

RECORDED IN OFFICIAL RECORDS
INSTRUMENT # 2010100635 56 PGS
2010 SEP 03 12:31 PM
KAREN E. RUSHING
CLERK OF THE CIRCUIT COURT
SARASOTA COUNTY, FLORIDA
DCOURSEY Receipt#1312062

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✓ PREPARED BY AND AFTER RECORDING, RETURN TO:
Douglas Manson
Manson Law Group PA
1101 West Swann Avenue
Tampa, Florida 33606



2010100635

**Regional Integrated Loop System - Phase 3A (Carlton/State Road 681) Interconnect
Permanent Easement Parcel 113
Property Folio No. 0371-00-3000 and 0373-00-1000**

NON-EXCLUSIVE WATERLINE EASEMENT AGREEMENT

THIS NON-EXCLUSIVE WATERLINE EASEMENT AGREEMENT (the "Agreement") is made this 1st day of September, 2010 (the "Effective Date") by and between **CITY OF VENICE**, a Florida municipality, ("Grantor") whose address is 401 West Venice Avenue, Venice Florida 34285 to **PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY**, an interlocal governmental entity of the State of Florida ("Grantee"), whose address is 6311 Atrium Drive, Suite 100, Bradenton, Florida 34202.

RECITALS:

WHEREAS, Grantee desires to construct, install, operate, maintain, replace, inspect, patrol, test, repair, relocate, replace, remove, and upgrade an underground pipeline for the purpose of transporting water over, across, through and under the lands hereinafter described ("Waterline") along with the installation of appurtenant above-ground and below-ground pipes, valves and equipment (collectively the "Facilities") to be located on the easement.

WHEREAS, Grantee has requested and Grantor grants a non-exclusive, permanent and perpetual easement to Grantee to construct, install, operate, maintain, replace, inspect, patrol, test, repair, relocate, replace, remove, and upgrade the above-mentioned Waterline and Facilities on the Easement Property (as defined below) on the terms set forth herein.

WHEREAS, in exchange for the granting of easements to the Grantee at no cost, the Grantee shall conduct the following restoration and improvements: Construct a roadway on specified easement property, install a six foot high chain-link fence along the northern boundary of the Easement Property, and install landscaping in accordance with a landscape restoration plan.

NOW, THEREFORE, in consideration of the above recitals, and the sum of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by Grantor, the parties agree as follows:

1. Grantor does hereby grant, bargain, sell and convey to Grantee, its successors and assigns, and all other persons claiming by, through or under Grantee, a permanent and perpetual, non-exclusive easement over, above, across, through and under Grantor's property located in Sarasota County, Florida as described on Exhibit "A" attached hereto and incorporated herein ("Easement Property"), which easement rights shall extend to Grantee's agents, employees, representatives, licensees, invitees, or such other persons or entities as Grantee deems necessary, as well as the following:

- a. Grantee shall have the perpetual right, privilege and easement for and to construct, install, operate, maintain, replace, inspect, patrol, test, repair, relocate, replace, remove, and upgrade the Waterline and/or Facilities, with the Waterline and Facilities described in the Exhibit "B", which Waterline and Facilities shall be used for the purpose of transporting water over, above, across, through and under the Easement Property. If the Grantee requires the installation and operation of additional facilities, the Grantee shall provide to the Grantor a written request for consent to install and operate such additional facilities. The Grantor shall not arbitrarily or unreasonably withhold or condition consent for the installation and operation of the requested additional facilities. The Grantor must respond to Grantee's request in writing within 30 days of receipt of such request or consent by the Grantor is deemed to be granted. For purposes of this subsection, "additional facilities" shall mean any above-ground pumping or booster facility, and/or building.
- b. Grantee shall have the right of ingress to and egress from the Easement Property by means of the Easement Property and adjacent public or private roadways, easements or rights-of-way owned or held or lawfully available to Grantee, including any other property over which Grantee has access rights.
- c. Grantee shall have the right to excavate and refill ditches and trenches for the location of such Waterline and Facilities and further right to remove fences, trees, bushes, undergrowth, structures and any other obstructions interfering with the location, construction, operation, maintenance, repair, upgrade and replacement of such Waterline and Facilities.
- d. Grantee shall have the right, but not the obligation, (without liability for damages) from time to time to reclear the Easement Property by cutting and removing therefrom trees, brush and other obstructions that may, in the reasonable judgment of Grantee or pursuant to regulatory requirements, injure, endanger or interfere with Grantee's use of the Easement Property. Notwithstanding, the Grantee shall provide to the Grantor a written request for consent prior to reclearing the Easement Property. The Grantor shall not arbitrarily or unreasonably withhold or condition consent for the reclearing of the Easement Property. The Grantor must respond to Grantee's request in writing within 30 days of receipt of such request or consent by the Grantor is deemed to be granted.
- e. Grantee shall not unreasonably restrict ingress or egress to the Grantor's property abutting the Easement Property and shall provide reasonable

ingress and egress across the Easement Property for the use of Grantor. Notwithstanding the foregoing, Grantee shall be permitted to restrict ingress or egress to property abutting the Easement Property for safety purposes in Grantee's reasonable discretion during construction activity.

- f. After completion of construction activity, Grantee will remove all construction equipment and unused materials and will re-seed the Easement Property and other areas, if any, disturbed by the construction operations of Grantee. Subject to Grantee's rights hereunder and to the extent not inconsistent therewith, Grantee will restore the surface of all disturbed areas of the Easement Property to original contour and condition, as near as is reasonably practicable, and shall replace any fences, vegetation and structures removed or damaged by the Grantee from the Easement Property.
- g. After completion of construction activity, Grantee will insure the permanent re-location of the existing fence and its appurtenances to the north boundary of Easement Property.
- h. After completion of construction activity, Grantee will install the type and quantity of vegetative screening, mutually acceptable to Grantor and Grantee, in the Easement Property, along its north boundary, at locations mutually agreeable to Grantor and Grantee.

2. Upon completion of the initial installation of the Waterline and Facilities, the Grantee shall, on behalf of the Grantor, have its contractor install:

- a. a twenty foot wide asphalt paved access road ("Access Road") from the end of the existing payment on Laurel Road to the Grantor's Myakka River Park Parking lot, as shown on Exhibit "C", including a portion of the Access Road being installed on the Easement Property. The Grantee shall be responsible for permitting the Access Road, if applicable, grading the site, installation of the Access Road and the costs associated with its installation. Upon the completion of the installation of the Access Road, any warranties from the Grantee's contractor associated with the Access Road shall be transferred to the Grantor. The Grantor shall own the Access Road and be responsible for repairing, maintaining, upgrading and replacing it.
- b. a six foot high chain-link fence ("Fence") along the northern boundary of the Easement Property, or the southern extent of the existing landscape berm if present, and if applicable, consistent with existing agreements between the Authority and Florida Power and Light, as shown on Exhibit "D". The Grantee shall be responsible for installation of the Fence and the costs associated with its installation. Upon the completion of the installation of the Fence, any warranties from the Grantee's contractor associated with the Fence shall be transferred to the Grantor. The Grantor shall own the Fence and be responsible for repairing, maintaining, upgrading and replacing it.
- c. landscaping in conformance with a landscape restoration plan ("Landscape") as shown on Exhibit "E", between the Myakka River Park

and the Fence. The Grantee shall be responsible for the installation of the Landscape and the costs associated with its installation. Upon the completion of the installation of the Landscape, any warranties from the Grantee's contractor associated with the Landscape shall be transferred to the Grantor. The Grantor shall own the Landscape and be responsible for maintaining, upgrading and replacing it.

3. The parties agree that this Easement is non-exclusive in nature. The grant herein made shall begin and commence on the date executed below ("Effective Date").

4. The parties agree to the following restrictions relating to the Easement Property: (i) Grantor shall not enter upon or use the Easement Property while the Waterline and/or Facilities is being constructed, repaired, replaced or upgraded; (ii) Grantor shall not obstruct or restrict Grantee's use of the Easement Property in any manner; (iii) Grantor shall not grant an easement on the Easement Property to a third party which could, may, or will negatively impact the Waterline; and (iv) upon the completion of construction of the Waterline and/or Facilities and when such Waterline and/or Facilities is not being repaired, replaced or upgraded, Grantor may use the Easement Property for any and all lawful purposes, provided such use is not inconsistent with and does not interfere with Grantee's use thereof ("Inconsistent Use"). The term "Inconsistent Use" includes, but is not limited to, digging or excavating, construction of any permanent structures, sod farming, citrus farming, storage of any materials on the Easement Property or storage of earth cover exceeding ten (10) feet above the top of the Waterline. Examples of a permitted use include, but are not limited to: pasture use; driveways; public or private road for ingress and egress of Grantor. Grantee agrees to provide Grantor, either upon Grantor's request or at Grantee's option, a prior written determination that any particular exercise of the right to use the Easement Property by Grantor does not directly interfere with the safe and efficient exercise of the Grantee's rights, which determination shall not be arbitrarily or unreasonably withheld or conditioned. For safety and for Grantee's operational purposes, the use of the surface and subsurface of the Easement Property by Grantor shall be subject to the following terms, conditions and limitations:

- (a) no excavation operations shall be undertaken on the Permanent Easement without five (5) days prior notice to the Florida Sunshine State One Call System or its successor;
- (b) construction activities and operations on and/or under the Easement Property shall be subject to the reasonable conditions imposed by Grantee for such operations;
- (c) construction, installation, operation and maintenance activities on or across the Easement Property and/or use of the surface or subsurface of the Easement Property shall be in compliance with all applicable statutes, rules, regulations, ordinances and codes of any governmental agency or entity having jurisdiction over the Easement Property and/or the operations being conducted;
- (d) installation and construction of any public or private utilities, including but not limited to, water, sewer, gas, electrical, fiber optic and/or telephone which

impact or encroach on the Easement Property shall be subject to the following additional specific terms, conditions and limitations: (1) construction and installation of all subsurface utility pipes or cables which cross the Easement Property shall be constructed and installed so as to maintain a separation distance of not less than eighteen inches (18") or state-required minimum separation, whichever is greater, between such pipes and/or cables and Grantee's Waterline pipe and (2) no utilities shall be installed above the Easement Property or between the surface of the property and the top of the Waterline pipe;

- (e) installation and construction of any fences which impact or encroach on the Easement Property, after the initial construction of the Waterline, shall be subject to the following additional specific terms, conditions and limitations: (1) no fence posts for any fences crossing the Easement Property perpendicularly shall be installed closer than ten feet (10') on either side of Grantee's Waterline pipe and (2) any fences running parallel to the Easement Property shall be installed no closer than ten feet (10') from Grantee's Waterline pipe;
- (f) no new canals, ditches or other open drainage facilities shall be constructed on or across the surface of the Easement Property;
- (g) installation and construction of any public or private roads or streets which impact or encroach on the Easement Property shall be subject to the following specific additional terms, conditions and limitations: (1) all roads or streets which are located on or across the Easement Property may be paved with asphalt or concrete; (2) all roads and streets proposed for the Easement Property shall be coordinated with Grantee; and (3) use of the roads or streets crossing over the Easement Property shall be limited to normal automobile and truck traffic with a load limitation not to exceed a gross weight of sixty-four thousand pounds (64,000 lbs.) per axle; (4) Grantee shall have the right to utilize any road or street installed on or across the Easement Property as a means of ingress to, and egress from, the Easement Property; and, (5) use of the roads and/or streets constructed on or across the Easement Property shall be at the sole risk of Grantor and the agents and invitees of Grantor;
- (h) planting and installation of any trees and/or landscaping which impacts or encroaches on the Easement Property, after the initial construction of the Waterline, shall be subject to the following specific additional terms, conditions and limitations: (1) any trees or shrubbery shall be shallow rooted; and (2) no trees or shrubbery shall be planted any closer than ten feet (10') on either side of any Waterline located on the Easement Property;
- (i) Grantor shall be responsible, at the sole cost and expense of Grantor, for the repair and maintenance of the roads, streets, fences and/or subsurface utilities installed on or across the Easement Property and for the care and maintenance of the trees, shrubbery and other landscaping planted by Grantor on the Easement Property; and
- (j) operations by others on the Easement Property pursuant to the provisions of this Non-Exclusive Waterline Easement Agreement shall not impair or

interfere with the rights granted to Grantee by this Non-Exclusive Waterline Easement Agreement and shall not require the relocation or lowering of the Waterline pipe, decrease the ground cover of the Waterline pipe or change the contour of the Easement Property.

5. Grantor may grant an easement on the Easement Property to a third party upon giving the Grantee thirty (30) days prior written notice. Notwithstanding, Grantor may not grant an easement on the Easement Property to a third party which could, may, or will negatively impact the Waterline and/or Facilities. Grantee may assign its rights acquired under the provisions of this Non-Exclusive Waterline Easement Agreement in whole or in part, and Grantee shall have the right to operate the Waterline and/or Facilities for its own use or to lease, sell, or assign any or all of the Waterline or the rights thereto.

6. Grantor represents to Grantee that the Easement Property is not leased, rented or occupied by any lessee or tenant.

7. Each party agrees to indemnify and hold harmless the other party, its agents, officials and employees against all injuries, deaths, losses, damage claims, liabilities, judgments, costs, attorneys' fees and expenses which may accrue against the other party as a consequence of the intentional or negligent acts of its agents, officials or employees. Nothing in this paragraph is intended or is to be construed as a waiver of sovereign immunity as provided to both parties under Section 768.28, Florida Statutes, or as otherwise provided by law.

8. In the event of a dispute between the parties hereto relating to this Agreement, the prevailing party shall be entitled to recover its reasonable attorneys' fees, paralegal fees and costs incurred from the date of the dispute through any appeals, bankruptcy proceeding or to collect or enforce any judgment.

9. The provisions of this Agreement run with the Easement Property and shall bind and inure to the benefit of Grantor, Grantee and their respective heirs, successors, legal representatives and assigns.

10. The above recitals are true, correct and incorporated herein.

11. The Parties each knowingly, voluntarily and intentionally waive any right to which either of them may have to a trial by jury with respect to any litigation or legal proceeding based upon or arising directly, indirectly or otherwise in connection with, out of, related to or from this Agreement.

12. This Agreement incorporates and describes all of the grants, undertakings, conditions, and consideration of the parties with respect to the Agreement. Grantor, in executing and delivering this Agreement, represents that Grantor has not relied upon any promises, inducements or representations of Grantee or its agents or employees, except as expressly set forth herein.

13. Grantee is a condemning authority and Grantor is entering into this Agreement in lieu of Grantee acquiring these rights under eminent domain proceedings.

14. This Agreement may be executed in counterparts, all of which together shall constitute a single document.

THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK.

IN WITNESS WHEREOF, the parties have executed this Agreement this
1st day of September, 2010.

WITNESSES:

Susan E. Schult
(Signature)

Name: Susan E. Schult
(Print Name)

Address: 401 W. Venice Ave
Venice, FL 34285

Judy Gamel
(Signature)

Name: JUDY GAMEL
(Print Name)

Address: 401 W. VENICE AVE.
VENICE, FL 34285

**GRANTOR:
CITY OF VENICE**

Ernie Zavadnyik
(Signature)

Name: ERNIE ZAVODNYIK
(Print Name)

Address: 401 VENICE AVE WEST
VENICE FL 34285

Approved By City Council

Date: 5/10/2010

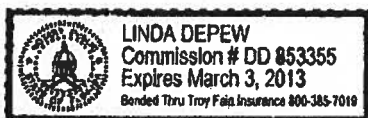
ACKNOWLEDGEMENT

STATE OF FLORIDA)
COUNTY OF SARASOTA)

The foregoing document was acknowledged before me this 10th day of
AUGUST, 2010, by ERNIE ZAVODNYIK who is
personally known to me or has produced _____ (type of
identification) as identification.

Linda Depew
Notary Public
Name (Printed): LINDA DEPEW

My Commission Expires:



BOARD APPROVED

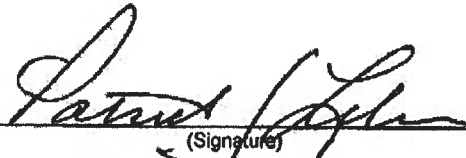
WITNESSES:

GRANTEE:

PEACE RIVER MANASOTA
REGIONAL WATER SUPPLY
AUTHORITY, an interlocal
governmental entity of the State of
Florida

SEP - 1 2010

Peace River Manasota
Regional Water Supply Authority


(Signature)

Name: Patrick J. Lehman
Title: Executive Director


(Signature)

Name Jerry Hill John Chappie
Title: Chairman Vice Chairman

Address: 6311 Atrium Drive Ste 100

Bradenton, FL 34202

Address: 6311 Atrium Drive Ste 100

Bradenton, FL 34202


(Signature)

Name: Linda Stewart
(Print Name)

Address: 6311 Atrium Drive
Ste 100
Bradenton, FL 34202

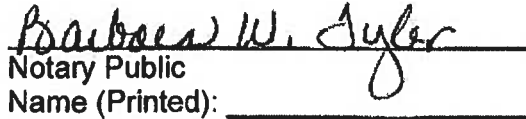
Approved as to form:


Douglas P. Manson, Esq., General
Counsel

ACKNOWLEDGEMENT

STATE OF FLORIDA)
COUNTY OF SARASOTA) MANATEE

The foregoing document was acknowledged before me this 1st day of
September, 2010, by ~~Jerry Hill as Chairman~~ of PEACE RIVER
MANASOTA REGIONAL WATER SUPPLY AUTHORITY (the "Authority"), an interlocal
governmental entity of the State of Florida. John Chappie as Vice Chairman


Notary Public
Name (Printed): _____

My Commission Expires:



BARBARA W. TYLER
MY COMMISSION # DD 801994
EXPIRES: July 30, 2012
Bonded Thru Budget Notary Services

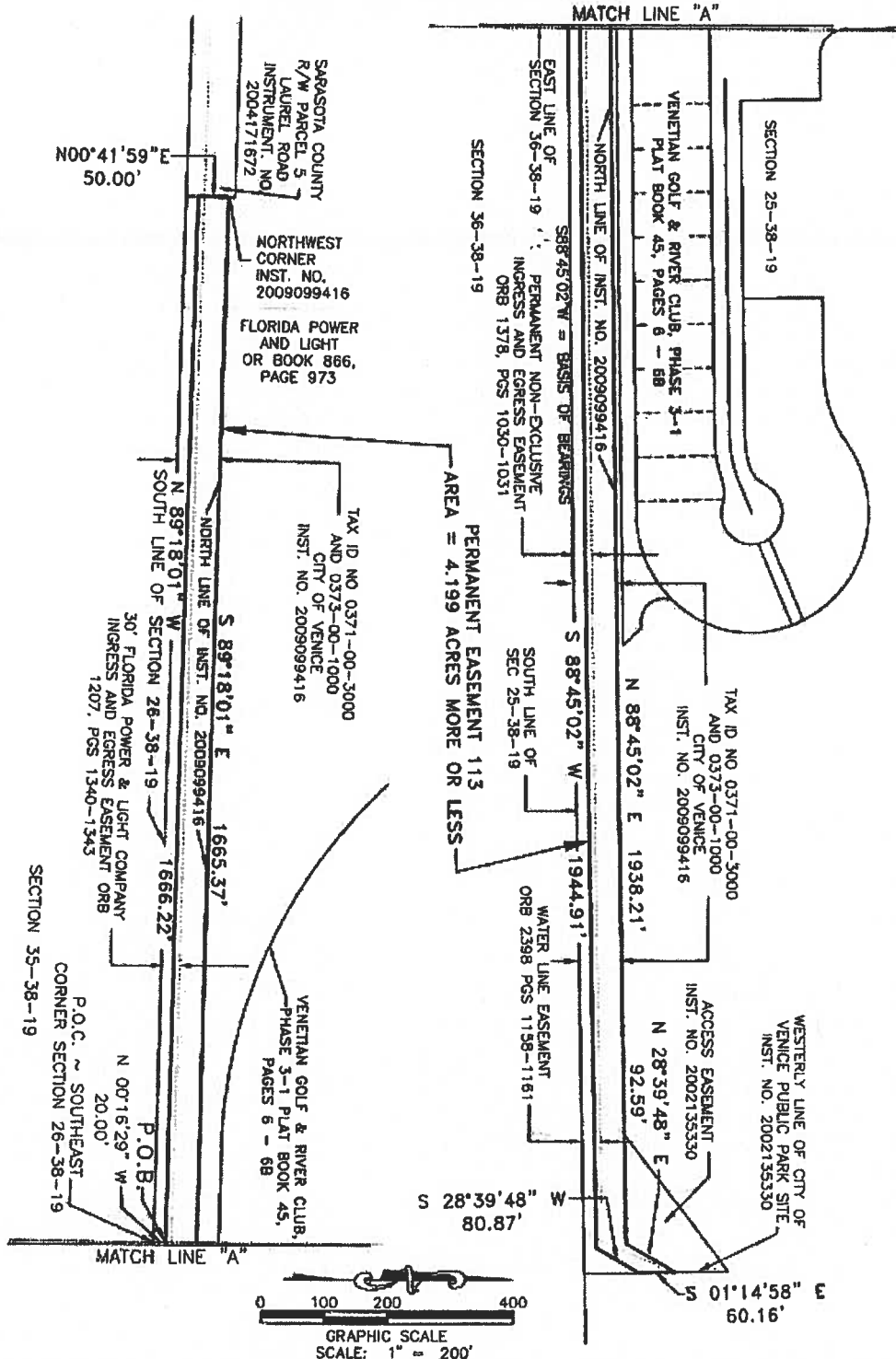
EXHIBIT "A"
Legal Description and Sketch of Easement Property

SKETCH AND DESCRIPTION

THIS IS NOT A SURVEY

SECTIONS 25 AND 26, TOWNSHIP 38 SOUTH, RANGE 19 EAST, SARASOTA COUNTY, FLORIDA

PARCEL NUMBER 113



PERMANENT EASEMENT PEACE RIVER

SEE SHEET 2 FOR NOTES, LEGEND AND DESCRIPTION.
SHEET 1 OF 2

C:\temp\AcPublish_864\PARCEL 113 (old 108).dwg



ENGINEERS, PLANNERS & SURVEYORS
4030 WEST BOY SCOUT BLVD. SUITE 700
TAMPA, FLORIDA 33607
Ph. (813) 282-7275

LICENSED BUSINESS 24, STATE OF FLORIDA

JOB No:	100002301	DATE	01/25/09
Scale:	1" = 200'	Rev:	01/04/10 06/22/10
Drawn By:	BBINKOWSKI	Checked By:	PM

THIS IS NOT A SURVEY

SECTIONS 25 AND 26, TOWNSHIP 38 SOUTH, RANGE 19 EAST, SARASOTA COUNTY, FLORIDA

PARCEL NUMBER 113

LEGAL DESCRIPTION (PERMANENT EASEMENT)

A PORTION OF THE LANDS DESCRIBED IN OFFICIAL RECORDS INSTRUMENT NUMBER 2009099416 OF THE PUBLIC RECORDS OF SARASOTA COUNTY, FLORIDA LYING IN SECTIONS 25 AND 26, TOWNSHIP 38 SOUTH, RANGE 19 EAST, SARASOTA COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FOR A POINT OF REFERENCE COMMENCE AT THE SOUTHEAST CORNER OF SECTION 26, TOWNSHIP 38 SOUTH, RANGE 19 EAST, SARASOTA COUNTY, FLORIDA; THENCE N00°16'29"W, A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING; THENCE N89°18'01"W, A DISTANCE OF 1666.22 FEET TO A POINT ON SARASOTA COUNTY RIGHT OF WAY PARCEL NUMBER 5 AS RECORDED IN OFFICIAL RECORDS INSTRUMENT NUMBER 2004171672 OF THE PUBLIC RECORDS OF SAID COUNTY; THENCE N00°41'59"E, ALONG SAID RIGHT OF WAY PARCEL NUMBER 5, A DISTANCE OF 50.00 FEET TO THE NORTHWEST CORNER OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS INSTRUMENT NUMBER 2009099416 OF THE PUBLIC RECORDS OF SARASOTA COUNTY, FLORIDA; THENCE S89°18'01"E, DEPARTING SAID RIGHT OF WAY PARCEL NUMBER 5 AND ALONG THE NORTH LINE OF SAID LANDS DESCRIBED IN OFFICIAL RECORDS INSTRUMENT NUMBER 2009099416, A DISTANCE OF 1665.37 FEET; THENCE N88°45'02"E, ALONG THE NORTH LINE OF SAID OFFICIAL RECORDS INSTRUMENT NUMBER 2009099416 AND THE EASTERLY EXTENSION THEREOF, A DISTANCE OF 1938.21 FEET; THENCE N28°39'48"E, A DISTANCE OF 92.59 FEET TO A POINT ON THE WESTERLY LINE OF THE CITY OF VENICE PUBLIC PARK SITE AS DESCRIBED IN OFFICIAL RECORDS INSTRUMENT NUMBER 2002135330 OF THE PUBLIC RECORDS OF SAID COUNTY; THENCE S01°14'58"E, ALONG SAID WESTERLY LINE, A DISTANCE OF 60.16 FEET; THENCE S28°39'48"W, DEPARTING SAID WESTERLY LINE, A DISTANCE OF 80.87 FEET; THENCE S88°45'02"W, A DISTANCE OF 1944.91 FEET TO THE POINT OF BEGINNING.

CONTAINING 4.199 ACRES, MORE OR LESS.

LEGEND

ITEM	DESCRIPTION
(C)	CALCULATED
INST.	INSTRUMENT
NO.	NUMBER
ORB	OFFICIAL RECORDS BOOK
O.T.	ORDER OF TAKING
P.O.C.	POINT OF COMMENCEMENT
P.O.B.	POINT OF BEGINNING
PGS	PAGE
R	PROPERTY LINE
R/W	RIGHT OF WAY
SEC	SECTION
SQ. FT.	SQUARE FEET

SURVEYOR'S NOTES:

1. THE SKETCH SHOWN HEREON IS FOR GRAPHIC REPRESENTATION ONLY AND DOES NOT REPRESENT A BOUNDARY SURVEY.
2. CORNER MONUMENTS WERE NOT SET IN CONJUNCTION WITH THE PREPARATION OF THIS DRAWING.
3. BEARINGS SHOWN ARE ASSUMED, BASED ON THE SOUTH LINE OF SECTION 25, TOWNSHIP 38 SOUTH, RANGE 19 EAST, SARASOTA COUNTY, FLORIDA AS BEARING S 88°45'02" W.
4. LEGAL DESCRIPTION PREPARED BY PBS&J.
5. SEE SHEET 1 OF 2 FOR SKETCH.

Drawing Name: C:\temp\AcPublic_664\PARCEL 113 (old 108).dgn

Jun 28, 2010 - 2:25pm

SHEET 2 OF 2

PERMANENT EASEMENT PEACE RIVER

Job No:	100002301	Date:	01/25/09
Scale:	N/A	Rev:	01/04/10 06/22/10
Drawn By:	BBENKOWSKI	Checked By:	PM



LICENSED BUSINESS 24, STATE OF FLORIDA

ENGINEERS, PLANNERS & SURVEYORS
4030 WEST BOY SCOUT BLVD., SUITE 700
TAMPA, FLORIDA 33607
Ph. (813) 282-7275

I HEREBY CERTIFY THAT THIS SKETCH AND DESCRIPTION MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

Patrick McCormack
Professional Surveyor & Mapper Registration No. 6494
State of Florida

THIS SKETCH AND LEGAL DESCRIPTION NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
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EXHIBIT "B"
Water Line & Facilities





PEACE RIVER /
MINNESOTA REGIONAL
WATER SUPPLY AUTHORITY

REGIONAL INTEGRATED
LOOP SYSTEM

PHASE 3A INTERCONNECT PROJECT

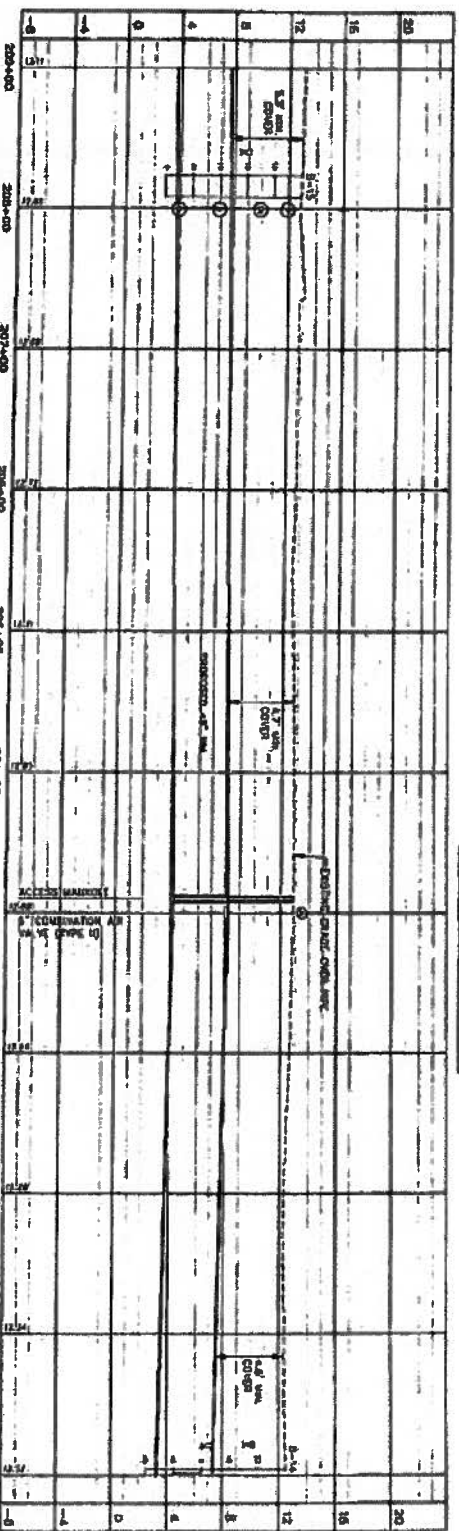
PLAN AND PROFILE
STA. 209+00.00 - 199+00.00

DATE: 10/1/03
BY: J. J. JENSEN

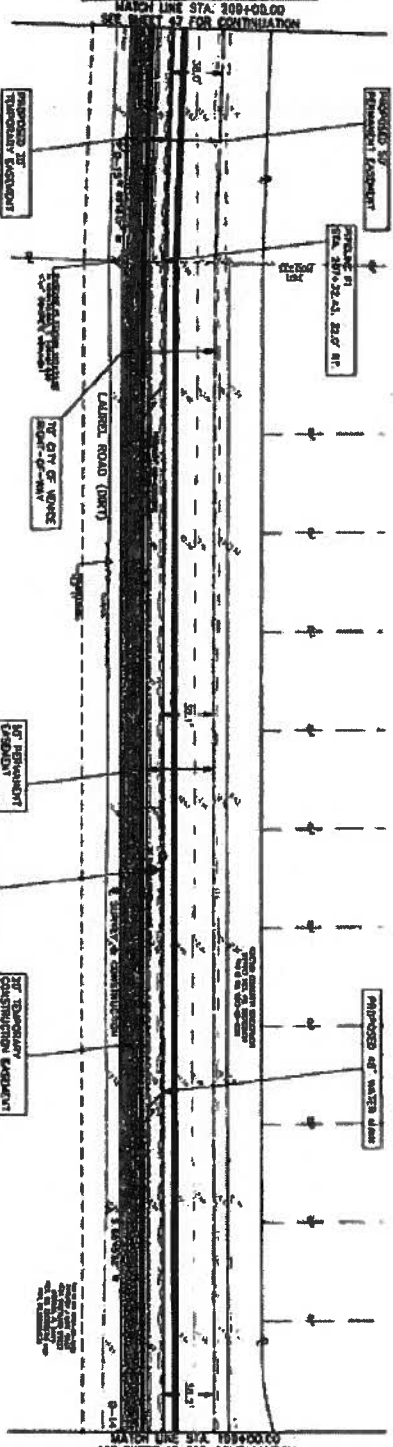
PROJECT NO. 03-001
SHEET 48 OF 72



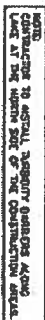
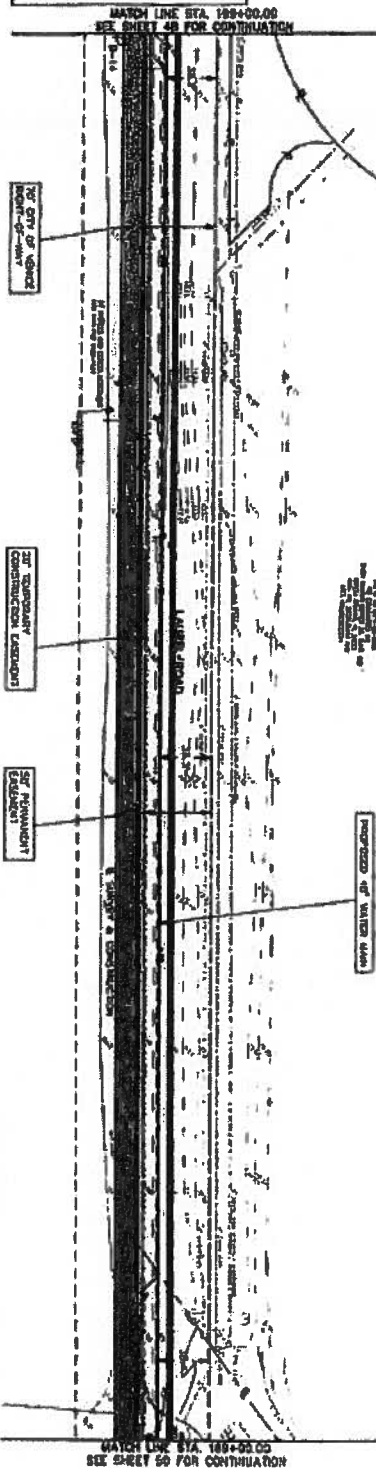
MINNESOTA
WATER SUPPLY AUTHORITY
48 OF 72



STA. 204+00.00 51.00 FT.
REGUL. CONSTRUCTION AIR VALVE (TYPE D)
1 - 12\"/>



MATCH LINE STA. 199+00.00
SEE SHEET 49 FOR CONTINUATION



 PBSI PEACE RIVER SUPPLY INCORPORATED 10000 100th Ave. N.E. Redmond, WA 98073 (206) 881-1100 (toll-free) 1-800-451-1100		CLIENT PEACE RIVER / MINNESOTA REGIONAL WATER SUPPLY AUTHORITY		PROJECT REGIONAL INTEGRATED LOOP SYSTEM PHASE 3A INTERCONNECT PROJECT		TRAIL PHASE 3A PIPELINE PLAN AND PROFILE STA. 189+00.00 - 189+00.00		CONTRACT NO. 100-000000-0000 DATE 01/01/00		PROJECT NO. 100-000000-0000 DATE 01/01/00		PEACE RIVER / MINNESOTA REGIONAL WATER SUPPLY AUTHORITY 10000 100th Ave. N.E. Redmond, WA 98073 (206) 881-1100 (toll-free) 1-800-451-1100	
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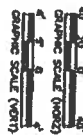
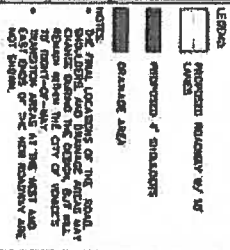
EXHIBIT "C"
Access Road

Laurel Road Extension

Outline Specification

Roadway shall consist of:

- 20 foot wide paved roadway with 4 foot wide shoulders.
- 12-inch thick sub base (FDOT type B stabilization LBR 40)
- 7-inch thick limerock base (FDOT LBR 100)
- 1.5-inch thick asphalt surface (FDOT type SP 12.5 structural course)
- Striping and speed tables per FDOT standards
- Drainage swale with discharge to retention pond adjacent to Myakka Park.



PBS NATIONAL PUBLIC SERVICE 501 EAST 10TH AVENUE, SUITE 400 DENVER, COLORADO 80202 PHONE (303) 733-8000 FAX (303) 733-8001		PROJECT PEACE RIVER / MANASOTA REGIONAL WATER SUPPLY AUTHORITY		PROJECT REGIONAL INTEGRATED LOOP SYSTEM PHASE 3A INTERCONNECT PROJECT		YEAR PHASE 3A PIPELINE PLAN AND PROFILE STA. 189+00.00 - 189+00.00		REVISIONS 1. _____ 2. _____ 3. _____ 4. _____ 5. _____		DESIGNER KANSAS CITY 1801 W. 12TH AVE. KANSAS CITY, MO 64101 TEL. (816) 441-1100 FAX (816) 441-1101		DATE 9-21-87	
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EXHIBIT "D"
Fence Location



100 AIRWAY ANESTHESIA
 BOX 250
 BURLINGTON, VT 05401
 TEL 802/253-2000
 TDD 802/253-2000

CLIENT	PROJECT	FAIR	ORIGINAL DATE	PROJECT MONITOR	DATE
PEACE RIVER / MANASOTA REGIONAL WATER SUPPLY AUTHORITY	REGIONAL INTEGRATED LOOP SYSTEM	PHASE 3A PIPELINE LAUREL ROAD / MYAKKA RIVER PARK	ORIGINAL DATE 11/11/2010	PROJECT MONITOR DATE	DATE

GENERAL LANDSCAPE NOTES

- [illegible]

2 LANDSCAPE WATERING BENEFITS

CONTRACTOR, VENDOR, SCHEDULED DATES AND PAYMENT FREQUENCY					
PERIOD	QUANTITY	PLANT SIZE	APPLICATION RATE	FREQUENCY	WPA
WPA 1-4	1,700	3 GALLON PLANT	15 GALLONS PER WATERSHED	2 TIMES PER WEEK	2,000
	207	2 GALLON PLANT	15 GALLONS PER WATERSHED		8,389
	61	5 GALLON PLANT	15 GALLONS PER WATERSHED		4,756
	97	16 GALLON PLANT	20 GALLONS PER WATERSHED		2,409
	43	PHASE	20 GALLONS PER WATERSHED		2,889
	146	FIELD CROWN	15 GALLONS PER WATERSHED		1,789
	2	CONTRACTOR SPEC.	10 GALLONS PER WATERSHED		400
WPA 5-6	1,700	3 GALLON PLANT	15 GALLONS PER WATERSHED	2 TIMES PER WEEK	17,506
	207	2 GALLON PLANT	15 GALLONS PER WATERSHED		6,716
	151	5 GALLON PLANT	15 GALLONS PER WATERSHED		4,500
	43	16 GALLON PLANT	20 GALLONS PER WATERSHED		1,420
	43	PHASE	20 GALLONS PER WATERSHED		1,289
	146	FIELD CROWN	15 GALLONS PER WATERSHED		4,726
	2	CONTRACTOR SPEC.	10 GALLONS PER WATERSHED		388
WPA 6-7	1,700	3 GALLON PLANT	15 GALLONS PER WATERSHED	1 TIME PER WEEK	8,600
	207	2 GALLON PLANT	15 GALLONS PER WATERSHED		2,850
	151	5 GALLON PLANT	15 GALLONS PER WATERSHED		2,350
	43	16 GALLON PLANT	20 GALLONS PER WATERSHED		810
	43	PHASE	20 GALLONS PER WATERSHED		640
	146	FIELD CROWN	15 GALLONS PER WATERSHED		2,265
	2	CONTRACTOR SPEC.	10 GALLONS PER WATERSHED		140
TOTAL WATERSHEDS PER TABLE					15,836



141 AGRICULTURAL ROAD
RUSTON 2ND
SUSSEX, A 1000
FOR FURTHER DETAILS
01243 8017 10 AUSTIN AND

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PEACE RIVER /
MANASOTA REGIONAL
WATER SUPPLY AUTHORITY

REGIONAL INTEGRATED
LOOP SYSTEM

PHASE 3A PIPELINE
LAUREL ROAD / WYAKKA RIVER PARK

ORIGINAL MAY 19, 2010
REVIEWS:

DAVID W. LARSEN
REC NO. 11000101



425 W. 170003781
ISSUED BY
RECEIVED BY
DATE
BY
OTHER USE
PAGE 2 OF 3

[illegible]

1. LITERATURE, BOOK REVIEW MATERIALS, SCHEMATA

[illegible]

2 MYNDA RIVER PARK MATERIALS SCIENCE



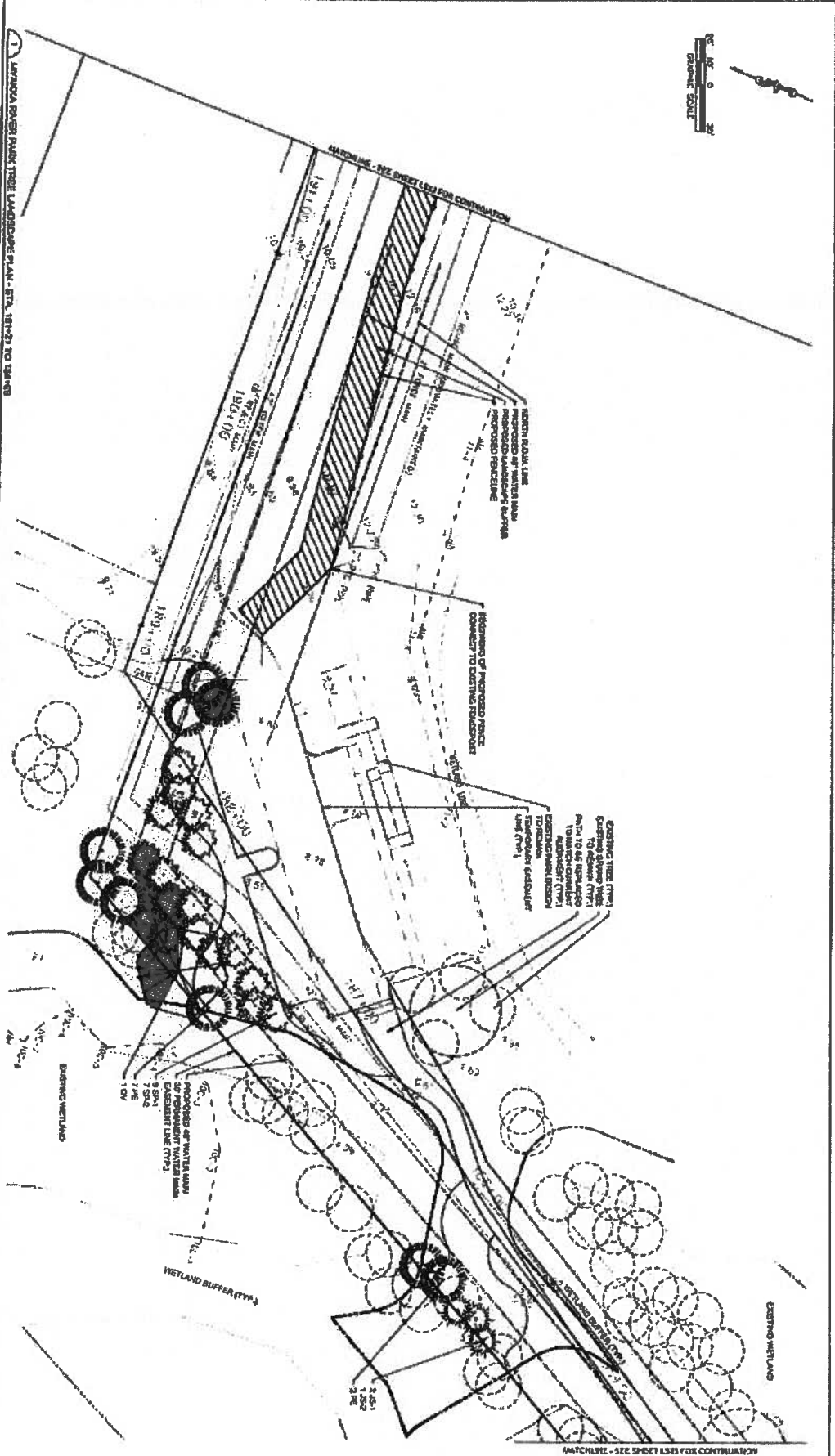
PEACE RIVER /
 MANASOTA REGIONAL
 WATER SUPPLY AUTHORITY

REGIONAL INTERCONNECT
 LOOP SYSTEM
 PHASE 3A INTERCONNECT PROJECT

PHASE 3A PIPELINE
 NYAKKA RIVER PARK
 LANDSCAPE PLAN

DESIGN: J. J. JENSEN
 DATE: 11/11/2011
 CHECKED: J. J. JENSEN
 DATE: 11/11/2011

MANASOTA
 WATER SUPPLY AUTHORITY
 11/11/2011
 SHEET 4 OF 9



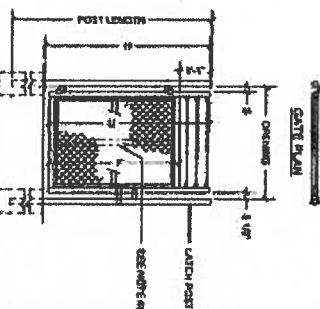
WATCHLINE - SEE SHEET 1581 FOR CONTINUATION



FENCE HEIGHT		UPRIGHT END & CORNER POSTS		LINE POSTS		CORNER POSTS WITH CORNER ASL	
1	4'-0"	B-1	B-2	N-1	A-1	A-2	A-3
2	4'-6"	B-1	B-2	N-1	A-1	A-2	A-3
3	5'-0"	B-1	B-2	N-1	A-1	A-2	A-3
4	5'-6"	B-1	B-2	N-1	A-1	A-2	A-3
5	6'-0"	B-1	B-2	N-1	A-1	A-2	A-3
6	6'-6"	B-1	B-2	N-1	A-1	A-2	A-3
7	7'-0"	B-1	B-2	N-1	A-1	A-2	A-3
8	7'-6"	B-1	B-2	N-1	A-1	A-2	A-3
9	8'-0"	B-1	B-2	N-1	A-1	A-2	A-3
10	8'-6"	B-1	B-2	N-1	A-1	A-2	A-3
11	9'-0"	B-1	B-2	N-1	A-1	A-2	A-3
12	9'-6"	B-1	B-2	N-1	A-1	A-2	A-3
13	10'-0"	B-1	B-2	N-1	A-1	A-2	A-3
14	10'-6"	B-1	B-2	N-1	A-1	A-2	A-3
15	11'-0"	B-1	B-2	N-1	A-1	A-2	A-3
16	11'-6"	B-1	B-2	N-1	A-1	A-2	A-3
17	12'-0"	B-1	B-2	N-1	A-1	A-2	A-3
18	12'-6"	B-1	B-2	N-1	A-1	A-2	A-3
19	13'-0"	B-1	B-2	N-1	A-1	A-2	A-3
20	13'-6"	B-1	B-2	N-1	A-1	A-2	A-3
21	14'-0"	B-1	B-2	N-1	A-1	A-2	A-3
22	14'-6"	B-1	B-2	N-1	A-1	A-2	A-3
23	15'-0"	B-1	B-2	N-1	A-1	A-2	A-3
24	15'-6"	B-1	B-2	N-1	A-1	A-2	A-3
25	16'-0"	B-1	B-2	N-1	A-1	A-2	A-3
26	16'-6"	B-1	B-2	N-1	A-1	A-2	A-3
27	17'-0"	B-1	B-2	N-1	A-1	A-2	A-3
28	17'-6"	B-1	B-2	N-1	A-1	A-2	A-3
29	18'-0"	B-1	B-2	N-1	A-1	A-2	A-3
30	18'-6"	B-1	B-2	N-1	A-1	A-2	A-3
31	19'-0"	B-1	B-2	N-1	A-1	A-2	A-3
32	19'-6"	B-1	B-2	N-1	A-1	A-2	A-3
33	20'-0"	B-1	B-2	N-1	A-1	A-2	A-3
34	20'-6"	B-1	B-2	N-1	A-1	A-2	A-3
35	21'-0"	B-1	B-2	N-1	A-1	A-2	A-3
36	21'-6"	B-1	B-2	N-1	A-1	A-2	A-3
37	22'-0"	B-1	B-2	N-1	A-1	A-2	A-3
38	22'-6"	B-1	B-2	N-1	A-1	A-2	A-3
39	23'-0"	B-1	B-2	N-1	A-1	A-2	A-3
40	23'-6"	B-1	B-2	N-1	A-1	A-2	A-3
41	24'-0"	B-1	B-2	N-1	A-1	A-2	A-3
42	24'-6"	B-1	B-2	N-1	A-1	A-2	A-3
43	25'-0"	B-1	B-2	N-1	A-1	A-2	A-3
44	25'-6"	B-1	B-2	N-1	A-1	A-2	A-3
45	26'-0"	B-1	B-2	N-1	A-1	A-2	A-3
46	26'-6"	B-1	B-2	N-1	A-1	A-2	A-3
47	27'-0"	B-1	B-2	N-1	A-1	A-2	A-3
48	27'-6"	B-1	B-2	N-1	A-1	A-2	A-3
49	28'-0"	B-1	B-2	N-1	A-1	A-2	A-3
50	28'-6"	B-1	B-2	N-1	A-1	A-2	A-3
51	29'-0"	B-1	B-2	N-1	A-1	A-2	A-3
52	29'-6"	B-1	B-2	N-1	A-1	A-2	A-3
53	30'-0"	B-1	B-2	N-1	A-1	A-2	A-3
54	30'-6"	B-1	B-2	N-1	A-1	A-2	A-3
55	31'-0"	B-1	B-2	N-1	A-1	A-2	A-3
56	31'-6"</						

3 CHAIN LINK FENCE ELEVATION

PEACE RIVER / MANASOTA REGIONAL WATER SUPPLY AUTHORITY	REGIONAL INTEGRATED LOOP SYSTEM PHASE 3A INTERCONNECT PROJECT
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SHED & LEAF GATE			
OPENING	GATE POSTS	HORSE SPACE (S)	
243" TO 303"	50 AND 60 INCHES	30" TO 36" LONG	
12"	4" AND 6" DIA	2 8"	
NOAL HEIGHT (A)	UPPERST. HEIGHT (U)	PRQUE HEIGHT (P)	
NO. BARRED WOOD	ACTUAL DIA.	ACTUAL DIA.	
3 1/2"	4 1/4"	3 1/2"	

4 CHAIN LINK SINGLE LEAF GATE DETAIL

[illegible]

**SECTION 02830
CHAIN LINK FENCES AND GATES**

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The work in this section shall include but not be limited to all labor, equipment, materials and all incidentals required for the construction, installation and testing of all chain link fences, and gates as noted in the Contract drawings.

1.02 RELATED WORK

- A. Section 03300: Cast-In Place Concrete

1.03 REFERENCED STANDARDS

- A. ASTM A 53: Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
- B. ASTM A 428: Standard Test Method for Weight [Mass] of Coating on Aluminum-Coated Iron or Steel Articles
- C. ASTM A 491-03: Standard Specification for Aluminum-Coated Steel Chain-Link Fence Fabric.

1.04 SUBMITTALS

- A. Submit to the Engineer for review the specified number of copies of the following shop drawings:
 - 1. Chain length fence fabric
 - 2. Post
 - 3. Gate fabrication details
 - 4. Braces, rails, tension bars
 - 5. Barbed wire and supporting arm
 - 6. Galvanized coating details
 - 7. Aluminum coating details
 - 8. Hardware

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Fabric: Aluminum coated steel chain link 72 inches high, No. 9 gauge wire woven in a 2-inch mesh with top and bottom selvages barbed, conforming to ASTM A 491. Provide aluminum coating a minimum of 0.40 ounces per square foot of wire surface for No. 9 gauge fabric or 0.35 ounces per square foot of wire surface for No. 11 gauge, with the weight of coating as determined by the strip test as defined in ASTM A 428.

- B. Posts And Other Appurtenances: Hot dipped galvanized pipe sections conforming to ASTM A 53 with a minimum of 1.8 ounces per square foot of surface.

- C. Sizes of Posts, Gate Frames and Rails:

DIMENSIONS IN INCHES

<u>Designation</u>	<u>Nominal Diameter</u>	<u>Outside Diameter</u>	<u>Thickness</u>	<u>Pounds Per Foot Plain Ends</u>
1. End, corner & pull posts:	2-1/2	2.875	0.203	5.79
2. Gate posts (one leaf width over 13 feet):	6	6.625	0.280	18.97
3. Gate posts (one leaf width 6 feet to 13 feet):	3-1/2	4.000	0.226	9.11
4. Gate posts (one leaf width 6 feet or less):	2-1/2	2.875	0.203	5.79
5. Intermediate posts:	2	2.375	0.154	3.65
6. Gate frames:	1-1/2	1.900	0.145	2.72
7. Braces	1-1/4	1.660	0.140	2.27
8. Top rails:	1-1/4	1.660	0.140	2.27

- D. Posts, Braces, Rails and Gate Frames - Option: Steel pipe manufactured from steel conforming to ASTM A 569, cold-rolled and coated with a minimum of 0.9 ounces of zinc per square foot, a minimum of 15 micrograms of zinc chromate per square inch and a minimum of 3 mils cross link polyurethane acrylic exterior coating may be furnished in lieu of round posts of Paragraphs B and C. Use steel pipe of the same external dimension as round posts for the respective uses with minimum wall thickness as follows:

<u>Outside Dimension</u> Inches	<u>Wall Thickness</u> Inches
1.66	0.111
1.90	0.120
2.375	0.130
2.875	0.160

- E. Gates:

- Swing Gates: Provide gates with frames constructed of round tubular members continuously welded at all corners or assembled with fittings with gate filler of same fabric as the fence and attached securely to the gate frame at intervals not exceeding 14 inches with hinges of adequate strength for the gate and with large bearing surfaces for clamping in position so that the hinges do not twist or turn under the action of the gate. Provide painted welds with aluminum or zinc based paint. Provide gates that are easily operable by one person, and provide latches, stops and keepers for all gates, with provision for padlocking.
- Sliding Gates: Provide sliding gates, complete with latches, stops, keepers, rollers and roller tracks, with gate posts 2.875" O.D., frame of 1.9" O.D, slide pipe tracks of 1.66" O.D., safety post (outside of gate post) of 2 -1/2" O.D., and fabric and barbed wire to match fence. Use gate designed to ride on a double wheel carrier.
- Gate Padlocks: Schlage 45-101, case-brass, shackle-case hardened steel, 1-inch length with 9-inch chain, 606 finish and keyed alike when more than one, unless otherwise specified or noted on the Drawings.

- F. Top Rail: Provide couplings of the outside sleeve type, at least 6 inches long, approximately every 20 feet.
- G. Barbed Wire Supporting Arms: Provide supporting arms forming an angle of approximately 45 degrees with the vertical fence being of sufficient strength to withstand a weight of 200 pound applied at the outer strand of barbed wire, be fitted for attaching three strands of barbed wire with the top wire projecting approximately 12-inches horizontally from the fence line and the other wires spaced uniformly between the top of the fence fabric and the outside strand.
- H. Barbed Wire: Three aluminum coated steel strands of 12-1/2 gauge wire with 14 gauge aluminum wire, 4 point barbs spaced approximately 5 inches apart.
- I. Concrete: Class B (3,000 psi) conforming to Section 03300.
- J. Hardware: Steel, malleable iron or ductile iron of standard design and conforming to the requirements of the Chain Link Fence Manufacturer's Institute with all parts galvanized except ties and clips may be of aluminum.
- K. Bottom Tension Wire: No. 7 gauge steel wire with 0.4 ounce aluminum coating per square foot of wire surface.

PART 3 - EXECUTION

3.01 ARRANGEMENT

- A. Posts: Install posts uniformly spaced, not to exceed 10 feet on centers with intermediate posts having waterproof tops and integrally cast openings through which the top rails pass.
- B. Braces: Provide braces at each gate, corner, pull and end post.
- C. Top Rails: Securely fasten the top rail to the terminal posts by heavy pressed steel brace bands and malleable end connections and pass the top rails through the line post tops to form a continuous brace from end to end of each stretch of fence.
- D. Bottom Tension Wire: Bottom tension wire shall be stretched taut between terminal posts and securely fastened to each intermediate post 6 inches above the finish grade line. Attach tension wire to the fence fabric with aluminum hog rings every 24 inches.
- E. Stretcher Bars: A 3/16-inch x 3/4-inch steel bar having a minimum length of 70-inches. Use stretcher bars for attaching the fabric to all terminal posts by threading through the fabric and attaching to the posts with 11 gauge tension bands, or other positive mechanical means, spaced at 12-inch centers. Provide one stretcher bar for each gate and end post and two for each corner and pull post.
- F. Ties and Clips: Fasten fabric to all intermediate posts with 9 gauge tie wires, spacing not to exceed 14 inches apart, and to top rail with 9 gauge tie wires, spacing not to exceed 24 inches on centers.

3.02 INSTALLATION

- A. Post Setting: Set line posts in holes 12 inches in diameter, 38 inches deep with 36-inch post embedment, terminal posts in holes 15 inches diameter, 38 inches deep with 36-inch post embedment and after the post has been set and plumbed, fill the hole with concrete. Crown the exposed surface of the concrete to shed water.
- B. Terminal and Gate Posts: Set as specified above and brace to the nearest post with a galvanized horizontal brace used as a compression member and a galvanized 3/8-inch steel truss rod and truss tightener used as a tension member.
- C. Fabric: When concrete footings have cured a minimum of three days, place chain link fabric on the side designated by the Owner, stretch taut approximately 2-inches above finish grade and securely fasten to all posts. Join rolls of wire fabric by weaving a single strand into the ends of the rolls to form a continuous mesh.

END OF SECTION

EXHIBIT "E"
Landscape Restoration Plan

HARDSCAPE MATERIAL					
Item	Quantity	Unit			Specification
Fence	2,700	LF			6' Ht. Chain Link w/ Barbed Wire
Gate	1	EA			12' Metal Swing Gate, Single Leaf, 6' Ht.
LANDSCAPE MATERIAL					
Symbol	Quantity	Unit	Botanical Name	Common Name	Specification
Trees					
JS	140	EA	<i>Juniperus silicicola</i>	Southern Red Cedar	15 Gal., 6-7' Ht. x 3-4'
PE	94	EA	<i>Pinus elliotti 'densa'</i>	South Florida Slash Pine	FG; 6'-8', BB
QV	31	EA	<i>Quercus virginiana</i>	Live Oak	65 Gal., 14' Ht., 8-6" C.T., 3.5" cal.
Shrubs					
MCE	281	EA	<i>Myrica cerifera</i>	Wax Myrtle	3 Gal., 14"-16" Ht., Full, 36" O.C.
SRE	187	EA	<i>Serenoa repens</i>	Saw Palmetto	3 Gal., Full, 36" O.C.
Sod and Miscellaneous					
Sod	5,203	SY		Bahia	Solid Sod
Mulch	733	SY		Pine Straw	3" depth settled, 1" over rootball
Diehard	283	LB		Horticultural Alliance	Applied at recommended rates



201 EAST 10TH AVE. SUITE 100
DENVER, CO 80202
TEL: 303.733.1111
FAX: 303.733.1112
WWW.DENVERCITY.COM

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PEACE RIVER /
MANASOTA REGIONAL
WATER SUPPLY AUTHORITY

[illegible]

REGIONAL INTEGRATED
LOOP SYSTEM

1

PHASE 3A PIPELINE
LAUREL ROAD / MYAKKA RIVER PARK

CRONCA, AA 54, 7015
REYNOLDS

UNITED STATES GOVERNMENT
OFFICE OF THE ATTORNEY GENERAL
WASHINGTON, D. C. 20530

Name _____
Date _____
Grade _____
School _____

SYMBOL	QUANTITY	DESCRIPTION, MAKE	DISCRIPTION, MAKE	DISCRIPTION	PRICE
TREES					
AS	420	AMERICAN RED CEDAR	10 CAL. 47 H.T. 2-6' SPREAD		400
PE	140	ROSE OLIVE TREE	500 H.T. 10 CAL. 47 H.T. 2-6' SPREAD		400
CV	17	CAJUPUT	10 CAL. 47 H.T. 2-6' SPREAD		400
SHRUBS AND GROUNDCOVERS					
MC	400	MAHOGANY	10 CAL. 47 H.T. 2-6' SPREAD		400
MC	500	MAHOGANY	10 CAL. 47 H.T. 2-6' SPREAD		400
WATER AND IRRIGATION					
WATER	400	WATER	10 CAL. 47 H.T. 2-6' SPREAD		400
WATER	500	WATER	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE MATERIALS					
LANDSCAPE	400	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	500	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	600	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	700	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	800	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	900	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	1000	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	1100	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	1200	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	1300	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	1400	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	1500	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	1600	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	1700	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	1800	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	1900	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	2000	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	2100	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	2200	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	2300	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	2400	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	2500	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	2600	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	2700	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	2800	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	2900	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	3000	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	3100	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	3200	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	3300	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	3400	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	3500	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	3600	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	3700	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	3800	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	3900	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	4000	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	4100	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	4200	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	4300	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	4400	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	4500	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	4600	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	4700	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	4800	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	4900	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	5000	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	5100	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	5200	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	5300	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	5400	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	5500	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	5600	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	5700	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	5800	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	5900	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	6000	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	6100	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	6200	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	6300	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	6400	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	6500	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	6600	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	6700	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
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LANDSCAPE	6900	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
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LANDSCAPE	7100	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	7200	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	7300	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
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LANDSCAPE	8400	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	8500	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	8600	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	8700	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	8800	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	8900	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
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LANDSCAPE	9100	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
LANDSCAPE	9200	LANDSCAPE	10 CAL. 47 H.T. 2-6' SPREAD		400
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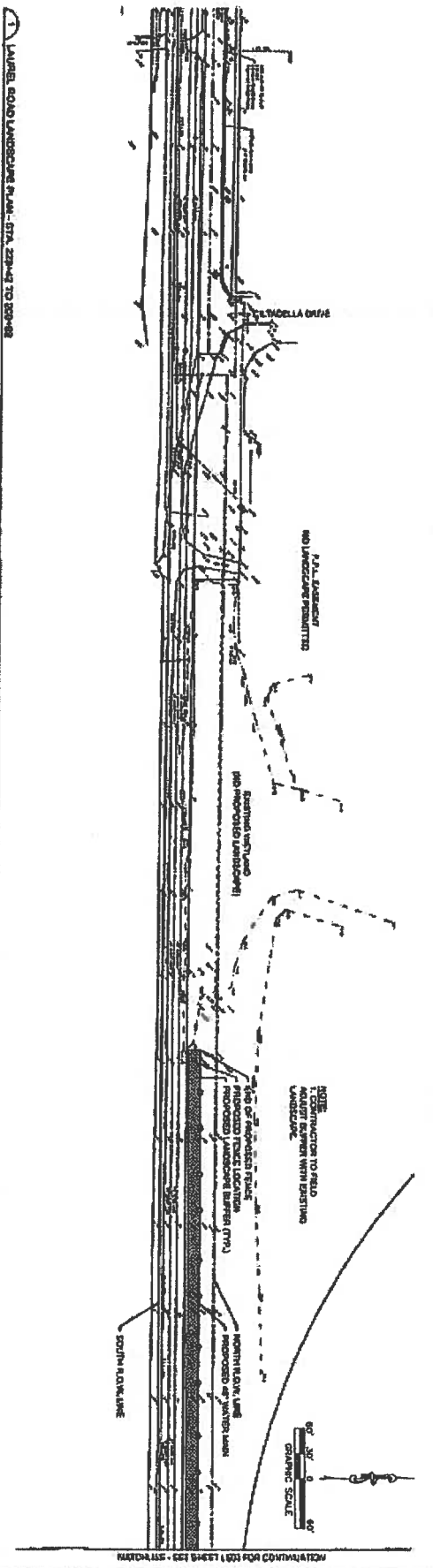
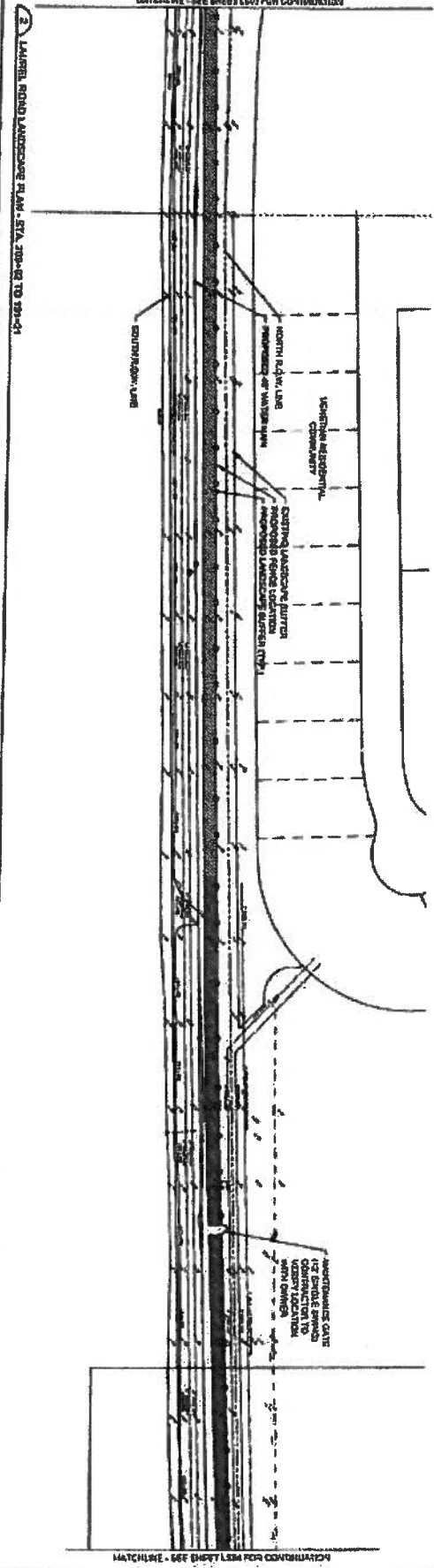
1 CANIBEL ROAD BUFFER MATERIALS SCHEDULE

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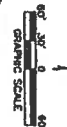
2. HWYAKKA RIVER PAID MATERIALS SCHEDULE

DBSI
 DESIGN BUILD SERVICES, INC.
 200 WEST 10TH AVENUE
 SUITE 100
 DENVER, CO 80202
 TEL: (303) 733-8800
 FAX: (303) 733-8801
 WWW.DBSI-CO.COM

CLIENT	PROJECT	DATE	REVISIONS	APPROVED	DATE	BY	DATE	BY	DATE
PEACE RIVER / MANASOTA REGIONAL WATER SUPPLY AUTHORITY	REGIONAL INTEGRATED LOOP SYSTEM PHASE 3A INTERCONNECT PROJECT	PHASE 3A PIPELINE LAUREL ROAD LANDSCAPE PLAN	DATE: MAY 10, 2010 REVISIONS:	APPROVED: [Signature] DATE: MAY 10, 2010					



NOTE:
 1. CONSTRUCTION TO FIELD
 2. CONSTRUCTION TO FIELD
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 7. CONSTRUCTION TO FIELD
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 9. CONSTRUCTION TO FIELD
 10. CONSTRUCTION TO FIELD



DATE: 11/11/2010 11:11:11 AM
 PROJECT: PEACE RIVER / REGIONAL INTEGRATED LOOP SYSTEM
 DRAWN BY: J. L. JONES
 CHECKED BY: J. L. JONES
 DESIGNED BY: J. L. JONES



FOR THE PEACE RIVER REGIONAL WATER DISTRICT
 1000 N. 10TH AVE., SUITE 100
 DENVER, CO 80202
 PHONE: 303.733.1111
 FAX: 303.733.1112
 WWW.PBS-PA.COM

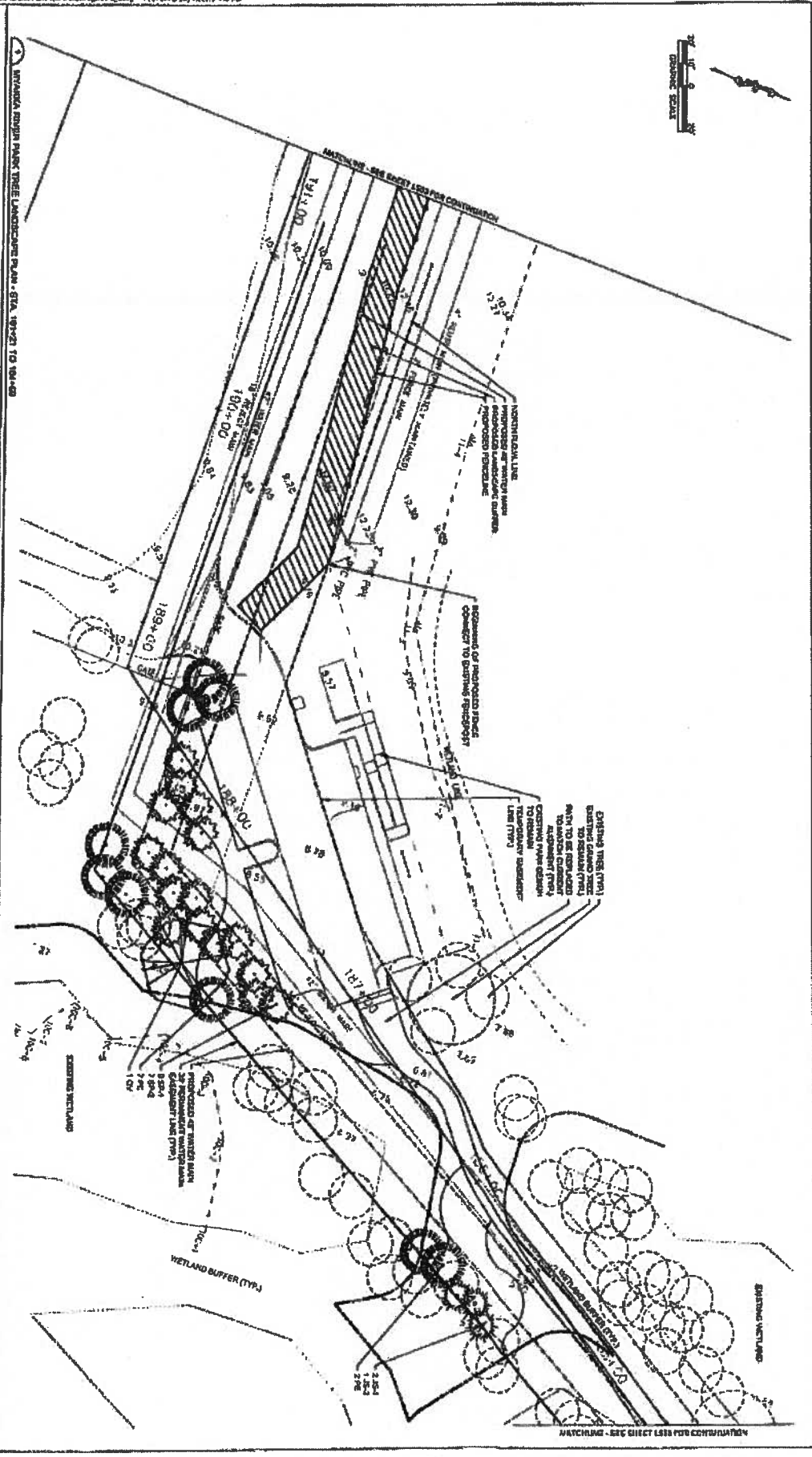
PROJECT: PEACE RIVER / REGIONAL INTEGRATED LOOP SYSTEM
 PHASE 3A INTERCONNECT PROJECT
 LANDSCAPE PLAN

PROJECT: PEACE RIVER / REGIONAL INTEGRATED LOOP SYSTEM
 PHASE 3A INTERCONNECT PROJECT
 LANDSCAPE PLAN

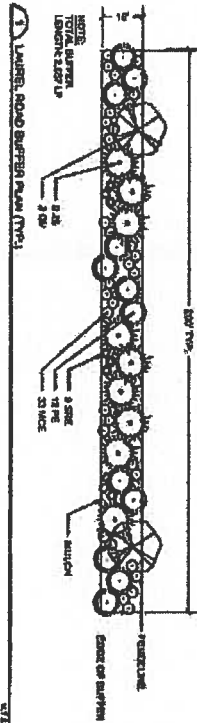
PROJECT: PEACE RIVER / REGIONAL INTEGRATED LOOP SYSTEM
 PHASE 3A INTERCONNECT PROJECT
 LANDSCAPE PLAN

PROJECT: PEACE RIVER / REGIONAL INTEGRATED LOOP SYSTEM
 PHASE 3A INTERCONNECT PROJECT
 LANDSCAPE PLAN

PROJECT: PEACE RIVER / REGIONAL INTEGRATED LOOP SYSTEM
 PHASE 3A INTERCONNECT PROJECT
 LANDSCAPE PLAN

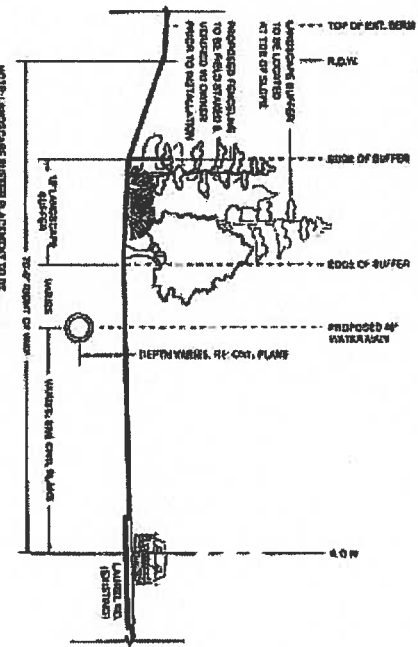


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 PROJECT: PEACE RIVER / REGIONAL INTEGRATED LOOP SYSTEM
 DRAWN BY: J. L. JONES
 CHECKED BY: J. L. JONES
 DESIGNED BY: J. L. JONES



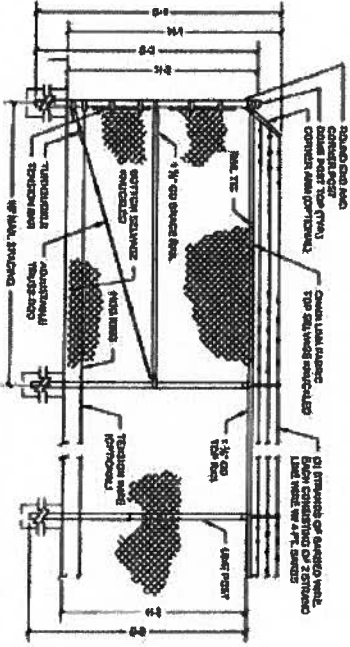
LAUREL ROAD BUFFER PLANT (TYPE 1)

11.1



LAUREL ROAD LANDSCAPE BUFFER PLANT (TYPE 2)

11.2

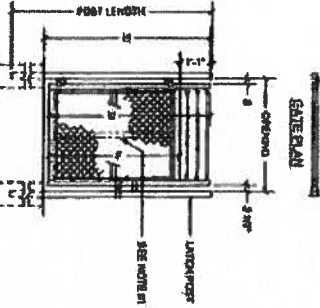


NOTES:
1. BUFFER STRIP SHALL BE 10' WIDE.
2. BUFFER STRIP SHALL BE 2' HIGH.
3. BUFFER STRIP SHALL BE 1' WIDE.
4. BUFFER STRIP SHALL BE 1' WIDE.
5. BUFFER STRIP SHALL BE 1' WIDE.
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9. BUFFER STRIP SHALL BE 1' WIDE.
10. BUFFER STRIP SHALL BE 1' WIDE.

POST HEIGHT	UPRIGHT END & CORNER POSTS	LINE POSTS	CORNER POSTS WITH CORNER ARM
8' 1"	8' 1"	8' 1"	8' 1"
8' 1"	8' 1"	8' 1"	8' 1"
8' 1"	8' 1"	8' 1"	8' 1"
8' 1"	8' 1"	8' 1"	8' 1"
8' 1"	8' 1"	8' 1"	8' 1"
8' 1"	8' 1"	8' 1"	8' 1"
8' 1"	8' 1"	8' 1"	8' 1"
8' 1"	8' 1"	8' 1"	8' 1"
8' 1"	8' 1"	8' 1"	8' 1"

CHALK LINE FORCE PLANTATION

11.3



CHALK LINE SINGLE LEAF GATE DETAIL

11.4

OPENING	GATE POSTS	HINGE SPACE (H)	POST TO UPRIGHT
10' 0"	10' 0"	10' 0"	10' 0"
10' 0"	10' 0"	10' 0"	10' 0"
10' 0"	10' 0"	10' 0"	10' 0"
10' 0"	10' 0"	10' 0"	10' 0"
10' 0"	10' 0"	10' 0"	10' 0"
10' 0"	10' 0"	10' 0"	10' 0"
10' 0"	10' 0"	10' 0"	10' 0"
10' 0"	10' 0"	10' 0"	10' 0"
10' 0"	10' 0"	10' 0"	10' 0"

NOTES:
1. BUFFER STRIP SHALL BE 10' WIDE.
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10. BUFFER STRIP SHALL BE 1' WIDE.



PEACE RIVER /
MANASOTA REGIONAL
WATER SUPPLY AUTHORITY

PEACE RIVER /
MANASOTA REGIONAL
WATER SUPPLY AUTHORITY

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WATER SUPPLY AUTHORITY

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MANASOTA REGIONAL
WATER SUPPLY AUTHORITY

**SECTION 02950
LANDSCAPE PLANTING**

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. The work included in this Section consists of furnishing, planting, watering, fertilizing and mulching all plants and lawn areas of the species, size and quality in the locations indicated on the Drawings or as discussed with the Owner's Representative.

1.02 DELIVERY, STORAGE AND HANDLING

- A. Inventory: Verify that plant species, quantity, quality and specifications of plants matches that on plant list and drawings.
- B. Preparation for Delivery:
 - 1. Prune head and/or roots of all trees only under direction of the Owner or Owner's Representative, and as required to assure safe loading, shipment, and handling without damaging the natural form and health of the plant.
 - 2. Balled and Burlapped (B&B) plants:
 - a. Dig and prepare for shipment in a manner that will not damage roots, branches, shape, and future development after replanting. Oak trees shall be root pruned 30 days prior to digging and hardened off at the supplier's nursery under mist for 30 to 60 days.
 - b. Root balls shall be with firm, natural balls of soil. Dry, cracked, or broken balls before or during planting operations will not be accepted.
 - c. Wrap ball firmly with burlap or strong cloth and tie: AMSI Z60.1. Burlap shall be all natural burlap only, without any synthetic material. Roots shall extend beyond burlap.
- C. Delivery:
 - 1. Deliver soil conditioners (pesticides, herbicides, and fertilizers) to site in original unopened containers bearing manufacturer's guaranteed chemical analysis, name, trade name, trademark, and conformance to state law. Store in designated areas only.
 - 2. Deliver planting soil mixes and mulch in bulk with manufacturer's guaranteed mix, name, and conformance to state law. Store in designated areas only.
 - 3. Deliver plants with legible identification labels.
 - a. Label all trees, containers of like shrubs, and containers of groundcover plants.
 - b. State correct plant names and size as indicated on Plant List.
 - c. Use durable waterproof labels with water-resistant ink, which will remain

legible for at least 60 days.

4. Protect all plant materials during transport/delivery with shade cloth or other acceptable means to prevent windburn.
5. Protect all plant material during delivery to prevent damage or desiccation to root ball or desiccation of crown and leaves.
6. Each day periodically mist all tree root balls and crowns/tops during delivery, handling, and storing on-site to ensure against drying.
7. Notify Owner of delivery schedule in advance so plant material may be inspected upon arrival at job site.
8. Remove unacceptable plant material immediately from job site.

D. Storage:

1. Balled and burlapped plant stock: Deliver direct from nursery.
2. Protect roots of all plant material from drying or other possible injury. Keep plant root ball and crown moist at all times.
3. Store plants in shade and protect from weather. Heel-in trees in a vertical position as required. Irrigate all stored plants as required for healthy maintenance.
4. Maintain and protect plant material not to be planted within four hours.

E. Handling:

1. Do not drop plants.
2. Do not pick up plant materials by stems or trunks.
3. Do not use chains or cables on any trees or palms. Handle using nylon straps, 2" width minimum.

1.03 GUARANTEE

- A. **Guarantee Period:** The Contractor shall guarantee all tree plantings and transplantings (if any) for a period of twelve (12) months, shrub/groundcover plantings for a period of twelve (12) months and all sod for a period of twelve (12) months after the date of Final Acceptance. During this period, the Contractor shall continue the observation of plants and guaranteed work. The Contractor shall submit monthly observation reports to the Owner with a copy to the Owner during the guarantee period. The purpose of these reports is to state any maintenance deficiencies observed. It is the Contractor's responsibility to report these to protect the guarantee. Failure to submit reports eliminates any claims that the guarantee is not valid due to improper maintenance by the Owner.
- B. **Replacement of Defective Plants:** Any dead plants or plants showing indication of probable non-survival or lack of health and vigor, or which do not exhibit the characteristics to meet specifications, shall be replaced within two weeks of notice from Construction Manager. All replacement plants shall be furnished/installed at no additional cost to the Owner and shall be guaranteed for a period of twelve (12) months for all tree

replacements, a period of twelve (12) months for all shrubs/groundcover replacements, and for three (3) months for the replacement of sod from the date of replacement. All replacements shall meet original specifications.

- C. Notification: The Contractor shall notify the Owner ten days prior to the end of the Guarantee Period and such guarantee shall be extended until notification is received.
- D. Replacements: At the end of the guarantee period, all plants that are dead or in unsatisfactory growth shall be replaced within two weeks.

1.06 JOB CONDITIONS

- A. Protection: The Contractor shall protect all materials and work against injury from any causes and shall provide and maintain all necessary safeguards for the protection of the public. The Contractor shall be held responsible for any damage or injury to person or property which may occur as a result of his negligence in the prosecution of the work. All work shall be conducted utilizing all accepted and applicable standards for construction.
- B. Existing Conditions:
 - 1. The Contractor shall exercise care in digging and other work so as not to damage existing work including, but not limited to, plant material, irrigation materials, underground pipes and cables, and the pipes and hydrants of watering systems. Should such overhead or underground obstructions be encountered which interfere with planting, the Owner shall be consulted and will adjust the location of plants to clear such obstruction. The Contractor shall be responsible for the immediate repair of any damage caused by his work. (See Section 3.01.)
 - 2. Should any objectionable materials such as old concrete, bricks, or other debris be encountered during planting operations, the Contractor shall bring it to the attention of the Owner to coordinate removal of the material from the site.
 - 3. The Contractor shall be responsible for proper plant growth in existing on-site soils. Prior to commitment of plant shipments, the Contractor shall examine the soils in all areas of work by conducting soil tests and filling test holes with water to determine if soil chemistry and drainage is satisfactory. Tests shall be conducted for the Owner's review and approval prior to planting. Any unsatisfactory conditions shall be brought to the immediate attention of the Owner for possible remedial action or plant material substitutions. The Contractor shall be responsible for all plantings in on-site soils and shall provide recommendations for amendments or remedial actions where soil conditions will not sustain proposed plantings in a healthy vigorous condition.

1.07 QUALITY CONTROL

- A. Rejections: The Owner's Representative shall have the right, at any stage of the operations, to reject any and all work and materials which, in his/her opinion, do not meet with the requirements of these specifications.
- B. Qualifications: All planting shall be performed by personnel familiar with planting procedure and under the supervision of a qualified planting foreman.
- C. Compliance: All work shall comply with applicable codes and regulations.
- D. Coordination: The work shall be coordinated with other trades to prevent conflicts.

1.08 QUANTITIES

- A. General: In the event of a conflict between quantities shown on the plant list and plans, the plans shall control.

1.09 SUBMITTALS

- A. Documentation of Plant Availability: Prior to commencing work and procuring plant material, the Contractor shall provide the Owner with written documentation that all of the plant materials can be supplied as specified within the timeframe designated by the Owner. The Contractor shall verify that the nursery sources, quantities, size and specimen quality of each plant specified can be provided. If specified plant material is not obtainable, the Contractor shall submit written notice of non-availability together with a proposal to the Owner for equivalent substitution. Under no circumstances shall any substitutions be made without the prior written approval of the Owner.
- B. Plant Photographs: The Contractor shall provide representative color photographs of all plant materials specified over 7 gallon in size with a readable measuring rod included in the photograph. Photographs shall be provided as part of the documentation of plant availability and shall be provided before plant materials are approved by the Owner.
- C. Plant Samples: Three samples of all material, 7 gallon size or less as specified, shall be submitted for approval by the Owner's Representative and shall be used as representative for all plant materials of that specification to be installed. Any plant materials that do not conform to the plans, specifications, or approved plant samples shall be rejected.
- D. Certificates: All certificates, reports, and samples shall be submitted by the Contractor to the Owner a minimum of one week prior to the installation of any of the materials. Contractor shall not begin work until all submittals have been verified by the Owner. Submittals required, but not limited to, are as follows:
1. Schedule with milestone dates and manpower projections.
 2. Fertilizer analysis is recommended.
 3. Sod.
- E. MSDS Reports: Submit MSDS Reports for all chemicals/fertilizers that will be used on the project prior to construction.
- F. Maintenance Instructions: Prior to the end of the maintenance period, furnish three (3) copies of written maintenance instructions to the Owner for installed plants throughout their full growing season.
- G. Top Soil Mix: Submit mix and samples for approval.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General:
1. Nomenclature: All trees, shrubs and plants shall be true to name as established

by the American Joint Committee on Horticultural Nomenclature publication "Standard Plant Names". The designated authority for the identification of all material shall be the two publications of L.H. Bailey, "Hortus III" and "Manual of Cultivated Plants", and all specimens shall be true to type, name, etc., as described therein.

2. **Grade Standards and Quality:** All plants shall be nursery grown and shall comply with all required inspection, grading standards and plant regulations as set forth in the Florida Department of Agriculture "Grades and Standards for Nursery Plants", 2nd Edition February, 1998
 - a. The minimum grade for all trees and shrubs shall be Florida #1, unless otherwise indicated, and all plants shall be sound, healthy, and vigorous, well branched and densely foliated when in leaf. They shall have healthy, well-developed root systems and shall be free of disease and insect pests, eggs, or larvae.
 3. **Measurements:** The minimum acceptable size of all plants, measured after pruning, with branches in normal positions, shall conform to the specified sizes as shown on the plans. Sizes specified are minimum standards. Plants shall be equal to or larger than all categories (height, spread, caliper, container) of size specification. Substantial deviations from these measurements must be approved by Owner. Caliper of tree trunks shall be measured one foot above root ball for trees 4 inches and greater in caliper, and shall be measured 6 inches above the root ball for trees *under 4 inches in caliper*.
- B. **Plant Materials:** In reference to method of cultivation, root system status, etc., plants for landscaping shall be classified under the following designations:
1. **Container Grown Plants:**
 - a. Container grown plants shall have been grown in a container large enough and for sufficient time for the root system to have developed well to hold its soil together firm and whole. No plants shall be loose in the container. Plants which have become root bound or for which the top system is too large for the size of the container, will not be acceptable. Root bound plant material or plants with curling roots may be rejected by the Landscape Architect at any time until project completion.
 - b. All containers shall be cut and opened fully, in a manner such as will not damage the root system. Container grown plants shall not be removed from the container until immediately before planting, when all due care shall be taken to prevent damage to the root system.
 - c. If any container-grown material was previously tagged for the job by the Landscape Architect, the locking tag shall be visible on the tree until substantial completion has been awarded.
 - d. All plant materials shall be container grown unless otherwise specified and/or approved by the Owner or Owner's Representative. A credit will be issued to the owner for all plant materials originally specified as container grown and approved for installation as something other than container grown.

2. Balled and Burlapped Trees:

- a. Plants so classified shall be dug with firm natural root balls of earth coming from singular climatic and soil conditions as those on the project site and of sufficient diameter and depth to include most of the fibrous roots. The root ball of these plants shall be properly wrapped with burlap sack material and remain protected and wet until they are planted. The plant shall be handled only by the earth ball and not by the plant itself. All balled and burlapped plants which cannot be planted immediately upon delivery shall be set on the ground and shall be well protected with soil, wet soil, wet moss, or other acceptable material. The plants shall be set with the burlap cover intact and with the burlap showing, until final inspection. Roots shall extend beyond burlap.
- b. Burlap: Shall be pure burlap, 100% organic material with the ability to decompose.

3. Bare Root Plants: No bare root plants shall be used unless otherwise specified.

4. Grow Bag Plants: No grow bag plants shall be used unless otherwise specified.

C. Planting Materials:

1. Topsoil:

- a. Any imported topsoil shall be a friable loam, typical of cultivated topsoils locally, containing at least 5 percent of decayed organic matter (humus). It shall be taken from a well drained, arable site. It shall be reasonably free of weeds, subsoil, stones, clods, sticks, roots or other objectionable extraneous matter or debris. It shall not contain toxic materials and shall have an acidity range of pH 5.5 to 6.5. Topsoil from nut grass infested areas will not be acceptable.
- b. Soil Preparation: Prior to placing mix and backfill, or commencing with planting, rototill any or all areas that have been previously compacted over 90 percent for other construction purposes.

2. Fertilizer:

- a. Planting Beds - Fertilizer shall be a complete balanced blend formula, of which part of the elements shall be derived from organic sources. It shall contain nitrogen, phosphorus and potassium as well as recommended micronutrients such as magnesium, iron, copper, zinc, boron, and manganese in sulfate form.
- b. Nitrogen shall be applied over all turf, shrub, and tree areas at a rate of 1 1/2 pounds per 1,000 square feet. The complete fertilizer analysis shall be approved by the Owner or Owner's Representative in advance.

3. Mulch:

a. Pine Needle Mulch:

1. Pine needle mulch shall be baled specifically for horticultural use, free of minerals (rocks), branches larger than 1/4" diameter, fire ants, and any other deleterious materials, 3" layer.

2. Pine needle mulch shall be free of other deleterious materials, debris, insects, and weed seed. Mulch shall be fresh and bright.
4. Water: Suitable water for the irrigation of the new plantings during the progress of construction shall be provided and paid for by the Contractor, who shall also furnish adequate watering equipment.
5. Stakes and Ties: Stakes and tree ties shall be provided in accordance with the requirements of Paragraph 3.02.B hereinafter.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Underground Obstructions:
 1. All utilities shall be verified by the Contractor prior to construction.
 2. Upon request from the Contractor, the Owner shall provide plans showing locations of underground utilities and/or will assist the Contractor in securing underground locations from other public utility companies, such as telephone, electricity, etc.
 3. In the event that rock, underground construction work, utility lines or obstructions out of the ordinary are encountered in any plant pit excavation, alternative locations shall be selected by the Owner. Where locations cannot be changed and the obstructions may be removed, the obstructions shall be removed to a depth of not less than 3-feet below grade and no less than 6-inches below bottom of balls or roots when plant is properly set at the required grade.
- B. Excavation of Planting Beds and/or Plant Holes:
 1. Where excavation encounters materials which are unsuitable for plant growth, all of said unsuitable material shall be removed and replaced with topsoil.
 2. Where excavation encounters materials which are suitable for plant growth, the plant hole excavations shall be roughly cylindrical in shape, with the sides approximately vertical. Tree hole shall be approximately 2 times the size of the root ball. Plants shall be centered in the hole, with the trunk location as shown in the Drawings. The bottom of the holes shall be undisturbed natural subgrade to prevent the tree from settling.
- C. Protection of Existing Trees: The Contractor shall protect existing trees from damage. Where damage does occur, the Contractor shall remove the damaged tree with approval from the Owner, and replace it in kind and size in accordance with the instructions of the Owner or Owner's Representative and the appropriate specifications, all at no additional cost to the Owner
- D. Grades: It shall be the responsibility of the Contractor to finish (fine) grade all landscape areas eliminating all surface irregularities, depressions, sticks, stones and other debris to the satisfaction of the Owner or Owner's Representative. Contractor shall also be responsible to provide the appropriate grade where planting areas and sod abut hard surface materials. No plant material shall be planted until final grade has been established, compacted to the required depth, and approved by the Owner or Owner's

Representative, The Contractor shall be responsible to grade all planting and sod areas for positive drainage as directed by the Owner or Owner's Representative and as indicated on the plans.

3.02 PLANTING

A. Setting of Plants:

1. When lowered into the hole, the plant shall rest on a prepared hole bottom such that the roots are level with, or slightly above, the level of their previous growth and so oriented such as to present the best appearance. The Contractor, when setting plants in holes, shall make allowances for any anticipated settling of the plants. If wet conditions are anticipated, trees will be set 3 inches to 4 inches and shrubs/ groundcovers 2 inches to 3 inches higher than normal.
2. The backfill shall be made with native topsoil and shall be firmly rodded and watered-in, so that no air pockets remain. The quantity of water applied immediately upon planting shall be sufficient to thoroughly moisten all of the backfilled earth. Plants shall be kept in a moistened but not saturated condition for the duration of the establishment period.

- B. Staking and Guying: It is the responsibility of the Contractor to maintain all trees in a plumb, upright position until the end of the Guarantee Period. Inappropriate staking and guying shall be replaced by the Contractor at no expense to the Owner. The Contractor shall be responsible for removing all staking and guying materials at the end of the guarantee period or as directed by the Owner. Trees shall be staked and guyed per the planting details using Staking Systems, Inc. products, or approved equal, available at:

Arborguy
300 Morin Street
Eustis, FL 32726
(866) 272-6771

C. Pruning:

1. All broken or damaged roots shall be cut off smoothly and the tops of all trees shall be pruned in a manner complying with standard horticultural practice. At the time pruning is completed, all remaining wood shall be alive. Fine pruning for tree shape and appearance shall be done only under the direction of the Owner or Owner's Representative.
2. At the end of the guarantee period at least 80 percent of the wood remaining shall be alive.

- D. Mulching: Within one week after the planting, mulch material shall be uniformly applied to a minimum settled thickness of 3-inches over the entire bedding area and 1" over the plants' rootball. The mulch shall be maintained continuously in place until the time of final acceptance.

- E. Watering: The Contractor shall continue watering as necessary until the end of the Guarantee Period in order to promote the growth and survival of the plant materials and properly establish the new plantings. Care shall be taken to prevent staining of new construction where temporary well water is used.

- F. Pest Control: Prior to Final Acceptance, occurrence of scales, borers, foliar feeders, aphids, mites, leaf-spot and die back, nematodes and canker-producing fungi, shall be

treated with appropriate pesticide. MSDS reports for all products applied shall be provided to Owner prior to use.

- G. All plantings shall receive the specified fertilizer at time of installation and prior to final acceptance.

3.03 FILL

- A. **Fill Dirt:** Fill dirt, if required, shall be locally obtained material from naturally drained sources, free from dry, organic debris, stones larger than 1-inch diameter and other materials harmful to successful drainage and plant growth. Soil shall be well mixed and contain no more than 25 percent muck.
- B. **Repair:** Repair and re-establish grades in settled, eroded, rutted, or otherwise damaged areas.

3.04 SODDING

- A. See Section 02940 Sodding

3.05 FIELD QUALITY CONTROL

- A. **Maintenance Prior to Final Acceptance:**
 - 1. **Maintenance Period:** Maintenance shall begin immediately after each plant is planted and shall continue until Final Acceptance. Plants shall be watered, mulched, weeded, pruned, sprayed, fertilized, cultivated and otherwise maintained and protected for the period of time stated above. Sod shall be mowed at a minimum twice per month until Final Acceptance for general turf areas. Fields shall be mowed at a minimum once per week until Final Acceptance.
 - 2. **General Maintenance:** Leaning trees and settled plants shall be reset to proper grade position, planting saucer restored and dead material removed. Guys shall be tightened and repaired.
 - 3. **Defective Work:** Defective work shall be corrected as soon as possible after it becomes apparent and weather and season permit. Upon completion of planting, the Contractor shall remove excess soil and debris from the site, and repair any damage to structures, etc., resulting from planting operations.
 - 4. **Protection:** The Contractor is responsible for protection against mechanical damage. This shall include providing protection from vehicles, including the posting of approved warning signs and barricades, as needed. The Contractor shall repair, restore or replace any plants or planting areas which might become damaged as a result of any negligence in complying with these requirements. As a specific requirement of these conditions, the Contractor shall be responsible for assuring that all plants at the time of final inspection, exhibit the characteristics and qualifications required for the grade of plant as originally specified.
 - 5. **Watering:** The Contractor shall be responsible for any additional watering required if irrigation proves to be inadequate for freshly planted material.
 - 6. **General:** Except as otherwise specified, the Contractor's work shall conform to accepted horticultural practices as used in the trade.

B. Final Acceptance:

1. Upon completion of all Work, including maintenance, the Contractor shall arrange for a final inspection. The Contractor shall be responsible for maintenance until Final Acceptance. Refer to Division 1 for Project Close Out.
2. The date of Final Acceptance shall mark the beginning of the Guarantee Period.

C. Guarantee Inspection: At the end of the Guarantee Period, inspection of plants will be made by the Owner or Owner's Representative upon written notice requesting such inspection, submitted by the Contractor at least ten days before the anticipated inspection. All defects discovered shall be repaired or replaced by the Contractor.

3.06 ADJUSTMENT AND CLEANING

- A. Cleaning Up the Site:** Upon completion of any landscape project, the Contractor must thoroughly clean up the project site. In addition to removing all equipment, unused materials, deleterious material, and surplus excavated material, the Contractor shall fine grade all disturbed areas and the areas adjacent to the new plantings to provide a neat and uniform site. All damaged or altered existing structures, as a result of the landscape work, shall be corrected.

END OF SECTION

**SECTION 02940
SODDING**

PART 1.00 - GENERAL

1.01 WORK INCLUDED

- A. Permanent sodding at locations indicated on Drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02950 Landscape Planting

1.03 QUALITY ASSURANCE

- A. Standards: Federal Specifications (FS) O-F-241D, Fertilizers, Mixed, Commercial.
- B. Testing Agency: Independent Testing Laboratory.
- C. Regulatory Agencies: Conform to the requirements of local agricultural and governing agencies.
- D. Sod Producer: Shall be a company specializing in sod production and harvesting with a minimum of five (5) years of experience producing sod.
- E. Sod: Sod shall be grown between six (6) to twelve (12) months with root development that will support its own weight, without tearing, when suspended vertically by holding the upper two corners.

1.04 SUBMITTALS

- A. Procedures: Submit in accord with Division 1 Requirements.
- B. Certificates:
 - 1. Growers Certification:
 - a. Grass species, and location of field from which sod is cut.
 - b. Compliance certificates for quarantine restrictions.
 - c. Sod certification information.
 - 2. Manufacturer's certification of fertilizer and herbicide composition and proposed application rates.
 - 3. Proposed schedule of herbicide and fertilization applications.
 - 4. Proposed schedule of grassing.
 - 5. Sample and supplier credentials of the proposed top dressing mix.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Construction Manager to be notified of sod delivery 24 hours prior to delivery to allow for installation observation.

- B. Deliver sod on pallets, or on rolls as appropriate by species.
- C. Protect root system from exposure to wind or sun.
- D. Protect sod against dehydration, contamination, and heating during transportation and delivery.
- E. Keep stored sod moist and under shade, or covered with moistened burlap.
- F. Do not pile sod more than 2 feet deep.
- G. Do not tear, stretch, or drop sod.

1.06 JOB CONDITIONS

- A. Start: Begin installation of sod only after related work is accepted.
 - 1. Earthwork
 - 2. Fine Grading
 - 3. Utilities
 - 4. Paving
 - 5. Irrigation
- B. Environmental Requirements:
 - 1. Install sod during time period acceptable to the Construction Manager.
 - 2. Do not install sod on saturated soil.
- C. Protection of work: Erect signs and barriers against vehicular traffic, where applicable.

1.07 GUARANTEE

- A. Guarantee sod for period of twelve (12) months after date of Final Acceptance.
- B. Replacement sod under this guarantee shall be guaranteed for twelve (12) months from the date of installation.
- C. Repair damage to other landscape and hardscape during sod replacement.
- D. Contractor will accept responsibility for repairs of all washouts caused by weather or irrigation run off for all areas not showing an acceptable stand of grass.
- E. Contractor shall be responsible for any damage caused by forklifts, tractors, trucks etc. during the placing of that sod.
- F. Contractor shall provide a uniform stand of grass. Re-sod areas with specified materials which fail to provide a uniform stand of grass until Final Acceptance.

PART 2.00 - PRODUCTS

2.01 MATERIALS

- A. Grass Species:
 - 1. Bahia 'Paspalum Notatum', certified.
- B. American Sod Producers Association (ASPA) Grade: Nursery Grown or Approved. Field grown sod is not acceptable.
- C. Sod Configuration:
 - 1. Bahia 'Paspalum Notatum'
 - a. Furnished in pieces, 24" x 18" x 1-1/2", excluding top growth and thatch.
 - b. Pads not stretched or broken.
 - c. Uniformly mowed height when harvested - 2 inches.
- D. Pests: Inspected and found free of diseases, nematodes, pests, and pest larvae, by entomologist of the local Agricultural agency.
- E. Weeds:
 - 1. Free of non-specified grass, nut grass or other objectionable weeds.
- F. Uniform in color, leaf texture, and density.

2.02 WATER

- A. Water: Free of substances harmful to plant growth.

2.03 HERBICIDES AND STERILIZERS

- A. As recommended by local agricultural agencies to be approved by the County six (6) weeks prior to execution.

PART 3.00 - EXECUTION

3.01 HARVESTING AND PLANTING

- A. Harvesting:
 - 1. Use approved sod cutters for cutting and removing sod. Exercise care to retain native soil intact.
 - 2. Cut sod to a thickness sufficient to secure a dense stand of live grass.
 - 3. Sod shall not contain noxious weeds.
- B. Planting:
 - 1. At time of planting, sod shall be live, fresh, and uninjured, with native soil mat adhering firmly to root structure.

2. Pre-irrigate soil to wet it to a depth of 2 in. Soil should be damp, but not muddy.
 3. Plant sod within 24 hours after it has been delivered to site and within 72 hours of harvesting. Do not leave it exposed to direct sun any longer than is necessary.
 4. Roll-out sod or lay squares carefully. Use a 2 x 4 laid on its side as a "kicker" to butt against sod strips and force them into place.
 5. Stagger joints.
 6. Roll with lawn roller filled with water. It is important to get new sod into close contact with the soil by thorough rolling.
 7. After laying and rolling, water area thoroughly and deeply. Keep sod well watered during the first two weeks after planting to insure good rooting into base soil.
 8. Cut and trim sod edges at plant beds, walks, buildings or other edge areas.
 9. When piecing sod, use pieces no smaller than one (1) square foot.
 10. Install sod with top flush with adjacent curbs, sidewalks, drains and seeded areas.
 11. Slopes for any mowed lawn area within a Park project area shall be no greater than 4:1. If directed by Landscape Architect and approved by SPR, sod installed on slopes greater than 4:1 shall be pegged with wooden stakes and laid parallel to the contours. Pegs shall be set flush with finished grades.
 12. Roll with light lawn roller to ensure contact with sub-grade on slopes 5:1 or less.
- B. Top Dressing:
1. Hand top dress sod with 1/2" Ortona coarse sand; fill all voids between panels and at pavement edges.
- C. Water: Sprinkle sod immediately after transplanting to thoroughly water and wash in lawn sand. Add additional sand to produce a level lawn.
- D. Netting: Remove netting from "Big Rolls" prior to installation.

3.02 LAWN ESTABLISHMENT

- A. Watering:
1. Irrigate sod immediately upon planting.
 2. Keep sod moist during first two weeks after planting.
 3. After two weeks, continue watering unless rainfall produces a minimum of 2 inches per week.
- B. Mowing:
1. Bahia Sod - when grass reaches 2 1/2 inches in height, mow to 2 inches.
 2. St. Augustine - when grass reaches 2 1/2 inches in height, mow to 2 inches.

3. Bermuda 'Tifway 419' - when grass reaches 1 1/2 inches in height, mow to 1 inch with reel mower. Reel mower to be approved by Construction Manager prior to first cut.
- C. Maintainable Height: Contractor shall maintain all grass within the project limit within the heights specified until final project completion date.
- D. General: Resod spots larger than 6" x 6" not having uniform stand of grass.
- E. Weed Eradication: Between second and third mowing, apply herbicide uniformly at manufacturer's recommended rate to reduce weed infestation.
- F. Fertilizer:
 1. Immediately prior to planting, all sod areas shall be fertilized. A starter fertilizer shall be applied to the sod surface, at a rate of 176 lbs. Per acre.
 2. Apply fertilizer once after sodding uniformly at a rate of 1 1/2 pounds of Nitrogen per 1,000 square feet, on a schedule, as directed by the Construction Manager.
 3. Care shall be taken when spreading fertilizer to insure that there are no gaps during application. The fertilizer shall be applied under favorable conditions and by such approved methods as will ensure maximum uniformity of distribution.
- G. Establishment period to extend until Final Acceptance by the Construction Manager.

3.05 CLEANING

- A. Spills: Immediately clean spills from paved and finished surface areas.
- B. Trash/Debris: Remove debris and excess materials from project site.
- C. Barricade removal: Dispose of protective barricades and warning signs at termination of lawn establishment with consent of Construction Manager.

3.06 FINAL INSPECTION AND ACCEPTANCE

- A. Request for Acceptance: The Contractor shall request final inspection for acceptance at completion.
- B. Replacements: Replace rejected sod area with acceptable sod within two weeks after the inspection.
- C. Upon Final Acceptance, the Owner shall assume lawn maintenance.

END OF SECTION