




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Crystal Falls #1 and #2	MINE/PROSPECTING ID#: M-2019-045	MINERAL: GEM	COUNTY: El Paso
INSPECTION TYPE: Illegal(Unpermitted Operation)	INSPECTOR(S): Timothy A. Cazier	INSP. DATE: September 26, 2019	INSP. TIME: 10:15
OPERATOR: James Thomas	OPERATOR REPRESENTATIVE: James Thomas	TYPE OF OPERATION: ILL - Illegal	
REASON FOR INSPECTION: Citizen Complaint	BOND CALCULATION TYPE: IT.Bondcalculationtype.CD.Desc	BOND AMOUNT: No Bond Held	
DATE OF COMPLAINT: August 8, 2019	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: U.S.Forest Service	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: October 25, 2019	

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>NA</u>	(FN) FINANCIAL WARRANTY----- <u>NA</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>NA</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>NA</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>NA</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This inspection was prompted by a complaint received by the DRMS indicating two very large open pits as well as two other areas of additional digging had been present for 1 1/2 years with no activity or reclamation since. Mine claim information was provided in the complaint enabling the DRMS to contact the Claimant. The site was accessed from Bear Creek trail in the Pikes Peak National Forest, west of Colorado Springs in El Paso County. The complainant did not attend the inspection. This was a joint inspection with Jeff Hovermale representing the US Forest Service. Mr. James Thomas (mine claim holder) was notified of the inspection and was present. Tim Cazier represented the DRMS for this inspection.

Backfilling and Grading: Mr. Thomas pointed out where he had initiated consolidation and stabilization of cast-off material (see **Photos 1 & 2**) from digs in the vicinity of his discovery pits (see **Photos 3 & 4**), shown as markers on attached **Post Inspection Map** as Discovery post no 1 and no 2 that had occurred before he discovered the area. Backfill material was available for the larger dig sites (labeled as "Mathew's dig", "Facebook dig", and Mathew & Scott's dig" on the attached **Post Inspection Map**) observed within his two claims, but above the discovery pits on flatter ground (see **Photos 5, 6 & 7**).

Excess Spoil and Dev. Waste: Development waste or cast-off material surrounded all five notable dig sites. As noted above Mr. Thomas had initiated consolidation and stabilization of the cast-off material associated with the discovery pits. The cast-off material from both the Mathew's dig and the Mathew & Scott's dig had been scattered as far as 50 feet from the dig sites. The cast-off material from the Facebook dig site appeared to be primarily left in place, essentially turned over from where it was disturbed. Mr. Thomas committed to include reclamation costs for all three excavations by others in his financial warranty.

Fish and Wildlife: No discernable impact to wildlife was observed. Construction fencing provided a short barrier to steep highwall drop offs in each case (see **Photos 8 & 9**).

Hydrologic Balance: No stormwater or exposed groundwater was observed at any of the dig sites.

Reclamation Success: As stated above, Mr. Thomas had initiated stabilization of cast-off material in the steeply sloped (approximately 1H:1V) near the discovery digs. No reclamation had been initiated at the other three dig sites at the time of the inspection. Mr. Thomas explained he left all conditions "as is" when he received our August 12, 2019 letter indicating a mine reclamation permit and site inspection were required so we could observe the conditions at the time, without further clean-up. Mr. Thomas provided some hand drawings to myself and Mr. Hovermale showing how he intends to stabilize various planned excavations (see **Attachment A**).

Revegetation: No revegetation had been initiated at the time of the inspection. No noxious weeds were observed.

Sediment Control: Mr. Thomas explained he has professional experience and training in the construction industry for implementing erosion control measures. His efforts to stabilize the cast off material on the steep slope near the discovery posts appeared to be adequate at the time of this inspection. No erosion problems were observed as a result of the larger disturbances (attributed to others above, in Backfilling and Grading), therefore no immediate need for erosion control best management practices (BMPs) was deemed necessary. The DRMS encourages Mr. Thomas to continue his efforts in stabilizing the disturbed areas related to his claims.

Topsoil: Mr. Thomas stated he begin salvaging topsoil once he gets his mine reclamation permit and begins mining.

Summary: The DRMS recommends a 110(1) mine reclamation permit as the appropriate type given the affected area is less than 5 acres. Please reference Permit # M-2019-045 in future correspondence. The application can be found on our website at:

[http://mining.state.co.us/SiteCollectionDocuments/Hardrock110\(1\)App.pdf](http://mining.state.co.us/SiteCollectionDocuments/Hardrock110(1)App.pdf)

Or a fillable form can be found at:

[http://mining.state.co.us/SiteCollectionDocuments/Hardrock%20Metal%20Mining%20Limited%20Impact%20Operation%20110\(1\)%20%20\(2\).pdf](http://mining.state.co.us/SiteCollectionDocuments/Hardrock%20Metal%20Mining%20Limited%20Impact%20Operation%20110(1)%20%20(2).pdf)

Your application and fee must be submitted within 45 days of the date of this report (December 9, 2019). Please contact Tim Cazier (303)866-3567 ext. 8169 or email at tim.cazier@state.co.us if you have any questions regarding this report.

PHOTOGRAPHS



Photo 1. Stabilization of cast-off material (looking west from downhill & east of Discovery Pit #2).

PHOTOGRAPHS (cont.)



Photo 2. Stabilization of cast-off material (looking east from downhill & east of Discovery Pit #2)



Photo 3. Discovery Pit #2 (looking west from downhill side).

PHOTOGRAPHS (cont.)



Photo 4. Discovery Pit #1 (looking west from downhill side).



Photo 5. "Mathew's dig" (looking east from west side of highwall crest).

PHOTOGRAPHS (cont.)



Photo 6. "Facebook dig" (looking north from south end of disturbance).



Photo 7. "Mathew & Scott's dig" (looking east from west side of highwall crest).

PHOTOGRAPHS (cont.)



Photo 8. Construction fencing barrier above Discovery pit #2 (looking SE from above pit).



Photo 9. Construction fencing barrier above "Mathew's dig" (looking SW from highwall crest).

Inspection Contact Address

James Thomas
3506 Mesa Grande Drive
Colorado Springs, Colorado 80918

Enclosures (Post inspection map, Attachment A)


ec: Michael Cunningham, DRMS
DRMS file
Jeff Hovermale, USFS

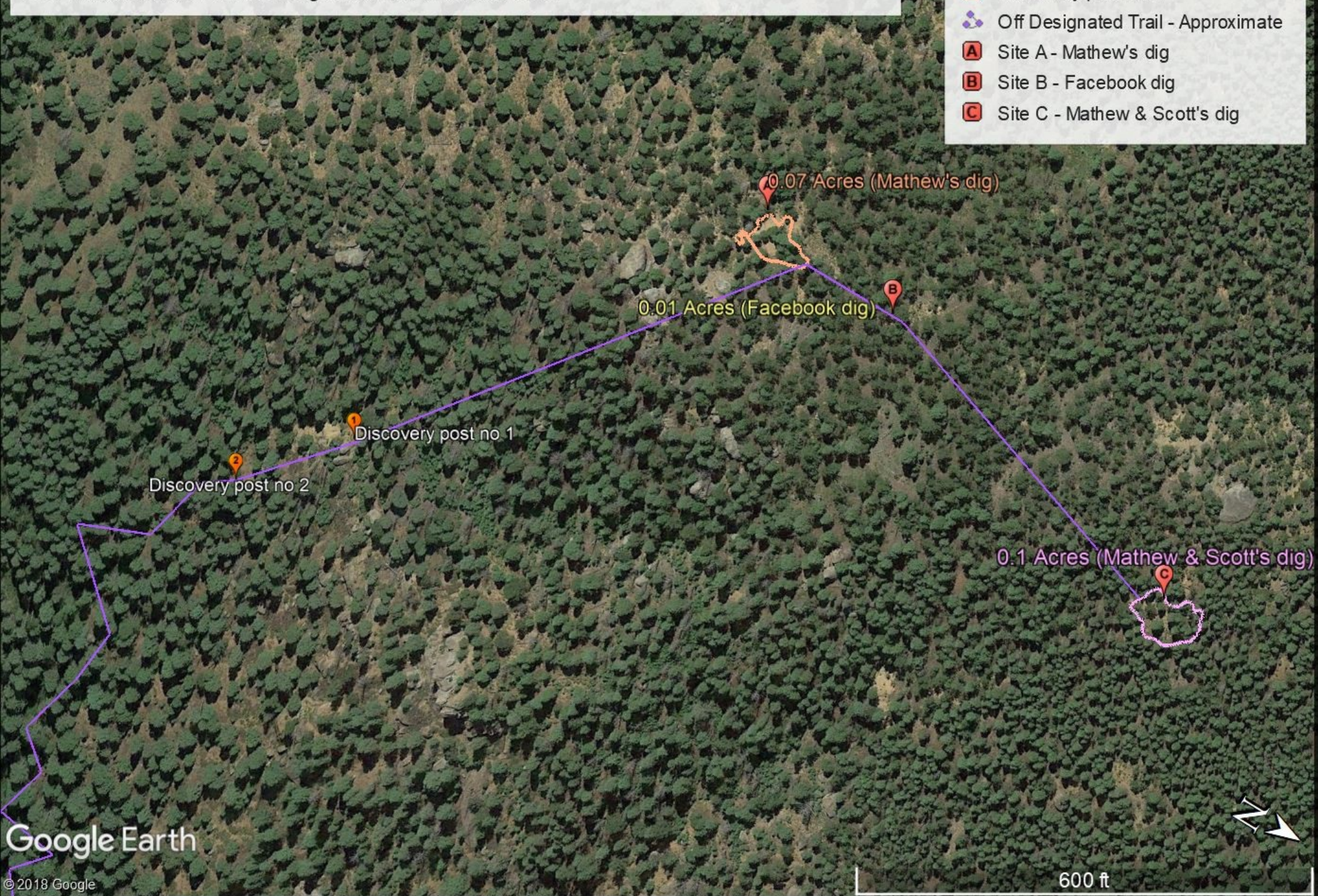
M-2019-045 Crystal Falls #1 & #2 2019 Post Inspection Map

Satellite Imagery from 6/9/2017.

GPS data collected 9/26/2019 using a handheld Trimble Juno 3B.

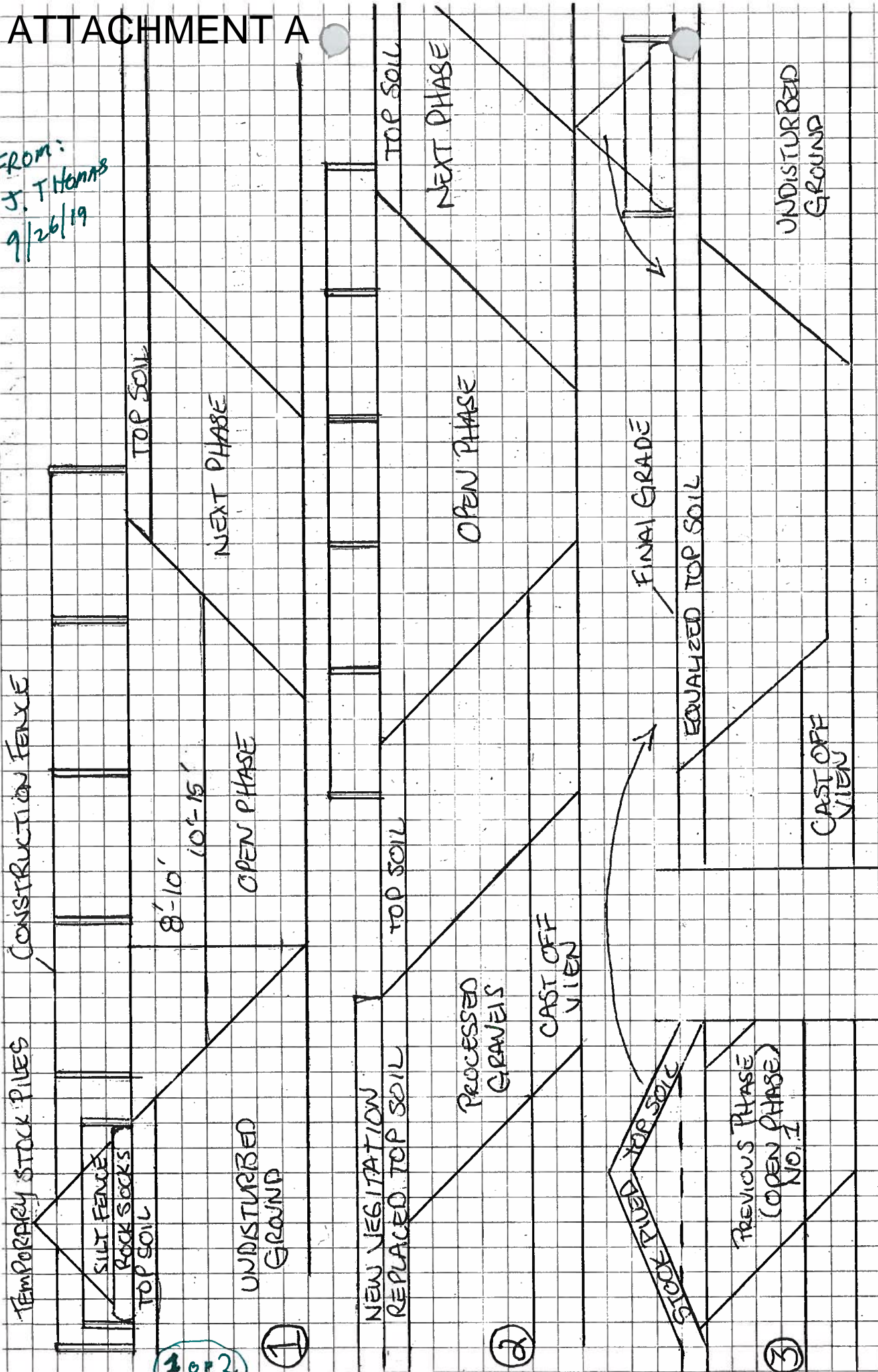
Legend

- 1** Discovery post no 1
- 2** Discovery post no 2
-  Off Designated Trail - Approximate
- A** Site A - Mathew's dig
- B** Site B - Facebook dig
- C** Site C - Mathew & Scott's dig



ATTACHMENT A

FROM:
J. THOMAS
9/26/19

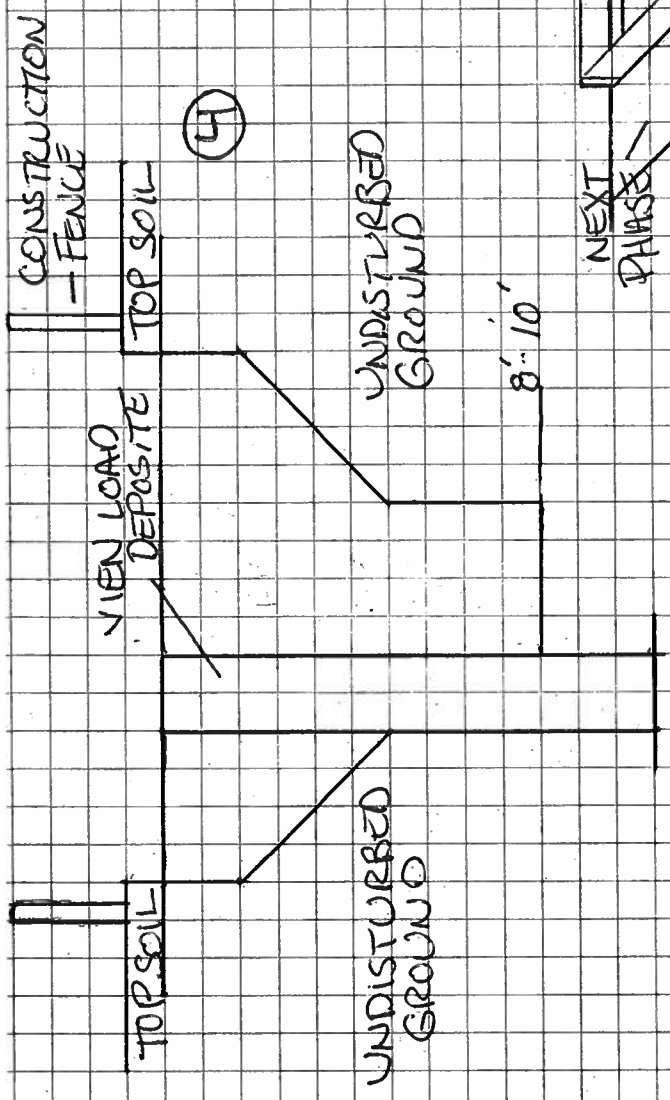


1. OPENING OF DIGGING STOCK PILES FROM PHASE ONE AND TWO ARE COMBINED AND STORED UNTIL FINAL PHASE.

2. PROGRESSION OF PHASES - EACH PHASE CLOSING THE LAST PHASE FOR RECLAMATION.

3. CLOSING OF PHASES - FINAL GRADE IS ACHIEVED BY EQUALIZING STORED TOP SOIL AND GRAVELS FROM OPENING PHASE. FINAL RECLAMATION ON FIRST

5. Rom.
9/26/19

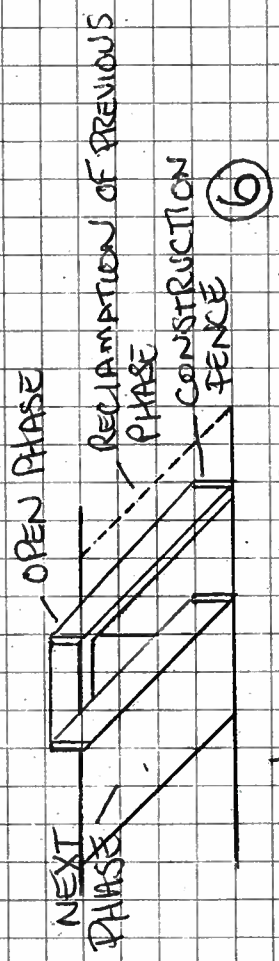


(4)

4. CROSS SECTION OF TRENCH ON LEVEL GROUND.

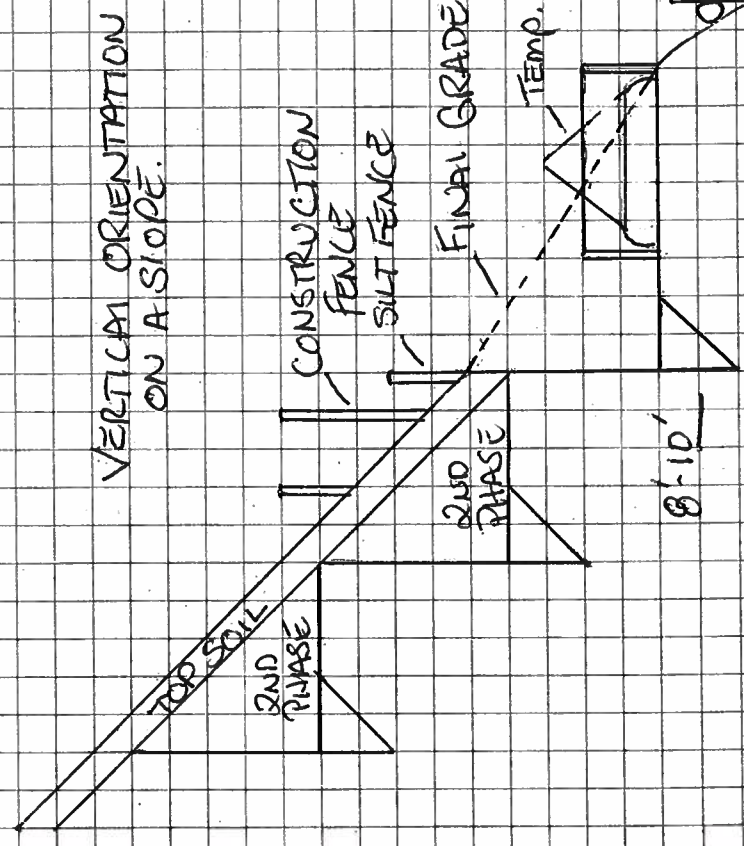
5. PHASE PROGRESSION ON VERTICAL ORIENTATION ON A SLOPE

6. PHASE PROGRESSION ON HORIZONTAL ORIENTATION ON A SLOPE.



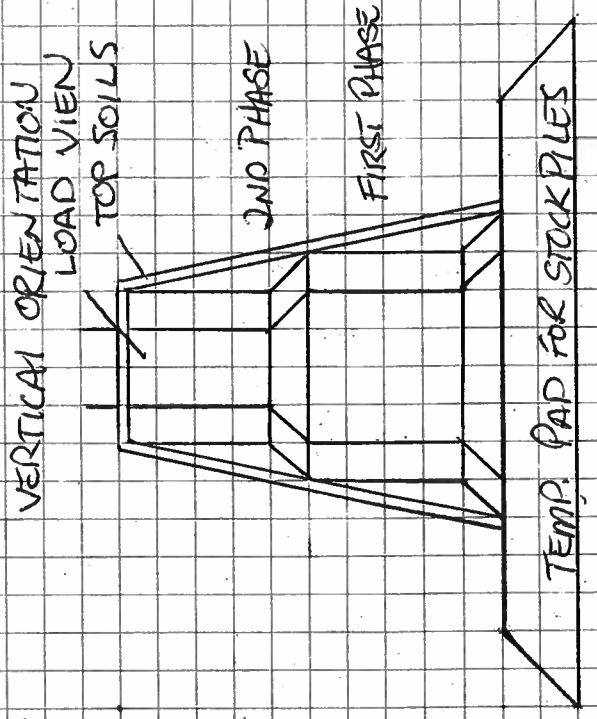
(6)

HORIZONTAL ORIENTATION ON A SLOPE



(5)

VERTICAL ORIENTATION ON A SLOPE.



VERTICAL ORIENTATION LOAD VIEW TOP SOILS