

COW SLOUGH WATER CONTROL DISTRICT

AMENDED PLAN OF WATER CONTROL
JANUARY 2000

PREPARED BY:

JOHNSON-PREWITT & ASSOC., INC.
850 WEST VENTURA AVENUE
CLEWISTON, FL 33440
(863) 983-9188

Overview

In 1984 the Cow Slough Watershed Improvement District was created. To better serve the needs of the landowners the Cow Slough Water Control District was created in 1989 by the Florida Legislature.

The Cow Slough Watershed Improvement District summoned the USDA-SCS to prepare a watershed improvement plan. The USDA-SCS also prepared an application and received a permit from the SFWMD for drainage improvements beneficial to the landowners. In an effort to better fund the improvements the Cow Slough Water Control district was established. The Cow Slough Water Control District includes all the lands within the Watershed Improvement District and those additional lands which drained into the Watershed District. The original Plan of Reclamation for the Cow Slough Water Control District was approved in 1990 and amended in 1996. In 1996 the original SFWMD permit was modified to reflect changes made in the 1996 Plan of Reclamation. The works within the 1996 plan have been constructed except in isolated locations where the landowners have not developed their property.

A history of the Townsend Canal was included in the 1990 Plan of Reclamation. This history is repeated in the attachments.

Responsibilities and Powers of the District

The Cow Slough Water Control District is responsible for maintaining water control within Cow Slough's boundaries. To facilitate this Cow Slough maintains the Townsend Canal, laterals, and water control structures. Cow Slough is responsible for maintaining a surface water management permit with the South Florida Water Management District. Cow Slough has no ability to deliver irrigation water. The attachments include a District Facilities Map and a Canal Capacity Table.

Boundaries of the District

Attached is a legal description of Cow Slough. The District Facilities Map graphically shows the boundaries of the Cow Slough Water Control District.

Land Use and Facilities within the District

Cow Slough is predominantly agriculture. Crops cultivated include vegetables, citrus, and improved pasture. Cow Slough has several home sites on large parcels, an area of single family home sites, and a commercial area adjacent to state road 29.

District's Capacity for the Management and Storage of Surface Water

Cow Slough has the ability to remove 30 cubic feet per second per square mile (csm). This removal rate is consistent with the SFWMD permit. Attached is a copy of the SFWMD permit and staff report, the FDOT permit allowing the improvement of L-29 in FDOT's right-of-way, and the USACOE letter stating no permit is required.

Environmental and Water Quality Programs

None, other than those required in an agreement with other users of the Townsend Canal.

Areas Outside of the District's Boundaries Served

No areas outside of Cow Slough's boundaries are served. The district does not have a perimeter levee and some mixing of waters may occur. The volume of runoff entering or leaving the district thru these conveyances is negligible.

The 1996 Plan of Reclamation identified two tracts of land within the district boundaries in Sections 8 and 7, T46S, R29E, Collier County. These landowners drain their properties across the district boundaries to outfall facilities that are not owned or operated by Cow Slough Water Control District. As long as these systems are operated in the current manner, the benefits received from Cow Slough Water Control District are at or near nil. These tracts are shown on the district facilities map attached.

Facilities and Services Planned in the Next 5 Years

None, other than maintenance.

Administrative Structure of the District

The Board of Supervisors consist of three (3) representatives of landowners. The supervisors are elected by the landowners. Each supervisor's term is staggered such that one supervisor is elected each year. Cow Slough employs a District Manager who conducts the business of the District. Cow Slough employs the services of an attorney and engineer. Any physical labor is conducted by the supervisors, landowners, or contractors.

List of Attachments

History of the Townsend Canal from the 1990 Plan of Reclamation

District Facilities Map

Canal Capacity Table

Legal Description of the District

SFWMD Permit and Staff Report

FDOT Permit

USACOE Letter

This document transcribed from the 1990 Plan of Reclamation.

The History of The Townsend Canal
in
Hendry County, Florida

The Townsend Canal was named for Asa Townsend. Townsend was the owner of 4,500 acres in the Felda area of Hendry County some 18 miles South of LaBelle and the Caloosahatchee River. Due to the poor drainage in the area, he began to look for a means to control the annual flooding that occurred each rainy season.

The Roberts family owned the land to the South of the Townsend property and the area known as Cow Slough drained North and onto the Townsend property. The Roberts family also suffered annual flooding during the rainy season.

As a result of the mutual need to control flooding, Roberts and Townsend reached an informal agreement with Circle Bar Cattle Corporation, the landowner North of the Townsend property, to construct a canal northward to the Caloosahatchee River. Shortly after the end of World War II, in 1946, Townsend had an engineer survey a route for a canal from the area of the Townsend and Roberts property to the Caloosahatchee River, which was the natural receptacle of the watershed in the area and the canal was constructed during the next several months. This canal began on the Roberts property line in Cow Slough just north of the Hendry-Collier County line and drained northward on through the Townsend and Circle Bar Cattle Corporation property to where it intersected S. R. 80 and from there through the Murphy property to the Caloosahatchee River. The total cost of the canal was paid by Townsend and Roberts with Townsend paying 2/3 and Roberts paying 1/3.

From 1946 until 1962 this canal was used only for drainage and was maintained solely by Townsend and Roberts. When the Townsend property was sold to A. Duda and Sons in 1962, it was agreed that the right to use the Townsend Canal would be deeded to A. Duda and Sons and Red Cattle Company (the Roberts Family). This was done by Quit Claim Deed from Townsend to A. Duda & Sons and Red Cattle Company and described the route of the Canal from the south boundary of the Townsend property to S. R. 80.

Shortly after purchasing the Townsend property, Duda also purchased a large portion of the Circle Bar Cattle Corporation property to the North. The northernmost portion of the Circle Bar Cattle Corporation property was purchased by Berry, Paul and Lawless at about the same time.

Duda and Berry, Paul & Lawless group agreed to develop the Townsend Canal in order to receive irrigation water from the Caloosahatchee River. The Canal was deepened, widened and two major pump lift stations were constructed to serve their needs. The Canal improvements was extended southward to a point about 1 and 1/4 miles North of the Roberts property.

During this, A. Duda & Sons completely diked their property including the southern boundary and closed off several natural drainage ways to the North except for the Townsend Canal. Later, at least two other points in the Duda dikes were constructed with a culvert to allow drainage to the North.

The Roberts landowners, (Red Cattle Company), were not involved in the Canal improvements financially and did not gain access to river irrigation water. However, they did maintain that portion within their property and that portion inside Duda that was not improved from 1962 until 1980. At that time, Red Cattle Company was dissolved and the landownership was transferred to individual members of the Roberts family.

It must be noted here that the Townsend Canal ultimately became the only drainage way for much of the community of Felda West of S. R. 29 and several landowners in Collier County, South of Hendry County. With the entire watershed funneled into the Townsend Canal due to the Duda property dike, flooding in the area was an often occurrence but was tolerated for a number of years since there was little development in the area.

After Red Cattle Company was dissolved in 1980, the new landowners wished to develop their land for citrus groves and thus, the drainage needed to be improved in the area. The Hendry County landowners in the area formed the Cow Slough Watershed Improvement District under the Hendry County Soil Conservation District in order to have an organization to deal with the problem. The Watershed boundary was defined by the U. S. D. A. Soil Conservation Service and it included some 56 owners with about 8,900 acres in Hendry and Collier counties. An engineering study was done to ascertain the Townsend Canal improvement necessary. It was found that the area was entitled to about 414 cfs drainage based on the West Caloosahatchee Basin formula of 30 cfs per section; however, the current size and depth of the Canal will only handle about 110 cfs or slightly over 25% of the need.

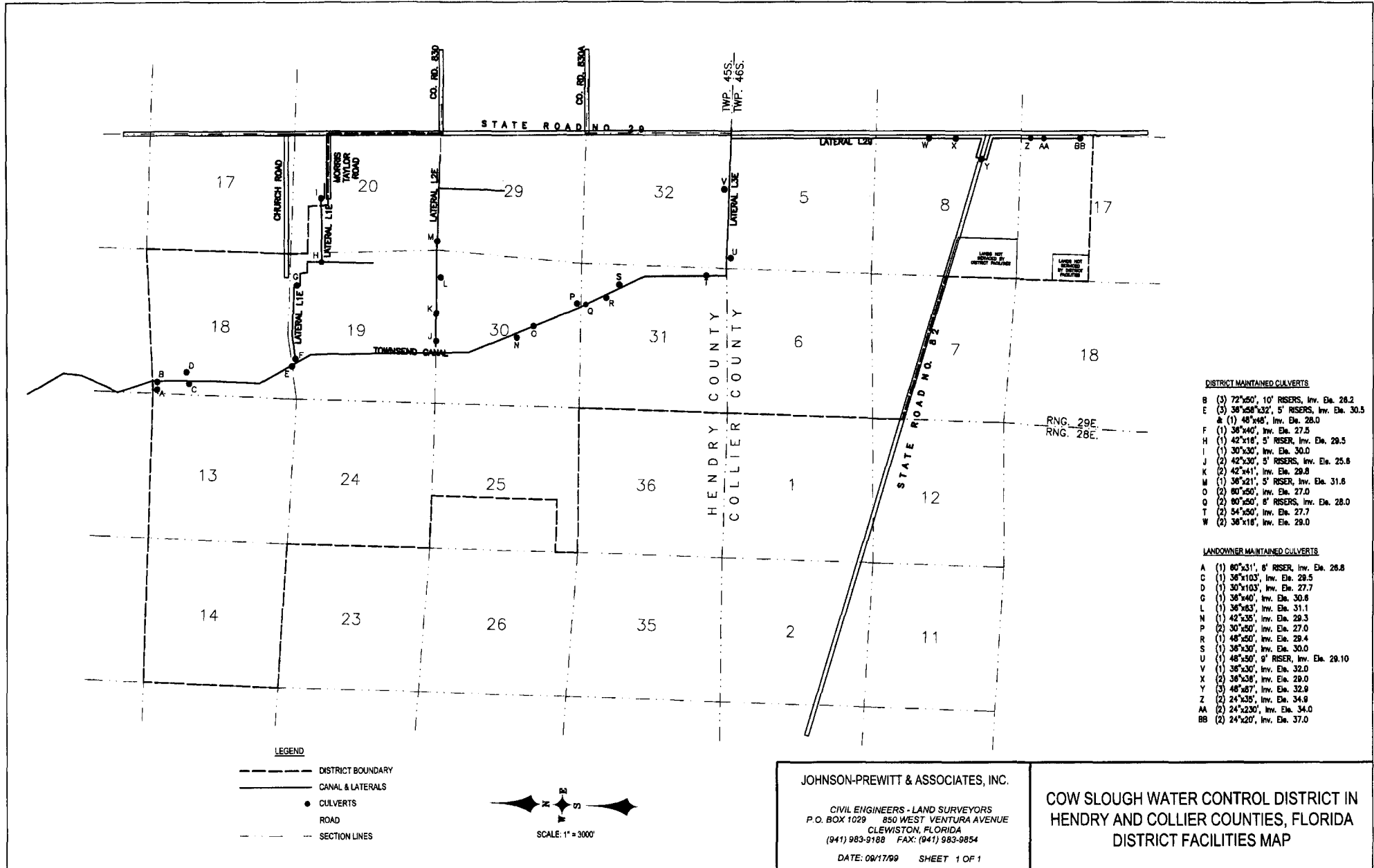
After the engineering study was completed and showed that the proposed improvements would not impact the downstream landowners, A. Duda and Sons agreed to the improvements to be constructed in the Townsend Canal and the South Florida Water Management District issued a permit to improve the Canal.

The engineering study had shown that the improvements would be quite costly. The Hendry County landowners met with the Collier County landowners in order to gain their financial support for improving the Townsend Canal. The Collier County landowners agreed to participate in the project.

Since the Cow Slough Watershed Improvement District could not legally annex land outside of the county boundary, it was decided to form the Cow Slough Water Control District under Chapter 298 of the Florida Statutes so that there would be a legal entity in place to govern the project. This was done in July of 1989.

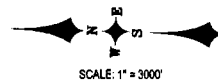
It should be noted that the Cow Slough Watershed Improvement District had maintained the Canal as had the Roberts family earlier until the formation of the Cow Slough Water Control District.

It is the intention of the Cow Slough Water Control District to improve and maintain the Townsend Canal within the District and for one and one fourth miles inside the Duda Property for the mutual benefit of all District landowners.



LEGEND

- DISTRICT BOUNDARY
- CANAL & LATERALS
- CULVERTS
- ROAD
- SECTION LINES



JOHNSON-PREWITT & ASSOCIATES, INC.

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 P. O. BOX 1029 850 WEST VENTURA AVENUE
 CLEWISTON, FLORIDA
 (941) 983-9188 FAX: (941) 983-9854

DATE: 08/17/99 SHEET 1 OF 1

**COW SLOUGH WATER CONTROL DISTRICT IN
 HENDRY AND COLLIER COUNTIES, FLORIDA
 DISTRICT FACILITIES MAP**

DISTRICT MAINTAINED CULVERTS

- B (3) 72"x50", 10' RISERS, Inv. Ele. 28.2
- E (3) 36"x50"x32', 5' RISERS, Inv. Ele. 30.5
- 4 (1) 48"x48", Inv. Ele. 28.0
- F (1) 36"x40", Inv. Ele. 27.5
- H (1) 42"x18", 5' RISER, Inv. Ele. 29.5
- I (1) 30"x30", Inv. Ele. 30.0
- J (2) 42"x30", 5' RISERS, Inv. Ele. 25.5
- K (2) 42"x41", Inv. Ele. 29.8
- M (1) 36"x21", 5' RISER, Inv. Ele. 31.6
- O (2) 80"x50", Inv. Ele. 27.0
- Q (2) 80"x50", 6' RISERS, Inv. Ele. 28.0
- T (2) 54"x50", Inv. Ele. 27.7
- W (2) 36"x18", Inv. Ele. 29.0

LANDOWNER MAINTAINED CULVERTS

- A (1) 80"x31", 6' RISER, Inv. Ele. 28.8
- C (1) 36"x103", Inv. Ele. 29.5
- D (1) 30"x103", Inv. Ele. 27.7
- G (1) 36"x40", Inv. Ele. 30.6
- L (1) 36"x63", Inv. Ele. 31.1
- N (1) 42"x35", Inv. Ele. 29.3
- P (2) 30"x50", Inv. Ele. 27.0
- R (1) 48"x50", Inv. Ele. 29.4
- S (1) 36"x30", Inv. Ele. 30.0
- U (1) 48"x50", 5' RISER, Inv. Ele. 29.10
- V (1) 36"x30", Inv. Ele. 32.0
- X (2) 36"x38", Inv. Ele. 29.0
- Y (3) 48"x87", Inv. Ele. 32.8
- Z (2) 24"x35", Inv. Ele. 34.8
- AA (2) 24"x230", Inv. Ele. 34.0
- BB (2) 24"x20", Inv. Ele. 37.0

COW SLOUGH WATER CONTROL DISTRICT CANAL CAPACITY TABLE

DESCRIPTION OF FACILITIES	LEN. (feet)	RUN-OFF (cfs)	DESIGN HYDRAULIC SECTIONS											
			EL. GRADE		WATER DIMENSIONS					HYDRAULIC FUNCTIONS				
			W.S.	D.B.	W.D.	B.W.	S.S.	T.W.	AREA	R	n	s	v	Q
Townsend Canal														
219+50 - 216+00	350	414	30.7	25.51	5.4	45	1:1	55.8	272.16	4.52	0.025	0.0001	1.64	446
216+00 - 210+50	550	354.7	31.0	25.60	5.4	40	1:1	50.8	245.16	4.43	0.025	0.0001	1.63	399
210+50 - 168+50	4200	339.9	31.06	26.06	5.0	40	1:1	50	225	4.16	0.025	0.0001	1.52	342
168+50 - 106+50	6200	232	31.48	26.48	5.0	30	1:1	40	175	3.97	0.025	0.0001	1.50	258
106+50 - 76+50	3000	183	32.10	27.10	5.0	22	1:1	32	135	3.73	0.025	0.0001	1.43	193
76+50 - 54+00	2250	155.2	32.40	27.40	5.0	18	1:1	28	115	3.58	0.025	0.0001	1.40	161
54+00 - 0+00	5400	120	32.63	27.63	5.0	14	1:1	24	95	3.38	0.025	0.0001	1.33	126
L1E (all reaches)		15	31.50	26.90	4.6	4	1:1	12.8	36.96	2.25	0.025	0.0001	0.98	36.22
L2E (all reaches)		20	32.1	27.5	4.6	4	1:1	12.8	36.96	2.25	0.025	0.0001	0.98	36.22
L3E (all reaches)		20	33.2	28.6	4.6	4	1:1	12.8	36.96	2.25	0.025	0.0001	0.98	36.22
L29 N. of SR-82		20	33.7	29.1	4.6	4	1:1	12.8	36.96	2.25	0.025	0.0001	0.98	36.22
L29 S. of SR-82		8	36.0	34.0	2.0	4	1:1	16	20.0	1.20	0.025	0.0001	0.67	13.40

**Cow Slough Water Control District
Legal Description**

Hendry County:

In Township 45 South, Range 28 East: All of Section 13, 14 and 24; and Section 25 less the following described parcel: Commencing at the southwest corner of said Section 25; thence N. 0-31-29 W. along the west boundary line of said Section 25 a distance of 665.19 feet to the Point-of-Beginning of this description; thence continuing N. 0-32-29 W. along said west boundary line of Section 25 a distance of 4656.88 feet to the northwest corner of said Section 25; thence S. 87-56-46 E. along the north boundary line of said Section 25 a distance of 1950.00 feet; thence S. 0-27-54 E. a distance of 2450.41 feet; thence S. 0-34-26 E. a distance of 1025.07 feet; thence N. 88-07-20 W. a distance of 1963.85 feet to the said Point-of-Beginning of this description.

In Township 45 South, Range 29 East: All of Sections 18 and 19; that portion of the South 1/2, west of State Road 29 and the South 1/2 of the Northwest 1/4 of Section 20; all Section 29 West of State Road 29; all of Sections 30 and 31; and all of Section 32 west of State Road 29.

Collier County:

In Township 46 South, Range 29 East: All of Section 5 west of State Road 29; all of Section 6; that portion of Section 7 north of State Road 82; all of Section 8 West of State Road 29; and, that portion of the North 1/2 of Section 17 west of State Road 29.



**SOUTH FLORIDA WATER MANAGEMENT DISTRICT
SURFACE WATER MANAGEMENT
PERMIT MODIFICATION NO. 26-00324-S**

Form #0115

DATE ISSUED: JULY 10, 1997

Rev 08/95

PERMITTEE: COW SLOUGH WATER CONTROL DISTRICT
(COW SLOUGH W.C.D. MODIFICATIONS)
PO BOX 1986,
ARCADIA, FL 34265

ORIGINAL PERMIT ISSUED: OCTOBER 6, 1988
ORIGINAL PROJECT DESCRIPTION: CONSTRUCTION AND OPERATION OF A WATER MANAGEMENT SYSTEM SERVING 6273 ACRES OF AGRICULTURAL LANDS DISCHARGING VIA THE TOWNSEND CANAL INTO THE CALOOSAHATHEE RIVER.

APPROVED MODIFICATION : MODIFICATION TO AUTHORIZE CONSTRUCTION AND OPERATION OF A SURFACE WATER MANAGEMENT SYSTEM SERVING A 6273 ACRE 298 DRAINAGE DISTRICT DISCHARGING VIA PREVIOUSLY PERMITTED FACILITIES TO THE C-43 CANAL VIA THE TOWNSEND CANAL.

PROJECT LOCATION: HENDRY COUNTY, SECTION: 13,14,24,25 TWP: 45S RGE: 28E
SECTION: 18,19,20,29,30,31,32 TWP: 45S RGE: 29E

This Permit Modification is approved pursuant to Application No. 970116-3, dated December 19, 1996. Permittee agrees to hold and save the South Florida Water Management District and its successors harmless from any and all damages, claims or liabilities which may arise by reason of the construction, operation, maintenance or use of activities authorized by this Permit. This Permit is issued under the provisions of Subsections of 373.414(11)-(16) Florida Statutes (F.S.), and the Operating Agreement Concerning Regulation Under Part IV, Chapter 373 F.S. between South Florida Water Management District and the Department of Environmental Protection. Issuance of this Permit constitutes certification of compliance with state water quality standards where necessary pursuant to Section 401, Public Law 92-500, 33 USC Section 1341, unless this Permit is issued pursuant to the net improvement provisions of Subsections 373.414(1)(b), F.S., or as otherwise stated herein.

This Permit Modification may be revoked, suspended or modified at any time pursuant to the appropriate provisions of Chapter 373, F.S. and Sections 408-4.351(1), (2), and (4), Florida Administrative Code (F.A.C). This Permit Modification may be transferred pursuant to the appropriate provisions of Chapter 373, F.S., and Sections 408-1.6107(1) and (2), and 408-4.351(1), (2), and (4) F.A.C.

All specifications and special and general/limiting conditions attendant to the original Permit, unless specifically rescinded by this or previous modifications, remain in effect.

This Permit Modification shall be subject to the General Conditions set forth in Rule 408-4.361, F.A.C., unless waived or modified by the Governing Board. The Application, and the Surface Water Management Staff Review Summary of the Application, including all conditions, and all plans and specifications incorporated by reference, are a part of this Permit Modification. All activities authorized by this Permit Modification shall be implemented as set forth in the plans, specifications, and performance criteria as set forth and incorporated in the Surface Water Management Staff Review Summary. Within 30 days after completion of construction of the permitted activity, the Permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual, pursuant to the appropriate provisions of Chapter 373, F.S. and Sections 408-4.361 and 408-4.381, F.A.C.

In the event the property is sold or otherwise conveyed, the Permittee will remain liable for compliance with this Permit until transfer is approved by the District pursuant to Rule 408-1.6107, F.A.C.

SPECIAL AND LIMITING CONDITIONS ARE AS FOLLOWS:
SEE PAGES 2-2 OF 4 - 12 SPECIAL CONDITIONS.
SEE PAGES 3-4 OF 4 - 19 LIMITING CONDITIONS.

PERMIT MODIFICATION APPROVED BY THE GOVERNING BOARD OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT.

FILED WITH THE CLERK OF THE
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

ON _____ Original signed by:
BY Vern Kaiser

DEPUTY CLERK

Original signed by
TONY BURNS
BY _____ ASSISTANT SECRETARY

SPECIAL CONDITIONS

1. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION, SHOALING OR WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
2. MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS ARE NOT CREATED IN THE RECEIVING WATER.
3. THE DISTRICT RESERVES THE RIGHT TO REQUIRE THAT ADDITIONAL WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.
4. FACILITIES OTHER THAN THOSE STATED HEREIN SHALL NOT BE CONSTRUCTED WITHOUT AN APPROVED MODIFICATION OF THIS PERMIT.
5. LAND USE BY THE PERMITTED FACILITIES IS AGRICULTURAL. PROPOSED CONSTRUCTION OF RESIDENCES MAY REQUIRE MODIFICATION OF THIS PERMIT AND MUST BE REPORTED TO THE DISTRICT.
6. ALL SPECIAL CONDITIONS PREVIOUSLY STIPULATED BY PERMIT NUMBER 26-00324-S REMAIN IN EFFECT UNLESS OTHERWISE REVISED AND SHALL APPLY TO THIS MODIFICATION.
7. OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF COW SLOUGH WATER CONTROL DISTRICT.
8. SILT SCREENS, HAY BALES OR OTHER SUCH SEDIMENT CONTROL MEASURES SHALL BE UTILIZED DURING CONSTRUCTION. THE SELECTED SEDIMENT CONTROL MEASURES SHALL BE INSTALLED LANDWARD OF THE UPLAND BUFFER ZONES AROUND ALL PROTECTED WETLANDS. ALL AREAS SHALL BE STABILIZED AND VEGETATED IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION INTO THE WETLANDS AND UPLAND BUFFER ZONES.
9. THE SFWMD RESERVES THE RIGHT TO REQUIRE REMEDIAL MEASURES TO BE TAKEN BY THE PERMITTEE IF WETLAND AND/OR UPLAND MONITORING OR OTHER INFORMATION DEMONSTRATES THAT ADVERSE IMPACTS TO PROTECTED, CONSERVED, INCORPORATED OR MITIGATED WETLANDS OR UPLANDS HAVE OCCURRED DUE TO PROJECT RELATED ACTIVITIES.
10. ANY FUTURE CHANGES IN LAND USE OR TREATMENT OF WETLANDS AND/OR UPLAND BUFFER/COMPENSATION AREAS MAY REQUIRE A SURFACE WATER MANAGEMENT PERMIT MODIFICATION AND ADDITIONAL ENVIRONMENTAL REVIEW BY DISTRICT STAFF. PRIOR TO THE PERMITTEE INSTITUTING ANY FUTURE CHANGES NOT AUTHORIZED BY THIS PERMIT, THE PERMITTEE SHALL NOTIFY THE SFWMD OF SUCH INTENTIONS FOR A DETERMINATION OF ANY NECESSARY PERMIT MODIFICATIONS.
11. DISCHARGE FACILITIES:
DISCHARGE IS THROUGH AN EXISTING CONTROL STRUCTURE. THE STRUCTURE CONSISTS OF 3 - 72" DIAMETER X 50 LF CMP DISCHARGE CULVERTS WITH AN INVERT AT ELEVATION 26.2' NGVD. EACH CULVERT IS EQUIPPED WITH A 10' HIGH RISER. EACH 8' WIDE RISER IS EQUIPPED WITH FOUR GATES, TWO OPERABLE (REMOVABLE) GATES WITH INVERT AT ELEVATION 27.7' NGVD AND A TOP ELEVATION OF 28.5' NGVD AND TWO FIXED GATES (NON-REMOVABLE) WITH INVERT AT ELEVATION 26.2' NGVD.
12. NO WORK SHALL COMMENCE ON THE EASTERLY EXTENSION OF LATERAL-L2E UNTIL AN EASEMENT IS SECURED WITH THE AFFECTED PROPERTY OWNER. A COPY OF THIS AGREEMENT SHALL BE SUBMITTED TO THE DISTRICT'S POST PERMIT COMPLIANCE STAFF FOR REVIEW AND INCLUSION TO THE PERMIT FILE.

LIMITING CONDITIONS

1. THE PERMITTEE SHALL IMPLEMENT THE WORK AUTHORIZED IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACT OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES, AND WATER QUALITY. THE PERMITTEE SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES, TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS.
2. WATER QUALITY DATA FOR THE WATER DISCHARGED FROM THE PERMITTEE'S PROPERTY OR INTO SURFACE WATERS OF THE STATE WILL BE SUBMITTED TO THE DISTRICT AS REQUIRED BY SECTION 5.9, "BASIS OF REVIEW FOR SURFACE WATER MANAGEMENT PERMIT APPLICATIONS WITHIN SOUTH FLORIDA WATER MANAGEMENT DISTRICT - MARCH, 1994." PARAMETERS TO BE MONITORED MAY INCLUDE THOSE LISTED IN CHAPTER 62-302, F.A.C. IF WATER QUALITY DATA IS REQUIRED, THE PERMITTEE SHALL PROVIDE DATA ON VOLUMES OF WATER DISCHARGED, INCLUDING TOTAL VOLUME DISCHARGED DURING THE DAYS OF SAMPLING AND TOTAL MONTHLY DISCHARGES FROM THE PROPERTY OR INTO SURFACE WATERS OF THE STATE.
3. THIS PERMIT SHALL NOT RELIEVE THE PERMITTEE OF ANY OBLIGATION TO OBTAIN NECESSARY FEDERAL, STATE, LOCAL OR SPECIAL DISTRICT APPROVALS.
4. THE OPERATION PHASE OF THIS PERMIT WILL NOT BECOME EFFECTIVE UNTIL THE DISTRICT'S ACCEPTANCE OF CERTIFICATION OF THE COMPLETED SURFACE WATER MANAGEMENT SYSTEM. THE PERMITTEE SHALL REQUEST TRANSFER OF THE PERMIT TO THE RESPONSIBLE OPERATIONAL ENTITY ACCEPTED BY THE DISTRICT, IF DIFFERENT FROM THE PERMITTEE. THE TRANSFER REQUEST CAN BE SUBMITTED CONCURRENTLY WITH THE CONSTRUCTION COMPLETION CERTIFICATION.
5. ALL ROAD ELEVATIONS SHALL BE SET IN ACCORDANCE WITH THE CRITERIA SET FORTH IN SECTION 6.5, "BASIS OF REVIEW FOR SURFACE WATER MANAGEMENT PERMIT APPLICATIONS WITHIN SOUTH FLORIDA WATER MANAGEMENT DISTRICT - MARCH, 1994."
6. ALL BUILDING FLOOR ELEVATIONS SHALL BE SET IN ACCORDANCE WITH THE CRITERIA SET FORTH IN SECTION 6.4, "BASIS OF REVIEW FOR SURFACE WATER MANAGEMENT PERMIT APPLICATIONS WITHIN SOUTH FLORIDA WATER MANAGEMENT DISTRICT - MARCH, 1994."
7. OFF-SITE DISCHARGES DURING CONSTRUCTION AND DEVELOPMENT WILL BE MADE ONLY THROUGH THE FACILITIES AUTHORIZED BY THIS PERMIT.
8. A PERMIT TRANSFER TO THE OPERATION PHASE SHALL NOT OCCUR UNTIL A RESPONSIBLE ENTITY MEETING THE REQUIREMENT IN SECTION 9.0, "BASIS OF REVIEW FOR SURFACE WATER MANAGEMENT PERMIT APPLICATIONS WITHIN SOUTH FLORIDA WATER MANAGEMENT DISTRICT - MARCH, 1994," HAS BEEN ESTABLISHED TO OPERATE AND MAINTAIN THE SYSTEM. THE ENTITY MUST BE PROVIDED WITH SUFFICIENT OWNERSHIP OR LEGAL INTEREST SO THAT IT HAS CONTROL OVER ALL WATER MANAGEMENT FACILITIES AUTHORIZED HEREIN.
9. THE PERMIT DOES NOT CONVEY TO THE PERMITTEE ANY PROPERTY RIGHT NOR ANY RIGHTS OR PRIVILEGES OTHER THAN THOSE SPECIFIED IN THE PERMIT AND CHAPTER 40E-4, FAC.
10. THE PERMITTEE SHALL HOLD AND SAVE THE DISTRICT HARMLESS FROM ANY AND ALL DAMAGES, CLAIMS, OR LIABILITIES WHICH MAY ARISE BY REASON OF THE CONSTRUCTION, OPERATION, MAINTENANCE OR USE OF ANY FACILITY AUTHORIZED BY THE PERMIT.
11. THIS PERMIT IS ISSUED BASED ON THE APPLICANT'S SUBMITTED INFORMATION WHICH REASONABLY DEMONSTRATES THAT ADVERSE WATER RESOURCE RELATED IMPACTS WILL NOT BE CAUSED BY THE COMPLETED PERMIT ACTIVITY. SHOULD ANY ADVERSE IMPACTS CAUSED BY THE COMPLETED SURFACE WATER MANAGEMENT SYSTEM OCCUR, THE DISTRICT WILL REQUIRE THE PERMITTEE TO PROVIDE APPROPRIATE MITIGATION TO THE DISTRICT OR OTHER IMPACTED PARTY. THE DISTRICT WILL REQUIRE THE PERMITTEE TO MODIFY THE SURFACE WATER MANAGEMENT SYSTEM, IF NECESSARY, TO ELIMINATE THE CAUSE OF THE ADVERSE IMPACTS.
12. WITHIN 30 DAYS OF ISSUANCE OF THIS PERMIT, THE PERMITTEE OR AUTHORIZED AGENT SHALL NOTIFY THE DISTRICT (VIA THE SUPPLIED CONSTRUCTION COMMENCEMENT NOTICE OR EQUIVALENT) OF THE ACTUAL OR ANTICIPATED CONSTRUCTION START DATE AND THE EXPECTED COMPLETION DATE.
13. WHEN THE DURATION OF CONSTRUCTION EXCEEDS ONE YEAR, THE PERMITTEE OR AUTHORIZED AGENT SHALL SUBMIT CONSTRUCTION STATUS REPORTS ON AN ANNUAL BASIS (VIA THE SUPPLIED ANNUAL STATUS REPORT OR EQUIVALENT) BEGINNING ONE YEAR AFTER THE INITIAL COMMENCEMENT OF CONSTRUCTION.
14. WITHIN 30 DAYS AFTER COMPLETION OF CONSTRUCTION OF THE SURFACE WATER MANAGEMENT SYSTEM, THE PERMITTEE OR AUTHORIZED AGENT SHALL FILE A WRITTEN STATEMENT OF COMPLETION AND CERTIFICATION BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER. THESE STATEMENTS MUST SPECIFY THE ACTUAL DATE OF CONSTRUCTION COMPLETION AND MUST CERTIFY THAT ALL FACILITIES HAVE BEEN CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE PLANS AND SPECIFICATIONS APPROVED BY THE DISTRICT (VIA THE SUPPLIED CONSTRUCTION COMPLETION/CONSTRUCTION CERTIFICATION OR EQUIVALENT). THE CONSTRUCTION COMPLETION CERTIFICATION MUST INCLUDE, AT A MINIMUM, EXISTING ELEVATIONS, LOCATIONS AND DIMENSIONS OF THE COMPONENTS OF THE WATER MANAGEMENT FACILITIES. ADDITIONALLY, IF DEVIATIONS FROM THE APPROVED DRAWING ARE DISCOVERED DURING THE CERTIFICATION PROCESS, THE CERTIFICATION MUST BE ACCOMPANIED BY A

COPY OF THE APPROVED PERMIT DRAWINGS WITH DEVIATIONS NOTED.

15. WITHIN 30 DAYS OF ANY SALE, CONVEYANCE OR OTHER TRANSFER OF ANY OF THE LAND WHICH IS PROPOSED FOR DEVELOPMENT UNDER THE AUTHORIZATION OF THIS PERMIT, THE PERMITTEE SHALL NOTIFY THE DISTRICT OF SUCH TRANSFER IN WRITING VIA EITHER FORM 0483, REQUEST FOR PERMIT TRANSFER; OR FORM 0920, REQUEST FOR TRANSFER OF SURFACE WATER MANAGEMENT CONSTRUCTION PHASE TO OPERATION PHASE (TO BE COMPLETED AND SUBMITTED BY THE OPERATING ENTITY), IN ACCORDANCE WITH SECTIONS 40E-1.6105 AND 40E-4.351, F.A.C.
16. A PRORATED SHARE OF SURFACE WATER MANAGEMENT RETENTION/DETENTION AREAS, SUFFICIENT TO PROVIDE THE REQUIRED FLOOD PROTECTION AND WATER QUALITY TREATMENT, MUST BE PROVIDED PRIOR TO OCCUPANCY OF ANY BUILDING OR RESIDENCE.
17. A STABLE, PERMANENT AND ACCESSIBLE ELEVATION REFERENCE SHALL BE ESTABLISHED ON OR WITHIN ONE HUNDRED (100) FEET OF ALL PERMITTED DISCHARGE STRUCTURES NO LATER THAN THE SUBMISSION OF THE CERTIFICATION REPORT. THE LOCATION OF THE ELEVATION REFERENCE MUST BE NOTED ON OR WITH THE CERTIFICATION REPORT.
18. IT IS THE RESPONSIBILITY OF THE PERMITTEE TO INSURE THAT ADVERSE OFF-SITE WATER RESOURCE RELATED IMPACTS DO NOT OCCUR DURING CONSTRUCTION.
19. THE PERMITTEE MUST OBTAIN A WATER USE PERMIT PRIOR TO CONSTRUCTION DEWATERING, UNLESS THE WORK QUALIFIES FOR A GENERAL PERMIT PURSUANT TO SUBSECTION 40E-20.302(4), F.A.C.

LAST DATE FOR GOVERNING BOARD ACTION:
AUGUST 14, 1997

DRAFT
Subject to Governing
Board Approval

SURFACE WATER MANAGEMENT STAFF REVIEW SUMMARY

I. ADMINISTRATIVE

APPLICATION NUMBER: 970116-3

PERMIT NUMBER: 26-00324-S

PROJECT NAME: COW SLOUGH W.C.D. MODIFICATIONS

LOCATION: HENDRY COUNTY, S13,14,24,25/T45S/R28E
S18,19,20,29,30,31,32/T45S/R29E
S5,6,7,8,17/T46S/R29E

APPLICANT'S NAME: COW SLOUGH WATER CONTROL DISTRICT

OWNERS NAME AND ADDRESS: COW SLOUGH WATER CONTROL DISTRICT
PO BOX 1986
ARCADIA, FL 34265

ENGINEER: JOHNSON-PREWITT & ASSOCIATES, INC.

II. PROJECT DESCRIPTION

PROJECT AREA: 6273.00 acres DRAINAGE AREA: 8820.00 acres

DISTRICT DRAINAGE BASIN: C-43

RECEIVING BODY: C-43 CANAL VIA EXISTING CANAL LATERALS AND TOWNSEND CANAL

CLASSIFICATION: CLASS III

SPECIAL DRAINAGE DISTRICT: COW SLOUGH W.C. DISTRICT

PURPOSE:

This application is a request for a Surface Water Management Permit modification authorizing Construction and Operation of drainage canal extensions and appurtenances for the 6273 acre Cow Slough Water Control District, authorized under Chapter 298, F.S. This application does not request to add area to the existing permit. The district serves the drainage requirements for 8820 acres of developed agricultural and single-family

residential lands. The surface water management system discharges to the C-43 Canal via the Townsend Canal.

BACKGROUND:

The Cow Slough Watershed Improvement District was created under Section 582.32, Florida Statutes and approved by the Florida Department of Agriculture and Consumer Services on November 26, 1984. On December 8, 1988, the District Governing Board granted Construction and Operation approval for a surface water management system to serve the 6273 acre project. The system was permitted to improve water conservation and provide flood protection. The installation of control structures limits discharge downstream in the Townsend Canal to the C-43 Basin rates. The District was permitted to operate and maintain the Townsend Canal and the laterals connected to it with the primary contributors of runoff being agricultural interests.

In 1989, the Florida Legislature created the Cow Slough Water Control District under Chapter 298, Florida Statutes.

EXISTING FACILITIES:

The canal network for the Cow Slough Water Control District (CSWCD) consists of the Townsend Canal and a series of lateral canals which convey runoff from 8820 acres of agricultural and residential lands within Hendry and Collier Counties. The CSWCD boundaries cover 6273 acres in Hendry County. All of the permitted facilities lie within these boundaries. However, the system conveys additional runoff from parts of 5 sections of land within Collier County by means of the FDOT culverts and ditches along State Roads 82 and 29. Numerous agricultural projects lie within the boundaries of the CSWCD and rely on the district to convey their discharges to the Townsend Canal. Most of the agricultural projects have surface water management systems permitted by the SFWMD. These systems provide water quality treatment and attenuation for the 25 year-3 day design storm event. Water quality treatment generally exceeds the first one-inch of stormwater runoff, typical of most agricultural projects utilizing above ground impoundments for storage of runoff. They are limited to discharges not exceeding the C-43 Canal Basin rate. The CSWCD canal system contains culverts, culverts with risers, and a primary discharge structure which provide additional water quality and attenuation. The existing discharge structure (described in the Special conditions) is located in the Townsend Canal at the northern district boundary and serves the previously permitted discharge requirements of the CSWCD.

PROPOSED FACILITIES:

The applicant proposes to construct lateral canal extensions which connect with the Townsend Canal. In addition, the State Road 29 ditch will be improved to function as a lateral canal and several existing culverts in the ditch will be replaced. Each of these modifications is noted on Exhibit 2.

Existing Lateral-L1E will be extended southward to receive discharges from two permitted agricultural projects (SFWMD Permit Nos. 26-00036-S and 26-00438-S, the Brown and Dunaway properties, respectively). These projects have not yet been constructed and there are no existing ditches conveying runoff from this area. Runoff from this area is presently conveyed via sheetflow.

A separate branch of L1E will extend easterly to connect with existing swales at the northeast corner of the Brown property.

The east branch of L1E will connect to the main lateral with a new 42" CMP with 5' riser. An existing 18" diameter CMP at the east end will be replaced with a 30" diameter CMP and the existing swales will be cleaned. At the Church Road crossing over Townsend Canal, the existing culverts will be replaced with 3-60" CMPs with an invert at elevation 26.5' NGVD.

Existing Lateral-L2E will be extended southward from its present terminus to receive the direct discharges from SFWMD Permit No. 26-00227-S, the Jo-Mar-E1 agricultural project. This extension is referred to as Lateral-L2E-S on Exhibit 2. There is currently no conveyance external to the agricultural projects to convey discharges. Discharges are conveyed internally to the present terminus of L2E. The new lateral extension will accommodate present and future agricultural development in the area. Existing Lateral-L2E will also be extended eastward 1320' from its present terminus. Easements to construct this extension have not yet been secured and work will not commence until the documents are signed between the owner and the CSWCD.

Existing Lateral-L3E will be extended eastward approximately 500' from its present terminus at the discharge point for SFWMD Permit No. 26-00430-S, the Sherrod project. It will follow the same route and be constructed over an existing agricultural ditch. The lateral will be constructed with a sandbag-cement broad-crested weir located approximately 200' from the edge of Fye Pond, a wetland bordering State Road 29. The weir will have a crest at elevation 34.2' NGVD. The structure will assist in maintaining hydroperiods within Fye Pond. Fye Pond is hydraulically connected to the State Road 29 ditch.

The CSWCD also proposes to clean the State Road 29 swale (referred to as Lateral-L29 on Exhibit 2) as needed to adequately convey flows from the south and into Fye Pond. FDOT has issued a permit authorizing the CSWCD to conduct the improvements as well as replacing existing CMPs at three locations. Approximately 1/2 mile north of the intersection of SR 29 and 82, an existing 24" CMP will be replaced with 2-36" CMPs. Closer to the intersection, an existing 18" CMP will be replaced with 2-36" CMPs. Approximately 1000' south of the intersection, an existing 18" CMP will be replaced with 2-24" CMPs.

All of these improvements to the FDOT swale are necessary for CSWCD to relieve flooding for parts of 5 sections of agricultural runoff in Collier County which historically have drained north and were accepted flows when CSWCD was originally formed and permitted.

The dimensional criteria and hydraulics of each lateral canal and the Townsend Canal are shown on Exhibit 3. STA 0+00 is at the southern end of the Townsend Canal. STA 219+50 is at the northern end.

The allowable discharge for the the CSWCD via the existing control structure in the Townsend Canal is 446 CFS. The design discharge for the project is not modified in this application.

III. PROJECT EVALUATION

WATER QUALITY:

The majority of stormwater runoff discharged to the canals and laterals of the CSWCD has been treated in District permitted surface water management systems.

All of these projects are agricultural and have detention facilities which generally provide water quality treatment exceeding the first one-inch of runoff. The remaining development consists of single family residences, improved, and unimproved pasture. In addition, the canal system within the Cow Slough Water Control District provides water quality treatment in that the control structures attenuate the stormwater runoff prior to releasing it to the Townsend Canal.

IV. ENVIRONMENTAL ASSESSMENT

PROJECT SITE DESCRIPTION:

The majority of the lands within the Cow Slough Drainage Basin are either pasture or are permitted for intensive agricultural activities including citrus and row crops. The wetlands scattered throughout this agricultural area are primarily shallow slough systems and isolated marshes. The majority of these wetlands have been altered and impacted to various degrees by past agricultural activities including numerous drainage ditches which have been excavated throughout the area.

The proposed canal extensions are located in three separate areas and are identified as Lateral-L1E, Lateral-L2E, and Lateral-L3E. Wetlands are located within 200' of each of the proposed canal extensions. The location and extent of each of these wetlands was addressed in the surface water management permits of the adjacent landowners.

To the west of the Lateral-L1E southern extension, and located on the Brown property, is a 16.5 acre wetland which consists of a freshwater marsh surrounded by a wet prairie system. This wetland is vegetated with alligator flag, willow, and wax myrtle. A historic drainage ditch runs through the center of this wetland.

To the west of the proposed Lateral-2E extension (L2E-S) are two isolated marshes located on the Jo-Mar-E1 property. These freshwater marshes were preserved outside of the water management system approved in the Jo-Mar-E1 permit.

Fye pond is located to the east of the proposed extension of Lateral- L3E. The dominant vegetation within this wetland is willow. This wetland was preserved outside of the water management system in the existing Sherrod permit. Fye Pond receives water from the SR 29 roadside swale.

The location of the wetlands in relation to the proposed work is shown on Exhibit 5.

EXISTING ON SITE UPLAND COMMUNITIES:

ID NO	TOTAL ACREAGE	BIOLOGICAL CONDITION	COMMUNITY TYPE	COMMUNITY ACREAGE
01	6273.00	FAIR	AGRICULTURE	6273.00

TOTAL ON SITE UPLAND ACREAGE: 6273.00

ENDANGERED, THREATENED & SPECIES OF SPECIAL CONCERN SUMMARY:

Utilization of the project area by listed species was reviewed under the original permit. At that time, no concerns were identified. District staff contacted the Florida Game and Fresh Water Fish Commission (FGFWFC) for comments on the proposed modifications. The FGFWFC has reviewed the proposed modifications and has no comments.

The project site does not contain preferred habitat for endangered, threatened, or species of special concern. No endangered/threatened or species of special concern were observed on site, and submitted information indicates that endangered/threatened or species of special concern use of the site is not an issue. This permit does not relieve the applicant from complying with all applicable rules and any other agencies' requirements if in the future, endangered/threatened or species of special concern are discovered on the site.

WETLAND PRESERVATION AND IMPACT SUMMARY:

No wetland impacts are anticipated as a result of the proposed canal extensions.

The construction of Lateral-L1E is shown on the construction drawings for permit No. 26-00036-S, the Brown property, and is necessary for the conveyance of the outfall for Brown's permitted Reservoir R-2. This reservoir incorporates the subject wetland into the Brown's surface water management system. The proposed canal extension is consistent with the plans previously reviewed and approved by staff. No additional wetland impacts are anticipated as a result of the proposed extension of Lateral-L1E. A wetland monitoring plan which includes a transect, photo point, and staff gauge in this wetland, was required as a special condition of the Brown permit.

The proposed alignment of Lateral L2E-S is immediately east of two wetlands preserved within the Jo-Mar-E1 permit. These wetlands are preserved outside the surface water management plan. A perimeter field ditch is constructed according to permit along the western edge of both wetlands. According to Exhibit 3, the proposed extension of Lateral-L2E-S will be controlled at a higher elevation than the permitted, internal control elevation of the perimeter field ditch, as documented in the Jo-Mar-E1 permit drawings. Therefore, the proposed extension will not cause adverse impacts to these preserved wetlands. A wetland monitoring plan was not required as a condition of the Jo-Mar-E1 permit.

A weir will be constructed at the end of the proposed extension of Lateral-L3E. The proposed structure will be located in uplands approximately 200' from the edge of Fye Pond. The control elevation of the weir is 34.2' approximately and is controlled at a slightly higher elevation than the WSWT of Fye pond. Fye Pond was not required to be monitored in the Sherrod permit since it is located outside of the Sherrod surface water management system.

MITIGATION/MONITORING:

No wetland impacts are proposed and each of the identified wetlands is located within an existing permit. Therefore, mitigation, monitoring and maintenance data and plans were addressed in the previous permits and are not a requirement of this permit.

SYSTEM OPERATION:

Cow Slough Water Control District

PROPOSED LAND USE(S):

Agricultural
Residential

WATER USE PERMIT STATUS:

A Water Use permit is not required for this project at this time.

POTABLE WATER SUPPLIER:

Not Applicable

WASTE WATER SYSTEM/SUPPLIER:

Not Applicable

DRI STATUS:

This project is not a DRI.

SAVE OUR RIVERS:

The project is not within or adjacent to lands under consideration by the Save Our Rivers program.

SWIM BASIN:

The project is not within nor does it discharge directly to a designated SWIM basin.

RIGHT-OF-WAY PERMIT STATUS:

A Right-of-Way Permit is not required for this project.

ENFORCEMENT ACTIVITY:

There has been no enforcement activity associated with this application.

THIRD PARTY INTEREST:

No third party has contacted the District with concerns about this application.

WELL FIELD ZONE OF INFLUENCE:

The project is not located within the zone of influence of a wellfield.

PRIMARY ISSUES RESOLVED:

Construction within FDOT right-of-way.
Protection of existing wetlands.

V. APPLICABLE LAND AREA

PROJECT

	<u>TOTAL PROJECT</u>	<u>PREVIOUSLY PERMITTED</u>	<u>THIS PHASE</u>	
TOTAL ACRES	6273.00	6273.00	6273.00	acres

VI. STAFF RECOMMENDATION

The Staff recommends that the following be issued:

MODIFICATION TO AUTHORIZE CONSTRUCTION AND OPERATION OF A SURFACE WATER MANAGEMENT SYSTEM SERVING A 6273 ACRE 298 DRAINAGE DISTRICT DISCHARGING VIA PREVIOUSLY PERMITTED FACILITIES TO THE C-43 CANAL VIA THE TOWNSEND CANAL.

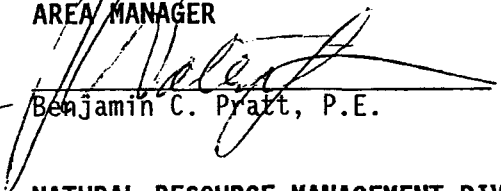
Based on the information provided, District rules have been adhered to.

Staff recommendation is for approval subject to the attached Standard Limiting and Special Conditions.

DRAFT
Subject to Governing Board Approval

VII. STAFF REVIEW

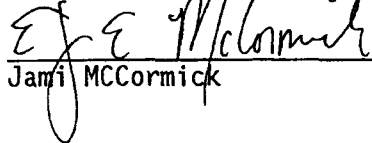
AREA MANAGER

for 
Benjamin C. Pratt, P.E.

DATE: 6/17/97

NATURAL RESOURCE MANAGEMENT DIVISION APPROVAL

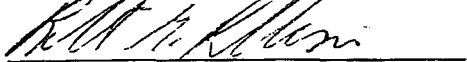
ENVIRONMENTAL EVALUATION


Jami McCormick

SUPERVISOR


Karen M. Johnson

DIVISION DIRECTOR:


Robert G. Robbins


DATE: 6/12/97

SURFACE WATER MANAGEMENT DIVISION APPROVAL

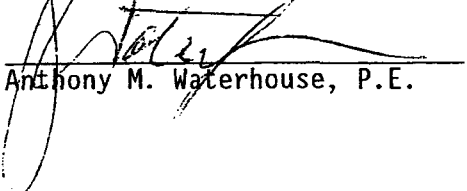
ENGINEERING EVALUATION


Craig A. Medlock

SUPERVISOR


Richard H. Thompson, P.E.

DIVISION DIRECTOR:


Anthony M. Waterhouse, P.E.

DATE: 6/17/97

LIMITING CONDITIONS

1. THE PERMITTEE SHALL IMPLEMENT THE WORK AUTHORIZED IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACT OF THE WORKS ON FISH, WILDLIFE, NATURAL ENVIRONMENTAL VALUES, AND WATER QUALITY. THE PERMITTEE SHALL INSTITUTE NECESSARY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING FULL COMPACTION OF ANY FILL MATERIAL PLACED AROUND NEWLY INSTALLED STRUCTURES, TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING AND SEDIMENTATION IN THE RECEIVING WATERS.
2. WATER QUALITY DATA FOR THE WATER DISCHARGED FROM THE PERMITTEE'S PROPERTY OR INTO SURFACE WATERS OF THE STATE WILL BE SUBMITTED TO THE DISTRICT AS REQUIRED BY SECTION 5.9, "BASIS OF REVIEW FOR SURFACE WATER MANAGEMENT PERMIT APPLICATIONS WITHIN SOUTH FLORIDA WATER MANAGEMENT DISTRICT - MARCH, 1994." PARAMETERS TO BE MONITORED MAY INCLUDE THOSE LISTED IN CHAPTER 62-302, F.A.C. IF WATER QUALITY DATA IS REQUIRED, THE PERMITTEE SHALL PROVIDE DATA ON VOLUMES OF WATER DISCHARGED, INCLUDING TOTAL VOLUME DISCHARGED DURING THE DAYS OF SAMPLING AND TOTAL MONTHLY DISCHARGES FROM THE PROPERTY OR INTO SURFACE WATERS OF THE STATE.
3. THIS PERMIT SHALL NOT RELIEVE THE PERMITTEE OF ANY OBLIGATION TO OBTAIN NECESSARY FEDERAL, STATE, LOCAL OR SPECIAL DISTRICT APPROVALS.
4. THE OPERATION PHASE OF THIS PERMIT WILL NOT BECOME EFFECTIVE UNTIL THE DISTRICT'S ACCEPTANCE OF CERTIFICATION OF THE COMPLETED SURFACE WATER WATER MANAGEMENT SYSTEM. THE PERMITTEE SHALL REQUEST TRANSFER OF THE PERMIT TO THE RESPONSIBLE OPERATIONAL ENTITY ACCEPTED BY THE DISTRICT, IF DIFFERENT FROM THE PERMITTEE. THE TRANSFER REQUEST CAN BE SUBMITTED CONCURRENTLY WITH THE CONSTRUCTION COMPLETION CERTIFICATION.
5. ALL ROAD ELEVATIONS SHALL BE SET IN ACCORDANCE WITH THE CRITERIA SET FORTH IN SECTION 6.5, "BASIS OF REVIEW FOR SURFACE WATER MANAGEMENT PERMIT APPLICATIONS WITHIN SOUTH FLORIDA WATER MANAGEMENT DISTRICT - MARCH, 1994."
6. ALL BUILDING FLOOR ELEVATIONS SHALL BE SET IN ACCORDANCE WITH THE CRITERIA SET FORTH IN SECTION 6.4, "BASIS OF REVIEW FOR SURFACE WATER MANAGEMENT PERMIT APPLICATIONS WITHIN SOUTH FLORIDA WATER MANAGEMENT DISTRICT - MARCH, 1994."
7. OFF-SITE DISCHARGES DURING CONSTRUCTION AND DEVELOPMENT WILL BE MADE ONLY THROUGH THE FACILITIES AUTHORIZED BY THIS PERMIT.
8. A PERMIT TRANSFER TO THE OPERATION PHASE SHALL NOT OCCUR UNTIL A RESPONSIBLE ENTITY MEETING THE REQUIREMENT IN SECTION 9.0, "BASIS OF REVIEW FOR SURFACE WATER MANAGEMENT PERMIT APPLICATIONS WITHIN SOUTH FLORIDA WATER MANAGEMENT DISTRICT - MARCH, 1994," HAS BEEN ESTABLISHED TO OPERATE AND MAINTAIN THE SYSTEM. THE ENTITY MUST BE PROVIDED WITH SUFFICIENT OWNERSHIP OR LEGAL INTEREST SO THAT IT HAS CONTROL OVER ALL

WATER MANAGEMENT FACILITIES AUTHORIZED HEREIN.

9. THE PERMIT DOES NOT CONVEY TO THE PERMITTEE ANY PROPERTY RIGHT NOR ANY RIGHTS OR PRIVILEGES OTHER THAN THOSE SPECIFIED IN THE PERMIT AND CHAPTER 40E-4, FAC.
10. THE PERMITTEE SHALL HOLD AND SAVE THE DISTRICT HARMLESS FROM ANY AND ALL DAMAGES, CLAIMS, OR LIABILITIES WHICH MAY ARISE BY REASON OF THE CONSTRUCTION, OPERATION, MAINTENANCE OR USE OF ANY FACILITY AUTHORIZED BY THE PERMIT.
11. THIS PERMIT IS ISSUED BASED ON THE APPLICANT'S SUBMITTED INFORMATION WHICH REASONABLY DEMONSTRATES THAT ADVERSE WATER RESOURCE RELATED IMPACTS WILL NOT BE CAUSED BY THE COMPLETED PERMIT ACTIVITY. SHOULD ANY ADVERSE IMPACTS CAUSED BY THE COMPLETED SURFACE WATER MANAGEMENT SYSTEM OCCUR, THE DISTRICT WILL REQUIRE THE PERMITTEE TO PROVIDE APPROPRIATE MITIGATION TO THE DISTRICT OR OTHER IMPACTED PARTY. THE DISTRICT WILL REQUIRE THE PERMITTEE TO MODIFY THE SURFACE WATER MANAGEMENT SYSTEM, IF NECESSARY, TO ELIMINATE THE CAUSE OF THE ADVERSE IMPACTS.
12. WITHIN 30 DAYS OF ISSUANCE OF THIS PERMIT, THE PERMITTEE OR AUTHORIZED AGENT SHALL NOTIFY THE DISTRICT (VIA THE SUPPLIED CONSTRUCTION COMMENCEMENT NOTICE OR EQUIVALENT) OF THE ACTUAL OR ANTICIPATED CONSTRUCTION START DATE AND THE EXPECTED COMPLETION DATE.
13. WHEN THE DURATION OF CONSTRUCTION EXCEEDS ONE YEAR, THE PERMITTEE OR AUTHORIZED AGENT SHALL SUBMIT CONSTRUCTION STATUS REPORTS ON AN ANNUAL BASIS (VIA THE SUPPLIED ANNUAL STATUS REPORT OR EQUIVALENT) BEGINNING ONE YEAR AFTER THE INITIAL COMMENCEMENT OF CONSTRUCTION.
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IN ACCORDANCE WITH SECTIONS 40E-1.6105 AND 40E-4.351, F.A.C.

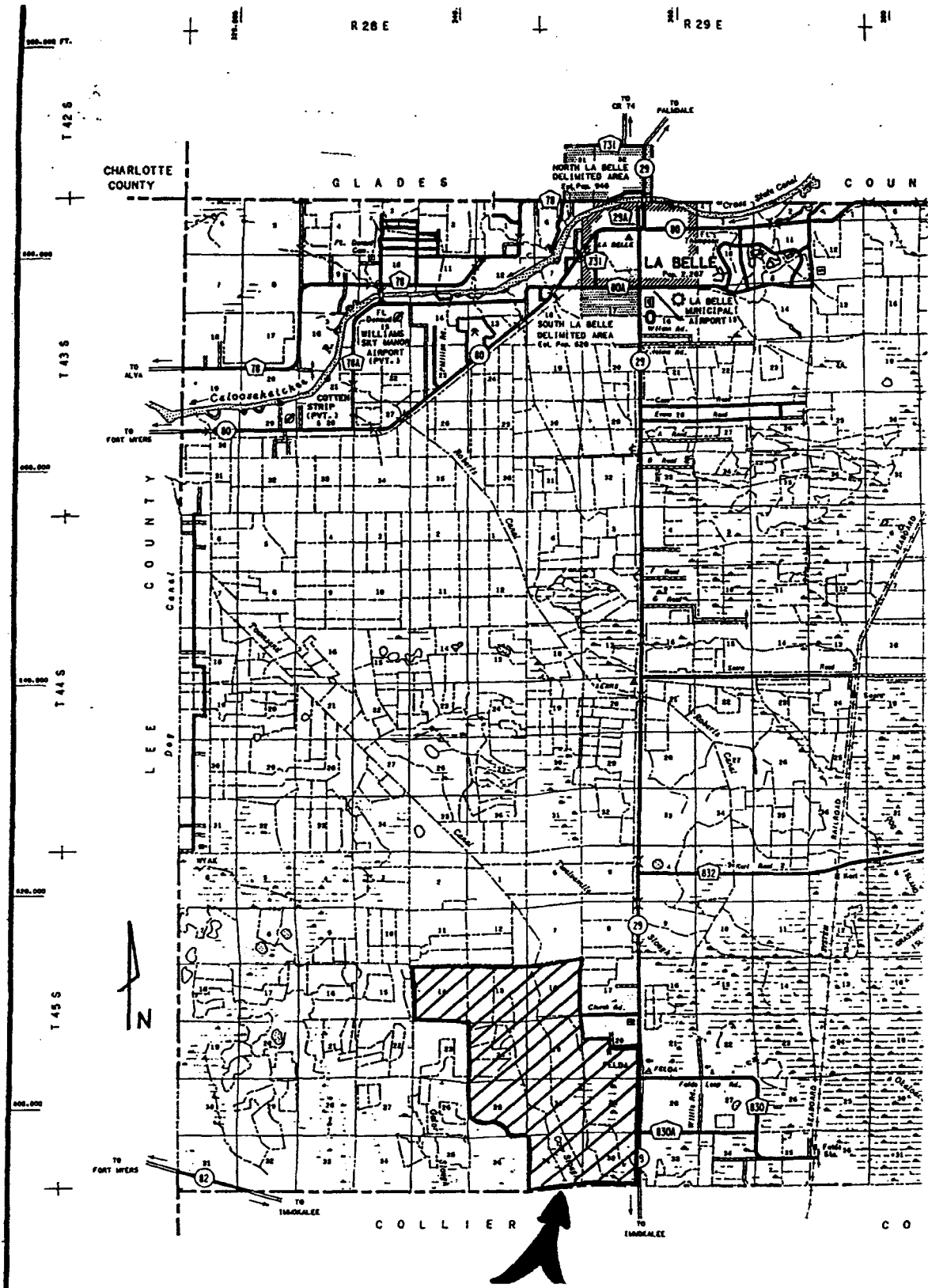
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17. A STABLE, PERMANENT AND ACCESSIBLE ELEVATION REFERENCE SHALL BE ESTABLISHED ON OR WITHIN ONE HUNDRED (100) FEET OF ALL PERMITTED DISCHARGE STRUCTURES NO LATER THAN THE SUBMISSION OF THE CERTIFICATION REPORT. THE LOCATION OF THE ELEVATION REFERENCE MUST BE NOTED ON OR WITH THE CERTIFICATION REPORT.
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19. THE PERMITTEE MUST OBTAIN A WATER USE PERMIT PRIOR TO CONSTRUCTION DEWATERING, UNLESS THE WORK QUALIFIES FOR A GENERAL PERMIT PURSUANT TO SUBSECTION 40E-20.302(4), F.A.C.

SPECIAL CONDITIONS

1. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE CORRECTION OF ANY EROSION, SHOALING OR WATER QUALITY PROBLEMS THAT RESULT FROM THE CONSTRUCTION OR OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM.
2. MEASURES SHALL BE TAKEN DURING CONSTRUCTION TO INSURE THAT SEDIMENTATION AND/OR TURBIDITY PROBLEMS ARE NOT CREATED IN THE RECEIVING WATER.
3. THE DISTRICT RESERVES THE RIGHT TO REQUIRE THAT ADDITIONAL WATER QUALITY TREATMENT METHODS BE INCORPORATED INTO THE DRAINAGE SYSTEM IF SUCH MEASURES ARE SHOWN TO BE NECESSARY.
4. FACILITIES OTHER THAN THOSE STATED HEREIN SHALL NOT BE CONSTRUCTED WITHOUT AN APPROVED MODIFICATION OF THIS PERMIT.
5. LAND USE BY THE PERMITTED FACILITIES IS AGRICULTURAL. PROPOSED CONSTRUCTION OF RESIDENCES MAY REQUIRE MODIFICATION OF THIS PERMIT AND MUST BE REPORTED TO THE DISTRICT.
6. ALL SPECIAL CONDITIONS PREVIOUSLY STIPULATED BY PERMIT NUMBER 26-00324-S REMAIN IN EFFECT UNLESS OTHERWISE REVISED AND SHALL APPLY TO THIS MODIFICATION.
7. OPERATION OF THE SURFACE WATER MANAGEMENT SYSTEM SHALL BE THE RESPONSIBILITY OF COW SLOUGH WATER CONTROL DISTRICT.
8. SILT SCREENS, HAY BALES OR OTHER SUCH SEDIMENT CONTROL MEASURES SHALL BE UTILIZED DURING CONSTRUCTION. THE SELECTED SEDIMENT CONTROL MEASURES SHALL BE INSTALLED LANDWARD OF THE UPLAND BUFFER ZONES AROUND ALL PROTECTED WETLANDS. ALL AREAS SHALL BE STABILIZED AND VEGETATED IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION INTO THE WETLANDS AND UPLAND BUFFER ZONES.
9. THE SFWMD RESERVES THE RIGHT TO REQUIRE REMEDIAL MEASURES TO BE TAKEN BY THE PERMITTEE IF WETLAND AND/OR UPLAND MONITORING OR OTHER INFORMATION DEMONSTRATES THAT ADVERSE IMPACTS TO PROTECTED, CONSERVED, INCORPORATED OR MITIGATED WETLANDS OR UPLANDS HAVE OCCURRED DUE TO PROJECT RELATED ACTIVITIES.
10. ANY FUTURE CHANGES IN LAND USE OR TREATMENT OF WETLANDS AND/OR UPLAND BUFFER/COMPENSATION AREAS MAY REQUIRE A SURFACE WATER MANAGEMENT PERMIT MODIFICATION AND ADDITIONAL ENVIRONMENTAL REVIEW BY DISTRICT STAFF. PRIOR TO THE PERMITTEE INSTITUTING ANY FUTURE CHANGES NOT AUTHORIZED BY THIS PERMIT, THE PERMITTEE SHALL NOTIFY THE SFWMD OF SUCH INTENTIONS FOR A DETERMINATION OF ANY NECESSARY PERMIT MODIFICATIONS.
11. DISCHARGE FACILITIES:

DISCHARGE IS THROUGH AN EXISTING CONTROL STRUCTURE. THE STRUCTURE CONSISTS OF 3 - 72" DIAMETER X 50 LF CMP DISCHARGE CULVERTS WITH AN INVERT AT ELEVATION 26.2' NGVD. EACH CULVERT IS EQUIPPED WITH A 10' HIGH RISER. EACH 8' WIDE RISER IS EQUIPPED WITH FOUR GATES, TWO OPERABLE (REMOVABLE) GATES WITH INVERT AT ELEVATION 27.7' NGVD AND A TOP ELEVATION OF 28.5' NGVD AND TWO FIXED GATES (NON-REMOVABLE) WITH INVERT AT ELEVATION 26.2' NGVD.

12. NO WORK SHALL COMMENCE ON THE EASTERLY EXTENSION OF LATERAL-L2E UNTIL AN EASEMENT IS SECURED WITH THE AFFECTED PROPERTY OWNER. A COPY OF THIS AGREEMENT SHALL BE SUBMITTED TO THE DISTRICT'S POST PERMIT COMPLIANCE STAFF FOR REVIEW AND INCLUSION TO THE PERMIT FILE.



Cow Slough
W.C.D.

EXHIBIT 1

ORIGINAL SUBMITTED

JAN 16 1997

FORT MYERS SERVICE CENTER

TOWNSHIP CANAL

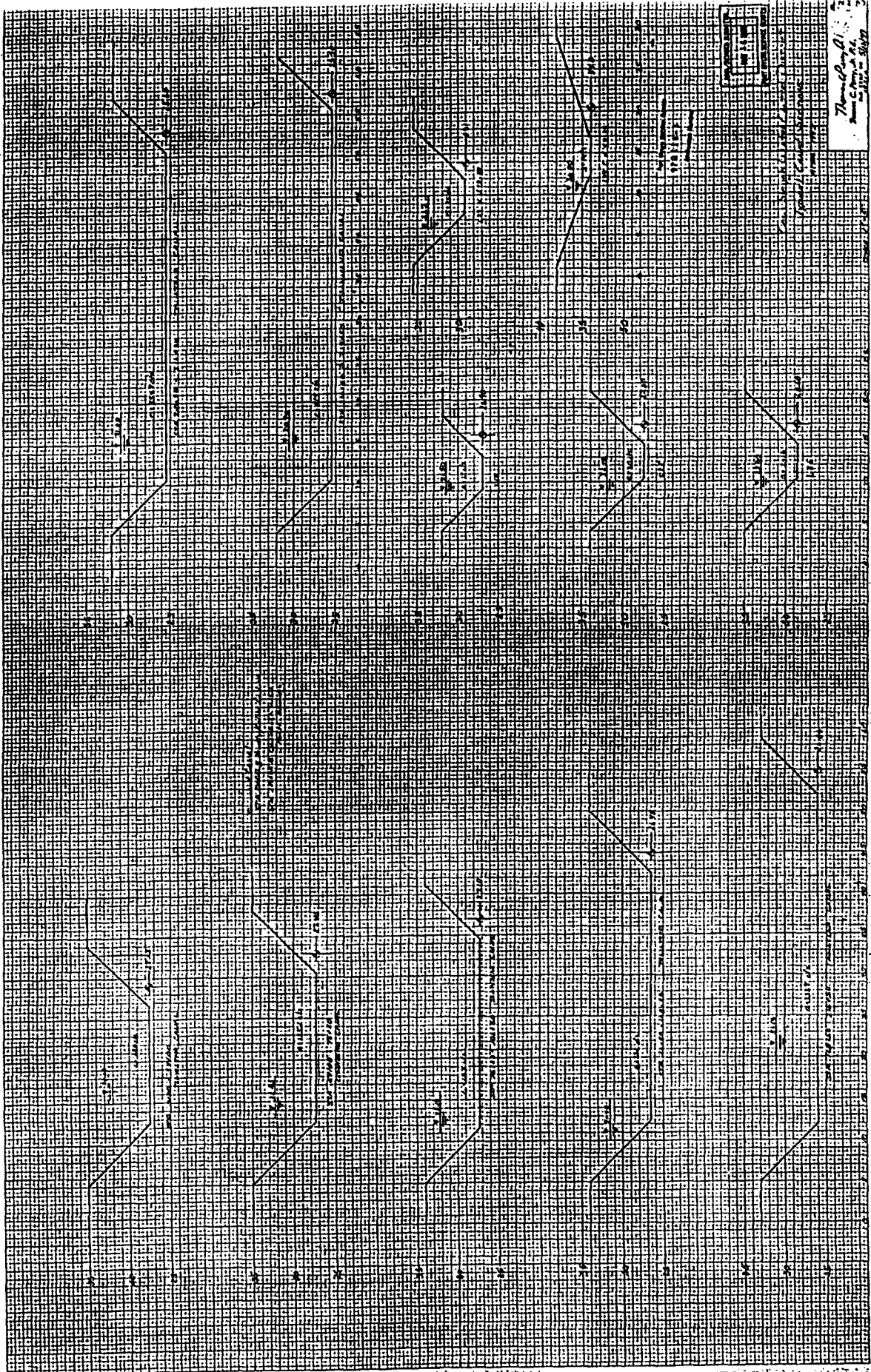
DESCRIPTION OF FACILITIES	LEN. FT.	RUN-OFF CFS	DESIGN HYDRAULIC SECTIONS												
			EL. GRADE		WATER DIMENSIONS						HYDRAULIC FUNCTIONS				
			W.S.	D.B.	W.D.	B.W.	S.S.	T.W.	AREA	R	n	s	v	Q	
219+50 - 216+00	350	414	30.7	25.51	5.4	45	1:1	55.8	272.16	4.52	0.025	0.0001	1.64	446	
216+00 - 210+50	550	354.7	31.0	25.60	5.4	40	1:1	50.8	245.16	4.43	0.025	0.0001	1.63	399	
210+50 - 168+50	4200	339.9	31.06	26.06	5.0	40	1:1	50	225	4.16	0.025	0.0001	1.52	342	
168+50 - 106+50	6200	232	31.48	26.48	5.0	30	1:1	40	175	3.97	0.025	0.0001	1.50	258	
106+50 - 76+50	3000	183	32.10	27.10	5.0	22	1:1	32	135	3.73	0.025	0.0001	1.43	193	
76+50 - 54+00	2250	155.2	32.40	27.40	5.0	18	1:1	28	115	3.58	0.025	0.0001	1.40	161	
54+00 - 0+00	5400	120	32.63	27.63	5.0	14	1:1	24	95	3.38	0.025	0.0001	1.33	126	
L1E (all reaches)		15	31.50	26.90	4.6	4	1:1	12.8	36.96	2.25	0.025	0.0001	0.98	36.22	
L2E (all reaches)		20	32.1	27.5	4.6	4	1:1	12.8	36.96	2.25	0.025	0.0001	0.98	36.22	
L3E (all reaches)		20	33.2	28.6	4.6	4	1:1	12.8	36.96	2.25	0.025	0.0001	0.98	36.22	
L29 N. of SR-82		20	33.7	29.1	4.6	4	1:1	12.8	36.96	2.25	0.025	0.0001	0.98	36.22	
L29 S. of SR-82		8	36.0	34.0	2.0	4	1:1	16	20.0	1.20	0.025	0.0001	0.67	13.40	

Fort Myers Service Center

970116-3

Application Number

EXHIBIT 3



1111

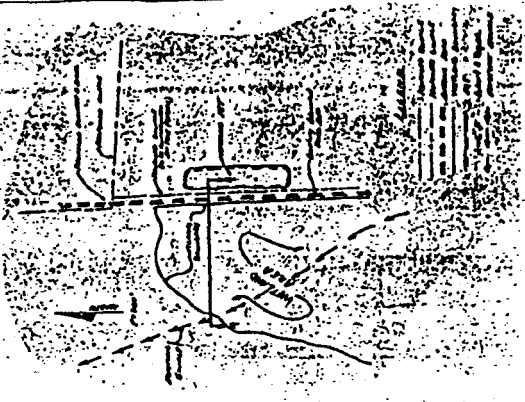
Thompson
 C. H. ...
 ...

DATE	BY	REVISION

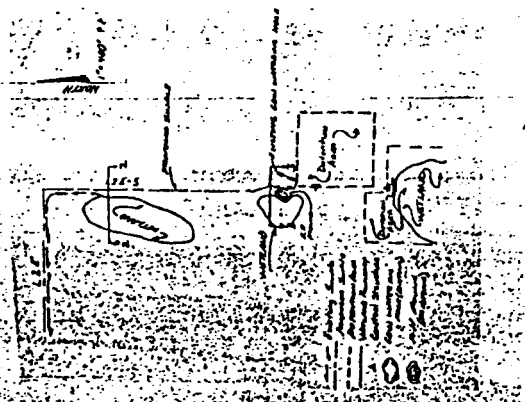
DATE	BY	REVISION

EXHIBIT 4

DETAIL C



DETAIL B



DETAIL A

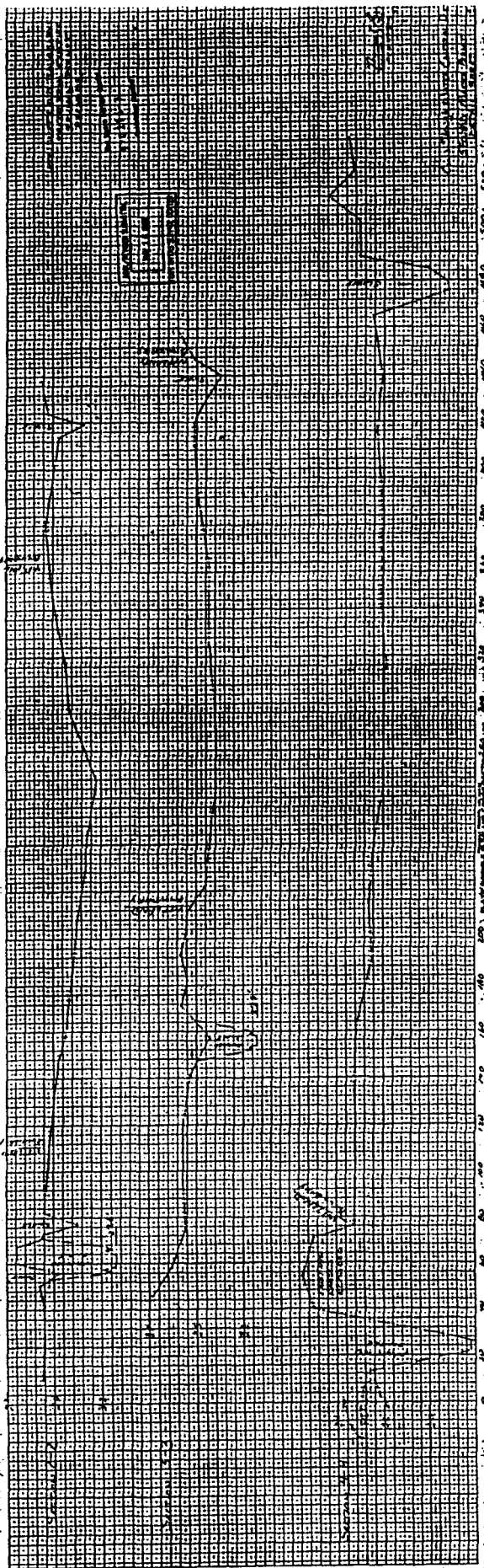
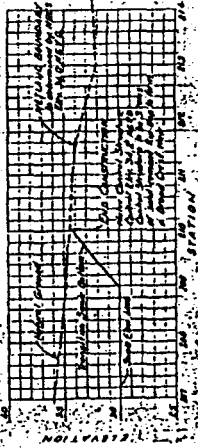
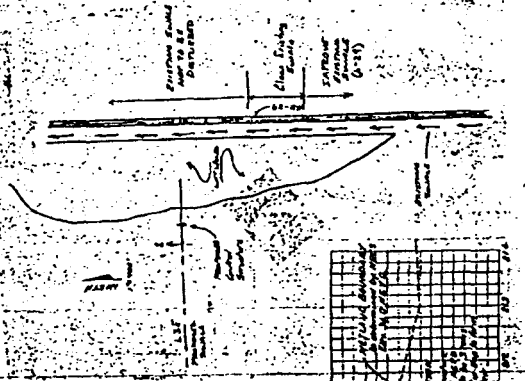


EXHIBIT 5

STAFF REPORT DISTRIBUTION LIST

PROJECT: COW SLOUGH W.C.D. MODIFICATIONS

APPLICATION NUMBER: 970116-3

PERMIT MODIFICATION NUMBER: 26-00324-S

INTERNAL DISTRIBUTION

Reviewer:

X Craig A. Medlock
X Jami McCormick
X Karen M. Johnson
X Richard H. Thompson, P.E.
 J. Golden - REG
 E. Hopkins - UDP
X R. Robbins - NRM
 Service Center Director - FTM
X A. Waterhouse - REG
X Enforcement
X Environmental PPC Reviewer
X Field Engineering
 Office of Counsel

GOVERNING BOARD MEMBERS

Mr. Mitchell W. Berger
Ms. Vera Carter
Mr. William Graham
Mr. William Hammond
Mr. Richard Machek
Mr. Michael Minton
Mr. Eugene K. Pettis
Ms. Miriam Singer
Mr. Frank Williamson, Jr.

DEPT. OF ENVIRONMENTAL PROTECTION

X Ft. Myers

EXTERNAL DISTRIBUTION

X Applicant:
COW SLOUGH WATER CONTROL DISTRICT

X Applicant's Consultant:
JOHNSON-PREWITT & ASSOCIATES, INC.

X Engineer, County of:
HENDRY, COLLIER

Engineer, City of:

X Local Drainage District:
COW SLOUGH W.C. DISTRICT

COUNTY

X Collier -Agricultural Agent
X Hendry -Aim Engineering and
 Surveying, Inc.
 -Bd of County Comm. (C.Adkin)
 -Zoning Department

BUILDING AND ZONING

OTHER

X Brian Kenedy
X Christine D. Straton
 Div of Recreation and Park - District 8
X F.G.F.W.F.C.
X Florida Audubon - Charles Lee
X Leonore Reich
X S.W.F.R.P.C. - Glenn Heath

NO ASPHALT, PAVERS, CONCRETE
POURING, THERMOPLASTIC
STRIPING, OR JACK AND BORES.
SHALL BE PERMITTED ON
FRIDAYS, SATURDAYS, OR
SUNDAYS.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

PERMIT

A copy of this permit and plans will be
on the job site at all times during the
construction of this facility.

DATE: April 15, 1997

PERMIT NO. 603-32-97 (5-97)

SUBJECT: SECTION 03080

STATE ROAD 29 COUNTY Collier

PERMITTEE: Cow Slough Water Control District

REQUESTING PERMISSION FROM THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, HEREINAFTER CALLED THE DEPARTMENT, TO CONSTRUCT, OPERATE AND MAINTAIN: A drainage ditch and driveway culverts

AT/FROM (M.P.)/STA. 42.291 TO (M.P.)/STA 44.884

1. PROPOSED WORK IS WITHIN THE CORPORATE LIMITS OF A MUNICIPALITY.
YES () NO (x) NAME OF MUNICIPALITY _____
2. IS INTERSTATE OR TOLL ROAD R/W INVOLVED? YES () NO (x)
3. APPLICANT DECLARES THAT PRIOR TO FILING THIS APPLICATION HE HAS ASCERTAINED THE LOCATION OF ALL EXISTING UTILITIES, BOTH AERIAL AND UNDERGROUND AND THE ACCURATE LOCATIONS ARE SHOWN ON THE PLANS. A LETTER OF NOTIFICATION WAS MAILED ON 4-15-97 TO THE FOLLOWING UTILITIES/MUNICIPALITIES: United Telephone Co.
SEE AND READ ALL ATTACHMENTS
PERMITTEE IS CAUTIONED, UTILITIES MAY BE LOCATED WITHIN THE CONSTRUCTION AREA.
4. THE OFFICE OF THE LOCAL MAINTENANCE OR RESIDENT ENGINEER SHALL BE NOTIFIED TWENTY-FOUR (24) HOURS PRIOR TO STARTING WORK AND AGAIN IMMEDIATELY UPON COMPLETION OF WORK. THE ENGINEER IS JOHN VIJET, LOCATED AT 4800 DAVIS BOULEVARD, NAPLES, FLORIDA 34104. TELEPHONE NUMBER (941) 417-6320.
5. ALL WORK, MATERIALS, AND EQUIPMENT SHALL BE SUBJECT TO INSPECTION BY THE LOCAL MAINTENANCE OR RESIDENT ENGINEER AND SHALL CONFORM TO ALL DEPARTMENT SPECIFICATIONS AND STANDARDS IN EFFECT AS OF THE APPROVAL DATE OF THIS PERMIT.
6. ALL DEPARTMENT PROPERTY SHALL BE RESTORED TO ITS ORIGINAL CONDITION IN KEEPING WITH THE DEPARTMENT'S SPECIFICATIONS AND IN A MANNER ACCEPTABLE TO THE DEPARTMENT.
7. PLANS OF THIS INSTALLATION SHALL CONFORM TO THE DEPARTMENT'S STANDARD SPECIFICATIONS AND ROADWAY AND TRAFFIC DESIGN STANDARDS AND SHALL BE MADE PART OF THIS PERMIT BY ATTACHMENT.
8. THE PERMITTEE SHALL COMMENCE ACTUAL CONSTRUCTION IN GOOD FAITH WITHIN Five (5) DAYS FROM THE DAY OF SAID PERMIT APPROVAL AND ALL WORK SHALL BE COMPLETED WITHIN 90 DAYS. IF THE BEGINNING WORK DATE IS MORE THAN SIXTY (60) DAYS FROM THE DATE OF PERMIT APPROVAL, THEN THE PERMITTEE MUST REVIEW THE PERMIT WITH THE AFFECTED DEPARTMENT ENGINEER TO DETERMINE IF ANY CHANGES HAVE OCCURRED THAT WOULD AFFECT THE PROPOSED PERMIT ACTIVITY.
9. THE CONSTRUCTION AND MAINTENANCE OF SAID ACTIVITY SHALL NOT INTERFERE WITH THE PROPERTY AND RIGHTS OF A PRIOR PERMITTEE. IT IS EXPRESSLY STIPULATED THAT THIS PERMIT IS A LICENSE FOR PERMISSIVE USE ONLY AND THAT THE PLACING OF FACILITIES UPON PUBLIC PROPERTY PURSUANT TO THIS PERMIT SHALL NOT OPERATE TO CREATE OR VEST ANY PROPERTY RIGHT IN SAID HOLDER.
10. WHENEVER NECESSARY FOR THE CONSTRUCTION, REPAIR, IMPROVEMENT, MAINTENANCE, SAFE AND EFFICIENT OPERATION, ALTERATION OR RELOCATION OF ALL, OR ANY PORTION OF SAID HIGHWAY AS DETERMINED BY THE DISTRICT DIRECTOR OF OPERATIONS, ANY AND ALL FACILITIES AND APPURTENANCES AUTHORIZED HEREUNDER, SHALL BE IMMEDIATELY REMOVED FROM SAID HIGHWAY OR RESET OR RELOCATED THEREON AS REQUIRED BY THE DIRECTOR OF OPERATIONS. THIS WILL BE ACCOMPLISHED AT THE EXPENSE OF THE PERMITTEE.

11. IT IS UNDERSTOOD AND AGREED THAT THE RIGHTS AND PRIVILEGES HEREIN SET OUT ARE GRANTED ONLY TO THE EXTENT OF THE STATE'S RIGHT, TITLE AND INTEREST IN THE LAND TO BE ENTERED UPON AND USED BY THE PERMITTEE. THE PERMITTEE WILL, AT ALL TIMES, ASSUME ALL RISK, INDEMNIFY, DEFEND AND SAVE HARMLESS THE STATE OF FLORIDA, THE DEPARTMENT'S OFFICERS, AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, DEMANDS, ACTIONS, LIABILITIES AND SUITS OF ANY NATURE WHATSOEVER ARISING OUT OF, BECAUSE OF, OR DUE TO THE PERMITTEE'S USE (OR USE BY ITS AGENTS OR EMPLOYEES) OF DEPARTMENT R/W. THIS WILL INCLUDE ANY AND ALL LOSS, DAMAGE, COST OR EXPENSE ARISING IN ANY MANNER ON ACCOUNT OF THE EXERCISE OR THE ATTEMPTED EXERCISE BY THE PERMITTEE OF THE AFORESAID RIGHTS AND PRIVILEGES. THIS WILL INCLUDE ANY ACT OR OCCURRENCE OF OMISSION OR COMMISSION BY THE PERMITTEE, ITS AGENT OR EMPLOYEES. IT IS SPECIFICALLY UNDERSTOOD AND AGREED THAT THIS INDEMNIFICATION CLAUSE DOES NOT COVER OR INDEMNIFY THE DEPARTMENT FOR ITS SOLE NEGLIGENCE.
12. DURING CONSTRUCTION, ALL SAFETY REGULATIONS OF THE DEPARTMENT SHALL BE ADHERED TO AND THE PERMITTEE SHALL BE RESPONSIBLE TO PROVIDE MEASURES, INCLUDING PLACING AND DISPLAY OF SAFETY DEVICES, THAT MAY BE NECESSARY IN ORDER TO SAFELY CONDUCT THE PUBLIC THROUGH THE PROJECT AREA IN ACCORDANCE WITH THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS AMENDED, AND THE DEPARTMENT'S LATEST ROADWAY AND TRAFFIC DESIGN STANDARDS.
13. SPECIAL CONDITIONS: 1) FDOT Permit approved providing all other permits (ie, SFWMD) etc. are obtained by permittee. 2) Check for other utilities in area (ie. Sunniland Pipe Line Co.) Phone 941-657-3256 see attached
14. THIS IS TO CERTIFY THAT THE ABOVE INFORMATION IS CORRECT WITH THE UNDERSTANDING THAT ANY FALSE STATEMENT WILL VOID THE PERMIT HEREBY REQUESTED. IN CASE OF NONCOMPLIANCE WITH THE APPLICABLE STATUTE, RULE, REGULATION, STANDARD OR SPECIFICATION, THIS PERMIT IS VOID AND THE FACILITY/ACTIVITY WILL HAVE TO BE BROUGHT INTO COMPLIANCE OR REMOVED FROM THE DEPARTMENT'S R/W AT THE PERMITTEE'S EXPENSE IMMEDIATELY.

SUBMITTED BY: Cow Slough Water Control District
PERMITTEE

PLACE CORPORATE
SEAL
(OR FACSIMILE)

Dallas Townsend, President
SIGNATURE AND TITLE

Dana A. Townsend
ATTESTED

Dallas Townsend, President

WITNESS: Sherry D. Davis

IS WAIVER OF CORPORATE SEAL ON FILE WITH THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, TALLAHASSEE, FLORIDA? YES () NO (X)

IS ROADWAY CONSTRUCTION PROPOSED OR UNDERWAY? YES () NO (X)

RECOMMENDED FOR APPROVAL Ed. [Signature]
PERMIT INSPECTOR

TITLE: _____ DATE: April 29 1997

APPROVED BY: [Signature] DATE: APR 29 1997
DISTRICT PERMIT ENGINEER OR
AUTHORIZED REPRESENTATIVE

VALIDITY OF THIS PERMIT IS CONTINGENT UPON:
PERMITTEE OBTAINING NECESSARY PERMITS FROM:
ALL OTHER AGENCIES INVOLVED.

A PRE-CONSTRUCTION MEETING IS
REQUIRED. PERMITTEE, PERMITTEE'S
CONTRACTORS AND SUB-CONTRACTORS
ARE TO BE REPRESENTED.

N.P.D.E.S. REQUIRES THAT STORM WATER CONTROL
MEASURES BE IMPLEMENTED ON ANY PROJECT ON
PUBLIC TRANSPORTATION FACILITY RIGHTS-OF-
WAY INCLUDING, BUT NOT LIMITED TO MEASURES
DESCRIBED IN F.D.O.T. STANDARDS DESIGN INDEX
DRAWING NUMBER 102, 103, AND 104.

SPECIAL CONDITIONS

RE: G03-32-97 (S-97)

1. ALL OF THE CROSS-DRAINS/HEADWALLS WITHIN THE RIGHT-OF-WAY SHOULD BE PROTECTED DURING THE EXCAVATION OF THE DITCH. SLOPE STABILITY SHOULD BE MONITORED.
2. THE ENLARGEMENT AND ADDITION OF DRIVEWAY CULVERTS SHOULD PROCEED WITH CAUTION TO AVOID DOWNSTREAM FLOODING.
3. THE COW SLOUGH WATER DISTRICT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY AND APPLICABLE PERMITS (I.E., SFWMD, ACOE). PLEASE PROVIDE COPIES OF ALL PERMITS AND/OR EXEMPTIONS TO THIS OFFICE.
4. THE WATER CONTROL STRUCTURE SHOWN ON SHEET 4 OF 13 OF THE SUBJECT PLANS SHALL NOT CAUSE ANY ADVERSE BACKWATER CONDITIONS WITHIN OR TO THE S.R. 29 DITCHES.



DEPARTMENT OF THE ARMY
TAMPA REGULATORY FIELD OFFICE, JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 19247
TAMPA, FLORIDA 33686-9247

REPLY TO
ATTENTION OF

NOV 20 1997

Regulatory Division
West Permits Branch
Fort Myers Regulatory Office
199700397 (NPR-SB)

Mr. Thomas C. Perry, Jr., P.E.
Johnson-Prewitt & Associates, Inc.
Post Office Box 1029
Clewiston, Florida 33440

Dear Mr. Perry:

Reference is made to your Environmental Resource Application, submitted on behalf of Cow Slough Water Control District, to construct a canal system to convey runoff from property within the Cow Slough Water Control District to the Townsend Canal. The project is located in Sections 13-14, 24-25, Township 45 South, Range 28 East; and Sections 18-20, 29-32, Township 45 South, Range 29 East, Hendry County, Florida and in Sections 5-8, 17, Township 46 South, Range 29 East, Collier County, Florida.

Providing the work is done in accordance with your enclosed plans (4 sheets), the project as proposed will not require a Department of the Army permit in accordance with Section 10 of the Rivers and Harbors Act of 1899 as it is not located within navigable waters of the United States. Furthermore, a permit will not be required in accordance with Section 404 of the Clean Water Act as it will not involve the discharge of dredged or fill material into waters of the United States.

This determination reflects current policy and regulations and is valid for a period no longer than 2 years from the date of this letter. If after the 2-year period, this determination has not been specifically revalidated by the Corps of Engineers, it shall automatically expire. This letter does not obviate your requirement to obtain State, local or other Federal permits which may be necessary. Should you propose any deviation or should additional work be contemplated, you should contact this office for a re-evaluation of this determination.

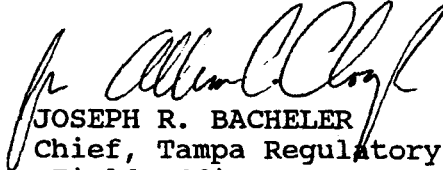
199700397(NPR-SB)
Cow Slough Water Control Dist.

NOV 20 1997

2

Thank you for your cooperation with the U.S. Army Corps of Engineers Regulatory Program. If you have any questions regarding this letter or Corps of Engineers regulatory program, please contact Mr. Skip Bergmann at the U.S. Army Corps of Engineers, Fort Myers Regulatory Office; 2301 McGregor Boulevard; Suite 300; Fort Myers, Florida 33901 or telephone 941-334-1975.

Sincerely,


JOSEPH R. BACHELER
Chief, Tampa Regulatory
Field Office

Enclosures

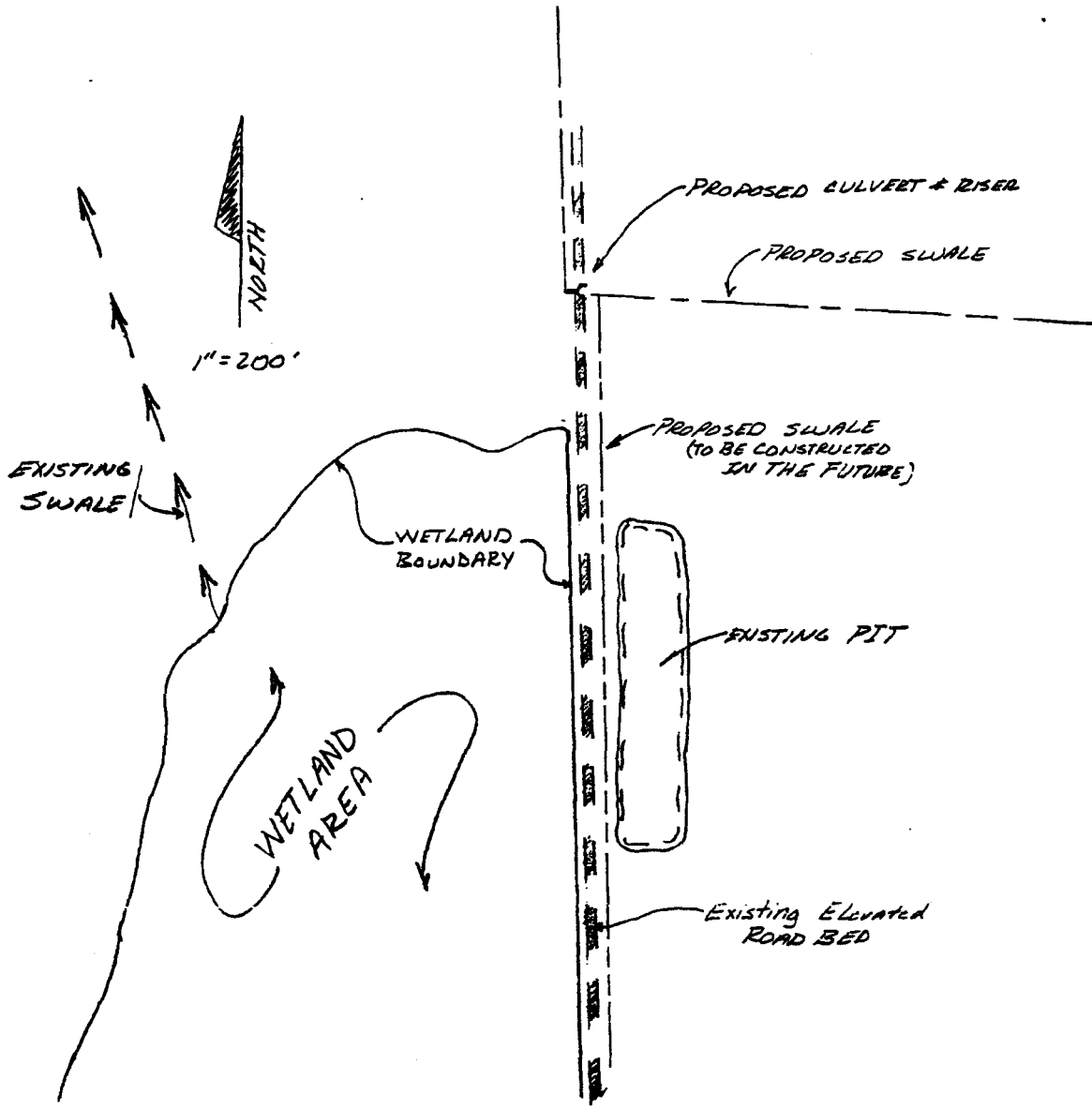
Copy furnished:

SFWMD; Fort Myers, Fl. (#970116-3

Mr. Dallas Townsend
Cow Slough Water Control Dist.
Post Office Box 1986
Arcadia, Fl 34265

Reading Copy

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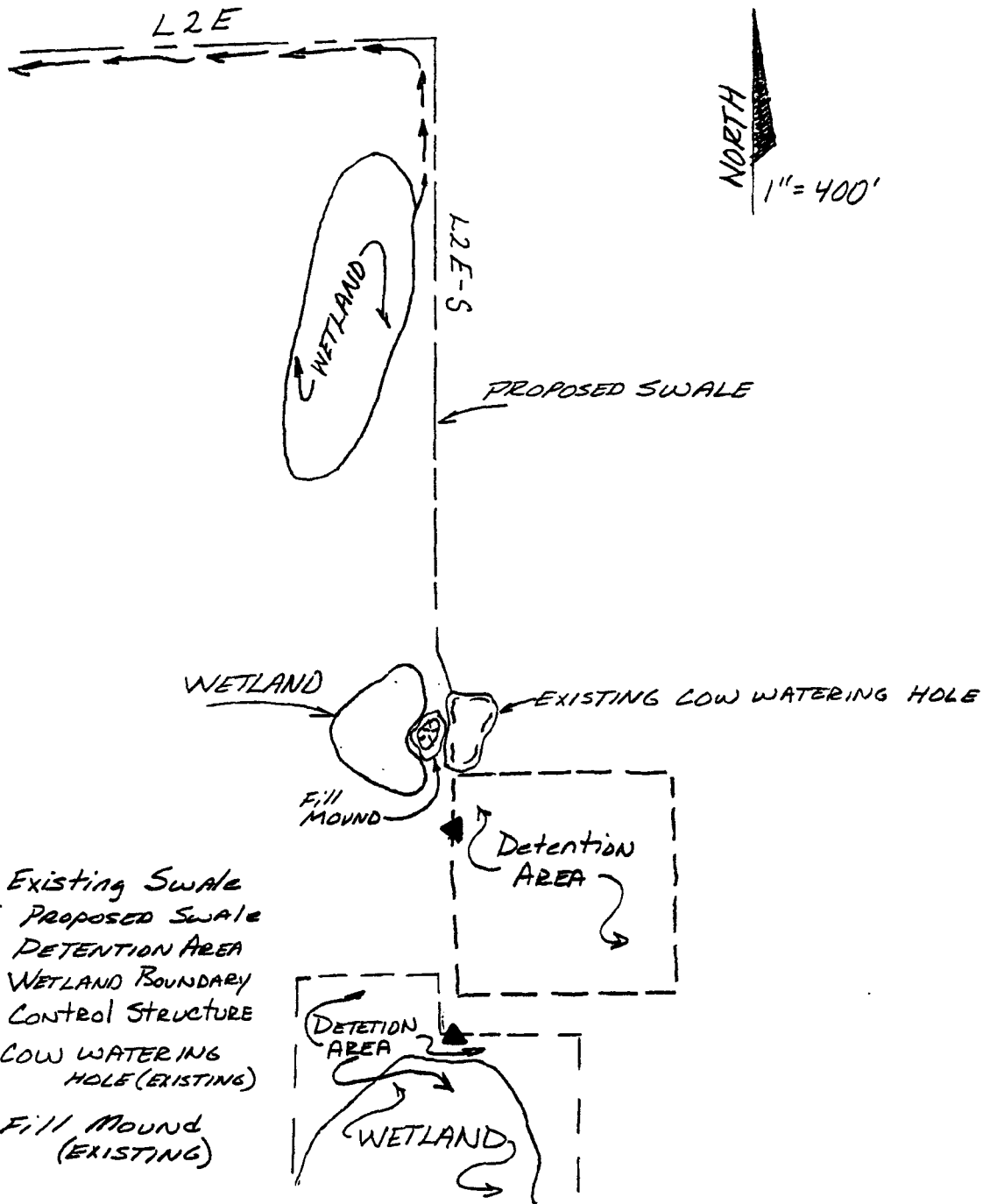
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LEGEND

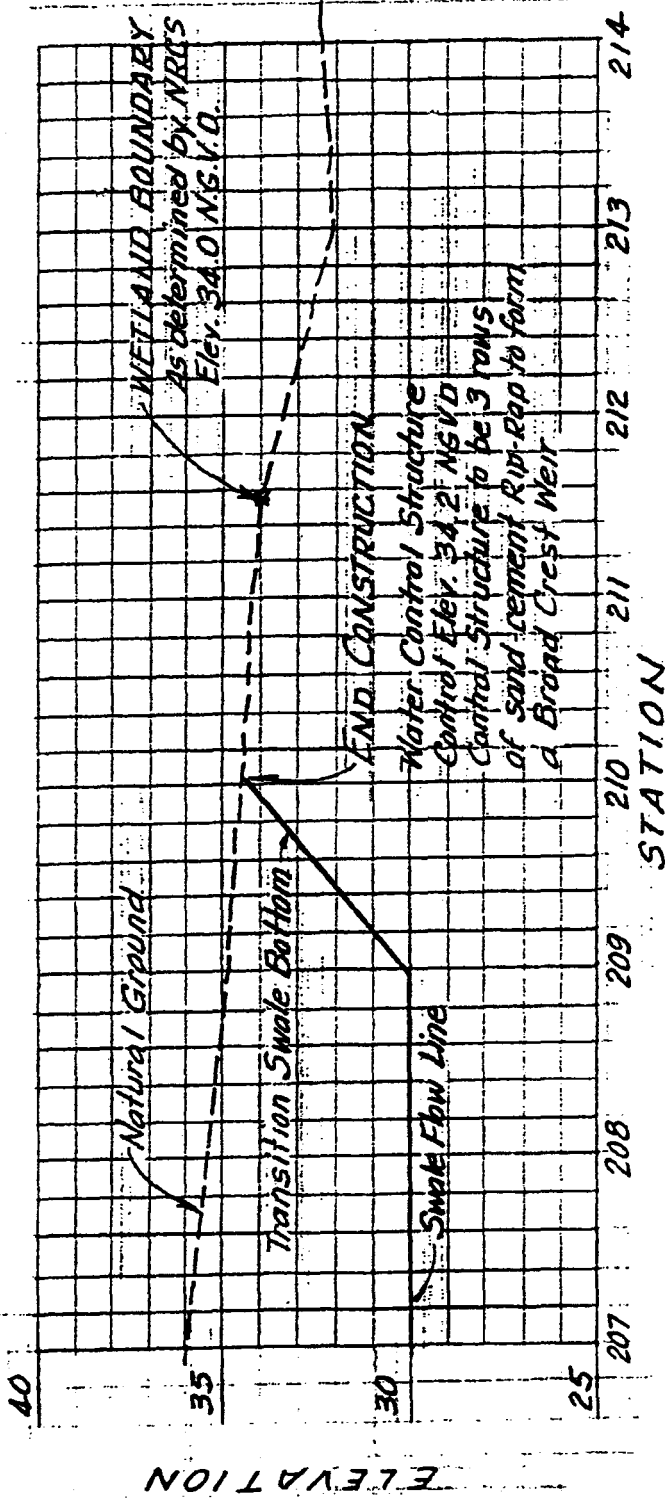
- PROPOSED SWALE
- PROPOSED SWALE
- ===== EXISTING ROAD
- WETLAND BOUNDARY
- ===== PIT
- C- Culvert & Riser
- ← ← ← EXISTING SWALE

A Portion of Lateral L2

42 481 30 SHEETS 5 SQUARE
 42 482 100 SHEETS 5 SQUARE
 42 483 200 SHEETS 5 SQUARE
 42 484 300 SHEETS 5 SQUARE
 NATIONAL



- ← Existing Swale
- - - Proposed Swale
- - - DETENTION AREA
- WETLAND BOUNDARY
- ▲ CONTROL STRUCTURE
- ☁ LOW WATERING HOLE (EXISTING)
- ⊕ Fill Mound (EXISTING)



DETAIL "A" EYE POND - L3E CONNECTION

HOR. SCALE 1" = 100'
VER. SCALE 1" = 5'

