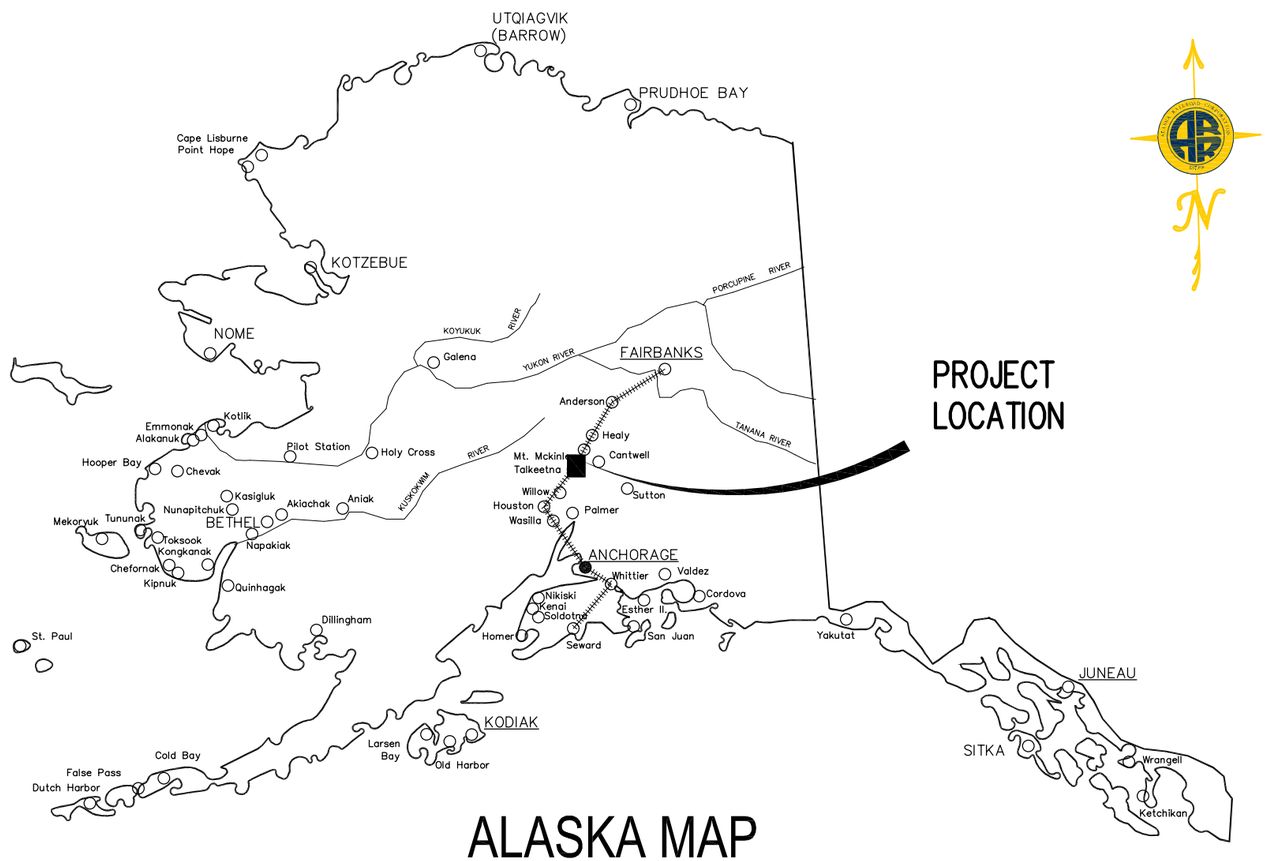


ALASKA MAP

NOT TO SCALE

General Notes:

1. Field Survey for active quarrying areas including stockpiles utilized lidar and was performed from September 27 to October 1, 2015. Lidar from the Matanuska-Susitna Borough was used elsewhere.
2. Drawing intended to be used as a visual representation of existing and planned quarry activity's.
3. Waste material shall be placed in compacted layers on the existing quarry floor. Individual lifts are not to exceed one foot.
4. The quarry floor shall be graded and left in a uniform, smooth, compacted and useable surface. Drainage to be as indicated in the contract documents.
5. Berms shall be compacted and graded to drain in a specified direction and shall be constructed and maintained to reduce and control surface water discharge.
6. Where drainage is specified, slopes shall be constructed and maintained at a minimum grade of 2%
7. Berms and drainage swales shall be constructed where required. As such, to remain SWPPP compliant and reduce concreted flows.
8. Where applicable, safety berms shall be constructed to meet MSHAW requirements and as directed by the owner.
9. Quarry face shall be benched and maintained according to MSHAW requirements amd as shown in the contract documents, access to benches shall be constructed and maintained.
10. Blasting activities shall extend in a uniform and even pattern, chasing material vain's shall not be permissible.
11. Organic overburden located above the eastern and southern portions of the existing quarry face shall be stripped and placed on the sloped spoils pile as shown on the drawings.
12. Drainage ditches/swales and storm water countermeasures shall be maintained and constructed where necessary and required by Federal, State and Local Agencies.
13. Ballast shall be monitored for acceptable quality and gradation. Ballast samples collected for Quality Assurance may be collected from material stockpiles and from production belts.
14. Ballast samples for Quality Control purposes shall be taken directly off the production belt.
15. The quarry access road shall be maintained and repaired as often as required to maintain storm water controls and safety requirements.
16. A non potable water well is currently located near the laydown area and load out rail.
17. ARRC personal and equipment shall perform rail car loading operations, this may occur simultaneously with material production.
18. Material shall be stockpiled in such a way that reduces segregation and material degeneration.
19. Stockpiles shall be placed as near to the load out rail as possible but not within 35 feet of the near rail and no higher then twenty (20) feet.
20. 100,000 Tons of Ballast material shall be stockpiled south of the primary stockpile area as shown on the drawings for use by a third party at a later date.

ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

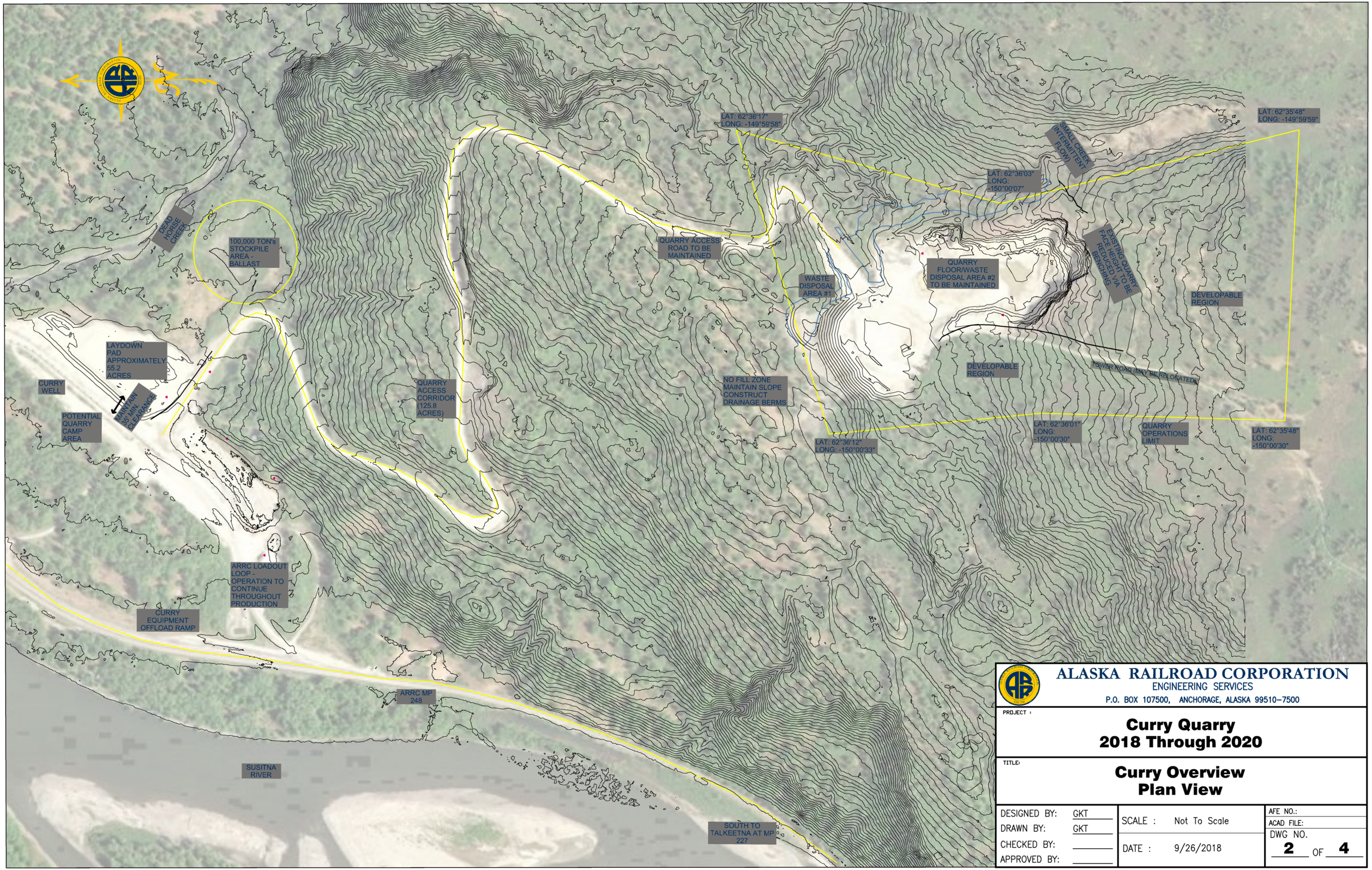
PROJECT :

Curry Quarry
2018 Through 2020

TITLE:

Developement Plans
Ballast Production

DESIGNED BY: GKT	SCALE : Not To Scale	AFE NO.:	
DRAWN BY: GKT		ACAD FILE:	
CHECKED BY:	DATE : 9/26/2018	DWG NO. 1 OF 4	
APPROVED BY:			



ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

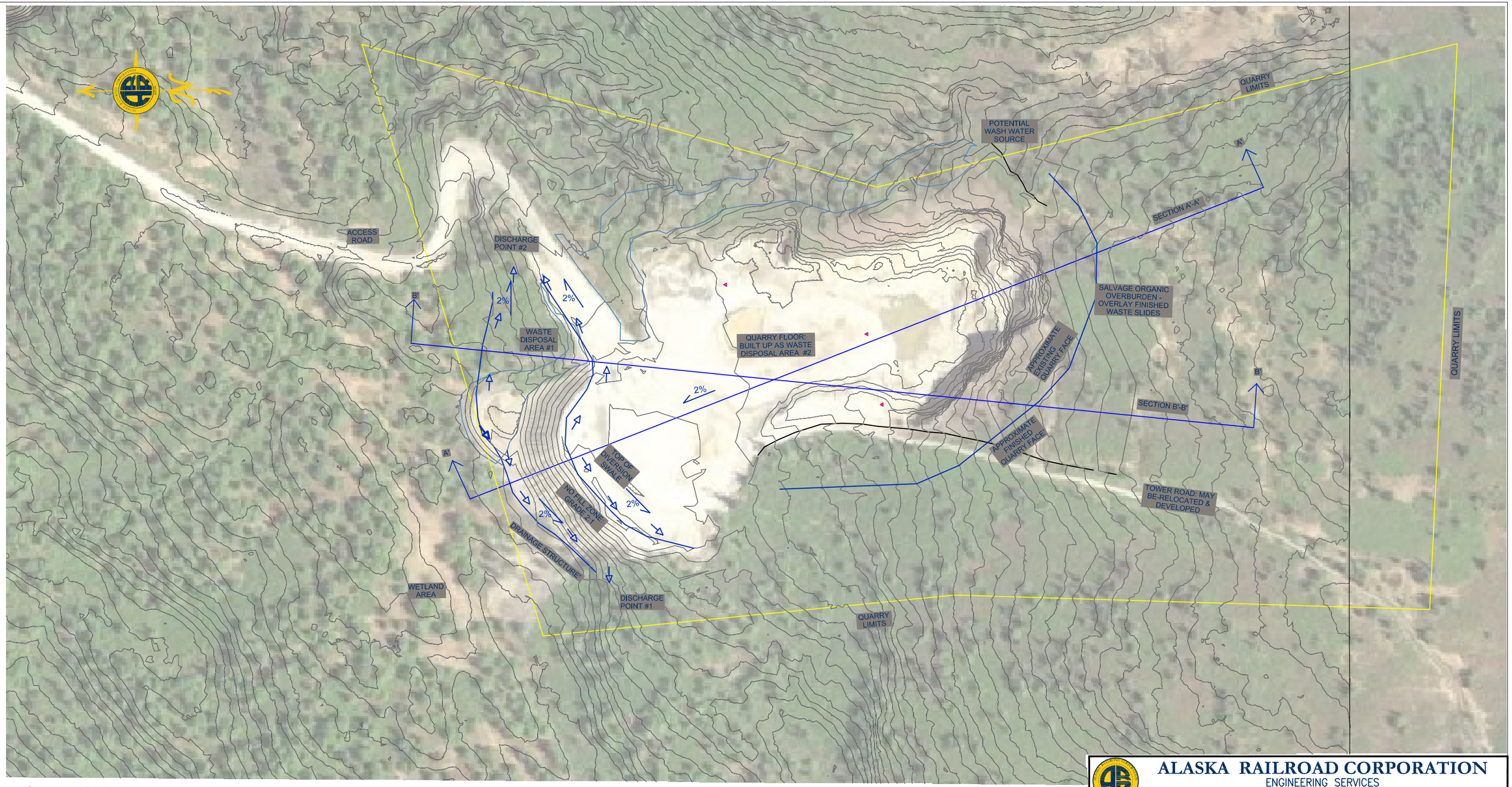
PROJECT :

Curry Quarry
2018 Through 2020

TITLE:

Curry Overview
Plan View

DESIGNED BY:	GKT	SCALE : Not To Scale	AFE NO.:
DRAWN BY:	GKT		ACAD FILE:
CHECKED BY:		DATE : 9/26/2018	DWG NO. 2 OF 4
APPROVED BY:			



General Notes:

1. No road access is available to the quarry.
2. Equipment travel will be limited to work trains, crew transportation via Hurricane Turn passenger train, helicopter or boat.
3. Crew transport shall be coordinated through and is the responsibility of the contractor/
4. All equipment will be mobilized and demobilized via dedicated work trains loaded at the Anchorage or Fairbanks Yards.
5. At the close of the first season of work, ARRC will provide a partial de-mobilization and springtime a partial re-mobilization.
6. ARRC will provide diesel fuel to the Quarry site.
7. Typical sections are intended for a visual representation of planned, at completion quarry development progression and expansion.
8. Contractor shall be responsible for providing, for ARRC approval their own Quarry development plan
9. Access to all benches shall be maintained throughout and after production.
10. Crusher waste and other waste material shall only be placed in locations approved by ARRC.
11. Waste material may be deposited in even lifts on the existing quarry floor. Lifts are not to exceed one (1) foot in depth and shall be properly compacted.
12. Production shots shall be loaded for the primary purpose of creating specified ballast material.
13. Subsequence larger rock created as the byproduct of ballast production shall be used as riprap.

ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

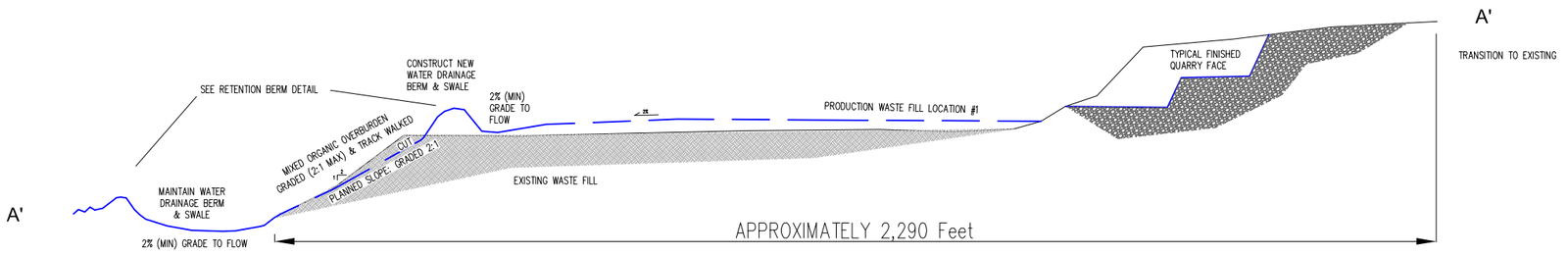
PROJECT :

Curry Quarry 2018 Through 2020

TITLE:

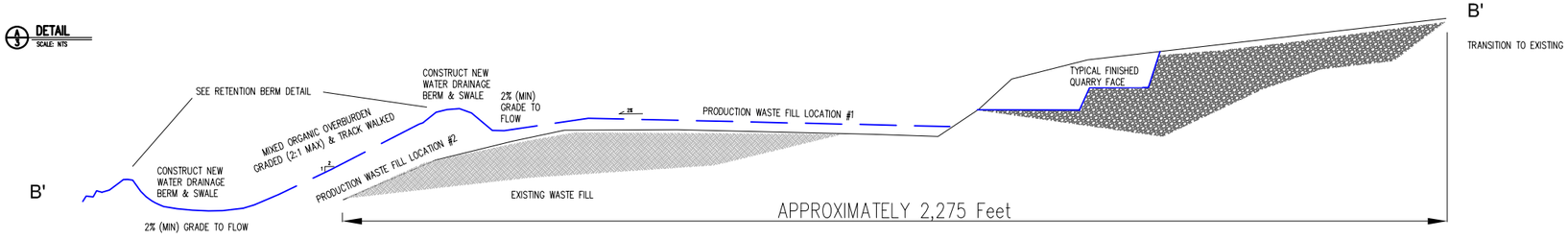
Site Plan View Quarry Limits

DESIGNED BY:	GKT	SCALE : Not To Scale	AFE NO.:
DRAWN BY:	GKT		ACAD FILE:
CHECKED BY:		DATE : 9/26/2018	DWG NO. 3 OF 4
APPROVED BY:			



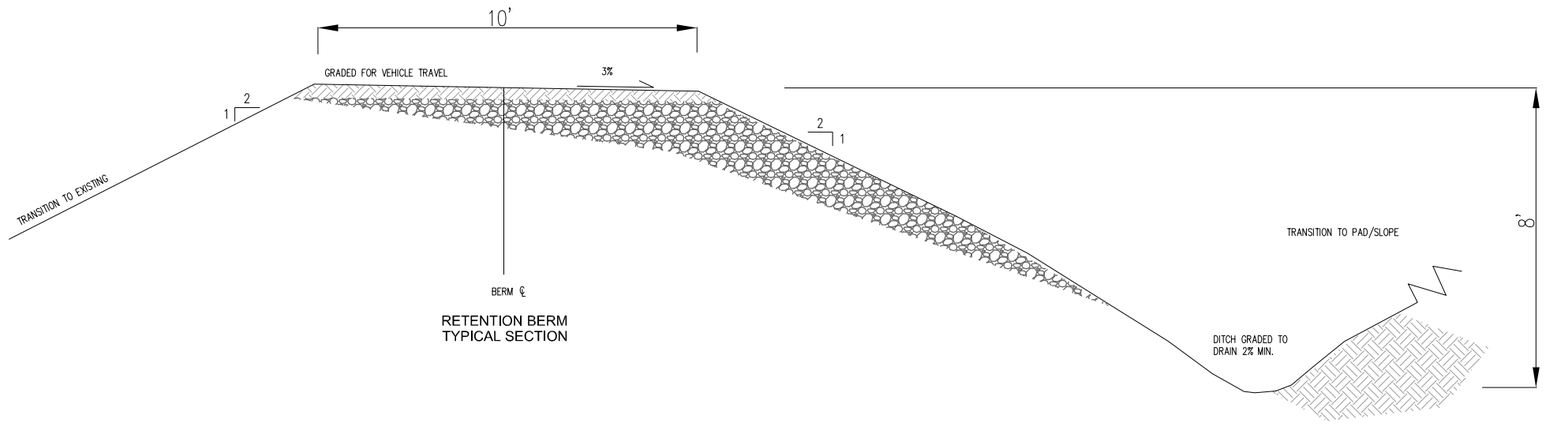
PROFILE SECTION
A'-A'
EXISTING/PLANNED

DETAIL
SCALE: NTS



PROFILE SECTION
B'-B'
EXISTING/PLANNED

DETAIL
SCALE: NTS



RETENTION BERM
TYPICAL SECTION

DETAIL
SCALE: NTS

General Notes:

1. Site conditions, including topographical survey, may have changed.
2. All plans and drawings are intended for visual representations of general concepts not drawn to scale.
3. Typical sections are intended for a visual representation of planned representation of the quarry development progression.
4. Underlain graphic was taken from Google Earth and was dated May of 2018.
5. ARRC may perform interim surveys throughout production to measure product quantity and quarry development.

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PROJECT :
Curry Quarry
2018 Through 2020

TITLE:
Drainage Swale/Berm - Cross Section
Typical Sections

DESIGNED BY: GKT	SCALE : Not To Scale	AFE NO.:	
DRAWN BY: GKT		ACAD FILE:	
CHECKED BY:	DATE : 9/26/2018	DWG NO. 4 OF 4	
APPROVED BY:			

C:\Users\ThomasG\Desktop\2017-05-24 Curry Quarry Surfaces w Lidar v2018_9-17-18.dwg VPort: PROFILES (3) Plot Style: 750C-Half.ctb