

# RECLAMATION PLANTING PLAN

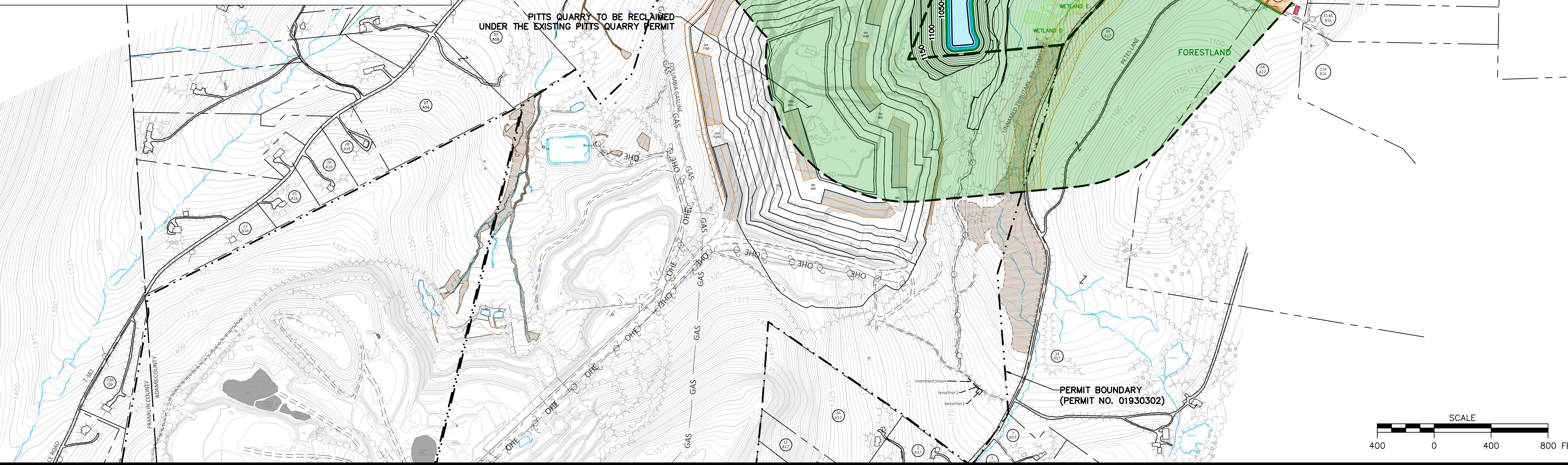
TEMPORARY COVER			
SEED MIXTURE	SPECIES	RATE OF APPLICATION 100% PLS (LBS/ACRE)	SEEDING DATES (MONTHS)
1TC	ANNUAL RYEGRASS	20	MARCH 1
	SMALL GRAIN	50	JUNE 15

PERMANENT COVER			
SEED MIXTURE	SPECIES	RATE OF APPLICATION 100% PLS (LBS/ACRE)	SEEDING DATES (MONTHS)
1PC	PERENNIAL RYEGRASS	10	MARCH 1
	ANNUAL RYEGRASS	5	MARCH 1
	TIMOTHY	5	MARCH 1
	WHITE CLOVER	3	MARCH 1
2PC	ORCHARDGRASS (STEEP SLOPES ONLY)	5	MARCH 1

WOODY PLANTS		
WOODY PLANTS MIXTURE	WOODY PLANT SPECIES	NO./ACRE
1WP	EASTERN WHITE PINE (10%)	600/ACRE (8'X9' GRID)
	NORTHERN RED OAK (10%)	
	NORWAY SPRUCE (10%)	
	YELLOW POPLAR (10%)	
	WHITE ASH (10%)	
	EUROPEAN ALDER (10%)	
	BLACK CHERRY (8%)	
2WP	SUGAR MAPLE (8%)	100/ACRE
	RED BUD (6%)	
	CRAB APPLE (3%)	
3WP	BLACK LOCUST (15%) *HYDROSEED	0.5 LB/ACRE

**PLANTING NOTES:**

1. WHEN PRACTICAL AND BASED ON FIELD CONDITIONS, SOIL WILL BE LOOSENEED WITH DISK OR OTHER STANDARD EXCEPTED METHOD.
2. TEMPORARY COVER, PERMANENT COVER, AND BLACK LOCUST WILL BE HYDRO SEEDDED.
3. BARE-ROOT EVERGREENS, HARDWOODS, AND FLOWERING TREES WILL BE PLANTED BY HAND.
4. MULCH TYPE AND RATE OF APPLICATION TO BE USED ARE: HYDRO-MULCH 2.5 TO 3.0 T/AC, STRAW MULCH OR HAY MULCH 3T/AC, WOOD CELLULOSE 1,500 LB/AC, OR WOOD CHIPS 4-6T/AC.
5. PERMANENT COVER ON STEEP SLOPES (GREATER THAN 3:1) IS TO BE PLANTED IN SEED MIXTURE 2PC.



## LEGEND

- 1200 ——— EXISTING TOPOGRAPHIC MAJOR CONTOUR (25' CONTOUR INTERVAL)
- EXISTING TOPOGRAPHIC MINOR CONTOUR (5' CONTOUR INTERVAL)
- - - - - PROPERTY BOUNDARY
- . . . . . EXISTING PERMIT BOUNDARY
- - - - - PROPOSED PERMIT BOUNDARY
- - - - - PROPOSED 1000' PERMIT BOUNDARY OFFSET
- ===== CUP MAINTAINED BUFFER
- ===== CUP OPERATIONAL BUFFER
- ===== EXISTING ROAD
- GAS — GAS — EXISTING GAS LINE
- OHE — OHE — EXISTING OVERHEAD ELECTRICAL LINES
- WATERS OF THE UNITED STATES
- STREAM
- WETLANDS (DELINEATED BY SKELLY & LOY 12/16/2015)
- WETLANDS (DELINEATED BY AECOM 1/2011 AND 5/2012)
- OCCUPIED STRUCTURE
- UNOCCUPIED STRUCTURE
- EXISTING ROAD - 100' BUFFER
- STREAM - 100' BUFFER
- LANDUSE - FORESTLAND
- LANDUSE - RESIDENTIAL
- LANDUSE - WATER

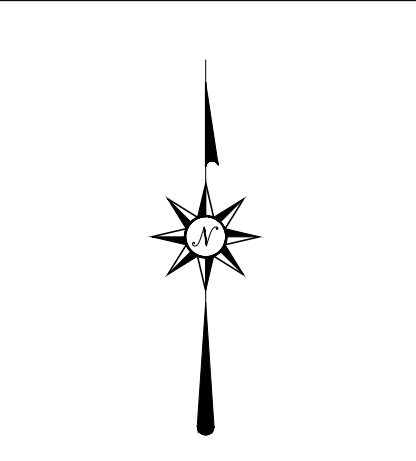
**NOTES:**

1. RECLAMATION CONSISTS OF THE REDUCTION OF QUARRY HIGHWALLS TO 35' OR LESS. THE QUARRY WILL BE ALLOWED TO NATURALLY FILL WITH WATER, AS AN UNMANAGED WATER IMPOUNDMENT, TO AN APPROXIMATE ELEVATION OF 1020.
2. FOR CLARITY, THE EXISTING TOPOGRAPHY AND NORTHERN TRACT QUARRY MINE PLAN NOT SHOWN WITHIN THE RECLAMATION GRADING LIMITS.
3. THE MINE PLAN DEPICTED FOR THE NORTHERN TRACT MAY BE SUBJECT TO CHANGE BASED UPON THE ENCOUNTERED FIELD CONDITIONS. THE CONFIGURATION OF THE ACCESS RAMPS AND HIGHWALLS ASSOCIATED WITH DEVELOPING THE MINE MAY DIFFER FROM WHAT IS SHOWN.
4. THE LOCATION, SIZE, AND ALIGNMENT OF THE ACCESS ROAD AND PLATFORM MAY BE ADJUSTED AS NECESSARY TO FACILITATE EQUIPMENT ACCESS TO THE IMPOUNDMENT POOL LEVEL BASED ON THE MINE CONFIGURATION AT RECLAMATION.
5. REFER TO THE MODULE 20 NARRATIVE FOR ADDITIONAL DETAIL OF THE QUARRY RECLAMATION.

**NOTES / REVISIONS**

ISSUED FOR	DATE	REV.	REVISION DESCRIPTION	MADE BY	CHKD BY	DATE
		1				
		2				
		3				
		4				

SEAL:



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CONSULTANTS

**SGI**

PROJECT NUMBER: 152596A  
FILE NAME: Exhibit 18-R0.dwg

DRAWN BY: AJM  
CHECKED BY: RMS/MDW

DATE: 10/24/2016  
DATE: 12/22/2017

**SPECIALTY GRANULES LLC**  
**CHARMIAN - NORTHERN TRACT QUARRY**

EXHIBIT 18  
LANDUSE AND RECLAMATION MAP

SCALE: AS SHOWN  
DRAWING NO. 43  
REV 0

Wednesday, January 3, 2018 5:23:11 PM  
 R: 2015152596 - S0 Disposal Embankment Drawings Northern Tract Exhibit 18-R0.dwg