



## GENERAL NOTES

- AS SHOWN ON PLANS, ALL DIKE INTERIOR SLOPES WILL BE 3:1 (H:V) AND ALL DIKE EXTERIOR SLOPES WILL BE 2:1 (H:V).
- VEGETATION WILL BE ADEQUATELY STRIPPED BEFORE CONSTRUCTION OF ANY POND OR ROAD. NO VEGETATION WILL BE PLACED IN FILL SLOPES.
- A LEAK DETECTION SYSTEM WILL BE INSTALLED UNDER THE POND. REGULAR MONITORING PROCEDURES WILL BE ACCORDING TO THE COLORADO OIL AND GAS CONSERVATION COMMISSION REGULATIONS.
- POND IS TO HAVE A 2' MINIMUM FREEBOARD. FREEBOARD MEANS THE TOP DEPTH OF THE PIT THAT DOES NOT CONTAIN LIQUID.
- REGULAR MAINTENANCE OF ALL DIKES WILL BE REQUIRED.
- ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES WILL BE REVIEWED AND STRICTLY COMPLIED WITH.

## Estimated Precipitation / Evaporation Data

Average Annual Precipitation = 12"  
Average Annual Evaporation = 36"

- ⊙ = 400 BBL WATER TANK
- ⊙ = 400 BBL SKIM TANK
- ⊙ = 400 BBL CONDENSATE TANK
- = OBSERVATION PORT
- ★ = EVAPORATOR

LOT 8

LOT 7

## CONTROL POINTS

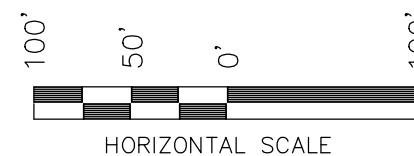
Northing	Easting	Elevation	Description
50000.00	50000.00	6644.00	SE COR SEC 4
49989.94	47373.49	6709.92	S 1/4 COR SEC 4
49978.15	44737.48	6783.46	SW COR SEC 4
52618.54	44723.50	6732.69	W 1/4 COR SEC 4
55267.96	44708.07	6656.03	NW COR SEC 4
55275.41	47352.46	6698.00	N 1/4 COR SEC 4
55280.35	49995.36	6578.57	NE COR SEC 4
52662.21	49999.72	6640.58	E 1/4 COR SEC 4

## FINISHED GRADE REFERENCE POINTS

Point #	Northing	Easting	Elevation	Description
1	54343.91	45847.70	6683.35	C-8.77
2	54347.44	45802.44	6698.85	F-5.65
3	54348.60	45787.49	6699.15	F-5.61
4	54390.19	45852.41	6698.85	F-8.70
5	54405.14	45853.58	6699.15	F-9.89
6	54327.84	46054.07	6683.35	C-6.82
7	54374.12	46058.79	6698.85	F-9.56
8	54389.07	46059.95	6699.15	F-10.29
9	54324.15	46101.54	6698.85	F-9.27
10	54322.98	46116.49	6699.15	F-9.80
11	54125.11	46034.88	6682.22	C-10.52
12	54121.18	46085.73	6698.85	F-7.80
13	54119.95	46100.68	6699.15	F-8.49
14	54075.29	46032.09	6698.85	F-4.57
15	54060.32	46031.10	6699.15	F-4.40
16	54140.66	45835.27	6682.22	C-16.71
17	54090.83	45832.53	6698.85	C-1.69
18	54075.87	45831.36	6699.15	C-1.62
19	54145.64	45771.68	6699.15	C-1.59
20	54144.47	45786.64	6698.85	C-1.60
21	54170.07	45773.58	6699.15	C-0.50
22	54145.27	45746.61	6704.15	F-2.77
23	54050.95	45829.42	6704.15	F-3.02
24	54048.05	45866.65	6704.15	F-4.18

Point #	Northing	Easting	Elevation	Description
25	54060.29	46040.65	6699.19	F-4.68
26	54065.05	46060.90	6699.15	F-6.20
27	54151.93	45661.19	6704.15	GRADE
28	54052.46	45512.86	6704.15	C-8.44
29	53877.01	45606.81	6704.15	C-2.62
30	53902.28	45667.84	6704.15	C-1.37
31	53915.27	45699.20	6704.15	C-0.66
32	53857.52	45775.88	6702.24	GRADE
33	53870.57	45807.09	6701.52	GRADE
34	53969.40	45568.55	6704.15	C-4.18
35	53982.50	45861.55	6704.15	F-3.93
36	53984.23	45750.74	6692.15	C-11.15
37	53988.06	45759.98	6692.15	C-10.93
38	54036.10	45740.08	6692.15	C-11.46
39	54032.28	45730.84	6692.15	C-11.68
40	54045.27	45699.48	6704.15	C-0.65
41	53952.88	45737.74	6704.15	F-0.49
42	53975.07	45791.33	6704.15	F-1.90
43	54067.46	45753.07	6704.15	F-0.87
44	53822.12	45560.77	6707.59	FENCE COR
45	53868.99	45453.45	6710.32	FENCE COR
46	53975.53	45411.67	6716.04	FENCE COR
47	54067.92	45444.22	6716.38	FENCE COR
48	54183.67	45464.52	6704.16	FENCE COR

Point #	Northing	Easting	Elevation	Description
49	54184.11	45741.99	6699.78	FENCE COR
50	54397.65	45746.50	6691.81	FENCE COR
51	54459.44	45813.64	6684.80	FENCE COR
52	54441.33	46106.31	6686.71	FENCE COR
53	54362.61	46173.44	6688.34	FENCE COR
54	54084.34	46146.38	6690.14	FENCE COR
55	54038.02	46111.38	6692.14	FENCE COR
56	54213.89	45658.69	6709.79	F-7.60
57	54212.72	45708.68	6707.22	F-7.60
58	54412.67	45713.37	6697.64	F-7.60
59	54413.84	45663.38	6699.76	F-7.60
60	54586.32	45619.16	6686.30	F-7.19
61	54530.13	45604.39	6688.30	F-5.49
62	54526.26	45687.17	6688.30	F-6.02
63	54496.37	45752.85	6688.30	F-6.12
64	54459.71	46167.00	6688.30	F-1.00
65	54379.05	46219.68	6688.30	F-2.46
66	54323.27	46211.53	6688.30	F-2.32
67	54269.17	46217.75	6688.30	F-1.79
68	54274.15	46261.31	6688.30	F-3.84
69	54497.62	46357.72	6686.30	F-5.57
70	54335.88	45950.88	6683.35	C-7.61
71	54129.50	45934.81	6683.35	C-12.74



EXISTING GROUND CONTOUR INTERVAL = 1 FOOT

## MATERIALS SPECIFICATION

MATERIAL AND CONSTRUCTION SPECIFICATIONS:  
THE FOLLOWING MATERIAL LIST IS NOT ALL INCLUSIVE.  
OTHER MATERIAL WILL BE NECESSARY FOR THE COMPLETION OF THE PROJECT.

PIT LINERS TO BE 60 MIL THICK (PRIMARY) AND 60 MIL (SECONDARY) HDPE OR OTHER AS APPROVED BY THE COLORADO OIL AND GAS CONSERVATION COMMISSION. PIT LINERS SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS. BEDDING MATERIAL FOR THE LINER AS PER MANUFACTURERS REQUIREMENTS OR IF NO MANUFACTURER REQUIREMENT IS SPECIFIED THE BEDDING MATERIAL SHALL MEET AASHTO GRADING REQUIREMENTS FOR SOIL-AGGREGATE MATERIALS GRADING E OR F OR ALL SAND OR SAND SILT MATERIAL. IN ADDITION TO THE GRADING REQUIREMENTS, THE MATERIAL SELECTED SHALL BE 90% FREE OF FRACTURED FACES CAPABLE OF PUNCTURING THE LINER MATERIAL. THE MATERIAL SHALL ALSO BE FREE OF ORGANIC MATERIAL. ALL FROZEN CLUMPS OF MATERIAL WILL BE WORKED UNTIL A SMOOTH BEDDING SURFACE IS OBTAINED. SOME MANUFACTURERS ALLOW THE USE OF GEOTEXTILE FABRIC FOR BEDDING MATERIAL.

ALL DIKES WILL BE KEYED INTO NATIVE MATERIAL. THE KEY-WAY WILL BE BACKFILLED AND COMPACTED WITH CLEAN DIKE MATERIAL. NO DEBRIS WILL BE USED IN THE DIKE CONSTRUCTION. NATIVE MATERIAL MAY BE USED FOR DIKE CONSTRUCTION EXCEPT NO CLEAN SAND OR POROUS ROCK MAY BE USED. DIKE MATERIAL MUST BE WELL GRADED.

ALL DIKE AND POND MATERIAL SHALL BE COMPACTED TO AT LEAST 95% OF THE OPTIMUM OBTAINED BY AASHTO METHOD T99. THE MATERIAL MUST BE PLACED IN LIFTS NOT TO EXCEED 12" AND COMPACTION TESTS SHALL BE MADE TO VERIFY COMPACTION REQUIREMENTS. IF COMPACTION REQUIREMENTS ARE NOT MET AT 12" LIFTS, ADJUSTMENTS MUST BE MADE TO THE LIFT DEPTH (EG. 8" MAX LIFT).



CIVIL ENGINEERING AND  
LAND SURVEYING SERVICES

85 South 200 East, Vernal, UT 84078  
O: 435.789.1017  
www.uintahgroup.com

- SINCE 1964 -

DOMINION ENERGY WEXPRO

POWDER WASH EVAPORATION FACILITY

LOCATED IN THE NW 1/4 OF  
SECTION 4, T11N, R97W, 6th P.M.  
MOFFAT COUNTY, COLORADO

REV	DATE	BY	REVISIONS
1	11-20-17	D.G.W.	60 mil liners, spread out spoils, add gen skid
2	01-02-18	D.G.W.	add diversion ditches
3	03-13-18	D.G.W.	re-grade pit bottom, add observation sump at SW corner
4	07-02-18	D.G.W.	add facilities layout
5	07-16-18	D.G.W.	remove generator skid
6	07-24-18	D.G.W.	update disturbance area
7	09-28-18	D.G.W.	show fire lane, off load pad
8	10-15-18	D.G.W.	change to shaped leak detection pipe

RESPONSIBLE ENGINEER:



GRADING PLAN

SCALE: 1" = 100'

DRAWN BY: D.G.W.

DATE DRAWN: 11-13-17

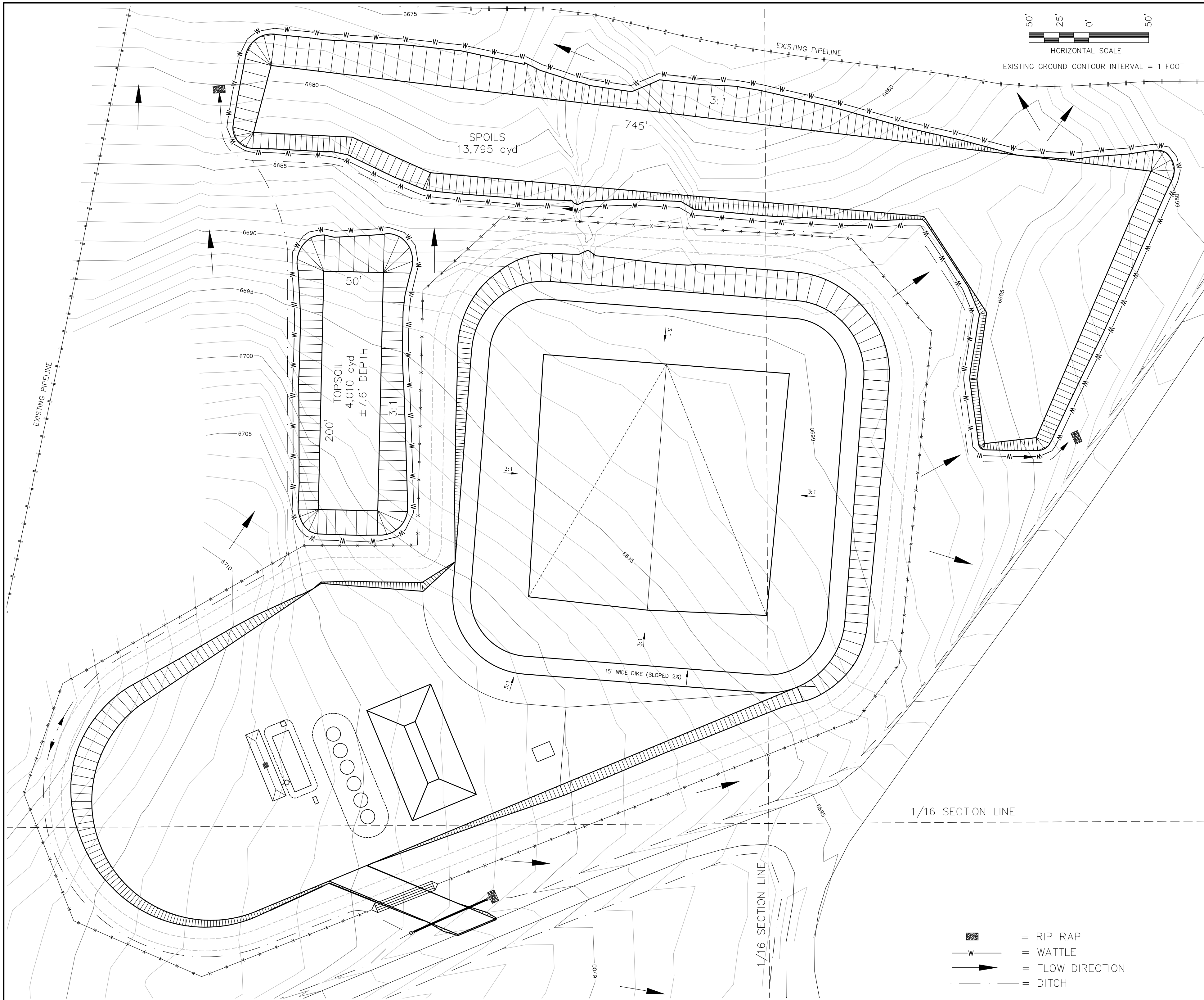
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PROJ. NO: DOM04-18-0021

FILE: 3 3 1 2 0

SHEET

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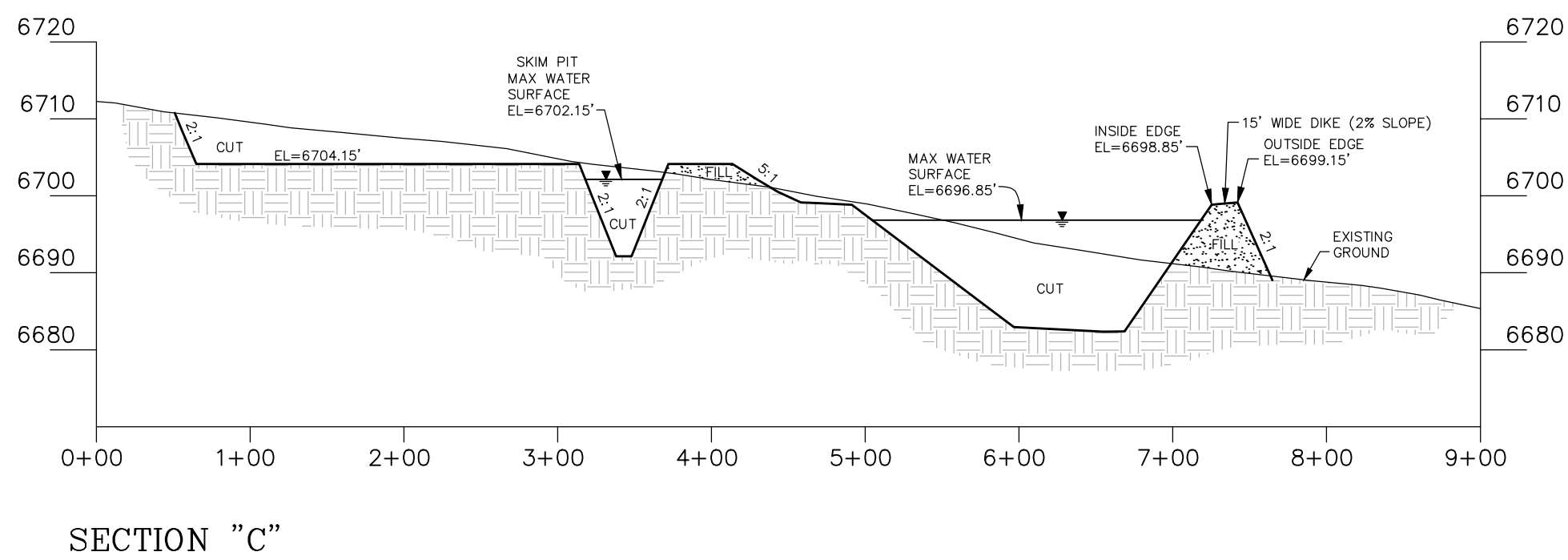
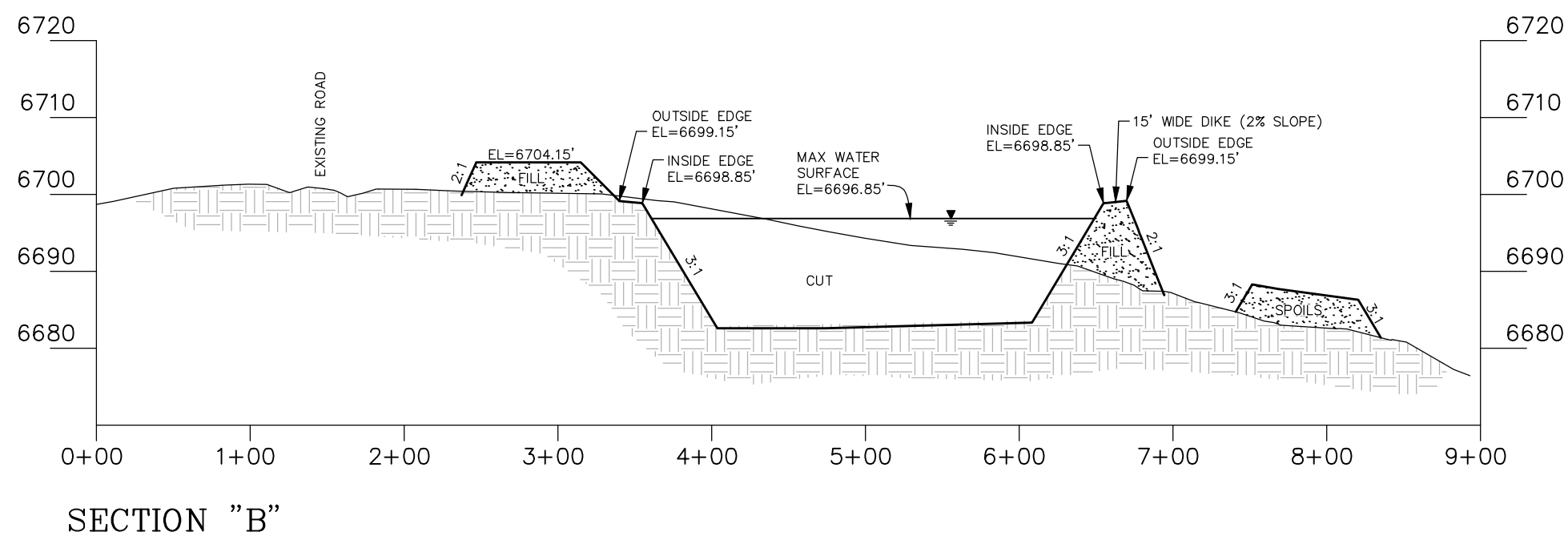
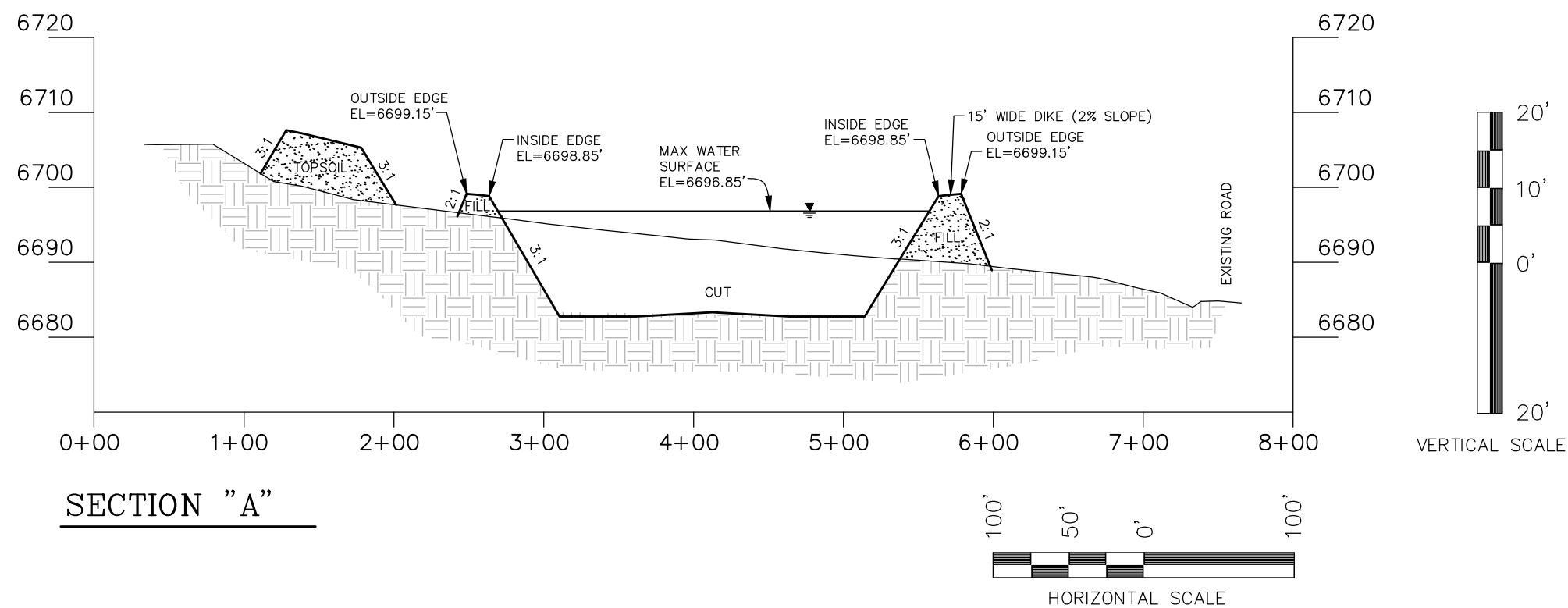
**DOMINION ENERGY WEXPRO**  
**POWDER WASH EVAPORATION FACILITY**  
LOCATED IN THE NW 1/4 OF  
SECTION 4, T11N, R97W, 6th P.M.  
MOFFAT COUNTY, COLORADO

REV	DATE	BY	REVISIONS
1	11-20-17	D.G.W.	60 mil liners, spread out spoils, add gen. skid
2	01-02-18	D.G.W.	add diversion ditches
3	03-13-18	D.G.W.	re-grade pit bottom, add observation sump at SW corner
4	07-03-18	D.G.W.	add facilities layout
5	07-16-18	D.G.W.	remove generator skid
6	07-24-18	D.G.W.	update disturbance area
7	09-26-18	D.G.W.	show fire lane, off load pad
8	10-15-18	D.G.W.	change to sloped leak detection pipe

RESPONSIBLE ENGINEER:

**EROSION CONTROL  
PLAN**

SCALE: 1" = 50'  
DRAWN BY: D.G.W.  
DATE DRAWN: 11-13-17  
UELS FILE NO.: W - 2 1 1 0  
PROJ. NO: DOM04-18-0021  
FILE: 3 3 1 2 0



#### DISTURBANCE AREA

4.97 ACRES (DISTURBANCE FOOTPRINT WITHIN FENCED AREA)  
7.59 ACRES (DISTURBANCE WITHIN FENCED AREA, TOPSOIL  
PILE AND SPOILS STOCKPILE)  
6.49 ACRES (FENCED AREA)

#### EARTHWORK APPROXIMATE YARDAGES

RAW CUT = 27,713 CU. YDS.  
FILL = 12,652 CU. YDS.  
FILL+10% = 13,918 CU. YDS.  
EXCESS = 13,795 CU. YDS.

#### TOP SOIL CUT & STOCKPILE

RAW CUT = 4,011 CU. YDS.  
Top soil for area within all areas  
of new disturbance (6" depth)

#### EVAPORATION POND VOLUME

POND VOLUME EXCLUDING FREEBOARD  
31,207 cyd, 19.34 acre feet, 150,072 BBL

SURFACE AREA AT MAX. LIQUID DEPTH  
81,457 SQUARE FEET (1.870 ACRES)

#### SKIM PIT VOLUME

POND VOLUME EXCLUDING FREEBOARD  
849 cyd, 0.53 acre feet, 4,085 BBL

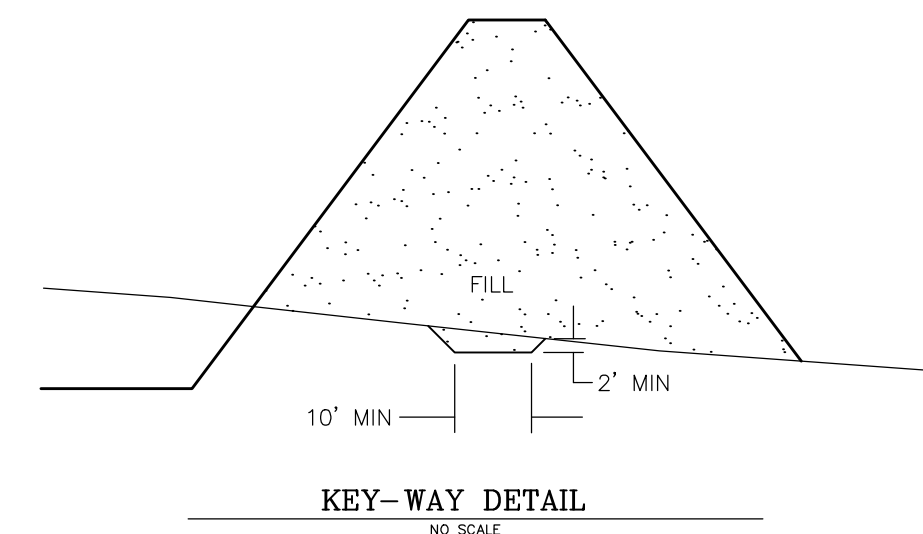
SURFACE AREA AT MAX. LIQUID DEPTH  
4,600 SQUARE FEET (0.106 ACRES)

#### MAXIMUM DAM HEIGHT

TOP OF DIKE ELEVATION (AT CENTERLINE) TO  
LOWEST NATURAL GROUND = 10.00 FT

#### DAM LENGTH

PERIMETER OF POND (FILL SECTION)  
980 FT



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LOCATED IN THE NW 1/4 OF  
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MOFFAT COUNTY, COLORADO

REV	DATE	BY	REVISIONS
1	11-30-17	D.G.W.	60 mil liners, spread out spoils, add gen. skid
2	01-02-18	D.G.W.	add diversion ditches
3	03-13-18	D.G.W.	re-grade pit bottom, add observation sump at SW corner
4	07-03-18	D.G.W.	Add facilities layout
5	07-16-18	D.G.W.	remove generator skid
6	07-24-18	D.G.W.	update disturbance area
7	09-28-18	D.G.W.	show fire lane, off load pad
8	10-15-18	D.G.W.	change to sloped leak detection pipe

RESPONSIBLE ENGINEER:

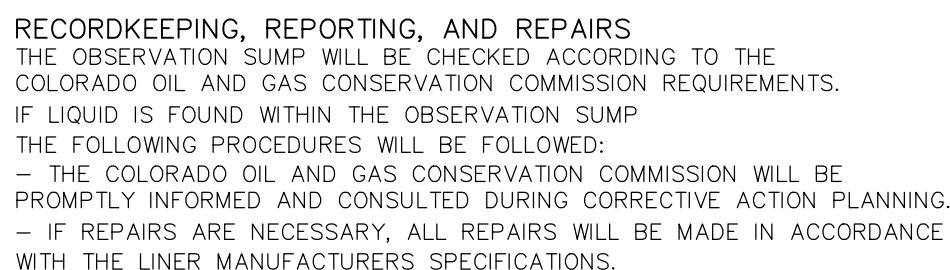
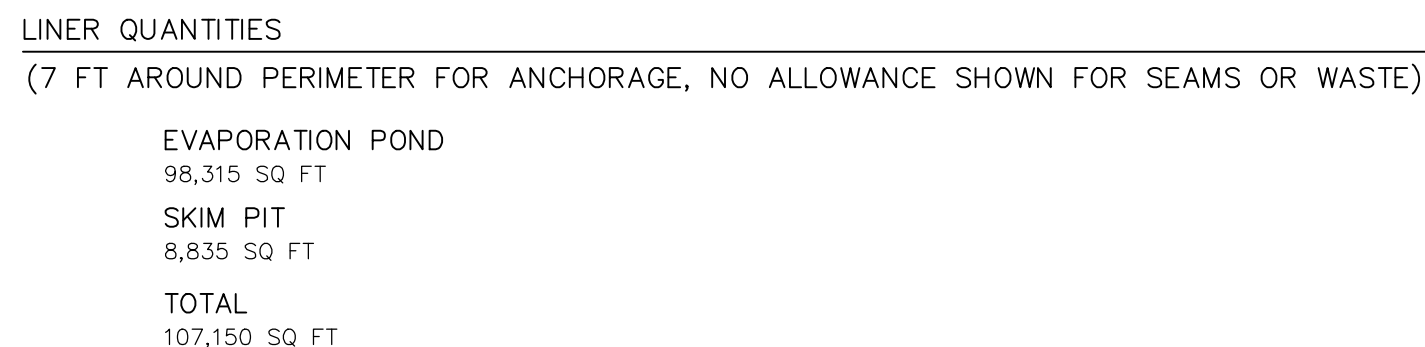


CROSS SECTIONS

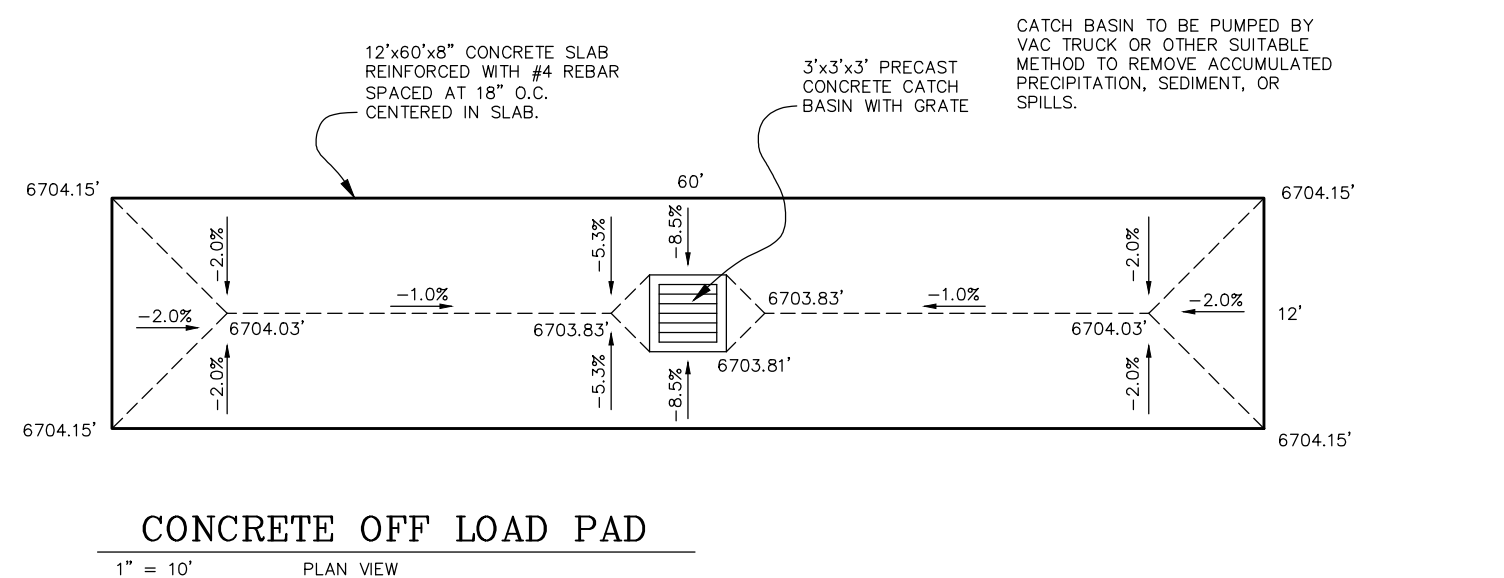
SCALE: AS SHOWN  
DRAWN BY: D.G.W.  
DATE DRAWN: 11-13-17  
UELS FILE NO.: W - 2 1 1 0  
PROJ. NO: DOM04-18-0021  
FILE: 3 3 1 2 0

SHEET

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TEXTURED "LADDERS" SHALL BE INSTALLED ON THE INSIDE SLOPE AROUND THE PERIMETER OF THE PONDS SPACED AT 50' C/S MAX. OR AS APPROVED BY OWNER. LADDER SHALL BE CONSTRUCTED OF 60 MIL HDPE LINER 36" WIDE WITH POLYLOC STRIPS FUSED HORIZONTALLY AT 24" C/S WITH STUDS FACING OUT. LADDERS SHALL BE FUSED TO PRIMARY LINER. TEXTURED PANELS OR OTHER EMERGENCY EGRESS METHODS MAY BE USED WITH APPROVAL OF THE ENGINEER AND OWNER.



ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE 2015, AMERICAN CONCRETE INSTITUTE (ACI 318), BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, AND ALL APPLICABLE STATE AND LOCAL CODES

CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.

CONCRETE SHALL CURE FOR A MINIMUM OF 7 DAYS BEFORE LOADING OR BACKFILLING OR UNTIL MINIMUM REQUIRED STRENGTH IS ACHIEVED.

CONCRETE SHALL BE 5 TO 7% AIR ENTRAINED.

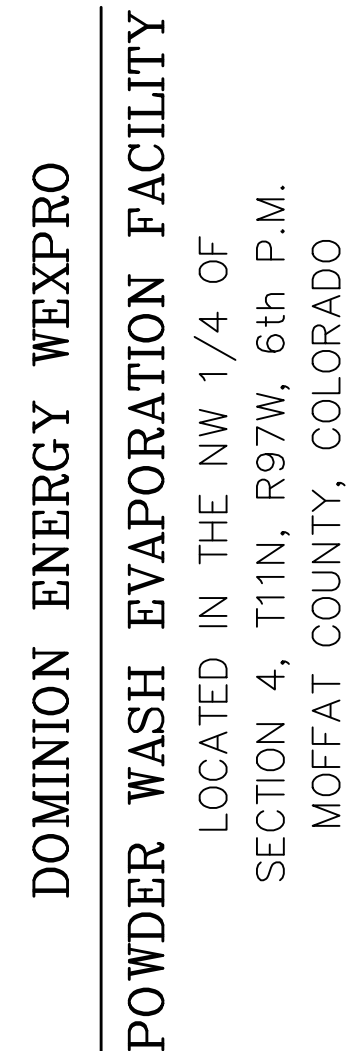
CONCRETE COVER FOR REINFORCING STEEL SHALL BE 3 INCHES MIN. OR CENTERED IN SLABS.

CONCRETE SHALL BE PROPERLY VIBRATED DURING PLACEMENT.

SPLICING OF REINFORCING BARS SHALL BE LAPS OF A MINIMUM OF 24 INCHES

REINFORCING STEEL SHALL BE OF THE SIZES INDICATED ON THESE DRAWINGS AND SHALL CONFORM TO ASTM A 615, GRADE 60.

COMPACT FILL MATERIALS TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557. FILL MATERIALS SHALL BE COMPACTED AT A MOISTURE CONTENT WITHIN 2% OF OPTIMUM.



REV	DATE	BY	REVISIONS
1	1/29/87	D.G.W.	60 mill liners, spread out inputs, add area, add
2	0/02/88	D.G.W.	add diversion ditches
3	0/31/88	D.G.W.	re-grade pit bottom, add observation sump at SW corner
4	0/23/88	D.G.W.	Add facilities layout
5	0/16/88	D.G.W.	remove generator skid
6	0/24/88	D.G.W.	update disturbance areas
7	0/28/88	D.G.W.	show fire lane, off load pad
8	10/15/88	D.G.W.	change to 8000 lbk detection pipe

RESPONSIBLE ENGINEER:



## DETAILS

SCALE: NO SCALE
DRAWN BY: D.G.W.
DATE DRAWN: 11-13-17
UELS FILE NO.: W - 2 1 1 0
PROJ. NO: DOM04-18-0021
FILE: 3 3 1 2 0

SHEET

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