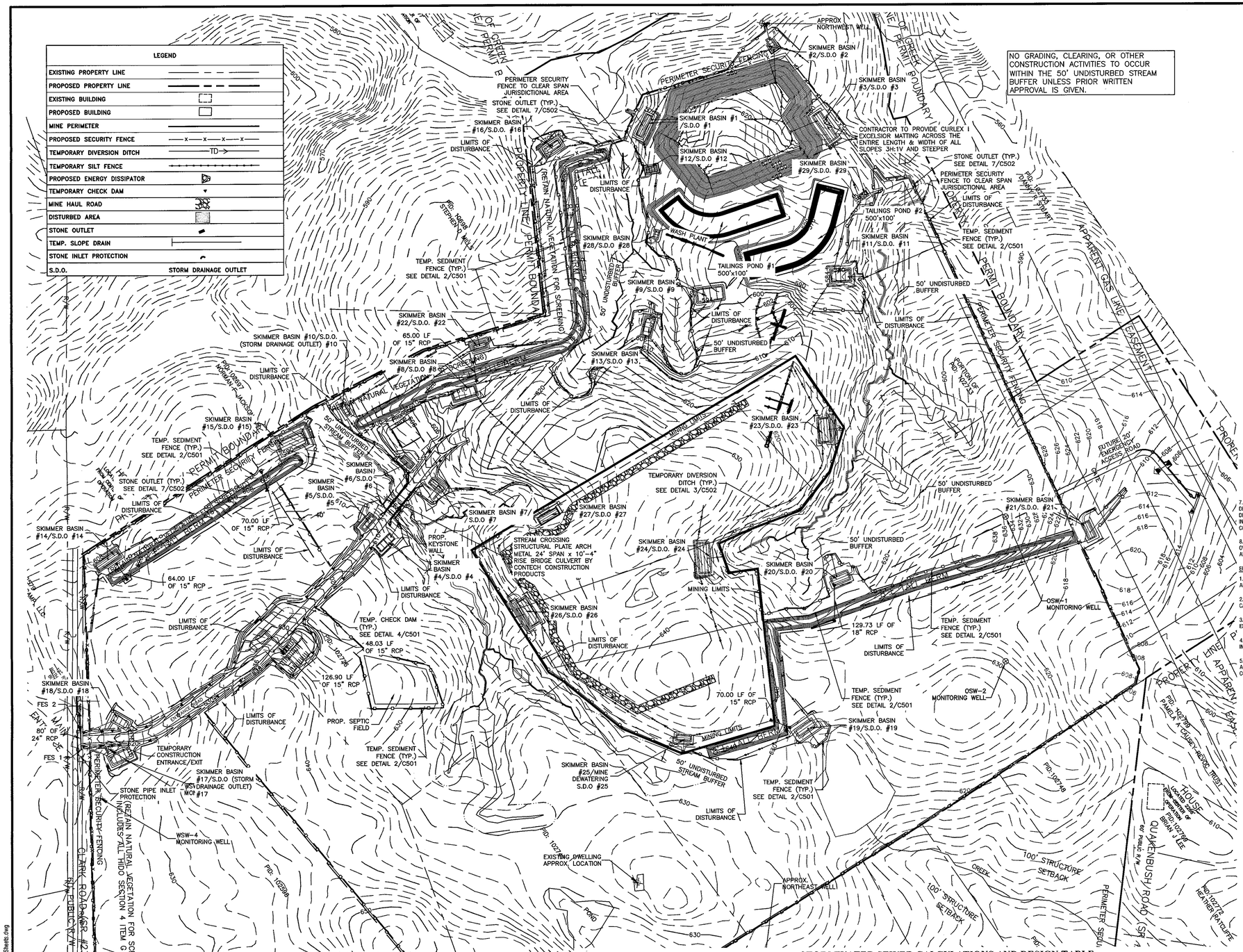


TOTAL DISTURBED AREA = 86.76 ACRES

EROSION CONTROL SEQUENCE NOTES

1. OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL AND PERMIT.

2. CONTACT EROSION CONTROL INSPECTOR TO ESTABLISH A PRE CONSTRUCTION CONFERENCE AND INSPECTION SCHEDULE.

SELF INSPECTION----EFFECTIVE OCTOBER 1, 2010, PERSONS CONDUCTING LAND-DISTURBING ACTIVITIES, LARGER THAN ONE (1) ACRE MUST INSPECT THEIR PROJECT AFTER EACH PHASE OF THE PROJECT, AND DOCUMENT THE INSPECTION IN WRITING ON APPROVED FORMS,

THE PHASES ARE AS FOLLOWS:
1. INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROL MEASURES.
2. CLEARING AND GRUBBING OF EXISTING GROUND COVER.
3. COMPLETION OF ANY PHASE OF GRADING OF SLOPES OR FILLS.
4. INSTALLATION OF STORM DRAINAGE FACILITIES.
5. COMPLETION OF CONSTRUCTION OF DEVELOPMENT.
6. ESTABLISHMENT OF PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION.

3. CLEAR SITE ONLY AS NECESSARY TO INSTALL INITIAL EROSION CONTROL MEASURES AS FOLLOWS:

A. TEMPORARY CONSTRUCTION ENTRANCE/EXIT AT CLARK ROAD.
B. THIS SITE HAS TEMPORARY SKIMMER BASINS AND SEDIMENT BASINS AS SHOWN.
C. TEMPORARY DIVERSION BERMS
D. TEMPORARY SILT FENCING AND STONE OUTLETS
E. SEED EMBANKMENTS AND DISTURBED AREAS OF DEVICES (INCLUDING "CLEAN" WATER DIVERSION) UPON COMPLETION OF CONSTRUCTION. SEE GROUND STABILIZATION CRITERIA BELOW FOR MORE INFORMATION.

4. BEGIN CLEARING, GRUBBING, AND STRIPPING OF SITE AS REQUIRED.
EARTHEN MATERIAL STOCKPILES ON-SITE FOR LATER DISTRIBUTION AND/OR REMOVAL. AREAS DEDICATED FOR MANAGEMENT OF LAND CLEARING AND DEMOLITION DEBRIS, CONSTRUCTION AND DOMESTIC WASTE, AND HAZARDOUS OR TOXIC WASTE SHALL BE LOCATED AT LEAST 50 FEET AWAY FROM STORM DRAIN INLETS AND SURFACE WATERS (UNLESS IT CAN BE SHOWN THAT NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE), AND WITHIN AREAS PROTECTED BY EROSION CONTROL MEASURES.

5. BEGIN SITE GRADING. MAINTAIN EROSION CONTROL DEVICES IN ACCORDANCE WITH THE MAINTENANCE PLAN. INSTALL ADDITIONAL EROSION CONTROL MEASURES AS REQUIRED.

6. INSTALL STORM DRAINAGE SYSTEM AND UTILITIES. STORM PIPING MUST BE INSTALLED TO THE POINT WHERE IT ENTERS EACH DEVICE. COMPLETION OF PIPING WILL ONLY BE ALLOWED ONCE THE SITE HAS BEEN DEEMED STABLE BY THE EROSION CONTROL INSPECTOR. INSTALL PROTECTION AROUND ALL INLETS AS STORM DRAIN SYSTEM IS INSTALLED.

| DESCRIPTION | STABILIZATION TIMEFRAME | STABILIZATION TIMEFRAME EXCEPTIONS |
|---|---|---|
| PERMANENT DIKES, SWALES, DITCHES, & SLOPES | 7 DAYS | NONE |
| SLOPES STEEPER THAN 3:1 | 7 DAYS | IF SLOPES ARE 10' OR LESS IN LENGTH & ARE NOT STEEPER THAN 2:1, 14 DAYS ALLOWED |
| SLOPES 3:1 OR FLATTER | 14 DAYS | 7 DAYS FOR SLOPES > 50' IN LENGTH |
| ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1 | 14 DAYS | NONE |

7. PRIOR TO THE CONTRACTOR DEMOBILIZING FROM THE SITE (AT APPROXIMATELY 45 DAYS PRIOR TO DEMOBILIZATION), THE FINANCIAL RESPONSIBLE PARTY (OR THEIR DESIGNEE) WILL NOTIFY THE ENGINEER AND THE DESIGNATED EROSION CONTROL INSPECTOR OF THEIR ANTICIPATED DATE TO LEAVE THE SITE. AN ON-SITE INSPECTION WILL BE CONDUCTED PRIOR TO THE LEAVE DATE BY THE ENGINEER AND/OR THE DESIGNATED EROSION CONTROL INSPECTOR TO MAKE CERTAIN ALL ACTIONS ITEMS HAVE BEEN ADDRESSED BY THE CONTRACTOR.

8. CONTINUE TO MAINTAIN EROSION CONTROL MEASURES UNTIL VEGETATIVE COVER HAS BEEN ESTABLISHED OVER ALL DISTURBED AREAS AND SITE HAS BEEN STABILIZED. REMOVE EROSION CONTROL MEASURES ONLY AFTER FINAL INSPECTION AND APPROVAL BY ENGINEER.

EROSION CONTROL MAINTENANCE PLAN **(CONTRACTOR MUST INCLUDE MAINTENANCE IN BASE BID)**

1. INSPECT ALL SEDIMENTATION AND EROSION CONTROL DEVICES FOR STABILITY AND FUNCTION EACH WEEK AND FOLLOWING EACH RAINFALL EVENT.

2. REMOVE SILT/SEDIMENT FROM TEMPORARY DEVICES WHEN ACCUMULATED VOLUME HAS REACHED 50% CAPACITY.

3. REMOVED ACCUMULATED SILT/SEDIMENT FROM BEHIND TEMPORARY SEDIMENT FENCE WHEN DEPTH EXCEEDS APPROXIMATELY 0.5'. REPAIR AND REPLACE SILT FENCE AS NECESSARY.

4. SEED AND STABILIZE TEMPORARY DIVERSION BERMS IMMEDIATELY AFTER CONSTRUCTION INCLUDING "CLEAN" WATER DIVERSION BERMS. RE-GRADE/REPAIR BERMS AS REQUIRED.

5. CONTRACTOR SHALL APPOINT AN ON-SITE INSPECTOR AND MAINTAIN RECORDS OF INSPECTIONS IN ACCORDANCE WITH THE PROVISION OF THE GENERAL NPDES STORMWATER DISCHARGE PERMIT FOR CONSTRUCTION ACTIVITIES.

DETAILED CONSTRUCTION SEQUENCE

1. CONSTRUCT THE TEMPORARY SURGE STONE CONSTRUCTION ENTRANCE/EXIT OFF CLARK ROAD.

2. INSTALL SILT FENCE AND STONE OUTLETS FROM CLARK ROAD TO THE SOUTH SIDE OF THE STREAM LOCATED AT 16+87. SILT FENCE TO BE LOCATED ON BOTH SIDES OF THE ROAD AND SOUTH BANKS OF THE STREAM.

3. INSTALL SKIMMER BASIN 6 AND SKIMMER BASIN 7 AND THEIR ASSOCIATED TEMPORARY DIVERSION DITCHES AND SLOPE DRAIN (IF CALLED FOR).

4. INSTALL IMPERVIOUS CLEAN WATER DIKE AND BYPASS PUMPING SYSTEM AS SHOWN ON SHEET C402. INSTALL THE PERMANENT 54" PIPE AND ENDWALLS AT STATION 16+87.

5. APPLY 10" STONE BASE LAYER TO ENTRANCE ROAD AND COMPACT.

6. BACKFILL, PREPARE SLOPES AND OTHER DISTURBED AREAS AND STABILIZE.

7. INSTALL SILT FENCE AND STONE OUTLETS ALONG NORTH SIDE OF THE STREAM.

8. INSTALL SILT FENCE AND STONE OUTLETS AROUND THE EXISTING STREAM BUFFER AND PROPERTY BOUNDARY (WHERE DENOTED ON PLANS). INSTALL SKIMMER BASINS 4, 5, 13, 11, 3, 2, 1, 12, 8, AND 10 AND THEIR ASSOCIATED TEMPORARY DIVERSION DITCHES AND SLOPE DRAINS (IF CALLED FOR).

9. PLACE ALL SILT FENCE AND STONE OUTLETS DOWN SLOPE OF ALL PROPOSED BERMS.

10. BEGIN GRADING THE INITIAL MINE AREA, MOVE AND PLACE MATERIAL FOR BERMS. PLACE AND COMPACT MATERIAL FOR PLANT AND STOCKPILE AREA. ALL BERMS SHALL BE CONSTRUCTED AND STABILIZED WITHIN 1 YEAR OF STARTING MINING ACTIVITIES.

11. CONSTRUCT TAILINGS PONDS BEFORE MINING OPERATION BEINGS.

12. SEED AND MULCH ALL AREAS THAT ARE NOT COVERED WITH ASPHALT OR STONE.

13. STABILIZE ALL CHANNELS AND SLOPES WITH MATTING AS NOTED ON THE PLANS.

SEEDING NOTE:

SEED MIXTURE, SEEDING RATE, AND SOIL AMENDMENTS TO BE APPROVED BY AN ENVIRONMENTAL PROFESSIONAL AND SUBMITTED TO OWNER AND ENGINEER PRIOR TO APPLICATION. SEED MIXTURE TO BE A MIXTURE OF RED CLOVER, CREEPING RED FESCUE, AND A GRAIN, SUCH AS, OAT, WHEAT, OR RYE.

## STORMWATER SEWER CALCULATIONS AND DESIGN TABLE

INLET Q BASED ON 4"/HOUR
STORM RETURN PERIOD: 10 Yr for (TOC=5 Minutes)

| TYPE GRATE RIM | FROM | TO | INLET AREA (Ac.) | INLET Q CFS | TOTAL AREA (Ac.) | I (in/hr) | C | Q CFS | GRATE/ RIM/ THROAT | FROM INV. (ft) | TO INV. (ft) | APPROX. LENGTH (ft) | SLOPE % | N | D(THEO.) (inches) | PIPE SIZE (inches) | PIPE MATERIAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N/A | FES 1 | FES 2 | 7.91 | 9.49 | 7.910 | 7.04 | 0.30 | 16.71 | N/A | 612.59 | 611.79 | 80.00 | 1.00 | 0.013 | 21.40 | 24 | RCP |
| 840.16 | DI 1 | DI 2 | 0.45 | 0.90 | 0.450 | 7.04 | 0.50 | 1.58 | 632.50 | 630.25 | 626.95 | 126.90 | 2.60 | 0.013 | 7.39 | 15 | RCP |
| 840.16 | DI 2 | FES 13 | 0.19 | 0.61 | 0.64 | 7.04 | 0.80 | 3.60 | 629.20 | 626.95 | 624.48 | 48.03 | 5.14 | 0.013 | 8.86 | 15 | RCP |
| N/A | FES 3 | FES 4 | 4.24 | 5.09 | 4.240 | 7.04 | 0.30 | 8.95 | N/A | 600.24 | 597.31 | 64.00 | 4.58 | 0.013 | 12.73 | 15 | RCP |
| N/A | FES 5 | FES 6 | 2.51 | 3.01 | 2.510 | 7.04 | 0.30 | 5.30 | N/A | 630.50 | 628.00 | 70.00 | 3.57 | 0.013 | 10.96 | 15 | RCP |
| N/A | FES 7 | FES 8 | 5.52 | 6.62 | 5.520 | 7.04 | 0.30 | 11.66 | N/A | 617.75 | 616.12 | 129.73 | 1.26 | 0.013 | 17.92 | 18 | RCP |
| N/A | FES 9 | FES 10 | 0.31 | 0.37 | 0.308 | 7.04 | 0.30 | 0.65 | N/A | 611.00 | 607.00 | 65.00 | 6.15 | 0.013 | 4.51 | 15 | RCP |
| N/A | FES 11 | FES 12 | 3.24 | 3.89 | 3.240 | 7.04 | 0.30 | 6.84 | N/A | 609.60 | 606.92 | 64.00 | 4.19 | 0.013 | 11.71 | 15 | RCP |
| N/A | FES 13 | FES 14 | 7.58 | 9.10 | 7.580 | 7.04 | 0.30 | 16.01 | N/A | 607.20 | 606.40 | 32.00 | 2.50 | 0.013 | 17.74 | 18 | RCP |
| N/A | FES 15 | FES 16 | 0.54 | 0.86 | 0.536 | 7.04 | 0.40 | 1.51 | N/A | 609.84 | 609.00 | 56.00 | 1.50 | 0.013 | 8.05 | 18 | RCP |

**REINFORCED CONCRETE PIPE (RCP) TO BE CLASS III, PIPE JOINTS PER ASTM C443; TYPE 2 PIPE INSTALLATION ASTM C1479**
**DROP INLETS 1 & 2 TO BE NCDOT STANDARD 840.14 WITH 840.16 FRAME & GRATES**
**FLARED END SECTION (FES)**


LaBella
Powered by partnership.
615 St. George Square
Suite 300
Winston-Salem, NC 27103
336-842-4065
C#0430
labellapc.com


NORTH CAROLINA PROFESSIONAL SEAL 22452 ENGINEER PAUL A. STAMPSON
6/26/2020

© 2019 LaBella Associates

**ALAMANCE AGGREGATES, LLC**

**Mr. Chad Threatt, VP**

**Snow Camp Mine**

| NO: | DATE: | DESCRIPTION: |
|---|---|---|
| 3 | 6/26/20 | REMOVED REFERENCE TO C302 |
| 2 | 3/31/20 | NCDEMLR COMMENTS |
| 1 | 1/20/20 | ADDITIONAL STREAM INFO - ALAM. AGG. & LAND QUALITY COMMENTS |

REVISIONS

PROJECT NUMBER: 2190335

DRAWN BY: KCG/ATC/BWS

REVIEWED BY: PAS

ISSUED FOR: CONSTRUCTION

DATE: 6/26/20

DRAWING NAME:

**OVERALL SEDIMENTATION & EROSION CONTROL PLAN**

DRAWING NUMBER:

**C301**

Date & Time: 6/26/2020 1:23 PM By: Sherrill, Brandon
Path: Y:\2190335-Snow Camp Mine\CAD\Civil\Civil3d\DWG\Snow Camp Plan Sheets.dwg