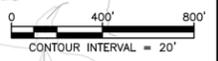


p:\mervpin03\mhw\global.com\AM_PROJECTS\03\Documents\F122_Neumont\Midnight_Mine\RD-RA 011-Sheet_Sat\2015-01-01 BDR\06_SW n SED CTRL\6-1.dwg



ISSUE NO.	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN	JV	NH	06-15
2	ISSUED FOR 90% DESIGN	KB	NH	07-14
1	ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
 THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

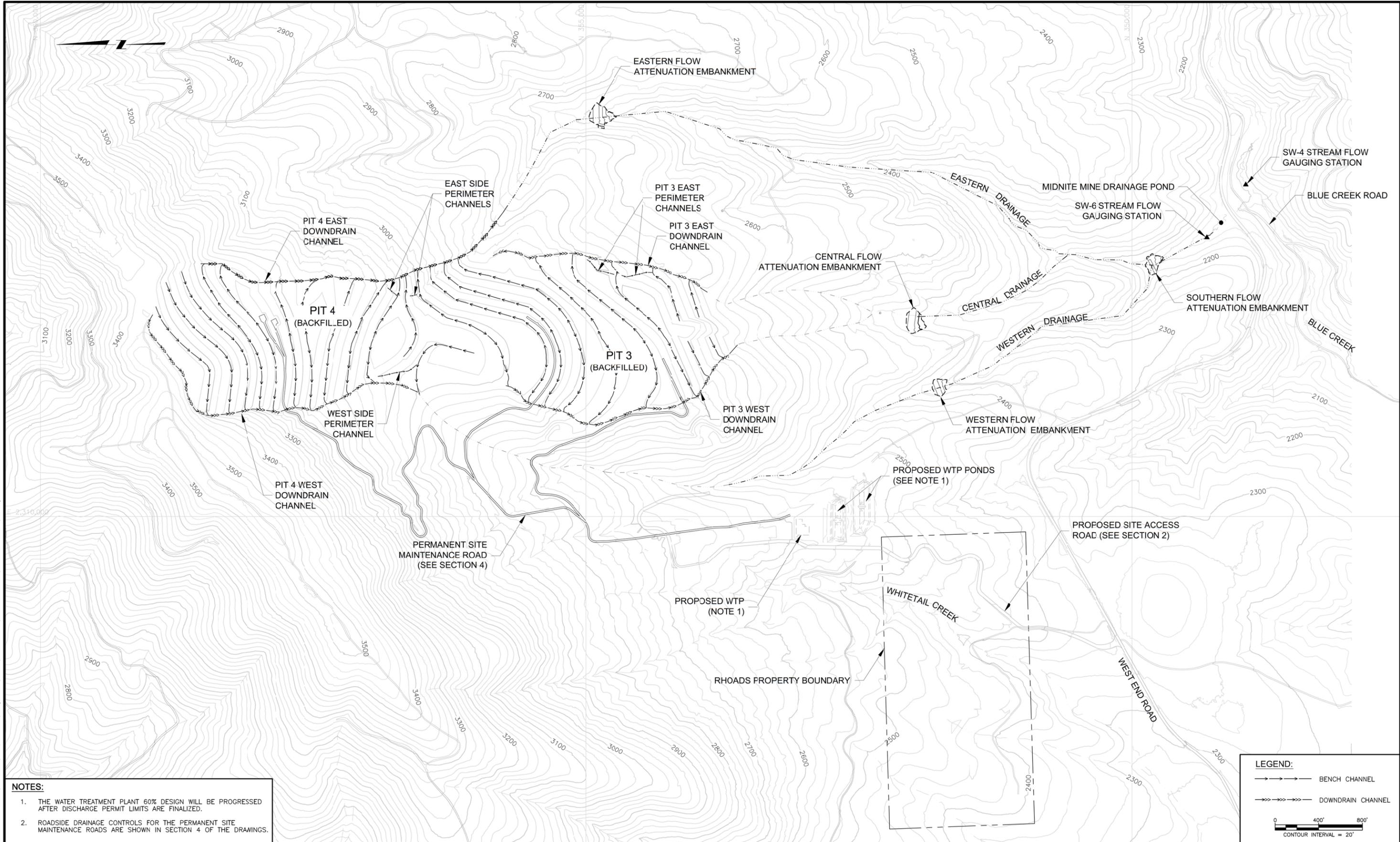
DRAWING REFERENCE(S):
 * EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL, 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAV088.
 * PRELIM TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USDM, NOV. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC ORIGINAL COORDINATE SYSTEM USED IN USDM MAPPING (NAD27/NAV029) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAV088 COORDINATES.
 * CONTOURS SHOWN REPRESENT EXISTING CONDITIONS.

DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15



PROJECT LOCATION	WELLPINIT, WASHINGTON
PROJECT	MIDNITE MINE
TITLE	EXISTING CONDITIONS

	SHEET	6-1	REVISION	3
	FILE NAME	6-1	DATE	JUNE 2015



- NOTES:**
1. THE WATER TREATMENT PLANT 60% DESIGN WILL BE PROGRESSED AFTER DISCHARGE PERMIT LIMITS ARE FINALIZED.
 2. ROADSIDE DRAINAGE CONTROLS FOR THE PERMANENT SITE MAINTENANCE ROADS ARE SHOWN IN SECTION 4 OF THE DRAWINGS.

LEGEND:

- → → → → BENCH CHANNEL
- --- --- DOWNDRAIN CHANNEL

0 400' 800'
CONTOUR INTERVAL = 20'

ISSUE/REV	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN	JV	NH	06-15
2	ISSUED FOR 90% DESIGN	KB	NH	07-14
1	ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DRAWING REFERENCE(S):

- EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS88.
- PRELIMINARY TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USDM, INC. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC ORIGINAL COORDINATE SYSTEM USED IN USDM MAPPING (NAD83/NAVDS88) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS88 COORDINATES.
- CONTOURS SHOWN REPRESENT APPROXIMATE GROUND SURFACE AFTER REMEDIATION.

DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	07-14
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15

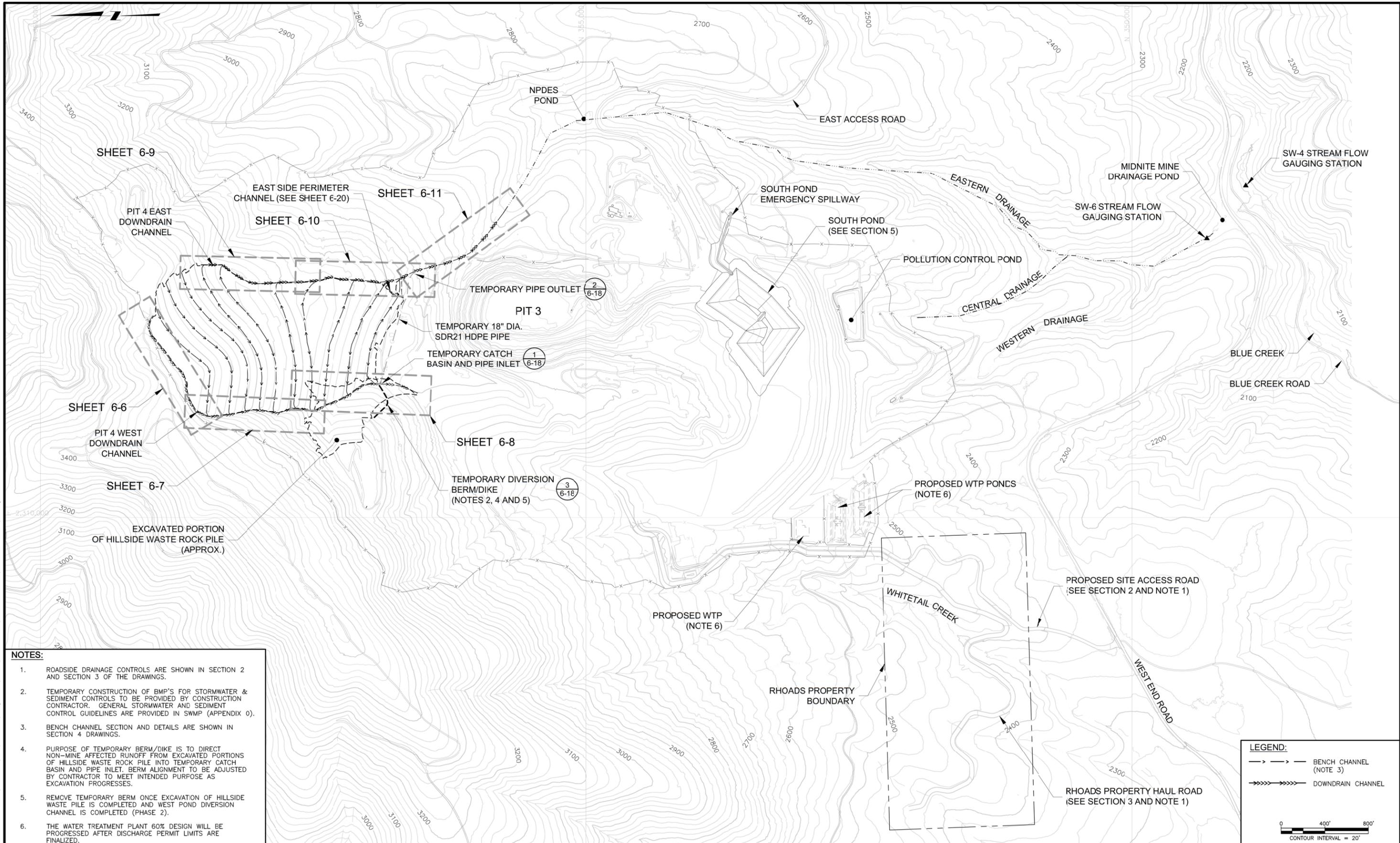


PROJECT LOCATION	WELLPINIT, WASHINGTON
PROJECT	MIDNITE MINE
TITLE	POST REMEDIATION STORM WATER CONTROLS

MWH

SHEET	6-2	REVISION	3
FILE NAME	6-2	DATE	JUNE 2015

p:_omervp\m03_mh\global.com\AM_PROJECTS\303\Documents\F122_Neumont\Wildnight_Mine\RD-RA 011-Sheet_Sat_2015-01-01_BDR_06_SW_n_SED_CTRL\6-2.dwg



- NOTES:**
- ROADSIDE DRAINAGE CONTROLS ARE SHOWN IN SECTION 2 AND SECTION 3 OF THE DRAWINGS.
 - TEMPORARY CONSTRUCTION OF BMP'S FOR STORMWATER & SEDIMENT CONTROLS TO BE PROVIDED BY CONSTRUCTION CONTRACTOR. GENERAL STORMWATER AND SEDIMENT CONTROL GUIDELINES ARE PROVIDED IN SWMP (APPENDIX 0).
 - BENCH CHANNEL SECTION AND DETAILS ARE SHOWN IN SECTION 4 DRAWINGS.
 - PURPOSE OF TEMPORARY BERM/DIKE IS TO DIRECT NON-MINE AFFECTED RUNOFF FROM EXCAVATED PORTIONS OF HILLSIDE WASTE ROCK PILE INTO TEMPORARY CATCH BASIN AND PIPE INLET. BERM ALIGNMENT TO BE ADJUSTED BY CONTRACTOR TO MEET INTENDED PURPOSE AS EXCAVATION PROGRESSES.
 - REMOVE TEMPORARY BERM ONCE EXCAVATION OF HILLSIDE WASTE PILE IS COMPLETED AND WEST POND DIVERSION CHANNEL IS COMPLETED (PHASE 2).
 - THE WATER TREATMENT PLANT 60% DESIGN WILL BE PROGRESSED AFTER DISCHARGE PERMIT LIMITS ARE FINALIZED.

LEGEND:

- >---> BENCH CHANNEL (NOTE 3)
- ====>====> DOWNDRAIN CHANNEL

0 400' 800'
CONTOUR INTERVAL = 20'

ISSUE	REV	DESCRIPTION	TECH	ENG	DATE
3		ISSUED FOR 100% DESIGN	JV	NH	6-15
2		ISSUED FOR 90% DESIGN	KB	NH	07-14
1		ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DRAWING REFERENCE(S):

- EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAV088.
- PREMISE TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USDM, INC. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USDM MAPPING (NAD27/NAV029) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAV088 COORDINATES.
- CONTOURS SHOWN REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 1.

DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15

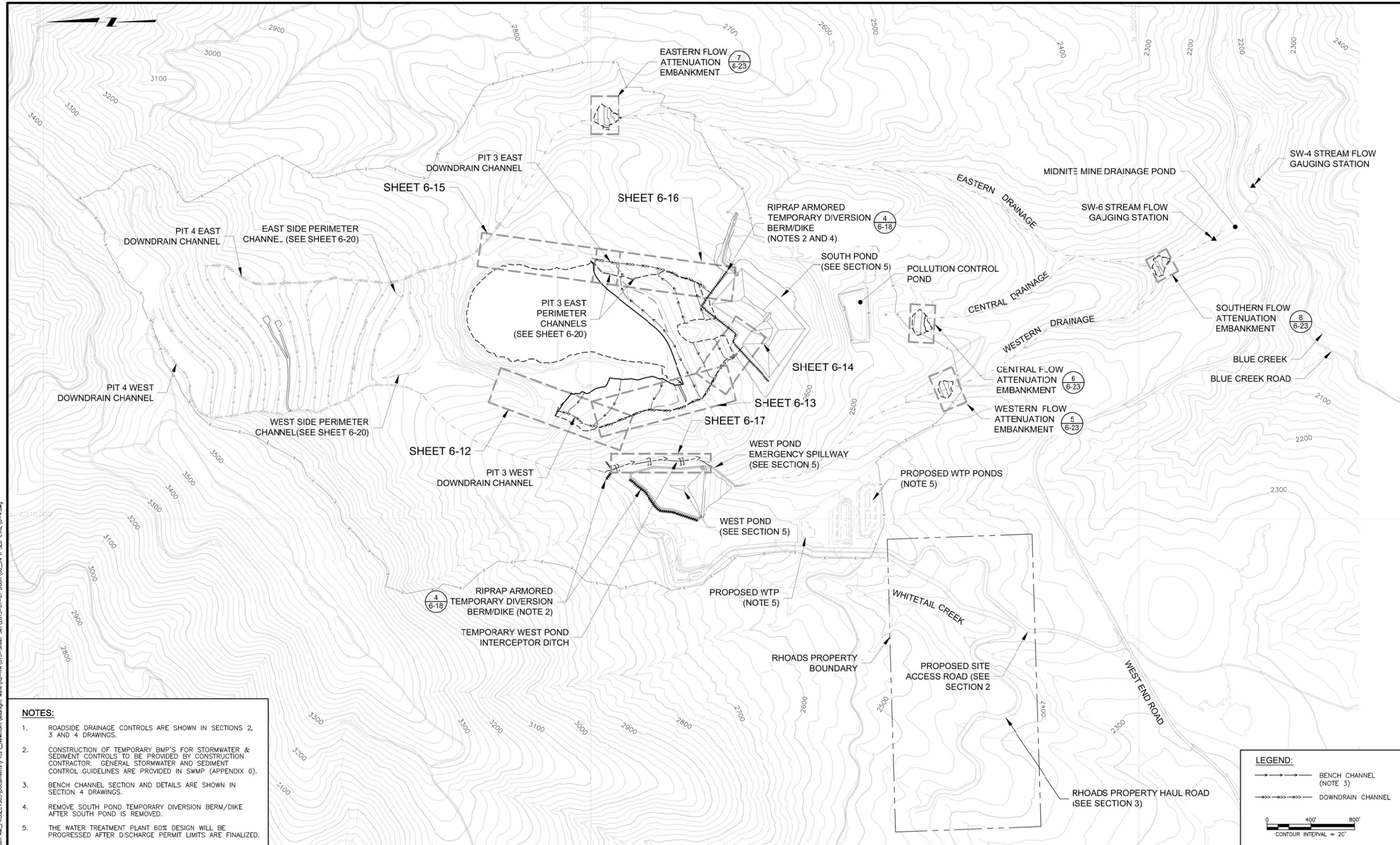


PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	END OF PHASE 1 STORM WATER CONTROLS	

SHEET	6-3	REVISION	3
FILE NAME	6-3	DATE	JUNE 2015

p:\mervyn\03_mh\global.com\AM_PROJECTS\03_Neumont\Midnight_Mine\RD-RA 01-Sheet_Sat\2015-01-01_BDR_06_SW_n_SED_CTRL\6-3.dwg

p:\omervpin03\mwh\global.com\AM_PROJECTS\303\Documents\F122_Neumont\Wildnight_Mine\RD-RA 011-Sheet_Sat_2015-01-01_BDR_06_SW_n_SED_CTRL\6-4.dwg



- NOTES:**
- ROADSIDE DRAINAGE CONTROLS ARE SHOWN IN SECTIONS 2, 3 AND 4 DRAWINGS.
 - CONSTRUCTION OF TEMPORARY BMP'S FOR STORMWATER & SEDIMENT CONTROLS TO BE PROVIDED BY CONSTRUCTION CONTRACTOR. GENERAL STORMWATER AND SEDIMENT CONTROL GUIDELINES ARE PROVIDED IN SWMP (APPENDIX O).
 - BENCH CHANNEL SECTION AND DETAILS ARE SHOWN IN SECTION 4 DRAWINGS.
 - REMOVE SOUTH POND TEMPORARY DIVERSION BERM/DIKE AFTER SOUTH POND IS REMOVED.
 - THE WATER TREATMENT PLANT 60% DESIGN WILL BE PROGRESSED AFTER DISCHARGE PERMIT LIMITS ARE FINALIZED.

LEGEND:

- BENCH CHANNEL (NOTE 3)
- DOWNDRAIN CHANNEL

0 400' 800'
CONTOUR INTERVAL = 20'

ISSUE	REV	DESCRIPTION	TECH	ENG	DATE
3		ISSUED FOR 100% DESIGN	JV	NH	6-15
2		ISSUED FOR 90% DESIGN	KB	NH	07-14
1		ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DRAWING REFERENCE(S):

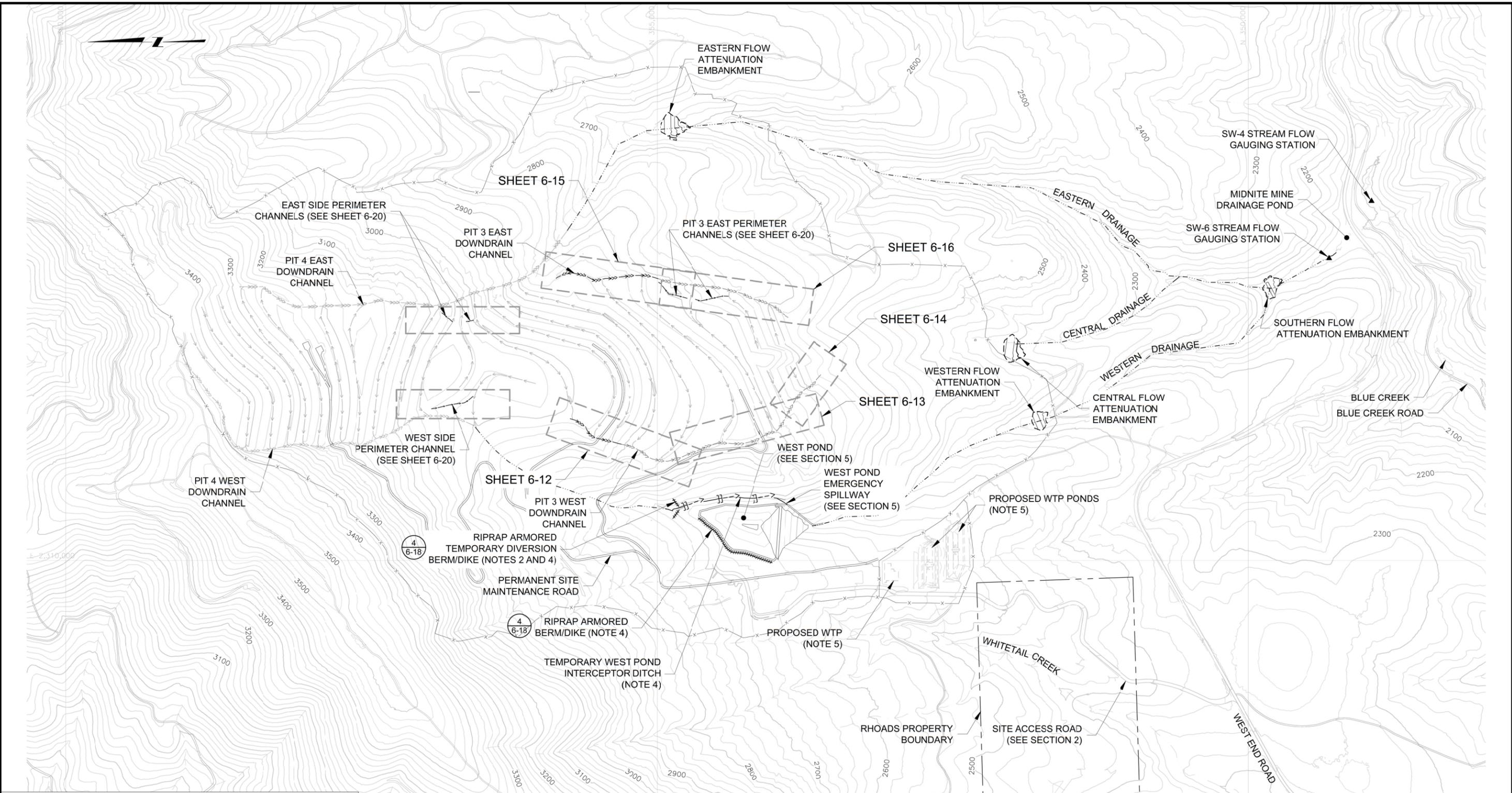
- EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL, 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS8.
- PREMISE TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USMA, INC. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC ORIGINAL COORDINATE SYSTEM USED IN USMA MAPPING (NAD83/NAVDS8) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS8 COORDINATES.
- CONTOURS SHOWN REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 2.

DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15

PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	END OF PHASE 2 STORM WATER CONTROLS	

SHEET	6-4	REVISION	3
FILE NAME	6-4	DATE	JUNE 2015

p:\mervpin03\mhw\global\com\AM_PROJECTS\303\Documents\F122_Neumont\Wildnight_Mine\RD-RA 011-Sheet_Sat_2015-01-01_BDR_06_SW_n_SED_CTRL\6-5.dwg



- NOTES:**
1. ROADSIDE DRAINAGE CONTROLS ARE SHOWN IN SECTIONS 2 AND 4 OF THE DRAWINGS.
 2. TEMPORARY CONSTRUCTION OF BMP'S FOR STORMWATER & SEDIMENT CONTROL TO BE PROVIDED BY CONSTRUCTION CONTRACTOR. GENERAL STORMWATER AND SEDIMENT CONTROL GUIDELINES ARE PROVIDED IN SWMP (APPENDIX O).
 3. BENCH CHANNEL SECTION AND DETAILS ARE SHOWN IN SECTION 4 DRAWINGS.
 4. REMOVE DIVERSION CHANNEL AND BERM/DIKE UPON REMOVAL OF WEST POND.
 5. THE WATER TREATMENT PLANT 60% DESIGN WILL BE PROGRESSED AFTER DISCHARGE PERMIT LIMITS ARE FINALIZED.

LEGEND:

- > — > — BENCH CHANNEL (NOTE 3)
- >>>> — DOWNDRAIN CHANNEL

ISSUE NO.	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN	JV	NH	6-15
2	ISSUED FOR 90% DESIGN	KB	NH	07-14
1	ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DRAWING REFERENCE(S):

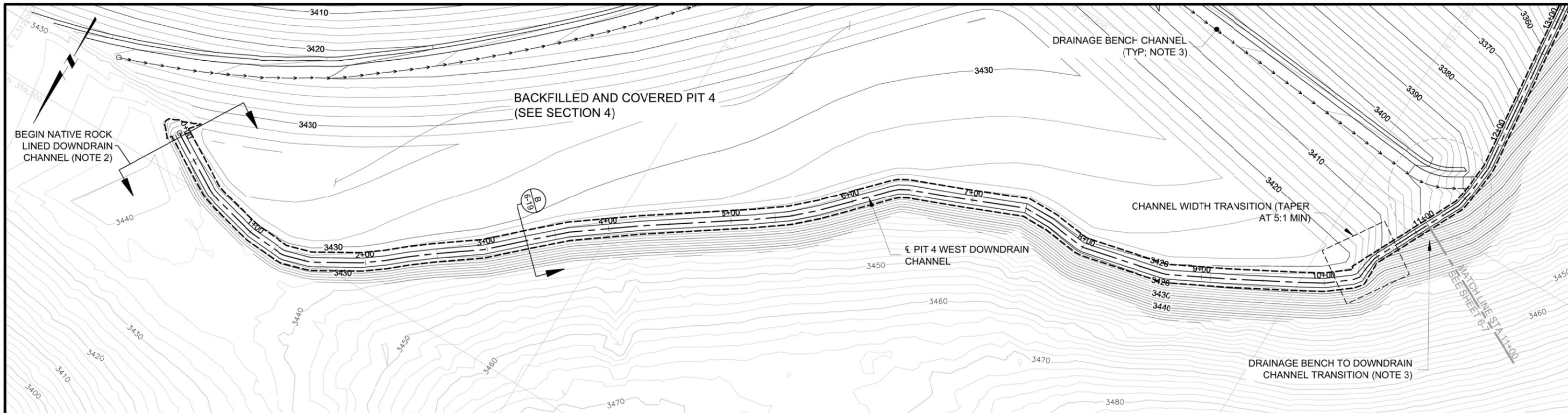
- EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAV088.
- PRELIMINARY TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USERRA, JULY 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USERRA MAPPING (NAD83/NAV088) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAV088 COORDINATES.
- CONTOURS SHOWN REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 3.

DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15

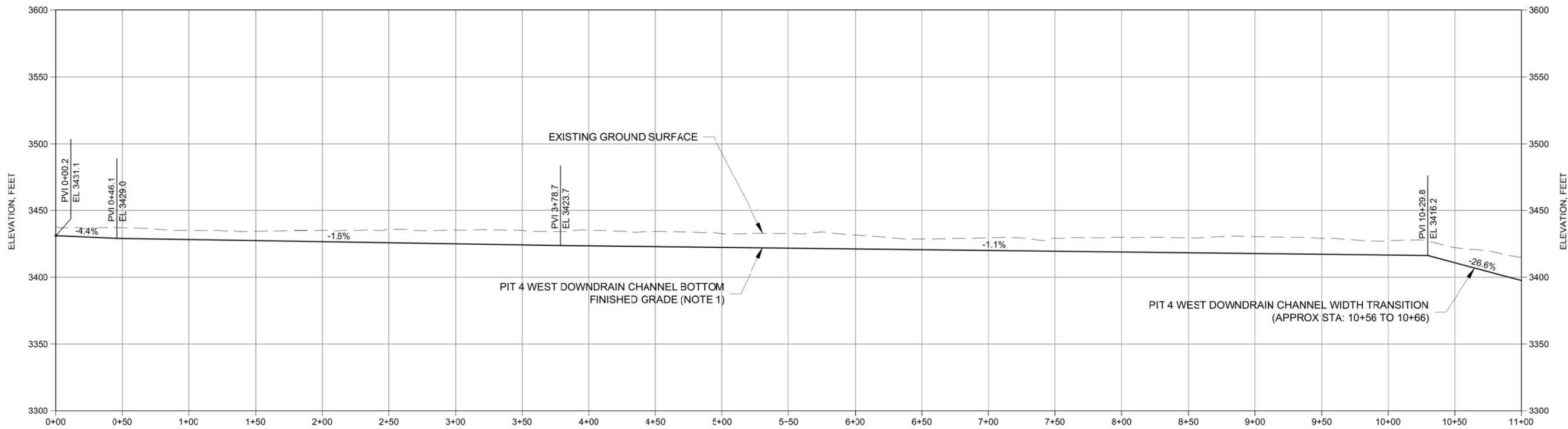


PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	END OF PHASE 3 STORM WATER CONTROLS	
SHEET	6-5	REVISION 3
FILE NAME	6-5	DATE JUNE 2015





PLAN
 0 40' 80'
 CONTOUR INTERVAL = 2'



PROFILE
 0 40' 80'

NOTES:

1. DOWNDRAIN CHANNEL BOTTOM FINISHED GRADE CORRESPONDS TO TOP OF CHANNEL LINING AT CHANNEL INVERT. SEE TABLE 1 ON SHEET 6-19 FOR CHANNEL LINING.
2. LIMITS OF CHANNEL LININGS AND TRANSITION LOCATIONS ARE APPROXIMATE AND WILL BE VERIFIED IN THE FIELD BASED ON SITE CONDITIONS. EXTENTS SHALL BE APPROVED BY THE FIELD ENGINEER.
3. COVER GRADING, INCLUDING DRAINAGE BENCH CHANNELS, DOWNDRAIN TRANSITION APRONS, AND ACCESS ROADS, IS PRESENTED IN SECTION 4.
4. CHANNELS EXCAVATED INTO FRACTURED ROCK SHALL BE SLUSH GROUTED TO SEAL OPEN FRACTURES AS DIRECTED BY THE ENGINEER.

ISSUE NO.	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN	JV	NH	06-15
2	ISSUED FOR 90% DESIGN	KB	NH	07-14
1	ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
 THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

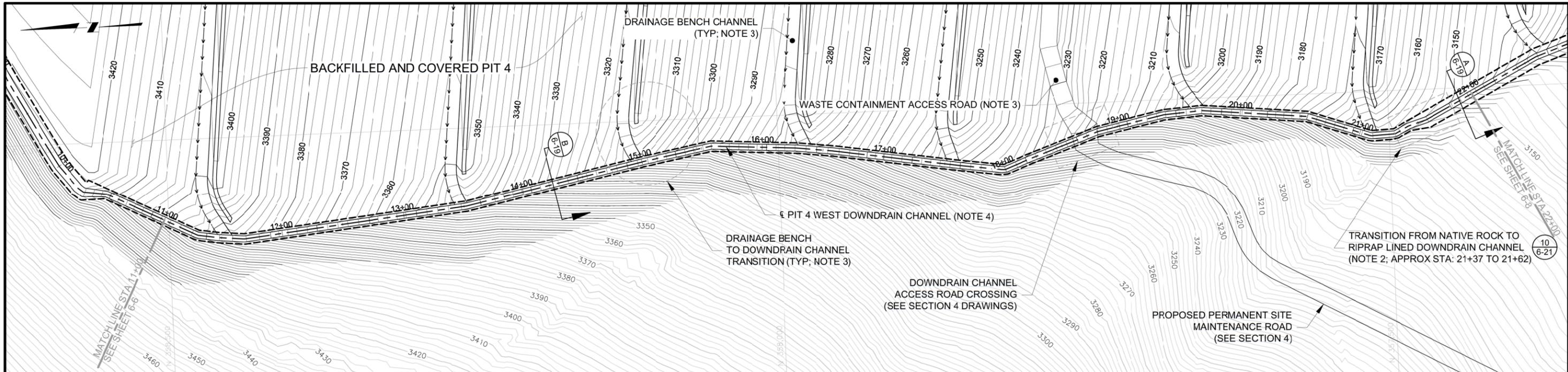
DRAWING REFERENCE(S):		
DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15



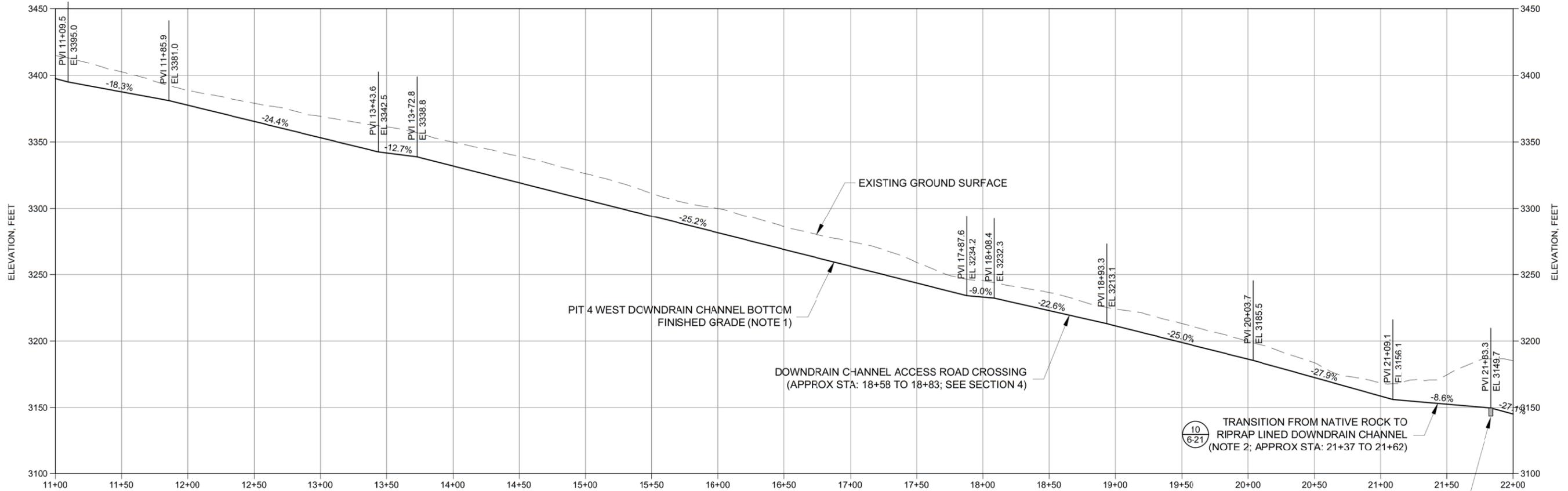
PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	PIT 4 WEST DOWNDRAIN CHANNEL PLAN AND PROFILE - STA 0+00 TO 11+00	

	SHEET	6-6	REVISION	3
	FILE NAME	6-6	DATE	JUNE 2015

p:\omervpwin03\mwh\global.com\AM_PROJECTS\303\Documents\F102_Neumont\Wildnight_Mine\RD-RA\01-Sheet_Sat\2015-01-01_BDR\06_SW_n_SED_CTRL\6-6.dwg



PLAN
 0 40' 80'
 CONTOUR INTERVAL = 2'



PROFILE
 0 40' 80'

- NOTES:**
1. DOWNDRAIN CHANNEL BOTTOM FINISHED GRADE CORRESPONDS TO TOP OF CHANNEL LINING AT CHANNEL INVERT. SEE TABLE 1 ON SHEET 6-19 FOR CHANNEL LINING.
 2. LIMITS OF CHANNEL LININGS AND TRANSITION LOCATIONS ARE APPROXIMATE AND WILL BE VERIFIED IN THE FIELD BASED ON SITE CONDITIONS. EXTENTS SHALL BE APPROVED BY THE FIELD ENGINEER.
 3. COVER GRADING, INCLUDING DRAINAGE BENCH CHANNELS, AND DOWNDRAIN TRANSITION APRONS, AND ACCESS ROADS, IS PRESENTED IN SECTION 4.
 4. CHANNELS EXCAVATED INTO FRACTURED ROCK SHALL BE SLUSH GROUTED TO SEAL OPEN FRACTURES AS DIRECTED BY THE ENGINEER.

REV	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN	JV	NH	6-15
2	ISSUED FOR 90% DESIGN	KB	NH	07-14
1	ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
 THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DRAWING REFERENCE(S):
 • EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS8.
 • PREMIERE TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USDM, INC. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USDM MAPPING (NAD83/NAVDS8) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS8 COORDINATES.
 • CONTOURS SHOWN ON PLAN VIEW REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 1.

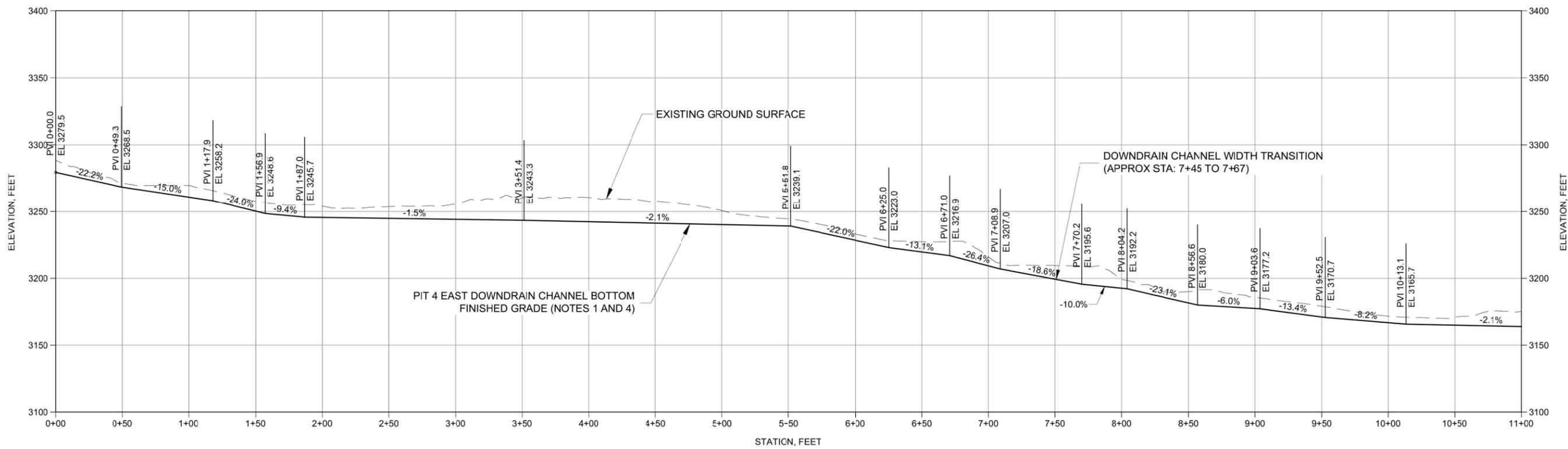
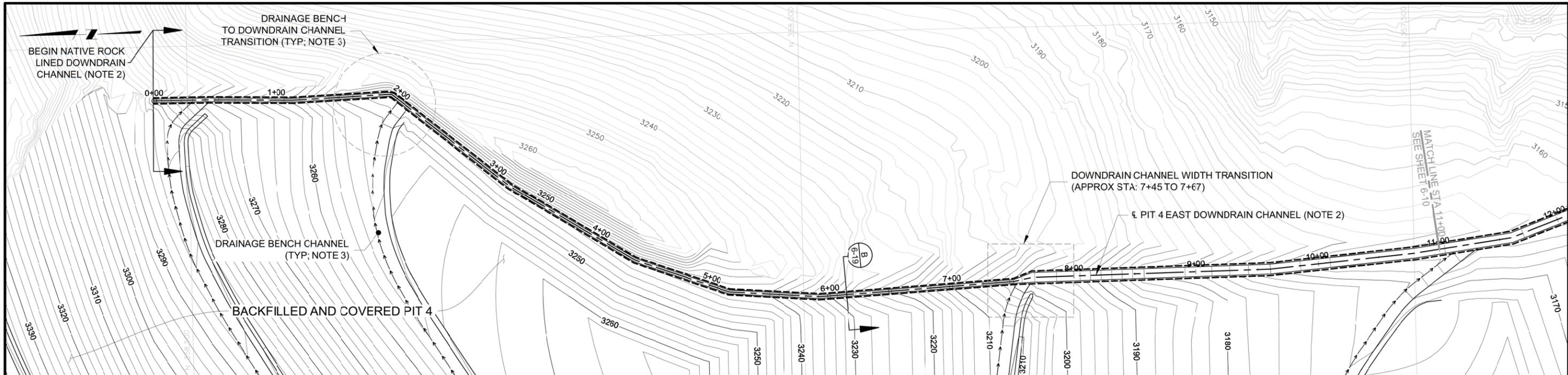
DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15



PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	PIT 4 WEST DOWNDRAIN CHANNEL PLAN AND PROFILE - STA 11+00 TO 22+00	
SHEET	6-7	REVISION 3
FILE NAME	6-6	DATE JUNE 2015



p:\omervp\m03\m03\global.com\AM_PROD\CT503\Documents\Ft22_Neamont\Wildnight_Mine\RD-RA\015-Sheet_Sat\2015-01-01_BDR\06_SW_n_SED_CTRL\6-6.dwg



- NOTES:**
1. DOWNDRAIN CHANNEL BOTTOM FINISHED GRADE CORRESPONDS TO TOP OF CHANNEL LINING AT CHANNEL INVERT. SEE TABLE 1 ON SHEET 6-19 FOR CHANNEL LINING.
 2. LIMITS OF CHANNEL LININGS AND TRANSITION LOCATIONS ARE APPROXIMATE AND WILL BE VERIFIED IN THE FIELD BASED ON SITE CONDITIONS. EXTENTS SHALL BE APPROVED BY THE FIELD ENGINEER.
 3. COVER GRADING, INCLUDING DRAINAGE BENCH CHANNELS AND DOWNDRAIN TRANSITION APRONS, IS PRESENTED IN SECTION 4.
 4. CHANNELS EXCAVATED INTO FRACTURED ROCK SHALL BE SLUSH GROUTED TO SEAL OPEN FRACTURES AS DIRECTED BY THE ENGINEER.

REV	ISSUE	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN		JV	NH	6-15
2	ISSUED FOR 90% DESIGN		KB	NH	07-14
1	ISSUED FOR 60% DESIGN		ID	NH	12-13

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DRAWING REFERENCE(S):
 * EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS8.
 * PRELIM TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USMMA, INC. 1995 AND PROVIDED BY BAWN MINING COMPANY, USMMA ORIGINAL COORDINATE SYSTEM USED IN USMMA MAPPING (NAV27/NAV25) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS8 COORDINATES.
 * CONTOURS SHOWN ON PLAN VIEW REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 1.

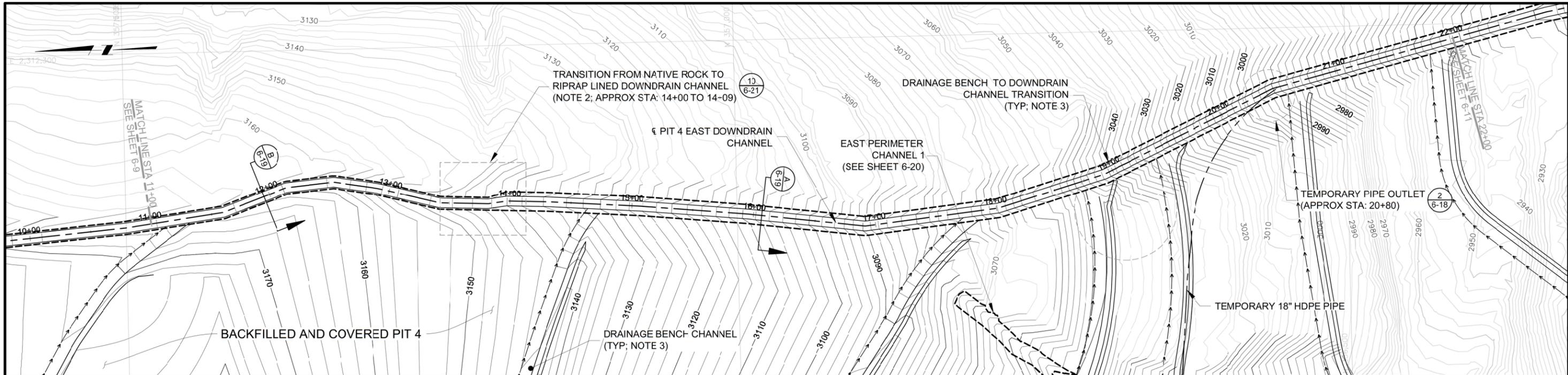
DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15



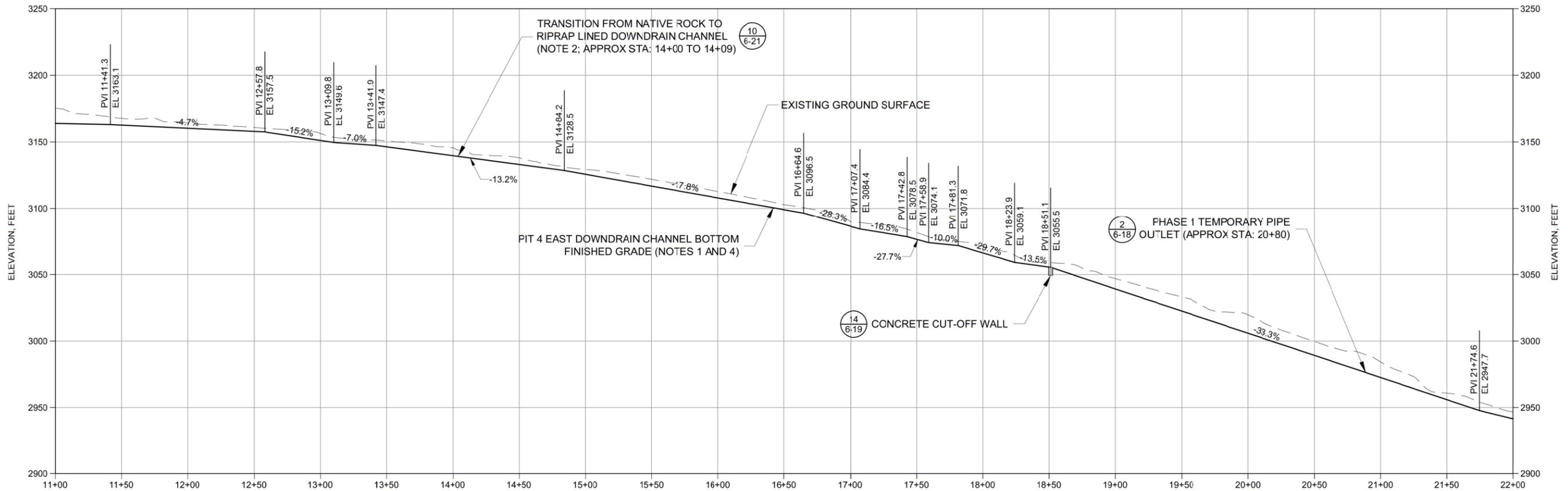
PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	PIT 4 EAST DOWNDRAIN CHANNEL PLAN AND PROFILE - STA 0+00 TO 11+00	
SHEET	6-9	REVISION 3
FILE NAME	6-6	DATE JUNE 2015



p:\omervp\m03\m\gdbal.com\AM_PROJECTS\303\Documents\F122_Neumont\Midnight_Mine\RD-RA 013-Sheet_Sat\2015-01-01 BDR\06_SW n SED CTRL\6-6.dwg



PLAN
0 40 80
CONTOUR INTERVAL = 7



PROFILE
0 40 80

- NOTES:**
1. DOWNRAIN CHANNEL BOTTOM FINISHED GRADE CORRESPONDS TO TOP OF CHANNEL LINING AT CHANNEL INVERT. SEE TABLE 1 ON SHEET 6-19 FOR CHANNEL LINING.
 2. LIMITS OF CHANNEL LININGS AND TRANSITION LOCATIONS ARE APPROXIMATE AND WILL BE VERIFIED IN THE FIELD BASED ON SITE CONDITIONS. EXTENTS SHALL BE APPROVED BY THE FIELD ENGINEER.
 3. COVER GRADING, INCLUDING DRAINAGE BENCH CHANNELS AND DOWNRAIN TRANSITION APRONS, IS PRESENTED IN SECTION 4.
 4. CHANNELS EXCAVATED INTO FRACTURED ROCK SHALL BE SLUSH GROUTED TO SEAL OPEN FRACTURES AS DIRECTED BY THE ENGINEER.

ISSUE NO.	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN	JV	NH	6-15
2	ISSUED FOR 90% DESIGN	KB	NH	07-14
1	ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DRAWING REFERENCE(S):
 * EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAV088.
 * PRELIM TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USBM, NOV. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USBM MAPPING (NAD83/NAV088) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAV088 COORDINATES.
 * CONTOURS SHOWN ON PLAN VIEW REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 1.

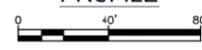
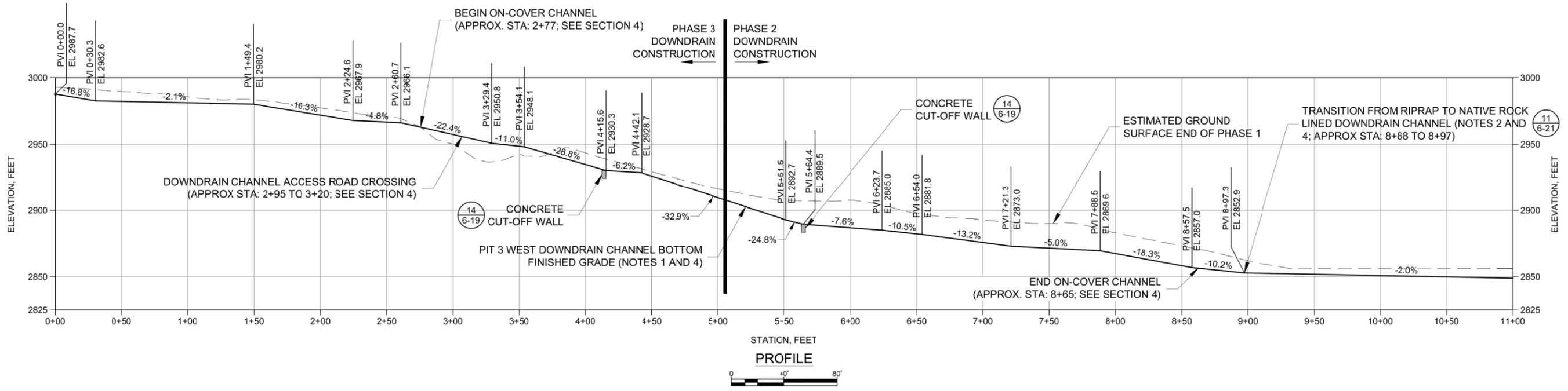
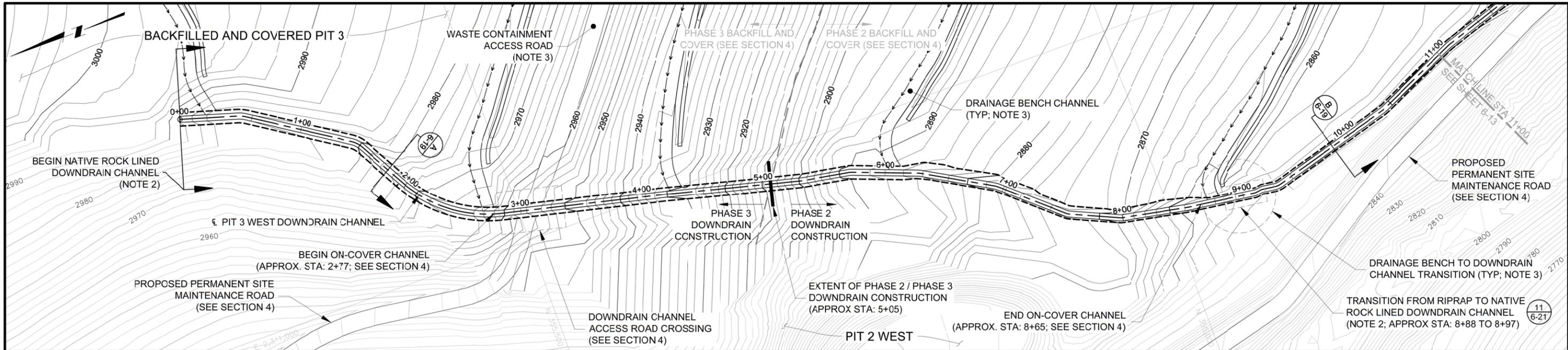
DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15



PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	PIT 4 EAST DOWNRAIN CHANNEL PLAN AND PROFILE - STA 11+00 TO 22+00	
SHEET	6-10	REVISION 3
FILE NAME	6-6	DATE JUNE 2015



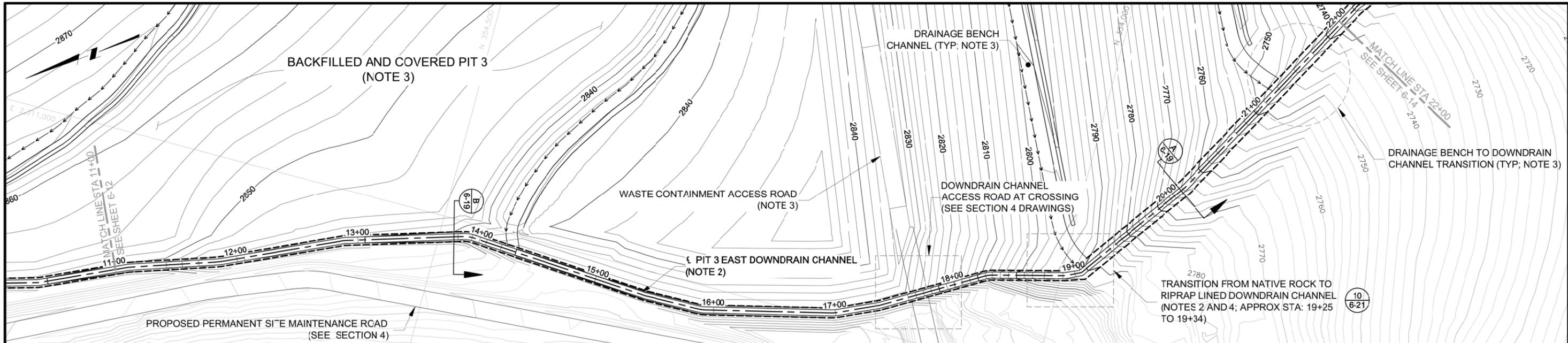
p:\omervp\m03\m\gdbal.com\AM_PROJECTS\03\Documents\F102_Neumont_Wildnight_Mine\RD-RA 015-Sheet_Sat\2015-01-01_BDR\06_SW_n_SED_CTRL\6-6.dwg



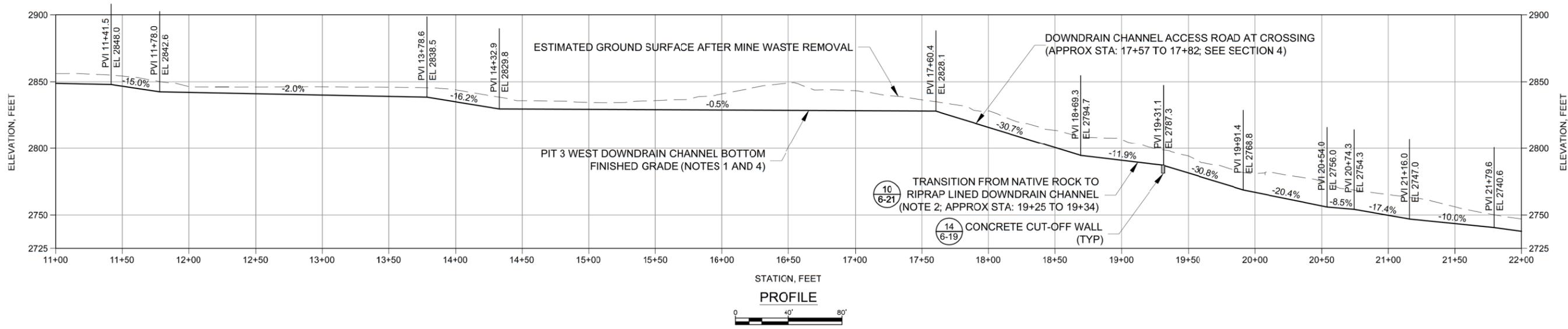
- NOTES:**
1. DOWNDRAIN CHANNEL BOTTOM FINISHED GRADE CORRESPONDS TO TOP OF CHANNEL LINING AT CHANNEL INVERT. SEE TABLE 1 ON SHEET 6-19 FOR CHANNEL LINING.
 2. LIMITS OF CHANNEL LININGS AND TRANSITION LOCATIONS ARE APPROXIMATE AND WILL BE VERIFIED IN THE FIELD BASED ON SITE CONDITIONS. EXTENTS SHALL BE APPROVED BY THE FIELD ENGINEER.
 3. COVER GRADING, INCLUDING DRAINAGE BENCH CHANNELS, DOWNDRAIN TRANSITION APRONS, AND ACCESS ROADS IS PRESENTED IN SECTION 4.
 4. CHANNELS EXCAVATED INTO FRACTURED ROCK SHALL BE SLUSH GROUTED TO SEAL OPEN FRACTURES AS DIRECTED BY THE ENGINEER.

<p>DISCLAIMER: THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.</p>				<p>DRAWING REFERENCE(S): • EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS88. • PRELIMINARY TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USMA, INC. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USMA MAPPING (NAD83/NAVDS88) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS88 COORDINATES. • CONTOURS SHOWN ON PLAN VIEW REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 3.</p>				<p>DESIGNED BY: N HAWS 06-15 DRAWN BY: K REED 06-15 CHECKED BY: T KELLEY 06-15 APPROVED BY: C STRACHAN 06-15 PROJECT MANAGER: V DRAIN 06-15</p>		<p>PROJECT LOCATION: WELLPINIT, WASHINGTON PROJECT: MIDNITE MINE TITLE: PIT 3 WEST DOWNDRAIN CHANNEL - STATION 0+00 TO 11+00</p>		<p>MWH</p> <p>SHEET: 6-12 REVISION: 3 FILE NAME: 6-12 DATE: JUNE 2015</p>	
3	ISSUED FOR 100% DESIGN	JV	NH	6-15									
2	ISSUED FOR 90% DESIGN	KB	NH	07-14									
1	ISSUED FOR 60% DESIGN	ID	NH	12-13									
ISSUE/REV	DESCRIPTION	TECH	ENG	DATE									

p:\mine\p3\03\m\global.com\AM_PROJECTS\03\Documents\F122_Neumont\Wildnight_Mine\RD-RA 013-Sheet_Sat\2015-01-01_BDR\06_SW_n_SED_CTRL\6-12.dwg



PLAN
0 40' 80'
CONTOUR INTERVAL = 2'



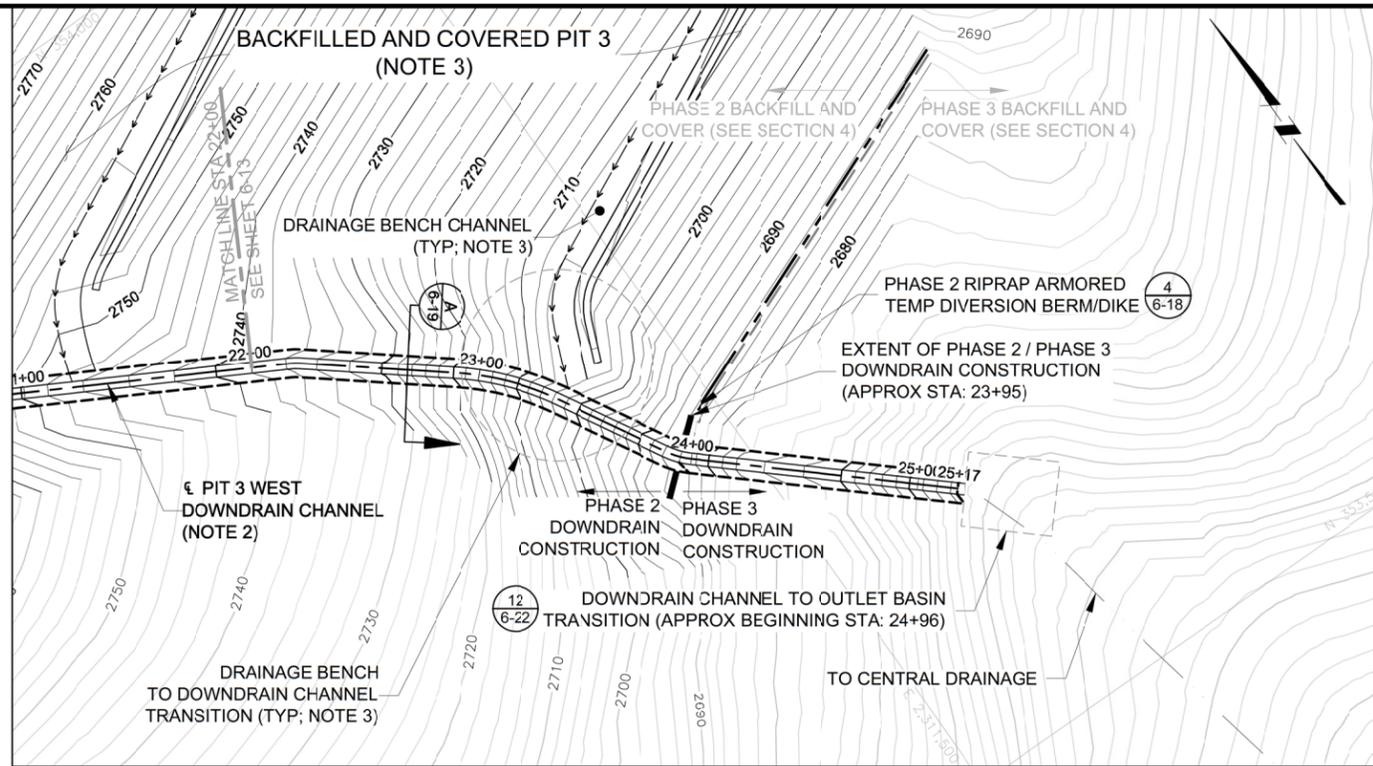
PROFILE
0 40' 80'

NOTES:

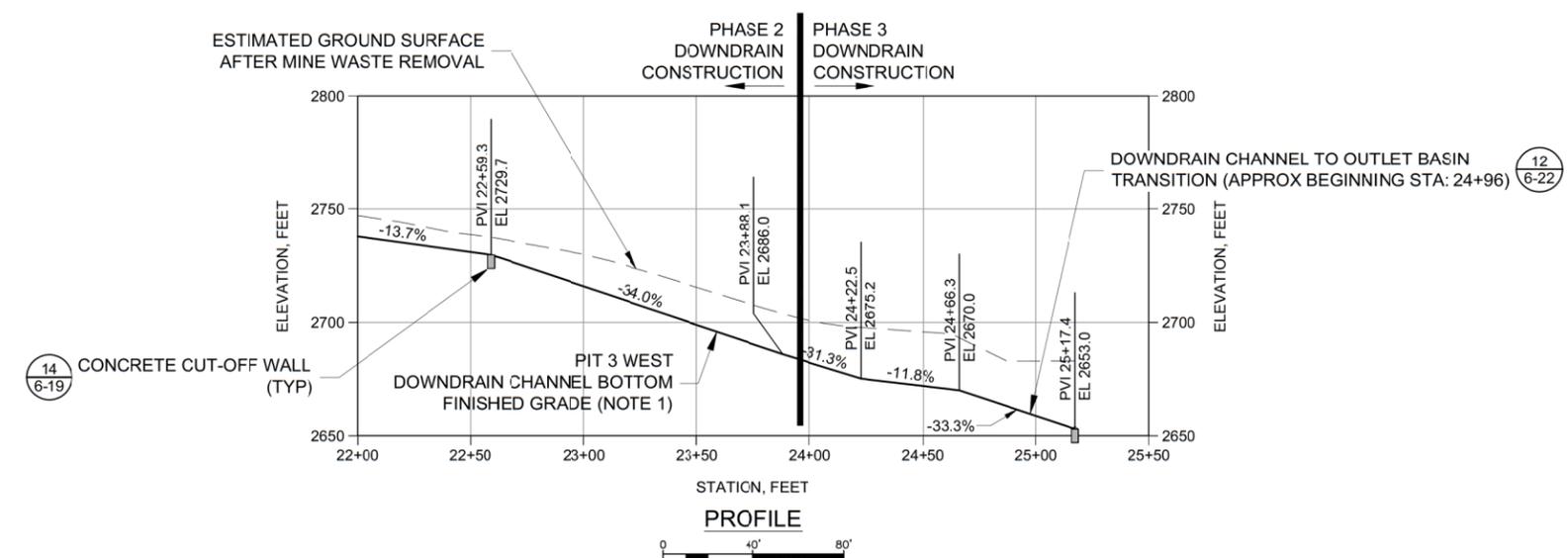
- DOWNDRAIN CHANNEL BOTTOM FINISHED GRADE CORRESPONDS TO TOP OF CHANNEL LINING AT CHANNEL INVERT. SEE TABLE 1 ON SHEET 6-19 FOR CHANNEL LINING.
- LIMITS OF CHANNEL LININGS AND TRANSITION LOCATIONS ARE APPROXIMATE AND WILL BE VERIFIED IN THE FIELD BASED ON SITE CONDITIONS. EXTENTS SHALL BE APPROVED BY THE FIELD ENGINEER.
- COVER GRADING, INCLUDING DRAINAGE BENCH CHANNELS, DOWNDRAIN TRANSITION APRONS, AND ACCESS ROADS IS PRESENTED IN SECTION 4.
- CHANNELS EXCAVATED INTO FRACTURED ROCK SHALL BE SLUSH GROUTED TO SEAL OPEN FRACTURES AS DIRECTED BY THE ENGINEER.

<p>DISCLAIMER: THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.</p>				<p>DRAWING REFERENCE(S): • EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAV088. • PREMIERE TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USMMA, INC. 1995 AND PROVIDED BY BAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USMMA MAPPING (NAD83/NAV088) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAV088 COORDINATES. • CONTOURS SHOWN ON PLAN VIEW REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 3.</p>				<p>DESIGNED BY: N HAWS 06-15 DRAWN BY: K REED 06-15 CHECKED BY: T KELLEY 06-15 APPROVED BY: C STRACHAN 06-15 PROJECT MANAGER: V DRAIN 06-15</p>		<p>PROJECT LOCATION: WELLPINIT, WASHINGTON PROJECT: MIDNITE MINE TITLE: PIT 3 WEST DOWNDRAIN CHANNEL - STATION 11+00 TO 22+00</p>		<p>MWH</p>	
3	ISSUED FOR 100% DESIGN	JV	NH	6-15	<p>PROJECT MANAGER: V DRAIN 06-15</p>		<p>SHEET: 6-13 REVISION: 3 FILE NAME: 6-12 DATE: JUNE 2015</p>						
2	ISSUED FOR 90% DESIGN	KB	NH	07-14									
1	ISSUED FOR 60% DESIGN	ID	NH	12-13									
ISSUE/REV	DESCRIPTION	TECH	ENG	DATE									

p:\omervp\03\mwh\global.com\AM_PROJECTS\03\Documents\F122_Neumont\Wildnight_Mine\RD-RA 013-Sheet_Sat_2015-01-01_BDR\06_SW_n_SED_CTRL\6-12.dwg



PLAN
 0 40' 80'
 CONTOUR INTERVAL = 2'



- NOTES:**
1. DOWNDRAIN CHANNEL BOTTOM FINISHED GRADE CORRESPONDS TO TOP OF CHANNEL LINING AT CHANNEL INVERT. SEE TABLE 1 ON SHEET 6-19 FOR CHANNEL LINING.
 2. LIMITS OF CHANNEL LININGS AND TRANSITION LOCATIONS ARE APPROXIMATE AND WILL BE VERIFIED IN THE FIELD BASED ON SITE CONDITIONS. EXTENTS SHALL BE APPROVED BY THE FIELD ENGINEER.
 3. COVER GRADING, INCLUDING DRAINAGE BENCH CHANNELS AND DOWNDRAIN TRANSITION APRONS, IS PRESENTED IN SECTION 4.
 4. CHANNELS EXCAVATED INTO FRACTURED ROCK SHALL BE SLUSH GROUTED TO SEAL OPEN FRACTURES AS DIRECTED BY THE ENGINEER.

REV	ISSUE	DESCRIPTION	TECH	ENG	DATE
3		ISSUED FOR 100% DESIGN	JV	NH	6-15
2		ISSUED FOR 90% DESIGN	KB	NH	07-14
1		ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
 THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DRAWING REFERENCE(S):
 * EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS88.
 * PRELIMINARY TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USDM, 2005, 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USDM MAPPING (NAD83/NAVDS88) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS88 COORDINATES.
 * CONTOURS SHOWN ON PLAN VIEW REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 3.

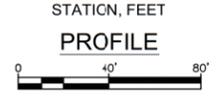
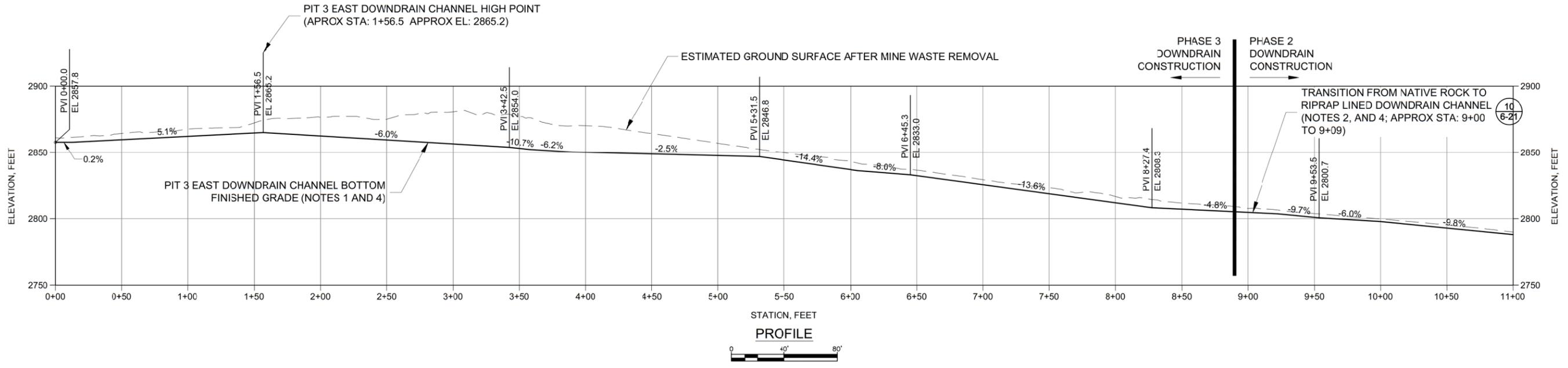
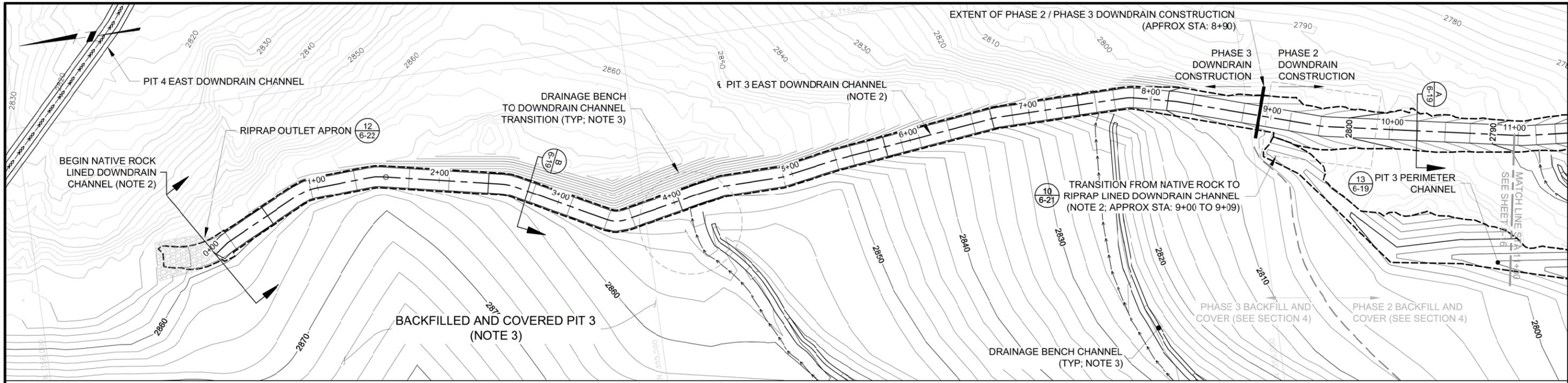
DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15



PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	PIT 3 WEST DOWNDRAIN CHANNEL - STATION 22+00 TO END	

	SHEET	6-14	REVISION	3
	FILE NAME	6-12	DATE	JUNE 2015

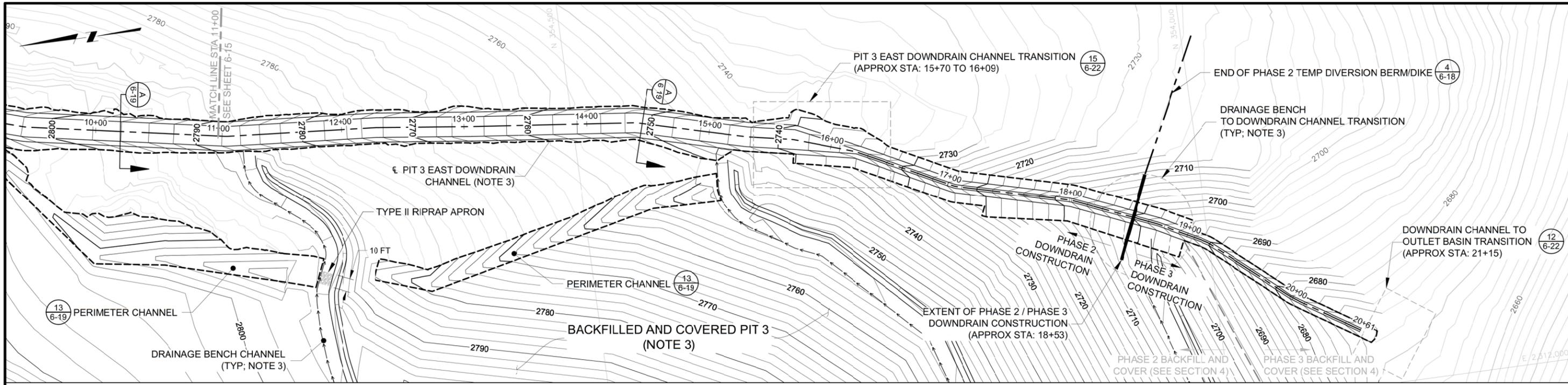
p:\mine\p3\103_rmh\global.com\AM_PROJECTS\103\Documents\F102_Neumont\Wildnight_Mine\RD-RA 013-Sheet_Sat\2015-01-01 BDR\06_SW n SED CTRL\6-12.dwg



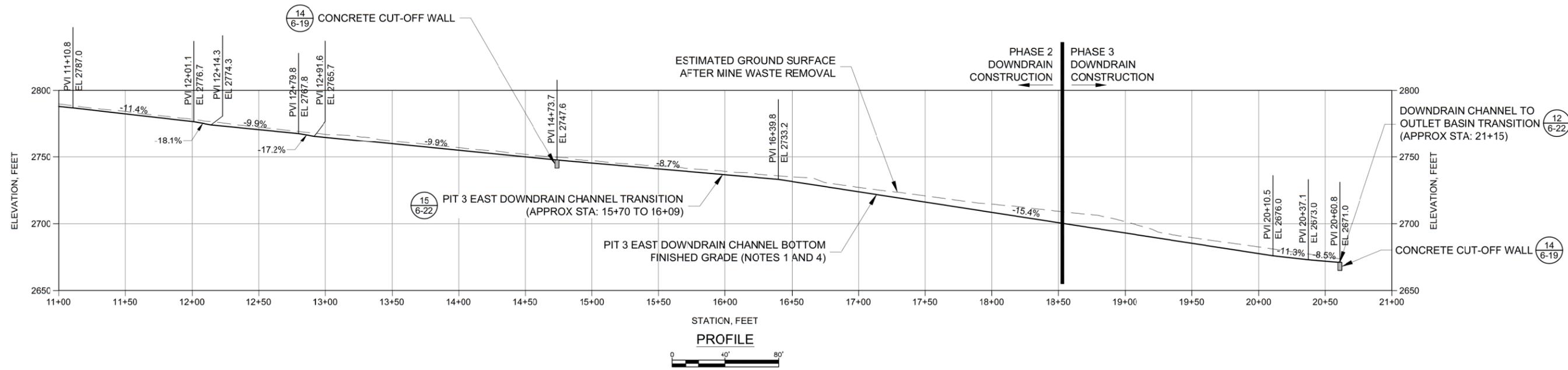
- NOTES:**
- DOWNDRAIN CHANNEL BOTTOM FINISHED GRADE CORRESPONDS TO TOP OF CHANNEL LINING AT CHANNEL INVERT. SEE TABLE 1 ON SHEET 6-19 FOR CHANNEL LINING.
 - LIMITS OF CHANNEL LININGS AND TRANSITION LOCATIONS ARE APPROXIMATE AND WILL BE VERIFIED IN THE FIELD BASED ON SITE CONDITIONS. EXTENTS SHALL BE APPROVED BY THE FIELD ENGINEER.
 - COVER GRADING, INCLUDING DRAINAGE BENCH CHANNELS AND DOWNDRAIN TRANSITION APRONS, IS PRESENTED IN SECTION 4.
 - CHANNELS EXCAVATED INTO FRACTURED ROCK SHALL BE SLUSH GROUTED TO SEAL OPEN FRACTURES AS DIRECTED BY THE ENGINEER.

<p>DISCLAIMER: THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.</p>				<p>DRAWING REFERENCE(S):</p> <ul style="list-style-type: none"> EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS8. PREMINE TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USMMA, INC. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USMMA MAPPING (NAD83/NAVDS8) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS8 COORDINATES. CONTOURS SHOWN ON PLAN VIEW REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 3. 				<p>DESIGNED BY: N HAWS 06-15 DRAWN BY: K REED 06-15 CHECKED BY: T KELLEY 06-15 APPROVED BY: C STRACHAN 06-15 PROJECT MANAGER: V DRAIN 06-15</p>		<p>PROJECT LOCATION: WELLPINIT, WASHINGTON PROJECT: MIDNITE MINE</p>		
<p>3 ISSUED FOR 100% DESIGN JV NH 6-15 2 ISSUED FOR 90% DESIGN KB NH 07-14 1 ISSUED FOR 60% DESIGN ID NH 12-13</p>		<p>PROJECT TITLE: PIT 3 EAST DOWNDRAIN CHANNEL - STATION 0+00 TO 11+00</p>		<p>SHEET: 6-15 REVISION: 3 FILE NAME: 6-12 DATE: JUNE 2015</p>								

p:\mervin\03_mh\global.com\AM_PROJECTS\03\Documents\F122_Neumont\Wildnight_Mine\RD-RA 013-Sheet_Sat_2015-01-01_BDR\06_SW n SED CTRL\6-12.dwg



PLAN
 0 40' 80'
 CONTOUR INTERVAL = 2'



PROFILE
 0 40' 80'

- NOTES:**
1. DOWNDRAIN CHANNEL BOTTOM FINISHED GRADE CORRESPONDS TO TOP OF CHANNEL LINING AT CHANNEL INVERT. SEE TABLE 1 ON SHEET 6-19 FOR CHANNEL LINING.
 2. LIMITS OF CHANNEL LININGS AND TRANSITION LOCATIONS ARE APPROXIMATE AND WILL BE VERIFIED IN THE FIELD BASED ON SITE CONDITIONS. EXTENTS SHALL BE APPROVED BY THE FIELD ENGINEER.
 3. COVER GRADING, INCLUDING DRAINAGE BENCH CHANNELS AND DOWNDRAIN TRANSITION APRONS, IS PRESENTED IN SECTION 4.
 4. CHANNELS EXCAVATED INTO FRACTURED ROCK SHALL BE SLUSH GROUTED TO SEAL OPEN FRACTURES AS DIRECTED BY THE ENGINEER.

ISSUE NO.	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN	JV	NH	6-15
2	ISSUED FOR 90% DESIGN	DM	NH	07-14
1	ISSUED FOR 60% DESIGN	RW	SM	10-13
0	ISSUED FOR 30% DESIGN	DM	SM	11-12

DISCLAIMER:
 THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DRAWING REFERENCE(S):
 • EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAV088.
 • PREMIERE TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USMMA, INC. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USMMA MAPPING (NAD83/NAV088) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAV088 COORDINATES.
 • CONTOURS SHOWN ON PLAN VIEW REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 3.

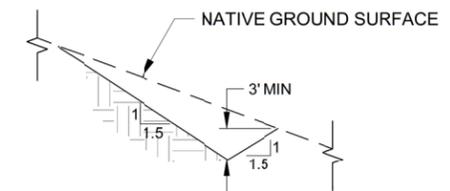
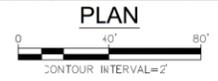
DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15



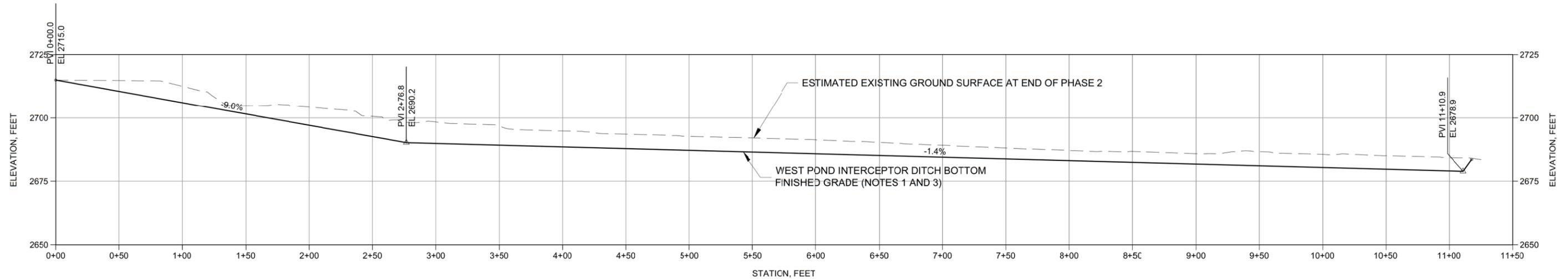
PROJECT LOCATION	WELLPINIT, WASHINGTON
PROJECT	MIDNITE MINE
TITLE	PIT 3 EAST DOWNDRAIN CHANNEL - STATION 11+00 TO END

	SHEET	6-16	REVISION	3
	FILE NAME	6-12	DATE	JUNE 2015

p:\omervp\m03_mh\gdbal.com\AM_PROJECTS\303\Documents\F122_Neumont\Wildnight_Mine\RD-RA 013-Sheet_Sat_2015-01-01_BDR_06_SW_n_SED_CTRL_6-12.dwg



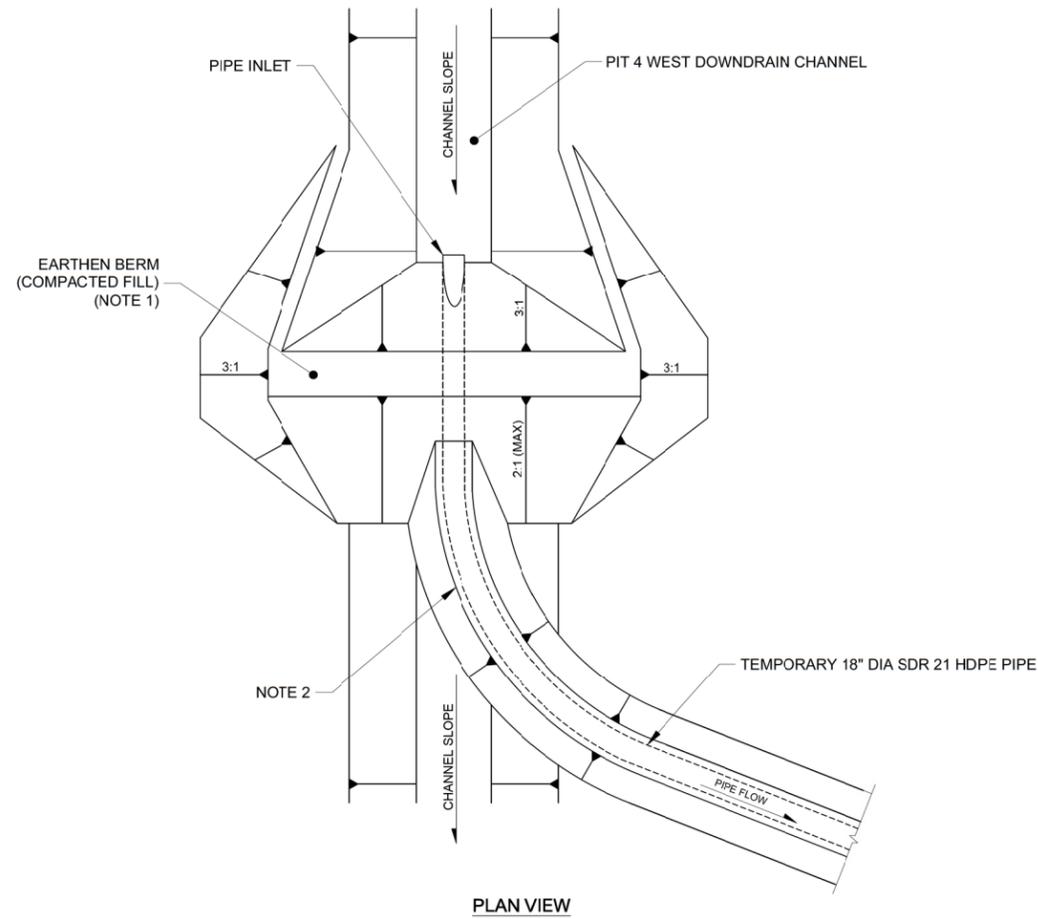
16 WEST POND DIVERSION CHANNEL TYPICAL SECTION
6-17 NOT TO SCALE



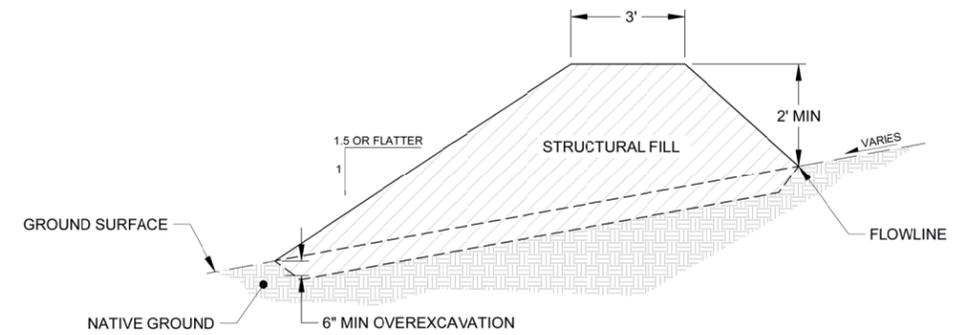
- NOTES:**
1. DOWNDRAIN CHANNEL BOTTOM FINISHED GRADE CORRESPONDS TO TOP OF CHANNEL LINING AT CHANNEL INVERT. SEE TABLE 1 ON SHEET 6-19 FOR CHANNEL LINING.
 2. LIMITS OF CHANNEL LININGS AND TRANSITION LOCATIONS ARE APPROXIMATE AND WILL BE VERIFIED IN THE FIELD BASED ON SITE CONDITIONS. EXTENTS SHALL BE APPROVED BY THE FIELD ENGINEER.
 3. CHANNELS EXCAVATED INTO FRACTURED ROCK SHALL BE SLUSH GROUTED TO SEAL OPEN FRACTURES AS DIRECTED BY ENGINEER.

p:\mervp\pin03\mh\gld\com\AM_PROJECTS\303\Documents\F102_Neumont\Wildlight_Mine\RD-RA\01-Sheet_Sat\2015-01-01_BDR\06_SW_n_SED_CTRL\6-17.dwg

<p>DISCLAIMER: THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.</p>				<p>DRAWING REFERENCE(S):</p> <ul style="list-style-type: none"> EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS8. PREMINE TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USMMA, INC. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USMMA MAPPING (NAD27/NAVDS8) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS8 COORDINATES. CONTOURS SHOWN REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 2. 				<p>DESIGNED BY: N HAWS 06-15</p> <p>DRAWN BY: K REED 06-15</p> <p>CHECKED BY: T KELLEY 06-15</p> <p>APPROVED BY: C STRACHAN 06-15</p> <p>PROJECT MANAGER: V DRAIN 06-15</p>		<p>PROJECT LOCATION: WELLPINIT, WASHINGTON</p> <p>PROJECT: MIDNITE MINE</p> <p>TITLE: TEMPORARY WEST POND INTERCEPTOR DITCH -STATION 0+00 TO END</p>		<p>MWH</p> <p>SHEET: 6-17 REVISION: 3</p> <p>FILE NAME: 6-17 DATE: JUNE 2015</p>	
3	ISSUED FOR 100% DESIGN	JV	NH	06-15									
2	ISSUED FOR 90% DESIGN	KB	NH	07-14									
ISSUE/REV	DESCRIPTION	TECH	ENG	DATE									



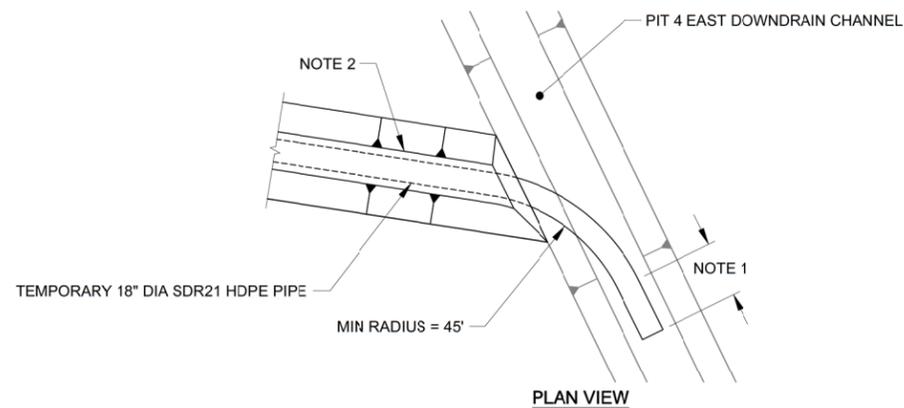
1 END OF PHASE 1 TEMPORARY CATCH BASIN AND PIPE INLET
6-18 NOT TO SCALE



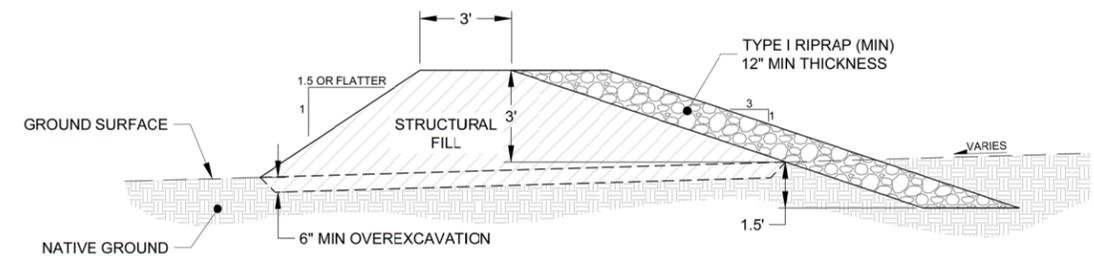
3 TEMPORARY DIVERSION BERM/DIKE TYPICAL SECTION
6-18 NOT TO SCALE

NOTES:

1. PLACE EARTHEN BERMS TO STABILIZE PIPE.
2. EARTHEN BERMS AND PIPE TO BE REMOVED AFTER COMPLETION OF AREA 5 COVER PLACEMENT (PHASE 2).
3. BERM FILL OVER TEMPORARY PIPE TO PROTECT AGAINST FREEZING CONDITIONS.



2 END OF PHASE 1 TEMPORARY PIPE OUTLET AND STABILIZATION BERM
6-18 NOT TO SCALE



4 RIPRAP ARMORED TEMPORARY DIVERSION BERM/DIKE SECTION
6-18 NOT TO SCALE

NOTES:

1. PIPE SHALL BE LAID STRAIGHT IN BOTTOM OF DOWNDRAIN CHANNEL FOR A MINIMUM DISTANCE OF 20'.
2. BERM FILL OVER TEMPORARY PIPE TO EDGE OF PIT 4 EAST DOWNDRAIN CHANNEL TO PROTECT AGAINST FREEZING CONDITIONS.

p:\omervpin03_rmh\global.com\AM_PROJECTS\03\Documents\F122_Neumont\Midnight_Mine\RD-RA 01-Sheet_Sat\2015-01-01_BDR\06_SW n SED CTRL\6-18.dwg

ISSUE/REV	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN	JV	NH	06-15
2	ISSUED FOR 90% DESIGN	KB	NH	07-14
1	ISSUED FOR 60% DESIGN	ID	NH	12-13

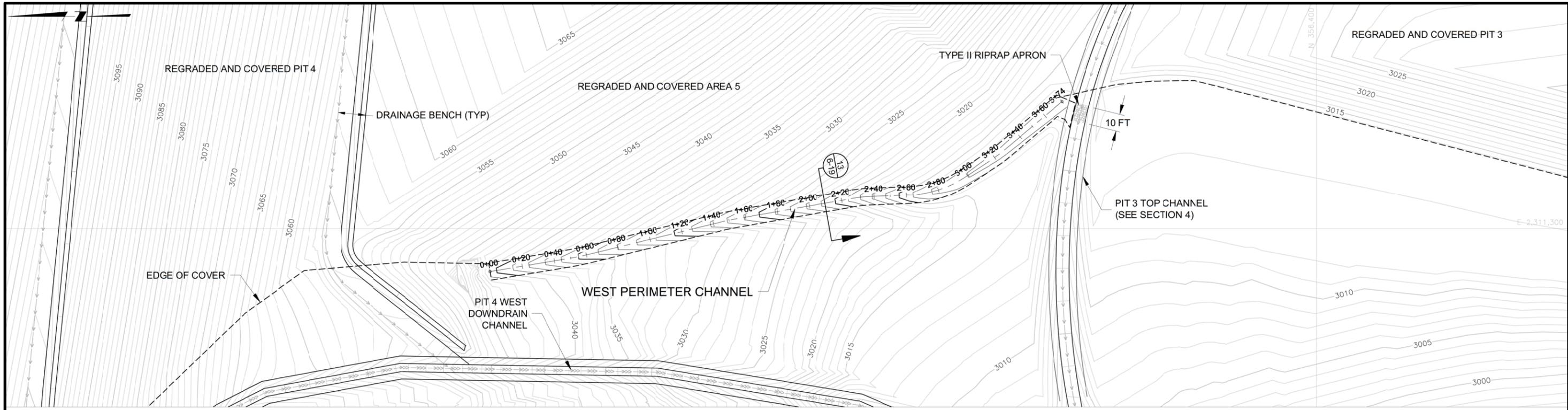
DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK COVERING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15

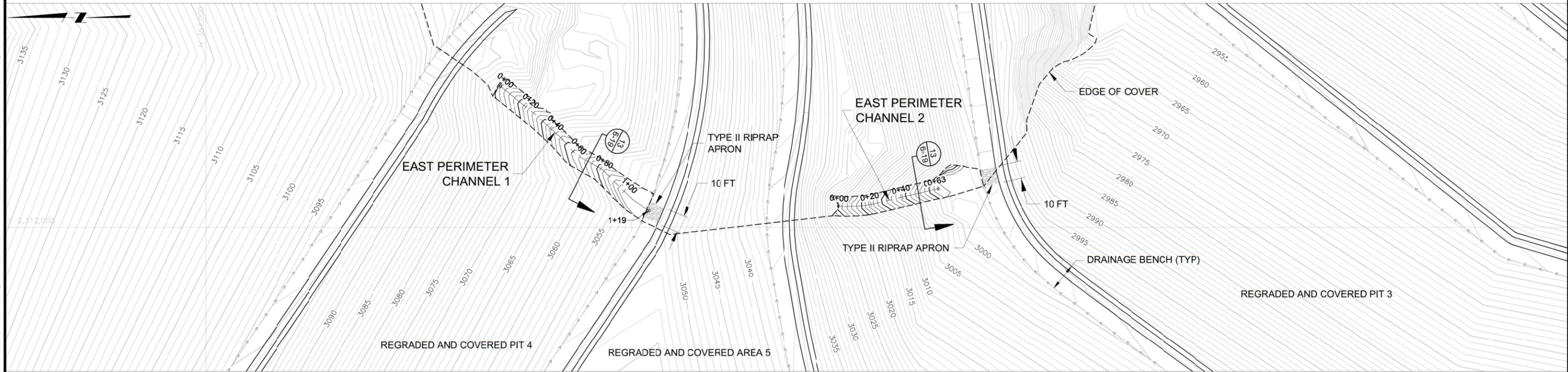


PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	TYPICAL TEMPORARY STORMWATER CONTROL	

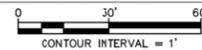
	SHEET	6-18	REVISION	3
	FILE NAME	6-18	DATE	JUNE 2015



WESTSIDE PERIMETER CHANNEL



EASTSIDE PERIMETER CHANNELS



p:\mervpin03\mh\global.com\AM_PROJECTS\03\Documents\F122_Neumont\Midnight_Mine\RD-RA 011-Sheet_Sat\2015-01-01 BDR\06_SW n SED CTRL\6-20.dwg

3	ISSUED FOR 100% DESIGN	JV	NH	06-15
ISSUE	DESCRIPTION	TECH	ENG	DATE
REV				

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

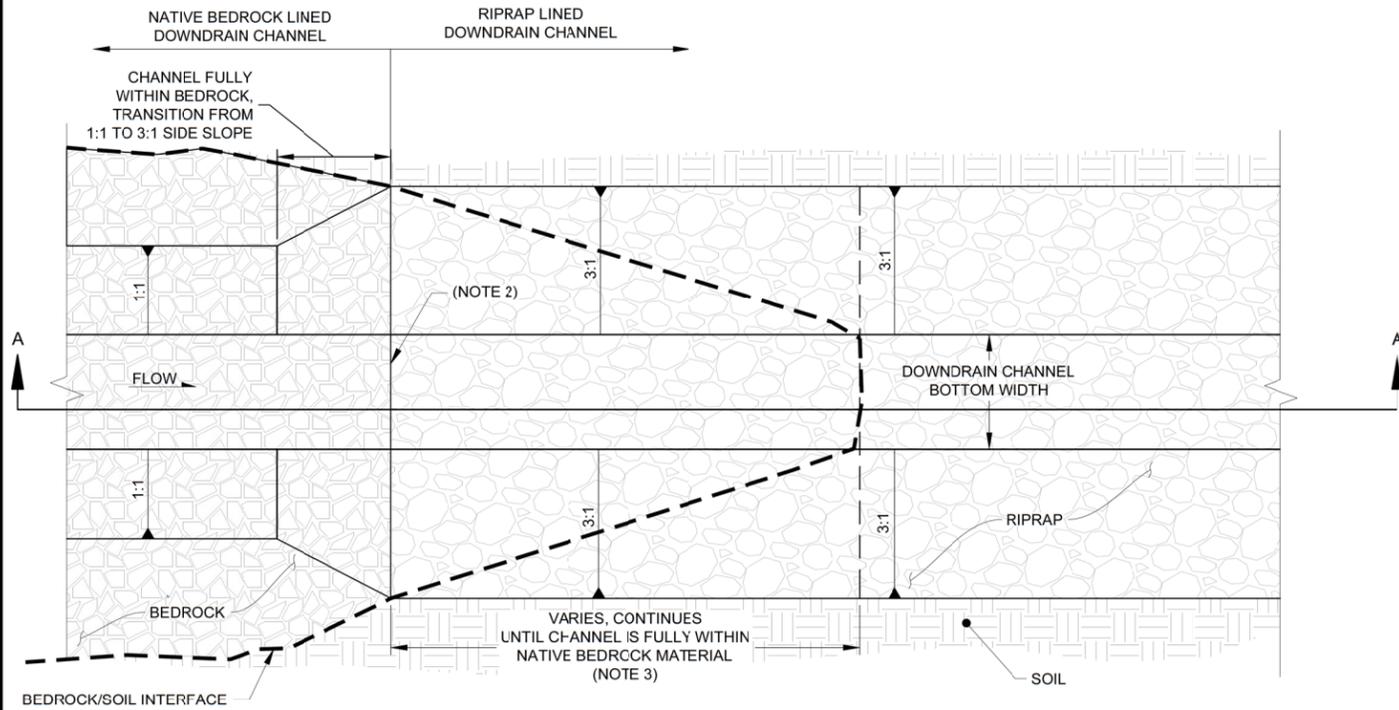
DRAWING REFERENCE(S):
 • EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAV088.
 • PRELIM TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USDM, INC. 1995 AND PROVIDED BY DAWN MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USDM MAPPING (NAD83/NAV088) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAV088 COORDINATES.
 • CONTOURS SHOWN REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 3.

DESIGNED BY	S MCMANUS	06-15
DRAWN BY	J VERNER	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15

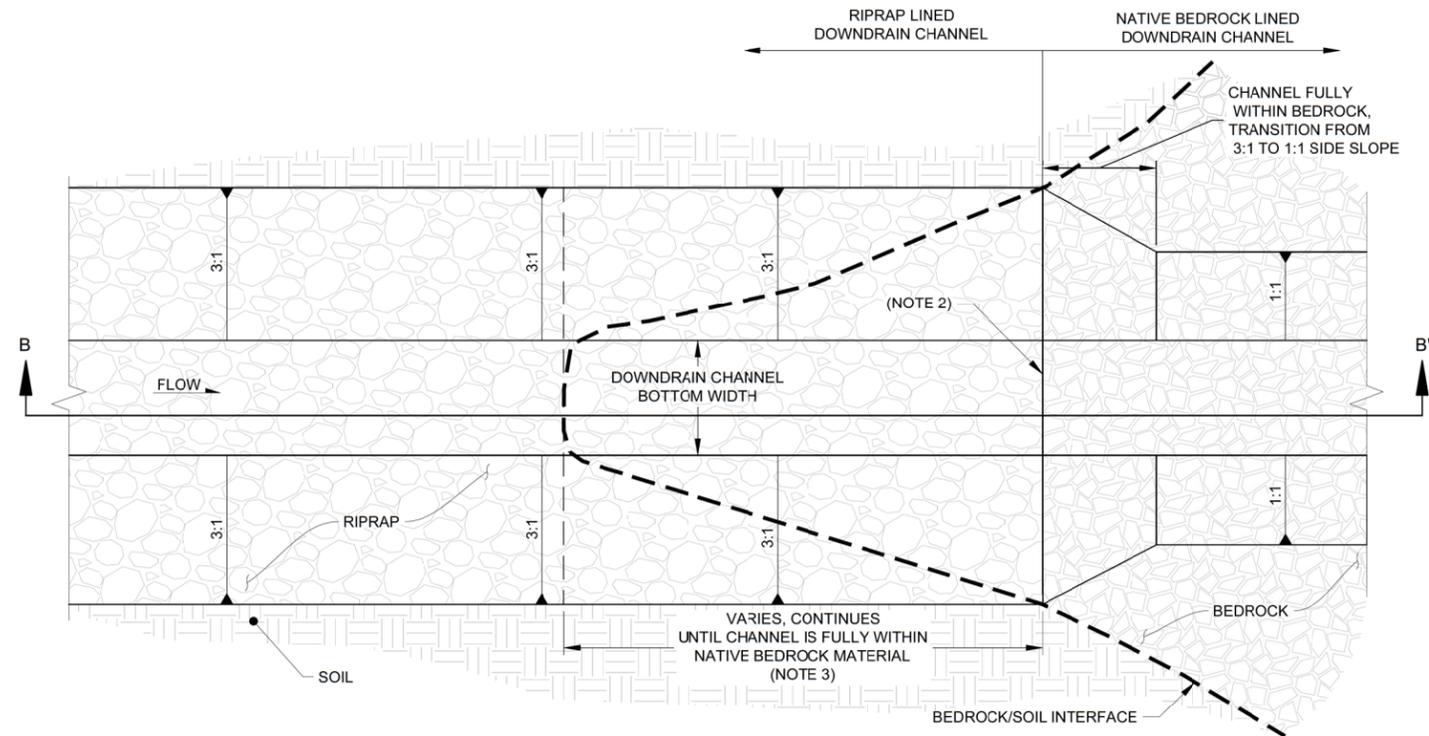


PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	PERIMETER CHANNEL PLAN	

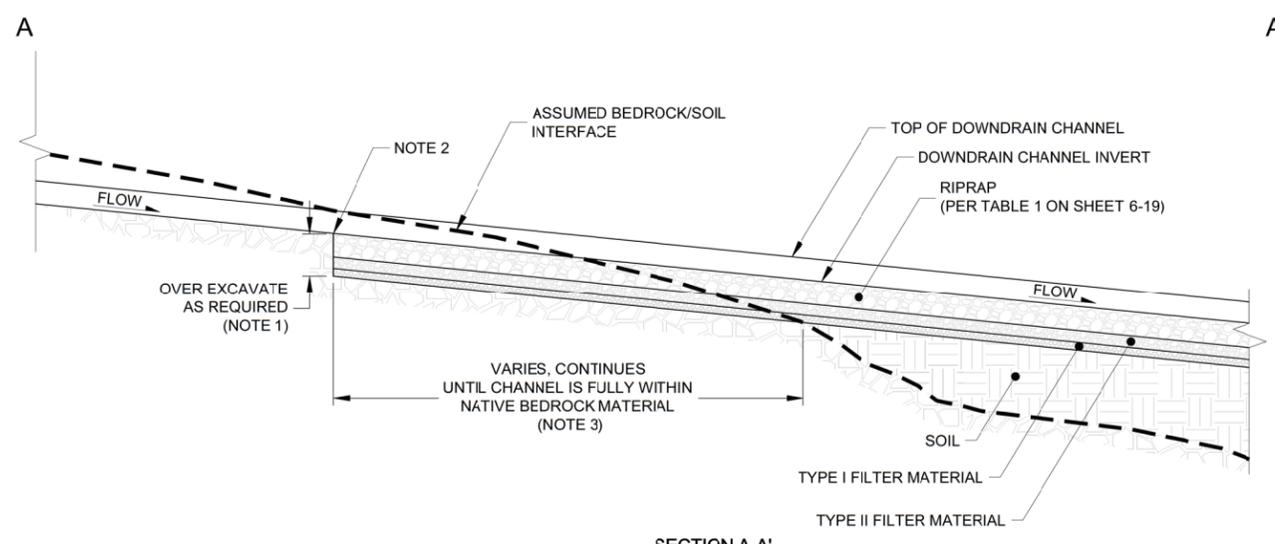
	SHEET	6-20	REVISION	3
	FILE NAME	6-20	DATE	JUNE 2015



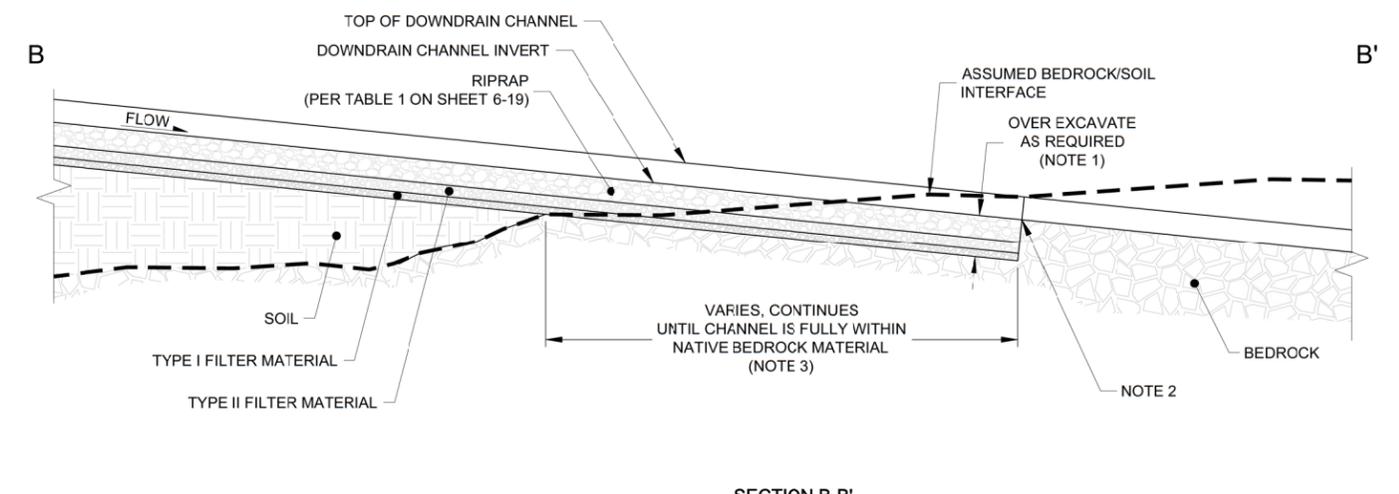
PLAN VIEW



PLAN VIEW



SECTION A-A'



SECTION B-B'

10 TYPICAL TRANSITION FROM NATIVE ROCK TO RIPRAP LINED DOWNDRAIN CHANNEL
6-21 NOT TO SCALE

11 TYPICAL TRANSITION FROM RIPRAP TO NATIVE ROCK LINED DOWNDRAIN CHANNEL
6-21 NOT TO SCALE

NOTES:

- EXCAVATE AS REQUIRED SO THAT FINAL GRADE OF THE RIPRAP-LINED DOWNDRAIN CHANNEL MATCHES FINAL GRADE OF NATIVE BEDROCK DOWNDRAIN CHANNEL AT TRANSITION INTERFACE. EXCAVATION DEPTH INCLUDES DOWNDRAIN CHANNEL RIPRAP PLUS FILTER MATERIAL.
- INVERT OF RIPRAP DOWNDRAIN AND INVERT OF NATIVE BEDROCK DOWNDRAIN CHANNEL SHALL MATCH AT TRANSITION.
- EXCAVATE AS REQUIRED SO THAT THE FULL DEPTH OF DOWNDRAIN CHANNEL IS WITHIN BEDROCK MATERIAL.

NOTE:

- CONCRETE CUT-OFF WALLS SHALL NOT BE CONSTRUCTED IN COMPETENT BEDROCK.

p:\mervynpin03\mh\global.com\AM\PROJECTS\303\Newmont\Wildnight_Mine\RD-RA\013-Sheet_Sat\2015-01-01_BDR\06_SW_n_SED_CTRL\6-19.dwg

ISSUE	REV	DESCRIPTION	TECH	ENG	DATE
3		ISSUED FOR 100% DESIGN	JV	NH	06-15
2		ISSUED FOR 90% DESIGN	KB	NH	07-14

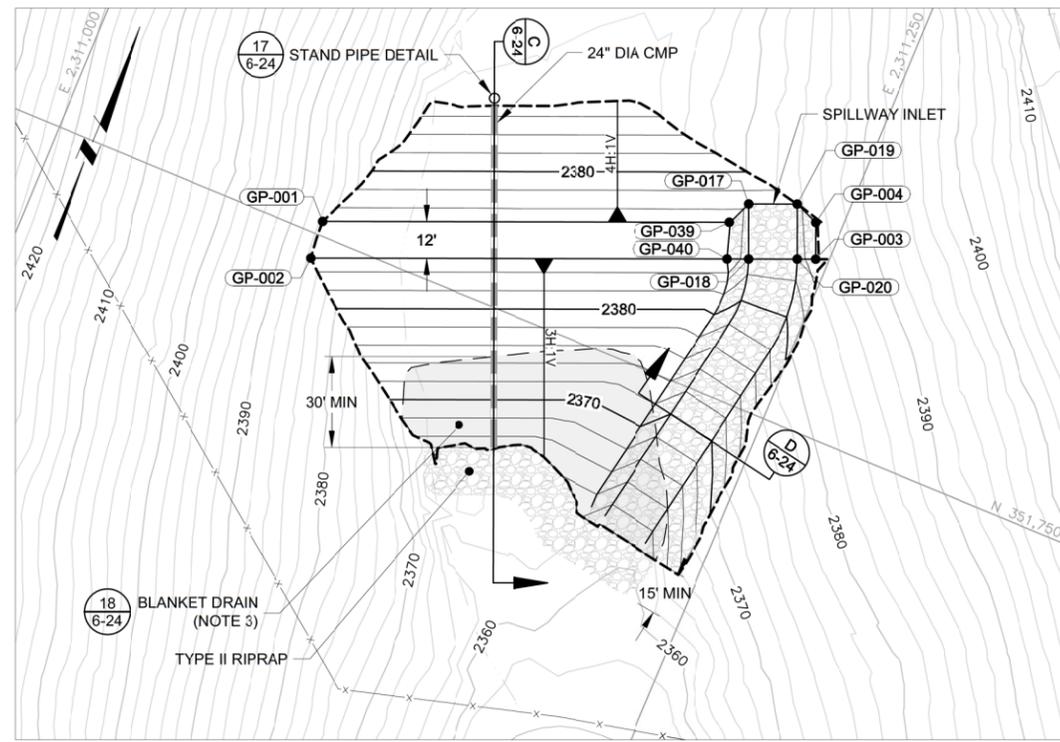
DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15

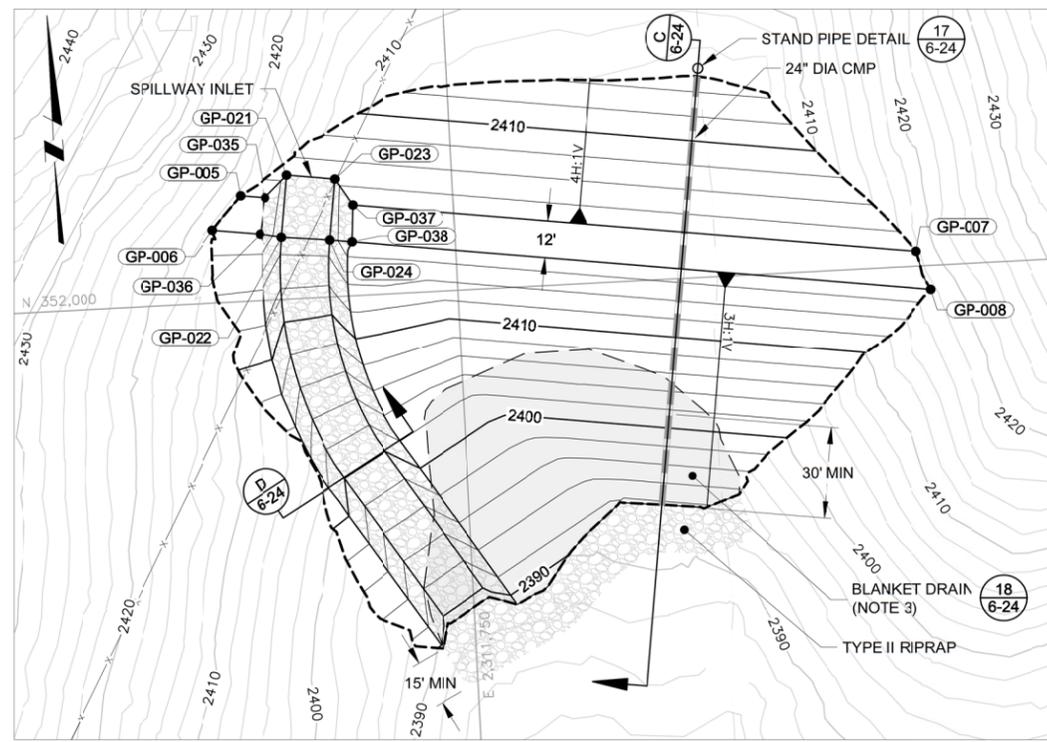


PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	TRANSITION DETAILS (SHEET 1 OF 2)	
SHEET	6-21	REVISION 3
FILE NAME	6-19	DATE JUNE 2015

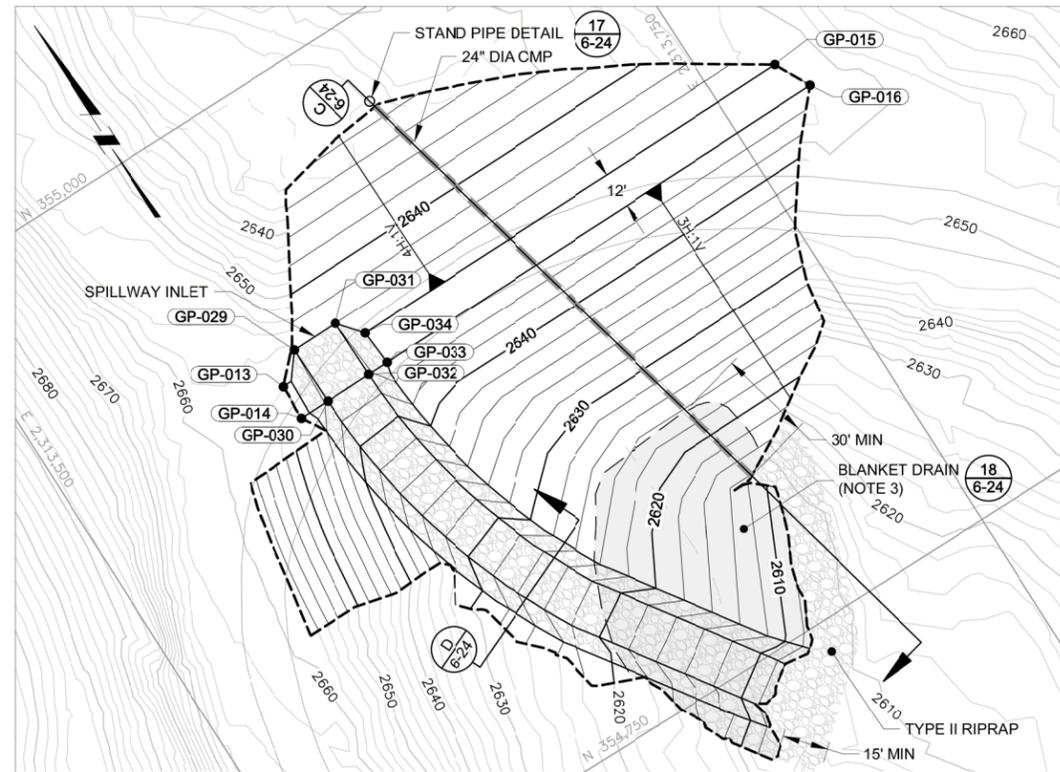




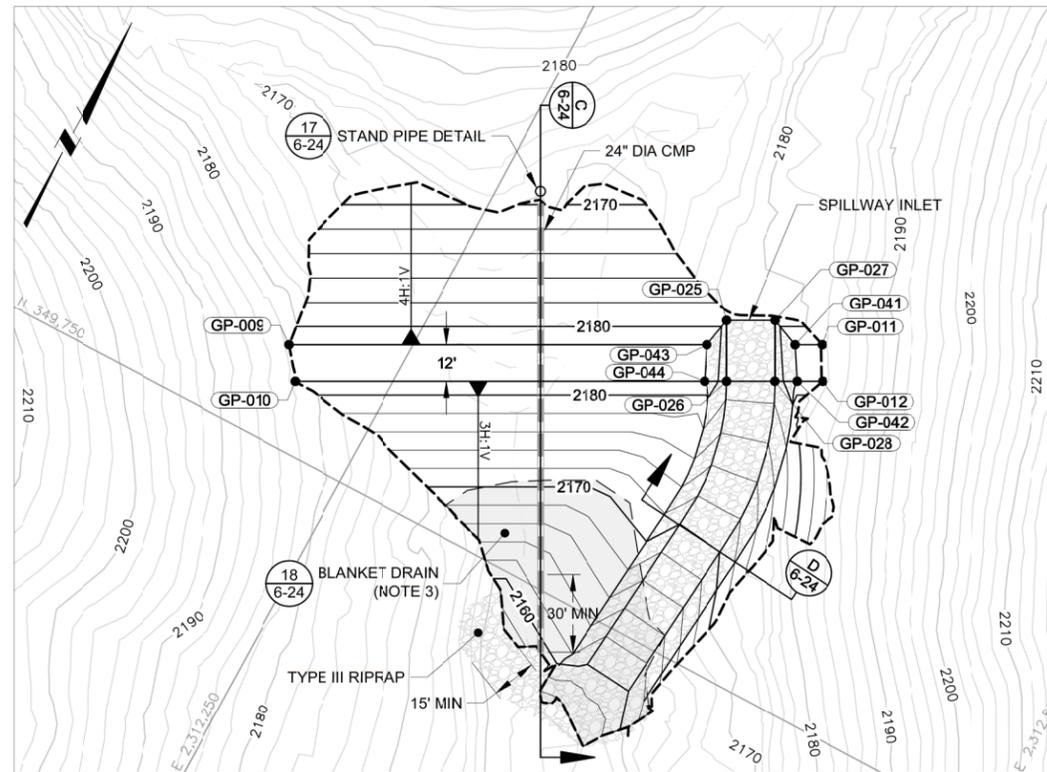
5 WESTERN FLOW ATTENUATION EMBANKMENT
6-23



6 CENTRAL FLOW ATTENUATION EMBANKMENT
6-23



7 EASTERN FLOW ATTENUATION EMBANKMENT
6-23



3 SOUTHERN FLOW ATTENUATION EMBANKMENT
6-23

GRADING POINTS			
POINT NO.	NORTHING (FT)	EASTING (FT)	ELEVATION (FT)
GP-001	351754.6	2311091.7	2385.5
GP-002	351742.0	2311092.8	2385.5
GP-003	351805.0	2311245.8	2385.1
GP-004	351816.1	2311241.3	2385.4
GP-005	352034.6	2311680.4	2417.5
GP-006	352023.8	2311670.7	2417.5
GP-007	352004.8	2311901.0	2417.5
GP-008	351992.2	2311905.1	2417.5
GP-009	349781.7	2312214.1	2181.5
GP-010	349772.1	2312221.6	2181.5
GP-011	349864.4	2312368.3	2181.5
GP-012	349853.9	2312374.1	2181.5
GP-013	354909.6	2313579.9	2646.0
GP-014	354897.7	2313579.3	2646.0
GP-015	354912.2	2313772.4	2646.0
GP-016	354900.2	2313778.6	2646.0
GP-017	351813.3	2311218.6	2383.5
GP-018	351796.7	2311225.5	2383.1
GP-019	351819.4	2311233.4	2383.5
GP-020	351802.8	2311240.3	2383.1
GP-021	352040.5	2311695.9	2415.5
GP-022	352020.3	2311693.2	2415.0
GP-023	352038.4	2311711.8	2415.5
GP-024	352018.6	2311709.1	2415.1
GP-025	349856.6	2312336.9	2179.5
GP-026	349839.0	2312346.4	2179.1
GP-027	349864.2	2312351.0	2179.5
GP-028	349846.5	2312360.4	2179.1
GP-029	354917.8	2313589.4	2644.0
GP-030	354897.8	2313589.7	2643.6
GP-031	354918.0	2313605.4	2644.0
GP-032	354898.0	2313605.7	2643.6
GP-033	354898.1	2313612.9	2646.0
GP-034	354910.1	2313612.0	2646.0
GP-035	352033.5	2311688.5	2417.5
GP-036	352021.7	2311686.1	2417.5
GP-037	352029.6	2311717.2	2417.5
GP-038	352017.6	2311716.3	2417.5
GP-039	351805.4	2311215.1	2385.4
GP-040	351794.0	2311219.0	2385.5
GP-041	349860.2	2312360.5	2181.5
GP-042	349850.0	2312366.8	2181.5
GP-043	349846.5	2312335.0	2181.5
GP-044	349835.6	2312340.0	2181.5

NOTES:

- RIPRAP SPECIFICATIONS FOR THE RIPRAP APRON SHALL MATCH SPECIFICATIONS FOR RIPRAP ON SPILLWAY.
- BLANKET DRAIN NOT REQUIRED WHERE IT INTERSECTS WITH SPILLWAY RIPRAP AND FILTER.
- EXTENTS OF BLANKET DRAIN SHOWN ARE APPROXIMATE. ACTUAL EXTENTS MUST SATISFY DETAIL 18, SHEET 24.
- SOIL CLEANUP AND VERIFICATION SHALL BE COMPLETED IN THE EMBANKMENT FOOTPRINT AND IMPOUNDMENT AREAS PRIOR TO COMMENCING WITH CONSTRUCTION ATTENUATION BERMS.

p:\m\emvpin03.mh\global.com\AM_PROJECTS\303\Documents\F122_L\Newmont\Wildnight_Mine\RD-RA 013-Sheet_Sat\2015-01-01_BDR\06_SW_n_SED_CTRL\6-23.dwg

ISSUE NO.	REV	DESCRIPTION	TECH	ENG	DATE
3		ISSUED FOR 100% DESIGN	JV	NH	06-15
2		ISSUED FOR 90% DESIGN	KB	NH	07-14
1		ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

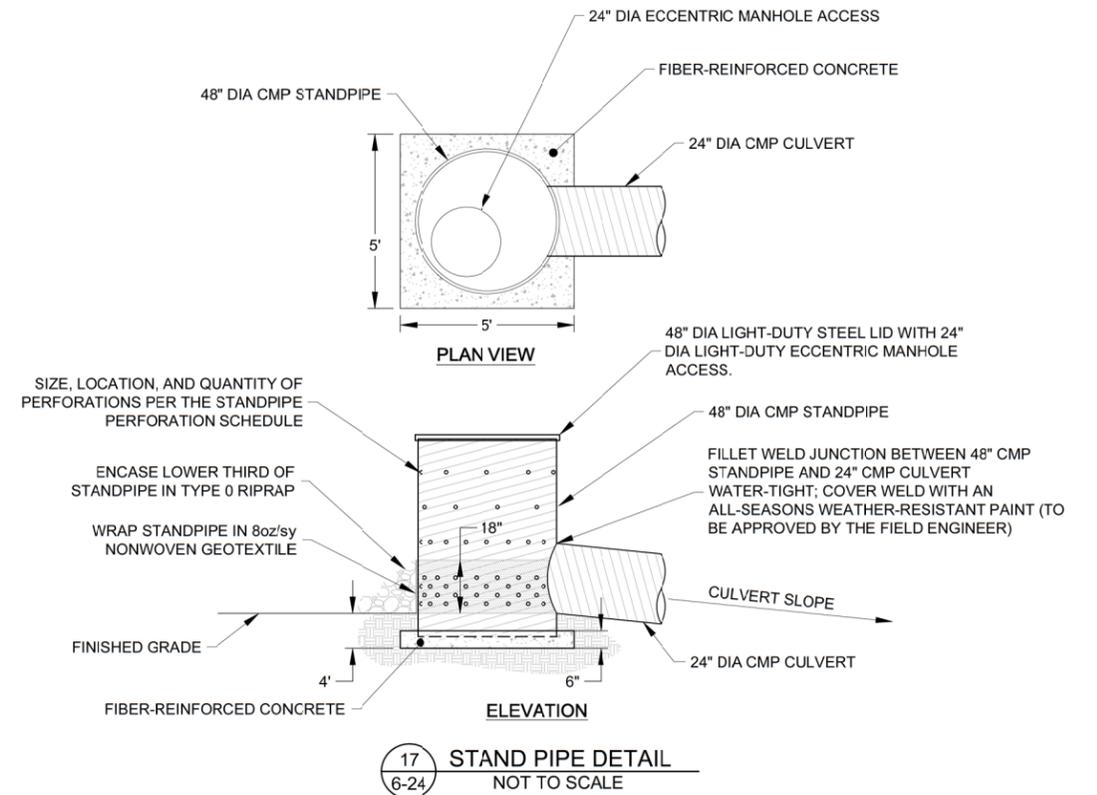
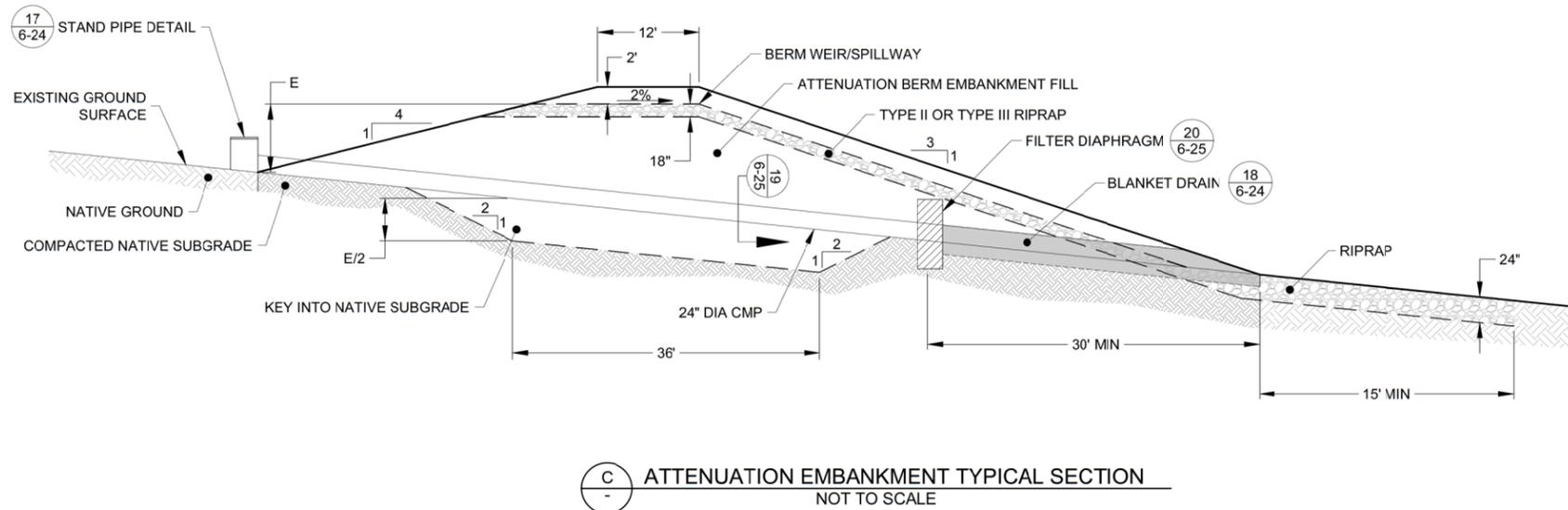
DRAWING REFERENCE(S):
 * EXISTING TOPOGRAPHY BASED UPON LIDAR MAPPING BY SPATIAL INTEL 2010, WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS83.
 * PRELIM TOPOGRAPHY AND PIT EXCAVATION TOPOGRAPHY BASED UPON INFORMATION PREPARED BY USERRA, NOV. 1995 AND PROVIDED BY BARNI MINING COMPANY, LLC. ORIGINAL COORDINATE SYSTEM USED IN USRR MAPPING (NAD83/NAVDS83) HAS BEEN CONVERTED TO WASHINGTON STATE PLANE-NORTH, NAD83/NAVDS83 COORDINATES.
 * CONTOURS SHOWN REPRESENT APPROXIMATE GROUND SURFACE AT THE END OF PHASE 2.

DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15



PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	FLOW ATTENUATION EMBANKMENT PLAN VIEWS	
SHEET	6-23	REVISION 3
FILE NAME	6-23	DATE JUNE 2015





- NOTES:**
- RIPRAP USED FOR THE RIPRAP APRON SHALL MATCH RIPRAP ON SPILLWAY.
 - BLANKET DRAIN NOT REQUIRED WHERE IT INTERSECTS WITH SPILLWAY RIPRAP AND FILTER.

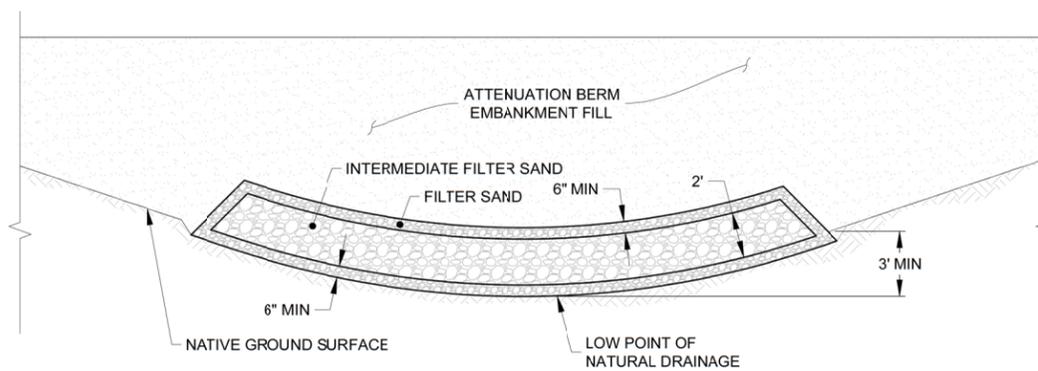
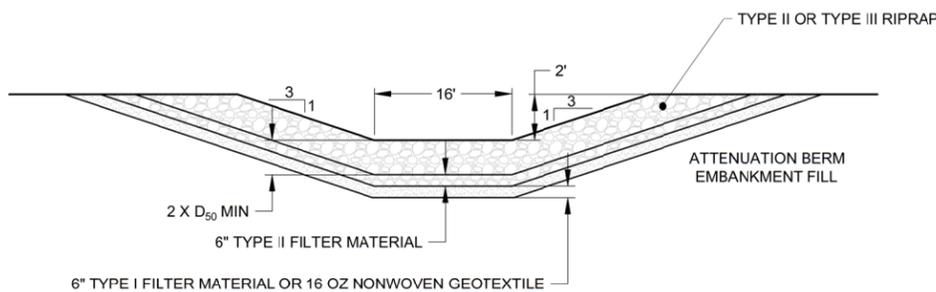
TABLE 2 - FLOW ATTENUATION BERM DIMENSIONS

LOCATION	E, SPILLWAY HEIGHT (FT)	PIPE LENGTH (FT) (APPROX)	PIPE SLOPE (%) (APPROX)	SPILLWAY RIPRAP
WESTERN EMBANKMENT	9.5	170	7.5	TYPE II
CENTRAL EMBANKMENT	11.5	160	10.5	TYPE II
EASTERN EMBANKMENT	12.0	180	12.5	TYPE II
SOUTHERN EMBANKMENT	9.5	120	10.0	TYPE III

STANDPIPE PERFORATION SCHEDULE

ROW	WESTERN BERM			CENTRAL BERM		
	ELEV ABOVE FG	PERFORATION DIA. (IN)	# HOLES	ELEV ABOVE FG	PERFORATION DIA. (IN)	# HOLES
7	4	1.00	10	4	1.00	2
6	3	1.00	10	3	1.00	6
5	2	1.00	10	2	1.00	6
4	1	1.00	20	1	1.00	6
3	0.75	0.13	20	0.75	0.13	30
2	0.50	0.13	20	0.50	0.13	30
1	0.25	0.13	20	0.25	0.13	30

ROW	EASTERN BERM			SOUTHERN BERM		
	ELEV ABOVE FG	PERFORATION DIA. (IN)	# HOLES	ELEV ABOVE FG	PERFORATION DIA. (IN)	# HOLES
7	4	1.00	2	4	2.00	1
6	3	1.00	5	3	2.00	5
5	2	1.00	5	2	2.00	10
4	1	1.00	5	1	2.00	10
3	0.75	0.13	20	0.75	0.25	20
2	0.50	0.13	20	0.50	0.25	20
1	0.25	0.13	20	0.25	0.25	20



p:\amervpin03.mh\global.com\AM_PROJECTS\303\Documents\F102_Neumont\Wildnight_Mine\RD-RA 011-Sheet_Sat\2015-01-BDR\06_SW n SED CTRL\6-24.dwg

ISSUE/REV	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN	JV	NH	06-15
2	ISSUED FOR 90% DESIGN	KB	NH	07-14
1	ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK GOVERNING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

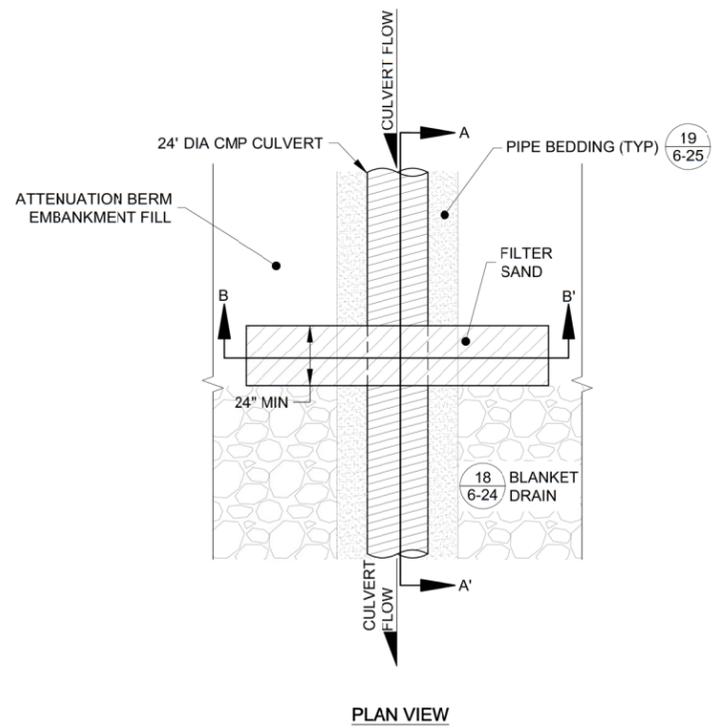
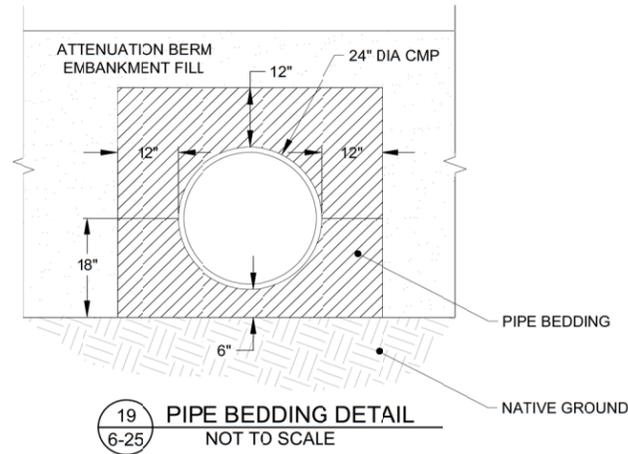
DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15



PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	FLOW ATTENUATION EMBANKMENT DETAILS (SHEET 1 OF 2)	
SHEET	6-24	REVISION 3
FILE NAME	6-24	DATE JUNE 2015

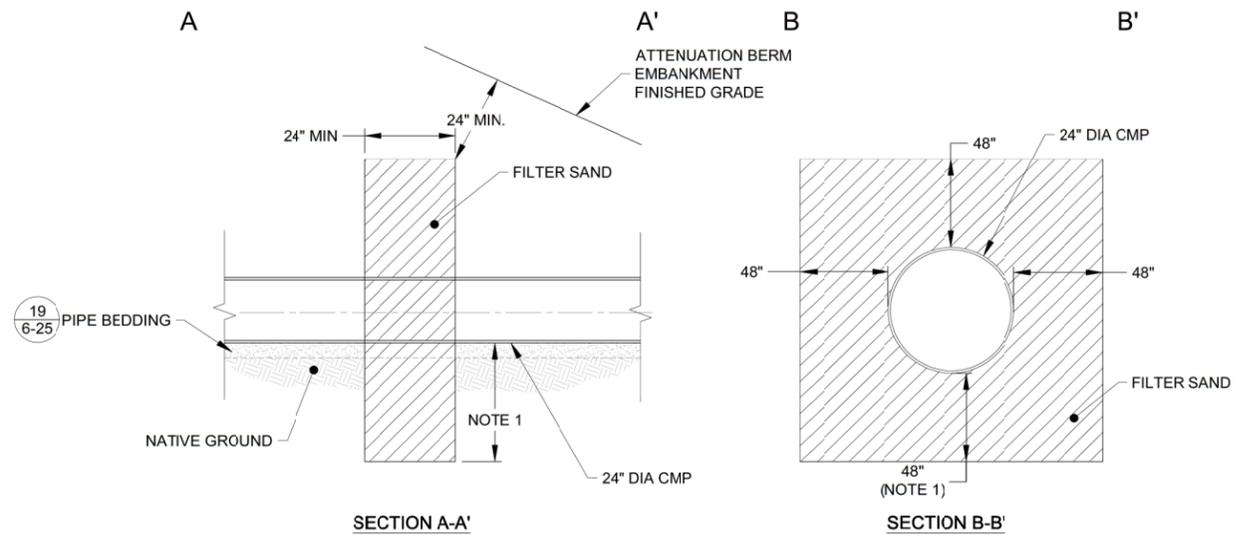


p:\mine\pin03_rmh\global.com\AM_PROJECTS\03\Documents\F122_Neumont\Wildnight_Mine\RD-RA 01-Sheet_Sat_2015-01-01_BDR\06_SW_n_SED_CTRL\6-24.dwg



NOTE:

1. EXTEND LOWER PORTION OF FILTER DIAPHRAGM A MINIMUM OF 48" BELOW CULVERT BOTTOM OR 12" INTO NATIVE ROCK.



20
6-25

FILTER DIAPHRAGM DETAIL
NOT TO SCALE

ISSUE/REV	DESCRIPTION	TECH	ENG	DATE
3	ISSUED FOR 100% DESIGN	JV	NH	06-15
2	ISSUED FOR 90% DESIGN	KB	NH	07-14
1	ISSUED FOR 60% DESIGN	ID	NH	12-13

DISCLAIMER:
THIS DRAWING WAS DEVELOPED THROUGH THE APPLICATION OF PROFESSIONAL ENGINEERING SKILL AND PROPRIETARY METHODOLOGIES, PROCESSES AND KNOW HOW OF MWH AS AUTHOR ALL PURSUANT TO THE TERMS OF A CONTRACTUAL SCOPE OF WORK COVERING ITS PREPARATION. THIS DRAWING MAY NOT BE USED OR MODIFIED OTHER THAN IN STRICT ACCORDANCE WITH THE TERMS OF THE GOVERNING CONTRACT AND SCOPE OF WORK OR OTHERWISE ABSENT THE INVOLVEMENT AND CONSENT OF THE AUTHOR. ANY ALTERATION OR ADAPTATION OF THIS DRAWING SHALL BE CONSISTENT WITH THE AUTHOR'S CONTRACTUAL AND PROPRIETARY RIGHTS AND BE AT USER'S SOLE RISK AND WITHOUT ANY LIABILITY OR LEGAL RESPONSIBILITY OF MWH.

DESIGNED BY	N HAWS	06-15
DRAWN BY	K REED	06-15
CHECKED BY	T KELLEY	06-15
APPROVED BY	C STRACHAN	06-15
PROJECT MANAGER	V DRAIN	06-15



PROJECT LOCATION	WELLPINIT, WASHINGTON	
PROJECT	MIDNITE MINE	
TITLE	FLOW ATTENUATION EMBANKMENT DETAILS (SHEET 2 OF 2)	
SHEET	6-25	REVISION 3
FILE NAME	6-24	DATE JUNE 2015

