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July 5, 2019

Via Electronic Filing

Ms. Barcy McNeal
Administration/Docketing
Public Utilities Commission of Ohio
180 East Broad Street, 11th Floor
Columbus, OH 43215-3793

Re: Guernsey Power Station, LLC, Case No. 16-2443-EL-BGN

Dear Ms. McNeal:

The October 5, 2017, Opinion, Order, and Certificate ("Certificate") approving Guernsey Power Station, LLC ("GPS") Certificate of Environmental Compatibility and Public Need to Construct the Guernsey Power Station approved the Stipulation which set forth a set of conditions as part of the Certificate.

Within this set of conditions, **Condition No. 3** requires that:

At least 30 days before the preconstruction conference, the Applicant shall submit to Staff, for review to ensure compliance with this condition, one set of detailed engineering drawings of the final project design, including the facility, temporary and permanent access roads, any crane routes, construction staging areas, and any other associated facilities and access points, so that Staff can determine that the final project design is in compliance with the terms of the certificate. The final project layout shall be provided in hard copy and as geographically-referenced electronic data. The final design shall include all conditions of the certificate and references at the locations where the Applicant and/or its contractors must adhere to a specific condition in order to comply with the certificate.

In compliance with **Condition No. 3**, GPS notifies the Staff of the Ohio Power Siting Board ("Board" or "OPSB") attached are the detailed engineering drawings for the final project design of the facility for the civil construction phase of the project.

If you have any questions please call at the number listed above.

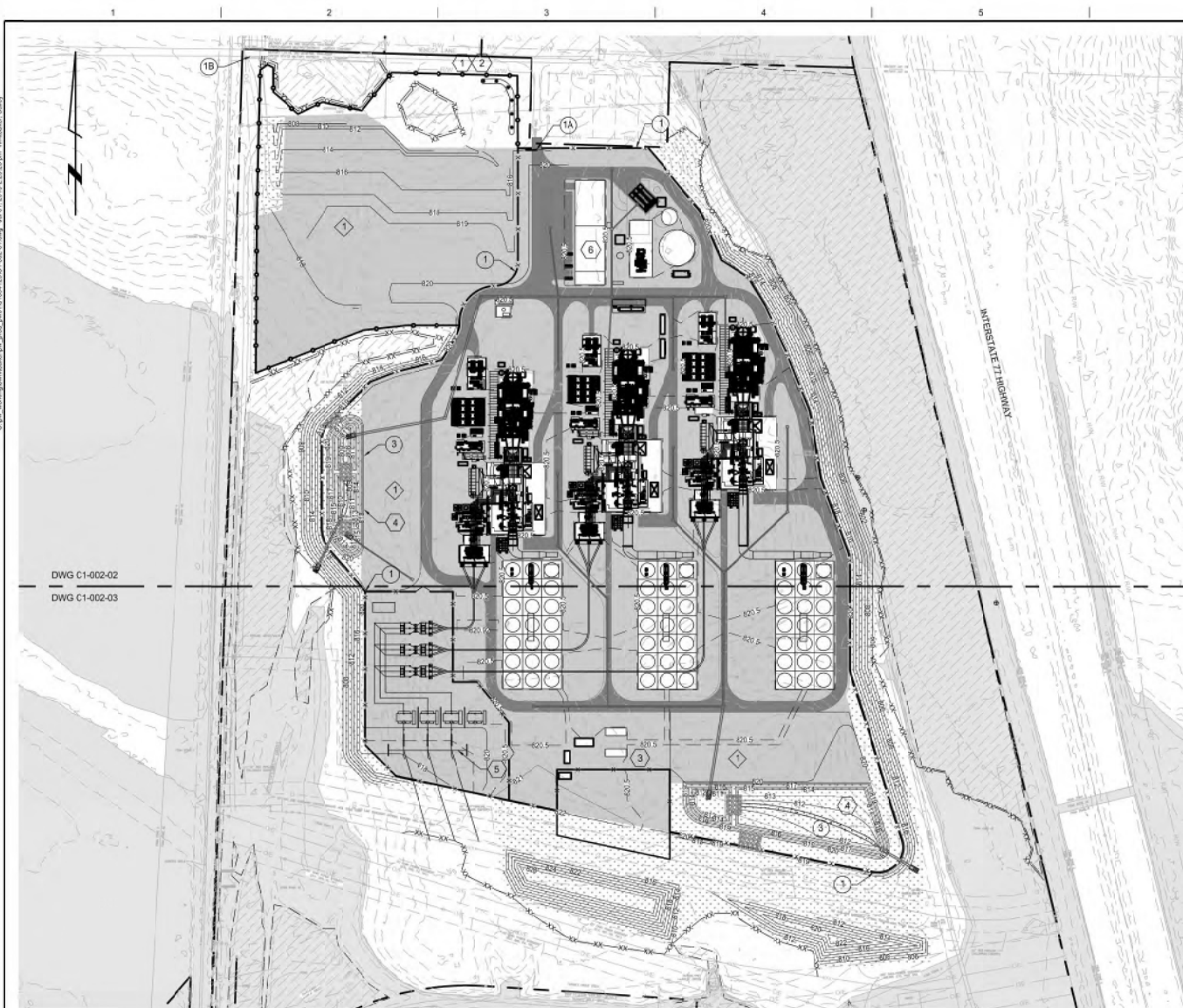
Sincerely,

Dylan F. Borchers

Attachment

Cc: Robert Holderbaum (w/Attachment)

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SITE PLAN - OVERALL
SCALE 1" = 120'-0"

NOTES

- HORIZONTAL AND VERTICAL CONTROL AS WELL AS FACILITIES SHOWN ON THESE DRAWINGS IS BASED UPON AN OWNER SUPPLIED CADD DRAWING OF AN ALTANSPS SURVEY (SHEET 1 THROUGH 10) AS PERFORMED BY SAM SURVEYING-AERIAL-MAPPING-ENGINEERING AND SEALED AND SIGNED BY JEFFREY C. SPONTAK ON JULY 10, 2017. EXISTING FACILITIES INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING: PROPERTY LINES, EASEMENTS, RIGHTS-OF-WAY, ROADS, OVERHEAD AND SOME UNDERGROUND UTILITIES, BRUSH/VEGETATION LINE, DELINEATED WETLANDS, FLOOD PLAIN ZONES, CONTOURS, BUILDING AND PARCELS.
- PROPOSED ASPIRE GAS LINE EASEMENTS AS SHOWN ON THESE DRAWINGS ARE BASED UPON AN OWNER SUPPLIED ADOBE PDF MARK-UP OF THE SURVEY TITLED "PROPOSED ASPIRE GAS LINE EASEMENTS" DATED 10-18-2017.

SITE PLAN KEYNOTES

- SECURITY FENCE & GATES
- MAIN ENTRANCE
- ENTRANCE TO ASPIRE GAS LINE EASEMENT
- LANDSCAPING
- STORM WATER DETENTION BASIN

TERMINAL POINT DESCRIPTION

- BYESVILLE WATER SUPPLY
- PROCESS WASTE WATER/SANITARY SEWER DISCHARGE
- FUEL GAS SUPPLY AND COMMUNICATIONS
- STORM WATER DETENTION POND
- 230KV POWER AND UTILITY COMMUNICATIONS INTERFACE POINT
- TELEPHONE AND INTERNET INTERFACE POINT

CONSTRUCTION PHASE KEYNOTES

- CONSTRUCTION LAYDOWN
- NOT USED



VICINITY MAP
NOT TO SCALE

LEGEND

- FLOOD PLAIN
- CRUSHED ROCK SURFACE
- PAVEMENT
- SEEDING
- WETLANDS
- POND/STREAM
- RIPRAP
- OVERFLOW WEIR
- EXISTING CONTOURS
- PROPOSED FENCE
- PRESERVATION FENCE
- PROPOSED CONTOURS
- PROPOSED INTERMEDIATE CONTOURS
- PROPERTY LINE
- TEMPORARY FENCE

0 60 120 240 360 FEET
1" = 120'

NOMINAL SITE ELEVATION EQUALS 820'

C1-002-01.DWG

THIS DRAWING WAS PREPARED BY POWER ENGINEERS, INC. FOR A SPECIFIC PROJECT. IT IS NOT TO BE USED FOR ANY OTHER PROJECT. REUSE OF THIS DRAWING OR ANY INFORMATION CONTAINED IN THIS DRAWING FOR ANY PURPOSE IS PROHIBITED UNLESS WRITTEN PERMISSION FROM BOTH POWER AND POWER'S CLIENT IS OBTAINED.

INTER-DISCIPLINE REVIEW						
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REVISIONS		DATE	DRN	DSGN	CKD	APPD
REV						

DSGN	BHR	01/18/18
DRN	BRG	01/18/18
CKD	TND	07/01/19
SCALE: 1" = 120'-0"		
FOR 2D/3D DWS ONLY		



GEMMA POWER SYSTEMS, LLC.



GEMMA POWER SYSTEMS, LLC
CAITHNESS GUERNSEY POWER STATION
VALLEY TOWNSHIP, OHIO
SITE PLAN - OVERALL

JOB NUMBER 149791
DRAWING NUMBER C1-002-01

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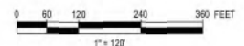


EROSION CONTROL NOTES

1. SILT FENCE SHALL BE CLEANED AND REPAIRED WHEN SILT BUILD-UP REACHES $\frac{1}{2}$ SILT FENCE HEIGHT.
2. NO VEGETATION OR CONSTRUCTION DEBRIS SHALL BE BURIED ON SITE. NO BURNING PITS SHALL BE ALLOWED.
3. ALL DISTURBED AREAS THAT REMAIN INACTIVE FOR MORE THAN 21 DAYS SHALL BE STABILIZED BY SEEDING, OR BY OTHER EQUIVALENT EROSION CONTROL MEASURES AS SOON AS PRACTICAL.
4. PRIOR TO ANY GRADING, STRIPPING, EXCAVATING, FILLING OR ANY OTHER DISTURBANCE OF THE NATURAL GROUND COVER, THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES. THE CONTRACTOR SHALL MAINTAIN THESE DEVICES THROUGHOUT THE DURATION OF THE PROJECT AND UNTIL PERMANENT VEGETATION IS PROPERLY ESTABLISHED.
5. THE SITE SHALL HAVE GRADED ROADS AND ACCESS DRIVES TO PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH TO PREVENT SEDIMENT FROM BEING TRACKED ON TO PUBLIC ROADWAYS. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL BE RETURNED TO THE POINT OF LIKELY ORIGIN OR OTHER SUITABLE LOCATION BEFORE THE END OF EACH WORK DAY. CONSTRUCTION ENTRANCES SHALL BE ROCKED PRIOR TO ANY OTHER SITE WORK.
6. EROSION AND SEDIMENTATION CONTROLS AND SEEDING SHALL MEET THE STANDARDS AND SPECIFICATIONS OF GUERNSEY COUNTY, AND OHIO EPA. EROSION CONTROL MEASURES ARE TEMPORARY AND SHALL BE MAINTAINED UNTIL PROJECT STABILIZATION.
7. PROPOSED MINOR GRADES ARE NOT SHOWN FOR CLARITY. PLEASE REFERENCE THE GRADING AND DRAINAGE PLAN FOR DETAILS.
8. MANUFACTURED SLOPES AND PADS SHALL BE ROUNDED VERTICALLY AND HORIZONTALLY AS APPROPRIATE TO BLEND WITH THE SURROUNDING TOPOGRAPHY.
9. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SITE EROSION CONTROL IN ACCORDANCE WITH THE PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
10. CONTRACTOR SHALL REMOVE ALL EROSION CONTROL DEVICES AFTER PROPER COVER IS ESTABLISHED AND IF APPROVED BY OWNER'S REPRESENTATIVE.
11. STOCKPILES SHALL BE LOCATED AWAY FROM SLOPES AND TRAFFIC ROUTES AND BE TEMPORARILY SEEDDED AS SOON AS POSSIBLE, BUT NO MORE THAN AFTER FORMATION OF THE STOCKPILE. SILT FENCE SHALL BE PLACED AROUND THE STOCKPILE TO CONTROL EROSION.
12. AS SOON AS CUTS OR EMBANKMENTS ARE COMPLETED, ALL CUT AND FILL SLOPES SHALL BE STABILIZED WITH A HYDROMULCH. APPROVED SLOPE PROTECTION MEASURES SHALL PROCEED IMMEDIATELY BEHIND THE EXPOSURE OF CUT SLOPES AND/OR THE CREATION OF EMBANKMENT SLOPES.
13. ADDITIONAL CATCH BASINS AND DESILTING BASINS SHALL BE INSTALLED TO FACILITATE DRAINAGE.
14. THE EROSION CONTROL PLAN EXHIBITS GENERAL EROSION CONTROL LOCATIONS. ACTUAL LOCATIONS WILL DEPEND ON ACTUAL EXCAVATION OR FILL LIMITS AND DEMOLITION AND CONSTRUCTION SEQUENCING.
15. UNLESS OTHERWISE SPECIFIED, RIPRAP SHALL BE CLEAN, WELL GRADED, ANGULAR, NATURAL STONE WITH A MEAN STONE DIAMETER OF 8", UNDERLAIN BY A 6" DEEP LAYER OF 3/4" CLEAN, CRUSHED ROCK ON TOP OF GEOTEXTILE FILTER FABRIC. STONE SHALL BE PLACED TO PRODUCE A REASONABLE WELL-GRADED MASS OF RIPRAP WITH THE MINIMUM POSSIBLE PERCENTAGE OF VOIDS. DO NOT PLACE RIPRAP IN LAYER BY DUMPING INTO CHUTES, BY DUMPING FROM THE TOP OF SLOPE, BY PUSHING IT FROM THE TOP OF SLOPE, OR ANY METHOD LIKELY TO RESULT IN SEGREGATION OF VARIOUS SIZES.
16. UNLESS OTHERWISE SPECIFIED, GEOTEXTILE FILTER FABRIC SHALL BE MIRAFI NON-WOVEN 150N OR APPROVED EQUAL AND BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
17. THE CONTRACTOR TO MAINTAIN THE PLANTING AND EROSION CONTROL MEASURES DESCRIBED ABOVE UNTIL RELIEVED OF THE SAME BY THE OWNER. THE CONTRACTOR TO REMOVE ALL SOIL INTERCEPTED BY THE GRAVEL BAGS, CATCH BASINS, AND DESILTING BASINS AND KEEP THE FACILITIES CLEAN AND FREE OF SILT AND SAND.

LEGEND

	FLOOD PLAN		OVERFLOW WEIR
	CRUSHED ROCK SURFACE		EXISTING CONTOURS
	PAVEMENT		PROPOSED FENCE
	SEEDING		PRESERVATION FENCE
	WETLANDS		PROPOSED CONTOURS
	POND/STREAM		PROPOSED INTERMEDIATE CONTOURS
	RIPRAP		PROPERTY LINE
			TEMPORARY FENCE
			AREA OF DISTURBANCE



EROSION CONTROL PLAN - OVERALL

SCALE 1" = 120'-0"

NOMINAL SITE ELEVATION EQUALS 820'

C1-005-01.DWG

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INTER-DISCIPLINE REVIEW						
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REVISIONS						
REV	DATE	DRN	DSGN	CKD	APPD	
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DSGN	BHR	01/18/18
DRN	JPS	01/18/18
CKD	TND	07/01/19
SCALE: 1" = 120'-0"		
FOR 20x40 DWG ONLY		



GEMMA POWER SYSTEMS, LLC.



GEMMA POWER SYSTEMS, LLC	
CAITHNESS GUERNSEY POWER STATION	
VALLEY TOWNSHIP, OHIO	
EROSION CONTROL PLAN - OVERALL	

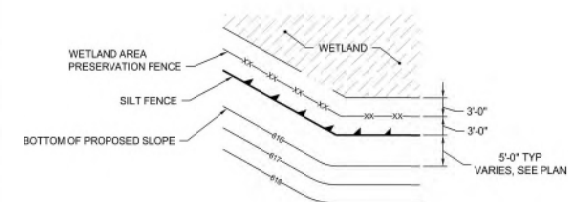
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DRAWING NUMBER	
C1-005-01	

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EROSION CONTROL KEYNOTES

1. INSTALL SILT FENCE
2. INSTALL INLET PROTECTION (GEOTEXTILE OR BLOCK AND GRAVEL)
3. INSTALL STRAW BALE CULVERT PROTECTION
4. INSTALL CONCRETE WASHOUT FACILITY AT LOCATIONS WHERE DRIVERS ARE LIKELY TO WASHOUT DRUMS
5. INSTALL CONSTRUCTION ENTRANCE
6. INSTALL PRESERVATION FENCE

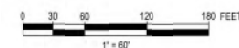


TYPICAL FENCING SPACING

NTS

NOTES

1. REFERENCE EROSION CONTROL PLAN - OVERALL FOR LEGEND.



EROSION CONTROL PLAN - NORTH
SCALE 1" = 60'-0"

NOMINAL SITE ELEVATION EQUALS 820'

C1-005-03.DWG

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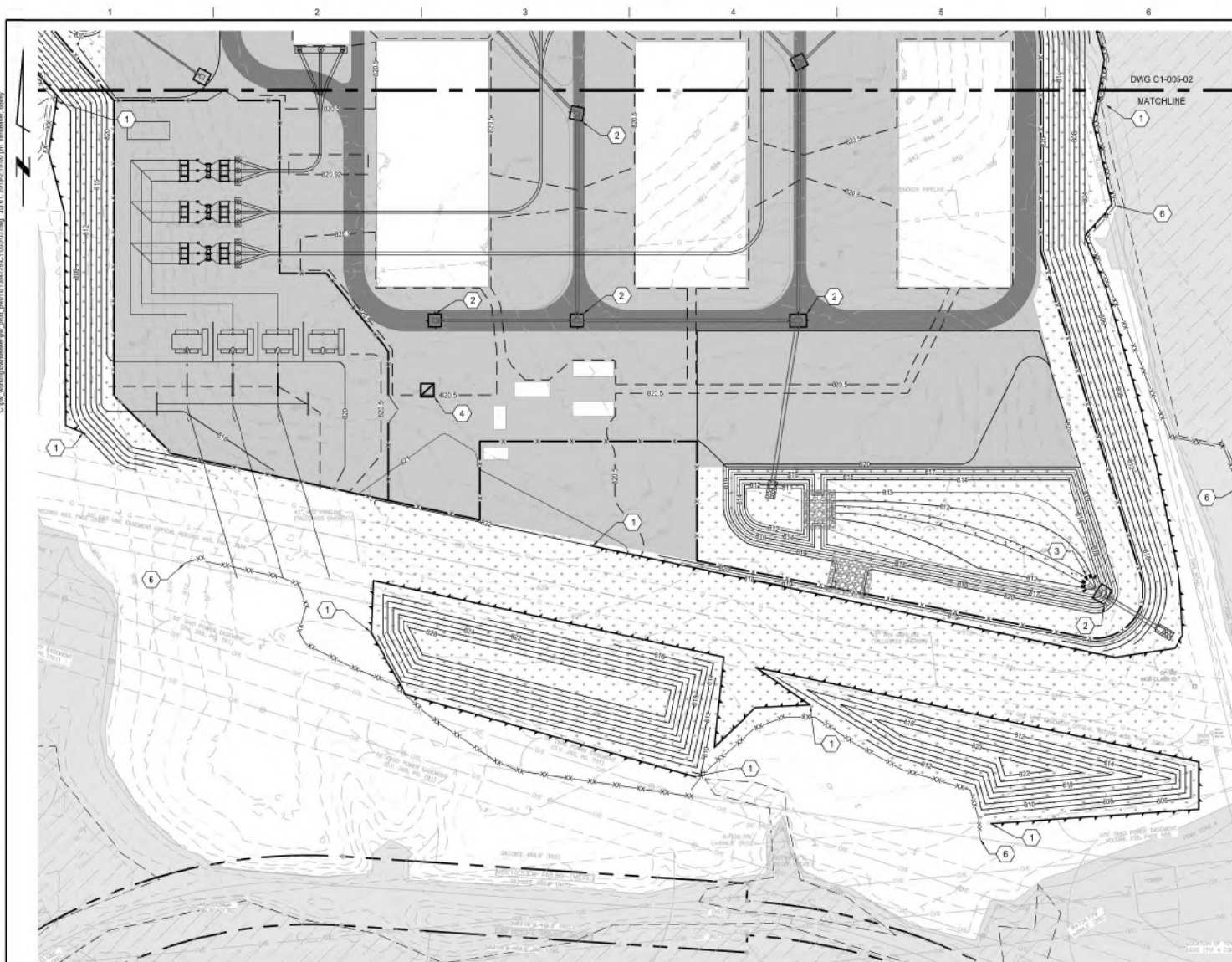
GEMMA POWER SYSTEMS, LLC.



GEMMA POWER SYSTEMS, LLC
CAITHNESS GUERNSEY POWER STATION
VALLEY TOWNSHIP, OHIO
EROSION CONTROL PLAN - NORTH

JOB NUMBER
149791
DRAWING NUMBER
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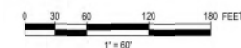


EROSION CONTROL KEYNOTES

- 1. INSTALL SILT FENCE
- 2. INSTALL INLET PROTECTION (GEOTEXTILE OR BLOCK AND GRAVEL)
- 3. INSTALL STRAW BALE CULVERT PROTECTION
- 4. INSTALL CONCRETE WASHOUT FACILITY AT LOCATIONS WHERE DRIVERS ARE LIKELY TO WASHOUT DRUMS
- 5. NOT USED
- 6. INSTALL PRESERVATION FENCE

NOTES

- 1. REFERENCE EROSION CONTROL PLAN - OVERALL FOR LEGEND.



EROSION CONTROL PLAN - SOUTH
SCALE 1" = 60'-0"

NOMINAL SITE ELEVATION EQUALS 820'

C1-005-02.DWG

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INTER-DISCIPLINE REVIEW						
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FOR PLAN ONLY		



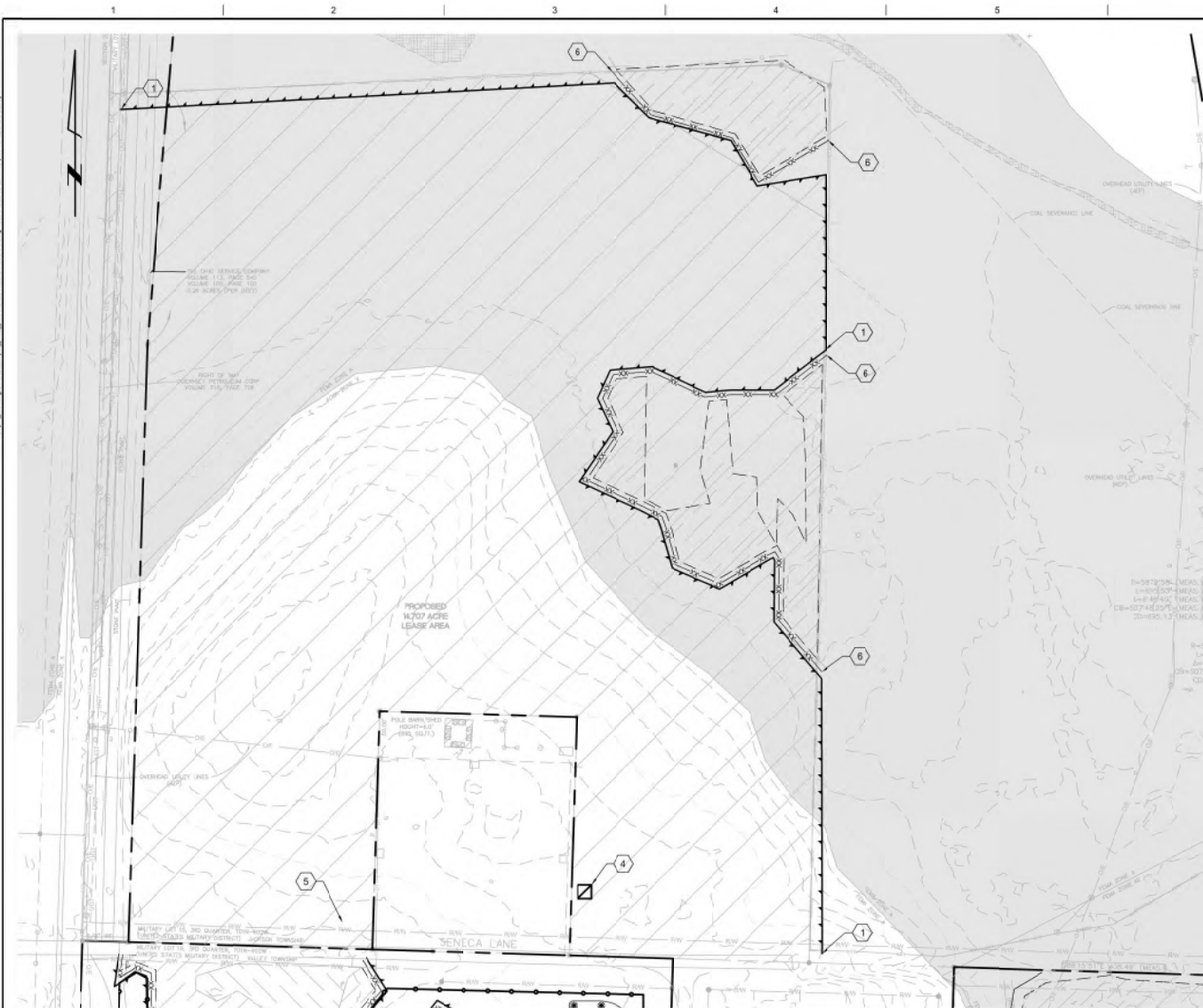
GEMMA POWER SYSTEMS, LLC.



GEMMA POWER SYSTEMS, LLC
CAITHNESS GUERNSEY POWER STATION
VALLEY TOWNSHIP, OHIO
EROSION CONTROL PLAN - SOUTH

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EROSION CONTROL PLAN -
CONSTRUCTION LAYDOWN NORTH
SCALE 1" = 60'-0"

EROSION CONTROL KEYNOTES

- 1 INSTALL SILT FENCE
- 2 NOT USED
- 3 INSTALL STRAW BALE CULVERT PROTECTION
- 4 INSTALL CONCRETE WASHOUT FACILITY AT LOCATIONS WHERE DRIVERS ARE LIKELY TO WASHOUT DRUMS
- 5 INSTALL CONSTRUCTION ENTRANCE
- 6 INSTALL PRESERVATION FENCE

LEGEND

- FLOOD PLAN
- CRUSHED ROCK SURFACE
- PAVEMENT
- SEEDING
- WETLANDS
- POND/STREAM
- RIPRAP
- OVERFLOW WEIR
- EXISTING CONTOURS
- PROPOSED FENCE
- PRESERVATION FENCE
- PROPOSED CONTOURS
- PROPOSED INTERMEDIATE CONTOURS
- PROPERTY LINE
- TEMPORARY FENCE
- AREA OF DISTURBANCE
- EROSION CONTROL SILT FENCE



NOMINAL SITE ELEVATION EQUALS 820'

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INTER-DISCIPLINE REVIEW						
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FOR 2D/4D DWS ONLY		



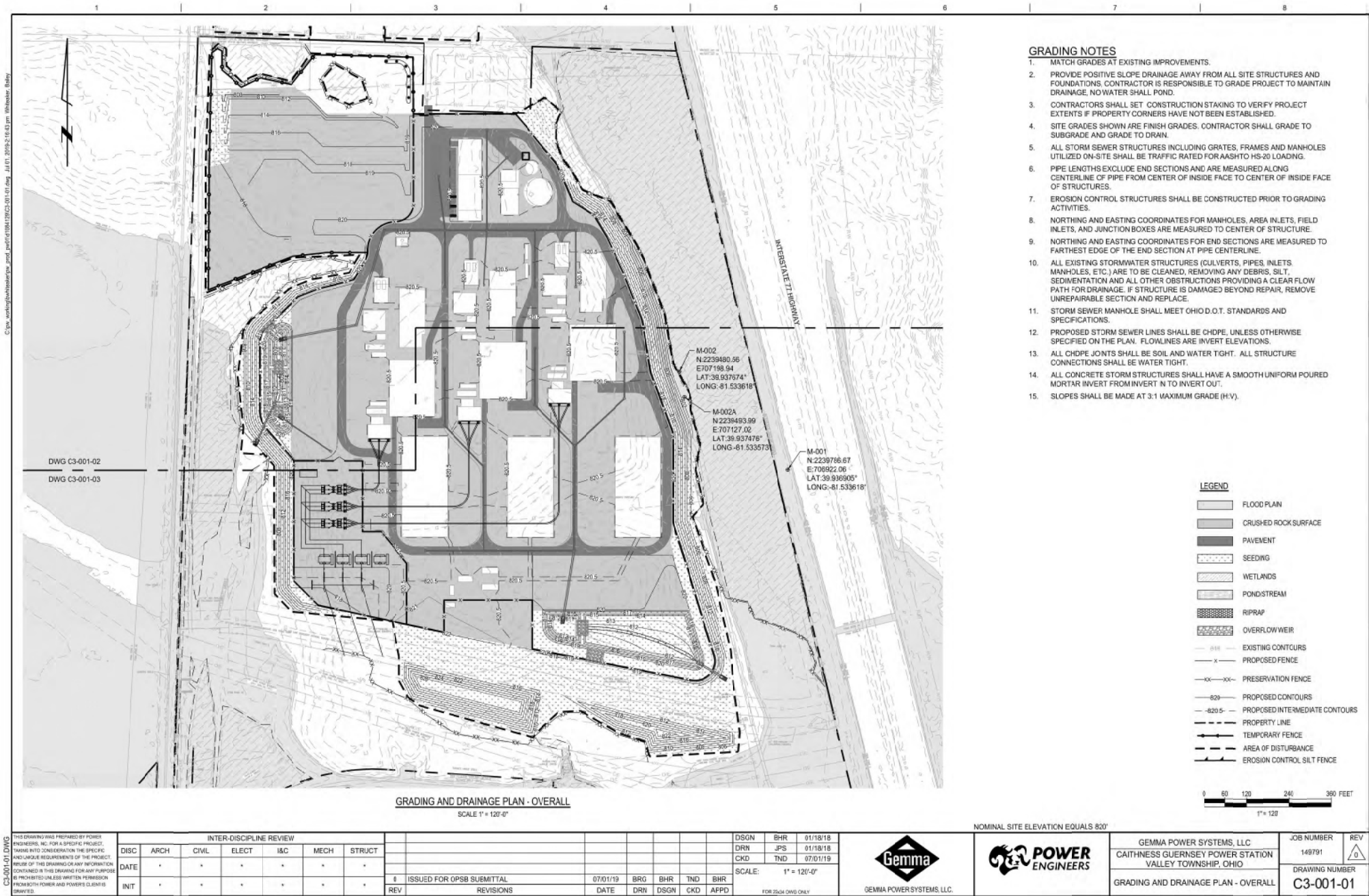
GEMMA POWER SYSTEMS, LLC.



GEMMA POWER SYSTEMS, LLC.	
CAITHNESS GUERNSEY POWER STATION	
VALLEY TOWNSHIP, OHIO	
EROSION CONTROL PLAN -	
CONSTRUCTION LAYDOWN NORTH	

JOB NUMBER	REV
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DRAWING NUMBER	C1-005-04

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DWG C3-001-03

GRADING AND DRAINAGE PLAN - NORTH

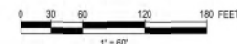
SCALE 1" = 60'-0"

STORM DRAINAGE NETWORK

1 N: 707438.25 E: 2239187.04 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE OUT (N) = 815.50' 157 LF 18" DIA CHDPE PIPE @ 0.50% SL	4C N: 707802.64 E: 2238962.23 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE OUT (SW) = 814.74' 75 LF 12" DIA CHDPE PIPE @ 0.50% SL	8 N: 707293.29 E: 2238386.66 FLARED END SECTION FLOWLINE = 808.70'
2 N: 707598.25 E: 2239187.04 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE IN (S) = 814.72' FLOWLINE OUT (W) = 814.54' 111 LF 24" DIA CHDPE PIPE @ 0.50% SL	4D N: 707444.00 E: 2238928.15 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE OUT (N) = 814.92' 150 LF 12" DIA CHDPE PIPE @ 0.50% SL	9 N: 707109.95 E: 2238337.73 8" WIDE TRICKLE CHANNEL TO FLARED END SECTION FLOWLINE = 810.00'
3 N: 707598.25 E: 2239071.92 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE IN (S) = 813.98' FLOWLINE IN (E) = 813.98' FLOWLINE OUT (W) = 813.81' 131 LF 36" DIA CHDPE PIPE @ 0.50% SL	5 N: 707598.25 E: 2238817.49 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE IN (E) = 812.42' FLOWLINE IN (S) = 812.42' FLOWLINE OUT (W) = 812.25' 169 LF 48" DIA CHDPE PIPE @ 0.50% SL	10 N: 707106.95 E: 2238336.28 OUTLET CONTROL STRUCTURE WITH 4" FAIR CLOTH SKIMMER 4" X 8" AREA INLET TOP EL = 818.00' FLOWLINE OUT (W) = 808.83' 62 LF 36" DIA CHDPE PIPE @ 1.69% SL
3A N: 707438.25 E: 2239071.92 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE OUT (N) = 814.77' 156 LF 24" DIA CHDPE PIPE @ 0.50% SL	5A N: 707750.08 E: 2238799.00 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE OUT (S) = 813.17' 148 LF 24" DIA CHDPE PIPE @ 0.50% SL	11 N: 707007.91 E: 2238288.35 FLARED END SECTION FLOWLINE = 807.00'
4 N: 707598.25 E: 2238937.11 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE IN (E) = 813.16' FLOWLINE IN (S) = 814.17' FLOWLINE IN (N) = 813.18' FLOWLINE OUT (W) = 813.00' 116 LF 36" DIA CHDPE PIPE @ 0.50% SL	5B N: 707438.25 E: 2238817.50 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE OUT (N) = 813.21' 156 LF 24" DIA CHDPE PIPE @ 0.51% SL	12 N: 706973.87 E: 2238494.28 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE OUT (NW) = 815.50' 150 LF 21" DIA CHDPE PIPE @ 1.62% SL
4A N: 707748.25 E: 2238937.11 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE IN (N) = 814.08' FLOWLINE IN (NE) = 814.37' FLOWLINE OUT (S) = 813.91' 146 LF 24" DIA CHDPE PIPE @ 0.50% SL	6 N: 707598.52 E: 2238644.99 4" X 4" AREA INLET TOP EL = 819.50' FLOWLINE IN (E) = 811.41' FLOWLINE OUT (S) = 811.24' 277 LF 48" DIA CHDPE PIPE @ 0.50% SL	13 N: 707064.48 E: 2238351.84 FLARED END SECTION FLOWLINE = 812.90'
4B N: 707682.01 E: 2238937.11 4" X 4" AREA INLET TOP EL = 820.00' FLOWLINE OUT (S) = 814.74' 130 LF 24" DIA CHDPE PIPE @ 0.51% SL	7 N: 707330.48 E: 2238567.40 4" X 4" AREA INLET TOP EL = 819.50' FLOWLINE IN (N) = 809.87' FLOWLINE OUT (W) = 809.70' 202 LF 48" DIA CHDPE PIPE @ 0.50% SL	

NOTES

- REFERENCE GRADING AND DRAINAGE PLAN - OVERALL FOR LEGEND
- REFERENCE DETENTION BASIN PLAN FOR DETAILS OF THE FOREBAY, EMBANKMENTS, AND OUTLETS.



NOMINAL SITE ELEVATION EQUALS 820'

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REVISIONS						

DSGN	BHR	01/18/18
DRN	JPS	01/18/18
CKD	TND	07/01/19
SCALE: 1" = 60'-0"		
FOR 2D/4D DWS ONLY		



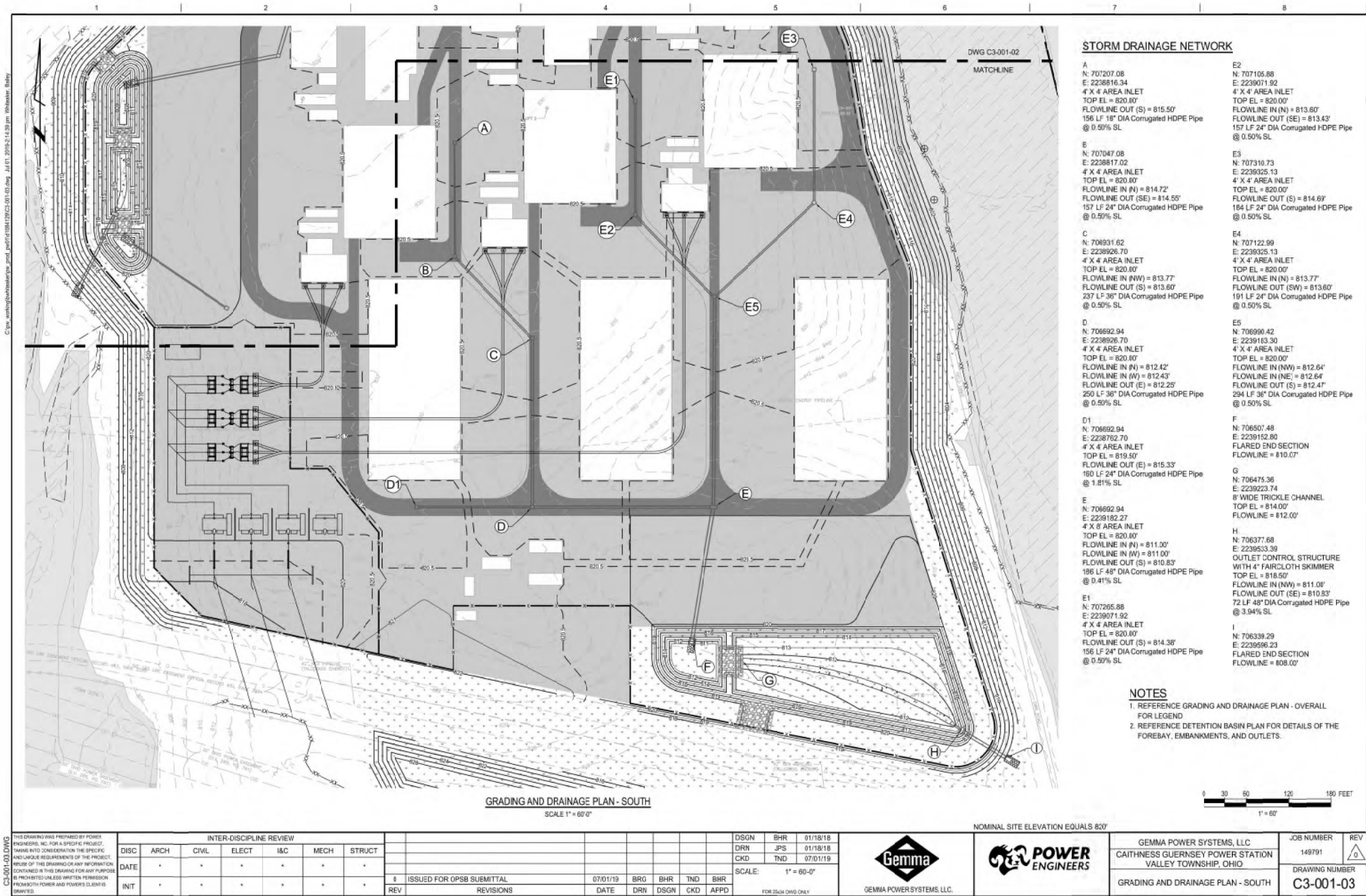
GEMMA POWER SYSTEMS, LLC.



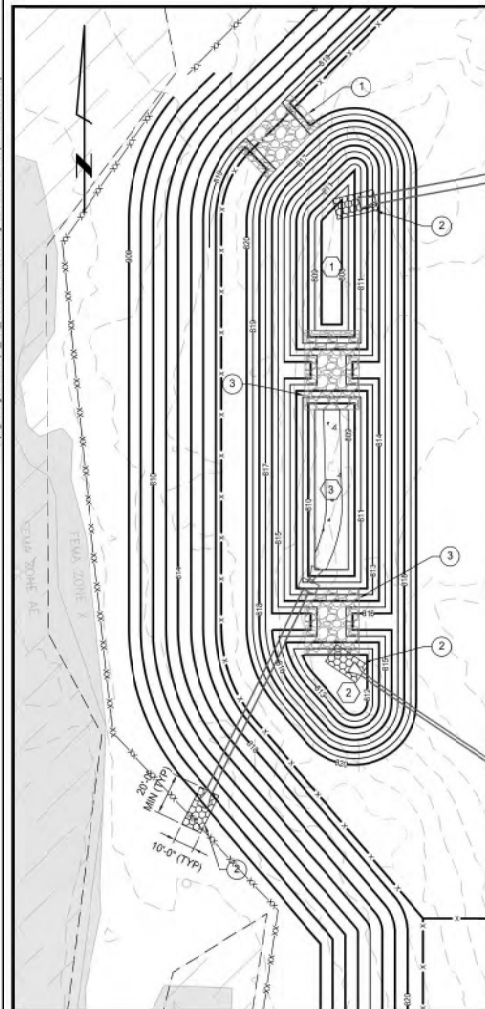
GEMMA POWER SYSTEMS, LLC	
CHAITHNESS GUERNSEY POWER STATION	
VALLEY TOWNSHIP, OHIO	
GRADING AND DRAINAGE PLAN - NORTH	

JOB NUMBER	149791	REV	0
DRAWING NUMBER	C3-001-02		

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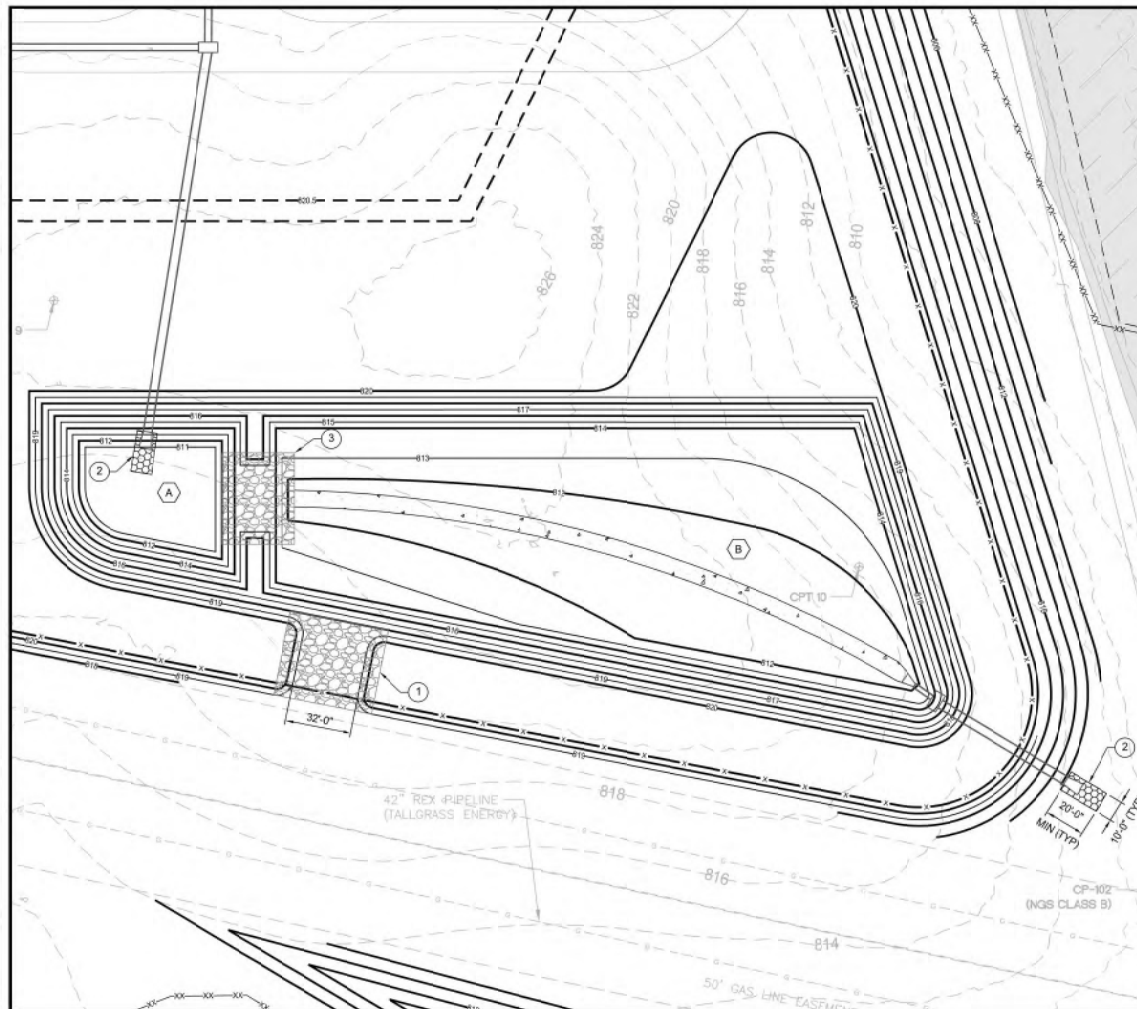


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WEST DETENTION BASIN
SCALE 1" = 30'-0"

- 1 NORTH FOREBAY VOLUME > 9,500 CF
- 2 SOUTH FOREBAY VOLUME > 2,000 CF
- 3 DEWATERING ZONE VOLUME > 21,000 CF



SOUTH DETENTION BASIN
SCALE 1" = 30'-0"

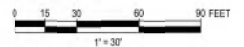
- A FOREBAY VOLUME > 17,000 CF
- B DEWATERING ZONE VOLUME > 30,800 CF

GENERAL NOTES

1. REFERENCE GRADING AND DRAINAGE - OVERALL DRAWING FOR LEGEND.
2. SEE GRADING AND DRAINAGE PLANS FOR DETAILED STORM DRAINAGE DESIGN DATA.
3. SEE STORM DRAINAGE CALCULATIONS FOR DETENTION BASIN AND OUTLET CONTROL DESIGN.

KEYNOTES

1. INSTALL 24" DEEP, CDOT TYPE C RIPRAP EMERGENCY OVERFLOW WEIR
2. INSTALL 24" DEEP, CDOT TYPE C ROCK OUTLET PROTECTION
3. INSTALL SEDIMENT TRAP EMBANKMENT



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REVISIONS						

DSGN	BHR	01/18/18
DRN	JPS	01/18/18
CKD	TND	07/01/19
SCALE: 1" = 30'-0"		
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GEMMA POWER SYSTEMS, LLC.

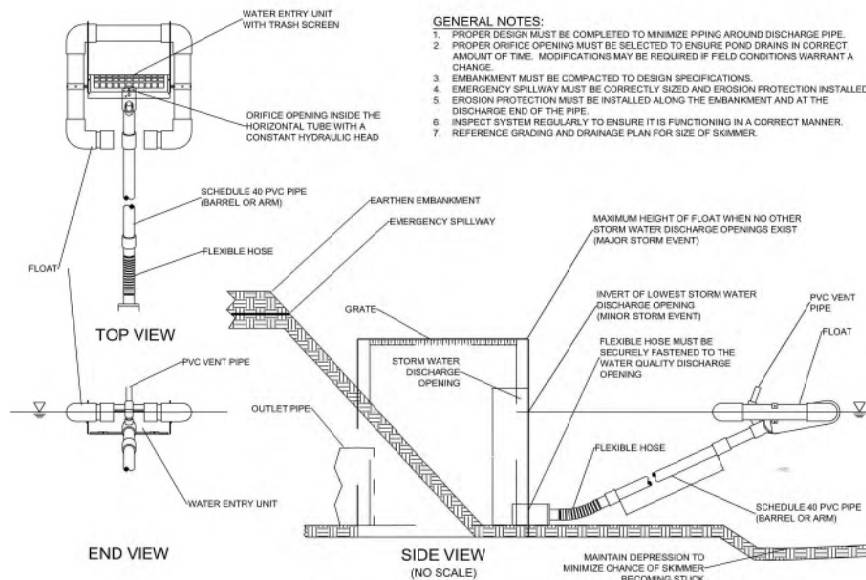


GEMMA POWER SYSTEMS, LLC CAITHNESS GUERNSEY POWER STATION VALLEY TOWNSHIP, OHIO
DETENTION BASIN PLAN

JOB NUMBER 149791	REV 0
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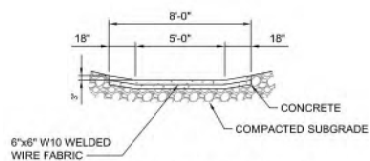
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TYPICAL OUTLET CONTROL STRUCTURE DETAIL

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TYPICAL TRICKLE CHANNEL SECTION

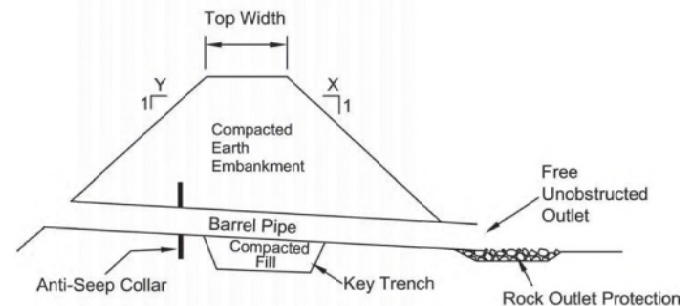
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NOTE

1. PROVIDE CONTRACTION JOINTS AT INTERVALS NOT GREATER THAN 15 FEET.

GENERAL NOTES:

1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. REFERENCE GRADING AND DRAINAGE PLAN FOR SIZE OF SKIMMER.



SECTION

TYPICAL EMBANKMENT DETAIL
NTS

NOMINAL SITE ELEVATION EQUALS 829'

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD

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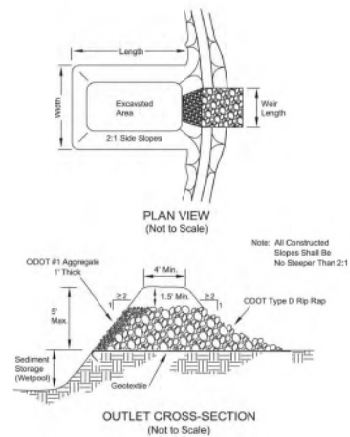
GEMMA POWER SYSTEMS, LLC.



GEMMA POWER SYSTEMS, LLC
CAITHNESS GUERNSEY POWER STATION
VALLEY TOWNSHIP, OHIO
GRADING AND DRAINAGE DETAILS

JOB NUMBER	REV
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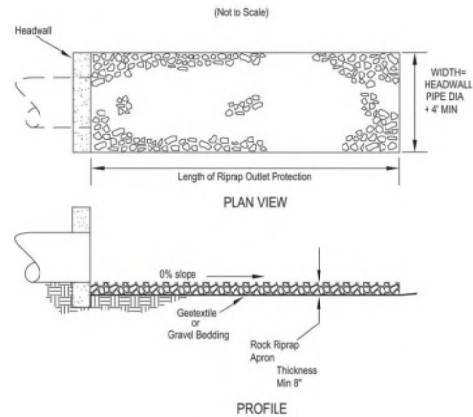
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SEDIMENT TRAP EMBANKMENT DETAIL
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NOTES

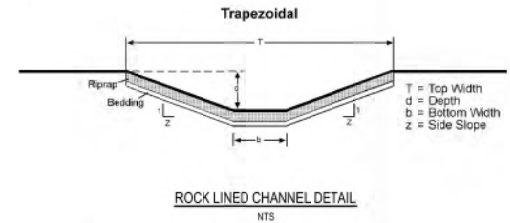
1. WORK SHALL CONSIST OF THE INSTALLATION AND MAINTENANCE OF ALL SEDIMENT TRAPS AT THE LOCATIONS DESIGNATED ON THE DRAWINGS.
2. SEDIMENT TRAPS SHALL BE CONSTRUCTED TO THE DIMENSIONS SPECIFIED ON THE DRAWINGS AND OPERATIONAL PRIOR TO UPSLOPE LAND DISTURBANCE.
3. THE AREA BENEATH THE EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF VEGETATION TO A MINIMUM DEPTH OF SIX (6) INCHES. THE POOL SHALL BE CLEARED AS NEEDED TO FACILITATE SEDIMENT CLEANOUT.
4. FILL USED FOR THE EMBANKMENT SHALL BE EVALUATED TO ASSURE ITS SUITABILITY AND IT MUST BE FREE OF ROOTS OR OTHER WOODY VEGETATION, LARGE ROCKS, ORGANICS OR OTHER OBJECTIONABLE MATERIALS. FILL MATERIAL SHALL BE PLACED IN SIX (6) INCH LIFTS AND SHALL BE COMPACTED BY TRAVERSING WITH A SHEEPSFOOT OR OTHER APPROVED COMPACTION EQUIPMENT. FILL HEIGHT SHALL BE INCREASED FIVE (5) PERCENT TO ALLOW FOR STRUCTURE FOUNDATION SETTLEMENT. CONSTRUCTION SHALL NOT BE PERMITTED IF EITHER THE EARTH FILL OR COMPACTION SURFACE IS FROZEN.
5. THE MAXIMUM HEIGHT OF EMBANKMENT SHALL BE FIVE (5) FEET ALL CUT AND FILL SLOPES SHALL BE 2:1 (H:V) OR FLATTER.
6. TEMPORARY SEEDING SHALL BE ESTABLISHED AND MAINTAINED OVER THE USEFUL LIFE OF THE PRACTICE.
7. THE OUTLET FOR THE SEDIMENT TRAP STRUCTURE SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN ON THE DRAWINGS.
8. THE OUTLET SHALL BE CONSTRUCTED USING THE MATERIALS SPECIFIED ON THE DRAWINGS. WHERE GEOTEXTILE IS USED, ALL OVERLAPS SHALL BE A MINIMUM OF TWO (2) FEET OR AS SPECIFIED BY THE MANUFACTURER, WHICHEVER IS GREATER. ALL OVERLAPS SHALL BE MADE WITH THE UPPER MOST LAYER PLACED LAST. GEOTEXTILE SHALL BE KEVED IN AT LEAST 6" ON THE UPSTREAM SIDE OF THE OUTLET.
9. AFTER ALL SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, THE STRUCTURE AND ALL ASSOCIATED SEDIMENT SHALL BE REMOVED. STABLE EARTH MATERIALS SHALL BE PLACED IN THE SEDIMENT TRAP AREA AND COMPACTED. THE AREA SHALL BE GRADED TO BLEND IN WITH ADJOINING LAND SURFACES AND HAVE POSITIVE DRAINAGE. THE AREA SHALL BE IMMEDIATELY SEEDDED.



ROCK OUTLET PROTECTION DETAIL
NTS

NOTES

1. SUBGRADE FOR THE FILTER OR BEDDING AND RIPRAP SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES AS SHOWN ON THE PLAN. THE SUBGRADE SHALL BE CLEARED OF ALL TREES, STUMPS, ROOTS, SOIL, LOOSE ROCK, OR OTHER MATERIAL.
2. RIPRAP SHALL CONFORM TO THE GRADING LIMITS AS SHOWN ON THE PLAN.
3. GEOTEXTILE SHALL BE SECURELY ANCHORED ACCORDING TO MANUFACTURERS' RECOMMENDATIONS.
4. GEOTEXTILE SHALL BE LAID WITH THE LONG DIMENSION PARALLEL TO THE DIRECTION OF FLOW AND SHALL BE LAID LOOSELY BUT WITHOUT WRINKLES AND CREASES. WHERE JOINTS ARE NECESSARY, STRIPS SHALL BE PLACED TO PROVIDE A 12-IN. MINIMUM OVERLAP, WITH THE UPSTREAM STRIP OVERLAPPING THE DOWNSTREAM STRIP.
5. GRAVEL BEDDING SHALL BE COOT NO. 67'S OR 57'S UNLESS SHOWN DIFFERENTLY ON THE DRAWINGS.
6. RIPRAP SHALL BE PLACED BY EQUIPMENT BUT SHALL BE PLACED IN A MANNER TO PREVENT SLIPPAGE OR DAMAGE TO THE GEOTEXTILE.
7. RIPRAP SHALL BE PLACED BY A METHOD THAT DOES NOT CAUSE SEGREGATION OF SIZES. EXTENSIVE PUSHING WITH A DOZER CAUSES SEGREGATION AND SHALL BE AVOIDED BY DELIVERING RIPRAP NEAR ITS FINAL LOCATION WITHIN THE CHANNEL.
8. CONSTRUCTION SHALL BE SEQUENCED SO THAT OUTLET PROTECTION IS PLACED AND FUNCTIONAL WHEN THE STORM DRAIN, CULVERT, OR OPEN CHANNEL ABOVE IT BECOMES OPERATIONAL.
9. ALL DISTURBED AREAS WILL BE VEGETATED AS SOON AS PRACTICAL.



NOTES

1. SUBGRADE FOR THE FILTER AND RIPRAP SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES AS SHOWN ON THE PLAN. THE SUBGRADE SHALL BE CLEARED OF ALL TREES, STUMPS, ROOTS, SOIL, LOOSE ROCK, OR OTHER MATERIAL.
2. RIPRAP SHALL CONFORM TO THE GRADING LIMITS AS SHOWN ON THE PLAN.
3. NO ABRUPT DEVIATIONS FROM THE DESIGN GRADE OR HORIZONTAL ALIGNMENT SHALL BE PERMITTED.
4. GEOTEXTILE SHALL BE SECURELY ANCHORED ACCORDING TO MANUFACTURERS' RECOMMENDATIONS.
5. GEOTEXTILE SHALL BE LAID WITH THE LONG DIMENSION PARALLEL TO THE DIRECTION OF FLOW AND SHALL BE LAID LOOSELY BUT WITHOUT WRINKLES AND CREASES. WHERE JOINTS ARE NECESSARY, STRIPS SHALL BE PLACED TO PROVIDE A 12-IN. MINIMUM OVERLAP, WITH THE UPSTREAM STRIP OVERLAPPING THE DOWNSTREAM STRIP.
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7. RIPRAP MAY BE PLACED BY EQUIPMENT BUT SHALL BE PLACED IN A MANNER TO PREVENT SLIPPAGE OR DAMAGE TO THE GEOTEXTILE.
8. RIPRAP SHALL BE PLACED BY A METHOD THAT DOES NOT CAUSE SEGREGATION OF SIZES. EXTENSIVE PUSHING WITH A DOZER CAUSES SEGREGATION AND SHALL BE AVOIDED BY DELIVERING RIPRAP NEAR ITS FINAL LOCATION WITHIN THE CHANNEL.
9. CONSTRUCTION SHALL BE SEQUENCED SO THAT RIPRAP CHANNEL PROTECTION IS PLACED AND FUNCTIONAL WITHOUT DELAYS WHEN THE CHANNEL BECOMES OPERATIONAL.
10. ALL DISTURBED AREAS WILL BE VEGETATED AS SOON AS PRACTICAL.

NOMINAL SITE ELEVATION EQUALS 820'

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DSGN	BHR	01/18/18
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GEMMA POWER SYSTEMS, LLC.



GEMMA POWER SYSTEMS, LLC		JOB NUMBER	REV
CAITHNESS GUERNSEY POWER STATION		149791	0
VALLEY TOWNSHIP, OHIO		DRAWING NUMBER	
GRADING AND DRAINAGE DETAILS		C8-003-02	

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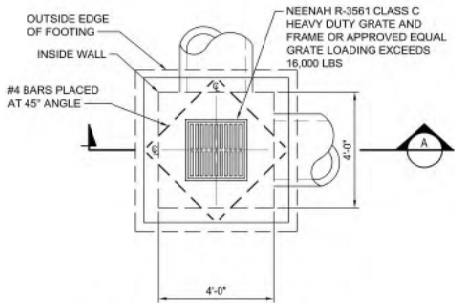


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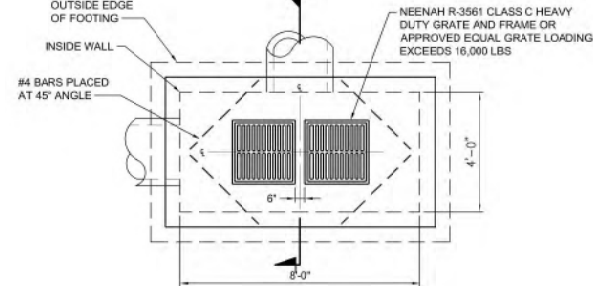
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CAITHNESS GUERNSEY POWER STATION	
VALLEY TOWNSHIP, OHIO	
GRADING AND DRAINAGE DETAILS	

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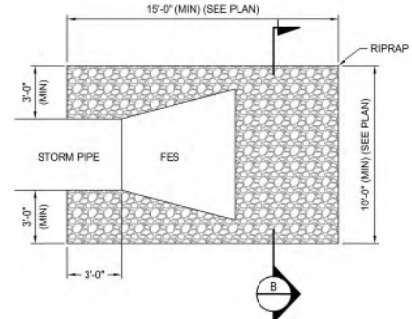
TYPICAL CONCRETE 4' X 4' AREA INLET DETAIL

NTS



TYPICAL CONCRETE 8' X 4' AREA INLET DETAIL

NTS



TYPICAL RIPRAP SECTION

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STORM STRUCTURE NOTES

GENERAL

1. ALL STORM SEWER STRUCTURES SHALL BE PRE-CAST OR POURED IN PLACE. IF PRE-CAST STRUCTURES ARE NOT USED THE TOPS SHALL BE POURED IN PLACE AND THE WALL STEEL SHALL BE LEFT EXPOSED TO A HEIGHT 2' BELOW THE FINISHED TOP ELEVATION.
2. PRE-CAST SHOP DRAWINGS ARE TO BE APPROVED BY THE ENGINEER.
3. DO NOT SCALE THESE DRAWINGS FOR DIMENSIONS OR CLEARANCES. ANY QUESTIONS REGARDING DIMENSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION.
4. ALL STORM DRAINAGE STRUCTURES, GRATES, AND FRAMES SHALL BE TRAFFIC RATED, AASHTO HS-20 LOADING.
5. POINTS OF ATTACHMENT PROVIDED FOR LIFTING PRECAST TOPS SHALL NOT BE LOCATED ON THE TOP SIDE OF INLET TOP. (OTHERWISE, CONTRACTOR SHALL USE A NON-SHRINK GROUT TO CREATE A FLUSH SURFACE.)

CONCRETE

6. INLET FLOORS SHALL BE SHAPED WITH NON-REINFORCED CONCRETE INVERTS TO PROVIDE SMOOTH FLOW.
7. BEVEL ALL EXPOSED EDGES WITH 3/4" TRIANGULAR MOLDINGS.

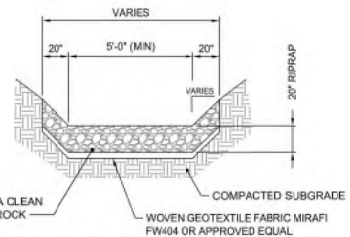
REINFORCING STEEL

8. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BARS 1/2" CLEARANCE SHALL BE PROVIDED THROUGHOUT UNLESS NOTED OTHERWISE TOLERANCE OR +/- 1/2" SHALL BE PERMITTED.
9. ALL LAP SPLICES NOT SHOWN SHALL BE A MINIMUM OF 48" BAR DIAMETERS IN LENGTH.
10. ALL REINFORCING STEEL SHALL BE SUPPORTED ON FABRICATED STEEL BAR SUPPORTS @ 3'-0" MAXIMUM SPACING.
11. ALL DOWELS SHALL BE ACCURATELY PLACED AND SECURELY TIED IN PLACE PRIOR TO PLACEMENT OF BOTTOM SLAB CONCRETE. STICKING OF DOWELS INTO FRESH OR PARTIALLY HARDENED CONCRETE IS NOT ACCEPTABLE.
12. THE BOTTOM SLAB SHALL BE AT LEAST 24 HOURS OLD BEFORE PLACING SIDEWALL CONCRETE. ALL SIDEWALL FORMS SHALL REMAIN IN PLACE A MINIMUM OF 24 HOURS AFTER SIDEWALLS ARE POURED BEFORE REMOVAL, AND AFTER REMOVAL SHALL BE IMMEDIATELY TREATED WITH MEMBRANE CURING COMPOUND.
13. PIPE CONNECTIONS TO PRE-CAST STRUCTURES SHALL HAVE A MINIMUM OF 6" OF CONCRETE AROUND THE ENTIRE PIPE WITHIN 2'-0" OF THE STRUCTURE.
14. THE FOLLOWING SHALL BE STENCILED USING 2 INCH HIGH LETTERS AND BLACK PAINT ON THE FACE OF THE STRUCTURE ADJACENT TO THE INLET (EITHER SIDE) AND ON THE TOP OF THE INLET. NO DUMPING-DRAINS TO STREAM.

CONNECTION TO EXISTING MANHOLE (IF REQUIRED)

1. EXISTING MANHOLE STRUCTURE SHALL BE SUFFICIENTLY BRACED AND PROTECTED TO PREVENT ANY SHIFTING OR DAMAGE TO THE MANHOLE.
2. CORE DRILL DIAMETER HOLE TO ACCOMMODATE NEW STORM SEWER PIPE TO BE EMBEDDED INTO MANHOLE. SEAL AROUND NEW STORM SEWER PIPE WITH NON-SHRINK GROUT OR APPROVED EQUAL. NO IMPACT DEVICES WILL BE ALLOWED TO BE USED FOR MAKING HOLES.
3. PIPE ENTERING INTO STORM SEWER MANHOLE SHALL NOT EXCEED 90 DEGREES ALIGNMENT AGAINST EXISTING STORM SEWER MAIN FLOW.

NOMINAL SITE ELEVATION EQUALS 820'

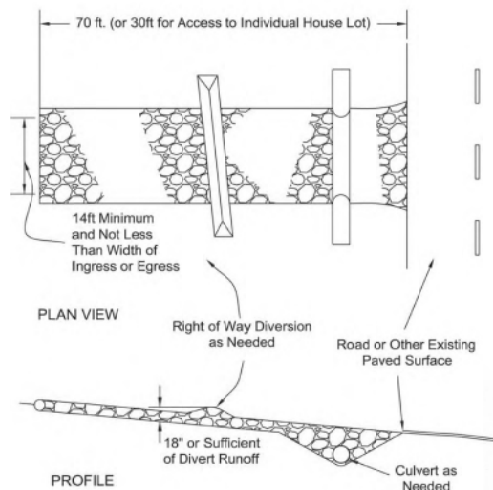


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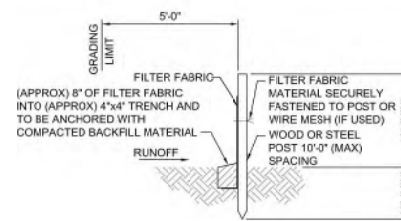
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1. STONE SIZE--ODOT #2 (1 1/2 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH--THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 78 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS).
3. THICKNESS--THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
4. WIDTH--THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE A GEOTEXTILE SHALL BE LAD OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:

Geotextile Specification for Construction Entrance	
Minimum Tensile Strength	200 lbs.
Minimum Puncture Strength	80 psi.
Minimum Tear Strength	50 lbs.
Minimum Burst Strength	320 psi.
Minimum Elongation	20%
Equivalent Opening Size	EOS < 0.6 mm.
Permittivity	1*10-3 cm/sec.

6. TIMING—THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT—A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
8. WATER BAR—A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
9. MAINTENANCE—TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROL, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY GRABING OR SHOVING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMOVAL—THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE. SPECIFICATIONS FOR CONSTRUCTION ENTRANCE



TYPICAL SILT FENCE DETAIL

NTS



1. All silt fence shall be constructed before upslope land disturbance begins.
2. All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions that may carry small concentrated flows to the silt fence are dissipated along its length.
3. Ends of the silt fences shall be brought up slope slightly so that water ponded by the silt fence will be prevented from flowing around the ends.
4. Silt fence shall be placed on the flattest area available.
5. Where possible, vegetation shall be preserved for 5 feet (or as much as possible) upslope from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the installation of the silt fence.
6. The height of the silt fence shall be a minimum of 16 inches above the original ground surface.
7. The silt fence shall be placed in an excavated or sliced trench cut a minimum of 6 inches deep. The trench shall be made with a trencher, cable laying machine, slicing machine, or other suitable device that will ensure an adequately uniform trench depth.
8. The silt fence shall be placed with the stakes on the downslope side of the geotextile. A minimum of 8 inches of geotextile must be below the ground surface. Excess material shall lay on the bottom of the 6-inch deep trench. The trench shall be backfilled and compacted on both sides of the fabric.
9. Seams between sections of silt fence shall be spliced together only at a support post with a minimum 6-in. overlap prior to driving into the ground, (see details).
10. Maintenance—Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff overtopped the silt fence, flows under the fabric or around the fence ends, or in any other way allowed a concentrated flow discharge, one of the following shall be performed, as appropriate: 1) the layout of the silt fence shall be changed, 2) accumulated sediment shall be removed, or 3) other practices shall be installed. Sediment deposits shall be routinely removed when the deposit reaches approximately one-half of the height of the silt fence. Silt fences shall be inspected after each rainfall and at least daily during a prolonged rainfall. The location of existing silt fence shall be reviewed daily to ensure its proper location and effectiveness. If damaged, the silt fence shall be repaired immediately.

1. Fence post – The length shall be a minimum of 32 inches. Wood posts will be 2-by-2-in. nominal dimensioned hardwood of sound quality. They shall be free of knots, splits and other visible imperfections, that will weaken the posts. The maximum spacing between posts shall be 10 ft. Posts shall be driven a minimum 16 inches into the ground where possible. If not possible, the posts shall be adequately secured to prevent overturning of the fence due to sediment/water loading.
2. Silt fence fabric – See chart below.

FABRIC PROPERTIES	VALUES	TEST METHOD
Minimum Tensile Strength	120 lbs. (535 N)	ASTM D 4638
Maximum Elongation at 60 lbs	50%	ASTM D 4638
Minimum Puncture Strength	50 lbs (220 N)	ASTM D 4833
Minimum Tear Strength	40 lbs (160 N)	ASTM D 4533
Apparent Opening Size	≤ 0.84 mm	ASTM D 4757
Minimum Permittivity	1X10 ⁻² sec.-1	ASTM D 4498
UV Exposure Strength Retention	70%	ASTM G 435

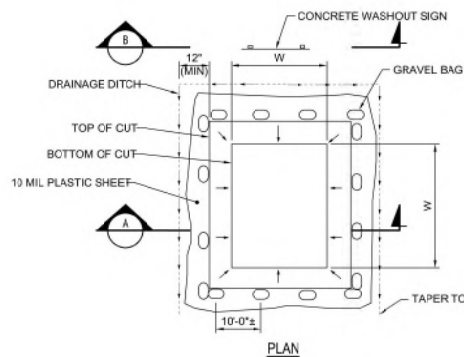
NOMINAL SITE ELEVATION EQUALS 820

INTER-DISCIPLINE REVIEW																				DSGN BHR 01/18/18 DRN JPS 01/18/18 CKD TND 07/01/19						GEMMA POWER SYSTEMS, LLC CAITHNESS GUERNSEY POWER STATION VALLEY TOWNSHIP, OHIO		JOB NUMBER	REVISION
DATE	ARCH	CIVIL	ELECT	I&C	MECH	STRUCT												149791	0										
INIT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*												
0 ISSUED FOR OPSB SUBMITTAL										07/01/19		BRG	BHR	TND	BHR	SCALE: AS NOTED				EROSION CONTROL DETAILS		C8-005-01							
REV REVISIONS										DATE		DRN	DSGN	CKD	APPD	EPPB SCALE: 0.0000 (1:100)													

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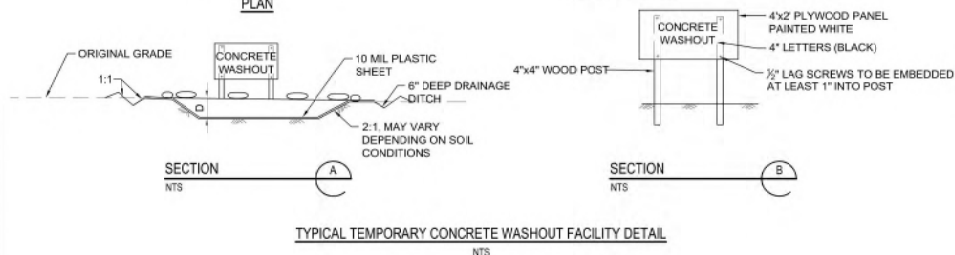


PIT SIZING CHART		
(APPROX.) VOLUME OF SPOILS	(MIN) WIDTH (W)	DEPTH (D)
5 CY OR LESS	3'-0"	12"
5 TO 20 CY	10'-0"	12"
* 20 CY OR MORE	15'-0"	18"

* UTILIZE FOR SITE

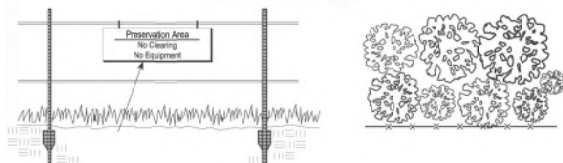
NOTES

1. ULTIMATE WASHOUT SIZE DETERMINED BY AMOUNT OF CONCRETE REQUIRED FOR PROJECT AREA AND/OR POUR LOCATION.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 20' OF THE TEMPORARY CONCRETE WASHOUT.



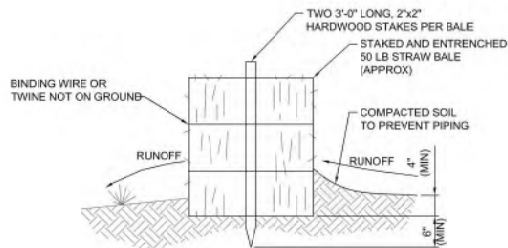
TYPICAL TEMPORARY CONCRETE WASHOUT FACILITY DETAIL

PRESERVATION AREA

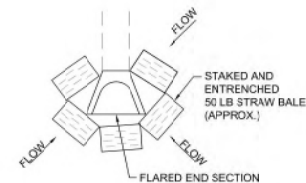


NOTES

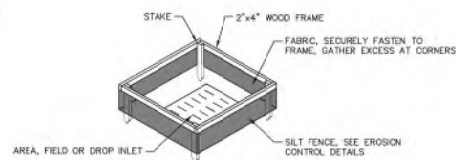
1. PRESERVATION AREA SHALL BE FENCED PRIOR TO BEGINNING CLEARING OPERATIONS. CONTRACTOR SHALL USE A LICENSED SURVEYOR TO STAKE THE DELINEATED WETLANDS ON THIS PROJECT.
2. FENCE MATERIALS SHALL BE METAL FENCE POSTS WITH TWO STRANDS OF HIGH TENSILE WIRE, PLASTIC FENCE OR SNOW FENCE.
3. SIGNAGE SHALL CLEARLY IDENTIFY THE TREE AND NATURAL PRESERVATION AREA AND STATE THAT NO CLEARING OR EQUIPMENT IS ALLOWED WITHIN IT.
4. FENCE SHALL BE PLACED AS SHOWN ON PLANS AND BEYOND THE DRIP LINE OR CANOPY OF TREES TO BE PROTECTED.
5. IF ANY CLEARING IS DONE AROUND SPECIMEN TREES IT SHALL BE DONE BY CUTTING AT GROUND LEVEL WITH HAND HELD TOOLS AND SHALL NOT BE GRUBBED OR PULLED OUT. NO CLEARING SHALL BE DONE IN BUFFER STRIPS OR OTHER PRESERVED FORESTED AREAS.
6. NO FILLING OR STOCKPILING OF MATERIALS SHALL OCCUR WITHIN THE PRESERVATION AREA, INCLUDING DEPOSITION OF SEDIMENT.



TYPICAL STRAW BALE DETAIL



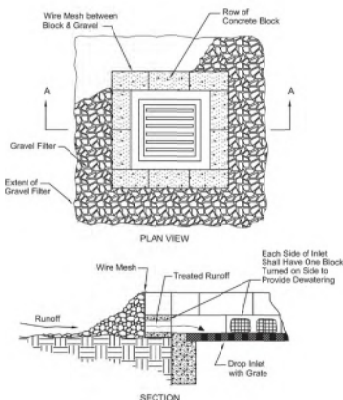
TYPICAL STRAW BALE CULVERT PROTECTION DETAIL



TYPICAL GEOTEXTILE INLET PROTECTION DETAIL

NOTES

1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE INLET BECOMES FUNCTIONAL.
2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 INCHES.
3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-INCH BY 4-INCH CONSTRUCTION GRADE LUMBER. THE 2-INCH BY 4-INCH POSTS SHALL BE DRIVEN ONE (1) FT. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-INCH BY 4-INCH FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF PONDED WATER WILL POSE A SAFETY HAZARD TO TRAFFIC.
4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
5. GEOTEXTILE MATERIAL SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6 INCH LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
7. A COMPACTED EARTH DIKE OR CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION. THE TOP OF THE DIKE SHALL BE AT LEAST 6 INCHES HIGHER THAN THE TOP OF THE FRAME.



BLOCK AND GRAVEL DROP INLET FILTER DETAIL

NOTES

1. PLACE 4-INCH BY 8-INCH BY 12-INCH CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING UPON THE DESIGN NEEDS. BY STACKING COMBINATIONS OF THE SAME SIZE BLOCKS, THE BARRIER OF BLOCKS SHOULD BE AT LEAST 12-INCHES HIGH BUT NO GREATER THAN 24-INCHES HIGH.
2. WIRE MESH SHOULD BE PLACED OVER THE OUTSIDE VERTICAL FACE (WEBBING) OF THE CONCRETE BLOCKS, AS SHOWN BELOW. STONE FROM BEING WASHED THROUGH THE BLOCK CORES. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHOULD BE USED.
3. TWO-INCH STONE SHOULD BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER, AS SHOWN BELOW.
4. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, PULL STONE AWAY FROM THE BLOCKS, CLEAN AND/OR REPLACE.

NOMINAL SITE ELEVATION EQUALS 820'

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INTER-DISCIPLINE REVIEW						
DISC	ARCH	CIVIL	ELECT	ISC	MECH	STRUCT
DATE	*	*	*	*	*	*
INIT	*	*	*	*	*	*

ISSUED FOR OPSB SUBMITTAL		07/01/19	BRG	BHR	TND	BHR
REVISIONS		DATE	DRN	DSGN	CKD	APPD
REV						

DSGN	BHR	01/18/18
DRN	JPS	01/18/18
CKD	TND	07/01/19
SCALE: AS NOTED		
FOR 25x36 DWG ONLY		



GEMMA POWER SYSTEMS, LLC.



GEMMA POWER SYSTEMS, LLC		JOB NUMBER	REV
CAITHNESS GUERNSEY POWER STATION VALLEY TOWNSHIP, OHIO		149791	0
EROSION CONTROL DETAILS		DRAWING NUMBER C8-005-02	

This foregoing document was electronically filed with the Public Utilities

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7/5/2019 2:00:43 PM

in

Case No(s). 16-2443-EL-BGN

Summary: Correspondence of Guernsey Power Station, LLC in Compliance with Condition No. 3 - Part 1 electronically filed by Teresa Orahod on behalf of Dylan F. Borchers