

02

31



**COUNTY ATTORNEY'S OFFICE
MEMORANDUM**

TO: Board of County Commissioners

THROUGH: Stephen P. Lee, Deputy County Attorney *[Signature]*

FROM: Lynn Vouis, Assistant County Attorney *[Signature]*

CONCUR: Jeff Thompson, PEI, Environmental Services *[Signature]*
 Bob Adolphe, Environmental Services *[Signature]*

DATE: April 30, 2004

SUBJECT: ROW License Agreement for use of FPL Easement on Consumer/Lake Hayes Water Main Project

This memo requests execution of a license agreement with Florida Power & Light in order to use their existing right of way to construct the Consumer/Lake Hayes water main project.

At its July 22, 2003 meeting, the BCC approved the construction of a water transmission main to connect the Southeast Regional Consumers Water Treatment Plant and the Lake Hayes Water Treatment Plant. Based on studies by the County's engineering consultant, Inwood Consulting Engineers, Inc., the BCC approved an alignment which is wholly contained within an existing 100 foot wide utility easement owned by Florida Power & Light Company. This location will save the County money and lessen the impact of the project upon property owners. The County still must obtain an easement from the underlying fee owners to utilize the property, but the cost savings from locating in FPL's existing easement is significant.

FPL does not object to the County co-locating its water main in the existing easement, as long as the County agrees to abide by the terms of FPL's standard license agreement. The agreement, already executed by FPL, is attached as Exhibit A to this memorandum. The agreement limits the County's physical presence in the easement (the actual location of the water main), to a ten foot wide corridor. The County will, however, be able to enter upon the remainder of the 30 foot area covered by the license for the construction and maintenance of the water main. Since this is a license agreement as opposed to an easement, FPL could, at their discretion, withdraw the County's right to use the easement, or require that the County relocate the line at the County's expense.

Staff has negotiated with FPL for several months to obtain the license agreement at no cost to the County. FPL was adamant that the license agreement, with the limitations described above is the only acceptable arrangement. The alternatives to acceptance of the proposed license agreement are: (1) condemnation of FPL's interest, or (2) moving the water line to another location. Neither alternative is attractive, as FPL vowed to vigorously oppose a condemnation action and the redesign and moving of the line will be an expensive, time consuming process that will impact more property owners. Condemning an entity which itself has condemnation powers is an unusual proceeding, involving a balancing of the competing public interests. While we are optimistic about our ability to win such a contest under the facts of this situation, we cannot guarantee a victory and recommend an amicable resolution. Accordingly, approval of the attached license agreement is recommended.

LV/sb

Attachment:

ROW License Agreement

P:\USERS\LV\OUI\MEMOS\BCC FPL LICENSE AGT CONSUMER LAKE HAYES.DOC

Line No.: _____ Parcel No.: _____
Line Name: _____
Structure No.: _____
Section, Township, Range: _____

RIGHT-OF-WAY CONSENT LICENSE AGREEMENT

FLORIDA POWER & LIGHT COMPANY, a Florida corporation, whose mailing address is P.O. Box 14000, Juno Beach, Florida 33408-0420, Attn: Corporate Real Estate Department, hereinafter referred to as "Company", hereby consents to SEMINOLE COUNTY, whose mailing address is 1101 East First Street, Sanford, Florida 32771, hereinafter referred to as "Licensee", using an area within Company's right-of-way granted by those certain agreements recorded in Book 132 at Page 285, Book 133 at Page 236, Book 134 at Page 42, Book 134 at Page 44, Book 134 at Page 46, Book 134 at Page 285, and Book 143 at Page 251, Public Records of Seminole County, Florida.

The said area within Company's right-of-way, hereinafter referred to as "Lands", is more particularly described on Exhibit "A" attached hereto. The use of the Lands by Licensee shall be solely for the purpose of construction and maintenance of a water main transmission line, as shown on the plans and specifications submitted by Licensee, attached hereto as Exhibit "B".

In consideration for Company's consent and for the other mutual covenants set forth below, and for TEN DOLLARS AND NO/CENTS (\$10.00) and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties hereto agree as follows:

1. Licensee agrees to obtain all necessary rights from the owners of the Lands in the event Licensee does not own said Lands; any and all applicable federal, state, and local permits required in connection with Licensee's use of the Lands; and at all times, to comply with all requirements of all federal, state, and local laws, ordinances, rules and regulations applicable or pertaining to the use of the Lands by Licensee pursuant to this Agreement.

2. Licensee understands and agrees that the use of the Lands pursuant to this Agreement is subordinate to the rights and interest of the Company in and to the

Lands and agrees to notify its employees, agents, and contractors accordingly. Company specifically reserves the right to maintain its facilities located on the Lands; to make improvements; add additional facilities; maintain, construct or alter roads; maintain any facilities, devices, or improvements on the Lands which aid in or are necessary to Company's business or operations; and the right to enter upon the Lands at all times for such purposes. Licensee understands that in the exercise of such rights and interest, Company from time-to-time may require Licensee, to relocate, alter or move its facilities and equipment, including parking spaces and areas, and other improvements made by Licensee pursuant to this Agreement which interfere with or prevent Company, in its opinion, from properly and safely constructing, improving, and maintaining its facilities. Licensee agrees to relocate, alter, or remove said facilities, equipment, parking spaces and areas, and other improvements within one (1) year of receiving notice from Company to do so. Such relocation alteration or removal will be made at the sole cost and expense of Licensee and at no cost and expense to Company; provided however, should Licensee, for any reason, fail to make such relocation, alteration or removal, Company retains the right to enter upon the Lands and make said relocation, alteration, or removal of Licensee's facilities, equipment, parking spaces and areas, and other improvements and Licensee hereby agrees to reimburse Company for all of its costs and expense incurred in connection therewith upon demand.

3. Licensee agrees that it will not use the Lands in any manner which, in the opinion of Company, may tend to interfere with Company's use of the Lands or may tend to cause a hazardous condition to exist. Licensee agrees that no hazardous substance, as the term is defined in Section 101 (14) of the Comprehensive Environmental Response Compensation and Liability Act ("CERCLA") (42 USC Section 9601 [14]), petroleum products, liquids or flammables shall be placed on, under, transported across or stored on the Lands, which restricts, impairs, interferes with, or hinders the use of the Lands by Company or the exercise by Company of any of its rights thereto. Licensee agrees further that in the event it should create a hazardous condition, then upon notification by Company, Licensee shall, within seventy-two (72) hours, at its sole cost and expense, correct such condition or situation; provided

however that the Company retains the right to enter upon the Lands and correct any such condition or situation at any time and, by its execution hereof, Licensee hereby agrees, to the extent permitted by Florida law, to indemnify and hold harmless Company from all loss, damage or injury resulting from Licensee's failure to comply with the provisions of this Agreement.

4. Licensee hereby agrees and covenants to prohibit its agents, employees, and contractors from using any tools, equipment, or machinery on the Lands capable of extending greater than fourteen (14) feet above existing grade and further agrees that no dynamite or other explosives shall be used within the Lands and that no alteration of the existing terrain, including the use of the Land by Licensee as provided herein, shall be made which will result in preventing Company access to its facilities located within said Lands. Unless otherwise provided herein, Licensee agrees to maintain forty (40) foot wide setback, twenty (20) feet on each side, from Company's facilities.

5. Trees, shrubs, and other foliage planted or to be planted upon the Lands by Licensee are not to exceed a height of fourteen (14) feet above existing grade.

6. Outdoor lighting installed or to be installed upon the Lands by Licensee are not to exceed a height of fourteen (14) feet above existing grade and all poles or standards supporting light fixtures are to be of a non-metallic material.

7. Sprinkler systems installed or to be installed by Licensee upon the Lands are to be constructed of a non-metallic material and sprinkler heads are to be set so the spray height does not exceed fourteen (14) feet above existing grade and does not make contact with any Company's facilities. Aboveground systems shall not be installed within or across Company patrol or finger roads and underground systems crossing said patrol and finger roads are to be buried at a minimum depth of one (1) foot below existing road grade.

8. Licensee agrees to warn its employees, agents, contractors and invitees of the fact that the electrical facilities and appurtenances installed or to be installed by Company within the Lands are of high voltage electricity and agrees to use all safety and precautionary measures when working under or near Company's facilities.

9. Licensee agrees, at all times, to maintain and keep the Lands clean and free of debris caused by Licensee's use of the Lands in accordance herewith. Except

as provided herein, Licensee further understands and agrees that certain uses of the Lands are specifically prohibited; such uses include but are not limited to recreational purposes, hunting and camping, and Licensee agrees to notify its employees, agents, contractors, and invitees accordingly.

10. The use of the Lands by Licensee, to the extent provided in Section 768.28, Florida Statutes, shall be at the sole risk and expense of Licensee, and Company is specifically relieved of any responsibility for damage or loss to Licensee or other persons resulting from Company's use of the Lands for its purpose.

11. Notwithstanding any provision contained herein, Licensee agrees to reimburse Company for all cost and expense for any damage to Company's facilities resulting from Licensee's use of the Lands and agrees that if, in the opinion of Company, it becomes necessary as a result of Licensee's use of the Lands for Company to relocate, rearrange or change any of its facilities, to promptly reimburse Company for all cost and expense involved with such relocation, rearrangement or change.

12. Licensee recognizes its respective liability for certain tortuous acts of its agents, officers, employees and invitees to the extent and limits provided in Section 768.28, Florida Statutes, the State of Florida's partial waiver of sovereign immunity; provided however that this provision shall not be construed as a waiver of any right or defense that the Licensee has under said statute.

13. This Agreement will become effective upon execution by Company and Licensee and will remain in full force and effect until completion of Licensee's use of the Lands pursuant to this Agreement unless earlier terminated upon ninety (90) days written notice by Company to Licensee, or at the option of Company, immediately upon Licensee failing to comply with or abide by any or all of the provisions contained herein.

14. The use granted herein as shown on Exhibit "B" shall be under construction by Licensee within one (1) year of the effective date of this Agreement and the construction shall be diligently pursued to completion. Licensee shall give Company ten (10) days prior written notice of its commencement of construction. "Under construction" is the continuous physical activity of placing the foundation or continuation of construction above the foundation of any structure or improvement permitted

hereunder. Under construction does not include application for or obtaining a building permit, a site plan approval, or zoning approval from the appropriate local government agency having jurisdiction over the activity, purchasing construction materials, placing such construction materials on the site, clearing or grading the site (if permitted) in anticipation of construction, site surveying, landscaping work or reactivating construction after substantially all construction activity has remained stopped for a period of two (2) months or more. Licensee acknowledges that failure to have the use under construction within the one (1) year time period will result in immediate termination of this Agreement for failing to comply with the provisions contained herein unless Licensor grants a written extension for a mutually agreed upon time. Any request for an extension of time shall be submitted in writing by Licensee no later than thirty (30) days prior to the expiration of the one (1) year period for the project to be under construction. Consent to any request for a time extension shall not be unreasonably withheld.

15. The term "Licensee" shall be construed as embracing such number and gender as the character of the party or parties require(s) and the obligations contained herein shall be absolute and primary and shall be complete and binding as to each, including its successors and assigns, upon this Agreement being executed by Licensee and subject to no conditions precedent or otherwise.

16. Should any provision of this Agreement be determined by a court of competent jurisdiction to be illegal or in conflict with any applicable law, the validity of the remaining provisions shall not be impaired. In the event of any litigation arising out of enforcement of this License Agreement, the prevailing party in such litigation shall be entitled to recovery of all costs, including reasonable attorneys' fees.

17. Licensee may assign its rights and obligations under this Agreement to a solvent party upon prior written consent of the Company, which consent shall not be unreasonably withheld.

18. This Agreement includes and is subject to the provisions described on the attached Addendum.

The parties have executed this Agreement this _____ day of _____, 200__.

WITNESSES:

Signature

Print Name

Signature

Print Name

FLORIDA POWER & LIGHT COMPANY

By: _____

Its: _____

Print Name: _____

ATTEST:

MARYANNE MORSE
Clerk to the Board of
County Commissioners of
Seminole County, Florida.

By: _____
DARYL G. MCLAIN, Chairman

Date: _____

For the use and reliance of
Seminole County only. Ap-
proved as to form and legal
sufficiency.

As authorized for execution by the Board
of County Commissioners at its _____
200__, regular meeting.

County Attorney

EXHIBIT "A"

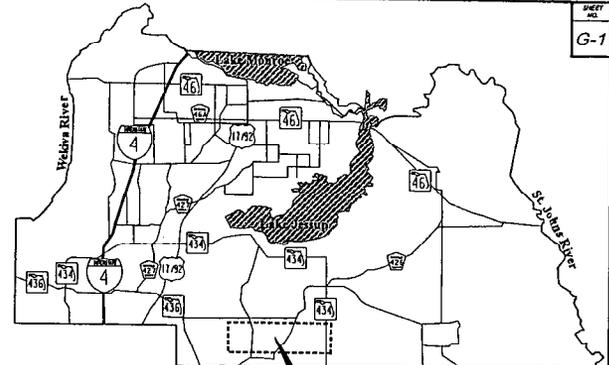
LEGAL DESCRIPTION

A portion of Sections 16, 20, 27 and 28, Township 21 South, Range 31 East, Seminole County, Florida.

Said lands more particularly shown on Exhibit "B" attached hereto and made a part hereof.

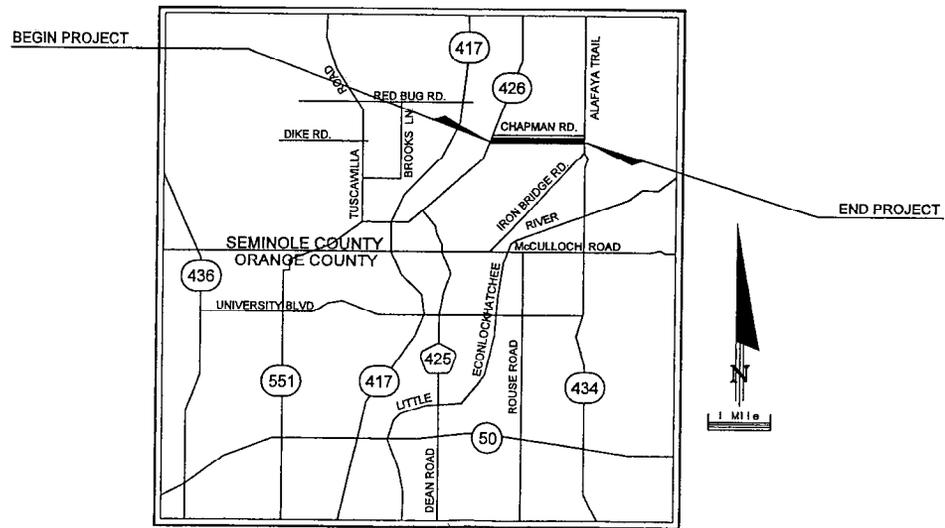
INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
G-1	KEY SHEET
G-2	GENERAL NOTES AND SHEET INDEX
G-3	SYMBOLS AND ABBREVIATIONS
C-1 TO C-16	PLAN AND PROFILE
C-17 TO C-20	STANDARD DETAILS



PROJECT VICINITY MAP

**CONSUMERS / LAKE HAYES
WATER TRANSMISSION MAIN
CONTRACT 2**



PROJECT LOCATION MAP

ENGINEER OF RECORD

JOSEPH A. MARGIO, P.E.
3504 LAKE LYNDA DRIVE, SUITE 410
ORLANDO, FLORIDA 32817

PLANS PREPARED BY:

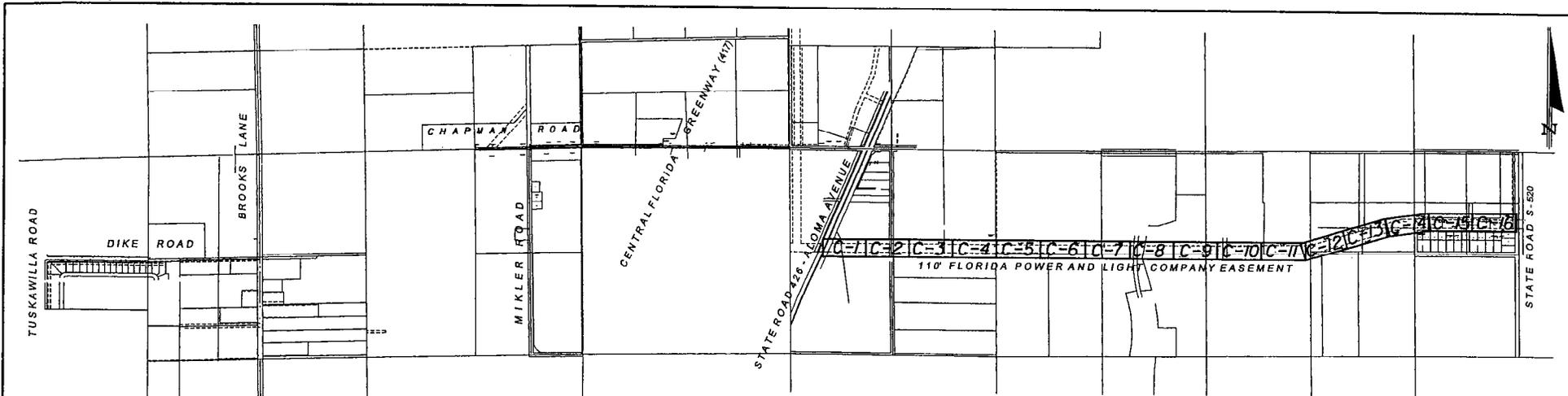
Inwood CONSULTING ENGINEERS, INC.
Civil • Environmental • Transportation
870 Clark Street • Orlando, FL 32765
BUS: (407) 971-8850 • FAX: (407) 971-8955

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

REVISIONS		
DATE	BY	DESCRIPTION

EXHIBIT B

UTILITY PLANS
APPROVED BY: JOSEPH A. MARGIO, P.E.
DATE: NOVEMBER 4, 2003
P.E. NO.: 40180



SHEET INDEX

GENERAL NOTES

1. ALL PIPE SHALL BE PRESSURE TESTED AND 1.6AK TESTED IN ACCORDANCE WITH ANWWA STANDARD C-400, C-405 AND THE SPECIFICATIONS.
2. IN AREAS WHERE THE PROPOSED WASTEWATER PIPES CROSS EXISTING POTABLE AND RECLAIMED WATER MAINS, THE CONTRACTOR SHALL PROVIDE A VERTICAL DISTANCE OF AT LEAST 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND CROWN OF THE LOWER PIPE. WHEN THIS CLEARANCE CAN NOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE POTABLE OR RECLAIMED WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN JOINTS, OR THE WASTEWATER PIPE SHALL BE ENCASED IN CONCRETE FOR A DISTANCE OF 10 FEET FROM THE POINT OF CROSSING.
3. ALL PIPING SHALL BE RESTRAINED IN ACCORDANCE WITH RESTRAINED JOINT DETAILS.
4. THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AT ALL INTERSECTIONS OF PROPOSED WORK AND EXISTING UTILITIES. THE EXPLORATORY EXCAVATION SHALL BE MADE 48 HOURS OR 1,000 FEET IN ADVANCE OF THE WORK, WHICHEVER IS GREATER. IF THERE IS A CONFLICT, THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY. INFORMATION ON THE OBSTRUCTION TO BE FURNISHED BY THE CONTRACTOR SHALL INCLUDE: LOCATION, ELEVATION, UTILITY TYPE, MATERIAL, AND SIZE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY SUPPORT OF UTILITY POLES AND COORDINATION OF SUCH WITH UTILITY OWNERS.
6. THE CONTRACTOR SHALL CONTACT UTILITY OWNERS TO ARRANGE FOR THE LOCATION OF EXISTING UTILITIES IN THE AREA AND TO ASSURE DAMAGE WILL NOT OCCUR DURING REPRODUCTION.
7. WHEN USING SCALED DATA CONSIDER THAT THESE DRAWINGS MAY HAVE BEEN REDUCED IN SIZE DURING REPRODUCTION.
8. CONTRACTOR SHALL AVOID ENCROACHMENT ONTO PRIVATE PROPERTY AND MAINTAIN CONSTRUCTION WITHIN RIGHT-OF-WAY AND UTILITY EASEMENTS.
9. UNLESS OTHERWISE NOTED, PIPING SHALL HAVE A MINIMUM OF 36" OF COVER.
10. THE CONTRACTOR SHALL RESTORE ALL DISTURBED MATERIALS INCLUDING LANDSCAPING, WATER SERVICES, DRIVEWAYS, SIDEWALKS, MAILBOXES, DRIVEWAY STREET SIGNS AND OTHER EXISTING FEATURES, PERSONAL PROPERTY WITHIN THE LIMITS OF CONSTRUCTION SHALL BE RELOCATED BY CONTRACTOR AS REQUIRED TO COMPLETE WORK. CONTRACTOR SHALL NOTIFY PROPERTY OWNERS OF REMOVAL REQUIREMENT A MINIMUM OF 72 HOURS PRIOR TO COMMENCING REMOVAL. PROPERTY SHALL BE RESTORED IMMEDIATELY UPON COMPLETION OF CONSTRUCTION WITHIN THE AREA.

GENERAL NOTES (CONT)

11. PIPE LENGTHS SHOWN REPRESENT SCALE DISTANCES BETWEEN FITTINGS AND BRANCHES OF MAINS. THESE LENGTHS ARE FOR INFORMATIONAL PURPOSES AND THE CONTRACTOR SHALL DETERMINE THE ACTUAL CONSTRUCTION QUANTITIES.
12. INSTALLATION, OPERATION AND MAINTENANCE OF ALL TRAFFIC CONTROL SIGNS, SIGNALS, DEVICES AND MARKINGS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATOR'S MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES ALONG WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION 800 SERIES DESIGN STANDARDS.
13. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN OBTAINED FROM THE RESPECTIVE UTILITY OWNERS USING THE LATEST INFORMATION AVAILABLE. HOWEVER, THESE LOCATIONS, AS SHOWN ON THE DRAWINGS, ARE NOT CONSIDERED TO BE INCLUSIVE.
14. WHERE A CONNECTION IS TO BE MADE IN THE FIELD TO AN EXISTING PIPE, THE CONTRACTOR SHALL EXCAVATE IN THE AREA TO VERIFY THE TYPE OF PIPE AND THE PIPE SIZE, AND OBTAIN THE OWNER'S APPROVAL OF THE PROPOSED METHOD OF CONNECTION PRIOR TO ORDERING AND INSTALLING MATERIALS.
15. CONTRACTOR SHALL PROVIDE TEMPORARY THRUST RESTRAINT, BRACING, TEST PLUGS AND/OR OTHER DEVICES NECESSARY TO SUCCESSFULLY COMPLETE PRESSURE TESTING OF ALL PRESSURE PIPING SYSTEMS.
16. ALL GRASSED AREAS DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE RESTORED BY SOEDING, SEEDING AND MULCHING IS NOT ACCEPTABLE.
17. ANY HOV-3+ MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHOULD NOTIFY:
GEODETTIC INFORMATION CENTER
ATTN: MARK MAINTENANCE SECTION
MCS-162
8001 EXECUTIVE BOULEVARD
ROCKVILLE, MARYLAND 20858
TELEPHONE: (301) 443-8319
18. THE FPL CONTACT PERSON IS JERRY PENNY @ (386) 847-8101. THE CONTRACTOR MUST CONTACT AND NOTIFY MR. PENNY 5 DAYS IN ADVANCE OF STARTING WORK WITHIN THE FPL EASEMENT.
19. WHENEVER WORKING DIRECTLY UNDER OVERHEAD POWER TRANSMISSION LINES, ANY EQUIPMENT USED TO COMPLETE THE WORK MUST NOT BE CAPABLE OF REACHING OR EXTENDING HIGHER THAN 14 FEET ABOVE THE GROUND.
20. THE CONTRACTOR AND ALL HIS EMPLOYEES WORKING WITHIN THE FPL POWER EASEMENT MUST ATTEND A SAFETY SEMINAR TO BE CONDUCTED BY FPL PERSONNEL PRIOR TO STARTING ANY WORK IN THE FPL EASEMENT.

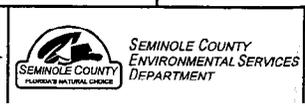
UTILITY COMPANIES

- SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT
500 WEST LAKE MARY BLVD.
SAWFAREO, FL 32773
CONTACT: MARC MAHEU
(407) 655-274
- CITY OF OVIEDO UTILITIES
400 ALEXANDRIA BLVD.
OVIEDO, FL 32765
CONTACT: TOM KING
(407) 977-8068
- SPRINT TELEPHONE
802 FIRST STREET
ALTAMONTE SPRINGS, FL 32707
CONTACT: PAUL MOSEWNA
- THE WARMER COMMUNICATIONS
844 MAGUIRE ROAD
DODGE, FL 34701
CONTACT: MATYON USRY
(407) 532-8509
- FLORIDA POWER CORPORATION
2801 WEST ST. ADE
OVIEDO, FL 32765
CONTACT: TERRI BOHANNON
(407) 353-4431
- FPL - FIBERNET
2520 W. FLAGLER STREET
JANAI, FL 33174
CONTACT: NOEL REESE
(954) 552-2219
- FPL POWER
CONTACT: JERRY PENNY
(386) 847-8101
- TECO - PEOPLES GAS SYSTEM
601 WEST ROBINSON STREET
ORLANDO, FL 32801
CONTACT: BRUCE STOUT
(407) 428-9009 EXT.216

NOTE: CONTACT "SUNSHINE ONE-CALL" AT 1-800-432-4770 FOR ALL UTILITY LOCATIONS.

REVISIONS		
DATE	BY	DESCRIPTION
2/24/04	JAM	ADDED NOTES 18, 19, & 20

DESIGNED: J.A.M.
 DRAWN: D.M.A. Joseph A. Marglo P.E.
 CHECKED: D.G.C. License No. 40180
 PROJ. MGR.: J.A.M.



SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT
 CONSUMERS / LAKE HAYES WATER TRANSMISSION MAIN

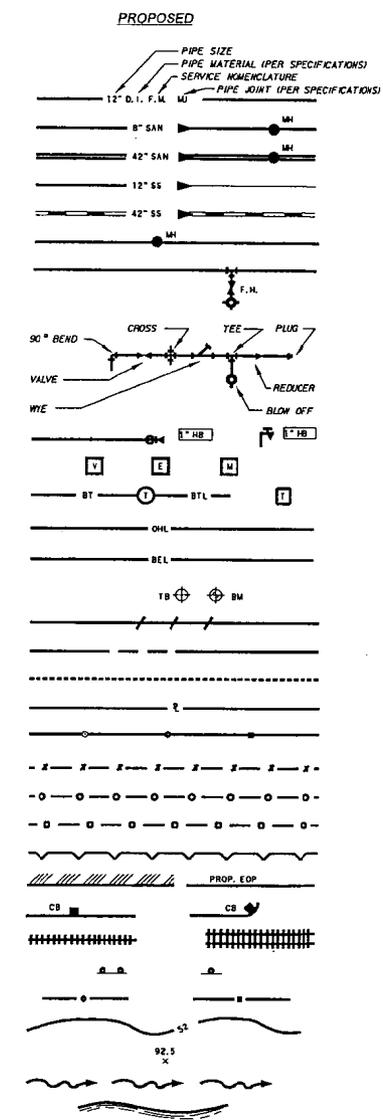
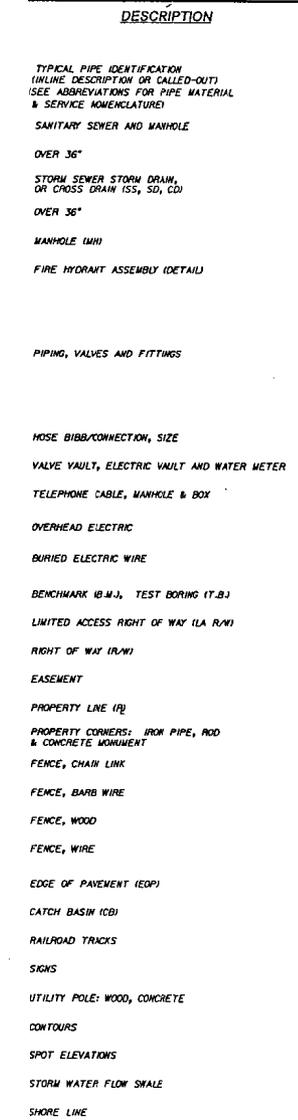
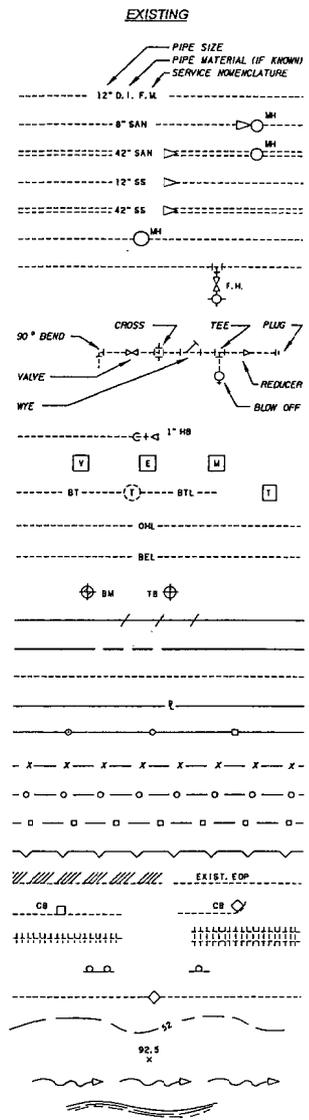
Inwood CONSULTING ENGINEERS
 Civil • Environmental • Transportation
 870 Clark Street Oviedo, Florida 32765
 Certificate No. 7074

SHEET INDEX AND GENERAL NOTES

SHEET NO.
 G-2

CIVIL DRAWING LEGEND

ABBREVIATIONS AND SYMBOLS



ABBREVIATIONS		PIPE MATERIAL JOINTS	
ADAPTER	ADPT.	MAINTENANCE	MAINT.
ADJUSTABLE	ADJ.	MANHOLE	MH
ALTERNATE OR ALTERNATIVE	ALT.	MANUFACTURER	MFR.
ALUMINUM	ALUM.	MANUFACTURING MATERIAL	MFG.
AMERICAN CONCRETE INSTITUTE	A.C.I.	MAXIMUM	MAX.
AMERICAN SOCIETY FOR TESTING MATERIAL	A.S.T.M.	MECHANICAL	MECH.
AMERICAN WATERWORKS ASSOCIATION	A.W.W.A.	MECHANICAL JOINT	M.J.
APPROXIMATE	APPROX.	METER	M.
ASSEMBLY	ASST.	MILLIONS GALLONS PER DAY	M.G.D.
AUTOMATIC	AUTC.	MISCELLANEOUS	MISC.
AUXILIARY	AUX.	MOTOR CONTROL CENTER	M.C.C.
BENCH MARK	B.M.	MOUNTED	MTO.
BIRMINGHAM	BIT.	NATIONAL PIPE THREAD	N.P.T.
BOTTOM	BTM.	NOMINAL	NOM.
BRACKET	BRKT.	NOT TO CONTRACT	N.T.C.
BUILDING	BLDG.	NUMBER	NO.
BURIED ELECTRIC	BE	OPENING	OPNG.
BURIED FIBER OPTIC CABLE	BFO	OPERATOR	OPER.
CABLE TELEVISION	CATV	ORIGINAL	ORIG.
CAPACITY	CAP.	OUTSIDE DIAMETER	O.D.
CAST IRON	CI	PHASE	PH.
CENTER LINE	C.L. or C L	PLAIN END	P.E.
CENTER TO CENTER	C.C.	PLATE	PL.
CONCENTRIC	C.C.F.R.	POINT	PT.
CONCRETE	CONC.	POLYVINYL CHLORIDE	P.V.C.
CONDITION	COND.	POUND	LBS.
CONNECTION	CONN.	POUNDS PER SQUARE INCH	P.S.I.
CONSTRUCTION	CONSTR.	PRESSURE	PRESS.
CONTINUATION	CONT.	PROCESS	PROC.
COUPLING	CPG.	PRODUCT	PROD.
DEFLECTION	DEFL.	PROPOSED	PROP.
DEGREE	DEG. or °	QUANTITY	QTY.
DEPARTMENT	DEPT.	RADIUS	R.
DIAMETER	DIA. or Ø	REDUCER	RED.
DIMENSION	DM.	REFERENCE	REF.
DISCHARGE	DISC.	REINFORCED	REIN.
DRAWING	DMG.	RESTRAINED	RESTR.
DUCTILE IRON	DI	REVERSE	REV.
EACH	EA.	REVOLUTIONS PER MINUTE	R.P.M.
ECCENTRIC	ECC.	RIGHT-OF-WAY	R.W. or R.O.W.
EFFECTIVE	EFF.	SANITARY SEWER	SS
ELEVATION	EL. or ELEV.	SCHEDULE	SCH.
ENGINEER	ENGR.	SECTION	SECT.
EQUIPMENT	EQUIP.	SERVICED	SERV.
EXCHANGE	EXCH.	SHEET	SHT.
EXISTING	EXIST.	SIMILAR	SM.
EXPANSION	EXP.	SPECIFICATIONS	SPECS.
FARRICATE	FAB.	SQUARE	SQ.
FEET OR FOOT	FT. or °	STAINLESS STEEL	SS
FIGURE	FIG.	STANDARD	STD.
FINISH	FIN.	STEEL	STL.
FITTING	FTG.	SYSTEM	SYS.
FLANGE	FLG.	TEMPERATURE	T.
FORCE MAIN	F.M.	TEMPORARY	TEMP.
GALLON	GAL.	THICK	TK.
GALLONS PER MINUTE	G.P.M.	THREADED	TKD.
GALVANIZED	GALV.	TOE OF SLOPE	T.S.
GAUGE (OR GAGE)	GA.	TOP OF BANK	T.O.B.
GRADE	GR.	TOP OF SLAB	T.O.S. or T.S.L.
HARDWARE	HW.	TOP OF HALL	T.O.H.
HEIGHT	H.T.	TOP OF FINISH	T.O.F.
HIGH POINT	H.P.	TRANSFER	TRNS.
HIGH WATER LEVEL	H.W.L.	TYPICAL	TYP.
HORIZONTAL	HORZ.	UNDER GROUND	UG
HORSE POWER	H.P.	VACUUM	VAC.
HOUR	HR.	VARIABLE	VAR.
HYDRANT	HYD.	VERTICAL	VERT.
IMPELLER	IMP.	VOLUME	VOL.
INCH	IN. or °	WATER LINE	WL.
INFLUENT	INF.	WATERPROOF	WP.
INSIDE DIAMETER	ID.	WEIGHT	WT.
INSTRUMENT	INST.	WITH	W.
INVERT	INV.	WITHOUT	W/O
JOINT	JT.		
LEFT	LT.		
LENGTH	LGTH.		
LINEAR FEET	L.F.		
LOW WATER LEVEL	L.W.L.		

UTILITY SERVICE NOMENCLATURE

CABLE TELEVISION	CATV
PROPANE GAS	GM
GAS MAIN	GM
FIBER OPTIC CABLE	FOC
BURIED FIBER OPTIC CABLE	BFO
RECLAIMED WATER MAIN	RWM
UNDERGROUND ELECTRIC	UGE
BURIED ELECTRIC	BE
UNDERGROUND TELEPHONE	UGT
WATER LINE (WATER MAIN)	WL

VALVES, FITTINGS, APPURTENANCES

AIR CUSHION CHECK VALVE	ACCV
AIR RELEASE VALVE	ARV
BALL CHECK VALVE	BCV
BALL VALVE	BV
BLIND FLANGE	BF
BURIED GEAR OPERATOR	BOO
BUTTERFLY VALVE	BYV
CHECK VALVE	CV
CLEANOUT	CO
ELECTRIC VALVE ACTUATOR	EVA
ELEVATED GEAR OPERATOR	EGO
EQUIPMENT DRAIN (FLUSH TYPE)	EQD
EQUIPMENT DRAIN (EXTENDED OPEN TYPE)	EQD(I)
EQUIPMENT DRAIN (EXTENDED TYPE - SEALED)	EQD(II)
EXPANSION JOINT	EJ
FIRE HYDRANT	FH
FITTING	FTD
FLANGED ADAPTOR	FA
FLEXIBLE COUPLING	FC
FLOOR (RUSHING TYPE)	FB
FLOOR DRAIN	FD
GATE VALVE	GV
HARNESSED FLANGED ADAPTOR	HFA
HOSE BIBB	HB
HYDRAULIC VALVE ACTUATOR	HVA
INFLUENT GATE VALVE	IGV
MANHOLE	MH
MATERIALIZED SECTION	MES
PLASTIC BALL VALVE	PBV
PLUG VALVE	PV
RESISER	RES
ROOF DRAIN	RD
SOLENT CHECK VALVE	SCV
VENT	VT
VENT THROUGH ROOF	VTR
WALL SLEEVE	WS
WALL PIECE (W/ WATER TOP)	WP

FACILITY SERVICE NOMENCLATURE

ALUM SOLUTION	AS
BURIED ELECTRIC	BE
BURIED FIBER OPTIC CABLE	BFO
BYPASS	BP
CHLORINE SOLUTION	CS
CHLORINE GAS	CG
DRAIN	D
DIGESTED SLUDGE	DS
EFFLUENT	E
EFFLUENT SAMPLE	ES
FINISHED WATER	FW
FLUORIDE SOLUTION	FS
FORCE MAIN	FM
FUEL OIL SUPPLY	FO
FUEL OIL RETURN	FOR
GAS LINE	GL
GAS MAIN	GM
HIGH PRESSURE AIR	HPA
INFLUENT	INF
LIQID ALUM	LA
MIXED LIQUID	ML
METHANOL SOLUTION	MS
NONPOTABLE WATER	NPW
PROCESS AIR	PA
PRIMARY EFFLUENT	PE
POTABLE WATER	PW
RAW WATER	RW
RETURN ACTIVATED SLUDGE	RAS
SANITARY SEWER	SS
SODIUM HYDROXIDE SOLUTION	SHS
STORM SEWER	SS
SULFUR DIOXIDE SOLUTION	SDS
SECONDARY EFFLUENT	SE
WASTE ACTIVATED SLUDGE	WAS
WATER LINE	WL
WATER MAIN	WM
WATER SERVICE	WS

REVISIONS		
DATE	BY	DESCRIPTION

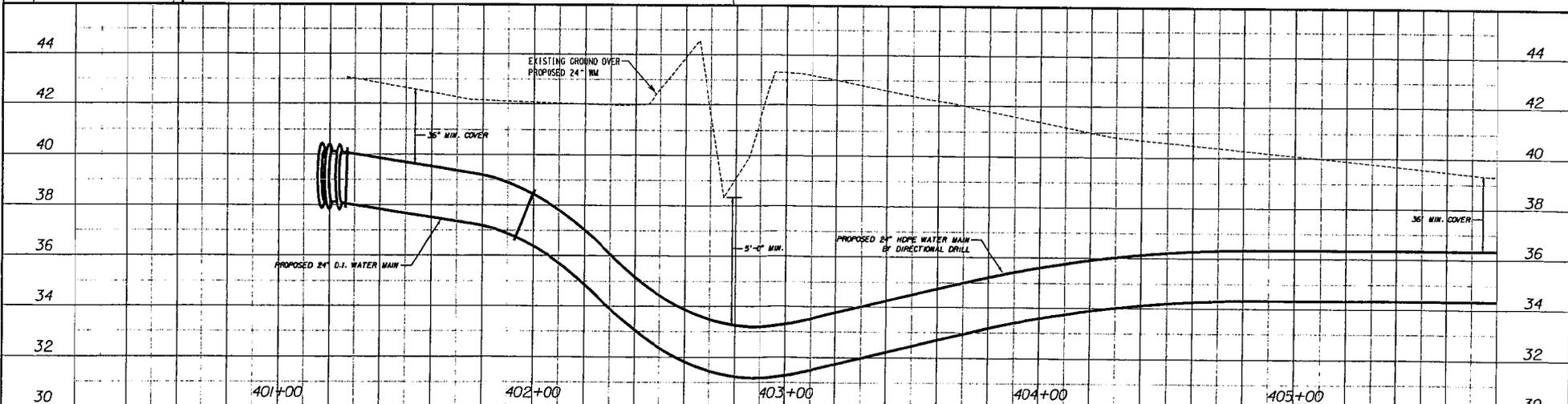
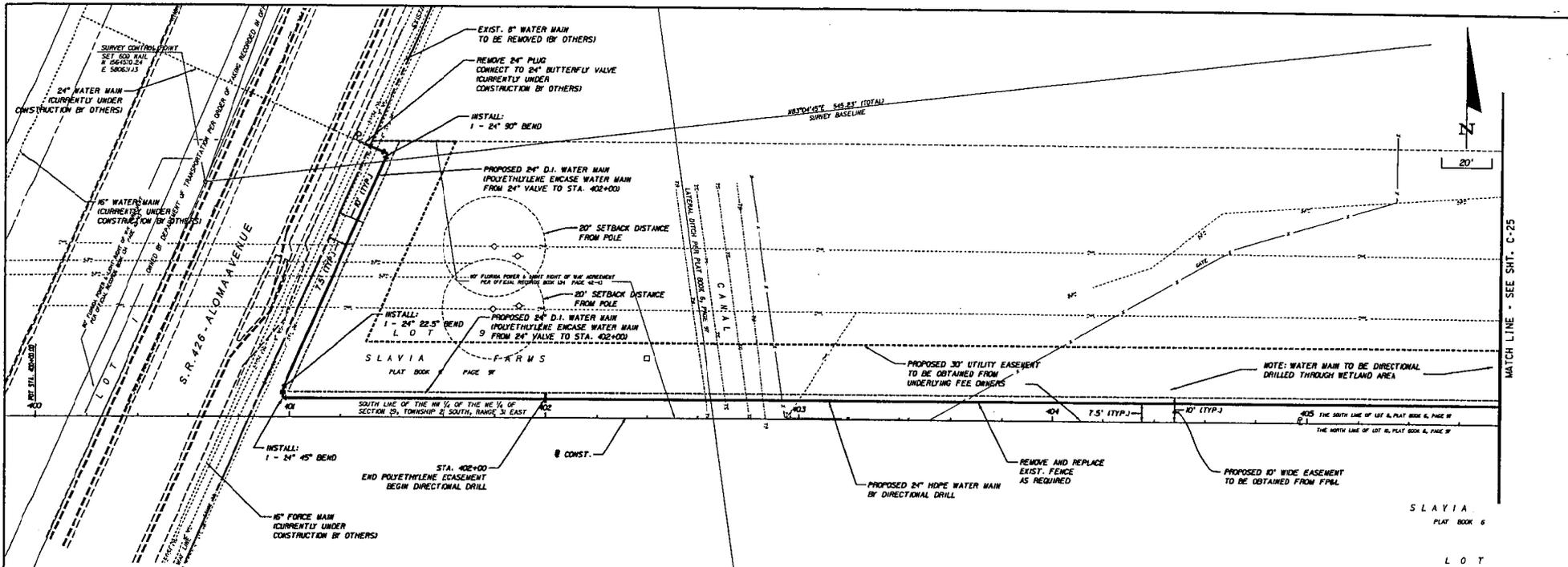
DESIGNED:	J.A.M.
DRAWN:	D.M.A. Joseph A. Margio P.E. License No. 40180
CHECKED:	D.G.C.
PROJ. MGR.:	J.A.M.



CONSUMERS / LAKE HAYES
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Certificate No. 7074

SYMBOLS AND ABBREVIATIONS



REVISIONS		
DATE	BY	DESCRIPTION
2-24-2004	JWR	MOVED WATERLINE TO 7.5' & ADDED 10' EASEMENT

DESIGNED: J.A.M.
 DRAWN: D.M.A. Joseph A. Margio P.E.
 CHECKED: D.G.C. License No. 40180
 PROJ. MGR.: J.A.M.

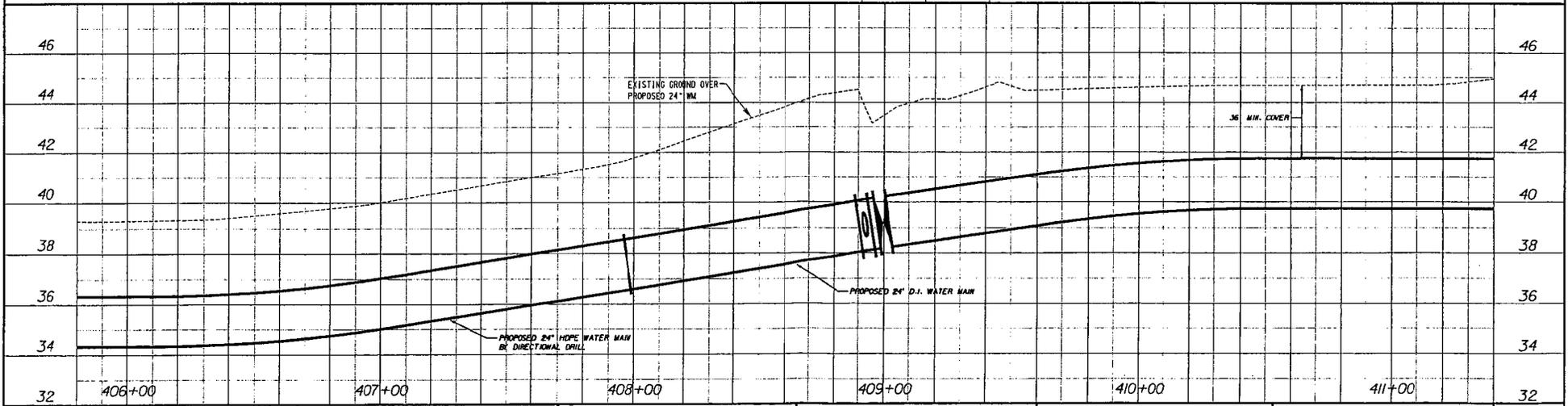
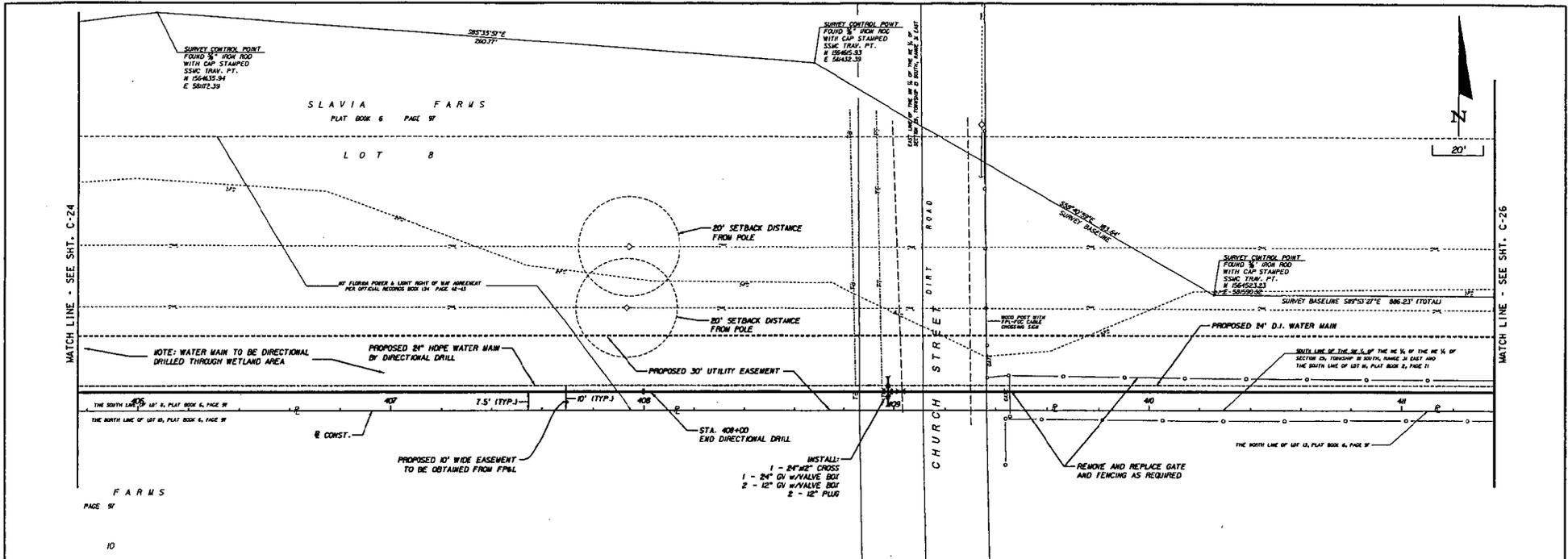


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FP & L EASEMENT
 PLAN & PROFILE
 STA. 400+00 TO STA. 405+78.34

SHEET NO.
C-1



REVISIONS		
DATE	BY	DESCRIPTION
2-24-2004	JWR	MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED: J.A.M.
 DRAWN: D.M.A. Joseph A. Marglo P.E.
 CHECKED: D.G.C. License No. 40180
 PROJ. MGR.: J.A.M.

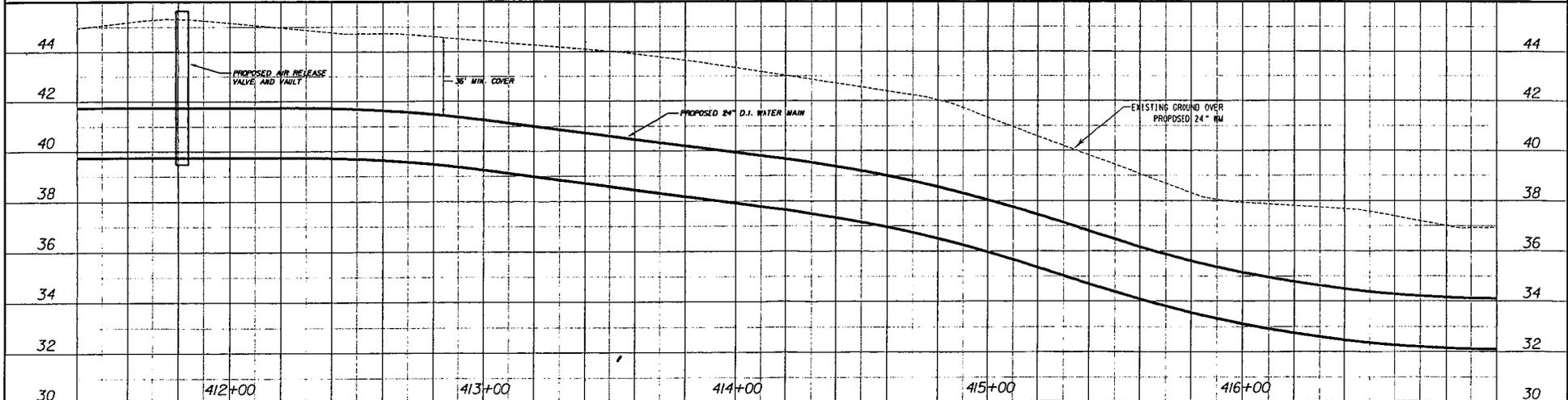
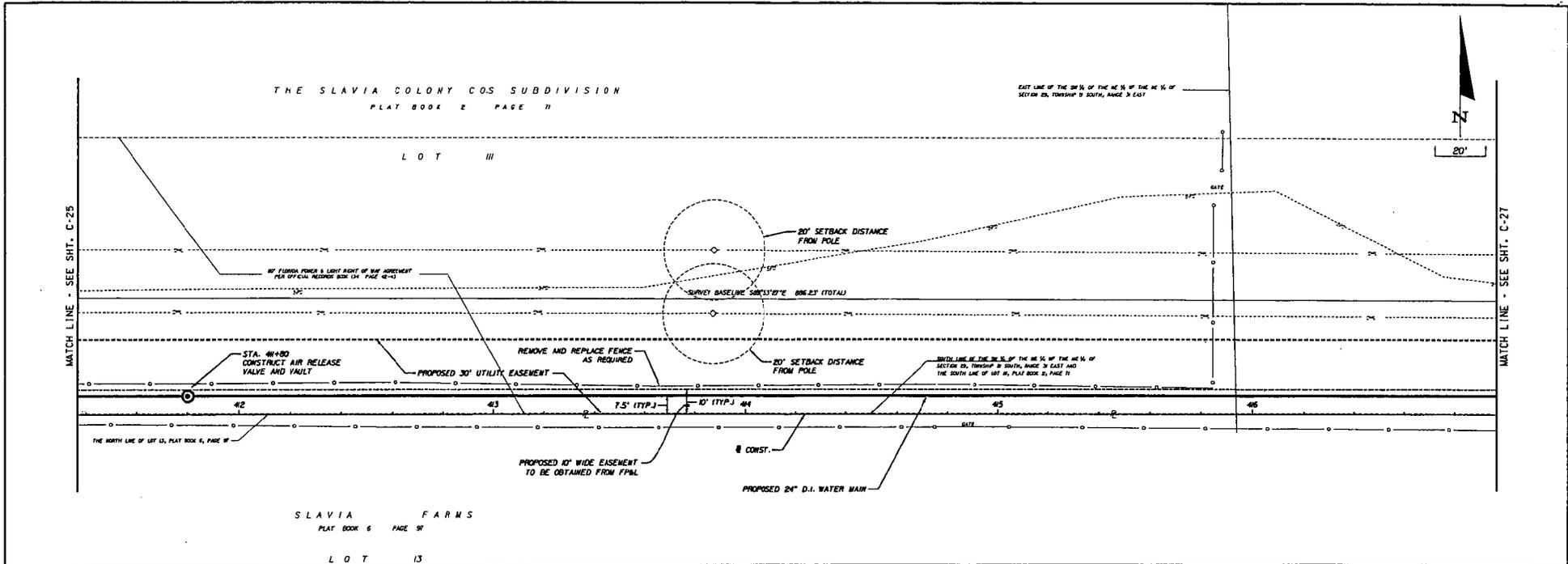


CONSUMERS / LAKE HAYES WATER TRANSMISSION MAIN



FP & L EASEMENT PLAN & PROFILE
 STA. 405+76.34 TO STA. 411+36.34

SHEET NO.
C-2



REVISIONS	
DATE	DESCRIPTION
2-24-2004	MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED: J.A.M.
 DRAWN: D.M.A.
 CHECKED: D.G.C.
 PROJ. MGR: J.A.M.

Joseph A. Margio P.E.
 License No. 40180



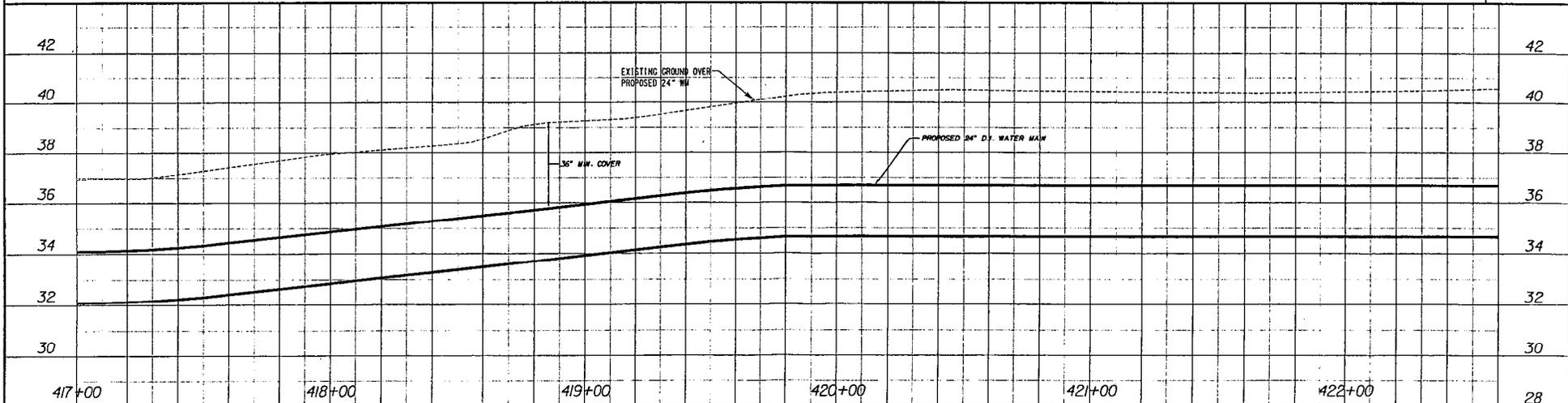
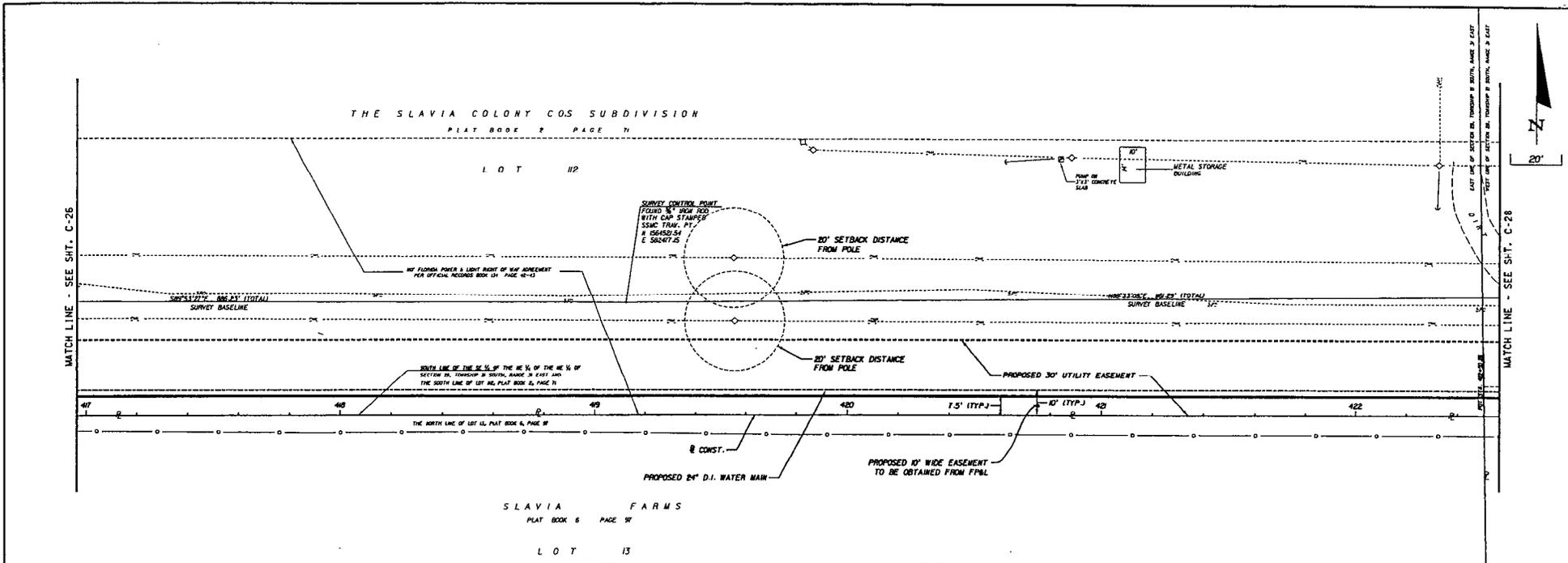
SEMINOLE COUNTY
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ENGINEERS
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 Certificate No. 7074

FP & L EASEMENT
 PLAN & PROFILE
 STA. 411+36.34 TO STA. 418+96.34

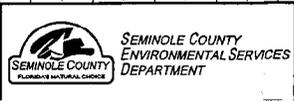
SHEET
 NO.
C-3



REVISIONS	
DATE	BY
2-24-2004	JWR
MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT	

DESIGNED: J.A.M.
 DRAWN: D.M.A.
 CHECKED: D.G.C.
 PROJ. MGR.: J.A.M.

Joseph A. Margio P.E.
 License No. 40180

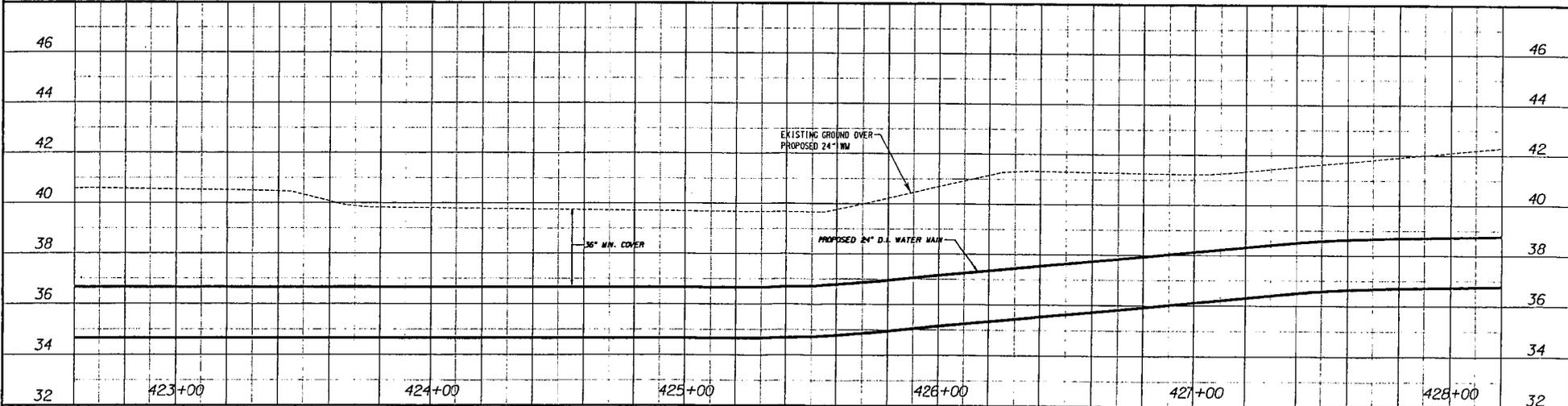
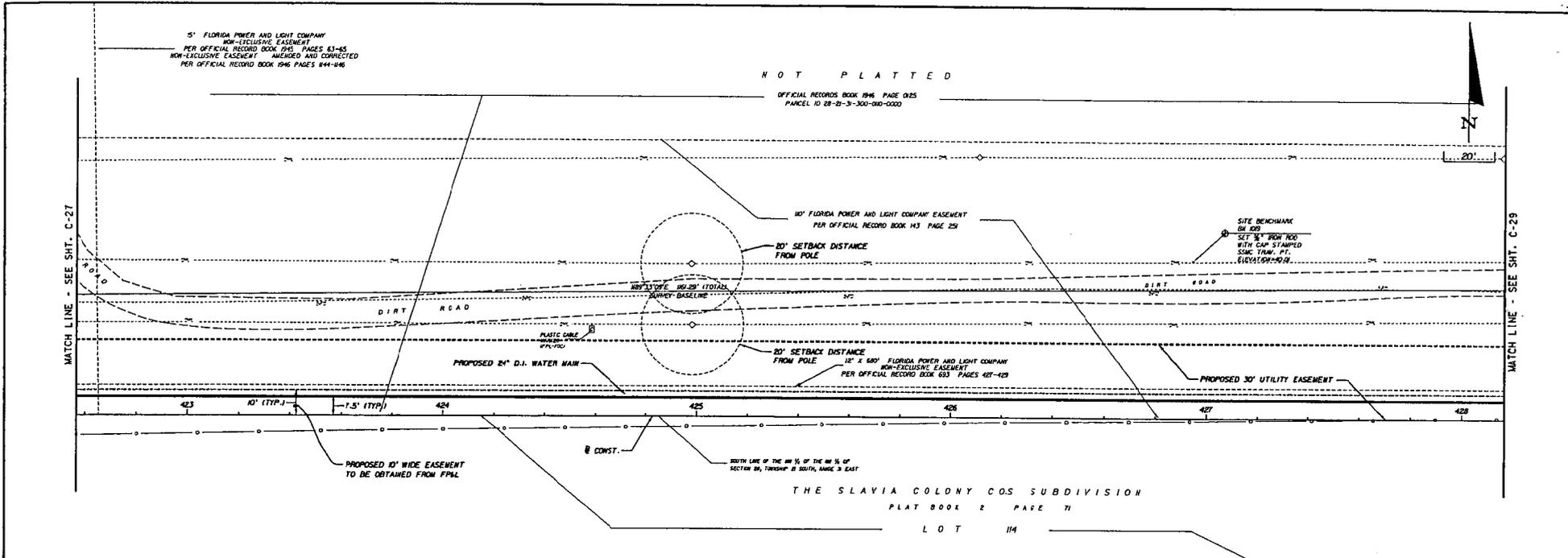


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FP & L EASEMENT
 PLAN & PROFILE
 STA. 416+96.34 TO STA. 422+56.34

SHEET NO.
C-4



REVISIONS	
DATE	DESCRIPTION
2-24-2004	JMR MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED: J.A.M.
 DRAWN: D.M.A. Joseph A. Margio P.E.
 CHECKED: D.G.C. License No. 40180
 PROJ. MGR: J.A.M.

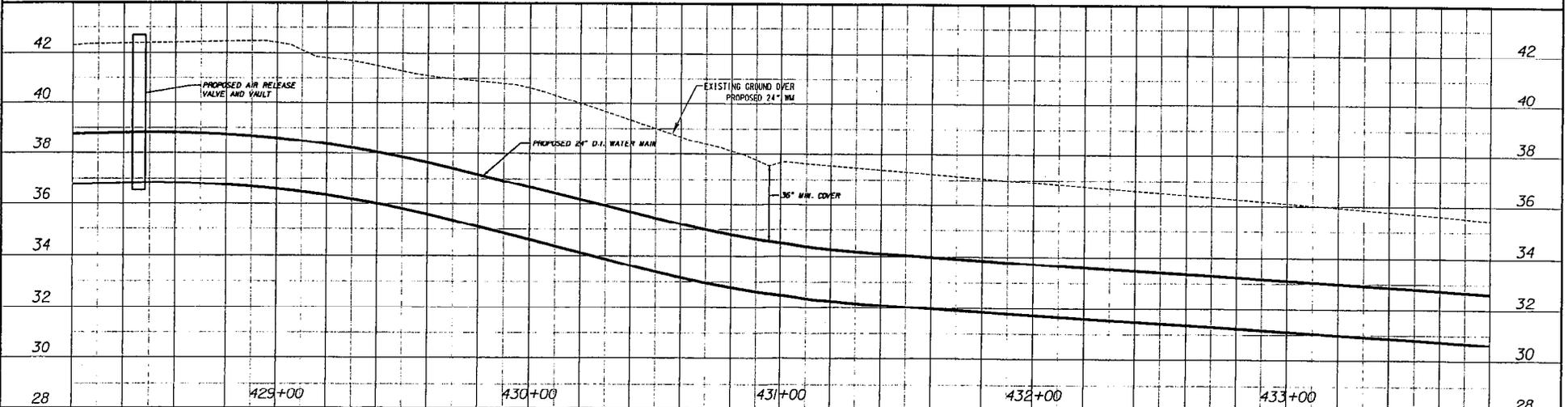
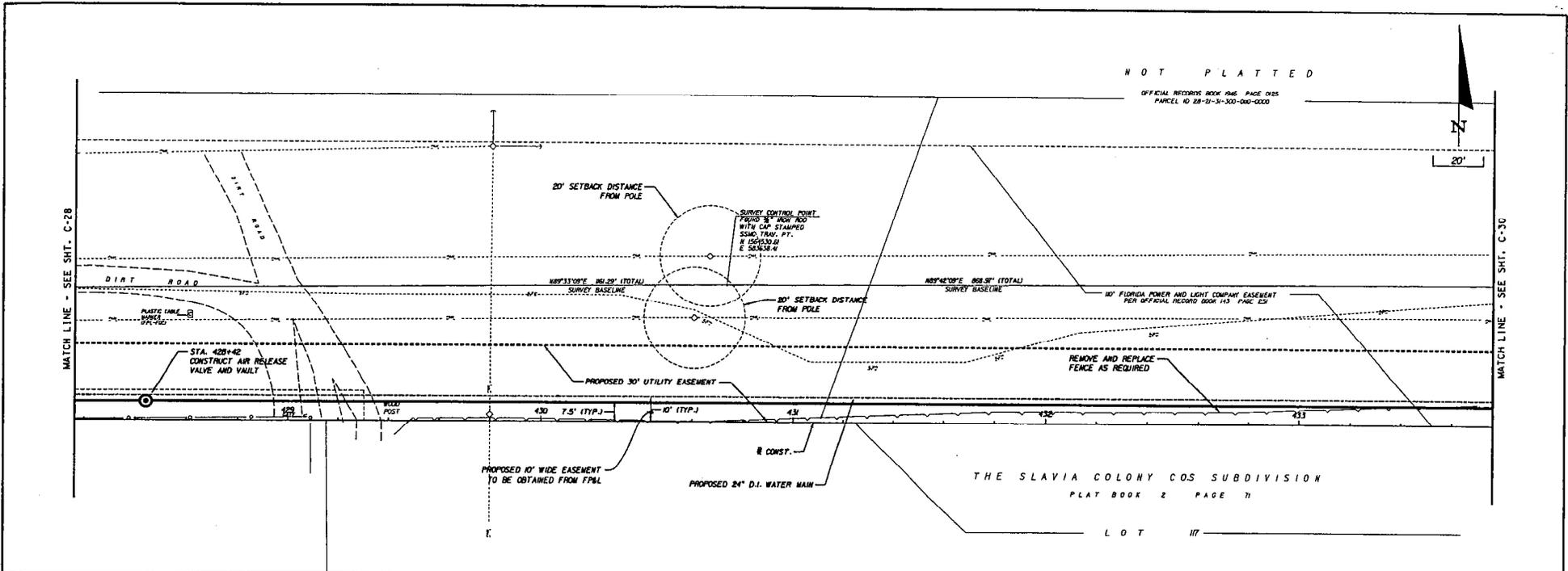


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 Certificate No. 7074

FP & L EASEMENT
 PLAN & PROFILE
 STA. 422+56.34 TO STA. 428+16.34

SHEET NO.
 C-5



REVISIONS	
DATE	DESCRIPTION
2-24-2004	JMR MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED: J.A.M.
 DRAWN: D.M.A.
 CHECKED: D.G.C.
 PROJ. MGR.: J.A.M.

Joseph A. Margio P.E.
 License No. 40180

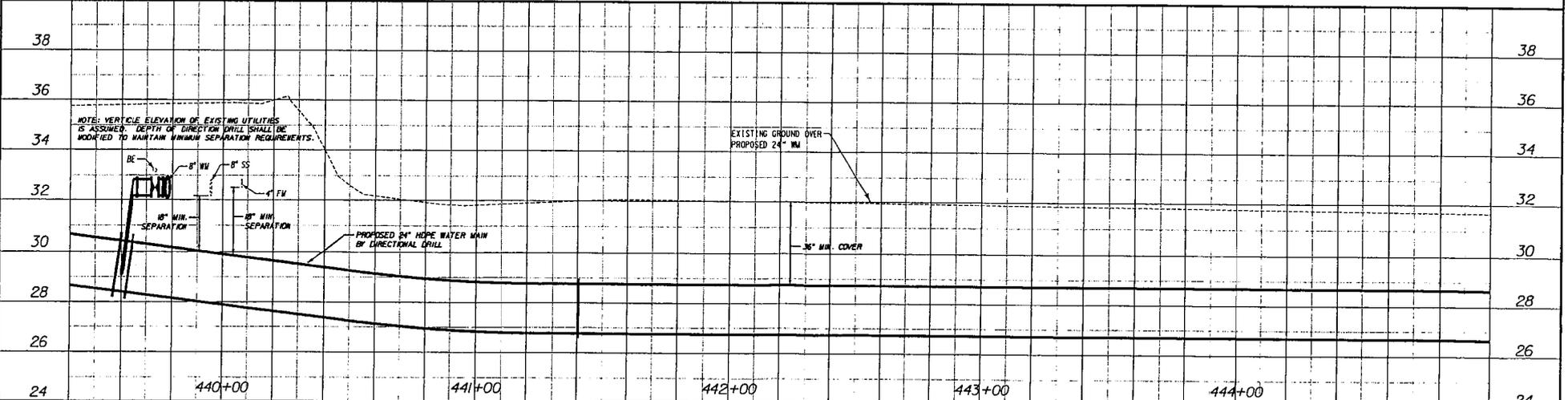
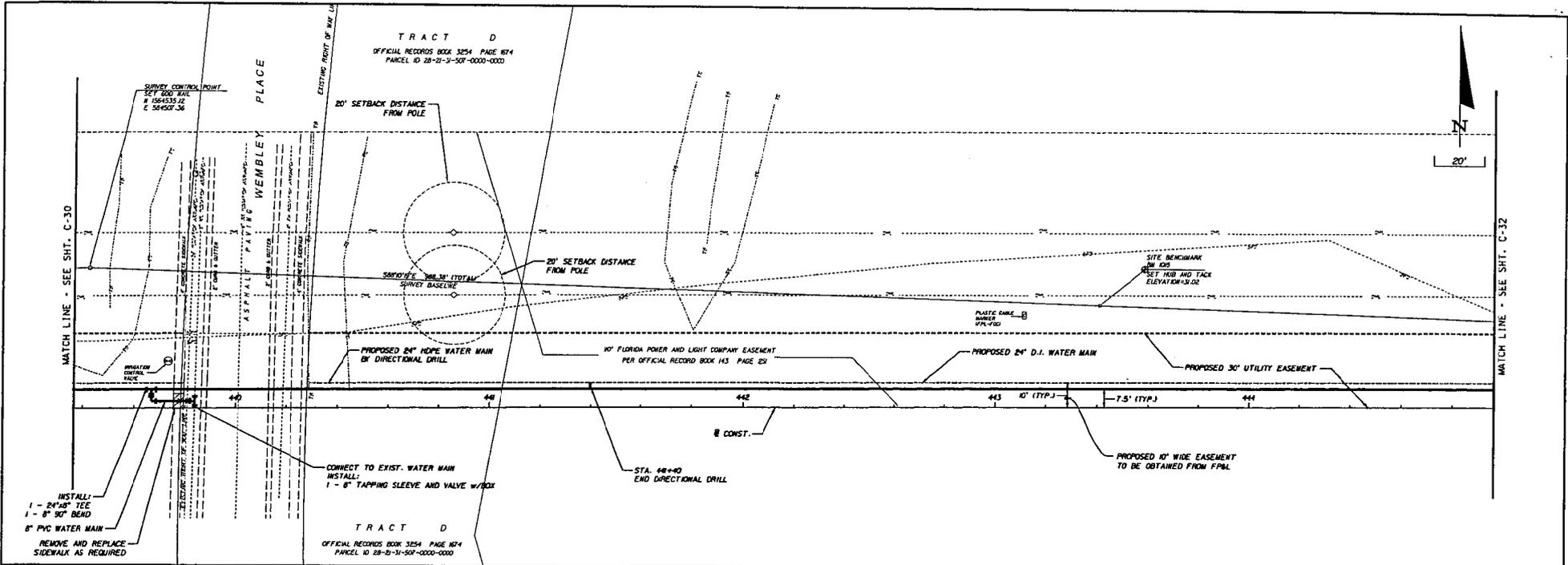


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 Certificate No. 7074

FP & L EASEMENT
 PLAN & PROFILE
 STA. 428+16.34 TO STA. 433+76.34

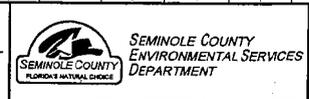
SHEET NO.
C-6



REVISIONS	
DATE	DESCRIPTION
2-24-2004	JWR MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED:	J.A.M.
DRAWN:	D.M.A.
CHECKED:	D.G.C.
PROJ. MGR.:	J.A.M.

Joseph A. Margio P.E.
License No. 40180

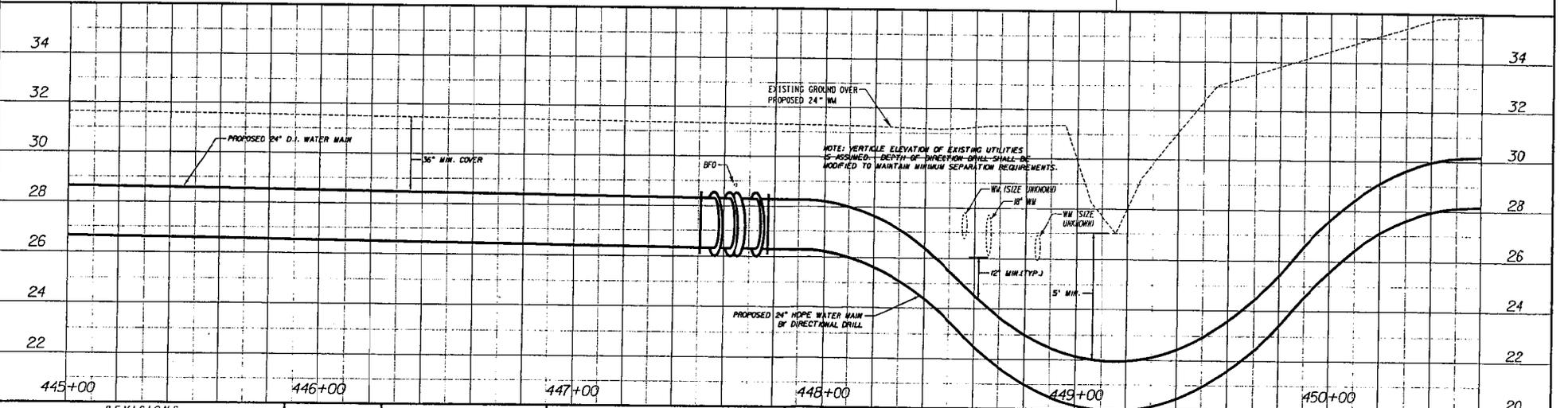
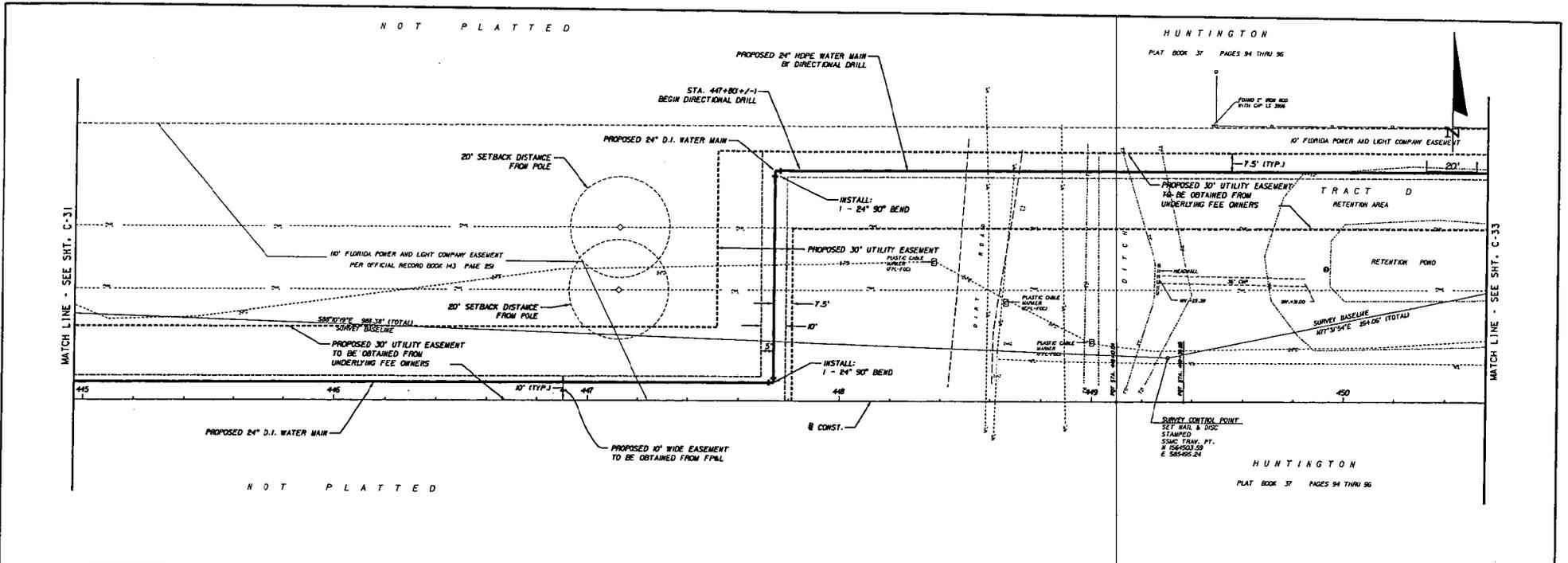


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FP & L EASEMENT
PLAN & PROFILE
STA. 439+36.35 TO STA. 444+96.37

SHEET NO.
C-8



REVISIONS	
DATE	DESCRIPTION
2-24-2004	JWR MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED: J.A.M.	DRAWN: D.M.A.	Joseph A. Margio P.E.
CHECKED: D.G.C.	PROJ. MGR.: J.A.M.	License No. 40180

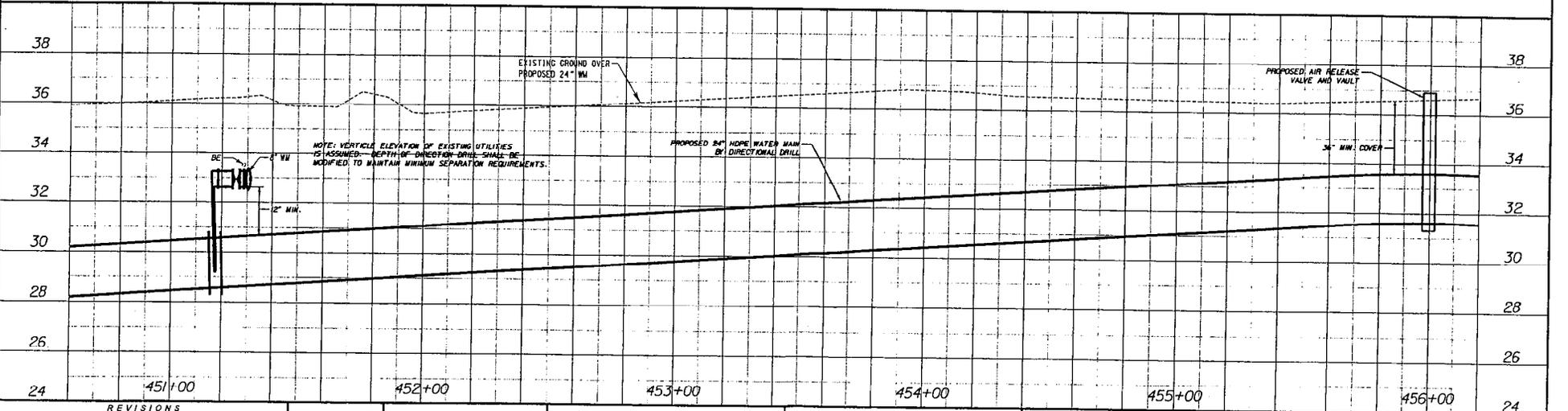
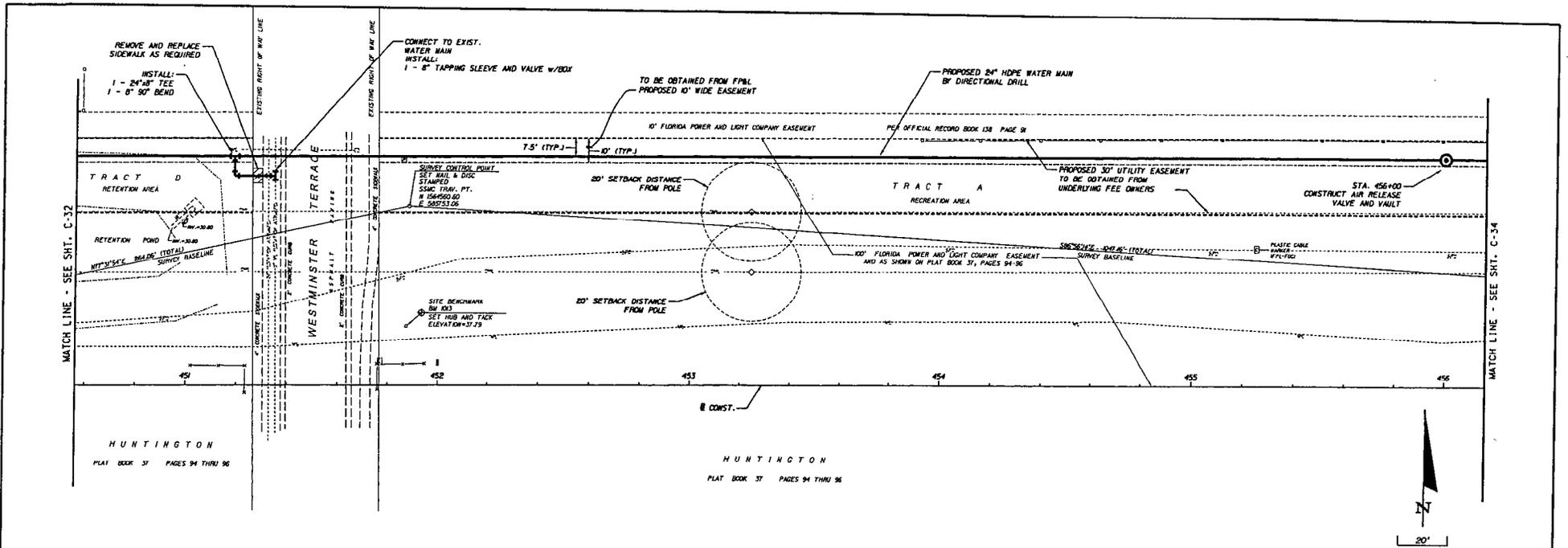


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Certificate No. 7074

FP & L EASEMENT
PLAN & PROFILE
STA. 444+96.37 TO STA. 450+56.38

SHEET NO.
C-9



REVISIONS	
DATE	DESCRIPTION
2-24-2004	JWR MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED: J.A.M.
 DRAWN: D.M.A. Joseph A. Margio P.E.
 CHECKED: D.G.C. License No. 40180
 PROJ. MGR.: J.A.M.

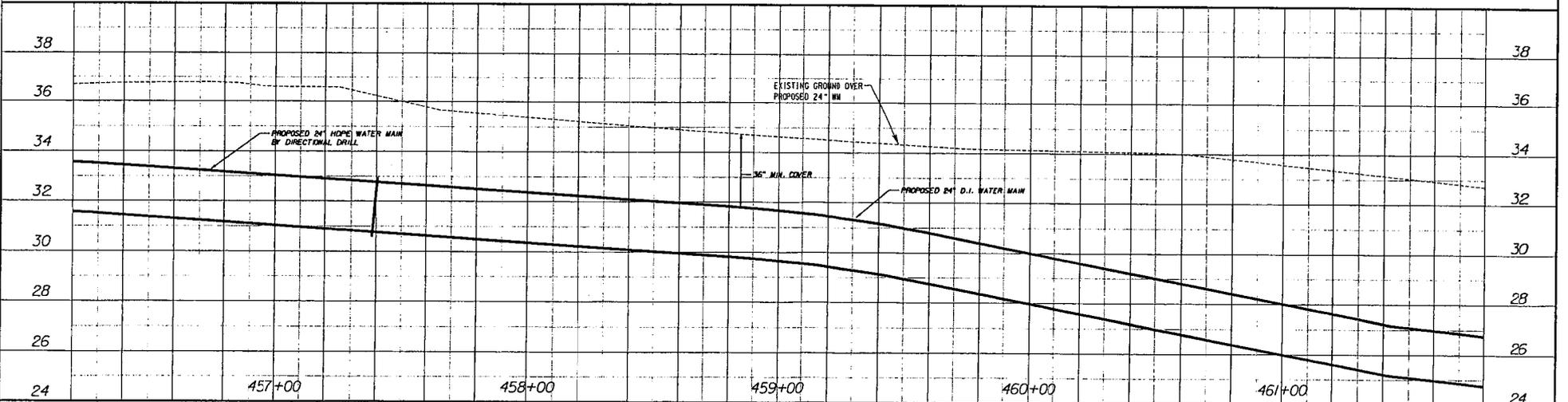
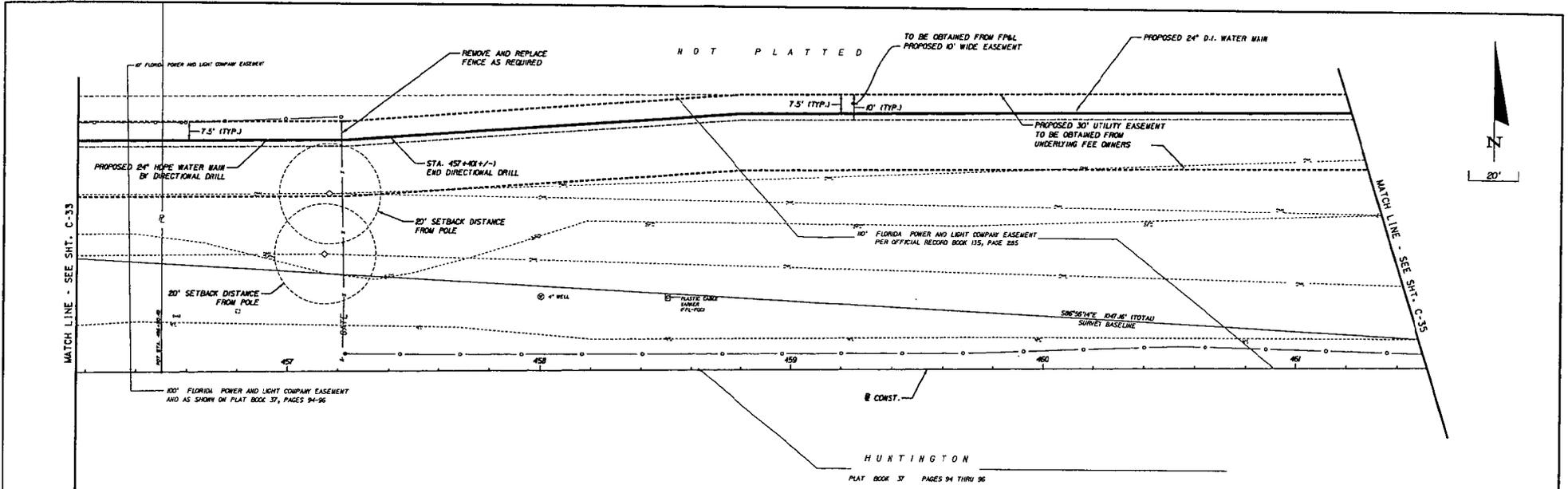


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 Certificate No. 7074

FP & L EASEMENT
 PLAN & PROFILE
 STA. 450+56.38 TO STA. 456+16.41

SHEET NO.
C-10



REVISIONS	
DATE	DESCRIPTION
2-24-2004	Moved watermain to 7.5' & added 10' easement

DESIGNED: J.A.M.
 DRAWN: D.M.A. Joseph A. Marglo P.E.
 CHECKED: D.G.C. License No. 40180
 PROJ. MGR.: J.A.M.

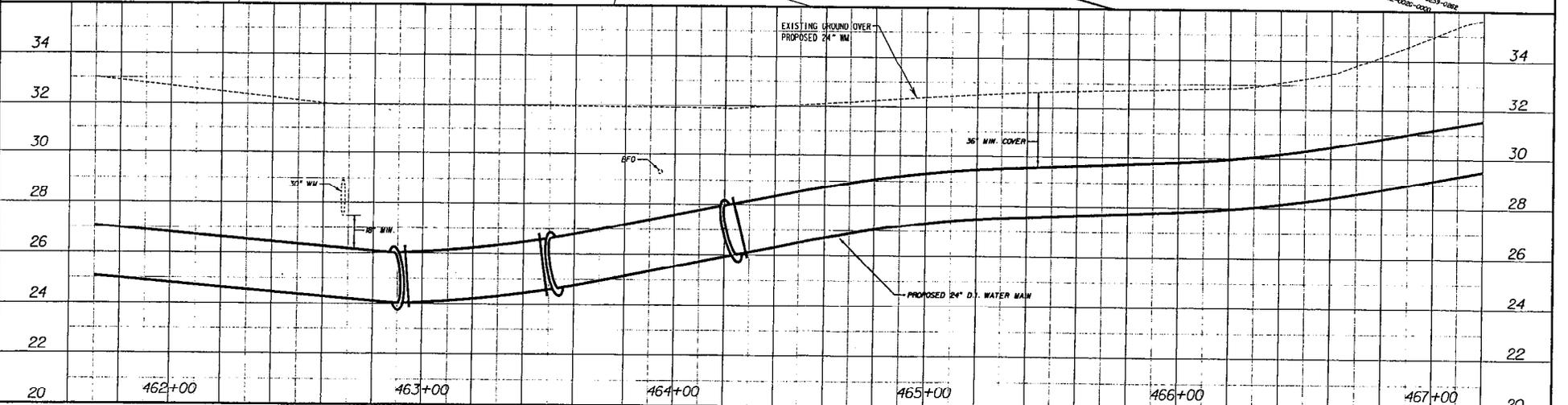
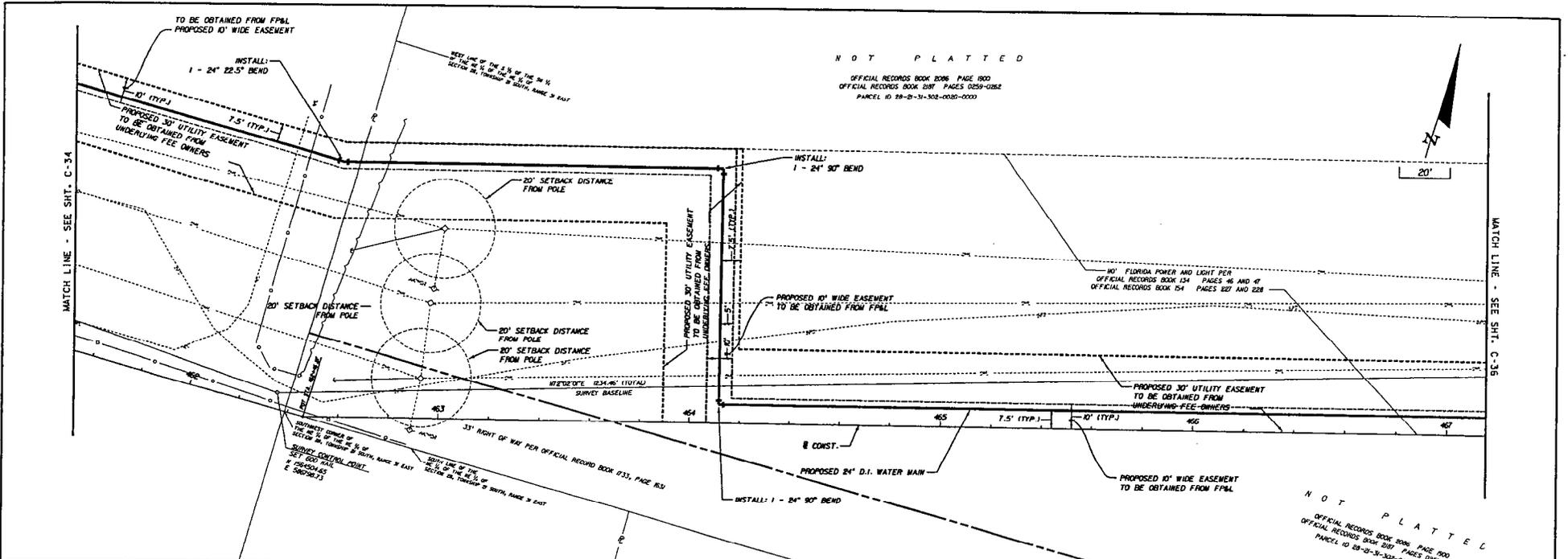


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FP & L EASEMENT
 PLAN & PROFILE
 STA. 456+16.41 TO STA. 461+52.07

SHEET NO.
C-11



REVISIONS	
DATE	DESCRIPTION
2-24-2004	JMR MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED: J.A.M.
 DRAWN: D.M.A.
 CHECKED: D.G.C.
 PROJ. MGR.: J.A.M.

Joseph A. Margio P.E.
 License No. 40180



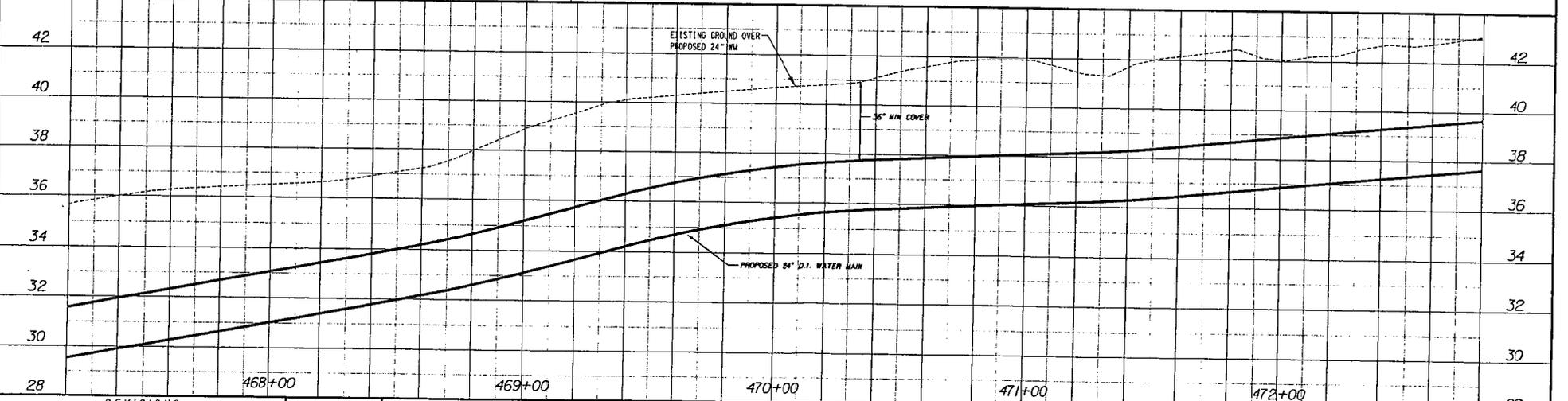
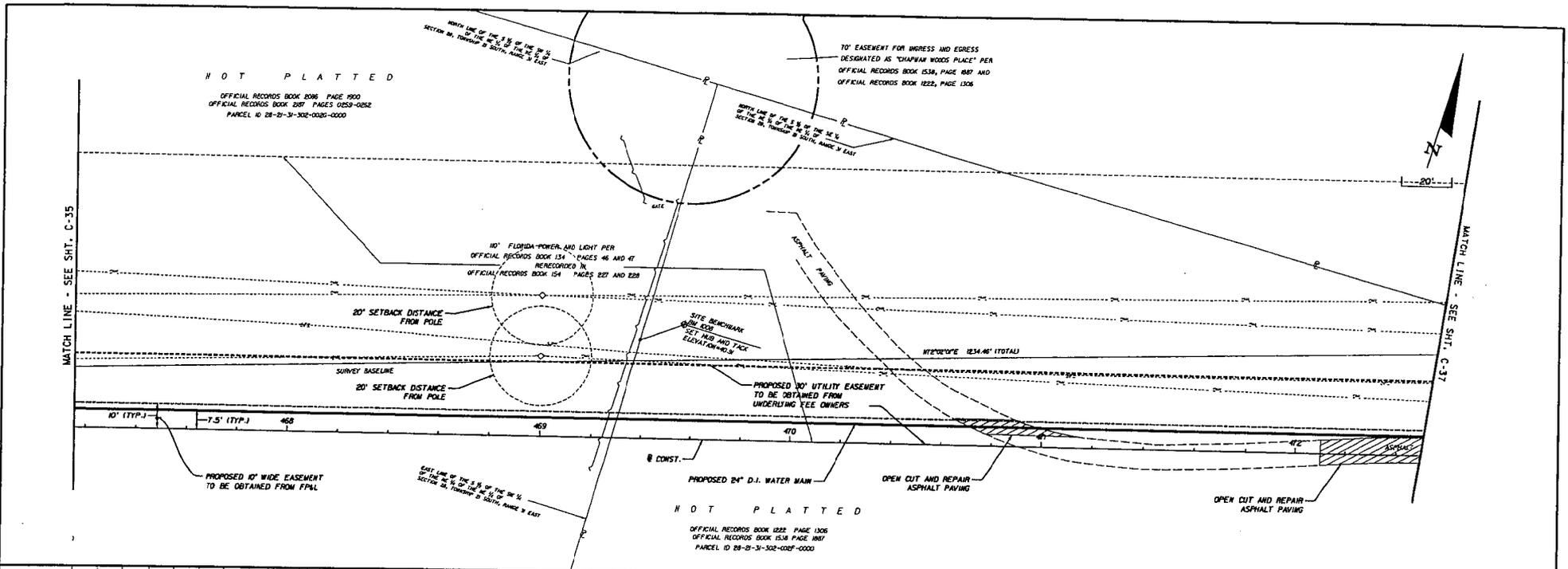
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 Certificate No. 7074

FP & L EASEMENT
 PLAN & PROFILE
 STA. 461+52.07 TO STA. 467+15.77

SHEET
 NO.
C-12



REVISIONS	
DATE	DESCRIPTION
2-24-2004	MJR MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED:	J.A.M.
DRAWN:	D.M.A. Joseph A. Margio P.E.
CHECKED:	D.G.C. License No. 40180
PROJ MGR:	J.A.M.

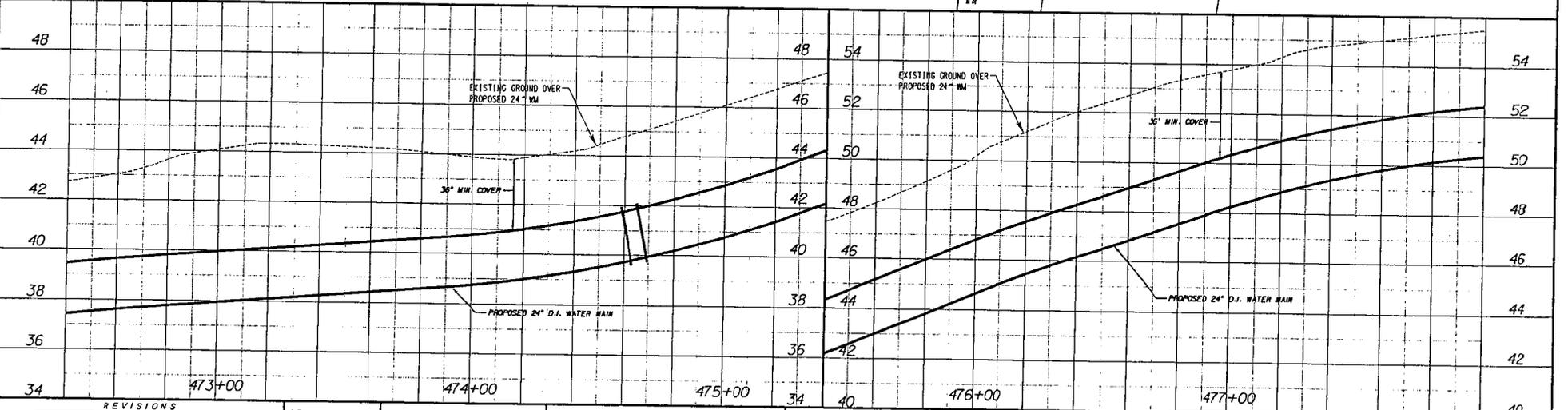
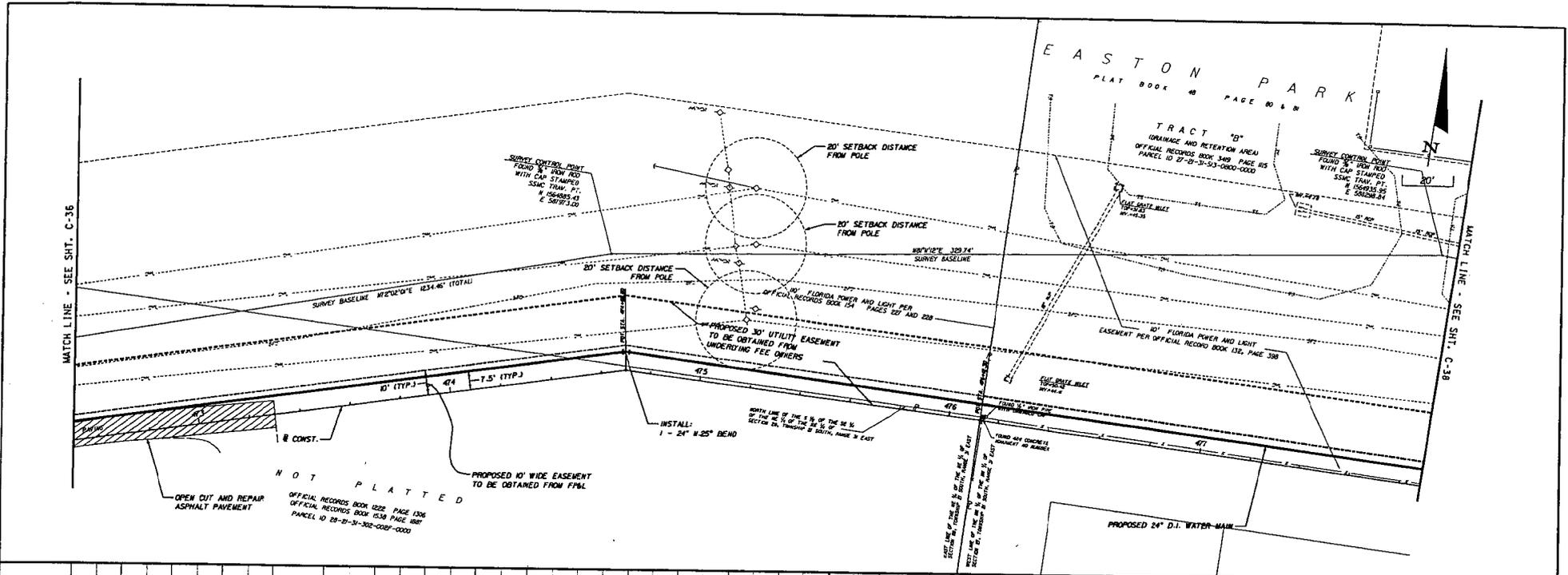


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870 Clark Street Oviedo, Florida 32765
Certificate No. 7074

FP & L EASEMENT
PLAN & PROFILE
STA. 467+15.77 TO STA. 472+49.71

SHEET NO.
C-13



REVISIONS	
DATE	DESCRIPTION
2-24-2004	MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED: J.A.M.
 DRAWN: D.M.A.
 CHECKED: D.G.C.
 PROJ. MGR.: J.A.M.

Joseph A. Margio P.E.
 License No. 40180



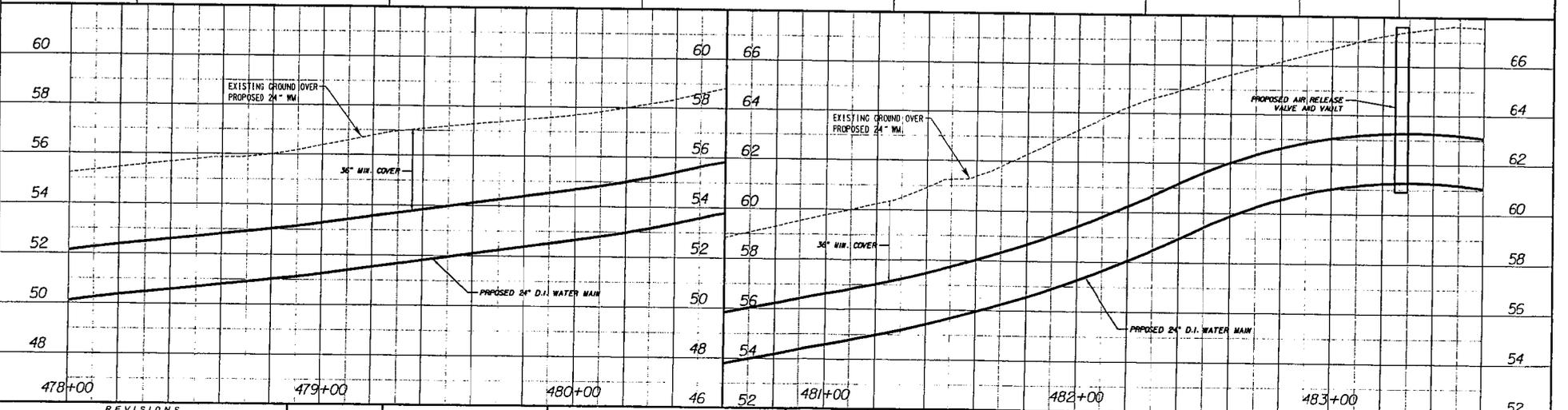
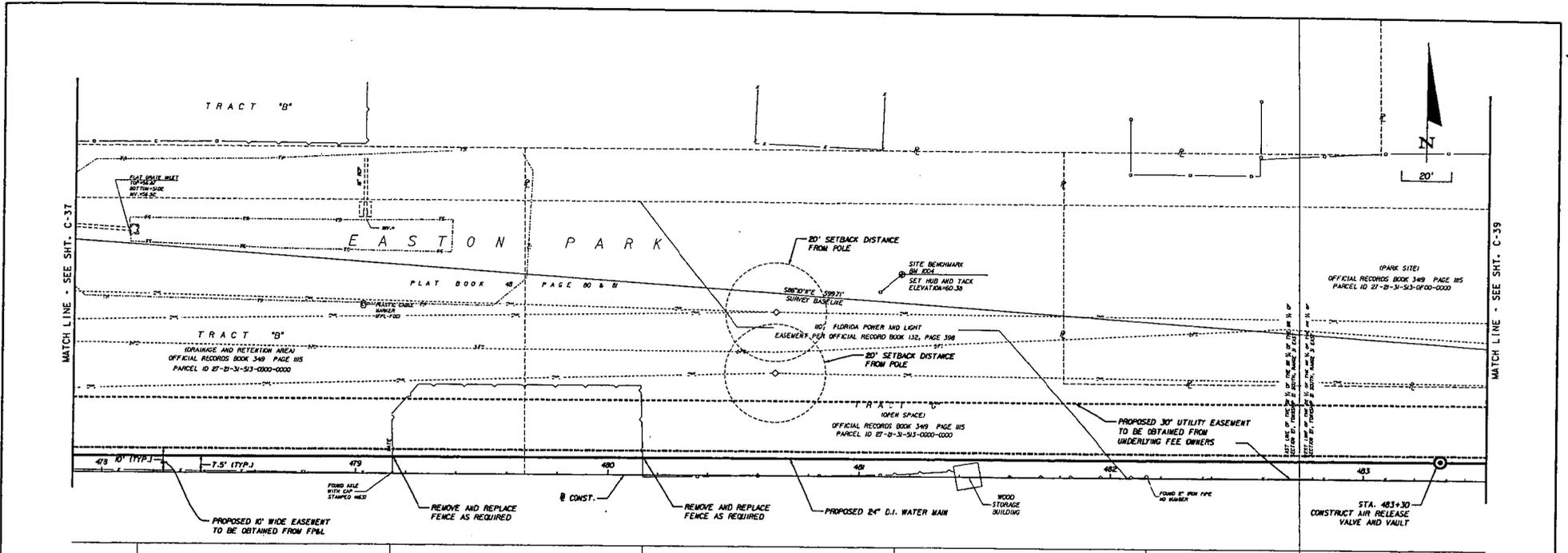
SEMINOLE COUNTY ENVIRONMENTAL SERVICES DEPARTMENT

CONSUMERS / LAKE HAYES WATER TRANSMISSION MAIN

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 870 Clark Street Oviedo, Florida 32765
 Certificate No. 7074

FP & L EASEMENT PLAN & PROFILE
 STA. 472+49.71 TO STA. 477+88.45

SHEET NO. C-14



REVISIONS		
DATE	BY	DESCRIPTION
2-24-2004	JMR	MOVED WATERMAIN TO 7.5' & ADDED 10' EASEMENT

DESIGNED: J.A.M.	Joseph A. Margio P.E. License No. 40180
DRAWN: D.M.A.	
CHECKED: D.G.C.	
PROJ. MGR.: J.A.M.	



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FP & L EASEMENT
 PLAN & PROFILE
 STA. 477+88.46 TO STA. 483+48.46

SHEET NO.
C-15

