State of Alaska
Department of Transportation and Public Facilities

Mining and Reclamation Development Guidelines
MS 65-9-090-2 – Wiseman Quarry

This mining and reclamation plan is subject to the Bureau of Land Management (BLM) Use Permit FF-093019 (expiration 12/31/2022) and all site-specific stipulations contained. This letter is available either from the BLM's Fairbanks office or State of Alaska Department of Transportation (ADOT) Northern Region Materials Section at 2301 Peger Road, Fairbanks, Alaska, 99709, telephone 907-451-2245.

Location

Within Section 30, T30N, R11E, Fairbanks Meridian at Dalton Highway MP 186.

The site is a bedrock quarry on a west-facing hillside overlooking the Dalton Highway and Trans-Alaska Pipeline.

Description

This material site is shared with Alyeska Pipeline Service Company (APSC) (OMS 100-2.1). Due to the limited distribution of favorable useable material on this portion of the highway ADOT, APSC and others heavily use this material site. Due to the limited distribution of bedrock within this site all operators mine in the same areas. Coordination will be required with APSC, and other potential operators.

APSC also has mining plan on file with the BLM. If any of the following guidelines are in conflict with those of APSC, the applicant will contact both parties to resolve the conflicting stipulations.

*The contractor will hold a meeting with ADOT and APSC **prior** to any in-pit work to ensure all mining, processing, and reclamation activities are coordinated with all parties.*

Bedrock in this site consists of hard conglomerate, interbedded with sandstone and shale. Bedding in the exposed face strikes northeast and dips steeply to the southeast. Future mining will follow favorable beds along strike to the northeast and down-dip.

The site is accessed via 100-AMS-2.1 which traverses an APSC material storage pad.

Drilling and blasting will be required for production in the quarry.

Scheduling

Due to the limited working area within the quarry, contractors are responsible for ascertaining there are no competing production interests during their desired production window.

Proposed Use

This bedrock site is primarily a source for riprap. Other products are potentially available from the site, including ditch lining and select materials. Test hole and laboratory testing data is available from ADOT Materials Section office at 2301 Peger Road, Fairbanks, Alaska, 99709, telephone number 907-451-2245.

Mining has created a benched face in the northeast portion of the quarry. Future mining will proceed in a benched manner. This will require maintaining an access road for drilling, blasting and haulage equipment to each bench. Crushing, sorting or other processing is expected to occur on the pit floor or material storage area.

Attached are a plan and typical section for the proposed mining.

Access and Buffers

Access to the material site exists, departing the Dalton Highway at MP 261.

A 50-feet wide buffer within the material site boundary between surrounding lands and mining activities will remain undisturbed.

Work Pad

ADOT Maintenance and Operations actively use this site for producing and stockpiling material for maintenance of the Dalton Highway. This site will be mined and maintained to ensure it remains useable as a long-term source to meet ADOT needs in the area for both construction and maintenance needs. A work pad 5 to 10 acres in size will remain at the end of individual projects that subsequent operations can utilize.

Blasting

Bedrock at this site requires blasting for production. Blasting restrictions were placed in effect by the April 7, 2006 letter from the BLM.

Blasting notice and coordination is required with APSC as the Trans Alaska Pipeline is nearby. Blasting restrictions and plan requirements for blasting in proximity to the Trans Alaska Pipeline can be found in APSC Specification C-415, Blasting Restrictions Near The Trans Alaska Pipeline System.

Contractors will abide by these stipulations. Persons conducting the blasting shall be licensed by the State of Alaska for such purposes and shall observe all applicable laws and regulations.

Mining Objectives and Guidelines

The site will be mined in benches, nominally 20-feet high. Contractors may have specific plans or equipment constraints that make flexibility in bench size and location necessary. However, maximum bench height is 40 feet. Developing the pit in benches is intended to:

1. Provide multiple working faces.
2. Limit safety hazards to operators and wildlife due to falling rock.

3. Provide safer slopes for continued development.

Mining will take place following these guidelines:

1. The contractor shall survey and mark material site and buffer boundaries in the area to be mined prior to breaking ground.
2. Surface vegetation and organic soils are limited at this site. Windrow or stockpile them for use in reclamation.
3. Appropriate slope angles or offsets between overburden berms and the active pit should be used so berms do not fall into the active pit.
4. Overburden is limited at this site. It will be pushed off and stored in a berm or windrowed separate from the vegetation and organic soils, or incorporated directly into areas being reclaimed.
5. Overburden will not be stockpiled where it will need to be moved during future stripping or adjacent to the unnamed drainage southeast of the pit area.
6. Conserve material for future mining by not placing waste on top of material that can be mined in the future.
7. Mining will proceed in a benched manner. Individual benches will be no more than 40-feet apart vertically, and will be no narrower than 20-feet wide. Multiple benches can be in production at one time.
8. Individual bench faces may be vertical, but overall slope angle will be no steeper than 1H:2V.
9. Applicant will maintain access to all benches during and at the end of production.
10. Mining will not result in daylighting the current pit.
11. Mining will not lower the floor of the current pit.
12. The side slopes of the active pit should not be steeper than 1H:2V.
13. Contractors may elect to have flatter slopes.
14. All mining activities will be in accordance with the Construction General Permit (CGP) and an approved Storm Water Pollution Prevention Plan (SWPPP).
15. Conduct mining activities to put materials to their best use.
16. All material handled will be sorted and stockpiled by riprap class for future use. Reject amounts will depend on product(s) being produced. Riprap classes are defined on page 226 of the 2004 edition of the State of Alaska Department of Transportation and Public Facilities Standard Specifications for Highway Construction.
17. Screening, crushing, and sorting operations will occur within existing developed areas.
18. Place stockpiles of sorted material within the work area for future use. Coordinate stockpile locations with APSC and ADOT M&O representatives.
19. After each use, stockpiles will be left in a neat and orderly fashion, and appropriately signed.

As described, the contractor will haul and/or process material as it is mined. A temporary stockpile of unsorted material may be sited on the work pad as scheduling or other factors dictate. However, this stockpile will be completely sorted, as outlined above prior to leaving the site.

Reclamation Objectives and Guidelines

As mining progresses past a section of the pit, side slopes can be reclaimed. The reclamation plan has several general objectives:

1. Not to disturb previously reclaimed areas.
2. To blend with previous reclamation.
3. To prevent erosion and sediment transport to surrounding undisturbed areas.
4. To reestablish vegetation, and allow the development of habitat that will be productive and used by wildlife in the area.
5. To leave the excavated portion of the pit in a safe manner that would not endanger users of the area.
6. Not to preclude future development of un-mined areas.
7. All reclamation activities will be in accordance with the CGP and an approved SWPPP.

Reclamation activities will follow these general guidelines:

1. Slopes where future development is not anticipated will be reclaimed after each use. These slopes will be graded to 1.5H:1V, or flatter
2. Available overburden will be spread over the re-graded slopes.
3. Available vegetation and organic soils will then be spread over overburden.
4. At the end of each use the working or producing face will be scaled of lose and dangerous rock.
5. The active work area will not be reclaimed through the life of the material source. This area can be used for continued staging and stockpiling of material, and production of material on an as needed basis, so reducing the footprint of future operations.
6. After each use, the pit floor or pad will be graded to a flat or gently sloping shape, and the contractor will remove all equipment and non-native debris and waste.

Using silt and sand overburden and covering with salvaged vegetation and organic soils at the edges of the pit will help vegetation establish and stabilize the slopes. The limited overburden will be used to aid natural seed deposition and help native species to reestablish themselves. Invasion of native species often occurs through vegetative growth rather than seed dispersal.

Project Mining and Reclamation Plan

Prior to use of the site for any project, the contractor shall submit a detailed Project Mining and Reclamation Plan, in accordance with A.S. 27.19 and 11 AAC 97 for approval by both the BLM and ADOT. The detailed mining and reclamation plan submitted by the contractor will follow the guidelines in this and in the APSC mining plan. If any of guidelines in ADOT's development plan are in conflict with those in the APSC mining plan, the applicant will contact both parties to resolve the issues.

The Project Mining and Reclamation Plan, by sketch map and narrative describes the contractor's proposed method of operation and must be in compliance with the conditions outlined above. After approval of this plan, it will be followed by the contractor and Project Engineer.

In general all data that can be shown graphically should be shown in that manner unless it can be better described in the accompanying narrative. Section and profile drawings should be used as appropriate.

Project Mining and Reclamation Plans should contain the following as appropriate:

1) SKETCH MAPS

Sketch maps shall have a scale sufficient for clarity under field conditions and should not be overly complex or inflexible. Items to be shown on sketch maps, when appropriate, shall include:

a) Site boundary (including monumentation and demarcation);
b) Existing access route;
c) Proposed working limits to be marked on the ground;
d) Development stages;
e) Approximate contours before and after excavation;
f) High and low water lines;
g) Vegetation lines and type of vegetation, screens and dimensions;
h) Material stockpiling areas;
i) Overburden and reject stockpiling areas;
j) Other planned features, such as processing plants, temporary housing, well(s), weigh scales, etc.;
k) Final slope ratios and site drainage measures including grade and, when appropriate, day-lighting ditches or stream diversions;
l) Scale of drawing, North arrow, and specific dimensions as appropriate.

2) NARRATIVE

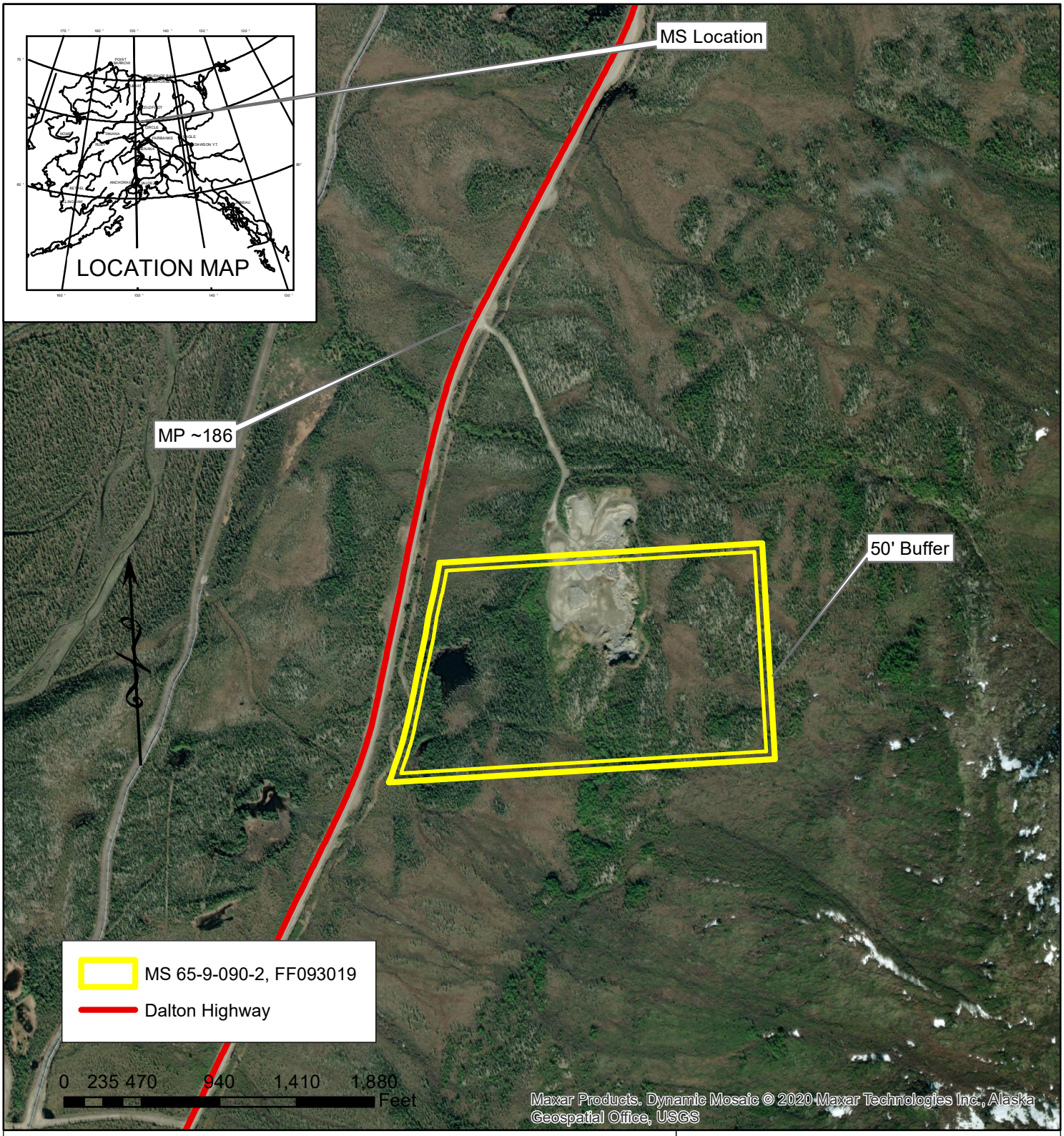
The mining and reclamation plan narrative may be made part of the sketch map or may be attached to the sketch map as conditions allow. Items to be addressed in the narrative shall include:

a) Methods of operation;
b) Length and times of operation (day, month, year, and working hours);
c) Air and water pollution control measures;
d) Rehabilitation measures.

3) SUPPLEMENTS AND AMENDMENTS

Supplements and amendments to an approved mining and reclamation plan may be initiated by the contractor or the Resident Engineer when conditions warrant such action. Supplements and amendments must be mutually agreed upon and proper approval obtained prior to commencement of work of a changed nature.

a) Minor changes are those that affect the handling of the details of the operation, but remain in compliance with the development guidelines. These changes may be authorized by the Resident Engineer.
b) Major changes are those which cause the final outcome of the site to be significantly different from the approved mining and reclamation plan or are not in compliance with the development guidelines.
c) Changes in final site outcome must be approved in writing by the Engineer.
d) Changes not in compliance with the development guidelines must be authorized in writing by the Engineer.



M.S.65-9-090-2
FF093019

T30N, R11E, Sec. 30 FM

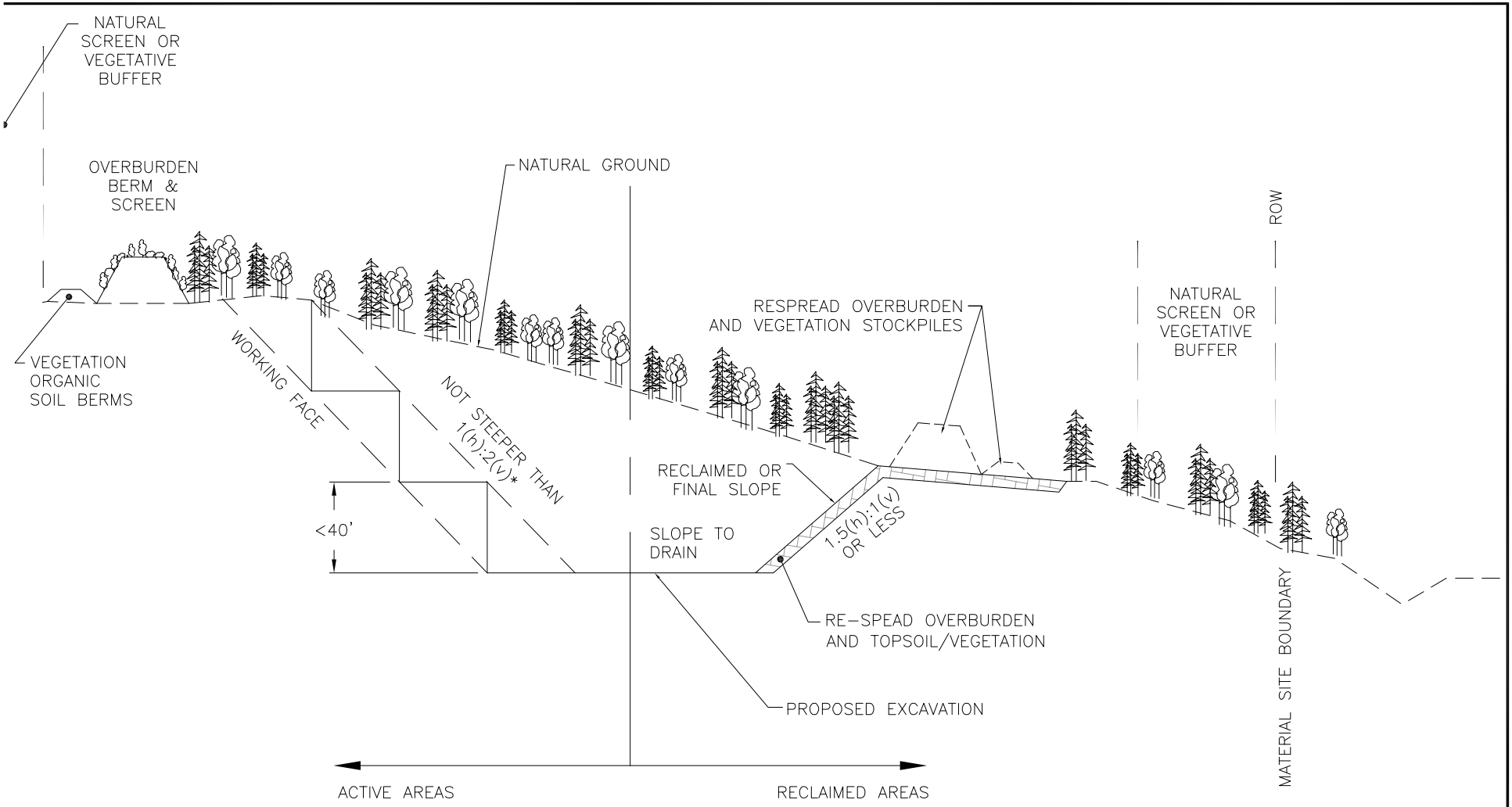
STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

MATERIAL SITE PLAN

M.S. 65-9-090-2

NORTHERN REGION	**Date:** 4/12/2023
SCALE NTS **DRAWN BY: KAW**	Current: ~64 acres



* MAXIMUM SLOPE ANGLE DEPENDS ON SITE-SPECIFIC PARAMETERS AND SHOULD BE DETERMINED FOR INDIVIDUAL SITES.

TYPICAL CROSS SECTION OF ROCK QUARRY

NOT TO SCALE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DATA: JR	M.S. 680-105-2 ROSEBUD CREEK PIT TYPICAL SECTION
DRAWN: JB	
APPROVED: SM	PROJECT NO.
DATE: AUG 2010	Y:\WORKING\MATERIAL SITES\x MINING PLANS\z Misc\2 cross sections\rock quar