

CITY OF BETHEL

City Council Meeting Agenda, May 13, 2025 – 6:30 PM

Website: <https://www.cityofbethel.org/council>

Location: Council Chambers, City Hall, 300 Chief Eddie Hoffman Highway, Bethel

Council Members: Mayor Rose Henderson, Vice-Mayor Teresa Keller, Mark Springer, Mikayla Miller, Alicia Miner, Pamela Conrad, John Lloyd



Zoom Meeting Link: <https://us06web.zoom.us/j/4888456188?pwd=bkN1dGI4MHpGZ1kwOUVYWU5kd0xhZz09>

Zoom Meeting ID: 488 845 6188

Zoom Meeting Passcode: 13871

Zoom Meeting Conference Line Numbers: 833 548 0276 US Toll-free

833 548 0282 US Toll-free

877 853 5257 US Toll-free

888 475 4499 US Toll-free

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

4. PEOPLE TO BE HEARD – FIVE MINUTES PER PERSON

- 4.1. *Written Public Comments can be submitted by opening your phone camera and hovering over this URL code. The link to the submission form will appear. You may also go to www.cityofbethel.org. Written public comment must be submitted 24 hours before the meeting.*



5. APPROVAL OF CONSENT AGENDA AND REGULAR AGENDA

6. APPROVAL OF MEETING MINUTES

- 6.1. *4-15-2025 Special City Council Meeting
- 6.2. *4-22-2025 Regular City Council Meeting
- 6.3. *4-24-2025 Special City Council Meeting
- 6.4. *5-1-2025 Special City Council Meeting

7. REPORTS OF STANDING COMMITTEES

- 7.1. Committee/Commission Agendas And Draft Meeting Minutes

8. SPECIAL ORDER OF BUSINESS

- 8.1. Proclamation: Proclaiming May 2025 As Frontline Worker Appreciation Month (Mayor Henderson)

9. UNFINISHED BUSINESS

- 9.1. Public Hearing Of Ordinance 24-04 (d): Amending The Adoption Annual Operating Budget For Fiscal Year 2025, July 1, 2024-June 30, 2025 (City Manager Strickler)
- 9.2. Public Hearing Of Ordinance 25-07: Amending Title 5.08.080 Alcoholic Beverages, Hours And Days

Posted May 7, 2025 at AC Co., Swanson's, City Hall, and the Post Office.

Kevin Morgan, City Clerk

City Clerk's Office Contact Information: Email cityclerk@cityofbethel.net Phone 907-543-1384

Items noted with an asterisk (*) are consent agenda items, unless removed from the consent agenda they are approved upon the approval of the agenda. Ordinances introduced at this meeting may be set for public hearing at the next regular meeting.

The Council may by unanimous consent, after 12:00 AM Fix the Time to Which To Adjourn until the following day at 6:30 PM

Of Operation (Vice-Mayor Keller)

- 9.3. Public Hearing Of Ordinance 25-08: Providing For The Adoption Of The Annual Operating Budget For Fiscal Year 2026, July 1, 2025-June 30, 2026 And Appropriating Funds To Carry Out Said Budget (City Manager Strickler)

10. NEW BUSINESS

- 10.1. *Introduction Of Ordinance 24-05(f): Amending The Capital Improvement, Budget For Fiscal Year 2025, July 1, 2024-June 30, 2025 (City Manager Strickler)
- 10.2. *Resolution 25-02: Requesting Alaska's Congressional Delegation To Strongly Oppose The Rescission Of Funding From The Corporation For Public Broadcasting (Mayor Henderson)
- 10.3. *Resolution 25-03: A Resolution And Order By The Bethel City Council Declaring The Property At 621 Setter, Generally Described As Lot 25 Block 4, Plat #78-4 Bethel Alaska, A Public Nuisance, Fire Hazard, And Health Hazard And Ordering The Abatement Thereof (Mayor Henderson)
- 10.4. *Resolution 25-04: A Resolution And Order By The Bethel City Council Declaring The Property At 229 Akiak, Generally Described As Lot 3, Block 8 Plat #71-425, Bethel Alaska, A Public Nuisance, Fire Hazard, And Health Hazard And Ordering The Abatement Thereof (Mayor Henderson)
- 10.5. *Resolution 25-05: A Resolution And Order By The Bethel City Council Declaring The Property At 244 Akiak, Generally Described As Lot 6, Block 6, Plat #71-425, Bethel Alaska, A Public Nuisance, Fire Hazard, And Health Hazard And Ordering The Abatement Thereof (Mayor Henderson)
- 10.6. *Resolution 25-06: A Resolution And Order By The Bethel City Council Declaring The Property At 808 Ptarmigan, Generally Described As Lot 23, Block 1, Plat #81-10 Bethel Alaska, A Public Nuisance, Fire Hazard, And Health Hazard And Ordering The Abatement Thereof (Mayor Henderson)
- 10.7. *Resolution 25-07: A Resolution And Order By The Bethel City Council Declaring The Property At 140 Torgerson, Generally Described As Lot 11, Block 3, Plat #70-444, Bethel Alaska, A Public Nuisance And A Fire Hazard, And Ordering The Abatement Thereof (Mayor Henderson)
- 10.8. *AM 25-17: Appointment Of Committee And Commission Members For A Term Of Three Years (Mayor Henderson)
- 10.9. *AM 25-18: Authorize The City Manager To Negotiate And Execute A Contract For Construction-Installation Of Road Culverts On Ptarmigan Road (City Manager Strickler)

11. REPORTS

- 11.1. Mayor's Report
- 11.2. City Manager's Report
- 11.3. Clerk's Report

12. COUNCIL MEMBER COMMENTS

13. EXECUTIVE SESSION

14. ADJOURNMENT

Posted May 7, 2025 at AC Co., Swanson's, City Hall, and the Post Office.

Kevin Morgan, City Clerk

City Clerk's Office Contact Information: Email cityclerk@cityofbethel.net Phone 907-543-1384

Items noted with an asterisk (*) are consent agenda items, unless removed from the consent agenda they are approved upon the approval of the agenda. Ordinances introduced at this meeting may be set for public hearing at the next regular meeting.

The Council may by unanimous consent, after 12:00 AM Fix the Time to Which To Adjourn until the following day at 6:30 PM

1. CALL TO ORDER

A Special Meeting of the Bethel City Council was held on April 15, 2025 at 6:30 p.m., in the Council Chambers, Bethel, Alaska.

Mayor Henderson called the meeting to order at 6:30 p.m.

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Comprising a quorum of the Council, the following members were present:
City Council Member Mark Springer Mayor Rose Henderson Vice-Mayor Teresa Keller City Council Member Mikayla Miller City Council Member Pamela Conrad City Council Member John Lloyd
Members Absent:
City Council Member Alicia Miner
Also in attendance were the following:
City Manager Lori Strickler, City Clerk Kevin Morgan, City Attorney Libby Bakalar (telephonically)

4. PEOPLE TO BE HEARD – Five minutes per person

No one present to be heard.

Item 4.1. - Written Public Comments

No written comments submitted.

5. APPROVAL OF AGENDA

Main Motion: Approve the Agenda.

Moved by:	Teresa Keller
Seconded by:	John Lloyd
In favor:	Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, Pamela Conrad, John Lloyd
Opposed:	None
Results:	Motion Carries

6. SPECIAL ORDERS OF BUSINESS

Item 6.1. - Presentation Of Life Saving Award To Officer Cordoba (Mayor Henderson)

Chief Harris presented the Life Saving Award to Officer Cordoba.

7. NEW BUSINESS

Item 7.1. - Fiscal Year 2026 Operating Budget Review/Amendment

Main Motion: Move into Committee of the Whole.

Moved by:	Mark Springer
Seconded by:	Teresa Keller
In favor:	Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, Pamela Conrad, John Lloyd
Opposed:	None
Results:	Motion Carries

Main Motion: Move out of Committee of the Whole.

Moved by:	Mark Springer
Seconded by:	John Lloyd
In favor:	Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, Pamela Conrad, John Lloyd
Opposed:	None
Results:	Motion Carries

8. ADJOURNMENT

Main Motion: Adjournment.

Moved by:	Mark Springer
Seconded by:	John Lloyd
In favor:	Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, Pamela Conrad, John Lloyd
Opposed:	None
Results:	Motion Carries

Meeting ended at 7:57 p.m.

Rose Henderson, Mayor

ATTEST:

Kevin Morgan,
City Clerk

1. CALL TO ORDER

A Regular Meeting of the Bethel City Council was held on April 22, 2025 at 6:30 p.m., in the Council Chambers, Bethel, Alaska.

Mayor Henderson called the meeting to order at 6:30 p.m.

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Comprising a quorum of the Council, the following members were present:
City Council Member Mark Springer (telephonically) Mayor Rose Henderson Vice-Mayor Teresa Keller City Council Member Mikayla Miller City Council Member Alicia Miner (telephonically) City Council Member Pamela Conrad City Council Member John Lloyd (telephonically)
Members Absent:
Also in attendance were the following:
City Manager Lori Strickler, City Clerk Kevin Morgan, City Attorney Libby Bakalar (telephonically)

4. PEOPLE TO BE HEARD – Five minutes per person

Jared Vaughn- Bethel, Alaska- Gave a summary of the 4-H program in Bethel. Requesting that the City of Bethel make a contribution to the 4-H program.

Kelsi Kime- Bethel, Alaska- Would like information on Bethel Potholes and would like to know more about the responsibility of the city and state to address them.

Kristin Hall- Anchorage, Alaska- Gave an update to the Council on how Federal funding will affect KYUK. Asks the city to oppose the rescission of funding to Public Broadcasting as it provides 70% of KYUK's operating funds. Spoke about how losing the funding would affect KYUK and the services that they provide to the city and the region.

Item 4.1. - Written Public Comments

No Written Comments submitted.

5. APPROVAL OF CONSENT AGENDA AND REGULAR AGENDA

Main Motion: Approval of the Consent and Regular Agenda.

Moved by:	Teresa Keller
Seconded by:	Mikayla Miller
In favor:	Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, Alicia Miner, Pamela Conrad , John Lloyd
Opposed:	None
Results:	Motion Carries

Council Member Miller -Remove from the Consent Agenda, Item 10.3- Introduction Of Ordinance 25-08

Vice-Mayor Keller -Remove from the Consent Agenda, Item 10.2-Introduction Of Ordinance 25-07

6. APPROVAL OF MEETING MINUTES

Item 6.1. - 4-8-2025 Regular City Council Meeting
Passed on the consent agenda.

7. REPORTS OF STANDING COMMITTEES

Port Commission, Council Member Miner- Nothing to report.

Planning Commission, Mayor Henderson- Discussed nuisance properties and the hearings that are coming up.

Community Action Grant Committee, Council Member Conrad- Nothing to report. No meetings due to lack of funds.

Community Parks and Recreation Committee, Council Member Miller- Nothing to report.

Finance Committee, Council Member Lloyd- Waiting to make quorum.

Public Works Committee, Council Member Springer- Not enough members to have a meeting.

Public Safety and Transportation Commission, Vice-Mayor Keller- No meeting since last meeting.

Item 7.1. - Committee/Commission Agendas And Draft Meeting Minutes

8. SPECIAL ORDER OF BUSINESS

Item 8.1. - Proclamation: Missing And Murdered Indigenous People Day May 5, 2025 (Mayor Henderson)

Mayor Henderson read the proclamation.

9. UNFINISHED BUSINESS

10. NEW BUSINESS

Item 10.1. - *Introduction Of Ordinance 24-04 (d): Amending The Adoption Annual Operating Budget For Fiscal Year 2025, July 1, 2024-June 30, 2025 (City Manager Strickler)

Passed on the consent agenda.

Item 10.2. - *Introduction Of Ordinance 25-07: Amending Title 5.08.080 Alcoholic Beverages, Hours And Days Of Operation (Vice-Mayor Keller)

Main Motion: Introduce Ordinance 25-07.

Moved by:	Mikayla Miller
Seconded by:	Teresa Keller
In favor:	Rose Henderson, Teresa Keller, Mikayla Miller, Alicia Miner, Pamela Conrad, John Lloyd
Opposed:	None
Results:	Motion Carries

Council Member Springer disconnected at 6:54 pm

Motion to amend:

To strike the second whereas statement:

~~Whereas, the current hours of operations allow for the sale, service, and consumption of alcoholic beverages between the hours of 10:00 p.m. and 11:00 a.m.;~~

And insert: "Whereas, currently under BMC 5.08.080.A, a person may not sell, offer for sale, give, furnish, deliver, or consume an alcoholic beverage on premises licensed under AS 04.11.080 between the hours of 10:00 p.m. and 11:00 a.m."

and

in the new section "D" to strike "posted" and to insert after closure "set forth in this section" and

in the new section "E" to insert after premises "between the hours of closure set forth in this section" and to strike "during the posted hours of closure"

Moved by: Teresa Keller

Seconded by: John Lloyd
In favor: Rose Henderson, Teresa Keller, Mikayla Miller, Alicia Miner, Pamela Conrad ,
John Lloyd
Opposed: None
Results: Motion Carries

Item 10.3. - *Introduction Of Ordinance 25-08: Providing For The Adoption Of The Annual Operating Budget For Fiscal Year 2026, July 1, 2025-June 30, 2026 And Appropriating Funds To Carry Out Said Budget (City Manager Strickler)

Main Motion: Introduce Ordinance 25-08.

Moved by: Teresa Keller
Seconded by: Mikayla Miller
In favor: Mark Springer, Rose Henderson, Mikayla Miller, Alicia Miner, Pamela Conrad,
John Lloyd
Opposed: None
Results: Motion Carries

*Council Member Springer reconnected at 6:56 pm
Vice-Mayor Keller steps out at 7:31 p.m.*

Item 10.4. - AM 25-15: Approve Mayor Henderson's Travel Expenses For Alaska Walkability Action Institute (Mayor Henderson)

Main Motion: Approve AM 25-16.

Moved by: Mark Springer
Seconded by: Mikayla Miller
In favor: Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, Alicia Miner,
Pamela Conrad, John Lloyd
Opposed: None
Results: Motion Carries

Vice-Mayor Keller rejoined at 7:33 p.m.

Item 10.5. - *AM 25-16: Appointment Of Committee And Commission Members For A Term Of Three Years (Mayor Henderson)

Passed on the consent agenda.

Item 10.6. - *IM 25-04: Documentation That The Bethel City Council Received And Reviewed The Full Financial Budget Report And Water & Wastewater Activity Report For The Month Of March 2025 (City Manager Strickler)

Passed on the consent agenda.

11. REPORTS

Item 11.1. - Mayor's Report

Item 11.2. - City Manager's Report

Item 11.3. - Clerk's Report

12. COUNCIL MEMBER COMMENTS

Mayor Henderson- Thanked Julie McWilliams for volunteering for the Community Action Grant Committee. Shared the public's frustration with the potholes. The city is doing the best that we can. Appreciates the Acting General Manager of KYUK for attending people to be heard and informing the council about the Federal funding situation. Encouraged the public to reach out to your congresspeople, especially Murkowski, by phone, email, websites or go to protectmypublicmedia.org. Be safe on the lakes and rivers; stay off the thin ice.

Vice-Mayor Keller- There are many committee/commission seats that need to be filled. If you know someone who might be interested, ask them.

Council Member Miner- No comment.

Council Member Conrad- Thanked the city employees that are working hard to keep the roads operational with all the melting ice and water.

Council Member Miller- Wanted the public to know that the City is working on concerns from the public. Please be patient and kind. Thanked everyone who spoke at people to be heard.

Council Member Springer- Thanked the Acting General Manager of KYUK for speaking at people to be heard. Encouraged the public to contact Representative Begich as the House of Representatives control the budget.

Council Member Lloyd- No comment.

13. EXECUTIVE SESSION

14. ADJOURNMENT

Main Motion: Adjournment.

Moved by:	Mikayla Miller
Seconded by:	John Lloyd
In favor:	Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, Alicia Miner, Pamela Conrad, John Lloyd

Opposed: | None
Results: | Motion Carries

Meeting ended at 7:56 p.m.

Rose Henderson, Mayor

ATTEST:

Kevin Morgan,
City Clerk

1. CALL TO ORDER

A Special Meeting of the Bethel City Council was held on April 24, 2025 at 6:00 p.m., in the Council Chambers, Bethel, Alaska.

Mayor Henderson called the meeting to order at 6:00 p.m.

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Comprising a quorum of the Council, the following members were present:
City Council Member Mark Springer Mayor Rose Henderson Vice-Mayor Teresa Keller City Council Member Mikayla Miller City Council Member John Lloyd
Members Absent:
Also in attendance were the following:
City Manager Lori Strickler, City Clerk Kevin Morgan

4. PEOPLE TO BE HEARD – Five minutes per person

Theresa Quiner- Bethel, Alaska- The library is facing budget deficits due to lost of grants and increased water and sewer needs from serving the public. Requesting from the city, \$10,000 to purchase books, \$10,000 to help with water and sewer costs, and \$10,000 for furniture replacement.

Item 4.1. - Written Public Comments

No Written Comments submitted.

5. APPROVAL OF AGENDA

Main Motion: Approval of the Agenda.

Moved by:	Mark Springer
Seconded by:	Teresa Keller
In favor:	Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, John Lloyd
Opposed:	None
Results:	Motion Carries

Motion to Amend: Fix time to adjourn at 8:30 p.m.

Moved by: Mark Springer

Seconded by: Teresa Keller
In favor: Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, John Lloyd
Opposed: None
Results: Motion Carries

6. UNFINISHED BUSINESS

7. NEW BUSINESS

Item 7.1. - Fiscal Year 2026 Operating Budget Review/Amendment-

Main Motion: Move into Committee of the Whole.

Moved by: Mark Springer
Seconded by: Mikayla Miller
In favor: Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, John Lloyd
Opposed: None
Results: Motion Carries

*Mayor Henderson called for a break at 7:17 p.m.
Back on record at 7:24 p.m.*

Main Motion: Move out of Committee of the Whole.

Moved by: Mark Springer
Seconded by: John Lloyd
In favor: Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, John Lloyd
Opposed: None
Results: Motion Carries

8. ADJOURNMENT

Main Motion: Adjournment.

Moved by: Mark Springer
Seconded by: Mikayla Miller
In favor: Mark Springer, Rose Henderson, Teresa Keller, Mikayla Miller, John Lloyd
Opposed: None
Results: Motion Carries

Meeting ended at 8:26 p.m.

ATTEST:

Rose Henderson, Mayor

Kevin Morgan, City Clerk

1. CALL TO ORDER

A Special Meeting of the Bethel City Council was held on May 1, 2025 at 6:00 p.m., in the Council Chambers, Bethel, Alaska.

Mayor Henderson called the meeting to order at 6:00 p.m.

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Comprising a quorum of the Council, the following members were present:
City Council Member Mark Springer (<i>arrived after roll call 6:16 pm</i>) Mayor Rose Henderson City Council Member Mikayla Miller City Council Member Alicia Miner City Council Member Pamela Conrad
Members Absent:
Vice-Mayor Teresa Keller City Council Member John Lloyd
Also in attendance were the following:
City Manager Lori Strickler, City Clerk Kevin Morgan, City Attorney Libby Bakalar (telephonically)

4. PEOPLE TO BE HEARD – Five minutes per person

No one present to be heard.

Item 4.1. - Written Public Comments

No written comments submitted.

5. APPROVAL OF AGENDA

Main Motion: Approval of the Agenda.

Moved by:	Mikayla Miller
Seconded by:	Alicia Miner
In favor:	Rose Henderson, Mikayla Miller, Alicia Miner, Pamela Conrad
Opposed:	None
Results:	Motion Carries

6. UNFINISHED BUSINESS

7. NEW BUSINESS

Item 7.1. - Fiscal Year 2026 Operating Budget Review/Amendment-
Motion to move into Committee of the Whole.

Moved by:	Mikayla Miller
Seconded by:	Alicia Miner
In favor:	Rose Henderson, Mikayla Miller, Alicia Miner, Pamela Conrad
Opposed:	None
Results:	Motion Carries

Council Member Springer arrives at 6:16 pm

Mayor Henderson calls for a 10 minute break 7:41 p.m.

Council Member Miner departs at 8:04 p.m.

Motion to move out of Committee of the Whole.

Moved by:	Mark Springer
Seconded by:	Mikayla Miller
In favor:	Mark Springer, Rose Henderson, Mikayla Miller, Pamela Conrad
Opposed:	None
Results:	Motion Carries

8. ADJOURNMENT

Main Motion: Adjournment.

Moved by:	Mark Springer
Seconded by:	Mikayla Miller
In favor:	Mark Springer, Rose Henderson, Mikayla Miller, Pamela Conrad
Opposed:	None
Results:	Motion Carries

Meeting ended at 8:22 p.m.

Rose Henderson, Mayor

ATTEST:

Kevin Morgan,
City Clerk



CITY OF BETHEL

PUBLIC SAFETY AND TRANSPORTATION COMMISSION

WEDNESDAY, MAY 7, 2025, 6:30 PM

LOCATION: COUNCIL CHAMBERS, CITY HALL, 300 CHIEF EDDIE HOFFMAN
HIGHWAY, BETHEL ALASKA

JOIN MEETING AT ZOOM.US:

<https://us06web.zoom.us/j/3350154000?pwd=HYFLQJB5BBF9IUAXHBN9SOZQAFWPLS.1&OMN=81314125060>

MEETING ID: 335 015 4000

PASSCODE: 140569

US TOLL-FREE PHONE NUMBERS: 888 475 4499; 833 548 0276; 833 548 0282; 877 853 5257

MEMBERS

Joy Anderson, Chair
Musa Sailu
John Hastie
Jesslyn Elliot
Teresa Keller, Council Rep.
Jody Brand

STAFF

James Harris, Ex Officio Member
Madison Abolafia, Ex Officio Member
MAbolafia@cityofbethel.net
907-543-3781

I. CALL TO ORDER

II. ROLL CALL

III. PEOPLE TO BE HEARD – FIVE MINUTES PER PERSON

- A. Please submit written public comments to police@cityofbethel.net by 4:00 p.m. the day of the meeting.

IV. APPROVAL OF AGENDA

V. APPROVAL OF MEETING MINUTES

- A. Lack of Quorum 02/05/25

VI. UNFINISHED BUSINESS

- A. Consideration of BMC Title 5 Amendment to allow transportation network companies to operate in Bethel. (John Hastie)
- B. Discussion for recommending changes PSTC would like to see concerning public intoxication. (Jesslyn Elliot)
- C. Review of BMC 5.30: Taxi Cabs and inspection requirements. (John Hastie)

VII. NEW BUSINESS

- A. Discussion about *On Patrol: Live*. (Chief Harris)
- B. Proposal for Amendments to the Bethel Municipal Code Taxicab Mechanical Equipment Standards and Vehicle Horn Honking (John Hastie)

Posted 5/1/2025 at City Hall, AC Co., Swanson's, and the Post Office.

Ex-Officio Staff

VIII. EX OFFICIO REPORT

IX. MEMBER COMMENTS

X. ADJOURNMENT

Posted 5/1/2025 at City Hall, AC Co., Swanson's, and the Post Office.

Ex-Officio Staff



CITY OF BETHEL

COMMUNITY PARKS AND RECREATION COMMITTEE

MONDAY, MAY 12, 2025, 6:00 PM

LOCATION: 300 CHIEF EDDIE HOFFMAN HIGHWAY, BETHEL, ALASKA

JOIN MEETING AT ZOOM.US:

[HTTPS://US06WEB.ZOOM.US/J/3350154000?PWD=HYFLQJB5BBF9IUAXHBN9SOZQAFWPLS.1&OMN=81314125060](https://us06web.zoom.us/j/3350154000?pwd=HYFLQJB5BBF9IUAXHBN9SOZQAFWPLS.1&OMN=81314125060)

MEETING ID: 335 015 4000

PASSCODE: 140569

US TOLL-FREE PHONE NUMBERS: 888 475 4499; 833 548 0276; 833 548 0282; 877 853 5257

MEMBERS

Brian Lefferts, Chair
Mikayla Miller Council Rep.
Michelle DeWitt
Zeff Prina
Alternate 2-Lisa Yancy

Beverly Hoffman, Vice-Chair
Jessica Pew
Sean Glasheen,
Alternate 1- Jody Brand

STAFF

Ex-Officos: Shane Iverson, Kayla Saddler
Email: ksaddler@cityofbethel.net Phone: 907-543-1386

I. CALL TO ORDER

II. ROLL CALL

- A. Ex Officio Member's Attendance Log

III. PEOPLE TO BE HEARD – FIVE MINUTES PER PERSON

- A. Please submit written public comments to pwadmin@cityofbethel.net by 4:00 p.m. the day of the meeting.

IV. APPROVAL OF AGENDA

V. APPROVAL OF MEETING MINUTES

- A. April 14, 2025 Meeting Minutes

VI. UNFINISHED BUSINESS

- A. Community Center Construction Project *Updates!* (Lefferts)
B. Review of 2045 Comprehensive Plan/Identify Community Outreach Opportunities And Committee Goals (Pew/Lefferts)
C. Update on Tribal Technical Assistance Request (Glasheen)
D. Update on Status for Deep Cleaning the YK Fitness Center Shower & Pool Area (Hoffman)
E. 2025 4th of July (Lefferts)
F. Parks & Rec Financial Report Including Comparison of This year to Previous 3 year's Expenses by Cost Category, Enterprise Fund Balance, and Revenue by Source (Hoffman)
G. Update on Avenues Park Progress (DeWitt)

VII. NEW BUSINESS

- A. Determination of Quorum for the June 9th Meeting

Posted <<DATE>> at City Hall, AC Co., Swanson's, and the Post Office.

Ex-Officio Staff

- B. Status on Wood Chipper Aquisition (Hoffman)
- C. Status on YKFC Roof/Leaking Maintenance (Hoffman)
- D. Identifying the next location for the community sign design contest (Administration)
- E. Parks and Recreation Budget, Year to Date Revenues and Expenses (Hoffman)
- F. Planning Commission's Resolution approving the CUP for the eventual City Park
- G. Placement of new plauground equipment (Iverson)

VIII. EX OFFICIO REPORT

- A. Manager's Reports April 2025

IX. MEMBER COMMENTS

X. ADJOURNMENT

City of Bethel, Alaska

Finance Committee Minutes

April 28, 2025

Regular Meeting

Bethel, Alaska

I. CALL TO ORDER

A Regular Meeting of the Finance Committee was held on April 28, 2025 at 5:35 PM in Council Chambers at 300 Chief Eddie Hoffman Highway.

II. ROLL CALL

The following Finance Committee members were present: John Lloyd, John Hamilton

Also in attendance are Kayla Saddler, Nathaniel Ayuluk Recorder (Ex Officio)

Unexcused Absences: Carolann Willard, Victoria Sosa, Cynthia Sharp (Ex Officio)

Excused Absences:

No Meeting was held due to lack of quorum.

John Hamilton, Chair

ATTEST:

Nathaniel Ayuluk, Recorder



CITY OF BETHEL
FINANCE COMMITTEE
MONDAY, APRIL 28, 2025, 5:30 PM

LOCATION: 300 CHIEF EDDIE HOFFMAN HIGHWAY, BETHEL, ALASKA

JOIN MEETING AT ZOOM.US:
<https://us06web.zoom.us/j/3350154000?pwd=HYFLQJB5BBF9IUAXHBN9SOZQAFWPLS.1&OMN=81314125060>
MEETING ID: 335 015 4000
PASSCODE: 140569
US TOLL-FREE PHONE NUMBERS: 888 475 4499; 833 548 0276; 833 548 0282; 877 853 5257

MEMBERS	STAFF
John Hamilton, Chair	Ex Officio Members
John Lloyd, Council Rep.	Cindy Sharp
Victoria Sosa	Kayla Saddler
Carolann Willard	finance@cityofbethel.net
Vacancies: 3 Alt:2	907-543-1381

- I. CALL TO ORDER**
- II. ROLL CALL**
 - A. Ex Officio Member's Attendance Log
- III. PEOPLE TO BE HEARD – FIVE MINUTES PER PERSON**
 - A. Please submit written public comments to finance@cityofbethel.net by 4:00 p.m. the day of the meeting.
- IV. APPROVAL OF AGENDA**
- V. APPROVAL OF MEETING MINUTES**
 - A. 12/17/2024 Meeting Minutes
 - B. 1-27-2025 Meeting Minutes
 - C. 2-24-2025 Meeting Minutes
 - D. 3-24-2025 Meeting Minutes
- VI. SPECIAL ITEMS**
 - A. Elections of Chair and Vice Chair
- VII. UNFINISHED BUSINESS**
- VIII. NEW BUSINESS**
 - A. Ordinance Senior Citizen Exemption Card
 - B. [Determination of quorum for May 26th Meeting](#)
- IX. EX OFFICIO REPORT**

Posted <<DATE>> at City Hall, AC Co., Swanson’s, and the Post Office.

Ex-Officio Staff

- A. Manager's Reports April 2025
- B. Financial Statements February 2025
- C. Budget for FY26

X. MEMBER COMMENTS

XI. ADJOURNMENT

Posted <<DATE>> at City Hall, AC Co., Swanson's, and the Post Office.

Ex-Officio Staff



CITY OF BETHEL
PLANNING COMMISSION
THURSDAY, MAY 8, 2025, 6:30 PM
LOCATION: 300 CHIEF EDDIE HOFFMAN HIGHWAY, BETHEL ALASKA

JOIN MEETING AT ZOOM.US:
<https://us06web.zoom.us/j/3350154000?pwd=HYFLQJB5BBF9IUAXHBN9SOZQAFWPLS.1&OMN=81314125060>
MEETING ID: 335 015 4000
PASSCODE: 140569
US TOLL-FREE PHONE NUMBERS: 888 475 4499; 833 548 0276; 833 548 0282; 877 853 5257

MEMBERS	STAFF
Kathy Hanson, Chair Lorin Bradbury, Vice Chair Rose Henderson, Council Rep. Alex Wasierski Shadi Rabi Haley Hanson Sundi Scott Jody Brand, Alternate 1 Vacant Seat, Alternate 2	Pauline Boratko, Ex Officio Member Lee Foley, City Planner planning@cityofbethel.net 907-543-5301

- I. CALL TO ORDER**
- II. ROLL CALL**
- III. PEOPLE TO BE HEARD – FIVE MINUTES PER PERSON**
 - A. Please submit written public comments to planning@cityofbethel.net by 4:00 p.m. the day of the meeting.
- IV. APPROVAL OF AGENDA**
- V. APPROVAL OF MEETING MINUTES**
 - A. April 10, 2025, regular meeting minutes
- VI. UNFINISHED BUSINESS**
 - A. Update Discussion on Nuisance properties
- VII. NEW BUSINESS**
 - A. Land Transfer Proposal with Lyman Hoffman
- VIII. EX OFFICIO REPORT**
- IX. MEMBER COMMENTS**
- X. ADJOURNMENT**

Posted <<05/02/2025>> at City Hall, AC Co., Swanson’s, and the Post Office.

Ex-Officio Staff



City of Bethel Proclamation

*Proclaiming May 2025
Frontline Worker Appreciation Month*

WHEREAS, frontline workers are the builders of our community, exercising curiosity, compassion, courage, and creativity to provide essential services that ensure the safety, health, and education of our residents; and;

WHEREAS, over 9 million healthcare workers across the United States serve in hospitals, clinics, and long-term care facilities, often placing themselves at risk to provide lifesaving care; and;

WHEREAS, firefighters respond to an estimated 36 million emergency calls each year, over 800,000 sworn law enforcement officers nationwide work tirelessly to uphold the law and ensure public safety, and emergency medical services (EMS) personnel respond to more than 240 million calls annually; and

WHEREAS, teachers dedicate their careers to shaping the future of our communities, with over 3.7 million educators in the U.S. providing knowledge and guidance to our youth; and

WHEREAS, we encourage all residents to join in recognizing and honoring the heroic contributions of our local healthcare workers, firefighters, law enforcement officers, EMS personnel, and teachers; and

WHEREAS, we recognize their immense sacrifices, invaluable dedication, commitment, and unwavering effort for the benefit of others; and

WHEREAS, we wish to express immense gratitude to all of the frontline workers for their resilient efforts to keep our community and region safe, and for providing healing and hope for a stronger tomorrow.

Now, THEREFORE, I do hereby proclaim the month of May 2025 as Frontline Worker Appreciation Month and send sincere gratitude to the many people in our community and region that sacrifice so much to keep us safe and healthy.

Signed this 13th day of May, 2025,

Rose Henderson, Mayor

Attest: Kevin Morgan, City Clerk

Introduced by: City Manager Strickler
Introduction Date: April 22, 2025
Public Hearing: May 13, 2025
Action:
Vote:

CITY OF BETHEL, ALASKA

ORDINANCE #24-04 (d)

AN ORDINANCE BY THE BETHEL CITY COUNCIL AMENDING THE ADOPTION ANNUAL OPERATING BUDGET FOR FISCAL YEAR 2025, JULY 1, 2024-JUNE 30, 2025

BE IT ORDAINED by the City Council of Bethel, Alaska, as follows:

SECTION 1. Classification. This is a noncodified ordinance amending the City of Bethel Annual Operating Budget for Fiscal Year 2025.

SECTION 2. Amendment. The adopted Fiscal Year 2025 Annual Operating Budget is amended as follows:

D-1 BOARDWALK WALK BRIDGE EMERGENCY INSPECTION

Whereas, the metal pedestrian bridge that connects the wooden boardwalk near Akakeek was observed to have structural damage from helical piles unscrewing from the ground and disconnecting from the bridge;

Whereas, the city attempted to procure through an emergency hire, a contractor to install pilings to brace the bridge, however, the site is too unstable to perform the repairs;

Whereas, at the suggestion of a local contractor, the City braced the bridge with chains and will hire a structural inspection of the bridge to ensure it is safe for pedestrian access this summer;

D-1 EMERGENCY BOARDWALK BRIDGE REPAIR				
Line Item	Description	Approved Appropriations	Proposed Amendment	Proposed Total Appropriations
100-70-6111	Boardwalk repairs	\$9,366	\$20,000	\$29,366
FY25 Operating Budget	FY25 Revenue over Expenditures	\$426,050	(\$20,000)	\$406,050
General Fund Change Summary:	The general fund revenue over expenditures will decrease after this amendment from \$426,050 to \$406,050.			

Summary of FY25 Operating Budget following expenditure adjustments:

General Fund

Adopted Excess General Fund (GF) Revenue over Expenditures:	\$343,955
Budget Amendment 24-04 (a) Revenue over Expenditures:	\$551,201
Budget Amendment 24-04 (b) Revenue over Expenditures:	\$327,640
Budget Amendment 24-04 (c) Revenue over Expenditures:	\$426,050
Budget Amendment 24-04 (d) Revenue over Expenditures	\$406,050

Solid Waste Enterprise Fund

Adopted Excess Solid Waste Revenue over Expenditures:	\$51,768
Budget Amendment 24-04 (b) Revenue over Expenditures:	(\$683,574)

Water and Sewer Enterprise Fund

Adopted Excess Water and Sewer Fund Revenue over Expenditures:	\$197,474
Budget Amendment 24-04 (a) Revenue over Expenditures:	\$37,474
Budget Amendment 24-04 (b) Revenue over Expenditures:	\$8,474

Municipal Dock Enterprise Fund

Adopted Excess Solid Waste Revenue over Expenditures:	\$253,666
---	-----------

SECTION 4. Effective Date. This ordinance shall become effective upon passage by the Bethel City Council.

NOW THEREFORE BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF BETHEL, ALASKA, that the Fiscal Year 2025 operating budget is adopted for a period of one year, from July 1, 2024, through June 30, 2025.

ENACTED THIS ____ DAY OF ____ 2025, BY A VOTE OF __ IN FAVOR AND __ OPPOSED.

Rose Henderson, Mayor

ATTEST:

Kevin Morgan, City Clerk

Introduced by: Vice-Mayor Keller
Introduction Date: April 22, 2025
Public Hearing May 13, 2025
Action:
Vote:

CITY OF BETHEL, ALASKA

Ordinance 25-07

AN ORDINANCE BY THE BETHEL CITY COUNCIL AMENDING TITLE 5.08.080 ALCOHOLIC BEVERAGES, HOURS AND DAYS OF OPERATION

WHEREAS, In the 2019 Regular City of Bethel Election, the voters chose to adopt Local Option Alaska Statute (AS) 4.11.491(a)(2)(A), to prohibit the sale of alcoholic beverages except through a restaurant or eating place license;

WHEREAS, ~~the current hours of operations allow for the sale, service, and consumption of alcoholic beverages between the hours of 10:00 p.m. and 11:00 a.m.;~~

WHEREAS, currently under BMC 5.08.080.A, a person may not sell, offer for sale, give, furnish, deliver, or consume an alcoholic beverage on premises licensed under AS 04.11.080 between the hours of 10:00 p.m. and 11:00 a.m.;

WHEREAS, the hours of operation for the consumption of alcoholic beverages should better reflect the use of a restaurant license in the community;

WHEREAS, ending consumption of alcoholic beverages at 10:00 pm may not give patrons enough time to finish their meal with an alcoholic beverage that they ordered;

WHEREAS, AS 4.16.010(d) provides: "A municipality may provide for additional hours of closure under AS 04.21.010";

WHEREAS, AS 04.21.010 allows for a municipality to adopt ordinances governing the consumption of alcoholic beverages within the municipality; and

WHEREAS, the State of Alaska revised its Alcohol Statutes and the references to the Alaska Statutes have been corrected in this ordinance to reflect the changes, including the previous subsection E, which has been stricken as it no longer exists in Alaska Statutes.

BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF BETHEL, ALASKA,;

SECTION 1. Classification. This is a codified Ordinance and shall become part of the Bethel Municipal Code.

Introduced by: Vice-Mayor Keller
Introduction Date: April 22, 2025
Public Hearing May 13, 2025
Action:
Vote:

Section 2. Amendment: Section 5.08.080 of the Bethel Municipal Code, Alcoholic Beverages, Hours and Days of Operation, is hereby amended, new language is underlined and old language is stricken.

5.08.080 Hours and days of operation.

A. A person may not sell, offer for sale, give, furnish, or deliver, ~~or consume~~ an alcoholic beverage on premises licensed under ~~AS 04.11.080~~ AS 04.09.210 between the hours of 10:00 p.m. and 11:00 a.m.

~~B.~~ A person may not consume an alcoholic beverage on premises licensed under AS 04.09.210 between the hours of 11:30 p.m. and 11:00 a.m.

~~B.~~ C. All other retail premises licensed under ~~AS 04.11.080~~ AS 04.09.010 may only be open for the sale of alcoholic beverages between the hours of 1:00 P.M. and 9:00 P.M.

~~C.~~ D. A person may not sell, offer for sale, give, furnish, deliver or consume an alcoholic beverage on premises licensed under ~~AS 04.11~~ 04.09.010 during the ~~posted~~ hours of closure set forth in this section.

~~D.~~ E. A licensee, an agent, or employee may not permit a person to consume alcoholic beverages on the licensed premises between the hours of closure set forth in this section. ~~during the posted hours of closure.~~

~~E.~~ As authorized by AS 04.16.070(b), the sale of alcoholic beverages on state and/or city election days is not prohibited.

SECTION 3. Effective Date. This ordinance shall become effective upon passage by the Bethel City Council.

ENACTED THIS ____ DAY OF ____ 2025 BY A VOTE OF ____ IN FAVOR AND ____ OPPOSED.

Rose Henderson, Mayor

ATTEST:

Kevin Morgan, City Clerk

Introduced by: City Manager Strickler
Introduction Date: April 22, 2025
Public Hearing: May 13, 2025
Action:
Vote:

CITY OF BETHEL, ALASKA

ORDINANCE #25-08

AN ORDINANCE BY THE BETHEL CITY COUNCIL PROVIDING FOR THE ADOPTION OF THE ANNUAL OPERATING BUDGET FOR FISCAL YEAR 2026, JULY 1, 2025-JUNE 30, 2026 AND APPROPRIATING FUNDS TO CARRY OUT SAID BUDGET

BE IT ORDAINED by the City Council of Bethel, Alaska, as follows:

SECTION 1. Classification. This is a noncodified ordinance establishing the City of Bethel Annual Operating Budget for Fiscal Year 2026. The document entitled "City of Bethel Annual Budget" that includes complete line-item details of revenue and expenditures for all funds, is incorporated here by reference.

SECTION 2. Purpose. In accordance with Bethel Municipal Code 4.04 the Bethel City Council hereby adopts the Annual Budget for the Fiscal Year 2026.

SECTION 3. Budget Adoption. The following sums of money are hereby appropriated for the operations of the City of Bethel for the fiscal year commencing on the first day of July 1, 2025, and ending the 30th day of June, 2026, to be expended consistent with and subject to the restrictions, procedures, and purposes set forth in the Code of the City of Bethel, and to be expended substantially by line item in the manner shown in the budget adopted by Section 1 hereof:

General Fund Revenue Sources	Revenues
Federal Sources	\$1,107,000
State of Alaska Sources	\$143,000
Taxes and Interest	\$12,095,000
Charges for Services	\$160,000
Licenses, Permits and Fees	\$1,400,000
Miscellaneous	\$1,137,000
Total General Fund Revenue	\$16,042,000

General Fund Expenditures	Expenditures
Administration	\$978,000
City Clerk	\$304,000
Finance	\$1,562,000
Planning	\$381,000
City Attorney	\$328,000

Fire	\$2,163,000
Police	\$4,835,000
Public Works Administration	\$171,000
Public Works – Streets & Roads	\$1,757,000
Public Works – Property Maintenance	\$589,000
Community Parks & Recreation	\$1,181,000
Community Services	\$410,000
In -Kinds and Transfers	\$244,000
Total General Fund Expenditures	\$14,903,000
Indirect Cost Recovery (ICR)	(\$1,368,000)
GF Expenditures after ICR	\$13,535,000
GF Revenue over Expenditures	\$2,507,000

Special Revenue Funds	Expenditures
Community Service Patrol	\$352,000
Enhanced 911 System	\$137,000

Enterprise Fund Summaries	Revenue	Expenditures	Net Operating Difference
Solid Waste Enterprise Fund	\$1,471,200	\$1,248,000	\$223,200
Water and Sewer Utility Fund	\$9,438,300	\$8,721,000	\$717,300
Municipal Dock Summary	\$1,431,100	\$1,262,600	\$168,500
Leased Properties	\$1,029,000	\$878,900	\$150,100
Public Transit System	\$482,400	\$482,400	\$0

Internal Service Funds *	Expenditures
Vehicle and Equipment	\$1,128,900
Employee Group Health Benefits	\$2,455,344

SECTION 4. Effective Date. This ordinance shall become effective upon passage by the Bethel City Council.

NOW THEREFORE BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF BETHEL, ALASKA, that the Fiscal Year 2026 operating budget is adopted for a period of one year, from July 1, 2025, through June 30, 2026.

ENACTED THIS xx DAY OF JUNE 2025, BY A VOTE OF ___ IN FAVOR AND ___ OPPOSED.

Rose Henerson, Mayor

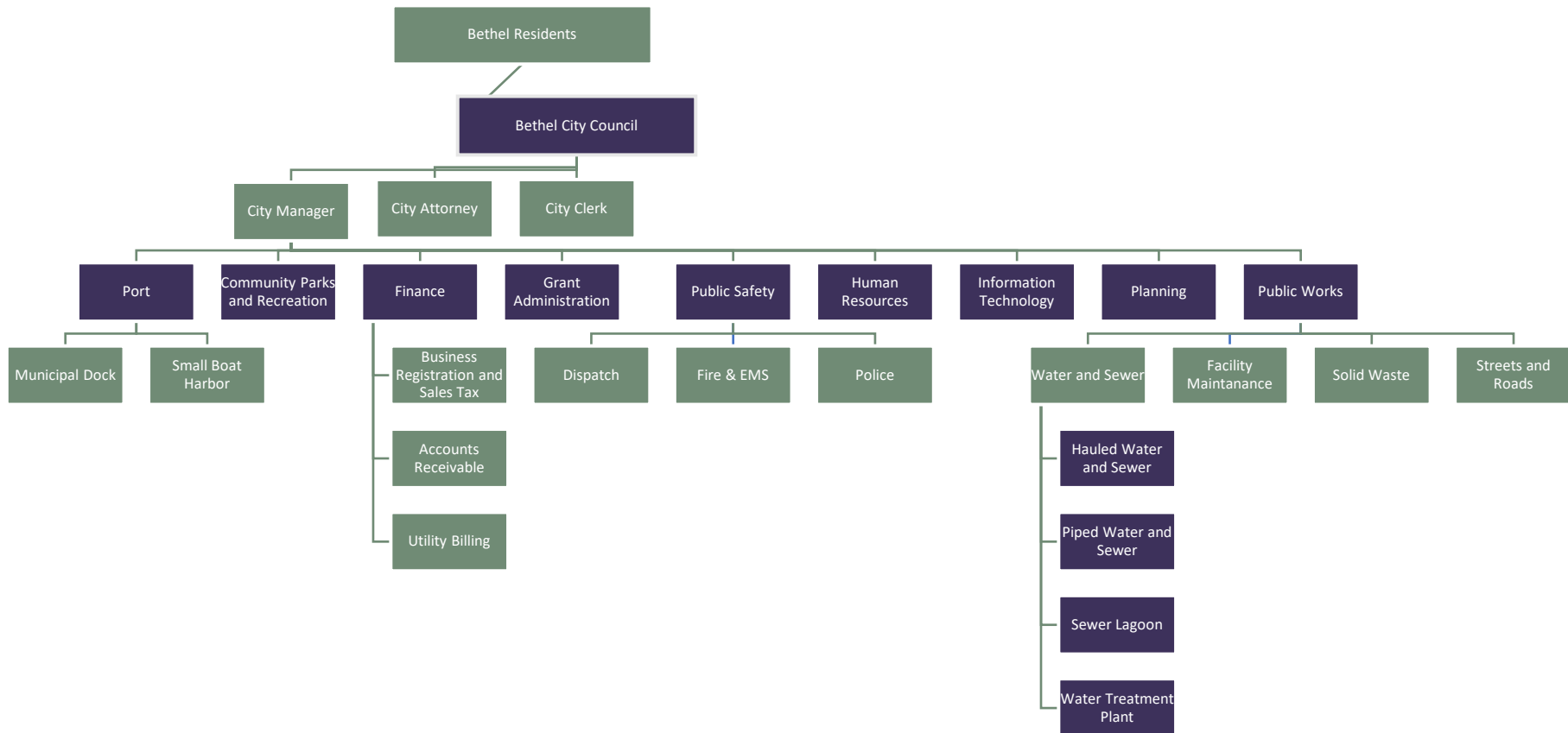
ATTEST:

Kevin Morgan, City Clerk

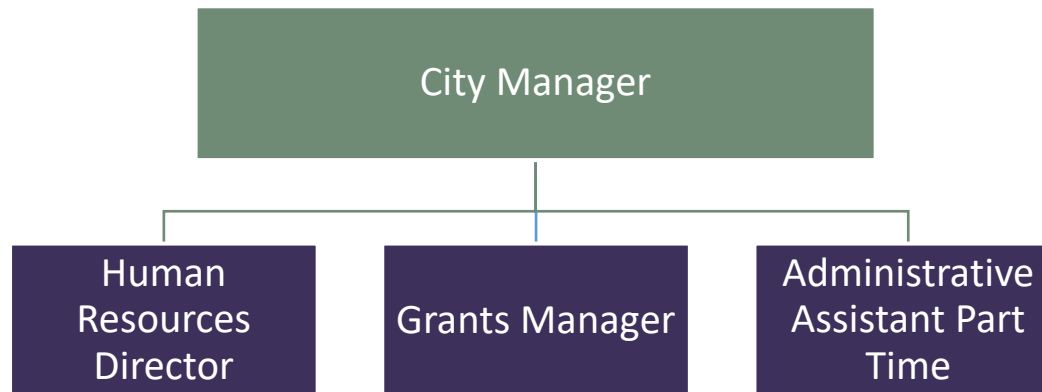
City of Bethel, Alaska

Ordinance #25-08
Page 2 of 2

City of Bethel Organizational Chart



Administration 3.5 FTEs



The Department of Administration, consisting of the City Manager, Human Resources Director and Grant Manager, supports the overall operations and management of municipal operations. The City Manager serves as the Chief Executive Officer and is responsible for overseeing municipal departments and services to our residents, maintaining smart fiscal operations through the implementation and management of the annual operating and capital improvement budgets, and implementing policies set by the City Council. The Human Resources Director is responsible for employee recruitment, retention, training, and workplace policies. The Grant Manager identifies funding opportunities, prepares grant applications, and manages awarded grants to support City programs and projects. Collectively, the Department of Administration works to support the operations of the municipality and our services to the City of Bethel residents through transparency and accountability.

City Clerk 1.5 FTEs



The City Clerk's Office is committed to serving the Bethel community by supporting transparent and open government. The office helps ensure that the City Council's work is conducted in a clear and accessible way, through managing meetings, records, and communication. The City Clerk is responsible for maintaining the security and accessibility of all official City records, managing legislative documents and proceedings, and conducting municipal elections. The office also provides direct support to the City Council, City staff, boards and commissions, and members of the public.

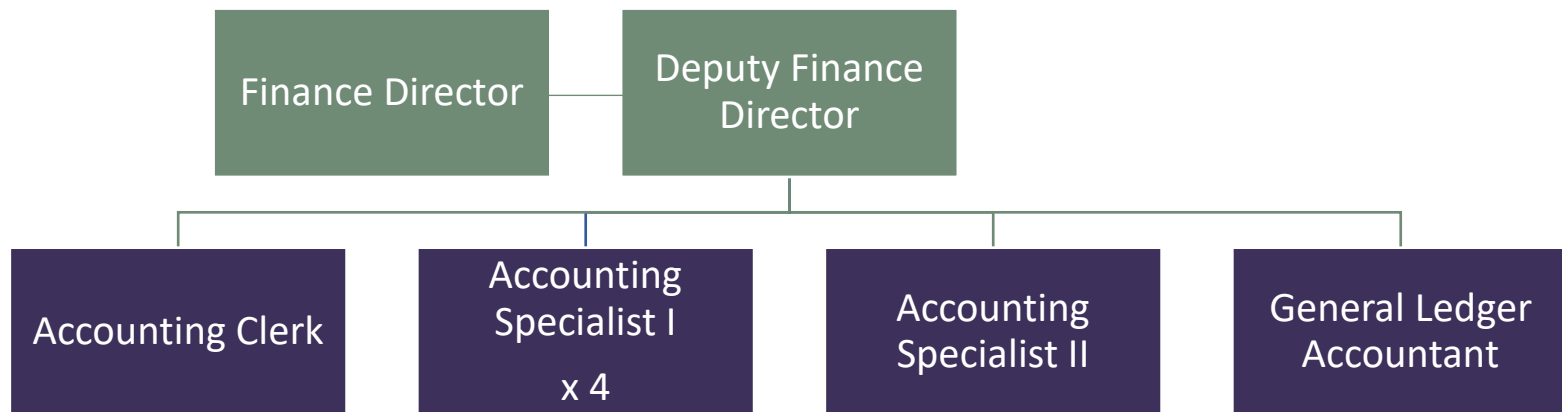
City Attorney 1 FTE



City Attorney

The City Attorney is the legal advisor to the City Council and City Administration. The City Attorney is a one-person office whose job is to help these bodies and offices achieve their policy goals within the bounds of Alaska law, through maximizing their entitlements and minimizing their liabilities. The City Attorney advises on various diverse legal issues impacting the function of municipal government, including contracts; leases; grants; planning and zoning; personnel; public safety; public records; parks and recreation; port; state and federal compliance; and defending the city in litigation. The City Attorney also assists with ordinance and resolution drafting and advises the Council and boards and committees on legal issues that arise during and outside of public meetings.

Finance 9 FTEs



The Finance Department is committed to providing timely, accurate, clear, and complete information and support to other city departments, citizens, and the City Council for the purpose of making informed financial decisions.

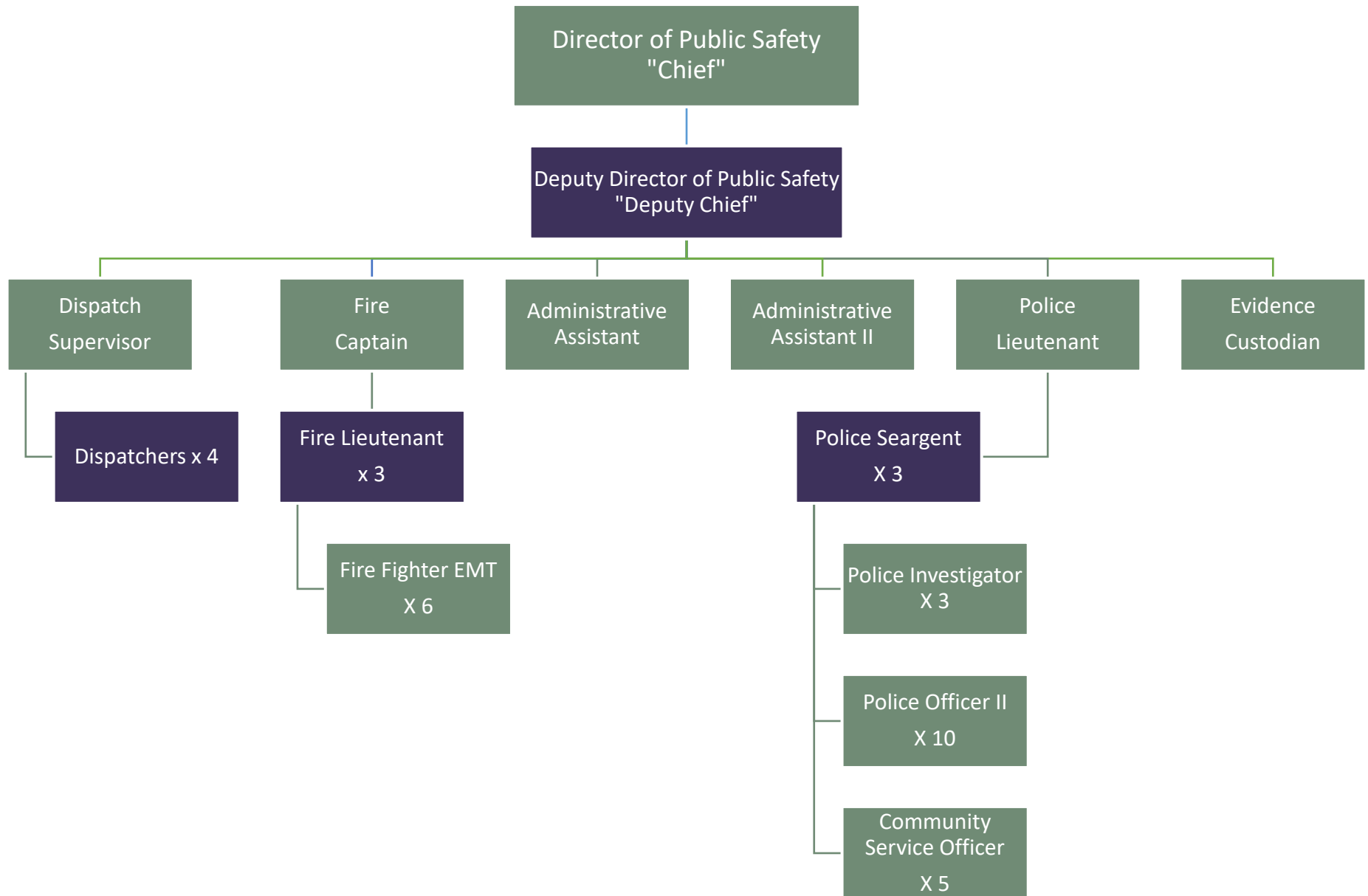
The Finance Department is responsible for the financial and budgetary operations of the City. The Finance Department processes purchase orders, issues vendor checks, processes the citywide payroll, compiles the budget, processes all accounts receivable transactions including the water and sewer utility bills, and invests the City's money. The department is involved in numerous day-to-day activities of City operations, including special assessments, land sales, land leases, personnel matters, insurance, pensions, and general accounting.

Planning 2 FTEs



The Planning Department is committed to encouraging thoughtful development practices while ensuring compliance with the Bethel Municipal Code (BMC). Key responsibilities include assisting citizens with new developments and property rehabilitation, reviewing development applications, and providing guidance to promote responsible growth. The department enforces code compliance related to planning, health, and safety, oversees floodplain development in accordance with local, state, and federal regulations, and maintains accurate permit records and community data. Additionally, the department monitors planning trends at all levels and recommends updates to the BMC to support community health, safety, and sustainable development.

Public Safety - 42 FTEs

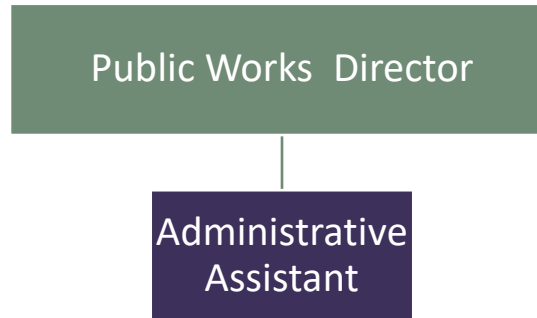


Department of Public Safety Continued

The Bethel Department of Public Safety is responsible for delivering comprehensive emergency services to the community, including law enforcement, fire suppression, emergency medical response, rescue operations, and public education. The department is committed to protecting life and property, ensuring public safety, and enhancing the quality of life for all residents through professional, ethical, and community-centered service.

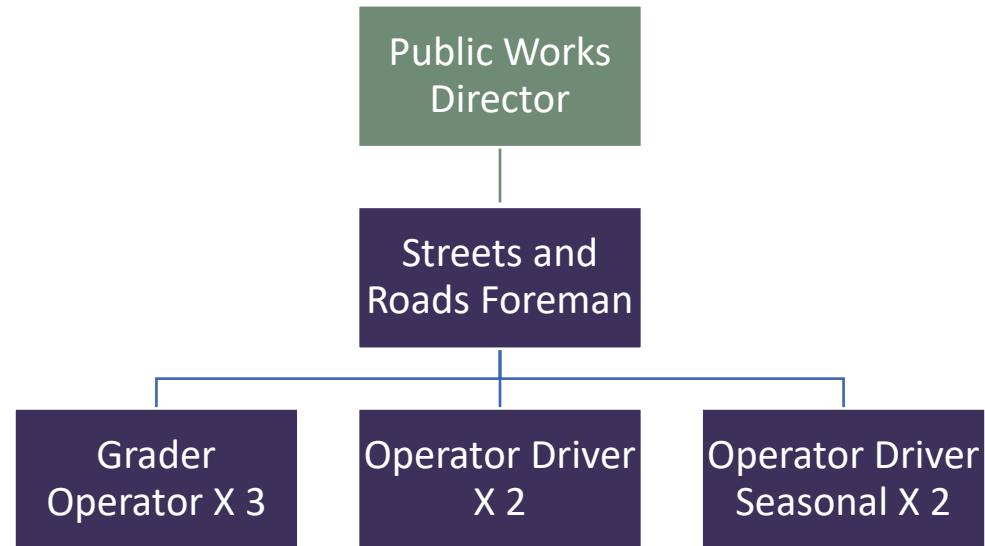
It is the mission of the Bethel Department of Public Safety to serve and protect the community through effective law enforcement, fire and rescue services, and emergency medical response. The Department is dedicated to providing unbiased, professional, and ethical public safety services that safeguard lives and property. Through integrity, honor, and a commitment to excellence, the department strives to maintain public trust and engagement.

Public Works Administration 2 FTEs



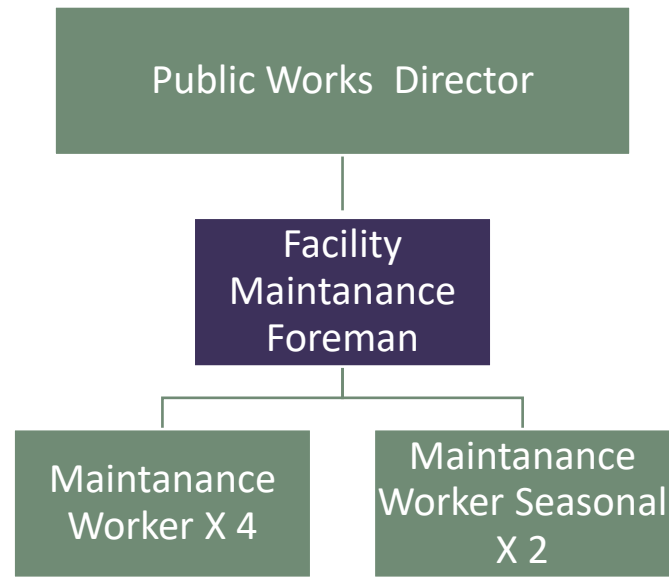
The Public Works Administration provides oversight for the essential infrastructure and utility services that support the community's health, safety, and daily operations. The department director manages a wide range of functions, including water, sewer, and solid waste utilities, lagoon waste management, facilities maintenance, water treatment plants, streets and road maintenance, and the management of city vehicles and equipment.

Public Works Streets and Roads 6 FTEs / 2 Seasonal



The Streets and Roads Department is responsible for the maintenance and improvement of the city's predominantly gravel road network in a challenging tundra environment. The department focuses on grading, drainage management, and seasonal upkeep to ensure safe and reliable transportation throughout the community.

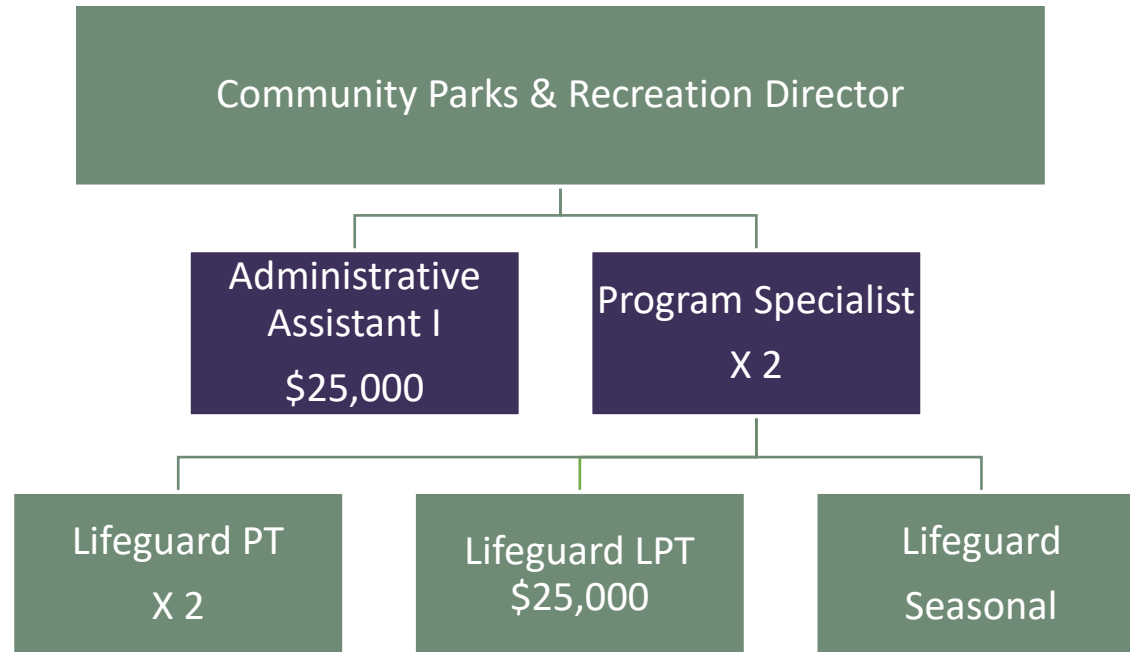
Facility Maintenance 6 FTEs / 2 Seasonal



The Facility Maintenance Department ensures the proper upkeep and operation of all city-owned buildings and facilities. This includes routine maintenance, repairs, and managing systems such as heating, plumbing, and electrical to provide a safe, functional environment for city employees and the public.

Community Parks and Recreation 3 FTE / 2 PT / 2 Seasonal

The two \$25,000 Buckets are for shift work



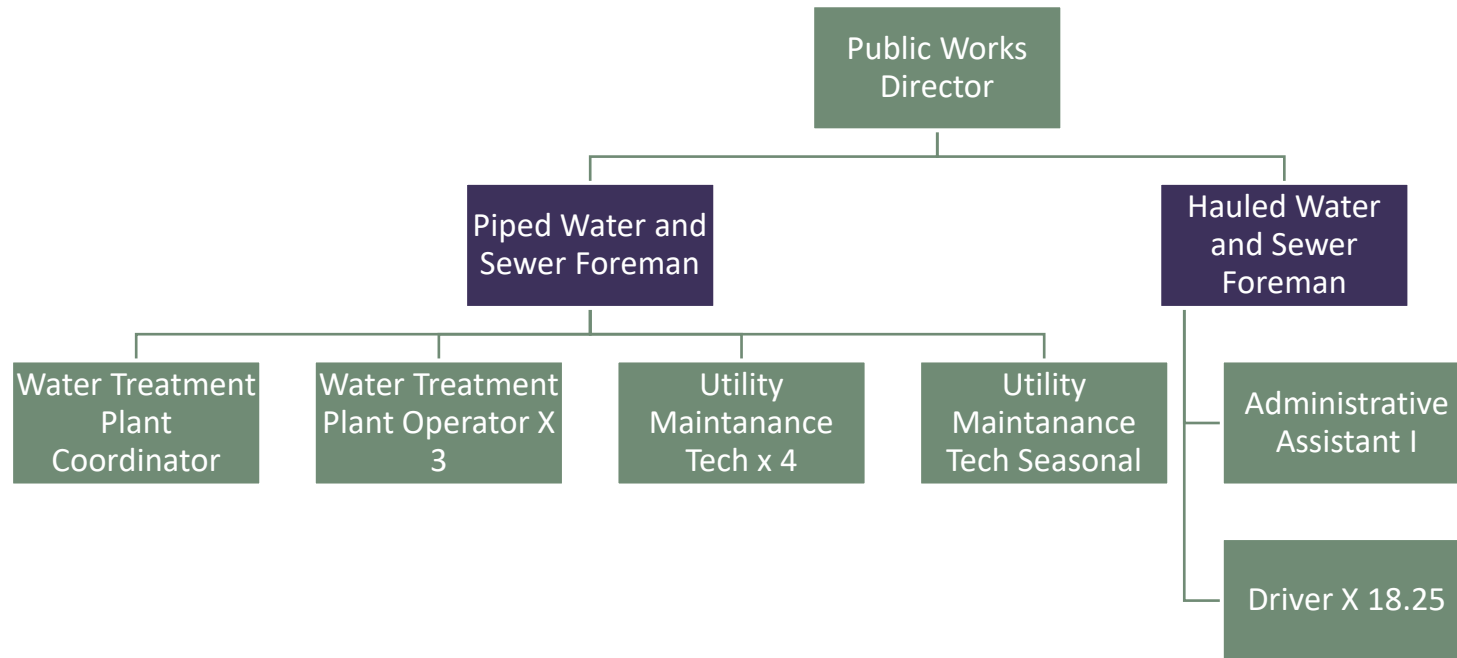
Improve the quality of life in Bethel by providing abundant opportunities for healthy activities and community cohesion. This includes maintaining and enhancing; pool and recreational center facilities, outdoor parks and trails, recreational programs for all ages, access for all income levels.

Solid Waste Management 3.5 FTEs



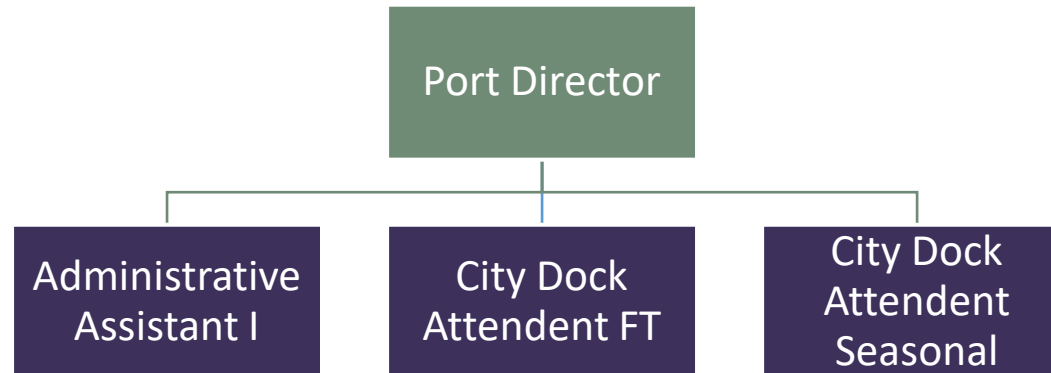
The Solid Waste Management Department oversees the operation of the city landfill and provides residential dumpster pickup services to ensure effective and sanitary waste disposal. The department is committed to maintaining environmental compliance and supporting public health through responsible waste handling and site management.

Water and Sewer Utility 29.25FTEs/1 Seasonal



The Water and Sewer Utility Department is responsible for delivering safe, reliable water and wastewater services through both a hauled and piped system. The utility operates two water treatment plants and manages a wastewater lagoon to ensure regulatory compliance and protect public health and the environment. Services include the delivery of treated water and the collection of wastewater from homes and businesses, whether connected to the piped network or served through the city's haul system. In a region where extreme weather and permafrost present ongoing challenges, the department remains committed to maintaining and upgrading infrastructure to ensure consistent service delivery. A top priority moving forward is to improve operational efficiencies across all systems, with the dual goals of maintaining high service standards and reducing overall operating costs. These efforts are aimed at creating long-term sustainability and potentially lowering water and sewer rates for residents in the future.

Port of Bethel 3 FTEs / 5 Seasonal



The Port of Bethel is the receiving and transshipment center for petroleum products and barged freight for the Yukon-Kuskokwim Delta. The Kuskokwim area commercial salmon industry also relies on the Port for most of its infrastructure and processing requirements. The Port Cargo Dock is a nine-acre facility that offloads, stores, and distributes cargo destined for Bethel and transshipping to other communities in western and northern Alaska. Because the Yukon-Kuskokwim Delta is not connected to any other community by road or rail, the Bethel general cargo dock and staging area are critical to the shipment of freight to the Delta.

Fiscal Year 2026 Operating Budget Summary

General Fund Summary

The proposed FY26 operating budget is balanced in accordance with the Bethel Municipal Code.

General Fund Operating Expenses	\$15,079,561
Indirect Cost Recovery (ICR) from Enterprise	(\$1,367,651)
General Fund Operating Expenses after ICR	\$13,711,911
General Fund Operating Revenue	\$16,041,902
Debt Payments	(\$335,666)
Excess Revenue After Expenses and Debt Payments	\$1,923,107
Expected Depreciation	>(\$1,409,903)
Excess Revenue After Expected Depreciation	\$513,204

- The FY26 operating budget reflects a **reduction of \$1,237,205** in general fund operating expenses before an indirect cost recovery is applied compared to the previous year.
- The **indirect cost recovery**—operational expenses from enterprise funds was reduced by **\$649,988** from prior year.
- General fund operating revenue to expected to increase by **\$1,319,122**. This projection is largely due to the transition of the YK Fitness Center operations to a general fund operation. The facility is expected to generate **\$632,000** in revenue and the set-aside tax, which was previously budgeted as an in-kind transfer of **\$714,039**, is now also reflected as revenue.

Enterprise Fund Summaries

Enterprise Fund	Operating Expenses	Operating Revenue	Revenue/ Expenses	Expected Depreciation	Excess Revenue After Expected Depreciation
Solid Waste	\$1,253,294	\$1,471,238	\$217,944	> (\$218,321)	> -\$377
Water & Sewer	\$8,308,861	\$9,438,290	\$680,139	> (\$2,145,111)	> -\$1,464,972
Muni Dock	\$1,267,896	\$1,431,164	\$163,268	> (\$1,947,877)	> -\$1,784,609
Leased Property	\$378,428	\$249,500	\$128,928	> (\$329,500)	> -\$200,572
Transit System	\$482,389*	\$482,389	0	> (\$26,389)	> -\$26,389

* City's Match to the Transit System is \$164,118. \$278,271 is from the grant, and \$40,000 is from fairs.

Personnel

Staff Reduction:

The budget reflects a reduction of **four** positions compared to the FY25 operating budget:

- Director of IT
- IT Technician
- Fire Chief
- Police Officer (School Resource Officer)

IT Department Personnel Explanation:

The IT Department lost two budgeted employees in 2024. The total personnel cost for that budget was **\$302,060**. The FY25 operating budget for IT was **\$1,328,469**. The City transitioned operations to a contracted IT support team and is requesting **\$864,513** for the FY26 operating budget—a reduction of **\$463,956**.

Fire Chief Personnel Explanation:

The City has combined police and fire into a public safety department, reporting to a Director and Deputy Director of Public Safety. This transition resulted in the removal of the Fire Chief from the operating budget.

Police Officer (School Resource Officer):

The School Resource Officer was grant funded in the FY25 operating budget. With the expiration of the grant, one full-time police officer position was removed from the Police Department budget.

Position Title Changes:

Police Lieutenant → **Deputy Director of Public Safety**

Position Type Changes:

We have found success in advertising for part-time employment. The FY26 operating budget includes part-time employees for:

- Grant Manager
- Administrative Assistant, Administration
- Administrative Assistant, City Clerk's Office
- Accounting Specialist I, Finance

These adjustments result in savings within the benefits and taxes, as part-time employees do not qualify for the same benefits as full-time employees.

Miscellaneous Personnel Items:

Merit:

Merit has been budgeted at **2.5%** for each position. This is the standard rate agreed upon in the City's Collective Bargaining Agreement and part of the adopted wage scale for exempt employees.

Cost of Living Adjustment (COLA):

A COLA has been applied to all positions. This is a standard provision in the City's Collective Bargaining Agreement, though **new** for exempt employees. The adjustment was made in response to two key factors:

1. Union employees outpacing executive team compensation, as noted in the 2023 Classification and Compensation Study. Union employees have historically received **4.5%–5.5%** increases annually, while leadership has received **2.5%–3%**.
2. The **2024** cost-of-living index of **2.9%** for Anchorage.

Interesting Personnel Points:

- The City of Bethel's operational budget includes **121 permanent employees**.
- Total budgeted wages in FY26: **\$10,516,848**.
- Total budgeted benefits: **\$6,141,215**—approximately **58%** of total wages. (Departmental benefit-to-wage ratios range from **28% to 75%**.)

Operations

Three significant operational changes are presented in this fiscal year's budget.

Parks and Recreation:

The first is the modification of the City's YK Fitness Center from an **enterprise** to a **general fund** operation. Enterprise funds are intended to be self-supporting through user fees. However, community service programs—like parks and recreation, public safety, and planning—are not intended to rely on user fees for full cost recovery.

By transitioning to a general fund, the City's tax contributions to the enterprise fund will return to the general fund, along with the user fee revenues.

- Proposed Community Parks and Recreation Department budget: **\$1,181,369**
- Reduction from FY25 YK Fitness Center budget: **\$311,398** (previously **\$1,498,489**)
- Projected user fee revenue: **\$632,000**
- Required draw from taxes: **\$549,369**

Equipment Leases:

The second change is moving equipment lease payments from the capital budget to the operating budget. Although these qualify as capital expenses, they are annual costs not tied to multi-year projects.

- General Fund: **\$406,884**
- Port Enterprise Fund: **\$185,357**

Indirect Cost Recovery (ICR):

ICR allows the general fund to be reimbursed for services it provides to enterprise fund operations (e.g., utility services, port operations).

Each department evaluated how much of their resources support each of the enterprise funds. The updated figures provide a more accurate reflection of service costs:

- ICR reduced from **\$2,121,869** (FY25) to **\$1,367,651** (FY26)
- Reduction in general fund revenue: **\$754,218**
- Impact: **\$313,458** in savings on the Water and Sewer Utility for reference.

Operational Requests from Leadership Team

Public Safety

As noted, the school resource officer grant program ended, eliminating one officer position. The Director of Public Safety is requesting to fund the position and will reach out to LKSD for possible funding support.

Police Officer – School Resource Officer Cost Estimates:

- Total Cost: **\$115,500** (based on a \$70,000 salary)
- **Plan A:** School pays 75% / City pays 25% = **\$28,875** (City portion)
- **Plan B:** City pays 100% = **\$115,000**

Administration

- Classification and Compensation Study - \$50,000

Capital Considerations Requests from Leadership Team

Public Safety:

- Replace tires on police vehicles – **\$35,000**

Finance:

- Carpet replacement – **\$20,000**

Information Technology:

- Internet for Streets & Roads Office and Animal Control Center – **\$8,000**
- PD Server replacement – **\$15,000**

Community Parks and Recreation

- Woodchipper **\$9,000**

Public Works – Landfill:

- Shredder – **\$40,000**
- Compactor – **\$800K–\$900K**
- Trash vacuum – **\$30,000**

Streets and Roads:

- Slider sanders – **\$55,000**
- Steamer truck – **\$250,000**

Vehicles and Equipment:

- Mobile lift – **\$160,000**

Property Maintenance:

- City Hall / Courthouse leveling – *[cost TBD]*
- Fire Dept – Drain improvements –*[cost TBD]*

Water Treatment:

- BHWTP: Replace metal roof, siding, and insulation – **\$1.5 Million**

Police Department:

- Vehicle tires and rim sets x 15- **\$38,000**

Port

- Dock front gate automation – **\$20,000**

Port Requests Without Cost Estimates:

- Expand footprint on the dock and harbor
- Replace warehouse
- Install cameras at the harbor, dock, and walking path accessing the seawall. *Grant request submitted \$300,000, should know by the end of June.*

Leadership Team Community Wide Priorities

- **Youth Activities**
 - Organized sports and pickup games
 - A youth community center with games/ events
 - National Night Out
- **Rehabilitation of Pinky's Basketball Court:**
 - Add benches
 - Update basketball rims
 - Paint lines for multiple sports
- **Community Improvements:**
 - Nuisance abatement
 - Community-wide trash pickup efforts
- **Create a Community Landmark or Attraction**
(Examples: Barrow's whale bones, Nome's Park)

Capital Program

Project Name	Grant Amount	City Amount
Professional Housing Development	\$3,000,000	\$ 450,000 FY25 Capital
Grant Agency	Year Initiated	Grant Deadline
Alaska Housing Finance Corporation	2024	2026

Project Name	Grant Amount	City Amount
Safe Streets Plan	\$52,800	\$ 13,200
Grant Agency	Year Initiated	Grant Deadline
Federal Highway Administration	1-1-2025	12-30-2025

Project Name	Grant Amount	City Amount
YK Fitness Community Center	\$500,000 \$9,000,000 FY24 \$500,000 FY23	Pledge \$6,000,000
Granting Agency	Year Initiated	Grant Deadline
- Designated Legislative Grant - Office of Management & Budget - State of AK, Denali Commission	2024	\$9M 12/31/2026

Capital Project	Grant Amount	City Amount
Animal Control Center	0	\$800,000 FY23 Capital \$400,000 FY24 Capital \$300,000 FY24 Capital (g) \$1,000,000 FY25 Capital (a) \$250,000 Rasmuson Grant

Project Name	Grant Amount	City Amount
Virtual Shooting Simulator	\$87,200	0
Grant Agency	Year Initiated	
State Homeland Security	2023	

Capital Expense	Grant Amount	City Amount
Vehicle Purchases Police Department 2024 For Expedition X 2	0	\$154,068 FY25 Capital

Capital Expense	Grant Amount	City Amount
Jacket and Gear	0	\$35,900 FY24 Capital

Capital Project	Grant Amount	City Amount
Bethel Cemetery	0	\$100,000 FY24 Capital

Capital Project	Grant Amount	City Amount
Akakeek, Ptarmigan, Delapp Heavy Use Road Improvement Project.	\$7,271,462 (As of 2020) JOHN	\$1,095,004 FY23 or before Capital Required City Match
Granting Agency	Year Initiated	Grant Deadline
Statewide Transportation Improvement Plan	2020	NA

Capital Project	Grant Amount	Budget Year
Ptarmigan Culverts	0	\$2,000,000 FY25 Capital

Project Name	Grant Amount	City Amount	Funding Year
Dust Control	\$1,200,000	\$ 0	2024
Grant Agency	Year Initiated	Grant Deadline	
State of Alaska Legislative Appropriation	2024	6/30/2029	

Project Name	Grant Amount	City Amount
Rehabilitation of Parks	0	\$100,000 FY23 or Prior Capital

Capital Purchase	Grant Amount	City Amount
Water Truck/Freight	0	\$320,000 FY24 Capital

Project Name	Grant Amount	City Amount
Bethel Heights Martina Oscar Water/Sewer Phase 1	\$13,860,000	0

Awarded Grants

#	Grant	Amount	Expiration
1	Coronavirus Capital Project Fund	\$ 9,000,000	12/31/2026
	Design and construction of Bethel Multiuse Community Center (gym, computer facilities). This fund is now being tapped for design/construction costs. Design at 95% nearly done.		
2	Denali Commission Grant	\$ 500,000	9/30/2026
	Design and construction of Bethel Multiuse Community Center (gym, computer facilities). City still waiting on a grant agreement from grantor.		
3	CSP - DHSS FY 2025	\$ 323,081	6/30/2025
	One CSP recently promoted to police officer. Vacancy to fill. Applied for FY 26 CSP grant for same amount.		
4	23SHSP-GY23 – Virtual Simulator & Fencing	\$ 268,000	9/30/2025
	The City must complete the Environmental, Historical and Preservation documents necessary for		
5	Coronavirus Local Fiscal Recovery Fund (ARPA)	\$ 3,361,604	12/31/2024
	The performance period closed December 31, 2024. The City expects to claim the remaining balance of \$1,242,895 on the Final Report, which is due April 30, 2025.		
6	Designated Legislative Grant > YK Fitness Ctr. Gym Design	\$ 500,000	6/30/2026
	This grant is fully expended. Final report will be completed in April 2025.		
7	Designated Legislative Grant > Public Safety Communication Tower	\$ 500,000	6/30/2028
	STG, Inc. completed the installation of the Public Safety Communications Tower. Final report to be completed in April 2025.		
8	Designated Legislative Grant> Dust Control	\$ 1,200,000	6/30/2029
	Finance Dept. assigned GL# combination so that purchases can be credited correctly.		
9	State and Local Cybersecurity Grant Program (SLCGP)	\$ 75,000	9/30/2026
	The City of Bethel plans to hire a consultant to conduct a cybersecurity review of the City's IT network, equipment, software, and physical layout. The City plans to use recommendations in the plan as grant requests next year.		
10	VSW Capital Improvement Project Grant	\$ 13,860,000	
	Sturgeon Electric nearly completed the water treatment plant improvements. DOWL is now working on the design to run water pipes from the Bethel Heights Water Treatment Plant to the Martina Oscar Subdivision.		

11	Last Frontier Housing Initiative	\$ 5,000,000	12/31/2026
Alaska Housing Finance Corporation is the grantor. City hired Urban KNKT to construct and operate three rental units to serve low-income residents. The City hired Kuqo Construction to construct three professional housing two-bedroom units.			
12	State Homeland Security Program Grant - SFY 25	\$ 9,000	9/30/2026
This grant will cover the cost of paying a trainer to come to Bethel to teach ICS-300, an Incident Command System course for first responders and municipal administrators who may play a role in a major emergency situation.			
13	Safe Streets 4 All Grant	\$ 52,800	TBD
The City is waiting on grantor to obtain federal agency approval and then produce a grant agreement. Infrastructure, equipment, road signs, and other hardware recommended in the safety plan become eligible for funding in the next Safe Streets 4 All grant opportunity.			
14	Justice Assistance Grant (JAG)	\$ 11,116	9/30/2025
Security cameras and access control system installation at Police Station. The City is applying for Homeland Security grant funds to match this grant for the full purchase of cameras and card reader equipment.			
15	Energy Efficiency and Conservation Block Grant (EEBG)	\$ 75,220	9/30/2026
Solar panel installation on YK Fitness Center. Project likely to begin once UIC begins construction of Bethel Community Center (gymnasium). Parks and Rec. Director assumed role of Project Manager.			
16	Rasmuson Foundation Grant	\$ 250,000	1/31/2026
This grant will cover part of the cost of constructing a new animal shelter in Bethel.			
17	Community Transit Operating Grant	\$ 184,131	6/30/2025
Transit Manager Evon Fox manages the daily operation of the transit system, handles all purchases, and completes monthly billing summaries and quarterly reports.			
18	Community Transit Capital Grant	\$ 853,563	6/30/2026
This grant covers the capital cost of a new boiler in the transit center and the purchase of two new buses. Two buses purchased and in use.			

Grant Applications Awaiting Notice

State of Alaska Capital Grants

Funder-State of AK	Amount Requested	Type	Notice Expected
Bethel Community Center Expansion	\$3,000,000	Competitive	April-May 2025
Planning, Permitting, and Design of Cargo Port East Wall	\$3,000,000	Competitive	April-May 2025
Planning, Permitting, and Design of Public Works Building	\$3,000,000	Competitive	April-May 2025

Federal Appropriations

Funder-Federal Gov.	Amount Requested	Type	Notice Expected
Bethel Community Center Expansion	\$3,000,000	Competitive	May-June 2025
Planning, Permitting, and Design of Cargo Port East Wall	\$3,000,000	Competitive	May-June 2025
Planning, Permitting, and Design of Public Works Building	\$3,000,000	Competitive	May-June 2025
Solar Power Project	\$225,000	Competitive	May-June 2025
Bethel Heights Water Treatment Plant Automation Project	\$1,418,000	Competitive	May-June 2025

Federal Congressional Directed Spending

Funder-Federal Gov.	Amount Requested	Type	Notice Expected
Bethel Community Center Expansion	\$3,000,000	Competitive	May-June 2025
Planning, Permitting, and Design of Cargo Port East Wall	\$3,000,000	Competitive	April-May 2025
Planning, Permitting, and Design of Public Works Building	\$3,000,000	Competitive	April-May 2025

Community Service Patrol

Funder	Amount Requested	Type	Notice Expected
--------	------------------	------	-----------------

State Dept. of Health	\$323,081	Formula	April 2025
-----------------------	-----------	---------	------------

Alaska Community Transportation

Funder-AK Dept. of Transportation & Public Facilities	Amount Requested	Type	Notice Expected
Transit Division-Transit Operating Costs	\$278,271	Formula	June 2025

State Revolving Fund Loan Program

Funder-State VSW	Amount Requested	Type	Notice Expected
Water Haul Truck	\$361,957	Competitive	April 2025
Sewer Haul Truck	\$315,009	Competitive	April 2025
Water Dist. Center on Hwy.	\$1,900,000	Competitive	April 2025
QFC#2 Lift Station Repairs	\$1,097,690	Competitive	April 2025

VSW Capital Improvement Project - Planning Grant

Funder-State VSW	Amount Requested	Type	Notice Expected
Tech. memo on water & Sewer Garage	\$40,000	Formula	April 2025

T-Mobile Hometown Community Grant

Funder-Private Corp. T-Mobile	Amount Requested	Type	Notice Expected
Renovation, furniture, computers, supplies for Computer Room/Telehealth Rm.	\$50,000	Competitive Nationally	May 2025

State Homeland Security Program Grant

Funder- AK Division of Homeland Security & Emerg. Mgmt.	Amount Requested	Type	Notice Expected
Police Security Cameras	\$32,000	Competitive In-state	June 2025
Access Control equip.	\$42,000	Competitive In-state	June 2025
Port Security Cameras	\$300,000	Competitive In-state	June 2025

Contents

General Fund Summary	1
General Fund Revenues	2
Administrative Personnel.....	3
Administration	4
City Clerk's Office Personnel	5
City Clerk's Office	6
Finance Department Personnel	7
Finance Department	8
Planning Department Personnel.....	9
Planning Department.....	10
Information Technology.....	11
City Attorney	13
City Attorney Office	14
Fire Department Personnel.....	15
Fire Department.....	16
Police Department Personnel	17
Police Department	18
Public Works Administration	19-20
Streets & Roads.....	21-22
Property Maintenance	23-24
Community Parks and Recreation	25-26
Community Service	27
In-Kind & Transfer	27
Special Revenue Funds.....	28
Community Service Patrol Program	29-30
E-911 Service Fund Personnel.....	31
E-911 service Fund	32
City of Bethel Enterprise Funds	33
Solid Waste Summary	34
Solid Waste Revenue	35
Hauled Refuse	36-37

Landfill.....	38
Landfill Operations	39
Water & Sewer Utility Fund Summary.....	40
Water & Sewer Utility Fund Revenues	41
Utility Billing.....	42-43
Hauled Water.....	44-45
Piped Water	46-47
Bethel Heights Water Treatment.....	48
Bethel Heights Water Treatment Facility	49
City-Sub Water Treatment.....	50
City-Sub Water Treatment Facility.....	51
Hauled Sewer	52-53
Piped Sewer	54-55
Sewer Lagoon.....	56-57
Municipal Dock Fund Summary	58
Municipal Dock Revenue	59
Municipal Dock	60
Municipal Dock Expenses.....	61
Small Bot Harbor	62-63
Leased Properties Summary	64
Other Leased Properties	65
Nora Guinn Court Complex.....	66
Bethel Transit System Summary	67
Bethel Transit System Revenue	68
Bethel Transit System	69
Bethel Public Transit System	70
Internal Service Funds	71
Vehicles & Equipment Maintenance	72-73
Employee Health Group Benefits.....	74
City of Bethel Endowment Permanent Fund	75-76

GENERAL FUND SUMMARY

100		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
General Fund Revenue		15,221,086	15,436,635	14,901,800	8,038,565	16,041,902
Operating Expenditures:						
100-51	Administration	863,298	608,099	894,526	304,257	978,160
100-52	City Clerk	451,386	455,328	229,151	249,112	304,215
100-53	Finance	1,461,342	1,337,124	1,651,096	626,965	1,562,408
100-54	Planning	272,896	263,033	263,033	158,767	380,701
100-55	Information Technology	620,369	579,216	538,862	12,041	-
100-56	City Attorney	279,505	249,570	278,685	119,589	328,382
100-60	Fire	1,833,016	1,861,737	1,861,737	898,603	2,162,803
100-61	Police	3,804,711	4,355,064	4,355,064	2,124,345	4,834,677
100-65	Public Works-Administration	147,172	125,067	125,067	39,752	170,546
100-66	Public Works-Streets	1,890,213	1,642,414	1,642,414	618,849	1,756,369
100-70	Property Maintenance	511,795	474,099	474,099	205,658	589,208
100-71	Community Parks & Recreation	-	-	-	-	1,181,369
100-72	Community Services	541,983	336,290	336,290	352,078	409,853
100-73	In-Kind & Transfers	66,226	89,944	279,074	46,758	244,118
Total Operating Expenditures Before ICR		15,783,184	12,376,984	12,929,097	5,756,773	14,902,807
875	Indirect Cost Recovery (ICR)	(1,268,000)	(1,346,646)	(2,121,869)	(589,880)	(1,367,651)
Total Operating Expenditures After ICR		11,197,200	11,030,338	10,807,228	5,166,893	13,535,157
Net After Operating Expenditures		3,743,673	4,406,297	4,094,572	2,871,672	2,506,745
Payments on Leased Equipment						
100-60	Fire	71,218	71,218	71,218	71,218	71,218
100-66	Streets & Roads	24,047	24,047	209,404	185,357	235,357
Total Debt Payments		95,265	95,265	280,622	256,575	306,575
Excess of Revenue after Debt Payments		3,648,408	4,311,032	3,813,950	2,615,097	2,200,170

GENERAL FUND REVENUES

GENERAL FUND REVENUES		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Budget
Federal Sources:						
42-4102	Payment in Lieu of Taxes (PILT)	983,654	1,081,842	950,000	1,106,744	1,106,744
	Total	983,654	1,081,842	950,000	1,106,744	1,106,744
State of Alaska:						
4203	Community Assistance Program	225,611	154,518	150,000	149,258	121,737
4345	SOA-Electric Co-Op Tax Share	20,545	20,456	20,500	21,197	21,697
	Total	246,156	174,974	170,500	170,455	143,434
Taxes and Interest:						
4300	Sales Tax @ 6%	9,087,625	8,415,338	8,400,000	3,611,711	8,400,000
4301	Sales Tax on Interest & Penalties	151,804	26,937	160,000	29,102	58,204
4310	Transient Lodging Tax	514,943	514,686	512,000	258,886	517,772
4320	Cigarette and Tobacco Tax	554,455	579,881	620,000	306,479	612,958
4322	Marijuana Tax	892,668	790,742	850,000	465,149	930,298
4330	Tax - Alcohol Use	356,754	371,546	430,000	197,383	394,766
4340	Tax - Motor Vehicle Registration	36,015	38,901	47,000	29,274	58,548
4342	AK Remote Seller Sales Tax Commission	795,030	1,079,767	650,000	561,319	1,122,638
	Total	12,389,294	11,817,798	11,669,000	5,459,303	12,095,184
Charges for Services:						
4374	Ambulance Services	339,614	136,256	160,000	75,556	160,000
	Total	339,614	136,256	160,000	75,556	160,000
Licenses, Permits & Fees						
4341	Gaming Fees	485,959	507,891	420,000	287,031	574,062
4360	Community Parks & Recreation	467,997	496,462	582,000	281,458	632,000
4500	Taxi Permits	123,696	113,055	145,000	68,905	137,810
4502	Sales Tax Certificate	31,556	28,125	32,000	23,900	32,000
4504	Animal Control Licenses/Fees	2,397	4,840	2,200	1,979	2,200
4510	Planning Fees	7,559	4,331	5,000	5,225	10,450
4511	Plat/Recording Fees	-	300	100	1,460	2,920
4512	Site Review Fees	17,275	1,400	17,000	720	1,440
4559	Miscellaneous Fees	16,405	8,775	11,000	3,321	6,642
	Total	1,152,844	1,165,179	1,214,300	673,999	1,399,524
Miscellaneous:						
4202	SOA Court Fines/Fees	2,200	12,647	12,000	6,618	13,236
4362	PC Tickets	5,050	2,534	8,000	1,493	2,986
4379	Police Department Miscellaneous (SOA, taxi, etc.)	2,913	2,010	6,000	3,410	6,820
4439	Miscellaneous Revenue	22,977	76,018	30,000	3,377	6,754
4590	Investment Income	(60,331)	967,377	650,000	537,610	1,075,220
4890	Gain (Loss) Sale of Fixed Asset	36,715	-	-	-	-
9482	Snow Removal	100,000	-	32,000	-	32,000
	Total	109,524	1,060,586	738,000	552,508	1,137,016
	Total Revenues	15,221,086	15,436,635	14,901,800	8,038,565	16,041,902

Administrative Personnel

100-51			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIV	10010	City Manager			160,823		154,000
MII	10011	Director of Human Resources			127,579		133,383
MI	10012	Grants Manager			39,229		48,863
R3	10001	Administrative Assistant	-	-	53,560		52,896
		Seasonal Hires					12,800
	6000	Wages	362,389	189,975	381,191	102,368	401,942
		Merit Increase	-	-	1,070		10,049
	6010	Overtime	8,402	1,178	2,000	81	-
		Other Wages	8,402	1,178	3,070	81	10,049
		Total Wages	370,791	191,153	384,261	102,449	411,991
	6021	Sick Pay	-	-	-		-
	6022	Holiday Pay	5,211	2,934	-		-
	6023	Leave Cashout: TW*5%	28,118	26,607	17,252		20,600
	6030	Soc Sec Exp 6.2% of non-PERS	9,003	4,250	2,432	1,478	3,030
	6031	Medicare: 1.45% of TW	5,743	3,164	5,572	1,675	5,974
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	2,841	5,349	2,841
	6033	Workers' Comp: (TW/100)*.02165	641	311	993	164	1,064
	6034	PERS: 22% of Eligible Wages	53,868	27,074	75,907	12,629	79,888
	6040	Emp Group Ben: (1734*12)*FTE(3)	50,249	16,526	54,288	5,351	62,424
	6041	Utility Benefit: (380*12)*FTE(1)	6,685	2,929	9,120	1,730	4,560
		Benefits & Taxes	159,518	83,795	168,404	28,376	180,380
		Total Personnel	530,309	274,948	552,665	130,825	592,371

Administration

100-51		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Budget
Personnel						
6010	Salaries, Benefits & Taxes	471,658	257,244	496,377	125,393	529,947
	Overtime	8,402	1,178	2,000	81	-
6040	Employee Group Health	50,249	16,526	54,288	5,351	62,424
Total Personnel		530,309	274,948	552,665	130,825	592,371
Materials, Supplies & Services						
6002	Relocation Expenses	10,000	14,995	15,000	-	-
6003	Recruitment Costs	10,000	10,259	20,000	6,449	-
6044	Community Center Employee Membership	40,000	-	40,000	40,000	40,000
6060	Travel/Training	5,000	9,982	10,000	7,235	20,000
6100	Supplies	8,000	6,562	7,500	2,452	7,000
6150	Gasoline/Diesel/Oil					2,000
6153	Heating Fuel	20,000	36,690	25,000	16,163	32,000
6155	Water/Sewer/Garb	12,000	15,263	13,100	13,275	13,100
6160	Electricity	15,000	21,137	24,150	10,110	24,150
6170	Telephone	20,000	8,240	7,500	2,371	11,254
6171	Staff Cellular Phones	1,000	1,823	2,500	920	1,197
6179	IT (ICR)					37,588
6200	Minor Equipment	4,000	704	1,000	-	-
6230	Vehicle Maint/Repair (ISF) 570-43-4651	2,189	2,189	1,111	1,522	2,265
6320	Other Professional Fees	20,000	21,416	38,000	200	
6325	Consulting Fees	59,250	18,244	20,000	19,898	20,000
6333	Janitorial	20,000	14,564	15,000	9,740	15,000
6335	Other Purchased Services	30,000	109,330	34,000	34,393	92,500
6400	Insurance	17,000	19,792	21,000	9,321	33,236
6401	Insurance-Ded Exp & other	7,000	-	10,000	-	10,000
6430	Allowance Special Events	15,050	13,929	20,000	10,032	20,000
6500	Drug Testing/Background Checks	9,500	5,315	10,000	3,415	
6502	Advertising	5,000	-	2,500	1,637	
6503	Dues/Subscriptions	1,000	1,768	2,000	-	2,000
6506	Postage	1,000	140	1,000	417	1,000
6539	Miscellaneous Expenses	1,000	809	1,500	(176)	1,500
Total MS&S		332,989	333,151	341,861	209,432	385,789
Total Operating Expenditures		863,298	608,099	894,526	340,257	978,160

City Clerk's Office Personnel

100-52			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MII	12010	City Clerk			131,406		104,710
MI	12502	Deputy City Clerk			84,599		
R3	12001	Administrative Asst (12 hrs/week @ \$24.81)	-	-	-	-	18,000
	6000	Wages	202,462	211,614	216,005	111,982	104,710
		Merit Increase		-	5,334		2,618
		Other Wages	-	-	5,334	-	2,618
		Total Wages	202,462	211,614	221,339	111,982	107,328
	6022	Holiday Pay	308	308	-	-	-
	6023	Leave Cashout: (TW*5%) of FTE(1)	5,984	6,164	11,067	6,318	5,366
	6030	Soc Sec Exp 6.2% of non-PERS					1,116
	6031	Medicare: 1.45% of TW	2,972	3,112	3,209	1,847	1,556
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	1,420	193	1,031
	6033	Workers' Comp: (TW/100)*.2165	319	196	572	94	232
	6034	PERS: 22% of Eligible Wages	44,609	46,623	48,695	22,247	23,612
	6040	Employee Group Benefits: (1734*12)*FTE(1)	45,548	50,993	36,192	22,352	20,808
	6041	Utility Benefit: (380*12)*FTE(1)	8,066	8,703	9,120	5,039	4,560
		Benefits & taxes	107,806	116,099	110,275	58,090	58,282
		Total Personnel	310,268	327,713	331,614	170,072	165,609

City Clerk's Office

100-52		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
6040	Salaries, Benefits & Taxes	264,720	276,720	295,422	147,720	144,801
	Employee Group Health	45,548	50,993	36,192	22,352	20,808
	Total personnel	310,268	327,713	331,614	170,072	165,609
Marterials, Supplies & Services						
6060	Travel/Training-Council	24,451	13,260	19,000	10,280	21,200
6061	Training/Travel-Clerk	2,382	12,333	9,300	2,364	4,800
6100	Supplies-Clerk	1,230	684	500	603	500
6101	Supplies-Council	35	-	500	213	600
6170	Telephone	-	-	-	-	-
6171	Staff Cellular Phones	1,174	1,194	1,750	602	598
6179	IT (ICR)					37,588
6200	Minor Equipment	19,230	-	-	-	-
6321	Legal Fees	322	-	5,000	-	7,000
6335	Other Purchase Services	33,899	52,591	29,520	31,968	34,270
6400	Insurance	2,939	(700)	-	-	4,004
6430	Allowance for Special Events	535	-	600	-	600
6502	Advertising	-	-	-	-	2,000
6503	Dues/Subscriptions	8,080	1,774	7,700	7,208	7,195
6505	Election Expenses	22,750	17,382	18,900	7,718	17,450
6507	Donations & Awards	682	-	800	757	800
6539	Miscellaneous Expenses	490	-	-	-	-
6711	Admin Overhead - IT Services	22,919	29,097	33,118	17,327	
	Total MS&S	141,118	127,615	(102,463)	79,040	138,605
	Total Operating Expenditures	451,386	455,328	229,151	249,112	304,215

Finance Department Personnel

100-53			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Budget
Personnel							
MIII	13010	Finance Director			115,580		124,892
MII	13015	Deputy Finance Director			110,000		115,016
R6	13101	General Ledger Accountant			83,867		85,544
R4	13201	Accounting Specialist II			83,379		63,060
R3	13301	Accounting Specialist I			71,689		60,020
R3	13302	Accounting Specialist I			61,823		58,559
R3	13303	Accounting Specialist I			53,560		32,315
R2	13401	Acct Clerk (Front Desk/Utility Billing) 25%/75%			12,402		12,900
		Sasonal Hires					6,400
	6000	Wages	565,607	300,536	592,300	211,641	558,706
		Merit Increase		-	7,334	-	13,968
	6010	Overtime	26,929	24,644	21,000	5,144	10,000
		Other Wages	26,929	24,644	28,334	5,144	23,968
		Total Wages	592,536	325,180	620,634	216,785	582,673
	6022	Holiday Pay	15,736	12,117	-	-	-
	6023	Leave Cashout: (BW*2%) of FTE(7.25)	46,976	7,948	11,846	3,251	11,174
	6030	Soc Sec Exp 6.2% of non-PERS	676	-	-	-	-
	6031	Medicare: 1.45% of TW	9,708	5,152	8,999	3,337	8,449
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	4,888	5,149	563	5,149
	6033	Workers' Compensation: (TW/100)*0.2165	1,215	430	1,603	267	1,261
	6034	PERS: 22% of Eligible Wages	135,684	73,911	136,539	47,693	128,188
	6040	Employee Group Benefits: (1734*12)*FTE(7.25)	119,358	62,889	131,196	38,058	150,858
	6041	Utility Benefit: (380*12)*FTE(7.25)	21,574	17,990	33,060	11,223	33,060
		Benefits & Taxes	350,927	185,325	328,393	104,392	338,140
		Total Personnel	943,463	510,505	949,027	321,177	920,813

Finance Department

100-53		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
6010	Salaries, Benefits & Taxes	797,176	422,972	796,831	277,975	759,955
	Overtime	26,929	24,644	21,000	5,144	10,000
6040	Employee Group Health	119,358	62,889	131,196	38,058	150,858
Total Personnel		943,463	510,505	949,027	321,177	920,813
Materials, Supplies & Services						
6060	Training/Travel	15,575	19,496	20,000	2,391	20,000
6100	Supplies	15,532	11,729	16,000	4,146	10,000
6150	Gasoline/Diesel/Oil	1,055	411	1,200	209	1,200
6170	Telephone	89	117	100	33	100
6171	Staff Cellular Phones	1,817	1,188	1,750	598	-
6179	IT (ICR)					37,588
6200	Minor Equipment	17,106	2,887	8,000	1,168	8,000
6230	Vehicle Maint/Repair (ISF)	1,426	1,882	2,215	864	2,265
6310	Admin Outsources Services (Support)	76,473	8,226	90,000	-	110,000
6311	Auditing Expense	52,053	85,752	205,500	40,516	205,500
6331	Hardware/Software Support	10,457	20,510	32,904	21,619	32,904
6335	Other Professional Fees	262,092	601,857	250,000	196,843	125,000
6400	Insurance	6,492	6,978	7,100	3,152	21,740
6502	Advertising	135	-	2,500	-	2,500
6503	Dues & Subscriptions	1,769	2,640	5,000	414	5,000
6506	Postage	767	5,750	1,000	58	1,000
6530	Finance Charges/Penalties	159	2,488	300	721	300
6531	Bank Charges	51,598	54,128	52,500	30,228	52,500
6533	IRS Penalties & Interest	899	-	2,000	-	2,000
6539	Miscellaneous Expenses	2,385	580	4,000	2,828	4,000
Total MS&S		517,879	826,619	702,069	305,788	641,596
Total Operating Expenditures		1,461,342	1,337,124	1,651,096	626,965	1,562,408

Planning Department Personnel

100-54			FY23 Actuals	FY24 Budget	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MII R2	14010	City Planner			92,550	-	94,399
	14101	Planning Clerk			64,722	-	67,708
	6000	Wages	71,940	108,637	157,272	78,321	162,107
		Merit Increase	-	-	1,294	-	4,053
	6010	Overtime	-	-	-	206	-
		Other Wages	-	-	1,294	206	4,053
		Total Wages	71,940	108,637	158,566	78,527	166,160
	6022	Holiday Pay	2,596	3,347	-	-	-
	6023	Leave Cashout: (BW*2%) of FTE(2)	20,182	-	6,343	-	3,323
	6031	Medicare: 1.45%*TW	1,329	1,685	2,299	1,186	2,409
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	2,822	141	1,420
	6033	Workers' Compensation: (TW/100)*.2165	279	119	206	68	360
	6034	PERS: 22% of Eligible Wages	16,670	24,637	34,885	17,276	36,555
	6040	Employee Group Benefits: (1734*12)*FTE(2)	17,584	22,173	36,192	23,417	41,616
	6041	Utility Benefit: (380*12)*FTE (2)	2,104	3,611	9,120	4,530	9,120
Benefits & Taxes			60,744	55,572	91,867	46,618	94,804
Total Personnel			132,684	164,209	250,434	125,145	260,963

Planning Department

100-54		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
6010	Salaries, Benefits & Taxes	115,100	142,036	214,242	101,522	219,347
	Overtime	-	-	-	206	-
6040	Employee Group Health	17,584	22,173	36,192	23,417	41,616
	Total personnel	132,684	164,209	250,434	125,145	260,963
Marterials, Supplies & Services						
6061	Travel/Training	-	2,095	15,000	-	10,000
6100	Supplies	2,687	491	4,500	342	4,200
6103	Wearing Apparel	271	288	400	-	
6150	Gasoline/Diesel/Oil	387	1,495	1,500	807	2,000
6153	Heating Fuel	5,651		3,402	-	3,402
6155	Water/Sewer/Garbage	169	-	760	-	760
6160	Electricity	498	-	3,930	-	3,930
6170	Telephone	40	47	50	13	-
6171	Staff Cellular Phones	587	597	750	299	598
6179	IT (ICR)					37,588
6200	Minor Equipment	10	-	1,000	-	
6230	Vehicle Maint/Repairs (ISF)	-	1,142	100-54-6230	643	1,698
6231	Vehicle Parts & Tools	496	778	1,000	99	1,000
6320	Other Professional Services	89,426	60,559	50,000	10,838	40,000
6330	Other Professional Fees	7,540	120	-	-	-
6331	Hardware/Software Support	2,539	2,792	-	-	-
6400	Insurance	3,442	(820)	-	-	7,061
6502	Advertising	1,416	143	3,000	-	3,000
6503	Dues & Subscriptions		-	1,000	2,954	1,000
6539	Miscellaneous Expenses	790	-	5,000	300	3,500
6711	Admin Overhead-IT SVCS	22,919	29,097	33,118	17,327	
	Total MS&S	140,212	98,824	124,410	33,622	119,737
	Total Operating Expenditures	272,896	263,033	374,844	158,767	380,701
6890	Capital Expenditures	35,516	60,327		-	
9694	Comprehensive Plan	60,678	5,724	26,771	2,869	
		96,194	66,051	26,771	2,869	-
	Total	369,090	329,084	401,615	161,636	380,701

Information Technology

100-55		FY23 Actuals	FY24 Actuals	FY25 budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	242,310	206,970	255,868	-	-
6010	Overtime	3,334	7,719	10,000	-	-
6040	Employee Group Health	30,290	34,769	36,192	-	-
	Total Personnel	275,934	249,458	302,060	-	-
6100	Supplies	6,994	1,088	7,000	87	
6150	Gasoline/Diesel/Oil	3,405	3,000	4,000	330	
6171	Staff Cellular Phones	3,097	2,079	45,000	1,057	-
6179	Connectivity Services	465,281	313,784	350,000	163,545	339,526
6200	Minor Equipment	16,184	20,733	30,000	-	
6210	Equipment Rental	114,534	140,588	220,000	66,299	256,487
6230	Vehicle Maint/Repairs (ISF)	1,344	2,284	3,322	1,266	
6231	Vehicle Parts & Tools	2,067	1,998	3,000	2,798	
6320	Other Professional Fees	88,790	112,328	85,000	32,090	268,500
6331	Hardware/Software Support	79,208	84,188	115,000	111,297	
6335	Other Purchased Services	13,658	7,835	10,000	2,093	
6400	Insurance	2,687	10,128	8,969	3,981	
6539	Miscellaneous Expenses	3,719	930	2,000	430	
6700	Indirect Cost Recovery	(666,254)	(582,886)	(746,489)	(373,232)	(864,513)
6890	Capital Expenditures	209,721	209,744	100,000	-	-
9694	Server Room Air Conditioner	-	1,937	-	-	-
	Total MS&S	620,369	579,216	538,862	12,041	-
	Total Operating Expenditures	620,369	579,216	538,862	12,041	-

City Attorney

100-56			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII	30010	City Attorney	144,347	150,711	157,813	76,722	158,048
	6000	Wages	144,347	150,711	157,813	76,722	158,048
		Merit Increase	-	-		-	3,951
		Other Wages	-	-	-	-	3,951
		Total Wages	144,347	150,711	157,813	76,722	161,999
	6023	Leave Cashout: (TW*2%) of FTE(1)	-	-	3,156	-	3,161
	6031	Medicare: 1.45% of TW	2,077	2,170	2,288	1,105	2,292
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	2,809	138	710
	6033	Workers' Comp: (TW/100)*.2165	247	134	103	67	342
	6034	PERS: 22% of Eligible Wages	31,749	33,156	34,719	16,879	35,640
	6040	Employee Group Benefit: (1734*12)*1	34,117	24,141	18,096	14,909	20,808
	6041	Utility Benefit: (380*12)*FTE ()	-	-	-	-	-
Benefits & Taxes			68,190	59,601	61,172	33,098	62,953
Total Personnel			212,537	210,312	218,985	109,820	224,952

City Attorney Office

100-56		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
6040	Salaries, Benefits & Taxes	178,420	186,171	200,889	94,911	204,144
	Employee Group Health	34,117	24,141	18,096	14,909	20,808
	Total personnel	212,537	210,312	218,985	109,820	224,952
Materials, Supplies & Services						
6060	Training/Travel	8,353	5,464	12,000	3,389	12,000
6100	Supplies	356	52	300	-	
6171	Staff Cellular Phones	587	646	800	299	598
6179	IT (ICR)					37,588
6320	Other Professional Fees	35,134	10,688	20,000	-	
6321	Legal Fees	-	10,059	15,000	916	15,000
6335	Other Purchased Services	9,873	7,503	7,000	3,379	30,000
6400	Insurance	2,156	2,368	2,400	1,065	6,044
6410	Rents & Leases	8,444	1,478	-	-	
6503	Dues & Subscriptions	2,041	872	1,000	710	1,000
6539	Miscellaneous Expense	24	128	1,200	11	1,200
Total MS&S		66,968	39,258	59,700	9,769	103,430
Total operating expenditures		279,505	249,570	278,685	119,589	328,382

Fire Department Personnel

100-60			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MII		Fire Chief			126,193	-	-
PS6	16101	Fire Captain			82,763	-	86,106
PS4	16201	Lieutenant			74,192	-	75,668
PS4	16202	Lieutenant			84,418	-	77,556
PS2	16203	Lieutenant			76,038	-	75,668
PS2	16301	Firefighter/EMT			59,171	-	59,171
PS2	16302	Firefighter/EMT			57,729	-	57,729
PS2	16303	Firefighter/EMT			55,224	-	55,224
PS2	16304	Firefighter/EMT			55,224	-	55,224
PS2	16305	Firefighter/EMT			55,224	-	55,224
PS2	16306	Firefighter/EMT			55,224	-	55,224
R2	16001	Administrative Assistant			58,662	-	52,896
	6000	Wages	651,552	565,492	840,062	304,839	705,690
		Merit Increase	-	-	16,801	-	14,114
	6010	FLSA Overtime	102,807	165,115	150,000	64,803	150,000
	6011	Call-Back Overtime	51,955	59,021	75,000	29,117	75,000
	6022	Holiday Pay	40,750	31,062	-	-	-
	9649	Volunteer Stipend	1,715	10,644	10,000	12,645	25,000
		Other Wages	197,227	265,842	251,801	106,565	264,114
		Total Wages	848,779	831,334	1,091,863	411,404	969,804
	6023	Leave Cashout: (BW*6%) of FTE(11)	61,445	27,234	60,484	17,772	42,341
	6030	Soc Sec Exp 6.2% of non-PERS	2,275	660	620	400	1,550
	6031	Medicare: 1.45% of TW	13,564	12,708	15,832	6,450	14,062
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	8,523	834	7,812
	6033	Workers' Compensation: (TW/100)*3.7735	28,974	18,065	28,198	8,359	36,596
	6034	PERS: 22% of Eligible Wages	188,060	175,746	227,514.00	90,842	207,857
	6040	Employee Group Benefits: (1734*12)*FTE(11)	164,025	104,404	217,152	49,439	228,888
	6041	Utility Benefit: (380*12)*FTE(11)	30,761	44,424	54,720	19,609	50,160
		Benefits & Taxes	489,104	383,241	613,043	193,705	589,266
		Total Personnel	1,337,883	1,214,575	1,704,907	605,109	1,559,070

Fire Department						
100-60		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	1,019,096	886,035	1,262,755	461,750	1,105,182
6010	Overtime	154,762	224,136	225,000	93,920	225,000
6040	Employee Group Health	164,025	104,404	217,152	49,439	228,888
	Total personnel	1,337,883	1,214,575	1,704,907	605,109	1,559,070
Materials, Supplies & Services						
6060	Travel/Training	25,392	31,702	59,800	12,358	59,800
6100	Supplies	26,596	70,932	27,400	12,478	27,400
6103	Wearing Apparel	27,590	5,935	20,800	8,124	20,800
6150	Gasoline/Diesel/Oil	17,190	22,366	16,400	12,967	26,000
6153	Heating Fuel	32,362	36,931	40,000	16,973	40,000
6155	Water/Sewer/Garbage	-	11,824	11,600	10,811	22,000
6160	Electricity	20,285	20,271	25,300	9,410	20,000
6170	Telephone	3,046	3,394	2,400	975	2,932
6171	Staff Cellular Phones	2,696	2,740	4,000	1,371	2,992
6179	IT (ICR)					37,588
6200	Minor Equipment	41,293	15,607	23,700	8,269	15,000
6230	Vehicle Maint/Repair (ISF)	11,869	15,591	19,933	7,597	20,382
6231	Vehicle Parts & Tools	34,201	35,500	32,000	17,661	35,000
6240	Property Maint	1,516	6,920	30,000	2,304	20,000
6335	Other Purchased Services	30,908	43,552	31,000	3,968	31,000
6400	Insurance	97,789	106,366	108,000	47,939	86,940
6502	Advertising	1,553	2,863	5,000	375	500
6503	Dues/Subscriptions	11,885	4,888	15,200	4,525	15,200
6534	Collection/ Ambulance Billing	17,996	27,734	31,200	37,543	31,200
6537	Fire Prevention Program	4,755	10,357	7,500	7,426	7,500
6539	Miscellaneous Expenses	868	1,882	1,500	2,292	1,500
6660	XFER TO F-58 FLEET REPLACEMENT	85,343	169,807	68,128	68,128	80,000
	Total MS&S	495,133	647,162	580,861	293,494	603,733
	Total Operating Expenditures	1,833,016	1,861,737	2,285,768	898,603	2,162,803

Police Department Personnel

100-61			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
Personnel							
MIII	17010	Director of Public Safety (90%)			104,022		131,733
MII	17015	Deputy Director of Public Safety			122,905		107,328
PS6	17101	Police Lieutenant			129,121		127,251
PS5	17201	Police Officer IV (Sgt)			78,297		94,962
PS5	17202	Police Officer IV (Sgt)			95,398		90,203
PS5	17203	Police Officer IV (Sgt)			76,648		79,726
PS4	17301	Police Officer III (Corporal)			94,984		99,288
PS3	17401	Police Officer II (Investigator)			77,714		81,261
PS3	17402	Police Officer II (Investigator)			85,798		97,540
PS3	17403	Police Officer II			75,826		71,807
PS3	17404	Police Officer II			79,666		85,363
PS3	17405	Police Officer II			83,697		77,328
PS3	17406	Police Officer II			79,666		77,320
PS3	17407	Police Officer II			81,660		69,595
PS3	17408	Police Officer II			85,798		83,289
PS3	17409	Police Officer II			85,798		77,323
PS3	17410	Police Officer II			81,660		85,363
PS3	17411	Police Officer II			93,016		101,137
PS4	17412	Police Officer II			75,826		63,177
R3	17001	Administrative Assistant II			50,600		55,723
R3	17501	Community Service Officer			54,631		55,724
R3	17502	Community Service Officer			56,010		58,559
R3	17601	Evidence Custodian			53,560		64,632
R4	17701	Dispatch Supervisor			89,786		71,543
R3	17801	Public Safety Dispatcher I			56,010		53,144
R3	17802	Public Safety Dispatcher I			79,136		82,731
R3	17803	Public Safety Dispatcher I			58,832		58,541
R3	17804	Public Safety Dispatcher I			54,631		58,559
	6000	Wages	1,631,033	1,921,437	2,240,696	966,783	2,260,150
		Merit Increase	-	-	53,417	-	56,504
	6010	Shift Differential and Overtime	293,712	493,455	266,208	239,167	266,208
		Other Wages	293,712	493,455	319,625	239,167	322,712
		Total Wages	1,924,745	2,414,892	2,560,321	1,205,950	2,582,862
	6020	Vacation Pay	100	-	-	-	-
	6021	Sick Pay	100	-	-	-	-
	6022	Holiday Pay	75,991	108,549	-	-	-
	6023	Leave Cashout: (BW*6%) of FTE(27.9)	158,771	49,370	134,442	81,212	135,609
	6030	Soc Sec Exp 6.2% of non-PERS		1,282	-	955	-
	6031	Medicare: 1.45% of TW	31,792	37,706	37,125	18,840	37,451
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	(627)	45,574	3,878	19,815
	6033	Workers' Compensation: (TW/100)*2.459	57,258	27,721	66,141	14,132	63,513
	6034	PERS: 22% of Eligible Wages	461,445	546,393	563,271	260,105	568,230
	6040	Employee Group Benefits: (1734*12)*FTE (27.9)	324,072	316,949	504,878	175,784	580,543
	6041	Utility Benefit: (380*12)*FTE(27.9)	53,421	47,696	127,224	25,764	127,224
		Benefits & Taxes	1,162,950	1,135,039	1,478,654	580,670	1,532,385
		Total Personnel	3,087,695	3,549,931	4,038,975	1,786,620	4,115,247

Police Department

100-61		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
6010	Salaries, Benefits & Taxes	2,469,911	2,739,527	3,267,889	1,371,669	3,268,496
	Overtime	293,712	493,455	266,208	239,167	266,208
6040	Employee Group Health	324,072	316,949	504,878	175,784	580,543
	Total personnel	3,087,695	3,549,931	4,038,975	1,786,620	4,115,247
Materials, Supplies & Services						
6002	Relocation Expenses	7,083	11,768	10,000	-	10,000
6060	Travel/Training	70,887	64,839	80,000	34,310	80,000
6100	Supplies	29,152	25,123	32,000	20,237	32,000
6102	SART Exams	2,010	15,090	10,000	-	20,000
6103	Employee Wearing Apparel	12,851	35,334	25,000	1,638	32,400
6150	Gasoline/Diesel/Oil	52,609	73,903	45,000	28,941	60,000
6153	Heating Fuel	51,934	59,378	59,500	23,750	52,000
6155	Water/Sewer/Garbage	8,389	15,727	19,000	7,750	16,000
6160	Electricity	45,144	50,635	45,000	25,191	56,000
6170	Telephone	18,745	33,275	28,000	11,733	17,129
6171	Staff Cellular Phones	17,615	15,310	20,000	7,408	11,366
6179	IT (ICR)					37,588
6200	Minor Equipment	12,077	13,958	30,000	7,505	25,000
6230	Vehicle Maint/Repair (ISF)	-	23,326	22,812	9,756	23,326
6231	Vehicle Parts & Tools	21,949	51,587	35,000	12,236	35,000
6240	Property Maint	-	-	-	-	-
6335	Other Purchased Services	28,443	63,009	99,000	34,948	80,000
6400	Insurance	226,252	245,044	249,000	110,526	125,622
6401	Insurance-Ded Exp & Other	-	6,291	10,000	-	-

Public Works Adminstration

100-65			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
PERSONNEL:							
MIII R2	19010	Public Works Director 25%			20,897		35,547
	19001	Admin Assistant 25%			8,586	-	13,223
	6000	Wages	29,041	30,053	29,483	14,178	48,770
		Merit Increase	136		215	-	1,219
	6010	Overtime	-	42	-	7	-
		Other Wages	-	42	-	7	-
		Total Wages	29,041	30,095	29,483	14,185	48,770
	6022	Holiday Pay	80	58	-	-	-
	6023	Leave Cashout: (BW*3%) of FTE(.50)	7,220	-	172	-	975
	6031	Medicare: 1.45% of TW	472	381	428	284	707
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	525	27	868
	6033	Workers' Compensation: (TW/100)*.2165	52	22	76	13	106
	6034	PERS: 22% of Eligible Wages	6,488	6,603	6,486	3,113	10,729
	6040	Employee Group Benefits: (1734*12)*FTE(.50)	7,272	7,642	5,429	3,636	10,404
	6041	Utility Benefit: (380*12)*FTE(0.50)	481	1,200	1,368	372	2,280
		Benefits & Taxes	22,065	15,906	14,483	7,445	26,070
		Total Personnel	51,106	46,001	43,966	21,630	74,840

Public Works Administration

100-65		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	43,834	38,317	38,537	17,987	64,436
6010	Overtime	-	42	-	42	-
6040	Employee Group Health	7,272	7,642	5,429	3,755	10,404
	Total Personnel	51,106	46,001	43,966	21,784	74,840
Material, Supplies & Services						
6060	Travel/Training	1,563	7,320	10,000	3,058	10,000
6100	Supplies	2,972	1,158	4,000	1,502	4,000
6103	Wearing Apparel	-	640	-	-	-
6150	Gasoline/Diesel/Fuel	1,977	396	2,000	1,034	2,000
6153	Heating Fuel	7,042	50,380	9,000	-	9,000
6155	Water/Sewer/Garbage	3,148	1,068	500	-	500
6160	Electricity	804	885	1,725	-	1,725
6170	Telephone	40	47	50	13	1,617
6171	Staff Cellular Phones	1,174	1,195	1,500	748	598
6179	IT (ICR)					37,588
6200	Minor Equipment	10	-	-	-	-
6230	Vehicle Maint/Repair (ISF)	3,455	3,273	4,762	1,815	4,869
6231	Vehicle Parts & Tools	2,137	3,821	3,000	6,331	3,000
6232	Tires & Wheels	-	-	-	-	-
6335	Other Purchased Services	67,329	3,473	15,000	713	15,000
6400	Insurance	2,775	3,013	3,500	2,554	2,309
6503	Dues & Subscriptions	689	496	500	200	500
6539	Miscellaneous Expenses	951	1,901	3,000	-	3,000
	Total MSS	96,066	79,066	58,537	17,968	95,706
	Total Operating Expenditures	147,172	125,067	102,503	39,752	170,546

Streets & Roads

100-66			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
R4	20101	Streets & Roads - Foreman			109,335	-	113,758
R3	20201	Grader Operator			68,231	-	66,237
R3	20202	Grader Operator			73,492	-	76,823
R3	20203	Grader Operator			83,146	-	89,102
R3	20204	Operator/Driver			83,146	-	86,929
R3	21000	Driver (\$47,110 @ 25% S&R, 50% HR, 12.5% HW, 12.5% HS)			14,003	-	13,931
		Temporary Driver x 2 July1- October 31			36,400	-	63,000
	6000	Wages	311,592	407,425	467,753	204,433	509,780
		Merit Increase	-		10,784	-	11,170
	6010	Overtime	40,145	37,756	35,000	6,131	35,000
		Other Wages	40,145	37,756	45,784	6,131	46,170
		Total Wages	351,737	445,181	513,537	210,564	555,950
	6022	Holiday Pay	14,489	19,117	-	-	-
	6023	Leave Cashout: (BW*3%) of FTE(5.25)	43,406	12,425	12,941	5,741	13,403
	6030	Soc Sec Exp 6.2% of non-PERS	-	224		956	3,906
	6031	Medicare: 1.45% of TW	6,064	7,056	7,446	3,250	8,061
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	4,623	425	4,850
	6033	Workers' Compensation: (TW/100)*3.124	17,027	7,313	1,327	3,992	17,368
	6034	PERS: 22% of Eligible Wages	88,556	101,197	112,978	37,731	108,449
	6040	Employee Group Benefits: (1734*12)*FTE(5.25)	98,156	115,057	94,642	57,511	109,242
	6041	Utility Benefit: (380*12)*FTE(5.25)	14,646	21,463	23,849	10,644	23,940
		Benefits & Taxes	282,344	283,852	257,806	120,250	289,219
		Total Personnel	634,081	729,033	771,343	330,814	845,169

Streets & Roads						
100-66		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	495,780	576,220	641,700	267,172	700,927
502	Overtime	40,145	37,756	35,000	6,131	35,000
512	Employee Group Health	98,156	115,057	94,642	57,511	109,242
	Total Personnel	634,081	729,033	771,343	330,814	845,169
Materials, Supplies & Sevicees						
6100	Supplies	8,494	4,868	4,500	3,686	4,500
6103	Wearing Apparel	2,313	3,000	5,000	2,792	5,000
6111	Signs	2,472	4,903	4,500	1,816	6,000
6131	Street Maint Gravel	702,008	410,400	200,000	-	200,000
6132	Salt	86,630	-	-	-	30,000
6150	Gasoline/Diesel/Oil	108,453	124,636	100,000	65,084	100,000
6153	Heating Fuel (25% of City Shop ISF)+100% S&R Shop	15,147	31,255	16,250	24,736	62,500
6155	Water/Sewer/Garbage (25% of City Shop ISF)	2,686	2,937	6,492	3,157	6,750
6160	Electric (25% of City Shop ISF)	2,954	3,063	15,875	3,054	18,000
6161	Electric: Street Lights	56,109	59,840	80,500	30,545	68,816
6170	Telephone	20	23	50	7	-
6171	Staff Cellular Phones	1,454	1,195	2,500	598	598
6179	IT (ICR)					37,588
6200	Minor Equipment	7,168	8,197	10,000	452	10,000
6230	Vehicle Maint/Repair (ISF)	134,485	114,181	166,109	63,309	173,281
6231	Vehicle Parts & Tools	70,275	107,818	70,000	43,846	95,000
6232	Tires & Wheels	807	7,575	25,000	-	-
6240	Property Maintenance	4,174	-	-	-	-
6250	Street Light MT & Pole Repair	18,530	-	20,000	18,597	20,000
6335	Other Purchased Services	8,064	2,968	10,000	7,868	10,000
6400	Insurance	23,889	26,522	26,300	18,488	63,167
	Total MS&S	1,256,132	913,381	763,076	288,035	911,200
	Total Operating Expenditures	1,890,213	1,642,414	1,534,419	618,849	1,756,369
6892	Capital Equipment	1,257,632	2,162,228	1,123,056	448,568	
9694	Cat 4WD Extend a Hoe BKHOE	697,447	-	-	-	
9704	Dump Trucks	203,578	-	-	-	
9705	Caterpillar Attachments	126,500	-	-	-	
9706	Caterpillar Henje Hi Gate	4,912	-	-	-	
9707	Caterpillar Loader Snow Bucket	3,917	-	-	-	
9708	Bus Barn Improvements	65,124	2,483	-	9,261	
6894	Vehicle-2024 F250's FY25	-	-	-	131,790	
6897	FY25 Dust Control	-	-	-	488,661	
9693	Street Lights-Asha Courts	-	-	110,000	103,480	
9703	STIP Match Or Gravel for Roads	-	-	1,095,004	-	
9771	Ptarmigan St. Culvert Crossing	-	-	2,000,000	61,193	
	Cat D8: 8/1/24 - 8/1/28 - Annual			185,357	185,357	185,357
	Mack Water Truck 5/16/2019 - 5/16/25 - Annual	24,047	24,047	24,047		-
	Total	4,249,323	3,807,125	5,862,479	1,861,802	1,756,369

Property Maintenance						
100-70		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
Personnel						
R4	22101	Building Maintenance Foreman		65,133	-	68,103
R2	22102	Maintenance Worker		60,147	-	91,062
R2	22103	Maintenance Worker		54,631	-	64,437
R2	22104	Maintenance Worker		87,092	-	52,889
R2	22105	Maintenance Worker		54,483	-	52,889
	18901	Temp Maint Worker (800 hrs @18/hr)		14,400	-	14,400
	18902	Temp Maint Worker (800 hrs @18/hr)		14,400	-	14,400
	6000	Wages	266,645	300,914	350,286	152,739
		Merit Increase	-	-	8,037	-
	6010	Overtime	59,722	52,769	50,000	27,049
		Other Wages	59,722	52,769	58,037	27,049
		Total Wages	326,367	353,683	408,323	179,788
	6022	Holiday Pay	11,872	15,547	-	-
	6023	Leave Cashout: (BW*2%) of FTE(5)	40,945	8,012	7,006	426
	6030	Soc Sec Exp 6.2% of non-PERS	218	-	1,786	412
	6031	Medicare: 1.45% of TW	5,660	5,520	5,921	3,318
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	4,239	352
	6033	Workers' Compensation: (TW/100)*2.6136	10,006	3,850	10,548	2,221
	6034	PERS: 22% of Eligible Wages	80,946	81,148	89,831	38,089
	6040	Emp Group Ben: (1734*12)*FTE(5)	98,802	68,602	92,290	50,557
	6041	Utility Benefit: (380*12)*FTE(5)	30,378	35,855	23,256	14,936
		Benefits & Taxes	278,827	218,534	234,876	110,311
		Total Personnel	605,194	572,217	643,199	290,099

Property Maintenance						
100-70		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	446,670	450,846	500,909	212,493	504,424
6010	Overtime	59,722	52,769	50,000	27,049	50,000
6040	Employee Group Health	98,802	68,602	92,290	50,557	104,040
	Total Personnel	605,194	572,217	643,199	290,099	658,464
Materials, Supplies & Services						
6060	Travel/Training	-	-	8,000	-	8,000
6100	Supplies	2,531	2,513	5,000	3,189	29,000
6103	Wearing Apparel	1,252	436	5,000	54	5,000
6105	Cleanup Greenup Supplies	381	100	1,000	-	-
6106	Paint Supplies	709	-	2,000	102	-
6107	Electrical Supplies	2,870	662	5,000	1,956	-
6108	Plumbing Supplies	2,708	3,307	7,000	192	-
6110	Materials	5,338	1,114	5,000	687	-
6111	Boardwalk Repair Supplies	32	634	10,000	-	-
6142	Glycol Supplies	-	-	10,000	9,702	10,000
6150	Gasoline/Diesel/Oil	14,805	22,999	15,000	14,752	30,000
6153	Heating Fuel	76,050	74,693	25,000	7,991	25,000
6155	Water/Sewer/Garbage	2,150	2,006	8,000	-	8,000
6160	Electricity	12,004	13,528	13,340	5,515	13,340
6170	Telephone	26	149	50	7	-
6171	Staff Cellular Phones	1,120	1,140	1,700	571	1,197
6179	IT (ICR)					37,588
6200	Minor Equipment	8,175	5,340	8,000	6,854	8,000
6201	Boiler Expense	14,587	21,001	25,000	5,087	25,000
6230	Vehicle Maint. Repair (ISF)	5,608	4,719	6,866	2,617	7,020
6231	Vehicle Parts & Tools	2,730	2,595	5,000	3,827	5,000
6240	Wind Turbine Contract	14,400	-	11,000	7,200	14,400
6241	Parks Maintenance	1,675	11,570	45,000	1,400	55,000
6242	Boardwalk Lighting Project	34	-	343,339	-	-
6250	Carpentry Expense	1,506	256	5,000	2,351	-
6335	Other Purchased Services	20,054	8,746	15,000	13,807	56,000
6400	Insurance	12,950	14,083	14,300	6,347	17,314
6510	4th of July	130	53	1,000	53	1,000
6530	Finance Charges/Penalties	11	-		-	
6539	Miscellaneous Expenses	1,053	1,858	15,000	1,053	5,000
6700	Indirect Cost Recovery Allocation	(298,288)	(291,620)	(358,910)	(179,755)	(430,114)
	Total MS&S	(93,399)	(98,118)	256,685	(84,441)	(69,256)
	Total Operating Expenditures	511,795	474,099	899,884	205,658	589,208

Community Parks and Recreation

100-71			FY26 Budget
Personnel			
MII	18010	Community Parks and Recreation Director	117,892
R3	18001	Program Specialist	62,545
R3	18002	Program Specialist	55,723
	18101	Lifeguard PT	23,889
	18102	Lifeguard PT	23,889
		Lifeguard - 14 hours/week bucket	25,000
		Administrative Assistant- 14 hours/week bucket	25,000
		Program Specialist Seasonal	11,000
		Lifeguard Seasonal	11,000
	6000	Wages	308,938
		Merit Increase	5,904
	6010	Overtime	2,000
		Other Wages	7,904
		Total Wages	316,842
	6023	Leave Cashout: (TW*5%) of FTEs(3)	11,808
	6030	Soc Sec Exp 6.2% of non-PERS	4,464
	6031	Medicare: 1.45% of TW	4,594
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	4,263
	6033	Workers' Compensation: (TW/100)*2.5833	8,185
	6034	PERS: 22% of Eligible Wages	71,161
	6040	Employee Group Benefits: (1734*12)*FTE(3)	62,424
	6041	Utility Benefit: (380*12)*FTE (3)	13,680
		Benefits & Taxes	180,579
		Total Personnel	497,421

COMMUNITY PARKS & RECREATION

100-71		FY23 Actual	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
Personnel						
6010	Salaries, Benefits & Taxes					432,997
6040	Overtime					2,000
	Employee Group Health Benefits					62,424
Total Personnel						497,421
Materials, Supplies & Services						
6060	Travel/Training					14,000
6100	Supplies					80,000
6110	Building Maintenance					16,100
6150	Gasoline/Diesel/Oil				869	2,000
6153	Heating Fuel				162,336	210,000
6155	Water/Sewer/Garbage				39,358	80,000
6160	Electricity				53,681	115,000
6170	Telephone				511	-
6171	Staff Cellular Phones					1,197
6179	IT (ICR)					37,588
6200	Minor Equipment					6,000
6230	Vehicle Maint./Repair (ISF)					1,129
6335	Other Purchase Services					37,000
6400	Insurance				27,521	78,935
6430	Allowance for Special Events					2,000
6502	Advertising					2,000
6503	Dues/Subscriptions					1,000
Total MS&S						683,948
Total Operating Expenditures						1,181,369

Community Services

100-72		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
6155	Bethel Winter House	-		118,300	595	118,300
6171	Bethel Friends of Canines	102,000	115,000	115,000	115,000	115,000
6430	Community Action Grant 20% of Prior Year Alcohol tax	143,383	36,690	86,000	31,883	78,953
6431	UAF 4-H Contribution	224,000	112,000	112,000	112,000	
6509	Kusko Consortium Library Agreement	72,600	72,600	92,600	92,600	92,600
	K-300/Family Bereavement W/S Donations		-	5,000	-	5,000
Total Donations		541,983	336,290	528,900	352,078	409,853

In-Kind & Transfers

100-73		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
6643	Cash Transfer to Transit Bus	66,226	89,944	166,766	46,758	164,118
6647	Xfer out to Fleet Replacement Fund	-	-	80,000	-	80,000
6440	Community Service Patrol Program 270-50-6440	-	-	32,308	-	-
Total In-Kind Transfers		66,226	89,944	279,074	46,758	244,118

Special Revenue Funds

270 - Community Service Patrol

410 - Enhanced 911 System

Community Service Patrol Program

270-50			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
R3	28101	Community Service Patrol			54,631		58,543
R3	28102	Community Service Patrol			53,560		57,117
R3	28103	Community Service Patrol			54,631		55,723
	6000	Wages	82,377	84,365	162,822	71,378	171,383
		Shift differential @3.5% of base wages	-		5,699	-	5,998
		Merit Increase	-		4,071	-	4,285
	6010	Overtime	7,824	9,289	10,000	10,366	5,000
		Other Wages	7,824	9,289	19,769	10,366	15,283
		Total Wages	90,201	93,654	182,591	81,744	186,666
	6022	Holiday Pay	5,456	3,822		-	
	6023	Leave Cashout: (BW*5%) of FTE(3)	15,283	-	8,141	-	8,569
	6031	Medicare: 1.45% of TW	1,604	1,411	2,648	1,178	2,707
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	3,250	122	2,131
	6033	Workers' Comp: (TW/100)*2.459	4,490	1,458	4,717	1,046	4,590
	6034	PERS: 22% of Eligible Wages	23,849	20,953	40,170	17,984	41,067
	6040	Employee Group Benefits: (1734*12)*FTE(3)	23,485	15,069	54,288	9,120	62,424
	6041	Utility Benefit: (380*12)*FTE(3)	4,076	5,307	13,680	2,452	13,680
		Benefits & Taxes	78,243	48,020	126,894	31,902	135,167
		Total Personnel	168,444	141,674	309,485	113,646	321,833

Community Service Patrol Program

270-50		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	137,135	117,316	245,197	94,160	254,409
502	Overtime	7,824	9,289	10,000	10,366	5,000
512	Employee Group Health	23,485	15,069	54,288	9,120	62,424
Total Personnel		168,444	141,674	309,485	113,646	321,833
Materials, Services & Supplies						
6100	Supplies	405	-	4,000	746	4,000
6103	Wearing Apparel	-	-	1,800	-	1,800
6150	Gasoline/Diesel/Fuel	9,701	4,328	16,000	8,659	16,000
6153	Heating Fuel	(59)	-	100	-	100
6171	Staff Cellular Phones	-	1,345	800	897	800
6400	Insurance	3,261	3,545	3,600	1,598	7,435
6440	In-Kind Expenses/Grant Match from 100-73	-		32,308	-	
Total MS&S		13,308	9,218	58,608	11,900	30,135
Total Operating Expenditures		181,752	150,892	368,093	125,546	351,968

E-911 Services Fund Personnel

410-50			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII R3	17010	Police Chief 10% (90% GF)			13,077		14,637
	17805	Public Safety Dispatcher			59,119		53,114
	6000	Wages	56,021	16,632	72,196	7,000	67,751
		Merit Increase	-	-	-	-	1,694
	6010	Overtime	9,537	783	-	-	-
		Other Wages	9,537	783	-	-	1,694
		Total Wages	65,558	17,415	72,196	7,000	69,445
	6022	Holiday Pay	4,884	359	2,000	-	2,000
	6023	Leave Cashout: (BW*5%) of FTE(1.1)	6,368	634	3,610	-	3,388
	6031	Medicare: 1.45% of TW	1,204	272	1,047	101	1,007
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	1,285	23	971
	6033	Workers' Comp: (TW/100)*2.459	129	63	187	31	1,708
	6034	PERS: 22% of Eligible Wages	16,326	3,910	15,883	1,540	15,278
	6040	EmpGroup Ben: (1734*12)*FTE (1.1)	49,046	1,837	19,906	1,168	22,889
	6041	Utility Benefit: (380*12)*FTE(1.1)	3,772	2,832	5,016	48	5,016
		Benefits & Taxes	81,729	9,907	48,933	2,911	52,256
		Total Personnel	147,287	27,322	121,129	9,911	121,700

E-911 Services Fund						
410-50		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Revenue						
42-4428	Surcharge	139,619	151,326	148,000	74,510	148,000
Total Revenue		139,619	151,326	148,000	74,510	148,000
Personnel						
	Salaries, Benefits & Taxes excluding EGHB	88,704	24,702	101,223	8,743	98,812
6010	Overtime	9,537	783	-	-	-
6040	Employee Group Health Benefits (EHGB)	49,046	1,837	19,906	1,168	22,889
Total Personnel		147,287	27,322	121,129	9,911	121,700
Materials, Supplies & Services						
6335	Other Purchased Services	48,530	5,318	-	-	-
6400	Insurance	2,292	2,455	2,500	1,109	2,591
6410	Rents & Leases	17,400	31,866	13,000	4,302	13,000
Total MS&S		68,222	39,639	15,500	5,411	15,591
Total Expense		215,509	66,961		15,322	137,291
Net Operating Profit/(Loss)		(75,890)	84,365	11,371	59,188	10,709

**City of Bethel
Enterprise Funds**

500 - Solid Waste Enterprise Fund

510 - Water & Sewer Enterprise Fund

520 - Municipal Dock Enterprise Fund

530 - Leased Properties Enterprise Fund

560 - Bethel Transit System Enterprise Fund

SOLID WASTE SUMMARY

Enterprise Fund 500	FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Revenue					
Total Revenue	1,243,726	1,341,036	1,275,495	735,619	1,471,238
Expense					
Hauled Refuse - 500-70	405,754	447,163	657,555	264,625	549,570
Landfill Operations - 500-71	601,109	459,552	660,515	265,208	698,422
Landfill Closure Costs	59,931		64,636	64,636	82,302
Total Operating Expense	1,066,794	1,006,863	1,318,071	594,469	1,247,992
Net Income (Loss)	176,932	334,173	(42,576)	141,150	223,246
Landfill Closure Costs	59,931		64,636		82,302
Previous Landfill Closure Fund Balance	1,284,629		1,344,560		1,409,196
Landfill Closure Fund Balance	1,344,560		1,409,196		1,491,498

SOLID WASTE REVENUE

Enterprise Fund 500		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Revenue						
44-4396	Commercial Garbage Pickup	766,357	749,740	800,000	431,378	862,756
44-4397	Landfill Dump Fee	135,940	258,185	125,000	157,944	315,888
44-4398	Residential Garbage Pickup	341,429	333,111	350,495	146,297	292,594
	Total Solid Waste Services	1,243,726	1,341,036	1,275,495	735,619	1,471,238
	Total Revenue	1,243,726	1,341,036	1,275,495	735,619	1,471,238

Hauled Refuse

Enterprise Fund 500-70			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MII	19010	Public Works Director @ 5%	-	6,664	6,966	-	7,109
R2	19001	Admin Asst @ 5%	-	2,540	2,862	-	2,645
R3	25201	Hauled Refuse Driver	-	94,184	103,765	-	107,957
		Temporary Worker	-	14,432	14,432	-	14,432
		Temporary Worker	-	14,432	14,432	-	14,432
	6000	Wages	98,144	132,252	142,457	70,484	146,575
		Merit Increase	-	3,140	2,666	-	2,943
	6010	Overtime	5,854	10,250	10,250	2,063	10,250
		Other Wages	5,854	13,390	12,916	2,063	13,193
		Total Wages	103,998	145,641	155,373	72,547	159,768
	6022	Holiday Pay	4,236	-	-	-	-
	6023	Leave Cashout: (BW*5%) of FTE(1.1)	23,400	7,282	5,864	-	5,886
	6030	Soc Sec Exp 6.2% of non-PERS	-	1,790	1,790	769	1,790
	6031	Medicare: 1.45% of TW	1,848	2,112	2,253	1,178	2,317
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	2,592	1,399	110	1,632
	6033	Workers' Compensation: (TW/100)*4.8252	12,553	3,762	4,014	3,340	7,709
	6034	PERS: 22% of Eligible Wages	26,295	32,041	34,182	10,323	28,799
	6040	Employee Group Benefits: (1734*12)*FTE(1.1)	14,979	27,971	19,906	8,950	22,889
	6041	Utility Benefit: (380*12)*FTE(1.1)	2,290	5,016	5,016	1,298	5,016
		Benefits & Taxes	85,601	82,566	74,423	25,968	76,037
		Total Personnel	189,599	228,207	229,796	98,515	235,805

Hauled Refuse						
Enterprise Fund 500-70		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	168,766	199,641	199,641	87,502	202,666
6010	Overtime	5,854	10,250	10,250	2,063	10,250
6040	Employee Group Health	14,979	19,906	19,906	8,950	22,889
Total Personnel		189,599	229,796	229,796	98,515	235,805
Materials, Supplies & Services						
6100	Supplies	709	1,000	1,000	1,297	1,000
6103	Wearing Apparel	462	1,000	1,000	110	1,000
6121	4 YD Dumpsters	57,072	60,000	60,000	59,748	60,000
6150	Gasoline/Diesel/Oil	17,564	14,000	14,000	18,788	40,000
6230	Vehicle Maint/Repair (ISF)	67,256	72,000	79,732	33,664	80,363
6231	Vehicle Parts & Tools	9,095	10,000	20,000	26,081	20,000
6232	Tires/Wheels/Chains	1,320	8,000	8,000	2,069	8,000
6335	Other Purchased Services	-	1,000	1,000	-	1,000
6400	Insurance	6,996	7,700	7,700	3,418	12,402
6710	Administration Overhead - (ICR)	55,681	42,667	235,327	20,935	90,000
	Total MS&S	216,155	217,367	427,759	166,110	313,765
	Total Operating Expenses	405,754	447,163	657,555	264,625	549,570

Landfill							
Enterprise Fund 500-71			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
Personnel							
MIII	19010	Public Works Director @ 5%			6,966	-	7,109
R2	19001	Admin Asst @ 5%			2,862	-	2,645
R4	23101	Landfill Manager			71,901	-	64,814
R3	23201	Landfill Operator			57,411	-	52,889
R3	20106	Driver (50% Landfill, 25% S&R, 12.5% HW, 12.5% HS)			28,005	-	27,862
	6000	Wages	148,838	121,569	167,145	68,210	155,319
		Merit Increase	-	-	4,004	-	3,883
	6010	Overtime	32,434	14,239	35,000	9,726	35,000
		Other Wages	32,434	14,239	39,004	9,726	38,883
		Total Wages	181,272	135,808	206,149	77,936	194,202
	6022	Holiday Pay	6,673	7,518	-	-	-
	6023	Leave Cashout: (BW*5%) of FTE(2.6)	46,842	542	20,823	-	7,766
	6030	Soc Sec Exp 6.2% of non-PERS	54	258	-	360	-
	6031	Medicare: 1.45% of TW	3,465	2,129	2,989	1,207	2,816
6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	1,847	235	2,782	
6033	Workers' Comp: (TW/100)*2.7373	9,244	4,971	5,325	2,447	5,316	
6034	PERS: 22% of Eligible Wages	45,643	30,333	45,353	15,864	42,724	
6040	Emp Group Benefits: (1734*12)*FTE(2.6)	30,423	16,927	47,050	4,990	54,101	
6041	Utility Ben: (380*12)*FTE(2.6)	6,990	6,222	11,856	3,761	11,856	
		Benefits & Taxes	149,334	68,900	135,243	28,864	127,361
		Total Personnel	330,606	204,708	341,392	106,800	321,563

Landfill Operations						
Enterprise Fund (500-71)		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	267,749	173,542	259,343	92,084	232,462
6010	Overtime	32,434	14,239	35,000	9,726	35,000
6040	Employee Group Health	30,423	16,927	47,050	4,990	54,101
	Total Personnel	330,606	204,708	341,392	106,800	321,563
Materials, Supplies & Services						
6060	Training/Travel	2,358	3,678	10,000	2,669	5,000
6100	Supplies(Includes Salt)	3,844	3,119	3,000	3,295	33,000
6103	Wearing Apparel	1,430	1,033	3,000	342	3,000
6132	Salt	27,029	-	30,000	30,244	-
6150	Gasoline/Diesel/Oil	23,508	31,982	15,000	3,397	15,000
6153	Heating Fuel	9,646	21,799	18,100	8,346	18,000
6160	Electricity	4,921	4,434	5,700	1,387	5,700
6171	Staff Cellular Phones	629	598	900	299	598
6179	IT(ISR)					37,588
6200	Minor Equipment	3,366	4,835	7,500	1,242	7,500
6230	Vehicle Maint/Repair (ISF)	68,189	60,896	88,592	33,765	90,585
6231	Vehicle Parts	20,117	22,015	20,000	24,994	20,000
6240	Property Maint (ISF)	24,857	25,073	29,909	14,980	17,676
6335	Other Purchased Services	3,303	9,125	4,000	-	4,000
6400	Insurance	4,765	5,108	5,200	2,308	15,211
6503	Dues and Subscriptions	4,000	4,245	10,000	-	10,000
6539	Miscellaneous Expense	-	50	4,000	38	4,000
6710	Administration Overhead - (ICR)	68,541	56,854	64,222	31,102	90,000
	Total MS&S	270,503	254,844	319,123	158,408	376,859
	Total Operating Expenses	601,109	459,552	660,515	265,208	698,422

Water & Sewer Utility Fund Summary

Enterprise Fund 510	FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Operating Revenue	8,388,457	9,070,294	8,592,702	4,589,840	9,438,290
Operating Expenditures for Services:					
Hauled Water	3,174,718	2,546,057	2,321,951	954,220	2,191,891
Hauled Sewer	1,817,304	2,055,148	2,454,119	1,630,804	2,205,979
Piped Water	432,821	542,856	517,192	175,027	603,386
Piped Sewer	610,897	803,136	792,854	257,892	900,370
Water Treatment - Bethel Heights	729,453	861,721	904,814	420,105	1,028,527
Water Treatment - City Subdivision	1,010,681	848,372	839,175	466,121	1,090,373
Sewer Lagoon	122,692	253,154	200,280	72,222	251,217
Subtotal	7,938,368	7,910,444	8,030,385	4,047,774	8,271,742
Excess of Revenue Over Operating Expense	450,089	1,159,850	562,317	542,066	1,166,547
Less: Operating Expenses for Non-Services					
Utility Billing	131,316	354,336	364,844	140,548	449,290
Subtotal	131,316	354,336	364,844	140,548	449,290
Excess of Revenue over Operating & Non-Service Expense	299,585	805,514	197,473	384,191	717,257

*Note: Capital Exenditures and Capital Projects have been removed from the Operational Budget as well as their calculations from prior years

WATER & SEWER UTILITY FUND REVENUES

Enterprise Fund 510		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Revenue						
100-72	Cash Xfer from Community Serv 100-73		-		50	5,000
42-4384	Contract Water	14,024	9,742	14,783	9,864	20,320
42-4386	Metered Piped Water (Comm)	880,140	1,187,983	967,773	522,439	1,076,224
42-4387	Unmetered Piped Water (Res.)	958,864	963,577	961,395	500,425	1,030,876
42-4389	Pumphouse Water	26,316	34,271	24,406	17,536	36,124
42-4390	Trucked Water	3,174,718	3,298,474	3,338,369	1,507,793	3,106,054
	Total Water Services	5,054,062	5,494,047	5,306,726	2,558,107	5,274,597
43-4384	Contract Sewer & Lagoon Dump	29,833	45,712	14,474	30,369	62,560
43-4386	Metered Piped Sewer (Comm.)	525,448	702,026	583,123	306,341	631,062
43-4387	Unmetered Piped Sewer (Res.)	283,506	283,335	282,330	151,902	312,918
43-4390	Trucked Sewer (EVAC/HB)	1,817,304	1,937,065	1,888,920	1,188,794	2,448,916
	Total Sewer Services	2,656,091	2,968,138	2,768,847	1,677,406	3,455,456
45-4392	Water Subscription Fees	204,679	209,802	204,946	108,653	223,825
45-4393	Sewer Subscription Fees	217,379	219,859	216,015	116,238	239,450
45-4394	Reconnect Fees	-	-	3,000	-	3,090
45-4429	Senior Discounts	(55,134)	(57,585)	(52,000)	(30,614)	(53,560)
45-4430	NSF Fees/Credit Card Surcharge	85	360	-	(30)	(60)
45-4520	Utility Inspection Fee	-	(251)		-	-
45-4523	Utility Penalty & Interest	69,377	72,626	70,000	35,022	72,145
45-4590	Investment Income	75,760	124,830	50,000	62,583	125,166
49-4427	Ins Claim Recovery from PY	145,154				-
49-4439	Miscellaneous Income	20,381	20,000	20,000	48,832	97,664
49-4982	Utility Collections (New for FY24)	-	19,278	-	13,763	-
49-6532	Cash Over/Short	623	(810)	500	(120)	515
	Total Other Revenue	678,304	608,109	512,461	354,327	708,236
	Total Revenue	8,388,457	9,070,294	8,588,034	4,589,840	9,438,290

Utility Billing

Enterprise Fund 510-80			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
Personnel							
R3	13304	Acct Specialist I (Utility Billing)			54,632		57,116
R2	13401	Acct Clerk @ 75% w/ 25% to Finance			37,206		38,699
	6000	Wages	10,659	37,971	91,838	29,566	95,815
		Merit Increase	-	-	2,296	-	2,395
	6010	Overtime	18	465	3,000	346	3,000
		Other Wages	18	465	5,296	346	5,395
		Total Wages	10,677	38,436	97,134	29,912	101,210
	6022	Holiday Pay	253	1,949	-	-	-
	6023	Leave Cashout: (BW*5%) of FTEs (1.75)	-	-	4,592	-	4,791
	6031	Medicare: 1.45% of Total Wages	158	583	1,408	430	1,468
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	1,729	50	1,807
	6033	Workers' Comp: (TW/100)*.2165	207	99	2,509	41	219
	6034	PERS: 22% of Eligible Wages	2,405	8,744	21,369	6,557	22,266
	6040	Emp Group Ben: (1734*12)*FTE(1.75)	36	5,734	40,716	5,130	36,414
	6041	Utility Benefit: (380*12)*FTE(1.75)	421	2,842	10,260	2,623	7,980
		Benefits & Taxes	3,480	19,951	82,584	14,831	74,944
		Total Personnel	14,157	58,387	179,718	44,743	176,154

Utility Billing						
Enterprise Fund 510-80		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
6010	Salaries, Benefits & Taxes	14,103	52,188	136,002	39,267	136,740
	Overtime	18	465	3,000	346	3,000
6040	Employee Group Health	36	5,734	40,716	5,130	36,414
	Total Personnel	14,157	58,387	179,718	44,743	176,154
Materials, Supplies & Services						
6060	Travel/Training	-	-	4,500	-	4,500
6100	Supplies	719	-	3,500	402	3,500
6170	Telephone					80
6179	IT (ICR)					37,588
6200	Minor Equipment	-	-	4,000	-	4,000
6335	Outsourced Services Caselle Utility Billing	5,161	53,596	49,500	34,062	60,000
6400	Insurance	1,046	1,191	1,200	533	3,776
6506	Postage Nextrust Billflash	12,691	4,818	15,000	2,349	18,000
6531	Bank Charges	55,815	62,061	40,000	31,497	40,000
6539	Miscellaneous	-	18,647	500	10,589	500
6710	Administration Overhead - (ICR)	41,727	41,329	33,808	16,373	101,192
	Total MS&S	117,159	181,642	152,008	95,805	273,136
	Total Operating Expenses	131,316	240,029	331,726	140,548	449,290

Hauled Water

Enterprise Fund 510-81			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII	19010	Public Works Director @ 2.5%			6,966	-	3,555
R2	19001	Admin Asst @ 2.5%			2,862	-	1,322
R4	24101	Hauled Services Foreman (50% of base salary)			49,561	-	53,102
R2	24001	Administrative Assistant-Water/Sewer (50% of base salary)			33,192	-	34,700
R3	24201	Driver			63,372	-	58,559
R3	24202	Driver			53,560	-	63,060
R3	24203	Driver			53,560	-	55,723
R3	24204	Driver			53,560	-	55,723
R3	24205	Driver			53,560	-	55,723
R3	24206	Driver			53,560	-	55,723
R3	24207	Driver			53,560	-	55,723
R3	24208	Driver			53,560	-	55,723
R3	21000	Driver (\$47,110 @ 12.5% HW, 50% HR, 25% S&R, 12.5% HS)			7,001	-	5,889
	6000	Wages	419,814	527,175	537,874	280,496	554,525
		Merit Increase	-	-	13,447	-	13,863
	6010	Overtime	221,346	270,856	225,000	107,679	225,000
		Other Wages	221,346	270,856	238,447	107,679	238,863
		Total Wages	641,160	798,031	776,321	388,175	793,388
	6022	Holiday Pay	11,139	13,334	-	-	-
	6023	Leave Cashout: (BW*5%) of FTE(9.175)	25,852	1,921	26,545	-	27,726
	6030	Soc Sec Exp 6.2% of non-PERS	26,645	35,210	-	15,464	-
	6031	Medicare: 1.45% of Total Wages	9,738	11,446	11,257	6,098	11,504
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	(1,902)	2,447	9,450	3,431	11,453
	6033	Workers' Compensation: (TW/100)*1.9641	10,692	8,184	20,055	3,133	-
	6034	PERS: 22% of Eligible Wages	52,560	54,348	170,791	28,673	174,545
	6040	Employee Group Benefits: (1734*12)*FTE(9.175)	43,952	30,755	169,198	23,278	190,913
	6041	Utility Benefit: (380*12)*FTE (9.175)	3,046	5,050	42,636	1,632	41,838
		Benefits & Taxes	181,722	162,695	449,931	81,709	457,980
		Total Personnel	822,882	960,726	1,226,252	469,884	1,251,368

Hauled Water						
Enterprise Fund 510-81		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	557,584	659,115	832,054	338,927	835,455
6010	Overtime	221,346	270,856	225,000	107,679	225,000
6040	Employee Group Health	43,952	30,755	169,198	23,278	190,913
	Total	822,882	960,726	1,226,252	469,884	1,251,368
Materials, Supplies & Services						
6060	Travel/Training	4,640	-	10,000	-	-
6100	Supplies	12,388	20,862	15,000	2,792	15,000
6103	Wearing Apparel	11,661	13,692	15,000	1,350	15,000
6150	Gasoline/Diesel/Oil	141,621	154,186	110,000	89,488	150,000
6153	Heating Fuel (25% of City Shop ISF)	30,467	29,593	16,250	17,050	22,500
6155	Water/Sewer/Garbage (25% of City Shop ISF)	6,232	7,007	6,492	3,157	6,750
6160	Electric (25% of City Shop ISF)	13,982	15,192	15,875	6,295	18,000
6170	Telephone	20	42	50	13	-
6171	Staff Cellular Phones	7,446	1,195	6,500	592	598
6179	IT (ICR)					37,588
6200	Minor Equipment	5,436	646	5,000	603	5,000
6230	Vehicle Maint/Repair (ISF)	278,801	228,133	331,886	126,491	339,356
6231	Vehicle Parts & Tools	81,244	90,977	100,000	22,901	125,000
6232	Tires & Wheels	2,573	5,838	20,000	15,773	-
6240	Property Maint (ISF)	41,429	40,503	49,849	24,966	29,460
6332	Lab Tests	769	100	3,000	-	3,000
6335	Other Purchased Services	(15,519)	823	3,000	(1,000)	3,000
6400	Insurance	107,044	128,181	122,000	61,668	67,079
6539	Miscellaneous	41,212	13,623	2,000	482	2,000
6710	Administration Overhead - (ICR)	214,380	241,271	230,679	111,715	101,192
	Total MS&S	985,826	991,864	1,062,581	484,336	940,523
	Total Operating Expenses	1,808,708	1,952,590	2,288,833	954,220	2,191,891

Piped Water

Enterprise Fund 510-82			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII	19010	Public Works Director @ 20%			13,931	-	28,437
R2	19001	Admin Asst @ 20%			5,724	-	10,579
R4	25101	Utility Maintenance Foreman (30% of base salary)			17,353	-	18,059
R3	25401	Utility Maintenance Tech (45% of base salary)			22,770	-	25,079
R3	25402	Utility Maintenance Tech (45% of base salary)			22,770	-	26,352
R3	25403	Utility Maintenance Tech (45% of base salary)			22,324	-	25,079
R3	25404	Utility Maintenance Tech (45% of base salary)			22,324	-	25,079
		Temporary Maintenance Worker (5.1-9.1, 800 hrs @ 19/hr)			15,200	-	15,200
	6000	Wages	78,582	65,485	142,396	38,644	173,864
		Merit Increase	-	-	3,560	-	3,967
	6010	Overtime	44,664	30,671	35,000	15,368	35,000
	19001	Other Wages	44,664	30,671	38,560	15,368	38,967
	19001	Total Wages	123,246	96,156	180,956	54,012	212,831
	6022	Holiday Pay	2,074	1,459	-	-	-
	6023	Leave Cashout: (BW*5%) of FTE(2.5)	11,167	1,212	9,048	-	8,693
	6030	Soc Sec Exp 6.2% of non-PERS	2,258	937	942	-	942
	6031	Medicare: 1.45% of Total Wages	1,951	1,359	2,624	898	3,086
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	1,953	95	3,788
	6033	Workers' Compensation: (TW/100)*1.9641	3,431	822	4,675	667	4,180
	6034	PERS: 22% of Eligible Wages	20,712	18,090	39,810	11,877	43,479
	6040	Employee Group Benefits: (1734*12)*FTE(2.5)	52,244	45,395	49,764	19,355	52,020
	6041	Utility Benefit: (380*12)*FTE(2.5)	4,818	5,065	12,540	2,894	11,400
	19001	Benefits & Taxes	98,655	74,339	121,356	35,786	127,589
	19001	Total Personnel	221,901	170,495	302,312	89,798	340,419

Piped Water						
Enterprise Fund 510-82		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
6010	Salaries, Benefits & Taxes	124,993	94,429	217,548	55,075	253,399
6010	Overtime	44,664	30,671	35,000	15,368	35,000
6040	Employee Group Health	52,244	45,395	49,764	19,355	52,020
	Total	221,901	170,495	302,312	89,798	340,419
Materials, Supplies & Services						
6060	Travel/Training	-	-	8,000	600	8,000
6100	Supplies	2,509	5,186	5,000	1,716	5,000
6103	Wearing Apparel	-	-	5,000	710	5,000
6108	Plumbing Supplies	7,824	14,855	15,000	-	15,000
6150	Gasoline/Diesel/Oil	15,142	16,597	15,000	3,837	15,000
6153	Heating Fuel	50,895	61,945	48,400	21,434	48,400
6155	Water/Sewer/Garbage	2,317	2,687	2,200	1,286	2,200
6160	Electricity-Util Mt. Shop	8,185	7,695	8,200	2,250	8,200
6170	Telephone	40	28	50	7	-
6171	Staff Cellular Phones	2,550	2,571	2,200	1,286	1,197
6179	IT (ICR)					37,588
6200	Minor Equipment	-	3,692	-	51	-
6230	Vehicle Maint/Repair (ISF)	2,688	2,207	3,211	1,224	3,284
6231	Vehicle Parts & Tools	2,598	3,053	1,500	2,363	1,500
6232	Tires & Wheels	-	835	500	-	500
6332	Lab Tests	812	1,195	500	-	500
6335	Other Purchased Services	733	4,955	1,500	-	1,500
6400	Insurance	7,368	7,970	8,100	3,595	8,376
6401	Insurance-Ded Exp & Other	-	-	530	-	530
6710	Administration Overhead - (ICR)	80,170	57,688	56,870	27,542	101,192
	Total MS&S	210,920	242,213	214,879	85,229	262,966
	Total Operating Expenses	432,821	412,708	517,191	175,027	603,386

Bethel Heights Water Treatment

Enterprise Fund 510-83			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII	19010	Public Works Director @ 5%			6,966	-	7,109
R2	19001	Admin Asst @ 5%			2,862	-	2,645
R4	25101	Utility Maintenance Foreman (15% of base salary)			8,677	-	9,030
R2	25102	Water Treatment Operator - Bethel Heights			96,078	-	102,960
R2	25103	Water Treatment Operator (50% of base salary)			28,005	-	29,280
	6000	Wages	119,383	136,783	142,588	75,099	151,024
		Merit Increase	-		3,391	-	3,776
	6010	Overtime	37,364	42,425	37,000	18,858	37,000
		Other Wages	37,364	42,425	40,391	18,858	40,776
		Total Wages	156,747	179,208	182,979	93,957	191,800
	6022	Holiday Pay	4,321	4,975	-	-	-
	6023	Leave Cashout: (BW*5%) of FTEs(1.75)	30,300	2,548	18,648	-	7,551
	6030	Soc Sec Exp 6.2% of non-PERS	-	468	-	-	-
	6031	Medicare: 1.45% of Total Wages	4,130	1,386	2,653	524	2,781
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	1,538	157	2,292
	6033	Workers' Compensation: (TW/100)*1.9641	2,600	1,255	4,727	711	3,767
	6034	PERS: 22% of Eligible Wages	37,532	38,844	40,255	17,293	42,196
	6040	Emp Group Benefits: (1734*12)*FTE(1.75)	14,877	21,256	49,764	13,197	36,414
	6041	Utility Benefit: (380*12)*FTE(1.75)	9,575	13,067	12,540	6,640	7,980
		Benefits & Taxes	103,335	83,799	130,125	38,522	102,981
		Total Personnel	260,082	263,007	313,104	132,479	294,781

Bethel Heights Water Treatment Facility

Enterprise Fund 510-83		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	207,841	199,326	226,340	100,424	221,367
6010	Overtime	37,364	42,425	37,000	18,858	37,000
6040	Employee Group Health	14,877	21,256	49,764	13,197	36,414
Total Personnel		260,082	263,007	313,104	132,479	294,781
Materials, Supplies & Services						
6060	Training/Travel	300	-	5,000	150	5,000
6100	Supplies	1,331	1,447	4,000	1,560	4,000
6103	Wearing Apparel	-	237	1,500	333	1,500
6108	Plumbing Supplies	1,785	2,232	5,000	57	
6140	Chemicals	18,507	50,649	125,000	86,796	125,000
6150	Gasoline/Diesel/Oil	1,058	236	2,000	129	
6153	Heating Fuel	218,056	245,593	207,800	88,041	190,000
6160	Electricity	106,006	117,748	130,525	57,207	130,525
6179	IT (ICR)					37,588
6200	Minor Equipment	14,060	78,718	45,000	11,521	50,000
6230	Vehicle Maint/Repair (ISF)	2,688	2,246	3,267	1,245	3,340
6240	Property Maint (ISF)					17,676
6332	Lab Tests	3,820	4,688	4,000	255	4,000
6335	Other Purchased Services	11,825	23,741	25,000	-	10,000
6400	Insurance	24,130	26,187	26,600	11,807	53,925
6710	Administration Overhead - (ICR)	65,805	57,362	58,900	28,525	101,192
Total MS&S		469,371	611,084	643,592	287,626	733,746
Total Operating Expenses		729,453	874,091	956,696	420,105	1,028,527

City-Sub Water Treatment

Enterprise Fund 510-84			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII	19010	Public Works Director 10%			6,966	-	14,219
R2	19001	Admin Asst @ 10%			2,862	-	5,289
R4	25101	Utility Maintenance Foreman @ 15%			8,677	-	9,030
R4	25201	Water Treatment Facilities Coordinator			87,601	-	91,582
R3	25303	Water Treatment Operator			49,608	-	57,127
R3	25302	Water Treatment Operator @ 50%			28,005	-	29,280
	6000	Wages	96,676	127,770	183,719	75,958	206,527
		Merit Increase	-		4,593	-	5,163
	6010	Overtime	42,865	127,550	45,000	42,217	45,000
		Other wages	42,865	127,550	49,593	42,217	50,163
		Total Wages	139,541	255,320	233,312	118,175	256,690
	6022	Holiday Pay	3,522	4,540	-	-	-
	6023	Leave Cashout: (BW*5%) of FTEs (2.85)	18332	2,548	8,838	-	10,326
	6030	Soc Sec Exp 6.2% of non-PERS	-	468	-	-	-
	6031	Medicare: 1.45% of TW	2,295	3,860	3,383	1,773	3,722
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	1,953	272	3,343
	6033	Workers' Compensation: (TW/100)*1.9641	3,266	1,165	6,027	916	5,042
	6034	PERS: 22% of Eligible Wages	32,764	55,499	51,329	25,886	56,472
	6040	Employee Group Benefits: (1734*12)*FTE(2.85)	17,177	28,701	49,764	18,544	59,303
	6041	Utility Benefit: (380*12)*FTE(2.85)	3,856	7,174	12,540	3,962	12,996
Benefits & Taxes			81,212	103,955	133,834	51,353	151,203
Total Personnel			220,753	359,275	367,146	169,528	407,893

City-Sub Water Treatment Facility

Enterprise Fund 510-84		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	160,711	203,024	272,382	108,767	303,591
6010	Overtime	42,865	127,550	45,000	42,217	45,000
6040	Employee Group Health	17,177	28,701	49,764	18,544	59,303
Total Personnel		220,753	359,275	367,146	169,528	407,893
Materials, Supplies & Services						
6060	Travel/Training	1,350	-	10,000	-	10,000
6100	Supplies	1,798	9	3,000	2,550	5,000
6103	Wearing Apparel	464	1,067	3,000	364	3,000
6108	Plumbing Supplies	2,649	51	3,000	23	
6140	Chemicals	47,344	99,009	125,000	92,730	125,000
6150	Gasoline/Diesel/Oil	1,605	4,589	1,500	2,710	5,500
6153	Heating Fuel	183,391	153,260	120,000	86,528	120,000
6160	Electricity	77,115	91,557	98,900	42,189	98,900
6171	Cell Phone	20	1,028	50	512	1,197
6179	IT (ICR)					37,588
6200	Minor Equipment	40,878	2,137	25,000	11,576	43,000
6230	Vehicle Maint/Repair (ISF)	3,201	3,045	4,430	1,688	4,529
6240	Property Maint (ISF)	149	-	-	-	29,460
6332	Lab Tests	12,883	18,164	15,000	9,491	20,000
6335	Other Purchased Services	308,889	55,648	15,000	5,460	15,000
6400	Insurance	15,025	16,230	16,500	7,324	62,614
6502	Advertising		-	500	-	500
6710	Administration Overhead - (ICR)	93,167	60,345	407,893	33,448	101,192
Total MS&S		789,928	506,139	848,773	296,593	682,480
Total Operating Expense		1,010,681	865,414	1,215,919	466,121	1,090,373

Hauled Sewer

Enterprise Fund 510-85			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
Personnel							
MIII	19010	Public Works Director @ 2.5%		-	9,699	-	3,555
R2	19001	Admin Asst @ 2.5%		-	2,862	-	1,322
R4	24101	Utility Foreman (50% of base salary)		-	49,561	-	53,102
R2	24001	Admin Asst - Water/Sewer (50% of base salary)		-	33,192	-	24,700
R3	24301	Driver		-	89,532	-	66,226
R3	24302	Driver		-	56,010	-	55,723
R3	24303	Driver		-	54,631	-	55,723
R3	24304	Driver		-	60,317	-	55,723
R3	24305	Driver		-	53,560	-	55,723
R3	24306	Driver		-	53,560	-	55,723
R3	24307	Driver		-	53,560	-	55,723
R3	24308	Driver		-	53,560	-	55,723
R3	24309	Driver		-	53,560	-	55,723
R3	21000	Driver (\$47,110 @ 50% HR, 25% S&R, 12.5% HW, 12.5% HS)		-	7,001	-	6,965
	6000	Wages	529,041	595,389	630,605	328,522	601,654
		Merit Increase	-	-	15,523	-	15,041
	6010	Overtime	191,891	232,713	200,000	101,049	200,000
		Other Wages	191,891	232,713	215,523	101,049	215,041
		Total Wages	720,932	828,102	846,128	429,571	816,695
	6022	Holiday Pay	17,912	19,650	-	-	-
	6023	Leave Cashout: (BW*5%) of FTEs (10.175)	59,996	1,921	31,530	-	30,083
	6030	Soc Sec Exp 6.2% of non-PERS	21,845	27,523	20,000	13,326	-
	6031	Medicare: 1.45% of Total Wages	11,617	12,170	12,269	6,205	11,842
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	545	-	3,433	7,753
	6033	Workers' Compensation: (TW/100)*2.2115	22,352	10,571	21,858	5,512	18,061
	6034	PERS: 22% of Eligible Wages	92,283	89,574	186,148	41,903	179,673
	6040	Employee Group Benefits: (1734*12)*FTE(10.175)	107,217	83,720	205,390	55,895	211,721
	6041	Utility Benefit: (380*12)*FTE(10.175)	12,307	2,238	51,756	958	46,398
		Benefits and Taxes	345,529	247,912	528,951	127,232	505,531
		Total Personnel	1,066,461	1,076,014	1,375,078	556,803	1,322,226

Hauled Sewer

Enterprise Fund 510-85		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	767,353	759,581	969,689	399,859	910,505
6000	Overtime	191,891	232,713	200,000	101,049	200,000
6010	Employee Group Health	107,217	83,720	205,390	55,895	211,721
	Total Personnel	1,066,461	1,076,014	1,375,078	556,803	1,322,226
Materials, Supplies & Services						
6060	Training/Travel	-	-	10,000	-	
6100	Supplies	8,453	10,308	15,000	8,847	15,000
6103	Wearing Apparel	9,974	5,836	15,000	8,144	15,000
6150	Gasoline/Diesel/Oil	127,304	162,840	110,000	97,173	110,000
6153	Heating Fuel (25% of City Shop ISF)	30,994	28,518	16,250	17,050	22,500
6155	Water/Sewer/Garbage (25% of City Shop ISF)	6,232	7,007	6,492	3,157	6,750
6160	Electricity (25% of City Shop ISF)	13,982	15,192	15,875	6,296	18,000
6171	Staff Cellular Phones	-	-	5,500	-	598
6179	IT (ICR)					37,588
6200	Minor Equipment	204	944	5,000	1,247	5,000
6230	Vehicle Maint/Repair (ISF)	282,385	224,555	326,681	124,508	334,034
6231	Vehicle Parts & Tools	57,809	97,665	100,000	38,139	125,000
6232	Tires & Wheels	1,675	2,867	20,000	17,008	-
6240	Property Maint (ICR)	41,511	40,503	49,849	24,966	17,676
6335	Other Purchased Services	(15,368)	(3,261)	3,000	(1,807)	3,000
6400	Insurance	79,702	114,824	86,600	46,496	70,415
6539	Miscellaneous	585	2,217	2,000	575	2,000
6710	Administration Overhead - (ICR)	244,478	175,308	258,676	125,273	101,192
	Total MS&S	889,920	885,323	1,045,923	1,074,001	883,752
	Total Operating Expense	1,956,381	1,961,337	2,421,001	1,630,804	2,205,979

Piped Sewer							
Enterprise Fund 510-86			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII	19010	Public Works Director @ 15%		-	13,931	-	21,328
R2	19001	Admin Asst @ 15%		-	5,724	-	7,934
R4	25101	Utility Maintenance Foreman (30% of base salary)		-	17,353	-	18,059
R3	25401	Utility Maintenance Tech (45% of base salary)		-	22,770	-	25,079
R3	25403	Utility Maintenance Tech (45% of base salary)		-	22,770	-	26,352
R3	25403	Utility Maintenance Tech (45% of base salary)		-	22,324	-	25,079
R3	25403	Utility Maintenance Tech (45% of base salary)		-	22,324	-	25,079
		Temporary Maintenance Worker (800 hrs @ 19/hr)		-	15,200	-	28,000
	6000	Wages	57,250	58,417	142,396	35,929	176,910
		Merit Increase (Bargaining Unit only)	-	-	3,212	-	3,723
	6010	Overtime	23,038	30,671	35,000	15,368	35,000
		Other Wages	23,038	30,671	38,212	15,368	38,723
		Total Wages	80,288	89,088	180,608	51,297	215,633
	6022	Holiday Pay	2,074	1,459	-	-	-
	6023	Leave Cashout: (BW*5%) of FTE(2.40)	9,432	1,212	7,120	-	7,445
	6030	Soc Sec Exp 6.2% of non-PERS	-	937	942	-	1,736
	6031	Medicare: 1.45% of Total Wages	1,317	1,271	2,619	850	3,127
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	-	88	3,838
	6033	Workers' Compensation: (TW/100)*2.2115	3,437	821	4,666	665	4,769
	6034	PERS: 22% of Eligible Wages	19,275	16,540	39,734	11,280	41,279
	6040	Employee Group Benefits: (1734*12)*FTE(2.40)	39,561	12,239	49,764	18,562	49,939
	6041	Utility Benefit: (380*12)*FTE(2.40)	4,692	4,957	12,540	2,828	10,944
		Benefits & Taxes	79,788	39,436	117,384	34,273	123,078
		Total Personnel	160,076	128,524	297,992	85,570	338,710

Piped Sewer

Enterprise Fund 510-86		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	97,477	85,614	213,228	51,640	253,771
6000	Overtime	23,038	30,671	35,000	15,368	35,000
6010	Employee Group Health	39,561	12,239	49,764	18,562	49,939
	Total Personnel	160,076	128,524	297,992	85,570	338,710
Materials, Supplies & Services						
6060	Travel/Training	-	-	5,000	-	-
6100	Supplies	1,054	5,870	3,000	32,315	3,000
6103	Wearing Apparel	629	5,266	4,000	2,006	4,000
6108	Plumbing Supplies	160	6,630	7,500	1,408	7,500
6150	Gasoline/Diesel/Oil	4,050	7,997	15,000	7,532	15,000
6153	Heating Fuel	55,110	51,924	60,000	21,831	60,000
6155	Water/Sewer/Garbage	2,317	2,687	2,200	1,287	2,200
6160	Electricity (Lift Stations & Mt. Bldg)	109,312	107,689	108,000	20,268	108,000
6171	Cell Phones					1,197
6179	IT (ICR)					37,588
6200	Minor Equipment	135,141	278,020	150,000	16,596	150,000
6230	Vehicle Maint/Repair (ISF)	2,759	2,740	3,987	1,520	4,076
6231	Vehicle Parts & Tools	1,475	4,199	1,500	1,883	1,500
6232	Tires & Wheels	-	2,140	500	-	500
6240	Prop Maint(ISF)					29,460
6335	Other Purchased Services	16,942	34,069	20,000	269	10,000
6400	Insurance	7,275	7,872	8,000	3,551	9,447
6410	Leased Property - Lift Station	14,369	15,805	17,000	17,381	17,000
6710	Administration Overhead - (ICR)	80,307	59,259	56,057	27,148	101,192
Total MS&S		450,821	625,049	494,862	172,322	561,660
Total Operating Expenditures		610,897	753,573	792,854	257,892	900,370

Sewer Lagoon

Enterprise Fund 510-87			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII	19010	Public Works Director @ 5%		-	27,863	-	7,109
R2	19001	Admin Asst @ 5%		-	11,448	-	2,645
R4	25101	Utility Maint Foreman @ 10% of BW		-	5,784	-	6,012
R3	25401	Utility Maint Worker @ 10% of BW		-	5,060	-	5,572
R3	25402	Utility Maint Worker @ 10% of BW		-	5,060	-	5,856
R3	25403	Utility Maint Worker @ 10% of BW		-	4,941	-	5,572
R3	25404	Utility Maint Worker @ 10% of BW		-	4,941	-	5,572
	6000	Wages	21,256	23,549	65,097	15,174	38,338
		Merit Increase	-	-	931	-	958
	6010	Overtime	5,281	7,323		4,312	6,250
		Other Wages	5,281	7,323	931	4,312	7,208
		Total Wages	26,537	30,872	66,028	19,486	45,546
	6022	Holiday Pay	556	407	-	-	-
	6023	Leave Cashout: (BW*5%) of FTE(.6)	3,777	269	3,301	-	2,300
	6030	Soc Sec Exp 6.2% of non-PERS	-	382	-	-	-
	6031	Medicare: 1.45% of TW	433	426	957	352	660
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	-	25	811
	6033	Workers' Comp: (TW/100)*2.2115	843	67	1,706	126	1,007
	6034	PERS: 22% of Eligible Wages	6,279	5,362	14,526	4,276	10,020
	6040	Emp Group Ben: (1734*12)*FTE(.6)	10,649	4,206	16,286	5,553	12,485
	6041	Utility Benefit: (380*12)*FTE(0.6)	1,204	2,107	4,104	863	2,736
		Benefits & Taxes	23,741	13,226	40,881	11,195	30,020
		Total Personnel	50,278	44,098	106,909	30,681	75,566

Sewer Lagoon

Enterprise Fund 510-87		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	34,348	32,569	90,622	20,816	56,831
502	Overtime	5,281	7,323	-	4,312	6,250
512	Employee Group Health	10,649	4,206	16,286	5,553	12,485
	Total Personnel	50,278	44,098	106,909	30,681	75,566
Materials, Supplies & Services						
6060	Travel/Training	-	-	3,000	-	3,000
6100	Supplies	2,218	279	1,000	507	1,000
6103	Wearing Apparel	-	-	3,000	-	3,000
6108	Plumbing Supplies	-	1,080	3,000	-	3,000
6150	Gasoline/Diesel/Oil	-	849	38,000	185	38,000
6200	Minor Equipment	-	339	1,100	-	1,100
6231	Vehicle Parts & Tools	1,528	210	160	436	160
6320	Lagoon Study	-	25,729	-	21,252	-
6332	Lab Tests	10,188	10,617	15,000	4,230	15,000
6335	Other Purchased Services	-	393	500	-	500
6400	Insurance	498	481	500	958	1,699
6420	Interest Sewer Lagoon Bond	19,554	18,836	-	-	-
6503	Dues & Subscriptions (SOA Permit)	7,920	7,920	8,000	-	8,000
6710	Administration Overhead - (ICR)	30,508	27,884	20,111	9,740	101,192
	Total MS&S	72,414	421,963	93,371	41,541	175,651
	Total Operating Expenses	122,692	466,061	200,280	72,222	251,217

MUNICIPAL DOCK FUND SUMMARY

Enterprise Fund 520-50	FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
Operating Revenue					
Municipal Dock Operations	950,112	1,600,210	1,089,552	996,944	1,113,288
Small Boat Harbor	271,024	378,192	310,500	308,390	317,876
Total	1,221,136	1,978,402	1,400,052	1,305,334	1,431,164
Operating Expense					
Municipal Dock Operations	543,475	629,533	879,633	253,115	875,106
Small Boat Harbor	187,971	184,161	266,753	87,064	237,487
Payments on Leased Equipment					
Port Grader Lease				150,000	150,000
Total	731,446	813,694	1,146,386	340,179	1,262,593
Operating Income	489,690	1,164,708	253,666	965,155	168,571

MUNICIPAL DOCK REVENUE

Enterprise Fund 520-50		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Revenue						
43-4402	City Dock-Storage	68,872	112,065	90,000	25,946	75,000
43-4403	City Dock-Permits	5,340	4,950	3,000	-	3,000
43-4404	City Dock-Wharfage	122,565	235,942	140,000	86,728	140,000
43-4405	City Dock-Dockage	19,147	22,750	25,000	19,363	30,000
43-4410	Petro Yard-Storage		42,598	2,000	17,769	2,000
43-4412	PetroPort-Fuel Thru-Put (\$.04/gal.)	453,524	664,396	500,000	601,187	500,000
43-4413	PetroPort-Dockage	15,735	40,462	20,000	27,807	25,000
43-4415	Seawall-Moorage	31,408	25,168	30,000	-	30,000
43-4416	Seawall Dockage	44,569	23,661	30,000	24,029	30,000
43-4418	Beach-Storage	39,914	102,132	35,000	27,953	35,000
43-4419	Beach-Wharfage	56,200	177,839	100,000	83,069	110,000
43-4420	Beach-Dockage	45,807	26,779	35,000	33,605	35,000
44-4440	Lease Revenue - AML - \$2,701	-	30,554	30,552	-	32,412
45-4388	Extra Water Calls	23,628	40,348	25,000	32,550	30,000
49-4439	Miscellaneous Revenue	-	7,540	2,000		2,000
49-4590	Investment Income	23,403	43,026	20,000	16,938	33,876
Total Revenue		950,112	1,600,210	1,087,552	996,944	1,113,288

Municipal Dock

Enterprise Fund 520-50			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII	27101	Port Director 95% MD 5% SBH		-	89,984		92,750
R2	27102	Administrative Assistant 67% MD 33% SBH		-	37,413		34,575
R3	27103	City Dock Attendant 90% MD 10% SBH		-	49,168		52,703
	27902	Seasonal City Dock Attendant 1,040 hrs @ \$22/hr. 90% MD 10% SBH		-	20,592		20,592
	6000	Wages	134,737	168,059	197,157	82,363	200,620
		Merit Increase	-	-	4,929	-	4,501
	6010	Overtime	5,132	5,059	5,000	2,672	5,000
		Subtotal of miscellaneous wages	5,132	5,059	9,929	2,672	9,501
		Total Wages	139,869	173,118	207,086	85,035	210,121
	6022	Holiday Pay	5,299	5,299	2,300	-	
	6023	Leave Cashout: (BW*5%) of FTE(2.52)	13,708	13,708	9,858	2,423	9,001
	6030	Soc Sec Exp 6.2% of non-PERS	200	200	1,277	-	1,277
	6031	Medicare: 1.45% of TW	2,887	2,887	3,003	1,317	3,047
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	3,686	164	2,402
	6033	Workers' Compensation: (TW/100)*2.7683	1,845	1,845	5,350	800	5,817
	6034	PERS: 22% of Eligible Wages	38,544	38,544	43,375	18,708	41,696
	6040	Employee Group Benefits: (1734*12)*FTE(2.52)	46,736	45,736	45,602	28,103	52,436
	6041	Utility Benefit: (380*12)*FTE (2.52)	8,941	8,941	11,491	5,547	11,491
		Benefits & Taxes	118,160	117,160	125,941	57,062	127,168
		Total Personnel	258,029	290,278	333,027	142,097	337,289

Municipal Dock Expenses

Enterprise Fund 520-50		FY23 Actuals	FY24 Actual	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	206,161	239,483	282,425	111,322	279,852
	Overtime	5,132	5,059	5,000	2,672	5,000
	Employee Group Health	46,736	45,736	45,602	28,103	52,436
	Total Personnel	258,029	290,278	333,027	142,097	337,289
Materials, Supplies & Services						
6060	Travel/Training	2,690	1,135	5,000	-	5,000
6100	Supplies	5,279	2,087	8,000	351	8,000
6103	Wearing Apparel	-	318	5,000	480	5,000
6121	Municipal Dock Gravel	-	130,000	130,000	-	130,000
6150	Gasoline/Diesel/Oil	9,911	14,850	15,000	2,164	15,000
6153	Heating Fuel	6,018	5,941	5,000	3,472	5,000
6155	Water/Sewer/Garbage	12,986	13,361	13,500	17,192	13,500
6156	Water for Barges	-	-	12,000	-	12,000
6160	Electricity	18,285	15,282	18,900	1,572	18,900
6170	Telephone	2,294	2,555	2,250	770	2,316
6171	Staff Cellular Phones	1,580	1,599	2,400	800	1,197
6179	IT (ICR)					37,588
6200	Minor Equipment	11,623	137	30,000	10	10,000
6230	Vehicle Maint/Repair (ISF)	3,374	2,468	3,544	1,351	3,623
6231	Vehicle Parts & Tools	32,853	15,022	20,000	1,202	5,000
6235	Tires & Wheels	3,088	1,932	-	-	-
6241	Municipal Dock Maintenance	17,086	2,891	50,000	-	20,000
6242	Seawall Maintenance	1,208	732	7,000	752	7,000
6244	Property Maintenance (ICR)	24,857	24,302	29,909	14,980	17,676
6320	Other Professional Fees	13,718	1,053	20,000	1,008	
6321	Legal Fees	1,424	-	5,000	-	
6324	Planning/Engineering Fees	-	-	10,000	-	
6339	Other Purchased Services	21,426	8,602	30,000	23,929	
6400	Insurance	13,467	14,800	15,000	8,635	44,985
6502	Advertising	275	275	1,000	-	1,000
6503	Dues & Subscriptions	225	236	2,000	604	2,000
6531	Bank Charges	1,882	1,460	3,000	443	3,000
6539	Miscellaneous	-	286	900	469	900
6710	Administration Overhead - (ICR)	79,897	77,931	63,667	30,834	169,133
	Total MS&S	285,446	339,255	508,070	111,018	537,817
	Total Operating Expense	543,475	629,533	841,097	253,115	875,106

Small Boat Harbor

Enterprise Fund 520-55			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII	27101	Port Director @ 5%		-	4,736	-	4,882
R2	27102	Admin Assistant @ 33%		-	19,427	-	17,029
R3	27103	Dock Attendant @ 10%		-	5,463	-	5,856
		Seasonal Dock Attendant Temp					
	27902	(1,040 hrs. @ \$22/hr. @ 10% SBH 90% MD)		-	2,288	-	2,288
	27903	Port Attendant Temp - 5 mo. (867 hrs.) @ 19/hr.		-	16,473	-	16,473
	27904	Port Attendant Temp - 5 mo. (867 hrs.) @ 19/hr.		-	16,473	-	16,473
	27905	Port Attendant Temp - 5 mo. (867 hrs.) @ 19/hr.		-	16,473	-	16,473
	27906	Port Attendant Temp - 5 mo. (867 hrs.) @ 19/hr.		-	16,473	-	16,473
	27907	Port Attendant Temp - 5 mo. (867 hrs.) @ 19/hr.		-	16,473	-	16,473
	6000	Wages	68,854	71,787	114,279	37,082	112,420
		Merit Increase	2,168	-	622	-	694
	6010	Overtime	-	2,331	1,500	1,304	1,500
		Other Wages	2,168	2,331	2,122	1,304	2,194
		Total Wages	71,022	74,118	116,401	38,386	114,614
	6022	Holiday Pay	1,478	1,001	-	-	-
	6023	Leave Cashout: (BW*5%) of FTE(.48)	8,940	847	2,794	269	1,388
	6030	Soc Sec Exp 6.2% of non-PERS	1,548	2,875	5,248	1,393	5,248
	6031	Medicare: 1.45% of TW	1,191	1,107	1,688	563	1,662
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	-	341	31	2,040
	6033	Workers' Compensation: (TW/100)*2.7683	3,268	1,170	3,007	784	3,173
	6034	PERS: 22% of Eligible Wages	11,795	6,323	25,608	3,503	6,591
	6040	Employee Group Benefits: (1734*12)*FTE(.48)	17,097	3,169	8,686	1,853	9,988
	6041	Utility Benefit: (380*12)*FTE(.48)	5,741	2,994	2,189	1,009	2,189
		Benefits & Taxes	51,058	19,486	49,561	9,405	32,280
		Total Personnel	122,080	93,604	165,962	47,791	146,894

SMALL BOAT HARBOR

Enterprise Fund 520-55		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Revenue						
43-4409	SBH Petro Port-Fuel Thru-Put (\$.02/gal.)	235,819	332,862	250,000	300,593	250,000
45-4424	SBH-Storage	5,175	7,375	3,500	1,375	5,000
43-4422	SBH-Moorage	18,620	23,166	15,000	3,102	15,000
45-4535	SBH-Permits	11,280	11,730	20,000	3,320	12,000
45-4559	Permits/Licenses/Fees	130	3,059	-	-	-
	Total Operating Revenue	271,024	378,192	288,500	308,390	282,000
49-4439	Misc Revenue	-	-	2,000	-	2,000
49-4591	Investment Income	-	-	20,000	-	33,876
	Total Revenue	271,024	378,192	310,500	308,390	317,876
Expense						
Personnel						
	Salaries, Benefits & Taxes	104,983	88,104	155,776	44,634	135,406
	Overtime	-	2,331	1,500	1,304	1,500
	Employee Group Health	17,097	3,169	8,686	1,853	9,988
	Total Personnel	122,080	93,604	165,962	47,791	146,894
Materials, Supplies & Services						
6100	Supplies	4,558	4,098	3,000	1,786	3,000
6103	Wearing Apparel	-	2,251	3,000	902	3,000
6132	Small Boat Harbor Gravel	-	30,075	30,000	-	30,000
6150	Gasoline/Diesel/Oil	12,802	11,481	8,000	9,477	12,000
6160	Electricity	-	-	2,000	-	-
6200	Minor Equipment	3,635	3,364	4,000	3,925	4,000
6241	Small Boat Harbor Maintenance	3,502	-	6,000	5,128	6,000
6400	Insurance	1,968	6,098	5,470	2,428	4,276
6539	Miscellaneous	162	2,343	1,000	507	1,000
6710	Administrative Overhead-GF	39,264	30,847	163,657	15,120	27,317
	Total MS&S	65,891	90,557	226,127	39,273	90,594
	Total Operating Expense	187,971	184,161	392,089	87,064	237,487

Leased Properties Summary

Enterprise Fund 530		F23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Revenue						
	Total Leased Properties Revenue	850,922	850,922	972,115	455,563	1,029,001
	Total Operating Expenses	(474,453)	(501,301)	(493,654)	(250,046)	(629,363)
Excess of Revenues over Operating Expenses		376,469	349,621	478,461	205,517	399,638
Debt Payments						
	Court Complex Bond Payment	283,125	255,625	250,250	232,750	249,500
Net		93,344	93,996	228,211	(27,233)	150,138

Other Leased Properties

530-44		Monthly	FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Revenue							
4440	Riverfront easement		-	-	-	-	-
4443	Professional Housing Units	\$ 12,000					108,000
4451	Lease-Bethel Sportsman Club	\$ 1	-	-	1	1	1
4452	Lease-Faulkner Walsh	\$ 1,050	12,600	12,600	12,600	-	12,600
4453	Lease-YKHC Warehouse	\$ 484	4,200	4,200	4,200	2,820	5,808
4455	Lease-State of AK DMV	\$ 1,030	12,360	12,360	12,360	6,210	12,360
4456	Lease-Lions Cub	\$ 150	-	-	1	-	1,800
4459	Lease-YKHC Bautista House	\$ 300	-	-	3,600	-	3,600
4461	Lease-AVCP Head Start	\$ 275	2,700	2,700	2,700	-	3,300
4463	Lease-Swanson's HW/BTP	\$ 2,007	22,560	22,560	21,120	11,280	24,084
4467	Lease-Bethel Korean Gospel	\$ 150	1,800	1,800	1,800	1,050	1,800
4470	Lease-GCI	\$ 1,051	10,846	11,726	12,252	6,126	12,612
4474	Lease-SOA-DOT Fish & Game	\$ 800	9,600	9,600	9,600	4,800	9,600
9455	Lease-YKHC VHC Maint Bldg	\$ 1,697	19,200	19,200	19,200	9,888	20,364
Total Revenue		\$ 20,995	95,866	96,746	99,434	42,175	215,929

Expense							
6153	Heating Fuel	1,800					21,600
6155	Water, Sewer, Garbage	1,800					21,600
6160	Electricity	1,800					21,600
6339	Other Purchased Services	1,440					12,960
6400	Insurance	901					10,811
Total Expenses		\$ 7,741					88,571

Nora Guinn Court Complex

Enterprise Fund 530-55		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Revenue						
44-4444	SoA - Alaska Court System - \$53,043	595,211	705,197	613,620	325,542	636,516
44-4447	SoA - Dept of Law - \$14,088	152,485	157,822	163,346	81,673	169,056
49-4590	Investment Income	7,360	12,350	7,500	6,173	7,500
Total Revenue		755,056	875,369	784,466	413,388	813,072
Expense						
6153	Heating Fuel	85,044	97,995	61,598	37,059	61,598
6155	Water, Sewer, Garbage-Court Complex	18,444	20,534	23,240	8,382	23,240
6160	Electricity - Court Complex	74,283	90,104	97,570	44,819	97,570
6170	Telephone	751	878	800	252	800
6240	Property Maintenance (ISF)	124,287	121,508	149,546	74,898	70,705
6241	Property Maintenance	15,781	37,763	25,000	13,000	25,000
6333	Janitorial - Court Complex	82,150	89,625	89,500	52,150	89,500
6339	Other Purchased Services	10,751	2,283	2,500	-	2,500
6400	Insurance	62,962	40,611	43,900	19,486	51,526
6710	Administrative Overhead- ICR					118,353
Total Operating Expense		474,453	501,301	493,654	250,046	540,792
Net Operating Income		280,603	374,068	290,812	163,342	272,280
Debt Payments						
25000	Revenue Bonds Payable	1,305,000	1,115,000	910,000	700,000	700,000
25100	Court Complex Bond Principal	190,000	205,000	210,000	210,000	220,000
6420	Courthouse Loan Interest	32,625		-	-	-
6421	Court Complex Bond Interest	60,500	50,625	40,250	22,750	29,500
55-6422	Amortization of Bond Premium	-	-	-	-	-
Total Debt Payments		283,125	255,625	250,250	232,750	249,500
Net Income before Depreciation		(2,522)	118,443	40,562	(69,408)	22,780

BETHEL TRANSIT SYSTEM SUMMARY

ENTERPRISE FUND 560-50	FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Operating Revenue					
Local & Federal Sources	544,040	218,631	424,209	198,789	442,389
Fares	21,080	28,422	40,000	12,639	40,000
Total	565,120	247,053	464,209	211,428	482,389
Operating Expense					
Personnel	141,946	257,032	245,391	135,486	263,546
Expenses	116,391	159,959	187,643	66,257	218,843
Total	258,337	416,991	433,034	201,743	482,389
Net Operating Income	306,783	(169,938)	31,175	9,685	-

BETHEL TRANSIT SYSTEM REVENUE

Enterprise Fund 560-50		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Local Sources:						
40-4600	Contributed Support City of Bethel	-	-	166,766	-	164,118
	Total	-	-	166,766	-	164,118
Federal Sources:						
41-4101	Section 5311 Grant	544,040	218,631	257,443	198,789	278,271
	Total	544,040	218,631	257,443	198,789	278,271
Charges for Services:						
43-4370	Bus Fares	21,080	26,082	40,000	8,039	40,000
43-4371	Bus Fares - Prepaid	-	2,340	-	4,600	-
	Total	21,080	28,422	40,000	12,639	40,000
	Total Revenue	565,120	247,053	464,209	211,428	482,389

Bethel Transit System

Enterprise Fund 560-50			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
R4	29101	Transit Manager		-	59,002		63,233
R2	29201	Driver		-	54,483		56,957
R2	29202	Driver- PT (1040 hrs @ \$26.79)		-	25,300		27,862
	6000	Wages	65,165	139,979	138,785	69,650	148,052
		Merit Increase	-	-	2,837	-	3,005
	6010	Overtime	3,846	14,146	-	9,942	15,000
		Miscellaneous wages	3,846	14,146	2,837	9,942	18,005
		Total Wages	69,011	154,125	141,622	79,592	166,056
	6022	Holiday Pay	1,930	5,461	800	-	
	6023	Leave Cashout: (BW*5%) of FTE(2)	21,802	6,004	6,939	4,558	6,010
	6030	Soc Sec Exp 6.2% of non-PERS	890	359	-	-	1,727
	6031	Medicare: 1.45% of TW	1,375	2,468	2,054	1,249	2,408
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	0	-	2,521	149	1,916
	6033	Workers' Compensation: (TW/100)*3.6343	3,435	2,815	3,659	1,428	4,290
	6034	PERS: 22% of Eligible Wages	15,997	33,836	31,157	15,585	30,403
	6040	Employee Group Benefits: (1734*12)*FTE(2)	22,524	45,190	45,240	29,221	41,616
	6041	Utility Benefit: (380*12)*FTE(2)	4,982	6,774	11,400	3,704	9,120
		Benefits and Taxes	72,935	102,907	103,769	55,894	97,490
		Total Personnel	141,946	257,032	245,391	135,486	263,546

BETHEL PUBLIC TRANSIT SYSTEM

Enterprise Fund 560-50		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel						
	Salaries, Benefits & Taxes	115,576	197,696	200,151	96,323	206,930
6010	Overtime	3,846	14,146	-	9,942	15,000
6040	Employee Group Health	22,524	45,190	45,240	29,221	41,616
	Total Personnel	141,946	257,032	245,391	135,486	263,546
Materials, Supplies & Services						
6060	Travel/Training	2,119	2,345	2,000	(1,235)	
6100	Supplies	4,023	5,718	2,000	4,517	2,000
6150	Gasoline/Diesel/Oil	13,679	27,341	32,000	11,938	24,000
6153	Heating Fuel	12,226	22,127	22,000	6,030	15,000
6155	Water/Sewer/Garbage	2,434	4,063	4,200	2,085	4,200
6160	Electricity	7,354	10,640	11,100	1,789	6,000
6170	Telephone	10	23	700	7	-
6171	Staff Cellular Phones	348	598	-	299	598
6179	IT (ICR)					37,588
6230	Vehicle Maint./Repair (ISF)	14,835	19,791	28,792	10,974	29,440
6231	Vehicle Maint. (Parts & Tools)	1,684	6,415	20,000	1,322	5,000
6232	Tires & Wheels	-	1,646	3,000	-	
6240	Prop Maint (ISF)					23,568
6400	Insurance	7,843	13,372	13,889	6,165	12,198
6503	Dues & Subscriptions	885	32	300	-	300
6539	Miscellaneous	250	366	1,500	10	1,500
6710	Administrative Overhead- ICR	48,701	45,482	46,162	22,356	90,632
	Total MS&S	116,391	159,959	187,643	66,257	252,025
	Total Operating Expenses	258,337	416,991	433,034	201,743	515,571

Internal Service Funds

560 - Vehicle & Equipment Maintenance

Employee Group Health Benefits

Vehicles & Equipment Maintenance

Internal Service Fund 570-50			FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Personnel							
MIII	19010	Public Works Director @ 5%		-	6,966	-	7,109
R2	19001	Admin Asst. @ 5%		-	2,862	-	2,645
R4	26101	Foreman		-	77,417	-	82,969
R3	26201	Heavy Equipment Mechanic		-	53,560	-	55,734
R3	26202	Heavy Equip Mechanic II		-	66,576	-	71,335
R3	26203	Mechanic II/Oiler		-	53,560	-	52,891
R3	26204	Mechanic II/Oiler		-	54,631	-	55,723
R2	26301	Mechanic I		-	50,600	-	52,889
R2	26401	Parts Inventory Clerk		-	50,600	-	54,209
	6000	Wages	278,558	254,915	416,772	139,274	435,504
		Merit Increase		-	10,245	-	10,888
	6010	Overtime/Shift Differential	3,041	7,596	15,000	4,103	15,000
		Other Wages	3,041	7,596	25,245	4,103	25,888
		Total Wages	281,599	262,511	442,017	143,377	461,392
	6022	Holiday Pay	8,945	11,895	-	-	-
	6023	Leave Cashout: (BW*5%) of FTE(7.1)	24,850	-	22,101	485	21,775
	6031	Medicare: 1.45% of TW	4,817	4,226	6,409	2,270	6,690
	6032	Unemployment Ins: 1.78% w/ \$39,900 cap	-	3,330	7,868	275	5,145
	6033	Workers' Comp: (TW/100)*2.3353	11,801	5,264	11,419	2,821	10,775
	6034	PERS: 22% of Eligible Wages	66,400	59,861	97,244	29,202	101,506
	6040	Employee Group Benefits: (1734*12)*FTE(7.1)	106,849	90,854	128,482	32,184	147,737
	6041	Utility Ben: (380*12)*(FTE=7.1)	24,762	25,330	32,376	14,939	32,376
		Benefits and Taxes	248,424	200,760	305,898	82,176	326,004
		Total Personnel	530,023	463,271	747,915	225,553	787,396

Vehicle & Equipment Maintenance

Internal Service Fund 570-50		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
Allocations to V&E						
4651	From General Fund-City Administration	2,189	1,111	1,111	423	2,265
4653	From General Fund-Finance	1,426	1,882	2,215	864	2,265
4654	From General Fund-Planning	1,344	1,698	1,661	643	1,698
4655	From General Fund-Fire	11,869	20,382	19,933	7,597	20,382
4656	From General Fund-Police	25,401	23,326	22,812	9,756	23,326
4657	From General Fund-PW Admin	3,455	4,869	4,762	1,815	4,869
4658	From General Fund-Streets & Roads	134,485	173,281	166,109	63,309	173,281
4661	From General Fund-Property Maintenance	5,608	7,020	6,866	2,617	7,020
	From General Fund-Comm Parks & Rec			1,104		1,129
4672	From Enterprise Fund-Hauled Water	278,801	228,133	331,886	126,491	339,356
4673	From Enterprise Fund-Hauled Sewer	282,385	224,555	326,681	124,508	334,034
4674	From Enterprise Fund-Piped Water	2,688	2,207	3,211	1,224	3,284
4664	From Enterprise Fund-Piped Sewer	2,759	2,740	3,987	1,520	4,076
4678	From Enterprise Fund-Water Trmt.-Bethel Hgts	2,688	2,246	3,267	1,245	3,340
4680	From Enterprise Fund-City Sub Water Trmt.	3,201	3,045	4,430	1,688	4,529
4676	From Enterprise Fund-Refuse Hauling	67,256	72,000	79,732	33,664	80,363
4677	From Enterprise Fund-Landfill Operations	68,189	60,896	88,592	33,765	90,585
4671	From Enterprise Fund-Port	3,374	2,468	3,544	1,351	3,623
4684	From Enterprise Fund-Bethel Transit System	14,835	19,791	28,792	10,974	29,440
Total Revenue		913,666	851,650	1,100,695	424,870	1,128,866
Personnel						
	Salaries, Benefits & Taxes minus EGHB	420,133	364,821	604,433	189,266	624,659
	Overtime	3,041	7,596	15,000	4,103	15,000
	Employee Group Health Benefits	106,849	90,854	128,482	32,184	147,737
Total Personnel		530,023	463,271	747,915	225,553	787,396
Materials, Supplies & Services						
6060	Travel/Training	48	-	10,000	-	5,000
6100	Supplies	11,451	12,283	10,000	1,923	10,000
6103	Wearing Apparel	706	3,718	4,000	714	4,000
6150	Gasoline/Diesel/Oil	86,222	45,629	8,000	8,592	8,000
6153	Heating Fuel (25% of City Shop)	-	-	16,250	17,050	22,500
6155	Water/Sewer/Garbage (25% of City Shop)	4,779	5,970	6,492	3,157	6,750
6160	Electric (25% of City Shop ISF)	24,315	26,555	15,875	9,333	18,000
6179	IT (ICR)					37,588
6200	Minor Equipment	2,552	7,780	25,000	2,704	5,000
6230	Vehicle Main ISF	(169)				
6231	Vehicle Parts	8,051	14,584	8,000	4,580	10,000
6232	Tires & Wheels	1,539	631	2,000	-	-
6240	Property Maintenance	153				
6339	Other Purchased Services	3,609	1,377	15,000	53	5,000
6400	Insurance	39,900	43,200	43,900	19,486	35,363
6503	Dues & Subscriptions	14,243	17,385	20,000	7,170	20,000
6539	Miscellaneous Expenses	832	199		347	
6710	Administrative Overhead - GF	162,119	136,907	138,467	68,137	154,269
Total MS&S		360,350	316,218	322,984	143,246	341,469
Total Operating Expense		890,373	779,489	1,070,899	368,799	1,128,865

Employee Health Group Benefits

Internal Service Fund		FY23 Actuals	FY24 Actuals	FY25 Budget	FY25 Mid- Year Actuals	FY26 Proposed Budget
Allocations to Employee Health Group Benefits:						
100-51	City Administration	50,249	16,526	54,288	2,429	62,424
100-52	City Clerk & Council	45,548	50,993	36,192	25,496	20,808
100-53	Finance Department	119,358	62,889	131,196	35,420	150,858
100-54	Planning Department	17,584	36,555	36,192	6,223	41,616
100-56	City Attorney	34,117	24,141	18,096	12,710	20,808
100-60	Fire Department	164,025	589,266	217,152	60,465	228,888
100-61	Police Department	324,072	316,949	504,878	147,631	580,543
100-65	Public Works - Administration	7,272	7,642	5,429	3,821	10,404
100-66	Streets & Roads	98,156	109,242	94,642	64,771	109,242
100-70	Property Maintenance	98,802	104,040	92,290	44,722	104,040
100-71	Comm Parks & Rec	-	-	-	-	62,424
270-50	Community Service Patrol	23,485	15,069	54,288	19,631	62,424
410-50	E-911 Services	49,046	1,837	19,906	1,846	22,889
500-70	Hauled Refuse	14,979	22,889	-	8,295	22,889
500-71	Landfill Operations	30,423	4,990	47,050	8,388	54,101
510-80	Utility Billing	36	5,734	40,716	-	36,414
510-81	Hauled Water	43,952	190,913	169,198	17,126	190,913
510-82	Piped Water	52,244	45,395	49,764	23,768	52,020
510-83	Bethel Heights Water Treatment Plant	14,877	17,293	49,764	11,222	36,414
510-84	City-Sub Water Treatment Plan	17,177	28,701	49,764	15,454	59,303
510-85	Hauled Sewer	107,217	83,720	205,390	44,344	211,721
510-86	Piped Sewer	39,561	18,562	49,764	6,347	49,939
510-87	Sewer Lagoon	10,649	5,553	16,286	2,153	12,485
520-50	Municipal Dock Department	46,736	45,736	45,602	23,376	52,436
520-55	Small Boat Harbor	17,097	1,853	8,686	1,671	9,988
560-50	Bethel Public Transit System	22,524	45,190	45,240	25,104	41,616
570-50	Vehicle & Equipment Maintenance	106,849	32,184	128,482	49,706	147,737
Total Contributions		1,556,035	1,883,863	2,170,253	662,119	2,455,344

City of Bethel Endowment Permanent Fund

900-46

Endowment Permanent Fund (900-46)

Revenue		FY23 Actual	FY24 Actuals	FY25 Budget	FY25 Mid-Year Actuals	FY26 Proposed Budget
49-4590	Investment Income	16,856	24,341	40,000	11,867	25,000
	Total Revenue	16,856	24,341	40,000	11,867	25,000
46-4740	Transfer to General Fund* (70%)	-	17,039	28,000	-	17,500
	Total Expense	-	17,039	28,000	-	17,500
	Net Income	16,856	7,302	12,000	11,867	7,500

*Transfer to General Fund is 70% of the Fund's earnings (exclusive of gains and losses recorded for changes in market value on an annual basis.)

NOTE: Per Ordinance #08-19: "...city manager shall cause to be introduced an ordinance proposing an appropriation to the general fund of monies in an amount equal to seventy (70) percent of the endowment fund's net income of the previous fiscal year". This change is effective beginning in FY10. To get on the schedule outlined in Ord. #08-19, no transfer to the General Fund will occur in FY10, but will resume in FY11.

Introduced by: City Manager Strickler
Introduction Date: May 13, 2025
Public Hearing: May 27, 2025
Action:
Vote:

CITY OF BETHEL, ALASKA

ORDINANCE #24-05 (f)

AN ORDINANCE BY THE BETHEL CITY COUNCIL AMENDING THE CAPITAL IMPROVEMENT, BUDGET FOR FISCAL YEAR 2025, JULY 1, 2024-JUNE 30, 2025

WHEREAS, Council adopted the Ptarmigan Road Culvert Project under the FY25 Capital Improvement Program with a budget allocation of \$2,000,000;

WHEREAS, following a competitive request for bid solicitation, the culvert expense was \$205,352;

WHEREAS, DOWL Engineering Firm, the City's contracted support on the design and project management of the Ptarmigan Road Culvert Project was estimated to costs to be \$276,607;

WHEREAS, following a competitive solicitation for bids, the City received a bid in the amount of \$2,330,000 for the construction costs associated with the project;

WHEREAS, total cost with all known expenses is \$2,811,959;

WHEREAS, to help support any change orders or unexpected expenses, the administration is seeking an additional \$1,000,000, bringing the total for the project to \$3,000,000;

BE IT ORDAINED by the City Council of Bethel, Alaska, as follows:

SECTION 1. Classification. This is a noncodified ordinance amending the City of Bethel Capital Improvement Budget for Fiscal Year 2025.

SECTION 2. Appropriations. That money shall be appropriated from the following associated City Funds for capital expenditures, amounts being returned to the fund are stricken, new appropriations are in red and underlined:

Line Item	Description	Approved Appropriations	Proposed Amendment	Proposed Total for this Project
100-66-9771	Streets & Roads Dept Capital Expenses	<u>\$2,000,000</u>	<u>\$1,000,000</u>	<u>\$3,000,000</u>
100-61-6890	Police Dept Capital Expenditures	\$2,231,427	(1,000,000)	\$1,231,427

SECTION 3. Effective Date. This ordinance shall become effective upon the passage by the Bethel City Council.

NOW THEREFORE BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF BETHEL, ALASKA, that the Fiscal Year 2025 Capital Improvement Budget is amended.

ENACTED THIS 27th DAY OF MAY 2025, BY A VOTE OF _ IN FAVOR AND _ OPPOSED.

Rose Henderson, Mayor

ATTEST:

Kevin Morgan, City Clerk

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

CITY OF BETHEL, ALASKA

Resolution 25-02

A RESOLUTION OF BY THE BETHEL CITY COUNCIL REQUESTING ALASKA'S CONGRESSIONAL DELEGATION TO STRONGLY OPPOSE THE RESCISSION OF FUNDING FROM THE CORPORATION FOR PUBLIC BROADCASTING.

- WHEREAS,** the Bethel City Council is the elected governing body of the City of Bethel, Alaska;
- WHEREAS,** President Trump is very likely to release a rescission package requesting Congress to rescind the funding that has already been approved for the Corporation for Public Broadcasting for FY26 and FY27;
- WHEREAS,** public broadcasting provides a wealth of civic, cultural, education, news, and entertainment programming and is the primary source of emergency information for Alaska residents;
- WHEREAS,** a rescission of funding would directly impact the availability of local news in our area;
- WHEREAS,** KYUK, located in Bethel, Alaska is the oldest Indigenous-owned and operated radio station in the United States;
- WHEREAS,** KYUK is the only independent media outlet in the region, and in many cases the only media outlet, and provides essential local news and information about what is happening in local government and business, high school sports, and other news that connects and provides 24-hour programming to an audience of approximately 22,000 residents in the Yukon-Kuskokwim Delta with a service area comparable to the state of South Dakota;
- WHEREAS** in addition to the AM radio signal, 5 TV Channels, Website, Facebook, Instagram, and YouTube pages, KYUK operates 90.3 FM in Bethel and in partnership with tribes, village corporations, and schools, KYUK owns and operates nine village-based FM sites located in Alakanuk, Aniak, Cheforak, Emmonak, Goodnews Bay, Kongiganak, Nunam Iqua, Quinhagak, and Russian Mission and is the only radio signal available in most of these communities;

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

WHEREAS, KYUK is also the Local Primary Emergency Alert System (EAS) Originator for the Yukon-Kuskokwim Delta, providing updates and alerts for: Amber Alerts, Missing Children, Missing Persons, and Weather Alerts, and has strong working relationships with partners including Bethel Search and Rescue and the National Weather Service to provide critical updates and alerts regarding travel on the river and safety precautions throughout the year;

WHEREAS, KYUK owns the largest Yup'ik/Cup'ik audio/visual collection in the world, and is actively working on digitizing their archive to make these materials more easily accessible for everyone, materials which include decades of interviews with local Elders, Yup'ik dancing, political interviews, traditional kayak building, and hours and hours of archival footage documenting over 50 years of life in the Yukon-Kuskokwim Delta, including building an interactive website utilizing archival materials to help promote Yup'ik literacy while encouraging the sharing of knowledge; and

WHEREAS, federal funding makes up nearly 70% of KYUK's operating budget and without federal funding, these public services could be eliminated in our community.

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BETHEL: the Bethel City Council requests that the Alaska Congressional Delegation strongly oppose the rescission of funding from the Corporation for Public Broadcasting as the planned defunding would have a detrimental impact on our community by eliminating proven educational resources for kids and families, trusted local journalism, cultural programs, and life-saving safety alerts for our city and region of Alaska.

ENACTED THIS 13th DAY OF MAY 2025 BY A VOTE OF ____ IN FAVOR AND ____ OPPOSED.

Rose Henderson, Mayor

ATTEST:

Kevin Morgan, City Clerk

CITY OF BETHEL, ALASKA

Resolution #25-03

A RESOLUTION AND ORDER BY THE BETHEL CITY COUNCIL DECLARING THE PROPERTY AT 621 SETTER, GENERALLY DESCRIBED AS LOT 25 BLOCK 4, PLAT #78-4 BETHEL ALASKA, A PUBLIC NUISANCE, FIRE HAZARD, AND HEALTH HAZARD AND ORDERING THE ABATEMENT THEREOF

WHEREAS, the legal description of the property subject to this resolution and order is 621 Setter, Plat 78-4 Block 4 Lot 25, recorded in the Bethel Recording District, Fourth Judicial District, State of Alaska, subject to reservations, exceptions, easements, covenants, conditions and restrictions of record, if any;

WHEREAS, pursuant to Bethel Municipal Code (BMC) 15.04.010, the Bethel City Council received a written report on March 19, 2025, from the City Manager that the property located at 621 Setter as identified on the City's address map, constitutes a fire hazard, a health hazard, and a public nuisance;

WHEREAS, the report identified Michael Typpo as the property owner of record;

WHEREAS, pursuant to BMC 15.04.010(B), after receiving the report regarding the potential nuisance, the Bethel City Council set a hearing for April 29, 2025, and the City Clerk notified all necessary parties;

WHEREAS, pursuant to BMC 15.04.010(C), on April 4, 2025, notice to the property owner was provided by the City Clerk prior to the hearing by certified mail along with a copy of the record, posting notice of the hearing in three public places around town, and posting notice of the hearing at the property;

WHEREAS, pursuant to BMC 15.04.010(D), a hearing on the matter was held on April 29, 2025.

WHEREAS, the City Administration, City Manager Lori Strickler, and City Planner Lee Foley, presented evidence that the property described herein constitutes a public nuisance, a fire hazard, and a health hazard;

WHEREAS, the property owner, Mike Typpo, attended the April 29, 2025, hearing by phone and stated his position and gave evidence regarding the subject property;

WHEREAS, based on evidence presented at the hearing, the Council found that the City Manager's report was substantially correct in all material respects and that there exists on the property a fire hazard, public nuisance, and health hazard as those terms are defined in BMC 15.04.040, and that these conditions require abatement.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BETHEL,

The property located at 621 Setter Bethel, Alaska, with the legal description stated above, is declared a public nuisance, fire hazard, and health hazard. The Council hereby makes the following findings of fact and conclusions of law, and issues the following orders:

I. FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. Titles 15, 16, 17, and 18 of the Bethel Municipal Code require the City to enforce platting, land use, and site development code provisions in order to promote a logical growth pattern within the city and the economic extension of public services and facilities; encourage the most appropriate use of land throughout the city; reduce congestion in the streets; enhance safety from fire, flooding and other dangers; provide adequate light, air and open space; preserve property values; prevent the overcrowding of the land; avoid undue concentration of population; facilitate adequate provisions for transportation, water, sewage, drainage, schools, parks and other facilities; assure that development does not adversely affect either the ability of the city to deliver public services or the safety of property and the health, safety and welfare of persons; assure that the burdens placed on public facilities by development are borne by the development; and promote the public health, safety and welfare.
2. The City Manager's report is **substantially correct in all material respects** as required for the declaration of a fire hazard, health hazard, or public nuisance at the property under BMC 15.04.010(D).
3. BMC 15.04.040 defines "**fire hazard**" as "any structure, which, for want of proper repairs, or by reason of age or dilapidated condition, or by reason of poorly installed or defective electrical wiring or equipment, defective chimneys, defective heating apparatus or any other cause or reason, is especially liable to fire, or which building or structure is so situated and occupied as to endanger any other structure or property or human life. Such term shall also mean and include any structure containing any combustible or explosive material, rubbish, rags, waste, oils, gasoline or inflammable substance of any kind, especially liable to cause fire or endanger the safety of such structure, premises, or human life. Such term shall also mean and include any situation or condition in which any combustible or explosive material, rubbish, rags, waste, oils, gasoline or inflammable substance of any kind is especially liable to cause or spread fire or endanger the safety of any structure, premises or human life."
4. The Council finds that the property presents a **fire hazard** as defined in BMC 15.04.040 and Section 304 of the International Fire Code **due to the presence of:** junk vehicles, tires, and trash that can easily catch fire and produce toxic smoke as well as the accumulation of wastepaper, wood, litter or combustible or flammable waste, and the improper storage of snow machines and appliances that contain flammable fluids such as gasoline or oil.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

5. BMC 15.04.040 defines "**health hazard**" as "any parcel or structure which is in a filthy or unsanitary condition especially liable to cause the spread of contagious or infectious disease or diseases or permits foul odors or obnoxious or poisonous gases to escape from such parcel or structure."
6. The Council finds that the property presents a **health hazard** as defined in BMC 15.04.040 **due to the presence of:** trash, waste, and abandoned appliances that collect stagnant water and can breed mosquitoes, leading to public health risks; decomposing organic matter that can attract rodents, insects, and other vermin that encourage disease transmission; and lack of active water or sewer service that creates and unsanitary living environment and potential contamination risks.
7. BMC 15.04.040 defines "**public nuisance**" as "any parcel or structure the condition of which is such as to likely endanger the safety of persons or property of persons other than the owner of the building or structure, whether because of damage, deterioration, dilapidation, or other cause, whether or not the fault of the owner."
8. BMC 16.12.30 further defines "**nuisance**" as activity which arises from unreasonable, unwarranted or unlawful use by a person of property, which interferes with, obstructs or injures the right of another, or the public, in the use or enjoyment of property, endangers personal health or safety or produces material annoyance, inconvenience and discomfort.
9. The Council finds that the property presents a **nuisance** and a **public nuisance** as defined in BMC 15.04.040 and 16.12.030 **due to the presence of:** abandoned vehicles, snow machines, trash, tires, appliances, and other refuse scattered across the lot in violation of BMC 16.04.010.
10. BMC 13.4.025 and 13.08.035 require the property owner to sign up for **city utility services**. The Council finds that the property owner has not signed up for city utility services as required by the foregoing code provisions.

II. ORDERS OF THE CITY COUNCIL

1. Pursuant to BMC 15.04.020(A), the City Council ORDERS the property owner to abate the hazards and nuisances, including but not limited to the following, on the following timelines:
 - **Within thirty (30) days:**
 - Property owner shall remove, dispose of, or properly store appliances and large items such as water heaters, Toyo stoves, bed frames, grills, bike frames, truck bed storage boxes, boat motors, toilet components, and window frames.
 - Property owner shall eliminate fire hazards as follows: tires, foam panels, pallets (plastic, wood, broken, or intact), five-gallon buckets, 50-gallon

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

drums, and gas cans must be removed or neatly organized inside an enclosed, weatherproof, fire-resistant structure if intended for personal use, or otherwise disposed of properly. If retained, gas cans must be emptied, cleaned, and safely stored according to fire safety regulations.

- Property owner shall remove or neatly organize all loose trash and debris including broken tarps, cardboard boxes, scattered trash cans, totes, garden hoses, pumps, crutches, shovels, extension cords, chair parts, and/or other items.
 - Property owner shall organize salvageable property by neatly storing, safely stacking, and securing against tipping or damage any useable plastic or metal water tanks; if deemed unusable, such property must be disposed of properly.
 - Property owner shall remove any remaining loose or broken materials such as wood scraps, foam panels, or pallets; repair or remove items that pose trip, fall, or fire risk; and maintain walkways, access areas, and rights-of-way free from obstruction and debris.
 - The City shall verify that cleanup efforts are underway.
- **Within fourteen (14) days**, the property owner shall sign up for city utilities (water and sewer).
 - **Within sixty (60) days**, the property owner shall determine which of the vehicles on his property are junk vehicles as defined in BMC 10.15.010(D) and notify the City that such vehicles are ready for removal.
2. Removal of the hazards and public nuisance shall be completed by the above timelines after **final written notice** is mailed to the owner.
 3. If the hazards and public nuisance are not abated by the imposed deadlines, the City may initiate abatement of its own volition as stated in BMC 15.04.020(D) and (E), and the cost of correcting the condition **shall be a lien against the land**, subject to recording and foreclosure as provided in BMC 15.04.020(G).
 4. The City Clerk is directed to, at minimum, cause a copy of this Order to be conspicuously posted on the property and to mail a copy to the property owner.
 5. As provided in BMC 15.04.020(C), at any time before the date set for completion of the Council orders, the owner of the property **may request a rehearing**. The request for rehearing shall include a notarized statement setting out with specificity the corrective actions taken or initiated, and how these steps did or will eliminate the hazards or nuisance found by the City Council.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

6. As provided in BMC 15.04.030, the owner of the property or their agent **may appeal the decision and order of the City Council to the Alaska Superior Court** in accordance with the court rules of appellate procedure. A request for a rehearing does not toll the time for filing the notice of appeal.

ENACTED THIS ____ DAY OF MAY 2025 BY A VOTE OF ____ IN FAVOR AND ____ OPPOSED.

Rose Henderson, Mayor

Kevin Morgan, City Clerk

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

CITY OF BETHEL, ALASKA

Resolution #25-04

A RESOLUTION AND ORDER BY THE BETHEL CITY COUNCIL DECLARING THE PROPERTY AT 229 AKIAK, GENERALLY DESCRIBED AS LOT 3, BLOCK 8 PLAT #71-425, BETHEL ALASKA, A PUBLIC NUISANCE, FIRE HAZARD, AND HEALTH HAZARD AND ORDERING THE ABATEMENT THEREOF

WHEREAS, the legal description of the property is 229 Akiak, Plat 71-425 Block 8 Lot 3, recorded in the Bethel Recording District, Fourth Judicial District, State of Alaska, subject to reservations, exceptions, easements, covenants, conditions and restrictions of record, if any;

WHEREAS, pursuant to Bethel Municipal Code (BMC) 15.04.010, the Bethel City Council received a written report on March 19, 2025, from the City Manager that the property located at 229 Akiak as identified on the City's address map, constitutes a fire hazard, a health hazard, and a public nuisance;

WHEREAS, the report identified Tony and Ruth Evon as the property owners of record;

WHEREAS, pursuant to BMC 15.04.010(b), after receiving the report regarding the potential nuisance, the Bethel City Council set a hearing for April 29, 2025 and the City Clerk notified all necessary parties;

WHEREAS, pursuant to BMC 15.04.010(C), on April 4, 2025, notice to the property owners was provided by the City Clerk prior to the hearing by certified mail along with a copy of the record, posting notice of the hearing in three public places around town, and posting notice of the hearing at the property;

WHEREAS, pursuant to BMC 15.04.010(D), a hearing on the matter was held on April 29, 2025;

WHEREAS, the City Administration, City Manager Lori Strickler, presented evidence that the property described herein constitutes a public nuisance, a fire hazard, and a health hazard;

WHEREAS, the property owners of Record, Tony and Ruth Evon, did not attend the April 29, 2025, hearing nor did anyone representing the property owners attend the hearing; and

WHEREAS, based on evidence presented at the hearing, the Council found that the City Manager's report was substantially correct in all material respects and that there exists on the property a fire hazard, public nuisance, and health hazard as those terms are defined in BMC 15.04.040, and that these conditions require abatement.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BETHEL;

The property located at 229 Akiak, Bethel, Alaska, with the legal description stated above is declared a public nuisance, fire hazard, and health hazard. The Council hereby makes the following findings of fact and conclusions of law, and issues the following orders:

I. FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. Titles 15, 16, 17, and 18 of the Bethel Municipal Code require the City to enforce platting, land use, and site development code provisions in order to promote a logical growth pattern within the city and the economic extension of public services and facilities; encourage the most appropriate use of land throughout the city; reduce congestion in the streets; enhance safety from fire, flooding and other dangers; provide adequate light, air and open space; Preserve property values; prevent the overcrowding of the land; avoid undue concentration of population; facilitate adequate provisions for transportation, water, sewage, drainage, schools, parks and other facilities; assure that development does not adversely affect either the ability of the city to deliver public services or the safety of property and the health, safety and welfare of persons; assure that the burdens placed on public facilities by development are borne by the development; and promote the public health, safety and welfare.
2. The City Manager's report is **substantially correct in all material respects** as required for the declaration of a fire hazard, health hazard, or public nuisance at the property under BMC 15.04.010(D).
3. BMC 15.04.040 defines "**fire hazard**" as "any structure, which, for want of proper repairs, or by reason of age or dilapidated condition, or by reason of poorly installed or defective electrical wiring or equipment, defective chimneys, defective heating apparatus or any other cause or reason, is especially liable to fire, or which building or structure is so situated and occupied as to endanger any other structure or property or human life. Such term shall also mean and include any structure containing any combustible or explosive material, rubbish, rags, waste, oils, gasoline or inflammable substance of any kind, especially liable to cause fire or endanger the safety of such structure, premises, or human life. Such term shall also mean and include any situation or condition in which any combustible or explosive material, rubbish, rags, waste, oils, gasoline or inflammable substance of any kind is especially liable to cause or spread fire or endanger the safety of any structure, premises or human life."
4. The Council finds that the property presents a **fire hazard** as defined in BMC 15.04.040 and Section 304 of the International Fire Code **due to the presence of:** junk vehicles, tires, and trash that can easily catch fire and produce toxic smoke as well as the accumulation of wastepaper, wood, litter or combustible or flammable waste, and the

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

improper storage of snow machines and appliances that contain flammable fluids such as gasoline or oil.

5. BMC 15.04.040 defines "**health hazard**" as "any parcel or structure which is in a filthy or unsanitary condition especially liable to cause the spread of contagious or infectious disease or diseases or permits foul odors or obnoxious or poisonous gases to escape from such parcel or structure."
6. The Council finds that the property presents a **health hazard** as defined in BMC 15.04.040 **due to the presence of:** trash, waste, and abandoned appliances that collect stagnant water and can breed mosquitoes, leading to public health risks; decomposing organic matter that can attract rodents, insects, and other vermin that encourage disease transmission.
7. BMC 15.04.040 defines "**public nuisance**" as "any parcel or structure the condition of which is such as to likely endanger the safety of persons or property of persons other than the owner of the building or structure, whether because of damage, deterioration, dilapidation, or other cause, whether or not the fault of the owner."
8. BMC 16.12.30 further defines "**nuisance**" as activity which arises from unreasonable, unwarranted or unlawful use by a person of property, which interferes with, obstructs or injures the right of another, or the public, in the use or enjoyment of property, endangers personal health or safety or produces material annoyance, inconvenience and discomfort.
9. The Council finds that the property presents a **nuisance** and a **public nuisance** as defined in BMC 15.04.040 and 16.12.030 **due to the presence of:** abandoned vehicles, snow machines, trash, tires, appliances, and other refuse scattered across the lot in violation of BMC 16.04.010.

II. ORDERS OF THE CITY COUNCIL

1. Pursuant to BMC 15.04.020(A), the City Council ORDERS the property owners to abate the hazards and nuisances, including but not limited to the following, on the following timelines:
 - **Within thirty (30) days:**
 - Property owners shall eliminate fire hazards as follows: pallets, five-gallon buckets, and gas cans must be removed or neatly organized inside an enclosed, weatherproof, fire-resistant structure if intended for personal use; otherwise, they must be disposed of properly.
 - Property owners shall remove or neatly organize all loose trash and debris including broken tarps, cardboard boxes, scattered trash cans, totes, and/or other items.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

- Property owners shall dispose of all inoperable vehicles and inoperable recreational vehicles.
 - Property owners shall organize salvageable property by neatly storing, safely stacking, and securing such property against tipping or damage; if deemed unusable, such property must be disposed of properly.
 - Property owners shall remove any remaining loose or broken materials that pose trip, fall, or fire risk, and maintain walkways, access areas, and rights-of-way free from obstruction and debris.
 - Property owners shall remove the storage shed from the easement.
 - The City shall verify that cleanup efforts are underway.
- **Within sixty (60) days**, the City shall inspect the property to ensure all abatement efforts have been completed.
2. Removal of the hazards and public nuisance shall be completed by the above timelines after **final written notice** is mailed to the owner.
 3. If the hazards and public nuisance are not abated by the imposed deadlines, the City may initiate abatement of its own volition as stated in BMC 15.04.020(D) and (E), and the cost of correcting the condition **shall be a lien against the land**, subject to recording and foreclosure as provided in BMC 15.04.020(G).
 4. The City Clerk is directed to, at minimum, cause a copy of this Order to be conspicuously posted on the property and to mail a copy to the property owner.
 5. As provided in BMC 15.04.020(C), at any time before the date set for completion of the Council orders, the owner of the property **may request a rehearing**. The request for rehearing shall include a notarized statement setting out with specificity the corrective actions taken or initiated, and how these steps did or will eliminate the hazards or nuisance found by the City Council.
 6. As provided in BMC 15.04.030, the owner of the property or their agent **may appeal the decision and order of the City Council to the Alaska Superior Court** in accordance with the court rules of appellate procedure. A request for a rehearing does not toll the time for filing the notice of appeal.

RESOLVED THIS ____ DAY OF MAY 2025 BY A VOTE OF ____ IN FAVOR AND ____ OPPOSED.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

Rose Henderson, Mayor

Kevin Morgan, City Clerk

CITY OF BETHEL, ALASKA

Resolution #25-05

A RESOLUTION AND ORDER BY THE BETHEL CITY COUNCIL DECLARING THE PROPERTY AT 244 AKIAK, GENERALLY DESCRIBED AS LOT 6, BLOCK 6, PLAT #71-425, BETHEL ALASKA, A PUBLIC NUISANCE, FIRE HAZARD, AND HEALTH HAZARD AND ORDERING THE ABATEMENT THEREOF

WHEREAS, the legal description of the property is 244 Akiak, Plat 71-425 Block 6 Lot 6, recorded in the Bethel Recording District, Fourth Judicial District, State of Alaska, subject to reservations, exceptions, easements, covenants, conditions and restrictions of record, if any;

WHEREAS, pursuant to Bethel Municipal Code (BMC) 15.04.010, the Bethel City Council received a written report on March 19, 2025, from the City Manager that the property located at 244 Akiak as identified on the City's address map, constitutes a fire hazard, a health hazard, and a public nuisance;

WHEREAS, the report identified Hazel Keezer as the property owner of record;

WHEREAS, pursuant to BMC 15.04.010(B), after receiving the report regarding the potential nuisance, the Bethel City Council set a hearing for April 29, 2025, and the City Clerk notified all necessary parties;

WHEREAS, pursuant to BMC 15.04.010(C), on April 4, 2025, notice to the property owners was provided by the City Clerk prior to the hearing by certified mail along with a copy of the record, posting notice of the hearing in three public places around town, and posting notice of the hearing at the property;

WHEREAS, pursuant to BMC 15.04.010(D), a hearing on the matter was held on April 29, 2025;

WHEREAS, the City Administration, City Manager Lori Strickler, presented evidence that the property described herein constitutes a public nuisance, a fire hazard, and a health hazard;

WHEREAS, the property Owner of Record, Hazel Keezer, did not attend the April 29, 2025, hearing nor did anyone representing the property owner attend the hearing; and

WHEREAS, based on evidence presented at the hearing, the Council found that the City Manager's report was substantially correct in all material respects and that there exists on the property a fire hazard, public nuisance, and health hazard as those terms are defined in BMC 15.04.040, and that these conditions require abatement.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BETHEL,

The property located at 244 Akiak, Bethel, Alaska, with the legal description stated above is declared a public nuisance, fire hazard, and health hazard. The Council hereby makes the following findings of fact and conclusions of law, and issues the following orders:

I. FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. Titles 15, 16, 17, and 18 of the Bethel Municipal Code require the City to enforce platting, land use, and site development code provisions in order to promote a logical growth pattern within the city and the economic extension of public services and facilities; encourage the most appropriate use of land throughout the city; reduce congestion in the streets; enhance safety from fire, flooding and other dangers; provide adequate light, air and open space; Preserve property values; prevent the overcrowding of the land; avoid undue concentration of population; facilitate adequate provisions for transportation, water, sewage, drainage, schools, parks and other facilities; assure that development does not adversely affect either the ability of the city to deliver public services or the safety of property and the health, safety and welfare of persons; assure that the burdens placed on public facilities by development are borne by the development; and promote the public health, safety and welfare.
2. The City Manager's report is **substantially correct in all material respects** as required for the declaration of a fire hazard, health hazard, or public nuisance at the property under BMC 15.04.010(D).
3. BMC 15.04.040 defines "**fire hazard**" as "any structure, which, for want of proper repairs, or by reason of age or dilapidated condition, or by reason of poorly installed or defective electrical wiring or equipment, defective chimneys, defective heating apparatus or any other cause or reason, is especially liable to fire, or which building or structure is so situated and occupied as to endanger any other structure or property or human life. Such term shall also mean and include any structure containing any combustible or explosive material, rubbish, rags, waste, oils, gasoline or inflammable substance of any kind, especially liable to cause fire or endanger the safety of such structure, premises, or human life. Such term shall also mean and include any situation or condition in which any combustible or explosive material, rubbish, rags, waste, oils, gasoline or inflammable substance of any kind is especially liable to cause or spread fire or endanger the safety of any structure, premises or human life."
4. The Council finds that the property presents a **fire hazard** as defined in BMC 15.04.040 and Section 304 of the International Fire Code **due to the presence of:** junk vehicles, tires, and trash that can easily catch fire and produce toxic smoke as well as the

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

accumulation of wastepaper, wood, litter or combustible or flammable waste, and the improper storage of snow machines and appliances that contain flammable fluids such as gasoline or oil.

5. BMC 15.04.040 defines "**health hazard**" as "any parcel or structure which is in a filthy or unsanitary condition especially liable to cause the spread of contagious or infectious disease or diseases or permits foul odors or obnoxious or poisonous gases to escape from such parcel or structure."
6. The Council finds that the property presents a **health hazard** as defined in BMC 15.04.040 **due to the presence of:** trash, waste, and abandoned appliances that collect stagnant water and can breed mosquitoes, leading to public health risks; decomposing organic matter that can attract rodents, insects, and other vermin that encourage disease transmission.
7. BMC 15.04.040 defines "**public nuisance**" as "any parcel or structure the condition of which is such as to likely endanger the safety of persons or property of persons other than the owner of the building or structure, whether because of damage, deterioration, dilapidation, or other cause, whether or not the fault of the owner."
8. BMC 16.12.30 further defines "**nuisance**" as activity which arises from unreasonable, unwarranted or unlawful use by a person of property, which interferes with, obstructs or injures the right of another, or the public, in the use or enjoyment of property, endangers personal health or safety or produces material annoyance, inconvenience and discomfort.
9. The Council finds that the property presents a **nuisance** and a **public nuisance** as defined in BMC 15.04.040 and 16.12.030 **due to the presence of:** abandoned vehicles, snow machines, trash, tires, appliances, and other refuse scattered across the lot in violation of BMC 16.04.010.

II. ORDERS OF THE CITY COUNCIL

1. Pursuant to BMC 15.04.020(A), the City Council ORDERS the property owner to abate the hazards and nuisances, including but not limited to the following, on the following timelines:
 - **Within thirty (30) days:**
 - Property owner shall eliminate fire hazards as follows: pallets, five-gallon buckets, and gas cans must be removed or neatly organized inside an enclosed, weatherproof, fire-resistant structure if intended for personal use; otherwise, they must be disposed of properly.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

- Property owner shall remove or neatly organize all loose trash and debris including broken tarps, broken window frames and appliances, cardboard boxes, scattered trash cans, totes, and/or other items.
 - Property owner shall dispose of all inoperable vehicles and inoperable recreational vehicles.
 - Property owner shall organize salvageable property by neatly storing, safely stacking, and securing such property against tipping or damage; if deemed unusable, such property must be disposed of properly.
 - Property owner shall remove any remaining loose or broken materials that pose trip, fall, or fire risk, and maintain walkways, access areas, and rights-of-way free from obstruction and debris.
 - Property owner shall demolish or repair accessory structures (shed/building) that are not on a foundation and/or have missing doors and windows.
 - The City shall verify that cleanup efforts are underway.
- **Within sixty (60) days**, the City shall inspect the property to ensure all abatement efforts have been completed.
2. Removal of the hazards and public nuisance shall be completed by the above timelines after **final written notice** is mailed to the owner.
 3. If the hazards and public nuisance are not abated by the imposed deadlines, the City may initiate abatement of its own volition as stated in BMC 15.04.020(D) and (E), and the cost of correcting the condition **shall be a lien against the land**, subject to recording and foreclosure as provided in BMC 15.04.020(G).
 4. The City Clerk is directed to, at minimum, cause a copy of this Order to be conspicuously posted on the property and to mail a copy to the property owner.
 5. As provided in BMC 15.04.020(C), at any time before the date set for completion of the Council orders, the owner of the property **may request a rehearing**. The request for rehearing shall include a notarized statement setting out with specificity the corrective actions taken or initiated, and how these steps did or will eliminate the hazards or nuisance found by the City Council.
 6. As provided in BMC 15.04.030, the owner of the property or their agent **may appeal the decision and order of the City Council to the Alaska Superior Court** in accordance with the court rules of appellate procedure. A request for a rehearing does not toll the time for filing the notice of appeal.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

**RESOLVED THIS ____ DAY OF MAY 2025 BY A VOTE OF ____ IN FAVOR AND ____
OPPOSED.**

Rose Henderson, Mayor

Kevin Morgan, City Clerk

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

CITY OF BETHEL, ALASKA

Resolution #25-06

A RESOLUTION AND ORDER BY THE BETHEL CITY COUNCIL DECLARING THE PROPERTY AT 808 PTARMIGAN, GENERALLY DESCRIBED AS LOT 23, BLOCK 1, PLAT #81-10 BETHEL ALASKA, A PUBLIC NUISANCE, FIRE HAZARD, AND HEALTH HAZARD AND ORDERING THE ABATEMENT THEREOF

WHEREAS, the legal description of the property is 808 Ptarmigan, Plat 81-10 Block 1 Lot 23, recorded in the Bethel Recording District, Fourth Judicial District, State of Alaska, subject to reservations, exceptions, easements, covenants, conditions and restrictions of record, if any;

WHEREAS, pursuant to Bethel Municipal Code (BMC) 15.04.010, the Bethel City Council received a written report on March 19, 2025, from the City Manager that the property located at 808 Ptarmigan as identified on the City's address map, constitutes a fire hazard, a health hazard, and a public nuisance;

WHEREAS, the report identified Travis and Kenny Dostert as the property owners of record;

WHEREAS, pursuant to BMC 15.04.010(B), after receiving the report regarding the potential nuisance, the Bethel City Council set a hearing for April 30, 2025, and the City Clerk notified all necessary parties;

WHEREAS, pursuant to BMC 15.04.010(C), on April 4, 2025, notice to the property owners was provided by the City Clerk prior to the hearing by certified mail along with a copy of the record, posting notice of the hearing in three public places around town, and posting notice of the hearing at 834 Ptarmigan;

;

WHEREAS, the City Administration amended the report to reflect the correct address, 808 Ptarmigan. The corrected notice of hearing was posted at three public places around town on April 11, 2025, and on April 15, 2025, the notice of the corrected record was sent to the property owner by certified mail and a copy of the corrected record and notice was posted at 808 Ptarmigan by the City Clerk;

WHEREAS, pursuant to BMC 15.04.010(D), a hearing on the matter was held on April 30, 2025;

WHEREAS, the City Administration, City Manager Lori Strickler, and City Planner Lee Foley, presented evidence that the property described herein constitutes a public nuisance, a fire hazard, and a health hazard;

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

WHEREAS, the property Owners of Record, Travis and Kenny Dostert, did not attend the April 30, 2025, hearing nor did anyone representing the property owners attend the hearing; and

WHEREAS, based on evidence presented at the hearing, the Council found that the City Manager's report was substantially correct in all material respects and that there exists on the property a fire hazard, public nuisance, and health hazard as those terms are defined in BMC 15.04.040, and that these conditions require abatement.

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BETHEL;

The property located at 808 Ptarmigan, Bethel, Alaska, with the legal description stated above, is declared a public nuisance, fire hazard, and health hazard. The Council hereby makes the following findings of fact and conclusions of law, and issues the following orders:

I. FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. Titles 15, 16, 17, and 18 of the Bethel Municipal Code require the City to enforce platting, land use, and site development code provisions in order to promote a logical growth pattern within the city and the economic extension of public services and facilities; encourage the most appropriate use of land throughout the city; reduce congestion in the streets; enhance safety from fire, flooding and other dangers; provide adequate light, air and open space; Preserve property values; prevent the overcrowding of the land; avoid undue concentration of population; facilitate adequate provisions for transportation, water, sewage, drainage, schools, parks and other facilities; assure that development does not adversely affect either the ability of the city to deliver public services or the safety of property and the health, safety and welfare of persons; assure that the burdens placed on public facilities by development are borne by the development; and promote the public health, safety and welfare.
2. The City Manager's report is **substantially correct in all material respects** as required for the declaration of a fire hazard, health hazard, or public nuisance at the property under BMC 15.04.010(D).
3. BMC 15.04.040 defines "**fire hazard**" as "any structure, which, for want of proper repairs, or by reason of age or dilapidated condition, or by reason of poorly installed or defective electrical wiring or equipment, defective chimneys, defective heating apparatus or any other cause or reason, is especially liable to fire, or which building or structure is so situated and occupied as to endanger any other structure or property or human life. Such term shall also mean and include any structure containing any combustible or explosive material, rubbish, rags, waste, oils, gasoline or inflammable substance of any kind, especially liable to cause fire or endanger the safety of such structure, premises, or human life. Such term shall also mean and include any situation or condition in which any combustible or explosive material, rubbish, rags, waste, oils, gasoline or inflammable

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

substance of any kind is especially liable to cause or spread fire or endanger the safety of any structure, premises or human life.”

4. The Council finds that the property presents a **fire hazard** as defined in BMC 15.04.040 and Section 304 of the International Fire Code **due to the presence of:** junk vehicles, tires, and trash that can easily catch fire and produce toxic smoke as well as the accumulation of wastepaper, wood, litter or combustible or flammable waste, and the improper storage of snow machines and appliances that contain flammable fluids such as gasoline or oil.
5. BMC 15.04.040 defines “**health hazard**” as “any parcel or structure which is in a filthy or unsanitary condition especially liable to cause the spread of contagious or infectious disease or diseases or permits foul odors or obnoxious or poisonous gases to escape from such parcel or structure.”
6. The Council finds that the property presents a **health hazard** as defined in BMC 15.04.040 **due to the presence of:** trash, waste, and abandoned appliances that collect stagnant water and can breed mosquitoes, leading to public health risks; decomposing organic matter that can attract rodents, insects, and other vermin that encourage disease transmission; and lack of active water or sewer service that creates and unsanitary living environment and potential contamination risks.
7. BMC 15.04.040 defines “**public nuisance**” as “any parcel or structure the condition of which is such as to likely endanger the safety of persons or property of persons other than the owner of the building or structure, whether because of damage, deterioration, dilapidation, or other cause, whether or not the fault of the owner.”
8. BMC 16.12.30 further defines “**nuisance**” as activity which arises from unreasonable, unwarranted or unlawful use by a person of property, which interferes with, obstructs or injures the right of another, or the public, in the use or enjoyment of property, endangers personal health or safety or produces material annoyance, inconvenience and discomfort.
9. The Council finds that the property presents a **nuisance** and a **public nuisance** as defined in BMC 15.04.040 and 16.12.030 **due to the presence of:** abandoned vehicles, snow machines, trash, tires, appliances, and other refuse scattered across the lot in violation of BMC 16.04.010.
10. BMC 13.4.025 and 13.08.035 require the property owner to sign up for **city utility services**. The Council finds that the property owner has not signed up for city utility services as required by the foregoing code provisions.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

II. ORDERS OF THE CITY COUNCIL

1. Pursuant to BMC 15.04.020(A), the City Council ORDERS the property owner to abate the hazards and nuisances, including but not limited to the following, on the following timelines:
 - **Within thirty (30) days:**
 - Property owners shall eliminate fire hazards as follows: pallets, motors, five-gallon buckets, and gas cans must be removed or neatly organized inside an enclosed, weatherproof, fire-resistant structure if intended for personal use; otherwise, they must be disposed of properly.
 - Property owners shall remove or neatly organize all loose trash and debris including broken tarps, cardboard boxes, scattered trash cans, totes, and/or other items.
 - Property owners shall organize salvageable property by neatly storing, safely stacking, and securing such property against tipping or damage; if deemed unusable, such property must be disposed of properly.
 - Property owners shall remove any remaining loose or broken materials that pose trip, fall, or fire risk, and maintain walkways, access areas, and rights-of-way free from obstruction and debris.
 - The City shall verify that cleanup efforts are underway.
 - **Within fourteen (14) days**, if the residence is occupied, the property owners shall sign up for city utilities (water and sewer).
 - **Within sixty (60) days**, the City shall inspect the property to ensure all abatement efforts have been completed.
2. Removal of the hazards and public nuisance shall be completed by the above timelines after **final written notice** is mailed to the owner.
3. If the hazards and public nuisance are not abated by the imposed deadlines, the City may initiate abatement of its own volition as stated in BMC 15.04.020(D) and (E), and the cost of correcting the condition **shall be a lien against the land**, subject to recording and foreclosure as provided in BMC 15.04.020(G).
4. The City Clerk is directed to, at minimum, cause a copy of this Order to be conspicuously posted on the property and to mail a copy to the property owner.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

5. As provided in BMC 15.04.020(C), at any time before the date set for completion of the Council orders, the owner of the property **may request a rehearing**. The request for rehearing shall include a notarized statement setting out with specificity the corrective actions taken or initiated, and how these steps did or will eliminate the hazards or nuisance found by the City Council.
6. As provided in BMC 15.04.030, the owner of the property or their agent **may appeal the decision and order of the City Council to the Alaska Superior Court** in accordance with the court rules of appellate procedure. A request for a rehearing does not toll the time for filing the notice of appeal.

RESOLVED THIS ____ DAY OF MAY 2025 BY A VOTE OF ____ IN FAVOR AND ____ OPPOSED.

Rose Henderson, Mayor

Kevin Morgan, City Clerk

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

CITY OF BETHEL, ALASKA

Resolution #25-07

A RESOLUTION AND ORDER BY THE BETHEL CITY COUNCIL DECLARING THE PROPERTY AT 140 TORGERSON, GENERALLY DESCRIBED AS LOT 11, BLOCK 3, PLAT #70-444, BETHEL ALASKA, A PUBLIC NUISANCE AND A FIRE HAZARD, AND ORDERING THE ABATEMENT THEREOF

WHEREAS, the legal description of the property is 140 Torgerson, Lot 11, Block 3, Plat #70-444, recorded in the Bethel Recording District, Fourth Judicial District, State of Alaska, subject to reservations, exceptions, easements, covenants, conditions and restrictions of record, if any;

WHEREAS, pursuant to Bethel Municipal Code (BMC) 15.04.010, the Bethel City Council received a written report on March 19, 2025, from the City Manager that the property located at 140 Torgerson as identified on the City's address map, constitutes a fire hazard and a public nuisance;

WHEREAS, the report identified the Moravian Church as the property owner of record;

WHEREAS, pursuant to BMC 15.04.010(B), after receiving the report regarding the potential nuisance, the Bethel City Council set a hearing for April 30, 2025, and the City Clerk notified all necessary parties;

WHEREAS, pursuant to BMC 15.04.010(C), on April 4, 2025, notice to the property owners was provided by the City Clerk prior to the hearing by certified mail along with a copy of the record, posting notice of the hearing in three public places around town, and posting notice of the hearing at the property;

WHEREAS, pursuant to BMC 15.04.010(D), a hearing on the matter was held on April 30, 2025;

WHEREAS, the City Administration, City Manager Lori Strickler, and City Planner Lee Foley, presented evidence that the property described herein constitutes a public nuisance and a fire hazard;

WHEREAS, Arthur Coolidge and Clifford Jimmie, representing the Moravian Church, attended the April 30, 2025, hearing; and

WHEREAS, based on evidence presented at the hearing, the Council found that the City Manager's report was substantially correct in all material respects and that there exists on the property a fire hazard and public nuisance as those terms are defined in BMC 15.04.040, and that these conditions require abatement.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF BETHEL,

The property located at 140 Torgerson, Bethel, Alaska, with the legal description stated above is declared a public nuisance and a fire hazard. The Council hereby makes the following findings of fact and conclusions of law, and issues the following orders:

I. FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. Titles 15, 16, 17, and 18 of the Bethel Municipal Code require the City to enforce platting, land use, and site development code provisions in order to promote a logical growth pattern within the city and the economic extension of public services and facilities; encourage the most appropriate use of land throughout the city; reduce congestion in the streets; enhance safety from fire, flooding and other dangers; provide adequate light, air and open space; Preserve property values; prevent the overcrowding of the land; avoid undue concentration of population; facilitate adequate provisions for transportation, water, sewage, drainage, schools, parks and other facilities; assure that development does not adversely affect either the ability of the city to deliver public services or the safety of property and the health, safety and welfare of persons; assure that the burdens placed on public facilities by development are borne by the development; and promote the public health, safety and welfare.
2. The City Manager's report is **substantially correct in all material respects** as required for the declaration of a fire hazard and public nuisance at the property under BMC 15.04.010(D).
3. BMC 15.04.040 defines "**fire hazard**" as "any structure, which, for want of proper repairs, or by reason of age or dilapidated condition, or by reason of poorly installed or defective electrical wiring or equipment, defective chimneys, defective heating apparatus or any other cause or reason, is especially liable to fire, or which building or structure is so situated and occupied as to endanger any other structure or property or human life. Such term shall also mean and include any structure containing any combustible or explosive material, rubbish, rags, waste, oils, gasoline or inflammable substance of any kind, especially liable to cause fire or endanger the safety of such structure, premises, or human life. Such term shall also mean and include any situation or condition in which any combustible or explosive material, rubbish, rags, waste, oils, gasoline or inflammable substance of any kind is especially liable to cause or spread fire or endanger the safety of any structure, premises or human life."
4. The Council finds that the property presents a **fire hazard** as defined in BMC 15.04.040 and Section 304 of the International Fire Code **due to the presence of:** open flames and combustible debris accumulation, with unauthorized individuals occupying the structure and using open flames, portable stoves, or makeshift wood-burning devices as well as potential flammable materials such as clothing, cardboard, bedding, plastic, and trash all of which serve as accelerants in the event of ignition.

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

5. BMC 15.04.040 defines “**public nuisance**” as “any parcel or structure the condition of which is such as to likely endanger the safety of persons or property of persons other than the owner of the building or structure, whether because of damage, deterioration, dilapidation, or other cause, whether or not the fault of the owner.”
6. BMC 16.12.30 further defines “**nuisance**” as “activity which arises from unreasonable, unwarranted or unlawful use by a person of property, which interferes with, obstructs or injures the right of another, or the public, in the use or enjoyment of property, endangers personal health or safety or produces material annoyance, inconvenience and discomfort.”
7. The Council finds that the property presents a **nuisance** and a **public nuisance** as defined in BMC 15.04.040 and 16.12.030 **due to the presence of:** accumulated trash, debris, and overgrowth in and around the structure; lack of maintenance and neglect over an extended period of time; collapsing or unstable walls and roof; missing or broken doors and windows, and the presence of unauthorized individuals on the property engaging in potentially criminal activity.
8. The Property owner testified that they wish to dispose of the building and contacted a demolition company to demolish the structure but have not heard back yet.

II. ORDERS OF THE CITY COUNCIL

1. Pursuant to BMC 15.04.020(A), the City Council ORDERS the property owner to abate the hazards and nuisances, including but not limited to the following, on the following timelines:
 - **Within 120 (One Hundred and Twenty) Days:**
 - Property owner shall demolish, remove, and dispose of the structure in its entirety including all debris, foundations, and hazardous materials.
 - **Within 60 (Sixty) Days,** the City shall inspect the property and/or communicate with the property owner to ensure that progress is being made toward demolition, including but not limited to a signed contract with a demolition company.
2. Removal of the hazards and public nuisance shall be completed by the above timelines after **final written notice** is mailed to the owner.
3. If the hazards and public nuisance are not abated by the imposed deadlines, the City may initiate abatement of its own volition as stated in BMC 15.04.020(D) and (E), and the cost of correcting the condition **shall be a lien against the land**, subject to recording and foreclosure as provided in BMC 15.04.020(G).

Introduced by: Mayor Henderson
Date: May 13, 2025
Action:
Vote:

4. The City Clerk is directed to, at minimum, cause a copy of this Order to be conspicuously posted on the property and to mail a copy to the property owner.
5. As provided in BMC 15.04.020(C), at any time before the date set for completion of the Council orders, the owner of the property **may request a rehearing**. The request for rehearing shall include a notarized statement setting out with specificity the corrective actions taken or initiated, and how these steps did or will eliminate the hazards or nuisance found by the City Council.
6. As provided in BMC 15.04.030, the owner of the property or their agent **may appeal the decision and order of the City Council to the Alaska Superior Court** in accordance with the court rules of appellate procedure. A request for a rehearing does not toll the time for filing the notice of appeal.

RESOLVED THIS ____ DAY OF MAY 2025 BY A VOTE OF ____ IN FAVOR AND ____ OPPOSED.

Rose Henderson, Mayor

Kevin Morgan, City Clerk

City of Bethel Action Memorandum

Action memorandum No.	25-17		
Date action introduced:	May 13, 2025	Introduced by:	Mayor Henderson
Date action taken:		Approved	Denied
Confirmed by:			

Title: Appointment of Committee and Commission Members for a term of three years.

To maintain staggered terms, the term expiration date for appointments will be December 31, 2027 unless otherwise stated. The appointments will be for regular seats unless otherwise stated.

Attachment(s): None

Amount of fiscal impact:		Account information:
x	No fiscal impact	

Planning Commission

Juan Delgado has applied for appointment; term expiration is December 31, 2026. Alternate Seat 2.

Public Works Committee

Juan Delgado has applied for appointment; term expiration is December 31, 2027.

City of Bethel Action Memorandum

Action memorandum No.	25-18		
Date action introduced:	May 13, 2025	Introduced by:	City Manager Strickler
Date action taken:		Approved	Denied
Confirmed by:			

Action Title: Authorize the City Manager to negotiate and execute a contract for construction-installation of road culverts on Ptarmigan Road.

Attachment(s) Request for Bid and Addendums

Account information:		Amount of fiscal impact:
100-66-9771	\$2,000,000 Budgeted Budget Amendment Requesting an Additional \$1,000,000 Proposed.	\$3,000,000

Summary Statement

The City Council authorized \$2,000,000 in capital funding for the purchase and installation of culverts on Ptarmigan Road. To date, the City has \$481,959 in planned expenses requiring additional appropriation to be made in order to facilitate this contract award.

\$205,352	Culvert Purchase
\$276,607	DOWL Contract Services, Design, Permitting, Project Management and Inspection
<u>\$2,330,000</u>	<u>Culvert Construction</u>
\$2,811,959	Total Known Cost of the Project

The City released a Request for Bid on April 25, 2025. Submissions for the RFB were required by May 5, 2025. The Review Team evaluated the proposal received with the following bid amount:

Company	Bid Amount
KNIK Construction	\$2,330,000

Administration is seeking confirmation to proceed with the negotiation and execution of the contract with KNIK Construction in accordance with the Request for Bid documents, with the understanding, Council will also authorize the additional appropriations requested in Capital Budget Amendment 24-05 (f), at the May 27th, regular meeting.

**CITY OF BETHEL
BETHEL, ALASKA**



REQUEST FOR BIDS

Ptarmigan Street Culvert Crossings

Deadline for Questions/ Protests: Friday, April 25, 2025, at 12:00 pm
Opening/ Due Date: Monday, May 5, 2025, at 12:00 pm
Opening Time: 12:00 pm
Opening Place: City of Bethel – City Hall
300 Chief Eddie Hoffman Highway
Bethel, Alaska 99559

BID DOCUMENTS TABLE OF CONTENTS

DIVISION 00 PROCUREMENT AND CONTRACTING REQUIREMENTS

00 11 13	Advertisement For Bids
00 21 13	Instruction to Bidders
00 41 13	Bid Form
00 43 13	Bid Bond (EJCDC C-430, 2013 edition)
00 52 13	Agreement Between Owner and Contractor for Construction Contract (EJCDC C-520, 2013 edition)
00 61 13.13	Performance Bond (EJCDC C-610, 2013 edition)
00 61 13.16	Payment Bond (EJCDC C-615, 2013 edition)
00 72 13	Standard General Conditions of the Construction Contract (EJCDC C-700, 2013 edition)
00 80 00	Supplementary Conditions (EC-800)

DIVISION 01 GENERAL REQUIREMENTS

01 00 00	General Requirements
----------	----------------------

SIGNATURE AND VERIFICATION OF ANTI-COLLUSION

ENGINEERING DOCUMENTS

Ptarmigan Street Culvert Crossing Engineering Drawings
Supplemental Specifications to 2020 State of Alaska Department of Transportation Standard
Specifications
February 3, 2025 DOWL Geotechnical Investigation and Recommendations

END TABLE OF CONTENTS

SECTION 00 11 13 ADVERTISEMENT FOR BIDS

**CITY OF BETHEL
BETHEL, ALASKA**

PTARMIGAN STREET CULVERT CROSSINGS- CULVERT CROSSINGS

The City of Bethel (Owner) is seeking separate sealed Bids for construction of Ptarmigan Street Culvert Crossings – Culvert Replacement (Project). Bids will be received by the Purchasing Agent at City Hall, located at 300 Chief Eddie Hoffman Highway (or PO Box 1388), Bethel, Alaska 99559, until 12:00 PM local time on Monday, May 5, 2025, at which time the Bids received will be publicly opened and read.

The Project includes excavation and removal and replacement of both existing Corrugated Metal Pipe (CMP) culverts at the Ptarmigan Street East Project and at the West Project location, and installation per design plans of the (owner-procured) new pipe arch culverts.

Bids will be received for a single prime Contract. Bids shall be developed on a lump sum basis with a schedule of values following bidding as indicated in the Bid Form and Method of Measurement and Basis of Payment.

The Issuing Office for the Bidding Documents is:

City of Bethel
C/O Purchasing Agent
Bethel, Alaska 99559
Email: purchasingagent@cityofbethel.net

Prospective Bidders may examine the Bidding Documents at the Issuing Office on Monday through Friday between the hours of 8:00 AM and 5:00 PM and may obtain copies of the Bidding Documents from the Issuing Office.

The Issuing Office has established a Bidding Documents Website:
<https://www.cityofbethel.org/rfps>

Bidding Documents may be downloaded from the designated website. The designated website, and only the designated website, will be updated when necessary with addenda, lists of registered plan holders, and other information relevant to submitting a Bid for the Project.

Bidding Documents may also be examined at The Plans Room LLC (4831 Old Seward Highway, Suite 202, Anchorage, Alaska), The Association of General Contractors (8005 Schoon Street, Anchorage, Alaska), and AGC/The Plans Room (3750 Bonita Street, Fairbanks, Alaska) on Monday through Friday between the hours of 9:00 AM and 4:00 PM; and the office of the Engineer, DOWL (5015 Business Park Boulevard, Suite 4000, Anchorage, Alaska), on Monday through Friday between the hours of 8:00 AM and 5:00 PM.

Each bid must be submitted and sealed in an envelope addressed to City of Bethel C/O Purchasing Agent, Bethel, Alaska 99559 and plainly marked on the outside of the envelope as “Bid for City of Bethel, Ptarmigan Street Culvert Crossings – Culvert Replacement” and the date and hour of the bid opening. In person bids will be accepted from 11:30 AM to 12:00 PM at the

entrance to City Hall (at 300 Chief Eddie Hoffman Highway). Bids may also be mailed to PO Box 1388, Bethel, Alaska 99559, or emailed to the Purchasing Agent.

The prevailing wage rates of the State of Alaska Department of Labor and Safety for Laborers' & Mechanics Minimum Rates of Pay (Pamphlet 600) apply to this project and are hereby incorporated by reference as if fully set forth herein.

The successful Bid shall comply with each provision thereof. Each Bid will be reviewed by the Owner and Engineer for compliance and completeness. Bidders must be in good standing with the City of Bethel. The winning bid will be selected based on the lowest, responsive, qualified bid. Local Bids will receive a five percent (5%) preference in determining the lowest responsible and responsive bid.

The City of Bethel will not be liable for any costs incurred by any Bidder in response to this advertisement. The City of Bethel reserves the right to reject any or all bids without cause.

All questions should be submitted in writing to the Purchasing Agent at purchasingagent@cityofbethel.net

END OF ADVERTISEMENT FOR BIDS

SECTION 00 21 13
INSTRUCTIONS TO BIDDERS
TABLE OF ARTICLES

	Page
ARTICLE 1 – Defined terms	2
ARTICLE 2 – Bidding Documents.....	2
ARTICLE 3 – Qualifications of Bidders	3
ARTICLE 4 – Site and Other Areas; Existing Site Conditions; Examination of Site; Owner’s Safety Program; Other Work at the Site	4
ARTICLE 5 – Bidder’s Representations	5
ARTICLE 6 – Interpretations and Addenda	6
ARTICLE 7 – Bid Security.....	7
ARTICLE 8 – Contract Times	7
ARTICLE 9 – Liquidated Damages.....	7
ARTICLE 10 – Substitute and “Or-Equal” Items.....	7
ARTICLE 11 – Subcontractors, Suppliers, and Others	8
ARTICLE 12 – Preparation of Bid	8
ARTICLE 13 – Basis of Bid.....	9
ARTICLE 14 – Submittal of Bid	10
ARTICLE 15 – Modification and Withdrawal of Bid	10
ARTICLE 16 – Opening of Bids	10
ARTICLE 17 – Bids to Remain Subject to Acceptance	11
ARTICLE 18 – Evaluation of Bids and Award of Contract	11
ARTICLE 19 – Bonds and Insurance	11
ARTICLE 20 – Signing of Agreement	12
ARTICLE 21 – Cancellation of Bid Process	12
ARTICLE 22 – Wage Rate Requirements.....	12
ARTICLE 23 – Bid Protests	12

ARTICLE 1 – DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. *Issuing Office* – The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

City of Bethel
C/O Purchasing Agent
Bethel, Alaska 99559
purchasingagent@cityofbethel.net

B. *Local Bidder* – A local bidder means a business that submits a bid with fixed offices or distribution points located within the boundaries of the City of Bethel and who has a current City of Bethel business license and who is at the time bidding in compliance with all requirements of the City of Bethel sales tax ordinance. A Bethel post office box number or residential address may not be used solely to establish status as a local bidder. The Owner reserves the final right to determine local bidder status.

ARTICLE 2 – BIDDING DOCUMENTS

2.01 Bidder shall obtain a complete set of Bidding Requirements and proposed Contract Documents (together, the Bidding Documents). See the Agreement for a list of the Contract Documents. It is Bidder's responsibility to determine that it is using a complete set of documents in the preparation of a Bid. Bidder assumes sole responsibility for errors or misinterpretations resulting from the use of incomplete documents, by Bidder itself or by its prospective Subcontractors and Suppliers.

2.02 Bidding Documents are made available for the sole purpose of obtaining Bids for completion of the Project and permission to download or distribution of the Bidding Documents does not confer a license or grant permission or authorization for any other use. Authorization to download documents, or other distribution, includes the right for plan holders to print documents solely for their use, and the use of their prospective Subcontractors and Suppliers, provided the plan holder pays all costs associated with printing or reproduction. Printed documents may not be re-sold under any circumstances.

2.03 Owner has established a Bidding Documents Website as indicated in the Advertisement or invitation to bid. Owner recommends that Bidder obtain a complete set of the Bidding Documents from such website. Bidders may rely that sets of Bidding Documents obtained from the Bidding Documents Website are complete, unless an omission is blatant.

2.04 Plan rooms (including construction information subscription services, and electronic and virtual plan rooms) may distribute the Bidding Documents or make them available for examination. Owner is not responsible for omissions in Bidding Documents or other documents obtained from plan rooms, or for a Bidder's failure to obtain Addenda from a plan room.

2.05 Electronic Documents

- A. When the Bidding Requirements indicate that electronic (digital) copies of the Bidding Documents are available, such documents will be made available to the Bidders as Electronic Documents in the manner specified.
 - 1. Bidding Documents will be provided in Adobe PDF (Portable Document Format) (.pdf) that is readable by Adobe Acrobat Reader Version 2017 or later. It is the intent of the Engineer and Owner that such Electronic Documents are to be exactly representative of the paper copies of the documents. However, because the Owner and Engineer cannot totally control the transmission and receipt of Electronic Documents nor the Contractor's means of reproduction of such documents, the Owner and Engineer cannot and do not guarantee that Electronic Documents and reproductions prepared from those versions are identical in every manner to the paper copies.
- B. Unless otherwise stated in the Bidding Documents, the Bidder may use and rely upon complete sets of Electronic Documents of the Bidding Documents, described in Paragraph 2.06.A above. However, Bidder assumes all risks associated with differences arising from transmission/receipt of Electronic Documents versions of Bidding Documents and reproductions prepared from those versions and, further, assumes all risks, costs, and responsibility associated with use of the Electronic Documents versions to derive information that is not explicitly contained in printed paper versions of the documents, and for Bidder's reliance upon such derived information.

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit with its Bid (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:
 - A. Evidence of Bidder's authority to do business in the state or jurisdiction of where the Project is located,
 - B. Alaska Contractor's License No.,
 - C. List of proposed Subcontractor(s),
 - D. List of proposed Supplier(s),
 - E. Required Bid security in the form of a Bid Bond (EJCDC No. C-430, 2013),
 - F. List of similar projects over the past five years in the Yukon-Kuskokwim Delta Region including location, size, owner contact name, and telephone, and
 - G. If Bidder is a Local Bidder, a signed letter stating status as a Local Bidder must be provided and the Bidder must show compliance with the definition of a local bidder as found in Article 1 of this section.
- 3.02 Bidders must be in good standing with the Owner. Good standing includes but is not limited to:
 - A. No outstanding debts, fees, payments, or taxes owed to the Owner.

- B. No outstanding claims between the Owner and Bidder, and
 - C. No previous history of default of duty, contract, or obligation to the Owner.
- 3.03 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.04 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.05 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 *Site and Other Areas*

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by the Contractor.

4.02 *Existing Site Conditions*

- A. Subsurface, Physical, and Hazardous Environmental Conditions
 - 1. The Supplementary Conditions identify:
 - a. One report known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site – please see Engineering Documents.
 - 2. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
 - 3. If the Supplementary Conditions do not identify Technical Data, the default definition of Technical Data set forth in Article 1 of the General Conditions will apply.
- B. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 5.03, 5.04, and 5.05 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 5.06 of the General Conditions.

4.03 *Site Visit and Testing by Bidders*

- A. Bidder shall conduct a voluntary Site visit during normal working hours and shall not disturb any ongoing operations at the Site.
- B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.
- C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
- D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- E. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 *Other Work at the Site*

- A. Reference is made to Article 8 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

- A. Examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. Visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. Become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;

- D. Carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;
- E. Consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;
- F. Agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
- G. Become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. Promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
- I. Determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. Agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 6 – INTERPRETATIONS AND ADDENDA

- 6.01 Owner on its own initiative may issue Addenda to clarify, correct, supplement, or change the Bidding Documents.
- 6.02 Bidder shall submit all questions about the meaning or intent of the Bidding Documents to the Purchasing Agent in writing. Contact information and submittal procedures for such questions are as follows:

City of Bethel
C/O Purchasing Agent
Email: purchasingagent@cityofbethel.net

- 6.03 Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all registered plan holders. Questions received less than seven days prior to the date for opening of Bids may not be answered.
- 6.04 Only responses set forth in an Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect. Responses to questions are not part of the Contract Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

ARTICLE 7 – BID SECURITY

- 7.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of five percent (5%) of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 6.01 and 6.02 of the General Conditions.
- 7.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.
- 7.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be released.
- 7.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

ARTICLE 8 – CONTRACT TIMES

- 8.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

ARTICLE 9 – LIQUIDATED DAMAGES

- 9.01 Provisions for liquidated damages, if any, for failure to timely attain Substantial Completion or completion of the Work in readiness for final payment, are set forth in the Agreement.

ARTICLE 10 – SUBSTITUTE AND "OR-EQUAL" ITEMS

- 10.01 The Contract for the Work, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those "or-equal" or substitute materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an "or-equal" or substitute unless written request for approval has been

submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids in case of a proposed substitute and 5 days prior in the case of a proposed “or equal”. Each such request shall comply with the requirements of Paragraphs 7.04 and 7.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. Engineer’s decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner. Substitutes and “or-equal” materials and equipment may be proposed by Contractor in accordance with Paragraph 7.04 and 7.05 of the General Conditions after the Effective Date of the Contract.

- 10.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of “or-equal” or substitution requests are made at Bidder’s sole risk.

ARTICLE 11 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

- 11.01 The apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of the Subcontractors or Suppliers proposed for the Work.

If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder’s Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.

- 11.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation of such acceptance as provided in Paragraph 7.06 of the General Conditions.
- 11.03 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.
- 11.04 The Contractor shall not award work to Subcontractor(s) in excess of the limits stated in SC 7.06.

ARTICLE 12 – PREPARATION OF BID

- 12.01 The Bid Form is included with the Bidding Documents.

- A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, adjustment unit price item, and unit price item listed therein.
 - B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words “No Bid” or “Not Applicable.”
- 12.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.
- 12.03 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be provided on the Bid Form.
- 12.04 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 12.05 A Bid by an individual shall show the Bidder’s name and official address.
- 12.06 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 12.07 All names shall be printed in ink below the signatures.
- 12.08 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 12.09 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 12.10 The Bid shall contain evidence of Bidder’s authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder’s state contractor license number, if any, shall also be shown on the Bid Form.

ARTICLE 13 – BASIS OF BID

13.01 *Lump Sum*

- A. Bidders shall submit a Bid on a lump sum basis for each item of Work listed in the bid price section of the Bid Form.
- B. The “Bid Price” (sometimes referred to as the extended price) for each lump sum Bid item will be the “Bid Lump Sum Price” offered by the Bidder. The total of all lump sum Bid items will be the sum of these “Bid Prices”; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 13.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and lump sum prices will be resolved in favor of the lump sum prices. Discrepancies between the indicated sum

of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

- 13.02 Per the City of Bethel Municipal Code Chapter 4.20 Purchasing, local Bidders submitting a bid shall receive a five percent (5%) preference in determining the lowest responsible and responsive bid.

ARTICLE 14 – SUBMITTAL OF BID

- 14.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.
- 14.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the Advertisement for Bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation “BID ENCLOSED.” When using the mail or other delivery system, the Bidder is totally responsible for the mail or other delivery system delivering the Bid at the place and prior to the time indicated in the Advertisement for Bid. A mailed Bid shall be addressed to City of BethelC/O: Purchasing Agent, PO BOX 1388, Bethel, Alaska 99559.
- 14.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted.

ARTICLE 15 – MODIFICATION AND WITHDRAWAL OF BID

- 15.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 15.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 15.03 If within 24 hours after Bids are opened any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned.

ARTICLE 16 – OPENING OF BIDS

- 16.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 17 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 17.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 18 – EVALUATION OF BIDS AND AWARD OF CONTRACT

- 18.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.
- 18.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.
- 18.03 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.
- 18.04 Evaluation of Bids
- A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
 - B. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.
- 18.05 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.
- 18.06 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents.

ARTICLE 19 – BONDS AND INSURANCE

- 19.01 Article 6 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

ARTICLE 20 – SIGNING OF AGREEMENT

20.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Within ten days thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

ARTICLE 21 – CANCELLATION OF BID PROCESS

22.01 The City retains the right to cancel the bid process at any point.

ARTICLE 22 – WAGE RATE REQUIREMENTS

22.01 The prevailing wage rates of the State of Alaska apply to this contract as do any requirements of the State of Alaska associated with the use of these State prevailing wages.

ARTICLE 23 – BID PROTESTS

23.01 A Bidder may protest a bid result in writing to the Owner within (7) seven calendar days of the Bid opening. Any protests received after seven days will not be accepted. Oral protest will not be accepted.

23.02 In order for a protest to be granted, a Bidder must prove by preponderance of the evidence that their Bid was the lowest responsive, responsible Bid.

END OF INSTRUCTION TO BIDDERS

SECTION 00 41 13**BID FORM****TABLE OF CONTENTS**

	Page
Article 1— Owner and Bidder	2
Article 2— Attachments to this Bid.....	2
Article 3— Basis of Bid—Lump Sum Bid and Unit Prices.....	2
BASE BID SCHEDULE.....	3
Article 4— Time of Completion	3
Article 5— Bidder’s Acknowledgements: Acceptance Period, Instructions, and Receipt of Addenda.....	3
Article 6— Bidder’s Representations and Certifications	4

BID FORM FOR CONSTRUCTION CONTRACT

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

1.01 This Bid is submitted to:

City of Bethel
C/O Purchasing Agent
300 Chief Eddie Hoffman Highway (or PO Box 1388)
Bethel, Alaska 99559
Email: purchasingagent@cityofbethel.net

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

2.01 The following documents are submitted with and made a condition of this Bid:

- A. Required Bid Security;
- B. List of Proposed Subcontractors;
- C. List of Proposed Suppliers;
- D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
- E. Contractor's license number as evidence of Bidder's State Contractor's License or a covenant by Bidder to obtain said license within the time for acceptance of Bids;
- F. Required Bidder Qualification Statement with supporting data;
- G. If a Local Bidder, signed letter stating status as a Local Bidder, then show that the Bidder complies with the definition of a Local Bidder as found in Article 1, Instruction to Bidders;
- H. Signed and dated verification of anti-collusion.

ARTICLE 3—BASIS OF BID—LUMP SUM BID AND UNIT PRICES

3.01 *Lump Sum Bids*

- A. Bidder will perform the following Work at the indicated Lump Sum prices:

BASE BID SCHEDULE

Item No.	Description	Unit	Bid Unit Price	Bid Amount
101	Mobilization and Demobilization	Lump Sum		\$
102	West Project Culvert Replacement	Lump Sum		\$
103	East Project Culvert Replacement	Lump Sum		\$
104	Project Documentation and Close-out	Lump Sum		\$
TOTAL				\$

B. Bidder acknowledges that:

1. Each Bid Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
2. Bidder will comply with State of Alaska Wage Rates.
3. If Bidder wishes to submit manufacturer's data for a product for preliminary approval, the bidder must submit the manufacturer's data no later than when questions are due. Preliminary approvals will be granted on a case-by-case basis and are not guaranteed. Preliminary approvals are not to take the place of the submittal review and approval process with the successful bidder.

ARTICLE 4—TIME OF COMPLETION

- 4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 4.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA**5.01 Bid Acceptance Period**

- A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

5.02 Instructions to Bidders

- A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 Receipt of Addenda

- A. Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Addendum Date

ARTICLE 6—BIDDER’S REPRESENTATIONS AND CERTIFICATIONS**6.01 Bidder’s Representations**

A. In submitting this Bid, Bidder represents the following:

1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder’s (Contractor’s) safety precautions and programs.
7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 Bidder's Certifications**A. The Bidder certifies the following:**

1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

BIDDER hereby submits this Bid as set forth above:

Bidder:

(typed or printed name of organization)

By:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

If Bidder is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.

Attest:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(typed or printed)

Address for giving notices:

Bidder's Contact:

Name:

(typed or printed)

Title:

(typed or printed)

Phone:

Email:

Address:

Bidder's Contractor License No.:

SECTION 00 43 12 BID BOND (PENAL SUM FORM)

Bidder Name: Address <i>(principal place of business)</i> :	Surety Name: Address <i>(principal place of business)</i> :
Owner Name: City of Bethel Address <i>(principal place of business)</i> : P.O. Box 1388 Bethel, Alaska 99559	Bid Project <i>(name and location)</i> : Ptarmigan Street Culvert Crossings; Ptarmigan Street, City of Bethel Bid Due Date: May 5, 2025
Bond Penal Sum: Date of Bond:	
Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth in this Bid Bond, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.	
Bidder	Surety
_____ <i>(Full formal name of Bidder)</i>	_____ <i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature) (Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
<i>Notes: (1) Note: Addresses are to be used for giving any required notice. (2) Provide execution by any additional parties, such as joint venturers, if necessary.</i>	

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond will be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder occurs upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation will be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions does not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action will be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety, and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond will be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder must be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Postal Service registered or certified mail, return receipt requested, postage pre-paid, and will be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond will be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute governs and the remainder of this Bond that is not in conflict therewith continues in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

SECTION 00 52 13

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

This Agreement is by and between **City of Bethel, P.O. Box 1388 Bethel, AK 99559** ("Owner") and _____ ("Contractor").

Terms used in this Agreement have the meanings stated in the General Conditions and the Supplementary Conditions.

Owner and Contractor hereby agree as follows:

ARTICLE 1—WORK

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: All materials, equipment, labor and related services to construct the Ptarmigan Street Culvert Crossings project as described under Article 2 and in the Contract Documents.

ARTICLE 2—THE PROJECT

- 2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: The project scope consists of excavation and removal and replacement of both existing CMP culverts at the Ptarmigan Street East Project and at the West Project location, installation per design plans of the (pre-purchased) new pipe arch culverts and infill to tie-in to the existing road.

ARTICLE 3—ENGINEER

- 3.01 The Owner retained **DOWL** ("Engineer") to act as Owner's representative, assume all duties and responsibilities of Engineer, and have the rights and authority assigned to Engineer in the Contract.
- 3.02 The part of the Project that pertains to the Work has been designed by **the Engineer**.

ARTICLE 4—CONTRACT TIMES

- 4.01 *Time is of the Essence*
- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.
- 4.02 *Contract Times: Dates*
- A. The Work will be substantially complete on or before **September 30, 2025**, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before **October 15, 2025**. The substantial and final completion dates may change based on the awarding of any or all of the additive alternates.

4.04 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the Contract Times, as duly modified. The parties also recognize the delays, expense, and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
1. *Substantial Completion*: Contractor shall pay Owner **\$500.00** for each day that expires after the time (as duly adjusted pursuant to the Contract) specified above for Substantial Completion, until the Work is substantially complete.
 2. *Completion of Remaining Work*: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner **\$500.00** for each day that expires after such time until the Work is completed and ready for final payment.
 3. Liquidated damages for failing to timely attain Milestones, Substantial Completion, and final completion are not additive, and will not be imposed concurrently.
- B. If Owner recovers liquidated damages for a delay in completion by Contractor, then such liquidated damages are Owner's sole and exclusive remedy for such delay, and Owner is precluded from recovering any other damages, whether actual, direct, excess, or consequential, for such delay, except for special damages (if any) specified in this Agreement.

ARTICLE 5—CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents, the amounts that follow, subject to adjustment under the Contract:

- A. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6—PAYMENT PROCEDURES

6.01 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 *Progress Payments; Retainage*

- A. Owner shall make progress payments on the basis of Contractor's Applications for Payment on or about the 1st (first) day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract.
 - a. 95 percent of the value of the Work completed (with the balance being retainage).
 - b. 95 percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
 - B. Upon Substantial Completion of the entire construction to be provided under the construction Contract Documents, Owner shall pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less **200** percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.
- 6.03 *Final Payment*
- A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price in accordance with Paragraph 15.06 of the General Conditions.
- 6.04 *Consent of Surety*
- A. Owner will not make final payment, or return or release retainage at Substantial Completion or any other time, unless Contractor submits written consent of the surety to such payment, return, or release.
- 6.05 *Interest*
- A. All amounts not paid when due will bear interest at the rate of **8** percent per annum.

ARTICLE 7—CONTRACT DOCUMENTS

- 7.01 *Contents*
- A. The Contract Documents consist of all of the following:
 1. This Agreement.
 2. Bonds:
 - a. Performance bond (together with power of attorney).
 - b. Payment bond (together with power of attorney).
 3. General Conditions.
 4. Supplementary Conditions.
 5. Supplemental Conditions to State of Alaska Standard Specifications as listed in the table of contents of the project manual.
 6. Drawings (not attached but incorporated by reference) consisting of **15** sheets with each sheet bearing the following general title: **Ptarmigan St. Culvert Crossings – Culvert Replacement**
 7. Addenda (numbers _____ to _____, inclusive).

8. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages __ _ to __ __, inclusive).
 - b. Permits obtained:
 - 1) No Rise Certificate
 - c. Project Contract Forms
9. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - a. Notice to Proceed.
 - b. Work Change Directives.
 - c. Change Orders.
 - d. Field Orders.
 - e. Warranty Bond, if any.
- B. The Contract Documents listed in Paragraph 7.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 7.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the Contract.

ARTICLE 8—REPRESENTATIONS, CERTIFICATIONS, AND STIPULATIONS

8.01 Contractor's Representations

- A. In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 1. Contractor has examined and carefully studied the Contract Documents, including Addenda.
 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 3. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 4. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 5. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and

performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.

6. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
7. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
8. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
9. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
10. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

8.02 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 8.02:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

8.03 *Standard General Conditions*

- A. Owner stipulates that if the General Conditions that are made a part of this Contract are EJCDC® C-700, Standard General Conditions for the Construction Contract (2018), published by the Engineers Joint Contract Documents Committee, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the

standard wording of such published document to the Contractor, through a process such as highlighting or “track changes” (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on _____ (which is the Effective Date of the Contract).

Owner:

City of Bethel

(typed or printed name of organization)

By:

(individual's signature)

Date:

(date signed)

Name:

(typed or printed)

Title:

(typed or printed)

Attest:

(individual's signature)

Title:

(typed or printed)

Address for giving notices:

PO Box 1388

Bethel, AK 99559

Designated Representative:

Name:

(typed or printed)

Title:

(typed or printed)

Address:

Phone:

Email:

(If **[Type of Entity]** is a corporation, attach evidence of authority to sign. If **[Type of Entity]** is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

Contractor:

(typed or printed name of organization)

By:

(individual's signature)

Date:

(date signed)

Name:

(typed or printed)

Title:

(typed or printed)

(If **[Type of Entity]** is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

(individual's signature)

Title:

(typed or printed)

Address for giving notices:

Designated Representative:

Name:

(typed or printed)

Title:

(typed or printed)

Address:

Phone:

Email:

License No.:

(where applicable)

State:

SECTION 00 61.13.13 PERFORMANCE BOND

Contractor Name: Address <i>(principal place of business)</i> :	Surety Name: Address <i>(principal place of business)</i> :
Owner Name: City of Bethel Mailing address <i>(principal place of business)</i> : PO Box 1388 Bethel, AK 99559	Contract Description <i>(name and location)</i> : Ptarmigan Street Culvert Crossings; Ptarmigan Street, City of Bethel Contract Price: Effective Date of Contract:
Bond Bond Amount: Date of Bond: <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: ☐ None ☐ See Paragraph 16	
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.	
Contractor as Principal	Surety
_____ <i>(Full formal name of Contractor)</i>	_____ <i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature)(Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.	

EJCDC® C-610, Performance Bond.

Copyright© 2018 National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers. All rights reserved.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:
 - 3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - 3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
 - 3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.
4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.
5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;
 - 5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;
 - 5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or
 - 5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

- 5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
 - 5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.
- 6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.
- 7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:
 - 7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and
 - 7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.
- 9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
- 10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
- 11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.
- 12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.
- 13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such

statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

- 14.1. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
 - 14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.
 - 14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.
 - 14.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
 - 14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
16. Modifications to this Bond are as follows: **None**

SECTION 00 61 13.16 PAYMENT BOND

Contractor Name: Address <i>(principal place of business)</i> :	Surety Name: Address <i>(principal place of business)</i> :
Owner Name: City of Bethel Mailing address <i>(principal place of business)</i> : PO Box 1388 Bethel, AK 99559	Contract Description <i>(name and location)</i> : Ptarmigan Street Culvert Crossings; Ptarmigan Street, City of Bethel Contract Price: Effective Date of Contract:
Bond Bond Amount: Date of Bond: <i>(Date of Bond cannot be earlier than Effective Date of Contract)</i> Modifications to this Bond form: ☐ None ☐ See Paragraph 18	
Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.	
Contractor as Principal	Surety
_____ <i>(Full formal name of Contractor)</i>	_____ <i>(Full formal name of Surety) (corporate seal)</i>
By: _____ <i>(Signature)</i>	By: _____ <i>(Signature)(Attach Power of Attorney)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Attest: _____ <i>(Signature)</i>	Attest: _____ <i>(Signature)</i>
Name: _____ <i>(Printed or typed)</i>	Name: _____ <i>(Printed or typed)</i>
Title: _____	Title: _____
Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.	

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond will arise after the following:
 - 5.1. Claimants who do not have a direct contract with the Contractor
 - 5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2. Pay or arrange for payment of any undisputed amounts.
 - 7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.
13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.
14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.
15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.
16. Definitions
 - 16.1. *Claim*—A written statement by the Claimant including at a minimum:
 - 16.1.1. The name of the Claimant;
 - 16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;
 - 16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
 - 16.1.4. A brief description of the labor, materials, or equipment furnished;

- 16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
 - 16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
 - 16.1.7. The total amount of previous payments received by the Claimant; and
 - 16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.
- 16.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.
- 16.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.
- 16.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.
18. Modifications to this Bond are as follows: **None**

SECTION 00 72 13
STANDARD GENERAL CONDITIONS
OF THE CONSTRUCTION CONTRACT

Prepared By



Copyright© 2018

National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

The copyright for this EJCDC document is owned jointly by the three sponsoring organizations listed above. The National Society of Professional Engineers is the Copyright Administrator for the EJCDC documents; please direct all inquiries regarding EJCDC copyrights to NSPE.

NOTE: EJCDC publications may be purchased at www.ejcdc.org, or from any of the sponsoring organizations above.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

	Page
Article 1—Definitions and Terminology.....	1
1.01 Defined Terms.....	1
1.02 Terminology	6
Article 2—Preliminary Matters	7
2.01 Delivery of Performance and Payment Bonds; Evidence of Insurance.....	7
2.02 Copies of Documents	7
2.03 Before Starting Construction	7
2.04 Preconstruction Conference; Designation of Authorized Representatives	8
2.05 Acceptance of Schedules	8
2.06 Electronic Transmittals	8
Article 3—Contract Documents: Intent, Requirements, Reuse	9
3.01 Intent.....	9
3.02 Reference Standards	9
3.03 Reporting and Resolving Discrepancies	10
3.04 Requirements of the Contract Documents.....	10
3.05 Reuse of Documents	11
Article 4—Commencement and Progress of the Work	11
4.01 Commencement of Contract Times; Notice to Proceed	11
4.02 Starting the Work.....	11
4.03 Reference Points	11
4.04 Progress Schedule	12
4.05 Delays in Contractor’s Progress	12
Article 5—Site; Subsurface and Physical Conditions; Hazardous Environmental Conditions	13
5.01 Availability of Lands	13
5.02 Use of Site and Other Areas.....	14
5.03 Subsurface and Physical Conditions.....	15
5.04 Differing Subsurface or Physical Conditions	16

5.05	Underground Facilities.....	17
5.06	Hazardous Environmental Conditions at Site	19
Article 6—Bonds and Insurance.....		21
6.01	Performance, Payment, and Other Bonds	21
6.02	Insurance—General Provisions	22
6.03	Contractor’s Insurance.....	24
6.04	Builder’s Risk and Other Property Insurance	25
6.05	Property Losses; Subrogation	25
6.06	Receipt and Application of Property Insurance Proceeds	27
Article 7—Contractor’s Responsibilities		27
7.01	Contractor’s Means and Methods of Construction	27
7.02	Supervision and Superintendence	27
7.03	Labor; Working Hours	27
7.04	Services, Materials, and Equipment	28
7.05	“Or Equals”	28
7.06	Substitutes	29
7.07	Concerning Subcontractors and Suppliers.....	31
7.08	Patent Fees and Royalties.....	32
7.09	Permits	33
7.10	Taxes	33
7.11	Laws and Regulations.....	33
7.12	Record Documents.....	33
7.13	Safety and Protection	34
7.14	Hazard Communication Programs	35
7.15	Emergencies.....	35
7.16	Submittals	35
7.17	Contractor’s General Warranty and Guarantee	38
7.18	Indemnification	39
7.19	Delegation of Professional Design Services	39
Article 8—Other Work at the Site.....		40
8.01	Other Work	40
8.02	Coordination	41
8.03	Legal Relationships.....	41

Article 9—Owner’s Responsibilities	42
9.01 Communications to Contractor	42
9.02 Replacement of Engineer	42
9.03 Furnish Data	42
9.04 Pay When Due.....	42
9.05 Lands and Easements; Reports, Tests, and Drawings	43
9.06 Insurance.....	43
9.07 Change Orders	43
9.08 Inspections, Tests, and Approvals.....	43
9.09 Limitations on Owner’s Responsibilities	43
9.10 Undisclosed Hazardous Environmental Condition.....	43
9.11 Evidence of Financial Arrangements.....	43
9.12 Safety Programs	43
Article 10—Engineer’s Status During Construction	44
10.01 Owner’s Representative.....	44
10.02 Visits to Site.....	44
10.03 Resident Project Representative.....	44
10.04 Engineer’s Authority	44
10.05 Determinations for Unit Price Work	45
10.06 Decisions on Requirements of Contract Documents and Acceptability of Work	45
10.07 Limitations on Engineer’s Authority and Responsibilities	45
10.08 Compliance with Safety Program.....	45
Article 11—Changes to the Contract	46
11.01 Amending and Supplementing the Contract	46
11.02 Change Orders	46
11.03 Work Change Directives.....	46
11.04 Field Orders.....	47
11.05 Owner-Authorized Changes in the Work.....	47
11.06 Unauthorized Changes in the Work.....	47
11.07 Change of Contract Price	47
11.08 Change of Contract Times.....	49
11.09 Change Proposals.....	49
11.10 Notification to Surety.....	50

Article 12—Claims.....	50
12.01 Claims.....	50
Article 13—Cost of the Work; Allowances; Unit Price Work	51
13.01 Cost of the Work	51
13.02 Allowances	55
13.03 Unit Price Work.....	55
Article 14—Tests and Inspections; Correction, Removal, or Acceptance of Defective Work	56
14.01 Access to Work.....	56
14.02 Tests, Inspections, and Approvals.....	56
14.03 Defective Work	57
14.04 Acceptance of Defective Work.....	58
14.05 Uncovering Work	58
14.06 Owner May Stop the Work	58
14.07 Owner May Correct Defective Work.....	59
Article 15—Payments to Contractor; Set-Offs; Completion; Correction Period	59
15.01 Progress Payments.....	59
15.02 Contractor’s Warranty of Title	62
15.03 Substantial Completion.....	62
15.04 Partial Use or Occupancy	63
15.05 Final Inspection	64
15.06 Final Payment.....	64
15.07 Waiver of Claims	65
15.08 Correction Period	66
Article 16—Suspension of Work and Termination	67
16.01 Owner May Suspend Work	67
16.02 Owner May Terminate for Cause.....	67
16.03 Owner May Terminate for Convenience.....	68
16.04 Contractor May Stop Work or Terminate	68
Article 17—Final Resolution of Disputes	69
17.01 Methods and Procedures.....	69
Article 18—Miscellaneous	69
18.01 Giving Notice	69
18.02 Computation of Times.....	69

18.03	Cumulative Remedies	70
18.04	Limitation of Damages	70
18.05	No Waiver	70
18.06	Survival of Obligations	70
18.07	Controlling Law	70
18.08	Assignment of Contract.....	70
18.09	Successors and Assigns	70
18.10	Headings.....	70

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*
 - a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the

requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.

- b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
- 11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
 - 12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
 - 13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
 - 14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
 - 15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
 - 16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
 - 17. *Cost of the Work*—See Paragraph 13.01 for definition.
 - 18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
 - 19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
 - 20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
 - 21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the

recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
 - a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion of such Work.

43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
 - c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:* The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:* The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:* The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - 1. does not conform to the Contract Documents;
 - 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
 - 1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 - 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 - 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work

into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

- A. *Standards Specifications, Codes, Laws and Regulations*
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility

inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the

established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. ~~Abnormal weather conditions;~~
 - 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 - 4. Acts of war or terrorism.

- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.
- Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.
- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.

- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
 - C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment

and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
3. Technical Data contained in such reports and drawings.

- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

- C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
 3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
 4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
 2. is of such a nature as to require a change in the Drawings or Specifications;
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;
- then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition **within 15 calendar days of discovery**. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.
- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in

Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions:* Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations;

3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown

or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

- of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special

conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or

Regulations, and must be issued and signed by a surety named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual’s authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner’s termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and “Occupational Accident and Excess Employer’s Indemnity Policies,” are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by

Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.

- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
- H. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 *Contractor's Insurance*

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
 - 1. include at least the specific coverages required;
 - 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;
 - 3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 - 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 - 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds:* The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
 - 1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 - 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 - 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);

4. not seek contribution from insurance maintained by the additional insured; and
5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.
- D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.
- E. *Insurance of Other Property; Additional Insurance*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against

Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.

- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

- 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
- b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request*: If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 Substitutes

- A. *Contractor's Request; Governing Criteria*: Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. **Deleted.**
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.

- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
- 2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.

3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.
1. *Shop Drawings*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.
 2. *Samples*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Engineer's Review of Shop Drawings and Samples*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will

document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.

5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.

- d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
- 2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.
- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 - 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 - 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
 - 1. Observations by Engineer;
 - 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. Use or occupancy of the Work or any part thereof by Owner;
 - 5. Any review and approval of a Shop Drawing or Sample submittal;
 - 6. The issuance of a notice of acceptability by Engineer;
 - 7. The end of the correction period established in Paragraph 15.08;
 - 8. Any inspection, test, or approval by others; or

9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 Delegation of Professional Design Services

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.

E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:

1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

- A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.

- B. *Change Proposal Procedures*

- 1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
- 2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

- 3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
- 4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change

Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge

and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 - 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
 5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are

consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

- 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.

c. *Construction Equipment Rental*

- 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
 - 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
 - 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
 - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded:* The term Cost of the Work does not include any of the following items:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
 - 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
 - 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 - 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 - 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 - 6. Expenses incurred in preparing and advancing Claims.
 - 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee*
- 1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
 - 2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change

Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

- E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision

thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 Defective Work

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs,

losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work,

or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 - 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation

establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

- b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time

submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without

significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

- d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. *Final Payment Becomes Due:* Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim,

appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.

- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,

attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The

provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 - 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
 - 1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 - 2. agree with the other party to submit the dispute to another dispute resolution process; or
 - 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
 - 1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 - 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 - 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared By



Endorsed By



Copyright© 2018

National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

The copyright for this EJCDC document is owned jointly by the three sponsoring organizations listed above. The National Society of Professional Engineers is the Copyright Administrator for the EJCDC documents; please direct all inquiries regarding EJCDC copyrights to NSPE.

NOTE: EJCDC publications may be purchased at www.ejcdc.org, or from any of the sponsoring organizations above.

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

	Page
ARTICLE 5 – Site, Subsurface and Physical Conditions, Hazardous Environmental Conditions.....	1
ARTICLE 6 – Bonds and Insurance.....	1
ARTICLE 7 – Contractor’s Responsibilities.....	2
ARTICLE 17 – Final Resolutions of Disputes	3
ARTICLE 19 –FEDERAL REQUIREMENTS	4

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement EJCDC® C-700, Standard General Conditions of the Construction Contract (2018). The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added—for example, "Paragraph SC-4.05."

ARTICLE 5 – SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

5.03 *Subsurface and Physical Conditions*

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D:

- C. The following reports of explorations and tests of subsurface conditions at or adjacent to the Site are known to Owner:
 - 1. February 3, 2025 Geotechnical Investigation and Recommendations

ARTICLE 6 – BONDS AND INSURANCE

6.03 *Contractor's Insurance*

SC-6.03 Supplement Paragraph 6.03 with the following provisions after Paragraph 6.03.C:

- D. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:
 - 1. Workers' Compensation, and related coverages under Paragraphs 6.03.A.1 and A.2 of the General Conditions:

State:	<u>Statutory</u>
Federal, if applicable (e.g., Longshoreman's):	<u>Statutory</u>
Employer's Liability:	
Bodily injury, each accident	<u>\$1,000,000</u>
Bodily injury by disease, each employee	<u>\$1,000,000</u>
Bodily injury/disease aggregate	<u>\$1,000,000</u>

2. Contractor's Commercial General Liability under Paragraphs 6.03.B and 6.03.C of the General Conditions:

General Aggregate	<u>\$2,000,000</u>
Products - Completed Operations Aggregate	<u>\$1,000,000</u>
Personal and Advertising Injury	<u>\$1,000,000</u>
Each Occurrence (Bodily Injury and Property Damage)	<u>\$1,000,000</u>

3. Automobile Liability under Paragraph 6.03.D. of the General Conditions:

Combined Single Limit	<u>\$1,000,000</u>
-----------------------	--------------------

4. Excess or Umbrella Liability:

Per Occurrence	<u>\$2,000,000</u>
General Aggregate	<u>\$2,000,000</u>

5. Contractor's Pollution Liability:

Each Occurrence	<u>NA</u>
General Aggregate	<u>NA</u>

6. Additional Insureds: In addition to Owner and Engineer, include as additional insureds the following:

- a. City of Bethel
- b. DOWL
- c. EDC

7. Contractor's Professional Liability:

Each Claim	<u>NA</u>
Annual Aggregate	<u>NA</u>

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.03 Labor; Working Hours

SC-7.03 Amend the first and second sentences of Paragraph 7.03.C to state "...all Work at the Site must be performed during regular working hours."

SC-7.03 Add the following new subparagraphs immediately after Paragraph 7.03.C:

1. Regular working hours will be 7:00 am to 7:00 pm.

7.13 *Safety and Protection*

SC-7.13 Insert the following after the second sentence of Paragraph 7.13.G:

The Contractor is to prepare and maintain a project specific health and safety plan. The health and safety plan will be subject to review and approval by Owner and Engineer.

ARTICLE 17 – FINAL RESOLUTIONS OF DISPUTES

SC-17.02 Add the following new paragraph immediately after Paragraph 17.01.

17.02 *Arbitration*

- A. All matters subject to final resolution under this Article will be settled by arbitration administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules (subject to the conditions and limitations of this Paragraph SC-17.02). Any controversy or claim in the amount of \$100,000 or less will be settled in accordance with the American Arbitration Association's supplemental rules for Fixed Time and Cost Construction Arbitration. This agreement to arbitrate will be specifically enforceable under the prevailing law of any court having jurisdiction.
- B. The demand for arbitration will be filed in writing with the other party to the Contract and with the selected arbitration administrator, and a copy will be sent to Engineer for information. The demand for arbitration will be made within the specific time required in Article 17, or if no specified time is applicable within a reasonable time after the matter in question has arisen, and in no event will any such demand be made after the date when institution of legal or equitable proceedings based on such matter in question would be barred by the applicable statute of limitations.
- C. The arbitrator(s) must be licensed engineers, contractors, attorneys, or construction managers. Hearings will take place pursuant to the standard procedures of the Construction Arbitration Rules that contemplate in-person hearings. The arbitrators will have no authority to award punitive or other damages not measured by the prevailing party's actual damages, except as may be required by statute or the Contract. Any award in an arbitration initiated under this clause will be limited to monetary damages and include no injunction or direction to any party other than the direction to pay a monetary amount.
- D. The Arbitrators will have the authority to allocate the costs of the arbitration process among the parties, but will only have the authority to allocate attorneys' fees if a specific Law or Regulation or this Contract permits them to do so.
- E. The award of the arbitrators must be accompanied by a reasoned written opinion and a concise breakdown of the award. The written opinion will cite the Contract provisions deemed applicable and relied on in making the award.

- F. The parties agree that failure or refusal of a party to pay its required share of the deposits for arbitrator compensation or administrative charges will constitute a waiver by that party to present evidence or cross-examine witness. In such event, the other party shall be required to present evidence and legal argument as the arbitrator(s) may require for the making of an award. Such waiver will not allow for a default judgment against the non-paying party in the absence of evidence presented as provided for above.
- G. No arbitration arising out of or relating to the Contract will include by consolidation, joinder, or in any other manner any other individual or entity (including Engineer, and Engineer's consultants and the officers, directors, partners, agents, employees or consultants of any of them) who is not a party to this Contract unless:
 - 1. the inclusion of such other individual or entity will allow complete relief to be afforded among those who are already parties to the arbitration;
 - 2. such other individual or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration, and which will arise in such proceedings;
 - 3. such other individual or entity is subject to arbitration under a contract with either Owner or Contractor, or consents to being joined in the arbitration; and
 - 4. the consolidation or joinder is in compliance with the arbitration administrator's procedural rules.
- H. The award will be final. Judgment may be entered upon it in any court having jurisdiction thereof, and it will not be subject to modification or appeal, subject to provisions of the Laws and Regulations relating to vacating or modifying an arbitral award.
- I. Except as may be required by Laws or Regulations, neither party nor an arbitrator may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties, with the exception of any disclosure required by Laws and Regulations or the Contract. To the extent any disclosure is allowed pursuant to the exception, the disclosure must be strictly and narrowly limited to maintain confidentiality to the extent possible.

SC-19 Add the following new article immediately after Article 18:

ARTICLE 19 –FEDERAL REQUIREMENTS

- ~~19.01 The Project has been funded wholly or in part by the United States Environmental Protection Agency. The contents of the Bidding Documents do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does the Environmental Protection Agency endorse trade names or recommend the use of commercial products mentioned in this document.~~
- 19.02 The Contractor shall comply with all applicable federal statutes, regulations, ordinances and codes, whether or not specifically mentioned herein including:
 - A. Americans with Disabilities Act of 1990
 - B. Section 504 of the Rehabilitation Act of 1973

- C. Title VI of the Civil Rights Act of 1965
- D. Age Discrimination Act of 1975
- E. Equal Employment Opportunity Executive Orders
- F. Copeland Anti-Kickback Act
- G. Davis-Bacon Act
- H. Contract Work Hours and Safety Standards Act
- I. Debarment and Suspension Executive Order 1259
- J. Bayh-Dole Act
- K. Byrd Anti-Lobbying Amendment
- L. Drug Free Workplace Act
- M. Hotel-Motel Fire Safety Act
- N. Clean Air and Clean Water Act
- O. 2 CFR 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements

- 19.02 — ~~The Contractor shall place a sign at the Site that displays the Environmental Protection Agency Logo in a manner that informs the public that the project is funded in wholly or in part by the Environmental Protection Agency. The sign must be placed in a visible location that can be directly linked to the work taking place and must be maintained in good condition throughout the construction period. Sign specifications are available at: <https://www.epa.gov/grants/epa-logo-seal-specifications-signage-produced-epa-assistance-agreement-recipients>~~
- 19.03 — ~~The Contractor shall comply with the requirements of the Environmental Protection Agency's Disadvantaged Business Enterprise Program contained in 40 CFR Part 33 and described at: <https://www.epa.gov/grants/disadvantaged-business-enterprise-program-requirements>~~
- 19.04 — ~~The Contractor shall notify the Owner and Engineer immediately upon determination of any Conflict of Interest as defined and described in the Environmental Protection Agency's Conflict of Interest policy found at: <https://www.epa.gov/grants/epas-financial-assistance-conflict-interest-policy>~~

SIGNATURE AND VERIFICATION OF ANTI-COLLUSION

By signing below, I hereby acknowledge the following:

1. Bidder, nor any of their representatives or third party mandated by Bidder, has attempted to contact City representatives or members of the selection committee for the purpose of influencing their choice, judgment or recommendation relating to the contract, or with members of the City Council to influence their decision.
2. Bidder has produced the bid package without collusion, communication, agreement or arrangement with a competitor with regards to price, methods, factors or formulas for setting prices, to the decision to submit a bid package or to present a bid package that does not comply, directly or indirectly, with specifications contained in the Request for Bids.
3. Neither the Bidder nor any of its representatives engaged in discrimination, intimidating measures, influence peddling or corruption or entered into any form of collusion, communication, agreement or arrangement with other suppliers or third parties relating to a contract with the City of Bethel.
4. If selected, neither Bidder nor any of its representatives will engage in discriminating against any person because of race, color, religion (creed), gender, gender expression or identity, age, national origin (ancestry), disability, marital status, sexual orientation, military status, political affiliation, or any other status protected by law.
5. Failure to complete and attach this sworn declaration shall result in automatic rejection of the bid.
6. In the event that the Bidder, or a representative or third party mandated by them, has violated any of the statements above, the Bidder's proposal shall be automatically rejected.
7. The City may cancel a contract that has been awarded if the City becomes aware, during the course of the contract, of a situation contravening any sworn statement required by this section.

Signature

Date

Printed Name

ALASKA NOTARY ACKNOWLEDGMENT

State of Alaska

Judicial District or County

of Or Municipality of

On this [DATE], before me, the undersigned notary public, personally appeared: [SIGNER'S NAME] known to me to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged that he/she/they executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Signature of Person Taking Acknowledgment

Title or Rank: _____

Serial Number, if any: _____

My Commission Expires: _____

**SECTION 01 00 00
GENERAL REQUIREMENTS**

PART 1 - SCOPE OF WORK

1.01 PROJECT INFORMATION

- A. Project Identification: City of Bethel, Bethel Ptarmigan Street Culvert Crossings
- B. Owner: City of Bethel Public Works Department.
 - 1. City's Representative: William Arnold
- C. Engineer: DOWL, LLC
 - 1. Project Engineer Representative: DOWL 5015 Business Park, Suite 4000, Anchorage AK 99503. Phone Number: 907-562-2000.

1.02 GENERAL

The Project consists of removal of damaged wall sections, concrete repairs, and installation of new steel structural upgrades.

1.03 CONTRACTOR USE OF SITE AND PREMISES

- A. Restricted Use of Site: Contractor shall not disturb portions of the roadway or private property beyond the easements and project site in which Work is indicated.
 - a. Driveways, walkways, and entrances to buildings shall be kept clear and available to the City, City personnel and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
 - b. NOTE: Contractor shall familiarize themselves with the site conditions and plan accordingly.

1.04 PUBLIC RELATIONS

- A. The Contractor shall communicate to the public any road closures, driveway closures or other traffic control impacts on the community.
- B. Contractor shall familiarize themselves with the area and plan accordingly.

PART 2 - PRE-CONSTRUCTION REQUIREMENTS

- 2.01** Photographs and videos will be taken showing details of existing conditions to ensure complete restoration after the project.
- 2.02** City of Bethel bears sole responsibility for keeping the rights-of-way and easements clean of debris, dirt, and gravel during construction.

PART 3 - EXTRA OR DISPUTED WORK REPORTS

- 3.01** If payment for work performed is to be based on time and materials, or if a claim is contemplated in which time and material reports would assist in settling the claim, the Contractor shall maintain adequate records on the Daily Report forms available from the

Engineer. The reported work shall have the Engineer's and/or Resident Project Representative's signature to indicate his concurrence prior to being submitted to the Engineer or Contract Administrator within 48 hours of the time the work was performed. Concurrence by the Resident Project Representative does not indicate agreement to or authorization of "extra work" or "extra payment" but rather indicates agreement that the work effort recorded during that time period was in fact done.

PART 4 - MATERIAL TESTING AND INSPECTION

4.01 CONTRACTOR'S OBLIGATION

- A. The Contractor shall obtain and pay for all testing that may be necessary to qualify Contractor-furnished materials for use in the work. This shall include material quality tests, mix designs, equipment and plant calibration, and other similar tests required to qualify Contractor-furnished materials for compliance with the specifications. The Contractor shall submit test results to the Engineer sufficiently in advance of the work so that approval to proceed is received by the Contractor prior to using that material in the work.
- B. Samples of material required for testing shall be furnished by the Contractor.
- C. The Contractor is responsible for coordinating with the Resident Project Representative and requesting all testing, including any field testing paid for by the Owner.
- D. The Contractor shall pay for all failing field tests performed to monitor construction control of the materials used in the work.
- E. Payment for failing field tests will be deducted from any amounts due or to become due to the Contractor.
- F. Contractor to verify the Owner supplied items are not damaged or defective. Damage and defective items shall not be used for this project.

4.02 OWNER'S OBLIGATION

- A. The Owner will be paying for periodic Engineer inspections during the construction.

PART 5 - WEATHER LIMITATIONS

The Contractor shall protect each increment of completed work against detrimental effects due to weather, by approved methods. Any increment of completed work that is damaged by freezing or rain, shall be reconditioned, reshaped, re-compacted, or replaced by the Contractor in conformance with the requirements of this specification without additional cost to the Owner.

PART 6 - NOTICE TO BE GIVEN

6.01 Contractor shall notify the Engineer's Resident Project Representative at least 24 hours prior to the following:

- A. Disruptions in utility services.
- B. Any Material or Quality Control Testing as indicated in the Specifications.
- C. Needs for Traffic Control.

PART 7 - LABOR STANDARDS, REPORTING, AND PREVAILING WAGE RATES DETERMINATIONS

The prevailing wage rates of the State of Alaska apply to this contract as do any requirements of the State of Alaska associated with the use of these State prevailing wages.

PART 8 - AS-BUILTS**9.01 GENERAL**

The Contractor shall provide the Owner as-built information on all construction. This information will include copies of the Contractor's field survey notes and a set of the Drawings red-lined with as-built information. Items to be as-built by the Contractor include any item that deviates from the plans or is Contractor designed, or other information required to ensure a complete and accurate set of record drawings are delivered to the Owner.

END OF SECTION 01 00 00

SUPPLEMENTARY INFORMATION

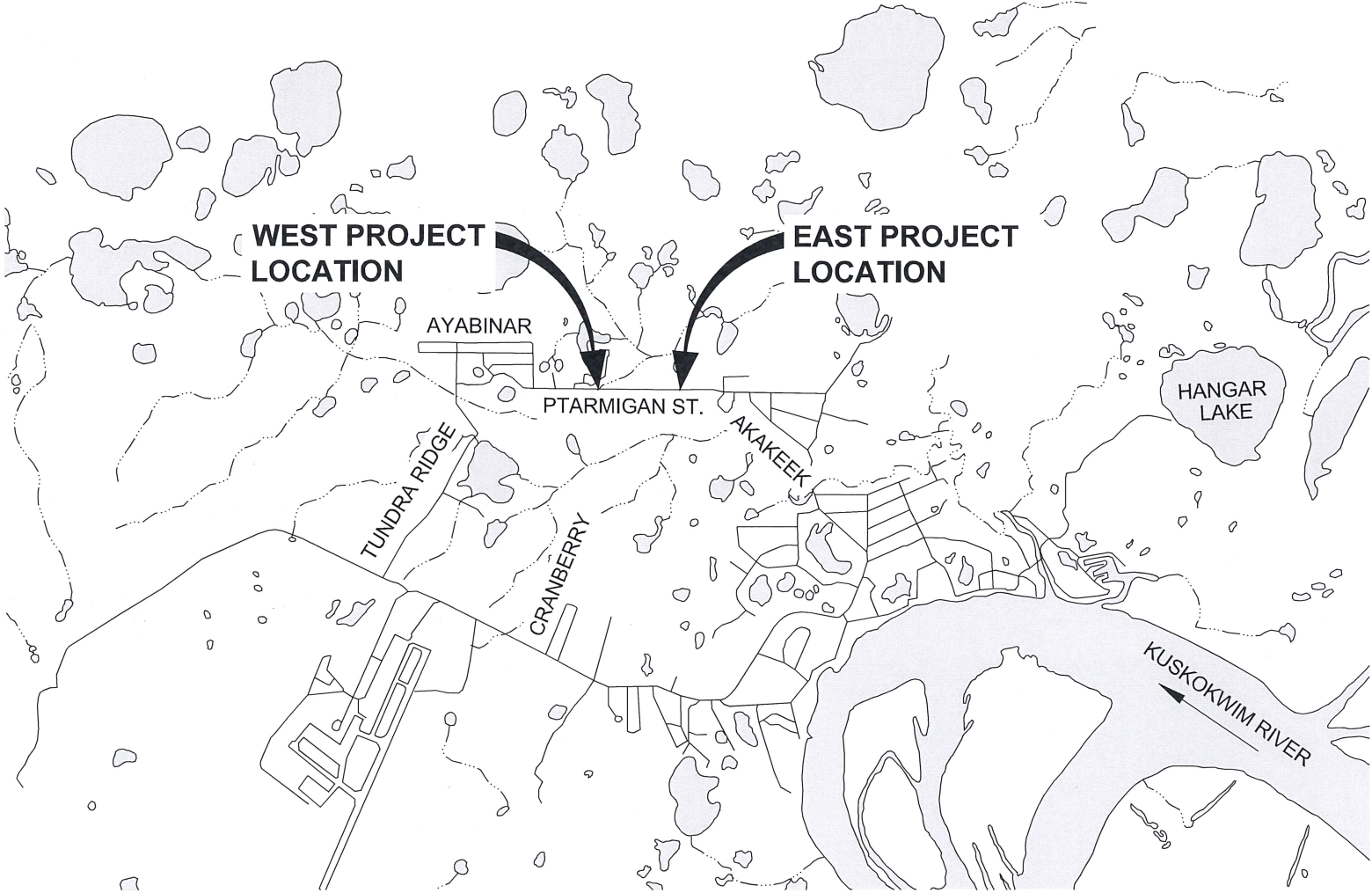
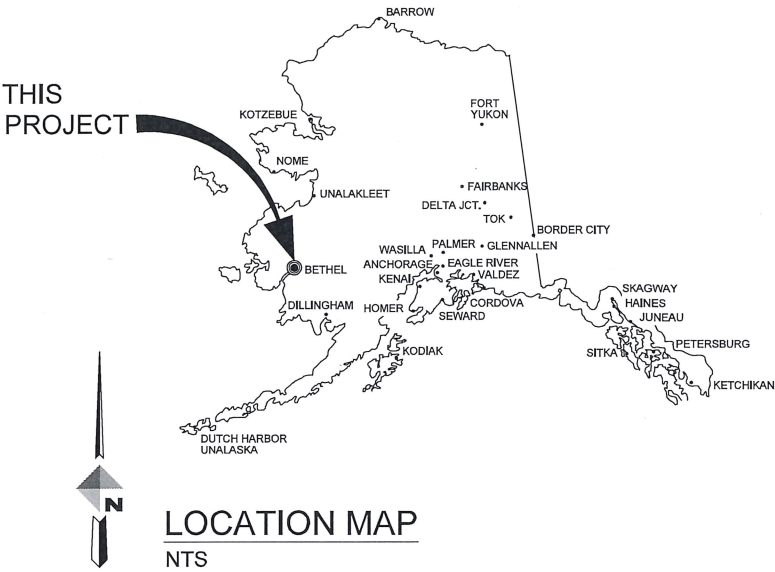
CONTRACT DRAWINGS FOR

PTARMIGAN STREET CULVERT CROSSINGS

PTARMIGAN CREEK

CITY OF BETHEL

SECTION 6, TOWNSHIP 8 NORTH, RANGE 71 WEST, SEWARD MERIDIAN, ALASKA
APRIL 2025

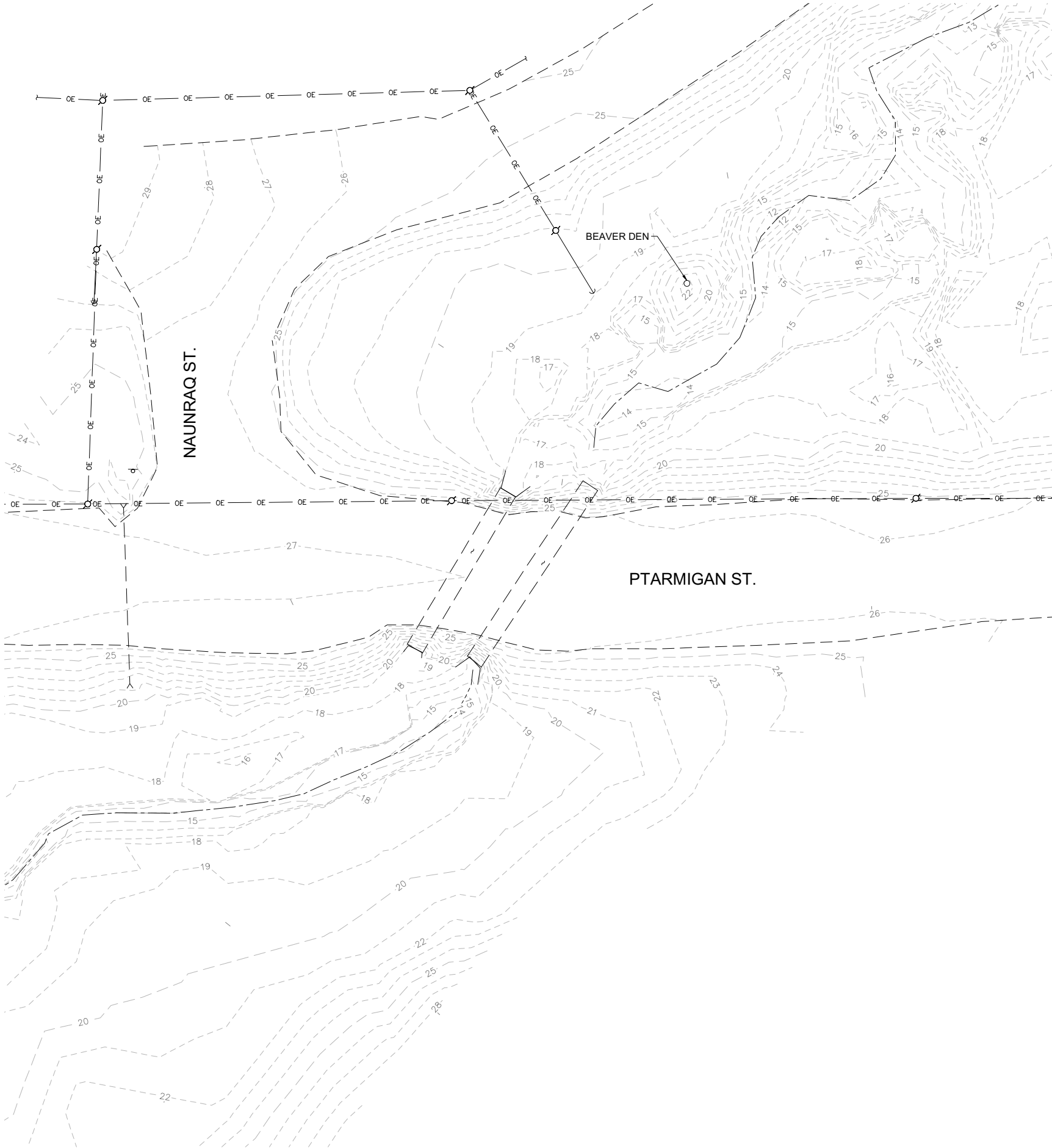


VICINITY MAP
NTS

PROJECT	LOCATION	WATERBODY NAME	ADF&G ANADROMOUS WATERS CATALOG CODE
WEST CULVERT	PTARMIGAN ST.	PTARMIGAN CREEK	335-10-16600-2621-3020
EAST CULVERT			

DRAWING INDEX	
C1	COVER SHEET
C2	GENERAL NOTES AND QUANTITIES
C3	SURVEY CONTROL - WEST CULVERT
C4	SURVEY CONTROL - EAST CULVERT
C5	EXISTING STREAM PLAN AND PROFILE - WEST CULVERT
C6	EXISTING STREAM PLAN AND PROFILE - EAST CULVERT
C7	STREAM PLAN AND PROFILE - WEST CULVERT
C8	STREAM PLAN AND PROFILE - EAST CULVERT
C9	ROADWAY PLAN AND PROFILE
C10	GRADING PLAN
C11	DETAILS AND TYPICAL SECTIONS
C12	ESCP & STREAM DIVERSION PLAN
C13	REVEGETATION PLAN
C14	BANK RECONSTRUCTION
C15	CULVERT MARKER POST

C:\dowl_pw\40418828\C3-SA-CH-WA-50305.dwg PLOT DATE 2025-3-31 08:40 SAVED DATE 2025-03-31 08:39 USER: tgrab



SURVEY CONTROL NOTES:

HORIZONTAL CONTROL

COORDINATE SYSTEM:

THIS PROJECT IS LOCATED ENTIRELY WITHIN THE KUSKOKWIM RIVER 2015 LOW DISTORTION PROJECTION (LDP) COORDINATE SYSTEM. THIS LDP WAS DEVELOPED IN 2015 BY THE STATE OF ALASKA DOT&PF CENTRAL REGION SURVEY SECTION. THIS LDP COVERS COMMUNITIES ON AND AROUND THE LOWER KUSKOKWIM RIVER FROM THE RIVER'S MOUTH TO THE COMMUNITY OF CHUATHBALUK. BERING SEA COASTAL COMMUNITIES FROM CHEFORNAK TO KONGIGANAK ARE ALSO INCLUDED.

BASIS OF COORDINATES:

THE BASIS OF COORDINATES IS NGS STATION BET C (PID:DF3624) PROJECT POINT 553. SAID STATION IS LOCATED WITHIN THE FENCED AREA OF THE BETHEL AIRPORT AND HAS A NAD83(2011) POSITION OF LATITUDE 60°47'03.11084" N, LONGITUDE 161°50'08.36533" W, ELLIPSOID HEIGHT 42.527 METERS. BET C HAS PROJECT COORDINATES OF N 1034266.0570, E 582894.7332 U.S. FEET.

BASIS OF BEARINGS:

THE BASIS OF BEARINGS IS A LOCAL PLANE BEARING BETWEEN NGS STATION BET C (PID: DF3624) AND NGS STATION BET B (PID: DF3623). NGS STATION BET B BEARS S 25°34'22.5" W A DISTANCE OF 2672.876 FEET FROM NGS STATION BET C, ALL AS DETERMINED BY STATIC GNSS TECHNIQUES. NGS STATION BET B HAS PROJECT COORDINATES OF N 1031854.9671, E 581740.9628 U.S. FEET.

TRANSLATION PARAMETERS:

KUSKOKWIM RIVER 2015 LDP PARAMETERS

LINEAR UNIT: U.S. SURVEY FEET

DATUM: NAD83(2011)

ELLIPSOID: GRS80

PROJECTION: HOTINE OBLIQUE MERCATOR

LATITUDE OF CENTER: 60°40'00" N

LONGITUDE OF CENTER: 162°00'00" W

AZIMUTH: 50°00'00"

FALSE NORTHING: -15,500,000.0'

FALSE EASTING: -19,100,000.0'

GRID SCALE FACTOR: 1.000002 (EXACT)

VERTICAL CONTROL

BASIS OF VERTICAL IS LOCAL MEAN TIDE LEVEL, AS DETERMINED FROM LEVELS PERFORMED BY ALASKA DOT&PF BETWEEN TIDAL BENCHMARK NO.6 (1970) AND TIDAL BENCHMARK NO.7 (1970). A DATUM ADJUSTMENT OF -1.55 FEET WAS APPLIED TO THE PUBLISHED MLLW ELEVATIONS PER NOAA/NOS PUBLICATION OF 1/22/71, TO ARRIVE AT PROJECT MEAN TIDE VALUES.

[601]BENCHMARK NO.6 (1970): A BRASS DISK ON COPPER COATED ROD, ENCASED IN A 4" CONCRETE PIPE BROKEN OFF AT CAP LEVEL, IS LOCATED +/-400 FEET WESTERLY ALONG THIRD AVENUE (HOFFMAN HIGHWAY) FROM ITS INTERSECTION WITH MAIN STREET, +/-53 FEET SOUTH OF CENTERLINE, +/-20 FEET SOUTH OF UTILITY POLE #L1P70 AND +/-15 FEET NORTH OF THE MIDDLE OF A 2-STORY WOOD BUILDING. ELEVATION = 19.97 FEET (USED THIS SURVEY)

BENCHMARK NO.7 (1970): A BRASS DISK ON A COPPER COATED ROD, ENCASED IN A 4" CONCRETE PIPE BROKEN OFF 0.4' BELOW CAP LEVEL, IS LOCATED +/-750 FEET WESTERLY ALONG FOURTH AVENUE FROM ITS INTERSECTION WITH MAIN STREET AND +/-8 FEET NORTH OF THE SOUTHEAST CORNER OF THE BOTTOM STEP LEADING TO THE MAIN ENTRANCE OF THE NATIONAL GUARD ARMORY (UNDER AN ELEVATED, METAL GRATE WALKWAY). ELEVATION = 25.57 FEET (NOT USED THIS SURVEY)

[554]BENCHMARK PS-3(2003): A BRASS CAP IN A BROKEN PVC PIPE FLUSH IN GROUND, IS LOCATED +/-23 FEET SOUTHWEST FROM THE EDGE OF TUNDRA RIDGE ROAD AND +/-27 FEET NORTHWEST FROM THE EDGE OR GEORGE STREET. ELEVATION = 37.58 FEET (USED THIS SURVEY)

VERTICAL CONTROL WAS EXTENDED THROUGHOUT THE PROJECT AREA USING DIFFERENTIAL LEVELING METHODS.

A LEICA DNA10 DIGITAL LEVEL AND LEICA LGO SOFTWARE WERE USED TO CHECK ADJUSTED ELEVATIONS. ELEVATIONS FOR THE LISTED BENCHMARKS WERE PROVIDED TO DOWL BY THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES.

ALL ELEVATIONS ON CONTROL POINTS AND BENCHMARKS NEED TO BE FIELD VERIFIED BEFORE THEY ARE USED.

SURVEY POINTS:

CONTROL MONUMENTS FOUND THIS SURVEY

ID	REC. NORTHING	REC. EASTING	REC. ELEV.	DESCRIPTION
567	1041934.5807	588490.8424	-9999	RCM Fd AM[DOT]: RCM 567
588	1041867.3884	590514.5170	34.83	STS Set AC[12041]: BRR-588
589	1041886.1205	589529.5735	16.03	STS Set AC[12041]: BRR-589

LEGEND

	BUILDING OUTLINE
	OVERHEAD UTILITY LINES
	EDGE OF GRAVEL
	CREEK CENTER/THALWEG
	CULVERT
	MINOR CONTOUR LINE (1')
	MAJOR CONTOUR LINE (5')
	SIGN
	UTILITY POLE
	GUY ANCHOR
	SURVEY MONUMENT FOUND
	SURVEY MONUMENT POINT NUMBER



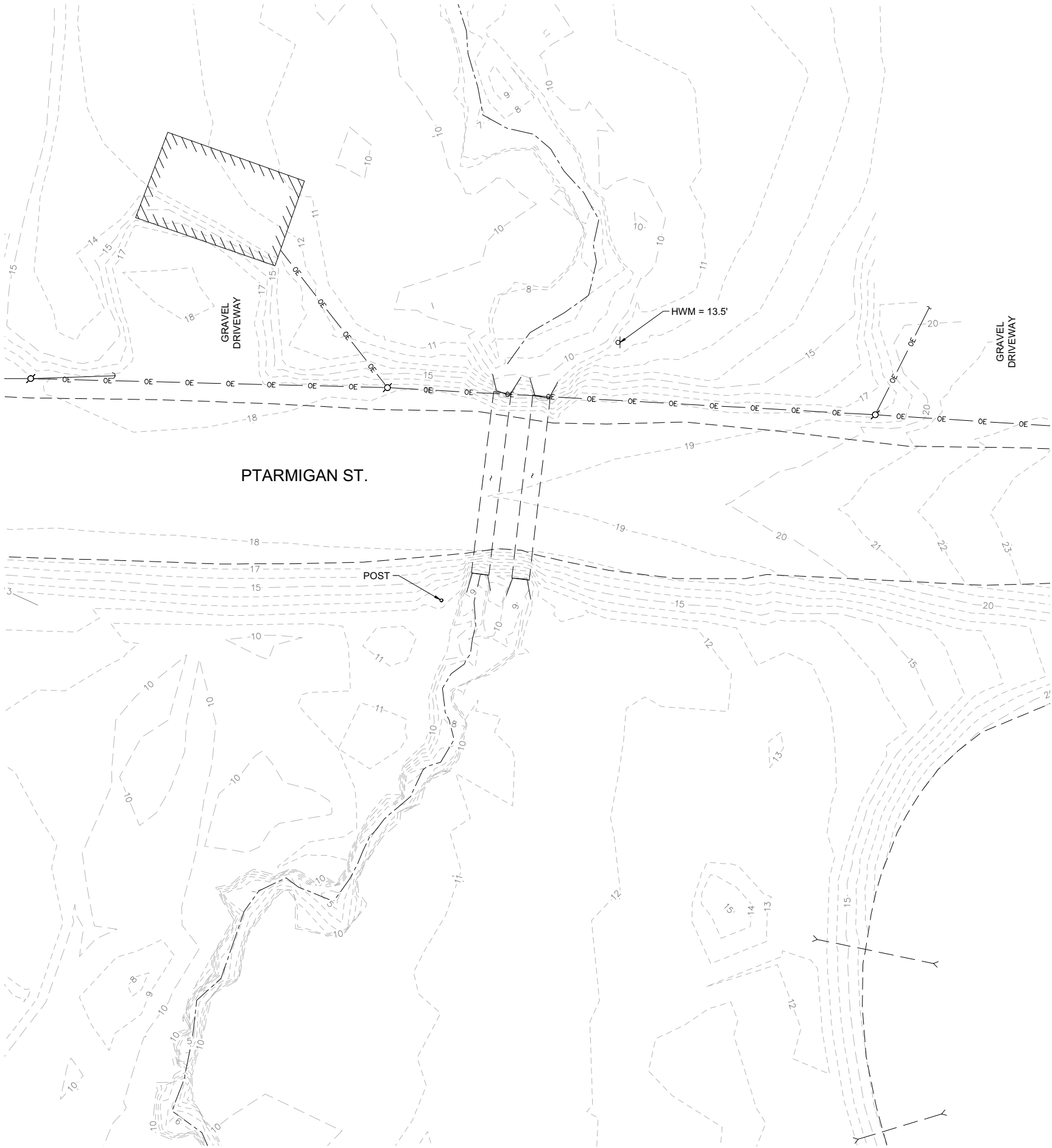
PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
SURVEY CONTROL – WEST CULVERT

PROJECT 1163.50270.68
DATE MARCH 2025

DOWL 2025
SHEET

C3 OF C15

C:\dowl_pw\40418828\C4-SA-CH-WA-50305.dwg PLOT DATE 2025-3-31 08:42 SAVED DATE 2025-03-31 08:41 USER: tgrab



SURVEY CONTROL NOTES:

HORIZONTAL CONTROL

COORDINATE SYSTEM:

THIS PROJECT IS LOCATED ENTIRELY WITHIN THE KUSKOKWIM RIVER 2015 LOW DISTORTION PROJECTION (LDP) COORDINATE SYSTEM. THIS LDP WAS DEVELOPED IN 2015 BY THE STATE OF ALASKA DOT&PF CENTRAL REGION SURVEY SECTION. THIS LDP COVERS COMMUNITIES ON AND AROUND THE LOWER KUSKOKWIM RIVER FROM THE RIVER'S MOUTH TO THE COMMUNITY OF CHUATHBALUK. BERING SEA COASTAL COMMUNITIES FROM CHEFORNAK TO KONGIGANAK ARE ALSO INCLUDED.

BASIS OF COORDINATES:

THE BASIS OF COORDINATES IS NGS STATION BET C (PID:DF3624) PROJECT POINT 553. SAID STATION IS LOCATED WITHIN THE FENCED AREA OF THE BETHEL AIRPORT AND HAS A NAD83(2011) POSITION OF LATITUDE 60°47'03.11084" N, LONGITUDE 161°50'08.36533" W, ELLIPSOID HEIGHT 42.527 METERS. BET C HAS PROJECT COORDINATES OF N 1034266.0570, E 582894.7332 U.S. FEET.

BASIS OF BEARINGS:

THE BASIS OF BEARINGS IS A LOCAL PLANE BEARING BETWEEN NGS STATION BET C (PID: DF3624) AND NGS STATION BET B (PID: DF3623). NGS STATION BET B BEARS S 25°34'22.5" W A DISTANCE OF 2672.876 FEET FROM NGS STATION BET C, ALL AS DETERMINED BY STATIC GNSS TECHNIQUES. NGS STATION BET B HAS PROJECT COORDINATES OF N 1031854.9671, E 581740.9628 U.S. FEET.

TRANSLATION PARAMETERS:

KUSKOKWIM RIVER 2015 LDP PARAMETERS

LINEAR UNIT: U.S. SURVEY FEET

DATUM: NAD83(2011)

ELLIPSOID: GRS80

PROJECTION: HOTINE OBLIQUE MERCATOR

LATITUDE OF CENTER: 60°40'00" N

LONGITUDE OF CENTER: 162°00'00" W

AZIMUTH: 50°00'00"

FALSE NORTHING: -15,500,000.0'

FALSE EASTING: -19,100,000.0'

GRID SCALE FACTOR: 1.000002 (EXACT)

VERTICAL CONTROL

BASIS OF VERTICAL IS LOCAL MEAN TIDE LEVEL, AS DETERMINED FROM LEVELS PERFORMED BY ALASKA DOT&PF BETWEEN TIDAL BENCHMARK NO.6 (1970) AND TIDAL BENCHMARK NO.7 (1970). A DATUM ADJUSTMENT OF -1.55 FEET WAS APPLIED TO THE PUBLISHED MLLW ELEVATIONS PER NOAA/NOS PUBLICATION OF 1/22/71, TO ARRIVE AT PROJECT MEAN TIDE VALUES.

[601]BENCHMARK NO.6 (1970): A BRASS DISK ON COPPER COATED ROD, ENCASED IN A 4" CONCRETE PIPE BROKEN OFF AT CAP LEVEL, IS LOCATED +/-400 FEET WESTERLY ALONG THIRD AVENUE (HOFFMAN HIGHWAY) FROM ITS INTERSECTION WITH MAIN STREET, +/-53 FEET SOUTH OF CENTERLINE, +/-20 FEET SOUTH OF UTILITY POLE #L1P70 AND +/-15 FEET NORTH OF THE MIDDLE OF A 2-STORY WOOD BUILDING. ELEVATION = 19.97 FEET (USED THIS SURVEY)

BENCHMARK NO.7 (1970): A BRASS DISK ON A COPPER COATED ROD, ENCASED IN A 4" CONCRETE PIPE BROKEN OFF 0.4' BELOW CAP LEVEL, IS LOCATED +/-750 FEET WESTERLY ALONG FOURTH AVENUE FROM ITS INTERSECTION WITH MAIN STREET AND +/-8 FEET NORTH OF THE SOUTHEAST CORNER OF THE BOTTOM STEP LEADING TO THE MAIN ENTRANCE OF THE NATIONAL GUARD ARMORY (UNDER AN ELEVATED, METAL GRATE WALKWAY). ELEVATION = 25.57 FEET (NOT USED THIS SURVEY)

[554]BENCHMARK PS-3(2003): A BRASS CAP IN A BROKEN PVC PIPE FLUSH IN GROUND, IS LOCATED +/-23 FEET SOUTHWEST FROM THE EDGE OF TUNDRA RIDGE ROAD AND +/-27 FEET NORTHWEST FROM THE EDGE OR GEORGE STREET. ELEVATION = 37.58 FEET (USED THIS SURVEY)

VERTICAL CONTROL WAS EXTENDED THROUGHOUT THE PROJECT AREA USING DIFFERENTIAL LEVELING METHODS.

A LEICA DNA10 DIGITAL LEVEL AND LEICA LGO SOFTWARE WERE USED TO CHECK ADJUSTED ELEVATIONS. ELEVATIONS FOR THE LISTED BENCHMARKS WERE PROVIDED TO DOWL BY THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES.

ALL ELEVATIONS ON CONTROL POINTS AND BENCHMARKS NEED TO BE FIELD VERIFIED BEFORE THEY ARE USED.

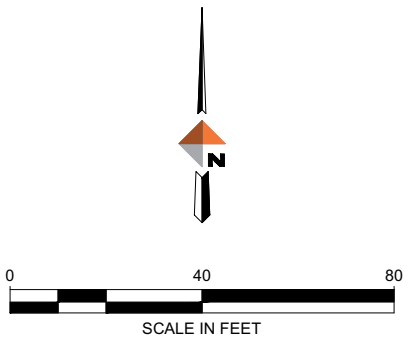
SURVEY POINTS:

CONTROL MONUMENTS FOUND THIS SURVEY

ID	REC. NORTHING	REC. EASTING	REC. ELEV.	DESCRIPTION
567	1041934.5807	588490.8424	-9999	RCM Fd AM[DOT]: RCM 567
588	1041867.3884	590514.5170	34.83	STS Set AC[12041]: BRR-588
589	1041886.1205	589529.5735	16.03	STS Set AC[12041]: BRR-589

LEGEND

	BUILDING OUTLINE
	OVERHEAD UTILITY LINES
	EDGE OF GRAVEL
	CREEK CENTER/THALWEG
	CULVERT
	MINOR CONTOUR LINE (1')
	MAJOR CONTOUR LINE (5')
	SIGN
	UTILITY POLE
	GUY ANCHOR
	SURVEY MONUMENT FOUND
	SURVEY MONUMENT POINT NUMBER



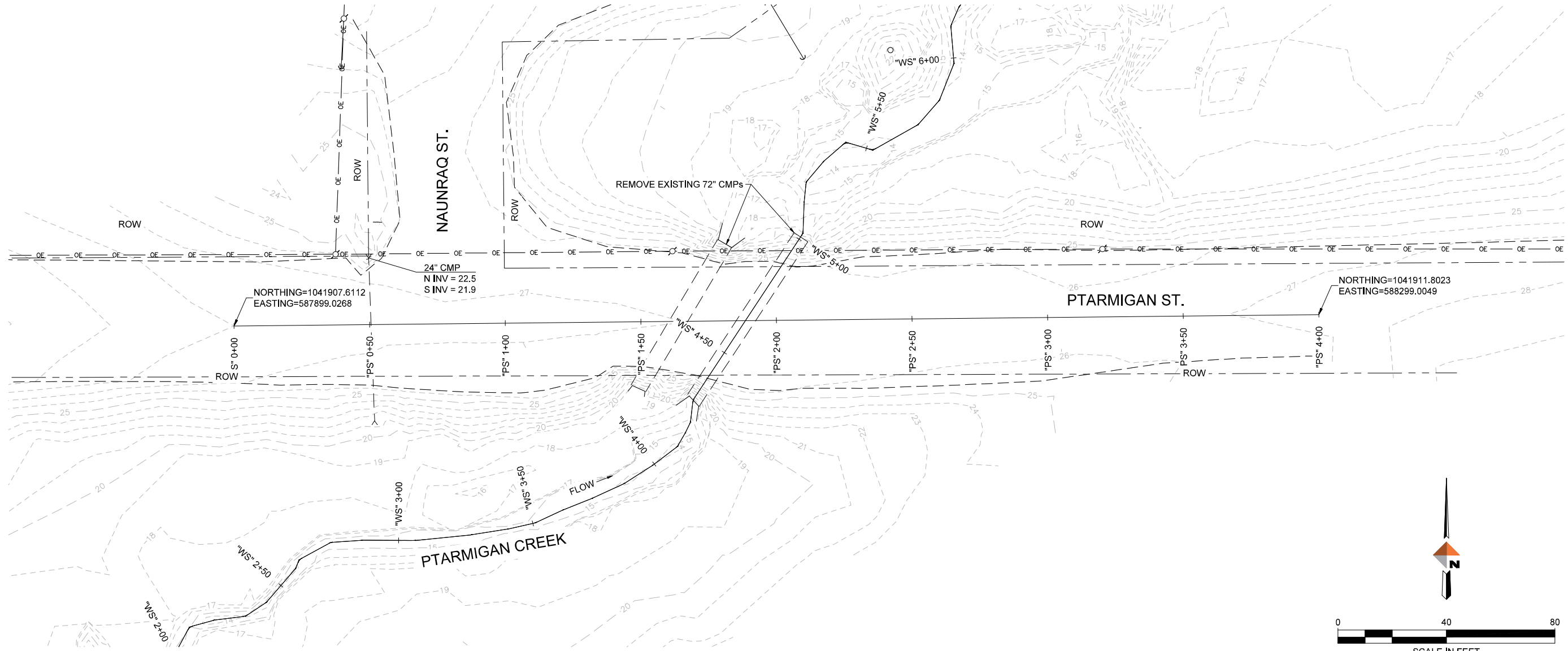
PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
SURVEY CONTROL – EAST CULVERT

PROJECT 1163,50270.68
DATE MARCH 2025

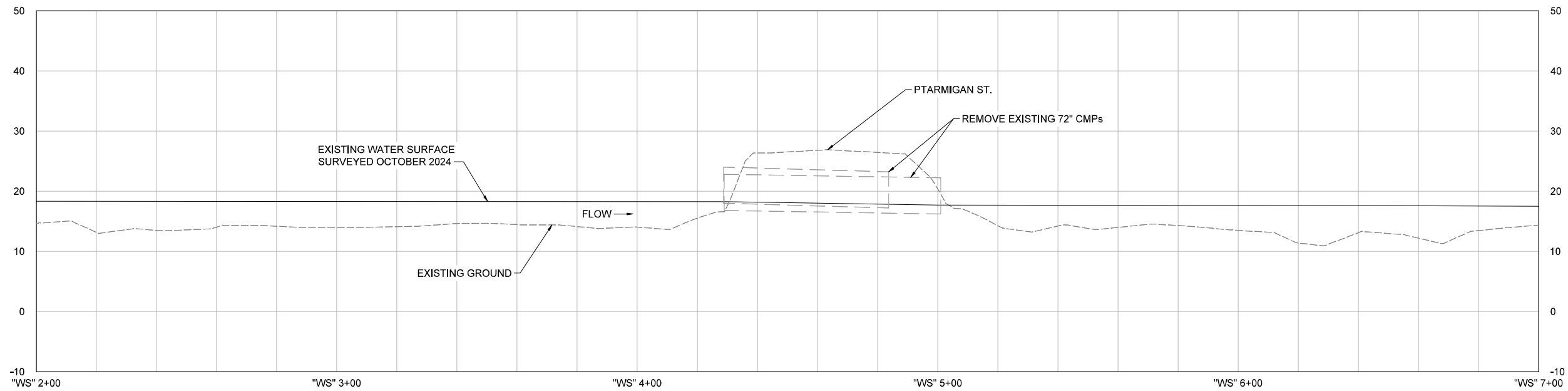
DOWL 2025
SHEET

C4 OF C15

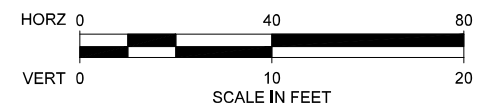
C:\dowl_pw\0418828\C5-SA-CH-WA-50305.dwg PLOT DATE 2025-4-3 13:17 SAVED DATE 2025-04-03 13:16 USER: tgrab



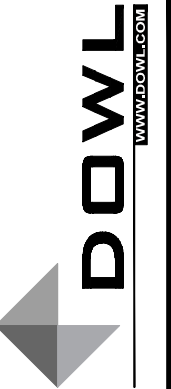
PLAN



PROFILE



REV	DATE	DESCRIPTION	BY



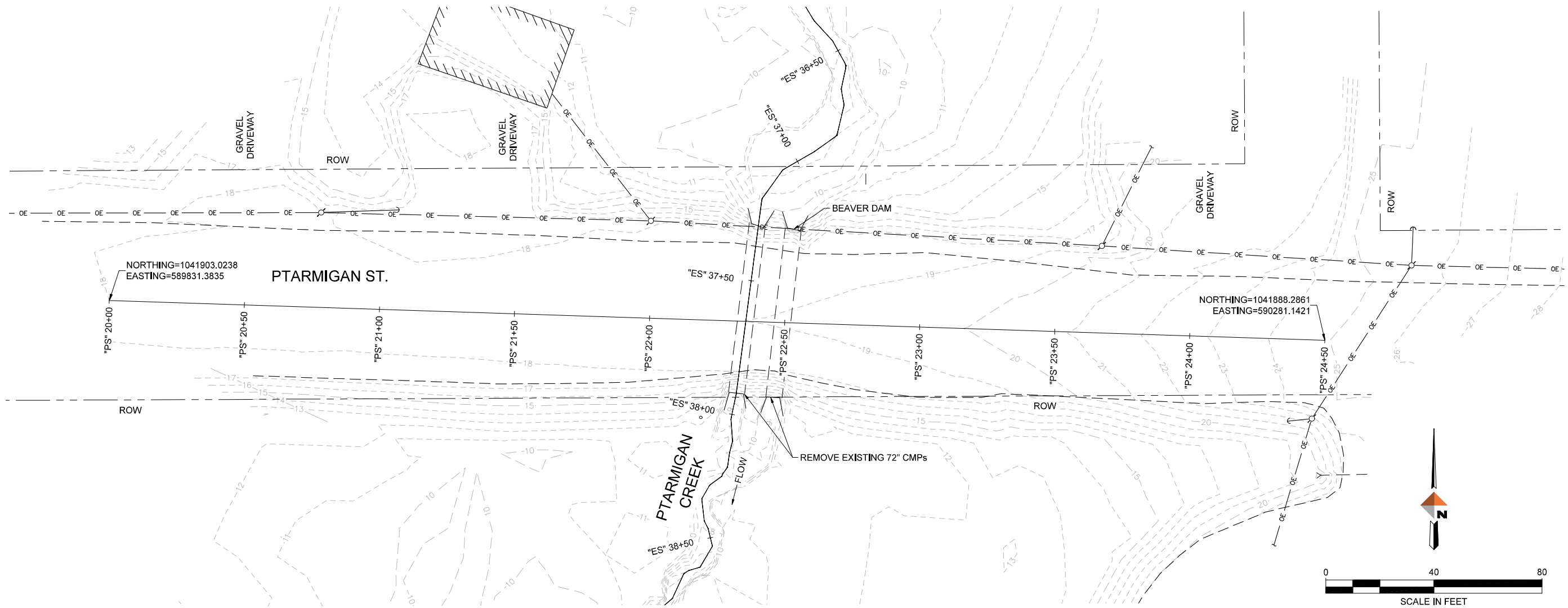
PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
EXISTING STREAM PLAN AND PROFILE
WEST CULVERT
BETHEL, ALASKA

PROJECT 1163.50270.68
DATE APRIL 2025

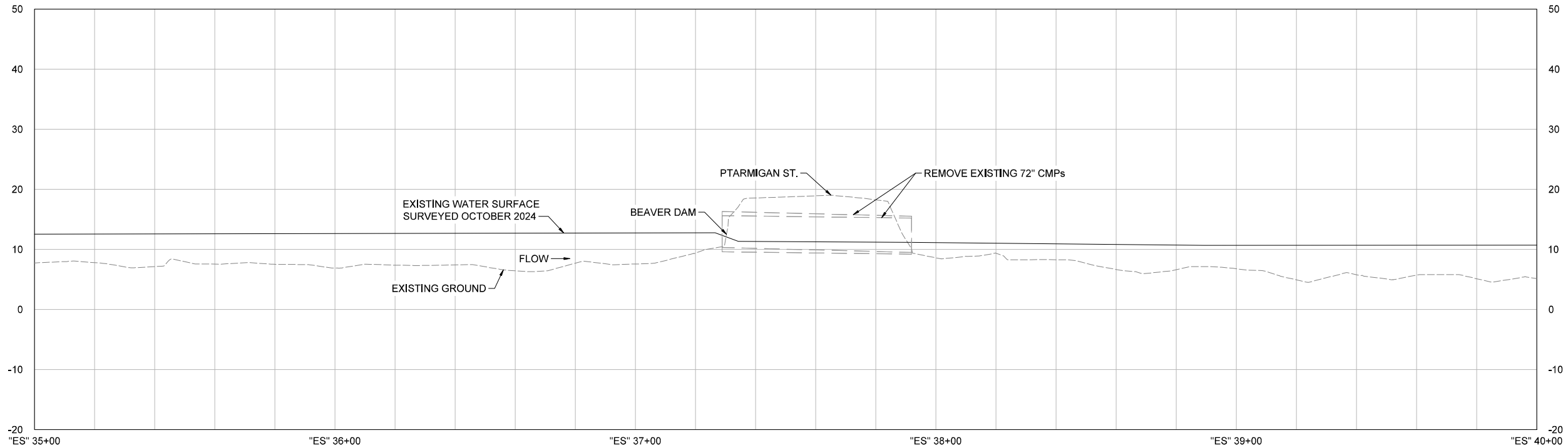
© DOWL 2025
SHEET

C5 OF C15

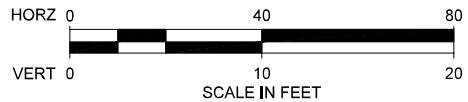
C:\dowl_pw\0418828\C6-SA-CH-WA-50305.dwg PLOT DATE 2025-4-3 13:19 SAVED DATE 2025-04-03 13:18 USER: tgarab



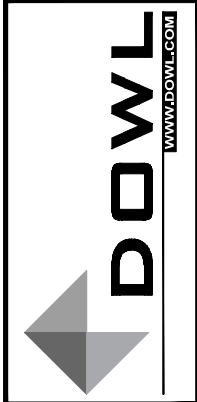
PLAN



PROFILE



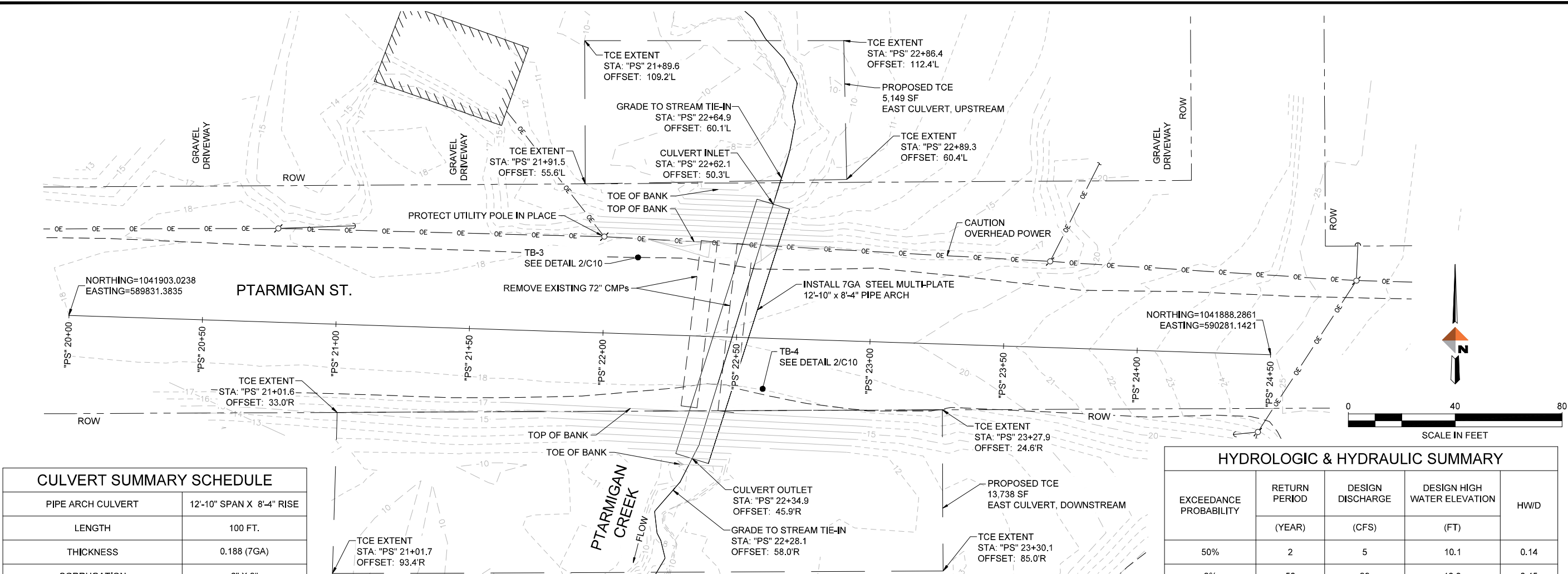
REVISIONS		DESCRIPTION	BY
REV	DATE		



PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
EXISTING STREAM PLAN AND PROFILE
EAST CULVERT
BETHEL, ALASKA

PROJECT 1163.50270.68
DATE APRIL 2025
© DOWL 2025
SHEET
C6 OF C15

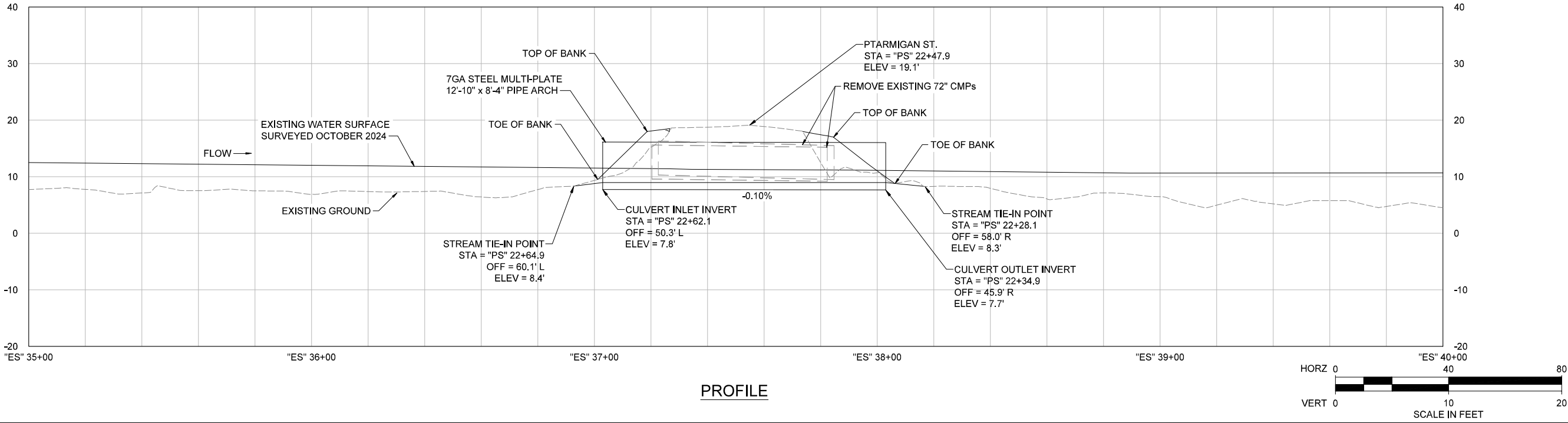
C:\dowl_pw\0418828\08-SA-CH-WA-50305.dwg PLOT DATE 2025-4-3 13:28 SAVED DATE 2025-04-02 17:53 USER: tgrdb



CULVERT SUMMARY SCHEDULE	
PIPE ARCH CULVERT	12'-10" SPAN X 8'-4" RISE
LENGTH	100 FT.
THICKNESS	0.188 (7GA)
CORRUGATION	6" X 2"
MATERIAL	GALVANIZED STEEL
SLOPE	0.1%
LOADING	HL-93
"PS" CL STATION	22+47.9

CONTROL POINT TABLE			
POINT	NORTHING	EASTING	ELEVATION
E CULVERT INLET INVERT	1041945.209	590100.646	0.0
E CULVERT OUTLET INVERT	1041849.417	590064.619	7.7

HYDROLOGIC & HYDRAULIC SUMMARY				
EXCEEDANCE PROBABILITY	RETURN PERIOD	DESIGN DISCHARGE	DESIGN HIGH WATER ELEVATION	HWD
	(YEAR)	(CFS)	(FT)	
50%	2	5	10.1	0.14
2%	50	29	12.2	0.45
1%	100	39	13.0	0.55
DRAINAGE AREA = 8.8 SQUARE MILES				
ANTICIPATED ADDITIONAL BACKWATER = 0 FEET				
ROADWAY OVERTOPPING Q = 126.15 CFS				



REV

DATE

DESCRIPTION

BY

STATE OF ALASKA

49TH

REG-ANGUS WALLED

CE 180639

REGISTERED PROFESSIONAL ENGINEER

03/01/25

DOWL

WWW.DOWL.COM

PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
STREAM PLAN AND PROFILE
EAST CULVERT
BETHEL, ALASKA

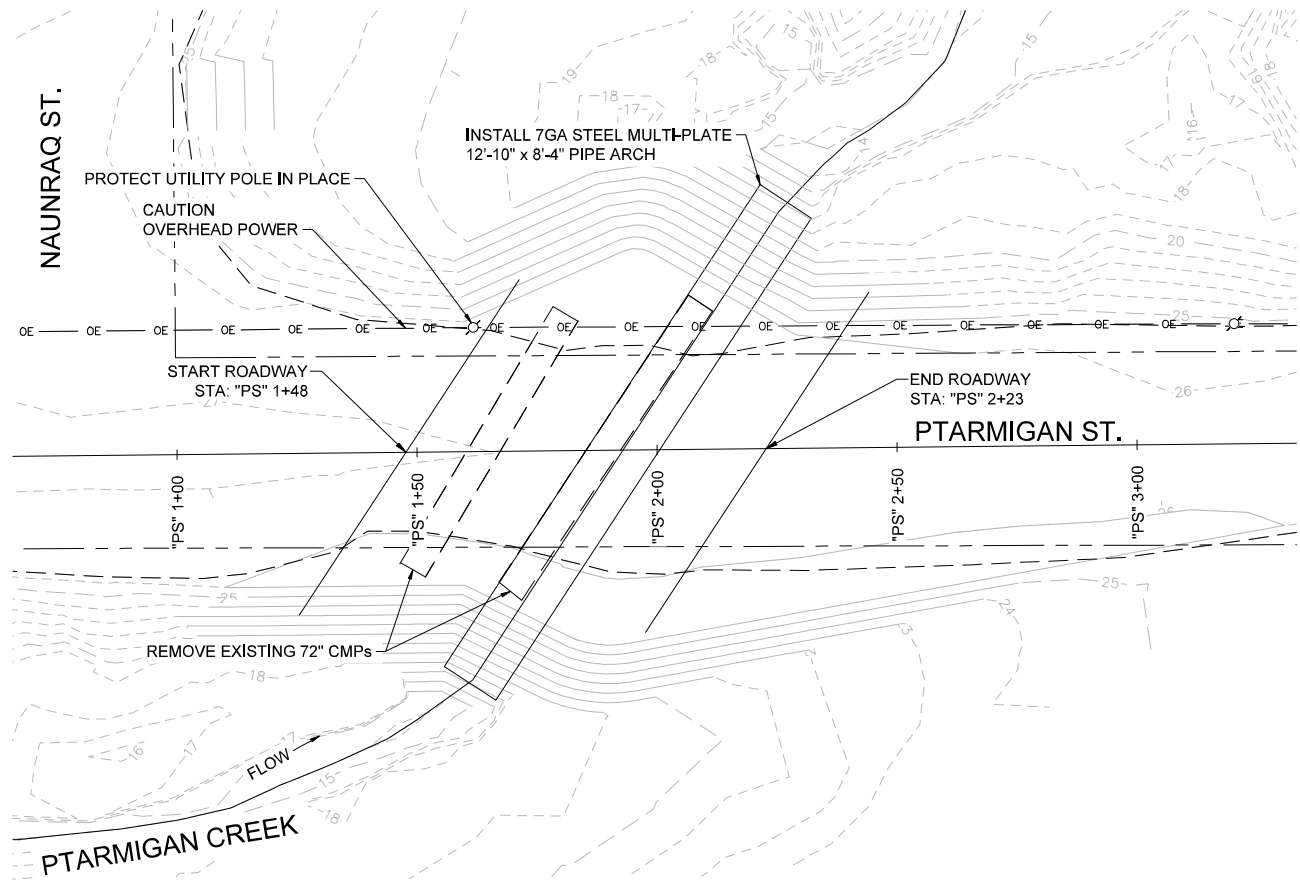
PROJECT 1163.50270.68
DATE APRIL 2025

DOWL 2025

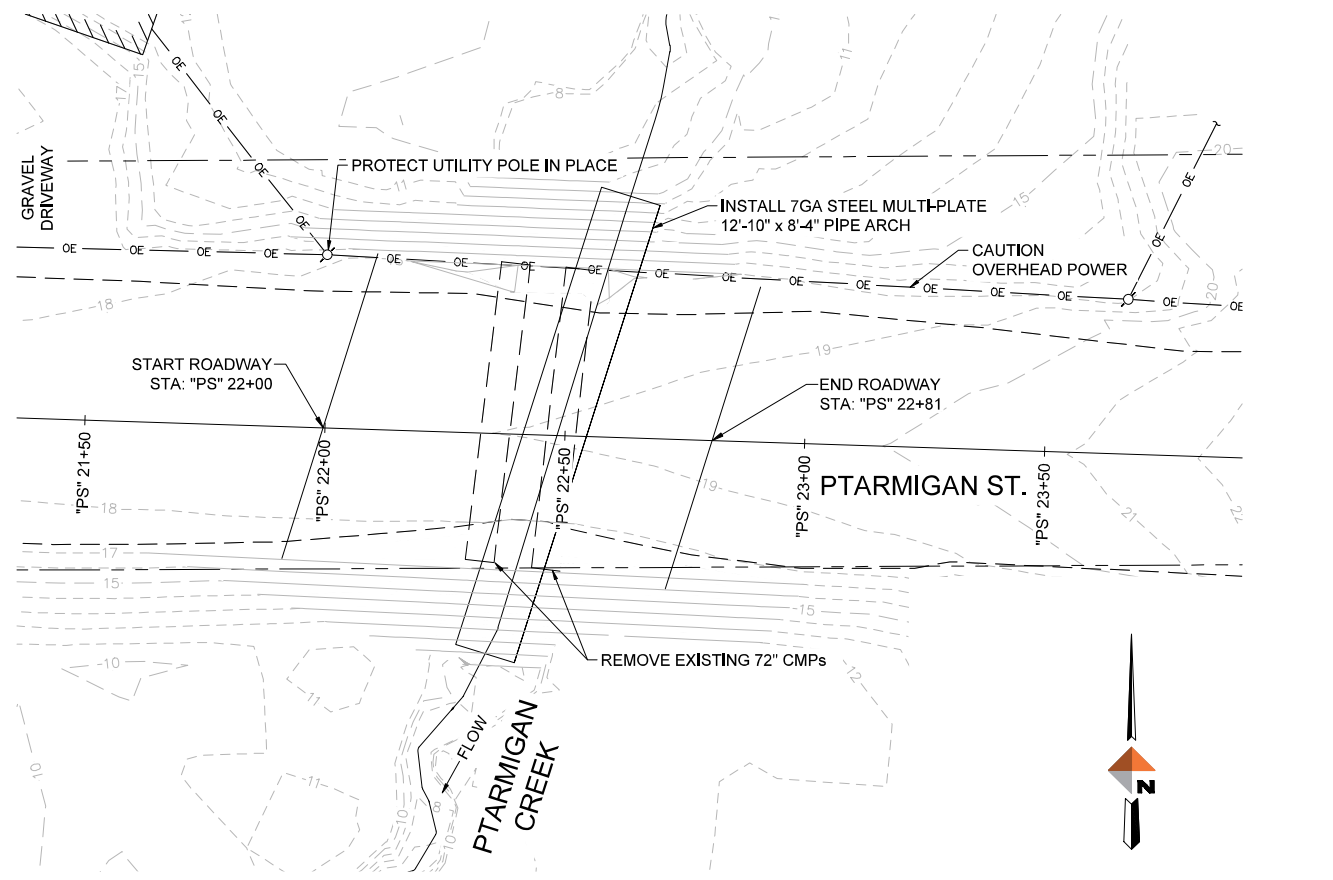
SHEET

C8 OF C15

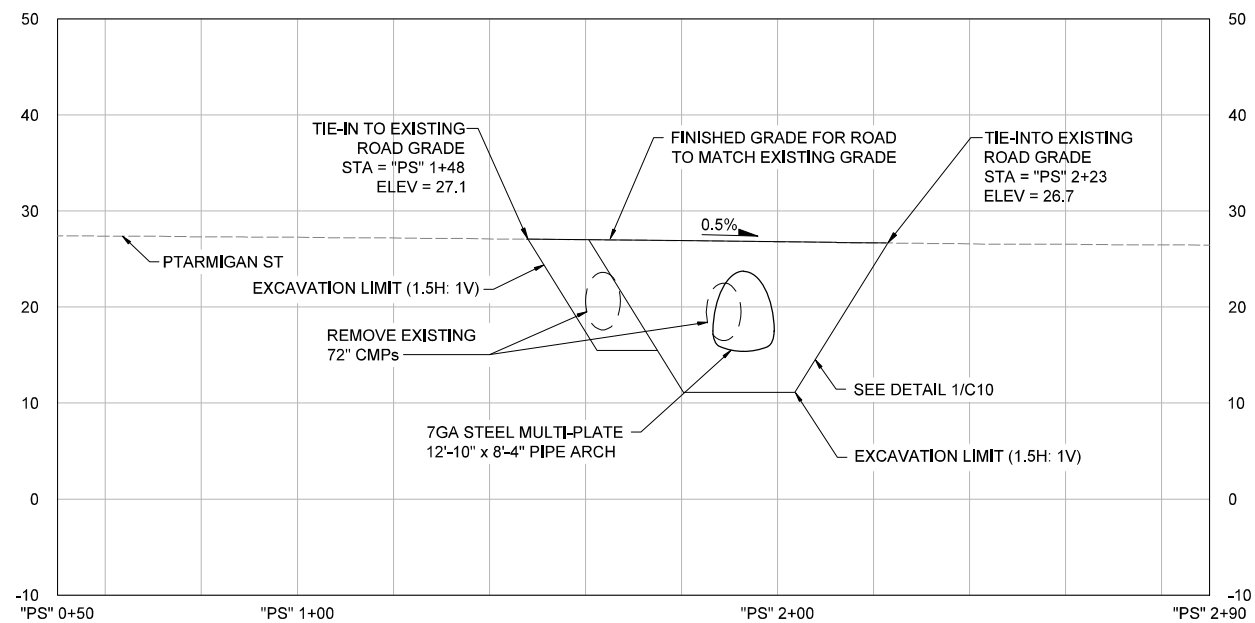
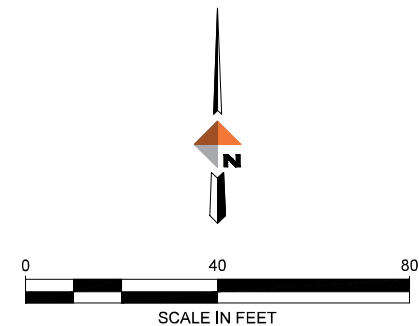
C:\dowl_pw\40418828\C9-SA-CH-WA-50305.dwg PLOT DATE 2025-4-3 13:31 SAVED DATE 2025-04-03 10:06 USER: tgrab



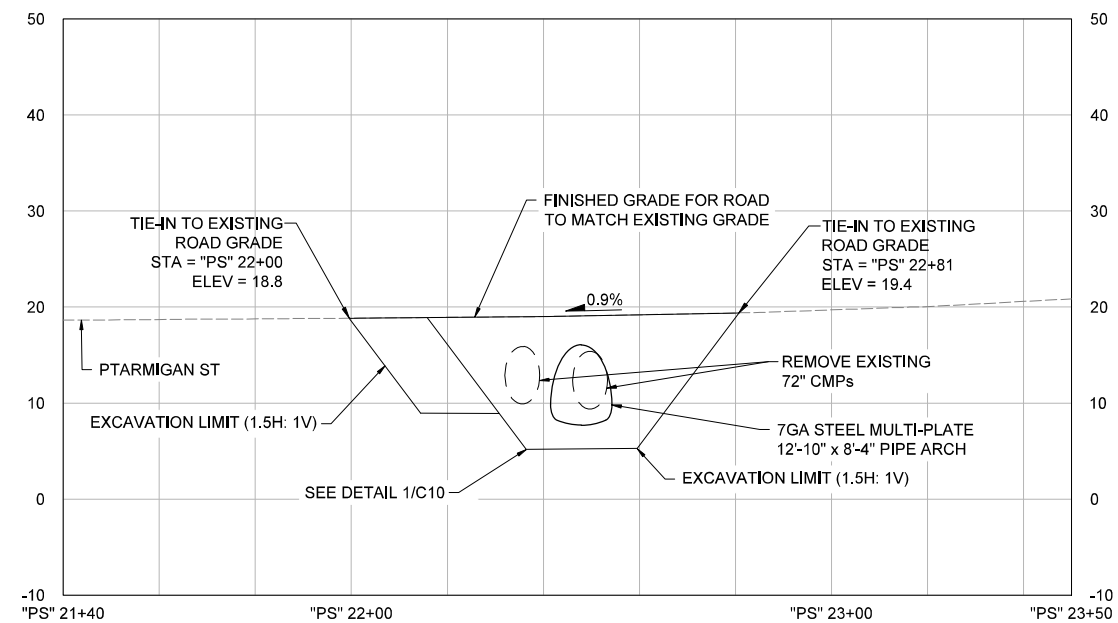
WEST CULVERT
PLAN



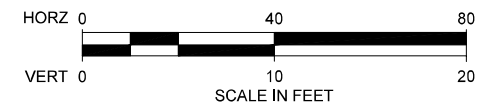
EAST CULVERT
PLAN



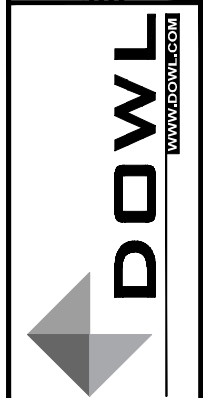
WEST CULVERT
PROFILE



EAST CULVERT
PROFILE



REVISIONS		DESCRIPTION	BY
REV	DATE		

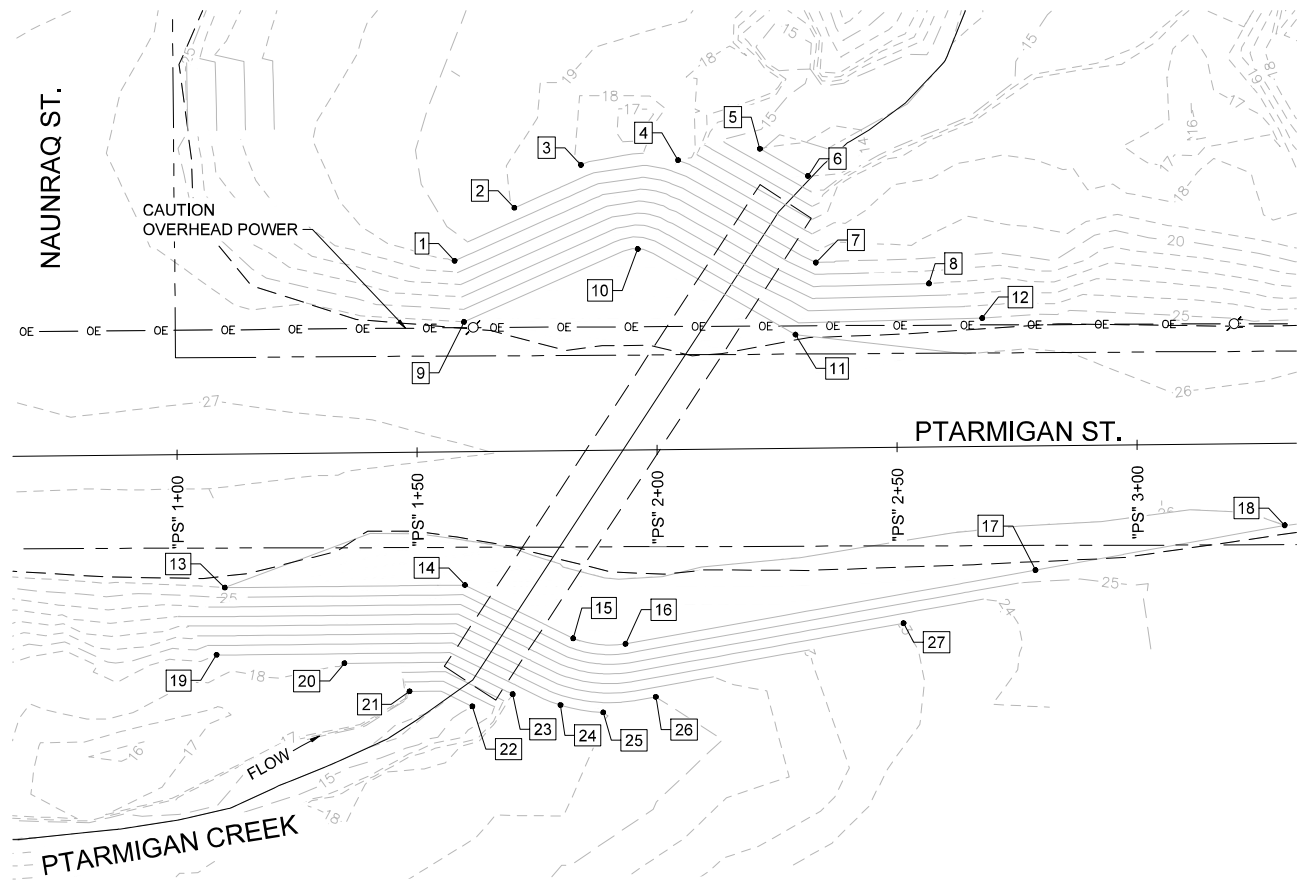


PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
ROADWAY PLAN AND PROFILE

BETHEL, ALASKA

PROJECT 1163.50270.68
DATE APRIL 2025
DOWL 2025
SHEET
C9 OF C15

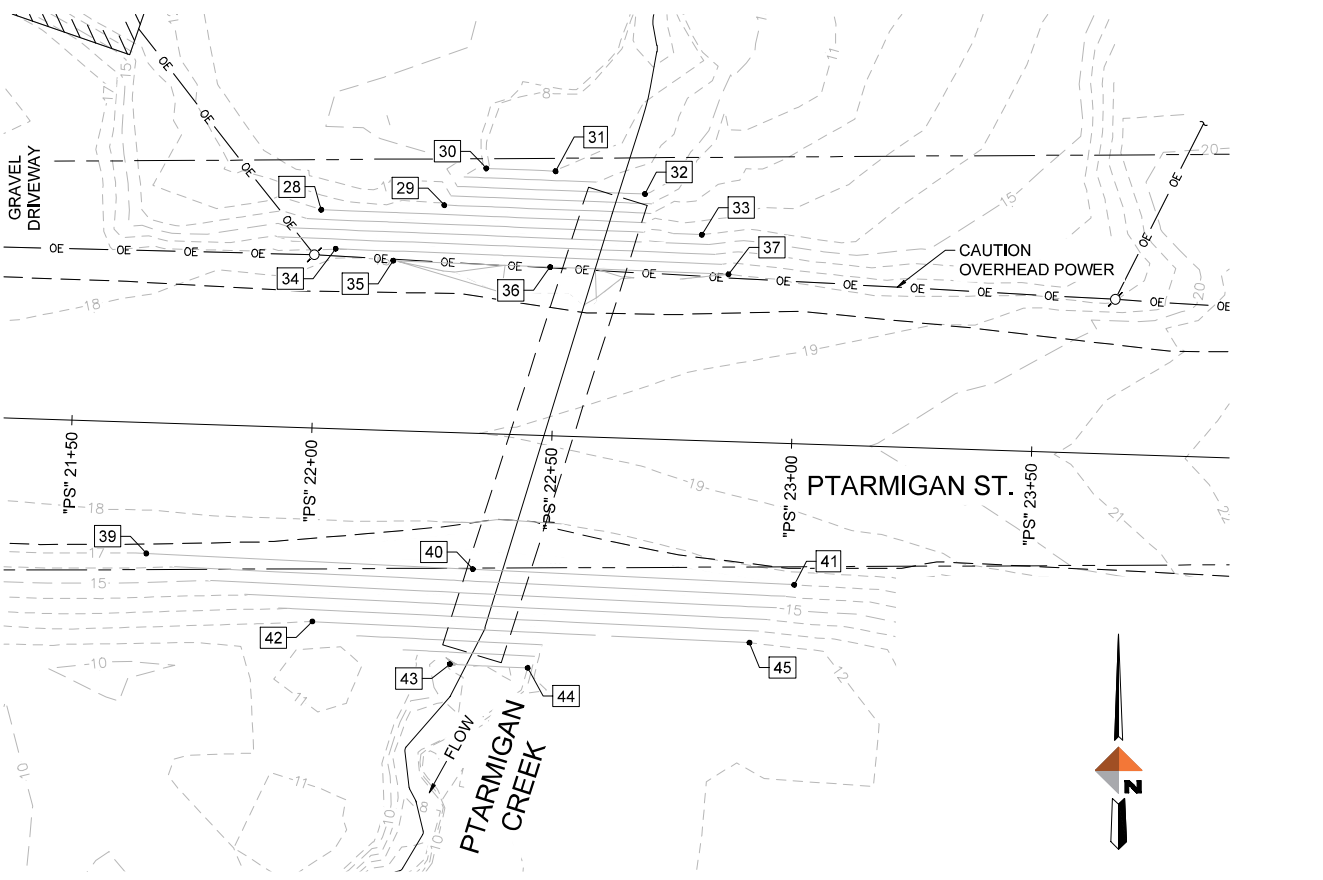
C:\dowl_pw\0418828\C10-SA-CH-WA-50305.dwg PLOT DATE: 2025-4-3 14:47 SAVED DATE: 2025-04-03 14:46 USER: lgrab



WEST CULVERT
PLAN

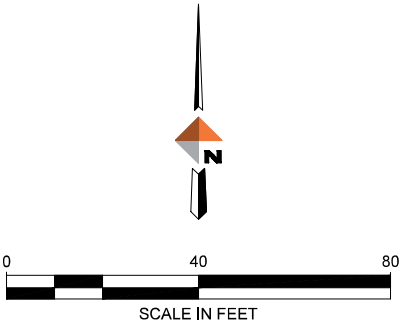
WEST CULVERT GRADING TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1041948.975	588056.604	21.0	TIE-IN POINT
2	1041960.114	588069.268	19.0	TOE OF SLOPE
3	1041969.056	588083.156	18.0	TOE OF SLOPE
4	1041970.041	588103.382	18.0	TOE OF SLOPE
5	1041972.423	588120.432	14.0	TOE OF SLOPE
6	1041966.693	588130.434	14.0	TOE OF SLOPE
7	1041948.726	588132.081	20.0	TOE OF SLOPE
8	1041944.349	588155.684	22.0	TIE-IN POINT
9	1041936.360	588058.784	26.0	TIE-IN POINT
10	1041951.551	588094.987	26.0	TOP OF SLOPE
11	1041933.680	588127.851	26.0	TOP OF SLOPE
12	1041937.139	588166.718	25.0	TIE-IN POINT
13	1041880.968	588008.950	26.0	TIE-IN POINT
14	1041881.512	588058.991	26.0	TOP OF SLOPE
15	1041870.411	588081.526	26.0	TOP OF SLOPE
16	1041869.261	588092.447	26.0	TOP OF SLOPE
17	1041884.631	588177.835	26.0	TOP OF SLOPE
18	1041893.979	588229.764	26.0	TIE-IN POINT

WEST CULVERT GRADING TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
19	1041866.968	588007.263	19.0	TIE-IN POINT
20	1041865.238	588033.874	18.0	TOE OF SLOPE
21	1041859.385	588047.437	15.0	TOE OF SLOPE
22	1041856.240	588060.508	15.0	TOE OF SLOPE
23	1041858.683	588068.986	18.0	TOE OF SLOPE
24	1041856.532	588078.825	19.0	TOE OF SLOPE
25	1041855.024	588087.831	19.0	TOE OF SLOPE
26	1041858.203	588098.749	20.0	TOE OF SLOPE
27	1041873.588	588150.350	23.0	TOE OF SLOPE



EAST CULVERT
PLAN

EAST CULVERT GRADING TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
28	1041941.931	590033.212	13.0	TIE-IN POINT
29	1041942.897	590058.835	12.0	TOE OF SLOPE
30	1041950.549	590067.594	8.0	TOE OF SLOPE
31	1041949.965	590082.037	8.0	TOE OF SLOPE
32	1041945.209	590100.646	10.0	TOE OF SLOPE
33	1041936.722	590112.515	14.0	TIE-IN POINT
34	1041936.291	590024.202	16.0	TIE-IN POINT
35	1041933.814	590036.209	17.0	TOP OF SLOPE
36	1041931.338	590048.217	18.0	TOP OF SLOPE
37	1041929.994	590080.905	18.0	TIE-IN POINT
38	1041928.492	590118.052	18.0	TIE-IN POINT
39	1041870.456	589996.768	17.0	TIE-IN POINT
40	1041867.052	590064.788	17.0	TOP OF SLOPE
41	1041863.811	590131.765	17.0	TIE-IN POINT
42	1041856.155	590031.356	12.0	TOE OF SLOPE
43	1041847.262	590059.967	9.0	TOE OF SLOPE
44	1041846.475	590076.228	9.0	TOE OF SLOPE
45	1041851.749	590122.418	12.0	TIE-IN POINT

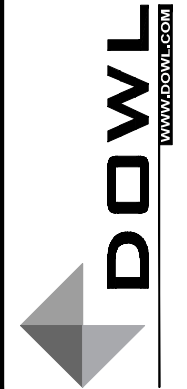


PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
GRADING PLAN

PROJECT 1163.50270.68
DATE APRIL 2025

© DOWL 2025
SHEET

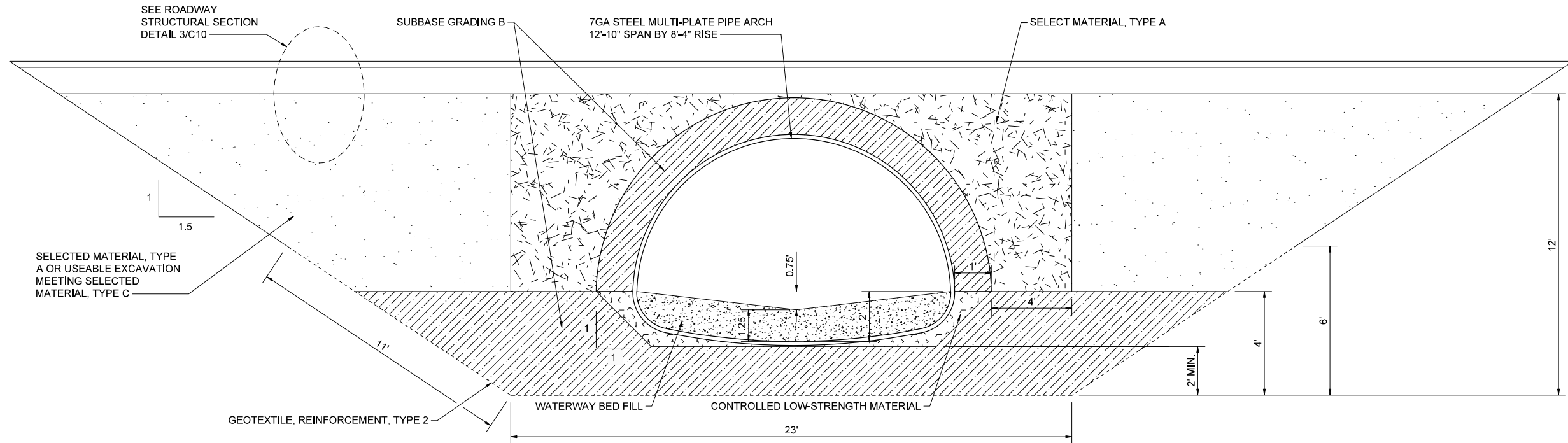
C10 OF C15



BETHEL, ALASKA

REV	DATE	DESCRIPTION	BY

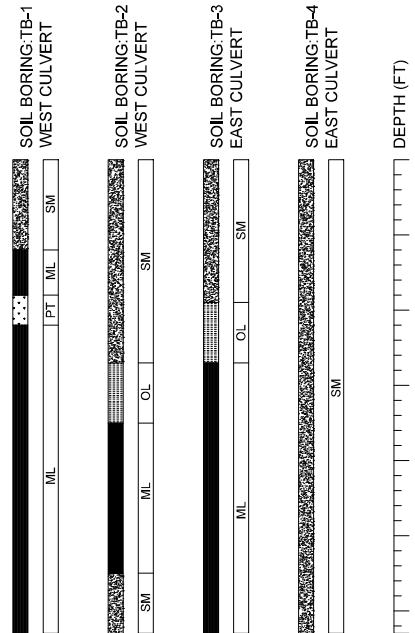
C:\dowl_pw\40418828\C11-SA-CH-WA-50305.dwg PLOT DATE 2025-4-3 13:38 SAVED DATE 2025-04-03 13:33 USER: tgrab



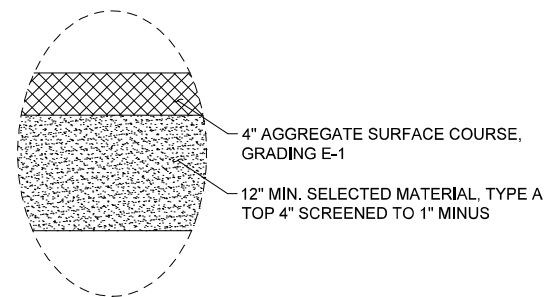
1 PIPE ARCH TYPICAL SECTION
C10 NTS

NOTES:

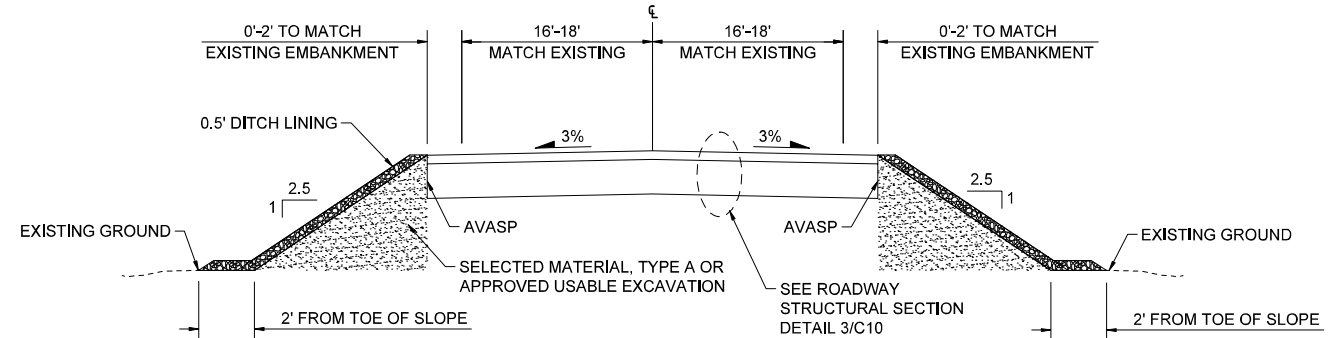
1. EXCAVATE ALL ORGANICS OR A MINIMUM OF 2' FEET BELOW CULVERT INVERT, WHICHEVER IS GREATER.
2. GEOTEXTILE, REINFORCEMENT, TYPE 2 SHALL BE PLACED BETWEEN IN-SITU MATERIAL AND SUBBASE, GRADING B.
3. FOR QUANTITY ESTIMATION PURPOSES, NO USABLE EXCAVATION WAS ASSUMED AND EMBANKMENT QUANTITIES WERE CALCULATED USING SELECTED MATERIAL, TYPE A.
4. MINIMUM COVER FOR PIPE ARCH CULVERT IS 2.0'.
5. CONTROLLED LOW-STRENGTH MATERIAL SHALL BE USED FOR PIPE BEDDING. PREPARE AND PLACE PER SPECIFICATION 205-2.01 AND REFERENCE SUBSECTION 712-2.22. PAY ITEM 205.0005.
6. MIX MATERIAL FOR WATERWAY BED FILL TO ACHIEVE A WELL GRADED MIXTURE.
7. FILL VOIDS IN WATERWAY BED FILL AND WASH FINES IN AFTER PLACEMENT.
8. PLACE WATERWAY BED FILL MATERIAL THROUGH THE FULL LENGTH OF THE CULVERT.



2 BOREHOLE LOGS
C10 NTS

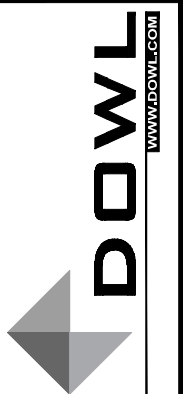


3 ROADWAY STRUCTURAL SECTION
C10 NTS



4 ROADWAY SECTION
C10 NTS

REVISIONS		DESCRIPTION	BY
REV	DATE		



PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
DETAILS AND TYPICAL SECTIONS

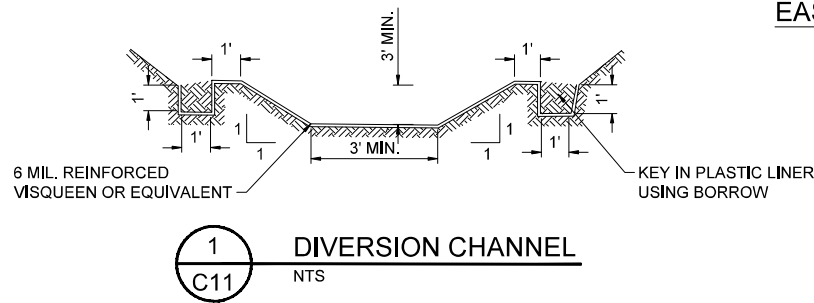
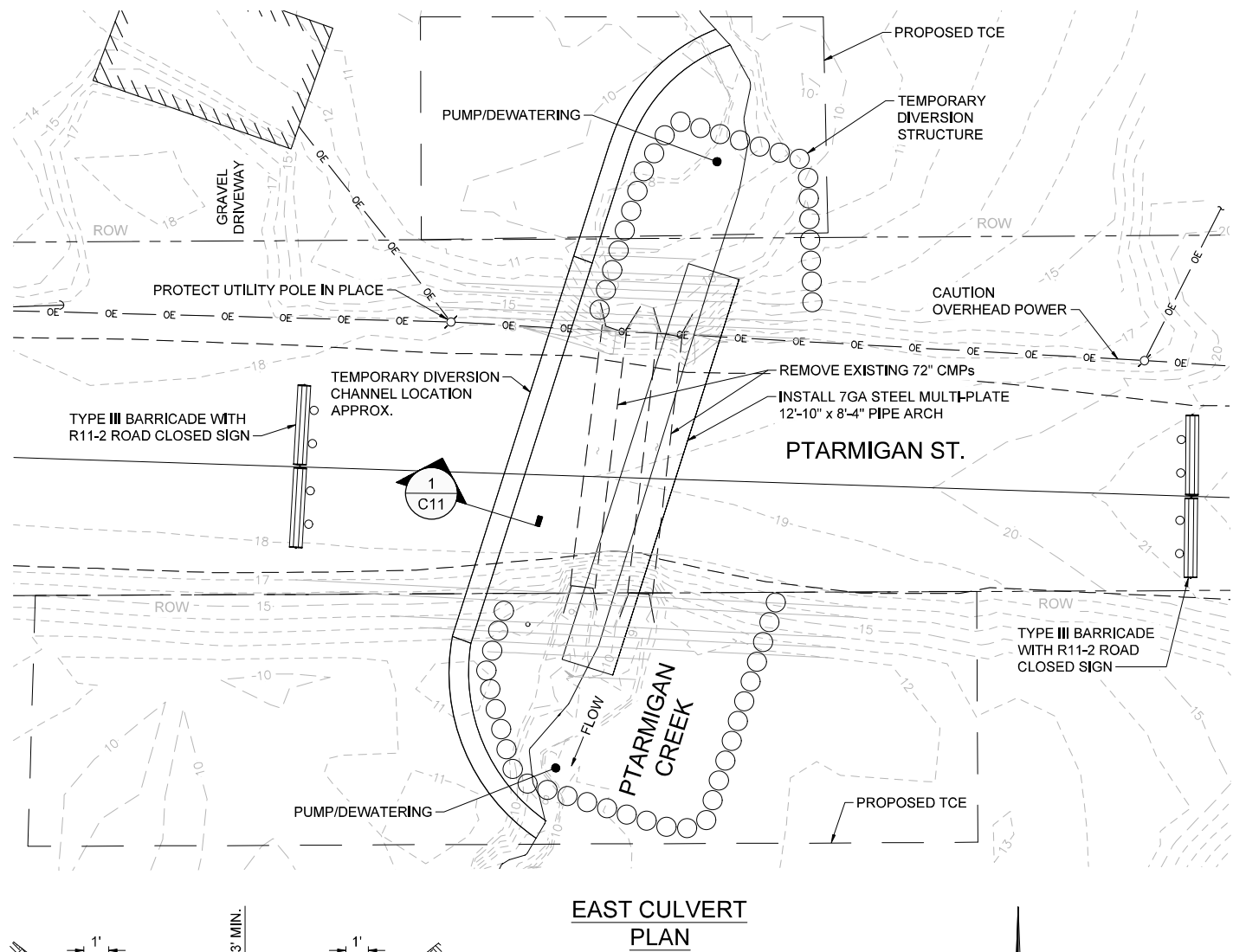
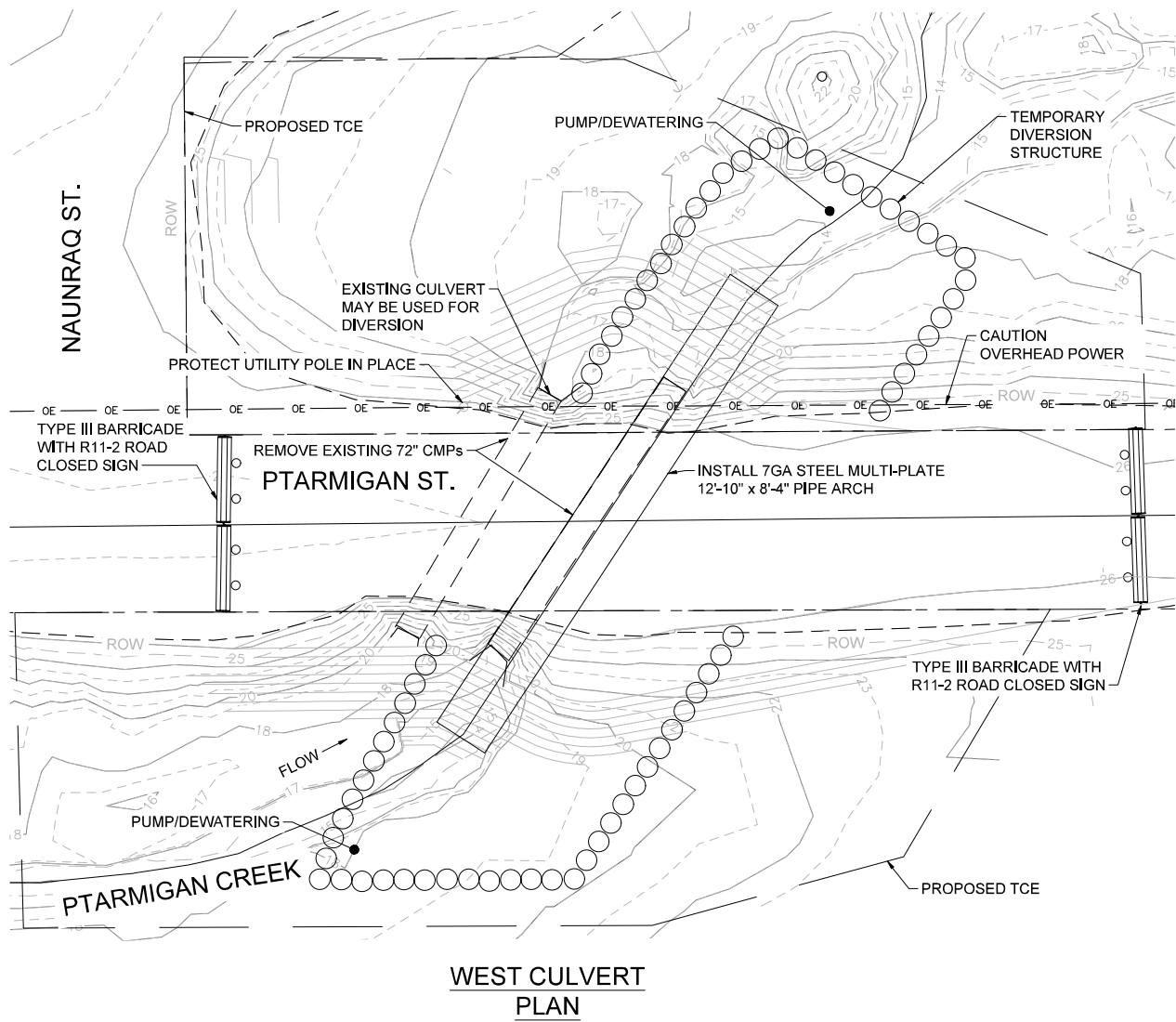
BETHEL, ALASKA

PROJECT 1163.50270.68
DATE APRIL 2025

DOWL 2025
SHEET

C11 OF C15

C:\dowl_pw\40418828\C12-SA-CH-WA-50305.dwg PLOT DATE 2025-4-3 13:43 SAVED DATE 2025-04-03 13:42 USER: tgrab



ROADWAY DIVERSION NOTES:

1. REFER TO SPECIFICATIONS FOR ROAD CLOSURE AND TRAFFIC CONTROL INFORMATION.
2. PTARMIGAN STREET DETOUR CLOSURE PLAN SHALL BE SUBMITTED BY CONTRACTOR FOR APPROVAL BY CITY OF BETHEL.

STREAM DIVERSION NOTES:

THIS WORK MAY REQUIRE A DIVERSION OF STREAM WATER. THE DESIGNERS RECOGNIZE THAT DIFFERENT CONTRACTORS WILL HAVE VARIOUS APPROACHES FOR CONTROLLING WATER AND CONSTRUCTION SEQUENCING. THIS DIVERSION PLAN HAS BEEN DEVELOPED TO CHECK FOR CONSTRUCTABILITY AND AS A STARTING POINT FOR A CONTRACTOR-GENERATED PLAN. FLOW RATES MAY BE LOW ENOUGH TO BE PUMPED AROUND THE PROJECT AREA. CONTRACTOR MUST SUBMIT DIVERSION PLANS TO ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTATION.

A COFFERDAM MADE OF SHEET PILE MAY BE NEEDED TO REDUCE GROUNDWATER FLOW INTO EXCAVATED AREA. TEMPORARY DIKES OR BERMS MAY BE USED TO ISOLATE THE WORK AREA FROM WATERS OF THE SURROUNDING AREA.

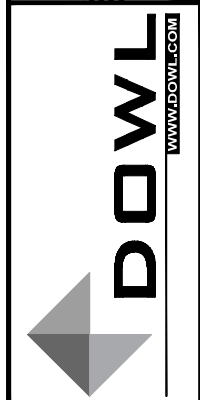
SUGGESTED DIVERSION PLAN:

1. PLACE BARRICADES, SIGNS, AND TEMPORARY ROAD DETOUR IN COMPLIANCE WITH SPECIFICATIONS, ADOT&PF, AND MUTCD. COORDINATE WITH OTHER CONTRACTORS WHO MAY BE PRESENT IN AREA AND USING PTARMIGAN STREET FOR CONSTRUCTION ACCESS.
2. IF EXISTING CULVERTS ON PTARMIGAN STREET ARE NOT SUFFICIENT, REMOVE THE 72" EXISTING CULVERTS AND CONSTRUCT VISQUEEN LINED DIVERSION CHANNEL.
3. USE A TEMPORARY DIVERSION STRUCTURE (BULK BAGS, SUPERSTACKS, OR SHEETPILES) TO DIVERT STREAM FLOW THROUGH DIVERSION CHANNEL.
4. CONSTRUCT THE NEW PIPE ARCH CULVERT.
5. INFILL CULVERT AND RECONSTRUCT CREEK CHANNEL AS SHOWN IN PLANS.
6. DIVERT CREEK FLOW THROUGH THE NEW ARCH CULVERT.
7. FILL DIVERSION CHANNEL/ROAD EMBANKMENT.
8. RECONSTRUCT CREEK CHANNEL AND BANKS AS SHOWN IN PLANS.
9. RECONSTRUCT PTARMIGAN STREET OVER THE NEWLY INSTALLED CULVERT.
10. RETURN VEHICULAR TRAFFIC TO PTARMIGAN STREET. REMOVE DETOUR ROAD AND FILL REMAINING PORTION OF DIVERSION CHANNEL.
11. STABILIZE AND REVEGETATE ALL REMAINING DISTURBED AREAS.

ESCP AND DEWATERING NOTES:

1. DEWATER TRENCH AND WORK AREA WITH PUMP HOSE IF REQUIRED.
2. ALL DISCHARGE POINTS REQUIRE PERMANENT OR TEMPORARY VELOCITY CONTROLS.
3. PROVIDE FOR SEDIMENT REMOVAL FOR ALL DEWATERING ACTIVITY PRIOR TO DISCHARGE FROM THE PROJECT INTO ANY WATER OF THE U.S.
4. PROVIDE SPARE (EXTRA) PUMPS FOR BOTH THE STREAM BYPASS PUMP AND DEWATERING PUMP.
5. EXISTING RIPARIAN VEGETATION SHOULD BE PROTECTED TO MINIMIZE DISTURBANCE.
6. SILT FENCING TO BE USED TO PREVENT DISTURBED SEDIMENT FROM ENTERING THE WATERBODY. ADJUST LOCATION AS NECESSARY AND AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION.
7. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS. MAINTENANCE SHALL INCLUDE REMOVAL AND DISPOSAL OF ACCUMULATED SEDIMENT, CLEANING AND REPAIR OF DAMAGED SEDIMENT CONTROL DEVICES.
8. ALL DISTURBED GROUND CAPABLE OF SUPPORTING VEGETATION SHALL BE REVEGETATED FOR FINAL STABILIZATION. ALL AREAS NOT REVEGETATED SHALL BE 100% COVERED BY ROCK OR OTHER PERMANENT NON-ERODIBLE MATERIAL. FINAL STABILIZATION SHALL BE AS APPROVED BY THE ENGINEER.
9. PUMPS OUTSIDE OF THE FISH EXCLUSION AREA MUST HAVE FISH SCREENS MADE OF WEDGE WIRE WITH OPENINGS NOT GREATER THAN 1/16TH INCH.

REVISIONS		DESCRIPTION
REV	DATE	



PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
ESCP & STREAM DIVERSION PLAN

PROJECT 1163.50270.68
DATE APRIL 2025

© DOWL 2025
SHEET

C12 OF C15

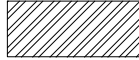
BETHEL, ALASKA

NOTES:

1. REHABILITATE VEGETATED AREAS WITH NATIVE ORGANIC SOILS, PER SECTION 620 OF THE SPECIFICATIONS.
2. VEGETATIVE MAT SHALL BE PLACED ON DISTURBED AREAS AS SHOWN ON THE PLANS.
3. VEGETATIVE MAT LOCATIONS MAY VARY BASED ON SITE CONDITIONS AND AVAILABILITY DURING CONSTRUCTION.
4. SALVAGED VEGETATIVE MAT MUST HAVE A MINIMUM THICKNESS OF 12 INCHES AND BE SOURCED FROM THE DISTURBED AREA OR LOCAL AREA. SEE DETAIL 1/C13, 2/C13, AND 3/C13.
5. REFER TO SPECIFICATION SECTION 690 FOR ADDITIONAL BANK REVEGETATION INFORMATION.
6. PROTECT STREAMBANK IN PLACE, AND MINIMIZE DISTURBANCE. REHABILITATE WITH VEGETATIVE MAT BANK STABILIZATION IF DISTURBED, PER DETAIL 1/C13, 2/C13, AND 3/C13.
7. PLACE DITCH LINING ON SLOPE AS SHOWN ON DETAIL 4/C10. THE EXTENTS OF THE DITCH LINING SLOPE PROTECTION IS FOUND IN THE TABLE BELOW.

SITE REVEGETATION

- 

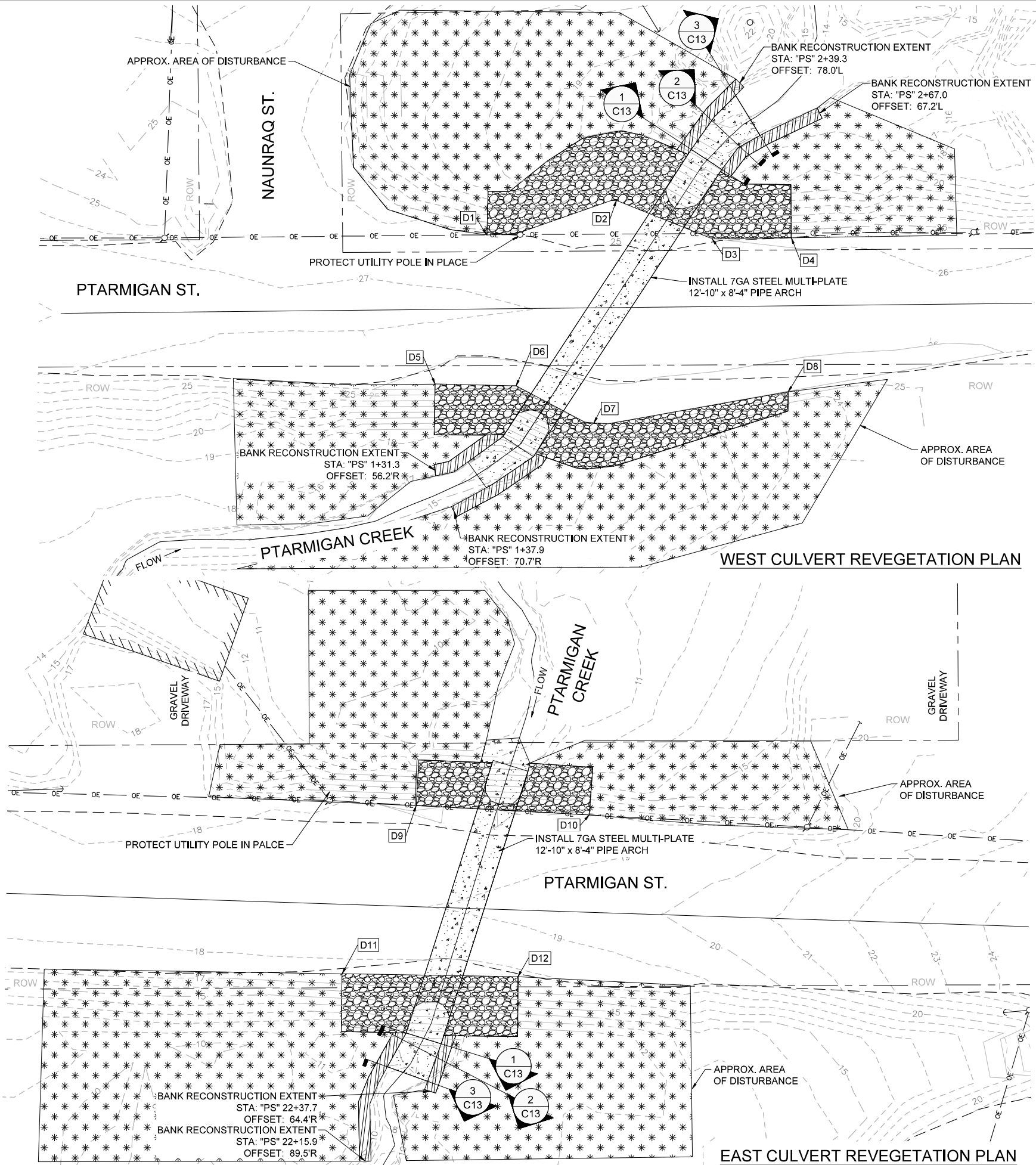
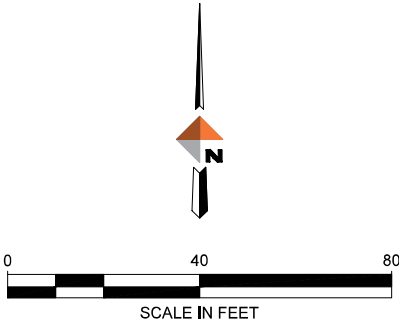
NATIVE ORGANIC SOILS AND VEGETATIVE MAT, AS AVAILABLE. MULCH AS NEEDED
- 

WATERWAY BANK REVEGETATION AND PROTECTION VEGETATIVE MAT
- 

WATERWAY BED FILL
- 

DITCH LINING

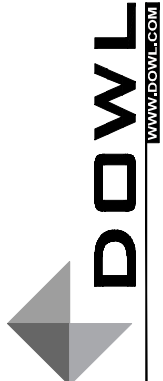
COORDINATE TABLE: DITCH LINING			
LOCATION	POINT ID	"PC" STATION	OFFSET
WEST CULVERT DS	D1	1+50.3	25.9 L
WEST CULVERT DS	D2	1+95.7	37.5 L
WEST CULVERT DS	D3	2+29.1	23.7 L
WEST CULVERT DS	D4	2+56.7	23.7 L
WEST CULVERT US	D5	1+31.7	26.1 R
WEST CULVERT US	D6	1+60.0	27.0 R
WEST CULVERT US	D7	1+87.1	40.2 R
WEST CULVERT US	D8	2+55.1	30.1 R
EAST CULVERT US	D9	22+90.1	34.0 L
EAST CULVERT US	D10	22+90.9	50.6 L
EAST CULVERT DS	D11	22+05.6	24.3 R
EAST CULVERT DS	D12	22+67.1	23.3 R



REVISIONS

REV	DATE	DESCRIPTION	BY





PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
REVEGETATION PLAN

BETHEL, ALASKA

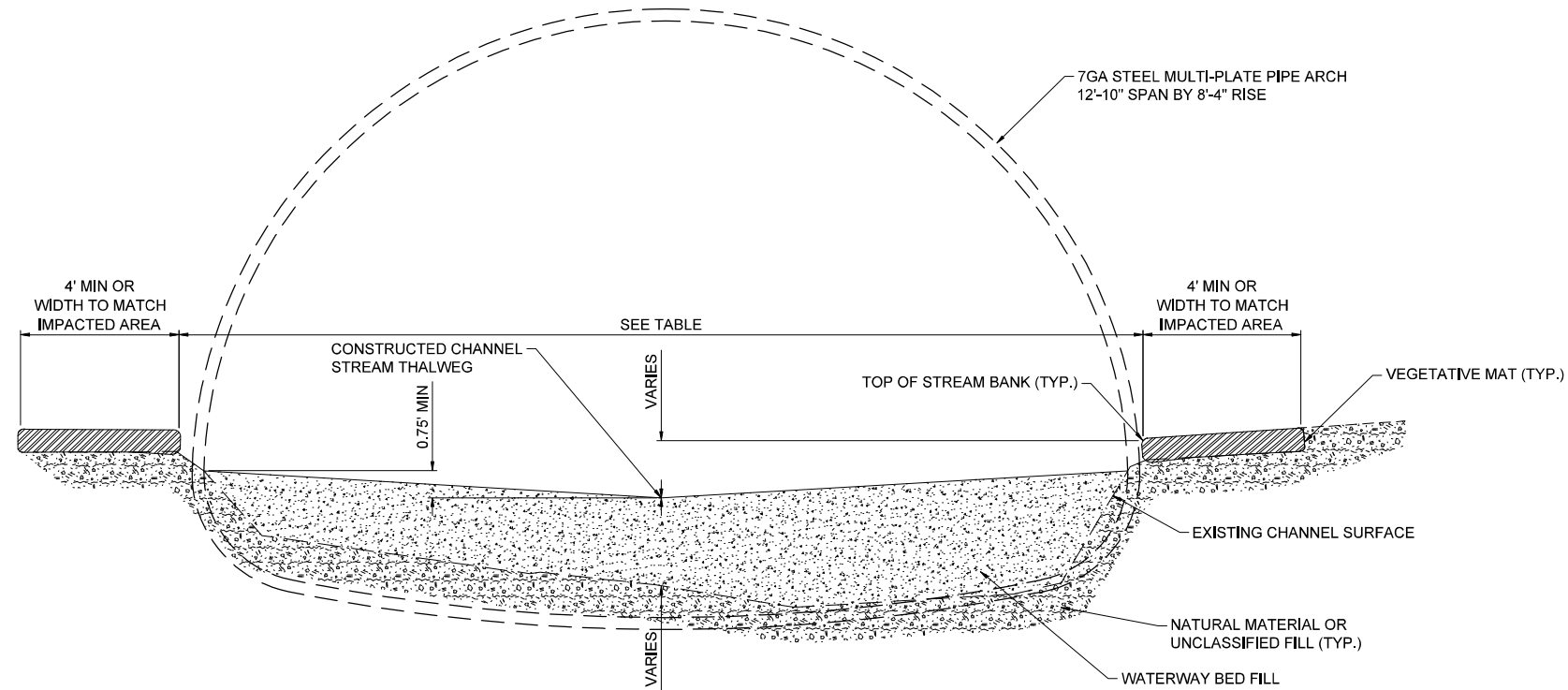
PROJECT 1163.50270.68
DATE APRIL 2025

DOWL 2025

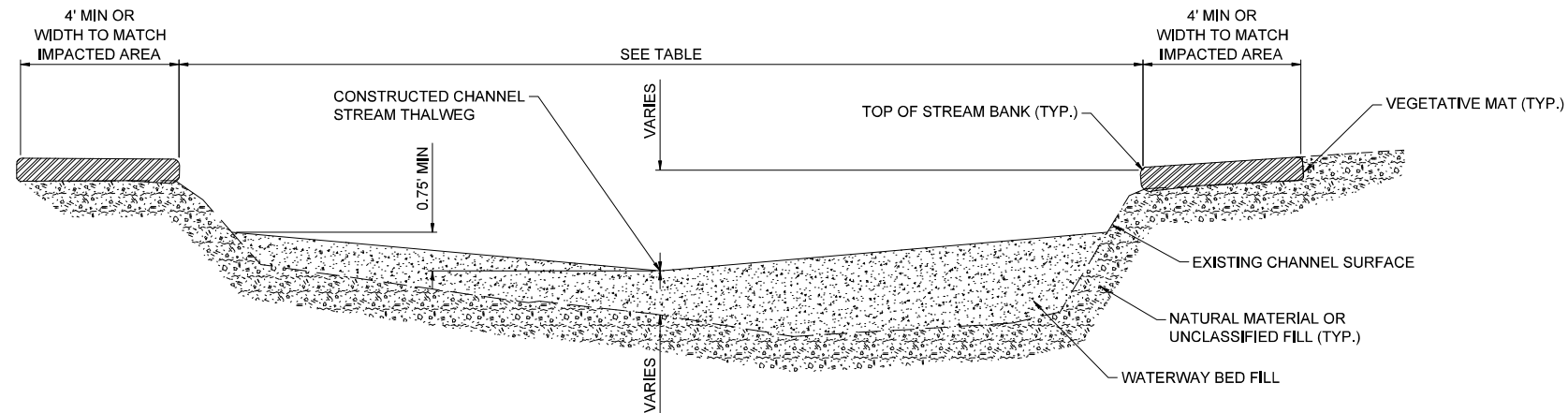
SHEET

C13 OF C15

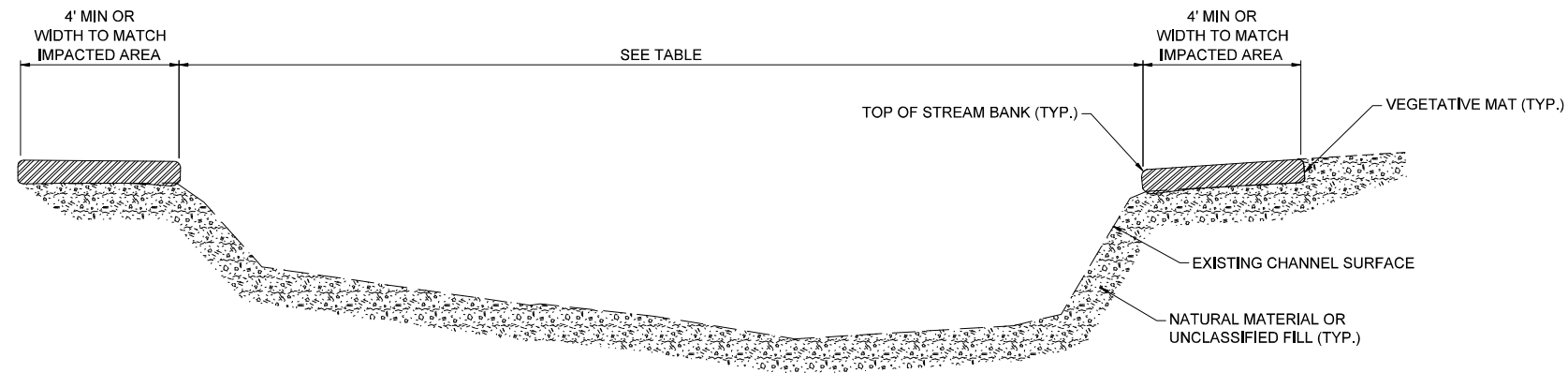
C:\dowl_pw\0418828\C14-SA-CH-WA-50305.dwg PLOT DATE 2025-4-3 13:50 SAVED DATE 2025-04-03 13:49 USER: tgrab



1
C13
BANK RECONSTRUCTION AT CULVERT
NTS



2
C13
BANK RECONSTRUCTION AT MIDPOINT
NTS



3
C13
BANK RECONSTRUCTION AT STREAM TIE-IN
NTS

NOTES:

1. SALVAGED VEGETATIVE MAT MUST HAVE A MINIMUM THICKNESS OF 12 INCHES AND BE SOURCED FROM THE DISTURBED AREA OR LOCAL AREA.
2. TAPER BANKS AND TIE INTO EXISTING BANKS UPSTREAM AND DOWNSTREAM.
3. GRADE STREAM THALWEG LINEARLY FROM ELEVATION AT CULVERT INLET TO STREAM TIE IN POINT

INSTALL VEGETATIVE MAT IN THE FOLLOWING SEQUENCE

1. STAKE ALL AREAS TO BE PLANTED WITH VEGETATIVE MATS PRIOR TO INSTALLATION.
2. WET THE IN-SITU SOIL THAT THE VEGETATIVE MAT WILL BE PLACED ON.
3. IF THE VEGETATIVE MAT HAS LOST TOPSOIL, SUCH THAT THE IN-PLACE THICKNESS OF THE MAT WILL BE LESS THAN 9 INCHES THICK, PLACE ADDITIONAL FILL, FILLING VOIDS, AND TO INCREASE THE EFFECTIVE MAT THICKNESS TO 12 INCHES.
4. IF THE VEGETATIVE MAT IS GREATER THAN 15 INCHES THICK, ADJUST THE BENCH HEIGHT SUCH THAT THE TOP OF THE BANK WILL BE WITHIN 3 INCHES OF FINAL GRADE.
5. PLACE VEGETATIVE MATS TIGHTLY TOGETHER, WITHOUT GAPS, WITH FULL CONTACT OF THE ROOT MASS TO THE SOIL SURFACE BELOW, TAP INTO PLACE.

WEST CULVERT CHANNEL TRANSITION

STATION	LOCATION IN TRANSITION	CHANNEL WIDTH
"WS" 3+90	UPSTREAM TIE-IN POINT	11'
"WS" 398.8	UPSTREAM MIDPOINT	11.5'
"WS" 4+07.5	CULVERT INLET	13'
"WS" 5+27.4	CULVERT OUTLET	13'
"WS" 5+37.7	DOWNSTREAM MIDPOINT	13.5'
"WS" 5+48	DOWNSTREAM TIE-IN POINT	16'

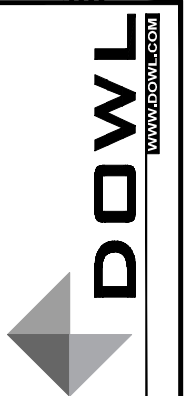
STATION LOCATIONS AND WIDTHS ARE APPROXIMATE

WEST CULVERT CHANNEL TRANSITION

STATION	LOCATION IN TRANSITION	CHANNEL WIDTH
"ES" 36+96.9	UPSTREAM TIE-IN POINT	17'
"ES" 36+99.9	UPSTREAM MIDPOINT	17'
"ES" 37+02.9	CULVERT INLET	13'
"ES" 38+03	CULVERT OUTLET	13'
"ES" 38+10	DOWNSTREAM MIDPOINT	14'
"ES" 38+17	DOWNSTREAM TIE-IN POINT	15'

STATION LOCATIONS AND WIDTHS ARE APPROXIMATE

REV	DATE	DESCRIPTION	BY



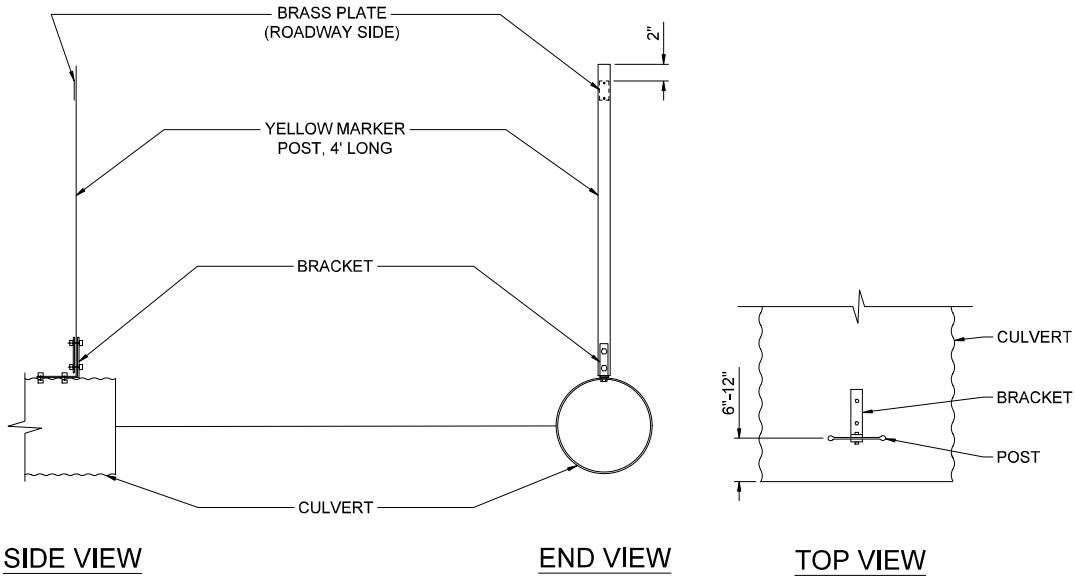
PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
BANK RECONSTRUCTION

BETHEL, ALASKA

PROJECT 1163.50270.68
DATE APRIL 2025

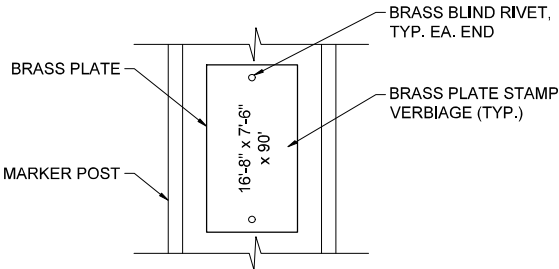
DOWL 2025
SHEET

C14 OF C15



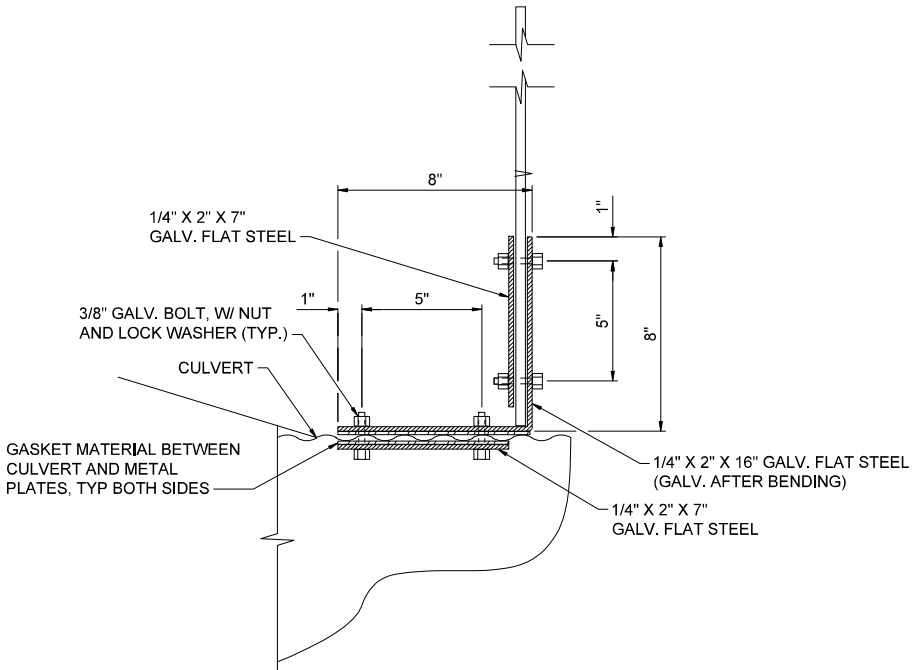
1 CULVERT MARKER POST DETAIL
NTS

- NOTES:
- 1. MARKER POSTS ARE TO BE INSTALLED ON ALL PROJECT CULVERTS.
 - 2. DRILL ALL BOLT HOLES. FLAME CUTTING SHALL NOT BE PERMITTED.
 - 3. GASKET MATERIAL SHALL BE PLACED BETWEEN DISSIMILAR METALS. GASKET MATERIAL SHALL BE APPROVED PRIOR TO INSTALLATION.

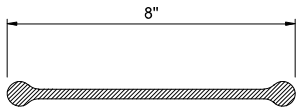


STAMP STATION AND PIPE SIZE, USING 3/8" HIGH MINIMUM LETTERS INTO A 2" X 4" X 0.064" THICK BRASS PLATE. FASTEN PLATE TO THE SIDE FACING THE ROADWAY WITH TWO 1/8" BRASS BLIND RIVETS.

3 BRASS PLATE DETAIL
NTS

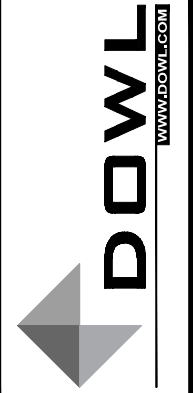


2 BRACKET DETAIL
NTS



4 POST CROSS SECTION
NTS

REVISIONS		DESCRIPTION	BY
REV	DATE		



PTARMIGAN ST. CULVERT CROSSINGS
CULVERT REPLACEMENT
CULVERT MARKER POST
BETHEL, ALASKA

PROJECT	1163.50270.68
DATE	APRIL 2025
DOWL 2025	
SHEET	
C15 OF C15	

City of Bethel

Ptarmigan Street Culvert Crossings, Ptarmigan Creek, City of Bethel

SCOPE OF WORK

General

This project's purpose is to supply all labor, equipment, materials, and supplies required to install new culvert structures at the existing culvert locations identified on Ptarmigan Street at the Ptarmigan Creek Crossings (Ptarmigan West and Ptarmigan East).

All construction shall be completed in accordance with the current Alaska Department of Transportation and Public Facilities (ADOT&PF) Standard Specifications for Highway Construction (SSHC) 2020 Edition. Project specific special provisions are provided in the following sections. The requirements contained in these specifications and special provisions are hereby made a part of this solicitation and resultant contract.

The crossings are located on the Ptarmigan Street, approximately 1.07 (Ptarmigan West) and 0.68 (Ptarmigan East) miles east of Ridgecrest Dr.

Stream Name	ADF&G Site Number	DOWL ID	Latitude	Longitude
Ptarmigan Creek	335-10-16600-2621-3020	WEST	N60.8050694°	W161.8066222°
Ptarmigan Creek	335-10-16600-2621-3020	EAST	N60.8050222°	W161.7953750°

Work shall be performed in one continuous time period.

Definition of Roles

City of Bethel is the Owner. City of Bethel will retain an Owner's Field Representative to be on site. All reference to "Engineer" within the project manual and specifications refers to the Owner's Field Representative.

DOWL is the Engineer of Record for the design of the project.

Permits

The Contractor shall coordinate permitting with the Owner to obtain or transfer permits to the Contractor, including but not limited to:

- ADF&G Fish Habitat Permit
- U.S. Army Corps of Engineers Alaska District (ACOE) Section 404 Wetland Permit

Before any excavation begins on Ptarmigan Street, the Contractor shall have a copy of and fully execute all permit requirements.

The Contractor shall obtain permits and approvals from:

- Affected utility companies
- City of Bethel for traffic control and road closure

- Alaska Department of Natural Resources (ADNR) Temporary Water Use Permit
- ADF&G Aquatic Resource Permit
- Alaska Department of Environmental Conservation (ADEC) SWPPP Permit

If more than one (1) acre of land is being disturbed, the Contractor shall obtain (the latest version) Construction General Permit, develop a SWPPP based on that permit and submit a Notice of Intent (NOI) to ADEC. A Construction General Permit and NOI will not be required if less than (1) acre of land is disturbed. However, the Contractor shall still develop a SWPPP and follow best management practices under that SWPPP when less than (1) acre of land is disturbed.

Notify regulatory agencies a minimum of 14 calendar days (2 weeks) before beginning work.

Utility Locates

Contractor shall verify locations of all underground utilities present at the site. Request utility locates from the utilities having facilities in the area. Use the Alaska Digline, Inc. Locate Call Center for the utility locates. Provide documented locations of all known utility locations, including relevant sketches, redlines, and detailed information regarding the utilities and proposed work.

Submittals

The submittals listed in the table below are required of the Contractor and shall be submitted to the Engineer unless otherwise noted.

Item	Submittal	Specification	Review Type	Timeline
Erosion, Sediment, and Pollution Control	Storm Water Pollution Prevention Plan	641-1.03	Information	At least 21 Calendar Days prior to beginning construction activity
Erosion, Sediment, and Pollution Control	Notice of Termination	641-4.01	Information	Final Stabilization has been achieved on all portions of the site
Construction Surveying and Monuments	As-built Plans	642-3.01	Approval	Within 14 Calendar Days of substantial completion

Materials Testing Requirement

Prior to construction the Contractor is responsible for acceptance testing and quality control (QC) testing for all materials, including aggregates. Contractor shall submit the test results to the Engineer for approval.

The material testing submittals shown in the table below are required for acceptance of materials prior to use on the project. All test results shall be submitted to the Engineer a minimum of 14 days prior to placement of materials. If material testing submittals are not accepted, and additional reviews are required, additional review periods will be necessary.

Material	Submittals Required	Specification	AASHTO Test Number
Useable Excavation/Selected Material, Type C	Plasticity Index Gradation Proctor Compaction Curve	703-2.07	ATM 205 T27 T180
Selected Material, Type A	Plasticity Index Gradation Proctor Compaction Curve	703-2.07	ATM 205 T27 T180
Subbase, Type B	Test Results for Properties in Table 703-8 Plasticity Index Gradation Proctor Compaction Curve	703-2.09	ATM 205 T27 T180
Subbase, Type D	Test Results for Gradation in Table 703-9	703-2.09	ATM 205 T27 T180
Aggregate Surface Course (E-1)	Test Results for Properties in Table 703-2 Gradation Proctor Compaction Curve	703-2.03	T27 T180
Ditch lining	Gradation	610-2.01	ATM 304
Controlled Low-Strength Material	Mix Design	712-2.22	

Other Requirements

Park within the public right-of-way. Do not block private property.

Contractor shall notify ADF&G and the Engineer a minimum of 72 business hours prior to the following construction milestones and obtain the approval of the Engineer prior to proceeding.

- The initial excavation at the start of the project.
- Diverting stream flows into the diversion channel/culvert.
- Fish trapping.
- Final excavated surface
- Backfill of culvert above the spring line (to verify the invert elevations).
- Rewatering of the installed culvert and stream bed (diverting stream flows back into the constructed channel and culvert, flooding the constructed channel and culvert by removing or turning off dewatering pumps, etc.).

The Contractor is responsible for relocating trapped fish in accordance with the ADF&G Aquatic Resource Permit. The Engineer and agency personnel (e.g., ADF&G, etc), at their discretion, may elect to be onsite during stream diversion and rewatering of the installed culvert to relocate trapped fish.

Final acceptance by the Owner (or others appointed by the Owner) is required for the following project elements:

- Culvert
- Roadway
- Waterway bed fill (stream channel grading and material)
- Waterway revegetation (habitat work outside of the stream channel)

This page intentionally left blank.

CITY OF BETHEL

Request for Bid - 2025

**Ptarmigan Street Culvert Crossings, Ptarmigan Creek,
City of Bethel**

**MODIFICATIONS & SPECIAL PROVISIONS TO
2020 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION**

This page intentionally left blank.

SECTION 101
DEFINITIONS AND TERMS

101-1.03 DEFINITIONS. *Replace the following:*

DEPARTMENT. The City of Bethel.

All references made to 'The Department' within the Alaska Department of Transportation and Public Facilities (DOT&PF) Standard Specifications and Standard Details for Highway Construction shall refer to the City of Bethel.

SECTION 102
BIDDING REQUIREMENTS AND CONDITIONS

Special Provision

102-1.03 INTERPRETATION OF QUANTITIES. Delete the text of this subsection in its entirety and replace with:

Bidders shall determine the quantities of work to be done and materials to be furnished under the Contract. Bidders shall base their bid price on their estimated quantities.

Any quantities shown in the Contract Documents were used to develop the Engineer's cost estimate. The City of Bethel assumes no responsibility for such quantities or any incidental information in the bid package that may be construed as a quantity of work or materials. Bidders shall accept their Bid Price as full compensation for providing all quantities of work and materials necessary to complete the project as specified.

102-1.05 PREPARATION OF BID. Delete:

"Item 2. Enter a unit price for each contract item for which a quantity is given;"

"Item 3. Enter the products of the respective unit prices and quantities in the column provided;"

Delete and replace item 5 with:

5. Enter the lump sum amount of each basic bid item identifies in the Bid Form.

SECTION 104 SCOPE OF WORK

Special Provision

104-1.01 INTENT OF CONTRACT Add the following:

The Contractor shall designate a Quality Control (QC) Manager to ensure materials and workmanship meet the contract requirements on a daily basis. Qualifications of the QC Manager shall be submitted to the Engineer for approval. The QC Manager shall prepare daily reports which shall be provided to the Engineer on a daily basis. The daily reports shall contain the following information at a minimum: work performed, equipment and personnel on site, survey notes, quality control activities, test results, submittal information including submittals approved, and delays or predicted delays.

104-1.02 CHANGES. Delete description in item 1.a. and replace with:

If the changed work does not materially differ in character or cost from specified Contract work, the Contractor shall perform the work at the original Contract Price.

In item 1.b. in the first sentence, delete the word:

"unit"

In item 3, Cost and Pricing Data, add the following last sentence:

The Contractor shall explain any price deviation from the schedule of values for similar work.

SECTION 109 MEASUREMENT AND PAYMENT

Special Provisions

109-1.03 SCOPE OF PAYMENT. Delete the text of this subsection in its entirety and replace with:

The Contract will be paid on a lump sum basis and the Contract lump sum price shall constitute full compensation for furnishing all plant, labor, equipment, materials, and performing all operations required to complete the work as specified in all of the Contract Documents and as shown on the drawings or otherwise directed.

In the event the Contract Documents require any Work, but is not identified as being directly incident or incidental to the completion of any Contract item, the contract price for all enumerated items shall also constitute full compensation of such work.

The Contractor shall accept the Contract Price as full payment for furnishing all resources necessary to complete all work under the Contract in a complete and acceptable manner. The Contractor shall assume all liability for risk, loss, damage, or expense resulting from the work, subject to Subsection 107-1.18.

109-1.04 COMPENSATION FOR ALTERED QUANTITIES. Delete the text of this subsection in its entirety and replace with:

Except as provided in Subsection 104-1.02, no allowance shall be made to the Contractor for any increased expenses, loss of expected reimbursement or loss of anticipated profits suffered or claimed, from alterations in quantities.

109-1.05 COMPENSATION FOR EXTRA WORK. Item 4, delete second sentence and replace with:

No percentage will be paid on work covered under the original Contract.

109-1.08 FINAL PAYMENT. Add the following paragraph:

Final payment will be withheld until the As-Built Plans have been submitted and approved in accordance with the requirements stated in Section 642.

SECTION 201 CLEARING AND GRUBBING

Special Provisions

201-1.01 DESCRIPTION. Add the following:

Salvage and stockpile native organic soils and vegetative mat.

201-3.01 GENERAL. Add the following:

Clearing is not permitted within the migratory bird window of May 5 to July 25; except as permitted by Federal, State, and local laws. The Contractor is responsible for completing clearing prior to May 1 as necessary to complete the in-stream (below Ordinary High Water) work within the work window permitted by the ADF&G Fish Habitat Permit.

Topsoil. Stockpile organic soils removed during grubbing. Place stockpiled organic soils on finished slopes as topsoil.

Vegetative Mat. Salvage vegetative mat in accordance with Section 690. Take care not to damage vegetative mats to be salvaged during clearing and grubbing.

201-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for clearing and grubbing.

201-5.01 BASIS OF PAYMENT. Add the following:

Salvaging/harvesting, stockpiling, and transporting native organic soils and vegetative mat shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

SECTION 202
REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Special Provisions

202-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

201-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Item 202.0004.0000. Removing and disposing or relocating of all structures and obstructions encountered within the right-of-way under the provisions of this Section and shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

SECTION 203 EXCAVATION AND EMBANKMENT

Special Provisions

203-3.01 GENERAL. Add the following:

All excavation, trench excavation for installation of culverts/structures, and placement of culvert infill material shall be completed in accordance with applicable Occupational Safety & Health Administration (OSHA) requirements. Contractor is responsible for knowing all applicable OSHA requirements and maintaining safe working conditions at all times on the project site.

Inspect excavation for hazardous conditions before worker entry daily and as conditions change. Inspections are to be completed by a competent person as defined by OSHA.

Contractor is responsible for initial acceptance testing of all materials, including aggregates, and submitting test results to the Engineer. The Contractor shall submit the test results to the Engineer for approval two weeks prior to planned activities that use the subject materials. If material sources change, or if the provided material is visibly different than past material, updated tests are required.

The Engineer shall be on site to approve the bottom of excavation. The Contractor shall notify the Engineer a minimum of 72 business hours prior.

203-3.03 EMBANKMENT CONSTRUCTION. add the following:

Prior to any excavation of the existing embankment at or below the existing water level, install a cofferdam using bulk bags (e.g., Super Sacks) and/or other equivalent methods. Use only approved materials in the construction of road embankment and culvert backfill.

Delete the second paragraph and add the following:

Borrow materials for the new embankment shall be Selected Material, Type A for backfill and Subbase, Grading B for bedding; all meeting the requirements of Subsection 703-2.07 and 703-2.09. Selected Material, Type A and Subbase, Grading B materials shall be obtained from borrow sources that have been laboratory tested and meet the project gradation requirements. The Contractor is responsible for obtaining all necessary laboratory tests for materials. Submit results of laboratory tests to Engineer for approval before using material. Borrow, Selected Material, Type A shall be sourced if material found during excavation does not meet contract specifications.

203-3.06 COMPACTION BY PROOF ROLLING. Add the following:

Proof-roll the base of excavation and where the embankment crosses previously undisturbed ground, prior to placing new embankment material, to the extent that ensures the first lift of material placed upon it can be compacted to the specified density. Omit proof rolling only if approved by the Engineer and if necessary, to prevent liquefaction of surface soils.

203-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

203-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section and all materials testing shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

**SECTION 205
EXCAVATION AND FILL FOR MAJOR STRUCTURES**

Special Provisions

204-1.01 DESCRIPTION. Add the following:

Controlled Low-Strength Material (CLSM) item shall include all work necessary to gain access to site, prepare site, and place stabilized CLSM in accordance with these Specifications, as shown on the Plans and as directed by the Engineer. The CLSM shall be used as pipe bedding.

205-3.06 CONTROLLED LOW-STRENGTH MATERIAL.

Add the following after the last paragraph:

After completing the work, the Contractor shall remove from the project site any excess CLSM that resulted from spillage, over filling, et cetera, and restore the project site to a condition that is acceptable to the Engineer.

205-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

205-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

SECTION 301
AGGREGATE BASE AND SURFACE COURSE

Special Provisions

301-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

301-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

**SECTION 304
SUBBASE**

Special Provisions

304-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

304-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

SECTION 602 STRUCTURAL PLATE PIPE

Special Provisions

602-1.01 DESCRIPTION. Add the following:

The Owner shall procure manufacturer-designed culvert bridges (galvanized steel structural plate culverts) to meet the contract requirements for installation by Contractor.

The Contractor shall install the galvanized steel structural plate culverts provided by the Owner at the locations shown on the Drawings. Install in accordance with details, specifications, and instructions provided by the manufacturer.

Add the following Subsection:

602-2.02 GEOTECHNICAL DATA AND HYDROLOGY INFORMATION.

The Engineer shall provide available geotechnical and hydrology data and reports previously completed in support of this project at the Contractor's request.

602-3.01 CONSTRUCTION REQUIREMENTS. Add the following:

Contractor shall be responsible for receiving and storing the culvert from City of Bethel. The contractor is also responsible for inventorying and transporting the structural plate galvanized steel pipe arches to the project site. The contractor is responsible for inventorying and certifying receipt of all culvert parts and pieces on a materials transfer form at time of offloading. Contractor is responsible for assembling and installing the structural plate galvanized steel pipe arch culverts as shown in the Plans. Contractor shall follow manufacturer's recommendations when moving and transporting assembled culverts.

If requested by the Engineer, provide the Engineer access to manufacturer's installation recommendations.

The Contractor must provide proof of culvert foundation and material prior to placement of the culverts in the final locations as shown on the Plans and placement of CLSM. Final elevations of the culvert inverts shall be within 1 inch, plus or minus, of the elevations shown in the Plans. Structural culvert invert elevations outside the 1-inch plus or minus tolerance shall be cause for resetting of the culverts at the Contractor's expense. Notify the Engineer a minimum of 72 hours before scheduled placement of the culverts.

Obtain the Engineer's approval before over-excavating in-situ materials.

602-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

602-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

All work including labor, materials, and equipment associated with receiving, transporting, assembling, inspecting, and installing culvert bridges is subsidiary to Section 602 items.

Items in this Section including excavation, borrow, and bedding shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

**SECTION 610
DITCH LINING**

Special Provisions

610-3.01 CONSTRUCTION REQUIREMENTS. Delete first sentence and add the following:

Place ditch lining materials on the existing or established ground surface to the dimensions shown on the plans.

610-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

610-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

Delete Section 613 in its entirety and substitute the following:

**SECTION 613
MONUMENTS AND MARKERS**

613-1.01 DESCRIPTION. Delete the text of this subsection in its entirety and replace with:

This work consists of furnishing and installing culvert marker posts in conformance with the Plans and Specifications or as directed.

613-2.01 MATERIALS. Add the following:

Steel mounting supports shall conform to the requirements of ASTM A 36. Steel mounting supports and fasteners for culvert marker posts shall be galvanized in accordance with AASHTO M 232.

613-3.01 CONSTRUCTION REQUIREMENTS. Delete the text of this subsection in its entirety and replace with:

Culvert marker posts shall be installed as detailed on the Plans.

613-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

613-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

**SECTION 619
SOIL STABILIZATION**

Special Provisions

619-3.02 APPLICATION. Add the following:

Apply Wood Cellulose Fiber or Natural Wood Fiber mulch meeting the requirements of Subsection 727-2.01 Mulch over all disturbed areas. Straw is not an approved soil stabilization material and is prohibited on the project site.

Apply mulch at 40 pounds/1,000 square feet.

Delete Subsections 619-4.01 and 619-5.01 in their entirety, and add the following new subsections:

619-4.01 METHOD OF MEASUREMENT.

No measurement will be made for mulch, application, water, maintenance, or repair.

619-5.01 BASIS OF PAYMENT.

Mulch, application, water, maintenance, and repair shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

SECTION 620 TOPSOIL

Special Provision

620-3.01 PLACING. Add the following:

Place native organic soils (salvaged from clearing and grubbing and excavation work) to a minimum thickness of 4 inches (or as approved by the Engineer) on all disturbed soil away from the road prism. Salvaged vegetative mat free of noxious weeds, including vegetative mat with insufficient thickness for use along stream channel banks, may be substituted for topsoil in any quantity. Spread excess salvaged material over disturbed soils outside road prism. Excess salvaged vegetated mat beyond what is required by the Plans may be used in lieu of topsoil.

Delete Subsections 620-4.01 and 620-5.01 in their entirety, and add the following new subsections:

620-4.01 METHOD OF MEASUREMENT.

No measurement will be made for native organic soils or topsoil.

620-5.01 BASIS OF PAYMENT.

Native organic soil/topsoil is subsidiary to Section 690.

SECTION 630
GEOTEXTILE FOR EMBANKMENT AND ROADWAY
SEPARATION, STABILIZATION AND REINFORCEMENT

Special Provision

630-3.01 CONSTRUCTION REQUIREMENTS.

2. b. Delete the first two sentences and replace with the following:

Lay the machine rolled direction of the geotextile parallel with the culvert centerline. Join seams parallel with the culvert centerline by overlapping a minimum of 2 feet. No seams will be allowed perpendicular to the culvert centerline.

630-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

630-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

SECTION 640
MOBILIZATION AND DEMOBILIZATION

Special Provisions

640-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

640-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section shall be paid under bid item 101 Mobilization and Demobilization.

**SECTION 641
EROSION, SEDIMENT, AND POLLUTION CONTROL**

Special Provisions

641-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

641-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

SECTION 642 CONSTRUCTION SURVEYING AND MONUMENTS

Special Provisions

642-1.01 GENERAL. Add the following:

Contractor is responsible for verifying the survey control prior to use.

Prepare as-built plans to submit at project completion.

642-3.01 GENERAL. Add the following:

As-Built Plans. Prepare a complete set of red lined as-built plans and keep them current during construction. Detail in the as-built plans all construction changes made to the Plans. Include the following information on the appropriate sheets:

1. Culvert elevations at inlet and outlet. Final culvert invert elevations shall be within 1 inch, plus or minus, of the elevations listed on the Plans as stated in Section 602. If elevations are outside of the given tolerance, contact the Engineer immediately.
2. Stream channel thalweg elevations at inlet, outlet, and tie-in points
3. Final road elevation at tie-in points and directly over the proposed culvert, including centerline and edge of roadway elevations.
4. Top and toe of slope for reconstructed embankments.

Furnish a copy of the as-built plans at the completion of construction. As-built plans shall be sealed by a professional land surveyor licensed in the State of Alaska. Furnish any additional information required to clarify the as-built plans and correct all discrepancies. Submit as-built plans within 14 days of substantial completion.

642-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

642-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Construction Surveying and As-Built Plans includes field and office work required to accomplish the work, including furnishing necessary personnel, equipment, transportation and supplies.

Traffic control devices necessary for the survey parties are subsidiary to items under this section

Survey efforts to verify control point elevations and establishment of additional survey control and/or coordination with surveyor of record are subsidiary to items under this section.

Items in this Section shall be paid under bid items 102 West Project Culvert Replacement, 103 East Project Culvert Replacement, and 104 Project Documentation and Close-out.

**SECTION 643
TRAFFIC MAINTENANCE**

Special Provisions

643-1.03 TRAFFIC CONTROL PLAN. Add the following:

Road closures shall be coordinated with and approved by the Engineer two weeks in advance of each closure so that proper public notice may be given. See special provisions 643-3.03 for notification requirements.

643-3.03 PUBLIC NOTICE. Add the following:

1. CITY OF BETHEL Director of Public Works, (907) 543-3110, warnold@cityofbethel.net

643-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

643-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

Add the following Section:

SECTION 672

STREAM DIVERSION & DEWATERING

672-1.01 DESCRIPTION. The Work under this Section consists of performing all operations pertaining to the dewatering of Work areas or diversion of surface and subsurface water flows for excavation and backfill during construction operations.

672-1.02 GENERAL. A recommended Stream Diversion Plan has been provided in Drawings. The provided Stream Diversion Plan is intended to convey general concepts and locations are approximate. The Contractor shall adjust the locations of bulk bags (e.g. Super Sacks), coffer dams, temporary culverts, diversion channels, detour roads, and related items as needed to fit field conditions. The Contractor shall review this plan and submit any changes to the Engineer in writing for approval prior to implementing a modified plan. Divert and dewater per permits.

The Contractor shall notify ADF&G and the Engineer before:

1. Diverting stream flows into the diversion channel.
2. Diverting stream flows into the reconstructed channel and new culvert.

Provide notification a minimum of 72 hours before diverting stream flows or as required by permits, whichever is greater.

672-2.01 MATERIALS. Contractor shall be responsible for obtaining, mobilizing, operating, and maintaining all materials and equipment necessary to complete dewatering operations, including machinery, bulk bags, sandbags, hoses, pumping facilities, piping, temporary culverts, and the like.

672-3.01 CONSTRUCTION. Comply with construction design, installation, and operation of dewatering systems with current safety and environmental regulations. Work must be performed in dry conditions. Minimize disturbance of undisturbed ground. Dewatering casings shall be placed at least 10 feet from the proposed culvert inlet or outlet.

Maintain 24-hour pump operation for trench dewatering until backfill is at least one (1) foot above the groundwater elevation. Provide a redundant pump onsite during dewatering activities and maintain adequate fuel levels for dewatering pumps to function overnight or whenever the site is not attended. Contact the Engineer immediately if pumping operations cease before backfill is placed to the required elevation.

672-3.02 DEWATERING. Acceptance of Contractor's Stream Diversion Plan by the Engineer does not relieve Contractor of responsibility for the exercise of reasonable precaution, prudent construction practices, overloading or misuse of existing or new structures, the adequacy and safety of such works, and potential damage or undermining of existing or completed works.

Relocate fish contained within any coffer/diversion dams or the old channel before the site is completely dewatered. Place relocated fish in the closest pool upstream of the construction area. If pumps are used for dewatering an isolated pools after diversion, the intake must meet specifications required by the Fish Habitat Permit to prevent fish entrapment, entrainment, or injury.

Water resulting from Contractor's dewatering effort may not be pumped or otherwise diverted into creeks unless required permits, including, but not limited to, ADNR, ADEC and the U.S. Environmental Protection

Agency, are obtained. Under no circumstances will the Contractor be allowed to divert water from the excavation onto roadways. Contractor is to provide a disposal site for excess water in accordance with all necessary permits.

Maintain the dewatering pumping operations to ensure return flow does not exceed State of Alaska water quality standards. Water pumped from the construction site may require additional filtration by filter fabrics, settling, or other methods to prevent turbid water from directly entering the stream. Turbid water pumped from the work site for the purpose of lowering the water table in the trench during stream channel reconstruction shall be discharged at least 100 feet, or as far as reasonably practical if 100 feet cannot be obtained, from stream flows onto riprap velocity dissipators to reduce downstream turbidity, except when performing rewatering procedures described in the next subsection.

672-3.03 REWATERING. Conduct rewatering activities to minimize sediment movement downstream of the site upon completion of in-stream work. Prior to re-diverting full stream flows to reconstructed channel (including culvert), wet the channel to wash fines into stream bed. Slowly wet the channel through use of pumps or by diverting a small portion of stream flows into the reconstructed channel. Provide means for collecting sediment and turbid water at downstream end of reconstructed channel. Capture and pump turbid water from downstream end of channel back to upstream end of channel until fines are washed into stream bed and water runs clear as determined by the Engineer. After the initial sediment pulse is removed, slowly breach the coffer/diversion dams to avoid a large pulse of water being sent through the newly constructed channel.

672-4.01 METHOD OF MEASUREMENT. Section 109.

At the contract lump sum price and including preparation of Stream Diversion Plan and all labor, material and equipment required to implement the Stream Diversion Plan as specified and directed. Excavation, backfill, temporary culverts, pumps, hoses, stilling basins, sandbags, bulk bags (e.g., Super Sacks), plastic liners, temporary rock and riprap, and other materials will not be measured for payment.

672-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

All other materials, equipment, and labor necessary to complete the scope of work as specified under this section and not paid for under other items on the bid schedule, including temporary culverts, pumps, hoses, stilling basins, sandbags, bulk bags (e.g., Super Sacks), plastic liners, temporary rock and riprap, are subsidiary to items under this section.

Excavation and backfill required to complete the scope of work as specified under this section are subsidiary to items under this section.

Pumping efforts to maintain trench dewatering, including pumps and fuel, are subsidiary to items under this section.

Items in this Section includes (but not limited to) all resources required to provide Stream Diversion Plan shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

Add the following Section:

**SECTION 690
WATERWAY**

690-1.01 DESCRIPTION. Construct a waterway bed (stream bed, river bed, creek bed, and or similar), and waterway bank (protection and revegetation), at the locations shown on the Plans.

690-1.02 REFERENCES.

1. Stream Bank Revegetation and Protection: A Guide for Alaska; published by Alaska Department of Fish and Game; printed copy available from the Department, and electronic copy available on the internet. Available here: https://www.adfg.alaska.gov/static/home/library/pdfs/habitat/98_03.pdf

690-2.01 MATERIALS.

Clearing and Grubbing	Section 201
Excavation and Embankment (waterway bed and bank)	Section 203 & 703
Structural Plate Pipe	Section 602 & 707
Ditch lining	Section 610
Native organic soils/topsoil	Section 201 & 620
Erosion, Sediment, and Pollution Control	Section 641
Selected and Subbase Material	Section 703

Waterway Bed Fill:

Use salvaged existing stream bed material or Waterway Bed Fill produced by mixing, by volume, 70% Ditch lining and 30% Subbase, Type D. Mix material on site before placing. Salvaged existing stream bed material shall be processed to remove unsuitable material containing, muck, roots, sod, or other deleterious material.

Mix material on site before placing. Submit a gradation for produced Waterway Bed Fill to the Engineer for approval. The Engineer's approval of the Waterway Bed Fill must be obtained before placing Waterway Bed Fill. Adjust the gradation of Waterway Bed Fill mix onsite as directed by the Engineer.

Gradation testing is required for materials listed in the Materials Testing Requirements table included in the Request for Proposal.

690-3.01 CONSTRUCTION REQUIREMENTS. Provide equipment of a size and type to efficiently complete the work with the least impact on the waterway. Submit to the Engineer a list of equipment to be used during construction for review and approval.

Notify the Engineer 72 hours before beginning Waterway work to provide opportunity for the Engineer to coordinate having one person with fish habitat experience (ADF&G, or similar) on site during construction of waterway bed and bank reconstruction.

The Engineer shall approve Waterway Bed Fill prior to placement of material. Notify the Engineer a minimum of 72 hours before scheduled placement of Waterway Bed Fill.

The Engineer shall approve waterway bank limits prior to construction of banks. Notify the Engineer a minimum of 72 hours before scheduled bank construction.

690-3.02 EXCAVATION. Excavate to the dimensions shown on the Plans. Control excavated material to minimize disturbance to the channel and banks.

690-3.03 WATERWAY BED. Place Waterway Bed Fill material in the Ptarmigan Creek channel by methods that do not cause segregation or damage. Place the fill in lifts of maximum depth of 6-inches. Fill voids by machine or hand tamping after placing each lift. Compact bed materials, each lift, by mechanical means as approved by the Engineer. Make waterway bed surface roughness similar to the natural waterway bed.

Fill all voids left during placement of fill material and bank reconstruction with Subbase, Type D or useable excavation meeting the requirements of Selected Material, Type C. Use water pressure, metal tamping rods, and similar hand-operated equipment to force material into all surfaces. If voids are present after water compaction, add additional Subbase, Type D or useable excavation meeting the requirements of Selected Material, Type C and water compact until water is flowing on the surface of the waterway bed.

690-3.04 WATERWAY BANK. Tie the ends of constructed banks to the existing Ptarmigan Creek banks. Modify bank height and width as necessary to create a smooth transition from constructed bank to natural bank.

Place the bank reconstruction materials as shown on the Plans. Place the salvaged backfill material such that the top of the bank is tapered and at the same elevation as the existing bank.

Vegetative Mat. The Contractor shall harvest, transport, and store vegetative mats from an approved onsite or offsite location coordinated with the City of Bethel. The Contractor shall prioritize salvaging vegetative mats from the project site or in the vicinity of the project from areas that will be disturbed for other work. Notify the Owner 72 hours in advance of harvesting vegetative mat. The preferred method for harvesting vegetative mat from identified sites on City of Bethel lands is with hand tools at all times possible. Remove the mat in at least 12-inch-thick sections and preserve intact as possible. The Contractor shall notify the Owner 72 hours before vegetative mat placement. The Owner must approve vegetative mat prior to placement. The Contractor shall place vegetative mats harvested from offsite locations within one (1) day of harvesting. Install vegetative mat in the follow sequence:

1. Stake all areas to be planted with vegetative mats prior to installation. Notify the Engineer of the delineated areas three working days prior to installation. Install only after receiving the Engineer approval.
2. Wet the in-situ soil or topsoil matrix that the vegetative mat will be placed on.
3. If the vegetative mat has lost topsoil, such that the in-place thickness of the mat will not be 12 inches thick, place additional topsoil, filling voids, and increasing the effective mat thickness to 12 inches.
4. Place vegetative mats tightly together, without gaps, with full contact of the root mass to the soil surface below, tamp into place.
5. In disturbed areas less than 4 feet wide, use only the width of vegetative mat necessary to extend to existing vegetation.
6. In disturbed areas more than 4 feet wide, place vegetative mat to extend at least 4 feet from edge of bank.
7. Place any remaining small mobile woody debris material and slash on top of stream banks to provide overbank habitat

690-3.05 MAINTENANCE. Deep water vegetative mat immediately after planting. Deeply water again at least twice a week for two weeks, then weekly for 6 weeks or as directed by the Engineer. Deep watering shall provide water penetration throughout the entire layer, to the top of the waterway bank fill, with minimum runoff. Rain will not be considered a substitute for deep watering unless permitted by the Engineer.

690-4.01 METHOD OF MEASUREMENT. Delete this subsection in its entirety and replace with the following:

See Section 109 and the following:

No measurement will be made for items under this section.

690-5.01 BASIS OF PAYMENT. Delete this subsection in its entirety and replace with the following:

Items in this Section shall be paid under bid items 102 West Project Culvert Replacement and 103 East Project Culvert Replacement.

All work to place and maintain the materials in place, including but not limited to, excavation, placement/backfilling, benching, compacting, filling voids and similar and all work to grade placed fill in culvert to match constructed channels upstream and downstream, including any minor exaction and placement of Waterway Bed Fill are subsidiary to items under this section.

All work to construct stream banks and complete revegetation of disturbed areas. The materials and all work to salvage/harvest, store, transport, place and maintain organic materials in the state specified (vegetative mat, salvaged vegetation, native organic soil/topsoil, mulch, and similar) and watering are subsidiary to items under this section.

Filling voids left during placement of fill material and bank reconstruction with Subbase, Type D or useable excavation meeting the requirements of Selected Material, Type C, including compaction and water washing, is subsidiary.

Hauling, stockpiling, and disposal of unsuitable and surplus material are subsidiary to items under this section.

Water diversion subsidiary to Section 672.



February 3, 2025

Mr. Bill Arnold
City of Bethel
P.O. Box 1388
Bethel, AK 99559

**Subject: Task order #68 – Ptarmigan Street Culvert Crossing – Bethel, Alaska
Geotechnical Investigation and Recommendations**

Dear Mr. Arnold:

This report presents the results of our field investigation, the results of laboratory testing, and preliminary recommendations regarding foundation design and site development in support of the proposed replacement of the culverts at two locations that convey Ptarmigan Creek under Ptarmigan Street in Bethel, Alaska.

PROJECT UNDERSTANDING

The two culvert locations and the surrounding embankment were compromised after major flooding events occurred in the spring of 2024. The City of Bethel (City) intends to replace both culverts to maintain the connectivity of Bethel residents located on the west side of the culverts to the rest of Bethel. Within this report, the westernmost crossing shall be referred to as Site 1, and the easternmost crossing as Site 2.

SCOPE OF WORK

Our geotechnical scope of work for this project included:

- A review of existing geotechnical and geological information at or near the culvert replacement locations.
- Drilling four (4) borings to a depth of approximately 30 feet below the existing site grade.
- Complete associated laboratory testing on collected samples to determine engineering properties.
- Prepare a report that presents the data obtained, analysis and interpretation, and engineering recommendations with respect to the observed site soils and subsurface conditions.

Our proposal was accepted, and we received Notice-to-Proceed on September 17, 2024.

BACKGROUND REVIEW

DOWL has reviewed several geotechnical investigations in the vicinity of the subject site. The nearest investigation took place approximately ½-mile from the culvert locations. These reports and findings were reviewed to predict the subsoils at the site, determine appropriate test boring depths and quantity, and prepare a sampling plan.

Based on the regional geology and previous geotechnical explorations near the site, the subsurface site conditions were anticipated to consist of fill material composed of silty sand over multiple feet of organics over silty sand and sandy silt deposits with organics.

EXPLORATION SUMMARY

The field investigation for this site was conducted November 12 and 13, 2024. Four (4) test borings were drilled, sampled, and logged to depths of 31.5 feet below existing grade near the existing culverts.

Locations of the test borings were determined in the field by handheld GPS and are only as accurate as the method implies. Test boring locations are on Figure A-2, Test Boring Location Map (Appendix A), and a list of the exploration locations is presented as Table 1.

Table 1: Test Boring Location

Boring Number	Boring Depth (feet)	Latitude (deg)	Longitude (deg)	Location
TB-01	31.5	60.805111	-161.806626	Site 1, West culvert, North side
TB-02	31.5	60.805032	-161.806484	Site 1, West culvert, South side
TB-03	31.5	60.805067	-161.795537	Site 2, East culvert, North side
TB-04	31.5	60.804955	-161.795249	Site 2, East culvert, North side

The test boring was drilled using a Geoprobe 6620 DT track-mounted drill rig fitted with continuous-flight, hollow-stem auger. The rig is owned and operated by GeoTek Alaska out of Anchorage, Alaska. The drilling was supervised, and the samples logged by a geotechnical engineer with DOWL. Test boring logs and descriptive guide are presented in Appendix B.

A grab sample was obtained at the surface where each test boring was drilled. Disturbed samples were obtained at depths of 2.5, 5, 7.5 and 10 feet and then at 5-foot intervals thereafter using a standard split-spoon sampler.

The Standard Penetration Test (SPT) was performed in the test borings by driving a 2-inch outside-diameter, split-spoon sampler a distance of 18 inches ahead of the auger with a 140-pound hammer falling 30 inches in general accordance with ASTM Standard Test Method for Standard Penetration Test and Split-Barrel Sampling of Soils (D1586). The standard penetration resistance (N) value shown on the test boring logs indicates the number of blows required to drive the sampler the last 12 inches. The results are an indication of the relative density or consistency of the subsoil. The N-values shown in the logs are raw data from the field and have not been adjusted for sampling equipment type or overburden pressure. In frozen soils, the SPT values are highly influenced by ice content, ground temperature, and the presence of gravel.

Soil samples recovered during drilling were classified in general accordance with ASTM D2488 (visual-manual procedures) and sealed in plastic bags to preserve the natural water content. The samples were then transported to Alaska Testlab in Anchorage in accordance with ASTM D4220, for further testing.

Laboratory Testing

Laboratory tests were performed on selected samples to measure soil index properties to provide a basis for estimating engineering properties. Soil index tests including moisture

contents and grain size analyses were performed on select samples. The natural water content of all the recovered samples was measured.

Table 2: Laboratory Tests

Test	Purpose
Natural Moisture Content ASTM D2216	Provides a measure of natural (<i>in situ</i>) water content.
Atterberg Limits ASTM D4318	Provides an indicator of the consistency and swell potential of fine-grained soils.
Particle-Size Distribution ASTM D422	Provides a measure of grain sizes of the soils for classification and identification of physical characteristics.
Limited Mechanical Analysis ASTM D1140	Provides the percentage of material finer than the #4 and #200 screen generating percentages of gravel, sand, and silt sized particles.

Laboratory testing results are presented in Appendix C.

SITE AND SUBSURFACE CONDITIONS

The two existing culvert sites are located on Ptarmigan Street. The western culvert site (Site 1) is located near Naunraq Street and eastern culvert site (Site 2) is located near the Lulu Heron Congregate Home. The area consists of residential development to the north and native ground and brush to the south.



Figure 1: Site 1 culvert crossing viewed northeast.



Figure 2: Site 2 culvert crossing viewed southwest.

Observed soils varied between test borings with varying depths and thickness of organic soils. Conditions were generalized to simplify the engineering analysis. The soils conditions observed at the Site 1 can be generalized as follows:

- 10 to 14 feet thick: Fill, silty sand with gravel to sandy silt (SM, ML), over
- 2 to 4 feet thick: Peat and Organic Silt with varying amounts of silt, sand, and fibrous organics (OL, PT), over
- 18 feet below ground surface (bgs) to drilling termination depth: Mineral silt with sand (ML, SM)

Site 1 conditions are described in greater detail in Table 3.

Table 3:Site 1 (West) Soil Unit summary

Depth (feet)		Soil Unit	USCS	Moisture Content (%)		Fines Content (%)		Blows per 12-inches	
Top	Bottom			Low	High	Low	High	Low	High
0	10-14	Fill material	SM, ML	6	23	16	22	4	8
10-14	12-18	Peat and organic silt	OL, ML, PT	34	78	-	70	3	7
18	30	Silt with sand	ML, SM	23	40	-	62	12	27

The soils conditions observed at the Site 2 can be generalized as follows:

- 0 to 10 feet: Silty sand fill (SM)
- 10 to 14 feet: Organic Silt with fine sand (OL) (OL not observed in TB-4)
- 14 to 30 feet: Silty sand (SM) with trace organics (OL)

Site 2 conditions are described in greater detail in Table 4.

Table 4:Site 2 (East) Soil Unit summary

Depth (feet)		Soil Unit	USCS	Moisture Content (%)		Fines Content (%)		Blows per 12-inches	
Top	Bottom			Low	High	Low	High	Low	High
0	10	Fill material	SM	6	21	14	39	5	25
10	14	Organic silt	OL, SM	20	60	-	43	2	8
20	30	Silty sand	SM	19	35	21	31	9	50

Groundwater. Groundwater was encountered during drilling at approximately 10 feet and 13.5 feet below ground surface at Sites 1 and 2, respectively.

Frozen Ground. Seasonally frozen ground was observed from the surface down to approximately 2 to 4.5 feet bgs. Permafrost or perennially frozen ground was not observed to the maximum depth of exploration but is common in the area.

CLIMATE

NOAA climate data for the period of 1994 through 2023 was analyzed to calculate the average and design air thawing and freezing indices for the minimum and maximum using a 100-year return period over a Weibull probability distribution. The design indices are given in Table 5. The average annual temperature in Bethel over the last 30 years is 31.5 °F; however, from 2014 to 2019 the average annual temperature ranged from 33.5 to 37 °F with air thawing indices approaching or exceeding the 100-year event in 2016 and 2019.

Table 5:Design Air-Thawing and Design Air-Freezing Indices

	Design Air Temperature Indices (°F-Degree*Days)		
	Minimum	Mean	Design or Maximum
Thawing	2,008	3,014	3,687
Freezing	1,173	3,177	5,037

ENGINEERING ANALYSIS AND DISCUSSION

In general, the proposed culvert replacements are feasible at both sites provided the organics within the bearing prism are excavated and replaced with structural fill. Our engineering analysis and recommendations assumes the new culverts will be box or pipe arch culverts with full inverts. If the design is significantly different, we will revise our recommendations accordingly. The analyses and associated recommendations for each culvert crossing are the same for both the Site 1 and 2 culvert crossings.

Bearing Capacity and Settlement. We estimate the culverts will bear on soil approximately five to six feet below the groundwater table. Soils at this depth consist of sand and mineral and organic silt with some fibrous organics.

To improve bearing conditions and combat localized settlement, over excavation and replacement with structural fill below the culverts will be recommended. A reinforcement geotextile placed between the structural fill and underlying mineral soil will provide separation to improve fill placement and reduce differential settlement below the structure. We anticipate that excavation will extend a minimum of two feet below the bottom of the culvert and should extend laterally five feet beyond the edge of the culvert. Settlement will be nearly immediate with loading and placement of backfill assuming organics are fully excavated.

An allowable bearing capacity of 3,000 psf may be used for each culvert to maintain total settlement at 1-inch or less with a differential settlement half that. Higher bearing pressures are feasible but will result in higher settlement. A completely frost-protected design including headwall installation was deemed uneconomical. Complete frost protection would require a large, deep excavation on the order of 10 feet below the bottom of culvert with structural fill placed. The recommended section is for a cost-effective solution that is not completely frost protected and may be subject to frost heave during winter months. An insulated section below the culvert to reduce frost penetration is feasible, however multiple cold years could reintroduce permafrost and frost heave at the insulation extents.

Geotextile. A reinforcement type, woven geotextile with permittivity meeting DOT&PF Reinforcement Geotextile (Type 2) specifications (729-2.01) is needed for separation and to support the overlying culverts and fill.

RECOMMENDATIONS

Bearing Capacity and Settlement. The structural section beneath each culvert shall consist of the following:

- 24 inches NFS structural fill, over
- DOT&PF Reinforcement Geotextile, Type 2, over
- Native mineral soil

To construct the structural section, excavate all organics or a minimum of two feet below the bottom of the culvert (whichever is deeper) and extend excavation five feet beyond the sides of the culvert walls.

Geotextile. The reinforcement geotextile placed at the base of the structural section shall have stitched seams and placed in accordance with DOT&PF Standard Specifications Section 630. If overlapping is required, overlaps shall be a minimum of five feet and oriented perpendicular to the culvert alignment or parallel to centerline.

CONSTRUCTION CONSIDERATIONS

Structural Fill. All structural fill should consist of non-frost susceptible (NFS) or possibly frost susceptible (PFS) gravel and contain no lumps, frozen material, organic matter, or other deleterious matter. Structural fill shall meet the following gradation requirements provided in Table 6.

Table 6: Structural Fill Gradation Requirements

Sieve Size	Percent Finer
3"	100*
1-1/2"	70-100
3/4"	30-100
1/2"	25-100
No. 4	20-49
No. 40	0-25
No. 200	0-6
0.02mm	0-3

Other fill material, which does not meet this gradation requirement, may be acceptable for use. However, the gradation of such material should be evaluated by the project geotechnical engineer prior to its use.

Excavation. Our recommendations assume that the culvert bases will be founded directly on a minimum of 2 feet of structural fill, constructed above the undisturbed silty and sandy soil.

Any peat or organic material shall be removed from below the culvert footprints extending horizontally from the edge of culverts 1-foot for each foot below the bottom of the culverts and replaced with structural fill. Frozen soil should not be used as fill or backfill and may need to be thawed until compactable or removed and replaced with compactable backfill.

Earthwork. Earthwork should be completed with quality control inspection, including bottom-of-hole inspections, fill gradation classification, and in-situ compacting testing. A bottom-of-hole inspection should be conducted by a qualified geotechnical engineer, geologist, or special inspector following each site excavation activities (and before any foundation construction begins) to visually confirm the findings of this report and provide recommendations for non-conforming conditions encountered during the excavation activities.

Fill material should be placed at 95 percent of the modified Proctor density as determined by ASTM D1557, unless specifically stated otherwise in other sections of this report. Structural fill and backfill around the culvert should be placed in six-inch lifts. All earthwork should be completed with quality control inspection.

Dewatering. Excavation for the reinforced soil mat will require dewatering or control of the adjacent stream. We anticipate sheet piles be driven around the excavation area to limit the disturbance to the site. Sheet pile shoring and dewatering should be designed by the contractor's engineer.

LIMITATIONS

DOWL based the conclusions and recommendations presented in this report, based on the assumption that site conditions are not substantially different than those exposed by the explorations. If during construction, subsurface conditions are different from those encountered in the explorations, advise DOWL at once to review those conditions and reconsider recommendations if necessary. The geotechnical recommendations provided herein are based on the premise that an adequate program of tests and observations will be conducted during construction in order to document compliance with DOWL's recommendations and to confirm conditions exposed during subgrade preparations. DOWL geotechnical personnel must review final designs to verify that recommendations provided herein have been properly implemented.

If there is a substantial lapse of time between submission of this report and the start of work at the site, and especially if conditions have changed due to natural causes or construction operations at or near the site, contact DOWL to review this report and to evaluate the applicability of the conclusions and recommendations presented herein.

DOWL prepared this report for the City of Bethel to use on this project. DOWL recommends you make this report available to prospective contractors for information and factual data only, but not as a warranty of subsurface conditions. DOWL prepared this report, including engineering analyses, recommendations, figures, and design details specifically for the culvert replacement project on Ptarmigan Street. These recommendations are not applicable to other construction sites. Do not separate the figures from the text for independent use.

DOWL performed these services consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in this area under similar time and budgetary constraints. No warranty is made or implied.

Any conclusions made by a construction contractor or bidder relating to construction means, methods, techniques, sequences, or costs based upon the information provided in this report are not the responsibility of DOWL.

Sincerely,
DOWL



Robert Sanders, EI
Geotechnical Engineer



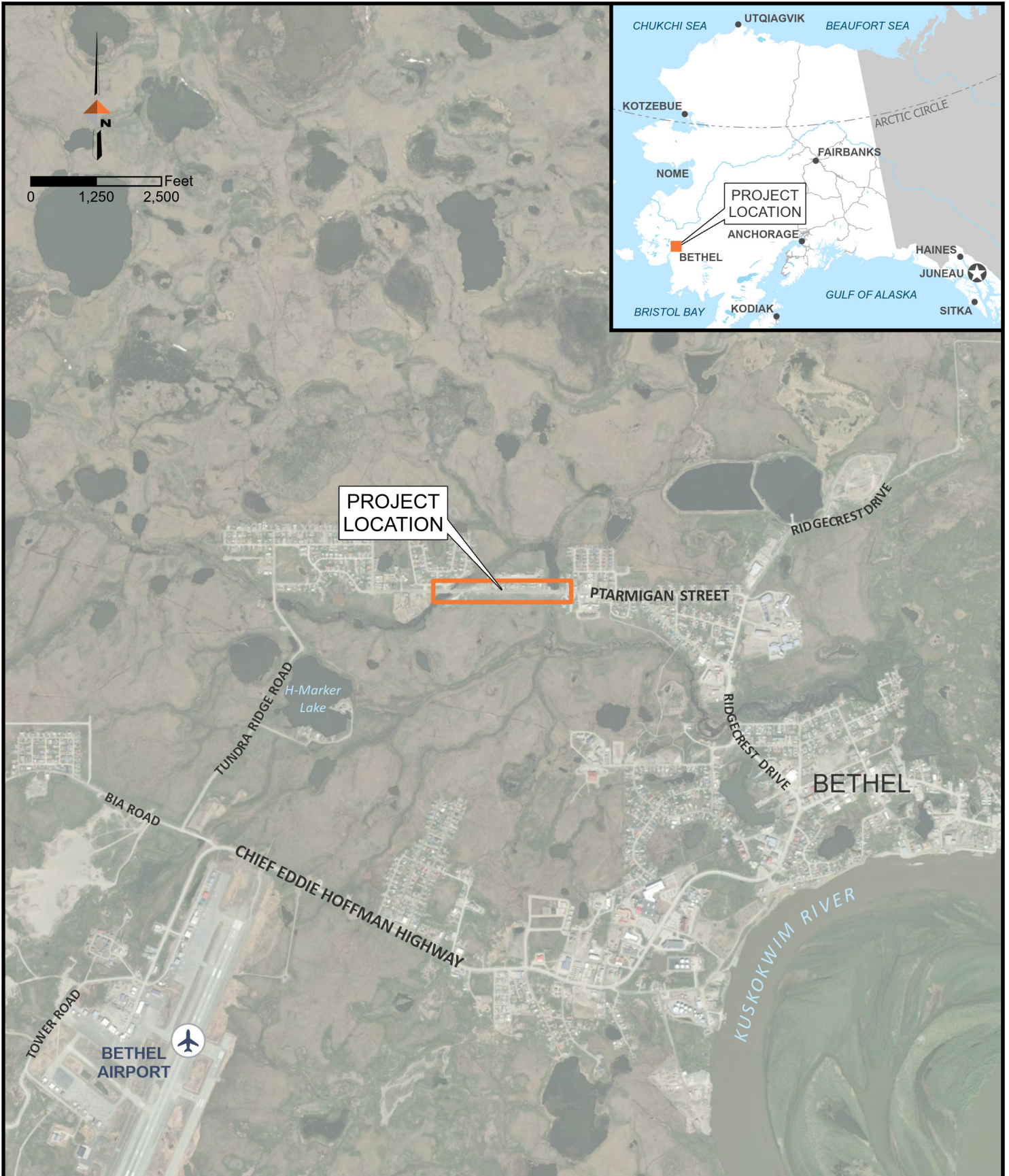
Jeremiah Holland, PE
Senior Geotechnical Engineer



Appendices: Appendix A: Project Location and Test Boring Location Map
 Appendix B: Test Borings Logs and Descriptive Guide
 Appendix C: Laboratory Test Result

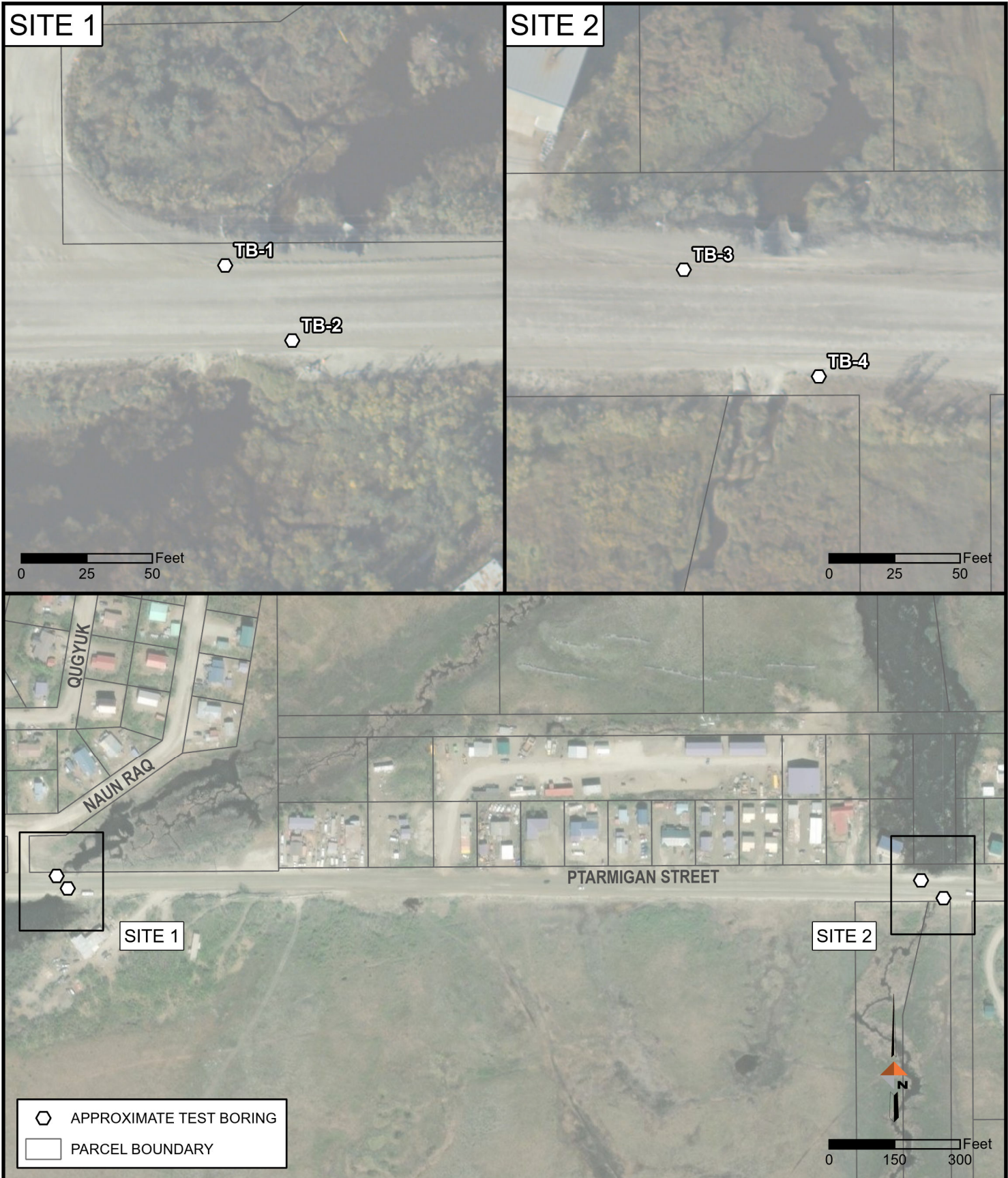
APPENDIX A

Project Vicinity and Test Boring Location Map



	PROJECT LOCATION AND VICINITY	PROJECT	1163.50270.68
	PTARMIGAN ST. CULVERT CROSSING GEOTECHNICAL INVESTIGATION	DATE	JAN 06, 2025
	BETHEL, AK	FIGURE A-1	

Service Layer Credits: World Imagery: Maxar



	TEST BORING LOCATION	PROJECT1163.50270.68
	PTARMIGAN ST. CULVERT CROSSING GEOTECHNICAL INVESTIGATION	DATEJAN 08, 2025
	BETHEL, AK	FIGURE A-2

Service Layer Credits: World Imagery: Kodiak Mapping Inc
World Imagery: Maxar

APPENDIX B

Test Boring Logs and Descriptive Guide



Bethel Ptarmigan Street Culvert Crossings

Soil Boring: TB-1

Client:	City of Bethel	Project Number:	1163.50270.68
Contractor:	GeoTek Alaska	Date Completed:	11/12/2024
Equipment:	Geoprobe 6620DT	Boring Depth:	31.5'
Method:	Auger	Coordinates:	60.805111, -161.806626
Operator:	Mason Iverson	▽ Drilling Water Level:	10'
Logged By:	Robert Sanders	▼ Delayed Water Level:	N/A

Depth (ft)	Lab				Samples				Frozen	Graphic Log	USCS	Soil Description and Remarks	Water Levels
	% Gravel	% Sand	% Fines	Moisture Content (%)	Atterberg Limits (LL-PL-Pi)	Sample Number	Blow Counts	Sample Graphic					
	24	56	20	6		1		■				FILL, Silty Sand with Gravel (SM) - 25% fine, subangular to subrounded gravel; 55% fine sand; 20% fines; brown, FROZEN , Nbn	4.5
				9		2	4 3 5	■			SM		
5	0	78	22	10		3	4 4 4	■					
				20		4	2 2 2	■			ML	FILL, Sandy Silt (ML) - 40% fine sand; 60% low to medium plasticity fines; wet, gray, soft	7.0
10				44		5	2 1 2	■			PT		10.0
												Peat (PT) - 15% fine sand; wet, brown	12.0
15	0	30	70	34	NP	6	2 3 4	■					
				35		7	5 5 7	■			ML	Silt (ML) - 30 to 40% fine sand; 60 to 70% non plastic fines; wet, gray, firm to very stiff	31.5
25	0	38	62	26		8	10 8 10	■					
												End of Boring, backfilled with soil cuttings	
30				27		9	3 5 7	■					



Bethel Ptarmigan Street Culvert Crossings

Soil Boring: TB-2

Client:	City of Bethel	Project Number:	1163.50270.68
Contractor:	GeoTek Alaska	Date Completed:	11/12/2024
Equipment:	Geoprobe 6620DT	Boring Depth:	31.5'
Method:	Auger	Coordinates:	60.805032, -161.806483
Operator:	Mason Iverson	▽ Drilling Water Level:	10.3'
Logged By:	Robert Sanders	▼ Delayed Water Level:	N/A

Depth (ft)	Lab				Samples				Frozen	Graphic Log	USCS	Soil Description and Remarks	Water Levels
	% Gravel	% Sand	% Fines	Moisture Content (%)	Sample Number	Blow Counts	Sample Graphic	Sampler Recovery					
5				12	1		■					FILL, Silty Sand (SM) - 10% fine, subangular to subrounded gravel; 70% fine sand; 20% fines; grayish brown, FROZEN , Nbn	4.5
				19	2	4 3 4	▲	2.0 [11]				FILL, Silty Sand with Gravel (SM) - 20% fine, subrounded gravel; 65% fine sand; 15% fines; moist, brown, loose	9.5
5	18	66	16	9	3	4 3 2	▲	16.0 [89]			SM	FILL, Silty Sand (SM) - 80% fine sand; 20% fines; wet, gray, loose	13.5
				23	4	2 2 2	▲	8.0 [44]				Organic Silt (OL) - 10% fine sand; 90% fines; moist to wet, brown, firm, contains fibrous organics	17.5
10	2	77	21	22	5	2 3 3	▲	16.0 [89]				Sandy Silt (ML) - 40% fine sand; 60% low to medium plasticity fines; wet, gray, stiff	27.5
												Silty Sand (SM) - 75% fine sand; 25% fines; wet, gray, medium dense	31.5
15				78	6	2 3 2	▲	16.0 [89]			OL	Silty Sand (SM) - 75% fine sand; 25% fines; wet, gray, medium dense	31.5
												Silty Sand (SM) - 75% fine sand; 25% fines; wet, gray, medium dense	31.5
20				40	7	4 4 8	▲	18.0 [100]			ML	Silty Sand (SM) - 75% fine sand; 25% fines; wet, gray, medium dense	31.5
												Silty Sand (SM) - 75% fine sand; 25% fines; wet, gray, medium dense	31.5
25				26	8	7 7 10	▲	16.0 [89]			SM	Silty Sand (SM) - 75% fine sand; 25% fines; wet, gray, medium dense	31.5
												Silty Sand (SM) - 75% fine sand; 25% fines; wet, gray, medium dense	31.5
30				23	9	5 10 17	▲	16.0 [89]			SM	Silty Sand (SM) - 75% fine sand; 25% fines; wet, gray, medium dense	31.5

End of Boring, backfilled with soil cuttings



Bethel Ptarmigan Street Culvert Crossings

Soil Boring: TB-3

Client:	City of Bethel	Project Number:	1163.50270.68
Contractor:	GeoTek Alaska	Date Completed:	11/13/2024
Equipment:	Geoprobe 6620DT	Boring Depth:	30.9'
Method:	Auger	Coordinates:	60.805067, -161.795537
Operator:	Mason Iverson	▽ Drilling Water Level:	13.5'
Logged By:	Robert Sanders	▼ Delayed Water Level:	N/A

Depth (ft)	Lab				Samples				Frozen	Graphic Log	USCS	Soil Description and Remarks	Water Levels
	% Gravel	% Sand	% Fines	Moisture Content (%)	Sample Number	Blow Counts	Sample Graphic	Sampler Recovery					
				12	1		■					FILL, Silty Sand (SM) - 10% fine to coarse, subangular to subrounded gravel; 75% fine sand; 15% fines; light brown, FROZEN , No	
0	0	77	23	6	2	6 9 9	▲	16.0 [89]			SM	FILL, Silty Sand (SM) - 75% fine sand; 25% fines; wet, brownish gray, medium dense	
5													
				13	3	6 8 7	▲	16.0 [89]					
				20	4	6 6 5	▲	16.0 [89]					
10													9.5
				60	5	2 1 5	▲	10.0 [56]			OL	Organic (OL) - 10% fine sand; 90% fines; wet, brown, firm	
15	0	57	43	30	6	2 2 3	▲	16.0 [89]				Silty Sand (SM) - 55% fine sand; 45% low to medium plasticity fines; wet, gray, firm	11-13-24 ▽
													17.5
20												Silty Sand (SM) - 80% fine sand; 20% fines; wet, gray, medium dense	
				21	7	7 8 10	▲	18.0 [100]			SM		23.5
25												Silty Sand (SM) - 70% fine sand; 30% fines; wet, gray	
				21	8	5 8 27	▲	18.0 [100]					
30	0	69	31	24	9	36 50/5"	▲	11.0 [100]					30.9

End of Boring, backfilled with soil cuttings



Bethel Ptarmigan Street Culvert Crossings

Soil Boring: TB-4

Client:	City of Bethel	Project Number:	1163.50270.68
Contractor:	GeoTek Alaska	Date Completed:	11/13/2024
Equipment:	Geoprobe 6620DT	Boring Depth:	31.5'
Method:	Auger	Coordinates:	60.804955, -161.795249
Operator:	Mason Iverson	▽ Drilling Water Level:	13.6'
Logged By:	Robert Sanders	▼ Delayed Water Level:	N/A

Depth (ft)	Lab				Samples				Frozen	Graphic Log	USCS	Soil Description and Remarks	Water Levels
	% Gravel	% Sand	% Fines	Moisture Content (%)	Sample Number	Blow Counts	Sample Graphic	Sampler Recovery					
				17	1		■						
9	52	39		21	2	2 2 3	▲	2.0 [11]					
5													4.5
				19	3	1 1 1	▲	18.0 [100]					
8	78	14		17	4	8 11 14	▲	16.0 [89]					
10													9.5
				20	5	4 4 4	▲	16.0 [89]					
15													
				22	6	1 1 1	▲	6.0 [33]					
20	0	79	21	35	7	WOH 5 8	▲	18.0 [100]					
25													
				26	8	5 9 12	▲	18.0 [100]					
30													
				19	9	3 4 5	▲	18.0 [100]					

End of Boring, backfilled with soil cuttings

TEST BORING LOG – DESCRIPTIVE GUIDE

Soil Descriptions – The soil classified visually in the field based on drill action, auger cuttings, and sample information. The recovered soil samples are classified visually again in the laboratory. The soil description on the boring log is based on an interpretation of the field and laboratory visual classifications, along with the results of the laboratory testing which may have been performed.

The **soil classification** is based on ASTM Designation D2487 “Standard Test method for Classification of Soils for Engineering Purposes” and ASTM D 2488 “Standard Practice for Description and Identification of Soils (Visual – Manual Procedure)”. The **soil frost classification** is based on the system developed by the U.S. Army Corps of Engineers and is performed in accordance with the Departments of the Army and Air Force Publication TM 5-822-5 “Pavement Design for Roads, Streets, Walks, and Open Storage Areas”. Outlines of these classification procedures are presented on the following pages.

The soil color is the subjective interpretation of the individual logging the test boring.

Plasticity Indices - The plasticity of the minus No. 40 fraction of the soil is described and the fine-grained soils are identified from manual tests using the following tables as a guide:

Soil Symbol	Dry Strength	Dilatancy	Toughness
ML	none to low	slow to rapid	low or thread cannot be formed
CL	medium to high	none to slow	medium
MH	low to medium	none to slow	low to medium
CH	high to very high	none	high

Plasticity Description	Criteria
Non Plastic	A 1/8" (3.2mm) thread cannot be rolled at any water content
Low	A thread can barely be rolled and the lump cannot be formed when drier than the plastic limit
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.

Laboratory Atterberg Limits tests are usually performed on a few of the plastic soils and results are reported on the test boring log. These laboratory tests are performed in accordance with ASTM D4318 “Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.”

Gravel Shape – The shape of the gravel particles is described based on this guide:

Angular: Particles have sharp edges and relatively plane sides with unpolished surfaces.
Subangular: Particles are similar to angular but have somewhat rounded edges.
Subrounded: Particles exhibit nearly plane sides but have well-rounded corners and edges.
Rounded: Particles have smoothly curved sides and no edges.

Material Size – The maximum nominal size of gravel and predominate percentage of sand particles are described using the following table:

Description	Gravel	Sand
Coarse	Passes 3" (75 mm) sieve, retained on ¾" (19 mm) sieve)	Passes No. 4 sieve, retained on No. 10 sieve
Medium	N/A	Passes No. 10 sieve, retained on No. 40 sieve
Fine	Passes ¾" (19 mm) sieve, retained on No. 4 sieve	Passes No. 40 sieve, retained on No. 200 sieve

Soil Moisture – The soils moisture is described as:

Dry: Powdery, dusty, no visible moisture
 Moist: Enough moisture to affect the color of the soil; damp
 Moist to Wet: Water in pores but not dripping; capillary zone above water table
 Wet: Dripping wet, contains significant free water, or sampled below water table

Field Density Estimates – The subject estimate of the density of coarse-grained soils is based on the observed drill action and on drive sample data. The guide below is used with the Standard Penetration Test (SPT) for sands with minor amounts of fine gravel; however blow counts can be affected strongly by gravel content, thermal state, drilling procedures, condition of equipment, and performance of the test.

**Standard Penetration
Resistance
N (blows/foot)**

Relative Soil Density

0 - 4	Very loose
5 - 10	Loose
11 - 30	Medium dense
31 - 50	Dense
More than 50	Very Dense

An estimate of the consistency of fine-grained soils is based on the observed drill action and on drive sample data. The guide below is used:

**Standard Penetration
Resistance
N (blows/foot)**

Relative Soil Density

0 - 2	Very soft
3 - 4	Soft
5 - 8	Firm
9 - 15	Stiff
16 - 30	Very Stiff
More than 30	Hard

Soil Layer Boundaries – Generally, there is a gradual transition from one soil type to another in a natural soil deposit, and it is difficult to determine accurately the boundaries of the soil layers.

- A *solid diagonal line* between soil layers on the graphic boring log indicates the general region of transition from one soil layer to another.
- A *dashed diagonal line* indicates the soil boundary was detected only by a change in the recovered samples and the actual boundary may be anywhere between the indicated sample depths.
- A soil *horizontal line* between soil layers indicates a relatively distinct transition between soil types was observed in the recovered samples and/or by a distinct change in drill action

Sample Interval – The sample interval is shown graphically on the test boring log and generally is accurate to about 0.5-foot.

Frost Depth and Soil Temperatures – If frozen ground is encountered during drilling, the interval of frozen soil is shown graphically on the test boring log. Generally, the temperature of a few soil samples is measured and shown on the boring log. These sample temperatures only give a qualitative indication of in situ soil temperatures. The temperature of samples can be influenced significantly by ambient air temperature and friction during drilling and sampling. Greater confidence is given to temperatures obtained through thermistors installations.

Soil Moisture Content - Generally, laboratory soil moisture content tests are performed on all recovered samples. Only about 30 grams of minus No.4 material is typically used for the moisture content test, so results reported on the log may not reflect accurately the *in situ* moisture content of gravelly soils.

Soil Density/Unit Weight – The soil density shown on the test boring logs generally is determined by measuring the wet weight, moisture content, and physical dimensions of relatively undisturbed specimens.

Groundwater – The depth to groundwater observed during drilling is generally shown on the test boring log. Alternatively, depth to groundwater can be measured in a perforated PVC pipe installed in the boring to monitor groundwater level. Differences can occur between depth to groundwater during drilling and those measured after drilling due to the time needed to equalize the groundwater elevation during and after drilling.

Penetration Resistance, N – Standard Penetration Tests (SPT) are performed in accordance with ASTM Designation D186 “Standard Method for Penetration Test and Split- Barrel Sampling of Soils”. A Modified Penetration Test (MPT) using a 2.5-inch inside-diameter split spoon driven with a 340-pound hammer falling 30 inches is performed to obtain larger samples, particularly in gravelly soils. The boring log key describes the graphic symbols used to differentiate between sample types.

Undisturbed Samples – Undisturbed Shelby tube samples are obtained in accordance with ASTM D1587, “Standard Practice for Thin-Walled Tube Sampling of Soils.” Generally, 3-inch outside-diameter Shelby tubes are used.

Grab Samples – Grab samples are obtained from the auger flights. The sample depth and interval indicated on the test boring log should be considered a rough approximation. The grab samples may not be representative of in situ soils, particularly in layer soil deposits.

CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES

ASTM DESIGNATION: D2487

Based on the Unified Soil Classification System (USCS)

Based on the Unified Soil Classification System (USCS)				USCS Soil Classification		
Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^A				Group Symbol	Group Name ^B	
Coarse-Grained Soils	Gravels	Clean Gravels	$Cu \geq 4$ and $1 \geq Cc \leq 3$ ^E	GW	Well-graded gravel	
		Less than 5% fines ^C	$Cu < 4$ and/or $1 \leq Cc \leq 3$ ^E	GP	Poorly graded gravel	
	More than 50% of coarse fraction retained on #4 sieve	Gravel with Fines	Fines classify as ML or MH	GM	Silty gravel ^{F,G,H}	
		More than 12% fines ^C	Fines classify as CL or CH	GC	Clayey gravel ^{F,G,H}	
	More than 50% retained on #200 sieve	Sands	Clean Sands	$Cu \geq 6$ and $1 \geq Cc \leq 3$ ^E	SW	Well-graded sand ^I
			Less than 5% fines ^D	$Cu \geq 6$ and/or $1 \leq Cc \leq 3$ ^E	SP	Poorly graded sand ^I
		50% or more of coarse fraction passes #4 sieve	Sands with Fines	Fines classify as ML or MH	SM	Silty sand ^{G,H,I}
			More than 12% fines ^D	Fines classify as CL or CH	SC	Clayey sand ^{G,H,I}
Fine-Grained Soils	Silts and Clays	Inorganic	$PI > 7$ and plots on or above "A" line ^J	CL	Lean clay ^{K,L,M}	
			$PI < 4$ and plots on or above "A" line ^J	ML	Silt ^{K,L,M}	
	Liquid limit less than 50	Organic	Liquid limit - oven dried < 0.75	OL	Organic clay ^{K,L,M,N}	
			Liquid limit - not dried	OL	Organic silt ^{K,L,M,O}	
	50% or more passes the #200 sieve	Silt and Clays	Inorganic	PI plots on or above "A" line	CH	Fat clay ^{K,L,M}
				PI plots below "A" line	MH	Elastic silt ^{K,L,M}
		Liquid limit 50 or more	Organic	Liquid limit - oven dried > 0.75	OH	Organic clay ^{K,L,M,P}
				Liquid limit - not dried	OH	Organic clay ^{K,L,M,Q}
High Organic Soils		Primarily organic matter	dark in color, and organic odor	PT	Peat	
A	Based on material passing the 3-in sieve		F	If fines classify as CL-ML, use dual symbol GC-GM, SC-SM		
B	If field sample contained cobbles or boulders, or both, add "with cobbles or boulders or both" to group name		G	If soil contains $\geq 15\%$ sand, add "with sand to group name		
C	Gravels with 5 to 12% require dual symbols: GW-GM well-graded gravel with silt GW-GC well-graded gravel with clay GP GM poorly-graded gravel with silt GP-GC poorly graded gravel with clay		H	If fines are organic, add " with organic fines" to group name		
			I	If soil contains $\geq 15\%$ gravel, add "with gravel" to group name		
			J	If Atterberg Limits plot in hatched area, soil is CL-ML, silty clay		
			K	If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel", whichever is predominant.		
D	Sands with 5 to 12% require dual symbols: SW-SM well-graded sand with silt SW-SC well-graded sand with clay SP-SM poorly graded sand with silt SP-SC poorly graded sand with clay		L	If soil contains $\geq 30\%$ plus No. 200, predominantly sand, add "sandy" to group name.		
			M	If soil contains $\geq 30\%$ plus No. 200, predominantly gravel, add "gravelly" to group name.		
			N	$PI \geq 4$ or plots below "A" line		
			O	$PI < 4$ or plots below "A" line		
E	$Cu = D_{60}/D_{10}$ $Cc = [(D_{30})^2/(D_{10} \times D_{60})]$		P	PI plots on or above "A" line		
			Q	PI plots below A line		

DESCRIPTION OF FROZEN SOILS (Visual-Manual Procedure) ASTM Designation: D4083

Part I Description of Soil Phase			Classify Soil Phase by ASTM D2487 or D2488		
Part II Description of Frozen Soil	Segregated ice is not visible by eye	Group Symbol	Subgroup		Field Identification
		N	Description	Symbol	Identify by visual examination to determine presence of excess ice, use procedures under Note 2 and hand magnifying lens as necessary. For soils not fully saturated, estimate degree of ice saturation; medium, low. Note presence of crystals or ice coatings around larger particles. (Note 1)
			Poorly bonded or friable	Nf	
			No excess ice	Nb	
	Well-bonded Excess ice	Nbe			
	Segregated ice is visible by eye (ice 1- inc or less in thickness)	V	Individual ice crystal or inclusions	Vx	For ice phase, record the following when applicable: Location, Structure, Orientation, Color, Thickness, Size, Length, Shape, Spacing, Hardness, Pattern of arrangement
			Ice coatings on particles	Vc	
			Random or irregularly oriented ice formations	Vr	
			Stratified or distinctly oriented ice formations	Vs	Estimate volume of visible segregated ice present as percentage of total sample volume. (Note 2)
			Uniformly distributed ice	Vu	
Part III Description of Substantial Ice	Ice (greater than 1-inh in thickness)	ICE	Ice with soil inclusions	ICE+Soil Type	Designate material as ICE (Note 3) and use descriptive terms as follows, usually one item from each group where applicable: <u>HARDNESS</u> : Hard, Soft (of mass, not individual crystals) <u>STRUCTURE</u> (Note 4): Clear, Cloudy, Porous, Canded, Granular, Stratified <u>COLOR</u> : Colorless, Gray, Blue <u>ADMIXTURES</u> : Contains few thin silt inclusions
			Ice without soil inclusions	ICE	

DEFINITIONS

- 1) Ice coatings on particles - discernible layers of ice found on or below larger soils particles in a frozen soil mass.
- 2) Ice Crystal - a very small individual ice particle visible in the face of a soil mass. Crystals may be present alone or in combination with other ice formations.
- 3) Clear Ice - ice that is transparent and contains only a moderate number of air bubbles.
- 4) Cloudy Ice - ice that is translucent or relatively opaque due to the content of air or other reasons, but which is essentially sound and impervious
- 5) Porous Ice - ice that contains numerous voids, usually interconnected and usually resulting from melting at air bubbles or along crystal interfaces from presence of salt or other materials in the water or from the freezing of saturated snow. Though porous, the mass retains its structural unity.
- 6) Canded Ice - ice that has rotted or otherwise formed into long columnar crystals, very loosely bonded together
- 7) Granular Ice - ice that is composed of coarse, more or less equidimensional crystals weakly bonded together
- 8) Ice Lenses - lenticular ice formations in soil occurring essentially parallel to each other, generally normal to the direction of heat loss, and commonly in repeated layers.
- 9) Ice Segregation - the growth of ice within soil in excess of the amount that may be produced by the in-place conversion of the original void moisture to ice. Ice segregation occurs most often as distinct lenses, layers, veins, and masses, commonly, but not always, oriented normal to the direction of heat loss.
- 10) Well-Bonded - a condition in which the soil particles are strongly held together by the ice so that the frozen soil possesses relatively high resistance to chipping or breaking.
- 11) Poorly-Bonded - a condition in which the soil particles are weakly held together by the ice so that the frozen soil has poor resistance to chipping and breaking.
- 12) Thaw Stable - the characteristics of frozen soils that, upon thawing, do not show loss of strength in comparison to normal, long-time thawed values nor produce detrimental settlement.

Note 1: Frozen soils in the N group may, on close examination, indicate presence of ice within the voids of the material by crystalline reflections or by a sheen on fractured or trimmed surfaces. The impression received by the unaided eye, however, is that none of the frozen water occupies space in excess of the original voids in the soils. The opposite is true of frozen soils in the V group

Note 2: When visual methods may be inadequate, a simple field test to aid evaluation of the volume of excess ice can be made by placing some frozen soil in a small jar, allowing it to melt, and observing the quantity of supernatant water as a percentage of total volume

Note 3: Where special forms of ice such as hoarfrost can be distinguished, more explicit description should be given

Note 4: Observer should be careful to avoid being misled by surface scratches or frost coating on the ice.

FROST DESIGN SOIL CLASSIFICATION¹

Frost² Group	Kind of Soil	Percentage Finer than 0.02 mm by Weight	Typical Soil Types Under Unified Soil Classification
NFS ³	(a) Gravels Crushed stone Crushed rock	0 to 1.5	GW and GP
	(b) Sands	0 to 3	SW and SP
PFS ⁴ (MOA NFS) (MOA F2)	(a) Gravels Crushed stone Crushed rock	1.5 to 3	GW and GP
	(b) Sands	3 to 10	SW and SP
S1 (MOA F1)	Gravelly soils	3 to 6	GW, GP, GW-GM, and GP-GM
S2 (MOA F2)	Sandy soils	3 to 6	SW, SP, SW-SM, and SP-SM
F1	Gravelly soils	6 to 10	GM, GW-GM, and GP-GM
F2	(a) Gravelly soils	10 to 20	GM, GW-GM, and GP-GM
	(b) Sands	6 to 15	SM, SW-SM, and SP-SM
F3	(a) Gravelly soils	Over 20	GM and GC
	(b) Sands, except very fine silty sands	Over 15	SM and SC
	(c) Clays, PI>12		CL and CH
F4	(a) All silts	Over 15	ML and MH
	(b) Very fine silty sands		SM
	(c) Clays, PI<12		CL and CL-ML
	(d) Varved clays and other fine- grained, banded sediments		CL and ML CL, ML, and SM CL, CH, and ML CL, CH, ML and SM

¹ Departments of the Army and Air Force Publication TM 5-822-5/AFM 88-7, "Pavement Design for Roads, Streets, Walks, and Open Storage Areas", Table 18-2.

² Corps of Engineers Frost groups directly correspond to the Municipality of Anchorage soil frost classification groups, except as noted.

³ Non Frost-Susceptible.

⁴ Possibly frost-susceptible, but requires laboratory test to determine frost design soil classification.

APPENDIX C

Laboratory Test Results



Material Test Report

Report No: ASM:24-10360
Issue No: 1

Client: DOWL, LLC 5015 Business Park Blvd. Suite 4000 Anchorage, AK, 99503	Project Code: 241419 CC: DOWL Maria Kampsen	The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.  Reviewed By: Cindy Zickefoose Title: Laboratory Supervisor Date: 11/25/2024
Project: PT Culvert		
1163.50270.68 02		

Sample Details					
Sample ID	24-10360-S01	24-10360-S02	24-10360-S03	24-10360-S04	24-10360-S05
Field Sample ID					
Client Sample ID	TB-01 Sa1	TB-01 Sa2	TB-01 Sa3	TB-01 Sa4	TB-01 Sa5
Date Sampled					

Particle Size Distribution			
Method:	Sieve Size	% Passing	Limits
ASTM D 422	3in	100	
Description: Analysis of Particle Size Distribution in Soils. Sieving for Particles >75µm, Hydrometer	2in	100	
	1½in	100	
	1in	100	
	¾in	100	
	½in	99	
	3/8in	89	
Washed: Sample Washed	No.4	76	
	No.10	63	
	No.20	56	
	No.40	51	
	No.60	47	
	No.100	36	
	No.200	20	
	Finer No.200 (75µm)	18.9	

Other Test Results						
Description	Method	Results				Limits
Dispersion device	ASTM D 422	Dispersant by hand				
Dispersion time (min)						
Shape						
Hardness						
Water Content (%)	ASTM D2216	6	9	10	20	44
Date Tested		11/22/2024	11/22/2024	11/22/2024	11/22/2024	11/22/2024
Tested By		Desirae Pascale	Desirae Pascale	Desirae Pascale	Desirae Pascale	Desirae Pascale
Group Code	ASTM D2487	SM			SM	
Group Name		Silty sand with gravel			Silty sand	
Liquid Limit		0			0	
Plasticity Index		0			0	
Gravel (%)		24			0	
Sand (%)		56			78	
Fines (%)		20			22	
Tested By	ASTM D2487	Desirae Pascale			Desirae Pascale	

Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing



Material Test Report

Report No: ASM:24-10360
Issue No: 1

Client: DOWL, LLC 5015 Business Park Blvd. Suite 4000 Anchorage, AK, 99503	Project Code: 241419 CC: DOWL Maria Kampsen	The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.  Reviewed By: Cindy Zickefoose Title: Laboratory Supervisor Date: 11/25/2024
Project: PT Culvert		
1163.50270.68 02		

Sample Details

Sample ID	24-10360-S06	24-10360-S07	24-10360-S08	24-10360-S09
Field Sample ID				
Client Sample ID	TB-01 Sa6	TB-01 Sa7	TB-01 Sa8	TB-01 Sa9
Date Sampled				

Particle Size Distribution

Method:	Sieve Size	% Passing	Limits
ASTM D 422	3in	100	
Description: Analysis of Particle Size Distribution in Soils. Sieving for Particles >75µm, Hydrometer	2in	100	
	1½in	100	
	1in	100	
	¾in	100	
	½in	100	
	3/8in	100	
	No.4	100.0	
Washed: Sample Washed	No.10	100	
	No.20	100	
	No.40	100	
	No.60	98	
	No.100	89	
	No.200	70	

Other Test Results

Description	Method	Results	Limits
Water Content (%)	ASTM D2216	34 35 26 27	
Date Tested		11/22/2024 11/22/2024 11/22/2024 11/22/2024	
Tested By		Desirae Pascale Desirae Pascale Desirae Pascale Desirae Pascale	
Group Code	ASTM D2487	ML ML	
Group Name		Sandy silt Sandy silt	
Liquid Limit		0	
Plasticity Index		0	
Gravel (%)		0	
Sand (%)		30	
Fines (%)		70	
Tested By	ASTM D2487	Desirae Pascale Desirae Pascale	
Liquid Limit	ASTM D4318	Not Obtainable	
Plastic Limit		NP (Non-Plastic)	
Plasticity Index		NP (Non-Plastic)	
As-Received Water Content (%)		33.9	
Preparation Method		Air Dry	
Oversize Removed By		Dry Sieving over No. 40 sieve	
Liquid Limit Apparatus		Mechanical	
Grooving Tool		Plastic	
Rolling		Hand	
Tested By		Cindy Zickefoose	

Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing



Material Test Report

Report No: ASM:24-10360
Issue No: 1

Client: DOWL, LLC
5015 Business Park Blvd. Suite 4000
Anchorage, AK, 99503

Project Code: 241419

CC: DOWL
Maria Kampsen

Project: PT Culvert

1163.50270.68 02

The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.

Reviewed By: Cindy Zickefoose
Title: Laboratory Supervisor
Date: 11/25/2024

Sample Details

Sample ID	24-10360-S06	24-10360-S07	24-10360-S08	24-10360-S09
Field Sample ID				
Client Sample ID	TB-01 Sa6	TB-01 Sa7	TB-01 Sa8	TB-01 Sa9
Date Sampled				

Other Test Results

Description	Method	Results	Limits
Date Tested	ASTM D4318	11/21/2024	
Method	ASTM D6913	A	
Preparation Method		Oven Dry	
Composite Sieving?		Yes	
Separating Sieve(s)		No. 4	
Cu	ASTM D2487		
Cc			

Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing



Material Test Report

Report No: ASM:24-10593
Issue No: 1

Client: DOWL, LLC 5015 Business Park Blvd. Suite 4000 Anchorage, AK, 99503	Project Code: 241419 CC: DOWL Maria Kampsen	The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.  Reviewed By: Cindy Zickefoose Title: Laboratory Supervisor Date: 11/25/2024
Project: PT Culvert		
1163.50270.68 02		

Sample Details						
Sample ID	24-10593-S01	24-10593-S02	24-10593-S03	24-10593-S04	24-10593-S05	
Field Sample ID						
Client Sample ID	TB-02 Sa1	TB-02 Sa2	TB-02 Sa3	TB-02 Sa4	TB-02 Sa5	
Date Sampled						
Other Test Results						
Description	Method	Results				Limits
Water Content (%)	ASTM D2216	12	19	9	23	22
Date Tested		11/22/2024	11/22/2024	11/22/2024	11/22/2024	11/22/2024
Tested By		Desirae Pascale	Desirae Pascale	Desirae Pascale	Desirae Pascale	Desirae Pascale
Group Code	ASTM D2487			SM		SM
Group Name				Silty sand with gravel		Silty sand
Liquid Limit				0		0
Plasticity Index				0		0
Gravel (%)				18		2
Sand (%)				66		77
Fines (%)				16		21
Tested By	ASTM D2487			Desirae Pascale		Desirae Pascale

Comments
Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing



Material Test Report

Report No: ASM:24-10593
Issue No: 1

Client: DOWL, LLC 5015 Business Park Blvd. Suite 4000 Anchorage, AK, 99503	Project Code: 241419 CC: DOWL Maria Kampsen	The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.  Reviewed By: Cindy Zickefoose Title: Laboratory Supervisor Date: 11/25/2024
Project: PT Culvert		
1163.50270.68 02		

Sample Details

Sample ID	24-10593-S06	24-10593-S07	24-10593-S08	24-10593-S09
Field Sample ID				
Client Sample ID	TB-02 Sa6	TB-02 Sa7	TB-02 Sa8	TB-02 Sa9
Date Sampled				

Other Test Results

Description	Method	Results				Limits
Water Content (%)	ASTM D2216	78	40	26	23	
Date Tested		11/22/2024	11/22/2024	11/22/2024	11/22/2024	
Tested By		Desirae Pascale	Desirae Pascale	Desirae Pascale	Desirae Pascale	

Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing



Material Test Report

Report No: ASM:24-10594
Issue No: 1

Client: DOWL, LLC 5015 Business Park Blvd. Suite 4000 Anchorage, AK, 99503	Project Code: 241419 CC: DOWL Maria Kampsen	The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.  Reviewed By: Cindy Zickefoose Title: Laboratory Supervisor Date: 11/25/2024
Project: PT Culvert	1163.50270.68 02	

Sample Details						
Sample ID	24-10594-S01	24-10594-S02	24-10594-S03	24-10594-S04	24-10594-S05	
Field Sample ID						
Client Sample ID	TB-03 Sa1	TB-03 Sa2	TB-03 Sa3	TB-03 Sa4	TB-03 Sa5	
Date Sampled						
Other Test Results						
Description	Method	Results				Limits
Water Content (%)	ASTM D2216	12	6	13	20	60
Date Tested		11/22/2024	11/22/2024	11/22/2024	11/22/2024	11/22/2024
Tested By		Desirae Pascale	Desirae Pascale	Desirae Pascale	Desirae Pascale	Desirae Pascale
Group Code	ASTM D2487		SM			
Group Name			Silty sand			
Liquid Limit			0			
Plasticity Index			0			
Gravel (%)			0			
Sand (%)			77			
Fines (%)			23			
Tested By	ASTM D2487		Desirae Pascale			

Comments
Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing



Material Test Report

Report No: ASM:24-10594
Issue No: 1

Client: DOWL, LLC 5015 Business Park Blvd. Suite 4000 Anchorage, AK, 99503	Project Code: 241419 CC: DOWL Maria Kampsen	The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.  Reviewed By: Cindy Zickefoose Title: Laboratory Supervisor Date: 11/25/2024
Project: PT Culvert		
1163.50270.68 02		

Sample Details

Sample ID	24-10594-S06	24-10594-S07	24-10594-S08	24-10594-S09
Field Sample ID				
Client Sample ID	TB-03 Sa6	TB-03 Sa7	TB-03 Sa8	TB-03 Sa9
Date Sampled				

Particle Size Distribution

Method:	Sieve Size	% Passing	Limits
ASTM D6913	3in	100	
Description: Sieve Analysis of Soil	2in	100	
	1½in	100	
	1in	100	
	¾in	100	
	½in	100	
Drying By: Oven	3/8in	100	
	No.4	100.0	
Washed: Sample Washed	No.10	100	
	No.20	100	
	No.40	100	
	No.60	99	
	No.100	85	
	No.200	31	

Other Test Results

Description	Method	Results	Limits
Water Content (%)	ASTM D2216	30 21 21 24	
Date Tested		11/22/2024 11/22/2024 11/22/2024 11/22/2024	
Tested By		Desirae Pascale Desirae Pascale Desirae Pascale Desirae Pascale	
Group Code	ASTM D2487	SM SM	
Group Name		Silty sand Silty sand	
Liquid Limit		0 0	
Plasticity Index		0 0	
Gravel (%)		0 0	
Sand (%)		57 69	
Fines (%)		43 31	
Tested By	ASTM D2487	Desirae Pascale Desirae Pascale	
Method	ASTM D6913	A	
Preparation Method		Oven Dry	
Composite Sieving?		Yes	
Separating Sieve(s)		No. 4	
Cu	ASTM D2487		
Cc			

Comments

Soil Classification of Fines (-#200) in LMAs Assumed Unless Verified by Additional Testing



Material Test Report

Report No: ASM:24-10595
Issue No: 1

Client: DOWL, LLC 5015 Business Park Blvd. Suite 4000 Anchorage, AK, 99503	Project Code: 241419 CC: DOWL Maria Kampsen	The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.  Reviewed By: Cindy Zickefoose Title: Laboratory Supervisor Date: 11/25/2024
Project: PT Culvert		
1163.50270.68 02		

Sample Details

Sample ID	24-10595-S01	24-10595-S02	24-10595-S03	24-10595-S04	24-10595-S05
Field Sample ID					
Client Sample ID	TB-04 Sa1	TB-04 Sa2	TB-04 Sa3	TB-04 Sa4	TB-04 Sa5
Date Sampled					

Particle Size Distribution

Method:	Sieve Size	% Passing				Limits
ASTM D 422	3in		100		100	
	2in		100		100	
Description:	1½in		100		100	
Analysis of Particle Size	1in		100		100	
Distribution in Soils. Sieving for	¾in		100		98	
Particles >75µm, Hydrometer	½in		100		95	
	3/8in		96		93	
Washed:	No.4		91		91.8	
Sample Washed	No.10		86		89	
	No.20		83		85	
	No.40		81		82	
	No.60		76		73	
	No.100		62		45	
	No.200		39		14	
	Finer No.200 (75µm)		35.7			

Other Test Results

Description	Method	Results					Limits
Water Content (%)	ASTM D2216	17	21	19	17	20	
Date Tested		11/22/2024	11/22/2024	11/22/2024	11/22/2024	11/22/2024	
Tested By		Desirae Pascale	Desirae Pascale	Desirae Pascale	Desirae Pascale	Desirae Pascale	
Dispersion device	ASTM D 422	Dispersant by hand					
Dispersion time (min)							
Shape							
Hardness							
Group Code	ASTM D2487		SM		SM		
Group Name			Silty sand		Silty sand		
Atterberg Limits Estimated					Yes		
Liquid Limit			0				
Plasticity Index			0				
Gravel (%)			9		8		
Sand (%)			52		78		
Fines (%)			39		14		
Tested By	ASTM D2487		Desirae Pascale		Desirae Pascale		

Comments

Soil Classification of Fines (-#200) in Sieve Analyses Assumed Unless Verified by Additional Testing



Material Test Report

Report No: ASM:24-10595
Issue No: 1

Client: DOWL, LLC 5015 Business Park Blvd. Suite 4000 Anchorage, AK, 99503	Project Code: 241419 CC: DOWL Maria Kampsen	The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.  Reviewed By: Cindy Zickefoose Title: Laboratory Supervisor Date: 11/25/2024
Project: PT Culvert		
1163.50270.68 02		

Sample Details					
Sample ID	24-10595-S01	24-10595-S02	24-10595-S03	24-10595-S04	24-10595-S05
Field Sample ID					
Client Sample ID	TB-04 Sa1	TB-04 Sa2	TB-04 Sa3	TB-04 Sa4	TB-04 Sa5
Date Sampled					
Other Test Results					
Description	Method	Results			Limits
Method	ASTM D6913				A
Preparation Method					Oven Dry
Composite Sieving?					Yes
Separating Sieve(s)					No. 4
Cu	ASTM D2487				
Cc					

Comments
Soil Classification of Fines (-#200) in Sieve Analyses Assumed Unless Verified by Additional Testing



Material Test Report

Report No: ASM:24-10595
Issue No: 1

Client: DOWL, LLC 5015 Business Park Blvd. Suite 4000 Anchorage, AK, 99503	Project Code: 241419 CC: DOWL Maria Kampsen	The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.  Reviewed By: Cindy Zickefoose Title: Laboratory Supervisor Date: 11/25/2024
Project: PT Culvert		
1163.50270.68 02		

Sample Details

Sample ID	24-10595-S06	24-10595-S07	24-10595-S08	24-10595-S09
Field Sample ID				
Client Sample ID	TB-04 Sa6	TB-04 Sa7	TB-04 Sa8	TB-04 Sa9
Date Sampled				

Other Test Results

Description	Method	Results				Limits
Water Content (%)	ASTM D2216	22	35	26	19	
Date Tested		11/22/2024	11/22/2024	11/22/2024	11/22/2024	
Tested By		Desirae Pascale	Desirae Pascale	Desirae Pascale	Desirae Pascale	
Group Code	ASTM D2487		SM			
Group Name			Silty sand			
Liquid Limit			0			
Plasticity Index			0			
Gravel (%)			0			
Sand (%)			79			
Fines (%)			21			
Tested By	ASTM D2487		Desirae Pascale			

Comments

Soil Classification of Fines (-#200) in Sieve Analyses Assumed Unless Verified by Additional Testing



Material Test Report

Report No: MAT:24-10360-S01
Issue No: 1

Client: DOWL, LLC
5015 Business Park Blvd. Suite 4000
Anchorage, AK, 99503
Project Code: 241419
CC: DOWL
Maria Kampsen

Project: PT Culvert

1163.50270.68 02

The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.

Reviewed By: Cindy Zickefoose
Title: Laboratory Supervisor
Date: 11/25/2024

Sample Details

Sample ID 24-10360-S01
Client Sample ID TB-01 Sa1
Specification Sieve

Particle Size Distribution

Method: ASTM D 422

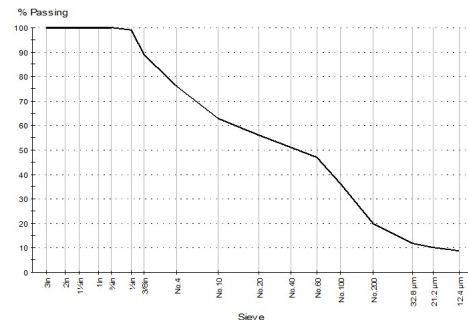
Date Tested: 11/21/2024
Tested By: Desirae Pascale

Sieve Size	% Passing	Limits
3in	100	
2in	100	
1½in	100	
1in	100	
¾in	100	
½in	99	
3/8in	89	
No.4	76	
No.10	63	
No.20	56	
No.40	51	
No.60	47	
No.100	36	
No.200	20	
Finer No.200 (75µm)	18.9	
32.8 µm	11.9	
21.2 µm	10.0	
12.4 µm	8.8	

Other Test Results

Description	Method	Result	Limits
Dispersion device	ASTM D 422	Dispersant by hand	
Dispersion time (min)			
Shape			
Hardness			
Water Content (%)	ASTM D2216	6	
Date Tested		11/22/2024	
Tested By		Desirae Pascale	
Group Code	ASTM D2487	SM	
Group Name		Silty sand with gravel	
Liquid Limit		0	
Plasticity Index		0	
Gravel (%)		24	
Sand (%)		56	
Fines (%)		20	
	ASTM D2487		
Tested By		Desirae Pascale	
Date Tested		11/22/2024	

Chart



Comments

No Plasticity Index Test Performed
Soil Classification of Fines (-#200) in Sieve Analyses Assumed Unless Verified by Additional Testing



Material Test Report

Report No: MAT:24-10360-S06
Issue No: 1

Client: DOWL, LLC
5015 Business Park Blvd. Suite 4000
Anchorage, AK, 99503
Project: PT Culvert

1163.50270.68 02

Project Code: 241419
CC: DOWL
Maria Kampsen

The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.

[Signature]

Reviewed By: Cindy Zickefoose
Title: Laboratory Supervisor
Date: 11/25/2024

Sample Details

Sample ID 24-10360-S06
Client Sample ID TB-01 Sa6

Particle Size Distribution

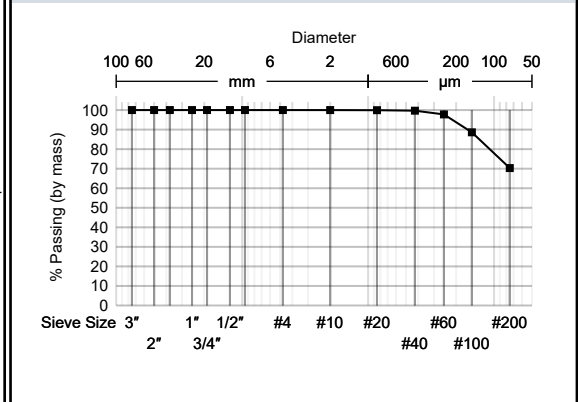
Method: ASTM D6913
Drying By: Oven
Date Tested: 11/21/2024
Tested By: Desirae Pascale

Other Test Results

Description	Method	Result	Limits
Water Content (%)	ASTM D2216	34	
Date Tested		11/22/2024	
Tested By		Desirae Pascale	
Group Code	ASTM D2487	ML	
Group Name		Sandy silt	
Gravel (%)		0	
Sand (%)		30	
Fines (%)		70	
	ASTM D2487		
Tested By		Desirae Pascale	
Date Tested		11/22/2024	
	ASTM D4318		
Liquid Limit		Not Obtainable	
Plastic Limit		NP (Non-Plastic)	
Plasticity Index		NP (Non-Plastic)	
As-Received Water Content (%)		33.9	
Preparation Method		Air Dry	
Oversize Removed By		Dry Sieving over No. 40 sieve	
Liquid Limit Apparatus		Mechanical	
Grooving Tool		Plastic	
Rolling		Hand	
Tested By		Cindy Zickefoose	
Date Tested		11/21/2024	
Method	ASTM D6913	A	
Preparation Method		Oven Dry	
Composite Sieving?		Yes	
Separating Sieve(s)		No. 4	
Cu	ASTM D2487		
Cc			
Date Tested		11/21/2024	

Sieve Size	% Passing	Limits
3in	100	
2in	100	
1½in	100	
1in	100	
¾in	100	
½in	100	
3/8in	100	
No.4	100.0	
No.10	100	
No.20	100	
No.40	100	
No.60	98	
No.100	89	
No.200	70	

Chart



Comments

N/A



Material Test Report

Report No: MAT:24-10594-S09
Issue No: 1

Client: DOWL, LLC
5015 Business Park Blvd. Suite 4000
Anchorage, AK, 99503
Project Code: 241419
CC: DOWL
Maria Kampsen

Project: PT Culvert

1163.50270.68 02

The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.

Reviewed By: Cindy Zickefoose
Title: Laboratory Supervisor
Date: 11/25/2024

Sample Details

Sample ID 24-10594-S09
Client Sample ID TB-03 Sa9

Particle Size Distribution

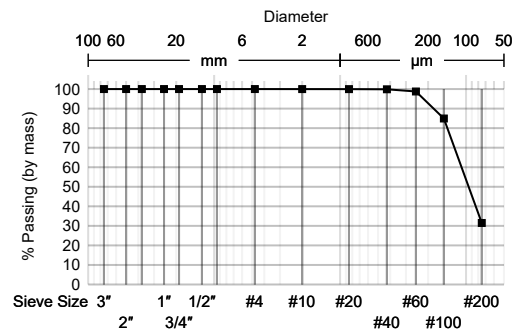
Method: ASTM D6913
Drying By: Oven
Date Tested: 11/21/2024
Tested By: Desirae Pascale

Sieve Size	% Passing	Limits
3in	100	
2in	100	
1½in	100	
1in	100	
¾in	100	
½in	100	
3/8in	100	
No.4	100.0	
No.10	100	
No.20	100	
No.40	100	
No.60	99	
No.100	85	
No.200	31	

Other Test Results

Description	Method	Result	Limits
Water Content (%)	ASTM D2216	24	
Date Tested		11/22/2024	
Tested By		Desirae Pascale	
Group Code	ASTM D2487	SM	
Group Name		Silty sand	
Liquid Limit		0	
Plasticity Index		0	
Gravel (%)		0	
Sand (%)		69	
Fines (%)		31	
	ASTM D2487		
Tested By		Desirae Pascale	
Date Tested		11/21/2024	
Method	ASTM D6913	A	
Preparation Method		Oven Dry	
Composite Sieving?		Yes	
Separating Sieve(s)		No. 4	
Cu	ASTM D2487		
Cc			
Date Tested		11/21/2024	

Chart



Comments

Soil Classification of Fines (-#200) in Sieve Analyses Assumed Unless Verified by Additional Testing
No Plasticity Index Test Performed



Material Test Report

Report No: MAT:24-10595-S02
Issue No: 1

Client: DOWL, LLC
5015 Business Park Blvd. Suite 4000
Anchorage, AK, 99503
Project: PT Culvert

1163.50270.68 02

Project Code: 241419
CC: DOWL
Maria Kampsen

The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.

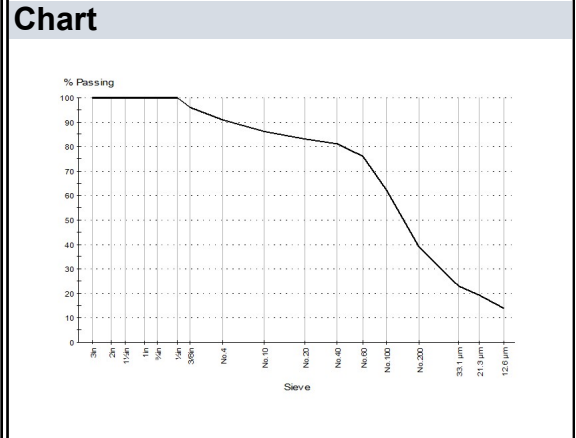
[Signature]

Reviewed By: Cindy Zickefoose
Title: Laboratory Supervisor
Date: 11/25/2024

Sample Details			
Sample ID	24-10595-S02		
Client Sample ID	TB-04 Sa2		
Specification	Sieve		

Particle Size Distribution		
Method:	ASTM D 422	
Date Tested:		
Tested By:		
Sieve Size	% Passing	Limits
3in	100	
2in	100	
1½in	100	
1in	100	
¾in	100	
½in	100	
3/8in	96	
No.4	91	
No.10	86	
No.20	83	
No.40	81	
No.60	76	
No.100	62	
No.200	39	
Finer No.200 (75µm)	35.7	
33.1 µm	22.9	
21.3 µm	19.1	
12.6 µm	14.0	

Other Test Results			
Description	Method	Result	Limits
Dispersion device	ASTM D 422	Dispersant by hand	
Dispersion time (min)			
Shape			
Hardness			
Water Content (%)	ASTM D2216	21	
Date Tested		11/22/2024	
Tested By		Desirae Pascale	
Group Code	ASTM D2487	SM	
Group Name		Silty sand	
Liquid Limit		0	
Plasticity Index		0	
Gravel (%)		9	
Sand (%)		52	
Fines (%)		39	
	ASTM D2487		
Tested By		Desirae Pascale	
Date Tested		11/22/2024	



Comments

No Plasticity Index Test Performed
Soil Classification of Fines (-#200) in Sieve Analyses Assumed Unless Verified by Additional Testing



Material Test Report

Report No: MAT:24-10595-S04
Issue No: 1

Client: DOWL, LLC
5015 Business Park Blvd. Suite 4000
Anchorage, AK, 99503
Project Code: 241419
CC: DOWL
Maria Kampsen

Project: PT Culvert

1163.50270.68 02

The results contained below pertain only to the items tested below. This report should not be reproduced, except in full, without the prior written approval of Alaska Testlab or the agency.

Reviewed By: Cindy Zickefoose
Title: Laboratory Supervisor
Date: 11/25/2024

Sample Details

Sample ID 24-10595-S04
Client Sample ID TB-04 Sa4

Particle Size Distribution

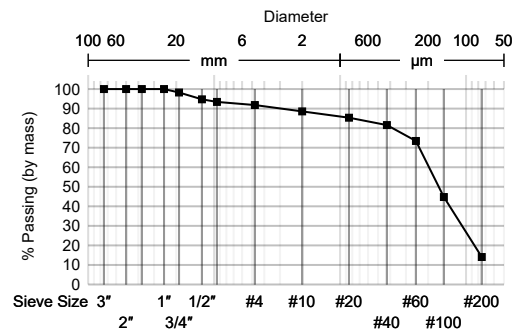
Method: ASTM D6913
Drying By: Oven
Date Tested: 11/21/2024
Tested By: Desirae Pascale

Sieve Size	% Passing	Limits
3in	100	
2in	100	
1½in	100	
1in	100	
¾in	98	
½in	95	
3/8in	93	
No.4	91.8	
No.10	89	
No.20	85	
No.40	82	
No.60	73	
No.100	45	
No.200	14	

Other Test Results

Description	Method	Result	Limits
Water Content (%)	ASTM D2216	17	
Date Tested		11/22/2024	
Tested By		Desirae Pascale	
Group Code	ASTM D2487	SM	
Group Name		Silty sand	
Atterberg Limits Estimated		Yes	
Gravel (%)		8	
Sand (%)		78	
Fines (%)		14	
	ASTM D2487		
Tested By		Desirae Pascale	
Date Tested		11/22/2024	
Method	ASTM D6913	A	
Preparation Method		Oven Dry	
Composite Sieving?		Yes	
Separating Sieve(s)		No. 4	
Cu	ASTM D2487		
Cc			
Date Tested		11/21/2024	

Chart



Comments

No Plasticity Index Test Performed
Soil Classification of Fines (-#200) in Sieve Analyses Assumed Unless Verified by Additional Testing

CITY OF BETHEL
Ptarmigan Street Culvert Crossings

Addendum No. 1
April 25, 2025

The information in this Addendum modifies and changes the original Bid Documents. In case of conflicts between this Addendum and previously issued documents, this Addendum shall take precedence.

NOTE: This Addendum does **not** change the deadline for the bid opening/due date. The Deadline for Questions/Protests has passed, and no additional questions will be accepted.

This Addendum responds to the following questions:

Does the city have product data and shop drawings they can provide for the owner supplied culverts?

Yes. See attached approved shop drawing from Contech Engineered Solutions LLC (the culvert manufacturer).

The scope of work states, “The Contractor shall coordinate permitting with the Owner to obtain or transfer permits to the Contractor, including but not limited to: a ADF&G Fish Habitat Permit and a U.S. Army Corps of Engineers Alaska District (ACOE) Section 404 Wetland Permit.” Has the City of Bethel obtained a ADF&G Fish Habitat Permit and a U.S. Army Corps of Engineers Alaska District (ACOE) Section 404 Wetland Permit for this work? If these permits have been obtained, will the City forward these documents to the contractor to examine?

The City has not yet obtained the ACOE Nationwide Wetland Permit or the ADF&G Fish Habitat Permit but the City’s agent has prepared the applications and will be submitting it within the next 1-2 weeks. The City will forward the permits to the awarded contractor once obtained.



Ptarmigan Street Culvert Crossings

Ptarmigan Creek Fish Passage Improvement Projects

City of Bethel

ADF&G Anadromous Waters Catalog Code 335-10-16600-2621-3020

Multiplate Pipe Arches

Contech Project Number 830365

CALCULATIONS, DRAWINGS, AND INDEPENDENT DESIGN CHECK



4/11/25

Contech Engineered Solutions

Phone: 970-347-2208 • E-mail: joel.hahm@conteches.com

Table of Contents

- 1. Design Summary (1 page)**
- 2. Appendix A: Structure Design Calculations & Drawings**
 - a. West Culvert – 12’10” x 8’4” Multiplate Pipe Arch (8 pages)**
 - b. East Culvert – 12’10” x 8’4” Multiplate Pipe Arch (8 pages)**
- 3. Appendix B: LRFD & LFR Load Rating Calculations**
 - a. Load Rating Cover Letter (2 pages)**
 - b. West Culvert – 12’10” x 8’4” Multiplate Pipe Arch (11 pages)**
 - c. East Culvert – 12’10” x 8’4” Multiplate Pipe Arch (11 pages)**
- 4. Appendix C: Independent Design Check – (2 pages)**

Design Summary for Multiplate Structures

Contech Engineered Solutions is providing two (2) multiplate structures intended to be installed as culvert replacements below Ptarmigan Street in Bethel, Alaska. Both structures carry Ptarmigan Creek, which meanders along the road and passes beneath it in multiple locations. The structures were specified by DOWL, LLC on behalf of the City of Bethel, Alaska and evaluated by Contech Engineered Solutions for HL93 design live load. Project specifications require that the structure submittal include design calculations and an Independent Design Check in accordance with Alaska DOT&PF Standard Specifications and Bridge and Structures Manual. Similar sized structures have been previously designed and supplied by Contech Engineered Solutions.

The project specifications require that design calculations, working drawings, load rating, and an *Independent Design Check* (IDC) be provided for the design submittal. This submittal includes an executive summary of the structure design followed by structure drawings & design calculations, load rating, and the IDC in the appendices. Joel Hahm, PE, of Contech Engineered Solutions is the *Designer of Record* (DOR) for the structure. Travis Schneider, PE, of the firm Pacific Affiliates Consulting Engineers is the *Independent Engineer* (IE) in responsible charge of the IDC.

The structure designs for each structure were checked by Contech Engineered Solutions based on the requirements in Section 12 of the AASHTO LRFD Bridge Design Specifications, 9th Edition (2020), and confirmed to meet AASHTO LRFD design requirements based on a 7 gauge shell thicknesses. The structure geometries were specified by DOWL, LLC and are assumed to meet the project structure clearance, service life, seismic, and hydraulic requirements (as applicable).

The design cover for each structure was estimated by graphically scaling the profile views on sheets C7 and C8 of the project drawings. The extent of the roadway above the structures was not clearly defined in the profile views. As a result, some judgement was used to estimate the minimum cover to be used for encompassing a reasonable cover range for the design checks as well as estimating an anticipated as-built minimum cover below the road to use for the load rating calculations. The design cover range is included in the structure drawings and calculations in Appendix A. The anticipated minimum as-built cover below the road used for the load rating calculations is included in Appendix B.

We assume foundation soil evaluation, preparation, and improvements (if necessary) will take place as specified in the project documents, applicable Alaska DOT&PF requirements, and as directed by the project engineer. The Independent Design Check is provided in Appendix C.

Appendix A

Structure Drawings & Design Checks (16 pages)

- West Culvert – 12'10" x 8'4" Multiplate Pipe Arch (8 pages)
- East Culvert – 12'10" x 8'4" Multiplate Pipe Arch (8 pages)

Structural Design Check for Corrugated Steel Plate Pipe

Per AASHTO LRFD Bridge Design Specifications, Section 12, 9th Edition 2020

Project Name: Ptarmigan Street Culvert Crossings - West Culvert

CRM #: 830865

Location: Bethel, Alaska

Date: 4/8/2025

Structure Shape	<u>Pipe Arch</u>		Select Shape Below
Corrugation Type	<u>6 X 2 in.</u>		
Loading Case	<u>1</u>	(lanes)	<u>12'-10" X 8'-4"</u>
Gage	<u>7</u>		
Bolting Type	<u>4 Bolts/ft.</u>		
H, Height of Cover	<u>2.00</u>	(ft.)	S, Span <u>154</u> (in.)
SB, Maximum Soil Bearing Pressure	<u>4.00</u>	(ksf)	Note: Please enter Soil Bearing Pressure value in space at left
ρ, Density of Cover Material (120 pcf default)	<u>0.12</u>	(kcf)	(Table 3.5.1-1)
Design Truck (LRFD Highway Load is HL-93)	<u>HL-93</u>		

A _w , Pipe Wall Area	<u>2.739</u>	(sq. in./ft.)	(Table A12-3)
I, Moment of Inertia	<u>0.108</u>	(in. ⁴ /in.)	(Table A12-3)
r, Radius of Gyration	<u>0.688</u>	(in.)	(Table A12-3)
R _t , Top Radius	<u>77</u>	(in.)	(See Shapes Sheet)
R _c , Corner Radius	<u>18</u>	(in.)	(See Shapes Sheet)
E _m , Modulus of Elasticity	<u>29000</u>	(ksi)	(Table A12-10)
F _u , Tensile Strength	<u>45</u>	(ksi)	(Table A12-10)
F _y , Yield Strength	<u>33</u>	(ksi)	(Table A12-10)
L _p , Surface Load Contact Length	<u>0.833</u>	(ft.)	(3.6.1.2.5)
w _t , Surface Load Contact Width	<u>1.667</u>	(ft.)	(3.6.1.2.5)

HL93 Truck Controls

s _w , Wheel	<u>6.00</u>	(ft)	
s _a , axle spacing	<u>14.00</u>	(ft)	
LLDF	<u>1.15</u>		(Table 3.6.1.2.6a-1)
H _{int-t} , Wheel Interaction Depth	<u>3.10</u>	(ft)	(3.6.1.2.6b-1)
W _w , live load patch length			
Ww=wt/12+sw+LLDF x H + 0.06 Di/12	<u>4.74</u>	(ft)	(3.6.1.2.6b-3)
H _{int-p} , Axle Interaction Depth	<u>11.45</u>		
Number of Interacting Wheels	<u>1</u>		
DL, Design Lane Load	<u>0.64</u>	(klf)	(3.6.1.2.4)
I _w , live load patch length			(3.6.1.2.6b-5)
Iw=lt/12+LLFD(H)	<u>3.13</u>	(ft)	
A _{LL} , Area of live load patch at H	<u>14.84</u>	(ft ²)	(3.6.1.2.6a-1)
FFR, Flexibility Factor Required	<u>30</u>	(in./kip)	(Table 12.5.6.1-1)
k, Soil Stiffness Factor	<u>0.22</u>		(12.7.2.4)
IM, Dynamic Load Factor	<u>24.75</u>	(%)	(3.6.2.2-1)
IM = 33(1.0-0.125H)			
m, Multiple Presence Factor	<u>1.2</u>		(Table 3.6.1.1.2-1)

Structural Design Check for Corrugated Steel Plate Pipe

Per AASHTO LRFD Bridge Design Specifications, Section 12, 9th Edition 2020

P, HL93 Truck Load	16	(kip/wheel group)	(3.6.1.2.2)
PT, HL93 Tandem Load	12.5	(kip/wheel group)	(3.6.1.2.3)
SS, Seam Strength	93	(kip/ft.)	(Table A12-8)
Φ_w , Wall Area and Buckling	1.00		(Table 12.5.5-1)
Φ_{SS} , Seam Strength	0.67		(Table 12.5.5-1)
Φ_{BP} , Backfill Bearing Resistance	1.00		(Table 12.5.5-1)
η_{EV} , Redundancy Factor	1.05		(1.3.4, 12.5.4)
η_{LL} , Redundancy Factor	1.00		(1.3.4, 12.5.4)
γ_{EV} , Dead Load Factor	1.95		(Table 3.4.1-2)
γ_{LL} , Live Load Factor	1.75		(Table 3.4.1-1)
$P_L = (P(1+IM/100)m)/ALL$	1.61	(ksf)	(3.6.1.2.6b-7)
P_{FD} , Factored Dead Load Crown Pressure $= \eta_{EV} \gamma_{EV} \times H \times p$	0.4914	(ksf)	(3.5.1)
P_{FL} , Factored Live Load Crown Pressure $= \eta_{LL} \gamma_{LL} P_L$	2.82	(ksf)	
P_{DL} , Factored Design Lane Load $= \eta_{LL} \gamma_{LL} mDL/10$	0.134	(ksf)	
Factored Thrust (standard structures)			
F_{min} = greater of 15/S or 1	1.00	(dimensionless)	(12.7.2.2-4)
F_1 = greater of 0.75S/lw or F_{min}	3.07	(dimensionless)	(12.7.2.2-3)
C_L , Width of Culvert on which LL is applied $= lw \leq S$	3.13	(ft)	(12.7.2.2-2)
T_L , Factored Thrust $= (P_{FD} + P_{DL})S/2 + (P_{FL} C_L F_1)/2$	17.607	(kip/ft)	(12.7.2.2-1)
EV, Vertical Earth Load $EV = \rho H$	0.24	(ksf)	(3.5.1)
R_w , Wall Resistance $R_w = \Phi_w F_y A_w$	90.387	(kip/ft.)	> T 17.607 (12.7.2.3-1) OK
F_{cr} , Critical Buckling Stress	41.472	(ksi)	
If: $S < \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}$	Then:	$F_{cr} = F_u - \left(\frac{F_u k S}{r} \right)^2$	(12.7.2.4-1)
	upper case controls		
But if: $S > \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}$	Then:	$F_{cr} = \left(\frac{k S}{r} \right)^2$	(12.7.2.4-2)
R_b , Buckling Resistance If: $F_{cr} > F_y$, then $F_{cr} = F_y$ $R_b = \Phi_w F_{cr} A_w$	41.472 90.387	(ksi) (kip/ft.)	> > T 33 17.607 (12.7.2.3-1) OK
FF, Flexibility Factor $FF = S^2/(E_m I)$	7.572	(in./kip)	< FFR 30 (12.7.2.6-1) OK
R_s , Factored Seam Strength $R_s = \Phi_{SS} SS$	62.310	(kip/ft.)	> T 17.607 (12.7.2.5) OK
Consider the trench width to reduce the corner bearing pressure?	Yes		
Default to AASHTO trench width?	Yes		
W_T , Trench Width	60	(in.)	(Table C12.6.6.2-1)
$L_1 = 40 + (12H - 12)1.75$	61	(in.)	
$L_2 = L_1 + 1.37S$	271.98	(in.)	
$L_3 = L_2 + 72$	343.98	(in.)	
$C1 = 2 \times L1/L3$	0.3547		
P_C , Corner Bearing Pressure $P_C = (EV + C_1(P_L + DL/10)) \times R_T/[\Phi_{BP}(R_C + W_T)]$	0.824	(ksf)	< SB 4.000 (12.6.3.2, NCSPA 7-22) OK

Structural Design Check for Corrugated Steel Plate Pipe

Per AASHTO LRFD Bridge Design Specifications, Section 12, 9th Edition 2020

Project Name: Ptarmigan Street Culvert Crossings - West Culvert

CRM #: 830865

Location: Bethel, Alaska

Date: 4/8/2025

Structure Shape	<u>Pipe Arch</u>		Select Shape Below
Corrugation Type	<u>6 X 2 in.</u>		
Loading Case	<u>1</u>	(lanes)	<u>12'-10" X 8'-4"</u>
Gage	<u>7</u>		
Bolting Type	<u>4 Bolts/ft.</u>		
H, Height of Cover	<u>2.75</u>	(ft.)	S, Span <u>154</u> (in.)
SB, Maximum Soil Bearing Pressure	<u>4.00</u>	(ksf)	Note: Please enter Soil Bearing Pressure value in space at left
ρ, Density of Cover Material (120 pcf default)	<u>0.12</u>	(kcf)	(Table 3.5.1-1)
Design Truck (LRFD Highway Load is HL-93)	<u>HL-93</u>		

A _w , Pipe Wall Area	<u>2.739</u>	(sq. in./ft.)	(Table A12-3)
I, Moment of Inertia	<u>0.108</u>	(in. ⁴ /in.)	(Table A12-3)
r, Radius of Gyration	<u>0.688</u>	(in.)	(Table A12-3)
R _t , Top Radius	<u>77</u>	(in.)	(See Shapes Sheet)
R _c , Corner Radius	<u>18</u>	(in.)	(See Shapes Sheet)
E _m , Modulus of Elasticity	<u>29000</u>	(ksi)	(Table A12-10)
F _u , Tensile Strength	<u>45</u>	(ksi)	(Table A12-10)
F _y , Yield Strength	<u>33</u>	(ksi)	(Table A12-10)
L _p , Surface Load Contact Length	<u>0.833</u>	(ft.)	(3.6.1.2.5)
w _t , Surface Load Contact Width	<u>1.667</u>	(ft.)	(3.6.1.2.5)

HL93 Truck Controls

s _w , Wheel	<u>6.00</u>	(ft)	
s _a , axle spacing	<u>14.00</u>	(ft)	
LLDF	<u>1.15</u>		(Table 3.6.1.2.6a-1)
H _{int-t} , Wheel Interaction Depth	<u>3.10</u>	(ft)	(3.6.1.2.6b-1)
W _w , live load patch length			
Ww=wt/12+sw+LLDF x H + 0.06 Di/12	<u>5.60</u>	(ft)	(3.6.1.2.6b-3)
H _{int-p} , Axle Interaction Depth	<u>11.45</u>		
Number of Interacting Wheels	<u>1</u>		
DL, Design Lane Load	<u>0.64</u>	(klf)	(3.6.1.2.4)
I _w , live load patch length			(3.6.1.2.6b-5)
Iw=lt/12+LLFD(H)	<u>4.00</u>	(ft)	
A _{LL} , Area of live load patch at H	<u>22.37</u>	(ft ²)	(3.6.1.2.6a-1)
FFR, Flexibility Factor Required	<u>30</u>	(in./kip)	(Table 12.5.6.1-1)
k, Soil Stiffness Factor	<u>0.22</u>		(12.7.2.4)
IM, Dynamic Load Factor	<u>21.65625</u>	(%)	(3.6.2.2-1)
IM = 33(1.0-0.125H)			
m, Multiple Presence Factor	<u>1.2</u>		(Table 3.6.1.1.2-1)

Structural Design Check for Corrugated Steel Plate Pipe

Per AASHTO LRFD Bridge Design Specifications, Section 12, 9th Edition 2020

P, HL93 Truck Load	16	(kip/wheel group)		(3.6.1.2.2)
PT, HL93 Tandem Load	12.5	(kip/wheel group)		(3.6.1.2.3)
SS, Seam Strength	93	(kip/ft.)		(Table A12-8)
Φ_w , Wall Area and Buckling	1.00			(Table 12.5.5-1)
Φ_{SS} , Seam Strength	0.67			(Table 12.5.5-1)
Φ_{BP} , Backfill Bearing Resistance	1.00			(Table 12.5.5-1)
η_{EV} , Redundancy Factor	1.05			(1.3.4, 12.5.4)
η_{LL} , Redundancy Factor	1.00			(1.3.4, 12.5.4)
γ_{EV} , Dead Load Factor	1.95			(Table 3.4.1-2)
γ_{LL} , Live Load Factor	1.75			(Table 3.4.1-1)
$P_L = (P(1+IM/100)m)/ALL$	1.04	(ksf)		(3.6.1.2.6b-7)
P_{FD} , Factored Dead Load Crown Pressure $= \eta_{EV} \gamma_{EV} \times H \times p$	0.675675	(ksf)		(3.5.1)
P_{FL} , Factored Live Load Crown Pressure $= \eta_{LL} \gamma_{LL} P_L$	1.83	(ksf)		
P_{DL} , Factored Design Lane Load $= \eta_{LL} \gamma_{LL} mDL/10$	0.134	(ksf)		
Factored Thrust (standard structures)				
F_{min} = greater of 15/S or 1	1.00	(dimensionless)		(12.7.2.2-4)
F_1 = greater of 0.75S/lw or F_{min}	2.41	(dimensionless)		(12.7.2.2-3)
C_L , Width of Culvert on which LL is applied $= lw \leq S$	4.00	(ft)		(12.7.2.2-2)
T_L , Factored Thrust $= (P_{FD} + P_{DL})S/2 + (P_{FL} C_L F_1)/2$	13.991	(kip/ft)		(12.7.2.2-1)
EV, Vertical Earth Load $EV = \rho H$	0.33	(ksf)		(3.5.1)
R_w , Wall Resistance $R_w = \Phi_w F_y A_w$	90.387	(kip/ft.)	> T	13.991 OK (12.7.2.3-1)
F_{cr} , Critical Buckling Stress	41.472	(ksi)		
If: $S < \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}$	Then:	$F_{cr} = F_u - \left(\frac{F_u k S}{r} \right)^2 \frac{1}{48E_m}$		(12.7.2.4-1)
upper case controls				
But if: $S > \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}$	Then:	$F_{cr} = \left(\frac{kS}{r} \right)^2 \frac{12E_m}{1}$		(12.7.2.4-2)
R_b , Buckling Resistance If: $F_{cr} > F_y$, then $F_{cr} = F_y$ $R_b = \Phi_w F_{cr} A_w$	41.472 90.387	(ksi) (kip/ft.)	> > T	33 13.991 OK (12.7.2.3-1)
FF, Flexibility Factor $FF = S^2/(E_m I)$	7.572	(in./kip)	< FFR	30 OK (12.7.2.6-1)
R_s , Factored Seam Strength $R_s = \Phi_{SS} SS$	62.310	(kip/ft.)	> T	13.991 OK (12.7.2.5)
Consider the trench width to reduce the corner bearing pressure?	Yes			
Default to AASHTO trench width?	Yes			
W_T , Trench Width	60	(in.)		(Table C12.6.6.2-1)
$L_1 = 40 + (12H - 12)1.75$	76.75	(in.)		
$L_2 = L_1 + 1.37S$	287.73	(in.)		
$L_3 = L_2 + 72$	359.73	(in.)		
$C1 = 2 \times L1/L3$	0.4267			
P_C , Corner Bearing Pressure $P_C = (EV + C_1(P_L + DL/10)) \times R_T/[\Phi_{BP}(R_C + W_T)]$	0.793	(ksf)	< SB	4.000 OK (12.6.3.2, NCSPA 7-22)

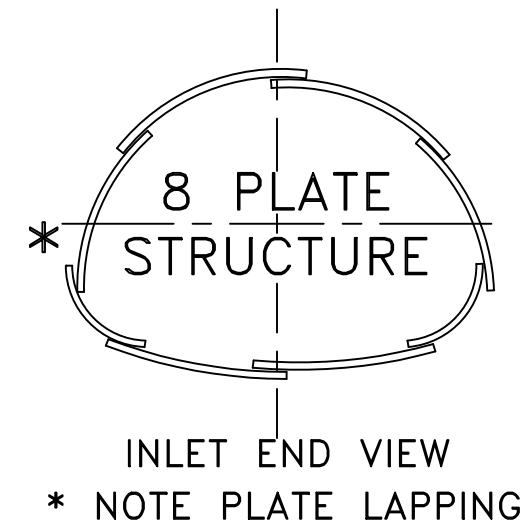
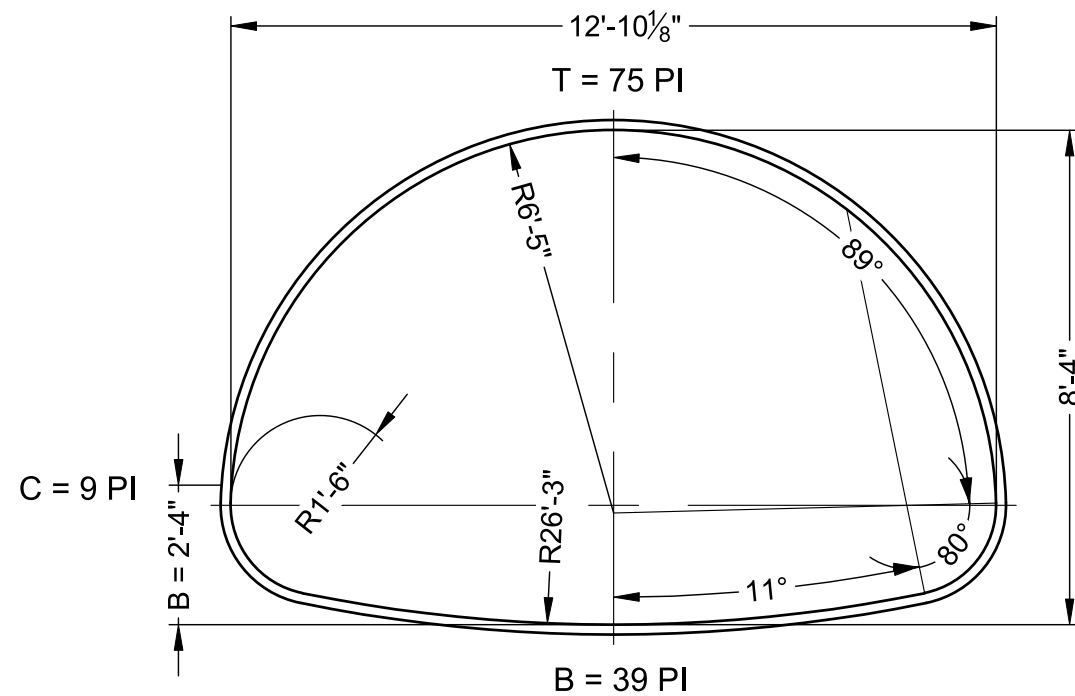


PLATE MAKE-UP:

TOP PL'S: 3 @ 18PI , 1 @ 21PI

CORNER PL'S: 1 @ 9PI

BOTTOM PL'S: 1 @ 18PI, 1@ 21PI

TOTAL PL'S: 2 @ 9PI, 4 @ 18PI, 2 @ 21PI

APPROX AREA = 85 SQ. FT.

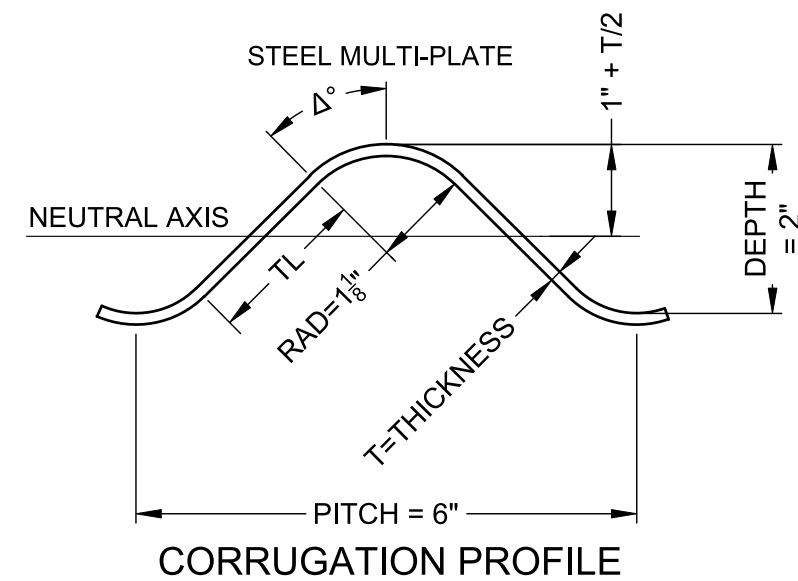
STRUCTURE 132 PI

ALL DIMENSIONS ARE TO INSIDE CORRUGATION CRESTS, UNLESS OTHERWISE NOTED.

ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.

"B" IS THE MEASUREMENT FROM THE INVERT TO THE TOP OF THE CORNER PLATE.

COLOR CODE: GREEN



SKEW	INLET	OUTLET	TYPE STRUCTURE	PIPE ARCH
	90	90	SIZE	132 PI
BEVEL	0	0	SPAN =	12'-10"
			RISE =	8'-4"
			LENGTH	● CL 120'-0"

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH[®]
ENGINEERED SOLUTIONS LLC
www.ContechES.com
700 Tech Drive, Winchester, KY 40391

859-744-3339 859-744-9665 FAX



CONTECH
STRUCTURAL PLATE

CONTRACT
DRAWING

MULTIPLATE PIPE ARCH - WEST CULVERT
12'-10" SPAN x 8'-4" RISE
PTARMIGAN ROAD CULVERTS
BETHEL, AK 99559

DRAWING #:	830865-015-MP-CON-A		SALES ORDER NO.	
	PROJECT No.:	830865	SEQ. No.:	015
	DATE:		3/11/2025	
	DESIGNED:	DRAWN:		
	ED			
CHECKED:	KF	APPROVED:		
SHEET NO.:		2 OF 4		



J:\MISC\PROJECTS\ACTIVE\830865\830865-15\MULTI-PLATE\DRAWINGS\CONTRACT\830865-015-MP-CON-A.DWG 4/11/2025 8:30 AM



SELECT GRANULAR STRUCTURAL BACKFILL LIMITS.



CRITICAL HAUNCH AREA BACKFILL ZONE, PRESSURE ON SOIL GREATEST HERE.



INITIAL LIFTS OVER THE CROWN OF STRUCTURE AS INDICATED BY SHADED AREA TO BE COMPACTED TO REQUIRED DENSITY WITH HAND OPERATED EQUIPMENT OR WITH LIGHTWEIGHT (D-4 OR LIGHTER) EQUIPMENT.

NOTES:

- TRENCH WIDTH AND/OR SELECT BACKFILL WIDTH SHALL BE DETERMINED BY THE ENGINEER DEPENDING ON SITE SPECIFIC CONDITIONS. TYPICAL BACKFILL WIDTH IS 4 FEET FOR STRUCTURE SPANS 14 FEET AND LESS, AND 6 FEET FOR STRUCTURE SPANS GREATER THAN 14 FEET.
- SHAPED BEDDING IS REQUIRED FOR A MINIMUM WIDTH OF SPAN/2. THE MINIMUM BEDDING THICKNESS SHALL BE 6 INCHES
- ALL SELECT GRANULAR BACKFILL TO BE PLACED IN A BALANCED FASHION IN THIN LIFTS (8" LOOSE TYPICALLY) AND COMPACTED TO 90 PERCENT DENSITY PER AASHTO T-180.
- COMPLETE AND REGULAR MONITORING OF THE PIPE ARCH STRUCTURE IS NECESSARY DURING THE BACKFILL PROCESS TO AT LEAST THE MINIMUM COVER LEVEL.
- PREVENT DISTORTION OF SHAPE AS NECESSARY BY VARYING COMPACTION METHODS AND EQUIPMENT.
- PLACE SELECT GRANULAR BACKFILL IN RADIAL LIFTS AT APPROXIMATELY 85% OF THE RISE OF THE PIPE ARCH STRUCTURE.

ADDITIONAL SELECT GRANULAR STRUCTURAL BACKFILL NOTES:

SATISFACTORY BACKFILL MATERIAL, PROPER PLACEMENT, AND COMPACTION ARE KEY FACTORS IN OBTAINING MAXIMUM STRENGTH AND STABILITY.

THE BACKFILL MATERIAL SHOULD BE FREE OF ROCKS, FROZEN LUMPS, AND FOREIGN MATERIAL THAT COULD CAUSE HARD SPOTS OR DECOMPOSE TO CREATE VOIDS. BACKFILL MATERIAL SHOULD BE WELL GRADED GRANULAR MATERIAL THAT MEETS THE REQUIREMENTS OF AASHTO M-145 FOR SOIL CLASSIFICATIONS A-1, A-2-4, A-2-5 OR A-3 MODIFIED. *SEE THE STRUCTURAL PLATE BACKFILL GROUP CLASSIFICATION TABLE ON THIS SHEET.* BACKFILL MUST BE PLACED SYMMETRICALLY ON EACH SIDE OF THE STRUCTURE IN 8" LOOSE LIFTS. EACH LIFT IS TO BE COMPACTED TO A MINIMUM OF 90% DENSITY PER AASHTO T-180.

A HIGH PERCENTAGE OF SILT OR FINE SAND IN THE NATIVE SOILS SUGGESTS THE NEED FOR A WELL GRADED GRANULAR BACKFILL MATERIAL TO PREVENT SOIL MIGRATION. IF THE PROPOSED BACKFILL IS NOT A WELL GRADED GRANULAR MATERIAL, A NON-WOVEN GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE SELECT BACKFILL AND THE IN SITU MATERIAL.

DURING BACKFILL, ONLY LIGHTWEIGHT TRACKED VEHICLES (D-4 OR LIGHTER) SHOULD BE NEAR THE STRUCTURE AS FILL PROGRESSES ABOVE THE CROWN AND TO THE FINISHED GRADE. THE ENGINEER AND CONTRACTOR ARE CAUTIONED THAT THE MINIMUM COVER MAY NEED TO BE INCREASED TO HANDLE TEMPORARY CONSTRUCTION VEHICLE LOADS (HEAVIER THAN D-4).

STRUCTURAL PLATE BACKFILL GROUP CLASSIFICATION, REFERENCE AASHTO M-145

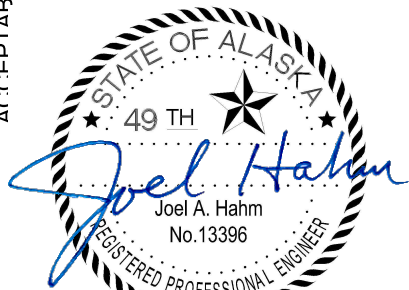
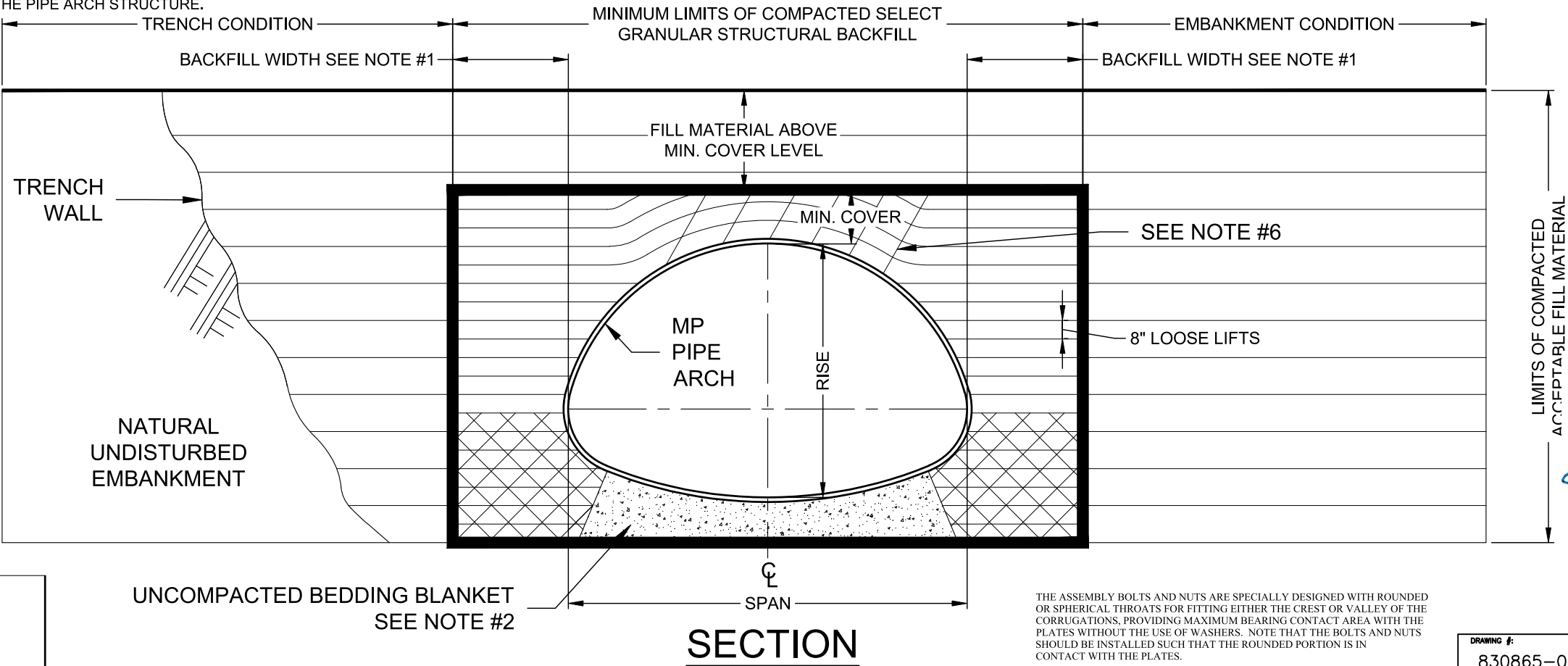
GROUP CLASSIFICATION	A-1-a	A-1-b	A-2-4	A-2-5	A-3
Sieve Analysis Percent Passing					
No. 10 (2.000 mm)	50 max.	---	---	---	---
No. 40 (0.425 mm)	30 max.	50 max.	---	---	51 max.*
No. 200 (0.075 mm)	15 max.	25 max.	35 max.	35 max.	10 max.
Atterberg Limits for Fraction Passing No. 40 (0.425 mm)					
Liquid Limits	---	---	40 max.	41 min.	---
Plasticity Index	6 max.	6 max.	10 max.	10 max.	Non Plastic
Usual Materials	Stone Fragment, Gravel and Sand		Silty or Clayey Gravel and Sand		Coarse Sand

*Modified from AASHTO M-145.

Fine beach sands, windblown sands, stream deposited sands, etc., exhibiting fine, rounded particles and typically classified by AASHTO M-145 as A-3 Materials should not be used.

Reference the most current version of ASTM D2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System), for comparable soil groups.

COLOR CODE: GREEN



	INLET	OUTLET	TYPE STRUCTURE	PIPE ARCH
SKREW	90	90	SIZE 132 PI	
BEVEL	0	0	SPAN = 12'-10"	
			RISE = 8'-4"	
			LENGTH @ CL 120'-0"	

UNCOMPACTED BEDDING BLANKET
SEE NOTE #2

SECTION

THE ASSEMBLY BOLTS AND NUTS ARE SPECIALLY DESIGNED WITH ROUNDED OR SPHERICAL THROATS FOR FITTING EITHER THE CREST OR VALLEY OF THE CORRUGATIONS, PROVIDING MAXIMUM BEARING CONTACT AREA WITH THE PLATES WITHOUT THE USE OF WASHERS. NOTE THAT THE BOLTS AND NUTS SHOULD BE INSTALLED SUCH THAT THE ROUNDED PORTION IS IN CONTACT WITH THE PLATES.

DRAWING #: 830865-015-MP-CON-A

PLANT ORDER NO.

SALES ORDER NO.

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com
700 Tech Drive, Winchester, KY 40391
859-744-3339 859-744-9665 FAX

CONTECH
STRUCTURAL PLATE
CONTRACT
DRAWING

MULTIPLATE PIPE ARCH - WEST CULVERT
12'-10" SPAN x 8'-4" RISE
PTARMIGAN ROAD CULVERTS EAST AND WEST
BETHEL, AK 99559

PROJECT No.: 830865	SEQ. No.: 015	DATE: 3/11/2025
DESIGNED:	DRAWN: ED	
CHECKED: KF	APPROVED:	
SHEET NO.: 3	OF 4	

J:\MERLIN\PROJECTS\ACTIVE\830865\830865-15\MULTIPLATE\DRAWINGS\CONTRACT\830865-015-MP-CON-A.DWG 4/11/2025 8:30 AM

1.0 STANDARDS AND DEFINITIONS

- 1.1 STANDARDS - All standards refer to the current ASTM/AASHTO edition unless otherwise noted.
- 1.1.1 ASTM A761 "Corrugated Steel Structural Plate, Zinc Coated for Field-Bolted Pipe, Pipe-Arches and Arches" (AASHTO Designation M-167).
- 1.1.2 AASHTO Standard Specification for Highway Bridges - Section 12 Division I - Design, AASHTO LRFD Bridge Design Specifications Section 12.
- 1.1.3 AASHTO Standard Specification for Highway Bridges - Section 26 Division II - Construction, AASHTO LRFD Bridge Construction Specifications - Section 26. ASTM A807, Standard Practice for Installing Corrugated Steel Structural Plate Pipe.
- 1.1.4 ARMMA Manual for Railway Engineering 2023 - Chapter 1 Section 4.14 - Design Criteria for Structural Plate Structures

1.2 DEFINITIONS

- 1.2.1 Owner - In these specifications the word "Owner" shall mean DOWL - ANCHORAGE.
- 1.2.2 Engineer - In these specifications the word "Engineer" shall mean the Engineer of Record or Owner's designated engineering representative.
- 1.2.3 Manufacturer - In these specifications the word "Manufacturer" shall mean CONTECH ENGINEERED SOLUTIONS 800-338-1122 MICHAEL BLANK.
- 1.2.4 Contractor - In these specifications the word "Contractor" shall mean the firm or corporation undertaking the execution of any installation work under the terms of these specifications.
- 1.2.5 Approved - In these specifications the word "approved" shall refer to the approval of the Engineer or his designated representative.
- 1.2.6 As Directed - In these specifications the words "as directed" shall refer to the directions to the Contractor from the Owner or his designated representative.

2.0 GENERAL CONDITIONS

- 2.1 Any installation guidance provided herein shall be endorsed by the Engineer; discrepancies herein are governed by the Engineer's plans and specifications.
- 2.2 The Contractor shall furnish all labor, material and equipment and perform all work and services except those set out and furnished by the Owner, necessary to complete in a satisfactory manner the site preparation, excavation, filling, compaction, grading as shown on the plans and as described therein. This work shall consist of all mobilization clearing and grading, grubbing, stripping, removal of existing material unless otherwise stated, preparation of the land to be filled, filling of the land, spreading and compaction of the fill, and all subsidiary work necessary to complete the grading of the cut and fill areas to conform with the lines, grades, slopes, and specifications. This work is to be accomplished under the observation of the Owner or his designated representative.
- 2.3 Prior to bidding the work, the Contractor shall examine, investigate and inspect the construction site as to the nature and location of the work, and the general and local conditions at the construction site, including without limitation, the character of surface or subsurface conditions and obstacles to be encountered on and around the construction site and shall make such additional investigation as he may deem necessary for the planning and proper execution of the work.
- 2.4 The construction shall be performed under the direction of the Engineer.
- 2.5 All aspects of the structure design and site layout including foundations, backfill, end treatments and necessary scour consideration shall be performed by the Engineer.

COLOR CODE: GREEN

3.0 ASSEMBLY AND INSTALLATION

- 3.1 Bolts and nuts shall conform to the requirements of ASTM A449. The pipe arch structure shall be assembled in accordance with the plate layout drawings provided by the Manufacturer and per the Manufacturer's recommendations.
- 3.2 The pipe arch structure shall be installed in accordance with the plans and specifications, the Manufacturer's recommendations, and AASHTO Standard Specification for Highway Bridges - Section 26 Division II - Construction/AASHTO LRFD Bridge Construction Specifications - Section 26.
- 3.3 Trench excavation shall be made in embankment material that is structurally adequate. The trench width shall be shown on the plans. Poor quality in situ embankment material must be removed and replaced with suitable backfill as directed by the Engineer.
- 3.4 Bedding preparation is critical to both structure performance and service life. The bed should be constructed to uniform line and grade to avoid distortions that may create undesirable stresses in the structure and/or rapid deterioration of the roadway. The bed should be free of rock formations, protruding stones, frozen lumps, roots, and other foreign matter that may cause unequal settlement.
- 3.5 The foundation shall be designed to support the radial pressures exerted by the smaller radius portions of the pipe. The principal foundation support shall be provided in the critical haunch area extending radially outward from the haunches.
- 3.6 The structure shall be assembled in accordance with the Manufacturer's instructions. All plates shall be unloaded and handled with reasonable care. Plates shall not be rolled or dragged over gravel rock and shall be prevented from striking rock or other hard objects during placement in trench or on bedding.
- 3.7 The structure shall be backfilled using clean well graded granular material that meets the requirements for soil classifications A-1, A-2-4, A-2-5 or A-3 modified per AASHTO M-145. See the structural plate backfill classification table on this sheet.
- 3.8 If temporary construction vehicles are required to cross the structure, it is the Contractor's responsibility to contact the Engineer to determine the amount of additional minimum cover necessary to handle the specific loading condition.
- 3.9 If a metal headwall and/or wingwall system is specified, the select granular structural backfill limits shall extend past the deadman anchor system. Contact the Engineer if stiff material or rock is encountered where the wingwalls and deadmen are to be installed.

THE ASSEMBLY BOLTS AND NUTS ARE SPECIALLY DESIGNED WITH ROUNDED OR SPHERICAL THROATS FOR FITTING EITHER THE CREST OR VALLEY OF THE CORRUGATIONS, PROVIDING MAXIMUM BEARING CONTACT AREA WITH THE PLATES WITHOUT THE USE OF WASHERS. NOTE THAT THE BOLTS AND NUTS SHOULD BE INSTALLED SUCH THAT THE ROUNDED PORTION IS IN CONTACT WITH THE PLATES.



	INLET	OUTLET	TYPE STRUCTURE PIPE ARCH
SKEW	90	90	SIZE 132 PI
BEVEL	0	0	SPAN = 12'-10"
			RISE = 8'-4"
			LENGTH @ CL 120'-0"

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.			
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.			
MARK	DATE	REVISION DESCRIPTION	BY



CONTECH
ENGINEERED SOLUTIONS LLC

www.ContechES.com

700 Tech Drive, Winchester, KY 40391

859-744-3339 859-744-9665 FAX



CONTECH
STRUCTURAL PLATE

CONTRACT
DRAWING

MULTIPLATE PIPE ARCH - WEST CULVERT
12'-10" SPAN x 8'-4" RISE
PTARMIGAN ROAD CULVERTS EAST AND WEST
BETHEL, AK 99559

DRAWING #:		SALES ORDER NO.		
830865-015-MP-CON-A				
PROJECT No.:	830865	SEQ. No.:	015	DATE: 3/11/2025
DESIGNED:		DRAWN:	ED	
CHECKED:	KF	APPROVED:		
SHEET NO.:	4	OF	4	

Structural Design Check for Corrugated Steel Plate Pipe

Per AASHTO LRFD Bridge Design Specifications, Section 12, 9th Edition 2020

Project Name: Ptarmigan Street Culvert Crossings - East Culvert

CRM #: 830865

Location: Bethel, Alaska

Date: 4/8/2025

Structure Shape	<u>Pipe Arch</u>		Select Shape Below
Corrugation Type	<u>6 X 2 in.</u>		
Loading Case	<u>1</u>	(lanes)	<u>12'-10" X 8'-4"</u>
Gage	<u>7</u>		
Bolting Type	<u>4 Bolts/ft.</u>		
H, Height of Cover	<u>1.60</u>	(ft.)	S, Span <u>154</u> (in.)
SB, Maximum Soil Bearing Pressure	<u>4.00</u>	(ksf)	Note: Please enter Soil Bearing Pressure value in space at left
ρ, Density of Cover Material (120 pcf default)	<u>0.12</u>	(kcf)	(Table 3.5.1-1)
Design Truck (LRFD Highway Load is HL-93)	<u>HL-93</u>		

A _w , Pipe Wall Area	<u>2.739</u>	(sq. in./ft.)	(Table A12-3)
I, Moment of Inertia	<u>0.108</u>	(in. ⁴ /in.)	(Table A12-3)
r, Radius of Gyration	<u>0.688</u>	(in.)	(Table A12-3)
R _t , Top Radius	<u>77</u>	(in.)	(See Shapes Sheet)
R _c , Corner Radius	<u>18</u>	(in.)	(See Shapes Sheet)
E _m , Modulus of Elasticity	<u>29000</u>	(ksi)	(Table A12-10)
F _u , Tensile Strength	<u>45</u>	(ksi)	(Table A12-10)
F _y , Yield Strength	<u>33</u>	(ksi)	(Table A12-10)
L _p , Surface Load Contact Length	<u>0.833</u>	(ft.)	(3.6.1.2.5)
w _t , Surface Load Contact Width	<u>1.667</u>	(ft.)	(3.6.1.2.5)

HL93 Truck Controls

s _w , Wheel	<u>6.00</u>	(ft)	
s _a , axle spacing	<u>14.00</u>	(ft)	
LLDF	<u>1.15</u>		(Table 3.6.1.2.6a-1)
H _{int-t} , Wheel Interaction Depth	<u>3.10</u>	(ft)	(3.6.1.2.6b-1)
W _w , live load patch length			
Ww=wt/12+sw+LLDF x H + 0.06 Di/12	<u>4.28</u>	(ft)	(3.6.1.2.6b-3)
H _{int-p} , Axle Interaction Depth	<u>11.45</u>		
Number of Interacting Wheels	<u>1</u>		
DL, Design Lane Load	<u>0.64</u>	(klf)	(3.6.1.2.4)
I _w , live load patch length			(3.6.1.2.6b-5)
lw=lt/12+LLFD(H)	<u>2.67</u>	(ft)	
A _{LL} , Area of live load patch at H	<u>11.43</u>	(ft ²)	(3.6.1.2.6a-1)
FFR, Flexibility Factor Required	<u>30</u>	(in./kip)	(Table 12.5.6.1-1)
k, Soil Stiffness Factor	<u>0.22</u>		(12.7.2.4)
IM, Dynamic Load Factor	<u>26.4</u>	(%)	(3.6.2.2-1)
IM = 33(1.0-0.125H)			
m, Multiple Presence Factor	<u>1.2</u>		(Table 3.6.1.1.2-1)

Structural Design Check for Corrugated Steel Plate Pipe

Per AASHTO LRFD Bridge Design Specifications, Section 12, 9th Edition 2020

P, HL93 Truck Load	16	(kip/wheel group)	(3.6.1.2.2)
PT, HL93 Tandem Load	12.5	(kip/wheel group)	(3.6.1.2.3)
SS, Seam Strength	93	(kip/ft.)	(Table A12-8)
Φ_w , Wall Area and Buckling	1.00		(Table 12.5.5-1)
Φ_{SS} , Seam Strength	0.67		(Table 12.5.5-1)
Φ_{BP} , Backfill Bearing Resistance	1.00		(Table 12.5.5-1)
η_{EV} , Redundancy Factor	1.05		(1.3.4, 12.5.4)
η_{LL} , Redundancy Factor	1.00		(1.3.4, 12.5.4)
γ_{EV} , Dead Load Factor	1.95		(Table 3.4.1-2)
γ_{LL} , Live Load Factor	1.75		(Table 3.4.1-1)
$P_L = (P(1+IM/100)m)/ALL$	2.12	(ksf)	(3.6.1.2.6b-7)
P_{FD} , Factored Dead Load Crown Pressure = $\eta_{EV} \gamma_{EV} \times H \times p$	0.39312	(ksf)	(3.5.1)
P_{FL} , Factored Live Load Crown Pressure = $\eta_{LL} \gamma_{LL} P_L$	3.71	(ksf)	
P_{DL} , Factored Design Lane Load = $\eta_{LL} \gamma_{LL} mDL/10$	0.134	(ksf)	
Factored Thrust (standard structures)			
F_{min} = greater of 15/S or 1	1.00	(dimensionless)	(12.7.2.2-4)
F_1 = greater of 0.75S/lw or F_{min}	3.60	(dimensionless)	(12.7.2.2-3)
C_L , Width of Culvert on which LL is applied = $lw \leq S$	2.67	(ft)	(12.7.2.2-2)
T_L , Factored Thrust = $(P_{FD} + P_{DL})S/2 + (P_{FL} C_L F_1)/2$	21.262	(kip/ft)	(12.7.2.2-1)
EV, Vertical Earth Load $EV = \rho H$	0.192	(ksf)	(3.5.1)
R_w , Wall Resistance $R_w = \Phi_w F_y A_w$	90.387	(kip/ft.)	> T 21.262 (12.7.2.3-1) OK
F_{cr} , Critical Buckling Stress If: $S < \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}$	41.472	(ksi)	$F_{cr} = F_u - \frac{\left(\frac{F_u k S}{r}\right)^2}{48E_m}$ (12.7.2.4-1)
upper case controls			
But if: $S > \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}$	Then:	$F_{cr} = \left(\frac{kS}{r}\right)^2 \frac{12E_m}{r}$	(12.7.2.4-2)
R_b , Buckling Resistance If: $F_{cr} > F_y$, then $F_{cr} = F_y$ $R_b = \Phi_w F_{cr} A_w$	41.472 90.387	(ksi) (kip/ft.)	> > T 33 21.262 (12.7.2.3-1) OK
FF, Flexibility Factor $FF = S^2/(E_m I)$	7.572	(in./kip)	< FFR 30 (12.7.2.6-1) OK
R_s , Factored Seam Strength $R_s = \Phi_{SS} SS$	62.310	(kip/ft.)	> T 21.262 (12.7.2.5) OK
Consider the trench width to reduce the corner bearing pressure?	Yes		
Default to AASHTO trench width?	Yes		
W_T , Trench Width	60	(in.)	(Table C12.6.6.2-1)
$L_1 = 40 + (12H - 12)1.75$	52.6	(in.)	
$L_2 = L_1 + 1.37S$	263.58	(in.)	
$L_3 = L_2 + 72$	335.58	(in.)	
$C1 = 2 \times L1/L3$	0.3135		
P_C , Corner Bearing Pressure $P_C = (EV + C_1(P_L + DL/10)) \times R_T/[\Phi_{BP}(R_C + W_T)]$	0.866	(ksf)	< SB 4.000 (12.6.3.2, NCSPA 7-22) OK

Structural Design Check for Corrugated Steel Plate Pipe

Per AASHTO LRFD Bridge Design Specifications, Section 12, 9th Edition 2020

Project Name: Ptarmigan Street Culvert Crossings - East Culvert

CRM #: 830865

Location: Bethel, Alaska

Date: 4/8/2025

Structure Shape	<u>Pipe Arch</u>		Select Shape Below
Corrugation Type	<u>6 X 2 in.</u>		
Loading Case	<u>1</u>	(lanes)	<u>12'-10" X 8'-4"</u>
Gage	<u>7</u>		
Bolting Type	<u>4 Bolts/ft.</u>		
H, Height of Cover	<u>3.15</u>	(ft.)	S, Span <u>154</u> (in.)
SB, Maximum Soil Bearing Pressure	<u>4.00</u>	(ksf)	Note: Please enter Soil Bearing Pressure value in space at left
ρ , Density of Cover Material (120 pcf default)	<u>0.12</u>	(kcf)	(Table 3.5.1-1)
Design Truck (LRFD Highway Load is HL-93)	<u>HL-93</u>		

A_w , Pipe Wall Area	<u>2.739</u>	(sq. in./ft.)	(Table A12-3)
I, Moment of Inertia	<u>0.108</u>	(in. ⁴ /in.)	(Table A12-3)
r, Radius of Gyration	<u>0.688</u>	(in.)	(Table A12-3)
R _t , Top Radius	<u>77</u>	(in.)	(See Shapes Sheet)
R _c , Corner Radius	<u>18</u>	(in.)	(See Shapes Sheet)
E _m , Modulus of Elasticity	<u>29000</u>	(ksi)	(Table A12-10)
F _u , Tensile Strength	<u>45</u>	(ksi)	(Table A12-10)
F _y , Yield Strength	<u>33</u>	(ksi)	(Table A12-10)
L _p , Surface Load Contact Length	<u>0.833</u>	(ft.)	(3.6.1.2.5)
w _t , Surface Load Contact Width	<u>1.667</u>	(ft.)	(3.6.1.2.5)

HL93 Truck Controls

s _w , Wheel	<u>6.00</u>	(ft)	
s _a , axle spacing	<u>14.00</u>	(ft)	
LLDF	<u>1.15</u>		(Table 3.6.1.2.6a-1)
H _{int-t} , Wheel Interaction Depth	<u>3.10</u>	(ft)	(3.6.1.2.6b-1)
W _w , live load patch length			
Ww=wt/12+sw+LLDF x H + 0.06 Di/12	<u>12.06</u>	(ft)	(3.6.1.2.6b-3)
H _{int-p} , Axle Interaction Depth	<u>11.45</u>		
Number of Interacting Wheels	<u>2</u>		
DL, Design Lane Load	<u>0.64</u>	(klf)	(3.6.1.2.4)
I _w , live load patch length			(3.6.1.2.6b-5)
lw=lt/12+LLFD(H)	<u>4.46</u>	(ft)	
A _{LL} , Area of live load patch at H	<u>53.73</u>	(ft ²)	(3.6.1.2.6a-1)
FFR, Flexibility Factor Required	<u>30</u>	(in./kip)	(Table 12.5.6.1-1)
k, Soil Stiffness Factor	<u>0.22</u>		(12.7.2.4)
IM, Dynamic Load Factor	<u>20.00625</u>	(%)	(3.6.2.2-1)
IM = 33(1.0-0.125H)			
m, Multiple Presence Factor	<u>1.2</u>		(Table 3.6.1.1.2-1)

Structural Design Check for Corrugated Steel Plate Pipe

Per AASHTO LRFD Bridge Design Specifications, Section 12, 9th Edition 2020

P, HL93 Truck Load	16	(kip/wheel group)	(3.6.1.2.2)
PT, HL93 Tandem Load	12.5	(kip/wheel group)	(3.6.1.2.3)
SS, Seam Strength	93	(kip/ft.)	(Table A12-8)
Φ_w , Wall Area and Buckling	1.00		(Table 12.5.5-1)
Φ_{SS} , Seam Strength	0.67		(Table 12.5.5-1)
Φ_{BP} , Backfill Bearing Resistance	1.00		(Table 12.5.5-1)
η_{EV} , Redundancy Factor	1.05		(1.3.4, 12.5.4)
η_{LL} , Redundancy Factor	1.00		(1.3.4, 12.5.4)
γ_{EV} , Dead Load Factor	1.95		(Table 3.4.1-2)
γ_{LL} , Live Load Factor	1.75		(Table 3.4.1-1)
$P_L = (P(1+IM/100)m)/ALL$	0.86	(ksf)	(3.6.1.2.6b-7)
P_{FD} , Factored Dead Load Crown Pressure $= \eta_{EV} \gamma_{EV} \times H \times p$	0.773955	(ksf)	(3.5.1)
P_{FL} , Factored Live Load Crown Pressure $= \eta_{LL} \gamma_{LL} P_L$	1.50	(ksf)	
P_{DL} , Factored Design Lane Load $= \eta_{LL} \gamma_{LL} mDL/10$	0.134	(ksf)	
Factored Thrust (standard structures)			
F_{min} = greater of 15/S or 1	1.00	(dimensionless)	(12.7.2.2-4)
F_1 = greater of 0.75S/lw or F_{min}	2.16	(dimensionless)	(12.7.2.2-3)
C_L , Width of Culvert on which LL is applied $= lw \leq S$	4.46	(ft)	(12.7.2.2-2)
T_L , Factored Thrust $= (P_{FD} + P_{DL})S/2 + (P_{FL} C_L F_1)/2$	13.051	(kip/ft)	(12.7.2.2-1)
EV, Vertical Earth Load $EV = \rho H$	0.378	(ksf)	(3.5.1)
R_w , Wall Resistance $R_w = \Phi_w F_y A_w$	90.387	(kip/ft.)	> T 13.051 OK (12.7.2.3-1)
F_{cr} , Critical Buckling Stress	41.472	(ksi)	
If: $S < \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}$	Then:	$F_{cr} = F_u - \left(\frac{F_u k S}{r} \right)^2 \frac{1}{48E_m}$	(12.7.2.4-1)
upper case controls			
But if: $S > \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}$	Then:	$F_{cr} = \left(\frac{kS}{r} \right)^2 \frac{12E_m}{1}$	(12.7.2.4-2)
R_b , Buckling Resistance If: $F_{cr} > F_y$, then $F_{cr} = F_y$ $R_b = \Phi_w F_{cr} A_w$	41.472 90.387	(ksi) (kip/ft.)	> > T 13.051 OK (12.7.2.3-1)
FF, Flexibility Factor $FF = S^2/(E_m I)$	7.572	(in./kip)	< FFR 30 OK (12.7.2.6-1)
R_s , Factored Seam Strength $R_s = \Phi_{SS} SS$	62.310	(kip/ft.)	> T 13.051 OK (12.7.2.5)
Consider the trench width to reduce the corner bearing pressure?	Yes		
Default to AASHTO trench width?	Yes		
W_T , Trench Width	60	(in.)	(Table C12.6.6.2-1)
$L_1 = 40 + (12H - 12)1.75$	85.15	(in.)	
$L_2 = L_1 + 1.37S$	296.13	(in.)	
$L_3 = L_2 + 72$	368.13	(in.)	
$C1 = 2 \times L1/L3$	0.4626		
P_C , Corner Bearing Pressure $P_C = (EV + C_1(P_L + DL/10)) \times R_T / [\Phi_{BP}(R_C + W_T)]$	0.794	(ksf)	< SB 4.000 OK (12.6.3.2, NCSPA 7-22)

I:\MERLIN\PROJECTS\ACTIVE\830865-020\MULTIPLATE\DRAWINGS\CONTRACT\830865-020-MP-CON-A.DWG 4/11/2025 8:31 AM

LOADING: HL-93
MIN HOC: 1.6'
MAX HOC: 3.15'
HOT-DIP GALVANIZED
IMPORTANT

ASSEMBLY INSTRUCTIONS WILL BE SHIPPED WITH THE STRUCTURE. THEY ARE LOCATED IN THE BRIGHT COLORED BUCKET.

IMPORTANT
WHEN BEGINNING ASSEMBLY, BE CERTAIN PLATES ARE ORIENTED SO BOLT HOLE PATTERN MATCHES THAT SHOWN ON THIS DRAWING AND ASSEMBLY INSTRUCTIONS.

TORQUE NOTE

PLATE LAPS MUST BE PROPERLY MATED IN A TANGENT FASHION USING PROPER ALIGNMENT TECHNIQUES AND ADEQUATE BOLT TORQUE TO SEAT THE CORRUGATION. FOR PLAIN, GALVANIZED PLATES, AN INSTALLATION BOLT TORQUE OF 100-300 ft-lbs IS RECOMMENDED. WHEN SEAM SEALANT TAPE OR ASPHALT (SHOP) COATED PLATES ARE USED, BOLTS SHALL BE INSTALLED AT 150-300 ft-lbs AND RETIGHTENED TO THESE LIMITS AFTER 4 TO 6 HOURS. TORQUE LEVELS ARE FOR INSTALLATION, NOT RESIDUAL, IN-SERVICE REQUIREMENTS.

	INLET	OUTLET	TYPE STRUCTURE
SKEW	90	90	PIPE ARCH
BEVEL	0	0	SIZE 132 PI
			SPAN = 12'-10"
			RISE = 8'-4"
			LENGTH @ CL 100'-0"

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.			
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.			
MARK	DATE	REVISION DESCRIPTION	BY



CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com
700 Tech Drive, Winchester, KY 40391

859-744-3339 859-744-9665 FAX



CONTECH
STRUCTURAL PLATE

CONTRACT
DRAWING

MULTIPLATE PIPE ARCH - EAST CULVERT
12'-10" SPAN x 8'-4" RISE
PTARMIGAN ROAD CULVERTS
BETHEL, AK 99559

PROJECT No.: 830865	SEQ. No.: 020	DATE: 3/11/2025
DESIGNED:	DRAWN: ED	
CHECKED: KF	APPROVED:	
SHEET NO.: 1	OF 4	

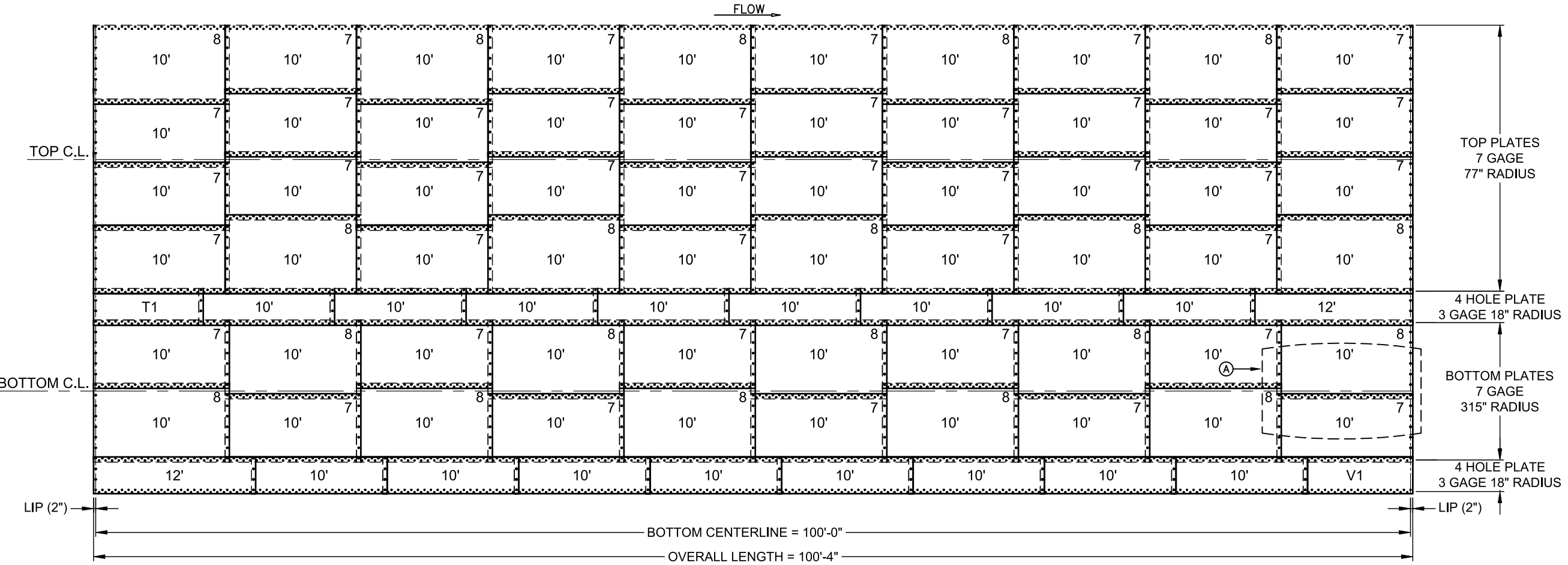
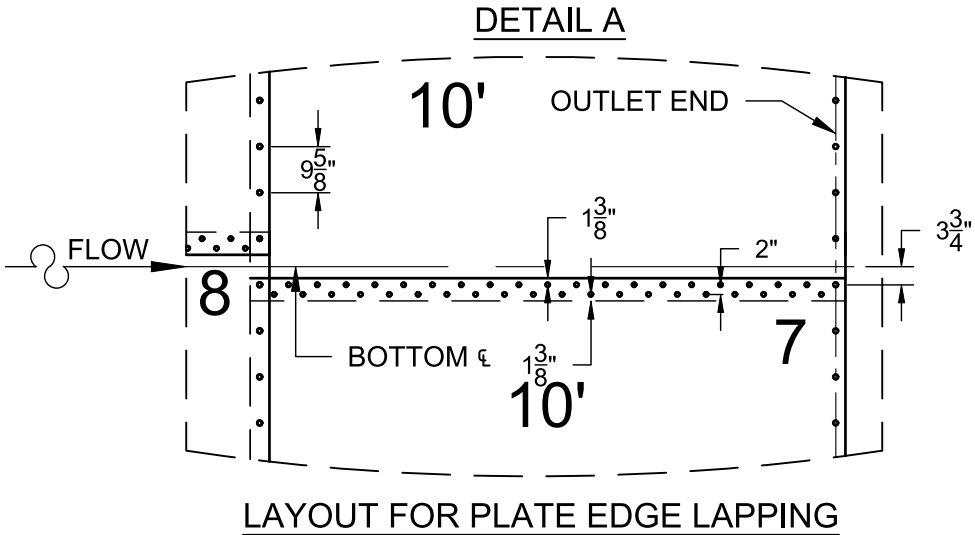


PLATE LAYOUT --- INSIDE VIEW

COLOR CODE: ORANGE



THE ASSEMBLY BOLTS AND NUTS ARE SPECIALLY DESIGNED WITH ROUNDED OR SPHERICAL THROATS FOR FITTING EITHER THE CREST OR VALLEY OF THE CORRUGATIONS, PROVIDING MAXIMUM BEARING CONTACT AREA WITH THE PLATES WITHOUT THE USE OF WASHERS. NOTE THAT THE BOLTS AND NUTS SHOULD BE INSTALLED SUCH THAT THE ROUNDED PORTION IS IN CONTACT WITH THE PLATES.



PLANT ORDER NO.

DRAWING #: 830865-020-MP-CON-A SALES ORDER NO.

I:\MERLIN\PROJECTS\ACTIVE\830865-02\MULTI-PLATE\DRAWINGS\CONTRACT\830865-02\MULTI-PLATE\CON-A.DWG 4/11/2025 8:31 AM

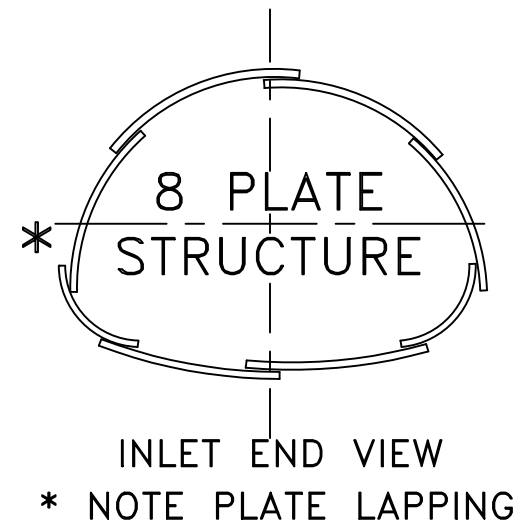
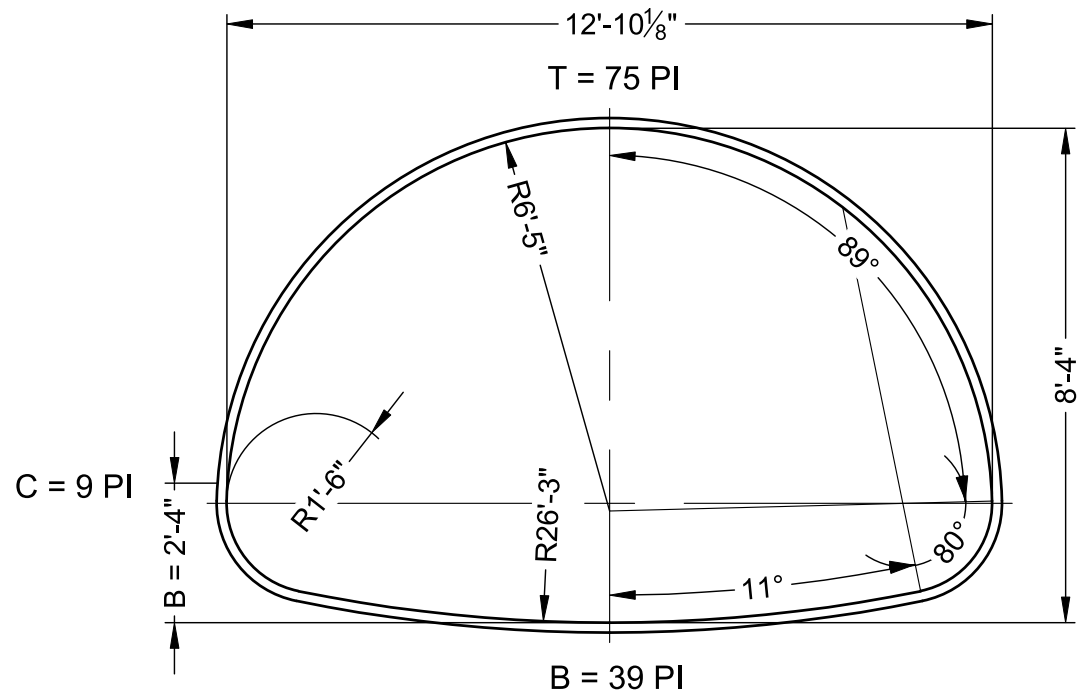


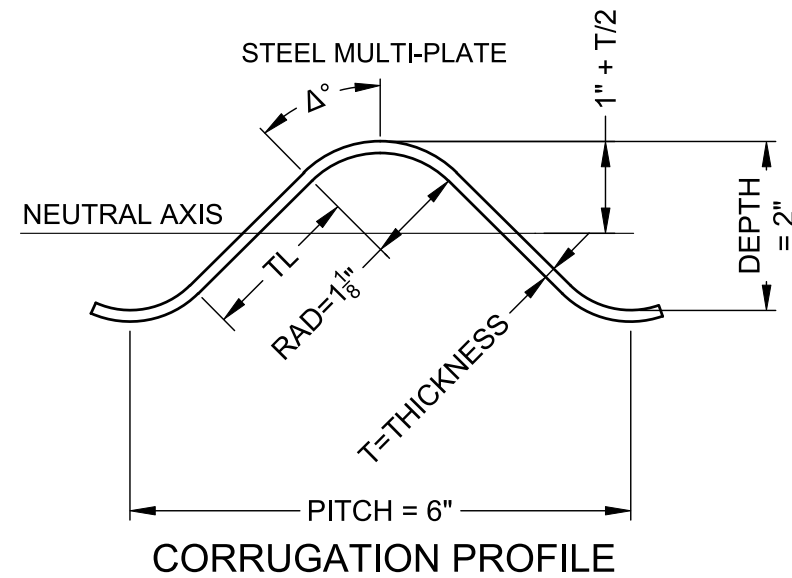
PLATE MAKE-UP:
TOP PL'S: 3 @ 18PI , 1 @ 21PI
CORNER PL'S: 1 @ 9PI
BOTTOM PL'S: 1 @ 18PI, 1@ 21PI

TOTAL PL'S: 2 @ 9PI, 4 @ 18PI, 2 @ 21PI

APPROX AREA = 85 SQ. FT.
STRUCTURE 132 PI

ALL DIMENSIONS ARE TO INSIDE CORRUGATION CRESTS, UNLESS OTHERWISE NOTED.
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
"B" IS THE MEASUREMENT FROM THE INVERT TO THE TOP OF THE CORNER PLATE.

COLOR CODE: ORANGE



	INLET	OUTLET	TYPE STRUCTURE PIPE ARCH
SKREW	90	90	SIZE 132 PI
BEVEL	0	0	SPAN = 12'-10"
			RISE = 8'-4"
			LENGTH @ CL 100'-0"

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.			
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.			
MARK	DATE	REVISION DESCRIPTION	BY



CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com
700 Tech Drive, Winchester, KY 40391
859-744-3339 859-744-9665 FAX

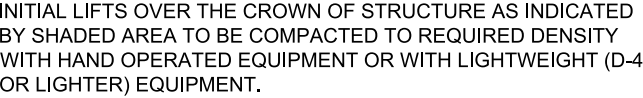


CONTECH
STRUCTURAL PLATE

CONTRACT
DRAWING

MULTIPLATE PIPE ARCH - EAST CULVERT
12'-10" SPAN x 8'-4" RISE
PTARMIGAN ROAD CULVERTS
BETHEL, AK 99559

PROJECT No.: 830865		SEQ. No.: 020		DATE: 3/11/2025	
DESIGNED:			DRAWN: ED		
CHECKED: KF			APPROVED:		
SHEET NO.: 2 OF 4					



NOTES:

1. TRENCH WIDTH AND/OR SELECT BACKFILL WIDTH SHALL BE DETERMINED BY THE ENGINEER DEPENDING ON SITE SPECIFIC CONDITIONS. TYPICAL BACKFILL WIDTH IS 4 FEET FOR STRUCTURE SPANS 14 FEET AND LESS, AND 6 FEET FOR STRUCTURE SPANS GREATER THAN 14 FEET.
2. SHAPED BEDDING IS REQUIRED FOR A MINIMUM WIDTH OF SPAN/2. THE MINIMUM BEDDING THICKNESS SHALL BE 6 INCHES
3. ALL SELECT GRANULAR BACKFILL TO BE PLACED IN A BALANCED FASHION IN THIN LIFTS (8" LOOSE TYPICALLY) AND COMPACTED TO 90 PERCENT DENSITY PER AASHTO T-180.
4. COMPLETE AND REGULAR MONITORING OF THE PIPE ARCH STRUCTURE IS NECESSARY DURING THE BACKFILL PROCESS TO AT LEAST THE MINIMUM COVER LEVEL.
5. PREVENT DISTORTION OF SHAPE AS NECESSARY BY VARYING COMPACTION METHODS AND EQUIPMENT.
6. PLACE SELECT GRANULAR BACKFILL IN RADIAL LIFTS AT APPROXIMATELY 85% OF THE RISE OF THE PIPE ARCH STRUCTURE.

ADDITIONAL SELECT GRANULAR STRUCTURAL BACKFILL NOTES:

SATISFACTORY BACKFILL MATERIAL, PROPER PLACEMENT, AND COMPACTION ARE KEY FACTORS IN OBTAINING MAXIMUM STRENGTH AND STABILITY.

THE BACKFILL MATERIAL SHOULD BE FREE OF ROCKS, FROZEN LUMPS, AND FOREIGN MATERIAL THAT COULD CAUSE HARD SPOTS OR DECOMPOSE TO CREATE VOIDS. BACKFILL MATERIAL SHOULD BE WELL GRADED GRANULAR MATERIAL THAT MEETS THE REQUIREMENTS OF AASHTO M-145 FOR SOIL CLASSIFICATIONS A-1, A-2-4, A-2-5 OR A-3 MODIFIED. *SEE THE STRUCTURAL PLATE BACKFILL GROUP CLASSIFICATION TABLE ON THIS SHEET.* BACKFILL MUST BE PLACED SYMMETRICALLY ON EACH SIDE OF THE STRUCTURE IN 8" LOOSE LIFTS. EACH LIFT IS TO BE COMPACTED TO A MINIMUM OF 90% DENSITY PER AASHTO T-180.

A HIGH PERCENTAGE OF SILT OR FINE SAND IN THE NATIVE SOILS SUGGESTS THE NEED FOR A WELL GRADED GRANULAR BACKFILL MATERIAL TO PREVENT SOIL MIGRATION. IF THE PROPOSED BACKFILL IS NOT A WELL GRADED GRANULAR MATERIAL, A NON-WOVEN GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE SELECT BACKFILL AND THE IN SITU MATERIAL.

DURING BACKFILL, ONLY LIGHTWEIGHT TRACKED VEHICLES (D-4 OR LIGHTER) SHOULD BE NEAR THE STRUCTURE AS FILL PROGRESSES ABOVE THE CROWN AND TO THE FINISHED GRADE. THE ENGINEER AND CONTRACTOR ARE CAUTIONED THAT THE MINIMUM COVER MAY NEED TO BE INCREASED TO HANDLE TEMPORARY CONSTRUCTION VEHICLE LOADS (HEAVIER THAN D-4).

STRUCTURAL PLATE BACKFILL GROUP CLASSIFICATION, REFERENCE AASHTO M-145

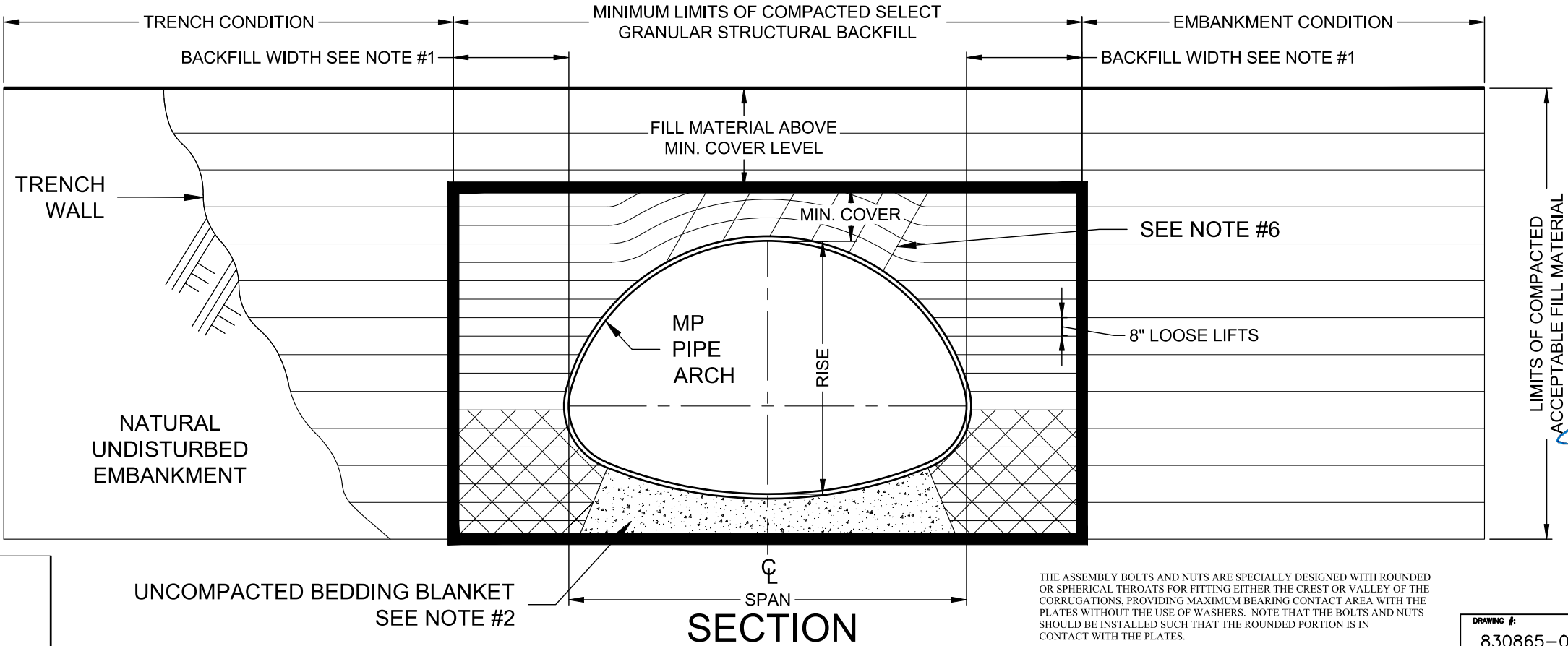
GROUP CLASSIFICATION	A-1-a	A-1-b	A-2-4	A-2-5	A-3
Sieve Analysis Percent Passing					
No. 10 (2.000 mm)	50 max.	—	—	—	—
No. 40 (0.425 mm)	30 max.	50 max.	—	—	51 max.*
No. 200 (0.075 mm)	15 max.	25 max.	35 max.	35 max.	10 max.
Atterberg Limits for Fraction Passing No. 40 (0.425 mm)					
Liquid Limits	—	—	40 max.	41 min.	—
Plasticity Index	6 max.	6 max.	10 max.	10 max.	Non Plastic
Usual Materials	Stone Fragment, Gravel and Sand		Silty or Clayey Gravel and Sand		Coarse Sand

*Modified from AASHTO M-145.

Fine beach sands, windblown sands, stream deposited sands, etc., exhibiting fine, rounded particles and typically classified by AASHTO M-145 as A-3 Materials should not be used.

Reference the most current version of ASTM D2487, Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System), for comparable soil groups.

COLOR CODE: ORANGE



	INLET	OUTLET	TYPE STRUCTURE PIPE ARCH
SKREW	90	90	SIZE 132 PI
			SPAN = 12'-10"
BEVEL	0	0	RISE = 8'-4"
			LENGTH @ C _L 100'-0"

UNCOMPACTED BEDDING BLANKET
SEE NOTE #2

SECTION

THE ASSEMBLY BOLTS AND NUTS ARE SPECIALLY DESIGNED WITH ROUNDED OR SPHERICAL THROATS FOR FITTING EITHER THE CREST OR VALLEY OF THE CORRUGATIONS, PROVIDING MAXIMUM BEARING CONTACT AREA WITH THE PLATES WITHOUT THE USE OF WASHERS. NOTE THAT THE BOLTS AND NUTS SHOULD BE INSTALLED SUCH THAT THE ROUNDED PORTION IS IN CONTACT WITH THE PLATES.

PLANT ORDER NO.

SALES ORDER NO.

DRAWING #:
830865-020-MP-CON-A

PROJECT No.:	SEQ. No.:	DATE:
830865	020	3/11/2025

DESIGNED:	DRAWN: ED
-----------	--------------

CHECKED: KF	APPROVED:
----------------	-----------

3 OF 4

Page 401 of 452

I:\MERLIN\PROJECT\ACTIVE\830800\830865\830865-20-MULTI-PLATE\DRAWINGS\CONTRACT\830865-20-MP-CON-A.DWG 4/11/2025 8:31 AM

J:\MERLIN\PROJECTS\ACTIVE\830865-02\MULTIPLATE\DRAWINGS\CONTRACT\830865-02A-MP-CON-A.DWG 4/11/2025 8:31 AM

1.0 STANDARDS AND DEFINITIONS

- 1.1 STANDARDS - All standards refer to the current ASTM/AASHTO edition unless otherwise noted.
- 1.1.1 ASTM A761 "Corrugated Steel Structural Plate, Zinc Coated for Field-Bolted Pipe, Pipe-Arches and Arches" (AASHTO Designation M-167).
- 1.1.2 AASHTO Standard Specification for Highway Bridges - Section 12 Division I - Design, AASHTO LRFD Bridge Design Specifications Section 12.
- 1.1.3 AASHTO Standard Specification for Highway Bridges - Section 26 Division II - Construction, AASHTO LRFD Bridge Construction Specifications - Section 26. ASTM A807, Standard Practice for Installing Corrugated Steel Structural Plate Pipe.
- 1.1.4 ARMMA Manual for Railway Engineering 2023 - Chapter 1 Section 4.14 - Design Criteria for Structural Plate Structures

1.2 DEFINITIONS

- 1.2.1 Owner - In these specifications the word "Owner" shall mean DOWL - ANCHORAGE.
- 1.2.2 Engineer - In these specifications the word "Engineer" shall mean the Engineer of Record or Owner's designated engineering representative.
- 1.2.3 Manufacturer - In these specifications the word "Manufacturer" shall mean CONTECH ENGINEERED SOLUTIONS 800-338-1122 MICHAEL BLANK.
- 1.2.4 Contractor - In these specifications the word "Contractor" shall mean the firm or corporation undertaking the execution of any installation work under the terms of these specifications.
- 1.2.5 Approved - In these specifications the word "approved" shall refer to the approval of the Engineer or his designated representative.
- 1.2.6 As Directed - In these specifications the words "as directed" shall refer to the directions to the Contractor from the Owner or his designated representative.

2.0 GENERAL CONDITIONS

- 2.1 Any installation guidance provided herein shall be endorsed by the Engineer; discrepancies herein are governed by the Engineer's plans and specifications.
- 2.2 The Contractor shall furnish all labor, material and equipment and perform all work and services except those set out and furnished by the Owner, necessary to complete in a satisfactory manner the site preparation, excavation, filling, compaction, grading as shown on the plans and as described therein. This work shall consist of all mobilization clearing and grading, grubbing, stripping, removal of existing material unless otherwise stated, preparation of the land to be filled, filling of the land, spreading and compaction of the fill, and all subsidiary work necessary to complete the grading of the cut and fill areas to conform with the lines, grades, slopes, and specifications. This work is to be accomplished under the observation of the Owner or his designated representative.
- 2.3 Prior to bidding the work, the Contractor shall examine, investigate and inspect the construction site as to the nature and location of the work, and the general and local conditions at the construction site, including without limitation, the character of surface or subsurface conditions and obstacles to be encountered on and around the construction site and shall make such additional investigation as he may deem necessary for the planning and proper execution of the work.
- 2.4 The construction shall be performed under the direction of the Engineer.
- 2.5 All aspects of the structure design and site layout including foundations, backfill, end treatments and necessary scour consideration shall be performed by the Engineer.

If conditions other than those indicated are discovered by the Contractor, the Owner shall be notified immediately. The material which the Contractor believes to be a changed condition shall not be disturbed so that the owner can investigate the condition.

3.0 ASSEMBLY AND INSTALLATION

- 3.1 Bolts and nuts shall conform to the requirements of ASTM A449. The pipe arch structure shall be assembled in accordance with the plate layout drawings provided by the Manufacturer and per the Manufacturer's recommendations.
- 3.2 The pipe arch structure shall be installed in accordance with the plans and specifications, the Manufacturer's recommendations, and AASHTO Standard Specification for Highway Bridges - Section 26 Division II - Construction/AASHTO LRFD Bridge Construction Specifications - Section 26.
- 3.3 Trench excavation shall be made in embankment material that is structurally adequate. The trench width shall be shown on the plans. Poor quality in situ embankment material must be removed and replaced with suitable backfill as directed by the Engineer.
- 3.4 Bedding preparation is critical to both structure performance and service life. The bed should be constructed to uniform line and grade to avoid distortions that may create undesirable stresses in the structure and/or rapid deterioration of the roadway. The bed should be free of rock formations, protruding stones, frozen lumps, roots, and other foreign matter that may cause unequal settlement.
- 3.5 The foundation shall be designed to support the radial pressures exerted by the smaller radius portions of the pipe. The principal foundation support shall be provided in the critical haunch area extending radially outward from the haunches.
- 3.6 The structure shall be assembled in accordance with the Manufacturer's instructions. All plates shall be unloaded and handled with reasonable care. Plates shall not be rolled or dragged over gravel rock and shall be prevented from striking rock or other hard objects during placement in trench or on bedding.
- 3.7 The structure shall be backfilled using clean well graded granular material that meets the requirements for soil classifications A-1, A-2-4, A-2-5 or A-3 modified per AASHTO M-145. See the structural plate backfill classification table on this sheet.
- 3.8 If temporary construction vehicles are required to cross the structure, it is the Contractor's responsibility to contact the Engineer to determine the amount of additional minimum cover necessary to handle the specific loading condition.
- 3.9 If a metal headwall and/or wingwall system is specified, the select granular structural backfill limits shall extend past the deadman anchor system. Contact the Engineer if stiff material or rock is encountered where the wingwalls and deadmen are to be installed.

Backfill must be placed symmetrically on each side of the structure in 8 inch loose lifts. Each lift shall be compacted to a minimum of 90 percent density per AASHTO T-180.

Normal highway traffic is not allowed to cross the structure until the structure has been backfilled and paved. If the road is unpaved, cover allowance to accommodate rutting shall be as directed by the Engineer.

THE ASSEMBLY BOLTS AND NUTS ARE SPECIALLY DESIGNED WITH ROUNDED OR SPHERICAL THROATS FOR FITTING EITHER THE CREST OR VALLEY OF THE CORRUGATIONS, PROVIDING MAXIMUM BEARING CONTACT AREA WITH THE PLATES WITHOUT THE USE OF WASHERS. NOTE THAT THE BOLTS AND NUTS SHOULD BE INSTALLED SUCH THAT THE ROUNDED PORTION IS IN CONTACT WITH THE PLATES.

COLOR CODE: ORANGE



	INLET	OUTLET	TYPE STRUCTURE
SKEW	90	90	PIPE ARCH
BEVEL	0	0	SIZE 132 PI
			SPAN = 12'-10"
			RISE = 8'-4"
			LENGTH @ CL 100'-0"

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.			
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.			
MARK	DATE	REVISION DESCRIPTION	BY

CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com
700 Tech Drive, Winchester, KY 40391
859-744-3339 859-744-9665 FAX

CONTECH
STRUCTURAL PLATE
CONTRACT
DRAWING

MULTIPLATE PIPE ARCH - EAST CULVERT
12'-10" SPAN x 8'-4" RISE
PTARMIGAN ROAD CULVERTS
BETHEL, AK 99559

PROJECT No.: 830865	SEQ. No.: 020	DATE: 3/11/2025
DESIGNED:	DRAWN: ED	
CHECKED: KF	APPROVED:	
SHEET NO.:	4	OF 4

Appendix B

Load Rating Report (24 pages)

- Load Rating Cover Letter (2 pages)
- West Culvert – 12'10" x 8'4" Multiplate Pipe Arch (11 pages)
- East Culvert – 12'10" x 8'4" Multiplate Pipe Arch (11 pages)

April 11, 2025

Re: Load Ratings for Multiplate Culverts
Ptarmigan Street Culvert Crossings – West and East Culverts
Contech Project No. 830865

Project requirements indicate the new structural plate culverts for the project referenced above are to include a load rating. Section 27 of the Alaska Bridges and Structures Manual requires that both LRFR and LFR load rating methodologies be provided.

Background

Alaska DOT&PF specifications require that load ratings be provided according to the AASHTO Manual for Bridge Evaluation (MBE) and the Alaska Bridge and Structures Manual (BSM). No information or references were provided in the project documents, MBE, or BSM indicating calculations or methods to be used to perform a load rating for metal culverts or other flexible buried structures. In order to meet the project requirement, we are providing the LRFR Load Rating using a tool developed by the Ohio DOT for culverts and structural plate structures that incorporates MBE requirements and load rating procedures outlined in National Corrugated Steel Pipe Association (NCSPA) Design Data Sheet No 19. This procedure is based on thrust and has been accepted by other DOTs to satisfy NBI reporting requirements. This approach was also indicated as an accepted method in the recently completed NCHRP 15-54 study *Proposed Modifications to AASHTO LRFD Load Rating Specifications* and subsequently adopted in the AASHTO MBE.

LFR load ratings are based on structures designed per the AASHTO Standard Specification for Highway Bridges, 17th Edition. The load rating procedure is the same as that used for LRFR load rating, but load factor methodology is used and the rating factors are based on HS loading.

Discussion

The MBE does not address how to properly perform load rating analyses for flexible or radiused buried bridge structures (including culverts). Culverts and radiused buried bridge structures differ from traditional bridges and flat topped concrete box culverts in that the magnitude of vehicle load transferred to the structure depends on the amount of structural backfill cover that exists between the structure and the point of application of the load on the on the subgrade/pavement, which varies as a vehicle travels across a structure. As a result, the live load case governing the design of almost all flexible buried structures will be when the heaviest axle of the vehicle is centered over the crown of the structure at the lowest design cover height. The magnitude of the live load and its effect on the structure will also depend on the geometry of the crown of the structure, condition & type of backfill, tire contact area, and other factors.

According to the AASHTO MBE load rating is performed on existing structures. However, the project specifications are requiring that load ratings be provided with the structure designs prior to construction. The load ratings provided in the CBDP assume that the structures will be constructed in accordance with the project documents and enclosed structure drawings and that the minimum cover after completion of construction will not fall below the cover used in the load rating calculations. If the conditions of the as-built structures vary from any of the construction requirements or the soil cover is

different from what was used in the calculations, the load rating calculations provided may no longer be valid.

There have been resources and/or tools developed by some states and industry organizations to perform load ratings for buried structures, but approaches vary and in general are based on what has been developed for traditional bridges – which is often not applicable. To date, there has been no consensus regarding which (if any) of these are correct and none of them have been incorporated into the MBE with the exception of the reference to the Ohio DOT approach as mentioned above.

Analysis

The LRFR load rating was carried out using the Ohio DOT load rating worksheet. The Ohio DOT tool determines structure loads based on thrust according to section 12.7 in the AASHTO LRFD Bridge Design Specifications. The tool verifies that AASHTO minimum cover requirements are met and then calculates rating factors based on the maximum thrust and cover using the rating factor formulas in the MBE.

The LFR load rating was carried out using an Ohio DOT load rating worksheet for the HS vehicle (32 kip single axle) by determining thrust as described above. Rating factors were calculated using the LFR rating factor formulas based on thrust capacity, which was the governing design load based on Load Factor Design methodology.

The project drawings and specifications did not include an indication of the cover above the structures at the roadway or the extent of the roadway above the structures. As a result, the cover was estimated based on graphical scaling profile views of the structures on sheets C7 and C8 of the project drawings. Based on these measurements minimum cover below the road was estimated to be 2.3 ft for the West Culvert and 2.1 ft for the East Culvert. If the actual minimum cover below the road is different from what was estimated the load ratings may need to be revised.

If you have any questions, please contact me at your convenience.

Respectfully,

Joel Hahm, PE
Senior Engineer
Contech Engineered Solutions
Email: joel.hahm@conteches.com

Attachments:

LRFR & LFR Calculations for West Culvert (11 pages)
LRFR & LFR Calculations for East Culvert (11 pages)

Contech Project No: <u>830865-015</u>	Project Name: <u>Ptarmign St Culvert Crossings - West Culvert</u>
Project Location: <u>Bethel, Alaska</u>	Project No: <u>335-10-16600-2621-3020</u>
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>PAA</u> Date: <u>4/11/2025</u>

LRFR of In-Service, Corrugated Metal Pipe Structures

Based on **AASHTO LRFD** Bridge Design Specifications, Section 3, 4 & 12 & **NCSA** Design Data Sheet No. 19 & **ODOT Bridge Design Manual** 2004 (effective 10-15-2010), Section 900 (Adapted for Alaska DOT load rating)

(do not use this spreadsheet to load rate Structural Plate Box Culverts)

A. Design Dimensions

- For **typical structures**, use the actual field measured span for calculations.
- For **unsymmetrical structures or those deflected over 5%**:
 - use 2 x the top radius ($2R_t$) in lieu of span for calculations.
 - base critical buckling stress calculations on the theoretical design span, reducing the resulting allowable buckling stress by the appropriate multiplier to account for deflection "f" (NCSA Design Data Sheet No. 19, Figure B.1.1).
- For all **long span structures** (horizontal ellipse, low and high profile arches, inverted pear shapes and pear arches), as well as other horizontal ellipses, use 2 x actual top radius ($2R_t$) in all cases.

For typical structures :	Design Span = Actual Span "S" (ft) =	12.83
For unsymmetrical or deflect more than 5% structures:	Design Span (ft) = $2R_t$ =	12.84
	Pipe Crown Deflection =	0%
	Buckling Strength Reduction Factor, f^* =	0.95
* reduction factor f is based on NCSA Design Data Sheet No 19, II Structural Evaluation A.2.b & Appendix B.1, Figure B.1.1 for Unsymmetrical structures or structures deflected over 5% only.		
long span structures:	Design Span (ft) = $2R_t$ =	12.84

Structure Category: Typical (NCSA design data sheet No. 19, II. A. 1.)

Then, Span Length used in Load Rating Calculation (ft)=	12.83
Then, R_t used in Load Rating Calculation (ft)=	6.42
$R_{t(max)}^* (ft) =$	

* Maximum Plate Radius allowed if Long Span Structural Plate Structures Selected

B. Design Properties

Conduits Mechanical & Section Properties:

Mechanical Properties:

Metal Type:	Steel	
F_y = Minimum Yield Point of the Metal	33	ksi
F_u = Minimum Tensile Strength of the Metal	45	ksi
E_m = Modulus of elasticity of metal	29000	ksi

Section Properties:

Corrugation:	6 x 2 (steel structural plate pipe)
Gage Number:	7
c (in) =	
d (in) =	
t (in) =	0.188
$t_{(min)}^{**} (in) =$	

** Required Minimum Top Arc Thickness if Long Span Structural Plate Structures Selected

$A_s (in^2/ft) =$	2.739
r (in) =	0.6880
$I \times 10^{-3} (in^4/in) =$	108.000

Contech Project No: 830865-015	Project Name: Ptarmign St Culvert Crossings - West Culvert
Project Location: Bethel, Alaska	Project No: 335-10-16600-2621-3020
Year Built: 2025	Load Rated By: JH
Bridge Type: Steel Multiplate	Checked By: PAA
	Date: 4/11/2025
	Date: 4/11/2025

LRFR of In-Service, Corrugated Metal Pipe Structures

C. Design Calculations:

Structure Type:	Structural Plate Pipe
Seam Type:	Annular pipe w/ spot welded, riveted or bolted seam
	Longitudinal Length of Structure "L" (ft) = 120.00
	AASHTO minimum cover, "h" (ft) = 1.60
	Depth of cover used to check AASHTO minimum cover requirement "H _{min} " (ft) = 2.30
	Φ _{loss} = Section Properties reduction factor on the basis of metal loss from the materials field evaluation = 1.00
	Φ ₁ = Resistance Factor for wall area and buckling (Table 12.5.5-1) = 1.00
	Φ ₂ = Resistance Factor for seam strength (Table 12.5.5-1) = 0.67
	δ = Soil density (k/ft ³) = 0.120
	k = soil stiffness factor = 0.22
	Φ _E = Factor for Distribution of Live Load with Depth of Fill based on Backfill Type (per AASHTO LRFD 3.6.1.2.6) = 1.15

Calculate the f_{cr} (critical buckling stress) : (AASHTO LRFD 12.7.2.4)

$$\text{if: } S < \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}, \text{ then } f_{cr} = F_u - \frac{F_u^2}{48E_m} \left(\frac{kS}{r} \right)^2$$

$$\text{if: } S > \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}, \text{ then } f_{cr} = \frac{12E_m}{(kS/r)^2}$$

Compare: $S \text{ (in)} = 153.96 < \frac{r}{k} \sqrt{\frac{24E_m}{F_u}} = 388.92$

Therefore, $f_{cr} = 41.47$ ksi

Calculate the T_{cap} (thrust capacity of the wall) :

Seam Strength (k/ft) = 93.0

T_{cap} = less of:	1. wall yield strength = $\Phi_1 \Phi_{loss} F_y A$	90.4
	2. wall buckling strength = $f \Phi_1 \Phi_{loss} f_{cr} A$	113.6
	3. seam strength = $\Phi_2 \times$ (seam strength) =	62.3

Therefore, $T_{cap} = 62.3$ k/ft

Calculate the T_E (pipe wall thrust due to earth cover) :

T_E = higher value of :	1. $\delta H (S/2) =$	1.77	k/ft
	2. $\delta H R_t =$	1.77	k/ft

Therefore, $T_E = 1.77$ k/ft

Calculate the $T_{(L+IM)}$ (pipe wall thrust due to live load plus dynamic load allowance) :

$T_{(L+IM)}$ = higher value of :	1. $\rho_{(L+IM)} (S/2) =$	k/ft
	2. $\rho_{(L+IM)} R_t =$	k/ft

$\rho_{(L+IM)}$: pressure at crown due to live load plus dynamic load allowance

Based on AASHTO LRFD 3.6.1.1.2-1:

Multiple Presence Factors, $m =$	1.2	← one lane loaded assumed here
adjust m based on ADTT =	0.95	See AASHTO LRFD C3.6.1.1.2
after ADTT adjustment, $m_{adj} =$	1.14	

Based on AASHTO LRFD 3.6.2.2:

Live load Dynamic Load Allowance, $IM = 33(1.0-0.125 D_E) \geq 0\%$

where, D_E = the minimum depth of earth cover above the structure (ft)

For this structure: Depth of Fill, $D_E = H = 2.30$ ft

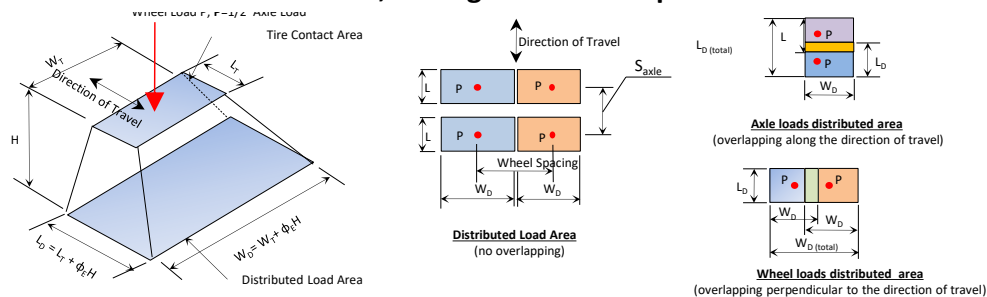
$IM =$	24%
$(1+IM) =$	1.24

Calculations will be based on AASHTO LRFD 3.6.1.2.5 & 6:

Wheel Load P , $P = 1/2$ Axle Load

Contech Project No: 830865-015	Project Name: Ptarmign St Culvert Crossings - West Culvert
Project Location: Bethel, Alaska	Project No: 335-10-16600-2621-3020
Year Built: 2025	Load Rated By: JH
Bridge Type: Steel Multiplate	Checked By: PAA
	Date: 4/11/2025
	Date: 4/11/2025

LRFR of In-Service, Corrugated Metal Pipe Structures



Where, W_T = Tire contact width, L_T = Tire contact length, W_D = Distributed load width, L_D = Distributed load length

The surface tire contact area for HL-93 loading (per AASHTO LRFD 3.6.1.2.5):

$W_T = 20"$	1.67	ft
$L_T = 10"$	0.83	ft

The surface tire contact area for Alaska Legal Trucks (per AASHTO LRFD C3.6.1.2.5 Guideline):

$$W_T (\text{in}) = P/0.8$$

$$L_T (\text{in}) = 6.4\gamma(1+IM/100)$$

where, p = wheel load (kips)

$$\gamma = \text{Load Factor for Alaska Legal Loads } \gamma_{LL} = 1.30$$

IM = dynamic load allowance percent

So,	20k Single	38k Tandem	42k Tri-dem		SU4, SU5, SU6, SU7	EV2	EV3
P "heavy axle" wheel load with m_{adj} (kips) =	11.4	10.8	8.0		9.7	19.1	17.7
W_T (ft) =	1.19	1.13	0.83		1.01	1.99	1.84
L_T (ft) =	0.86	0.86	0.86		0.86	0.86	0.86

Distribution of wheel loads through earth fills (per AASHTO LRFD 3.6.1.2.6):

for HL-93 Design Truck:

$W_D = 1.67 + \phi_E H =$	4.31	ft
$L_D = 0.83 + \phi_E H =$	3.48	ft

for Alaska Legal Trucks and SHVs:

	20k Single	38k Tandem	42k Tridem		SU4, SU5, SU6, SU7	EV2	EV3
$W_D = W_T + \phi_E H =$	3.83	3.77	3.48		3.65	4.63	4.49
$L_D = L_T + \phi_E H =$	3.50	3.50	3.50		3.50	3.50	3.50

Fill depth, $H =$	2.30	ft
Structure Total Length, $L =$	120.00	ft

[if $W_{D(\text{total})} > L$, use $L = W_{D(\text{total})}$ in the calculations]

	HL-93 Truck	HL-93 Tandem	20k Single	38k Tandem	42k Tridem		SU4, SU5, SU6, SU7	EV2	EV2
Heavy Axle Load (kips)	32.00	25.00	20.00	19.00	14.00		17.00	33.50	31.00
$P_{\text{heavy}} (1+IM) \& m_{adj}$ (kips) =	22.53	17.60	14.08	13.38	9.86		11.97	23.58	21.82
$S_{\text{axle 1}}$ (ft) =	0.00	4.00	0.00	3.50	3.50		4.00	0.00	4.00
Axle 2 Load (kips)	0.00	25.00	0.00	19.00	14.00		17.00	0.00	31.00
$P_2 (1+IM) \& m_{adj}$ (kips) =	0.00	17.60	0.00	13.38	9.86		11.97	0.00	21.82

Contech Project No: 830865-015	Project Name: Ptarmign St Culvert Crossings - West Culvert
Project Location: Bethel, Alaska	Project No: 335-10-16600-2621-3020
Year Built: 2025	Load Rated By: JH Date: 4/11/2025
Bridge Type: Steel Multiplate	Checked By: PAA Date: 4/11/2025

LRFR of In-Service, Corrugated Metal Pipe Structures

$S_{\text{axle } 2}$ (ft) =	0.00	0.00	0.00	0.00	3.50		4.00	0.00	0.00
Axle 3 Load (kips)	0.00	0.00	0.00	0.00	14.00		8.00	0.00	0.00
P_3 (1+IM) & m_{adj} (kips) =	0.00	0.00	0.00	0.00	9.86		5.63	0.00	0.00
wheel spacing on axle	6.00	6.00	6.00	6.00	6.00		6.00	6.00	6.00
W_D (ft) =	4.31	4.31	3.83	3.77	3.48		3.65	4.63	4.49
$W_{D(\text{total})}$ =	4.31	4.31	3.83	3.77	3.48		3.65	4.63	4.49
L_D (ft) =	3.48	3.48	3.50	3.50	3.50		3.50	3.50	3.50
$L_{D(\text{total})}$ =	3.48	3.48	3.50	7.00	10.50		3.50	3.50	3.50
$A_D = W_{D(\text{total})} \times L_{D(\text{total})}$ =	15.00	15.00	13.42	26.42	36.51		12.80	16.23	15.71
P_D (kips) =	22.53	17.60	14.08	26.75	29.57		11.97	23.58	21.82
$P_{(L+IM)} = P_D/A_D$ =	1.50	1.17	1.05	1.01	0.81		0.94	1.45	1.39
$T_{(L+IM)}$ (k/ft) =	9.64	7.53	6.74	6.50	5.20		6.01	9.33	8.92

$P_{(1+IM)}$ & m_{adj} = axle wheel loads plus dynamic load allowance and adjusted multiple presence factor.

Axle 2 Load = 1st adjacent axle load to the heavy axle, if the $S_{\text{axle } 1} > 4'$, input Axle 2 load = 0.

$S_{\text{axle } 1}$ = distance from the heavy axle to the 1st adjacent axle, if the spacing is $> 4'$, input $S_{\text{axle } 1} = 0$.

Axle 3 Load = 2nd adjacent axle load to the heavy axle, if the $S_{\text{axle } 2} > 4'$, input Axle 3 load = 0.

$S_{\text{axle } 2}$ = distance from the 1st adjacent axle to the 2nd adjacent axle, if the spacing is $> 4'$, input $S_{\text{axle } 2} = 0$.

$P_{(L+IM)}$ = pressure at crown due to live load plus dynamic load allowance

A_D = Total Load Distributed Area

P_D = Total Load being Distributed

One lane loaded. Longitudinal pressure overlaps are considered for two adjacent heavy axle loads when the S_{axle} is ≤ 4 feet. If the span length is long enough for more axles of loads overlapping at crown location, hand calculations have to be done to consider the additional loads and P_D & A_D values have to be overwritten for those cases.

D. Load Rating Factors for Ring Compression Structures:

1. Operating Load Rating Factor (RF_O):

a. RF_O based on wall strength

$$RF_{O-W} = \frac{\phi_c \phi_s T_{cap} - \gamma_{EV} \eta_R T_E}{\gamma_{LL} T_{(L+IM)}}$$

b. RF_O based on minimum cover requirements

$$RF_{O-C} = \frac{H_{\min}^2}{C(h)^2}$$

$$\text{Where, } C = 2.36 \frac{H_{\min}}{S} + 0.528 \leq 1.0 = 0.95$$

$$\text{So, } RF_{O-C} = 2.16 \quad \text{*Note: RF based on min cover does not include any effects from vehicular loading}$$

Operating Load Rating Factors, RF_O									
	HL-93 Truck	HL-93 Tandem	20k Single	38k Tandem	42k Tridem		SU4, SU5, SU6, SU7	EV2	EV3
T_{cap}	62.31	62.31	62.31	62.31	62.31		62.31	62.31	62.31
$\phi_c \phi_s$	1.00								
T_E	1.77	1.77	1.77	1.77	1.77		1.77	1.77	1.77
γ_{EV}	1.95	1.95	1.95	1.95	1.95		1.95	1.95	1.95
η_R	1.05	1.05	1.05	1.05	1.05		1.05	1.05	1.05
$T_{(L+IM)}$	9.64	7.53	6.74	6.50	5.20		6.01	9.33	8.92
γ_{LL}	1.35	1.35	1.30	1.30	1.30		1.30	1.30	1.30
RF_{O-W}	4.51	5.77	6.70	6.94	8.68		7.52	4.84	5.06

Contech Project No: 830865-015	Project Name: Ptarmign St Culvert Crossings - West Culvert
Project Location: Bethel, Alaska	Project No: 335-10-16600-2621-3020
Year Built: 2025	Load Rated By: JH Date: 4/11/2025
Bridge Type: Steel Multiplate	Checked By: PAA Date: 4/11/2025

LRFR of In-Service, Corrugated Metal Pipe Structures

RF _{O-C}	2.16	2.16	2.16	2.16	2.16		2.16	2.16	2.16
RF _O	2.16	2.16	2.16	2.16	2.16		2.16	2.16	2.16

2. Inventory Load Rating Factor (RF_i):

a. RF_i based on wall strength

$$RF_{i-w} = \frac{\phi_c \phi_s T_{cap} - \gamma_{EV} \eta_R T_E}{\gamma_{LL} T_{(L+IM)}}$$

b. RF_i based on minimum cover requirements (1.3 is the Ohio DOT modified safety factor, to avoid RF_(Inventory) = RF_(Operating))

$$RF_{i-c} = RF_{O-C} / 1.3$$

Inventory Load Rating Factor, RF _i		
	HL-93 Truck	HL-93 Tandem
T _{cap}	62.31	62.31
φ _c φ _s	1.00	
T _E	1.77	1.77
γ _{EV}	1.95	1.95
η _R	1.05	1.05
T _(L+IM)	9.64	7.53
γ _{LL}	1.75	1.75
RF _{i-w}	3.48	4.45
RF _{i-c}	1.66	1.66
RF _i	1.66	1.66

Load Rating Summary - Alaska Legal Trucks				
Loading Type	GVW (Tons)	Rating Factor - RF		Safe GVW (Tons)
		Inventory	Operating	
HL-93	36	1.66	2.16	78
20k Single	10		2.16	22
38k Tandem	19		2.16	41
42K Tridem	21		2.16	45
Alaska Legal Loads Overall Minimum Rating Factor				
215%				
Alaska Legal Loads Overall Controlling Truck				
20k Single				

Load Rating Summary - Specialized Hauling Vehicles (SHV)			
Loading Type	GVW (Tons)	Rating Factor - RF	
		Operating	
SU4	27	2.16	
SU5	31	2.16	
SU6	34.75	2.16	
SU7	38.75	2.16	

Load Rating Summary - EMERGENCY VEHICLES (EV)			
Loading Type	GVW (Tons)	Rating Factor - RF	
		Operating	
EV2	28.75	2.16	
EV3	43	2.16	

Contech No: <u>830865-015</u>	Project Name: <u>Ptarmign St Culvert Crossings - West Culvert</u>
Bridge Location: <u>Bethel, Alaska</u>	
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u> Date: <u>4/11/2025</u>

Load Factor Load Rating of In-Service, Corrugated Metal Pipe Structures

(based on *NCSPA Design Data Sheet No. 19 & AASHTO Standard Specification for Highway Bridges, Division I, Section 12*)

(* do not use this spreadsheet to load rate Structural Plate Box Culverts)

A. Design Dimensions

- For **typical structures**, use the actual field measured span for calculations.
- For **unsymmetrical structures or those deflected over 5%**:
 - use 2 x the top radius (2 R_t) in lieu of span for calculations.
 - base critical buckling stress calculations on the theoretical design span, reducing the resulting allowable buckling stress by the appropriate multiplier to account for deflection "f" (NCSPA Design Data Sheet No. 19, Figure B.1.1).
- For all **long span structures** (horizontal ellipse, low and high profile arches, inverted pear shapes and pear arches), as well as other horizontal ellipses, use 2 x actual top radius (2 R_t) in all cases.

For typical structures :	Design Span = Actual Span "S" (ft) =	12.83
--------------------------	--------------------------------------	-------

For unsymmetrical or deflect more than 5% structures:	Design Span (ft) = 2 R_t =	12.84
	Pipe Crown Deflection =	0%
	Buckling Strength Reduction Factor, f =	0.95

long span structures:	Design Span (ft) = 2 R_t =	12.84
-----------------------	------------------------------	-------

Structure Category: Typical (NCSPA design data sheet No. 19, II. A. 1.)

Then, Span Length used in Load Rating Calculation(ft) =	12.83
Then, R_t used in Load Rating Calculation (ft) =	6.42
$R_{t(max)}$ * (ft) =	

* Maximum Plate Radius allowed if Long Span Structural Plate Structures Selected

B. Design Properties

Conduits Mechanical & Section Properties:

Mechanical Properties:

Metal Type:	Steel	
F_y = Minimum Yield Point of the Metal	33	ksi
F_u = Minimum Tensile Strength of the Metal	45	ksi
E_m = Modulus of elasticity of metal	29000	ksi

Contech No: <u>830865-015</u>	Project Name: <u>Ptarmign St Culvert Crossings - West Culvert</u>
Bridge Location: <u>Bethel, Alaska</u>	
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u> Date: <u>4/11/2025</u>

Section Properties:

Corrugation:	6 x 2 (steel structural plate pipe)
Gage Number:	7
c (in) =	
d (in) =	
t (in) =	0.188
t _(min) ** (in) =	

** Required Minimum Top Arc Thickness if Long Span Structural Plate Structures Selected

A _s (in ² /ft) =	<u>2.739</u>	input these values based on metal type, corrugation, gage number or pipe wall thickness, see tables in worksheet "section property tables".
r* (in) =	<u>0.6880</u>	
I x 10 ⁻³ (in ⁴ /in) =	<u>108.000</u>	

* r = radius of gyration of corrugation (in)

C. Design Calculations:

Structure Type:	Structural Plate Pipe (AASHTO 12.6)
Seam Type:	Annular pipe w/ spot welded, riveted or bolted seam
Longitudinal Length of Structure "L" (ft) =	120.00
AASHTO minimum cover, h (ft) =	1.60
Height of cover above crown "H" (ft) = the lowest cover over the structure in a traffic area based on field measurement	2.30
φ _{loss} = Section Properties reduction factor on the basis of metal loss from the materials field evaluation =	1.00
φ ₁ = capacity modification factor for wall area and buckling	1.0
φ ₂ = capacity modification factor for seam strength	0.67
δ = Soil density (k/ft ³)	<u>0.120</u>
k = soil stiffness factor =	0.22

Calculate the F_{cr} (critical buckling stress) :

$$\text{if: } S < \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}, \text{ then } F_{cr} = F_u - \frac{F_u^2}{48E_m} \left(\frac{kS}{r} \right)^2$$

$$\text{if: } S > \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}, \text{ then } F_{cr} = \frac{12E_m}{(kS/r)^2}$$

Compare: S (in) = 153.96 < $\frac{r}{k} \sqrt{\frac{24E_m}{F_u}} = \underline{388.92}$

So: F_{cr} = 41.47 ksi

Contech No: <u>830865-015</u>	Project Name: <u>Ptarmign St Culvert Crossings - West Culvert</u>
Bridge Location: <u>Bethel, Alaska</u>	
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u> Date: <u>4/11/2025</u>

Calculate the T_{cap} (thrust capacity of the wall) :

Seam Strength (k/ft) =

93.0

input the seam strength value based on metal type, corrugation, gage number or pipe wall thickness, see tables in worksheet "seam strength tables"

T_{cap} = less of:	1. wall yield strength = $\phi_1 \phi_{loss} F_y A =$	90.4
	2. wall buckling strength = $f \phi_1 \phi_{loss} F_{cr} A =$	113.6
	3. seam strength = $\phi_2 \times (\text{seam strength}) =$	62.3

So:

$T_{cap} =$ **62.3** k/ft

Calculate the T_E (pipe wall thrust due to earth cover) :

T_E = higher value of :	1. $\delta H (S/2) =$	1.77	k/ft
	2. $\delta H R_t =$	1.77	k/ft

So:

$T_E =$ **1.77** k/ft

Calculate the $T_{(L+I)}$ (pipe wall thrust due to live load plus impact) :

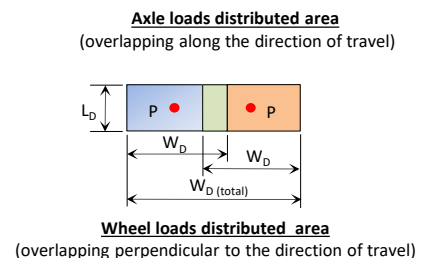
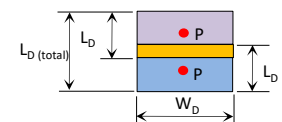
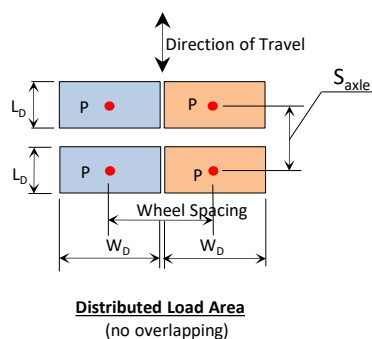
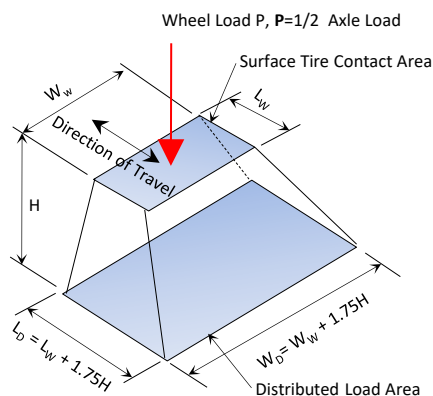
$T_{(L+I)}$ = higher value of :	1. $\rho_{(L+I)} (S/2) =$	k/ft
	2. $\rho_{(L+I)} R_t =$	k/ft

Based on AASHTO 3.8.2.3 :	Live load Impact Factor, $I =$	30%	for $0'-0" < H < 1'-0"$
		20%	for $1'-1" < H < 2'-0"$
		10%	for $2'-1" < H < 2'-11"$
		0%	for $H \geq 3'-0"$

So, for this structure: Depth of Fill, $H =$ **2.30** ft

$I =$ **10%**

$(1+I) =$ **1.10**



Pressure on the tire contact area is distributed on the culvert through the cover depth, Dimension as:

Contech No: <u>830865-015</u>	Project Name: <u>Ptarmign St Culvert Crossings - West Culvert</u>		
Bridge Location: <u>Bethel, Alaska</u>			
Year Built: <u>2025</u>	Load Rated By: <u>JH</u>	Date: <u>4/11/2025</u>	
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u>	Date: <u>4/11/2025</u>	

$$W_D = W_W + 1.75H$$

$$L_D = L_W + 1.75H$$

Contech No: <u>830865-015</u>	Project Name: <u>Ptarmign St Culvert Crossings - West Culvert</u>
Bridge Location: <u>Bethel, Alaska</u>	
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u> Date: <u>4/11/2025</u>

The surface tire contact area for HS20 loading (per AASHTO 3.30):

$$\begin{aligned}
 W_W = 20'' &= 1.67 \text{ ft} & W_D = 1.67 + 1.75H &= 5.69 \text{ ft} \\
 L_W = 10'' &= 0.83 \text{ ft} & L_D = 0.83 + 1.75H &= 4.86 \text{ ft}
 \end{aligned}$$

The surface tire contact area for Alaska Legal Trucks (Per NCSPA Design Data Sheet No. 19 Appendix C. 2) :

Per NCSPA Design Data Sheet No. 19 Appendix C. 2, the surface tire contact area $A(\text{in}^2) =$	$A = W_W \times L_W = 0.01 P_{(1+I)}$
1% of the wheel load plus impact, $P_{(1+I)}$ in pounds. And $W_W = 2.5 L_W$	$W_W = 2.5 L_W$

So:

$$W_W = 2.5 \left(\sqrt{\frac{0.01 P_{(1+I)}}{2.5}} \right) / 12 \text{ ft}$$

$$L_W = \left(\sqrt{\frac{0.01 P_{(1+I)}}{2.5}} \right) / 12 \text{ ft}$$

$$W_D = 2.5 \left(\sqrt{\frac{0.01 P_{(1+I)}}{2.5}} \right) / 12 + 1.75 H \text{ ft}$$

$$L_D = \left(\sqrt{\frac{0.01 P_{(1+I)}}{2.5}} \right) / 12 + 1.75 H \text{ ft}$$

$$\text{Fill depth, } H = 2.30 \text{ ft}$$

$$\text{Structure Total Length, } L = 120.00 \text{ ft}$$

[if $W_{D(\text{total})} > L$, use $L = W_{D(\text{total})}$ in the calculations]

	HS20	20k Single	38k Tandem	42k Tridem	
Heavy Axle Load (lbs)	32,000	20,000	19,000	14,000	
$P_{(1+I)}$ (lbs) =	17,600	11,000	10,450	7,700	
* $S_{\text{axle } 1}$ (ft) =	0.00	0.00	3.50	3.50	
* $S_{\text{axle } 2}$ (ft) =	0.00	0.00	0.00	3.50	
wheel spacing on axle	6.00	6.00	6.00	6.00	
W_D (ft) =	5.69	5.41	5.37	5.18	
L_D (ft) =	4.86	4.58	4.56	4.49	
$W_{D(\text{total})}$ =	5.69	5.41	5.37	5.18	
$L_{D(\text{total})}$ =	4.86	4.58	8.06	11.49	
* A_D (ft ²) =	27.65	24.75	43.32	59.52	
* P_D (kips) =	17.60	11.00	20.90	23.10	
$p_{(L+I)} = P_D / A_D$ =	0.64	0.44	0.48	0.39	
$T_{(L+I)}$ (k/ft) =	4.09	2.85	3.10	2.49	

* $S_{\text{axle } 1}$ = distance to the 1st adjacent heavy axle load, if the spacing is $> 4'$, $S_{\text{axle } 1} = 0$.

$S_{\text{axle } 2}$ = distance to the 2nd adjacent heavy axle load, if the spacing is $> 4'$, $S_{\text{axle } 2} = 0$.

A_D = Total Load Distributed Area

P_D = Total Load being Distributed

Transverse pressure overlaps are considered. Longitudinal pressure overlaps are considered for two adjacent heavy axle loads when the S_{axle} is ≤ 4 feet.

Contech No: <u>830865-015</u>	Project Name: <u>Ptarmign St Culvert Crossings - West Culvert</u>
Bridge Location: <u>Bethel, Alaska</u>	
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u> Date: <u>4/11/2025</u>

D. Load Rating Factors for Ring Compression Structures:

1. Operating Load Rating Factor (RF_O):

a. RF_O based on wall strength

$$RF_{O-W} = \frac{T_{cap} - 1.95T_E}{1.3T_{(L+I)}}$$

b. RF_O based on minimum cover requirements

$$RF_{O-C} = \frac{H^2}{C(h)^2}$$

$$\text{Where, } C = 2.36 \frac{H}{S} + 0.528 \leq 1.0 = 0.95$$

$$\text{So, } RF_{O-C} = \boxed{2.16}$$

Operating Load Rating Factors, RF_O					
	HS20	20k Single	38k Tandem	42k Tridem	
T_{cap}	62.31	62.31	62.31	62.31	
T_E	1.77	1.77	1.77	1.77	
$T_{(L+I)}$	4.09	2.85	3.10	2.49	
RF_{O-W}	11.08	15.87	14.62	18.17	
RF_{O-C}	2.16	2.16	2.16	2.16	
RF_O	2.16	2.16	2.16	2.16	

2. Inventory Load Rating Factor (RF_i):

a. RF_i based on wall strength

$$RF_{i-W} = \frac{3}{5} RF_{O-W}$$

b. RF_i based on minimum cover requirements

$$RF_{i-C} = \frac{H^2}{h^2}$$

Inventory Load Rating Factor, RF_i	
	HS20
RF_{i-W}	6.65
RF_{i-C}	2.06
RF_i	2.06

Contech Project No: <u>830865-020</u>	Project Name: <u>Ptarmign St Culvert Crossings - East Culvert</u>
Project Location: <u>Bethel, Alaska</u>	Project No: <u>335-10-16600-2621-3020</u>
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>PAA</u> Date: <u>4/11/2025</u>

LRFR of In-Service, Corrugated Metal Pipe Structures

Based on **AASHTO LRFD** Bridge Design Specifications, Section 3, 4 & 12 & **NCSA** Design Data Sheet No. 19 & **ODOT Bridge Design Manual** 2004 (effective 10-15-2010), Section 900 (Adapted for Alaska DOT load rating)

(do not use this spreadsheet to load rate Structural Plate Box Culverts)

A. Design Dimensions

- For **typical structures**, use the actual field measured span for calculations.
- For **unsymmetrical structures or those deflected over 5%**:
 - use 2 x the top radius (2 R_t) in lieu of span for calculations.
 - base critical buckling stress calculations on the theoretical design span, reducing the resulting allowable buckling stress by the appropriate multiplier to account for deflection " f " (NCSA Design Data Sheet No. 19, Figure B.1.1).
- For all **long span structures** (horizontal ellipse, low and high profile arches, inverted pear shapes and pear arches), as well as other horizontal ellipses, use 2 x actual top radius (2R_t) in all cases.

For typical structures :	Design Span = Actual Span "S" (ft) =	12.83
For unsymmetrical or deflect more than 5% structures:	Design Span (ft) = 2R _t =	12.84
	Pipe Crown Deflection =	0%
	Buckling Strength Reduction Factor, f * =	0.95
* reduction factor f is based on NCSA Design Data Sheet No 19, II Structural Evaluation A.2.b & Appendix B.1, Figure B.1.1 for Unsymmetrical structures or structures deflected over 5% only.		
long span structures:	Design Span (ft) = 2R _t =	12.84

Structure Category: Typical (NCSA design data sheet No. 19, II. A. 1.)

Then, Span Length used in Load Rating Calculation (ft)=	12.83
Then, R_t used in Load Rating Calculation (ft)=	6.42
R_{t (max)} * (ft) =	

* Maximum Plate Radius allowed if Long Span Structural Plate Structures Selected

B. Design Properties

Conduits Mechanical & Section Properties:

Mechanical Properties:

Metal Type:	Steel	
F _y = Minimum Yield Point of the Metal	33	ksi
F _u = Minimum Tensile Strength of the Metal	45	ksi
E _m = Modulus of elasticity of metal	29000	ksi

Section Properties:

Corrugation:	6 x 2 (steel structural plate pipe)
Gage Number:	7
c (in) =	
d (in) =	
t (in) =	0.188
t _(min) ** (in) =	

** Required Minimum Top Arc Thickness if Long Span Structural Plate Structures Selected

A _s (in ² /ft) =	2.739
r (in) =	0.6880
I x 10 ⁻³ (in ⁴ /in) =	108.000

Contech Project No: 830865-020	Project Name: Ptarmign St Culvert Crossings - East Culvert
Project Location: Bethel, Alaska	Project No: 335-10-16600-2621-3020
Year Built: 2025	Load Rated By: JH
Bridge Type: Steel Multiplate	Checked By: PAA
	Date: 4/11/2025
	Date: 4/11/2025

LRFR of In-Service, Corrugated Metal Pipe Structures

C. Design Calculations:

Structure Type:	Structural Plate Pipe
Seam Type:	Annular pipe w/ spot welded, riveted or bolted seam
	Longitudinal Length of Structure "L" (ft) = 100.00
	AASHTO minimum cover, "h" (ft) = 1.60
	Depth of cover used to check AASHTO minimum cover requirement "H _{min} " (ft) = 2.10
	Φ _{loss} = Section Properties reduction factor on the basis of metal loss from the materials field evaluation = 1.00
	Φ ₁ = Resistance Factor for wall area and buckling (Table 12.5.5-1) = 1.00
	Φ ₂ = Resistance Factor for seam strength (Table 12.5.5-1) = 0.67
	δ = Soil density (k/ft ³) = 0.120
	k = soil stiffness factor = 0.22
	Φ _E = Factor for Distribution of Live Load with Depth of Fill based on Backfill Type (per AASHTO LRFD 3.6.1.2.6) = 1.15

Calculate the f_{cr} (critical buckling stress) : (AASHTO LRFD 12.7.2.4)

$$\text{if: } S < \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}, \text{ then } f_{cr} = F_u - \frac{F_u^2}{48E_m} \left(\frac{kS}{r} \right)^2$$

$$\text{if: } S > \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}, \text{ then } f_{cr} = \frac{12E_m}{(kS/r)^2}$$

Compare: S (in) = 153.96 < $\frac{r}{k} \sqrt{\frac{24E_m}{F_u}} = 388.92$

Therefore, $f_{cr} = 41.47$ ksi

Calculate the T_{cap} (thrust capacity of the wall) :

Seam Strength (k/ft) = 93.0

T_{cap} = less of:	1. wall yield strength = $\Phi_1 \Phi_{loss} F_y A$	90.4
	2. wall buckling strength = $f \Phi_1 \Phi_{loss} f_{cr} A$	113.6
	3. seam strength = $\Phi_2 \times$ (seam strength) =	62.3

Therefore, $T_{cap} = 62.3$ k/ft

Calculate the T_E (pipe wall thrust due to earth cover) :

T_E = higher value of :	1. $\delta H (S/2) =$	1.62	k/ft
	2. $\delta H R_t =$	1.62	k/ft

Therefore, $T_E = 1.62$ k/ft

Calculate the $T_{(L+IM)}$ (pipe wall thrust due to live load plus dynamic load allowance) :

$T_{(L+IM)}$ = higher value of :	1. $\rho_{(L+IM)} (S/2) =$	k/ft
	2. $\rho_{(L+IM)} R_t =$	k/ft

$\rho_{(L+IM)}$: pressure at crown due to live load plus dynamic load allowance

Based on AASHTO LRFD 3.6.1.1.2-1:

Multiple Presence Factors, $m =$	1.2	← one lane loaded assumed here
adjust m based on ADTT =	0.95	See AASHTO LRFD C3.6.1.1.2
after ADTT adjustment, $m_{adj} =$	1.14	

Based on AASHTO LRFD 3.6.2.2:

Live load Dynamic Load Allowance, $IM = 33(1.0-0.125 D_E) \geq 0\%$

where, D_E = the minimum depth of earth cover above the structure (ft)

For this structure: Depth of Fill, $D_E = H = 2.10$ ft

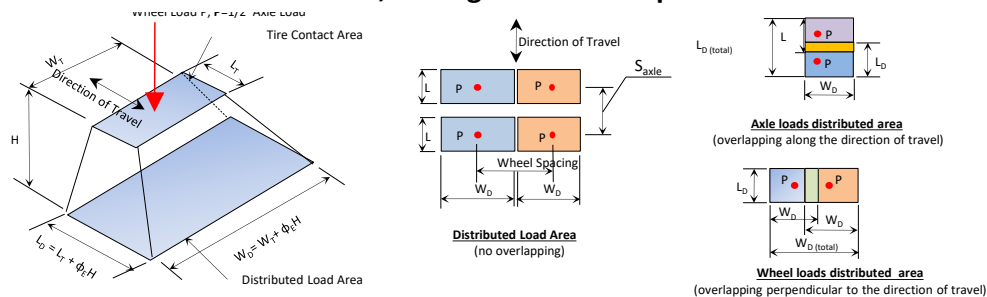
$IM =$	24%
$(1+IM) =$	1.24

Calculations will be based on AASHTO LRFD 3.6.1.2.5 & 6:

Wheel Load P , $P=1/2$ Axle Load

Contech Project No: 830865-020	Project Name: Ptarmign St Culvert Crossings - East Culvert
Project Location: Bethel, Alaska	Project No: 335-10-16600-2621-3020
Year Built: 2025	Load Rated By: JH
Bridge Type: Steel Multiplate	Checked By: PAA
	Date: 4/11/2025
	Date: 4/11/2025

LRFR of In-Service, Corrugated Metal Pipe Structures



The surface tire contact area for HL-93 loading (per AASHTO LRFD 3.6.1.2.5):

$W_T = 20'' =$	1.67	ft
$L_T = 10'' =$	0.83	ft

The surface tire contact area for Alaska Legal Trucks (per AASHTO LRFD C3.6.1.2.5 Guideline):

$$W_T (\text{in}) = P/0.8$$

$$L_T (\text{in}) = 6.4\gamma(1+IM/100)$$

where, p = wheel load (kips)

γ = Load Factor for Alaska Legal Loads $\gamma_{LL} =$

1.30

IM = dynamic load allowance percent

SO,	20k Single	38k Tandem	42k Tri-dem		SU4, SU5, SU6, SU7	EV2	EV3
P "heavy axle" wheel load with m_{adj} (kips) =	11.4	10.8	8.0		9.7	19.1	17.7
W_T (ft) =	1.19	1.13	0.83		1.01	1.99	1.84
L_T (ft) =	0.86	0.86	0.86		0.86	0.86	0.86

Distribution of wheel loads through earth fills (per AASHTO LRFD 3.6.1.2.6):

for HL-93 Design Truck:

$W_D = 1.67 + \phi_E H =$	4.08	ft
$L_D = 0.83 + \phi_E H =$	3.25	ft

for Alaska Legal Trucks and SHVs:

	20k Single	38k Tandem	42k Tridem		SU4, SU5, SU6, SU7	EV2	EV3
$W_D = W_T + \phi_E H =$	3.60	3.54	3.25		3.42	4.40	4.26
$L_D = L_T + \phi_E H =$	3.28	3.28	3.28		3.28	3.28	3.28

Fill depth, $H =$ 2.10 ft

Structure Total Length, $L =$ 100.00 ft

[if $W_D (\text{total}) > L$, use $L = W_D (\text{total})$ in the calculations]

	HL-93 Truck	HL-93 Tandem	20k Single	38k Tandem	42k Tridem		SU4, SU5, SU6, SU7	EV2	EV2
Heavy Axle Load (kips)	32.00	25.00	20.00	19.00	14.00		17.00	33.50	31.00
$P_{\text{heavy}} (1+IM) \& m_{adj}$ (kips) =	22.68	17.72	14.17	13.47	9.92		12.05	23.74	21.97
$S_{\text{axle 1}}$ (ft) =	0.00	4.00	0.00	3.50	3.50		4.00	0.00	4.00
Axle 2 Load (kips)	0.00	25.00	0.00	19.00	14.00		17.00	0.00	31.00
$P_2 (1+IM) \& m_{adj}$ (kips) =	0.00	17.72	0.00	13.47	9.92		12.05	0.00	21.97

Contech Project No: 830865-020	Project Name: Ptarmign St Culvert Crossings - East Culvert
Project Location: Bethel, Alaska	Project No: 335-10-16600-2621-3020
Year Built: 2025	Load Rated By: JH Date: 4/11/2025
Bridge Type: Steel Multiplate	Checked By: PAA Date: 4/11/2025

LRFR of In-Service, Corrugated Metal Pipe Structures

$S_{\text{axle } 2}$ (ft) =	0.00	0.00	0.00	0.00	3.50		4.00	0.00	0.00
Axle 3 Load (kips)	0.00	0.00	0.00	0.00	14.00		8.00	0.00	0.00
P_3 (1+ IM) & m_{adj} (kips) =	0.00	0.00	0.00	0.00	9.92		5.67	0.00	0.00
wheel spacing on axle	6.00	6.00	6.00	6.00	6.00		6.00	6.00	6.00
W_D (ft) =	4.08	4.08	3.60	3.54	3.25		3.42	4.40	4.26
$W_{D(\text{total})}$ =	4.08	4.08	3.60	3.54	3.25		3.42	4.40	4.26
L_D (ft) =	3.25	3.25	3.28	3.28	3.28		3.28	3.28	3.28
$L_{D(\text{total})}$ =	3.25	3.25	3.28	3.28	3.28		3.28	3.28	3.28
$A_D = W_{D(\text{total})} \times L_{D(\text{total})}$ =	13.26	13.26	11.81	11.61	10.64		11.22	14.43	13.95
P_D (kips) =	22.68	17.72	14.17	13.47	9.92		12.05	23.74	21.97
$P_{(L+IM)} = P_D/A_D$ =	1.71	1.34	1.20	1.16	0.93		1.07	1.65	1.58
$T_{(L+IM)}$ (k/ft) =	10.98	8.58	7.71	7.45	5.99		6.89	10.56	10.11

$P_{(1+IM)}$ & m_{adj} = axle wheel loads plus dynamic load allowance and adjusted multiple presence factor.

Axle 2 Load = 1st adjacent axle load to the heavy axle, if the $S_{\text{axle } 1} > 4'$, input Axle 2 load = 0.

$S_{\text{axle } 1}$ = distance from the heavy axle to the 1st adjacent axle, if the spacing is $> 4'$, input $S_{\text{axle } 1} = 0$.

Axle 3 Load = 2nd adjacent axle load to the heavy axle, if the $S_{\text{axle } 2} > 4'$, input Axle 3 load = 0.

$S_{\text{axle } 2}$ = distance from the 1st adjacent axle to the 2nd adjacent axle, if the spacing is $> 4'$, input $S_{\text{axle } 2} = 0$.

$P_{(L+IM)}$ = pressure at crown due to live load plus dynamic load allowance

A_D = Total Load Distributed Area

P_D = Total Load being Distributed

One lane loaded. Longitudinal pressure overlaps are considered for two adjacent heavy axle loads when the S_{axle} is ≤ 4 feet. If the span length is long enough for more axles of loads overlapping at crown location, hand calculations have to be done to consider the additional loads and P_D & A_D values have to be overwritten for those cases.

D. Load Rating Factors for Ring Compression Structures:

1. Operating Load Rating Factor (RF_O):

a. RF_O based on wall strength

$$RF_{O-W} = \frac{\phi_c \phi_s T_{cap} - \gamma_{EV} \eta_R T_E}{\gamma_{LL} T_{(L+IM)}}$$

b. RF_O based on minimum cover requirements

$$RF_{O-C} = \frac{H_{\min}^2}{C(h)^2}$$

$$\text{Where, } C = 2.36 \frac{H_{\min}}{S} + 0.528 \leq 1.0 = 0.91$$

$$\text{So, } RF_{O-C} = 1.88 \quad \text{*Note: RF based on min cover does not include any effects from vehicular loading}$$

Operating Load Rating Factors, RF_O									
	HL-93 Truck	HL-93 Tandem	20k Single	38k Tandem	42k Tridem		SU4, SU5, SU6, SU7	EV2	EV3
T_{cap}	62.31	62.31	62.31	62.31	62.31		62.31	62.31	62.31
$\phi_c \phi_s$	1.00								
T_E	1.62	1.62	1.62	1.62	1.62		1.62	1.62	1.62
γ_{EV}	1.95	1.95	1.95	1.95	1.95		1.95	1.95	1.95
η_R	1.05	1.05	1.05	1.05	1.05		1.05	1.05	1.05
$T_{(L+IM)}$	10.98	8.58	7.71	7.45	5.99		6.89	10.56	10.11
γ_{LL}	1.35	1.35	1.30	1.30	1.30		1.30	1.30	1.30
RF_{O-W}	3.98	5.09	5.89	6.10	7.58		6.58	4.30	4.49

Contech Project No: 830865-020	Project Name: Ptarmign St Culvert Crossings - East Culvert
Project Location: Bethel, Alaska	Project No: 335-10-16600-2621-3020
Year Built: 2025	Load Rated By: JH Date: 4/11/2025
Bridge Type: Steel Multiplate	Checked By: PAA Date: 4/11/2025

LRFR of In-Service, Corrugated Metal Pipe Structures

RF _{O-C}	1.88	1.88	1.88	1.88	1.88		1.88	1.88	1.88
RF _O	1.88	1.88	1.88	1.88	1.88		1.88	1.88	1.88

2. Inventory Load Rating Factor (RF_i):

a. RF_i based on wall strength

$$RF_{i-w} = \frac{\phi_c \phi_s T_{cap} - \gamma_{EV} \eta_R T_E}{\gamma_{LL} T_{(L+IM)}}$$

b. RF_i based on minimum cover requirements (1.3 is the Ohio DOT modified safety factor, to avoid RF_(Inventory) = RF_(Operating))

$$RF_{i-c} = RF_{O-C} / 1.3$$

Inventory Load Rating Factor, RF _i		
	HL-93 Truck	HL-93 Tandem
T _{cap}	62.31	62.31
φ _c φ _s	1.00	
T _E	1.62	1.62
γ _{EV}	1.95	1.95
η _R	1.05	1.05
T _(L+IM)	10.98	8.58
γ _{LL}	1.75	1.75
RF _{i-w}	3.07	3.93
RF _{i-c}	1.44	1.44
RF _i	1.44	1.44

Load Rating Summary - Alaska Legal Trucks				
Loading Type	GVW (Tons)	Rating Factor - RF		Safe GVW (Tons)
		Inventory	Operating	
HL-93	36	1.44	1.88	68
20k Single	10		1.88	19
38k Tandem	19		1.88	36
42K Tridem	21		1.88	39
Alaska Legal Loads Overall Minimum Rating Factor				
190%				
Alaska Legal Loads Overall Controlling Truck				
20k Single				

Load Rating Summary - Specialized Hauling Vehicles (SHV)			
Loading Type	GVW (Tons)	Rating Factor - RF	
		Operating	
SU4	27	1.88	51
SU5	31	1.88	58
SU6	34.75	1.88	65
SU7	38.75	1.88	73

Load Rating Summary - EMERGENCY VEHICLES (EV)			
Loading Type	GVW (Tons)	Rating Factor - RF	
		Operating	
EV2	28.75	1.88	28.75
EV3	43	1.88	43.00

Contech No: <u>830865-020</u>	Project Name: <u>Ptarmign St Culvert Crossings - East Culvert</u>
Bridge Location: <u>Bethel, Alaska</u>	
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u> Date: <u>4/11/2025</u>

Load Factor Load Rating of In-Service, Corrugated Metal Pipe Structures

(based on *NCSPA Design Data Sheet No. 19 & AASHTO Standard Specification for Highway Bridges, Division I, Section 12*)

(* do not use this spreadsheet to load rate Structural Plate Box Culverts)

A. Design Dimensions

- For **typical structures**, use the actual field measured span for calculations.
- For **unsymmetrical structures or those deflected over 5%**:
 - use 2 x the top radius ($2 R_t$) in lieu of span for calculations.
 - base critical buckling stress calculations on the theoretical design span, reducing the resulting allowable buckling stress by the appropriate multiplier to account for deflection " f " (NCSPA Design Data Sheet No. 19, Figure B.1.1).
- For all **long span structures** (horizontal ellipse, low and high profile arches, inverted pear shapes and pear arches), as well as other horizontal ellipses, use 2 x actual top radius ($2R_t$) in all cases.

For typical structures :	Design Span = Actual Span "S" (ft) =	12.83
--------------------------	--------------------------------------	-------

For unsymmetrical or deflect more than 5% structures:	Design Span (ft) = $2R_t$ =	12.84
	Pipe Crown Deflection =	0%
	Buckling Strength Reduction Factor, f =	0.95

long span structures:	Design Span (ft) = $2R_t$ =	12.84
-----------------------	-----------------------------	-------

Structure Category: Typical (NCSPA design data sheet No. 19, II. A. 1.)

Then, Span Length used in Load Rating Calculation(ft) =	12.83
Then, R_t used in Load Rating Calculation (ft) =	6.42
$R_{t(max)} *$ (ft) =	

* Maximum Plate Radius allowed if Long Span Structural Plate Structures Selected

B. Design Properties

Conduits Mechanical & Section Properties:

Mechanical Properties:

Metal Type:	Steel		
	F_y = Minimum Yield Point of the Metal	33	ksi
	F_u = Minimum Tensile Strength of the Metal	45	ksi
	E_m = Modulus of elasticity of metal	29000	ksi

Contech No: <u>830865-020</u>	Project Name: <u>Ptarmign St Culvert Crossings - East Culvert</u>
Bridge Location: <u>Bethel, Alaska</u>	
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u> Date: <u>4/11/2025</u>

Section Properties:

Corrugation:	6 x 2 (steel structural plate pipe)
Gage Number:	7
c (in) =	
d (in) =	
t (in) =	0.188
t _{(min)**} (in) =	

** Required Minimum Top Arc Thickness if Long Span Structural Plate Structures Selected

A _s (in ² /ft) =	<u>2.739</u>	input these values based on metal type, corrugation, gage number or pipe wall thickness, see tables in worksheet "section property tables".
r* (in) =	<u>0.6880</u>	
I x 10 ⁻³ (in ⁴ /in) =	<u>108.000</u>	

* r = radius of gyration of corrugation (in)

C. Design Calculations:

Structure Type:	Structural Plate Pipe (AASHTO 12.6)
Seam Type:	Annular pipe w/ spot welded, riveted or bolted seam
Longitudinal Length of Structure "L" (ft) =	100.00
AASHTO minimum cover, h (ft) =	1.60
Height of cover above crown "H" (ft) = the lowest cover over the structure in a traffic area based on field measurement	2.10
φ _{loss} = Section Properties reduction factor on the basis of metal loss from the materials field evaluation =	1.00
φ ₁ = capacity modification factor for wall area and buckling	1.0
φ ₂ = capacity modification factor for seam strength	0.67
δ = Soil density (k/ft ³)	<u>0.120</u>
k = soil stiffness factor =	0.22

Calculate the F_{cr} (critical buckling stress) :

$$\text{if: } S < \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}, \text{ then } F_{cr} = F_u - \frac{F_u^2}{48E_m} \left(\frac{kS}{r} \right)^2$$

$$\text{if: } S > \frac{r}{k} \sqrt{\frac{24E_m}{F_u}}, \text{ then } F_{cr} = \frac{12E_m}{(kS/r)^2}$$

Compare: S (in) = 153.96 < $\frac{r}{k} \sqrt{\frac{24E_m}{F_u}} = \underline{388.92}$

So: F_{cr} = 41.47 ksi

Contech No: <u>830865-020</u>	Project Name: <u>Ptarmign St Culvert Crossings - East Culvert</u>
Bridge Location: <u>Bethel, Alaska</u>	
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u> Date: <u>4/11/2025</u>

Calculate the T_{cap} (thrust capacity of the wall) :

Seam Strength (k/ft) =

93.0

input the seam strength value based on metal type, corrugation, gage number or pipe wall thickness, see tables in worksheet "seam strength tables"

T_{cap} = less of:	1. wall yield strength = $\phi_1 \phi_{loss} F_y A =$	90.4
	2. wall buckling strength = $f \phi_1 \phi_{loss} F_{cr} A =$	113.6
	3. seam strength = $\phi_2 \times (\text{seam strength}) =$	62.3

So:

$T_{cap} =$ **62.3** k/ft

Calculate the T_E (pipe wall thrust due to earth cover) :

T_E = higher value of :	1. $\delta H (S/2) =$	1.62	k/ft
	2. $\delta H R_t =$	1.62	k/ft

So:

$T_E =$ **1.62** k/ft

Calculate the $T_{(L+I)}$ (pipe wall thrust due to live load plus impact) :

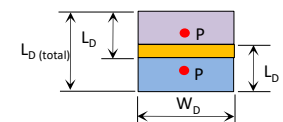
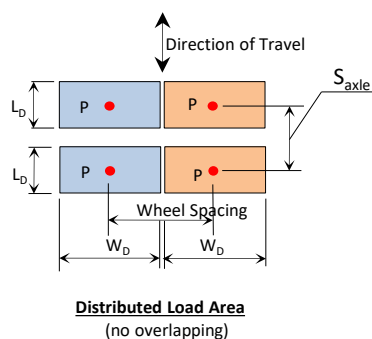
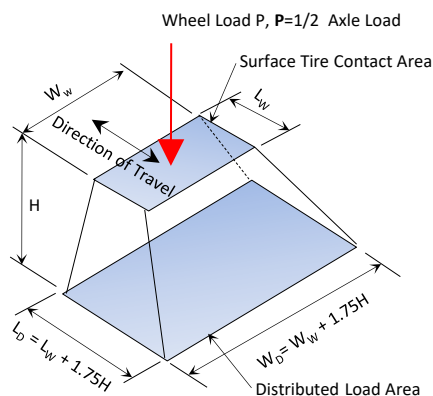
$T_{(L+I)}$ = higher value of :	1. $\rho_{(L+I)} (S/2) =$	k/ft
	2. $\rho_{(L+I)} R_t =$	k/ft

Based on AASHTO 3.8.2.3 :	Live load Impact Factor, $I =$	30%	for $0'-0" < H < 1'-0"$
		20%	for $1'-1" < H < 2'-0"$
		10%	for $2'-1" < H < 2'-11"$
		0%	for $H \geq 3'-0"$

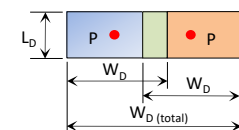
So, for this structure: Depth of Fill, $H =$ **2.10** ft

$I =$ **10%**

$(1+I) =$ **1.10**



Axle loads distributed area
(overlapping along the direction of travel)



Wheel loads distributed area
(overlapping perpendicular to the direction of travel)

Pressure on the tire contact area is distributed on the culvert through the cover depth, Dimension as:

Contech No: <u>830865-020</u>	Project Name: <u>Ptarmign St Culvert Crossings - East Culvert</u>		
Bridge Location: <u>Bethel, Alaska</u>			
Year Built: <u>2025</u>	Load Rated By: <u>JH</u>	Date: <u>4/11/2025</u>	
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u>	Date: <u>4/11/2025</u>	

$$W_D = W_W + 1.75H$$

$$L_D = L_W + 1.75H$$

Contech No: <u>830865-020</u>	Project Name: <u>Ptarmign St Culvert Crossings - East Culvert</u>
Bridge Location: <u>Bethel, Alaska</u>	
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u> Date: <u>4/11/2025</u>

The surface tire contact area for HS20 loading (per AASHTO 3.30):

$W_W = 20'' =$	1.67	ft	$W_D = 1.67 + 1.75H =$	5.34	ft
$L_W = 10'' =$	0.83	ft	$L_D = 0.83 + 1.75H =$	4.51	ft

The surface tire contact area for Alaska Legal Trucks (Per NCSPA Design Data Sheet No. 19 Appendix C. 2) :

Per NCSPA Design Data Sheet No. 19 Appendix C. 2, the surface tire contact area $A(\text{in}^2) =$	$A = W_W \times L_W = 0.01 P_{(1+I)}$
1% of the wheel load plus impact, $P_{(1+I)}$ in pounds. And $W_W = 2.5 L_W$	$W_W = 2.5 L_W$

So:

$$W_W = 2.5 \left(\sqrt{\frac{0.01 P_{(1+I)}}{2.5}} \right) / 12 \quad \text{ft}$$

$$L_W = \left(\sqrt{\frac{0.01 P_{(1+I)}}{2.5}} \right) / 12 \quad \text{ft}$$

$$W_D = 2.5 \left(\sqrt{\frac{0.01 P_{(1+I)}}{2.5}} \right) / 12 + 1.75H \quad \text{ft}$$

$$L_D = \left(\sqrt{\frac{0.01 P_{(1+I)}}{2.5}} \right) / 12 + 1.75H \quad \text{ft}$$

Fill depth, H =	2.10	ft
-----------------	------	----

Structure Total Length, L =	100.00	ft
-----------------------------	--------	----

[if $W_{D(\text{total})} > L$, use $L = W_{D(\text{total})}$ in the calculations]

	HS20	20k Single	38k Tandem	42k Tridem	
Heavy Axle Load (lbs)	32,000	20,000	19,000	14,000	
$P_{(1+I)}$ (lbs) =	17,600	11,000	10,450	7,700	
* $S_{\text{axle } 1}$ (ft) =	0.00	0.00	3.50	3.50	
* $S_{\text{axle } 2}$ (ft) =	0.00	0.00	0.00	3.50	
wheel spacing on axle	6.00	6.00	6.00	6.00	
W_D (ft) =	5.34	5.06	5.02	4.83	
L_D (ft) =	4.51	4.23	4.21	4.14	
$W_{D(\text{total})}$ =	5.34	5.06	5.02	4.83	
$L_{D(\text{total})}$ =	4.51	4.23	7.71	11.14	
* A_D (ft ²) =	24.08	21.38	38.74	53.81	
* P_D (kips) =	17.60	11.00	20.90	23.10	
$p_{(L+I)} = P_D / A_D$ =	0.73	0.51	0.54	0.43	
$T_{(L+I)}$ (k/ft) =	4.69	3.30	3.46	2.76	

* $S_{\text{axle } 1}$ = distance to the 1st adjacent heavy axle load, if the spacing is > 4', $S_{\text{axle } 1} = 0$.

$S_{\text{axle } 2}$ = distance to the 2nd adjacent heavy axle load, if the spacing is > 4', $S_{\text{axle } 2} = 0$.

A_D = Total Load Distributed Area

P_D = Total Load being Distributed

Transverse pressure overlaps are considered. Longitudinal pressure overlaps are considered for two adjacent heavy axle loads when the S_{axle} is ≤ 4 feet.

Contech No: <u>830865-020</u>	Project Name: <u>Ptarmign St Culvert Crossings - East Culvert</u>
Bridge Location: <u>Bethel, Alaska</u>	
Year Built: <u>2025</u>	Load Rated By: <u>JH</u> Date: <u>4/11/2025</u>
Bridge Type: <u>Steel Multiplate</u>	Checked By: <u>Pac. Aff.</u> Date: <u>4/11/2025</u>

D. Load Rating Factors for Ring Compression Structures:

1. Operating Load Rating Factor (RF_O):

- a. RF_O based on wall strength

$$RF_{O-W} = \frac{T_{cap} - 1.95T_E}{1.3T_{(L+I)}}$$

- b. RF_O based on minimum cover requirements

$$RF_{O-C} = \frac{H^2}{C(h)^2}$$

$$\text{Where, } C = 2.36 \frac{H}{S} + 0.528 \leq 1.0 = 0.91$$

$$\text{So, } RF_{O-C} = \boxed{1.88}$$

Operating Load Rating Factors, RF_O					
	HS20	20k Single	38k Tandem	42k Tridem	
T_{cap}	62.31	62.31	62.31	62.31	
T_E	1.62	1.62	1.62	1.62	
$T_{(L+I)}$	4.69	3.30	3.46	2.76	
RF_{O-W}	9.70	13.78	13.14	16.51	
RF_{O-C}	1.88	1.88	1.88	1.88	
RF_O	1.88	1.88	1.88	1.88	

2. Inventory Load Rating Factor (RF_i):

- a. RF_i based on wall strength

$$RF_{i-W} = \frac{3}{5} RF_{O-W}$$

- b. RF_i based on minimum cover requirements

$$RF_{i-C} = \frac{H^2}{h^2}$$

Inventory Load Rating Factor, RF_i	
	HS20
RF_{i-W}	5.82
RF_{i-C}	1.71
RF_i	1.71

Appendix C

Independent Design Check – (2 pages)



April 11, 2025

Ms. Kirsten Voorhees
Contech Engineered Solutions LLC
107 N 4th Street #746
Osburn, ID 83849

Re: Independent Design Check of Contech Multiplate Pipe Arch Design Drawings, Structural Calculations, and Load Rating
Ptarmigan Street Culvert Crossings
Ptarmigan Creek Fish Passage Improvement Project
Bethel, Alaska
Contech ES Project No. 830365

Ms. Voorhees:

The following is a summary of the Independent Design Check (IDC) completed for the multiplate culverts to be constructed as part of the above referenced project. Items provided for the IDC review are as follows:

- Plate layout drawings for two multiplate pipe arches
- Corrugated steel plate AASHTO structural design calculations
- Load rating calculations

Pacific Affiliates' scope of work is limited to Independent Design Check review of the above listed items for the new multiplate structure designed by Contech E.S., Project No. 830365. Pacific Affiliates is serving as the Independent Engineer in responsible charge of the IDC. Our scope does not include construction activities, scour analysis or any other items not specifically discussed herein. All other aspects of this project are the responsibility of others than Pacific Affiliates and the only responsibility of Pacific Affiliates is as listed above.

Project Understanding

The following design constraints were derived from the project plans prepared by DOWL, 65% design set dated January 2025 (Project 1163.50270.68). Culvert structure sizes were specified by DOWL to replace existing CMP culverts along Ptarmigan Street. Design cover over each culvert was provided in Addendum #2.

Review of Design Drawings and Structural Responses

Contech is providing 12'-10" x 8'-4" pipe arch multiplate culverts for both crossings. The west culvert will have a length of 120'-0" and the east culvert will have a length of 100'-0". The west multiplate was evaluated for HL-93 vehicle loading for 2 feet minimum and 2.75 feet maximum design cover cases. The east multiplate was evaluated for HL-93 vehicle loading for 1.6 feet minimum and 3.15 feet maximum design cover cases. Analysis was performed in accordance with Section 12 of AASHTO LRFD Bridge Design Specifications, 9th Edition.

WWW.PACAFF.COM

Structural plates are designed with 6"x2" corrugations and proposed to have 7 gage plates with bolted seams. Unit weight of the backfill material was assumed to be 120 pcf. We have reviewed the inputs utilized for the calculations and conclude the structural analysis and resultant plate gage is acceptable for the proposed culvert configuration on this project.

We have reviewed the provided submittal drawings for the culvert bridge structure and conclude that they accurately portray the design requirements of both the Contech prepared structural analysis, and the contract drawings.

Review of Load Rating

Load rating procedure followed AASHTO Manual for Bridge Evaluation (MBE) and Alaska Bridge and Structures Manual (BSM) by using the Ohio DOT load rating spreadsheet. Both the LRFR and LFR methods were utilized to determine rating factors for legal and permit loads on the structure. Load rating factors for all vehicles were reported as well above 1.0, which is what we would expect for the planned culvert configuration.

Conclusion and Other Considerations

It is our opinion that the Culvert Bridge Design Package meets the AASHTO LRFD Bridge Design Specifications, the AASHTO Manual for Bridge Evaluation, and the Contract requirements. Project site conditions were not independently verified by Pacific Affiliates. Our review is based on information provided by others. Site conditions should be verified during construction. If they differ from what is described herein or in other project documents, the engineer of record shall be contacted. Should you have any questions or require additional information, please contact this office.

Sincerely,

Travis Schneider
R.P.E. 14274



cc: File 25-3488

City of Bethel, Alaska

City Manager's Office

April 16, 2025-May 6, 2025

Personnel

City Spirit Award Winners-The following individuals were nominated by their peers for their exceptional contributions to the City and for going above and beyond the expectations of their roles:

- **Buzz Chaney**, Grader Operator
- **Corbin Ford**, Water Treatment Plant Coordinator
- **Daniela Cordoba**, Police Officer
- **Jake Thompson**, Streets and Roads Foreman
- **Mike Mendenhall**, Hauled Water and Sewer Foreman
- **Randy Turner**, Grader Operator

Let's celebrate these outstanding team members for their dedication and commitment to improving our community and making a lasting impact.

Request for Proposals

- The City received one bid on the Ptarmigan Road Culvert Intallation. Notice of Intent to Award was delivered May 6th. Administration has presented to the Council an AM to authorize the contract, and an associated and required budget modification to proceed with the contract.

General Operations

Nuisance Abatement

- Phase 1 of the nuisance abatement report has been submitted to City Council and abatement hearing held the week of April 28th.
- Phase 2 will involve:
 - Additional public notices for properties with unclear ownership records.
 - Continued identification of additional properties for reporting as time and resources allow.

Solid Waste Services Audit

- Staff is reviewing over 100 accounts that may not be in compliance.
- Current actions:
 - Cross-checking reported noncompliant accounts for accuracy.
 - Notifying commercial users of required billing changes.
 - Developing an action plan for correction and next steps.

Transit System Changes

- After analyzing **ridership data**, transit stops with low participation were identified and removed.
- New routes go into effect on April 1, and public notices have been issued.

Leases

- University of Alaska Lease & Contract – The City has notified the University of intent to terminate the lease and operating contract due to noncompliance.
- Lions Club Lease – The leaseholders responded to our notice of intent to terminate. They are working on obtaining nonprofit status with the City.

- Enforcement paused until April 1 to allow for compliance efforts.
- The new lease will not be signed until compliance is confirmed.
- Alaska Marine Lines Lease (Port Warehouse) – Currently month-to-month after expiration.
 - A request for bids will be issued in the fall after the barge season.
- Lease Rate Increases – Notices sent to relevant lessees; new rates take effect July 1, 2025.
- City-Owned Lot Appraisals – Updates received regarding two City-owned lots in City Subdivision.

Energy Audit for the Community Center

- The Department of Energy will continue working with the City on an energy audit for the Community Center, with support from ONC.
- The goal is to explore options for extending recovered heat from AVEC, potentially leading to significant cost savings.

Pinky's Park Lighting

- The Streets and Roads team, along with the electrician, is actively repairing the lighting system in Pinky's Park.
- Some minor vandalism occurred, but we hope issues will be minimal moving forward.





City of Bethel

May 1, 2025

FROM: Planning Director

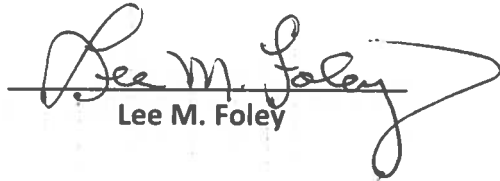
TO: Lori Strickler, City Manager

SUBJ: Planning Director's April 2025 Report

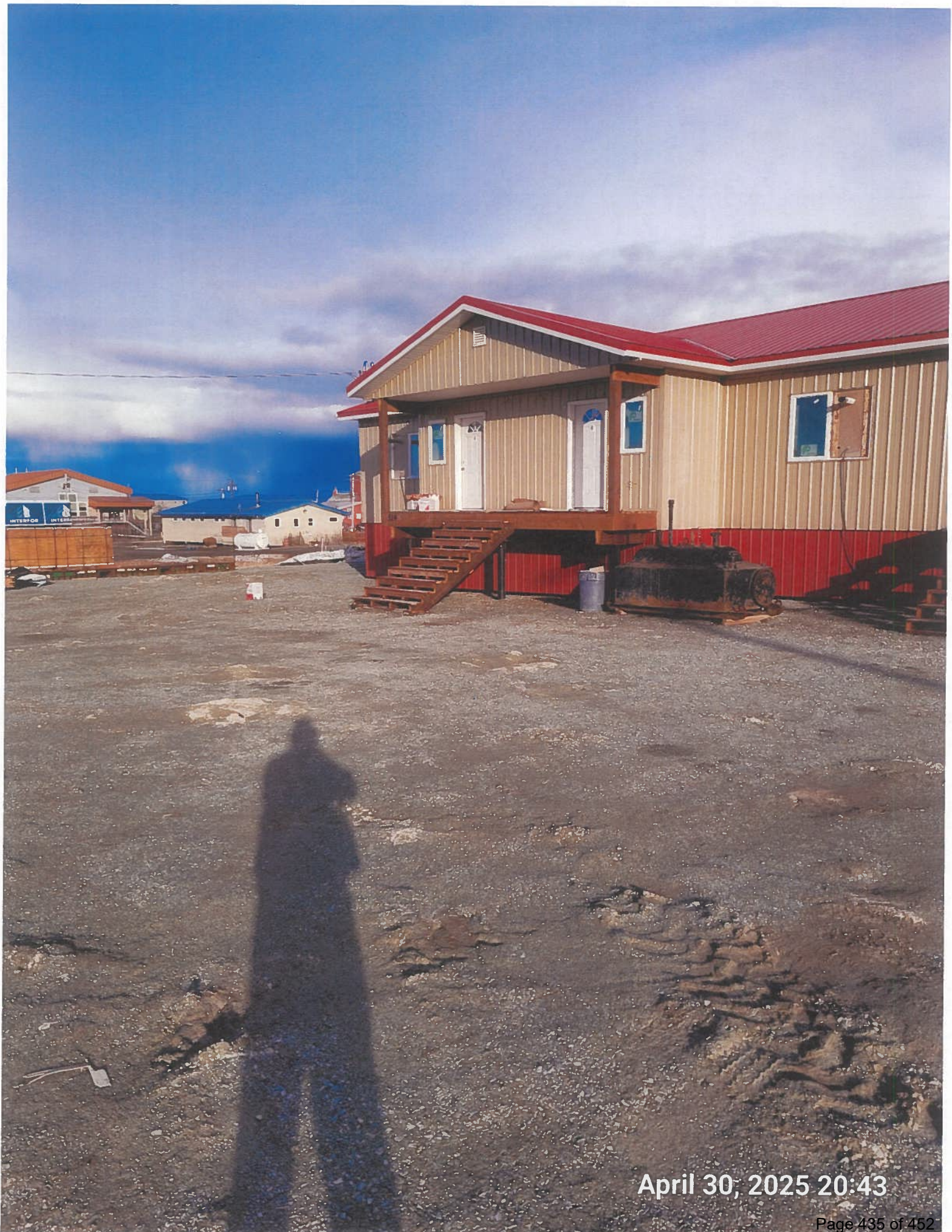
April 2025 Events

- **Planning Commission:** An update on nuisance properties was presented and discussed.
- **YK Fitness Center Gym Expansion:** 63% design completion to date.
- **Residential Site Plan Permits Submitted and Approved:** 3
- **Commercial Site Plan Permits Submitted and Approved:** 3
- **Conditional Use Permits Submitted and Approved by The Planning Commission:** None
- **Variances Requested and Disposition:** None
- **Zoning Amendments Submitted and Approved:** None
- **Plats Submitted for Review and Disposition:** None
- **Summary Statement:** There are no major Planning projects under review.
- **Abandoned and/or Junk Vehicles:** To date, Planning has received nine (9) new complaints of abandoned/junk vehicles throughout the City. These submissions were made on the Nuisance Property Complaint Forms available on the City's website. Letters via certified mail will be sent to the owners. On April 18, 2025, the City Manager conducted a junk vehicle meeting to ensure all complaints were being addressed.
- **Vacancies:** Fully staffed.
- **Other Events:** Online training in GIS applications for the Planning Director will start by checking out Planning's version of Arc/GIS and discussing available data with Eckersall LLC on Wednesday, May 7, 2025.
- **Large Projects:**
 1. **Ptarmigan Street Encroachments** – A ROW update team meeting was conducted on April 21, 2025. The focus of the meeting was to provide the City with an updated spreadsheet of the encroaching properties and a ROW planning document to illustrate their locations.
 2. **Ptarmigan Street Culvert Replacement** – Planning received and reviewed the associated Floodplain Development materials for this City-funded/sponsored project.
 3. **City of Bethel Professional Housing Project** – External progress photos attached.

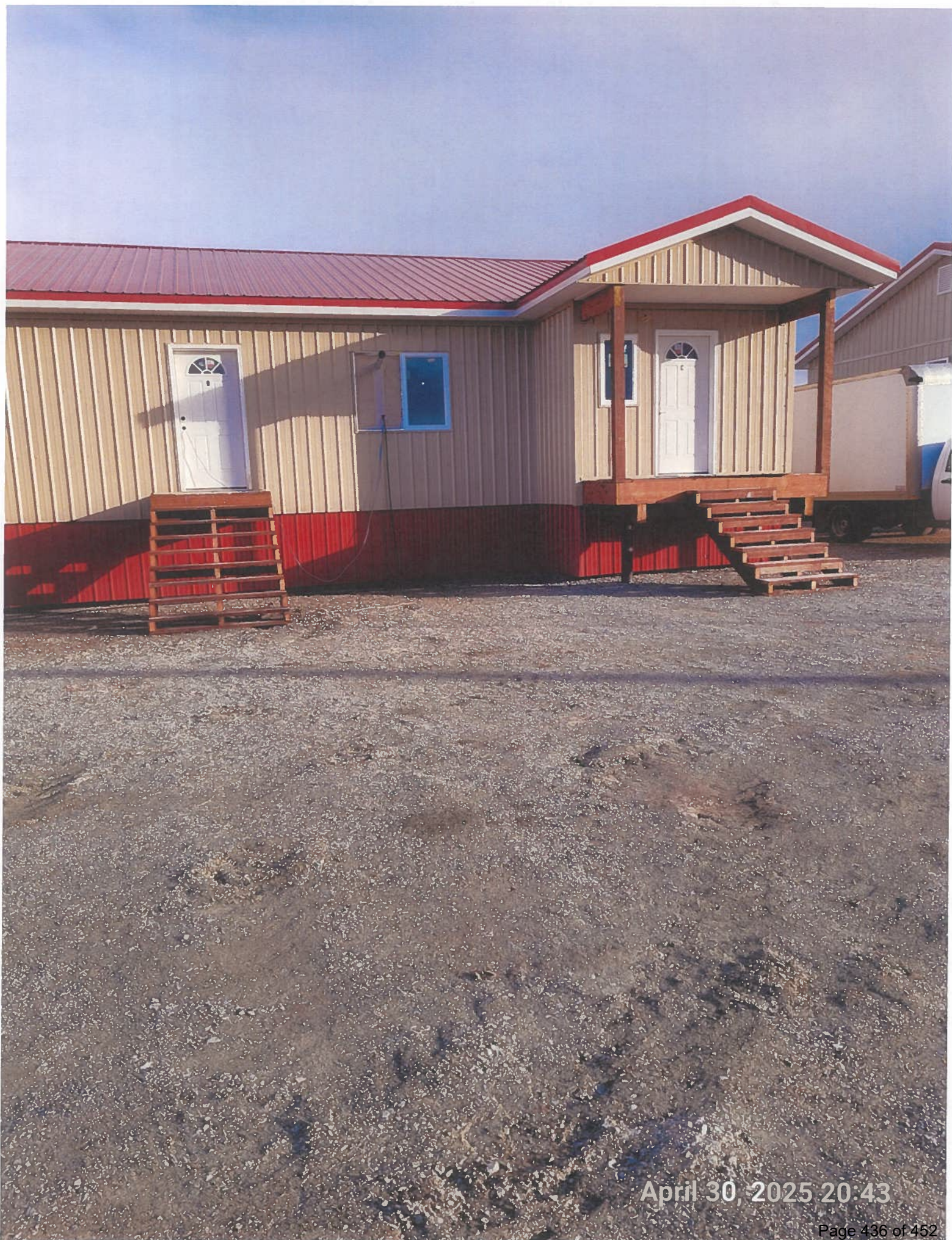
4. **Hazard Mitigation Plan** – Planning is working with other City-team players under a grant funded by the Alaska Division of Homeland Security & Emergency Management and the Federal Emergency Management Agency to upgrade the plan and bring it current.
5. **Nuisance Abatement** – In collaboration with Public Works, City Attorney, Chief of Public Safety, and the City Clerk, and in support of the City Manager's initiative, data and photos were collated and presented to the City Council for consideration during Nuisance Abatement Hearings on April 29-30, 2025. An onsite inspection of nuisance properties was conducted by the City Manager, Public Works Director, and the Planning Director on April 24, 2025.



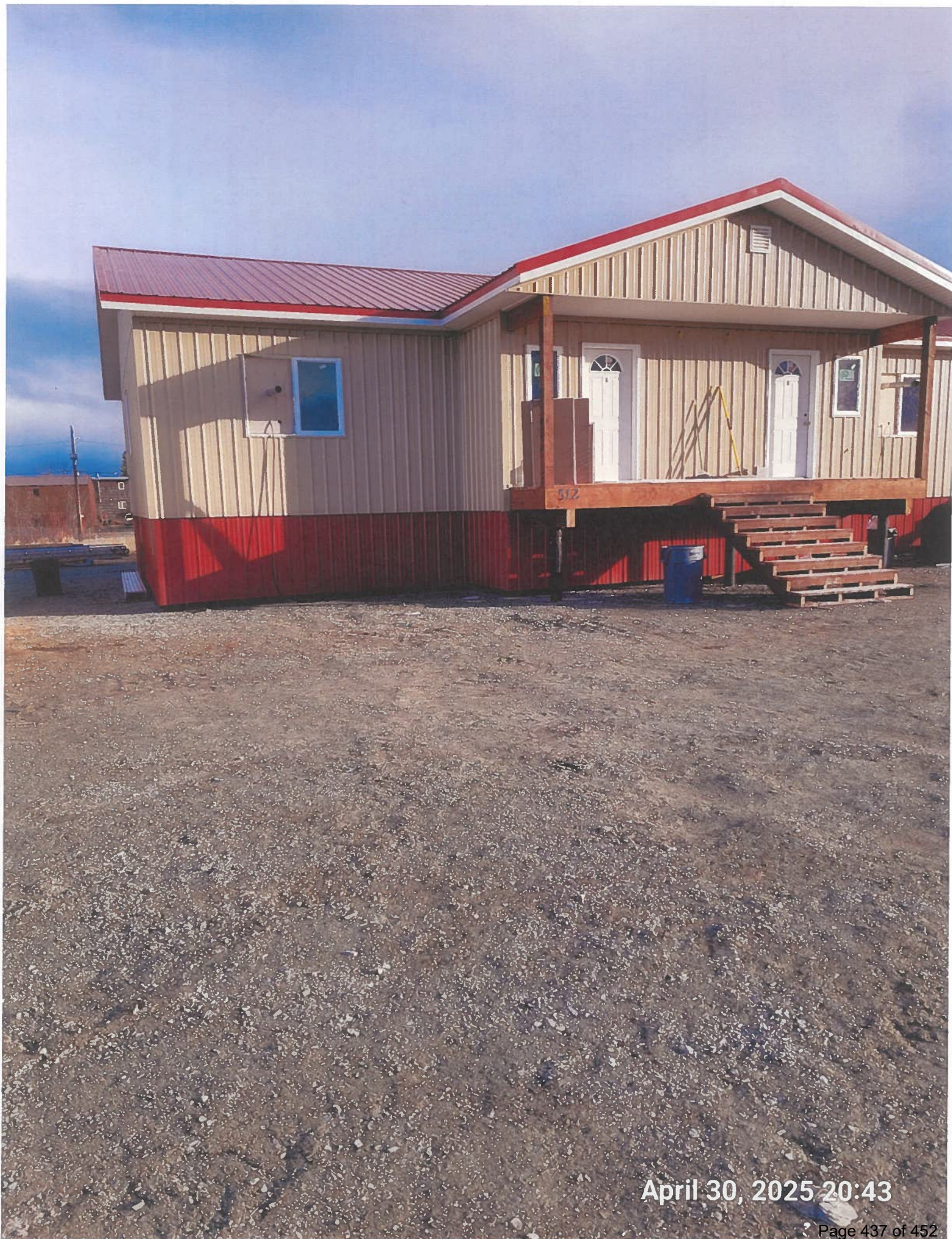
Lee M. Foley



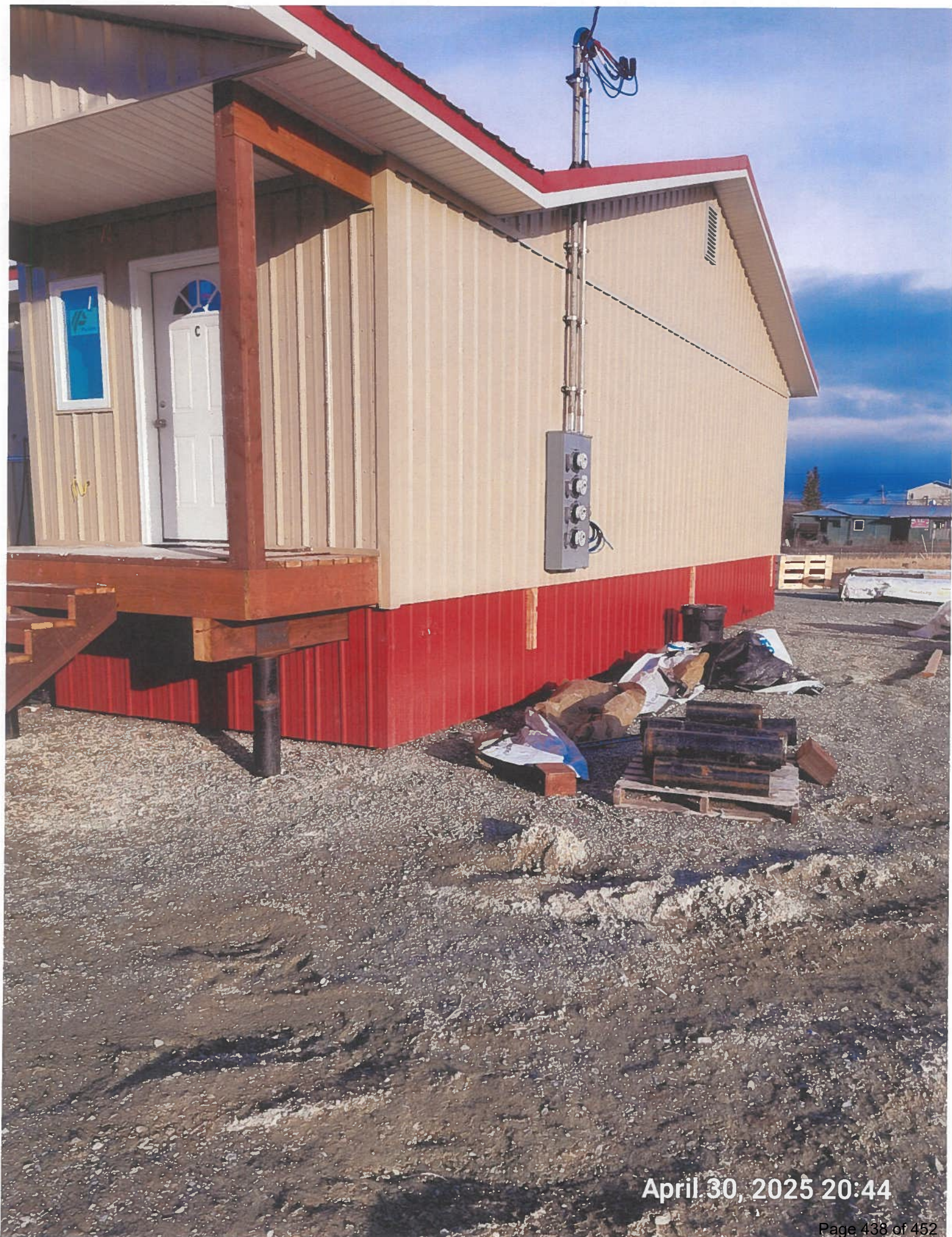
April 30, 2025 20:43



April 30, 2025 20:43



April 30, 2025 20:43



April 30, 2025 20:44



April 30, 2025 20:45

PORT OF BETHEL

Post Office Box 1388
Bethel, Alaska 99559
Voice: 907-543-2310
Fax: 907-543-2311



To: Lori Strickler, City Manager
From: Edward Flores, Port Director
Subject: April 2025 Managers Report

- **Small Boat Harbor**

April was a slow month for the small boat harbor, but it will be roaring with life here soon. The Napaimute crew has moved their ice road equipment out of the small boat harbor south side parking lot. We did have a crane that was stored in the harbor for 10 days. It has also moved. With the traffic on the ice road down, we are planning to replace the armor rock to protect the road, hopefully before breakup. Our joint approach project between the Port and Streets & Roads is done, all the approaches are near, if not at, level. During the month of April, the two crews were at it every workday for almost two weeks. This could not have been done without the help and knowledge of the streets and roads crew. Our new floats should be here in Bethel sometime in July, with a hopefully successful deployment of the floats before the end of the season. This is all dependent on the construction of the new floats.

- **City Dock/Beach 1/Petro Port**

The Dock is starting to come back to life with representatives from the different marine companies. The constant grooming of the City Dock over the winter proved successful in the ability to have a dry, workable dock. This is by far better than dealing with calcium mud from the get-go. H Construction won the bid to fix the tear in the slough side of the dock, as well as the broken concrete bullrail that was damaged last year. Both of the projects went well, they were able to secure a steel plate to bring the two sections of the tear back together and in line. Once that was done the area was backfilled with gravel. On the face of the dock, the gravel around the broken bullrail was excavated, and the concrete was removed. The inner structure was reinforced and new concrete was poured and cured. I expect representatives from the different companies to start showing up in Bethel and my office starting the 1st of May.

- **Port Office**

The port office is running well. We have no issues with connectivity or heat. Building Maintenance continues to do their morning checks on the building with no problems..

- **Admin**

Our monthly storage is prepared and will leave the Port office this first week of May. The Port Commission did not meet in April. Our next scheduled meeting will be at 7 p.m. on May 19, 2025. At City Council Chambers. We currently have an opening for an Administrative Assistant; we would like to fill that position before summer.



CITY OF BETHEL
OFFICE OF
JAMES C. HARRIS
CHIEF OF PUBLIC SAFETY
harrisjc@cityofbethel.net



April 2025 Monthly Report
Police Department

Personnel:

Current Staffing			
Position	Allocated	Staffed	Vacant
Safety Patrol (three grant funded)	3	2	1
Community Service Officer	2	2	0
Evidence and Record Custodian	1	0	0
Administrative Assistant/Taxi Inspector	1	0	1
Public Safety Dispatcher (one E911 funded)	5	3	2
Public Safety Dispatch Supervisor	1	1	0
Peace Officers (one grant funded/reimbursed SRO)	20	18	2

Operations:

Operations Tempo				
	April 2025	March 2025	APRIL 2024	2025 Total
Calls Total	986	827	2133	3918
Reports Total	88	81	114	403
Intoxicated Pedestrian Calls	201	167	160	728
Driving Under Influence Calls	14	14	15	55
Domestic Violence Reports	13	16	27	59
Disturbance Calls	69	69	110	290
Subject Removal Calls	70	70	91	304
Animal Calls	25	28	47	108
Animal Bite Reports	1	0	0	4
Sexual Assault Reports	2	3	3	9
Death Investigation Reports	0	0	0	0

Dispatch: (907) 543-3781 FAX: (907) 543-5086



**CITY OF BETHEL
OFFICE OF
JAMES C. HARRIS
CHIEF OF PUBLIC SAFETY
harrisjc@cityofbethel.net**



PERSONNEL:

Jeffrey Kirkham began work on April 14

Background on Alexis Tracy has been completed and an offer of employment has been made .

Madison Abolafia has been hired and began work on 04/02/2025

One applicant David James is currently in background

Bethel Fire Department April Report

April Calls

Total calls: 166

Fire Calls: 17

EMS Calls: 149

Most fire calls were lockouts both car and house and false alarms made up most fire calls.

Notable Fire Calls

On 4-21-25 at 22:30 firefighters responded to the report of a shed on fire. Crews pulled lines and extinguished the fire. Total apparatuses 3. Total personnel 9

On 4-23-25 at 08:55 PM, Firefighters responded to the report of a structure fire originating from the front porch and arctic entry of the residence. Occupants were evacuated and unharmed and the fire was extinguished with help from Bethel Police Department officers. The cause of ignition is believed to be arson

Notable EMS Call

Dispatch: (907) 543-3781 FAX: (907) 543-5086



**CITY OF BETHEL
OFFICE OF
JAMES C. HARRIS
CHIEF OF PUBLIC SAFETY
harrisjc@cityofbethel.net**



On 04-02-2025 at 05:46 PM, Medics responded to the report of a patient that was choking and is not breathing. Lifesaving efforts were initiated, and the patient was transported to the hospital.

April had an uptick in overdose calls

Most other calls were alcohol related.

Sobering Center calls: 0

Staffing

Career Staffing. 10 out of 11 positions. Administrative assistant position is still available.

Volunteering staffing. volunteers 38

The EMT class will wrap up in May with 13 students this will bring 13 new EMT's to the department.

Community Parks & Recreation Report – APRIL 2025

By: Dept. Director, Shane Iverson

Projects

Computer Center Project Package including grant budget for furthering grant application to T-Mobile.

Completed Gym Expansion, 95% Design Plan; research and lead COB's communication with design team.

Reviewed and familiarized myself with the following projects:

- Project management lead of EECBG Solar Energy Project
- Tribal Technical Assistance Energy Efficiency projects
 - 1) YKFC energy audit
 - 2) Waste heat feasibility delivery

YKFC Transition

- Finalized FY26 draft dept. budget
- Continued: YKFC on-site training
- Training for: lifeguard certification, pool operators training, YKFC website.

Programming

- Developed ten camp themes for summer healthy activities club.
- Developing after school programming

Miscellaneous

- Drafted new mission statement for department
- Set-up of new company iPhone, and Facebook accounts
- Completed research and enrollment of retirement accounts
 - Alaska PERS
 - 457(b)

END REPORT



City of Bethel
Finance Department
Manager's Report for April 2025

Date: 5/6/2025

To: Lori Strickler, City Manager

From: Cynthia Sharp, Deputy Finance Director

Subject: Management Report

Current Events within the Finance Department

April was a very busy month for the Finance Department with new staff training, Utility Accounts are being audited. Working on online timekeeping (this has taken awhile due to connectivity issues. The FY23 Audit is complete, we are waiting for the Auditors to finish their part. We are working on a new Community Payment Portal to replace Xpress BillPay. The new Portal should be up and running in about a month.

Finance Committee

The Finance Committee did not have a quorum.

Personnel/Open positions: Accounting Specialist I

MEMORANDUM

DATE: May 6, 2025
TO: Lori Strickler, Acting City Manager
FROM: John Sargent, Grant Manager



SUBJECT: Grant Manager's Report for May 13, 2025 Bethel City Council Meeting

Grant Applications Submitted

CSP Grant Application

I prepared and submitted the FY 26 Community Service Patrol grant to the Alaska Department of Health. The grant amount of \$323,081 has been the maximum allowed by the State for years. The grant covers the salary and benefits of three Community Service Patrol officers, gasoline for their vehicle, and money for supplies and clothing.

VSW CIP Construction Grant

I prepared and submitted a construction grant to the Alaska Department of Environmental Conservation's Village Safe Water Program and requested \$23,778,552 to complete a portion of the Avenues Water and Sewer Improvements project. This amount would cover the installation of the mains and service connections to 33 households on 26 parcels.

VSW Bethel Heights Water & Sewer Project – Additional Fund Request

Working with DOWL project manager Chase Nelson's input and past spending data, I requested \$4,060,392 in additional funding for the Bethel Heights project. The money will be available in fall 2025 for use on the project. The City still has \$11,299,896 in grant funds available. DOWL is currently working on the design of Phase 2 – the connection of Martina Oscar Subdivision homes to the piped system.

Grant Applications in Preparation

EPA Grant for Removal of Derelict Vessels

On February 26, 2025, City administrators met with EPA staff members in a Teams call. The staff laid out the application process and grant responsibilities. The City must apply for a grant from the Environmental Protection Agency in order to secure the \$5,018,000 appropriation from Senator Murkowski's Office to remove derelict vessels from Steamboat Slough.

Grant Administration

Grant Reports & Reimbursement Requests

I completed monthly and quarterly grant reports in April to request \$2,788,791 in reimbursement for grant funds expended. The two largest reimbursements were for the Bethel Heights Water and Sewer Improvements project (\$1,169,549) and the Coronavirus Local Fiscal Recovery Fund (\$1,221,371).

Closed Grants

The City expended 100% of the Coronavirus Local Fiscal Recovery Fund grant funds available by the December 31, 2024 deadline. Also known as the ARPA grant, this grant helped cover costs for lift station repairs, chemical storage building, and KYUK's new radio tower.

Professional Development

Participated in the two-day *Energize Your Grant Skills* Conference in Elizabethtown, Kentucky sponsored by the Kentucky Chapter of the Grant Professionals Association. I attended several sessions on the use of artificial intelligence in grant writing, changes in federal policies impacting the grant industry, and how to approach private foundations for funds.

I applied for a scholarship to cover the cost of the Grant Professional Certification exam. I am qualified to take the exam in all respects: education, employment, grant application awards in last five years, and provision of community service. If I pass the exam, I will be a Certified Grant Professional (GPC) and able to put the initials indicating the credential after my name.

Current Grants

See list on following pages.



Professional Housing Building

City of Bethel Current Grants

#	Grant	Amount	Expiration
1	Coronavirus Capital Project Fund	\$ 9,000,000	12/31/2026
	Design and construction of Bethel Multiuse Community Center (gym, computer facilities). This fund is now being tapped for design/construction costs. Design at 95% nearly done.		
2	Denali Commission Grant	\$ 500,000	9/30/2026
	Design and construction of Bethel Multiuse Community Center (gym, computer facilities). City still waiting on a grant agreement from grantor.		
3	CSP - DHSS FY 2025	\$ 323,081	6/30/2025
	Applied for FY 26 CSP grant for same amount. Spent 58% of grant funds at 75% of the year. CSPs assisted 147 individuals over the quarter, most of which were non-residents.		
4	23SHSP-GY23 – Virtual Simulator & Fencing	\$ 268,000	9/30/2025
	I prepared the Environmental, Historical and Preservation document necessary for the simulator purchase and will submit it this week. The EHP must be approved by FEMA before City can spent		
5	Coronavirus Local Fiscal Recovery Fund (ARPA)	\$ 3,361,604	12/31/2024
	City spent 100% of the grant funds. Final reports were filed. This grant will be removed from the list in next month's report.		
6	Designated Legislative Grant > YK Fitness Ctr. Gym Design	\$ 500,000	6/30/2026
	This grant has a balance of \$6,875, which will be claimed in the next report.		
7	Designated Legislative Grant > Public Safety Communication Tower	\$ 500,000	6/30/2028
	STG, Inc. completed the installation of the Public Safety Communications Tower. Final report was completed in April 2025 with 100% of grant funds expended.		
8	Designated Legislative Grant> Dust Control	\$ 1,200,000	6/30/2029
	Thus far, only \$52,932.90 claimed as expended. City must initiate more charges.		
9	State and Local Cybersecurity Grant Program (SLCGP)	\$ 75,000	9/30/2026
	The City of Bethel plans to hire a consultant to conduct a cybersecurity review of the City's IT network, equipment, software, and physical layout. The City plans to use recommendations in the plan as grant requests next year.		
10	VSW Capital Improvement Project Grant	\$ 13,860,000	
	Sturgeon Electric completed the water treatment plant improvements. DOWL collecting BABAA compliance documents from contractor and subcontractors. DOWL is now working on the design to run water pipes from the Bethel Heights Water Treatment Plant to the Martina Oscar Subdivision. City asked for \$4,060,392 in additional funds to cover upcoming year expenses.		

11	Last Frontier Housing Initiative	\$ 5,000,000	12/31/2026
The low-income housing project and City professional housing project are proceeding rapidly.			
12	State Homeland Security Program Grant - SFY 25	\$ 9,000	9/30/2026
This grant will cover the cost of paying a trainer to come to Bethel to teach ICS-300, an Incident Command System course for first responders and municipal administrators who may play a role in a major emergency situation.			
13	Safe Streets 4 All Grant	\$ 52,800	TBD
The City is waiting on grantor to obtain federal agency approval and then produce a grant agreement. Infrastructure, equipment, road signs, and other hardware recommended in the safety plan become eligible for funding in the next Safe Streets 4 All grant opportunity.			
14	Justice Assistance Grant (JAG)	\$ 11,116	9/30/2025
Security cameras and access control system installation at Police Station. The City applied for Homeland Security grant funds to match this grant for the full purchase of cameras and card reader equipment.			
15	Energy Efficiency and Conservation Block Grant (EEBG)	\$ 75,220	9/30/2026
Solar panel installation on YK Fitness Center. Project likely to begin once UIC begins construction of Bethel Community Center (gymnasium). Parks and Rec. Director assumed role of Project Manager.			
16	Rasmuson Foundation Grant	\$ 250,000	1/31/2026
This grant will cover part of the cost of constructing a new animal shelter in Bethel.			
17	Community Transit Operating Grant	\$ 184,131	6/30/2025
Transit Manager Evon Fox manages the daily operation of the transit system, handles all purchases, and completes monthly billing summaries and quarterly reports.			
18	Community Transit Capital Grant	\$ 853,563	6/30/2026
This grant covers the capital cost of a new boiler in the transit center and the purchase of two new buses. Two buses purchased and in use. Boiler project nearly completed.			

Total \$ 36,023,515



CITY OF BETHEL

Post Office Box 1388

Bethel, Alaska 99559

Phone: 907- 543- 2047

TO: City Manager
FROM: Human Resources
SUBJECT: Monthly Manager Report

DATE: May 1, 2025

The following identifies significant projects that were in addition to general personnel action-based activities during the week (hiring, terminations, benefits review, employee support, etc):

Position Update

Department	Budgeted FY25	Apps Received April 25	Vacancies As of 4/30/25	<u>Change Since Last Report</u>		
				Pending	Hired	Separated
Administration	4		0			
City Clerk	1.5	*3 Clerk/Port	.5			
Finance	9	1	1			
Planning	2		0			
Attorney	1		0			
Public Safety						
<i>Admin</i>	4	3	1		1	
<i>Fire</i>	10		0			
<i>Police Officers</i>	18	1	1			
<i>Non-Sworn Patrol</i>	5	2	1			
<i>Dispatch</i>	6	4	2			
Public Works						
<i>Admin</i>	2		0			
<i>Streets/Roads</i>	6	2 Seas	0			
<i>Prop Maintenance</i>	5		2			1
<i>Refuse/Landfill</i>	3	1 Seas.	0			
<i>Hauled Services</i>	19	2 (incl temps)	13*			
<i>Util Maint/Water</i>	9	3	2		1	
<i>Vehicles & Equip</i>	7	3	3		1	2
Transit	2.5	2	.5			
Port and Harbor	3	*3 Clerk/Port	1			
Parks and Rec	1		0			
Interns		3				
Total	118.5	30	37.5	* Supported with 8 temps		

Recruitment and Hiring

Employing Permanent CDL drivers remains a recruiting challenge. The Union has submitted a challenge to the City's practice of hiring long-term temporary employees to fill this need. The practice (temporary employment exceeding 6 months) is counter to both the CBA and Title III. HR is working with City Manager to address the Union's concern and make sure the City is meeting applicable Labor and Affordable Care Act requirements related to temporary staff. An increased emphasis is being placed on hiring qualified applicants for permanent positions.

HR participated in a virtual career fair for the school district. Over 190 students participated from at least 16 schools across the district. Focus areas included the City's skills-based vacancies and the new intern opportunities.

NeoGOV Activity

Employees have completed their required annual Financial and Business Interest Disclosure on NeoGov. The form, one reviewed by HR, is stored in their online personnel files. Those employees with disclosures are forwarded to the City Manager for review. The Manager's approval form is also uploaded to the personnel file.

Employees completed the annual vehicle policy review on NeoGov, as well as the request for vehicle privileges, if applicable. HR is waiting on the State's DMV staff to provide a process for bulk vehicle records check. A license/records check will be performed on all employees who were not background-checked during the last 12 months (new hires).

HR will be assigning online Evaluation Review tasks as applicable to ensure timelines established in the CBA are met and that all employees receive at a minimum, one evaluation each year.

Policy roll-outs in NeoGov for May include the federally-required Drug and Alcohol Policy for all City drivers. HR is also reviewing the City's Drug and Alcohol policy to determine if it is a necessary addendum to the Employee Handbook, or if it can be superseded with an Employee Handbook update.

Forms Review

HR is working on streamlining all employee forms into NeoGov and removing them from the P-drive. This will ensure that staff are using current forms and consolidate all City forms in one electronic file. Currently, versions of forms exist in numerous folders and with varied content.

Workplace Safety, Injuries and OSHA Notifications

One injury was reported during the month of April. It was not OSHA-reportable.

Ongoing and Future Projects

- Updating classification and compensation data.
- Job Description review and updates.
- Updating the Employee Handbook, last adopted by City Council in 2015.

City of Bethel, Alaska

City Clerk's Office

Meetings

April 24, 2025 Special City Council Meeting
April 29, 2025 Nuisance Abatement Hearings
April 30, 2025 Nuisance Abatement Hearings
May 1, 2025 Special City Council Meeting
May 13, 2025 Regular City Council Meeting
May 27, 2025 Regular City Council Meeting

City Clerk's Office

- The City Manager sent a report to Council Identifying seven properties for Nuisance Abatement. The City Council held hearings April 29th, 30th, 2025 to determine the report's accuracy. The City Council declared five properties a nuisance and the City Clerk prepared the resolutions for each declaration. The City Attorney added the legal findings and orders for each resolution. The resolutions are being presented at the May 13, 2025 Regular City Council Meeting.
- In the process of updating the Public Request for Information policy and procedures.
- Met with the City Attorney and Fire Captain to establish a standard procedure for future requests.
- Trained the Ex-Officios for the Finance and Public Safety and Transportation Commission.
- Arranged rent-a-car for the Mayor's Walkability Institute trip.
- Attended the start of the Missing and Murdered Indigenous People Awareness March.
- Worked on automating the Alcohol Special Events Permit Process.

Task	Period Total	Year to Date Total
Passport Appointments	3	61
Burial Permits/Reservations	2	6
Notary Services	-	23
Meeting Minutes Drafted	4	14
Resolutions Drafted	6	6
Ordinances Drafted	1	3
AM/IM/Proclamation Drafted	2	12

Committee/Commission Vacancies	Regular	Alternate
Community Parks and Recreation Committee	full	full
Planning Commission	full	full
Port Commission	1	2
Public Safety and Transportation Commission	1	2
Community Action Grant Technical Review Board	2	2
Public Works Committee	3	2
Finance Committee	3	2
Ethics Board	4	1