Agenda Item 4C-2

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

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Meeting Date: August 22, 2006 **Consent [ ]** **Regular [✓]**
Public Hearing [ ]

Submitted By: **Water Utilities Department**
Submitted For: **Water Utilities Department**

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I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: A) a Right of Way Consent Agreement with Florida Power & Light Company (FPL) for pipelines adjacent to La Mancha Avenue; and **B)** a Utility Easement Agreement with the Village of Royal Palm Beach for the La Mancha Avenue Pipeline Extension Project.

Summary: Construction of the La Mancha Avenue Pipeline extension project necessitates encroachment onto FPL's right-of-way along La Mancha Avenue extending from Bilbao Street to 40th Street North. A utility easement is also needed from the Village of Royal Palm Beach for a tract of land located between Okeechobee Boulevard and Bilbao Street. The land tracts addressed with these easements are recorded in O.R. Book 29, Page 165 through 170 and Pages 196 through 200 of the Public Records. During the Department's utility coordination efforts, FPL requested the County execute Right-of-Way Consent Agreement with FPL at no cost. The execution of a Utility Easement Agreement with the Village of Royal Palm Beach is required to ensure the Department maintains legal access to its pipelines. Both agreements will continue in effect in perpetuity.

(WUD Project No. 04-125B) District 6 (MJ)

Background and Justification: On August 24, 2004, the Board approved an Amended Potable Water, Reclaimed Water and Wastewater Utilities Franchise and Service Area Agreement with the Village of Royal Palm Beach (R2004-1802) allowing the County to provide utility service in the unincorporated areas west and north of the Village. The Agreement requires that the County install backbone potable water and wastewater pipelines to provide public utility service to public and private facilities to the extent that they have been or will be approved by the Board in the future. The Right-of-Way Consent Agreements with FPL and the Utility Easement Agreement with Village of Royal Palm Beach are needed to ensure proper utility coordination is maintained in the future.

Attachments:

1. Two (2) Originals Agreements with FPL
2. Three (3) Originals Agreements with the Village
3. Location Map

Recommended By: Leisha L. Pica 07/24/06
Department Director **Date**

Approved By: 8/18/06
Assistant County Administrator **Date**

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2005	2006	2007	2008	2009
Capital Expenditures	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income (County)	0	0	0	0	0
In-Kind Match County	0	0	0	0	0
NET FISCAL IMPACT	0	0	0	0	0
# ADDITIONAL FTE POSITIONS (Cumulative)	0	0	0	0	0

Is Item Included in Current Budget? Yes No

Reporting Category **N/A**

B. Recommended Sources of Funds/Summary of Fiscal Impact:

This item has no fiscal impact.

C. Department Fiscal Review: Debra M West

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Development and Control Comments:

8-1-06
OFMB

8/2/06
Contract and Development Control

This item complies with current County policies.

B. Legal Sufficiency:

8/14/06
Assistant County Attorney

C. Other Department Review:

Department Director

This summary is not to be used as a basis for payment.

Line Name: _____ Parcel No.: _____
Structure No.: _____
Section, Township, Range: 14 & 23/ 43S / 41E

RIGHT-OF-WAY CONSENT 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 Palm Beach County Water Utilities Department, whose mailing address is P.O. Box 16097, West Palm Beach, Florida 33416-6097, hereinafter referred to as "Licensee", using an area within Company's right-of-way granted by that certain agreement recorded in O.R. Book 29, at Pages 165 through 170 and Pages 196 through 200, Public Records of Palm Beach 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 a water/wastewater utility pipeline parallel crossing 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; to obtain 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 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 remove 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 thirty (30) days 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 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 Lands 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 a 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, at maturity, a height of fourteen (14) feet above existing grade. Licensee hereby agrees to maintain the height of all vegetation on the Lands at a height not to exceed 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. 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 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 purposes.

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 acknowledges the waiver of sovereign immunity for liability in tort contained in Florida Statues 768.28 and acknowledges that such statue permits actions at law against the County to recover damages in tort for money damages up to the amounts set forth in such statue for injury or loss of property, personal injury or death caused by the negligence or wrongful act or omission of an employee of County while acting within the scope of the employee's office or employment under circumstances in which County, if a private person, would be liable under the general laws of this state.

13. Without waiving the right to sovereign immunity as provided by Florida Statutes, Section 768.28, the Licensee acknowledges that it is self-insured for general liability under Florida sovereign immunity statutes with coverage limits of $100,000 per person and $200,000 per occurrence; or such monetary limits that may change and be set forth by the Florida legislature. Licensee agrees to provide a statement or certificate of insurance evidencing such self-insurance.

14. 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. Upon the failure of Licensee to comply with or abide by any or all of the provisions contained herein, Company shall provide Licensee with written notice of such failure and Licensee shall have sixty (60) days within which to cure such failure. Failure to cure shall be grounds for termination and Company may terminate this Agreement unless the parties mutually agree to extend the time for cure and/or termination

15. 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 termination of this Agreement in accordance with Paragraph 14 herein 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.

16. 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.

17. 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 Consent Agreement, the prevailing party in such litigation shall be entitled to recovery of all costs, including reasonable attorneys' fees.

18. 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.

The parties have executed this Agreement this 17th day of July, 20[illegible].

Witnesses:

FLORIDA POWER & LIGHT COMPANY

Form 3740 Rev. 10/9/95

Signature: Michelle Kahmann
Print Name: Michelle Kahmann

Signature:
Print Name: Branchy C. SoScella

By:
Its: AREA REAL ESTATE MANAGER
Print Name: J. D. CORSON

AS TO COUNTY:

ATTEST:

Sharon R. Bock, Clerk and Comptroller

By:_____
Deputy Clerk

PALM BEACH COUNTY, FLORIDA,
BY ITS BOARD OF COUNTY
COMMISSIONERS

By:_____
Tony Masilotti, Chairman

APPROVED AS TO FORM AND LEGAL
SUFFICIENCY

By:_____
County Attorney

APPROVED AS TO TERMS AND
CONDITIONS

By: Paula L. Pucci

Department Director

CCC/DGE
3740#RW.Con (4C)

Exhibit A

This Instrument Prepared By:
Katherine C. Blaney - CRE/JB
Florida Power & Light Company
P.O. BOX 14000
Juno Beach, FL 33408

MEMORANDUM OF RIGHT-OF-WAY CONSENT AGREEMENT

THIS MEMORANDUM OF RIGHT-OF-WAY CONSENT AGREEMENT dated this ___ day of ___, 200_, by and between PALM BEACH COUNTY WATER UTILITIES DEPARTMENT (hereinafter referred to as "Licensee"), and FLORIDA POWER & LIGHT COMPANY, a Florida corporation (hereinafter referred to as "Company").

WITNESSETH:

WHEREAS, on the 12th day of July, 2006, Company and Licensee entered into a written Right-of-Way Consent Agreement, hereinafter referred to as the "Agreement" related to certain property situated in the County of Palm Beach, State of Florida as more particularly set forth in said Agreement and described in Exhibit "A" attached hereto and made a part hereof and hereinafter referred to as the "Lands", and

WHEREAS, the parties are desirous of placing their interest therein as a matter of public record.

NOW THEREFORE, in consideration of the mutual covenants herein contained and the parties intending to be legally bound thereby, the parties hereto agree as follows:

1. The property described in Exhibit "A" is subject to a right-of-way in favor of Company recorded in O.R. Book 29, Pages 165 through 170 and Pages 196 through 200 of the Public Records of Palm Beach County, Florida.

2. The Agreement provides, among other things, Licensee's right to construct certain improvements upon the Lands including, but not limited to, a water utility pipeline crossing, subject to certain conditions and restrictions.

3. The Agreement is assignable to purchasers of all or a portion of the Lands provided that the purchasers assume the obligations under the Agreement and specifically acknowledge and agree that the use of the property and improvements to be placed on the property are strictly limited to those depicted on a certain plan of improvement and are otherwise subject to the terms of the Agreement.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Agreement on the date hereinabove written.

Witnesses:

Signature
Michelle Kahmann
Name (Print):

Signature
Brandy C. Sciella
Name (Print):

Company:
FLORIDA POWER & LIGHT COMPANY

By:
Its: Corporate Real Estate Manager
Print Name:
J.T. CORSON

AS TO COUNTY:

ATTEST:

Sharon R. Bock, Clerk and Comptroller

By:
Deputy Clerk

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

By:
County Attorney

PALM BEACH COUNTY, FLORIDA, BY ITS BOARD OF COUNTY COMMISSIONERS

By:
Tony Masilotti, Chairman

APPROVED AS TO TERMS AND CONDITIONS

By:
Department Director

State of Florida)
)ss:
County of Palm Beach)

On this 12th day of July, 2006, before me, the undersigned Notary Public, personally appeared ~~David G. Douglass,~~ J. T. Corson Corporate Real Estate Manager of Florida Power & Light Company, a Florida corporation, personally known to me to be the person who subscribed to the foregoing instrument and acknowledged that he executed the same on behalf of said corporation and that he was duly authorized to do so.

In Witness Whereof, I hereunto set my hand and official seal.

(seal)

Michelle M. Kahmann
NOTARY PUBLIC, STATE OF FLORIDA

Print Name: Michelle M. Kahmann

Michelle M. Kahmann
My Commission DD242663
Expires September 18, 2007

Commission No.: DD242663

My Commission Expires: September 18, 2007

State of)
)ss:
County of _____)

On this _____ day of _____ , 200__, before me, the undersigned notary public, personally appeared _____,_____ personally known to me to be the person who subscribed to the foregoing instrument and acknowledged that she executed the same on behalf of said corporation and that she was duly authorized to do so.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

(seal)

_____
NOTARY PUBLIC, STATE OF

Print Name: _____

Commission No.: _____

My Commission Expires:

UTILITY EASEMENT

Exhibit "A"

A PORTION OF LA MANCHA, (P.B. 29 PGS. 165 THROUGH 170), AND
LA MANCHA TWO, (P.B. 29 PGS. 196 THROUGH 200),
LYING WITHIN SECTIONS 23 AND 14, TOWNSHIP 43 SOUTH, RANGE 41 EAST,
PALM BEACH COUNTY, FLORIDA.

UTILITY EASEMENT LEGAL DESCRIPTION

A PORTION OF LA MANCHA, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29, AT PAGES 165 THROUGH 170 AND A PORTION OF LA MANCHA TWO, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29, AT PAGES 196 THROUGH 200, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF LOT 4, BLOCK "A", AS SHOWN ON THE PLAT OF LA MANCHA ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29, AT PAGES 165 THROUGH 170 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA; THENCE N56°19'20"E ALONG THE SOUTH LINE OF SAID BLOCK "A" FOR A DISTANCE OF 130.02 FEET TO A POINT OF CURVATURE; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE RIGHT AND CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3252.89 FEET AND A CENTRAL ANGLE OF 02°29'44" FOR AN ARC DISTANCE OF 141.68 FEET TO THE EAST LINE OF A 12 FOOT WIDE FLORIDA POWER AND LIGHT EASEMENT LYING WITHIN SAID TRACT "A; THENCE N01°10'41"E ALONG THE EAST LINE OF SAID EASEMENT FOR A DISTANCE OF 72.85 FEET TO THE POINT OF BEGINNING; THENCE N88°49'19"W FOR 12.00 FEET TO A POINT ON THE WEST LINE OF SAID EASEMENT; THENCE N01°10'41"E ALONG THE WEST LINE OF SAID EASEMENT FOR A DISTANCE OF 966.00 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF BILBAO STREET OF SAID LA MANCHA PLAT; THENCE S88°49'19"E ALONG SOUTH RIGHT OF WAY LINE OF SAID BILBAO STREET FOR A DISTANCE OF 12.00 FEET; THENCE S01°10'41"W ALONG THE EAST LINE OF SAID 12 FOOT FLORIDA POWER AND LIGHT EASEMENT FOR A DISTANCE OF 926.00 FEET; THENCE S88°49'19"E FOR A DISTANCE OF 158.60 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF OKEECHOBEE BOULEVARD AS DESCRIBED IN OFFICIAL RECORDS BOOK 6105, PAGE 1581 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, SAID POINT BEING ON A NON-TANGENT CURVE, SAID POINT BEARING N29°30'12"W FROM THE RADIUS POINT ON THE NEXT DESCRIBED CURVE; THENCE SOUTHWESTERLY ALONG THE NORTH RIGHT OF WAY LINE OF SAID OKEECHOBEE BOULEVARD BEING A CIRCULAR CURVE TO THE LEFT AND CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3225.65 FEET AND A CENTRAL ANGLE OF 01°21'54" FOR AN ARC DISTANCE OF 76.85 FEET; THENCE DEPARTING FROM SAID RIGHT OF WAY LINE N88°49'19"W FOR A DISTANCE OF 92.98 FEET TO THE POINT OF BEGINNING;

AND

COMMENCE AT THE INTERSECTION OF THE CENTERLINE OF BILBAO STREET AND THE CENTERLINE OF LA MANCHA AVENUE AS SHOWN ON THE PLAT OF LA MANCHA, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29, AT PAGES 165 THROUGH 170 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA; THENCE S88°49'19"E ALONG THE CENTERLINE OF SAID BILBAO STREET FOR A DISTANCE OF 70.00 FEET; THENCE N01°10'41"E FOR 30.00 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF BILBAO STREET, SAID POINT BEING THE POINT OF BEGINNING; THENCE N88°49'19"W ALONG THE SAID NORTH RIGHT OF WAY LINE FOR A DISTANCE OF 5.00 FEET TO A POINT OF CURVATURE; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE RIGHT AND CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 90°00'00" FOR AN ARC DISTANCE OF 39.27 FEET; THENCE N01°10'41"E ALONG THE EAST RIGHT OF WAY LINE OF SAID LA MANCHA AVENUE FOR A DISTANCE OF 600.00 FEET TO A POINT OF CURVATURE; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE RIGHT AND CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 90°00'00" FOR AN ARC DISTANCE OF 39.27 FEET, SAID CURVE BEING ON THE SOUTH RIGHT OF WAY LINE OF CASTILLA STREET OF SAID PLAT; THENCE S88°49'19"E ALONG SAID SOUTH RIGHT OF WAY LINE FOR A DISTANCE OF 5.00 FEET; THENCE S01°10'41"W ALONG A LINE PARALLEL WITH AND 30.00 FEET EAST OF AS MEASURED AT RIGHT ANGLES TO THE SAID EAST RIGHT OF WAY LINE OF LA MANCHA AVENUE FOR A DISTANCE OF 650.00 FEET TO THE POINT OF BEGINNING;

(CONTINUED SHEET 2)

EXHIBIT "A"

HWS FILE NO. 06-15365-SS1

HWS
LB. NO. 0003449
Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers

310 S.E. 1st Street, Suite 4
Delray Beach, Florida 33483
(561) 243-8700 - Phone
(561) 243-8777 - Fax

UTILITY EASEMENT (CONTINUED)

(CONTINUED FROM SHEET 1)

AND

COMMENCE AT THE INTERSECTION OF THE CENTERLINE OF SAID CASTILLA STREET AND THE CENTERLINE OF SAID LA MANCHA AVENUE THENCE S88°49'19"E ALONG THE CENTERLINE OF SAID CASTILLA STREET FOR A DISTANCE OF 70.00 FEET; THENCE N01°10'41"E FOR 30.00 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF SAID CASTILLA STREET, SAID POINT BEING THE POINT OF BEGINNING; THENCE N88°49'19"W ALONG THE NORTH RIGHT OF WAY LINE OF SAID CASTILLA STREET FOR A DISTANCE OF 5.00 FEET TO A POINT OF CURVATURE; THENCE NORTHWESTERLY ALONG A CIRCULAR CURVE TO THE RIGHT AND CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 90°00'00" FOR AN ARC DISTANCE OF 39.27 FEET; THENCE N01°10'41"E ALONG THE EAST RIGHT OF WAY LINE OF LA MANCHA AVENUE FOR A DISTANCE OF 1465.00 FEET TO A POINT OF CURVATURE; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE RIGHT AND CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 90°00'00" FOR AN ARC DISTANCE OF 39.27 FEET, SAID CURVE BEING ON THE SOUTH RIGHT OF WAY LINE OF GALICIA STREET OF SAID PLAT; THENCE S88°49'19"E FOR A DISTANCE OF 5.00 FEET; THENCE S01°10'41"W ALONG A LINE PARALLEL WITH AND 30.00 FEET EAST OF AS MEASURED AT RIGHT ANGLES TO THE SAID EAST RIGHT OF WAY LINE OF LA MANCHA AVENUE FOR A DISTANCE OF 1515.00 FEET TO THE POINT OF BEGINNING;

AND

COMMENCE AT THE INTERSECTION OF THE CENTERLINE OF SAID GALICIA STREET AND THE CENTERLINE OF SAID LA MANCHA AVENUE THENCE S88°49'19"E ALONG THE CENTERLINE OF SAID GALICIA STREET FOR A DISTANCE OF 70.00 FEET; THENCE N01°10'41"E FOR 30.00 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF SAID GALICIA STREET, SAID POINT BEING THE POINT OF BEGINNING; THENCE N88°49'19"W ALONG THE NORTH RIGHT OF WAY LINE OF SAID GALICIA STREET FOR A DISTANCE OF 5.00 FEET; TO A POINT OF CURVATURE; THENCE NORTHWESTERLY ALONG A CIRCULAR CURVE TO THE RIGHT AND CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 90°00'00" FOR AN ARC DISTANCE OF 39.27 FEET, SAID CURVE BEING ON THE EAST RIGHT OF WAY LINE OF LA MANCHA AVENUE OF SAID PLAT; THENCE N01°10'41"E ALONG THE EAST RIGHT OF WAY LINE OF SAID LA MANCHA AVENUE FOR A DISTANCE OF 600.00 FEET TO A POINT OF CURVATURE; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE RIGHT AND CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 90°00'00" FOR AN ARC DISTANCE OF 39.27 FEET, SAID CURVE BEING ON THE SOUTH RIGHT OF WAY LINE OF LAS PALMAS STREET OF SAID PLAT; THENCE S88°49'19"E ALONG THE SOUTH RIGHT OF WAY LINE OF SAID LAS PALMAS STREET FOR A DISTANCE OF 5.00 FEET; THENCE S01°10'41"W ALONG A LINE PARALLEL WITH AND 30.00 FEET EAST OF AS MEASURED AT RIGHT ANGLES TO THE SAID EAST RIGHT OF WAY LINE OF LA MANCHA AVENUE FOR A DISTANCE OF 650.00 FEET TO THE POINT OF BEGINNING;

AND

COMMENCE AT THE INTERSECTION OF THE CENTERLINE OF SAID LAS PALMAS STREET AND THE CENTERLINE OF SAID LA MANCHA AVENUE THENCE S88°49'19"E ALONG THE CENTERLINE OF SAID LAS PALMAS STREET FOR A DISTANCE OF 70.00 FEET; THENCE N01°10'41"E FOR 30.00 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF SAID LAS PALMAS STREET, SAID POINT BEING THE POINT OF BEGINNING; THENCE N88°49'19"W ALONG THE NORTH RIGHT OF WAY LINE OF SAID LAS PALMAS STREET FOR A DISTANCE OF 5.00 FEET TO A POINT OF CURVATURE; THENCE NORTHWESTERLY ALONG A CIRCULAR CURVE TO THE RIGHT AND CONCAVE TO THE NORTHEAST HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 90°00'00" FOR AN ARC DISTANCE OF 39.27 FEET, SAID CURVE BEING ON THE EAST RIGHT OF WAY LINE OF SAID LA MANCHA AVENUE; THENCE N01°10'41"E ALONG THE EAST RIGHT OF WAY LINE OF LA MANCHA AVENUE FOR A DISTANCE OF 466.58 FEET; THENCE N00°08'49"E FOR A DISTANCE OF 2712.56 FEET TO A POINT ON THE NORTH LINE OF SAID PLAT OF LA MANCHA AND ON THE SOUTH LINE OF THE PLAT OF LA MANCHA TWO, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29, AT PAGES 196 THROUGH 200 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA; THENCE CONTINUE ALONG THE EAST

(CONTINUED SHEET 3)

HWS
L.B. NO. 0003449
Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers

310 S.E. 1st Street, Suite 4
Delray Beach, Florida 33483
(561) 243-8700 - Phone
(561) 243-8777 - Fax

UTILITY EASEMENT (CONTINUED)

(CONTINUED FROM SHEET 2)

RIGHT OF WAY LINE OF LA MANCHA AVENUE AND THE NORTHERLY EXTENSION THEREOF N00°24'21"E FOR A DISTANCE OF 2622.25 FEET TO THE NORTH LINE OF SAID PLAT OF LA MANCHA TWO, SAID LINE ALSO BEING THE NORTH LINE OF SECTION 14, TOWNSHIP 43 SOUTH, RANGE 41 EAST; THENCE S88°35'13"E ALONG SAID LINE FOR A DISTANCE OF 30.00 FEET; THENCE S00°24'21"W ALONG A LINE PARALLEL WITH AND 30.00 FEET EAST OF AS MEASURED AT RIGHT ANGLES TO THE EXTENSION OF THE EAST RIGHT OF WAY LINE OF SAID LA MANCHA AVENUE FOR A DISTANCE OF 1055.38 FEET; THENCE N89°35'39"W FOR 10.00 FEET; THENCE S00°24'21"W ALONG A LINE PARALLEL WITH AND 20.00 FEET EAST OF AS MEASURED AT RIGHT ANGLES TO THE SAID EXTENSION OF THE EAST RIGHT OF WAY LINE OF LA MANCHA AVENUE FOR A DISTANCE OF 1566.19 FEET TO THE SOUTH LINE OF SAID PLAT OF LA MANCHA TWO AND THE NORTH LINE OF SAID PLAT OF LA MANCHA; THENCE S00°08'49"W ALONG A LINE PARALLEL WITH AND 20.00 FEET EAST OF AS MEASURED AT RIGHT ANGLES TO THE SAID EAST RIGHT OF WAY LINE OF LA MANCHA AVENUE FOR A DISTANCE OF 733.16 FEET; THENCE S89°51'11"E FOR 10.00 FEET; THENCE S00°08'49"W ALONG A LINE PARALLEL WITH AND 30.00 FEET EAST OF AS MEASURED AT RIGHT ANGLES TO THE SAID EAST RIGHT OF WAY LINE OF LA MANCHA AVENUE FOR A DISTANCE OF 1979.73 FEET; THENCE S01°10'41"W ALONG A LINE PARALLEL TO AND 30.00 FEET EAST OF AS MEASURED AT RIGHT ANGLES TO SAID EAST RIGHT OF WAY LINE OF LA MANCHA AVENUE FOR A DISTANCE OF 491.85 FEET TO THE POINT OF BEGINNING.

SAID LANDS SITUATE IN THE VILLAGE OF ROYAL PALM BEACH, PALM BEACH COUNTY, FLORIDA.

NOTES:

1) THIS SKETCH AND LEGAL DESCRIPTION DOES NOT REPRESENT A FIELD SURVEY ("THIS IS NOT A SURVEY").

2) THIS SKETCH IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED SEAL OF A FLORIDA REGISTERED LAND SURVEYOR.

3) BEARINGS SHOWN HEREON ARE BASED ON THE EAST LINE OF LA MANCHA AVENUE, LA MANCHA, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29 AT PAGES 165 THROUGH 170 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, HAVING AN ASSUMED BEARING OF NORTH 01°10'41" EAST.

4) REFERENCE DOCUMENTS:
*LA MANCHA PLAT BOOK 29 PAGES 165-170 AND LA MANCHA TWO PLAT BOOK 29 PAGES 196-200 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY.
*PALM BEACH COUNTY WATER UTILITIES DEPARTMENT ENGINEERING DIVISION LA MANCHA PIPELINE EXTENSION PROJECT NUMBER 04-125 (B) DESIGN DRAWING BY MATHEWS CONSULTING DATED MARCH, 2006.

LEGEND:

H.W.S.	= HELLER WEAVER & SHEREMETA INC.
P.B.	= PLAT BOOK
O.R.B.	= OFFICIAL RECORD BOOK
L	= LENGTH
R	= RADIUS
Δ	= DELTA
℄	= CENTERLINE

HELLER-WEAVER AND SHEREMETA, INC.
FLORIDA STATE L.B. NO. 3449

BY: DANIEL C. LAAK
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REG. NO. 5118

DATED: MAY 18, 2006
WORK ORDER 15457.004

HWS FILE NO. 06-15365-SS3

HWS
L.B. NO. 0003449
Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers

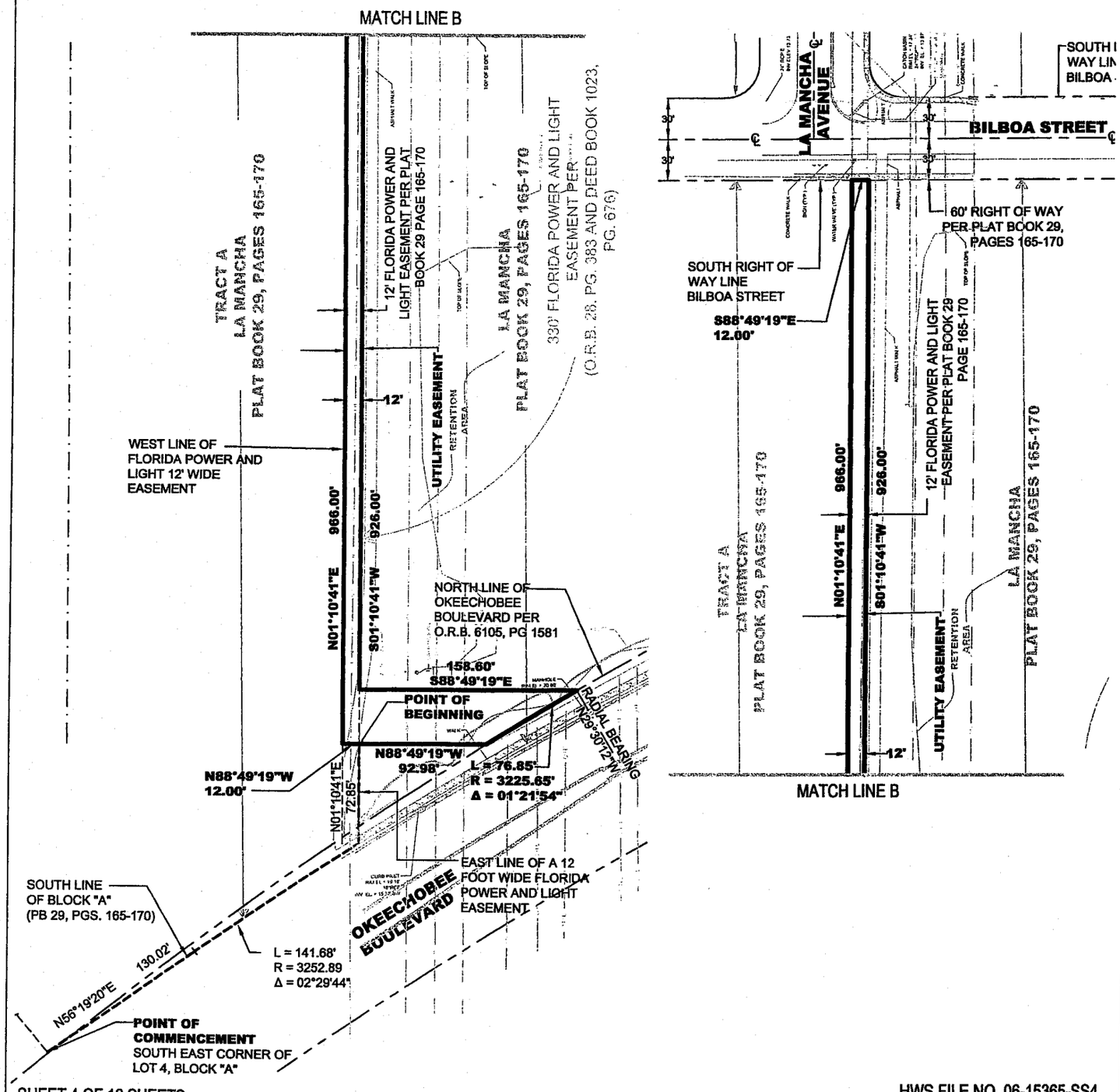
310 S.E. 1st Street, Suite 4
Delray Beach, Florida 33483
(561) 243-8700 - Phone
(561) 243-8777 - Fax

UTILITY EASEMENT

A PORTION OF LA MANCHA, (P.B. 29 PGS. 165 THROUGH 170), AND
LA MANCHA TWO, (P.B. 29 PGS. 196 THROUGH 200),
LYING WITHIN SECTIONS 23 AND 14, TOWNSHIP 43 SOUTH, RANGE 41 EAST,
PALM BEACH COUNTY, FLORIDA.

NORTH

SCALE: 1" - 100'



SHEET 4 OF 12 SHEETS

HWS FILE NO. 06-15365-SS4

Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers
E.B. NO. 0003449
310 S.E. 1st Street, Suite 4
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Delray Beach, Florida 33483
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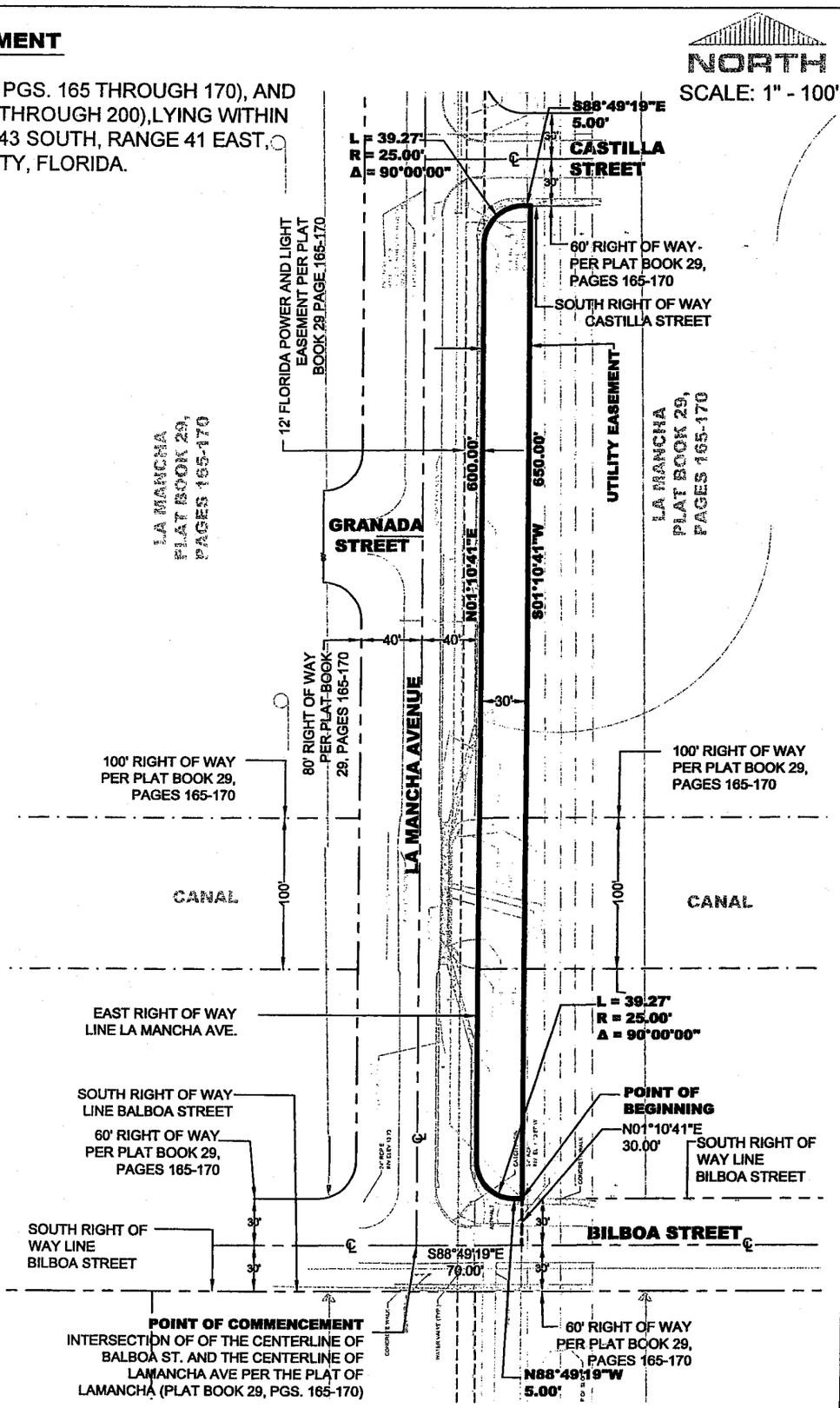
(561) 243-8777 - Fax

UTILITY EASEMENT

A PORTION OF LA MANCHA, (P.B. 29 PGS. 165 THROUGH 170), AND LA MANCHA TWO, (P.B. 29 PGS. 196 THROUGH 200),LYING WITHIN SECTIONS 23 AND 14, TOWNSHIP 43 SOUTH, RANGE 41 EAST, PALM BEACH COUNTY, FLORIDA.



SHEET 5 OF 12 SHEETS

HWS FILE NO. 06-15365-SS5

Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers
E.B. NO. 0003449
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UTILITY EASEMENT

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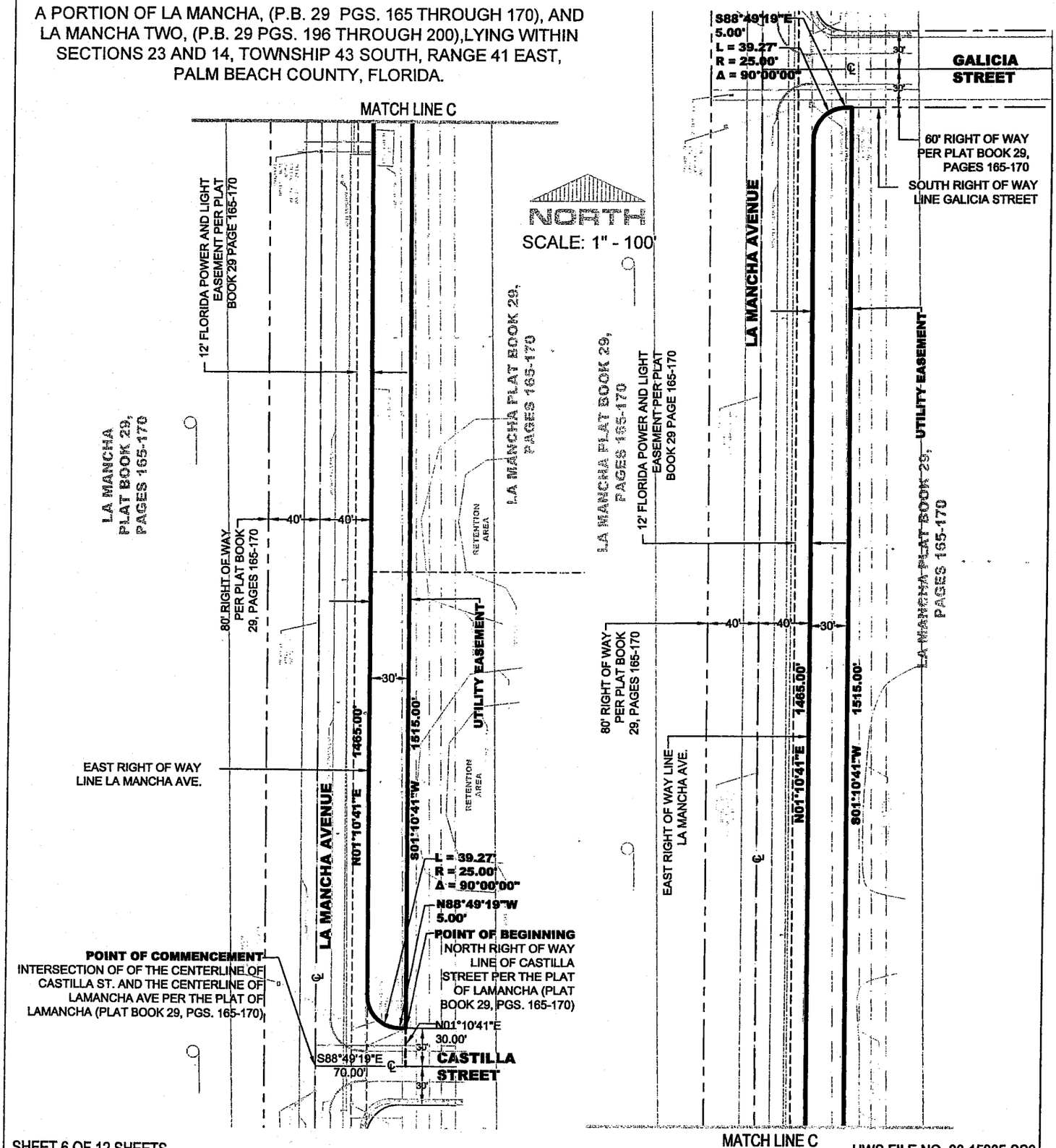

SHEET 6 OF 12 SHEETS

HWS FILE NO. 06-15365-SS6

Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers
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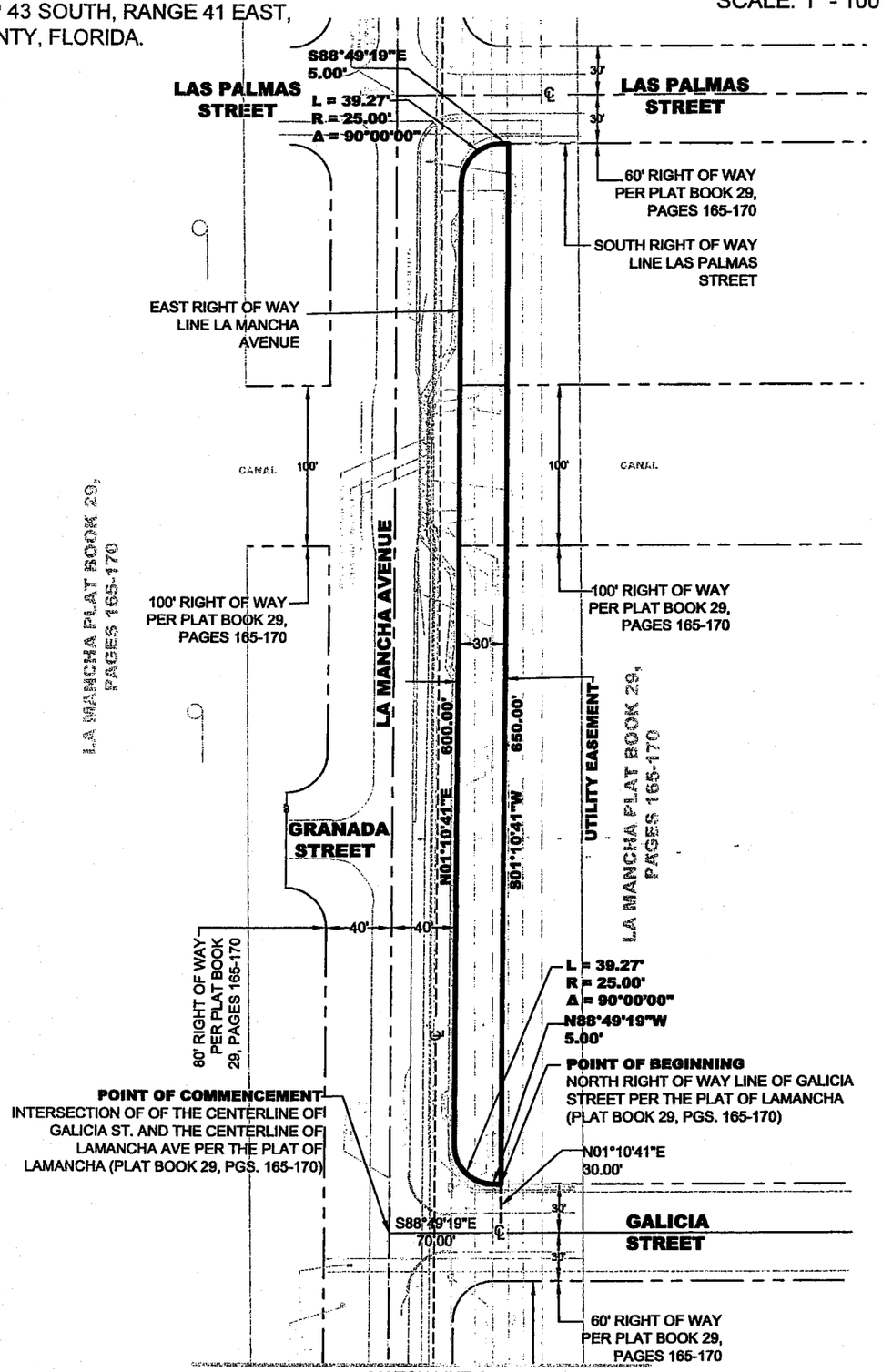
NORTH

SCALE: 1" - 100'



MATCH LINE C

SHEET 7 OF 12 SHEETS

HWS FILE NO. 06-15365-SS7

Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers
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UTILITY EASEMENT

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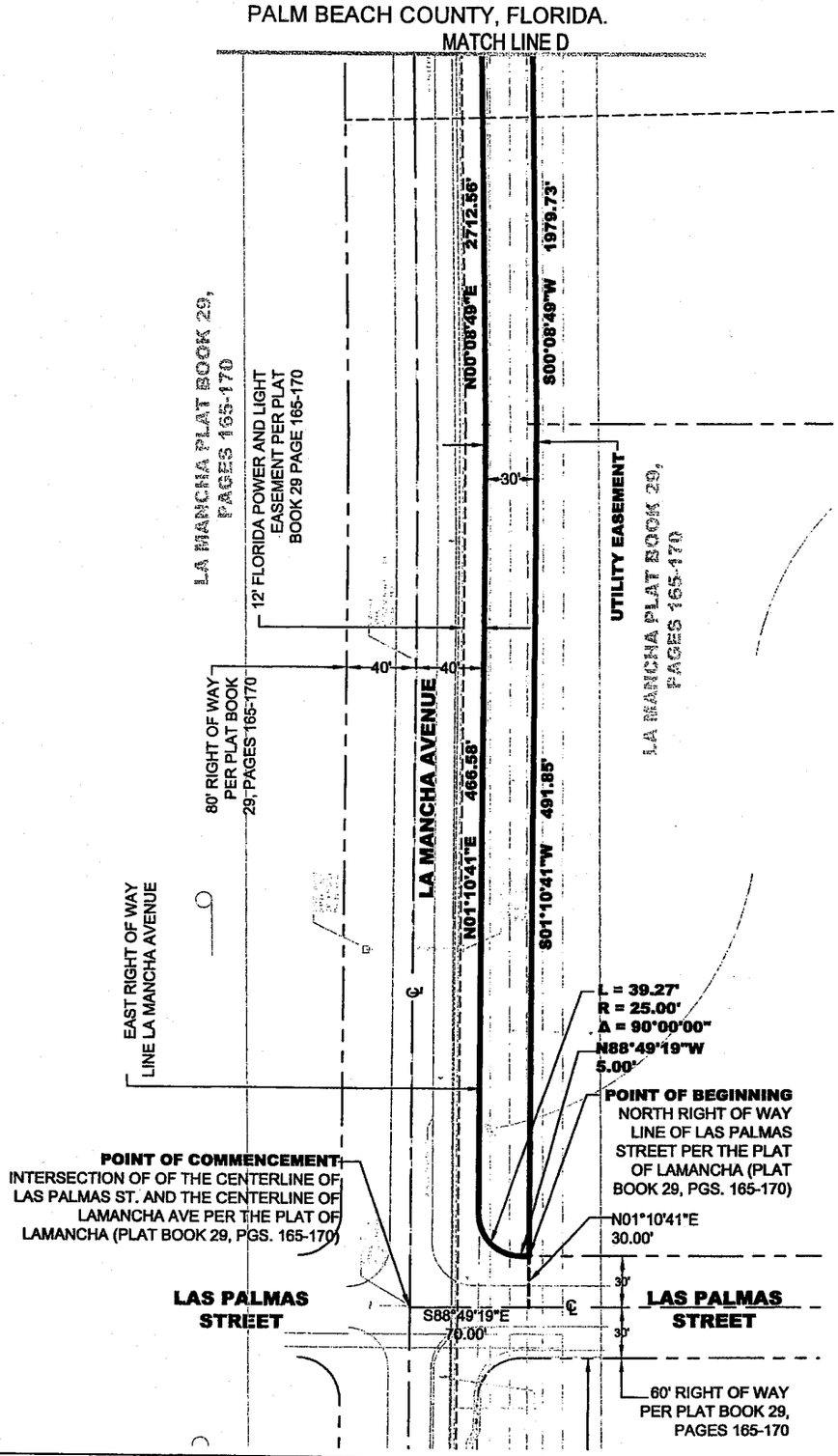
NORTH

SCALE: 1" - 100'



SHEET 8 OF 12 SHEETS

HWS FILE NO. 06-15365-SS8

Heller - Weaver and Sheremeta, inc.
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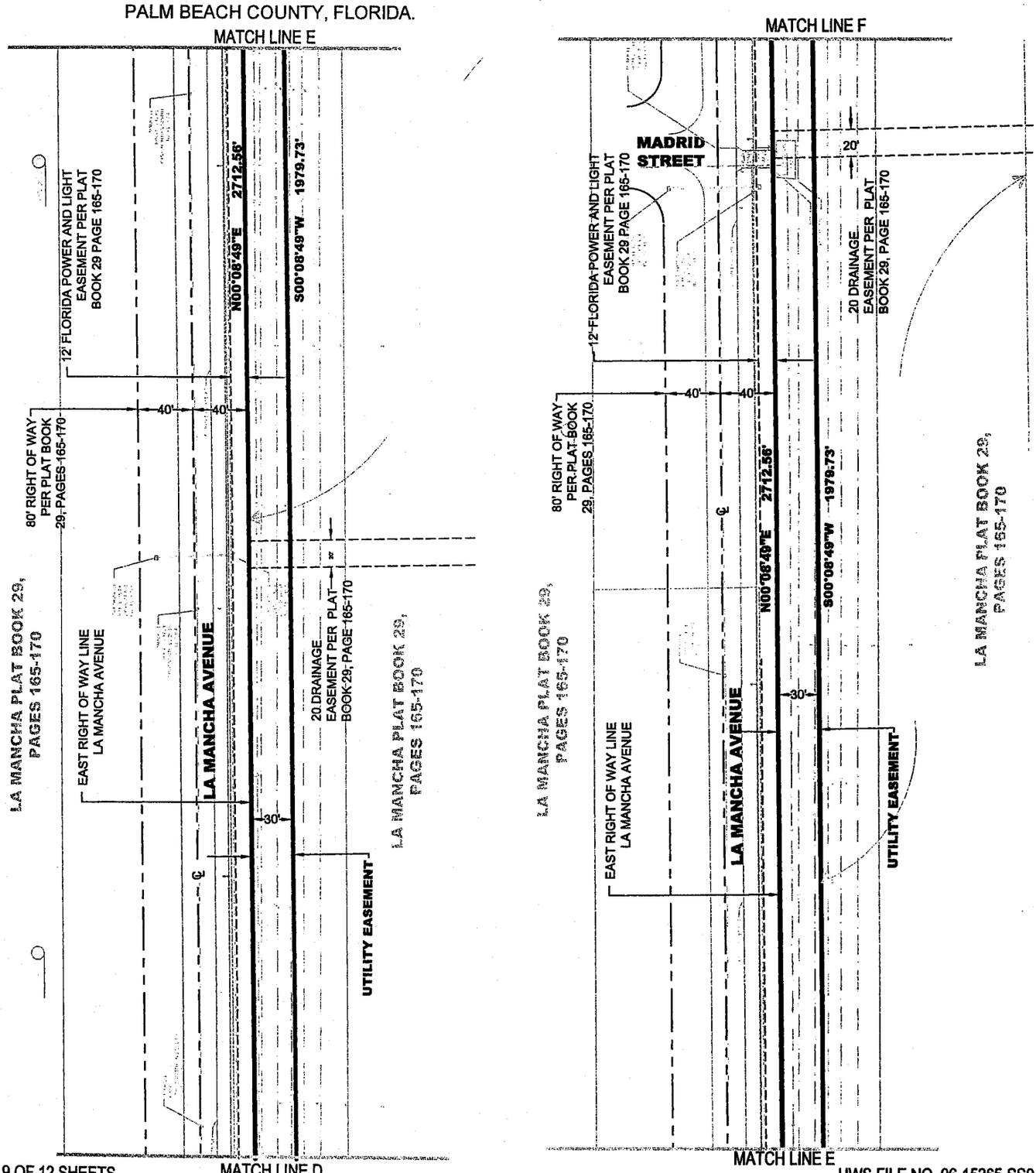
NORTH

SCALE: 1" - 100'



SHEET 9 OF 12 SHEETS

HWS FILE NO. 06-15365-SS9

Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers
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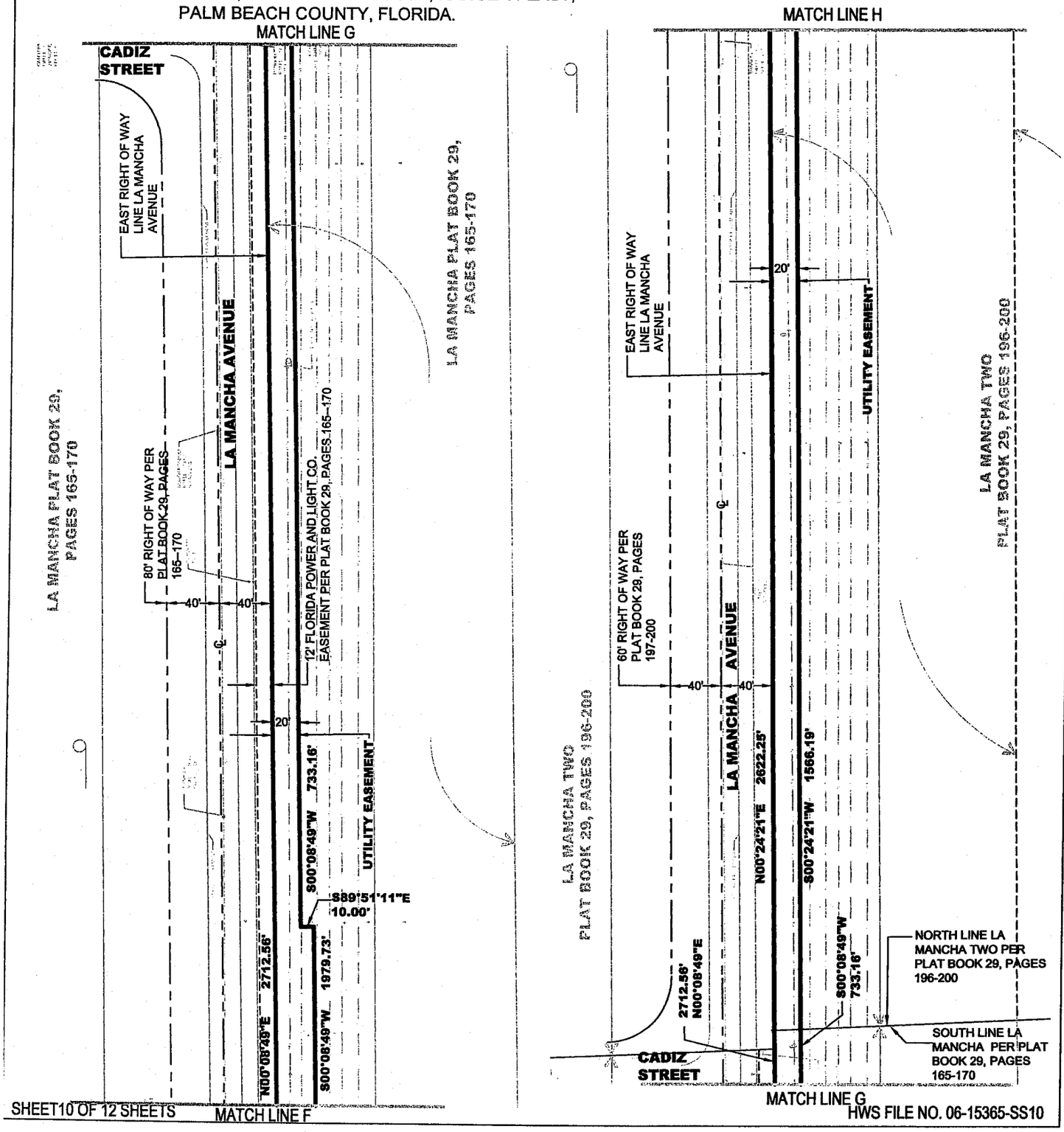
NORTH

SCALE: 1" - 100'



SHEET10 OF 12 SHEETS

HWS FILE NO. 06-15365-SS10

Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers
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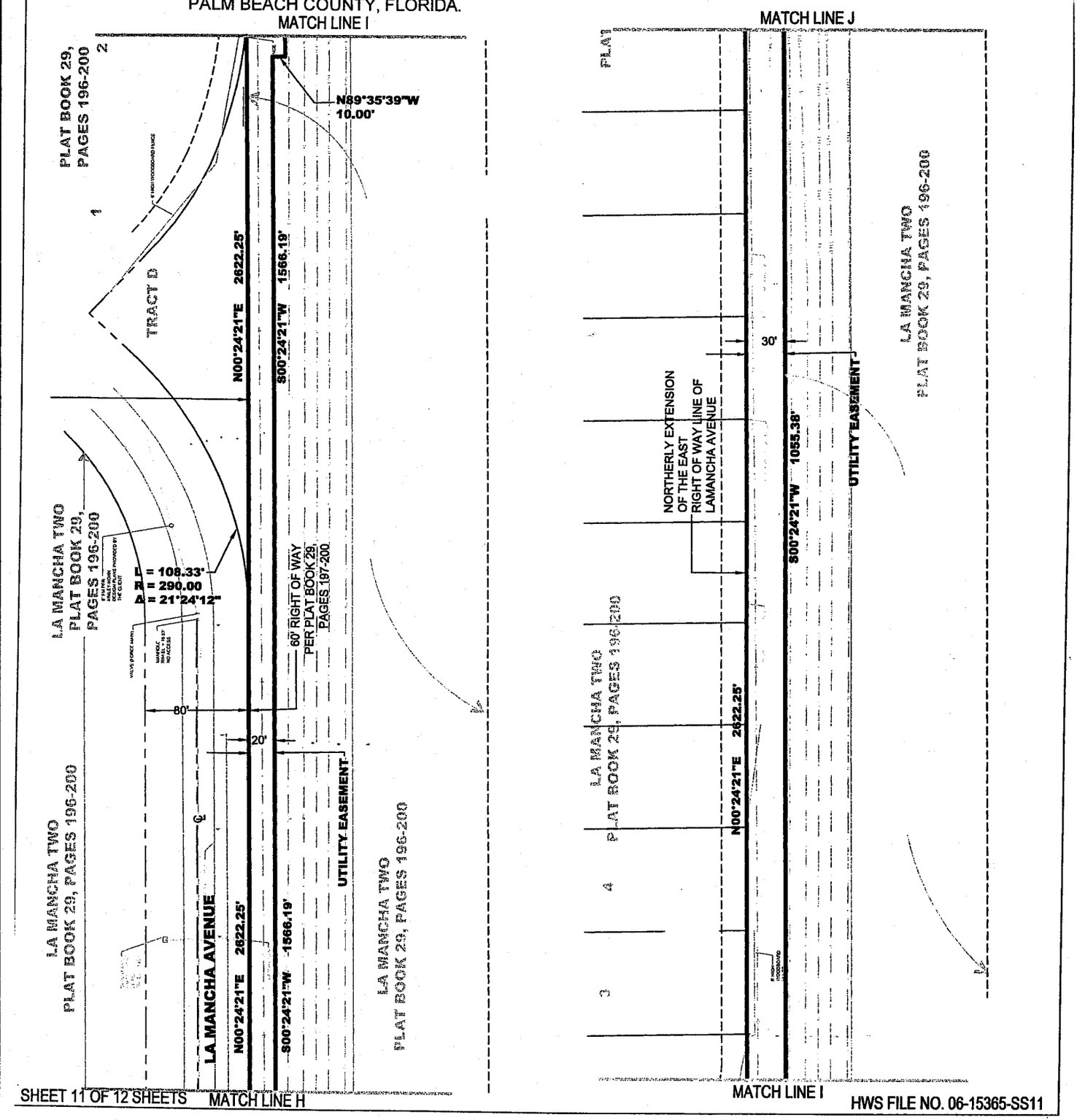
NORTH

SCALE: 1" - 100'



SHEET 11 OF 12 SHEETS

HWS FILE NO. 06-15365-SS11

Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers
L.B. NO. 0003449
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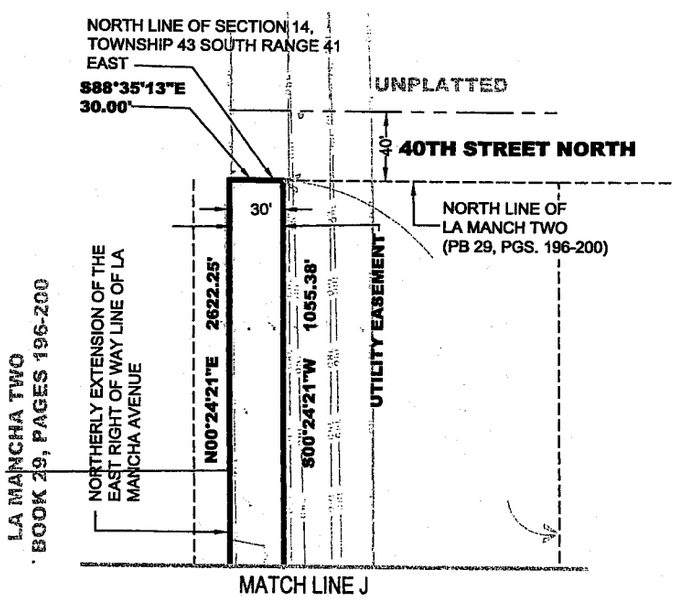
NORTH

SCALE: 1" - 100'



SHEET 12 OF 12 SHEETS

HWS FILE NO. 06-15365-SS12

Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers
E.B. NO. 0003449
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310 S.E. 1st Street, Suite 4
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(561) 243-8777 - Fax

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Delray Beach, Florida 33483
(561) 243-8700 - Phone
(561) 243-8777 - Fax

Exhibit "B"

WUD PROJECT No. 04-125(B)
LA MANCHA PIPELINE EXTENSION PROJECT

Call 48 hours before you dig
It's the Law
1-800-432-4770
Sunshine State One Call of Florida, Inc.

BOARD OF COUNTY COMMISSIONERS

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ADDIE L. GREENE, VICE CHAIRPERSON	-	DISTRICT 7
KAREN MARCUS	-	DISTRICT 1
JEFF KOONS	-	DISTRICT 2
WARREN H. NEWELL	-	DISTRICT 3
MARY McCARTY	-	DISTRICT 4
BURT AARONSON	-	DISTRICT 5

COUNTY ADMINISTRATION

ROBERT WEISMAN, P.E.	-	ADMINISTRATOR
JON VAN ARNAM	-	ASSISTANT ADMINISTRATOR

WATER UTILITIES DEPARTMENT

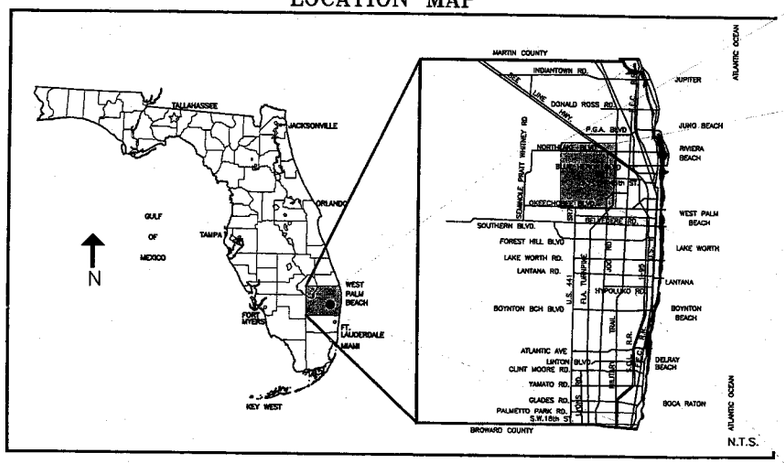
BEVIN A. BEAUDET, P.E.	-	DIRECTOR
LEISHA PICA, P.E.	-	DEPUTY DIRECTOR
BRIAN SHIELDS, P.E.	-	ENGINEERING DIRECTOR

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
ENGINEERING DIVISION

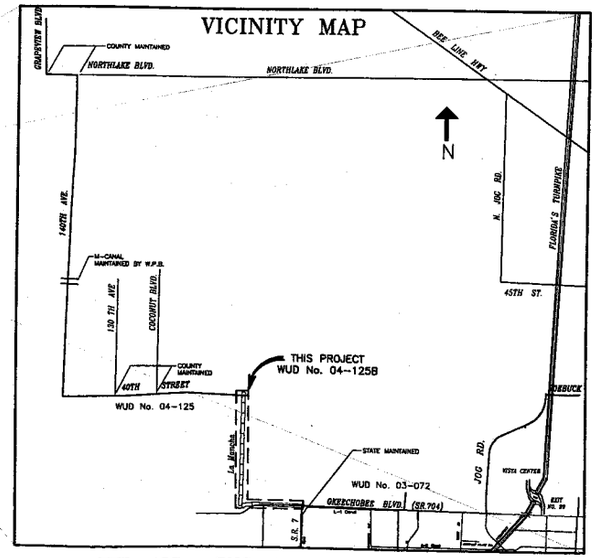
LA MANCHA
PIPELINE EXTENSION PROJECT

WUD PROJECT No. 04-125(B)

LOCATION MAP



VICINITY MAP



TWP. 43S - RNG. 41E - SEC. 14, 23 & 24

DRAWING INDEX

SHEET	DRAWING TITLE
1 of 27	COVER SHEET
2 of 27	KEY MAP & LEGEND
3 of 27	GENERAL NOTES
4–22 of 27	LA MANCHA PIPELINE EXTENSION PLAN & PROFILE SHEETS
23 of 27	CANAL CROSSING AT STATION 131+80 TO 132+80
24 of 27	CANAL CROSSING AT STATION 157+00 TO 158+20
25 of 27	STANDARD DETAILS
26 of 27	STANDARD DETAILS
27 of 27	STANDARD DETAILS

CONFORMED DOCUMENTS
MAY 3, 2006

EXHIBIT "B"

FOR INFORMATION REGARDING THIS PROJECT, CONTACT:
DAVID L. MATHEWS, P.E.
MATHEWS CONSULTING, INC.
1475 CENTREPARK BOULEVARD, SUITE 250
WEST PALM BEACH, FL. 33401
561/478-7981
EB 0007929
www.mathesconsultinginc.com

JUN 2 6 2006

DAVID L. MATHEWS, P.E.
No. 48242 (CIVIL)

TITLE SHEET

SHEET: 1 of 27
DRAWING: G-1

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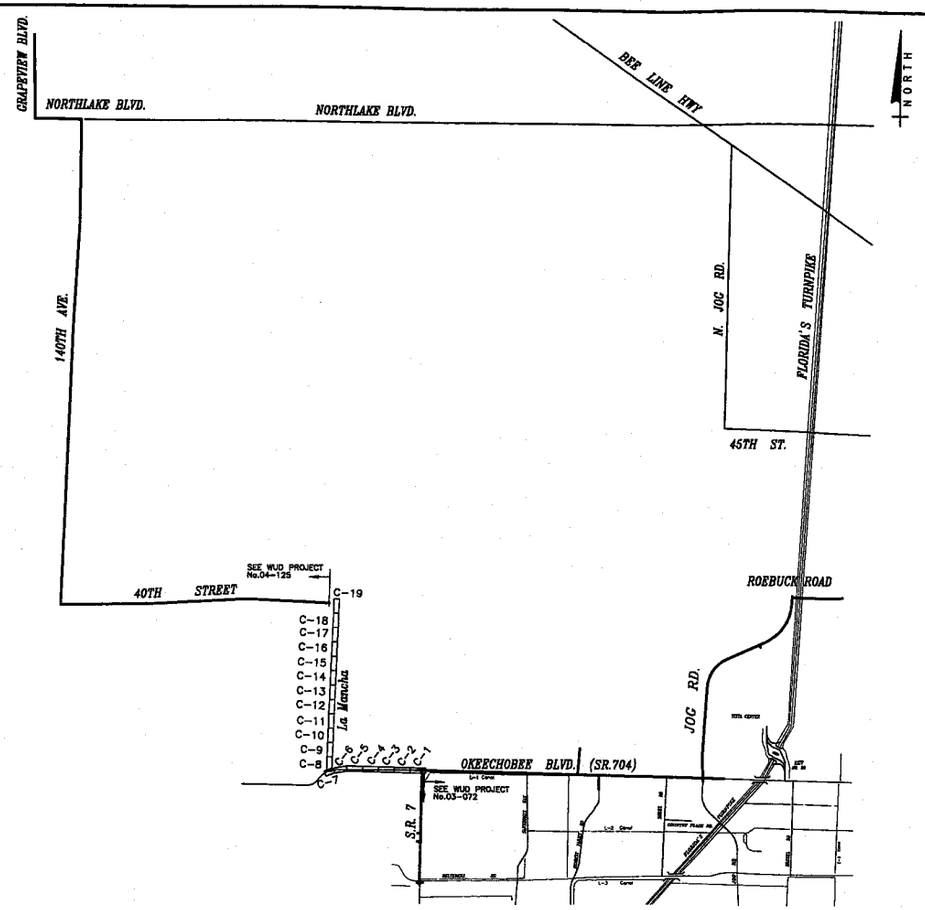

KEY MAP (N.T.S.)
TWP. 43, RGE. 41, SEC. 14, 23 & 24

Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors ... Planners
E.B. NO. 0003449
310 S.E. 1st Street, Suite 4
Delray Beach, Florida 33483
(561) 243-8700 - Phone
(561) 243-8777 - Fax
HWS- 15365.005

SURVEY ABBREVIATIONS

PBC\= FIBER OPTIC TRAFFIC CONTROL CABLE
PG. or PGS.= PAGES
T.O.B. = TOP OF BANK
B.O.S. = BOTTOM OF SLOPE
E.O.W. = EDGE OF WATER
P.B. = PLAT BOOK
W.M. = WATER MAIN
BE = BURIED ELECTRIC
BT = BURIED TELEPHONE
BTV = BURIED TV
Δ = DELTA
L = LENGTH
R = RADIUS
L.W.D.D. = LAKE WORTH DRAINAGE DISTRICT
PVC = POLY VINYL CHLORIDE
HWS = HELLER-WEAVER AND SHEREMETA, INC.
O.R.B. = OFFICIAL RECORDS BOOK
CONC. = CONCRETE
ASPH. = ASPHALT
RCP = REINFORCED CONCRETE PIPE
INV. = INVERT
EL. = ELEVATION
FP & L = FLORIDA POWER & LIGHT
℄ = BASELINE
℄ = CENTERLINE

SURVEY SYMBOLS

= CONCRETE
= PALM TREE
= PINE TREE
= SHRUB
= UNKNOWN TREE
= YARD LAMP
= CHAIN LINK FENCE
= WOOD BOARD FENCE
= GUY ANCHOR (ANCHOR)
= WOOD POWER POLE
= CONCRETE POLE
= OVERHEAD LINES
= SIGN
= EXISTING MAIL BOX
= EXISTING DRAINAGE MANHOLE
= ADELPHIA BOX
= EXISTING WATER METER
= EXISTING FIRE HYDRANT
= EXISTING WATER VALVE,

ENGINEERING LEGEND

PAVEMENT MILL & OVERLAY (1" TYPE S-III ASPHALTIC CONCRETE)
OPEN CUT PAVEMENT REPAIR
PROPOSED SIDEWALK RESTORATION
REMOVE EXISTING PAVEMENT
DIP FM
AIR RELEASE VALVE (ARV)
SAMPLE POINT (SP)
TH = SOFT DIG LOCATION
TB = SPT BORING LOCATION
AB = AUGER BORING LOCATION
RJ = RESTRAINED JOINT PIPE
GV = GATE VALVE
BV = BUTTERFLY VALVE
W = WATER
WW = WASTE WATER
HDPE = HIGH DENSITY POLYETHYLENE
DR = DIAMETER RATIO
DIP = DUCTILE IRON PIPE
PVC = POLY VINYL CHLORIDE

NOTES:

1) SYMBOLS SHOWN HEREON ARE NOT TO SCALE.

2) UNLESS OTHERWISE NOTED, THIS FIRM DID NOT ATTEMPT TO LOCATE UNDERGROUND FOUNDATIONS OR FOOTERS.

3) THIS SURVEY IS NOT VALID UNLESS SEALED WITH AN EMBOSSED FLORIDA REGISTERED SURVEYORS SEAL.

4) RECORD INFORMATION SHOWN HEREON WAS TAKEN FROM RECORD PLATS OBTAINED FROM THE PUBLIC RECORDS OF PALM BEACH COUNTY.

5) ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.

6) PALMBEACH COUNTY BENCH MARKS USED: DIX ELEVATION 16.995
TO REACH THE STATION FROM THE INTERSECTION OF ROYAL PALM BEACH BOULEVARD AND 40TH STREET NORTH, GO SOUTH ON ROYAL PALM BEACH BOULEVARD 1.0 MILES TO THE STATION ON THE RIGHT. THE STATION IS A PALM BEACH COUNTY BRASS DISKC SET IN CONCRETE, STAMPED "DIX". THE STATION IS LOCATED 12.17 FEET EAST OF A POWER POLE BEARING A WITNESS SIGN, 10.4 FEET NORTHEAT AND 11.7 FEET SOUTHEAST OF X-CUT SET IN CONCRETE SIDEWALK, 1.5 FEET EAST OF THE SIDEWALK AND 61 FEET SOUTH OF FLASHING YELLOW CAUTION LIGHT POST FOR BLIND DRIVE.

AND

SMILY ELEVATION 19.577'
TO REACH THE THE BENCH MARK FROM THE INTERSECTION OF ROYAL PALM BOULEVARD AND 40TH STREET NORTH, GO SOUTH ON ROYAL PALM BEACH BOULEVARD 0.5 MILES TO THE BENCHMARK ON THE RIGHT. THE BENCHMARK IS A PALM BEACH COUNTY BRASS DISC SET IN CONCRETE STAMPED "SMILY". THE BENCHMARK LIES 44.7 FEET WEST IF THE CENTERLINE OF ROYAL PALM BEACH BOULEVARD, 8.7 FEET EAST OF A POWER POLE BEARING A WITNESS SIGN, 11.0 FEET NORTHEAST OF AN X-CUT IN A CONCRTE WALK AND 7.6 FEET SOUTHEAST OF AN X-CUT SET IN THE CONCRETE WALK, AND 296 FEET NORTH OF THE CENTER OF PONCE DE LEON STREE TO THE EAST.

7) BEARINGS ON THIS SURVEY ARE REFERENCED TO THE STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE, NORTH AMERICAN DATUM 1983 (ADJUSTMENT OF 1990).

8) BEARINGS SHOWN HEREON ARE BASED ON THE SOUTH LINE OF SECTION 24, TOWNSHIP 43 SOUT, RANGE 41 EAST BEING SOUTH 88°48'43" EAST PER PALM BEACH COUNTY ENGINEERING DEPARTMENT.

9) SUNSHINE STATE ONE CALL OF FLORIDA, TICKET NO 22054767

10) RIGHT OF WAY INFORMATION OBTAINED FROM PLATS OF RECORD.

11) ALL WATER MAINS , FORCE MAINS, BURIED ELECTRIC, BURIED TV AND BURIED TELEPHONE SHOWN ARE FROM LA MANCHA AVENUE IMPROVEMENTS PREPARED BY KIMLEY-HORN AND ASSOCIATES, INC. DATED: JAN, 2004

HELLER-WEAVER AND SHEREMETA, INC.
FLORIDA STATE L.B. NO. 3449

BY: JAMES A. SCHROEDER
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REG. NO. 5143

DATED: 09-20-05 WORK ORDER NO. 15365.005
FIELD BOOK 05-03, PAGES 52-72, 34-40
FIELD BOOK 05-05, PAGES 31-35, 43-48

CONFORMED DOCUMENTS

NO.	DATE	ISSUED FOR	APRVD BY
1	4/4/06	ADDENDUM NO. 2	D.L.M.

DESIGNED: D.L.M./G.T.D.
DRAWN: J.A.J.
CHECKED: R.M.T.
APPROVED: R.L.M

JUN 2 6 2006
DAVID L. MATHEWS, P.E.
NO. 48242

MATHEWS CONSULTING INC.
Civil and Environmental Engineers
1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL. 33401
TEL. (561)478-7981
www.mathewsconsultinginc.com
LICENSE No. E.B.-0007928

VERIFY SCALE
1"
BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1328
CLIENT PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328G02

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

KEY MAP AND LEGEND

DATE: MAY 3, 2006
SHEET: 2 of 27
DRAWING: G-2

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GENERAL NOTES:

1. UNLESS SPECIFIED OTHERWISE ON THESE PLANS OR IN THE SPECIFICATIONS, ALL WATER MAINS AND FORCE MAINS TO BE INSTALLED AT ELEVATION SHOWN ON PROFILES OR A MINIMUM 36" OF COVER, WHICHEVER IS DEEPER, WITH +0.1' AND -0.25' MAXIMUM TOLERANCE.
2. PIPE DEFLECTION AT THE JOINT SHALL NOT EXCEED 75% OF THE MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.
3. CONTRACTOR TO VERIFY ALL UTILITY CROSSINGS, EXACT ELEVATIONS AND LOCATIONS PRIOR TO CONSTRUCTION OR WITHIN NOTICE TO PROCEED + 30 DAYS WHICHEVER OCCURS FIRST.
4. ALL RESTRAINED JOINT LENGTHS SHOWN ON THESE DRAWINGS ARE BASED ON DUCTILE IRON PIPE (DIP) DESIGN AND SPECIFICATIONS.
5. RESTRAINED JOINTS FOR DUCTILE IRON PIPE (DIP) AND FITTINGS TO BE INSTALLED AND RESTRAINED ACCORDING TO THE TABLE SHOWN IN THE POTABLE WATER AND WASTEWATER STANDARD DETAILS.
6. UNLESS SPECIFIED OTHERWISE ON THESE PLANS OR IN THE SPECIFICATIONS ALL WATER MAINS SHALL BE DIP (CEMENT LINED).
7. WATER MAIN AND FORCE MAIN CONSTRUCTION IS RELATIVE TO THE CONSTRUCTION BASELINE.
8. WATER MAINS MUST BE TESTED FOR BACTERIOLOGICAL ACCEPTABILITY USING PRESSURE PIPE TIE-IN (BY-PASS) DETAIL FOR TWO CONSECUTIVE DAYS AND APPROVED BY THE PALM BEACH COUNTY HEALTH DEPARTMENT BEFORE THEY ARE PRESSURE TESTED FOR LEAKAGE. IF THE WATER MAIN PRESSURE DROPS BELOW 20 P.S.I. AFTER INITIAL BACTERIOLOGICAL TESTS WERE CONDUCTED, OR THE TESTS ARE MORE THAN 30 DAYS OLD, THE BACTERIOLOGICAL TEST MUST BE REPEATED. REPEAT ABOVE PROCEDURE UNTIL A SATISFACTORY PRESSURE TEST IS ACHIEVED.
9. ALL MATERIALS USED SHALL CONFORM TO PALM BEACH COUNTY STANDARD SPECIFICATIONS AND BE FROM THE COUNTY'S CURRENT APPROVED LIST OF MATERIALS AND MANUFACTURERS, IN ACCORDANCE WITH SPECIFICATION SECTION 01015, OR AS SPECIFIED HERE IN.
10. THE CONTRACTOR SHALL BE RESPONSIBLE, AT NO ADDITIONAL COST TO OWNER, FOR HOLDING ELECTRIC, TELEPHONE AND SIGNAL POLES AS NECESSARY DURING CONSTRUCTION, UNLESS NOTED ON PLANS.
11. ALL DEBRIS, SPOIL, RUBBLE, VEGETATION, AND SIMILAR ITEMS REMOVED SHALL BE LEGALLY DISPOSED OF BY CONTRACTOR.
12. ANY WATER MAIN SHUT DOWN SHALL BE COORDINATED WITH PALM BEACH COUNTY WATER UTILITIES DEPT. (PBCWUD) MINIMUM ONE WEEK IN ADVANCE. SHUTDOWNS SHALL BE CONDUCTED DURING NIGHTS OR WEEKENDS, AS DIRECTED BY PBCWUD FOR A MAXIMUM OF 4 HOURS.
13. CONTRACTOR TO COMPLY WITH THE TRAFFIC CONTROL PLAN ACCORDING TO F.D.O.T. CURRENT INDEX 600 SERIES.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEYING AND STAKING RIGHT-OF-WAY LINES AND PROPOSED WATER MAIN AND FORCE MAIN LOCATIONS WITH NO ADDITIONAL COST TO THE OWNER.
15. CONTRACTOR TO ADEQUATELY RESTRAIN ALL EXISTING VALVES, FITTINGS, PIPES AND APPURTENANCES AS NECESSARY TO MAKE CONNECTIONS, AT NO ADDITIONAL COST TO OWNER.
16. CENTER FULL LENGTH OF WATER MAIN OR FORCE MAIN PIPE AT POINT OF CONFLICTS WITH STORM PIPES PER PRESSURE PIPE CONFLICT DETAIL SHOWN ON STANDARD DETAIL SHEET.
17. APPROVED RECORD DRAWINGS DOCUMENTS ARE REQUIRED ACCORDING TO P.B.C.W.U.D. MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS.
18. PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPE LINES.
19. ALL WATER MAIN DUCTILE IRON PIPE AND FITTINGS SHALL BE FIELD PAINTED BY THE CONTRACTOR WITH A 4" WIDE CONTINUOUS BLUE LINES THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP, AND LEFT AND RIGHT SIDES OF THE PIPE. APPROVED PAINT: INDURON, AQUANAUT 5082 ALASKAN BLUE (ONE COAT, 3 MILS DRY FILM THICKNESS APPLIED WITH ½" NAP MEDIUM ROLLER)
20. ALL WATER MAINS SHALL BE MARKED WITH ONE CONTINUOUS STRIP OF 6" WIDE MAGNETIC BLUE CODED TAPE IMPRINTED WITH TWO (2) INCH HIGH LETTERING READING "CAUTION - POTABLE WATER LINE BURIED BELOW" AND LOCATED APPROXIMATELY TWELVE (12) INCHS ABOVE THE CROWN OF THE PIPE. THE WORDING SHALL OCCUR EVERY THREE (3) FEET.
21. ALL FORCE MAINS SHALL BE MARKED WITH ONE CONTINUOUS STRIP OF 6" WIDE MAGNETIC BROWN CODED TAPE IMPRINTED WITH TWO (2) INCH HIGH LETTERING READING "CAUTION - FORCE MAIN BURIED BELOW" AND LOCATED APPROXIMATELY TWELVE (12) INCHS ABOVE THE CROWN OF THE PIPE. THE WORDING SHALL OCCUR EVERY THREE (3) FEET.
22. M.O.T. PLANS MUST BE APPROVED BY P.B.C.W.U.D. ENGINEERING DEPARTMENT, F.D.O.T AND VILLAGE OF ROYAL PALM BEACH (IF APPLICABLE)(CONDITIONED TO OWNERSHIP OF ROAD) BEFORE COMMENCING ANY WORK DISTURBING TRAFFIC.
23. PRESSURE TEST ALL WATER MAINS AND WASTEWATER FORCE MAINS TO 150 PSI FOR A MINIMUM OF 2 HOURS WITHOUT LEAKAGE.
24. THE PROJECT PLANS ARE FOR THE INSTALLATION OF WATER MAINS AND WASTE WATER FORCE MAINS. REFER TO PBC ENGINEERING PROJECT No. 1998500 FOR CONSTRUCTION OF FUTURE PAVING AND DRAINAGE.
25. VALVE LOCATIONS MAY BE REVISED AT THE OWNER'S DISCRETION AT NO ADDITIONAL COST.
26. ARV MANHOLE RIM ELEVATIONS AND LOCATIONS ARE APPROXIMATE, CONTRACTOR SHALL FIELD VERIFY EXISTING GROUND ELEVATIONS PRIOR TO ORDERING MANHOLES. AVVS TO BE INSTALLED AT HIGH POINTS.
27. A 20 FOOT FULL PIPE LENGTH IS REQUIRED FOR BOTH WATER MAINS AND FORCE MAINS WITH AN ARV CENTERED ON THE PIPE LENGTH.
28. BENCHMARK ELEVATIONS ARE SHOWN HEREON.
28. NON-OFFSET ARV MANHOLES SHALL HAVE A MINIMUM DIAMETER OF (8) FEET (SHOP DRAWINGS REQUIRED).
30. SAMPLE POINT CORP. STOPS TO HAVE VALVE BOXES. TAPS SHALL BE HORIZONTAL TO ALLOW ACCESS TO THE HEAD WITHOUT DISTURBING PAVEMENT.
31. ALL SIGNING AND PAVEMENT MARKINGS TO BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION OR BETTER AS PART OF THIS PROJECT AND SHALL CONFORM TO PALM BEACH COUNTY TYPICALS FOR PAVEMENT MARKINGS, SIGNING AND GEOMETRICS (NO. T-P-04-011).
32. ANY AREAS DISTURBED BY THE CONSTRUCTION (INCLUDING SODDING, IRRIGATION, LANDSCAPING, ETC.) SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION OR BETTER AS PART OF THIS PROJECT.
33. PAVEMENT OVERLAY SHALL BE AT LEAST ONE FULL LANE WIDTH. IF CONTRACTOR DAMAGES PAVEMENT OUTSIDE OF ONE FULL LANE WIDTH, THEN CONTRACTOR SHALL REPLACE IN KIND (THIS IS A NON-PAY ITEM).
34. PROJECT SITE SAFETY:
    A. THE ENGINEER/ OWNER OR THEIR EMPLOYEES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER THE CONTRACTOR, ANY SUB-CONTRACTOR OR OTHER ENTITY OR THEIR EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY JOBSITE HEALTH OR SAFETY PRECAUTIONS.
    B. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY, AND WARRANTS THAT THIS INTENT IS MADE EVIDENT BY THE AGREEMENT BETWEEN OWNER AND CONTRACTOR
    C. ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS OR ENCOUNTERED THROUGH THE PROGRESSION OF WORK AT THIS PROJECT SITE ARE ASSUMED TO BE LIVE, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS WHEN WORKING AROUND EXISTING OVERHEAD OR UNDERGROUND UTILITIES.

2

GENERAL INFORMATION

1. BELLSOUTH TELEPHONE, FLORIDA POWER AND LIGHT, CABLE TV, GAS, ETC. ARE TAKEN FROM FIELD INSPECTION AND SKETCHES PROVIDED BY UTILITIES AND ARE SHOWN FOR CONVENIENCE OF CONTRACTOR ONLY. THE CONTRACTOR SHALL CONTACT ALL UTILITY OWNERS AND CONFIRM LOCATIONS OF UTILITIES NO LESS THAN 48 HOURS BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL ACCURATELY LOCATE AND UNCOVER ALL EXISTING UTILITIES BEFORE BEGINNING CONSTRUCTION WHERE CROSSING OR PARALLELING OF EXISTING UTILITIES OCCUR. ANY DAMAGE RESULTING FROM THE CONTRACTORS OPERATION SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

EROSION CONTROL NOTES:

1. CUT AND FILL SLOPES TO BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SILT FENCES TO BE USED WHERE NECESSARY.
2. CONSTRUCTION VEHICLE ACCESS ROUTES SHALL BE SWEPT CLEAN OF SEDIMENT, CONCRETE AND OTHER CONSTRUCTION MATERIALS AS NEEDED.
3. ALL BERMS, DIKES AND SPOIL PILES SUBJECT TO EROSION MUST BE STABILIZED OR CONTAINED TO PREVENT AND RUNOFF FROM THE PROJECT.
4. ALL EXISTING STORM SEWER INLET GRATES TO BE COVERED WITH FILTER FABRIC DURING CONSTRUCTION.

TREE REMOVAL AND RELOCATE NOTE:

1. A PRECLEARING MEETING MUST BE HELD PRIOR TO ANY CLEARING OF TREE MATERIAL TO DETERMINE WHAT TREES NEED TO BE RELOCATED OR REMOVED. CONTRACTOR IS RESPONSIBLE TO MOVE ALL RELOCATES AND ALL WATERING OF RELOCATES FOR 120 DAYS. TREE LOCATES TO HAVE A WARRANTY OF SIX MONTHS.

CONFORMED DOCUMENTS

NO.	DATE	ISSUED FOR	APRV'D BY
2	4/4/06	ADDENDUM NO. 2	D.L.M.

DESIGNED: D.L.M./G.T.D.
DRAWN: J.A.J.
CHECKED: R.M.T.
APPROVED: R.L.M.

JUN 2 6 2006

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ENGINEER NO.: 1328
CLIENT WUD
PROJECT NO.: 04-125(B)
CAD REF.: 1328G03

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

GENERAL NOTES

DATE: MAY 3, 2006
SHEET: 3 of 27
DRAWING: G-3

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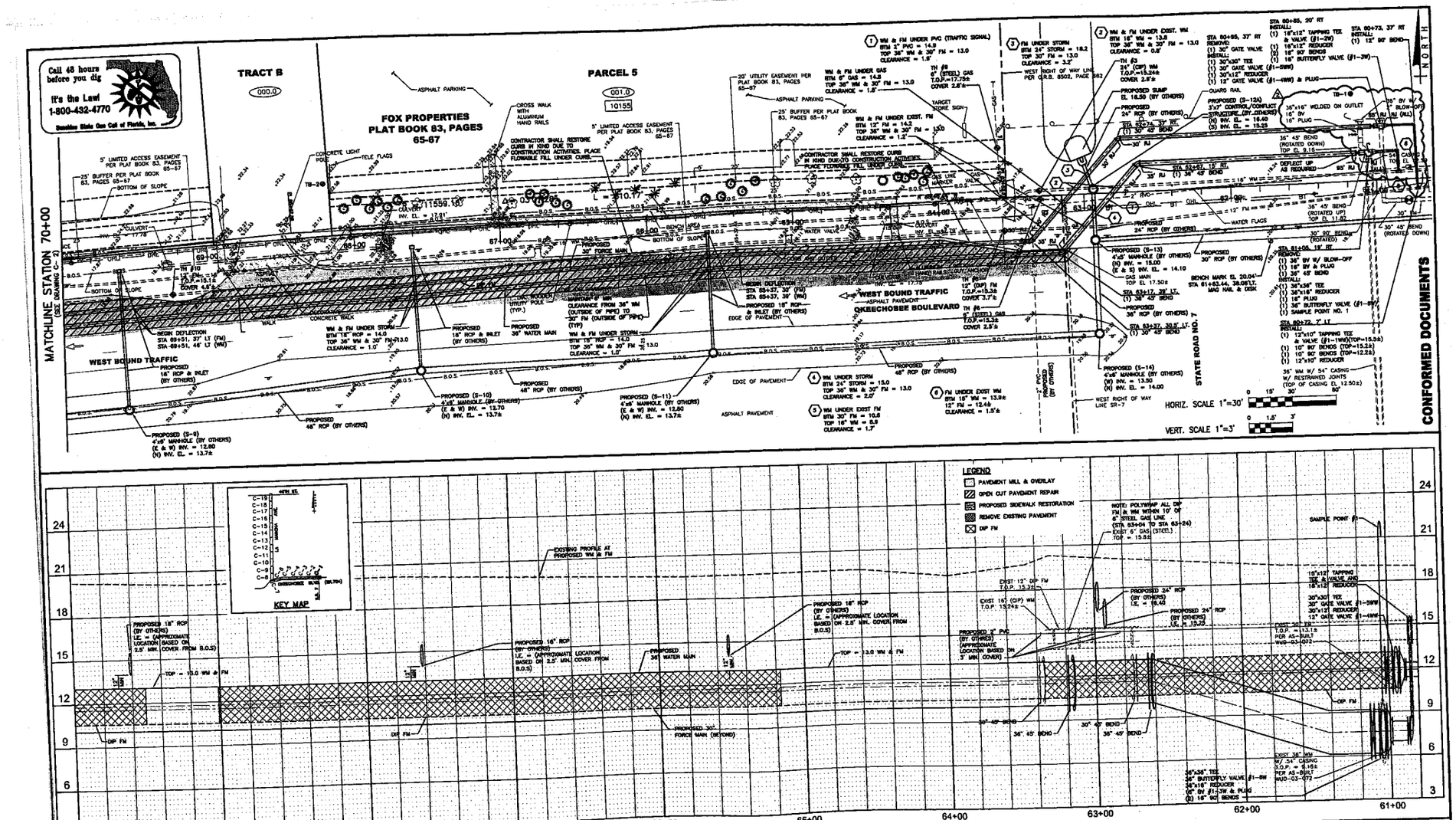

NO.	DATE	ISSUED FOR	APRV'D BY
1	4/4/06	ADDENDUM NO. 2	D.L.M.

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APPROVED: R.L.M.

JUN 26 2006
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CLIENT PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
OKEECHOBEE BOULEVARD
PLAN AND PROFILE – SHEET 1
STA 63+52.97 TO STA 70+00

DATE: MAY 3, 2006
SHEET: 4 of 27
DRAWING: C-1

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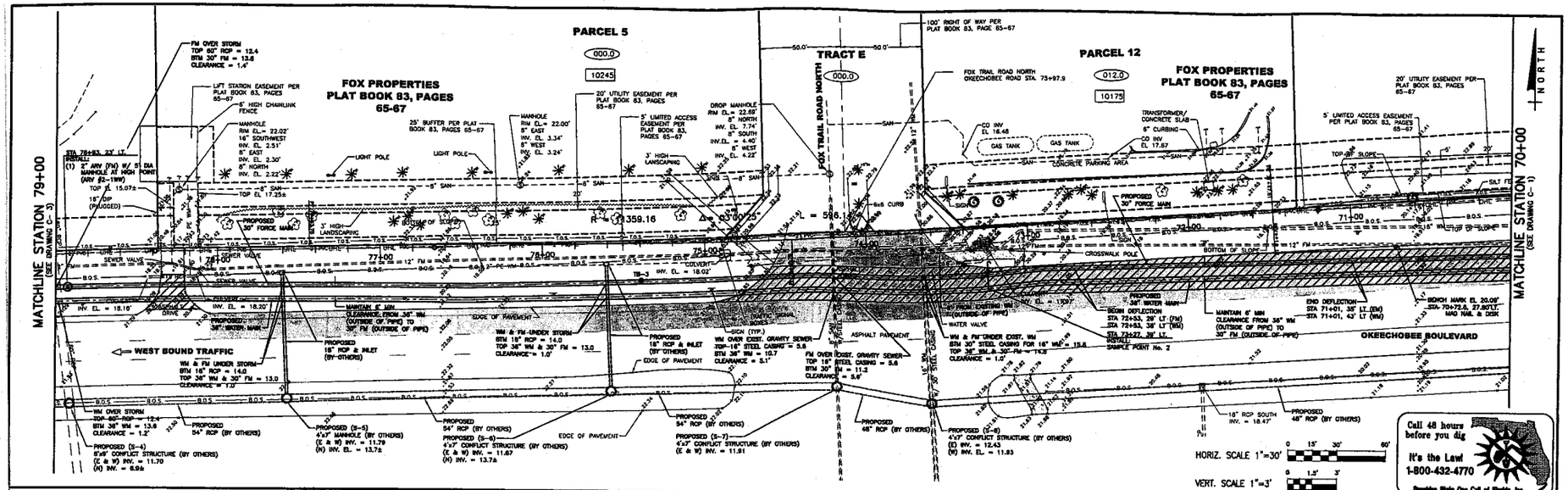

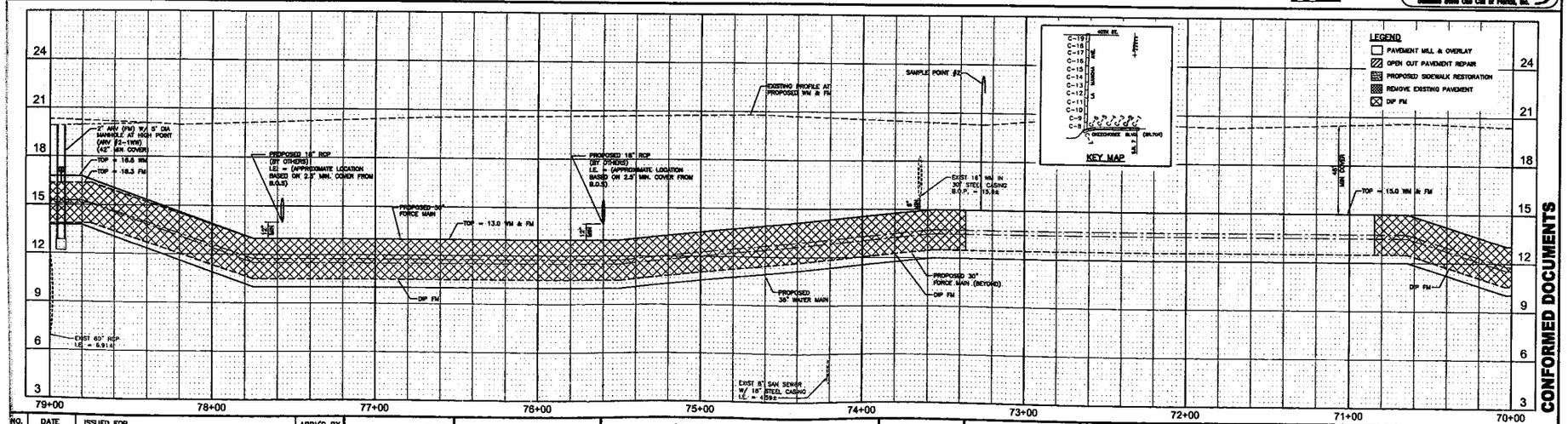

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PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

OKEECHOBEE BOULEVARD
PLAN AND PROFILE – SHEET 2
STA 70+00 TO STA 79+00

DATE: MAY 3, 2006
SHEET: 5 of 27
DRAWING: C-2

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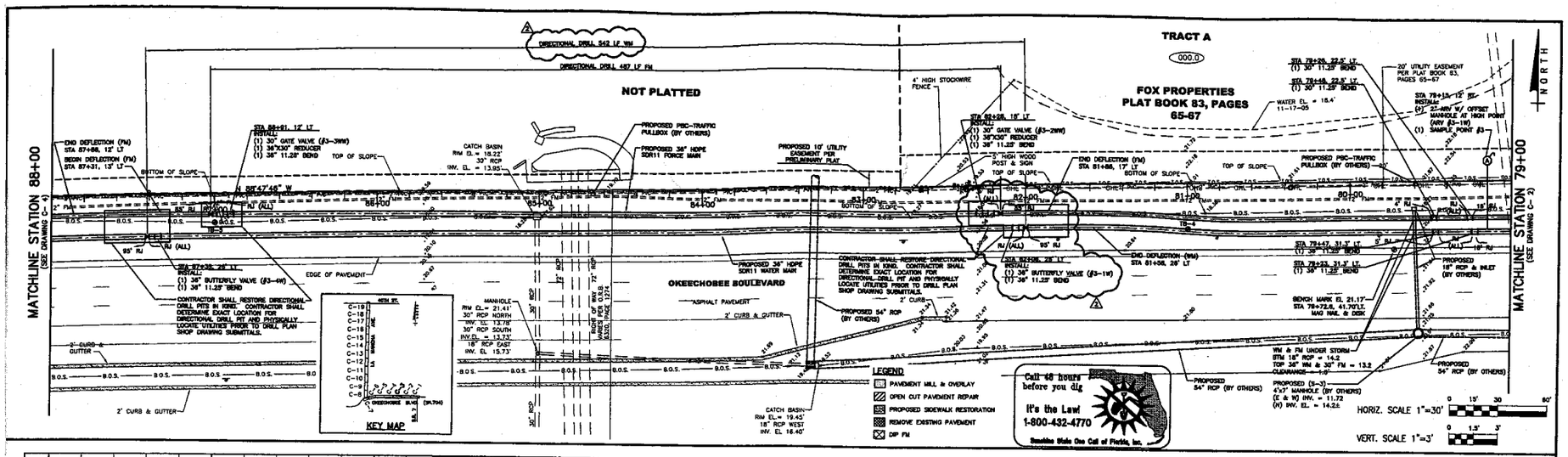

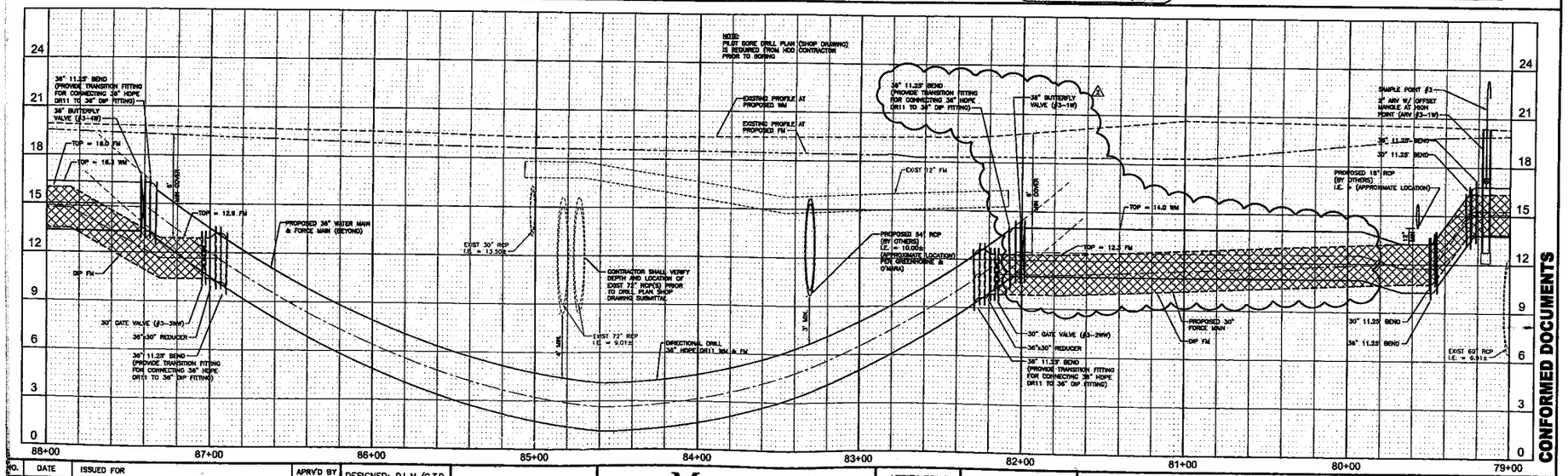

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PROJECT NO.: 04-125(P)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
OKEECHOBEE BOULEVARD
PLAN AND PROFILE – SHEET 3
STA 79+00 TO STA 88+00

DATE: MAY 3, 2006
SHEET: 6 of 27
DRAWING: C-3

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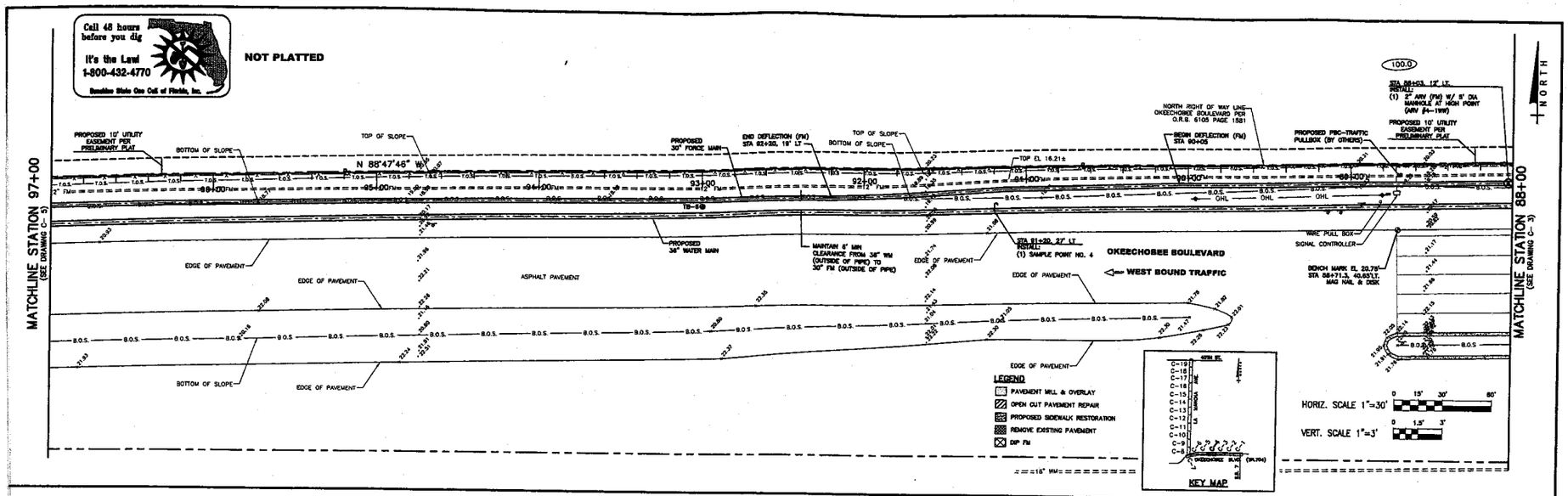

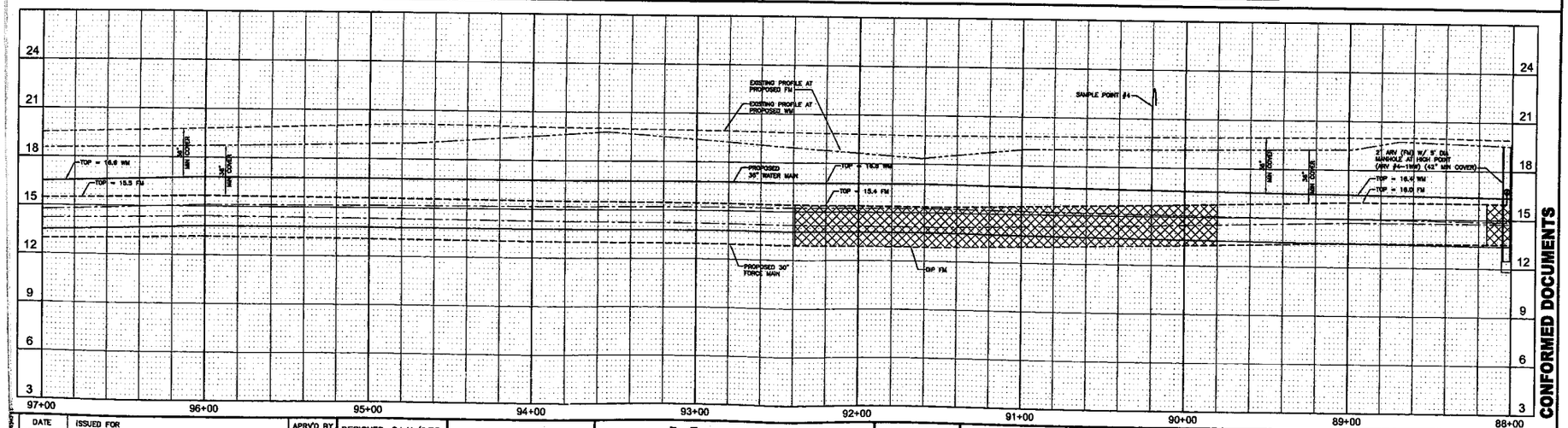

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CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
OKEECHOBEE BOULEVARD
PLAN AND PROFILE – SHEET 4
STA 88+00 TO STA 97+00

DATE: MAY 3, 2006
SHEET: 7 of 27
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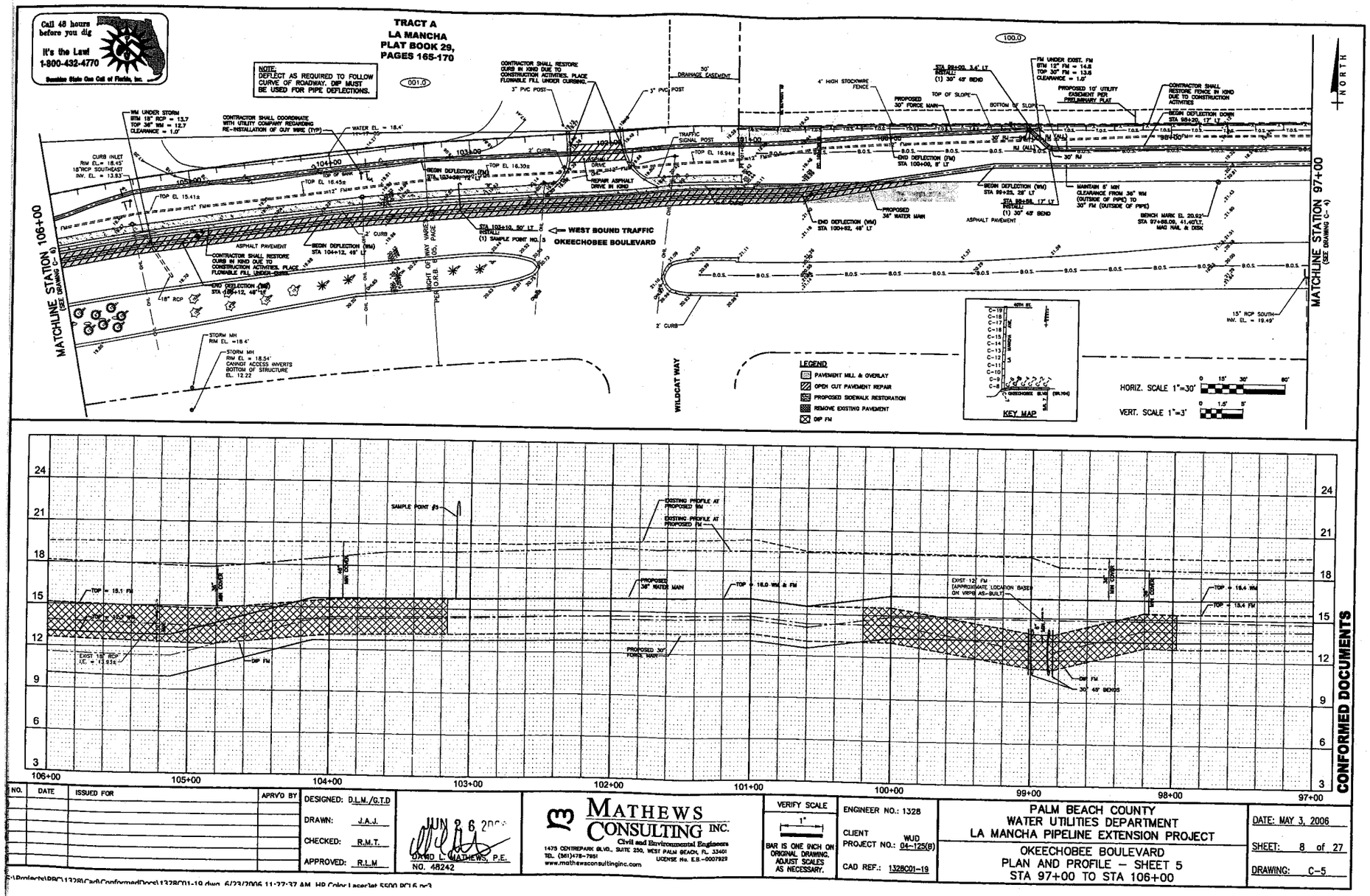

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WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
OKEECHOBEE BOULEVARD
PLAN AND PROFILE – SHEET 5
STA 97+00 TO STA 106+00

DATE: MAY 3, 2006
SHEET: 8 of 27
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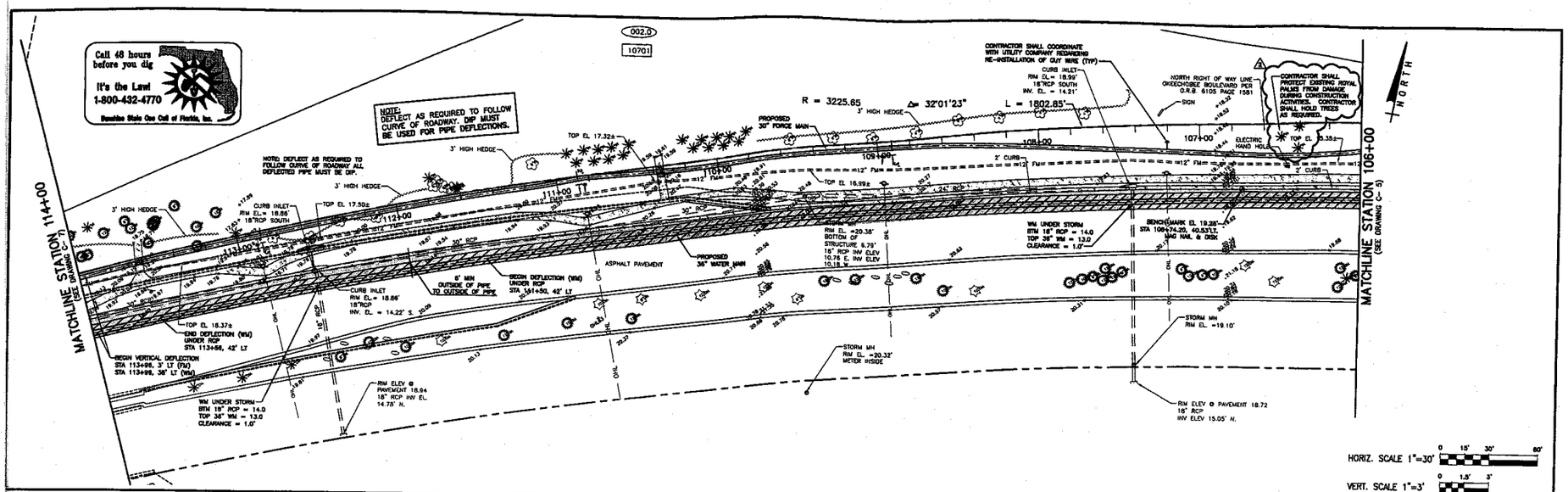

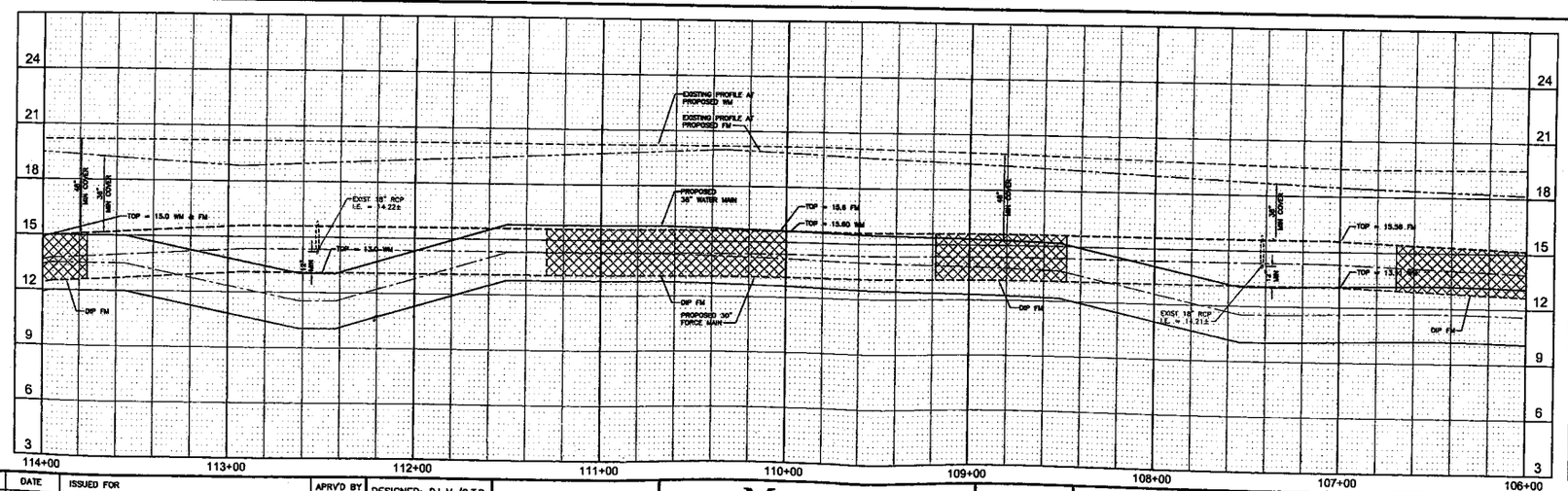

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PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
OKEECHOBEE BOULEVARD
PLAN AND PROFILE – SHEET 6
STA 106+00 TO STA 1+00

DATE: MAY 3, 2006
SHEET: 9 of 27
DRAWING: C-6

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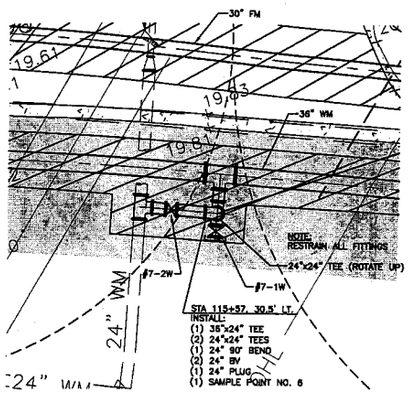

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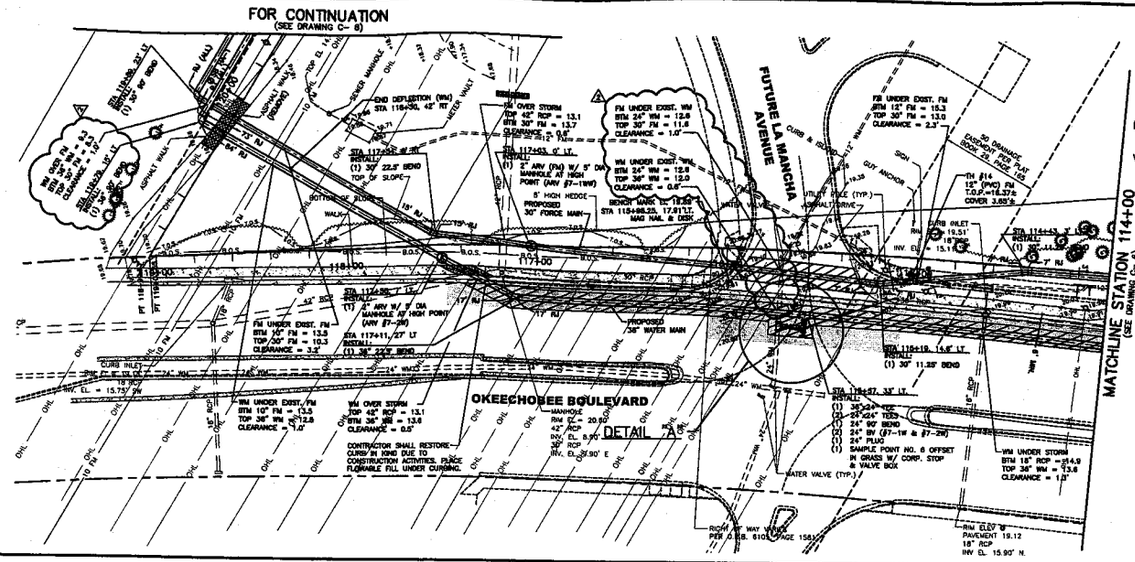

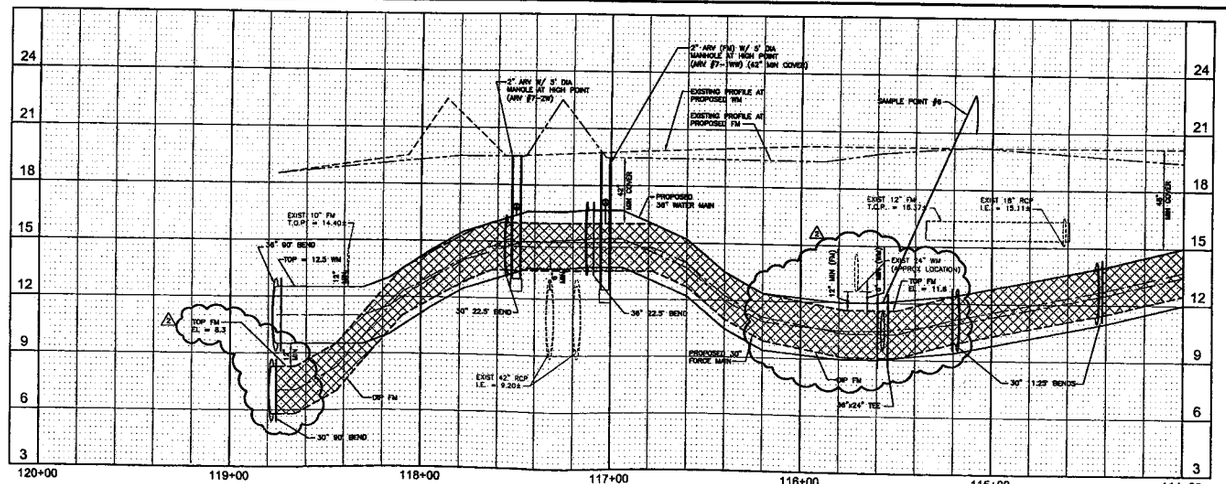

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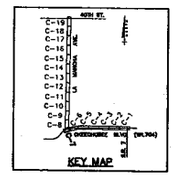
- OPEN CUT PAVEMENT REPAIR
- PROPOSED SIDEWALK RESTORATION
- REMOVE EXISTING PAVEMENT
- DIP FM



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APPROVED: R.L.M

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CLIENT: WUD
PROJECT NO.: 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
OKEECHOBEE BOULEVARD
PLAN AND PROFILE – SHEET 7
STA 114+00 TO STA 119+03.55

DATE: MAY 3, 2006
SHEET: 10 of 27
DRAWING: C-7

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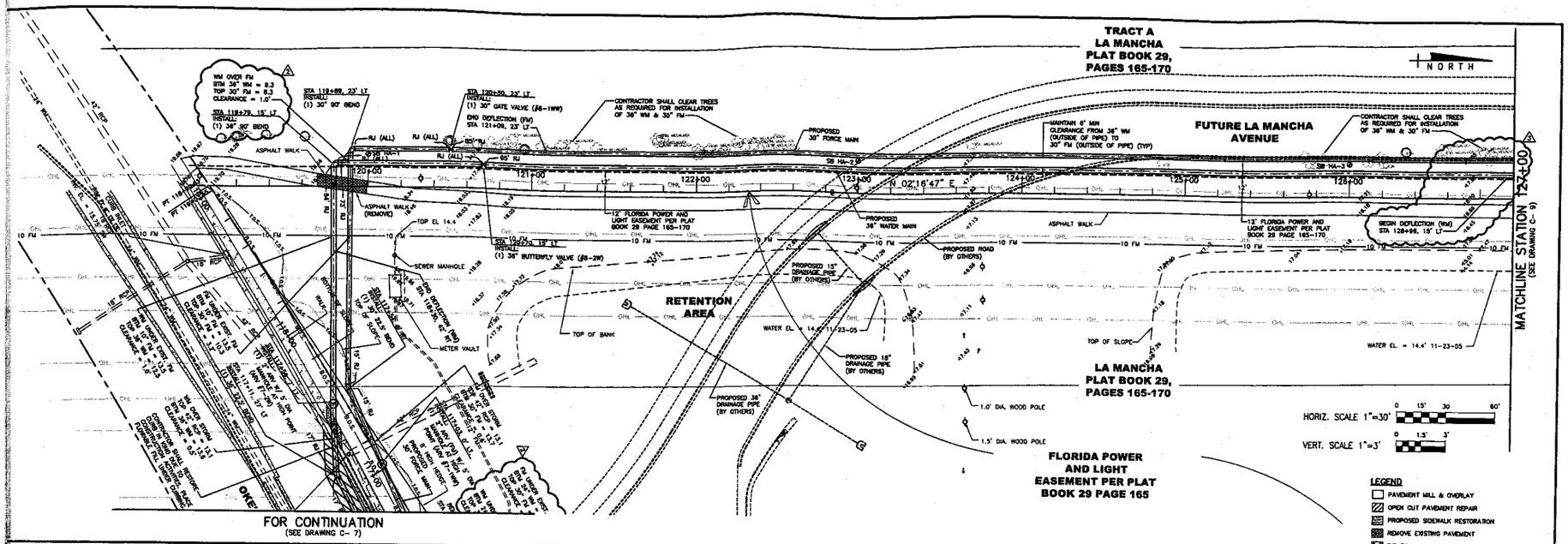

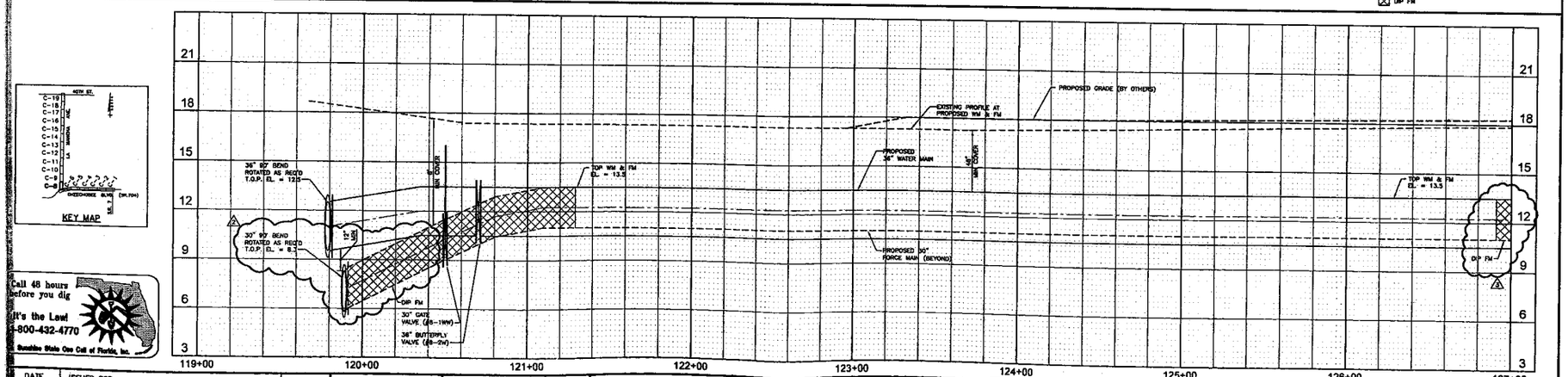

KEY MAP

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DATE	ISSUED FOR	APRV'D BY
4/4/06	ADDENDUM NO. 2	D.L.M.
6/7/06	VILLAGE OF ROYAL PALM BEACH PERMIT CHANGE	D.L.M.

DESIGNED: D.L.M./G.T.D
DRAWN: J.A.J.
CHECKED: R.M.T.
APPROVED: R.L.M

JUN 2 6 2006

DAVID L. MATHEWS, P.E.
NO. 48242

MATHEWS CONSULTING INC.
Civil and Environmental Engineers
1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL. 33401
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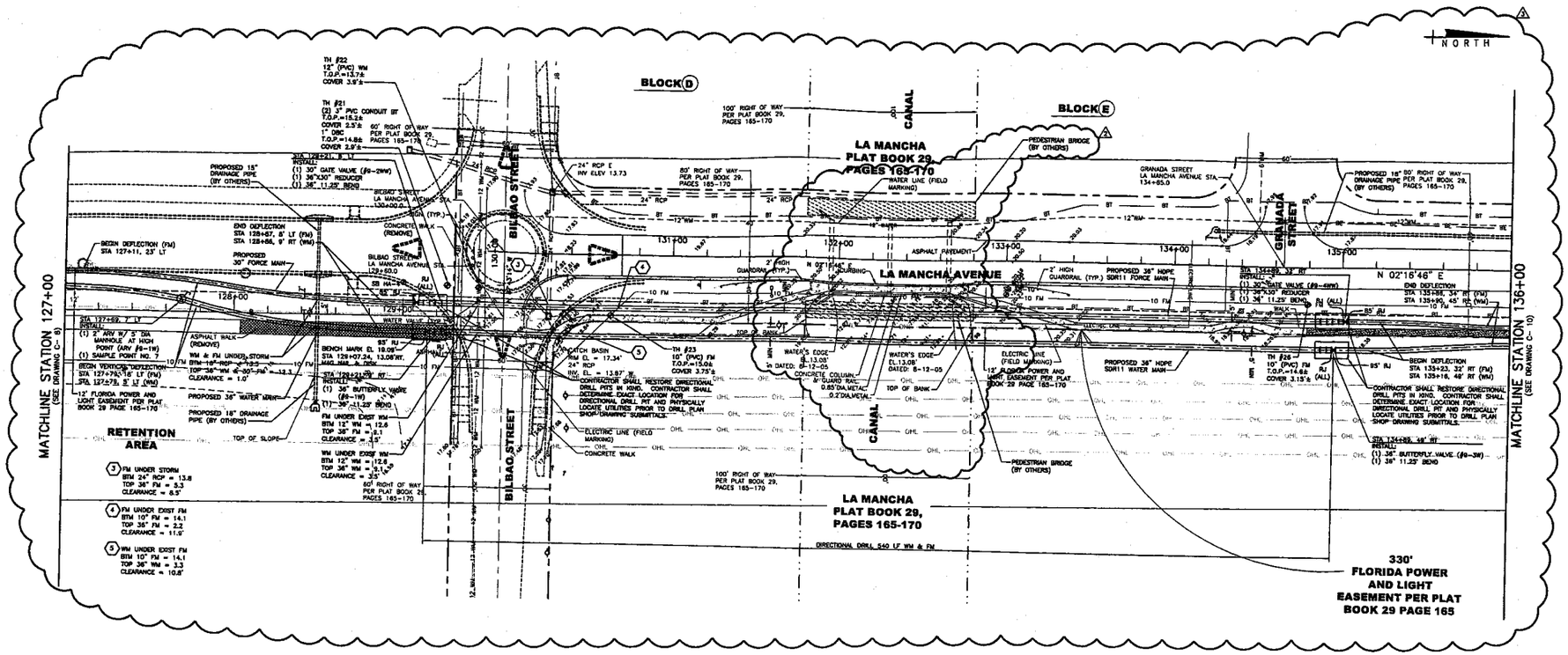
ENGINEER NO.: 1328
CLIENT
PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

LA MANCHA AVENUE
PLAN AND PROFILE – SHEET 8
STA 119+03.55 TO STA 127+00

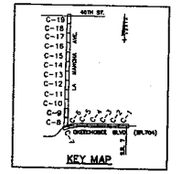
DATE: JUNE, 2006
SHEET: 11 of 27
DRAWING: C-8

Projects\PBC\1328\Cad\Change Order No. 1\1328C08-12.dwg, 6/23/2006 11:41:38 AM, HP Color LaserJet 5500 PCL 6



REFER TO DRAWING C-9B FOR PROFILE

LEGEND
- PAVEMENT MILL & OVERLAY
- OPEN CUT PAVEMENT REPAIR
- PROPOSED SIDEWALK RESTORATION
- REMOVE EXISTING PAVEMENT
- DIP FM



KEY MAP

HORIZ. SCALE 1"=30' 0 15' 30 60'

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4/4/06	ADDENDUM NO. 2	D.L.M.
6/7/06	VILLAGE OF ROYAL PALM BEACH PERMIT CHANGE	D.L.M.

DESIGNED: D.L.M./G.T.D
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APPROVED: R.L.M.

JUN 26 2006
DAVID L. MATHEWS, P.E.
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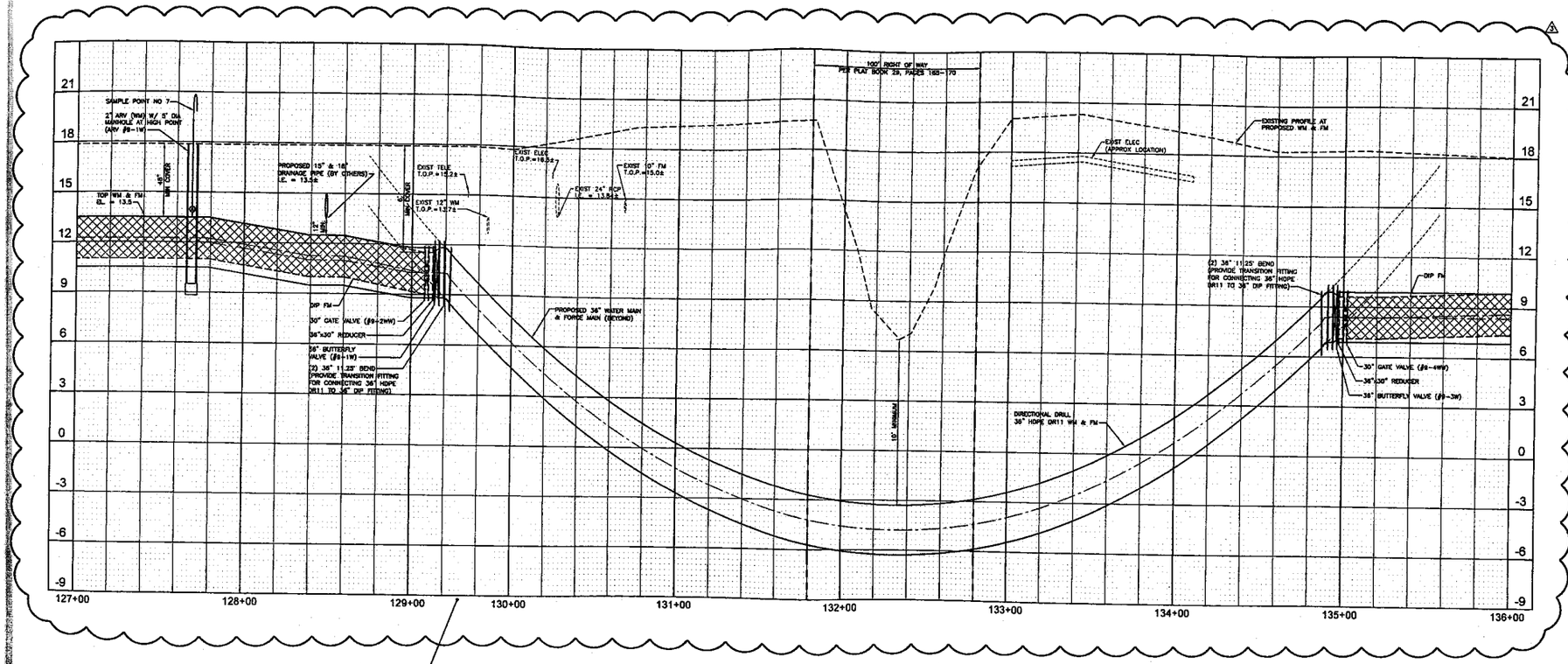
CLIENT PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

LA MANCHA AVENUE
PLAN – SHEET 9
STA 127+00 TO STA 136+00

DATE: JUNE, 2006
SHEET: 12 of 27
DRAWING: C-9A

Projects\PBC\1328\Cad\Change Order No. 1\1328C08-12.dwg, 6/23/2006 11:41:54 AM, HP Color LaserJet 5500 PCL 6



NOTE:
SURVEY BASELINE IS OFFSET 40' TO THE WEST AT STA 128+80. SEE PLAN VIEW ON C-9A.

REFER TO DRAWING C-9A FOR PLAN

LEGEND
- PAVEMENT MILL & OVERLAY
- OPEN CUT PAVEMENT REPAIR
- PROPOSED SIDEWALK RESTORATION
- REMOVE EXISTING PAVEMENT
- DIP FM

VERT. SCALE 1"=3' (0, 1.5', 3')

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6/7/06	VILLAGE OF ROYAL PALM BEACH PERMIT CHANGE	D.L.M.

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APPROVED: R.L.M.

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CLIENT PROJECT NO.: WUD 04-125(B)
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PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
LA MANCHA AVENUE
PROFILE – SHEET 9
STA 127+00 TO STA 136+00

DATE: JUNE, 2006
SHEET: 12 of 27
DRAWING: C-9B

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BLOCK F

1 WM & FM UNDER EXIST WM
BTM 6" WM = 13.0
TOP 30" FM = 9.8
CLEARANCE = 3.1'

2 WM & FM UNDER PROPOSED STORM
BTM 18" RCP = 11.4
TOP 30" FM = 8.9
CLEARANCE = 1.5'

3 FM UNDER EXIST FM
BTM 10" FM = 14.4
TOP 30" FM = 13.9
CLEARANCE = 0.5'

4 FM OVER EXIST GRAVITY SEWER
TOP 10" SEWER = 8.8
BTM 30" FM = 11.2
CLEARANCE = 2.4'

5 FM UNDER EXIST FM
BTM 12" FM = 14.4
TOP 30" FM = 13.9
CLEARANCE = 0.5'

6 WM OVER EXIST GRAVITY SEWER
TOP 10" SEWER = 7.7
BTM 36" WM = 10.7
CLEARANCE = 3.0'

LEGEND
- PAVEMENT MILL & OVERLAY
- OPEN CUT PAVEMENT REPAIR
- PROPOSED SIDEWALK RESTORATION
- REMOVE EXISTING PAVEMENT
- DIP FM

NORTH
HORIZ. SCALE 1"=30'
VERT. SCALE 1"=3'

LA MANCHA PLAT BOOK 29, PAGES 165-170

LA MANCHA AVENUE

CASTILLA STREET

MATCHLINE STATION 136+00 (SEE DRAWING C- 9)

MATCHLINE STATION 145+00 (SEE DRAWING C- 11)

RETENTION AREA

330' FLORIDA POWER AND LIGHT EASEMENT PER PLAT BOOK 29 PAGE 165

KEY MAP

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6/7/06	VILLAGE OF ROYAL PALM BEACH PERMIT CHANGE	D.L.M.

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CLIENT
PROJECT NO.: 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
LA MANCHA AVENUE
PLAN AND PROFILE – SHEET 10
STA 136+00 TO STA 145+00

DATE: JUNE, 2006
SHEET: 13 of 27
DRAWING: C-10

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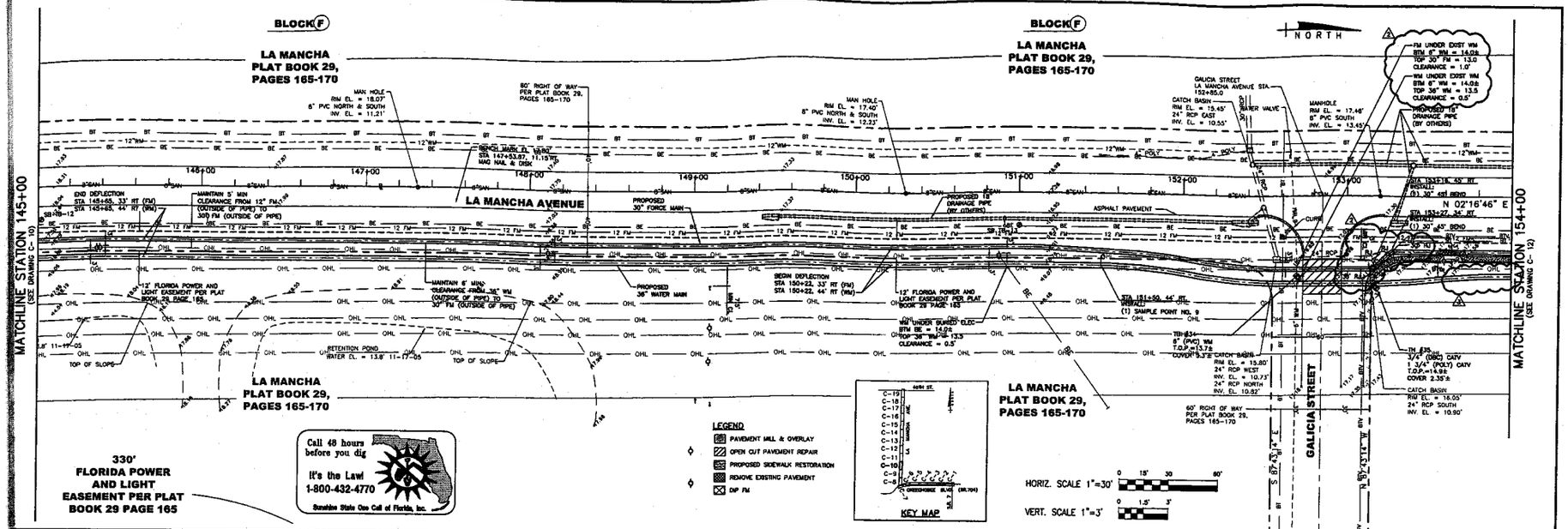

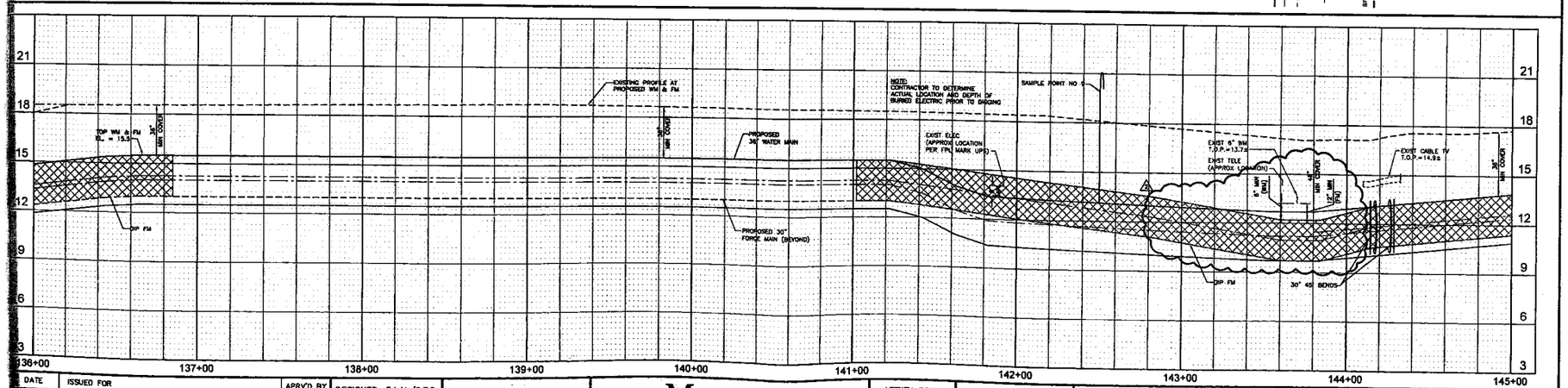

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6/7/06	VILLAGE OF ROYAL PALM BEACH PERMIT CHANGE	D.L.M.

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DRAWN: J.A.J.
CHECKED: R.M.T.
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WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
LA MANCHA AVENUE
PLAN AND PROFILE - SHEET 11
STA 145+00 TO STA 154+00

DATE: JUNE, 2006
SHEET: 14 of 27
DRAWING: C-11

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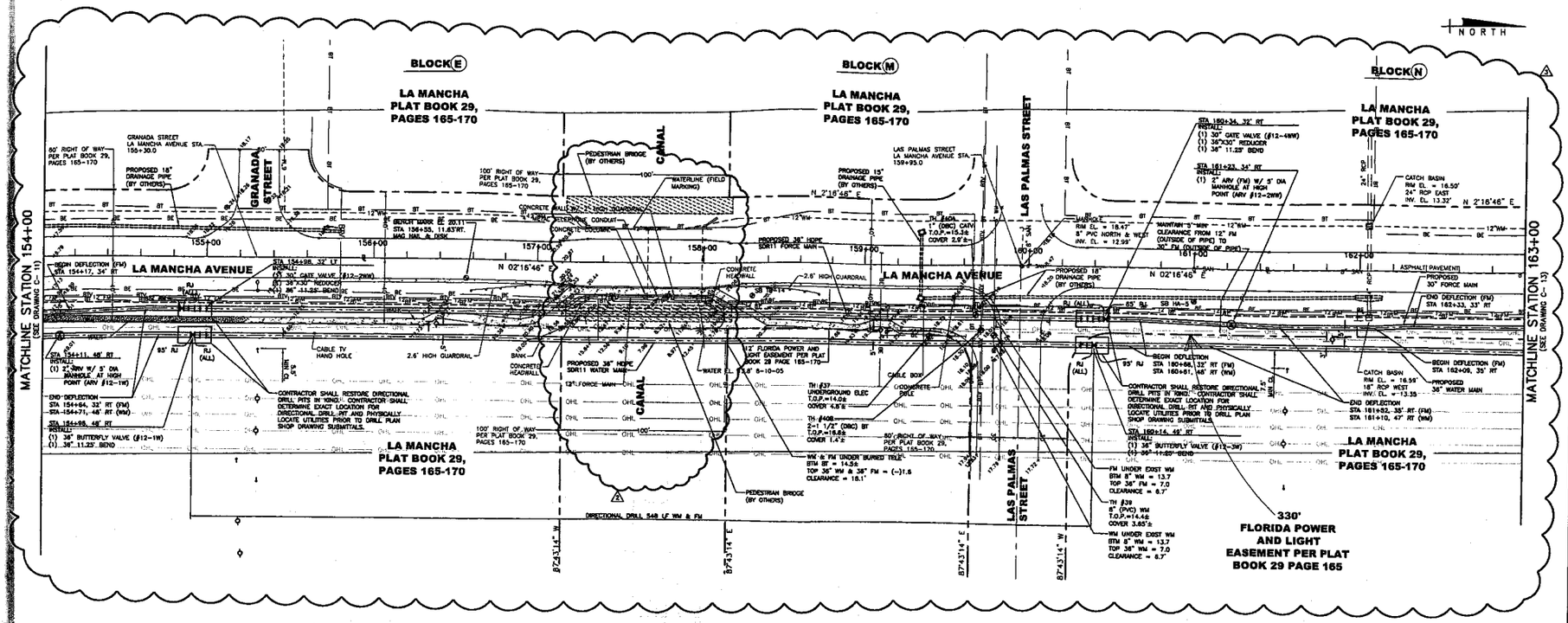

REFER TO DRAWING C-129 FOR PROFILE

LEGEND
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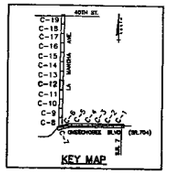
- OPEN CUT PAVEMENT REPAIR
- PROPOSED SIDEWALK RESTORATION
- REMOVE EXISTING PAVEMENT
- DIP FM

HORIZ. SCALE 1"=30' (0, 15', 30', 60')



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DRAWN: J.A.J.
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CLIENT PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
LA MANCHA AVENUE
PLAN – SHEET 12
STA 154+00 TO STA 163+00

DATE: JUNE, 2006
SHEET: 15 of 27
DRAWING: C-12A

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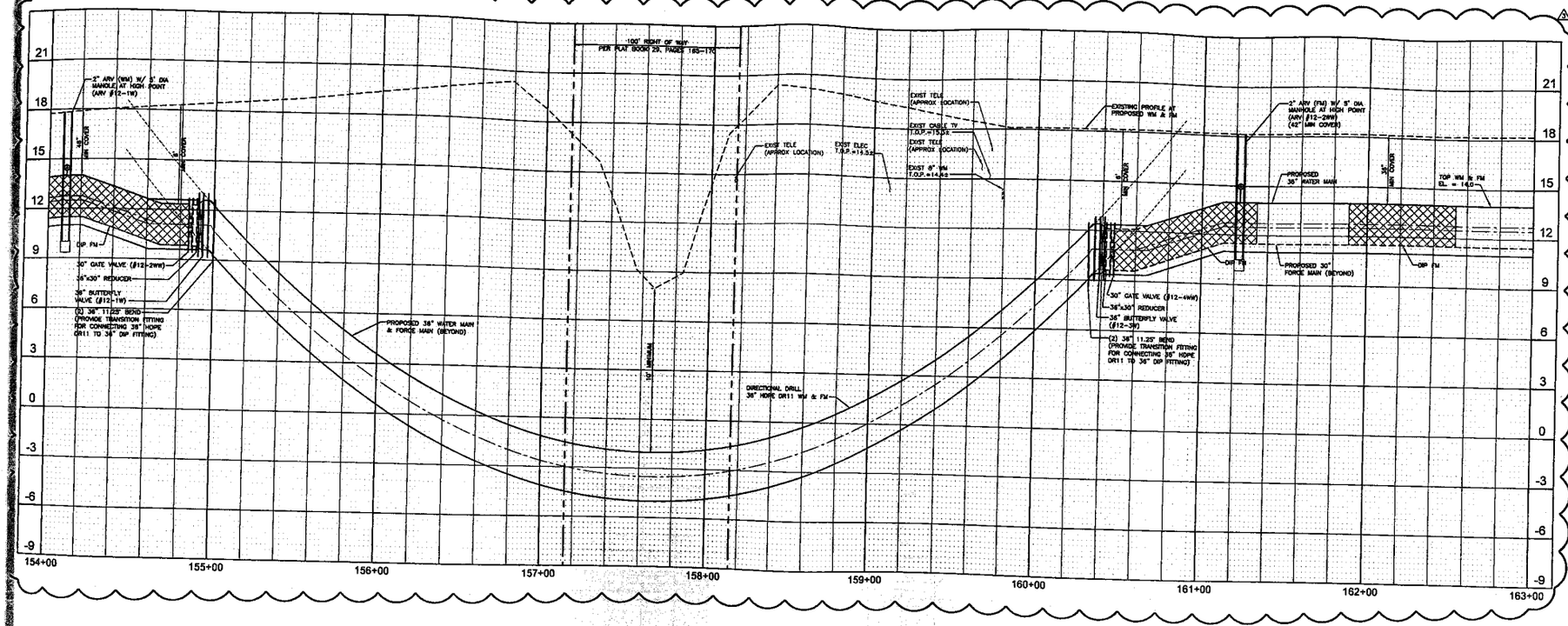

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VERT. SCALE 1"=3'

LEGEND
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- REMOVE EXISTING PAVEMENT
- DIP FM

DATE	ISSUED FOR	APRV'D BY
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6/7/06	VILLAGE OF ROYAL PALM BEACH PERMIT CHANGE	D.L.M.

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DRAWN: J.A.J.
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PROJECT NO.: WUO 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

LA MANCHA AVENUE
PROFILE - SHEET 12
STA 154+00 TO STA 163+00

DATE: JUNE, 2006
SHEET: 15 of 27
DRAWING: C-12B

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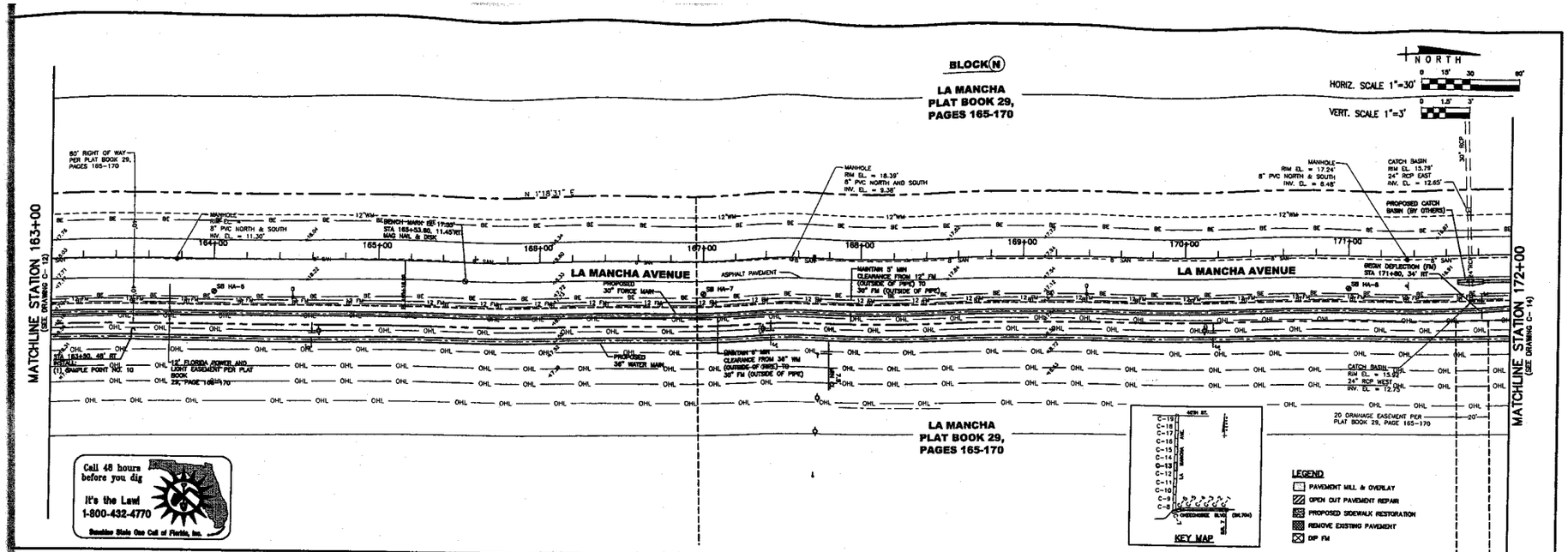

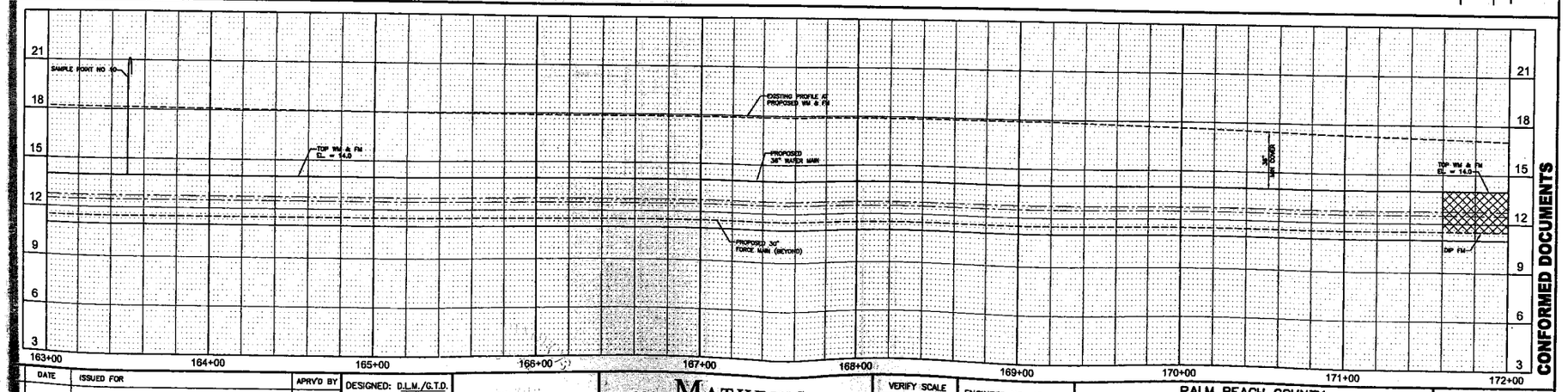

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PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

LA MANCHA AVENUE
PLAN AND PROFILE – SHEET 13
STA 163+00 TO STA 172+00

DATE: MAY 3, 2006
SHEET: 16 of 27
DRAWING: C-13

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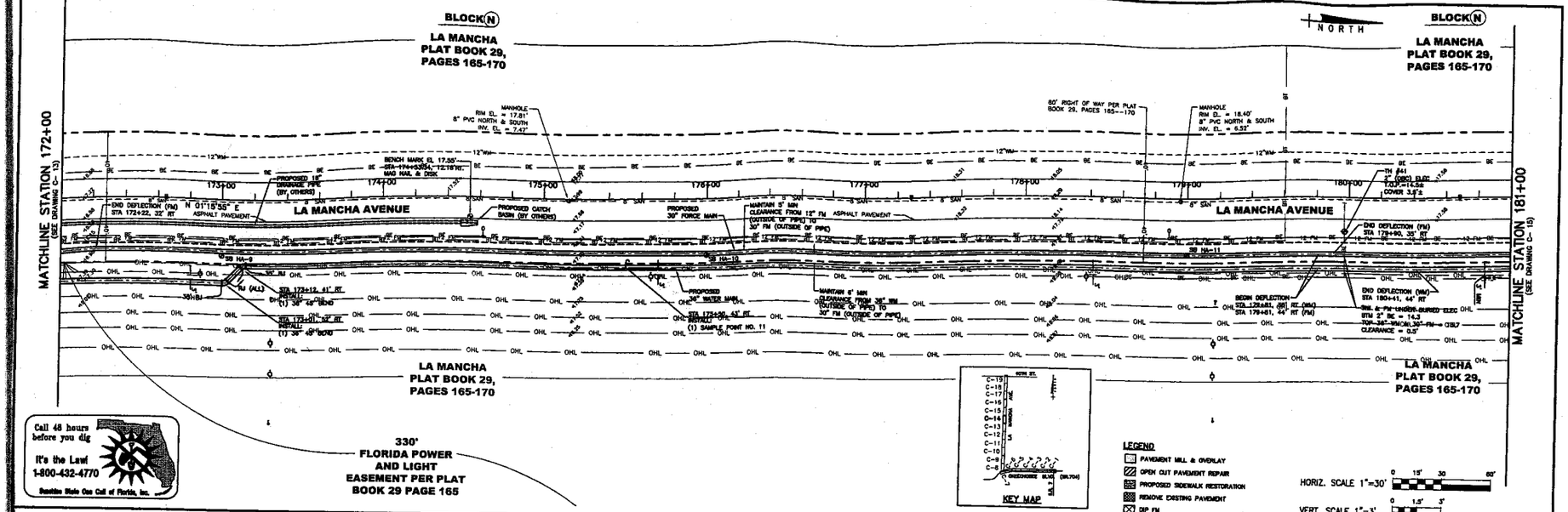

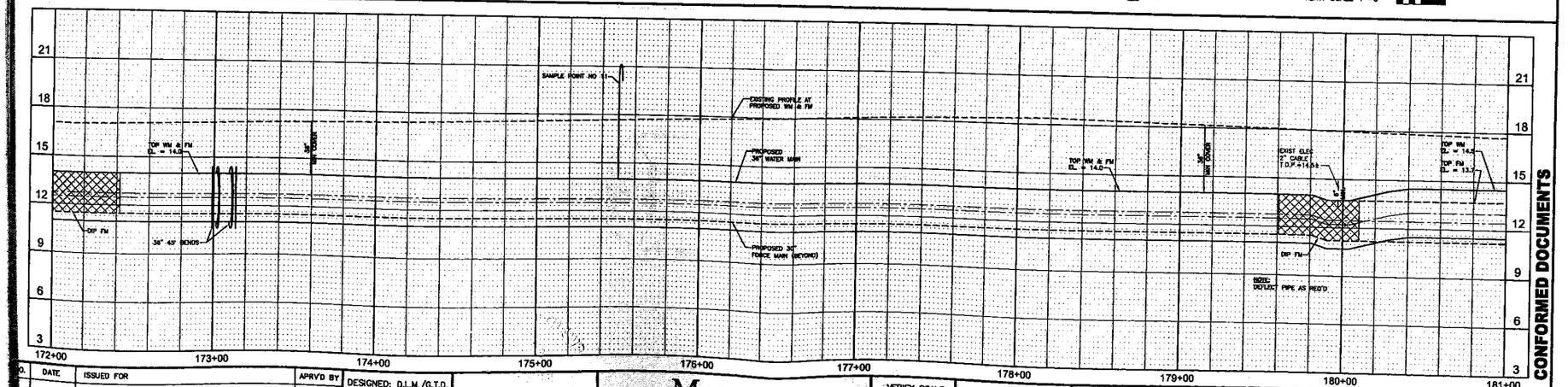

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CLIENT WUD
PROJECT NO.: 04-125(B)
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WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

LA MANCHA AVENUE
PLAN AND PROFILE – SHEET 14
STA 172+00 TO STA 181+00

DATE: MAY 3, 2006
SHEET: 17 of 27
DRAWING: C-14

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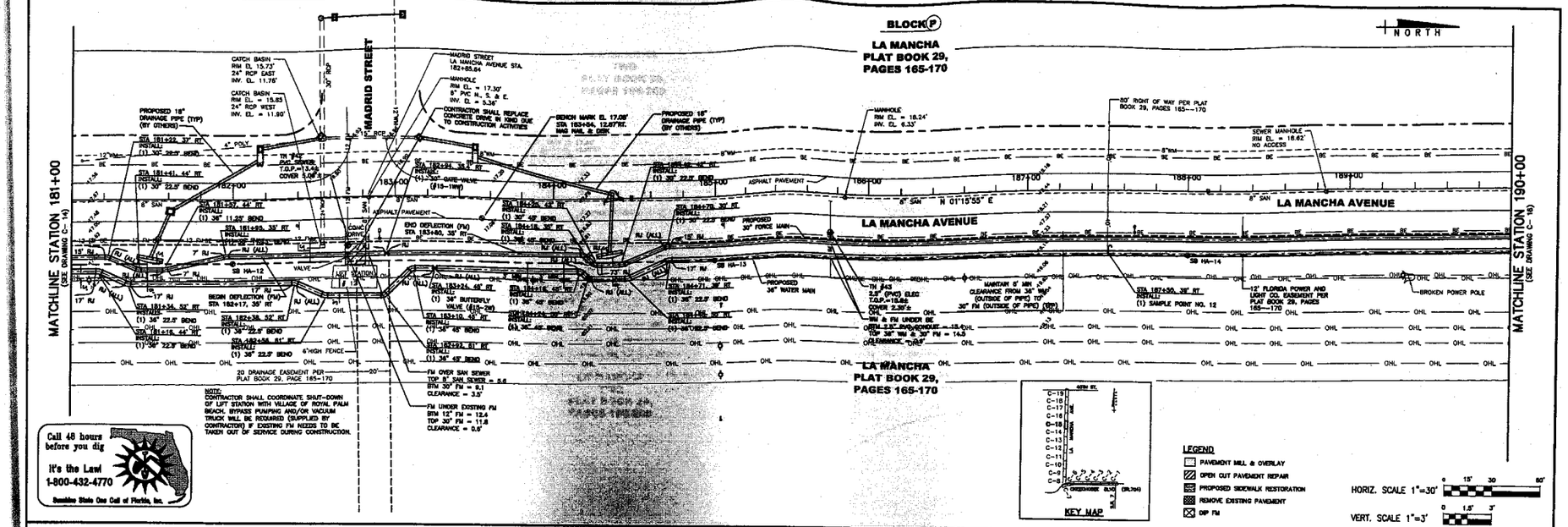

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DAVID L. MATHEWS
No. 19324
STATE OF FLORIDA

MATHEWS CONSULTING INC.
Civil and Environmental Engineers
SUITE 210, WEST PALM BEACH, FL. 33401
LICENSE No. E.B.-0007228

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ORIGINAL DRAWING
ADJUST SCALES
AS NECESSARY

ENGINEER NO.: 1328
CLIENT PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

LA MANCHA AVENUE
PLAN AND PROFILE – SHEET 15
STA 181+00 TO STA 190+00

DATE: MAY 3, 2006
SHEET: 18 of 27
DRAWING: C-15

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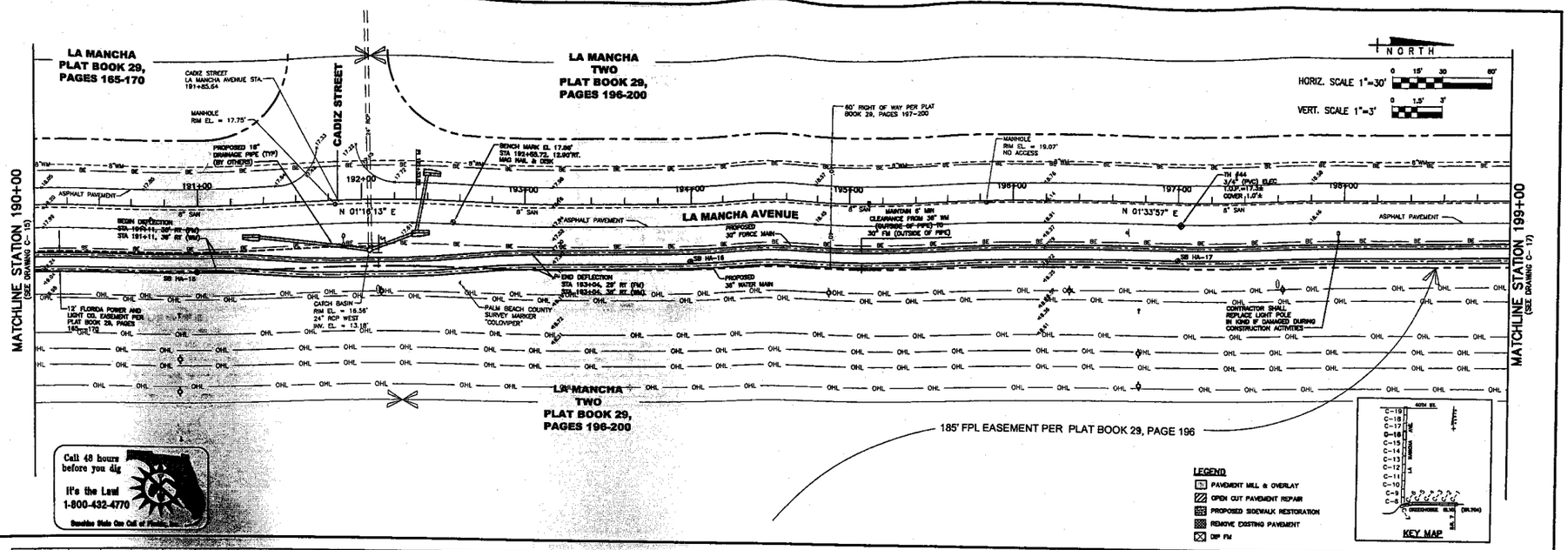

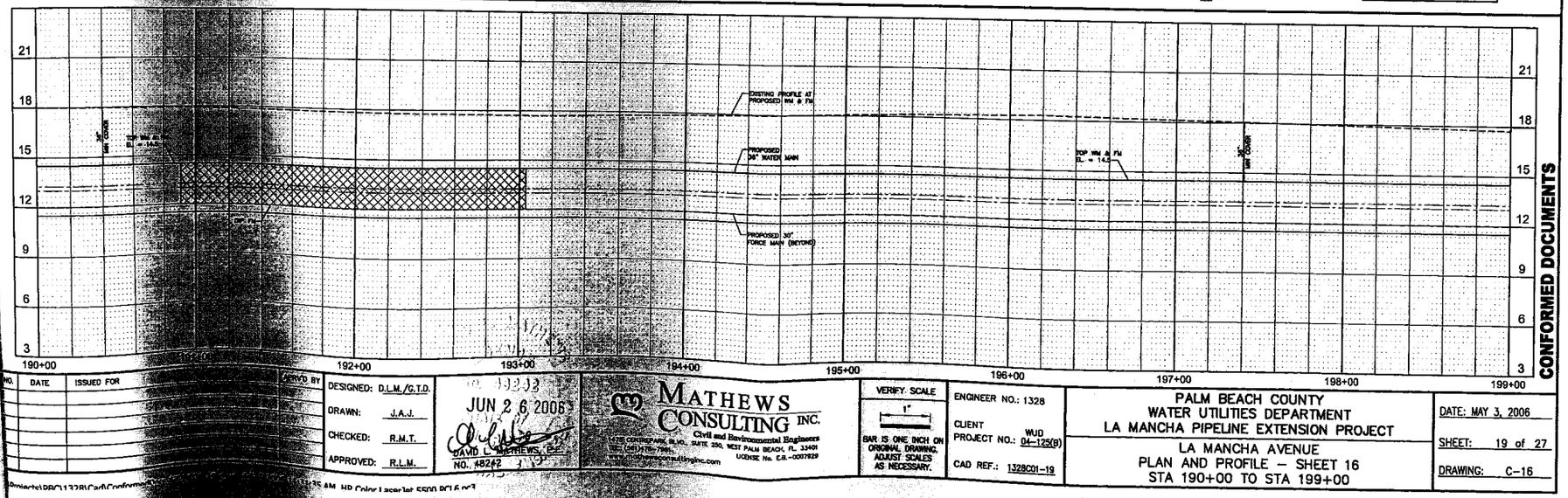

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PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C01-19

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LA MANCHA PIPELINE EXTENSION PROJECT

LA MANCHA AVENUE
PLAN AND PROFILE – SHEET 16
STA 190+00 TO STA 199+00

DATE: MAY 3, 2006
SHEET: 19 of 27
DRAWING: C-16

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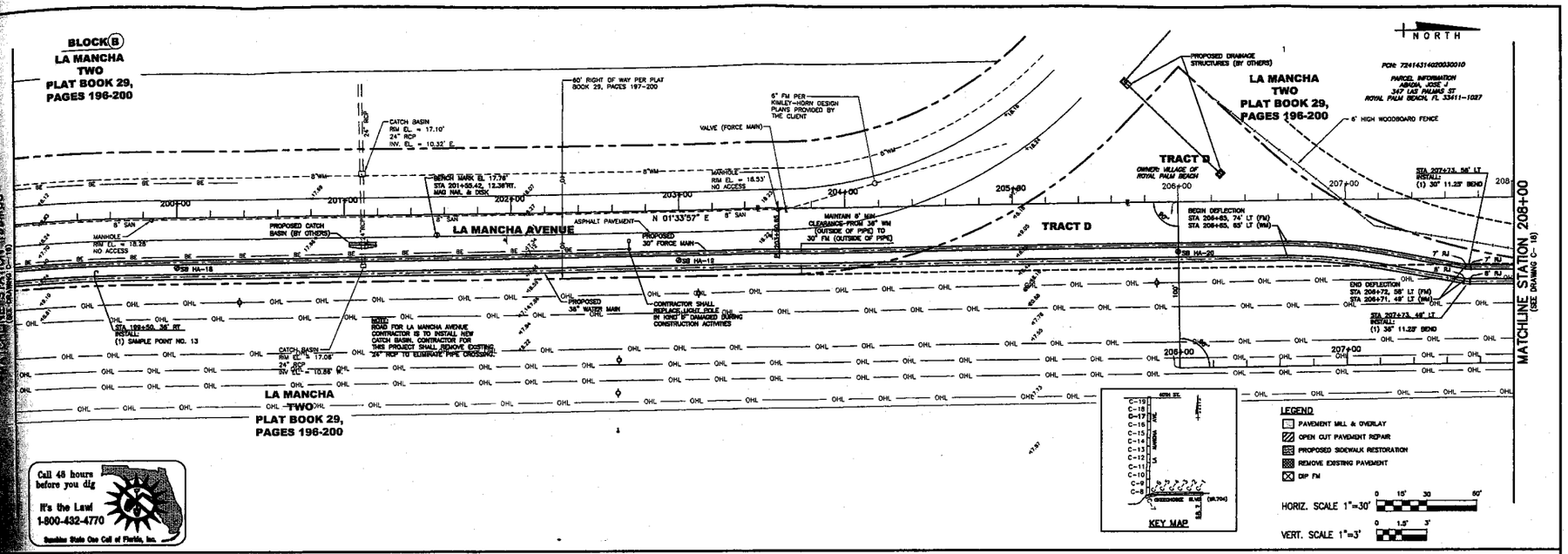

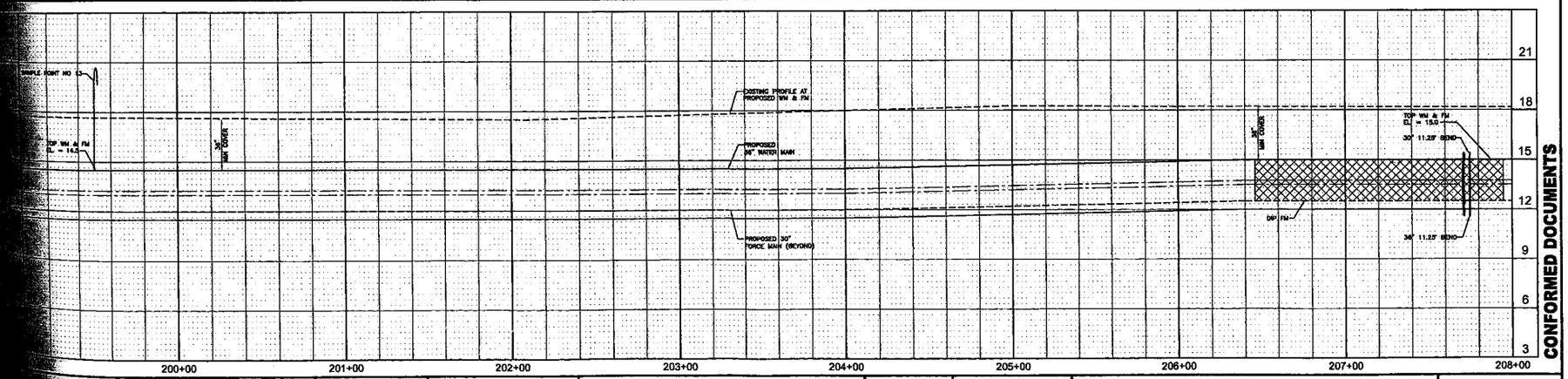

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DRAWN: J.A.J.
CHECKED: R.M.T.
APPROVED: R.L.M.

JUN 2 6 2006

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ENGINEER NO.: 1328
CLIENT WUD
PROJECT NO.: 04-125(9)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
LA MANCHA AVENUE
PLAN AND PROFILE – SHEET 17
STA 199+00 TO STA 208+00

DATE: MAY 3, 2006
SHEET: 20 of 27
DRAWING: C-17

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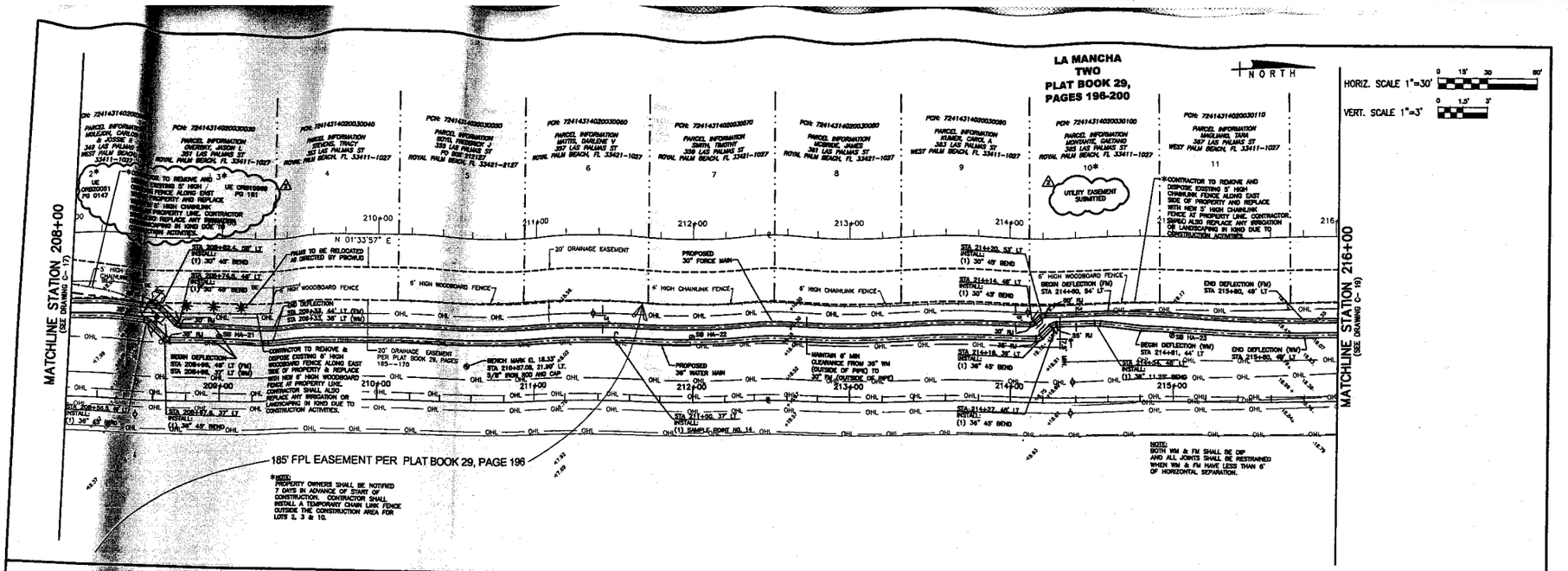

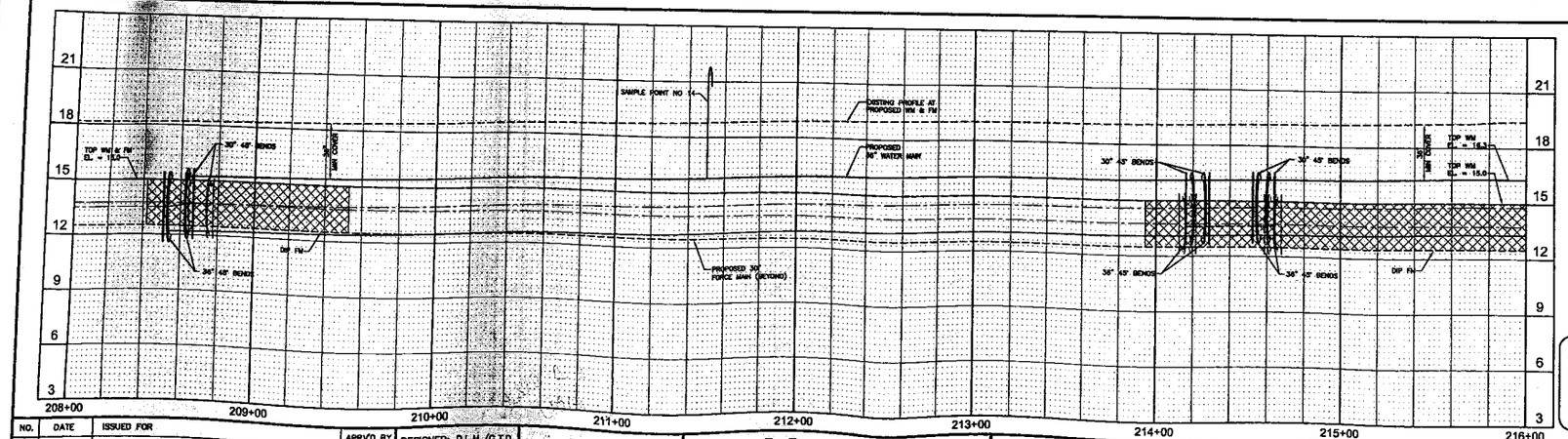

LEGEND
- PAVEMENT MILL & OVERLAY
- OPEN CUT PAVEMENT REPAIR
- PROPOSED SIDEWALK RESTORATION
- REMOVE EXISTING PAVEMENT
- DIP FM

KEY MAP

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1	4/4/06	ADDENDUM NO. 2	D.L.M.

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CHECKED: R.M.T.
APPROVED: R.L.M.

JUN 26 2006
DAVID L. MATHEWS, P.E.
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ENGINEER NO.: 1328
CLIENT WUD
PROJECT NO.: 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT
LA MANCHA AVENUE
PLAN AND PROFILE – SHEET 18
STA 208+00 TO STA 216+00

DATE: MAY 3, 2006
SHEET: 21 of 27
DRAWING: C-18

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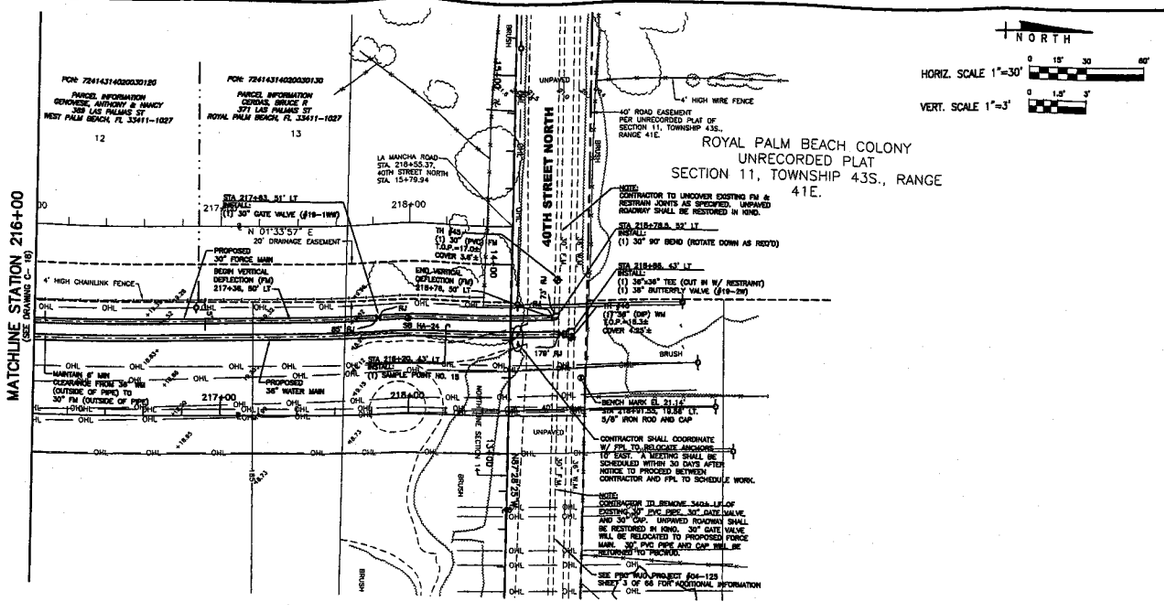

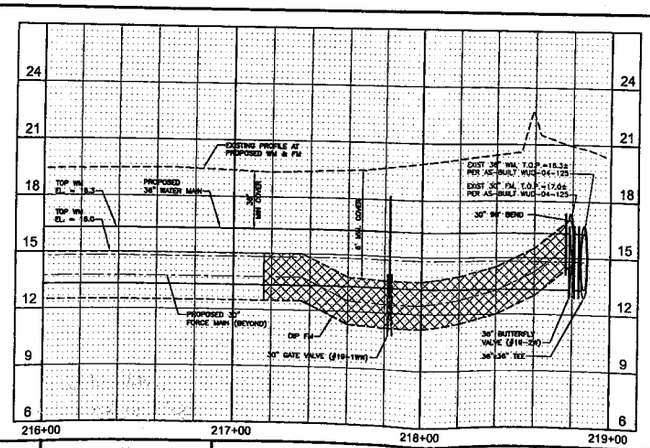

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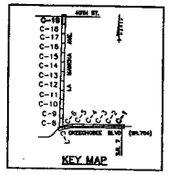

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CLIENT PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C01-19

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

LA MANCHA AVENUE
PLAN AND PROFILE – SHEET 19
STA 216+00 TO STA 218+55.37

DATE: MAY 3, 2006
SHEET: 22 of 27
DRAWING: C-19

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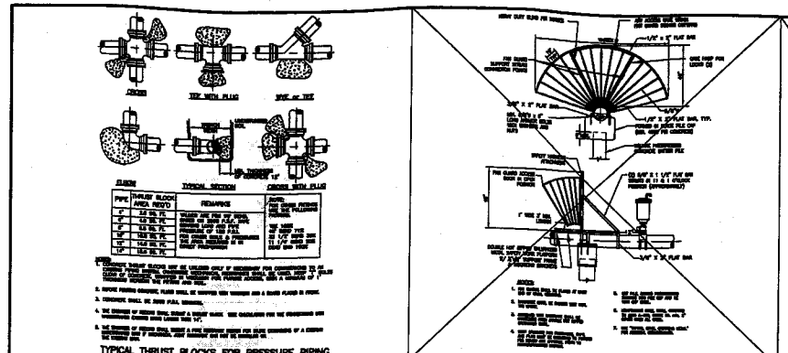
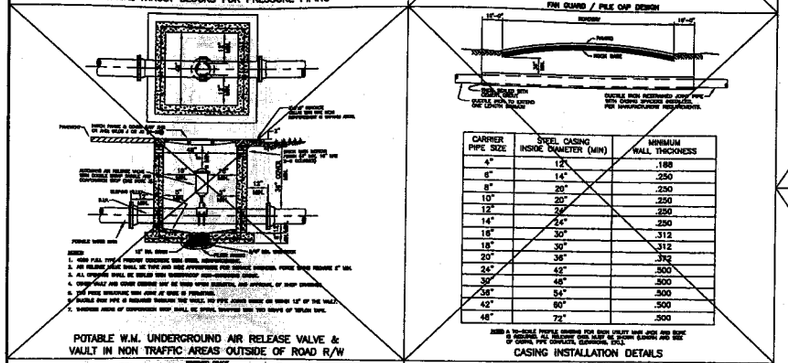


TYPICAL THRUST BLOCKS FOR PRESSURE PIPING

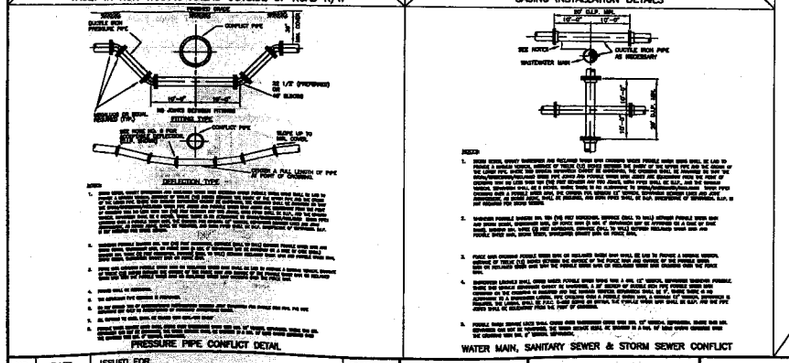
FIRE GUARD / PILE CAP DESIGN



POTABLE W.M. UNDERGROUND AIR RELEASE VALVE & VAULT IN NON TRAFFIC AREAS OUTSIDE OF ROAD R/W

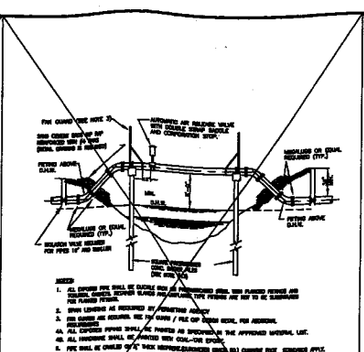
CARRIER PIPE SIZE	STEEL CASING INSIDE DIAMETER (MIN)	MINIMUM WALL THICKNESS
4"	12"	.188
6"	14"	.250
8"	20"	.250
10"	20"	.250
12"	24"	.250
14"	24"	.250
16"	30"	.312
18"	30"	.312
20"	36"	.312
24"	42"	.500
30"	48"	.500
36"	54"	.500
42"	60"	.500
48"	72"	.500

CASING INSTALLATION DETAILS

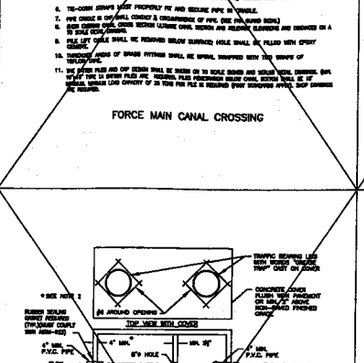


PRESSURE PIPE CONFLICT DETAIL

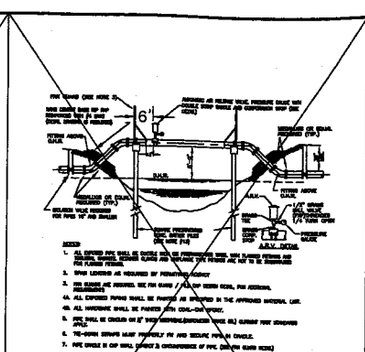
WATER MAIN, SANITARY SEWER & STORM SEWER CONFLICT



FORCE MAIN CANAL CROSSING



OIL/GREASE INTERCEPTOR DETAIL (FOOD HANDLING ESTABLISHMENTS)



POTABLE WATER MAIN CANAL CROSSING

MIN. LENGTH OF PIPE (FEET) TO BE RESTRAINED

(SOURCE: EBAA IRON RESTRAINT LENGTH CALCULATION PROGRAM FOR PVC PIPE, RELEASE 2.1, AND DIPRA THRUST RESTRAINT FOR DUCTILE IRON PIPE, RELEASE 3.2)

FITTING TYPE		PIPE SIZE									
		4"	6"	8"	10"	12"	16"	20"	24"	30"	36"	42"	48"
90° HORIZ. BEND		16	20	28	36	45	54	62	73	84	93	101	
45° HORIZ. BEND		8	9	11	13	15	19	22	26	30	34	38	42
22.5° HORIZ. BEND		3	4	5	6	7	9	11	13	15	17	19	20
11.25° HORIZ. BEND		1	2	3	3	4	4	5	6	7	8	9	10
90° VERT. OFFSET	UPPER BEND	28	41	53	64	74	88	113	134	160	180	207	228
	LOWER BEND	7	10	13	16	18	22	28	33	40	45	52	57
45° VERT. OFFSET	UPPER BEND	12	19	24	29	34	39	48	56	66	77	86	94
	LOWER BEND	3	4	6	7	8	10	12	15	18	20	23	26
22.5° VERT. OFFSET	UPPER BEND	6	9	12	14	17	19	23	27	32	37	41	45
	LOWER BEND	1	2	4	4	4	5	6	7	8	10	11	12
11.25° VERT. OFFSET	UPPER BEND	3	4	6	7	8	9	11	13	16	18	20	23
	LOWER BEND	1	1	1	2	2	2	3	3	4	5	5	6
PLUG (END CAP)		33	45	59	70	83	107	129	151	180	198	227	228
M-J/ME VALVE		33	45	45	45	45	55	69	80	80	99	109	119
TEE (BRANCH RESTRAINT)	4"x 6	53	–	–	–	–	–	–	–	–	–	–	–
	6"x 6	21	30	–	–	–	–	–	–	–	–	–	–
	8"x 6	15	24	42	–	–	–	–	–	–	–	–	–
	10"x 6	18	32	48	56	–	–	–	–	–	–	–	–
	12"x 6	13	30	44	57	68	–	–	–	–	–	–	–
	16"x 6	7	26	41	55	67	80	–	–	–	–	–	–
	20"x 6	1	31	39	52	65	88	109	–	–	–	–	–
	24"x 6	1	18	36	48	62	86	108	128	–	–	–	–
	30"x 6	1	9	30	44	58	83	105	127	154	–	–	–
	36"x 6	1	1	22	38	54	80	103	125	152	179	–	–
	42"x 6	1	1	15	33	49	77	100	122	151	177	201	–
	48"x 6	1	1	7	27	44	73	97	120	149	176	200	222
REDUCER (LARGER PIPE RESTRAINT)	8"x 6	33	–	–	–	–	–	–	–	–	–	–	–
	8"x 8	38	28	–	–	–	–	–	–	–	–	–	–
	10"x 8	27	43	34	41	–	–	–	–	–	–	–	–
	12"x 8	22	39	44	41	–	–	–	–	–	–	–	–
	16"x 8	99	99	78	73	65	–	–	–	–	–	–	–
	20"x 8	133	116	107	105	81	63	–	–	–	–	–	–
	24"x 8	146	140	133	131	111	92	69	–	–	–	–	–
	30"x 8	157	153	148	141	133	113	87	56	–	–	–	–
	36"x 8	162	178	173	168	163	147	129	101	56	–	–	–
	42"x 8	208	202	199	194	189	175	160	138	100	54	–	–
	48"x 8	226	224	221	217	213	201	187	169	136	96	53	–

NOTES:
1. THE DATA IN THE ABOVE TABLE ARE BASED UPON THE FOLLOWING INSTALLATION CONDITIONS:
   SOIL TYPE=SW90 — DEPTH OF BURY=3'
   TEST PRESSURE=150 PSI — SAFETY FACTOR=1.5
   TRENCH TYPE=STANDARD — VERTICAL OFFSET=3'
2. THE RESTRAINED PIPE LENGTHS APPLY TO DUCTILE IRON AND PVC PIPE.
3. ALL JOINTS BETWEEN FITTINGS AND OTHER SERVICES SHALL BE RESTRAINED.
4. REMAINING PIPE LENGTHS APPLY TO PIPE ON BOTH SIDES OF VALVES AND PITTINGS.

MECHANICAL THRUST RESTRAINT – MINIMUM PIPE LENGTHS

GENERAL NOTES

DEFINITIONS

1. DEPARTMENT – THE PALM BEACH COUNTY WATER UTILITIES DEPARTMENT.
2. CONTRACTOR – UTILITY CONTRACTOR AND ALL UTILITY SUBCONTRACTORS.
3. ENGINEER – ENGINEER RESPONSIBLE FOR INSPECTION AND CERTIFICATION.

PROCEDURE

1. A PRE-CONSTRUCTION MEETING IS TO BE HELD PRIOR TO DELIVERY OF MATERIALS AND INITIATION OF ANY POTABLE WATER, RECLAIMED WATER AND/OR WASTEWATER CONSTRUCTION. THE MEETING SHALL BE ATTENDED BY THE DEPARTMENT, CONTRACTOR, ENGINEER AND OTHERS INTERESTED PARTIES.
2. ANY REVISIONS TO THE APPROVED PLANS SHALL BE CALLED TO THE ATTENTION OF THE DEPARTMENT PRIOR TO THE PRE-CONSTRUCTION MEETING. REVISED PLANS MUST BE APPROVED PRIOR TO THE MEETING.
3. TWO (2) COPIES OF THE CURRENT APPROVED MATERIAL LIST AND ALL NECESSARY SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO SCHEDULING TO THE PRE-CONSTRUCTION MEETING.
4. ALL APPLICABLE PERMITS MUST BE OBTAINED PRIOR TO COMMENCEMENT OF CONSTRUCTION (DOT, HEALTH DEPARTMENT, COUNTY ENGINEER, ETC.).
5. THE CONTRACTOR SHALL MAINTAIN A CURRENT APPROVED SET OF CONSTRUCTION PLANS ON JOB SITE.
6. ALL MATERIALS SUPPLIED SHALL CONFORM TO PRODUCT LIST AND SHOP DRAWINGS AS APPROVED UNDER THE CONTRACT. SUBSTITUTE MATERIALS SHALL NOT BE APPROVED AFTER DELIVERY TO THE JOB SITE, ALL MATERIALS TO BE APPROVED, SUBSTITUTIONS SHALL BE APPROVED PRIOR TO DELIVERY OF THOSE MATERIALS TO THE JOB SITE.
7. THE LOCATIONS OF CONNECTIONS AND BENDS ON THE APPROVED PLANS ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO FABRICATION OF PIPE. THE DEPARTMENT IS NOT RESPONSIBLE FOR THE ACCURACY OF THE APPROVED PLANS OR THE DESIGN CONTAINED THEREIN. ACCEPTANCE OF THE ACCURACY OF THESE PLANS OR THE DESIGN CONTAINED THEREIN, BY THE DEPARTMENT IS NO EXPRESS OR IMPLIED WAIVER OF THE APPROVED PLANS OR TO BE OPPOSED TO THE JUDGMENT OF THE DEPARTMENT BY THE ENGINEER AND CONTRACTOR. THE CONTRACTOR SHALL CONFIRM AND INSTALL (IF NECESSARY) ADEQUATE MECHANICAL PIPE / JOINT RESTRAINT ON EXISTING PIPES PRIOR TO CONNECTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES FROM DAMAGE OR DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING SUCH BARRICADES AS NECESSARY TO PROTECT THE HEALTH, SAFETY AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATIONS FROM ALL OTHER UTILITY FACILITIES.
10. THE CONTRACTOR OR ENGINEER SHALL SCHEDULE INSPECTIONS AND NOTIFY A MINIMUM OF 72—48 HOURS IN ADVANCE.
11. NO CONNECTION TO OR ANY OTHER CONSTRUCTION SHALL BE PERFORMED ON AN EXISTING DEPARTMENT OWNED OR MAINTAINED MAIN OR STRUCTURE WITHOUT THE PRESENCE OF A DEPARTMENT INSPECTOR.
12. ANY/ALL PROPOSED HORIZONTAL DIRECTIONAL DRILL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND THE APPROVED DRILLING SCHEDULE. ANY/ALL DEVIATIONS FROM THE APPROVED DRILLING SCHEDULE SHALL BE CALLED TO THE ATTENTION OF THE DEPARTMENT FOR RESOLUTION. CHANGES FROM THE APPROVED PLANS MUST BE APPROVED IN ADVANCE BY THE DEPARTMENT.
13. UPON COMPLETION OF CONSTRUCTION & FINAL INSPECTION SHALL VERIFY PROPER ADHERENCE TO ALL FACETS OF THE PLANS AND SPECIFICATIONS.

PRESSURE PIPE NOTES

1. THERE SHALL BE 36" MINIMUM COVER FROM FINISHED GRADE TO TOP OF PIPE.
2. DUCTILE IRON PIPE (DIP) THICKNESS SHALL CONFORM TO THE DEPARTMENT'S APPROVED MATERIAL LIST. POTABLE WATER AND RECLAIMED WATER SLIP DIP SHALL BE CEMENT LINED. FORCE MAIN DIP SHALL BE CERAMIC EPOXY LINED.
3. PVC PRESSURE PIPE SHALL BE C-900, SDR-32.5, 150 PSI.
4. ALL FITTINGS SHALL BE DUCTILE IRON WITH MECHANICAL JOINTS AND CEMENT OR APPROVED EPOXY LINING.
5. POTABLE WATER, RECLAIMED WATER AND WASTEWATER FORCE MAIN VALVES 12 INCHES AND SMALLER SHALL BE RESILIENT SEAT GATE VALVES. TWELVE-INCH (12") FORCE MAIN VALVES SHALL BE RESILIENT SEAT GATE VALVES. LARGER FORCE MAIN VALVES MAY BE PLUG VALVES. PLUG VALVES 4" APPROVED IN ADVANCE BY DEPARTMENT. POTABLE WATER AND RECLAIMED WATER MAIN VALVES LARGER THAN 12 INCHES SHALL BE BUTTERFLY VALVES.
6. ALL TIE-IN/CROSS, PIPE LAYING, BACKFILL, PRESSURE TESTING, AND DISINFECTION PROCEDURES SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY AND HEALTH DEPARTMENT STANDARDS AND REGULATIONS.

GRAVITY SEWER NOTES

1. MANHOLES AND COVER CASTINGS SHALL BE INSPECTED BY THE DEPARTMENT BEFORE PLACEMENT AND FIELD APPLIED SURFACE TREATMENT (PAINTED WITH APPROVED COLORING).
2. ALL OPENINGS IN PRECAST MANHOLES SHALL BE CAST AT TIME OF MANUFACTURE OR CORED IN FIELD.
3. ALL MANHOLES SHALL BE SET PLUMB TO LINE AND GRADE, AND SHALL REST ON A FINAL CHEMICALLY CLEANED SURFACE. BACK SHALL PROVIDE UNIFORM BEARING UNDER BASE.
4. PVC WASTEWATER GRAVITY PIPE SHALL CONFORM TO ASTM D-3034, SDR 26 SEWER PVC PIPE OR PVC C-900 SDR 18, PIPE AND FITTINGS, WITH PUSH-ON RUBBER GASKET JOINTS.
5. DIP GRAVITY SEWER PIPE SHALL BE PRESSURE CLASS 350, EPOXY LINED.
6. THE COMPLETED GRAVITY SEWER/DRAIN SYSTEM SHALL BE INSPECTED BY THE DEPARTMENT TO VERIFY ALIGNMENT AND INTEGRITY. THOSE SHALL BE NO LEAKAGE. ALL SHALL SHALL BE LAMPED, EXAMINED & A FULL CIRCLE OF LIGHT, DURING THOSE TESTS, THE MAIN SHALL BE CLEAN AND DRY.

CONFORMED DOCUMENTS

NO.	DATE	ISSUED FOR	APRV'D BY

DESIGNED: D.L.M./G.T.D.
DRAWN: J.A.J.
CHECKED: R.M.T.
APPROVED: R.L.M.

JUN 2 6 2006

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ENGINEER NO.: 1328
CLIENT PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C22

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

STANDARD DETAILS

DATE: MAY 3, 2006
SHEET: 25 of 27
DRAWING: C-22

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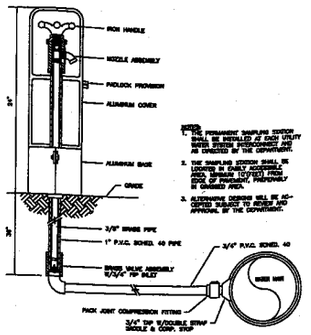

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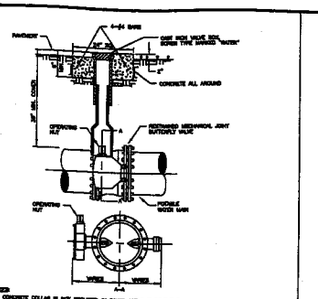
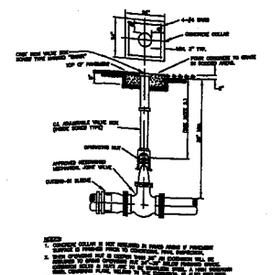
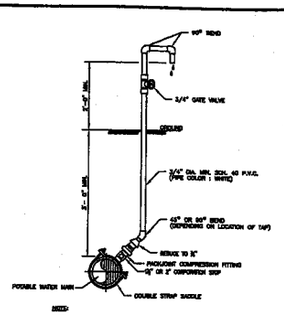


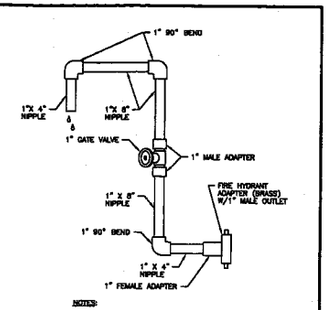
TYPICAL BUTTERFLY VALVE SETTING



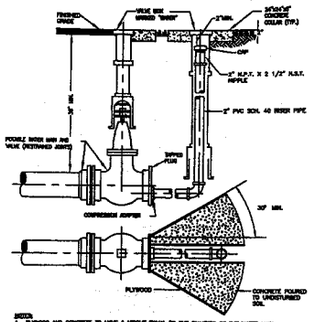
POTABLE WATER MAIN TYPICAL
GATE VALVE SETTING AND CUT-IN DETAIL



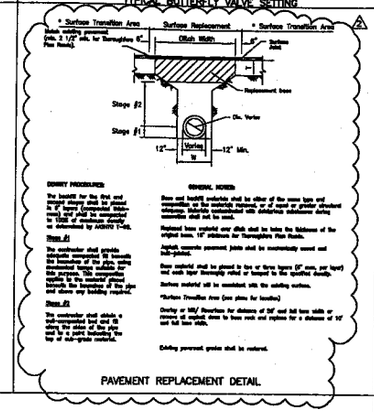
POTABLE WATER MAIN TYPICAL SAMPLING POINT



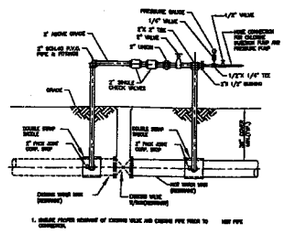
HYDRANT SAMPLING POINT



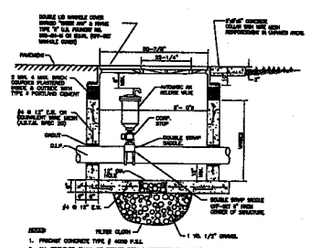
POTABLE WATER MAIN TYPICAL 2" TERMINAL BLOWOFF



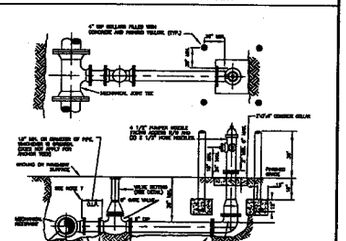
PAVEMENT REPLACEMENT DETAIL



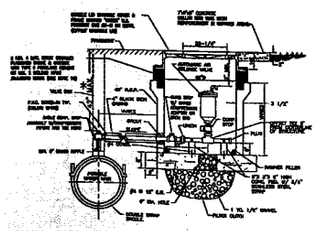
PRESSURE PIPE TIE-IN (BYPASS) DETAIL



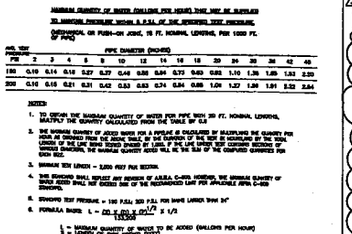
POTABLE WATER MAIN AIR RELEASE MANHOLE
IN PAVED AREAS AND ROAD R/W



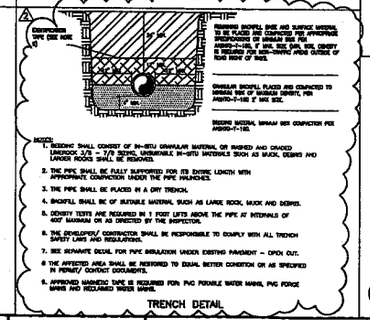
TYPICAL FIRE HYDRANT INSTALLATION WITH BOLLARDS



POTABLE WATER MAIN OFFSET AIR RELEASE
VALVE AND MANHOLE



POTABLE WATER PRESSURE TEST CRITERIA



TRENCH DETAIL

CONFORMED DOCUMENTS

NO.	DATE	ISSUED FOR	APRV'D BY
1	4/4/06	ADDENDUM No. 2	D.L.M.

DESIGNED: D.L.M./C.T.D.
DRAWN: J.A.J.
CHECKED: R.M.T.
APPROVED: R.L.M

JUN 26 2006

DAVID L. MATHEWS, P.E.
NO. 48242

MATHEWS CONSULTING INC.
Civil and Environmental Engineers
1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL. 33401
TEL. (561)478-7981
www.mathewsconsultinginc.com
LICENSE No. E.B.-0007929

VERIFY SCALE
1"
BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

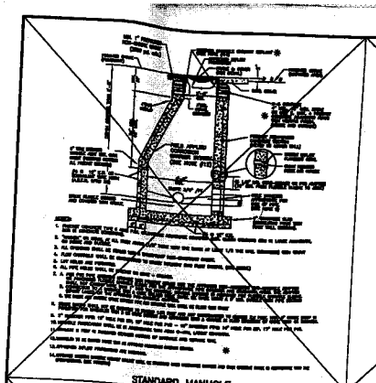
ENGINEER NO.: 1328
CLIENT PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C23

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

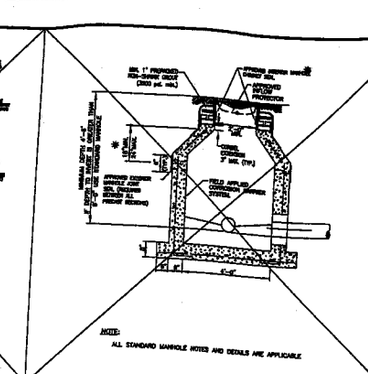
STANDARD DETAILS

DATE: MAY 3, 2006
SHEET: 26 of 27
DRAWING: C-23

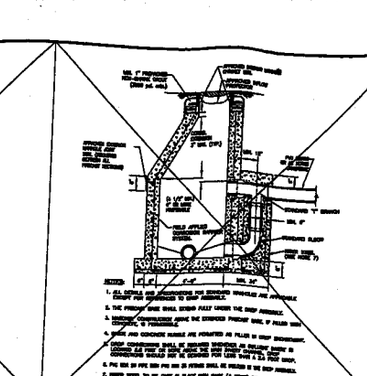
S:\Projects\PBC\1328\Cad\Conformed\Dwgs\1328C23.dwg, 6/23/2006 11:33:16 AM, HP Color LaserJet 5500 PCL6.pc3



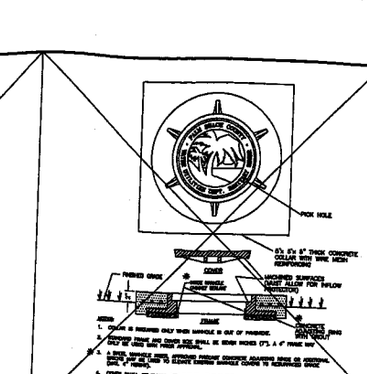
STANDARD MANHOLE



SHALLOW MANHOLE



DROP CONNECTION PRECAST MANHOLE



SANITARY SEWER MANHOLE FRAME & COVER

I. FORCE MAIN OUTSIDE OF WELLFIELD PROTECTION ZONE

MINIMUM QUANTITY OF WATER (GALLONS PER HOUR) THAT MAY BE SUPPLIED TO MAINTAIN PRESSURE WITHIN A P.S.I. OF THE SPECIFIED TEST PRESSURE, AFTER EXPANSION, OR PUSH-ON JOINT, 18 FT. NOMINAL LENGTHS, PER 1000 FT. OF PIPE

AVG. TEST PRESS.	PIPE DIAMETER (INCHES)													
PSI	2	3	4	6	8	10	12	14	16	18	20	24	30	36	42	48
150	0.10	0.14	0.18	0.27	0.37	0.46	0.55	0.64	0.73	0.83	0.92	1.10	1.38	1.65	1.93	2.20
200	0.12	0.16	0.21	0.31	0.42	0.53	0.63	0.74	0.84	0.95	1.06	1.27	1.59	1.91	2.23	2.54

ADDED:

1. TO OBTAIN THE MINIMUM QUANTITY OF WATER FOR PIPE WITH 20 FT. NOMINAL LENGTHS, MULTIPLY THE QUANTITY CALCULATED FROM THE TABLE BY 0.9
2. THE MINIMUM QUANTITY OF WATER WHEN FOR 1 HYDRANT IS CALCULATED BY MULTIPLYING THE QUANTITY FOR 1 HYDRANT FROM THE TABLE BY THE NUMBER OF HYDRANTS IN THE LINE. ONLY 2 HYDRANTS OF THE LINE NEED BE CONSIDERED AT ONE TIME, REGARDLESS OF THE TOTAL NUMBER OF HYDRANTS IN THE LINE. FOR LINE LENGTHS OVER 1000 FT., THE MINIMUM QUANTITY SHALL BE INCREASED PROPORTIONALLY. WHERE VALVES WILL BE IN THE LINE OF THE COMPLETED CONSTRUCTION FOR SUCH SIZE.
3. MINIMUM TEST LENGTH = 1,000 FEET PER SEGMENT.
4. THE MEASURED SHALL REPLACE ANY MEMBERS OF A.W.W.A. C-600, HOWEVER, THE MINIMUM QUANTITY OF WATER ADDED SHALL NOT EXCEED 80% OF THE RECOMMENDED LOSS FOR APPLICABLE A.W.W.A. C-600 STANDARD.
5. MINIMUM TEST PRESSURE = 150 P.S.I.G. 200 P.S.I. FOR MAINS LARGER THAN 24"
6. FORMULA USED: $L = \frac{SD\sqrt{P}}{148,000}$ $Q = \frac{ND}{7400}\sqrt{P}$ x 1/2

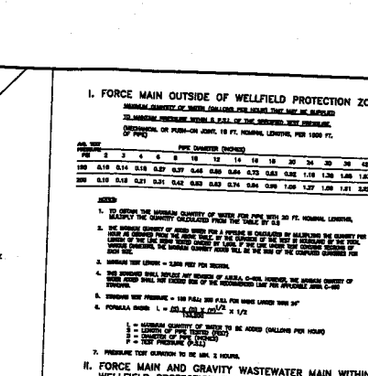
L = LENGTH OF PIPE TO BE TESTED
S = QUANTITY OF WATER TO BE ADDED (GALLONS PER HOUR)
D = NOMINAL DIAMETER OF PIPE (INCH)
N = NUMBER OF JOINTS IN LENGTH L
P = TEST PRESSURE (P.S.I.)

7. PRESSURE TEST DURATION TO BE MIN. 2 HOURS.

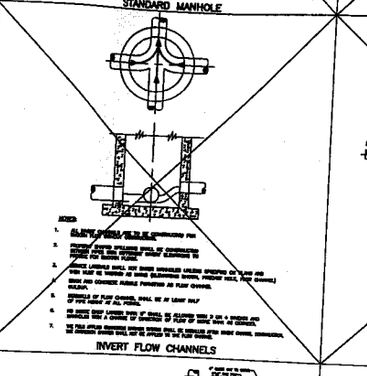
II. FORCE MAIN AND GRAVITY WASTEWATER MAIN WITHIN WELLFIELD PROTECTION ZONE.

NOTES: 1. PRESSURE TEST PROCEDURE TO FOLLOW THE CURRENT AWWA C-600 STANDARD (150psi, 2O HOUR DURATION).
2. THERE SHALL BE NO PRESSURE DROP IN THE PIPE DURING THE TEST ("ZERO" FILL-UP TOLERANCE).

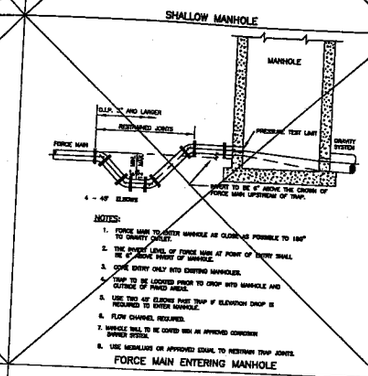
WASTEWATER PRESSURE TEST CRITERIA



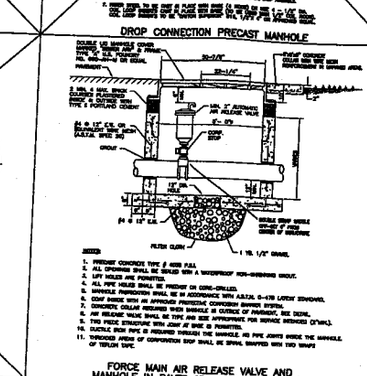
SAND/OIL INTERCEPTOR DETAIL



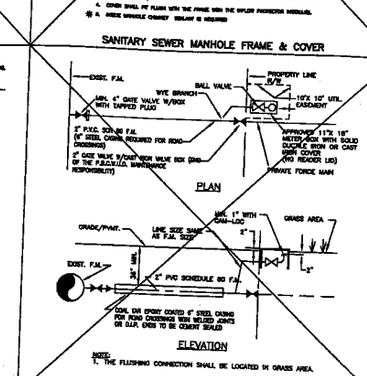
INVERT FLOW CHANNELS



FORCE MAIN ENTERING MANHOLE



FORCE MAIN AIR RELEASE VALVE AND MANHOLE IN PAVED AREAS AND ROAD R/W



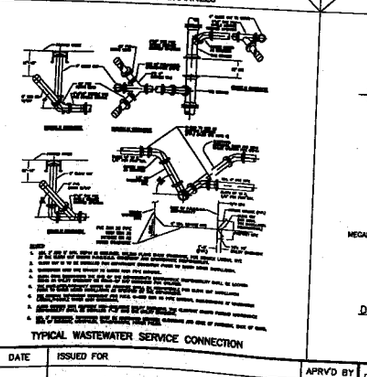
SANITARY SEWER MANHOLE FRAME & COVER

PLAN

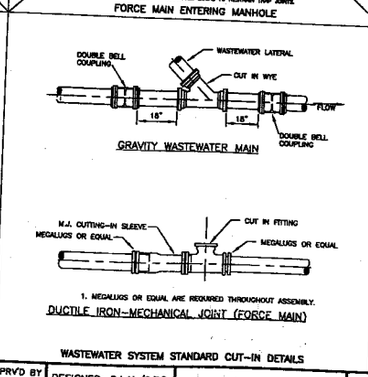
ELEVATION

NOTE: 1. THE FLUSHING CONNECTION SHALL BE LOCATED IN GRASS AREA.

FORCE MAIN UNDER 3" IN DIAMETER



TYPICAL WASTEWATER SERVICE CONNECTION

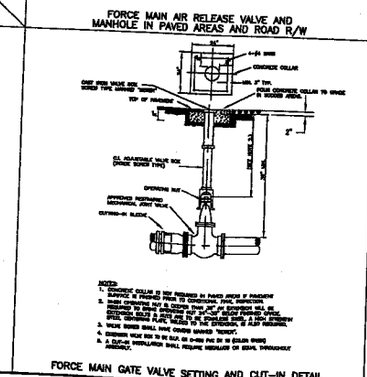


GRAVITY WASTEWATER MAIN

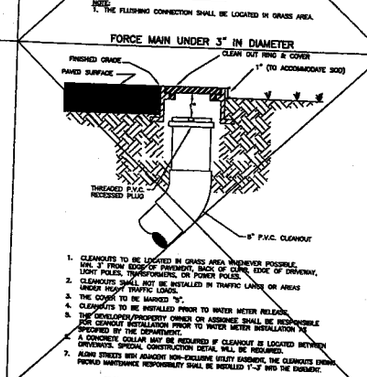
DUCTILE IRON-MECHANICAL JOINT (FORCE MAIN)

1. MEGALUGS OR EQUAL ARE REQUIRED THROUGHOUT ASSEMBLY.

WASTEWATER SYSTEM STANDARD CUT-IN DETAILS



FORCE MAIN GATE VALVE SETTING AND CUT-IN DETAIL



TYPICAL CLEANOUT INSTALLATION

CONFORMED DOCUMENTS

NO.	DATE	ISSUED FOR	APRVD BY

DESIGNED: D.L.M./C.T.D
DRAWN: J.A.J.
CHECKED: R.M.T.
APPROVED: R.L.M.

JUN 2 6 2006
DAVID L. MATHEWS, P.E.
NO. 48242

MATHEWS CONSULTING INC.
Civil and Environmental Engineers
1475 CENTREPARK BLVD., SUITE 250, WEST PALM BEACH, FL. 33401
TEL. (561)478-7981
www.mathewsconsultinginc.com
LICENSE No. E.B.-0007929

VERIFY SCALE
1"
BAR IS ONE INCH ON ORIGINAL DRAWING. ADJUST SCALES AS NECESSARY.

ENGINEER NO.: 1328
CLIENT
PROJECT NO.: WUD 04-125(B)
CAD REF.: 1328C24

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
LA MANCHA PIPELINE EXTENSION PROJECT

STANDARD DETAILS

DATE: MAY 3, 2006
SHEET: 27 of 27
DRAWING: C-24

S:\Projects\PBC\1328\Cad\ConformedDocs\1328C24.dwg, 6/23/2006 11:33:22 AM, HP Color LaserJet 5500 PCL6.pc3

Attachment 2

Record & Return To:
Raymond C. Liggins, Jr., P.E.
Village Engineer
Village of Royal Palm Beach
1050 Royal Palm Beach Boulevard
Royal Palm Beach, Florida 33411

GRANT OF UTILITY AND ACCESS EASEMENT

KNOW ALL MEN BY THESE PRESENTS, that the undersigned, **VILLAGE OF ROYAL PALM BEACH**, a municipal corporation existing under the laws of the State of Florida whose address is 1050 Royal Palm Beach Boulevard, Royal Palm Beach, Florida 33411, hereinafter referred to as "Grantor", owner of the property described hereinbelow, for and in consideration of the sum of TEN DOLLARS AND NO/100 ($10.00) and other good and valuable consideration receipt whereof is hereby acknowledged, **DOES HEREBY GRANT** unto **PALM BEACH COUNTY**, a political subdivision of the State of Florida, whose address is Governmental Center, 301 North Olive Avenue, Suite 601, West Palm Beach, Florida 33401, hereinafter referred to as "County", a non-exclusive Utility and Access Easement for the purposes of allowing the installation of County utility facilities and in order to provide to the County access to the easement area for matters related to the installation and maintenance of such utility facilities within the following described land lying and being situated in Palm Beach County, Florida, to wit:

See Exhibit "A" attached hereto for complete legal description and sketch.

IT IS EXPRESSLY COVENANTED AND AGREED, that this easement grants County the authority to access and enter upon the easement area at any time to install, operate, maintain, service, construct, reconstruct, remove, relocate, repair, replace, improve, expand, tie into, and inspect potable water and/or wastewater lines and appurtenant facilities and equipment in, on, over, under and across the easement premises.

FURTHERMORE, that this Grant of Utility and Access Easement does in no way convey the fee simple title to this property nor shall it be intended to be construed as dedication of the area for public use, but is only a Grant of Utility and Access Easement for the uses and purposes stated herein. In the event that this parcel of property is no longer necessary for use as a utility and access easement as stated above, all rights, titles, and interests herein granted shall be released to the Grantor, its successors and/or assigns in title, by Quit Claim Deed. Additionally, Grantor shall be responsible for the general maintenance of the above-ground area owned by the Grantor which is subject to this grant of easement.

FURTHERMORE, it is expressly understood by the Grantor and the County that the property subject to this grant of easement may also be required in the future to be subject to a right-of way easement, and that all or a portion of this utility and access easement may need to be released at that time. The Village shall make every reasonable effort to locate such future right-of-way so as not to interfere with this grant of easement. It is

expressly understood that the future location of a right of way easement so that it overlaps the utility and access easement created by this grant of easement shall not remove the authority of the County to continue to locate and access the facilities located within the right of way easement, nor shall it automatically require the relocation of the County's facilities. In such case, the parties' will use their best efforts to allow any overlap to exist without requiring relocation of the County's facilities. Notwithstanding these efforts, should it ultimately become necessary to provide for a right-of-way easement which interferes in a way which would require the relocation of the County's utility facilities lying within this easement area, the County understands that it shall be responsible for such relocation expenses and this grant of easement shall be amended by the Village as necessary to depict the changes to the legal description and sketch for the grant of utility and access easement area as modified.

IN WITNESS WHEREOF, the Grantor and County have hereunto caused this Grant of Easement be signed on this _____ day of _____, 2006.

VILLAGE OF ROYAL PALM BEACH
(a municipal corporation of the State of Florida)

By: David A. Lodwick, Mayor

(SEAL)

ATTEST:

Diane DiSanto, ~~Deputy~~ Village Clerk

Accepted by:

PALM BEACH COUNTY, FLORIDA,
BY ITS BOARD OF COUNTY
COMMISSIONERS

ATTEST:

Sharon R. Bock, Clerk and Comptroller

By:_____
Deputy Clerk

By:_____
Tony Masilotti, Chairman

APPROVED AS TO FORM AND LEGAL SUFFICENCY

By:_____
County Attorney

APPROVED AS TO TERMS AND CONDITIONS

By:_____
Department Director

EXHIBIT A

"EASEMENT PROPERTY"

UTILITY EASEMENT

A PORTION OF LA MANCHA, (P.B. 29 PGS. 165 THROUGH 170), AND
LA MANCHA TWO, (P.B. 29 PGS. 196 THROUGH 200),
LYING WITHIN SECTIONS 14 AND 23, TOWNSHIP 43 SOUTH, RANGE 41 EAST,
PALM BEACH COUNTY, FLORIDA.

UTILITY EASEMENT LEGAL DESCRIPTION

A PORTION OF TRACT A, AND LA MANCHA AVENUE, LA MANCHA, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29, AT PAGES 165 THROUGH 170, AND A PORTION OF TRACT D, LA MANCHA TWO, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29, AT PAGES 196 THROUGH 200, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF LOT 4, BLOCK "A", AS SHOWN ON THE PLAT OF LA MANCHA ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29, AT PAGES 165 THROUGH 170 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA; THENCE N56°19'20"E ALONG THE SOUTH LINE OF SAID BLOCK "A" FOR A DISTANCE OF 130.02 FEET TO A POINT OF CURVATURE; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE RIGHT AND CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 3252.89 FEET AND A CENTRAL ANGLE OF 02°29'44" FOR AN ARC DISTANCE OF 141.68 FEET TO THE EAST LINE OF A 12 FOOT WIDE FLORIDA POWER AND LIGHT EASEMENT AS SHOWN ON SAID PLAT OF LA MANCHA LYING WITHIN SAID TRACT "A; THENCE N01°10'41"E ALONG THE EAST LINE OF SAID EASEMENT FOR A DISTANCE OF 72.85 FEET; THENCE N88°49'19"W FOR 12.00 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE N88°49'19"W FOR 23.00 FEET; THENCE N01°10'41"E ALONG A LINE PARALLEL WITH AND 23.00 FEET WEST OF AS MEASURED AT RIGHT ANGLES TO THE WEST LINE OF SAID 12 FOOT WIDE FLORIDA POWER AND LIGHT EASEMENT FOR A DISTANCE OF 966.00 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF BILBAO STREET OF SAID LA MANCHA PLAT; THENCE S88°49'19"E ALONG THE SOUTH RIGHT OF WAY LINE OF SAID BILBAO STREET FOR A DISTANCE OF 23.00 FEET; THENCE S01°10'41"W ALONG THE WEST LINE OF SAID 12 FOOT WIDE FLORIDA POWER AND LIGHT EASEMENT FOR A DISTANCE OF 966.00 FEET TO THE POINT OF BEGINNING;

AND

COMMENCE AT THE NORTHEAST CORNER OF LOT 2, BLOCK "C", AS SHOWN ON THE PLAT OF LA MANCHA TWO ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29, AT PAGES 196 THROUGH 200 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA; THENCE S00°24'21"W ALONG THE EAST LINE OF SAID LOT 2 FOR A DISTANCE OF 25.00 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE S00°24'21"W ALONG THE EAST LINE OF TRACT "D" OF SAID PLAT OF LA MANCHA TWO FOR A DISTANCE OF 466.32 FEET TO A POINT OF CUSP; THENCE NORTHWESTERLY ALONG A CIRCULAR CURVE TO THE LEFT AND CONCAVE TO THE SOUTHWEST HAVING A RADIUS OF 290.00 FEET AND A CENTRAL ANGLE OF 21°24'12" FOR AN ARC DISTANCE OF 108.33 FEET; THENCE N00°24'21"E ALONG A LINE PARALLEL WITH AND 20.00 FEET WEST OF AS MEASURED AT RIGHT ANGLES TO THE EAST LINE OF SAID TRACT "D" FOR A DISTANCE OF 262.55 FEET TO A POINT ON A NON-TANGENT CURVE, A LINE THROUGH SAID POINT HAVING A RADIAL BEARING OF S66°30'07"E; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE LEFT AND CONCAVE TO THE NORTHWEST HAVING A RADIUS OF 249.71 FEET AND A CENTRAL ANGLE OF 23°05'32" FOR AN ARC DISTANCE OF 100.64 FEET TO THE POINT OF BEGINNING.

SAID LANDS SITUATE IN THE VILLAGE OF ROYAL PALM BEACH, PALM BEACH COUNTY, FLORIDA.

HWS
I.B. NO. 0003449
Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers

310 S.E. 1st Street, Suite 4
Delray Beach, Florida 33483
(561) 243-8700 - Phone
(561) 243-8777 - Fax

UTILITY EASEMENT (CONTINUED)

NOTES:

1) THIS SKETCH AND LEGAL DESCRIPTION DOES NOT REPRESENT A FIELD SURVEY ("THIS IS NOT A SURVEY").

2) THIS SKETCH IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED SEAL OF A FLORIDA REGISTERED LAND SURVEYOR.

3) BEARINGS SHOWN HEREON ARE BASED ON THE EAST LINE OF LA MANCHA AVENUE, LA MANCHA, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 29 AT PAGES 165 THROUGH 170 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, HAVING AN ASSUMED BEARING OF NORTH 01°10'41" EAST.

4) REFERENCE DOCUMENTS:
*LA MANCHA PLAT BOOK 29 PAGES 165-170 AND LA MANCHA TWO PLAT BOOK 29 PAGES 196-200 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY.
*PALM BEACH COUNTY WATER UTILITIES DEPARTMENT ENGINEERING DIVISION LA MANCHA PIPELINE EXTENSION PROJECT NUMBER 04-125 (B) DESIGN DRAWING BY MATHEWS CONSULTING DATED MARCH, 2006.

LEGEND:

H.W.S.	= HELLER WEAVER & SHEREMETA INC.
P.B.	= PLAT BOOK
O.R.B.	= OFFICIAL RECORD BOOK
L	= LENGTH
R	= RADIUS
Δ	= DELTA

HELLER-WEAVER AND SHEREMETA, INC.
FLORIDA STATE L.B. NO. 3449

BY: DANIEL C. LAAK
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REG. NO. 5118

DATED: MAY 18, 2006
WORK ORDER 15457.004

HWS FILE NO. 06-15365-SS14

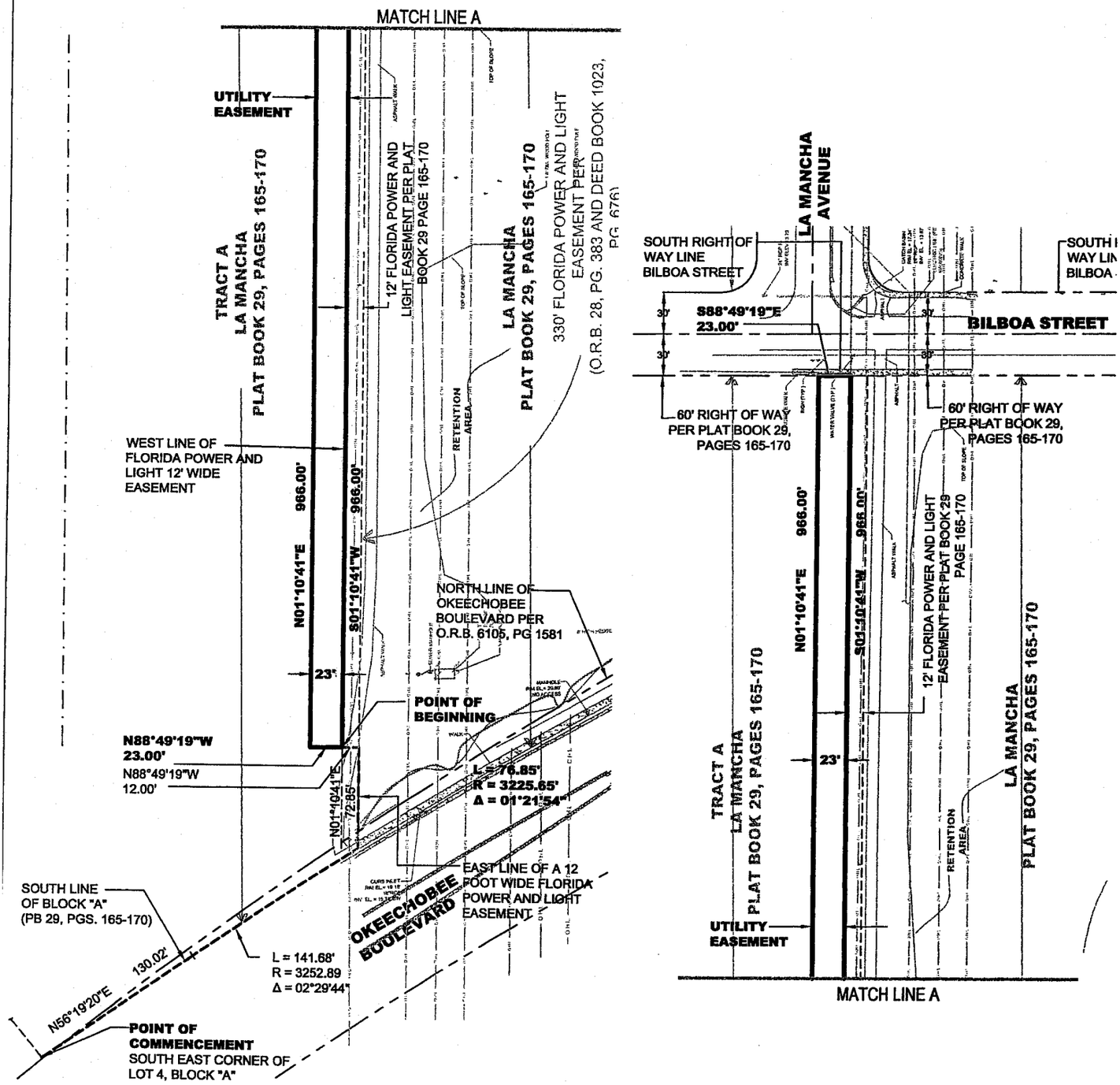
HWS
L.B. NO. 0003449
Heller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers

310 S.E. 1st Street, Suite 4
Delray Beach, Florida 33483
(561) 243-8700 - Phone
(561) 243-8777 - Fax

UTILITY EASEMENT

A PORTION OF LA MANCHA, (P.B. 29 PGS. 165 THROUGH 170), AND
LA MANCHA TWO, (P.B. 29 PGS. 196 THROUGH 200),
LYING WITHIN SECTIONS 23 AND 14, TOWNSHIP 43 SOUTH, RANGE 41 EAST,
PALM BEACH COUNTY, FLORIDA.

NORTH
SCALE: 1" - 100'



SHEET 3 OF 4 SHEETS

HWS FILE NO. 06-15365-SS15

Keller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers
L.B. NO. 0003449
310 S.E. 1st Street, Suite 4
Delray Beach, Florida 33483
(561) 243-8700 - Phone
(561) 243-8777 - Fax

310 S.E. 1st Street, Suite 4
Delray Beach, Florida 33483
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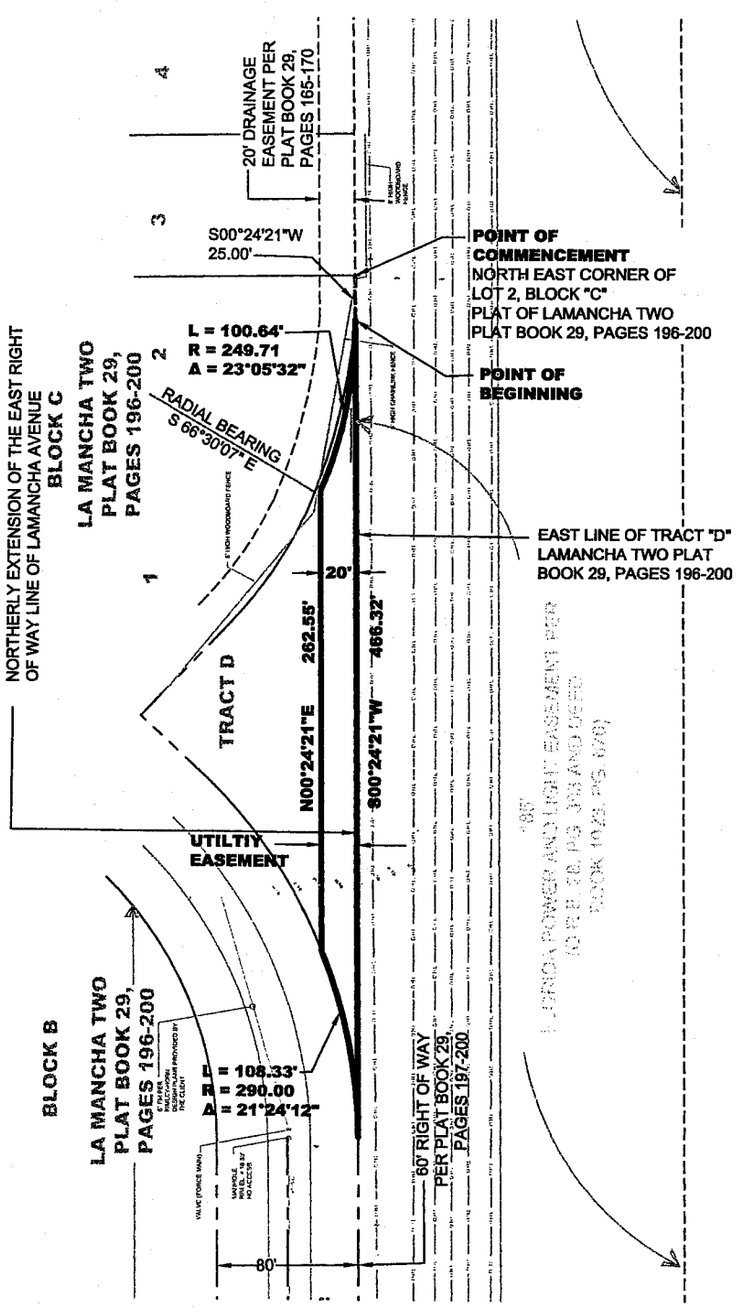
UTILITY EASEMENT

A PORTION OF LA MANCHA, (P.B. 29 PGS. 165 THROUGH 170), AND
LA MANCHA TWO, (P.B. 29 PGS. 196 THROUGH 200),
LYING WITHIN SECTIONS 23 AND 14, TOWNSHIP 43 SOUTH, RANGE 41 EAST,
PALM BEACH COUNTY, FLORIDA.

NORTH
SCALE: 1" - 100'



SHEET 4 OF 4 SHEETS

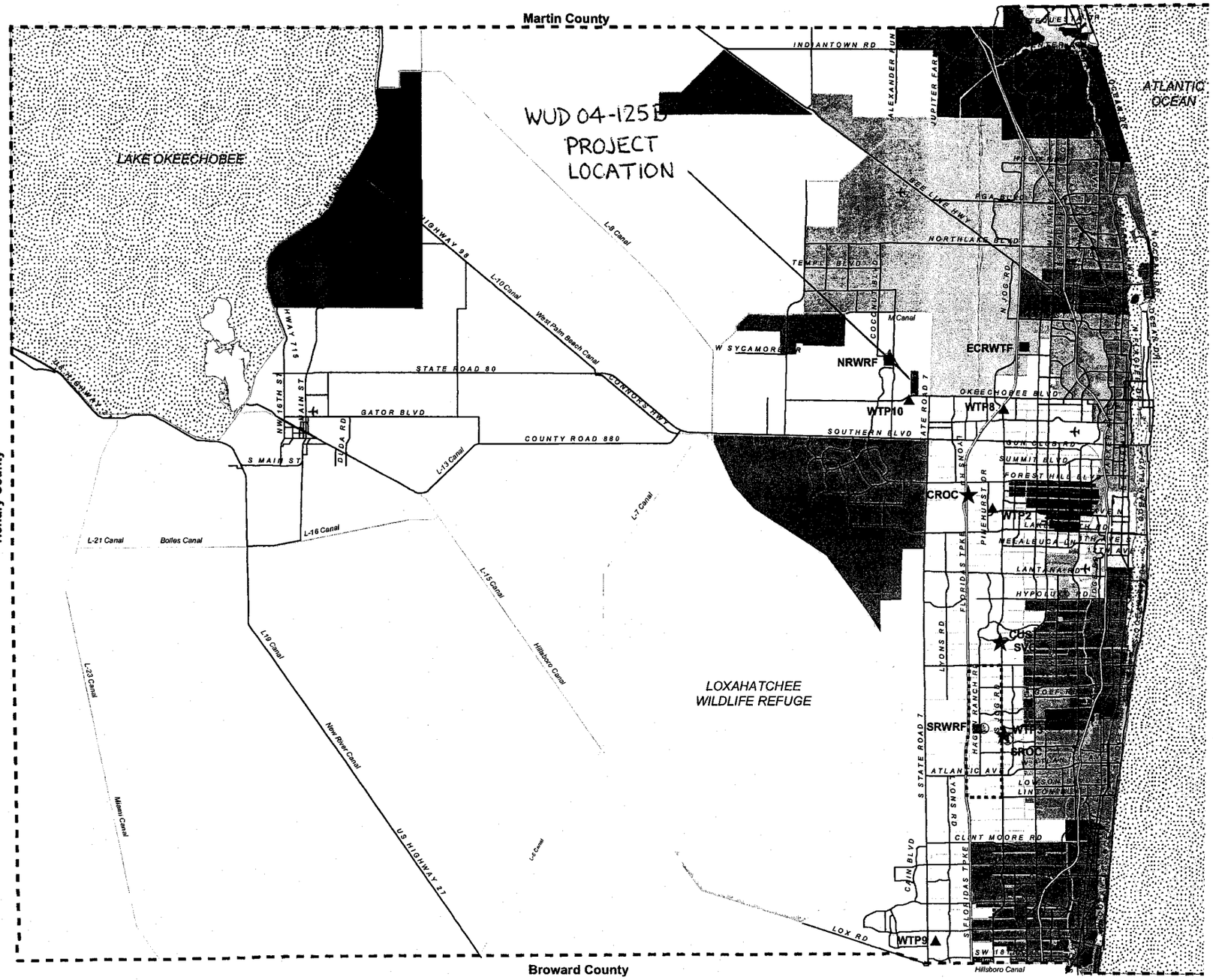
HWS FILE NO. 06-15365-SS16

Ieller - Weaver and Sheremeta, inc.
Engineers ... Surveyors and Mappers
:.B. NO. 0003449
310 S.E. 1st Street, Suite 4
Delray Beach, Florida 33483
(561) 243-8700 - Phone
(561) 243-8777 - Fax

310 S.E. 1st Street, Suite 4
Delray Beach, Florida 33483
(561) 243-8700 - Phone
(561) 243-8777 - Fax

Palm Beach County Water Utilities Department Service Area (SA) and Major Facilities

Attachment 3



Legend

- P.B.C.W.U.D. SA
- MANDATORY RECLAIMED SA
- Palm Beach County Limits
- ★ Administration
- ■ Water Reclaimation Facility
- ▲ Water Treatment Facility
- Ⓦ Wetlands

NOT TO SCALE