Russian Jack Springs Trail and Bridge Improvements

INVITATION TO BID NO. 2023C019

Municipality of Anchorage
Anchorage Water and Wastewater Utility
3000 Arctic Boulevard
Anchorage, AK 99503

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS

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MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS

E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

I

INVITATION TO BID

MUNICIPALITY OF ANCHORAGE
PURCHASING DEPARTMENT

Invitation to Bid

No. 2023C019

Sealed bids will be received in accordance with the time schedule shown below by the Municipality of Anchorage at the Purchasing Department, 632 W. 6th Ave., Suite 520, Anchorage, Alaska 99501 for:

Russian Jack Springs Trail and Bridge Improvements

The Work that is presented in the Bid Proposal for this Contract consists of:

Base Bid, Schedule A: consisting of approximately 1,600 SY of Remove Pavement; 160 C.Y. of Unusable Excavation; 780 CY of Unusable Excavation; 1,520 Ton of Classified Backfill Type 2A; 432 Tons of Leveling Course; 2,100 SY of Geotextile; 231 Tons of Asphalt Concrete Pavement, 1,920 LF of Root Barrier; and other related work.

Additive Alternative, Schedule B: consisting of approximately 220 SY of Remove Pavement; 60 C.Y. of Unusable Excavation; 200 CY of Classified Backfill Type 3; 260 Ton of Classified Backfill Type 2A; 43 Tons of Leveling Course; Removal of Structure (Bridge), 1 Prefabricated Bridge; 40 C.Y. of P.C.C. Structures (Abutments and Decking); Railing; and other related work.

ESTIMATED CONSTRUCTION COST: **Between: $500,001 - $1,000,000**

Site Visit:	**N/A**
Pre-Bid Conference:	**4:00 P.M. Local Time, May 9, 2023**
Questions Due:	**12:00 P.M. Local Time, May 10, 2023**
Bid Opening:	**4:00 P.M. Local Time, May 19, 2023**

All Pre-Bid Conferences and/or Bid Openings may be attended in person or via conference call at this number (907) 343-6089. You may call in five (5) minutes before any scheduled conference. EMAILED BIDS WILL NOT BE ACCEPTED.

ALL QUESTIONS SHALL BE SUBMITTED PRIOR TO THE QUESTION DUE DATE THIS WILL BE THE FINAL OPPORTUNITY TO ASK QUESTIONS OR REQUEST CLARIFICATIONS.

Requests for interpretation or clarification of the bidding Documents shall be made in writing to the Purchasing Office (wwpur@muni.org). Please reference the Invitation to Bid Number & Project Title. Do not contact the specified department directly.

To maintain the project schedule, Interpretations, corrections, or changes to the Bidding Documents shall be made by Addendum and shall not be binding unless included in the Addendum. It is your responsibility to periodically check the website for addenda.

Municipality of Anchorage
ITB: 2023C019

At the above indicated time, the bids will be opened publicly and read. Bids must be received by the Purchasing Officer prior to the time fixed for opening of the bids to be considered. Time of receipt will be as determined by the time stamp in the Purchasing Office, Suite 520.

The Municipality of Anchorage reserves the right to reject any and all bids and to waive any informalities in the bids. No bidder may withdraw his bid after the hour set for the opening of bids or before the award of contract unless said award is delayed for a period exceeding sixty (60) days from the time of the opening.

The Municipality shall not be responsible for bid preparation costs, nor for costs, including attorney fees, associated with any (administrative, judicial or otherwise) challenge to the determination of the lowest responsive and responsible bidder and/or award of contract, and/or rejection of bids. By submitting a bid, each bidder agrees to be bound in this respect and waives all claims to such costs and fees.

Contracts shall be awarded by written notice issued by the Purchasing Officer to the lowest responsive and responsible bidder; however, preference will be given to local bidders in compliance with Anchorage Municipal Code Section 7.20.040.

The Municipality of Anchorage assumes no responsibility for any interpretations or presentations made by any of its officers or agents unless such interpretations or presentations are made by written addendum to this Invitation to Bid.

Bonding Requirements are per MASS/MASS B or as per special provisions

THE MUNICIPALITY OF ANCHORAGE IS AN "EQUAL OPPORTUNITY EMPLOYER"

PUBLISH ONE TIME

Date: April *28*, 2023

Senior Buyer Assigned to this Project:
Jared Brunelle

Chris Hunter

Chris Hunter
Deputy Purchasing Director

MUNICIPALITY OF ANCHORAGE

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

II

SPECIAL PROVISIONS

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

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MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

SPECIAL PROVISIONS

SECTION 95.01 LOCATION AND SCOPE

All proposed Work is located within the Municipality of Anchorage corporate limits and is more particularly located on the design drawings. The Work included under this Contract consists of furnishing all labor, materials, equipment, supervision, and other facilities necessary to successfully complete the Work set forth in the Drawings and Specifications. The Work included under this Contract consists of, but is not limited to:

- All clearing and grubbing necessary to construct the project.
- Construction of approximately 2,250 linear feet of asphalt trail.
- Excavation and classified backfill for the bridge approaches and abutments.
- Installation of concrete abutments and concrete decking.
- Design, procurement, and installation of 65 lineal foot prefabricated steel pedestrian bridge.
- Installation of associated bridge railing and asphalt decking.
- Traffic maintenance.

It is the responsibility of the bidder to prepare the bid so that all materials and/or fittings shall harmoniously conform to the intent of the Contract Drawings, Specifications, and Special Provisions.

Below are the schedules of Work that are presented in the Bid Proposal of this Contract:

BASE BID	DESCRIPTION
SCHEDULE A	SITE IMPROVEMENTS

ADDITIVE ALTERNATIVE	
SCHEDULE B	BRIDGE REMOVAL AND REPLACEMENT

SECTION 95.02 REFERENCE TO MUNICIPALITY OF ANCHORAGE STANDARD SPECIFICATIONS

This Contract is subject to and hereby incorporates by reference the Municipality of Anchorage Standard Specifications, dated 2015, hereinafter referred to as M.A.S.S.; the Alaska Sign Design Specifications (ASDS) as adopted and amended by the Municipality; the Municipality of Anchorage Sign Manual; the Alaska Traffic Manual (ATM)-Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition, with the Alaska supplement, dated 1/13/12; the National Electrical Safety Code (NESC) as amended and adopted by the Municipality; the National Electrical Code as amended and adopted by the Municipality of Anchorage; and the Edition of the Standard Specifications for Structural Supports for Highway Sign, Luminaires and Traffic Signals provided in the appropriate divisions. When conflicts exist between M.A.S.S. and MUTCD, the requirements of M.A.S.S. and these Special Provisions shall govern.

SECTION 95.03 TIME OF COMPLETION

This Project shall be completed within ninety (90) calendar days after the Notice-to-Proceed is issued. Base Bid: Schedule A -Site Improvements shall be substantially complete prior to the start of school, August 17, 2023, as outlined in Division 10, Article 4.12 – Public Convenience and Access.

SECTION 95.04 MODIFICATIONS AND/OR ADDITIONS TO MUNICIPALITY OF ANCHORAGE STANDARD SPECIFICATIONS

The following listed provisions of M.A.S.S. are amended as hereinafter stated:

A. DIVISION 10 STANDARD GENERAL PROVISIONS

Add the following Section:

SECTION 10.00 ALL APPLICABLE M.A.S.S. ARTICLES

Delete all references to and requirements for compliance with Anchorage Municipal Code Chapter 7.60 the Disadvantaged/Women Owned Business (DBE/WBE) program and specifications.

SECTION 10.04 SCOPE OF WORK

Article 4.8 Work Incidental to the Contract

Add the following item:

14. Installation of flexible delineators at the end of culverts, ends of retaining walls, field inlets, and other locations that may be hazardous or should be delineated for snow removal operations as determined by the Engineer.

15. Mobilization and Demobilization.

16. Dewatering for construction of concrete abutments and cross culverts.

17. Construction access/staging area improvements and restoration of area(s) disturbed for said improvements.

18. Project information signs.

19. Saw-cutting of existing asphalt pavement.

20. Other items indicated in the Drawings, or mentioned in these Special Provisions herein, and not specified for measurement for payment.

Article 4.12 Public Convenience and Access

Add the following:

Regular School Session

The Contractor is hereby notified that Russian Jack Elementary School and Bettye Davis East Anchorage High School are anticipated to commence pre-session faculty operations for the 2023-2024 regular school session on August 14, 2023, and anticipated to begin full time operations on August 17, 2023. Contacts: Russian Jack Elementary School Principal – Haylee Donovan, Phone number – 742-1300; and Bettye Davis East High School Principal - Ron Brown, Phone number – 742-2100.

With the commencement of the pre-session faculty operations, the Contractor should expect an increase of automobile and pedestrian traffic to and from the schools and should take that increase into account when complying with this Article, Article 4.13 – Traffic Control Plan, and Section 70.12 – Traffic Maintenance.

At the commencement of full-time operations, work associated with Base Bid: Schedule A – Site Improvements (BOP to Station 28+50) shall be substantially complete. The Contractor should expect student drop-offs/pick-ups and school bus operations to and from each school between 7:00 a.m. - 9:30 a.m. and 1:30 p.m. - 4:00 p.m.

Moreover, during full time school operations, because of the presence of student pedestrians, the Contractor shall take special precautions when working between 7:00 a.m. - 9:30 a.m. and 1:30 p.m. - 4:00 p.m., Monday through Friday. Special precautions may include detouring the student pedestrians from the worksite or the provision of an escort for the pedestrians. The Contractor shall have an affirmative duty to coordinate the required plan under this Article, and plan under Article 4.13 – Traffic Control Plan, with school Officials.

Should the Contractor, during periods of heavy student pedestrian/vehicle flows, elect to suspend construction operations, the Contractor shall ensure that all appropriate safety measures are implemented for the protection of the public, no matter how short the suspension of work. Beginning August 17, 2023 the Contractor's road and lane closures will be prohibited during the following hours on Monday thru Friday:

7:00 a.m. - 9:30 a.m.

1:30 p.m. - 4:00 p.m.

Article 4.13 Traffic Control Plan

Add the following item:

The Contractor may choose to develop and submit a Pedestrian Traffic Route Plan (PTRP) to MOA Parks for approval or use the approved plan as shown in the Drawings. The Contractor shall close affected trail segments completely and divert traffic in accordance with the approved PTRP from Notice-to-Proceed until completion. The Contractor shall conduct operations in a manner that minimizes interference to trail users (walkers, runners, bicyclist, etc.). The Contractor shall provide and post all necessary signage and barriers to close trailheads in the approved Pedestrian Detour Route. At the request of the Engineer, the Contractor shall post additional signs and barriers and modify the layout locations to direct pedestrian traffic. See Section 70.12, Article 12.3 of these Special Provisions.

Article 4.17 Utilities

C. Gas

Add the following paragraphs:

The Contractor shall download and follow the most current construction guidelines published by ENSTAR. Those guidelines can be downloaded from:

https://www.enstarnaturalgas.com/safety-education/natural-gas-safety/safety-for-excavators-contractors/

Click on the link in the last sentence of the first paragraph.

The Final Rule from the PHMSA website can be obtained from:

http://www.phmsa.dot.gov/nprm-anprm/PHMSA-2009-0192

Click on the "Excavation Damage 80 FR 43836 Final Rule" link on the right hand side.

D. Electrical and Telecommunications

Add the following paragraphs:

The Contractor shall download and follow the most current construction guidelines published by Chugach Electric Association. Those guidelines can be downloaded from:

http://www.chugachelectric.com/media-room/publications-request

Click on the link titled "Electrical Facility Clearance Requirements".

The following contact information is provided as a courtesy to the Contractor and is the most currently available.

Alaska Communication Systems (ACS) North ANC – Francisco Martin, 564-1785 or 231-7369

Alaska Communication Systems (ACS) South ANC – Duilio Guerrero, 564-1522

Anchorage Water & Wastewater Utility (AWWU) – Shawn Dooley, 564-2786

AT&T – Mike Barsalou, 264-7325

Chugach Electric Association (CEA) – Victor Willis, 230-7536

ENSTAR Natural Gas – Stan Staples, 334-7777

GCI – Steven Cranford, 868-6769

Municipal Street and Storm Drain Maintenance – Eric Hodgson, 343-8100

Municipal Street Light Maintenance – Eric Hodgson, 343-8100

Municipal Traffic Signals Section – Levi Piehl, 343-8363

Solid Waste Services (SWS) – Evalu Filitaula, 343-6258 or 317-6863

Matanuska Electric Association (MEA) – John Foutz, 761-9265

Matanuska Telephone Assoc. (MTA) – Robbie Nash, 761-2704 or 355-1687

Eagle River Street & Storm Drain Maintenance – Mark Littlefield, 343-1512

Alaska Waste – Josh James, 688-4446

Add the following Articles:

Article 4.22 Project Information Signs

Prior to beginning of any work on the project, Contractor shall install two (2) project information sign(s) (combination owner and contractor supplied materials), in accordance with Section 70.12, Article 12.7 - Traffic Control Devices, in a location directed by the Engineer. The Owner supplied project information signs shall be available for pick up at 5701 Northwood Drive, Monday thru Thursday from 8:00

a.m. to 4:00 p.m. Contact Paul VanLandingham at 343-8372 (office) or 317-7054 (cell) to coordinate pickup.

Owner-supplied materials are as follows:

- Project Information Sign - two (2) 4'x8'x¾" MDO wood sign Russian Jack Springs Trail and Bridge Improvements.

Contractor provided materials are as follows:

- Sign Frame - two (2) 2"x4" lumber pre-assembled in a rectangular shape measuring 4-foot by 8-foot
- Post Skids – assembled, two (2) EA 4"x6" lumber standing vertical 8-foot in height, with 8-foot base attached with a ¾" plywood gusset between the 2 vertical pieces.

Assembly shall be constructed per Appendix IV Project Information Sign(s) detail. Once assembled and positioned as directed by the Engineer, the Contractor shall supply and secure each post skid with two (2) each 60-pound sandbags or provide equivalent anchoring system as approved by the Engineer. The Contractor shall be responsible for maintaining placement and possible location adjustment if required per the Engineer, and for overall maintenance of the signs.

Following final completion of the project, Contractor shall disassemble the signs and return the owner-provided materials to 5701 Northwood Drive. Contact Paul VanLandingham at 343-8372 (office) or 317-7054 (cell) to coordinate drop-off.

All Work in this Article shall be considered incidental to the project.

SECTION 10.05 CONTROL OF WORK

Article 5.27 Liquidated Damages

Add the following paragraph:

The Owner may withhold from any progress payment the sum of $500 per day as Liquidated Damages for each and every calendar day that the Substantial Completion Date is delayed beyond the Contract Completion Date. The Owner may withhold out of any progress payment the sum of $250 per day as Liquidated Damages for each and every calendar day that the Final Acceptance Date is delayed beyond the Contract Completion Date. If no money is due Contractor, the Owner will have the right to recover said sums from Contractor, the Surety, or both.

Article 5.31 Winter Suspension

C. Suitable Conditions for Winter Maintenance

Add the following paragraph:

8. Contractor shall install temporary flexible delineators at the end of culverts, end of retaining walls, field inlets, and other locations as determined by the Engineer.

SECTION 10.06 LEGAL RELATIONS AND RESPONSIBILITIES

Article 6.1 Laws to be Observed

Add the following paragraph:

Owner is not aware of any contaminated material within the project limits. If such material is encountered, Contractor shall notify the Engineer immediately for direction. This will be treated as a changed condition, unless the contamination was caused by Contractor's operation.

B. DIVISION 20 STANDARD CONSTRUCTION SPECIFICATIONS FOR EARTHWORK

SECTION 20.04 CLEARING AND GRUBBING

Article 4.2 Construction

Add the following paragraph:

The Contractor shall protect migratory bird habitat in compliance with the most current version of the "Construction Advisory for Protecting Migratory Birds (pdf)" handout located at https://www.fws.gov/alaska/mbsp/mbm/index.htm. Additionally, Contractor shall notify the Engineer immediately if any active nests are found at any time during construction of the project.

Clearing was performed within the project work zone in early Spring 2023. Clearing debris that could not be hydro-axed or mulched was hauled off-site. The Contractor shall do all grubbing necessary for the construction of the pathway, bridge approaches, and abutments. Remove and dispose of all dead fall, stumps, logs, roots, moss, grass, turf, debris, or other objectionable materials within the clearing limits. Grubbing operations shall be hauled to a disposal site provided by the Contractor as delineated in Division 10.04, Section 10.04, Article 4.9 – Disposal Site.

Article 4.3 Measurement

Add the following:

The measurement of grubbing shall be by the acre or portion thereof as shown in the Drawings and approved by the Engineer.

Article 4.4 Basis of Payment

Add the following:

Payment shall be made under the following unit:

ITEM	UNIT
Grubbing	Acre

SECTION 20.06 REMOVAL OF TREES

Article 6.2 Construction

Add the following paragraph to Article 6.2 Construction:

The Contractor shall protect migratory bird habitat in compliance with the most current version of the "Construction Advisory for Protecting Migratory Birds (pdf)" handout located at https://www.fws.gov/alaska/mbsp/mbm/index.htm. Additionally, Contractor shall notify the Engineer immediately if any active nests are found at any time during construction of the project.

SECTION 20.09 REMOVAL OF PAVEMENT

Article 9.2 Construction

Replace the second paragraph with:

Contractor shall keep all asphalt surfacing designated for removal free from objectionable material (concrete, steel, etc.). Contractor shall deliver all asphalt surfacing that does not contain objectionable material to Street Maintenance. Contractor shall coordinate exact location and time of delivery with the Maintenance & Operations Department, Street Maintenance Division, at 343-8102. If the removed asphalt surfacing, under this Section, contains objectionable material, as identified by the Engineer, Contractor shall dispose of this asphalt surfacing in accordance with Division 10, Section 10.04, Article 4.9 – Disposal Sites.

SECTION 20.22 LEVELING COURSE

Article 22.4 Measurement

Remove the first sentence and replace with the following:

The leveling course shall be measured in tons of materials delivered and placed in accordance with these Specifications and adjusted for excess moisture as provided.

SECTION 20.25 GEOTEXTILE FABRIC

Article 25.2 Materials

Add the following Sub-article:

E. Type D Geotextile (Subgrade Stabilization)
Geotextile Type-D shall be the following or accepted equal:
Mirafi® RS580i

By:
TenCate Geosynthetics Americas
365 South Holland Drive
Pendergrass, Georgia 30567
Tel: 706-693-2226
Fax: 706-693-4400
http://www.tencate.com

Article 25.3 Construction

Add the following:

Geotextile Type-D shall be installed per manufacturer's recommendations.

Article 25.4 Basis of Payment

Add the following:

Payment shall be made under the following unit:

ITEM	UNIT
Geotextile (Type D)	Square Yard

Add the following Section:

SECTION 20.31 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Article 31.1 Description

The work under this Section consists of performing all the work identified in the Plans on the Demolition Sheet, and required for the removal, protection and restoration of miscellaneous items encountered during course of the work. Work under this item shall also include backfilling the resulting trenches, holes, cavities, and pits.

Article 31.2 Construction

Remove and dispose of all bridge steel, concrete and timber bridge elements including railing and foundations. Do not damage new construction during demolition operations.

Do not allow debris from bridge removal operations to enter a waterway.

Dispose of all non-salvageable materials in a Contractor-furnished waste disposal site or in a manner approved by the Engineer.

Dress all bridge slopes or embankments according to the Plans. Dress slopes not designated in the Plans to conform to the natural ground surface or blend as directed. Fill all excavations and depressions.

Article 31.3 Measurement

All work necessary to complete demolition of the existing bridge and foundations shall be measured as one complete work unit as accepted by the Engineer.

Backfill and grading required to restore the site surroundings to original grade will not be measured for payment.

All elements of Work shown on the Demolition Sheet that are not specially included in separate bid items shall be work incidental to the Contract.

Article 31.4 Basis of Payment

Payment for this Work shall in accordance with Division 10.00 Standard General Provisions, Section 10.07 Measurement and Payment, and shall include full payment for all work described in this Section.

Payment shall be made under the following unit:

ITEM	UNIT
Removal of Structure and Obstructions (Bridge)	Lump Sum

C. DIVISION 30 STANDARD CONSTRUCTION SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE

SECTION 30.05 STRUCTURES AND RETAINING WALLS

Add the following Section:

Article 5.2.1 Materials

Concrete used shall be in accordance with the *Alaska Department of Transportation and Public Facilities Standard Specifications for Highway Construction*, 2020 Edition.

Concrete used for abutments shall be Class A.

Concrete used for bridge decks shall be Class A-A.

TABLE 501-1
WATER-CEMENT RATIO REQUIREMENTS

Class of Concrete	Water-Cement Ratio, maximum lbs/lbs
A	0.45
A-A	0.40
P	0.35
DS	0.45

Table 501-1 from AKDOT-DF SSHC 2020

D. DIVISION 40 STANDARD CONSTRUCTION SPECIFICATIONS FOR ASPHALT SURFACING

SECTION 40.01 GENERAL

Add the following Article:

Article 1.7 Asphalt Price Adjustment

This provision provides a price adjustment for asphalt cement material by:

1. an increase to the contract amount, or
2. a deduction from the contract amount.

The provision shall apply to asphalt concrete pavement which:

- is a major bid item as defined in M.A.S.S. Division 10, Section 10.04, Article 4.5 – Increased Quantities;
- is placed in the second or later year of the contract;
- conforms to M.A.S.S. Division 40, Section 40.06 – Asphalt Concrete Pavement; and
- is paid pursuant to M.A.S.S. Division 40, Section 40.06 – Asphalt Concrete Pavement and Section 40.07 – Stone Mastic Asphalt Concrete Pavement.

This provision shall only apply to cost changes in the asphalt cement material that occurs between the date of bid opening and the date the asphalt material is incorporated into the project.

The asphalt price adjustment shall only apply when there is more than a seven and one-half percent (7.5%) increase or decrease in the Alaska Asphalt Material Price Index from the date of the bid opening to the date the asphalt material is incorporated into the project.

As used in this Article, the Alaska Asphalt Material Price Index is calculated bi-monthly on the first and third Friday of each month, and will remain in effect from the day of calculation until the next bi-monthly calculation. The Alaska Asphalt Material Price Index is posted on the ADOT&PF's Statewide Materials website, and is calculated according to the formula posted therein.

The Asphalt Price Adjustment (APA) payment is cumulative and is calculated with each progress payment. Asphalt material price index in effect on the last day of the pay period is used to calculate the price adjustment for asphalt cement material incorporated into the project during that pay period. The Municipality will increase or decrease payment under this contract by the amount determined with the following asphalt cement material price adjustment formula:

$$\mathbf{APA\ \{price\ ^{increase}/_{decrease}\}^{*} = [(\pm\ IPP\ \mp\ IB) - (0.075 * IB)] * Q * \%\ AC}$$

Where,

Q = quantity of asphalt concrete pavement incorporated into the project during the pay period, in tons, and documented by weight tickets;

IB = Index at bid: the bi-monthly Alaska asphalt material price index in effect on date of bid, in dollars per ton;

IPP = Index at Pay Periods: the bi-monthly Alaska asphalt material price index in effect on the last day of the pay period, in dollars per ton; and

%AC = percentage asphalt cement content in the asphalt concrete pavement, as determined by the average asphalt cement content in project's asphalt concrete quality control testing.

***** Note: a negative price adjustment (APA) results in a price reduction to the Contract.

Method of measurement for determining quantity, Q, is the weight of asphalt concrete pavement material that conforms to M.A.S.S. Division 40, Section 40.06 – Asphalt Concrete Pavement and is incorporated into the project.

No asphalt price adjustment will be paid based on estimated quantities.

Contingent Sum payment shall be made on the following basis:

The final asphalt price adjustment on a project is the aggregate of the price adjustments paid on a project's respective progress pay estimates, i.e.,

$$APA = APA_1 + APA_2 + \ldots. + APA_n$$

Where n = partial payment estimate number.

F. DIVISION 55 STANDARD CONSTRUCTION SPECIFICATIONS FOR STORM DRAIN SYSTEMS

SECTION 55.02 FURNISH AND INSTALL PIPE

Article 2.2 Material

Replace the second sentence of E. Polypropylene Pipe (PP) with the following:

The pipe shall meet AASHTO M330.

I. DIVISION 70 STANDARD CONSTRUCTION SPECIFICATIONS MISCELLANEOUS

SECTION 70.12 TRAFFIC MAINTENANCE

Amend the following Article:

Article 12.6 Public Notice

Delete the first paragraph, inclusive of the list of local officials and transportation organizations, and replace with the following:

The Work Site Traffic Supervisor shall give notices of changes, delays, or lane/road closures to the following local officials and transportation organizations including, but not limited to:

1.	Anchorage Chamber of Commerce	272-2401
2.	Alaska Travel Industry Association	929-2842
3.	Alaska Trucking Association	276-1149
4.	Alaska State Troopers	428-7200
5.	Alaska Court System	264-8232
6.	Anchorage Police Department	786-8500
7.	Anchorage Fire Department	267-4950
8.	Local Emergency Medical Services	267-4950
9.	Anchorage Public Transportation	343-8253/8386
10.	ASD Pupil Transportation	742-1207
11.	U.S. Postal Service	266-3261
12.	MOA Parks and Recreation	343-4355
13.	Russian Jack Elementary School	742-1300
	Bettye Davis East High School	742-2100
14.	Volunteer Fire Departments (applicable if operating in the project area)	
15.	Local Solid Waste Utilities	
16.	Commercial Vehicle Enforcement	365-1203

Add the following Section:

SECTION 70.90 STEEL PIPE AND TUBE RAILING

Article 90.1 Description

Furnish and install steel pipe and tube railings to top of new concrete barrier.

Article 90.2 Materials

Steel

- Tubing: Corrosion resistant, ASTM A 847.
- Plates, Shapes, and Bars: Corrosion resistant, ASTM A 588.

Fasteners

- Type 304 stainless-steel or hot-dip zinc-coated steel fasteners complying with ASTM A 153/A 153M or ASTM F 2329 for zinc coating.

Miscellaneous Materials

- Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

Article 90.3 Construction

Submittals

Shop drawings. Shop drawings shall be unique drawings, specific to this project and not a copy of the bid drawing package. All relative design information such as member size, ASTM material specification, dimensions, connections such as shop welding and field splicing, and all items as necessary to fabricate and erect shall be clearly shown on the drawings. Drawings shall have cross referenced details and sheet numbers.

Fabrication

Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.

Form work true to line and level with accurate angles and surfaces.

Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.

- Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
- Obtain fusion without undercut or overlap.
- Remove flux immediately.
- At exposed connections, finish exposed surfaces smooth and blended so no roughness shows after finishing and welded surface matches contours of adjoining surfaces.

Form changes in direction by bending or by inserting prefabricated elbow fittings.

For changes in direction made by bending, use jigs to produce uniform curvature for each repetitive configuration required. Maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.

Close exposed ends of railing members with prefabricated end fittings.

Erection/Installation

Installation, General:

Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.

- Do not weld, cut, or abrade surfaces of railing components that are coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
- Set posts plumb within a tolerance of 1/16 inch in 3 feet.
- Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.

Article 90.4 Measurement

The Work paid for under “Steel Pipe and Tube Railings” shall be measured as furnished, constructed, finished, and accepted in place for complete of all steel pipe and tube railings. Attachment to the concrete barrier, shop drawings, touchup painting and finishing is considered incidental, and no separate payment shall be made.

Article 90.5 Basis of Payment

Payment for this Work shall in accordance with Division 10.00 Standard General Provisions, Section 10.07 Measurement and Payment, and shall include full payment for all work described in this Section.

Payment shall be made under the following unit:

ITEM	UNIT
Steel Pipe and Tube Railing	Lump Sum

Add the following Section:

SECTION 70.91 PREFABRICATED PEDESTRIAN BRIDGE

Article 91.1 Description

Design, engineer, fabricate, deliver, erect, and finish a steel pedestrian bridge to the profile and span shown on the plans. The bridge shall be delegated design.

Article 91.2 Design Standards

Bridge shall be designed in accordance with the LRFD Guide Specifications for Design of Pedestrian Bridges (LGSDPB), Latest Edition, with all interim guidelines, by AASHTO. This document will control if any conflicting requirements occur in supplemental standards or other referenced documents.

Fracture Critical Member requirements in LGSDPB Sections 4.2 and 8.2.3 shall apply to all members.

Supplemental Standards as Referenced:

- AASHTO LRFD Bridge Design Specifications, Latest Edition (AASHTO)
- AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals, Latest Edition (SSHSLTS)
- American Institute of Steel Construction (AISC), Steel Construction Manual, Latest Edition (AISC 360)
- AISC, Code of Standard Practice for Steel Buildings and Bridges, Latest Edition (AISC 303)
- American Welding Society (AWS), Structural Welding Code, D1.1, Latest Edition
- International Building Code (IBC), Latest Edition
- ASCE/SEI 7 Minimum Design Loads for Buildings and Other Structures, Latest Edition
- Specification for Structural Joints using ASTM A325 or A490 Bolts

Article 91.3 Qualifications

Bridge Engineer Qualifications: The bridge engineer of record shall have a minimum of 10 years' experience in bridge design and be a currently licensed civil or structural professional engineer in the State of Alaska. The engineer shall seal all calculations and drawings.

Bridge Fabricator Qualifications: The bridge fabricator shall have at least 5 years' experience in the fabrication of half-through truss pedestrian bridge with HSS members and have current certification by AISC as a Certified Bridge Fabricator – Intermediate. The bridge shall be fabricated in a facility owned and/or leased by the corporate owner of the manufacturer, and fully dedicated to bridge manufacturing.

Bridge Fabricator AISC certification may be waived if fabricator complies and provide evidence of the following:

- Use AWS certified welders.
- Submits welder's qualifications for approval.
- Submits AWS compliant welding procedures (WPS) and Procedure Qualification Records (PQR) according to AWS D1.1 for approval.
- Submits plant QA/QC program for approval.
- Provides full-time independent certified welding inspector during fabrication of bridge and submits inspection records.
- Any costs of these requirements to waive AISC certification shall be the responsibility of the Contractor and no extra payment shall be made.

In addition to the requirements above, any manufacturer must have five successful steel half-through truss pedestrian bridge projects in the last three calendar years prior to the bridge project bid submission date. Lowest responsive and responsible bidder must submit bridge engineer and bridge fabricator qualifications, as well as bridge locations, sizes, owners, and contacts for reference of each of five projects performed within the last three years to the Municipality of Anchorage Parks and Recreation (MOA Parks) for review. The MOA Parks will evaluate and verify the accuracy of any bridge manufacturer. If the MOA Parks determines that the qualifying criteria have not been met, the contractor's proposed bridge manufacturer shall be rejected. The ruling shall be final, and no appeals shall be accepted or reviewed.

Article 91.4 Submittals

Bridge design calculations: Calculations shall be prepared and sealed by the bridge engineer of record, who is licensed in accordance with Subsection 91.3. Calculations shall include complete design. The calculations shall include all design information necessary to determine the structural adequacy of the bridge. The calculations shall include the following:

- Axial, bending, and shear capacity checks in accordance with LGSDPB of the critical member of each truss member type (i.e., top chord, bottom chord, floor beam, vertical, etc.).
- Checks for the critical connection failure modes for each truss member type (i.e., vertical, diagonal, floor beam, etc.). Special attention shall be given to all welded tube on tube connections.
- Member to member connections.
- All splice connections.
- Deflection checks.
- Connectivity and support conditions, bearings, and anchorage to foundation.
- Truss stability checks.
- An analysis of the top chords of half through-trusses.
- Deck design.
- The analysis and design of triangulated truss bridges shall account for moments induced in members due to joint fixity where applicable. Moments due to both truss deflection and joint eccentricity must be considered.

Engineering and shop drawings: Engineering and shop drawings shall be unique drawings, specific to this project and prepared to illustrate the specific portion of the bridge being fabricated. All relative design information such as member size, bridge reactions, joint movement, ASTM material specification, dimensions, general notes, connections such as shop welding and field splicing, and all items as necessary to fabricate and erect shall be clearly shown on the drawings. Drawings shall have cross referenced details and sheet numbers. All drawings shall be signed and sealed by the Bridge Engineer who is licensed in accordance with Subsection 91.3.

Erection plan and lifting weights (prepared by Bridge Manufacturer, sealed by Bridge Engineer and certified by Installer). Include crane size, splicing plan, rigging plan, crane placement and movement and any temporary measures required to accomplish bridge installation.

Shop Quality Control Certifications.

Welding Certificates, either:

- Certified within the last 6 months or
- With an accompanying Letter of Continuity confirming that the welder has performed the specific weld without a lapse of more than 6 months since certification.

Mill test reports for structural steel, including chemical and physical properties traced to heat numbers.

Fracture toughness (Charpy V-notch) test results.

Product test reports for:

- Bolts, nuts, and washers including mechanical properties and chemical analysis.
- Welding filler material.

Quality Control: Welding testing and fabrications quality control reports shall be submitted for all fabrication.

Inspection and Maintenance Procedures: The bridge manufacturer shall provide written inspection and maintenance procedures to be followed by the bridge owner.

Article 91.5 Materials

Structural Steel

All members of the truss and deck support system shall be fabricated from corrosion resistant square or rectangular hollow structural shapes (HSS), with the exception that floor beams may be corrosion resistant wide flange shapes. All open ends of end posts and floor support beams shall be capped. Drain holes shall be provided for all sections at the low point of the member that that could possibly become filled with water.

Unless the floor and fastenings are specifically designed to provide adequate lateral support to the top flange of open shape stringers (w-shapes or channels), a minimum of one stiffener shall be provided in each stringer at every floor beam location.

Minimum nominal thickness of primary hollow structural shapes shall be 1/4-inch. Rolled shapes shall have a minimum flange and web thickness of 1/4-inch. Dimensions shall be in accordance with the AISC Manual of Steel Constructions' "Standard Mill Practice Guidelines". For tubing, the section properties used for design shall be per the Steel Tube Institute of North America's Hollow Structural Sections "Dimensions and Section Properties".

Corrosion-Resisting, Cold-Formed Hollow Structural Sections: ASTM A 847, structural tubing.

Corrosion-Resisting Structural-Steel Shapes, Plates, and Bars: ASTM A 588, Grade 50.

Deck Material

Decking shall be structural steel corrugated metal deck, 1.5-inches minimum depth, sized for the applied loads.

The steel utilized shall meet ASTM A653, Coating Grade 50, Class I with a minimum 2 oz hot-dip galvanized coating.

The deck shall be designed to support structural loads including concrete in the deck flutes, and above the flutes – 4" total thickness of metal deck and concrete. An additional sloped asphalt pavement wearing surface tapering from 1" to 2.25" will be applied to the top of the concrete. The bridge shall be designed for not less than a total wearing surface weight of 63 psf. The deck shall be designed to directly receive asphalt pavement without loss of integrity.

The decking shall be attached per the Bridge Manufacturer's recommendations.

Any damage to the pre-galvanized finish shall be wire-brushed cleaned and then treated with an organic zinc-rich coating meeting the material and performance requirements of ASTM A780.

An asphalt wearing surface shall be applied to the top of the concrete deck after installation of the bridge. Total average weight of all asphalt on bridge shall not exceed 20 psf.

Wood decking is not allowed.

Fasteners

Structural bolts used to field splice or connect; all main members shall be ASTM A325, Type 3 Bolts (weathering steel). The nuts for these structural bolts shall be ASTM A563, grade DH3.

Bolts used for the connection of a rub rail shall be ASTM A307 or SAE J429 Grade 2, 1/4-inch diameter carriage bolts, zinc plated. Countersunk blind fastenings or

button-head blind fastening (Hollo-bolts or equivalent) are permitting for this application.

Self-drilling fasteners for attachment of the metal bridge deck shall be #14 x 1-inch zinc plated hex-washer head Tek screws with a self-drilling head capable of penetrating the bridge deck and supporting steel.

Anchor Rods shall be F1554, grade as determined by Bridge Manufacturer for applied loads, hot dip galvanized.

Other miscellaneous fasteners shall be ASTM A307 zinc plated or galvanized, as determined by the Bridge Manufacturer.

Welding

Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded. Filler metal shall be in accordance with the applicable AWS Filler Metal Specification and shall match the corrosion properties of the base metal.

Grout

Metallic, Shrinkage-Resistant Grout: ASTM C 1107/C 1107M, factory-packaged, metallic aggregate grout, mixed with water to consistency suitable for application and a 30-minute working time.

Article 91.6 Bridge Configuration

The bridge configuration shall be a Half-Through Truss Bridge with HSS Members. No members across trusses are allowed above the deck surface. The vertical trusses shall be designed such that the top and bottom chord members are parallel for the entire length of bridge. The interior verticals of the trusses shall be perpendicular to the top face of the bottom chord.

End Vertical Type: The end vertical of the trusses shall be plumb.

Floor Beam Location: The bridge shall utilize an H-Section configuration with underhung floor beams where the ends of the floor beams are welded to the interior face of the truss verticals.

Step Height: The distance from the top of deck to the bottom of the bottom chord shall be determined by the Bridge Manufacturer during final design. This dimension has been preliminarily designated on plans but will be coordinated with the abutment/foundation construction once final bridge design is complete, prior to abutment/foundation construction.

Diagonal Style: The vertical truss shall use a single-diagonal, Pratt configuration, where all of the diagonals are in tension. For a truss with odd number of bays, less

than or equal to nine bays, a second diagonal shall be added to the center bay to form an “X”.

Symmetry: The bridge shall be symmetrical about mid-span.

Article 91.7 Bridge Geometry

Span Length: The bridge span length shall be indicated on drawings and measured from face of abutment wall to face of abutment wall.

Width: The bridge clear inside width shall be 10 feet 6 inches and shall be as measured from the inside face of structural truss elements at the deck level.

Top of Truss Height: The top of the top chord shall be 42 inches above the deck (measured from the high point of the deck).

Truss Bay Spacing: The number of bays and the dimension of the panel points shall be determined by the Bridge Manufacturer. However, at no time shall the panel point dimension be a distance which will cause the diagonals to be at an angle shallower than 35-degress with the bottom chord.

Camber: Vertical camber dimension at the mid-span shall be equal to 100% of the anticipated full dead load deflection.

Elevation Difference: The top of deck elevation shall match the existing trail paving elevation at both ends, as noted on the Contract Drawings.

Expansion: Provide clearance for construction tolerances as determined by the Installer and Bridge Manufacturer. Provide for at least one inch movement at the expansion end of the bridge (noted with an E on the drawings), but not less than that required for the design temperature range as determined from the Tables in AASHTO Article 3.12.2.1.

- Temperature range for design shall be for a COLD climate, -30 degrees to 120 degrees Fahrenheit.

Transitions: Provide a smooth transition from the abutment to the premanufactured pedestrian bridge.

Article 91.8 Structural Design Loads

Design loads shall conform to *LGSDPB* Section 3. In considering design and fabrication issues, this structure shall be assumed to be statically loaded. No dynamic analysis shall be required, nor shall fabrication issues typically considered for dynamically loaded structures be required for this bridge.

Dead Load (DL): The bridge structure shall be designed considering its own dead load (superstructure and metal deck), plus asphalt infill and an additional asphalt wearing layer (60 psf minimum for all asphalt).

Pedestrian Loading (PL): Shall be for 90 psf in accordance with LGSDPB Article 3.1.

Vehicle Load (LL): Bridge shall be designed for HS-10 Design Vehicle (20,000 pounds, Front axle = 4,000 pounds and single rear axles at 16,000 pounds each spaced at 14 feet from center of axle to center of axle) in accordance with LGSDPB Article 3.2.

Rear Axle = 16,000 lbs total, 8,000 each at 6' spacing

Front Axle = 4,000 lbs (16'-0" axle to axle spacing)

Wind Load (WS): Shall be per LGSDPB Article 3.4, including concurrent 20 psf uplift load on deck. I_r=1.15, V_{DZ}=132 mph, K_z=0.84, C_d=1.3 (acting on full bridge profile area).

Fatigue Load (LL): Shall be per LGSDPB Article 3.5.

Railing Loads (RL): Each element of the pedestrian rail system shall be designed to support a uniformly applied load of 50 pounds per lineal foot (plf), both transversely and vertically, acting simultaneously. In addition, each longitudinal element shall be designed to support a concentrated load of 200 pounds (lbs), which will act simultaneously with the above uniform loads at any point and in any direction at the top of the longitudinal element.

The posts of the pedestrian rail system shall be designed for a concentrated load applied at either the center of gravity of the upper longitudinal element or 60-inches above the top of the walkway, whichever is less. This concentrated load shall be equal to 200 pounds plus 50 lbs times the post spacing in feet.

Combination of Loads: The load combinations and load factors to be used shall be as per LGSDPB Article 3.7 to produce the most unfavorable effects on the bridge superstructure or structural member concerned.

Top Chord/Railing Loads: The top chord, truss verticals, and floor beams shall be designed for lateral wind loads and for any loads required to provide top chord stability. Top chord stability shall be checked by any rational, published method.

The foundations have been designed in accordance with *LGSDPB* for the loads specified in Article 91.8 assuming a dead weight of the bridge (including concrete and additional asphalt wearing surface). If the unfactored dead weight of the bridge, including the concrete deck and asphalt wearing surface, as determined by the Bridge Engineer, exceeds the load listed below, contact the engineer of record for a revised abutment design.

- Russian Jack Springs Bridge (65'): 19.3 kips

Article 91.9 Structural Design Criteria

Structural design of the bridge structure shall be performed by or under the direct supervision of an Alaska Licensed Professional Engineer and done in accordance with recognized engineering practices and principles. The design of all elements shall conform to LGSDPB.

Modeling: The bridge shall be modeled and analyzed utilizing three-dimensional finite element computer software which shall account for moments induced in members due to joint fixity where applicable. Moments due to both truss deflection and joint eccentricity must be considered. Analyzing the truss as a pure pinned structure will not be allowed. All required design loads in these specifications shall be applied to the model and analyzed appropriately.

Lateral Frame Design: The bridge shall be designed and proportioned such that appropriate lateral stiffness is provided locally and globally, to ensure that the structure is stable.

The vertical truss members, the floor beams and their connections shall be proportioned to resist a lateral force applied at the top of the truss verticals. This lateral force shall be applied as an additional load to the top of the vertical, creating a cantilever moment, which is then added to the forces obtained from the three-dimensional model. The magnitude of this lateral force shall not be less than 0.01/K times the average factored design compressive force in the two adjacent top chord members.

The top chord shall be analyzed as a column with elastic lateral supports at the panel points, taking into account all moments due to in-plane and out-of-plane bending, along with moments due to eccentricities of the members.

The U-Frame Stiffness of the verticals and floor beams shall be as determined in the LGSDPB Article 7.1.2, assuming that the vertical and floor beam connection is rigid. This means that the following must be met:

- Matched member widths in simple unreinforced HSS connections between the floor beam and vertical, that is, no deformation is allowed due to tube wall plastification of the member faces at service loads.

- The connection of the floor beam to the vertical shall not include the HSS bottom chord member, that is, the vertical and floor beam shall not be connected to different sides of a HSS chord. These members shall not be connected to faces of the bottom chord at a 90-degree to one another.

- All fixed end moments in the floor beams and verticals due to floor beam rotations, in addition to the loads derived from a U-Frame analysis have been accounted for in the strength design of the connections.

At no time shall a column effective length factor, “K”, greater than 2.0 be used in the design of the top chord.

The end verticals shall be designed as a simple cantilever to carry the loads obtained from the three-dimensional model, plus the cantilever moment due to a lateral load of 0.01 times the axial force in the end vertical, applied laterally at the upper end of the end vertical.

The floor beams shall always be sized for the forces obtained from a simple span, pinned end analysis, or from the forces obtained from the three-dimensional model, whichever controls.

The diagonals and brace diagonals shall be analyzed as pinned-end connection members. All other members shall be analyzed as fixed-end connections.

Vertical Deflections: Shall be per LGSDPB Section 5 at a Service I load combination.

- The vertical deflection of the main trusses due to pedestrian live load shall not exceed 1/360 of the span.

- The vertical deflection of the floor system members (floor beams and stringers) due to pedestrian live load shall not exceed 1/360 of their respective spans.

- Deflection limits due to occasional vehicular traffic need not be considered.

Horizontal Deflections: Shall be per LGSDPB Section 5 at an unfactored load combination.

- The horizontal deflection of the structure due to lateral wind loads shall not exceed 1/360 of the span.

Vibrations: The vibration requirements of LGSDPB Article 6 are NOT waived and the bridge design shall comply with the Article 6 requirements.

Wheel Load Distribution on Deck: Tire Contact Area will be calculated as 0.01 times the wheel load.

Anchorage: Bridge Manufacturer shall design the anchor rods to resist all applied horizontal and uplift forces to be transferred from the superstructure to the supporting foundation, considering all applicable modes of failure, including but not limited to concrete breakout strength in shear and tension, pullout strength,

concrete side-face blowout strength, and concrete pry-out strength. The Contractor shall provide and install the anchor bolts in accordance with the Bridge Manufacturer's anchor bolt spacing dimensions.

Article 91.10 Fabrication

Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," and to AISC 360.

- Camber structural-steel members where indicated.
- Fabricate beams with rolling camber up.
- Mark and match-mark materials for field assembly.

Thermal Cutting: Perform thermal cutting by machine to greatest extent possible. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1/D1.1M.

Bolt Holes: Cut, drill, or punch standard bolt holes perpendicular to metal surfaces.

Finishing: Accurately finish ends of and other members transmitting bearing loads.

Holes: Provide holes required for field splicing members or securing other work.

- Cut, drill, or punch holes perpendicular to steel surfaces. Do not thermally cut bolt holes or enlarge holes by burning.
- Baseplate Holes: Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.
- Weld threaded nuts to framing and other specialty items indicated to receive other work

Welding:

Welding procedures and weld qualification test procedures shall conform to the provisions of AWS D1.1, Structural Welding Code, latest edition for tolerances, appearances, weld quality, and methods used in correcting welding work. Assemble and weld sections by methods that maintain true alignment of axes without exceeding tolerance in AISC 303 for mill material. Filler metal shall be in accordance with the applicable AWS Filler Metal Specification and shall match the corrosion properties of the base metal.

Visually inspect 100% of shop-welded connections according to AWS D1.1/D1.1M and 20% of the shop-welded connections using the following inspection procedures, at welding inspector’s option:

- Liquid Penetrant Inspection: ASTM E 165.
- Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration are not accepted.
- Ultrasonic Inspection: ASTM E 164.
- Radiographic Inspection: ASTM E 94.

Welders shall be qualified for each process and position used while fabricating the bridge. Qualification tests shall be in accordance with AWS D1.1. All weld qualifications and records shall be kept in accordance with the Fabricator's Quality Assurance Manual which has been approved by AISC. Welders shall be properly accredited operators, each of whom shall submit certification of satisfactorily passing AWS standard qualification tests for all positions with unlimited thickness of base metal, have a minimum of 6 months experience in welding tubular structures and have demonstrated the ability to make uniform sound welds of the type required.

All tubular joints shall be plain unstiffened joints (made without the use of reinforcing plates) except as follows:

- Floor beams which frame directly into the truss verticals (H-Section bridges) may be designed with or without end stiffening plates as required by design.
- Where chords, end floor beams and in high profiles the top end struts weld to the end verticals, the end verticals (or connections) may require stiffening to transfer the forces from these members into the end vertical.
- Truss vertical to chord connections.

The effects of fabrication tolerances shall be accounted for in the design of the structure. Special attention shall be given to the actual fit-up gap at welded truss joints.

Special attention shall be given to developing sufficient weld throats on tubular members. Fillet weld details shall be in accordance with AWS D1.1, Section 3.9 (See AWS Figure 3.2). Unless determined otherwise by testing, the loss factor "Z" for heel welds shall be in accordance with AWS Table 2.8. Fillet welds which run onto the radius of a tube shall be built up to obtain the full throat thickness (See Figure 91.10-1 below). The maximum root openings of fillet welds shall not exceed 3/16" in conformance with AWS D1.1, Section 5.22. Weld size or effective throat dimensions shall be increased in accordance with this same section when applicable (i.e., fit-up gaps greater than 1/16-inch).

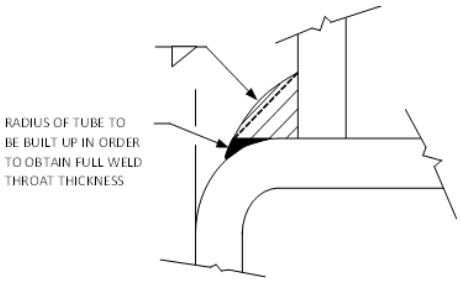


FIGURE 91.10-1
BUILD UP RADIUS WELD

The fabricator shall have verified that the throat thickness of partial joint penetration groove welds (primarily matched edge welds or the flare-bevel-groove welds on underhung floor beams) shall be obtainable with their fit-up and weld procedures. Matched edge welds shall be "flushed" out when required to obtain the full throat or branch member wall thickness.

For full penetration butt welds of tubular members, the backing material shall be fabricated prior to installation in the tube so as to be continuous around the full tube perimeter, including corners. Backing may be of four types:

- A "box" welded up from four (4) plates.
- Two "channel" sections, bent to fit the inside radius of the tube, welded together with full penetration welds.
- A smaller tube section which slides inside the spliced tube.
- A solid plate cut to fit the inside radius of the tube.

Corners of the "box" backing, made from four plates, shall be welded and ground to match the inside corner radii of the chords. The solid plate option shall require a weep hole either in the chord wall above the "high side" of the plate or in the plate itself. In all types of backing, the minimum fit-up tolerances for backing must be maintained at the corners of the tubes as well as across the "flats".

Shop Splices:

Shop splices for main truss members shall be full penetration welds all around the perimeter of the member. These shop splices shall be performed using a full perimeter backing plate. After welding of the shop splices, the weld shall be ground smooth to match the perimeter of the member.

Bolted Splices:

For shipping purposes, the bridge shall be fabricated in sections. Sections shall be designed to allow field assembly using bolted connections. No field welding of members is allowed.

The chord members of the bridge shall be bolted such that all faces of the member are bolted to provide equal force distribution around the perimeter of the member. Bolted splices shall be designed and fabricated such that the head of the bolt is the only item exposed. No through-bolting of the member is allowed.

The diagonals and brace diagonals shall be bolted utilizing a through-bolt system with plates on the exterior faces of the members. An internal stiffening plate is required to keep the member from crushing during the bolt tightening process.

Article 91.11 Attachments

Safety rails shall be placed longitudinally and on the inside of the structure, spaced so as to prevent a 4-inch sphere from passing through the side truss for the full height of the side truss, or 54-inches, whichever is less. Rails shall be welded directly to the truss verticals. The ends of any longitudinal rails near the end of the bridge shall be mitered at a 45-degree angle, capped, and ground smooth. No solid plate covering all rails as a unit will be allowed.

At a minimum, safety rails shall be HSS 1 ½ x 1 ½ x 3/16 or 1/8 angles. Rails shall be mounted longitudinally. Ends tube rails shall be capped, welded and ground smooth. The rails shall be seal welded to the truss verticals.

The top of any vertical pickets shall have a continuous cap angle or some other means to prevent bridge users from cutting or scraping their hands.

Toe Plates:

Steel toe plates shall consist of 1/4-inch x 6-inch minimum plate material and shall be welded all around to the truss verticals. If the vertical spacing exceeds 6 feet, a mid-bay support shall be utilized or else the toe plate shall be a minimum HSS4x2x3/16 tube (ends capped) welded all around directly to the truss verticals. The bottom of the toe plate shall be placed 2-inches above the finished height of the deck. All seams of the toe plate shall be fully welded to give the appearance of a continuous member (welding should be located at a support member).

Expansion Joint Cover Plate:

Provide a 1/4-inch-thick minimum plate which attaches to the bridge and extends at least 2-inches over the gap between end of bridge deck and foundation back wall. The plate shall have all edges beveled at a 45-degree angle. The cover connection shall be detailed to accommodate the bridge movement.

Placard:

The bridge shall have a permanently affixed placard stamped in stainless steel plate with the manufacturer, year, and design load limits of the bridge.

Article 91.13 Shipping

Contractor is responsible for delivery and shipping to the job site including any oversize permits and traffic control required. Contractor shall be responsible for offsite storage of bridge prior to erection. The bridge shall be protected during shipment, storage, and delivery. Any costs of shipping, storage, delivery (including traffic control and oversize permits or other closures required) are incidental and no extra payment shall be made.

Article 91.14 Erection

The Bridge Manufacturer will provide detailed written procedures for proper lifting and splicing the bridge.

Examination: Contractor shall verify, with bridge erector present, elevations of foundations and locations of anchor rods, bearing and slide plates, and other embedments for compliance with requirements.

- Contractor shall prepare a certified survey of existing conditions. Include bearing surfaces, abutment corners, anchor rods, bearing and slide plates, and other embedments showing dimensions, locations, angles, and elevations.

- Proceed with bridge installation only after unsatisfactory conditions have been corrected.

Preparation: Provide temporary shores, guys, braces, and other supports during erection to keep bridge secure, plumb, and in alignment. Remove temporary supports when bridge is completely erected and attached to foundation.

Coordination with Wetland and SWPPP permits: The contractor shall not disturb areas in the wetland and shall follow approved environmental permits and regulations. Such coordination is incidental to the pay item and no separate payment shall be made.

Coordination with Alaska Rail Road: The contractor shall coordinate with Alaska Rail Road Corporation and follow necessary right-of-way permits while working inside Alaska Railroad Right of Way. Such coordination is incidental to the pay item and no separate payment shall be made.

Set and splice bridge accurately in locations and to elevations indicated and according to AISC 303 and AISC 360.

Align and adjust various members that form part of complete structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that are in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.

- Level and plumb individual members of structure.

- Make allowances for difference between temperature at time of fabrication and mean temperature when structure is erected to allow bolt alignment.

Field splice as required by installing high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.

Baseplates: Clean concrete bearing surfaces of bond reducing materials and roughen surfaces prior to setting beating and base plates. Clean bottom surface of plates.

- Set plates on wedges, shims, or setting nuts as required to the proper elevation.

- Finger-tighten anchor rods on fixed bearing and loose on sliding bearing after bridge members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.

- Promptly pack grout solidly between bearing surfaces and plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.

- After grout has cured a minimum of 7-days, fully torque anchor bolts at Fixed Bearing end.

Article 91.15 Field Quality Control

Bolted Connections shall be inspected and tested according to RSSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

The bridge shall be free of burrs, sharp areas, or rough steel areas.

Article 91.16 Repairs and Protection

Galvanized Surfaces: Clean areas where galvanizing is damaged or missing and repair galvanizing to comply with ASTM A 780/A 780M.

Article 91.17 Warranty

The Bridge Manufacturer shall warrant their steel structure to be free of design, material, and workmanship defects for a period of ten years from the date of delivery.

This warranty shall not cover defects in the bridge caused by abuse, misuse, overloading, accident, improper maintenance, alteration, or any other cause not the result of defective materials or workmanship.

Repair or replacement shall be the exclusive remedy for defects under this warranty. The bridge manufacturer shall not be liable for any consequential or incidental damages for breach of any express or implied warranty on their structures.

Article 91.18 Measurement

The Work paid for under "Prefabricated Pedestrian Bridge" shall be measured as furnished, constructed, finished, and accepted in place for complete. Attachment to the concrete foundations, bearings, attachments, shipping, erection, storage, shop drawings, engineering, touchup finishing, and environmental permit coordination is considered incidental, and no separate payment shall be made.

Article 91.19 Basis of Payment

Payment for this Work shall in accordance with Division 10.00 Standard General Provisions, Section 10.07 Measurement and Payment, and shall include full payment for all work described in this Section.

Payment shall be made under the following unit:

ITEM	UNIT
Russian Jack Springs Prefabricated Pedestrian Bridge	Lump Sum

J. DIVISION 75 STANDARD CONSTRUCTION SPECIFICATIONS FOR LANDSCAPING IMPROVEMENTS

SECTION 75.04 SEEDING

Article 4.3 Application

Remove the first paragraph of A. Soil Preparation and replace with the following:

After grading of areas has been completed in conformity with the lines and grades shown on the Drawings, and before beginning seeding operations, the areas to be seeded shall be cultivated to provide a reasonably firm but friable seedbed. Cultivation shall be carried to a depth of two inches (2"). On slopes steeper than 3:1, depth of cultivation may be reduced as directed by the Engineer. All areas to be cultivated shall be raked or cleared of stones (one inch [1"] in diameter and larger), weeds, plant growth, sticks, stumps, and other debris or irregularities which might interfere with the seeding operation, germination of seed, or subsequent maintenance of the seed-covered areas. Cultivation shall include the entire ground surface, regardless of existing ground cover. Contractor may be required to track-walk slopes 2:1 or over as directed in the Drawings or by the Engineer. Prior to

seeding application, site inspection by the Engineer is required to confirm that preparation conditions are satisfactory for the seeding work to proceed.

Add the following Section:

SECTION 75.12 Root Barrier

Article 12.1 Description

The Work under this Section consists of all labor, equipment, and materials necessary to place owner supplied root barrier panels. All Work shall be in accordance with these Specifications and shall be placed at the locations shown on the Drawings.

Article 12.2 Materials

Owner supplied root barrier panels are 24-inch x 24-inch Century Products CPU-Series Utility Grade Root Barrier Panels. Material is available for pick-up at the South Maintenance Yard, 11440 Lang Street, Anchorage, Alaska. See Appendix IV for manufacturer's product sheet.

Article 12.3 Construction

Root barrier shall be installed per manufacturer's specifications, in location shown in the Drawings. Install root barrier so that top of barrier is 2-inches below finished grade.

Article 12.4 Measurement

Root barrier shall be measured per linear foot, delivered, and accepted in place.

Article 12.5 Basis of Payment

Payment for this Work shall be in accordance with Division 10.00 Standard General Provisions, Section 10.07 Measurement and Payment, and shall include full payment for all work described in this Section.

Payment shall be made under the following unit:

ITEM	UNIT
Install Root Barrier (Owner Supplied)	Linear Foot

END OF SPECIAL PROVISIONS

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

APPENDIX A UTILITY REQUIREMENTS

CHUGACH
POWERING ALASKA'S FUTURE

December 7, 2020

ELECTRICAL FACILITY CLEARANCE REQUIREMENTS

Enclosed please find a copy of Chugach Electric Association, Inc.'s (Chugach) Electrical Facility Clearance Requirements policy. Periodically, copies of this policy are mailed out to various companies and agencies whose activities may bring their personnel in close proximity to Chugach's electrical facilities. Chugach distributes copies of this policy in an effort to help minimize and identify potential hazards for construction personnel and the general public. In addition, Chugach is concerned with preventing damage to its electrical facilities and any disruption of electrical service to its customers. Please note that the Electrical Facility Clearance Requirements publication may be found on Chugach's website at: www.chugachelectric.com. Click on the "Member Services" tab and go to "Regulations & Requirements", click on "Electrical Facility Clearance Requirements" (December 7, 2020).

For your additional information, Alaska State Statute ("AS 42.30.400 " Excavator's Notice of Proposed Excavation") has been included as an attachment.

Please thoroughly read and understand the entire document. It could save your life or the life of your employees and the public. We request that particular attention be paid to the following provisions:

(Paragraph B. 2.) "Under no circumstances will Chugach allow any of its underground cable(s) to remain energized after it has been exposed, unless it is protected by supplementary mechanical protection approved by Chugach or unless a *qualified person* is on site at all times".

(Paragraph H. 7.) "Chugach defines a *qualified person* as a journeyman lineman who holds a current Certificate of Fitness in the Journeyman Lineman category issued by the State of Alaska". These two provisions clearly emphasize Chugach's position relating to the exposure and approach to energized facilities.

Chugach strongly recommends that prior coordination takes place between Chugach and the construction entity or contractor , either during the design phase of a project or prior to the start of construction, to help eliminate or minimize conflicts. If you have questions, please contact the Line Operations Division at (907) 762-7679 and your call will be directed to the appropriate department for assistance.

Sincerely,

James Mullican

James Mullican
Senior Manager Line Operations

Enclosures

cc: MOA Development Services; State of Alaska OSHA Inspector; SOA Electrical Inspector; AGC, Cook Inlet Housing, GCI, ACS, Enstar, AWWU, Anchorage Home Builders Association

Chugach Electric Association, Inc.
5601 Electron Drive, P.O. Box 196300, Anchorage, Alaska 99519-6300 • (907) 563-7494 • Fax (907) 562-0027 • (800) 478-7494
www.chugachelectric.com

Issued December 7, 2020

CHUGACH ELECTRIC ASSOCIATION, INC.

CLEARANCE REQUIREMENTS FOR CONSTRUCTION OR MAINTENANCE NEAR ELECTRICAL FACILITIES

Chugach's concern for the safety of non-qualified personnel working adjacent to its electrical facilities, its concern for the public in general, and its requirement that only *qualified personnel* under the employ of *qualified electrical contractors* handle electrical facilities such as conductors, cables, poles, transformers, padmounted equipment, etc., is based upon the following considerations:

- The potential for serious injury and resulting liability is extremely high when dealing with all electric utility voltage levels up to 230,000 volts on overhead and underground lines.

- Certain types of equipment, particularly cable, can easily be damaged by improper handling. For example, when cable is hit or improperly suspended (common during excavation adjacent to cables), the scraped, cut, or stressed insulation will almost always result in premature cable failure. The highest risk to unqualified personnel is a cable failure while the cable is being handled during excavation or construction. Undetected cable damage may result in a subsequent cable failure with consumer outages for periods of up to a week's duration during winter conditions.

- The inherent stability of overhead pole lines or padmounted equipment is jeopardized with improper excavation and backfill, often resulting in hazardous voltage exposure to the public and contractors and leads to consumer power outages.

The above concerns can be minimized by the use of properly trained, licensed, and certified electrical outside linework personnel. The National Electrical Safety Code (NESC), the United States Occupational Safety and Health Administration (OSHA) and the Alaska State OSHA support this position as well as the clearances addressed herein.

The NESC, defines *"qualified"* as *"Having been trained in and having demonstrated adequate knowledge of the installation, construction, or operation of lines and equipment and the hazards involved, including identification of and exposure to electric supply and communication lines and equipment in or near the workplace*." Only qualified persons are permitted to handle or work on or adjacent to energized electrical facilities. This includes not only overhead pole lines but also padmounted

and underground facilities. Within the NESC, two rules specifically address the need for qualified persons to perform work on or near energized facilities:

> Rule 420B1 states, *"Employees whose duties require working on or in the vicinity of energized equipment or lines shall perform only those tasks for which they are trained, equipped, authorized, and so directed. Inexperienced employees shall: (a) work under the direction of an experienced and qualified person at the site; and (b) perform only directed tasks."*
>
> Rule 420B4 states, *"Employees who do not normally work on or in the vicinity of electric supply lines and equipment but whose work brings them into these areas for certain tasks shall proceed with this work only when authorized by a qualified person."*

OSHA 29CFR 1910.269 contains the training and documentation requirements for a qualified person.

OSHA 29CFR 1926.1408 addresses equipment operations near electrical lines. If any part of the equipment, when operated up to the equipment's maximum working radius, could get closer than twenty (20) feet to a power line, then the operator must notify the utility, verify line voltage, and implement one of the safety options in OSHA 29CFR 1926.1408.

At no time may equipment violate minimum required clearance to an energized power line: ten (10) feet for lines up to 50 kilovolts (kV), or ten (10) feet plus 0.4 inches per one (1) kV over 50 kV. Minimum clearances are provided below for common Chugach system voltages.

CHUGACH SYSTEM VOLTAGES	
Normal Voltage (Phase-to-Phase)	**Minimum Clearance Required At All Times**
Operations Near High-Voltage Overhead Power Lines to 50 kV	10 Feet
Over 50 kV to 200 kV	15 Feet
Over 200 kV to 350 kV	20 Feet

Specifically, 29CFR1926.1408 (b)(4)(ii) requires a "Safety Observer" during equipment operations if the equipment is operating where it is difficult for the operator to maintain twenty (20) feet of clearance to the overhead power line(s) by visual means. Alaska Statutes (AS) Sections 18.60.670 through Section 18.60.695 govern placement and operation of equipment near electrical lines or conductors. 29CFR1926, Subpart P addresses the specific requirements involved with trenching operations. These include prior notice to utility companies, prior location of utility facilities, and proper supports once the facilities are exposed. Furthermore, 29CFR Sections 1910.180; 1910.333; 1926.416; and 1926.651 regulate activities relative to job site electrical facilities.

In summary, Chugach's concern for the safety of all personnel affected by work adjacent to its energized facilities has led to the development of the attached policy.

ELECTRICAL FACILITY CLEARANCE REQUIREMENTS

The following requirements have been developed to help provide a safer work site to those personnel working adjacent to Chugach's electrical facilities and to protect Chugach facilities that are in proximity to the area of work being done by State or Municipal entities and private construction and maintenance projects.

A. NOTIFICATION

It is recommended that Chugach be informed of construction/maintenance activities as early as possible in the design process and be included in timely plan reviews. Any work that needs to be performed on Chugach facilities must have prior Chugach approval.

1. Overhead Facilities

Any work in the proximity of overhead power lines shall be preceded by a call to Chugach at (907) 762-7679 , at least 48 hours in advance, as notification of the planned work and compliance with OSHA 29CFR1926 (1408), and AS 18.60.670. If equipment, tools, machinery, or material must work in proximity closer than the minimum clearances outlined in OSHA 29CFR1926 (1408), and AS 18.60.670, the requirements of AS 18.60.680 shall be implemented before work can proceed. All necessary arrangements with Chugach by the requesting party for compliance with AS 18.60.680 shall be arranged in advance of the project start date.

2. Underground Facilities

Alaska Statutes 42.30.400 through 42.30.490, Anchorage Municipal Code, 24.40 and 26.90, and 29CFR1926, Subpart P place requirements on contractors who will be excavating around or adjacent to underground utilities. Advance notification requirements, underground facility locates, and the responsibilities for protection of utility facilities by contractors are specified in these regulations. All requests for locates of Chugach's underground facilities are to be made through the Alaska Digline at 811. Prior to excavation, Chugach's Line Operations Department shall be contacted at (907) 762-7679 a minimum of two (2) business days in advance of construction.

Locate surface markings are only reasonably accurate to +/- two (2) feet. Chugach and State law require hand-digging within two (2) feet of locate marks. In some cases, hand-digging may be required within three (3) or four (4) feet of the markings, depending on the facility involved and field

conditions at the project site. Maintaining locate marks is the responsibility of the party requesting the locate. Chugach may charge for re-locating and re-marking facilities that were previously marked.

B. UNDERGROUND CABLE EXCAVATION

1. Any excavation which is within a three (3) foot radius of a cable and parallels a cable for a distance greater than twenty (20) feet in length (see Section H.1 below) may require relocation of that cable. Excavations shorter in length and/or closer may also require relocation. At a minimum, cables that will require exposure must be exposed by *hand-digging* only, by a *qualified person* under the employ of a *qualified electrical contractor* (see Section H). See Drawing No. F-062388 attached.

2. Any excavation, such as a trench which crosses cable and/or conduit, shall be limited to twenty (20) feet in width and have provisions for the exposed cable/conduit to be supported every two (2) feet on a Chugach approved support system, to prevent cable damage. The cable support work and excavation within the three (3) foot radius (see Section H-1) shall be performed by a *qualified* person under the employ of a *qualified electrical contractor*.

   NOTE: When excavation must occur within the limits specified in B.1, and B.2, above, reasonable efforts will be made by Chugach to de-energize the cable if system conditions and personnel requirements allow. Even if the cable has been de-energized, a "Cable Watch" by a qualified person under the employ of a qualified contractor is still required. To request the de-energization of the cable, contact the Chugach Line Operations Department at (907) 762-7679 and your call will be directed to the appropriate department for assistance. Requests must be made three (3) business days in advance of the outage date requested. For emergencies, contact Chugach's Dispatch Center at (907) 762-4660.

   Under no circumstances will Chugach allow any of its underground cable(s) to remain energized after it has been exposed, unless it is protected by supplementary mechanical protection approved by Chugach or unless a qualified person is on site at all times.

3. Should any cable be exposed by non-qualified personnel, Chugach must be immediately contacted for field investigation before work may resume in the immediate area of such exposed cable.

Chugach recognizes that reasonable continuation of work may be required around energized underground cables after Chugach inspects the site. When this occurs, it is the responsibility of the construction contractor working at the site to arrange for qualified personnel as well as payment of the costs of said personnel and/or equipment. Chugach will neither arrange for, nor provide qualified personnel to satisfy this requirement unless Chugach determines this course of action is in its best interest, on a case-by-case basis. Where Chugach is otherwise forced to subsequently take steps to ensure the safety of the site, Chugach will advise the construction contractor that Chugach will pass these costs to the construction contractor.

4. In all cases, a final minimum burial depth of forty (40) to sixty (60) inches for primary-voltage (above 1000 volts) circuits and thirty (30) inches for secondary voltage (480V or below) circuits shall be maintained. If, however, existing Federal, State, or Municipal permit conditions require depths in excess of forty (40) inches, then the cable/conduit shall be buried at the depth required in the permit. The depth is measured from the top of the cable/conduit to final grade at the shallowest depth. Burial shall be in compliance with Chugach Construction Standard SUR 2-3, 5 or 6 (supplied upon request).

5. Projects that will increase final grade to sixty (60) inches or greater above Chugach direct buried cable shall require relocation at the customer's expense. Where cables are in conduit, review and written approval by Chugach is required for proposed grade changes resulting in a burial depth of sixty (60) inches or greater.

6. Projects which propose to modify the grade over Chugach's underground cables/circuits at voltages above 25kV require review and written approval by Chugach in all cases.

7. Excavations near underground cable/circuits energized above 25kV will require the following:

   a) Excavation Adjacent to Cables/Circuits Energized Above 24kV
   Chugach will require its Locate Contractor to notify excavators when a locate request includes the locating of cables are energized above 25kV.

   When excavation is planned that will come within ten (10) feet, expose, parallel, or undermine sections of Chugach's underground cables energized above 25kV, special precaution and safety

consideration must be taken. These distribution and sub-transmission cables operate at voltages of 34.5kV (34,000 volts) and transmission cables operate above 34.5kV up to 230kV (230,000 volts), provide power to tens of thousands of Chugach customers and require extraordinary protection. The following guidelines shall apply:

Chugach Line Operations Department shall be contacted at (907) 762-7679 in advance of the planned excavation a minimum of five (5) business days prior to beginning excavation. Chugach requires that a *qualified person* be on site at all times during excavation activity that comes within ten (10) feet of any circuit cable energized above 24kV. The contractor shall arrange and pay for a *qualified person* from Chugach or, with approval, from one of Chugach's approved and *qualified contractors*. Excavations closer than ten (10) feet shall require exposure of the cables (vac-truck, pot-holing or other approved means) at the intersecting point or at intervals of not less than every twenty-five (25) feet for parallel excavations by *qualified personnel* to determine the exact location of the cable prior to machine excavation.

Excavations within ten (10) feet of cables energized above 25kV can expose unqualified workers to potentially high fault currents and extremely unsafe conditions. Prior planning by the construction contractor with coordination and approval from Chugach for any excavation projects within ten (10) feet of circuits or cables energized above 25kV is mandatory.

Chugach may require a special locate utilizing Ground Penetrating Radar to locate critical facilities. "Pothole" locates utilizing vacuum excavation in conjunction with an air-knife tool may be used, with Chugach approval.

C. STRUCTURE EXCAVATION

1. Equipment Pads or Vaults

Temporary excavation is allowed with a maximum slope of 1:1 beginning three (3) feet from the exterior edge of a concrete pad or vault. The final grade shall consist of a level area radiating out a minimum of four (4) feet, measured from the exterior edge of the pad or vault, and a maximum slope of 2:1 beginning from that four (4) foot distance from the exterior edge of the pad or vault. For both temporary and final grade situations, a level

area extending ten (10) feet out from the edge of the concrete pad in front of equipment doors or access panels is necessary. Refer to Drawing No. F-062388 attached.

If the slope cannot be maintained at the grades specified above, additional protection such as barriers or piling is required. All shoring and excavation (closer than the above limits) shall be done by a qualified person(s) under the employ of a qualified electrical contractor.

2. Concrete-Encased Duct

Excavation wider than five (5) feet under a concrete-encased duct requires a method designed and certified by an Alaska-registered civil engineer and approved by Chugach. Installation of the temporary shoring or bracing shall be done under the supervision of a qualified person under the employ of a qualified electrical contractor.

D. POLE/GUY ANCHOR EXCAVATION

Excavation beginning no closer than a three (3) foot radius from a pole or guy anchor in stable soil conditions or a ten (10) foot radius from a pole or guy anchor in organic/unstable soil conditions is allowed, provided the slope from that point does not exceed 1:1. Refer to Drawing No. F-062388 attached.

Excavation closer than the limits defined above or within a ten (10) foot radius of more than one consecutive pole where excavation will be open while more than one pole is affected, may require shoring of each pole. Chugach review and approval of a shoring plan is required for all excavations where more than one pole is subject to an open excavation. Pole shoring shall be approved by Chugach for the specific excavation. All work for installing poles must be performed within OSHA guidelines. Shoring by other methods requires prior approval by Chugach on a case-by-case basis. Streetlight poles may be temporarily removed, subject to a written agreement with Chugach, prior to excavation.

Any excavation that may expose the pole butt requires a structural analysis of the pole shoring method. The analysis shall be performed by an Alaska-licensed professional engineer familiar with electrical transmission and distribution design standards in use by Chugach. Chugach also reserves the right, at contractor expense, to have a structural engineer examine any excavation deeper than the pole butt within a fifteen (15) foot radius of the pole.

All shoring and excavation (closer than the above limits) shall be done by a qualified person under the employ of a qualified electrical contractor.

E. RELOCATION REQUIRED

Where protection of the cable and structures cannot be maintained, as required in Sections A, B, and C, relocation of those facilities will be required prior to the intended work and at the contracting agency's expense.

F. BACKFILL

Replacement backfill for electrical facilities must be in accordance with Chugach specifications and performed by a qualified person under the employ of a qualified electrical contractor.

A damaged underground facility may not be reburied until it is repaired or relocated to the satisfaction of Chugach.

G. INSPECTION AND APPROVAL

All work on or in the immediate vicinity of Chugach facilities, such as backfilling, temporary support, shoring, and relocations are subject to prior approval and inspection by Chugach. On large projects where inspection time is substantial, all costs for inspection shall be the responsibility of the agency or entity contracting for the work. Reimbursement to Chugach shall be in accordance with Chugach's tariff, Section 8.

For any questions or approvals involving these requirements contact Chugach Line Operations at (907) 762-7679 and your call will be directed to the appropriate department for assistance.

H. MISCELLANEOUS

1. Depending on the soil type, depth and length of the excavation, type of Chugach facility involved, and the certainty of the cable locate markings, excavations can be approved within a two (2) foot radius of cable on a case-by-case basis.

2. Stable soil conditions are defined as all dry and non-organic. Soil conditions shall be evaluated and approved on a case-by-case basis by Chugach. The evaluation will be done using 29CFR1926, Subpart P, "*Excavations*" as a guide.

3. Excavation, except as noted, shall be defined as mechanically performed by a backhoe, trencher, scraper, grader, auger, or other equipment.

4. Cables are defined as insulated conductors whether buried directly or in conduit. The guidelines for cables also include 600-Volt pedestals and other small electrical apparatus associated with cables but not included under pads or vaults.

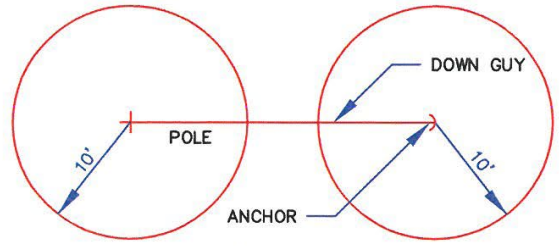
5. Spare conduit is not included in these provisions except to the extent of providing temporary support when exposed and inspected by Chugach prior to the placement of proper backfill.

6. Chugach defines a *qualified electrical contractor* as a contractor registered in the State of Alaska who has an Electrical Administrator's License in the Outside Linework category; or who has an employee with an Electrical Administrator's License in the same category registered with the contractor.

7. Chugach defines a *qualified person* as a journeyman lineman who holds a current Certificate of Fitness in the Journeyman Lineman category issued by the State of Alaska.

8. Chugach defines *hand-digging* as the removal of soil with hand tools, an air-knife tool (compressed air jet), or a vacuum truck.

Issued December 7, 2020

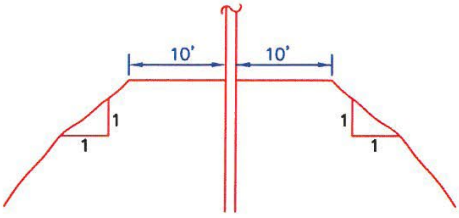


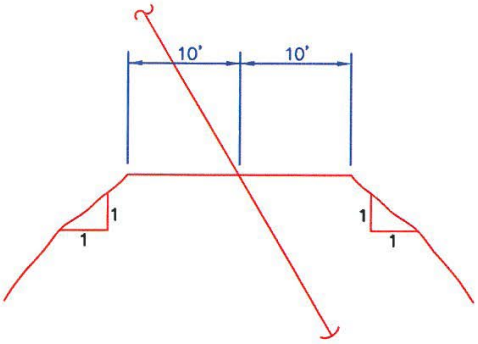
PLAN

(RADIUS OF UNDISTURBED SOIL)

NOTE:

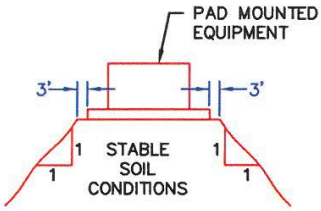
FOR VERY UNSTABLE SOIL CONTACT CHUGACH ELECTRIC.





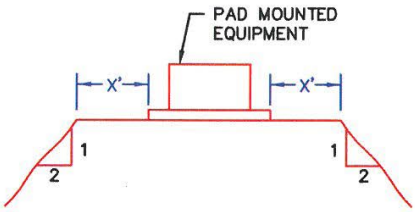
PROFILE

POLES/GUYS



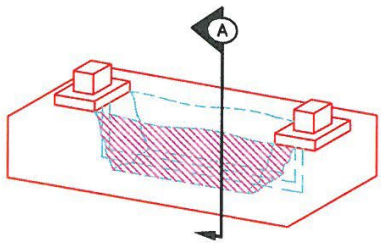
DURING CONSTRUCTION

SUPPLEMENTAL SUPPORT REQUIRED FOR EXCAVATIONS WITHIN 5' OF PADMOUNTED EQUIPMENT LOCATED ON UNSTABLE SOIL CONTACT CHUGACH ELECTRIC

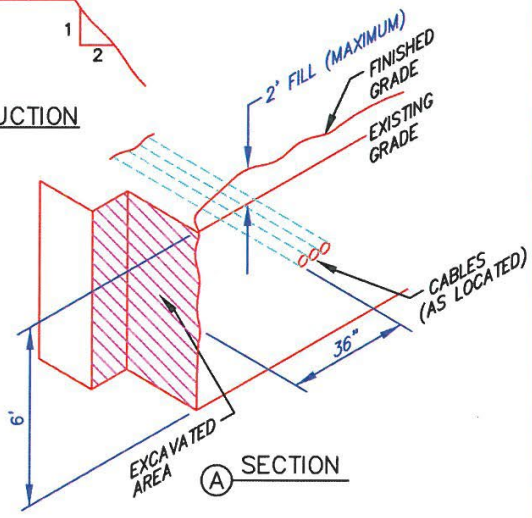


AFTER CONSTRUCTION

X': 10' ON DOOR/ACCESS SIDES. 4' ON OTHER SIDES.



PARALLEL EXCAVATION



SECTION

STRUCTURES/CABLES

REV. NO.: 3 DATE: 1/28/98

Standards Engineer:

Mgr., Dist. Engineering:

Mgr., Const. & Maint.:

Dir., T&D Services Div.:

Chugach Electric Association, Inc.

EXCAVATION LIMITS

DEFINITION OF LIMITS REQUIRING NO ADDITIONAL STRUCTURAL SUPPORT

DRAWING NUMBER F-062388

SHEET 1 OF 1

Sec. 42.30.450. Waiver of requirements by written agreement.

An operator and an excavator may, by written agreement, waive the requirements of AS 42.30.400 - 42.30.490 that the excavator notify the operator of planned excavations and that the operator locate underground facilities. The agreement must identify the geographic areas to which the waiver applies and the time period for which the waiver is valid.

Sec. 42.30.460. Underground facility owner.

If the operator of an underground facility is not the owner of the facility and if the operator cannot be identified or has been identified but cannot be reached in a reasonable amount of time, the excavator may give the notice required by AS 42.30.400 - 42.30.490 to the owner of the underground facility and the owner shall assume the duties and responsibilities of the operator under AS 42.30.400 - 42.30.490.

Sec. 42.30.490. Definitions.

(1) "damage" means

(A) the substantial weakening of structural or lateral support of an underground facility;

(B) penetration, impairment, or destruction of any underground protective coating, housing, or other protective device; and

(C) the partial or complete severance of an underground facility to the extent that the project owner or facility operator determines that repairs are required;

(2) "emergency" means

(A) a condition that constitutes a clear and present danger to life, health, or property; or

(B) an unplanned service interruption;

(3) "excavation" means

(A) an activity in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means;

(B) road maintenance that changes the original road grade;

(C) demolition or movement of earth by equipment, tools, or explosive device except tilling of the soil less than 12 inches in depth for agricultural purposes;

(4) "excavator" means a person who conducts excavation in the state;

(5) "inaccessible" means impossible or unreasonably difficult to reach due to conditions beyond the control of the underground facility operator;

(6) "notification center" or "center" means a service through which a person is able to call one number to notify member operators of underground facilities that an excavation is proposed and to request the operators to mark facilities located inside of the proposed excavation area;

(7) "operator" means a person who supplies a service for commercial or public use by means of an underground facility;

(8) "person" means any individual, public or private corporation, political subdivision, government agency, municipality, industry, partnership, copartnership, association, firm, trust, estate, or any other entity whatsoever;

(9) "remote" means not accessible by road;

(10) "underground facility" means a pipe, sewer, conduit, cable, valve, line, or wire, including attachments and those parts of poles or anchors that are below ground, for use in connection with the storage or conveyance of water, sewage, telecommunications, cable television, electricity, petroleum, petroleum products, hazardous liquids, or flammable, toxic, or corrosive gas;

(11) "unstaffed" means not normally staffed with employees;

(12) "working day" means a day on which an underground facility operator is open for regular business.

ALASKA STATUTES

TITLE 42

PUBLIC UTILITIES & CARRIERS

Sec. 42.30.400. Excavator's notice of proposed excavation.

(a) Before beginning an excavation, an excavator shall give notice of the proposed excavation to each underground facility operator who has an underground facility in the area of the proposed excavation and request the operator to field mark the location of its underground facility. The excavator shall notify an underground facility operator who subscribes to a notification center by giving notice to the center. The excavator shall notify an underground facility operator listed in the applicable telephone directory who is not a subscriber to a notification center by giving notice directly to the operator.

(b) Except in the case of an emergency locate request or a request to locate in a remote, unstaffed, or inaccessible location, the excavator shall notify an underground facility operator who may have a facility in the area of a proposed excavation at least two but not more than 15 working days before the date scheduled for beginning the excavation. In the case of a request to locate in a remote or unstaffed location, the excavator shall notify the operator at least 10 but not more than 20 working days before the scheduled date for beginning excavation.

(c) In an emergency, the excavator shall immediately notify each underground facility operator in the area of the emergency and of the need for the excavation and request prompt location of underground facilities.

Sec. 42.30.410. Operator's response to request to locate; immunity related to unmarked or inaccurately marked facilities.

(a) An underground facility operator shall accept requests to locate underground facilities during the operator's regular business hours. An operator who receives a request to locate shall maintain for at least one year an accurate record of the request and responses to the request.

(b) When an underground facility operator receives a request to locate, it shall notify the excavator of the location of the underground facilities that the operator is able to field mark with reasonable accuracy and field mark those facilities. If the operator owns, uses, or operates an underground facility that is identified as being in the area of the proposed excavation but that the operator cannot field mark with reasonable accuracy, the operator shall provide the excavator with the best information available to the operator about its location and shall provide on-site assistance until the facility is located or until the excavator no longer needs assistance in locating that facility.

(c) The field marks for an underground facility buried 10 feet deep or less must be located within 24 horizontal inches of the outside dimensions of the facility. For a facility buried deeper than 10 feet, the operator shall locate the field marks within 30 horizontal inches of the outside dimensions of the facility. The operator shall use stakes, paint, or other clearly identifiable material to show the field location of the underground facility. The marker used to designate the approximate location of an underground facility must follow the current color code standard used by the American Public Works Association.

(d) Except for an underground facility in a remote, unstaffed, or inaccessible location, an underground facility operator shall respond to a request to locate promptly. A response is considered to be prompt if it is made within two working days after the operator receives the request or at a later time so long as the response occurs before the beginning of the excavation. For an underground facility in an accessible remote or unstaffed location, the operator shall respond within 10 working days after the operator receives the request or at a later time so long as the response occurs before the beginning of excavation.

(e) After an operator has field marked an underground facility, the excavator is responsible for maintaining the markings.

(f) An excavator may not begin to excavate until each underground facility has been field marked.

(g) When an operator has field marked an underground facility once at the request of an excavator, the operator has the right to receive compensation from the excavator for costs incurred in responding to subsequent requests to locate the same underground facility during the same excavation project if the excavator failed to maintain the original marking.

(h) If an excavator discovers an underground facility that was not field marked or was inaccurately field marked, the excavator shall immediately stop excavating in the vicinity of the facility and shall notify the operator of the discovery. The excavator may notify the operator by means of a notification center. The operator shall treat the notification as a request to locate in an emergency and shall respond accordingly. An excavator may not be held liable for inadvertent damage caused to an unmarked or an inaccurately marked underground facility.

(i) Unless the request to locate is made in response to an emergency, an underground facility operator has the right to receive compensation for costs incurred in responding to a request to locate that gives the operator less notice than the minimum notice required by this section. This subsection may not be interpreted to require the operator to respond to the request to locate within the time requested in the notice.

Sec. 42.30.420. Responsibility of construction project owners.

The owner of a construction project that will require excavation shall indicate in bid documents or contracts for construction the existence of underground facilities that the project owner knows are located inside of the proposed area of excavation. This requirement does not release the excavator from the excavator's responsibility under AS 42.30.400 - 42.30.490.

Sec. 42.30.430. Obligations concerning the conduct of excavations.

(a) An excavator shall use reasonable care to avoid damaging an underground facility. The excavator shall

(1) determine, without damage to the facility, the precise location of an underground facility whose location has been marked;

(2) plan the excavation to avoid damage to and minimize interference with an underground facility in or near the excavation area; and

(3) to the extent necessary to protect a facility from damage, provide support for an underground facility in and near the construction area during the excavation.

(b) An excavator who, in the course of excavation, contacts or damages an underground facility shall notify the operator. If the damage causes an emergency, the excavator shall also alert appropriate local public safety agencies and take reasonable steps to ensure public safety. A damaged underground facility may not be reburied until it is repaired or relocated to the satisfaction of the operator. The operator of an underground facility that was damaged during excavation shall arrange for repair or relocation of the facility as soon as practical.

Sec. 42.30.440. Penalties; injunctive relief.

(a) In addition to all other remedies provided by law, a person who violates a provision of AS 42.30.400 - 42.30.490 is subject to a civil penalty of not less than $50 nor more than $1,000 for each offense if the violation results in or significantly contributes to damage to an underground facility.

(b) If the court finds that an excavator is violating or threatening to violate a provision of AS 42.30.400 - 42.30.490 and the violation may result in damage to an underground facility, the court may grant injunctive relief to the underground facility operator.

CHUGACH ELECTRIC ASSOCIATION, INC.
2022-2023 Outside Electrical Line Construction Contractors

STURGEON ELECTRIC COMPANY, INC.					
1301 E 64th Avenue Anchorage, Alaska 99518	Contacts	Office	Cellular	Fax	Email Address
Main	Main	907-344-0321		907-522-2068	
General Foreman	Ian Whitmore	907-344-0321 x2351	907-440-7438		Iwhitmore@myrgroup.com
Foreman	Josh Henrick	907-344-0321 x2364	907-617-3186		Jhenrick@myrgroup.com
Foreman	Jason Anelon	907-344-0321	907-301-2245		
Foreman	Anthony Pickens	907-344-0321	907-440-9146		
Alaska District Manager	Larry Rhymer	907-344-0321 x2358	907-250-8201		LRhymer@myrgroup.com
Admin	Sheri Gorne	907-344-0321 x2352	907-351-8256		SGorne@myrgroup.com

NORTHERN POWERLINE CONSTRUCTORS, INC.					
7941 Sandlewood Place Anchorage, Alaska 99507	Contacts	Office	Cellular	Fax	Email Address
Main	Main	907-344-3436		907-349-1813	
President	James Zehnder	907-365-7513	907-440-6635		jamesz@northernpowerline.com
Vice President of Operations	Buck Guffey	907-365-7562	907-885-4687		jguffey@northernpowerline.com
General Foreman	Barry Perrell	907-365-7516	907-441-9452		barryp@northernpowerline.com
General Foreman	Rob Zehnder		907-223-2375		rzehnder@northernpowerline.com
Admin	Lanette Bell	907-365-7505			lanetteb@northernpowerline.com

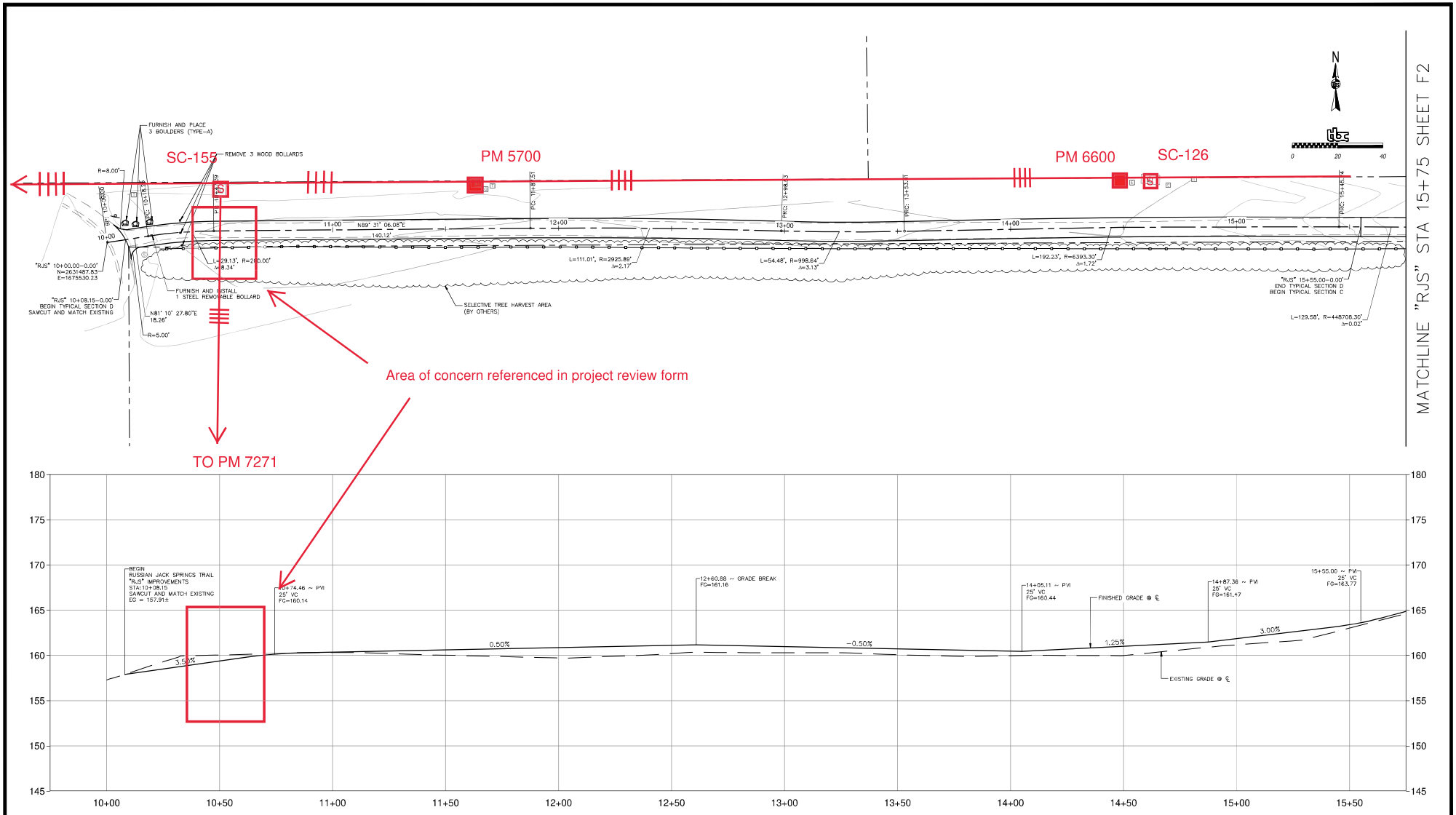
LINEWORKS, LLC					
P.O Box 201146 Anchorage, Alaska 99520	Contacts	Office	Cellular	Fax	Email Address
Main	Main	907-240-0722	907-841-6661		
Member	Steve Horwatt	907-240-0722	907-240-0722		steve@lineworksalaska.com
Electrical Administrator/Member	Nathan Maki	907-841-6661	907-841-6661		nate@lineworksalaska.com
Foreman	Cecil Colley	907-440-1816	907-440-1816		Cecilcolley3@gmail.com

ELECTRIC POWER CONSTRUCTORS, INC					
3305 Arctic Blvd, Suite 201 Anchorage, Alaska 99503	Contacts	Office	Cellular	Fax	Email Address
Main	Main	907-646-5100		907-522-1182	
Project Manager/General Foreman	Ben Miebs	907-631-4702	907-830-7304		bmiebs@epsinc.com
Project Coordinator	Pam Conn	907-631-4701	907-351-9784		pconn@epconstructors.com
President	David Burlingame	907-646-5103	907-440-2479		dburlingame@epsinc.com
Health & Safety Coordinator	Erin Marchwick	907-646-5162	907-414-1675		emarchwick@epsinc.com
Electrical Administrators	Benjamin Miebs & Eric Nielsen	907-631-4702	907-830-7301		

ALASKA LINE BUILDERS, LLC					
PO Box 521405 Anchorage, Alaska 99652	Contacts	Office	Cellular	Fax	Email Address
Main	Main	907-892-1550		907-892-1552	
Electrical Administrator	Jeff Faulkner	907-892-1550			
Member - Project Manager	Andy Korzeniewski	907-892-1550	907-232-0731		andyk@aklinebuilders.com
Member - General Foreman	Robby Schachle	907-892-1550	907-232-8248		robby@aklinebuilders.com
Project Coordinator	Savanha House	907-892-1550	907-355-6395		savanha@aklinebuilders.com
Office Manager	Amey Armachain	907-892-1554	907-350-5650		amey@aklinebuilders.com

TREE CLEARING CONTACT

CARLOS TREE SERVICE					
2451 Cinnabar Loop Anchorage, Alaska 99507	Contacts	Office	Cellular	Fax	Email Address
Main	Main	907-522-6049		907-522-5004	
President	Dale Carlos	907-522-6049	907-830-2530		dale@carlostreeservice.com
Project Manager	Heather Henderson	907-522-6156	907-830-2538		heather@carlostreeservice.com
Accts Receivable	Cindy Carlos	907-522-6174	907-830-2531		cindy@carlostreeservice.com
Office Manager	Gwen Petron	907-522-6136			gwen@carlostreeservice.com



FIELD BOOKS	BM NO.	LOCATION	ELEV.
DESIGN:			
STAKING:			
ASBUILT:			
CONTRACTOR:	BASIS OF DATUM:		
INSPECTOR:			

CONSTRUCTION RECORD

VERTICAL DATUM

DATA	DRAWN BY	CHECKED BY
BASE	TBC	
TOPOGRAPHY	TBC	
PROFILE	TBC	
SANITARY SEWER	---	
STORM SEWER	---	
WATER	---	
GAS	---	

DATA	DRAWN BY	CHECKED BY
TELEPHONE	---	
ELECTRIC	---	
CABLE TV	---	
TRAFFIC SIGNAL	---	
DESIGN		TBC
QUANTITIES		TBC
MUNI FINAL CHECK		

PLAN CHECK

REV	DATE	DESCRIPTION	BY

REVISIONS

The Boutet Company, Inc.
601 E. 57th Place #102
Anchorage, AK, 99518
Ph. 907-522-6776
Fx. 907-522-6779
License No. AECC957

CONSULTANT

95% NOT FOR CONSTRUCTION

SEAL

ANCHORAGE PARKS AND RECREATION
HEALTHY PARKS, HEALTHY PEOPLE

MUNICIPALITY OF ANCHORAGE

PARKS AND RECREATION DEPARTMENT

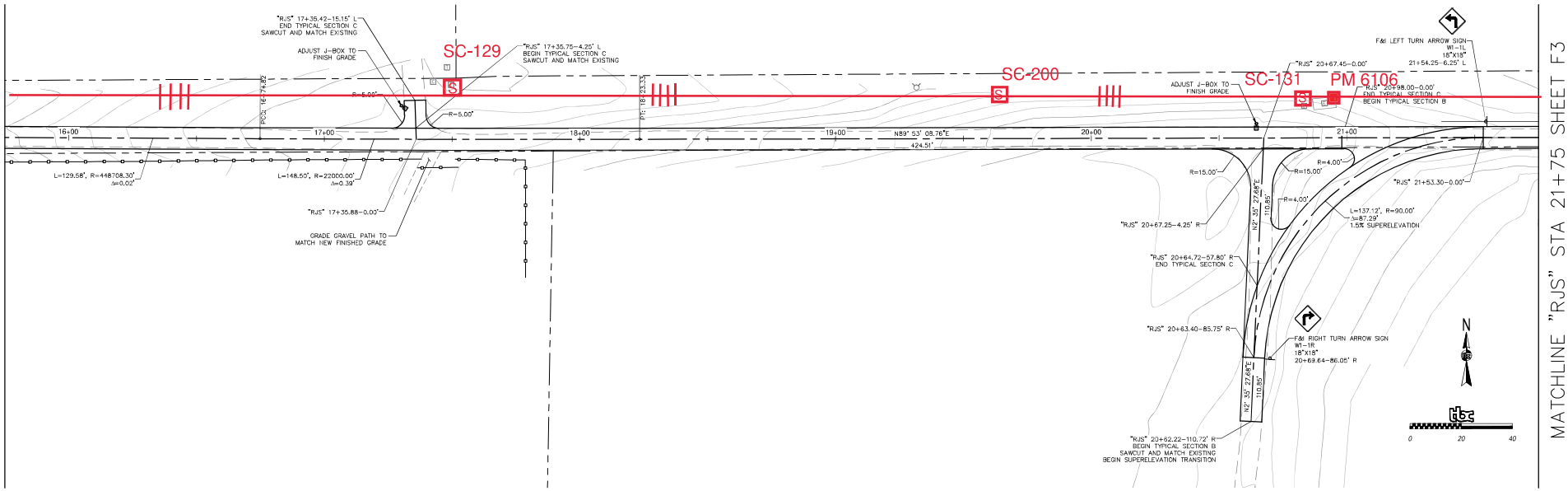
RUSSIAN JACK SPRINGS TRAIL REPAIRS

"RJS" 10+08.15 TO 15+75

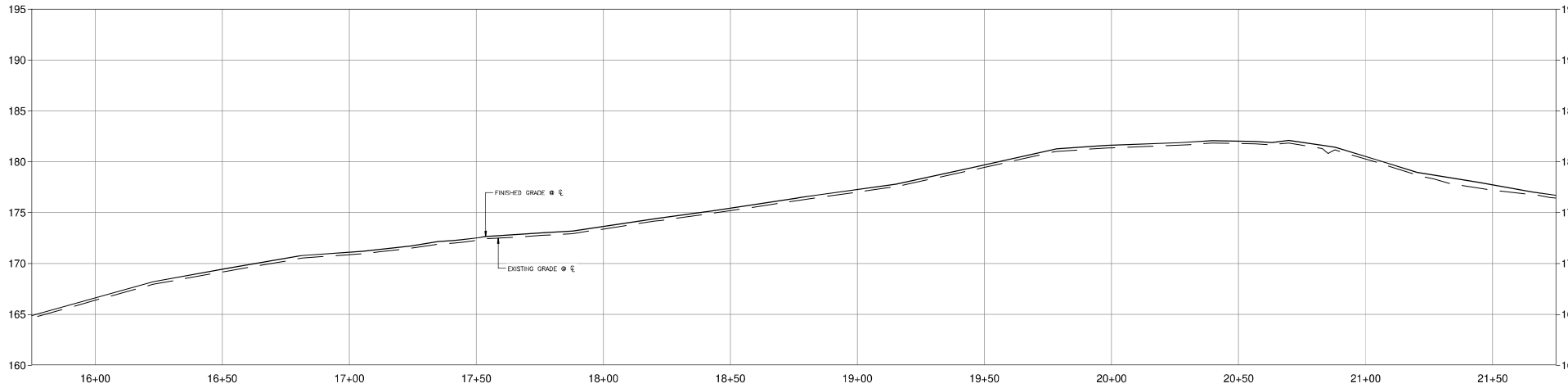
SCALE	HOR. PER SHEET	DATE: 05/13/2022	GRID: N/A
	VER. PER SHEET	STATUS: 95% DESIGN REVIEW	

SHEET F1 of F4

MATCHLINE "RJS" STA 15+75 SHEET F1



MATCHLINE "RJS" STA 21+75 SHEET F3



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DESIGN:			
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CONTRACTOR:	BASIS OF DATUM:		
INSPECTOR:			

CONSTRUCTION RECORD

VERTICAL DATUM

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TOPOGRAPHY	TBC		ELECTRIC	---	
PROFILE	TBC		CABLE TV	---	
SANITARY SEWER	---		TRAFFIC SIGNAL	---	
STORM SEWER	---		DESIGN	TBC	
WATER	---		QUANTITIES	TBC	
GAS	---		MUN. FINAL CHECK		

PLAN CHECK

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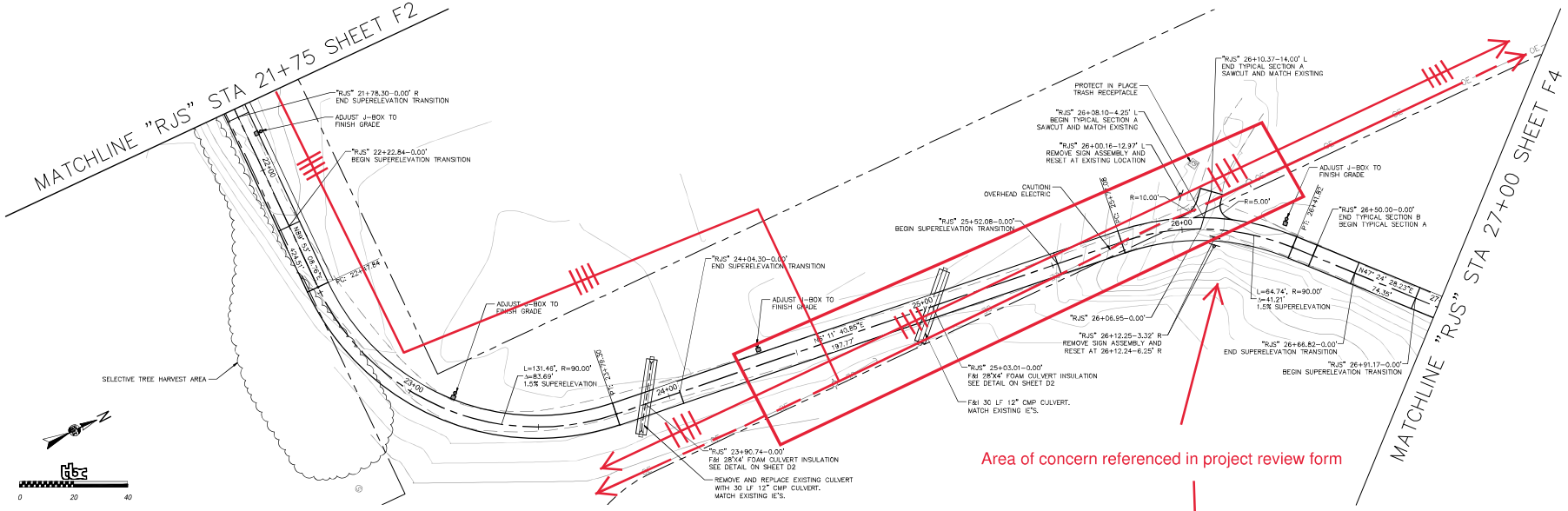
RUSSIAN JACK SPRINGS
TRAIL REPAIRS
"RJS" 15+75 TO 21+75

SCALE HOR. PER SHEET
VER. PER SHEET

DATE: 05/13/2022
GRID: N/A
STATUS: 95% DESIGN REVIEW

SHEET F2 of F4



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DESIGN:			
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CONTRACTOR:	BASIS OF DATUM:		
INSPECTOR:			

CONSTRUCTION RECORD

VERTICAL DATUM

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TOPOGRAPHY	TBC		ELECTRIC	---	
PROFILE	TBC		CABLE TV	---	
SANITARY SEWER	---		TRAFFIC SIGNAL	---	
STORM SEWER	---		DESIGN		TBC
WATER	---		QUANTITIES		TBC
GAS	---		MUN. FINAL CHECK		

PLAN CHECK

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RUSSIAN JACK SPRINGS
TRAIL REPAIRS

"RJS" 21+75 TO 27+00

SCALE HOR. PER SHEET
VER. PER SHEET

DATE: 05/13/2022
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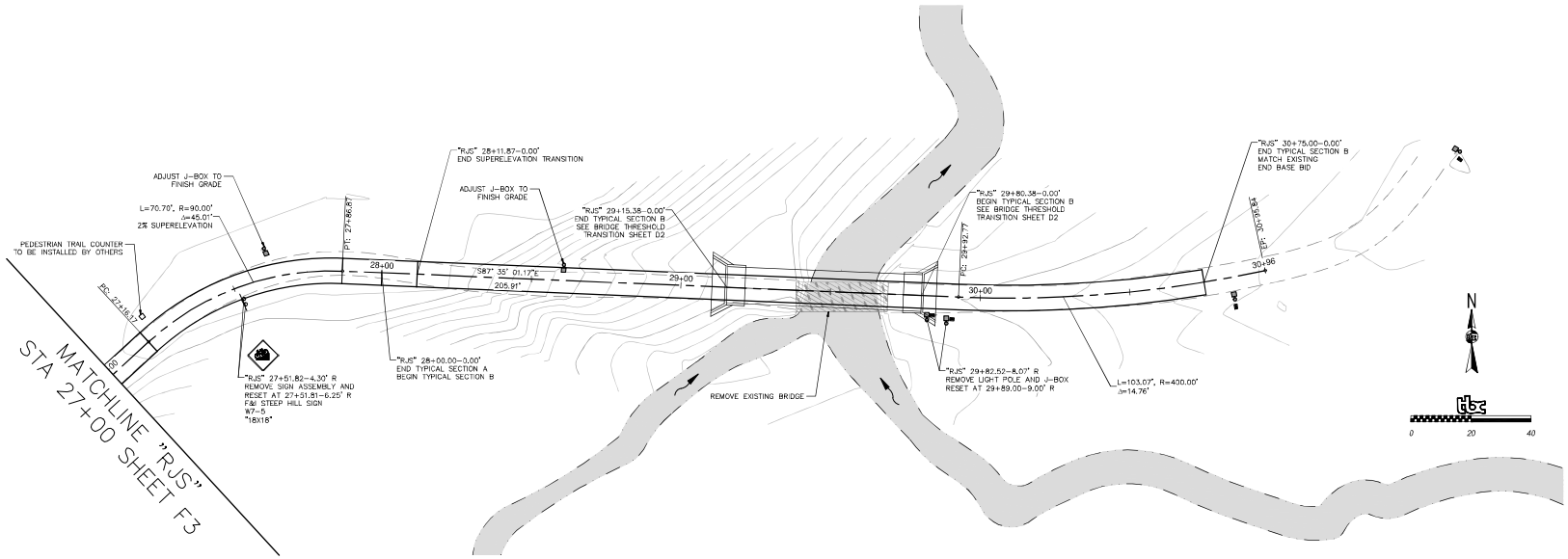
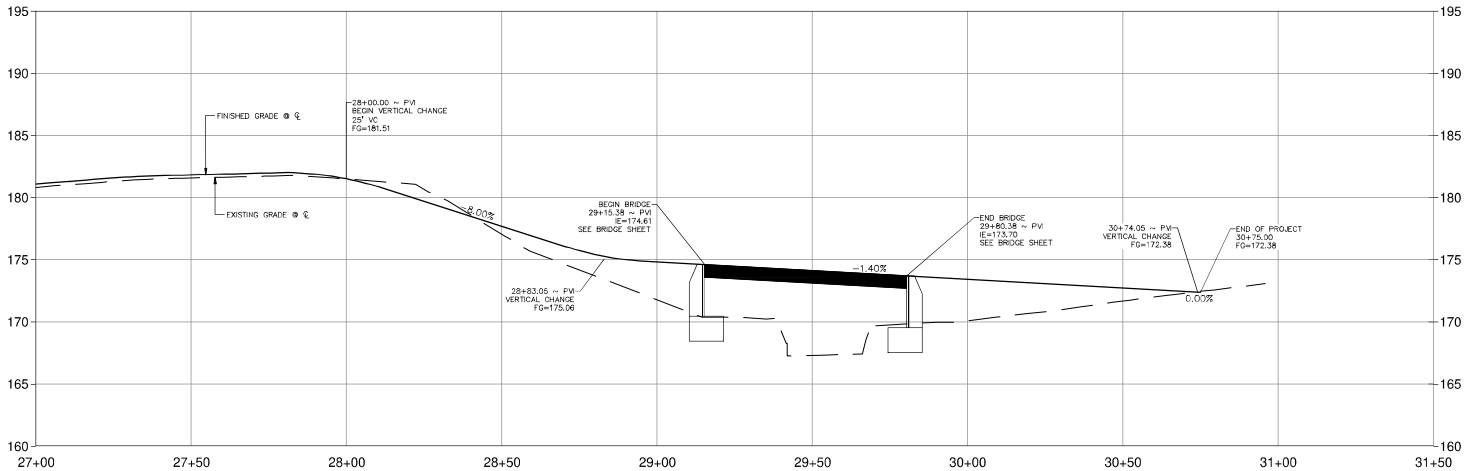
STATUS: 95% DESIGN REVIEW

SHEET F3 of F4





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CONSTRUCTION RECORD

VERTICAL DATUM

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BASE	TBC		TELEPHONE	---	
TOPOGRAPHY	TBC		ELECTRIC	---	
PROFILE	TBC		CABLE TV	---	
SANITARY SEWER	---		TRAFFIC SIGNAL	---	
STORM SEWER	---		DESIGN		TBC
WATER	---		QUANTITIES		TBC
GAS	---		MUN. FINAL CHECK		

PLAN CHECK

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601 E. 57th Place #102
Anchorage, AK, 99518
Ph. 907-522-6776
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PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS
TRAIL REPAIRS

"RJS" 27+00 TO 31+50 (END)

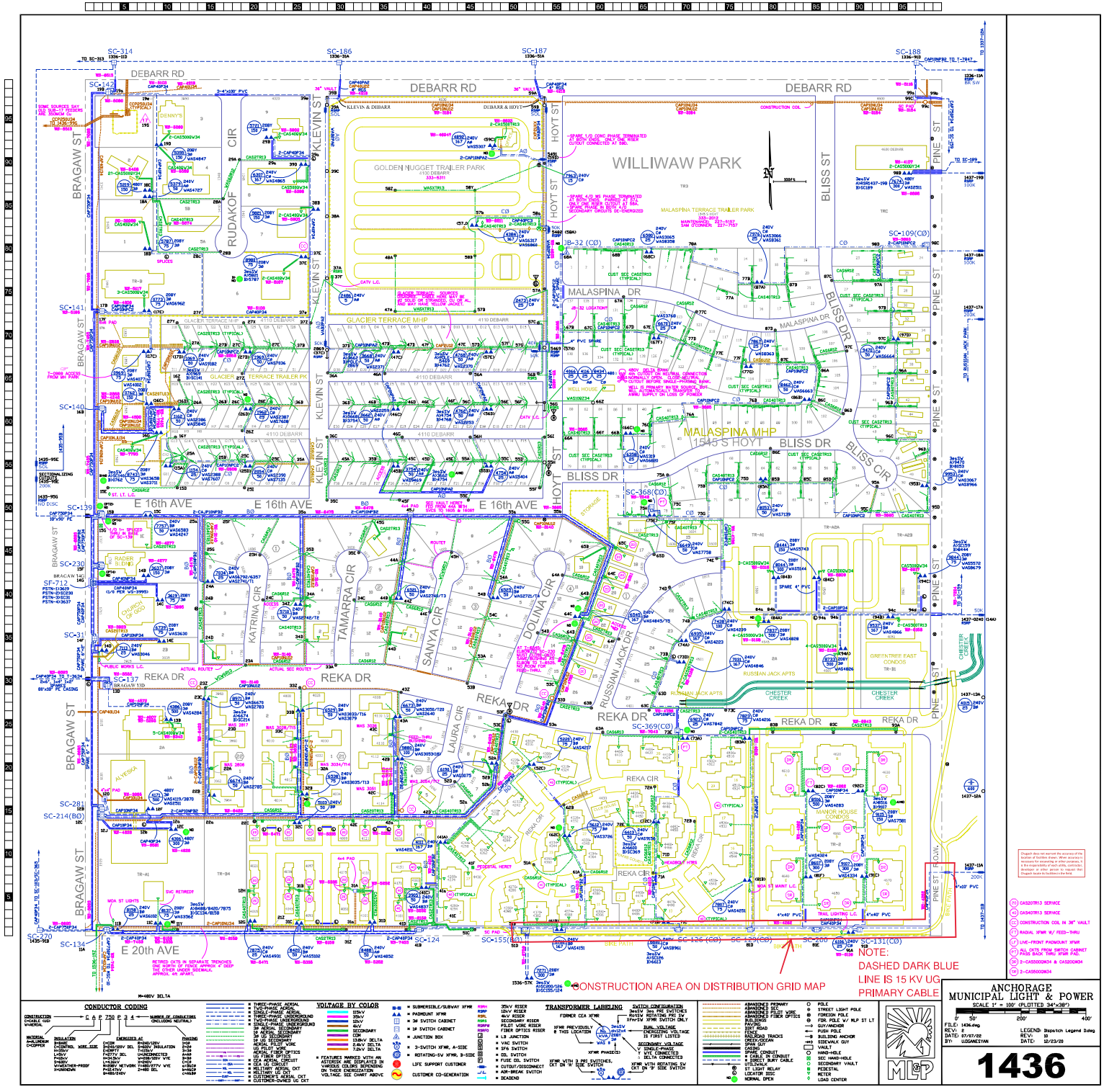
SCALE HOR. PER SHEET
VER. PER SHEET

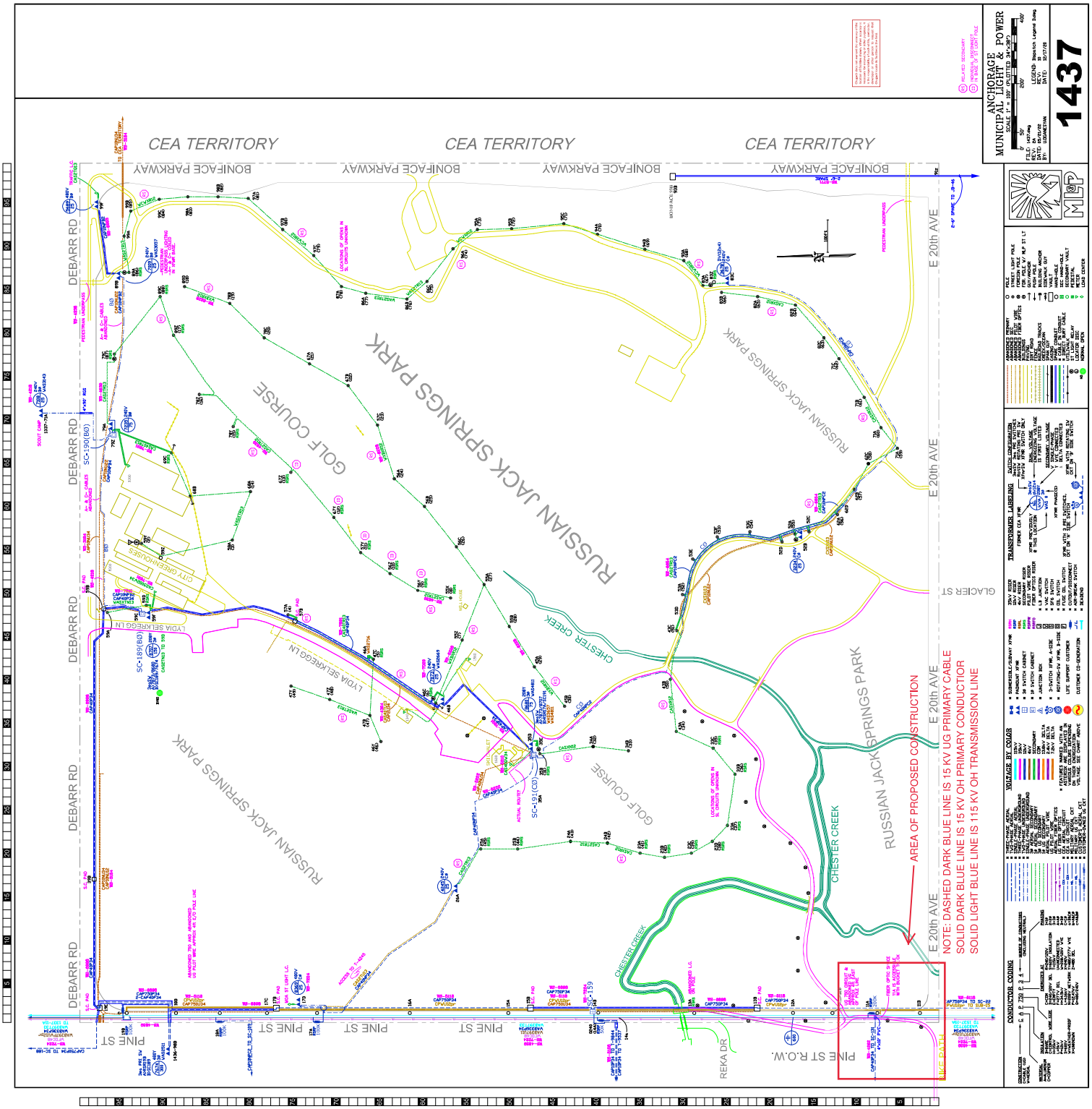
DATE: 05/13/2022

GRID: N/A

STATUS: 95% DESIGN REVIEW

SHEET F4 of F4





SHEET INDEX

G1 - PROJECT TITLE SHEET
G2 - DRAWING INDEX & KEY MAP
G3 - NOTES, LEGEND & ABBREVIATIONS
G4 - SURVEY CONTROL

P1 - SUGGESTED PEDESTRIAN DETOUR ROUTE AND CONSTRUCTION ACCESS

D1 - TYPICAL SECTIONS
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F1 - RUSSIAN JACK SPRINGS TRAIL 10+00 TO 15+7
F2 - RUSSIAN JACK SPRINGS TRAIL 15+75 TO 21+7
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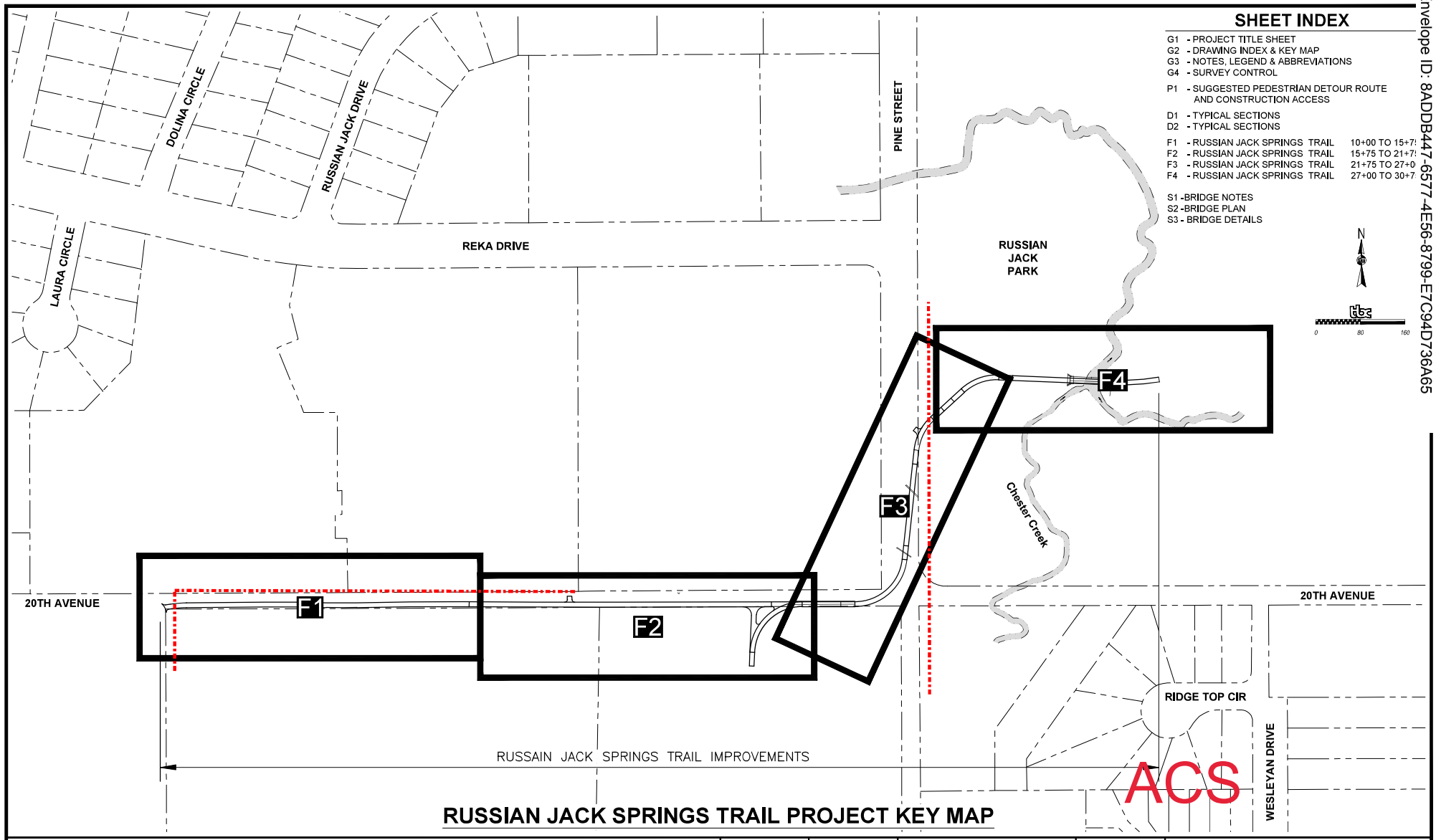
F4 - RUSSIAN JACK SPRINGS TRAIL 27+00 TO 30+7

S1 - BRIDGE NOTES
S2 - BRIDGE PLAN
S3 - BRIDGE DETAILS



RUSSIAN JACK SPRINGS TRAIL PROJECT KEY MAP

ACS

FIELD BOOKS	BM NO.	LOCATION	ELEV.
DESIGN:			
STAKING:			
ASBUILT:			
CONTRACTOR:	BASIS OF DATUM:		
INSPECTOR:			

CONSTRUCTION RECORD — VERTICAL DATUM

DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY
BASE	TBC		TELEPHONE	—	
TOPOGRAPHY	TBC		ELECTRIC	—	
PROFILE	TBC		CABLE TV	—	
SANITARY SEWER	—		TRAFFIC SIGNAL	—	
STORM SEWER	—		DESIGN	TBC	
WATER	—		QUANTITIES	TBC	
GAS	—		MUN. FINAL CHECK		

PLAN CHECK

REV	DATE	DESCRIPTION	BY

REVISIONS

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Anchorage, AK. 99518
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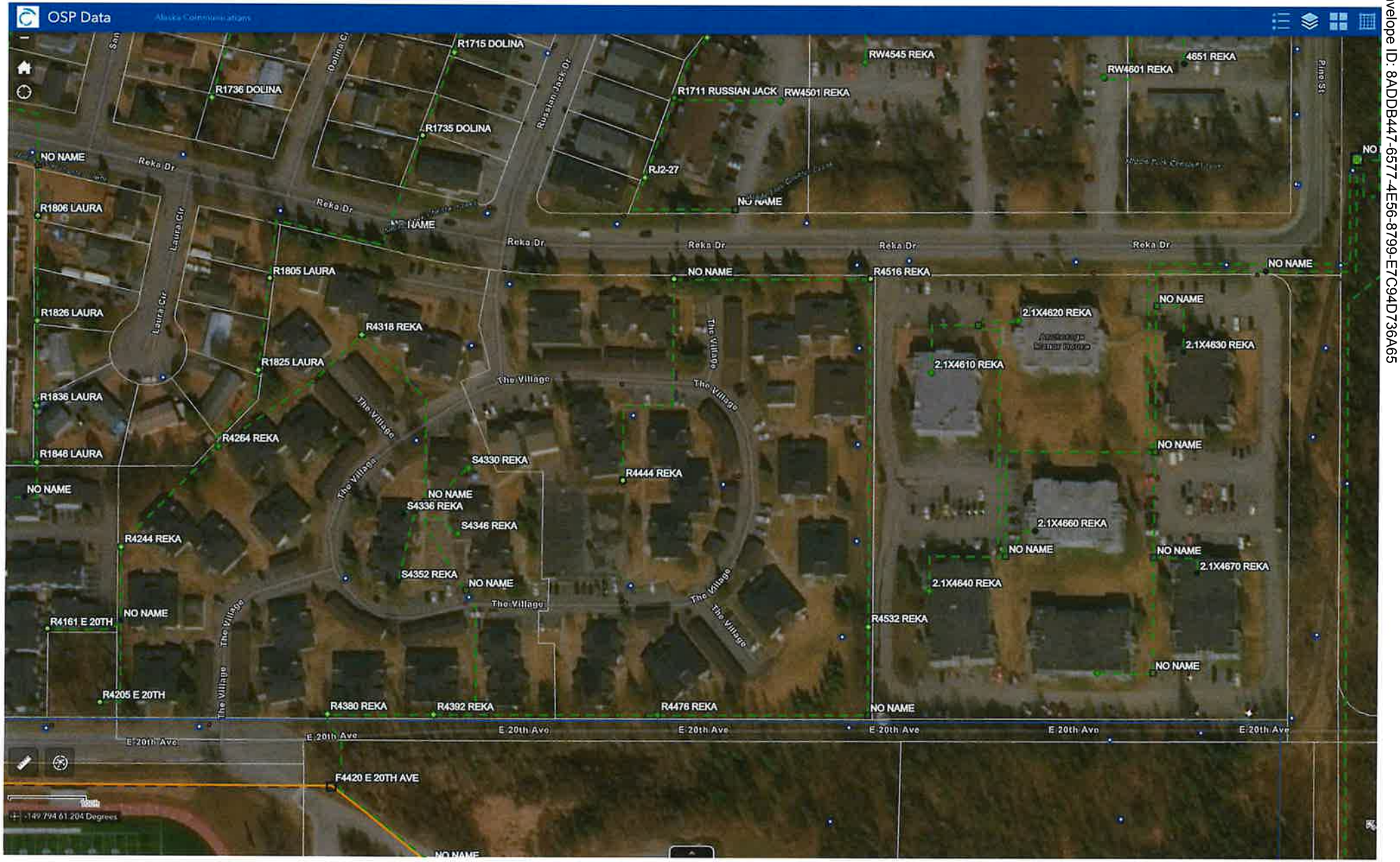
MUNICIPALITY OF ANCHORAGE

PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS
TRAIL REPAIRS

DRAWING INDEX & KEY MAP

SCALE — HOR. PER SHEET / VER. PER SHEET
DATE: 05/13/2022
GRID: N/A
STATUS: 95% DESIGN REVIEW
SHEET G2 of G4



ACS

Excavation Safety for Natural Gas Pipelines

Safety



ENSTAR Natural Gas Company provides natural gas service through 3,580 miles of gas mains to over 142,000 customers in South Central Alaska. ENSTAR's gas pipeline system is designed, installed, and maintained with the highest regard for safety in compliance with applicable federal, state, and local government statutes and regulations. ENSTAR is regularly inspected to ensure that its operation meets industry standards.

The US Department of Transportation, Pipeline & Hazardous Materials Safety Administration (PHMSA) oversees minimum safety regulations for the transportation of natural gas by pipelines. The DOT safety regulations are currently published in Title 49, Part 190, 191, 192 & 199 of the Code of Federal Regulations (CFR).

The Law

Call 811 before you dig; it's free and it's the law. Calling for locates is now as simple as dialing **811** or go online to www.akonecall.com. In Alaska, dialing **811** connects you with Alaska Digline Inc. Alaska Digline Inc. will take your excavation information and notify all affected utilities. Utilities have two business days to mark their utilities after receiving your call.

PHMSA is the excavation damage enforcement agency in the State of Alaska. The enforcement program protects the public from the risk of pipeline ruptures caused by excavation damage. Should an excavator violate any of the damage prevention requirements prescribed in 49 CFR part 196, Subpart B, they may face civil and or criminal penalties. Civil penalties of not more than $200,000 for each violation, not to exceed $2,000,000 may be levied. Criminal penalties may be enforced with imprisonment of not more than 5 years per violation. More information about the PHMSA ruling can be found at http://www.phmsa.dot.gov/.

Excavation Safety for Natural Gas Pipelines

Pipeline Markers

Do not assume there is not a pipeline if there is no marker.

ENSTAR transmission pipelines are generally marked above ground with pipeline markers similar to the one shown. Transmission pipelines are located in the vicinity of the pipeline markers. Transmission pipelines are steel and range in size from 2" to 20" in diameter. They are typically coated with a protective coating. Pipeline coatings are predominantly yellow and black, but may also be green or brown.

Typical ENSTAR Pipeline Marker

Distribution pipelines are steel, or High Density polyethylene with locate wire. These pipelines range in size from 1" diameter to 12" in diameter. Gas "Mains" are typically found in street right-of-ways or utility easements and supply the natural gas to an entire street or subdivision.
Natural gas service lines are connected to the gas main. Service lines generally serve a single building or small group of buildings on private property. Service lines are typically ½" to 2" in diameter. Service lines can be rigid steel, steel tubing, copper or polyethylene with locate wire. Gas mains and service lines are generally black or yellow in color.

Steps to Follow

1 **Line Locating: A Free Service:** To request a locate, dial **811**, the Nationally recognized One-Call number and you will be connected to Alaska Digline Inc. Call at least 2 but not more than 15 working days before the date scheduled for beginning the excavation.

2 **Request a Relocate Ticket when**: the marks have not been maintained, the excavator is unable to accurately "read" the locate marks, the marks have been destroyed, or the marks are more than 15 working days old.

3 **Excavating around Locate Marks:** In Alaska, you must use reasonable care when digging within 24 horizontal inches of the outside dimensions of the locate marks. If you are digging to a depth of 10 feet or greater, you must use reasonable care within 30 horizontal inches. *Treat all buried lines as if they were active.*
Typical means of excavating around locate marks:
- Hand Dig
- Air Knife
- Vac Truck

4 **Standby/Inspection Requirements:** Extreme caution must be exercised whenever pipelines are encountered. All excavations in the immediate vicinity of ENSTAR Natural Gas facilities (including backfill, compaction, temporary support, and shoring), are subject to prior approval and inspection by ENSTAR personnel. Pipeline inspections are provided whenever an excavator is working within 10 feet of a transmission pipeline, or within 5 feet of a distribution line. If excavation occurs without either locates or standby (qualified ENSTAR personnel), ENSTAR Natural Gas reserves the right to excavate to determine if there has been any damage to ENSTAR Natural Gas facilities. If damage has occurred ENSTAR Natural Gas has the right to charge the excavator for repairs.

Excavation Safety for Natural Gas Pipelines

5 **Support for Steel Pipeline Crossings:** If an excavation below a **steel gas** pipeline leaves the pipeline unsupported for a distance of more than 20 feet, the excavator must provide additional support for the pipeline. Support must be provided in a way as to not damage the pipe or its coating during construction, backfill placement, and compaction. Generally, a support spacing of 5 feet or less will provide the required support. ENSTAR Engineering must approve all excavations crossing steel pipelines above 4-inch diameter. If support is required, ENSTAR engineering written approval is required prior to beginning construction. Call ENSTAR Engineering (907)334-7740 for further information. Extra care must be taken when geotextile fabric and/or rigid insulation are used. Geotextile fabric and/or rigid insulation shall be sufficiently separated from steel pipeline and in addition to continuous support under the pipeline, compacted fill material shall be placed between the geotextile fabric/rigid insulation and the pipeline (see item 10 clearance). Care shall be taken to insure stability for the ENSTAR facility. Failure to properly protect ENSTAR's facilities could result in future damage if differential settlement occurs.

6 **Support for Polyethylene Line Crossings:** If an excavation is below a **polyethylene gas pipeline** the excavator must continuously support such pipeline during construction, backfill placement, and compaction. Geotextile fabric and/or rigid insulation shall be sufficiently separated from the polyethylene gas pipeline to prevent undue stress during the compaction/settlement process. (see item 10 clearance)

7 **Excavation Parallel to Pipeline: Whenever an excavation (horizontal or vertical) is performed within 5 feet of a distribution pressure pipeline and 10 feet of a transmission pressure pipeline, the gas pipeline must be exposed to visually determine the exact location.** When parallel excavations are expected to expose or undermine sections of pipeline, the excavator must notify ENSTAR engineering in advance. Care must be taken not to damage the pipeline, or to induce stresses due to differential settlement following construction**. Long parallel excavations exposing pipelines can be very dangerous if not properly performed and shall not be attempted without prior approval by ENSTAR.** Unless otherwise approved by ENSTAR engineering, all excavations parallel to a gas pipeline require that the pipeline be exposed at intervals no greater than every 25 feet to visually determine the pipeline's exact location. Contact ENSTAR Engineering at (907)334-7740 for additional information.

8 **Blasting:** All plans for blasting that will occur within 500' of any Company Facility, shall be reviewed by an ENSTAR engineer. The person performing the blasting shall take all appropriate measures as recommended by ENSTAR engineering, (i.e. require minimum distance from facilities, minimize blasting charge intensity, etc.) to protect the integrity of the Company's Facilities. A leak survey shall be performed before and after any blasting activity, within 500' of any Company Facility.

9 **Trenchless Excavation (Vertical or Horizontal): Whenever a trenchless excavation (horizontal or vertical) is performed within 5 feet of a distribution pressure pipeline and 10 feet of a transmission pressure pipeline, the gas pipeline must be exposed to visually determine the exact location.** If the trenchless excavation is expected to cross the pipeline within the aforementioned distances, the pipeline in question shall be fully exposed to a minimum of 1 foot beneath the pipeline prior to the expected crossing to ensure that the pipeline is not unduly damaged due to ground movement in the immediate vicinity of the pipeline. **When performing a trenchless excavation parallel to a gas pipeline, the gas pipeline must be exposed at intervals of 25 feet or less to visually determine the pipeline's exact location.** Trenchless excavation is defined as drilling, directional drilling, boring, pile installation etc.

10 **Clearance:** Natural Gas pipelines require a **12 inch minimum separation from other underground structures** not associated with ENSTAR's pipeline system. Additional clearance from other underground structures may be required to allow proper maintenance and reduce the possibility of damage due to

Excavation Safety for Natural Gas Pipelines

the proximity of other structures (49 CFR § 192.325.) This clearance requirement includes rigid insulation and geotextile fabrics. **ENSTAR requires a 36-inch minimum separation from certain electrical facilities, including any grounded components i.e. ground rods, non-insulated conductors and associated structures.**

11 **Pipeline Cover:** ENSTAR pipelines in public rights-of-way are generally installed with 36 inches to 48 inches of cover, and in private rights-of-way with 12 inches to 36 inches of cover. Projects that decrease cover or increase cover in excess of 60 inches must receive prior approval from ENSTAR Engineering Department (907)334-7740**.** ENSTAR has limited ability to prevent the removal of cover over gas pipelines. Increasing pipeline cover more than 5 feet or decreasing pipeline cover to less than 3 feet may be considered a damage that may result in relocation of the gas pipeline at the expense of the Excavator. The depth of cover listed above cannot be assumed after installation. The excavator is responsible for any damage to ENSTAR pipelines regardless of the depth at which they are encountered.

12 **Landscaping:** Most landscaping activities require locates, and when it is determined that landscaping activities are within 5 feet of a distribution pipeline, or 10 feet of a transmission pipeline, Inspection/Standby requirements as listed above are applicable. Planting of trees and shrubs over existing pipelines is not permissible and can present a safety and reliability hazard to the pipeline.

Damage Reporting

If you damage a gas line, immediately Call 911 and ENSTAR at 1-844-SMELL GAS (1-844-763-5542). It's the Law.

Gas lines that have been pulled, stretched, kinked or bent could be damaged underground away from where the line is connected. If you pull or stretch gas lines call ENSTAR at (907)277-5551 and an ENSTAR Representative will investigate for possible underground leakage.

Pipe Wall Protection

Dents, scrapes, gouges and scratches reduce pipeline wall thickness and affect the safety of the facility in two ways. First, the reduced wall thickness decreases the pressure at which the pipeline can safely operate. Second, the damage serves as a stress concentration that can cause a future brittle failure of the pipeline. **An ENSTAR representative must inspect each dent, scrape, gouge or scratch, no matter how small, before it is reburied.**

Corrosion Protection

ENSTAR's **steel** pipelines are protected from corrosion by a dielectric coating and an impressed current or galvanic anode cathodic protection system. Direct contact with metallic objects (a short) or removal of the protective coating can compromise this system. Contact the ENSTAR Engineering Department (907)334-7740, whenever coating damage or a short is encountered. **An ENSTAR representative must inspect each short or section of damaged coating before it is reburied.**

Locate Wire Protection

ENSTAR's **polyethylene** pipelines are installed with a parallel copper wire, which is used to locate the pipeline. If the locate wire or wire coating is damaged, ENSTAR's ability to properly locate the pipeline may be severely compromised. Electrical continuity must be maintained. **An ENSTAR representative must**

Excavation Safety for Natural Gas Pipelines

inspect and/repair each possible locate wire damage before it is reburied, accidental locate wire damage repair is free of charge.

Excess Flow Valves

An Excess Flow Valve (EFV) is a safety device installed in a natural gas service line near the gas main that is designed to automatically shut off the flow of natural gas in the event that the service line is broken. Effective April 14th, 2017, all gas companies nationwide are required to install an EFV or a curb-side shut off valve in any new or renewed service lines.

What does this mean to you as an Excavator?
Should you damage a natural gas service line that has an EFV, the gas will blow for a short duration and shut off automatically if the flow of gas is sufficient to close the EFV. Damages that do not sever the service line completely may not cause the EFV to close and the gas will continue to blow. Regardless, **you must report all damages to ENSTAR immediately**. EFVs are designed to allow a small amount of "bleed-by" so they can be reset without excavating the gas main. Backfilling a damaged service line with gas bleeding underground is extremely dangerous and could fuel an explosion if it is not repaired timely. **Do not assume a damaged service is dead or abandoned if it is not blowing gas**. The EFV may have shut down the flow of gas. Report all damages immediately by calling **1-844-SMELL-GAS.**

Please remember that the vast majority of ENSTAR service lines WILL NOT have an EFV. Should you damage a service line without an EFV, gas will blow at full line pressure until ENSTAR can arrive to shut it off. Your best protection against damaging underground utilities is to call **811** for locates and hand dig within 2 feet of the locate marks.

What to do if You Smell Gas

Natural gas actually does not have a natural odor, but mercaptan compounds are added to distribution system gas to enable you to smell a leak. If you smell the characteristic Sulphur odor, call ENSTAR at 1-844-SMELL GAS (1-844-763-5542)

Qualified Personnel Requirements

Only qualified individuals meeting all applicable requirements may perform work on Natural Gas facilities. At a minimum, such individuals must comply with applicable federal, state and local regulation, statutes, and ordinances.

Additional pipeline information can be found on the following websites:

PHMSA/DOT	https://phmsa.dot.gov/pipeline
Common Ground Alliance	http://www.commongroundalliance.com
Pipeline 101	http://www.pipeline101.com
Alaska Digline, Inc.	http://www.akonecall.com/

ENSTAR Natural Gas Company

ALASKA PIPELINE COMPANY

NORSTAR Pipeline Company

Excavation Safety for Natural Gas Pipelines

For further information about ENSTAR, visit our web site @ www.enstarnaturalgas.com

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION
DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

III

SUBMITTAL LIST

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

SUBMITTAL LIST

Job #: _____ Contractor: _____

Submittal Number	Rev.	Description
10.04.9		Private Property Disposal Site Permission; Fill Permit
10.04.12		Property Owner 48-Hour Closure Notice
10.04.13		Street Closures; Traffic Control Plan
10.04.15		Temporary Erosion and Sediment Control Plan
10.04.17		Utility Notification Verification
10.04.17		Pre-Construction Utility Inspection Report
10.04.17		Post-Construction Utility Inspection Report
10.04.19		Record Drawings
10.04.20		Operating and Maintenance Manuals
10.05.3		Construction Progress Schedule
10.05.3		Schedule of Values
10.05.4		Notice of Unusual Working Hours
10.05.7		Proposed Substitutions
10.05.9		Contractor's Authorized Representatives and Employees
10.05.10		Subcontractor's List
10.05.31		Winter Suspension Plan
10.06.6		Contractor Obtained Permits (ROW, Noise, Electrical, Dewatering, etc.)
10.06.9		Certificate of Insurance
10.06.12		Certified Payroll
10.07.1		Material Weight Tickets
10.07.7		ADOL Notification of Compliance
10.07.7		Notarized Certificate of Compliance
20.02.4		Storm Water Pollution Prevention Plan (SWPPP)

Submittal Number	Rev.	Description
20.02.4		eNOI
20.02.14		eNOT and Final SWPPP
20.02.16		SWPPP Inspection Reports
20.10.7		Survey Cross-Section Measurement - Usable and Unusable Excavation
20.12.2		Dewatering Plan
20.27.4		Survey Cross-Section Measurement - Trench Excavation Disposal of Unusable or Surplus Material
30.01.9		Concrete Temperature Maintenance Procedure Proposal
40.06.2		Certified Analysis of Asphalt for A.C. Pavement from Refining Laboratory
40.06.3		Asphalt Job Mix Formula for A.C. Pavement
65.02.2		Survey Field Notes
65.02.3		Party Chief's Daily Diary
65.02.5		Survey Cross Sections
65.02.5		Notification Prior to Cross Section Work
65.02.13		Survey Electronic Data
65.02.16		Survey Quantity Measurements (Clearing, Clearing & Grubbing, Pavement Removal, Pavement Rotomilling, Pavement Reclamation, Road Excavation, Trench Excavation, Topsoil, Seeding, and other areas of misc. final surfacing application such as asphalt, concrete, RAP, etc. which are measured in SF or SY)
70.12.2		Traffic Control Plan (TCP)
75.02.4		Landscaping Watering Schedule
75.03.2		Topsoil Analysis Test Reports
75.04.2		Seed Certification Tag

NOTE: The above list of submittals is not all inclusive. In addition to the above, the Contractor is required to comply with all submittal requirements as required or identified in the plans, specifications, M.A.S.S., or as directed by the Engineer.

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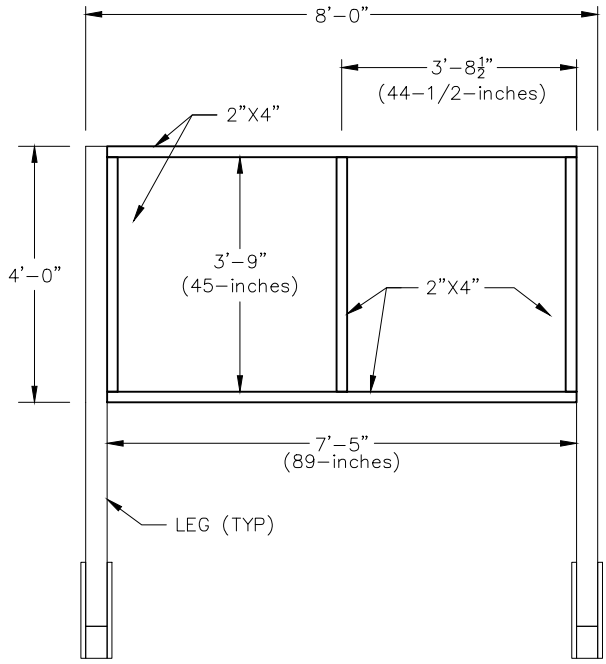
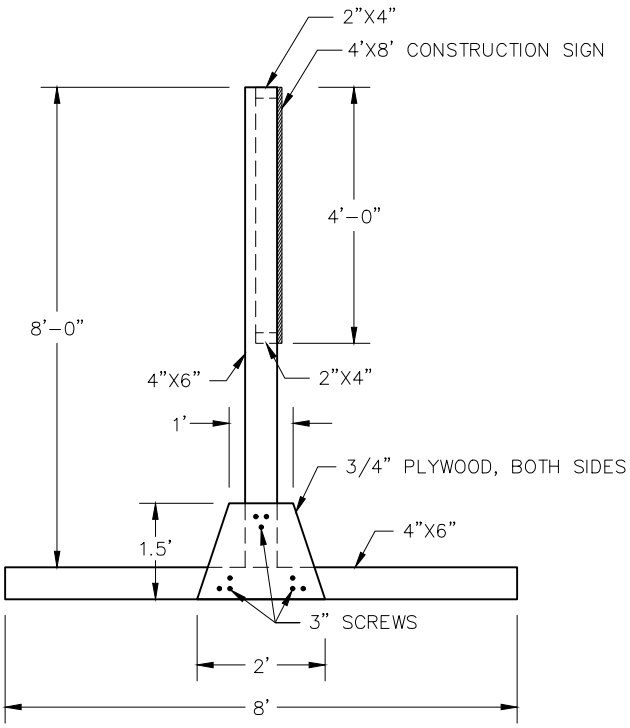
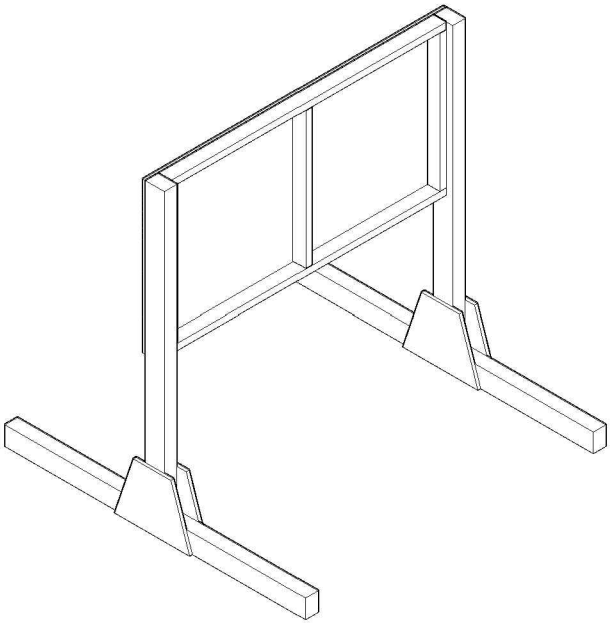
IV

SPECIAL DETAILS







BACK

FRONT

MUNICIPALITY OF ANCHORAGE

MOA/PM&E CONSTRUCTION SIGN LEGS & FRAMES DETAIL

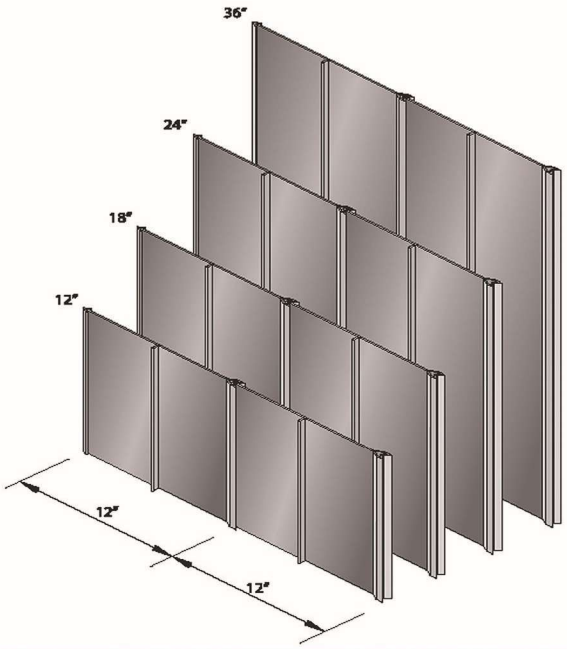
SCALE: NTS

REVISED: 9/21

Century Products
The Leader in Hardscape Protection

CPU-Series Utility Grade Root Barrier Panels

Exclusively designed for maximum depth installation where protection of fiber optics, utility lines or sewer lines exceeds 4'-6' in depth. Manufactured from durable polyethylene material. Century Products panels feature 90° root deflecting ribs and self-interlocking panel to panel connection that eliminates joiner strips and gluing. As well as being a root impervious barrier, the CPU-Series panels direct roots downward to prevent costly damage to surrounding hardscapes and landscapes. These versatile panels can be used in linear and surround applications. The CPU-Series panels are designed to reduce maintenance costs and liabilities for government agencies, cities, and private industry.

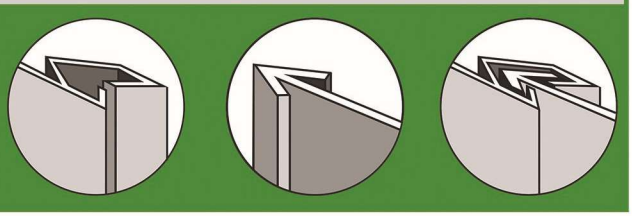


Linear Application: For root pruning of existing trees or in planting situations where one or more trees are in close proximity to hardscapes.

-OR-

Tree Well Application: For new tree planting or when the hardscape encircles the planter.

INTERLOCKING JOINTS



Features:

- Flexible Top Safety Edge
- Versatile barrier for linear or tree well applications
- Manufactured with recycled plastic
- Raised 90° extruded root deflecting ribs, spaced 5 ½" to 6" apart
- 90° ½" - ¾" raised rib, side interlocking panel to panel joining system
- Adjustable anti-lift polyethylene panels which can be separated into 1' (30cm) sections

SPECIFICATIONS

CPU-SERIES: CPU12-2, CPU 18-2, CPU 24-2, CPU 36-2, CPU 48-2, CPU 60-2, and CPU 72-2 90° ½"-¾" raised rib, side interlocking panel to panel joining system.
Material: Polyethylene with ultraviolet inhibitors.
Thickness: 0.085"

MATERIAL	Polyethylene	
THICKNESS	0.085"	
PROPERTIES	ASTM TEST METHOD	VALUE POLYETHYLENE COPOLYMER
Tensile Stress @ Yield	D638	4100 TO 4300 PSI
Elongation @ Break	D638	40%
Tensile Modulus of Elasticity	D638	150,000 PSI
Flexural Stiffness	-	-
Cantilever Beam	D747	125,000 PSI
Tensile Impact	D1822	50 Ft. lbs/in^2
Environmental Stress	-	-
Crack Resistance	D1693	1 Hr.
Hardness, Shore D	D2240	68

U.S. Standard
For Technical or Field Support, please call: 714.632.7083

Tolerances may vary in order to maintain the integrity of post-consumer materials and assure the material structure. We make no other warranties, express or implied, and specifically disclaim the warranty of merchantability or fitness for a particular purpose.

TREE WELL APPLICATION

Raised 90° Extruded Root Deflecting Ribs

LINEAR APPLICATION

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

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V

SOILS INFORMATION (NOT USED)

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

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VI

TEMPORARY CONSTRUCTION PERMITS AND EASEMENTS (NOT USED)

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VII

EQUAL EMPLOYMENT OPPORTUNITY SPECIAL PROVISIONS

CONTRACT COMPLIANCE SPECIFICATIONS

EQUAL EMPLOYMENT OPPORTUNITY

SPECIAL PROVISIONS

Every municipal contract shall include language substantially the same as the following: The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, marital status, or physical or mental disability. The contract will comply with all laws concerning the prohibition of discrimination including, but not limited to, Title 5 and Title 7 of the Anchorage Municipal Code.

Every municipal contract shall state, in all solicitations or advertisements for employees to work under the contract, that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, marital status, or physical or mental disability.

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VIII

MINIMUM RATES OF PAY

Laborers' & Mechanics' Minimum Rates of Pay

Title 36. Public Contracts AS 36.05 & AS 36.10 Wage & Hour Administration Pamphlet No. 600 (Pamphlet 600) is hereby incorporated in its entirety. Pamphlet 600 is available for free download at http://labor.state.ak.us/lss/pamp600.htm.

The Municipality of Anchorage will include a paper copy of the wage rates in the signed Contract.

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IX

CONTRACT

C O N T R A C T

Invitation to Bid No. **2023C_____**

Contract No. **C-2023_____**

NAME AND ADDRESS OF CONTRACTOR:

_____

_____

_____

Check appropriate box:

☒ **Incorporated in the State of**

MUNICIPALITY OF ANCHORAGE, acting through _____ (hereinafter the Owner).

Contract for _____

BID SCHEDULES	**ITEMS**	**PLAN SHEET FILE NUMBERS**	**AMOUNT**
			$ _____

Total Amount : $ _____

THIS CONTRACT, entered into by the MUNICIPALITY OF ANCHORAGE, ALASKA, acting through the Owner named above, and the individual, partnership, or corporation named above, hereinafter called the Contractor, WITNESSETH that the parties hereto do mutually agree as follows:

Statement of Work: The Contractor shall furnish all labor, equipment and materials and perform the Work above described, for the amount stated, in strict accordance with the Contract Documents.

CONTRACT DOCUMENTS

I. This CONTRACT consisting of 4 pages.

II. The Bid Proposal Section ___ consisting of ____ pages numbered as ____, **as contained in ITB 2023C_____.**

III. The Contract Performance and Payment Bond **_____.**

IV. The Contractor's Certificate of Insurance Dated **_____.**

V. Municipality of Anchorage Standard Specifications dated 2015 (MASS) Incorporated by Reference, **as contained in ITB 2023C_____.**

VI. Specifications consisting of the following:

Supplemental Provisions Section _____ consisting of _____ pages, with attachments Exhibit A through F, **as contained in ITB 2023C_____.**

VII. Equal Opportunity Special Provisions and Forms Section _____ consisting of _____ pages, **as contained in ITB 2023C_____.**

VIII. Disadvantaged/Women-Owned Business Enterprise (DBE/WBE) Specification Section _____ consisting of _____ pages, **as contained in ITB 2023C_____.**

IX. The Laborers' and Mechanics' Minimum Rates of Pay dated September 1, 2015 Section _____ consisting of _____ pages, **as contained in ITB 2023C_____.**

X. Submittal List Section _____ consisting of _____ page, **as contained in ITB 2023C_____.**

XI. The Drawings consisting of _____ sheets numbered _____, **as contained in ITB 2023C_____.**

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the Contract Date entered below.

MUNICIPALITY OF ANCHORAGE, ALASKA VENDOR _____

BY _____ BY _____
Signature Signature

_____
Printed Name

Purchasing Officer or designee _____
Title

_____
Title

_____
Date of Signature

Date of Signature and Contract Date:

_____

CONTRACT AND PERFORMANCE AND PAYMENT BOND SIGNATURE INSTRUCTIONS

1. The full name and business of the Contractor shall be inserted on Page 1 of the Contract and on the Performance and Payment Bond, hereinafter the Bond.
2. Two copies of the Contract and the Bond shall be manually signed by the Contractor. If the Contractor is a partnership or joint venture, all partners or joint ventures shall sign the Contract and the Bond except that one partner or one joint venturer may sign for the partnership or joint venture when all other partners or joint venturers have executed a Power-of-Attorney authorizing one partner or joint venturer to sign. The Power-of-Attorney shall accompany the executed contract and the Bond.
3. If the Contractor is a corporation, the President of the corporation shall execute the Contract and the Bond unless a Power-of-Attorney or corporate resolution shall accompany the executed Contract and Bond.
4. The Bond shall be returned to the Purchasing Division undated. The Contract Date shall be inserted on the Contract when the Municipality signs the Contract and the Bond shall be dated the same as the Contract Date.

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

X

CONTRACT PERFORMANCE AND PAYMENT BOND

CONTRACT PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, That we _____ _____ of _____ as Principal, and _____ a corporation organized under the laws of the _____ _____ and authorized to transact surety business in the State of Alaska, of _____ as Surety, are held and firmly bound unto the MUNICIPALITY OF ANCHORAGE, as Obligee, in the full and just sum of _____ ($_____) Dollars, lawful money of the UNITED STATES, for the payment which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION IS SUCH, that whereas the principal has entered into a certain contract dated the _____ date of _____ 20_____, with the Obligee for the construction of _____ _____ which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract, and shall promptly make payments to all persons supplying labor and material in the prosecution of the work provided for in said contract, during the original term of said contract and any extensions or modifications thereof that may be granted by the Municipality, with or without notice to the Surety, then this obligation to be void; otherwise to remain in full force and effect.

This obligation is made for the use of said Obligee and also for use and benefit of all persons who may perform any work or labor or furnish any material in the execution of said Contract and may be sued on thereby in the name of said Obligee.

The said Surety, for the value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same, shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

Whenever Principal shall be, and declared by Obligee to be in default under the Contract the Obligee having performed Obligee's obligations thereunder, the Surety may promptly remedy the default or shall promptly:

1. Complete the Contract in accordance with its terms and conditions, or
2. Obtain a bid or bids for submission to Obligee for completing the Contract in accordance with its terms and conditions and upon determination by Surety of the lowest responsible bidder, or, if the Obligee elects, upon determination by Obligee and the Surety jointly of the lowest responsible bidder, arrange for a contract between such bidder and Obligee and make available as Work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price but not exceeding, including other costs and damages for which the Surety may be liable hereunder the amount set forth in the first paragraph hereof. The term "balance of the contract price" as used in this paragraph, shall mean the total amount payable by Obligee to Principal under the Contract and any amendments thereto, less the amount properly paid by Obligee to Principal.

IN TESTIMONY WHEREOF, the parties hereunto have caused the execution hereof in _____ _____ original counterparts as of the _____ day of _____, 20_____.

WITNESS AS TO PRINCIPAL:

_____ _____
Principal Name

_____
Principal Signature

_____
Corporate Surety

(AFFIX CORPORATE SEAL)

_____

_____
Surety Business Address

BY: _____
(Attorney-In-Fact)

(AFFIX SURETY SEAL)

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

XI

CERTIFICATE OF INSURANCE

INSURANCE

By submitting a bid, the bidder agrees, if they are the successful bidder, to obtain and maintain the insurance required by this section. The bidder also agrees to provide the Municipality a copy of their Certificate of Liability Insurance prior to signing the contract and prior to commencement of any work under this contract.

GENERAL: The Contractor will not allow any subcontractor to commence work until the subcontractor has obtained insurance as listed in this section. The contractor and each subcontractor shall maintain this insurance throughout the life of this contract, including any maintenance and/or guarantee/warranty period. The contractor shall obtain separate insurance certificates for each contract.

ADDITIONAL INSURED: The Municipality of Anchorage shall be listed as an additional insured on all General and Auto Liability policies required by this contract. All policies shall contain a waiver of subrogation against the Municipality, except Professional Liability. All policies shall remain in effect during the life of the contract. The Contractors insurance certificate shall also indicate the Municipality of Anchorage as a certificate holder of the policy.

WORKERS COMPENSATION: The Contractor shall purchase and maintain during the life of this contract, workers compensation insurance for all employees who will work on this project and, if any work is sublet, the Contractor shall require the subcontractor similarly to provide such insurance. Employers' Liability with a minimum limit of $500,000 shall be maintained and Workers Compensation with minimum limits as required by Alaska State Workers Compensation Statutes. The policy shall contain a waiver of subrogation against the Municipality.

NOTICE TO "OUT-OF-STATE" CONTRACTORS WORKING IN ALASKA: The Contractor shall provide evidence of Workers Compensation insurance, either State of Alaska Workers Compensation coverage or an endorsement to the Contractor's home state Workers Compensation policy, evidencing coverage for "other states" including Alaska, prior to execution of a contract or, if approved, before commencement of contract performance in Alaska.

GENERAL LIABILITY: The Contractor shall purchase and maintain, in force, during the life of this contract such general liability insurance as shall protect the Owner and the Contractor against losses which may result from claims for damages for bodily injury, including accidental death, as well as from claims for property damages which may arise from any operations under this contract whether such operations be those of the Contractor, a subcontractor or anyone directly or indirectly employed by either of them.

Commercial General Liability	**Minimum Limits**
Products/Completed Operations	$2,000,000
Personal & Advertising Injury	$1,000,000
Each Occurrence	$1,000,000
General Aggregate	$2,000,000
Medical Payments	$5,000
Commercial Auto Liability	**Minimum Limits**
Combined single limit (Bodily Injury and Property Damage)	$1,000,000
Including all owned, hired, and non-owned	
Workers Compensation and Employers Liability	**Minimum Limits**
Per Alaska statute	$500,000
Errors and Omissions	**Minimum Limits**
Professional Liability (Not required unless limits appear in space provided)	
Umbrella Liability	**Minimum Limits**
(Not required unless limits appear in space provided)	
$ _____ S.I.R.	

Each insurance policy required by this section shall require the insurer to give advance notice to the MOA/Contract Administrator prior to the cancellation of the policy. IF the insurer does not notify the MOA upon policy cancellation, it shall be the Contractor's responsibility to notify the MOA of such cancellation.

COMPLIANCE WITH LAWS

The Contractor shall observe and abide by all applicable laws, regulations, ordinances and other rules of the State of Alaska and/or any political subdivisions thereof, or any other duly constituted public authority wherein work is done or services performed, and further agrees to indemnify and save the Municipality of Anchorage harmless from any and all liability or penalty which may be imposed or asserted by reason of the Contractor's failure or alleged failure to observe and abide thereby.

(Remainder of Page Initially left Blank)

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) shall be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C,
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
	☐ ☐ CLAIMS-MADE OCCUR						MED EXP (Any one person)	$
	☐						PERSONAL & ADV INJURY	$
	☐						GENERAL AGGREGATE	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG	$
	☐ POLICY ☐ PRO - ☐ LOC							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	☐ **UMBRELLA LIAB** ☐ OCCUR						EACH OCCURRENCE	$
	☐ **EXCESS LIAB** ☐ CLAIMS-						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						☐ WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE ☐ N / A						E.L. EACH ACCIDENT	$
	OFFICER/MEMBER EXCLUDED? **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

1. The Municipality of Anchorage is an additional insured on Auto and General Liability policies. All policies, including workers compensation, contain a WAIVER OF SUBROGATION against the Municipality, except Professional Liability, .
2. CANCELLATION: "Should any of the above described policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the Policy Provisions."

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

Authorized Representative

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

XII

BID BOND

BID BOND

KNOW ALL MEN BY THESE PRESENTS, That we, _____

as Principal, and _____ a corporation organized under the laws of the _____ and authorized to transact surety business in the State of Alaska, of _____ _____ as Surety, are held and firmly bound unto the MUNICIPALITY OF ANCHORAGE, as Obligee, in the full and just sum of _____ _____ ($_____) Dollars, lawful money of the UNITED STATES, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by the presents.

WHEREAS, the said Principle is herewith submitting its proposal for _____ _____.

The condition of this obligation is such that if the aforesaid Principal will, within the time required enter into a formal contract and give a good and sufficient bond to secure the performance of the terms and conditions of the contract, then this Obligation to be void; otherwise the Principal and Surety will pay unto to the Obligee the amount stated above.

Signed, sealed, and delivered _____, 20_____.

WITNESS AS TO PRINCIPAL:

_____ _____
Contractor Name

_____
Contractor Signature

(AFFIX CORPORATE SEAL) _____
Corporate Surety

_____

_____
Surety Business Address

BY: _____
(Attorney-In-Fact)

(AFFIX SURETY SEAL)

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

XIII

BIDDER'S CHECKLIST & RESPONSIBLE BIDDER QUESTIONNAIRE

BIDDER'S CHECKLIST

INSTRUCTIONS TO BIDDER

I. GENERAL

Bidders are advised that, notwithstanding any instructions or implications elsewhere in this Invitation to Bid, only the documents shown and detailed on this sheet need be submitted with and made part of their bid. Other documents may be required to be submitted after bid time, but prior to award. Bidders are hereby advised that failure to submit the documents shown and detailed on this sheet shall be justification for rendering the bid nonresponsive. Evaluation of bids for responsiveness shall be accomplished in accordance with Anchorage Municipal Code, Title 7.

II. REQUIRED DOCUMENTS FOR BID:

NOTE: Only the following listed items as marked with an "X" are required to be completely filled out and submitted with the bid.

__X__ Bid proposal consisting of pages BP- 1 through BP- 5. BP - 2 of 5 must be manually signed.

__X__ Erasures or other changes made to the Bid Proposal Sheet must be initialed by the person signing the bid.

_____ Two identical sets of descriptive literature, brochures, and/or data must accompany the bid where specifically requested or when in support of an "or equal" offer.

__X__ Bid bond, certified check, cashiers check, money order or cash shall be submitted with the bid in the amount indicated.

__X__ All Addenda issued shall be acknowledged in the space provided on the Bid Proposal sheet or by manually signing the Addenda sheet and submitting it prior to the bid opening in accordance with Anchorage Municipal Code 7.20.020C.

_____ Disadvantaged and Women-Owned Business Enterprises, Form 10-029.

__X__ Others - Bridge Engineer and Fabricator Prequalification Statement.

Municipality of Anchorage
Contractor Questionnaire

Contractors/Vendors wishing to qualify for award of a bid or proposal offered by the Municipality of Anchorage shall submit this completed form and any supplemental information requested by this form within five days following a request by the Purchasing Officer.

This form is to be filled out by the prime, and subcontractors that perform work "on-site". On-site is defined as the physical place or places where the building or work called for in the contract will remain, and any other site where a significant portion of the building or work is constructed, provided that such site is established specifically for the performance of the contract or project.

Contractor/Vendor Name: _____

Owner(s) of Company (if sole proprietorship or partnership):_____

_____

List all Alaska construction contractor's registration numbers, registration types and expiration dates of the Alaska business licenses held by your company in the past three years:

_____

_____

Has your company changed names, business license number, or contractor registration number in the past three years?

☐ Yes ☐ No

If "Yes," explain on a separate signed page, including the reason for the change.

Has any owner, partner or (for corporations) officer of your company operated any business offering similar services outlined in the bid or proposal under any other name in the past three years?

☐ Yes ☐ No

If "Yes," explain on a separate signed page, including the reason for the change.

Certifications & Disclosures

For these questions & certifications, "company" includes any entity that shares or has shared majority ownership or control with your company. "Determination of violation" includes any citations, orders or recommendations issued to or against the company.

Debarment

1. In the last three years has your company been debarred from bidding on, or being awarded, a state or federal project?

   ☐ Yes ☐ No

Occupational Safety & Health

Note: Only willful violations of state or federal occupational safety and health laws will result in disqualification; disclosure of other violations does not lead to automatic disqualification.

2. In the last three years has your company been determined to have committed a **willful violation** of state or federal occupational safety and health law? For purposes of this question, a state or federal occupational safety and health law includes laws enforced by the Occupational Safety and Health Administration (OSHA), Alaska Occupational Safety and Health (AKOSH), or another state's occupational safety and health agency.

☐ Yes ☐ No

3. In the last three years, has the federal Occupational Safety and Health Administration (OSHA), Alaska Occupational Safety and Health (AKOSH), or another state's occupational safety and health agency, made a determination of violation against your company?

Note: If you have filed an appeal of a citation and the appropriate appeals board has not yet ruled on your appeal, you need not include information about it.

☐ Yes ☐ No

If "Yes," attach a separate signed page describing each citation.

Wage & Hour

Note: Only willful violations of state or federal wage and hour laws will result in disqualification; disclosure of other violations does not lead to automatic disqualification.

4. In the last three years has your company been determined to have committed a **willful violation** of state or federal wage and hour law?

☐ Yes ☐ No

5. In the last three years has there been a determination of violation of wage and hour laws against your company? Wage and hour violations include failure to pay minimum wages, overtime, or prevailing wages.

☐ Yes ☐ No

If "Yes," attach a separate signed page describing each violation, identifying the claim by claimant, date, and status/outcome.

Unemployment Insurance & Workers' Compensation

6. In the last three years has there been a determination of violation of unemployment insurance or workers' compensation requirements against your company?

☐ Yes ☐ No

If "Yes," attach a separate signed page describing each violation, identifying the claim by claimant, date, and status/outcome.

Licensing & Registration

7. If a license or certificate of fitness is required to perform any services provided by your company, has there been a determination of violation of any certificate of fitness requirements against your company in the last three years?

☐ Yes ☐ No

If "Yes," attach a separate signed page describing each violation, identifying the claim by claimant, date, and status/outcome.

Subcontracting

8. I certify that all independent subcontractors engaged by my company meet the definition of an independent contractor under Alaska Statute 23.30.230.

☐ Yes ☐ No

9. I understand that my company is responsible for ensuring that each subcontractor my company uses on the project completes this form and associated documentation. I will submit any disclosures required by Anchorage Municipal Code.

☐ I understand

10. I understand that my company is responsible for providing this form and any associated documentation for each subcontractor hired after award within 30 days of hire, and that the subcontractor may not begin work on the project until such information is provided.

☐ I understand

11. I understand that my company is responsible for ensuring that if any event, such as a violation or loss of coverage, causes the information submitted by the subcontractor to change, the subcontractor shall submit updated certifications or disclosures within 30 days of occurrence to the department contract administrator.

☐ I understand

I declare under penalty of perjury that the foregoing is true and correct.

Dated: _____ _____
(Signature)

_____
(Printed name and title)

Right to Appeal: Anchorage Municipal Code provides that any person adversely affected in connection with the award of a municipal contract, including the Municipality's determination on responsibility, may request that the mayor or assembly refer the matter to the bidding review board.

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

XIV

BID PROPOSAL

BID PROPOSAL
(CERTIFICATION)

TO: MUNICIPALITY OF ANCHORAGE _____, 2023
PURCHASING DEPARTMENT
632 W. 6TH AVENUE, SUITE 520
ANCHORAGE, ALASKA 99501

SUBJECT: Invitation to Bid No. 2023C019

PROJECT TITLE: Russian Jack Park Trail & Bridge Improvements

Pursuant to and in compliance with subject Invitation to Bid, and other bid documents relating thereto, the bidder hereby proposes to furnish all labor and materials and to perform all work for the construction of the above referenced project in strict accordance with the bid documents at the prices established in the Bid Proposal, page **BP- 1 of 5 through BP- 5 of 5** submitted herewith.

The bidder agrees, if awarded the contract, to commence and complete the work within the time specified in the bid documents.

BASE BID / SCHEDULE A: $_____

ADDITIVE ALTERNATIVE / SCHEDULE B: $_____

TOTAL BID (A + B) **$_____**

The bidder acknowledges receipt of the following addenda:

Addenda No._____ Addenda No. _____
Addenda No._____ Addenda No. _____
Addenda No._____ Addenda No. _____

Enclosed is a Bid Bond in the amount of _____.
(Dollar Amount or Percentage of Bid)

Type of Business Organization
The bidder, by checking the applicable box, represents that it operates as ( ) a corporation incorporated under the laws of the State of _____, ( ) an individual, ( ) an LLC, ( ) a partnership, ( ) a nonprofit organization, or ( ) a joint venture. If a partnership or joint venture, identify all parties on a separate page.

Is this project Federally Funded?
Yes ☐
No ☒

_____
Company Name

BID PROPOSAL
(CERTIFICATION)
Continued

SUBJECT: Invitation to Bid No. 2023C019

PROJECT TITLE: Rusian Jack Springs Trail and Bridge Improvements

Date	Alaska Contractor's License Number
Company Name (Printed)	Employer's Tax Identification Number
Authorized Representative Signature	Printed Name & Title
Company **Mailing** Address	Company Phone Number
City, State, Zip Code	Company Fax Number
Company **Physical** Address (if different from mailing address)	Company Email Address
City, State, Zip Code	

Russian Jacks Springs Trail and Bridge Improvements

Base Bid

SCHEDULE A: SITE IMPROVEMENTS

ITEM NO.	SPEC. NO.	WORK DESCRIPTION	PAY UNIT	ESTIMATED QUANTITY	UNIT BID PRICE	TOTAL BID PRICE
A-1	20.02	Storm Water Pollution Prevention Plan (Type 2)	per LS	1		
A-2	20.05 95.04	Grubbing	per LS	1		
A-3	20.04 95.04	Remove Tree	per EA	10		
A-4	20.09	Remove Pavement	per SY	1600		
A-5	20.10	Usable Excavation	per CY	160		
A-6	20.10	Unusable Excavation	per CY	780		
A-7	20.21	Classified Fill and Backfill (Type IIA)	per Ton	1520		
A-8	20.22 95.04	Leveling Course	per Ton	432		
A-9	20.25 95.04	Geotextile (Type D)	per SY	2100		
A-10	20.26	Insulation Board (R = 18)	per SF	240		
A-11	40.06 95.04	Asphalt Concrete Pavement (Class D)	per Ton	231		
A-12	55.02 95.04	Culvert w/End Section (12-inch, CPEP, Type S)	per LF	60		
A-13	65.02	Construction Survey Measurement	per LS	1		
A-14	65.02	Two-Person Survey Crew	per HR	4		
A-15	70.07	Remove Pipe	per LF	60		
A-16	70.1	Traffic Markings (4" Solid Yellow)	per LF	405		
A-17	70.11	Remove and Relocate Sign	per EA	3		
A-18	70.11	Standard Sign	per SF	4.5		
A-19	70.12 95.04	Traffic Maintenance	per LS	1		
A-20	70.13	Remove Bollard	per EA	3		
A-21	70.13	Bollard (Removable, Rectangular Steel)	per EA	1		
A-22	75.03	Topsoil (2-inch Depth)	per MSF	19.0		
A-23	75.04 95.04	Seeding (Schedule D, No Mowable Mix)	per MSF	19.0		
A-24	75.06 95.04	Install Root Barrier (Owner Supplied)	per LF	1920		
A-25	75.11	Landscape Boulders (Type-A)	per EA	3		

Total Schedule A: _____

Russian Jacks Springs Trail and Bridge Improvements

Additive Alternative

SCHEDULE B: BRIDGE REMOVAL AND REPLACEMENT

ITEM NO.	SPEC. NO.	WORK DESCRIPTION	PAY UNIT	ESTIMATED QUANTITY	UNIT BID PRICE	TOTAL BID PRICE
B-1	20.02	Storm Water Pollution Prevention Plan (Type 2)	per LS	1		
B-2	20.05 95.04	Grubbing	per LS	1		
B-3	20.09	Remove Pavement	per SY	220		
B-4	20.10	Unusable Excavation	per CY	60		
B-5	20.21	Classified Fill and Backfill (Type III)	per CY	200		
B-6	20.21	Classified Fill and Backfill (Type IIA)	per Ton	260		
B-7	20.22 95.04	Leveling Course	per Ton	43		
B-8	20.25 95.04	Geotextile (Type D)	per SY	350		
B-9	20.31 95.04	Removal of Structures and Obstructions (Bridge)	per LS	1		
B-10	30.05 95.04	P.C.C. Structures/Retaining Wall (Abutment, Class A)	per CY	30		
B-11	30.05 95.04	P.C.C. Structures/Retaining Wall (Deck, Class A)	per CY	10		
B-12	40.06 95.04	Asphalt Concrete Pavement (Class D)	per Ton	35		
B-13	65.02	Construction Survey Measurement	per LS	1		
B-14	65.02	Two-Person Survey Crew	per HR	8		
B-15	70.12 95.04	Traffic Maintenance	per LS	1		
B-16	70.91 95.04	Steel Pipe and Tube Railing	per LS	1		
B-17	70.91 95.04	Prefabricated Pedestrian Bridge	per LS	1		
B-18	75.03	Topsoil (2-inch Depth)	per MSF	5.0		
B-19	75.04 95.04	Seeding (Schedule D, No Mowable Mix)	per MSF	5.0		
B-20	75.06 95.04	Install Owner Supplied Root Barrier	per LF	100.0		

Total Schedule B: _____

2023 Russian Jack Springs
Trail and Bridge Improvements

BID PROPOSAL SUMMARY

BASE BID

SCHEDULE	DESCRIPTION	BID AMOUNT
SCHEDULE A	SITE IMPROVEMENTS	

ADDITIVE ALTERNATES

SCHEDULE	DESCRIPTION	BID AMOUNT
ADDITIVE ALTERNATE 1, SCHEDULE B	BRIDGE REMOVAL AND REPLACEMENT	

TOTAL BASE BID: _____

TOTAL ADDITIVE ALTERNATES: _____

TOTAL PROJECT: _____

CONTRACTORS NAME: _____

DATE: _____

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

XV

BRIDGE ENGINEER AND FABRICATOR PREQUALIFICATION STATEMENT

BRIDGE ENGINEER AND FABRICATOR PREQUALIFICATION STATEMENT

SUBJECT: Invitation to Bid No. _____

PROJECT TITLE: Russian Jack Springs Trail and Bridge Improvements
E. 20th Ave. to Middle Fork Chester Creek

The intent of the OWNER is to pre-qualify Contractors who must have prior bridge engineering and fabrication experience. This statement will determine the Contractor's qualification for this project. Contractor must demonstrate an ability to meet minimum guidelines as set forth in **SPECIAL PROVISION SECTION 70.91, PREFABRICATED PEDESTRIAN BRIDGE, Article 91.3, Qualifications** of the Contract Documents. Submission of this questionnaire does not constitute qualification. Qualification may be denied for any reason the Owner deems necessary for the successful completion of the project.

BRIDGE ENGINEER and FABRICATOR CONTRACTOR INFORMATION

COMPANY NAME (Full Legal Name)

_____

STREET ADDRESS

_____

MAILING ADDRESS (If Different Than Above)

_____

STATE /ZIP /PHONE

_____

CONTACT PERSON E-MAIL /FAX #

_____

FEDERAL TAX ID NO.

_____

APPLICATION SUBMITTED BY:

_____
(Name) (Title)

MUNICIPALITY OF ANCHORAGE
PARKS AND RECREATION DEPARTMENT

RUSSIAN JACK SPRINGS TRAIL AND BRIDGE IMPROVEMENTS
E. 20TH AVE. TO MIDDLE FORK CHESTER CREEK

XVI

PLANS (15 SHEETS)

Sheet 1	Title Sheet
Sheet 2	Drawing Index & Key Map
Sheet 3	Notes, Legend, & Abbreviations
Sheet 4	Survey Control Diagram
Sheet 5	Construction Access & Pedestrian Traffic Control Route Plan
Sheet 6	Typical Sections
Sheet 7	Typical Sections
Sheet 8	Plan and Profile – Sta. 10+00 to Sta. 15+75
Sheet 9	Plan and Profile – Sta. 15+75 to Sta. 21+75
Sheet 10	Plan and Profile – Sta. 21+75 to Sta. 27+00
Sheet 11	Plan and Profile – Sta. 27+00 to Sta. 31+50
Sheet 12	Bridge General Notes & Quality Assurance
Sheet 13	Bridge Plan & Profile
Sheet 14	Bridge Sections & Detail
Sheet 15	Bridge Guardrail & Reinforcement Details