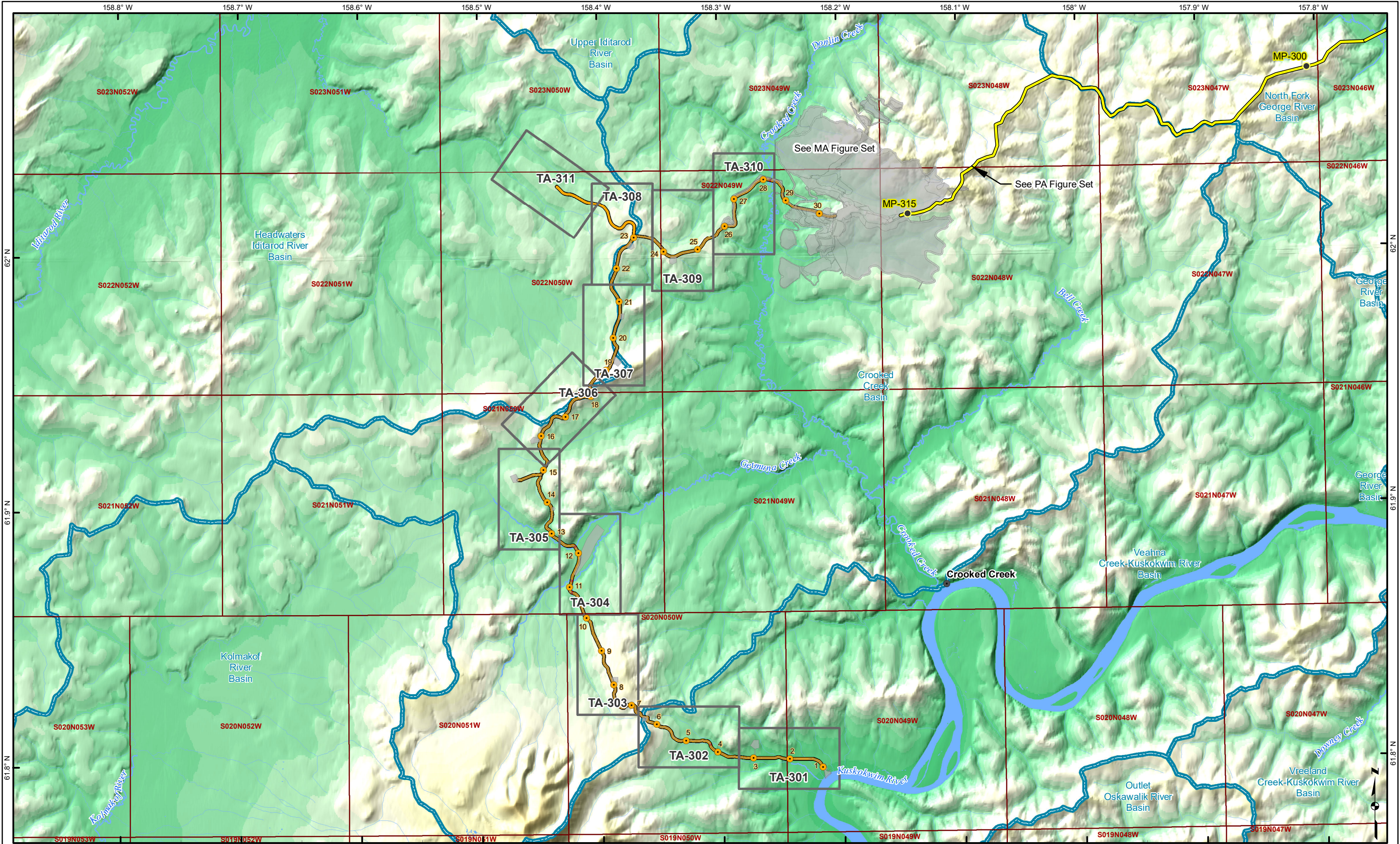


Engineering Drawings: Transportation Area

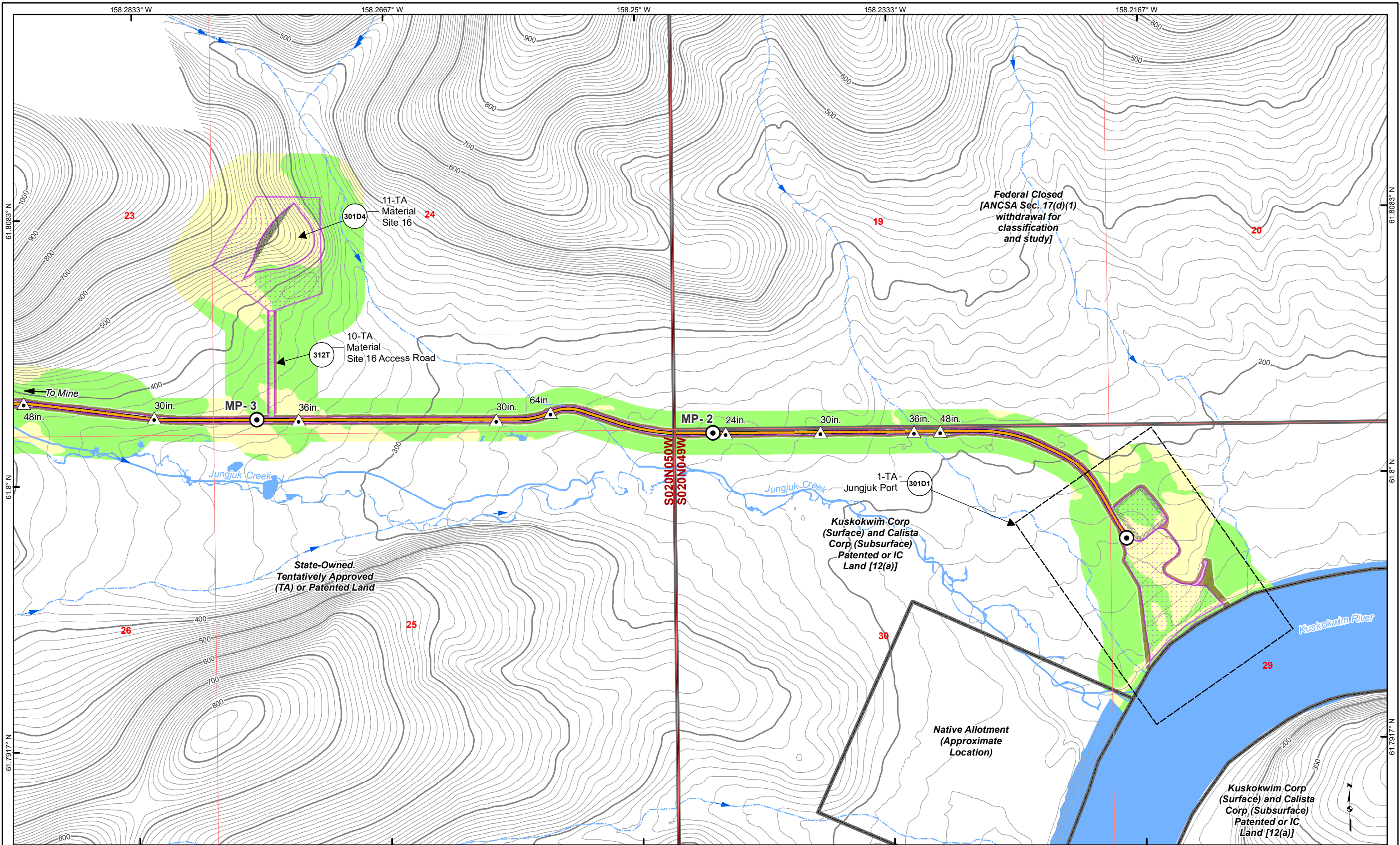


<ul style="list-style-type: none">● Pipeline Milepost (MP)● Road Milepost● Populated Place— Proposed Natural Gas Pipeline— Proposed Jungjuk Road— HUC 10 Basins (NRCS)— Proposed Mine Facility— Bridge— River/Stream— Figure Page Index	Associated Engineering Drawings	DONLIN GOLD PROJECT APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503 NAD 1983 UTM Zone 4N SCALE: 1 inch = 2 miles DATE: 12/22/2017	DRAWING TITLE: PLAN VIEW TRANSPORTATION AREA INDEX MAP	
	ACAD-Donlin Jungjuk Alignment and toes.dxf (Recon)		FIGURE NO.: TA-300G	FILE NO.: POA-1995-120
	A1-166549-80-13-006.dwg (AMEC)			

012

Miles

Basemap Source: USGS, NGA, NASA, CGIAR, N. Robinson, NCEAS, NLS, O.S, NMA, Geodatasylreisen and the GIS User Community



Culvert	Proposed Jungjuk Road	Cut/Fill Limit	Wetland Status	Uplands	10' Contour	Stream Flow Direction
Road Milepost	Powerline	Work Area/Vegetation Clearing	WOUS	Wetlands	100' Contour	Unnamed River/Stream
Bridge	Land Status					Named River/Stream

Associated Engineering Drawings

ACAD-Donlin Jungjuk Alignment and toes.dxf (Recon)

0 500 1,000 Feet

DONLIN GOLD PROJECT
APPLICANT: Donlin Gold, LLC
4720 Business Park Blvd., Suite G-25
Anchorage, Alaska 99503

NAD 1983 UTM Zone 4N

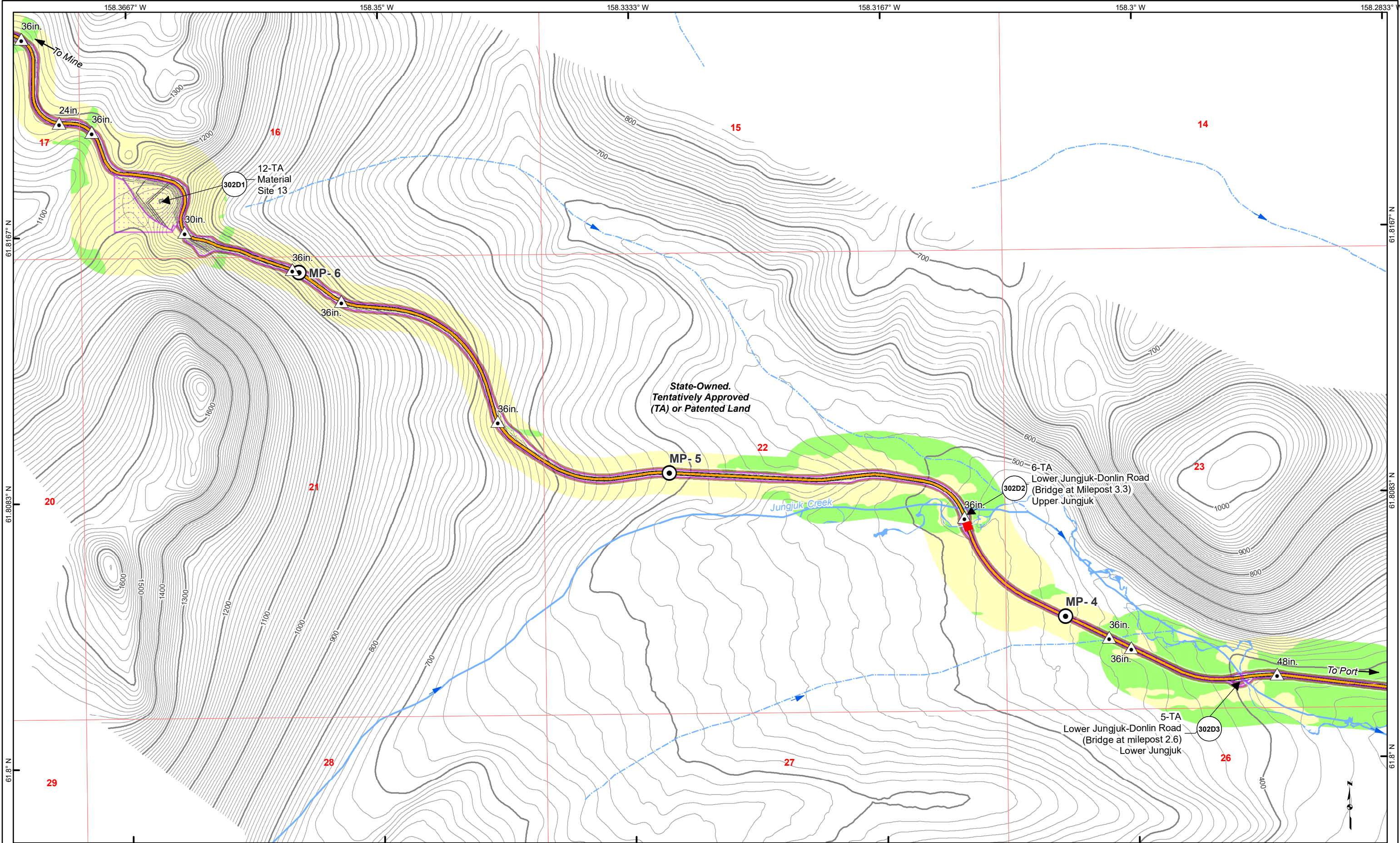
SCALE: 1 inch = 1,000 feet

DATE: 12/22/2017

DRAWING TITLE: **PLAN VIEW ACCESS ROAD WETLANDS MAP**

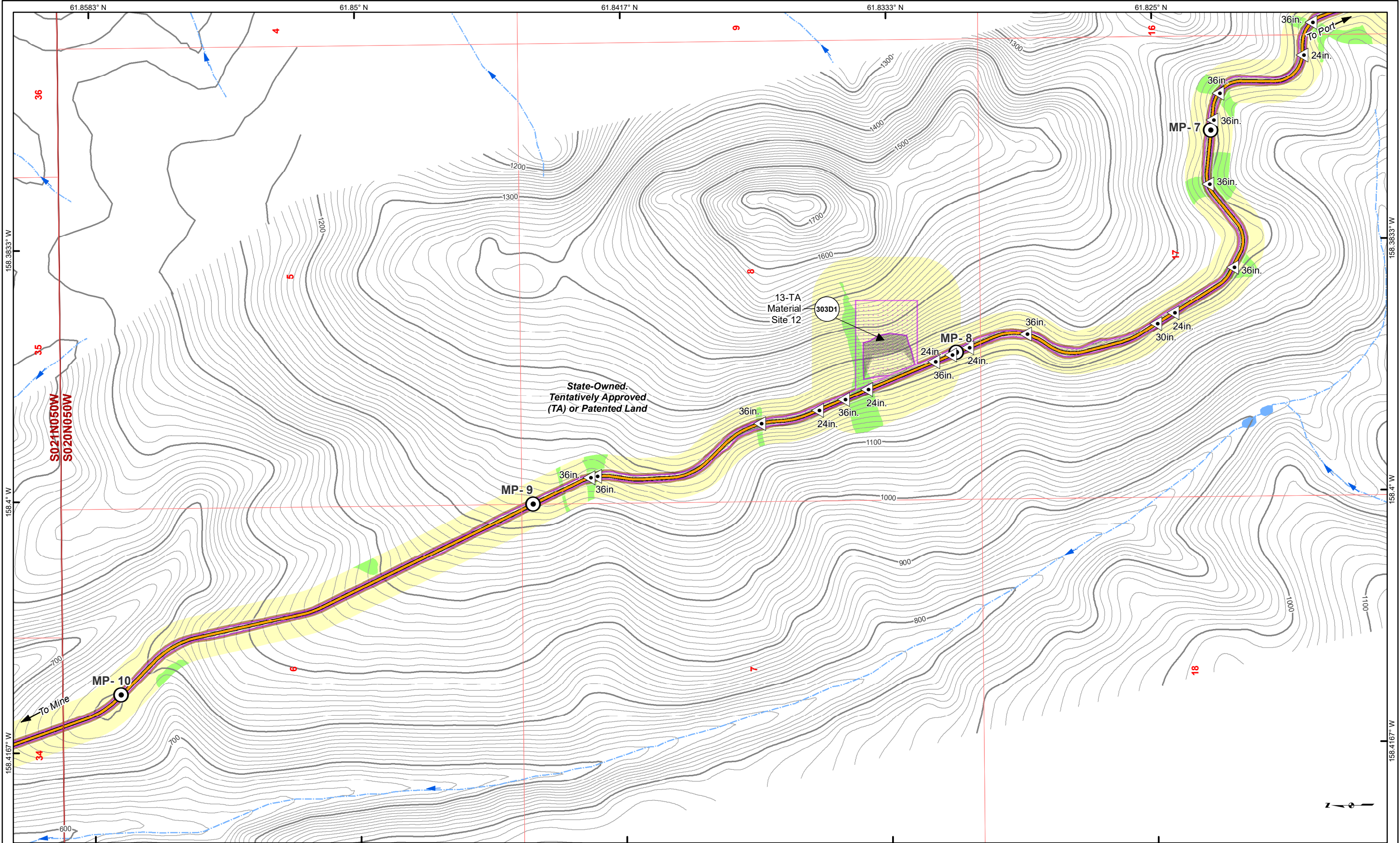
FIGURE NO. **TA-301A**

FILE NO. **POA-1995-120**



Culvert	Proposed Jungjuk Road	Cut/Fill Limit	Wetland Status	Uplands	10' Contour	Stream Flow Direction
Road Milepost	Powerline	Work Area/Vegetation Clearing	WOUS	Wetlands	100' Contour	Unnamed River/Stream
Bridge	Land Status		Named River/Stream			

Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE: PLAN VIEW ACCESS ROAD WETLANDS MAP	
ACAD-Donlin Jungjuk Alignment and toes.dxf (Recon)		APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		FIGURE NO. TA-302A	
0 500 1,000 Feet		NAD 1983 UTM Zone 4N		FILE NO. POA-1995-120	
		SCALE: 1 inch = 1,000 feet		DATE: 12/22/2017	



<div><div><div><div><div><div></div></div><div>Culvert</div></div><div><div><div></div></div><div>Road Milepost</div></div><div><div><div></div></div><div>Bridge</div></div></div><div><div><div></div></div><div>Proposed Jungjuk Road</div></div><div><div><div></div></div><div>Cut/Fill Limit</div></div><div><div><div></div></div><div>Wetland Status</div></div><div><div><div></div></div><div>Uplands</div></div><div><div><div></div></div><div>10' Contour</div></div><div><div><div></div></div><div>Stream Flow Direction</div></div></div><div><div><div></div></div><div>Powerline</div></div><div><div><div></div></div><div>Work Area/Vegetation Clearing</div></div><div><div><div></div></div><div>WOUS</div></div><div><div><div></div></div><div>Wetlands</div></div><div><div><div></div></div><div>100' Contour</div></div><div><div><div></div></div><div>Unnamed River/Stream</div></div></div> <div><div><div></div></div><div>Land Status</div></div> <div><div><div></div></div><div>Named River/Stream</div></div>
--

Associated Engineering Drawings

ACAD-Donlin Jungjuk Alignment and toes.dxf (Recon)

0 500 1,000 Feet

DONLIN GOLD PROJECT

APPLICANT: Donlin Gold, LLC

4720 Business Park Blvd., Suite G-25

Anchorage, Alaska 99503

NAD 1983 UTM Zone 4N

SCALE: 1 inch = 1,000 feet

DATE: 12/22/2017

DRAWING TITLE:

PLAN VIEW

ACCESS ROAD

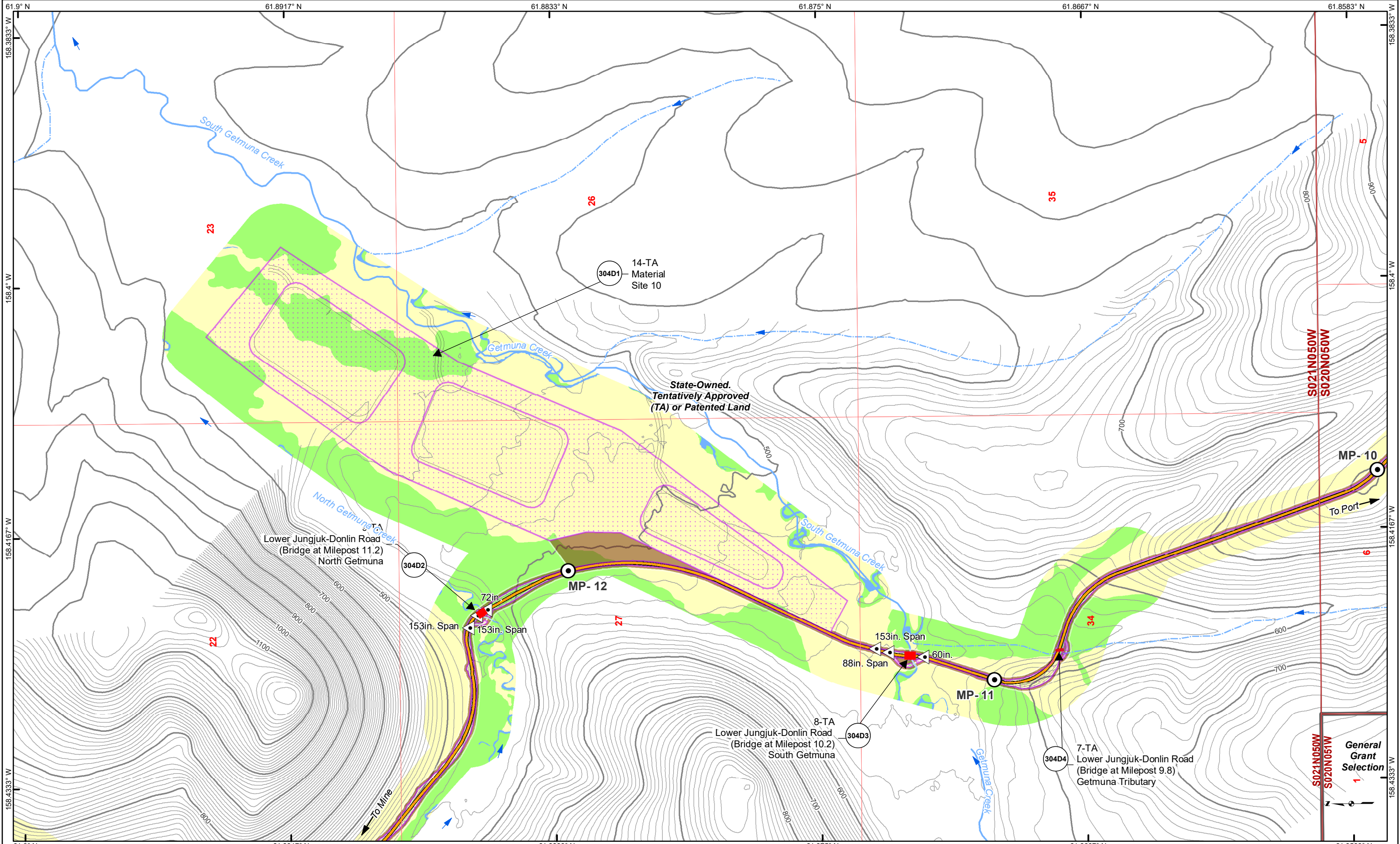
WETLANDS MAP

FIGURE NO.

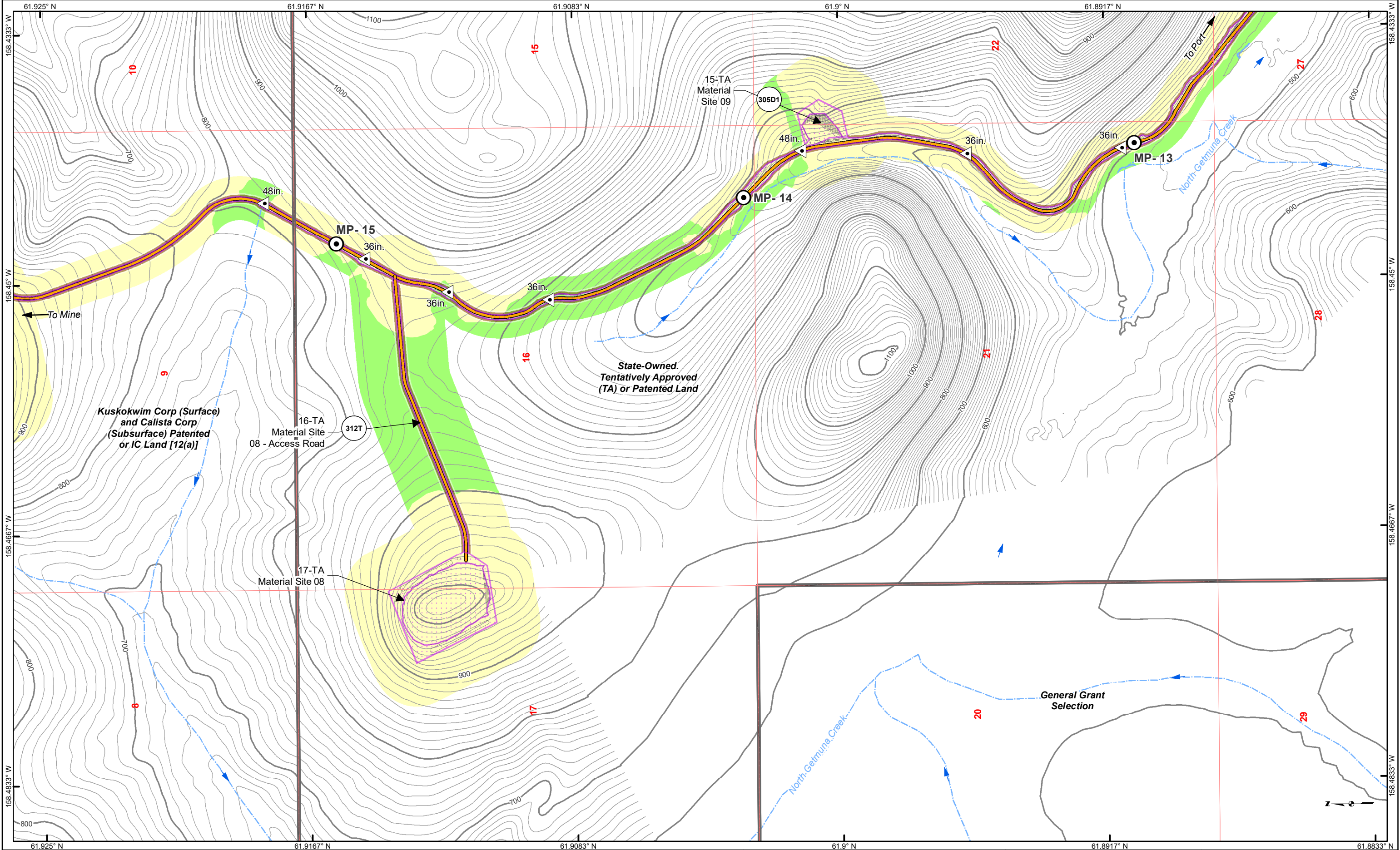
TA-303A

FILE NO.

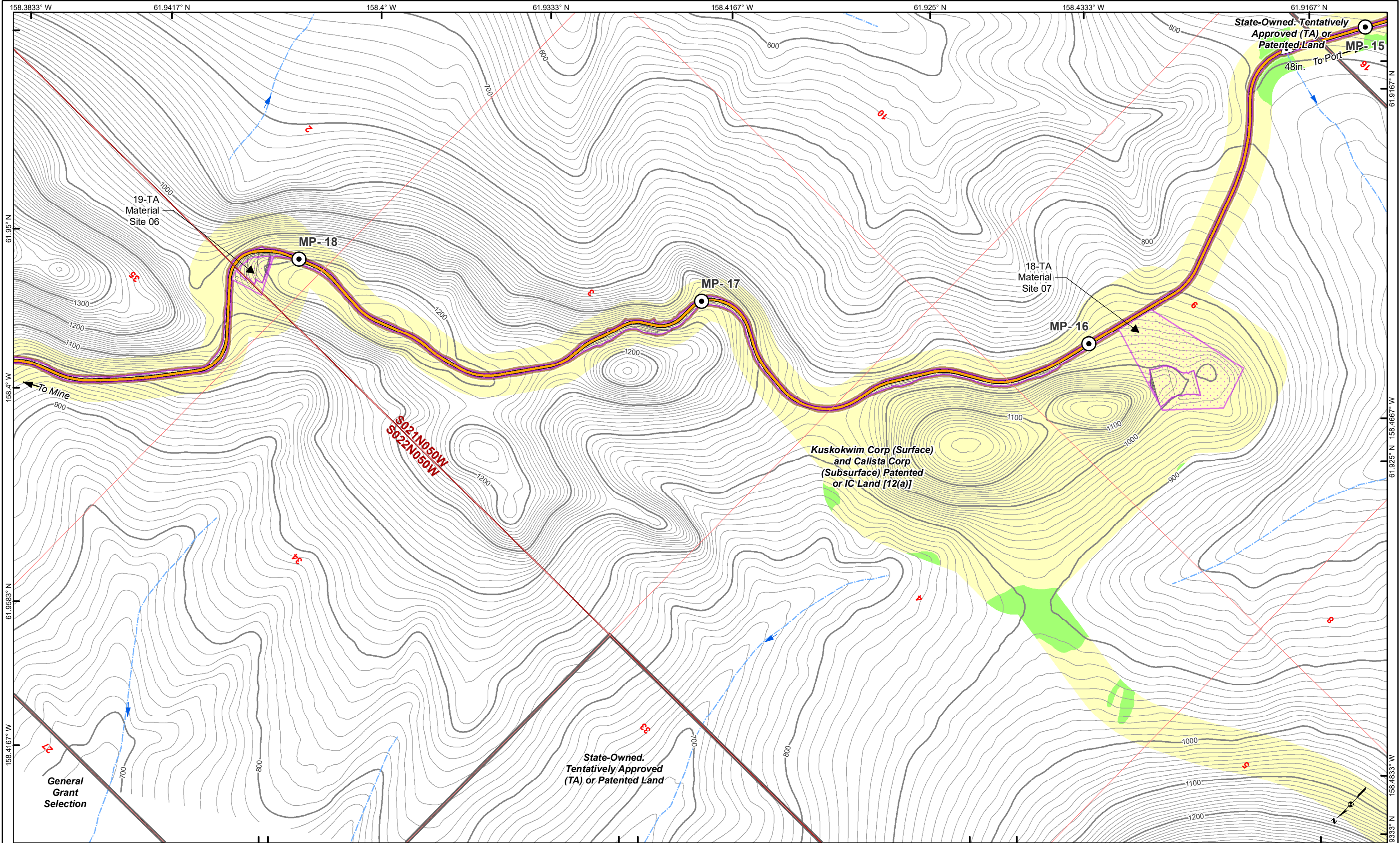
POA-1995-120



<p> Culvert</p> <p> Road Milepost</p> <p> Bridge</p>	<p> Proposed Jungjuk Road</p> <p> Powerline</p> <p> Land Status</p>	<p> Cut/Fill Limit</p> <p> Work Area/Vegetation Clearing</p>	<p>Wetland Status</p> <p> Wetlands</p> <p> WOUS</p>	<p>Uplands</p> <p> Wetlands</p> <p> WOUS</p>	<p> 10' Contour</p> <p> 100' Contour</p> <p> Stream Flow Direction</p> <p> Unnamed River/Stream</p> <p> Named River/Stream</p>	<p>Associated Engineering Drawings</p> <p>ACAD-Donlin Jungjuk Alignment and toes.dxf (Recon)</p> <p>0 500 1,000 Feet</p>	<p>DONLIN GOLD PROJECT</p> <p>APPLICANT: Donlin Gold, LLC</p> <p>4720 Business Park Blvd., Suite G-25</p> <p>Anchorage, Alaska 99503</p> <p>NAD 1983 UTM Zone 4N</p> <p>SCALE: 1 inch = 1,000 feet</p> <p>DATE: 12/22/2017</p>	<p>DRAWING TITLE: PLAN VIEW ACCESS ROAD WETLANDS MAP</p> <p>FIGURE NO. TA-304A</p> <p>FILE NO. POA-1995-120</p>
--	---	--	---	--	--	---	---	--

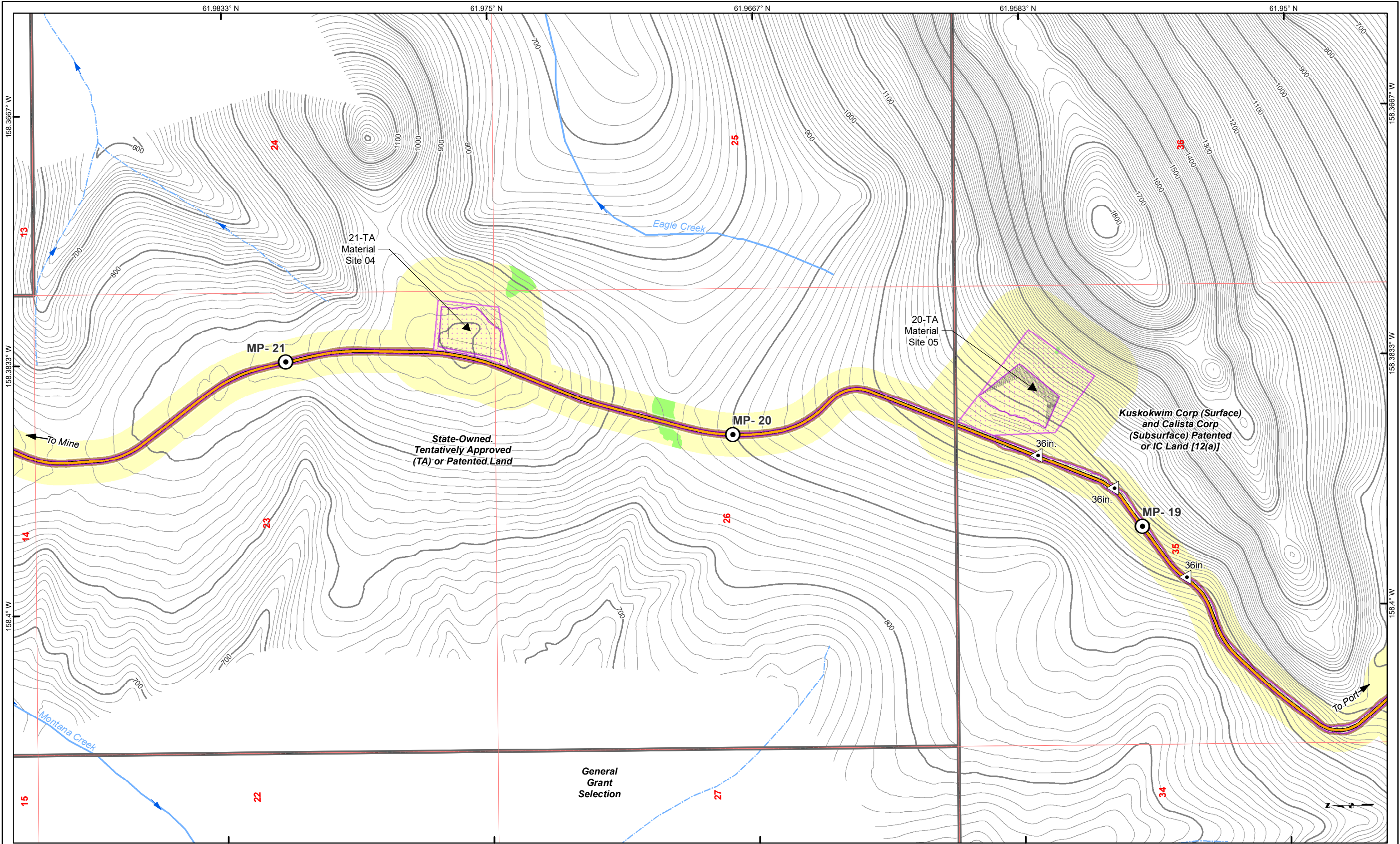


<div><div><div><div><div><div></div></div><div>Culvert</div></div><div><div><div></div></div><div>Road Milepost</div></div><div><div><div></div></div><div>Bridge</div></div></div><div><div><div><div><div></div></div><div>Proposed Jungjuk Road</div></div><div><div><div></div></div><div>-P- Powerline</div></div><div><div><div></div></div><div>Land Status</div></div></div><div><div><div><div><div></div></div><div>Cut/Fill Limit</div></div><div><div><div></div></div><div>Work Area/Vegetation Clearing</div></div></div><div><div><div><div><div></div></div><div>Wetland Status</div></div><div><div><div></div></div><div>WOUS</div></div></div><div><div><div><div><div></div></div><div>Uplands</div></div><div><div><div></div></div><div>Wetlands</div></div></div><div><div><div><div><div></div></div><div>10' Contour</div></div><div><div><div></div></div><div>100' Contour</div></div></div><div><div><div><div><div></div></div><div>Stream Flow Direction</div></div><div><div><div></div></div><div>Unnamed River/Stream</div></div></div><div><div><div><div><div></div></div><div>Named River/Stream</div></div></div></div></div><div><div><div><div><div></div></div><div>Associated Engineering Drawings</div></div><div><div><div></div></div><div>ACAD-Donlin Jungjuk Alignment and toes.dxf (Recon)</div></div></div><div><div><div><div><div></div></div><div>0</div></div><div><div><div></div></div><div>500</div></div><div><div><div></div></div><div>1,000</div></div></div><div><div></div></div><div>Feet</div></div></div><div><div><div><div><div></div></div><div>DONLIN GOLD PROJECT</div></div><div><div><div></div></div><div>APPLICANT: Donlin Gold, LLC</div></div><div><div><div></div></div><div>4720 Business Park Blvd., Suite G-25</div></div><div><div><div></div></div><div>Anchorage, Alaska 99503</div></div></div><div><div><div><div><div></div></div><div>NAD 1983 UTM Zone 4N</div></div><div><div><div></div></div><div>SCALE: 1 inch = 1,000 feet</div></div><div><div><div></div></div><div>DATE: 12/22/2017</div></div></div><div><div><div><div><div></div></div><div>DRAWING TITLE:</div></div><div><div><div></div></div><div>PLAN VIEW</div></div><div><div><div></div></div><div>ACCESS ROAD</div></div><div><div><div></div></div><div>WETLANDS MAP</div></div></div><div><div><div><div><div></div></div><div>FIGURE NO.</div></div><div><div><div></div></div><div>TA-305A</div></div></div><div><div><div><div><div></div></div><div>FILE NO.</div></div><div><div><div></div></div><div>POA-1995-120</div></div></div></div></div></div><div data-bbox="1320 1977 1787 1999" data-label="Page-Footer"><p>PRELIMINARY PLAN NOT FOR CONSTRUCTION</p></div></div></div></div></div></div></div></div></div></div>

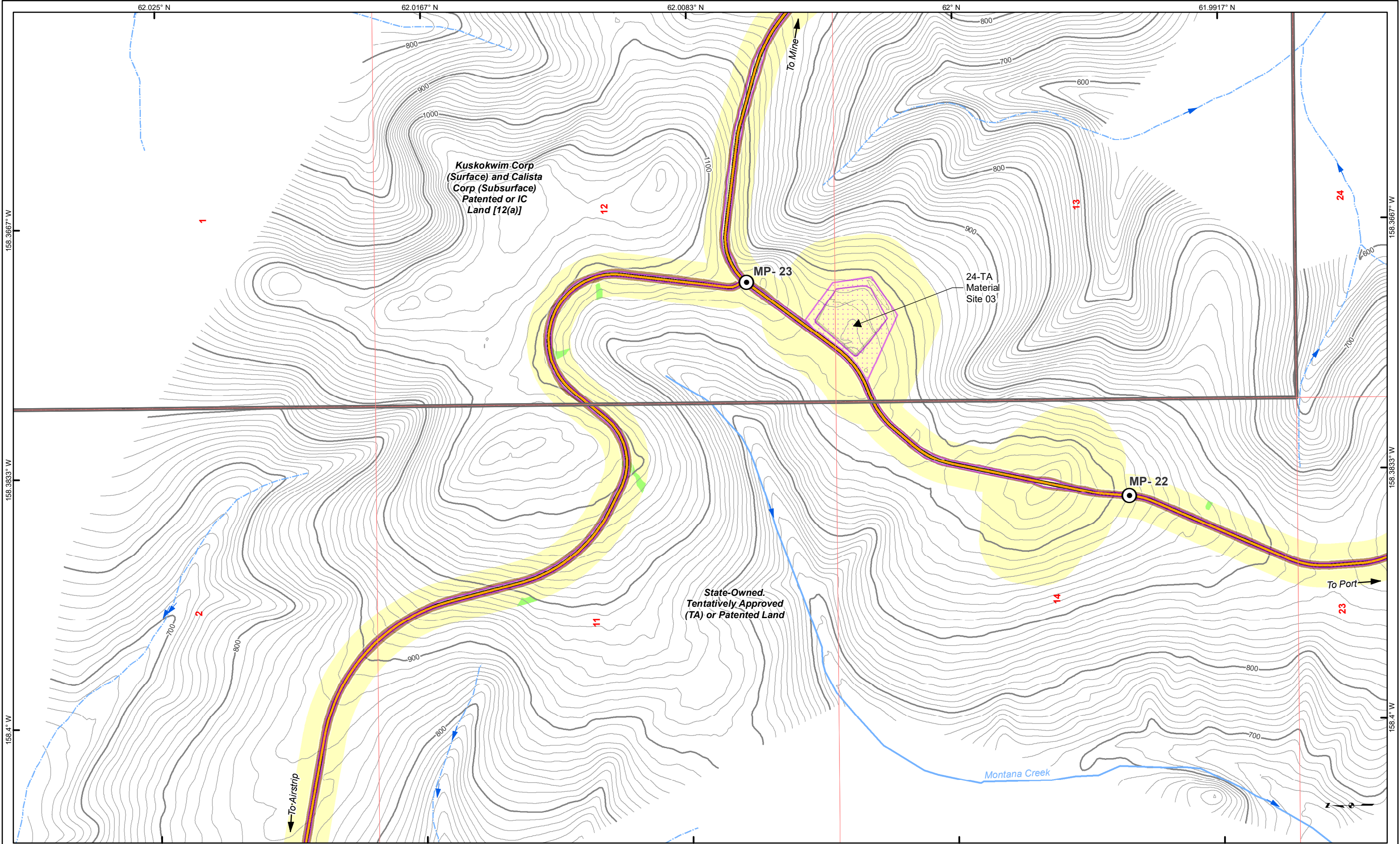


Culvert	Proposed Jungjuk Road	Cut/Fill Limit	Wetland Status	Uplands	10' Contour	Stream Flow Direction
Road Milepost	Powerline	Work Area/Vegetation Clearing	WOUS	Wetlands	100' Contour	Unnamed River/Stream
Bridge	Land Status					Named River/Stream

Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE: PLAN VIEW ACCESS ROAD WETLANDS MAP	
ACAD-Donlin Jungjuk Alignment and toes.dxf (Recon)		APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		FIGURE NO. TA-306A	
0 500 1,000 Feet		NAD 1983 UTM Zone 4N		FILE NO. POA-1995-120	
		SCALE: 1 inch = 1,000 feet		DATE: 12/22/2017	

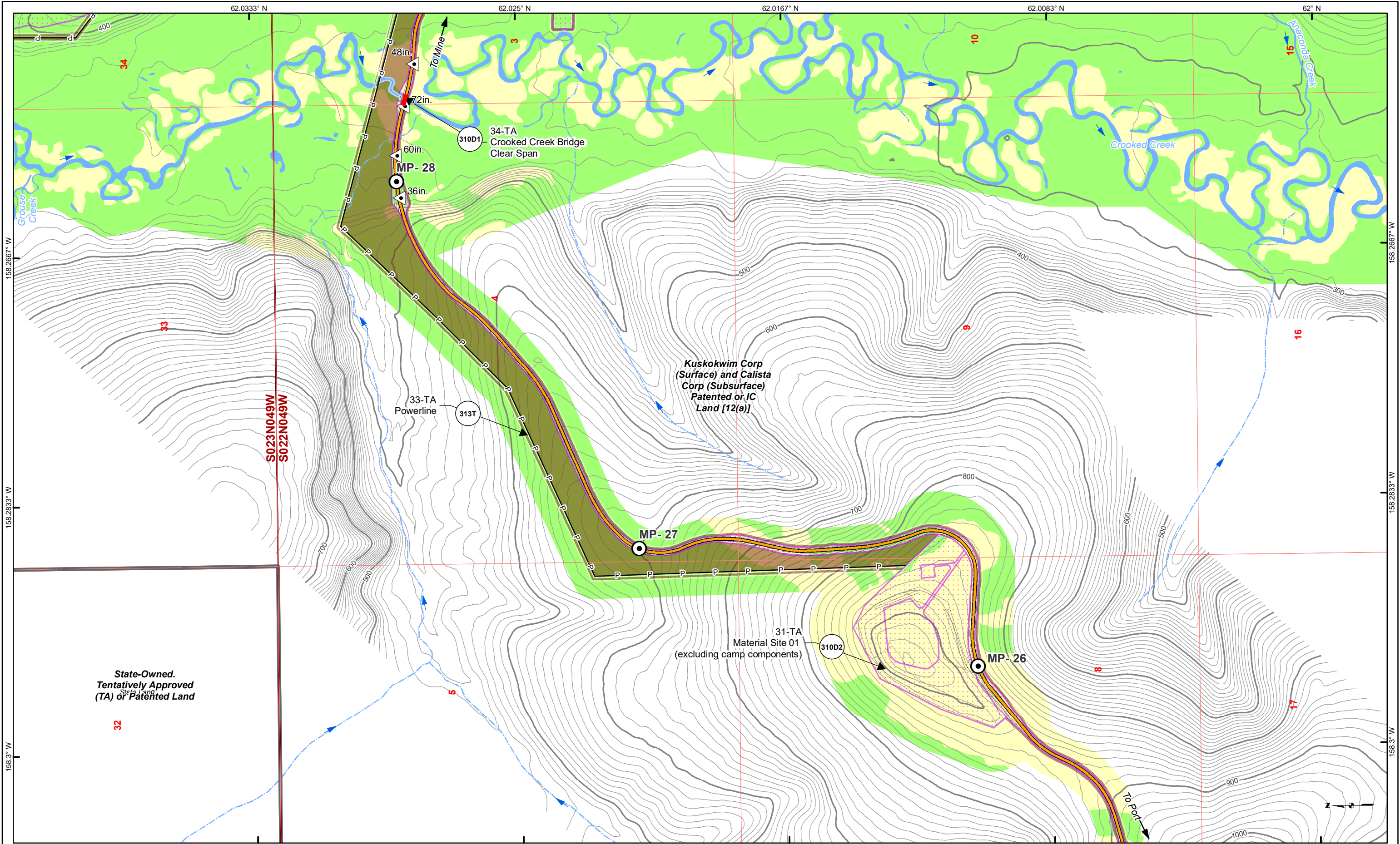


Culvert Road Milepost Bridge	Proposed Jungjuk Road Powerline Land Status	Cut/Fill Limit Work Area/Vegetation Clearing	Wetland Status WOUS Wetlands	Uplands 10' Contour 100' Contour	Stream Flow Direction Unnamed River/Stream Named River/Stream	Associated Engineering Drawings ACAD-Donlin Jungjuk Alignment and toes.dxf (Recon)	DONLIN GOLD PROJECT APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503 NAD 1983 UTM Zone 4N SCALE: 1 inch = 1,000 feet DATE: 12/22/2017	DRAWING TITLE: PLAN VIEW ACCESS ROAD WETLANDS MAP	FIGURE NO. TA-307A	FILE NO. POA-1995-120

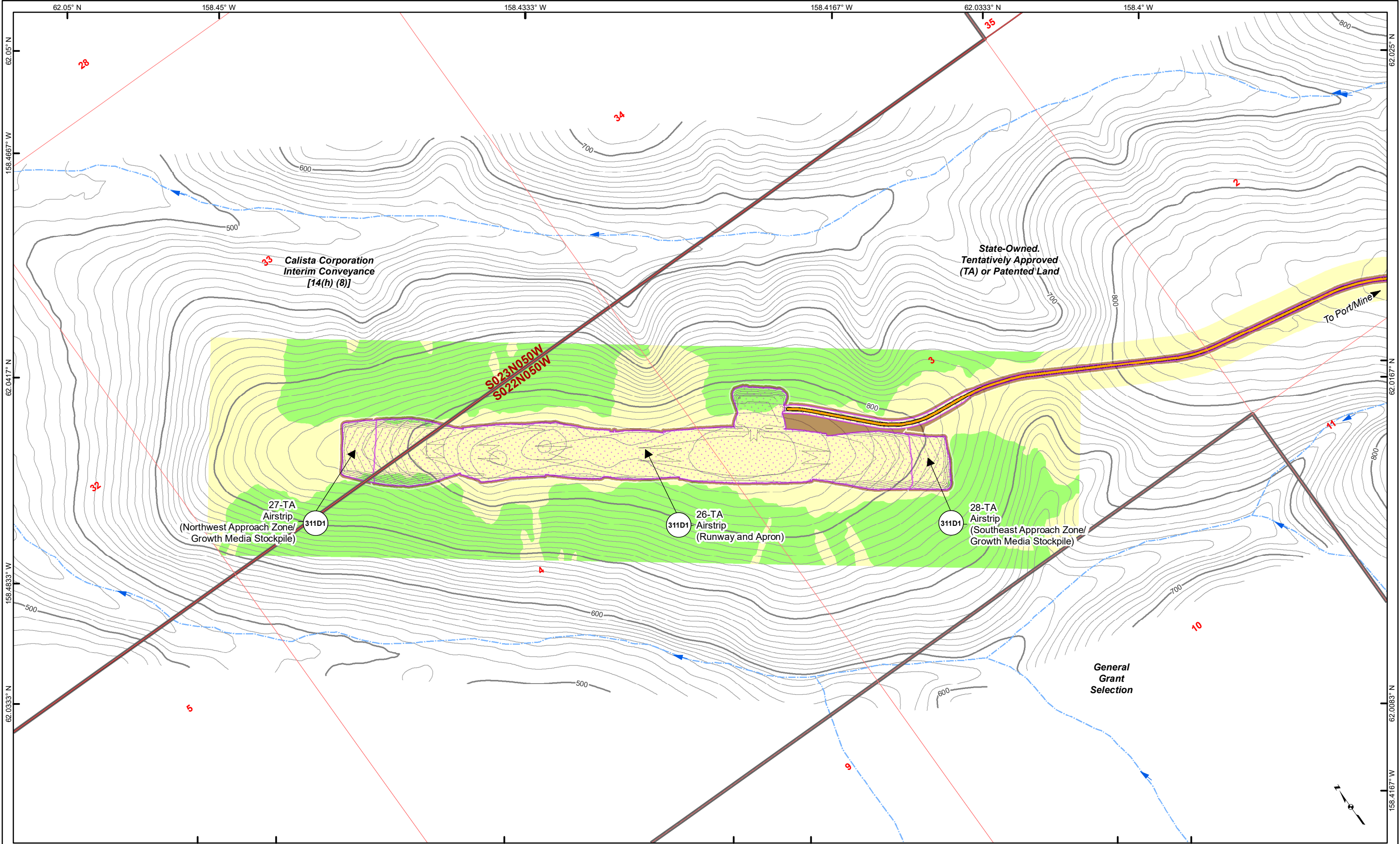


Culvert	Proposed Jungjuk Road	Cut/Fill Limit	Wetland Status	Uplands	10' Contour	Stream Flow Direction
Road Milepost	Powerline	Work Area/Vegetation Clearing	WOUS	Wetlands	100' Contour	Unnamed River/Stream
Bridge	Land Status					Named River/Stream

Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE: PLAN VIEW ACCESS ROAD WETLANDS MAP	
ACAD-Donlin Jungjuk Alignment and toes.dxf (Recon)		APPLICANT: Donlin Gold, LLC		FIGURE NO. TA-308A	
A1-166549-80-13-006.dwg (AMEC)		4720 Business Park Blvd., Suite G-25		FILE NO. POA-1995-120	
		Anchorage, Alaska 99503			
		NAD 1983 UTM Zone 4N			
0 500 1,000 Feet		SCALE: 1 inch = 1,000 feet		DATE: 12/22/2017	

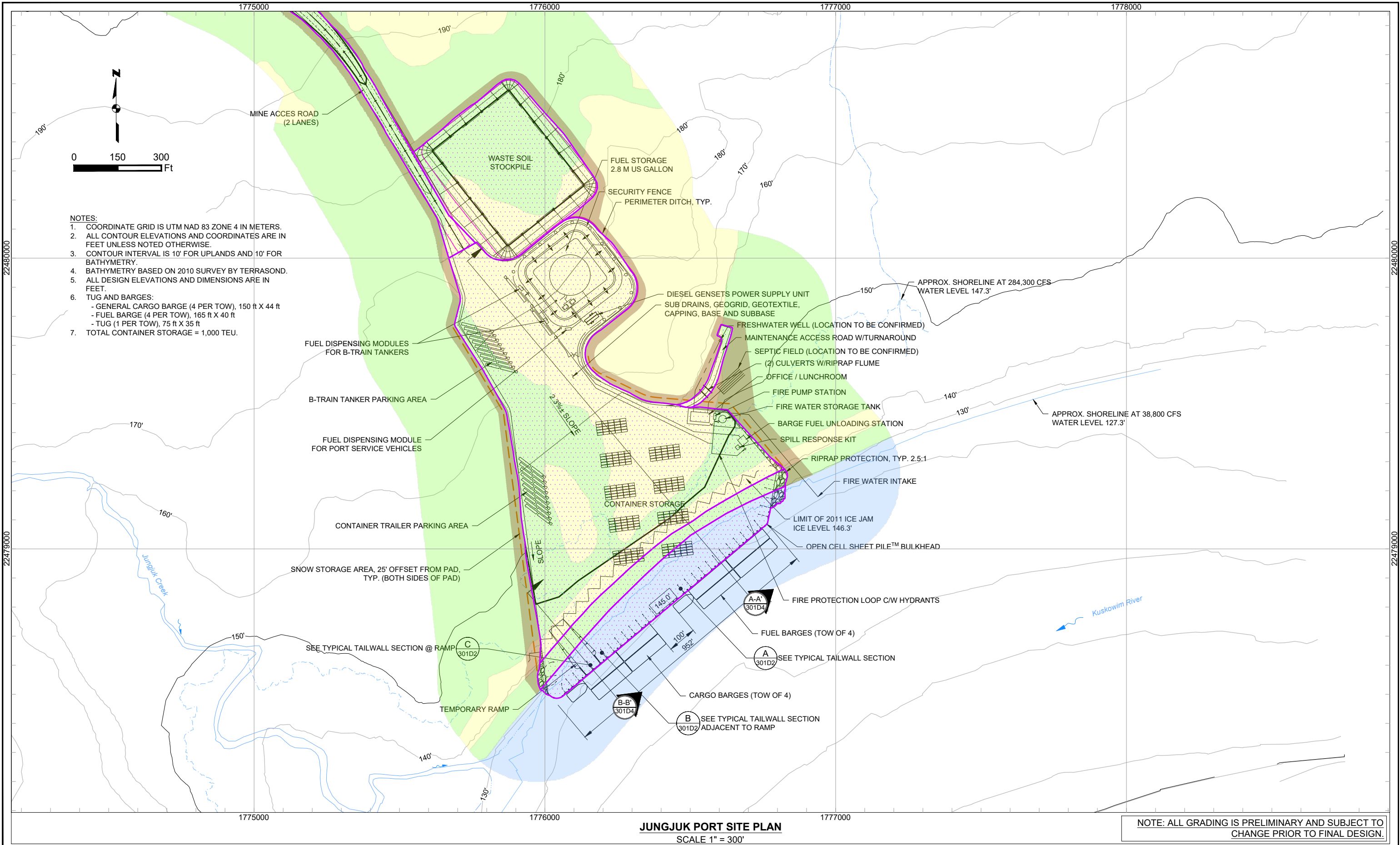


<p> Culvert</p> <p> Road Milepost</p> <p> Bridge</p>	<p> Proposed Jungjuk Road</p> <p> Powerline</p> <p> Land Status</p>	<p>Wetland Status</p> <p> WOUS</p> <p> Wetlands</p>	<p> Uplands</p> <p> Wetlands</p>	<p> 10' Contour</p> <p> 100' Contour</p>	<p> Stream Flow Direction</p> <p> Unnamed River/Stream</p> <p> Named River/Stream</p>	<p>Associated Engineering Drawings</p> <p>ACAD-Donlin Jungjuk Alignment and toes.dxf (Recon)</p> <p>0 500 1,000 Feet</p>	<p>DONLIN GOLD PROJECT</p> <p>APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503</p> <p>NAD 1983 UTM Zone 4N</p> <p>SCALE: 1 inch = 1,000 feet</p> <p>DATE: 12/22/2017</p>	<p>DRAWING TITLE: PLAN VIEW ACCESS ROAD WETLANDS MAP</p> <p>FIGURE NO. TA-310A</p> <p>FILE NO. POA-1995-120</p>
--	---	--	----------------------------------	--	---	---	---	--














Culvert	Proposed Jungjuk Road	Cut/Fill Limit	Wetland Status	Uplands	10' Contour	Stream Flow Direction
Road Milepost	Powerline	Work Area/Vegetation Clearing	WOUS	Wetlands	100' Contour	Unnamed River/Stream
Bridge	Land Status					Named River/Stream

Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE: PLAN VIEW	
A1-166549-80-13-006.dwg (AMEC)		APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		AIRSTRIIP & ACCESS ROAD	
		NAD 1983 UTM Zone 4N		WETLANDS MAP	
		SCALE: 1 inch = 1,000 feet		FIGURE NO. TA-311A	
		DATE: 12/22/2017		FILE NO. POA-1995-120	



JUNGJUK PORT SITE PLAN
SCALE 1" = 300'

NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO
CHANGE PRIOR TO FINAL DESIGN.

PLAN LEGEND:			
	Uplands		Existing 10' Contours
	Wetlands		Existing 50' Contours
	Waters of U.S.		Proposed 10' Contours
			Proposed 50' Contours
			Work Area/Vegetation Clearing
			Cut/Fill Limit
			Unnamed River/Stream
			Named River/Stream

Associated Engineering Drawings

01 Site Plan.dwg (PND) JUL 2015

DONLIN GOLD PROJECT

APPLICANT: Donlin Gold, LLC
4720 Business Park Blvd., Suite G-25
Anchorage, Alaska 99503

NAD 1983 UTM Zone 4N (US Survey Feet)

SCALE: AS SHOWN

DATE: 12/22/2017

DRAWING TITLE:

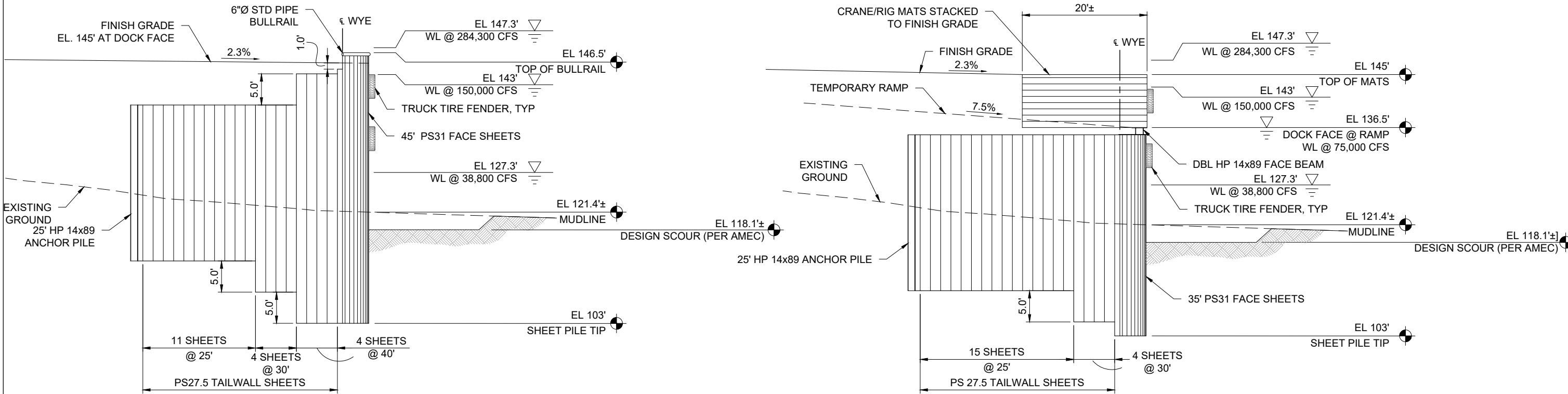
JUNGJUK PORT
SITE PLAN

FIGURE NO.

TA-301D1

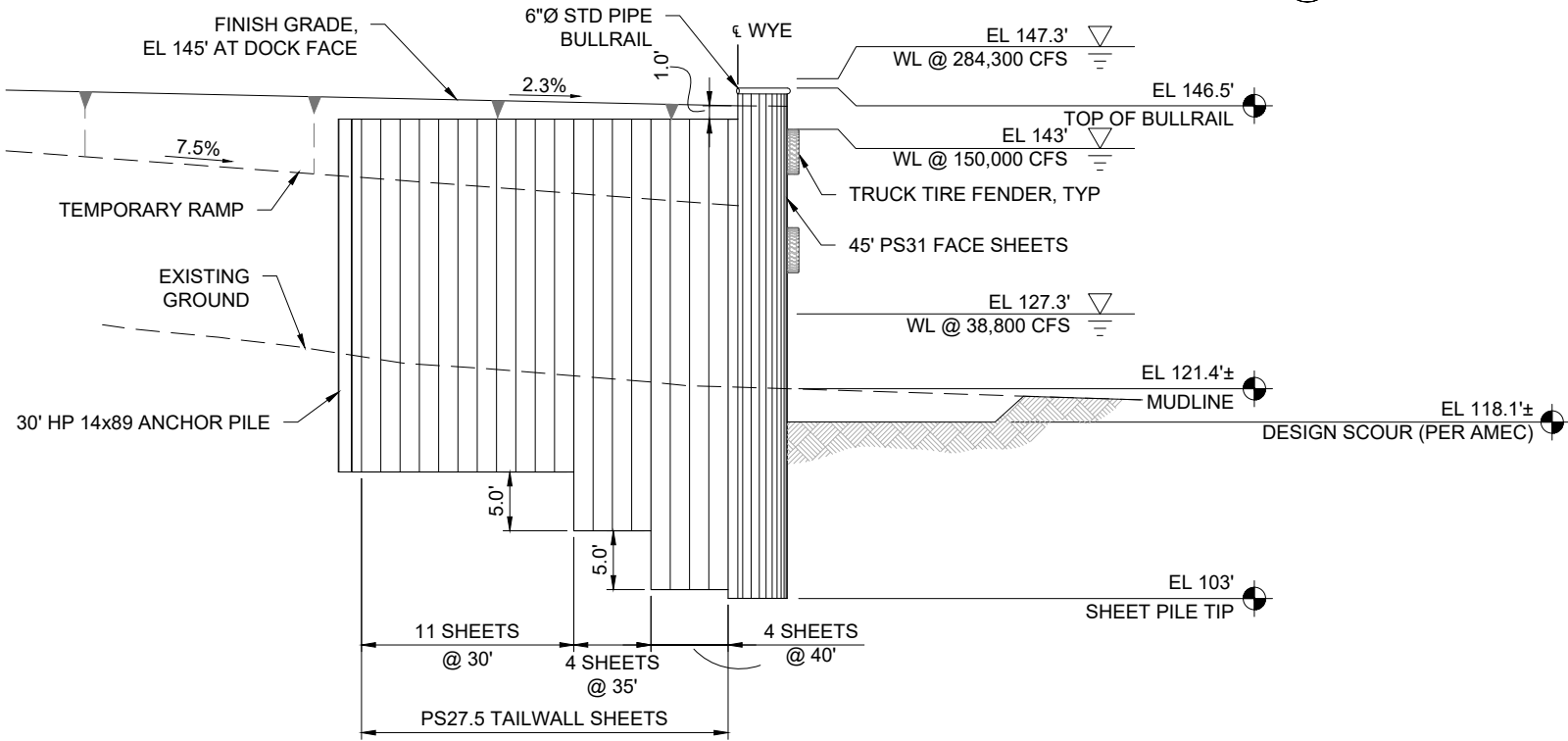
FILE NO.

POA-1995-120



A TYPICAL TAILWALL SECTION
301D2 N.T.S.

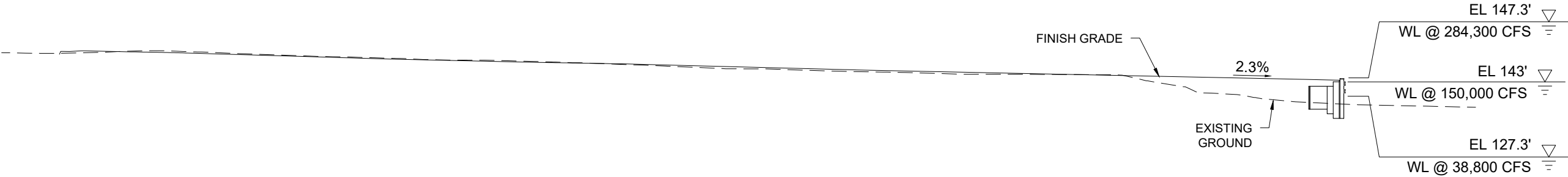
C TAILWALL SECTION @ RAMP
301D2 N.T.S.



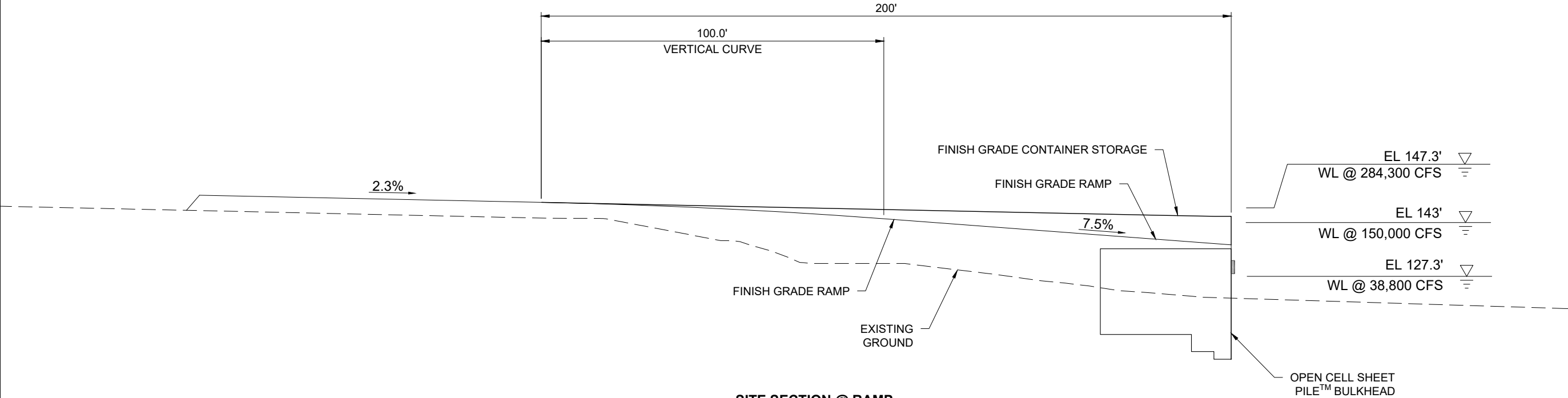
B TAILWALL SECTION ADJACENT TO RAMP
301D2 N.T.S.

NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO
CHANGE PRIOR TO FINAL DESIGN.

	Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE:	
	03 Tailwall Sections.dwg (PND) JUL 2015		APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		JUNGJUK PORT TAILWALL SECTIONS	
			NAD 1983 UTM Zone 4N (US Survey Feet)		FIGURE NO.	FILE NO.
			SCALE: AS SHOWN	DATE: 12/22/2017	TA-301D2	POA-1995-120



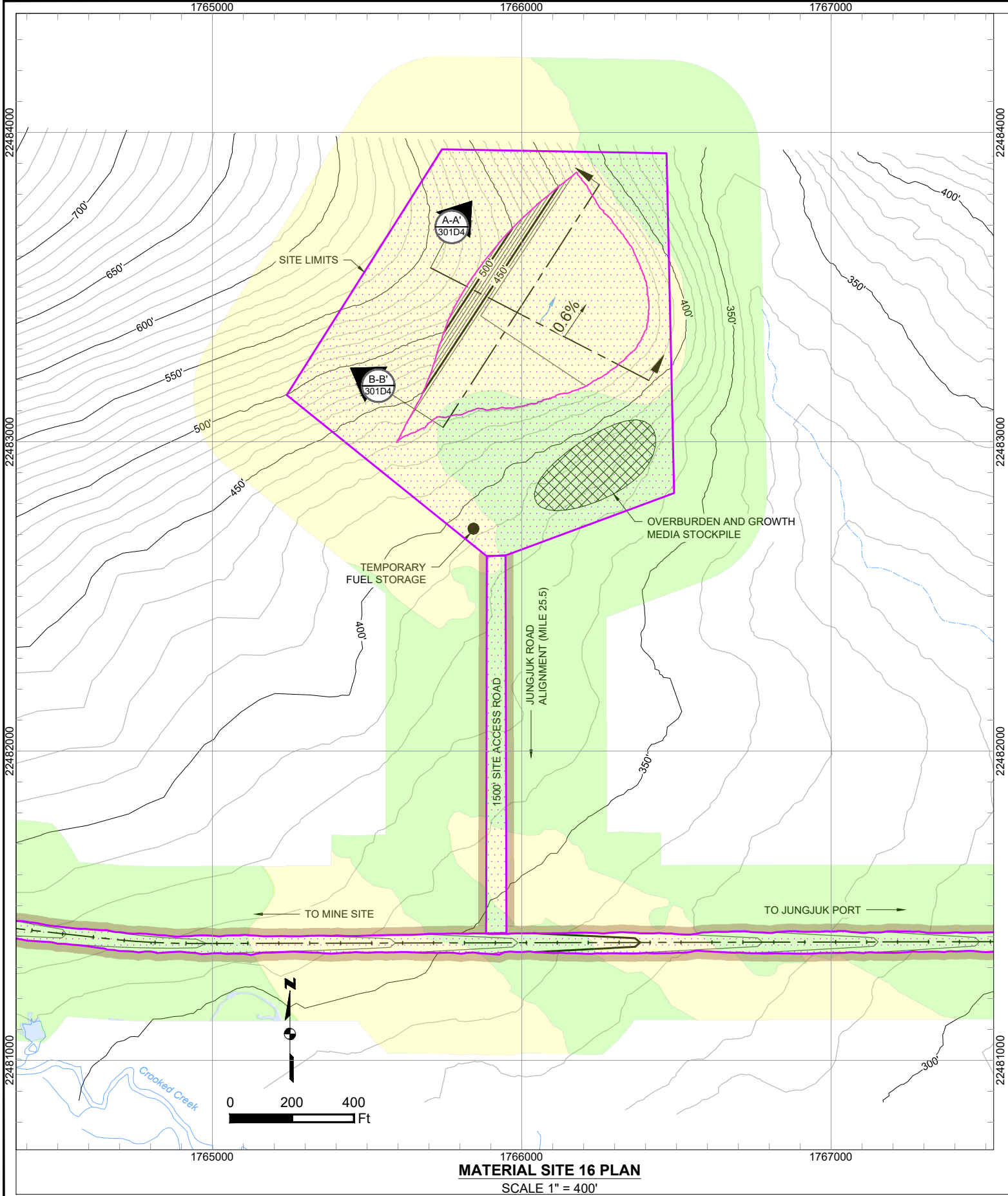
A-A
301D3
SITE SECTION
N.T.S.



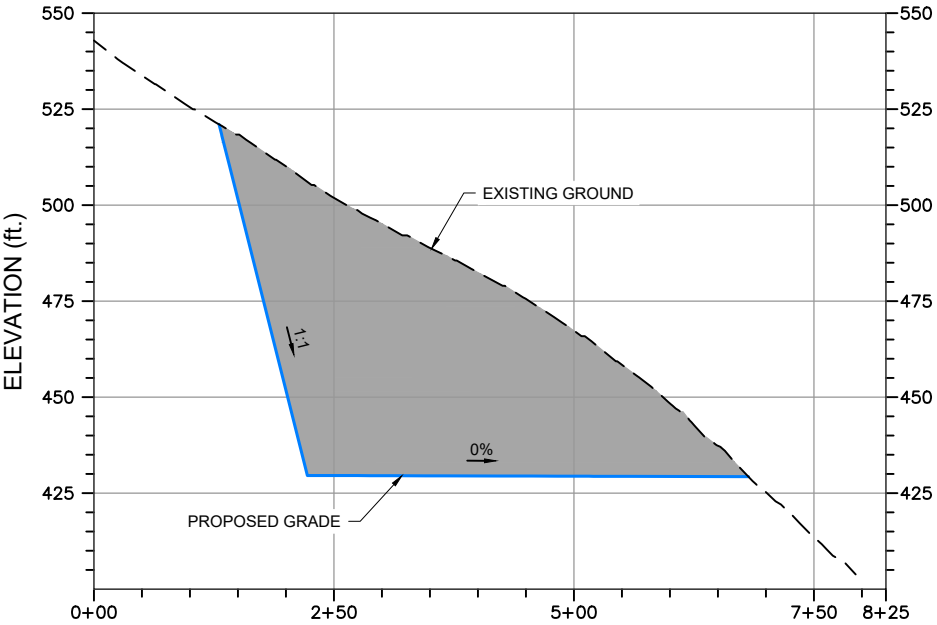
B-B
301D3
SITE SECTION @ RAMP
N.T.S.

NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO
CHANGE PRIOR TO FINAL DESIGN.

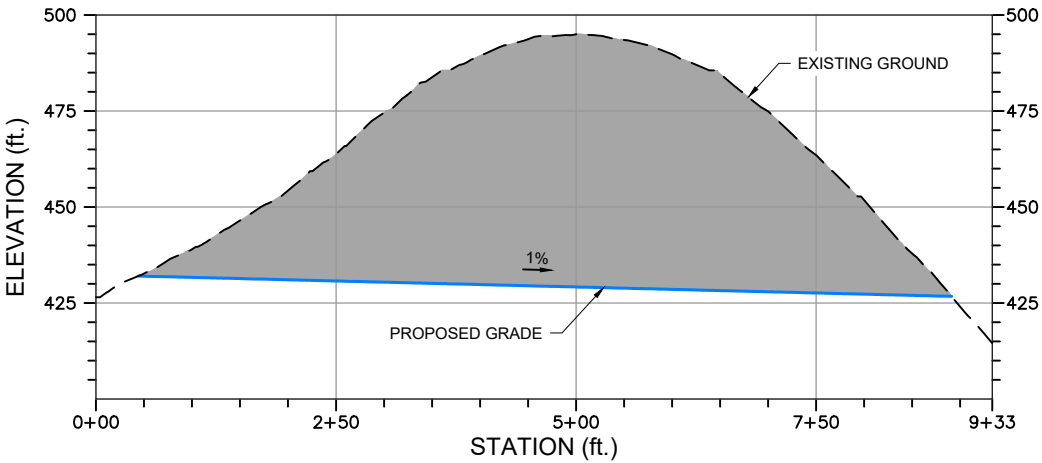
	Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE:	
	04 Site Sections.dwg (PND) JUL 2015		APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		JUNGJUK PORT SITE SECTIONS	
			NAD 1983 UTM Zone 4N (US Survey Feet)		FIGURE NO.	FILE NO.
			SCALE: AS SHOWN	DATE: 12/22/2017	TA-301D3	POA-1995-120



MATERIAL SITE 16 PLAN
SCALE 1" = 400'



A-A'
301D4
MATERIAL SITE 16 SECTION A-A'
HORIZONTAL SCALE 1" = 200'
VERTICAL SCALE 1" = 40'



B-B'
301D4
MATERIAL SITE 16 SECTION B-B'
HORIZONTAL SCALE 1" = 200'
VERTICAL SCALE 1" = 40'

NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO
CHANGE PRIOR TO FINAL DESIGN.

PLAN LEGEND:

- | | | |
|----------------|-----------------------|---------------------------------------|
| Uplands | Existing 10' Contours | Work Area/Vegetation Clearing |
| Wetlands | Existing 50' Contours | Cut/Fill Limit |
| Waters of U.S. | Proposed 10' Contours | Unnamed River/Stream |
| | Proposed 50' Contours | Named River/Stream |
| | | Proposed Drainage Direction |
| | | Overburden And Growth Media Stockpile |
| | | Temporary Fuel Storage |

SECTION VIEW LEGEND:

- | |
|-----------------|
| Fill Area |
| Cut Area |
| Existing Ground |
| Proposed Grade |

Associated Engineering Drawings

Donlin_Jungjuk_MaterialSites_Rev3_150202.dwg (RECON) FEB 2015

DONLIN GOLD PROJECT

APPLICANT: Donlin Gold, LLC
4720 Business Park Blvd., Suite G-25
Anchorage, Alaska 99503

NAD 1983 UTM Zone 4N (US Survey Feet)

SCALE: AS SHOWN

DATE: 12/22/2017

DRAWING TITLE:

MATERIAL SITE 16
LAYOUT AND SECTIONS

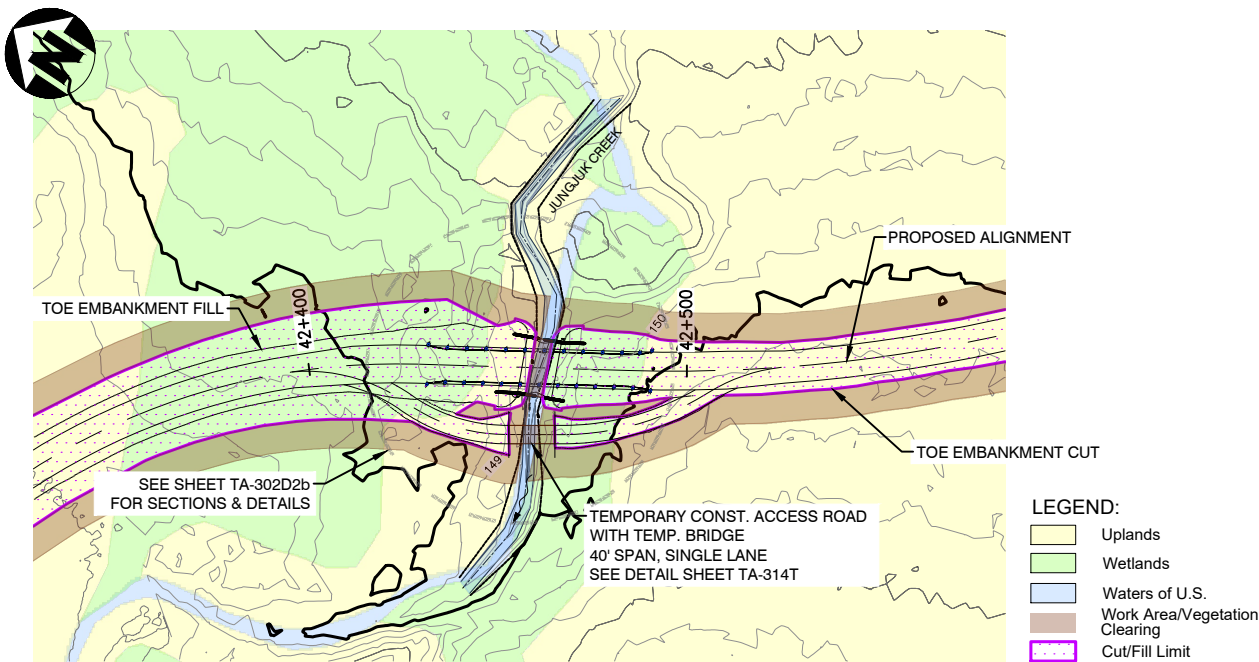
FIGURE NO.

TA-301D4

FILE NO.

POA-1995-120

JUNGJUK CREEK, UPPER CROSSING BRIDGE

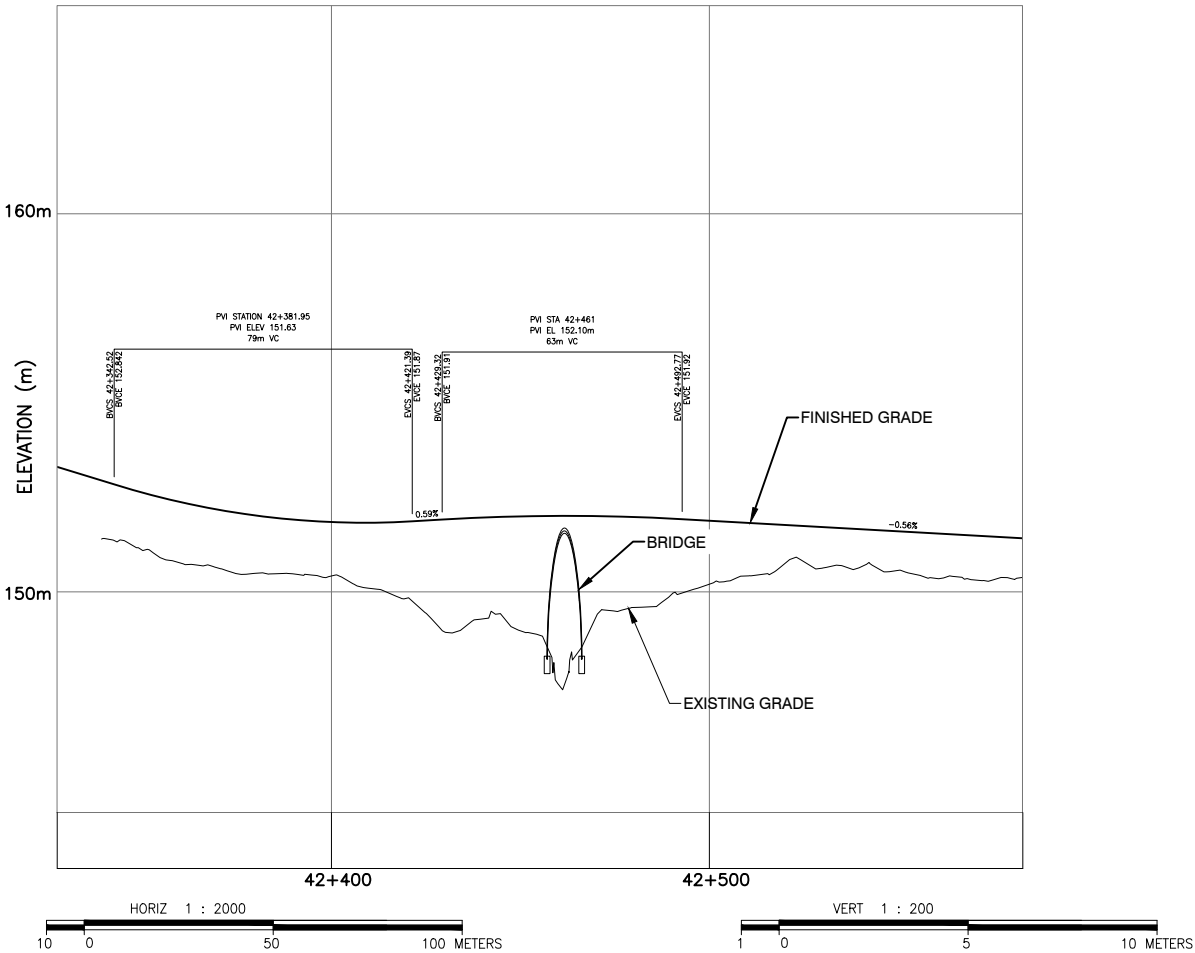


JUNGJUK CREEK, UPPER CROSSING



NOTES:

1. TOPOGRAPHY PROJECTION IS UTM, ZONE 4, NAD83 AS EXPRESSED IN METERS. VERTICAL DATUM IS NAVD88 APPROXIMATED USING GEOID12B.
2. ALL ELEVATIONS, STATIONING, AND COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
4. GUARDRAIL LEFT & RIGHT 30M FROM BRIDGE CENTERLINE EACH DIRECTION.
5. RIP RAP CLASS II PLACED TO 0.5' BELOW THALWEG TO EXTENTS TO BE DETERMINED BY FIELD ENGINEER/HYDROLOGIST.
6. BRIDGE STRUCTURE SUPPLIED BY BIG R BRIDGE. TYPE: SUPER-COR GALVANIZED CORRUGATED STRUCTURAL STEEL PLATE.
7. WELDED WIRED MSE RETAINING WALLS INSTALLED AS NEEDED TO CONTAIN ROAD EMBANKMENT FILL. AS MANUFACTURED BY VIST-A-WALL. SEE GENERAL SPECIFICATIONS ON SHEET 2.
8. TREE/BRUSH LINE TYPICALLY AT OHW OR BSW.
9. TEMPORARY CONSTRUCTION ACCESS ROAD TO BE 16' WIDTH SINGLE LANE CLEAR SPAN TEMPORARY BRIDGE WITH TIMBER PAD ABUTMENTS, FIELD LOCATED BY THE ENGINEER. NO CONSTRUCTION BELOW OHW.

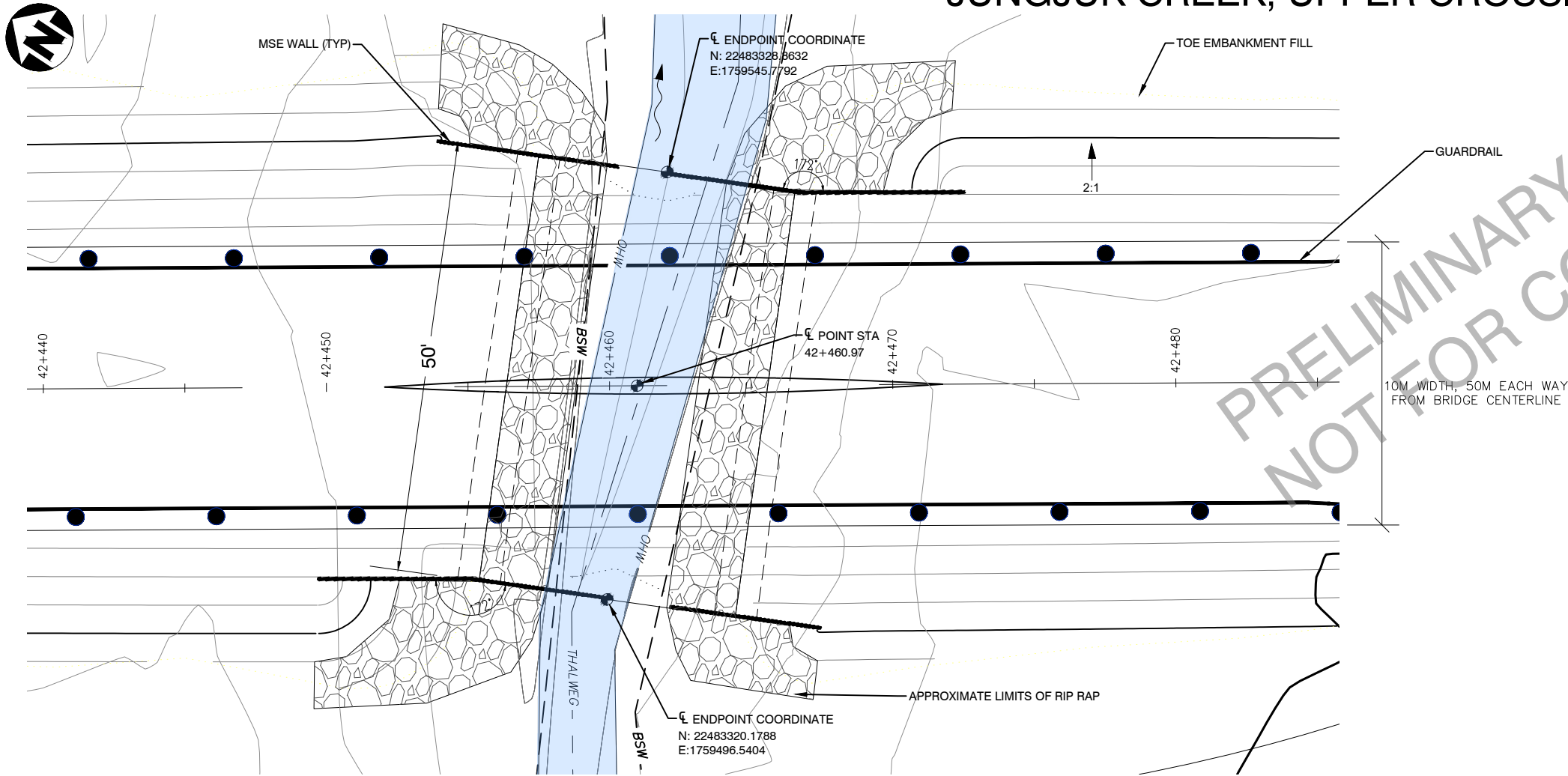


JUNGJUK CREEK, UPPER CROSSING AERIAL



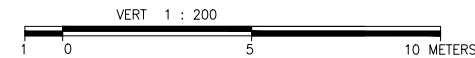
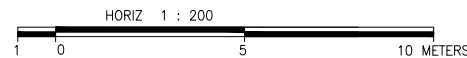
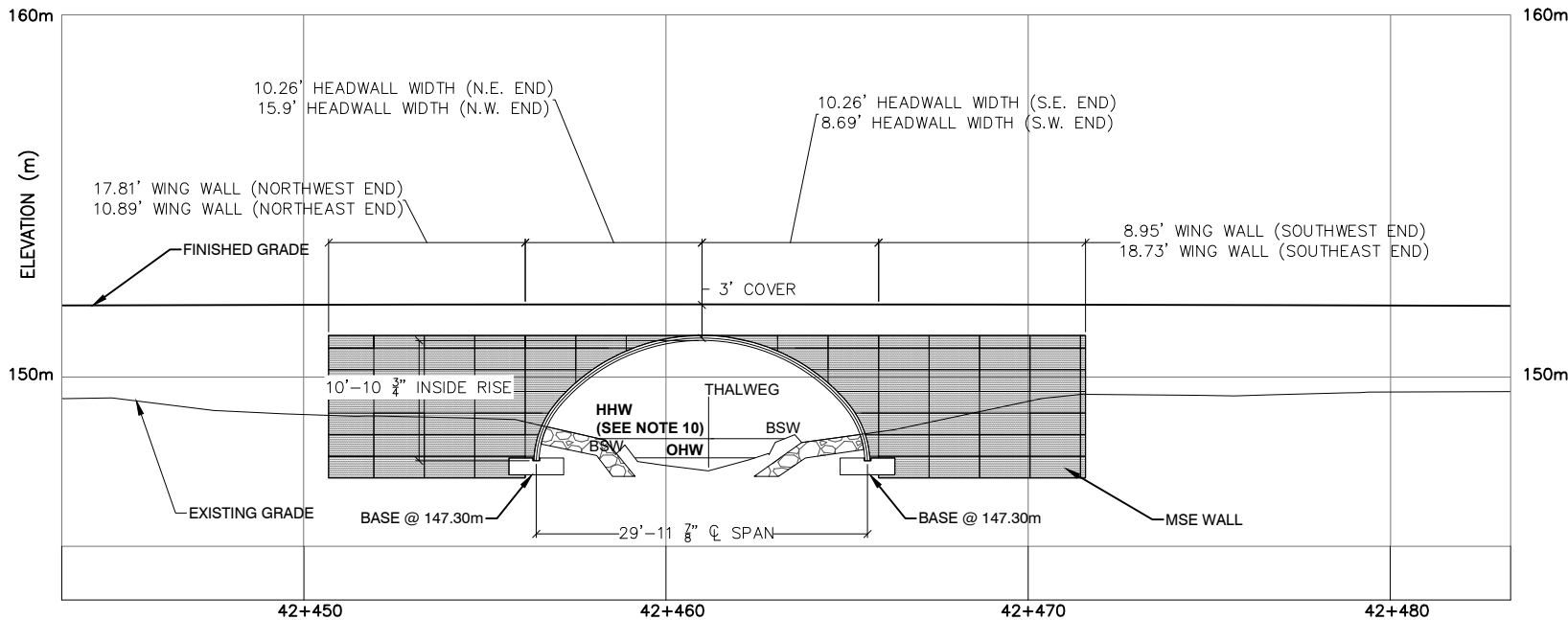
NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

JUNGJUK CREEK, UPPER CROSSING BRIDGE



NOTES:

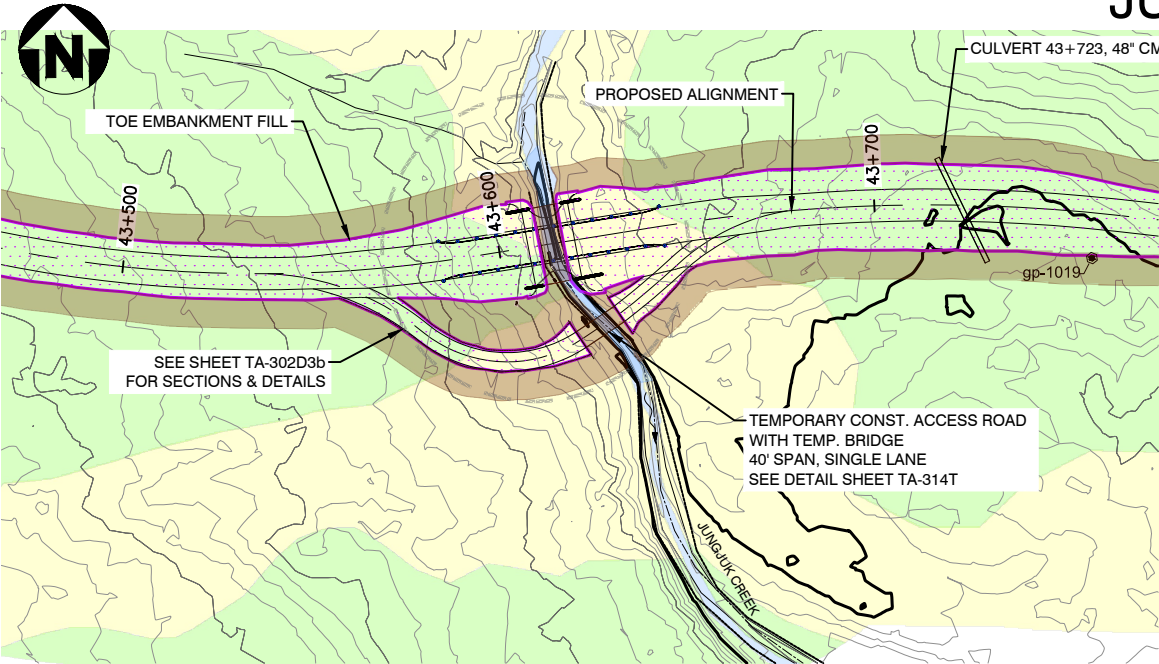
1. TOPOGRAPHY PROJECTION IS UTM, ZONE 4, NAD83 AS EXPRESSED IN METERS. VERTICAL DATUM IS NAVD88 APPROXIMATED USING GEOID12B.
2. ALL ELEVATIONS, STATIONING, AND COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
4. GUARDRAIL LEFT & RIGHT 30M FROM BRIDGE CENTERLINE EACH DIRECTION.
5. RIP RAP CLASS II PLACED TO 0.5' BELOW THALWEG TO EXTENTS TO BE DETERMINED BY FIELD ENGINEER/HYDROLOGIST.
6. BRIDGE STRUCTURE SUPPLIED BY BIG R BRIDGE. TYPE: SUPER-COR GALVANIZED CORRUGATED STRUCTURAL STEEL PLATE.
7. WELDED WIRED MSE RETAINING WALLS INSTALLED AS NEEDED TO CONTAIN ROAD EMBANKMENT FILL. AS MANUFACTURED BY VIST-A-WALL. SEE GENERAL SPECIFICATIONS ON SHEET 2.
8. TREE/BRUSH LINE TYPICALLY AT OHW OR BSW.
9. FULL TEST HOLE LOG INFORMATION IS AVAILABLE IN THE SOIL REPORT.
10. HIGH HIGH WATER (HHW) BASED ON FIELD OBSERVATION. FLOOD ELEVATIONS TO BE DETERMINED DURING FINAL HYDRAULICS ANALYSIS.



NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

Associated Engineering Drawings Donlin_BRIDGES.dwg (RECON) OCT 2016	DONLIN GOLD PROJECT APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		DRAWING TITLE: JUNGJUK CREEK UPPER CROSSING BRIDGE SECTIONS AND DETAILS	
	NAD 1983 UTM Zone 4N (Meters)		FIGURE NO. TA-302D1b	FILE NO. POA-1995-120
	SCALE: AS SHOWN	DATE: 12/22/2017		

JUNGJUK CREEK, LOWER CROSSING BRIDGE



CULVERT TABLE				
CULVERT NAME	INNER DIAMETER (in.)	LENGTH (ft.)	START STATION, OFFSET	END STATION, OFFSET
43+723	48" CMP	100	43+717, 12.35m L	43+730, 14.81m R

NOTE:
CULVERTS ARE NOT IN ACTIVE CHANNELS AND ARE LOCATED FOR INTERMITTENT DRAINAGE AND FLOOD RELIEF.

- LEGEND:
- Uplands
 - Wetlands
 - Waters of U.S.
 - Work Area/Vegetation Clearing
 - Cut/Fill Limit

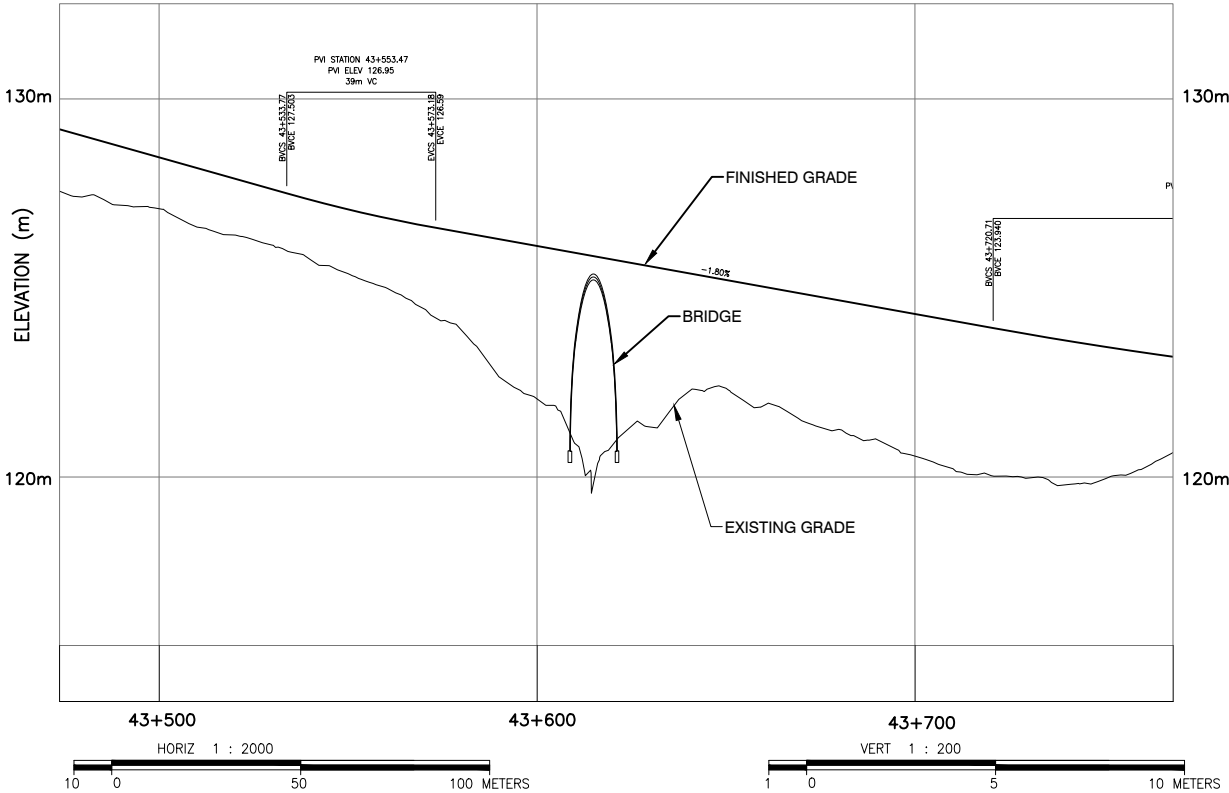
JUNGJUK CREEK, LOWER CROSSING



- NOTES:
- TOPOGRAPHY PROJECTION IS UTM, ZONE 4, NAD83 AS EXPRESSED IN METERS. VERTICAL DATUM IS NAVD88 APPROXIMATED USING GEOID12B.
 - ALL ELEVATIONS, STATIONING, AND COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
 - ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
 - GUARDRAIL LEFT & RIGHT 30M FROM BRIDGE CENTERLINE EACH DIRECTION.
 - RIP RAP CLASS II PLACED TO 0.5' BELOW THALWEG TO EXTENTS TO BE DETERMINED BY FIELD ENGINEER/HYDROLOGIST.
 - BRIDGE STRUCTURE SUPPLIED BY BIG R BRIDGE. TYPE: SUPER-COR GALVANIZED CORRUGATED STRUCTURAL STEEL PLATE.
 - WELDED WIRED MSE RETAINING WALLS INSTALLED AS NEEDED TO CONTAIN ROAD EMBANKMENT FILL. AS MANUFACTURED BY VIST-A-WALL. SEE GENERAL SPECIFICATIONS ON SHEET 2.
 - TREE/BRUSH LINE TYPICALLY AT OHW OR BSW.
 - TEMPORARY CONSTRUCTION ACCESS ROAD TO BE 16' WIDTH SINGLE LANE CLEAR SPAN TEMPORARY BRIDGE WITH TIMBER PAD ABUTMENTS, FIELD LOCATED BY THE ENGINEER. NO CONSTRUCTION BELOW OHW.
 - CULVERT END LOCATIONS SHALL BE VERIFIED AND STAKED IN THE FIELD BY THE ENGINEER. CULVERT INLET AND OUTLET INVERTS TO BE SET 0.2 x DIAMETER BELOW NATURAL GROUND SURFACE.

LEGEND:

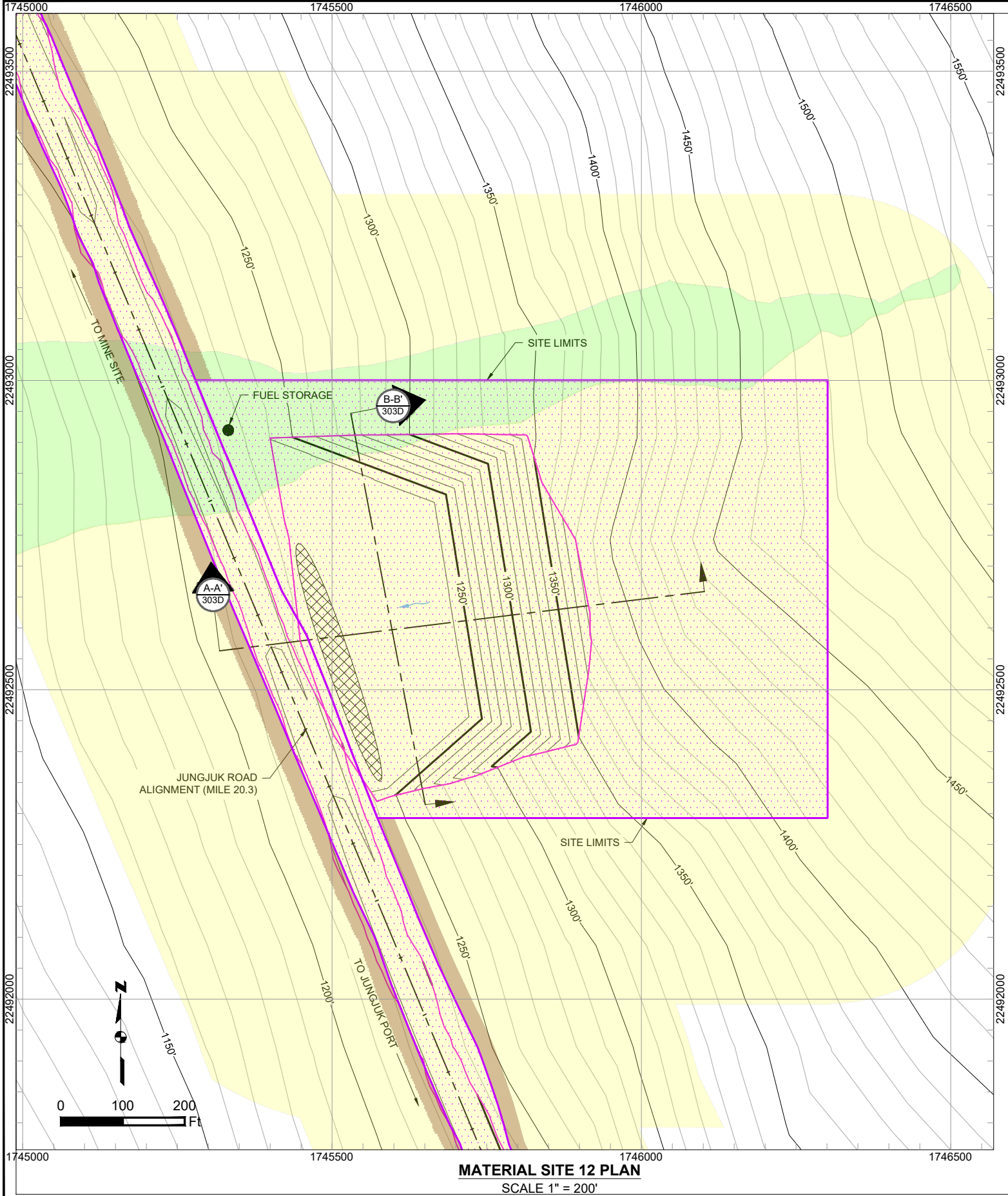
- gp-####
● TEST HOLE LOCATION



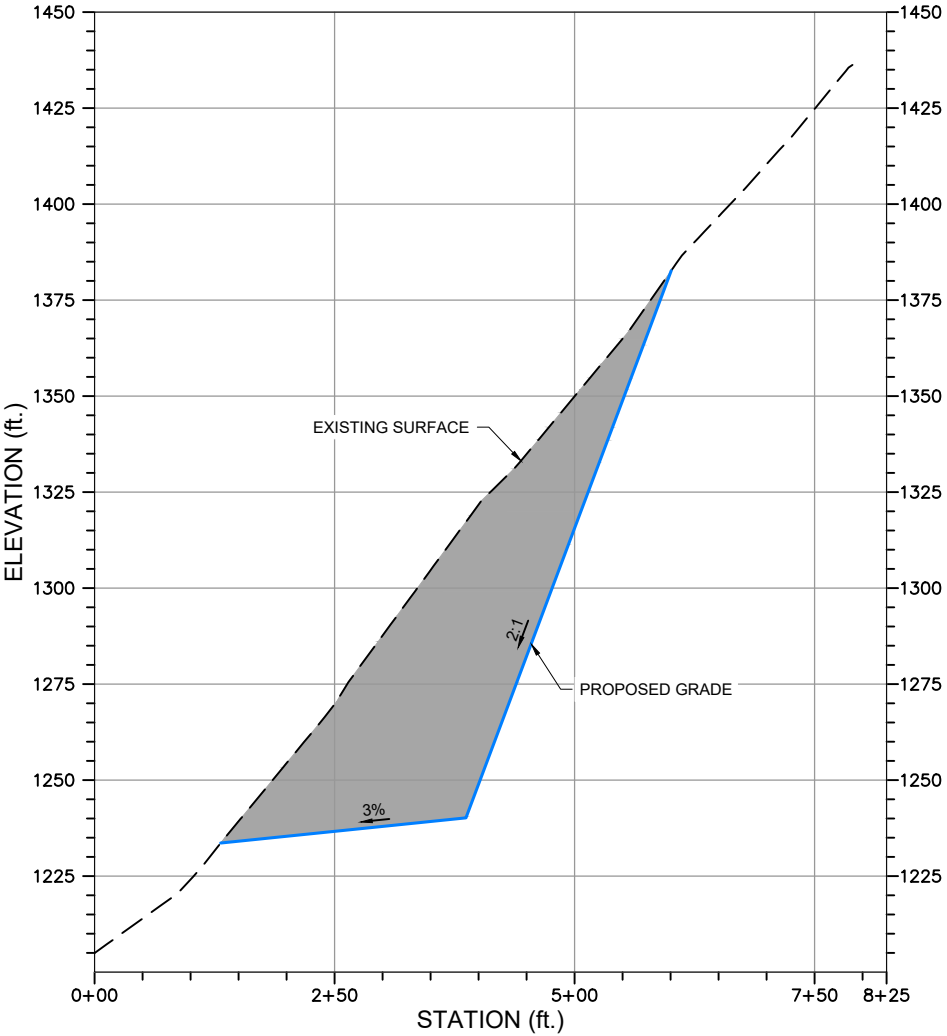
NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

JUNGJUK CREEK, LOWER CROSSING AERIAL

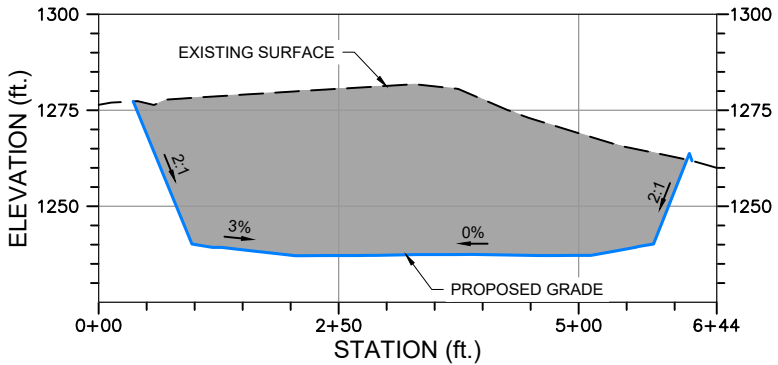




MATERIAL SITE 12 PLAN
SCALE 1" = 200'



A-A'
303D MATERIAL SITE 12 SECTION A-A'
HORIZONTAL SCALE 1" = 200'
VERTICAL SCALE 1" = 40'



B-B'
303D MATERIAL SITE 12 SECTION B-B'
HORIZONTAL SCALE 1" = 200'
VERTICAL SCALE 1" = 40'

NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO
CHANGE PRIOR TO FINAL DESIGN.

PLAN LEGEND:

- | | | |
|----------------|-----------------------|---------------------------------------|
| Uplands | Existing 10' Contours | Work Area/Vegetation Clearing |
| Wetlands | Existing 50' Contours | Cut/Fill Limit |
| Waters of U.S. | Proposed 10' Contours | Unnamed River/Stream |
| | Proposed 50' Contours | Named River/Stream |
| | | Proposed Drainage Direction |
| | | Overburden And Growth Media Stockpile |
| | | Temporary Fuel Storage |

SECTION VIEW LEGEND:

- | |
|-----------------|
| Fill Area |
| Cut Area |
| Existing Ground |
| Proposed Grade |

Associated Engineering Drawings

Donlin_Jungjuk_MaterialSites_Rev3_150202.dwg (RECON) FEB 2015

DONLIN GOLD PROJECT

APPLICANT: Donlin Gold, LLC
4720 Business Park Blvd., Suite G-25
Anchorage, Alaska 99503

NAD 1983 UTM Zone 4N (US Survey Feet)

SCALE: AS SHOWN

DATE: 12/22/2017

DRAWING TITLE:

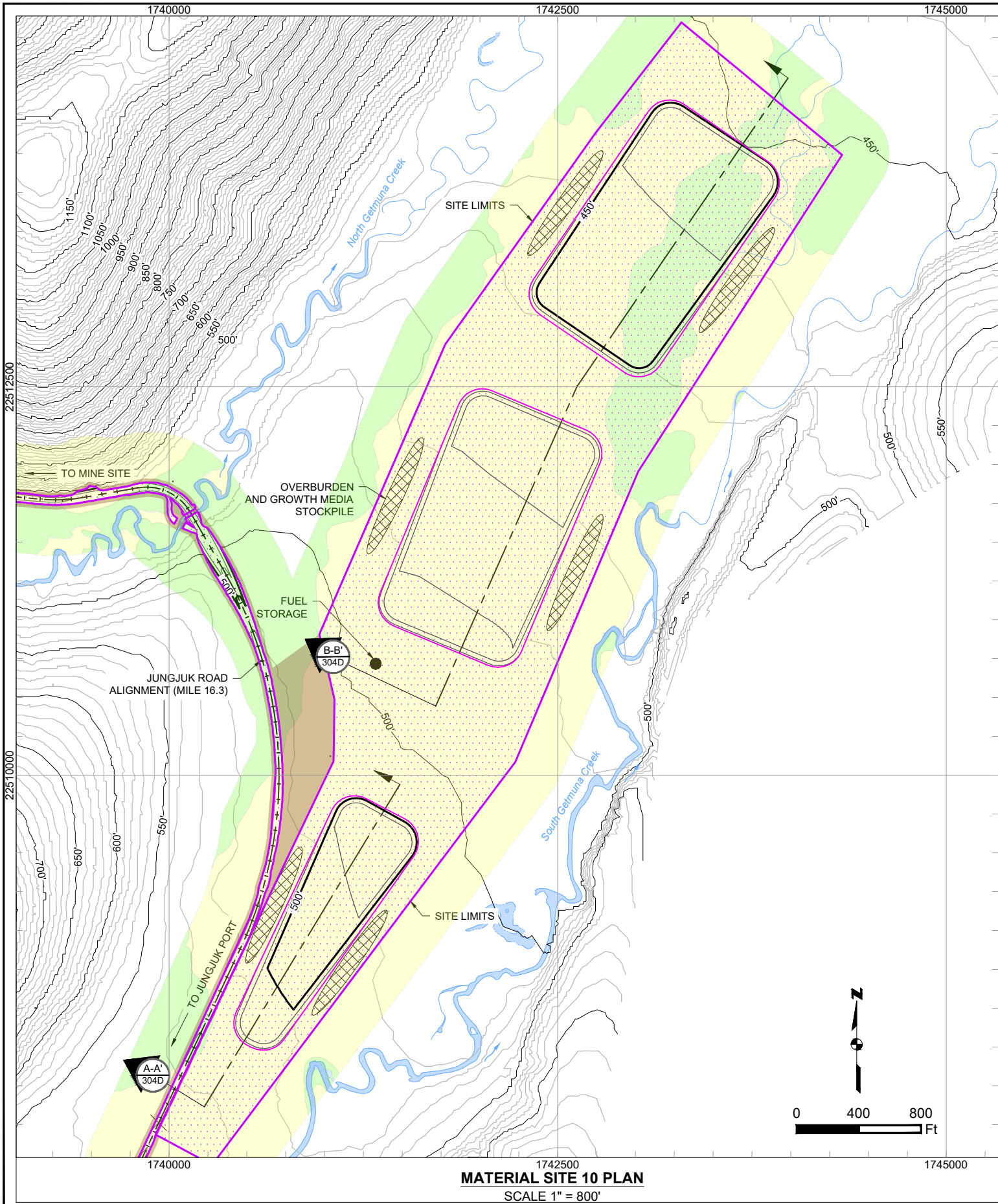
MATERIAL SITE 12
LAYOUT AND SECTIONS

FIGURE NO.

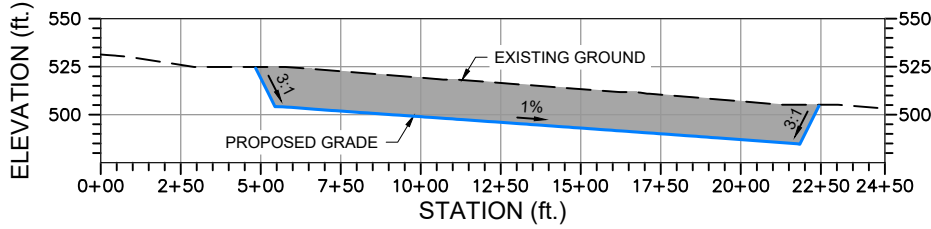
TA-303D

FILE NO.

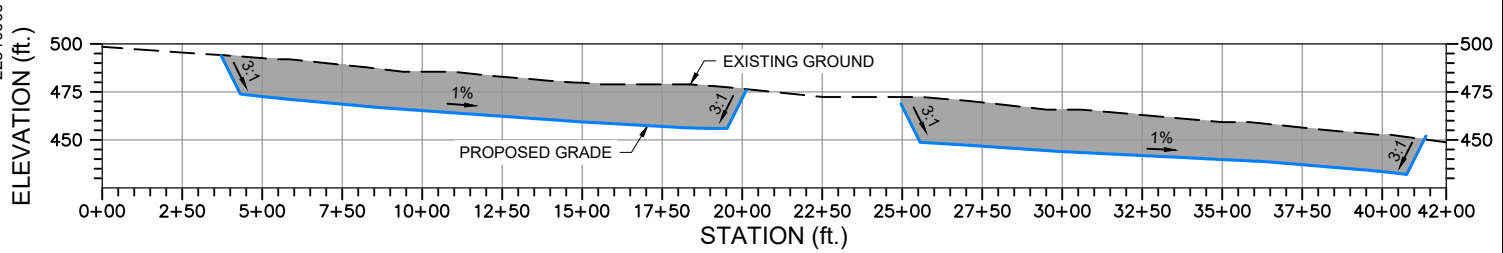
POA-1995-120



MATERIAL SITE 10 PLAN
SCALE 1" = 800'













MATERIAL SITE 10 SECTION A-A'
HORIZONTAL SCALE 1" = 600'
VERTICAL SCALE 1" = 100'

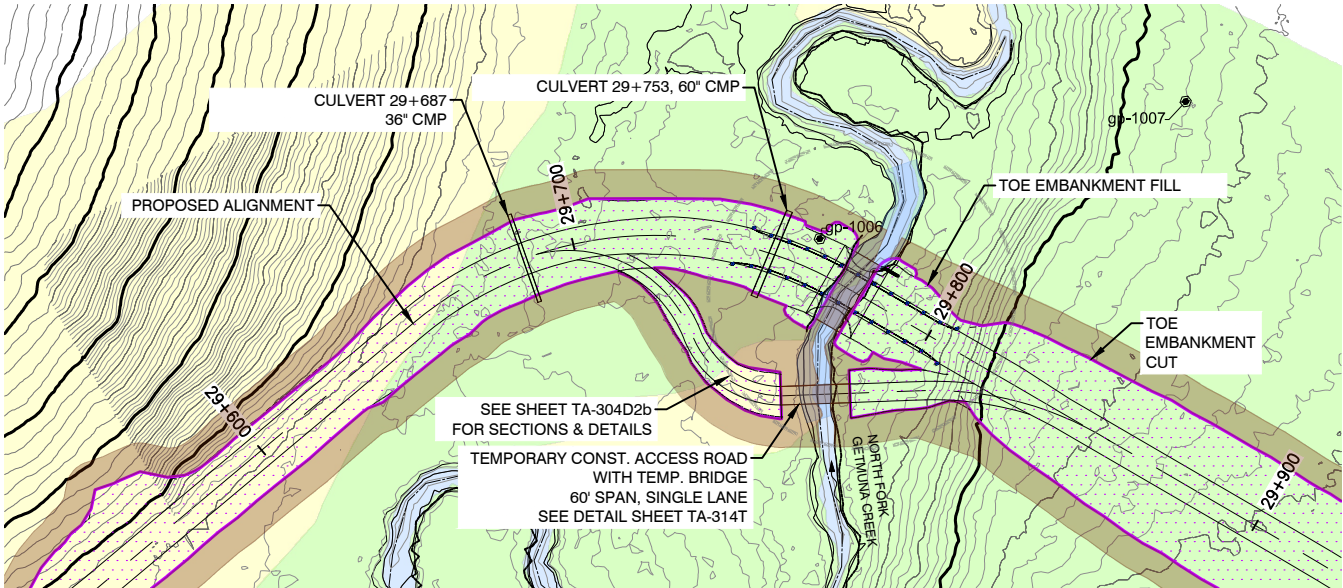


MATERIAL SITE 10 SECTION B-B'
HORIZONTAL SCALE 1" = 600'
VERTICAL SCALE 1" = 100'

NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

PLAN LEGEND:						SECTION VIEW LEGEND:		Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE:			
	Uplands		Existing 10' Contours		Work Area/Vegetation Clearing		Proposed Drainage Direction		Fill Area	MS10_JungRd_Mitigation_170420.dwg (RECON) APR 2017		APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		MATERIAL SITE 10 LAYOUT AND SECTIONS	
	Wetlands		Existing 50' Contours		Cut/Fill Limit		Overburden And Growth Media Stockpile		Cut Area						
	Waters of U.S.		Proposed 10' Contours		Unnamed River/Stream		Temporary Fuel Storage		Existing Ground	NAD 1983 UTM Zone 4N (US Survey Feet)		FIGURE NO.	FILE NO.		
			Proposed 50' Contours		Named River/Stream				Proposed Grade	SCALE:	AS SHOWN	DATE:	12/22/2017	TA-304D1	POA-1995-120

NORTH FORK GETMUNA CREEK BRIDGE



CULVERT TABLE				
CULVERT NAME	INNER DIAMETER (in.)	LENGTH (ft.)	START STATION, OFFSET	END STATION, OFFSET
29+687	36" CMP	80	29+687, 12.31m L	29+686, 12.08m R
29+753	60" CMP	80	29+754, 12.17m L	29+752, 12.16m R

NOTE:
CULVERTS ARE NOT IN ACTIVE CHANNELS AND ARE LOCATED FOR INTERMITTENT DRAINAGE AND FLOOD RELIEF.

LEGEND:

- Uplands
- Wetlands
- Waters of U.S.
- Work Area/Vegetation Clearing
- Cut/Fill Limit

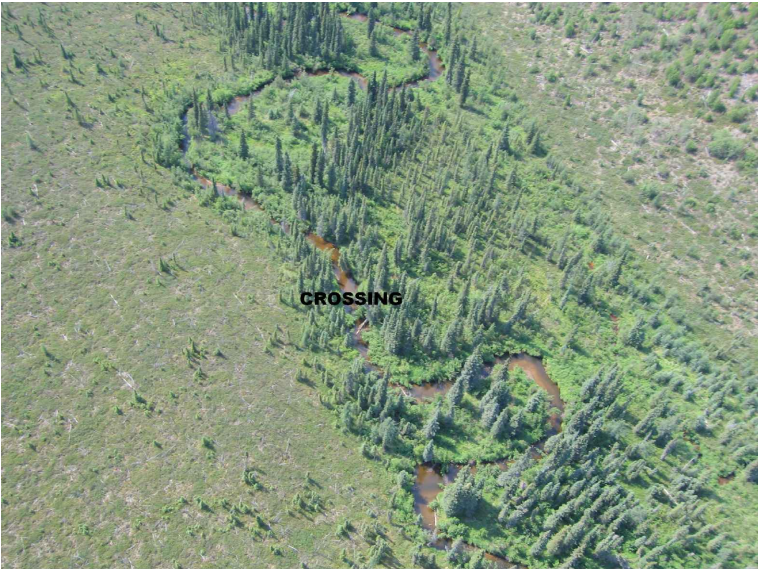
NOTES:

- TOPOGRAPHY PROJECTION IS UTM, ZONE 4, NAD83 AS EXPRESSED IN METERS. VERTICAL DATUM IS NAVD88 APPROXIMATED USING GEOID12B.
- ALL ELEVATIONS, STATIONING, AND COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
- GUARDRAIL LEFT & RIGHT 30M FROM BRIDGE CENTERLINE EACH DIRECTION.
- RIP RAP CLASS II PLACED TO 0.5' BELOW THALWEG TO EXTENTS TO BE DETERMINED BY FIELD ENGINEER/HYDROLOGIST.
- BRIDGE STRUCTURE SUPPLIED BY BIG R BRIDGE. TYPE: SUPER-COR GALVANIZED CORRUGATED STRUCTURAL STEEL PLATE.
- WELDED WIRED MSE RETAINING WALLS INSTALLED AS NEEDED TO CONTAIN ROAD EMBANKMENT FILL. AS MANUFACTURED BY VIST-A-WALL. SEE GENERAL SPECIFICATIONS ON SHEET 2.
- TREE/BRUSH LINE TYPICALLY AT OHW OR BSW.
- TEMPORARY CONSTRUCTION ACCESS ROAD TO BE 16' WIDTH SINGLE LANE CLEAR SPAN TEMPORARY BRIDGE WITH TIMBER PAD ABUTMENTS, FIELD LOCATED BY THE ENGINEER. NO CONSTRUCTION BELOW OHW.
- CULVERT END LOCATIONS SHALL BE VERIFIED AND STAKED IN THE FIELD BY THE ENGINEER. CULVERT INLET AND OUTLET INVERTS TO BE SET 0.2 x DIAMETER BELOW NATURAL GROUND SURFACE.

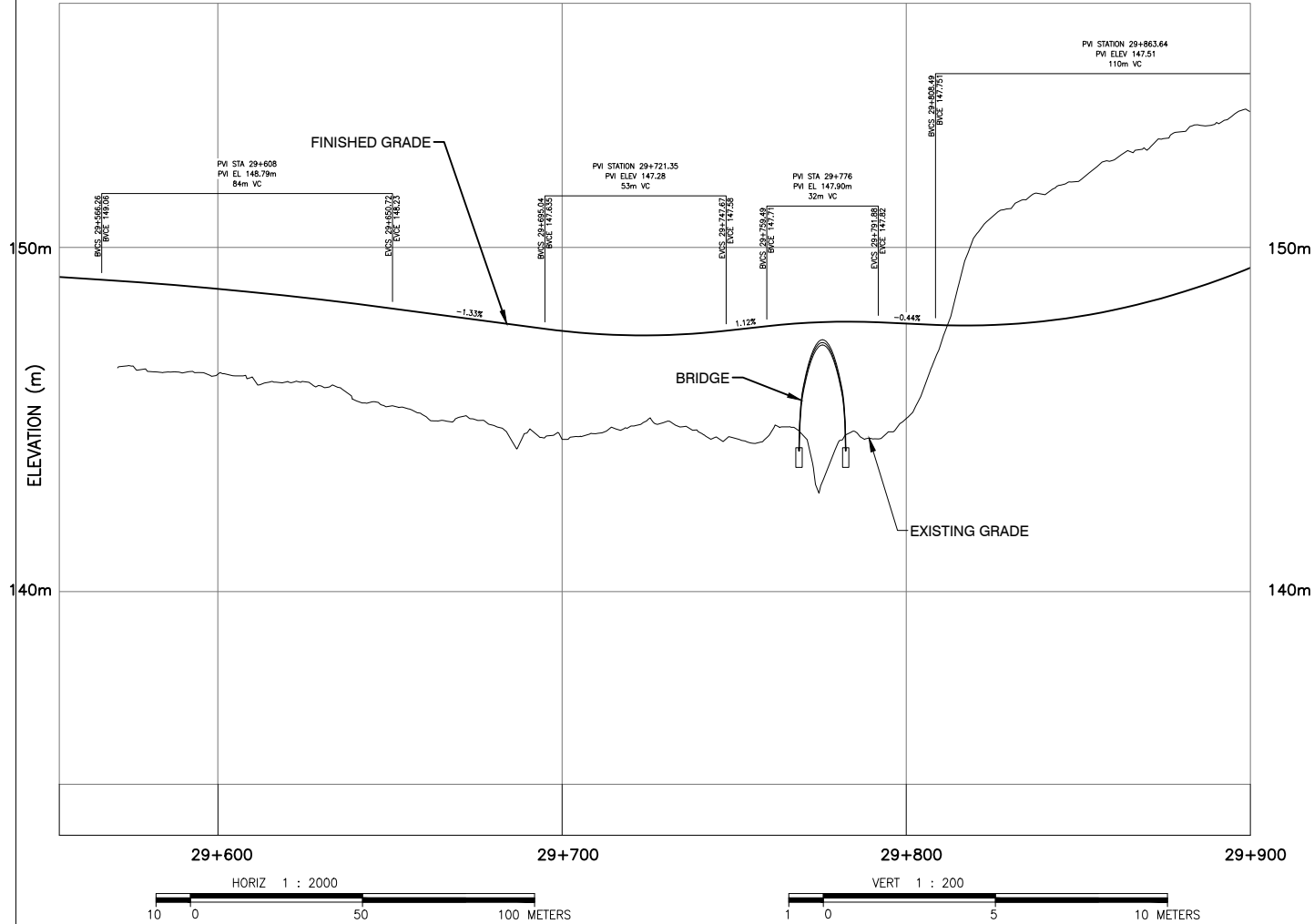
LEGEND:

- gp-#### TEST HOLE LOCATION

NORTH FORK GETMUNA CREEK CROSSING AERIAL



NORTH FORK GETMUNA CREEK CROSSING



NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

Associated Engineering Drawings

Donlin_BRIDGES.dwg (RECON) OCT 2016

DONLIN GOLD PROJECT

APPLICANT: Donlin Gold, LLC
4720 Business Park Blvd., Suite G-25
Anchorage, Alaska 99503

NAD 1983 UTM Zone 4N (Meters)

SCALE: AS SHOWN

DATE: 12/22/2017

DRAWING TITLE:

**NORTH FORK GETMUNA CREEK
BRIDGE PLAN & PROFILE**

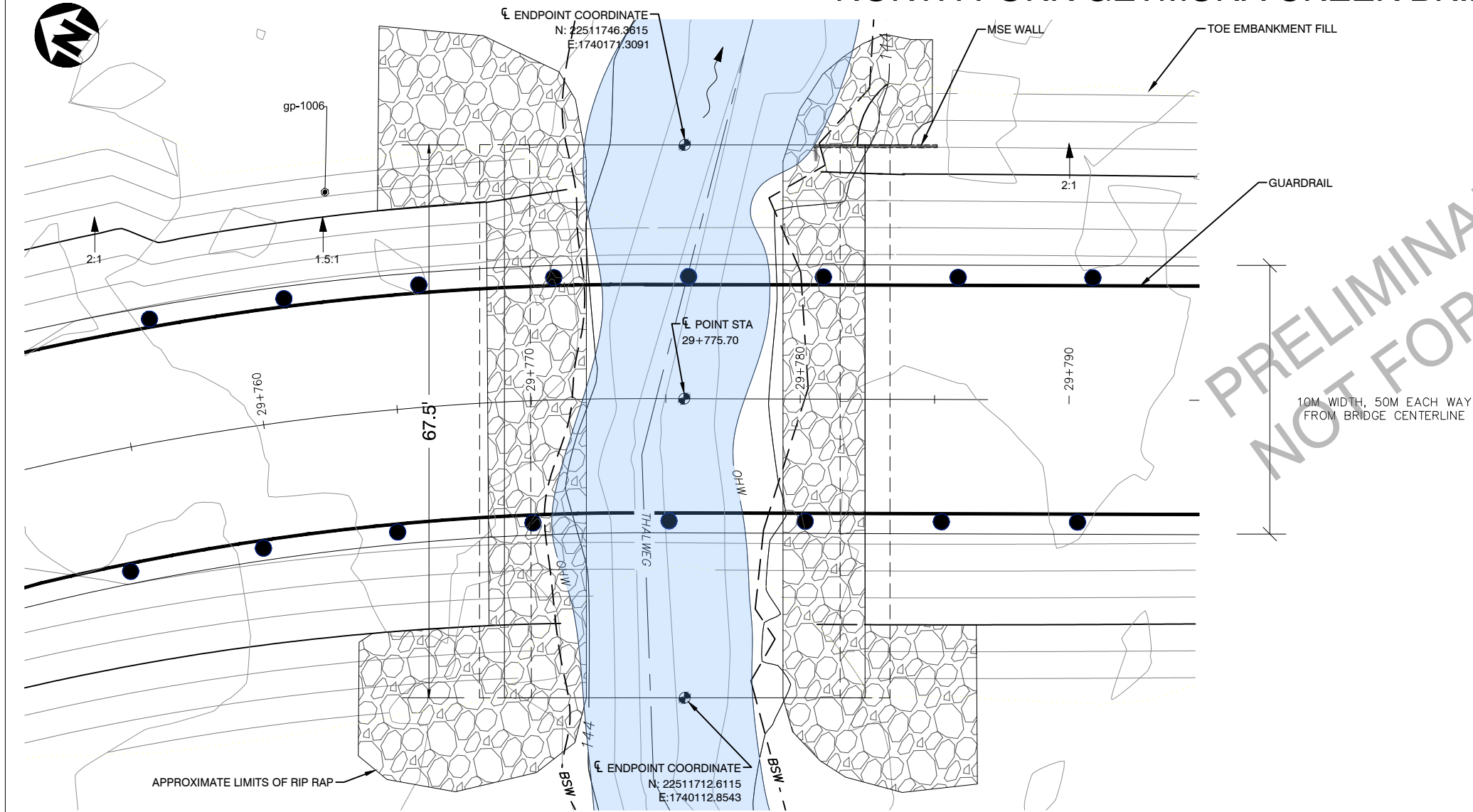
FIGURE NO.

TA-304D2a

FILE NO.

POA-1995-120

NORTH FORK GETMUNA CREEK BRIDGE



NOTES:

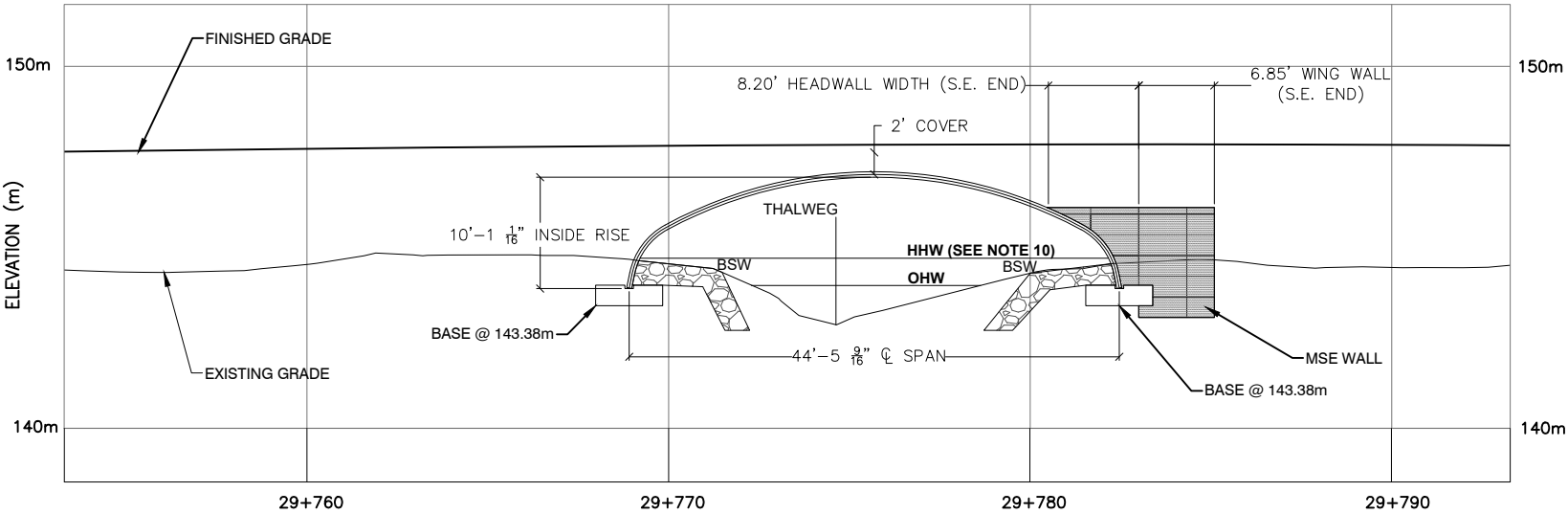
1. TOPOGRAPHY PROJECTION IS UTM, ZONE 4, NAD83 AS EXPRESSED IN METERS. VERTICAL DATUM IS NAVD88 APPROXIMATED USING GEOID12B.
2. ALL ELEVATIONS, STATIONING, AND COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
4. GUARDRAIL LEFT & RIGHT 30M FROM BRIDGE CENTERLINE EACH DIRECTION.
5. RIP RAP CLASS II PLACED TO 0.5' BELOW THALWEG TO EXTENTS TO BE DETERMINED BY FIELD ENGINEER/HYDROLOGIST.
6. BRIDGE STRUCTURE SUPPLIED BY BIG R BRIDGE. TYPE: SUPER-COR GALVANIZED CORRUGATED STRUCTURAL STEEL PLATE.
7. WELDED WIRED MSE RETAINING WALLS INSTALLED AS NEEDED TO CONTAIN ROAD EMBANKMENT FILL. AS MANUFACTURED BY VIST-A-WALL. SEE GENERAL SPECIFICATIONS ON SHEET 2.
8. TREE/BRUSH LINE TYPICALLY AT OHW OR BSW.
9. FULL TEST HOLE LOG INFORMATION IS AVAILABLE IN THE SOIL REPORT.
10. HIGH HIGH WATER (HHW) BASED ON FIELD OBSERVATION. FLOOD ELEVATIONS TO BE DETERMINED DURING FINAL HYDRAULICS ANALYSIS.

LEGEND:

gp-####
TEST HOLE LOCATION

TEST HOLE gp-1006 LOG

USCS	DEPTH
PT	
OL	1.0
	2.0
SM	
	5.0
GP	
GP	7.5
GM	
	10.0
GP	
	13.5
BXW	



NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

Associated Engineering Drawings

Donlin_BRIDGES.dwg (RECON) OCT 2016

DONLIN GOLD PROJECT

APPLICANT: Donlin Gold, LLC
4720 Business Park Blvd., Suite G-25
Anchorage, Alaska 99503

NAD 1983 UTM Zone 4N (Meters)

SCALE: AS SHOWN

DATE: 12/22/2017

DRAWING TITLE:

**NORTH FORK GETMUNA CREEK
BRIDGE SECTIONS & DETAILS**

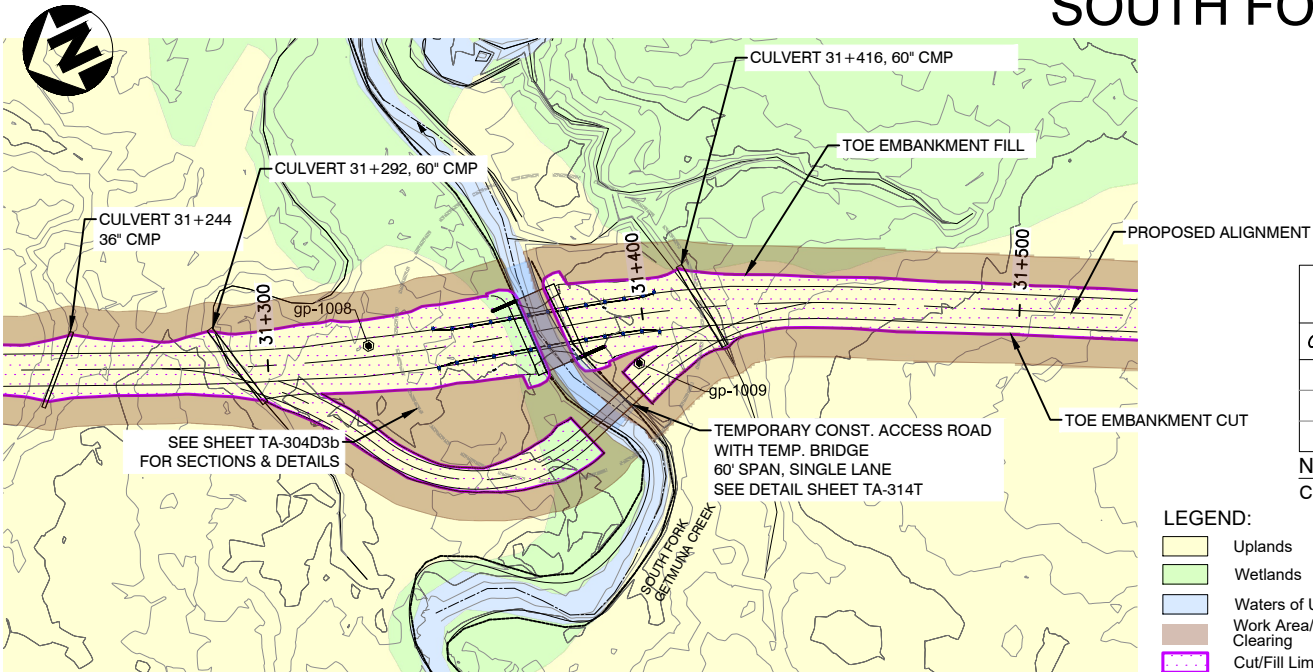
FIGURE NO.

TA-304D2b

FILE NO.

POA-1995-120

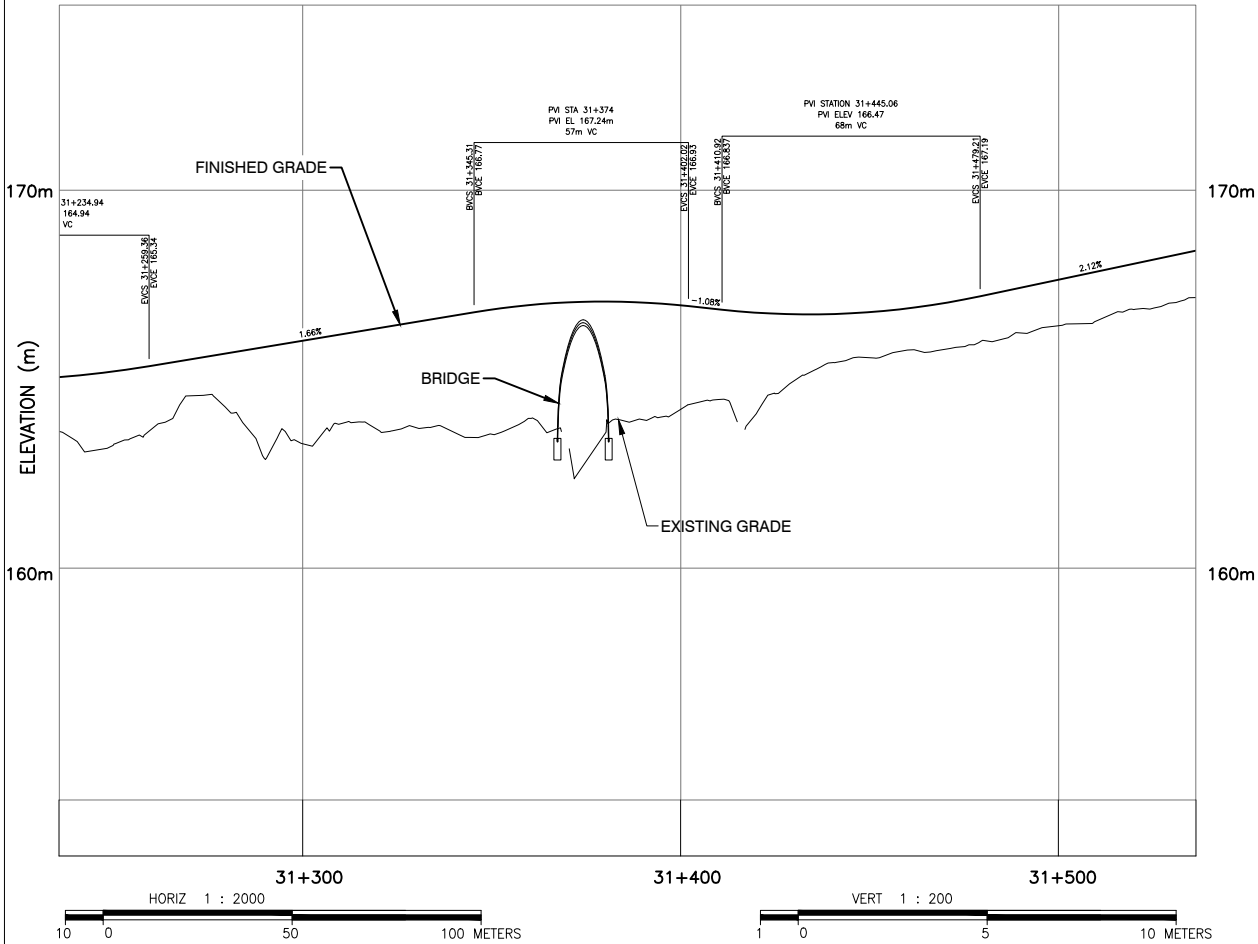
SOUTH FORK GETMUNA CREEK BRIDGE



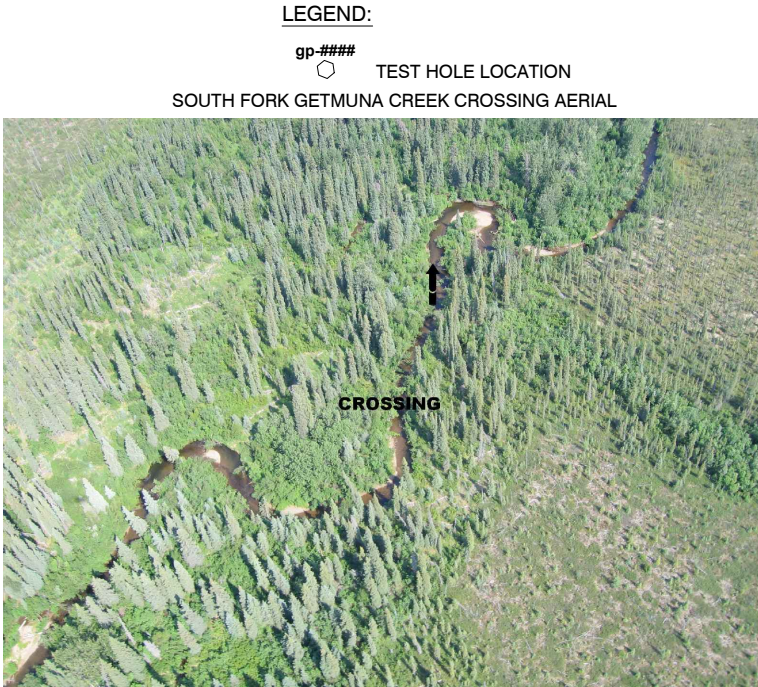
CULVERT TABLE				
CULVERT NAME	INNER DIAMETER (in.)	LENGTH (ft.)	START STATION, OFFSET	END STATION, OFFSET
31+244	36" CMP	70	31+241, 9.95m R	31+248, 9.95m L
31+292	60" CMP	80	31+285, 10.26m L	31+299, 9.78m R
31+416	60" CMP	80	31+411, 11.43m L	31+421, 10.64m R

NOTE:
CULVERTS ARE NOT IN ACTIVE CHANNELS AND ARE LOCATED FOR INTERMITTENT DRAINAGE AND FLOOD RELIEF.

- NOTES:
1. TOPOGRAPHY PROJECTION IS UTM, ZONE 4, NAD83 AS EXPRESSED IN METERS. VERTICAL DATUM IS NAVD88 APPROXIMATED USING GEOID12B.
 2. ALL ELEVATIONS, STATIONING, AND COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
 3. ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
 4. GUARDRAIL LEFT & RIGHT 30M FROM BRIDGE CENTERLINE EACH DIRECTION.
 5. RIP RAP CLASS II PLACED TO 0.5' BELOW THALWEG TO EXTENTS TO BE DETERMINED BY FIELD ENGINEER/HYDROLOGIST.
 6. BRIDGE STRUCTURE SUPPLIED BY BIG R BRIDGE. TYPE: SUPER-COR GALVANIZED CORRUGATED STRUCTURAL STEEL PLATE.
 7. WELDED WIRED MSE RETAINING WALLS INSTALLED AS NEEDED TO CONTAIN ROAD EMBANKMENT FILL. AS MANUFACTURED BY VIST-A-WALL. SEE GENERAL SPECIFICATIONS ON SHEET 2.
 8. TREE/BRUSH LINE TYPICALLY AT OHW OR BSW.
 9. TEMPORARY CONSTRUCTION ACCESS ROAD TO BE 16' WIDTH SINGLE LANE CLEAR SPAN TEMPORARY BRIDGE WITH TIMBER PAD ABUTMENTS, FIELD LOCATED BY THE ENGINEER. NO CONSTRUCTION BELOW OHW.
 10. CULVERT END LOCATIONS SHALL BE VERIFIED AND STAKED IN THE FIELD BY THE ENGINEER. CULVERT INLET AND OUTLET INVERTS TO BE SET 0.2 x DIAMETER BELOW NATURAL GROUND SURFACE.

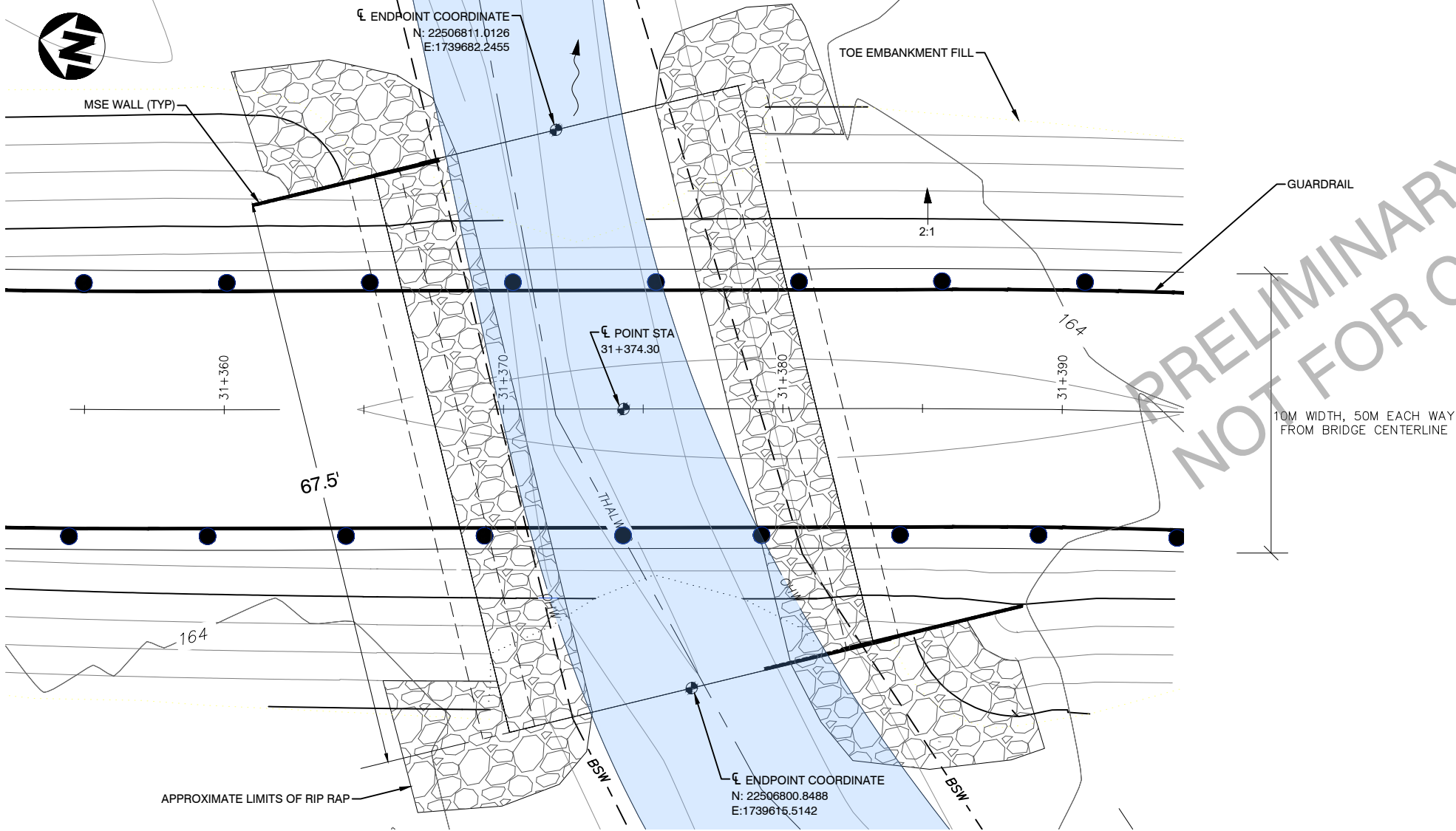


SOUTH FORK GETMUNA CREEK CROSSING



NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

SOUTH FORK GETMUNA CREEK BRIDGE



NOTES:

1. TOPOGRAPHY PROJECTION IS UTM, ZONE 4, NAD83 AS EXPRESSED IN METERS. VERTICAL DATUM IS NAVD88 APPROXIMATED USING GEOID12B.
2. ALL ELEVATIONS, STATIONING, AND COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
4. GUARDRAIL LEFT & RIGHT 30M FROM BRIDGE CENTERLINE EACH DIRECTION.
5. RIP RAP CLASS II PLACED TO 0.5' BELOW THALWEG TO EXTENTS TO BE DETERMINED BY FIELD ENGINEER/HYDROLOGIST.
6. BRIDGE STRUCTURE SUPPLIED BY BIG R BRIDGE. TYPE: SUPER-COR GALVANIZED CORRUGATED STRUCTURAL STEEL PLATE.
7. WELDED WIRED MSE RETAINING WALLS INSTALLED AS NEEDED TO CONTAIN ROAD EMBANKMENT FILL. AS MANUFACTURED BY VIST-A-WALL. SEE GENERAL SPECIFICATIONS ON SHEET 2.
8. TREE/BRUSH LINE TYPICALLY AT OHW OR BSW.
9. FULL TEST HOLE LOG INFORMATION IS AVAILABLE IN THE SOIL REPORT.
10. HIGH HIGH WATER (HHW) BASED ON FIELD OBSERVATION. FLOOD ELEVATIONS TO BE DETERMINED DURING FINAL HYDRAULICS ANALYSIS.

LEGEND:

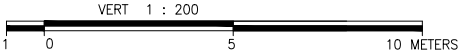
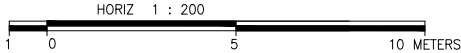
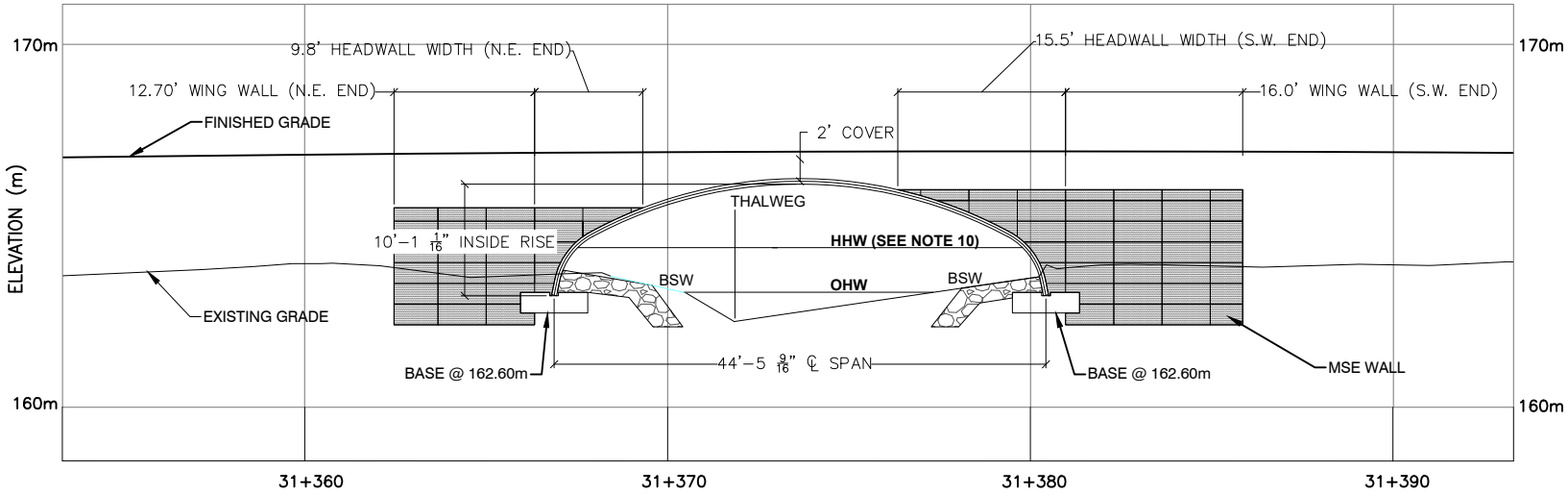
gp-####
○ TEST HOLE LOCATION

TEST HOLE gp-1008 LOG

USCS	DEPTH
PT	0.2
OL	2.0
ML	4.0
GW	7.0
BXW	

TEST HOLE gp-1009 LOG

USCS	DEPTH
PT	1.0
OL	1.0
SP-SM	4.5
GW	7.5
BXW	



NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

Associated Engineering Drawings

Donlin_BRIDGES.dwg (RECON) OCT 2016

DONLIN GOLD PROJECT

APPLICANT: Donlin Gold, LLC
4720 Business Park Blvd., Suite G-25
Anchorage, Alaska 99503

NAD 1983 UTM Zone 4N (Meters)

SCALE: AS SHOWN

DATE: 12/22/2017

DRAWING TITLE:

**SOUTH FORK GETMUNA CREEK
BRIDGE SECTIONS & DETAILS**

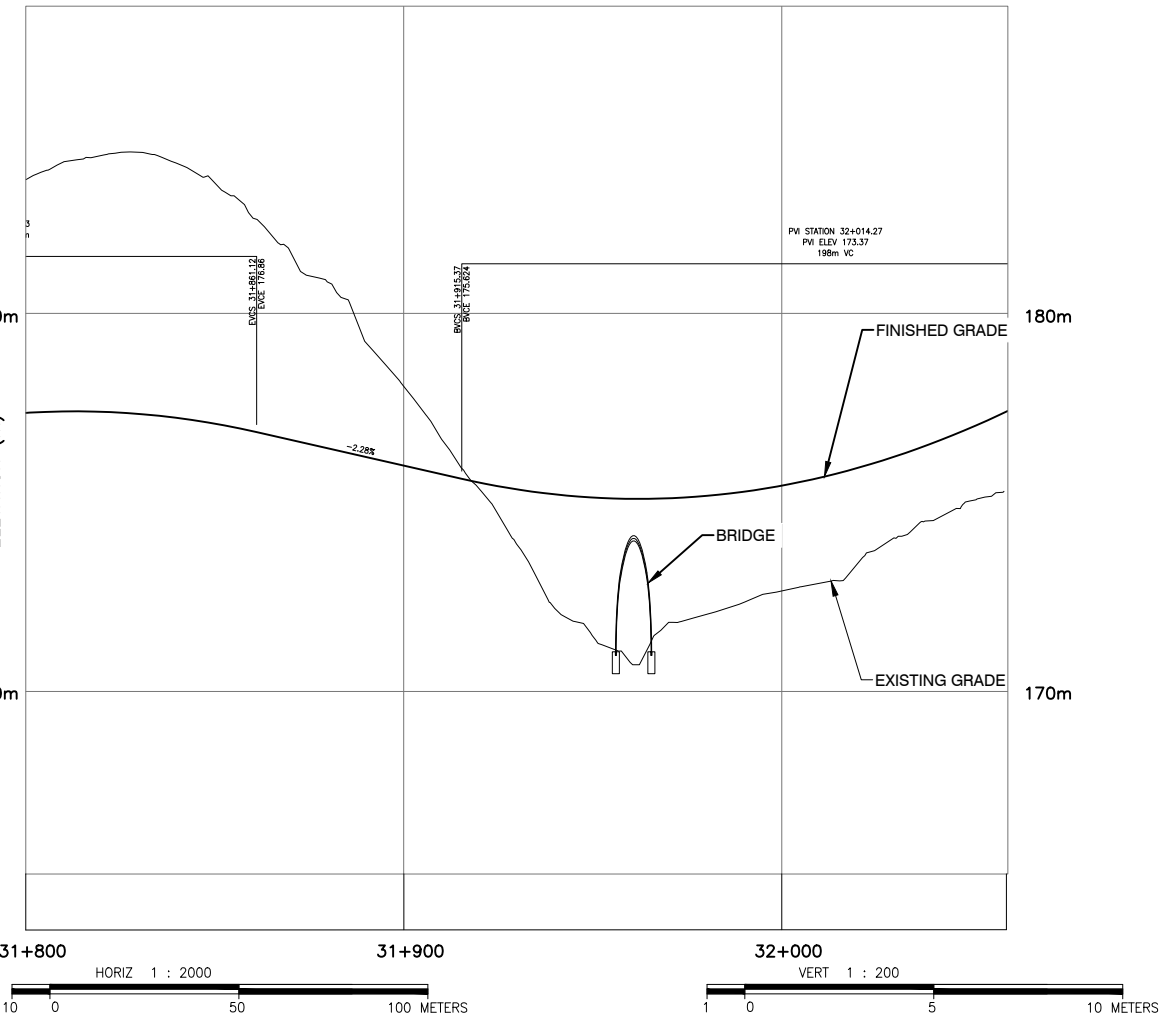
FIGURE NO.

TA-304D3b

FILE NO.

POA-1995-120

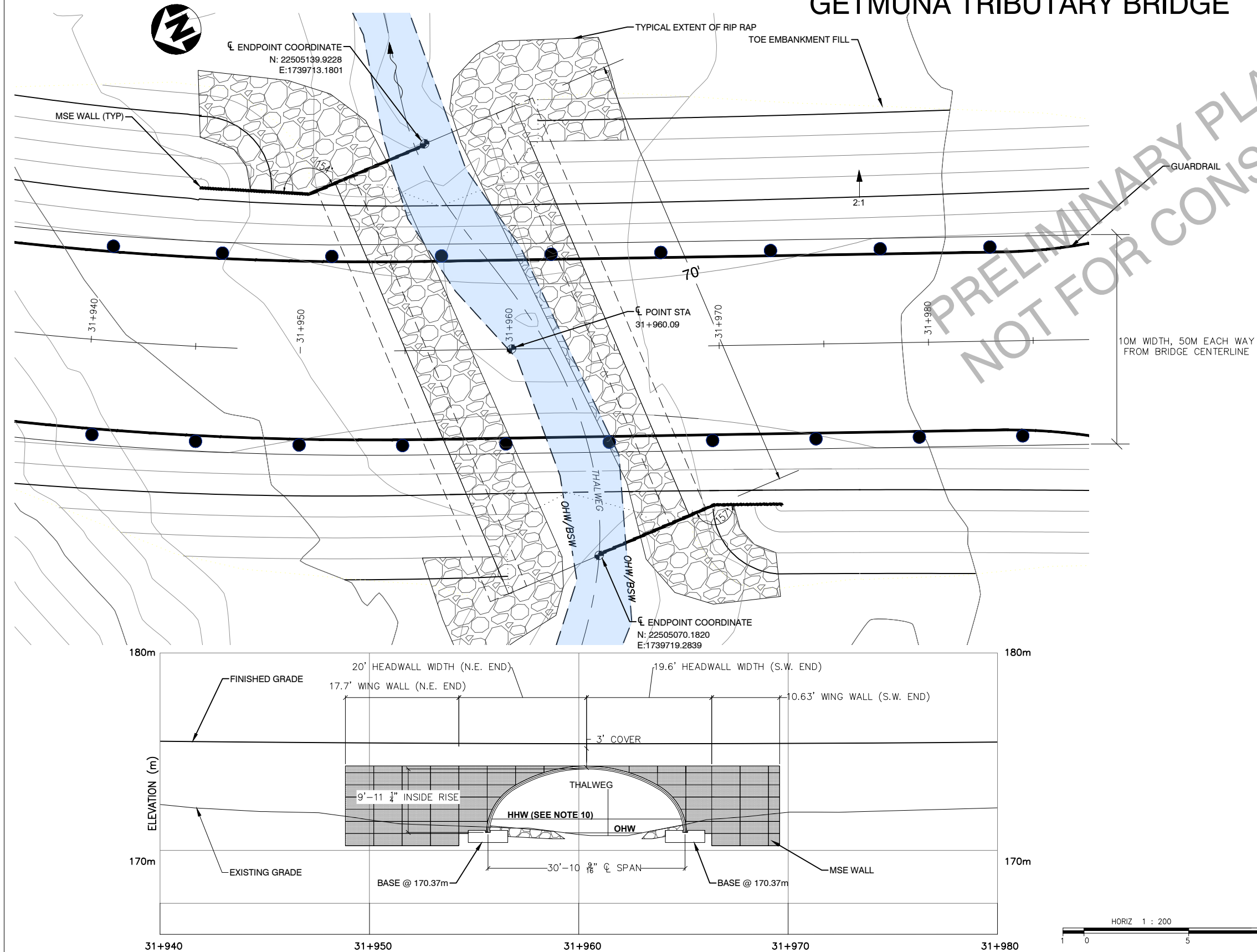
UTARY BRIDGE



- NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO
CHANGE PRIOR TO FINAL DESIGN.**

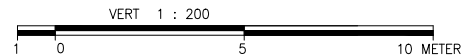
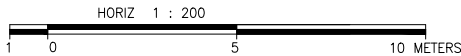
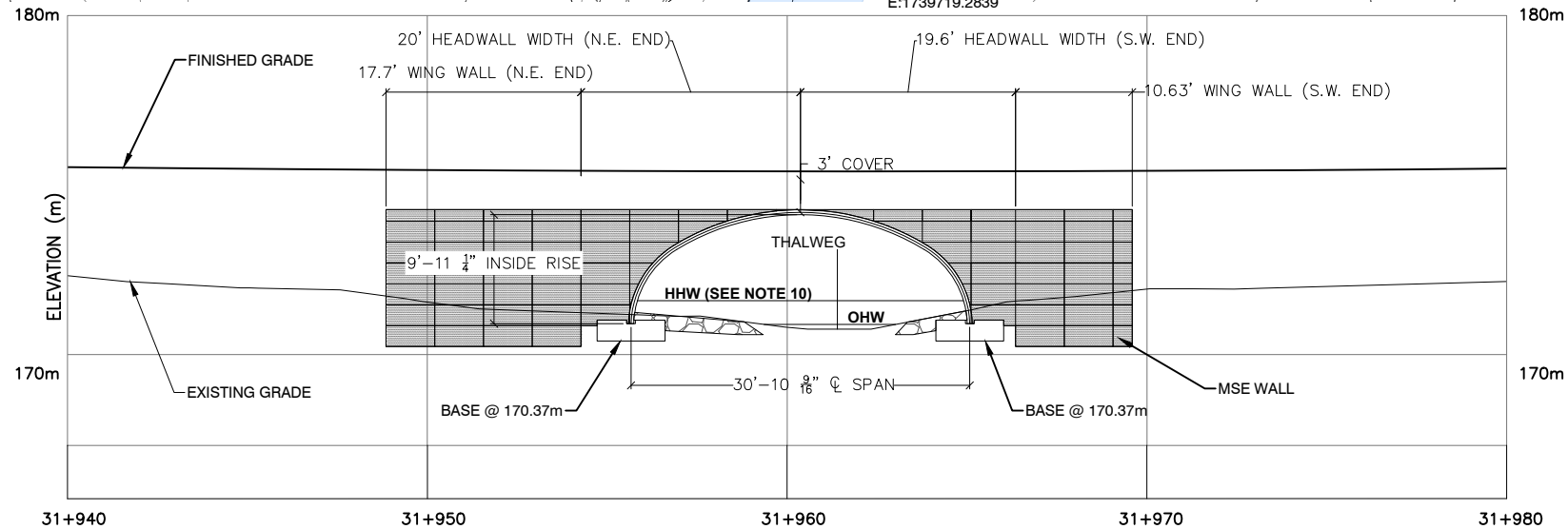
PATH: d:\Dropbox\181202_040_task_400_phase_2\TA Bridges.dwg

GETMUNA TRIBUTARY BRIDGE



NOTES:

1. TOPOGRAPHY PROJECTION IS UTM, ZONE 4, NAD83 AS EXPRESSED IN METERS. VERTICAL DATUM IS NAVD88 APPROXIMATED USING GEOID12B.
2. ALL ELEVATIONS, STATIONING, AND COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
4. GUARDRAIL LEFT & RIGHT 30M FROM BRIDGE CENTERLINE EACH DIRECTION.
5. RIP RAP CLASS II PLACED TO 0.5' BELOW THALWEG TO EXTENTS TO BE DETERMINED BY FIELD ENGINEER/HYDROLOGIST.
6. BRIDGE STRUCTURE SUPPLIED BY BIG R BRIDGE. TYPE: SUPER-COR GALVANIZED CORRUGATED STRUCTURAL STEEL PLATE.
7. WELDED WIRED MSE RETAINING WALLS INSTALLED AS NEEDED TO CONTAIN ROAD EMBANKMENT FILL. AS MANUFACTURED BY VIST-A-WALL. SEE GENERAL SPECIFICATIONS ON SHEET 2.
8. TREE/BRUSH LINE TYPICALLY AT OHW OR BSW.
9. FULL TEST HOLE LOG INFORMATION IS AVAILABLE IN THE SOIL REPORT.
10. HIGH HIGH WATER (HHW) BASED ON FIELD OBSERVATION. FLOOD ELEVATIONS TO BE DETERMINED DURING FINAL HYDRAULICS ANALYSIS.



NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

Associated Engineering Drawings

Donlin_BRIDGES.dwg (RECON) OCT 2016

DONLIN GOLD PROJECT

APPLICANT: Donlin Gold, LLC
4720 Business Park Blvd., Suite G-25
Anchorage, Alaska 99503

NAD 1983 UTM Zone 4N (Meters)

SCALE: AS SHOWN

DATE: 12/22/2017

DRAWING TITLE:

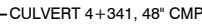
GETMUNA CREEK TRIBUTARY
BRIDGE SECTIONS & DETAILS

FIGURE NO.

TA-304D4b

FILE NO.

POA-1995-120

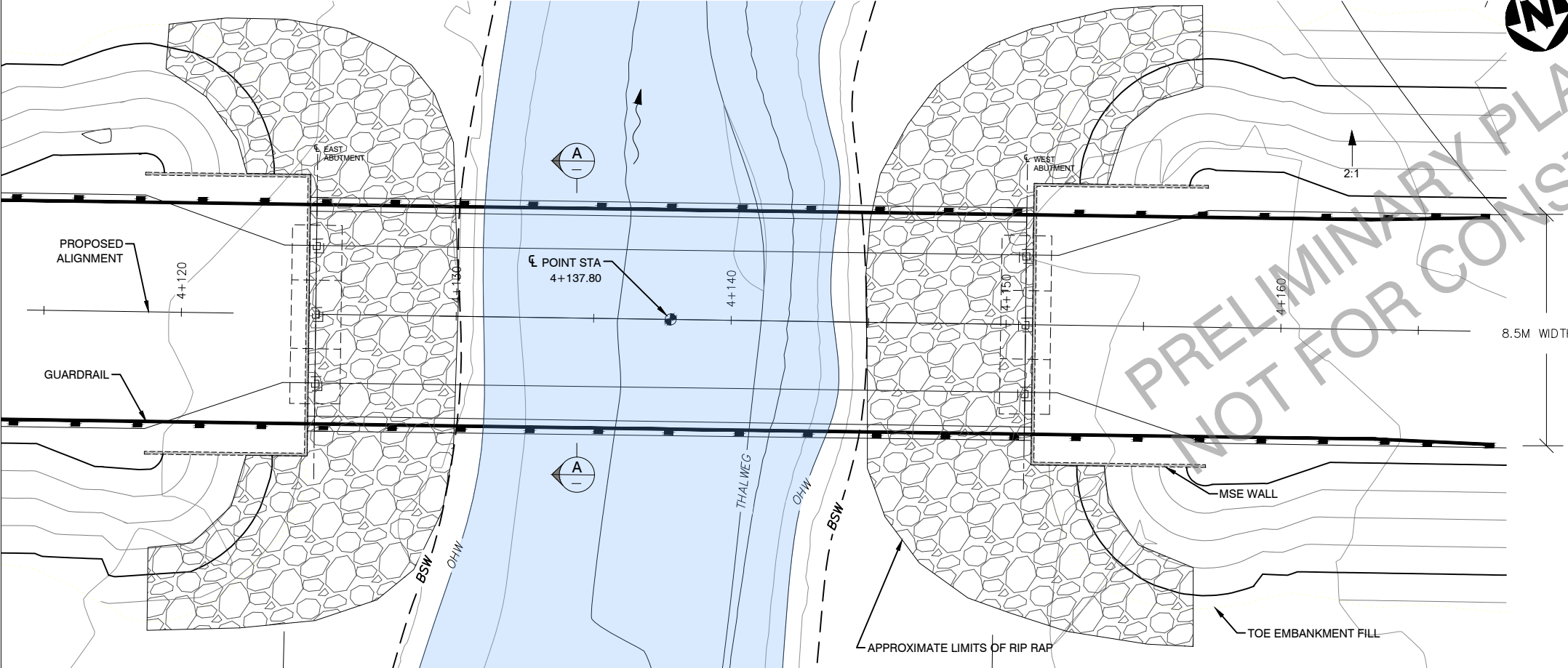


1. TOPOGRAPHY PROJECTION IS UTM, ZONE 4, NAD83 AS EXPRESSED IN METERS. VERTICAL DATUM IS NAVD88 APPROXIMATED USING GEOID12B.
2. ALL ELEVATIONS, STATIONING, AND COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
4. GUARDRAIL LEFT & RIGHT 30M FROM BRIDGE CENTERLINE EACH DIRECTION.
5. RIP RAP CLASS II PLACED TO 0.5' BELOW THALWEG TO EXTENTS TO BE DETERMINED BY FIELD ENGINEER/HYDROLOGIST.
6. WELDED WIRED MSE RETAINING WALLS INSTALLED AS NEEDED TO CONTAIN ROAD EMBANKMENT FILL. AS MANUFACTURED BY VIST-A-WALL. SEE GENERAL SPECIFICATIONS ON SHEET 2.
7. TREE/BRUSH LINE TYPICALLY AT OHW OR BSW.
8. TEMPORARY CONSTRUCTION ACCESS ROAD TO BE 16' WIDTH SINGLE LANE CLEAR SPAN TEMPORARY BRIDGE WITH TIMBER PAD ABUTMENTS, FIELD LOCATED BY THE ENGINEER. NO CONSTRUCTION BELOW OHW.
9. BRIDGE DESIGN FROM AMEC DRAWING #A1-159984-10-13-301, DATED 9/10/08. WELDED WIRED MSE RETAINING WALLS HAVE REPLACED THE ROCK BASKET GABIONS USED IN THE ORIGINAL AMEC DESIGN.
10. CULVERT END LOCATIONS SHALL BE VERIFIED AND STAKED IN THE FIELD BY THE ENGINEER. CULVERT INLET AND OUTLET INVERTS TO BE SET 0.2 x DIAMETER BELOW NATURAL GROUND SURFACE.

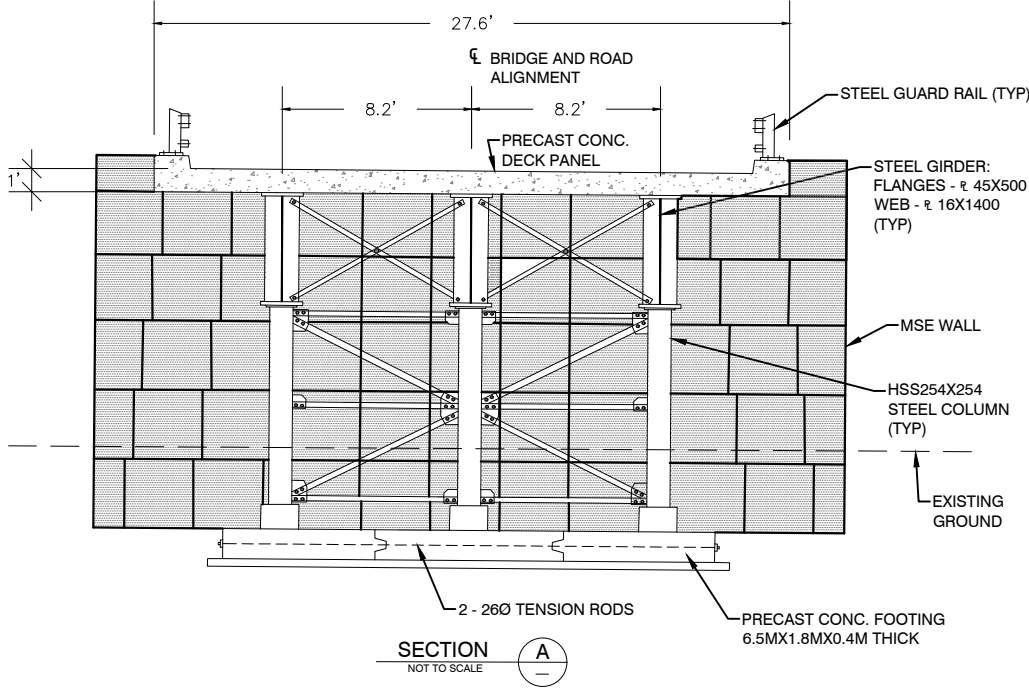
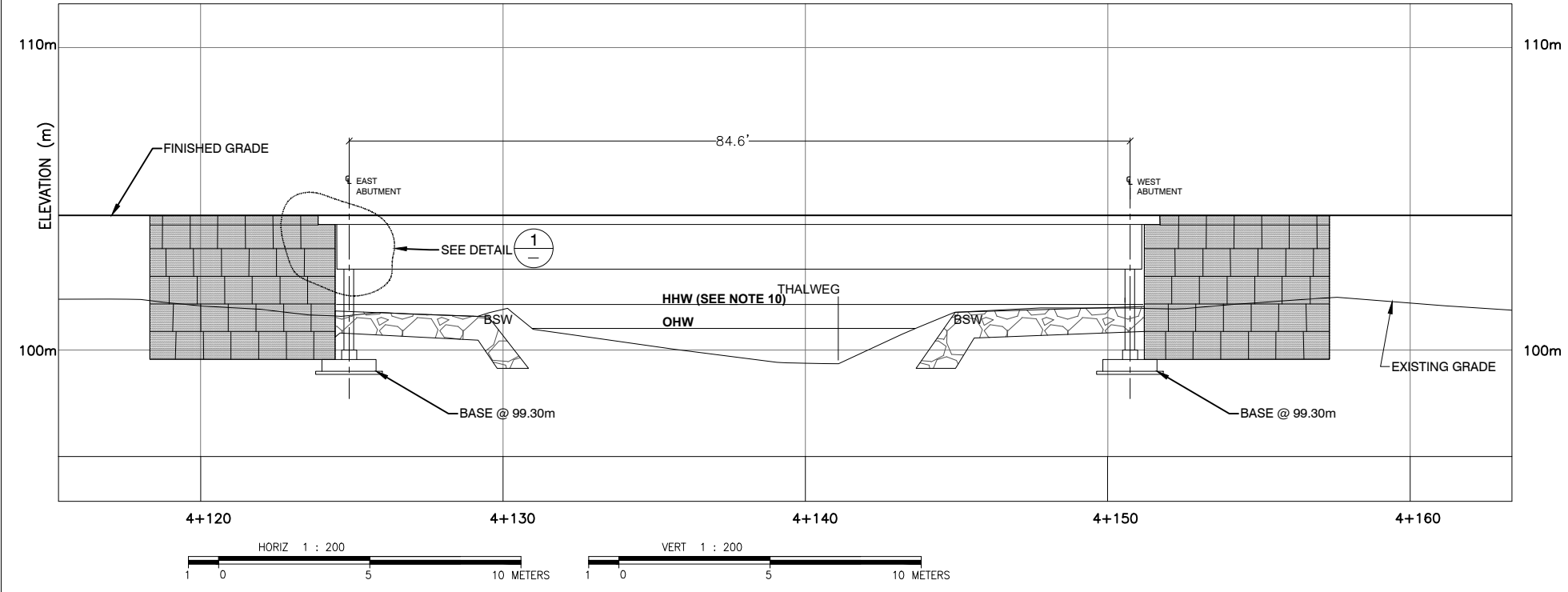
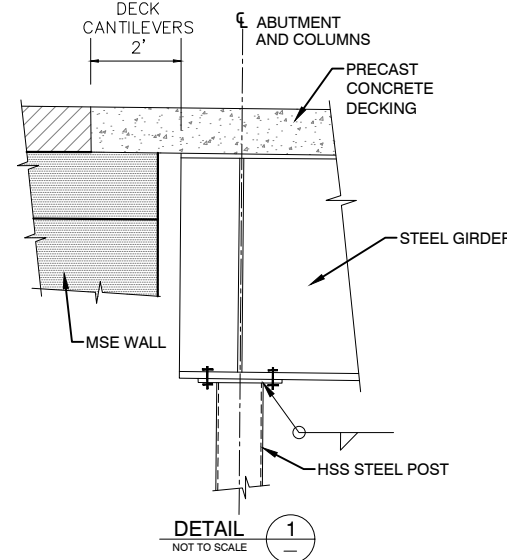
NOTE:
CULVERTS ARE NOT IN ACTIVE CHANNELS AND ARE LOCATED FOR INTERMITTENT DRAINAGE AND FLOOD RELIEF.



CROOKED CREEK BRIDGE

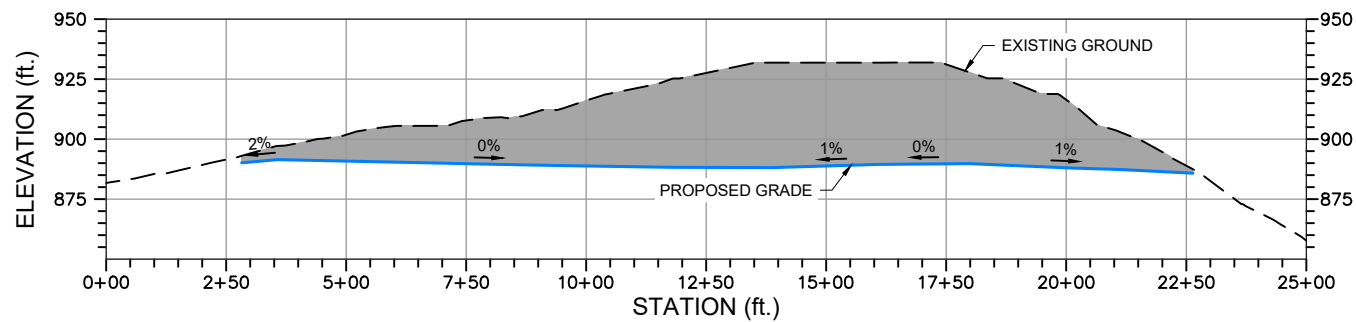


- NOTES:
1. TOPOGRAPHY PROJECTION IS UTM, ZONE 4, NAD83 AS EXPRESSED IN METERS. VERTICAL DATUM IS NAVD88 APPROXIMATED USING GEOID12B.
 2. ALL ELEVATIONS, STATIONING, AND COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
 3. ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE.
 4. GUARDRAIL LEFT & RIGHT 30M FROM BRIDGE CENTERLINE EACH DIRECTION.
 5. RIP RAP CLASS II PLACED TO 0.5' BELOW THALWEG TO EXTENTS TO BE DETERMINED BY FIELD ENGINEER/HYDROLOGIST.
 6. WELDED WIRED MSE RETAINING WALLS INSTALLED AS NEEDED TO CONTAIN ROAD EMBANKMENT FILL. AS MANUFACTURED BY VIST-A-WALL. SEE GENERAL SPECIFICATIONS ON SHEET 2.
 7. TREE/BRUSH LINE TYPICALLY AT OHW OR BSW.
 8. TEMPORARY CONSTRUCTION ACCESS ROAD TO BE 16' WIDTH SINGLE LANE CLEAR SPAN TEMPORARY BRIDGE WITH TIMBER PAD ABUTMENTS, FIELD LOCATED BY THE ENGINEER. NO CONSTRUCTION BELOW OHW.
 9. BRIDGE DESIGN FROM AMEC DRAWING #A1-159984-10-13-301, DATED 9/10/08. WELDED WIRED MSE RETAINING WALLS HAVE REPLACED THE ROCK BASKET GABIONS USED IN THE ORIGINAL AMEC DESIGN.
 10. HIGH HIGH WATER (HHW) BASED ON FIELD OBSERVATION. FLOOD ELEVATIONS TO BE DETERMINED DURING FINAL HYDRAULICS ANALYSIS.

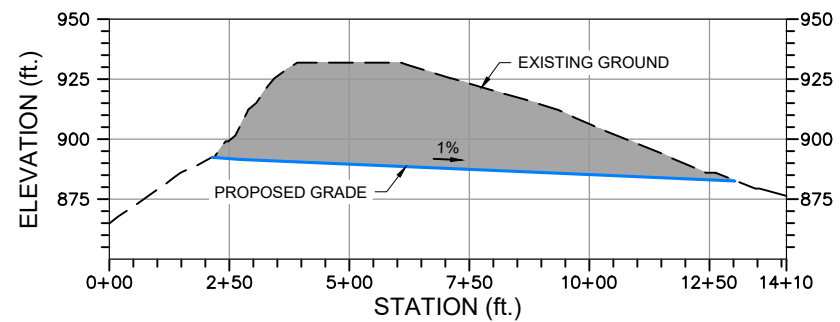


NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

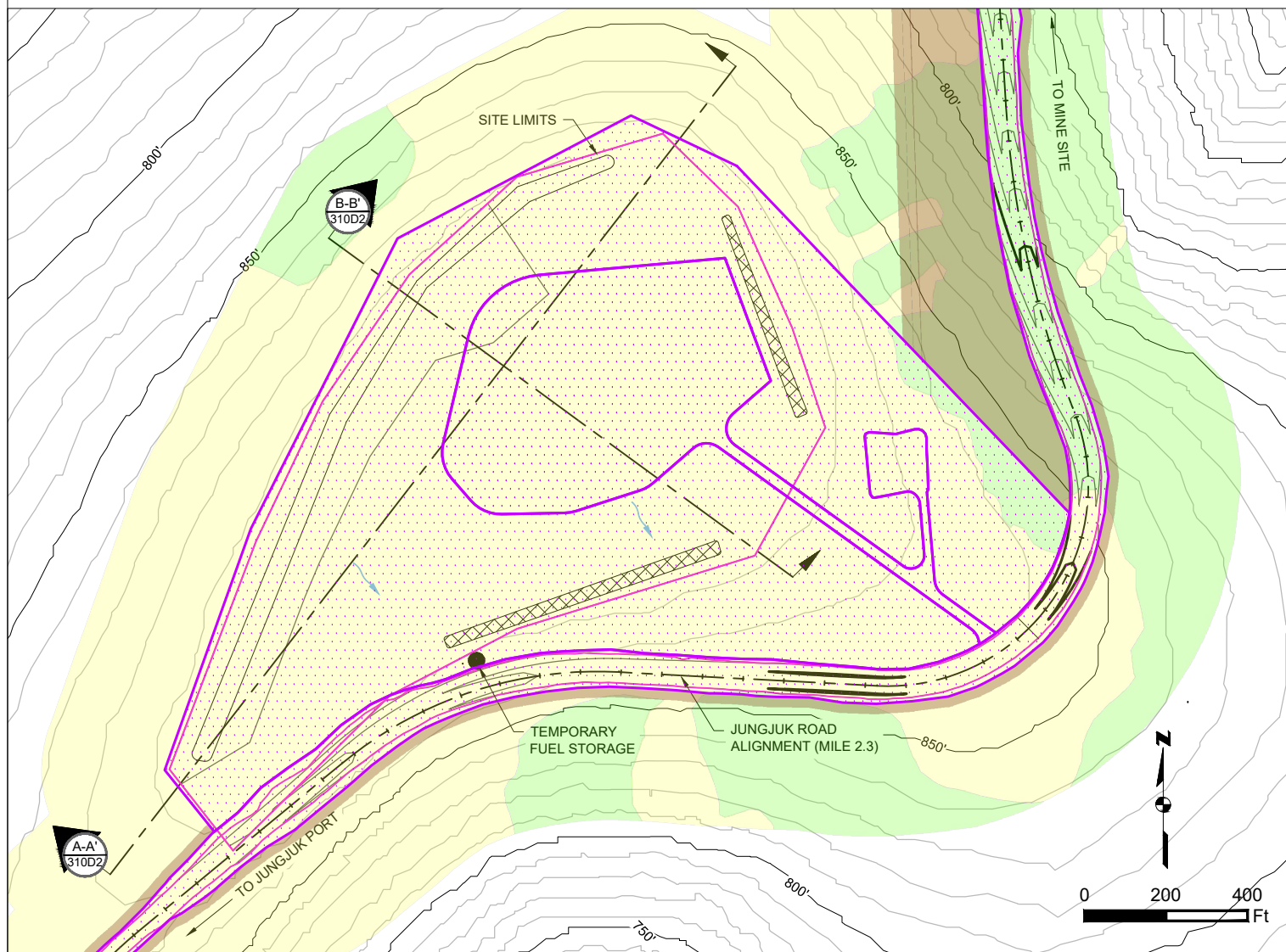
Associated Engineering Drawings Donlin_BRIDGES.dwg (RECON) OCT 2016		DONLIN GOLD PROJECT APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		DRAWING TITLE: CROOKED CREEK BRIDGE SECTIONS & DETAILS	
NAD 1983 UTM Zone 4N (Meters)		FIGURE NO. TA-310D1b		FILE NO. POA-1995-120	
SCALE: AS SHOWN		DATE: 12/22/2017			



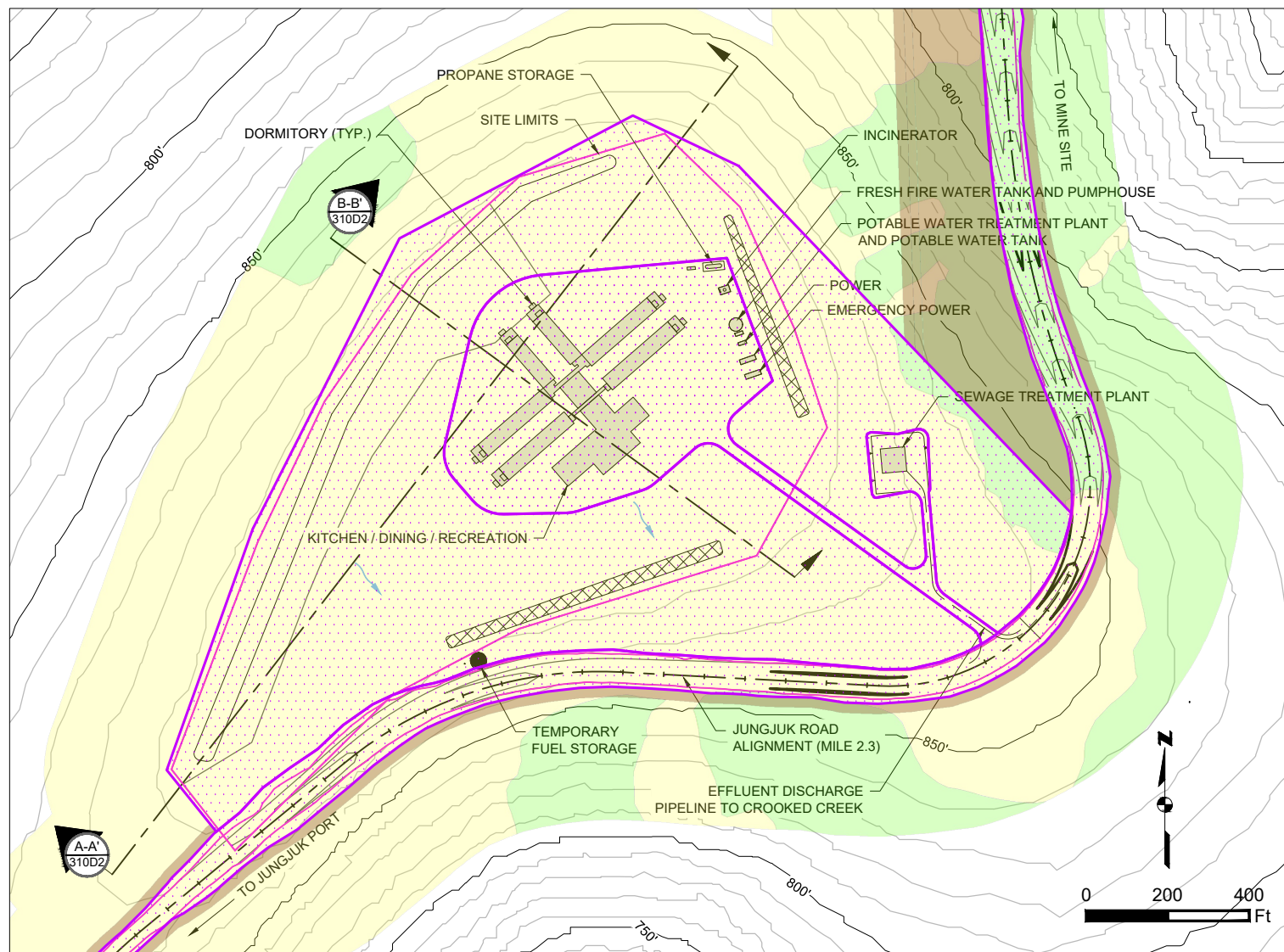
MATERIAL SITE 01 SECTION A-A'
HORIZONTAL SCALE 1" = 200'
VERTICAL SCALE 1" = 40'



MATERIAL SITE 01 SECTION B-B'
HORIZONTAL SCALE 1" = 200'
VERTICAL SCALE 1" = 40'



MATERIAL SITE 01 PLAN
SCALE 1" = 400'

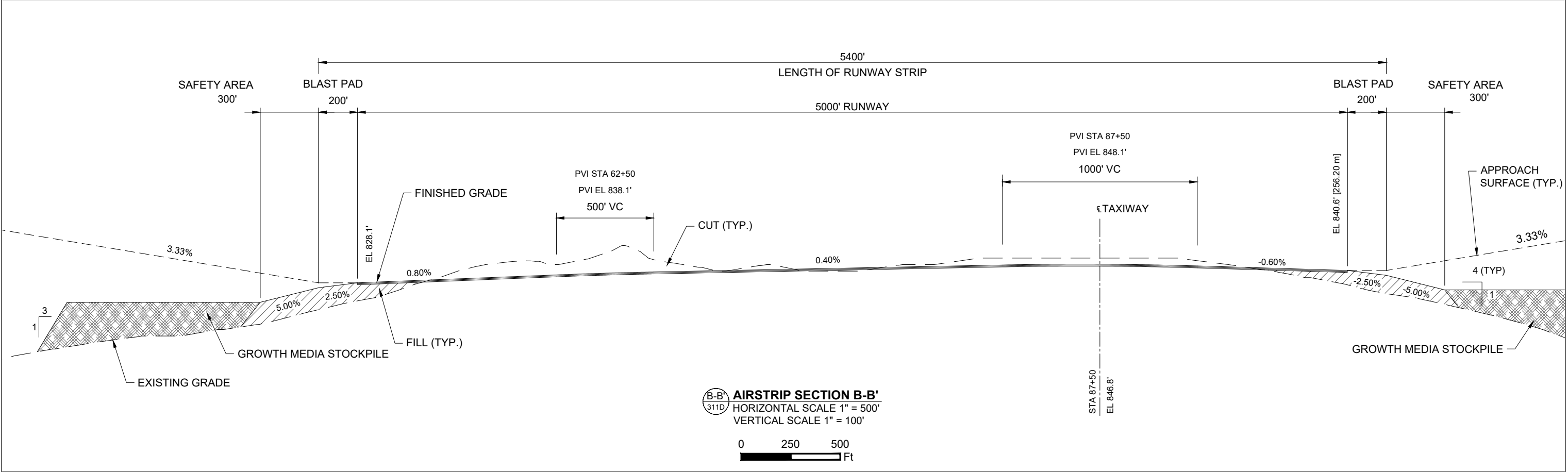
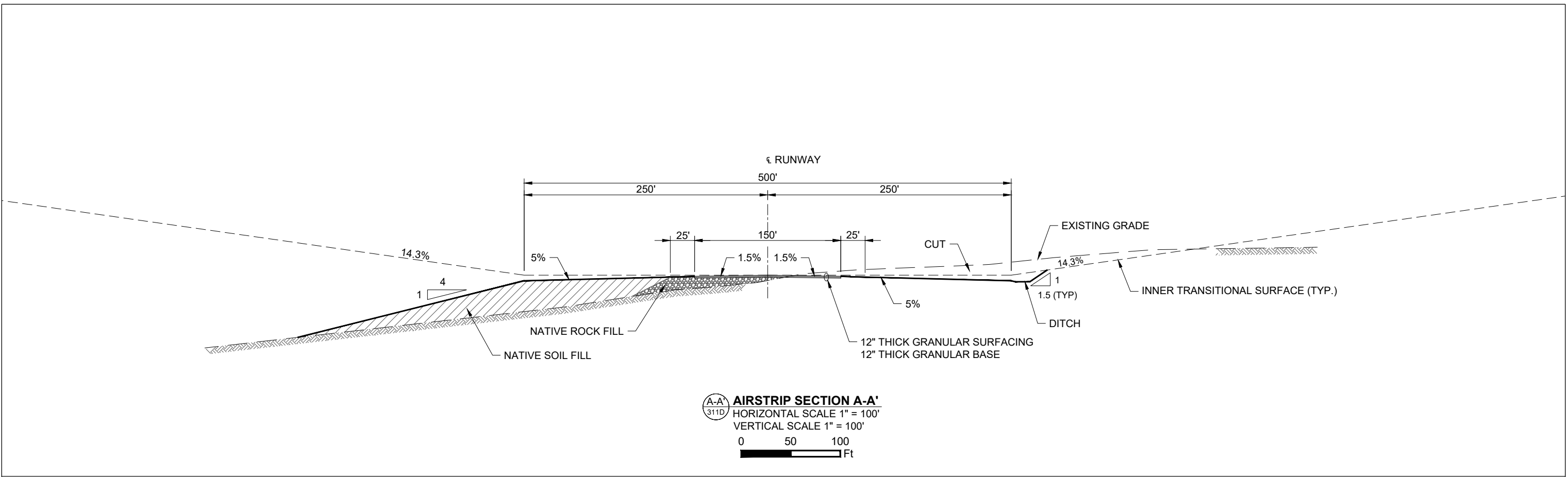


CAMP FACILITIES
SCALE 1" = 400'

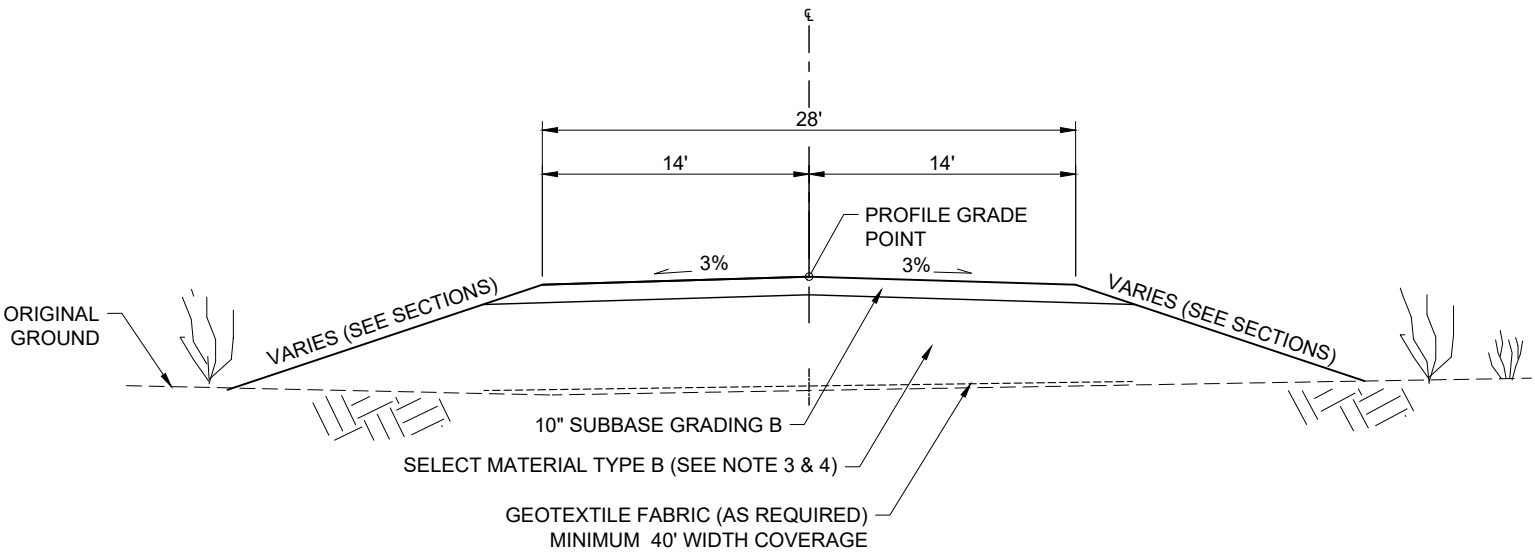
NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

PLAN LEGEND:			SECTION VIEW LEGEND:		
Uplands	Existing 10' Contours	Work Area/Vegetation Clearing	Fill Area		
Wetlands	Existing 50' Contours	Cut/Fill Limit	Cut Area		
Waters of U.S.	Proposed 10' Contours	Unnamed River/Stream	Existing Ground		
	Proposed 50' Contours	Named River/Stream	Proposed Grade		
			Proposed Drainage Direction		
			Overburden And Growth Media Stockpile		
			Temporary Fuel Storage		

Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE:	
Donlin_Jungjuk_MaterialSites_Rev3_150202.dwg (RECON) FEB 2015		APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		MATERIAL SITE 01 LAYOUT AND SECTIONS	
NAD 1983 UTM Zone 4N (US Survey Feet)		FIGURE NO.		FILE NO.	
SCALE: AS SHOWN		DATE: 12/22/2017		TA-310D2	
				POA-1995-120	



	Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE:	
	A1-166549-80-13-020 (AMEC) 04/05/2011; A1-166549-80-13-021 (AMEC) 04/05/2011		APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		AIRSTRIP SECTIONS	
	SCALE: AS SHOWN		DATE: 12/22/2017		FIGURE NO. TA-311D	FILE NO. POA-1995-120

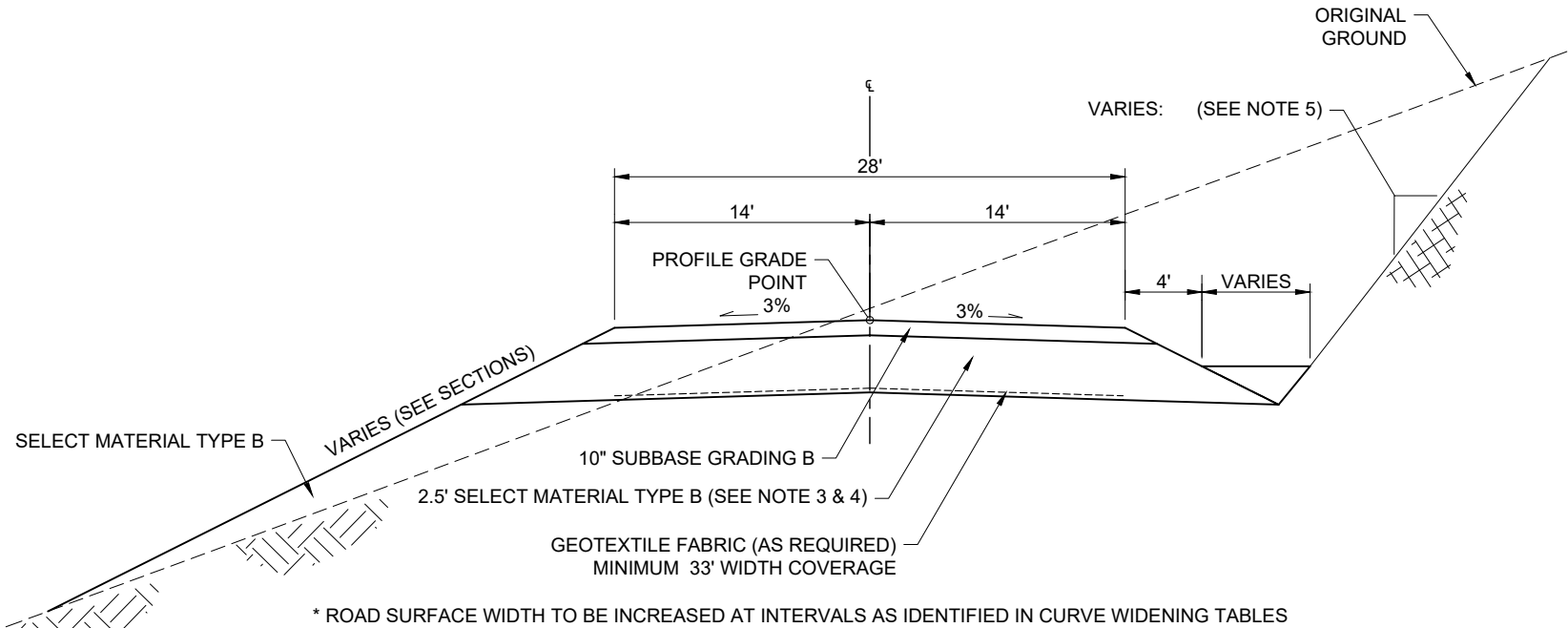


SECTION TYPICAL FOR WETLAND AND PERMAFROST INTERVALS IN MOSTLY LEVEL TERRAIN.

A-A
312T
ROAD TYPICAL SECTION FOR WETLAND OR PERMAFROST AREAS
SCALE 1" = 10'
0 5 10
Ft

NOTES:

1. CLEARING LIMITS ARE TOE OF FILL.
2. SUBBASE GRADING B; TO CONSIST OF 3" MINUS, WELL GRADED, GRANULAR MATERIAL WITH 6 TO 10% PASSING THE 200 SIEVE. MATERIAL TO BE DURABLE
3. SELECT MATERIAL TYPE B; TO CONSIST OF COARSE ROCK OR GRAVEL. NON-FROST-SUSCEPTIBLE.
4. DEPTH OF FILL WILL VARY DEPENDING ON SOIL TYPE AND CONDITION. 6' TOTAL EMBANKMENT DEPTH WILL TYPICALLY BE THE MINIMUM.
5. TO THE EXTENT POSSIBLE, NATIVE VEGETATION AND GROUND SURFACE TO BE LEFT INPLACE.



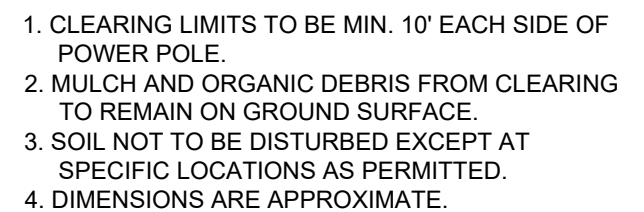
* ROAD SURFACE WIDTH TO BE INCREASED AT INTERVALS AS IDENTIFIED IN CURVE WIDENING TABLES

B-B
312T
ROAD TYPICAL SECTION FOR AREAS WITH GOOD SOILS OR ROCK
SCALE 1" = 10'
0 5 10
Ft

NOTES:

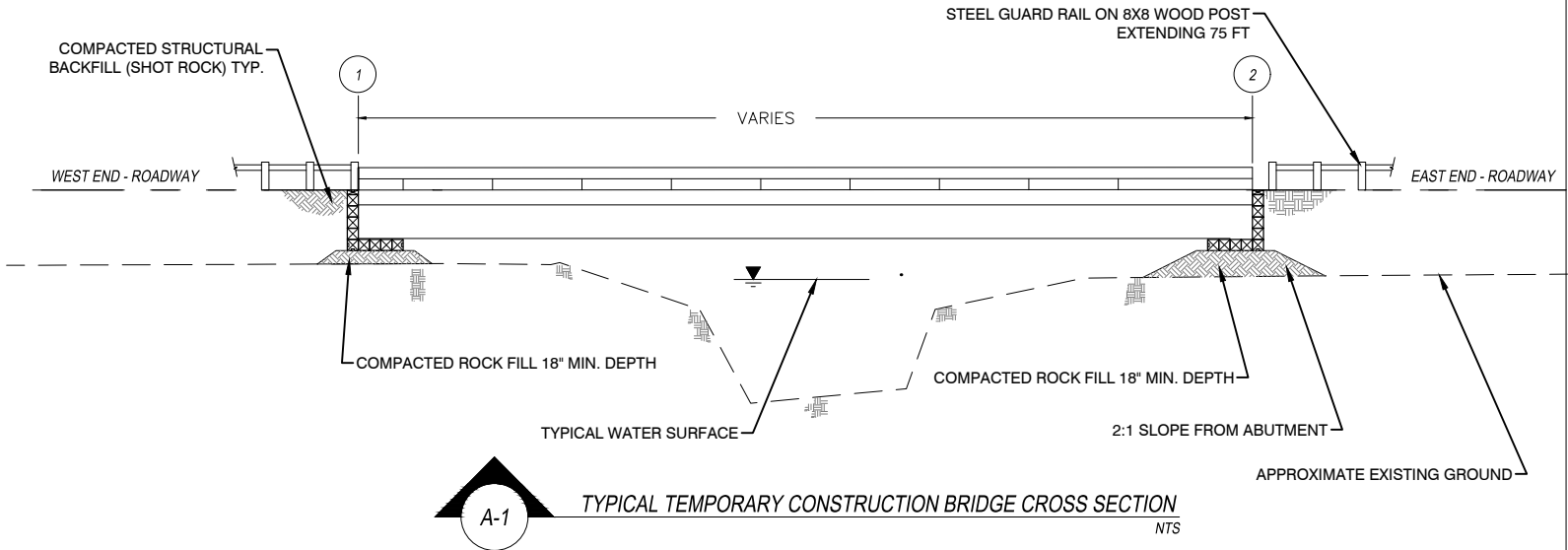
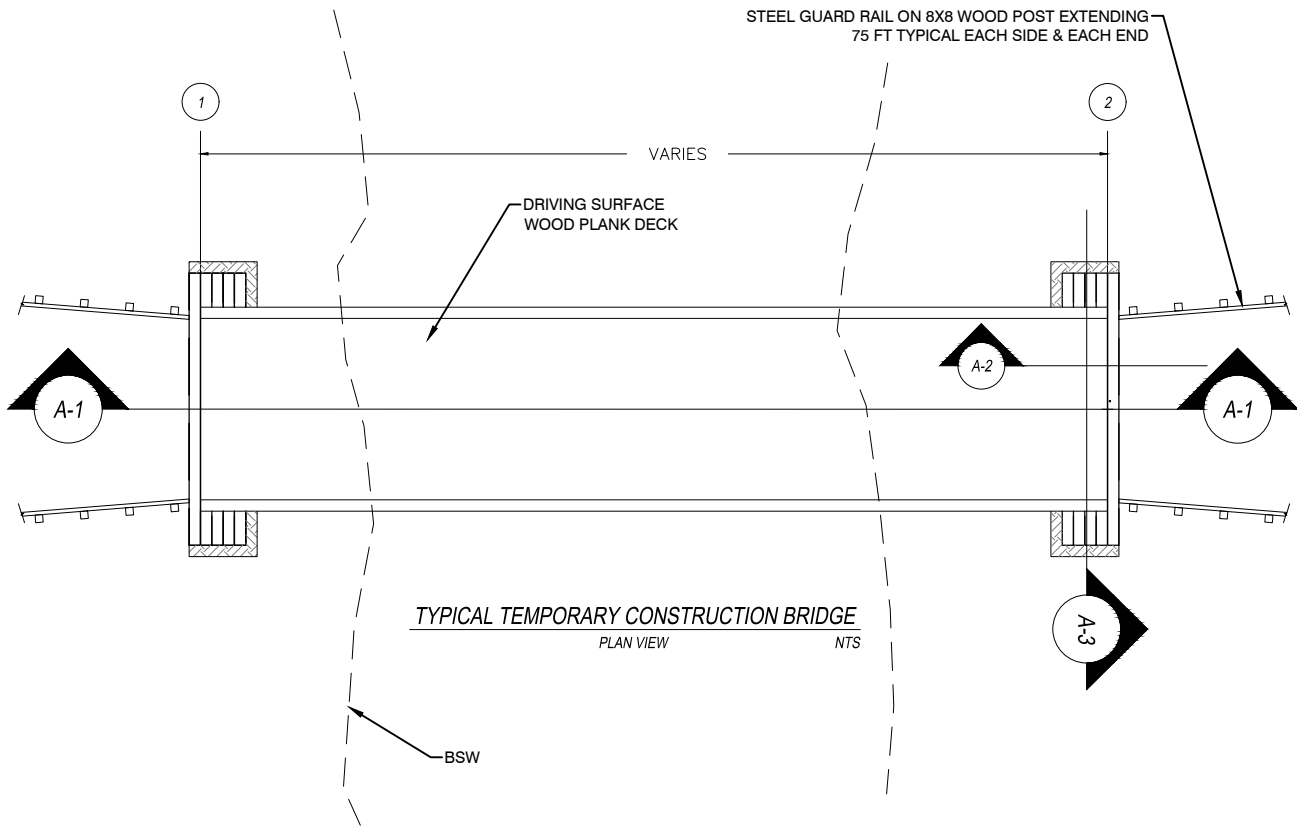
1. CLEARING LIMITS MIN. 3.3' BEYOND TOP OF CUT OR TOE OF FILL.
2. SUBBASE GRADING B; TO CONSIST OF 3" MINUS, WELL GRADED, GRANULAR MATERIAL WITH 6 TO 10% PASSING THE 200 SIEVE. MATERIAL TO BE DURABLE
3. SELECT MATERIAL TYPE B; TO CONSIST OF COARSE ROCK OR GRAVEL. NON-FROST-SUSCEPTIBLE.
4. DEPTH OF FILL WILL VARY DEPENDING ON SOIL TYPE AND CONDITION. 3.3' TOTAL EMBANKMENT DEPTH WILL TYPICALLY BE THE MINIMUM.
5. BACKSLOPES WILL VARY DEPENDENT UPON SOIL TYPES OR ROCK CHARACTERISTICS.
TYPICAL:
3.0 : 1 FOR WET SILTY COLLUVIAL SOIL
2.0 : 1 FOR WELL DRAINED SILT AND SILTY GRAVEL
1.5 : 1 FOR WELL DRAINED SILT AND SILTY GRAVEL UP TO 1.0 : 1 FOR ROCK
6. ACCOMODATE EXCESS EXCAVATION AND WASTE DISPOSAL BY FLATTENING AND/OR EXTENDING INSLOPE. EXTENT TO BE DETERMINED BY FIELD ENGINEER.

Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE:	
A1-166549-4100-C-0097 (RECON/AMEC) MAR 2012; A1-166549-4100-S-101 (RECON/AMEC) MAR 2012		APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		ROAD TYPICAL SECTIONS	
SCALE: AS SHOWN		DATE: 12/22/2017		FIGURE NO. TA-312T	FILE NO. POA-1995-120



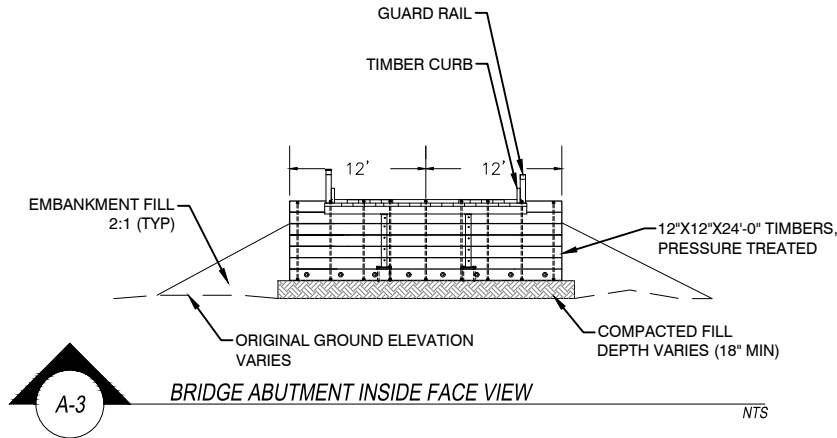
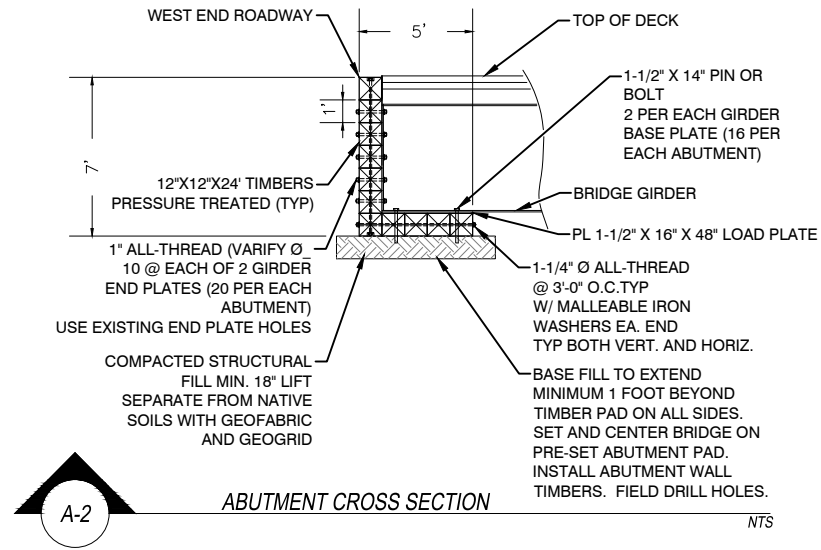
POWERPOLE SECTION
N.T.S.

Associated Engineering Drawings		DONLIN GOLD PROJECT		DRAWING TITLE:	
M21E-DT-EE_01.dwg (BAKER) SEP 2014; M05C-SC-TR_01.dwg (BAKER) SEP 2014		APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		TYPICAL POWERPOLE CLEARING LIMITS DETAILS	
				FIGURE NO.	FILE NO.
		SCALE: AS SHOWN	DATE: 12/22/2017	TA-313T	POA-1995-120



NOTES:

1. ABUTMENT PADS AND STRUCTURES TO BE PLACED ABOVE OHW.
2. BRIDGE ABUTMENT CONSTRUCTION DETAILS FOR BRIDGES AT CROOKED CREEK, NORTH FORK GETMUNA CREEK, SOUTH FORK GETMUNA CREEK, GETMUNA TRIBUTARY, AND THE UPPER & LOWER CROSSINGS OF JUNGJUK CREEK. ALL BRIDGES TO BE INSTALLED PER PERMIT REQUIREMENTS AND AT LOCATIONS FIELD STAKED BY PROJECT ENGINEER.



NOTE: ALL GRADING IS PRELIMINARY AND SUBJECT TO CHANGE PRIOR TO FINAL DESIGN.

Associated Engineering Drawings

Donlin_BRIDGES.dwg (RECON) OCT 2016

DONLIN GOLD PROJECT

APPLICANT: Donlin Gold, LLC
4720 Business Park Blvd., Suite G-25
Anchorage, Alaska 99503

NAD 1983 UTM Zone 4N (Meters)

SCALE: AS SHOWN

DATE: 12/22/2017

DRAWING TITLE:

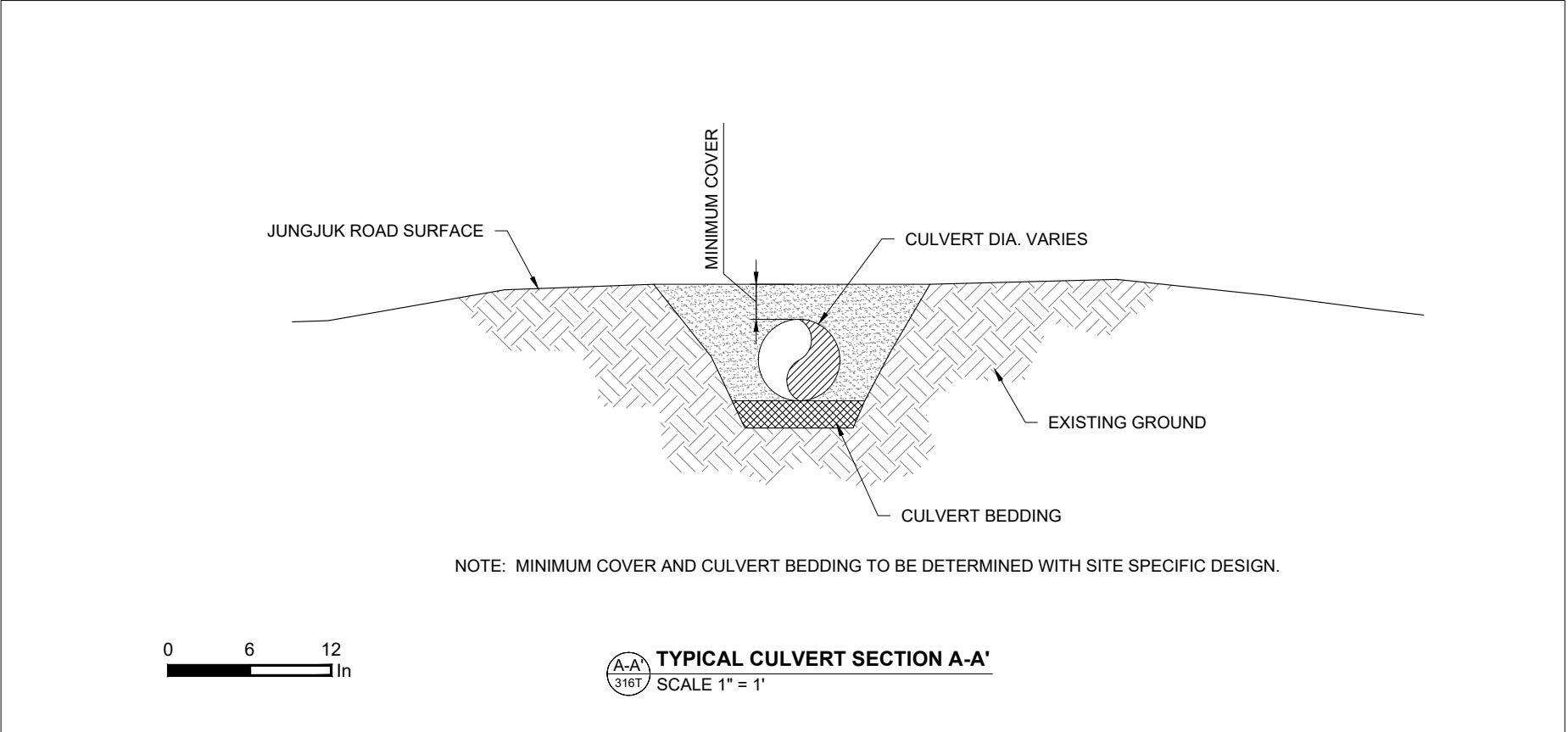
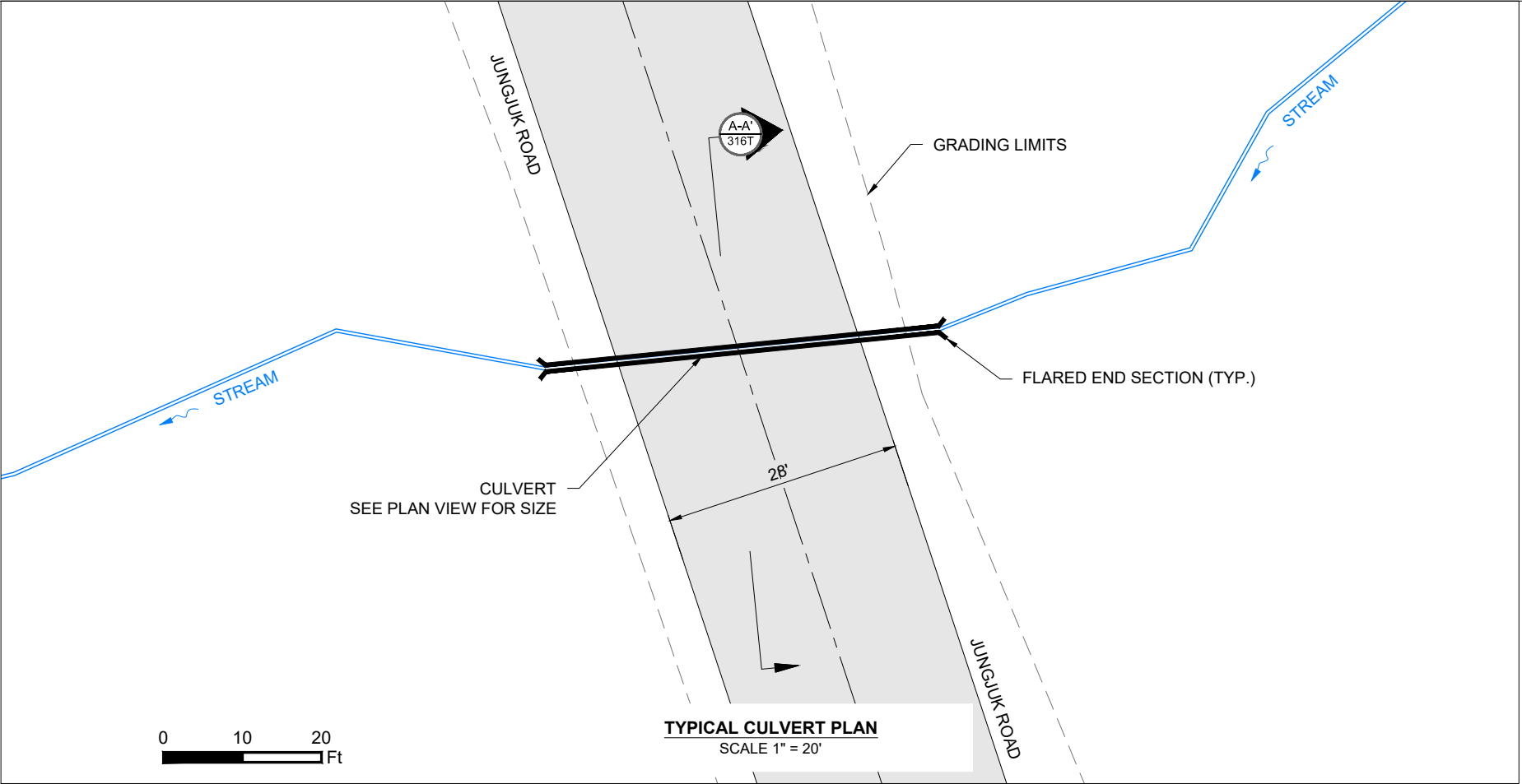
**TYPICAL TEMPORARY
CONSTRUCTION BRIDGE
PLAN & SECTIONS**

FIGURE NO.

TA-314T

FILE NO.

POA-1995-120



	Associated Engineering Drawings		DONLIN GOLD PROJECT APPLICANT: Donlin Gold, LLC 4720 Business Park Blvd., Suite G-25 Anchorage, Alaska 99503		DRAWING TITLE: TYPICAL CULVERT				
			NAD 1983 UTM Zone 4N (US Survey Feet)		FIGURE NO.		FILE NO.		
					TA-316T		POA-1995-120		
		SCALE: AS SHOWN		DATE: 12/22/2017					