

***PIONEER AGGREGATES
SOUTH PARCEL PROJECT***

TAX ACCOUNT NUMBERS:

SOUTH PARCEL LEASE AREA:

011923301
0119233014
0119233015
0119233016
0119233017
0119262015
0119262016

0119231005
0119232003

0119221007

0119221007	0119224006
0119221008	0119224007
0119221009	0119224008
0119221010	0119224009
0119221011	0119232008
0119221012	0119232009
0119221013	0119232010
0119221014	0119232011
0119221015	0119232012
0119223013	0119233010
0119224004	0119233012

0119143000

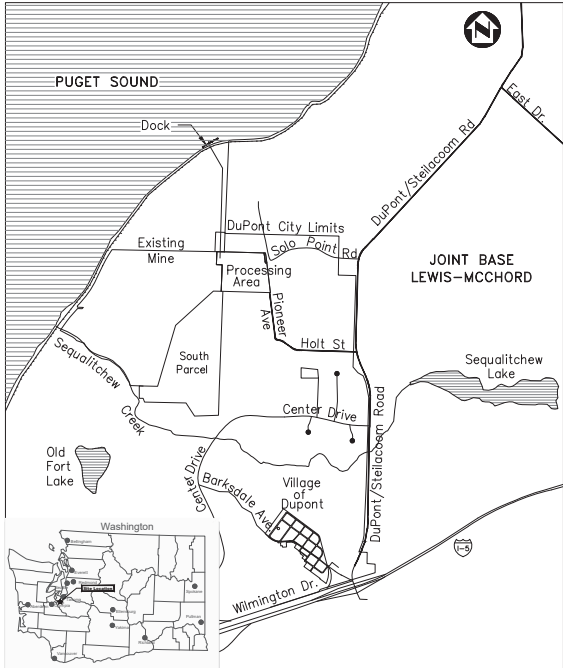
0119143000
0119143000
0119221004
0119232003
0119232000
0119154000

**LEGAL DESCRIPTION OF 2006 ADDITION TO MINERAL
RESOURCE OVERLAY AS MODIFIED IN 2018**

THAT portion of Sections 23 and 26, Township 19 North, Range 1 East, W.M., City of DuPont, Pierce County, Washington, being more particularly described as follows:

BEGINNING at the southwest corner of said Section 23, as shown on that exempt segregation as depicted on Record of Survey recorded under Pierce County Recording No. 200609185006;
THENCE 3 88°47'45" E, 500.26 feet;
THENCE N 16°28'48" E, 2207.74 feet;
THENCE N 47°49'56" E, 1770.29 feet;
THENCE 3 88°24'40" E, 329.75 feet to the north-south centerline of said Section 23 as depicted on said exempt segregation;
THENCE along said north-south centerline, S 02°06'11" W, 3353.98 feet to the north quarter corner of said Section 26 as depicted on said exempt segregation;
THENCE 3 01°41'03" W, 949.13 feet to the southeasterly corner of Lot 23 of said exempt segregation;
THENCE along said southerly line, S 87°59'18" W, 1492.66 feet to the southerly corner common to said Lot 23 and Lot 22 of said segregation;
THENCE along the southerly line of said Lot 22, N 65°00'00" W, 897.54 feet;
THENCE N 25°58'31" W, 35.06 feet to the west line of said Section 26 as depicted on said exempt segregation;
THENCE along said west line, N 01°47'33" E, 297.73 feet to the POINT OF BEGINNING.

Containing 172.37 acres, more or less.



LOCATION MAP

NOT TO SCALE

SITE AREAS:

SOUTH PARCEL LEASE:	178 AC
EXISTING MINE LEASE:	360 AC
NORTH PARCEL:	201 AC
PROCESSING AREA:	52 AC

DISTURBED AREA:

EXISTING MINE LIMIT: 497 AC
PROPOSED MINE LIMIT: 620 AC

SITE ADDRESS:

4301 PIONEER AVENUE
DUPONT, WASHINGTON 98327

CONTACTS:

OWNER/APPLICANT: CALPORTLAND COMPANY
PETE STOLTZ
(206) 764-3000

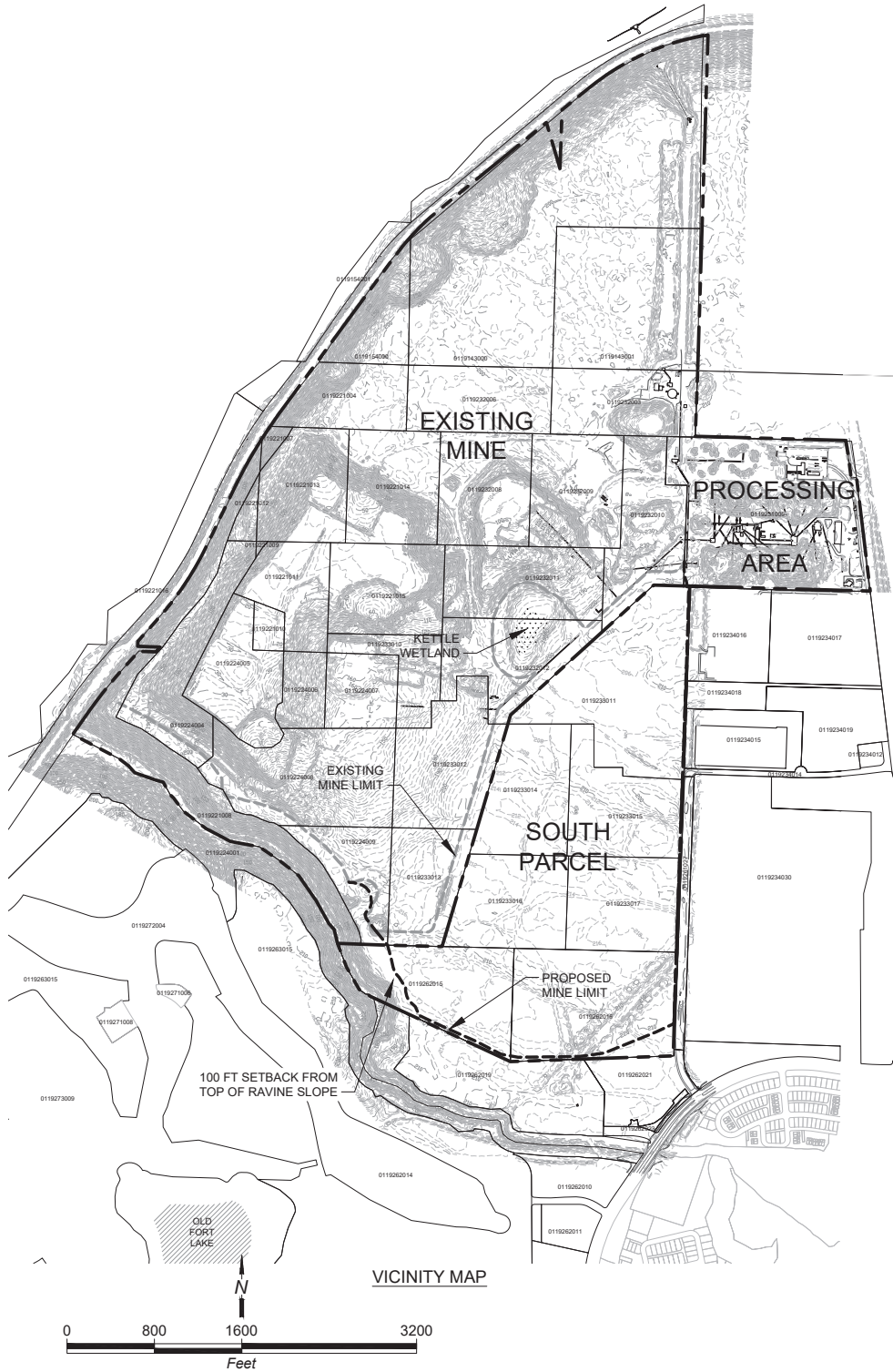
AERIAL MAPPING: AERO-METRIC, INC
(206) 244-2300

GROUND SURVEY: ESM CONSULTING
ENGINEERS, LLC
(253) 838-8113

ENGINEER: ASPECT CONSULTING, LLC
OWEN REESE, P.E.
(206) 838-5844

SHEET INDEX:

G1	COVER SHEET AND VICINITY MAP
G2	EXISTING TOPOGRAPHY - WHOLE MINE SITE, 2007
G3	EXISTING TOPOGRAPHY - EXISTING MINE AREA, 2018
G4	SENSITIVE AREAS
C1	FINAL SITE PLAN
C2	STORMWATER SITE PLAN
C3	CONSTRUCTION SEQUENCE
C4	CROSS SECTIONS
C5	DEWATERING SYSTEM
C6	BERM AND SLOPE DETAILS
C7	EROSION AND SEDIMENT CONTROL PLAN

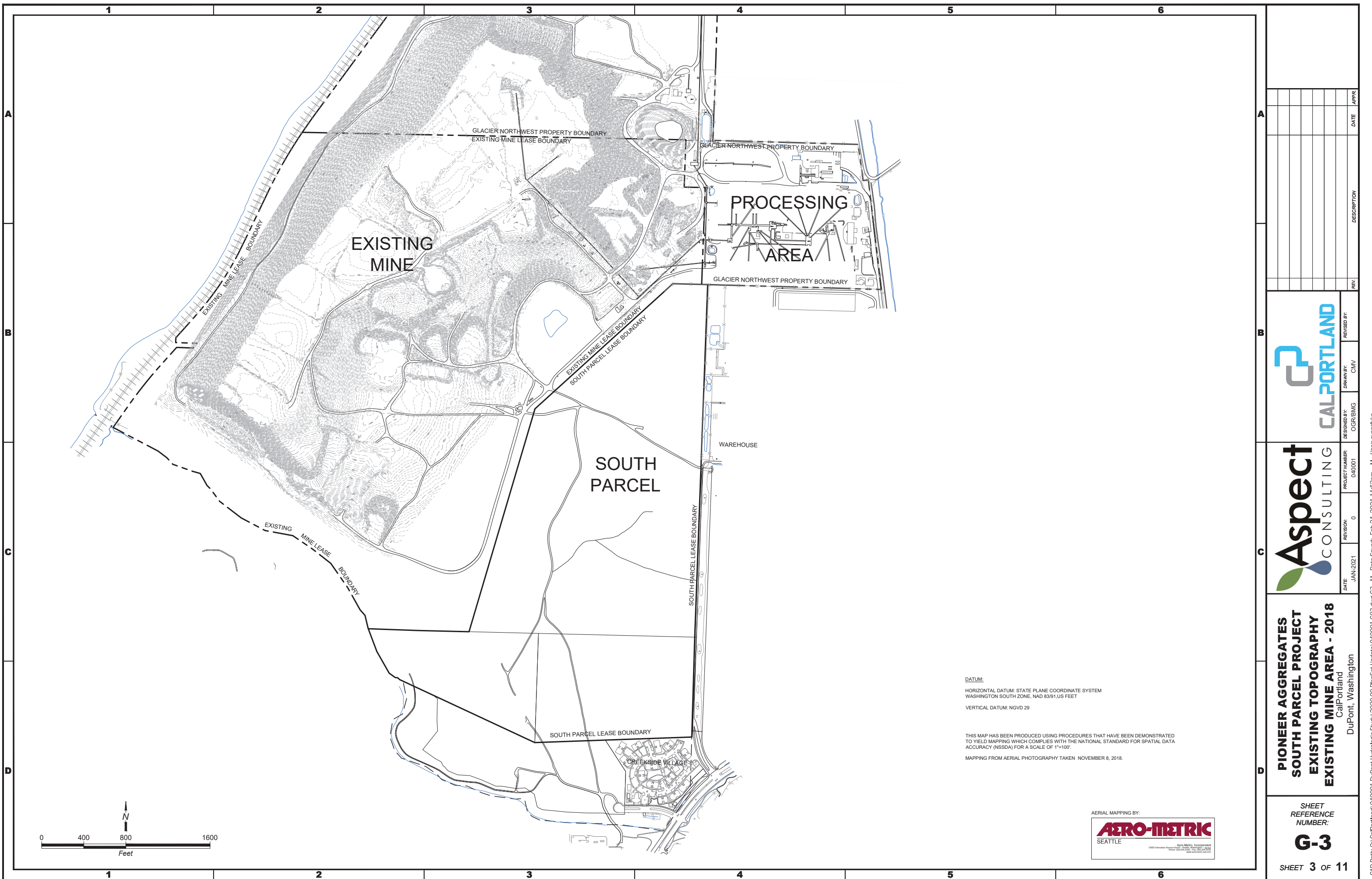


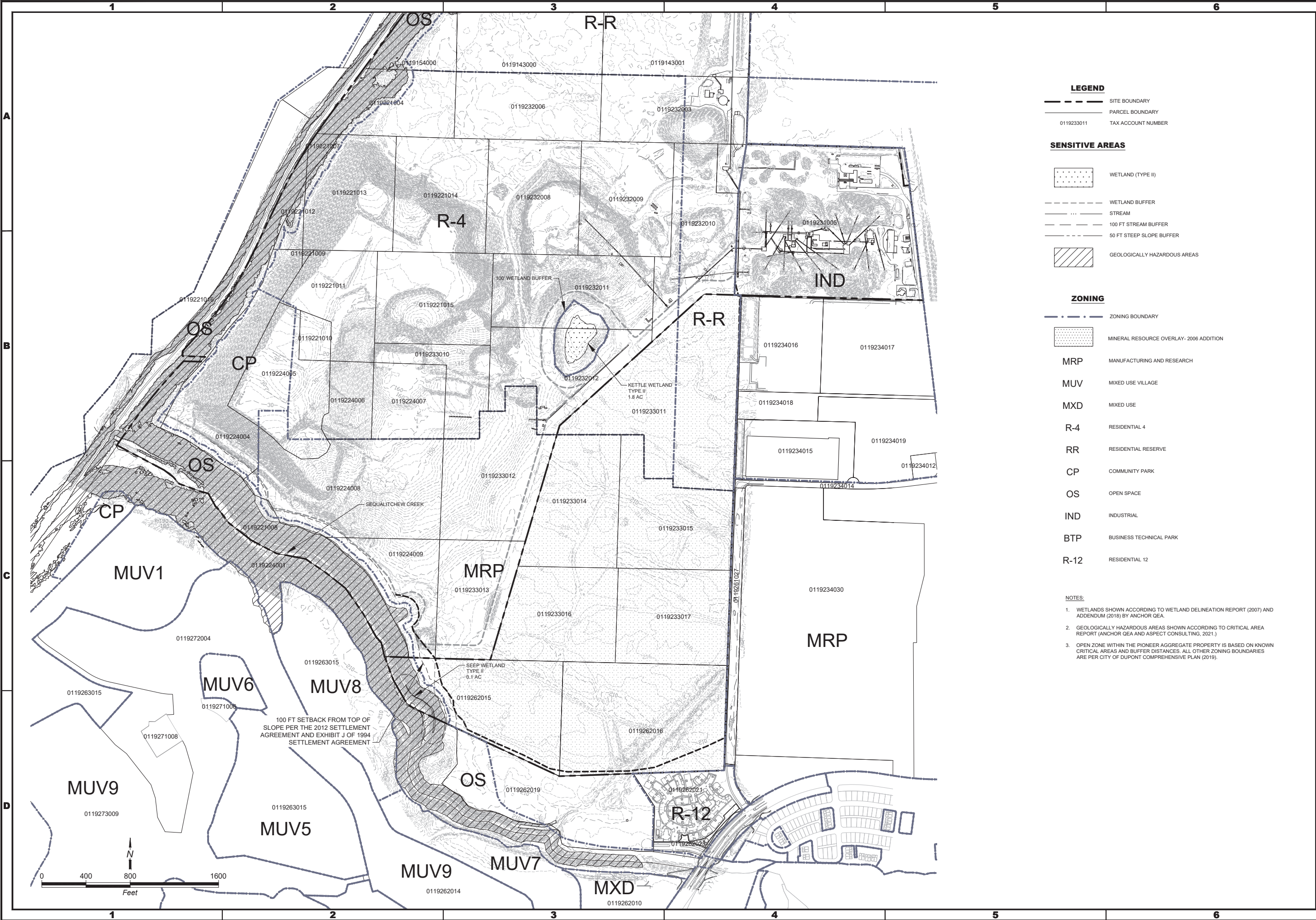
**PIONEER AGGREGATES
SOUTH PARCEL PROJECT
COVER SHEET AND
VICINITY MAP**

SHEET
REFERENCE
NUMBER:

G-1

SHEET 1 OF 11





LEGEND

- SITE BOUNDARY
- PARCEL BOUNDARY
- TAX ACCOUNT NUMBER

SENSITIVE AREAS

- WETLAND (TYPE II)
- WETLAND BUFFER
- STREAM
- 100 FT STREAM BUFFER
- 50 FT STEEP SLOPE BUFFER
- GEOLOGICALLY HAZARDOUS AREAS

ZONING

- ZONING BOUNDARY
- MINERAL RESOURCE OVERLAY- 2006 ADDITION
- MRP MANUFACTURING AND RESEARCH
- MUV MIXED USE VILLAGE
- MXD MIXED USE
- R-4 RESIDENTIAL 4
- RR RESIDENTIAL RESERVE
- CP COMMUNITY PARK
- OS OPEN SPACE
- IND INDUSTRIAL
- BTP BUSINESS TECHNICAL PARK
- R-12 RESIDENTIAL 12

NOTES:

- WETLANDS SHOWN ACCORDING TO WETLAND DELINEATION REPORT (2007) AND ADDENDUM (2018) BY ANCHOR QEA.
- GEOLOGICALLY HAZARDOUS AREAS SHOWN ACCORDING TO CRITICAL AREA REPORT (ANCHOR QEA AND ASPECT CONSULTING, 2021.)
- OPEN ZONE WITHIN THE PIONEER AGGREGATE PROPERTY IS BASED ON KNOWN CRITICAL AREAS AND BUFFER DISTANCES. ALL OTHER ZONING BOUNDARIES ARE PER CITY OF DUPONT COMPREHENSIVE PLAN (2019).



REV	DESCRIPTION	DATE	APPR



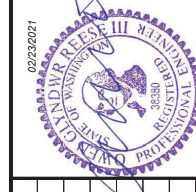
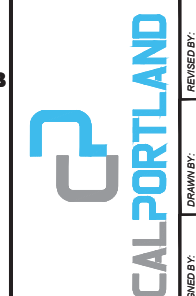
PIONEER AGGREGATES
SOUTH PARCEL PROJECT
SENSITIVE AREAS AND ZONING
DUPONT MINE EXPANSION

CalPortland
DuPont, Washington

SHEET
REFERENCE
NUMBER:

G-4

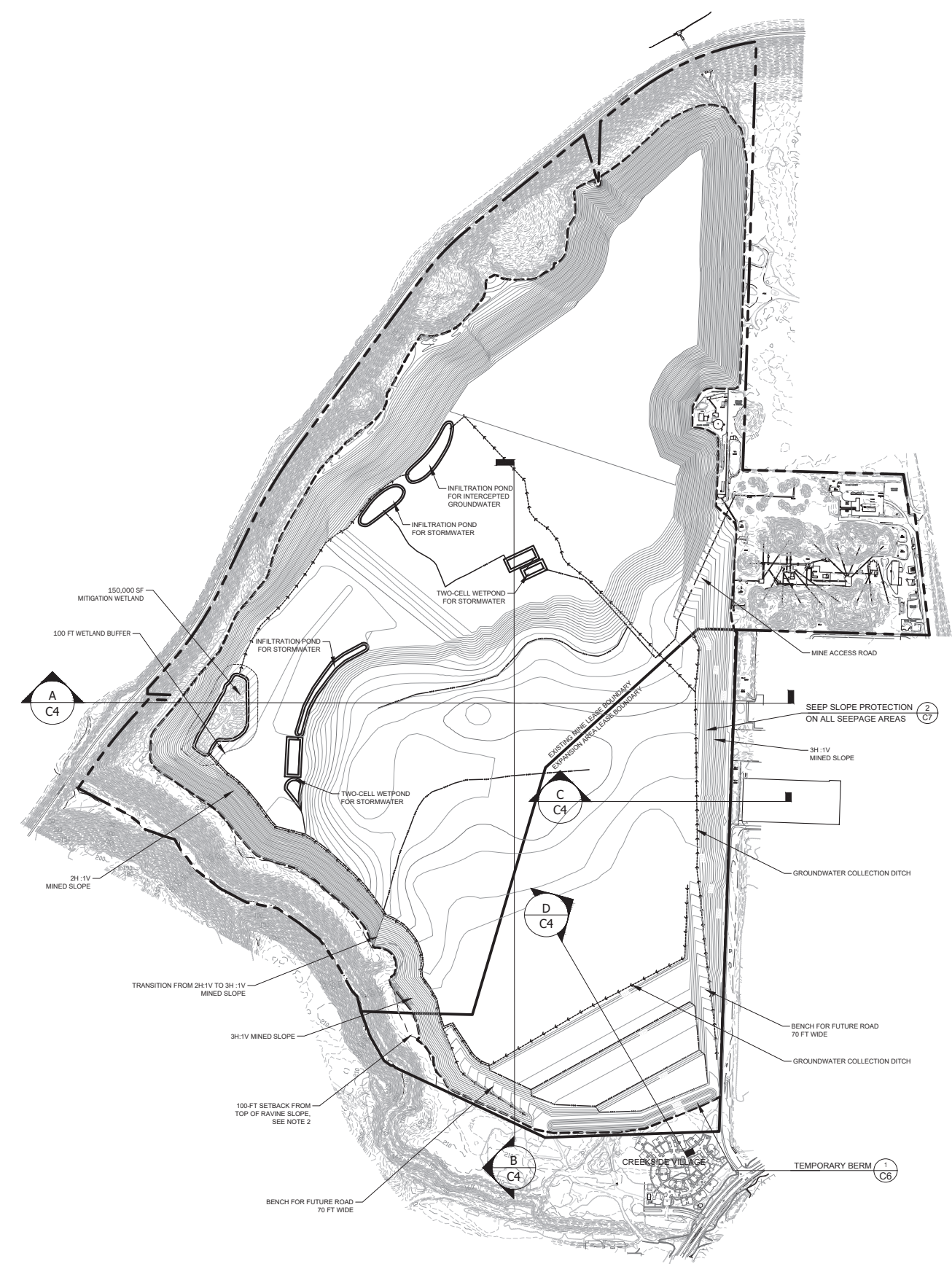
SHEET 4 OF 11

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FINAL SITE PLAN

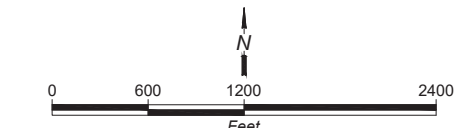
CalPortland
DuPont, Washington

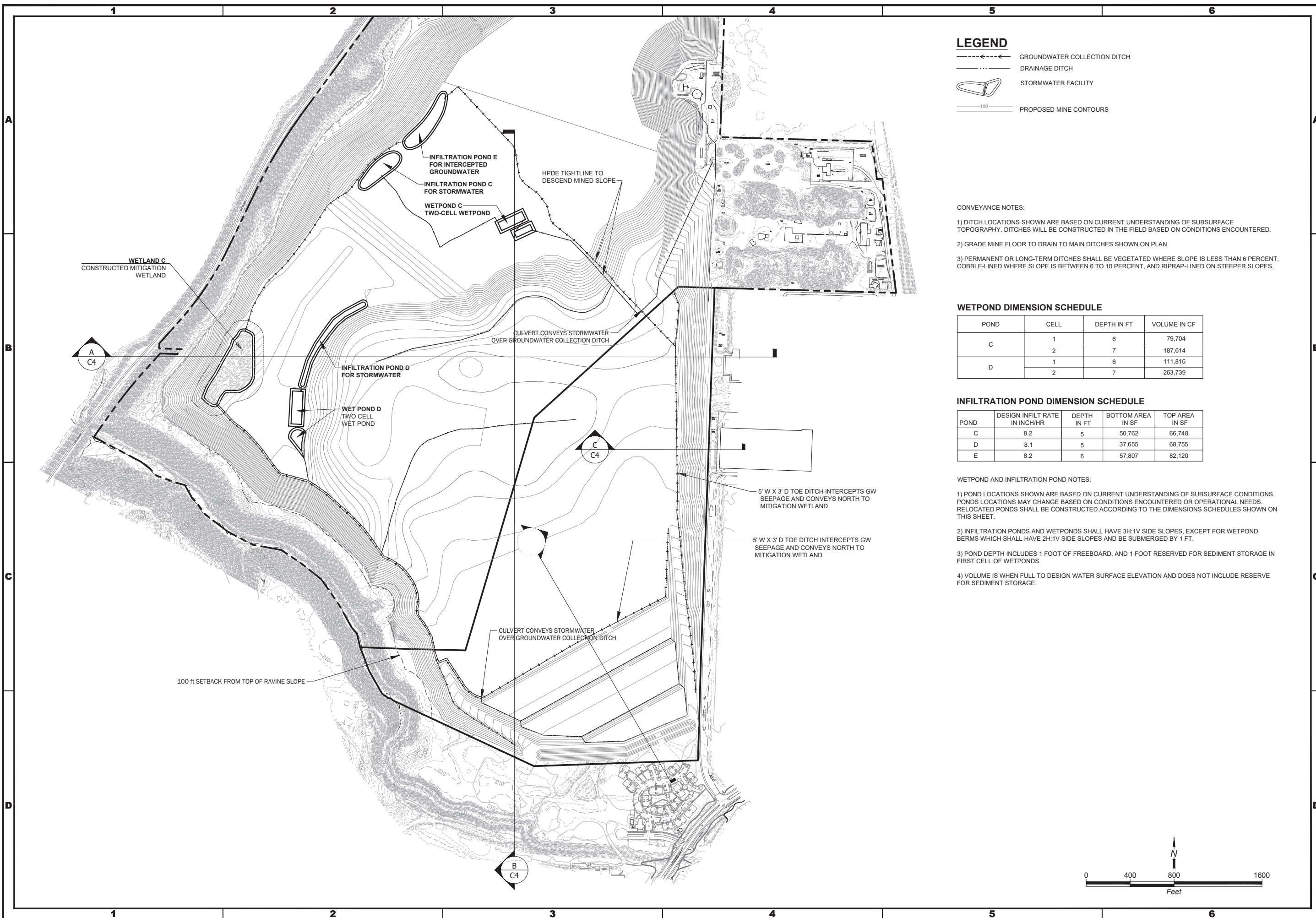
SHEET
REFERENCE
NUMBER:
C-1
SHEET 5 OF 11







NOTES:

1. NO MINING IS PROPOSED WITHIN 189 FEET OF THE LOCATION OF THE MISSION HISTORICAL SITE, AS DESCRIBED IN EXHIBIT C OF THE 2012 SETTLEMENT AGREEMENT.
2. NO MINING IS PROPOSED WITHIN 100 FEET OF THE TOP OF SLOPE OF THE SEQUALITCHEW CREEK RAVINE IN ACCORDANCE WITH THE 2012 SETTLEMENT AGREEMENT AND EXHIBIT J OF THE 1994 SETTLEMENT AGREEMENT.





LEGEND

	GROUNDWATER COLLECTION DITCH
	DRAINAGE DITCH
	STORMWATER FACILITY
	PROPOSED MINE CONTOURS

CONVEYANCE NOTES:

- 1) DITCH LOCATIONS SHOWN ARE BASED ON CURRENT UNDERSTANDING OF SUBSURFACE TOPOGRAPHY. DITCHES WILL BE CONSTRUCTED IN THE FIELD BASED ON CONDITIONS ENCOUNTERED.
- 2) GRADE MINE FLOOR TO DRAIN TO MAIN DITCHES SHOWN ON PLAN.
- 3) PERMANENT OR LONG-TERM DITCHES SHALL BE VEGETATED WHERE SLOPE IS LESS THAN 6 PERCENT. COBBLE-LINED WHERE SLOPE IS BETWEEN 6 TO 10 PERCENT, AND RIPRAP-LINED ON STEEPER SLOPES.

POND	CELL	DEPTH IN FT	VOLUME IN CF
C	1	6	79,704
	2	7	187,614
D	1	6	111,816
	2	7	263,739

POND	DESIGN INFILT RATE IN INCH/HR	DEPTH IN FT	BOTTOM AREA IN SF	TOP AREA IN SF
C	8.2	5	50,762	66,748
D	8.1	5	37,655	68,755
E	8.2	6	57,807	82,120

WETPOND AND INFILTRATION POND NOTES:

1) POND LOCATIONS SHOWN ARE BASED ON CURRENT UNDERSTANDING OF SUBSURFACE CONDITIONS. POND LOCATIONS MAY CHANGE BASED ON CONDITIONS ENCOUNTERED OR OPERATIONAL NEEDS. RELOCATED PONDS SHALL BE CONSTRUCTED ACCORDING TO THE DIMENSIONS SCHEDULES SHOWN ON THIS SHEET.

2) INFILTRATION PONDS AND WETPONDS SHALL HAVE 3H:1V SIDE SLOPES, EXCEPT FOR WETPOND BERMS WHICH SHALL HAVE 2H:1V SIDE SLOPES AND BE SUBMERGED BY 1 FT.

3) POND DEPTH INCLUDES 1 FOOT OF FREEBOARD, AND 1 FOOT RESERVED FOR SEDIMENT STORAGE IN FIRST CELL OF WETPONDS.

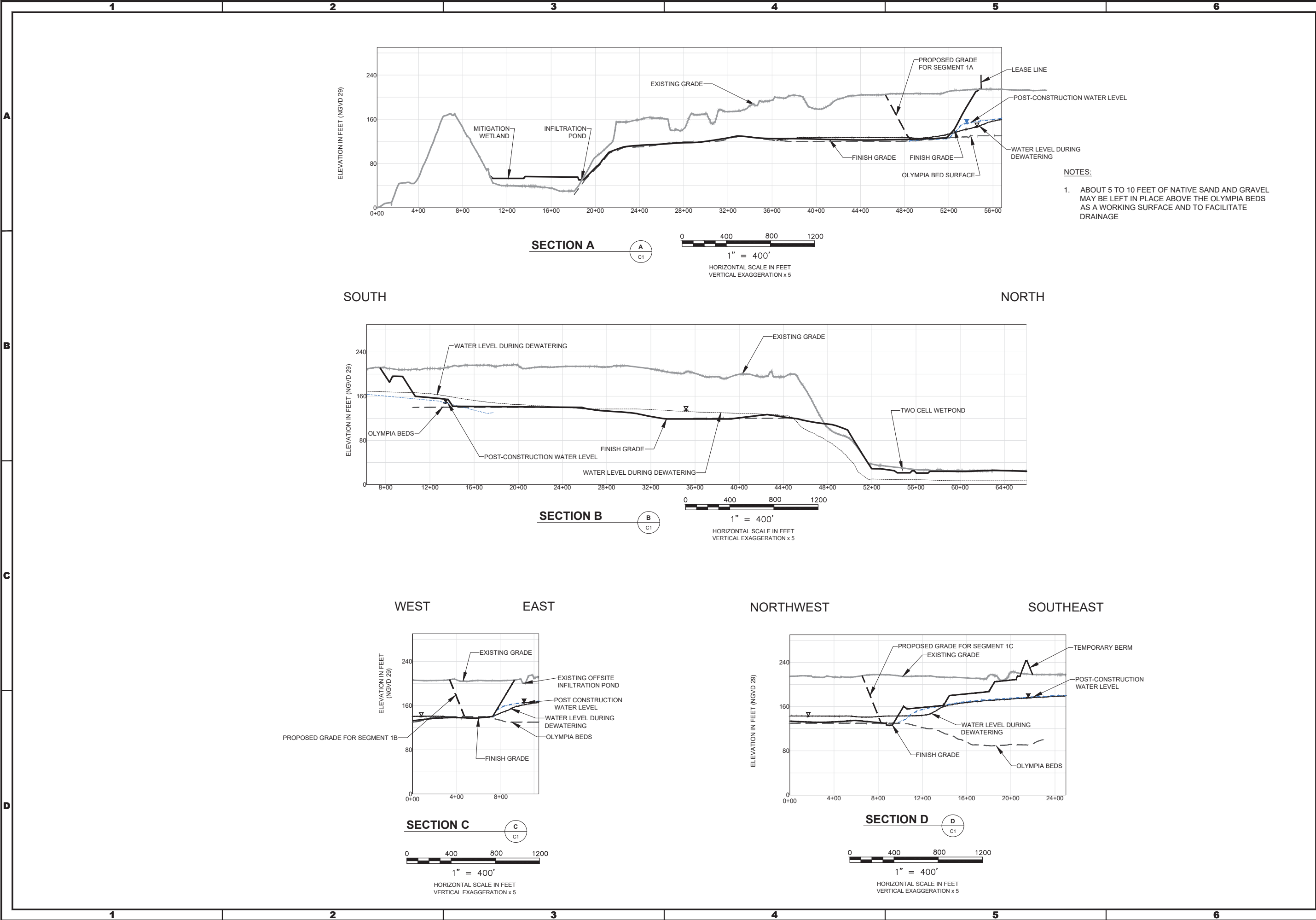
4) VOLUME IS WHEN FULL TO DESIGN WATER SURFACE ELEVATION AND DOES NOT INCLUDE RESERVE FOR SEDIMENT STORAGE.

[illegible]

DATE: JAN-2021	REVISION: 0	PROJECT NUMBER: 040001	DESIGNED BY: OGR/BMG	DRAWN BY: CMV	REVISED BY:
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CalPortland
DuPont, Washington

SHEET
REFERENCE
NUMBER:
C-2
SHEET **6** OF **11**



REV	DESCRIPTION	DATE	APPR



REVIEWED BY: CMV
DRAWN BY: CGR/BMG
DESIGNED BY: CGR/BMG



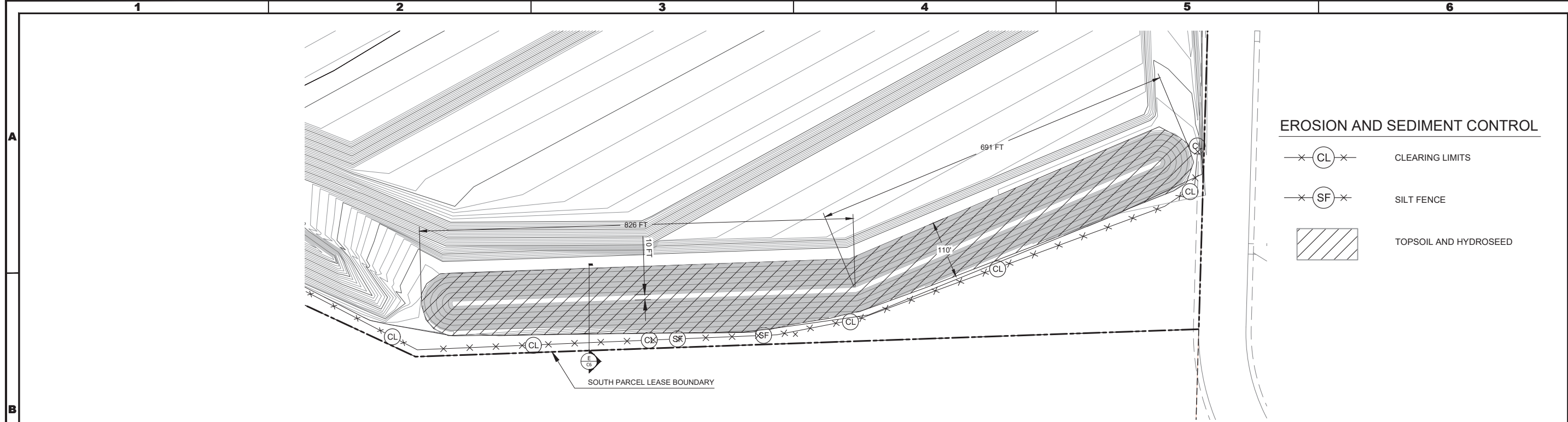
PROJECT NUMBER: 040001
REVISION: 0
DATE: JAN-2021

**PIONEER AGGREGATES
SOUTH PARCEL PROJECT
CROSS SECTIONS**

CalPortland
DuPont, Washington

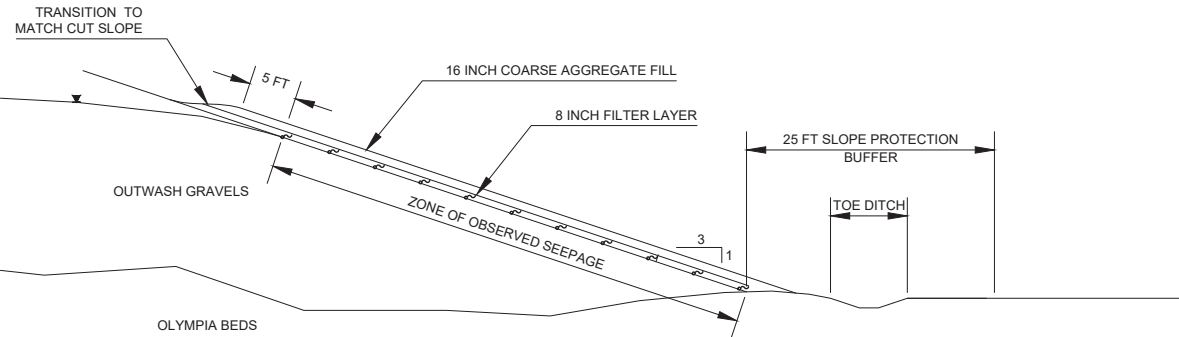
SHEET
REFERENCE
NUMBER:
C-4

SHEET 8 OF 11



TEMPORARY BERM DETAIL
SCALE: 1" = 100'

1
C6

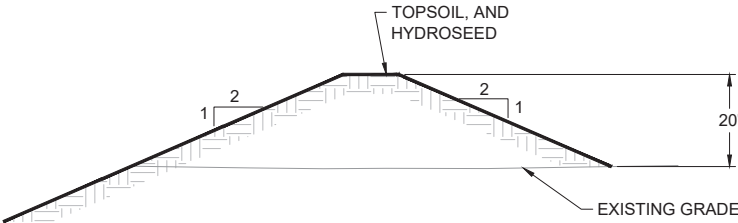


SLOPE PROTECTION AT SEEPS
SCALE: 1" = 100'

2
C6

SLOPE PROTECTION SPECIFICATIONS:

- 1) PLACE SEEP SLOPE PROTECTION IN ALL AREAS OF EASTERN MINE SLOPE WITH OBSERVED SEEPS OR SPRINGS AFTER DEWATERING WELLS HAVE BEEN TURNED OFF. SEEP SLOPE PROTECTION SHALL EXTEND A MINIMUM OF 5 FEET ABOVE AND TO THE SIDES OF OBSERVED SEEPAGE.
- 2) SEEP SLOPE PROTECTION CONSISTS OF:
 - A) 8 INCH FILTER LAYER CONSISTING OF COARSE SAND/FINE GRAVEL. FILTER LAYER SPECIFICATIONS SHALL BE DETERMINED BASED ON GRAIN SIZE OF THE EXPOSED NATIVE MATERIAL ACCORDING TO THE FOLLOWING EQUATIONS:
$$D_{50\text{filter}} < 25 * D_{50\text{native}}$$
$$D_{15\text{filter}} < 5 * D_{85\text{native}}$$
 - B) 16 INCH LAYER OF CLEAN, WELL-GRADED AGGREGATE FILL.
 - C) TOPSOIL AND VEGETATION PER WETLAND MITIGATION PLAN.
- 3) WHERE SPRINGS OR CONCENTRATED FLOW ARE PRESENT, PLACE COBBLE ARMOR INSTEAD OF TOPSOIL AND VEGETATION.



SECTION - TEMPORARY BERM
Scale: 1" = 20'

E
C6

EROSION AND SEDIMENT CONTROL

- X—CL—X— CLEARING LIMITS
- X—SF—X— SILT FENCE
- TOPSOIL AND HYDROSEED



REV	DESCRIPTION	DATE	APPR

REVIEWED BY: CMV
DRAWN BY: OGR/BMG
DESIGNED BY: OGR/BMG

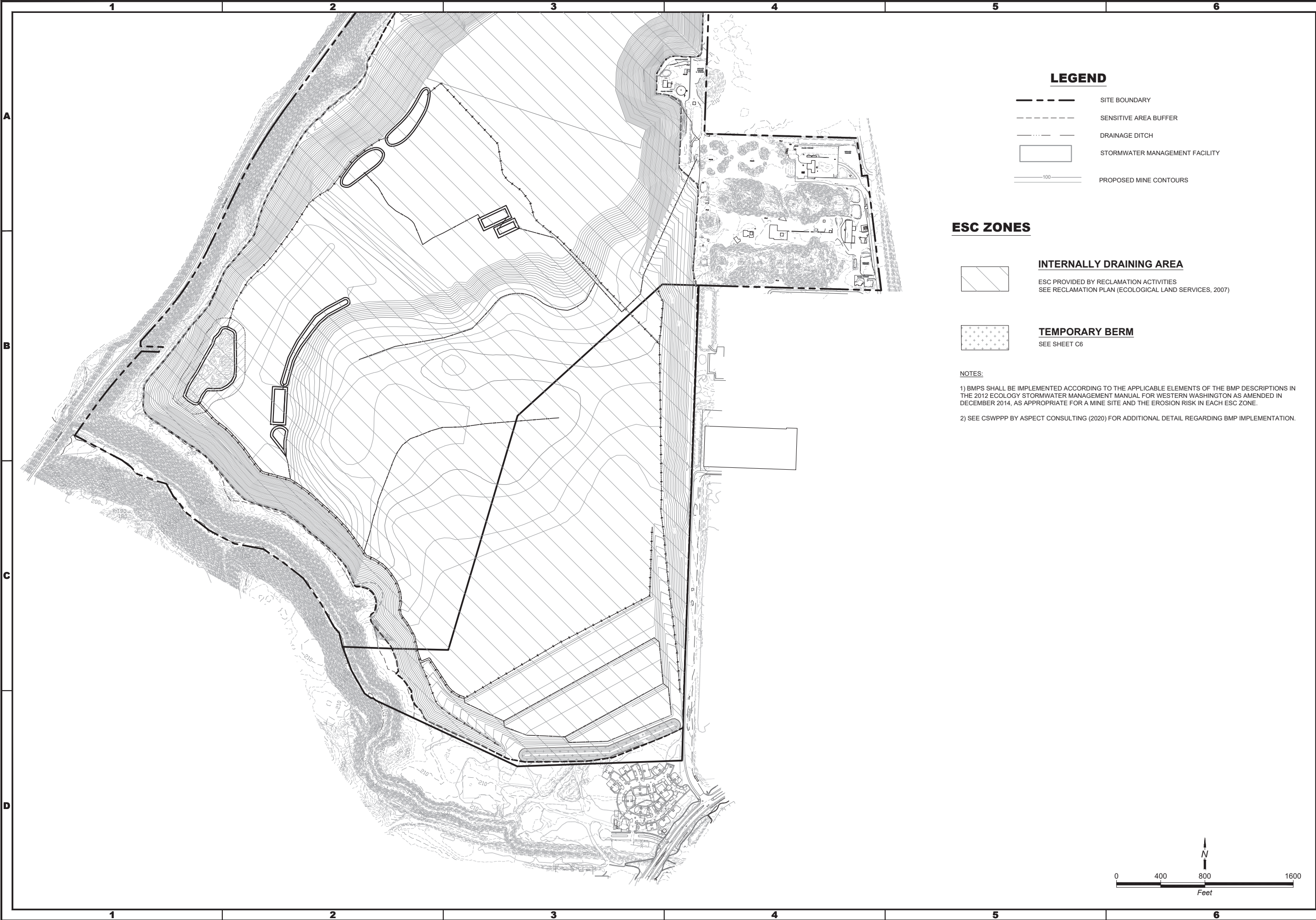
PROJECT NUMBER: 040001
REVISION: 0
DATE: JAN-2021

BERM AND SLOPE DETAILS

CalPortland
DuPont, Washington

SHEET
REFERENCE
NUMBER:
C-6

SHEET 10 OF 11



LEGEND

- SITE BOUNDARY
- SENSITIVE AREA BUFFER
- DRAINAGE DITCH
- STORMWATER MANAGEMENT FACILITY
- PROPOSED MINE CONTOURS



ESC ZONES

- INTERNALLY DRAINING AREA
ESC PROVIDED BY RECLAMATION ACTIVITIES
SEE RECLAMATION PLAN (ECOLOGICAL LAND SERVICES, 2007)
- TEMPORARY BERM
SEE SHEET C6

NOTES:
1) BMPS SHALL BE IMPLEMENTED ACCORDING TO THE APPLICABLE ELEMENTS OF THE BMP DESCRIPTIONS IN THE 2012 ECOLOGY STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON AS AMENDED IN DECEMBER 2014, AS APPROPRIATE FOR A MINE SITE AND THE EROSION RISK IN EACH ESC ZONE.
2) SEE CSWPPP BY ASPECT CONSULTING (2020) FOR ADDITIONAL DETAIL REGARDING BMP IMPLEMENTATION.



REV	DESCRIPTION	DATE	APPR



DATE	REVISION	PROJECT NUMBER	DESIGNED BY	DRAWN BY	REVIEWED BY
JAN-2021	0	040001	OCR/BMG	CMV	

EROSION AND SEDIMENT CONTROL PLAN
CalPortland
DuPont, Washington

SHEET REFERENCE NUMBER:
C-7
SHEET 11 OF 11