



Interoffice Memorandum

October 31, 2022

To: Katie Smith, Manager
Comptroller Clerk's Office

Through: Cheryl Gillespie, Agenda Development Supervisor
Agenda Development

From: David D. Jones, P.E., CEP, Manager
Environmental Protection Division
(407) 836-1406

**Staff Person: Elizabeth R. Johnson, CEP, Assistant Manager
Environmental Protection Division
(407) 836-1511**

Subject: Request for Public Hearing on December 13, 2022, at 2:00 p.m., for a Shoreline Alteration/Dredge and Fill Permit Application (SADF-22-03-008) to authorize maintenance dredging of an existing canal within the Hidden Oaks Condominiums on the properties located at Riverview Way, Cedar Creek Court, and Cedar Springs Place, Winter Park, FL 32792 (Parcel ID Nos. 11-22-30-3582-00-001, 11-22-30-3583-00-001, and 11-22-30-3594-00-001, District 5.

=====

Applicant: Hidden Oaks Condominium Association, Inc.

Type of Hearing: Shoreline Alteration/Dredge and Fill Permit Application

Hearing required by
Florida Statute # or Code: Chapter 15, Article VI, Pumping and Dredging Control

Advertising requirements: Publish once in a newspaper of general circulation in Orange County at least (7) seven days prior to public hearing.

Advertising timeframes: At least (7) seven days prior to public hearing.

Abutters to be notified: The applicants and the property owners within 500 feet of the project area will be notified at least (7) seven days prior to public hearing by the Environmental Protection Division (EPD).

October 31, 2022

Request for Public Hearing – Shoreline Alteration/Dredge and Fill Permit Application for Hidden Oaks Condominium Association, Inc. (SADF-22-03-008)

Estimated time required

For public hearing: 2 minutes

Lake Advisory Board

to be notified: N/A

Municipality or other

Public Agency to be

notified: St. Johns River Water Management District, Marc VonCanal,
Mvoncana@sjrwmd.com

Hearing Controversial: No

District #: 5

Materials being submitted as backup for public hearing request:

1. Location Map
2. Site Plan

Special Instructions to Clerk:

1. Once the Board of County Commissioners makes a decision on the Shoreline Alteration/Dredge and Fill Permit Application, please submit the decision letter to Liz Johnson with EPD. EPD will issue the decision to the applicant.

Advertising Language:

1. Applicant, Hidden Oaks Condominium Association, Inc., is requesting a Shoreline Alteration/Dredge and Fill Permit (SADF-22-03-008) to authorize maintenance dredging of an existing canal on the properties located at Riverview Way, Cedar Creek Court, and Cedar Springs Place, Winter Park, FL 32792, pursuant to Chapter 15, Article VI, Pumping and Dredging Control. Parcel ID Nos. 11-22-30-3582-00-001, 11-22-30-3583-00-001, and 11-22-30-3594-00-001, District 5 (property legal description on file at EPD).

JR/TMH/ERJ/DJ: jk

Attachments

Erosion and Sedimentation Control Plan for Ditch at Hidden Oaks Condominium Association, Inc.

received
10-17-2022




LOCATION MAP

INDEX OF SHEETS	
SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3	LEGEND AND ABBREVIATIONS
4-5	TOPOGRAPHIC PLAN
6	SURVEY CONTROL PLAN
7	EROSION CONTROL ELEMENT PLAN
8	SUMMARY OF QUANTITIES
9-12	PLAN AND PROFILE
13-19	CROSS SECTIONS
20	DETAIL - STEP POND
21-25	MANUFACTURER'S SPECIFICATIONS

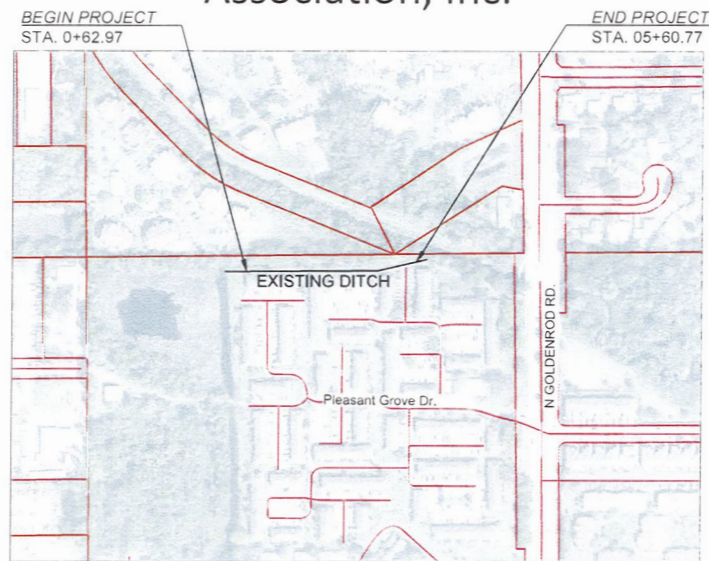
PREPARED FOR

Hidden Oaks Condo Association, Inc.
3303 Hidden Timber Lane,
Winter Park, FL 32792

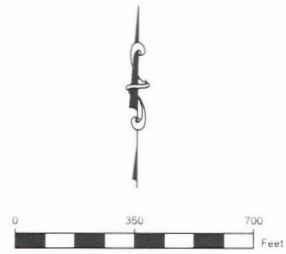
PREPARED BY
 **Landshore Enterprises, LLC**
"Your Shoreline Protection Specialists"
138 Shamrock Blvd.
Orlando, FL 32819
Office: 407.942.9238
Fax: 407.218.6113
Email: info@landshore.com
PIETER M. LOMBARD
ENGINEER, P.E.
FLORIDA REGISTRATION NO. 66596

DESIGNED BY: SM DATE: 08/17/2021
DRAWN BY: SM DATE: 07/15/2021
CHECKED BY: AWG DATE: 08/04/2022
APPROVED BY: PML DATE: 08/09/2022
PROJECT NO: 2019-137

SHEET 1
OF 25



LOCATION MAP
SECTION 11 TOWNSHIP 22S RANGE 30E



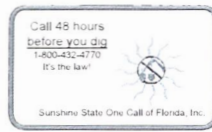
SITE LOCATION

7302
Cedar Creek Ct,
Winter Park, FL 32792

28.587997, -81.288156
28°35'16.8"N, 81°17'17.4"W

JULY 31, 2020

- PROJECT NOTES**
- GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS AMENDED BY CONSTRUCTION DOCUMENTS.
 - PLANS WERE PREPARED ACCORDING TO INFORMATION COLLECTING ON THE FIELD WITH SURVEYING INSTRUMENTS. HISTORICAL DATA FROM PUBLICLY AVAILABLE SOURCES AND ORANGE COUNTY GIS DATA PARCELS, LOTS, ROADWAYS, ETC.
 - THE SCALES OF THE PLANS MAY HAVE CHANGES DUE TO REPRODUCTION, ESPECIALLY IF THE PAPER SIZE WILL BE CHANGED. THESE PLAN SHEETS SHOULD BE PRINTED OR PLOTTED ON 11"X17" PAPER.
 - COORDINATE SYSTEMS HEREON FOR THE HORIZONTAL SYSTEM ARE BASED ON NORTH AMERICA DATUM OF 1983 (NAD 83) FLORIDA STATES PLANES, WEST ZONE AND FOR THE VERTICAL SYSTEM ARE BASED ON NORTH AMERICA VERTICAL DATUM 1988 (NAVD 88), AND THE UNITS ARE BASED ON US FOOT.
 - OFFICIAL BENCHMARKS FOR THIS PROJECT COULD NOT BE FOUND AROUND OR NEAR THE JOB SITE OR AREA IN STUDY.
 - THE BEARINGS VALUES SHOWN HEREON ARE BASED ON GPS/RTK OBSERVATIONS AND RTK CORRECTIONS FROM THE FLORIDA DEPARTMENT OF TRANSPORTATION, FLORIDA PERMANENT REFERENCE NETWORK.
 - THE PROJECT SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE. THERE MAY BE INSTRUMENTS OF RECORD AND NOT OF RECORD AFFECTING THE SUBJECT PARCEL THAT ARE NOT SHOWN ON THIS SURVEY.
 - CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE-CALL AT 1-(800)-432-4770 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY DIGGING TO VERIFY THE EXACT LOCATION OF EXISTING UTILITIES. A CONTRACTOR'S REPRESENTATIVE MUST BE PRESENT WHEN UTILITY COMPANIES LOCATE THEIR FACILITIES.



REVISIONS	DATE	BY
REDESIGN - ADDITIONAL QUANTITIES	07/20/21	SM
REDESIGN - TURNPIKE BARRIER MOVES	06/01/21	SM
REDESIGN - TURNPIKE BARRIER MOVES	05/02/21	SM
ADDED UTILITY PLANNING TO TYPICAL SECTION	05/02/21	SM

Pieter
Lombard

Digitally signed by Pieter
Lombard
Date: 2022.10.17 12:41:58
-04'00'

ENGINEER PIETER M. LOMBARD REG. NO. 66596 DATE 10-17-2022

CERTIFICATION TO PLANS

THIS IS TO CERTIFY THAT THE CONSTRUCTION PLANS AND SPECIFICATIONS AS CONTAINED HEREIN WERE PREPARED AND DESIGNED BY LANDSHORE ENTERPRISES, LLC. THESE CONSTRUCTION DRAWINGS WERE PREPARED EITHER DIRECTLY, OR UNDER THE SUPERVISION AND DIRECTION OF THE RESPECTIVE UNDERSIGNED, WHOSE LICENSED AS A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF FLORIDA.

1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF GOVERNMENT ENTITIES WHICH WILL APPLY, AND ALL OTHER LOCAL AND NATIONAL CODES WHERE APPLICABLE
2. ALL CONSTRUCTION SHALL BE PERFORMED IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE STRICTLY OBSERVED
3. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING CONSTRUCTION.
4. UPON RECEIPT OF NOTICE OF AWARD AND AFTER OBTAINING AN ENGINEERING CONSTRUCTION PERMIT FROM APPLICABLE AGENCIES, THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE CLIENT, THE CONTRACTOR AND THE ENGINEER OF RECORD.
5. CONTRACTOR SHALL CONTACT STATE 811, AT LEAST 48 HOURS PRIOR TO PERFORMING ANY DIGGING TO VERIFY THE EXACT LOCATION OF EXISTING UTILITIES. A CONTRACTOR'S REPRESENTATIVE MUST BE PRESENT WHEN UTILITY COMPANIES LOCATE THEIR FACILITIES.
6. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD AND UNDERGROUND UTILITIES.
7. EXISTING UNDERGROUND UTILITIES, IF SHOWN ON THE DRAWINGS, HAVE BEEN SHOWN BASED UPON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE REQUIRED TO MARK AND CLEARLY DELINEATE LOCATIONS OF EXISTING UTILITIES WITHIN AREAS OF WORK PRIOR TO EXCAVATION TO AVOID DAMAGE. THE CONTRACTOR SHALL MAKE A FIELD VERIFICATION, COORDINATION WITH UTILITY COMPANIES AND ELECTRONIC OR OTHER SUCH DETECTION TECHNOLOGY AND MEANS AND SHALL BEAR ALL COSTS FOR THIS WORK.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS AND COSTS TO CORRECT DAMAGES RESULTING FROM FAILURE TO TAKE ALL NECESSARY PRECAUTIONS INCLUDING LOCATING, MARKING AND CAREFUL EXCAVATION. (CONTRACTOR SHALL AVOID DAMAGING EXISTING IRRIGATION SYSTEMS. IN CASE OF DAMAGE, THE CONTRACTOR SHALL REPLACE IRRIGATION SYSTEMS TO MATCH EXISTING CONDITIONS AND LOCATION)
9. IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER.
10. CONTRACTOR SHALL PROVIDE HIS OWN LINE AND GRADE FROM HORIZONTAL AND VERTICAL CONTROL.
11. FOR EACH PROJECT AREA, VERTICAL CONTROL IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NAVD 88).
12. ANY N.A. V.D. BENCH MARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED AND PROPERLY REFERENCED BY A REGISTERED-PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE MINIMUM TECHNICAL STANDARDS OF THE STATE BOARD OF PROFESSIONAL LAND SURVEYORS PRIOR TO BEGINNING WORK AT THE SITE.
13. ALL STATIONS AND OFFSETS REFER TO [BASELINE] OF CONSTRUCTION, UNLESS OTHERWISE STATED.
14. CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM PLANS FOR CONSTRUCTION PURPOSES.
15. THE CONTRACTOR IS ALERTED TO THE PRESENCE OF UNDERGROUND WIRES AND POLES IN THE PROJECT AREA. THE METHOD OF CONSTRUCTION IN THESE LOCATIONS MUST COMPLY WITH ALL OSHA SAFETY STANDARDS. THE CONTRACTOR SHALL INSPECT THESE SITES AND BE RESPONSIBLE FOR DETERMINING WHAT METHOD OF PREPARATION AND CONSTRUCTION WILL BE USED TO COMPLY WITH THESE REQUIREMENTS.
16. THE CONTRACTOR SHALL NOTIFY THE CLIENT AT LEAST 24 HOURS PRIOR TO BEGINNING OF WORK.
17. WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR BEEN PLACED IN WATER COURSES, GRAVITY SEWER, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.
18. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED BY THE CLIENT ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY THE WORK, EQUIPMENT, EMPLOYEES OR SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS.

19. THE CONTRACTOR SHALL MAINTAIN EXISTING TRAFFIC FLOW PATTERNS THROUGHOUT ALL WORK OPERATIONS. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE CITY, STATE AND LOCAL GOVERNMENT CODES.
20. ALL EXCAVATIONS SHALL COMPLY WITH OSHA'S EXCAVATION SAFETY STANDARDS AND TRENCH SAFETY CODES. CONTRACTOR SHALL FURNISH THE OWNER WITH WRITTEN ASSURANCE THAT HE WILL COMPLY WITH THESE REGULATIONS.
21. THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER. UPON FINAL CLEAN UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH.
22. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING TREES, STRUCTURES AND UTILITIES WHICH MAY NOT BE SHOWN ON PLANS. ANY STRUCTURE, PAVEMENT, TREES OR OTHER EXISTING IMPROVEMENT NOT SPECIFIED FOR REMOVAL WHICH IS TEMPORARY DAMAGED, EXPOSED OR IN ANY WAY DISTURBED BY CONSTRUCTION PERFORMED UNDER THIS CONTRACT, SHALL BE REPAIRED, PATCHED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
23. CONTRACTOR TO RELOCATE TREES AS DIRECTED BY THE CLIENT. CONTRACTOR SHALL AVOID DAMAGE TO ANY EXISTING TREES TO REMAIN. EXISTING TREES SHALL BE REMOVED ONLY IF REQUIRED FOR CONSTRUCTION. THOSE TREES NOT INTERFERING WITH CONSTRUCTION SHALL BE PROTECTED IN PLACE.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING AT HIS OWN EXPENSE ANY ITEMS, INCLUDING BUT NOT LIMITED TO NEARBY PROPERTIES AND EXISTING DRAINAGE INFRASTRUCTURE, DAMAGED DUE TO HIS PERSONNEL OR EQUIPMENT INSIDE AND/OR OUTSIDE OF THE CONSTRUCTION AREA.
25. CONTRACTOR SHALL ENSURE THAT ALL MUD OR ANY OTHER TYPE OF DEBRIS IS CLEANED FROM ADJACENT ROADWAYS (WHERE APPLICABLE) AT THE END OF EACH DAY. CONTRACTOR SHALL BE LIABLE FOR ANY PERSONAL OR PROPERTY DAMAGE CAUSED BY ANY TYPE OF DEBRIS LEFT ON ROADWAYS AND/OR PEDESTRIAN WAYS.
26. CONTRACTOR SHALL AVOID DAMAGING EXISTING IRRIGATION SYSTEMS. IF PLANS AND BLUEPRINTS ARE NOT PROVIDED OR AVAILABLE THE CONTRACTOR WILL NOT BE RESPONSIBLE.
27. THE INFORMATION PROVIDED IN THESE DRAWINGS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH BIDS WILL BE BASED.

7. FLOATING TURBIDITY BARRIERS SHALL BE INSTALLED AND MAINTAINED AS CLOSE AS POSSIBLE TO THE CONSTRUCTION OPERATION UPSTREAM AND DOWNSTREAM OF CANALS. TURBIDITY BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND DETAILS.
8. TURBIDITY BARRIERS WILL BE RELOCATED ALONG THE SHORELINE AS THE SECTIONS/PHASES OF CONSTRUCTION ARE COMPLETED.
9. TURBIDITY SCREENS OR EQUIVALENT SHALL BE PROPERLY EMPLOYED AND MAINTAINED AS NECESSARY DURING CONSTRUCTION ACTIVITIES SO THAT TURBIDITY LEVELS DO NOT EXCEED 29 NTU'S ABOVE NATURAL BACKGROUND 50 FEET DOWNSTREAM OF POINT OF DISCHARGE. IF TURBIDITY LEVELS EXCEED THESE LIMITS, PROJECT ACTIVITIES SHALL IMMEDIATELY CEASE, AND WORK SHALL NOT RESUME UNTIL TURBIDITY LEVELS DROP TO WITHIN THESE LIMITS.
10. CONTRACTOR SHALL SOD GRASS AREAS DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO OWNER.
11. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION AGENCY (EPA) AND THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES).
12. IF 1 ACRE OR MORE IS DISTURBED, A NPDES GENERAL PERMIT IS REQUIRED.

1. THIS PROJECT IS SUBJECT TO ALL RELATED ENVIRONMENTAL REQUIREMENTS WHICH INCLUDE A "CONTROL OF EROSION AND SEDIMENTATION PLAN". THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING NECESSARY AND ADEQUATE MEASURES FOR PROPER CONTROL OF EROSION DUE TO SEDIMENTATION RUNOFF FROM THE SITE PRIOR TO CONSTRUCTION OPERATIONS IN A PARTICULAR AREA. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO START OF CONSTRUCTION. FIELD ADJUSTMENTS WITH RESPECT TO LOCATIONS AND DIMENSIONS MAY BE MADE BY THE ENGINEER AS REQUIRED.
2. EROSION CONTROL MEASURES WILL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RAIN FOR DAMAGE AND GENERAL EFFECTIVENESS. ANY DAMAGED OR INEFFECTIVE CONTROLS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR.
3. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED, IF DEEMED NECESSARY, BY THE ON-SITE INSPECTOR.
4. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. TEMPORARY AND PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL TEMPORARY SEDIMENT CONTROL DEVICES SHALL BE LEFT IN PLACE AND MAINTAINED UNTIL THE AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION.
6. ALL CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ON TO ANY PUBLIC RIGHT-OF-WAY. THIS SHALL REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS REQUIRE. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHT-OF-WAY OR INTO STORM DRAINS SHALL BE PROMPTLY REMOVED BY CONTRACTOR.

REVISIONS		
DATE	BY	DESCRIPTION

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.



BY
PIETER M. LOMBARD, P.E.
FL LIC. No. 66596
ENGINEER OF RECORD

PROJECT NO	SHEET	OF
2019-137	2	25
DRAWN BY	DATE	SCALE
MR	07/31/2020	

LEGEND

SYMBOL/LINE	DESCRIPTION	USED
	BASILINE	<input checked="" type="checkbox"/>
N37°59'57"19"E	BEARING	<input checked="" type="checkbox"/>
	CATCH BASIN	<input checked="" type="checkbox"/>
	CENTERLINE	<input checked="" type="checkbox"/>
	DIAMETER	<input checked="" type="checkbox"/>
2.94	EXISTING GROUND ELEVATION (FROM SURVEY)	<input checked="" type="checkbox"/>
	HYDRANT	<input checked="" type="checkbox"/>
	LIGHT POLE	<input checked="" type="checkbox"/>
	OFFICIAL BENCHMARK (BM)	<input checked="" type="checkbox"/>
	PALM	<input checked="" type="checkbox"/>
	POLE	<input checked="" type="checkbox"/>
	SET OF GROUND SURVEY CONTROL POINT	<input checked="" type="checkbox"/>
	SIGN (SINGLE SUPPORT)	<input checked="" type="checkbox"/>
	SIGNAL MAST ARM	<input checked="" type="checkbox"/>
	SURVEY CONTROL POINT (BOP)	<input checked="" type="checkbox"/>
	SURVEY CONTROL POINT (SBOTBM)	<input checked="" type="checkbox"/>
	TREE	<input checked="" type="checkbox"/>
	WIRE PULL BOX	<input checked="" type="checkbox"/>
	CANAL MAINTENANCE EASEMENT	<input checked="" type="checkbox"/>
	CANAL RIGHT OF WAY	<input checked="" type="checkbox"/>
	CANAL RIGHTS ON RESERVATION	<input checked="" type="checkbox"/>
	EFT BASIC TUBE	<input checked="" type="checkbox"/>
	EFT SACRIFICIAL TUBE	<input checked="" type="checkbox"/>
	EFT SUPPORTING TUBE	<input checked="" type="checkbox"/>
	EXISTING EDGE FILTER TUBE	<input checked="" type="checkbox"/>
	SAFETY FENCE	<input checked="" type="checkbox"/>
	EXISTING WOOD CHAIN LINK FENCE	<input checked="" type="checkbox"/>
	EXISTING GUARDRAIL	<input checked="" type="checkbox"/>
	EXISTING SHRUBS	<input checked="" type="checkbox"/>
	GRASS SOD	<input checked="" type="checkbox"/>
	FLEXAMAT	<input checked="" type="checkbox"/>
	GULF ANCHOR	<input checked="" type="checkbox"/>
	PRIORITY 01 - SERIOUS CONDITION	<input checked="" type="checkbox"/>
	PRIORITY 02 - POOR CONDITION	<input checked="" type="checkbox"/>
	PRIORITY 03 - FAIR CONDITION	<input checked="" type="checkbox"/>
	PROPOSED CHAIN LINK FENCE	<input checked="" type="checkbox"/>
	PROPOSED HANDRAIL	<input checked="" type="checkbox"/>
	SHEET PILING	<input checked="" type="checkbox"/>

SYMBOL/LINE	DESCRIPTION	USED
	DETAIL NUMBER	<input checked="" type="checkbox"/>
	TYPICAL DETAIL CALL OUT	<input checked="" type="checkbox"/>
	DETAIL SHEET NUMBER	<input checked="" type="checkbox"/>
	ARTICULATING CONCRETE BLOCK MATS (ACBM)	<input checked="" type="checkbox"/>
	BEDDING STONE/CRUSHED CONCRETE	<input checked="" type="checkbox"/>
	EMBANKMENT	<input checked="" type="checkbox"/>
	HYDROTEX (ENVIRONMENTAL)	<input checked="" type="checkbox"/>
	REGULAR EXCAVATION	<input checked="" type="checkbox"/>
	RIP-RAP	<input checked="" type="checkbox"/>
	RIP-RAP (BOULDER)	<input checked="" type="checkbox"/>
	FLEXAMAT	<input checked="" type="checkbox"/>
	PLANTS	<input checked="" type="checkbox"/>
	SEAWALL	<input checked="" type="checkbox"/>
	STACKED CANAL BANK STABILIZATION (CBS)	<input checked="" type="checkbox"/>
	STRUCTURAL FILL - CROSS SECTION	<input checked="" type="checkbox"/>
	STRUCTURAL FILL - PROFILE	<input checked="" type="checkbox"/>

ABBREVIATIONS

ASPH = ASPHALT	PG = PAGE
BL = BASELINE	PI = POINT OF INTERSECTION
BLCP = BASELINE CONTROL POINT (TO BE SET BY CONTRACTOR)	P&P = PLAN AND PROFILE
BM = BENCHMARK	PROP = PROPOSED
CLF = CHAIN LINK FENCE	PVC = POLYVINYL CHLORIDE
CME = CANAL MAINTENANCE EASEMENT	PVMT = PAVEMENT
CAP = CORRUGATED ALUMINUM PIPE	R/W = RIGHT OF WAY
CBS = CANAL BANK STABILIZATION	RT = OFFSET RIGHT
CMP = CORRUGATED METAL PIPE	SAN = SANITARY
COA = COLLAPSED AREA	SCP = SURVEY CONTROL POINT
CONC = CONCRETE	SDWK = SIDEWALK
COR = CORNER	WMD = WATER MANAGEMENT DISTRICT
CSLAB = CONCRETE SLAB	SP = SHEET PILING
DIP = DUCTILE IRON PIPE	SPK = SPRINKLER
DWT = DESIGN WATER TABLE	SWPPP = STORMWATER POLLUTION PREVENTION PLAN
ELEV = ELEVATION	ST = STORM
EOP = EDGE OF PAVEMENT	STA = STATION
EGW = EDGE OF WATER	STD = STANDARD
ERA = ERODED AREA	TBM = TEMPORARY BENCHMARK
ESMT = EASEMENT	TOBP = TOP OF BANK (PROPOSED)
ETOB = EXISTING TOP OF BANK	TOB = TOP OF BANK
EXIST = EXISTING	TOS = TOP OF SLOPE
FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION	TYP = TYPICAL
FT = FEET	UT = UTILITY
G = GAS	VERT = VERTICAL
GR = GRADE	W = WATER
HFT = HOUSE FOOTPRINT	WD = WOOD DOCKS
HOR = HORIZONTAL	WL = WATERLINE
HWT = HIGH WATER TABLE	XS = CROSS SECTION
INV = INVERT	
IRR = IRRIGATION	
LB = POUND	
LT = OFFSET LEFT	
MUTCD = MANUAL OF UNIFORM TRAFFIC DEVICES	
N/A = NOT APPLICABLE	
NAD = NORTH AMERICAN DATUM	
NAVD = NATIONAL AMERICAN VERTICAL DATUM	
NG = NATURAL GRADE	
NGVD = NATIONAL GEODETIC VERTICAL DATUM	
NTS = NOT TO SCALE	
NTU = NEPHELOMETRIC TURBIDITY UNITS	
OWT = OBSERVED WATER TABLE	
P/L = PROPERTY LINE	
PB = PLAT BOOK	
PED = PEDESTRIAN	

© Erosion Restoration, LLC.

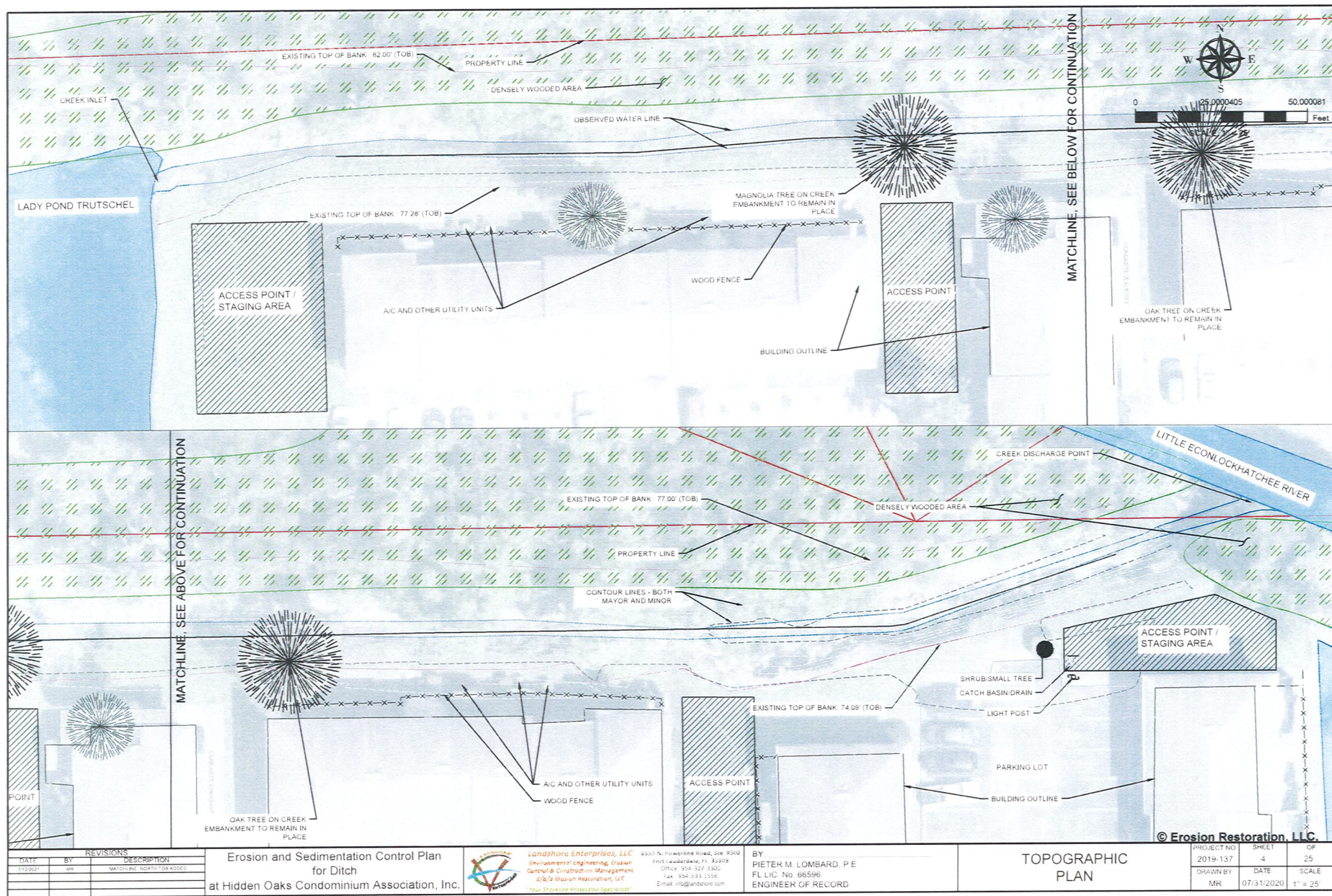
REVISIONS			Erosion and Sedimentation Control Plan for Ditch at Hidden Oaks Condominium Association, Inc.			LEGEND AND ABBREVIATIONS		
DATE	BY	DESCRIPTION				PROJECT NO.	SHEET	OF
						2019-137	3	25
						DRAWN BY	DATE	SCALE
						MR	07/31/2020	N/A



Landshore Enterprises, LLC
 Environmental Engineering, Erosion
 Control & Construction Management
 6161 S. Erosion Restoration, LLC
 "Your Shoreline Protection Specialists"

BY
 PIETER M. LOMBARD, P.E.
 FL LIC No. 66596
 ENGINEER OF RECORD

LEGEND AND ABBREVIATIONS



REVISIONS		
DATE	BY	DESCRIPTION
11/19/2021	MR	MATCHLINE NORTH TOB ADDED

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.



Landshore Enterprises, LLC
Environmental Engineering, Urban
Control & Construction Management
4160 Shalimar Regency, LLC
"Your Shoreline Protection Specialists"

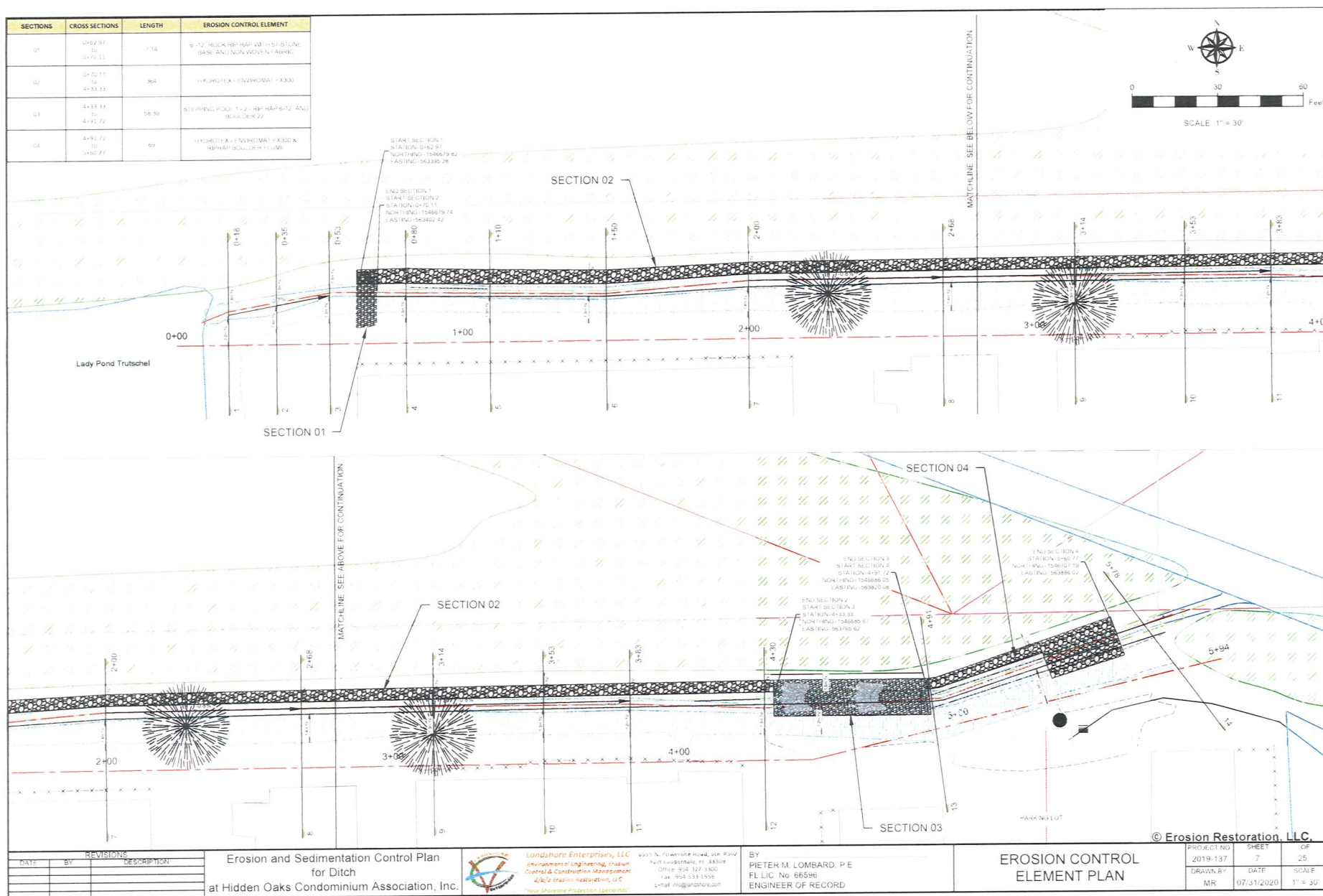
6225 N. Powerline Road, Ste. 3002
Fort Lauderdale, FL 33309
Office: 954.327.5300
Fax: 954.533.1556
E-mail: info@landshore.com

BY
PIETER M. LOMBARD, P.E.
FL LIC. No. 66596
ENGINEER OF RECORD

TOPOGRAPHIC PLAN

PROJECT NO.	SHEET	OF
2019-137	4	25
DRAWN BY	DATE	SCALE
MR	07/31/2020	1" = 25'

SECTIONS	CROSS SECTIONS	LENGTH	EROSION CONTROL ELEMENT
01	0+02.97 to 0+70.11	7 14	6" 12" ROCK RIP-RAP WITH 5" STONE BASE AND 50% WOOLLY ABRU
02	0+70.11 to 4+53.33	383	HYDROTEX - ENVIROMAT FX300
03	4+53.33 to 4+92.72	39	STEPPING ROCK 1-2" RIP-RAP 6-12" AND BOULDER 22
04	4+92.72 to 5+00.77	8	HYDROTEX - ENVIROMAT FX300 & RIP-RAP BOULDER FLUME



DATE	BY	DESCRIPTION

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.



Landshore Enterprises, LLC
Environmental Engineering, Erosion
Control & Construction Management
4000 E. Highway 100, Suite 100
Fort Lauderdale, FL 33308
Phone: 954.533.1556
Email: info@landshore.com

BY
PIETER M. LOMBARD, P.E.
FL LIC. No. 66596
ENGINEER OF RECORD

PROJECT NO.
2019-137
DRAWN BY
MR

DATE
07/31/2020

SHEET
7

OF
25

SCALE
1" = 30'

EROSION CONTROL
ELEMENT PLAN

ITEM NUMBER	FDOT OR LSE REFERENCE NUMBER	DESCRIPTION	UNIT	QUANTITY TOTAL
1	101- 1	MOBILIZATION	LS	1
2	110-1-1	CLEARING AND GRUBBING	LS	1
3	120- 1	REGULAR EXCAVATION	CY	313
4	120-6	EMBANKMENT	CY	133
5	02930-2.1	SOD	SY	769
6	FX300	HYDROTEX - ENVIROMAT FX300	SY	1163
7	900-2	C125 EROSION CONTROL BLANKET	SY	769
8	530-3-4A	RIPRAP TYPE "A" 6-12"	TON	90
9	530-3-4B	RIPRAP BOULDERS 22"	TON	16
10	530-34D	LIME ROCK #4	TON	25
11	900-2.2	NONWOVEN GEOTEXTILE FABRIC	SY	607
12	012170	FLOWABLE FILL (CONCRETE FILL)	CY	105

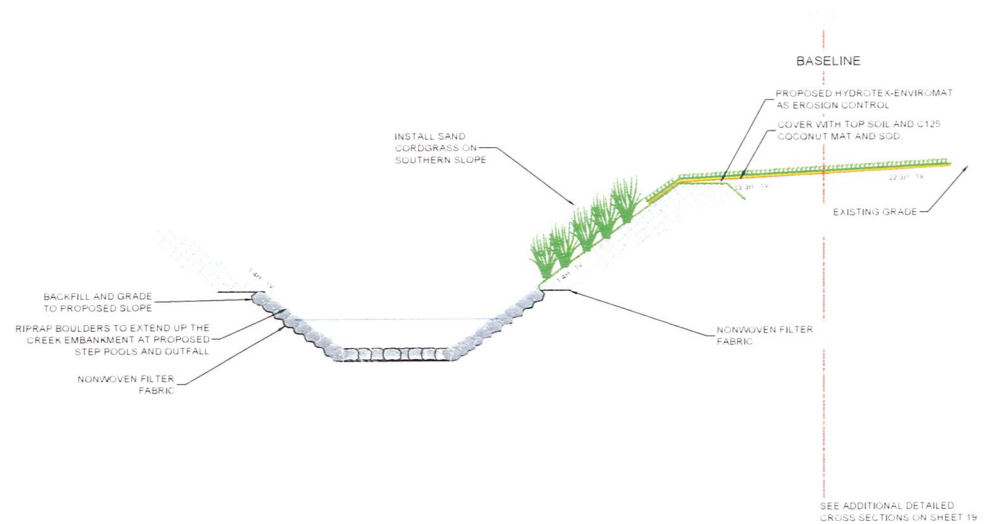
QUANTITY INFORMATION FOOTNOTES

- 01 -PROJECT LENGTH 495.5 ft
110-1-1 - INCLUDES CLEARING AND GRUBBING OF ALL MATERIAL WILL BE REMOVED FROM THE JOB SITE
120-6 - INCLUDES SUITABLE BACKFILL COMPACTED TO 95% DENSITY AT OPTIMUM MOISTURE (ACCORDING ASTM D 698)
02930-2.1 -INCLUDES GROUND PREPARATION AND COMPLETE MAINTENANCE OF THE AREA UNTIL FINAL COMPLETION. REFER TO VEGETATION SPECIFICATION 02930 FOR ADDITIONAL PLANTING DETAILS
FX300 -FOR CONCRETE FILL NEEDED IS AVERAGED TO 97 ft²/yd³.

FLORIDA DEPARTMENT OF TRANSPORTATION
LSE LANDSHORE ENTERPRISES, LLC

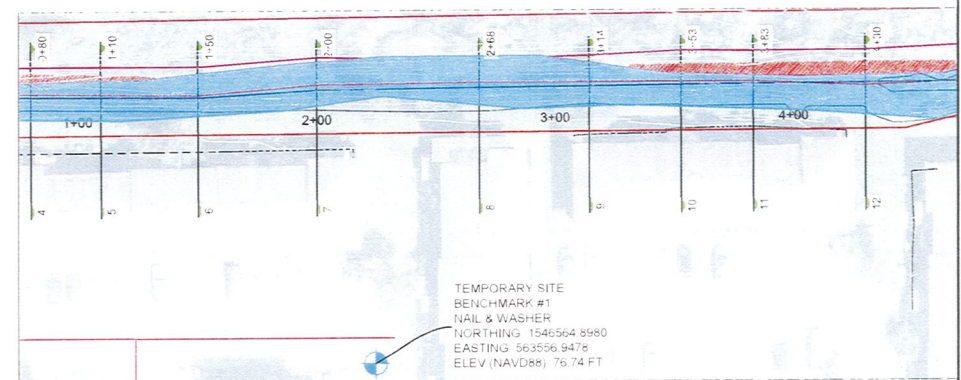
TYPICAL SECTION

STEP POOL



SCALE: N.T.S.

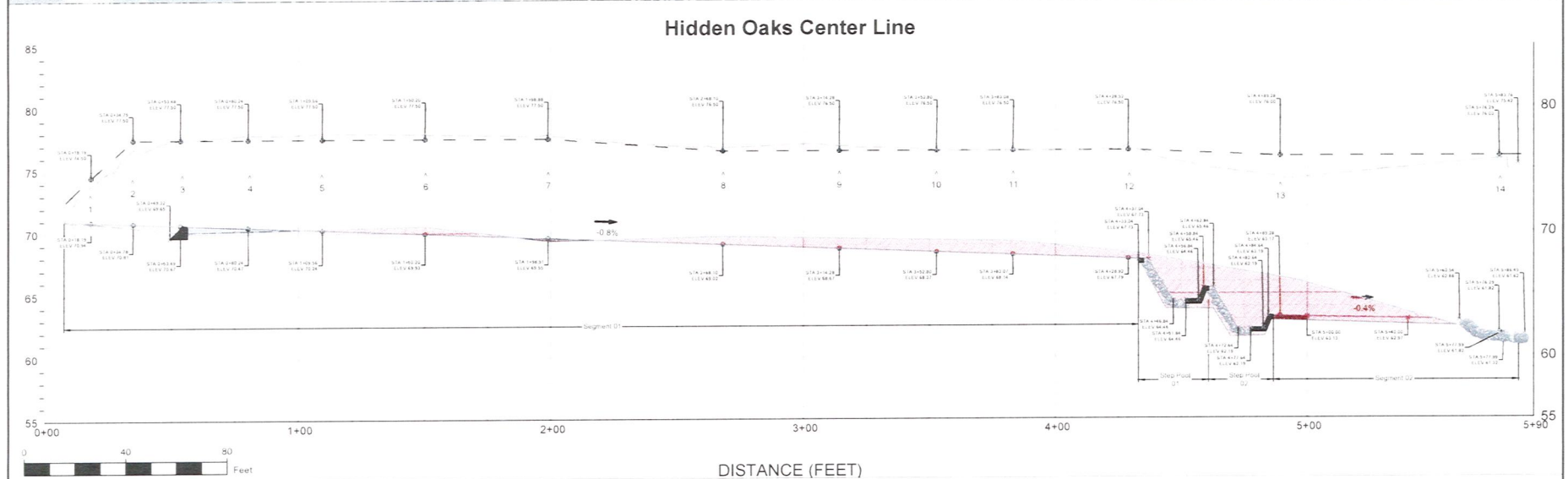
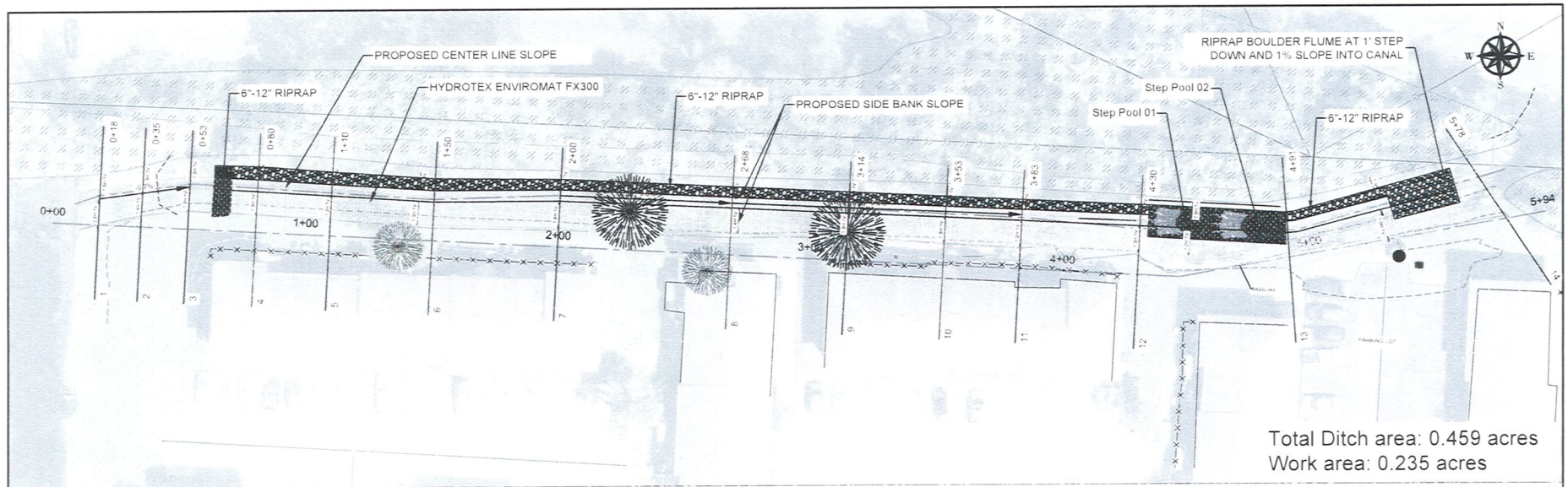
BENCHMARK LOCATION



SCALE: 1 : 200

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REVISIONS			Erosion and Sedimentation Control Plan for Ditch			SUMMARY OF QUANTITIES		
DATE	BY	DESCRIPTION	at Hidden Oaks Condominium Association, Inc.			PROJECT NO. 2019-137		
09/02/2020	MR	Final plan and specifications				SHEET 8 OF 25		
						DRAWN BY MR		
						DATE 07/31/2020		
						SCALE AS SHOWN		



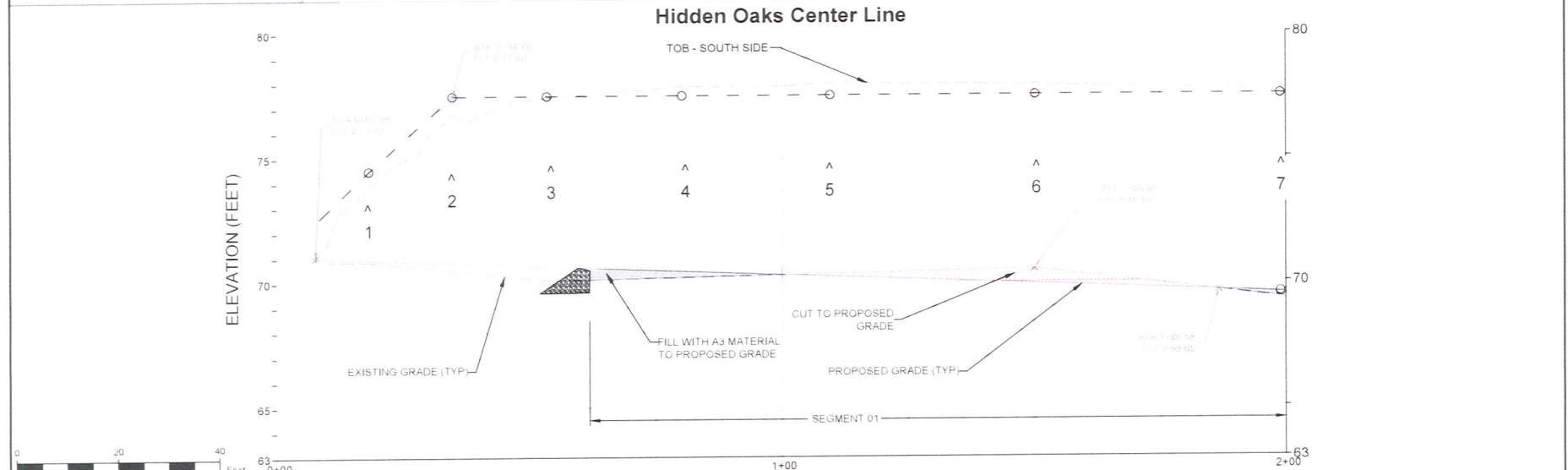
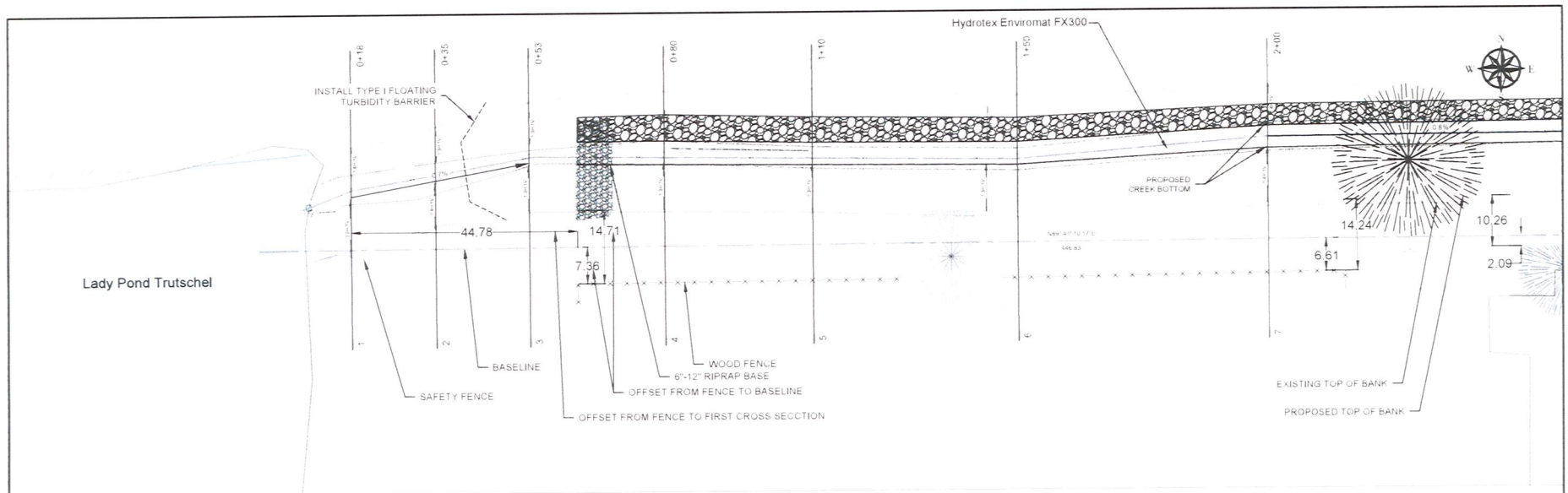
REVISIONS			Erosion and Sedimentation Control Plan for Ditch at Hidden Oaks Condominium Association, Inc.			PLAN AND PROFILE			© Erosion Restoration, LLC.		
DATE	BY	DESCRIPTION							PROJECT NO.	SHEET	OF
									2019-137	B	25
									DRAWN BY	DATE	SCALE
									MR	07/31/2020	1" = 60'




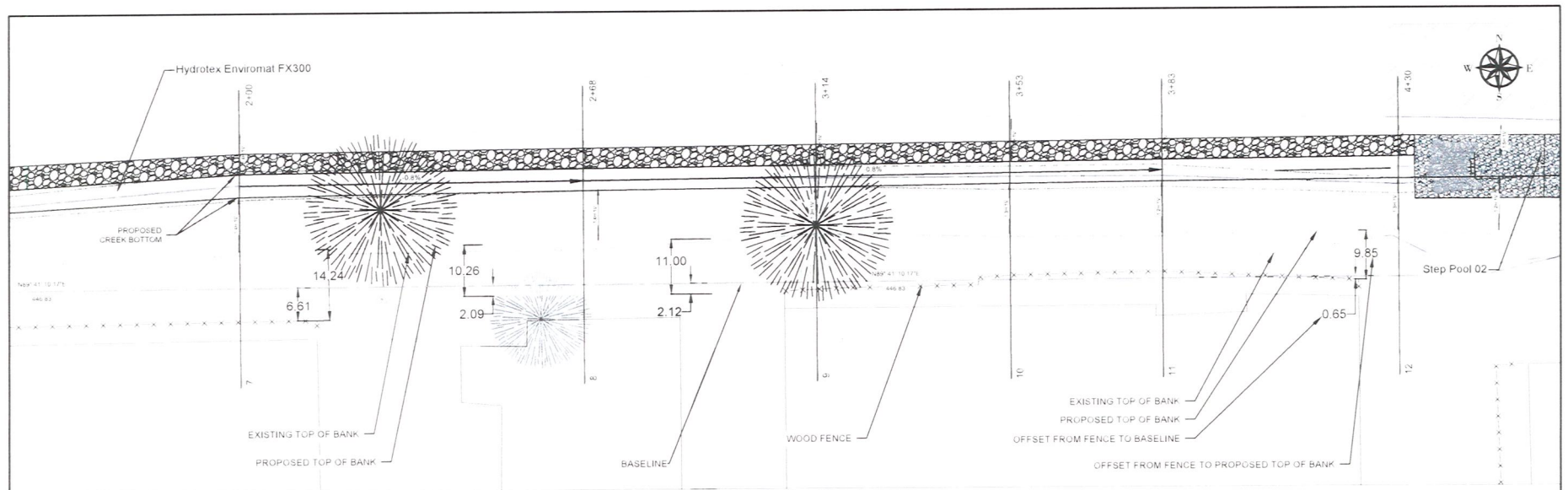
Landshore Enterprises, LLC
Environmental Engineering, Erosion
Control & Construction Management
4700 Invasive Management, LLC
"Your Shoreline Protection Specialists"

4552 N. Powerline Road, Ste. 400
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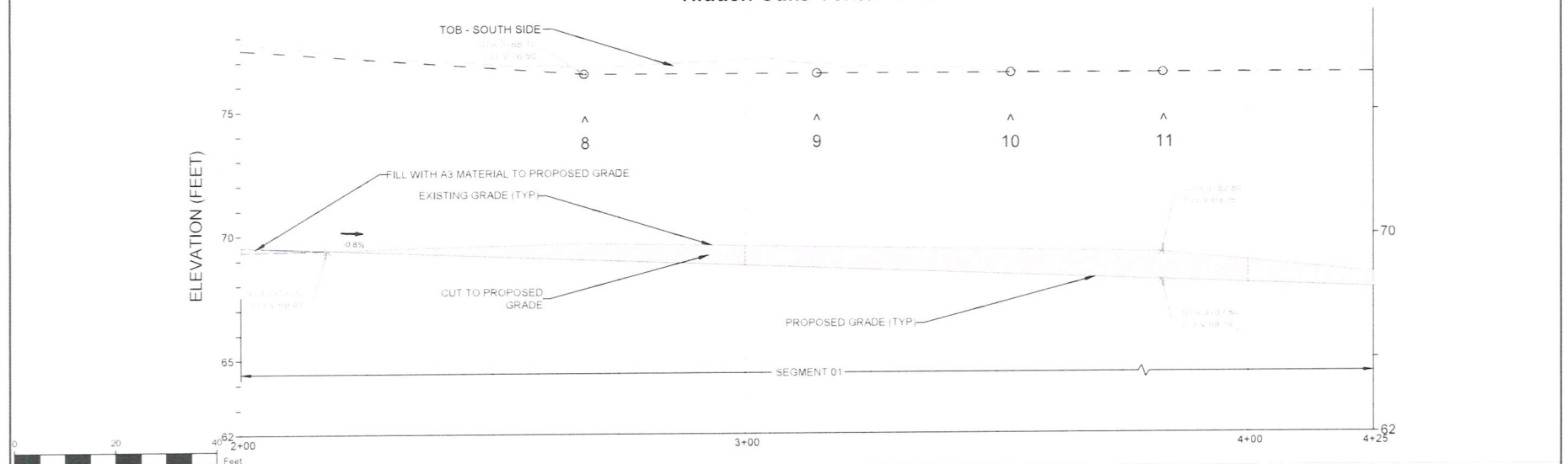
BY
PIETER M. LOMBARD, P.E.
FL LIC. No. 66596
ENGINEER OF RECORD



<div><div></div><div>Feet 0+00</div></div>									© Erosion Restoration, LLC.																							
REVISIONS			Erosion and Sedimentation Control Plan for Ditch at Hidden Oaks Condominium Association, Inc.			 <div>Landshore Enterprises, LLC environmental engineering, erosion control & construction management 210 S. Erosion Restoration, LLC "Your Erosion Restoration Specialists"</div>			5010 N. Powerline Road, Ste. 1002 Fort Lauderdale, FL 33309 Office: 954-337-1530 Fax: 954-333-1536 Email: info@landshore.com			BY: PIETER M. LOMBARD, P.E. FL LIC. No. 66596 ENGINEER OF RECORD			PLAN AND PROFILE			PROJECT NO.			SHEET			OF								
DATE																		BY			DESCRIPTION			2019-137			10			25		
															DRAWN BY			DATE			SCALE											
															MR			07/31/2020			1" = 20'											

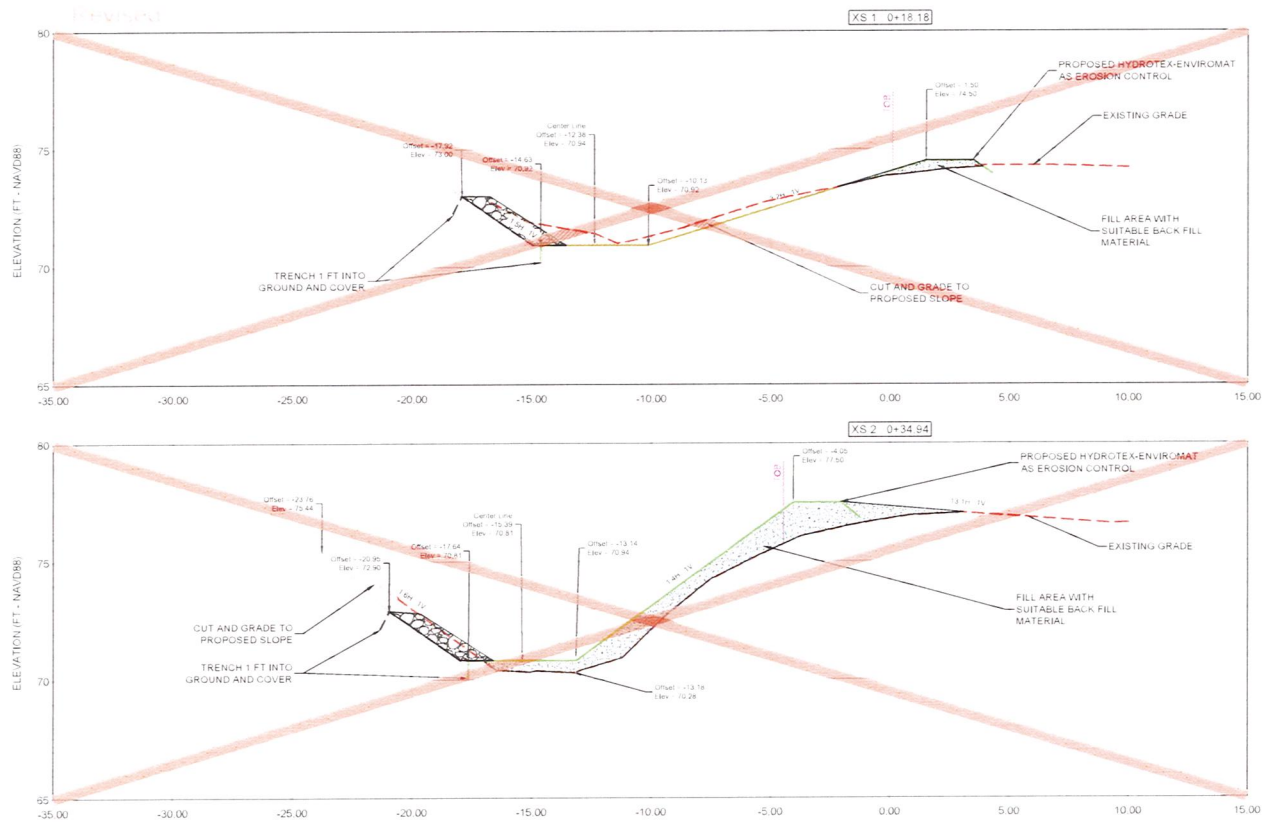


Hidden Oaks Center Line



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DATE	BY	DESCRIPTION									DRAWN BY MR	DATE 07/31/2020	SCALE 1" = 20'			



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REVISIONS		
DATE	BY	DESCRIPTION
7/12/2021	MR	crossed out sections no longer needed

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.

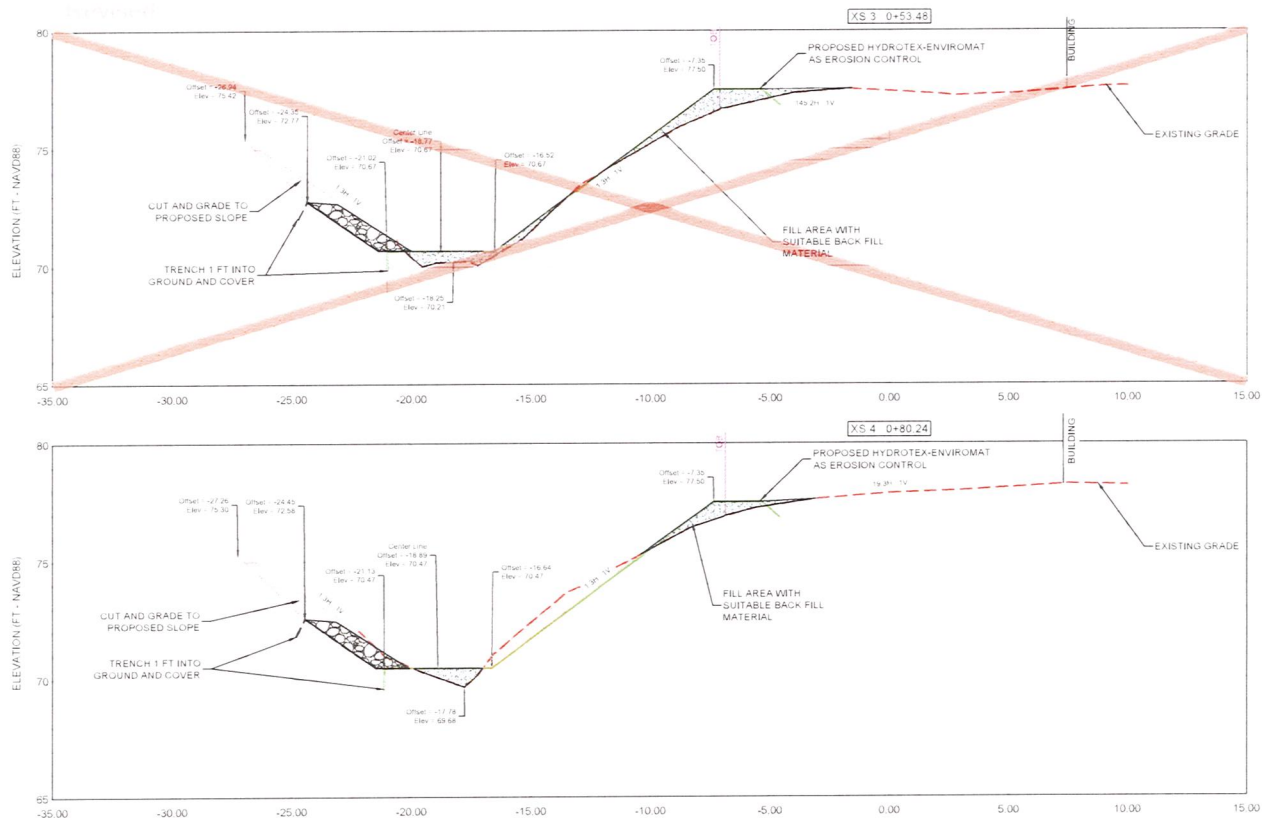


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Control & Construction Management
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CROSS SECTIONS

PROJECT NO.	SHEET	OF
2019-137	13	25
DRAWN BY	DATE	SCALE
MR	07/31/2020	1" = 5'



REVISIONS		
DATE	BY	DESCRIPTION
7/13/2021	MR	Added 2' of bottom to ditch needed

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.



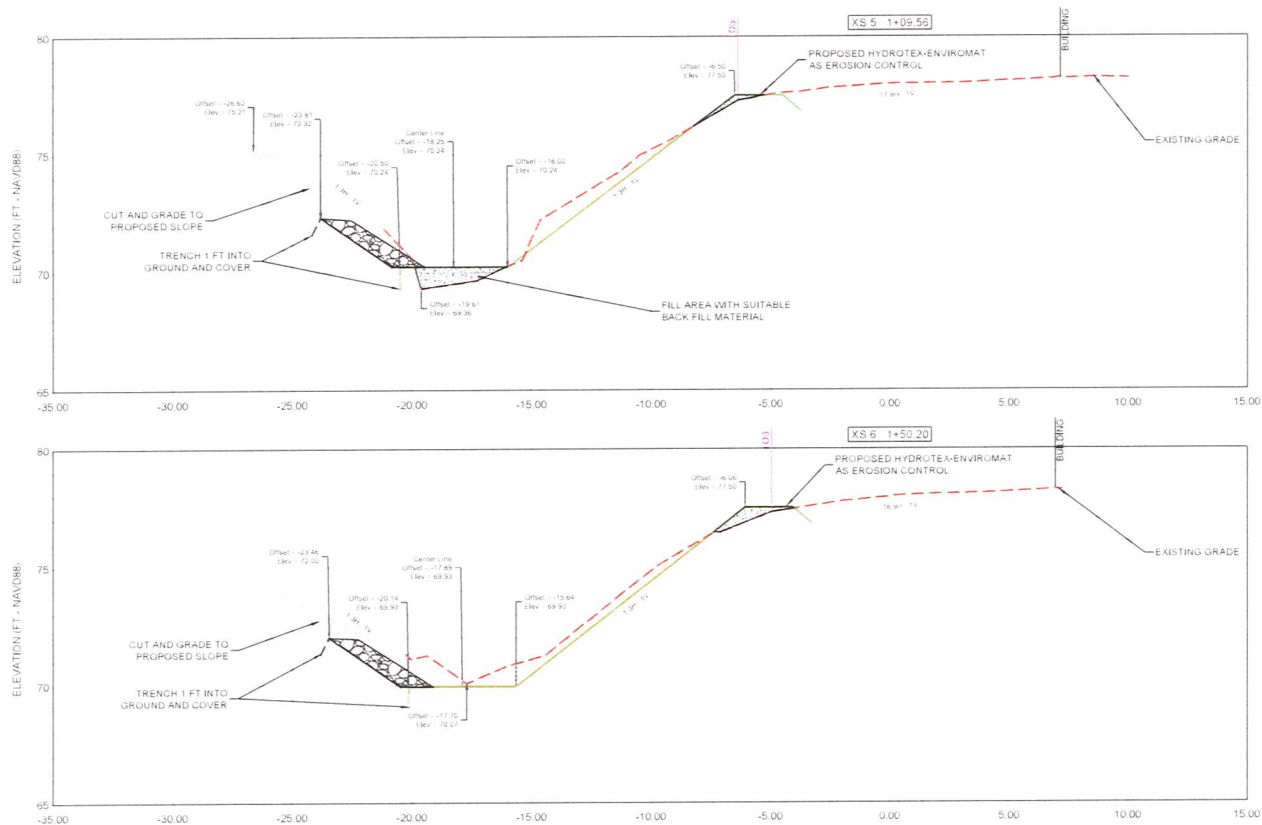
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BY
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ENGINEER OF RECORD

CROSS SECTIONS

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PROJECT NO.	SHEET	OF
2019-137	14	25
DRAWN BY	DATE	SCALE
MR	07/31/2020	1" = 5'



REVISIONS		
DATE	BY	DESCRIPTION

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.



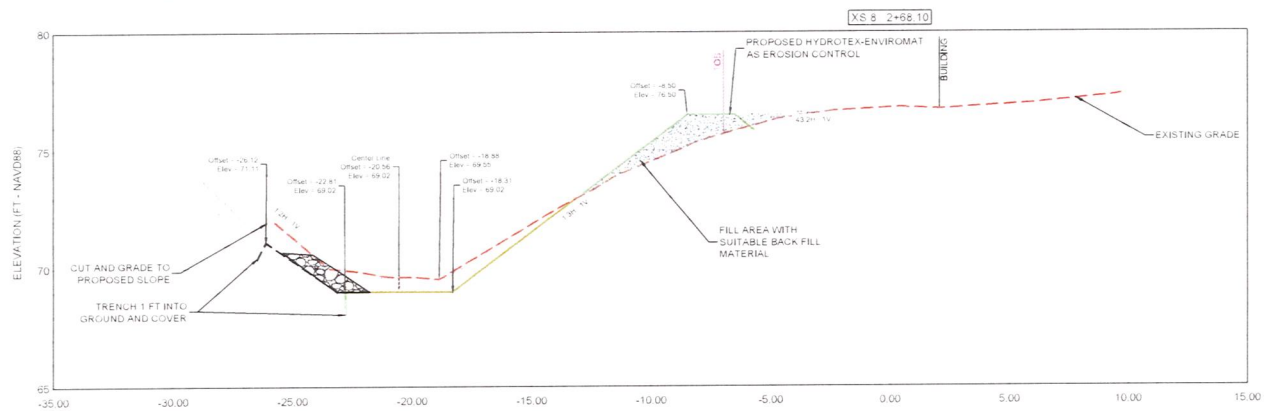
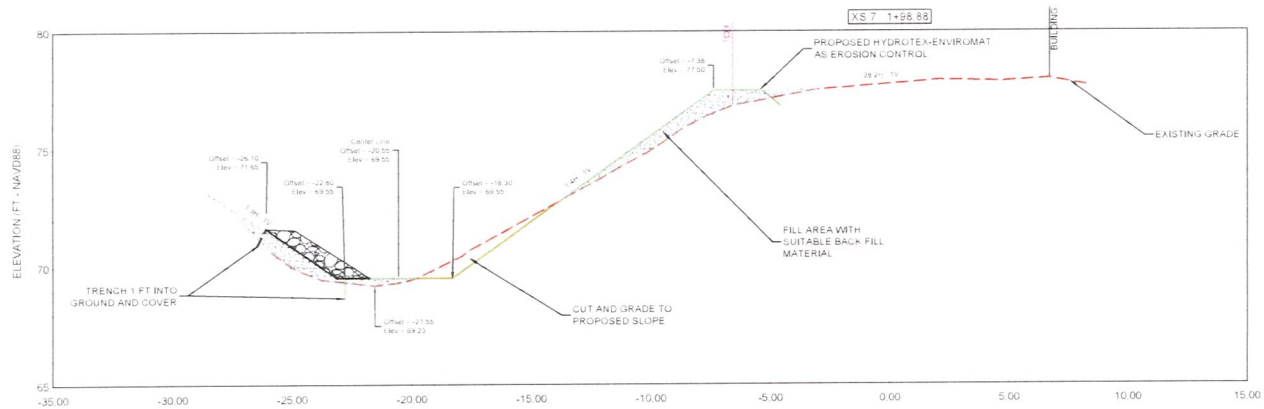
Landshore Enterprises, LLC
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4026 Erosion Restoration, LLC
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ENGINEER OF RECORD

CROSS SECTIONS

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PROJECT NO.	SHEET	OF
2019-137	15	25
DRAWN BY	DATE	SCALE
MR	07/31/2020	1" = 5'



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REVISIONS		
DATE	BY	DESCRIPTION

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.

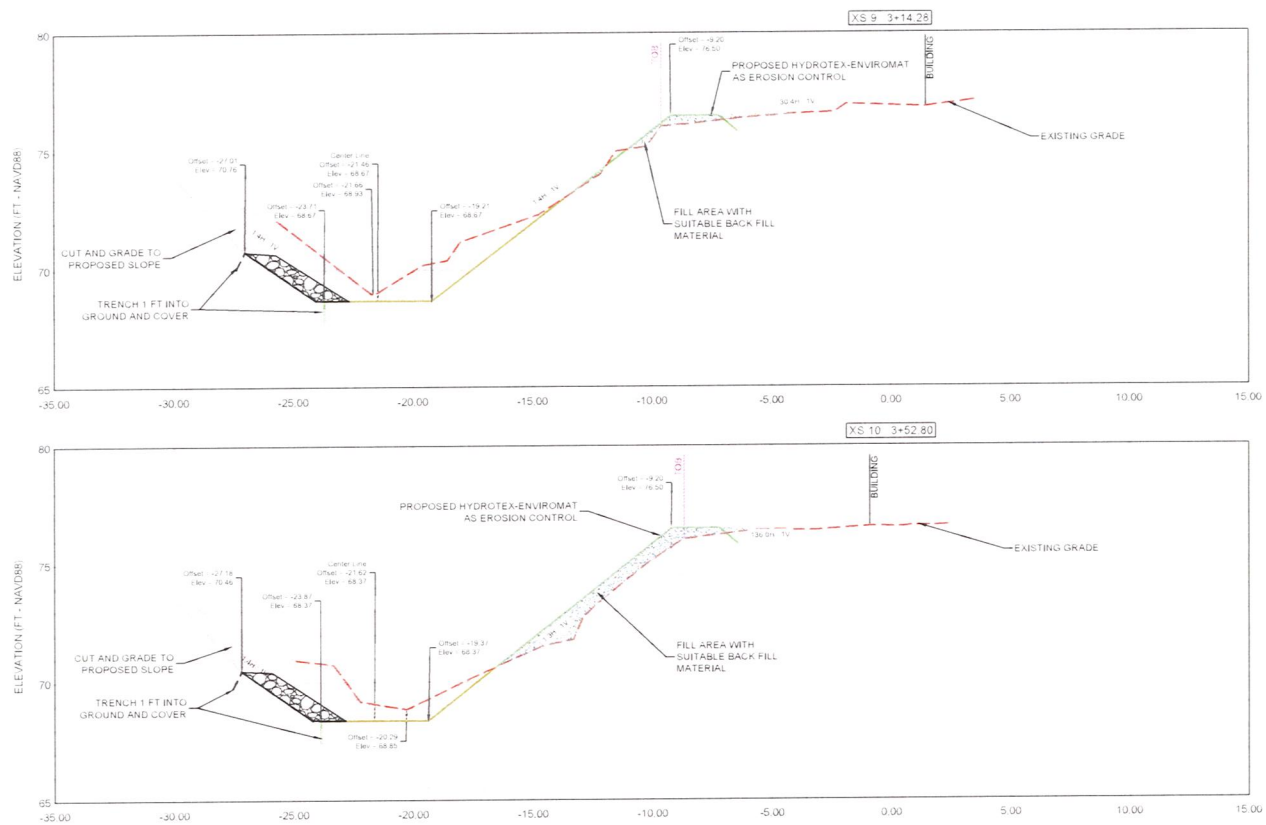


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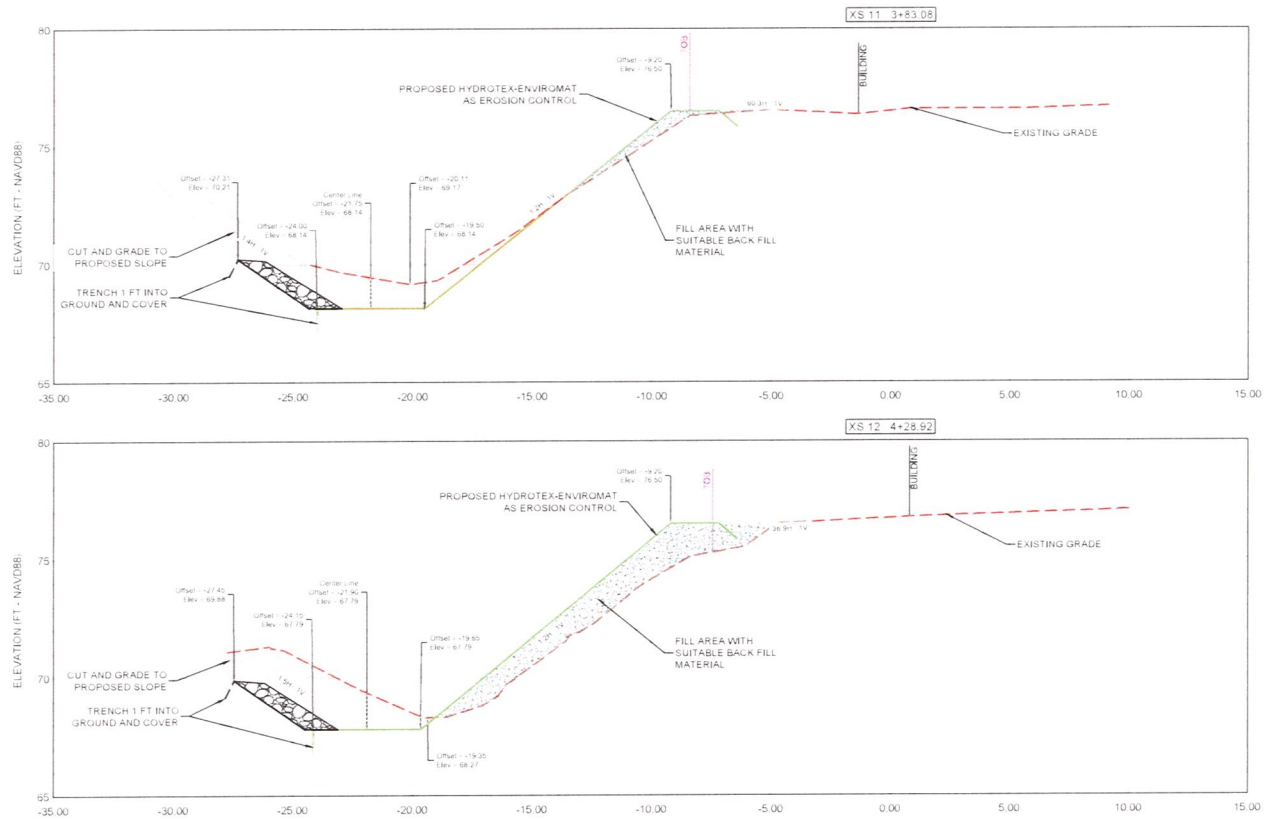
CROSS SECTIONS

PROJECT NO.	SHEET	OF
2019-137	16	25
DRAWN BY	DATE	SCALE
MR	07/31/2020	1" = 5'



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REVISIONS			Erosion and Sedimentation Control Plan for Ditch at Hidden Oaks Condominium Association, Inc.	 Landshore Enterprises, LLC Environmental Engineering, Erosion Control & Construction Management at Erosion Restoration, LLC www.erosionrestoration.com	BY PIETER M. LOMBARD, P.E. FL LIC. No. 66596 ENGINEER OF RECORD	CROSS SECTIONS	PROJECT NO.	SHEET	OF
DATE	BY	DESCRIPTION					2019-137	17	25
							DRAWN BY	DATE	SCALE
							MR	07/31/2020	1" = 5'



REVISIONS		
DATE	BY	DESCRIPTION

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.



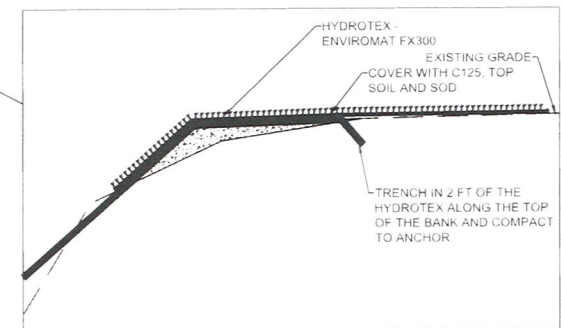
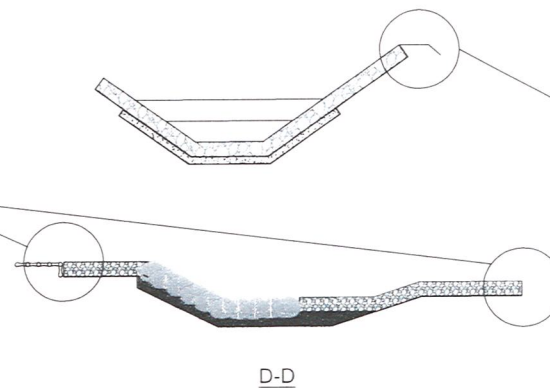
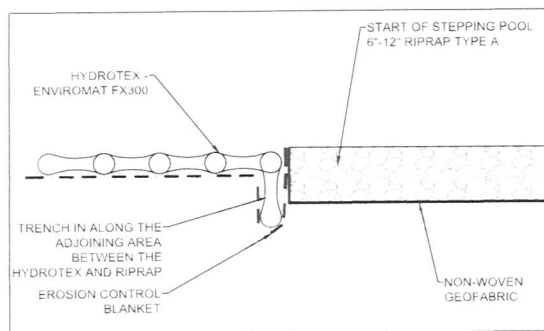
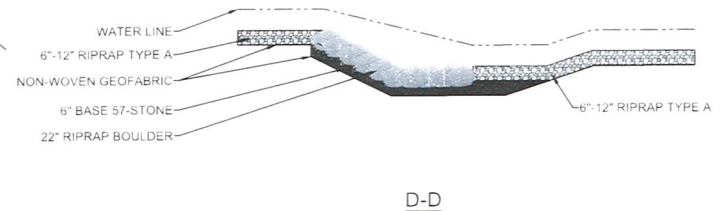
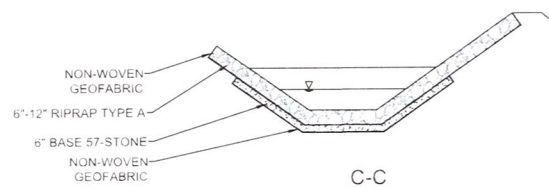
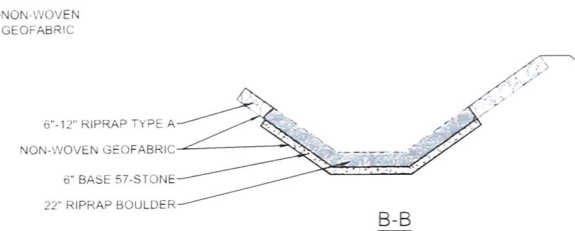
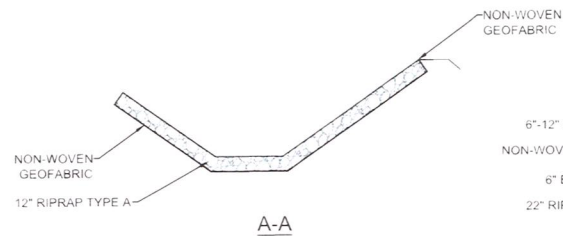
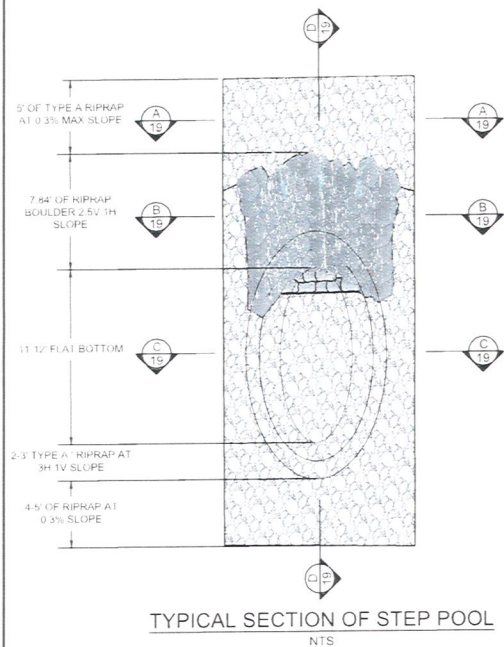
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& Construction Management
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CROSS SECTIONS

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PROJECT NO.	SHEET	OF
2019-137	18	25
DRAWN BY	DATE	SCALE
MR	07/31/2020	1" = 5'



REVISIONS		
DATE	BY	DESCRIPTION

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.



Landshore Enterprises, LLC
Environmental Engineering, Analysis,
Construction & Construction Management
4/4/19 Erosion Restoration, LLC
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BY
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FL LIC. No. 66596
ENGINEER OF RECORD

DETAIL - STEP POOL

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PROJECT NO.	SHEET	OF
2019-137	20	25
DRAWN BY	DATE	SCALE
MR	07/31/2020	1" = 8'



5550 Triangle Parkway
Suite 220
Peachtree Corners, GA 30092 USA
www.synthetex.com



HYDROTEX® EnviroMat FX300

Hydrotex® EnviroMat FX300 (patent-pending) linings are filled with concrete with unwoven filtration/vegetation perimeters provide an erosion resistant, permeable concrete lining having a cobbled surface and a relatively high coefficient of hydraulic friction in order to reduce water velocity. EnviroMat FX300 Linings are comprised of concrete-filled elements and unfilled fabric areas that allow for either filling in place or lifting and placing as well as the establishment of vegetation. Once the concrete sets, the defined, unfilled fabric areas (nominally 35% of the total area of the lining) are used to establish vegetation as well as facilitate articulation, lifting and placing. The unwoven fabric areas allow for planting establishment or are filled with topsoil and seeded. A vegetated cover should be designed for the lining, resulting in an erosion control system with the hydraulic, ecological and aesthetic features desired. The EnviroMat FX300 linings can be used in conjunction with a turf reinforcement mat (TRM) or erosion control blanket (ECM) based on local soil, hydraulic and vegetative growth conditions.

The fabric forms for casting the concrete lining(s) are HYDROTEX® EnviroMat FX300 fabric forms manufactured by Synthetex, LLC, 5550 Triangle Parkway, Suite 220 Peachtree Corners, Georgia 30092. Tel: 800.253.0561 or 770.399.5051, E-Mail: info@synthetex.com. Hydrotex EnviroMat FX300 linings have a finished average thickness of 3 inch, a nominal mass per unit area of 33 lb/ft², and a deeply cobbled surface appearance. In addition, EnviroMat FX300 has been tested in a hydraulic flume per ASTM 6460.

The fabric forms are composed of polyester and/or nylon yarns into woven fabric meeting the performance criteria in the following table. The fabric forms are woven with a minimum of 50% textured yarns (by weight). Partially-oriented (POY), draw-textured, and/or staple yarns are not used in the manufacture of the fabric. Each layer of fabric conforms to the physical, mechanical and hydraulic requirements Mean Average Roll Values listed in Table 1.0. The fabric forms are free of defects or flaws which significantly affect their physical, mechanical, or hydraulic properties.

Synthetex can provide certificates of compliance for the fabric forms as well as specifications, literature, shop drawings for the layout of the EnviroMat FX100 lining panels, and recommendations that are specifically related to the project, if requested.



Table 1.0 PROPERTY REQUIREMENTS – HYDROTEX WOVEN FABRIC 1, 2

	Test Method	Units	MARV
Physical Properties			
Mass Per Unit Area (double-layer)	ASTM D 5261	oz/yd ²	13
Thickness (single-layer)	ASTM D 5199	mils	15
Mill Width (Woven)		inch	84
Mechanical Properties			
Wide-Width Strip Tensile Strength - MD TD	ASTM D 4595	lbs/inch	300 350
Elongation at Break - MD TD - Max.		%	15 15
Trapezoidal Tear Strength - MD TD	ASTM D 4533	lbs	150 175
CBR Puncture Strength	ASTM D 6241	lbs	1250
Mullen Burst Strength	ASTM D 3786 (Mod.)	psi	500
Hydraulic Properties			
Apparent Opening Size (AOS)	ASTM D 4751	U.S. Standard Sieve	30 - 40
Flow Rate	ASTM D 4491	gal/min/ft ²	30 - 55

Notes

1. Conformance of fabric to specification property requirements are based on ASTM D 4759. Material testing reports are available and prepared by a certified geotextile laboratory attesting to the fabric form material's compliance with this Specification. Material laboratory testing shall have been performed within ninety (90) days of the submittal date.
2. All numerical values represent minimum average roll values (i.e., average of test results from any sample roll in a lot shall meet or exceed the minimum values). Lots are sampled according to ASTM D 4354.


Certification (Open Channel Flow)

The average thickness, mass per unit area and hydraulic resistance of each concrete lining shall withstand the hydraulic loadings for the design discharges along the structure(s). The stability analysis for each concrete lining are accomplished using a factor-of-safety methodology. A minimum factor of safety of 1.3 is required, or higher as determined by the Engineer-of-Record, local conditions, or critical structures. Synthetex can provide the calculations if needed to confirm conformance to the project conditions and requirements.

Erosion Control Blanket (ECB) or Turf Reinforcement Mat (TRM)

An underlying ECB or TRM, as specified elsewhere, can be selected and placed on the graded surface approved by the Engineer.

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REVISIONS			Erosion and Sedimentation Control Plan for Ditch at Hidden Oaks Condominium Association, Inc.		Landshore Enterprises, LLC environmental engineering, erosion control & construction management LLC/a Florida Restoration LLC "Your Shoreline Protection Specialists"	6502 N. Fawcett Road, Ste. 402 Fort Lauderdale, FL 33309 Office: 954-527-1550 Fax: 954-533-1556 Email: info@landshore.com	BY: PIETER M. LOMBARD, P.E. FL LIC. No. 66596 ENGINEER OF RECORD	MANUFACTURER'S SPECIFICATIONS	PROJECT NO. 2019-137	SHEET 21	OF 25
DATE	BY	DESCRIPTION									
									DRAWN BY MR	DATE 07/31/2020	SCALE N/A



Fine Aggregate Concrete

EnviroMat FX shall be filled with a suitable fine aggregate concrete for proper filling of the fabric forms. Typical concrete mix proportions and sample mix designs can be provided by Synthetex, as well as recommended installation means and methods. Average cured concrete compressive strength within the mat shall be 5,000 psi.

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Hydrotex® products are manufactured and sold by



5550 Triangle Parkway, Suite 220
Peachtree Corners, GA 30092 USA
Tel: 1.800.253.0561 or 770.399.5051
Fax: 770.394.5999
www.synthetex.com • e-mail: info@synthetex.com



TENCATE GEOSYNTHETICS
Americas



Mirafi® 160N is a nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. Mirafi® 160N is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids. Mirafi® 160N meets AASHTO M288 Class 2 for Elongation > 50%.

TenCate Geosynthetics Americas Laboratories are accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GA-LAP). **NTPEP Listed**

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value	
			MD	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	160 (712)	160 (712)
Grab Tensile Elongation	ASTM D4632	%	50	50
Trapezoid Tear Strength	ASTM D4533	lbs (N)	60 (267)	60 (267)
CBR Puncture Strength	ASTM D6241	lbs (N)	410 (1825)	
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	70 (0.212)	
Permittivity	ASTM D4491	sec-1	1.5	
Flow Rate	ASTM D4491	gal/min/ft2 (l/min/m2)	110 (4481)	
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	70	
Physical Properties		Unit	Roll Size	
Roll Dimensions (width x length)		ft (m)	15 x 300 (4.5 x 91)	
Roll Area		yd2 (m2)	500 (418)	

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FGS000361
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GA-LAP 25-97

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REVISIONS			Erosion and Sedimentation Control Plan for Ditch at Hidden Oaks Condominium Association, Inc.		Landshore Enterprises, LLC Environmental Engineering, Inc. Construction Management 4610 E. Erosion Management, LLC "Your Shoring Protection Specialist"	BY PIETER M. LOMBARD, P.E. FL LIC. No. 66596 ENGINEER OF RECORD	MANUFACTURER'S SPECIFICATIONS	PROJECT No. 2019-137		
DATE	BY	DESCRIPTION						DRAWN BY	DATE	SCALE
								MR	07/31/2020	N/A



Material and Performance Specification Sheet

North American Green
14649 Highway 41 North
Evansville, IN 47725
800-772-2040
FAX: 812-867-0247
www.nadgreer.com

C125 Erosion Control Blanket

The long-term double net erosion control blanket shall be a machine-produced mat of 100% coconut fiber with a functional longevity of up to 36 months. (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographical location, and elevation). The blanket shall be of consistent thickness with the coconut evenly distributed over the entire area of the mat. The blanket shall be covered on the top and bottom sides with a heavyweight polypropylene netting having ultraviolet additives to delay breakdown and an approximate 0.63 x 0.63 (1.59 x 1.59 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread.

The C125 shall meet requirements established by the Erosion Control Technology Council (ECTC) Specification and the US Department of Transportation, Federal Highway Administration's (FHWA) Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-03 Section 713.17 as a type 4 Long-term Erosion Control Blanket.

The C125 is also available with the DOT System™, which consists of installation staple patterns clearly marked on the erosion control blanket with environmentally safe paint. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for adjacent mats.

Material Content		
Matrix	100% Coconut Fiber	0.5 lbs/yd2 (0.27 kg/m2)
Nettings	Both sides - Heavyweight UV stabilized	3.0 lb/1000 ft2 (1.47 kg/100 m2)
Thread	100% Black Polypropylene	

C125 is available in the following standard roll sizes

Width	6.67 ft (2.03 m)	16 ft (4.87 m)
Length	108 ft (32.92 m)	108 ft (32.92 m)
Weight ± 10%	44 lbs (19.95 kg)	105.6 lbs (47.9 kg)
Area	80.0 yd2 (66.9 m2)	192 yd2 (165.5 m2)

Index Value Properties

Property	Test Method	Typical
Thickness	ASTM D6525	0.31 in (7.87 mm)
Resiliency	ECTC Guidelines	82%
Water Absorbency	ASTM D1117	220%
Mass/Unit Area	ASTM 6475	8.00 oz/yd2 (271 g/m2)
Swell	ECTC Guidelines	13%
Smolder Resistance	ECTC Guidelines	Yes
Stiffness	ASTM D1388	0.75 oz-in
Light Penetration	ECTC Guidelines	6.6%
Tensile Strength - MD	ASTM D6818	294 lbs/ft (4.36 kN/m)
Elongation - MD	ASTM D6818	21.3%
Tensile Strength - TD	ASTM D6818	205.2 lbs/ft (3.04 kN/m)
Elongation - TD	ASTM D6818	28.4%

Bench Scale Testing* (NTPEP)

Test Method	Parameters	Results
ECTC Method 2	50 mm (2 in)/hr for 30 min	SLR** = 14.93
Rainfall	100mm (4 in)/hr for 30 min	SLR** = 14.97
	150 mm (6 in)/hr for 30 min	SLR** = 15.00
ECTC Method 3	Shear at 0.50 inch soil loss	2.68 lbs/ft2
Shear Resistance		
ECTC Method 4	Top Soil, Fescue, 21 day incubation	477% improvement of biomass
Germination		

* Bench Scale tests should not be used for design purposes

** Soil Loss Ratio = Soil loss with Bare Soil/Soil Loss with RECP (soil loss is based on regression analysis)

Updated 3/09

Performance Design Values

Maximum Permissible Shear Stress	
Unvegetated Shear Stress	2.25 lbs/ft2 (108 Pa)
Unvegetated Velocity	10.00 ft/s (3.05 m/s)

Slope Design Data: C Factors			
Slope Gradients (S)			
Slope Length (L)	3:1	3:1 - 2:1	2:1
20 ft (6 m)	0.001	0.029	0.082
20-50 ft	0.036	0.060	0.096
50 ft (15.2 m)	0.070	0.090	0.110

Roughness Coefficients- Unveg.	
Flow Depth	Manning's n
0.50 ft (0.15 m)	0.022
0.50 - 2.0 ft	0.022 - 0.014
2.0 ft (0.60 m)	0.014

Product Participant of



EroNet™ C125® Erosion Control Blanket

PRODUCT DESCRIPTION

2.9 lb., UV-stable polypropylene top net.
70% straw/30% coconut fiber matrix, 1.5 lb.,
photodegradable polypropylene bottom net.

LONGEVITY

36 months

APPLICATIONS

High Flow Channels
1:1 and Greater Slopes

DESIGN PERMISSIBLE SHEAR STRESS

Unvegetated 2.25 lbs/ft2 (108 Pa)

DESIGN PERMISSIBLE VELOCITY

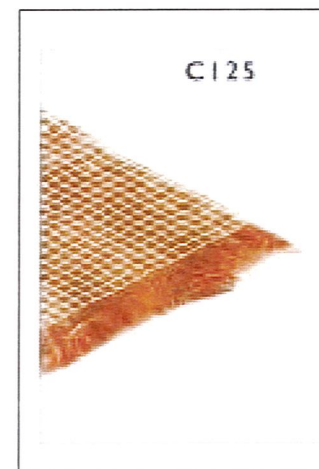
Unvegetated 10.0 lbs/s (3.05 m/s)

NETTINGS

Both sides - 3.0 lbs/1000 ft2 (1.47 Kg/100 m2/)

THREAD

Permanent



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REVISIONS		
DATE	BY	DESCRIPTION

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.



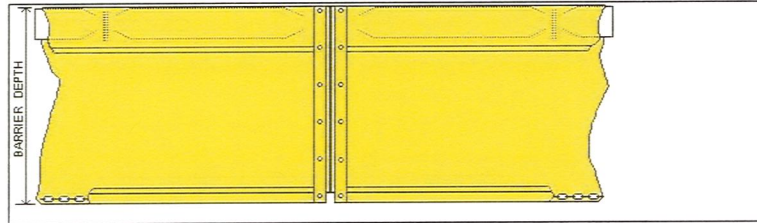
Landshore Enterprises, LLC
Environmental Engineering, Erosion
Control & Construction Management
4740 Crissum Meadows, LLC
"Your Shoreline Protection Specialists"

5500 N. Fairwinds Road, Ste. 400
Fort Lauderdale, FL 33499
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E-mail: info@landshore.com

BY
PIETER M. LOMBARD, P.E.
FL LIC No. 66596
ENGINEER OF RECORD

MANUFACTURER'S SPECIFICATIONS

PROJECT NO.	SHEET	OF
2019-137	23	25
DRAWN BY	DATE	SCALE
MR	07/31/2020	N/A



Floating Turbidity Barrier
Type 1.DOT

Specifications

Fabric - 18 oz. nominal vinyl/polyester laminated having the following characteristics

Construction - vinyl laminate on 9X9 1300 x 1300 denier scrim
Weight - 18 oz. per sq. yd. (423 gr./sq. m.)
Adhesion - 15 lb./in. (14daN/5 cm.)
Grab Tensile - 397 x 373 lb./in. (378 x 363 daN/5cm.)
Tongue Tear - 96 x 86 lb. (91 x 82 daN)
Hydrostatic - 385 psi (2674 kPa)

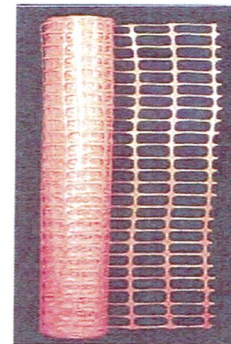
All seams heat sealed
5/8 inch diameter poly rope reinforced vertical edges
#4 brass grommets
1/4 in. (6.35mm) galvanized chain ballast
EPS flotation, 6 in. x 6 in., 15 lb./ft. (220N/m) buoyancy

8-3-04

WARNING BARRIER FENCE



#14993

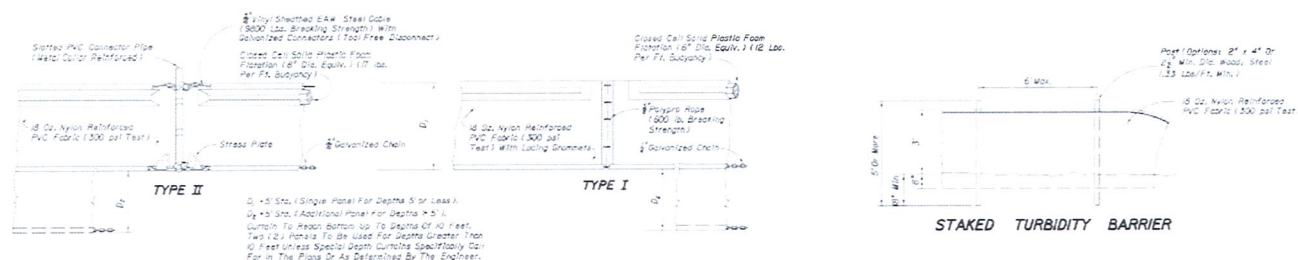
POLYMER:	Polyethylene (HPDE)
STABILIZER:	U.V. Stabilizer
COLOR:	Orange
MESH SIZE:	4" (- 1") x 2" (+1 1/2")
POROSITY:	60%
ROLL SIZE:	4' X 50' or 4' X 100'
ROLL WEIGHT:	4.5lbs 8.8 lbs
MD BREAK LOAD:	500 lbs/ft
MD YIELD STR:	600 lbs/ft
MD BREAK ELONGATION:	35%
MD YIELD POINT ELONGATION:	15%



Roll weight may vary +/- 10%

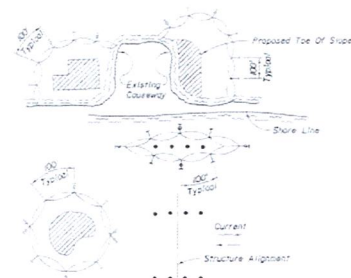
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REVISIONS			 Landshore Enterprises, LLC Environmental Engineering, Construction Consulting & Construction Management 4000 11th Avenue, Suite 100 Fort Lauderdale, FL 33309 Phone: 954.533.1556 Fax: 954.533.1558 Email: info@landshore.com	 ERRESTORATION 6500 N. Flamingo Road, Ste. 400 Fort Lauderdale, FL 33309 Office: 954.533.1556 Fax: 954.533.1558 Email: info@errestoration.com	BY PIETER M. LOMBARD, P.E. FL LIC. No. 66596 ENGINEER OF RECORD	MANUFACTURER'S SPECIFICATIONS	PROJECT NO. 2019-137	SHEET 24	OF 25
DATE	BY	DESCRIPTION					DRAWN BY MR	DATE 07/31/2020	SCALE N/A
			Erosion and Sedimentation Control Plan for Ditch at Hidden Oaks Condominium Association, Inc.						



NOTES: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.

FLOATING TURBIDITY BARRIERS

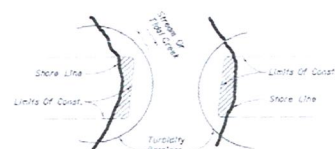


NOTES:

1. Turbidity barriers are to be used in all permanent bodies of water regardless of water depth.
2. Number and spacing of anchors dependent on current velocities.
3. Deployment of barrier around pile barriers may vary to accommodate construction operations.
4. Navigation may require segmenting barrier during construction operations.
5. For additional information see Section 04 of the Standard Specifications.

LEGEND

- Pile Locations
- ▨ Dredge Or FILL Area
- Working Buoys w/ Anchor
- ANCHOR
- Barrier Movement Due To Current Action



Note: Turbidity barriers for flowing streams and flood areas may be either floating, or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be of the Contractor's option unless otherwise specified in the plans, however payment will be under the pay item(s) established in the plans for Floating Turbidity Barrier and/or Staked Turbidity Barrier. Plans in staked turbidity barriers to be installed in vertical position unless otherwise directed by the Engineer.

GENERAL NOTES

1. Floating turbidity barriers are to be paid for under the contract unit price for Floating Turbidity Barrier, LF.
2. Staked turbidity barriers are to be paid for under the contract unit price for Staked Turbidity Barrier, LF.

TURBIDITY BARRIER APPLICATIONS



2006 FDOT Design Standards

TURBIDITY BARRIERS

Last Revision	Sheet No.
00	1 of 1
Index No.	
103	

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REVISIONS		
DATE	BY	DESCRIPTION

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.

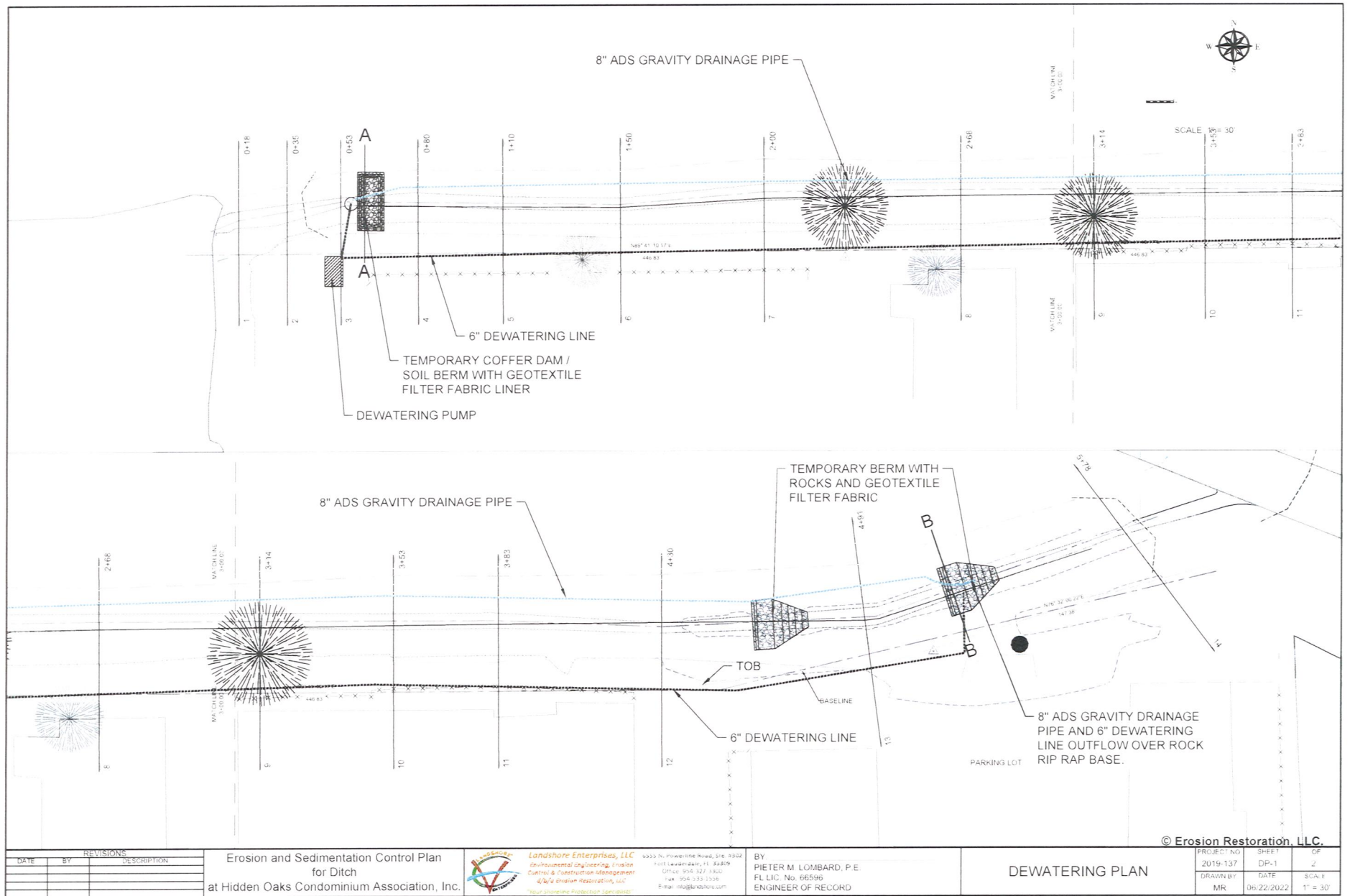


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MANUFACTURER'S SPECIFICATIONS

PROJECT NO.	SHEET	OF
2019-137	25	25
DRAWN BY	DATE	SCALE
MR	07/31/2020	N/A



REVISIONS		
DATE	BY	DESCRIPTION

Erosion and Sedimentation Control Plan
for Ditch
at Hidden Oaks Condominium Association, Inc.

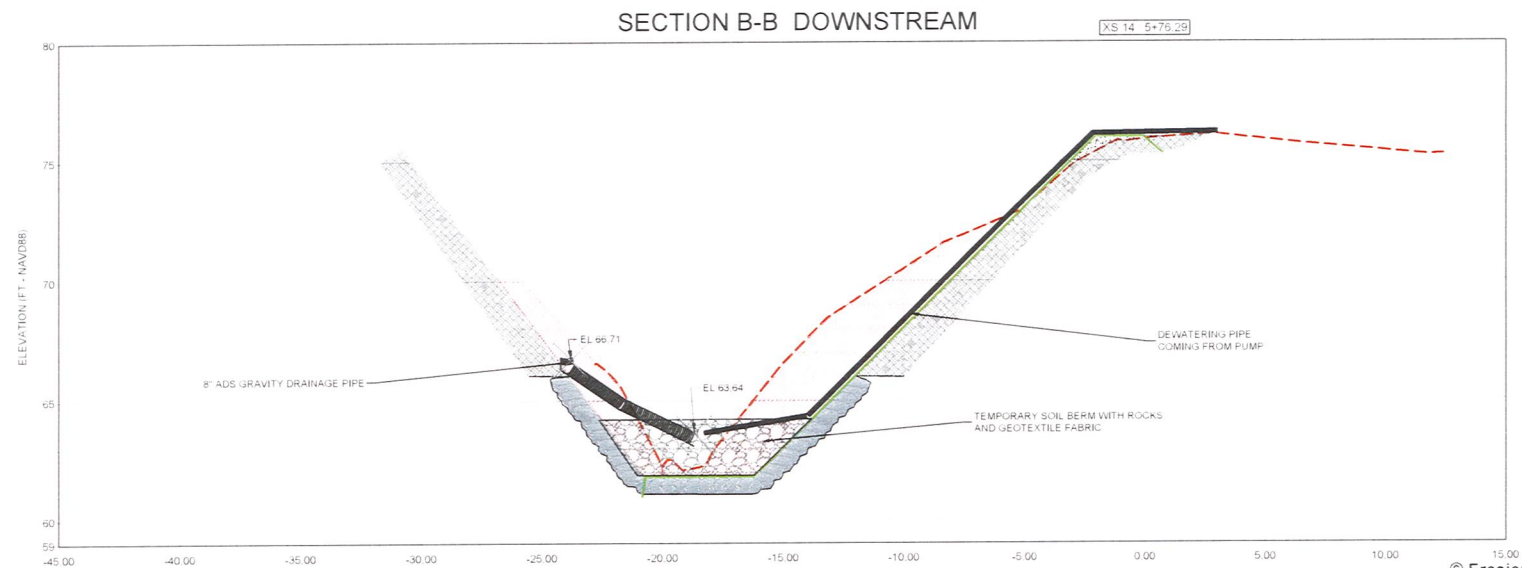
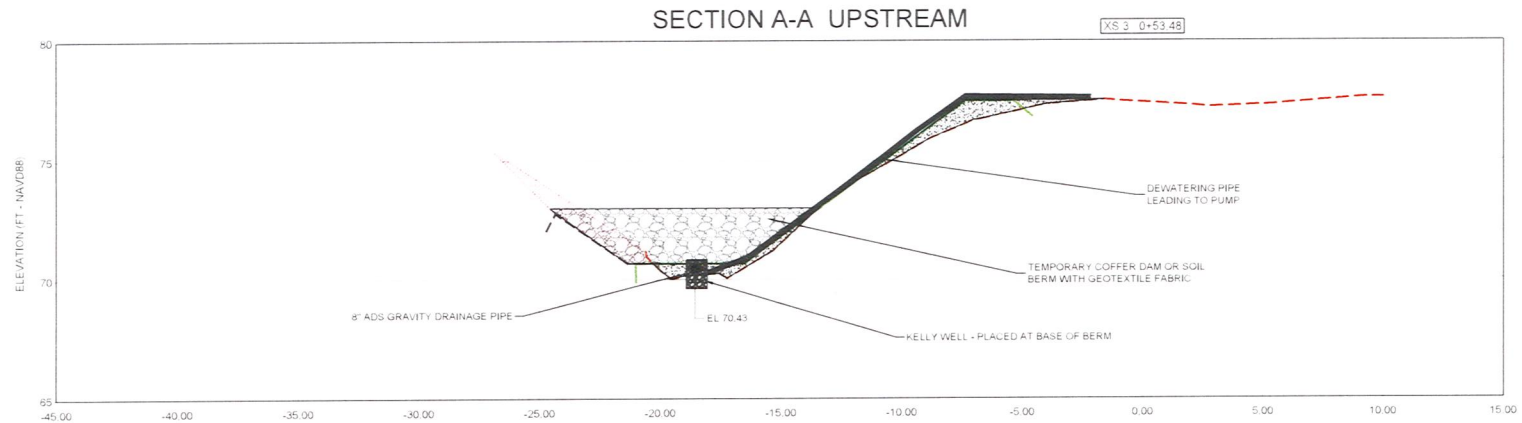


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DEWATERING PLAN

PROJECT NO.	SHEET	OF
2019-137	DP-1	2
DRAWN BY	DATE	SCALE
MR	06/22/2022	1" = 30'



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REVISIONS				Erosion and Sedimentation Control Plan for Ditch at Hidden Oaks Condominium Association, Inc.	 Landshore Enterprises, LLC Environmental Engineering, Erosion Control & Construction Management at Erosion Restoration, LLC 1000 N. Powerline Road, Ste. 200 Fort Lauderdale, FL 33309 Office: 954.327.5300 Fax: 954.327.5300 Email: info@landshore.com	BY PIETER M. LOMBARD, P.E. FL LIC. No. 66596 ENGINEER OF RECORD	DEWATERING PLAN			PROJECT NO.	SHEET	OF
DATE	BY	DESCRIPTION								2019-137	DP-2	2
										DRAWN BY	DATE	SCALE
										MR	06/22/2022	1" = 5'