

Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

2500 Jupiter Park Drive, Jupiter, Florida 33458

Telephone (561) 747-5700 • Fax (561) 747-9929 • www.loxahatcheeriver.org



D. Albrey Arrington, Ph.D., Executive Director

AGENDA REGULAR MEETING #7-2019 June 27, 2019 – 7:00 PM AT DISTRICT OFFICES ALL MEETINGS ARE OPEN TO THE PUBLIC

1. Call to Order & Pledge of Allegiance
2. Administrative Matters
 - A. Roll Call
 - B. Previous Meeting Minutes **Pg 3**
 - C. Additions and Deletions to the Agenda
3. Comments from the Public
4. Status Updates
 - A. Loxahatchee River Watershed **Pg 7**
 - B. Loxahatchee River District Dashboard **Pg 8**
5. Consent Agenda (see next page) **Pg 9**
6. Regular Agenda
 - A. Consent Agenda Items Pulled for Discussion
 - B. Jones Creek LRPI Grant Application Collaboration **Pg 360**
 - C. Budget Assumptions - Fiscal Year 2020 **Pg 364**
7. Reports (see next page) Pulled for Discussion
8. Future Business **Pg 407**
9. Board Comments
10. Adjournment

“...if a person decides to appeal any decision made by the Board, with respect to any matter considered at such meeting or hearing, he/she will need a record of the proceedings, and that, for such purpose, he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.”

Submitted by:
Date: June 17, 2019

\\Lreed-fp01\admin\BOARD\Agenda\2019-05_LRD-Board-Agenda.docx

Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

James D. Snyder
Board Member

5. CONSENT AGENDA

All items listed in this portion of the agenda are considered routine and will be enacted by one motion. There will be no separate discussion of these items unless requested by a Board member or citizen; in which event, the item will be removed and considered under the regular agenda.

- A. Turtle Creek Subsystem 2 Preliminary Assessment – Resolution 2019-05 Pg 10
- B. Turtle Creek Subsystem 3 Preliminary Assessment – Resolution 2019-06 Pg 18
- C. Fixed Asset Disposal – to approve disposal Pg 25
- D. Investment Policy - to approve update Pg 26
- E. Personnel Policies & Procedures – to approve update Pg 44
- F. Imperial Woods Cost Sharing Agreement – to approve amendment Pg 141
- G. Seacoast Utility Agreement Amendment – to approve amendment Pg 145
- H. Construction Standards & Technical Specifications Pg 160
- I. Jupiter Farms Elementary Contract Contingency Pg 357
- J. Change Order- to approve modifications Pg 358

7. REPORTS

- A. Neighborhood Sewering Pg 366
- B. Legal Counsel's Report Pg 368
- C. Engineer's Report Pg 371
- D. Busch Wildlife Sanctuary Pg 376
- E. Director's Report Pg 378

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D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: Governing Board

FROM: Recording Secretary

DATE: June 17, 2019

RE: Approval of Meeting Minutes

Attached herewith are the minutes of the Regular Meeting of May 16, 2019. As such, the following motion is presented for your consideration.

“THAT THE GOVERNING BOARD approve the minutes of the May 16, 2019 Regular Meeting as submitted.”

J:\BOARD\MinutesSamples\MinutesMemo2019.docx

Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

James D. Snyder
Board Member

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
REGULAR MEETING - MINUTES
May 16, 2019

1. CALL TO ORDER

Chairman Rostock called the Regular Meeting of May 16, 2019 to order at 7:04 PM.

2. ADMINISTRATIVE MATTERS

A. ROLL CALL

The following Board Members were in attendance.

Mr. Boggie
Mr. Rockoff- arrived at 7:06 PM
Mr. Silverman
Mr. Snyder
Dr. Rostock

Staff Members in attendance were Mr. Dean, Mr. Howard, Ms. Peterson, and Mr. Campbell.

Consultants in attendance were Mr. Muniz from Hazen & Sawyer, Ms. Miranda from Holtz Consulting, Ms. Marshall and Mr. Pugsley from Mathews Consulting and Mr. Shenkman with Smith, Gaskill & Shenkman.

Ms. Kight and Ms. Wynne with Busch Wildlife Sanctuary were also in attendance.

B. PREVIOUS MEETING MINUTES

The minutes of the Regular Meeting of April 25, 2019 were presented for approval and the following motion was made.

MOTION: Made by Mr. Boggie, Seconded by Mr. Silverman,
Passed Unanimously.

“THAT THE GOVERNING BOARD approve the minutes of the April 25, 2019 Regular Meeting as submitted.”

C. ADDITIONS & DELETIONS TO THE AGENDA

All items from Consent Agenda were deleted.

3. COMMENTS FROM THE PUBLIC

No comments were received.

4. STATUS UPDATES

A. LOXAHATCHEE WATERSHED STATUS

Mr. Howard discussed the Research Project to Evaluate the Effectiveness of Stormwater Filtration Devices.

B. LOXAHATCHEE RIVER DISTRICT DASHBOARD

Mr. Dean reviewed the District Dashboard.

5. CONSENT AGENDA

No action taken.

6. REGULAR AGENDA

A. CONSENT AGENDA ITEMS PULLED FOR DISCUSSION

No items were pulled for discussion.

B. BWS Zoo Mesh Cost Reimbursement

Mr. Boggie reviewed his memo and the following Motion was made:

“THAT THE DISTRICT GOVERNING BOARD authorize reimbursement to BWS in the amount not to exceed \$31,000 for actual cost increase spent for LRD directed changes to the proposed Alligator/Crocodile exhibit. Payment to be made within 30 days of completed exhibit.”

MOTION: Made by Mr. Snyder, Seconded by Mr. Boggie,
Motion **FAILED** 1-4 with Mr. Boggie voting for the motion.

The Board discussed additional options regarding funds available for BWS.

MOTION: Made by Mr. Silverman, Seconded by Mr. Boggie,
Motion passed 4-1 with Mr. Snyder opposed.

“THAT THE DISTRICT GOVERNING BOARD, in recognition of the service provided by the Busch Wildlife Sanctuary to the community, authorize a grant of \$16,000 to BWS.”

7. REPORTS

The following reports stood as written.

- A. NEIGHBORHOOD SEWERING
- B. LEGAL COUNSEL'S REPORT
- C. ENGINEER'S REPORTS
- D. BUSCH WILDLIFE SANCTUARY
- E. DIRECTOR'S REPORT

8. FUTURE BUSINESS

Mr. Dean reviewed the Future Business.

9. COMMENTS FROM THE BOARD

Mr. Boggie suggested a joint LRD and BWS workshop before the license agreement expiration in 2021 in which LRD and BWS discuss what has worked and/or what has not worked as well as our intentions of extending the license agreement.

Mr. Boggie would like the Board to consider naming a different person as the BWS liaison.

10. ADJOURNMENT

MOTION: Made by Mr. Rockoff, Seconded by Mr. Snyder,
Passed Unanimously.

"That the regular meeting of May 16, 2019 adjourns at 7:56 PM."

BOARD CHAIRMAN

BOARD SECRETARY

RECORDING SECRETARY

Watershed Status:



2018 STRATEGIC PLAN


2019 UPDATE

JUNE, 2018

**What have we accomplished
in the 1st year?**

LOXAHATCHEE RIVER DISTRICT'S EXECUTIVE DASHBOARD



		Stewardship	Wastewater						Engineering	General Business				EHS	River Health			
		# People educated at RC	Mean Daily Incoming Flow	Delivery of Reclaimed Water	Customer Service	Sewer Overflow	Permit exceedance	NANO Blend to Reuse (@ 511)	Grease Interceptor Inspections	Cash Available	Revenue (excluding assessment & capital contrib.)	Operating Expenses	Capital Projects		Employee Safety	Minimum Flow Compliance	Salinity @ NB seagrass beds	River Water Quality
Benchmark / Customer Expectation		% of Target	million gallons/day	# days demand not met	# blockages with damage in home	# occurrences	# occurrences	Max Specific Conductance (umhos/cm)	% requiring pump out	\$	% of Budget	% of Budget	% within budget	% on time	# of OSHA recordable injuries	# Days MFL Violation	%	Fecal Coliform Bacteria (cfu/100ml)
Green Level		≥ 90%	< 7.7	<2	Zero	Zero	Zero	<1542	≤ 15	≥ \$9,894,657	≥ 95%	≥ 85% but ≤ 105%	≥80%	≥80%	Zero	0	min ≥ 20 ‰	90% of sites ≤ 200
Yellow		< 90%	< 8.8	≥ 2	1	≥ 1	≥ 1	≤1875	≤ 25	< \$9,894,657	≥ 90%	≥ 80%	≥60%	≥60%	-	1	min ≥ 10 ‰	2 or more sites >200 but ≤ 400
Red		<75%	≥ 8.8	≥ 9	≥ 2	> 2	≥ 2	>1875	> 25	< \$5,557,057	< 90%	< 80% or > 105%	< 60%	< 60%	≥ 1	≥ 2	min < 10 ‰	≥ 2 sites > 400
2016 Baseline		2,169	6.7	0	0	1	0	1,063	12	\$ 33,223,653	96%	90%	100%	85%	0	not avail	18	1 > 200
2017 Baseline		104%	6.6	1	0	2	0	1,127	9	\$ 30,425,084	95%	85%	98%	85%	0	not avail	23	1 > 200
2018 Baseline		112%	6.8	1	0	2	0	1,216	8	\$ 33,683,858	99%	85%	95%	56%	0	42	23	1 > 200
2018	May	139%	7.2	1	0	4	0	1,245	0	\$ 32,001,517	101%	89%	93%	47%	1	0	7.0	5 > 400
	June	100%	7.1	3	0	3	0	1,061	6	\$ 30,357,463	100%	88%	93%	47%	0	0	8.6	6 > 200
	July	102%	6.5	0	0	3	0	987	5	\$ 36,393,890	100%	88%	93%	27%	1	0	11.0	0 > 200
	Aug	106%	6.6	2	0	0	0	1,039	7	\$ 36,911,972	99%	89%	93%	27%	1	0	15.8	7 > 200
	Sept	96%	6.3	3	0	5	0	1,219	8	\$ 35,472,108	100%	87%	93%	27%	0	0	17.6	1 > 200
	Oct	120%	6.4	1	0	2	0	1,296	7	\$ 35,973,349	96%	73%	100%	100%	0	0	29.1	1 > 200
	Nov	120%	6.6	0	0	3	0	1,226	8	\$ 37,075,977	95%	82%	100%	100%	0	0	29.2	1 > 400
	Dec	131%	6.8	0	0	1	0	1,310	5	\$ 37,311,234	103%	84%	100%	67%	1	14	33.3	0 > 200
2019	Jan	105%	7.2	0	0	6	0	1,399	8	\$ 37,478,367	101%	84%	100%	67%	1	17	29.9	1 > 200
	Feb	106%	7.6	0	1	0	0	1,262	7	\$ 39,498,968	101%	86%	100%	83%	0	3	24.5	1 > 400
	Mar	119%	7.2	0	0	2	0	1,170	0	\$ 38,046,365	99%	88%	100%	75%	0	0	30.4	0 > 200
	Apr	79%	6.9	0	0	4	0	1,176	2	\$ 38,021,490	99%	89%	100%	73%	0	0	31.2	0 > 200
	May	113%	6.7	0	0	0	0	1,125	5	\$ 36,569,040	98%	90%	92%	50%	0	0	25.7	0 > 200
Consecutive Months at Green		1	120	8	3	1	70	105	25	119	83	5	44	0	4	3	8	9
Metric Owner		O'Neill	Campbell	Dean	Dean	Dean	Campbell	Campbell	Dean	Peterson	Peterson	Peterson	Dean	Dean	Campbell	Howard	Howard	Howard

Metric
Capital Projects: On-time

Explanation
While half (6 of 12) of our large capital projects are technically behind schedule, only one (Jupiter Ocean Racket Club force main) is delayed due to LRD, the project engineer, or the contractor. The remaining projects that are behind schedule are: installation of permanent generators at Lift Station 43 and 62; Island Country Estates neighborhood sewerage; Alt. A1A force main replacement; Master Lift Station rehabilitation; and Olympus force main replacement.

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D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: Governing Board
FROM: Administration Staff
DATE: June 18, 2019
SUBJECT: Consent Agenda

All items listed below are considered routine and will be enacted by one motion. There will be no separate discussion of these items unless requested by a Board Member or citizen, in which event, the item will be removed and considered under the regular agenda.

This month's consent agenda consists of the following items:

- A. Turtle Creek Subsystem 2 Preliminary Assessment – Resolution 2019-05
- B. Turtle Creek Subsystem 3 Preliminary Assessment – Resolution 2019-06
- C. Fixed Asset Disposal – to approve disposal
- D. Investment Policy - to approve update
- E. Personnel Policies & Procedures – to approve update
- F. Imperial Woods Cost Sharing Agreement – to approve amendment
- G. Seacoast Utility Agreement Amendment – to approve amendment
- H. Construction Standards & Technical Specifications
- I. Jupiter Farms Elementary Contract Contingency
- J. Change Order- to approve modifications A. LS 43 Emergency Generator Award of Contract

Should you have any questions regarding these items, I would be pleased to discuss them further with you.

The following Motion is provided for Board consideration:

“THAT THE GOVERNING BOARD approve the Consent Agenda of June 27, 2019 as presented.”

Signed,

D. Albrey Arrington, Ph.D.
Executive Director

J:\BOARD\Consent2019.docx

Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

James D. Snyder
Board Member

TIMOTHY W. GASKILL

*Business, Probate
Family Litigation*

DONALD R. SMITH

*Personal Injury & Wrongful Death
Commercial Litigation*

CURTIS L. SHENKMAN

*Board Certified Real Estate
Attorney*

BROOKEGROGAN

Attorney

BRANDON D. SMITH

Attorney

SMITH, GASKILL & SHENKMAN, P.A.

ATTORNEYS & COUNSELORS AT LAW

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NORTH PALM BEACH, FLORIDA 33408

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Shenkman@LawPalmBeach.com

June 17, 2019

LEGAL ASSISTANTS

CIVIL TRIAL, PROBATE

AND FAMILY LAW

KAREN M. BOYDEN-LOPATOSKY
MINDY VASSER

PERSONAL INJURY

ROBIN B. MODLIN, CP
BETH KOENIG

REAL ESTATE

JUDY D. MONTEIRO
DENISE B. PAOLUCCI
MELISSA KAJEEJIT

D. Albrey Arrington, Ph.D., Executive Director

Loxahatchee River Environmental Control District

2500 Jupiter Drive

Jupiter, Florida 33458-8964

Re: Resolution 2019-05 and Preliminary Assessment Roll for TURTLE CREEK SUBSYSTEM 2

Dear Albrey:

Please attach to this letter Resolution 2019-05, Exhibit "A" Preliminary Assessment Roll, Map & Exhibit "B" most recent list of property owners as part of the Resolution.

In the Resolution, Sections 2 and 7, the "Board of Adjustment" public hearing and "Governing Board" meeting to confirm the "final" assessment roll is proposed for JULY 18, 2019. Preparation is necessary of the Notice to be published and mailed out by Friday, July 5, 2019.

A SUGGESTED MOTION for the Board at the June 27, 2019 meeting is as follows:

"THAT THE GOVERNING BOARD approve Resolution 2019-05 adopting the
TURTLE CREEK SUBSYSTEM 2 Preliminary Assessment Roll."

Sincerely,

Curtis L. Shenkman

Curtis L. Shenkman

LRECD RESOLUTION NO. 2019-05

A RESOLUTION OF THE LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT RELATING TO THE **TURTLE CREEK SUBSYSTEM 2** ASSESSMENT AREA IMPROVEMENTS; ADOPTING THE PRELIMINARY ASSESSMENT ROLL FOR **TURTLE CREEK SUBSYSTEM 2** ASSESSMENT AREA IMPROVEMENTS AS PREPARED BY THE DISTRICT CLERK AND ATTACHED HERETO AS EXHIBITS “A” AND “B”; AUTHORIZING THE DISTRICT GOVERNING BOARD TO ACT AS THE BOARD OF ADJUSTMENT; PROVIDING FOR THE FURNISHING OF TEN DAYS’ WRITTEN NOTICE TO ALL PROPERTY OWNERS AFFECTED; DIRECTING THAT AN AFFIDAVIT OF PUBLICATION BE OBTAINED; REQUIRING THE FILING OF THE PROOF OF PUBLICATION AND OF THE WRITTEN NOTICE; MAKING REFERENCE TO RESOLUTION NO. **2016-32** PROVIDING FOR THE PUBLICATION OF THE NOTICE OF THE MEETING TO CONSIDER CONFIRMATION OF THE PRELIMINARY ASSESSMENT ROLL; DIRECTING THAT AN AFFIDAVIT OF PUBLICATION BE OBTAINED; REQUIRING THE FILING OF THE PROOF OF PUBLICATION; PROVIDING FOR CONSISTENCY; PROVIDING FOR SEVERABILITY; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Governing Board of the Loxahatchee River Environmental Control District (hereinafter called the “District” has authorized the sewer improvements to the **TURTLE CREEK SUBSYSTEM 2** Assessment Area in **MARTIN** County, Florida.

WHEREAS, the Governing Board has considered the presentation of the District Engineer and considered such recommendations to be in accordance with the requests and the best interests of the citizens of the District.

WHEREAS, the Governing Board has considered the improvements to be in accordance with the best interests of the citizens of the **TURTLE CREEK SUBSYSTEM 2** Assessment Area.

WHEREAS, the District’s previous Resolution **2016-32** was approved by the District’s Governing Board and directed the preparation of the Assessment Roll.

WHEREAS, the District Clerk has prepared the Preliminary Assessment Roll attached hereto as Exhibits “A” and “B”.

NOW THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE DISTRICT, THAT:

Section 1. The District adopts the Preliminary Assessment Roll in the form as attached hereto as Exhibits “A” and “B”.

RESOLUTION 2019-05
OF THE LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

Section 2. The District Clerk is directed to publish a Notice stating that the District's Governing Board shall act as the **Board of Adjustment** at a hearing to be held on the **18th day of July, 2019** at the District's Governing Board meeting chambers, Jupiter, Florida. Such Notice shall be published at least ten (10) days in advance of such hearing, once in a newspaper published in Martin County and once in a newspaper published in Palm Beach County. Such Notice shall state that at the hearing, the Governing Board will hear objections of all interested persons to the confirmation of such resolution. Such Notice shall state in brief and general terms a description of the improvements with the location thereof and shall also state that plans, specifications, estimates, and the tentative apportionment of cost thereof are on file in the office of the District. The District Clerk is directed to mail a copy of such Notice to each of the affected property owners at least ten (10) days in advance of the hearing.

Section 3. During the Board of Adjustment hearing, such affected property owner may present information to the Governing Board in relation to his Special Assessment and the project, provided that such property owners must submit in writing to the District either prior to or at the time of said meeting of the Board of Adjustment their objections to the Special Assessment.

Section 4. The District Clerk is directed to obtain from the publisher of the newspaper(s) used for publication herein an affidavit confirming the publication of the Notice of the Hearing of the Governing Board as the Board of Adjustment as set forth herein.

Section 5. The District Clerk shall file Proof of Publication and Proof of Written Notice to the affected property owners at the Board of Adjustment hearing.

Section 6. Resolutions No. **2016-32 and 2019-05** of the District shall be a part of the record to be considered by the Governing Board at the aforescribed hearing when the Governing Board sits as the Board of Adjustment.

Section 7. The District Clerk is directed to publish a Notice stating that at the meeting of the Governing Board to be held on **July 18, 2019** at the District Governing Board meeting chambers, Jupiter, Florida, all interested persons may appear and file written objections to the confirmation of the Final Assessment Roll. Such Notice shall be published at least twelve (12) days in advance of such meeting, once in a newspaper published in Martin County and once in a newspaper published in Palm Beach County. Such Notice shall state the class of the improvement and the location thereof by terminal points and route. Such Notice shall also be mailed to those interested parties requesting such in writing.

Section 8. The District Clerk is directed to obtain from the publisher of the newspaper(s) used for publication herein an affidavit confirming the publication of the Notice of the Meeting of the Governing Board to confirm the Final Assessment Roll.

Section 9. All Resolutions or parts of Resolutions in conflict herewith are hereby repealed to the extent of such conflict.

RESOLUTION 2019-05
OF THE LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

Section 10. In the event that any portion of this Resolution is found to be unconstitutional or illegal, it shall be severed herefrom without affecting the validity or enforceability of the remaining portions of this Resolution.

Section 11. This Resolution shall become effective upon its passage and adoption.

PASSED AND ADOPTED BY THE GOVERNING BOARD OF THE LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT, THIS 27th day of **June, 2019.**

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

VOTE

JAMES D. SNYDER

STEPHEN ROCKOFF

GORDON M. BOGGIE

HARVEY SILVERMAN

DR. MATT H. ROSTOCK

Cip/Proj/PrelimAsmt/Resolution

EXHIBIT "A"
PRELIMINARY ASSESSMENT ROLL
LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
TURTLE CREEK SUBSYSTEM 2 ASSESSMENT AREA

TOTAL COSTS AND EXPENSES RELATED TO THE IMPROVEMENTS. The District shall consider the **total** costs and expenses related to the improvements in the **TURTLE CREEK SUBSYSTEM 2** Assessment Area shall be **\$25,167.38** per parcel of property in the **TURTLE CREEK SUBSYSTEM 2** Area.

APPORTIONMENT OF COSTS BETWEEN THE DISTRICT AND THE PROPERTY OWNERS. The District shall pay from the District's general funds ten percent (10%) of the total cost to the District of construction, reconstruction, labor, materials, acquisition, or property rights, surveys, design, engineering, and legal fees, administration expenses, and all other expenses necessary or incidental to completion of the specially assessed improvement and each lot or parcel of land subject to this special assessment shall be responsible for ninety percent (90%) of the total cost.

PAYMENT OF ASSESSMENT. As to Parcels of **TURTLE CREEK SUBSYSTEM 2** Assessment Area Property in EXHIBIT "B", the **\$22,650.65** assessment may be paid, interest free, at the office of the District on or before May 1, 2020.

Owners who do not pay the \$22,650.65 assessment on or before May 1, 2020 shall have the \$22,650.65 principal added to the tax roll as a non-ad valorem assessment to accrue interest, beginning October 1, 2019, at six and seven eights percent (6.875%) per annum, to be collected in twenty (20) equal annual installments of \$2,117.33, commencing with the November 1, 2020 Real Estate Tax Bill.

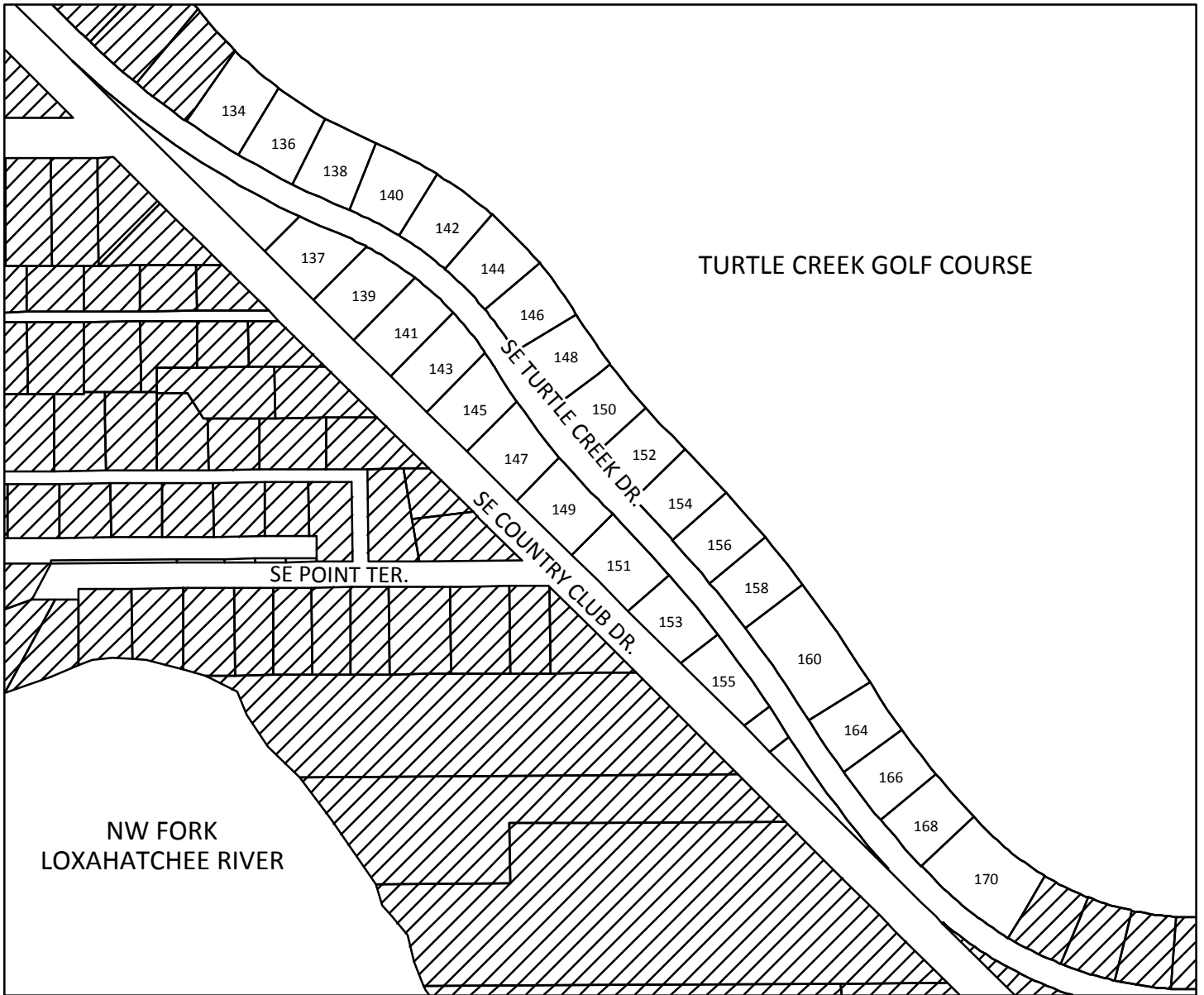
LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

By: _____
D. Albrey Arrington, District Clerk, Executive Director

EXHIBIT "B"

TURTLE CREEK - SUBSYSTEM 2

SEWER SYSTEM ASSESSMENT AREA



LEGEND

 NOT IN ASSESSMENT AREA

MARTIN COUNTY, FLORIDA

10-10-2016

SUB_2

Mr. Brian Muller
re: 134 SE Turtle Creek Dr
134 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00070-2

Mr. & Mrs. Kevin O Neil
re: 136 SE Turtle Creek Dr
136 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00080-0

Ms. Susan Maloney Tr
re: 138 SE Turtle Creek Dr
138 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00090-8

Mr. & Mrs. Charles Cramer
re: 140 SE Turtle Creek Dr
140 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00100-6

Mr. Douglas Faucher
re: 142 SE Turtle Creek Dr
142 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00110-4

Mr. Daniel Cronin Tr
re: 144 SE Turtle Creek Dr
144 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00120-2

Mr. & Mrs. Michael Topolka Tr
re: 146 SE Turtle Creek Dr
146 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00130-0

Mr. & Mrs. Thomas Manzi Tr
re: 148 SE Turtle Creek Dr
148 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00140-8

Mr. & Mrs. Charles Magrath
re: 150 SE Turtle Creek Dr
222 Ravencrest Rd
Yorktown Hts NY 10598
22-40-42-015-004-00150-5

Mr. & Mrs. Blake Schulman
re: 152 SE Turtle Creek Dr
152 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00160-3

Ms. Sherrie Perrelli
re: 154 SE Turtle Creek Dr
154 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00170-1

Mr. & Mrs. Michael Parrish
re: 156 SE Turtle Creek Dr
156 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00180-9

Mr. & Mrs. Michael Zambouros
re: 158 SE Turtle Creek Dr
158 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00190-7

Mr. & Mrs. David Stuart
re: 160 SE Turtle Creek Dr
160 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00200-5

Mr. & Mrs. Stephen Hall
re: 164 SE Turtle Creek Dr
164 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00220-1

Ms. Maria St Thomas
re: 166 SE Turtle Creek Dr
166 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00230-9

Ms. Frances Raymond
re: 168 SE Turtle Creek Dr
168 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00240-7

Mr. & Mrs. John Vallario
re: 137 SE Turtle Creek Dr
137 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-005-00020-0

Mr. & Mrs. John Blackmon
re: 139 SE Turtle Creek Dr
139 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-005-00030-8

Mr. & Mrs. John Prosuh
re: 141 SE Turtle Creek Dr
141 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-005-00040-6

Mr. & Mrs. James Vidal
re: 143 SE Turtle Creek Dr
143 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-005-00050-3

Mr. & Mrs. Arthur Hilly
re: 145 SE Turtle Creek Dr
145 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-005-00060-1

Mr. John Porter Jr
re: 147 SE Turtle Creek Dr
147 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-005-00070-9

Ms. Margarita Nikolis
re: 149 SE Turtle Creek Dr
149 SE Turtle Creek
Tequesta FL 33469
22-40-42-015-005-00080-7

Mr. & Mrs. Bruce Pickett
re: 151 SE Turtle Creek Dr
151 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-005-00090-5

Mr. & Mrs. Ryan Hudson
re: 153 SE Turtle Creek Dr
153 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-005-00100-3

Mr. & Mrs. Steven Friedland
re: 155 SE Turtle Creek Dr
121 Regency Dr
Grand Island NY 14072
22-40-42-015-005-00112-9

Mr. & Mrs. Bruce Wiita
re: 170 SE Turtle Creek Dr
170 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-016-000-00010-2

TIMOTHY W. GASKILL

*Business, Probate
Family Litigation*

DONALD R. SMITH

*Personal Injury & Wrongful Death
Commercial Litigation*

CURTIS L. SHENKMAN

*Board Certified Real Estate
Attorney*

BROOKEGROGAN

Attorney

BRANDON D. SMITH

Attorney

SMITH, GASKILL & SHENKMAN, P.A.

ATTORNEYS & COUNSELORS AT LAW

ESTABLISHED 1973

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Shenkman@LawPalmBeach.com

June 17, 2019

LEGAL ASSISTANTS

CIVIL TRIAL, PROBATE

AND FAMILY LAW

KAREN M. BOYDEN-LOPATOSKY
MINDY VASSER

PERSONAL INJURY

ROBIN B. MODLIN, CP
BETH KOENIG

REAL ESTATE

JUDY D. MONTEIRO
DENISE B. PAOLUCCI
MELISSA KAJEEJIT

D. Albrey Arrington, Ph.D., Executive Director

Loxahatchee River Environmental Control District

2500 Jupiter Drive

Jupiter, Florida 33458-8964

Re: Resolution 2019-06 and Preliminary Assessment Roll for TURTLE CREEK SUBSYSTEM 3

Dear Albrey:

Please attach to this letter Resolution 2019-06, Exhibit "A" Preliminary Assessment Roll, Map & Exhibit "B" most recent list of property owners as part of the Resolution.

In the Resolution, Sections 2 and 7, the "Board of Adjustment" public hearing and "Governing Board" meeting to confirm the "final" assessment roll is proposed for JULY 18, 2019. Preparation is necessary of the Notice to be published and mailed out by Friday, July 5, 2019.

A SUGGESTED MOTION for the Board at the June 27, 2019 meeting is as follows:

"THAT THE GOVERNING BOARD approve Resolution 2019-06 adopting the
TURTLE CREEK SUBSYSTEM 3 Preliminary Assessment Roll."

Sincerely,

Curtis L. Shenkman

Curtis L. Shenkman

LRECD RESOLUTION NO. 2019-06

A RESOLUTION OF THE LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT RELATING TO THE **TURTLE CREEK SUBSYSTEM 3** ASSESSMENT AREA IMPROVEMENTS; ADOPTING THE PRELIMINARY ASSESSMENT ROLL FOR **TURTLE CREEK SUBSYSTEM 3** ASSESSMENT AREA IMPROVEMENTS AS PREPARED BY THE DISTRICT CLERK AND ATTACHED HERETO AS EXHIBITS “A” AND “B”; AUTHORIZING THE DISTRICT GOVERNING BOARD TO ACT AS THE BOARD OF ADJUSTMENT; PROVIDING FOR THE FURNISHING OF TEN DAYS’ WRITTEN NOTICE TO ALL PROPERTY OWNERS AFFECTED; DIRECTING THAT AN AFFIDAVIT OF PUBLICATION BE OBTAINED; REQUIRING THE FILING OF THE PROOF OF PUBLICATION AND OF THE WRITTEN NOTICE; MAKING REFERENCE TO RESOLUTION NO. **2016-37** PROVIDING FOR THE PUBLICATION OF THE NOTICE OF THE MEETING TO CONSIDER CONFIRMATION OF THE PRELIMINARY ASSESSMENT ROLL; DIRECTING THAT AN AFFIDAVIT OF PUBLICATION BE OBTAINED; REQUIRING THE FILING OF THE PROOF OF PUBLICATION; PROVIDING FOR CONSISTENCY; PROVIDING FOR SEVERABILITY; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Governing Board of the Loxahatchee River Environmental Control District (hereinafter called the “District” has authorized the sewer improvements to the **TURTLE CREEK SUBSYSTEM 3** Assessment Area in **MARTIN** County, Florida.

WHEREAS, the Governing Board has considered the presentation of the District Engineer and considered such recommendations to be in accordance with the requests and the best interests of the citizens of the District.

WHEREAS, the Governing Board has considered the improvements to be in accordance with the best interests of the citizens of the **TURTLE CREEK SUBSYSTEM 3** Assessment Area.

WHEREAS, the District’s previous Resolution **2016-37** was approved by the District’s Governing Board and directed the preparation of the Assessment Roll.

WHEREAS, the District Clerk has prepared the Preliminary Assessment Roll attached hereto as Exhibits “A” and “B”.

NOW THEREFORE, BE IT RESOLVED BY THE GOVERNING BOARD OF THE DISTRICT, THAT:

Section 1. The District adopts the Preliminary Assessment Roll in the form as attached hereto as Exhibits “A” and “B”.

RESOLUTION 2019-06
OF THE LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

Section 2. The District Clerk is directed to publish a Notice stating that the District's Governing Board shall act as the **Board of Adjustment** at a hearing to be held on the **18th day of July, 2019** at the District's Governing Board meeting chambers, Jupiter, Florida. Such Notice shall be published at least ten (10) days in advance of such hearing, once in a newspaper published in Martin County and once in a newspaper published in Palm Beach County. Such Notice shall state that at the hearing, the Governing Board will hear objections of all interested persons to the confirmation of such resolution. Such Notice shall state in brief and general terms a description of the improvements with the location thereof and shall also state that plans, specifications, estimates, and the tentative apportionment of cost thereof are on file in the office of the District. The District Clerk is directed to mail a copy of such Notice to each of the affected property owners at least ten (10) days in advance of the hearing.

Section 3. During the Board of Adjustment hearing, such affected property owner may present information to the Governing Board in relation to his Special Assessment and the project, provided that such property owners must submit in writing to the District either prior to or at the time of said meeting of the Board of Adjustment their objections to the Special Assessment.

Section 4. The District Clerk is directed to obtain from the publisher of the newspaper(s) used for publication herein an affidavit confirming the publication of the Notice of the Hearing of the Governing Board as the Board of Adjustment as set forth herein.

Section 5. The District Clerk shall file Proof of Publication and Proof of Written Notice to the affected property owners at the Board of Adjustment hearing.

Section 6. Resolutions No. **2016-37 and 2019-06** of the District shall be a part of the record to be considered by the Governing Board at the aforescribed hearing when the Governing Board sits as the Board of Adjustment.

Section 7. The District Clerk is directed to publish a Notice stating that at the meeting of the Governing Board to be held on **July 18, 2019** at the District Governing Board meeting chambers, Jupiter, Florida, all interested persons may appear and file written objections to the confirmation of the Final Assessment Roll. Such Notice shall be published at least twelve (12) days in advance of such meeting, once in a newspaper published in Martin County and once in a newspaper published in Palm Beach County. Such Notice shall state the class of the improvement and the location thereof by terminal points and route. Such Notice shall also be mailed to those interested parties requesting such in writing.

Section 8. The District Clerk is directed to obtain from the publisher of the newspaper(s) used for publication herein an affidavit confirming the publication of the Notice of the Meeting of the Governing Board to confirm the Final Assessment Roll.

Section 9. All Resolutions or parts of Resolutions in conflict herewith are hereby repealed to the extent of such conflict.

RESOLUTION 2019-06
OF THE LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

Section 10. In the event that any portion of this Resolution is found to be unconstitutional or illegal, it shall be severed herefrom without affecting the validity or enforceability of the remaining portions of this Resolution.

Section 11. This Resolution shall become effective upon its passage and adoption.

PASSED AND ADOPTED BY THE GOVERNING BOARD OF THE LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT, THIS 27th day of **June, 2019.**

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

VOTE

JAMES D. SNYDER

STEPHEN ROCKOFF

GORDON M. BOGGIE

HARVEY SILVERMAN

DR. MATT H. ROSTOCK

Cip/Proj/PrelimAsmt/Resolution

EXHIBIT "A"
PRELIMINARY ASSESSMENT ROLL
LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT
TURTLE CREEK SUBSYSTEM 3 ASSESSMENT AREA

TOTAL COSTS AND EXPENSES RELATED TO THE IMPROVEMENTS. The District shall consider the **total** costs and expenses related to the improvements in the **TURTLE CREEK SUBSYSTEM 3** Assessment Area shall be **\$13,429.96** per parcel of property in the **TURTLE CREEK SUBSYSTEM 3** Area.

APPORTIONMENT OF COSTS BETWEEN THE DISTRICT AND THE PROPERTY OWNERS. The District shall pay from the District's general funds ten percent (10%) of the total cost to the District of construction, reconstruction, labor, materials, acquisition, or property rights, surveys, design, engineering, and legal fees, administration expenses, and all other expenses necessary or incidental to completion of the specially assessed improvement and each lot or parcel of land subject to this special assessment shall be responsible for ninety percent (90%) of the total cost.

PAYMENT OF ASSESSMENT. As to Parcels of **TURTLE CREEK SUBSYSTEM 3** Assessment Area Property in EXHIBIT "B", the **\$12,086.96** assessment may be paid, interest free, at the office of the District on or before May 1, 2020.

Owners who do not pay the \$12,086.96 assessment on or before May 1, 2020 shall have the \$12,086.96 principal added to the tax roll as a non-ad valorem assessment to accrue interest, beginning October 1, 2019, at six and seven eights percent (6.875%) per annum, to be collected in twenty (20) equal annual installments of \$1,129.86, commencing with the November 1, 2020 Real Estate Tax Bill.

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT

By: _____
D. Albrey Arrington, District Clerk, Executive Director

EXHIBIT "B"

TURTLE CREEK - SUBSYSTEM 3

SEWER SYSTEM ASSESSMENT AREA



LEGEND

 NOT IN ASSESSMENT AREA

MARTIN COUNTY, FLORIDA

11-30-2016

PHASE 3

Mr. & Mrs. Jason Lovelady
re: 122 SE Turtle Creek Dr
122 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00010-5

Mr. & Mrs. Paul Herchen
re: 126 SE Turtle Creek Dr
126 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00020-3

Mr. & Mrs. Robert Camp III
re: 128 SE Turtle Creek Dr
96 River Dr
Tequesta FL 33469
22-40-42-015-004-00040-9

Mr. & Mrs. Paul Hartman Tr
re: 130 SE Turtle Creek Dr
130 SE Turtle Creek Dr
Tequesta FL 33469
22-40-42-015-004-00050-6

Mr. & Mrs. Robert Wong
re: 132 SE Turtle Creek Dr
4 Gatehall Dr
Parsippany NY 07054
22-40-42-015-004-00060-4

Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

2500 Jupiter Park Drive, Jupiter, Florida 33458

Telephone (561) 747-5700 • Fax (561) 747-9929 • www.loxahatcheeriver.org



D. Albrey Arrington, Ph.D., Executive Director

To: Governing Board
From: Kara Fraraccio, Director of Finance and Administration
Date: June 21, 2019
Subject: Disposal of Fixed Assets

Whenever the District disposes of tangible personal property of a non-consumable nature we are required by Florida Statutes to bring the matter to the attention of the governing body. Therefore, consistent with our procedures, I request your authorization to dispose of the items listed below:

Tag #	F/A #	Description	Date Recorded	Acquired Value	Book Value
2665	N/A	TKN Block Digestor	09/30/10	\$ 4,745	\$ -
Total Assets to be Disposed				\$ 4,745	\$ -

These items are no longer of use to the District and will be sold or scrapped.

If you have any questions, please feel free to contact me.

I offer the following motion for your consideration:

“THAT THE GOVERNING BOARD authorize the Executive Director to dispose of tangible personal property including asset tag number 2665 in the schedule above.”

Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

2500 Jupiter Park Drive, Jupiter, Florida 33458

Telephone (561) 747-5700 • Fax (561) 747-9929 • www.loxahatcheeriver.org



D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

To: Governing Board
From: Kara Fraraccio, Director of Finance and Administration
Date: June 21, 2019
Subject: Investment Policy

District staff relies on our Investment Policy for guidance and direction when selecting investments on behalf of the District. The last revision to our Investment Policy was approved by the Board in July, 2001. In the attached draft Investment Policy, staff has made suggested revisions to our policy that clarifies and expands on the requirements of FS 218.415. Below is a summary of the more meaningful revisions to our Investment Policy:

1. Section I – Expanded the Purpose of the Investment Policy.
2. Section II – Reworded the Scope of the Investment Policy.
3. Section III – Streamlined the Investment Objectives and updated language to reflect current procedures and expectations.
4. Section V – Added language requiring those involved in the investment process to adhere to ethical standards.
5. Section VI – Added Negotiable Certificates of Deposits as allowed under the conditions of Authorized Deposits in FS 218.415 (23).
6. Section VII – Cleaned up language to reflect the requirements of FS 218.415 (6).
7. Section VIII – Cleaned up language and added guidelines for investments and limits on security issues, issuers, and maturities as required by FS 218.415 (7).
8. Section IX - Cleaned up language to reflect the requirements of FS 218.415 (8).
9. Section X – Added language specifying the authorized investment institutes and dealers the District may purchase securities from, as required by FS 218.415 (9).
10. Section XIV – Updated the language under Delegation of Authority and expanded the Written Procedure section.
11. Section XV – Language updated to specify the Director of Finance and Administration is required to complete the 8 hours of required continuing education in investment practices.
12. Section XVI – Updated language to reflect the District’s current procedures, which are in compliance with FS 218.415 (15).
13. Section XIX – Added language for Audits as required by FS 218.415 (22).

A marked-up draft of our revised Investment Policy and a complete copy of FS 218.415 is attached for your review. If you have any questions or would like to go over any sections in detail, please let me know.

The following motion is recommended for approval:

“THAT THE DISTRICT GOVERNING BOARD ratify and approve the Loxahatchee River District’s Investment Policy as of June 27, 2019.

Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

James D. Snyder
Board Member

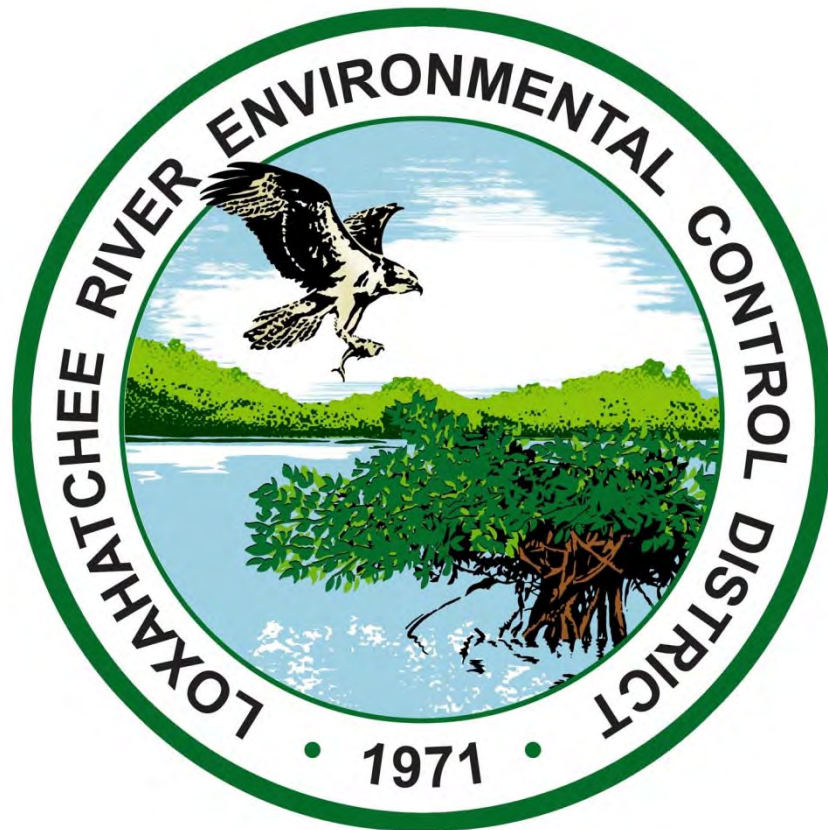
Effective Date:

September 21, 1995

Revised – July 19, 2001

Revised – June 27, 2019

LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT



INVESTMENT POLICY

I. PURPOSE

The purpose of this policy is to set forth investment objectives and parameters for the management of public funds of the Loxahatchee River Environmental Control District (the "District"). These policies are designed to ensure the prudent management of public funds, the availability of operating and capital funds when needed, and an investment return competitive with comparable funds and financial markets. To establish guidelines for the investment of public funds that are in excess of the amounts needed to meet current expenses.

II. SCOPE

In accordance with Section 218.415, Florida Statutes, this Investment Policy applies to all cash and investments held or controlled by the District with the exception of Pension Funds, which are self-directed by the plan beneficiaries, and funds related to the issuance of debt where there are other existing policies or indentures in effect for such funds. This investment policy applies to all the investment activity of the Loxahatchee River District, unless specifically exempt by the Governing Board. This policy does not apply to pension funds (District exempt), or funds related to the issuance of debt where there are other existing policies or indentures in effect for such funds.

III. INVESTMENT OBJECTIVES

The primary objectives, in priority order, of investment activities shall be safety of capital, liquidity of funds and then return on investment. The District's investment policy shall be structured to ensure that the highest priority is placed on the safety of principal and the liquidity of funds. The investment portfolio shall be managed in a manner to attain a market rate of return throughout budgetary and economic cycles while preserving and protecting the principal in the overall portfolio. Investments shall be made based upon statutory constraints and subject to the available designated staffing capabilities.

A. Safety of Capital

Safety of capital is regarded as the highest priority in the handling of investments for the District. Investment transactions shall seek to keep capital losses at a minimum, whether they are from securities defaults or erosion of market conditions. To attain this objective, diversification is required to avoid incurring unreasonable risks regarding specific security types or individual financial institutions. The District shall insure the safety of its invested funds by limiting credit and interest rate risk. Credit risk is the risk of loss due to the failure of the security issuer or backer. Interest rate risk is the risk that the market value of portfolio securities will fall due to an increase in general interest rates.

1. Credit risk is the risk of loss due to the failure of the security issuer or backer. Credit Risk will be mitigated by:

- ~~a) limiting investments to the safest types of securities;~~
- ~~b) prequalifying the financial institutions with which the District will do business;~~
- ~~c) diversifying the investment portfolio so that the failure of any one issuer or backer will not place an undue financial burden on the District; and~~
- ~~d) monitoring all of the District's investments regularly to anticipate and respond appropriately to a significant reduction of credit worthiness of any of the depositories.~~

~~2. Interest rate risk is the risk that the market value of portfolio securities will fall due to an increase in general interest rates. Interest Rate Risk will be mitigated by:~~

- ~~a) structuring the District's portfolio so that securities mature to meet the District's cash needs and anticipated cash flow requirements, thereby avoiding the need to sell securities on the open market prior to their maturation; and~~
- ~~b) investing primarily in shorter-term securities, unless it is anticipated that long-term securities can be held to maturity without jeopardizing the liquidity requirements.~~

B. Liquidity of Funds

~~The District's investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated. This can be accomplished by structuring the portfolio so that securities mature concurrent with cash needs. Since all possible cash demands cannot be anticipated, a portion of the portfolio may be placed in money market mutual funds or local government investment pools that offer same-day liquidity for short-term funds. The District's investment portfolio must be structured in a manner which will provide that the securities mature at the same time as cash is needed to meet anticipated demands. Additionally, since all possible cash demands cannot be anticipated, the portfolio should consist largely of securities with active secondary or resale markets.~~

C. Investment Income

~~After first considering the safety and liquidity of the District's investment portfolio, t~~The District's investment portfolio shall be designed with the objective of regularly exceeding the average rate of return on three-month U.S. Treasury Bills, or the average rate on Federal Funds, whichever is higher to maximize portfolio return given market conditions with the objective of attaining a market

rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints, liquidity needs, and state laws that restrict the placement of public funds.-

IV. PERFORMANCE MEASUREMENTS

The District shall seek to optimize return on investments within the constraints of safety of capital and liquidity by the identification of an appropriate benchmark against which to compare the portfolio's performance. The As stated above, the investment income objective is to regularly exceed the average rate of return on three-month U.S. Treasury Bills; or and the average rate on Federal Funds, whichever is higher. These indices are considered benchmarks for riskless investment transactions and therefore comprise a minimumthe standard for the portfolio's rate of return. The investment program shall seek to augment returns above this threshold, consistent with risk limitations identified herein and prudent investment principles.

V. PRUDENCE AND ETHICAL STANDARDS

Investments shall be made by competitive selection and tThe standard of prudence to be applied shall be the "Prudent Person Rule", which states: "Investments should be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income derived from the investment"investment.-

The District Governing Board and staff involved in the investment process Director, Administrative Services shall observe and adhere to all ethical standards applicable to public employees and their respective professions.

The District Governing Board and staff involved in the investment process, acting in accordance with the written procedures and exercising due diligence, shall not be held personally responsible for a specific security's credit risk or market price changes, provided that these changes are reported immediatelyas soon as practical; and that appropriate action is taken to control adverse developments.

VI. AUTHORIZED INVESTMENTS: WRITTEN INVESTMENT POLICIES

The Loxahatchee River District has elected to adopt a written investment policy as provided in Florida Statutes 218.415 subsections (1)-(15) and may be resolution from time to time, invest and reinvest any surplus public funds in their control or possession in:
The District shall limit investments under the guidelines of these policies to:

- A. The Local Government Surplus Funds Trust Fund or any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act as provided in Florida Statutes s. 163.01.
- B. Securities and Exchange Commission registered money market funds with the highest credit quality rating from a nationally recognized rating agency.
- C. Interest-bearing time deposits, ~~or~~ savings accounts, or money market accounts in qualified public depositories as defined in Florida Statutes s. 280.02.
- D. Direct obligations of the United States Treasury.
- E. Federal agencies and instrumentalities.
- F. Securities of, or other interests in, any open-end or closed-end management-type investment company or investment trust registered under the Investment Company Act of 1940, 15 U.S.C. ss. 80a-1 et seq., as amended from time to time, provided that the portfolio of such investment company or investment trust is limited to obligations of the United States Government or any agency or instrumentality thereof and to repurchase agreements fully collateralized by such United States Government obligations, and provided that such investment company or investment trust takes delivery of such collateral either directly or through an authorized custodian.
- G. Repurchase agreements collateralized by obligations of the United States Government.
- H. Negotiable Certificates of Deposit (“Brokered CD’s”) up to the amount guaranteed by the U.S. Government under Federal Deposit Insurance Corporation (FDIC) limits where
 - 1. Funds are initially deposited in a qualified public depository, as defined in Florida Statutes, 280.02 selected by the District;
 - 2. The selected depository arranges for depositing the funds in financial deposit instruments insured by the FDIC in one or more federally insured banks or savings and loan associations, wherever located, for the account of the unit of local government;
 - 3. The full amount of the principal and accrued interest of each financial deposit instrument is insured by the FDIC; and
 - 4. The selected depository acts as custodian for the unit of local government with respect to each financial deposit instrument issued for its account.FDIC approved institution.

I. Other investments authorized by law or by resolution of the Governing Board.

Investments not listed in this investment policy are prohibited by law. Any investments in derivative products are also prohibited by this investment policy. A 'derivative' is defined as a financial instrument the value of which depends on, or is derived from, the value of one or more underlying assets or index or asset values. The use of 'reverse' repurchase agreements or other forms of leverage is also prohibited by this investment policy.

Investments will be carried at market value in accordance with GASB Statement No. 31. Realized gains or losses from investments will be credited or charged to investment income at the time of sale. Unrealized gains or losses resulting from appreciation or depreciation will be changed to investment income on a monthly basis. Premiums or discounts on securities may be amortized over the life of the securities.

VI.VII. MATURITY AND LIQUIDITY REQUIREMENTS

The District's investment portfolio shall be structured to provide ~~that sufficient funds from investments are available every month to meet the District's anticipated cash needs~~liquidity to pay obligations as they come due. ~~To the extent possible, the District shall attempt to match investments with anticipated cash flow requirements.~~ Subject to the safety provisions outlined above, the choice of investments and maturities shall be based upon ~~an analysis of anticipated known~~ cash needs, ~~existing and anticipated revenues~~cash flow requirements, interest rate trends and specific market opportunities.

VII.VIII. PORTFOLIO COMPOSITION

Investments should be made subject to cash flow needs and revised as market conditions and the District's needs change.

~~The investment officer shall have the option to further restrict investment percentages from time to time based on market conditions, risk and diversification investment strategies.~~

The percentage allocation requirements for investment types and issuers are calculated based on the market value of each investment at the time of purchase. ~~The remaining portfolio will be held in investments authorized pursuant to this policy. Investments not listed in this policy are prohibited.~~

The following limits are hereby established to serve as guidelines:

<u>QPD Money Market/Savings Accounts</u>	<u>100%</u>
<u>QPD Certificates of Deposit</u>	<u>100%</u>
<u>U.S. Treasury Notes, Bonds, or Bills</u>	<u>100%</u>
<u>U.S. Agencies and Instrumentalities</u>	<u>50%</u>
<u>Local Government Surplus Funds Trust Fund</u>	<u>50%</u>

Local Government Investment Pools	50%
Negotiable Certificates of Deposit	25%
Repurchase Agreements	10%

The Investment Officer shall have the option to further restrict investment percentages from time to time based on market conditions, risk and diversification investment strategies.

~~Up to 10% of the portfolio could be held in Repurchase Agreements to ensure that the next disbursement date and payroll date are covered. The remaining portfolio will be held in investments authorized pursuant to this policy.~~

Unless matched to a specific cash flow, the District will not directly invest in securities maturing more than five years from the date of purchase.

VIII. IX. RISK AND DIVERSIFICATION

~~The Investment Officer shall diversify the use of investment instruments to avoid incurring unreasonable risks inherent in over investing in specific instruments, individual financial institutions, or maturities. Investments held shall be diversified, to the extent practicable, to control risk of loss resulting from overconcentration of assets in a specific maturity, issuer, instruments, dealer, or bank through which the financial instruments are bought and sold. Diversification strategies shall be determined reviewed and revised by the Investment Officer periodically.~~

~~In establishing specific diversification strategies, the following general policies and constraints shall apply:~~

- ~~— Portfolio maturities shall be staggered in a way that avoid undue concentration of assets in a specific maturity sector.~~
- ~~— Maturities shall be selected which provide for stability of income and reasonable liquidity.~~

IX. X. AUTHORIZED INVESTMENT INSTITUTIONS AND DEALERS

The District shall only conduct business with approved Public Depositories qualified by the Chief Financial Officer of the State of Florida, in accordance with Florida Statutes Chapter 280, financial institutions fully insured by the FDIC where permitted by law, and primary securities dealers reporting directly to the New York Federal Reserve Bank or with secondary brokers/dealers having equity of at least ten million dollars (\$10,000,000). Securities investment institutions shall meet or exceed the SEC Net Capital Rule. Annually, the firm will submit independent certification by an outside auditor or similar agency that it complied with the Net Capital Rule on its most recent year-end balance sheet date or FOCUS report submitted to FINRA. Current audited financial statements for each Qualified Institution and broker/dealer with which the

District transacts business related to this investment policy must be readily available for review in an electronic format.

~~All brokers, dealers, and other financial institutions deemed to be Qualified Institutions shall be provided with current copies of this investment policy and shall provide, in return to the Director of Finance and Administration, certification of having read and understood the investment policy and an agreement to comply with this investment policy. The certification should list any financial or family interests between the District's investment officers and the firm/depository and employees offering securities or investments to the District. Before accepting funds or engaging in investment transactions with the District, the supervisory officer at each depository and recognized securities investment institution/dealer shall submit a certification evidencing that he or she has reviewed the investment policies and objectives and states that there exists no potential conflicts, financial interests, marital or family interests between the District's investment officers and the firm/depository or other risks to public funds that might arise out of business transactions. All financial institutions shall agree to undertake reasonable efforts to preclude imprudent transactions involving the District's funds. The supervisory officer shall agree to exercise due diligence in monitoring the activities of other officers and subordinate staff members engaged in transactions with the District. Employees of any firm or financial institution offering securities or investments to the District shall be trained in the precautions appropriate to public sector investments and shall be required to familiarize themselves with our investment objectives, policies, and constraints. Securities investment institutions and dealers conducting financial investment transactions with the District shall meet a minimum capital adequacy requirement of 1.2 (or 120%) of the investment institutions/dealers calculated risks. The District shall require continuous compliance with the Federal Reserve's capital adequacy standard. The firm will submit independent certification by an outside auditor or similarly agency that it complied with the capital adequacy standard on its most recent balance sheet date.~~

X.XI. THIRD-PARTY CUSTODIAL AGREEMENTS

To protect against potential fraud and embezzlement, the assets of the District shall be secured through third-party custody and safekeeping procedures. Bearer instruments shall be held only through third-party institutions. Securities shall be held by a third party, and all securities purchased by, and all collateral obtained by, the District should be properly designated as an asset of the District. No withdrawal of securities, in whole or in part, shall be made from safekeeping, except by an authorized staff member listed in section XIV (A) of the District of this Policy.

Securities transactions between a broker-dealer and the custodian involving purchase or sale of securities by transfer or money or securities will be made on a 'delivery vs. payment' basis, if applicable, to ensure that the custodian will have the security or money, as appropriate, in hand at the conclusion of the transaction.

For investments purchased from institutions that require the delivery of securities versus payment (including electronic book entry process), a safekeeping receipt shall be issued

to the District which fully describes the securities and evidences clear ownership by the District.

XI.XII. MASTER REPURCHASE AGREEMENT

~~The~~ institutions and dealers transacting ~~the~~ repurchase agreements must execute and perform as stated in the Master Repurchase Agreement and should be monitored by the District on a monthly basis. All repurchase agreement transactions must adhere to the requirements of the Master Repurchase Agreement.

XI.XIII. BID REQUIREMENTS

After the District's cash flow needs have been determined, the approximate maturity dates and market conditions will be analyzed to determine one or more of the optimal types of investment. The investment policy requires staff to analyze and select the security, and competitively bid the security in question, when feasible and appropriate, through the authorized investment institutions and dealers. Except as otherwise required by law, the bid deemed to best meet the investment objectives ~~must~~ shall be selected.

XI.XIV. INTERNAL CONTROLS

A. Delegation of Authority

The Director of Finance and Administration is the Investment Officer of the District and is responsible for the administration of the investment program and complying with activities within the limits of the District's Investment Policy. In the absence of the Director of Finance and Administration, qualified persons designated by the Executive Director are authorized to initiate investment activities, subject to limits set forth in this policy. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures so established.

Positions currently authorized as investment signatories are the Executive Director and the Director of Finance and Administration. The persons holding these positions are also authorized to initiate internet and wire transfer of investments for the District.

B. Written Procedures

The Director of Finance and Administration or designee shall establish a system of internal controls and operations procedures that are in writing and made part of the District's financial operational procedures. The internal controls should be designed to prevent losses of funds which might arise from fraud, employee error, misrepresentation by third parties, or imprudent actions by employees of the District. No person may engage in an investment transaction except as authorized under the terms of this Policy. Employees or contractors involved in the investment process shall adhere to the Internal Control Policy of the District.

Independent auditors as a normal part of the annual financial audit to the District shall conduct a review of the system of internal controls to ensure compliance with policies and procedures.

~~The Director, Administrative Services is designated as the Investment Officer of the District and is responsible for investment decisions and activities under the direction of the Governing Board. The day-to-day administration of the cash management program is handled by the Investment Officer. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures so established.~~

~~Positions authorized as investment signatories for the District's funds are 1) the Executive Director and Board Member, or 2) Executive Director and Director, Administrative Services, or 3) Director, Administrative Services and Board Member, or 4) or Board Member and Board Member. Investment transactions shall be approved by any two of the above investment signatories. The persons holding these positions are also authorized to initiate wire transfers for the District.~~

~~The system of internal controls that are designed to safeguard the investments from fraud, employee error, misrepresentation by third parties, or imprudent actions by employees of the District, have been made a part of the operational procedures. Safekeeping procedures shall be reviewed annually by the independent auditors.~~

XIV.XV. CONTINUING EDUCATION

~~The investment policy shall provide for the continuing education of the Loxahatchee River District's officials responsible for making investment decisions. Such officials The Director of Finance and Administration, as the Investment Officer, must shall annually complete 8 hours of continuing education in subjects or courses of study related to investment practices and products.~~

XV.XVI. REPORTING

~~The Director of Finance and Administration shall annually, or more frequently, submit a report to the Governing Board which shall include securities by class or type, book value, income earned, comparison to established benchmarks, and market value as of the report date. These reports shall be available to the public. In addition, the Director of Finance and Administration shall generate and provide other such reports and information as deemed reasonable, upon request, from other internal and external sources. The Investment Officer shall generate a report for the Governing Board that summarizes recent market conditions, economic developments and anticipated investment conditions. The report shall summarize the investment strategies employed during the past year and describe the portfolio in terms of investment securities, maturities, risk characteristics and other features. In addition, the report shall include securities in the portfolio by class or type, book value, income earned, and market value as of the report date. The report shall explain the total investment return for the month and compare the return with budgetary expectations. This report shall be available to the public.~~

~~The Investment Officer shall provide other such reports and information as deemed reasonable, upon request, for other internal and external sources. In addition, the Investment Officer shall submit monthly to the Governing Board an investment report detailing where the District's surplus money is invested, current percentage rate, and the amount invested with each institution. The report shall also include a comparison of the current and prior year's financial status.~~

XVII.I. AUTHORIZED INVESTMENTS: WRITTEN INVESTMENT POLICIES

~~The Loxahatchee River District has elected to adopt a written investment policy as provided in Florida Statutes 218.415 subsections (1)-(15) and may by resolution from time to time, invest and reinvest any surplus public funds in their control or possession in:~~

~~A. The Local Government Surplus Funds Trust Fund or any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act as provided in Florida Statutes s. 163.01.~~

~~B.A. Securities and Exchange Commission registered money market funds with the highest credit quality rating from a nationally recognized rating agency.~~

~~C.A. Interest bearing time deposits or savings accounts in qualified public depositories as defined in Florida Statutes s. 280.02.~~

~~D.A. Direct obligations of the United States Treasury.~~

~~E.A. Federal agencies and instrumentalities.~~

~~F.A. Securities of, or other interests in, any open end or closed end management type investment company or investment trust registered under the Investment Company Act of 1940, 15 U.S.C. ss. 80a-1 et seq., as amended from time to time, provided that the portfolio of such investment company or investment trust is limited to obligations of the United States Government or any agency or instrumentality thereof and to repurchase agreements fully collateralized by such United States Government obligations, and provided that such investment company or investment trust takes delivery of such collateral either directly or through an authorized custodian.~~

~~G.A. Repurchase agreements.~~

~~H.A. FDIC approved institution.~~

~~A. Other investments authorized by law or by resolution of the Governing Board.~~

~~Investments not listed in this investment policy are prohibited by law. Any investments in derivative products are also prohibited by this investment policy. A 'derivative' is~~

~~defined as a financial instrument the value of which depends on, or is derived from, the value of one or more underlying assets or index or asset values. The use of 'reverse' repurchase agreements or other forms of leverage is also prohibited by this investment policy.~~

~~Investments will be carried at market value in accordance with GASB Statement No. 31. Realized gains or losses from investments will be credited or charged to investment income at the time of sale. Unrealized gains or losses resulting from appreciation or depreciation will be changed to investment income on a monthly basis. Premiums or discounts on securities may be amortized over the life of the securities.~~

XVII. SECURITIES; DISPOSITION

- A. Every security purchased under this section on behalf of the District must be properly earmarked and:
 - 1. If registered with the issuer or its agents, must be immediately placed for safekeeping in a location that protects the District's interest in the security;
 - 2. If in book entry form, must be held for the credit of the District by a depository chartered by the Federal Government, the state, or any other state or territory of the United States which has a branch or principal place of business in this state as defined in Florida Statutes s.658.12, or by a national association organized and existing under the laws of the United States which is authorized to accept and execute trusts and which is doing business in this state, and must be kept by the depository in an account separate and apart from the assets of the financial institution; or
 - 3. If physically issued to the holder but not registered with the issuer or its agents, must be immediately placed for safekeeping in a secured vault.
- B. The District's ~~governing body~~Governing Board may also receive bank trust receipts in return for investment of surplus funds in securities. Any trust receipts received must enumerate the various securities held, together with the specific number of each security held. The actual securities on which the trust receipts are issued may be held by any bank depository chartered by the Federal Government, this state, or any other state or territory of the United States which has a branch or principal place of business in this state as defined in Florida Statutes s. 658.12, or by a national association organized and existing under the laws of the United States which is authorized to accept and execute trusts and which is doing business in this state.

XVIII. SALE OF SECURITIES

When ~~the~~ invested funds are needed in whole or in part for the purposes originally intended or for more optimal investments, the District's Governing Board and/or the Investment Officer may sell such investments at the then-prevailing market price and place the proceeds into the proper account or fund of the District.

XIX. REVIEW BY AUDITORS

The controls and procedures specified in this investment policy shall be reviewed by the District's independent auditors as part of the audit process; the independent auditor shall report whether or not the District has complied with this policy.

Select Year: 2018 ▼ Go

The 2018 Florida Statutes

[Title XIV](#)
TAXATION AND
FINANCE

[Chapter 218](#)
FINANCIAL MATTERS PERTAINING TO POLITICAL
SUBDIVISIONS

[View Entire
Chapter](#)

218.415 Local government investment policies.—Investment activity by a unit of local government must be consistent with a written investment plan adopted by the governing body, or in the absence of the existence of a governing body, the respective principal officer of the unit of local government and maintained by the unit of local government or, in the alternative, such activity must be conducted in accordance with subsection (17). Any such unit of local government shall have an investment policy for any public funds in excess of the amounts needed to meet current expenses as provided in subsections (1)-(16), or shall meet the alternative investment guidelines contained in subsection (17). Such policies shall be structured to place the highest priority on the safety of principal and liquidity of funds. The optimization of investment returns shall be secondary to the requirements for safety and liquidity. Each unit of local government shall adopt policies that are commensurate with the nature and size of the public funds within its custody.

(1) **SCOPE.**—The investment policy shall apply to funds under the control of the unit of local government in excess of those required to meet current expenses. The investment policy shall not apply to pension funds, including those funds in chapters 175 and 185, or funds related to the issuance of debt where there are other existing policies or indentures in effect for such funds.

(2) **INVESTMENT OBJECTIVES.**—The investment policy shall describe the investment objectives of the unit of local government. Investment objectives shall include safety of capital, liquidity of funds, and investment income, in that order.

(3) **PERFORMANCE MEASUREMENT.**—The investment policy shall specify performance measures as are appropriate for the nature and size of the public funds within the custody of the unit of local government.

(4) **PRUDENCE AND ETHICAL STANDARDS.**—The investment policy shall describe the level of prudence and ethical standards to be followed by the unit of local government in carrying out its investment activities with respect to funds described in this section. The unit of local government shall adopt the Prudent Person Rule, which states that: “Investments should be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived from the investment.”

(5) **LISTING OF AUTHORIZED INVESTMENTS.**—The investment policy shall list investments authorized by the governing body of the unit of local government, subject to the provisions of subsection (16). Investments not listed in the investment policy are prohibited. If the policy authorizes investments in derivative products, the policy must require that the unit of local government’s officials responsible for making investment decisions or chief financial officer have developed sufficient understanding of the derivative products and have the expertise to manage them. For purposes of this subsection, a “derivative” is defined as a financial instrument the value of which depends on, or is derived from, the value of one or more underlying assets or index or asset values. If the policy authorizes investments in reverse repurchase agreements or other forms of leverage, the policy must limit the investments to transactions in which the proceeds are intended to provide liquidity and for which the unit of local government has sufficient resources and expertise.

(6) **MATURITY AND LIQUIDITY REQUIREMENTS.**—The investment policy shall require that the investment portfolio is structured in such manner as to provide sufficient liquidity to pay obligations as they come due. To that end, the investment policy should direct that, to the extent possible, an attempt will be made to match investment maturities with known cash needs and anticipated cash-flow requirements.

(7) **PORTFOLIO COMPOSITION.**—The investment policy shall establish guidelines for investments and limits on security issues, issuers, and maturities. Such guidelines shall be commensurate with the nature and size of the public funds within the custody of the unit of local government.

(8) **RISK AND DIVERSIFICATION.**—The investment policy shall provide for appropriate diversification of the investment portfolio. Investments held should be diversified to the extent practicable to control the risk of loss resulting from overconcentration of assets in a specific maturity, issuer, instrument, dealer, or bank through which financial instruments are bought and sold. Diversification strategies within the established guidelines shall be reviewed and revised periodically, as deemed necessary by the appropriate management staff.

(9) **AUTHORIZED INVESTMENT INSTITUTIONS AND DEALERS.**—The investment policy should specify the authorized securities dealers, issuers, and banks from whom the unit of local government may purchase securities.

(10) **THIRD-PARTY CUSTODIAL AGREEMENTS.**—The investment policy shall provide appropriate arrangements for the holding of assets of the unit of local government. Securities should be held with a third party; and all securities purchased by, and all collateral obtained by, the unit of local government should be properly designated as an asset of the unit of local government. No withdrawal of securities, in whole or in part, shall be made from safekeeping, except by an authorized staff member of the unit of local government. Securities transactions between a broker-dealer and the custodian involving purchase or sale of securities by transfer of money or securities must be made on a “delivery vs. payment” basis, if applicable, to ensure that the custodian will have the security or money, as appropriate, in hand at the conclusion of the transaction.

(11) **MASTER REPURCHASE AGREEMENT.**—The investment policy shall require all approved institutions and dealers transacting repurchase agreements to execute and perform as stated in the Master Repurchase Agreement. All repurchase agreement transactions shall adhere to the requirements of the Master Repurchase Agreement.

(12) **BID REQUIREMENT.**—The investment policy shall require that the unit of local government’s staff determine the approximate maturity date based on cash-flow needs and market conditions, analyze and select one or more optimal types of investment, and competitively bid the security in question when feasible and appropriate. Except as otherwise required by law, the bid deemed to best meet the investment objectives specified in subsection (2) must be selected.

(13) **INTERNAL CONTROLS.**—The investment policy shall provide for a system of internal controls and operational procedures. The unit of local government’s officials responsible for making investment decisions or chief financial officer shall establish a system of internal controls which shall be in writing and made a part of the governmental entity’s operational procedures. The investment policy shall provide for review of such controls by independent auditors as part of any financial audit periodically required of the unit of local government. The internal controls should be designed to prevent losses of funds which might arise from fraud, employee error, misrepresentation by third parties, or imprudent actions by employees of the unit of local government.

(14) **CONTINUING EDUCATION.**—The investment policy shall provide for the continuing education of the unit of local government’s officials responsible for making investment decisions or chief financial officer. Such officials must annually complete 8 hours of continuing education in subjects or courses of study related to investment practices and products.

(15) **REPORTING.**—The investment policy shall provide for appropriate annual or more frequent reporting of investment activities. To that end, the governmental entity’s officials responsible for making investment decisions or chief financial officer shall prepare periodic reports for submission to the legislative and governing body of the unit of local government, which shall include securities in the portfolio by class or type, book value, income earned, and market value as of the report date. Such reports shall be available to the public.

(16) **AUTHORIZED INVESTMENTS; WRITTEN INVESTMENT POLICIES.**—Those units of local government electing to adopt a written investment policy as provided in subsections (1)-(15) may by resolution invest and reinvest any surplus public funds in their control or possession in:

(a) The Local Government Surplus Funds Trust Fund or any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act of 1969, as provided in s. [163.01](#).

(b) Securities and Exchange Commission registered money market funds with the highest credit quality rating from a nationally recognized rating agency.

(c) Interest-bearing time deposits or savings accounts in qualified public depositories as defined in s. [280.02](#).

(d) Direct obligations of the United States Treasury.

(e) Federal agencies and instrumentalities.

(f) Rated or unrated bonds, notes, or instruments backed by the full faith and credit of the government of Israel.

(g) Securities of, or other interests in, any open-end or closed-end management-type investment company or investment trust registered under the Investment Company Act of 1940, 15 U.S.C. ss. 80a-1 et seq., as amended from time to time, provided that the portfolio of such investment company or investment trust is limited to obligations of the United States Government or any agency or instrumentality thereof and to repurchase agreements fully collateralized by such United States Government obligations, and provided that such investment company or investment trust takes delivery of such collateral either directly or through an authorized custodian.

(h) Other investments authorized by law or by ordinance for a county or a municipality.

(i) Other investments authorized by law or by resolution for a school district or a special district.

(17) **AUTHORIZED INVESTMENTS; NO WRITTEN INVESTMENT POLICY.**—Those units of local government electing not to adopt a written investment policy in accordance with investment policies developed as provided in subsections (1)-(15) may invest or reinvest any surplus public funds in their control or possession in:

(a) The Local Government Surplus Funds Trust Fund, or any intergovernmental investment pool authorized pursuant to the Florida Interlocal Cooperation Act of 1969, as provided in s. [163.01](#).

(b) Securities and Exchange Commission registered money market funds with the highest credit quality rating from a nationally recognized rating agency.

(c) Interest-bearing time deposits or savings accounts in qualified public depositories, as defined in s. [280.02](#).

(d) Direct obligations of the U.S. Treasury.

The securities listed in paragraphs (c) and (d) shall be invested to provide sufficient liquidity to pay obligations as they come due.

(18) **SECURITIES; DISPOSITION.**—

(a) Every security purchased under this section on behalf of the governing body of a unit of local government must be properly earmarked and:

1. If registered with the issuer or its agents, must be immediately placed for safekeeping in a location that protects the governing body's interest in the security;

2. If in book entry form, must be held for the credit of the governing body by a depository chartered by the Federal Government, the state, or any other state or territory of the United States which has a branch or principal place of business in this state as defined in s. [658.12](#), or by a national association organized and existing under the laws of the United States which is authorized to accept and execute trusts and which is doing business in this state, and must be kept by the depository in an account separate and apart from the assets of the financial institution; or

3. If physically issued to the holder but not registered with the issuer or its agents, must be immediately placed for safekeeping in a secured vault.

(b) The unit of local government's governing body may also receive bank trust receipts in return for investment of surplus funds in securities. Any trust receipts received must enumerate the various securities held, together with the specific number of each security held. The actual securities on which the trust receipts are issued may be held by any bank depository chartered by the Federal Government, this state, or any other state or territory of the United States which has a branch or principal place of business in this state as defined in s. [658.12](#), or by a national association organized and existing under the laws of the United States which is authorized to accept and execute trusts and which is doing business in this state.

(19) **SALE OF SECURITIES.**—When the invested funds are needed in whole or in part for the purposes originally intended or for more optimal investments, the unit of local government’s governing body may sell such investments at the then-prevailing market price and place the proceeds into the proper account or fund of the unit of local government.

(20) **PREEXISTING CONTRACT.**—Any public funds subject to a contract or agreement existing on October 1, 2000, may not be invested contrary to such contract or agreement.

(21) **PREEMPTION.**—Any provision of any special act, municipal charter, or other law which prohibits or restricts a local governmental entity from complying with this section or any rules adopted under this section is void to the extent of the conflict.

(22) **AUDITS.**—Certified public accountants conducting audits of units of local government pursuant to s. [218.39](#) shall report, as part of the audit, whether or not the unit of local government has complied with this section.

(23) **AUTHORIZED DEPOSITS.**—In addition to the investments authorized for local governments in subsections (16) and (17) and notwithstanding any other provisions of law, a unit of local government may deposit any portion of surplus public funds in its control or possession in accordance with the following conditions:

(a) The funds are initially deposited in a qualified public depository, as defined in s. [280.02](#), selected by the unit of local government.

(b) The selected depository arranges for depositing the funds in financial deposit instruments insured by the Federal Deposit Insurance Corporation in one or more federally insured banks or savings and loan associations, wherever located, for the account of the unit of local government.

(c) The full amount of the principal and accrued interest of each financial deposit instrument is insured by the Federal Deposit Insurance Corporation.

(d) The selected depository acts as custodian for the unit of local government with respect to each financial deposit instrument issued for its account.

History.—s. 1, ch. 95-194; s. 2, ch. 97-9; s. 3, ch. 2000-264; ss. 66, 141, ch. 2001-266; s. 2, ch. 2005-126; s. 1, ch. 2007-89; s. 42, ch. 2008-4; s. 2, ch. 2009-140.

Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

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D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: GOVERNING BOARD
FROM: D. ALBREY ARRINGTON, Ph.D.
DATE: JUNE 18, 2019
SUBJECT: PERSONNEL POLICIES & PROCEDURES UPDATE

The District's Personnel Policies & Procedures manual is a summary of the policies, procedures, and practices that are binding upon Loxahatchee River District and District personnel. This document clearly establishes the expectations between employer and employee. Our Personnel Policies & Procedures manual is generally brought to the Governing Board for a comprehensive review every two years. In between the two-year reviews, staff present suggested revisions on an as needed basis. The policy was last approved by the Governing Board on November 16, 2017.

The major revisions are described as:

- Section 1.3 we moved the Civility Policy up from section 1.13, because this policy expresses the spirit we would like employees to use when dealing with coworkers, customers, and the public.
- Section 1.7 Anti-Harassment Training we moved this section up from Section 1.6D to improve the hierarchical flow of the document.
- Section 1.8 we combined two nearly identical sections "Complaint Procedure: Reporting an Incident of Harassment, Discrimination or Retaliation" and "Complain Procedure: Reporting an Illegal/Unethical Behavior and/or Actions" to streamline this section.
- Section 1.8.C "Retaliation is Prohibited" section was moved down to Section 1.8C after The Investigation and Responsive Action sections to improve hierarchical flow of the document.
- Section 2.2 we added language to improve internal job posting and application process
- Section 2.3 we added language clarifying that job applications and resumes will be kept active for 60 days.
- Section 2.8.A we removed some particular details that likely change with time and legal revisions and inserted 'or other minimum threshold required by law.' This should reduce the likelihood that our policy does not keep pace with underlying legal requirements.
- Section 3.9 we have updated this section to reflect the new time and attendance web application we have implemented.
- Section 3.10E revised this policy to clarify our intent and include time served during past employment with LRD when calculating vacation accrual.
- Section 4 we have revised language to match what is happening presently with the new time and attendance web application.
- Section 4 we revised the language of Vacation, Sick Leave, etc. to be called Time Off Policies, so that it is not confused with Leave of Absences policies.
- Section 4.3 Holiday Pay – this section has been deleted because it is no longer necessary given our new time and attendance web application.
- Section 4.8 Leave of Absences – we have significantly revised this section to be more succinct. The proposed revisions are not intending to change (increase or decrease) benefits. The objective of these revisions is to make the policy easier to read and understand.
- Section 5.5 Retirement Plan we have reworded this section for clarity.
- Section 5.7 Employee Assistance Program is a brand-new section and reflects a benefit offered because of our health insurance.

- Section 6.12G2 Prescription Safety Glasses Reimbursement is a new benefit offered to improve the quality of safety eyewear available to our employees that need prescription glasses. This policy was modeled after our safety shoe reimbursement benefit.
- Section 6.12G3 Shot Program we updated this text and moved it up to a more logical location within the policy.
- Section 6.14 Personal Appearance has been updated to reflect accepted norms and in doing so we deleted the Causal Days section.
- Section 7.5 Progressive Discipline was revised to include text discussing suspensions.

On the following pages you can review the entire Personnel Policies & Procedures manual with proposed changes shown using Track Changes (strikeout and underline). I believe this revision is an improvement to the policy. The complete, revised policy was reviewed and approved by Lara Donlon, a lawyer who specializes in labor and employment law.

Staff request your approval of the following motion:

“THAT THE DISTRICT GOVERNING BOARD ratify and approve the Loxahatchee River Environmental Control District’s “Personnel Policies & Procedures” as revised with an effective date of June 28, 2019, and authorize the District’s Executive Director to update the Personnel Policies & Procedures from time to time, and periodically present it to the Governing Board for ratification and approval.”



Loxahatchee River District



Personnel Policies & Procedures

Issue Date: January 1, 1994

Date of Last Revision: ~~11/17/2017~~ 6/27/2019

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Forward

The Loxahatchee River Environmental Control District (LRD) is an Independent Special District of the State of Florida created to protect the Loxahatchee River and its watershed through resource management, research, and public education. Our 11 million gallon per day water reclamation facility serves approximately 73 square miles of northern Palm Beach and southern Martin Counties. The vast majority of wastewater collected is recycled and returned to the community to meet landscape irrigation needs. We also actively lead efforts to monitor the environmental health of the Loxahatchee River and assist with restoration efforts. We foster public education and stewardship through the River Center and Busch Wildlife Sanctuary. It is our mission to preserve the environmental health of our community and the National Wild & Scenic Loxahatchee River while striving to create a greater understanding of the river's significance.

Whether you have just joined our staff or have been at the Loxahatchee River District for a while, we are confident that you will find the District a dynamic and rewarding place in which to work and we look forward to a productive and successful association. We consider the employees of the District to be one of its most valuable resources. This manual has been written to serve as the guide for the employer/employee relationship.

There are several things that are important to keep in mind about this Personnel ~~Policy~~Procedure document. First, it contains ~~only~~ general information and guidelines. It is not intended to be comprehensive or to address all the possible applications of, or exceptions to, the general policies and procedures described. For that reason, if you have any questions concerning eligibility for a particular benefit, or the applicability of a policy or practice ~~to you~~, you should address your specific questions to Human Resources. Neither this Personnel Procedure document nor any other District document confers any contractual right, either expressed or implied, to remain in the District's employ. Nor does it guarantee any fixed terms and conditions of your employment. Your employment is not for any specific time and may be terminated at will, with or without cause and without prior notice by the District or you may resign for any reason at any time. No supervisor or other representative of the District (except the Executive Director) has the authority to enter into any agreement for employment for any specified period of time, or to make any agreement contrary to the above.

The procedures, practices, policies and benefits described here may be modified or discontinued from time to time. The District will inform all employees of any changes as they occur.

Finally, some of the subjects described here are covered in detail in official policy documents. You should refer to these documents for specific information, since this Personnel Procedure document only briefly summarizes those benefits. Please note that the terms of the written insurance policies are controlling.

If you have any questions or concerns, please contact Human Resources.

Personnel Policy Acknowledgement Receipt for Personnel Procedures

I acknowledge that I have received a copy of the Loxahatchee River District's Personnel Policies & Procedures. I certify that I have read and fully understand the policies~~rules~~ and procedures contained herein~~in the handbook~~. I acknowledge my full responsibility to follow these policies~~rules~~ and procedures faithfully in all respects.

I agree that if there is any policy, ~~or~~ provision, or in the procedure that I do not understand, I will seek clarification from my supervisor or Human Resources. I understand that the Loxahatchee River District is an "at will" employer, and ~~as such~~ employment with the District is not for a fixed term or definite period and may be terminated at the will of either party, with or without cause, and without prior notice.

No supervisor or other representative of the District (except the Executive Director) has the authority to enter into any agreement for employment for any specified period of time, or to make any agreement contrary to the above. In addition, I understand that this document ~~procedure~~ states the District's policies ~~and practices~~ in effect on the date of publication. I understand that nothing contained in this document~~procedure~~ may be construed as creating a promise of future benefits or a binding contract with the District for benefits or for any other purpose. I also understand that these policies and procedures are continually evaluated and may be amended, modified or terminated at any time.

Please sign and date this receipt and return it to Human Resources.

Revision Date: June 17, 2019

Date: _____

Signature: _____

Print Name: _____

1 EMPLOYMENT POLICIES

1.1 Individuals and Conduct Covered

These policies apply to all applicants and employees, and prohibit harassment, discrimination and retaliation whether engaged in by fellow employees, by a supervisor or manager or by someone not directly connected to the Loxahatchee River District (e.g., an outside vendor, consultant or customer).

Conduct prohibited by these policies is unacceptable in the workplace and in any work-related setting outside the workplace, such as during business trips, business meetings, and business-related social events.

1.2 Equal Employment Opportunity Policy Statement

Equal Employment Opportunity has been, and will continue to be, a fundamental principle at the District, where employment is based upon personal capabilities and qualifications without discrimination because of race, color, religion, gender, pregnancy, sexual orientation, gender identity or expression, age, national origin, disability, genetic information, marital status, familial status, ancestry or status as a covered veteran in accordance with applicable federal, state, and local laws.

This policy of Equal Employment Opportunity applies to all policies and procedures relating to recruitment, hiring, compensation, benefits, termination, placement, promotion, layoff, recall, transfer, leaves of absence, and training.

Human Resources has overall responsibility for this policy and will maintain reporting and monitoring procedures. Employees' questions or concerns should be referred to Human Resources. Appropriate disciplinary action may be taken against any employee violating this policy, up to and including termination.

1.3 Civility Policy

All employees are expected to treat each other, our customers, and the public with respect, consideration and civility. Intimidating, rude, discourteous, demeaning, threatening, vulgar or violent behaviors depart from the standard for civility and respect. These behaviors have no place in the workplace. Employees who violate this policy are subject to disciplinary action, up to and including termination.

1.3.1.4 Non-Discrimination and Anti-Harassment Policy

The Loxahatchee River District is committed to a work environment in which all individuals are treated with respect and dignity. Each individual has the right to work in a professional atmosphere that promotes equal employment opportunities and prohibits discriminatory practices, including harassment. Therefore, the District expects that all relationships among persons in the workplace will be business-like and free of bias, prejudice and harassment.

It is the policy of the District to ensure equal employment opportunity without discrimination or harassment on the basis of race, color, religion, gender, pregnancy, sexual orientation, gender identity or expression, national origin, age, disability, genetic information, marital status, familial status, ancestry or status as a covered veteran. The District strictly prohibits any such discrimination or harassment.

1.3.A1.4.A Definitions of Harassment

Sexual harassment constitutes discrimination and is illegal under federal, state and local laws. For the purposes of this policy, sexual harassment is defined as unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when, for example: (i) submission to such conduct is made either explicitly or implicitly a term of condition of an individual's employment; (ii) submission to or rejection of such

conduct by an individual is used as the basis for employment decisions affecting such individual; or (iii) such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile or offensive working environment.

Sexual harassment may include a range of subtle and not so subtle behaviors and may involve individuals of the same or different gender. Depending on the circumstances, these behaviors may include, but are not limited to: unwanted sexual advances or requests for sexual favors; sexual jokes and innuendo; verbal abuse of a sexual nature; commentary about an individual's body, sexual prowess or sexual deficiencies; leering, catcalls, or touching; insulting or obscene comments or gestures; display or circulation in the workplace of sexually suggestive objects or pictures (including through e-mail, cell phones, cameras, IMs and texts); and other physical, verbal or visual conduct of a sexual nature. Sex-based harassment, that is harassment not involving sexual activity or language, may also constitute discrimination if it is severe or pervasive and directed at employees because of their sex.

Harassment on the basis of any other protected characteristic is also strictly prohibited. Under this policy, harassment is verbal, written, physical, visual, photos or text conduct that denigrates or shows hostility or aversion toward an individual because of his/her race, color, religion, national origin, age, disability or any other characteristic protected by law or that of his/her relatives, friends or associates and that: (i) has the purpose or effect of creating an intimidating, hostile or offensive work environment; (ii) has the purpose or effect of unreasonably interfering with an individual's work performance; or (iii) otherwise adversely affects an individual's employment opportunities.

Harassing conduct includes, but is not limited to: epithets, slurs or negative stereotyping; threatening, intimidating or hostile acts; denigrating jokes and display or circulation in the workplace (including through email) of written or graphic material that denigrates or shows hostility or aversion toward an individual or group based on a protected category.

1.41.5 Americans with Disabilities Act Policy Statement

The District is committed to complying with all applicable provisions of the Americans with Disabilities Act as Amended ("ADA"). It is the District's policy not to discriminate against any qualified employee or applicant with regard to any terms or conditions of employment because of such individual's disability or perceived disability so long as the employee can perform the essential functions of the job.

Consistent with this policy of nondiscrimination, the District will provide reasonable accommodations to a qualified individual with a disability, as defined by the ADA, who has made a request to the District based upon his or her disability, provided that such accommodation does not constitute an undue hardship on the District. Employees with a disability who believe they need a reasonable accommodation to perform the essential functions of their job must contact Human Resources. The District encourages individuals with disabilities to come forward and request reasonable accommodations necessary to perform the essential functions of the job.

1.4.A1.5.A Procedure for Requesting an Accommodation

On receipt of an accommodation request, Human Resources will meet with you to discuss and identify the precise limitations resulting from the disability and the potential accommodation(s) that the District might make to help overcome those limitations. The employee's voluntary provision of medical records documenting the disability may be helpful in identifying the precise limitations and potential accommodation(s) and will be treated as confidential to the extent permissible by law.

The District will determine the feasibility of the requested accommodation considering various factors, including, but not limited to, the nature and cost of the accommodation, the District's overall financial resources and organization, and the accommodation's impact on the operation of the District, including its impact on the ability

of other employees and/or vendors of the District to perform their duties and on the District's ability to conduct business.

The District will inform the employee of its decision on the accommodation request or on how to make the accommodation. If the accommodation request is denied, employees will be advised of their right to appeal the decision by submitting a written appeal to the Executive Director explaining the reasons for the request. If the request on appeal is denied, that decision is final.

The ADA does not require the District to make the best possible accommodation, to reallocate essential job functions, or to provide personal use items (i.e., eyeglasses, hearing aids, wheelchairs, etc.).

An employee or job applicant who has questions regarding this policy or believes that he or she has been discriminated against based on a disability must notify Human Resources. All such inquiries or complaints will be treated as confidential to the extent permissible by law and [Florida Statute 119.0713](#).

1.51.6 Genetic Information Nondiscrimination Act of 2008 (GINA)

The Genetic Information Nondiscrimination Act of 2008 (GINA) prohibits employers and other entities covered by GINA Title II from requesting or requiring genetic information of an individual or family member of the individual, except as specifically allowed by this law. To comply with this law, the District will not provide nor ask for any genetic information when responding to this request for medical information. 'Genetic information,' as defined by GINA, includes an individual's family medical history, the results of an individual's or family member's genetic tests, the fact that an individual or an individual's family member sought or received genetic services, and genetic information of a fetus carried by an individual or an individual's family member or an embryo lawfully held by an individual or family member receiving assistive reproductive services.

1.7 Anti-Harassment Training

The District is committed to providing a work environment that is free of unlawful harassment of any kind. In furtherance of this commitment, the District provides Anti-harassment training to all District staff. This training is designed to assist employees in understanding the company's Anti-Harassment Policy, and their obligations under that policy. The following are the District's anti-harassment training guidelines:

1. All new hires will be required to take the training within the first week of hire.
2. All District staff will be required to take the training biennially per position:
 - o Supervisors will be required to take the supervisor-designated anti-harassment training course. A supervisor is defined as having the authority to hire, transfer, suspend, lay off, recall, promote, discharge, assign, rewards, or discipline other employees, or the responsibility to direct them or recommend any of the listed actions.
 - o All other employees will be required to take a standard anti-harassment training course.
3. The biennially training will open in the beginning of January and close at the end February of every odd year
4. The training must be completed during the employee's normal work hours.
5. The training may be administered through an E-Learning portal or other methods determined by HR.
6. If the employee refuses or does not complete the training within the allotted timeframe, unless on an approved leave of absence, progressive discipline may be used until the training has been completed.
7. Training will be managed by Human Resources and all records of completion and certificates will go into the District employee's file.

Retaliation Is Prohibited

~~The Loxahatchee River District prohibits retaliation against any individual, witness, and any other employee who reports discrimination or harassment or participates in an investigation of such reports. Retaliation against an individual for reporting harassment or discrimination or for participating in an investigation of a claim of harassment or discrimination is a serious violation of this policy and, like harassment or discrimination itself, will be subject to disciplinary action up to and including termination.~~

1.61.8 Complaint Procedure: Reporting an Incident of Harassment, Discrimination or Retaliation

The Loxahatchee River District requires the immediate reporting (within 24 hours) of all incidents perceived as of discrimination, harassment, or retaliation, unethical behavior or actions, or illegal behavior or actions. Such actions should be reported regardless of the offender's identity or position. Individuals who believe they have experienced or witnessed conduct that they believe is contrary to the District's policy or who have concerns about such matters should file their complaints with their immediate supervisor (or if the supervisor is the reason for the complaint, the Executive Director or Human Resources) before the conduct becomes severe or pervasive. Individuals should not feel obligated to file their complaints with their immediate supervisor first before bringing the matter to the attention of the Executive Director or Human Resources. Supervisors who receive such complaints must immediately (within 24 hours) provide the information to Human Resources or the Executive Director for action.

Important Notice to all Employees:

Employees who have experienced or witnessed conduct they believe is contrary to this policy have an obligation to take advantage of this complaint procedure. Early reporting and intervention have proven to be the most effective method of resolving actual or perceived incidents of harassment or discrimination inappropriate and/or illegal behavior. Therefore, the District requires the prompt reporting (within 24 hours) of complaints or concerns so that rapid and constructive action can be taken. The District will make every effort to stop alleged harassment, discrimination, or illegal actions before it becomes severe or pervasive, but can only do so with the cooperation of its staff/employees.

~~The availability of this complaint procedure does not preclude individuals who believe they are being subjected to harassing conduct from promptly advising the offender that his or her behavior is unwelcome and requesting that it be discontinued.~~

1.6.A Complaint Procedure: Reporting an Illegal/Unethical Behavior and/or Actions

~~The Loxahatchee River District requires the immediate reporting (within 24 hours) of all incidents of Illegal/Unethical Behavior and/or Actions, regardless of the offender's identity or position. Individuals who believe they have experienced conduct that they believe is contrary to the District's policy or who have concerns about such matters should file their complaints with their immediate supervisor (or if the supervisor is the problem, the Executive Director or Human Resources). Individuals are not obligated to file their complaints with their immediate supervisor first before bringing the matter to the attention of the Executive Director or Human Resources.~~

~~Supervisors who receive complaints must immediately (within 24 hours) provide the information to Human Resources or the Executive Director for action.~~

Important Notice to all Employees:

~~Employees who have experienced conduct they believe is contrary to this policy have an obligation to take advantage of this complaint procedure.~~

~~Early reporting and intervention have proven to be the most effective method of resolving harassment or discrimination; Illegal/Unethical Behavior and/or Actions. Therefore, the District requires immediate reporting (within 24 hours) of complaints or concerns so that rapid and constructive action can be taken. The District will~~

~~make every effort to stop Illegal/Unethical behavior before it becomes severe or pervasive and increases the effort with the cooperation of its staff/employees.~~

The availability of this complaint procedure does not preclude individuals who believe they are being subjected to harassing conduct or have witnessed Illegal/Unethical Behavior from promptly advising the offender that his or her behavior is unwelcome and requesting that it be discontinued. However, advising the offender that the conduct is unwelcome and/or requesting it be discontinued shall not constitute a complaint under this procedure even if the offender is one of the designated persons to receive such complaints. Calling 911 should not be delayed for misconduct involving bodily harm or the imminent threat of bodily harm to a victim.

1.6.B1.8.A The Investigation

Any reported allegations of harassment, discrimination, illegal/unethical behavior, or retaliation will be investigated promptly, thoroughly and impartially. The investigation may include individual interviews with the parties involved and, where necessary, with individuals who may have observed the alleged conduct or may have other relevant knowledge. Confidentiality will be maintained throughout the investigatory process to the extent consistent with adequate investigation, appropriate corrective action, and public records laws.

1.8.B Responsive Action

Misconduct constituting harassment, discrimination, illegal/unethical behavior, or retaliation will be dealt with promptly and appropriately. Responsive action may include, for example, training, referral to counseling, monitoring of the offender and/or disciplinary action such as warning, reprimand, withholding of a promotion or pay increase, reduction of wages, demotion, reassignment, temporary suspension without pay or termination, as the District believes appropriate under the circumstances.

If an employee making a complaint does not agree with its resolution, the employee may appeal to the District's Executive Director.

Individuals who have questions or concerns about these policies should talk with their supervisor or Division Director (unless the allegations are against one of them), then Human Resources or the Executive Director.

Finally, these policies should not, and may not, be used as a basis for excluding or separating individuals of a particular gender, or any other protected characteristic, from participating in business or work-related social activities or discussions in order to avoid allegations of harassment. The law and the policies of the District prohibit disparate treatment on the basis of sex or any other protected characteristic, with regard to terms, conditions, privileges and prerequisites of employment. The prohibitions against harassment, discrimination and retaliation are intended to complement and further these policies, not to form the basis of an exception to them.

1.6.C Anti-Harassment Training

~~The District is committed to providing a work environment that is free of unlawful harassment of any kind. In furtherance of this commitment, the District provides Anti-harassment training to all District staff. This training is designed to assist employees in understanding the company's Anti-Harassment Policy, and their obligations under that policy. The following are the District's anti-harassment training guidelines:~~

~~1.—All new hires will be required to take the training within the first week of hire.~~

~~2.—All District staff will be required to take the training biennially per position:~~

~~○ Supervisors will be required to take the supervisor-designated anti-harassment training course. A supervisor is defined as having the authority to hire, transfer, suspend, lay off, recall, promote, discharge, assign, rewards, or discipline other employees, or the responsibility to direct them or recommend any of the listed actions.~~

~~○ All other employees will be required to take a standard anti-harassment training course.~~

- ~~3. The biennially training will open in the beginning of January and close at the end February of every odd year~~
- ~~4. The training must be completed during the employee's normal work hours.~~
- ~~5. The training may be administered through an E-Learning portal or other methods determined by HR.~~
- ~~6. If the employee refuses or does not complete the training within the allotted timeframe, unless on leave of absence, progressive discipline may be used until the training has been completed.~~
- ~~7. Training will be managed by Human Resources and all records of completion and certificates will go into the District employee's file.~~

1.8.C Retaliation Is Prohibited

The Loxahatchee River District prohibits retaliation against any individual, witness, and any other employee who reports discrimination, harassment, unethical / illegal behaviors, or participates in an investigation of such reports. Retaliation against an individual for reporting harassment or discrimination or for participating in an investigation of a claim of harassment or discrimination is a serious violation of this policy and, like harassment or discrimination itself, will be subject to disciplinary action up to and including termination.

1.71.9 Conflict of Interest and Outside Employment Statement

The District expects its employees to conduct business according to the highest ethical standards of conduct. Employees are expected to devote their best efforts to the interests of the District. Conflicts of Interest can be unethical and/or illegal, can result in financial detriment to the District and/or be a violation of the trust citizens place in their government. Business dealings that appear to create a conflict between the interests of the District and an employee are subject to disclosure, evaluation, and prohibition.

The District recognizes the right of employees to engage in activities outside of their employment which are of a private nature and unrelated to our business. However, the employee must disclose any possible conflicts so that the District may assess and prevent potential conflicts of interest from arising. If in doubt, it is better to exercise an abundance of caution and disclose the potential conflict of interest for evaluation beforehand, rather than risk taking unethical and/or illegal action under a conflict of interest.

A potential or actual conflict of interest occurs whenever an employee is in a position to influence a decision that may result in a personal gain for the employee, a person affiliated in business with the employee or a family member (i.e., spouse or significant other, domestic partner, children, parents, siblings) as a result of the District's business dealings.

Although it is not possible to specify every action that might create a conflict of interest, this policy sets forth the ones which most frequently present problems. If an employee has any question whether an action or proposed course of conduct would create a conflict of interest, he or she should immediately contact Human Resources to obtain advice on the issue. If an employee becomes aware of a conflict of interest after the action or course of conduct was taken, the employee should disclose the conflict of interest as soon as possible thereafter, and the circumstances explaining why the employee may not have been aware of the conflict of interest beforehand. The purpose of this policy is to protect employees and the District from any conflict of interest that might arise.

A violation of this policy may result in immediate and appropriate discipline, up to and including immediate termination.

4-81.10 Outside Employment

Employees are required to obtain written approval from their Division Director before participating in outside employment activities. Approval will be granted unless the employment activity conflicts with the District's interest. In general, outside employment activities are not allowed when they:

- Prevent or diminish the employee from fully performing work for which he or she is employed at the District, including overtime assignments;
- Involve organizations that are doing or seek to do business with the District, including actual or potential vendors or customers; or
- Violate provisions of law or the District's policies or rules.

From time to time, District employees may be required to work beyond their normally scheduled hours. Employees are expected to reasonably accept this work when requested. In cases of conflict with any outside activity, the employee's obligations to the District must be given priority. Employees are hired and continue in the District's employ with the understanding that the District is their primary employer and that other employment or commercial involvement which is in conflict with the business interests of the District is strictly prohibited.

4-91.11 Acceptance of Gifts

The Florida Code of Ethics for Public Officers and Employees regulates the standards of conduct for public officers and employees of certain agencies, which apply to the District. Simply stated, a gift regardless of value or form, which has the purpose of influencing your decision making in your employment or official capacity shall not be solicited or accepted. If you have any doubts about the propriety of accepting a gift, chances are that others will believe you have misused your public position. Best practices policy is to avoid even the appearance of impropriety.

This gift policy is not intended to provide every statutory provision or exception. In any instance where an employee or official is not certain as to what constitutes a gift under this code, or the propriety of any gift or compensation, they should consult with the District attorney.

The following statutes are particularly relevant to all District officials:

- Fla. Stat. 112.313(2) SOLICITATION OR ACCEPTANCE OF GIFTS - No public officer, employee of an agency, local government attorney, or candidate for nomination or election shall solicit or accept anything of value to the recipient, including a gift, loan, reward, promise of future employment, favor, or service, based upon any understanding that the vote, official action, or judgment of the public officer, employee, local government attorney, or candidate would be influenced thereby.
- Fla. Stat. 112.313(4) UNAUTHORIZED COMPENSATION.—No public officer, employee of an agency, or local government attorney or his or her spouse or minor child shall, at any time, accept any compensation, payment, or thing of value when such public officer, employee, or local government attorney knows, or, with the exercise of reasonable care, should know, that it was given to influence a vote or other action in which the officer, employee, or local government attorney was expected to participate in his or her official capacity.
- Fla. Stat. 112.3148(4) A reporting individual or procurement employee or any other person on his or her behalf is prohibited from knowingly accepting, directly or indirectly, a gift from a vendor doing business with the reporting individual's or procurement employee's agency, a political committee as defined in s. 106.011, or a lobbyist who lobbies the reporting individual's or procurement employee's agency, or directly or indirectly on behalf of the partner, firm, employer, or principal of a lobbyist, if he or she knows or reasonably believes that the gift has a value in excess of \$100; however, such a gift may be accepted by such person on behalf of a governmental entity or a charitable organization. If the gift is accepted on

behalf of a governmental entity or charitable organization, the person receiving the gift shall not maintain custody of the gift for any period of time beyond that reasonably necessary to arrange for the transfer of custody and ownership of the gift.

1.9.A1.11.A Reporting of Gifts

Each gift having a value in excess of \$100.00 must be reported in accordance with Florida Statutes section 112.3148 on a quarterly basis. Gifts from relatives or those primarily associated with his or her business or employment are exempted from the reporting requirement.

1.101.12 Health Insurance Portability and Accountability Act (HIPAA)

The District follows all guidelines under the Health Insurance Portability and Accountability Act (HIPAA). HIPAA restricts the District's ability to use and disclose Protected Health Information (PHI). The act also mandates the governing of provision of health benefits, the delivery and payment of health care services, and the security and confidentiality of individually PHI in written, electronic, and/or oral formats.

While the District does not regularly collect or receive PHI, the District has established safeguards to prevent employee's protected PHI from intentionally or unintentionally being used or disclosed. If there are any questions or concerns regarding any HIPAA questions, see Human Resources.

1.111.13 Reporting Potential Disclosure of Confidential Information

All District records and information relating to the District or its customers are confidential and employees must, therefore, treat all matters accordingly, subject to the Public Records laws of Florida. No District or District-related information, including without limitation, documents, notes, files, records, oral information, computer files or similar materials (except in the ordinary course of performing duties on behalf of the District) may be removed from the District's premises without permission from the District. Additionally, the contents of the District's records or information otherwise obtained in regard to business may not be disclosed to anyone, except where required for a business purpose. Employees must not disclose any confidential information, (purposefully or inadvertently through casual conversation and/or social media), to any unauthorized person inside or outside the District. Employees who are unsure about the confidential nature of specific information must ask their supervisor for clarification. Employees will be subject to appropriate disciplinary action, up to and including dismissal, for knowingly or unknowingly revealing information of a confidential nature. Employees are not prohibited from discussing their terms and conditions of employment or otherwise engaging in concerted activity.

1.121.14 Whistleblower Policy

An employee of the District may report an activity that he/she believes is a violation of applicable law that creates a substantial and specific danger to the public's health, safety, or welfare, improper use of governmental office, gross waste of funds, or any other abuse or gross neglect of duty to one or more of the parties specified in this Policy. The employee is not responsible for investigating the activity or for determining fault or corrective measures; appropriate management officials are charged with these responsibilities.

If an employee has knowledge of or a concern of the aforementioned illegal or unethical activities, the employee is to contact his/her Division Director, Executive Director, or Human Resources. The employee must exercise sound judgment to avoid baseless allegations. An employee who intentionally files a false report of wrongdoing will be subject to discipline up to and including termination.

Whistleblower protections are provided in two important areas:

- (1) Confidentiality:

- Insofar as possible, the confidentiality of the whistleblower will be maintained during the course of the investigation. However, the whistleblower's identity may have to be disclosed to certain agencies that are authorized to conduct a thorough investigation, to comply with the law and to provide accused individuals their legal rights of defense.

(2) Adverse Personnel Action:

- The District will not retaliate against a qualified whistleblower. This includes, but is not limited to, protection from retaliation in the form of an adverse employment action such as termination, compensation decreases, suspensions, transfer, or any other adverse action taken against an employee because the employee reported under this policy.

Any whistleblower who believes he/she is being retaliated against must contact his/her Division Director, Executive Director or Human Resources. The right of a whistleblower for protection against retaliation does not include immunity for any personal wrongdoing that is alleged and investigated.

All reports of illegal and unethical activities shall be promptly submitted to Division Director, Human Resources, or Executive Director, who will be responsible for investigating and coordinating corrective action. Employees with any questions regarding this policy should contact the Human Resources.

1.13 Civility Policy

~~All employees are expected to treat each other, our customers, and the public with respect, consideration and civility. Intimidating, rude, discourteous, demeaning, threatening, vulgar or violent behaviors depart from the standard for civility and respect. These behaviors have no place in the workplace. Employees who violate this policy are subject to disciplinary action, up to and including termination.~~

1.141.15 Changes of Policy

This procedure supersedes all previous Personnel Procedures and memos that may have been issued from time to time on subjects covered in this Personnel Procedure.

However, the District reserves the right to interpret, change, suspend, cancel, or dispute with or without notice all or any part of our policies, procedures, and benefits at any time. We will notify all employees of these changes. Changes will be effective on the dates determined by the District, and after those dates all superseded policies will be null.

If you are uncertain about any policy or procedure, speak with your supervisor, Division Director, or Human Resources.

2 HIRING POLICIES

2.1 Employment Relationship-At Will

A District employee enters into employment voluntarily, and an employee is free to resign at any time for any reason or no reason. Similarly, the State of Florida is an "at will" employment state, such that the District is allowed to terminate the employment of any employee at any time for any reason without prior notice. Neither this handbook nor any other District document creates a contractual right, either express or implied, to remain employed for any specific period of time. No one other than the Executive Director has the authority to enter into any contract of employment for any specific period of time.

2.2 Transfers, Promotions, and Job Posting Process

The District encourages employees to assume higher-level positions or lateral transfers for which they qualify. Toward this end, the District has a job-posting program that offers employees the opportunity to apply for certain positions within the District. Each job posting notice will include the dates of the posting period, job title, division, grade level, job summary, essential duties and qualifications (required skills and abilities).

Generally, employees must be in their job for at least 90 days before applying for a change in position. In addition, employees must have a good performance, attendance and punctuality record. ~~Each employee requesting a transfer will be considered for the new position upon submission of a job application, like all other applicants.~~ An employee requesting to apply for an internal job transfer will be required to notify Human Resources through the company District email. Human Resources will then in return notify the employee's current supervisor as well as the supervisor of the open position.

Each transfer is judged on an individual basis, depending on the needs of the Division(s) involved. Management will make all final decisions regarding transfers. Employees who wish to apply for a transfer should discuss it first with their supervisor so that it may be determined if their skills meet the minimum requirements of the desired job, and then notify Human Resources through email of their interest in the position. ~~submit an application.~~

If an employee meets the minimum qualifications for the position, Human Resources ~~the supervisor~~ will make arrangements to set up an exploratory interview with the other department. Jobs open only to internal applicants may or may not be posted, as determined by the Division Director. When posted, ~~Jobs~~ will be posted for a minimum time period of up to 1 week. ~~5 days or until filled.~~

Job posting is a way to inform employees of openings and to identify qualified and interested applicants who might not otherwise be known to the hiring Division Director. Other recruiting sources may also be used to fill open positions in the best interest of the District.

2.3 Employment Applications

The District relies upon the accuracy of information contained in the employment application, as well as the accuracy of other data presented throughout the hiring process and employment. Any misrepresentations, falsifications, or material omissions in any of this information or data may result in the District's exclusion of the individual from further consideration for employment or, if the person has been hired, termination of employment. The District will retain applications based on the longest length required under all retention laws. All applications and or resumes will be kept active for a period of 60 days from the time that it has been received by the Human Resource Department. After 60 days applicants are encouraged to reapply if they are interested in a position.

2.4 Employment Reference Checks

To ensure that individuals who join the District are well qualified and have a strong potential to be productive and successful, it is the policy of the District to check the employment references of all applicants. The Human Resource Generalist will respond to all reference check inquiries from other employers. Responses to such inquiries will confirm dates of employment, position, and titles held. The District will comply with all requests for copying or inspection of personnel records in accordance with Florida law.

2.5 Background Checks

The District wants to ensure that all individuals who work for the District maintain a safe and productive work environment. It is our policy to conduct pre-employment background checks on all finalist and all applicants who accept an offer of employment from the District. Background checks may include verification of any information

on the applicant's resume or application form, employment history checks, driver's license checks and statewide criminal checks, and may include local criminal records checks through local law enforcement agencies.

All offers of employment are conditioned on the receipt of a background check report that is acceptable to the District. All background checks are conducted in compliance with applicable laws. Reports are kept confidential and are only viewed by individuals involved in the hiring process.

2.5.A Level 2 Background Checks

In addition to a background check all ~~ALL~~ employees required by Florida law to be screened pursuant to level 2 screening must undergo background investigations which include, but not limited to, fingerprinting for statewide criminal history records checks through the Department of Law Enforcement, and national criminal history checks through FBI, and local law enforcement agencies. Any person required by law to be screened pursuant to this section must not have an arrest awaiting final disposition, must not have been found guilty of, regardless of adjudication, or entered a plea of nolo contendere or guilty to, and must not have been adjudicated delinquent and the record has not been sealed or expunged for, any offense prohibited under [Florida Statute 435.04\(2\)](#) or similar law of another jurisdiction.

Any person who is required to undergo such a security background screening or investigation and who refuses to cooperate in such screening or investigation or refuses to submit fingerprints shall be disqualified for employment in such position or, if employed, may result in disciplinary action up to and including termination.

2.6 Employee Medical Examinations

To help ensure that employees are able to perform their duties safely, without risk of harm to the public, fellow employees, or themselves, medical examinations are required.

After an offer has been made to an applicant entering a designated job category, a medical examination will be performed at the District's expense by a health professional of the District's choice. The offer of employment and assignment to duties is contingent upon satisfactory completion of the exam.

Information on an employee's medical condition or history will be kept separate from other employee information and maintained confidentially to the extent permissible under the law. Access to this information will be limited to those who have a legitimate need to know.

2.7 Initial Employment Period

Every new employee goes through an initial period of adjustment in order to learn about the District and about his/her job. During this time, the employee will have an opportunity to find out if he/she is suited to, and suitable for, his/her new position.

Additionally, the initial employment period gives the employee's supervisor a reasonable period of time to evaluate his/her performance. Your initial employment period of 6 months was defined in your New Hire Status Memorandum and/or employment offer.

During this time, the new employee will be provided with training and guidance from his/her supervisor, and/or from co-workers under the supervision of the supervisor. The employee may be discharged at any time during this period for any reason or if the employee's supervisor concludes that the employee is not progressing or performing satisfactorily. Under appropriate circumstances, the initial employment may be extended. Additionally, as is true at all times during an employee's employment with the District, employment is not for any specific time and may be terminated at will, with or without cause and without prior notice.

At the end of the initial employment period, the supervisor will conduct a performance evaluation of the new employee. Provided the employee's job performance is 'satisfactory' at the end of the initial employment period, the employee may continue in the District's employment as an at-will employee.

2.8 Employee Categories

2.8.A Exempt

Exempt employees are classified as such if their job duties are exempt from the overtime provisions of the Fair Labor Standards Act (FLSA). Exempt employees are not eligible for overtime pay, except as set forth in (Exempt Employee Extra Compensation below). Their salaries are calculated on a weekly basis and cover all hours worked.

An exempt employee includes those holding executive, administrative, learned professional, and certain computer-related positions, among others. Exempt employees receive a salary of at least \$455 per week or- Effective December 1, 2016, the minimum weekly salary threshold is \$913 per week. other minimum threshold required by law. Federal regulations will adjust this amount every 3 years beginning January 1, 2020.

2.8.B Exempt Employee Disaster Compensation

Exempt employees generally receive a predetermined salary to cover all hours worked. However, additional compensation will be provided to exempt employees to better provide for the health, safety and welfare of all citizens and residents served by the District during a natural disaster under a declared state of emergency.

Eligible employees include all full-time exempt employees who are required to perform disaster-related emergency work. Disaster-related emergency work includes debris removal, emergency protective measures, and permanent restoration.

Debris removal activities include the clearance of trees and woody debris, building wreckage, sand, mud, silt, and gravel, vehicles and other disaster-related material. These activities must be necessary to eliminate immediate threats to lives, public health and safety, eliminate immediate threats of significant damage to improved public or private property; or ensure economic recovery of the District to the benefit of the community-at-large.

Emergency protective measures include those activities undertaken before, during and following a disaster that are necessary to eliminate or reduce an immediate threat to life, public health, or safety, or to eliminate or reduce an immediate hazard that threatens significant damage to improved public or private property. Examples of such activities include: search and rescue; emergency medical care; emergency mass care and shelter when such cannot be provided by volunteer agencies; security in the disaster area to include the alerting of public dangers by setting up barricades or other warning devices; provision of food, water, ice, and other essential needs at central distribution points for local citizens; provision of temporary facilities such as temporary bridges or road detours for essential community services; and removal of health and safety hazards.

Permanent work may include roads and bridges, water control facilities, some buildings and equipment, utilities, parks, recreational facilities and other items.

Exempt full-time employees required to perform disaster-related emergency work shall receive extra compensation at a rate of 1.5 times their “hourly rate” under the circumstances outlined herein. Because exempt employees are paid on a salary basis, the “hourly rate” shall be defined as the employee’s annual salary divided by 2080. The employee’s annual salary for the purposes of this calculation shall be the annual salary at the time the disaster-related emergency work was performed. Disaster payments are subject to all applicable and lawful deductions.

The disaster pay shall be calculated beginning in the workweek during which the District declares a state of emergency through the Executive Director or designee.

Disaster pay shall only be authorized for hours worked in excess of forty (40) hours in any workweek, or portion thereof, during which a state of emergency, as defined above, exists. Paid or unpaid time off under any of the District’s leave policies shall not be considered hours worked.

Eligible employees shall receive the disaster pay only upon submitting a signed time sheet, reflecting actual hours worked during the week(s) in which a state of emergency existed and verification reflecting the type and manner of disaster-related work performed to Human Resources. Said time sheet must also be signed by the supervisor requiring the exempt employee to perform disaster-related emergency work prior to submitting same to Human Resources. Failure of the eligible employee to submit the signed time sheet and verification within 5 business days of the conclusion of each workweek for which a state of emergency exists may cause delay in payment of the disaster pay. Failure of the eligible employee to submit the signed time sheet and verification within twenty (20) calendar days of the conclusion of each workweek for which a state of emergency exists shall result in the eligible employee forfeiting such extra compensation.

Any payments made as part of this policy shall not be construed to alter the exempt status of the employee. Regardless of any disaster payments made pursuant to this policy, each exempt employee is guaranteed his or her regular salary, which meets the minimum threshold pursuant to applicable Federal regulations.

Exempt employees engaged in emergency preparations, response, or recovery not meeting the guidelines of Disaster Compensation, may be authorized by the Executive Director to receive additional recognition in the form of additional specialty pay or paid time off.

2.8.C Non-Exempt

Non-Exempt employees receive at least minimum wage and overtime pay in accordance with our overtime policy. Their wages are calculated on an hourly basis. Non-Exempt Employees are covered by the Fair Labor Standards Act (FLSA). This classification is not exempt from law's requirements of minimum wage and overtime.

Based on the conditions of employment, employees of the District fall into the following categories;

2.8.D Regular Full-Time

A Full-Time employee is considered to work more than 30 working hours for the District each week. Full-Time employees are not classified as part-time, introductory, temporary, or grant status. Generally, full-time employees are eligible for the District's benefit package, subject to the terms, conditions, and limitations of each benefit program.

2.8.E Regular Part-Time - (1,000 hour Rule Applies)

Part-Time employees are classified as non-exempt and work a regular schedule of 29 hours or less a week. They are not in a temporary or introductory status. While they do receive all legally mandated benefits (such as: Social Security and Workers' Compensation Insurance) they are ineligible for all of the District's other benefit programs.

2.8.F Temporary/Seasonal Employees – (1,000 hour Rule Applies)

A temporary/seasonal employee is hired for a specified project or time frame and works an irregular schedule of less than 29 hours per week or less than 129 hours per month. A temporary/seasonal employee in an exempt position is paid according to the terms of hire for that individual. Temporary/Seasonal employees must work less than 120 days. Temporary/seasonal employees do not receive any additional compensation or benefits provided by the District due to the 1,000 hour maximum.

2.8.G Elected/Appointed Officers – Governing Board Members

The District's Governing board is comprised of Elected/Appointed Officers, going forward they will be referred to as the Governing Board Members. The Governing Board Members are not subject to FLSA classifications per [FLSA, 203\(e\)\(2\)\(C\)](#). They are eligible to take part in District specific District benefits. The Governing Board

Members who elect to participate in the District's benefit program shall be required to pay the fully funded rate for all elected coverages without subsidized premiums from the District.

2.8.H Grant

A Grant employee is hired for a specified project or time frame and works an irregular schedule of less than 29 hours per week. A Grant employee in an exempt position is paid according to the terms of hire for that individual per the Grant. Grant employees do not receive any additional compensation or benefits provided by the District.

2.8.I Under the Age of 18 years

Due to child labor laws, insurance restrictions and the nature of the District's business, individuals under the age of eighteen (18) years will not be considered for full-time employment with the District.

2.9 Immigration Law Compliance

The District is committed to employing only United States citizens and aliens who are authorized to work in the United States and complies with the Immigration Reform and Control Act of 1986. As a condition of employment, each new employee must properly complete, sign, and date the first section of the Immigration and Naturalization Form I-9 at the time the offer of employment is accepted, but no later than the first day of employment. The employee must also provide the supporting documents within three (3) business days of the first day of employment, or as otherwise provided by law. Before commencing work, newly rehired employees must also complete the Form I-9 if the employee did not previously do so, if the prior Form I-9 is more than three years old or if the previous Form I-9 is no longer valid. Rehired employees must also complete the Form I-9 upon acceptance of the position and also have three (3) business days to provide supporting documentation. Any employee whose immigration employment eligibility status changes at any time during employment must Human Resources immediately.

2.10 Job Descriptions

The District makes every effort to create and maintain accurate job descriptions for all positions within the organization. Each description includes job information, job summary (giving a general overview of the job's purpose), an essential duties and responsibilities section, supervisory responsibilities, and qualifications for the position (including education and/or experience, language skills, mathematical skills, reasoning ability, and any certification and/or licenses required), any physical demands, and work environment.

The District maintains job descriptions to aid in orienting new employees to their jobs, identifying the requirements of each position, establishing hiring criteria, setting standards for employee performance evaluations, and establishing a basis for making reasonable accommodations for individuals with disabilities. The Division Director, Human Resources, and the Executive Director prepare job descriptions when new positions are created.

Existing job descriptions are also reviewed and revised in order to ensure that they are up-to-date. Job descriptions may also be rewritten periodically to reflect any changes in the position's duties and responsibilities. All employees will be expected to help ensure that their job descriptions are accurate and current, reflecting the work being done. Employees should remember that job descriptions do not necessarily cover every task or duty that might be assigned, and that additional responsibilities may be assigned as necessary.

2.11 Performance Evaluation

Supervisors and employees are strongly encouraged to discuss job performance and goals on an informal, day-to-day basis. A formal written performance evaluation may be conducted at the end of an employee's introductory

period of hire. This period, also known as the introductory period, allows the supervisor and the employee to discuss job responsibilities, standards, and performance requirements of the new position. Additional formal performance evaluations are conducted to provide both supervisors and employees the opportunity to discuss job tasks, identify and correct weaknesses, encourage and recognize strengths, and discuss positive, purposeful approaches for meeting goals.

Employees that have less than two years of service with the District will be evaluated twice per year, from the month of the employee's anniversary date. Thereafter, the employee will be placed on an annual performance evaluation unless otherwise designated by the supervisor.

Merit-based pay adjustments may be awarded by the District in an effort to recognize truly superior employee performance. The decision to award such an adjustment is dependent upon numerous factors, including the information documented by this formal performance evaluation process as well as sufficient funds in the budget.

If a District employee is awarded a merit increase, the increase to their wages shall become effective on the first day of the pay period in which their hire date anniversary occurs. If the employee has been rehired, their rehire date will be used as the effective date.

2.12 Employee Referral Program

The District seeks qualified applicants for employment and appreciates recommendations made by existing employees. Employees should obtain permission from the individual before making a referral. Employees should not make commitments or oral promises of employment. If an existing employee recommends someone who is hired, an effort will be made to notify the existing employee prior to, upon, or shortly after the new employee's start date.

2.13 Employee or Independent Contractor

An employee cannot be both an employee of the District and an independent contractor to the District at the same time. Treating a portion of work done by an employee as work performed by an independent contractor is not allowed.

3 COMPENSATION POLICIES

3.1 Hours of Work

All employees are required to be present on their assigned jobs for the total hours in the workweek (defined below) unless absence from duty is authorized in advance in accordance with these Personnel Procedures. All absences shall be properly recorded and charged. Full-time District employees shall work at least forty (40) hours a week except where other provisions are specifically approved in advance in accordance with these Personnel Procedures. Normal workday shall be from 8:00 a.m. to 5:00 p.m. Monday through Friday, unless otherwise scheduled. Lunch times may be scheduled at the discretion of the Division Director, shall be unpaid, and are a time free from work interruption.

3.2 Work Schedules

The District is a 24 hour 7 day a week operation. To ensure the plant is operational for that duration, the District has different employee work schedules to accommodate:

- Normal Shift - 8 hours a day, 5 days a week
- Operations Shift 1 - 10 hour shifts, 4 days a week

- Operations Shift 2 - three 12 hour shifts with one 4 hour shift on a day of the work week as determined to be in the best interest of operational demands and scheduling.

Supervisors will advise employees of the times their schedules will normally begin and end. Staffing needs and operational demands may necessitate variations in starting and ending times, as well as variations in the total hours that may be scheduled each day and week.

3.3 Work Week

The workweek shall start on 7:31 a.m. Saturday and end at 7:30 am the following Saturday. The basic workweek for all Regular Full-Time employees is 40 hours per week except where other provisions are specifically approved in advance. The Division Directors may approve deviations from the basic workweek for individual activities or individual positions when such deviations can be demonstrated to be in the best interest of the District, the Division and the employee. Daily hours of work and workdays may vary according to the service requirements of the Division.

3.4 Meal Periods

The District provides all full-time employees with one bona fide meal period each workday. Supervisors or Division Directors will schedule meal periods to accommodate operating requirements.

A bona fide meal period is defined as a minimum of 30 minutes or maximum of 1(one) hour, whichever is approved by your Division Director, and are not considered hours worked. During this time, employees will be relieved of all active duties and responsibilities. If a non-exempt the employee is required to perform any work duties while on his or her meal break period, the employee must be compensated for the time spent performing work duties. The time spent working during the meal break will be counted toward the total hours worked.

3.5 Breaks

Breaks will be given to non-exempt employees at Division Director or supervisor discretion. Breaks will last no longer than 15 minutes for every 4 hours of work. Breaks will be paid, but not to be used to extend the normal workday. Breaks are not to be combined in order to arrive to work late or leave work early.

3.6 Overtime

From time to time, District non-exempt employees may be required to work beyond their normally scheduled hours. Employees are expected to reasonably accept this work when requested. Prior approval of a supervisor, however, is required before any non-exempt employee works overtime. Overtime will be paid at one and one-half times the employee's regular working hourly rate of pay.

Overtime pay is based on actual hours worked including holiday pay, vacation, and night shift differential. Sick, on-call pay, personal, Jury Duty, and Bereavement ~~leave~~ are not considered hours worked in a work week, and will be paid as straight time.

Non-exempt employees shall not use mobile devices or District E-mail for work when off duty since use of the same when off duty could pose as working overtime without approval. Mobile devices issued to non-exempt employees shall be used for work only during employee's working hours. Employees working overtime without approval will be paid for the overtime, and may be subject to disciplinary action.

3.7 On-Call Policy

- The District may designate employees periodically or rotationally to on-call assignments during weekends, evenings, holidays, and other off-duty hours. The District defines “on-call” as “waiting to be engaged”, per Fair Labor Standards Act regulations.
- On-call means employees can use their off time effectively for personal purposes. The employee must be within one-hour of their work environment and must be available for contact by telephone and/or pager. Scheduled on-call personnel shall be available for work due to the likelihood for an emergency to include nights, weekends, and holidays.

3.7.A On-Call Pay

- The scheduled on-call personnel will be paid one hour at double time for each day ~~two (2) additional hours at straight time per day that~~ they are on-call.
- The additional on-call time will only be paid to the employee who is scheduled for on-call duty. The employee scheduled for on-call duty shall receive the full on-call additional pay. If another employee is called in addition to the on-call employee, they will be paid at time and one half and not paid the additional scheduled on-call pay.
- ~~The additional two (2) hours of o~~n-call pay is not considered as time worked in the calculation of overtime pay.
- ~~The additional o~~n-call pay will~~shall~~ be forfeited if the scheduled personnel cannot be located or does not respond within one (1) hour from the initial call. This lack of response may result in disciplinary action that would be determined by the Department Supervisor.

3.7.B Area of Responsibility

- Collection Field Foreman and/or Superintendent will schedule and set the on-call rotation for the field Collection/Transmission/Reuse positions and set the areas of responsibility of the District field operating system.
- The Director of Operations or his designee ~~Chief Plant Operator~~ will schedule and set the on-call rotation for the Plant Operators and set the areas of responsibility for the Plant.
- The Lab Manager will schedule and set the on-call rotation for the Lab Technicians and set the areas of responsibility for the Lab.

3.7.C Exempt Employees

Exempt employees are ineligible for on call pay.

3.8 Night Shift Pay Differential

Night Shift Differential refers to the extra compensation a District employee received for hours worked outside the hours of 7:30 a.m. to 7:00 p.m., Monday through Sunday.

3.8.A Eligibility

Exempt employees are ineligible for Night Shift Differential Pay. Only non-exempt employees with a job title of Wastewater Treatment Plant Operator are eligible to receive Night Shift Differential Pay. To be eligible for Night Shift Differential pay, the following criteria must be met:

- Job Title is a Waste Water Treatment Plant Operator,
- Four or more hours were worked between the hours of 7:00 pm through 7:30 am., and
- ~~The Wastewater Treatment Plan Operator was scheduled to work four or more hours between 7:00 pm and 7:30 am.~~

Scheduled/Unscheduled ~~emergency~~ shutdowns do not qualify for Night Shift Differential.

3.8.B Night Shift Differential Pay

Non-exempt employees meeting the above criteria, from Section 3.8.A, will receive the night shift differential of \$0.50/hr. (Regular rate plus the Night Shift Differential).

3.8.C Designation of Night Shift Differential Pay

The Night Shift Differential is to be paid on top of the wastewater treatment plant Operator's regular rate of pay. In cases where the wastewater treatment plant Operator is receiving the maximum amount under the pay scale, as long as the wastewater treatment plant Operator meets the criteria listed above, they will still receive the Night Shift Differential.

3.8.D Night Shift Differential Overtime Pay

An employee who meets the Eligibility criteria above (3.8.A) for all hours worked, and works over 40 hours, will be paid overtime at one and one-half times their regular pay rate plus night shift differential pay [i.e., OT = (regular pay rate + \$0.50)*1.5]. Per the Fair Labor Standards Act, if the employee has two different pay rates in a week period that results in over 40 hours worked, the District will use the weighted average method to determine the employee's rate of pay.

3.8.E Night Shift Differential Leaves of Absence

Time not actually worked during a work period, such as ~~various types of leave (i.e., vv~~vacation, sick, holiday, ~~etc.etc.)~~, is not eligible for Night Shift Differential pay and will be paid at the base rate of pay.

3.8.F Night Shift Differential Holiday Pay

Time not actually worked during a work period, when an employee is not on duty, is not eligible for Night Shift Differential pay and will be paid at the base rate of pay.

3.9 Time Records

All ~~non-exempt~~ employees must complete a weekly time sheet from the District's online web-based time and attendance system. This also includes all vacation, sick and /or personal days (as applicable).

Non-exempt employees must complete their time card weekly in the time & attendance system sheet which must record any vacation, sick and/or personal days (as applicable). ~~Sick, vacation or personal days must also be submitted on a separate leave sheet (e.g., a blue sheet or a yellow sheet).~~

All Exempt Employees must complete a weekly time sheet from the District's web- based time and attendance system. All vacation, sick and /or personal days (as applicable) must be approved by ~~requiring vacation, sick or personal leave must turn in a leave sheet to~~ either their immediate Division Director or the Executive Director (whichever is applicable) if the required time off leave is for a full day (i.e., 8 hours) or more. Exempt employees are not required to submit a request for time off ~~leave sheet~~ for periods less than a full day.

3.10 Compensation

The compensation plan of the District consists of the following parts, which are subject to periodic review and revision by the District:

- (1) Job title and associated descriptions.
- (2) Salary schedule of pay grades and associated salary ranges.
- (3) Benefits package.

Upon being hired, each employee will be assigned a job title, description and salary within the appropriate pay grade.

3.10.A Cost of Living

Each year the Executive Director will work with the Governing Board through the budget process to determine if there will be a Cost of Living adjustment, and if so, the annual cost of living adjustment amount.

3.10.B Promotions

When an employee is promoted to a position in a higher job title, he/she will receive a salary increase at least equal to the minimum rate of the new pay grade to coincide with the active date for the new position and will maintain their original employment date. An introductory period of no longer than six (6) months may be used by the supervisor to evaluate the performance of the promoted employee and to assure that the employee is satisfactorily performing the duties of the new position. In the event the promoted employee is determined during the introductory period to not satisfactorily perform the duties of the new position, the District does not guarantee the employee can return to employee's former position, and as a result, the employee may be demoted or terminated.

3.10.C Demotions

When an employee is demoted, the demotion may be in the form of a reduction in pay, to a lesser job classification, or both. A demoted employee shall not be paid more than the maximum rate established for the new pay grade immediately from the date of demotion and will maintain his/her original employment date. Employees receiving demotions at their own request, or due to inability to perform the work because of health, or other reasons, may be adjusted to a lower job classification. The Executive Director will approve demotions prior to notifying the employee.

3.10.D Introductory

Introductory employees are those whose performance is being evaluated during the Initial Employment Period to determine whether further employment in a specific position or with the District is appropriate. Employees who satisfactorily complete the introductory period will be notified of their new employment classification. In some instances, adjustments to salaries could happen at the end of the employee's introductory period. This salary adjustment may be negotiated as part of the offering of employment and accepting employment with the District.

3.10.E Reinstated Employees

A reinstated employee will be paid at a salary rate within the approved salary range for the position in which he or she is reinstated. The reinstated employee will maintain his/her original employment date for calculation of (a) time of service awards, (b) vacation accrual rate, and (c) retirement benefits if the employee was previously vested and time of service awards as well as calculating vacation. —Only time actually worked for the Loxahatchee River District Any break in service will not count toward these benefits and calculations. The

~~reinstated employee will use their rehire date for all evaluations and other benefits. This policy is effective June 28, 2019 for employees rehired after July 1, 2019 only. There is no retroactive or retrospective grandfather provision to this policy. The reinstated employee will use their rehire date for evaluations, and accrued vacation time.~~

3.11 Performance Management and Compensation Programs

In order to attract and retain a highly qualified and competent work force, the District has instituted a performance review program to compensate employees in a fair and equitable manner based upon demonstrated job performance, and in accordance with its Equal Employment Opportunity policy.

Through this program employees will receive constructive work review designed to address performance and skill developmental needs and interests. An employee becomes eligible for consideration of a salary review, after at least 6 months of employment (or what is agreed upon at the time of employment) and subject to the limitations of the District's budget timing and approval process.

3.11.A Performance Review Program Schedule

Employees may receive performance evaluations on the following schedule:

- (1) Immediately prior to conclusion of introductory period.
- (2) Employees that have less than 24 months of service with the District will be evaluated twice per year (approximately every 6 months), from the month of the employee's anniversary date.
- (3) Employees that have more than 24 months of service with the District will be evaluated once per year (approximately every 12 months), i.e., in the month of the employee's anniversary date.

3.11.B Merit Increase

The Division Director may recommend a merit increase based upon on employee's Performance Review, but the Executive Director is authorized to approve or rescind merit increases in salary, as limited by the budget review and approval process and Governing Board oversight. Employees are not automatically entitled to merit increases, even with a satisfactory performance rating. Merit increases, including timing and amounts are as determined by the District. The award of a merit increase in one year does not set any precedent for award of a merit increase for the same or better performance by an employee in subsequent years. Merit Increases are not to extend an employee's hourly or salary wage above the maximum amount allotted in the paygrade.

If a District employee is awarded a merit increase, the increase to their wages shall become effective on the first day of the pay period in which their hire date anniversary occurs. If the employee has been rehired, their rehire date will be used as the effective date.

3.12 Payment of Salary

Exempt and Non-Exempt wages are made biweekly for base salary, which includes overtime payments for Non-Exempt employees. Paydays are usually every other Friday, reflecting the two preceding workweeks.

Direct Deposit of paychecks is strongly encouraged. It is the District's policy that employee paychecks will only be given personally to that employee. All other arrangements for mailing or pick-up of paychecks must be made in advance in writing to Human Resources.

If the normal payday falls on a District recognized holiday, paychecks will be distributed one workday prior to the aforementioned schedule. Under rare circumstances will the District release any paychecks prior to the announced schedule.

Employees may be paid by check or through direct deposit of funds to either a savings or checking account at their bank of choice (providing the bank has direct deposit capability). To activate direct deposit, please complete [Direct Deposit Authorization](#) form. The completed form must then be returned with a voided personal check to Human Resources. Once the completed form is turned into Human Resources, it will take effect on the next pay day.

In the event of a lost paycheck, Accounting must be notified in writing as soon as possible before a replacement check can be issued. In the event the lost paycheck is recovered and the District identifies the endorsement as that of the employee, the employee must remit the amount of the replacement check to the District within 24 hours of the time it is demanded, and may be subject to disciplinary action in the event of negligence by the employee.

A statement of earnings is given each pay period to employees indicating:

- Gross Pay
- Statutory Deductions
- Voluntary Deductions

3.13 Pay Advances

The District does not provide pay advances on unearned wages.

3.14 Improper Deductions Prohibited

It is the District's policy and practice to compensate employees accurately and in accordance with applicable state and federal laws. Employees classified as exempt are paid a pre-determined salary for any workweek in which they perform work, regardless of the quality of their performance, or the number of hours worked during that workweek. Under certain circumstances and in accordance with federal wage and hour regulations, deductions may be made from an exempt employee's salary (in addition to tax withholdings and other applicable payroll deductions). Unlawful deductions are prohibited. Employees are advised to check their paystubs and are required to report any mistakes to Accounting in accordance with Section 3.154. Inadvertent mistakes will be corrected promptly.

3.15 Administrative Pay Corrections

The District takes all reasonable steps to ensure that employees receive the correct amount of pay in each paycheck and that employees are paid promptly on the scheduled payday.

In the unlikely event that there is an error in the amount of pay, the employee should promptly bring the discrepancy to the attention of Accounting so that corrections can be made as quickly as possible, subject to the advance input of payroll data that precedes the next regularly scheduled payroll.

3.16 Pay Deductions

The law requires that the District make certain deductions from every employee's compensation. Among these are applicable federal and state taxes. The District also must deduct Social Security and Medicare taxes on each employee's earnings up to a specific limit that is called the Social Security 'wage base'. The District matches the amount of Social Security and Medicare taxes paid by each employee.

3.17 Business Travel Expenses

The District will reimburse employees for reasonable business travel expenses incurred while on assignments away from the normal work location per Chapter 112.061. The Division Director must approve all business travel in advance. Employees whose travel plans have been approved should make all travel arrangements through the District's purchasing department.

When approved, the actual costs of travel, meals, lodging, and other expenses directly related to accomplishing business travel objectives will be reimbursed by the District on a current [State of Florida Chapter 112.061](#) per diem basis. Employees are expected to limit expenses to reasonable amounts. Travel time associated with an overnight stay is generally considered compensable work time when the business travel cuts across the non-exempt employee's normal work hours, regardless of what day of the week the travel takes place.

However, time spent traveling to an airport terminal or train station is not treated as hours worked. By contrast, all reasonable time spent waiting at the terminal until arrival at the destination is compensable.

Employees who are involved in an accident while traveling on business must promptly report the incident to their immediate supervisor. Vehicles owned by the District may not be used for personal use without prior approval from the Executive Director.

Cash advances to cover reasonable anticipated expenses may be made to employees after travel has been approved. Employees should submit a written request to their Division Director when travel advances are needed. Employees should submit all business-related receipts when travel is completed. If the trip is cancelled, reimbursement of advancement is required, unless the employee had no control over the cancellation and incurred non-refundable deposits and advanced payments previously approved by the District.

Employees should contact their Division Director or the Purchasing Department for guidance and assistance on procedures related to travel arrangements, travel advances, expense reports, reimbursement for specific expenses, or any other business travel issues. Abuse of this business travel expenses policy, including falsifying expense reports to reflect costs not incurred by the employee, can be grounds for disciplinary action, including termination of employment.

4 ~~TIME OFF LEAVE~~ POLICIES

4.1 Vacation

Time away from work to relax and pursue special interests is beneficial. All Regular, Full-Time employees are eligible for paid vacation. Please refer to section [6.3.B Sufficient Notice](#), regarding how to ~~request a put-in-for~~ vacation day(s). ~~During the first calendar year of employment at the District, Regular Full-Time employees will begin accruing vacation time leave after completing his or her Initial Employment Period. Vacation time leave will be accrued according to the schedule below. Accruals will be calculated and included on your pay stub the last pay check of the month. This includes 3 paycheck months. NOTE: if your anniversary date is at the beginning to the middle of the month, you will not see your accrual until the end of the month.~~

Months (Years) of LRD Employment	Vacation Accrual Rate	
	Hours per month	Days per Year
0 - 12 Months (1 year)	8.00	12.0
13 - 24 Months (2 years)	8.00	12.0
25 - 36 Months (3 years)	8.33	12.5

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37 - 48 Months (4 years)	8.67	13.0
49 - 60 Months (5 years)	9.00	13.5
61 - 72 Months (6 years)	9.33	14.0
73 - 84 Months (7 years)	9.67	14.5
85 - 96 Months (8 years)	10.00	15.0
97 - 108 Months (9 years)	10.33	15.5
109 - 120 Months (10 years)	10.67	16.0
121 - 132 Months (11 years)	11.00	16.5
133 - 144 Months (12 years)	11.33	17.0
145 - 156 Months (13 years)	11.67	17.5
157 - 168 Months (14 years)	12.00	18.0
169 - 288 Months (15 years)	12.33	18.5
289 months and more (over 25 years)	13.33	20.0

The length of eligible service is calculated on the basis of a ‘benefit year’. This is the 12-month period that begins when the employee starts to earn vacation time. An employee’s benefit year may be extended for any significant leave of absence except military leave of absence or FMLA Leave. In computing vacation ~~leave~~ earned, no increments will accrue for any pay week which includes three or more days of leave of absence without pay. For all shift workers, no increments will accrue for any week which includes 24 hours or more of absence without pay.

An employee may not use vacation time during his or her Introductory Employment Period. ~~Only Regular Full-Time employees can request use of earned vacation time including that accrued during the Introductory Employment Period.~~ During a promotion or demotion Introductory Period, vacation time ~~can~~ may be taken.

Employees will not be permitted to carry more than 20 days of vacation ~~time~~ from one fiscal year to the next. The District’s fiscal year ~~is runs through~~ October 1st through September 30th.

Vacation time ~~off~~ is paid at the employee’s base pay rate at the time of vacation. It does not include overtime or any special forms of compensation such as incentives or bonuses. Vacation taken before or after a holiday, must be scheduled. When a District holiday falls during a scheduled vacation, it is not counted as a vacation day.

Exempt Employees requiring vacation, sick or personal ~~time leave~~ must ~~notify turn in a leave sheet to~~ either their immediate Division Director or the Executive Director (whichever is applicable) if the required ~~time leave~~ is for a full day (i.e., 8 hours) or more. Exempt employees are not required to submit a ~~leave sheet request~~ for periods less than a full day.

Any employee that becomes ill during a scheduled vacation cannot change a vacation day to a sick day; a scheduled vacation day counts as vacation even if an employee would ordinarily take a sick day.

The District also offers a Vacation Buy Back Policy. The following configuration will be used in determining if you can qualify for the Buy Back Plan:

Vacation Days Available on September 30th at 5:00 p.m.:

- (1) 0-20 accumulated vacation days will rollover to the following year.
- (2) 21-30 accumulated vacation days will automatically fall under the Buy Back Plan.
 - a. The maximum amount of vacation days the District will Buy Back is 10 days.
- (3) >30 days on the books will be automatically forfeited.

Guidelines for Vacation Pay for Terminating Employees

- Upon resignation or retirement, if two weeks' notice are provided, then the employee will receive payout of accrued balance no greater than 30 days (maximum of 240 hours).
- If two weeks' notice is not provided prior to the employee's last day of employment, the employee forfeits any rights and claims to accrued and unused vacation pay. An employee in their Initial Employment Period where no vacation can be taken, forfeits such accruals upon separation and is not eligible for payout of accrued and unused vacation.

4.2 Sick ~~Time Leave~~ Benefits

To keep the District and each Division running smoothly and efficiently, it is important that every employee be on the job and on time. For this reason, careful attention is given to promptness, absence record and overall dependability.

The District recognizes, however, that an employee may occasionally be affected by injury or illness. As a result, the Sick ~~Time Leave~~ policy-Benefit is designed to provide protection to employees against loss of income during unavoidable illness or injury. The District provides paid sick ~~time leave-benefits~~ to all eligible employees for periods of temporary absence due to illnesses or injuries. Eligible employee classification(s):

- Regular full-time employees
- Full-Time Employees in the Initial Employment Period

Eligible employees will accrue sick ~~time leave benefits~~ at the rate of 1 day for every full month of service (up to 12 days per year). Sick ~~Time leave b~~ Benefit ~~is are~~ calculated on the basis of a 'benefit year,' the 12-month period that begins when the employee starts to earn sick ~~time leave benefits~~.

Employees can request use of paid sick ~~time leave~~ after completing a waiting period of 30 calendar days (which does not include any week of 3 or more days of leave of absences without pay) from the date they become eligible to accrue sick ~~time leave~~ benefits. Paid sick ~~time leave~~ can be used in minimum increments of *15 minutes. Eligible employees may use sick ~~time leave-benefits~~ for an absence due to their own illness ~~for a non-work-~~ related injury. Also, eligible employees may use or up to five (5) days of sick time (per rolling calendar year) to care for a family member ~~per rolling calendar year~~ who resides in the employee's household.

Employees who are unable to report to work due to illness or injury should notify their direct supervisor not later than one (1) hour after the scheduled start of their workday. The direct supervisor must also be contacted on each additional day of absence. If an employee is absent 12 or more days during any 12 month period of time due to illness or injury, the supervisor, Division Director or Human Resources will require a physician's statement or other qualified medical provider's statement be provided verifying the illness, injury or disability and its beginning date and expected ending dates. Verification may be required for other sick ~~time leave~~ absences of less than 12 days per year in the District's sole discretion. Failure to provide a physician's statement when required results in an employee not being eligible for the sick ~~time leave~~ and will result in the missed day being treated as unpaid ~~time off. leave.~~

Sick ~~time leave~~ benefits will be calculated based on the employee's base pay rate at the time of absence.

Sick ~~time leave~~ benefits may be used if the employee has more than 5 days accumulated, to supplement any payments that an employee is eligible to receive from workers' compensation or long-term disability insurance programs. The combination of any such disability payments and sick ~~time leave~~ benefits cannot exceed the employee's normal weekly earnings.

Exempt Employees requiring vacation, sick, or personal ~~time off leave~~ must ~~notify turn in a leave sheet to~~ either their immediate Division Director or the Executive Director (whichever is applicable) if the required ~~leave time off~~ is for a full day (i.e., 8 hours) or more. Exempt employees are not required to submit ~~a request for time off a leave sheet~~ for periods less than a full day.

4.2.A Maximum Sick Accrual

Unused sick ~~time leave benefits~~ will be allowed to accumulate until the employee has accrued a total of 150 calendar days of sick ~~time leave benefits~~. If the employee's benefits reach this maximum, further accrual of sick ~~leave time~~ benefits will be suspended until the employee has reduced their sick ~~time leave~~ balance below the limit.

4.2.B Annual Unused Sick Bonus

Employees that use less than one day of sick time between December 1 and November 30 will receive a net check of \$200.00. Employees that use three or less days of sick time between December 1 and November 30 will receive a net check of \$50.00.

4.2.C Sick Payout Conversion

~~The Sick +Time leave bBenefit is are~~ intended solely to provide income protection in the event of illness or injury and may not be used for any other absence. Unused sick ~~time leave benefits~~ will not be paid to employees while they are employed.

Upon resignation, retirement, permanent disability, or death employees who have a minimum of three (3) years of continuous full-time employment with the District shall be paid for the total accrued, unused sick time balance as follows:

With 3 – 8 years of service	25% conversion, but not greater than 16 days
With 8 – 15 years of service	35% conversion, but not greater than 40 days
With 15 or more years of service	50% conversion, but not greater than 75 days

4.3 Holidays

All full-time employees (including those in initial employment period) are eligible for up to 11 paid holidays per year as follows:

- (1) New Year's Day
- (2) President's Day
- (3) Memorial Day
- (4) Independence Day
- (5) Labor Day
- (6) Veteran's Day
- (7) Thanksgiving

- (8) Friday after Thanksgiving
- (9) Christmas
- (10) Either the day after Christmas or the day before Christmas as determined by the District
- (11) Floater (to be designated by the District at the beginning of the year)

At the end of each year, the holiday schedule for the coming year will be made available to the employees by notification as determined by the District, such as posted on the Bulletin Boards and the Intranet.

When a holiday falls on a weekend, it will be observed on either the preceding Friday or following Monday as determined by the District.

If you are out sick the day before or after a holiday, you are required to bring in a physician's statement for that day(s). Failure to provide a physician's statement when required will result in the holiday being treated as unpaid time off. ~~leave~~.

Holiday Pay

4.3.A Non-shift employee:

~~To work on a Holiday and receive overtime:~~

~~Must be pre-approved by your Division Director.~~

- ~~(1) District non-exempt personnel are the only personnel authorized to work on a holiday utilize a Holiday Authorization Sheet.~~
- ~~(2) Use of the Holiday Authorization Sheet is only available when a non-exempt employee has worked their full 40 hours during the week of the holiday.~~

4.3.B Shift employee:

To work on a Holiday and receive overtime, pre-approval is required by your Division Director. -s

If approved, shift employees ~~who work on the holiday~~ may have the 8-hour Holiday straight time converted to vacation time, to be used at their discretion. ~~This Use of the Holiday Authorization Sheet~~ is only available when a non-exempt employee has worked their full 40 hours during the week of the holiday. If the employee calls in sick the day before or after a holiday, the employee must turn in a physician's statement before the employee will be paid. ~~with the leave authorization sheet~~. If ~~an acceptable~~ physician statement is not turned in by the end of the pay period, the employee will not receive the Holiday pay benefit.

4.4 Time Off to Vote

Election Days are days when elections for public office are held (elections for public office include elections for sheriff, school board, district attorney, and all primary and general elections that are scheduled throughout the state, county, city or town). The District encourages employees to fulfill their civic responsibilities by participating in elections. Generally, polls are open from 7 am to 7 pm, such that employees should be able to find time to vote in an election during their non-working hours. Nonetheless, if employees need time off to vote, they should speak with their supervisor at least two working days prior to the Election Day. Advance notice is required so that the necessary time off can be scheduled to minimize disruption to the normal work schedule. It is not automatic that you can take time off to vote. The District may grant up to 30 minutes paid time off to vote.

4.5 Bereavement ~~Leave~~Pay

In the unfortunate event of a death in the immediate family, Bereavement ~~a leave of absence of~~ up to 5 days with pay will be granted. These five days can be taken consecutively, split or postponed, but within a reasonable time of the date of the death or date of the funeral. For this purpose, immediate family is defined as your:

- Spouse
- Child
- Step-Child (ren)
- Parents (including in-laws), step-parents
- Siblings, step-siblings
- Grandparents
- Grandchildren
- Domestic Partner
- Eligible dependents of a Domestic Partner

Employees should make their supervisor aware of their situation. In turn, the supervisor should notify Human Resources of the reason and length of the employee's absence.

Upon returning to work, the employer must record employee's absence as a Bereavement ~~Leave~~ on employee's attendance record. Proof of death and employee's relationship to the deceased must be provided to the District upon returning to work.

4.6 Jury Duty

Employees are allowed to take up to two weeks of paid jury duty ~~leave~~ over any one-year period. Jury duty pay will be calculated on the employee's base pay rate times the number of hours the employee would otherwise have worked on the day of absence. If an employee is required to serve jury duty beyond the period of paid jury duty ~~time off leave~~, he/she may use any available vacation time or may request ~~an unpaid time off for the remainder of the~~ jury duty ~~leave of absence~~. Employees are expected to report for work whenever the court schedule permits.

Upon receipt of the notice to serve jury duty, the employee should immediately notify employee's supervisor, as well as Human Resources. Additionally, a copy of the notice to serve jury duty should be attached to the employee's attendance record for attendance purposes.

Subject to the terms, conditions and limitations of the applicable plans, The District will continue to provide health insurance benefits for the full term of the jury duty absence, and the employee. ~~Employees~~ will continue to be responsible to pay their employee insurance contribution. Benefit accruals, such as vacation and sick ~~leave~~ will be suspended during unpaid jury duty ~~leave~~ and will resume upon return to active employment.

Jury Duty Time Off

Normal Shift 8-5 M-F:

- Employee notifies District with copy or original summons of the date of Jury Duty
- Employee will report to jury duty on date/time required

- Employee will collect all summons slips for each day at Jury Duty
- If the employee is at jury duty for more than 5 hours, the employee is not required to come to work
- District will pay the employee for the full day of Jury Duty pay until the 2 (two) weeks of Jury Duty Pay has been exhausted

Day Shift Employee:

- Employee notifies District of the date of Jury Duty
- Employee will report to jury duty on date/time required
- Employee will collect all summons slips for each day at Jury Duty
- If the employee is at jury duty for more than half of their shift, the employee is not required to come back to work that day
- District will pay the employee for the full day of Jury Duty Pay until the two weeks of Jury Duty Pay has been exhausted

Night Shift Employee:

- Employee notifies District of the date of Jury Duty
- Employee will not report to work the night before Jury Duty
- Employee will collect all summons slips for each day at Jury Duty
- Employee will report to jury duty on date/time required
- Employee will not be required to come to work if jury duty last more than 4 hours
- District will pay the employee for the full day of Jury Duty Pay until the two weeks of Jury Duty Pay has been exhausted

4.7 Witness Duty

The District encourages employees to appear in court for witness duty when subpoenaed to do so. If an employee has been subpoenaed or otherwise requested to testify as a witness by the District, or other parties related to District business, the employee will receive paid time off for the entire period of witness duty. Upon being excused from witness duty, the employee is expected to return to work at the District.

Employees will be granted unpaid time off to appear in court as a witness when requested by a party other than the District. Employees are free to use available vacation ~~leave~~ to receive compensation for the period of this absence. Subject to the terms, conditions and limitations of the applicable plans, ~~the~~ District will continue to provide health insurance benefits for the full term of the witness duty absence, and the employee ~~Employees~~ will continue to be responsible to pay their employee insurance contribution.

The subpoena should be copied and given shown to the employee's supervisor ~~(copied and attached to a leave form)~~ immediately after it is received so that operating requirements can be adjusted, where necessary, to accommodate the employee's absence. The employee is expected to report for work whenever the court schedule permits. Benefits accruals, such as vacation and sick time leave will be suspended during unpaid witness duty ~~leave~~ and will resume upon return to active employment.

4.8 Leave of Absences:

Types of Leave:

-FMLA Leave: The Family and Medical Leave Act (FMLA) allows employees to take job-protected time away from work for a qualifying reason, including the employees own serious medical condition or that of an immediate family member, birth, adoption or foster care; and military family care for military exigency relating to foreign deployment.

-Personal Leave: This allows time away from work for a qualifying situation, as described in the Personal Leave policy. These can include medical conditions (employees or family members); birth, adoption or foster care; extended family care; Americans with Disability Act (ADA) reassignment; education; bereavement (when more than five days are needed); Domestic Violence Leave and other compelling reasons.

-Military Leave: This allows employees to take time off for military service, as described in the Military policy.

4.8 Military Leave

~~An employee who is a member of the United States Army, Navy, Air Force, Marines, Coast Guard, National Guard, or Reserves will be granted unpaid leave of absence for military service, training, or related obligations in accordance with applicable law.~~

4.8.A Training

~~All commissioned reserve officers or reserve enlisted personnel in the United States military or naval service or members of the National Guard shall receive a leave of absence without loss of vacation leave, pay, time or efficiency rating, on all days during which they are engaged in training ordered under the provisions of the United States military or naval training regulations when assigned to active or inactive duty. In any one annual period, leaves of absence shall not exceed 240 working hours provided that leaves of absence for additional or longer periods of time for assignment to duty functions of a military character shall be granted without pay and without loss of time or efficiency rating.~~

4.8.B Active Duty Assignments

~~All officers or enlisted personnel in the National Guard or a reserve component of the Armed Forces of the United States who are granted leave to perform active military service shall receive their full pay for the first 30 days of any such leave.~~

~~All members of the Florida National Guard who are granted leave to engage in active state duty for a named event, declared disaster, or operation pursuant to Florida Statute Sections 250.28 or 252.36, shall receive their full pay for the first 30 days. The leave of absence with full pay shall not exceed 30 days for each emergency or disaster. Additionally, under Florida law, National Guard Members called to active state duty may not be discharged from employment for a period of one (1) year after the date the employee returns to work, except for cause.~~

~~Employees on military leave in excess of 30 days may substitute their accrued vacation leave time in an amount necessary to bring their total compensation, inclusive of their base military pay, to the level earned at the time they were called to active military duty.~~

~~The District will continue to pay the eligible employee's portion of health, dental and life insurance premiums and the District's pension contribution while the employee is on military leave for up to 30 days. If an employee has dependent insurance coverage, the employee must make arrangements with the Finance Department for payment of associated premiums. The employee will also be responsible for making arrangements for any other benefit premium or other deduction (example: deferred compensation contribution, voluntary supplemental benefits, etc.). For military leaves of more than 30 days, an employee may elect to continue such coverage under COBRA and is required to pay the full premium for such continuation of coverage.~~

4.8.C Notice of Leave

~~Employees seeking to invoke military leave shall provide advance notice to the District unless such notice is precluded by military necessity or otherwise impossible or unreasonable as interpreted under applicable law.~~

4.8.D Documentation of Leave

~~Employees on military leave for periods of more than 30 days shall provide the District with such documentation that can be used to establish the employee's basic eligibility for protection under the Uniformed Services Employment and Reemployment Rights Act of 1994. If the employee is unable to provide satisfactory documentation of military service in excess of 30 days, the District reserves the right to contact the military unit with assistance from the employee to obtain such documentation.~~

4.8.E Reinstatement After Leave

~~Employees on military leave will be reinstated with the District in accordance with applicable State and Federal Laws. Employees who take a military leave of absence are entitled to any seniority-based rights and benefits that they would have attained had the employee remained continuously employed. The period of military leave is not considered a break in employment unless the employee indicates that he or she will not return from military leave.~~

~~Upon the return of any employee from Military Leave, as described above, the temporary services of the employee filling his/her position shall be terminated or said temporary employee moved elsewhere in the District's service, at the District's sole discretion. If an employee called to active duty is a probationary employee, the remaining number of days left on the probationary status will be added following the employee's return to work.~~

~~Upon return from military service, an employee must provide notice of or submit an application for reemployment in accordance with the following schedule:~~

- ~~(1) An employee who served for less than 30 days or who reported for a fitness examination, must provide notice for reemployment at the beginning of the first full regular scheduled work period that starts at least eight hours after the employee has returned from the location of service.~~
- ~~(2) An employee who served for more than 30 days, but less than 181 days, must submit an application for reemployment no later than 14 days after completing employee's period of service, or, if this deadline is impossible or unreasonable through no fault of the employee, then on the next calendar day when submission becomes possible.~~
- ~~(3) An employee who served for more than 180 days must submit an application for reemployment no later than 90 days after the completion of the uniformed service.~~
- ~~(4) An employee who has been hospitalized or is recovering from an injury or illness incurred or aggravated while serving must report to Human Resources (if the service was less than 31 days), or submit an application for reemployment (if the service was greater than 30 days), at the end of the necessary recovery period (which may not exceed two years).~~

~~An employee whose military service was for more than 30 days must provide documentation within two weeks of employee's return (unless such documentation does not yet exist or is not readily available) showing the following: (i) the application for reemployment is timely (i.e. submitted within the required time period); (ii) the period of service has not exceeded five years; and (iii) the employee received an honorable or general discharge. All current Military rulings will supersede this section.~~

~~4.8.F Failure to Return After Military Leave~~

~~Should the employee not return to employment with the District following said military leave, any vacation or sick leave accrued while on military leave will be subtracted before any allowable payment of any benefits is made in accordance with other provisions of these rules and regulations regarding payment of leave balances upon separation from employment.~~

~~4.8.G~~4.8.A ~~Leave under the~~ Family and Medical Leave Act ('FMLA')

Eligible employees will be granted up to twelve (12) weeks of unpaid family, medical, or exigency leave during a twelve (12)-month period in accordance with the Family and Medical Leave Act (FMLA). Eligible employees will be granted up to twenty-six (26) workweeks of unpaid leave to care for a member of the Armed Forces, including a member of the National Guard or Reserves, who is a family member or next of kin, during a single twelve (12)-month period in accordance with the FMLA as amended from time to time.

During this leave, an eligible employee is entitled to continued group health plan coverage as if the employee had continued to work, however the employee will not accrue vacation/sick time during unpaid family and medical leave (FML). At the conclusion of the leave, subject to some exceptions, an employee generally has a right to return to the same or an equivalent position.

~~PURPOSE OF THE POLICY~~

~~To ensure eligible employees are provided FML in accordance with applicable law.~~

DEFINITIONS

~~*Covered Service Member* means a member of the Armed Forces, including the National Guard or Reserves, who is undergoing medical treatment, recuperation or therapy, is otherwise in outpatient status, or is otherwise on the temporary disability retired list, for an injury or illness incurred or aggravated in the line of duty on covered active duty in the Armed Forces that may render the service member medically unfit to perform the duties of the service member's office, grade, rank or rating.~~

~~*Covered Veteran* means an individual who was discharged or released under conditions other than dishonorable at any time during the five (5) year period prior to the first date the eligible employee takes FML to care for the covered veteran.~~

~~*Family member* means a spouse, parent, or child.~~

~~*Spouse* is anyone recognized as a spouse through a legal marital relationship. A spouse includes an individual married to an eligible employee in a legal same-sex marriage, including a common-law marriage, where such marriage is recognized in the state or country where the marriage took place.~~

~~*Parent* means a biological parent or an individual who legally stands or stood in the place of the biological parent.~~

~~*Child* means an individual less than eighteen (18) years of age who is the biological, adopted or foster child, a stepchild, a legal ward/guardian or child of a person standing in the place of the biological parent. Child may also include an adult child where the adult child is incapable of self-care because of a mental or physical disability at the time the leave is to commence where the child also has a serious health condition.~~

~~*Exigency Leave* is leave related to, or necessitated by, the covered active duty or call to covered active duty status of a covered military member. Covered active duty, in the case of a member of a regular component of the Armed Forces, means duty during the deployment of the member with the Armed Forces to a foreign country. With respect to a member of a reserve component of the Armed Forces, covered active duty means duty during the deployment of the member with the Armed Forces to a foreign country under a call or order to active duty.~~

~~*Next of Kin* means the nearest blood relative of the Covered Service Member (other than the spouse, parent, or child of the Covered Service Member) in the following order of priority: blood relative who has been granted legal custody of the covered service member by court decree or statute; brothers and sisters; grandparents; aunts and uncles; and first cousins; unless the Covered Service Member has specifically designated in writing another blood relative as the nearest blood relative for purposes of military caregiver leave under the FMLA.~~

~~*Serious Health Condition* means certain illnesses, injuries, impairments, or physical conditions as further defined in this policy.~~

~~*Service Member Leave* means leave to care for the serious injury or illness of a family member or next of kin who is a Covered Service Member or Covered Veteran.~~

APPLICABILITY

~~This Policy and Procedure applies to all eligible employees as more fully described in the Eligibility Section of the Procedure.~~

NOTICE

Employees must provide the Human Resources Department with no less than thirty (30) days written notice of their intent to take FML when the leave is foreseeable. If such leave is unforeseeable, the employee shall provide notice to the Human Resources Department as soon as possible after the employee learns of the need for the leave. Employees on approved family leave, medical leave, exigency leave, or service member leave under this policy, with or without pay, must make at least monthly contact with the Human Resources Department during their absence. FML under this policy runs concurrently with all other paid or unpaid leaves of absence.

ELIGIBILITY

To be eligible for family leave, medical leave, exigency leave, or service member leave, an employee must have been employed by the District for at least twelve (12) months and must have actively worked for at least 1250 hours during the previous twelve (12)-month period. Employees must also work at a site with 50 or more District employees or where 50 or more District employees are located within 75 miles of the worksite.

In addition to the foregoing eligibility requirements, the employee must also show that the reason for the leave falls into one of the following categories:

- A. For the birth of a son or daughter, and to care for the newborn child;
- B. For the placement of a child with the employee for adoption or foster care, and to care for the newly placed child;
- C. To care for an immediate family member (spouse, child, or parent) with a serious health condition;
- D. When the employee is unable to work because of a serious health condition;
- E. To care for an injured or ill covered service member or covered veteran. The employee must be the family member or the next of kin of the covered service member or covered veteran.
- F. To address any qualifying exigency arising out of the fact that a spouse, child, or parent who is also a military member in the National Guard or Reserves or of a regular component of the Armed Forces when the military member is on covered active duty or called to covered active duty status and deployed to a foreign country.

Qualifying Reasons for FMLA Leave ~~TYPES OF FML LEAVE~~

Leave due to Birth or Placement of a Child Through Adoption or Foster Care.

An eligible employee can take up to twelve (12) weeks of leave during a twelve (12)-month period measured backward from the ~~first~~-date any FML is used. This applies equally to mothers and fathers. However, if both the mother and father are employed by the District, the aggregate number of workweeks of leave that both can receive is limited to twelve (12) work weeks during any twelve (12)-month period.

The entitlement to leave expires at the end of the twelve (12)-month period beginning on the date of the birth, or placement of the child.

Employees meeting the requirements of the District's sick ~~time leave~~ policy are required to use their applicable sick ~~time leave~~ and then the accrued vacation ~~leave~~ concurrently with FML before the leave becomes unpaid. Employees not meeting the requirements of the District's sick ~~time leave~~ policy must use vacation ~~leave~~ concurrently with FML leave before the leave becomes unpaid or sick ~~time leave~~ is used. After any accrued vacation ~~leave~~ is exhausted, employees may request to use their remaining accrued sick ~~time leave~~ if they did not meet the requirements for using ~~time-off leave~~ under the District's sick ~~leave~~ policy, or only met the requirements for a portion of the absence, before the leave becomes unpaid leave. To request to use the accrued sick ~~time leave~~, employees must submit the appropriate request form to the Human Resources Department. All paid ~~time off leaves of absence~~ shall run concurrently with the FML.

This type of leave shall not be taken intermittently or on a reduced work schedule.

Leave due to the serious health condition of the employee or to care for a family member having a serious health condition.

An eligible employee can take up to twelve (12) weeks of leave during a twelve (12)-month period measured backward from the ~~first~~ date ~~any FML~~ leave is used.

Serious health condition is defined as an illness, injury, impairment, or physical condition that involves:

1. Any period of incapacity or subsequent treatment connected with inpatient (overnight) care in a hospital, hospice, or residential medical care facility;
2. A period of incapacity requiring an absence of more than three (3) consecutive, full calendar days from work, school, or other regular daily activities and any subsequent treatment or period of incapacity relating to the same condition that also involves:
 - a. Treatment two (2) or more times within thirty (30) days of incapacity, unless extenuating circumstances exist, by (or under supervision of) a health care provider; or
 - b. Treatment by a health care provider on at least one (1) occasion that results in a regimen of continuing treatment under supervision of a health care provider.
 - c. The first, or only, treatment visit under Subsections (a) or (b) must take place in person within seven (7) days of the first day of incapacity.
3. Any period of incapacity due to pregnancy, or for prenatal care;
4. Any period of incapacity (or treatment therefore) due to a chronic serious health condition, which is defined as:
 - a. A condition that requires visits at least two (2) times per year for treatment by (or under the supervision of) a health care provider;
 - b. Continues over an extended period of time including episodes of a single underlying condition; and
 - c. May cause episodic rather than a continuing period of incapacity such as asthma, diabetes and epilepsy.
5. A period of incapacity that is permanent or long-term due to a condition for which treatment may not be effective such as Alzheimer's, stroke, or terminal diseases; or
6. Any absences for restorative surgery after an accident or injury or to receive multiple treatments (including any period of recovery there from) by, or on referral by, a health care

provider for a condition that likely would result in incapacity of more than three (3) consecutive days if left untreated, such as chemotherapy, physical therapy, or dialysis.

Employees using FML for a serious health condition are required to exhaust their sick ~~leave~~ then their accrued vacation ~~leave~~ balance before FML becomes unpaid. All paid leaves of absence or time off shall run concurrently with the FML.

Leave for the employee's own or a family member's serious health condition may be taken intermittently or on a reduced leave schedule when medically necessary. The employee must try to schedule the intermittent leave to avoid undue disruption of the District's operations. The District may elect to transfer the employee to an alternative position for which the employee is qualified that has equivalent pay and benefits, which better accommodates the intermittent leave schedule.

~~Leave due to care for the serious injury or illness of a family member or next of kin who is a covered service member or covered veteran.~~

~~Exigency Leave is leave related to, or necessitated by, the covered active duty or call to covered active duty status of a covered military member. Covered active duty, in the case of a member of a regular component of the Armed Forces, means duty during the deployment of the member with the Armed Forces to a foreign country. With respect to a member of a reserve component of the Armed Forces, covered active duty means duty during the deployment of the member with the Armed Forces to a foreign country under a call or order to active duty.~~

~~Next of Kin means the nearest blood relative of the Covered Service Member (other than the spouse, parent, or child of the Covered Service Member) in the following order of priority: blood relative who has been granted legal custody of the covered service member by court decree or statute; brothers and sisters; grandparents; aunts and uncles; and first cousins; unless the Covered Service Member has specifically designated in writing another blood relative as the nearest blood relative for purposes of military caregiver leave under the FMLA.~~

~~Serious Health Condition means certain illnesses, injuries, impairments, or physical conditions as further defined in this policy.~~

4.8.B Service Member Care Leave under FMLA

~~This leave is defined as~~ Means leave to care for the serious injury or illness of a family member or next of kin who is a Covered Service Member or Covered Veteran.

Exigency Leave

~~Leave related to, or necessitated by, the covered active duty or call to covered active duty status of a covered military member. Covered active duty, in the case of a member of a regular component of the Armed Forces, means duty during the deployment of the member with the Armed Forces to a foreign country. With respect to a member of a reserve component of the Armed Forces, covered active duty means duty during the deployment of the member with the Armed Forces to a foreign country under a call or order to active duty.~~

Next of Kin

~~Means the nearest blood relative of the Covered Service Member (other than the spouse, parent, or child of the Covered Service Member) in the following order of priority: blood relative who has~~

been granted legal custody of the covered service member by court decree or statute; brothers and sisters; grandparents; aunts and uncles; and first cousins; unless the Covered Service Member has specifically designated in writing another blood relative as the nearest blood relative for purposes of military caregiver leave under the FMLA.

Serious Health Condition:

mMeans certain illnesses, injuries, impairments, or physical conditions as further defined in this policy.

Applicability

APPLICABILITY

This Policy and Procedure applies to all eligible employees as more fully described in the Eligibility Section of the Procedure.

An eligible employee can take up to twenty-six (26) weeks of intermittent or consecutive leave during a single twelve (12)-month period, measured forward from the first date an employee uses FML, to care for a covered service member or covered veteran, who is undergoing medical treatment, recuperation or therapy, is otherwise in outpatient status, or is otherwise on the temporary disability retired list, for an injury or illness incurred in the line of duty on active duty (or existed before the beginning of the member's active duty and was aggravated by service in the line of duty on active duty) that may render the service member medically unfit to perform the duties of the service member's office, grade, rank or rating. Outpatient status means the service member is presently assigned to a military treatment facility as an outpatient or is assigned to a unit established for the purpose of providing command and control of service members receiving medical care as outpatients.

1. During the single twelve (12)-month period, eligible employees are entitled to a combined total of twenty-six (26) workweeks of leave for all types of FML;
2. If both a husband and wife are employed by the District, the aggregate number of workweeks of leave that both can receive is limited to twenty-six (26) workweeks during the single twelve (12)-month period for service member leave or a combination of service member leave and the other types of FML available;
3. If an eligible employee does not take all of the twenty-six (26) workweeks of leave entitlement under this section during the single twelve (12)-month period, the remaining part of the twenty-six (26) workweeks of leave entitlement is forfeited. However, the leave entitlement is applied on a per-covered-service member/veteran, per-injury basis such that an eligible employee may be entitled to take more than one (1) period of twenty-six (26) workweeks of leave if the leave is to care for a different covered service member/veteran or to care for the same service member/veteran with a subsequent serious injury or illness, except that no more than twenty-six (26) workweeks of leave may be taken within any single twelve (12)-month period. When the eligible employee takes leave to care for more than one (1) covered service member/veteran or for a subsequent serious injury or illness of the same covered service member/veteran, and the single twelve (12)-month periods corresponding to the different military caregiver leave entitlements overlap, the employee is limited to taking no more than twenty-six (26) workweeks of leave in each single twelve (12)-month period;

4. Where leave qualifies as both leave to care for a covered service member/veteran and leave to care for a family member with a serious health condition during the single twelve (12)-month period, the District must designate such leave as leave to care for a covered service member/veteran in the first instance. This leave must not be designated and counted as both leave to care for a covered service member/veteran and leave to care for a family member with a serious health condition.
5. Service member leave may be taken intermittently or on a reduced leave schedule when medically necessary. The employee must try to schedule the intermittent leave to avoid undue disruption of the District's operations. The District may elect to transfer the employee to an alternative position for which the employee is qualified that has equivalent pay and benefits which better accommodates the intermittent leave schedule.
6. Employees using FML for service member leave are required to exhaust their sick time leave then their accrued vacation leave balance before FML becomes unpaid. All paid time off ~~leaves of absence~~ shall run concurrently with the FML.

~~Leave due to a qualifying exigency arising out of the fact that a spouse, child or parent, who is also a National Guard or Reserve or a service member of a regular component of the Armed Forces, is on covered active duty or called to covered active duty status~~

Exigency Leave

Leave related to, or necessitated by, the covered active duty or call to covered active duty status of a covered military member. Covered active duty, in the case of a member of a regular component of the Armed Forces, means duty during the deployment of the member with the Armed Forces to a foreign country. With respect to a member of a reserve component of the Armed Forces, covered active duty means duty during the deployment of the member with the Armed Forces to a foreign country under a call or order to active duty.

An eligible employee can take up to twelve (12) weeks of leave during a twelve (12)-month period measured backward from the ~~first~~ date any FML leave is used.

The exigency must include one of the following:

1. Short-notice deployment;
 - a. Leave for this purpose may be used for seven (7) calendar days beginning on the date the covered military member is notified of an impending call or order to covered active duty.
 - b. Leave for this purpose is used to address issues that may arise from the fact that a covered military member is notified of an impending call or order to covered active duty seven (7) or less calendar days prior to the date of deployment.
2. Military events and related activities;
 - a. To attend any official ceremony, program, or event sponsored by the military; and
 - b. To attend family support or assistance programs and informational briefings sponsored or promoted by the military, military service organizations, or the American Red Cross.

3. Childcare and school activities;
 - a. To arrange for alternative childcare when the active duty or call to covered active duty status of a covered military member necessitates a change in the existing childcare arrangement for a child of a covered military member at the time FML is to commence;
 - b. To provide childcare on an urgent, immediate need basis (but not on a routine, regular, or everyday basis);
 - c. To enroll in or transfer to a new school or day care facility a child of the covered military member when enrollment or transfer is necessitated by the active duty or call to covered active duty status of a covered military member.
 - d. To attend meetings with staff at a school or a daycare facility, such as meetings with school officials regarding disciplinary measures, parent-teacher conferences, or meetings with school counselors, for a child of the covered military member.
4. Financial and legal arrangements;
 - a. To make or update financial or legal arrangements to address the covered military member's absence while on covered active duty or call to covered active duty status, such as preparing and executing financial and healthcare powers of attorney, transferring bank account signature authority, enrolling in the Defense Enrollment Eligibility Reporting System (DEERS), obtaining military identification cards, or preparing or updating a will or living trust.
 - b. To act as the covered military member's representative before a federal, state, or local agency for purposes of arranging or appealing military service benefits while the covered military member is on covered active duty or call to covered active duty status, and for a period of ninety (90) days following the termination of the covered military member's covered active duty status.
5. Counseling;
 - a. To attend counseling provided by someone other than a healthcare provider for:
 - i. The employee;
 - ii. The covered military member; or
 - iii. The child of the covered military member.
6. Rest and recuperation;
 - a. Leave may be taken for up to fifteen (15) days for each instance of rest and recuperation.
 - b. To spend time with a covered military member who is on short-term, temporary, rest and recuperation leave during the period of deployment.
7. Post-deployment activities;
 - a. To attend arrival ceremonies, reintegration briefings and events, and any other official ceremony or program sponsored by the military for a period of ninety (90) days following the termination of the covered military member's covered active duty status; and

- b. To address issues that arise from the death of a covered military member while on covered active duty status, such as meeting and recovering the body of the covered military member and making funeral arrangements.
8. Additional activities.
- a. To address other events provided that the employer and employee agree that such leave shall qualify as an exigency and agree to both the timing and duration of such leave.

Leave taken due to a qualifying exigency may be taken on an intermittent or reduced leave schedule basis. The employee must try to schedule the intermittent leave to avoid undue disruption of the District's operations. The District may elect to transfer the employee to an alternative position for which the employee is qualified that has equivalent pay and benefits which better accommodates the intermittent leave schedule.

4.8.H ~~Employees meeting the requirements of the District's sick time leave policy are required to use their applicable sick leave and then the accrued vacation leave concurrently with FML before the leave becomes unpaid. If sick time leave is not applicable and the employee has exhausted any accrued vacation leave, employees may request to use their remaining accrued sick time leave if they did not meet the requirements of the District's sick time leave policy, or only met the requirements for a portion of the absence, before the leave becomes unpaid leave. All paid leaves of absence shall run concurrently with the FML.~~ **MEDICAL CERTIFICATIONS**

~~The employee shall provide the Human Resources Department with complete and sufficient certification of the need for leave from the health care provider of the employee, family member, or covered service or military member within fifteen (15) days of notification of the need for leave.~~

~~The Human Resources Department shall provide the appropriate certification form to be used for all employees requesting FML.~~

~~The certification form must be completed in its entirety and shall state:~~

- ~~1. Health care provider contact information;~~
- ~~2. The date on which the qualifying condition began;~~
- ~~3. The probable duration of the condition;~~
- ~~4. The appropriate medical or other facts of the condition;~~
- ~~5. If the patient is the employee, information sufficient to establish the employee cannot perform the essential functions of the job, any other work restrictions, and the duration of the inability;~~
- ~~6. For family leave or service member leave, a statement that the employee is needed to care for the family member and an estimate of the amount of time that such care is needed;~~
- ~~7. The medical necessity of any intermittent leave request and estimate of the frequency and duration of episodes of incapacity; and~~
- ~~8. Any additional information requested on the certification form.~~

~~When the certification is returned incomplete or insufficient, the Human Resources Department will notify the employee in writing what additional information is necessary. A certification is not sufficient if it is complete, but the information provided is vague, ambiguous, or non-responsive. The Human Resources Department will give the employee seven (7) calendar days to correct an incomplete or insufficient certification.~~

~~The certification shall be signed by the health care provider responsible for providing such services and not by a staff member employed by the health care provider.~~

~~The employee will be required to submit a recertification if any of the following occurs:~~

- ~~1. Every thirty (30) days in connection with the employee's absence, but if the minimum duration of the condition is more than thirty (30) days, the District will not request a recertification until after the initial duration of the condition expires or when one (1) of the situations below occurs, whichever occurs first.~~
- ~~2. The District may require recertification within thirty (30) days if:~~
 - ~~a. The employee's own, their immediate family member's, or covered service member's medical condition or duration or frequency of absences changes significantly;~~
 - ~~b. The District receives information that casts doubt upon the stated reason for the absence or the continuing validity of the certification; or~~
 - ~~c. The employee's need for leave extends beyond the time their own, their immediate family member's or covered service member's health care provider indicates on the most recent medical certification.~~
- ~~3. After six (6) months of the date the most recent medical certification that was completed by the attending physician, in connection with an absence by the employee (regardless of the duration of the condition);~~
- ~~4. A qualifying exigency arises out of a different covered active duty or call to covered active duty status of the same or different covered military member; or,~~
- ~~5. The employee's need for leave due to the employee's own serious health condition, or the serious health condition of a covered family member, lasts beyond a single leave year.~~

~~Employees bear the entire cost of obtaining certifications required by the District.~~

~~The District may require, at its own expense, that the employee obtain the opinion of a second health care provider designated or approved by the District, however, the health care provider cannot be employed on a regular basis by the District.~~

~~Employees failing to provide complete and sufficient certifications as required, and after any opportunity to correct, may be denied the taking of FML. Failure to provide any certification may result in denial of leave under this policy. Employees who fail to provide requested documentation of the reason for an absence from work may be subject to disciplinary action up to, and including, termination.~~

4.8.I4.8.C Intermittent or Reduced Work Week Leave

Leave can be taken intermittently or on a reduced work schedule when medically necessary for a serious health condition, service member leave, or as a result of a qualifying exigency. The taking of the leave intermittently or on a reduced work schedule shall not reduce the total amount of leave to which the employee is entitled. However, the employee must provide a certification from the health care provider stating that the employee's reduced work schedule is medically necessary and the expected duration and schedule of the intermittent leave or reduced work schedule when intermittent leave is medically necessary. Such certification must also include the information listed under the foregoing "Medical Certification" section and shall also be signed by the health care provider responsible for providing such services and not by a staff member employed by the health care provider.

This section is not applicable to the birth or placement of a child.

If an employee requests intermittent leave or leave on a reduced work schedule that is foreseeable based on a planned medical treatment, the employee:

1. May be required to transfer temporarily to an available alternative position (for which he or she is qualified) which has an equivalent pay and benefits and which better accommodates recurring periods of leave than the regular position of the employee.
2. Must make reasonable efforts to schedule the treatment so as not to unduly disrupt operations.

If an employee was absent from work due to a FML reason that was unforeseeable, the employee is required to follow the District's sick ~~time leave~~ policy's unforeseeable use of sick ~~time leave~~ procedures to notify the District of the need for leave, and explicitly state that the need for leave is related to the previously approved FML condition. Upon returning to work, the employee must complete and submit to the Human Resources Department an Intermittent Leave of Absence Under FML Request Form within ~~threefive~~ (35) business days of the employee's return to work for the time to be designated as FML. In the absence of such timely notification by the employee, the employee may not subsequently assert FML protections for the absence.

4.8.J4.8.D Health Insurance During FML

During approved FML, the District is required to maintain group health, dental and life insurance benefits (hereafter "group insurance"). Maintenance of such group insurance requires that the employee continue to contribute the normal portion of the insurance premiums to the District at the same time payroll deductions would normally be made in order to maintain insurance coverage. If the employee's payment is more than thirty (30) days late, the District may discontinue health insurance coverage upon notice to the employee. To the extent an employee's FML is paid through available accrued leave balances, the employee's portion of premiums will be collected through payroll deductions. For details on continuation of group insurance benefits or supplemental coverage, contact the Human Resources Department.

4.8.E Return From FML

4.8.K1.1.A ~~Return From FML~~

Employees returning from FML are required to submit a fitness for duty certification from their healthcare provider prior to returning to work demonstrating the employee can perform the essential functions of the job. Failure to provide that certification may delay the employee's reinstatement.

Employees returning from leave will be restored to the same position held prior to the leave or to an equivalent position with equivalent pay, benefits, and other terms and conditions of employment.

After the beginning of the leave an employee may discover that circumstances have changed and the amount of leave time originally anticipated is either reduced or needs to be extended. In foreseeable circumstances where it is necessary to change leave time the employee is required to give the District notice within two (2) business days.

- A. An employee who fails to return to work on the next regularly scheduled work day following the expiration of FML, or who does not accept a position offered by the District when returning from leave, may be recommended for disciplinary action up to and including termination from their employment.
- B. Employees are prohibited from performing any work, whether full-time or part-time, during FML, for the District or any other entity or individual, and may be recommended for disciplinary action up to and including termination immediately upon discovery of same. Similarly, an employee who accepts other full-time employment during FML may

be recommended for disciplinary action up to and including termination immediately upon discovery of same.

- C. Employees who give notice to the District that they do not intend to return to work upon the expiration of FML will be considered to have voluntarily resigned.

4.8.L4.8.F Substitution of Paid Leave

When the District requires, or the employee requests, to substitute accrued paid ~~time off leave~~ under the District's vacation or sick ~~leave~~ policies, the payments under such paid ~~time off leave~~ policies running concurrently with the FML are subject to the employee satisfying any and all procedural requirements of such policies. Failure of the employee to follow the policy of the applicable paid ~~time off leave~~ may result in the FML becoming unpaid, even though the employee has an accrued balance of ~~time~~leave remaining.

Questions on Family and Medical Leave can be directed to the Human Resources Department. Forms relating to the Family and Medical Leave can be obtained from the Human Resources Department.

4.8.M4.8.G Non-Retaliation

The District will not interfere with an employee's FMLA rights or retaliate against any employee for using or trying to use FMLA leave. The District will not retaliate against any employee for opposing any practice made unlawful by the FMLA or being involved in a proceeding related to the FMLA.

Employees may file a complaint with the U.S. Department of Labor, Wage and Hour Division, or may bring a private lawsuit against an employer for violations of Federal law regarding the FMLA. The FMLA does not affect any federal or state law prohibiting discrimination or supersede any state or local law or collective bargaining agreement that provides greater family or medical leave rights.

4.8.NEMPLOYEE RESPONSIBILITIES

~~4.8.O Notify the Human Resources Department in writing that the employee needs leave for a condition the employee believes qualifies for FML.~~

~~4.8.P Notification must occur thirty (30) days prior to the need for leave in foreseeable circumstances and as soon as possible under unforeseen circumstances.~~

~~4.8.Q Timely return all certification and recertification, or other paperwork, to the Human Resources Department.~~

~~4.8.R Abide by all procedural requirements of the District's vacation and sick leave policies when such leave is used concurrently with FML. Failure to do so may result in FML being unpaid.~~

~~4.8.S When utilizing intermittent leave, make reasonable efforts to schedule absences so as not to unduly disrupt operations.~~

~~4.8.T Submit Intermittent Leave of Absence Request Form to the Human Resources Department within five (5) business days of employee's return to work from an intermittent absence. Failure to advise the Human Resources Department that the~~

~~absence was for a previously approved FML condition within five (5) business days may result in denial of FML for the absence.~~

~~4.8.U Submit Employee Request to Apply Sick Leave to Unpaid FML Based on Birth or Placement of a Child, when applicable and desired.~~

~~4.8.V Make timely medical insurance premium payments to the Human Resources Department to avoid any lapse in coverage.~~

~~4.8.W~~

~~4.8.X DEPARTMENT RESPONSIBILITIES~~

~~4.8.Y Allow employees reasonable time to meet or speak with Human Resources to obtain information, explanation and guidance on the FMLA policy, as needed.~~

~~4.8.Z Notify Human Resources within twenty-four (24) hours if an employee makes you aware, whether verbally or in writing, of any condition or situation that may qualify for FML.~~

~~4.8.AA Notify Human Resources within twenty-four (24) hours if you become aware of any employee who is absent due to their own or a family member's illness or injury for more~~

~~than three (3) days, or if you become aware of an employee or their family member being hospitalized overnight.~~

~~4.8.BB Do not make any comments or determinations about whether an employee's request for FML is valid or will qualify. This determination is made by Human Resources only after the appropriate certifications are received and reviewed.~~

~~4.8.CC Direct employees to Human Resources for any and all questions related to FML.~~

~~4.8.DD~~

~~4.8.EE HUMAN RESOURCES DEPARTMENT RESPONSIBILITIES~~

~~4.8.FF Assist employees and supervisors in understanding their responsibilities under the FMLA policy.~~

~~4.8.GG Provide all necessary forms to the employee within five (5) business days of supervisor or Human Resources learning of an employee's need for leave that may qualify for FML.~~

~~4.8.HH Upon receipt of complete and sufficient certifications, advise employee in writing of the determination as to whether the leave qualifies as FML.~~

~~Communicate with employee's department regarding dates and times of employee's expected FML, if approved, without disclosing medical facts or conditions, unless necessary to ensure safety or discuss restrictions upon the employee's return to work.~~

~~_____~~

~~_____~~

~~4.8.H Personal Leave~~

The District may approve a Personal Leave of Absence (i.e., unpaid leave) for Regular Full-Time employees who wish to take time off from work duties to fulfill personal obligations. Personal Leave of Absence does not include FMLA leave, Workers' compensation leave, vacation leave, or sick leave~~time~~. A Personal Leave of Absence may include up to 30 days per 12-month period. The 12-month period is a rolling 12-month period measured backward from the first date~~y of any of the requested~~ Personal Leave of Absence.

Only Regular Full-Time employees are eligible for a Personal Leave of Absence. Eligible employees may request personal leave only after having completed 90 calendar days of service. As soon as eligible employees become aware of the need for a Personal Leave of Absence, they should request such leave from their Division Director. Requests for a Personal Leave of Absence will be evaluated based on a number of factors, including anticipated workload and staffing needs.

A District employee on unpaid Personal Leave of Absence is prohibited from engaging in similar employment during leave. Personal leaves will not be granted for engaging in other employment

outside of the District. Misrepresentations or any act to deceive the District will be ground for discipline, up to and including employment termination.

Benefit accruals, such as vacation or sick ~~time leave~~ will be suspended during any Personal Leave of Absence and will resume upon the employee's return to active employment. Employees on Personal Leave of Absence are not entitled to holiday pay or special compensatory leave in conjunction with a holiday.

Subject to the terms, conditions and limitations of the applicable plans, the District will continue to provide health insurance benefits for the full period of the approved Personal Leave of Absence, ~~and the employee.~~ Employees will continue to be responsible to pay their employee insurance contribution prior to leaving.

There is no job guarantee with a Personal Leave of Absence. When a Personal Leave of Absence ends, a reasonable effort will be made to return the employee to the same position, if it is available, or to a similar available position for which the employee is qualified. However, the District cannot guarantee reinstatement.

Exempt Employees requiring vacation, sick or personal ~~time -off leave~~ to cover an unpaid Personal Leave of Absence must turn in a ~~notice leave sheet~~ to either their immediate Division Director or the Executive Director (whichever is applicable) if the required ~~time off leave~~ is for a full day (i.e., 8 hours) or more. Exempt employees are not required to submit a ~~notice leave sheet~~ for periods less than a full day.

The District reserves the right, in its sole discretion, to deny or limit Personal Leave of Absence if the requested Personal Leave will cause an impact on District business, staffing, District operations, or for any other reason.

If an employee fails to report to work promptly at the expiration of the approved Personal Leave of Absence, the District will consider that the employee has voluntarily resigned in accordance with the Districts Attendance Policy.

Continuing Benefit Plan Coverage

While on a personal unpaid leave of absence, employee's medical coverage will end on the 1st day of the month following the start of such leave subject to the terms, conditions, and limitations of the applicable plans. Employees will have the opportunity of continuing their benefits for a maximum period of 18 months by paying the monthly premiums as required by COBRA legislation. Unemployment Insurance benefits cannot be collected while on a leave of absence without pay.

Salary Action

While an employee is taking an approved Unpaid Personal Leave of absence, the evaluation period will extend compared to the amount of unpaid Personal Leave taken.

Performance Appraisal

The length of the leave will extend the normal performance appraisal date of an employee on an unpaid leave of absence.

Accrual of Sick and Vacation

During the unpaid leave of absence, the employee will not earn any sick or vacation time.

Returning/Not Returning From a Leave

Due to the 24 hours a day, 7 days a week, 365 days a year nature of the District's business, the District cannot guarantee either that an employee's job will remain available or that a comparable position will exist when return from an unpaid leave is sought. When an employee is ready to return from a leave of absence without pay, the District will attempt to reinstate the employee to employee's former position or to one with similar responsibilities.

An employee who returns to work following an unpaid leave will be considered as having continuous service. If an employee does not return from an unpaid leave of absence, the termination date is the last day of the authorized leave period or the date the employee notifies employee's supervisor that employee is not returning, whichever is sooner. Such employees may be considered for reemployment.

4.8.I Military Leave

An employee who is a member of the United States Army, Navy, Air Force, Marines, Coast Guard, National Guard, or Reserves will be granted paid or unpaid leave of absence for military service, training, or related obligations in accordance with applicable law.

Training

All commissioned reserve officers or reserve enlisted personnel in the United States military or naval service or members of the National Guard shall receive a leave of absence without loss of vacation pay, time or efficiency rating, on all days during which they are engaged in training ordered under the provisions of the United States military or naval training regulations when assigned to active or inactive duty. In any one annual period, leaves of absence shall not exceed 240 working hours provided that leaves of absence for additional or longer periods of time for assignment to duty functions of a military character shall be granted without pay and without loss of time or efficiency rating.

Active Duty Assignments

All officers or enlisted personnel in the National Guard or a reserve component of the Armed Forces of the United States who are granted leave to perform active military service shall receive their full pay for the first 30 days of any such leave.

All members of the Florida National Guard who are granted leave to engage in active state duty for a named event, declared disaster, or operation pursuant to Florida Statute Sections 250.28 or 252.36, shall receive their full pay for the first 30 days. The leave of absence with full pay shall not exceed 30 days for each emergency or disaster. Additionally, under Florida law, National Guard Members called to active state duty may not be discharged from employment for a period of one (1) year after the date the employee returns to work, except for cause.

Employees on military leave in excess of 30 days may substitute their accrued vacation time in an amount necessary to bring their total compensation, inclusive of their base military pay, to the level earned at the time they were called to active military duty.

The District will continue to pay the eligible employee's portion of health, dental and life insurance premiums and the District's pension contribution while the employee is on military leave for up to 30 days. If an employee has dependent insurance coverage, the employee must make arrangements with the Finance Department for payment of associated premiums. The employee will also be responsible for making arrangements for any other benefit premium or other deduction (example: deferred compensation contribution, voluntary supplemental benefits, etc.). For military leaves of more than 30 days, an employee may elect to continue such coverage under COBRA or USERRA and is required to pay the full premium for such continuation of coverage.

Notice of Leave

Employees seeking to invoke military leave shall provide advance notice to the District unless such notice is precluded by military necessity or otherwise impossible or unreasonable as interpreted under applicable law.

Documentation of Leave

Employees on military leave for periods of more than 30 days shall provide the District with such documentation that can be used to establish the employee's basic eligibility for protection under the Uniformed Services Employment and Reemployment Rights Act of 1994. If the employee is unable to provide satisfactory documentation of military service in excess of 30 days, the District reserves the right to contact the military unit with assistance from the employee to obtain such documentation.

Reinstatement After Leave

Employees on military Leave will be reinstated with the District in accordance with applicable State and Federal Laws. ~~Employees on military leave will be reinstated with the District in accordance with applicable State and Federal Laws. Employees who take a military leave of absence are entitled to any seniority-based rights and benefits that they would have attained had the employee remained continuously employed. The period of military leave is not considered a break in employment unless the employee indicates that he or she will not return from military leave.~~

~~Upon the return of any employee from Military Leave, as described above, the temporary services of the employee filling his/her position shall be terminated or said temporary employee moved elsewhere in the District's service, at the District's sole discretion. If an employee called to active duty is a probationary employee, the remaining number of days left on the probationary status will be added following the employee's return to work.~~

Upon return from military service, an employee must provide notice of or submit an application for reemployment in accordance with the following schedule:

- (1) — An employee who served for less than 30 days or who reported for a fitness examination, must provide notice for reemployment at the beginning of the first full regular scheduled work period that starts at least eight hours after the employee has returned from the location of service.
- (2) — An employee who served for more than 30 days, but less than 181 days, must submit an application for reemployment no later than 14 days after completing employee's period of service, or, if this deadline is impossible or unreasonable through no fault of the employee, then on the next calendar day when submission becomes possible.
- (3) — An employee who served for more than 180 days must submit an application for reemployment no later than 90 days after the completion of the uniformed service.
- (4) — An employee who has been hospitalized or is recovering from an injury or illness incurred or aggravated while serving must report to Human Resources (if the service was less than 31 days), or submit an application for reemployment (if the service was greater than 30 days), at the end of the necessary recovery period (which may not exceed two years).

An employee whose military service was for more than 30 days must provide documentation within two weeks of employee's return (unless such documentation does not yet exist or is not readily available) showing the following: (i) the application for reemployment is timely (i.e. submitted within the required time period); (ii) the period of service has not exceeded five years; and (iii) the employee received an honorable or general discharge. All current Military rulings will supersede this section.

Failure to Return After Military Leave

Should the employee not return to employment with the District following said military leave, any vacation or sick time accrued while on military leave will be subtracted before any allowable payment of any benefits is made in accordance with other provisions of these rules and regulations regarding payment of leave balances upon separation from employment.

4.8.H

4.8.J Domestic Violence Leave

Eligible employees will be granted up to three (3) days of unpaid Domestic Violence Leave in any twelve (12) month period, measured forward from the first date domestic violence leave is used, according to Section 741.313, Florida Statutes, as amended from time to time. The District shall not discriminate against an employee for exercising rights under this policy.

Domestic Violence means any assault, aggravated assault, battery, aggravated battery, sexual assault, sexual battery, stalking, aggravated stalking, kidnapping, false imprisonment, or any criminal offense resulting in physical injury or death of one family or household member by another family or household member. Domestic violence shall also include any crime the underlying factual basis of which has been found by a court to include an act of domestic violence.

Family or Household Member means spouses, former spouses, persons related by blood or marriage, persons who are presently residing together as if a family or who have resided together in the past as a family, and persons who are parents of a child in common regardless of whether they have been married. Except for persons who have a child in common, the family or household members must be currently residing or have in the past resided together in the same dwelling unit.

Employees may be permitted to use the leave for:

1. Seeking an injunction for protection against domestic, repeat, dating or sexual violence;
2. Obtaining medical care or mental health counseling for the employee and/or family/household member to address physical or psychological injuries resulting from the domestic violence;
3. Obtaining services from a victim-services organization as a result of the act of domestic violence;
4. Making the employee's home secure from the perpetrator of domestic violence, or to seek new housing to escape the perpetrator;
5. Seeking legal assistance or to attend and prepare for court-related proceedings arising from the act of domestic violence.

Notice

Except in cases of imminent danger to the health or safety of the employee, or to the health of safety of a family household member, an employee shall provide notice to Human Resources as soon as possible after the employee learns of the need for the leave. If the leave is foreseeable, such as court dates, the employee must provide thirty (30) days' notice. The request for leave must be accompanied with sufficient documentation of the act of domestic violence, if applicable.

Eligibility

To be eligible for Domestic Violence Leave, an employee must have been employed by the District for three (3) or more months. Domestic Violence Leave shall be granted if the employee or a family or household member of the employee is the victim of domestic violence and provides sufficient notice and documentation regarding same.

An employee seeking leave under this section must, before receiving the leave, exhaust all vacation and sick ~~time~~ leave available.

4.9

4.104.9 Workers' Compensation ~~Leave~~

In accordance with the state and federal requirements of the Workers' Compensation Act, the District provides insurance to protect employees against financial loss due to personal injury and some occupational illnesses arising out of and in the course of employment at the District. For detailed information concerning supervisor responsibilities regarding accident prevention and reporting, please contact Human Resources.

Where a workplace accident or illness also results in a serious health condition as defined by the FMLA policy, the employee's leave of absence under Worker's Compensation and FMLA shall run concurrently.

Reporting an Accident

The process for reporting a work-related accident and injury is as follows:

- Employee will notify supervisor immediately and fill out an Accident/Incident Report and First Report of Injury Form if there is an injury. ([Accident form](#)) ([First Report of Injury Form\(DWC-01\)](#))
 - If Employee is unable to fill out report Supervisor/Safety/Human Resources will fill out the reports and employee is to seek immediate medical attention.

- Within 24 hours of the accident Safety and Human Resources should be notified by reporting supervisor.
- If you are not seeking medical treatment, no further steps need to be taken
- If medical treatment is needed, you will be taken to Occupational Health/Jupiter Medical Center Emergency Room. ([Occupational Health Services Form](#))
- After initial hospital visit employee must schedule all subsequent Doctors' appointments through the Workers' Compensation Insurance Company.
 - If the employee fails to contact Workers' Compensation to schedule appointment, the employee will pay for the cost out of pocket if they go to a non-authorized workers compensation Doctor.
- To return to full duty, employee must be medically cleared of all restrictions by Worker's Compensation Doctor.
- If the Worker's Compensation doctor determines you can return to work but on Light Duty, the District will evaluate if there is light duty available in its sole discretion.

Wage Replacement and Medical Benefits

An employee who is absent 8 calendar days as the result of an accident or illness deemed to be work related, is eligible for wage replacement benefits from the 8th full day of absence due to injury or illness. When an employee is out more than 20 calendar days, the benefits are paid back to the first full day of disability.

The maximum wage replacement benefit for injured employees who lose time for work is 66 2/3% of the employee's average weekly wages. In all compensation cases, payment for adequate and reasonable medical and hospital services as mandated by the Workers' Compensation Act of Florida is also provided.

Supplemental District Payments

The District may make the following supplemental payments to employees absent from work due to a Workers Compensation injury or illness:

- If an employee is absent for less than a 40-hour work-week required to assure wage replacement benefits, the District may pay the employee his or her base weekly gross salary through accrued paid time off (sick then vacation). If an employee is absent for eight or more calendar days, wage replacement benefits will begin and will compensate lost wages up to 66 2/3% of their Average Weekly Wage (AWW). The AWW is based on the prior 13 weeks before the date of injury.
- The District will allow employees to supplement up to 33 1/3% of their accumulated sick ~~leave~~ then vacation ~~leave~~ to make up the difference when the injury/illness also qualifies as a serious health condition under FMLA. The supervisor will report the time as deductions from sick then vacation ~~leave~~. This benefit will not pay over 100% of the employee's total regular wages.
- The District wants to assure uninterrupted salary payments to the employee. Because there may be administrative delays before the employee actually receives wage replacement benefits for the first 40 hours, sick ~~leave~~ balances will be charged to cover these days of absence. If you are out more than 20 calendar days from the day of accident, Workers Compensation will pay the employee for the initial 40 hours from the first week of accident. Because the District paid the employee the first

40 hours of absence, the employee must return this amount to the District's Payroll Office, either by endorsement of the wage replacement check, or by future payroll deduction.

Accrual of Vacation and Sick ~~Time~~Leave

An employee who is absent from work as the result of an occupational injury or illness, and who is receiving Workers' Compensation insurance payments, will accrue sick/vacation based on the portion of hours paid by the District. No increments of sick/vacation will accrue for any pay week which includes three or more days of leave of absence without pay.

Payment of Holiday Pay

An employee will be paid for a holiday which falls during a period of absence due to an occupational injury or illness only if he or she is supplementing his or her wage replacement benefits with sick/vacation ~~time~~leave. In this event, the portion of supplemental pay normally charged to sick/vacation ~~time~~ leave will be charged to holiday pay.

Continuation of Benefits

Certain District benefits may be maintained for a limited period of time provided the employee makes arrangements with Human Resources and/or Payroll to continue the appropriate contributions to the plans.

Review of Employment Status

In cases of prolonged absence due to a Workers Compensation illness or injury, the employment status of the employee will be reviewed periodically. The District will be in constant contact with the Workers Compensation representative and the employee to stay current on the status of the employee. The District will make every reasonable effort to accommodate the employee to come back to work as long as the accommodation does not cause undue hardship to the District. All state and federal ~~leave~~ regulations concerning Worker's Compensation, FMLA, and ADA laws will be followed.

~~4.111.1 Personal Leave~~

~~The District may approve a Personal Leave of Absence (i.e., unpaid leave) for Regular Full-Time employees who wish to take time off from work duties to fulfill personal obligations. Personal Leave of Absence does not include FMLA leave, Workers' compensation leave, vacation leave, or sick leave. A Personal Leave of Absence may include up to 30 days per 12-month period. The 12-month period is a rolling 12-month period measured backward from the first day of the requested Personal Leave of Absence.~~

~~Only Regular Full-Time employees are eligible for a Personal Leave of Absence. Eligible employees may request personal leave only after having completed 90 calendar days of service. As soon as eligible employees become aware of the need for a Personal Leave of Absence, they should request such leave from their Division Director. Requests for a Personal Leave of Absence will be evaluated based on a number of factors, including anticipated workload and staffing needs.~~

~~A District employee on unpaid Personal Leave of Absence is prohibited from engaging in similar employment during leave. Personal leaves will not be granted for engaging in other employment outside of the District. Misrepresentations or any act to deceive the District will be ground for discipline, up to and including employment termination.~~

~~Benefit accruals, such as vacation or sick leave will be suspended during any Personal Leave of Absence and will resume upon the employee's return to active employment. Employees on Personal Leave of Absence are not entitled to holiday pay or special compensatory leave in conjunction with a holiday.~~

~~Subject to the terms, conditions and limitations of the applicable plans, the District will continue to provide health insurance benefits for the full period of the approved Personal Leave of Absence. Employees will be responsible to pay their employee insurance contribution prior to leaving.~~

~~There is no job guarantee with a Personal Leave of Absence. When a Personal Leave of Absence ends, a reasonable effort will be made to return the employee to the same position, if it is available, or to a similar available position for which the employee is qualified. However, the District cannot guarantee reinstatement.~~

~~Exempt Employees requiring vacation, sick or personal leave to cover an unpaid Personal Leave of Absence must turn in a leave sheet to either their immediate Division Director or the Executive Director (whichever is applicable) if the required leave is for a full day (i.e., 8 hours) or more. Exempt employees are not required to submit a leave sheet for periods less than a full day.~~

~~The District reserves the right, in its sole discretion, to deny or limit Personal Leave of Absence if the requested Personal Leave will cause an impact on District business, staffing, District operations, or for any other reason.~~

~~If an employee fails to report to work promptly at the expiration of the approved Personal Leave of Absence, the District will consider that the employee has voluntarily resigned in accordance with the Districts Attendance Policy.~~

4.11.A Continuing Benefit Plan Coverage

~~While on a personal unpaid leave of absence, employee's medical coverage will end on the 1st day of the month following the start of such leave subject to the terms, conditions, and limitations of the applicable plans. Employees will have the opportunity of continuing their benefits for a maximum period of 18 months by paying the monthly premiums as required by COBRA legislation. Unemployment Insurance benefits cannot be collected while on a leave of absence without pay.~~

4.11.B Salary Action

~~While an employee is taking an approved Unpaid Personal Leave of absence, the evaluation period will extend compared to the amount of unpaid Personal Leave taken.~~

4.11.C Performance Appraisal

~~The length of the leave will extend the normal performance appraisal date of an employee on an unpaid leave of absence.~~

4.11.D Accrual of Sick and Vacation

~~During the unpaid leave of absence, the employee will not earn any sick or vacation time.~~

4.11.E Returning/Not Returning From a Leave

~~Due to the 24 hours a day, 7 days a week, 365 days a year nature of the District's business, the District cannot guarantee either that an employee's job will remain available or that a comparable position will exist when return from an unpaid leave is sought. When an employee is ready to return from a leave of absence without pay, the District will attempt to reinstate the employee to employee's former position or to one with similar responsibilities.~~

~~An employee who returns to work following an unpaid leave will be considered as having continuous service. If an employee does not return from an unpaid leave of absence, the termination date is the last day of the authorized leave period or the date the employee notifies employee's supervisor that employee is not returning, whichever is sooner. Such employees may be considered for reemployment.~~

4.124.10 Pregnancy-Related Absences

The District will not discriminate against any employee who requests an excused absence for medical issues associated with pregnancy. Such ~~leave~~ requests will be evaluated according to the medical leave policy provisions outlined in this Personnel Procedures and all applicable federal and state laws.

Requests for time off associated with pregnancy and/or childbirth, such as bonding and childcare, not related to medical issues for those conditions, will be considered in the same manner as other requests for unpaid family or personal leave.

Domestic Violence Leave

~~Eligible employees will be granted up to three (3) days of unpaid Domestic Violence Leave in any twelve (12) month period, measured forward from the first date domestic violence leave is used, according to Section 741.313, Florida Statutes, as amended from time to time. The District shall not discriminate against an employee for exercising rights under this policy.~~

~~Domestic Violence means any assault, aggravated assault, battery, aggravated battery, sexual assault, sexual battery, stalking, aggravated stalking, kidnapping, false imprisonment, or any criminal offense resulting in physical injury or death of one family or household member by another family or household member. Domestic violence shall also include any crime the underlying factual basis of which has been found by a court to include an act of domestic violence.~~

~~Family or Household Member means spouses, former spouses, persons related by blood or marriage, persons who are presently residing together as if a family or who have resided together in the past as a family, and persons who are parents of a child in common regardless of whether they have been married.~~

~~Except for persons who have a child in common, the family or household members must be currently residing or have in the past resided together in the same dwelling unit.~~

~~Employees may be permitted to use the leave for:~~

~~1. Seeking an injunction for protection against domestic, repeat, dating or sexual violence;~~

~~2. Obtaining medical care or mental health counseling for the employee and/or family/household member to address physical or psychological injuries resulting from the domestic violence;~~

~~3. Obtaining services from a victim services organization as a result of the act of domestic violence;~~

~~4. Making the employee's home secure from the perpetrator of domestic violence, or to seek new housing to escape the perpetrator;~~

~~5. Seeking legal assistance or to attend and prepare for court related proceedings arising from the act of domestic violence.~~

Notice

~~Except in cases of imminent danger to the health or safety of the employee, or to the health or safety of a family household member, an employee shall provide notice to Human Resources as soon as possible after the employee learns of the need for the leave. If the leave is foreseeable, such as court dates, the employee must provide thirty (30) days' notice. The request for leave must be accompanied with sufficient documentation of the act of domestic violence, if applicable.~~

Eligibility

~~To be eligible for Domestic Violence Leave, an employee must have been employed by the District for three (3) or more months. Domestic Violence Leave shall be granted if the employee or a family or household member of the employee is the victim of domestic violence and provides sufficient notice and documentation regarding same.~~

~~An employee seeking leave under this section must, before receiving the leave, exhaust all vacation and sick leave available.~~

5 EMPLOYEE BENEFITS

The District has established a variety of employee benefit programs designed to assist employee and employee's eligible dependents in meeting the financial burdens that can result from illness and disability, and to help employee plan for retirement. This portion of the Employee's Personnel Procedures contains a very general

description of the benefits to which employee may be entitled as an employee of the District. Please understand that this general explanation is not intended to, and does not, provide employee with all the details of these benefits. Therefore, these Personnel Procedures do not change or otherwise interpret the terms of the official plan documents. Your rights can be determined only by referring to the full text of the official plan documents, which are available for employee's examination from Human Resources. To the extent that any of the information contained in these Personnel Procedures is inconsistent with the official plan documents, the provisions of the official documents will govern in all cases.

Please note that nothing contained in the benefit plans described herein shall be held or construed to create a promise of employment or future benefits, or a binding contract between the District and its employees. All employees shall remain subject to discharge or discipline to the same extent as if these plans had not been put into effect.

As in the past, the District reserves the right to amend, modify or terminate, in whole or in part, any or all of the provisions of the benefit plans described herein. Further, the District reserves the exclusive right, power and authority to administer, apply and interpret the benefit plans described herein, and to decide all matters arising in connection with the operation or administration of such plans.

For more complete information regarding any of our benefit programs, please refer to the Summary Plan Descriptions, which were provided to employee separately, or contact Human Resources. If employee lost or misplaced those descriptions, please contact Human Resources for another copy.

Governing Board Member Benefits – Overview

The Governing Board Members, are eligible to participate in the District's benefit package. Eligible individuals may select; Individual, individual and child(ren), individual and spouse, Family coverage or no coverage. The Governing Board members who elect to participate in the District's benefit program shall be required to pay the fully funded rate for all elected coverages without subsidized premiums from the District.

The following benefit programs are examples of those available to Governing Board Members:

- | | |
|----------------------|---|
| (1) Health Insurance | (3) Vision |
| (2) Dental Insurance | (4) Benefits of Continuation at Termination (COBRA) |

Employee Benefits – Overview

Eligible employees at the District are provided a wide range of benefits. A number of the programs (such as Social Security and Workers' Compensation) cover all employees in the manner prescribed by law.

Benefits eligibility is dependent upon a variety of factors, including employee classification. Employee's Division Director and/or Human Resources can identify the programs for which an employee is eligible. Details of many of these programs can be found elsewhere in the personnel procedures.

The following benefit programs are examples of those available to eligible Full-Time employees:

- | | |
|--|--------------------------------|
| Benefits Continuation at Termination (COBRA) | Jury Duty Leave |
| Bereavement Leave | Life Insurance |
| Retirement Pension Plan | Long-Term Disability |
| Dental Insurance | Health Insurance |
| Educational Financial Assistance | Military Leave |
| Family Leave/Medical Leave | Personal Leave |
| Holidays | Sick Leave Benefits |

Uniform

Witness Duty

Vacation Benefits

Workers' Compensation

Voting Time Off

Some benefit programs require contributions from the employee, and some are fully paid by the District.

5.1 Health Insurance

~~District Health Insurance~~

The District currently offers Governing Board Members and regular, full-time employees who have been employed by the District for over 30 days' health coverage under a point-of-service plan. The Health coverage begins on the first day of the month following 30 days of continuous full-time employment.

The point-of-service plan provides comprehensive hospital and major medical insurance coverage. Under the point of service plan, participants can choose to go in-network or out-of-network at any point in time. Many in-network services are fully covered (some require a co-payment) and no claim forms need to be completed. Out-of-network services are generally subject to an annual deductible and coinsurance payments, and require the submission of claim forms to the insurance carrier for reimbursement.

Employees have up to 30 days from their employment date to make their medical plan election. Once made, an employee's election is generally fixed for the remainder of the plan year. However, if an employee undergoes a change in family status, qualifying event (as defined in the Plan document), employee may make a mid-year change in coverage (i.e., employee may change coverage from individual to family or from family to individual, add or delete dependents, provided employee does so within 30 days from the date of the change in family status).

When a District employee incurs a qualifying event, there will be an insurance adjustment to the employee's paycheck. Types of qualifying events are: marriage/Divorce, Birth/Death of child, legal custody/adoption, start/terminate employment, etc. You can refer to the [Employee Benefit Highlight Book](#) to find additional qualifying events.

At the end of each calendar year, during open enrollment, the employee is free to change their medical elections for the following calendar year if employee has a change in family status. As of April 1, 2009, Children's Health Insurance Program Reauthorization Act 'CHIP' was passed. This Act requires employers that maintain group health plans to provide coverage for children that lose coverage under Medicaid and to notify employees of the premium assistance subsidy that became available around February 2010.

~~Also~~ Subject to applicable laws, health insurance is ~~now~~ available for an employee's children until the age of 30 ~~(subject to change by applicable law)~~, if they are dependent on the employee, not covered by any other insurance, not married, Florida resident or Full Time Student, and have no children of their own. Human Resources will assist employees in making the necessary arrangements for enrollment. A complete description of the plan is provided to each employee as "Summary Plan Descriptions" and appropriate supplements.

The Governing Board members who elect to participate in the District's benefit program shall be required to pay the fully funded rate for all elected coverages without subsidized premiums from the District.

5.2 Dental Insurance

The District currently offers dental coverage to Governing Board Members and Regular Full-Time employees who have been employed by the District for over 30 days. Dental coverage begins on the first day of the month following 30 days of continuous full-time employment. This plan offers two options: in-network and out-of-network.

Under the Plan, you can select a dentist from the network or receive care from any licensed dentist or dental specialist of employee's choice. Coverage is generally subject to deductibles for non-preventative services, co-payments and an annual benefit maximum per person.

District employee's dependent children may be covered through the end of the calendar year in which they turn 26.

The Governing Board members who elect to participate in the District's benefit program shall be required to pay the fully funded rate for all elected coverages without subsidized premiums from the District.

5.3 Group Life Insurance

The District offers Regular Full-Time employees who have been employed by the District for over 30 days an employer-paid basic group term life policy, along with an accidental death and dismemberment policy. Life Insurance coverage begins on the first day of the month following 30 days of continuous full-time employment. Each policy generally pays a death benefit of \$50,000.00 (subject to limitations and changes each year). Life insurance terminates on the last day of employment. Portable Life Insurance is up to the employee to either maintain or not.

5.4 Long Term Disability

The District offers eligible employees (i.e., regular full-time employees who are regularly scheduled to work a minimum of 35 hours per week) Long Term Disability (LTD) base plan. This plan provides for monthly LTD benefits of 60% of basic monthly earnings to a maximum benefit of \$6,500.00 per month, less any other offsets. Eligible employees are automatically enrolled as of the first day of the calendar month on/or following their date of hire. Long-term disability coverage terminates on the last day of employment.

5.5 Retirement Plan

~~To participate in the District's Retirement Plan (Money Purchase Plan and Trust) you must be 18 years of age and have worked at the District for a minimum of one (1) year. The retirement plan has two entry dates; January and July. Employees hired from January 1 through June 30 will be admitted to the retirement plan in July of the following year, and subsequently they will have a July retirement plan anniversary date. Employees hired July 1 through December 31 will be admitted to the retirement plan in January of the following year, a subsequently they will have a January retirement plan anniversary date. For example, an employee hired February 4, 2014 would be admitted to the retirement plan in July, 2015. An employee hired December 30, 2014 would be admitted to the retirement plan in January, 2016.~~

~~Upon your retirement plan anniversary date following your second year of service working at the District, you will begin contributing 4% of gross income into the District's retirement plan account. At this time, you will have the opportunity to sit down with the retirement representative to discuss and make investment decisions. Thereafter, you can address and/or revise your retirement plan investment decisions during normal business hours throughout the year. Upon your retirement plan anniversary date~~

following your third year of service working at the District, the District will begin contributing 12% of gross income into your retirement plan account. To participate in the District's Retirement Plan (Money Purchase Plan and Trust) you must be 18 years of age and have worked at the District for a minimum of one (1) year. The retirement plan has two entry dates; January and July. Employees hired from January 1 through June 30 will be admitted to the retirement plan in July of the following year, and subsequently they will have a July retirement plan anniversary date. Employees hired July 1 through December 31 will be admitted to the retirement plan in January of the following year, and subsequently they will have a January retirement plan anniversary date. For example, an employee hired February 4, 2014 would be admitted to the retirement plan in July 2015. An employee hired December 30, 2014 would be admitted to the retirement plan in January 2016.

Upon entering the retirement plan you will begin contributing 4% and the District will begin contributing 12% of your gross income into two retirement plan accounts opened in your name with Morgan Stanley. At this time, you will have the opportunity to sit down with the retirement representative to discuss and make investment decisions. Thereafter, you can address and/or revise your retirement plan investment decisions during normal business hours throughout the year. You may direct your 4% retirement account according to the guidelines of the Retirement Plan. The 12% account will stay in cash until you have reached your two-year retirement plan anniversary date (i.e., your vesting date). At your two-year retirement plan anniversary date, you will be fully vested in the retirement plan and can direct your full retirement balance according to the Retirement Plan guidelines. If you leave the District before your vesting date (e.g., your two-year retirement plan anniversary date) you will forfeit your 12% account and the funds will return to the District.

5.6 Flexible Spending Arrangement (FSA)

A Flexible Spending Arrangement (FSA) is also commonly known as a Flexible Spending Account. An FSA allows an employee to set aside a portion of employee's earnings to pay for qualified expenses as established in the cafeteria plan, most commonly for medical expenses but often for dependent care or other expenses. Money deducted from an employee's pay into an FSA is not subject to payroll taxes, resulting in a substantial payroll tax savings, but may be subject to income taxation if used to pay for unqualified expenses. Please refer to the current years [Benefit Highlight Book](#).

5.7 Employee Assistance Program (EAP)

The Employee Assistance Program (EAP) is a confidential counseling and information service for all District employees who are eligible to participate in the district healthcare plan. The EAP is designed to help you maximize your health and effectiveness at home and work. Through this program, you can receive confidential, personal support for a wide range of issues, from everyday concerns to serious problems.

The EAP can assist with problems such as:

Child/ parent or family member conflicts

Managing Stress

Parenting

Physical Abuse

Family illnesses or coping with grief or loss

Child or eldercare

Overcoming Depression/ Anxiety

Financial planning

Marital Conflicts

Legal Concerns

Alcohol or drug dependency

Compulsive gambling

The EAP should be the first step in receiving services for mental health/ substance abuse issues.

5.75.8 Tuition Reimbursement Policy

The District recognizes that the skills and knowledge of its employees are critical to the success of the organization. This tuition reimbursement policy encourages personal development through formal education so that employees can improve job-related skills or enhance their ability to compete for reasonably attainable jobs within the District.

This policy applies to all Regular Full-Time District employees. To maintain eligibility employees must remain on the active payroll and be performing their job satisfactorily through completion of each course.

Individual course or courses that are part of a degree, licensing, or certification program must be related to the employee's current job duties or a foreseeable-future position in the organization in order to be eligible for educational assistance. The District determines whether a course relates to an employee's current job duties or a foreseeable-future position. Employees should contact their Division Director for more information or questions about educational assistance.

While educational assistance is expected to enhance employee's performance and professional abilities, the District does not guarantee that participation in education and training will entitle the employee to automatic advancement, a different job assignment, greater benefits or pay increases.

The District will reimburse for technical training that is directly related to the employee's job as approved by his/her immediate Division Director (i.e. F.W.P.C.O.A. courses, California courses, computer courses, etc.). Training provided by equipment vendors and seminars that are job related will be paid for and/or reimbursed by the District.

Reimbursement for college courses will be made using the following criteria:

- Prior approval of the course must be obtained from the employee's supervisor, with an application for Educational Reimbursement Form pre-approved ([Education Reimbursement forms](#)).
- A passing grade of 'C' or better must be obtained. (Copy to be submitted within 30 days of receipt).
- Approved courses will be reimbursed in the same twelve-month period the courses are taken. Up to \$5,250 (or current IRS guidelines) can be used for education tax free, anything over the IRS limit will be taxed as compensation to the employee.
- No Lab reimbursement.

Employee's work schedule and hours must be maintained by the employee without interference from the course of studies. In the event a course of study interferes with the employee's work schedule, the District will not reimburse the employee, thus each employee must schedule their course of studies, required reading, homework, field work, reports, and testing accordingly.

The cost of books will be reimbursed at 50% of their cost (receipt required). Parking Permits, lab fees, supplies, mileage, and other expenses are not subject to reimbursement. No reimbursement is provided if covered by Bright Futures, Florida Prepaid or a 527 plan is also used. NOTE: the reimbursement is subject to IRS limitation, and could subject the employee to Federal Income Tax on the reimbursement.

6 ON THE JOB

5.86.1 Access to Personnel Files

The District maintains a personnel file on each employee. The personnel file includes such information as the employee's job application, resume, records of training, documentation of performance appraisals, salary increases, and other employment records.

Personnel files are public records and are open to inspection by anyone who desires access to these files. The District will follow the guidelines established in [Florida Statue 119](#), also known as the Public Records Law. Social security numbers and any other protected information will be redacted in accordance to the before mentioned law.

Medical Records are exempt from public records, and maintained confidential and are never subject to disclosure, unless specifically required by law.

Employees who wish to review their own file should contact Human Resources. With reasonable advance notice, employees may review and copy their own personnel files in the District's offices and in the presence of an individual appointed by the District to maintain the files. Confidential information about other employees that may also be in a personnel file of an employee may be removed and/or redacted prior to and/or during review by the employee.

5.96.2 Personnel Records Update

To keep necessary District records up-to-date, it is extremely important that you notify Human Resources of any changes in:

- Name and/or marital status
- Address and/or telephone number(s) and/or email address
- # of eligible dependents
- W-4 deductions
- Person(s) to contact in case of emergency
- Such other information reasonably required for the District to maintain accurate personnel records.

Where required, appropriate documentation must be provided to effectuate the change.

5.106.3 Attendance, Punctuality and Dependability

Punctual and regular attendance is an essential responsibility of each employee at the District. Any tardiness or absence causes problems for fellow employees and supervisors. When an employee is absent, others must perform the work, which diminishes the efficient and effective functioning of the District. Employees are required to report to work as scheduled, on time and prepared to start work. Employees also are expected to remain at work for their entire work schedule.

Late arrival, early departure, or other absences from scheduled hours are disruptive and must be avoided. The purpose of this policy is to promote the efficient operation of the District and minimize unscheduled absences. Any employee who fails to report to work without notification to his or her supervisor for a period of three (3) days or more will be considered to have voluntarily terminated their employment relationship.

5.10.A.1-6.3.A.1. Types of Absence

Excused Absence occurs when all four of the following conditions are met:

- a. The employee provides sufficient notice to his or her supervisor (see section 6.3.B),
- b. The reason is found credible and acceptable by his or her supervisor
- c. Such absence request is approved by his or her supervisor, and
- d. The employee has sufficient accrued **leave** time to cover such absence. Employees must take earned **leave** time for every absence unless otherwise allowed by the District's policy (e.g. Leave of Absence policy, Bereavement policy, Jury Duty, etc.). The District uses a rolling calendar year when determining an excessive amount of unexcused absences.

No District employee may be absent more than three consecutive days from work unless those absences are an Excused Absence. Reasons for granting Excused Absences shall be, but are not limited to the following:

- e. Illness or injury of an employee;
- f. Illness, injury or death of a member of the employee's family;
- g. Court order, subpoena, or business with a court;
- h. Unavoidable travel delays or cancellations;
- i. Any conflict or extraordinary circumstance or event approved by the Executive Director;

Employees, who have three consecutive days of Excused Absences because of illness or injury, must provide the District proof of physician's care. The employee will be given FMLA paperwork to complete to see if the injury or illness qualifies for job protected leave of absence. If an illness or injury prevents an employee from performing their regularly scheduled duties, a physician's statement must be provided verifying

- a) The nature of the illness or injury;
- b) If and when the employee will be able to return to work, if applicable.
- c) Whether the employee is capable of performing their regularly scheduled duties, and if not, what duties the employee is capable of performing.

Once a physician has determined an employee is not capable of performing their regularly scheduled duties, the employee must verbally or write a request for accommodation. The accommodation request will be submitted to the employee's Division Director or Human Resources. The District will evaluate the request and notify the employee of the decision within five business days. Please refer to [Section 1.4. A](#), for the District policy on Requesting Accommodation.

Unexcused Absence is an absence for any other reason than those stated above. If an employee has an unexcused absence for three consecutive days, the employee will be considered as having voluntarily resigned as a result of job abandonment. Job abandonment occurs after three consecutive days of not reporting or notifying your immediate supervisor, Division Director, or Human Resources. The District may attempt to contact the employee by phone and e-mail after two days of unexcused absence. A District employee is allowed to have a maximum of 24 hours of unexcused absence in a rolling calendar year. If the employee exceeds the 24 hours of unexcused absence may lead to discipline up to and including termination.

An otherwise Excused Absence is not excused if the employee fails to notify the District of the impending absence up to one hour after the start of their regular work schedule at which the absence will occur. This failure to notify the District office of the reason for the absence will be counted as unexcused.

5.10.A.2.6.3.A.2. Sufficient Notice

To be considered an Excused Absence as defined in (6.3.A), sufficient notice must be given to the supervisor. "Sufficient Notice" is:

- (1) For a scheduled absence of eight hours or more, employees must give a notice of one week (seven days).
- (2) For a scheduled absence of less than eight hours, employees must give a notice of two working days.
- (3) For an emergency absence occurring a) at the beginning of the employee's shift, employees must notify their supervisor within one hour after the beginning of their shift and b) during the employee's shift, employees must notify their supervisor prior to leaving the premises.
- (4) Your supervisor must approve any exceptions to this provision or any conflicts in scheduling.

Exempt Employees requiring vacation, sick or personal ~~time leave~~ must submit time on the time and attendance system ~~turn in a leave sheet~~ to either their immediate Division Director or the Executive Director (whichever is applicable) if the required time off leave ~~is~~ for a full day (i.e., eight hours) or more. Exempt employees are not required to submit a notice leave sheet ~~for periods less than a full day~~.

5.10.A.3.6.3.A.3. Tardiness

You are expected to report to work on time. If you can't report to work as scheduled, you must notify your Supervisor no later than 1 hour after your regular stating time. This notification does not excuse the tardiness but simply notifies your Supervisor that a schedule changed may be necessary.

- (1) First Instance-Verbal Warning
- (2) Second & All Future Instances totaling Fewer Than 24 hours-Written Warning
- (3) At 24 Hours of Accumulated Unexcused Absences- employee may be subject to termination

5.11.6.4 Drug Testing

The District is committed to providing a safe, efficient, and productive work environment for all employees. Using or being under the influence of drugs or alcohol on the job may pose serious safety and health risks. To help ensure a safe and healthful working environment, job applicants will be asked to provide body substance samples (such as urine, blood and/or hair) to determine the illicit or illegal use of drugs and alcohol. See separate [District Commercial Motor Vehicle Driver Controlled Substance and Alcohol use and Testing Policy](#) for specifics.

5.11.A6.4.A Reasonable Suspicion

Reasonable suspicion drug and alcohol testing must be based on specific, contemporaneous, articulable observations concerning the appearance, behavior, speech, or body odors of the employee. The observations may include indications of the chronic and withdrawal effects of controlled substances. Alcohol testing is authorized only if the observations are made during, just

preceding, or just after the work period. The alcohol breathalyzer test must be performed within the same time frame as outlined in post-accident situations.

5.11.B6.4.B Post-Accident

A driver must submit to a post-accident drug and alcohol breathalyzer test when one or more of the criteria occur following a vehicle accident (The criteria applicable to this section can be found under forms). The post-accident drug test must be performed within ~~32~~³² hours of the accident. The post-accident alcohol breath test should be performed within 2 hours of the accident but not to exceed 8 hours. For more information, see separate District Commercial Motor Vehicle Driver Controlled Substance and Alcohol use and Testing Policy.

5.11.C6.4.C Drug & Alcohol Abuse

Manufacturing, distribution, dispensation, possession, or use of any illegal drug, alcohol, or controlled substance while on the District's premises is strictly prohibited. These activities constitute serious violations of the District rules, jeopardize the District, and can create situations that are unsafe or that substantially interfere with job performance. Employees in violation of the policy are subject to appropriate disciplinary action, up to and including dismissal. See separate District Commercial Motor Vehicle Driver Controlled Substance and Alcohol use and Testing Policy for employees that utilize a CDL for District purposes.

5.126.5 Anti-Nepotism Policy

The District wants to ensure that nepotism does not create inappropriate situations in our work place, such as i.e., conflicts of interest or favoritism. Members of an employee's immediate family will be considered for employment on the basis of their qualifications. Immediate family may not be hired, however, if the new employee would likely:

- (1) create a supervisor/subordinate relationship with a family member;
- (2) have the potential for creating an adverse impact on work performance; or
- (3) create either an actual conflict of interest or the appearance of a conflict of interest.

This policy must also be considered when assigning, transferring, or promoting an employee. For the purpose of this policy, immediate family includes: husband, wife, domestic partner, father, mother, father-in-law, mother-in-law, grandfather, grandmother, son, son-in-law, daughter, daughter-in-law, uncle, aunt, nephew, niece, brother, brother-in-law, sister, sister-in-law, step parents, step children, half-siblings, and cousins. This policy also applies to romantic relationships.

Employees who become immediate family members or establish a romantic relationship may continue employment as long as it does not involve conditions (1), (2) or (3) above. If one of the conditions outlined should occur, attempts will be made to find a suitable position within the District to which one of the employees will transfer. If accommodations of this nature are not feasible, the employees will be permitted to determine which of them will resign. If the employees cannot make a decision within three business days, the District will decide which employee will remain employed and which employee will be terminated.

5.136.6 Romantic or Sexual Relationships

Consenting 'romantic' or sexual relationships between a supervisor and subordinate or co-workers may at some point lead to unhappy complications and significant difficulties for all concerned – the employee(s),

the supervisor and the District. Any such relationship may, therefore, be contrary to the best interests of the District.

Accordingly, the District strongly discourages such relationships and any conduct (such as: dating between a supervisor and a subordinate or co-workers) that is designed or may reasonably be expected to lead to the formation of a 'romantic' or sexual relationship.

By its discouragement of romantic and sexual relationships, the District does not intend to inhibit the social interaction (such as lunches or dinners or attendance at entertainment events) that are or should be an important part or extension of the working environment; and the policy articulated above is not to be relied upon as justification or excuse for a supervisor's refusal to engage in such social interaction with employees.

If a romantic or sexual relationship should develop, it shall be the responsibility and mandatory obligation of the supervisor and/or employee to promptly disclose the existence of the relationship to Human Resources.

The District recognizes the potential ambiguity of and the variety of meanings that can be given to the term 'romantic'. It is strongly encouraged, however, that either or both of the parties to such a relationship will appreciate the meaning of the term as it applies to either or both of them and will act in a manner consistent with this policy.

The supervisor shall inform the District's Executive Director, Human Resources, and others with a need-to-know of the existence of the relationship, including in all cases the person responsible for the employee's work assignments.

Upon being informed or learning of the existence of such a relationship, the District may take all steps that it deems appropriate. At a minimum, the employee and supervisor will not thereafter be permitted to work together on the same matters if a transfer is available (including matters pending at the time disclosure of the relationship is made), and the supervisor must withdraw from participations in activities or decisions (including, but not limited to, hiring, evaluations, promotions, compensation, work assignments and discipline) that may reward or disadvantage any employee with whom the supervisor has or has had such a relationship.

In addition, and in order for the District to deal effectively with any potentially adverse consequences such a relationship may have for the working environment, any person who believes that he or she has been adversely affected by such a relationship, notwithstanding its disclosure, is encouraged to make his or her views about the matter known to the Executive Director or Human Resources.

This policy shall apply without regard to gender and without regard to the sexual orientation of the participants in a relationship of the kind described.

5.146.7 Violence in the Workplace

The District strongly believes that all employees should be treated with dignity and respect. Acts of violence will not be tolerated. Calling 911 should not be delayed for misconduct involving bodily harm or the imminent threat of bodily harm to a victim. Any instances of violence or threats of violence must be reported to the employee's supervisor and/or Human Resources. All complaints will be fully investigated. The District will promptly respond to any incident or suggestion of violence. Violation of this policy will result in disciplinary action, up to and including immediate discharge.

5.156.8 Accidents and Emergencies

Maintaining a safe work environment requires the continuous cooperation of all employees. The District strongly encourages employees to communicate with fellow employees and their supervisor regarding

safety issues. All employees will be provided care, first-aid and emergency service, as required, for injuries or illnesses while on District premises. Employees should contact their supervisor, the nearest supervisor, and/or call 911 in the event of an accident or emergency. Employees should call 911 first in the event of an accident or emergency involving a member of the general public, so as not to delay the involvement of a trained first responder.

If an employee is injured on the job, the District provides coverage and protection in accordance with the Workers' Compensation Law. When an injury is sustained while at work, it must be reported immediately to the employee's supervisor, who in turn will notify Human Resources and/or Safety Training & Compliance Officer. See Safety and Compliance Officer for further information, and also refer to [4.11.A Reporting an Accident](#) for reference to policy.

Failure to report accidents is a serious matter as it may preclude an employee's coverage under Workers' Compensation Insurance.

5.166.9 Open Door Policy

The District promotes an atmosphere whereby employees can talk freely with members of the management staff. Employees are encouraged to openly discuss with their supervisor any problems so appropriate action may be taken. If the supervisor cannot be of assistance, Human Resources, the employee's Division Director and/or the Executive Director are available for consultation and guidance. The District is interested in all of our employees' success and job satisfaction with the District. The District welcomes the opportunity to help employees whenever feasible.

5.176.10 Solicitations, Distributions, and Use of Bulletin Boards

Employees may not solicit any other employee during working time, nor may employees distribute literature in work areas at any time without prior consent. Persons not employed by the District may not solicit the District employees during the employees' active work time for any purposes on the District premises.

5.17.A6.10.A Bulletin Boards

Bulletin boards maintained by the District are to be used only for posting or distributing material of the following nature:

- Notices containing matters directly concerning District business;
- Announcements of a business nature which are equally applicable and of interest to employees, as determined in the sole discretion of the District.

All posted material must have authorization from the supervisor. All employees are expected to check these bulletin boards periodically for new and/or updated information and to follow the rules set forth in all posted notices.

5.186.11 E-mail and Internet Policy

Every District employee is responsible for using the electronic mail, including texting, instant messaging, and other means of electronic communications (collectively referred to herein as "E-mail") system properly and in accordance with this policy. Any questions about this policy should be addressed to Information Services.

The E-mail system is the property of the District. It has been provided by the District for use in conducting company business. All communications and information transmitted by, received from, or stored in this

system are company records and property of the District. The E-mail system is to be used for District purposes only. Use of the E-mail system for personal purposes during the employees' active work time is prohibited. Employees have no right of personal privacy in any matter stored in, created, received, or sent over the District E-mail system.

The District as owner of the E-mail system, reserves and may exercise the right to monitor, access, retrieve, and delete (subject to public records laws) any matter stored in, created, received, or sent over the E-mail system, for any reason and without prior notice or the permission of any employee. By using these systems, employees waive any and all privileges with respect to any and all information, communications, files and records transmitted through and residing on these systems.

Even if employees use a password to access the E-mail system, the confidentiality of any message stored in, created, received, or sent from the District's E-mail system still cannot be assured. Use of passwords or other security measures does not in any way diminish the District's rights to access materials on its system, or create any privacy rights of employees in the messages and files on the system. Any password used by employees must be disclosed to the District as E-mail files may need to be accessed by the District in an employee's absence.

Employees should be aware that deletion of any E-mail messages or files will not truly eliminate the messages from the system, and may violate public records laws. All E-mail messages are stored on a central back-up system in the normal course of data management.

Even though the District has the right to retrieve and read any E-mail messages, those messages should still be treated as confidential by other employees and accessed only by the intended recipient. Employees are not authorized to retrieve or read any E-mail messages that are not sent to them. Any exception to this policy must receive the prior approval of the District management.

The District's policies against sexual or other harassment apply fully to the E-mail system, and any violation of those policies is grounds for discipline, including termination. Therefore, no E-mail messages should be created, sent, or solicited if they contain intimidating, hostile, or offensive material concerning race, color, religion, sex, age, national origin, disability or any other classification protected by law, or contain material in violation of the District's personnel procedures.

The E-mail system may not be used to solicit for religious or political causes, commercial enterprises, outside organizations, or other non-job-related solicitations.

The E-mail system shall not be used to send (upload) or receive (download) copyrighted materials, trade secrets, proprietary financial information, confidential public records, or similar materials without prior authorization from the District management. Employees, if uncertain about whether certain information is copyrighted, proprietary, confidential public records, or otherwise inappropriate for transfer, should resolve all doubts in favor of not transferring the information and consult District management.

Since District E-mails and computer files are public records, they should not be deleted or destroyed without authorization from employee's supervisor that said E-mails and/or computer files are backed up and preserved elsewhere by the District as public records. These deletions will help keep the system running smoothly and effectively, as well as minimize maintenance costs.

Any employee who discovers misuse of the E-mail system should immediately contact his/her supervisor. Violations of the District E-mail policy may result in disciplinary action, including termination. The District reserves the right to modify this E-mail policy at any time, with or without notice.

5.18.A6.11.A Internet Use Policy

Employee's use of the Internet is governed by this policy and the E-mail Policy

Certain employees may be provided access to the Internet to assist them in performing their jobs. The Internet can be a valuable source of information and research. In addition, E-mail can provide excellent means of communicating with other employees, our customers and clients, outside vendors, and other businesses. Use of the Internet, however, must be tempered with common sense and good judgment.

If an employee abuses their privilege to use the Internet, it will be taken away from that employee. In addition, that employee may be subject to disciplinary action, including possible termination, and civil and criminal liability.

The District is not responsible for material viewed or downloaded by users from the Internet. The Internet is a worldwide network of computers that contains more than a trillion pages of information. Users are cautioned that many of these pages include offensive, sexually explicit, and inappropriate material. In general, it is difficult to avoid at least some contact with this material while using the Internet. Even innocuous search requests may lead to sites with highly offensive content. In addition, having an E-mail address on the Internet may lead to receipt of unsolicited E-mail containing offensive content. Users accessing the Internet do so at their own risk.

Employees shall have no expectation of privacy in using the Internet, and the District has the right to monitor computer usage and block inappropriate content. This Internet policy may be amended or revised from time to time as the need arises. Violations of this policy will be taken seriously and may result in disciplinary action, including possible termination, and civil and criminal liability.

Use of the Internet via the District's computer system constitutes consent by the user to all of the terms and conditions of this policy.

5.19.12 Employer Information and Property

Protection of District business information, property and all other District assets are vital to the interests and success of the District. No District related information or property, including without limitation, documents, files, records, computer files, equipment, office supplies or similar materials (except in the ordinary course of performing duties on behalf of the District) may, therefore, be removed from the District's premises.

In addition, when an employee leaves the District, the employee must return to the District all of the District's related information and property that the employee has in employee's possession, including without limitation, documents, files, records, manuals, information stored on a personal computer or on a computer disc, supplies, and equipment or office supplies.

Violation of this policy is a serious offense and will result in appropriate disciplinary action, up to and including discharge.

5.19.A6.12.A Cell Phones

The District supplies a cell phone to numerous employees, because a District issued cell phone is a critical tool in today's workplace. Employees are encouraged to exercise caution to use their cell phone, like all tools, appropriately. To place a call or receive a call, you MUST pull off the road (when you safely can). Text messaging and similar acts of intricately engaging a cell phone (e.g., posting to social media) while driving is dangerous and strictly prohibited. The employee's first responsibility is to drive safely. Special care should be taken in adverse driving conditions including hazardous weather and heavy traffic situations. When an employee stops to make a call they should take extra precaution, as parked callers may become victims of accidents or theft. District issued phones are the property of the District and should only be used for District business.

5.19.B6.12.B Voice Mail Policy

The Voice Mail System is the property of the District. It has been provided by the District for use in conducting company business. Employees should use a professional and courteous greeting on their Voice Mail boxes so as to properly represent the District to outside callers.

All District phones should have the appropriate message: “You have reached “Your Name” ‘your job title’ with the Loxahatchee River District. I am unable to answer your call at this time, but if you leave your name and number I will get back to you as soon possible. Thank you!”

5.19.C6.12.C Use of District Equipment

The District provides supplies, uniforms, equipment, automobiles and materials necessary for each employee to perform their job. These items are to be used solely for District’s purposes. Employees are expected to exercise care in the use of District equipment and property and use such property only for authorized purposes. Loss, damages or theft of District property should be reported at once. Negligence in the care and use of District property or theft may be considered grounds for discipline, up to and including termination. Upon termination of employment, the employee must return all District property, uniforms, equipment, work product and documents in employee’s possession or control.

5.19.C.1-6.12.C.1 Use of Company Vehicles

Only employees with an unrestricted, current Florida driver’s license may operate the District vehicles or other vehicles used to conduct District business. District vehicles may only be used for authorized District business. Any employee operating a District vehicle must do so in a safe manner.

Any employee operating a District vehicle under the influence of drugs or alcohol or in an unsafe or negligent manner is subject to immediate termination. The District has the right to search any District vehicle at any time. Therefore, employees have no reasonable expectation of privacy with respect to District vehicles.

5.19.C.1.1-6.12.C.1.1 District Vehicle GPS System

District vehicles are also equipped with Fleet Tracking and GPS systems to monitor location, speed, and inertia. The District utilizes this technology for employee safety, coordination efficiency, loss prevention, liability protection, and asset location.

Tampering with any Fleet Tracking or GPS system in a District Vehicle or asset is prohibited and may subject employees to disciplinary action up to and including termination.

A Driver’s Evaluation Form will be used as many times a year as the District deems necessary to ensure that all drivers and potential drivers of District vehicles and equipment possess a valid State of Florida driver’s license applicable to their position; and maintain a driving record which meets or exceeds minimum District driving standards.

- Dismissal, demotion and/or suspension can occur if the employee is found to have an unauthorized person(s) riding in a District vehicle.
- The District mandates employees comply with the State Law regarding the use of Seat Belts when in a District vehicle.
- The District wants the employee to think ‘safety first’, and only use their cell phones when pulled off the road. Text messaging and similar acts of intricately engaging any cell phone

(e.g., posting to social media) while driving is dangerous and strictly prohibited while driving District vehicles.

5.19.C.2-6.12.C.2.Vehicle Repair and Preventative Maintenance

The following procedure will ensure proper documentation and timely repair of District vehicles:

- (1) When the vehicle has a problem, fill out a (work order request form) identifying the problem and forward the request to the Operations Division for a work order to be generated. A work order and purchase order will be issued to correct the problem.
- (2) The work will be scheduled to be completed by the appropriate subcontractor.
- (3) Upon work completion, forward the subcontractor receipt to the Purchasing Agent and the completed work order to Operations.

Preventative maintenance schedules for District vehicles are automatically identified by the computer software program. Work orders generated by the program are forwarded to the appropriate supervisor or employee responsible for the vehicle. The work order will identify the task to be performed. The supervisor, employee and Purchasing Agent may coordinate the work with the appropriate subcontractor to have the task completed.

- (1) Preventative maintenance is identified and completed on the weekly vehicle checklist. Completing this form by recording mileage or hours and documenting all maintenance tasks performed will allow the computer to automatically generate oil change work orders every 3,000 miles or every 40 hours for diesel engines.
- (2) Turn in weekly checklists on the last Monday of each month for timely input into the computer.

5.19.C.3-6.12.C.3.Telephone Use

Because a large percentage of our business is conducted over the phone, it is essential to project a professional telephone manner at all times. Although the District realizes that there are times when an employee may need to use the telephone for personal reasons, it is expected that good judgment will be used in limiting the length and frequency of such calls. Additionally, no long-distance personal calls may be made on District phones.

5.19.C.4-6.12.C.4.Postage Machine

There is restricted use of the District's postage machine. Employees that need postage are required to reimburse the District for any postage resulting from their personal use.

5.19.C.5-6.12.C.5.Mail

Every effort will be made to follow Postal Service Laws regarding personal mail being delivered to the District office. However, employees should endeavor to ensure personal mail is directed to their home or another non-work address.

5.19.D-6.12.D Internal Investigations and Searches

From time to time, the District may conduct internal investigations pertaining to security, auditing or work-related matters. Employees are required to cooperate fully with and assist in these investigations if requested to do so. In turn, the District will make a reasonable effort to conduct workplace monitoring in an ethical and respectful manner. Employees should be mindful that wherever necessary, in the District's discretion, work areas and personal belongings may be subject

to search without notice. Examples include: desks, lockers, file cabinets, handbags and briefcases. Employees should not bring items to work that might cause embarrassment or lead to disciplinary action if discovered.

5.19.E6.12.E Security

The District wishes to maintain a work environment that is free of illegal drugs, controlled substances, alcohol, firearms (in accordance with applicable law), explosives, other improper materials, credit card fraud, and computer piracy. To this end, the District prohibits the possession, transfer, sale, or use of such materials on or off its premises, with the exception of controlled substances in the dosage amount prescribed by a doctor that are medically necessary to dose during employee's time at work that do not impair the employee's job duties. Controlled substances that do not meet the above conditions shall not be brought to work. The District requires the cooperation of all employees in administering this policy.

Desks, lockers, computers, cell phones, lap tops and other storage devices may be provided for the convenience of employees, but remain the sole property of the District. Accordingly, they, as well as any articles found within them, can be inspected by any agent or representative of the District at any time, either with or without prior notice.

The District likewise wishes to discourage theft, fraud or unauthorized possession of the property of employees, the District, visitors, and customers. To facilitate enforcement of this policy, the District or its representative may inspect not only desks, computers, cell phones, lap tops and lockers but also persons entering and/or leaving the premises and any packages or other belongings. Any employee who wishes to avoid inspection of any articles or materials should not bring such items onto the District's premises.

5.19.F6.12.F Smoke Free Workplace

All individuals are prohibited from smoking in any enclosed indoor workplace at the District in accordance with Florida law.

"Simulated Smoking Device" includes, but is not limited to, electronic cigarettes, electronic pipes, or other devices intended to resemble or having the appearance of a cigarette, cigar, pipe or other tobacco product.

"Smoking" means inhaling, exhaling, burning, carrying, or possessing any lighted tobacco product, including cigarettes, cigars, pipe tobacco, simulated smoking devices, and any other lighted tobacco product.

"Tobacco products" include, but are not limited to, cigarettes, cigars, chewing tobacco and pipe smoking.

"Enclosed indoor workplaces" include any place that is predominantly or totally bounded on all sides and above by physical barriers. Predominately generally refers to coverage of more than 50%.

Employees are prohibited from smoking during their active work time regardless of the location. Employees unsure of the designated outdoor location provided for smoking during breaks and non-work time should consult their supervisor.

Employees who witness individuals smoking in an enclosed indoor workplace must request the individual immediately extinguish the smoking device. If the employee is not comfortable confronting another employee or a citizen about the violation, he or she should immediately seek assistance from his or her supervisor or any member of management if the supervisor is unavailable.

To ensure a professional appearance, employees are also prohibited from smoking on District property while on paid time, except in designated areas. Smoking is further prohibited in all District vehicles.

Employees who violate this policy may be subject to disciplinary action up to, and including, immediate termination.

5.19.F.1.6.12.F.1. Quit Smoking Assistance Program

To assist with the Smoke Free Workplace policy, the Loxahatchee River District is willing to support an employee who wants to give up smoking. The program that the District has put together is a one-time offer with reimbursement incentives available for the first 3 months of treatment.

To enter into this program, you will need to:

- (1) Notify Human Resources of your interest.
- (2) Then, whether you choose the nicotine gum or patch, the District will reimburse you 50%, (upon submittal of your receipt).

5.19.G.6.12.G Safety

To assist in providing a safe and healthful work environment for employees, customers, and visitors, the District has established a workplace safety program. The Safety Training & Compliance Officer has responsibility for implementing, administering, monitoring, and evaluating the safety program. Its success depends on the alertness and personal commitment of all.

The District provides information to employees about workplace safety and health issues through regular internal communication channels such as operations meetings, bulletin board postings, memos, or other written communications. A safety team has been established to assist in these activities and to facilitate effective communication between employees and management about workplace safety and health issues.

Employees and supervisors receive periodic workplace safety training. The training covers potential safety and health hazards and safe work practices and procedures to eliminate or minimize hazards. Some of the best safety improvement ideas come from employees. Those with ideas, concerns, or suggestions for improved safety in the workplace are encouraged to raise them with the Safety Training & Compliance Officer, their supervisor or the Division Director. Reports and concerns about workplace safety issues may be made anonymously to the Safety Training & Compliance Officer and/or the Executive Director if the employee wishes. All reports can be made without fear of retaliation.

Each employee is expected to obey safety rules and to exercise caution in all work activities. Employees must immediately report unsafe conditions to the Safety Training & Compliance Officer. Employees who violate safety standards, who cause hazardous or dangerous situations, or who fail to report or, where appropriate, remedy such situations, may be subject to disciplinary action, up to and including termination of employment.

In the case of accidents that result in injury, regardless of how insignificant the injury may appear, employees should immediately notify the Safety Training & Compliance Officer or their supervisor or Division Director. Such reports are necessary to comply with laws and initiate insurance and workers' compensation benefits procedures.

5.19.G.1-6.12.G.1. Safety Shoe Reimbursement

- The shoe must be labeled with ASTM standards confirming safety toe requirements for impact and compression. For the Lab only, a closed toed, leather Deck shoe will also be accepted.
- The shoe must be presented to the Safety Training & Compliance Officer to verify compliance and obtain reimbursement authorization.
- A receipt and reimbursement authorization must be provided to the District Purchasing Agent for the reimbursement of the cost of the shoe up to a maximum limit of \$150.00 per ~~calendar~~-fiscal year. The District does not reimburse tax or freight charges.
- Static Dissipative (SD) footwear must not be worn by any employee working with or in close proximity to electricity.

6.12.G.2. Prescription Safety Glasses Reimbursement

- The prescription safety glasses must be labeled with Z87.1 ANSI standards confirming safety glasses requirements for impact and resistant.
- The prescription safety glasses must be presented to the Safety Training & Compliance Officer to verify compliance and obtain reimbursement authorization.
- A receipt and reimbursement authorization must be provided to the District Purchasing Agent for the reimbursement of the cost of the glasses up to a maximum limit of \$150.00 per fiscal year. The District does not reimburse tax or freight charges.

6.12.G.3. Shot Program

- If an employee has been put at risk or exposed to Hepatitis A or B, or tetanus, the District will pay for your shots. Scheduling of the shots must be done through the District's Safety Officer. In case of follow-up shots are required, the Safety Officer will provide you a reminder.

5.19.H6.12.H Visitors in the Workplace

Only authorized visitors are allowed in District workplaces. Restricting unauthorized visitors helps maintain safety standards, protects against theft, ensures security of equipment, protects confidential information, safeguards employee welfare, and avoids potential distractions and disturbances. All visitors should enter the District at reception areas. Authorized visitors will receive directions or be escorted to their destination. Employees are responsible for the conduct and safety of their visitors.

For additional security, the District's Admin gate will be locked during non-business hours (before 7:30 am and after 5:15 p.m. on weekdays, weekends and holidays). District employees should use their identification badges to obtain access to the District during these times. Safety Cameras have been installed at the two main gates. They record your comings and goings by visually recording your face and license plate.

When an unidentified person is found on District property, the procedure will be to gather a description of the individual(s) and mode of transportation, if applicable. This information is to be called into the Palm Beach County Sheriff's Office (PBSO) via 911 or the North County Dispatch of PBSO at 561-688-3000. If you, the identifying employee, deem the individual(s) as no threat, you are to approach and, so long as the approach does not place you in danger, ask for identification (i.e., driver's license, identification card) and annotate the information on an incident report to be distributed through your chain of supervision. When you approach an unknown individual:

- (1) Maintain a safe distance of at least three steps (10 feet) between yourself and the person you are addressing.
- (2) Be persistent in your questioning.
- (3) Do not be easily dismissed. An intruder may give you a brief explanation and just keep on going. (For example: “Sir, may I help you?” “No thanks, I’m fine.”)

It is important to be alert for the following suspicious behaviors;

- Nervous behavior, evasive attitudes, or undue concern with privacy by guests or visitors.
- Attempts to gain access to restricted areas.
- Individuals taking notes, pictures, or videos of facility.
- Unattended or suspicious vehicles. Abandoned vehicles may be used to hide suspicious or stolen items
- Changes in vehicle patterns. Common vehicles such as mail trucks, delivery trucks, buses, or taxis may be suspicious during certain times of day – for example, a second mail delivery, an idle delivery truck, a bus on a different route, or a taxi circling the building numerous times.

~~5.19.H.1.—~~

~~5.19.H.2.—~~

~~5.19.H.3.~~6.12.H.1. **Children in the Workplace**

Due to the nature of the District’s business and the very real potential for harm, no District employee shall bring their children onsite during or after normal work hours. Any emergency circumstances need prior approval from the Executive Director.

~~5.19.H.4.—~~ **District Family Day’s**

~~At the discretion of the Executive Director an annual District Family day may be held to promote comradery among employees and their families and foster a sense of family pride in the excellent work District staff accomplish on a daily basis.~~

5.19.I Shot Program

~~FL Blue has confirmed that shots for Hepatitis C, A, and B are covered as long as the patient is at risk (i.e. job, age, etc.). The Doctor would need to show medical necessity in order for it to be covered. The employee would have to take a copy of their job description with them to their appointment.~~

~~Scheduling for shots must be done through the District’s Safety Officer in case follow-up shots are required, the Safety Officer will provide you a reminder. You will pay for it and bring in the receipt.~~

~~Palm Beach County Health Unit—Hepatitis:~~

~~For an appointment, please call 561-625-5180~~

~~Hours are: 8 am — noon and then 1:30 pm to 3:15 pm~~

~~Hepatitis shots can also be administered by Jupiter Medical Urgent Care by calling 561-263-7010.~~

~~**5.19.J6.12.I Tetanus Shots: Bring bill to Human Resources and the District will reimburse once every 10 years**~~
Weapons in the Workplace

The District complies with [Florida Statute 790.251](#) in regards to weapons and firearms in the workplace. Employees may not, at any time while on any property owned, leased or controlled by the District, including anywhere that the District's business is conducted, such as consultant's locations, trade shows, restaurants, District event venues, and so forth, possess or use any type of weapon not approved by the Executive Director. Unapproved Weapons include, but are not limited to; guns, swords with blades over twelve inches in length, explosives, and any chemical whose purpose is to cause harm to another person.

Any type of weapon, as defined above must remain locked inside the employee, customer, and/or guest private motor vehicle while on or using District property. Possession of a weapon can be authorized by the District's Executive Director to allow security personnel or a qualified/trained employee to have a weapon on District property, when this possession is deemed acceptable and/or an improvement to the safety and security of District employees. Only the Executive Director, or his or her designee, may authorize the carrying of or use of a weapon on District property.

Employees who violate this policy will be subject to disciplinary actions, up to and including employment termination.

~~**5.19.K6.12.J Hurricane**~~

Hurricanes are an inevitable part of living in Florida. In the event a hurricane or tropical storm is projected to impact the District's service area, employees should consult the [District's Hurricane Plan](#) and be in close contact with their Supervisor. Upon reaching [EMCON](#) (Emergency Operations Condition) 4, i.e., the emergency period is imminent, all non-essential staff will be relieved of duty. Only District personnel shall remain on District property – no family members or pets are allowed to be on District property. Upon reaching EMCON 5, i.e., immediately following the emergency period, all employees are to contact the supervisor as soon as reasonably possible. Upon reporting for regular duty, expectations and assignments will be provided by your Supervisor, Division Director, or the Executive Director.

~~**5.19.L6.12.K Emergency Closings**~~

At times, emergencies such as severe weather, fires, power failures, threats of terrorism, and etc., can disrupt company operations. In extreme cases, these circumstances may require the closing of a work facility. In the event that such an emergency occurs during non-working hours, a supervisor will notify all employees.

In cases where the Executive Director does not authorize an emergency closing, employees who fail to report for work will not be paid for the time off. Employees in essential operations may be asked to work on a day when operations are officially closed. We encourage all employees to report for duty and return to work as soon as possible.

~~5.20-~~~~5.21~~**6.13 Recycling**

The District supports environmental awareness by encouraging recycling and waste management in its business practices and operating procedures. This support includes a commitment to the purchase, use, and disposal of products and materials in a manner that will best utilize natural resources and minimize any negative impact on our environment.

~~5.22-~~~~5.23~~**6.14 Personal Appearance**

Personal appearance contributes to the image that our customers, visitors, co-workers etc. have of us and it is important that our appearance reflects the culture of the District. The District will supply 6 standard uniforms. Please reference the District's Uniform Policy for complete guidance for your appropriate work attire.

~~W-consisting of either short sleeve shirts, long sleeve shirts, shorts and pants, to applicable Divisions, in any combination the employee so chooses, all to be cared for by the employee.~~

~~W~~Without unduly restricting individual tastes, the following personal appearance guidelines should be followed:

- Shoes must provide safe, secure footing, and offer protection against spills and hazards.
- ~~Mustaches and beards must be clean, well-trimmed, and neat. Employees that are respiratory qualified must be able to shave on site to ensure a proper face seal during chlorine cylinder changes or in case of an emergency. It is recommended no mustache or beard for those employees that may have to use a SCBA or respirators.~~
- Perfume, cologne, and aftershave lotion should be used moderately or avoided altogether, as some individuals may be sensitive to strong fragrances.
- Jewelry should not be functionally restrictive, or dangerous to job performance.
- Facial jewelry, such as eyebrow rings, nose rings, lip rings, and tongue studs, are not professionally appropriate and must not be worn during business hours.
- ~~Torso body piercing with visible jewelry that can be seen through or under clothing must not be worn during working hours.~~

~~Also, please reference the District's Uniform Policy for complete guidance for your appropriate work attire.~~

~~5.23.A Casual Days~~

~~The following information is intended to serve as a guide to help define appropriate casual business wear for all employees during designated casual days at the District. Each supervisor will advise you if it is appropriate for your Division to participate.~~

~~Our primary objective is to have employees project a professional image while taking advantage of more casual and relaxed fashions. Casual dress offers a welcome alternative to the formality of typical business attire.~~

~~However, Not~~ all ~~casual~~ clothing is appropriate for the ~~District office~~. This list is not intended to be all-inclusive.

- ~~Examples of inappropriate clothing items that should not be worn on~~ while working at the District
~~casual days:~~

- Jeans that are excessively worn, faded or severely torn
- Sweatpants
- Warm-up or jogging suits and pants
- Short shorts
- Bib overalls
- Spandex or other form fitting pants or shorts
- Spaghetti-strap dresses or shirts, unless worn under a blouse or jacket
- Any offensive messages or images on ~~t-shirts or sweatshirts, etc. clothing~~
- Tank Tops, unless worn under a blouse or jacket
- Halter Tops, unless worn under a blouse or jacket
- tops with bare shoulders, unless worn under a blouse or jacket
- Visible undergarments
- Slippers or flip flops
- Costumes (except for Halloween)

Employees who report to work inappropriately attired will be asked to leave work to change clothes and will be required to use vacation time to do so.

67 TERMINATION OF EMPLOYMENT

6.17.1 Immediate Dismissals/Misconduct

The District maintains employment at-will with each of its employees and may separate employment without notice or cause. Notwithstanding, any employee whose conduct, actions or performance violates or conflicts with the District's policies may be disciplined up to and including being terminated immediately and without warning. You are required to sit down immediately with your Supervisor and Division Director to explain the violation(s) that have occurred. While the District may follow a progressive discipline model, employees may be terminated upon the first offense. The following are some examples of grounds for immediate dismissal of an employee:

- Breach of trust or dishonesty
- Conviction of a drug related felony
- Not reporting when convicted of a felony
- Willful violation of an established policy or rule

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- Falsification of District records
- Gross negligence
- Insubordination
- Violation of the Anti-Harassment and/or Equal Employment Opportunity Policies
- Undue and unauthorized absence from duty during regularly scheduled work hours
- Deliberate non-performance of work
- Larceny or unauthorized possession or use of property belonging to any co-worker, visitor, customer of the District, or the District
- Possession of unauthorized dangerous weapons on District premises (District owned property, buildings or vehicles).
- Unauthorized possession, use of, copying of any records that are the property of the District
- Excessive absenteeism or tardiness
- Marring, defacing or other willful destruction of any supplies, equipment or property of the District or theft of such
- Failure to call or directly contact your supervisor when you will be late or absent from work
- Fighting or serious breach of acceptable behavior
- Violation of the Alcohol or Drug Policy
- Violation of the District's Conflict of Interest/Outside Employment Policy
- Leaving work without authorization during work hours
- Sleeping on duty
- Having unauthorized people riding in a District vehicle
- Falsification of timekeeping records
- Smoking in prohibited areas
- Possession, distribution, sale, transfer, or use of alcohol, controlled substances or illegal drugs in the workplace, while on duty, or while operating employer-owned vehicles or equipment
- Prior use, or threatened to use, or attempted to use political influence in securing promotion, leave of absence, transfer, classification change, pay increase, or character of work. Or use of such influence to by-pass District chain of command
- Either during or after hours wearing of your District uniform in an inappropriate place of business
- Unsatisfactory performance
- Unsatisfactory conduct including profane tirade against your supervisor or fellow employee
- Violation of personnel policies
- Unauthorized use of telephones, cell phones, E-mail system, Internet system or other employer-owned equipment
- Sexual or other unlawful or unwelcomed harassment
- Violation of safety or health rules
- Violation of the District's Security Policy
- Illegal/Unethical Behavior on or off District property
- Disrespectful conduct towards a Supervisor, Division Director, or Executive Director
- Threatening or engaging in violence in the workplace

This list is intended to be representative of the types of activities that may result in immediate termination of employment. It is not exhaustive, and is not intended to be comprehensive and does not change the employment-at-will relationship between the employee and the District.

Gross Misconduct

In the event of dismissal for Gross Misconduct, (Acts of Gross Misconduct are intentional, wanton, willful, deliberate, reckless, or deliberate indifference to an employer's interest, whether on or off District property, whether during or after work hours), all benefits end at the end of the month. COBRA may not be available to anyone dismissed from the District for Gross Misconduct.

6.27.2 Dismissals Other Than Immediate Termination

All employees are expected to meet the District's standards of work performance. Work performance encompasses many factors, including attendance, punctuality, personal conduct, job proficiency and general compliance with the District's policies and procedures.

If an employee does not meet these standards, the District may, under appropriate circumstances, take corrective action other than immediate dismissal.

The intent of corrective action is to formally document problems while providing the employee with a reasonable time within which to improve performance. The process is designed to encourage development by providing employees with guidance in areas that need improvement, such as poor work performance, attendance problems, personal conduct, general compliance with the District's policies and procedures and/or other disciplinary problems.

6.37.3 Problem Resolution

The District is committed to providing a collaborative and constructive workplace for its employees. Part of this commitment is encouraging an open and frank atmosphere in which any problem, complaint, suggestion, or question receives a timely response from the District supervisors and management. The District strives to ensure fair and honest treatment of all employees. Supervisors, Division Directors, and employees are expected to treat each other with mutual respect. Employees are encouraged to offer positive and constructive criticism.

If employees disagree with established rules of conduct, policies, or practices, they can express their concern through the problem resolution procedure. No employee will be penalized, formally or informally, for voicing a complaint with the District in a reasonable, business-like manner, or for using the problem resolution procedure.

If a situation occurs where employees believe that a condition of employment or a decision affecting them is unjust or inequitable, they are encouraged to make use of the following Problem Resolution Procedure:

- (1) Employee presents problem to immediate supervisor within 30 calendar days after incident occurs. If supervisor is unavailable or employee believes it would be inappropriate to contact that person, employee may present problem to Human Resources or Executive Director.
- (2) Supervisor responds to problem during discussion within 30 calendar days, after consulting with appropriate management, when necessary. Supervisor documents discussion and decision.
- (3) If necessary, employee presents problem to Executive Director in writing.
- (4) Executive Director reviews and considers problem. Executive Director informs employee of decision within 30 calendar days, and forwards copy of written response to Human Resources for employee's file. The Executive Director has final authority to make adjustments deemed appropriate to resolve the problem.

The employees may discontinue the procedure at any step.

Not every problem can be resolved to everyone's total satisfaction, but only through understanding and discussion of mutual perspectives can employees and management develop confidence in each other. This confidence is important to the operation of an efficient and harmonious work environment, and helps to ensure job performance, safety, security and satisfaction.

6.47.4 Written Warnings

When an employee's workplace performance, including attendance, punctuality, personal conduct, job proficiency and general compliance with the District's policies and procedures, is deemed unsatisfactory, the employee's supervisor or Division Director may discuss the problem and present a written warning to the employee. The warning should clearly identify the problem and outline a course of corrective action within a specific time frame.

The employee should clearly understand both the corrective action and the consequence (i.e., up to and including termination) if the problem is not corrected or reoccurs. The employee should acknowledge receipt of the warning and include any additional comments of his/her own before signing it. A record of the discussion and the employee's comments should be placed in the employee file by Human Resources.

Employees who have had formal written warnings are not eligible for salary increases, bonus awards, promotions or transfers during the warning period. Nothing in this policy requires the District to utilize a written warning or other lesser levels of discipline before initiating a termination.

6.57.5 Progressive Discipline

The purpose of this policy is to state the District's position on administering equitable and consistent discipline for unsatisfactory conduct in the workplace. The best disciplinary measure comes from good leadership and fair supervision at all employment levels.

The District's best interest lies in ensuring fair treatment of all employees and in making certain that disciplinary actions are prompt, uniform, and impartial. The major purpose of any disciplinary action is to correct a problem, prevent recurrence, and prepare the employee for competent, safe, secure and satisfactory service in the future.

Although employment with the District is based on mutual consent and both the employee and the District have the right to terminate employment 'at will', with or without cause or advance notice, the District may use progressive discipline in certain circumstances as determined by the District.

Disciplinary action may call for any of four steps – verbal warning, written warning, suspension with or without pay, or termination of employment – depending on the severity of the problem and the number of occurrences. There may be circumstances when one or more steps are bypassed.

Progressive discipline means that, with respect to certain disciplinary problems, these steps may be followed in the District's sole discretion:

- (1) Verbal Warning- Supervisor verbally counsels an employee about an area of concern, and a written record is placed in the employee's file for reference
- (2) Written Warning- Supervisor conducts written warning for employee's behavior that has been considered serious or where verbal warnings have not changed unacceptable behavior. Written warnings are placed in the employee's file
- (3) Performance Improvement plan- Supervisor determines that employee has demonstrated the inability to perform assigned work responsibilities efficiently or a disciplinary situation has not been readily resolved. The Supervisor will set a predetermined amount of time, not to exceed 180

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days, the employee will be in a Performance Improvement plan. Within this time period, the supervisor will conduct informal and/or formal meetings with the employee to discuss relative performance, and employee must demonstrate a willingness and ability to meet and maintain the conduct/work outlined by the supervisor. At the End of the performance improvement period the supervisor will formally meet with the employee and either close the improvement plan or if established goals are not met employee will be terminated from the District. The improvement period does not alter the at-will nature of employment.

(4) Suspension with or without pay

(5) Termination

The District recognizes that there are certain types of employee problems that are serious enough to justify either a suspension, or, in other situations, termination of employment, without going through any progressive discipline steps.

If more than 1 year has passed since the last disciplinary action, the process will normally start over (if used).

While it is impossible to list every type of behavior that may be deemed a serious offense, the Immediate Dismissal/Misconduct policy includes examples of problems that may result in immediate suspension or termination of employment.

By using progressive discipline in certain circumstances, the District strives to have most employee problems corrected at an early stage, benefiting both the employee and the District.

Suspensions:

Suspensions will fall under two categories 1. As a punishment for violating a work rule; and 2. Time off while an investigation is conducted on al alleged serious violation of company policy. An un-paid suspension will be for violating a work rule where as a paid suspension will be during an on-going investigation period. Suspensions would generally range from 1 to 3 days depending on the severity but may not be limited to 1 to 3 days at the discretion of management.

6-67.6 Resignation

When an employee decides to leave for any reason, the District would like the opportunity to discuss the resignation before final action is taken. The District may find during this conversation that another alternative may be better. If, however, after full consideration the employee decides to leave, it is requested that the employee provide the District with a written two (2) week advance notice period. Vacation days or sick days may not be included in the two (2) week notice period.

The District will only compensate employees for earned unused vacation and sick time leave (when applicable) when the employee works throughout the notice period, and is not terminated for gross misconduct or cause. If the employee is terminated for gross misconduct or cause, earned unused vacation and sick time will be forfeited. If the employee's supervisor or District management determines it is better for the employee to leave prior to the end of the employee's two (2) week notice, the employee may be paid for the remainder of that period and may be compensated for unused vacation and sick time according to policy.

6.77.7 Dismissals

Every District employee has the status of ‘employee-at-will’, meaning that no one has a contractual right, express or implied, to remain in the District employ. The District may terminate an employee’s employment, or an employee may terminate his/her employment, with or without cause, and with or without notice, at any time for any reason. No supervisor or other representative of the District (except the Executive Director) has the authority to enter into any agreement for employment for any specified period of time, or to make any agreement contrary to the above.

6.87.8 Employment Termination

Termination of employment is an inevitable part of personnel activity within any organization, and many of the reasons for termination are routine. Below are examples of some of the most common circumstances under which employment is terminated:

- (1) Resignation – voluntary employment termination initiated by an employee. Any employee wishing to leave the District in good standing shall file with his/her Division Director at least two (2) weeks before leaving, a written resignation stating the date the resignation shall become effective and the reason for leaving.
- (2) Discharge – involuntary employment termination initiated by the organization.

For example:

- Employee convicted of a felony that makes the employee unfit for the position.
 - Employee failure to pass a random/suspicious drug test including DOT and/or failure to successfully complete the substance abuse program and follow up testing.
- (3) Layoff – involuntary employment termination initiated by the organization for non-disciplinary reasons.
 - (4) Retirement – voluntary employment termination initiated by the employee meeting age and length of service.

Since employment with the District is based on mutual consent, both the employee and the District have the right to terminate employment at will, with or without cause, at any time. Employees will receive their final pay in accordance with applicable state law.

Employee benefits will be affected by employment termination in the following manner. All accrued, vested benefits that are due and payable at termination will be paid. Unauthorized absence from work for a period of three (3) working days may be considered by the supervisor as a voluntary resignation by the employee. Division Directors shall forward all notices of resignation to the Executive Director immediately upon receipt.

6.97.9 Post Resignation/Termination Procedures

6.9.A7.9.A Exit Interview

The District will generally schedule an exit interviews at the time of employment termination. The exit interview will afford an opportunity to discuss such issues as employee benefits, conversion privileges, repayment of outstanding debts to the District, or return of the District-owned property. Suggestions, complaints, and questions can also be voiced by the employee. Human Resources is

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responsible for scheduling an exit interview with a terminating employee on the employee's last day of employment and for arranging the return of District property including:

- (1) Picture Identification Card
- (2) Office Keys
- (3) Company-issued credit cards
- (4) Company manuals
- (5) Uniforms (Where permitted by applicable laws, the District will withhold from the employee's final paycheck the cost of any items that are not returned when required)
- (6) Any additional Company-owned or issued property

In order to receive a disbursement of any amounts due from the Retirement Plan, the employee is required to complete and sign a distribution form. Specific information will be provided at the exit interview.

Employees may choose the continuation or waiver of comprehensive medical coverage and dental coverage under COBRA. Specific information will be provided at the exit interview.

6.9.B7.9.B Name Clearing Meeting

In the event of an involuntary termination, the employee may be provided reasons for termination. When the document providing reasons for the termination has the effect of stigmatizing the employee's reputation, and where the employee claims that such reasons are untrue, the employee shall be provided notice of the opportunity to request a "Name Clearing Process."

The purpose of a "Name Clearing Process" is to allow the employee an opportunity to tell his or her side of the story and respond to the charges leading to the termination. The Name Clearing Process is not an appeal of the termination or an opportunity to gain reinstatement. At or prior to the meeting, the employee has an opportunity to provide his or her position in writing so that it may be included in the personnel file and made part of the record open to the public under Florida's public records laws. An employee may provide this statement in lieu of or in addition to attending the Name Clearing Process meeting.

To request a "Name Clearing Process", employees must deliver the request to Human Resources in writing within 10 calendar days of the date of their termination. A meeting may be provided by the District within 10 business days of receipt of the employee's request for such a meeting. No such meeting will be held if a written request is not timely delivered by the employee. The employee may provide witness statements at or prior to the meeting. The meeting will be held before the Executive Director, Human Resources, and Division Director of terminated employee.

6.9.C7.9.C Return of Property

Employees are responsible for all the District property, materials, or written information issued to them or in their possession or control. Employees must return all District property immediately upon request or upon termination of employment. Where permitted by applicable laws, the District may withhold from the employee's check or final paycheck(s) the cost of any items that are not returned when required. The District may also take all actions deemed appropriate to recover or protect its property.

6.9.D7.9.D Benefits

Benefits (Life, Medical and Dental) end on the last day of the month in which your last day of employment falls. An employee, unless dismissed for gross misconduct, has the option to convert the individual life insurance, and/or to continue Medical/Dental Benefits in accordance with the Consolidated Omnibus Budget Reconciliation Act (COBRA) regulations.

6.9.E7.9.E Final Paycheck

The final paycheck(s) can be mailed during the next normal pay period or may be available at the exit interview.

6.9.F7.9.F Retirement Plan

If an employee is in the retirement plan, information regarding this plan or moving money out of this plan will be provided at the exit interview.

6.9.G7.9.G Sick ~~Time Leave~~ upon Resignation

Upon resignation, retirement, permanent disability, or death, employees who have a minimum of three (3) years of continuous full-time employment with the District shall be paid for the total accrued, unused sick time balance as follows:

With 3 – 8 years of service	25% conversion, but not greater than 16 days
With 8 – 15 years of service	35% conversion, but not greater than 40 days
With 15 or more years of service	50% conversion, but not greater than 75 days

6.107.10 COBRA

COBRA is a continuation of the District's Health and Dental insurances offered to Full Time Employees that have been employed with the District for more than 60 days. Former District Employee's will have to pay for the coverage of COBRA, and the user will also be charged a 2% handling fee. Normal COBRA benefits are extended for 18 months.

6.117.11 Death

In the event of the death of an employee, the last date of employment shall be the date of death. Any wages or travel expenses due through the date of death shall be payable to the wife or husband of the employee. If there is no spouse, then such amounts are paid to the child or children, provided the child or children are over the age of 18 years. If there is no child or children, then such amounts are payable to the father or mother. If there is no father or mother, such amounts shall be payable to the estate of the employee. For purposes of calculating the payment of wages due, the District shall also make payment on any accrued and unused vacation and sick ~~timeleave~~ in accordance with those policies in effect on the date of death.

78 Recent Policy Updates

2017

- [1.9 Acceptance of Gifts](#) updated 11/16/2017
- [1.9.A Reporting of Gifts](#) updated 11/16/2017
- [2.8.G Elected/Appointed Officers – Governing Board Members](#) added 11/16/2017
- [5.1 Governing Board Member Benefits – Overview](#) added 11/16/2017
- [5.3.A District Health Insurance](#) updated 11/16/2017
- [5.4 Dental Insurance](#) updated 11/16/2017
- [1.6.E Anti-Harassment Training](#) added 10/01/2017
- [3.7 On Call Policy](#) updated 10/01/2017
- [3.8 Night Shift Pay Differential](#) added 10/01/2017
- [4.2.A Maximum Sick Accrual](#) added 10/01/2017
- [4.2.B Annual Unused Sick Bonus](#) added 10/01/2017
- [4.2.C Sick Payout Conversion](#) updated 10/01/2017

2016

- [6.20.A Safety shoe Reimbursement](#) updated 10/01/2016
- [1.2 Equal Employment Opportunity Policy Statement](#) updated 08/25/2016
- [1.3 Non Discrimination and Anti Harassment](#) updated 08/25/2016
- [1.5 Genetic Information Nondiscrimination Act of 2008](#) added 08/25/2016
- [1.12 Whistleblower Policy](#) updated 08/25/2016
- [2.8.D Regular Full-Time](#) updated 08/25/2016
- [2.8.E Regular Part-Time](#) updated 08/25/2016
- [2.8.F Temporary/Seasonal Employees](#) updated 08/25/2016
- [2.11 Performance Evaluation](#) updated 08/25/2016
- [3.2 Work Schedules](#) updated 08/25/2016
- [3.4 Meal Periods](#) updated 08/25/2016
- [3.5 Breaks](#) added 08/25/2016
- [3.6 Overtime](#) updated 08/25/2016
- [3.7 Clarification of On Call](#) updated 08/25/2016
- [3.9.E.Reinstated Employees](#) updated 08/25/2016
- [3.13 Improper Deduction](#) updated 08/25/2016
- [4.7.A Jury Duty Time Off](#) added 08/25/2016

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• 4.9. Military Leave	updated	08/25/2016
• 4.10 FMLA	updated	08/25/2016
• 4.11.A Reporting an Accident	added	08/25/2016
• 4.14 Domestic Violence Leave	added	08/25/2016
• 6.3.A Types of Absence	updated	08/25/2016
• 6.16.B GPS Policy	added	08/25/2016
• 6.19 Smoking Policy	updated	08/25/2016
• 6.22 Children in the Workplace	updated	08/25/2016
• 7.8.B Name Clearing Meeting	added	08/25/2016
• 7.10 Death	added	08/25/2016

2015

• 1.5. Conflict of Interest and Outside Employment Statement	updated 2/16/15
• 1.7.A. Reporting of Gifts	updated 2/16/15
• Full-Time	updated 2/16/15
• 2.7. Immigration Law Compliance	updated 2/16/15
• 3.3. Payment of Salary	updated 2/16/15
• 4. Overtime Pay	updated 2/16/15
• 3.5. Time Records	updated 2/16/15
• 3.12. Business Travel Expenses	updated 2/16/15
• 4.1. Vacation	updated 7/1/15
• 4.3. Bereavement Leave	updated 2/16/15
• 4.7.D. Intermittent or Reduced Work Schedule Leave	updated 2/16/15
• 5.3.A. Affordable Care Act-(ACA)	added 1/28/15
• 6.12.A. Use of Company Vehicles	updated 1/28/15
• 6.20. Shot Program	updated 4/15/15

89 Forms

HR Forms:

[Personnel Data Change](#)

[FMLA Eligibility & Rights](#)

[Employee Benefit Highlight Book](#)

[Emergency Contact Form](#)

[Harassment Complaint Form](#)

Payroll Forms:

[Direct Deposit Authorization form](#)

[2017 W-4](#)

[Education Reimbursement forms](#)

[Paycheck Codes](#)

Safety:

[Accident Report Form](#)

[First Report of Injury for WC-DWC-1](#)

910Links to additional District Policy

[Uniform Policy](#)

[District GPS Policy](#)

[Tuition Reimbursement Guidelines](#)

[Security Policy](#)

[District Vehicle Accident Policy](#)

[DOT Drug Test Policy](#)

[Drug Free Workplace](#)

Loxahatchee River District

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D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: GOVERNING BOARD
FROM: D. ALBREY ARRINGTON, Ph.D. 
DATE: JUNE 10, 2019
SUBJECT: IMPERIAL WOODS COST SHARE AGREEMENT AMENDMENT

As part of the Imperial Woods neighborhood sewerage project, LRD will mill and overlay the private roads within Imperial Woods. Imperial Woods Homeowners Association agreed to pay the full cost of this roadway work. In February 2019 the LRD Governing Board authorized me to negotiate and execute a Cost Sharing Agreement with Imperial Woods Homeowners Association, Inc. for reimbursement of Roadway costs. The cost sharing agreement was drafted, reviewed by legal counsel, and executed by both parties on April 18, 2019.

The executed agreement stipulates Imperial Woods HOA assigns its claim and lien rights for the recovery of any unpaid roadway costs to LRD, which was provided for in paragraph 9 of the agreement:

9. IMPERIAL WOODS is governed by its Declaration of Maintenance Covenants and Restrictions, recorded in ... the Public Records of Palm Beach County, Florida (collectively referred to as the "Declaration"). The Declaration Article VI, paragraph G. provides in the last sentence thereof: *"The Association, acting through its Board of Directors, shall have the right to assign its claim and lien rights for the recovery of any unpaid assessments to the Developer or to any Dwelling Unit Owner or group of Dwelling Unit Owners, or to any third party."* IMPERIAL WOODS hereby assigns its claim and lien rights for the recovery of any unpaid invoices to the DISTRICT. In the event of a default by IMPERIAL WOODS as to monies due under this Agreement to the DISTRICT, and said default remains for thirty (30) days after the DISTRICT's written notice of default to IMPERIAL WOODS, the DISTRICT has the legal right, but not the obligation, to exercise the claim and lien rights of IMPERIAL WOODS for collection of the unpaid monies due from the Dwelling Unit Owners.

This provision allows LRD to recover roadway costs from the residents should the Imperial Woods HOA be found in default. As Imperial Woods was working to obtain financing for their roadway costs, they recognized that the cost share agreement did not provide for reassignment of their claim and lien rights back to Imperial Woods HOA upon satisfaction of their roadway costs.

Thus, Imperial Woods HOA legal counsel drafted an amendment to our existing cost sharing agreement. Mr. Shenkman reviewed the draft agreement, provided revisions, and supports the Imperial Woods Cost Sharing Agreement Amendment as presented (see attached).

I fully support the proposed amendment – there is no compelling reason for LRD to hold Imperial Woods HOA claim and lien rights once they have fully paid their roadway costs. Therefore, I offer the following motion for your consideration:

"THAT THE DISTRICT GOVERNING BOARD authorize the Executive Director to immediately execute the attached Amendment to Cost Sharing Agreement with Imperial Woods Homeowners Association, Inc., and execute the Assignment (Exhibit A) upon complete payment of roadway improvement costs."

Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

James D. Snyder
Board Member

AMENDMENT TO COST SHARING AGREEMENT

This amendment ("Amendment") to the Cost Sharing Agreement dated April 18, 2019 by and between the Loxahatchee River Environmental Control District, an Agency of the State of Florida ("DISTRICT") and Imperial Woods Homeowners Association, Inc., a Florida not for profit corporation ("IMPERIAL WOODS") is made on the ____ day of _____, 2019.

WHEREAS, in Paragraph 9 of the Cost Sharing Agreement, IMPERIAL WOODS unconditionally assigned its claim and lien rights for the recovery of any unpaid assessments and invoices to the DISTRICT; and

WHEREAS, after IMPERIAL WOODS satisfies in full all of its obligations under the Cost Sharing Agreement with respect to payment for the roadway improvement portion of the Project (as defined in the Cost Sharing Agreement) the parties agree such claim and lien rights should be re-assigned by the DISTRICT to IMPERIAL WOODS.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each party, the parties, intending to be legally bound, agree as follows:

1. The foregoing recitals are true and correct in all respects and are hereby incorporated by this reference in the Agreement.

2. Upon IMPERIAL WOODS satisfying in full all of its obligations under the Cost Sharing Agreement, the District shall unconditionally assign to IMPERIAL WOODS the claim and lien rights assigned by IMPERIAL WOODS to the DISTRICT in paragraph 9 of the Cost Sharing Agreement. The assignment shall be accomplished using the form attached hereto as Exhibit A.

3. This Amendment to the Cost Sharing Agreement shall be recorded by the DISTRICT in the Public Records of Palm Beach County, Florida.

4. All other terms, conditions, and other provisions of the Cost Sharing Agreement not specifically referenced in this Amendment remain in full force and effect and are not affected by this Amendment.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates set forth below.

Loxahatchee River Environmental Control District

By: _____

D. Albrey Arrington, Ph.D.

Its: Executive Director

Dated: _____, 2019.

STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this ____ day of _____, 2019 by D. Albrey Arrington, Ph.D., as Executive Director of the Loxahatchee River Environmental Control District, who [] is personally known or [] has produced a driver's license as identification.

Notary Public

Imperial Woods Homeowners Association, Inc.

By: _____

Debbie Sobel

Its: President

Dated: _____, 2019.

The foregoing instrument was acknowledged before me this ____ day of _____, 2019 by Debbie Sobel, as President of the Imperial Woods Homeowners Association, Inc., who [] is personally known or [] has produced a driver's license as identification.

Notary Public

ASSIGNMENT

This Assignment is made on the ____ day of _____, 2019 by and between Loxahatchee River Environmental Control District, an Agency of the State of Florida ("DISTRICT") and Imperial Woods Homeowners Association, Inc., a Florida not for profit corporation ("IMPERIAL WOODS").

Witnesseth, that DISTRICT, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, hereby assigns, conveys, and transfers forever to IMPERIAL WOODS any and all of DISTRICT'S right, title and interest in the following:

the claim and lien rights for the recovery of any unpaid assessments and invoices assigned by IMPERIAL WOODS to the DISTRICT in paragraph 9 of the Cost Sharing Agreement between the parties recorded in Official Records Book 30558, Page 988 of the Public Records of Palm Beach County, Florida.

DISTRICT covenants to IMPERIAL WOODS that DISTRICT is the lawful owner of the property described herein; that DISTRICT has not encumbered the property; and that DISTRICT has the right to assign, convey, and transfer its rights in the property.

Loxahatchee River Environmental Control District

By: _____

D. Albrey Arrington, Ph.D.

Its: Executive Director

Dated: _____, 2019.

STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing instrument was acknowledged before me this ____ day of _____, 2019 by D. Albrey Arrington, Ph.D., as Executive Director of the Loxahatchee River Environmental Control District, who [] is personally known or [] has produced a driver's license as identification.

[Notary Seal]

Notary Public

Loxahatchee River District

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D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: GOVERNING BOARD
FROM: D. ALBREY ARRINGTON, Ph.D. 
DATE: MAY 23, 2019
SUBJECT: INTERLOCAL AGREEMENT WITH SEACOAST UTILITY AUTHORITY

In May 2015 the LRD Governing Board approved an interlocal agreement with Seacoast Utility Authority (Seacoast) that allowed Seacoast to provide wastewater service to 6427 and 6501 Donald Ross Road until LRD has an available sewer line that could serve the property (see attached interlocal agreement dated 22 May 2015).

Recently, the owner of these properties, Guy Divosta, asked if LRD and Seacoast would add four adjacent properties to the interlocal agreement, specifically, 6383 Donald Ross Rd; 6367 Donald Ross Rd; 6349 Donald Ross Rd; 6327 Donald Ross Rd. Based on staff discussions, Seacoast drafted an amendment to the interlocal agreement, LRD staff and legal counsel reviewed the draft interlocal and provided comments. Seacoast incorporated our revisions, and the Seacoast Board approved the interlocal agreement amendment (see attached).

It would be cost prohibitive to extend LRD sewer infrastructure under I-95 and the Turnpike to serve just these 6 properties. These properties could be developed on septic systems. Seacoast has available sewer system nearby that the developer can connect to in a cost-effective manner. The developer prefers to avoid construction of septic systems and would like to connect these properties to a regional sanitary sewer system. It is my recommendation that we revise the interlocal agreement to include these additional four properties so that construction of additional, unnecessary septic systems within our service area is avoided.

Therefore, I offer the following motion for your consideration:

“THAT THE DISTRICT GOVERNING BOARD authorize the Executive Director to execute the First Amendment to Interlocal Agreement Between Loxahatchee River District and Seacoast Utility Authority for Provision of Sewer Service to Parcel 1 of the Palm Beach Country Estates Development.”

If you have any questions, please give me a call so we can discuss.

Upon Recording, Return to:
D. Albrey Arrington, PhD., Executive Director
Loxahatchee River District

FIRST AMENDMENT TO
INTERLOCAL AGREEMENT BETWEEN LOXAHATCHEE RIVER DISTRICT AND
SEACOAST UTILITY AUTHORITY FOR PROVISION OF SEWER SERVICE TO
PARCEL 1 OF THE PALM BEACH COUNTRY ESTATES DEVELOPMENT

This First Amendment ("First Amendment") to the Interlocal Agreement between Loxahatchee River District ("LRD") and Seacoast Utility Authority ("Seacoast") for Provision of Sewer Service to Parcel 1 of the Palm Beach Country Estates Development.

Whereas LRD and Seacoast entered into the Interlocal Agreement Between Loxahatchee River District and Seacoast Utility Authority for the Provision of Sewer Service to Parcel 1 of the Palm Beach Country Estates Development dated May 22, 2015, recorded May 26, 2015, in Official Record Book 27555, Page 944, of the Public Records of Palm Beach County, FL ("Agreement") ; and

Whereas LRD and Seacoast now wish to amend the Agreement as provided herein, such amendment having an effective date of the day on which the last party executes this Agreement ("Effective Date");

NOW THEREFORE in consideration of the mutual covenants and conditions hereinafter set forth the parties do hereby agree as follows:

1. The Third WHEREAS clause and paragraph 2 of the Agreement are hereby amended to provide for the following:

The Properties described in Exhibits C, D, E and F are hereby added to the group of properties (defined in the Agreement as "Country Estates Parcel 1") for which LRD gives Seacoast its consent to provide sewer service, all subject to, and in accordance with, all terms and conditions contained in the Agreement. For avoidance of doubt, this First Amendment merely adds additional properties to the properties covered by the Agreement and makes no other substantive change. In the event of a conflict between the Agreement and this First Amendment, this First Amendment shall govern, and the terms of the Agreement shall be interpreted in light of this First Amendment.

2. Exhibits C, D, E, and F attached hereto are hereby appended to and incorporated into the Agreement as Exhibit C, D, E, and F, respectively.
3. Except as provided herein, all other terms of the Agreement remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this instrument this 22nd day of May, 2019.

AS TO LOXAHATCHEE RIVER DISTRICT:

ATTEST:

LOXAHATCHEE RIVER ENVIRONMENTAL
CONTROL DISTRICT

By: _____

By: _____
Albrey Arrington, PhD., Executive Director

(SEAL)

AS TO SEACOAST UTILITY AUTHORITY:

ATTEST:

SEACOAST UTILITY AUTHORITY

By: Jessica Moore
Jessica Moore, Authority Clerk

By: Joseph Lo Bello
Joseph Lo Bello, Member

STATE OF FLORIDA

COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me this ____ day of _____, 2019, by D. Albrey Arrington, PhD., Executive Director, personally known to me or who produced a Florida Drivers License as identification.

Notary Public

(NOTARY SEAL)

STATE OF FLORIDA

“EXHIBIT “A”

Property Control Number: 00-42-41-22-00-000-8210

Parcel Z246 West, being a parcel of land in Section 22, Township 41 South, Range 42 East, in Palm Beach County, Florida, and being more particularly described as follows: The East 244 feet of a certain part of the South 300 feet of said Section 22 with the East line of said certain part being at right angles to the South line of said section; and so located that the Northerly projection of said East line intercepts the North line of the South 1250 feet of said section at a point 2720 feet East of the intersection of said North line with the West section line; and with all indicated distances being as measured along lines parallel to the West and South lines of said Section 22; less, however, the South 75 feet thereof for right of way of Donald Ross Road and less I-95 right of way more fully described in Official Record Book 4240; Page 677 of the Public Records of Palm Beach County, Florida.

6501 Donald Ross Road

“EXHIBIT “B”

Property Control Number: 00-42-41-22-00-000-8050

Parcel Z247 A parcel of land in Section 22, Township 41 South, Range 42 East, in Palm Beach County, Florida, and being more particularly described as follows: The East 235.3 feet of a certain part of the South 300 feet of said section 22 with the East line of said certain part being at right angles to the South line of said section; and so located that the Northerly projection of said East line intercepts the North line of the South 1250 feet of said section at a point 2955.3 feet East of the intersection of said North line with the West Section line; and with all indicated distances being as measured along lines parallel to the West and South lines of said Section 22; less however, the South 75 feet thereof for right of way of Donald Ross Road and less the West 30 feet thereof and less the right of way for highway I-95.

6427 Donald Ross Road

EXHIBIT "C"

Property Control Number: 00-42-41-22-00-000-7720

Parcel: West ½ of Z248 lying in Section 22, Township 41 South, Range 42 East, Palm Beach County, Florida.

The West 200 feet of the following described parcel: Being a rectangular parcel of land in said Section 22, the South line thereof, being the West 400 feet of the East 1000.55 feet of that part of the North right of way line of Donald Ross Road lying West of the intersection of said North right of way line with the Westerly right of way line of Sunshine State Parkway, with the North-South dimension of the parcel described being 225 feet.

Less the following described parcel of land:

A portion of Section 22, Township 41 South, Range 42 East being described as follows:

Commence at the Southeast corner of said Section 22; thence along the South line of said Section South 84°28'26" West 1783.77 feet; thence North 05°31'34" West 75.00 feet to the North right of way line of Donald Ross Road; thence along said right of way line South 84°28'26" West 143.94 feet to the Point of Beginning; thence continue along said right of way line South 84°28'26" West 200.00 feet; thence North 05°31'34" West 20.30 feet; thence North 80°39'35" East 200.44 feet; thence South 05°31'34" East 33.63 feet to the Point of Beginning.

6383 Donald Ross Road

EXHIBIT "D"

Property Control Number: 00-42-41-22-00-000-7880

A Parcel of land lying in Section 22, Township 41 South, Range 42 East, Palm Beach County, Florida. Being a rectangular parcel of land in said Section 22, the South line thereof, being the West 400 feet of the East 1000.55 feet of that part of the North right of way line of Donald Ross Road lying West of the intersection of said North right of way line with the Westerly right of way line of Sunshine State Parkway, with the North-South dimension of the parcel described being 300 feet, less the West 200 feet thereof, and less and excepting the following lands as conveyed to the State of Florida as follows: A portion of Section 22, Township 41 South, Range 42 East being described as follows: Commence at the Palm Beach County concrete monument marking the Southeast corner of said Section 22; thence along the South line of said Section South 84°28'26" West 1783.77 feet; thence North 05°31'34" West 75.00 feet to the North right of way line of Donald Ross Road and the Point of Beginning; thence continue North 05°3'34" West 43.23 feet; thence North 80°39'35" East 56.19 feet; thence South 05°31'34" East 46.97 feet to said North right of way line; thence along said right of way line South 84°28'26" West 56.06 feet to the Point of Beginning.

And

A portion of Section 22, Township 41 South, Range 42 East; being described as follows: Commence at the Palm Beach County concrete monument marking the Southeast corner of said Section 22; thence along the South line of said Section South 84°28'26" West 1783.77 feet; thence North 05°31'34" West 75.00 feet to the North right of way line of Donald Ross Road and the Point of Beginning; thence continue North 05°31'34" West 43.23 feet; thence North 80°39'35" East 56.19 feet; thence North 05°31'34" West 70.15 feet; thence South 80°39'35" West 200.45 feet; thence South 05°31'34" East 103.78 feet to said North right of way line; thence along said right of way line North 84°28'26" East 143.94 feet to the Point of Beginning.

6367 Donald Ross Road

EXHIBIT "E"

Property Control Number: 00-42-41-22-00-000-8500

Parcel Z49 West, being a parcel of land in Section 22, Township 41, South, Range 42 East, in Palm Beach County, Florida, and being more particularly described as follows:

That part of the North 300 feet of the South 375 feet of said Section 22, lying West of and adjacent to the West right of way line of Sunshine State Parkway, and lying East of a line at right angles to the North right of way line of Donald Ross Road; said right angle line being 600.55 feet West of the intersection of said North and West right of way lines, as measured along North right of way; LESS, however, that part lying East of a line 300 feet West of (and measured at right angles to) the said West right of way line. Subject to a road easement for ingress and egress to Parcel 249 East of the Southerly 40 feet thereof.

6349 Donald Ross Road

EXHIBIT "F"

Property Control Number: 00-42-41-22-00-000-7100

A Parcel of land lying in Section 22, Township 41 South, Range 42 East, Palm Beach County, Florida, more particularly described as follows:

That part of the North 300 feet of the South 375 feet of said Section 22 lying West of and adjacent to the West right of way line of Sunshine State Parkway; and lying East of a line at right angles to the North right of way line of Donald Ross Road; said right angle line being 600.55 feet West of the intersection of said North and West right of way lines, as measured along North right of way; LESS, however, that part lying West of a line 300 feet West of (and measured at right angles to) the said West right of way line. Subject to a road easement for ingress and egress to Parcel 249 East of the Southerly 40 feet thereof.

Excepting the following land as conveyed to the State of Florida, as follows:

A portion of Section 22, Township 41 South, Range 42 East; being described as follows:

Commence at the Palm Beach County Monument marking the Southeast corner of said Section 22; thence along the South line of said Section South 84°28'26" West 1127.15 feet; thence North 05°31'34" West 75.00 feet to the point of intersection of the North right of way line of Donald Ross Road with the West right of way line for the Sunshine State Parkway, said point being the Point of Beginning; thence along said North right of way line for Donald Ross Road South 84°28'26" West 600.55 feet; thence North 05°03'34" West 46.97 feet; thence North 80°39'35" East 45.59 feet; thence North 75°56'35" East 523.52 feet to said West right of way line; thence along said right of way line South 21°51'48" East 89.42 feet to the beginning of a tangent curve to the right having a radius of 11309.16 feet; thence Southerly along said curve and said right of way line 43.59 feet through a central angle of 00°13'15" to the end of said curve and the Point of Beginning.

6327 Donald Ross Road

Prepared by and return to: WC-53
Curtis Shenkman, District Attorney
Loxahatchee River District
2500 Jupiter Park Drive
Jupiter, Florida 33458

INTERLOCAL AGREEMENT BETWEEN LOXAHATCHEE RIVER
ENVIRONMENTAL CONTROL DISTRICT
AND
SEACOAST UTILITY AUTHORITY
FOR PROVISION OF SEWER SERVICE
TO PARCEL 1 OF THE PALM BEACH COUNTRY ESTATES DEVELOPMENT

THIS INTERLOCAL AGREEMENT, made and entered into this 22 day of May, 2015, by and between SEACOAST UTILITY AUTHORITY, a public utility in the State of Florida, herein referred to as "SEACOAST" and LOXAHATCHEE RIVER ENVIRONMENTAL CONTROL DISTRICT, a public utility in the State of Florida, herein referred to as "LRD",

W I T N E S S E T H:

WHEREAS, SEACOAST and LRD desire to maximize the utilization and efficiency of both public utility systems; and

WHEREAS, Florida Statutes, Section 163.01, allows governmental units to make the most efficient use of their powers by enabling them to cooperate with other localities on a basis of mutual advantage; and

WHEREAS, the PALM BEACH COUNTRY ESTATES Development Area is located within the service area of LRD sewer utility service. A parcel of the PALM BEACH COUNTRY ESTATES Development Area shown on Exhibit A and Exhibit B attached hereto and made a part hereof is not currently being served with sewer utility service by LRD, and Seacoast desires to provide sewer utility service to said parcel (which parcel is referred to herein as "Country Estates Parcel 1"). WHEREAS, the execution of this Agreement is in the best interests of both governmental units by promoting efficient utilization of utility services.

NOW THEREFORE, for and in consideration of the mutual covenants contained herein, the Parties to this Agreement agree as follows:

1. **RECITALS.** The above recitals are true and correct.

2. **CONSENT TO SERVICE.** Seacoast recognizes LRD is the legislatively authorized exclusive provider of sewer utility service to the Palm Beach Country Estates Development Area. LRD consents that Seacoast may provide sewer utility service to Country Estates Parcel 1 (the "Subject Property"). If and when the LRD declares available its sewer utility line to all or a portion of the Subject Property, Seacoast shall disconnect or verify the disconnect of that portion of the Subject Property that LRD wishes to serve from Seacoast's sewer system, whereupon Seacoast shall terminate its billing to the Owner(s) of the portions of the Subject Property which LRD wishes to serve. Seacoast shall charge all Owners connection charges in accordance with Seacoast's policies and procedures in effect at the time of connection. If any portion on the Subject Property pays connection charges to Seacoast, and that portion subsequently is no longer served by Seacoast but rather is served by LRD, then Seacoast will remit to LRD, without interest, any connection charges that it has received attributable to that portion of the Subject Property.

3. **TERM.** The term of this Interlocal Agreement shall continue until _____, 2025. It is recognized by the parties that it is desirable to have a continuous supply of sewer service to the Subject Property after the initial term hereof. Therefore, if Seacoast is providing sewer services to the Subject Property (or any portion thereof) at the expiration of any term, then the term of this Agreement shall be automatically extend for successive five (5) year terms unless one party gives written notice to the other y not later than six (6) months before the end of the applicable term of its intention not to renew..

4. **ENTIRE AGREEMENT; AMENDMENT.** This writing embodies the entire Agreement and understanding of the parties hereto. This Agreement supersedes any existing agreements or representations among the parties concerning providing service to the Property described in Exhibit A and Exhibit B. Other than the agreements specified herein, there are no other understandings or agreements between the parties, whether verbal or written, with reference to the subject matter hereof that are not merged herein and superseded hereby. No modification of the terms of this Agreement shall be valid unless made in writing and signed

by the parties hereto. This Agreement shall be governed and construed according to the laws of the State of Florida. LRD may record this Agreement.

5. **ASSIGNMENT.** The rights and duties created by this Agreement are personal to each party and shall not be assigned by either party to another except upon the express written permission and consent of all other parties to do so; provided however, that such permission and consent shall not be unreasonably withheld.

IN WITNESS WHEREOF, the parties hereto have executed this instrument this 22 day of May, 2015.

ATTEST:

LOXAHATCHEE RIVER

ENVIRONMENTAL CONTROL DISTRICT

BY: 

(DISTRICT SEAL)

BY: 

D. Albrey Arrington, PhD., Executive Director

ATTEST:

SEACOAST UTILITY AUTHORITY

BY: 

BY: 

~~Rim Bishop, Executive Director~~

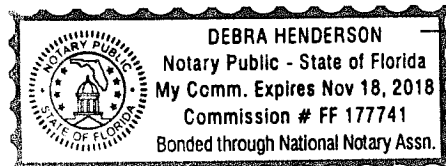
Joseph Lo Bello, Chair

STATE OF FLORIDA

COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me this 22 day of May, 2015, by D. Albrey Arrington, PhD., Executive Director, personally known to me or who produced a Florida Drivers License as identification.

(NOTARY SEAL)



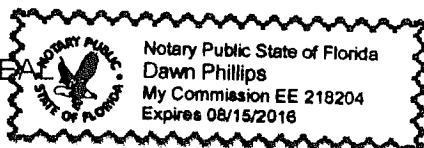

Notary Public

STATE OF FLORIDA

COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me this 22 day of April,
2015, by Joseph Lo Bello Chair
~~Rim Bishop, Executive Director~~, personally known to me or who produced a Florida
Drivers License as identification.

(NOTARY SEAL)



Dawn Phillips
Notary Public

“Exhibit A”

Property Control Number: 00-42-41-22-00-000-8210

Parcel Z-246 A parcel of land in Section 22, Township 41 South, Range 42 East in Palm Beach County, Florida and more particularly described as follows: The east 244 feet of a certain part of the south 300 feet of said section 22 with the east line of said certain part being at right angles to the south line of said section; and so located that the northerly projection of said east line intercepts the north line of the south 1250 feet of said section at a point 2720 feet east of the intersection of said north line with the west section line; and with all indicated distances being as measured along lines parallel to the west and south lines of said section 22; less, however, the south 75 feet thereof for right of way of Donald Ross Road and less I-95 right of way more fully described in Official Record Book 4240, Page 677 of the Public Records of Palm Beach County, Florida.

6501 Donald Ross Road

“Exhibit B”

Property Control Number: 00-42-41-22-00-000-8050

Parcel Z-247 A parcel of land in Section 22, Township 41 South, Range 42 East in Palm Beach County, Florida and more particularly described as follows: The east 235.3 feet of a certain part of the south 300 feet of said section 22 with the east line of said certain part being at right angles to the south line of said section; and so located that the northerly projection of said east line intercepts the north line of the south 1250 feet of said section at a point 2955.3 feet east of the intersection of said north line with the west section line; and with all indicated distances being as measured along lines parallel to the west and south lines of said section 22; less, however, the south 75 feet thereof for right of way of Donald Ross Road and less the west 30 feet thereof and less the right of way for highway I-95.

Subject to restriction, reservations, limitations, easements of record and taxes for the year 1993 and subsequent years

6427 Donald Ross Road

Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

2500 Jupiter Park Drive, Jupiter, Florida 33458

Telephone (561) 747-5700 • Fax (561) 747-9929 • www.loxahatcheeriver.org



D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: D. Albrey Arrington, Ph.D.
Executive Director

FROM: Kris Dean, P.E.
Deputy Executive Director/Director of Engineering Services

DATE: June 11, 2019

SUBJECT: Manual of Minimum Construction Standards and Technical Specifications – 2019 Update

In April of 1983 the Governing Board approved the District's first "Manual of Minimum Construction Standards and Technical Specifications". Since the initial adoption, this document has been updated from time to time as codes, rules, materials and methods have changed and improved over time. These changes were most recently approved by the Board in May 2018.

This June, Engineering Services is updating the Manual of Minimum Construction Standards and Technical Specifications as summarized below. Detailed updates can be reviewed in the Manual of Minimum Construction Standards and Technical Specifications, as attached

1. Renamed and numbered various sections for clarity.
2. Combined Sections 109, 111, 112, 113, 114 into Section 110.
3. Section 20
 - a. Cleaned up references in Section 20 to reference Base Flood Elevation
 - b. Deleted 4 Levels of lift stations and standardized to submersible lift station design.
 - c. Excluded new repump or cascading systems from lift station design requirements.
 - d. Revised separation requirements with other utilities.
4. Combined Sections 100 and 101 into Section 100.
5. Section 107
 - a. Renumbered to 101
 - b. Finalized wire line steering requirements for horizontal directional drills.
 - c. Revised pressure test requirements and moved to Section 140.
6. Section 140
 - a. Revised for HDPE piping testing
 - b. Added gravity main deflection testing requirements.
7. Low pressure details LP 25, 25A and 26 were updated to increase vault sizes.
8. Minor text revisions for clarity on various Standard Details

The following motion is offered for your consideration:

"THAT THE DISTRICT GOVERNING BOARD ratify and approve the Loxahatchee River Environmental Control District's "Manual of Minimum Construction Standards and Technical Specifications", as of June 27, 2019, and authorize the District Engineer and Executive Director to update the Construction Standards and Technical Specifications from time to time, and periodically present it to the Governing Board for ratification and approval."

Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

James D. Snyder
Board Member

**LOXAHATCHEE RIVER
ENVIRONMENTAL CONTROL DISTRICT**



**MANUAL OF MINIMUM CONSTRUCTION
STANDARDS AND TECHNICAL SPECIFICATIONS
FOR
LOXAHATCHEE RIVER DISTRICT**

D. Albrey Arrington, Ph.D.
Executive Director

Kris Dean, P.E.
Director of Engineering

Revision: June-May 2019~~8~~

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SECTION 10

ADMINISTRATIVE AND GENERAL

1.01 General

The purpose of this manual is to provide the minimum construction standards for design and construction work associated with wastewater systems within the District and is intended to supplement the requirements of other regulatory agencies. The design engineer is to use good engineering judgment in the design of wastewater systems. The design engineer and the contractor are responsible for providing sound, workable, and long lasting systems.

The intent of this section is to provide members of the development community with a brief introduction to the Loxahatchee River Environmental Control District, also referred to as “District”, its function, and procedures.

The Loxahatchee River Environmental Control District is an agency of government which was created in 1971 for the purpose of providing utility and other environmental services within the 72 square mile basin of the Loxahatchee River. Currently, the District owns, operates, and regulates the regional wastewater system serving Tequesta, Jupiter, Juno Beach, Juno, and the unincorporated areas of northern Palm Beach and southern Martin Counties.

The District offices are located at 2500 Jupiter Park Drive, Jupiter, Florida. The offices are open between 8:00 A.M. and 5:00 P.M. weekdays. The telephone number during working hours is (561) 747-5700. For emergency situations outside of normal office hours, the telephone number is (561) 747-5708. The District website can be found at <http://www.loxahatcheeriver.org>.

With specific regard to new development, the District’s legislated policy is to provide the required utility services to the area now and as it continues to grow. It is, therefore, the agency’s intent to work closely with new development to assure that the utility services can be provided in a manner which is both timely and consistent with the standards and specifications set forth in this manual.

Please note that the District’s “Manual of Minimum Construction Standards and Technical Specifications” may change from time to time. All projects will be subject to the current District, local, state and federal rules and regulations at the time of submittal of final engineering drawings for approval.

1.02 Procedures Prior to Construction

1.02.1 Introductory Meeting

It is highly recommended that the project representative(s) (owner, engineers) meet with the District’s Deputy Executive Director early in the planning stages of the development. At such time a determination of sewer and reuse water availability will be made, and financial impacts will be reviewed.

1.02.2 Developer Agreement

The submittal of a properly executed agreement, along with payment for certain charges, is required before the District will review the engineering plans. Copies of the District's Standard Developer Agreement and Chapter 31-10 F.A.C., which addresses the charges, are available online or at the District offices.

1.02.3 District Installed Facilities

During the introductory meeting the developer may wish to discuss the availability of District installed regional and sub regional facilities to serve the proposed project, although, this program is limited to larger developments.

The District currently maintains a program where sub regional lift stations may be constructed by and paid for by the District. A sub regional facility must be designated and approved by the District Governing Board. Staff will take no action for recommending designation of a facility for installation until a developer agreement is executed and all fees are paid.

Staff reviews and assesses the project based upon economic feasibility, consistency with the District Master Plan and its current and future demand. To promote stable and effective communication between the District and the Developer, we will require the Developer to coordinate all communication through the Engineer of Record.

In designating a sub-regional facility, the following items are the responsibility of the owner/developer:

Provide the District with any project information necessary for the design of lift station(s) and force mains(s).

Provide, at developer's expense, all necessary electrical service to the lift station site in conjunction with construction activities.

Provide suitable access to lift station and force main sites for District and contractor's vehicles and equipment. Paved asphaltic concrete or reinforced concrete access drives will be provided (Min.16' wide) prior to acceptance.

Provide appropriately sized sanitary sewer gravity lines that are necessary to serve adjoining properties in conjunction with lift station construction. Sewer lines to adjoining properties must be activated concurrent with lift station, or upon demand from the District.

The last collection manhole, just upstream of the lift station, should be placed in a manner to minimize road, lane or sidewalk closures should by-pass operations be

needed at the lift station. The District may require this last collection manhole to be placed inside the lift station easement.

Provide all clearing, grubbing and rough grading of the lift station and force main sites prior to construction.

Provide survey requirements and staking of the lift station and force main upon request from the District. Staking shall include provision of one stake at center of the proposed wet well, with 50' offsets and bench mark. Force main shall be staked at center line with 10' offsets every 100 feet, with a set bench mark. All survey work shall be performed by a professional surveyor licensed in the State of Florida.

Developer shall convey a deed to the lift station property prior to construction, and all required easements as follows:

Permanent Easements:

- a. Lift Station - 40' x 40'
- b. Force Mains - 10' wide minimum
- c. Gravity Mains - 15' wide minimum for sewers

Temporary Construction Easements:

- a. Lift Station - 100' x 100'
- b. Force Mains - 30' wide minimum
- c. Gravity Mains - 50' wide minimum

Developer's contractor will be responsible to make gravity line connections from the system collection manhole to the lift station after the construction of the wet well has been completed.

District staff will work in conjunction with the developer's project engineer to plan for the service area. Station design will be performed by the District. Construction will be contracted for by the District and inspected by District personnel.

1.02.4 Developer Installed Facilities - Plan Review and Approval

An initial electronic plan submittal (PDF) is recommended. Submittal should contain; one (1) complete set of plans including sewer, reuse, water and drainage systems, and paving and grading details. Upon review, the design engineer will be notified of acceptance or comments which need to be addressed. District staff will work with the Developer's Engineer of Record to address the final design of Developer installed facilities.

Final submittal for approval will require additional plan sets, to include one electronic (PDF), two (2) hardcopy full-size (24x36) sets for District files, four (4) sets for Florida Department of

Environmental Protection and/or Palm Beach County Health Department, plus any additional sets required by the engineer or owner.

District approval of utility plans and specifications, as well as sign off on the Florida Department of Environmental Protection/Health Department application, is required.

Plan review will be for technical sufficiency of design for incorporation into the District system. This review, as well as plan approval by the District, does not relieve the design engineer of his liabilities or responsibility for a properly detailed design. District Engineering staff will be available to work with the design engineer to assure the plans meet the requirements set forth in this manual.

All plan submittals must be signed and sealed by a Professional Engineer, registered in the State of Florida. Plans which are marked "Preliminary" or "Draft" will not be approved.

Supplemental data to be furnished with the final plans submitted for approval includes the following:

1. Project Summary
 - a. Number of residential units being served or non-residential uses.
 - b. Number of Manholes
 - c. L.F. of Gravity Main (for each pipe size)
 - d. L.F. of Force Main (for each pipe size)
 - e. Number of Lift Stations and depth of each
2. Basis of determination of design capacity and design flow.
3. Calculations and plot of system head curves.
4. Calculations of pump cycle times.
5. Wet well floatation calculations.
6. Landscaping plan that includes the proposed sewer facilities on the plan to determine if the necessary setbacks are provided.
7. Preliminary phasing plan (for entirety of project) that includes a table indicating number and type of lots (i.e., multifamily, single family, etc.) and the year those lots require DOH certifications.

1.03 Developer Installed Facilities - Procedures During Construction

1.03.1 Periodic Inspection

Throughout construction, the developer will look to his consulting engineering firm for progress by periodic inspections. District Engineering staff will periodically check the site during construction for progress. If problems are encountered during construction, it will be the developer's responsibility through his engineers, to resolve them to the District's satisfaction. Any revision of substance to the approved plans shall be submitted to the District for approval prior to incorporation into the work.

1.03.2 Pre-Final Inspection Submittals

1. Approximately 60 days prior to construction completion, the Developer's Engineer of Record shall provide the Deputy Executive Director the following for review and approval:
 - a. A signed and sealed cost of construction of the sewer improvements. This information will be used to establish the value of the maintenance bond.
 - b. A final Phasing Plan. The Phasing Plan should encompass the project in its entirety and is solely at the discretion of the District as to timing and extent of phases.
2. Upon receipt of the above information the Deputy Executive Director will prepare a letter to the Owner, with copy to the engineer, with the Bill of Sale and easement forms prepared for execution, along with a listing of administrative items to be provided prior to District inspection of facilities for acceptance.

1.04 Developer Installed Facilities - Procedures Following Construction

1.04.1 Project Completion

A project is not considered complete and prepared for District final inspection until such time as:

1. All sewer system construction is completed in accordance with plans and specifications and inspected and certified by the engineer.
2. Where sewers are constructed in paved areas, at least the 1st lift of asphalt has been provided.
3. Areas over lines and laterals, which are not proposed to be paved, shall be brought to finish compacted grade.

1.04.2 Project Completion Submittals

Upon Completion of Construction, but before District final inspection, submit the following items in forms acceptable to the District:

1. Bill of Sale
2. Grant of Easement
3. Maintenance Bond: From a surety company and executed by an attorney-in-fact for the surety company with a certified copy of his Power-Of Attorney attached to the Bond; or a
4. Letter of Credit: From a financial institution and in a form acceptable to the District.
5. Record Drawings: Submit one (1) blackline copy of the record drawings, signed and sealed by a Florida licensed Professional Surveyor & Mapper. Record drawings must comply with LRD's standard detail SD-29 "Record Drawing Submittal Guide".
6. Department of Environmental Protection Certificate of Completion Executed by Owner and Certifying Engineer.
7. Letter of Certification from the Engineer of Record
8. Performance Test Results: infiltration/exfiltration, pressure, leakage and pump start-up test records. All documents must be signed and sealed by the Engineer of Record.
9. Copy of Site Plan and Recorded Plat indicating all building numbers and street names.
10. Payment for all buildings connected to the system.

1.04.3 Final Inspection

After the owner and project engineer have provided the documents as outlined in Section 1.04.2, and all punch list items have been remedied, the District engineering staff will conduct a final inspection and recommend acceptance or denial. If acceptance is denied, a letter will be sent to the project engineer advising of the denial and reasons for such. Subsequently, the project engineer should address the comments and request scheduling a final reinspection. It should be noted that after the final inspection, any comments to the initial Record Drawing submittal shall be provided to the Engineer of Record for any remedies.

1.04.4 Final Record Drawings

After District Engineering staff has completed the final inspection and all work is to the satisfaction of the District Engineer, the final Record Drawings shall be submitted to the District, as follows:

1. Two (2) final black line record drawings, signed and sealed by a Florida licensed Professional Surveyor & Mapper. This record drawing shall meet the technical standards

for “Record Survey” set forth by the Florida Board of Professional surveyors and mappers, pursuant to Chapter 472 of the Florida Statutes and Chapter 61G17-6, Florida Administrative Code.

2. One (1) compact disc with the record drawing in AutoCAD 2008 or later format and PDF format. Only one (1) AutoCAD file shall be accepted containing the entire record drawing (additional files used for x-referencing are acceptable) and one Adobe Acrobat file with the entire record drawing as seen on the paper copy. The District will no longer accept separate AutoCAD and/or Adobe Acrobat files for separate record drawing pages. The AutoCAD files must be established in state plane coordinate system, NAD 83, Florida East Zone. The vertical datum referenced shall be NGVD 29.

1.04.5 One Year Maintenance Bond and Inspection

Prior to acceptance by the District, a maintenance bond which will remain in effect for one year from the date of District acceptance of the system, must be provided to the District. Shortly before the expiration of the one-year maintenance bond, the District will reinspect the system in a manner similar to the final inspection (i.e., broken pipes, deflection, infiltration, etc.) The District will advise the developer of any defects found, unless of an emergency nature, during this inspection and will require correction to be made prior to expiration of the maintenance bond.

Should adequate progress, in the opinion of the District, not be made in correcting the deficiencies, the District will look to the bonding company to pay for corrective action taken by the District.

A Letter of Credit drawn upon a financial institution licensed in the State of Florida, and in a form acceptable to the District may be provided in lieu of a maintenance bond.

1.04.6 District Acceptance

Upon satisfactory finding of the final inspection, the Department of Environmental Protection/Health Department Certification of Completion will be executed by the Executive Director, thereby, accepting the system for operation and maintenance.

1.04.7 Operation and Maintenance

With the exception of service laterals which lie beyond right-of-way or easement lines, or in common areas of ownership, the wastewater system serving the development will be operated and maintained by the District’s personnel, who are well trained and responsive to the needs of the community.

1.04.8 Utility Billing

The District’s accounting department will continue to work with the Developer in the collection of connection charges as new buildings are tied into the system, and in the billing of quarterly service charges.

1.05 Definitions and Abbreviations

The term “Owner” or “District” shall mean the Loxahatchee River Environmental Control District.

The term “Director” shall mean the Executive Director of the Loxahatchee River Environmental Control District.

The term “Engineer” or “Design Engineer” shall be the engineer registered in the State of Florida that signs and seals the plans of a developer or other person or entity.

The term “District Engineer” shall be the engineer designated by the District, whether acting directly or as an authorized agent of the District, acting within the scope of duties entrusted to them.

The abbreviation listed below shall have the meaning set forth opposite each:

AASHTO	American Association of State Highway Transportation Officials
ACI	American Concrete Institute
ANSI	American National Standards Institute
ASCE	American Society of Civil Engineers
ASTM	American Society for Testing and Material
AWWA	American Water Works Association
NEC	National Electric Code
NEMA	National Electric Manufacturers Association
AWG	American or Brown and Sharpe Wire Gage
NPT	National Pipe Thread
WOG	Water, Oil, Gas

END OF SECTION 10

SECTION 20

DESIGN CRITERIA

2.01 General

The requirements of this section are a minimum and nothing herein shall be construed to eliminate consideration of a design based on a rational procedure not covered by such requirements. Standards or minimum requirements set forth in this Manual are not intended to relieve the Developer, Contractor, or Design Engineer from complying with good engineering and construction practices under specific conditions which require a higher degree of procedure, standards, or requirements. Where the Developer, Contractor, or Design Engineer is not capable of following the requirements of the Manual due to certain site conditions, any deviation from the requirements set forth in the Manual shall first be approved by the District. It is intended that the requirements of this section shall be applicable in all cases where the facilities being constructed or to be constructed shall be owned and/or operated and maintained by the District.

2.02 Design Capacity

Gravity sewer systems should be designed for the estimated ultimate tributary population. Parts of the system that can be readily increased in capacity such as lift stations may be submitted for approval based on phased implementation. The basis of design for all projects shall accompany the plan documents.

2.03 Design Flow

Sewer system Average Daily Flow (ADF) designs shall be based on the design flows as listed in Chapter 64E-6 of the Florida Administrative Code.

2.03.1 Peak Hourly Flow

Peak Hourly Flow (PHF) shall be utilized for the sizing of all gravity sewers, force mains and lift station pump sizing. Peak hourly flow peaking factor (~~PHF~~) shall follow Figure 1 - Ratio of Peak Hourly Flow to Design Average Flow, of the “Recommended Standards for Wastewater Facilities”, by the Waste Water Committee of the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, latest edition.

For low pressure sewer systems, all low pressure mains and LRD’s approved grinder pump systems (centrifugal) shall be sized based upon the estimated peak design flow. The estimated peak design shall follow either Part 4 – Design Flows, of the “Design and Specification Guidelines for Low Pressure Sewer Systems”, by the FDEP, latest edition or Chapter 2, “Manual – Alternative Wastewater Collection Systems”, by the EPA, latest edition.

2.04 Gravity Sewers

2.04.1 New Construction

The basic design criteria for gravity sewers shall be as follows:

Pipe material – all new gravity sewer shall be of PVC construction. Use of epoxy coated D.I.P. will only be allowed with prior approval from the District Engineer.

The minimum gravity sewer pipe line diameter – All new gravity sewer mains (manhole to manhole) shall be a minimum of 8-inches in diameter.

The minimum depth of cover shall be as follows: 3'-6" for DIP or PVC C-900 and 4'-0" for PVC SDR-26. Any cover that is proposed to be less than 4'-0" must be given prior approval by the Director of Engineering.

Straight alignment and constant slope between manholes.

All manholes shall be precast concrete with monolithic bases and concentric conical cone sections.

Manholes are required at the end of each line; at all changes in grade, size or alignment. Stubs eight (8) inches or larger will require a manhole at the terminus point.

Manholes shall be spaced not greater than 400 feet for sewers fifteen (15) inches in diameter or less, 450 feet for sewers eighteen (18) inches in diameter or greater.

Five-foot drop manholes (internal type) are to be provided for a sewer entering a manhole at an elevation twenty-four 24 inches or more above the lowest manhole channel invert. (See Standard Details)

A positive 0.1-foot grade differential shall be provided between the upstream and downstream invert on all manholes.

All sewers shall be designed and constructed to give mean velocities, when flowing full, of not less than 2.0 feet per second, based on Kutter's formula using an "n" value of 0.013. The following are minimum slopes allowed:

<u>Sewer Size</u>	<u>Slope in Ft/100 Ft</u>
8-inch	0.40
10-inch	0.28
12-inch	0.22
15-inch	0.15
18-inch	0.12
21-inch	0.10
24-inch	0.08
27-inch	0.067
30-inch	0.058
36-inch	0.046

When possible, slopes at least 10% above the minimums shown are preferred. However, in no case will slopes be designed which would provide a mean velocity less than 2.0 feet per second when flowing full, based on an “n” value of 0.013.

When a smaller sewer joins a larger one, the invert of the larger sewer should be lowered sufficiently to maintain the same energy gradient. An approximate method for securing these results is to place the 0.8 depth point of both sewers at the same elevation.

Intersecting sewers shall not meet at an alignment angle of less than 90 degrees to downstream flow.

Manholes deeper than 14 feet from the lowest invert to the manhole rim, manholes with a force main discharge, manholes with inside drops and the last collection manhole just upstream of a lift station, shall be given a minimum 0.5-inch coat of Sewper Coat, Strong Seal, Refratta HAC 100 or other approved calcium aluminate corrosion barrier.

The last collection manhole, just upstream of the lift station, should be placed in a manner to minimize road, lane or sidewalk closures should by-pass operations be needed at the lift station. The District may require this last collection manhole to be placed inside the lift station easement.

All gravity sewers shall be placed in the center of any roadway and within any easements. The minimum gravity sewer easement is 15’ wide.

No landscaping or surface features (i.e., walls, fences, fountains, etc.) shall be placed in a manner that would adversely affect access to utility easements or District infrastructure. Trees shall be a minimum of 10’ away from any gravity sewer main or service line/lateral. This may be reduced to 7’ with the use of an approved root barrier system.

All gravity sewer mains shall be a minimum of 10' horizontally from any structures. This setback shall be measured from the outside edge of the pipe to the nearest part of the structure, including underground (i.e., footers) or above ground (i.e., roof overhangs) features.

In addition to the above requirements, gravity sewer design shall follow Recommended Standards for Wastewater Facilities, at a minimum.

2.04.2 Adjustments to Existing Sewer Infrastructure

There may be instances where an area is being redeveloped or when a new developer takes ownership of a project from a previous developer and wishes to make modifications to already constructed, but not yet activated sewer facilities. The following criteria shall apply:

It is advised that developers of redesigned projects meet with the District Engineer to conduct a pre-application meeting and/or conduct due diligence prior to submitting final engineering plans to discuss the proper procedure for obtaining approval for any modifications.

This manual is updated from time to time, thus any comments provided at a pre-application/due diligence meeting should be considered conceptual in nature and may no longer be applicable by the time final engineering drawings are submitted to the District for approval (See Section 1.01).

Services may be abandoned on a gravity run (manhole to manhole) and the service must be entirely removed, including the mainline wye fitting. The repair(s) must be completed using ~~one~~ two sleeves and one spool piece per abandoned service.

Lift stations and all related appurtenances must be brought up to current LRD standards if they haven't been installed.

LRD will accept all gravity and force mains as constructed and re-inspect them based upon the LRD standards at the time the project was approved. However, additional appurtenances may be required to be installed, such as air release/vacuum valves or inline valves should the District Engineer require them. Additionally, all setbacks shall be based upon the current LRD standards.

LRD will accept all previously agreed to sewer easement widths, though the extent of the easements may require modifications should any infrastructure be removed or added.

Any new infrastructure proposed by the new developer shall meet all current LRD standards.

2.05 Submersible Pumping Stations

The basic design criteria for pump stations are as follows:

Sized to handle the peak hourly flows from the tributary areas with the largest pumping unit out of service (firm capacity).

Total dynamic head based on static head, lift station friction losses and pipeline friction factor (C) of 120. Pumping units shall be capable of operating based on a C=100 and not “running out” based on a C=140.

Pumping units capable of passing spheres of at least three (3) inches in diameter.

Under normal conditions, pumps operate under a positive suction head.

Controls included to automatically alternate the pumps in use.

Maximum pump speed of submersible pumps shall not be greater than 1800 rpm unless specifically allowed otherwise by the District Engineer. ~~The maximum pump speed of other raw wastewater pumps shall be 1150 rpm unless specifically allowed by the District Engineer.~~

~~Four types of pump stations are considered for use in the District. The pump station types are as follows:~~

Level I &	
Level II	Submersible
Level III	Built in place constant or variable speed pumps
Level IV	Built in place variable speed pumps.

~~Typical application of the various pump station types is shown on Figure 2-1, page 2-11.~~

All electrical and mechanical equipment ~~to shall be protected from physical damage by a 100-year flood.~~ installed 1 foot minimum above the Base Flood Elevation.

Lift stations shall be provided with remote telemetry (Data Flow Systems radio telemetry or cellular telemetry) and wetwell level instrumentation.

Detailed specifications and drawings for ~~Level I—IV~~ submersible pump stations and appurtenances are included elsewhere in this manual. Site specific designs and requirements not covered under this manual will be reviewed on a case by case basis. Additional design criteria for these stations are contained in the “Recommended Standards for Wastewater Facilities”, by the Water Supply Committee of the Great Lakes – Upper Mississippi River Board of State and

Provincial Public Health and Environmental Managers, latest edition as referenced by the Florida Department of Environmental Protection.

All wet wells shall be designed to resist flotation ~~at times of the highest groundwater and/or the 100-year flood (whichever is greater)~~ based on a base flood event plus 1 foot at the site, without consideration of the weight of the pumps, with a safety factor of at least 1.0. Flotation calculations based on a unit weight of concrete of 130 pounds per cubic foot shall be submitted to the District for review with all pump station plans

Wet well cycle times shall be 10 minutes minimum 30 minutes maximum; based on the formula:

$$T = \frac{V}{Q-S} + \frac{V}{S}$$

Where:

T = Cycle time (minutes)

V = Effective volume of wet well (gallons)

Q = Pumping rate (gpm)

S = Average daily flow (gpm)

All lift stations shall be given a 1.0-inch coat of Sewper Coat, Strong Seal, Refratta HAC 100 or other approved calcium aluminate corrosion barrier.

Lift stations shall be designed to transmit wastewater from the station to the District's Regional Wastewater Treatment Facility or existing designated repump stations if specifically allowed by the District's Engineer. New repump and/or cascading systems shall not be considered.

2.06 Force Main

The basic design criteria for force mains are as follows:

Pipe material – C-900 PVC, epoxy lined ductile iron pipe or HDPE (DR-11 min).

Minimum size - 4-inch diameter.

Minimum velocity - 2 feet per second.

Maximum velocity - 8 feet per second.

Minimum depth of cover - 3 feet.

Branches of intersecting force mains shall be provided with appropriate valves such that one branch may be shut down for maintenance and repair without interrupting the flow of other branches. Stubouts on a force main, placed in anticipation of future connections, shall be equipped with a valve to allow such connections without interruption of service.

At all times, the force main shall be laid ~~level and~~ per the design elevations approved by the District. An automatic air release valve shall be placed at all high points of all force mains with a diameter of (4) inches or larger, as indicated on the construction plans and approved by the District.

All automatic air release/air vacuum valves shall be placed in a manhole as provided in the District's standard details.

Force main design drawings are to indicate elevations at all high points and all low points with constant slopes in between such points. Low point drains ~~should~~shall be placed at all low points in the force main profile.

Approved restrained joints shall be provided at all force main bends.

Terminal ends of force main (permanent or temporary) shall be as shown on the Standard Details.

2.07 Separation Requirements

~~Storm and sanitary~~ Sanitary sewers crossing under water mains shall be laid to provide a minimum vertical ~~distance separation~~ of twelve inches between the invert of the upper pipe and the crown of the lower pipe. Where this minimum separation cannot be maintained, the crossing shall be arranged so that the ~~sewer pipe joints and water main~~ joints are equidistant from the point of crossing with no less than ten (10) feet between any two joints and both pipes shall be D.I.P. Where there is no alternative to sewer pipes crossing over a water main, the criteria for the minimum separation between lines and joints in the above, shall be required and both pipes shall be D.I.P. irrespective of separation. ~~D.I.P. is not required for storm sewers. Vertical separations of less than (12) inches, will not be accepted.~~

Where storm sewers cross above or below sanitary sewer mains, the minimum vertical separation between the outside of the storm sewer main and the outside of the sanitary sewer main is (12) inches. Where the minimum separation cannot be maintained, the sewer main shall be constructed of ~~C-900, DR-18 PVC~~DI at the conflict with one full joint (min. 20 feet) centered on the conflict. ~~Vertical separations of less than 6 inches, will not be accepted. for pressure mains and C-900, DR18 inside DI or steel sleeve for gravity mains.~~

The minimum vertical separation between sanitary sewer mains and any other utility other than those listed above is 12 inches. Vertical separations of less than ~~12-6~~ inches, will not be accepted.

Maintain 10 feet horizontal distance between water mains, storm pipes and sanitary sewer mains unless reduced separation is allowed by the FDEP, Palm Beach County Health Department and

the District Engineer. Separations greater than ten feet may be required for drainage pipes larger than 48” in diameter.

2.08 Sewer Use Regulations

The Loxahatchee River Environmental Control District has adopted certain rules and regulations regarding the acceptability and pretreatment requirements for certain types of wastewaters. These rules and regulations are published in Chapter 31-13 of the District Rules and may be amended from time to time. Prospective users of the system should contact the District Deputy Executive Director for information regarding the above referenced rules and the Director of Operations for compatibility of the anticipated wastewater with the District’s facilities.

END OF SECTION 20

SECTION 30

MISCELLANEOUS REQUIREMENTS

3.01 Lines, Grades and Measurements

Alignment and grade of all pipe, tunnels and borings shall be continuously controlled by use of lasers or other acceptable method. Laser alignment and grade through the pipeline is the preferred method. The District Engineer shall be permitted at any time to check the lines, elevations, reference marks, laser, etc., set by the Contractor or the Design Engineer.

3.02 Work to Conform

The maximum allowed vertical deviation of any single gravity pipe, tunnel or boring from plan grade shall be three percent (3%) of inside diameter. No single gravity pipe shall vary in horizontal alignment right or left, from the pipe centerline by more than five percent (5%) of inside diameter. Force main joint deflections shall be limited by AWWA Standards and manufacturer's recommendation.

3.03 Pipeline location

Pipelines shall not be located closer to an existing or proposed structure than the horizontal distance obtained when drawing a 45-degree angle from the proposed invert of the pipeline to bottom outside face of the footing. In no case shall this distance be less than ten (10) feet. Pipelines shall be located as indicated on the drawings, but the Design Engineer is responsible to make such modifications in location as may be found desirable to avoid interference with existing structures or for other reasons, which are not material to the interest of the District and which do not otherwise conflict with any other statement or criteria set forth in this manual. The District should be notified of such changes in a timely fashion and such changes shall be recorded on Record Drawings.

3.04 Pipe Adapters

When joining pipes of different types, District approved transition sleeves, adapters, and couplings shall be used.

3.05 Fittings and Stoppers

Branches, stub-outs and fittings shall be laid as indicated in the Standard Details and shown on the approved drawings. Open ends of pipe and branches shall be closed with nonmetallic "wing nut" expansion stoppers secured in place in an acceptable manner. Stoppers shall be designed to remain in place and watertight during infiltration tests.

3.06 Service Lines

a. General

Service lines shall be as shown on the Standard Details. Service lines for a single building structure shall be minimum of 4 inches in diameter; for two building structures, a minimum of 6-inches in diameter. Where three or more building structures are connected to a single service line, the service line shall be considered a gravity sewer, shall be minimum of 8-inches in diameter, and shall be in accordance with the criteria covering District maintained gravity sewers.

If a residential property requires an easement across another residential property to gain access to District sewers this easement shall be conveyed to the District. This shall only be allowed when agreed to in writing by the District engineer.

b. Maintenance Responsibility

The service line (lateral) cleanout will usually delineate the point of responsibility between the District and the property owner; however, the following variations do exist:

1. Multi-family Units - Public right-of-way - Owner's responsibility to the right-of-way line.
2. Multi-family Units - Non-Public right-of-way - Owner's responsibility to the main line connection.
3. Commercial Buildings - Owner's responsibility to the main line.
4. Condominium with Common Areas - Non-Public right-of-way Owner's responsibility to the main line connection.
5. Condominium with Common Areas Adjacent to Public right-of-way - District assumes responsibility within the public right-of-way.

3.07 Service Line Markers

A service line marker shall be installed 12-inches {minimum} above the service wye adjacent to the cleanout of each service line. The service line markers shall be Electronic System, Sanitary Marker 1258, as manufactured by 3M.

3.08 Bolts, Anchor Bolts, and Nuts

Anchor bolts shall have suitable washers and, where so required, their nuts shall be hexagonal. All anchor bolts, nuts, washers, plates, and bolt sleeves shall be galvanized unless otherwise indicated or specified.

Expansion bolts shall have malleable iron and lead composition elements or the required number of units and sizes.

Bolts, anchor bolts, nuts and washers specified to be stainless steel shall be type 316 stainless steel.

Anchor bolts and expansion bolts shall be set accurately. If anchor bolts are set before the concrete has been placed, they shall be carefully held in suitable templates of approved design. If anchor or expansion bolts are set after the concrete has been placed, all necessary drilling and grouting or caulking shall be done, and care shall be taken not to damage the structure or finish by cracking, chipping, spalling, or otherwise during the drilling and caulking.

3.09 Concrete Inserts

Concrete inserts shall be designed to safely support the maximum load that can be imposed by the bolts used in the inserts. Inserts shall be of a type which will permit locking of the bolt head or nut. All inserts shall be galvanized.

3.10 Protection against Electrolysis

Where dissimilar metals are used in conjunction with each other, suitable insulation shall be provided between adjoining surfaces so as to eliminate direct contact with any resultant electrolysis. The insulation shall be bituminous impregnated felt, heavy bituminous coatings, nonmetallic separators or washers, or other approved materials.

END OF SECTION 30

SECTION 100

EXCAVATION, PIPE EMBEDMENT, FILL AND GRADING

100.01 Description

All excavations shall be made in such manner and to such widths as will provide suitable room for building the structures or laying and jointing the piping. All sheeting, bracing, supports, coffer dams, pumping and draining shall be performed to render the bottom of the excavations firm, dry and acceptable in all respects.

100.02 Sheeting and Bracing

Sheeting and bracing shall be furnished as may be necessary to support the sides of the excavation and to prevent any movement of earth which could in any way diminish the width of the excavation to less than that necessary for proper construction, or could otherwise injure or delay the work, or endanger adjacent structures.

All timber sheeting and bracing shall be left in place unless otherwise directed by the Design Engineer to remove same or cut off at a specified elevation.

All sheeting and bracing, including trench boxes not to be left in place, shall be carefully removed in such manner as not to endanger the construction or other structures. All voids left or caused by the withdrawal of sheeting shall be backfilled immediately with approved material and compacted by ramming with tools especially adapted to that purpose, by watering, or by other means as may be directed by the Design Engineer.

100.03 Drainage

100.03.01 General

To ensure proper conditions at all times during construction, all means shall be used to intercept and/or remove promptly and dispose properly of all water entering trenches and other excavations. Such excavations shall be kept dry until the structures, pipes and appurtenances to be built therein have been completed to such extent that they will not be floated or otherwise damaged.

All water pumped or drained from the work shall be disposed of in a suitable manner without undue interference with other work, damage to pavements, other surfaces, or property. Suitable temporary pipes, flumes, or channels shall be provided for water that may flow along or across the site of the work. All requirements of all regulatory agencies regarding dewatering and the discharge of water from the project shall be complied with.

All labor, materials, tools, and equipment shall be provided, as necessary, to properly control the quality of the discharge from the dewatering operations as described herein. All applicable laws, rules and regulations governing the discharge of water from dewatering operations shall be

complied with. All dewatering shall be accomplished by the use of sanded well points and other techniques deemed necessary by the Contractor to properly dewater the trench excavations.

The water discharged from the Contractor's dewatering operation shall not exceed the turbidity limits promulgated by the State of Florida Department of Environmental Protection discharge standards for the Loxahatchee River or its tributaries.

Unless otherwise directed by the Design Engineer, an approved siltation tank shall be installed ahead of dewatering discharge points. In addition, silt screens and other devices and techniques may be required to maintain the discharge quality at turbidity levels below the required limits.

Any and all methods approved by the Design Engineer to control the bacteriological quality of well point discharge into existing drainage ditches and/or canals shall be utilized. Levels for fecal coliform in a discharge which ultimately leads to the Loxahatchee River, shall not exceed those promulgated by the State of Florida Department of Environmental Protection discharge standards.

100.03.02 Drainage Well-point System

If it is necessary to drain the soil and prevent saturated soil from flowing into the excavation, an efficient drain well-point system will be utilized. The well points shall be designed especially for this service. The pumping unit shall be designed for use with the well-points and shall be capable of maintaining a high vacuum and of handling large volumes of air and water at the same time.

100.04 Trench Excavation

Where pipe is to be laid in rock bedding or concrete cradle, the trench may be excavated by machinery to, or to just below, the designated subgrade, provided that the material remaining at the bottom of the trench is not disturbed.

If the trench is excavated below the designated subgrade, the undercut shall be backfilled with compacted bedding rock, uniformly graded from 1/4-inch size.

100.05 Depth of Trench

Trenches shall be excavated to such points as will permit the pipe to be laid at the elevations, slopes, or depths of cover indicated and at uniform slopes between indicated elevations.

100.06 Width of Trench

Pipe trenches shall be made as narrow as practicable and shall not be widened by scraping or loosening materials from the sides. Every effort shall be made to keep the sides of the trenches firm and undisturbed until backfilling has been completed and consolidated.

Trenches shall be excavated with approximately vertical sides between the elevation of the center of the pipe and an elevation one (1) foot above the top of the pipe.

100.07 Trench Excavation in Fill

If pipe is to be laid in embankments or other recently filled material, the material shall first be placed to the top of the fill or to go to a height of at least three (3) feet above the top of the pipe, whichever is the lesser. Particular care shall be taken to ensure maximum consolidation of material under the pipe location. The pipe trench shall be excavated as though in undisturbed material.

100.08 Unauthorized Excavation

If bottom of any excavation is taken out or disturbed beyond the limits indicated or prescribed, the resulting void shall be backfilled with embedment material compacted to a minimum of 90% of AASHTO T-180 or to the standards of the applicable agency having jurisdiction.

100.09 Elimination of Unsuitable Material

Pipe bedding shall extend a minimum of 4 inches below the pipe. The pipe shall be supported on suitable material ascertained by the Design Engineer following good engineering practices.

100.10 Backfilling

As soon as practicable after the pipes have been laid, or the structures have been built and are structurally adequate to support the loads, including construction loads to which they will be subjected, the backfilling shall be started and thereafter it shall proceed until its completion.

100.10.1 Backfill Materials

The nature of the materials will govern both their acceptability for backfill and the methods best suited for their placement and compaction in the backfill. The materials and the methods shall both be subject to the approval and direction of the Design Engineer. No stone or rock fragment larger than 3 inches in greatest dimension shall be placed in the backfill nor shall large masses of backfill material be dropped into the trench in such a manner as to endanger the pipeline. If necessary, a timber grillage shall be used to break the fall of material dropped from a height of more than 5 feet. Pieces of bituminous pavement shall be excluded from the backfill unless their use is expressly permitted, in which case they shall be broken up as directed.

100.10.2 Embedment Materials

Three broad classes of material shall be used for bedding, haunching, and pipe side support.

CLASS 1 - Angular, 1/4-inch to 3/4-inch graded stone, of which 100% passes a 1-inch sieve such as coral, slag, cinders, crushed stone, crushed shells, or

bedding rock.

CLASS 2 - Coarse sands and gravels with maximum particle size 3/4 inch including variously graded sands and gravels containing small percentages of fines, generally granular and non-cohesive, either wet or dry. Soil Types GW, GP, SW, and SP are included in this class.

CLASS 3 - Fine sand and clayey gravels, including fine sands, sand-clay mixtures, and gravel-clay mixtures. Soil Types GM, GC, SM, and SC are included in this class. Included in Class 3 are existing soil types classified as select backfill.

Class 1, Class 2, or Class 3 material shall be used for bedding material to the top of the pipe. Special care must be taken to insure Class 1, 2, or 3 material is worked under the pipe haunch. Class 2 or 3 material shall be compacted to a minimum of 98% density per AASHTO T -180. The District has the option, at any time, to take density tests to confirm the 98% compaction. Precautions shall be taken to prevent movement of the pipe when placing and compacting material under the pipe haunches.

If Class 2 or 3 material is used for bedding and haunching, a dry trench shall be maintained.

Under certain conditions, the Engineer may be faced with an unusual amount of water running in the trench which he may find necessary to remove in order to properly install and compact the embedment material. The Engineer may elect to remove the water with trench side pumps through the use of Class 1 material for bedding. The depth of Class 1 material will depend upon the amount of water but take care to ensure that the trench wall soil material is such that it will not be removed from the area adjacent to the bedding as a result of the running water. The Engineer may also elect to utilize well points or under drain to control excessive ground water. If Class 1 material is used as bedding and under drain, it must be utilized at least up to the top of the pipe.

100.10.3 Zone Around Pipe

The zone around the pipe shall be backfilled with the materials and to the densities and limits indicated on the details.

100.10.4 Compaction

Compaction shall be accomplished by tamping, or under appropriate construction techniques to achieve the required densities.

100.10.5 Maximum Density

Unless specified otherwise, the percent of maximum density referred to in these specifications refers to the maximum density obtained when the material is laboratory tested in accordance with the procedures outlined in Designation AASHTO T-180, Latest Revision or as otherwise required by the governmental agency having jurisdiction over the finished roadway. Field densities shall be determined by a testing laboratory using accepted methods.

100.10.6 Miscellaneous Requirements

Whatever method of compacting backfill is used, care shall be taken that stones and lumps shall not become nested and that all voids between stones shall be completely filled with fine materials. Only approved quantities of stones and rock fragments shall be used in the backfill.

All voids left by the removal of sheeting shall be completely backfilled with suitable material, thoroughly compacted.

END OF SECTION 100 **SECTION 100**

EXCAVATION, BACKFILL, FILL AND GRADING

Description

~~All excavations shall be made in such manner and to such widths as will provide suitable room for building the structures or laying and jointing the piping. All sheeting, bracing, supports, coffer dams, pumping and draining shall be performed to render the bottom of the excavations firm, dry and acceptable in all respects.~~

Sheeting and Bracing

~~Sheeting and bracing shall be furnished as may be necessary to support the sides of the excavation and to prevent any movement of earth which could in any way diminish the width of the excavation to less than that necessary for proper construction, or could otherwise injure or delay the work, or endanger adjacent structures.~~

~~All timber sheeting and bracing shall be left in place unless otherwise directed by the Design Engineer to remove same or cut off at a specified elevation.~~

~~All sheeting and bracing, including trench boxes not to be left in place, shall be carefully removed in such manner as not to endanger the construction or other structures. All voids left or caused by the withdrawal of sheeting shall be backfilled immediately with approved material and compacted by ramming with tools especially adapted to that purpose, by~~

~~watering, or by other means as may be directed by the Design Engineer.~~

Drainage

General

~~To ensure proper conditions at all times during construction, all means shall be used to intercept and/or remove promptly and dispose properly of all water entering trenches and other excavations. Such excavations shall be kept dry until the structures, pipes and appurtenances to be built therein have been completed to such extent that they will not be floated or otherwise damaged.~~

~~All water pumped or drained from the work shall be disposed of in a suitable manner without undue interference with other work, damage to pavements, other surfaces, or property. Suitable temporary pipes, flumes, or channels shall be provided for water that may flow along or across the site of the work. All requirements of all regulatory agencies regarding dewatering and the discharge of water from the project shall be complied with.~~

~~All labor, materials, tools, and equipment shall be provided, as necessary, to properly control the quality of the discharge from the dewatering operations as described herein. All applicable laws, rules and regulations governing the discharge of water from dewatering operations shall be complied with. All dewatering shall be accomplished by the use of sanded well points and other techniques deemed necessary by the Contractor to properly dewater the trench excavations.~~

~~The water discharged from the Contractor's dewatering operation shall not exceed the turbidity limits promulgated by the State of Florida Department of Environmental Protection discharge standards for the Loxahatchee River or its tributaries.~~

~~Unless otherwise directed by the Design Engineer, an approved siltation tank shall be installed ahead of dewatering discharge points. In addition, silt screens and other devices and techniques may be required to maintain the discharge quality at turbidity levels below the required limits.~~

~~Any and all methods approved by the Design Engineer to control the bacteriological quality of well point discharge into existing drainage ditches and/or canals shall be utilized. Levels for fecal coliform in a discharge which ultimately leads to the Loxahatchee River, shall not exceed those promulgated by the State of Florida Department of Environmental Protection discharge standards.~~

Drainage Well-point System

~~If it is necessary to drain the soil and prevent saturated soil from flowing into the~~

~~excavation, an efficient drain well point system will be utilized. The well points shall be designed especially for this service. The pumping unit shall be designed for use with the well points and shall be capable of maintaining a high vacuum and of handling large volumes of air and water at the same time.~~

Trench Excavation

~~Where pipe is to be laid in rock bedding or concrete cradle, the trench may be excavated by machinery to, or to just below, the designated subgrade, provided that the material remaining at the bottom of the trench is not disturbed.~~

~~If the trench is excavated below the designated subgrade, the undercut shall be backfilled with compacted bedding rock, uniformly graded from 1/4 inch size.~~

Depth of Trench

~~Trenches shall be excavated to such points as will permit the pipe to be laid at the elevations, slopes, or depths of cover indicated and at uniform slopes between indicated elevations.~~

Width of Trench

~~Pipe trenches shall be made as narrow as practicable and shall not be widened by scraping or loosening materials from the sides. Every effort shall be made to keep the sides of the trenches firm and undisturbed until backfilling has been completed and consolidated.~~

~~Trenches shall be excavated with approximately vertical sides between the elevation of the center of the pipe and an elevation one (1) foot above the top of the pipe.~~

Trench Excavation in Fill

~~If pipe is to be laid in embankments or other recently filled material, the material shall first be placed to the top of the fill or to go to a height of at least three (3) feet above the top of the pipe, whichever is the lesser. Particular care shall be taken to ensure maximum consolidation of material under the pipe location. The pipe trench shall be excavated as though in undisturbed material.~~

Unauthorized Excavation

~~If bottom of any excavation is taken out or disturbed beyond the limits indicated or prescribed, the resulting void shall be backfilled with embedment material compacted to a minimum of 90% of AASHTO T-180 or to the standards of the applicable agency having~~

~~jurisdiction.~~

Elimination of Unsuitable Material

~~Pipe bedding shall extend a minimum of 4 inches below the pipe. The pipe shall be supported on suitable material ascertained by the Design Engineer following good engineering practices.~~

Backfilling

~~As soon as practicable after the pipes have been laid, or the structures have been built and are structurally adequate to support the loads, including construction loads to which they will be subjected, the backfilling shall be started and thereafter it shall proceed until its completion.~~

Backfill Materials

~~The nature of the materials will govern both their acceptability for backfill and the methods best suited for their placement and compaction in the backfill. The materials and the methods shall both be subject to the approval and direction of the Design Engineer. No stone or rock fragment larger than 3 inches in greatest dimension shall be placed in the backfill nor shall large masses of backfill material be dropped into the trench in such a manner as to endanger the pipeline. If necessary, a timber grillage shall be used to break the fall of material dropped from a height of more than 5 feet. Pieces of bituminous pavement shall be excluded from the backfill unless their use is expressly permitted, in which case they shall be broken up as directed.~~

Embedment Materials

~~These materials are described in subsequent sections of this Manual. The use and placement of these materials are indicated on the Standard Details and specified herein.~~

Zone Around Pipe

~~The zone around the pipe shall be backfilled with the materials and to the densities and limits indicated on the details.~~

Compaction

~~Compaction shall be accomplished by tamping, or under appropriate construction~~

~~techniques to achieve the required densities.~~

Maximum Density

~~Unless specified otherwise, the percent of maximum density referred to in these specifications refers to the maximum density obtained when the material is laboratory tested in accordance with the procedures outlined in Designation AASHTO T-180, Latest Revision or as otherwise required by the governmental agency having jurisdiction over the finished roadway. Field densities shall be determined by a testing laboratory using accepted methods.~~

Miscellaneous Requirements

~~Whatever method of compacting backfill is used, care shall be taken that stones and lumps shall not become nested and that all voids between stones shall be completely filled with fine materials. Only approved quantities of stones and rock fragments shall be used in the backfill.~~

~~All voids left by the removal of sheeting shall be completely backfilled with suitable material, thoroughly compacted.~~

END OF SECTION 100

~~SECTION 101~~

~~PIPE EMBEDMENT MATERIALS~~

~~100.01 — General~~

~~Pipe embedment materials, as specified herein, shall be installed as shown on the details and/or as specified.~~

~~100.02 — Class 1 Materials (Bedding Rock)~~

~~The material shall be $\frac{3}{4}$ inch to $\frac{1}{4}$ inch graded material such as coral, crushed stone, crushed shells or bedding rock, well graded in size, 100% passing a 1 inch sieve opening, and as specified in ASTM 57. The bedding rock shall consist of clean hard and durable particles or fragments, free from dirt, vegetable or other objectionable matter. Samples and gradation analysis shall be approved by the Design Engineer before any material is delivered to the job site.~~

~~100.03 — Class 2 Material~~

~~The material shall be well graded, clean coarse sand and gravels with a maximum particle size of $\frac{3}{4}$ inch, containing a small percentage of fines and free of organic and other deleterious matter.~~

~~100.04 — Class 3 Material (Select Backfill)~~

~~The material shall be fine sand and clayey gravels, including fine sands, sand-clay mixtures and gravel-clay mixtures, free of organic and other deleterious matter.~~

~~———— Placing and Compacting~~

~~The material shall be spread in layers of uniform thickness and installed to the densities and where shown on the Standard Details or as required.~~

~~After each pipe has been brought to grade, aligned and placed in final position, the embedment material shall be deposited and densified under the pipe haunches on each side of the pipe. Following this operation, the remainder of the embedment material shall be installed as shown on the Standard Details and as specified herein.~~

~~END OF SECTION 101~~

SECTION 10~~17~~

HORIZONTAL DIRECTIONAL DRILL

107.01 General

This specification covers installation of 4" and larger diameter HDPE pipe using horizontal directional drill methods. Installations shall comply with FDOT Standard Specification (Latest Edition) Section 555, ASTM F1962 and this specification.

107.02 Material and Equipment

The drilling fluid shall be a bentonite drilling fluid with or without polymer additives. All materials shall be NSF/ANSI 60 certified.

Pipe and fittings shall comply with Section 114.

Locating/Tracking/Steering equipment for directional drill installations ~~across open water~~ shall utilize a magnetic tracking system utilizing a DC or AC current and a surveyed surface loop coil. ~~Locating/Tracking/Steering equipment in other locations shall require a walk-over tracking system. The locating/tracking/steering equipment shall place the pilot bore with a maximum horizontal tolerance of +/- 5% of directional bore pipe depth below grade.~~

All directional drills shall be installed with a minimum 2" HDPE conduit and two minimum 10 gauge tracer wires installed for the full length of the bore. The conduit shall be terminated in a CDR box installed at each end of the bore. The 10-gauge tracer wires shall be terminated in the valve box for the isolation valves on each end. The conduit diameter and wall thickness shall be sized to withstand anticipated pull back forces of the installation. Tracer wire shall be high strength copper clad steel, Copperhead Soloshot EHS or approved equal.

107.03 Submittals

Submit technical data, cut sheets and shop drawings for equipment and materials including but not limited to drilling fluid (including MSDS Sheet), additives, pipe, fittings, adapters, pipe stiffeners, bore plan, locating and tracking equipment, locating tracking equipment calibration, locating and tracking equipment certification, heat fusion technician certification and proposed sequence of construction for approval by the Engineer.

Horizontal and vertical alignment of the pilot bore based on location information from the locating/tracking/steering equipment outlined in paragraph 107.02 and surveyed points on the DC surface looped coil. The horizontal and vertical alignment shall be referenced to horizontal and vertical datum requirements as specified in the Record Drawing Submittal Guide, Standard Detail SD-29. **The horizontal and vertical alignment shall be as-built and certified by the steering contractor as complying with the locating/tracking/steering equipment manufacturers recommended procedures.**

A log of directional drilling machine pressures during pulling operations converted to tensile stress seen in the pipe. Hydraulic pressure produced by the machine alone is not acceptable.

Experience and project resumes.

107.04 Experience

The directional drill contractor and locating/tracking/steering/contractor shall demonstrate experience in similar horizontal directional drills. Experience shall be a minimum of 5 successful installations of same or larger diameter of same or longer length in the previous 5 years. The directional drill contractor shall submit a list of references.

107.05 Placement and Testing

Perform all locates and pothole all potential conflicts prior to submitting the bore plan. The bore plan shall not be approved until all known conflicts have been resolved.

HDPE pipe shall be handled with care to include only the use of nylon slings for lifting and the use of appropriate sized pipeline rollers for supporting and maneuvering the pipe during fusion and pull back operations.

~~After fusing, prior to placement, the HDPE piping shall be filled with potable water and pressure tested at 100 psi for 2 hours. Each joint shall be visibly inspected for leakage at the end of 2 hours. Any sections showing visible leakage shall be cut out and the remaining pipe fused together and retested. After placement the~~All HDPE pipe shall be pressure tested per Section 140.

All pipe installed below the water table shall be flooded with water prior to pulling operations.

Installations shall not exceed the pipe manufacturer's recommended radius of curvature.

The reamed hole shall not exceed 1.5 times the nominal diameter of the installed pipe.

All directional bores shall include one isolation valve on each end.

Upon completion bore pits shall be cleaned of excess drilling fluid and backfilled with clean fill.

END OF SECTION 1017

SECTION 110

PIPE, FITTINGS AND ACCESSORIES

110.01 General

This section provides standards for all pipe and fittings used in the construction of District wastewater facilities. Approved piping systems include SCH40 and SCH 80 PVC, High Density Polyethylene (HDPE), SDR26 PVC, C900 PVC, C905 PVC and Ductile Iron.

110.02 Schedule 40 and 80 PVC Pipe (1/2" – 3")

Small diameter PVC (3" diameter or less) pipe and fittings shall be pressure rated ASTM D1784/D1785 schedule 40 for buried applications and schedule 80 for non-buried applications. Small diameter PVC pipe shall be marked with schedule, diameter, pressure rating at 140 F and applicable ASTM standards for dimensions and materials and be white or gray in color.

Small diameter PVC joints shall be solvent weld socket type.

110.03 AWWA C901 High Density Polyethylene (1/2" – 3")

Small diameter HDPE (3" diameter or less) pipe shall manufactured from PE4710 resin and comply with AWWA C901 and ASTM F714. Small diameter HDPE pipe shall be iron pipe size (IPS) with a standard dimension ratio (SDR) 11. Small diameter HDPE pipe shall be marked with diameter, SDR, AWWA C901, ASTM F714 and PE4710 and shall be black in color with extruded stripes in applicable color; sewer = green, IQ = purple.

Small diameter HDPE pipe shall come in reels sufficient for continuous lay lengths from service latera to service lateral.

Small diameter HDPE pipe shall use brass pack joint style couplings and stainless steel pipe stiffeners.

110.04 AWWA C906 High Density Polyethylene (4" – 63")

Large diameter HDPE (4" – 63") pipe shall manufactured from PE4710 resin and comply with AWWA C906, ASTM F714 and be listed with the Plastic Pipe Institute's (PPI) TR4. Large diameter pipe shall be ductile iron pipe size (DIPS) with a standard dimension ratio (SDR) 11. Large diameter HDPE pipe shall be marked with diameter, SDR, AWWA C906, ASTM F714 and PE4710 and be black in color with extruded stripes in applicable color; sewer = green, IQ = purple, potable = blue.

Single joints of pipe shall be a minimum of 40 feet in length. Damaged pipe may have the damaged area cut out and the remaining portion reused as long as the remaining portion is a minimum of 20 feet in length.

Large diameter HDPE pipe shall utilize HDPE butt fused fittings of the same SDR.

110.05 SDR 26 PVC Gravity Mains

Gravity main installations whose invert is greater than 4'-0" and less than 14'-0" shall be integral bell and spigot gasketed pipe and comply with ASTM D3034 for SDR 26 up to 15" in diameter. SDR 26 gravity main pipe shall meet the following ASTM Standards: D3212 (Joint), F477 (Gasket), D1784 (PVC Compound), D2412 (Stiffness) and D2321 (installation). SDR 26 gravity main pipe shall be green in color and marked with diameter, SDR and applicable ASTM standards.

Joints of SDR 26 gravity main pipe shall be either 14'-0" or 20'-0" in length

110.06 AWWA C900 Force Mains

Force main installations 4" – 48" shall be integral bell and spigot gasketed pipe and comply with AWWA C900 DR18, Pressure Class 235. C900 Force main pipe shall comply with ASTM Standards D1784 (PVC Compound), D3139 (Joint), and F477 (Gasket). C900 force main pipe shall be marked with diameter, DR and AWWA C900. C900 force main pipe shall be green for sewer and purple for IQ.

Joints of C900 force main pipe shall be either 14'-0" or 20'-0" in length.

C900 force main pipe shall use ductile iron fittings with restrained mechanical joints

110.07 Ductile Iron Pipe

All ductile iron pipe shall be manufactured in accordance with ANSI/AWWA C151/A21.51. Ductile iron pipe shall be pressure class 350 up to 20" and pressure class 250 for larger diameters. Ductile iron pipe shall be epoxy coated on the interior with Protecto 401, Permite 9043 Type II or Linerguard. Coatings shall conform to ANSI/AWWA C104/A21.4

Joints shall conform to ANSI/AWWA C111/A21.11. Restrained push on joints shall use Field Lok 350 Gaskets by US Pipe and Foundry Co., or approved equal.

Ductile Iron Pipe shall be minimum Pressure Class 350 up to 20-inches in diameter and Pressure Class 250 for larger diameters.

Where ductile iron pipe is used, fittings shall be ductile iron and conform to the requirements of ANSI/AWWA C153/A21.53 and shall be of a pressure classification at least equal to that of the pipe with which they are used. Fittings may be flanged or mechanical as applicable.

110.08 SDR 26 PVC Fittings

PVC Gravity main fittings shall conform to the requirements of ASTM D2241 SDR26. Gaskets shall confirm to ASTM F477. Fittings in sizes not available in injection molded form shall be fabricated from SDR26 pipe in accordance with ASTM D2241.

110.09 Schedule 40 and 80 PVC Fittings

Fittings used in small diameter PVC piping systems shall match the schedule of the piping system, either Schedule 40 or 80. Fittings shall be socket weld and conform ASTM D1785 for physical dimensions and ASTM D1784 for materials.

110.010 HDPE Butt Fused Fittings

Molded butt fusion fittings and adapters shall conform to ASTM D 3261, utilize HDPE conforming to the pipe to which it will be fused and have the same dimension ratio as the pipe to which it will be fused. All fittings shall be pressure rated to provide a working pressure rating no less than that of the pipe.

110.011 Large Diameter HDPE to PVC/DI Adapters

Transition from HDPE to other piping systems shall require MJ or flanged HDPE adapters. Instances where these adapters are not practical will require pipe stiffeners in conjunction with ductile iron fittings. The pipe stiffeners shall be stainless steel as manufactured by JCM Industries or pre-approved equal. Pipe stiffeners in conjunction with ductile iron fittings shall only be used with the written approval of the District Engineer for HDPE pipe 12" diameter and smaller. When approved, MEGALUG Series 2000PV mechanical joint restraints or approved equal shall be used.

110.012 Small Diameter HDPE Fittings and Adapters

Small diameter HDPE pipe (1/2" – 3") HDPE to HDPE and HDPE to PVC connections shall use pack joint style fittings as manufactured by Ford Meter Box Co. Stainless steel pipe stiffeners shall also be required.

110.013 Ductile Iron Fittings

Ductile iron fittings shall conform to ANSI/AWWA C153/A21.53 (compact fittings) with a minimum pressure rating of 350 psi. Fittings shall be mechanical joint or flanged as required.

Flanged fittings shall comply with ANSI B16.5, Class 150.

All mechanical joints shall be restrained. Restrained mechanical joints shall use 1100 Series Megalug by EBAA Iron Sales, Inc. or approved equal.

Ductile iron fittings shall be epoxy coated on the interior with Protecto 401, Permite 9043 Type II or Linerguard. Coatings shall conform to ANSI/AWWA C104/A21.4

110.014 Ductile Iron Pipe and Fittings Linings and Coatings

Ductile iron pipe fittings shall be epoxy coated on the interior with Protecto 401, Permite 9043 Type II or Linerguard. Coatings shall conform to ANSI/AWWA C104/A21.4

Buried ductile iron pipe and fittings shall receive an external bituminous coating in accordance with ANSI 21.10. and be striped with green for sewer and purple for IQ water.

Above grade ductile iron pipe and fittings shall receive a three coat system; Prime Coat: TNEMEC-Aluminum Mastic #135 (3 to 5 mils DFT), Intermediate Coat Series 66 Epoxoline Hi-Build Epoxy (4 to 6 mils DFT) and Finish Coat Series 73 Endura-Shield III Urethane (2 to 3 mils DFT). Coatings shall be green for sewer and purple for reclaimed water.

110.015 Marking Tape

All buried piping shall include marking tape. Marking tape shall be minimum 2” wide, magnetic and detectable. Marking tape shall be green and marked “SEWER”.

110.016 Buried Markers

Buried markers shall be installed at all fittings, valves, service connections, change of direction and every 300’ of pipe lay length. Buried markers are not required on gravity main piping but are required on service lateral piping and cleanouts. Buried markers shall be EMS Mini-Markers for Wastewater Model 1258 as by 3M.

110.017 Tracer Wire

When specifically required pressure rated piping shall be installed with tracer wire. Tracer wire shall be attached to the pipe using a half-hitch every 10’ for direct bury applications and shall be pulled with the pipe (without attaching) in directional drill installations. Tracer wire in directional drill applications shall be minimum 10 gauge, Copperhead Soloshot EHS or approved equal. Tracer wire in direct bury applications shall be minimum 14 gauge, PVC coated, solid copper wire.

110.018 Handling and Cutting Pipe

The pipe manufacturer's recommendation for handling, storing, unloading and cutting pipe shall be followed. Individual pipes shall not be allowed to drop from the truck when unloading. Pipe units shall not be handled with chains or single cables. Pipe shall not be stored more than two units high. Every care shall be taken in handling and laying pipe and fittings to avoid damaging the pipe or scratching or marring machined or finished surfaces.

Any fitting showing a crack shall be marked as rejected and removed at once from the work.

In any pipe showing a distinct crack and in which it is believed there is not incipient fracture beyond the limits of the visible crack, the cracked portions, if so approved by the Design Engineer, may be cut off before the pipe is laid so that the pipe used is perfectly sound. The cut shall be made in the sound barrel at a point at least 12-inches from the visible limits of the crack.

Except as otherwise approved, all cutting shall be done with knives or saws adapted to the purpose. All cut ends shall be examined for possible cracks caused by cutting.

Cut ends to be used with push on joints shall be carefully chamfered and the reference mark located in accordance with the manufacturer's recommendation to prevent cutting the gasket when the pipe is laid or installed.

110.019 Installing Pipe and Fittings

No defective pipe or fittings shall be laid or placed in the piping, and any piece discovered to be defective after having been laid or placed shall be removed and replaced by a sound and satisfactory piece.

Each pipe and fitting shall be cleared of all debris, dirt, etc., before being laid and shall be kept clean until accepted in the complete work. Pipe and fittings shall be laid accurately to the lines and grades indicated on the drawings or required. Care shall be taken to ensure a good alignment both horizontally and vertically.

Each length of pipe shall have a firm bearing along its entire length. Embedment requirements are shown on the Standard Details and in this specification.

The bell of the pipe shall be cleaned of dirt or other obstruction and wiped out before the cleaned and prepared spigot of the next pipe is inserted into it. Only lubricants made by the pipe manufacturer may be used on the spigot. The new pipe shall be shoved firmly into place until properly seated and held securely until the joint has been completed.

110.020 Temporary Plugs

At all times when pipe laying is not actually in progress, the open ends of pipe shall be closed by temporary watertight plugs. If water is in the trench when work is resumed, the plug shall not be removed until all danger of water entering the pipe has passed.

110.021 Preparation of Trench Bottom

The trench bottom shall be constructed to provide a firm, stable and uniform support for the full length of the pipe. Unsuitable foundation material shall be removed as required by the Engineer and refilled with Class 1, 2, or 3 material. Class 2 or 3 material shall be compacted to a minimum of 90% standard proctor density.

110.022 Manhole Connections

Where PVC gravity or force main pipe enters the manhole, approved sealing adapters as manufactured by Harco, Fernco or equal, shall be used. Any coupling used shall be coated with an epoxy coated sand finish approved by the District.

110.023 Bell Holes for Elastomeric Seal Joints

When the pipe being installed is provided with elastomeric seal joints, bell holes shall be excavated in the bedding material to allow for unobstructed assembly of the joint. Care should be taken that the bell hole is not larger than necessary to accomplish proper joint assembly. When the joint has been made, the bell hole should be carefully filled with bedding or haunching material to provide for adequate support of the pipe throughout the entire length.

SECTION 109

LARGE DIAMETER PVC PRESSURE PIPE

109.01 General

~~It is the intent of this section to provide a uniform standard for all PVC pressure pipe used in force main construction, whose nominal diameter exceeds 12 inches.~~

109.01 Larger Diameter PVC Pressure Pipe (D.I.O.D.)

~~All pipe shall meet the requirements for polyvinyl chloride pipe as specified in ASTM D2241, made from virgin PVC type 1120 compound with cell classification per ASTM D1784. The pipe shall be supplied in 20 foot lengths with an integral bell on each length and having a groove to retain the rubber sealing gasket. The other end of the pipe shall be cut square, beveled, and indelibly marked to the insertion depth. The pipe shall have a minimum dimension ratio (DR) of 25 with a pressure rating of not less than 150 psi. Outside diameter of the pipe shall be equal to ductile iron pipe. Pipe joints may be deflected up to the maximum deflection as recommended by the pipe manufacturer. Gaskets shall be as recommended by the pipe manufacturer for sewer application and shall comply with the requirements of ASTM F477.~~

~~The pipe manufacturer shall submit an affidavit of compliance that all materials used in the pipe production meet the requirements of Uni-Bell Pipe Association Standards and latest AWWA C-905 specifications.~~

~~PVC pressure pipe shall be installed with a magnetic tape suitable for locating pipe in the future. The tape shall be laid directly over the pipeline, at a depth (as recommended by the manufacturer) compatible with electronic pipe locators (not more than 18" deep from finished grade).~~

~~Electronic markers (EMS) shall be placed over the pipeline at each bend or valve along the length of the line (See Section 3.07).~~

~~109.01 — Fittings~~

~~Fittings shall be 40 mil epoxy lined ductile iron as specified in Sections 111 and 112.07.~~

~~109.01 — Installation~~

~~The pipe shall be installed in strict accordance with the manufacturer's recommendations. PVC pipe joints should not be deflected more than that recommended by the manufacturer's specifications.~~

~~No defective pipe or fittings shall be laid or placed in the piping, and any piece discovered to be defective after having been laid or placed shall be removed and replaced by a sound and satisfactory piece, at the Contractor's sole expense.~~

~~No PVC pipe shall be cut within a three (3) foot distance from the end of the bell end of the pipe.~~

~~Each pipe and fitting shall be cleared of all debris, dirt, etc., before being laid and shall be kept clean until accepted in the completed work.~~

~~Pipe and fittings shall be laid accurately to the lines and grades indicated on the Drawings. Care shall be taken to ensure a good alignment both horizontally and vertically.~~

~~Each length of pipe shall have a firm bearing along its entire length. Bedding as shown on the Standard Details shall be utilized. Compaction along the sides of pipe shall be strictly enforced at a minimum of 98% of AASHTD T-180 to a point one (1) foot above the pipe.~~

~~Pipe utilized for sewer force mains shall be colored green. Pipe used for reuse mains shall be colored purple throughout.~~

~~109.01 — Assembling Push-On Joints~~

~~Push-on joints shall be made up by first inserting the gasket (where applicable) into the grove of the bell and applying a thin film of special nontoxic gasket lubricant uniformly over the spigot end of the pipe. The chamfered end of the plain pipe shall be inserted into the gasket and then forced past it until it seats against the bottom of the socket.~~

END OF SECTION 109

~~SECTION 111~~

~~DUCTILE IRON PIPE AND FITTINGS~~

~~110.01 — Pipe~~

~~All ductile iron pipe shall be designed in accordance with ANSI/AWWA C150/A21.50, 1976, or latest revision, based on a Type 2 bedding condition and shall be manufactured in accordance with ANSI/AWWA C151/A21.51. Along with the Record Drawings, the Design Engineer shall furnish the District a sworn statement from the manufacturer in accordance with Section 51.4.2 of ANSI/AWWA C151/A21.51, for truck load quantities of pipe. Each pipe shall be marked with the manufacturer's year of manufacture and the class of pipe. The words "Ductile Iron or D.I." shall be stamped on the pipe.~~

~~Ductile Iron Pipe shall be minimum Pressure Class 350 up to 20 inches in diameter and Pressure Class 250 for larger diameters.~~

~~Where ductile iron pipe is used, fittings shall be ductile iron and conform to the requirements of ANSI/AWWA C153/A21.53, and shall be of a pressure classification at least equal to that of the pipe with which they are used.~~

~~110.01 — Adapters~~

~~Where it is necessary to joint pipe of different type, the necessary adapters shall be utilized. Adapters shall have ends conforming to the above specifications for the appropriate type of joint to receive the adjoining pipe. Adapters joining two classes of pipe may be of the lighter class provided that the annular space in bell and spigot type joints will be sufficient for proper jointing.~~

~~110.01 — Types of Joints~~

~~Joints for ductile iron pipe shall be either push on or mechanical joint for buried piping and flanged joints for exposed or interior piping. Joints for pipe in casings shall be mechanical joint type with retainer glands unless otherwise approved by the District Engineer. Retainer glands shall be equal to those manufactured by EBBA Iron Corp., known as "meg-a-lugs".~~

~~Joint for mechanical joint pipe shall conform to ANSI/AWWA C111/A21.11. Joints for push on joint pipe shall be equal to "Tyton" as manufactured by United States Pipe and Foundry Company, or equal. If the pipe bell is grooved, the minimum thickness at the groove shall be equal to that of the thickness class specified herein.~~

~~The plain end of push on pipe shall be manufactured to a true circle and chamfered to facilitate fitting the gasket.~~

~~Push on and mechanical joint pipe and fittings shall be provided with sufficient quantities of accessories conforming to ANSI/AWWA C111/A21.11.~~

~~Flanges shall conform to ANSI B16.1, Class 125. All bolts and nuts for flanged pipe shall conform to ANSI B18.2.1. and B18.2.2 and manufactured of 316 S.S.~~

~~Gaskets shall be of a composition suitable for exposure to the liquid within the pipe.~~

~~110.01 ——— Lining and Coating~~

~~All ductile iron force main pipe and fittings shall be furnished with an interior epoxy lining. The lining material for pipe and fittings shall be epoxy coatings, 40 mil thick, and shall be "Protecto 401", "Permite 9043 Type II", or "LinerGuard" and conform to the latest standards of ANSI/AWWA C104/A21.4.~~

~~The District will require that ductile iron pipes used in gravity sewers be lined with epoxy as specified above.~~

~~All buried pipe and fittings shall receive an external bituminous coating in accordance with ANSI 21.10.~~

~~All above ground ductile iron pipe and fittings shall receive a coated and painted green exterior (force mains) or purple (reclaimed water mains). The primer shall be TNEMEC Aluminum Mastie #135 (3 to 5 mils DFT), the intermediate coat shall be Series 66 Epoxoline Hi-Build Epoxy (4 to 6 mils DFT) and the finish coat shall be Series 73 Endura-Shield III Urethane (2 to 3 mils DFT).~~

~~110.01 ——— Handling and Cutting Pipe~~

~~Every care shall be taken in handling and laying pipe and fittings to avoid damaging the pipe and linings, scratching or marring machined surfaces, and abrasion of the pipe coating or lining.~~

~~Any fitting showing a crack shall be marked as rejected and removed at once from the work.~~

~~In any pipe showing a distinct crack and in which it is believed there is no incipient fracture beyond the limits of the visible crack, the cracked portions, if so approved by the Design Engineer, may be cut off before the pipe is laid so that the pipe used is perfectly sound. The cut shall be made in the sound barrel at a point at least 12 inches from the visible limits of the crack.~~

~~Except as otherwise approved, all cutting shall be done with knives or saws adapted to the purpose. Hammer and chisel or so-called wheel snap cutters shall not be used to cut pipe. All cut ends shall be examined for possible cracks caused by cutting.~~

~~Cut ends to be used with push-on joints shall be carefully chamfered to prevent cutting the gasket when the pipe is laid or installed.~~

~~Lined and coated pipe and fittings shall be installed as, and assembled as, recommended by the pipe manufacturer for the particular lining used.~~

~~110.01~~ Installing Pipe and Fittings

~~No defective pipe or fittings shall be laid or placed in the piping, and any piece discovered to be defective after having been laid or placed shall be removed and replaced by a sound and satisfactory piece.~~

~~Each pipe and fitting shall be cleared of all debris, dirt, etc. before being laid and shall be kept clean until accepted in the complete work.~~

~~Pipe and fittings shall be laid accurately to the lines and grades indicated on the Drawings or required. Care shall be taken to ensure a good alignment both horizontally and vertically.~~

~~Electronic markers (EMS) shall be placed over the pipeline at each bend or valve along the length of the line and at intervals of not more than 300' on straight runs.~~

~~Each length of pipe shall have firm bedding along its entire length. Bedding requirements are shown on the Standard Details.~~

~~When mechanical joint, push on joint, or similar pipe is laid, the bell of the pipe shall be cleaned of excess tar or other obstruction and wiped out before the cleaned and prepared spigot of the next pipe is inserted into it. The new pipe shall be shoved firmly into place until properly seated and held securely until the joint has been completed. The ductile iron pipe shall not have a joint deflection greater than that recommended by the manufacturer.~~

~~110.01~~ Temporary Plugs

~~At all times when pipe laying is not actually in progress, the open ends of pipe shall be closed by temporary watertight plugs. If water is in the trench when work is resumed, the plug shall not be removed until all danger of water entering the pipe has passed.~~

~~110.01~~ Assembling Push On Joints

~~Push on joints shall be made up by first inserting the gasket into the groove of the bell and applying a thin film of special nontoxic gasket lubricant uniformly over the inner surface of the gasket which will be in contact with the spigot end of the pipe. The chamfered end of the plain pipe shall be inserted into the gasket and then forced past it until it seats against the bottom of the socket.~~

~~110.01~~ Bolted Joints

~~Materials for bolted joints shall be as specified herein. Before the pieces are assembled, rust preventative coatings shall be removed from machined surfaces. Pipe ends, sockets, sleeves, housings, and gaskets shall be thoroughly cleaned and all burrs and other defects shall be carefully smoothed.~~

~~111.09 Assembling Mechanical Joints~~

~~Surfaces against which the gasket will come in contact shall be thoroughly brushed with a wire brush prior to assembly of the joint. The gasket shall be cleaned. The gasket, bell, and spigot shall be lubricated by being washed in soapy water. The gland and gasket, in that order, shall be slipped over the spigot and the spigot shall be inserted into the bell until it is correctly seated. The gasket shall then be seated evenly in the bell at all points, centering the spigot, and the gland shall be pressed firmly against the gaskets. After all bolts have been inserted and the nuts have been made up finger tight, diametrically opposite nuts shall be progressively and uniformly tightened all around the joint to the proper tension, preferably by means of a torque wrench.~~

~~The correct range of torque shall not exceed the manufacturer's recommendation.~~

~~If effective sealing of the joint is not attained at the maximum torque indicated above, the joint shall be disassembled and thoroughly cleaned, then reassembled. Bolts shall not be over stressed to tighten a leaking joint.~~

~~111.09 Restraints~~

~~Restrained joints shall be mechanical joint with ductile iron retainer glands, for pipe sizes 3 inches through 24 inches. The mechanical joints including the ductile iron retainer glands shall conform to ANSI/AWWA C111/A21.11 for Rubber Gasket Joints for Cast Iron and Ductile Iron Pressure Pipe and Fittings. All mechanical joint pipe and fittings shall be furnished with high strength cast iron tee head bolts and hex nuts with composition, dimensions, and threading in accordance with ANSI/AWWA C111/A21.11. The retainer glands shall be cast of high strength ductile iron and fitted with cup point, square head, double heat treated special alloy steel set screws. The retainer glands shall be EBBA Iron Corp. "Meg-a-Lug" or approved equal.~~

~~"Field Lok" push on retainer gaskets as manufactured by the U.S. Pipe and Foundry Co., or equal, can be used in lieu of retainer glands for ductile iron pipe sizes 4" - 12". Restrained joints for ductile iron pipe and fittings greater than 12 inches may be of the single rubber compression gasket push on or mechanical joint type such as TR-FLEX as manufactured by U.S. Pipe and Foundry, Fastite Joint Pipe by the American Cast Iron Pipe Co., Locked Mechanical Joint F-217-D or Super-Lock Joint by the Clow Corporation, or approved equal.~~

~~When approved by the District, the Contractor may place reaction and thrust blocking at the back of tapping sleeves. Blocking shall be poured against firm compaction material. The concrete for thrust blocking shall be as specified under Concrete Masonry.~~

END OF SECTION 111

~~SECTION 112~~

~~POLYVINYL CHLORIDE GRAVITY SEWER PIPE~~

~~111.01 — General~~

~~This standard designates general requirements for un-plasticized polyvinyl chloride (PVC) plastic class pipe with integral bell and spigot joints for the conveyance of sewage. This class of pipe shall not be used where the depth of invert is greater than 14'-0" from finished grade, where there are special well field protection zones and for other scenarios where identified by the District's Engineer. In those cases, along with any other special cases required by the District Engineer, approved pressure pipe shall be utilized.~~

~~111.01 — Materials~~

~~Un-plasticized polyvinyl chloride pipe (PVC) shall be integral wall bell and spigot joints which meets the requirements of ASTM Specifications D3034 for SDR 26 or up to 15-inch diameter pipe. The pipe shall meet the following ASTM Standards: *D3212* (Joint), *F477* (Gasket) and *D1784* (PVC Compound).~~

~~Gravity sewer pipe and fittings from 18 inches through 27 inches shall meet ASTM F-879.~~

~~111.01 — Stiffness~~

~~The pipe stiffness for gravity sewer pipe shall have a minimum pipe stiffness of 115 psi when measured at 5% vertical deflection and tested in accordance with ASTM D2412.~~

~~111.01 — Pipe Bell~~

~~The bell of the pipe shall be designed to use a rubber ring gasket to allow for contraction and expansion. The bell shall consist of an integral wall section designed to be at least as strong as the pipe wall or an integral sleeve reinforced bell.~~

~~111.01 — Tests~~

~~111.01.0 — Acetone Test~~

~~A 2-inch long sample ring shall not flake or disintegrate when immersed for 20 minutes in a sealed container of acetone when conducted in accordance with ASTM *D2152*. (Swelling or softening is not considered a failure.)~~

~~111.01.0 — Flattening~~

~~A six inch long sample ring shall be compressed between parallel plates to 0.40% of the outside diameter of the pipe without evidence of splitting, cracking or breaking.~~

~~111.01.0 — Impact Test~~

~~The pipe shall be tested at 73 degrees F and not fail an impact of a falling twelve (12) pound missile with a 2-inch radius at the levels prescribed by ASTM D2444. Sizes four inches through 12 inches shall pass an impact of 120 ft/lbs.~~

~~111.01.0 — Marking~~

~~All PVC pipe shall be marked in accordance with Section 12.1 of ASTM D3034.~~

~~111.01 — Standard Laying Lengths~~

~~All pipe shall be furnished in standard laying lengths provided by the pipe manufacturer.~~

~~111.01 — Fittings~~

~~PVC sewer fittings shall conform to the requirements of ASTM D3034 specification with minimum wall thickness of SDR 26 as defined in section 7.4.1. Fittings in sizes through 8" shall be molded in one piece with elastomeric joints and minimum socket depths as specified in sections 6.2 and 7.3.2. Gaskets shall have a minimum cross-sectional area of 0.20 sq. in. and conform to ASTM F477 specification. Fittings in sizes not available in injection molded form shall be fabricated from SDR 26 thickness pipe and in accordance with section 7.11 of the specification with manufacturers standard pipe bells and gaskets.~~

~~111.01 — Adapters~~

~~Where necessary to join pipe of different types, approved transition joints, as shown in the details, are acceptable. When joining sewer pipe to ductile iron or C 900 pipe, an adapter equal to Harco 300 series shall be used.~~

~~111.01 — Handling and Cutting Pipe~~

~~The pipe manufacturer's recommendation for handling, storing, unloading and cutting pipe shall be followed. Individual pipes shall not be allowed to drop from the truck when unloading. Pipe units shall not be handled with chains or single cables. Pipe shall not be stored more than two units high. Every care shall be taken in handling and laying pipe and fittings to avoid damaging the pipe or scratching or marring machined or finished surfaces.~~

~~Any fitting showing a crack shall be marked as rejected and removed at once from the work.~~

~~In any pipe showing a distinct crack and in which it is believed there is not incipient fracture beyond the limits of the visible crack, the cracked portions, if so approved by the Design Engineer, may be cut off before the pipe is laid so that the pipe used is perfectly sound. The cut shall be made in the sound barrel at a point at least 12 inches from the visible limits of the crack.~~

~~Except as otherwise approved, all cutting shall be done with knives or saws adapted to the purpose. All cut ends shall be examined for possible cracks caused by cutting.~~

~~Cut ends to be used with push on joints shall be carefully chamfered and the reference mark located in accordance with the manufacturer's recommendation to prevent cutting the gasket when the pipe is laid or installed.~~

~~111.01 — Installing Pipe and Fittings~~

~~No defective pipe or fittings shall be laid or placed in the piping, and any piece discovered to be defective after having been laid or placed shall be removed and replaced by a sound and satisfactory piece.~~

~~Each pipe and fitting shall be cleared of all debris, dirt, etc., before being laid and shall be kept clean until accepted in the complete work. Pipe and fittings shall be laid accurately to the lines and grades indicated on the drawings or required. Care shall be taken to ensure a good alignment both horizontally and vertically.~~

~~Each length of pipe shall have a firm bearing along its entire length. Embedment requirements are shown on the Standard Details.~~

~~The bell of the pipe shall be cleaned of dirt or other obstruction and wiped out before the cleaned and prepared spigot of the next pipe is inserted into it. Only lubricants made by the pipe manufacturer may be used on the spigot. The new pipe shall be shoved firmly into place until properly seated and held securely until the joint has been completed.~~

~~111.01 — Temporary Plugs~~

~~At all times when pipe laying is not actually in progress, the open ends of pipe shall be closed by temporary watertight plugs. If water is in the trench when work is resumed, the plug shall not be removed until all danger of water entering the pipe has passed.~~

~~111.01 — Preparation of Trench Bottom~~

~~The trench bottom shall be constructed to provide a firm, stable and uniform support for the full length of the pipe. Unsuitable foundation material shall be removed as required by the Engineer and refilled with Class 1, 2, or 3 material. Class 2 or 3 material shall be compacted to a minimum of 90% standard proctor density.~~

~~111.01 — Backfill Materials for PVC Gravity Lines~~

~~Three broad classes of material shall be used for bedding, haunching, and pipe side support:~~

~~CLASS 1 — Angular, $\frac{1}{4}$ inch to $\frac{3}{4}$ inch graded stone;~~

~~of which 100% passes a 1-inch sieve such as coral, slag, cinders, crushed stone, crushed shells, or bedding rock.~~

~~CLASS 2—Coarse sands and gravels with maximum particle size 3/4 inch including variously graded sands and gravels containing small percentages of fines, generally granular and non-cohesive, either wet or dry. Soil Types GW, GP, SW, and SP are included in this class.~~

~~CLASS 3—Fine sand and clayey gravels, including fine sands, sand-clay mixtures, and gravel-clay mixtures. Soil Types GM, GC, SM, and SC are included in this class. Included in Class 3 are existing soil types classified as select backfill.~~

~~Class 1, Class 2, or Class 3 material shall be used for bedding material to the top of the pipe. Special care must be taken to insure Class 1, 2, or 3 material is worked under the pipe haunch. Class 2 or 3 material shall be compacted to a minimum of 98% density per AASHTO T-180. The District has the option, at any time, to take density tests to confirm the 98% compaction. Precautions shall be taken to prevent movement of the pipe when placing and compacting material under the pipe haunches.~~

~~If Class 2 or 3 material is used for bedding and haunching, a dry trench shall be maintained.~~

~~Under certain conditions, the Engineer may be faced with an unusual amount of water running in the trench which he may find necessary to remove in order to properly install and compact the embedment material. The Engineer may elect to remove the water with trench side pumps through the use of Class 1 material for bedding. The depth of Class 1 material will depend upon the amount of water but take care to ensure that the trench wall soil material is such that it will not be removed from the area adjacent to the bedding as a result of the running water. The Engineer may also elect to utilize well points or under drain to control excessive ground water. If Class 1 material is used as bedding and under drain, it must be utilized at least up to the top of the pipe.~~

~~111.01—Manhole Connections~~

~~Where PVC gravity or force main pipe enters the manhole, approved sealing adapters as manufactured by Harco, Fernco or equal, shall be used. Any coupling used shall be coated with an epoxy coated sand finish approved by the District.~~

~~111.01—Bell Holes for Elastomeric Seal Joints~~

~~When the pipe being installed is provided with elastomeric seal joints, bell holes shall be excavated in the bedding material to allow for unobstructed assembly of the joint. Care should be taken that~~

~~the bell hole is not larger than necessary to accomplish proper joint assembly. When the joint has been made, the bell hole should be carefully filled with bedding or haunching material to provide for adequate support of the pipe throughout the entire length.~~

~~111.01 ——— Testing~~

~~Pipe deflection shall not exceed 5% measured by a go/no-go gauge or mandrel. The District may confirm the pipe deflection at the end of the job prior to acceptance. Additionally, the District may confirm the pipe deflection just prior to end of the one year guarantee period. Pipe sections exceeding 5% long term deflection will be relaid by the Contractor or the Developer at his own cost and expense and retested until the District's go/no-go gauge passes through the pipe section.~~

~~The District's mandrel will be considered the "official" gauge used for deflection testing. The standard District gauge is manufactured by "HURCO" Technologies, Inc., Harrisburg, S.D. The outside diameter of the District's mandrel is as follows:~~

Pipe Diameter —	Mandrel Diameter
—— (Inches)	—— (Inches)
8	7.28
10	9.08
12	10.79

~~**END OF SECTION 112**~~

SECTION 113

4" -12" DIAMETER POLYVINYL CHLORIDE FORCE MAIN PIPE

~~111.01~~ General

~~This standard designates general requirements for un-plasticized Polyvinyl Chloride (PVC) plastic class pipe with integral bell and spigots joints for the conveyance of sewage. All pipe shall be marked as indicated in Section 2.5 of AWWA C-900, Latest Revision.~~

~~111.01~~ Materials

~~All pipe shall meet the requirements of AWWA C-900 "Polyvinyl Chloride (PVC) Pressure Pipe". The DR of the pipe shall be calculated based on Appendix A of AWWA C-900, using a Class C bedding. The minimum pipe stiffness is DR-18. The pipe shall be extruded in sizes 4-inches through 12-inches ductile iron pipe equivalent outside diameter. All Class 150 pipe shall be minimum DR-18.. The pipe shall meet the following ASTM Standards:~~

~~D1784 (PVC Compound), D3139 (Joint), and F477 (Gasket).~~

~~111.01~~ Stiffness

~~The pipe stiffness using F/Y PVC class pressure pipe is contained in the table below:~~

CLASS	DR	F/Y
150	18	375
200	14	914

~~111.01~~ Pipe Bell

~~The bell of the pipe shall be designed to use a rubber ring gasket to allow for contraction and expansion. The bell shall consist of an integral wall section designed to be at least as strong as the pipe wall or an integral sleeve reinforced bell. The gasket shall be secured in the race by means of a nonmetallic polypropylene retainer ring or snugly seated in deep grooves to protect gasket roll-out upon assembly.~~

~~111.01~~ Tests

~~111.01.0~~ Factory Test

~~Each joint of pipe shall pass a factory hydrostatic test at four (4) times the pressure class of the pipe for five seconds.~~

~~111.01.0~~ Quick Burst Test

~~The pipe shall be designed to pass, without failure, the burst test for each rated class as follows:~~

~~DR 18 (755 psi) and
DR 14 (985 psi)~~

~~111.01.0 — Acetone Test~~

~~A 2-inch long sample ring shall not flake or disintegrate when immersed for 20 minutes in a sealed container of acetone when conducted in accordance with ASTM D 2152. (Swelling or softening is not considered a failure).~~

~~111.01.0 — Flattening~~

~~A 2-inch long sample ring shall be compressed between parallel plates to 40% of the outside diameter of the pipe without evidence of splitting, cracking, or breaking.~~

~~111.01.0 — Impact Test~~

~~The pipe shall be tested at 73 degrees F and not fail an impact of a falling twelve (12) pound missile with a 2-inch radius at the levels prescribed by ASTM D2444. Sizes 4-inches through 12-inches shall pass an impact of 120 ft.-lbs.~~

~~111.01 — Fittings~~

~~Fittings shall be ductile iron conforming to AWWA Standard C-153 or approved PVC fittings, conforming to AWWA Standard C-907.~~

~~111.01 — Adapters~~

~~Where it is necessary to joint pipe of different type, the necessary adapters shall be utilized. In the case of gravity sewers and service connections, transition joints as shown on the Details are acceptable. Adapters shall have ends conforming to the above specifications for the appropriate type of joint to receive the adjoining pipe. Adapters joining two classes of pipe may be of the lighter class provided that the annular space in bell and spigot type joints will be sufficient for proper jointing.~~

~~111.01 — Handling and Cutting Pipe~~

~~The pipe manufacturer's recommendation for handling, storing, 'Unloading, and cutting pipe shall be followed. Individual pipes shall not be allowed to drop from the truck when unloading. Pipe units shall not be handled with chains or single cables. Pipe shall not be stored more than two units high. Every care shall be taken in handling and laying pipe and fittings to avoid damaging the pipe or scratching or marring machined or finished surfaces.~~

~~Any fitting showing a crack shall be marked as rejected and removed at once from the work.~~

~~In any pipe showing a distinct crack and in which it is believed there is not incipient fracture beyond the limits of the visible crack, the cracked portions, if so approved by the Design Engineer, may be cut off before the pipe is laid so that the pipe used is perfectly sound. The cut shall be made in the sound barrel at a point at least 12 inches from the visible limits of the crack.~~

~~Except as otherwise approved, all cutting shall be done with knives or saws adapted to the purpose. All cut ends shall be examined for possible cracks caused by cutting.~~

~~Cut ends to be used with push-on joints shall be carefully chamfered and the reference mark located in accordance with the manufacturer's recommendation to prevent cutting the gasket when the pipe is laid or installed.~~

~~111.01 — Installing Pipe and Fittings~~

~~No defective pipe or fittings shall be laid or placed in the piping, and any piece discovered to be defective after having been laid or placed shall be removed and replaced by a sound and satisfactory piece.~~

~~Each pipe and fitting shall be cleared of all debris, dirt, etc., before being laid and shall be kept clean until accepted in the complete work. Pipe and fittings shall be laid accurately to the lines and grades indicated on the Drawings or required. Care shall be taken to ensure a good alignment both horizontally and vertically.~~

~~Each length of pipe shall have a firm bearing along its entire length. Embedment requirements are shown on the Standard Details.~~

~~The bell of the pipe shall be cleaned of dirt or other obstruction and wiped out before the cleaned and prepared spigot of the next pipe is inserted into it. Only lubricants made by the pipe manufacturer may be used on the spigot. The new pipe shall be shoved firmly into place until properly seated and held securely until the joint has been completed. The ductile iron pipe shall not have a joint deflection greater than that recommended by the manufacturer.~~

~~111.01 — Temporary Plugs~~

~~At all times when pipe laying is not actually in progress, the open ends of pipe shall be closed by temporary watertight plugs. If water is in the trench when work is resumed, the plug shall not be removed until all danger of water entering the pipe has passed.~~

~~111.01 — Restraint~~

~~Approved retainer glands equal to "Meg-a-Lug" as Manufactured by Ebba Iron Manufacturing Company made specifically for restraining PVC (C-900) force mains will be used.~~

~~END OF SECTION 113~~

SECTION 114

4"-65" DIAMETER HIGH DENSITY POLYETHYLENE FORCE MAIN PIPE

111.01 General

~~This standard designates general requirements for high density polyethylene pipe used in force main installations. All piping shall be marked as indicated in AWWA C-906, latest revision with the following minimum information; AWWA C-906, diameter, dimension ratio, resin and pressure rating.~~

111.01 Materials

~~All pipe shall be manufactured from PE4710, be minimum DR-11, 200 psi, meet the requirements of AWWA C-906 and be listed with the Plastic Pipe Institute's (PPI) TR4. The resin shall be formulated with carbon black and/or utilize ultraviolet stabilizer for protection against UV rays. The pipe shall meet the following ASTM Standards D3350 and F714.~~

~~Single joints of pipe shall be a minimum of 40 feet in length. Damaged pipe may have the damaged area cut out and the remaining portion reused as long as the remaining portion is a minimum of 20 feet in length.~~

111.01 Fittings and Adapters and Restraints

~~Molded butt fusion fittings and adapters shall conform to ASTM D-3261, utilize HDPE conforming to this specification and have the same dimension ratio as the pipe. All fittings shall be pressure rated to provide a working pressure rating no less than that of the pipe.~~

~~Pipe stiffeners shall be used in conjunction with ductile iron fittings where MJ or flanged adapters are not used. The pipe stiffeners shall be 316 stainless steel as manufactured by JCM Industries or pre-approved equal. Pipe stiffeners in conjunction with ductile iron fittings shall only be used with the written approval of the District Engineer for HDPE pipe 12" diameter and smaller. When approved, MEGALUG Series 2000PV mechanical joint restraints or approved equal shall be used.~~

111.01 Handling and Cutting Pipe

~~The pipe manufacturer's recommendation for handling, storing, Unloading, and cutting pipe shall be followed. Individual pipes shall not be allowed to drop from the truck when unloading. Pipe units shall not be handled with chains or single cables. Pipe shall not be stored more than two units high. Every care shall be taken in handling and laying pipe and fittings to avoid damaging the pipe or scratching or marring machined or finished surfaces.~~

~~Any fitting showing slices, scratches or gouges shall be rejected and removed at once from the work.~~

~~Any pipe showing slices, scratches or gouges where it is believed there is not damage beyond the limits of the visible defect, if so approved by the Design Engineer, may be cut off at a point at least 12 inches from the visible limits of the crack so long as the resulting piece does not violate the minimum length allowed.~~

~~Except as otherwise approved, all cutting shall be done with knives or saws adapted to the purpose. All cut ends shall be examined for possible cracks caused by cutting. All cuts shall be square and smooth.~~

~~111.01 — Butt Fusion Joining~~

~~All HDPE pipe and fittings shall be butt fused following the procedures outlined in ASTM F2620 Standard Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings. Fusion machine operators shall hold current certifications for fusing HDPE meeting ASTM F2620.~~

~~111.01 — Installing Pipe and Fittings~~

~~See Section 107 Horizontal Directional Drill.~~

~~111.01 — Temporary Plugs~~

~~The open ends of pipe shall be closed by temporary watertight plugs at all times. If water is in the trench when work is resumed, the plug shall not be removed until all danger of water entering the pipe has passed.~~

~~END OF SECTION 114~~

SECTION 120

CONCRETE MASONRYCAST IN PLACE CONCRETE

120.01 Materials

120.01.1 Concrete

Ready-mixed concrete shall be used. It shall comply with the Standard Specifications for Ready-Mixed Concrete, ASTM Designation C94 for the strengths specified herein. Alternate No.2, under Paragraph 4 - Quality of Concrete ASTM C94 shall govern for the design of the concrete mixture.

120.01.2 Cement

Type I cement shall be used in concrete for general purposes. Type II cement shall be used for sewer manholes, wet wells, and all other applications where the concrete may be exposed to a wastewater atmosphere.

~~120.01.3~~120.01.1 Reinforcing Steel

~~Reinforcing bars and mesh shall be sizes and shapes as indicated on the drawings. Bars shall be deformed bars of intermediate grade, new billet steel conforming with ASTM Designation A-615, Grade 60. Wire mesh shall conform with ASTM Designation A-185.~~

~~120.01.4~~120.01.1 Water Stops

~~Water stops shall be molded PVC, hollow center bulb, multiple ribbed as manufactured by W.R. Meadows, Inc., Electrovert, Inc. or Serviced Products Corporation, or approved equal.~~

120.02 Concrete

120.02.1 Mix

Concrete shall be composed of Portland cement, coarse aggregate, fine aggregate and water. The concrete mix shall be designed to produce the quality specified, proportioned and mixed in accordance with the requirements set forth herein and shall in all cases meet the following requirements:

<u>Class</u>	<u>Location</u>	<u>28 Day Compressive Strength</u>
A.	Specifically Required on Plans	4,000 psi
B.	General Structural Concrete	3,000 psi

C. Non-structural Applications 2,500 psi

120.02.2 Slump

The concrete, when placed, shall show slumps within the following limits when tested in accordance with the Method of Test for Slump of Portland Cement Concrete, ASTM Standard Specification C-143.

<u>Type of Concrete</u>	<u>Min. Slump</u>	<u>Max. Slump</u>
Mass Concrete	1 Inch	3 Inches
Reinforced Concrete:		
Thin vertical sections and thin columns, 7 inches or less in thickness	3 Inches	6 Inches
Heavy vertical sections more than 7 inches in thickness	3 Inches	5 Inches
Structural Slabs	1 Inch	4 Inches

120.02.3 Air Entraining

Air entrained concrete shall conform with the following requirements:

	<u>Maximum Aggregate Size(Inches):</u>				
	<u>3/8:</u>	<u>1-2:</u>	<u>3/4:</u>	<u>1:</u>	<u>1-1/2:</u>
Average total air content, percent (Plus or minus 1%):	5	5	4	4	3

120.03 Placing Concrete

~~Concrete shall be placed before the initial set has occurred and in no event after it has contained its water for more than 30 minutes. Concrete shall be placed within 1 hour of the load ticket time stamp and before the initial set has occurred.~~

The concrete shall be compacted and worked in an approved manner into all corners and angles of the forms and around reinforcement and embedded fixtures in such a manner to prevent segregation of the coarse aggregate.

All concrete shall be placed with an aid of mechanical vibrating equipment supplemented by hand forking or spading. Vibration shall be transmitted directly to the concrete and not through the

forms. The duration of vibration at any location in the forms shall be held to a minimum necessary to produce thorough compaction. The concrete shall be placed by suitable equipment as nearly as possible to its final location and without any segregation of the aggregate. Any free vertical drop shall not exceed 4-1/2 feet.

Expansion joints shall be placed as indicated on the plans. Joint material shall be installed as indicated and as approved by the Design Engineer. Construction joints shall be made only at locations indicated on the plans or approved by the Design Engineer, and in such manner as not to impair the strength, water-tightness or appearance of the structure.

120.04 Finishing

All top surfaces which are not covered by forms and which are not to be covered by additional concrete or backfill, shall be carried slightly above grade and struck off by board finish. All edges shall be provided with a 3/4 inch chamfer. All exposed surfaces which show board marks, joint marks or other irregularities after the forms are removed shall, at the discretion of the Design Engineer, be rubbed with carborundum brick, filled or otherwise dressed to produce a smooth true surface.

No special concrete or cement mortar topping course shall be used for slab finish unless shown on the drawings. The slab shall be brought to a true and even finish by power or hand floating. Unless otherwise specified, the surface shall be steel troweled to a smooth finish. Troweling shall be the minimum to obtain a smooth, dense surface and shall not be done until the mortar has hardened sufficiently to prevent excess fine material from being worked to the surface. ~~The top surface of the wet well shall immediately after troweling, be brushed lightly with a soft bristle janitor's push broom to produce a non-slip surface. The brushing shall be sufficient to mark the surface only without appreciably disturbing the troweled finish.~~

120.05 Curing

All concrete shall be kept wet by covering with water and approved water saturated covering, or other approved method which will keep all surfaces continuously wet for a period of seven (7) days, unless otherwise specified by the Design Engineer. All concrete shall be adequately protected from injurious action by the sun. Fresh concrete shall be protected from heavy rains, flowing water and mechanical injury. All concrete shall be kept damp for at least seven (7) days by covering with an approved saturated covering, by a system of perforated pipes or mechanical sprinklers, or by any other approved method which will keep all surfaces continuously damp.

Where wood forms are left in place during curing, they shall be kept wet at all times to prevent opening at the joints and drying out of the concrete. Water for curing shall be clean and entirely free from any elements which might cause staining or discoloration of the concrete.

120.06 Forms

Forms shall be of wood, metal, or other approved material shall be built true to line and grade, mortar tight, adequately braced and supported, and sufficiently rigid to prevent displacement or sagging.

Forms, except those lined with absorptive form lining, shall be coated with a non-staining mineral oil applied shortly before placing the concrete. In lieu of oiling, forms for unexposed surfaces may be thoroughly wetted immediately before placing the concrete.

Forms ties shall be of a design such that when forms are removed no metal shall be within 1 inch of the finished surface. Holes remaining from withdrawn tie rods or bolts shall be filled solid with cement mortar.

Under normal conditions, the minimum waiting period after placing concrete for stripping forms shall be as follows:

<u>Where Used</u>	<u>Time</u>
1. Bottom forms of girders and beams, floor slabs, and other concrete.	5 Days
2. Walls, piers, columns, sides of beams, and other vertical surfaces.	24-48 hours

The use of this schedule shall not operate to relieve the Contractor or the Design Engineer of responsibility for the safety of the structure.

120.07 Embedded Items

In addition to steel reinforcement, pipes, and other metal objects, as shown on the plans or ordered to be built into, or set in, or attached to the concrete, all necessary precautions shall be taken to prevent these objects being displaced, broken, or deformed. Before concrete is placed, care shall be taken to determine that any embedded or wood parts are firmly and securely fastened in place as indicated. They shall be thoroughly cleaned and free of paint or other coating, rust, scale, oil, or any foreign matter. ~~The embedding of wood in concrete shall be avoided whenever possible; metal being used instead.~~ The concrete shall be packed tightly around the pipes and other metal work to prevent leakage and to secure perfect adhesion. Drains shall be adequately protected from intrusion of concrete.

Concrete placing operations shall not begin until the reinforcing steel, utilities, anchor bolts, etc., to be embedded in concrete have been inspected and approved by the Design Engineer.

120.08 Reinforcing Steel

Reinforcing bars and mesh shall be sizes and shapes as indicated on the drawings. Bars shall be deformed bars of intermediate grade, new billet steel conforming with ASTM Designation A-615, Grade 60. Wire mesh shall conform with ASTM Designation A-185.

120.09 Water Stops

Water stops shall be molded PVC, hollow center bulb, multiple ribbed as manufactured by W.R. Meadows, Inc., Electrovert, Inc. or Serviced Products Corporation, or approved equal.

~~120.08~~120.10 Laboratory Testing Services

~~Laboratory Services~~Testing shall be performed by an independent commercial testing laboratory approved by the District. The Design Engineer shall furnish the District with copies of compression and slump test reports for every thirty (30) cubic yards or portion thereof of concrete placed. It shall be the responsibility of the Design Engineer to produce concrete of the strength, durability, workability and finish specified, furnish representative material for specimens in quantities required by the testing laboratory, and cooperate and assist in taking samples of materials for testing. The District reserves the right to take and test additional concrete samples.

END OF SECTION 120

SECTION 121

~~MANHOLES AND STRUCTURES~~PRECAST MANHOLES AND STRUCTURES

121.01 General

Manholes and structures shall conform in shape, size, dimensions, materials and other respects to the Standard Details or as directed by the District's Engineer.

All manholes and structures shall be precast concrete with monolithic base sections. Invert channels may be formed in the concrete of the base or may be formed of brick and mortar upon the base.

All manholes which will receive direct force main discharges, or are at least 14-feet deep (rim to lowest invert) and the last collection manhole just upstream of any lift station shall receive a minimum 0.5-inch thick calcium aluminate corrosion barrier such as Sewper Coat, Strong Seal, Refratta HAC 100 or approved equal, and installed per the manufacturers recommendations.

The inverts shall conform accurately to the size of the adjoining pipes. Sides inverts shall be curved and main inverts (where direction changes) shall be laid out in smooth curves of the longest possible radius which is tangent to the centerlines of adjoining sewers.

Connections to existing structures shall be made only by mechanically coring a hole through the structure. Jackhammer and other methods of cutting a hole through an existing structure are not acceptable.

Rubber "boots" subject to District approval, will be allowed for making pipe connections to structures provided that a layer of non-shrink grout be applied to seal the annular space on the inside of the manhole for the full wall thickness. The boots shall be cast in the precast structure and shall utilize stainless steel bands and screws.

~~The frames and covers shall be set to conform accurately to the grade of the finished pavement or roadway surface; in unsurfaced areas, the frames and covers shall be set 3 inches higher than the surrounding ground surface.~~

~~Concrete shall conform to the requirements specified under Concrete Masonry.~~

121.02 Precast Concrete Sections

Precast concrete sections, ~~if used~~, shall conform to the ASTM Specifications for Precast Reinforced Concrete Manhole Risers and Tops, Designation C-478 ~~Latest Revision~~, or ASTM C858 Standard Specification for Underground Precast Concrete Utility Structures with the following exceptions and additional requirements:

——Type II cement shall be used in structures directly exposed to wastewater (i.e.

manholes and wetwells.

Sections shall be steam cured and shall not be shipped until at least five (5) days after having been cast.

Acceptance of the sections will be on the basis of material tests, finished quality, and inspection of the completed product.

Cones shall be 30" - concentric type

Joint material in riser sections shall be of the bitumastic type as manufactured by RAM-NEK or equal.

No more than two (2) lift holes may be cast or drilled in each section.

121.03 Shallow Manhole

When the depth from the deepest invert to the top of the cone section is 4'-0" or less, an approved shallow cone section with a 30" opening shall be used. In no case shall a flat slab top section be used.

121.04 Setting Precast Sections

Precast reinforced concrete sections shall be set so as to be vertical with sections in true alignment.

All holes in sections, used for their handling, shall be thoroughly plugged with mortar. The mortar shall be one part cement and 1-1/2 parts sand; mixed slightly damp to the touch (just short of "balling"); hammered into the holes until it is dense and an excess of paste appears on the surface; and then finished smooth and flush with the adjoining surfaces.

Anti-hydro grout shall be used to fill all voids around sanitary sewer pipe and manhole sections.

121.05 Mortar for Brick and Concrete Block Work

The mortar shall be composed of Portland cement, hydrated lime, and sand, in which the volume of sand shall not exceed three (3) times the sum of the volumes of cement and lime. The proportions of cement and lime shall be as directed and may vary from 1:1/4 for dense, hard burned brick to 1:3/4 for softer brick. In general, mortar for Grade SA brick shall be mixed in the proportions of 1:1/2:4-1/2.

Cement shall be Type II Portland cement as specified for under Concrete Masonry.

Hydrated lime shall be Type "S" conforming to the ASTM Standard Specification for Hydrated Lime for Masonry Purposes, Designation C207 - Latest Revision.

The sand shall be well graded clean, durable particles all of which shall pass a No. 8 sieve.

121.06 Laying Brick

Only clean, red, fire cured brick shall be used. The brick or block shall be moistened by suitable means, as directed, until they are neither so dry as to absorb water from the mortar, nor so wet as to be slippery when laid.

Each brick or block shall be laid in a full bed and joint of mortar without repairing subsequent grouting, flushing, or filling, and shall be thoroughly bonded as directed.

Brick shall only be used in chimney construction for final adjustment of frame and covers to required grade. Brick chimneys shall not exceed 18 inches in height for manholes 4-6 feet deep and 24 inches for manholes greater than 6 feet deep.

121.07 Plastering and Curing Brick

Outside faces of brick shall be plastered with mortar from 1/4 inch to 3/8 inch thick. If required, the brick shall be properly moistened prior to application of the mortar. The plaster shall be carefully spread and troweled so that all cracks are thoroughly worked out. After hardening, the plaster shall be carefully checked by being tapped for bond and soundness. Unbonded or unsound plaster shall be removed and replaced.

Brick and plaster shall be protected from too rapid drying by the use of burlaps kept moist, or by other approved means and shall be protected from the weather, all as required.

121.08 Frames and Covers

The castings for the frames and covers shall be of good quality, strong, tough, even grained cast iron, smooth, free from scale, lumps, blisters, sandholes and defects of every nature which render them unfit for the service for which they are intended.

All castings shall be thoroughly cleaned and subject to a careful hammer inspection.

Casting shall be at least Class 30 conforming to the ASTM Standard Specification for Gray Iron Castings, Designation A48- Latest Revision, and conform to the standard details.

The contact surface of the frame and cover seat shall be a machine fit and the cover surface shall be "knobbed".

Frame and covers shall be US Foundry Model 230 AB-M

~~Before being shipped from the foundry, castings shall be given one coat of coat tar pitch varnish, applied in a satisfactory manner so as to make a uniform coating which does not tend to scale off.~~

121.09 Setting Frames and Covers

Frames shall be set with the tops conforming accurately to the grade of the pavement or finished roadway surface, in unsurfaced areas the frames and covers shall be set 3 inches higher than the surrounding ground. Frames shall be set concentric with the top of the masonry and in a full bed of mortar so that the space between the top of the manhole masonry and the bottom flange of the frame shall be completely filled and made watertight. A thick ring of mortar extending to the outer edge of the masonry shall be placed around the bottom flange. The mortar shall be smoothly finished to be flush with the top of the flange and have a slight slope to shed water away from the frame.

Cover shall be left in place in the frames on completion of other work at the manholes.

121.10 Adjustment of Existing Manhole Frames

When it is necessary to raise existing manhole frames due to repaving of roads or other reasons, the frames shall be shimmed with masonry, brick and Type II cement mortar to the new finished grade, or in the case of sodded areas, 2" above finished grade. ~~In no case shall adjustment rings or adapters be used, unless specifically authorized by the District.~~ In cases where raising the existing frame and cover result in chimneys greater than 12" in height the District may require the conical section be raised installation of additional barrel section below the conical section.

When new paving operations cause the manhole frame to be adjusted upwards, manholes will be raised using conventional shimming methods under the frame. The use of adapter rings in the existing frame will not be permitted unless specifically authorized by the District.

END OF SECTION 121

SECTION 122

GREASE INTERCEPTORS AND TRAPS

122.01 Grease, Oil and Sand Interceptors

122.01.1 Grease Interceptors

Grease, oil and sand can be a serious problem for any sewer system if not taken care of properly and adequately. When grease is discharged into a gravity collection system, it can cause operation and maintenance problems not only inside those gravity lines, but also with the downstream lift stations and force mains. Additionally, grease inhibits the biological processes at the wastewater treatment plant.

Frequent and adequate cleaning of interceptors is important and often over looked. Interceptors shall be provided when the resultant discharge from a business contains excessive amounts of grease, oil, lint, sand or other solids and substances that are harmful or hazardous when discharged into wastewater, or in the opinion of the District Engineer the resultant discharge from such occupancy will be detrimental to the District facilities.

Grease interceptors will be required on all food service establishments where any kind of food is prepared on site, or in the opinion of the District Engineer the resultant discharge from such occupancy will be detrimental to the District facilities. Examples of businesses that will be required to have a grease interceptor are restaurants, delis, bakeries, sandwich shops, schools, hospitals, assisted and independent living facilities, etc.

Grease interceptors will be sized according to one of the two (2) formulas listed in the 2010 Florida Building Code - Plumbing, Chapter 10 – Traps, Interceptors and Separators, Table 1003.5.1, whichever best applies for the proposed establishment. The minimum sized grease interceptor shall be 750 gallons, which will also apply to businesses where the above formulas might not directly apply.

When multiple tanks are required, they must be installed in series. This also applies to pre-existing restaurants (or other facilities) that require additional capacity to augment their existing interceptors.

Interceptors shall not be shared. Each business location is required to have its own interceptor(s) and its own separate plumbing to the interceptor(s). When the same establishment has multiple discharge points that require installation of interceptors at different locations, such as an institutional facility with a kitchen and a laundry, each use shall be provided with separate plumbing and the required interceptor(s).

All equipment and plumbing fixtures in a food service facility that may introduce fats, oil or grease into the LRD wastewater facilities must be connected through the grease

interceptor, including but not limited to:

- a. Scullery sinks (two or three compartment)
- b. Pots and pan sinks
- c. Floor drains in kitchen, walk-in coolers and washing areas (not including public restrooms)
- d. Pre-wash sinks
- e. Dishwashers and other washing machines
- f. Automatic hood wash units
- g. Indoor garbage can washes

Under the counter (flow-based) grease traps are not allowed.

122.01.2 Oil/Sand Interceptors

Oil/Sand interceptors are required for all car washes and establishments with facilities for servicing vehicles/mechanical equipment. All plumbing (other than the restroom) from the area where repairs and maintenance is being performed shall connect to an oil/sand interceptor; this includes but is not limited to floor drains and hand wash sinks. Engine oil, transmission oil, coolant, solvents, additives, brake fluid or any other fluid collected in the process of servicing vehicles/mechanical equipment shall not be discharged into the interceptor or other plumbing; the handling and disposal of these fluids shall be in compliance with the DEP and LRD rules and regulations.

Oil/Sand interceptors are also required for hydraulic and all outdoor elevators, such as in parking garages, where sump pumps and/or drains are proposed to discharge to LRD's sewer system. Oil/sand interceptors are not required for indoor elevators with an approved alarm system that meets the 2010 Florida Building Code.

Oil/Sand separators shall be sized based upon the 2010 Florida Building Code - Plumbing, Chapter 10 – Traps, Interceptors and Separators, Section 1003.4.2.2. The minimum sized oil/sand separator shall be 750 gallons.

122.02 Lint Interceptors

Lint interceptors are required for all laundromats and all establishments with a central laundry room with at least 5 washing machines or more. Interceptors shall be equipped with a wire basket or similar device that's removable for cleaning and prevents passage of solids ½" or larger in size, strings, rags, buttons or other materials detrimental to the

wastewater facilities. Lint interceptors shall be sized based on the following formula: Number of washers X 2 cycles per hour X 20 gallons per cycle flow rate X 2.0 hours retention time X 1.5 storage factor. The minimum sized lint interceptor shall be 750 gallons.

122.03 General Requirements

All interceptor construction shall be concrete and shall meet all applicable standards in Chapter 64E-6, Florida Administrative Code.

All interceptors shall be provided with two (2) access manholes: one (1) over the inlet and one (1) over the outlet. LRD approved, traffic rated lids shall be installed with manhole covers to finished grade. Manhole frame & covers and inside openings in the top slab, for tanks sized 1,250 gallons or less, shall be manufactured by US foundry with a 24-inch minimum clear opening. Manhole frame & covers and inside openings in the top slab, for tanks larger than 1250 gallons, shall be US foundry, model 230-AB-M, double ring & cover, with a 30-inch minimum clear opening.

All manhole covers shall be marked with the lettering: “GREASE”, “OIL” or “LINT”, as applicable.

Wastewater from toilets, urinals, showers, and other similar plumbing fixtures for human waste shall not discharge into an interceptor.

122.04 Grease Interceptor Exemptions

There are instances where a food service establishment may not require a grease interceptor. In these instances an exemption from a grease interceptor may be allowed. In order to qualify for an exemption, the following minimum criteria must be met.

- No food preparation on-site.
- The following equipment is prohibited from being on-site: oven, dishwasher, stove top cooking surfaces/griddle, fryers, ranges, or any equipment used to cook food.
 - Only pre-made food may be allowed to be heated on-site using the following equipment: toasters, microwaves or sandwich presses.
- If serving food on-site, all food is served on paper/plastic plates using disposable utensils or in the pre-packaging it was brought on-site in.
- All condiments are pre-packaged in individual servings.

If the above criteria cannot be initially met or if it is found that after an exemption is given the above criteria are no longer being met, then a District-approved grease interceptor must be installed. Failure to do so will result in a violation of the District’s Sewer Use Rule outlined in Chapter 31-13, Florida Administrative Code, which may result in fines against the property.

Any exemptions provided are permanent, so long as these requirements are met.

END OF SECTION 122

SECTION 130

VALVES AND APPURTENANCES

130.01 General

All buried valves and appurtenances including exposed nuts, bolts, and retainer glands shall be given an exterior approved bitumastic or epoxy coating. All valves shall open counterclockwise. All valves shall have extension stems pinned to the operating nut with a stainless steel pin extension. Stems will not be required where the valve operation nut is less than 30" from finished grade.

Contractors must supply LRD with shop drawings clearly indicating that the criterion for each type of valve or appurtenance listed in this section is satisfied.

130.02 Plug Valves

All mechanical joint and flanged plug valves shall be of the nonlubricated eccentric type. Valves shall be rated for not less than 125 psi pressure differential acting in either direction (bi-directional). At this differential, the valve shall provide drip tight shutoff. All components shall be of corrosion resistant construction. Valve flanges shall be ANSI B16.1, class 125 pound with a full round or other acceptable type port to assure minimum turbulence and minimum pressure drop. Valve bodies shall be of ductile iron and seats shall be of nickel-alloy. Valves are to have a balance plug, coated with a resilient material solidly bonded to a cast iron or semi-steel core, as required, to assure low torque and bubble-tight shutoff. The valve plug shall touch on the seat when in the closed position.

Plug valve port areas shall be at least 100% through 24 inches in diameter. For plug valves 30" and larger, a port area of at least 75% is required.

Buried plug valves shall be installed vertically with non-rising stems and shall open by turning a two inch square operating nut counterclockwise. An arrow shall be cast into the nut skirt to indicate the open direction.

Plug valves shall be as manufactured by DeZurik Corporation, Milliken, Keystone Valve Manufacturing Company (Ballcentric Type), or approved equal.

130.03 Resilient Seat Gate Valves

Gate valves shall be resilient seated, manufactured to meet or exceed the requirements of AWWA C509 or C515, Latest Revision, and in accordance with the following specifications. Valves shall have an unobstructed waterway canal equal to or greater than the full nominal diameter of the valve.

The valves are to be non-rising stem with the stem made of cast, forged, or rolled bronze as shown in AWWA C509. Two stem seals shall be provided and shall be of the O-ring type, one above and one below the thrust collar. A 2-inch square operating nut shall be provided for operating the valve. The stem nut, also made of bronze, may be independent of the gate or cast integrally with the gate. If the stem nut is cast integrally, the threads shall be straight and true with the axis of the stem to avoid binding during the opening or closing cycle.

The valve body, bonnet, and bonnet cover shall be ductile iron. All ferrous surfaces inside the valve body shall have a fusion bonded epoxy coating applied at the valve manufacturer's facilities. The coating shall meet or exceed all requirements of AWWA C550. All bolts, nuts and washers shall be stainless steel to limit exterior corrosion and maintain fastener strength.

The sealing mechanism shall consist of a cast iron or ductile iron gate having a vulcanized Buna-N or SBR synthetic rubber coating or a Buna-N rubber seat mechanically retained on the gate. The resilient sealing mechanism shall provide zero leakage at 250-psi working pressure. All valves shall have pressure tests performed to the requirements of AWWA C509 or C515 specifications, as applicable, prior to shipment from the manufacturer. Valve shall seat and be drip-tight at the working pressure when installed with the line flow in either direction.

All valves are to be tested in strict accordance with AWWA C509. Resilient seat gate valves shall be as manufactured by Mueller, Metro-Series, American Darling or approved equal.

Valves shall be covered by a Manufacturer's 10 year limited warranty from date of purchase by end user and delivered within 30 days from receipt of purchase order. The supplier will also provide laminated maintenance manuals.

130.04 Swing Check Valves

Swing check valves for sewage, sludge, and general service shall be in accordance with AWWA C 508, unless otherwise specified below, full-opening; designed for a working pressure of 150 psi unless otherwise shown, and shall have a flanged cover piece to provide access to the disc. Corrosive ferrous surface of valves, 4-inch and larger, which will be in contact with water, shall receive a fusion-bonded epoxy coating conforming to AWWA C550. The valve body and cover shall be of cast iron to ASTM A126, with flanged ends to ANSI B16.1, or mechanical joint ends, as shown.

The valve disc shall be of cast iron, ductile iron, or bronze to ASTM B 62. The valve seat and rings shall be of bronze to ASTM B 92 or B 148, or stainless steel. The hinge pin shall be of bronze or stainless steel.

Suppliers or Equal:

American-Darling Valve Co.

APCO (Valve and Primer Corp.)

Crane Company

Mueller Co.

The valves shall have a lever and counterweight and shall be suitable for horizontal or vertical mounting.

130.05 Air Release, Air Vacuum Valves, and Combination Type Valves

The air release and air vacuum valves shall be of the type especially designed for forced sewer systems. The valve shall be of the short body type and capable of releasing air, gas, or vapor under pressure during system operation or allow air to enter the system when the system is draining, as applicable. The valve shall be as shown on the Standard Details with a two inch inlet. The venting orifice shall be sized by the Design Engineer based on a working pressure of 75 psi.

It shall be the responsibility of the design engineer to determine which valve is necessary for the pipeline conditions encountered.

Air release and air vacuum valves shall be ARI D-025 (See Standard Details).

130.06 Ball Valves

Ball valves shall be limited to 3/4" through 2-1/2" in size and shall have cast brass, bronze or stainless steel body, bronze tee head, stem with check, full round way opening and provision for locking in a closed position.

Ball valves can be used for force main and low pressure sewer applications up to 2-1/2" in diameter. The primary use in force main applications is for ARV isolation valve use (See Standard Details).

Valves shall be designed to be fully opened with a 90-degree turn of the operating handle and shall be full port design with bi-directional sealing rated for a minimum 150 psi working pressure.

Brass ball valves in the low pressure system valve shall be as manufactured by Ford ~~or approved equal~~, with NPT or pack joint ends as needed.

Where these valves are direct buried, a 2" square gate valve operating nut shall be included with a valve box.

130.07 Brass Check Valves

Brass check valves shall be Proflo PFX31 size 1-1/2" to 2".

130.08 Valve Boxes and Vaults

All buried valves shall be equipped with a valve box. Valve boxes shall be heavy duty construction for traffic loading type, cast iron, three piece, slide type, or screw type with drop covers. The valve boxes shall be adjustable to six inches up or down from the nominal required cover of the pipe.

A number six base section shall be provided. Minimum shaft diameter shall be 5-1/4 inches and minimum metal thickness shall be 3/16 inch. Boxes shall be coated with an approved bitumastic or epoxy coating. Valve box covers shall have the word "SEWER" or "REUSE" cast thereon depending on the application. Swing check valves shall be installed in an approved suitable vault for easy access by the District maintenance staff.

Valve boxes shall be installed on firmly compacted material at a level approximately equal to the elevation of the valve packing plate. No contact between the valve and the box shall be permitted. On plug valves, the positioner on the operating mechanism shall be kept free of rocks, debris, etc.

Where valves are installed with over six feet of cover, or where the ground water table is within three feet of the ground level, an extension stem shall be provided to bring an operating nut within two feet of the finished grade. This extension, stem shall be satisfactorily pinned to the valve operation nut to prevent dislodging during operation of the valve.

END OF SECTION 130

SECTION 140

PIPELINE INTEGRITY TESTS

140.01 General

The District shall inspect all sewer facilities prior to acceptance and again just prior to the expiration of the 1-year guarantee.

When a section of pipe of a length deemed adequate by the Design Engineer is ready for testing, the pipe shall be flushed and then tested in accordance with the applicable testing method as described herein. Suitable temporary testing plugs or caps shall be installed. All necessary pressure pumps, pipe connections, meters, gauges, water, weirs, bulkheads, and other necessary equipment and all labor required for carrying out these tests shall be furnished. The Design Engineer shall notify the District at least 48 hours prior to any testing so that it may, at its option, have a representative present during the testing.

Gravity sewers shall be tested in accordance with the Hydraulic Infiltration/Exfiltration Test as described herein. Additionally, PVC Gravity sewers shall be tested for deflection as described herein. Force mains shall be tested in accordance with the Pressure and Leakage Test for Force Mains as described herein.

If the District Engineer so desires, the first section of any line between two manholes shall be tested as soon as possible after backfilling has been completed. If such tests appear to be satisfactory and acceptable, progressive testing of completed sections of the lines may be deferred at the option of the District's Engineer, and at the request of the Contractor, until all pipe has been laid and before final acceptance. However, if permitted, this will not constitute a waiver of any of the tests or the leakage requirements.

Sections of pipe tested for infiltration and exfiltration prior to completion of the project shall be subject to a final inspection at completion of the project, and also subject to additional leakage tests, if warranted in the opinion of the District Engineer.

If the section fails to pass the applicable tests, the Contractor shall locate, uncover and repair or replace the defective pipe, fitting or joint, at his own expense. Additional testing will be required after the deficiency is corrected.

140.02 Hydraulic Infiltration/Exfiltration Tests

Upon completion of a section of the sewer, the pipe shall be dewatered and tested to measure the infiltration for at least three (3) consecutive days. Test section shall be from manhole to manhole. Longer test sections may be used with the approval of the District Engineer.

For making the infiltration tests, underdrains, if used, shall be plugged, well points and other groundwater drainage shall be stopped to permit the groundwater to return to its normal level. Infiltration shall be measured by the use of weirs designed specifically for this purpose or other acceptable means approved by the District Engineer.

As required, suitable bulkheads shall be installed to permit the test of the sewer.

Where the crown of the pipe is below the natural groundwater table at the time and place of testing, the pipe shall be tested for infiltration. Suitable watertight plugs shall be installed and section of pipe to be tested shall be pumped dry before start of test. Where the crown of the pipe is above the natural water table, the pipe shall be tested for exfiltration by installing necessary plugs and filling pipes and manholes with water and maintaining a static head of water of a minimum of two feet above the crown of the pipe during the test. Exfiltration tests shall be conducted on main lines and lateral lines, unless waived by the District Engineer. The water level of internal pressure to be used for exfiltration test shall be determined by the Design Engineer.

The sewers shall pass the applicable test before any connections are made to buildings or to active sewers.

The maximum allowed infiltration/exfiltration shall not exceed 25 gallons per inch of diameter per mile per 24 hours for pipe lines and 4 gallons per 24 hours for manholes. Once systems are stabilized a 2 hour test shall be performed and the appropriate fraction of maximum allowed infiltration/exfiltration applied.

140.03 Pressure and Leakage Test for Force Mains (HDPE)

After fusing, prior to placement, the HDPE piping shall be filled with potable water and pressure tested at 100 psi or 1.5 times design operating pressure for 2 hours, whichever is greater. Each joint shall be visibly inspected for leakage at the end of 2 hours. Any sections showing visible leakage shall be cut out and the remaining pipe fused together and retested. After placement the HDPE pipe shall be pressurized to a minimum 1.65 times pipeline design pressure for 4 hours, with make up water added as necessary to maintain 1.65 times pipeline design pressure. At the end of 4 hours, pressure is reduced to 1.5 times design pressure and pressure monitored for 1 hour. Deviation in pressure > 5% during the 1 hour test indicate a failed test. All testing shall be in compliance with ASTM F2164.

140.04 Pressure and Leakage Test for Force Mains (PVC and DI)

Except as otherwise directed by the District, all pipelines shall be given combined pressure and leakage tests in sections of length approved by the District's Engineer. The Contractor shall furnish and install suitable temporary plugs or caps; all necessary pressure pumps, pipe connections, meters, gauges, and other necessary equipment; and all labor required. The Design Engineer shall witness all tests.

Subject to approval of the Design Engineer and provided that the tests are made within a reasonable time considering the progress of the project as a whole, and the need to put the section into service, the Contractor may make the tests when he desires.

The section of pipe to be tested shall be filled with water of approved quality and all air shall be expelled from the pipe.

The section under test shall be maintained full of water for a period of 24 hours prior to the combined pressure and leakage test being applied.

Two pressure and leakage tests shall be conducted for each pipeline segment. The first test shall be conducted at the average working pressure of the pipeline segment. The second test shall be conducted at a test pressure of 100 pounds per square inch or 1.5 times the pipeline design operating pressure, whichever is greater.

The pressure and leakage test shall consist of first raising the water pressure (based on the elevation of the lowest point of the section under test and corrected to the gauge location) to the specified pressure. If the Contractor cannot achieve the specified pressure and maintain it for a period of one hour with no loss of pressure and no additional pumping, the section shall be considered as having failed to pass the pressure test. The District may require that the pressure and leakage test be run in accordance with AWWA C-600 Standards, latest revision (Four Hour Test).

Allowable leakage shall not exceed the following where L = allowable leakage (gallons), N = number of joints, D = nominal diameter of pipe (inches), P = average test pressure (psi).

$$L = \frac{ND\sqrt{P}}{7400}$$

140.05 Pressure and Leakage Test for Low Pressure Force Mains

Low pressure force mains shall be filled with potable water, bled of air and pressurized to 70 psi. Pressure shall be maintained constant for 1 hour without adding water. Any loss of pressure indicates a failed test.

140.06 Deflection Testing

Pipe deflection shall not exceed 5% measured by a go/no-go gauge or mandrel. The District may confirm the pipe deflection at the end of the job prior to acceptance. Additionally, the District may confirm the pipe deflection just prior to end of the one year guarantee period. Pipe sections exceeding 5% long term deflection will be relaid by the Contractor or the Developer at his own cost and expense and retested until the District's go/no-go gauge passes through the pipe section.

The District's mandrel will be considered the "official" gauge used for deflection testing. The standard District gauge is manufactured by "HURCO" Technologies, Inc., Harrisburg, S.D. The outside diameter of the District's mandrel is as follows:

<u>Pipe Diameter</u> <u>(Inches)</u>	<u>Mandrel Diameter</u> <u>(Inches)</u>
8	7.28
10	9.08
12	10.79

END OF SECTION 140 **SECTION 140**

PIPELINE INTEGRITY TESTS

139.01 General

The District will inspect all sewer facilities prior to acceptance and again just prior to the expiration of the 1 year guarantee.

When a section of pipe of a length deemed adequate by the Design Engineer is ready for testing, the pipe shall be flushed and then tested in accordance with the applicable testing method as described herein. Suitable temporary testing plugs or caps shall be installed. All necessary pressure pumps, pipe connections, meters, gauges, water, weirs, bulkheads, and other necessary equipment and all labor required for carrying out these tests shall be furnished. The Design Engineer shall notify the District at least 48 hours prior to any testing so that it may, at its option, have a representative present during the testing.

Gravity sewers shall be tested in accordance with the Hydraulic Infiltration/Exfiltration Test as described herein or, at the Contractor's option, in accordance with the Low Pressure Air Test as described herein. Additionally, PVC Gravity sewers shall be tested for deflection as described herein. Force mains shall be tested in accordance with the Pressure and Leakage Test for Force Mains as described herein.

If the District Engineer so desires, the first section of any line between two manholes shall be tested as soon as possible after backfilling has been completed. If such tests appear to be satisfactory and acceptable, progressive testing of completed sections of the lines may be deferred at the option of the District's Engineer, and at the request of the Contractor, until all pipe has been laid and before final acceptance. However, if permitted, this will not constitute a waiver of any of the tests or the leakage requirements.

Sections of pipe tested for infiltration and exfiltration prior to completion of the project shall be subject to a final inspection at completion of the project, and also subject to additional leakage tests, if warranted in the opinion of the District Engineer.

~~If the section fails to pass the applicable tests, the Contractor shall do everything necessary to locate, uncover and repair or replace the defective pipe, fitting or joint, all at his own expense. Additional testing will be required to assure passage of the test.~~

~~139.01 ——— Hydraulic Infiltration/Exfiltration Tests~~

~~Upon completion of a section of the sewer, the pipe shall be dewatered and tested to measure the infiltration for at least three (3) consecutive days. Test section shall be from manhole to manhole. Longer test sections may be used with the approval of the District Engineer.~~

~~The amount of infiltration/exfiltration including manholes, "Y" branches and connections shall not exceed 10 gallons per inch diameter per mile of sewer per 24 hours for clay.~~

~~For making the infiltration tests, underdrains, if used, shall be plugged, well points and other groundwater drainage shall be stopped to permit the groundwater to return to its normal level. Infiltration shall be measured by the use of weirs designed specifically for this purpose or other acceptable means approved by the District Engineer.~~

~~As required, suitable bulkheads shall be installed to permit the test of the sewer.~~

~~Where the crown of the pipe is below the natural groundwater table at the time and place of testing, the pipe shall be tested for infiltration. Suitable watertight plugs shall be installed and section of pipe to be tested shall be pumped dry before start of test. Where the crown of the pipe is above the natural water table, the pipe shall be tested for exfiltration by installing necessary plugs and filling pipes and manholes with water and maintaining a static head of water of a minimum of two feet above the crown of the pipe during the test. Exfiltration tests shall be conducted on main lines and lateral lines, unless waived by the District Engineer. The water level of internal pressure to be used for exfiltration test shall be determined by the Design Engineer.~~

~~The sewers shall pass the applicable test before any connections are made to buildings or to active sewers.~~

~~139.01 ——— Pressure and Leakage Test for Force Mains~~

~~Except as otherwise directed by the District, all pipelines shall be given combined pressure and leakage tests in sections of length approved by the District's Engineer. The Contractor shall furnish and install suitable temporary plugs or caps; all necessary pressure pumps, pipe connections, meters, gauges, and other necessary equipment; and all labor required. The Design Engineer shall witness all tests.~~

~~Subject to approval of the Design Engineer and provided that the tests are made within a reasonable time considering the progress of the project as a whole, and the need to put the section into service, the Contractor may make the tests when he desires.~~

~~The section of pipe to be tested shall be filled with water of approved quality and all air shall be expelled from the pipe. If air release valves are not available at high points for releasing air, the Contractor shall make the necessary excavations and do the necessary backfilling and make the completion of the test.~~

~~The section under test shall be maintained full of water for a period of 24 hours prior to the combined pressure and leakage test being applied.~~

~~Two pressure and leakage tests shall be conducted for each pipeline segment. The first test shall be conducted at the average working pressure of the pipeline segment. The second test shall be conducted at a test pressure of 100 pounds per square inch.~~

~~The pressure and leakage test shall consist of first raising the water pressure (based on the elevation of the lowest point of the section under test and corrected to the gauge location) to the specified pressure. If the Contractor cannot achieve the specified pressure and maintain it for a period of one hour with no loss of pressure and no additional pumping, the section shall be considered as having failed to pass the pressure test. The District may require that the pressure and leakage test be run in accordance with AWWA C-600 Standards, latest revision (Four Hour Test).~~

END OF SECTION 140

SECTION 150

SUBMERSIBLE LIFT STATIONS

150.01 Scope

It is the intent of this standard is to provide component requirements and general design guidelines for submersible wastewater lift stations. This standard shall be used in conjunction with Standard Details SD-31 through 35 and referenced standards for complete submersible wastewater lift station requirements.

This specification typically defines requirements for 20HP and smaller lift stations. Lift stations greater than 20 HP, serving critical infrastructure or performing as a repump station may require alternate design criteria including variable speed, tri-plex configuration, permanent standby emergency power and PLC control. These additional design criteria will be defined by Engineering Services during the design.

150.02 Site

Lift station sites shall be provided with a minimum 40' x 40 lift station easement. Variations on the easement shall be considered on a case by case basis where access, maintenance and bypass operations can be accommodated with alternate configurations acceptable to the District and approved by Engineering Services.

The lift station site and access shall be set at proper elevations and configurations such that access and maintenance to the station will not be impaired by flooding, excessive road grades, swales, walls or landscaping. A lift station site plan indicating all topographical features, rights-of-way, easements and adjoining contiguous areas shall be submitted to the District for approval.

All above or at grade facilities shall be above the 1% Annual Chance Flood (100-year flood) zone, as shown on Flood Insurance Rate Maps (FIRMs). Site and lift station plans shall include the 100-year flood elevation.

150.03 Power

The Contractor shall coordinate with and pay all fees, deposits, and service costs to Florida Power and Light Corp. to provide a three phase, 480V or 240V underground power service to the new lift station site. The transformer for the station shall be located not further than 25 feet from the nearest station easement line.

The power meter for the lift station shall be located on the lift station site, installed on the District's standard control panel rack.

150.04 Lift Station Standard Equipment

A list of standard lift station equipment is given below. This list is not all inclusive and the Contractor shall supply all other equipment necessary for complete working installations. The lift station shall include:

Two (2) explosion proof submersible type sewage pumps with 316 stainless steel guide rails, base plates and all accessories.

Two (2) discharge lines with swing check valves and plug valves and emergency tap connection

Instrumentation/control system, (requirements vary on station size)..

One (1) electrical control panel, NEMA 4X, to house electrical equipment, pump controls, alarms and protection.

One (1) wet well.

One (1) valve vault.

Concrete covers with aluminum access hatches and safety grates

Influent drop assemblies

Permanent standby generator and ATS, (requirements vary on station size).

Radio or Cellular Telemetry System

Coatings

Concrete pads

Landscaping/site screening

The wet well structure shall receive a minimum 1.0-inch thick calcium aluminate corrosion barrier such as Sewper Coat, Strong Seal, Refratta HAC 100 or approved equal, and installed per the manufacturers recommendations.

One (1) influent (collection) manhole structure with piping connecting to the wet well structure. The distance between the collection manhole and the wet well shall be no more than 50 feet.

The pumps shall be capable of handling grit and raw unscreened sewage. The design shall be such that the pump unit will be automatically and firmly connected to the discharge piping when lowered into place on its mating discharge connection, permanently installed in the wet well. The pump shall be easily removable for inspection or service requiring no bolts, nuts, or other fastenings to be disconnected.

All major parts, such as the stator casing, oil casing, sliding bracket, volute, and impeller shall be of gray iron. All surfaces coming into contact with sewage shall be protected by a coating resistant to sewage. All exposed bolts and nuts shall be of stainless steel.

Pump faces shall be machined to accept a sacrificial plate between the pump face and seat. The sacrificial plate shall be manufactured from 1/4" brass plate, bolted to the pump face and removable/replaceable.

A wear ring system shall be installed to provide efficient sealing between the volute and impeller.

The impeller shall be hard alloy gray cast iron of non-clogging design capable of handling solids, fibrous material, heavy sludge, and other matter found in normal sewage applications. The impeller shall be constructed with a long throughout without acute turns. The impeller shall be dynamically balanced. The impeller shall be a slip fit to the shaft and key driven. Non-corroding fasteners shall be used.

Each pump shall be provided with a mechanical rotating shaft seal system running in an oil reservoir having separate, constantly hydro-dynamically lubricated and lapped seal faces.

The lower seal unit between the pump and oil chamber shall contain one stationary and one positively driven rotating tungsten-carbide ring.

The upper seal unit between the oil pump and motor housing shall contain one stationary tungsten-carbide ring and one positively driven rotating carbon ring. Each interface shall be held in contact by its own spring system supplemented by external liquid pressures. The seals shall be easily inspected and replaceable.

The shaft sealing system shall be capable of operating submerged to depths of, or pressure equivalent to, 65 feet. No seal damage shall result from operating the pumping unit out of its liquid environment. The seal system shall not rely upon the pumped media for lubrication.

A sliding guide bracket shall be an integral part of the pump unit. The volute casing shall have a machined discharge flange to automatically and firmly connect with the cast iron discharge connection, which when bolted to the floor of the sump and discharge line, will receive the pump discharge connection flange without the need of adjustment, fasteners, clamps or similar devices.

Installation of the pump unit to the discharge connection shall be the result of a simple linear downward motion of the pump unit guided by no less than two guide bars. No other motion of the pump unit, such as tilting or rotating, shall be acceptable. Sealing of the discharge interface by means of a diaphragm, O-ring, or other device will not be considered acceptable or equal to a metal to metal contact of the pump discharge flange and mating discharge connection specified and required. No portion of the pump unit shall bear directly on the floor of the wet well. There shall be no more than a 90-degree bend allowed between the volute discharge flanges and station piping.

The pump motor shall be housed in an air or oil filled watertight casing and shall have moisture resistant Class "F" 155-degree C insulation. Oil filled casing shall be filled with transformer oil, quality BP Energol JSO, or Shell Diala D or DX. The motor shall be a minimum of 5 BHP, rated for operation at 1700 or 1750 rpm, on a 230V, 3-phase, 60 hertz power supply. The cable entry water seal design shall be such that precludes specific torque requirements to insure a watertight and submersible seal. Epoxies, silicones or other secondary sealing systems shall not be required or used. The cable entry junction box and motor shall be separated by a stator lead sealing gland or terminal board which shall isolate the motor interior from foreign materials gaining access through the pump top.

Pump motor cable installed shall be suitable for submersible pump applications and this shall be indicated by a code or legend permanently marked on the cable. Cable sizing shall conform to NEC specifications for pump motors and shall be of adequate size for the motor rating. Pump motor cable shall be ample length to reach the rack mounted panel. Cable length to be determined by the site plans.

The pump cable shall have 90 degree C rated insulated material based on 40 degree ambient and shall have anti-ropeing and anti-wicking design. All mating surfaces of major parts shall be machined and fitted with nitrile O-rings where watertight sealing is required. Machining and fittings shall be such that sealing is accomplished by automatic compression in two planes and O-ring contact made on four surfaces, without the requirement of specific torque to affect this. Rectangular cross sectioned gaskets requiring specific torque limits to achieve compression shall not be considered adequate.

Tolerances of all parts shall be such that allows replacement of any parts without additional machining required to insure sealing as described above. No secondary sealing compounds, greases, or other devices shall be used.

Each unit shall be provided with an adequately designed cooling system. Thermal radiators integral to the stator housing, cast in on unit, are acceptable. Where water jackets along or in conjunction with radiators are used, separate circulation shall be provided. Cooling media channels and ports shall be no-clogging by virtue of their dimensions. Provisions for external cooling and flushing shall be provided.

Pump and motor assemblies shall meet NEC and NFPA requirements for explosion proof installations in Class 1, Division 1, Group D environments.

The pumps and motors shall be manufactured by FLYGT Corporation.

150.06 Control Panel

This section is specific to single speed, duplex lift stations with float control, for variable speed, PLC controlled stations see Section 161.

The Contractor shall furnish and install a heavy duty type District Standard control panel as shown on the plans and specified here, as manufactured by Sta-Con Incorporated, QCI, or approved equal, and in accordance with the detail sheets SD-31 through 35.

The control panel shall contain all the remote electrical equipment necessary to provide for the operation of the pumps. The panel shall start and stop the pumps in the wet well.

The control panel shall start the “lead” pump when the liquid level rises to a preselected elevation “D”. If the influent rate exceeds the capacity of the “lead” pump, the lag pump shall be started when the liquid level rises to a preselected elevation “C” (higher than “D”). If the liquid level rises to a preselected elevation “B” (higher than “C”), the high level alarm shall be activated. When the liquid level falls to a preselected elevation “E” (lower than “D”), both pumps shall be stopped.

The control panel shall be contained in a single enclosure, fabricated of not less than 14-gauge 316 stainless steel, NEMA 4X construction. The door shall be formed with minimum lip of 3/4” and full height hinged. Closure mechanisms shall be No. 3 S.S. fasteners with No. 3 keepers as manufactured by Simmons Fasteners, or approved equal.

The interior door shall be constructed of .080-inch thick 6061-T6 aluminum. The interior and exterior doors shall be provided with a stop mechanism to hold the doors open which working in the panel. A rain shield shall be provided.

The control panel shall include the following items plus any other items shown on the plans or required for a complete, operational installation.

Circuit breakers with combination full voltage motor Starters for each pump.

“Hand-Off-Auto” selector switch for each pump, heavy duty oil tight type (toggle switches will not be acceptable).

Automatic pump alternator with test switch.

Duplex receptacle with 15-amp circuit breaker 115V GFI.

Control power circuit breaker.

Main circuit breaker.

Emergency power minimum 100-amp circuit breaker and 100-amp, 4 wire, 3 pole, reverse service generator receptacle. Emergency power to match main breaker size.

Lightning arrestor, 3-phase.

Surge capacitor.

Phase monitor, to prevent energization of pump motors in the event of phase failure or reversal or low voltage.

Indicating light for each level regulator (float switch).

“Running” indicating light for each pump.

Elapsed time meter for each pump, 2-1/2”, 6-digit non-reset.

Emergency/High level alarm light and horn, 12 VDC with battery back-up.

The panel shall include back-up circuitry to permit one pump to operate with a normal drawdown in the event of failure (open circuit) of the “stop” level regulator.

Spare parts to be furnished with the panel include:

- 2 - 120V Relays
- 1 - Alternator
- 1 - Phase Monitor
- 12 - Lamps
- 12 - Fuse Links
- 1 – Intrinsically Safe Barrier
- 1 – Alarm Controller

A copy of the panel wiring diagram shall be attached to the inside of the outer panel door. An extra copy shall be given to the District.

The basic components and layout of the control panel are shown on Standard Details 31, 32, 33 and 34.

Substitutions of these components will be permitted for approved equal, interchangeable products upon obtaining specific written approval from the District.

150.07 Telemetry

Lift stations shall be provided with a District standard radio telemetry system by Data Flow Systems. Telemetry systems shall provide monitoring and control for the following signals:

1. Digital
 - a. Power Fail
 - b. Auxiliary Power
 - c. High Level
 - d. Pump # 1 Fail
 - e. Pump # 2 Fail
 - f. Pump Run # 1
 - g. Pump Run # 2
 - h. Pump On # 1
 - i. Pump On # 2
 - j. Pump Off # 1
 - k. Pump Off # 2
 - l. Spare
 - m. Spare
2. Analog
 - a. Wet Well Level
 - b. Spare
 - c. Spare

An alternative cellular telemetry system may be available. Coordinate with the District's Director of Engineering Services for specifics.

150.08 Access Hatches & Fall Through Safety Prevention Systems

The wetwell and valve vault access hatch shall be single leaf design with a minimum clear opening at 36" x 48", but must also meet the minimum clear opening as required by the pump manufacturer. The frame shall be a minimum: 3" x 3" x 1/4" aluminum angles and the cover shall be 1/4" aluminum angles and the cover shall be 1/4" aluminum diamond pattern. The hatch shall be completed with anchor straps, automatic hold open arm and cover release, forged brass or stainless steel hinges with stainless steel pins, hasp and staple lock, flush type handles, upper guide holders and sensor cable holder. The cover shall be reinforced to withstand a live load of 300 lbs./sq. ft. unless in areas that may experience traffic. Hatches in traffic areas shall meet H-20 design loading criteria, at a minimum. Hinges shall be of the interior type.

~~For~~A all stations 6' in diameter or larger, ~~the Contractor~~ shall be provided with fall through safety prevention systems. All systems will be of the grate type as manufactured by U.S.F. Fabrication, Inc., or approved equal able to withstand a pedestrian load of 300 lbs/sq. ft.. The safety grate ~~must~~ shall be constructed of aluminum ~~and/or stainless steel~~. All hardware must be of 316 stainless steel ~~construction~~.

The configuration of the hatch and safety grate shall be such that opposing sides of the wetwell opening are protected when the safety grate is in the upright position. ~~and s~~ Safety chains shall be provided from the safety grate to the hatch ~~shall be provided~~ to protect adjacent sides.

10' diameter and larger wetwells and tri-plex stations will require custom hatch and safety grate designs to be determined in coordination with the District's ~~Director of~~ Engineering Services ~~during design~~.

150.09 Floats

~~24V-f~~ Float switches with internal single pole mercury switch shall be installed in the wet well to control the operation of the pumps with variations of liquid level in the wet well. The float switches shall be sealed in a polypropylene casing with a firmly bonded electrical cable protruding. Floats shall be Roto-Float type S as manufactured by Anchor Scientific Inc..

150.10 Valves

See Section 130

150.11 Pipe and Fittings

See Section ~~114-110~~ for ~~HDPE~~ pipe and fittings ~~used in the wetwell~~. ~~See Section 111 for ductile iron pipe and fittings~~.

150.12 Wetwell and Valve Vault

See Section 121 and standard details SD-31

150.13 Wet Well via Caisson Construction

Wet wells installed via the caisson method are allowed only with prior approval by the Loxahatchee River District. Final acceptance of the wet well by caisson method will only occur when it is determined that:

- Wet well has no structural damage, deep gouges and and/or cracks.
- Wet well has been installed at the design depths indicated.
- Wet well is plumb. The maximum deviation shall be 1/8" per foot of each precast section.
- Wet well tremie seal is leak free and there are no continually damp areas prior to the installation of the secondary pour.
- Wet well sections show no evidence of separation and that the structure has not settled.
- Wet well walls, specifically at the joints, are flush and without overhang.
- Wet well was installed in proper sequence.

If any of the above items are not met to the satisfaction of the District, the wet well will be rejected and it will be the contractor's responsibility to remedy the problem at his own expense. The contractor shall also provide a warrantee that the wet well will meet the above requirements for a 1-year period from the date of District acceptance.

150.14 Submittals

The following submittals are required for approval prior to construction of the project.

1. Lift Station Calculations to include
 - a. Average Daily Flow
 - b. Peak Hour Flow
 - c. System Head Curves
 - d. Wetwell Cycle Time
 - e. Anti-Flotation
2. Lift Station Site Plan
3. Pump and Motor
4. Pipe and Fittings
5. Valves
6. Concrete Structures
7. Control Panel – complete detailed design including electrical schematic, panel layout, bill of materials
8. Panel Rack
9. Base Plates
10. Rails, Brackets and Adapters
11. Conduit and Cable
12. Aluminum Hatches and Safety Grates

Detailed wiring diagrams of the entire installation including main power supply, pump motors, control circuits, alarm circuits, and metering circuits shall be submitted. The diagrams shall include schematic and connection wiring diagrams.

Four (4) copies of detailed installation drawings including wiring diagrams, pump curves and maintenance and operating manuals shall be submitted to the District at the time of initial start-up.

150.15 Services to be Furnished by Manufacturer of Equipment

The services of a factory-trained representative shall be furnished for the lift station start-up. The representative shall check all electrical components, wiring, and pump operations.

150.16 Operation and Maintenance

Upon completion and successful startup of the lift station the District will be provided with two copies of the lift station operation and maintenance manual. The manual shall include operation and maintenance detail including service intervals for all equipment provided with the lift station.

Operation and maintenance manuals shall also include AS-BUILT drawings for the lift station, control panel, wiring schematics and appurtenances.

150.17 Warranty

The pump manufacturer shall warrant the pumps for a period of five (5) years from the date of pump manufacturer's start-up. The warranty shall include a minimum 100% coverage of the manufacturer's shop labor and parts for the first eighteen months, then 50% coverage through the third year, and then 25% coverage through the fifth year.

END OF SECTION 150

SECTION 151

LOW PRESSURE SEWER SYSTEMS

151.01 General Intent

It is the intent of the District to provide sanitary sewer service to the citizens, businesses, and industry of the area in a manner which maximizes use of existing facilities, minimizes environmental damage, and provides solutions to existing problems.

Gravity collection systems with central lift stations are the preferred methods of collecting and transporting sewage to the regional facilities. All property owners should anticipate connection via these conventional facilities unless otherwise directed by the District.

The District recognizes that the construction of gravity sanitary sewer lines is not conducive to all areas, and that utilization of an alternative system may be necessary to provide access to regional facilities.

The District may at its sole discretion allow or direct the utilization of LPSS where it is determined to be in the best interest of the District. The District may direct the use of LPSS to minimize the impacts of gravity sewer construction upon existing neighborhoods or upon environmentally sensitive areas.

The use and implementation of LPSS shall be at the sole discretion of the District and no installation shall be considered as a precedent for justifying the acceptance of LPSS in a similar or like situation.

151.02 Administration

The administrative procedures for construction are set forth in the latest revision of the District Construction Standards and Technical Specifications and shall be adhered to unless specifically modified in writing by the District.

151.03 Utilization

151.03.1 LPSS for Existing Developments

For the purpose of this section, the term "existing developments" shall be considered as those areas which have previously developed on septic tanks to the extent that a substantial portion of the subdivision is now built out; or, under less prevalent circumstances, an area which has received site plan approval and is plated/subdivided based upon use of septic tanks.

The criteria for the District's determination of whether the use of LPSS is warranted includes, but is not limited to: existing developments of less than 40 homes, or in areas of high water tables, or in areas where work space for construction activities is unreasonably restricted or in areas where

available gravity collection lines have not been provided by prior construction.

Existing gravity sewer systems will be utilized to the maximum extent possible; however, LPSS may be considered in existing neighborhoods where gravity construction would be unreasonably restricted in the opinion of the District Engineer.

151.03.2 Community Grinder Systems

The use of a community grinder system is a merge of a LPSS system and a traditional gravity collection system, in that there are instances where the District would allow “grinder systems” in conjunction with small gravity system to serve a community. In accordance with Section 151.01 above, the utilization of smaller “grinder systems” with limited gravity collection systems will be encouraged in new developments where environmental concerns would be adversely impacted by the construction of a traditional non-clog lift station and/or deep gravity lines, at the sole determination of the District.

Grinder systems could be considered for:

- New Development – areas of less than 15 homes, with a suitable site for a grinder station.
- Existing Development – areas of less than 20 homes, both sides of street participating, and cost is not greater than 200% of LPSS, unless specifically requested by property owners.

151.04 Responsibility

151.04.1 District

A low pressure sewer system may consist of one or more pump stations. A pump station shall be considered as the individual pumping unit which serves a single residence, or a commercial or industrial customer. In the latter cases, the unit may contain two pumps (duplex).

All plans for the construction of any portion of an LPSS shall be submitted to the District Engineer for review and approval.

All LPSS facilities which are located within public rights-of-way shall be conveyed to the District for operation and maintenance.

Any facility, associated with an LPSS, which is located outside of the private property being served, must be within a dedicated easement or right of way. The easement shall be conveyed to the District.

The District shall be responsible for the operation and maintenance of all facilities (force mains, valves, etc.) within rights-of-way, or dedicated platted utility easements which serve more than one unit.

Property owners must execute a License Agreement for District maintenance of residential and low flow nonresidential pump stations.

151.04.2 Residential or Non-residential User Responsibilities

Each individual residential or low flow non-residential user of the LPSS system shall provide his own pump station, electrical service, force main and connection to the District owned collection/transmission lines. The District shall be responsible for the operation and maintenance of all residential and 3-phase non-residential low flow equipment serving his individual property, whether located on his property or in easements off of his property. The residential or nonresidential user shall be responsible for the installation of the pump station, control panel, force main valves, and all appurtenances which are a part of the system solely serving the individual user. Maintenance will be provided in accordance with the License Agreement provisions.

Low Pressure Systems for commercial and single phase low flow non-residential use shall: 1) require a duplex grinder pump system, and 2) be operated and maintained by the property owner in accordance with P.B.C. Health Dept./Florida DEP requirements

The user shall provide electrical power from his meter to the control panel, and all operating costs shall be users responsibility.

151.05 Submissions and Approvals

All installations of individual units shall be reviewed and approved by the District Engineer prior to construction. The District Engineering Department shall be notified at time of installation of the pumping unit and prior to connection to the District line. Connection excavations shall remain open and protected until such time as an inspection has been performed and a satisfactory connection is made.

All installations shall be made in accordance with District Technical Specifications, and local plumbing and electrical codes, and the regulations of the Florida Department of Environmental Protections.

Submittals for area lines which will be taken over by the District for operation and maintenance shall be made by a Professional Engineer, registered in the State of Florida. The District may require a hydraulic analysis from the Professional Engineer to determine if the existing District infrastructure has the capacity to accept new connections. Once hydraulic capacity has been determined available, six (6) sets of signed and sealed construction plans shall be submitted for approval. The construction shall also be inspected and certified by a Florida registered professional engineer upon completion.

Submittals for individual installations shall include a shop drawing of the pump station and control panel, and an as-built drawing showing tie-in dimensions of the force main, valves, and any electrical conduits.

The use of pumping units is restricted to specific makes and models for which the District will maintain a limited spare parts inventory for emergency situations only.

151.06 Definition

A low pressure sewer system is defined as a means of conveying sewage by individual pumping units through a small pressurized force main to a discharge point which can be part of an existing force main or gravity system.

151.07 General System Design Considerations

The following particulars should be considered in the design of any proposed low pressure system:

1. Geographical location.
2. Type of development - number of residences.
3. Topography of service area (where applicable).
4. Layout of existing or proposed service area.
5. Projected sewage flows.
6. Location of nearest existing sewer facility.
7. Soil and water table information.
8. Availability of electric power.

151.07.1 System Layout and Alignment

The pressure sewer system should be designed so that all contributory lines are branched into a main collector. "Looping" and "dead-endings" of macerated sewage in remote areas of the system shall be avoided.

Pressure lines should be laid out to provide runs as short as possible with a minimum of major change in direction.

In order to facilitate maintenance and repair, force mains should be laid outside the limits of pavement or heavy traffic areas.

All system lines shall be kept full, under a positive pressure head at all times. This can be maintained by locating the system terminus at the highest elevation, or by employment of a positive pressure control device at the terminus.

To minimize the number of potential air pockets, pressure lines should be installed on a continuously rising grade as much as possible to predetermined points where air release devices and cleanout ports can be installed in accordance with the Standard Details.

151.07.2 Design Flow

As in any collection system, a pressure sewer system must be designed to effectively handle all sewage flow generated in the service area especially during times of peak flows.

Peak flow shall be determined by accepted sanitary sewer engineering principals and standards established by regulatory agencies. Proper design should assure that each contributing pump unit in the service area, no matter what its location or what other units are operating at the same time, will be able to deliver into the system during these peak flow system conditions at a rate sufficient to insure that there will be no sewage removal problem at any individual building or unit. A pumping rate in the range of 8-10 gal./min. is normally considered sufficient.

151.07.3 Line Sizing and Velocities

Line sizing must be designed to insure that scouring velocities will occur in the system pressure lines at some regular interval. At the same time they must avoid excessive system pressures which can jeopardize the delivery capacity of any unit on the system.

To insure that scouring will occur during design flows, it is recommended that the velocities in the pressure lines be maintained in the 2-5 ft./sec. range at regular intervals.

Minimum service line and tap diameters for commercial connections shall be 2-inches. In the case of tying into an existing 2 or 2.5-inch main, a tee with a 2-inch outlet shall be cut in.

151.07.4 Operation of Contributing Pumping Units

A most important design consideration is that the proper operation of any and each pumping unit on the system be assured during any flow conditions which could exist. This includes the most demanding maximum peak design flow which may be seldom, if ever, encountered (such as immediately following an extended power outage).

151.07.5 System Flushing

Design shall provide for the ability to mechanically purge sewage from the system at regular intervals. Flushing connections to the force main system are shown in the Standard Details.

151.07.6 Air Release

Design shall provide for relief of air at high points along the system. Valves and piping configuration is shown in the Standard Details.

151.08 Pumping Units

The pumping units shall combine a centrifugal submersible pumping unit(s) with a patented grinding assembly which is capable of reducing sewage and its normal constituents (together with sticks, rubber, bones, rags, plastics, etc.) to a particulate slurry which can easily be transported through small diameter pipes.

The units shall be furnished complete with unit tank, electrical control panel, level controls, alarms, check and ball valves, and other necessary appurtenances as shown on the Standard Details.

Pumps shall be manufactured by Barnes and have a 1-1/4" vertical discharge outlet. Reference the District's low pressure sewer standard details (LP details) for information regarding pump models and configurations.

151.09 Piping and Appurtenances

151.09.1 Pipe

Schedule 40 PVC: Pipe shall be Type I, PVC 1120 with a hydrostatic design stress of 2000 psi for liquid at 73.4 F. Pipe shall conform to ASTM D 1785, ASTM F 480 and ASSTM D 2665.

HDPE: Pipe shall be PE 4710 with a minimum hydrostatic design stress of 800 psi for liquid at 73.4 F utilizing a 0.5 design factor. Pipe shall conform to ASTM 3035 and ANSI/AWWA C901.

151.09.2 Valves and Cleanouts

Isolation valves shall be strategically placed along the pressure main at services, junction points, changes of direction, and recommended intervals along extensive straight runs (see LP Details). Isolation valves shall be ball type made of brass and be capable of operation with a 2" operating nut and be placed within a District approved valve box. Refer to the District's LP details for specifics on which isolation valves are not required to have a valve box.

Each pumping unit shall be isolated from the low pressure force main system by a PVC ball valve (service valve) and check valve, positioned at the street right-of-way line, inside of a service box (see LP details).

This service line will typically be 1.5 inches in diameter, set in a District approved meter box, at no more than 18" depths at the right of way line (see LP Details).

151.09.3 System Wiring and Control

Each individual contributing pumping unit shall be connected by underground conduit to the individual home electrical power supply. This conduit may be laid in the same trench as the gravity service pipe to the unit tank. Wiring and conduits shall be installed in accordance with all applicable local codes and regulations.

Liquid level controls shall be a sealed mercury switch in an approved float ball. The switch shall be sealed for life with a heavy neoprene jacketed control cord permanently attached.

A high water activated alarm shall be supplied. An alarm light shall be mounted on the building or control panel in such a manner so that it will be visible to building occupants and from the contiguous street areas.

The electrical control panel shall consist of the following:

Corrosion Proof Enclosure
NEMA 3R rating
Hinged Access Panel
Lockable Latch
120V AC Control Voltage - single phase
GFI Receptacle on dead front
Audible Alarm
Rated Disconnect Switch
The electrical control panel enclosure and its components shall be UL listed.

Typical wiring diagram is shown on the District's LP Details.

151.09.4 Tanks and Covers

Tanks shall be constructed of polymer or reinforced fiberglass polyester resin and the minimum size shall be 30" x 60" for a simplex configuration. Interior surface to be 10-20 mil. thick gel coated to provide a smooth sealed surface. Lockable gasketed water tight covers shall be flat aluminum and capable of supporting a 300 lb. wheel load. The fiberglass tank shall have an integral anti-flotation flange which will anchor into a concrete collar designed to counteract uplift forces.

The wall thickness of the fiberglass tank shall be sufficient to withstand a water saturated sand load of 120 pcf with a safety factor of two (2) for all depths.

Inlet hubs shall be as shown on the District's LP details. All hardware shall be stainless steel and be leak proof sealed.

The cover (lid) shall be 2/3rds hinged single leaf, rated at 300 lbs/sq. ft and be lockable. The lid shall be set at a minimum, six (6") inches above final grade.

Conduit opening shall be sealed with an approved duct seal.

Float and wire hanger bracket shall be stainless steel (Type 304).

All interior piping shall be Schedule 80 PVC. A PVC union on the horizontal discharge pipe shall allow for the quick removal of the grinder pump assembly. The discharge line inside the tank shall also have a 1.25 inch PVC ball type check valve located inside the tank.

END OF SECTION 151

~~SECTION 152~~

~~ADOPTION OF STANDARDS~~

~~The Loxahatchee River Environmental Control District Manual of Minimum Construction Standards and Technical Specifications were initially adopted and promulgated by the Governing Board in April, 1983.~~

~~The current edition was ratified by the Loxahatchee River Environmental Control District's Governing Board, on May 17, 2018, with a _____ vote as follows:~~

~~"THAT THE DISTRICT GOVERNING BOARD ratify the Loxahatchee River Environmental Control District's "Manual of Minimum Construction Standards and Technical Specifications", as of May 17, 2018, and authorize the District Engineer and Executive Director to update the Construction Standards and Technical Specifications from time to time, and periodically present it to the Governing Board for ratification."~~

<u>Board Member</u>	<u>Vote</u>
Mr. Snyder, Chairman	"Aye"
Mr. Rostock, Vice Chairman	"Aye"
Dr. Rockoff, Treasurer	"Aye"
Mr. Boggie, Secretary	"Aye"
Mr. Silverman, Assistant Secretary/Treasurer	"Aye"

~~D. Albrey Arrington, Ph.D.
Executive Director
Loxahatchee River Environmental Control District~~

~~END OF SECTION 152~~

SECTION 1601

VARIABLE SPEED/PLC CONTROL PANELS

161.01 General

This section provides for design, construction, installation and start-up of a custom power and control panel by a qualified panel manufacturer. The panel and components shall comply with the requirements of this specification and other sections and standard details of the District's Manual of Minimum Construction Standards and Technical Specifications.

This section is generally used for variable speed submersible wastewater lift stations greater than 20HP

161.02 Submittals

Submittals for the power and control panel shall include but not be limited to the following:

1. Panel materials of construction, layout and dimensions.
2. Anchoring details to concrete slab
3. Wind load calculations (if required by permitting authority)
4. Scaled dead front layout
5. Scaled back plan layout
6. Scaled component layout
7. Power, Instrumentation, Radio Telemetry and Control wiring schematics

161.03 Panel

The control panel shall be NEMA 4X ground mount enclosure with double doors and leg kit for floor standing. The panel shall be minimum thickness 12-gauge 316 stainless steel, enclosure and doors. The doors shall be formed with minimum lip of 3/4", full height concealed hinges, stainless steel door clamps on non-hinged sides and pad-lock hasps. The center post shall be removable for full access to the panel interior. A rain/drip ledge shall be provided over the doors. Sun shields shall be provided on top, east, west and south facing sides.

The interior doors/dead fronts shall be construction of minimum 0.080 inch 6061-T6 aluminum.

Both exterior and interior doors shall have a mechanism to hold the doors open.

The panel shall be manufactured by Hoffman or approved equal.

The control panel shall be designed and tested in conformance with UL 508.

The power and control panel shall provide for manual and automatic operation of the lift station pumps utilizing an ultrasonic level controller, programmable logic controller and variable speed drives. The station operating protocol shall be as follows.

1. Operating Protocol 1: Level Control

- a. ELEV A all pumps off
- b. ELEV \geq B lead pump on. speed adjust to maintain level
- c. ELEV \geq C lag 1 pump on. lead and lag 1 match speed and adjust to maintain level
- d. ELEV \geq D lag 2 pump on. lead, lag 1 and lag 2 match speed and adjust to maintain level
- e. ELEV E all pumps on 100% speed
- f. LEVEL DECREASING/MATCHED PUMP SPEED BELOW 50% for X seconds lag 2 off. Lead and lag 1 match speed adjust to maintain ELEV C.
- g. LEVEL DECREASING/MATCHED PUMP SPEED BELOW 50% for Y seconds lag 1 off. Lead adjusts speed to maintain ELEV D.

2. Operating protocol 2: Constant Speed

- a. ELEV INCREASING
 - i. ELEV \geq B lead pump on. N% speed.
 - ii. ELEV \geq C for X seconds. Lag 1 on. N% speed.
 - iii. ELEV \geq D for X seconds. Lag 2 on. N% speed.
- b. ELEV DECREASING
 - i. ELEV \leq C for X seconds. Lag 2 off.
 - ii. ELEV \leq B for X seconds. Lag 1 off.
 - iii. ELEV \leq A for X seconds. All pumps off.

3. Operating protocol 3: Manual/Hand

- a. With the HOA selector switch in Hand the selected pump shall turn on and speed be manually adjusted through the AFD. In Hand, all alarms shall function, but pump operation will not be prevented except for specific pump manufacturer alarms in place to prevent harm to the pump and/or motor.

4. Alarm Functions

- a. With the station in Hand, Off or Auto the alarm functions shall be fully operable.
- b. Alarms shall be available for the following
 - i. Pump Out of Service, each pump.
 - ii. Pump Fail to Run, each pump
 - iii. AFD Fault, each drive.

- iv. ATS Fault
- v. Generator Fault
- vi. UPS Fault
- vii. Communication Fault
- viii. Wetwell High Level
- c. The station shall have two high level alarm systems.
 - i. Alarm 1: PLC based alarm system using a preset high level as read from the pressure transmitter. This alarm will activate onsite and offsite audible and visual alarms including the following.
 - 1. Audible Alarm Horn
 - 2. Visual Alarm Light
 - 3. High Level indicator located on the dead front inside the panel.
 - 4. Alarm indication on the Panel PC
 - 5. Alarm indication in the PLC
 - 6. Alarm indication to the DFS Radio Telemetry System
 - 7. Alarm indication in the Plant VT SCADA system.
 - ii. Alarm 2: Back up to Alarm 1 using a high level float switch inside the wetwell. This alarm will activate onsite and offsite audible and visual alarms including the following.
 - 1. Audible Alarm Horn
 - 2. Visual Alarm Light
 - 3. High Level indicator located on the dead front inside the panel.
 - 4. Alarm indication on the Panel PC
 - 5. Alarm indication in the PLC
 - 6. Alarm indication to the DFS Radio Telemetry System
 - 7. Alarm indication in the Plant VT SCADA system.
- 5. Emergency Standby Generator Limited Operation – On emergency standby generator power station operation shall be limited to 2 pumps.
- 6. Pump Off – Back Up Float System
 - a. With the station in Auto a low level float in the wetwell will automatically shut off all pump operation until the high level float switch is activated.

Programming shall allow for operators to change all variables noted above through a simple interface via a laptop computer or the HMI.

161.05 Adjustable Frequency Drive:

Adjustable frequency drives shall be Eaton PowerXL DG1 Series. Drives shall be rated for 480V, 3 PH, 60 HZ. Drives shall be variable torque, pulse width modulated. Drive horsepower rating shall equal or exceed maximum pump motor horsepower requirements at any point on the pump curve.

The drive shall include a keypad interface that provides the following functions and displays at a minimum; Output frequency, frequency reference, motor speed, motor current, motor torque, motor power and motor voltage.

The drive shall include the following protective features, at a minimum; over current, over voltage, inverter fault, under voltage, input phase loss, output phase loss and under/over temperature.

The drive shall include the following field programmable I/O, at a minimum; DIGITAL: eight 24VDC digital inputs and eight 24VDC digital outputs including local/remote, drive ready, fault, running, overload, set speed, current. ANALOG: two 4-20 mA analog outputs, two 4-20 mA analog inputs.

The drive manufacturer shall provide services of a field service technician to assist in installation, setup and training.

Drives shall come with a minimum 12 month warranty.

161.06 Programmable Logic Controller: See Section 169

161.07 Uninterruptible Power Source (UPS)

Power and control panels shall be provided with an UPS for the control and telemetry system. The UPS shall be Eaton 5P Tower UPS with an Eaton Network Card-MS. The UPS shall be sized by the Contractor based on control and radio telemetry loads and to provide a minimum 10 minutes of backup power to these systems in the event of power failure.

The UPS shall provide power through an APC 120V 10 outlet rack mounted automatic transfer switch model number AP7750A. In the event of UPS failure the ATS shall switch to commercial power, if available.

161.08 Operator Interface/Panel PC

Power and control panels shall be provided with an operator interface/panel PC. The panel PC shall be Phoenix Contact USA Panel PC – VL2 PPC 2000 – 2400334:

Order Key **2400334/D29/A20/I32/R26/M52/M00/OS64/T00/S00/EF00/PS01**

The panel PC shall come with the following specific options:

1. Passive cooling system and fanless design for industrial applications
2. Panel PC (PPC): IP65 rating in front panel and IP20 rating in back. The control panel design shall ensure only IP65 areas are exposed when the dead front is closed.
3. Display shall be 47.0 cm / 18.5" TFT (Thin Film Transistor)
4. Screen resolution 1366 x 768 Pixel(s) (WXGA)
5. LED Backlighting

6. Intel® Celeron® N2930 1.83 GHz/2.16 GHz processor
7. Operating system shall be Windows® 10 IoT Enterprise LTSB 2015 (32-bit), Multi-language
8. RAM 4 GB DDR3 SODIMM
9. Mass storage - 2,5" SSD (MLC), 160 GB
10. Network 2x Ethernet (10/100/1000 Mbps), RJ45
11. Interfaces 1x COM (RS-232/422/485)
12. 4x USB 2.0
13. Monitor output 1x DisplayPort
14. Service life of battery 5 years
15. Environmental Conditions
 - a. Degree of protection IP65 (front), IP30 (back)
 - b. Ambient temperature (operation) 0 °C ... 45 °C (with HDD)
 - c. Ambient temperature (storage/transport) -40 °C ... 70 °C
 - d. Permissible humidity (operation) 5 % ... 95 % (non-condensing)
 - e. Permissible humidity (storage/transport) 5 % ... 95 % (non-condensing)
 - f. Power supply unit 24 V DC ±20 %

161.09 Ethernet Switch

Power and control panels shall be provided with an Ethernet switch to connect all networked devices including but not limited to the Panel PC, Uninterruptible Power Source and PLC. Ethernet switches shall be Allen Bradley Stratix 5700.

161.10 Ventilation

The panel shall include forced ventilation sufficient to maintain panel interior temperatures and conditions within the ranges set by the manufacturers of equipment located within the panel. Ventilation shall include filtration to prevent the entrance of dust, debris and water from entering the panel.

161.11 Level Transducer/Transmitter: See Section 169

161.12 Circuit Breakers:

Circuit breakers shall be Square D H-Frame sized per panel and pump power requirements.

161.13 Miscellaneous Materials and Requirements:

1. In general, except as specified otherwise in this section or the drawings, panel components shall comply with the Bill of Materials, on Sheet SD-34 of the District's Manual of Minimum Construction Standard and Technical Specifications.
2. One Duplex 15 amp 120 V GFCI receptacle with dedicated circuit breaker.
3. Two overhead fluorescent or LED lights with integral on/off switch mounted inside the panel behind each door in front of the dead front. The lights shall be 120V.

4. One “Hand-Off-Auto” selector switch for each pump, heavy duty oil tight type (toggle switches will not be acceptable).
5. One control power circuit breaker.
6. One main circuit breaker.
7. Secondary Backup Generator circuit breaker with Main Breaker Lockout.
8. Secondary Backup Generator receptacle.
9. Lightning arrestor, surge protector and phase monitor. The phase monitor shall lock out pump operation in the event of phase loss, reversal or low voltage.
10. One “RUN” indicator light for each pump.
11. One “FAIL” indicator light for each pump.
12. One Elapsed time meter for each pump, 2-1/2”, 6 digit non-resettable.
13. Independent 12VDC High Level Alarm System -
 - a. Alarm light, 12 VDC, with Flasher, outdoor type mounted on top of the control panel.
 - b. Alarm Horn, 12 VDC, outdoor type mounted on side of control panel.
 - c. High Level Alarm Circuitry to include high level float in the wetwell. Alarm circuit to match the District Standard, including the intrinsic safe circuit in the wetwell.
 - d. This alarm shall act independently from the PLC
14. A copy of the panel wiring diagram asbuilts and bill of materials shall be attached to the inside of the outer panel door. An extra copy shall be given to the District.

Spare parts to be furnished with the panel include:

- 2 - 120V Relays
- 1 - Alternator
- 1 - Phase Monitor
- 12 - Lamps
- 12 - Fuse Links
- 1 – Intrinsically Safe Barrier
- 1 – Alarm Controller

161.14 System Integration

System integration shall be performed by

Frank Sczurek, Process Analyst
Process Control Consultants
PO Box 1174
Loxahatchee, FL 33470

Phone: 561-791-1511
Email: procon@comcast.net

System integration shall include integration of the adjustable frequency drives, level transmitter, level transducer, programmable logic controller, uninterruptable power source, generator

controller, panel PC, automatic transfer switch, Data Flow Systems RTU and the District's VT Scada System for a fully functional system capable of implementing the required operating protocol and monitor/control functions as detailed in the specifications and the System Block Diagram.

System integration shall include screen development. At a minimum the following screens shall be provided at the Panel PC.

1. Overview – shows diagrammatic representation of the lift station pumps, drives, wetwell, generator and ATS and include equipment status and alarm and HOA functions. This screen shall also display, at a minimum, pump speed, pump hours, wetwell level, power source, voltage and current.
2. Setup Screen – allows setup of station parameters to include lead, lag, standby selection, time delays, tandem pump operation criteria, pump speed limits, operating levels and alarm levels,
3. Alarm/Fault Screen – displays a complete list of programmed alarms, indicates current/active alarm, allows alarm acknowledgment, allows setup of alarm parameters.
4. Trend Screen – Provide trending for lift station parameters including pump speed, wetwell level, estimated flow (based on correlation between pump speed, pump head and pump curve).

The following minimum screens shall be provided in the Plant VT SCADA system. Screens shall conform in style and function to the District's existing VT SCADA screens.

1. Station Status
2. Historical Trending

161.15 Radio Telemetry

The power and control panel shall include dry contacts for the radio telemetry unit. Dry contacts shall be provided for all I/O listed below.

1. Pump Status
2. Pump Fail
3. Pump Call to Run/Off
4. Commercial Power
5. Auxiliary Power
6. High Alarm – back up float
7. Generator General Alarm
8. Generator Low Coolant
9. Generator Fuel Alarm
10. Generator Fail
11. Pump Speed
12. Pump Disable
13. Wetwell Level
14. 2 Spare Digital
15. 2 Spare Analog

|

END OF SECTION 1610

SECTION ~~1706~~2

EMERGENCY STANDBY DIESEL GENERATOR SET

162.01 General

The generator shall provide emergency power to the lift station adequate to operate the station and all appurtenances. A detailed sizing report shall be submitted for approval. The generator set shall be 130 C (266 F) temperature rise at 0.8 PF, 480/277V, 3 phase, four wire at 500' above sea level and ambient temperature 25C (77 F). The generator set shall be EPA certified for this specific application (permanent standby emergency power) but not have less than an EPA Tier III emission certification.

The generator set shall include an automatic transfer switch, battery charger, batteries, sound attenuating/hurricane rated/weather resistant enclosure and exhaust silencer and come as a complete package from the manufacturer.

Work shall also include a generator sizing report based on design loads detailed in the contract including pumps, controls, instrumentation, lightening and miscellaneous loads verifying manufacturers concurrence with the above sizing.

162.02 Applicable Codes, Standards and Specifications

The installation shall comply with all applicable rules, regulations, and ordinances of the following:

- National Electric Code (NEC)
- Occupational and Safety Health Standards (OSHA)
- Florida Building Code (FBC)
- National Fire Prevention Association (NFPA)
- Underwriters Laboratory (UL)
- International Standardization Organization (ISO)
- National Electrical Manufacturers Association (NEMA)
- American National Standards Institute (ANSI)
- Institute of Electrical and Electronics Engineers (IEEE)
- Environmental Protection Agency (EPA)
- Town of Jupiter
- Palm Beach County

162.03 Submittals

The generator set submittal shall include drawings and schematics that fully depict the product being provided. Submittals shall include the following:

- A. Generator sizing report
- B. Generator set plans and elevations.
- C. Enclosure including plans and elevations.
- D. Fuel tank including plans and elevations.
- E. Engine, combustion air, exhaust, fuel, lubrication and cooling performance

- specifications.
- F. Alternator specifications.
- G. Fuel consumption rates.
- H. Generator set rating (Prime at 105 C temperature rise)
- I. Exhaust silencer.
- J. Generator breaker
- K. Battery charger.
- L. Controller.
- M. Enclosure including sound attenuation, wind rating and weather rating (wind driven rain proof).
- N. Tier Rating.
- O. Start-up report
- P. Factory production testing.

162.04 Acceptable Manufacturers

The generator set, fuel tank and enclosure shall be supplied by a single manufacturer. The generator set shall be manufactured by Caterpillar, Kohler, Cummins/Onan, Detroit Diesel or Generac.

162.05 Warranty

The generator set and ATS shall have a 1-year warranty from the date of acceptance by the District.

162.06 Diesel Engine Generator Set

The engine shall be water-cooled four-stroke compression ignition diesel and rated to drive the generator set after derating for elevation (altitude) and temperature.

Voltage regulation shall be within 5% of rated voltage at constant load. Frequency regulation shall be within 3%. Total harmonic distortion shall not exceed 5%.

When loaded voltage dip shall not exceed 20% and frequency dip shall not exceed 10%. Recovery time shall not exceed 3 seconds.

The generator shall be synchronous, four pole, revolving field, permanent magnet, drip proof, air cooled and direct connected to the engine. Insulation shall be Class H and suitable for use in wind driven rain and salt spray environments. Temperature rise shall not exceed 130 C at standby rating and 105 C at prime rating.

- A. Governor: The generator set shall be equipped with an electronic governor that maintains frequency regulation within 3%.
- B. Fuel System: The fuel system shall be equipped with a 5-micron fuel filter/water separator. The filter shall be sized to handle 125% of the fuel flow at full load. The fuel pump shall be engine driven, positive displacement and mechanical.

The fuel tank shall be sized for min. 72 hour run time at full load based on published fuel consumption rates provided by the generator set manufacturer. The fuel tank shall be belly style installed beneath the enclosure but not form a structural member of the enclosure. Fuel fill shall be readily accessible without opening the enclosure. The tank shall be fitted

with a local, mechanical fuel gauge. The tank shall be double walled with inspection port for the interstitial space.

- C. Space Heater: The generator shall have a 120V space heater sized to maintain the generator windings above temperatures typical in the installation location.
- D. Jacket Water Heater: The generator shall have a 120V jacket water heater sized to maintain the engine block at 90 F.
- E. Battery Charger: The generator shall have a 120V powered 12V or 24V battery charger with trickle charge/maintain function and standard charging capability. The battery charger shall be sized based on charging requirements and sizes of batteries provided as part of the standard generator set.
- F. Batteries: Batteries (12V or 24 V) based on the charging and starting systems shall be provided. Batteries shall be easily accessible for maintenance and replacement and be installed in a corrosion resistant (fiberglass or plastic) battery tray.
- G. Cooling System: The cooling system shall incorporate an engine driven fan, enclosure mounted radiator and ethylene glycol based coolant. Access to the radiator cap shall allow for filling of coolant without the need for additional funnels, piping, etc.
- H. Enclosure: The enclosure shall be sound attenuating (78 dB(A) at 7 meters), weather proof, aluminum and wind rated for min. 165 MPH (or current PBC requirement). The enclosure shall be coated with manufacturers standard coating system and color.

Sound attenuating material shall be moisture and weather resistant, securely fastened to the enclosure interior and protected from damage during routine maintenance and operation.

The enclosure shall house the generator muffler and all generator appurtenances (controller, radiator, breaker, etc.) except the fuel tank.

All hinges, latches and locks shall be corrosion resistant stainless steel.

- I. Controller: The generator controller shall provide/display the following functions.
 - a. Programmable generator exercise schedule.
 - b. Cool down period prior to shutoff.
 - c. All phase AC voltage
 - d. Current output
 - e. Each phase AC voltage
 - f. Utility status
 - g. KW power output
 - h. Power factor
 - i. Total runtime
 - j. Last runtime
 - k. Engine Speed
 - l. Overcrank
 - m. Oil Pressure
 - n. Fuel Pressure
 - o. Water Temperature
 - p. Coolant Level
 - q. Battery Voltage

- r. Frequency
 - s. Off/On/Auto(Remote)
 - t. Alarms
 - i. Oil Pressure
 - ii. Coolant Temperature
 - iii. Coolant Level
 - iv. Low Fuel Pressure
 - v. Engine Speed
 - vi. Overcrank
 - vii. Battery Voltage
- J. Generator Main Circuit Breaker: The generator set shall be provided with a generator main breaker mounted and wired on the generator set. The main breaker shall be UL listed, 480/277 VAC, 200 ampere and configured such that load side cables enter through the bottom of the enclosure.
- K. Air Filter: The generator set shall be provided with a dry type replaceable air filter.
- L. Mounts: Mounts for the generator set to the frame shall be spring type vibration isolation mounts.
- M. Exhaust Silencer: The exhaust silencer shall limit exhaust noise to 78 dB(A) at 7 meters. All enclosure interior exhaust piping shall be insulated to maintain a surface temperature not to exceed 150 degrees F. The insulation shall be installed so that it does not interfere with other components. The insulation shall not be asbestos base.

162.07 Automatic Transfer Switch

The automatic transfer switch shall be UL listed, electrically operated, 480/277 VAC, 3 phase, 60 Hz, 200 ampere and incorporate a mechanical lockout for only normal or emergency power. The use of molded case circuit breakers, contactors or components that are not intended for continuous duty, repetitive switching and transfer service will not be allowed.

The switch shall be mounted in a NEMA-4XSS enclosure.

The switch shall provide the following functions:

- A. Phase voltage sensing and transfer of power based on voltage of primary or emergency source. Transfer limits shall be adjustable for pick-up (85%-100% of nominal voltage) or drop-out (75%- 98% of pickup).
- B. Three phase voltage sensing and transfer of power based on voltage of primary or emergency source. Transfer limits shall be adjustable for pick-up (85%-100% of nominal voltage) or drop-out (fixed at 84%086% of pickup).
- C. Three phase frequency sensing and transfer of power based on frequency of primary or emergency source. Transfer limits shall be adjustable for pick-up (90%-100%) and drop out (fixed at 87%-89% of pickup).
- D. Time delay start in accordance with NFPA 110, Level 1, Type 10 (10 seconds).

- E. Time delay transfer to emergency power after start. Transfer time shall be adjustable from 0-120 seconds.
- F. Time delay transfer to primary power. Transfer time shall be adjustable from 0-30 minutes.
- G. Time delay shutdown of emergency generator after transfer to primary power. Transfer time shall be adjustable from 0-15 minutes.
- H. Status display:
 - a. Primary Power Status
 - b. Emergency Power Status
 - c. Current Power Source
 - d. Time to transfer (in consideration of time delays) to/from emergency
 - e. Transfer complete to/from emergency
 - f. Time to emergency generator stop

162.08 Testing

The generator set shall have factory production testing completed at the rated load. The production testing shall incorporate all parameters and limits identified in this specification. A factory certified record of testing shall be provided in the submittal.

After installation the manufacturer shall provide start up and testing services. Services shall conform to NFPA 110 and include start and shut down cycles, automatic start and load bank test at full load for 2 hours, power transfer and operation of the station on emergency power for not less than 2 additional hours.

162.09 Start-up and Instructions

On completion of the installation, start-up shall be performed by the generator set service representative. Operating and maintenance instruction manuals shall be supplied and operator training provided to operating personnel (minimum 2 hours training). Upon completion a start-up report shall be provided.

END OF SECTION 17062

SECTION ~~18068~~

INSTRUMENTATION

168.01 General

Instrumentation as described in this specification and shown in the drawings shall be provided.

Instrumentation shall be incorporated into the design requirements of the Contractor utilizing the equipment and materials included in this specification.

All electrical components of the system shall operate on 120 volt, single-phase, 60 hertz or 24 VDC power, except as otherwise noted in the specifications.

All electrical components located within the wetwell and the wetwell side of any sealed conduit fitting shall be Intrinsically Safe.

All necessary fuses or switches required by the instrumentation manufacturer for his equipment shall be provided with the equipment.

168.02 Submittals

Detailed design drawings including product specification sheets, mounting hardware, location, conduit, cable and tag numbers shall be provided.

168.03 Cable

All electronic (4-20MADC) signal wire shall be two conductors, copper, twisted pair with tape foil shield and drain wire. The shield is to be grounded at the PLC I/O panel only for single point grounding, in accordance with manufacturer's instructions. Single triad shielded cables for potentiometer signal cables shall be three conductors, copper, twisted triad with tape foil shield and drain wire. The cables must be UL listed for wet locations as defined by the NEC.

168.04 Instrument Mounts

All instruments shall be mounted in readily accessible positions that do not require entry into the wetwell for removal or maintenance. Brackets shall be fabricated to hold instruments. All brackets shall be 304 or 316 stainless steel. All mounting hardware, screws, machine bolts with washers and nuts shall be 316 stainless steel.

168.05 Conduits

All low voltage signals shall be isolated from high level control or power signals in separate conduits. All instrumentation signal conduits below grade shall be SCH80 PVC or 304 stainless steel. All underground conduits shall have grounding bushings and a No. 8 AWG copper minimum cable run to a ground lug at the termination points.

168.06 Lightning/Surge Protection

All transmitters with 4-20 MADC outputs shall have a transmitter mounted surge protection unit. The surge protection unit shall be a EDCO SS65 or approved equal.

168.07 Intrinsically Safe Pressure Transducer

Pressure transducers shall be intrinsically safe and encased in a 316 stainless steel housing.

1. Range: 0 – 15 PSI
2. Cable: Minimum 50'
3. Output: 4 – 20 mA
4. Accuracy: +/-5%

Pressure transducers shall be Blue Ribbon Model 311Z or approved equal.

168.08 Intrinsically Safe Pressure Transmitter

Pressure transmitters shall be intrinsically safe, backlit and mounted in the power and control panel dead-front.

1. Display: 5 Digit
2. Input: 24 VDC
3. Output: 4 – 20 mA
4. Accuracy: +/- 0.03%

Pressure transmitters shall be Precision Digital model 688 or approved equal.

168.09 Power Supplies

All instruments shall be looped powered with an appropriately rated power supply. Each instrument shall have a dedicated power supply.

168.10 Field Calibration and Testing

All instruments shall be set up, calibrated and tested in the field. The Contractor shall provide calibration sheets and testing equipment for each instrument. When installation is complete all components shall be tested to confirm operation and compliance with the contract.

168.11 Installation

All equipment shall be installed per the manufacturers requirements.

END OF SECTION 18068

SECTION ~~181~~69

PROGRAMMABLE LOGIC CONTROLLERS

169.01 General

This section describes the hardware and software requirements for a new Programmable Logic Controller (PLC) for a duplex or tri-plex lift submersible wastewater lift station with adjustable frequency drives, level control, emergency standby power, DFS radio telemetry unit (or) Cellular telemetry unit and appurtenances.

This section provides all labor and material required for the PLC system including the panels, equipment, software, screen development, programming, conduit, cable, tie-ins, checkout and start-up of the complete integrated system. This section shall be used in conjunction with the approved drawings and Section 161, Variable Speed/PLC Control Panels.

The latest version available at the time of installation of all PLC development software and communication driver software shall be provided.

All software and programming shall be required to perform the following functions in addition to the interlocking, monitoring and control functions indicated on the loop diagram drawings and developed in the PLC logic and OWS screen development meetings.

All enclosures shall be UL listed and NEMA rated to house the PLC, remote I/O, power supplies, and terminal blocks as shown in the drawings.

All panels shall be UL listed and labeled as a completed assembly. The panel fabricator shall furnish and install all items not specifically detailed in the drawings required to have the panels UL listed and labeled. All inspections, approvals and modifications required to have the completed panel labeled and listed by UL shall be furnished by, and the responsibility of the panel fabricator.

169.02 Applicable Standards

NEC
NEMA
UL
IEC

Temperature	IEC60068:
Relative Humidity	IEC60068:
Vibration	IEC 60068
Shock	IEC 60068
Emissions	IEC61000
ESD Immunity	IEC 61000
Radiated RF Immunity	IEC61000

EFT/B Immunity	IEC61000
Surge Immunity	IEC61000
Conducted RF Immunity	IEC61000

169.03 Operation and Maintenance Manuals

All products shall be provided with operation and maintenance manuals complete with installation, troubleshooting and technical information on the equipment provided under this contract. Manuals shall be published by the equipment manufacturer.

169.04 Training

Training and instruction shall be given by the manufacturer or representative. Training shall be 4-hours for personnel selected by the Owner in the operation and general maintenance of the PLC. This training is independent of operator training for lift station observation and operation associated with automated controls.

169.05 Submittals

Submittals shall include installation drawings and manufacturer cutsheets clearly defining the products to be provided, their accessories/options and interconnectivity with all systems. Drawings shall also include single line system diagrams and detailed line diagrams for power, input/output and tag numbers.

169.06 Spare Parts

- A. One CPU
- B. One of each Network Module
- C. One of each type of input/output and data link module
- D. One of each type of power supply

169.07 Programmable Logic Controller

1. Approved Manufacturer

The PLC system shall be a Rockwell Automation 1756 ControlLogix L7*** .

2. General

The PLC system (memory, communications, input/output modules, processor, power supplies, software) shall be a modular chassis mounted system and come complete from one manufacturer to provide a complete functioning control system as depicted in the Control Block Diagram and described in the operating protocol and of sufficient capacity for future expansion as allowed for in this specification.

Products shall be provided with conformal coatings, factory applied, to extend product life in harsh, corrosive environments.

The PLC shall be programmable and configurable from a Windows 7 and Windows 10

3. Communication

The PLC system shall be Ethernet compatible or have an Ethernet module accessible by a laptop computer. Programming functions associated with the PLC system shall be accessible through the Ethernet connection.

The PLC shall have a compatible communication modules or ports for communicating with the emergency standby generator controller exclusive of input/output modules and dry contacts. This communication port shall allow for sharing of all monitoring and alarm data associated with the emergency generator controller.

4. Input/Output Modules

The PLC shall have analog and discrete input/output modules sufficient for all proposed and future nodes identified in the control block diagram associated with the DFS Radio Telemetry System.

The PLC shall have analog and discrete input/output modules sufficient for all proposed generator status and generator fail signals.

The PLC shall have analog and discrete input/output modules sufficient for all proposed ATS, commercial, generator power signals.

The PLC shall have analog and discrete input/output modules sufficient for variable speed pump control based on level. PLC control and monitoring of variable speed drives shall be through analog and discrete input/output modules. The use of proprietary communication protocols for variable speed drive control shall be allowed.

The PLC shall have the ability to accommodate 50% additional I/O modules.

5. Central Processing Unit

The PLC configuration shall be maintained through a power loss. The PLC shall continue with operations when power is reinstated without additional programming, uploads or resets.

The PLC system shall utilize a Secure Digital (SD) card for non-volatile memory to store a user program and tag data on the PLC. The PLC system shall be

configurable to trigger the controller to save to or load from the SD card and to load to the controller from the SD card on power up.

The minimum size CPU shall be an A-B Rockwell Automation ControlLogix Series 1756-L71 with 128 MBs of optional nonvolatile memory storage.

6. Power Supplies

Power supplies shall be surge and transient protected, and shall accept input voltages of 90 to 130 VAC. The power supplies shall be fused.

All PLC systems power supplies shall be modular, allowing the power supply to be removed for replacement without affecting input/output modules or wiring.

The PLC systems shall come with redundant power supply.

7. Wire and Cabling

All PLC specific cables shall be furnished by the PLC system manufacturer and be designed for the intended use.

All other wire shall be stranded copper type TFF or MTW, 18 GA for I/O and minimum 14 GA for power.

8. Programming

The CPU shall be capable of being programmed by an external IBM compatible host device via either a serial communication port or Ethernet port on the CPU, or a parallel communication port on an input/output chassis. Serial programming shall be possible without the use of a workstation interface board.

Software shall be Rockwell Automation RSLogix 5000 Professional Edition.

All software shall be registered to the Owner.

9. Terminal Blocks

Input/output modules shall utilize removable terminal blocks to connect all field side wiring.

10. Signal Isolators, Converters and Conditioners

Instrument signals shall be 4 – 20 mA DC. Signal isolators and converters shall be provided as necessary to comply with this requirement. The devices shall be mounted in the panel and such that field wiring may be changed/maintained without affecting the devices.

All communication circuitry shall include protection against lightning, spikes and other transient surges.

11. Grounding

The grounding system of the PLC system shall be tied into the main ground system. The tie-in shall be made from the panel frames to the main ground system.

169.08 Execution

Start-up and testing services for the PLC system shall be provided. The PLC system shall be fully tested against the requirements outlined in this section and Section 161 and the operating protocol and equipment manufacturer requirements. Test procedures and checklists for approval shall be submitted prior to testing. Completed test checklists shall submitted as part of the project record documentation.

END OF SECTION ~~181~~69

SECTION ~~19070~~

REMOTE TERMINAL UNIT (RTU) – LIFT STATION

170.01 General

The District has an existing Radio Telemetry System as manufactured by Data Flow Systems, Melbourne, Florida (321) 259-5009. For compatibility purposes, new remote terminal units will be required as specified herein from Data Flow Systems (DFS) 321-259-5009. The remote terminal unit shall include all materials, labor, tools, equipment, and appurtenances necessary for the proper completion of the work. The work covered by these specifications consists of providing all design, labor, tools, materials, and testing necessary for the supply of the RTU as described herein.

Physical location information shall be provided to DFS for radio communication study purposes. Information shall be provided in the form of GPS readings or street map with actual site location(s) clearly marked.

The RTU shall be housed in its own enclosure. The RTU enclosure shall be mounted on the antenna tower. The RTU shall be powered by 120 VAC commercial power, monitor local statuses and transmit those statuses to the existing central site when polled by the master radio. An Uninterruptible Power Source (UPS) shall be included with the RTU.

170.02 Equipment Specification

170.02.1 Remote Terminal Unit (RTU204)

The remote terminal unit shall be DFS Model RTU204. The RTU shall communicate with the central site via a two-way radio link and designed to accommodate the required plug-in function modules. Function module card connectors shall be gold-over-nickel plated to inhibit corrosion. The RTU shall be housed in a white color NEMA 4X 316 SS enclosure. All mounting hardware utilized shall be stainless steel. The enclosure shall be capable of being locked. The latches utilized to secure the door of each enclosure shall not require the use of a screwdriver to open or close.

170.02.2 Power Supply Module (PSM003)

The RTU shall include a Power Supply Module (PSM003). All function modules in the RTU shall run off DC voltage from +7.5 volts to +13 volts. The PSM shall supply +12 volts. A battery backup shall be provided in event of power failure. The power supply shall be surge protected. The power supply shall be short circuit protected by current limiting. Normal operation shall automatically resume when the short circuit overload is removed. The power supply shall be sized to operate the system with the battery removed. The power supply module shall provide a battery backed, isolated bias voltage source. The circuit breaker for the power supply module shall be part of the power supply module. Neither the use of tools nor the disconnection of any wires shall be required to replace the power supply module.

170.02.3 Backup Battery/Uninterruptable Power Supply (UPS)

The RTU shall have the uninterruptible power supply (UPS) function built in. The RTU's internal Power Supply Module shall keep the battery at a float charge. The battery shall not be damaged by deep discharges.

170.02.4 Telemetry Interface Module (TIM007)

- a) The Telemetry Interface Module (TIM) shall incorporate a synthesized programmable radio.
- b) A data buffer on the TIM shall enable it to query and store the I/O function module(s) status between radio polling loops until data is requested by the central site.
- c) The TIM shall feature a wake up/report/sleep mode to aid in battery conservation for solar-powered applications.
- d) The TIM shall support four levels of digipeating (store and forward), enabling radio messages from a different RTU to be routed to the central site.
- e) The TIM shall monitor AC power on the Power Supply Module and DC Bias to the RTU I/O function modules.
- f) The TIM shall incorporate a 2x8 character LCD display and 3-button user interface for field diagnostics and support data without the use of a portable computer.
- g) The TIM shall incorporate a test mode switch that places the radio into a service mode.
- h) The TIM shall incorporate LEDs for TX, RX, Power, CPU Fault.

170.02.5 Digital Monitor Module (DMM002)

The RTU shall include a Digital Monitor Module (DMM002). The DMM002 shall accept 12 on/off inputs of 12 to 30 volts AC or DC. Voltages from 100 to 300 volts AC or DC shall be accommodated with the use of an inline voltage converter device. Status reporting of these inputs shall have an accuracy of +/- 2 seconds, the accuracy being defined as time of an occurrence to actual time recorded by the central site computer. The DMM002 shall not require interfacing relays to monitor 24 VDC, 115 VAC, 220 VAC or 480 VAC. The DMM002 shall have LEDs to indicate: the status of each input point; receive communications; transmit communications; CPU fault; and power status. The configuration of the monitor points as alarm points or monitor points (pump run time monitors) shall be operator changeable. The configuration shall not require any software or firmware changes in the system.

170.02.6 Antenna Subsystem

DFS shall determine the antenna type and height required for reliable communications. A high gain directional or omni antenna shall be used to transmit and receive data. The antenna mast/pole shall be hot dipped galvanized for corrosion protection. All mounting hardware shall be made of stainless steel. The coax cable shall be the type that utilizes an inert semi-liquid compound to flood the copper braid. The coax cable shall be of the RG-8 construction type and have the RF-loss characteristic of foam flex. The coax cable shall be RTC 400 as supplied by DFS. Type N connectors shall be utilized at both ends of the coax and sealed with 3-inch sections of Alpha

FIT321-1-0 sealant shrink tubing. The coax cable shall be secured to the mast/pole with AE112 Bandit coated 316 stainless steel cable ties. The RTU shall be protected from electrical surge or transients entering through the coaxial cable by use of a IS-B50LN-C2 Polyphaser coaxial cable surge protector.

170.02.7 RTU Monitor Points

The RTU shall accommodate the following I/O points.

RTU HARDWIRED I/O LIST:

DIGITAL INPUT (DI)	DIGITAL OUTPUT (DO)	ANALOG INPUT (AI)	ANALOG OUTPUT (AO)
COMMERCIAL POWER	PUMP 1 OVERRIDE	WET WELL LEVEL	NONE
AUXILIARY POWER	PUMP 2 OVERRIDE	(3) AI SPARE	
HIGH WET WELL LEVEL	*PUMP 3 OVERRIDE		
PUMP 1 RUN STATUS	PUMP 1 DISABLE		
PUMP 2 RUN STATUS	PUMP 2 DISABLE		
*PUMP 3 RUN STATUS	*PUMP 3 DISABLE		
PUMP 1 FAULT	(2) DO SPARE		
PUMP 2 FAULT			
* PUMP 3 FAULT			
GENERATOR GENERAL ALARM			
GENERATOR LOW COLLANT			
GENERATOR LOW FUEL			
GENERATOR FAIL TO START			
(7) DI SPARE			
* If applicable			

170.03 Installation

In order to insure total system integration with the existing system, secure and provide the services of Data Flow Systems, Inc. for RTU hardware.

170.04 Programming

Antenna alignment fine-tuning procedure, configuration of RTU into the system, RTU point-by-point verification at the central computer, and RTU screen generation services shall be covered by the District.

170.05 Warranty

DFS shall warrant all hardware provided under this contract against all defects in material and workmanship for a period of one year. The RTU plug-in modules shall carry an additional 2-year return-to-manufacturer warranty and shall be covered against damage due to lightning and surge the entire 3-year period.

170.06 Spare Parts

Provide the following spare parts with the RTU:

- a. (1) Telemetry Interface Module (TIM007)
- b. (1) Power Supply Module (PSM003)
- c. (1) Digital Control Module (DCM003)
- d. (1) Digital Control Module (DCM004)
- e. (1) Analog Monitor Module (AMM ---)
- f. (1) Backup Battery
- g. (1) RTU Antenna

END OF SECTION ~~19070~~

SECTION 200

ADOPTION OF STANDARDS

The Loxahatchee River Environmental Control District Manual of Minimum Construction Standards and Technical Specifications were initially adopted and promulgated by the Governing Board in April, 1983.

The current edition was ratified by the Loxahatchee River Environmental Control District's Governing Board, on May 17, 2018, with a _____ vote as follows:

"THAT THE DISTRICT GOVERNING BOARD ratify the Loxahatchee River Environmental Control District's "Manual of Minimum Construction Standards and Technical Specifications", as of May 17, 2018, and authorize the District Engineer and Executive Director to update the Construction Standards and Technical Specifications from time to time, and periodically present it to the Governing Board for ratification."

<u>Board Member</u>	<u>Vote</u>
<u>Dr. Rostock, Chairman</u>	<u>" "</u>
<u>Mr. Rockoff, Vice-Chairman</u>	<u>" "</u>
<u>Mr. Boggie, Treasurer</u>	<u>" "</u>
<u>Mr. Silverman, Secretary</u>	<u>" "</u>
<u>Mr. Snyder, Assistant Secretary/Treasurer</u>	<u>" "</u>

D. Albrey Arrington, Ph.D.
Executive Director
Loxahatchee River Environmental Control District

END OF SECTION 200

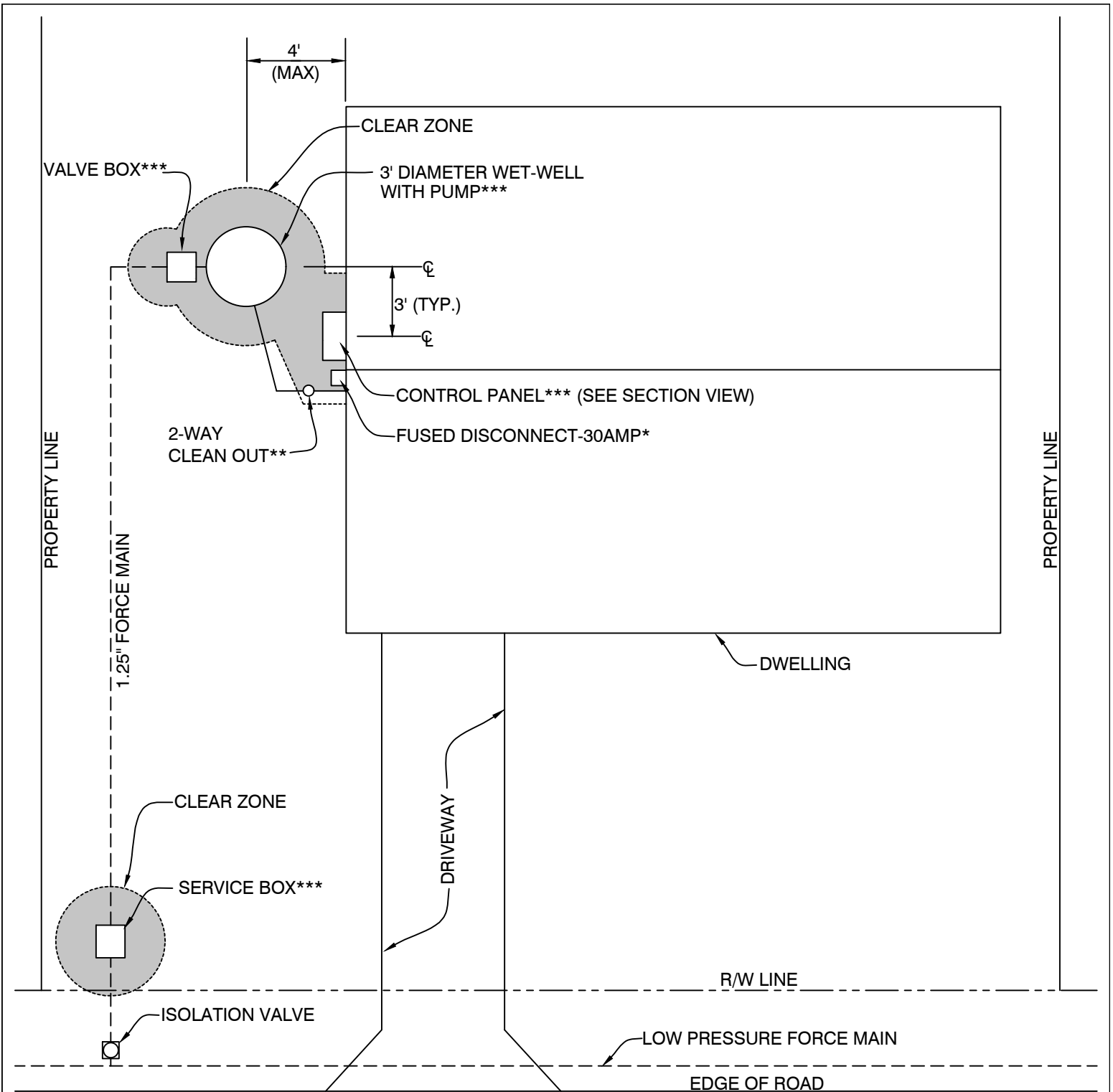
LP	LOW PRESSURE FORCE MAIN DETAILS INDEX
LP-1	TYPICAL RESIDENTIAL GRINDER SYSTEM LAYOUT (PLAN VIEW)
LP-2	TYPICAL RESIDENTIAL GRINDER SYSTEM LAYOUT (SECTION VIEW)
LP-3	ALTERNATE RESIDENTIAL GRINDER SYSTEM LAYOUT (PLAN VIEW)
LP-4	ALTERNATE RESIDENTIAL GRINDER SYSTEM LAYOUT FREE STANDING (1 OF 2)
LP-5	ALTERNATE RESIDENTIAL GRINDER SYSTEM LAYOUT FREE STANDING (2 OF 2)
LP-6	RESIDENTIAL SIMPLEX TYPICAL WET WELL
LP-7	RESIDENTIAL SIMPLEX CONTROL PANEL LAYOUT
LP-8	RESIDENTIAL SIMPLEX ELECTRICAL SCHEMATIC
LP-9	RESIDENTIAL DUPLEX TYPICAL WET WELL
LP-10	RESIDENTIAL DUPLEX CONTROL PANEL LAYOUT
LP-11	RESIDENTIAL DUPLEX ELECTRICAL SCHEMATIC
LP-12	COMMERCIAL DUPLEX TYPICAL WET WELL
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LP-13	COMMERCIAL DUPLEX CONTROL PANEL SUPPORT
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LP-15	COMMERCIAL DUPLEX CONTROL PANEL BACKPLATE LAYOUT
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LP-18	COMMERCIAL DUPLEX ELECTRICAL SCHEMATIC 3PHASE
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LP-20	COMMERCIAL DUPLEX ELECTRICAL SCHEMATIC NOTES
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LP-27	LOW PRESSURE MAIN INTO SHALLOW MANHOLE
LP-28	LOW PRESSURE MAIN INTO DEEP MANHOLE
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LP-30	LOW PRESSURE TIE - IN DETAIL
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LP-32	TYPICAL ROAD CROSSING REPAIR DETAIL
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LOXAHATCHEE RIVER DISTRICT

REVISION:
REVISION:
MARCH, 2017

LOW PRESSURE FORCE MAIN DETAILS INDEX

LP



*FOR DUPLEX INSTALLATIONS (5,000 sq ft or more) USE 60 AMP FUSEABLE DISCONNECT.

**REPLACE EXISTING CLEANOUT IF NOT 2-WAY.

*** PROVIDE A 36" CLEAR ZONE FREE FROM FENCING, LANDSCAPING AND OTHER OBSTRUCTIONS THAT MAY LIMIT ACCESS.

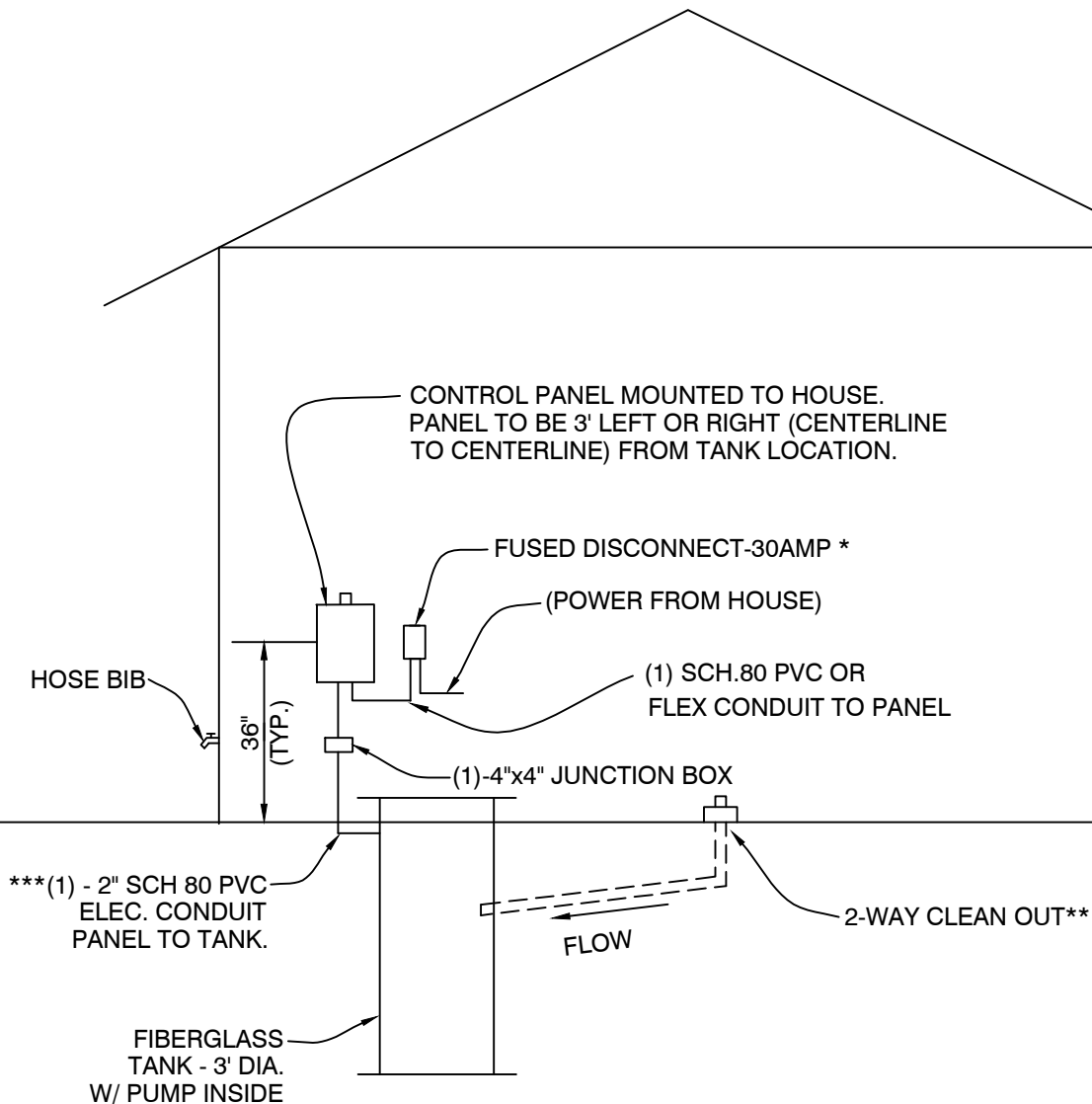
LOXAHATCHEE RIVER DISTRICT

**TYPICAL RESIDENTIAL
GRINDER SYSTEM LAYOUT (PLAN VIEW)**

LP-1

N.T.S.

REVISION:
JUNE, 2018



*FOR DUPLEX INSTALLATIONS (5,000 sq ft or more)
USE 60 AMP FUSEABLE DISCONNECT.

**REPLACE EXISTING CLEANOUT IF NOT 2-WAY.

***FOR DUPLEX STATIONS, USE TWO (2) - 2" SCH. 80 CONDUITS

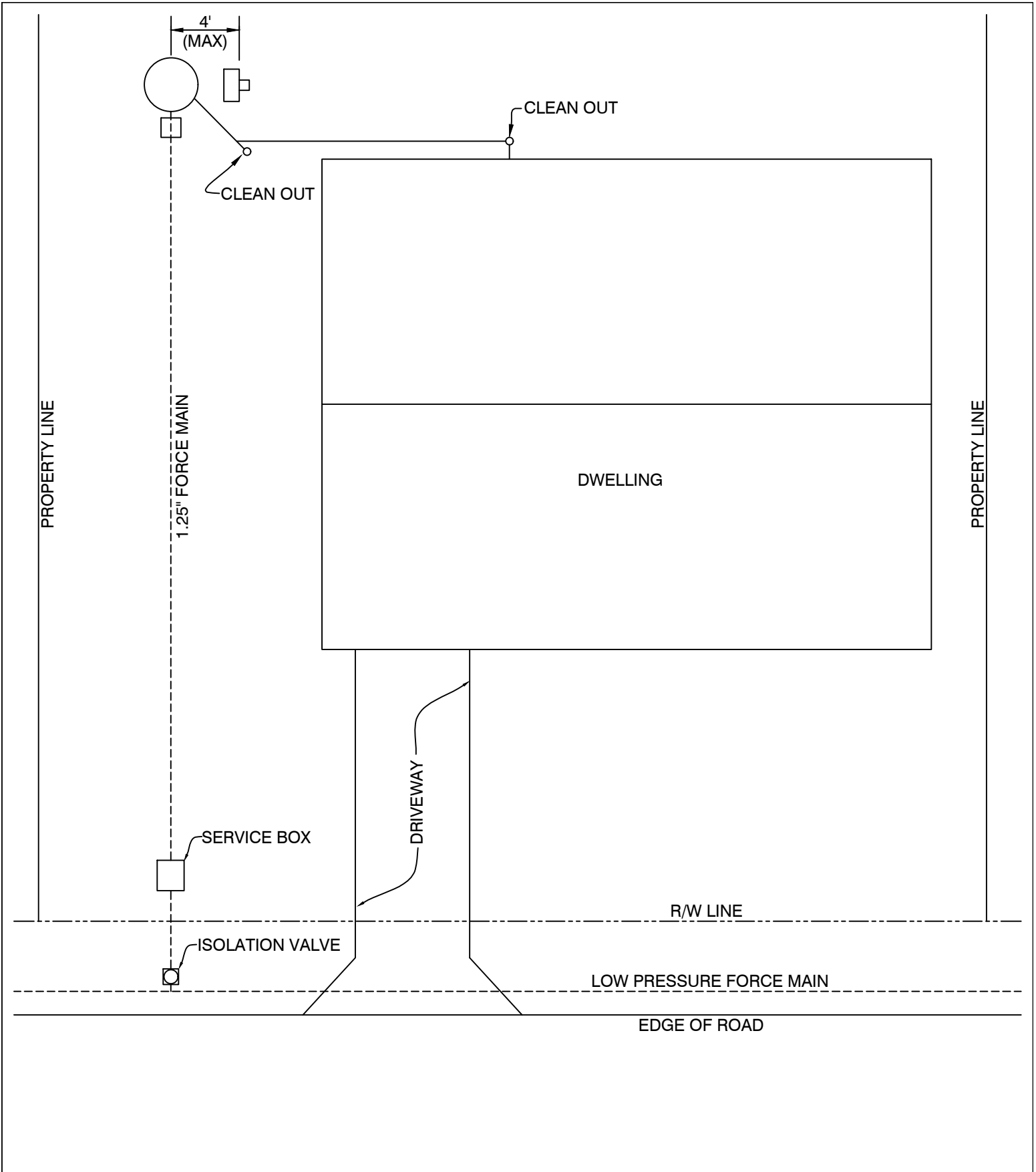
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
APRIL, 2012

**TYPICAL RESIDENTIAL
GRINDER SYSTEM LAYOUT (SECTION VIEW)**

LP-2



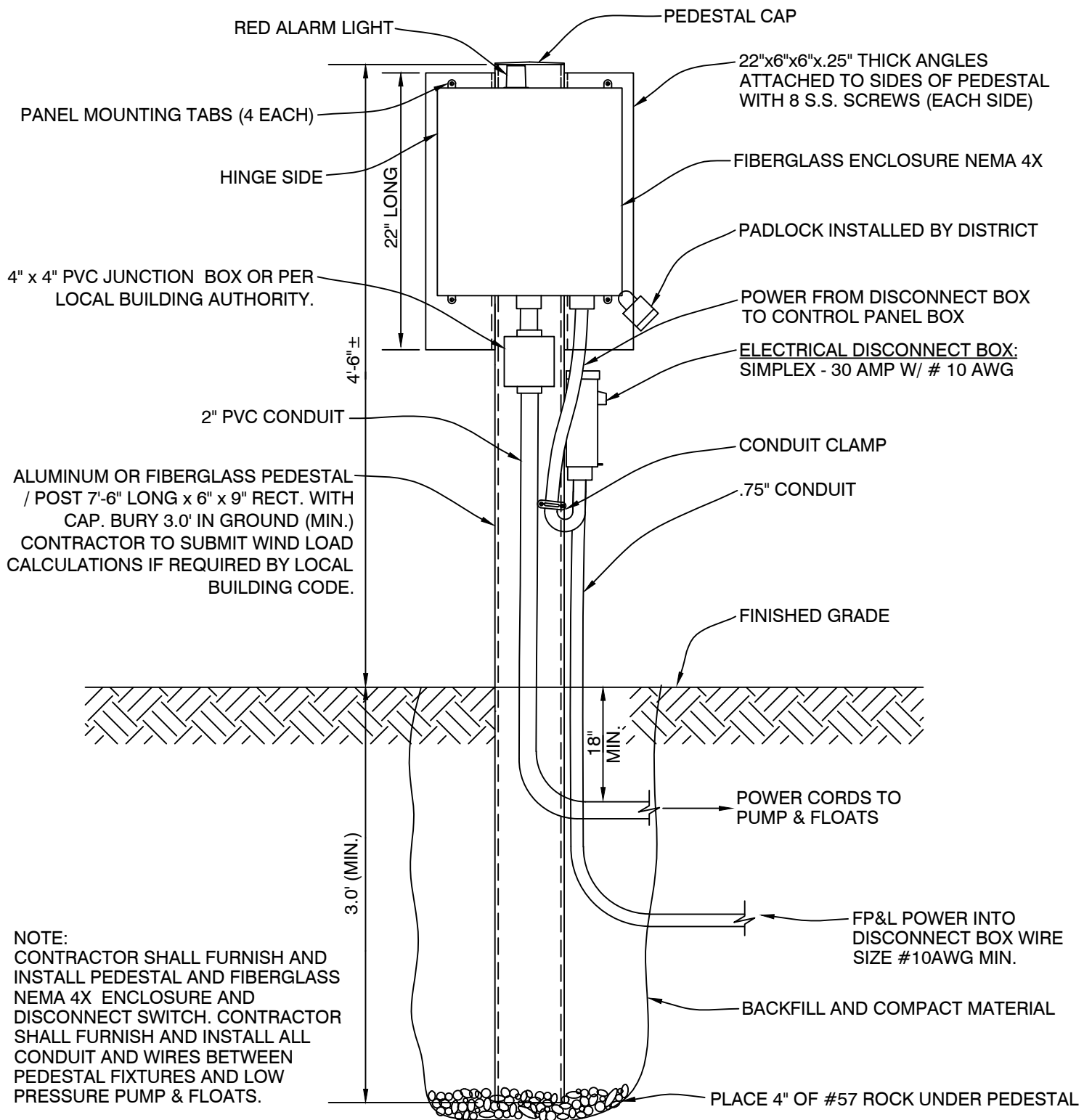
LOXAHATCHEE RIVER DISTRICT

**ALTERNATE RESIDENTIAL
GRINDER SYSTEM LAYOUT (PLAN VIEW)**

LP-3

N.T.S.

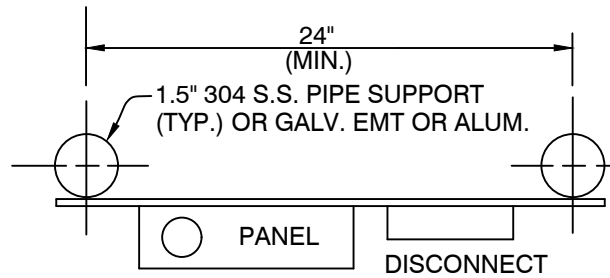
REVISION:
APRIL, 2012



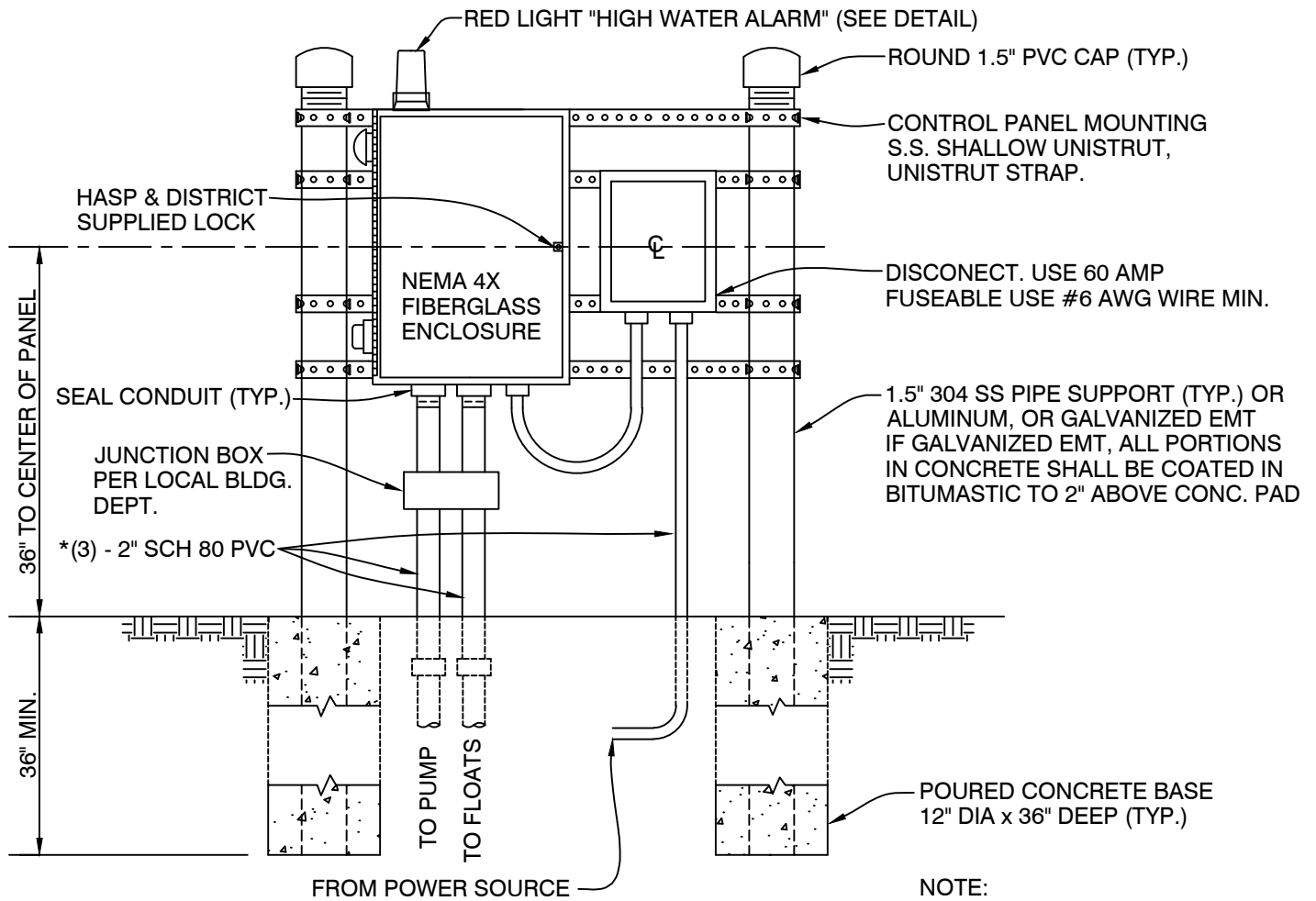
* FOR RESIDENTIAL SIMPLEX STATIONS ONLY

LOXAHATCHEE RIVER DISTRICT

<p>N.T.S.</p> <p>REVISION: MARCH, 2016</p>	<p>ALTERNATE RESIDENTIAL GRINDER SYSTEM LAYOUT FREE STANDING (1 OF 2)</p>	<p>LP-4</p>
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PLAN VIEW



FRONT ELEVATION

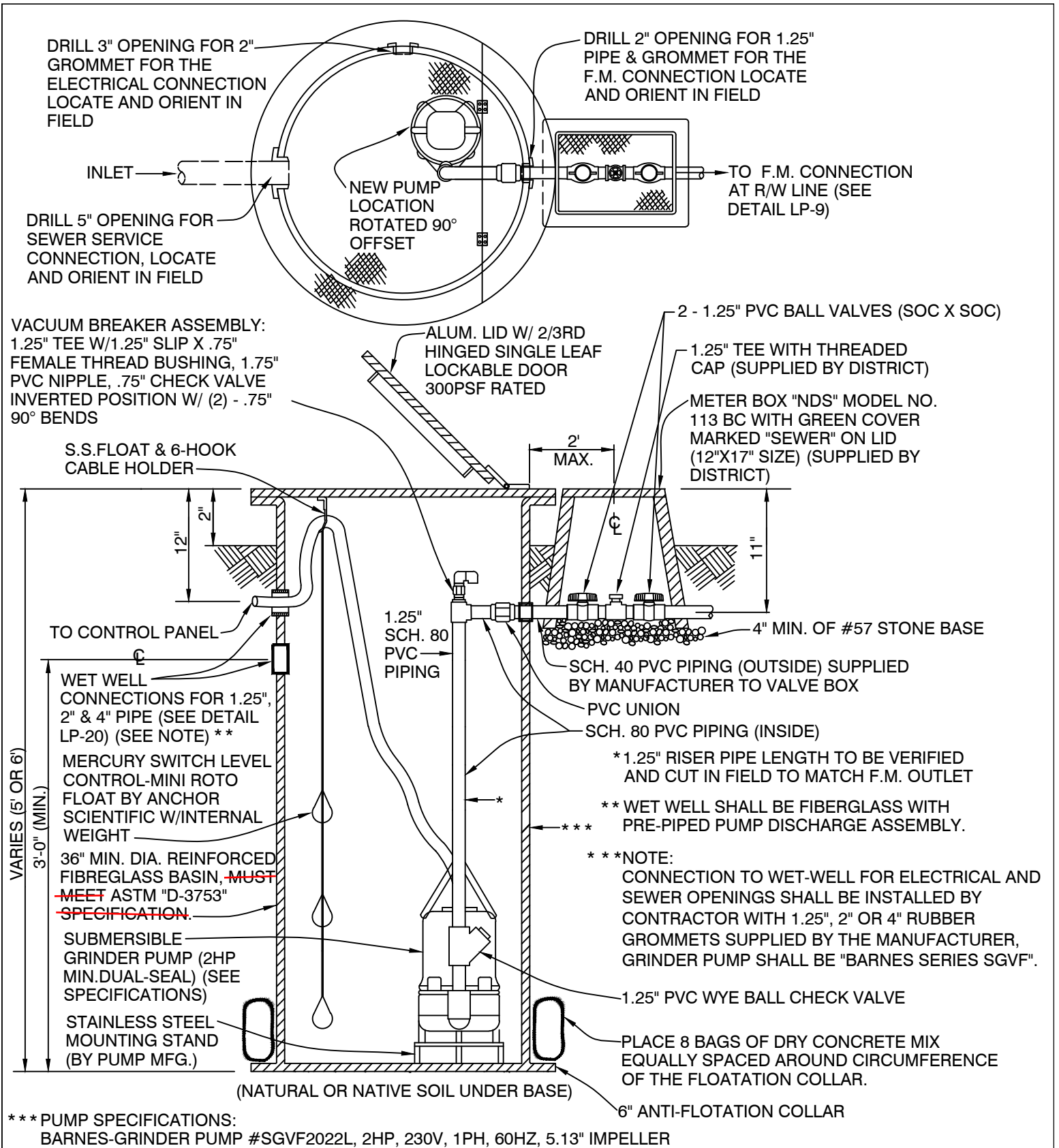
* FOR RESIDENTIAL DUPLEX STATIONS ONLY

LOXAHATCHEE RIVER DISTRICT

N.T.S.
REVISION:
APRIL, 2012

ALTERNATE RESIDENTIAL
GRINDER SYSTEM LAYOUT FREE STANDING (2 OF 2)

LP-5



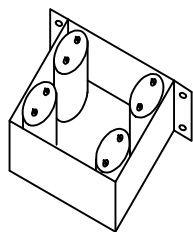
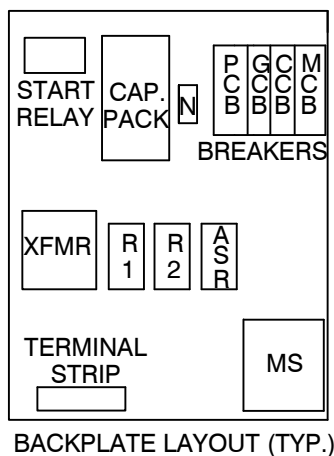
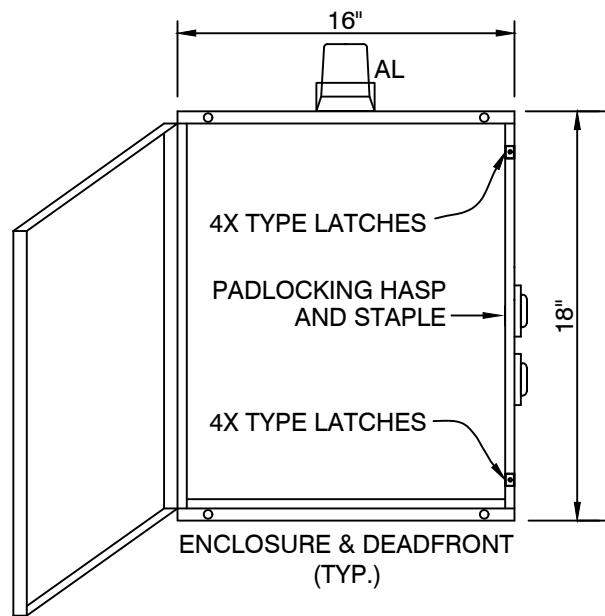
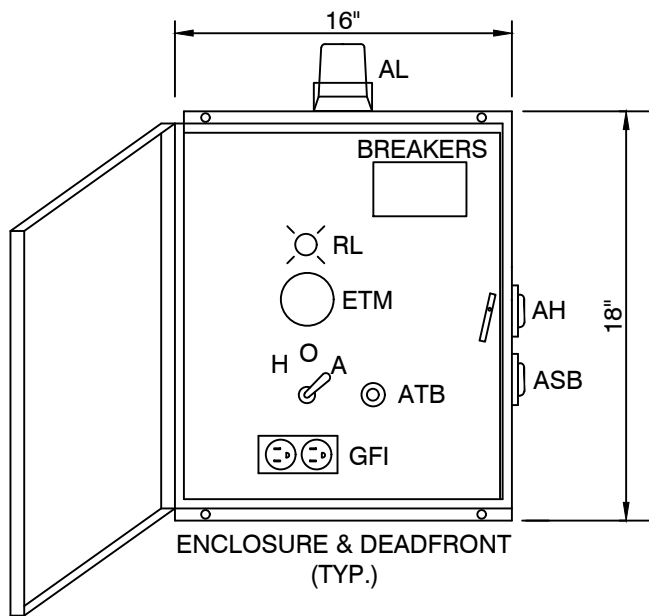
LOXAHATCHEE RIVER DISTRICT

RESIDENTIAL SIMPLEX TYPICAL WET WELL

LP-6

N.T.S.

REVISION:
APRIL, 2012



CAPACITOR
PACK SUPPORT
DETAIL

BILL OF MATERIALS

ENC	FIBERGLASS ENCLOSURE	ROBROY NEMA 4X, RJ1816HPL
PCB/MCB	PUMP & MAIN BREAKERS	SQ-D, QOU230
CCB/GCB	GFI & CONTROL BREAKERS	SQ-D, QOU115
MS	STARTER	SQ-D, 8502SBO2VO2S
OL	OVLD HTR ELEMENT	SQ-D, B25
XFMR	TRANSFORMER 50VA	SQ-D, 9070T50D13
ETM	ELAPSED TIME METER	CONTR. DYN. 120VAC, HMA303
HOA	HAND OFF AUTO SWITCH	MCGILL 20A, 910003
RL	RUN LIGHT	BACO 22M, L20SA50
AL	ALARM LIGHT	STONCO, VP11GCR
AH	ALARM HORN	FLOYD BELL, MC09201Q
*ASR	ALARM SILENCE RELAY	IDEC, SR3B05
ASB	ALARM SILENCE BUTTON	SQ-D, ZB4BA0
ATB	ALARM TEST BUTTON	SQ-D, ZB4BA2
GFI	15 AMP GFI RCPT	PASS SEYMOUR, 1595W
FU1	FUSE 1A	BUSS, MDL-1
FU2	FUSE 2A	BUSS, MDL-2
FU1-2	FUSE BLOCK	BUSS, BKS82021
OL	OVERLOAD RELAY	SQ-D, 9065SEO5
CR1-2	CONTROL RELAY	IDEC, RR2PULAC24V
CR1-2	8-PIN SOCKET	IDEC, SR2P06
TS	TERMINAL STRIP	ALTECH, TSF6012WP
CAP.PACK: MARS RUN CAP OVAL 45MF/440V, 12448 MARS STRT CAP 250V 124-156MF, 11148 GE START RELAY, 16104		
		TO MATCH GRINDER PUMP'S

* OR APPROVED EQUAL

* PANEL & COMPONENTS SHALL CONFORM TO
INDUSTRIAL UL LISTING PRE SEC. 508 N.E.C.

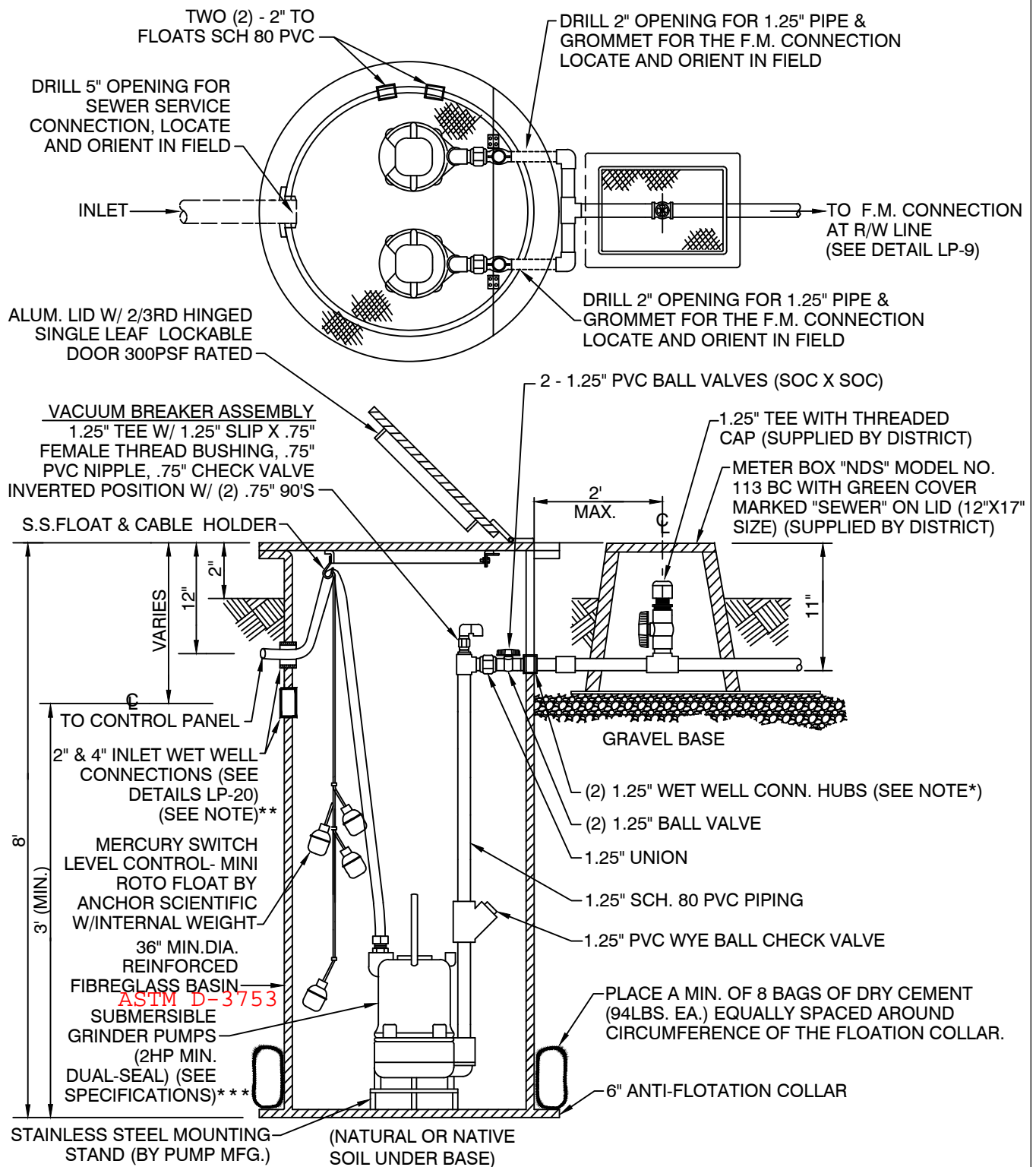
LOXAHATCHEE RIVER DISTRICT

RESIDENTIAL SIMPLEX
CONTROL PANEL LAYOUT

LP-7

N.T.S.

REVISION:
APRIL, 2012



*NOTE:
CONNECTOR HUBS FOR WET-WELL FORCE MAIN CONNECTION ARE FACTORY INSTALLED. USE THREADED PVC SCH. 80 NIPPLES.

**NOTE:
CONNECTION TO WET-WELL FOR ELECTRICAL AND SEWER OPENINGS SHALL BE INSTALLED BY CONTRACTOR WITH 2" & 4" RUBBER GROMMETS SUPPLIED BY THE DISTRICT, LOCATION DETERMINED BY CONTROL PANEL LOCATION.

***PUMP SPECIFICATIONS:
BARNES-GRINDER PUMPS #SGVF2022L, 2HP, 230V, 1PH, 60HZ, 5.13" IMPELLER

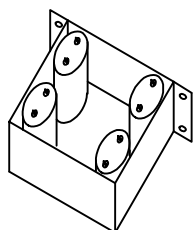
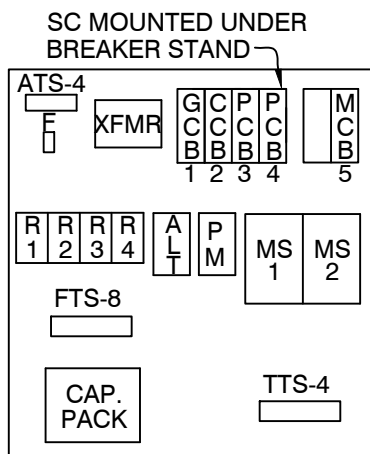
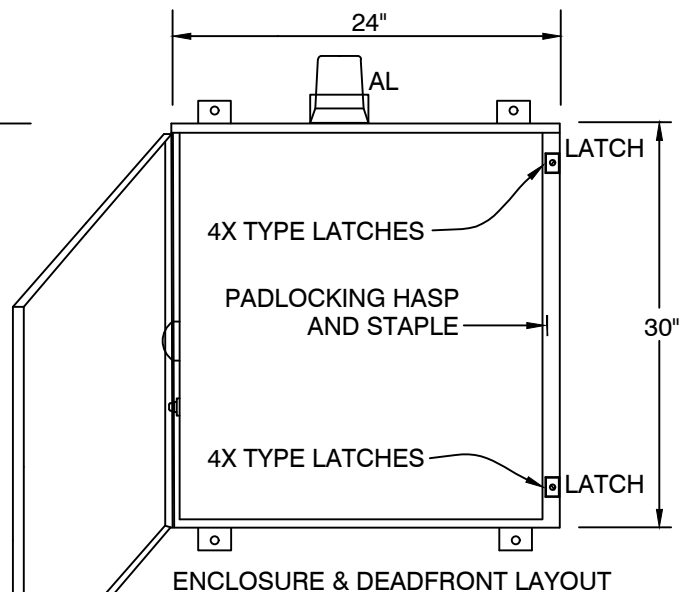
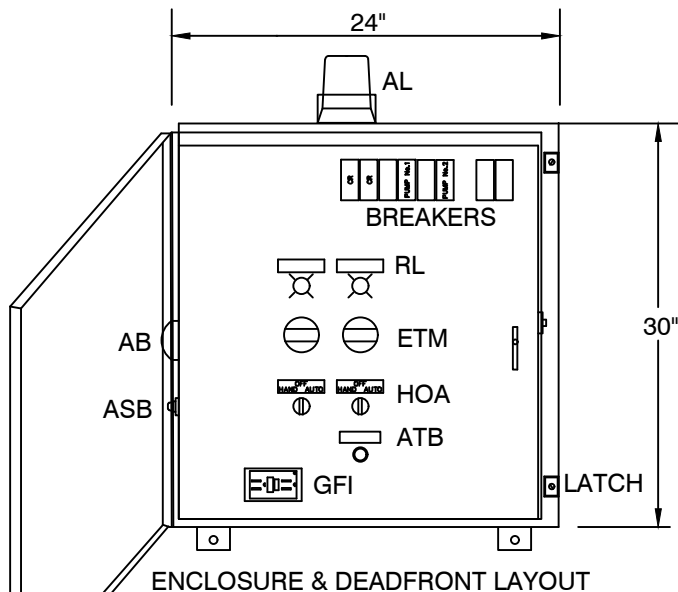
LOXAHATCHEE RIVER DISTRICT

RESIDENTIAL DUPLEX TYPICAL WET WELL

LP-9

N.T.S.

REVISION:
APRIL, 2012



BILL OF MATERIALS

ENC	FIBERGLASS ENCLOSURE	HOFFMAN, UU605025
PCB/MCB	PUMP & MAIN BREAKERS	SQ-D, QOU260/QOU230
CCB/GCB	GFI & CONTROL BREAKERS	SQ-D, QOU115/QOU110
MS1-2	STARTER	SQ-D, 8502SBO1V02S
OL	OVLD HTR ELEMENT	SQ-D, B25
XFMR	TRANSFORMER	SQ-D, 9070T50D13
ETM	ELAPSED TIME METER	REDINGTON, 7220004
HOA	HAND OFF AUTO SWITCH	SQ-D, ZB4BD3
RL	RUN LIGHT	BACO 22M, S20SA40
AL	ALARM LIGHT	STONCO, VP11GCR
AH	ALARM HORN	FLOYD BELL, MC09201Q
ASR	ALARM SILENCE RELAY	IDEC, RR3BULAC120V
ASB	ALARM SILENCE BUTTON	SQ-D, ZB4BA0
ATB	ALARM TEST BUTTON	SQ-D, ZB4BA2
GFI	15 AMP GFI RCPT	PASS SEYMOUR, 1595W
FU1	FUSE 1A	BUSS, MDL-1
FU2	FUSE 2A	BUSS, MDL-2
FU1-2	FUSE BLOCK	BUSS, BKS82021
OL1-2	OVERLOAD RELAY	SQ-D, 9065SEO5
CR1-3	CONTROL RELAY	IDEC, RR2PULAC24V
ALT	ALTERNATOR	DIVERSIFIED, ARB120ABA
LA	LIGHTNING ARRESTOR	INTERMATIC, AG2401C
CAP.PACK: MARS RUN CAP OVAL 45MF/440V, 12448 } TO MATCH MARS STRT CAP 250V 124-156MF, 11148 } GRINDER PUMP'S GE START RELAY, 16104 }		

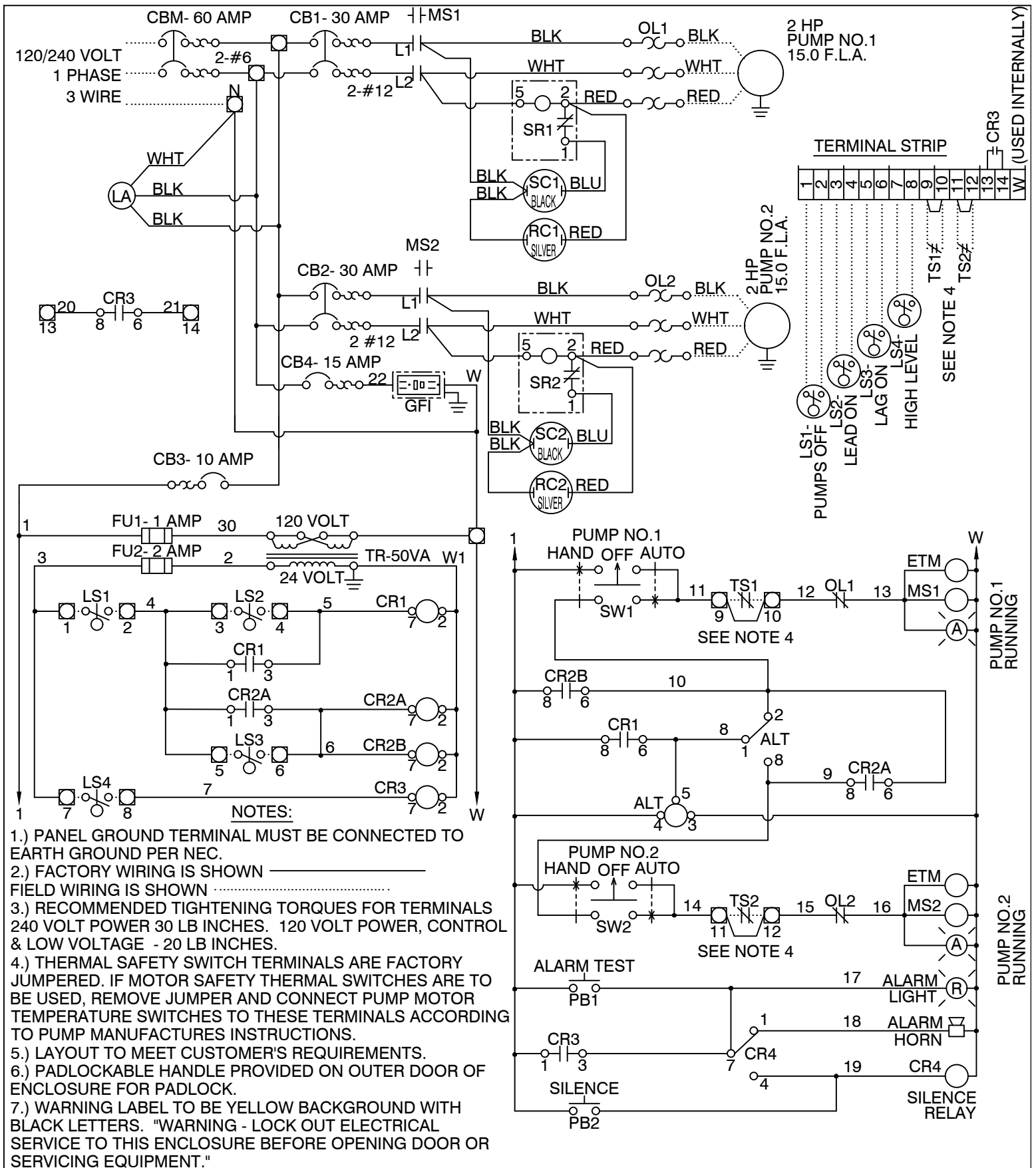
LOXAHATCHEE RIVER DISTRICT

RESIDENTIAL DUPLEX CONTROL PANEL LAYOUT

LP-10

N.T.S.

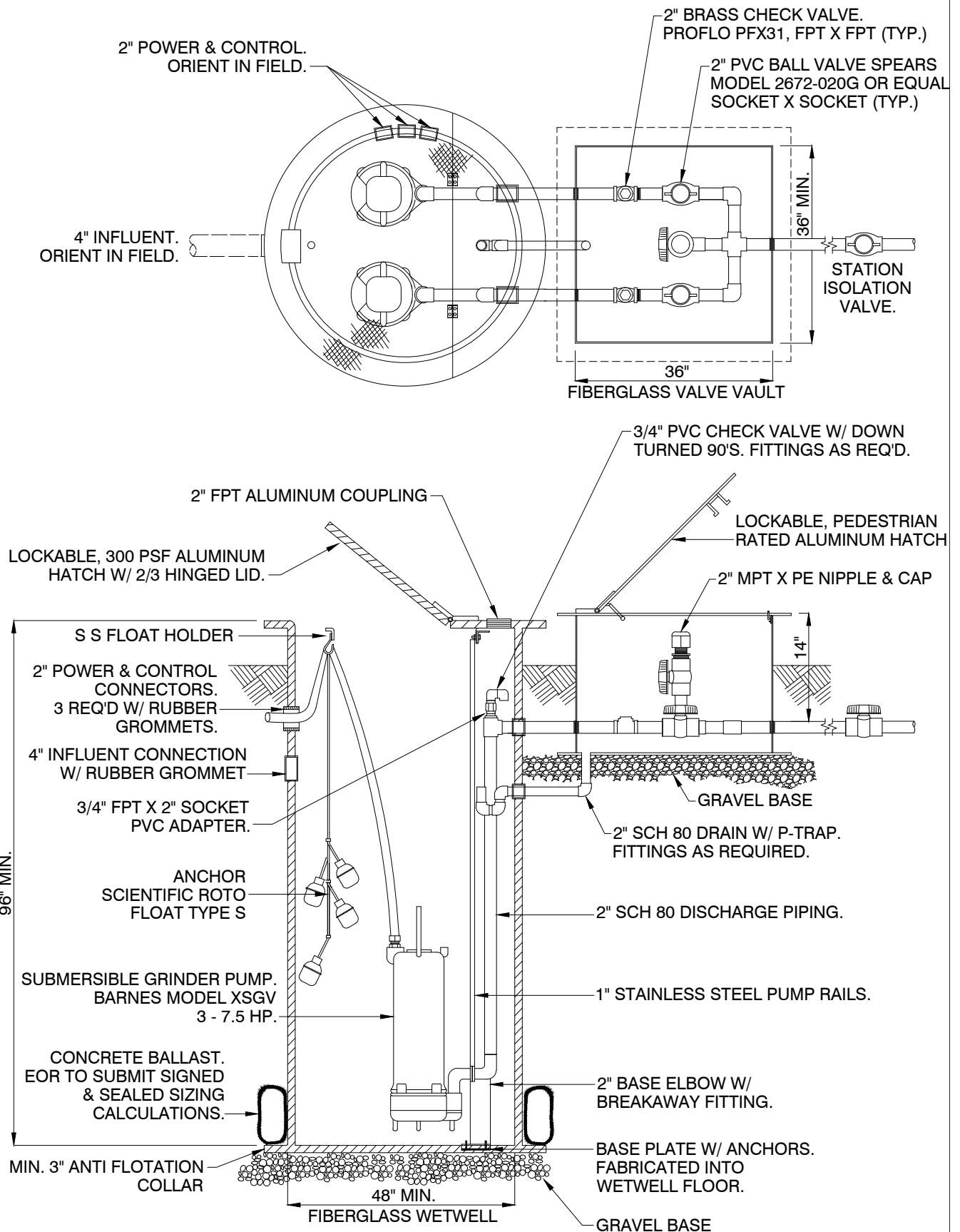
REVISION:
APRIL, 2012



LOXAHATCHEE RIVER DISTRICT

RESIDENTIAL DUPLEX ELECTRICAL SCHEMATIC

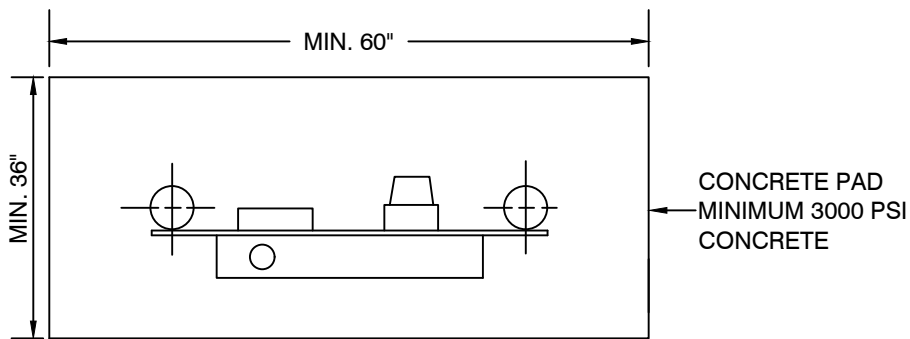
LP-11



LOXAHATCHEE RIVER DISTRICT
**COMMERCIAL DUPLEX
 TYPICAL WET WELL**

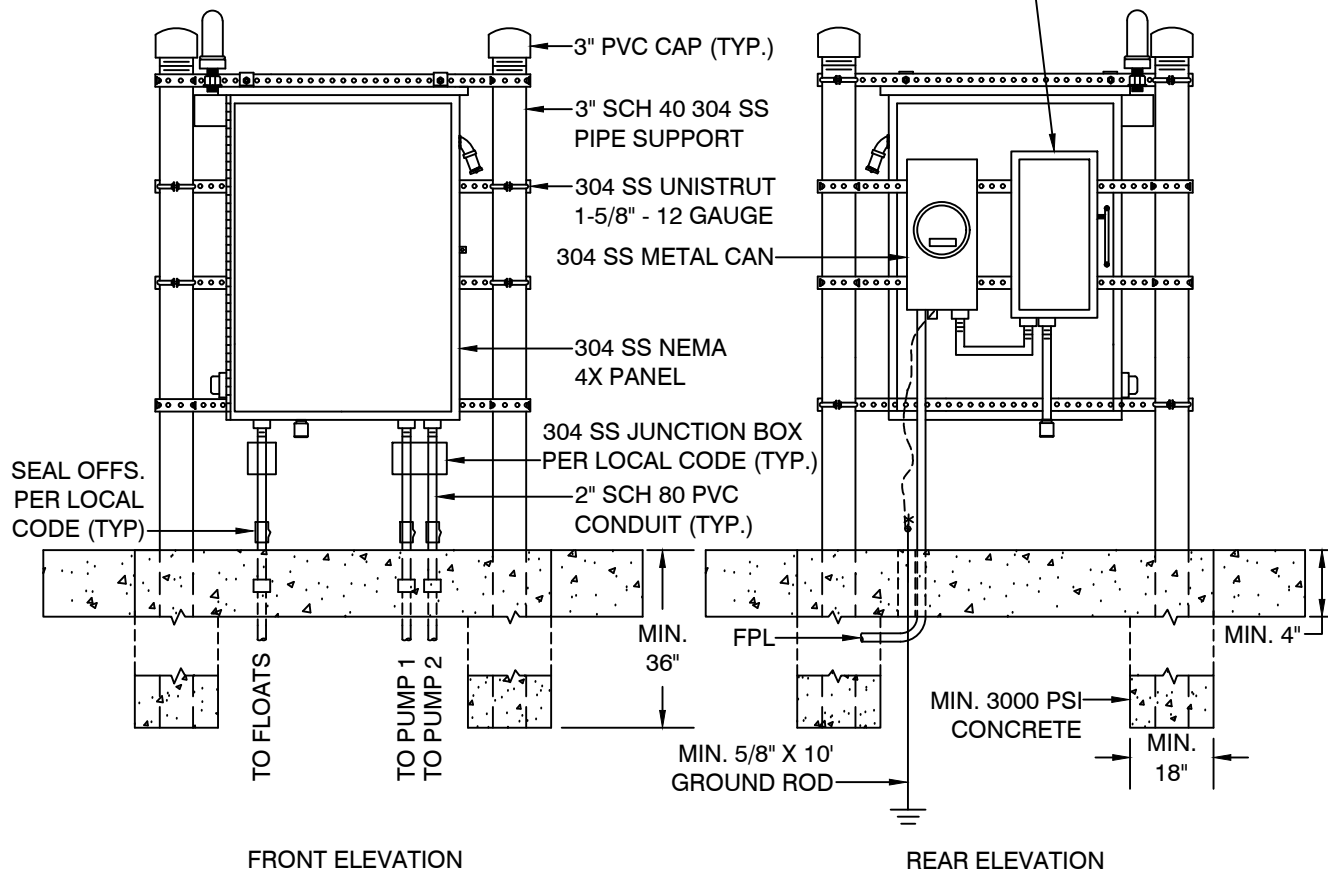
LP-12

N.T.S.
 REVISION:
 JUNE, 2015



PLAN VIEW

304 SS FUSED DISCONNECT.
SQUARE D MODEL H *** DS OR EQUAL.
SIZE PER PUMP REQUIREMENTS.
MIN. 60 AMP

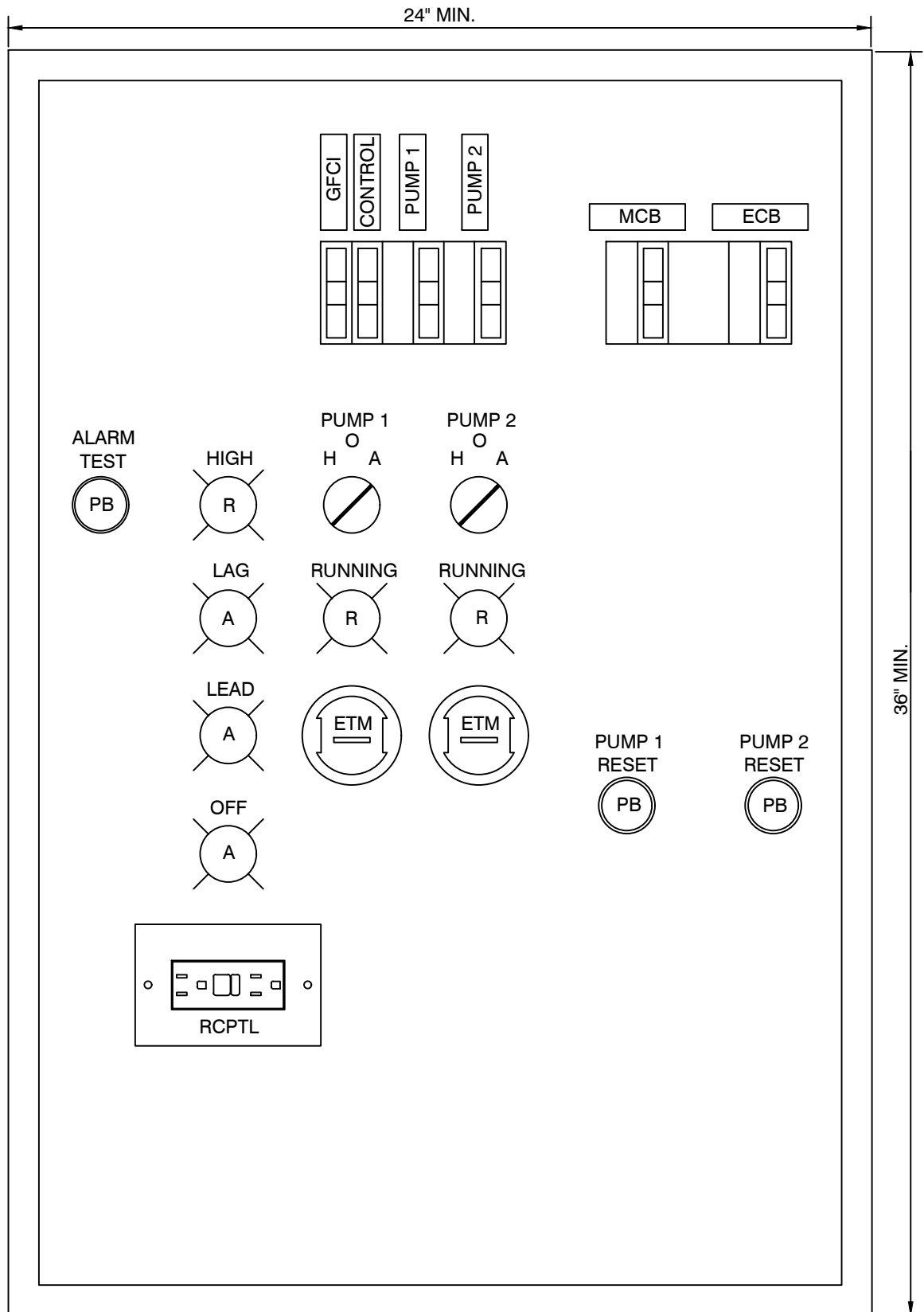


1. PROVIDE 4" SCH 40 PVC CHASE THROUGH CONCRETE SLAB DIRECTLY BELOW METER CAN FOR GROUND ROD. CLAMPED CONNECTION ON GROUND ROD TO BE 4" ABOVE SLAB.
2. ALL HARDWARE SHALL BE 316 SS.

LOXAHATCHEE RIVER DISTRICT

COMMERCIAL DUPLEX
CONTROL PANEL SUPPORT

LP-13



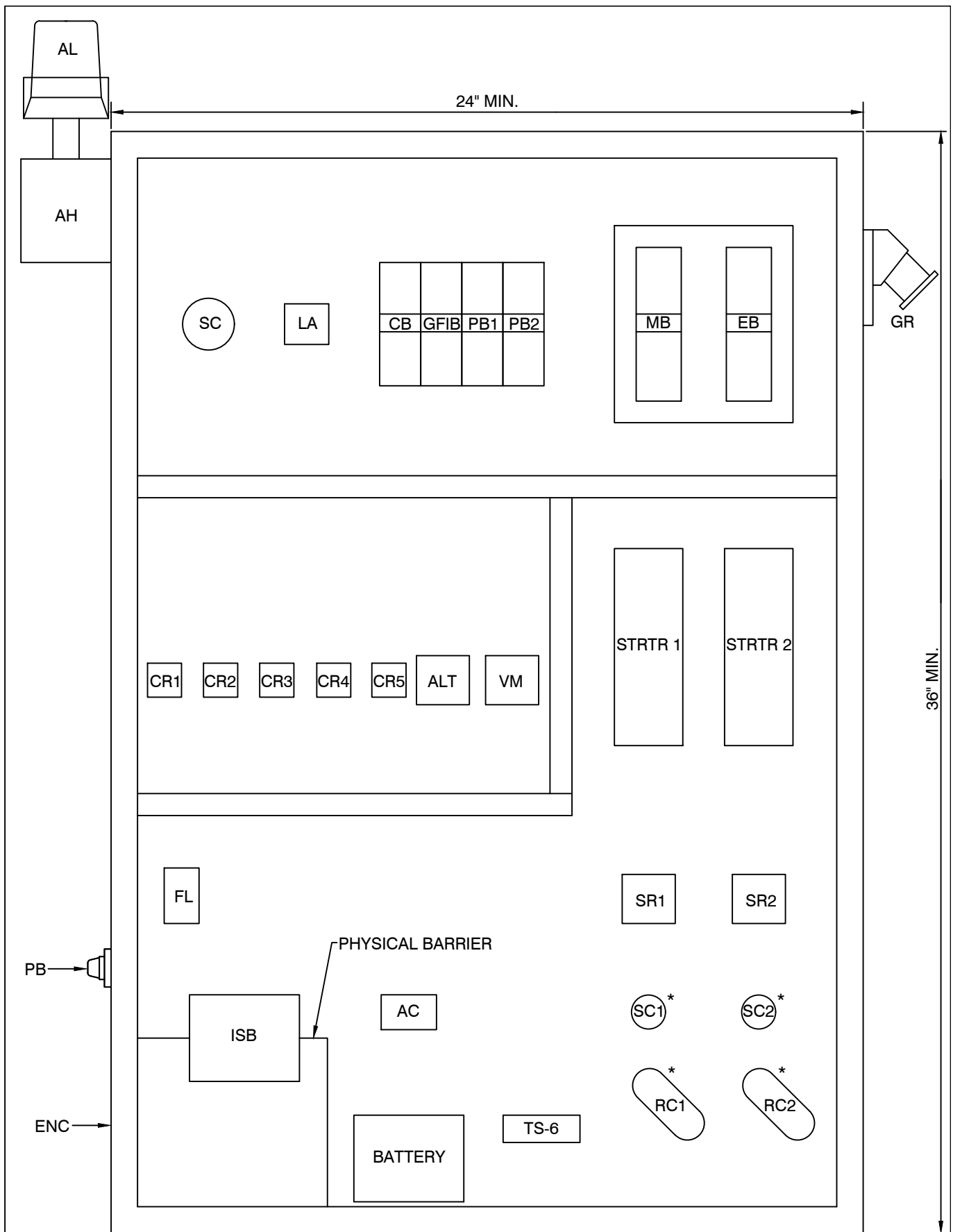
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
JUNE, 2015

COMMERCIAL DUPLEX CONTROL PANEL
DEADFRONT LAYOUT

LP-14



* SINGLE PHASE PANEL ONLY

LOXAHATCHEE RIVER DISTRICT

COMMERCIAL DUPLEX CONTROL PANEL BACKPLATE LAYOUT

LP-15

N.T.S.

REVISION:
JUNE, 2015

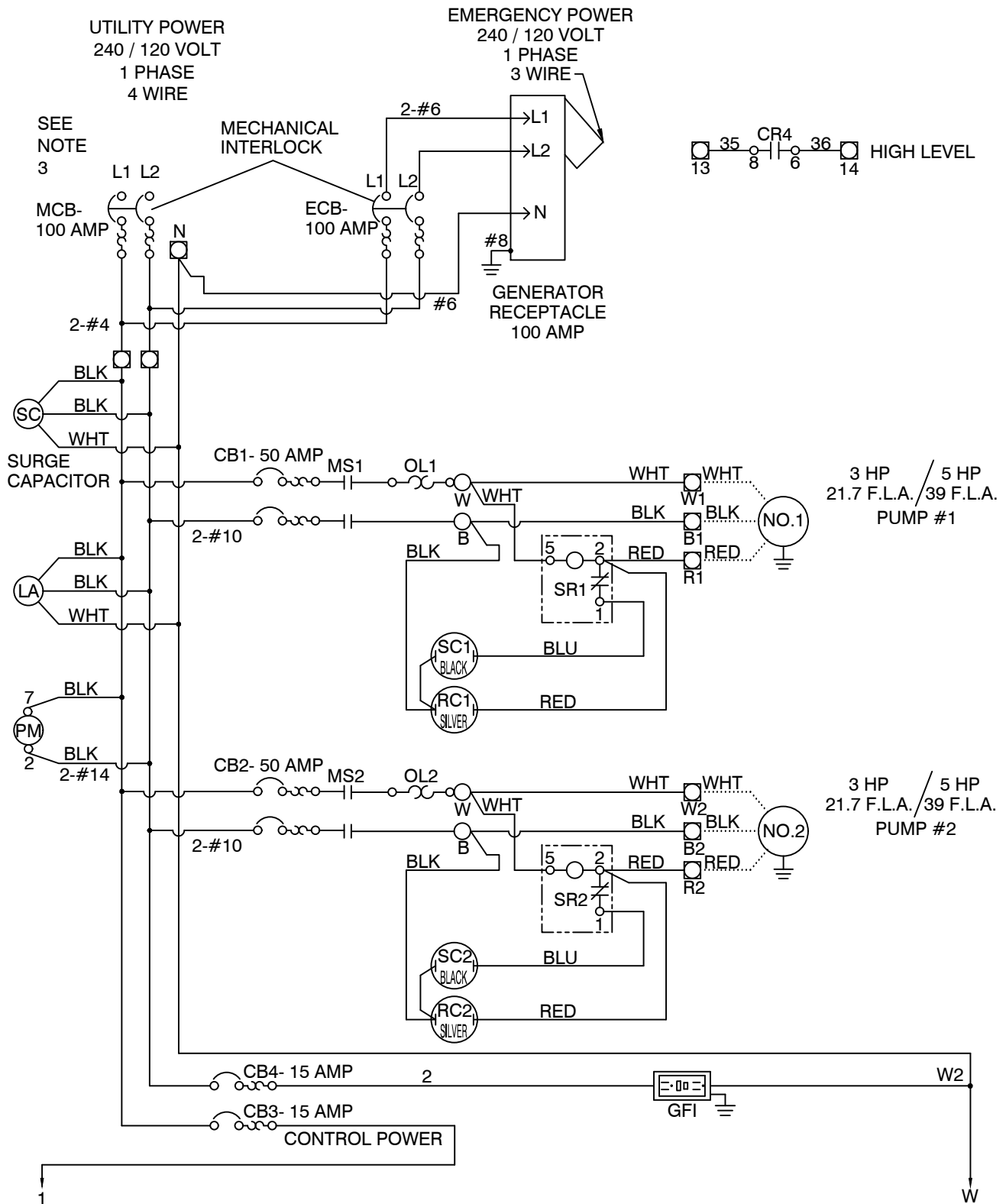
ITEM	DESCRIPTION	PART NO. SINGLE PHASE	PART NO. THREE PHASE	QTY
AC	ALARM CONTROLLER	MPE MODEL BOAC-001	MPE MODEL BOAC-001	1
AH	ALARM HORN	WHEELOCK AMT-12/24-R	WHEELOCK AMT-12/24-R	1
AL	ALARM LIGHT	CONDOR/GRAINGER 2ERP1	CONDOR/GRAINGER 2ERP1	1
ALT	ALTERNATOR	ATC DIVERSIFIED ELECTRONICS: ARB120AEA	ATC DIVERSIFIED ELECTRONICS: ARB120AEA	1
BAT	BATTERY	WERKER MODEL MWA12-7F	WERKER MODEL MWA12-7F	1
CR*	CONTROL RELAY	IDEC: RR 2 BA - U L AC120V	IDEC: RR 2 BA - U L AC120V	5
ETM	ELAPSED TIME METER	CONTROL DYNAMICS: HMA303	CONTROL DYNAMICS: HMA303	2
ENC*	ENCLOSURE NEMA 4X SS	HOFFMAN: CSD362410SS W/ DRIP SHIELD AND LOCKING HASP	HOFFMAN: CSD362410SS W/ DRIP SHIELD AND LOCKING HASP	1
FL	FLASHER	LIGHTS TO GO: AFDC 1	LIGHTS TO GO: AFDC 1	1
GR	GENERATOR RECEPTACLE	APPLETON: ADR1034RS	APPLETON: ADR1034RS	1
GFIB, CB	GFI & CONTROL BREAKER	SQUARE-D: QOU115	SQUARE-D: QOU115	2
	HAND OFF AUTO SWITCH	SUARE-D: 9001KS46B	SUARE-D: 9001KS46B	2
ISB	INTRINSICALLY SAFE BARRIER	IDEC: EB3C-R05A	IDEC: EB3C-R05A	1
LA	LIGHTNING ARRESTOR	SQUARE-D: SDSA1175	SQUARE-D: SDSA3650	1
MB, EB	MAIN & EMERGENCY BREAKERS	SQUARE-D: QOU2***	SQUARE-D: QOU3***	2
TU	THERMAL UNIT	SQUARE-D: B36.0	SQUARE-D: B36.0	2
	PILOT LIGHTS	BACO CONTROLS: NLD22* (COLOR AS INDICATED)	BACO CONTROLS: NLD22* (COLOR AS INDICATED)	6
PB***	PUMP BREAKERS	SQUARE-D: QOU2***	SQUARE-D: QOU3***	2
STRTR***	STARTER	SQUARE-D: 8536SCO2V02S	SQUARE-D: 8536SCO3V02S	2
SC	SURGE CAPACITOR	DELTA: CA302R	DELTA: CA603R	1
PB	TEST/RESET/SILENCE PUSH BUTTONS	SQUARE-D: 9001SKR1U	SQUARE-D: 9001SKR1U	1
VM	VOLTAGE MONITOR	ATC DIVERSIFIED ELECTRONICS: UOA240ALA	ATC DIVERSIFIED ELECTRONICS: SLA-***-***	1
RCPTL	15 AMP GFI RECEPTACLE	PASS AND SEYMOUR: 1595W	PASS AND SEYMOUR: 1595W	1
SC***	START CAPACITOR	***	NOT REQUIRED	2
RC***	RUN CAPACITOR	***	NOT REQUIRED	2

* HOFFMAN: UU1008030 FOR COMMERCIAL DUPLEX LOW FLOW OPTION

*** SIZED PER PUMP MANUFACTURER'S RECOMMENDATION

LOXAHATCHEE RIVER DISTRICT

N.T.S.	COMMERCIAL DUPLEX CONTROL PANEL BILL OF MATERIALS	LP-16
REVISION: JUNE, 2015		



CONTINUED ON COMMERCIAL DUPLEX ELECTRICAL SCHEMATIC CONTROL CIRCUIT

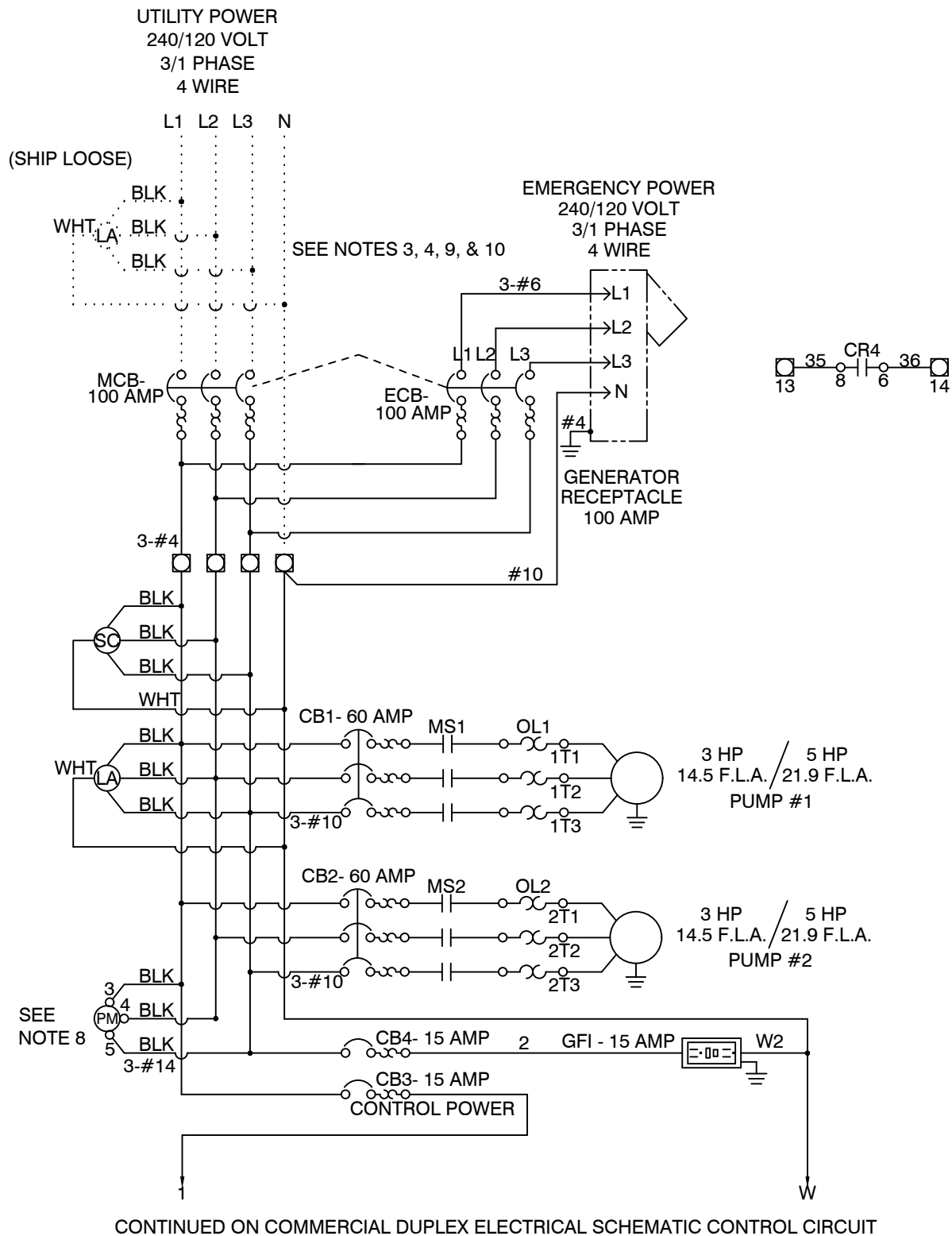
LOXAHATCHEE RIVER DISTRICT

COMMERCIAL DUPLEX ELECTRICAL SCHEMATIC 1PHASE

LP-17

N.T.S.

REVISION:
JUNE, 2015



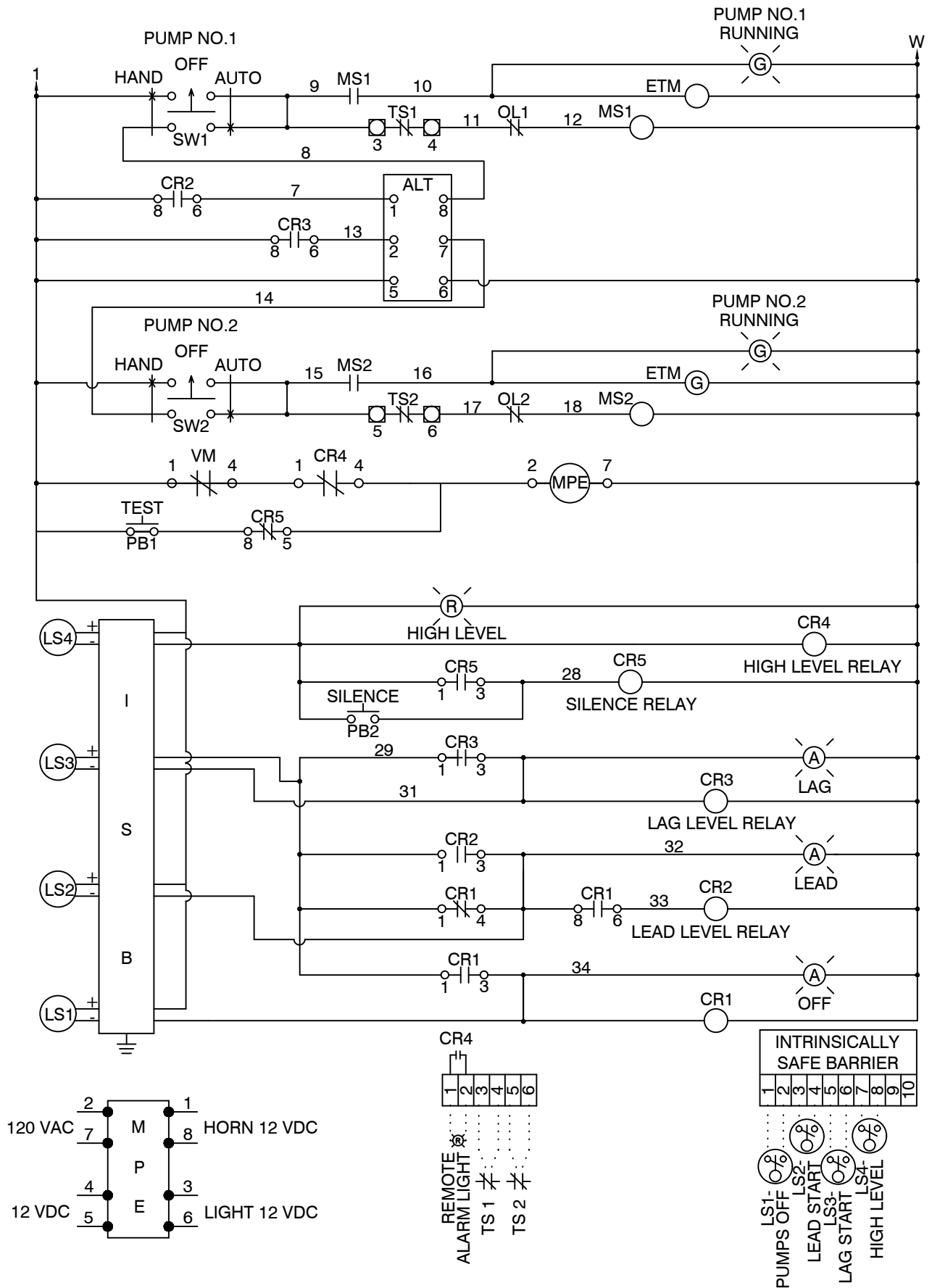
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
JUNE, 2015

COMMERCIAL DUPLEX ELECTRICAL SCHEMATIC 3PHASE

LP-18



LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
JUNE, 2015

COMMERCIAL DUPLEX
ELECTRICAL SCHEMATIC CONTROL CIRCUIT

LP-19

NOTES:

- 1.) PANEL GROUND TERMINAL MUST BE CONNECTED TO EARTH GROUND.
- 2.) FACTORY WIRING IS SHOWN _____
FIELD WIRING IS SHOWN
- 3.) INSTALLER MUST PROVIDE SHORT CIRCUIT PROTECTION FOR THE CONDUCTORS FEEDING TO THIS ELECTRICAL ASSEMBLY.
- 4.) RECOMMENDED TIGHTENING TORQUES FOR TERMINALS; 240 VOLT POWER - SEE CIRCUIT BREAKER 120 VOLT POWER, CONTROL & LOW VOLTAGE - 20 POUND INCHES
- 5.) THERMAL SAFETY SWITCH (TS) CONTACTS ARE NOT IN ALL MOTORS. IF MOTOR DOES NOT HAVE SWITCH, THESE TERMINALS MUST BE JUMPERED.
- 6.) HASP AND STAPLE PROVIDED ON OUTER DOOR OF ENCLOSURE FOR PADLOCK.
- 7.) WARNING LABEL TO BE YELLOW BACKGROUND WITH BLACK LETTERS. "WARNING - LOCK OUT ELECTRICAL SERVICE TO THIS ENCLOSURE BEFORE OPENING DOOR OR SERVICING EQUIPMENT".
- 8.) ON START UP, THE POWER MONITOR INDICATOR LIGHT SHOULD TURN "ON" WITHIN ONE (1) SECOND. IF IT DOESN'T, TURN POWER "OFF" TO THE PANEL & SWAP ANY TWO (2) OF THE THREE (3) INPUT WIRES TO THE MONITOR.
- 9.) MAIN CIRCUIT BREAKER AND EMERGENCY CIRCUIT BREAKER INTERLOCKED TO PREVENT SIMULTANEOUS CLOSURE.
- 10.) INSTALLER MUST VERIFY THAT PHASE TO NEUTRAL IS 120 VOLTS BEFORE CONNECTING CONTROL & RECEPTACLE CIRCUITS.
- 11.) WARNING LABEL TO BE RED WITH WHITE LETTERS: DO NOT OVERRIDE INTERLOCK NEVER ENERGIZE BOTH BREAKERS SIMULTANEOUSLY.

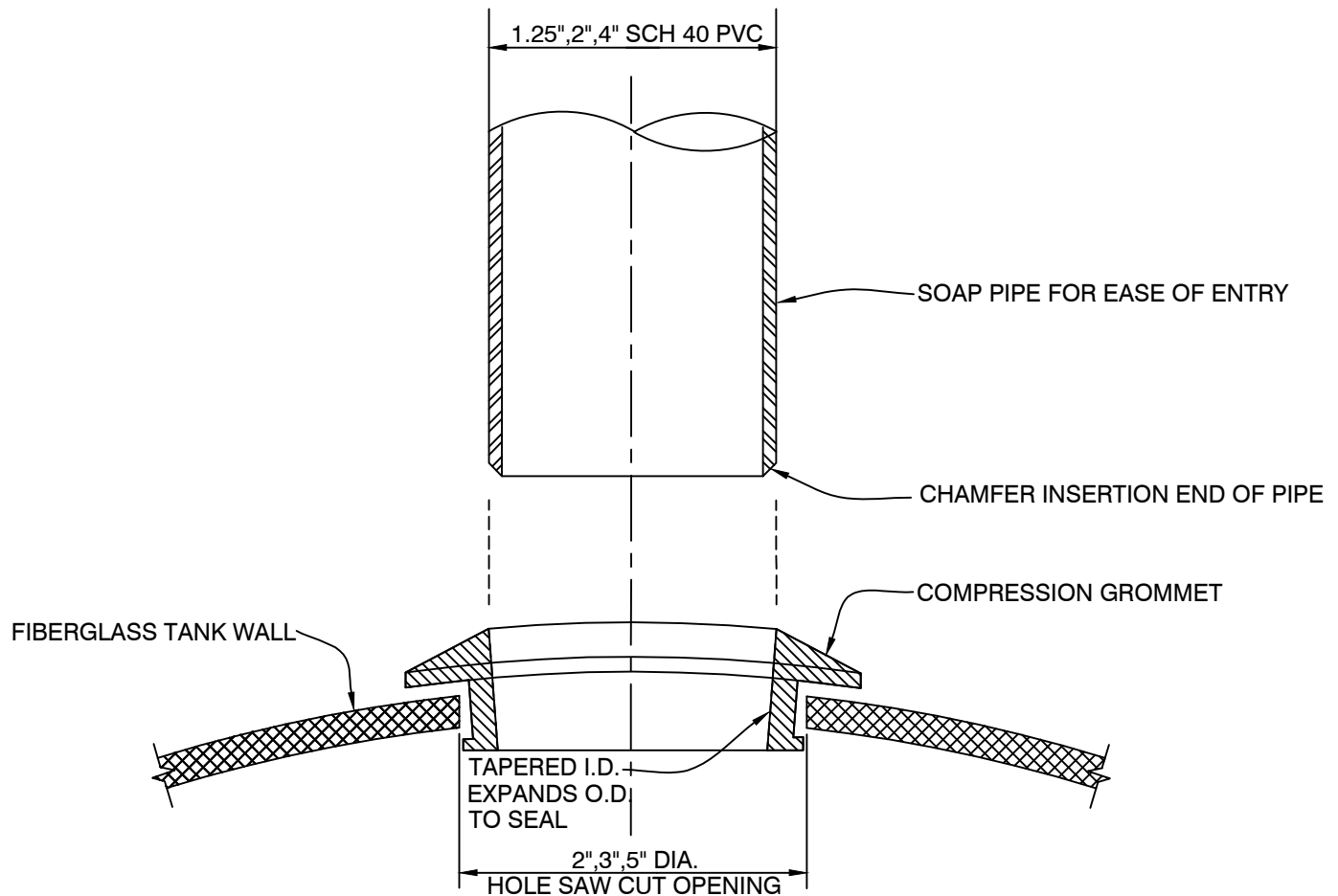
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
JUNE, 2015

**COMMERCIAL DUPLEX
ELECTRICAL SCHEMATIC NOTES**

LP-20



NOTES:

FOR A 4" PVC PIPE, USE A 5" DIA. HOLE SAW TO CUT OUT COUPON FROM WET WELL WALL. THE MANUFACTURER WILL SUPPLY THE PROPER COMPRESSION GASKET FOR A 4" DIA. PVC PIPE

FOR A 2" PVC PIPE, USE A 3" DIA. HOLE SAW TO CUT OUT COUPON FROM WET WELL WALL. THE MANUFACTURER WILL SUPPLY THE PROPER COMPRESSION GASKET FOR A 2" DIA. PVC PIPE

FOR A 1.25" PVC PIPE, USE A 2" DIA. HOLE SAW TO CUT OUT COUPON FROM WET WELL WALL. THE MANUFACTURER WILL SUPPLY THE PROPER COMPRESSION GASKET FOR A 1.25" DIA. PVC PIPE

TERMINATE INFLUENT SEWER LINE 3" INSIDE TANK.

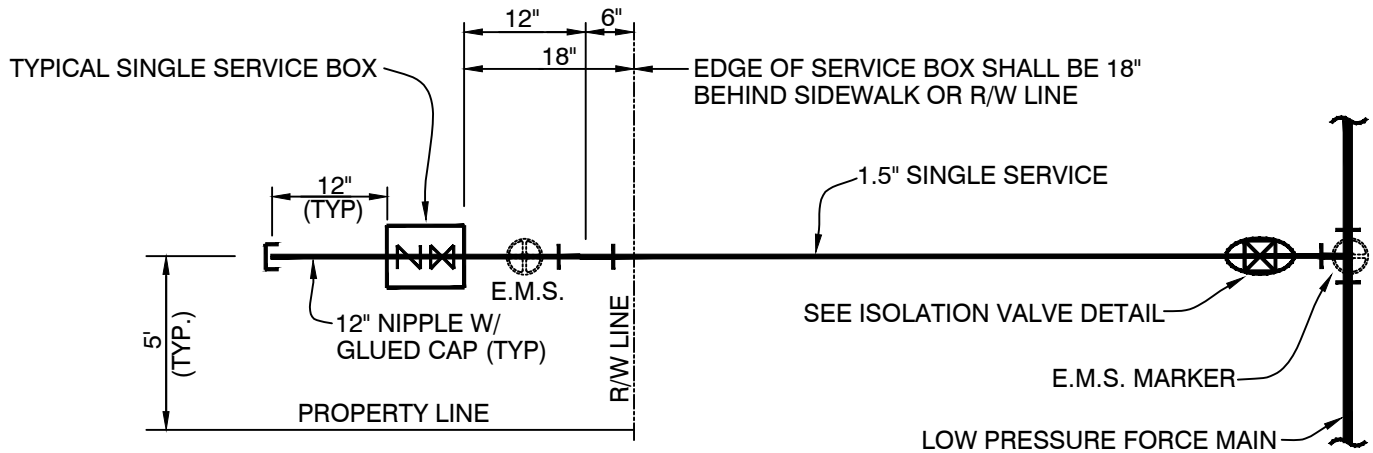
LOXAHATCHEE RIVER DISTRICT

N.T.S.

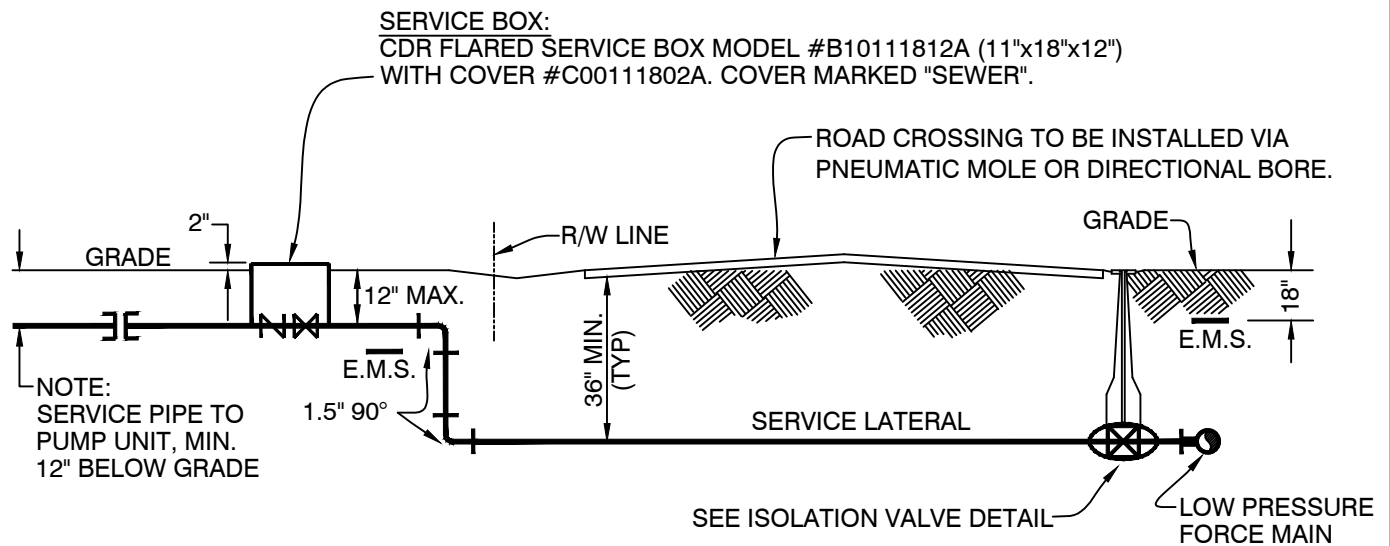
REVISION:
APRIL, 2012

PIPE CONNECTION DETAIL

LP-21



PLAN VIEW



TYPICAL ROAD CROSSING SECTION VIEW

NOTES:

1. SERVICE LOCATIONS ON PLANS ARE APPROXIMATE. INSTALLED LOCATIONS TO BE COORDINATED WITH EXISTING ONSITE PLUMBING OR PROPOSED ONSITE CONSTRUCTION.
2. BALL VALVES SHALL BE FORD MODEL #B11-666M WITH 2" BRASS OPERATING NUT.
3. ALL CHECK VALVES SHALL BE PROFLO MODEL PFX31.
4. ALL PIPING IN AND 6-INCHES BEYOND THE SERVICE BOX SHALL BE SCH 80 PVC.
5. INSTALL MINIMUM 4" OF NO 57 WASHED STONE BENEATH ALL SERVICE BOXES AND VALVE BOXES AND AROUND ALL PIPE PENETRATIONS THROUGH SERVICE BOXES.
6. FOR HDPE TO PVC TRANSITIONS USE FORD PACK JOINT COUPLING PVC X PE W/ 304SS STIFFENER.

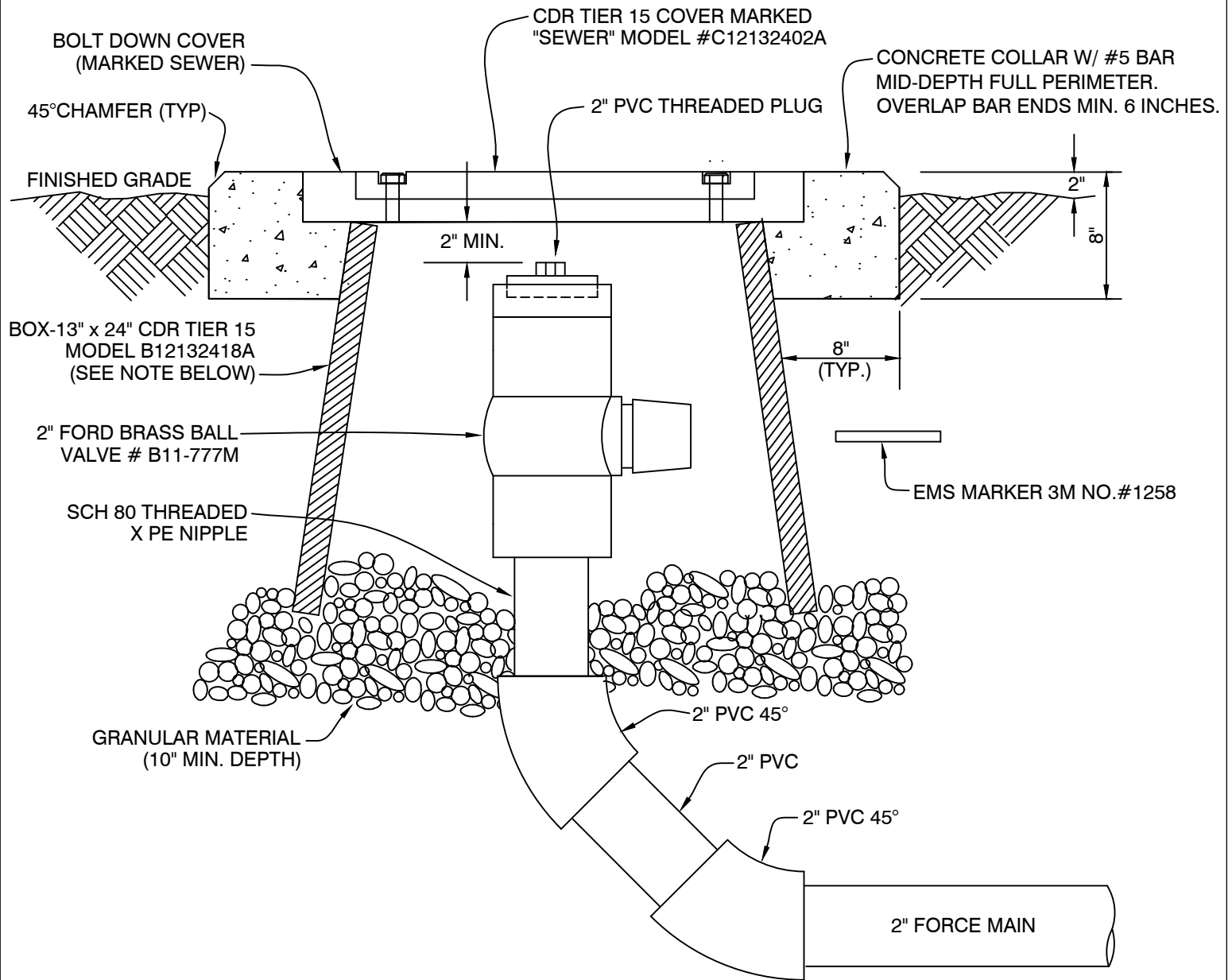
LOXAHATCHEE RIVER DISTRICT

TYPICAL SINGLE SERVICE SCHEMATIC

LP-22

N.T.S.
REVISION:
MARCH, 2017





NOTES:

1. IN PAVED AREAS, USE NO. PB16"x24"x24" DEEP x 4" WALLS AND 4" FLOOR, AND NO. PB1624 TRAFFIC COVER DESIGNED FOR HS-20-44 TRAFFIC RATED BY BROOKS PRODUCTS INC.
2. INSTALL MIN. 4" OF NO 57 WASHED STONE BENEATH ALL TERMINAL END FLUSHING PORT BOXES.
3. ALL PIPING IN AND 6 INCHES BEYOND BOX SHALL BE SCH 80 PVC.
4. FOR HDPE TO PVC TRANSITIONS USE FORD PACK JOINT COUPLING PVC x PE W/ 304SS STIFFENER.

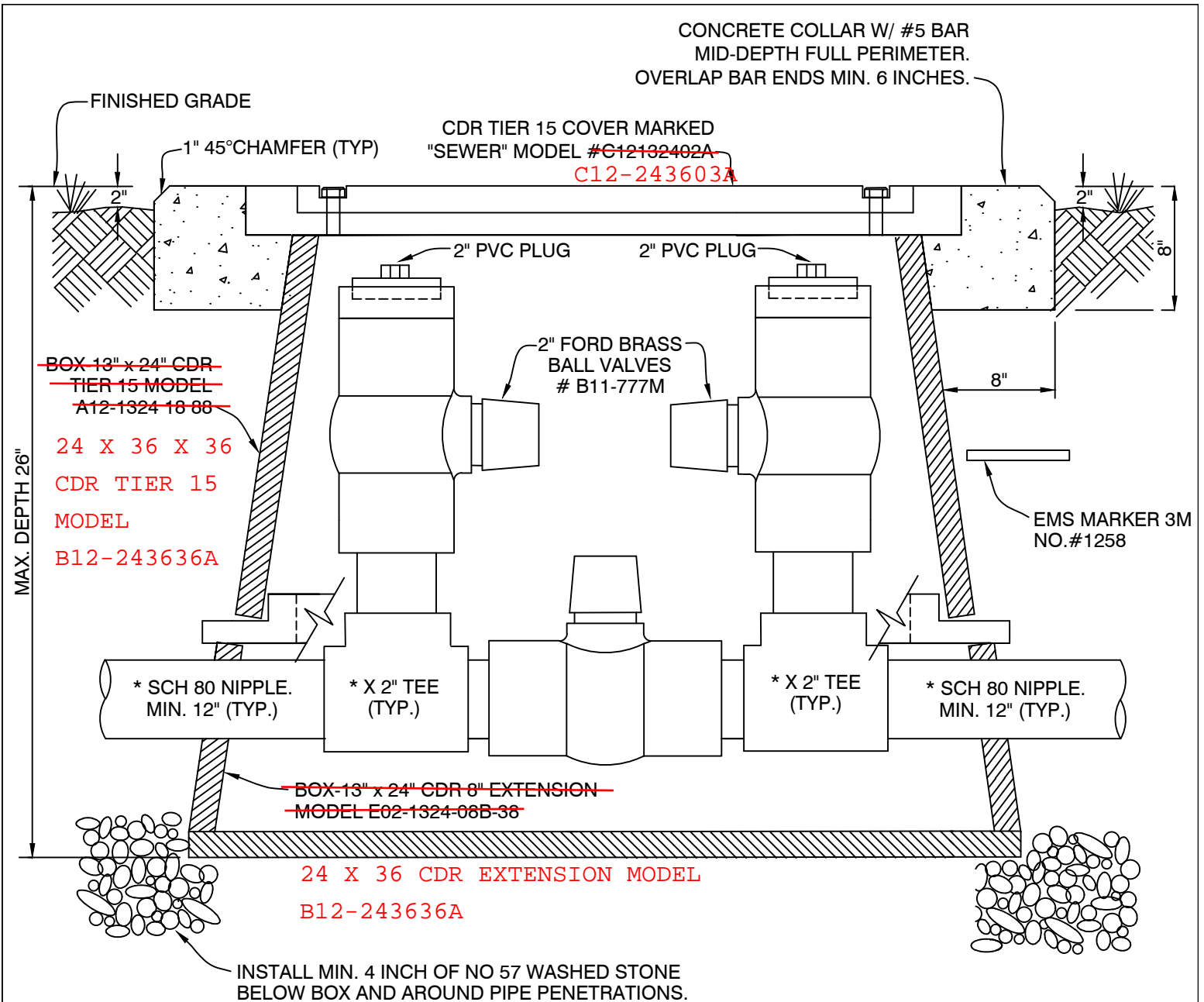
LOXAHATCHEE RIVER DISTRICT

TERMINAL FLUSHING PORT DETAIL

LP-24

N.T.S.

REVISION:
MARCH, 2017



* SIZED BY ENGINEER

USE VALVE BOX AND FLUSHING PORTS ALONG STRAIGHT RUNS IN FORCE MAIN.

NOTES:

1. IN PAVED AREAS, USE NO. PB16"x24"x24" DEEP x 4" WALLS AND 4" FLOOR, AND NO. PB1624 TRAFFIC COVER DESIGNED FOR HS-20-44 TRAFFIC RATED BY BROOKS PRODUCTS INC.
2. PUMP TAP VALVES TO BE 2" FORD BRASS BALL VALVES # B11-777M W/ SCH 80 THREADED x PE NIPPLES AS REQUIRED. INLINE VALVE TO MATCH FORCE MAIN DIAMETER.

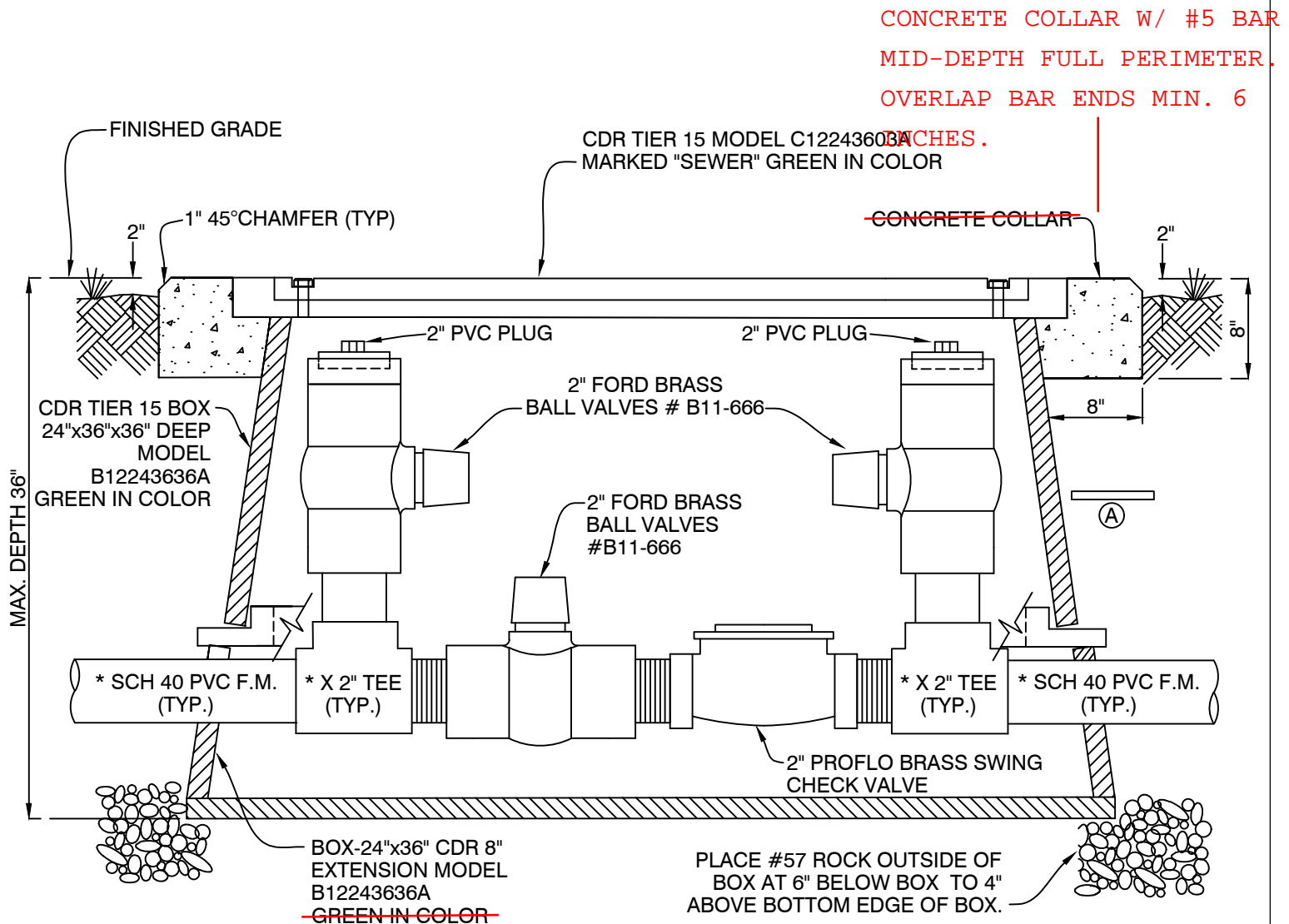
LOXAHATCHEE RIVER DISTRICT

IN LINE FLUSHING PORT

LP-25

N.T.S.

REVISION:
MARCH, 2017



(A) - EMS MARKER NO.#1258 ELECTRONIC MARKER SYSTEM AS
MFG. BY 3M TEST AND MEASUREMENT SYSTEM AUSTIN, TEXAS

* SIZED BY ENGINEER
USE VALVE BOX AND FLUSHING PORTS ALONG STRAIGHT RUNS IN FORCE MAIN.

1. NOTES:
PUMP TAP VALVES TO BE 2" FORD BRASS BALL VALVES # B11-666 W/ SCH 80 THREADED x PE NIPPLES
AS REQUIRED. INLINE VALVE TO MATCH FORCE MAIN DIAMETER.
2. PROFLO BRASS SWING CHECK VALVE MODEL PROFLO PEX31 TO BE INSTALLED TO PREVENT FLOW
INTO LOW PRESSURE MAIN.

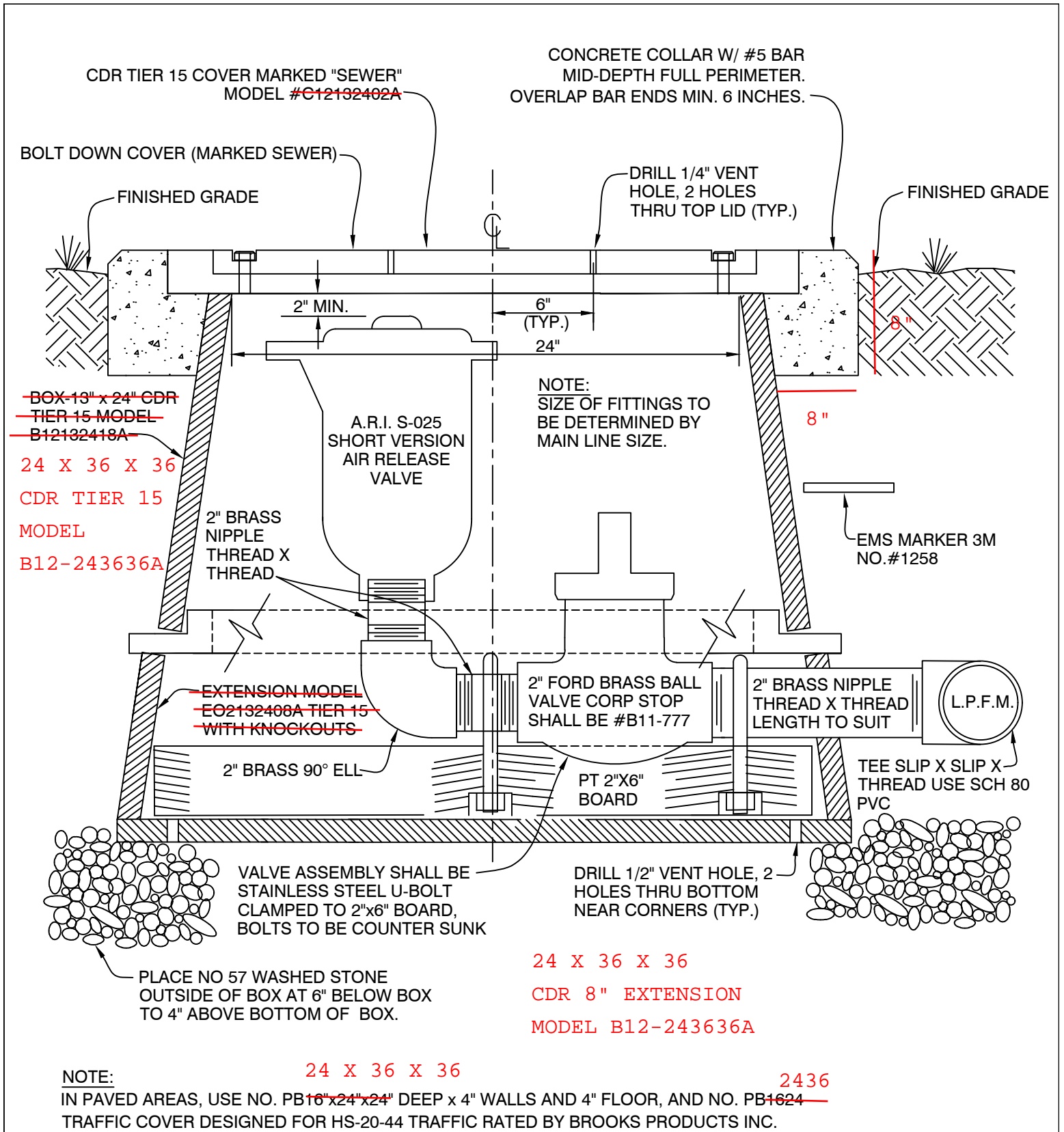
LOXAHATCHEE RIVER DISTRICT

N.T.S.

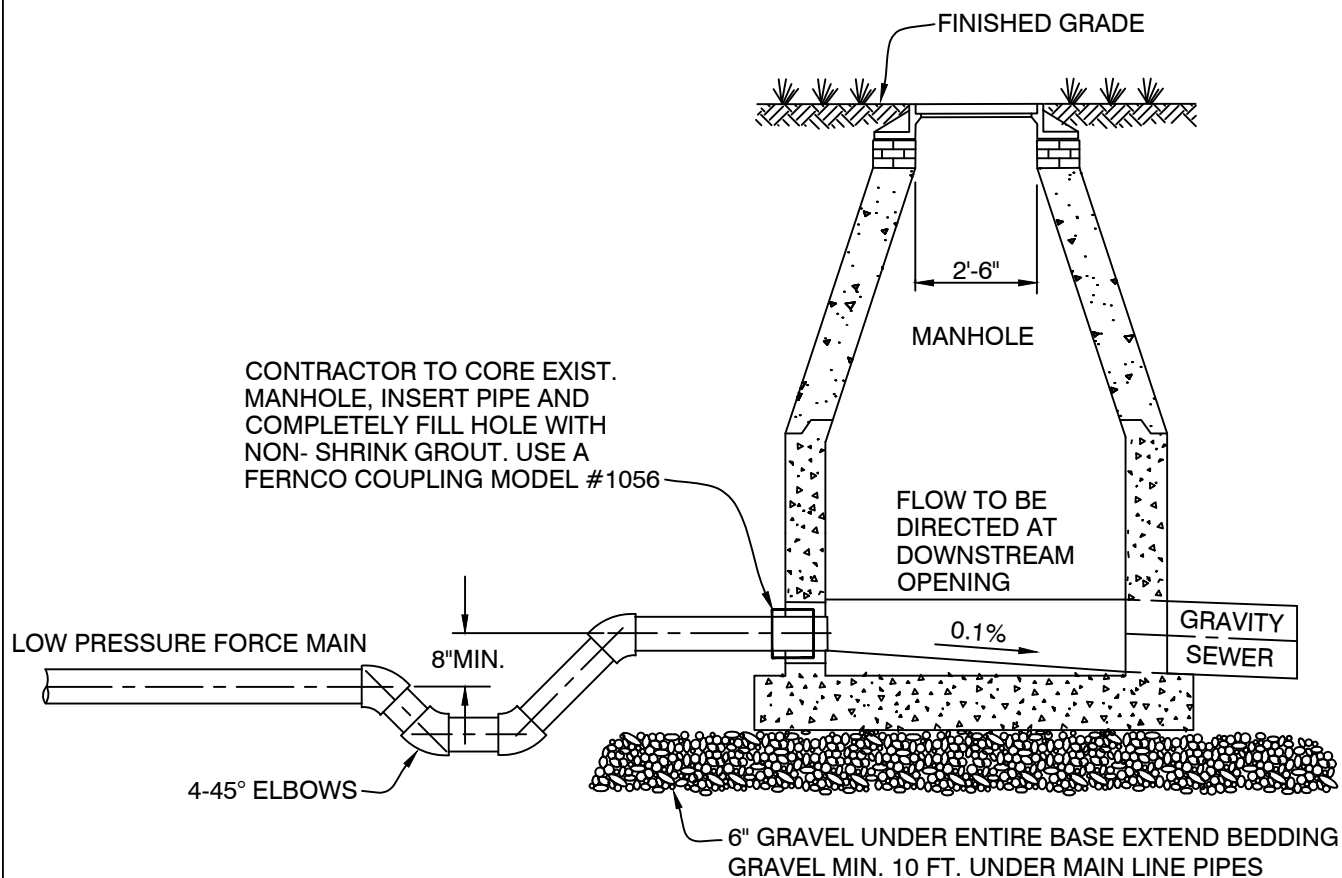
REVISION:
DEC, 2016

IN LINE FLUSHING PORT AT FORCE MAIN

LP-25A



LOXAHATCHEE RIVER DISTRICT		
N.T.S.	AIR / VACUUM VALVE DETAIL	LP-26
REVISION: MARCH, 2017		

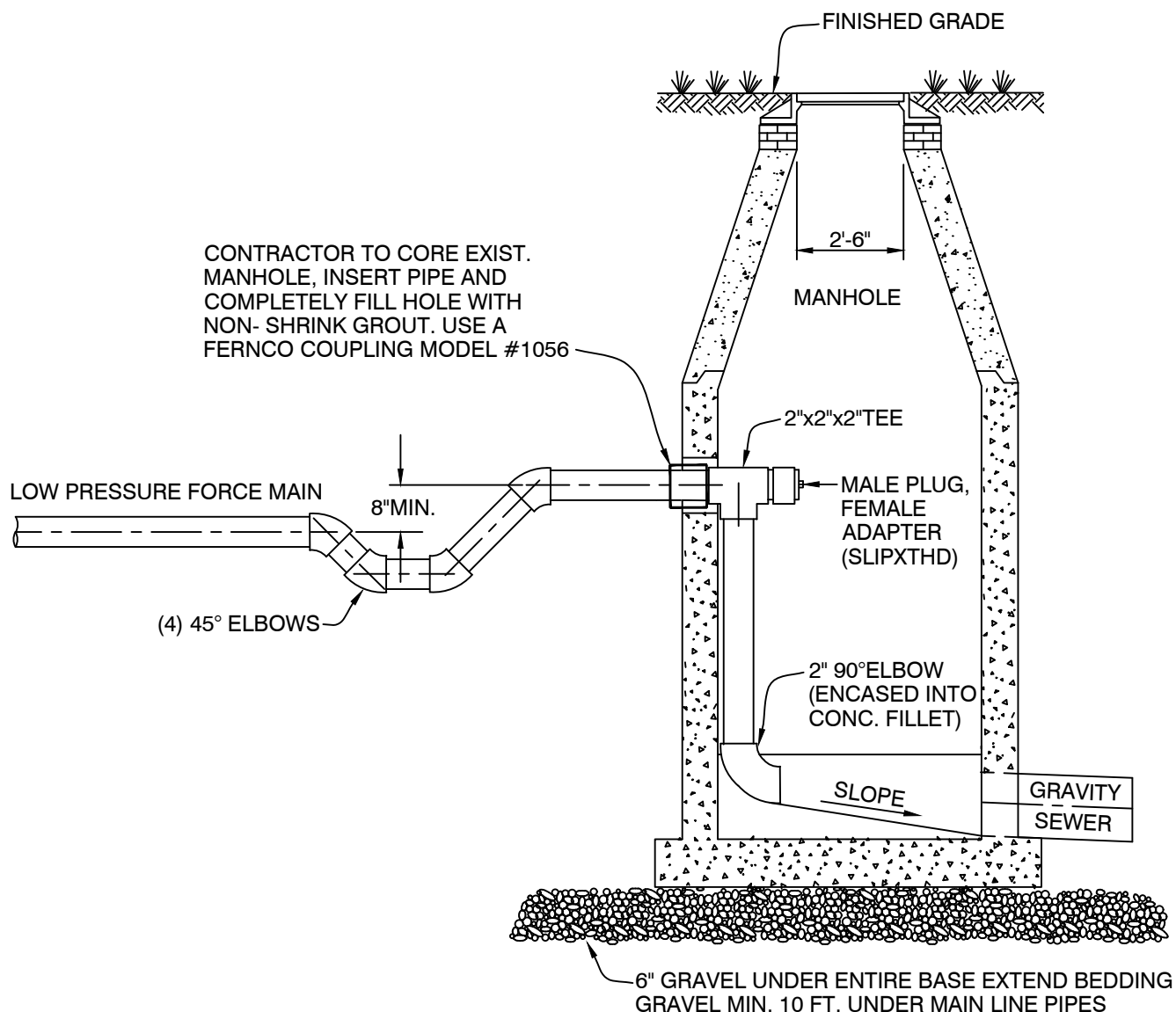


NOTES:

1. WHEN ELEVATION OF LOW PRESSURE MAIN (LPM) AT MANHOLE IS HIGHEST POINT OF LPM, TRAP CAN BE ELIMINATED.
2. WHEN LOW PRESSURE FORCE MAIN IS HDPE TRANSITION TO PVC FOR TRAP WITH FORD PACK JOINT COUPLING PVC x PE WITH 304SS STIFFENER.

LOXAHATCHEE RIVER DISTRICT

N.T.S.	LOW PRESSURE MAIN INTO SHALLOW MANHOLE	LP-27
REVISION:		
MARCH, 2017		



NOTES:

1. ALL DROP PIPING INCLUDING TEE SHALL BE SCH 40 PVC.
2. WHEN ELEVATION OF LOW PRESSURE MAIN (LPM) AT MANHOLE IS HIGHEST POINT OF LPM, TRAP CAN BE ELIMINATED.
3. WHEN LOW PRESSURE FORCE MAIN IS HDPE TRANSITION TO PVC FOR TRAP WITH FORD PACK JOINT COUPLING PVC x PE WITH 304SS STIFFENER.

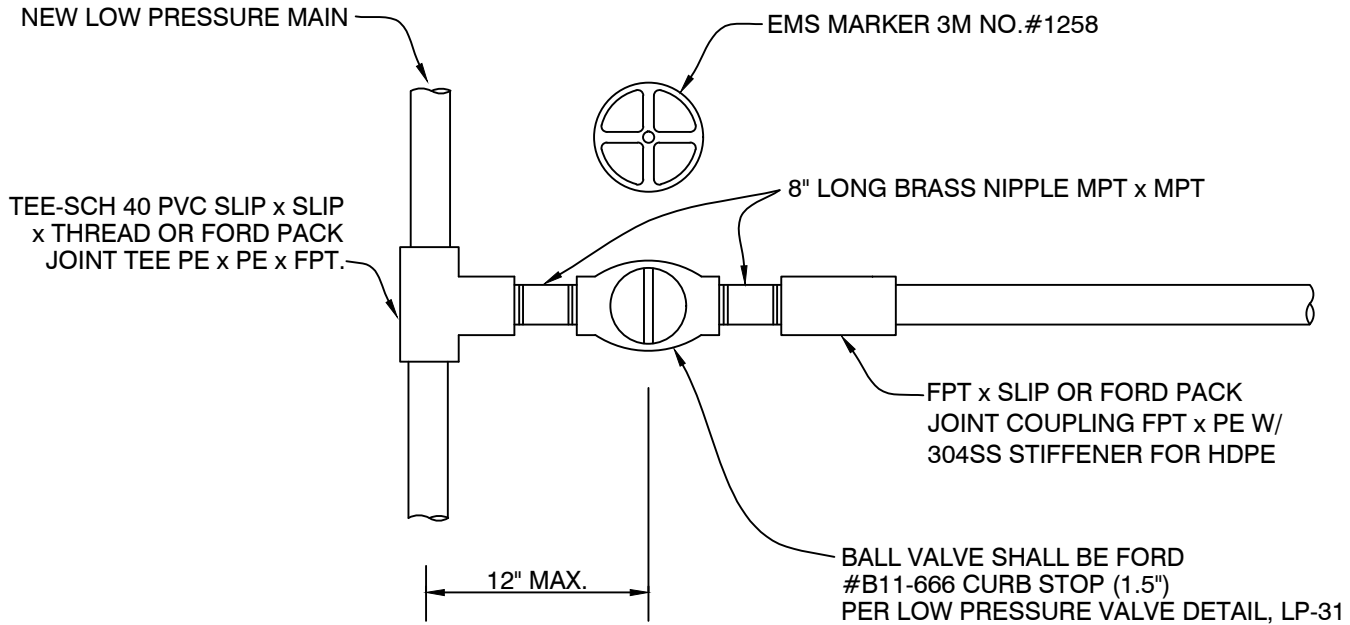
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
MARCH, 2017

LOW PRESSURE MAIN INTO DEEP MANHOLE

LP-28



NOTES:

1. EMS SHALL BE INSTALLED ON STREET SIDE OF TEE AND VALVE.
2. VALVE BOX WILL BE TYLER 141Q FOR 22"-30" DEPTH OR TYLER 142R FOR 30"-42" DEPTH. (SEE DETAIL #LP-31)
3. WHEN CUTTING INTO AN EXISTING FORCE MAIN LINE USE REPAIR TYPE SCH 80 PVC SLIP OR BRASS COMPRESSION COUPLINGS IMMEDIATELY UPSTREAM OR DOWNSTREAM OF TEE.

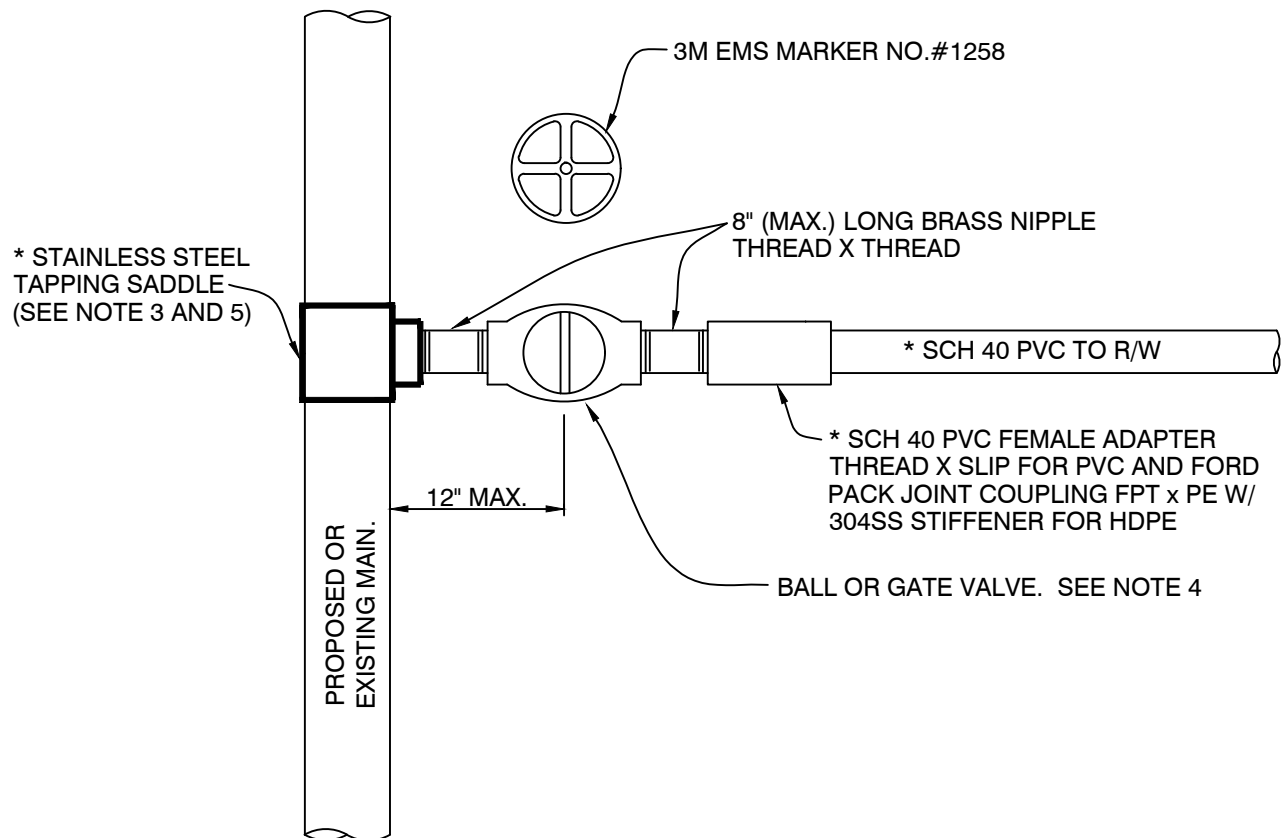
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
MARCH, 2017

TYPICAL ISOLATION VALVE DETAIL

LP-29



NOTES:

1. EMS SHALL BE INSTALLED ON STREET SIDE OF TEE AND VALVE.
2. PROVIDE VALVE BOX PER LP-31.
3. TAPPING SADDLES FOR TAPS 1-1/2" - 2-1/2" SHALL BE ROMAC MODEL 306 OR 306H. TAPPING SADDLES FOR TAPS LARGER THAN 2-1/2" SHALL COMPLY WITH SD-28
4. VALVES UP TO 2-1/2" SHALL BE FORD #B11-XXXM CURB STOP W/ 2" OPERATING NUT MODEL # QT67. 3" VALVES SHALL COMPLY W/ SECTION 130, PARAGRAPH 130.03.
5. FOR 2-1/2" AND SMALLER PVC MAINS USE SOCKET TEE AND BRASS COMPRESSION COUPLING. FOR 2-1/2" AND SMALLER HDPE MAINS USE FORD PACK JOINT TEE WITH FORD PACK JOINT COUPLING AND PVC SPOOL PIECE.

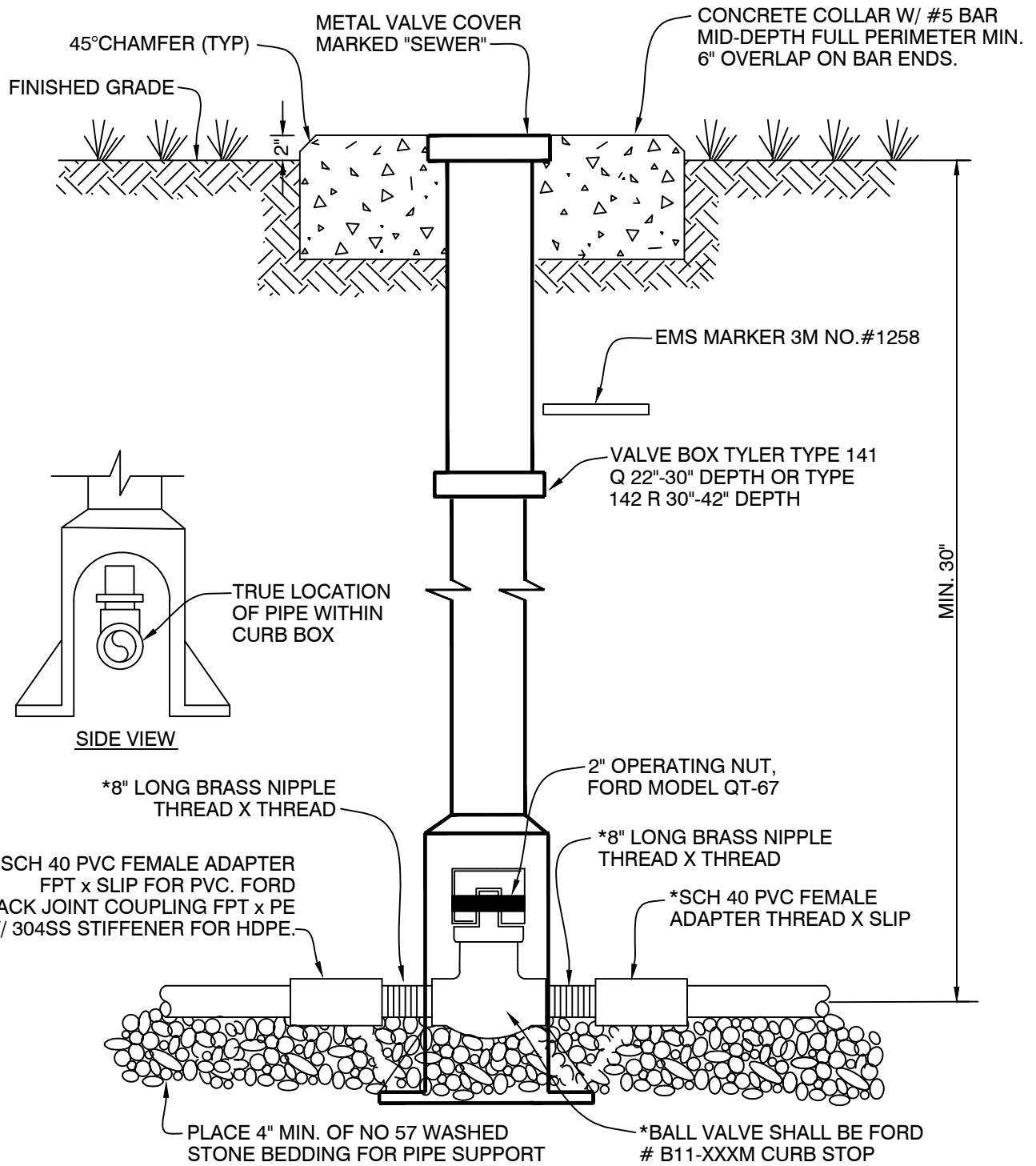
LOXAHATCHEE RIVER DISTRICT

LOW PRESSURE TIE - IN DETAIL

LP-30

N.T.S.

REVISION:
MARCH, 2017



*SIZE BY ENGINEER

LOXAHATCHEE RIVER DISTRICT

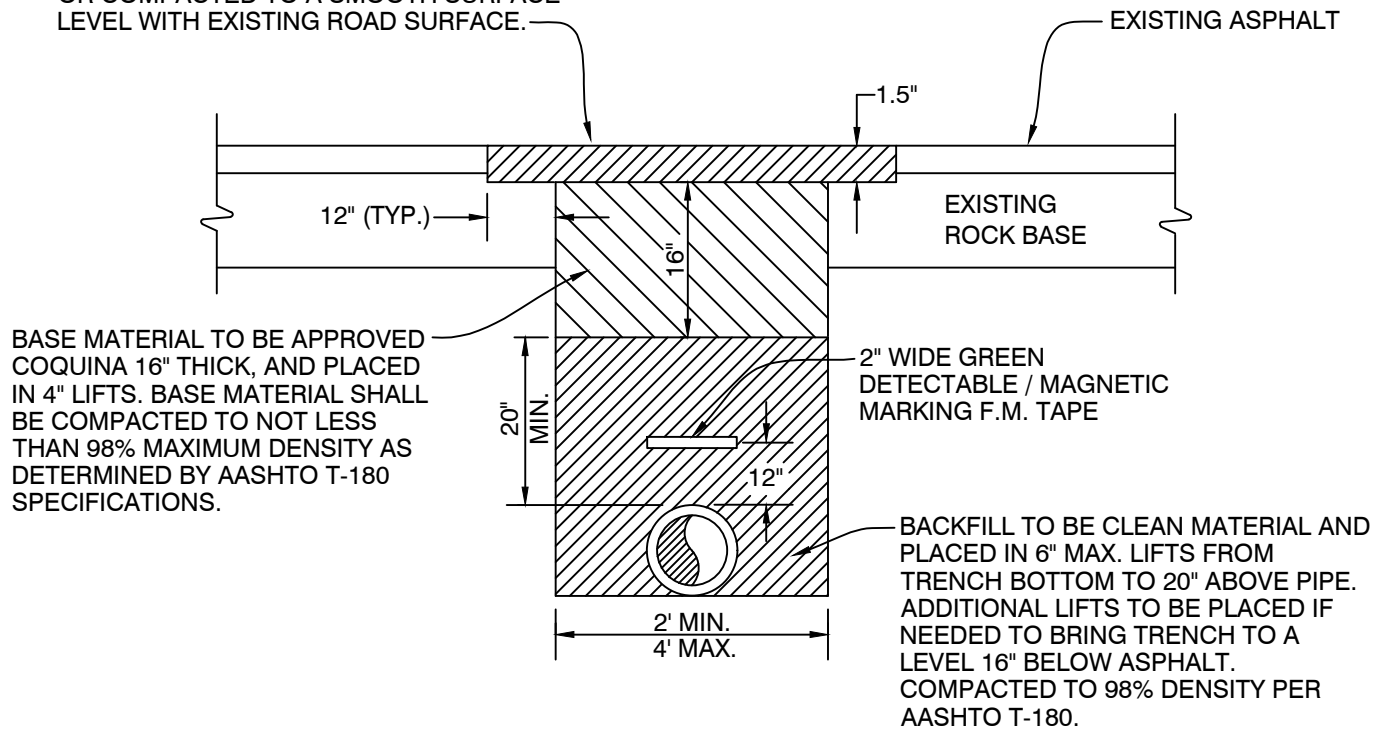
N.T.S.

REVISION:
MARCH, 2017

LOW PRESSURE VALVE DETAIL

LP-31

REPLACEMENT PAVEMENT MUST BE TYPE S-1 ASPHALTIC CONCRETE 1-1/2" THICK HOT MIX, WITH TACK COAT. IT MUST BE ROLLED OR COMPACTED TO A SMOOTH SURFACE LEVEL WITH EXISTING ROAD SURFACE.



NOTES:

1. SAW CUT ASPHALT BEFORE EXCAVATING.
2. COMPACTION MUST BE DONE BY A MECHANICAL VIBRATORY COMPACTOR. EACH LIFT MUST RECEIVE 5 PASSES OF THE COMPACTOR OVER ENTIRE SURFACE. BEFORE COMPACTING EACH LIFT, WATER MUST BE APPLIED AT THE RATE OF 1 GAL. PER LINEAL FOOT OF THE TRENCH FOR BACKFILL AND 1/2 GAL. PER LINEAL FOOT OF TRENCH FOR COQUINA BASE. WATER TO BE SPRINKLED EVENLY OVER TRENCH WIDTH.
3. IF EXCAVATION LEAVES LESS THAN 1' OF UNDISTURBED BASE BETWEEN TRENCH AND SAW CUT ASPHALT, ADDITIONAL WIDTH OF ASPHALT MUST BE CUT.

LOXAHATCHEE RIVER DISTRICT

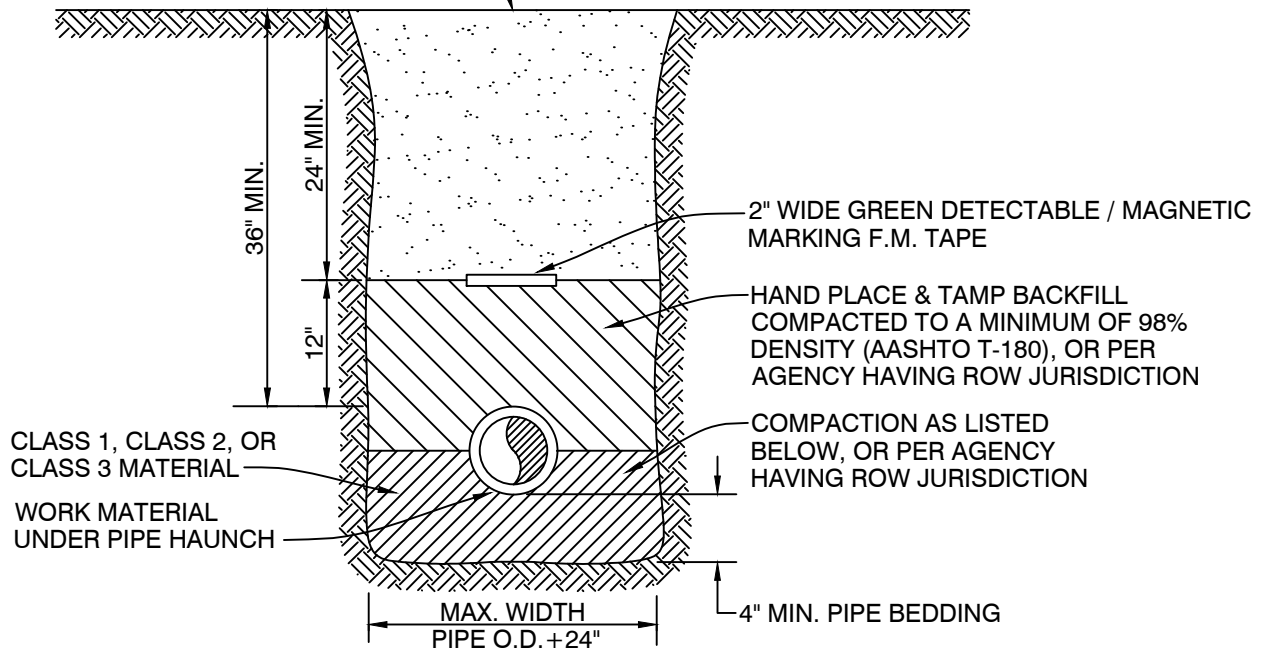
N.T.S.

REVISION:
APRIL, 2012

TYPICAL ROAD CROSSING REPAIR DETAIL

LP-32

REMAINDER OF BACKFILL MAY BE PLACED BY MACHINE AND COMPACTED TO A MINIMUM OF 95% DENSITY PER AASHTO T-180, OR PER AGENCY HAVING ROW JURISDICTION



NOTES:

CLASS 1 MATERIAL - ANGULAR .25" TO .75" GRADED STONE SUCH AS CORAL, CRUSHED STONE, OR CRUSHED SHELLS OR BEDDING ROCK (100% PASSING 1" SIEVE).

CLASS 2 MATERIAL - COURSE SAND AND GRAVEL'S WITH MAXIMUM PARTICLE SIZE OF .25 INCH WITH SMALL PERCENTAGE OF FINES COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY.

CLASS 3 MATERIAL - FINE SAND AND CLAYEY GRAVEL'S, INCLUDING FINE SANDS, SAND-CLAY MIXTURES AND GRAVEL-CLAY MIXTURES, COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY. INCLUDED IN CLASS 3 ARE EXISTING SOIL TYPES CLASSIFIED AS SELECT BACKFILL.

IF CLASS 1 MATERIAL IS USED FOR BEDDING, IT MUST BE USED FOR THE ENTIRE EMBEDMENT. A DRY TRENCH SHALL BE MAINTAINED WHEN USING CLASS 2 AND CLASS 3 MATERIAL.

DENSITY TESTING IS REQUIRED IN 1 FOOT LIFTS ABOVE PIPELINE AT INTERVALS OF 400' MAXIMUM.

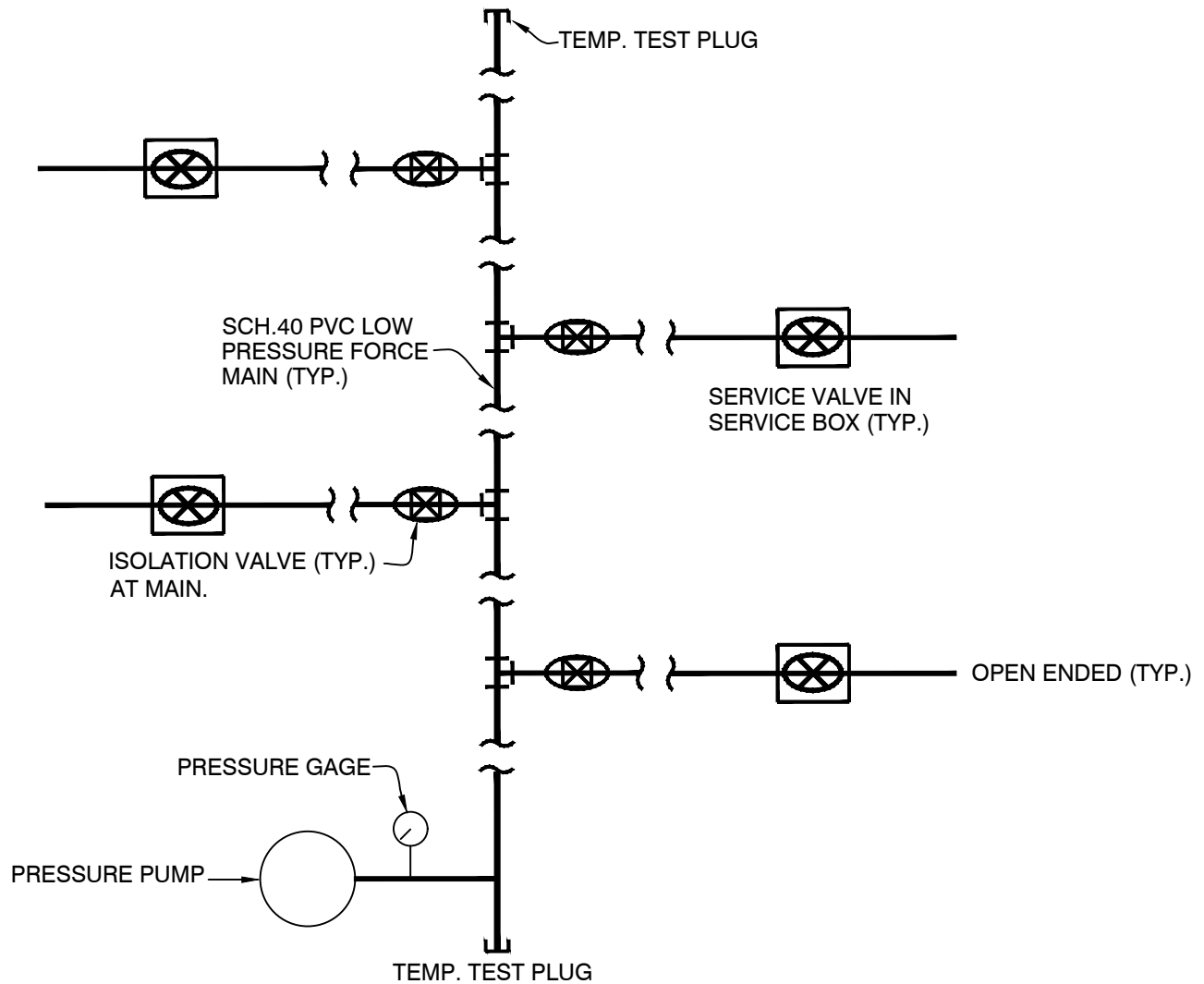
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
APRIL, 2012

TRENCH DETAIL

LP-33



PLAN VIEW

NOTES:

1. CLOSE ALL SERVICE VALVES INSIDE SERVICE BOXES.
2. OPEN ALL ISOLATION VALVES AT MAIN.
3. PRESSURIZE SYSTEM & TEST TO 70 P.S.I. FOR ONE (1) HOUR.
4. CLOSE ISOLATION VALVES ONE AT A TIME.
5. ONE AT A TIME, OPEN SERVICE VALVE AND BLEED OFF PRESSURE AT END CAP.
6. CHECK PRESSURE.
7. IF PRESSURE DROPS, ISOLATION VALVE IS NOT HOLDING PRESSURE.
8. REPAIR OR REPLACE IF NECESSARY.
9. REPEAT STEP 5 THRU 8 FOR EACH SERVICE CONNECTION.
10. SEE LOW PRESSURE DETAILS, LP-9 & LP-10 FOR TYPICAL LAYOUTS.

LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
APRIL, 2012

TESTING PROCEDURE

LP-34

1. LOW PRESSURE PUMPING UNITS SHALL BE LOCATED SO THAT SURFACE WATER RUN OFF SHALL NOT INTERFERE WITH ELECTRICAL COMPONENTS.
2. MANUFACTURER SHALL SUPPLY AND ATTACH ELECTRICAL CONTROL PANEL SCHEMATIC TO INSIDE FACE OF CONTROL PANEL DOOR (LAMINATED).
3. THE DISTRICT WILL BE CERTIFYING ALL LOW PRESSURE LIFT STATIONS WHEN COMPLETE. MANUFACTURER SHALL SCHEDULE A START UP TEST AND SUBMIT ALL AS-BUILT DATA TO THE DISTRICT FOR CERTIFICATION.
4. LIFT STATION AND CONTROL PANEL SHALL BE LOCATED SO THAT BOTH ARE ACCESSIBLE FOR MAINTENANCE. PROVIDE A 36" CLEAR ZONE FREE FROM FENCING, LANDSCAPING AND OTHER OBSTRUCTIONS THAT MAY LIMIT ACCESS.
5. WHERE FEASIBLE, HOMEOWNER SHALL PROVIDE WATER HOSE BIB. HOSE FOR MAINTENANCE OPERATIONS.
6. AIR RELEASE VALVE AND/OR VACUUM RELIEF VALVES SHALL BE PROVIDED ON ALL LOW PRESSURE FORCE MAIN INSTALLATION IMMEDIATELY UPSTREAM OF DISCHARGE POINT TO REGIONAL GRAVITY OR FORCE MAIN SYSTEMS.
7. FORCE MAIN DETECTABLE TAPE & MAGNETIC LOCATING DEVICES WILL BE INSTALLED OVER FORCE MAIN, VALVES, AND SERVICES.

LOXAHATCHEE RIVER DISTRICT

N.T.S.	<h1>GENERAL NOTES</h1>	<h2>LP-35</h2>
REVISION: JUNE, 2018		

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SD-1	TYPICAL TRENCH DETAIL FOR NON - PAVED AREAS
SD-2	TYPICAL TRENCH & PAVEMENT RESTORATION DETAIL
SD-3	TYPICAL TRENCH & PAVEMENT RESTORATION W/ FLOWABLE FILL DETAIL
SD-4	TYPICAL GRAVITY SEWER EMBEDMENT DETAIL
SD-5	GREASE INTERCEPTOR DETAIL
SD-6	4" OR 6" SINGLE SERVICE CONNECTION DETAIL
SD-7	4" OR 6" SINGLE SERVICE CONNECTION ALTERNATE CONFIGURATION DETAIL
SD-8	6" DOUBLE SERVICE CONNECTION DETAIL
SD-9	6" DOUBLE SERVICE CONNECTION ALTERNATE CONFIGURATION DETAIL
SD-10	SANITARY SEWER LATERAL CLEAN OUT PROTECTIVE BOX (PAVED AREAS ONLY) DETAIL
SD-11	PRECAST MANHOLE DETAIL
SD-12	GRAVITY SEWER INSIDE DROP MANHOLE DETAIL
SD-13	MANHOLE FRAME AND COVER DETAIL
SD-14	MANHOLE EXTENSION RING DETAIL
SD-15	DOGHOUSE MANHOLE INSTALLATION INTO AN EXISTING GRAVITY SEWER LINE DETAIL
SD-16	SEWER MANHOLE INSTALLATION INTO AN EXISTING GRAVITY SEWER LINE DETAIL
SD-17	SEWER MAIN / STORM DRAIN CONFLICT STRUCTURE DETAIL
SD-18	FORCE MAIN THRUST RESTRAINT CHART
SD-19	FORCE MAIN THRUST RESTRAINT DETAIL
SD-20	FORCE MAIN TERMINAL END DETAIL
SD-21	FORCE MAIN INTO SHALLOW MANHOLE DETAIL
SD-22	FORCE MAIN INTO DEEP MANHOLE DETAIL
SD-23	AUTOMATIC AIR RELEASE VALVE OFFSET FORCE MAIN CONDITION DETAIL
SD-24	AUTOMATIC AIR RELEASE VALVE DETAIL
SD-25	TYPICAL FORCE MAIN AIR RELEASE VALVE DETAIL ALTERNATE OFFSET CONFIGURATION
SD-26	FORCE MAIN DRAIN DETAIL
SD-27	BURIED VALVE DETAIL
SD-28	TAPPING FORCE MAIN DETAIL
SD-29	RECORD DRAWING SUBMITTAL GUIDE
SD-30	STANDARD WATER AND SEWER SEPARATION STATEMENT
SD-31	LIFT STATION STRUCTURAL & MECHANICAL STANDARD DETAILS
SD-32	LIFT STATION ELECTRICAL CONTROL PANEL STANDARD DETAILS
SD-33	LIFT STATION ELECTRICAL CONTROL PANEL STANDARD DETAILS
SD-34	LIFT STATION ELECTRICAL CONTROL PANEL STANDARD DETAILS

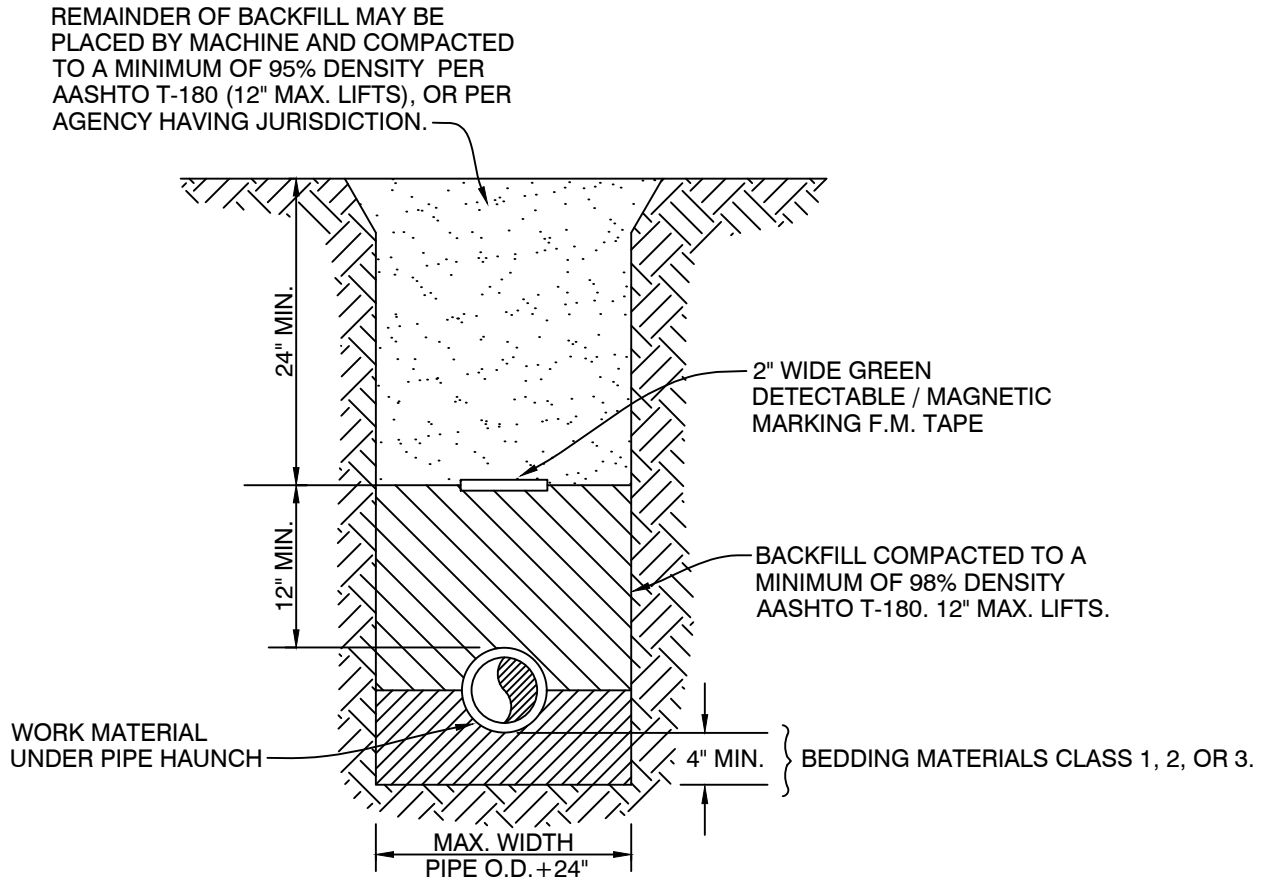
LOXAHATCHEE RIVER DISTRICT

STANDARD DETAILS INDEX

SD

N.T.S.

REVISION:
JAN, 2016



NOTES:

CLASS 1 MATERIAL - ANGULAR .25" TO .75" GRADED STONE SUCH AS CORAL, CRUSHED STONE, OR CRUSHED SHELLS OR BEDDING ROCK (100% PASSING 1" SIEVE).

CLASS 2 MATERIAL - COURSE SAND AND GRAVEL'S WITH MAXIMUM PARTICLE SIZE OF .25 INCH WITH SMALL PERCENTAGE OF FINES. COMPACT TO A MIN. 98% DENSITY PER AASHTO T-180.

CLASS 3 MATERIAL - FINE SAND AND CLAYEY GRAVEL'S, INCLUDING FINE SANDS, SAND-CLAY MIXTURES AND GRAVEL-CLAY MIXTURES. INCLUDED IN CLASS 3 ARE EXISTING SOIL TYPES CLASSIFIED AS SELECT BACKFILL. COMPACT TO A MIN. 98% DENSITY PER AASHTO T-180.

1. IF CLASS 1 MATERIAL IS USED FOR BEDDING, IT MUST BE USED FOR THE ENTIRE EMBEDMENT. A DRY TRENCH SHALL BE MAINTAINED WHEN USING CLASS 2 AND CLASS 3 MATERIAL.
2. DENSITY TESTING IS REQUIRED IN 1 FOOT LIFTS ABOVE PIPELINE AT INTERVALS OF 400' MAXIMUM.
3. UNSUITABLE IN-SITU MATERIAL SUCH AS MUCK, DEBRIS AND LARGER ROCKS SHALL BE REMOVED.
4. THE AFFECTED AREA SHALL BE RESTORED TO EQUAL OR BETTER CONDITION OR AS SPECIFIED IN PERMIT / CONTRACT DOCUMENTS.

5. EMS MARKER REQUIRED MINIMUM EVERY 300 FEET OF PRESSURE PIPELINE

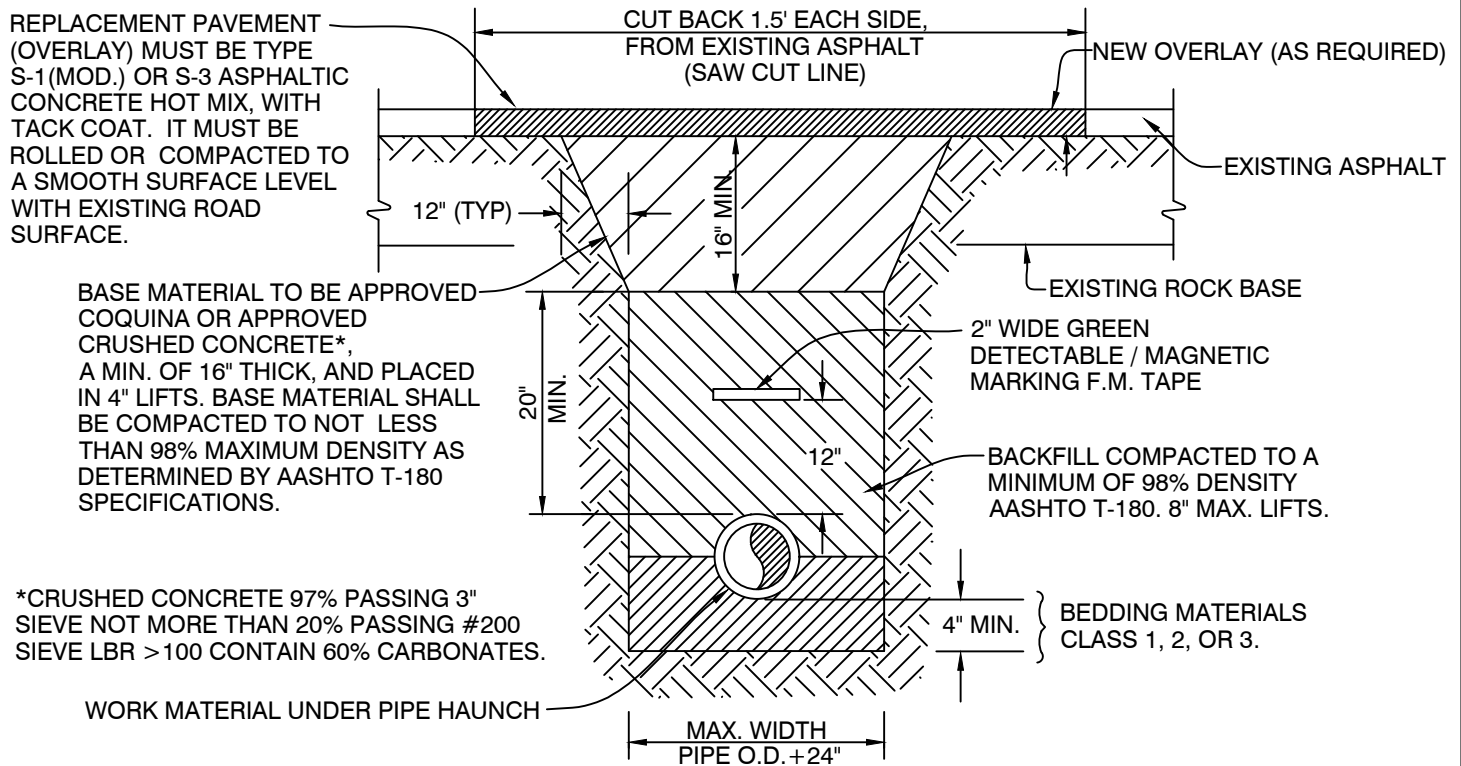
LOXAHATCHEE RIVER DISTRICT

**TYPICAL TRENCH DETAIL
FOR NON - PAVED AREAS**

SD-1

N.T.S.

REVISION:
APRIL, 2012



NOTES:

CLASS 1 MATERIAL - ANGULAR .25" TO .75" GRADED STONE SUCH AS CORAL, CRUSHED STONE, OR CRUSHED SHELLS OR BEDDING ROCK (100% PASSING 1" SIEVE).

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3. COMPACTION MUST BE DONE BY A MECHANICAL VIBRATORY COMPACTOR. EACH LIFT MUST RECEIVE 5 PASSES OF THE COMPACTOR OVER ENTIRE SURFACE. BEFORE COMPACTING EACH LIFT, WATER MUST BE APPLIED AT THE RATE OF 1 GAL. PER LINEAL FOOT OF THE TRENCH FOR BACKFILL AND 0.5 GAL. PER LINEAL FOOT OF TRENCH FOR COQUINA BASE. WATER TO BE SPRINKLED EVENLY OVER TRENCH WIDTH.
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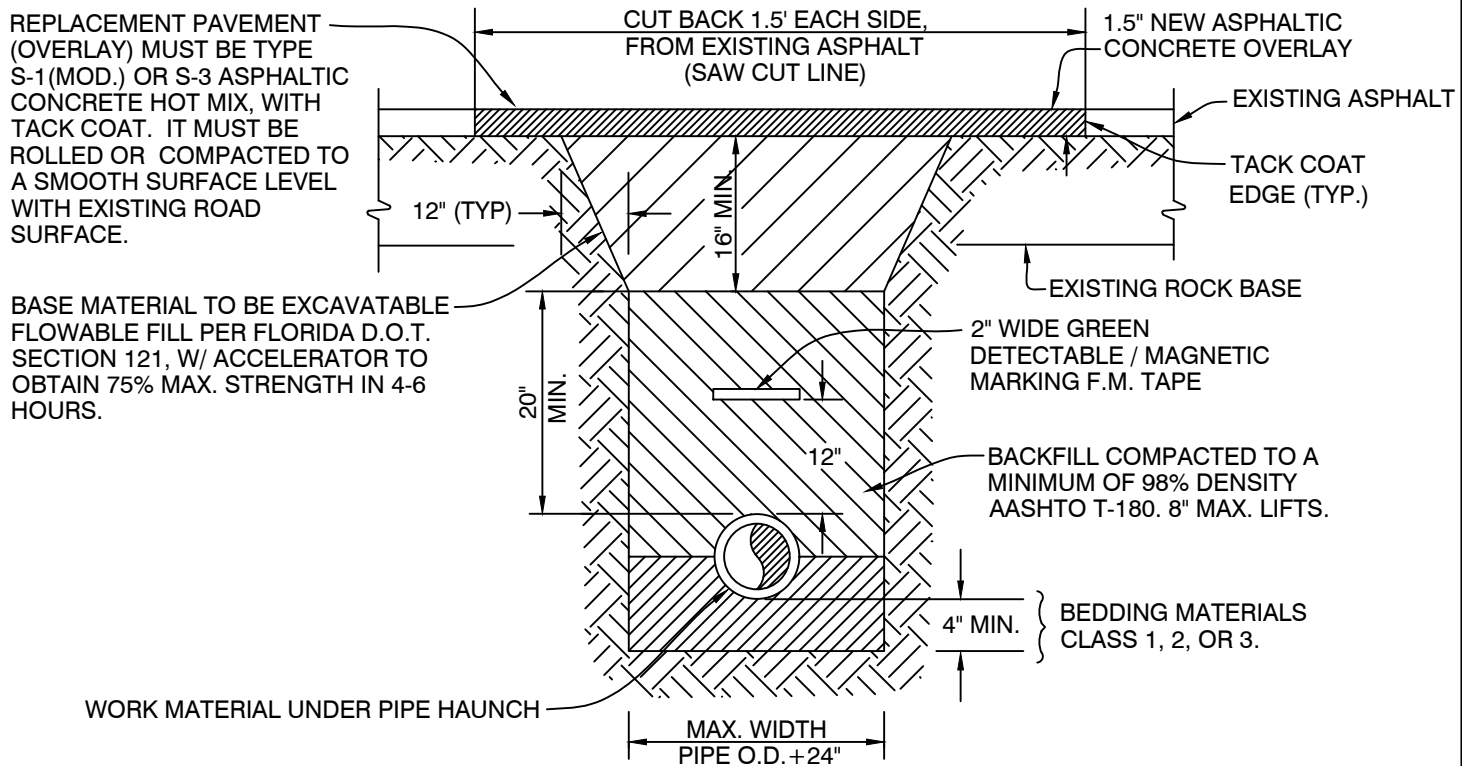
LOXAHATCHEE RIVER DISTRICT

**TYPICAL TRENCH & PAVEMENT
RESTORATION DETAIL**

SD-2

N.T.S.

REVISION:
APRIL, 2012



NOTES:

CLASS 1 MATERIAL - ANGULAR .25" TO .75" GRADED STONE SUCH AS CORAL, CRUSHED STONE, OR CRUSHED SHELLS OR BEDDING ROCK (100% PASSING 1" SIEVE).

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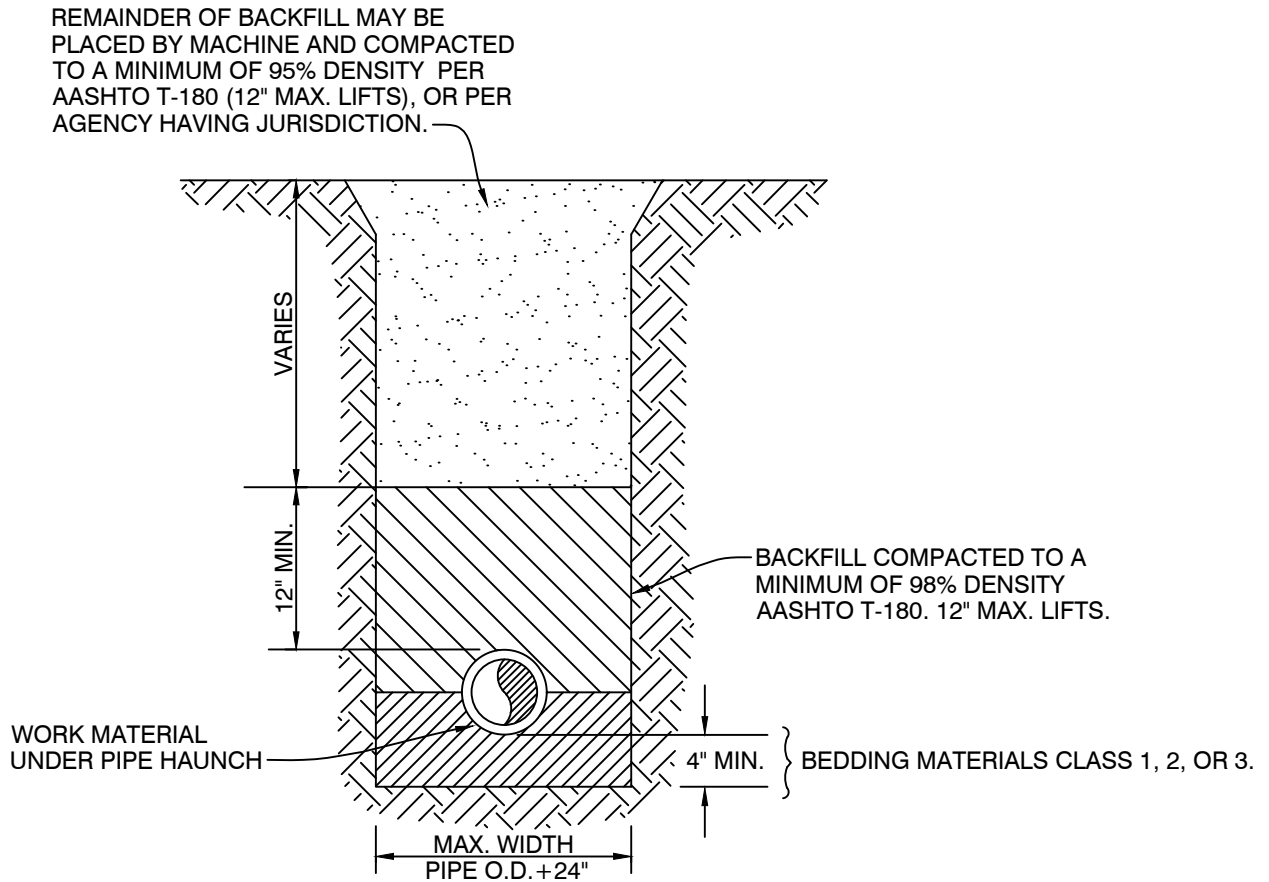
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4. UNSUITABLE IN-SITU MATERIAL SUCH AS MUCK, DEBRIS AND LARGER ROCKS SHALL BE REMOVED.
5. THE AFFECTED AREA SHALL BE RESTORED TO EQUAL OR BETTER CONDITION OR AS SPECIFIED IN PERMIT / CONTRACT DOCUMENTS.

6. EMS MARKER REQUIRED MINIMUM EVERY 300 FEET OF PRESSURE PIPELINE

LOXAHATCHEE RIVER DISTRICT

N.T.S.	TYPICAL TRENCH & PAVEMENT RESTORATION W/ FLOWABLE FILL DETAIL	SD-3
REVISION: APRIL, 2012		



NOTES:

CLASS 1 MATERIAL - ANGULAR .25" TO .75" GRADED STONE SUCH AS CORAL, CRUSHED STONE, OR CRUSHED SHELLS OR BEDDING ROCK (100% PASSING 1" SIEVE).

CLASS 2 MATERIAL - COURSE SAND AND GRAVEL'S WITH MAXIMUM PARTICLE SIZE OF .25 INCH WITH SMALL PERCENTAGE OF FINES. COMPACT TO A MIN. 98% DENSITY PER AASHTO T-180.

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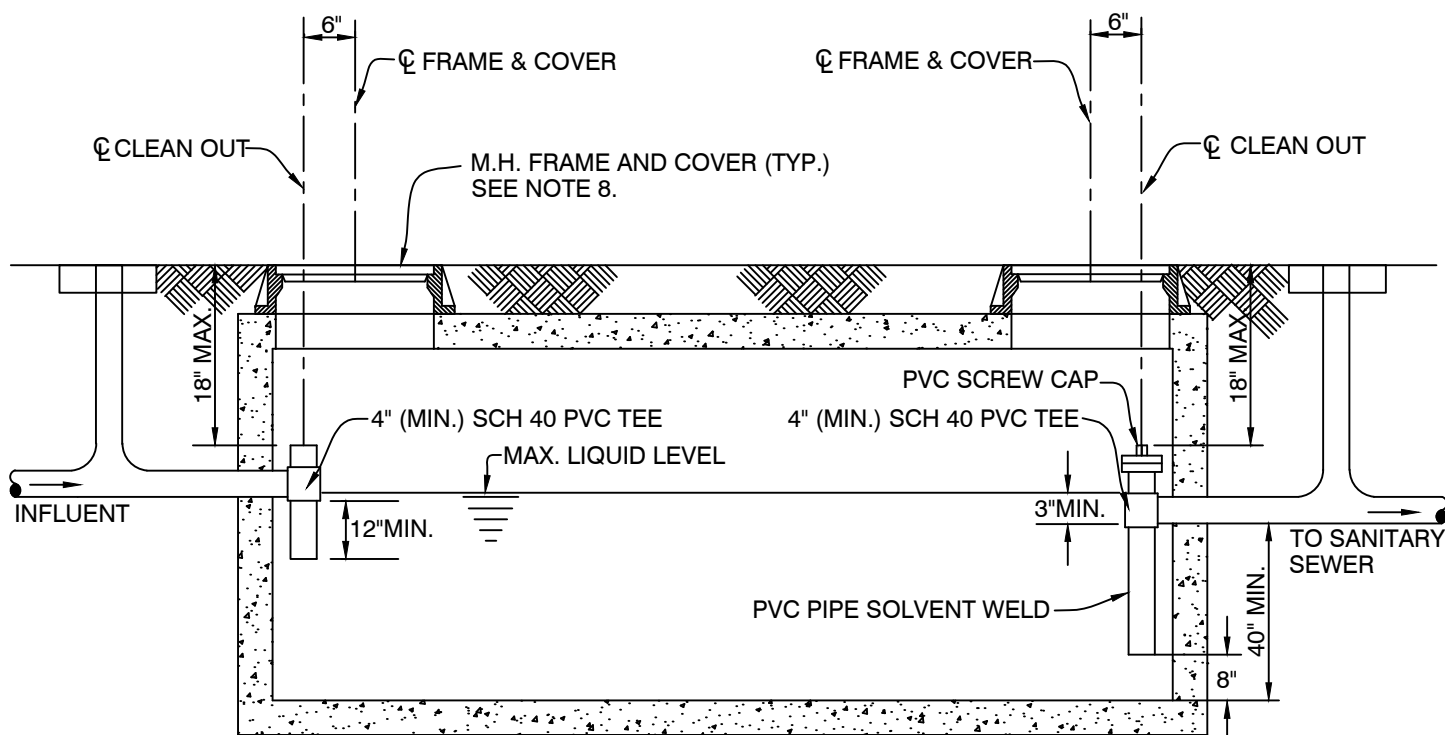
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
APRIL, 2012

TYPICAL GRAVITY SEWER EMBEDMENT DETAIL

SD-4

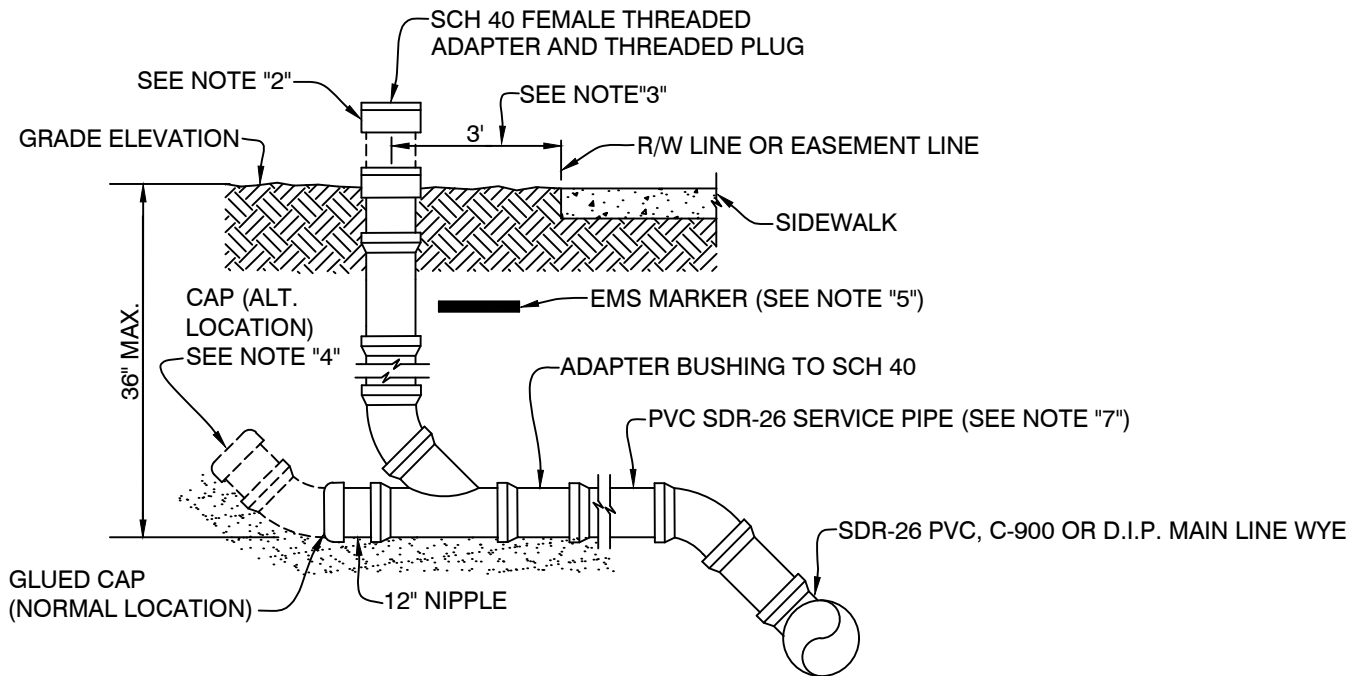


NOTES:

1. EFFECTIVE SIZE OF INTERCEPTOR 750 GALS MIN. AND SHALL BE MADE OF CONCRETE.
2. TANK TO BE DESIGNED TO RESIST FLOTATION WHEN EMPTY.
3. TWO-WAY CLEAN OUTS WILL BE INSTALLED IMMEDIATELY UPSTREAM AND DOWNSTREAM OF ALL GREASE INTERCEPTORS. IF INSTALLED IN PAVED AREAS, A PROTECTIVE STANDARD CLEAN OUT COVER WILL BE INSTALLED PER SD-10.
4. TANK(S) SIZING SHALL FOLLOW 2010 FL. BLDG CODE TABLE 1003.5.1. TANK CONSTRUCTION SHALL BE IN ACCORDANCE WITH CHAPTER 64E-6, OF THE FLORIDA ADMINISTRATIVE CODE.
5. ALL MATERIALS SHALL BE NEW AND CODE APPROVED.
6. ALL MANHOLE COVERS USED SHALL BE MARKED WITH: "GREASE TRAP" LETTERING.
7. TANKS TO BE IN SERIES WHERE MULTIPLE UNITS ARE REQUIRED.
8. FOR TANKS UP TO 1,250 GALLONS, USE 24" STANDARD M.H. FRAME AND COVER, U.S. FOUNDRY. FOR LARGER TANKS, USE DOUBLE RING AND COVER TYPE, #230-AB-M, U.S. FOUNDRY.

LOXAHATCHEE RIVER DISTRICT

N.T.S.	GREASE INTERCEPTOR DETAIL	SD-5
REVISION: APRIL, 2012		



NOTES:

1. WHERE SEWER LATERALS MAY BE FORCED TO BE INSTALLED AT A DEPTH GREATER THAN 36" DUE TO CONFLICT WITH OTHER UTILITIES, THE WYE FITTING MAY BE PLACED IN A VERTICAL POSITION ON THE CLEAN-OUT RISER PIPE (MAX.36")
2. LEAVE RISER 18" (MIN.) ABOVE GRADE. WHEN HOUSE RISER CONNECTION IS MADE BY BUILDING PLUMBER, RISER PIPE WILL BE CUT OFF, AND SET 2" ABOVE SOD GRADE (ADAPTER SHALL BE LEFT UNGLUED).
3. IN AREAS WHERE NO SIDEWALK EXISTS OR WHERE NONE ARE PLANNED, THE CLEAN OUT RISER WILL BE SET AT R/W OR EASEMENT LINE.
4. IN AREAS WHERE GROUND WATER TABLE IS LESS THAN 36" FROM FINISHED GRADE, NIPPLE OUT OF WYE WILL BE EXTENDED UP TO A POINT 6" MIN. ABOVE GROUND WATER TABLE.
5. EMS MARKER MODEL NO.1258, SERVICE LINE ELECTRONIC MARKER AS MFG. BY 3M CO., TO REMAIN IN PLACE AFTER CONNECTION OF BUILDING SEWER. BURY IN FRONT OF CLEAN OUT RISER 18" BELOW FINISHED GRADE.
6. 6" SINGLE SERVICES USED ONLY FOR COMMERCIAL OR MULTI-FAMILY RESIDENTIAL UNITS.
7. WHEN MAIN LINE IS C-900 PVC OR DIP (EPOXY COATED), SERVICE PIPE SHALL BE SAME MATERIAL AS MAIN LINE.
8. WHEN APPROVED BY THE DISTRICT, CLEAN-OUTS MAY BE PLACED IN PAVED AREAS, HOWEVER, PROTECTIVE BOXES AS SHOWN ON DETAIL SD-1 MUST BE INSTALLED.

(PLUMBERS ONLY)

WHERE EXISTING SERVICE LATERAL IS VITRIFIED CLAY PIPE, BELL (HUB) WILL BE REMOVED WITH APPROVED SAW AND A "FERNCO" VCP X PVC COUPLING WILL BE USED TO JOIN THE EXISTING AND NEW PIPE. FERNCO COUPLING WILL BE WRAPPED IN STRANDS OF COPPER WIRE AND COUPLING WILL BE BEDDED IN TYPE "57" ROCK TO UNDISTURBED MATERIAL. WHERE EXISTING SERVICE LATERAL IS DIP OR C-900, A DISTRICT APPROVED PVC TRANSITION COUPLING WILL BE USED.

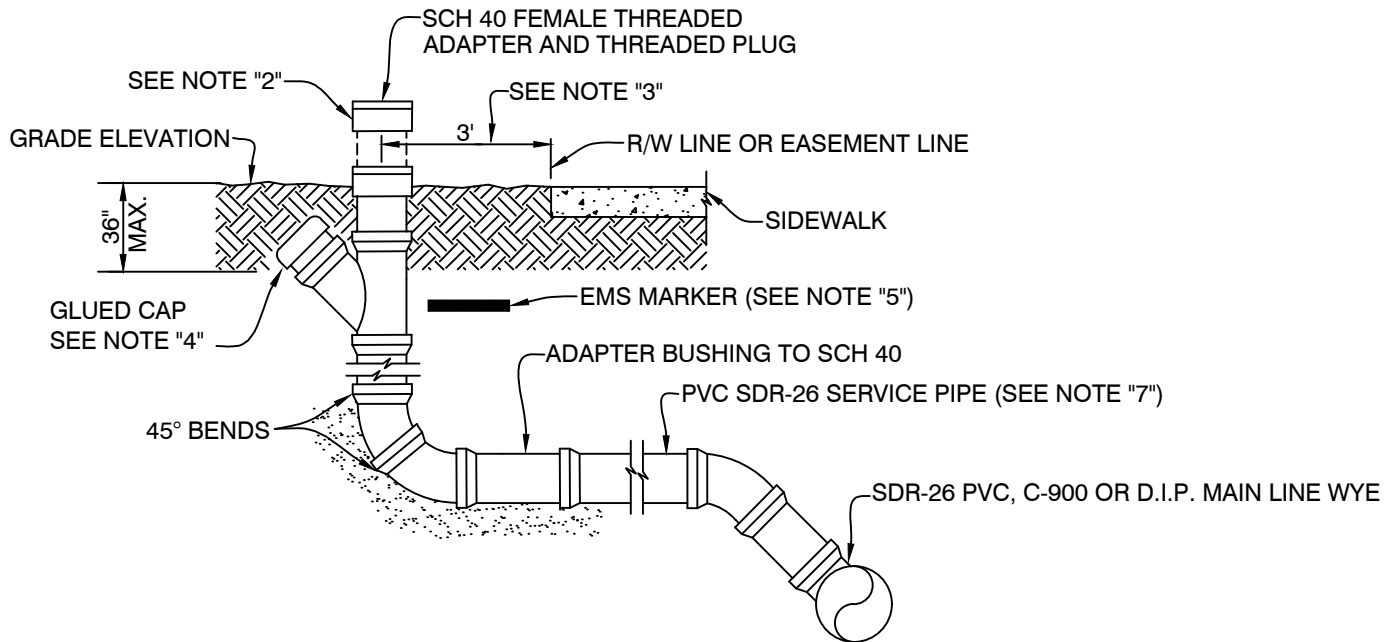
LOXAHATCHEE RIVER DISTRICT

**4" OR 6" SINGLE SERVICE CONNECTION
DETAIL**

SD-6

N.T.S.

REVISION:
APRIL, 2012



NOTES:

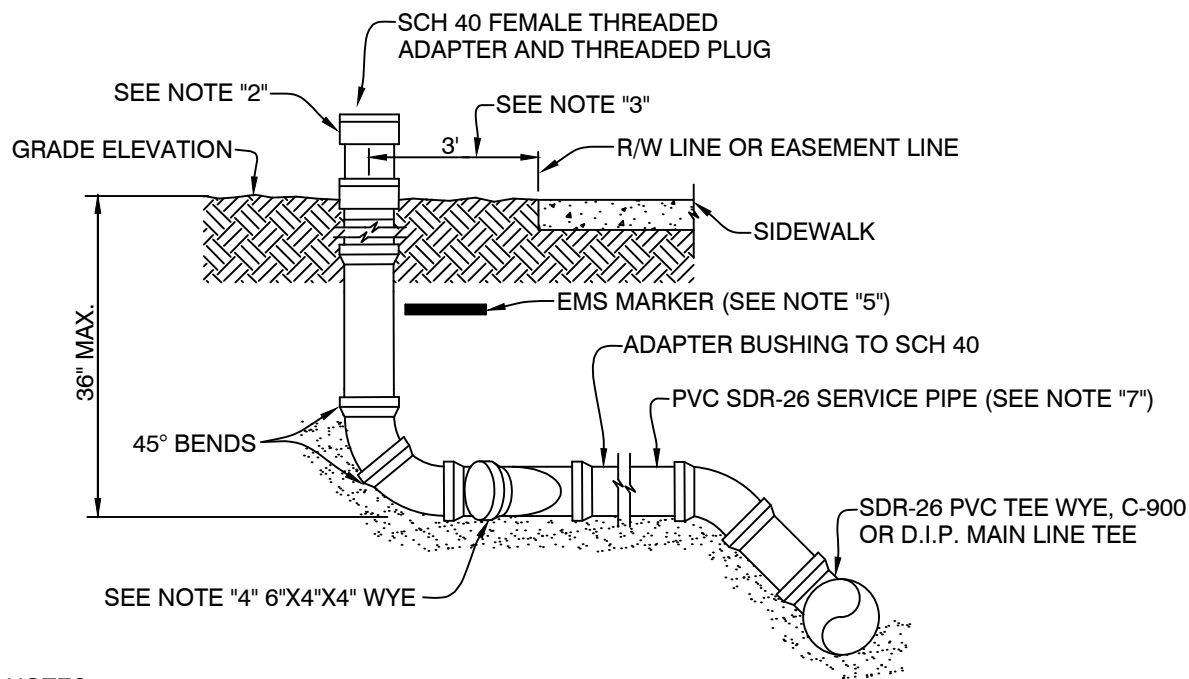
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2. LEAVE RISER 18" (MIN.) ABOVE GRADE. WHEN HOUSE RISER CONNECTION IS MADE BY BUILDING PLUMBER, RISER PIPE WILL BE CUT OFF, AND SET 2" ABOVE SOD GRADE (ADAPTER SHALL BE LEFT UNGLUED).
3. IN AREAS WHERE NO SIDEWALK EXISTS OR WHERE NONE ARE PLANNED, THE CLEAN OUT RISER WILL BE SET AT R/W OR EASEMENT LINE.
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5. EMS MARKER MODEL NO.1258, SERVICE LINE ELECTRONIC MARKER AS MFG. BY 3M CO., TO REMAIN IN PLACE AFTER CONNECTION OF BUILDING SEWER. BURY IN FRONT OF CLEAN OUT RISER 18" BELOW FINISHED GRADE.
6. 6" SINGLE SERVICES USED ONLY FOR COMMERCIAL OR MULTI-FAMILY RESIDENTIAL UNITS.
7. WHEN MAIN LINE IS C-900 PVC OR DIP (EPOXY COATED), SERVICE PIPE SHALL BE SAME MATERIAL AS MAIN LINE.
8. WHEN APPROVED BY THE DISTRICT, CLEAN-OUTS MAY BE PLACED IN PAVED AREAS, HOWEVER, PROTECTIVE BOXES AS SHOWN ON DETAIL SD-1 MUST BE INSTALLED.

(PLUMBERS ONLY)

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LOXAHATCHEE RIVER DISTRICT

N.T.S.	4" OR 6" SINGLE SERVICE CONNECTION ALTERNATE CONFIGURATION DETAIL	SD-7
REVISION: APRIL, 2012		



NOTES:

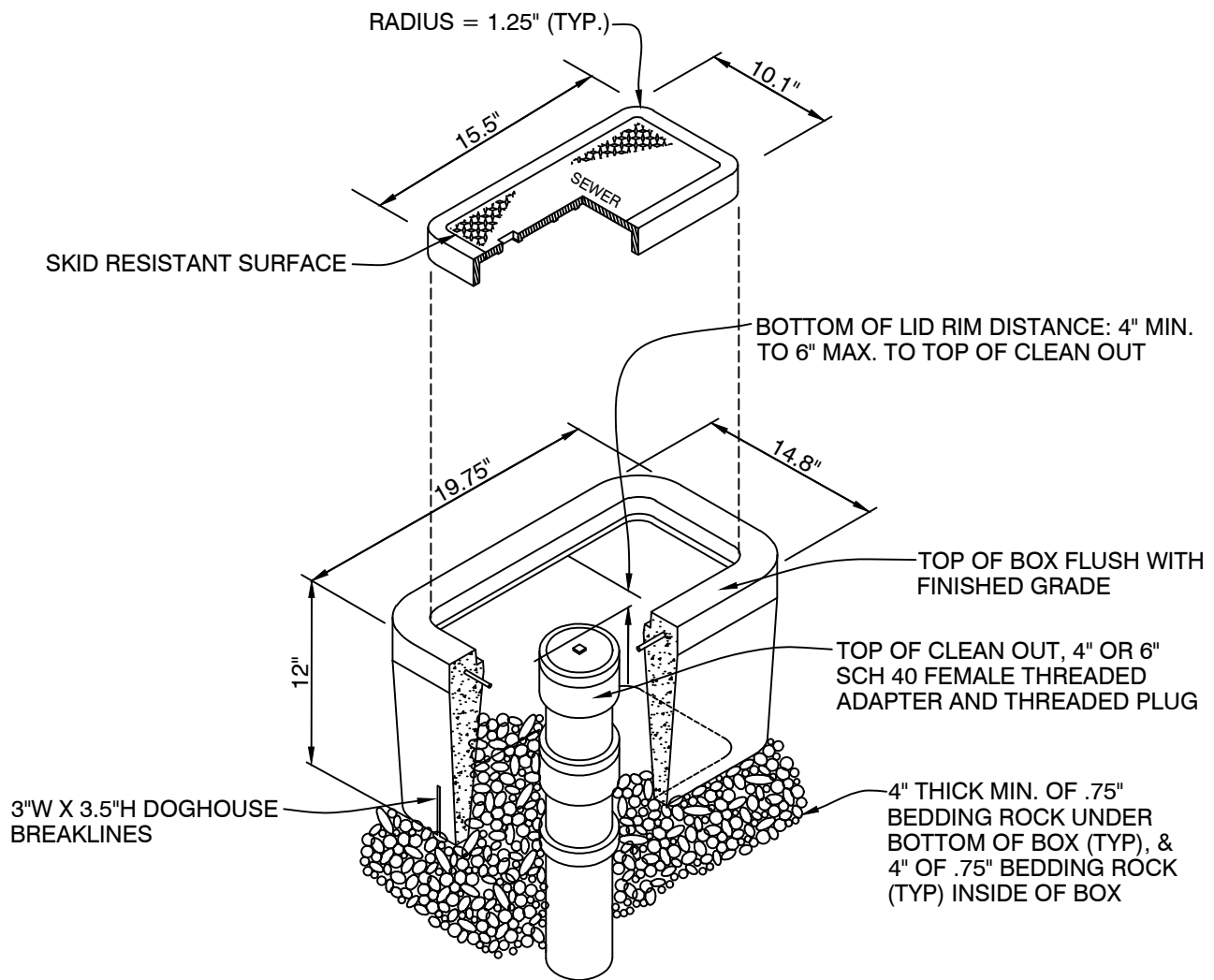
1. WHERE SEWER LATERALS MAY BE FORCED TO BE INSTALLED AT A DEPTH GREATER THAN 36" DUE TO CONFLICT WITH OTHER UTILITIES, THE WYE FITTING MAY BE PLACED IN A VERTICAL POSITION ON THE CLEAN-OUT RISER PIPE (ALTERNATE CONFIGURATION)
2. LEAVE RISER 18" (MIN.) ABOVE GRADE. WHEN HOUSE RISER CONNECTION IS MADE BY BUILDING PLUMBER, RISER PIPE WILL BE CUT OFF, AND SET 2" ABOVE SOD GRADE (ADAPTER SHALL BE LEFT UNGLUED).
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6. 6" SINGLE SERVICES USED ONLY FOR COMMERCIAL OR MULTI-FAMILY RESIDENTIAL UNITS. (SEE SD-3 & SD-4)
7. WHEN MAIN LINE IS C-900 PVC OR EPOXY COATED DIP, SERVICE PIPE SHALL BE SAME MATERIAL AS MAIN LINE.
8. WHEN APPROVED BY THE DISTRICT, CLEAN-OUTS MAY BE PLACED IN PAVED AREAS, HOWEVER, PROTECTIVE BOXES AS SHOWN ON DETAIL SD-1 MUST BE INSTALLED.

(PLUMBERS ONLY)

WHERE EXISTING SERVICE LATERAL IS VITRIFIED CLAY PIPE, BELL (HUB) WILL BE REMOVED WITH APPROVED SAW AND A "FERNCO" VCP X PVC COUPLING WILL BE USED TO JOIN THE EXISTING AND NEW PIPE. FERNCO COUPLING WILL BE WRAPPED IN STRANDS OF COPPER WIRE AND COUPLING WILL BE BEDDED IN TYPE "57" ROCK. WHERE EXISTING SERVICE LATERAL IS DIP OR C-900, A DISTRICT APPROVED PVC TRANSITION COUPLING WILL BE USED.

LOXAHATCHEE RIVER DISTRICT

N.T.S.	6" DOUBLE SERVICE CONNECTION DETAIL	SD-8
REVISION: APRIL, 2012		



NOTES:

1. STANDARD COVER MARKED WITH "SEWER".
2. CONCRETE: MIN. 28 DAY CONCRETE COMPRESSIVE STRENGTH = 4,500 PSI.
3. REINFORCING TO BE #6 GAGE WELDED WIRE FABRIC.
4. CLEAN OUT BOX, PLACED ON CRUSHED AGGREGATE.
5. ALL DIMENSIONS ARE APPROXIMATE.
6. LID & BOX MFG. BY BROOKS PRODUCTS SERIES 36 TYPE OR APPROVED EQUAL. (LID: NO. 36-T CAST IRON HEAVY DUTY COVER WT:18LBS, BOX: NO 36 BODY WT:92LBS.)

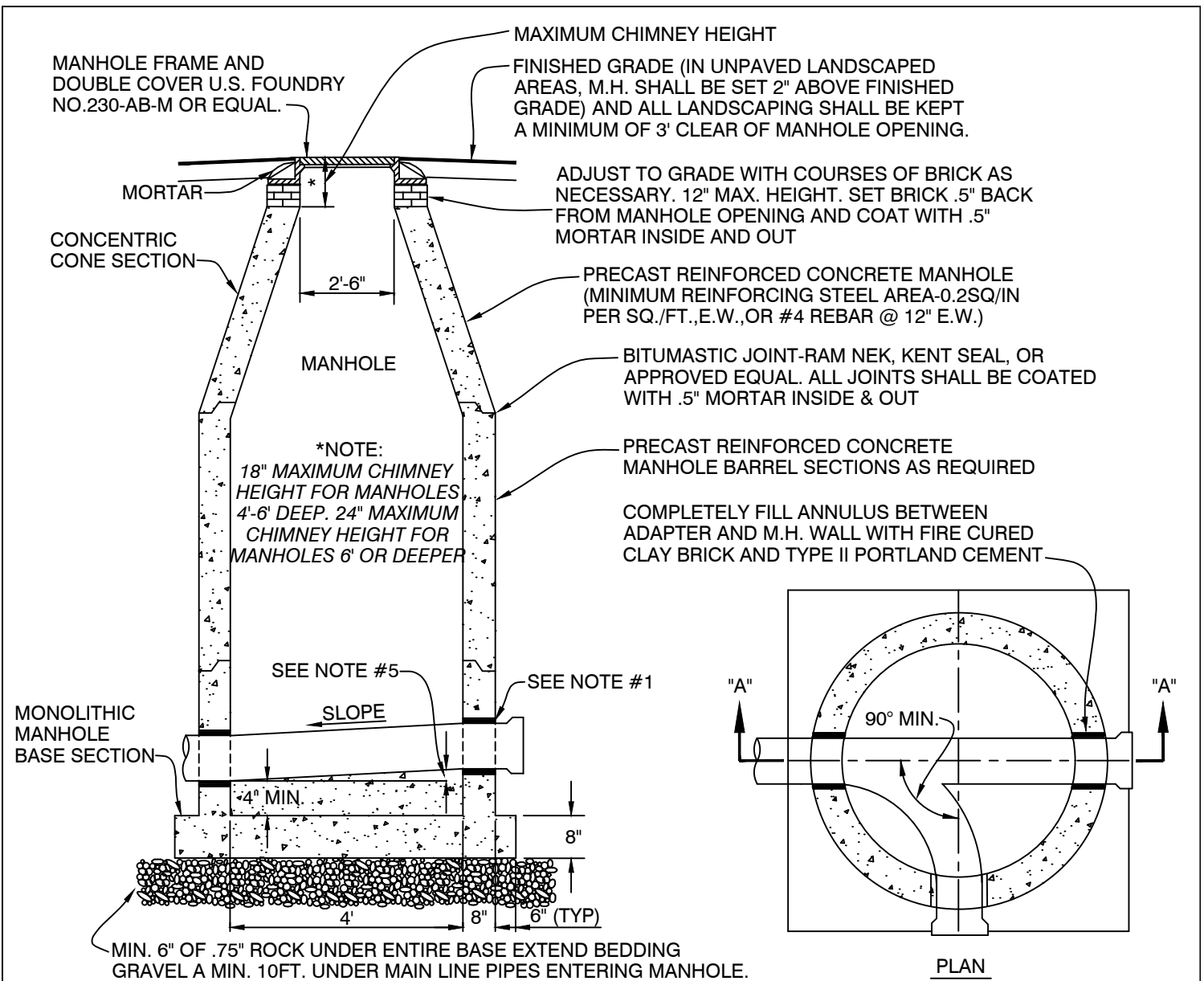
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
APRIL, 2012

**SANITARY SEWER LATERAL CLEAN OUT
PROTECTIVE BOX (PAVED AREAS ONLY) DETAIL**

SD-10



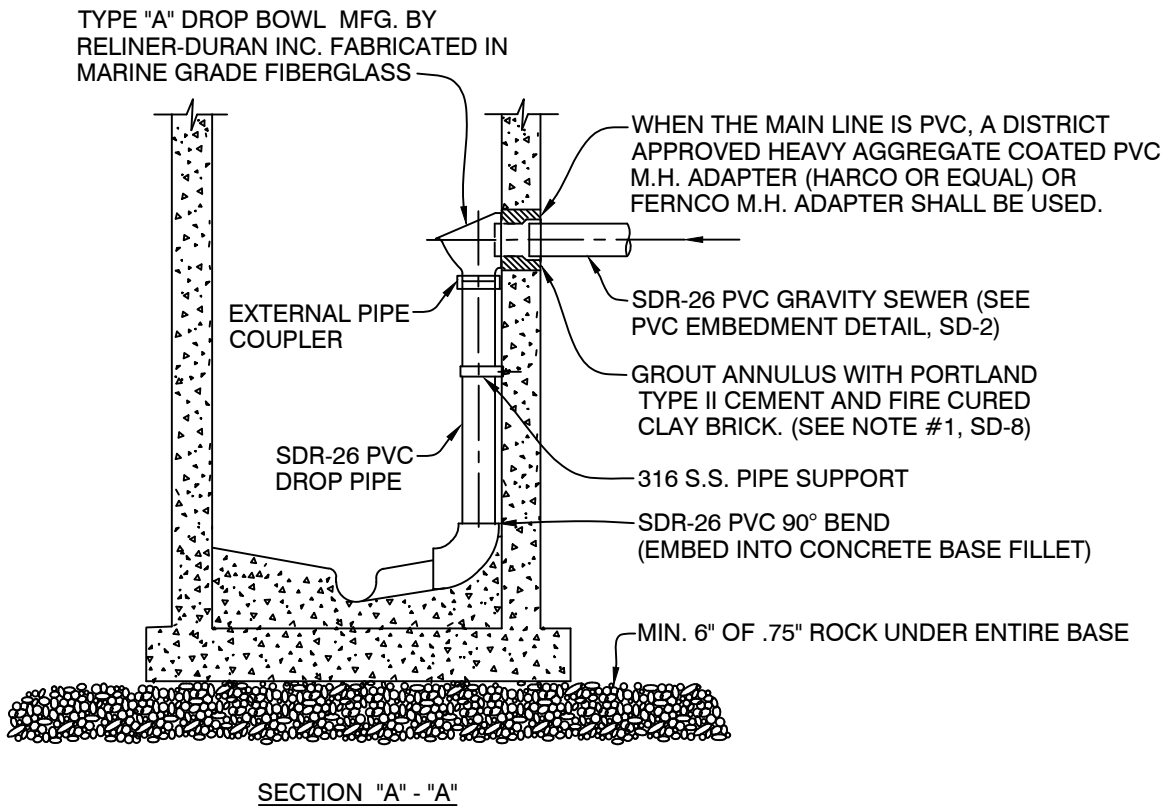
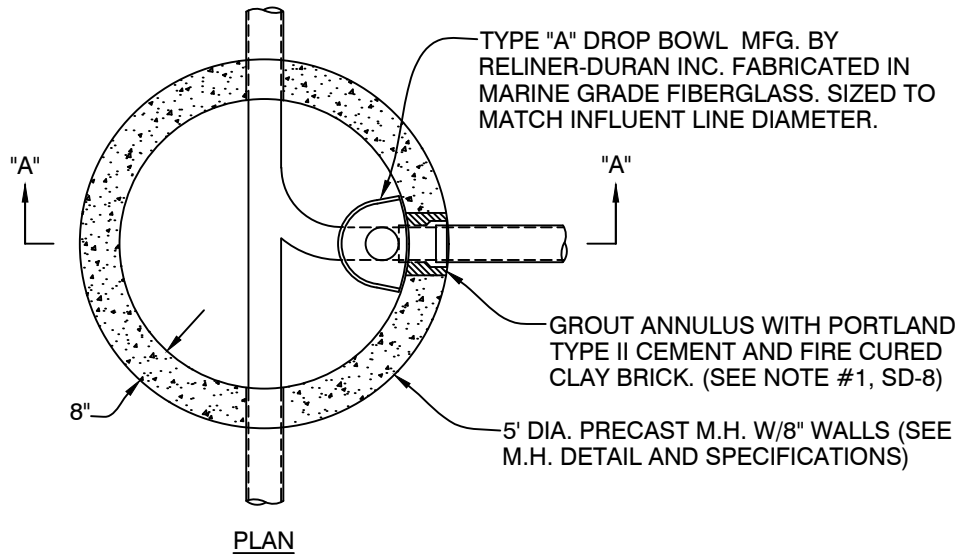
NOTES:

SECTION "A-A"

1. WHEN THE MAIN LINE IS PVC, A DISTRICT APPROVED HEAVY AGGREGATE COATED PVC M.H. ADAPTER (HARCO OR EQUAL) OR FERNCO M.H. ADAPTER SHALL BE USED. CAST IN PLACE RUBBER BOOTS WITH STAINLESS STEEL HARDWARE (CAST-A-SEAL 12-08 FOR 8", Z-LOC C-107 FOR ALL OTHER SIZES) MAY BE USED AS AN ALTERNATE.
2. CHANNEL WIDTHS AND INVERT RADII VARY UNIFORMLY FROM END TO END.
3. ALL HOLES FOR PIPES SHALL BE CAST INTO THE MANHOLES. OPENINGS REQUIRED ON ALL EXISTING MANHOLES SHALL BE CORED WITH APPROVED MACHINES.
4. WHEN INVERT DIFFERENTIALS BETWEEN PIPES ENTERING MANHOLES IS 2'. OR LESS, A "SLIDE" TYPE FLOW CHANNEL SHALL BE CONSTRUCTED TO FORM A SMOOTH FLOW TRANSITION. WHEN TWO (2) OR MORE "SLIDES" HAVE AN INVERT DIFFERENTIAL OF GREATER THAN .5' AND LESS THAN 2'. THE MANHOLE SHALL BE 5'-0". ALL INSIDE DROP MANHOLE'S SHALL BE 5' I.D. (SEE DETAIL SD-12).
5. A MINIMUM DIFFERENTIAL OF .1' SHALL BE PROVIDED BETWEEN THE INLET AND OUTLET PIPE INVERTS.
6. ALL MANHOLES 14' OR MORE FROM RIM TO LOWEST INVERT, SHALL RECEIVE A MINIMUM 0.5" THICK COATING OF SEWPERCOAT OR APPROVED EQUAL.
7. ALL MANHOLES IN A WELL FIELD PROTECTION ZONE 1 OR 2, SHALL RECEIVE A MINIMUM 1" THICK COATING OF SEWPERCOAT OR APPROVED EQUAL.

LOXAHATCHEE RIVER DISTRICT

N.T.S.	PRECAST MANHOLE DETAIL	SD-11
REVISION: MARCH, 2017		

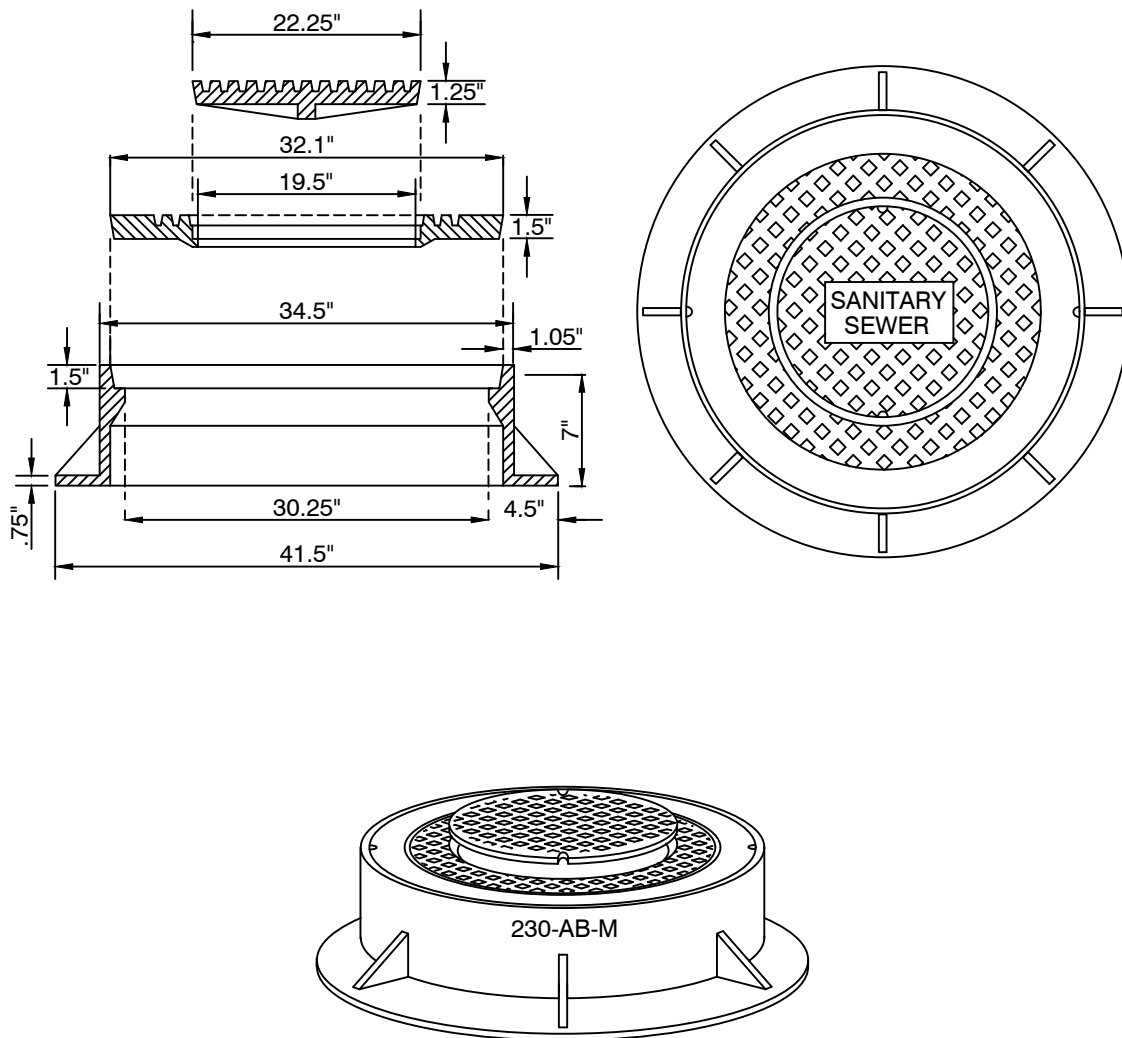


LOXAHATCHEE RIVER DISTRICT

N.T.S.
REVISION:
APRIL, 2012

GRAVITY SEWER
INSIDE DROP MANHOLE DETAIL

SD-12



NOTES:

1. U.S.F. #230-AB-M MANHOLE RING & DOUBLE COVER, APPROXIMATE TOTAL WEIGHT 605 POUNDS
2. IN CASES WHERE A SHALLOW FRAME IS REQUIRED USF MODEL #655 MAY BE SUBISTUTED FOR MODEL #230-AB-M

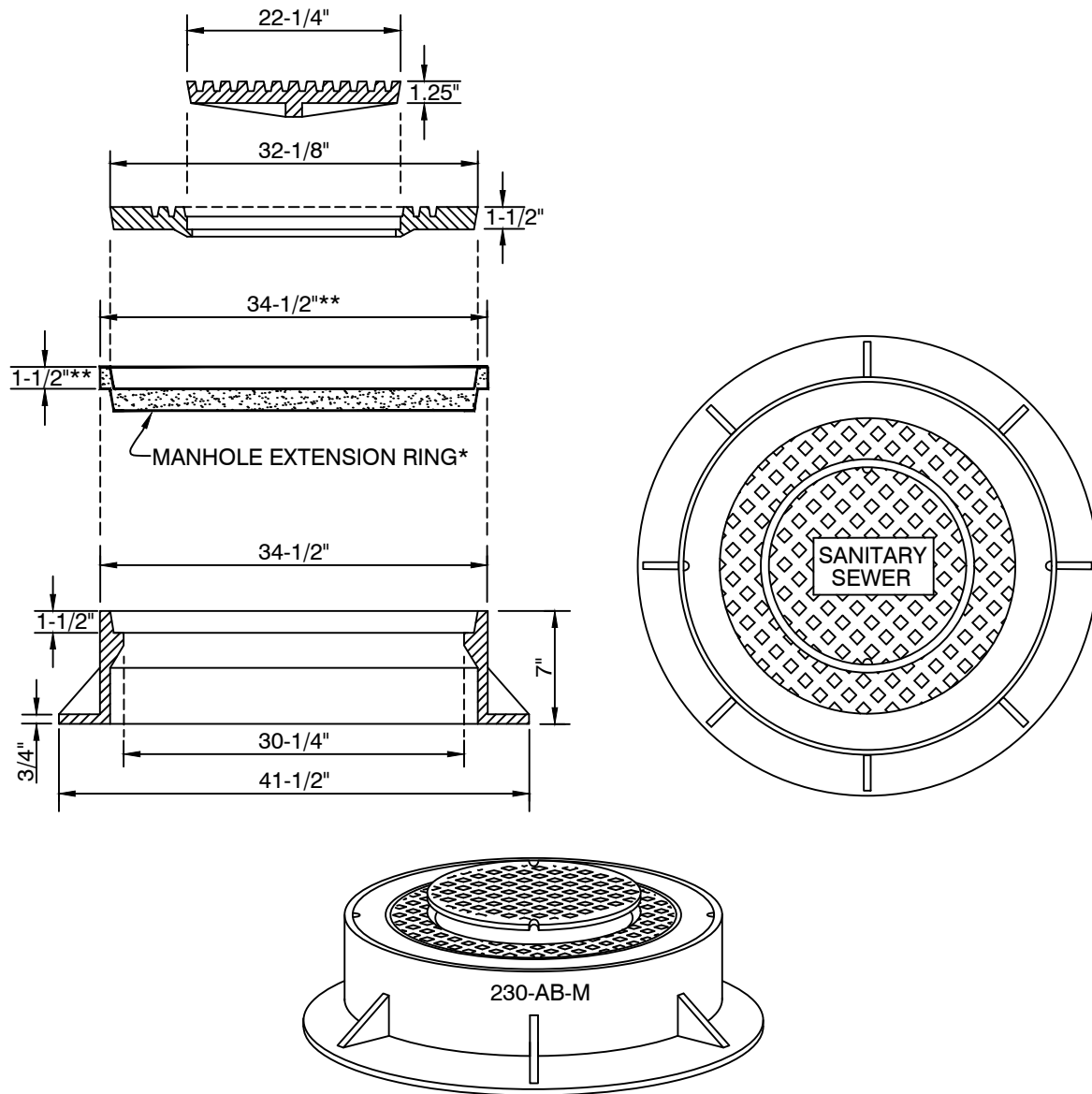
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
APRIL, 2012

MANHOLE FRAME AND COVER DETAIL

SD-13



NOTES:

1. USE OF THIS DETAIL REQUIRES PRIOR APPROVAL FROM THE DIRECTOR OF ENGINEERING.
2. EXTENSION RINGS SHALL BE POLYPROPYLENE & FIBERGLASS. MANHOLE RINGS AS MANUFACTURED BY: "TURNER COMPANY".
3. ALL SURFACES SHALL BE CLEANED OF ALL DIRT, GREASE, OIL, RUST. METAL SURFACES SHALL BE WIRE BRUSHED.
4. APPLY 3M 4693 ADHESIVE (OR APPROVED EQUAL) TO ALL MATING SURFACES.

LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
JAN, 2016

MANHOLE EXTENSION RING DETAIL

SD-14

Diagram illustrating the location of a new line (NEW LINE) relative to an existing flow line (EXISTING FLOW LINE) within a manhole structure. The diagram shows a plan view of the manhole, with the existing flow line running horizontally and the new line running vertically. The new line is shown entering the manhole from the bottom. The diagram also indicates a 90° MIN. clearance from the existing flow line to the new line. The manhole is labeled "A" on both sides, indicating a cross-section view.

1. WHEN THE MAIN LINE IS PVC, A DISTRICT APPROVED HEAVY AGGREGATE COATED PVC M.H. ADAPTER (HARCO OR EQUAL) OR FERNCO M.H. ADAPTER SHALL BE USED. CAST IN PLACE RUBBER BOOTS WITH STAINLESS STEEL HARDWARE (LOCK-JOINT MODEL CP6) MAY BE USED AS AN ALTERNATE.

3. ALL HOLES FOR PIPES SHALL BE CAST INTO THE MANHOLES. OPENINGS REQUIRED ON ALL EXISTING MANHOLES SHALL BE CORED WITH APPROVED MACHINES.

4. WHEN INVERT DIFFERENTIALS BETWEEN PIPES ENTERING MANHOLES IS 2FT. OR LESS, A "SLIDE" TYPE FLOW CHANNEL SHALL BE CONSTRUCTED TO FORM A SMOOTH FLOW TRANSITION. WHEN TWO (2) OR MORE "SLIDES" HAVE AN INVERT DIFFERENTIAL OF GREATER THAN 0.5FT. AND LESS THAN 2.0FT. THE MANHOLE SHALL BE 5'-0". ALL INSIDE DROP MANHOLE'S SHALL BE 5'-0" I.D. (SEE DETAIL SD-7).

MORTAR
 FINISHED GRADE
 M.H. FRAME & COVER 2" ABOVE GRADE
 ADJUST TO FINISHED GRADE WITH COURSES OF BRICK 4" MIN. AND 12" MAX. HEIGHT, SET BRICK .5" BACK FROM MANHOLE OPENING AND COAT WITH .5" MORTAR INSIDE AND OUT.
 PRECAST REINFORCED CONCRETE MANHOLE (MINIMUM REINFORCING STEEL AREA-0.2SQ/IN PER SQ./FT., E.W., OR #4 REBAR @ 12" E.W.)
 BITUMASTIC JOINT-RAM NEK, KENT SEAL, OR APPROVED EQUAL. ALL JOINTS SHALL BE COATED WITH 1/2" MORTAR INSIDE & OUT
 "DOG-HOUSE" OPENING IN PRE-CAST
 FILL ANNULUS WITH FIRE CURED CLAY BRICK AND PORTLAND TYPE II CEMENT. (TYP.)
 EXISTING GRAVITY MAIN
 NEW GRAVITY MAIN
 NOTE:
 ALL MANHOLES 14' OR MORE DEEP SHALL BE SET TO LOWEST INVERT, SHALL HAVE A MINIMUM 0.5" THICK COAT OF MORTAR OR APPROVED
 NO.4 BAR @ 12" O.C., E.W.
 PRE-CAST MONOLITHIC CONCRETE BASE SLAB WITH 6" LIP MINIMUM.
 MIN. 6" OF .75" ROCK UNDER ENTIRE BASE
 EXTEND BEDDING GRAVEL MIN. 10 FT. UNDER AND UP TO TOP OF PIPES ENTERING MANHOLE.
 SECTION "A"-"A"

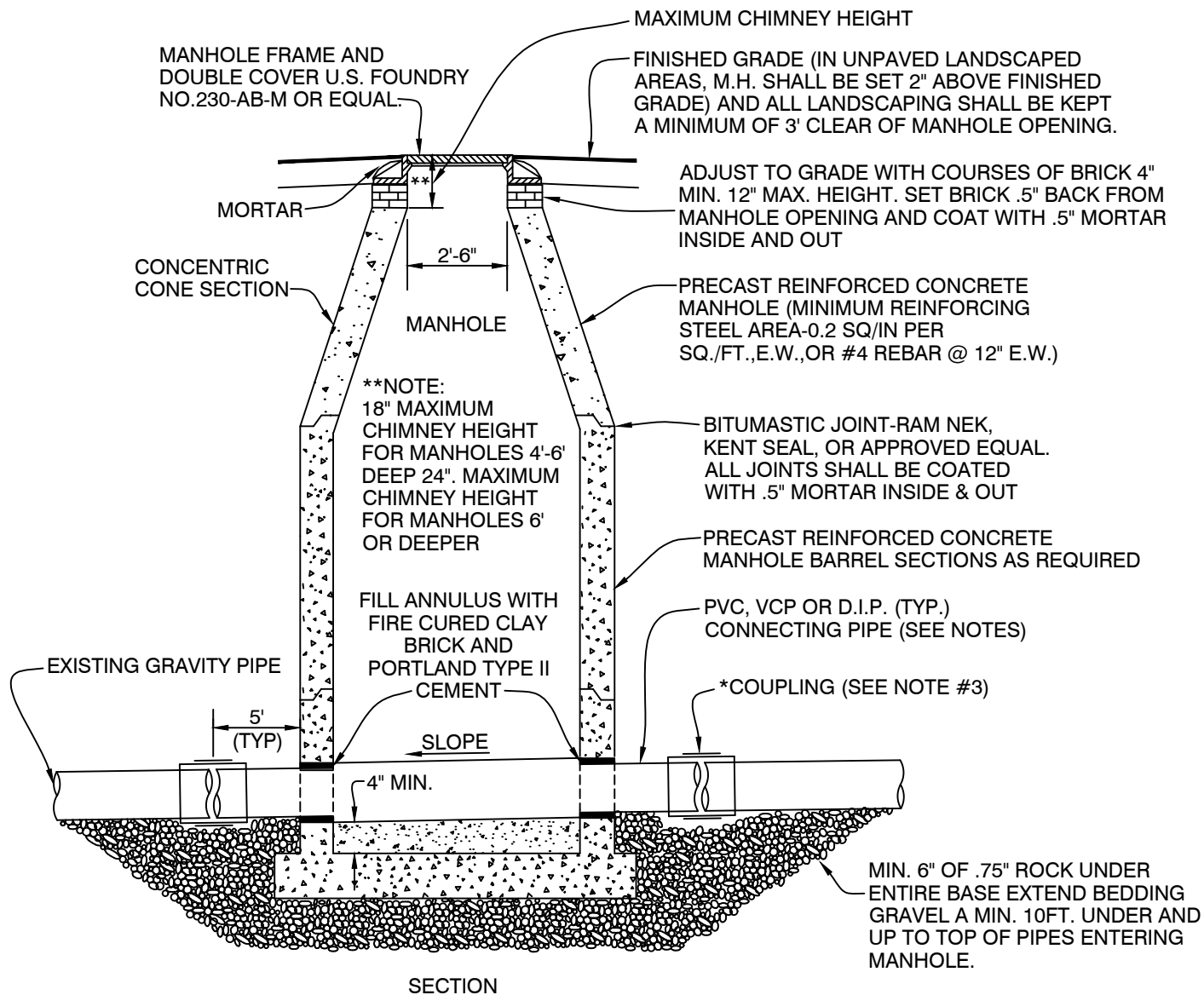
ALL MANHOLES 14' OR MORE FROM RIM
TO LOWEST INVERT, SHALL RECEIVE
A MINIMUM 0.5" THICK COATING OF
SEWPERCOAT OR APPROVED EQUAL.

N.T.S.

REVISION:
APRIL, 2012

DOGHOUSE MANHOLE INSTALLATION INTO AN EXISTING GRAVITY SEWER LINE DETAIL

SD-15



NOTES:

1. WHEN EXISTING GRAVITY PIPE IS VCP OR SDR-35 PVC, SDR-26 WILL BE USED TO MAKE CONNECTION. WHEN PIPE IS C-900, DIP OR SDR-26, USE SIMILAR PIPE TO RECONNECT.
2. EXISTING SEWAGE FLOWS SHALL BE BY-PASSED BY PUMPING BETWEEN CLOSEST AVAILABLE MANHOLES.
3. *WHEN EXISTING PIPE IS D.I.P., USE AN APPROVED C-900 COUPLING, WHEN EXISTING PIPE IS V.C.P., USE A FERNCO COUPLING. W/ COPPER WIRE WRAPPED AROUND PIPE AT BOTH ENDS OF FERNCO COUPLING.
4. WHEN THE MAIN LINE IS PVC, A DISTRICT APPROVED HEAVY AGGREGATE COATED PVC M.H. ADAPTER (HARCO OR EQUAL) OR FERNCO M.H. ADAPTER SHALL BE USED.
5. ALL MANHOLES 14' OR MORE FROM RIM TO LOWEST INVERT, SHALL RECEIVE A MINIMUM 0.5" THICK COATING OF SEWPERCOAT OR APPROVED EQUAL.

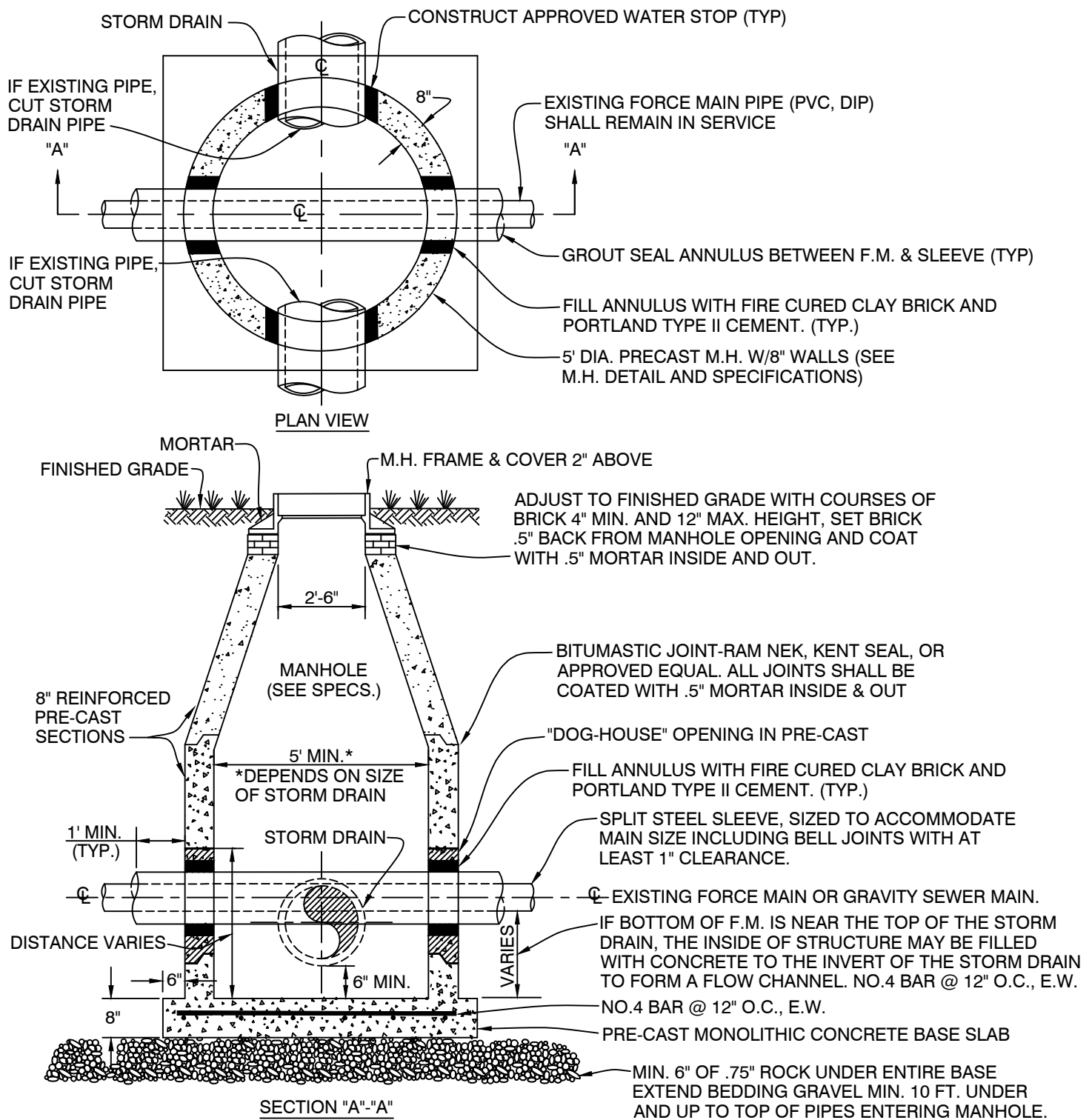
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
APRIL, 2012

SEWER MANHOLE INSTALLATION INTO AN EXISTING GRAVITY SEWER LINE DETAIL

SD-16



WHERE FORCE MAIN SERVICE CANNOT BE SHUT DOWN

LOXAHATCHEE RIVER DISTRICT

SEWER MAIN / STORM DRAIN CONFLICT STRUCTURE DETAIL

SD-17

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)										
TYPE	PIPE SIZE									
	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"
90° BEND	18	24	31	38	43	55	65	75	88	100
45° BEND	8	10	13	15	18	23	26	31	38	43
22-1/2° BEND	4	5	6	8	9	11	13	15	18	20
11-1/4° BEND	2	3	4	5	6	8	9	10	11	13
PLUG OR BRANCH OF TEE	38	50	65	79	90	117	139	163	194	223
VALVE	19	25	32	40	45	59	70	82	98	112
REDUCER	VARIES BY SIZE; TO BE DETERMINED BY THE DESIGN ENGINEER									

NOTES:

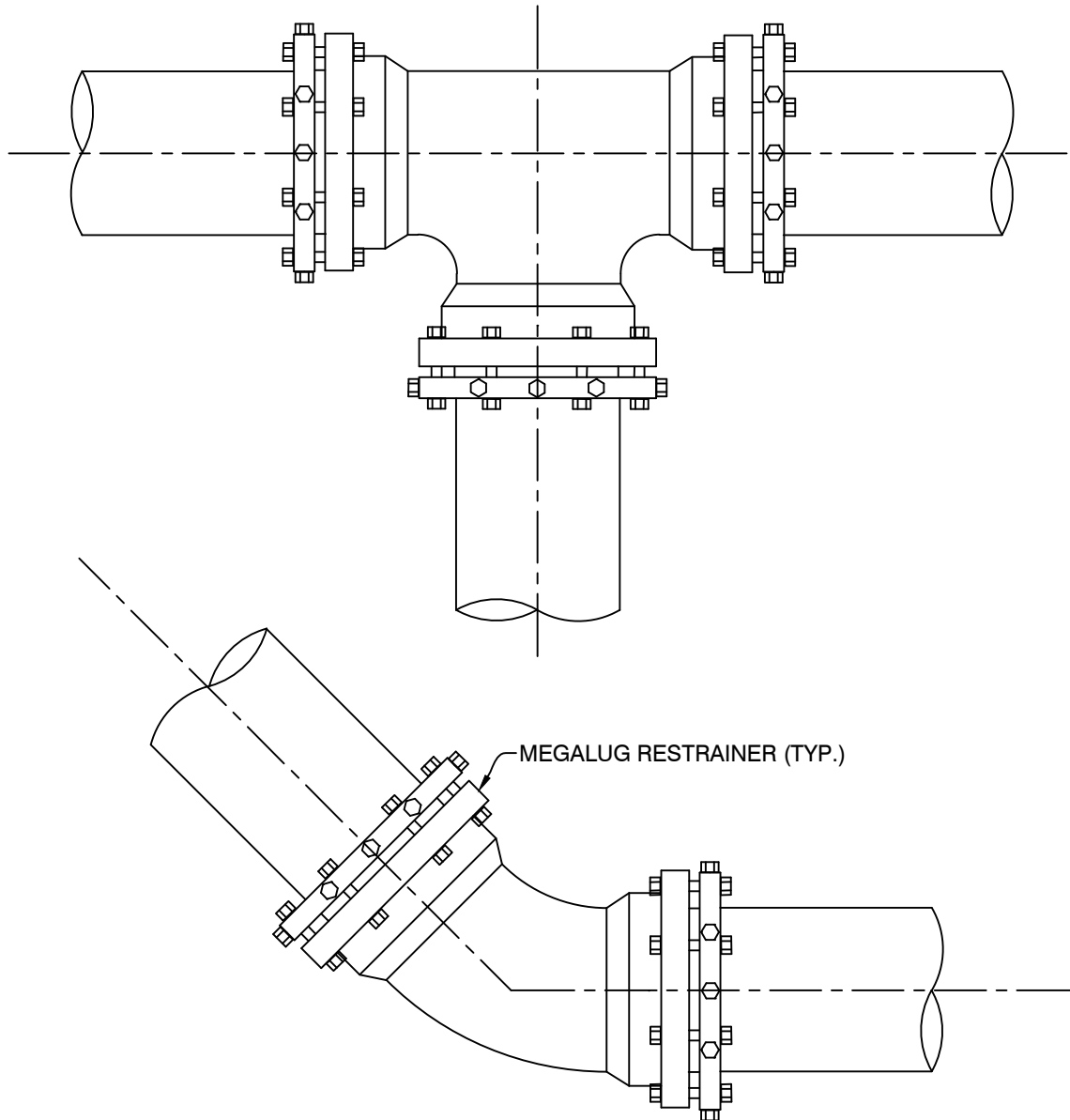
1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL INLINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW:

WORKING PRESSURE: 100 PSI
 SOIL DESIGNATION: SM (SAND SILT)
 LAYING CONDITIONS: 3
 DEPTH OF COVER: 3 FT
 SAFETY FACTOR: 1.5
 CONVERSION FACTOR FOR PVC PIPE: 1.25

THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.

LOXAHATCHEE RIVER DISTRICT

N.T.S.	FORCE MAIN THRUST RESTRAINT CHART	SD-18
REVISION: APRIL, 2012		



NOTES:

1. RETAINER GLANDS FOR PVC PIPE OR DUCTILE IRON PIPE SHALL BE USED AT BEND'S OR TEE'S; RETAINER GLANDS SHALL BE MANUFACTURED BY UNI-FLANGE CORP., OR "MEGALUG" BY EBAA IRON SALES INC., OR DISTRICT APPROVED EQUAL.
2. THE NUMBER OF JOINTS RESTRAINED EACH SIDE OF ANY FITTING OR VALVE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATION.
3. ALL BEND'S & TEE'S SHALL HAVE AN EMS INSTALLED.

LOXAHATCHEE RIVER DISTRICT

N.T.S.

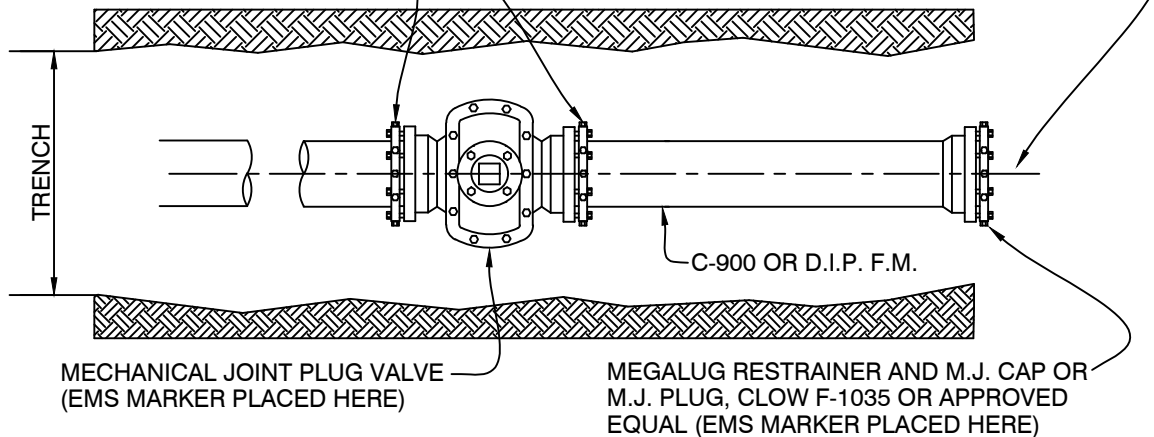
REVISION:
APRIL, 2012

FORCE MAIN THRUST RESTRAINT DETAIL

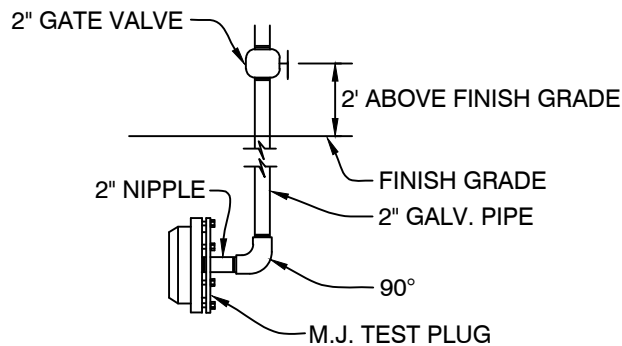
SD-19

MEGALUG RESTRAINT BY EBAA IRON
IN ACCORDANCE WITH
MANUFACTURER'S SPECIFICATIONS.

*IF TEST BLOWOFF USED IT WILL BE REMOVED PRIOR
TO FINAL, M.J. PLUG INSTALLED OR 2" BRASS PLUG
INSTALLED AND LEFT IN CLOSED POSITION.



PLAN



TEST BLOWOFF

NOTE:
ALL JOINTS WILL BE RESTRAINED BY "MEG-A-LUG" RESTRAINERS
AS MANUFACTURED BY EBAA IRON. THE NUMBER OF JOINTS TO BE
RESTRAINED SHALL BE BASED ON MANUFACTURER'S
RECOMMENDATIONS FOR APPLICABLE TEST PRESSURE RATINGS.

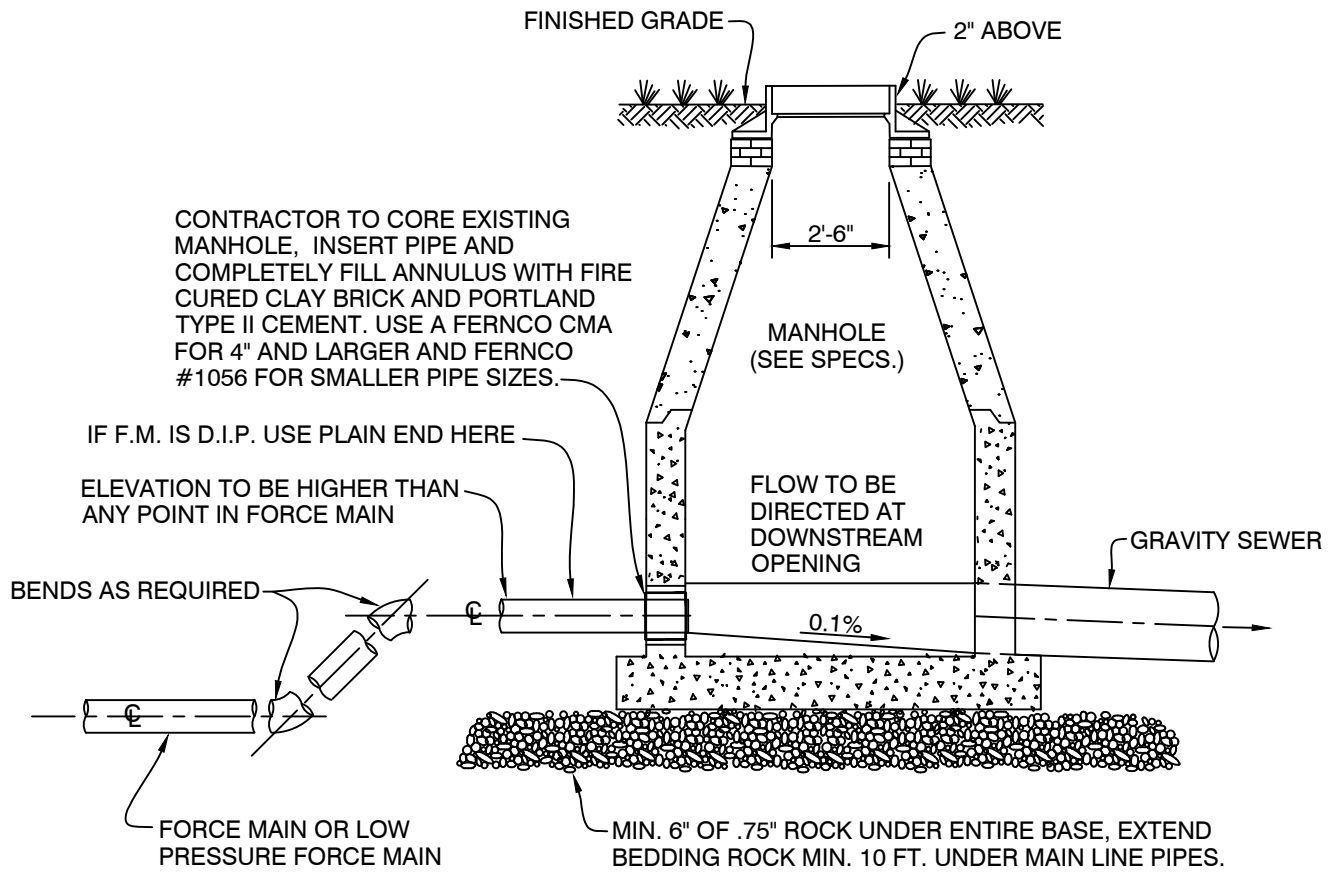
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
APRIL, 2012

FORCE MAIN TERMINAL END DETAIL

SD-20



NOTES:

1. WHEN ELEVATION OF FORCE MAIN AT MANHOLE IS HIGHEST POINT OF FORCE MAIN, BENDS CAN BE ELIMINATED.

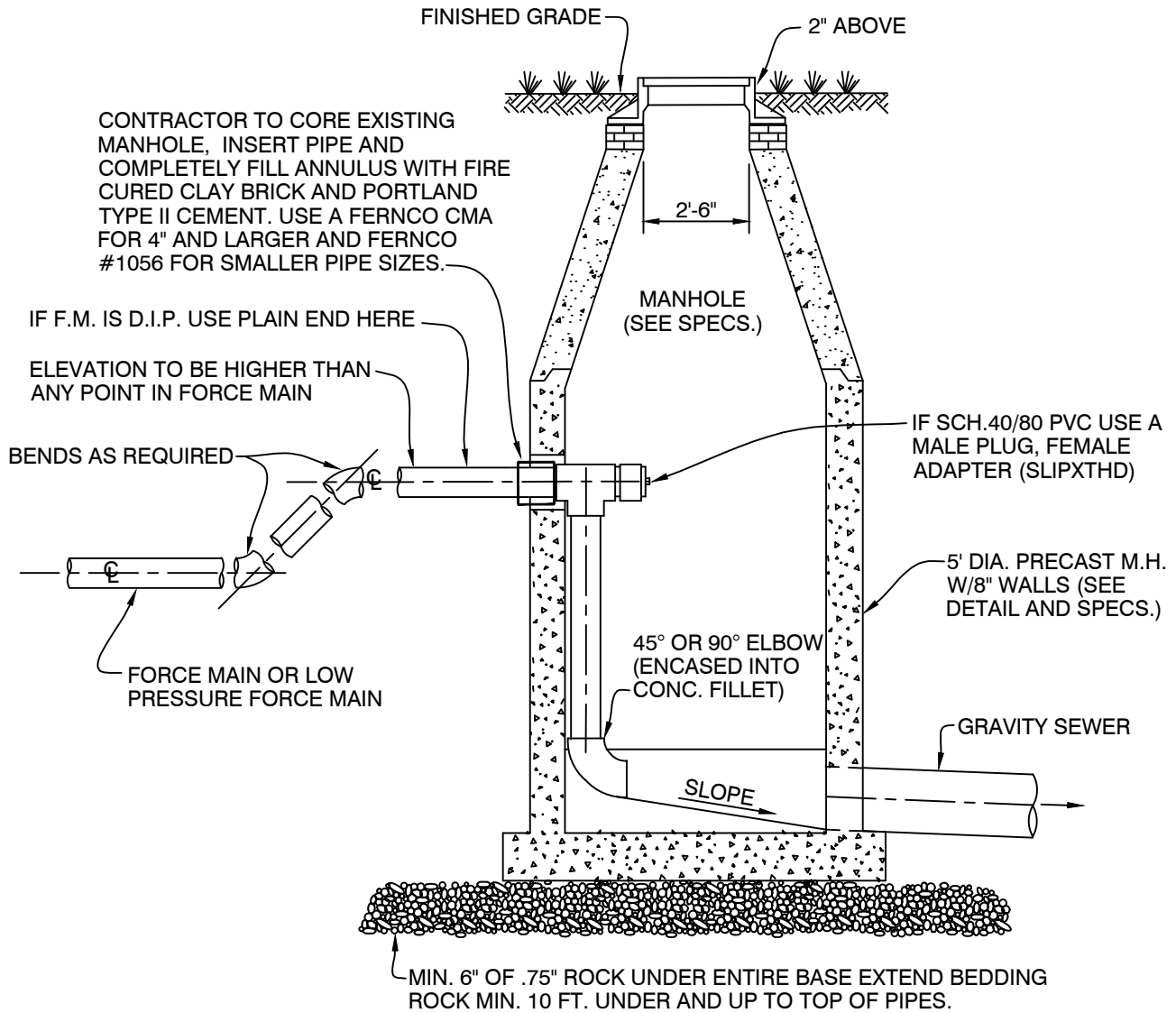
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
APRIL, 2012

FORCE MAIN INTO SHALLOW MANHOLE DETAIL

SD-21



NOTES:

1. ALL DROP PIPING INCLUDING TEE SHALL BE D.I.P., PVC (C-900), OR SCH 40/80 PVC.
2. MANHOLE SHALL RECEIVE A MINIMUM 0.5" THICK COATING OF SEWPERCOAT OR APPROVED EQUAL.

LOXAHATCHEE RIVER DISTRICT

N.T.S.

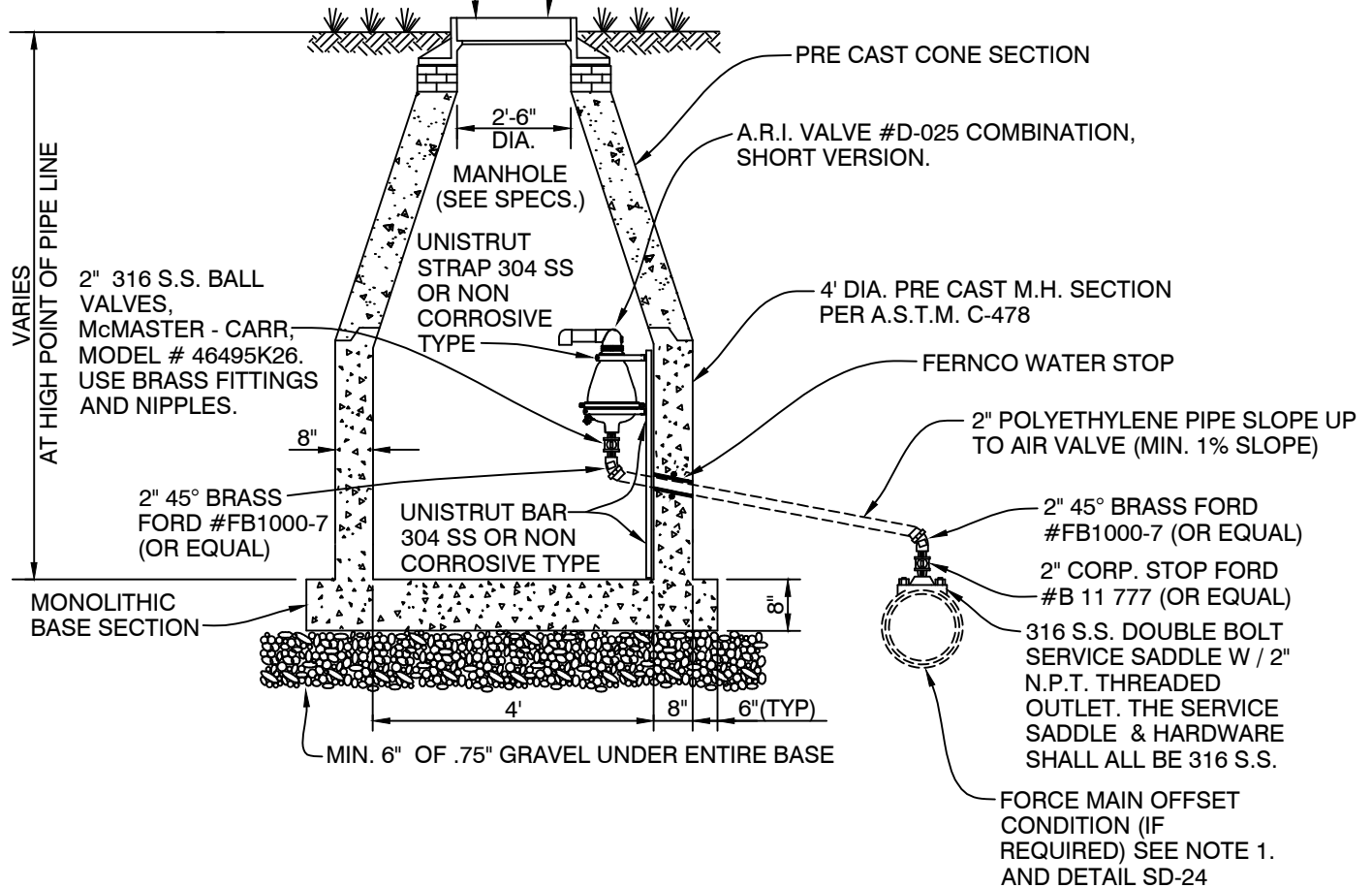
REVISION:
APRIL, 2012

FORCE MAIN INTO DEEP MANHOLE DETAIL

SD-22

M.H. COVER TO BE PLACED 2" ABOVE
FINISHED GRADE IN LANDSCAPED AREAS

FRAME AND DOUBLE COVER U.S.
FOUNDRY #230-AB-M OR EQUAL



NOTES:

1. FOR OFFSET CONDITION, AIR VALVE IN MANHOLE STRUCTURE SHALL BE ADEQUATELY SUPPORTED ON S.S. UNISTRUT BAR ANCHORED TO THE CONCRETE WALLS OF MANHOLE AND/OR ANCHORED TO THE CONCRETE ON MANHOLE FLOOR.
2. UNISTRUT BARS SHALL BE 304 S.S. OR NON CORROSIVE TYPE, STRAPS ANCHORING A.R.V. TO UNISTRUT TO BE OF SAME TYPE MATERIAL.

LOXAHATCHEE RIVER DISTRICT

N.T.S.

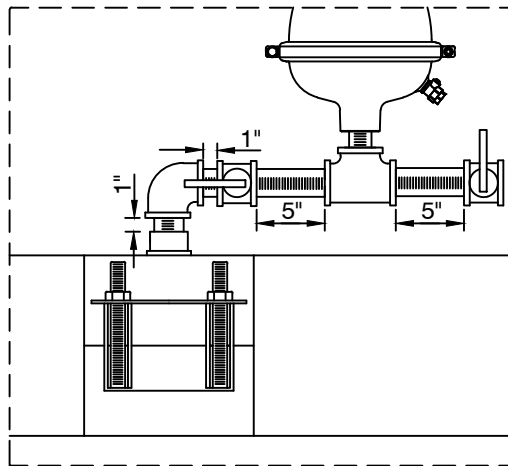
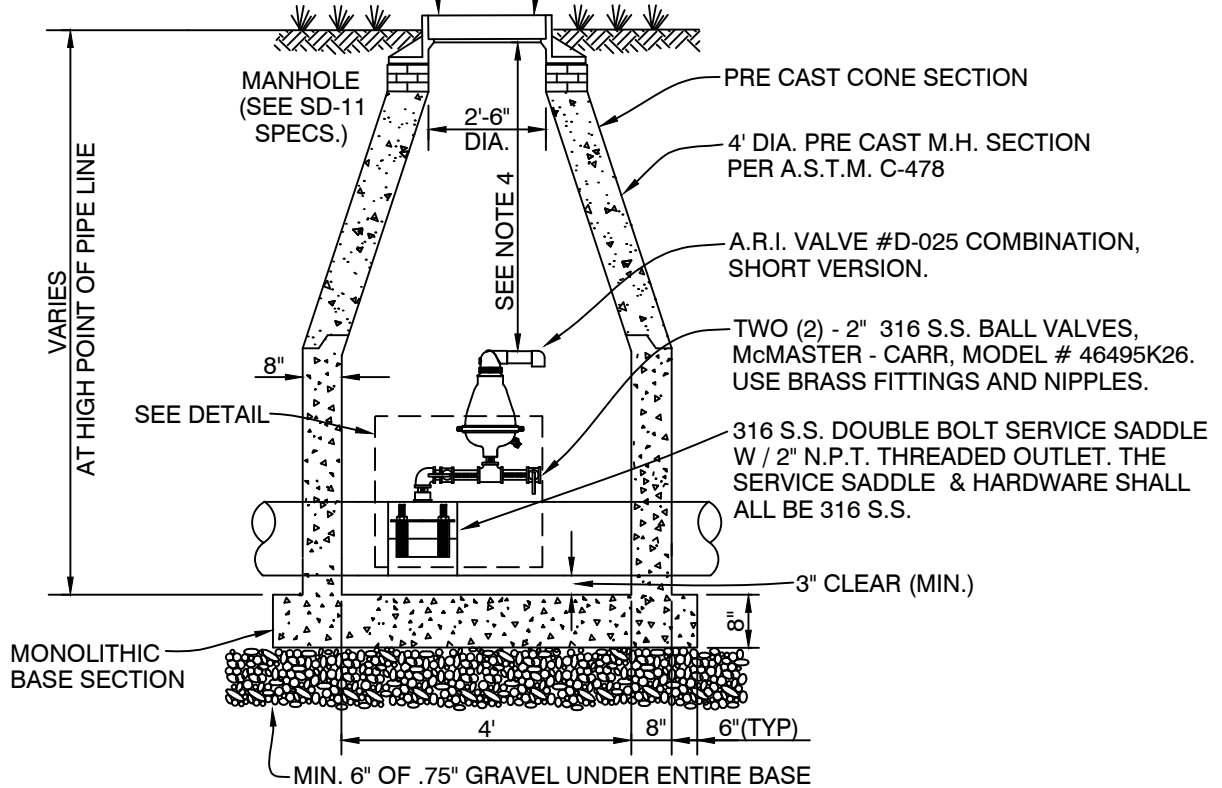
REVISION:
APRIL, 2012

**AUTOMATIC AIR RELEASE VALVE
OFFSET FORCE MAIN CONDITION DETAIL**

SD-23

M.H. COVER TO BE PLACED 2" ABOVE
FINISHED GRADE IN LANDSCAPED AREAS

FRAME AND DOUBLE COVER U.S.
FOUNDRY #230-AB-M OR EQUAL



DETAIL

NOTES:

1. IF OFFSET CONDITION IS UTILIZED, AIR VALVE IN MANHOLE STRUCTURE SHALL BE ADEQUATELY SUPPORTED ON A 4" THICK CONCRETE PAD ON M.H. FLOOR.
2. CENTER ARV UNDER MH OPENING.
3. IN SITUATIONS WHERE A FORCE MAIN CROSSES A CANAL OR IS ATTACHED TO A BRIDGE, WHERE A STRUCTURE IS NOT NECESSARY, AN A.R.V TYPE A.R.I. MODEL #D-025 SHALL BE USED.
4. TOP OF AIR RELEASE VALVES SHALL BE NO LESS THAN 12" FROM INSIDE MANHOLE RIM ELEVATION AND NO GREATER THAN 24".

LOXAHATCHEE RIVER DISTRICT

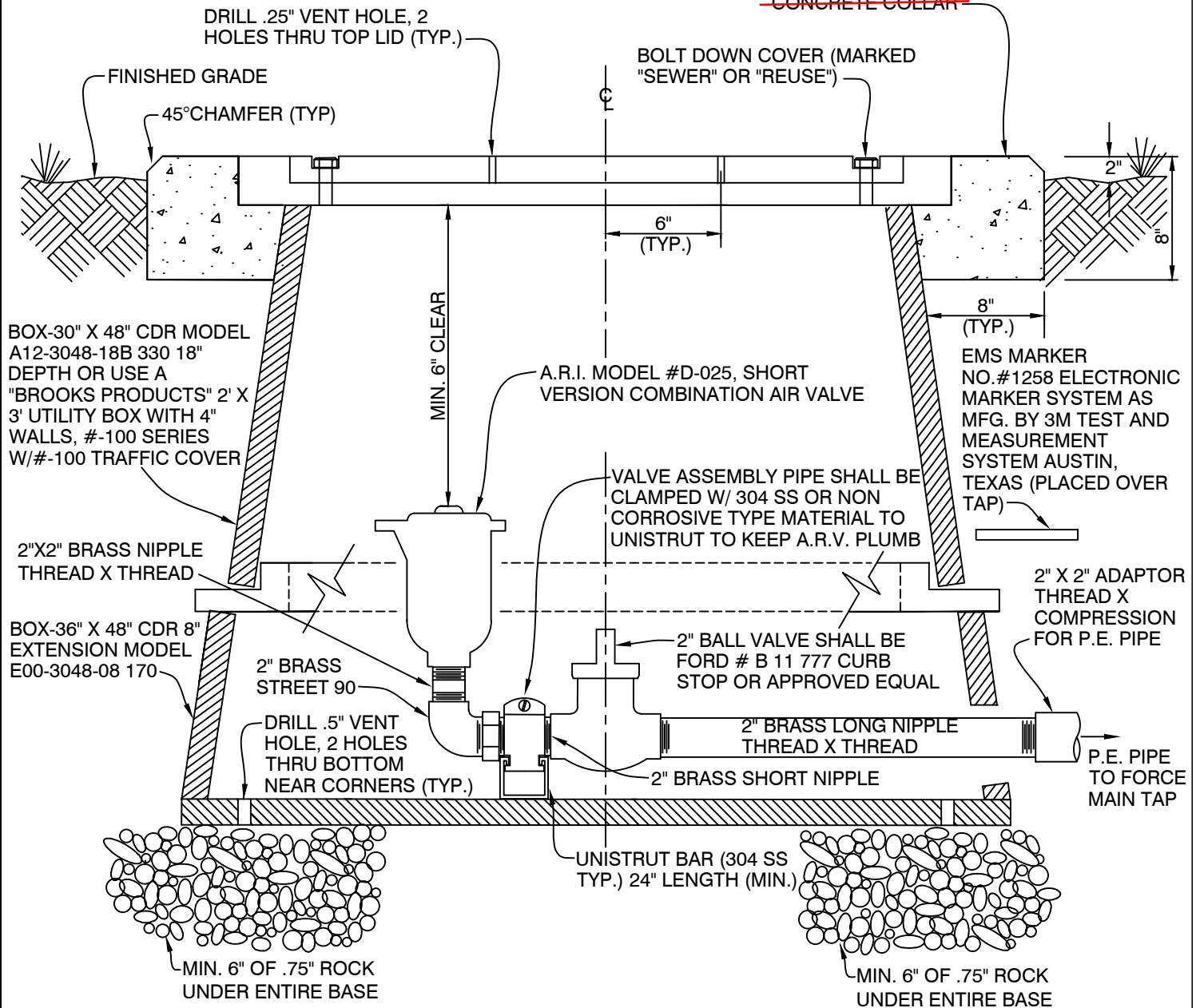
N.T.S.

REVISION:
APRIL, 2012

AUTOMATIC AIR RELEASE VALVE DETAIL

SD-24

CONCRETE COLLAR W/ #5 BAR
MID-DEPTH FULL PERIMETER.
OVERLAP BAR ENDS MIN. 6 INCHES.

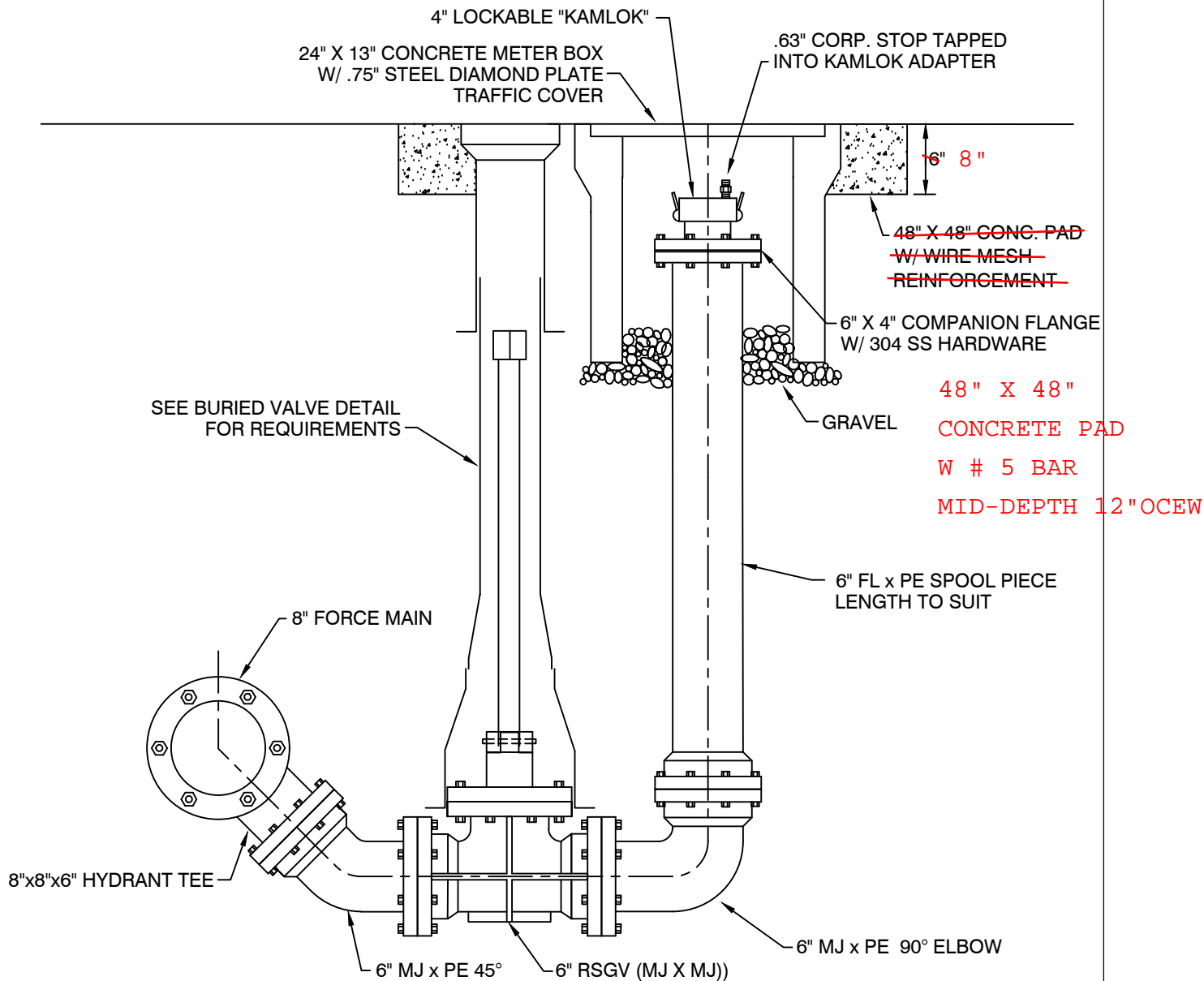


NOTES:

1. THIS DETAIL TO BE USED ONLY WITH DISTRICTS' PRIOR APPROVAL.
2. FORCE MAIN TAP SHALL BE DONE WITH 2" DOUBLE STRAP SERVICE SADDLE. BODY, STRAP & HARDWARE SHALL BE 316 S.S. THE ISOLATION VALVE AT THE TAP SHALL BE A 2" FORD CORP STOP # B 11 777.

LOXAHATCHEE RIVER DISTRICT

N.T.S.	TYPICAL FORCE MAIN AIR RELEASE VALVE DETAIL ALTERNATE OFFSET CONFIGURATION	SD-25
REVISION: APRIL, 2012		



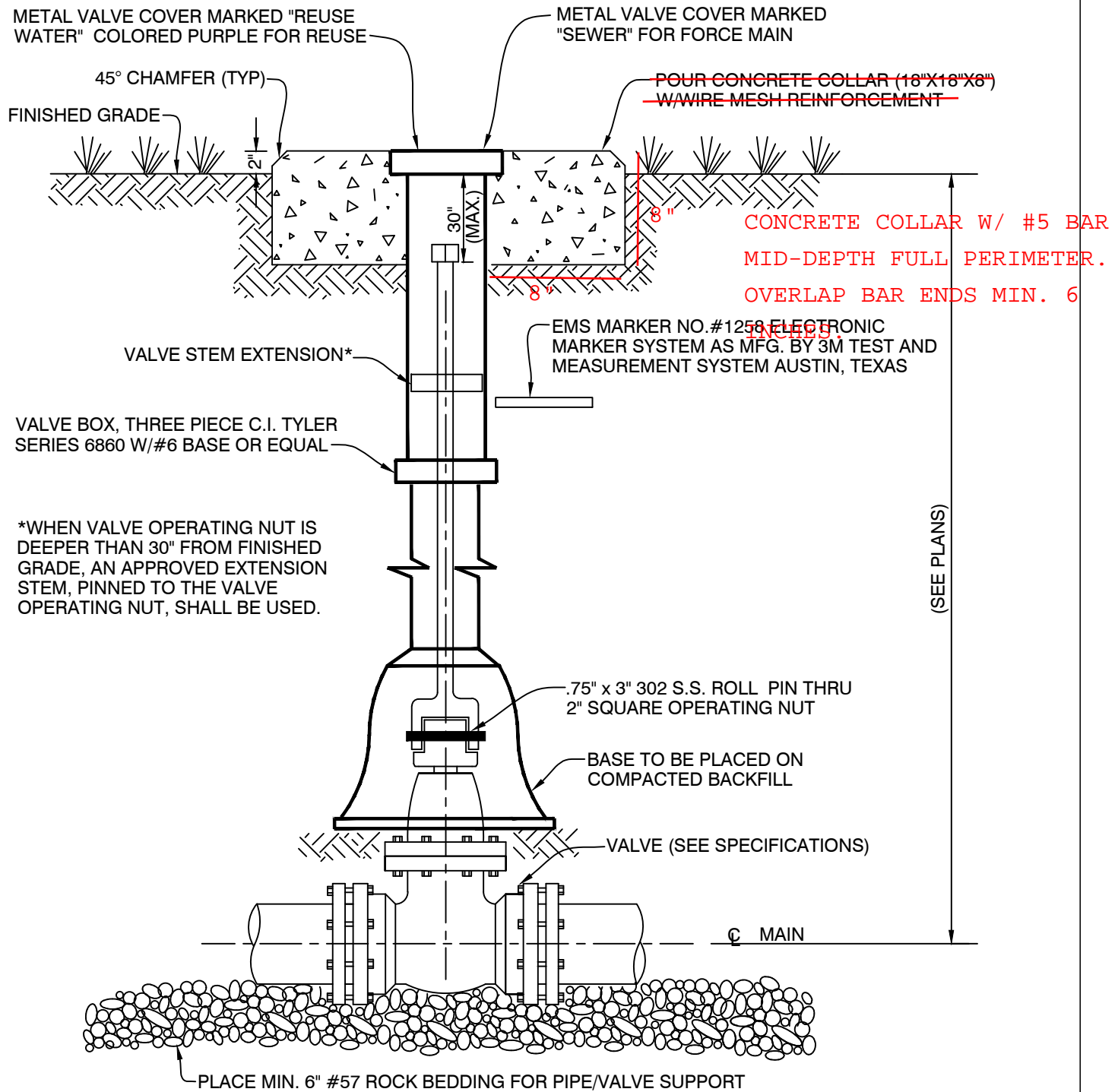
LOXAHATCHEE RIVER DISTRICT

N.T.S.

REVISION:
JUNE, 2014

FORCE MAIN DRAIN DETAIL

SD-26



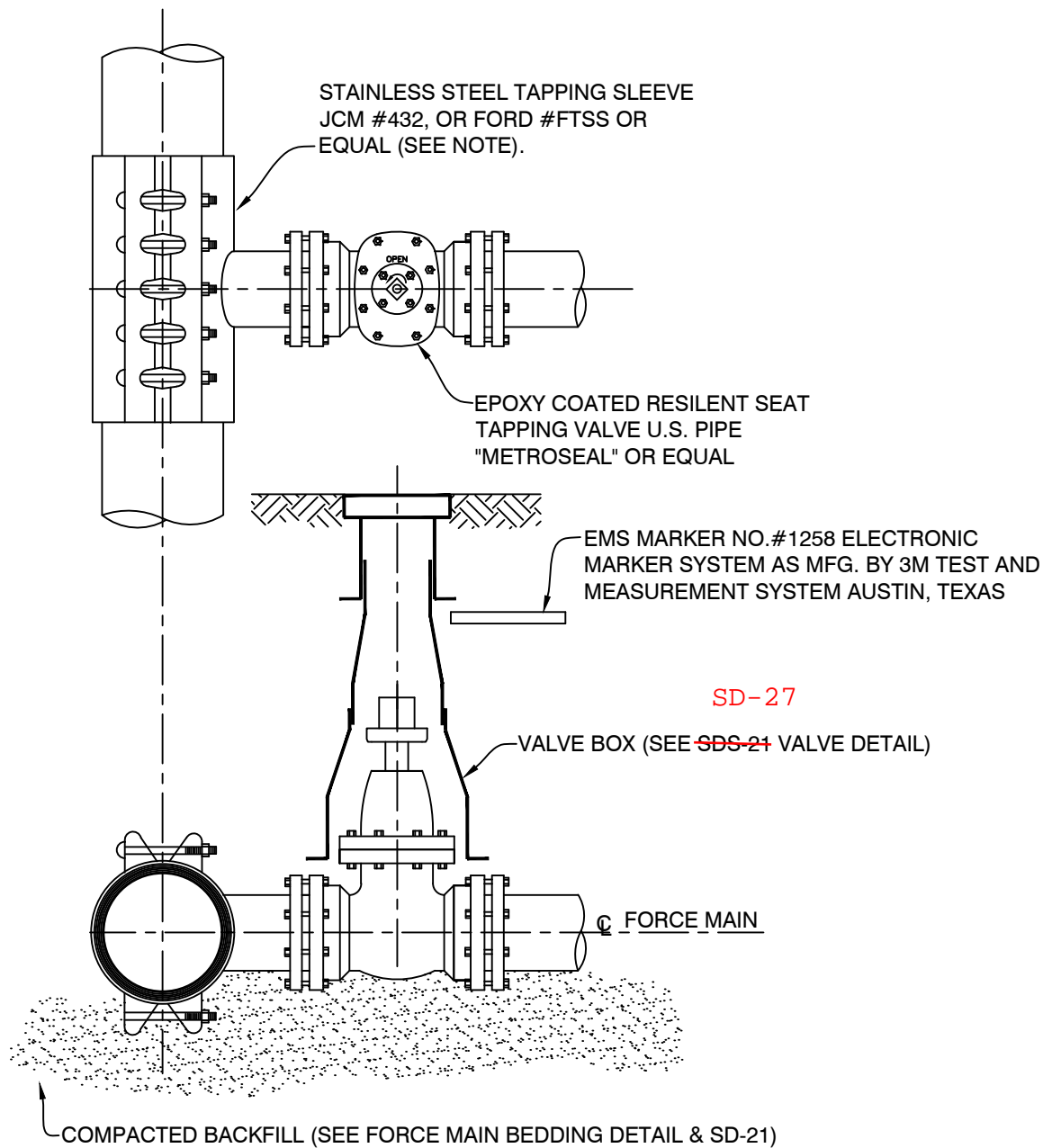
FORCE MAIN OR REUSE WATER SYSTEM

LOXAHATCHEE RIVER DISTRICT

N.T.S.
REVISION:
APRIL, 2012

BURIED VALVE DETAIL

SD-27



NOTE:
ALL SLEEVES SHALL BE PRESSURE TESTED.

LOXAHATCHEE RIVER DISTRICT

N.T.S.
REVISION:
APRIL, 2012

TAPPING FORCE MAIN DETAIL

SD-28

THE FOLLOWING SHALL BE USED AS A GUIDE FOR SUBMITTAL OF RECORD DRAWINGS TO THE LOXAHATCHEE RIVER DISTRICT

1. TWO (2) SETS OF PRINTS SHALL BE SUBMITTED TO THE DISTRICT FOR REVIEW 48 HOURS PRIOR TO REQUESTING INSPECTIONS SUCH AS, FINAL INSPECTION, PRESSURE TESTS, SANITARY SEWER LAMPING OR ANY OTHER ELEMENT OF THE SYSTEM WHICH IS DETERMINED BY THE DISTRICT TO REQUIRE CLARIFICATION.
2. THE DRAWINGS WILL BE REVIEWED BY THE DISTRICT FOR DEFICIENCIES. DEFICIENCIES WILL BE INDICATED ON ONE (1) SET OF PRINTS WHICH WILL BE RETURNED TO THE E.O.R. OR CONTRACTOR FOR NECESSARY CORRECTIVE ACTION.
3. UPON CORRECTION, TWO (2) SETS OF PRINTS (SIGNED/SEALED BY A FLORIDA LICENSED SURVEYOR) SHALL BE SUBMITTED.
4. NO DISCLAIMERS ON DRAWINGS WILL BE ACCEPTED.
5. UPON FINAL SUBMITTAL OF RECORD DRAWINGS, AN AUTOCAD VER. 2009 OR LATER AND ADOBE .PDF (24"X36") ELECTRONIC DATA FILE SHALL BE FURNISHED ON A CD-R DISK TO THE DISTRICT. ONLY ONE CAD FILE WITH ALL SHEETS OF RECORD DRAWINGS ALLOWED.
6. ALL SEWER ITEMS SHALL BE CATEGORIZED AND ASSIGNED TO THE DRAWING LAYERS SUCH AS: AB-MANHOLES, AB-FORCEMAIN, AB-VALVE, AB-GRAVITY MAIN, ETC.
7. REDRAW ALL SEWER LINES AND INFRASTRUCTURE ON RECORD DRAWINGS AS CONSTRUCTED HORIZONTALLY & VERTICALLY. USING ORIGINAL DESIGN LINEWORK & ONLY UPDATING THE CORRESPONDING TEXT CALLOUTS WILL NOT BE ACCEPTED AS RECORD DRAWINGS.

REQUIRED INFORMATION ON RECORD DRAWINGS

GENERAL

1. DRAWINGS ON 24" X 36" BOND PAPER THAT WILL REPRODUCE LEGIBLY.
2. LABEL DRAWINGS "RECORD DRAWINGS" WITH DATE. COMPLETE TITLE BLOCK WITH CURRENT FILE NAME.
3. DRAWINGS SHALL BE SIGNED / SEALED BY A FLORIDA LICENSED PROFESSIONAL LAND SURVEYOR.
4. CORRECT STREET/ROAD NAMES AND LOT AND BLOCK NUMBERS.
5. SHOW AS-BUILT CONSTRUCTED SEWER FACILITIES HEAVIED UP, BOLD OR BOXED OUT TO STAND OUT FROM REST OF EACH DRAWING.
6. ALL ITEMS LISTED BELOW MUST BE CORRECTLY GEOREFERENCED WITH NORTHINGS/EASTINGS CLEARLY SHOW. THE AS BUILTS SHALL BE GEOREFERENCED TO THE STATE PLANE COORDINATES IN NAD 83, FLORIDA EAST ZONE, WHILE THE VERTICAL DATUM SHALL BE NGVD 29.

GRAVITY SEWER

1. AS-BUILT DISTANCE OF GRAVITY MAIN FROM CENTER LINE OF ROAD OR EASEMENT RIGHT- OF-WAY LINE, BUILDINGS, OR AS DETERMINED BY THE LOXAHATCHEE RIVER DISTRICT. EXTENSIONS OF AN IMAGINARY LINE WILL NOT BE ACCEPTABLE AS REFERENCED POINTS.
2. TYPE OF MATERIALS INSTALLED - MAINS AND SERVICES.
3. SHOW EACH SEWER SERVICE LATERAL INCLUDING THE CONNECTION TO THE MAIN AND PROVIDE THE NORTHING & EASTING POINTS FOR EACH CLEANOUT & INDICATE CLEANOUT DIAMETER.
4. AS-BUILT LOCATIONS OF MANHOLES WITH A NORTHING & EASTING PROVIDED.
5. AS-BUILT ELEVATIONS, RIM ELEVATION, EACH INVERT AND PIPE SLOPE.
6. UPDATE LIFT STATION DETAILS/ELEVATIONS INCLUDING START UP DATA.
7. LIFT STATION AND UTILITY EASEMENTS, INCLUDING LOCATION OF F.P.&L. SERVICE TO CONTROL PANEL.

PRESSURE PIPE

1. AS-BUILT DISTANCE OF MAINS AT 100' INTERVALS FROM CENTER LINE OF ROAD, EASEMENT, RIGHT-OF-WAY LINE, BUILDINGS, SEWER MAINS OR AS DETERMINED BY THE LOXAHATCHEE RIVER DISTRICT. EXTENSIONS OF AN IMAGINARY LINE WILL NOT BE ACCEPTABLE AS REFERENCED POINTS.
2. SHOW ELEVATIONS, NORTHING/EASTING OF EACH VALVE, FITTING, AIR RELEASE VALVE, SERVICE LINE, TAP, ETC., AND RADIAL DIMENSIONS (TIES) FROM A NEARBY PERMANENT OBJECT WHERE POSSIBLE. (SEE NOTE NO. 6 IN GENERAL).
3. TYPE OF MATERIALS INSTALLED - PIPE AND APPURTENANCES. INDICATE ALL LOCATIONS OF CHANGE OF MATERIAL INCLUDING JOINT TYPE (M.J., SLIP, RESTRAINED).
4. VALVE TYPE (BUTTERFLY, GATE, PLUG) INCLUDING THE NORTHING & EASTING POINT.
5. AS-BUILT LENGTH OF ALL JACK AND BORE CASINGS INDICATING DISTANCE FROM CENTER LINE OF PAVING TO EACH END OF CASING. THE AS-BUILT INVERT ELEVATION OF EACH END OF CASING, (INCLUDING NORTHING/EASTING) AND AS-BUILT DISTANCE FROM EACH END OF CASING TO LIMITS OF MECHANICAL JOINT PIPE IS ALSO REQUIRED.
6. AS-BUILT ELEVATIONS AT 100' INTERVALS AS WELL AS ANY MAJOR CHANGES IN DIRECTION AND/OR ELEVATION. ELEVATIONS SHOWN AT THESE INTERVALS AND CHANGES MUST SHOW TOP OF PIPE ELEVATION, NORTHING/EASTING AND FINISHED GRADE ELEVATION AT THAT LOCATION. SHOW LOCATION OF EMS MARKERS.
7. UTILITY EASEMENTS SHALL BE CORRECTLY SHOWN AND DIMENSIONED WITH REFERENCED SEWER FACILITY.

LOXAHATCHEE RIVER DISTRICT

RECORD DRAWING SUBMITTAL GUIDE

SD-29

N.T.S.

REVISION:
APRIL, 2012

SEPARATION REQUIREMENTS

62-555.314 F.A.C. AUGUST 28, 2003

1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.
 - A. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
 - B. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
 - C. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.
 - A. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
 - B. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESURE- TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATERMAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
 - C. AT THE UTILITY CROSSING DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

*REQUIRED BY: HRS, STATE OF FLORIDA, PALM BEACH COUNTY PUBLIC HEALTH UNIT

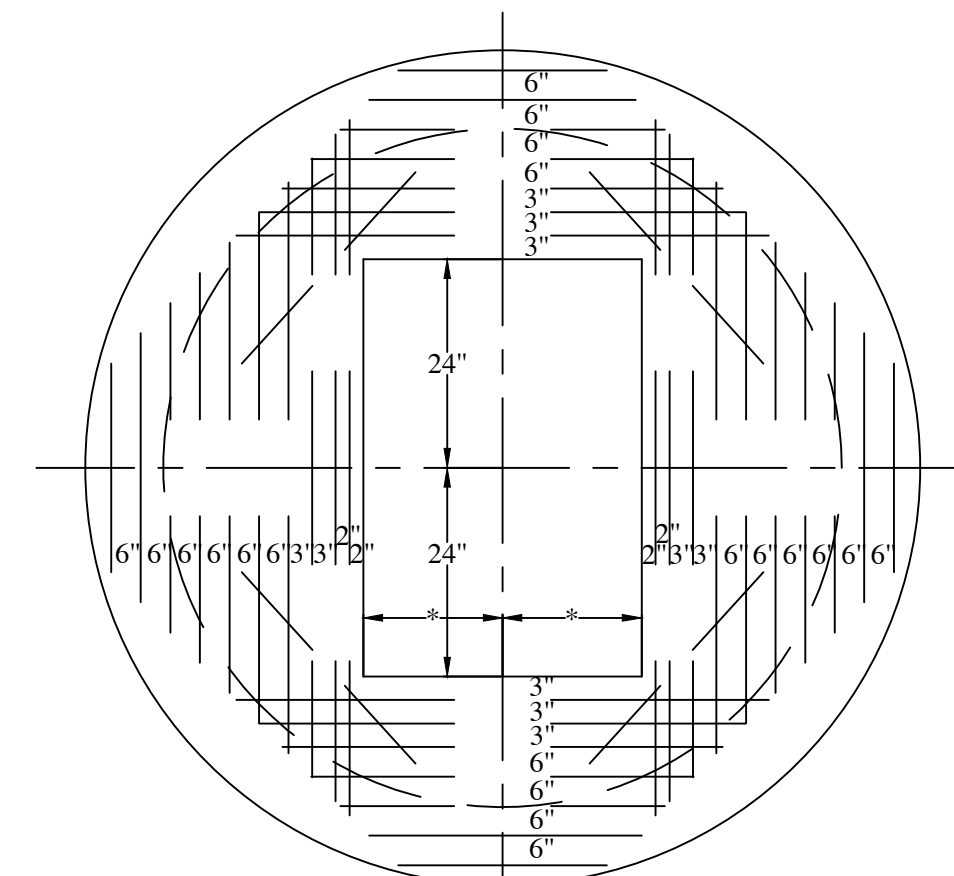
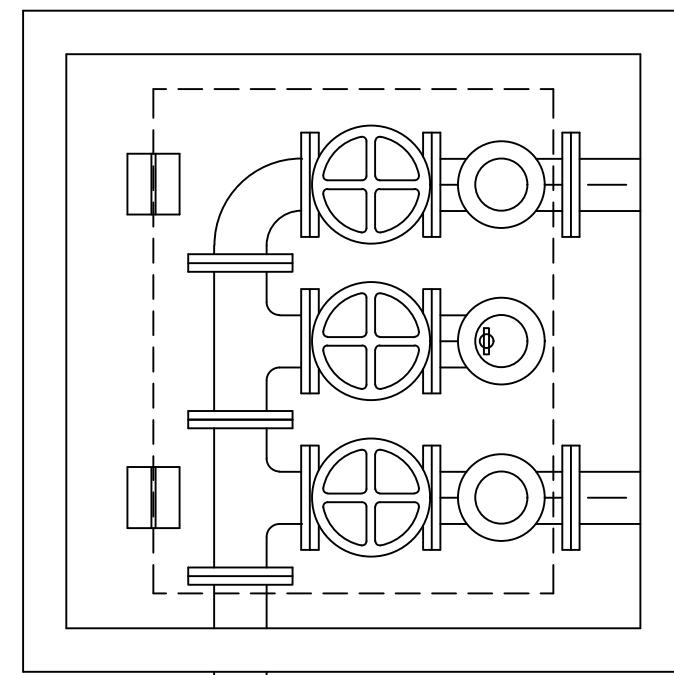
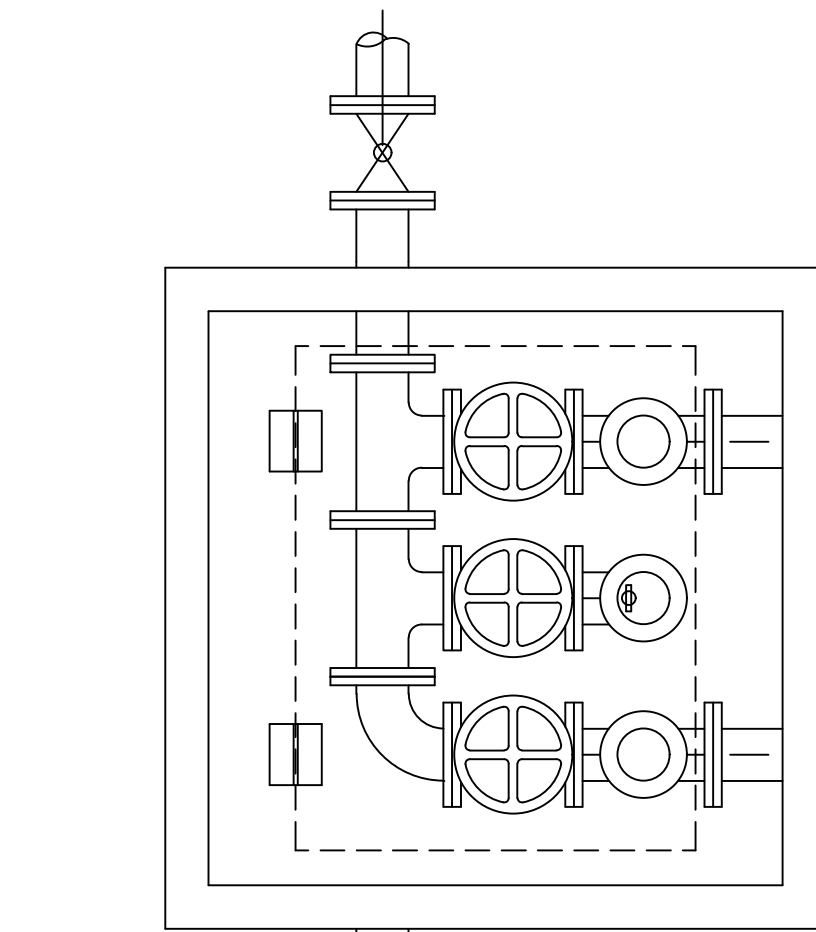
LOXAHATCHEE RIVER DISTRICT

STANDARD WATER AND SEWER SEPARATION STATEMENT

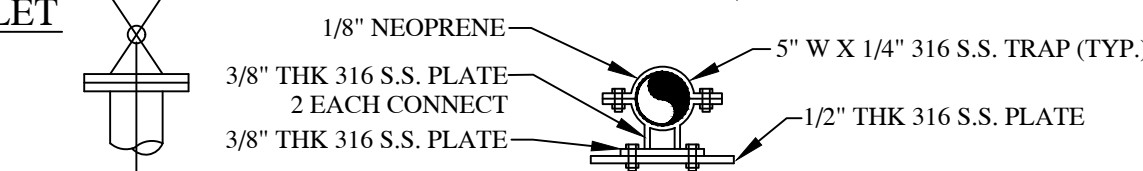
SD-30

N.T.S.

REVISION:
APRIL, 2012

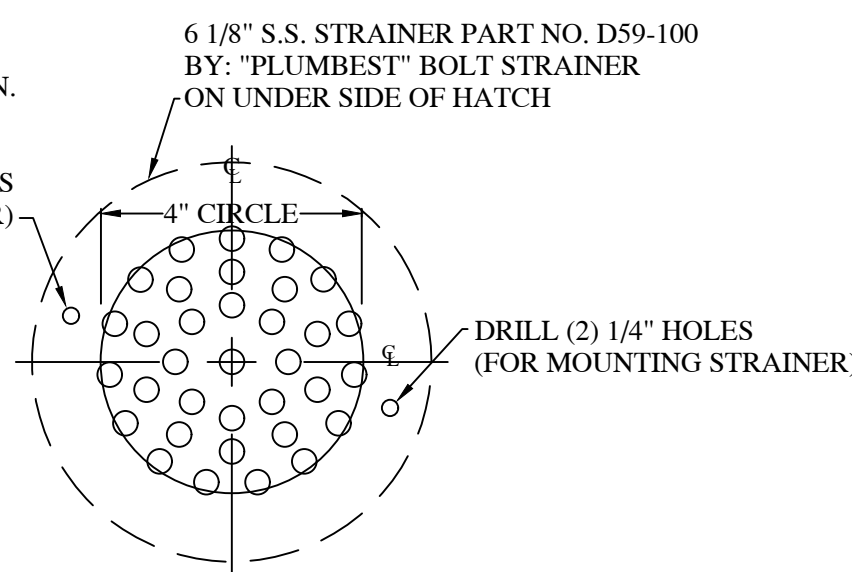


- NOTES:
1. ALL BARS IN TOP SLAB TO BE #5
LOCATION OF OPENING IN TOP SLAB TO
BE VERIFIED BY DESIGN ENGINEER WITH
REQUIREMENT OF PUMP MANUFACTURER.
 - *2. PER PUMP MANUFACTURER RECOMMENDATION



- NOTES:**
1. CONSTRUCT ALL WELDS IN ACCORDANCE WITH AWS D-1.6 STRUCTURAL WELDING CODE
 2. ALL NUTS & BOLTS SHALL BE 1/2" THK 316 S.S.

ANGLE PIPE SUPPORT DETAIL
N.T.S.

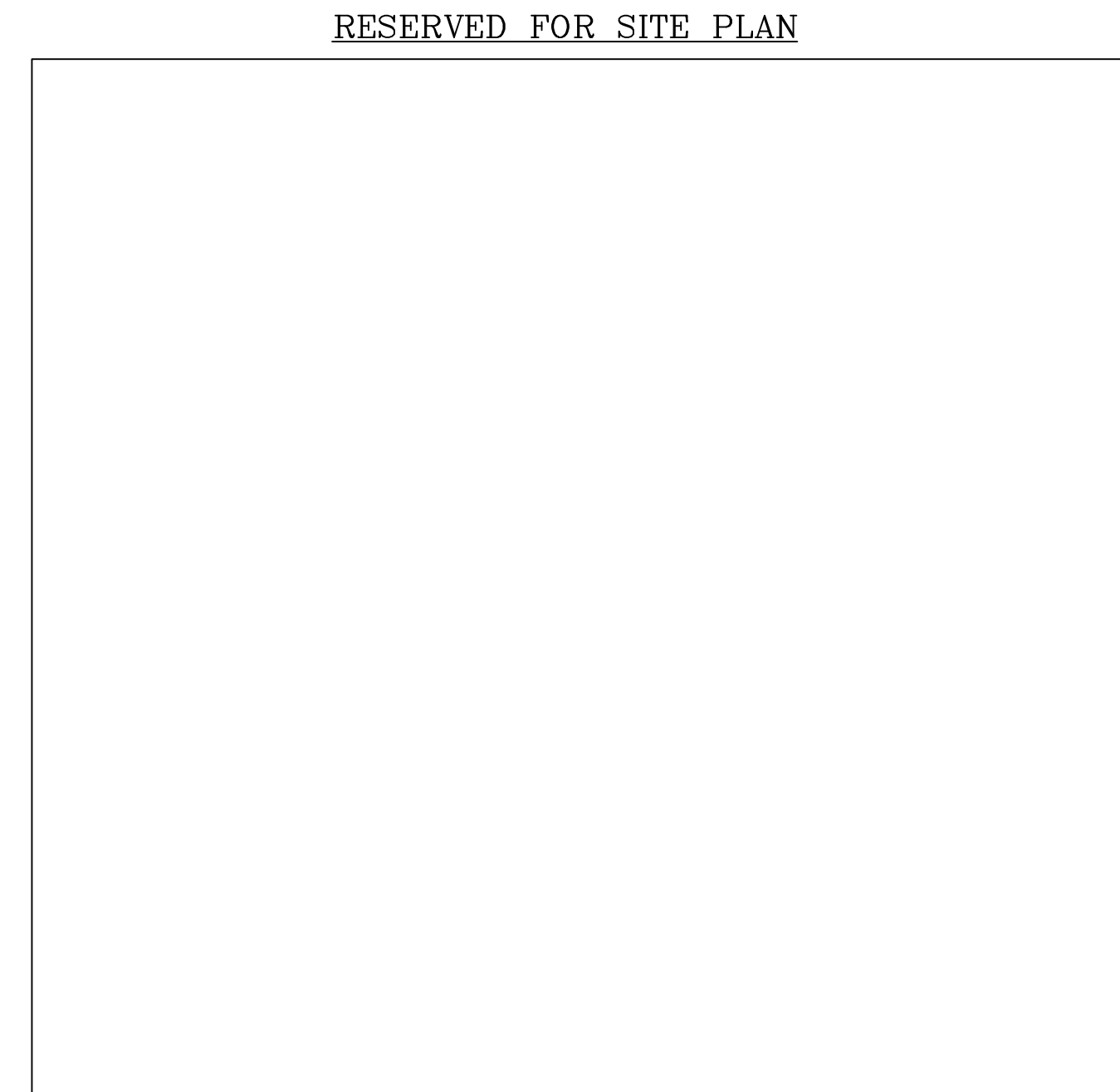
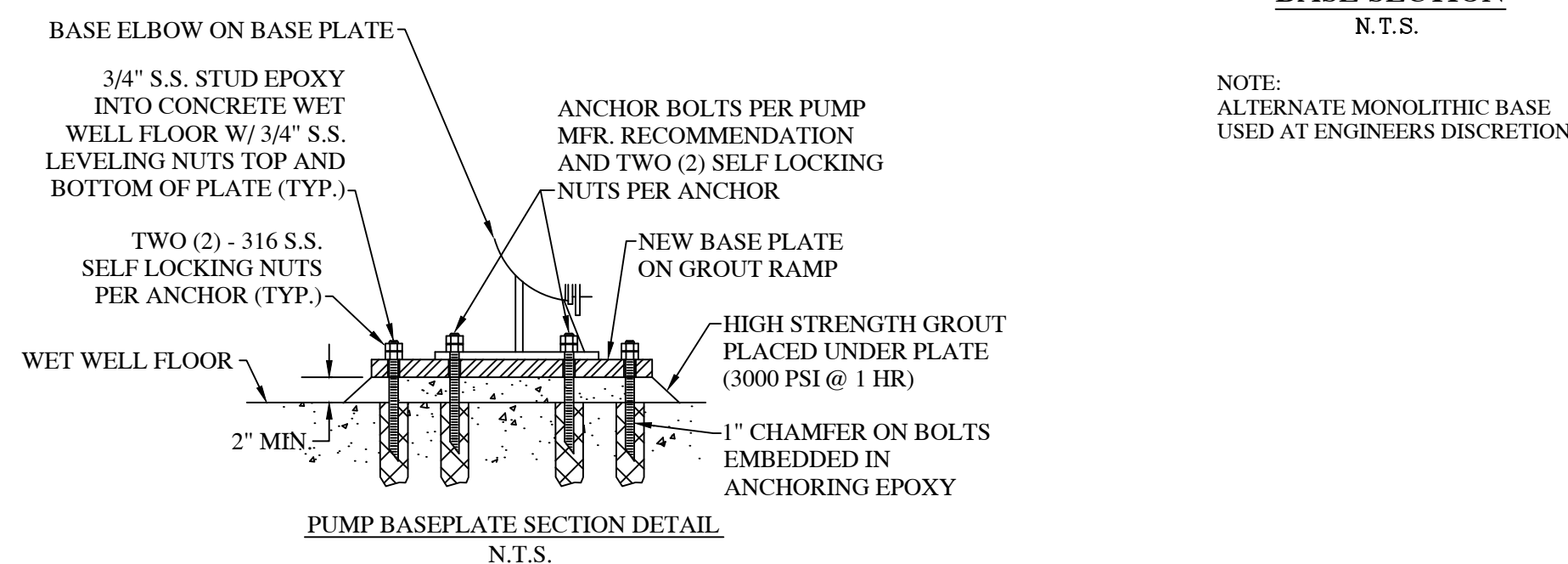
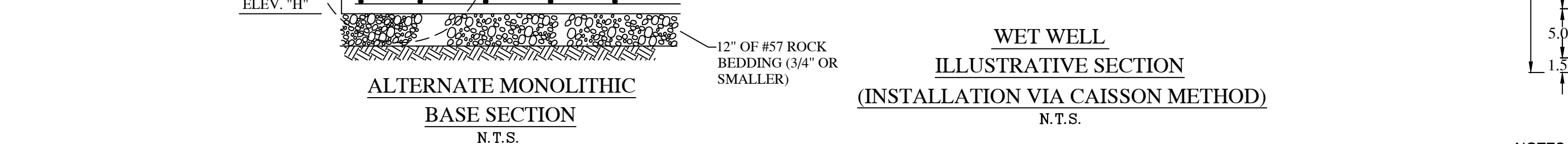
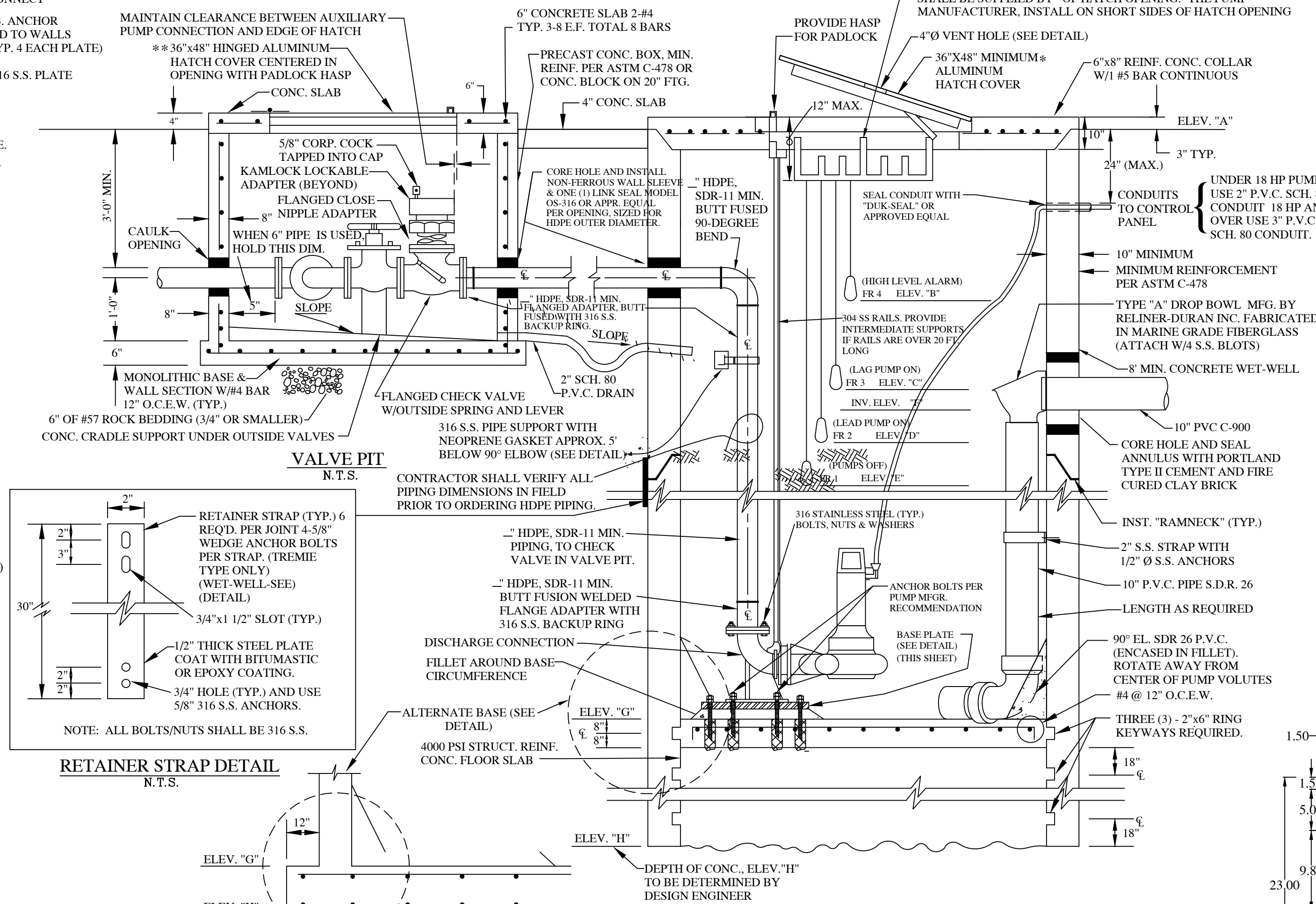
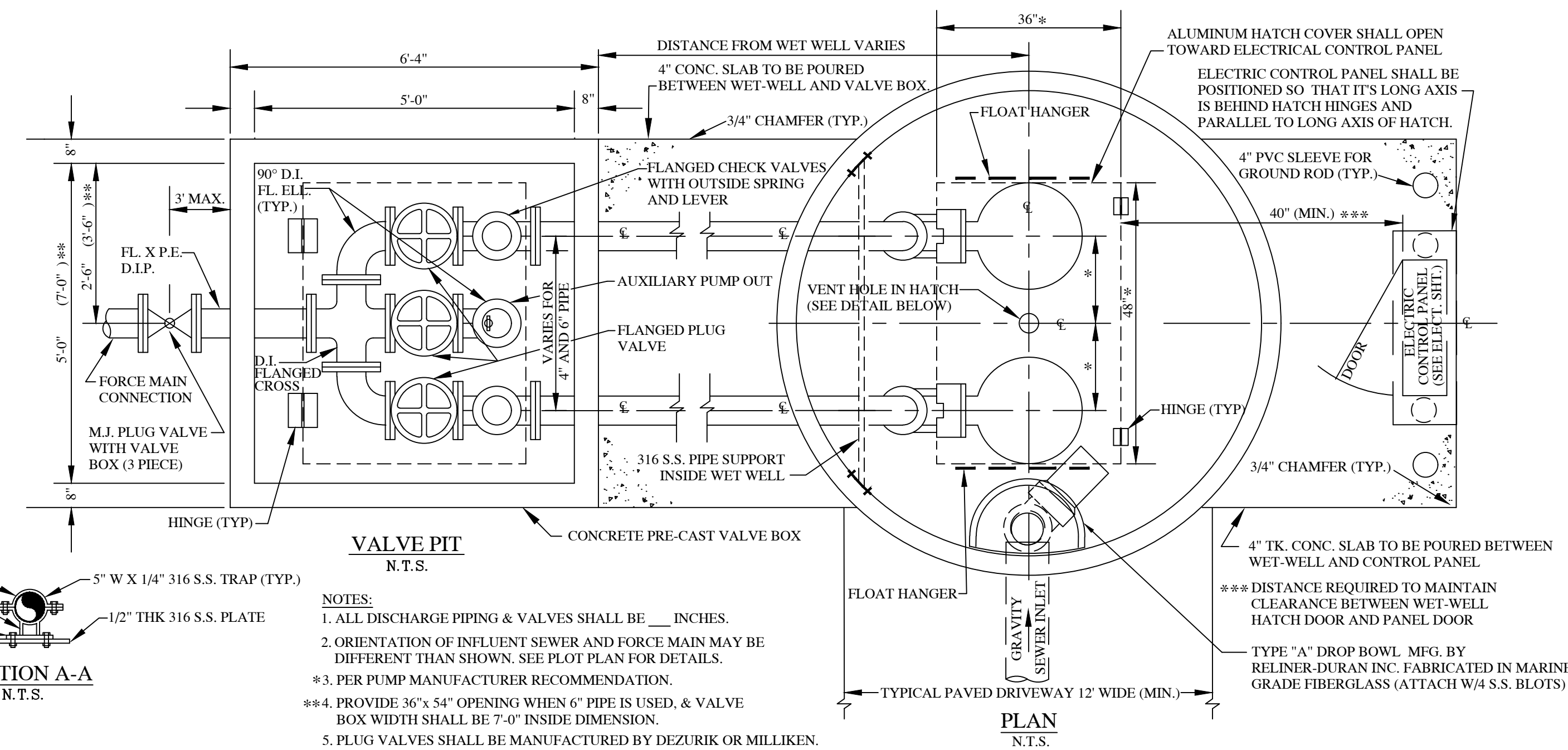


VENT HOLE DETAIL
WETWELL HATCH
N.T.S.

ELEVATION SCHEDULE	
ELEV. "A"	
ELEV. "B"	
ELEV. "C"	
ELEV. "D"	
ELEV. "E"	
ELEV. "F"	
ELEV. "G"	
ELEV. "H"	
FLOOD ZONE / 100 YR FLOOD ELEV	

PUMP SELECTION	
PRESS. IN EXIST. F.M.	
SUCTION LIFT	
STATION LOSS	
FRICTION LOSS	
STATIC HEAD	
T.D.H. (FEET)	

PUMP DATA			
MANUFACTURER: _____		SEWAGE PUMP	
MODEL: _____		SERIES: _____	
MOTORS: _____ HP.		_____ VOLT, _____ WIRE, 60 HZ.	
PUMPS DELIVERING _____		_____ G.P.M. AT _____ FT. T.D.H.	
<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;">Design</div>		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;">Design</div>	
PUMPS DELIVERING _____		_____ G.P.M. AT _____ FT. T.D.H.	
<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;">Asbuilt</div>		<div style="border: 1px solid black; width: 100px; height: 30px; margin: 0 auto; text-align: center;">Asbuilt</div>	



GENERAL SPECIFICATIONS

IT IS THE INTENT OF THIS STANDARD TO SPECIFY A TWO PUMP SUB- MERSIBLE LIFT STATION COMPLETE IN EVERY RESPECT WHETHER OR NOT COVERED BY SPECIFICATION OR THESE CONSTRUCTION DETAILS.

THE SURFACE OF THE LIFT STATION AND PAVED ACCESS ROADWAY SHALL BE SET AT PROPER ELEVATIONS SO THAT FUTURE ACCESS TO THE STATION WILL NOT BE IMPAIRED BY FLOODING, EXCESSIVE ROAD GRADES, SWALES, WALLS OR LANDSCAPING IN ANY MANNER. A SITE PLAN OF THE LIFT STATION SITE (PLOT PLAN) INDICATING ALL TOPOGRAPHICAL FEATURES, RIGHT-OF-WAYS AND EASEMENTS SHALL BE SUBMITTED TO THE DISTRICT FOR APPROVAL OF THE SITE AND ADJOINING CONTIGUOUS AREAS.

THE WETWELL DRIVEWAY IS INCLUDED WITH THE JOB, IT WILL BE CONSTRUCTED PER LOCAL CODE REQUIREMENTS.

THE CONTRACTOR SHALL COORDINATE WITH AND PAY ALL FEES, DEPOSITS, AND SERVICE COSTS TO FLORIDA POWER AND LIGHT CORP., TO BRING THREE (3) PHASE, FOUR (4) WIRE 230/120 VOLT (480 VOLTS WHEN REQUIRED) UNDERGROUND POWER SERVICE TO THE LIFT STATION SITE. THIS REQUIREMENT DOES NOT APPLY TO PROJECTS INVOLVING LIFT STATION REHABILITATION WORK PERFORMED BY THE DISTRICT.

THE LIFT STATION AND APPURTENANCES SHALL INCLUDE ALL COUPLINGS, ANCHOR BOLTS, PIPING, VALVES, ELECTRICAL EQUIPMENT, ETC., REQUIRED FOR A COMPLETE WORKING INSTALLATION.

A LIST OF EQUIPMENT INCLUDED UNDER THIS ITEM IS GIVEN BELOW. THIS LIST IS NOT ALL INCLUSIVE AND THE CONTRACTOR SHALL SUPPLY ALL OTHER EQUIPMENT NECESSARY FOR COMPLETE WORKING INSTALL- ATIONS. THE LIFT STATION SHALL INCLUDE:

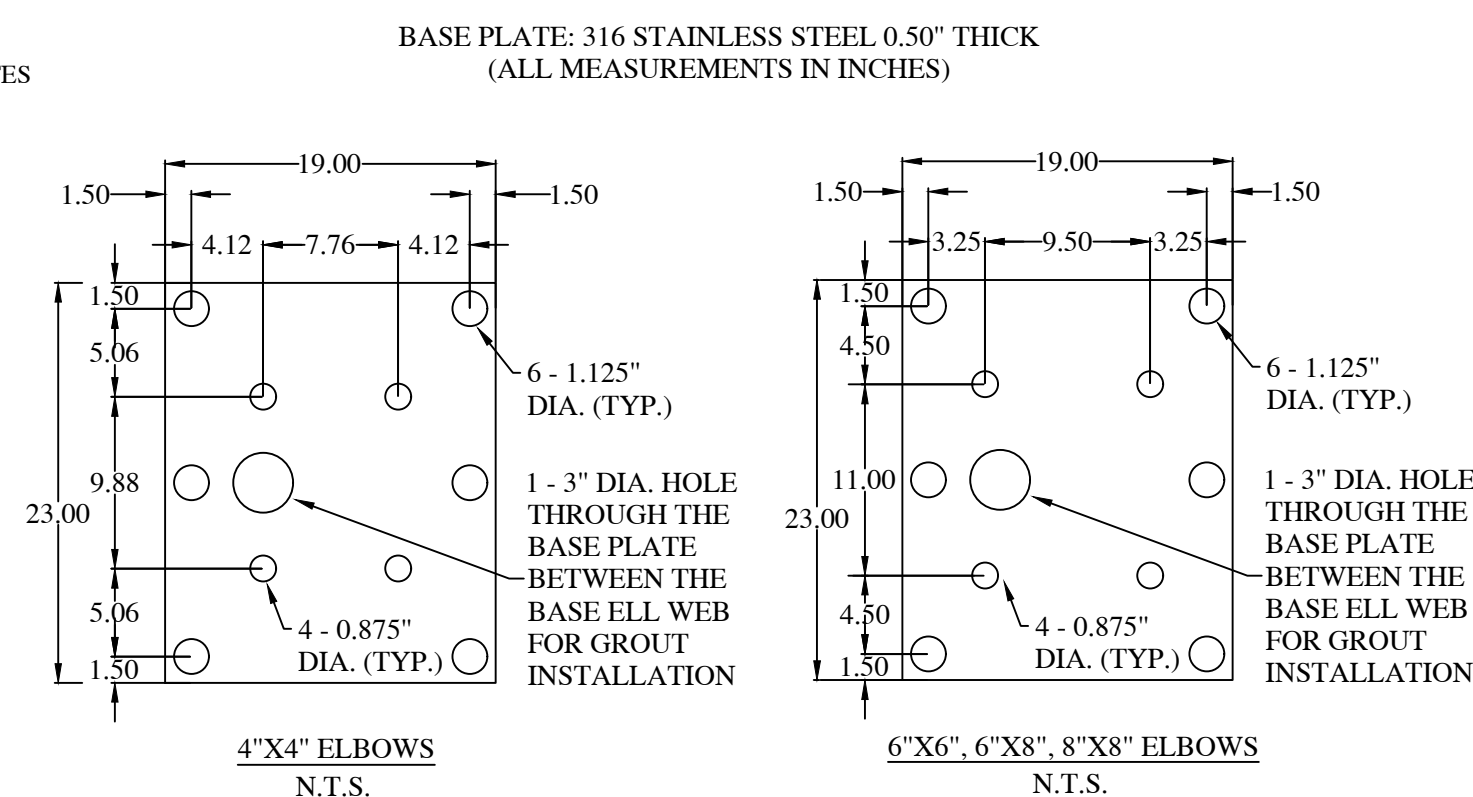
TWO (2) SUBMERSIBLE TYPE SEWAGE PUMPS WITH 304 STAINLESS STEEL GUIDE RAILS AND ALL ACCESSORIES.

TWO (2) DISCHARGE LINES WITH SWING CHECK VALVES, DEZURIK PLUG VALVES INSTALLED WITHIN A PRE-CAST CONCRETE PIT. (SEE STANDARD DETAIL THIS SHEET)

ONE (1) PUMP LEVEL CONTROL SYSTEM FOR PUMP LEAD/LAG CONTROLS WITH HIGH LEVEL ALARM, ELECTRICAL PANEL, ETC. (SEE LSELE SHT.)

ONE (1) WET-WELL STRUCTURE WITH ACCESS HATCH.

ONE (1) PRE-CAST VALVE PIT STRUCTURE



- NOTES:**
1. EACH BASE ELBOW SHALL BE SECURED TO THE BOTTOM OF THE WET WELL WITH FOUR (4) 3/4" DIAMETER 316 S.S. THREADED RODS, 316 S.S. SELF LOCKING NUTS, AND 316 S.S. PLATE. THE PLATE SHALL BE SECURED WITH SIX (6) 1" DIAMETER 316 S.S. THREADED RODS. THE THREADED RODS SHALL BE EMBEDDED A MINIMUM OF 6" INTO THE CONCRETE AND THE MAXIMUM TIGHTENING TORQUE APPLIED IS 110 FT. LBS.
 2. ANCHOR STUD HEIGHTS ABOVE THE GROUT RAMP SHOULD ALLOW FOR PLATE AND BASE ELBOW THICKNESSES, WASHERS, DOUBLE SELF-LOCKING NUTS WITH VERY LITTLE EXTRA HEIGHT (I.E., 0.25" OR LESS).
 3. EACH ANCHORING ROD SHALL HAVE TWO (2) SELF-LOCKING NUTS, AND A SINGLE WASHER. EACH PUMP BASE ELBOW SHALL UTILIZE 2"x2"x1/4" 316 SS FABRICATED WASHERS.
 4. CONTRACTOR SHALL USE A QUICK SET, HIGH STRENGTH, NON-SHRINKING GROUT TO CREATE 1-INCH (MINIMUM) LIFT OFF OF EXISTING FLOOR (7000 PSI @ 24 HOURS). CONTRACTOR SHALL ENSURE EXISTING FLOOR IS CLEANED AND PREPARED TO MAXIMIZE BONDING OF GROUT. DRY PACKING NOT ALLOWED.
 5. ALTERNATE BASE ELL STUDS. CONTRACTOR MAY PROVIDE (4) - 3/4" 316 SS THREADED RODS INSTALLED THROUGH 0.875" DIA. HOLES AND WELDED TO THE BOTTOM OF THE BASE PLATE TO ANCHOR THE BASE ELLS TO THE BASE PLATES.

[illegible]

NOTES:

1. FOUR (4) COPIES OF DETAILED INSTALLATION DRAWINGS INCLUDING WIRING DIAGRAMS, PUMP CURVES AND MAINTENANCE AND OPERATING MANUALS SHALL BE SUBMITTED TO THE DISTRICT AT THE TIME OF INITIAL START UP.
2. THE SERVICES OF A FACTORY-TRAINED REPRESENTATIVE SHALL BE FURNISHED FOR THE LIFT STATION START UP. THE REPRESENTATIVE SHALL CHECK ALL ELECTRICAL COMPONENTS, WIRING AND PUMP OPERATIONS.
3. THE PUMP MANUFACTURER SHALL WARRANT THE PUMPS FOR A PERIOD OF FIVE (5) YEARS FROM THE DATE OF PUMP MANUFACTURER'S SHIPPING DATE. THE WARRANTY MUST INCLUDE A MINIMUM 100% COVERAGE OF THE MANUFACTURER'S SHOP LABOR AND PARTS FOR THE FIRST EIGHTEEN MONTHS, THEN 50% COVERAGE THROUGH THE THIRD YEAR, AND 25% COVERAGE THROUGH THE FIFTH YEAR.
4. THE PANEL SHALL INCLUDE BACK-UP CIRCUITRY TO PERMIT ONE PUMP TO OPERATE WITH A NORMAL DRAWDOWN IN THE EVENT OF FAILURE (OPEN CIRCUIT) OF THE "STOP" LEVEL REGULATOR.
5. PROVIDE ONE SPARE ALTERNATOR AND ONE SPARE PHASE MONITOR.
6. A COPY OF THE PANEL WIRING DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE OUTER PANEL DOOR. AN EXTRA COPY SHALL BE GIVEN TO THE DISTRICT.
7. SUBSTITUTIONS OF EQUAL, COMPATIBLE MATERIALS WILL BE PERMITTED BUT REQUIRE PRIOR WRITTEN APPROVAL FROM THE DISTRICT.
8. FOUR (4) LEVEL CONTROL FLOAT SWITCHES SHALL BE INSTALLED IN THE WET-WELL TO CONTROL THE OPERATION OF THE PUMPS WITH VARIATIONS OF LIQUID LEVEL IN THE WET-WELL. THE FLOAT SWITCHES SHALL BE "ROTO-FLOAT" BY ANCHOR SCIENTIFIC INC. SWITCHES HERMETICALLY SEALED IN A POLYPROPYLENE CASING WITH A FIRMLY BONDED ELECTRICAL CABLE PROTRUDING.
9. IN ORDER TO ASSURE THE PROPER PERFORMANCE AND COMPATIBILITY OF INTERACTING COMPONENTS WITHIN THE INTENT OF THE SPECIFICATIONS; THE PUMPS, CONTROL CENTER, ACCESS HATCH AND WARRANTY SHALL BE SUPPLIED BY THE SAME VENDOR.
10. BEFORE PLACING INSTALLATION INTO SERVICE, THE PUMP MANUFACTURER SHALL VERIFY THE CORRECT PUMP ROTATION, THE DESIGN G.P.M. & T.D.H. CONDITIONS.
11. JUNCTION BOXES BETWEEN THE WETWELL AND CONTROL PANEL SHALL BE 304SS AND COMPLY WITH LOCAL GOVERNING CODE.
12. ALL CONDUITS SHALL BE SCHEDULE 80 PVC.
13. ALL WIRE TO BE MINIMUM 14 GA.
14. MAIN BREAKER AND EMERGENCY GENERATOR BREAKERS SHALL BE MECHANICALLY INTERLOCKED.

BILL OF MATERIALS

ALARM BELL	AMT 12/24R	WHEELLOCK
PUSH BUTTON	9001SKR3U	SQD
BREAKER STANDOFF		
CONTROL BREAKER	FAL 12015	SQD
DUPLEX RECEPTACLE BREAKER	FAL 12015	SQD
MAIN BREAKER	FAL 36 *	SQD
EMERGENCY BREAKER	FAL 36 *	SQD
LIGHTNING ARRESTOR	AG6503	INTERMATIC
CONTACT BLK	9001-KA2	SQD
DEADFRONT	ALUM	
ENCLOSURE W/D RIP SHIELD (NOTE) 48"x36"x12" FOR MOTOR STARTER NEMA SIZE 3 OR ABOVE	A36H30 10" SSLP	HOFFMAN OR EQUIV.
INT PANEL (SUB)	SIZED TO ENCLOSURE	
ALARM LIGHT	2ERP1	CONDOR
FUSE	AGU-5	BUSSMAN
GEN. ADAPTER	AJA100	APPLETON
GEN. RECEPTACLE W/SCREW CAP OR	ADR1034RS	APPLETON
ALTERNATE GENERATOR RECEPTACLE	AR-1048-S22	CROUSE-HINDS
GFI-RECEPTACLE	SIR-15-IV	SLATER
GFI-RECEPTACLE	68991	LEVITON
INTERLOCK MECHANICAL	MAIN BREAKER/ EMERGENCY BREAKER	
PILOT LIGHT	NLD 22 (COLOR AS REQ'D)	TEMOIN
LUG KIT CB	PDC6FA6	SQD
MOTOR STARTER	8536 *	SQD
OVERLOAD MODULE	9999 SO-4	SQD
ELECTRICAL INTERLOCK	9999 SX-6	SQD
PHASE MONITOR	SLA-230-ASA / SLA-440-ASA	DIVERSIFIED
ALTERNATOR	ARB-120-AEA	DIVERSIFIED
ALTERNATOR	008-120-13SP	STA-CON
3 POLE FORM C CONTROL RELAY	RR 3 BULAC 120V	IDEC
8 PIN SOCKETS ALT & PM	SR2P-06	IDEC
11 PIN SOCKETS	SR3B05	IDEC
8 PIN SOCKETS	SR2P-06	IDEC
SURGE CAPACITOR	9L18-BBB-301	G.E.
HOA	9001SKS43B	SQD
ALARM TERM STRIP	9080 GR6 (4 SEC)	SQD
THERMAL TERM STRIP	9080 GR6 (4 SEC)	SQD
RATS TERM STRIP	9080 GR6 (12 SEC)	SQD
THERMALS OVERLOADS	*	SQD
FLOATS (NORMALLY OPEN)	50 FT. "ROTO-FLOAT"	ANCHOR SCIENTIFIC INC.
DISCONNECT (STAINLESS STEEL)	NEMA 4X (240/600) W/ SOLID NEUTRAL ASSY.	SQD
DISCONNECT (STAINLESS STEEL)	NEMA 4X (240/600) W/ SOLID NEUTRAL ASSY.	CUTLER HAMMER
STAINLESS STEEL TRANSFORMER 480x120 1.0 KVA	1S1FSS	SQD
ELAPSED TIME METER	MODEL 7-10	STEMCO ENGLER
NEUT BLK		
ALARM CONTROLLER (AC)	BOAC-001	MPE
INTRINSICALLY SAFE BARRIER (ISB)	EB3C-R05A	IDEC
BATTERY	MWA12-7F	WERKER
NOTE: * SIZED PER PUMP MANUFACTURER REQUIREMENTS		

FUSED
DISCONNECT
A.I.C. RATED TO
F.P.L. SUPPLY

LOXAHATCHEE RIVER
ENVIRONMENTAL CONTROL DISTRICT



LIFT STATION ELECTRICAL CONTROL PANEL STANDARD DETAILS

Drawn:	JD
Checked:	KD
Proj. Eng.	KD
Scale:	NTS
Date:	JANUARY, 2016

SD-34

Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

2500 Jupiter Park Drive, Jupiter, Florida 33458

Telephone (561) 747-5700 • Fax (561) 747-9929 • www.loxahatcheeriver.org



D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: D. Albrey Arrington, Ph.D.
Executive Director

FROM: Kris Dean, P.E.
Deputy Executive Director/Director of Engineering Services

DATE: June 11, 2019

SUBJECT: Contract Contingency for the Jupiter Farms Elementary Force Main

This is a budgeted project for \$1.2M this fiscal year and includes extension of the existing Jupiter Farms force main to Jupiter Farms Elementary allowing for the abandonment of their onsite package wastewater treatment plant and connection to our regional system. This project was awarded to Felix and Associates of FL, Inc. in February of this year for \$1,089,490.00 without a contingency. We are now requesting that contingency.

The following motion is offered for your consideration:

“THAT THE DISTRICT GOVERNING BOARD authorize a contingency amount of \$35,000. ”

Change Orders

No Change Orders are presented for Board consideration this month.

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Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

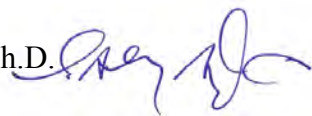
2500 Jupiter Park Drive, Jupiter, Florida 33458-8964

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D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: GOVERNING BOARD
FROM: D. ALBREY ARRINGTON, Ph.D. 
DATE: JUNE 7, 2019
SUBJECT: TOJ-LRD JONES CREEK LRPI GRANT COLLABORATION

This is a request from the Town of Jupiter for LRD to participate in the grant application process and funding of a project to improve Jones Creek water quality. Based on a significant amount of water quality assessment conducted by LRD within Jones Creek, we are aware of an ongoing water quality impairment due to elevated fecal coliform bacteria within Jones Creek, a tributary of the Southwest Fork of the Loxahatchee River. As you will see in the attached pages, the Town of Jupiter is developing a proposal to be submitted to the Loxahatchee River Preservation Initiative (LRPI) seeking grant funds to offset costs associated what is believed to be the best opportunity to reduce high bacterial concentrations within Jones Creek. Scientific literature and subject matter experts suggest high bacteria concentrations in Jones Creek are thriving because of excessive amounts of decaying vegetation, significant shading, and limited flow through the waterway. Thus, vegetative trimming along the margins and above Jones Creek is expected to improve water quality.

The Town of Jupiter is planning such a project, termed “Jupiter River Estates Canal Vegetation Trimming” project. This project will include exotic vegetation removal as well as mangrove trimming as permitted by the Florida Department of Environmental Protection. As conceived by the Town, this project is contingent upon the establishment, by relevant residents (n=181), of a property assessment to fund recurring canal maintenance for a minimum period of 10 years, which will ensure the area does not become overgrown again. Also, the Town’s project is contingent upon grant funding.

The following pages include the Town’s one-page project summary, the Town’s proposed funding sources, and an email from David Brown (Town of Jupiter Director of Utilities) requesting LRD contribute 25% (\$140,000) of the estimated initial trimming expense as proposed. The Town’s proposed funding includes the Town and LRD each covering 25% of project costs and the LRPI grant covering the remaining 50% of project costs.

I offer the following motion for your consideration:

“THAT THE GOVERNING BOARD authorize the Executive Director to collaborate with the Town of Jupiter on development and submission of a LRPI grant to improve water quality within Jones Creek, including specific authority to commit the following Loxahatchee River District resources:

- up to \$_____ of in-kind contributions (e.g., water quality monitoring, assessment, and reporting) and
- up to \$_____ of cash contributions to be used towards reimbursement of engineering and construction costs associated with the project.”

TOWN OF JUPITER
COMMUNITY INVESTMENT PROGRAM
2020 - 2024

Strategic Result : Blue, Green & Open Spaces	Department : Utilities
Project Name : Jupiter River Estates Canal Vegetation Trimming	Project No. : S21XX
	Year(s) : 2021
	Projected In-Service Date : 2022

Project Description :

In order to address elevated bacteria levels in the dead-end canal system, vegetative trimming along the canal is recommended to allow sunlight to penetrate into the water column and reduce the bacterial growth. This effort will include exotic vegetation removal as well as mangrove trimming as allowed by the Florida Department of Environmental Protection. Project is contingent upon the establishment of a benefitting property assessment for recurring canal maintenance for a minimum period of 10 years and the receipt of grant funding.

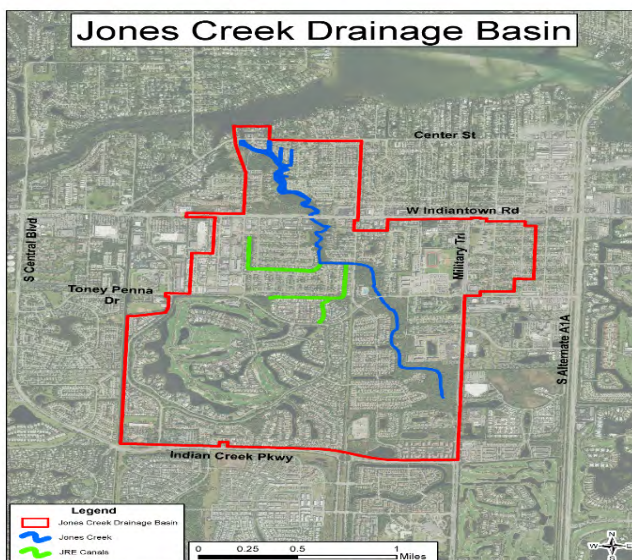
Link to Strategic Plan :

This project supports the Town's Strategic Plan Initiative entitled "Green, Blue and Open Spaces" as it is intended to promote the protection of the local environment.

Need, Justification, Benefits :

Enhance stormwater runoff quality prior to discharge to Jones Creek and the Loxahatchee River. Project intended to reduce nutrient and bacteriological impairments within the Loxahatchee River.

Location & Area Map



Project Photo



**TOWN OF JUPITER
COMMUNITY INVESTMENT PROGRAM
FINANCIAL INFORMATION
2020 - 2024**

Project Name :	Jupiter River Estates Canal Vegetation Trimming					Project No.	S21xx	
Strategic Result :	Blue, Green & Open Spaces							
Department :								
Project Budget : Land acquisition Planning / Design Engineering Construction Equipment Other Total Budget Funding Sources : General revenues Impact fees Grant revenues Stormwater R & R LRD Contribution Fund balance Total Revenues Operating : Personnel Operating Capital Other Total Operating	Prior to 2020	2020	2021	2022	2023	2024	After 2024	Total
								\$ -
								\$ -
			\$ 60,000					\$ 60,000
			\$ 500,000					\$ 500,000
								\$ -
								\$ -
								\$ -
								\$ -
								\$ -
								\$ -
								\$ -
								\$ -

PREVIOUS YEARS FINANCIAL ACTIVITY

	Prior to FY 2015	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	Total
Amount Budgeted	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amount Expended	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

From: David Brown <DavidB@jupiter.fl.us>
Sent: Wednesday, June 5, 2019 12:33 PM
To: Albrey Arrington <albrey@lrecd.org>
Cc: Matt Benoit <MattB@jupiter.fl.us>; Rebecca Wilder <RebeccaW@jupiter.fl.us>
Subject: Jones Creek Canal System Water Quality Issues

Good afternoon Albrey,

Following up on our recent discussion, please offer this to your board in support of the proposed joint project to address water quality in the Jones Creek Canal System.

Over the past couple years, we have been working collaboratively with your staff and property owners along the canals which feed into Jones Creek to address continuing water quality issues. These canals exist within the communities of Jupiter River Estates, Maple Isle and the Colony at Maplewood. Approximately 181 properties back to these canals. The canals are privately-owned waterways constructed as part of the original Jupiter River Estates development in the late 1960s. As these canals are connected to Jones Creek, they are tidally influenced and effect portions of the Loxahatchee River which are considered impaired.

While nutrient issues are a concern within the Jones Creek tributary, the continuing presence elevated bacteria levels in these canal waters are concerning from a regional water quality and public health standpoint. Significant water quality testing has occurred and all involved (Town, LRD, FDEP) have concluded that a primary contributor to the elevated bacteria counts is the decaying vegetative matter within the shaded, dead end, stagnant canal system. Meanwhile, the Palm Beach County Health Department is requiring that signage put in place after a recent sewage spill remain along the canal banks alerting residents that the water may be unsafe due to the continuance of high bacteria concentrations in the water.

Within the last several months, community representatives have offered a commitment to a recurring annual maintenance assessment if they could get help with an initial vegetative trimming intended to open the vegetative canopy reducing the amount of vegetative debris entering the waterway and further allowing sunlight to reach the canal water surface to minimize bacteria formation. As envisioned, this work would mimic the trimming done before the 2003 dredging of the canals which opened a 30' wide opening the length of the canals. I believe we all concur that this effort should result in significant mitigation of this festering problem.

For further reference, I have attached a draft project sheet for the Town's Proposed 5 Year Community Investment Program which reflects this potential project. I would ask that you review this document and let me know if the Loxahatchee River District would be willing to contribute 25% of the initial trimming expense as proposed (\$140,000). Please note that this contribution from LRD and that offered by the Town is contingent upon the receipt of grant funding for 50% of the initial trimming cost and the formal establishment of the annual maintenance assessment for a minimum of 10 years by the benefitting property owners along the canals. The assessment would fund yearly upkeep of the canal system in support of this initial investment being proposed.

Over the past couple weeks, the community has begun its petition drive drumming up support of the program and we hope to put the remaining pieces of this puzzle together over the next year so we may collectively address this problem to the benefit of the Loxahatchee. Although the vast majority of our river is in relatively good health, this issue remains a critical deficiency we believe that all must work to resolve.

Thank you for your consideration of this request.

David Brown
Director of Utilities
Town of Jupiter

Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration


2500 Jupiter Park Drive, Jupiter, Florida 33458-8964

Telephone (561) 747-5700 • Fax (561) 747-9929 • www.loxahatcheeriver.org



D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: GOVERNING BOARD
FROM: D. ALBREY ARRINGTON, Ph.D. 
DATE: JUNE 21, 2019
SUBJECT: FISCAL YEAR 2019-2020 – BUDGET ASSUMPTIONS

Our budget season is upon us. Over the next three months, we will work through our budgeting process to develop, review, and approve our Fiscal Year 2020 budget, which goes into effect on October 1, 2019. We are proceeding with the following schedule:

- June: Provide and review gross budget assumptions
- July: Provide and review budget matrix
- August: Provide and review draft budget by each account number
- September: Provide and review Final Draft Budget and approve Final Budget.

This month our goal is to review the gross assumptions that are being made as we formulate the FY 2019-2020 budget. Assumptions are provided based on the key budget categories used in the budget matrix. Our major objective is to avoid surprising the Board with unanticipated, significant increases in the draft and final budget.

Salary & Wages –

1. Number of Employees: Presently, the District has 81 full time positions budgeted. I propose adding one new full-time position to improve our institutional performance with asset management and the associated strategic objectives (i.e., Operational Excellence, Increase system reliability, refine preventative maintenance/rehabilitation/replacement program to include all assets with effort based on industry standards, failure analysis, and cost considerations).
2. Proposed Cost of Living Adjustment: The May consumer price index (CPI-U) was 1.8%; therefore, I have included a 1.8% cost of living adjustment (COLA) for our employees to maintain their purchasing power given the present rate of inflation. This will be revised with the June figures, which will be released in July.
3. Proposed Merit Increase: I recommend the budget include 3.0% to be disbursed to employees exhibiting meritorious performance during their annual performance review. The Society for Human Resource Management and Salary.com both expect U.S. employers to give average pay increases of 3.0% to 3.1% in 2019.

Payroll Tax – An increase proportional to the increase in salaries and wages will occur.

Retirement – An increase proportional to the increase in salaries and wages will occur.

Employee Health Insurance – The Gehring Group suggested we should anticipate an 8% increase in our health insurance premium. This is based on medical inflation and their knowledge of the industry.

General Insurance – We recently renewed of our Property, General Liability, Automobile Liability and Physical Damage, and Fiduciary Liability insurance policies with a 2-year rate lock. Thus, this budget line should only increase by the increasing value of our insured assets (minimal). Workers Compensation insurance is projected to increase by around 5%.

Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

James D. Snyder
Board Member

Supplies & Expenses – At this time I am not aware of any significant increases in this budget category.

Utilities – Good news: we are seeing a larger than expected benefit from FPL's rate decrease last year and expect it to continue to positively impact our FY2020 budget.

Chemicals – Kris and Tony appear to have identified a \$235,000 savings opportunity regarding our chemical costs. We are excited about this potential savings and hope to have more details next month.

Maintenance & Repair – I expect this budget category to increase by less than 5%.

Outside Services – I expect this budget category to increase by less than 5%.

Contingency – We do not anticipate a significant change in our budgeted contingency amounts.

Revenue – Staff project revenues from quarterly sewer rates will remain relatively flat (increase less than 0.5% due to new connections). Other revenues are projected to experience slight increases based on various factors. Overall, revenues are expected to increase by less than 1%.

Next month we will bring a thorough list of the major Capital and Renewal & Replacement projects anticipated for FY2020.

Many of these are coarse estimates that will be refined over the next two months. We look forward to further clarifying anticipated costs for next year and providing them to you in the budget matrix format next month.

This is an important process, and we look forward to receiving your input.

LOXAHATCHEE RIVER DISTRICT

Neighborhood Sewering Schedule



Rank *	Area Description	# Lots	Activity	Original Target Date	Revised Target Start Date
10	Turtle Creek Subsystem 3	5	Notified Owners – September 2012 Notice of Intent – December 2016 Notified to Connect – April 2018 Preliminary Assessment – June 2019 Final Assessment – July 2019	2016	2017
10	Turtle Creek Subsystem 2	28	Notified Owners – September 2012 Notice of Intent – October 2016 Notified to Connect – April 2018 Preliminary Assessment – June 2019 Final Assessment – July 2019	2016	2017
14	Whispering Trails	181	Notified Owners – January 2013 Notice of Intent – November 2016 Construction Started October 2018	2017	2017
16	Limestone Creek Road-West	71	Notified Owners – January 2013	2018	2020
16	181 st St N Gravity	11	Notified Owners – January 2013 Notice of Intent to Assess – October 2018	2018	2018
20	New Palm Beach Heights	35	Notified Owners – January 2016 Notice of Intent to Assess – October 2018 Resident meeting – October 2018	2019	2019
22	Bridgewater	70	In discussions with developer/engineer	2019	2019
11	Jupiter Farms (East)	708		TBD	TBD
11	PB Country Estates	1547		TBD	TBD

* Rank based upon “2010 Septic System Inventory & Assessment”

TBD = To be determined

Remnant Areas

Rank*	Area Description	Lots	Activity	Original Target Date	Revised Target Start Date
C	FDOT Turnpike Station <i>(institutional)</i>	3 ECs	Notified to Connect – February 2016 Variance requested – May 2016	2012	2020
H	Olympus Dr, Juno (LP)	2	Notified Owners – June 2013 Prelim. Design started – August 2017 Survey - 2018	2016	2018
	18870+18890 SE Country Club Dr, Cove Pt	3	Notified Owner – April + Aug 2017 Design started – August 2017	2018	2019
	US Highway 1 (13440-13500)	3	Notified Owners – August 2017	2019	2019
	Admiral's Cove West Guard House	1	Communicated with Engineer - July 2016	2019	2019
	Thelma Ave. LPSS	4	Notified Owners – September 2017	2020	2020
	197 th PI N	3	Notified Owners – April 2019		2020

Private Road Areas – Page 2

Rank *	Area Description	# Lots	Activity	Original Target Date	Revised Target Start Date
AA	Peninsular Road	5	Private Road Notice of Intent – February 2010 Partial construction complete - June 2013 Soliciting easements for remainder of project	2010	AEO
BB	Rivers Edge Road (Martin Co.)	35	Notified Owners – August 2010 Private Road-Easements Solicited –May 2014 Notice of Intent – February 2014 Project Delayed	2013	AEO
CC	171 st Street (Martin Co.)	7	Private Road - In House Design Owners notified October 2012 Easement rec'd from Church – April 2017 Grant received	2014	AEO
CC	Jamaica Dr	11	Private Road Owners notified Oct 2012 In House Design started	2014	AEO
CC	66 th Terr+Way	19	Notified Owners – Aug 2010 *Private Roads Notice of Intent to Assess – February 2015	2014	AEO
D	Loggerhead Park <i>(institutional)</i>	6 ECs	Need Easements from Palm Beach County	2014	2017
DD	Taylor Road	38	Notified Owners – September 2011 Private Roads	2015	AEO
EE	Imperial Woods LPSS	47	Notified Owners – October 2010 Withdrew Notification – Feb 2011 Easements Obtained – Aug 2017 + June 2018 Notice of Intent to Assess – September 2017 Grant Authorized Construction Award – February 2019	2016	2018
EE	Hobart St SE (Martin Co.)	13	Notified Owners – October 2012 Private Road	2016	AEO
FF	Rolling Hills	51	Notified Owners – January 2013 Private HOA	2017	AEO
FF	Gardiner Lane	2	Notified Owners – July 2013 Private Road	2017	2019
FF	North A1A	3	Postponed-Town activities in area	2012	AEO
GG	815 S US 1 (Yum Yum Tree)	9 ecs	Notified Owner – November 2014	2016	AEO
GG	Rockinghorse <i>(north of Roebuck Road)</i>	10	Notified Owners – January 2013	2018	AEO
GG	Island Country Estates	47	Notified Owners – January 2013 Private HOA-Received Easement – Feb. 2018 Notice of Intent – July 2018 Engineering Award – September 2018	2018	2019
HH	Harbor Rd. S. LPSS	6	Notified Owners – January 2014 Private Road	2017	AEO
HH	SE Indian Hills	12	Notified Owners – January 2016 Easement for Road & Utilities, No Dedication	2019	AEO
19	US Coast Guard Station Offices <i>(institutional)</i> PX Commercial <i>(commercial)</i>	2 ECs 2 ECs	US Government - private roads Albrey- mtg. w/BLM & Historical 3-2011 Prelim design prepared In House 4-2011 Working with Jupiter to obtain easement	2019	2020

* Rank based upon "2010 Septic System Inventory & Assessment"

TBD = To be determined

AEO = As easements are obtained

TIMOTHY W. GASKILL*
*Business, Probate
Family Litigation*

DONALD R. SMITH +*
*Personal Injury & Wrongful Death
And Civil, Business & Real Estate
Litigation*

CURTIS L. SHENKMAN
*Board Certified
Real Estate Attorney*

BROOKE GROGAN*
Personal Injury & Litigation

BRANDON D. SMITH
Personal Injury & Litigation

+ *Member of the Florida Justice Assoc.
and the Palm Beach Co. Justice Assoc.

*Members of the U. S. Federal Court -
Southern District, Florida

SMITH, GASKILL & SHENKMAN, P.A.

ATTORNEYS & COUNSELORS AT LAW
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NORTH PALM BEACH, FLORIDA 33408
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June 18, 2019

LEGAL ASSISTANTS
**CIVIL TRIAL, PROBATE
AND FAMILY LAW**

KAREN M. B. LOPATOSKY
Senior Litigation Paralegal
MINDY VASSER

**PERSONAL
INJURY/COMMERCIAL**

BETH KOENIG, PARALEGAL
KAREN M.B. LOPATOSKY
Senior Litigation Paralegal

REAL ESTATE
JUDY D. MONTEIRO
DENISE B. PAOLUCCI
MELISSA KAJEEJIT

Loxahatchee River Environmental Control District
D. Albrey Arrington, Exec. Dir. and Board Members (sent by email to DHenderson)
2500 Jupiter Park Drive
Jupiter, FL 33458

RE: PENDING LITIGATION STATUS REPORT

Dear Dr. Arrington and Board Members:

We are enclosing herewith a brief status report relating to the litigation in which the Loxahatchee River Environmental Control District is involved with our law firm as the attorney of record. This status report updates the last monthly status report previously submitted and consists of a summary of the record proceedings which have occurred in each of the pending cases since last month.

There are no analyses of the pending cases included, as the inclusion of such items might constitute a waiver of any attorney/client privilege that exists between our firm and the District. Therefore, if you would like to discuss the particulars of any specific case in more detail or would like to obtain more information concerning the strategy, status, or settlement posture of any of the individual cases, please feel free to contact me.

As always, we are available at any time to discuss any of these lawsuits with each individual Board Member by telephone or by conference, if there are any questions.

Respectfully submitted,

CURTIS L. SHENKMAN

CURTIS L. SHENKMAN

Attachments

cc: Timothy W. Gaskill, Esquire
Karen Boyden, paralegal

OTHER LITIGATION

ACTION: In Re Estate of Israel Marquez et al ...Loxahatchee River Envir Control District
Owner: Estate of Israel Marquez **Property: 911 Hawie St.**
Case No. 50-2010-CP-004006XXXXSBIY

TYPE OF ACTION: **Mortgage** Foreclosure by Lender, LRD named for its (possible) lien interest –

COMMENCEMENT: Service of Summons/Petition

COMMENTS: Action foreclosing mortgage– LRD named for lien interest

STATUS: **Pending**

11/24/14	District served with Petition re Homestead and Real Property as Estate Asset; Filed Answer and Affirmative Defenses; Hearing to be held
12/10/14-1/6/15	No change in status
2/3/15	No change in status
3/6/15-5/11/15	No change in status; monitoring probate action; monitoring for activity;
6/8/15-7/9/15	No change in status
8/7/15 – 10/12/15	No change in status, continuing to monitor probate
11/10/15	There is a pending Motion to sell real estate set for hearing in December, continue to monitor
12/7/15	No change in status
1/18/16 – 7/7/16	Last Activity in Court Docket 12/17/14 requiring a paternity test; continue to monitor ; No change in status
8/8/16 – 10/13/16	No change in status
11/9/16-12/14/16	No change in status –probate proceedings continuing
1/10/17 – 9/20/17	No change in status – Probate proceedings continuing –no activity since 11/15/16 on docket
10/6/17-12/6/17	No change in status – Probate proceedings continuing –no activity since 11/15/16 on docket
1/8/18	No change in status - Probate proceedings continuing –no activity since 11/15/16 on docket
2/5/18	No change in status - Probate proceedings continuing –no activity since 11/15/16 on docket
3/5/18 – 4/2/18	Only new filings in March were Petition to determine Paternity and Petition to Sell Property and delay Tax Deed Sale
5/10/18	No change in status
6/10/18-7/10/18	Probate still ongoing; Hearing on Per. Rep’s Petition to Delay Tax Deed Sale scheduled for 7/12/18; no other change in status
8/7/18	Hearing on Sale of Property held and Order entered authorizing sale; to monitor re sale and estoppel for any outstanding charges to LRD

9/7/18- 1/18/19	No sale reflected in public records to date, continue to monitor; Order entered in Probate declaring property to be homestead property
1/19/19- 6/18/19	No change in status

LIEN FORECLOSURES

NONE

MORTGAGE OR LIEN FORECLOSURES / LRD COUNTERCLAIMS/CROSSCLAIMS

NONE

MEMORANDUM

TO: Albrey Arrington, Ph.D. / Loxahatchee River District

COPY: Kris Dean / Loxahatchee River District
Tony Campbell / Loxahatchee River District

FROM: Albert Muniz / Hazen and Sawyer

DATE: June 17, 2019

FILE: 42009-029.3.1.3

SUBJECT: Loxahatchee River District
Engineer's Monthly Status Report through May 31, 2019

The following is a summary of work performed by Hazen and Sawyer (Hazen) on Loxahatchee River District (LRD) projects through the above referenced date.

General Operational Assistance – This project involves providing LRD with engineering assistance related to wastewater operations.

- Hazen will be submitting task orders for an odor control study and an evaluation for upgrades to the return activated sludge (RAS) system. A Green Gas Emissions scope is also being developed for review by LRD staff.
- Hazen is routinely communicating with LRD staff to discuss plant operations

Deep Bed Sand Filters – Final Design and Construction Management Services –The following provides a summary of tasks that have occurred during the above reporting period:

- LRD and Hazen have continued to finalize project closeout documents from the Contractor. We hope to obtain all necessary documents from the Contractor by end of June 2019, if acceptable to .
- The filter sampling program to determine the effectiveness of removal of contaminants of emerging concern (CECs) and cryptosporidium/giardia filter was completed. A memorandum to discuss findings is being prepared for review and discussion with LRD staff.

Injection Well Operating Permit Renewal – The renewal operating permit application for the Class I Injection Well was submitted to FDEP on April 1, 2019. A request for additional information was received on May 24, 2019. Responses to FDEP's comments are being prepared with the submittal anticipated by June 12, 2019.



*Loxahatchee River District
Monthly Progress Report*

BioWin™ Process Model Development and Training – Hazen has completed the DRAFT BioWin™ Technical Memorandum and training.. A copy of the draft Technical Memorandum was submitted to LRD for review. A meeting to discuss comments on the draft memo will be held in late June or early July.

As always, please feel free to contact us should you have any questions or need to discuss the progress of any of the above projects in more detail.



***Loxahatchee River Environmental Control District
Monthly Status Report
June 17, 2019***

Submitted To: Kris Dean, P.E, Deputy Executive Director/Director of Engineering

The following is a summary of work performed by Mathews Consulting (MC), a Baxter and Woodman Company, on District projects for the monthly period ending June 17, 2019.

Alternate A1A 16-Inch Force Main Extension

MC continued to coordinate with the U.S. Army Corps of Engineers to address potential impacts to mangrove plants on the south side of the bridge. MC submitted a response to USACOE Request for Information No. 1. Contractor has completed all possible project work. The remaining work includes a 225-ft section of force main south of the Alternate A1A Bridge. MC anticipates issuance of a partial Certificate of Substantial Completion by June 21, 2019.

Master Lift Station No. 1 Rehabilitation

The following items were ongoing or completed during the last monthly period:

- Contractor has completed approximately 90-percent of the work within the pump station building
- Contractor is in the process of making final modifications to the pump station control systems to accommodate the pump station improvements
- Facility shut-down to be completed June 17, 2019 to replace equipment which failed during a previous shutdown to replace the primary feeder
- Pump station start-up and testing is tentatively scheduled to commence the week of June 23, 2019
- Completion of the site restoration activities will be performed following successful system startup and testing and upon removal of the temporary pumping system from the project site

Whispering Trails Gravity Sewer System

Below is a summary of the ongoing construction activities for the project:

- Contractor completed all proposed Gravity Sewer Mainline Piping and Manhole Installation
- Contractor continued installation of Gravity Sewer Laterals
- Contractor completed the first lift of asphalt pavement installation west of Lift Station No. 180
- Contractor began total road reconstruction north and east of Lift Station No. 180
- Contractor began installation of electrical and mechanical system components at Lift Station No. 180
- Project Substantial Completion date is July 18, 2019.



Jupiter Farms Elementary Sanitary Sewer System

Below is a summary of the ongoing activities for the project:

- Pre-construction meeting with MC, the District and Felix and Associates was completed on May 10, 2019.
- Contractor and MC are in the process of preparing, submitting and reviewing shop drawing submittals.
- No onsite work has been completed to date.

Respectfully Submitted by:

MATHEWS CONSULTING,
A BAXTER & WOODMAN COMPANY

A handwritten signature in blue ink, appearing to read "J. Pugsley".

Jason A. Pugsley, P.E.
Vice President / Florida Operations Manager



HOLTZ CONSULTING ENGINEERS, INC.
270 South Central Boulevard, Suite 207, Jupiter, FL 33458 (561) 575 2005

MEMORANDUM

To: Kris Dean, PE, Deputy Director/Director of Engineering, Loxahatchee River Environmental Control District
From: Christine Miranda, PE, Holtz Consulting Engineers, Inc.
Date: June 20, 2019
Subject: Loxahatchee River Environmental Control District Monthly Status Report

The following is a summary of work performed by Holtz Consulting Engineers, Inc. (HCE) on Loxahatchee River District projects through June 20, 2019. **Note: Any information that is historical or repeated from previous months are shown in italics. Otherwise, all information as shown below is newly reported information.**

Imperial Woods Low Pressure Sewer System

- The public meeting with the homeowners was held on May 13, 2019 and the Contractor's Notice to Proceed was issued. The Contractor has installed all of the low-pressure main piping in the project and completed pressure testing. Curbing and pavement restoration are scheduled for the second and third week of July. It is anticipated all construction activities should be complete for the project by the end of July.

Island Country Estates Low Pressure Sewer System

- The 90% design submittal was transmitted to District staff on May 17, 2019, and comments were received on June 6, 2019. The 100% submittal will be delivered to District staff by June 28, 2019. A RAI was received from the FDEP on the permit application on June 6, 2019 and was responded to on June 17, 2019. The project will be advertised at the beginning of July with a bid opening date of August 6, 2019.

Loxahatchee River Road Reclaimed Water Main Replacement and Force Main Extension

- All work has been completed and all permits have been closed out. All final paperwork has been processed. This project is complete.

Turtle Creek –Subsystem 2& 3 – Gravity Sewers

- All final paperwork has been processed for this project. This project is complete.

Lift Station No. 082 Master Plan and Improvements

- Information from the pressure recorders and drawdown test were provided to HCE staff on June 19, 2019. This information will be used to calibrate the model and complete the model. *Upon completion of the calibration of the model, the selected scenarios will be inputted for analysis. Upon completion of the model the design for the new pumps and improvements can proceed. The survey work for the lift station site has been completed.*

Busch Wildlife Sanctuary

The 2nd Quarter Report will be presented at the
July 2019 Board Meeting.



Busch Wildlife Sanctuary

At Loxahatchee River District
2500 Jupiter Park Drive, Jupiter, Florida 33458
Main Office: (561)-575-5399 Facsimile: (561)-744-5288



June 6, 2019

Loxahatchee River Environmental Control District
2500 Jupiter Park Dr
Jupiter, FL 33458-8962

RECEIVED

JUN 14 2019

Loxahatchee River
Environmental Control District

Dear Loxahatchee River Environmental Control District,

On behalf of the Busch Wildlife Sanctuary, allow me to take this opportunity to express our sincere appreciation for your recent donation of \$16,000.00. Our non-profit organization exists only through the generous contributions from caring people like you.

Busch Wildlife Sanctuary is dedicated to the protection and conservation of wild animals and natural ecosystems by caring for sick, injured, and orphaned wild animals, and by providing environmental education opportunities to the community. I hope you will be proud to know that your contributions go directly to the support of these important environmental projects. Each year over 100,000, people of all ages are exposed to our environmental programs and exhibits, and over 4,500 animals receive treatment through our wildlife rehabilitation program. Thank you for supporting our cause!

There is always something new to see at the Sanctuary and we would love you to visit us often to see our updates and new additions. Our regular visitor hours are Monday through Saturday from 10:00 am to 4:30 pm. Please tell your friends and family about the Sanctuary as well. Busch Wildlife Sanctuary is a not for profit corporation organized under section 501(c)3 of the Internal Revenue Code. Your contribution is 100% tax deductible by law. No goods or services were provided in exchange for your generous donation.

Again, thank you for your support. Your contribution will help our efforts to care for injured wildlife and educate people about the importance of preserving Florida's native flora and fauna.

Sincerely,

Amy J. Kight
Executive Director

Albrey & Co. -
We are so happy for the
partnership between WLD &
BWS. Thank you
for your kindness
JK

Director's Report

- ▶ Admin. & Fiscal Report attach. #1
- ▶ Engineering Report attach. #2
- ▶ Operations Report attach. #3
- ▶ Information Services Report attach. #4
- ▶ Environmental Education attach. #5
- ▶ Safety Report attach. #6
- ▶ Other Matters (as needed) attach. #7

J:\Board\Notebook\Directors Report

Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

2500 Jupiter Park Drive, Jupiter, Florida 33458-8964

Telephone (561) 747-5700 • Fax (561) 747-9929 • www.loxahatcheeriver.org

D. Albrey Arrington, Ph.D., Executive Director



To: Governing Board
From: Kara Fraraccio, Director of Finance and Administration
Date: June 21, 2019
Subject: Monthly Financial Report

Cash and Investments

Balances as of May 31, 2019

Certificates of Deposit:

Institution	Original Term	Maturity	Rate	Book Value	Monthly Interest Earned	Market Value
Bank United	3 Months	06/11/19	2.43%	\$ 1,000,000	\$ 2,071	\$ 1,005,402
Bank United	10 Months	06/27/19	2.34%	1,500,000	3,028	1,526,849
US Bank	1 Year	07/30/19	2.45%	1,500,000	3,179	1,530,994
TD Bank	5 Years	09/22/19	2.09%	2,000,000	3,909	2,205,804
Bank United	18 Months	02/04/20	2.65%	1,000,000	2,264	1,008,304
Bank United	2 Years	04/02/20	2.46%	2,000,000	4,188	2,008,502
US Bank	18 Months	05/01/20	3.00%	1,507,875	3,896	1,533,134
Bank United	18 Months	06/07/20	2.88%	1,500,000	3,711	1,520,832
US Bank	2 Years	01/29/21	2.71%	1,011,450	2,117	1,020,341
Bank United	2 Years	03/11/21	2.60%	1,000,000	2,213	1,005,772
Subtotal				\$14,019,325	\$ 30,576	\$14,365,934
Money Market Accounts:						
Synovus - Public Demand			2.28%		\$ 23,155	\$ 12,128,971
TD Bank - NOW			2.38%		16,144	8,104,632
Subtotal					\$ 39,299	\$20,233,603
Checking Account:						
SunTrust-Hybrid Business Account			0.50%		\$ 550	\$ 1,969,503
Subtotal					\$ 550	\$ 1,969,503
Total					\$ 70,425	\$36,569,040

Average weighted rate of return on investments is: 2.31%

As of 5/31/19:

3 month Short Term Bond: 2.35%

1 month Federal Fund Rate: 2.40%

Cash position for May 2018 was \$32,001,517. Current Cash position is up by \$4,567,521.

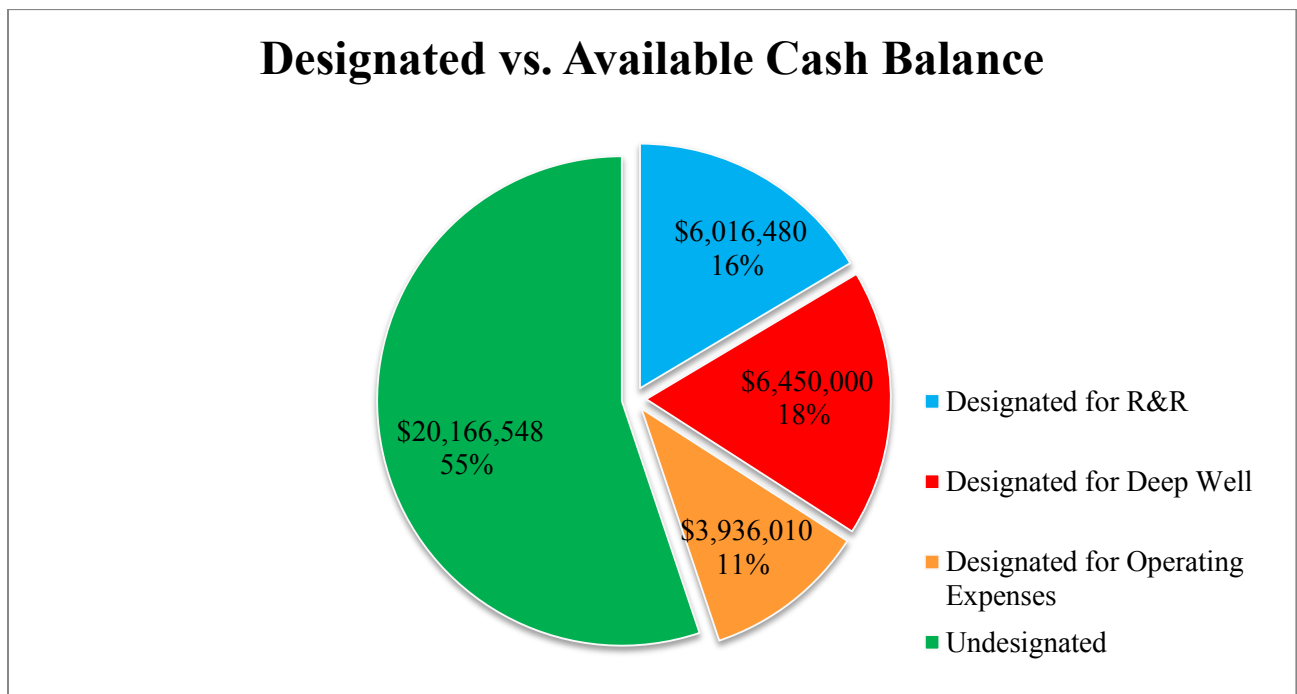
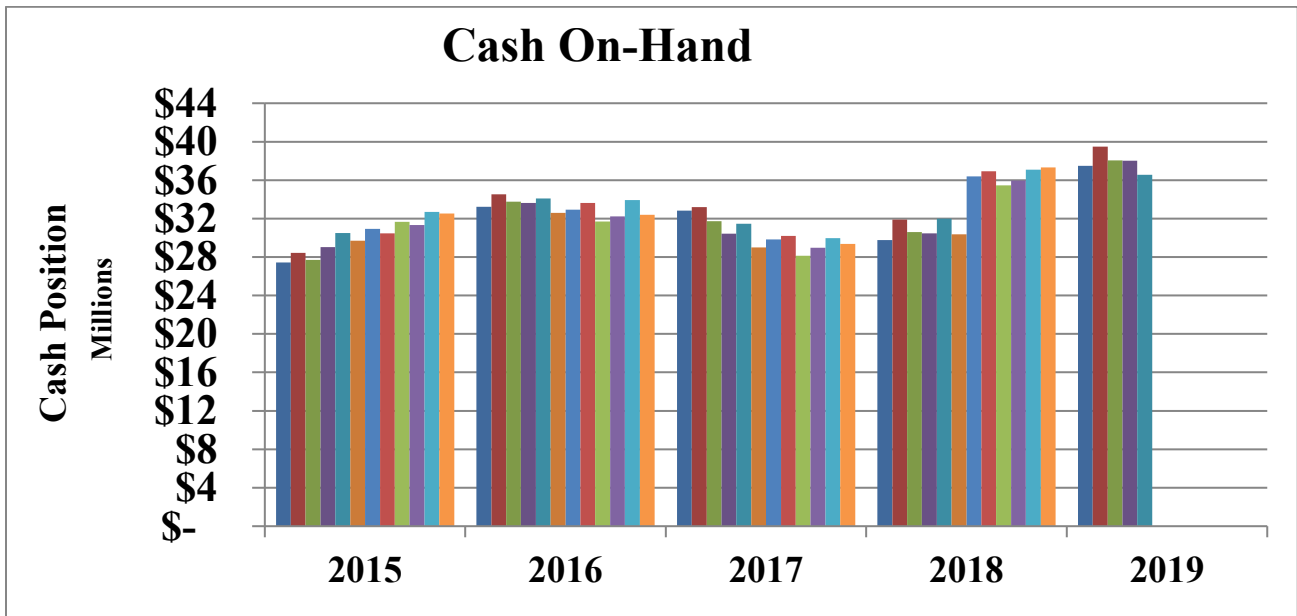
Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

James D. Snyder
Board Member



Financial Information

- Legal fees billed for the month of May totaled \$3,700. The fiscal year-to-date total is \$63,430.
- There was no Septage billing for the month of May. The fiscal year-to-date total is \$236.
- Developer's Agreement – No new Developer agreements were entered into in May.
- I.Q. Water Agreements – Osceola Woods is past due for May.
- Estoppel fees collected in May totaled \$9,050. The fiscal year-to-date total is \$60,175.

Summary of Budget vs. Actual

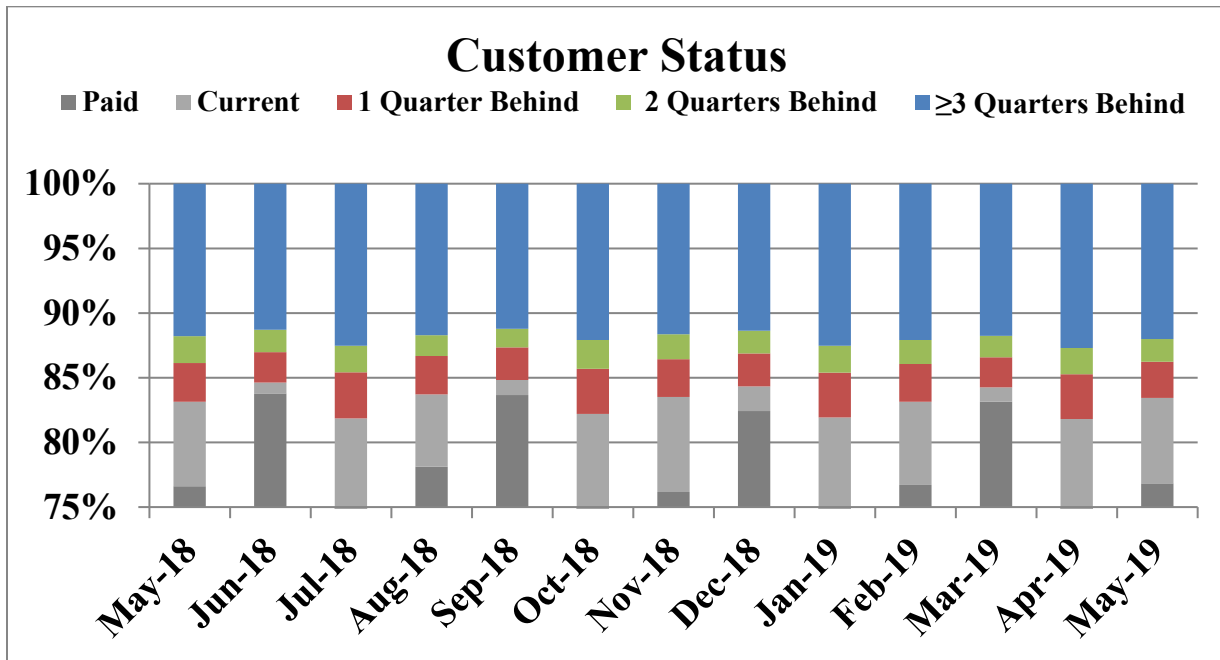
<i>Budget Benchmark</i> 67.00%	May-19 Actual	YTD Actual	FY 19 Budget	Favorable (Unfavorable)	Budget Expended	May-18 YTD
Revenues						
Operating Revenues						
Regional Sewer Service	\$1,405,044	\$11,176,513	\$ 17,067,530	\$ (5,891,017)	65.48%	\$11,152,384
Standby Sewer Service	8,417	65,685	157,550	(91,865)	41.69%	88,197
IQ Water Charges	196,205	1,576,961	2,264,000	(687,039)	69.65%	1,538,631
Admin. and Engineering Fees	1,203	34,676	48,865	(14,189)	70.96%	82,065
Other Revenue	23,025	278,126	183,000	95,126	151.98%	330,625
Subtotal Operating Revenues	1,633,894	13,131,961	19,720,945	(6,588,984)	66.59%	13,191,902
Capital Revenues						
Assessments	79,103	1,140,077	824,000	316,077	138.36%	101,399
Line Charges	5,724	168,423	232,575	(64,152)	72.42%	446,292
Plant Charges	14,333	357,313	1,402,600	(1,045,287)	25.48%	1,101,317
Capital Contributions	56,132	56,132	917,000	(860,868)	6.12%	467,434
Subtotal Capital Revenues	155,292	1,721,945	3,376,175	(1,654,230)	51.00%	2,116,442
Other Revenues						
Grants	491	24,732		24,732	100.00%	10,966
Interest Income	81,881	1,108,758	1,217,500	(108,742)	91.07%	258,630
Subtotal Other Revenues	82,372	1,133,490	1,217,500	(84,010)	93.10%	269,596
Total Revenues	\$ 1,871,558	\$ 15,987,396	\$ 24,314,620	\$ (8,327,224)	65.75%	\$ 15,577,940
Expenses						
Salaries and Wages	\$391,331	\$3,239,149	\$ 5,687,700	\$ 2,448,551	56.95%	\$3,128,798
Payroll Taxes	29,728	242,550	416,500	173,950	58.24%	234,913
Retirement Contributions	54,202	471,574	710,900	239,326	66.33%	505,229
Employee Health Insurance	98,853	722,331	1,339,800	617,469	53.91%	774,687
Workers Compensation Insurance	33,474	89,197	114,600	25,403	77.83%	45,686
General Insurance	135,156	337,379	346,716	9,337	97.31%	339,941
Supplies and Expenses	116,927	654,695	1,138,160	483,465	57.52%	696,059
Utilities	123,685	873,011	1,409,350	536,339	61.94%	887,101
Chemicals	46,950	371,204	672,570	301,366	55.19%	413,011
Repairs and Maintenance	138,132	1,285,484	1,830,615	545,131	70.22%	993,005
Outside Services	148,577	1,173,318	1,852,110	678,792	63.35%	1,187,246
Contingency			225,000	225,000	0.00%	
Subtotal Operating Expenses	1,317,015	9,459,892	15,744,021	6,284,129	60.09%	9,205,676
Capital						
Capital Improvements	1,235,088	4,531,462	11,088,500	6,557,038	40.87%	3,320,854
Renewal and Replacement	1,197,294	3,401,894	7,278,500	3,876,606	46.74%	1,945,688
Contingency			225,000	225,000	0.00%	40,495
Subtotal Capital	2,432,382	7,933,356	18,592,000	10,658,644	42.67%	5,307,037
Total Expenses	\$ 3,749,397	\$ 17,393,248	\$ 34,336,021	\$ 16,942,773	50.66%	\$ 14,512,713
Excess Revenues						
Over (Under) Expenses	\$ (1,877,839)	\$ (1,405,852)	\$ (10,021,401)	\$ 8,615,549		\$ 1,065,227

Pending/Threatened Litigation

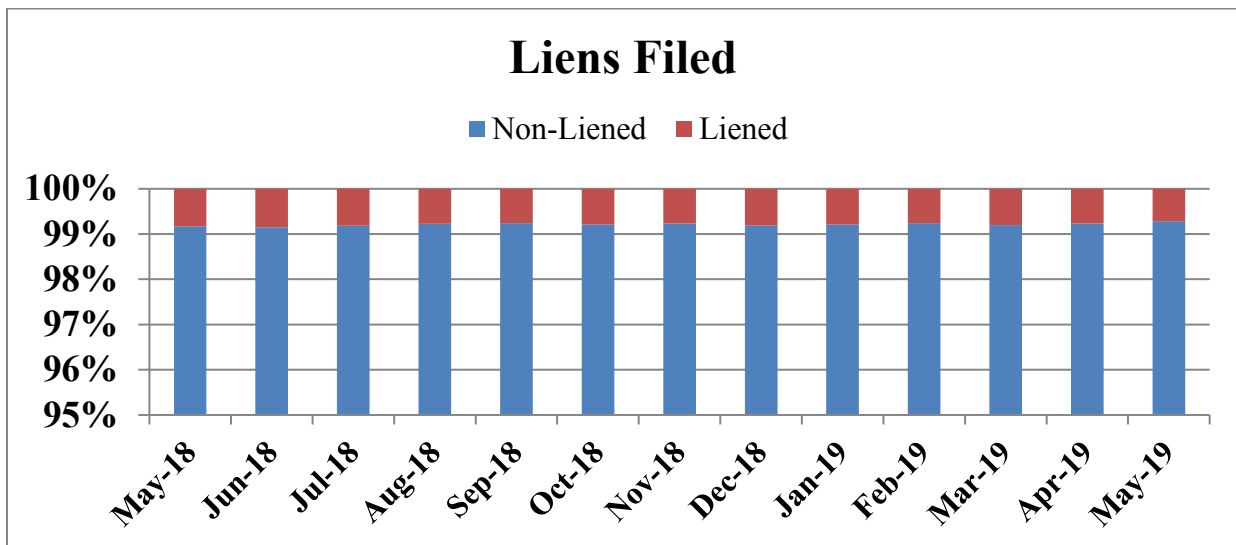
- Turtle Creek Substation 2 & 3 – Turtle Creek Village Property Owners Association, Inc. filed a Notice of Voluntary Dismissal with Prejudice on May 10, 2019, where claims against the District were dismissed.

Accounts Receivable

The chart below illustrates customers' receivable status as a percentage of quarterly sewer billing. Paid or current balances represent approximately 84% billing.



The District serves approximately 32,500 customers. Currently, the District has 234 liens filed which represent approximately 1% of our customers.



Loxahatchee River District

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D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: D. Albrey Arrington, Ph.D.
Executive Director

FROM: Kris Dean, P.E.
Deputy Executive Director/Director of Engineering Services

DATE: June 27, 2019

SUBJECT: Engineering Services Report - June 2019 Board Meeting

PROJECT HIGHLIGHTS

LS 43 and 62 Emergency Generators: Two projects to provide permanent emergency standby generators at LS 43 and 62. LS 43 is part of the cascading lift station system along Country Club Drive in Tequesta. LS 62 is a significant repump station serving areas of Tequesta and Jupiter Island. Both projects bid on May 7, 2019. Staff are coordinating with the contractor for an anticipated start date and recently took delivery of both emergency generators, pictured to the right and below, purchased under the Florida Sheriffs Association contract earlier this year.



Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

James D. Snyder
Board Member

ENGINEERING IN-HOUSE PROJECTS

Lift Station Fall Protection: After evaluating nets, hand rails and grates staff have agreed a retro-fitted safety grate is the preferred approach to providing fall protection at lift stations. The initial field evaluation is complete and staff are coordinating with the manufacturer to specify the preferred installation and 1-2 alternates for locations where the preferred option will not fit. Once the installation options are determined we go out to bid and award a contract to have the fall protection installed at all lift stations without fall protection. Based on the evaluation there are 200 lift stations without fall protection

Lift Station Rehabilitations General Construction Services: Rehabilitation requirements on three stations have been finalized and purchase orders issued for their rehabilitation. Staff are working with homeowners, the Town of Jupiter and FPL on street light relocation and driveway configurations at a fourth station.

Additionally, in EAM we have been accumulating condition data on lift stations and the various assets that make up the lift station. Staff are beginning work on a new tool to evaluate and prioritize this data for future rehabilitation work.

Cellular Telemetry: IT and Engineering staff are working on a project to test cellular telemetry installation at existing stations with no telemetry. The third alternate option is online and staff will begin working on the procurement process once the viability of the options is determined. It is anticipated that we will select up to three suppliers to source telemetry units through a competitive bid process.

181st Street Gravity Sewer System: This project will serve 11 lots located just off Limestone Creek Rd. The new system will tie into an existing gravity system in Limestone Creek Rd. Design is complete. One permit is pending. Staff are coordinating with the permit agency to resolve.

New Palm Beach Heights Low Pressure Sewer System: This project will serve 36 lots located just off US 1 south of Donald Ross Rd. The new system will tie into an existing gravity system serving the commercial property to the north. This project was awarded at the April Board Meeting. Staff anticipate construction beginning by July 2019.

Olympus Drive Force Main Replacement: This project is part of our asbestos cement (AC) force main replacement program and will replace approximately 2,000 feet of AC force main in Juno Beach. Soft digs were completed but results were not conclusive. Staff are investigating further with GPR and potholing as required. This project has been significantly delayed from the original schedule but the importance of the utility locates given the nature of the proposed directional bore installation warrants the delay.

LS 43 Emergency Generator: A project to provide a permanent emergency standby generator at LS 43. This station is part of the cascading lift station system along Country Club Drive in Tequesta. This project bid on May 7, 2019. Staff are coordinating with the contractor for an anticipated start date.

LS 62 Emergency Generator: A project to provide a permanent emergency standby generator at LS 62. This station is a significant repump station serving areas Tequesta and Jupiter Island. This project bid on May 7, 2019. Staff are coordinating with the contractor for an anticipated start date.

Lift Station 57 and 58 Tie-in to Transmission System: Both cascading stations will be connected to an adjacent transmission force main relieving significant flow to the repump station. Staff are coordinating with the design engineer for final revisions. Construction has been pushed to August 2019.

LS065: Lateral lining following the main lining performed in summer 2018 is scheduled for this year. The lateral liner contractor has mobilized and is complete. In March 2019 we awarded the Penn Park Lateral Lining project to

this contractor and the current schedule has him mobilizing into Penn Park upon completion of LS065.

Lift Station 70 Emergency Generator and Power/Control Panel: This project provides a permanent emergency generator at lift station 70 and a new power and control panel including variable speed pump drives. In an effort to expedite the panel and complete this work with the emergency generator, staff included the panel as a design/build specification, with specific component and performance requirements, in the emergency standby generator project. Staff have placed the station on bypass and the new panel is installed. Start up services are scheduled over June. It is anticipated the station will go into service in July.

Radio Telemetry System: The work is underway and should complete by June 2019.

Penn Park Lateral Lining: A PBC neighborhood repaving project. Paving has been postponed to allow the District to inspect their gravity system and perform any improvements prior to paving. This project was awarded at the March Board Meeting and the contractor, currently working in LS065's collection system, plans to mobilize to Penn Park by June.

CONSTRUCTION DEPARTMENT

Staff have been busy with scheduled maintenance and repair in the field and plant as well as emergency repairs.



To the left staff performed routine maintenance/repair in Palm Beach Heights. Work included replacing a section of service lateral to correct a belly in the line and deflection under an existing storm drain.

To the right staff performed emergency maintenance/repair in Jupiter Bay in advance of an ongoing lining project. The repair corrected a severe offset joint just outside a manhole.



To the left staff performed routine maintenance and repair at the headworks lift station located on the plant site.

COLLECTIONS/REUSE



A recurring pipeline failure on the reuse system was resolved this month when staff coordinated with an outside contractor to replace a section of PVC piping installed at Central Blvd and Donald Ross. The PVC piping was replaced with DR11 HDPE.

Plant Maintenance assisted Collections with installation of a motor soft start at IQ515. IQ 515 boosts reuse main pressure on the way to Jupiter Hills Country Club



SANITARY SEWER OVERFLOWS

There were 0 sanitary sewer overflows in the collection/transmission system for the month of May.

Loxahatchee River District

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D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: Albrey Arrington, Ph.D., Executive Director

FROM: Tony Campbell, Director of Operations

DATE: June 12, 2019

SUBJECT: Operations Department Monthly – Report for May 2019

Treatment Plant Division

Values:

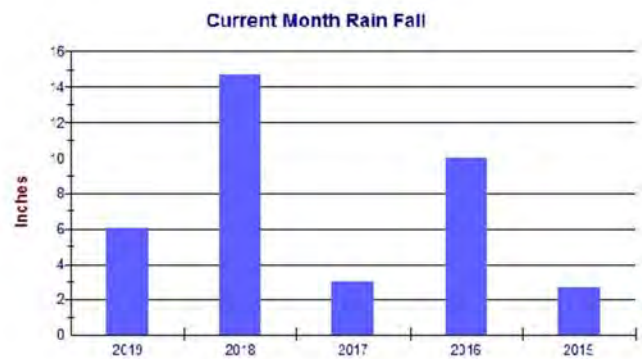
This past month Operations has been diving into our current work order system and identifying our top 10 % of vital equipment inside the plant. Equipment on this list has been identified as carrying the highest financial and environmental consequences if failure occurs. Saying this, it's imperative all our vital equipment is thoroughly identified, and strict preventive maintenance program is being followed. Our Operations and Maintenance staff has taken full ownership of this task and has created this equipment list also working alongside IT to implement an appropriate preventive maintenance schedule. This is an excellent example of multiple District Departments putting our minds together demonstrating our District Core Values, **Lean and collaboration**.



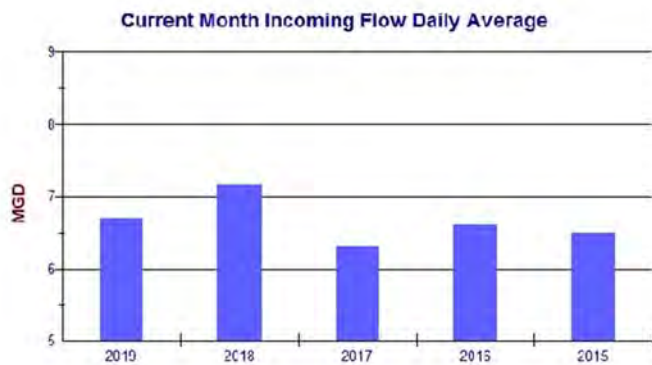
We've had another great month of no permit exceedances.



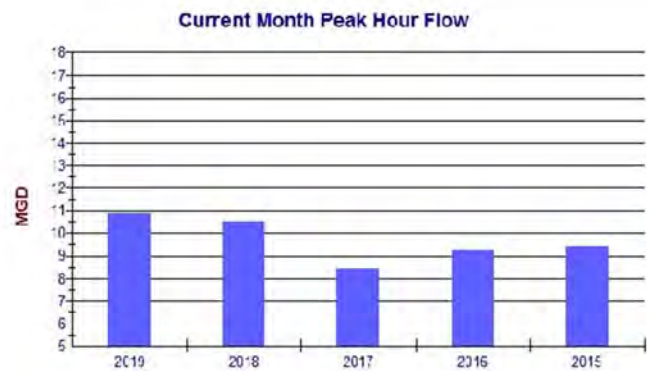
The plant total flow for the month of May was 207.50 million gallons.



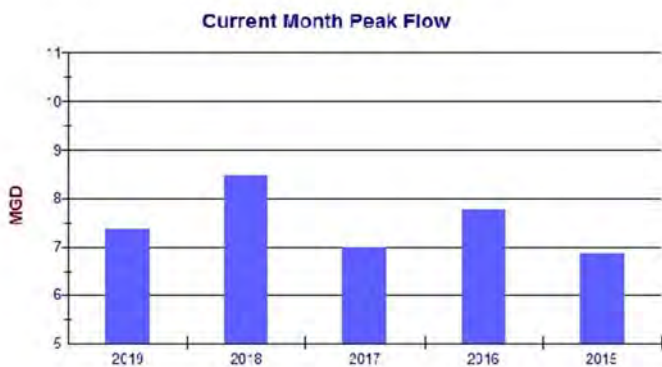
6.06 inches of rain was recorded at the plant site during the month of May.



The treatment plant incoming flow for the month of May averaged 6.69 MGD compared to 7.71 MGD one year ago, for the same month.

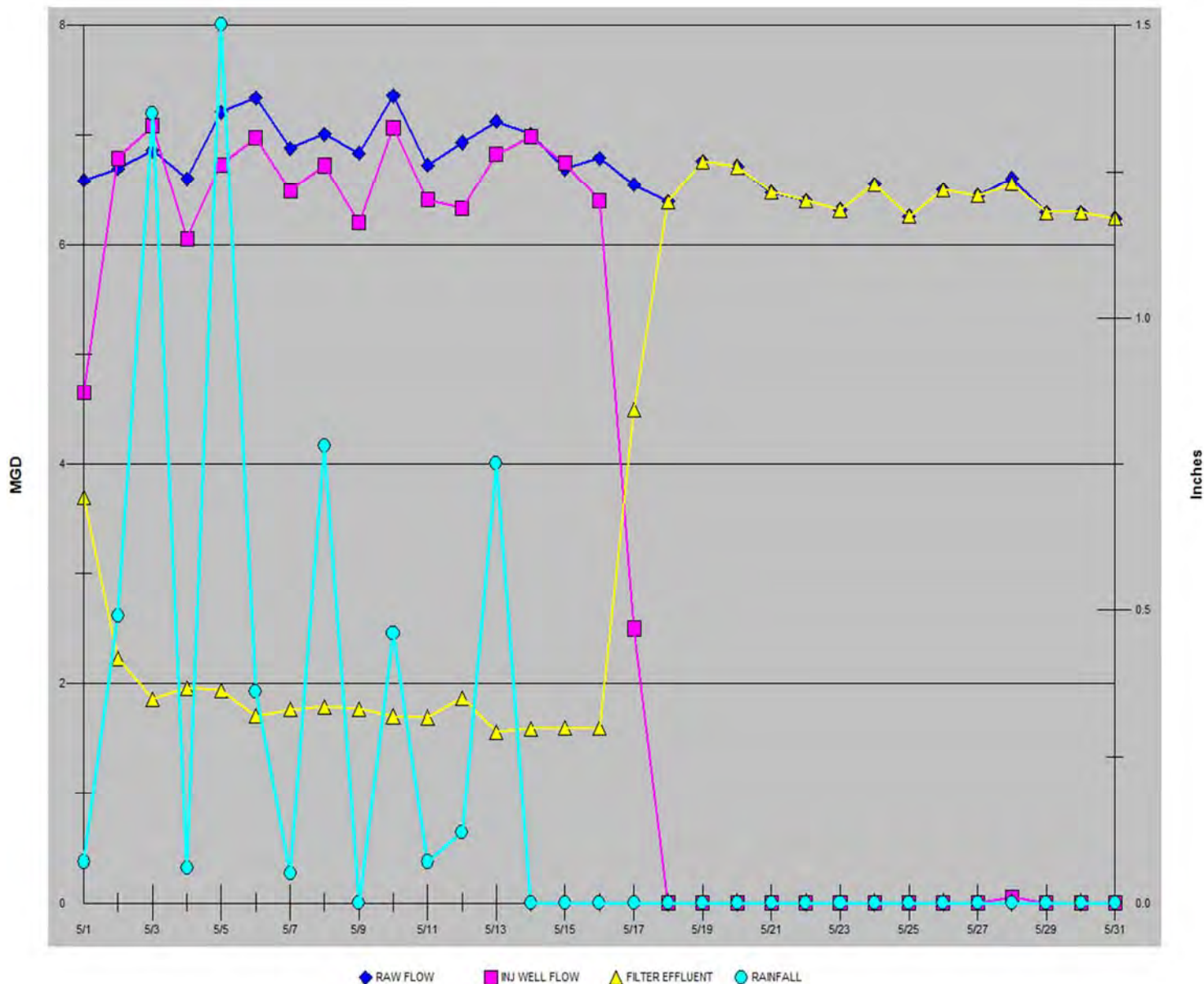


The peak hourly flow rate in May was 10.86 MG.



The greatest single day average flow in was 7.36 MGD.

For the month of May, the plant received 207.50 MG of influent flow of which 124.96 million gallons were sent to the IQ storage system where they were dispersed as needed to the various golf courses and the Abacoa development sites. We received 6.06 inches of rain during the month and 107.04 million gallons of blended effluent was diverted to the Injection Well. Overall, 60.22% of incoming flows were recycled for IQ use and the plant delivered 149.94 million gallons of IQ water to the Reuse customers.



Year to date, the plant recycled 67.19% of all incoming flow and the total amount of IQ water delivered to reuse customers stands at 746.06 million gallons.

All monthly reporting has been submitted on time.

Treatment Plant:



Above photos depict two of our newer operators going through steps placing a Deep Bed Filter Cell into a manual wash cycle. Like most of our other Treatment Plant controls the Deep Bed Filters are typically operated in an automated configuration. Nonetheless, Operations staff appreciate the importance of understanding exactly how to operate all our assets in a manual configuration, and we spend quality time training on such manual operations. By creating clear and precise Standard Operating Procedures and then training on such procedures, we work to assure Operations staff is always ready to maintain plant process performance through the next failure or emergency.

Maintenance Department:



Above and Below photos depict our maintenance department restoring one of our Original structures inside our treatment plant. The structure that was rehabilitated is labeled A-Structure which serves two purposes, diversion point for IQ water to lakes and a secondary source for vital plant service water. The improvements to A-Structure includes new pump/motor, addition of a much-needed Variable Frequency Drive, new control wires, the entire structure was sandblasted along with adding new stucco and repainting. Also, we added communications and SCADA control features, which allow operators to remotely manage the system. With this new configuration in place, operators have complete control and monitoring capabilities when using A-structure as a secondary plant service water source.



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D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

TO: Albrey Arrington, Ph.D., Executive Director
FROM: Bud Howard, Director of Information Services
DATE: June 18, 2019
SUBJECT: Monthly Governing Board Update for May 2019

WildPine Ecological Laboratory

Riverkeeper Project

In May, District and Jonathan Dickinson State Park (JDSP) staff collected water quality samples from 23 monitoring stations throughout the watershed. Town of Jupiter staff also collected an additional 8 bacteria samples from Jones and Sims Creeks. Overall, water quality conditions were better than April, despite increases in precipitation and flows to the river.

Fecal coliform bacteria scored “Poor” at only 2 of the 31 stations (6% in May compared to 8% in April) when scored to DEP’s threshold of 800 MPN/100 mL. The Jones Creek station (CALC), once again, had the highest concentration at 2,310 MPN/100 mL, which was marginally lower than last April’s result of 2,909 MPN/100 mL.

Total Phosphorus (TP) concentrations in May also improved from last month with 9% (2 out of 23) of the stations exceeding the EPA/DEP’s Numeric Nutrient Criteria (NNC), down from 20% in April. Two stations north of JD State Park had the highest concentrations of TP; Station 56 at 0.14 mg/L and Station 111 at 0.13 mg/L. Station 56 is located at the outfall of a residential community stormwater lake surrounded by turfgrass and homes on septic systems, and Station 111 is a roadside ditch near 138th St and Kitching Creek Rd. These results are not unusual for those sites and slightly above the NNC of 0.12 mg/L for those locations. All the other sites scored “good” relative to the NNC. The average TP concentration for all stations in May was 0.056 mg/L.

Chlorophyll (Chla) concentrations scored “Poor” at 8 of 23 (35%) Riverkeeper stations when compared to the stringent NNC for each river segment. Like phosphorus, the same two JDSP stations had the highest concentrations of Chla with 55 ug/L at Station 56, and 52 ug/L at Station 111, both more than double the NNC of 20 ug/L for these sites. The average for all stations in April was 12 ug/L Chla.

Total Nitrogen (TN) was generally “good” this month with all but one station meeting the NNC. Station 56 in JDSP was over the NNC limit (1.54 mg/L for fresh water) at 1.6 mg/L. Once again, these results are not unusual for that site. The average for all stations in May was 0.8 mg/L TN.

Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

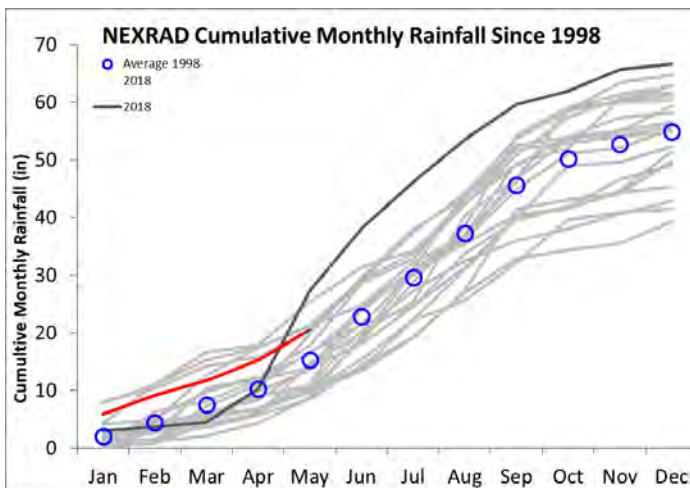
James D. Snyder
Board Member

Hydrologic Monitoring

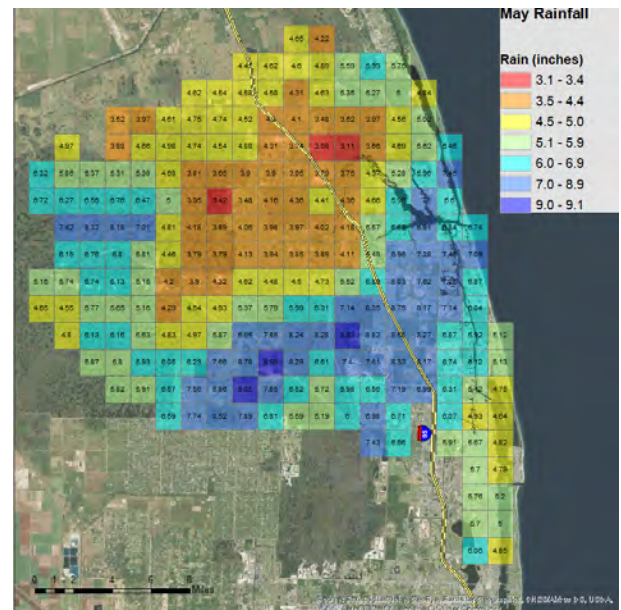
Mid May typically marks the start of the wet season, but this year we started the month with some heavy rain between May 2nd through the 13th, but then no rain for the remainder of the month. The month closed with an average of 5.3” of total rainfall measured across the watershed, which is only slightly higher than the historical monthly average of 5.1” (since 1998; figure below). The highest single day rainfall total was 0.9” measured on May 3. The year to date cumulative rainfall is 20.5”, 34% higher than the 15.3” typical through May. This is in sharp contrast to last year (May 2018), which brought record rainfall of 16.9” to the region.

Most of the rainfall experienced during May fell in a band along the southern region of the watershed including Loxahatchee Slough (which received up to 9” of rain) Abacoa and Jonathan’s Landing (figure below). Northern areas including Cypress Creek Natural Area and portions of Jonathan Dickinson State Park were among the driest regions of the watershed, with less than half the amount of rain relative to other parts of the watershed.

Flows over Lainhart Dam ranged from 39 to 156 cfs with a mean flow of 86 cfs for the month of May. There were no flow or salinity Minimum Flow and Level (MFL) violations for the month. SFMWD managers released a daily average of 136 cfs of water through the S-46 flood water control structure on May 6 in response to substantial precipitation (4 inches) early in the month. In addition, G-160 control structure had flow for 15 days averaging 87 cfs.



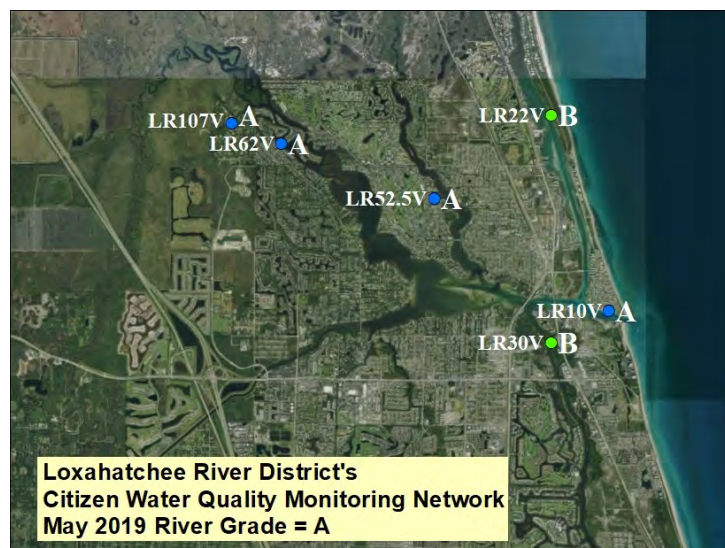
Cumulative annual rainfall using NEXRAD radar-based data. Red line indicates current 2019 cumulative rainfall total. Blue circles indicate mean cumulative rainfall since 1998. (2018 indicated as dark gray line).



Rainfall distribution across the watershed using NEXRAD data. Each pixel represents an area of 2 km x 2 km. Blue colored pixels show highest rainfall and red pixels show lowest rainfall.

Oyster Spat Monitoring

Oyster spat monitoring for the 29-day period ending June 4 is complete and the oysters are showing higher than average settlement in both river forks for this time period. Average settlement density in the NWF was 6,334 spat m² with 75% of the settlement activity occurring at the downstream site. Average settlement in the SWF was 5,656 spat m² and like the NWF, most settlement activity, 63%, was at the downstream site. We typically see heavy oyster spawning activity in the spring and fall, so we may see reduced oyster spawning as we transition into summer.



Volunteer Water Quality Monitoring Program

The weekly Volunteer Water Quality Monitoring grade improved to an “A” in May. All the scores were in the “Good” with only a few “Fair” scores for pH, visibility and color. Overall, it was a very good month!

May-19

Site	Temp (F)	Secchi	Salinity	pH	DO	DO%	Color	Vis	Salt	pH	DO	DO%	Color	Score	Grade
LR10V	79.7	1.9	32.9	8.2	6.7	100.2	1.0	Fair	Good	Good	Good	Good	Good	95.8	A
LR22V	80.2	2.3	34.5	8.7	7.0	107.8	1.5	Good	Good	Fair	Good	Good	Fair	83.3	B
LR30V	85.0	1.7	32.0	7.7	7.0	108.9	1.0	Good	Good	Fair	Good	Good	Good	87.9	B
LR52.5V	77.0	0.8	28.3	7.9	5.4	76.3	1.0	Good	Good	Good	Good	Good	Good	100.0	A
LR62V	76.8	1.0	13.0	7.5	5.0	65.3	1.0	Good	Good	Good	Good	Good	Good	100.0	A
LR107V	77.0	VAB	6.2	7.7	4.8	60.1	1.0	VAB	Good	Fair	Good	Good	Good	90.0	A
Average	79.3							scale: 0=poor 2=fair 4=good						92.8	A

VAB (Visible at Bottom)
DO (Dissolved Oxygen)

Intern News

Danny Tomasello is our new summer intern in the lab. He grew up in Jupiter where you could frequently find him on the boat or on the beach fishing. He graduated from the University of South Florida with a B.S. in Marine Biology. He is passionate about issues pertaining to South Florida marine ecosystems, particularly the Loxahatchee River. He resides on Jones Creek and has been helping with the day to day monitoring of turbidity conditions. In the future, he hopes to continue working in conservation research and advocacy.



Customer Service

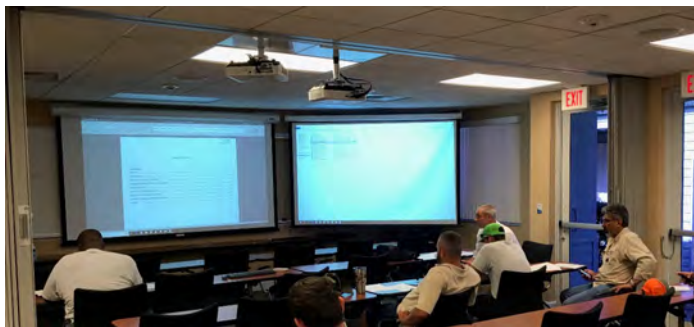
Payment Processing

Second Quarter Bills were due May 15, so the Customer Service Staff were busy processing over 17,600 payments totaling \$2.33M. Curiously, we have now had four consecutive quarters of very consistent payment counts for the first and second months of the quarter. Historically, we saw much greater variability in payments – sometimes as much of 50% fewer or more than our present counts for the first and third months of the quarter. We are not seeing anything noteworthy in our customer payment methods (eCheck, Credit card, check/cash) and it appears that we may have plateaued on the gradual increase in the proportion of customers paying by digital means, presently at 68% for the quarter.

Information Technology

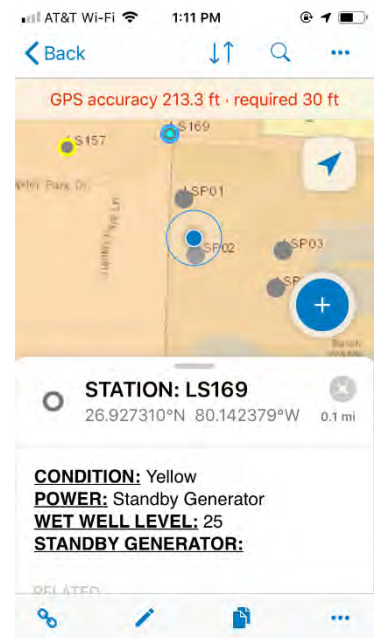
Hurricane Season Preparation

Prior to the start of hurricane season, IT staff helped make several enhancements to our Damage Assessment Tools and facilitate staff training. These tools are designed to improve the communication of information and coordination following a storm event.



Training for Lift Station staff

Users were trained on how to use the **Collector for ArcGIS** app for their mobile device. This app provides a way for users to visualize and capture data on lift station's condition. Once the device has connectivity, the data is uploaded to data visualization and summary tools at the District's hurricane Command Center. During the trainings, users observed the real-time updates that each of them made to the system.



Mobile device data collection screen

IT staff also trained users on how to use **Microsoft Teams** to help groups of people communicate using their mobile device, laptop or computer. This app provides familiar mobile texting-like abilities with the additional benefit of being able to manage the team from a central location like the hurricane command center or a laptop in the field.

The IT staff plans to offer additional training throughout the hurricane season to ensure readiness.


Loxahatchee River Environmental Center

June 2019



River Center Summary Statistics

LRD'S ENVIRONMENTAL STEWARDSHIP DASHBOARD



	Total Visitors	School & Camp Visitors	RC Offsite Programs	RC Onsite Programs	RC Staff Guest Appearances	Program Cancellations	Volunteer Engagement	1st Time Visitors	Visitor Satisfaction	Staff Assessment	Environmental Stewardship	Expenses	Program Revenue
Benchmark / Customer Expectation	% of Target	% of Target	% of Target	% of Target	% of Target	% of programs	% of Target	% of Target	Rating Average	Rating Average	Positive Responses	% within budget	% of Target
Green Level	≥ 90%	≥ 90%	≥ 90%	≥ 90%	≥ 90%	< 5%	≥ 90%	≥ 90%	≥ 4	≥ 4	≥ 90%	≥ 85% but ≤ 105%	≥ 90%
Yellow	≥ 75%	≥ 75%	≥ 75%	≥ 75%	≥ 75%	< 10%	≥ 75%	≥ 75%	≥ 3	≥ 3	≥ 80%	≥ 80%	≥ 75%
Red	< 75%	< 75%	< 75%	< 75%	< 75%	> 10%	< 75%	< 75%	< 3	< 3	< 80%	< 80% or > 105%	< 75%
2017 Baseline	103%	103%	179%	127%	141%		118%	50%	4.8	4.0	87%	102%	114%
2018 May	139%	81%	120%	282%	0%	8%	295%	54%	5.0	4.1	90%	85%	87%
June	100%	113%	181%	108%	0%	13%	99%	79%	4.7	3.9	93%	93%	75%
July	102%	90%	202%	114%	0%	0%	145%	78%	4.8	3.6	97%	83%	41%
Aug	106%	59%	157%	109%	0%	11%	79%	136%	5.0	3.9	99%	87%	86%
Sept	96%	95%	168%	144%	0%	24%	138%	163%	4.8	3.9	98%	91%	78%
Oct	120%	163%	120%	214%	160%	0%	150%	150%	4.6	4.6	87%	88%	102%
Nov	120%	157%	780%	206%	430%	42%	142%	45%	4.8	3.3	93%	82%	100%
Dec	131%	89%	130%	203%	0%	9%	122%	49%	4.5	4.2	83%	101%	160%
2019 Jan	105%	74%	450%	139%	70%	0%	281%	53%	4.5	4.2	83%	101%	160%
Feb	106%	142%	129%	92%	103%	9%	238%	88%	4.9	4.4	97%	93%	62%
Mar	119%	112%	268%	148%	203%	0%	119%	156%	4.8	4.5	91%	86%	73%
Apr	79%	75%	553%	77%	282%	33%	270%	99%	4.7	4.1	93%	89%	66%
May	113%	113%	960%	164%	0%	0%	250%	74%	4.8	4.1	92%	97%	56%
Consecutive Months at Green	1	1	13	1	0	1	9	0	13	6	4	5	0
Metric Owner	O'Neill	Harris	Harris/Duggan	Harris/Duggan	Duggan	Harris	Harris	O'Neill	O'Neill	O'Neill	O'Neill	O'Neill	O'Neill

Metric	Explanation
RC Guest Appearances	We were not invited to do any outreaches this month.
1st Time Visitors	We have sent out postcards to 1 neighborhood in Jupiter in an attempt to drive in new visitors. We are monitoring the success of this outreach campaign.
Program Revenue	Program revenues should catch up as we enter the summer and revenue from camp begins to be accounted for.

River Center General

Sawyer "Tommy" Thompson Scholarship Awards

The Loxahatchee River District awarded two \$1,000 scholarships to local graduating high school seniors. Lauren Arrington attended the Lecture on June 7th to receive her award. Christopher Keller was unable to attend but will be presented his award later this month.



Christopher Keller – Jupiter Environmental Research and Field Studies Academy

Chris has lived in Jupiter, Florida since he was four years old. He was a volunteer at the River Center since his freshman year and volunteered more than 275 hours here. He is always fishing and boating on the Loxahatchee River. When not in school or volunteering, he was constantly fishing, boating, hiking and diving. He loves everything outdoors. He recently graduated from the Jupiter Environmental Research and Field Studies Academy at Jupiter High School. He will attend the University of Florida beginning summer 2019 and will major in Economics.



Lauren Arrington – King’s Academy

Lauren Arrington has grown up in Jupiter, Florida and is a graduating senior from The King’s Academy high school. An avid fisherwoman and beach-goer, Lauren is passionate about water quality and South Florida’s unique watershed. Lauren hopes to positively impact both the environment and society by designing and building sustainable infrastructure to support our future. She will attend Columbia University in the city of New York and plans to study Civil Engineering in Columbia’s School of Engineering and Applied Science.

Lecture Series – Beyond Landscaping – Creating Wildlife Habitats for Birds and Butterflies

On June 7th, the River Center welcomed CJ McCartney from the Master Gardeners of Palm Beach for her presentation entitled “Beyond Landscaping – Creating Wildlife Habitats for Birds and Butterflies” Planting beautiful, natural gardens to attract birds, butterflies and pollinators to our yards is not only fun, it’s also making a huge difference to our neighborhoods and communities. This talk discussed how to create wildlife gardens by planting the flowers, bushes and trees that will attract birds and butterflies to your yard while giving them a new home. We had fifty-three guests participate in this lecture.



Special Programs

Sandbar and Seashells Family Boat Tour

This month the River Center held a Sandbar and Seashells Family Boat Tour with Aqua Adventures on May 8th. The Sandbar and Sea Shells Boat Tour provided the opportunity for nine guests to open the throttle and speed around the central embayment visiting sites like the Jupiter Inlet Lighthouse, Bird Island, the sandbar, and the osprey nest. Visitors got the opportunity to anchor up and explore the mangrove island with dip nets and snorkeling equipment. This was the perfect experience to get out on the water and enjoy the Loxahatchee River. We conduct these family emersion opportunities throughout the summer.



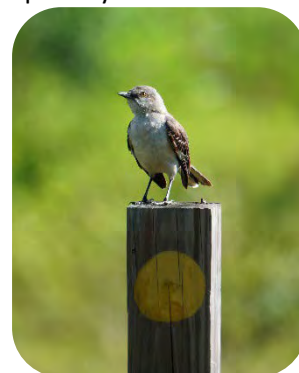
Girl Scout Eco-Action Workshop: Inventing a Brighter Tomorrow

Brownie and Daisy Girl Scouts came to the River Center to participate in the last Girl Scout Eco-Action Workshop of the school year on May 11th. Girls transformed into Wildlife Scientists and Inventors. All the activities throughout the workshop were centered on the unfortunate reality that there is trash on the beach. Our activities included sea turtle hurtles, its tough to be a shorebird, and ocean currents and plastic voyagers. Girls invented solutions to pollution, learned how trash harms us all and other animals, and what we can do to help. The girls also designed a reuse mural art project with materials that were collected from the Great American Cleanup. They put on their thinking caps, tuned up their inventor brains, and worked as a team to make this world a better place! Staff would like to thank all the partners and volunteers who participated in the workshop; especially the Society of Women Engineers and Pratt & Whitney for their continued support.



Naturalist Series Nature Hike to North Jupiter Flatwoods Natural Area

On May 14th the River Center team facilitated its last nature hike of the season. Eight visitors took a trip through North Jupiter Natural Area. This 160-acre natural area preserves mesic flatwoods, wet flatwoods, depression marsh, and dome swamp ecosystems. It is also home to several populations of rare plants including Atlantic St. John's-wort, trumpet creeper, and yellow jessamine and many of the wildflowers were in full bloom. It is located within a system of linked conservation lands creating a wildlife corridor adjacent to the Loxahatchee River. We were lucky enough to have Paul Strauss be part of our walk who is an interpreter instructor with the Florida Park Service and extremely knowledgeable with Florida's wildflowers.



Homeschool Workshop: Fish Like a Girl

On Wednesday, May 15th the River Center hosted a "Fish Like a Girl" Homeschool workshop for girls ages 7-13. This awesome workshop focused on conservation and regulations, knot tying and tackle basics, and casting practice. After the classroom portion of the workshop, we crossed the parking lot, bait and tackle in hand, and went fishing! The girls were very patient and they ended up catching 5 fish including: an Irish Pompano, Lane Snapper, and Florida Pompano.



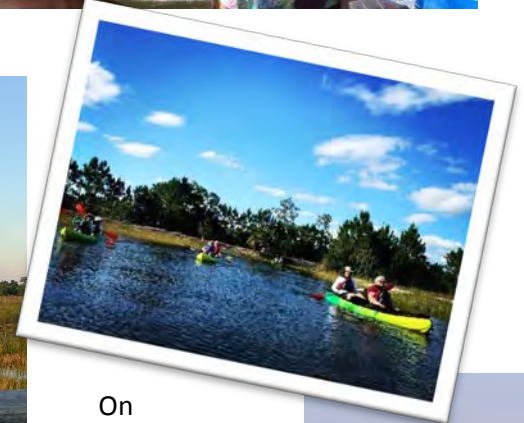
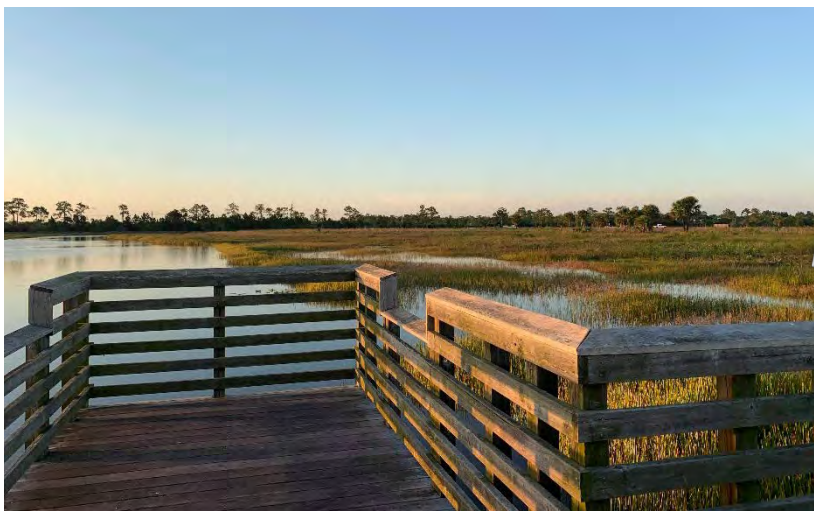


Naturalist Series: Kayak Tour from Lainhart Dam

The River Center partnered with the South Florida Water Management District to host a kayak tour from Lainhart Dam on Friday, May 17th. This paddle was to celebrate the anniversary of the Wild & Scenic designation of the Loxahatchee River. Winding through the fresh water swamp, guests were immersed in the beautiful and scenic parts of the Loxahatchee. We saw alligators, limpkins, osprey, and two manatees along our paddle. This day was also special because it was the kick off of training with our summer staff members. It was a magical day on the water and we had 10 guests participate in this event.



Naturalist Series: Full Moon Paddle



On Saturday, May 18th the River Center hosted a Full Moon Paddle at Pine Glades

Natural Area. The weather could not have been more perfect for our adventure through the grassy marsh of the natural area. As guests paddled along, we saw various local wildlife and vegetation including: alligators, limpkins, sandhill cranes, roseate spoonbills and newly planted Florida Red Maple trees. It was a great way to spend an evening and we hope to do more full moon paddles in the future. We had 14 guests participate in this event.



Summer Camp Counselor Training

This month the River Center conducted summer camp counselor training for the upcoming summer season. Fourteen high school students dedicated their time for training on water safety, kayaking, seining, and equipment use on May 18th. We also covered counselor expectations, responsibilities, and behavior. They got a chance to meet each other, the college interns, and River Center staff. To be a River Center counselor requires dedication, enthusiasm, and hard work. We have been so proud of these volunteers and are looking forward to a happy and safe summer camp season.

River Center Aquatic Adventure Summer Camp Family Open House

On May 22nd the River Center held for the first time a summer camp open house for families that will be participating in our Aquatic Adventure Summer Camp. This event came about to get new families familiar and comfortable with the River Center, our summer staff, and to complete and turn in paperwork. Staff was available to answer questions, provide agendas, and pass out t-shirts. Families also got a chance to look at the aquariums and were provided a touch tank. We had 30 children and 25 adults come throughout the evening. It was a great way to meet new families.

Homeschool Workshop: Estuary Exploration

The River Center hosted its last homeschool workshop titled Estuary Exploration at Blowing Rocks Preserve on May 29th. This was a kickoff to the summer with 33 students and 15 adults participating in seine and dip netting in our beautiful Indian River Lagoon. Students discovered sea urchins, a variety of juvenile fish species, and many species of seagrass and algae! We had fun exploring the preserve and splashing around outdoors. Students understood the importance of these seagrass and mangrove habitats and learned about abundance and diversity of these ecosystems.



Outreach

We were not invited to participate in any outreach events this month.



Volunteer of the Month – Julian Leyva

This month the River Center would like to acknowledge Julian Leyva as our Volunteer of the Month. Julian has been a volunteer at the River Center since last summer and has earned over 80 hours of community service. In the fall he will study Art at Dreyfus School of the Arts. He enjoys working with our touch tank animals and is an avid angler in his spare time. Recently Julian has been a great help with training our new summer volunteers, showing them how to perform daily tasks, welcoming new guests, and daily upkeep of the center. We are so appreciative of his hard work and dedication and look forward to his continued support. Thanks Julian!

Upcoming River Center Events

RSVP at www.lrdrivercenter.org/events-calendar
rivercenter@lrcd.org or 561-743-7123

June 15, 7 am – 3 pm: AustinBlu Land & Sea Fishing Tournament: Join the River Center and the AustinBlu Foundation for the annual AustinBlu Fishing tournament on Saturday, June 15th. This family-

friendly tournament aims to support the education and outreach efforts of the foundation, which is dedicated to teaching people about the importance of safety on the water. This unique tournament will showcase not just one competition, but two! Anglers will have the option to compete in our Release Competition and/or the Harvest Competition. In the Release Competition, anglers will receive points for the number/species of fish caught, photographed, and released. In the Harvest Competition, anglers will compete to catch the heaviest fish out of these 4 categories:

- Saltwater Catfish
- Crevalle Jack
- Snapper (any species)
- Checkered Puffer

Fishing will commence at 7:00 am and with lines out of the water at 3:00 p.m. Anglers will have until 4:00 pm to submit and weigh their catches. The tournament celebration will begin at 5:00 pm. Participants can enjoy food and beverages from local eateries Food Shack, Dune Dog and Kona Ice as well as partake in our various family-friendly activities such as arts & crafts, a bounce house and a campfire which are free to enjoy during the event. Winners will be announced at 7:00 p.m.

June 20, 1:30 pm – 3:30 pm: Kayak Tour: Join the River Center our public kayak tour to Coral Cove Park. Discover Jupiter's beautiful waterways on this naturalist led tour. Launching from of Coral Cove, guests will paddle through the beautiful blue waters of the Intracoastal. Don't miss out on this exciting kayaking excursion! Kayak Difficulty Level: Easy, all paddler levels welcome. All equipment will be provided but interested participants should bring water shoes, sunscreen, and plenty of water! The cost for this program is \$20 per person. Make sure to reserve your spot today! Space is limited!

June 21, 9 am – 11 am: Kayaking 101: Join the River Center for our Intro to Kayaking: Kayak 101 workshops! Participants in these workshops will learn basic kayak strokes, safety tips and how to be a proficient paddler on the water. This course will be conducted by a Level 2 Kayak instructor and all equipment will be provided. Registered participants need to bring water, water shoes, and comfortable clothing that can get wet. Registration is required to attend. Space is limited.

June 22, 8 am – 4 pm: Boating Safely Class: The River Center continues to collaborate with the US Coast Guard Auxiliary "Flotilla 52" to provide a series of Boating Safely Classes targeted specifically to young boaters in our community. These classes are provided through a generous sponsorship by the AustinBlu Foundation, a not-for-profit dedicated to raising awareness and promoting educational programs to improve boater safety. There is no cost for this class, however a deposit is required to reserve a seat. The deposit of \$10 will be refunded in full to all students who complete the class. Recommended for children 12 years and up.

June 29, 10 am – 11:30 am: Bloomin' in the Garden: Let's go explore! Join the River Center for our summer Bloomin' in the Garden program, designed for children ages 3-7. The program will start at 10:00 am in the River Center with a story time and a garden-themed craft. We will then move to our garden for a garden themed hands-on activity. When it's time to go home, children will receive a plant to take home to start their own garden! So, don't miss this exciting opportunity for your little ones to enjoy nature! Adults and children should come prepared and dress comfortable for being outside in the garden. All equipment will be provided, and this program is free of charge. Donations are always welcome. Please RSVP to attend!

June 30 – August 9: Jr. Angler Fishing Tournament: The Loxahatchee River District's River Center, in partnership with Fishing Headquarters, is delighted to announce the 6th Annual Jr. Angler Fishing Tournament. Due to its high popularity last year with over 50 anglers, participation for this year's

tournament is expected to grow. Interested anglers should mark their calendars and set their reels for Sunday, June 30th when the contest officially opens. Registration is now open! Anglers will have until August 3rd, 2019 to accumulate points in this unique catch-and-release tournament. By having the anglers photographed with the fish they catch and then submitted online. The contest is run over the course of several weeks instead of just a single day of competition. In addition, the contest awards points not only for the number of fish caught, but also for the number of different species represented in the submissions. The more fish you catch and the more species you catch, the better your chances are to win! These innovative guidelines encourage contestants to spend time throughout the summer exploring the diversity of habitats and fish species in our Palm Beach and Martin Counties.

July 2, 9:30 am – 11:30 am: Sandbar & Seashells Boat Tour: Join the River Center for an exciting family-friendly boat tour! Hop on-board the Osprey for a trip up the Central embayment of the Loxahatchee River. Hunt for shells and creatures at the sandbar and soak up some sunshine! Make sure to bring water, snacks, water shoes, and snorkel gear! The boat will launch from Burt Reynold's Park. Registration is required to attend. Space is Limited!

July 3, 9 am – 11 am: Kayaking 101: Join the River Center for our Intro to Kayaking: Kayak 101 workshops! Participants in these workshops will learn basic kayak strokes, safety tips and how to be a proficient paddler on the water. This course will be conducted by a Level 2 Kayak instructor and all equipment will be provided. Registered participants need to bring water, water shoes, and comfortable clothing that can get wet. Registration is required to attend. Space is limited.

July 4, 5:30 pm – 8 pm: Craft-a-Palooza: Let's get CRAFTY! Join us in the River Center classroom for some FREE arts and crafts, games, activities, music, and fun. This is a free event and no RSVP is required to attend or participate. Our crafts are designed for children ages 3-10. Make sure you don't miss out on this exciting summer event!

July 5, 10 am – 12 pm: Lagoon Exploration: Join the River Center in a day of estuary exploration at our Family Seine and Dip Netting Experience at Blowing Rocks Preserve! Activities will include exploring our local waterways through dip netting and seining. Guests are welcome to bring their own buckets and dip nets. Please make sure to bring sunscreen, water shoes, and plenty of water!

July 5, 12 pm – 1 pm: Lecture – No lecture this month.

July 6, 9 am – 12 pm: Family Fishing Clinic: Don't miss out on this exciting fishing opportunity with the River Center. Fishing clinics are a great way for kids to learn the basics of fishing methods and tactics! Make sure to join us for an engaging overview that includes knot tying, fish identification, and of course fishing! Parents are encouraged to accompany their kids and participate in the clinic. The cost is \$10 per child. Interested participants should bring water, sunscreen, a hat, and sunglasses.

July 13, 10 am – 11 am: Bloomin' in the Garden: Let's go explore! Join the River Center for our summer Bloomin' in the Garden program, designed for children ages 3-7. The program will start at 10:00am in the river center with a story time and a garden themed craft. We will then move to our garden for a garden themed hands-on activity. When it's time to go home, children will receive a plant to take home to start their own garden! So, don't miss this exciting opportunity for your little ones to enjoy nature! Adults and children should come prepared and dress comfortable for being outside in the garden. All equipment will be provided, and this program is free of charge. Please RSVP to attend!

June 20, 9 am – 11 am: Kayak Tour – Pine Glades Natural Area: Join the River Center for our Public Kayak Tour to Pine Glades Natural Area. Paddle along through the freshwater marsh on our naturalist led tour for great views of local wildlife. All equipment will be provided but interested participants

should bring water shoes, sunscreen, and plenty of water! The cost for this program is \$20 per person. Make sure to reserve your spot today! Space is limited!

July 20, 8 am – 4 pm: Boating Safely Class: The River Center continues to collaborate with the US Coast Guard Auxiliary “Flotilla 52” to provide a series of Boating Safely Classes targeted specifically to young boaters in our community. These classes are provided through a generous sponsorship by the AustinBlu Foundation, a not-for-profit dedicated to raising awareness and promoting educational programs to improve boater safety. There is no cost for this class, however a deposit is required to reserve a seat. The deposit of \$10 will be refunded in full to all students who complete the class. Recommended for children 12 years and up.

July 27, 10 am – 12 pm: Lagoon Exploration: Join the River Center in a day of estuary exploration at our Family Seine and Dip Netting Experience at Blowing Rocks Preserve! Activities will include exploring our local waterways through dip netting and seining. Guests are welcome to bring their own buckets and dip nets. Please make sure to bring sunscreen, water shoes, and plenty of water!

Loxahatchee River District

Water Reclamation | Environmental Education | River Restoration

2500 Jupiter Park Drive, Jupiter, Florida 33458

Telephone (561) 747-5700 • Fax (561) 747-9929 • www.loxahatcheeriver.org



D. Albrey Arrington, Ph.D., Executive Director

MEMORANDUM

To: D. Albrey Arrington, Ph.D., Executive Director
From: Travis Bains, CSHO, ENS, Safety Compliance Officer
Date: June 1, 2019
Subject: District Safety Report for May 2019

Safety is a Core Value at LRD

Our conduct is shaped by a personal commitment to protect the health and safety of ourselves and our colleagues. Safety is driven through education, training, planning, protective equipment, and individual accountability.

Safety Metrics April 2019

For the month of **May**, the District had **NO** OSHA recordable injuries.

For the month of **May**, the District had **NO** lost time injuries to report.

The District has worked **67,312.5** hours without a DART.

The District has worked **142** days without a DART.

DART = **D**ays **A**way **T**ransfer, **R**estricted; DART is a safety metric used by companies as well as OSHA to show how many workplace injuries and illnesses caused the affected employee to remain away from work, restricted their activities, or resulted in a transfer to another job as they were unable to do their usual job within a calendar year.

Hazard Analysis

4 Basic Steps of Evaluating Hazards

- I. Selecting a job/task.
- II. Analyzing the job/task.
- III. Breaking the job down into a sequence of steps.
- IV. Identifying the “potential hazards.

As the LRD Safety Officer, I have been asking the crews to ask these simple questions before a job/task is started. They are much like the 4Q’s; ask yourself a few simple questions and analyze the answers.

Risk Assessments

- LS 114 – Atmospheric Hazards, Fall Protection, PPE and proper egress, nonpermitted confined space
- Hurricane Plan – preparing for the upcoming season.
- Annual Signage – review of current displays and hazard analysis.

Compliance

- Non-Permitted Confined Space/Fall Protection – 100% tie off and three-point contact while accessing ladders, platforms and unseen fall hazards.
 - Continuous Monitoring of Air Exchange and sampling
- Implementing SOP for natural disaster
- HazCom, GHS, Noise, Confined Space, Electrical.

Training

- Understanding the function of the monitor, (non) permitting process of confined space, tying off ladder, entrant and attendant and rescue.
- Hurricane Plan – review of EMCONS within departments; Essential Staff training.
- Awareness safety training for new signage and placement.
- New employee and intern training – review of Employee Safety Manual

Safety Committee

Safety Committee will be assisting with the Hurricane Plan training for the next few months.

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D. Albrey Arrington, Ph.D., Executive Director



MEMORANDUM

TO: Governing Board

FROM: Administration Staff

DATE: June 20, 2019

SUBJECT: Consultant Payments

The following amounts have been reviewed and approved for payment to our consultants for work performed during the prior month.

	<u>Prior Month</u>	<u>Fiscal YTD</u>
Smith, Gaskill & Shenkman, PA	\$5,240.32	\$84,373.63
Hazen	\$4,819.80	\$123,193.56
Holtz	\$13,853.70	\$86,243.25
Mathews	\$36,058.25	\$343,516.45

Should you have any questions in regard to these items, please contact Kara Peterson concerning the attorney's invoice, and Kris Dean concerning the engineers' invoices.

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Gordon M. Boggie
Board Member

Stephen B. Rockoff
Board Member

Dr. Matt H. Rostock
Chairman

Harvey M. Silverman
Board Member

James D. Snyder
Board Member

Future Business



Neighborhood Sewering:

- Final Assessment-
 - Turtle Creek Subsystem 2
 - Turtle Creek Subsystem 3
- 181st Street Gravity Construction Contract
- Island Country Estates Construction Contract

Other:

- Fiscal Year 2020 Budget Assumptions
- Chapter 31-16 River Enhancement
- Low Pressure General Construction Services Contract
- Olympia Force Main Replacement Construction Contract
- Lift Station 82 Conversion