

**PROJECT DRAWINGS FOR
Wyoming Department of Environmental Quality
Land Quality Division
ANC Tailings Pond #1
Interim Site Stabilization Plan**

DRAFT

ENGINEER:

LIDSTONE AND ASSOCIATES - A WENCK COMPANY
4025 AUTOMATION WAY, BLDG. E
FORT COLLINS, COLORADO 80525

CLIENT:

WYOMING DEQ
LAND QUALITY DIVISION
200 WEST 17TH ST., SUITE 10
CHEYENNE, WY 82002



INDEX MAP



Lidstone and Associates - A Wenck Company

SHEET INDEX

SHEET NO.	SHEET TITLE
G-001	COVER SHEET
G-002	GENERAL NOTES
C-101	SITE OVERVIEW
C-102	MATERIAL BORROW PLAN
C-103	CUT AND FILL PLAN (NOT INCLUDED)
C-104	RECLAMATION PLAN
C-105	TP-1 COVER PLAN
C-201	DRAINAGE CHANNEL PROFILES
C-202	CROSS SECTIONS
C-501	DETAILS

I certify that these plans were prepared by me or under my direct supervision and that I am a duly registered professional engineer in the State of Wyoming.

Charles M. Jones

Plot Date & Time: 27 July 2017 3:27 PM
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PROJECT NOTES:

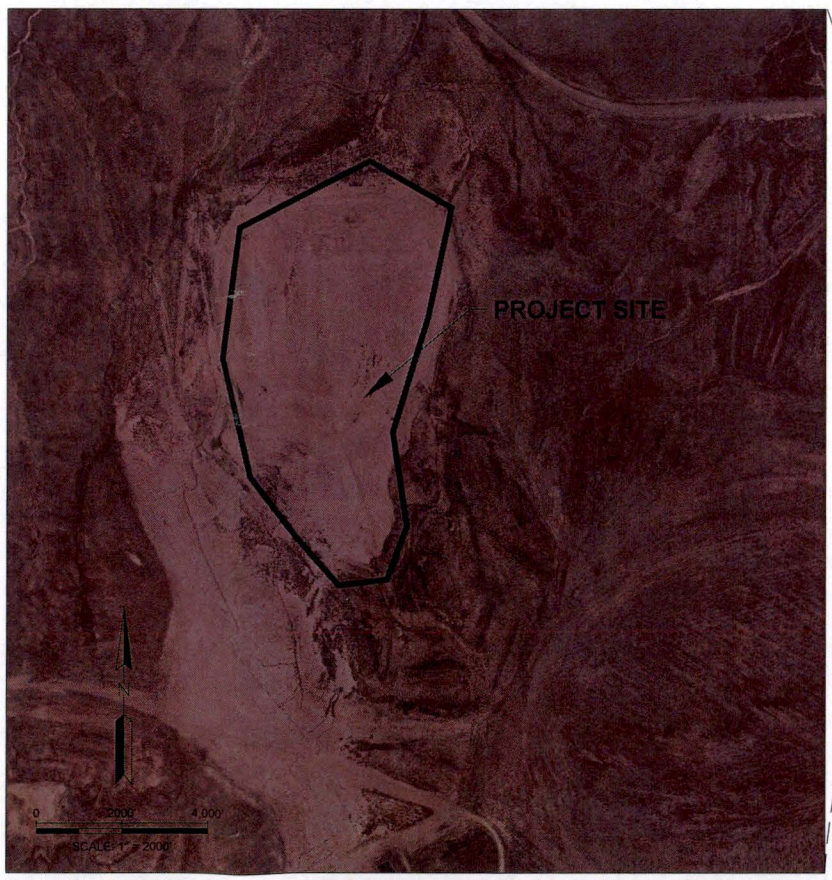
1. THE CONTRACTOR SHALL WARRANT THAT HE HAS EXAMINED THE PROJECT SITE AND THAT HE IS FULLY AWARE OF THE HAZARDOUS CONDITIONS THAT EXIST IN PERFORMING WORK IN AN AREA OF ABANDONED MINES, MINE SPOIL PILES, MINE HIGHWALLS, MINE WORKINGS, AND UTILITIES. ALTHOUGH THE ENGINEER HAS NOT LOCATED ALL UNDERGROUND WORKINGS OR VENT SHAFTS IN THE PROJECT AREA, IT SHOULD BE NOTED THAT THERE ARE UNDERGROUND WORKINGS AND CONSTRUCTION RELATED HAZARDS IN THE PROJECT AREA. SHOULD SUCH CONDITIONS/HAZARDS BE ENCOUNTERED, THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THOSE AREAS.
2. THE CONTRACTOR SHALL MAKE HIS OWN ESTIMATE OF THE FACILITIES, DIFFICULTIES, HAZARDS, SURFACE CONDITIONS, CHARACTER OF THE MATERIALS AND THE COSTS AFFECTING THE CONSTRUCTION OF THE PROPOSED WORK.
3. THE CONTRACTOR'S CONSTRUCTION STAGING AREA AND MATERIALS LAY DOWN AREA SHALL BE CONFINED TO AN AREA WITHIN THE IDENTIFIED PROJECT LIMITS. IF AN ALTERNATE STAGING AREA IS USED, THE CONTRACTOR SHALL RECLAIM IT AT THE END OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR HIS WORK AREA, STORAGE AREA AND MAINTAINING SECURITY. THE STAGING AREA SHALL BE MAINTAINED BY THE CONTRACTOR TO ADEQUATELY PREVENT LOSS OR DAMAGE TO THE CONTRACTOR'S EQUIPMENT AND MATERIALS. RECLAMATION OF THE STAGING AREA SHALL BE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL BE AWARE THAT LARGE ROCKS AND BOULDERS MAY BE ENCOUNTERED DURING EXCAVATION. LARGE ROCKS AND BOULDERS (> 24" DIA.) SHALL BE STOCKPILED IN LOCATIONS DESIGNATED BY THE ENGINEER. ALL LARGE ROCKS AND BOULDERS WILL BE UTILIZED AT SUITABLE LOCATIONS AS IDENTIFIED BY THE ENGINEER.
5. THE CONTRACTOR SHALL CONFINE HIS OPERATIONS WITHIN THE PROJECT CONSTRUCTION LIMITS AS DEFINED ON THE DRAWINGS. ANY DISTURBANCE OUTSIDE OF THE PROJECT CONSTRUCTION LIMITS OR WITHIN AREAS DEFINED AS "DO NOT DISTURB", WHICH RESULTS FROM THE CONTRACTOR'S AND/OR HIS SUBCONTRACTOR'S ACTIVITIES, WITHOUT THE WRITTEN AUTHORIZATION OF THE ENGINEER IS STRICTLY PROHIBITED. RECLAMATION OF SUCH DISTURBANCE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. FORCE ACCOUNT WORK SHALL ONLY BE USED FOR "MISCELLANEOUS WORK ITEMS" AS DEFINED BY THE ENGINEER AND WILL NOT BE USED ON OTHER UNIT PRICE PORTIONS OF THE CONTRACT. THE CONTRACTOR IS NOT REQUIRED TO COMPLETE A BID ITEM FOR THE FORCE ACCOUNT WORK ITEMS. UNIT COSTS OR HOURLY RATES WILL BE NEGOTIATED AT THE TIME OF THE CONSTRUCTION. THE CONTRACTOR SHALL ESPECIALLY NOTE THE RECLAIMED AREAS.
7. THE BID SCHEDULE IS AN ESTIMATE FOR BIDDING PURPOSES ONLY. ACTUAL QUANTITIES MAY VARY FROM THOSE SHOWN.
8. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ONE-CALL OF WYOMING AT 1-800-849-2476 AT LEAST THREE BUSINESS DAYS BEFORE DIGGING.
9. ROCK MAY BE ENCOUNTERED IN THE PROPOSED CUTS, IN EXISTING CHANNEL ROCK STRUCTURES AT SPECIFIC LOCATIONS AROUND THE SITE. THE CONTRACTOR SHALL SALVAGE THIS ROCK AND TEMPORARILY STOCKPILE OR DIRECTLY PLACE IT AT THE ENGINEERS DIRECTION.
10. REHANDLING AND PLACEMENT OF ONSITE ROCK FOR TOE SLOPE PROTECTION OR SIMILAR PURPOSES SHALL BE PAID AS FORCE ACCOUNT.
11. TOPSOIL SHALL BE SCRAPED FROM THE TOPSOIL STOCKPILES LOCATED ON SHEET C-XXX AND HAULED TO TP-1. THIS MATERIAL SHALL BE SPREAD OVER THE RECLAIMED AREA AND SEEDED WITH THE SPECIFIED SEED MIX.
12. CONTRACTOR SHALL SALVAGE EXISTING VEGETATION TO THE EXTENT POSSIBLE AND DIRECTLY REPLACE SUCH ORGANIC MATERIALS WITHIN FILLS. SUCH WORK SHALL BE PAID AS FORCE ACCOUNT.
13. ALL TRASH AND DEBRIS ENCOUNTERED ON SITE SHALL BE HAULED OFF SITE AND PROPERLY DISPOSED OF.

SURVEY CONTROL

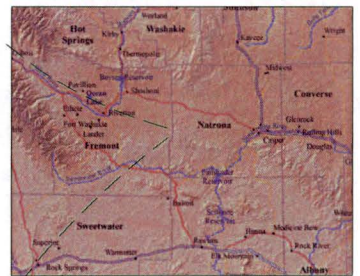
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50021	844044.3	2268011	6,366.82
50040	838104.8	2266448	6,570.11
50041	839680.1	2264974	6,476.99

PROJECTION: WYOMING STATE PLANE, WEST CENTRAL ZONE, US FOOT
 HORIZONTAL DATUM: NAD83, VERTICAL DATUM: NAVD88

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VICINITY MAP



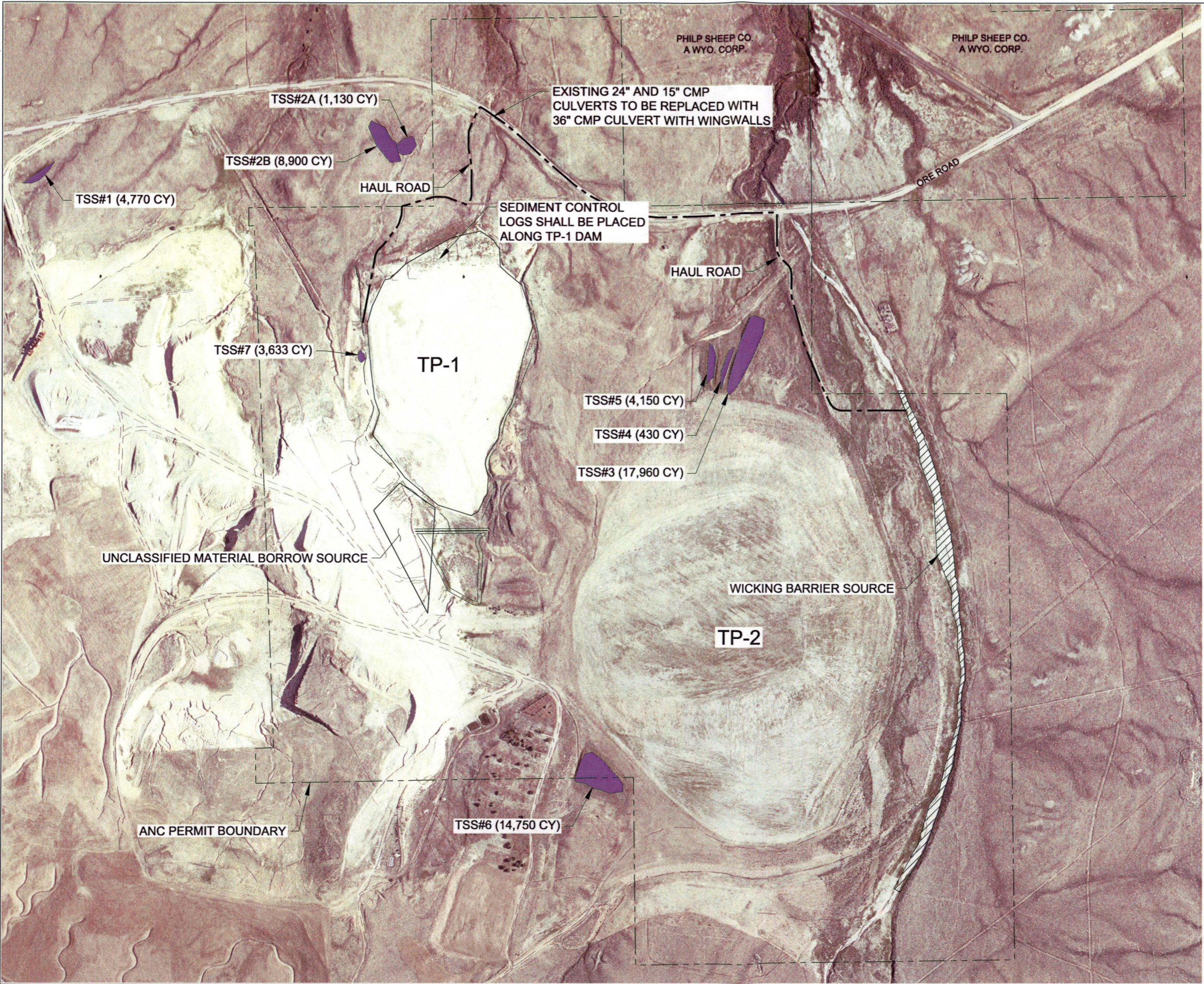
PROJECT LOCATION

REV	REVISION DESCRIPTION	DWN	APP	REV DATE

CLIENT				
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY LAND QUALITY DIVISION				
PRIME CONSULTANT				
 Responsive partner. Exceptional outcomes.				
SUB CONSULTANT				
SEAL				
PROJECT TITLE				
AMERICAN NUCLEAR CORPORATION TP-1 INTERIM STABILIZATION PLAN				
SHEET TITLE				
GENERAL NOTES				
DWN BY	CHK'D	APP'D	DWG DATE	7/25/17
DJW	CMJ	CDL	SCALE	
PROJECT NO.	SHEET NO.	REV NO.		
WYDEQ104	G-002			

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LEGEND

	HAUL ROAD
	PROPERTY BOUNDARY
	WICKING BARRIER SOURCE
	TOPSOIL SOURCE PILE

- NOTES:**
- TOTAL VOLUME OF WICKING BARRIER: 15,000 Cu. Yds.
 - TOTAL VOLUME OF TOPSOIL: 50,000 Cu. Yds.

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REV	REVISION DESCRIPTION	DWN	APP	REV DATE

CLIENT
 WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
 LAND QUALITY DIVISION

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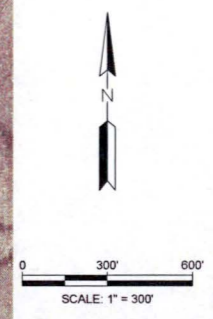
SUB CONSULTANT

SEAL

PROJECT TITLE
 AMERICAN NUCLEAR CORPORATION
 TP-1 INTERIM STABILIZATION PLAN

SHEET TITLE
 SITE OVERVIEW

DWN BY DJW	CHK'D ZSB	APP'D CDL	DWG DATE 7/25/17
PROJECT NO. WYDEQ104	SHEET NO. C-101	REV NO.	





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LEGEND

	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING DRAINAGE
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR

- NOTES:**
- VOLUME OF BORROW MATERIAL: 119649 Cu. Yds. (CUT).
 - BORROW MATERIAL TO BE EXCAVATED AND HAULED TO TP-1.

REV	REVISION DESCRIPTION	DWN	APP	REV DATE

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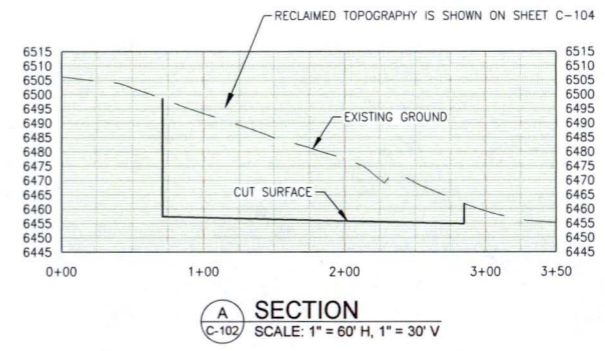
SUB CONSULTANT

SEAL

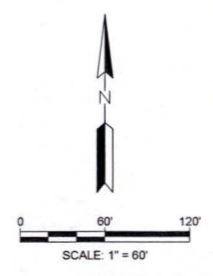
PROJECT TITLE
 AMERICAN NUCLEAR CORPORATION
 TP-1 INTERIM STABILIZATION PLAN

SHEET TITLE
 MATERIAL BORROW PLAN

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DJW	ZSB	CDL	SCALE	
PROJECT NO.	SHEET NO.	REV NO.		
WYDEQ104	C-102			

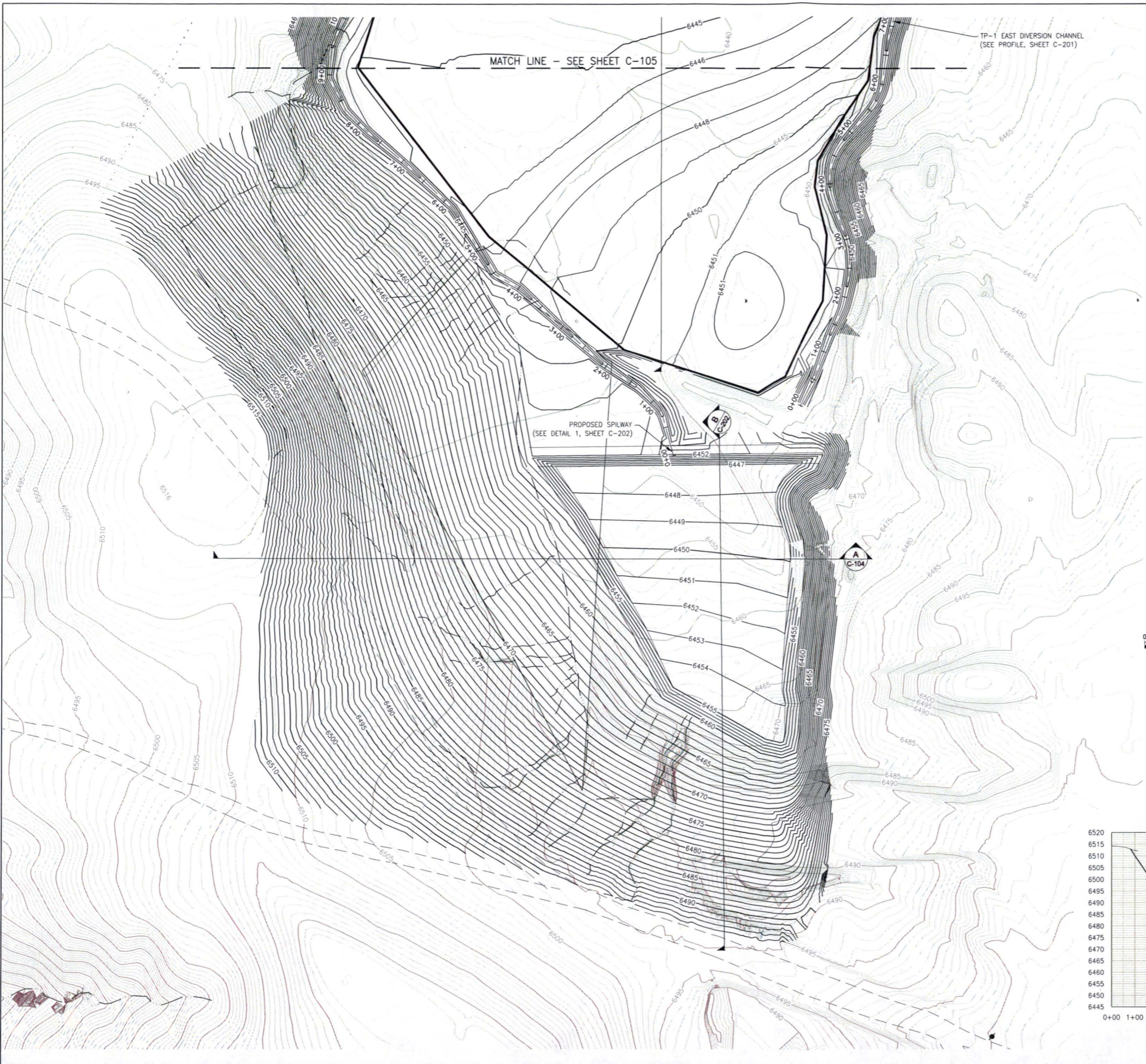


NOTE:
 EXCAVATED SLOPES WILL BE ADJUSTED FOR MAXIMUM ALLOWABLE SLOPES FOR FINAL PLAN.



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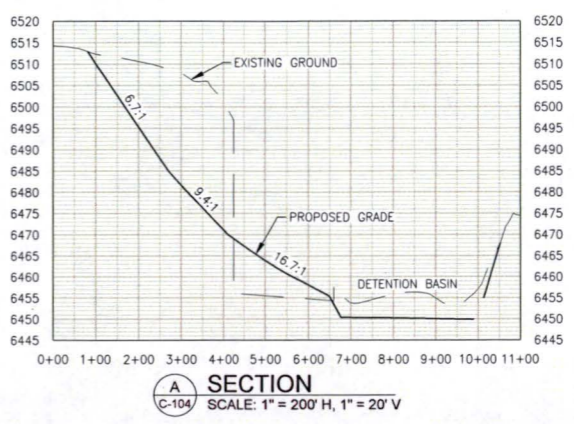
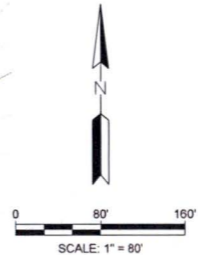


LEGEND

	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING DRAINAGE
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR

- NOTES:**
- TOTAL VOLUME PLACED ON TP-1: 184,000 Cu. Yds.
 - UNCLASSIFIED EXCAVATION VOLUME: 119,000 Cu. Yds.
 - WICKING BARRIER VOLUME: 15,000 Cu. Yds.
 - TOPSOIL VOLUME: 50,000 Cu. Yds.
 - RECLAMATION GRADING VOLUME: 76,000 Cu. Yds.

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REV	REVISION DESCRIPTION	DWN	APP	REV DATE

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SUB CONSULTANT

SEAL

PROJECT TITLE
 AMERICAN NUCLEAR CORPORATION
 TP-1 INTERIM STABILIZATION PLAN

SHEET TITLE
 RECLAMATION PLAN

DWN BY DJW	CHK'D ZSB	APP'D CDL	DWG DATE 7/25/17
PROJECT NO. WYDEQ104	SHEET NO. C-104	SCALE	REV NO.

Plot Date & Time: 27 July 2017 3:33 PM

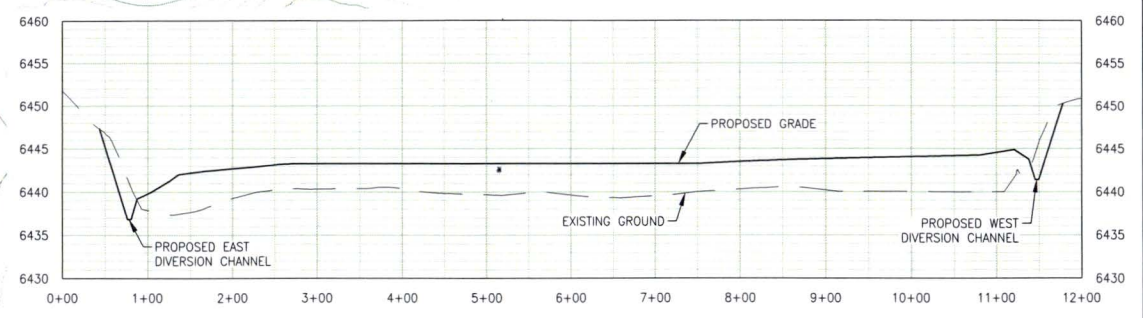
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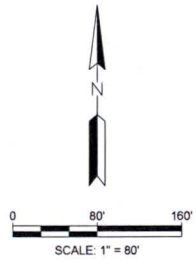
— 6700 —	EXISTING MAJOR CONTOUR
— 6700 —	EXISTING MINOR CONTOUR
— 6700 —	EXISTING DRAINAGE
— 6700 —	PROPOSED MAJOR CONTOUR
— 6702 —	PROPOSED MINOR CONTOUR

- NOTES:**
- TOTAL VOLUME PLACED ON TP-1: 184,000 Cu. Yds.
 - UNCLASSIFIED EXCAVATION VOLUME: 119,000 Cu. Yds.
 - WICKING BARRIER VOLUME: 15,000 Cu. Yds.
 - TOPSOIL VOLUME: 50,000 Cu. Yds.
 - RECLAMATION GRADING VOLUME: 76,000 Cu. Yds.



C SECTION
C-105 SCALE: 1" = 100' H, 1" = 10' V

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LAND QUALITY DIVISION

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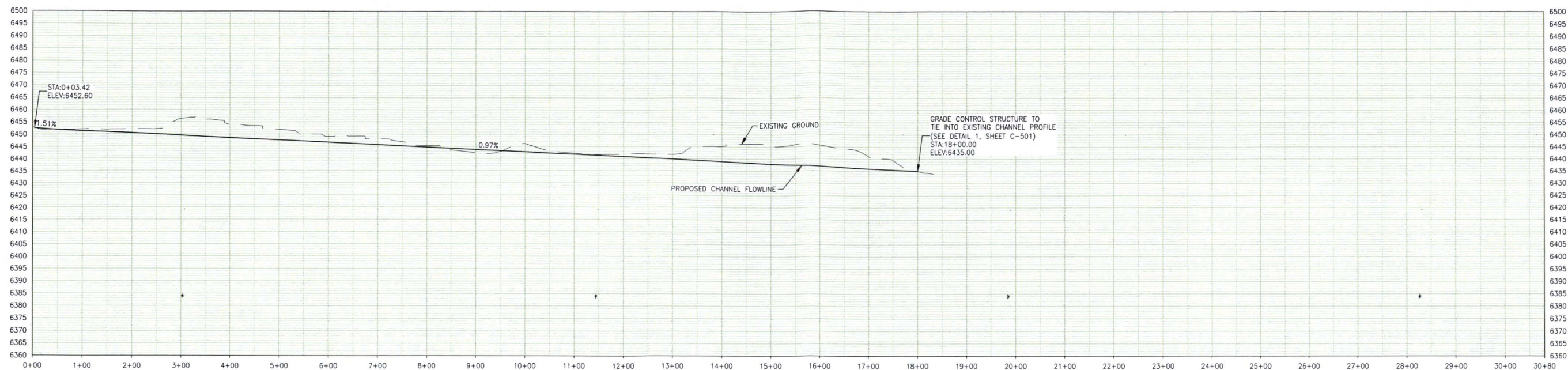
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PROJECT TITLE
AMERICAN NUCLEAR CORPORATION
TP-1 INTERIM STABILIZATION PLAN

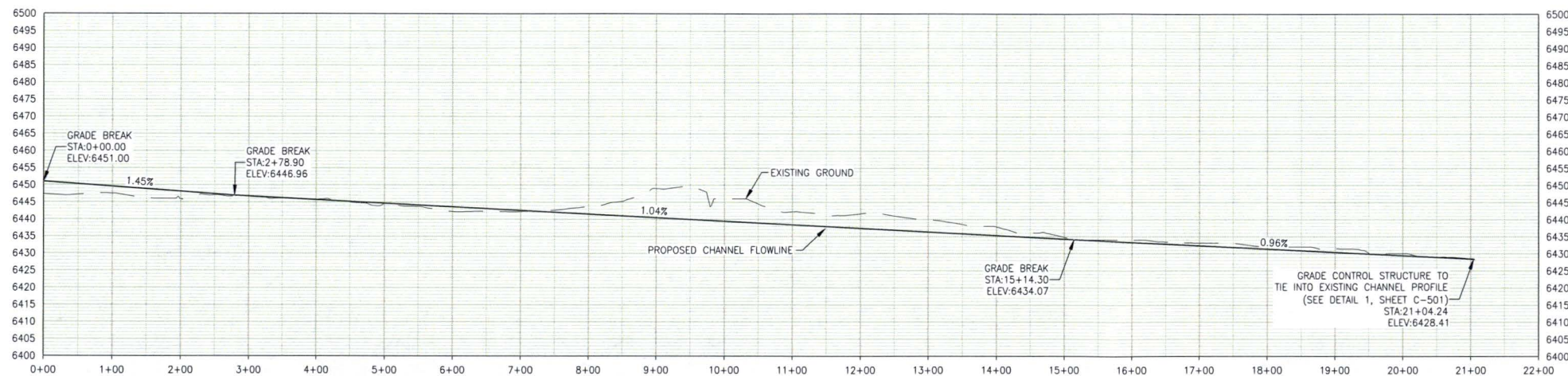
SHEET TITLE
TP-1 COVER PLAN

DWN BY DJW	CHK'D ZSB	APP'D CDL	DWG DATE 7/25/17
PROJECT NO. WYDEQ104	SHEET NO. C-105	SCALE	REV NO.

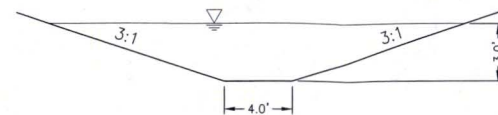
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TP-1 EAST DIVERSION CHANNEL PROFILE
SCALE: 1" = 100' H, 1" = 20' V



TP-1 WEST DIVERSION CHANNEL PROFILE
SCALE: 1" = 100' H, 1" = 20' V



TP-1 DIVERSION CHANNEL TYPICAL SECTION
SCALE: 1" = 5' H, 1" = 5' V

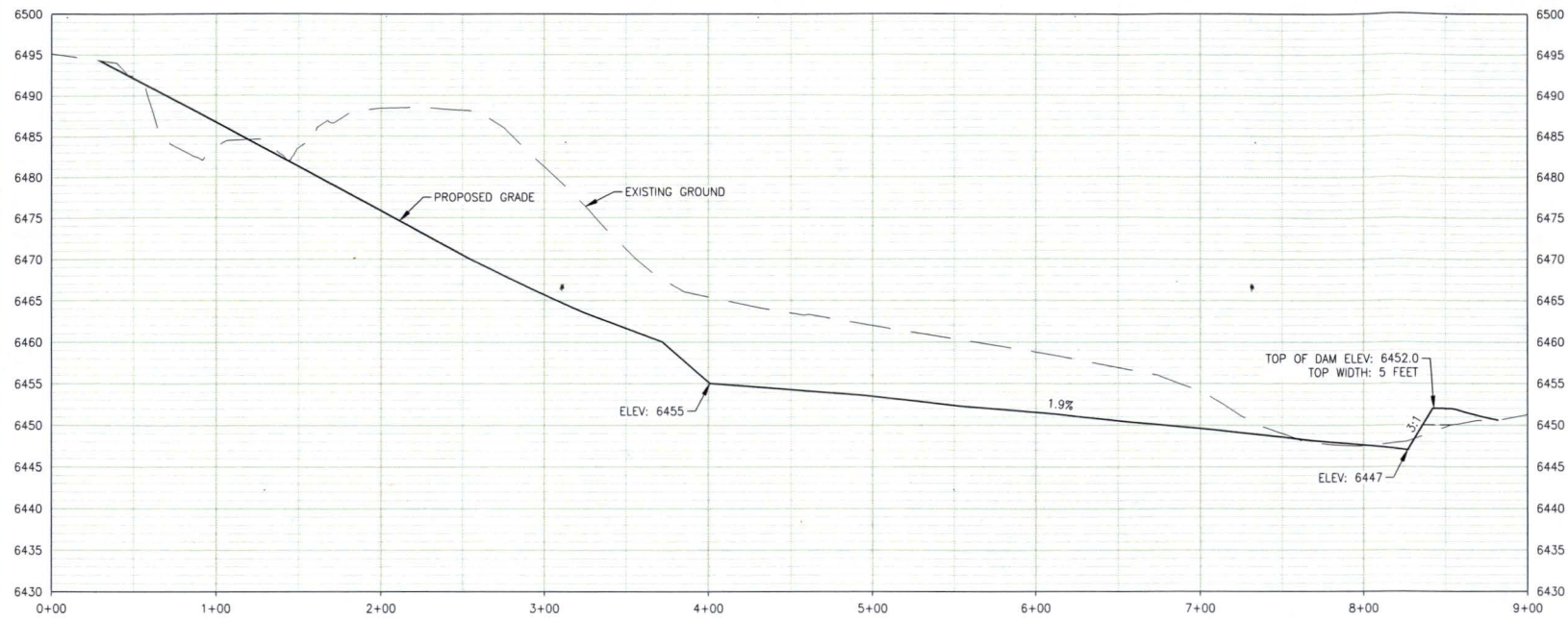
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REV	REVISION DESCRIPTION	DWN	APP	REV DATE
CLIENT				
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY LAND QUALITY DIVISION				
PRIME CONSULTANT				
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SUB CONSULTANT				
SEAL				
PROJECT TITLE				
AMERICAN NUCLEAR CORPORATION TP-1 INTERIM STABILIZATION PLAN				
SHEET TITLE				
DRAINAGE CHANNEL PROFILES				
DWN BY	CHK'D	APP'D	DWG. DATE	
DJW	ZSB	CDL	7/25/17	
			SCALE	
PROJECT NO.	SHEET NO.	REV NO.		
WYDEQ104	C-201			

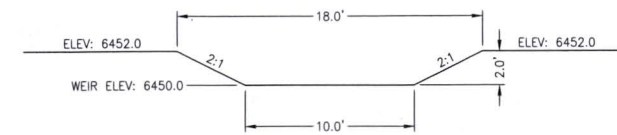
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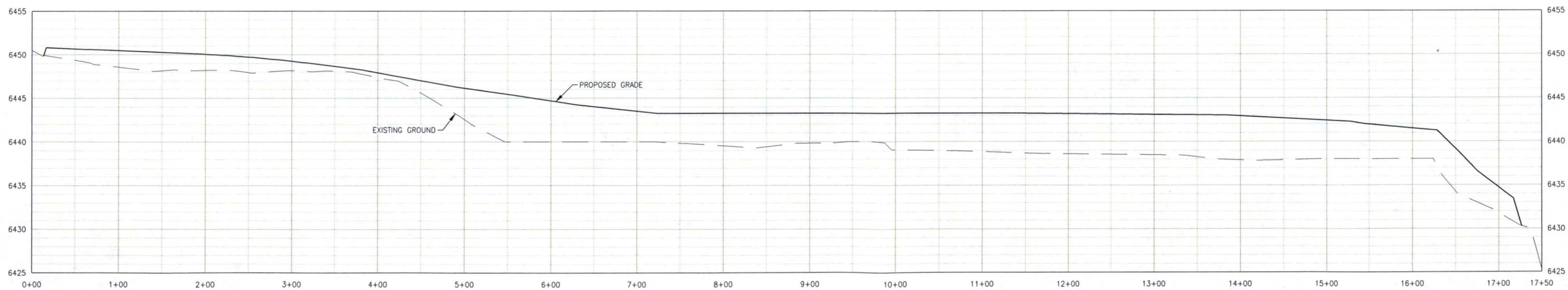
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B
SECTION
C-202 SCALE: 1" = 50' H, 1" = 10' V



TYPICAL SPILLWAY SECTION
SCALE: 1" = 5' H, 1" = 5' V



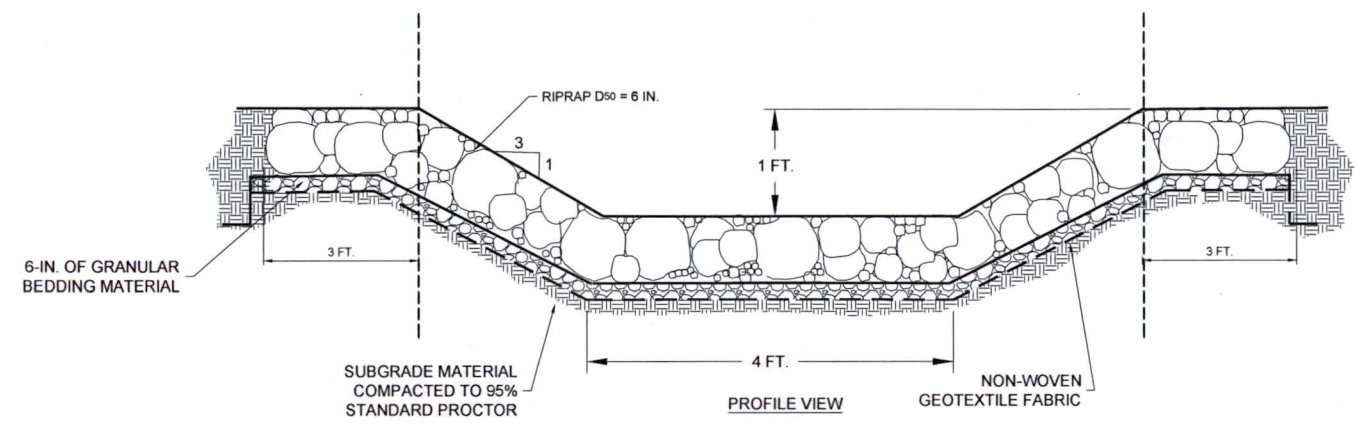
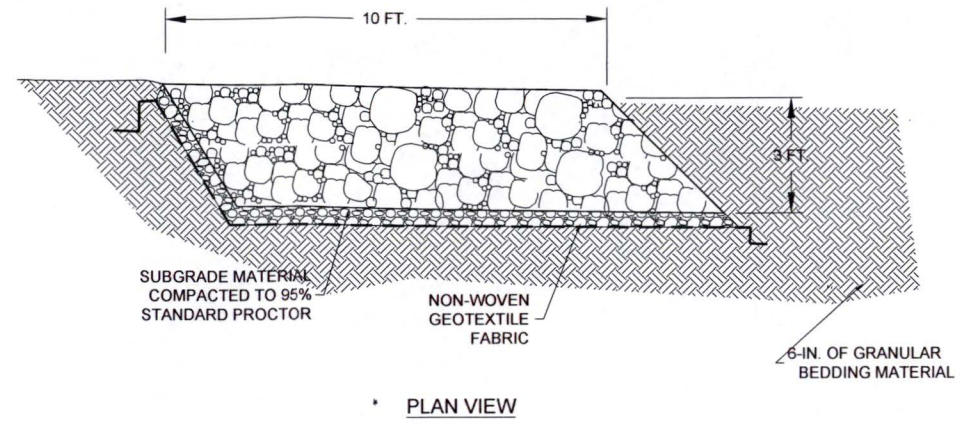
D
SECTION
C-202 SCALE: 1" = 60' H, 1" = 6' V

REV	REVISION DESCRIPTION	DWN	APP	REV DATE
CLIENT				
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SUB CONSULTANT				
SEAL				
PROJECT TITLE				
AMERICAN NUCLEAR CORPORATION TP-1 INTERIM STABILIZATION PLAN				
SHEET TITLE				
CROSS SECTIONS				
DWN BY	CHK'D	APP'D	DWG DATE	
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PROJECT NO.		SHEET NO.		REV NO.
WYDEQ104		C-202		

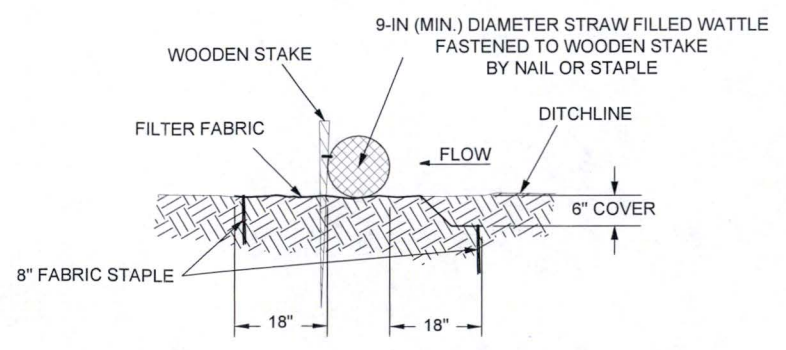
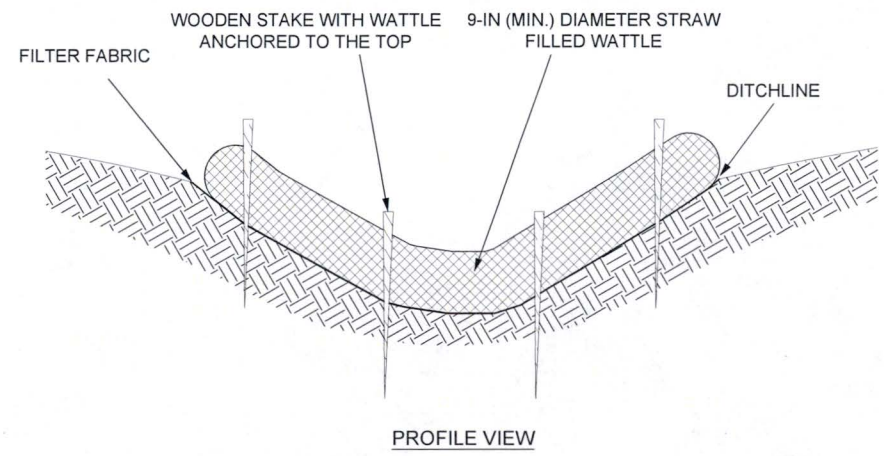
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RIPRAP GRADATION TABLE	
ROCK SIZE FRACTION	INTERMEDIATE ORTHOGONAL DIMENSION (INCHES)
D15	Less than 3"
D50	Less than 6"
D85	Less than 9"
D100	Less than 12"



1 TYPICAL GRADE CONTROL STRUCTURE DETAIL
C-501 NOT TO SCALE



2 TYPICAL WATTLE DETAIL
C-501 NOT TO SCALE

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WENCK ASSOCIATES
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SUB CONSULTANT
SEAL

PROJECT TITLE
AMERICAN NUCLEAR CORPORATION
TP-1 INTERIM STABILIZATION PLAN

SHEET TITLE
DETAILS

DWN BY DJW	CHK'D ZSB	APP'D CDL	DWG DATE 7/27/17
PROJECT NO. WYEQ104	SHEET NO. C-501	SCALE	REV NO.