

TOWN OF SOUTHWEST RANCHES, FLORIDA
Dykes Road Drainage and Water Quality Project
IFB No. 17-007
Wednesday, August 30, 2017

ADDENDUM 3

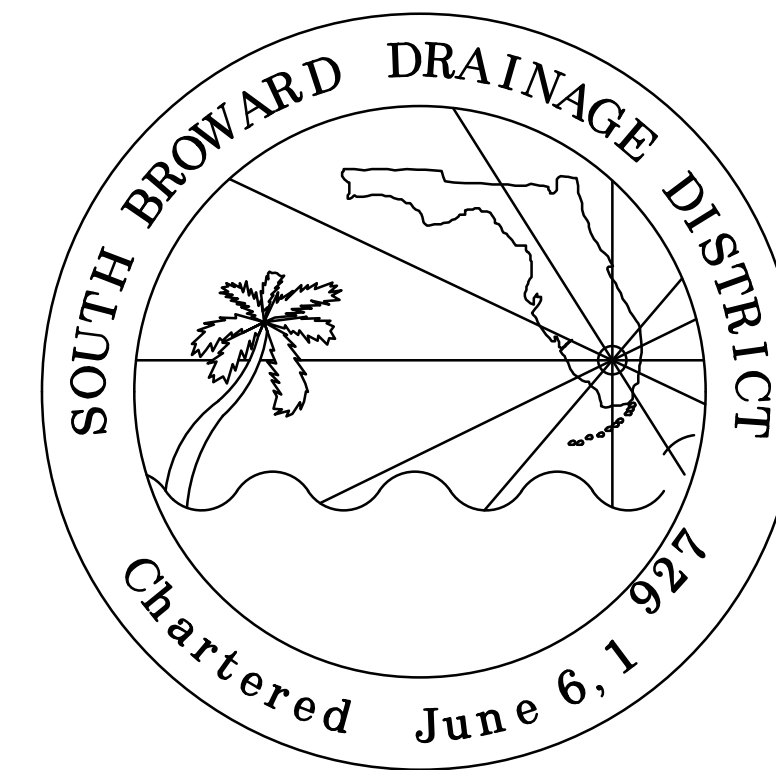
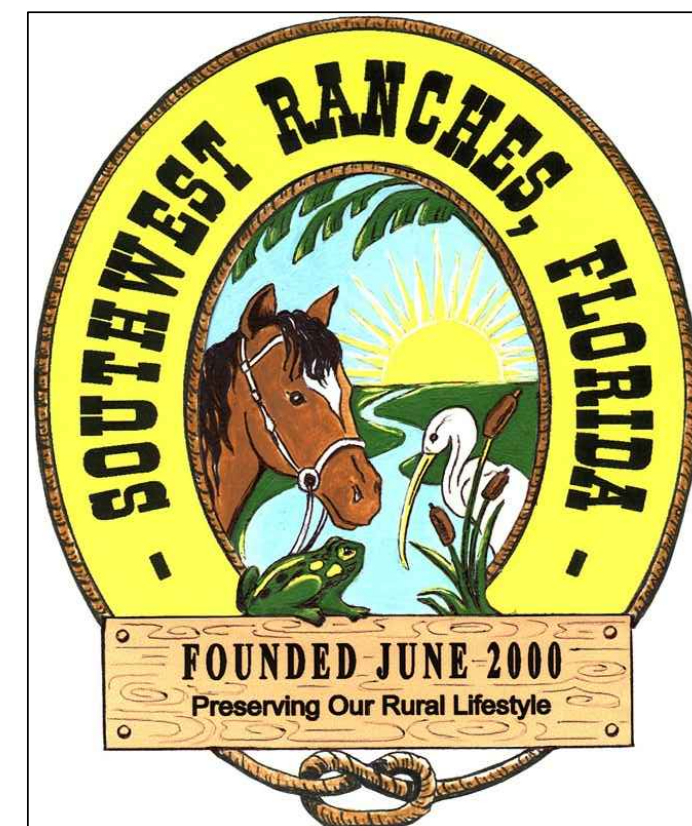
1. Revised plans to include new Disposal and Containment Plan (see below for drawings).

Summary list of changes include:

- Changed all elevations on the engineering plans from NGVD 29 to NAVD 88.
- The elevations on the survey (which is part of the plan set) have not been changed and remain at NGVD 29.
- Added Sheet 10 – Disposal and Containment Plan. Contractor is still responsible to remove all surplus material off of the site.
- Added sections F-F and G-G to Sheet 5 of 10.

TOWN OF SOUTHWEST RANCHES & SOUTH BROWARD DRAINAGE DISTRICT DYKES ROAD DRAINAGE AND WATER QUALITY PROJECT

TOWN OF SOUTHWEST RANCHES
13400 GRIFFIN ROAD
SOUTHWEST RANCHES, FLORIDA 33330



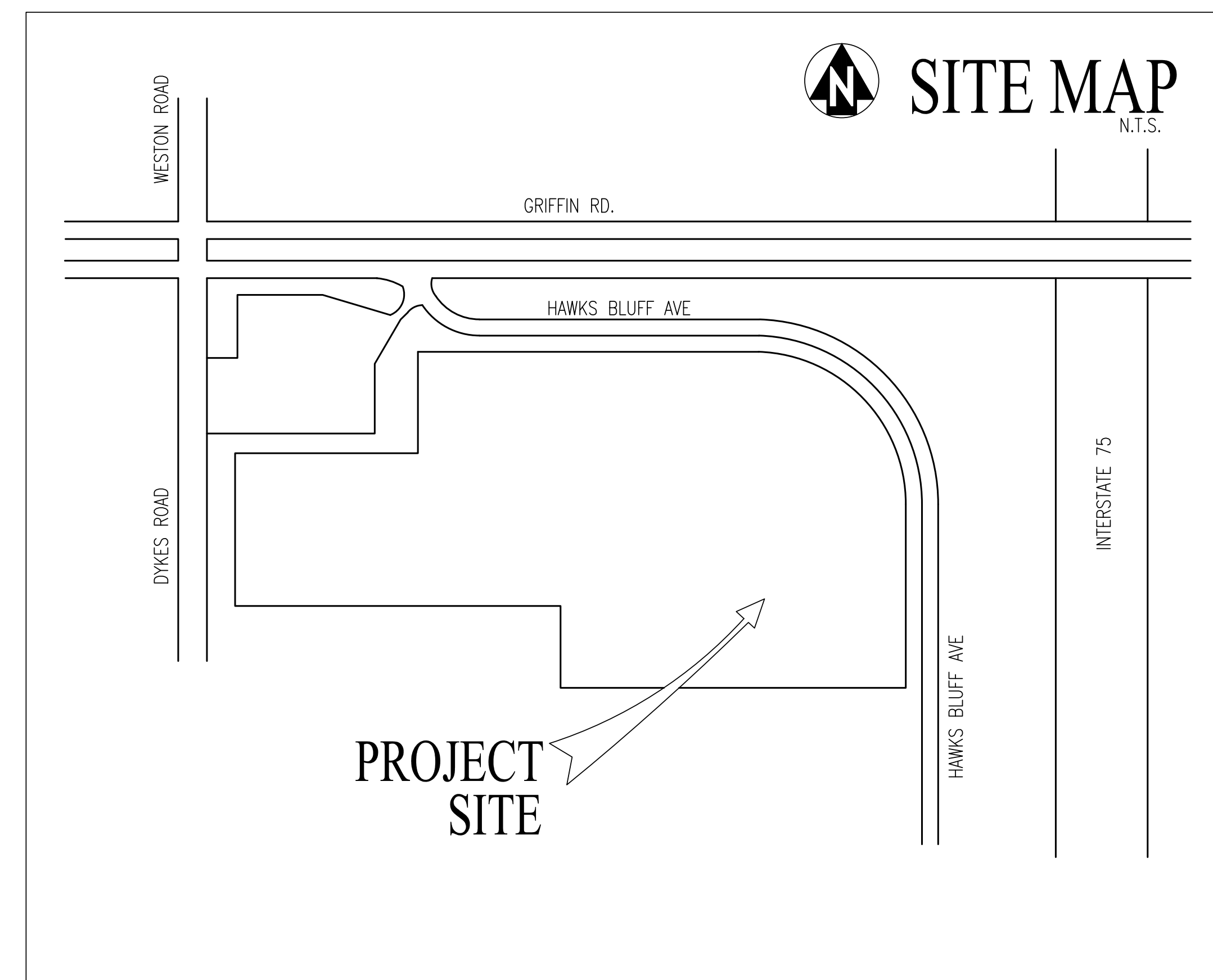
SOUTH BROWARD DRAINAGE DISTRICT
6591 SW 169th AVE.
SOUTHWEST RANCHES, FLORIDA 33331



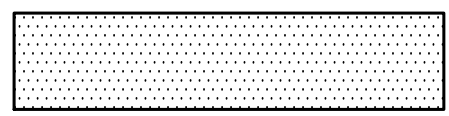
Know what's below.
Call before you dig.


DRAWING INDEX:

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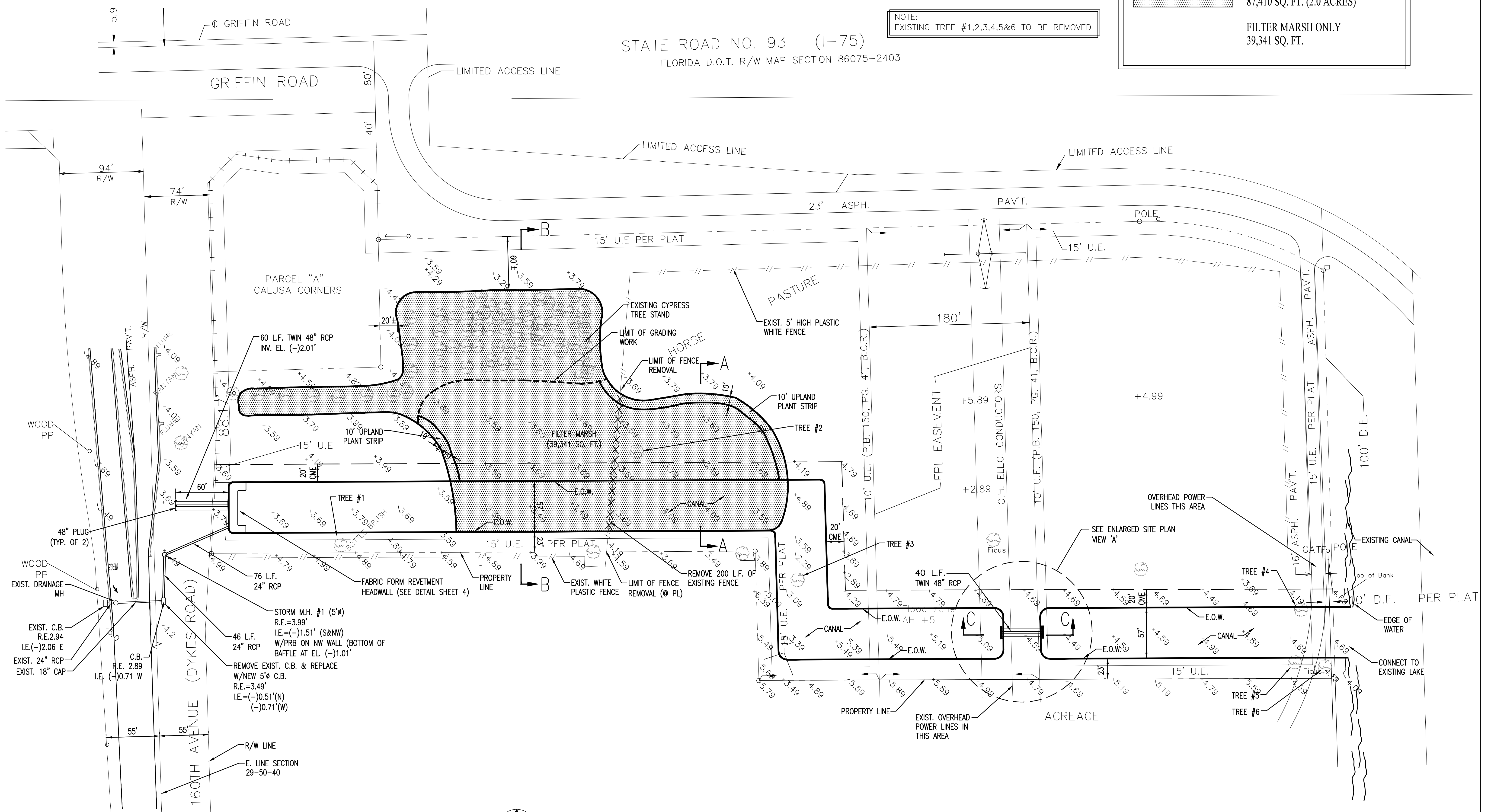
LEGEND:

 SWR WETLAND CREATION AREA
87,410 SQ. FT. (2.0 ACRES)

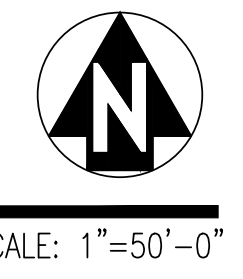
 FILTER MARSH ONLY
39,341 SQ. FT.

NOTE:
EXISTING TREE #1,2,3,4,5&6 TO BE REMOVED

STATE ROAD NO. 93 (I-75)
FLORIDA D.O.T. R/W MAP SECTION 86075-2403



GRADING & DRAINAGE PLAN



NOTES:
 • ALL ELEVATIONS ARE BASED ON NAVD '88 DATUM
 • CONVERSION FROM NAVD '88 DATUM TO NGVD '29 IS + 1.51' = NGVD '29

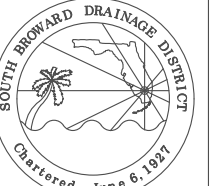
NO	DATE	REVISION	BY	NO	DATE	REVISION	BY
1	8-30-17	BROWARD COUNTY ENVIRONMENTAL RESOURCE PERMIT	KH				

SOUTH BROWARD DRAINAGE DISTRICT
6591 SW 160th AVE
SOUTHWEST RANCHES, FL. 33331

GRADING & DRAINAGE PLAN SOUTHWEST RANCHES, FLORIDA DYKES RD DRAINAGE AND WATER QUALITY PROJECT

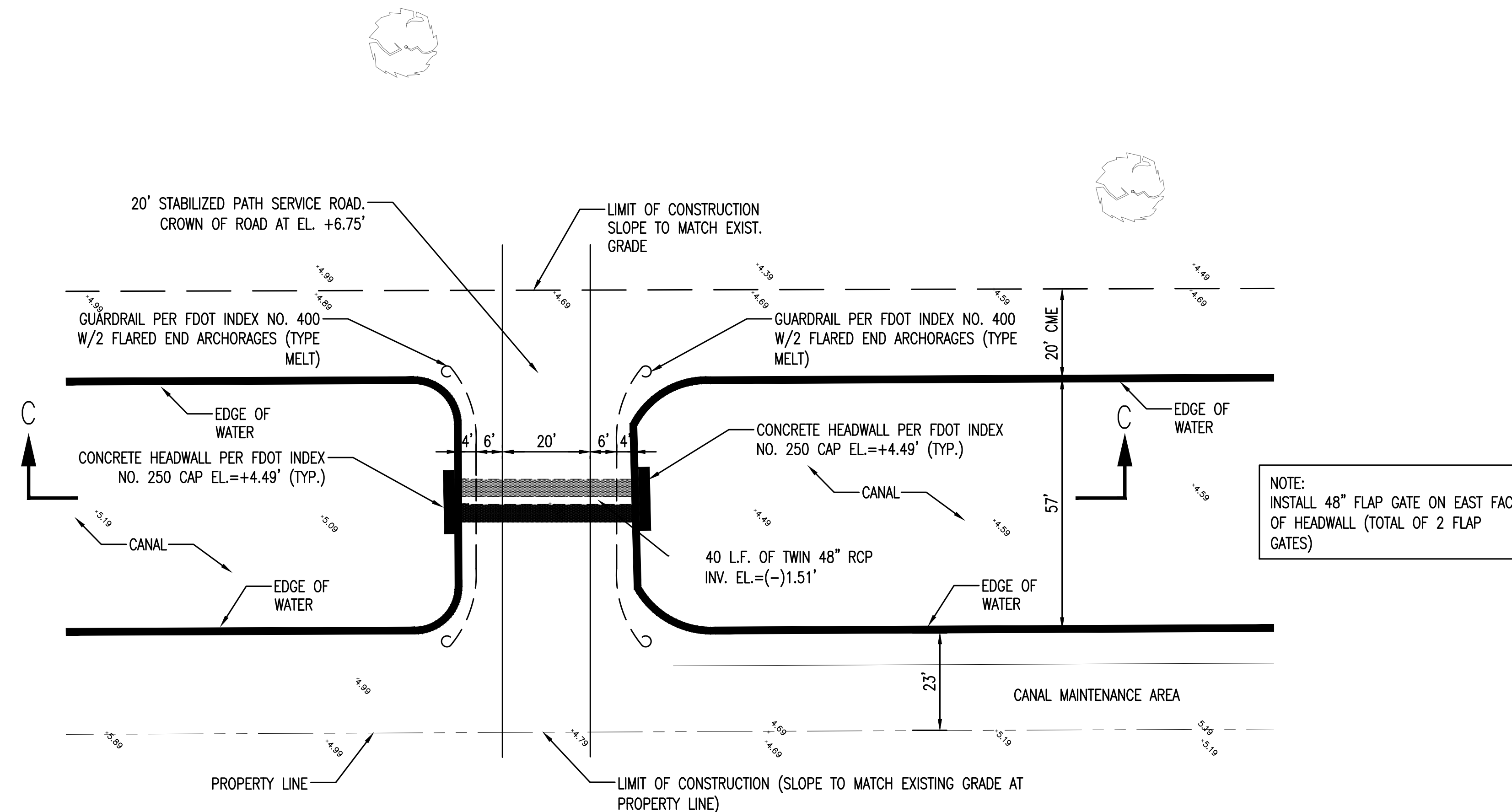
DRAWN BY:
J.K.S.
APPROVED BY:
K.M.H.
DATE 6-2-2017

SCALE: AS NOTED
PROJECT NO:
CAD FILE:



NOTES:

1. See Solis Report prepared by EastCoast Testing & Engineering, Inc, dated April 25, 2017 for locations and data on existing subsurface conditions, including the depth and hardness of the underlying soils.
2. There shall be no Change Orders or additional payments under this contract due to the hardness of the underlying rock or the depth to the water table. The Contractor shall perform any site investigations and obtain any additional information as they deem necessary to determine the extent of the work and equipment required to excavate the canal and to install the drainage culverts and structures as indicated in the Contract Documents.
3. See topographic survey prepared by Winningham & Fradley, Inc., dated 5/26/17, for information and data on existing ground elevations.
4. All existing trees within the limits of construction shall be removed by the Contractor.
5. The existing fence within the limits of construction shall be removed by the Contractor.
6. Refer to Horizontal Control Plan prepared by Winningham & Fradley, Inc. for all dimensions and layout information.
7. All elevations shown on this plan are based on the North American Vertical Datum of 1988 (NAVD 88). The conversion from NAVD 88 to the National Geodetic Vertical Datum of 1929 (NGVD 29) is: NGVD'29 = NAVD'88 + 1.51'
8. Contractor shall verify the location, size, material, and depth of all existing underground utility lines prior to beginning the work.
9. Contractor shall exercise extreme caution when working under and around existing overhead electric lines. Contractor shall notify and coordinate with FPL on any safety or other issues regarding overhead power lines.
10. Contractor shall submit a Maintenance of Traffic (MOT) Plan to the Town of Southwest Ranches for approval for any impacts to the flow of traffic on Dykes Road or Hawkes Bluff Avenue.
11. All excess fill from the canal excavation and drainage installation shall be removed from the site by the Contractor.
12. The limits of the Project area shall be restored with Bahia sod. Contractor shall be responsible for watering of the sod until final acceptance of the work.
13. The canal bank and Canal Maintenance Area shall be sodded with Bahia sod down to the edge of water. If necessary, the sod shall be staked along the canal bank to prevent sliding.
14. Contractor shall be responsible to completely restore the limits of construction including, but not limited to, sod, irrigation, pavement, and curbing. The existing C.B., M.H., 24" RCP and 18" CMP to be cleaned upon completion of construction.
15. Contractor shall be responsible to obtain a dewatering permit from the South Florida Water Management District (SFWMD) for the any dewatering activities (at the sole cost to the Contractor).
16. Any required density tests or material testing shall be paid for by the Contractor.
17. All required survey layouts and as-built surveys shall be paid for by the Contractor.
18. Contractor shall install a 12" concrete apron around the new drainage catch basin along Dykes Road.
19. Contractor shall comply with all requirements of Section 403.0885, Florida Statutes for NPDES, including, but not limited to, filing a Notice of Intent.



ENLARGED VIEW 'A' AT STABILIZED PATH



SCALE: 1"=20'-0"

EXISTING TREES TO BE REMOVED:			
No.	Species	Trunk Circumference	Canopy Radius
1	Bottlebrush	9'-2"	14'
2	Ficus	18'-0"	40'
3	Bischofia	13'-0"	33'
4	Bischofia	13'-2"	30'
5	Bischofia	9'-9"	30'
6	Ficus	8'-2"	28'

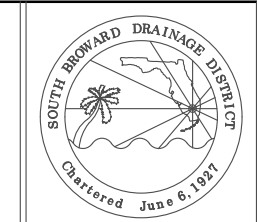
- NOTES:
- ALL ELEVATIONS ARE BASED ON NAVD '88 DATUM
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NO	DATE	REVISION	BY	NO	DATE	REVISION	BY
1	8-30-17	BROWARD COUNTY ENVIRONMENTAL RESOURCE PERMIT	KH				

SOUTH BROWARD DRAINAGE DISTRICT
6591 SW 160th AVE
SOUTHWEST RANCHES, FL. 33331

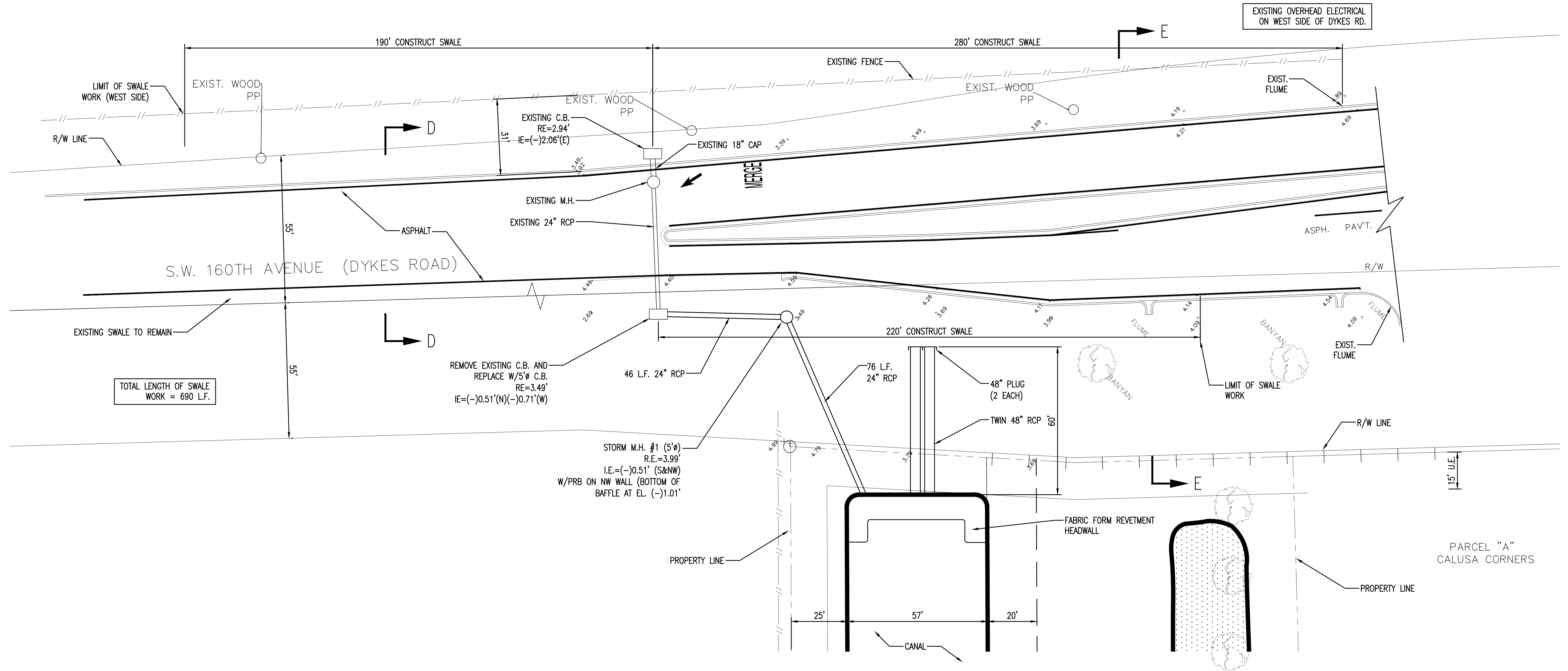
ENLARGED SITE PLAN 'A'
SOUTHWEST RANCHES, FLORIDA
DYKES RD DRAINAGE AND WATER QUALITY PROJECT

DRAWN BY:
J.K.S.
APPROVED BY:
K.M.H.
DATE 6-2-2017

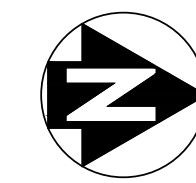


SCALE AS NOTED
PROJECT No
CAD FILE

SHEET
2 OF 10



DRAINAGE PLAN AT DYKES ROAD



SCALE: 1"=20'-0"

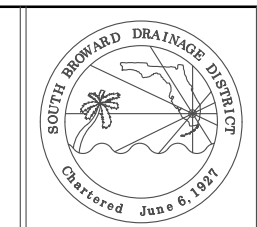
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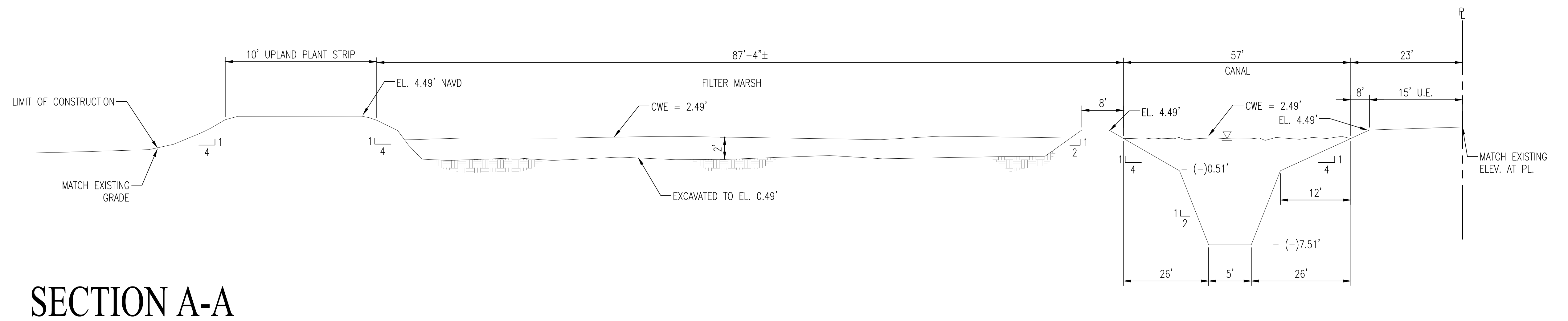
DRAINAGE PLAN AT DYKES ROAD
SOUTHWEST RANCHES, FLORIDA
DYKES RD DRAINAGE AND WATER QUALITY PROJECT

DRAWN BY:
J.K.S.
APPROVED BY:
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DATE 6-2-2017



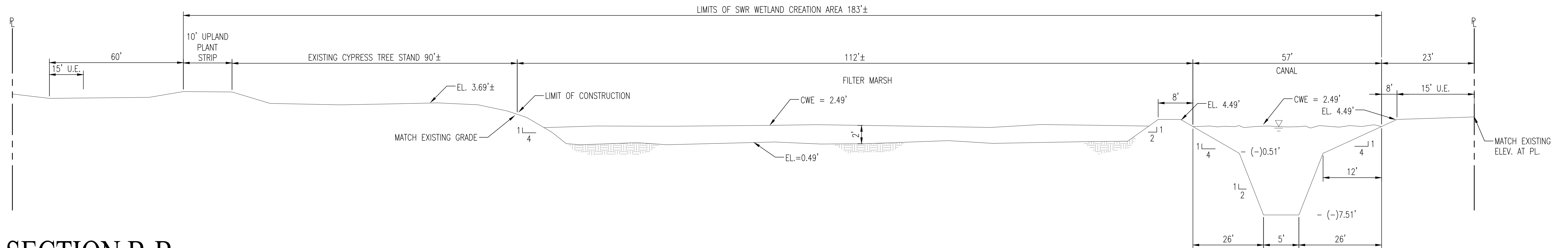
SCALE AS NOTED
PROJECT No
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3 OF 10



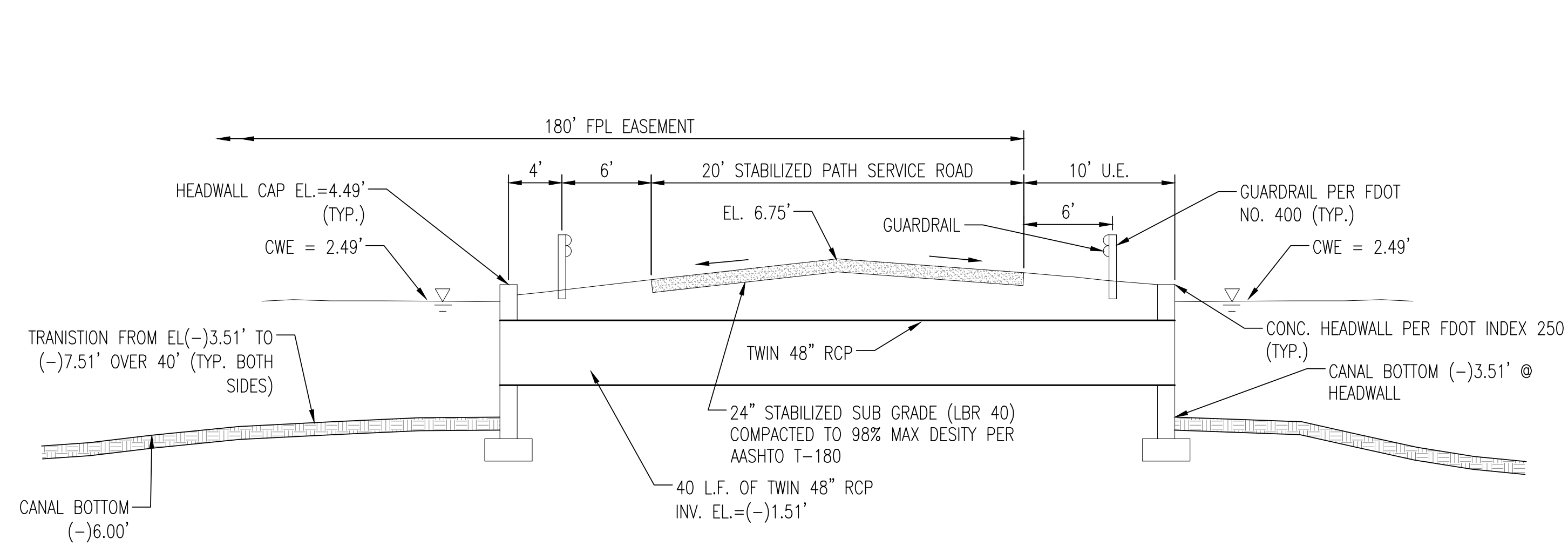
SECTION A-A

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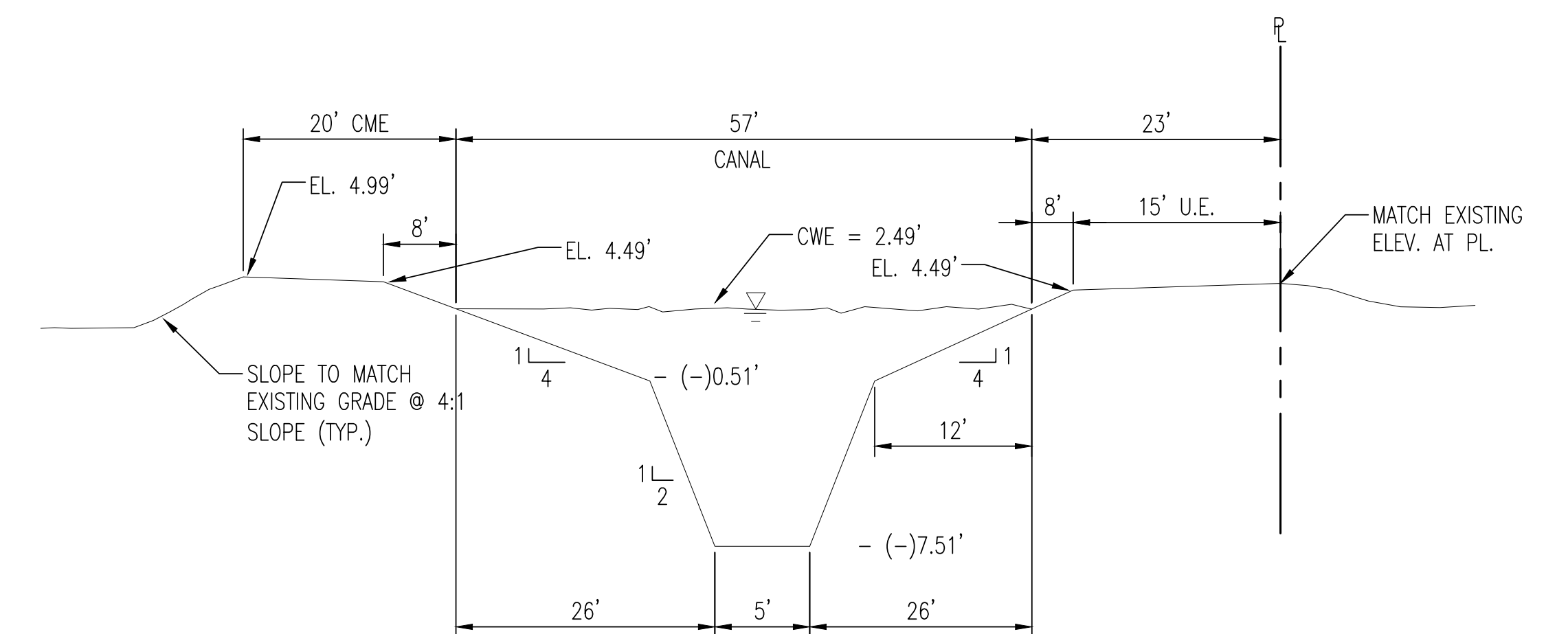
SECTION B-B

NO SCALE



SECTION C-C

NO SCALE



TYP. CANAL CROSS SECTION

NO SCALE

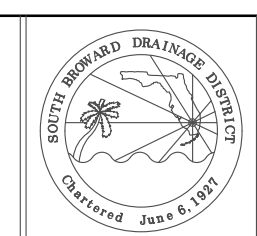
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SOUTHWEST RANCHES, FL. 33331

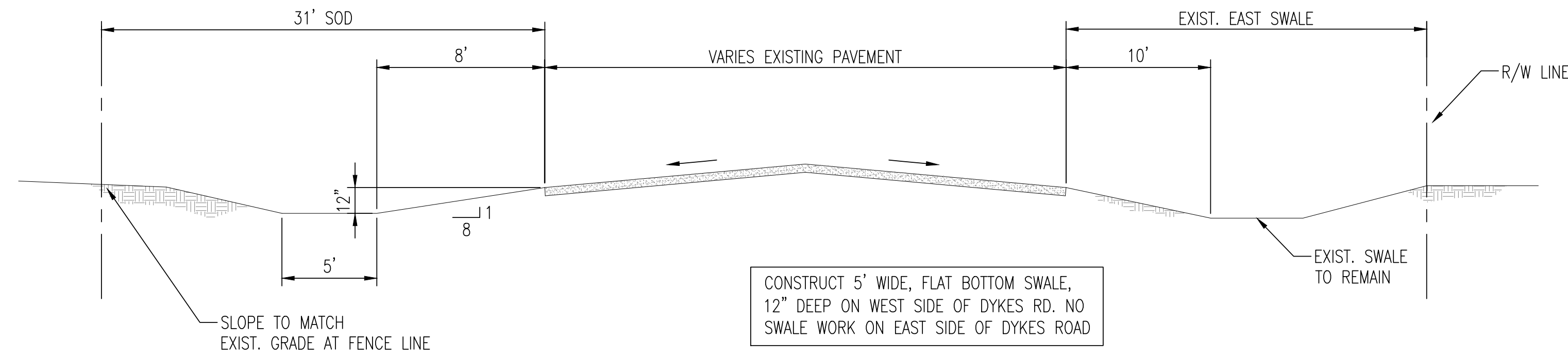
DRAINAGE DETAILS AND SECTIONS
SOUTHWEST RANCHES, FLORIDA
DYKES ROAD DRAINAGE AND WATER QUALITY PROJECT

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J.K.S.
APPROVED BY:
K.M.H.
DATE 6-2-2017



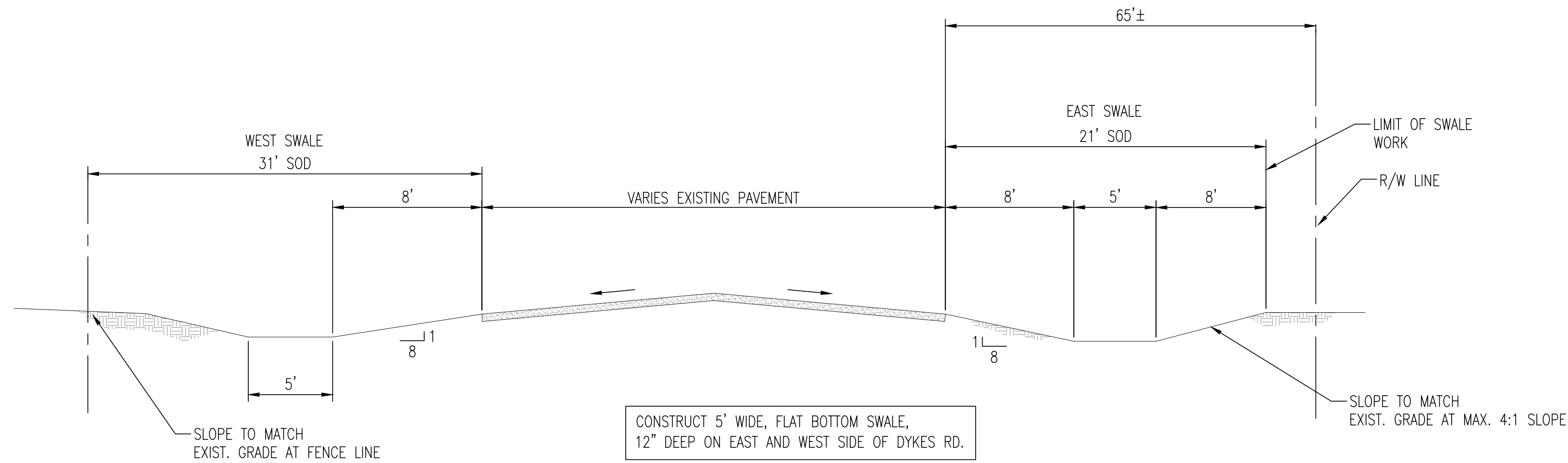
SCALE AS NOTED
PROJECT No
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4 OF 10



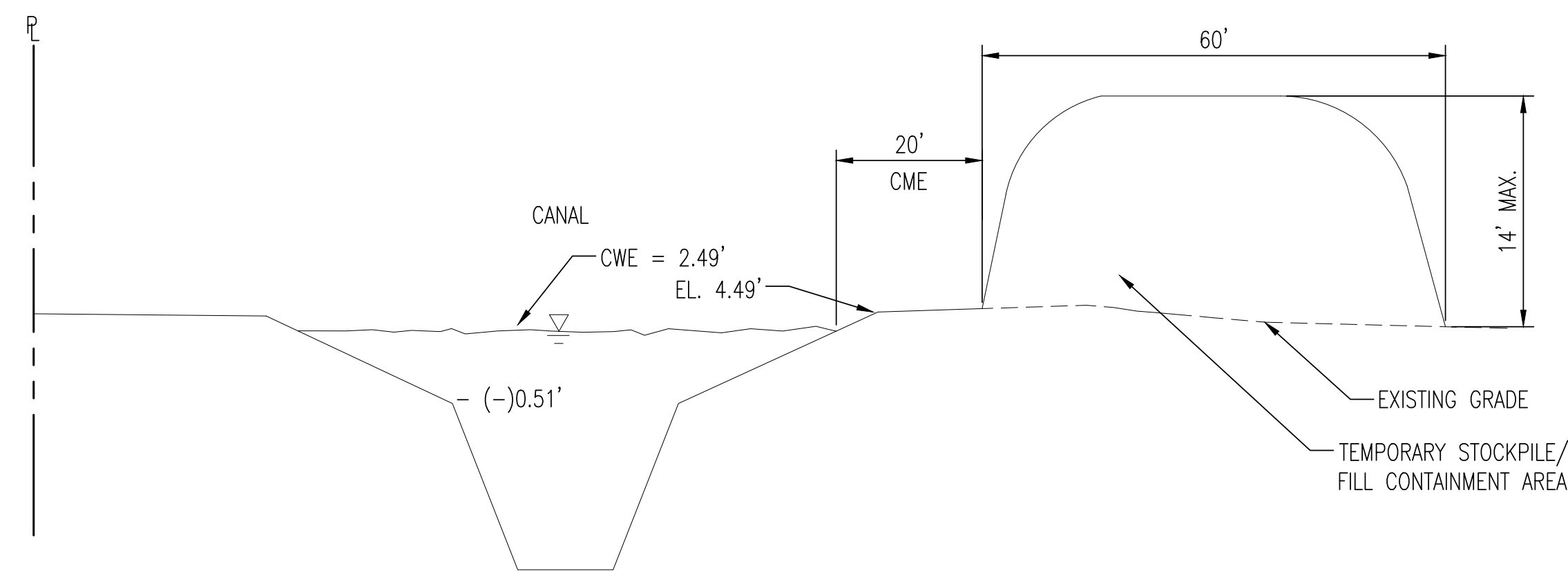
SECTION D-D

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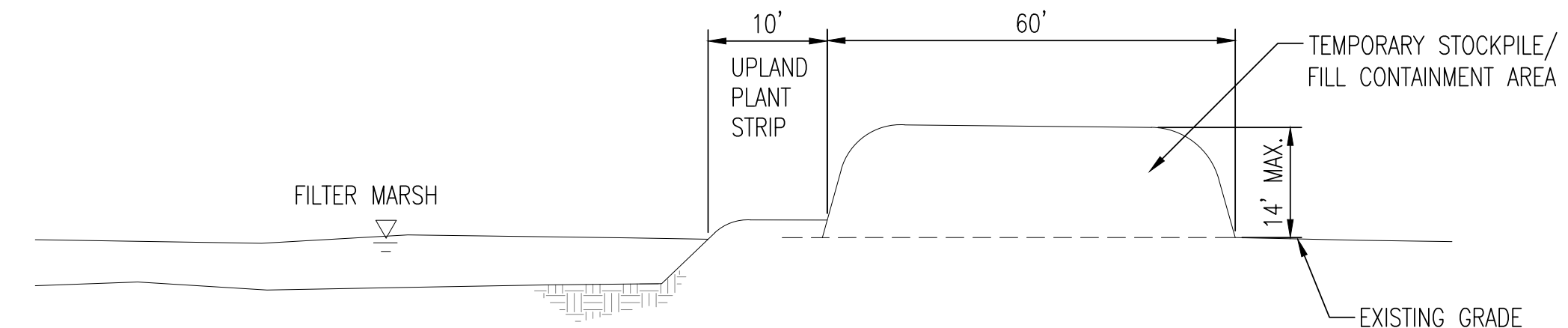
SECTION E-E

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SECTION F-F

NO SCALE



SECTION G-G

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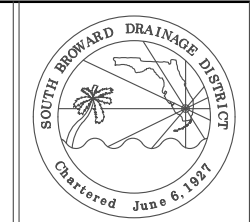
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6591 SW 160th AVE
SOUTHWEST RANCHES, FL. 33331

DRAINAGE DETAILS AND SECTIONS
SOUTHWEST RANCHES, FLORIDA
DYKES ROAD DRAINAGE AND WATER QUALITY PROJECT

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5 OF 10

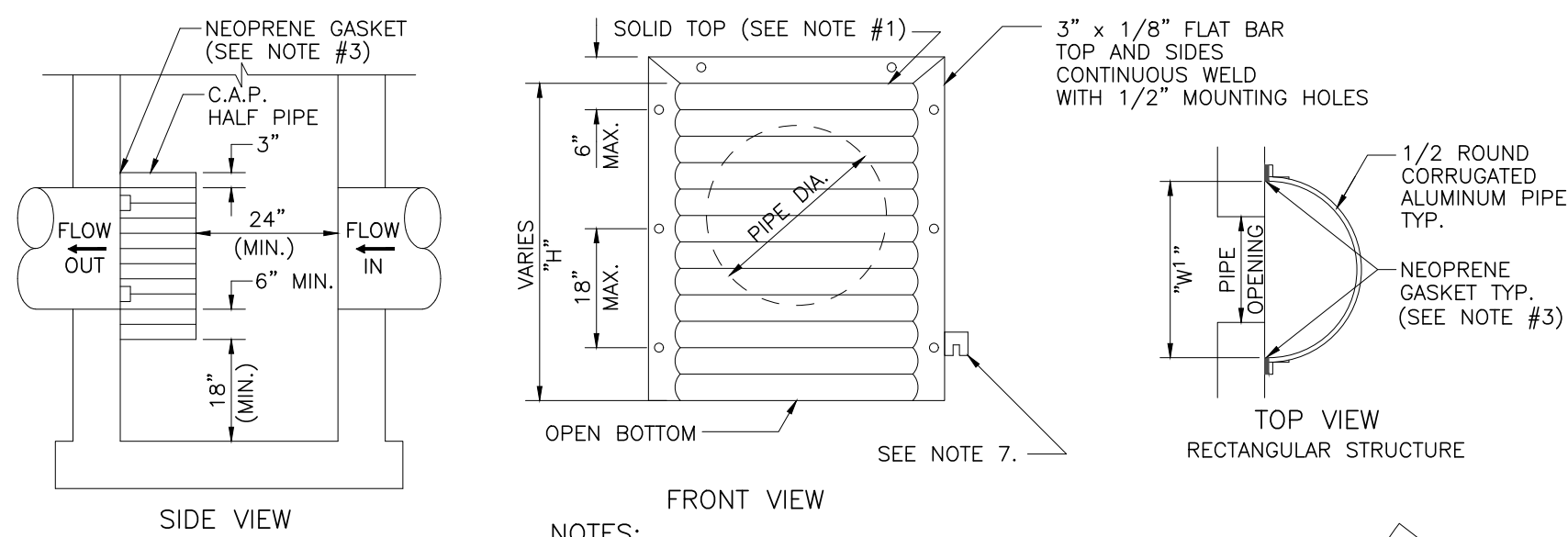


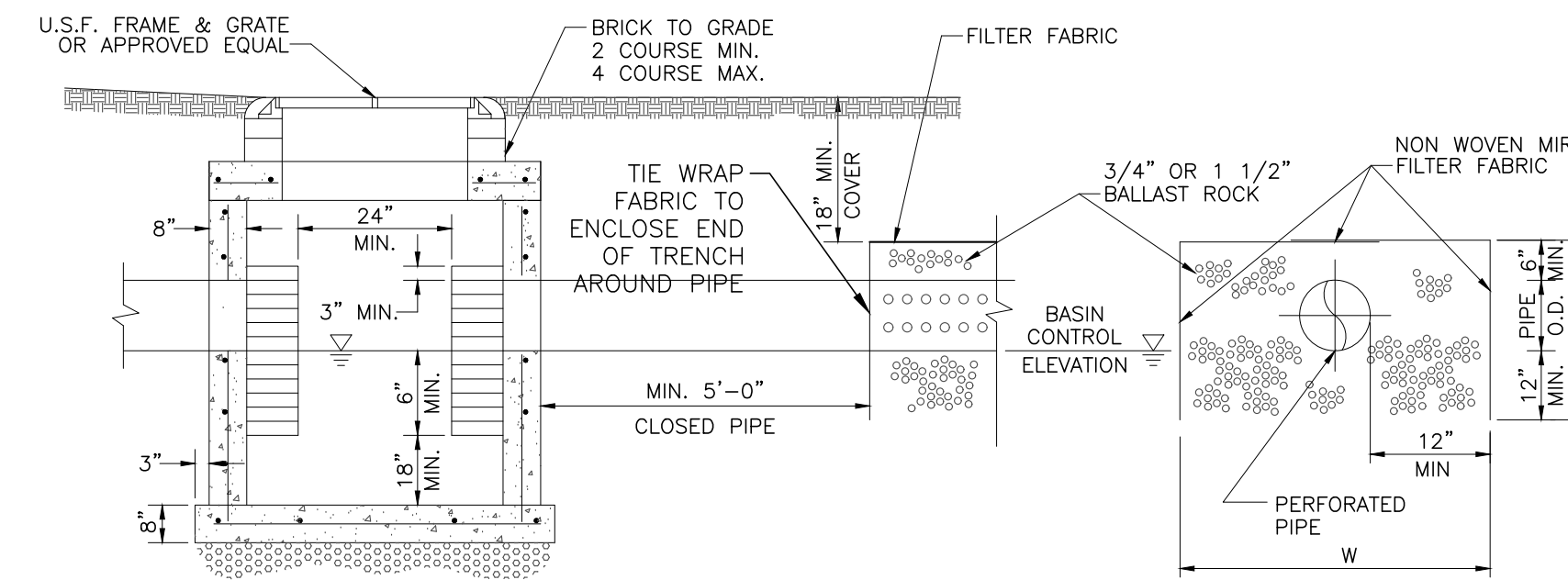
TABLE 1: RECTANGULAR STRUCTURE

PIPE DIA. (IN)	W (IN)	W ² (IN)	T (GAUGE)	H (IN)
15"	21"	21"	16	VARIES
18"	24"	24"	16	VARIES
21"	30"	30"	16	VARIES
24"	30"	36"	16	VARIES
30"	36"	42"	14	VARIES
36"	42"	48"	14	VARIES
42"	48"	54"	14	VARIES
48"	54"	60"	14	VARIES
54"	60"	66"	14	VARIES

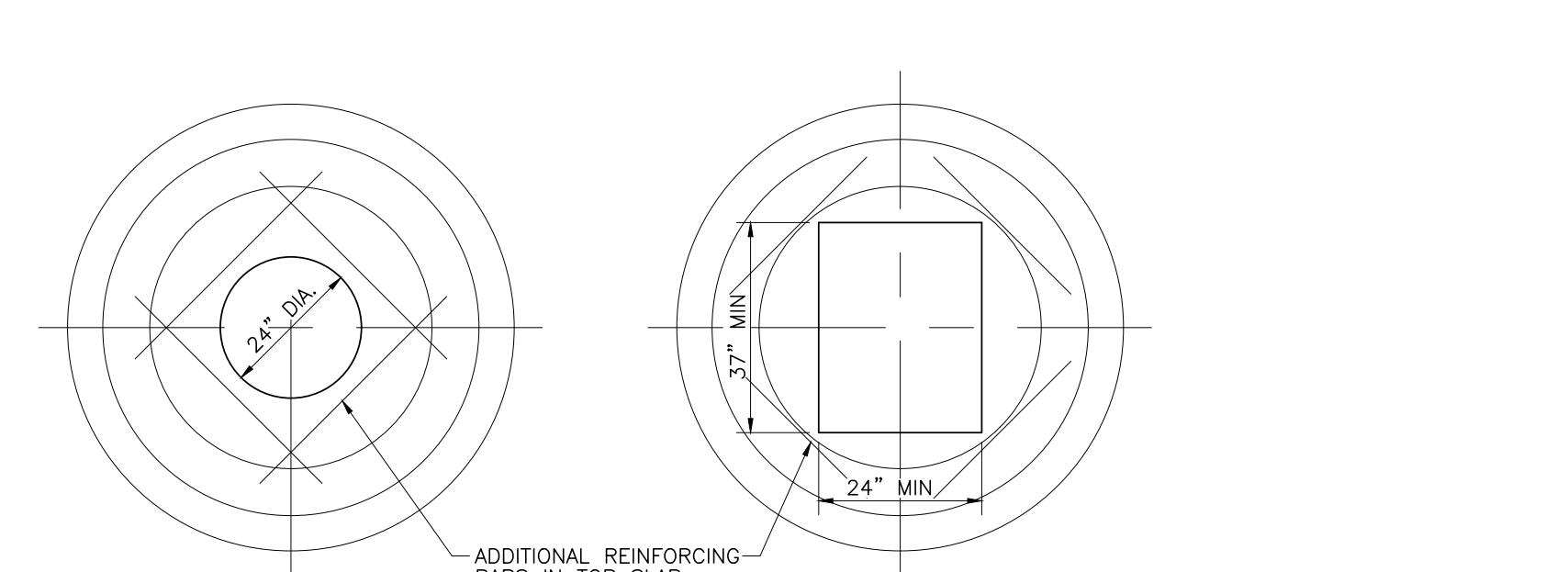
TABLE 2: ROUND STRUCTURE

PIPE DIA. (IN)	W (IN)	T (GAUGE)	H (IN)
15"	18"	16	VARIES
18"	21"	16	VARIES
21"	24"	16	VARIES
24"	27"	16	VARIES
30"	33"	14	VARIES
36"	39"	14	VARIES
42"	45"	14	VARIES
48"	51"	14	VARIES
54"	57"	14	VARIES

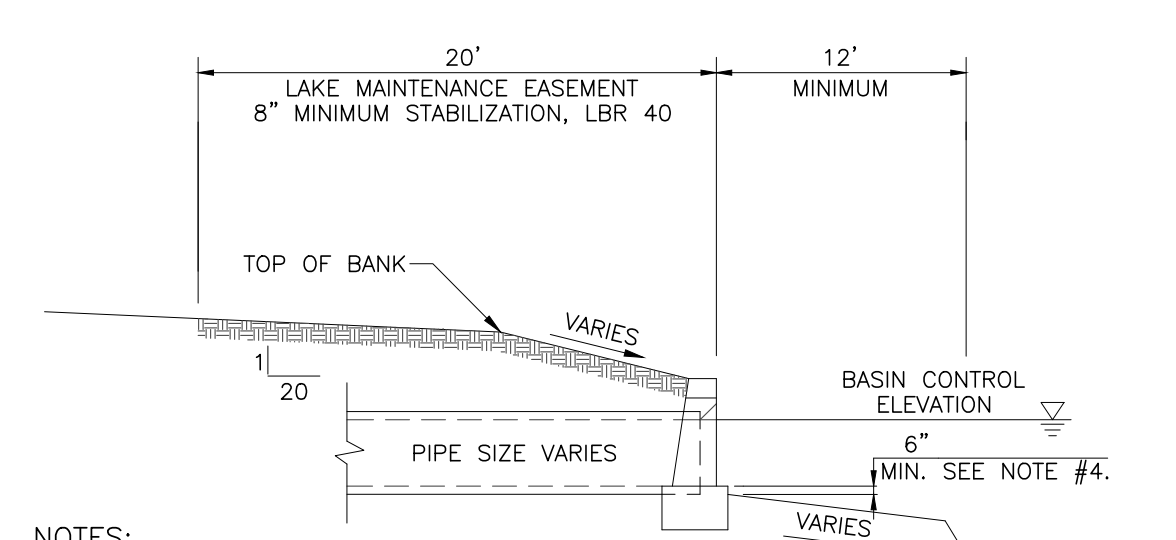
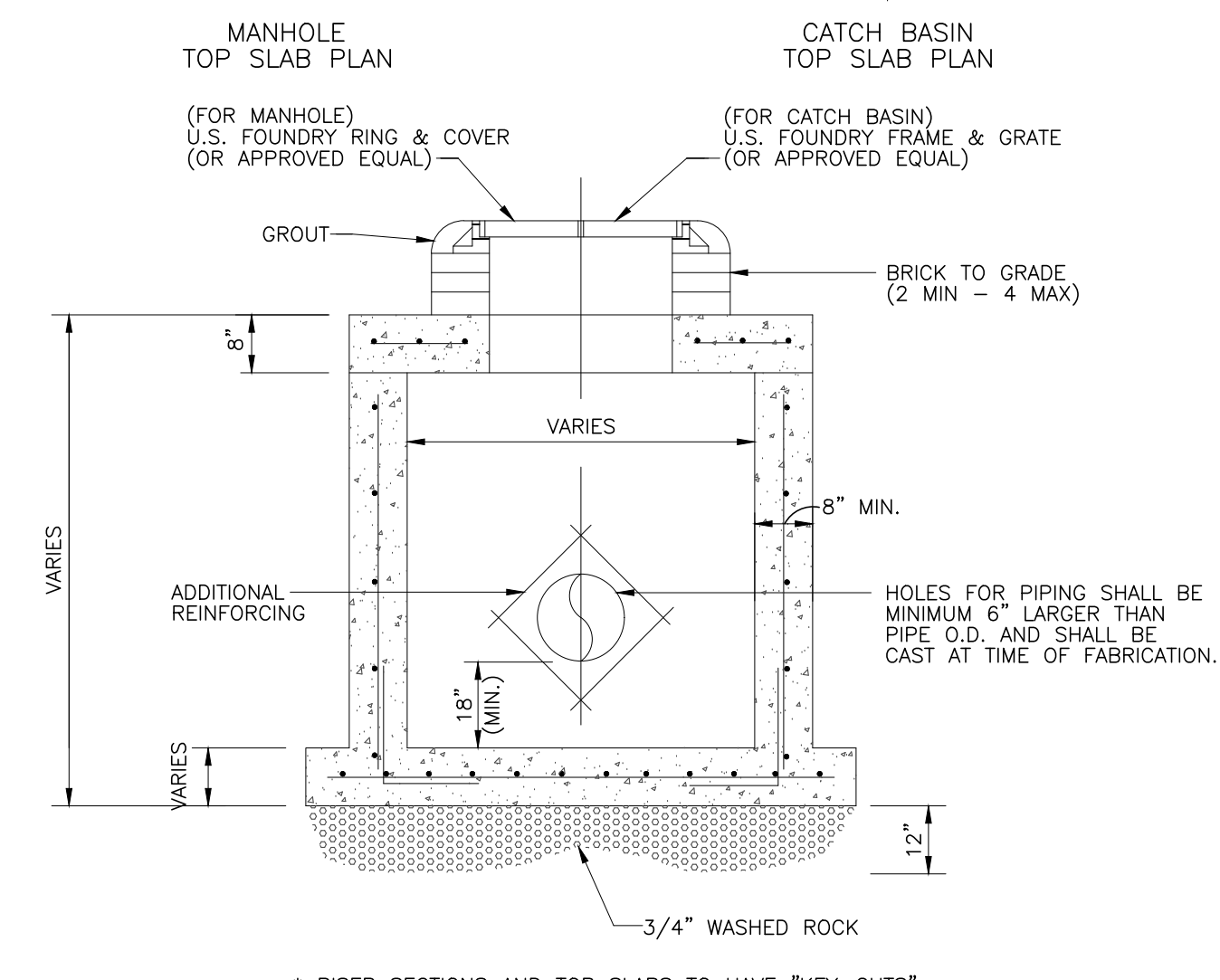
POLLUTION RETARDANT BAFFLE DETAIL



EXFILTRATION TRENCH DETAIL

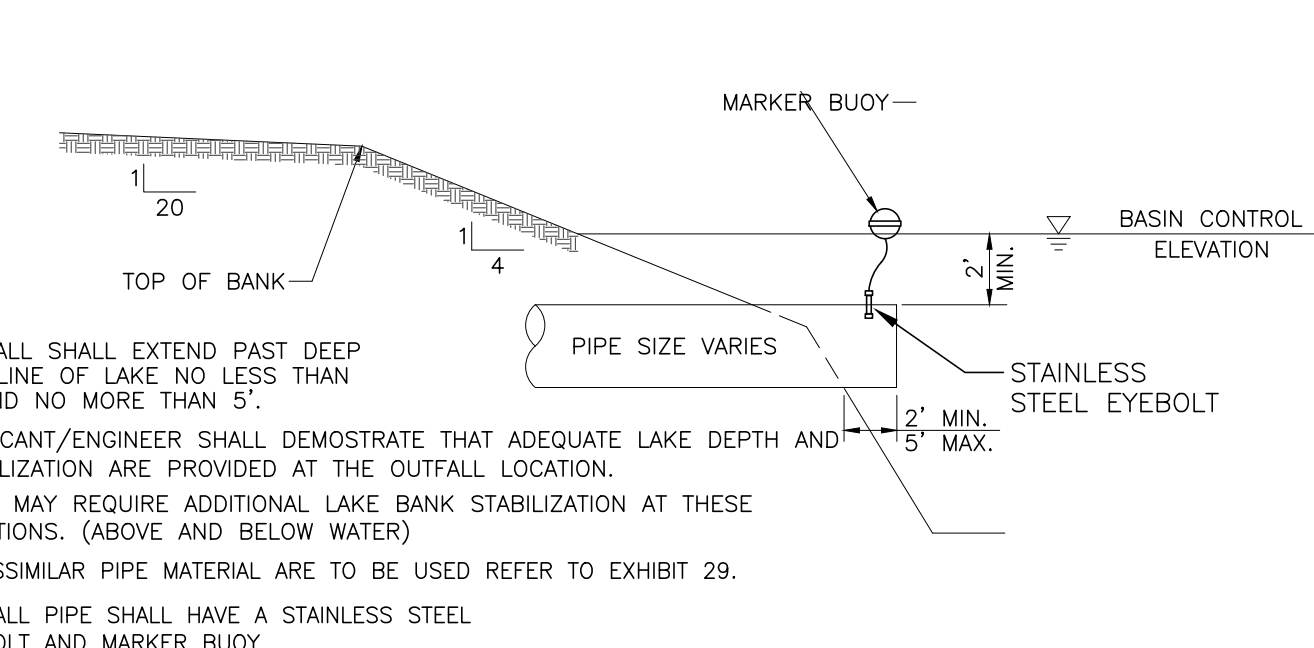


PRECAST CATCH BASIN AND MANHOLE DETAIL



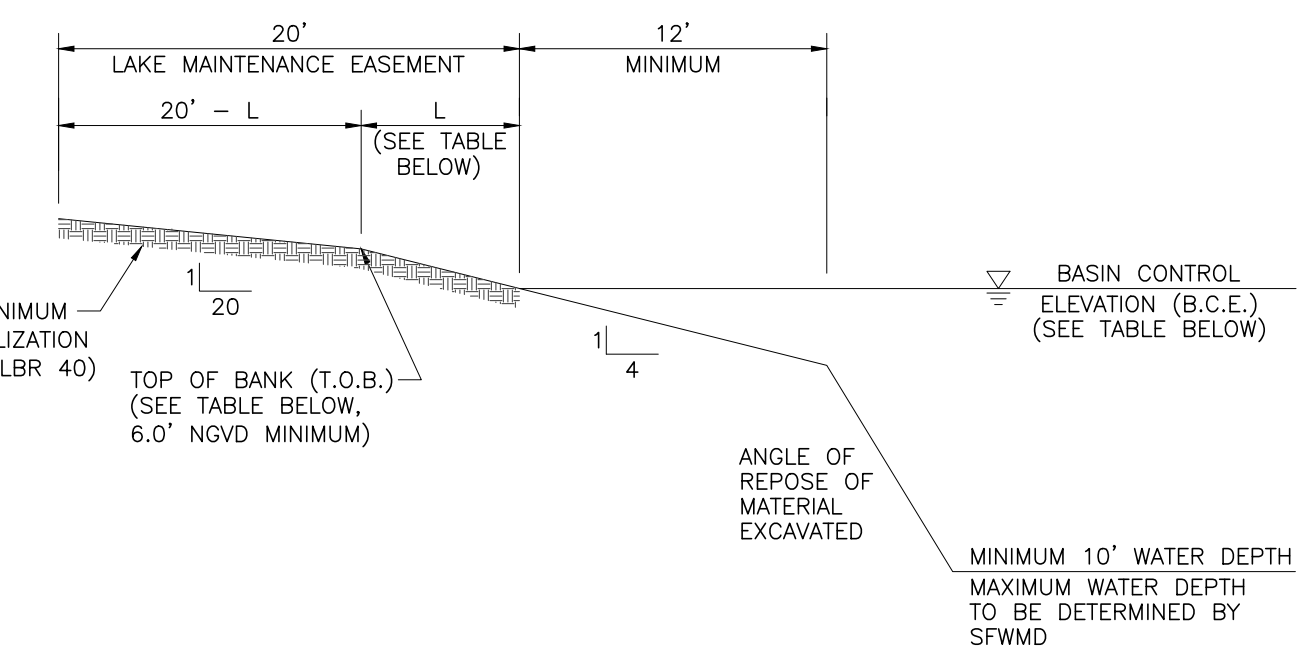
- NOTES:**
- TOP OF CAP TO BE 1' ABOVE THE BASIN CONTROL ELEVATION FOR LAKES AND 2' ABOVE BASIN CONTROL ELEVATION FOR CANALS, UNLESS OTHERWISE APPROVED BY THE DISTRICT.
 - HEADWALLS ARE REQUIRED FOR ALL LAKE AND CANAL INTERCONNECTS.
 - CONCRETE AND RIP-RAP ENDWALLS ARE ACCEPTED PER FDOT INDEX 250-255 AND INDEX 258 WITH EXCEPTIONS AS NOTED IN SECTION 3.7.7 OF THE SBDD DESIGN CRITERIA MANUAL.
 - CHANNEL IN FRONT OF PIPE TO BE MIN 6" BELOW THE INVERT OF THE PIPE AND AT LEAST 1 1/2 TIMES THE DIA. OF THE PIPE TO THE DEEP CUT LINE AND CENTERED ON THE PIPE.
 - FACE OF HEADWALL TO BE LOCATED AT DESIGN EDGE OF WATER.

LAKE OUTFALL DETAIL WITH HEADWALL



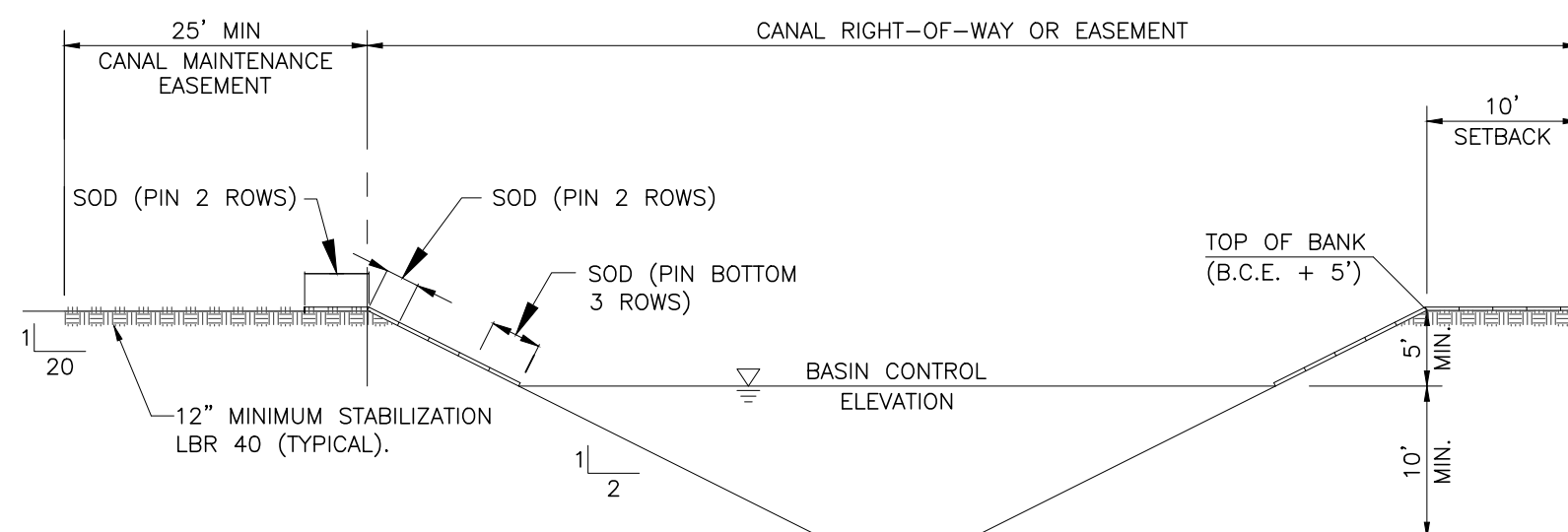
- NOTE:**
- OUTFALL SHALL EXTEND PAST DEEP CUT LINE OF LAKE NO LESS THAN 2' AND NO MORE THAN 5'.
 - APPLICANT/ENGINEER SHALL DEMONSTRATE THAT ADEQUATE LAKE DEPTH AND STABILIZATION ARE PROVIDED AT THE OUTFALL LOCATION.
 - SBDD MAY REQUIRE ADDITIONAL LAKE BANK STABILIZATION AT THESE LOCATIONS. (ABOVE AND BELOW WATER)
 - IF DISSIMILAR PIPE MATERIAL ARE TO BE USED REFER TO EXHIBIT 29.
 - OUTFALL PIPE SHALL HAVE A STAINLESS STEEL EYEBOLT AND MARKER BUOY.

LAKE OUTFALL DETAIL WITHOUT HEADWALL



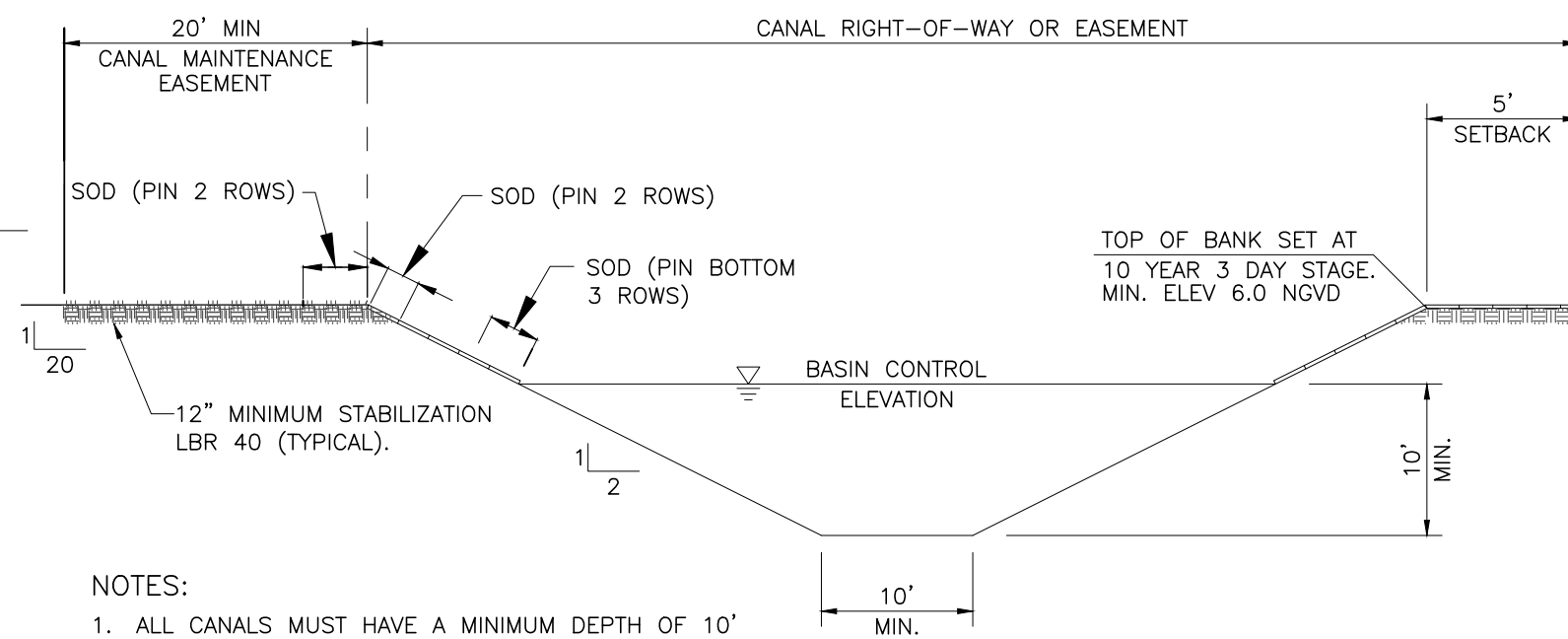
BASIN No.	B.C.E. (FT-NAVD)	T.O.B. (FT-NAVD)	L (FT)	BASIN No.	B.C.E. (FT-NAVD)	T.O.B. (FT-NAVD)	L (FT)
S-1	0.99	4.99	16.00	S-8	1.99	4.49	10.00
S-2 & S-7	1.19	4.49	13.20		2.49	4.99	10.00
S-3	1.49	4.99	14.00	S-9 & S-10	1.99	4.99	12.00
S-4	1.99	4.49	10.00		2.49	4.99	10.00
S-5	2.49	4.49	8.00	S-12	1.49	4.99	14.00
	2.74	4.99	9.00	S-13	1.49	4.99	14.00
	2.99	4.99	8.00				

LAKE CROSS SECTION AND LAKE MAINTENANCE EASEMENT



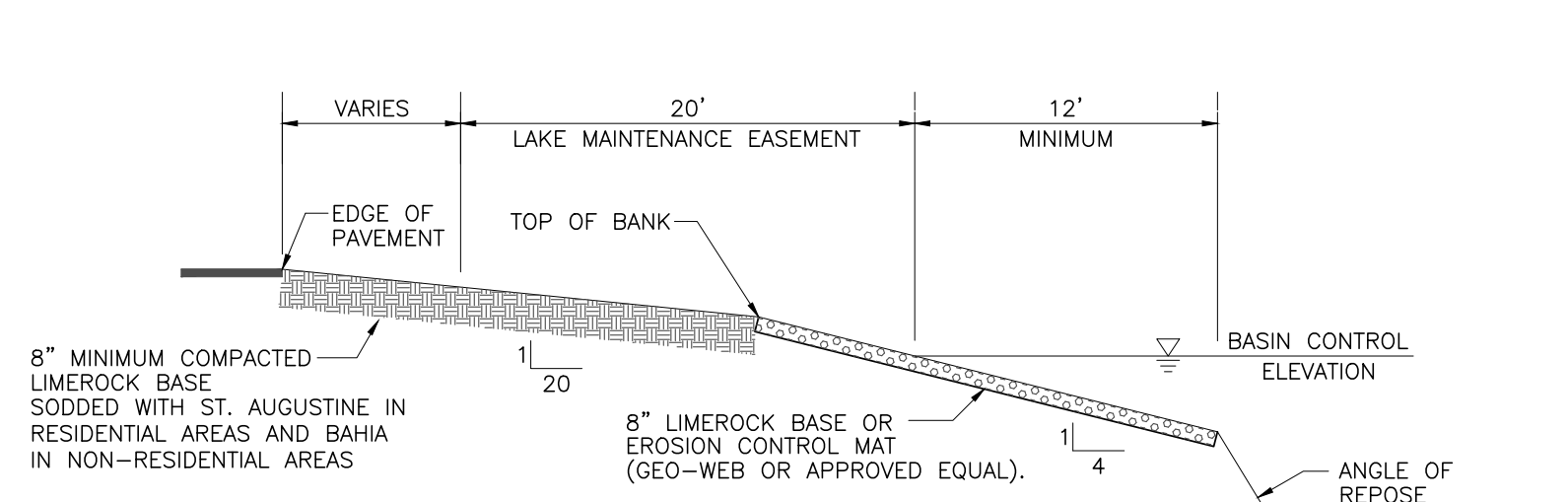
- NOTES:**
- ALL CANALS MUST HAVE A MINIMUM DEPTH OF 10' FROM CONTROL ELEVATION TO BOTTOM OF EXCAVATION
 - MINIMUM CANAL BOTTOM IS 10' WIDE
 - ALL PROPERTIES ADJACENT TO THE CANAL MUST SLOPE BANKS, SOD AND PROVIDE AS-BUILTS TO THE ABOVE DESIGN.
 - THERE SHALL BE NO MUCK WITHIN THE CANAL RIGHT OF WAY AND MAINTENANCE EASEMENT.
 - SOD PINS MUST BE WOOD.

PRIMARY CANAL MINIMUM DESIGN SECTION AND CANAL MAINTENANCE EASEMENT



- NOTES:**
- ALL CANALS MUST HAVE A MINIMUM DEPTH OF 10' FROM CONTROL ELEVATION TO BOTTOM OF EXCAVATION
 - MINIMUM CANAL BOTTOM IS 10' WIDE
 - ALL PROPERTIES ADJACENT TO THE CANAL MUST SLOPE BANKS, SOD AND PROVIDE AS-BUILTS TO THE ABOVE DESIGN.
 - THERE SHALL BE NO MUCK WITHIN THE CANAL RIGHT OF WAY AND MAINTENANCE EASEMENT.
 - SOD PINS MUST BE WOOD.

SECONDARY CANAL MINIMUM DESIGN SECTION AND CANAL MAINTENANCE EASEMENT



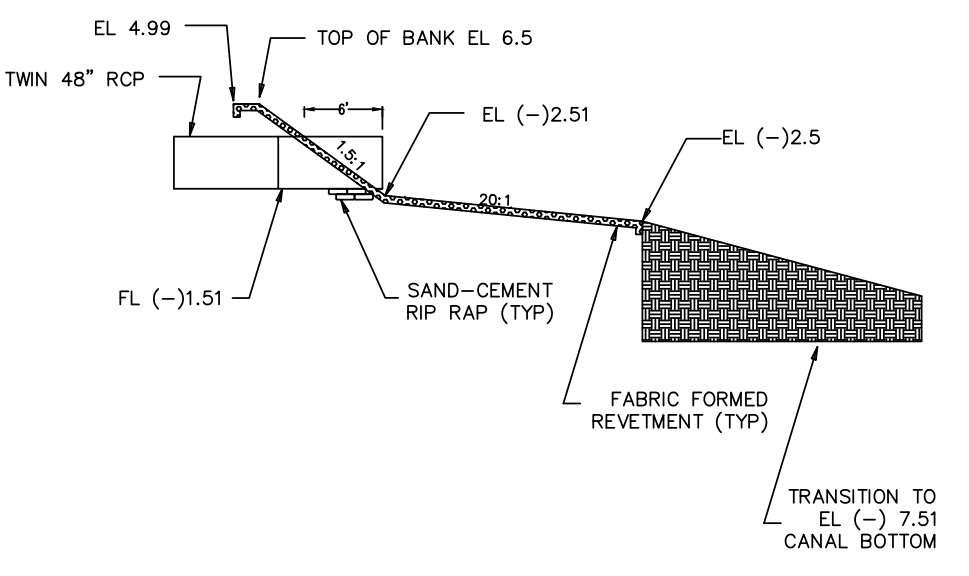
- NOTES:**
- LOCATION OF BOAT RAMP(S) MUST BE IDENTIFIED, INSPECTED AND APPROVED BY SBDD PRIOR TO CONSTRUCTION
 - SLOPE DETAILS AS OUTLINED ABOVE MUST BE INSPECTED AND APPROVED BY THE DISTRICT PRIOR TO INSTALLATION OF EROSION CONTROL MAT.
 - UPON COMPLETION OF BOAT RAMP, DISTRICT MUST BE NOTIFIED FOR FINAL APPROVAL.
 - BOAT RAMP MUST INTERSECT ADJACENT ROAD AND WATER BODY AT 90° ANGLE UNLESS OTHERWISE APPROVED.
 - THE BOAT RAMP(S) MUST BE MINIMUM 12' WIDE.
 - PROVIDE DROP CURB AT PAVEMENT WHERE APPLICABLE.
 - FOR BOAT RAMP CONSTRUCTED ON AN SBDD CANAL A SLOPE OF 3:1 CAN BE USED FROM EDGE OF WATER UP TO TOP OF BANK.
 - BOAT RAMPS SHALL BE CONSTRUCTED OF LIMEROCK OR EROSION CONTROL MAT, AT THE DISCRETION OF THE DISTRICT.
 - IF SBDD OPTS FOR AN EROSION CONTROL MAT, THE MAT SHALL BE FILLED WITH AT LEAST 4" OF 3/4" ROCK.

BOAT RAMP DETAIL

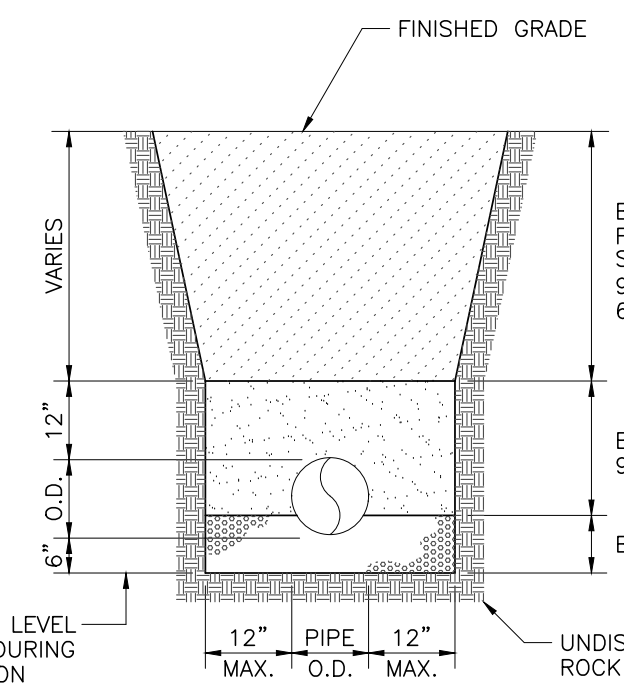
GENERAL NOTES

- THE FOLLOWING GENERAL NOTES ARE REQUIRED BY THE SOUTH BROWARD DRAINAGE DISTRICT (SBDD). THEY ARE NOT MEANT TO BE ALL INCLUSIVE. IT IS THE ENGINEER'S RESPONSIBILITY TO ADD ANY NOTES WHICH WILL INFORM THE OWNER AND THE CONTRACTOR OF ANY ADDITIONAL REQUIREMENTS OF SBDD.
- THE CONTRACTOR SHALL CONTACT SBDD 48 HOURS OR TWO (2) WORKING DAYS PRIOR TO ANY REQUIRED INSPECTION. TO SCHEDULE INSPECTIONS, PLEASE CALL SBDD AT (954)680-3337. SBDD'S WORKING HOURS ARE FROM 8:00 AM TO 4:30 PM, MONDAY THROUGH FRIDAY EXCEPT HOLIDAYS.
 - ANY REVISIONS TO PLANS PERMITTED BY SBDD MUST BE APPROVED BY THE DISTRICT ENGINEER PRIOR TO CONSTRUCTION.
 - A PRECONSTRUCTION MEETING SHALL BE SCHEDULED AND HELD AT LEAST FIVE (5) DAYS PRIOR TO BEGINNING CONSTRUCTION.
 - A SET OF SHOP DRAWINGS SHALL BE SUBMITTED TO SBDD AFTER APPROVAL BY THE ENGINEER OF RECORD, PRIOR TO BEGINNING CONSTRUCTION
 - DURING CONSTRUCTION, SBDD PERSONNEL WILL INSPECT THE FOLLOWING:
 - INSTALLATION OF ALL UNDERGROUND DRAINAGE FACILITIES BEFORE BACKFILLING.
 - BACKFILLING OF DRAINAGE TRENCHES.
 - SHORING OF CANAL AND LAKE BANKS FROM THE DEEP CUT TO THE UPLAND EASEMENT LINE OR AS REQUIRED BY SBDD.
 - AND ANY OTHER DRAINAGE RELATED CONSTRUCTION WORK.
 RE-INSPECTIONS, EXTRAORDINARY INSPECTIONS AND FINAL INSPECTIONS WILL BE SUBJECT TO ADDITIONAL FEE CHARGES BY SBDD.
 - THE CONTRACTOR CONSTRUCTING OR EXCAVATING LAKES OR OTHER WATER BODIES SHALL EXERCISE EXTREME CAUTION TO ENSURE THAT THE SIDE SLOPES AND DEEP CUT LINES ARE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS FOR THE DEVELOPMENT. THE CONTRACTOR OR OWNER SHALL PERIODICALLY, OR AS REQUIRED BY SBDD, OBTAIN A SURVEY FROM A FLORIDA REGISTERED SURVEYOR OF THE LOCATION OF THE DEEP CUT LINES PRIOR TO FORMING THE SIDE SLOPES. THIS SURVEY SHALL BE PERFORMED PRIOR TO THE OWNER/CONTRACTOR BEGINNING CONSTRUCTION OF ANY BUILDING PADS ADJACENT TO THE WATER BODY. IN THE EVENT THAT THE CONTRACTOR OVER DIGS THE WATER BODY, THE OWNER/CONTRACTOR SHALL SUBMIT TO SBDD ITS SOLUTION TO CORRECT THE OVER DIGGING. ANY SUGGESTED REMEDY OR CORRECTION MUST BE APPROVED BY SBDD BEFORE THE CONTRACTOR BEGINS THE PROPOSED CORRECTION/REMEDY.
 - PAVING AND DRAINAGE "AS-BUILT" PLANS CERTIFIED BY THE ENGINEER OF RECORD AND APPROVED BY THE DISTRICT'S ENGINEER SHALL BE REQUIRED BEFORE THE RELEASE OF THE BOND OR LETTER OF CREDIT. AS-BUILTS SHALL BE PROVIDED AS AN OVERLAY OF THE APPROVED CONSTRUCTION DRAWINGS AND AT THE SAME SCALE AS ORIGINALLY SUBMITTED. AS-BUILT SUBMITTALS SHALL CONFORM TO THE REQUIREMENTS OF SBDD'S CRITERIA MANUAL. AS-BUILTS MUST ALSO BE PROVIDED IN ELECTRONIC FORMAT.
 - AS-BUILT DRAWINGS OF WATER BODIES SHALL INCLUDE THE DATA REQUIRED UNDER EXHIBIT 39 OF SBDD'S CRITERIA MANUAL. THE AS-BUILT CROSS SECTIONS SHALL BE PROVIDED AT NOT MORE THAN 100 FOOT INTERVALS AND AT ALL OUTFALL PIPES CONSTRUCTED WITHOUT HEADWALLS.
 - SBDD WILL NOT COMPLETE THE FINAL INSPECTION UNTIL RECEIPT OF THE AS-BUILT PACKAGE WHICH MUST INCLUDE THE ENGINEER'S CERTIFICATION AND TEST RESULTS FOR STABILIZATION OF LAKE/CANAL MAINTENANCE EASEMENTS, ARE RECEIVED.

FABRIC FORM REVETMENT HEADWALL DETAIL

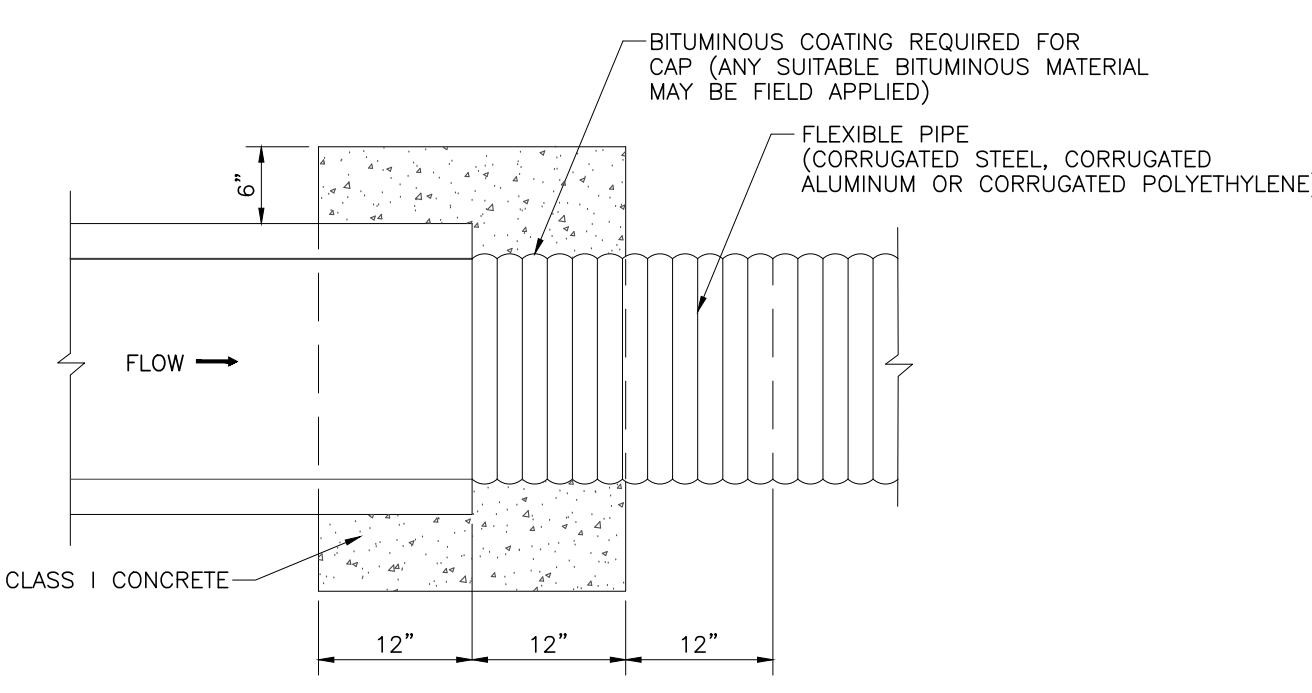


TRENCH EXCAVATION DETAIL



- NOTES:**
- WHERE SOIL CONDITION CANNOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE APPROVED MEANS OF CONSTRUCTION.
 - WHERE REQUIRED SHEETING AND SHORING SHALL BE IN ACCORDANCE WITH THE LOCAL GOVERNMENTAL AGENCY.
 - MUCK OR OTHER UNSUITABLE MATERIAL SHALL BE COMPLETELY REMOVED.
 - WHEN THE PIPE IS LAID IN THE PREPARED TRENCH, TRUE TO LINE AND GRADE, THE PIPE BARREL SHALL RECEIVE CONTINUOUS UNIFORM SUPPORT, WHERE NECESSARY, COURSE SAND, PEA ROCK OR 3/4" LIMESTONE GRAVEL SHALL BE USED TO PROVIDE UNIFORM BEDDING.
 - JOINTS MAY BE REQUIRED TO BE WRAPPED AT THE DISCRETION OF THE DISTRICT AND THE SITE CONDITIONS.
 - BACKFILL MATERIAL SHALL BE NON-COHESIVE AND NON-PLASTIC SOIL THAT IS FREE OF ALL DEBRIS, LUMPS, WOOD BROKEN PAVING OR ANY ORGANIC OR UNSUITABLE MATERIAL. BACKFILL MATERIAL PLACED WITHIN 12" OF THE PIPE SHALL CONTAIN NO ROCKS OR STONES LARGER THAN 3-1/2" INCHES IN DIAMETER. NO ROCKS OR STONES LARGER THAN 6" IN DIAMETER WILL BE PERMITTED IN THE REMAINING BACKFILL UNLESS OTHERWISE SPECIFIED.
 - TRENCH BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 90 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED BY AASHTO T-180. BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE TO THE STANDARD ENGINEERING DESIGN REQUIRED BY THE LOCAL GOVERNMENTAL AGENCY.

CONCRETE JACKET DETAIL

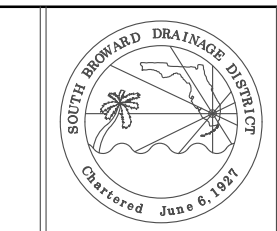


- NOTES:**
- A CONCRETE JACKET SHALL NOT BE USED TO JOIN:
 - METAL PIPE OF DISSIMILAR MATERIALS.
 - FLEXIBLE PIPE WHEN THE MAXIMUM COVER REQUIRED IN ACCORDANCE WITH F.D.O.T. INDEX No. 205 CANNOT BE OBTAINED.
 - OPTIONAL FOR LAKE OR CANAL OUTFALL.
 - WHEN USED FOR LAKE OUTFALL, JACKET SHALL BE CENTERED 8' LANDWARD OF THE BASIN CONTROL ELEVATION.

SOUTH BROWARD DRAINAGE DISTRICT
6591 SW 160th AVE
SOUTHWEST RANCHES, FL. 33331

PAVING AND DRAINAGE DETAILS
SOUTHWEST RANCHES, FLORIDA
S.W. 55th ST. & S.W. 185th WAY

DRAWN BY:
J.K.S.
APPROVED BY:
K.M.H.
DATE 6-2-17

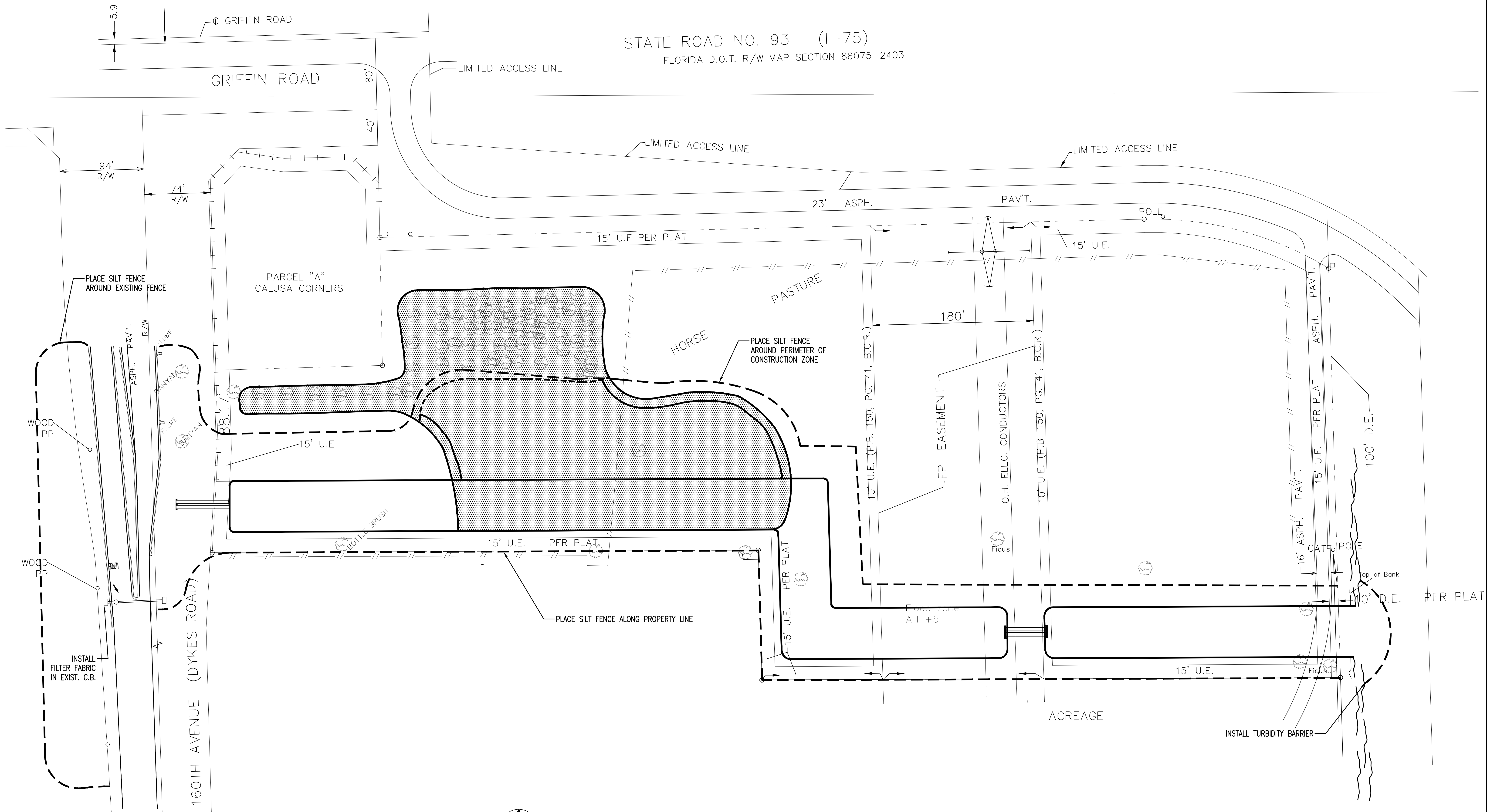


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PROJECT No
CAD FILE

SHEET
6 OF 10

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY
1	8-30-17	BROWARD COUNTY ENVIRONMENTAL RESOURCE PERMIT	KH				

STATE ROAD NO. 93 (I-75)
 FLORIDA D.O.T. R/W MAP SECTION 86075-2403



EROSION CONTROL PLAN

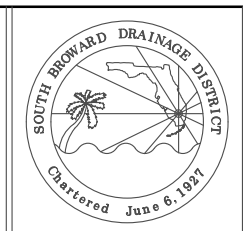


NO	DATE	REVISION	BY	NO	DATE	REVISION	BY
1	8-30-17	BROWARD COUNTY ENVIRONMENTAL RESOURCE PERMIT	KH				

SOUTH BROWARD DRAINAGE DISTRICT
 6591 SW 160th AVE
 SOUTHWEST RANCHES, FL. 33331

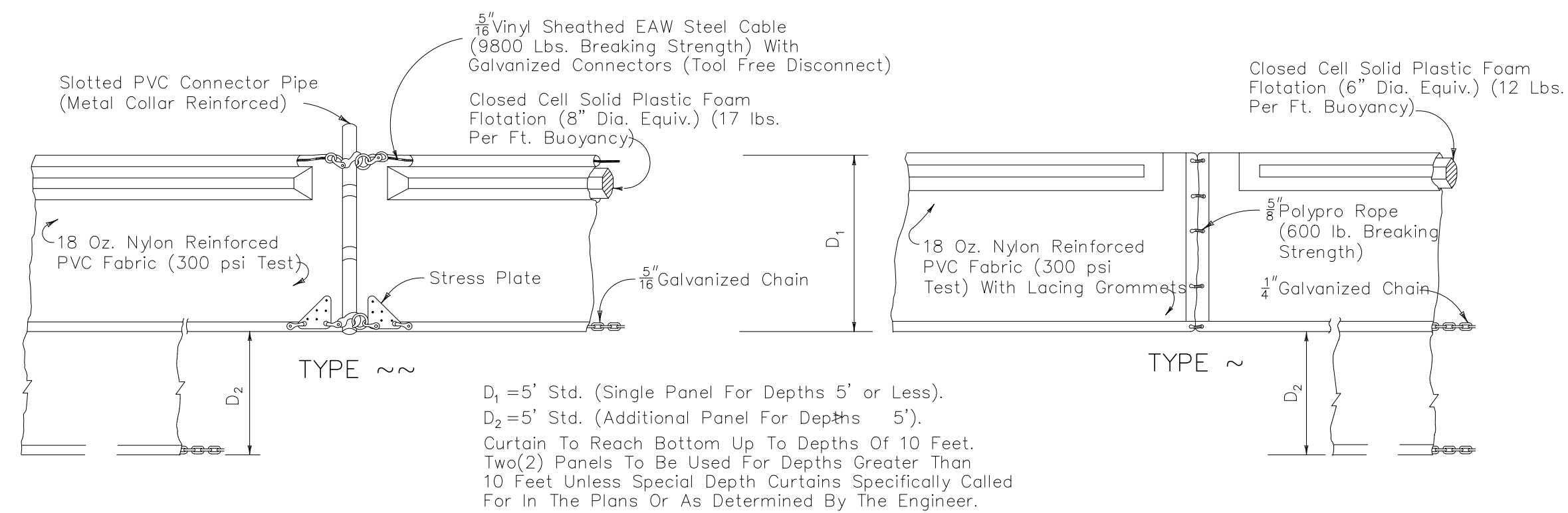
EROSION CONTROL PLAN
 SOUTHWEST RANCHES, FLORIDA
 DYKES RD DRAINAGE AND WATER QUALITY PROJECT

DRAWN BY:
 J.K.S.
 APPROVED BY:
 K.M.H.
 DATE 6-2-2017



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 CAD FILE

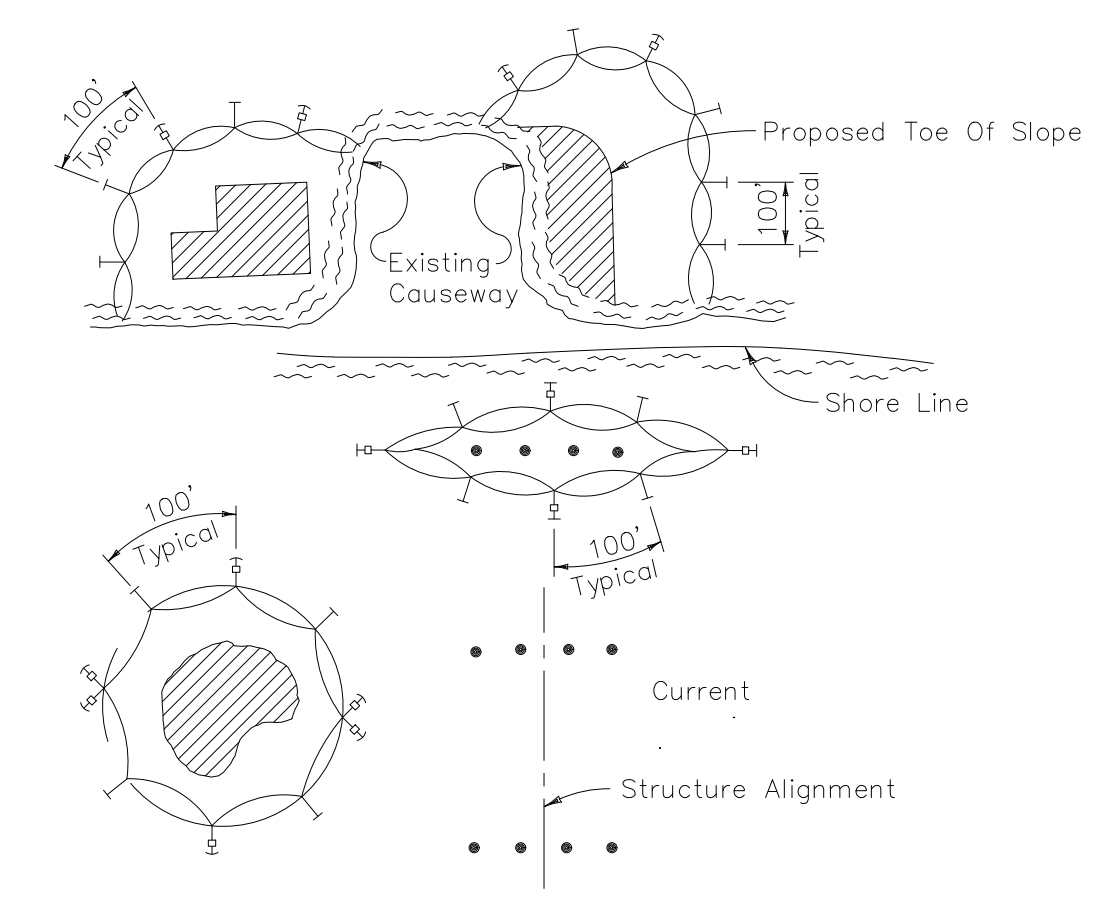
SHEET
 7 OF 10



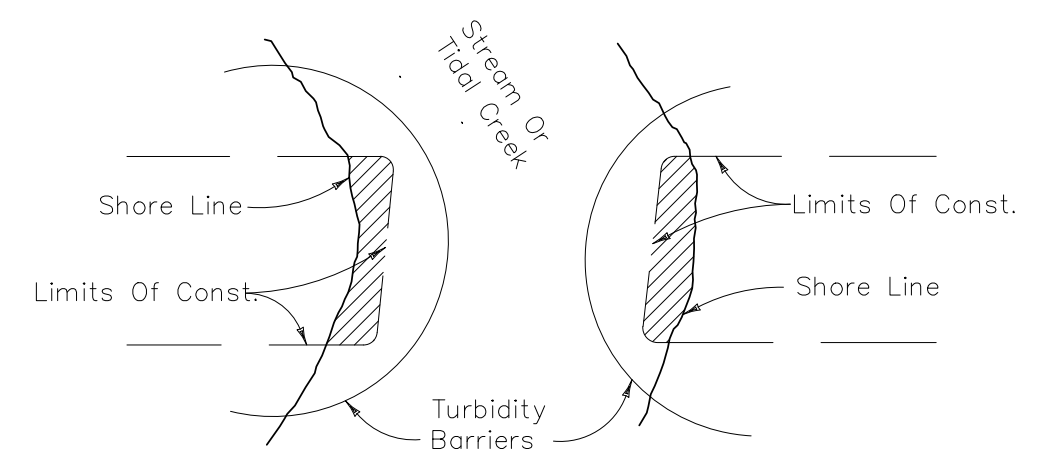
D₁ = 5' Std. (Single Panel For Depths 5' or Less).
 D₂ = 5' Std. (Additional Panel For Depths 5').
 Curtain To Reach Bottom Up To Depths Of 10 Feet.
 Two(2) Panels To Be Used For Depths Greater Than
 10 Feet Unless Special Depth Curtains Specifically Called
 For In The Plans Or As Determined By The Engineer.

NOTICE: COMPONENTS OF TYPES ~ AND ~ 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 ~ AND ~ SHALL BE AS
 APPROVED BY THE ENGINEER.

FLOATING TURBIDITY BARRIERS



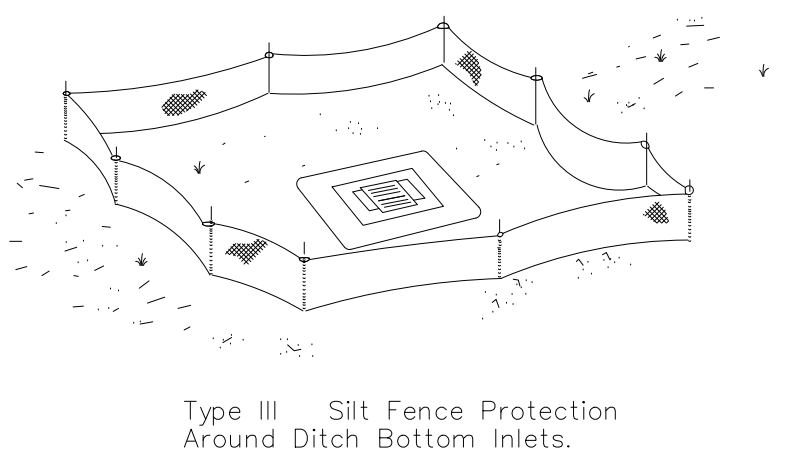
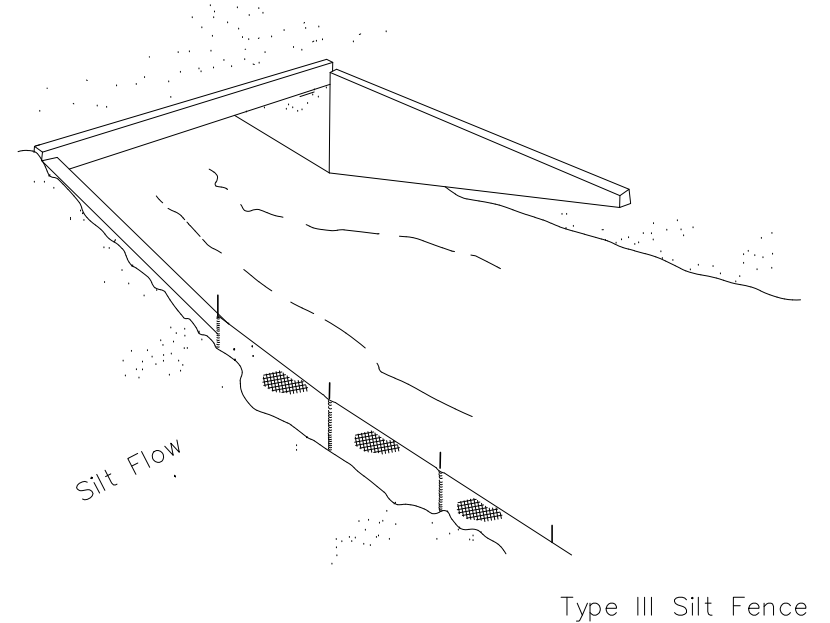
LEGEND
 • Pile Locations
 ▨ Dredge Or Fill Area
 -o- Mooring Buoy w/Anchor
 -| Anchor
 ○ Barrier Movement Due To Current Action



- 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 locations may vary to accommodate construction operations.
 4. Navigation may require segmenting barrier during construction operations.
 5. For additional information see Section 104 of the Standard Specifications.

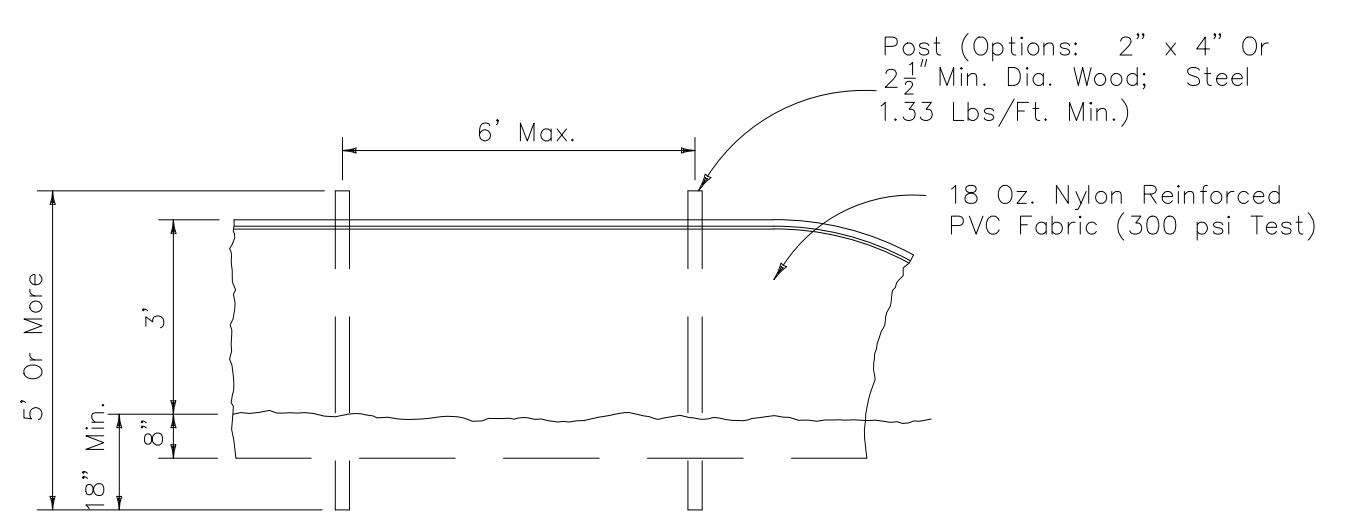
Note:
 Turbidity barriers for flowing streams and tidal creeks may be either floating or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractors option unless otherwise specified in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

TURBIDITY BARRIER APPLICATIONS



Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

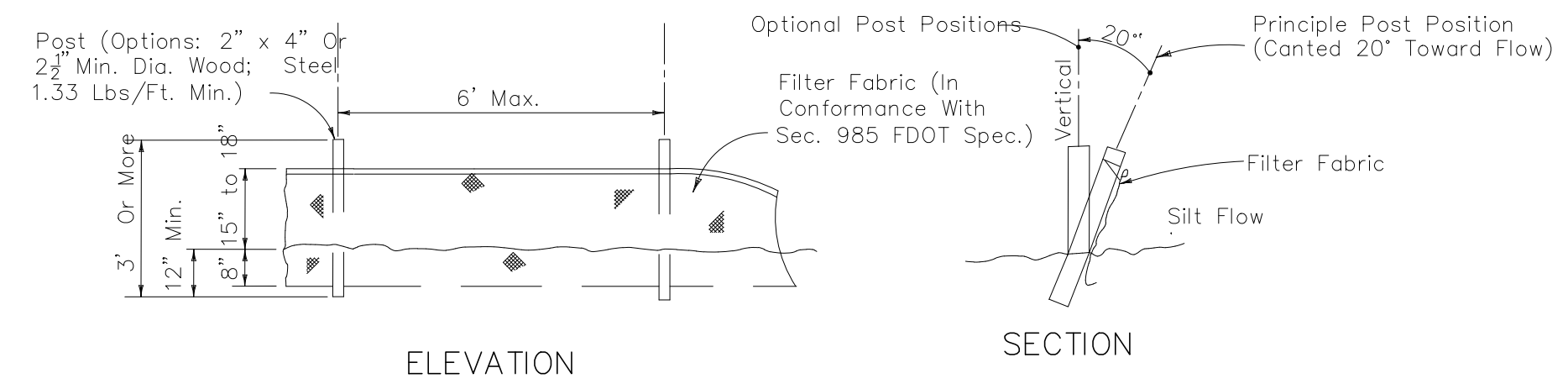
SILT FENCE APPLICATIONS



STAKED TURBIDITY BARRIER

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.



TYPE III SILT FENCE

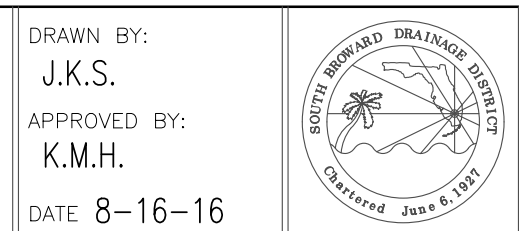
Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF).

NO	DATE	REVISION	BY	NO	DATE	REVISION	BY
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SOUTH BROWARD DRAINAGE DISTRICT
 6591 SW 160th AVE
 SOUTHWEST RANCHES, FL. 33331

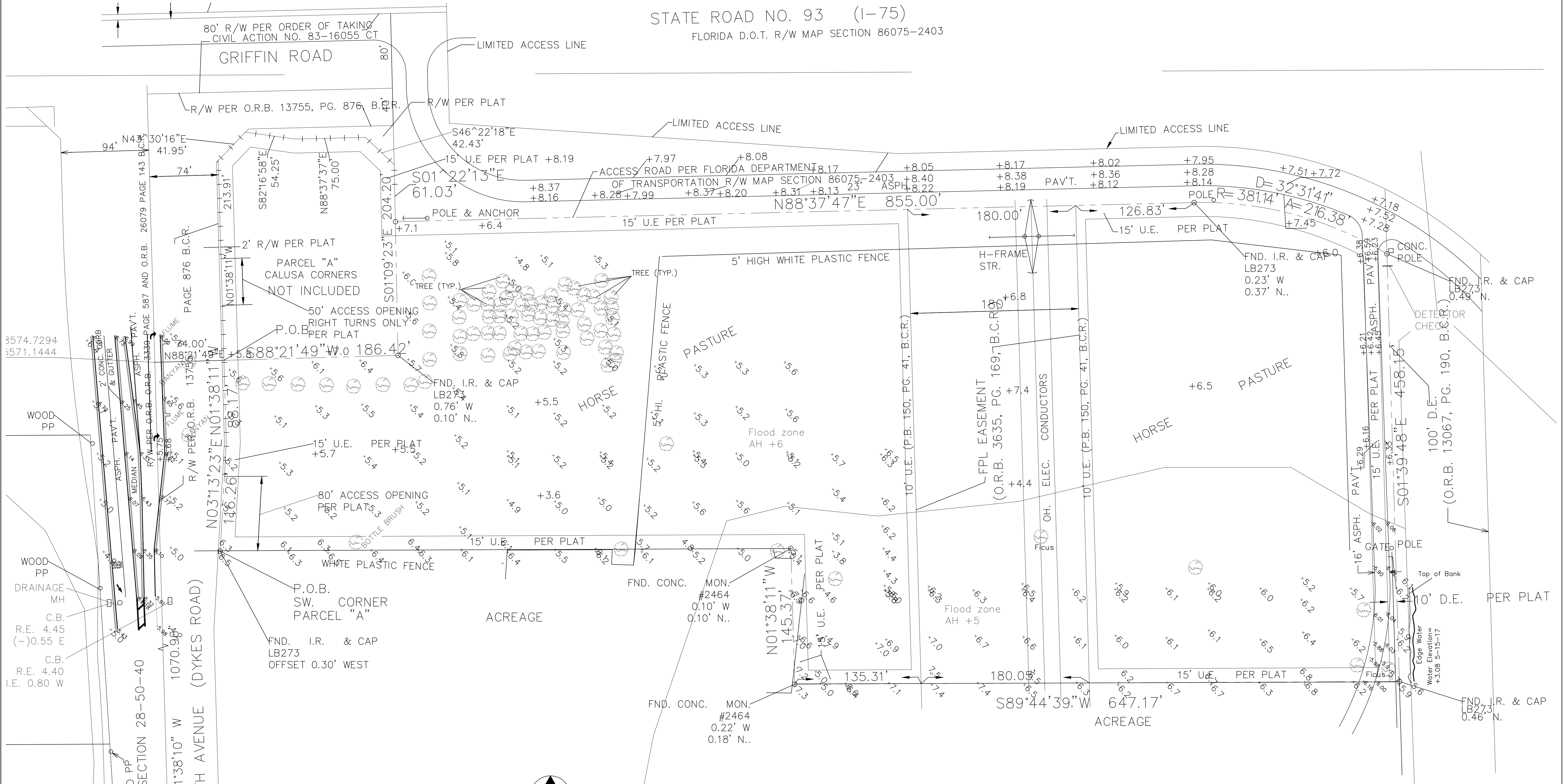
EROSION CONTROL DETAILS
 SOUTHWEST RANCHES, FLORIDA
 S.W. 55th ST. & S.W. 185th WAY

DRAWN BY:
 J.K.S.
 APPROVED BY:
 K.M.H.
 DATE 8-16-16



SCALE AS NOTED	SHEET 8 OF 10
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NOTE:
 SURVEY PREPARED BY:
 WINNINGHAM & FRADLEY, INC.

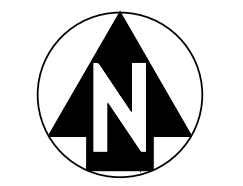


STATE ROAD NO. 93 (I-75)
 FLORIDA D.O.T. R/W MAP SECTION 86075-2403

3574.7294
 3571.1444

WOOD PP
 DRAINAGE MH
 C.B. R.E. 4.45 (-)0.55 E
 C.B. R.E. 4.40 I.E. 0.80 W

SURVEY



SCALE: 1"=50'-0"

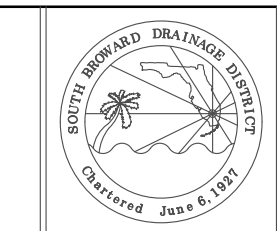
NOTES:
 • ALL ELEVATIONS ARE BASED ON NGVD '29 DATUM
 • CONVERSION FROM NGVD '29 DATUM TO NAVD '88 IS NAVD '88 + 1.51' = NGVD '29

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SOUTH BROWARD DRAINAGE DISTRICT
 6591 SW 160th AVE
 SOUTHWEST RANCHES, FL. 33331

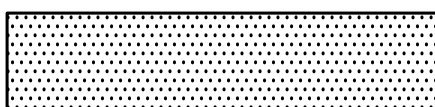
SURVEY
 SOUTHWEST RANCHES, FLORIDA
 DYKES RD DRAINAGE AND WATER QUALITY PROJECT


DRAWN BY:
 J.K.S.
 APPROVED BY:
 K.M.H.
 DATE 6-2-2017



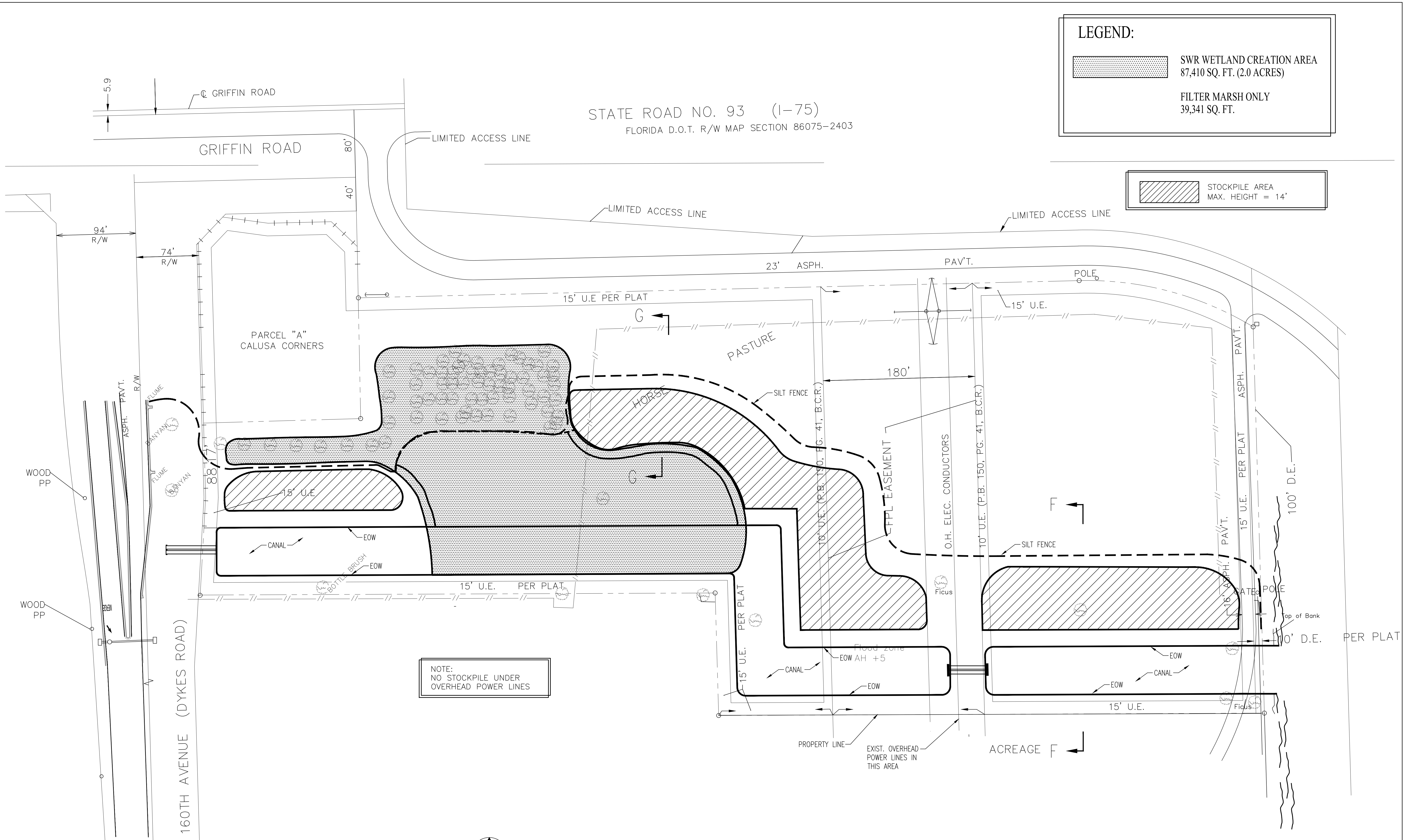
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 PROJECT No
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LEGEND:

 SWR WETLAND CREATION AREA
87,410 SQ. FT. (2.0 ACRES)

 FILTER MARSH ONLY
39,341 SQ. FT.

 STOCKPILE AREA
MAX. HEIGHT = 14'



NOTE:
NO STOCKPILE UNDER
OVERHEAD POWER LINES

DISPOSAL & CONTAINMENT PLAN

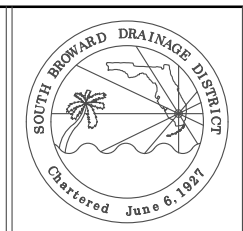


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SOUTH BROWARD DRAINAGE DISTRICT
6591 SW 160th AVE
SOUTHWEST RANCHES, FL. 33331

DISPOSAL & SOIL CONTAINMENT PLAN SOUTHWEST RANCHES, FLORIDA DYKES RD DRAINAGE AND WATER QUALITY PROJECT

DRAWN BY:
J.K.S.
APPROVED BY:
K.M.H.
DATE 6-2-2017



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