



Variances C-147 Registration Package

***Longfellow Energy Impound 24 Recycling  
Containment***

Section 24, T-17-S, R-28-E, Eddy County,  
New Mexico

**To:** Attn: Ms. Victoria Venegas  
New Mexico EMNRD  
Oil Conservation Division  
811 S. First Street  
Artesia, NM 88210

**From:** David Roybal

**Date:** January 29, 2021

**Subject:** Longfellow Energy – Impound 24 C-147 - Additional Information Request

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On behalf of Longfellow Energy, Pettigrew and Associates submits the following variance requests:

- Recycling containment secondary liner
- Avain protection plan
- Permanent 6' chain link fence

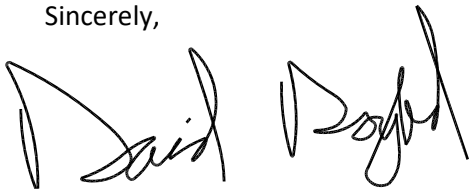
Please find attached with this submittal explanations for the variances listed above as well as information supporting each variance, if applicable.

Furthermore, Longfellow Energy would like to use this letter to clarify the proposed secondary liner as 40 mil HDPE and not 60 mil HDPE as stated on the application submitted November 2, 2020. Updated sheets CS-101 (General Note 9) and CS-501 (Details 2, 3, 4 and 5) are attached to this submittal.

Longfellow would like to request that the surface owner classification be changed from the private to public as it's stated on the cover letter submitted November 2, 2020. Attached with this request, is the cover letter with the updated surface owner classification.

If you have any questions or required additional information regarding any of the variances, secondary liner clarification or change of surface owner classification request, please contact me.

Sincerely,



David Roybal, PE



**To:** Attn: NMOCD District 2 - Artesia  
811 S. First Street  
Artesia, NM 88210

**From:** David Roybal

**Date:** January 29, 2021

**Subject:** REVISED COVER LETTER Longfellow Energy – Impound 24 C-147 Registration

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On behalf of Longfellow Energy, Pettigrew and Associates submits the attached registration. Grading and compaction of the containment and liner foundation will be conducted during construction. No variances from the Rule are necessary and this submittal demonstrates compliance with all mandates of the Rule for the containment. Since the recycling facility meets the criteria of 19.15.34.9.B.7, the facility also requires a registration.

This submission includes the following elements that, for the purpose of OCD statistics, would be listed as variances:


1. An equivalency demonstration written by experts for the proposed 40-mil HDPE secondary liner has been previously submitted and approved by OCD. A variance letter has been provided for this as a part of this revision along with relevant specifications.
2. OCD has approved the proposed Avian Protection Plan (Bird-X Mega Blaster Pro) for other containments. Thus, the plan meets the requirement of the rule that the “otherwise protective of wildlife, including migratory birds”. A variance letter has been provided for this as a part of this revision along with relevant specifications.
3. Using a 6-foot high chain link and/or game fence in lieu of a 4-strand barbed wire fence is not a variance. Because feral pigs, javelena and deer are present in the area, a fence is required in order to comply with Section 19.15.34.12 D.1 of the Rule<sup>1</sup>. The specification for fencing provided in 19.15.34.12 D.2 contradicts D.1 because pigs will move beneath the lower strand of a 4-strand, 4-foot high barbed wire fence and deer will jump over. Thus, compliance with D.2 results in a violation of D.1. We maintain that compliance with D.1 is the critical component of the Rule and a variance letter has been provided as a part of this revision in order to follow Best Management Practices and comply with the Rule.

Site specific information demonstrates compliance with siting criteria for the location.

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<sup>1</sup> The operator shall fence or enclose a recycling containment in a manner that deters unauthorized wildlife and human access and shall maintain the fences in good repair.





On this project an inspector (Engineer's Representative) from Pettigrew and Associates will be present on site during all the phases of construction. Construction will also be overseen by a Senior Project Manager with over 10 years of experience in construction and soil classification. Pettigrew & Associates will sample and test the properties of the soil throughout the construction process. While it is not anticipated, the Engineer will be notified immediately should existing conditions vary from design assumptions.

From the driller's log in Appendix F, it can be concluded that the water is encounter at approximately 160 feet below existing elevation, therefore it complies with Section 19.15.34.11.

Appendix A includes engineering design Longfellow Energy Impound 24 Recycling Containment. It is assumed that the in-situ material underlying the surface will be harvested for construction of roads and locations. As the construction progresses the in-situ material will be assessed. After construction of the liner foundation is complete, as-built drawings will be submitted to OCD.

Appendices B, C and D of this registration package are design/construction, operating and maintenance, and closure plans. These plans are verbatim from previously-approved containment submissions. Additionally we include a site survey and photographs of the proposed containment area in Appendix E. Appendix F presents driller's log from nearby water supply well.

In compliance with 19.15.34.10 of the Rule, this submission is copied to the State of New Mexico who is the surface owner of the public surface upon which the containment is constructed.

If you have any questions or concerns regarding this amendment to the registration or the attached C-147, please contact me.

Sincerely,



David Roybal, PE



**To:** Attn: Ms. Victoria Venegas  
New Mexico EMNRD  
Oil Conservation Division  
811 S. First Street  
Artesia, NM 88210

**From:** David Roybal

**Date:** January 29, 2021

**Subject:** Longfellow Energy – Impound 24 Variance for Avian Protection Plan

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On behalf of Longfellow Energy, Pettigrew and Associates is requesting a variance to Section 19.15.34.12(E) requiring netting to ensure the recycling facility is protected from wildlife, including migratory birds. Longfellow Energy is requesting approval to use the audible deterrent “Mega Blaster Pro” system.

The audible bird deterrents would provide equal or better protection at the proposed recycling containment due to its broadcast distress calls and predator cries deterring a variety of birds. In addition, they require less inspection, maintenance and repair over the life of the facility.

It is in my professional opinion that the audible deterrent “Mega Blaster Pro” will provide equal or better protection to wildlife, including migratory birds. Attached with this request is a sample specification for the “Mega Blaster Pro” system.

If you have any questions or require additional information regarding the bird netting variance, please contact me.

Sincerely,



David Roybal, P.E.  
NM License # 23576





## MEGA BLASTER PRO

### 20-SPEAKER SONIC DETERRENT SYSTEM



Effective wide-area bird control! The Mega Blaster PRO is our most powerful sonic bird control system. It covers up to 25 acres, broadcasting distress calls at up to 125 decibels that frighten infesting birds away for good. Choose any or all of the eight sounds, including predators to give birds even more of a sense of danger. Customize by choosing volume and downtime between sounds.

- Two high-output amplifiers cover up to 25 acres
- Comes with four different configurations for common bird infestations
- Weatherproof, NEMA-type box
- Includes installation consultation
- 30 Day Electronics Performance Satisfaction Guarantee

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Our most powerful system features two high-output amplifiers that drive our specially-designed 20 speaker tower. The intense sound output covers up to 25 acres (10 hectares). It features solid-state electronics mounted inside a NEMA-type control box, suitable for almost any large outdoor application. The generating unit mounts easily to a post or pole using the included hardware.

Birds are stubborn and territorial, returning year after year. Mega Blaster PRO uses their memory against them and scares them away repeatedly so they learn not to return.

**NOTICE: This unit is capable of producing sound output up to 125 decibels. Hearing protection is recommended.**



We have finished using the Mega Blaster in our vineyards now and are very pleased with the results. The unit was mounted on a trailer and shifted every couple of days to confuse the birds. It was mostly used in areas we hadn't had time to cover with nets. There was very little bird damage within a 200 metre radius (12.5 hectares).

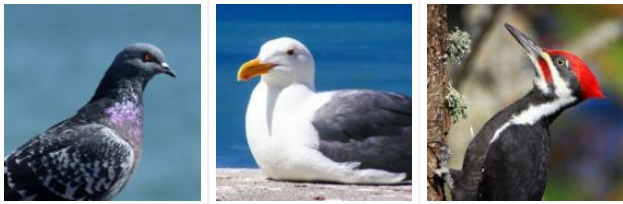
We have used electronic bird repellents for many years with various degrees of success but they had microchips with harassment sounds which were annoying for neighbours. The customized microchips programmed to suit our bird species were much more pleasant and successful.

I would have no hesitation in recommending this electronic equipment as an important tool in bird control. – Herman S. from New Zealand

**For use in large outdoor and unpopulated spaces to repel all types of pest birds.**

Landfills | Airfields | Fish Farms | Wastewater Treatment Facilities

Crows | Starlings | Grackles | Woodpeckers | Seagulls | Cormorants | And more



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### Benefits

- Cut recurring cleanup and repair costs
- Protect property, landscaping, vehicles, & other equipment/assets from corrosive bird droppings
- Reduce health and liability risks associated with pest bird infestation
- Prevent the spread of diseases, such as West Nile, Salmonella, & E. Coli
- Eliminate fire hazards caused by birds building nests in vents & chimneys
- Avoid government and safety inspection failures
- Prevent bird strikes on airfields – improve flight safety & avoid costly airplane/equipment damage

### Configuration Options:


- Agricultural #MEGA-AG
- Crow/Raven #MEGA-CROW
- Woodpecker #MEGA-WP
- Marine/Gull # MEGA-MAR

### Specs

<b>GUARANTEE /WARRANTY:</b>	30 Day Electronics Performance Satisfaction Guarantee, 6 Month Manufacturer's Warranty Against Material Defects
<b>PROTECTION COVERAGE:</b>	Up to 25 acres
<b>SOUND PRESSURE:</b>	Up to 125 decibels
<b>FREQUENCY RANGE:</b>	2,000–10,000 Hz
<b>VOLTAGE OPTIONS:</b>	Solar-powered, requires battery
<b>BOX DIMENSIONS:</b>	Box 1: 23" x 18" x 16" (unit and speaker), Box 2: 32" x 24" x 5" (solar panel)
<b>SHIPPING WEIGHT:</b>	Box 1: 23 lbs., Box 2: 17 lbs.
<b>COMPLIANCE:</b>	UL and CE listed
<b>EPA EST.</b>	075310-OR-001
<b>SKU:</b>	MEGA


### MEGA BLASTER PRO INSTRUCTIONS

### RELATED PRODUCTS




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**To:** Attn: Ms. Victoria Venegas  
New Mexico EMNRD  
Oil Conservation Division  
811 S. First Street  
Artesia, NM 88210

**From:** David Roybal

**Date:** January 29, 2021

**Subject:** Longfellow Energy – Impound 24 Variance for Permanent 6’ Chain Link Fence

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On behalf of Longfellow Energy, Pettigrew and Associates is requesting a variance to Section 19.15.34.12(D) requiring a fence four feet in height, with four strands of barbed wire evenly spaced between one and four feet. Longfellow Energy is requesting approval to use a chain link fence, six feet in height with a minimum of three strands of barbed wire over the top of the chain link

It is in my professional opinion that the chain link fence, six feet in height with a minimum of three strands of barbed wire over the top of the chain link will provide equal or better security to the facility against unauthorized wildlife and human access. Chain link fence details can be found on sheet CS-501, detail 6.

If you have any questions or require additional information regarding the fencing variance, please contact me.

Sincerely,



David Roybal, PE  
NM License # 23576





**To:** Attn: Ms. Victoria Venegas  
New Mexico EMNRD  
Oil Conservation Division  
811 S. First Street  
Artesia, NM 88210

**From:** David Roybal

**Date:** January 29, 2021

**Subject:** Longfellow Energy – Impound 24 Variance for Secondary Liner

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On behalf of Longfellow Energy, Pettigrew and Associates is requesting a variance to Section 19.15.34.12(A)(4) requiring secondary liner to be 30-mil LLDPE string reinforced. Longfellow Energy is requesting approval to use 40-mil HDPE liner.

The proposed 40-mil HDPE liner is an appropriate material to be use in the impoundment due to multiple factors. The proposed liner will be thicker than required and will provide a stronger, tougher and weather (UV) resistant option with a higher density. A thicker liner will also benefit the construction of the pond as it is less likely to be damaged during the installation process.

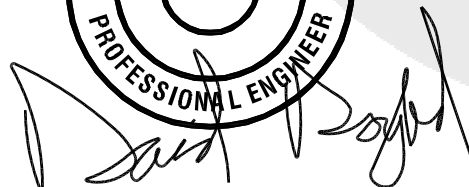
With the leakage through a geomembrane liner being directly a function of the height of liquid head above any hole or imperfection, upgrading from a 30-mil to a 40-mil thickness will decrease the probability of leakage during the pond's operational life.

It is in my professional opinion that the 40-mil HDPE liner as a secondary liner will provide equal or better protection of fresh water, public health and the environment. Attached with this request is a sample specification sheet for the previously mentioned 40-HDPE liner. Additionally, specifications for a 30-mil HDPE liner have been provided for comparison.

If you have any questions or require additional information regarding the secondary liner variance, please contact me.

Sincerely,

David Roybal, PE  
NM License # 23576



## HDPE 7000 Series, 40 mil Black, Smooth

PROPERTY	TEST METHOD	FREQUENCY <sup>(1)</sup>	UNIT Imperial	1102193
<b>SPECIFICATIONS</b>				
Thickness (Nominal $\pm 10\%$ ) (11)	ASTM D5199	Every roll	mils	40
Resin Density	ASTM D1505	Certified	g/cc	> 0.932
Melt Index - 190/2.16 (max.)	ASTM D1238	Certified	g/10 min	1.0
Sheet Density	ASTM D792	1/Batch	g/cc	$\geq 0.940$
Carbon Black Content	ASTM D4218	Every 2 rolls	%	2.0 - 3.0
Carbon Black Dispersion	ASTM D5596	Every 10 rolls	Category	Cat. 1 & Cat. 2
OIT - standard (avg.)	ASTM D3895	Per formulation	min	100
Tensile Properties (min. avg) (2)	ASTM D6693	Every 5 rolls		
Strength at Yield			ppi	85.7
Elongation at Yield			%	12
Strength at Break			ppi	154.2
Elongation at Break			%	700
Tear Resistance (min. avg.)	ASTM D1004	Every 10 rolls	lbf	24
Puncture Resistance (min. avg.)	ASTM D4833	Every 10 rolls	lbf	72
Dimensional Stability	ASTM D1204	Certified	%	$\pm 2$
Stress Crack Resistance (SP-NCTL)	ASTM D5397	1/Batch	hr	500
Oven Aging - % retained after 90 days	ASTM D5721	Per formulation		
HP OIT (min. avg.)	ASTM D5885		%	80
UV Res. - % retained after 1600 hr	ASTM D7238	Per formulation		
HP-OIT (min. avg.)	ASTM D5885		%	50
<b>SUPPLY SPECIFICATIONS(Roll dimensions may vary <math>\pm 1\%</math>)</b>				
Roll Dimension - Width	-		ft	22.5
Roll Dimension - Length	-		ft	940
Area (Surface/Roll)	-		ft <sup>2</sup>	21150

## NOTES

1. Testing frequency based on standard roll dimensions and one batch is approximately 180,000 lbs (or one railcar).
2. Machine Direction (MD) and Cross Machine Direction (XMD or TD) average values should be on the basis of 5 specimens each direction.
11. The minimum average thickness is  $\pm 10\%$  of the nominal value.

\* All values are nominal test results, except when specified as minimum or maximum.

\* The information contained herein is provided for reference purposes only and is not intended as a warranty of guarantee. Final determination of suitability for use contemplated is the sole responsibility of the user. SOLMAX assumes no liability in connection with the use of this information.

Solmax is not a design professional and has not performed any design services to determine if Solmax's goods comply with any project plans or specifications, or with the application or use of Solmax's goods to any particular system, project, purpose, installation or specification.

## HDPE 7000 Series, 30 mil Black, Smooth

PROPERTY	TEST METHOD	FREQUENCY <sup>(1)</sup>	UNIT Imperial	1102187
<b>SPECIFICATIONS</b>				
Thickness (Nominal $\pm 10\%$ ) (11)	ASTM D5199	Every roll	mils	30
Resin Density	ASTM D1505	Certified	g/cc	> 0.932
Melt Index - 190/2.16 (max.)	ASTM D1238	Certified	g/10 min	1.0
Sheet Density	ASTM D792	1/Batch	g/cc	$\geq 0.940$
Carbon Black Content	ASTM D4218	Every 2 rolls	%	2.0 - 3.0
Carbon Black Dispersion	ASTM D5596	Every 10 rolls	Category	Cat. 1 & Cat. 2
OIT - standard (avg.)	ASTM D3895	Per formulation	min	100
Tensile Properties (min. avg) (2)	ASTM D6693	Every 5 rolls		
Strength at Yield			ppi	63
Elongation at Yield			%	12
Strength at Break			ppi	114
Elongation at Break			%	700
Tear Resistance (min. avg.)	ASTM D1004	Every 10 rolls	lbf	18
Puncture Resistance (min. avg.)	ASTM D4833	Every 10 rolls	lbf	54
Dimensional Stability	ASTM D1204	Certified	%	$\pm 2$
Stress Crack Resistance (SP-NCTL)	ASTM D5397	1/Batch	hr	500
Oven Aging - % retained after 90 days	ASTM D5721	Per formulation		
HP OIT (min. avg.)	ASTM D5885		%	80
UV Res. - % retained after 1600 hr	ASTM D7238	Per formulation		
HP-OIT (min. avg.)	ASTM D5885		%	50
<b>SUPPLY SPECIFICATIONS(Roll dimensions may vary <math>\pm 1\%</math>)</b>				
Roll Dimension - Width	-		ft	22.5
Roll Dimension - Length	-		ft	1240
Area (Surface/Roll)	-		ft <sup>2</sup>	27900

## NOTES

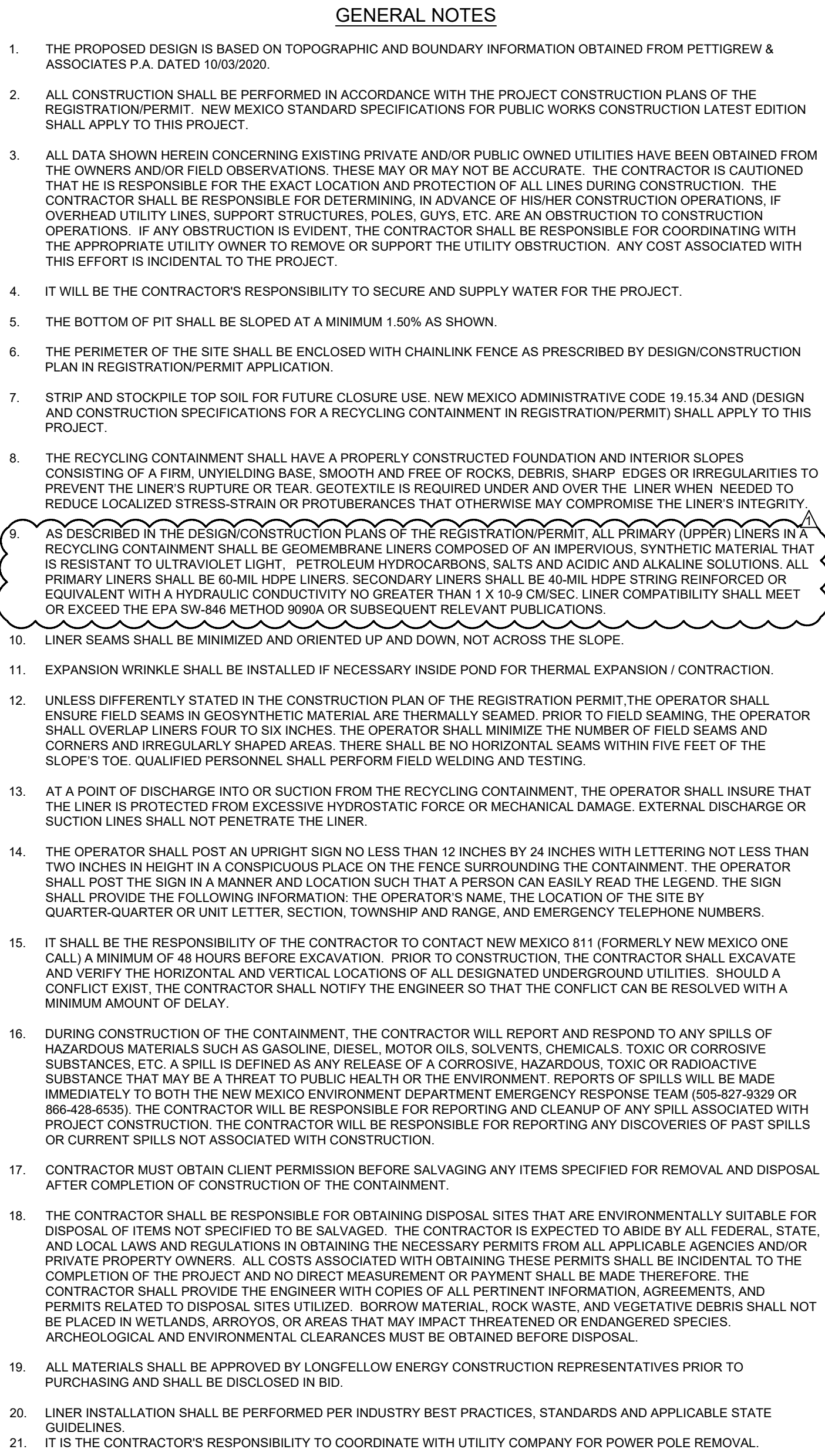
1. Testing frequency based on standard roll dimensions and one batch is approximately 180,000 lbs (or one railcar).
2. Machine Direction (MD) and Cross Machine Direction (XMD or TD) average values should be on the basis of 5 specimens each direction.
11. The minimum average thickness is  $\pm 10\%$  of the nominal value.

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LINER QUANTITIES				
	PRIMARY LINER (SQ. FT.)	SECONDARY LINER (SQ. FT.)	GEONET (SQ. FT.)	GEOTEXTILE (SQ. FT.)
RECYCLING CONTAINMENT WEST	411,060.00	411,060.00	411,060.00	411,060.00
RECYCLING CONTAINMENT EAST	411,060.00	411,060.00	411,060.00	411,060.00
<b>TOTAL</b>	<b>822,120.00</b>	<b>822,120.00</b>	<b>822,120.00</b>	<b>822,120.00</b>
<b>TOTAL + 5% CONTINGENCY</b>	<b>863,226.00</b>	<b>863,226.00</b>	<b>863,226.00</b>	<b>863,226.00</b>

1. LINER QUANTITIES WERE CALCULATED TO THE EDGE OF THE ANCHOR TRENCH AS SHOWN IN DETAIL 5, SHEET CS-501.
2. QUANTITIES DO NOT INCLUDE MATERIAL INSIDE THE ANCHOR TRENCH.
3. QUANTITIES DO NOT INCLUDE LINER OVERLAPPING.

## GENERAL NOTES

1. THE PROPOSED DESIGN IS BASED ON TOPOGRAPHIC AND BOUNDARY INFORMATION OBTAINED FROM PETTIGREW & ASSOCIATES P.A. DATED 10/03/2020.
2. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT CONSTRUCTION PLANS OF THE REGISTRATION/PERMIT. NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION LATEST EDITION SHALL APPLY TO THIS PROJECT.
3. ALL DATA SHOWN HEREIN CONCERNING EXISTING PRIVATE AND/OR PUBLIC OWNED UTILITIES HAVE BEEN OBTAINED FROM THE OWNERS AND/or FIELD OBSERVATIONS. THESE MAY OR MAY NOT BE ACCURATE. THE CONTRACTOR IS CAUTIONED THAT HE IS RESPONSIBLE FOR THE EXACT LOCATION AND PROTECTION OF ALL UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING, IN ADVANCE OF HIS/her CONSTRUCTION OPERATIONS, IF OVERHEAD UTILITY LINES, SUPPORT STRUCTURES, POLES, GUYS, ETC. ARE AN OBSTRUCTION TO CONSTRUCTION OPERATIONS. IF ANY OBSTRUCTION IS EVIDENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH APPROPRIATE UTILITY OWNER TO REMOVE OR SUPPORT THE UTILITY OBSTRUCTION. ANY COST ASSOCIATED WITH THIS EFFORT IS INCIDENTAL TO THE PROJECT.
4. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO SECURE AND SUPPLY WATER FOR THE PROJECT.
5. THE BOTTOM OF PIT SHALL BE SLOPED AT A MINIMUM 1:50% AS SHOWN.
6. THE PERIMETER OF THE SITE SHALL BE ENCLOSED WITH CHAINLINK FENCE AS PRESCRIBED BY DESIGN/CONSTRUCTION PLAN IN REGISTRATION/PERMIT APPLICATION.
7. STRIP AND STOCKPILE TOP SOIL FOR FUTURE CLOSURE USE. NEW MEXICO ADMINISTRATIVE CODE 19.15.34 AND (DESIGN AND CONSTRUCTION SPECIFICATIONS FOR A RECYCLING CONTAINMENT IN REGISTRATION/PERMIT) SHALL APPLY TO THIS PROJECT.
8. THE RECYCLING CONTAINMENT SHALL HAVE A PROPERLY CONSTRUCTED FOUNDATION AND INTERIOR SLOPES CONSISTING OF A FIRM, UNWEAVING BARE, SMOOTH AND FREE OF ROCKS, DEBRIS, SHARP EDGES OR IRREGULARITIES TO PREVENT THE LINER FROM BEING PUNCTURED. THE LINER SHALL BE QUERED UNDER AND OVER THE LINER WHEN NEEDED TO REDUCE LOCALIZED STRESS-STRAIN OR PROTRUSIONS THAT OTHERWISE MAY COMPROMISE THE LINER'S INTEGRITY.
9. AS DESCRIBED IN THE DESIGN/CONSTRUCTION PLANS OF THE REGISTRATION/PERMIT, ALL PRIMARY (UPPER) LINERS IN A RECYCLING CONTAINMENT SHALL BE GEOMEMBRANE LINERS COMPOSED OF AN IMPERVIOUS, SYNTHETIC MATERIAL THAT IS RESISTANT TO ULTRAVIOLET LIGHT, PETROLEUM HYDROCARBONS, SALTS AND ACIDIC AND ALKALINE SOLUTIONS. ALL PRIMARY LINERS SHALL BE 60-MIL HOPE LINERS. SECONDARY LINERS SHALL BE 40-MIL HOPE STRIP REINFORCED OR COMPOSITE WITH A HYDRAULIC CONDUCTIVITY NO GREATER THAN  $1 \times 10^{-9}$  CM/SEC. LINER COMPATIBILITY SHALL MEET OR EXCEED THE EPA SW-846 METHOD 9090A OR SUBSEQUENT RELEVANT PUBLICATIONS.
10. LINER SEAMS SHALL BE MINIMIZED AND ORIENTED UP AND DOWN, NOT ACROSS THE SLOPE.
11. EXPANSION WRINKLE SHALL BE INSTALLED IF NECESSARY INSIDE POND FOR THERMAL EXPANSION / CONTRACTION.
12. UNLESS DIFFERENTIALLY STATED IN THE CONSTRUCTION PLAN OF THE REGISTRATION PERMIT THE OPERATOR SHALL ENSURE FIELD SEAMS IN GEOSYNTHETIC MATERIAL ARE THERMALLY SEALED, PRIOR TO FIELD SEAMING, THE OPERATOR SHALL OVERLAP LINERS FOUR TO SIX INCHES, THE OPERATOR SHALL MINIMIZE THE NUMBER OF FIELD SEAMS AND CORNERS AND IRRADIATED AREAS. THERE SHALL BE NO HORIZONTAL SEAMS WITHIN FIVE FEET OF THE SLOPE'S TOE. QUALIFIED PERSONNEL SHALL PERFORM FIELD WELDING AND TESTING.
13. AT A POINT OF DISCHARGE INTO OR SUCTION FROM THE RECYCLING CONTAINMENT, THE OPERATOR SHALL INSURE THAT THE LINER IS PROTECTED FROM EXCESSIVE HYDROSTATIC FORCE OR MECHANICAL DAMAGE. EXTERNAL DISCHARGE OR SUCTION LINES SHALL NOT PENETRATE THE LINER.
14. THE OPERATOR SHALL POST AN UPRIGHT SIGN NO LESS THAN 12 INCHES BY 24 INCHES WITH LETTERING NOT LESS THAN TWO INCHES IN HEIGHT IN A CONSPICUOUS PLACE ON THE FENCE SURROUNDING THE CONTAINMENT. THE OPERATOR SHALL POST THE SIGN IN A MANNER AND LOCATION SUCH THAT A PERSON CAN EASILY READ THE LEGEND. THE SIGN SHALL PRODUCE THE FOLLOWING INFORMATION: THE OPERATOR'S NAME, THE LOCATION OF THE SITE BY QUARTER-QUARTER OR LOT LETTER, SECTION, TOWNSHIP AND RANGE, AND EMERGENCY TELEPHONE NUMBERS.
15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT NEW MEXICO 811 (FORMERLY NEW MEXICO ONE CALL) A MINIMUM OF 48 HOURS BEFORE EXCAVATION. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL DESIGNATED UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
16. DURING CONSTRUCTION OF THE CONTAINMENT, THE CONTRACTOR WILL REPORT AND RESPOND TO ANY SPILLS OF HAZARDOUS MATERIALS SUCH AS GASOLINE, DIESEL, MOTOR OIL, SOLVENTS, CHEMICALS, TOXIC OR CORROSIVE SUBSTANCES, ETC., OIL SPILLS, ETC., OR FLAMMABLES, ETC., OR ANY RELEASE OF A CORROSIVE, HAZARDOUS, TOXIC OR RADIOACTIVE SUBSTANCE THAT MAY BE A THREAT TO PUBLIC HEALTH OR THE ENVIRONMENT. REPORTS OF SPILLS WILL BE MADE IMMEDIATELY TO BOTH THE NEW MEXICO ENVIRONMENT DEPARTMENT EMERGENCY RESPONSE TEAM (905-827-9329 OR 905-827-9330). THE CONTRACTOR WILL BE RESPONSIBLE FOR REPORTING AND CLEANUP OF ANY SPILL ASSOCIATED WITH PROJECT CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPORTING ANY DISCOVERIES OF PAST SPILLS OR CURRENT SPILLS NOT ASSOCIATED WITH CONSTRUCTION.
17. CONTRACTOR MUST OBTAIN CLIENT PERMISSION BEFORE SALVAGING ANY ITEMS SPECIFIED FOR REMOVAL AND DISPOSAL. AFTER COMPLETION OF CONSTRUCTION OF THE CONTAINMENT.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING DISPOSAL SITES THAT ARE ENVIRONMENTALLY SUITABLE FOR DISPOSAL OF ITEMS NOT SPECIFIED TO BE SALVAGED. THE CONTRACTOR IS EXPECTED TO ABIDE BY ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS IN OBTAINING THE NECESSARY PERMITS FROM ALL APPLICABLE AGENCIES AND/OR PROPERTY OWNERS. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPORTING AND CLEANUP OF ANY SPILL ASSOCIATED TO THE COMPLETION OF THE PROJECT AND NO DIRECT MEASUREMENT OR PAYMENT SHALL BE MADE THEREFORE. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH COPIES OF ALL PERTINENT INFORMATION, AGREEMENTS, AND PERMITS RELATED TO DISPOSAL, SITES UTILIZED, BORROW MATERIAL, ROCK WASTE, AND VEGETATIVE DEBRIS SHALL NOT BE PLACED IN WETLANDS OR OTHER AREAS THAT MAY BE IMPACTED BY THREATENED OR ENDANGERED SPECIES. ARCHEOLOGICAL AND ENVIRONMENTAL CLEARANCES MUST BE OBTAINED BEFORE DISPOSAL.
19. ALL MATERIALS SHALL BE APPROVED BY LONGFELLOW ENERGY CONSTRUCTION REPRESENTATIVES PRIOR TO PURCHASING AND SHALL BE DISCLOSED IN BID.
20. LINER INSTALLATION SHALL BE PERFORMED PER INDUSTRY BEST PRACTICES, STANDARDS AND APPLICABLE STATE GUIDELINES.
21. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH UTILITY COMPANY FOR POWER POLE REMOVAL.

## KEYED NOTES

- 1 POND SUMP PER DETAIL 1, SHEET CS-501
- 2 LEAK DETECTION SYSTEM PER DETAILS 1, 2 AND 3, SHEET CS-501
- 3 3' FREEBOARD DEPTH (ELEV. 3647.10')
- 4 ANCHOR TRENCH PER DETAIL 5, SHEET CS-501
- 5 CONTAINMENT FENCE WITH NETTING (BY OTHERS)
- 6 PERMANENT 6" CHAINLINK FENCE PER DETAIL 6, SHEET CS-501
- 7 EXISTING POWER POLE TO BE REMOVED

## LEGEND

	FINISH GRADE 1.0' CONTOUR
	FINISH GRADE 5.0' CONTOUR
	EXIST. GRADE 1.0' CONTOUR
	EXIST. GRADE 5.0' CONTOUR
	GRADING LIMITS
	FLOWLINE
	CONTAINMENT FENCE
	PERMANENT CHAINLINK FENCE
	FREEBOARD ELEVATION
	ANCHOR TRENCH

## REVISIONS

[illegible]

# GENERAL SITE LAYOUT AND GENERAL NOTES

IMPOUND 24  
RECYCLING  
CONTAINMENT

LONGFELLOW ENERGY

PROJECT NUMBER:

2020.1212

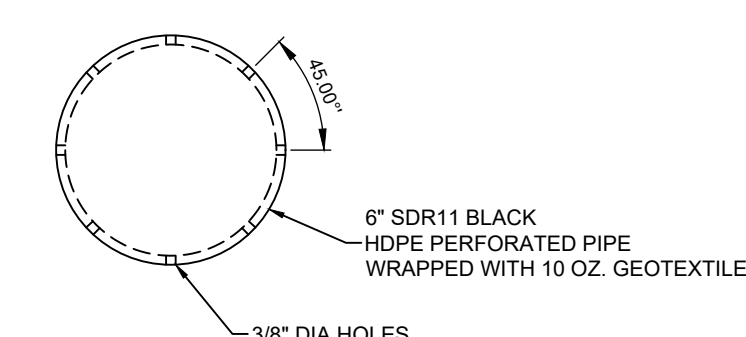
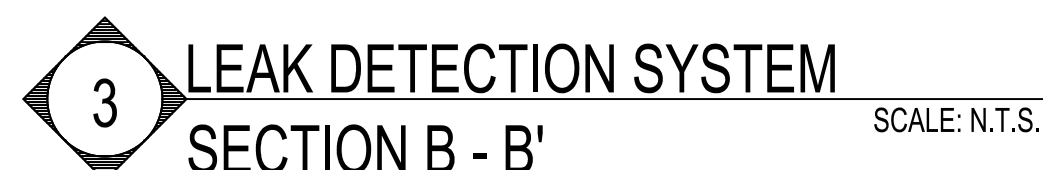
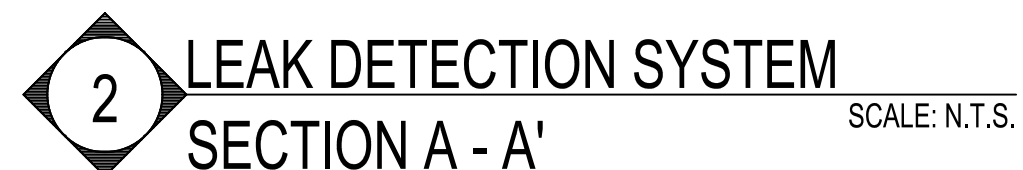
SHEET:

CS-101



PROJECT ENGINEER:	David Roybal, PE
PROJECT DESIGNER:	Juan C. Dominguez, E
DRAWN BY:	Juan C. Dominguez, E





REVISIONS

[illegible]CIVIL  
DETAILS

IMPOUND 24  
RECYCLING  
CONTAINMENT

LONGFELLOW ENERGY

PROJECT NUMBER:

2020.1212

SHEET:

CS-501