



DEVELOPMENT REVIEW

Property address or Location 25th street
Parcel ID #(s) 2432 - 411-0001 - 000-2
Project description The Manor ALF

Property Owner(s) Kelly Smith + Corine Groothest
Street Address _____

City PSL State FL Zip 34952

Phone Number 772-828-9358

Email Address kellydc@bellsouth.net

Tiffany Rink + MARK NICHOLAS

Applicant/Representative, Title, Company
701 HIDDEN RIVER

Street Address
PORT ST LUCIE FL 34983

City 727 State 463 Zip 3800

Phone Number redlioncorp1@gmail.com

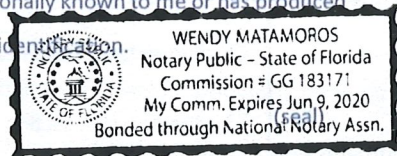
Email Address _____

Property Owner(s) Acknowledgements: - This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.

Corine Groothest / Kelly Smith
Property Owner(s) Signature(s)

STATE OF FLORIDA - COUNTY st lucie
The foregoing instrument was acknowledged before me this 9 day of August, 2018, by Kelly Smith and Corine Groothest who is personally known to me or has produced

Florida Driver License - Wendy Matamoros
Signature of Notary



INTAKE MEETINGS ARE REQUIRED FOR ALL SUBMITTALS. CALL (772) 467-3729

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation	
				Contributing	Individual
				Non-Contributing	None

Pre-Application Meeting Date _____ Fees _____ Control # _____ B. Permit # _____

Intake Planner _____

Planner Assigned _____

Approved By _____ Date _____

Comments _____



DEVELOPMENT REVIEW

General Information

- Incomplete application packets cannot be accepted.
- Site Plan approval is valid for one (1) year following City Commission approval. In order to maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date, and building permits must be maintained until site plan is completed, per plans, or approval shall lapse.

Choose Application Type:

Application Type		
<input checked="" type="checkbox"/> Site Plan	<input checked="" type="checkbox"/> Conditional Use with New Const.	<input type="checkbox"/> Major Amendment
<input type="checkbox"/> Conceptual Development Plan	<input type="checkbox"/> Minor Amendment	

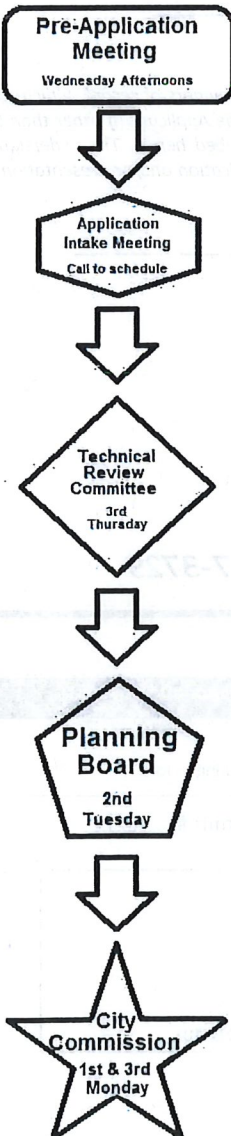
Site Information:

Non-Residential: Proposed Sq. Ft.: 26,926 Residential: Proposed Units: _____

Surrounding Uses: (i.e. single family home, retail, industrial, etc.)

North	South	East	West
School	Single Family Homes	Vacant	Single Family Homes

Application Outlook



Site Plan submittal requirements:

Submit one (1) original & thirteen (13) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals.

- Complete notarized application
- Warranty Deed
- SLC Property Record Card
- Statements of ownership & control of proposed development. Statement describing in detail: character & intended use.
- General location map (see Section 22-58.d.2)
- Survey (see Section 22-58.d.3)
- Site Plan (see Section 22-58.d.4)
- Landscaping Plan (see Section 22-187)
- Storm Drainage Plan (see Section 22-58.d.6)
- Environmental Impact Report
- Beach/Dune System protection plan, if applicable (see Section 22-58.d.7)
- Lighting Plan (see Section 22-58.d.8)
- Design Review submittals (see Design Review application)
- Traffic Impact Report
- Concurrency Review submittals (see Concurrency Review application)



THE SUNSHINE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

Design Review

Property address or Location 4201 SOUTH 25th STREET
 Parcel ID #(s) 2432-411-0001-000-2
 Project Description The Manor ALF

Kelly Smith / Corine Grathcast
 Property Owner(s)
2015 SE Avon Park dr
 Street Address
FL 34952
 City State Zip
772-4116-6155
 Phone Number
Kellydc@bellsouth.net
 Email Address

Mark Nicholas + Tiffany Rink
 Applicant/Representative, Title, Company
701 Hidden River
 Street Address
Port St. Lucie FL 34983
 City State Zip
727 463-3800
 Phone Number
redlioncorp1@gmail.com
 Email Address

Property Owner(s) Acknowledgements: - This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Application (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.

Kelly Smith / Corine Grathcast
 Property Owner(s) Signature(s)

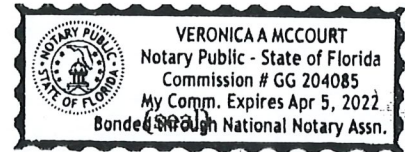
STATE OF FLORIDA -- COUNTY

The foregoing instrument was acknowledged before me this 29 day of Aug, 2018, by

Kelly Smith & Corine Grathcast who is personally known to me or has produced

Fla DL for Both as identification.

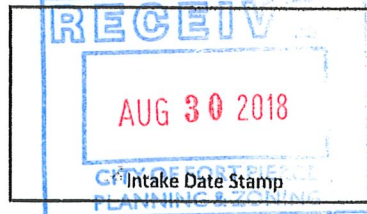
Veronica A McCourt
 Signature of Notary

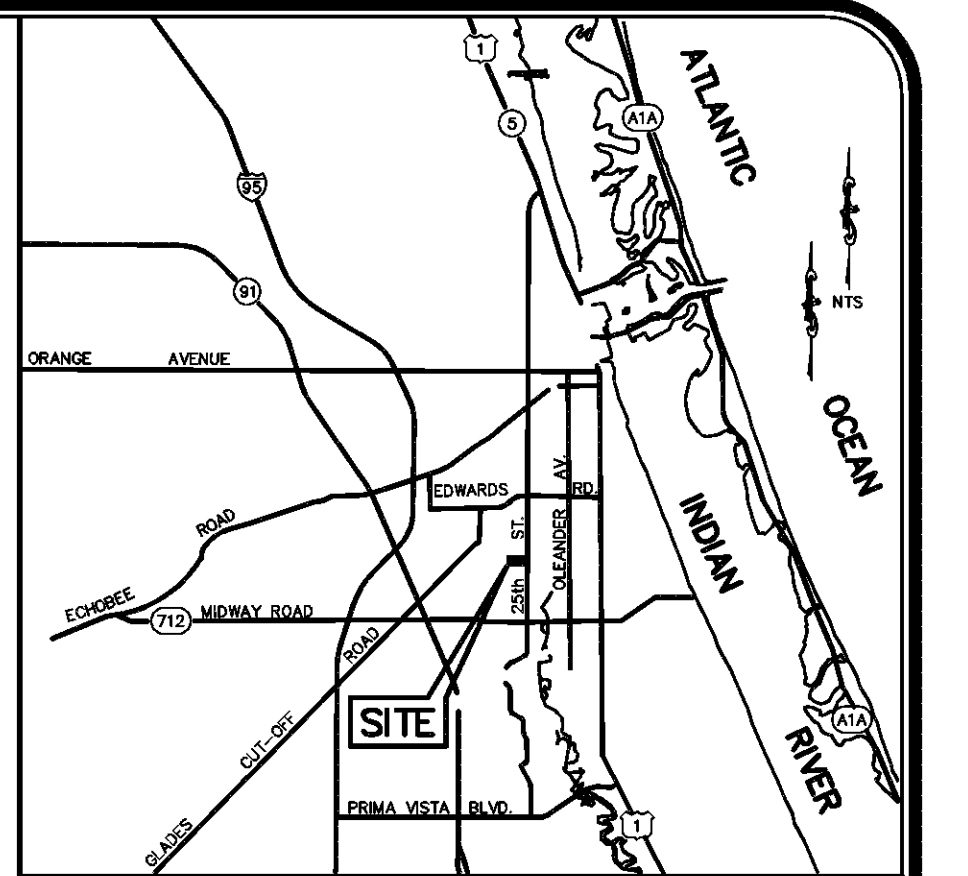
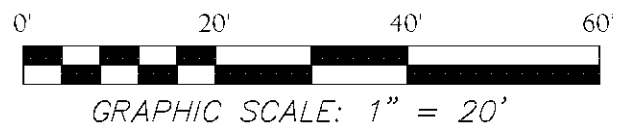
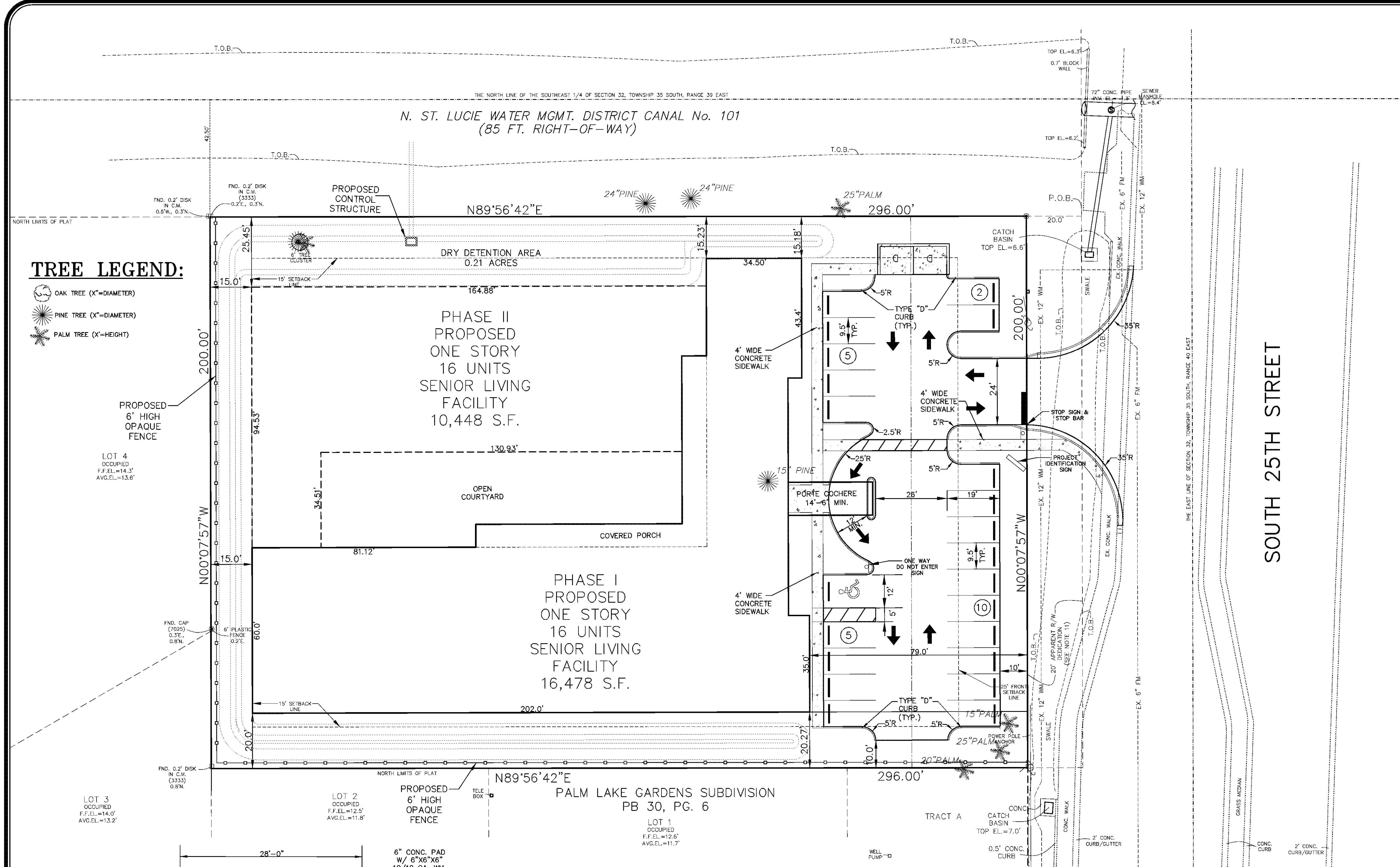


TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic Districts	Historic Designation

Pre-Application Meeting Date _____ Fees _____ Control # _____ B. Permit _____
 Intake Planner _____
 Planner Assigned _____
 Approved _____ Date _____
 Comments _____





LOCATION MAP

TREE LEGEND:

- OAK TREE (X"=DIAMETER)
- PINE TREE (X"=DIAMETER)
- PALM TREE (X"=HEIGHT)

SITE DATA

1. PROJECT NAME: THE MANOR, ADULT LIVING FACILITY
 2. LOCATION: 4201 SOUTH 25TH STREET, FORT PIERCE, FLORIDA
 3. OWNER/APPLICANT: RED LION CONSTRUCTION INC. MR. MARK NICHOLAS, PRESIDENT 7548 U.S. HIGHWAY #1 PORT ST. LUCIE, FL. 34952 PHONE: 727-463-3800
 4. ENGINEER: RICHARD M. LADYKO, P.E. LADYKO DESIGN GROUP, LLC 4400 BELLE GROVE DRIVE FORT PIERCE, FL. 34981 PHONE: 772-530-8261 FLORIDA C.A.: #28610
 5. SURVEYOR: HAYHURST LAND SURVEYING, INC. WILLIAM E. HAYHURST, P.S.M. 445 9TH ST. S.W., UNIT 7 VERO BEACH, FL. 32962 PHONE: 772-569-6680 FAX: 772-770-3446
 6. LANDSCAPE ARCHITECT: GREGORY BOGGS, ASLA BOGGS PLANNING & LANDSCAPE ARCHITECTURE 100 AVENUE A, SUITE 2E FORT PIERCE, FL. 34950 PHONE: 772-577-6473 CELL: 772-486-5228
 7. TYPE OF PROJECT: 32 ROOM ADULT LIVING FACILITY
 8. GROSS PROJECT SIZE: 59,200 S.F. 1.36 ACRES
 9. FUTURE LAND USE: RL (LOW DENSITY RESIDENTIAL)
 10. ZONING: OFFICE COMMERCIAL (C-1)
 11. PARCEL ID: 2432-411-0001-0002
 12. PROPOSED LAND USE BREAKDOWN: THIS APPLICATION
- | | Acres | Square Footage | Percentage of site |
|-----------------|-------------|----------------|--------------------|
| Prop. Buildings | 0.62 | 26,926 | 45.48 |
| Pavement | 0.22 | 9,793 | 16.54 |
| Walks and Misc. | 0.03 | 1,168 | 1.97 |
| Dry Detention | 0.21 | 9,067 | 15.31 |
| Open Space | 0.28 | 12,246 | 20.68 |
| TOTAL | 1.36 | 59,200 | 100.00 |
13. UTILITY SERVICE: WATER SERVICE: FORT PIERCE UTILITIES AUTHORITY
 - SEWER TREATMENT: FORT PIERCE UTILITIES AUTHORITY
 14. SITE DRAINAGE: THE PROJECT WILL PROVIDE ON-SITE DRY DETENTION FOR WATER QUALITY AND STORM ATTENUATION. DISCHARGE WILL BE TO N.S.L.R.W.C.D. CANAL NO. 101.
 15. PARKING CALCULATIONS: ADULT CONGREGATE CARE FACILITIES (ITE CODE 253) SHALL HAVE 0.45 SPACES PER UNIT PER THE REQUIREMENTS OF THE INSTITUTE OF TRAFFIC ENGINEERS (ITE), 4TH EDITION EDITION GENERATION MANUAL.
- | Category | Spaces |
|---|--------------------------------|
| Required Parking (0.45 spaces x 32 Units) | 14 Spaces |
| Provided Parking | 22 Spaces |
| Paved Parking | 22 Spaces |
| Total Provided | 22 Spaces (inc. 1 Handicapped) |
16. BUILDING SETBACKS: Front 25 FT., Sides 15 FT., Rear 15 FT.
 17. CONSTRUCTION: ALL CONSTRUCTION SHALL COMPLY WITH SECTIONS 17 AND 22 OF THE CITY OF FORT PIERCE CODE OF ORDINANCES.

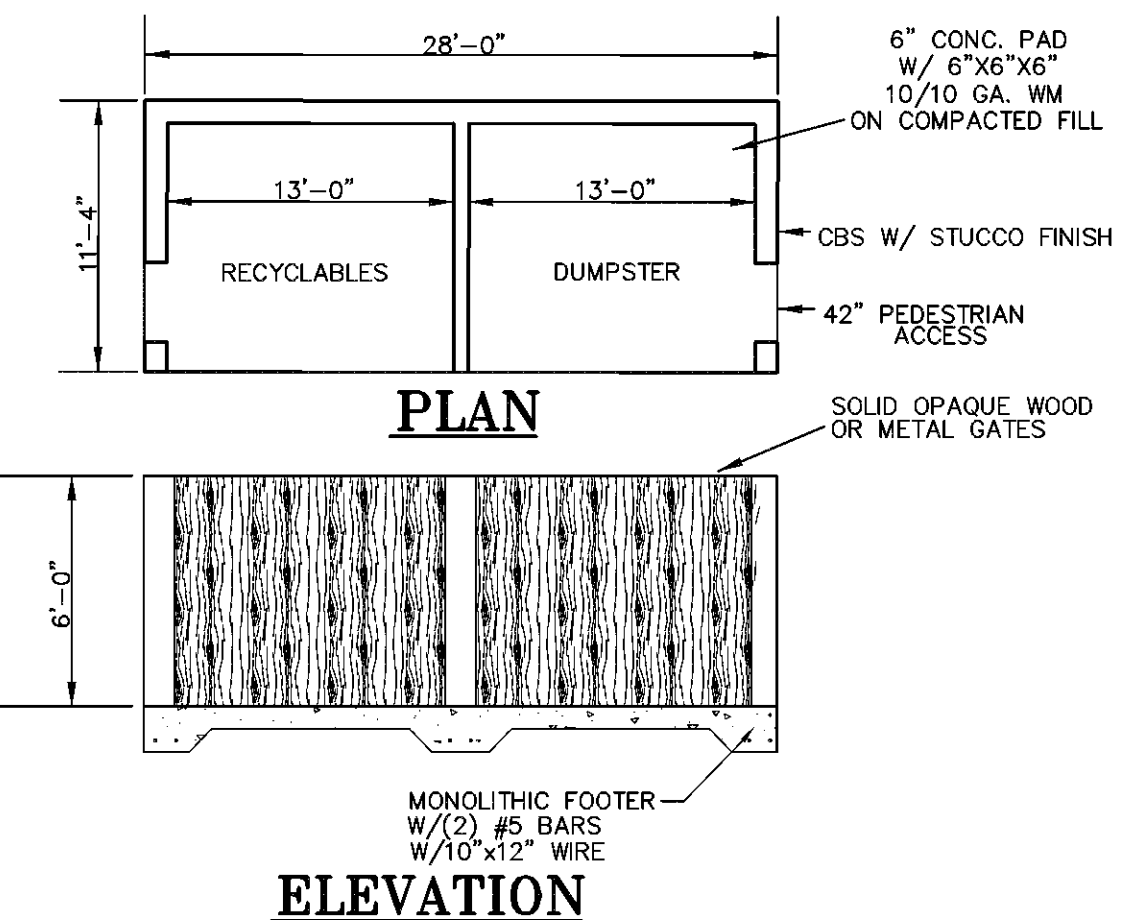
LEGAL DESCRIPTION

COMMENCING AT THE NORTHEAST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 32, TOWNSHIP 35 SOUTH, RANGE 40 EAST, THENCE RUN SOUTH ALONG THE EAST SECTION LINE, WHICH SAID LINE IS ALSO THE CENTERLINE OF HAWLEY ROAD, A DISTANCE OF 42.5 FT.; THENCE RUN WEST A DISTANCE OF 40.0 FT. TO THE WEST RIGHT-OF-WAY LINE OF HAWLEY ROAD FOR THE POINT OF BEGINNING; THENCE CONTINUE SOUTH ALONG THE LINE PARALLEL TO THE EAST SECTION LINE A DISTANCE OF 200 FT. TO A POINT; THENCE RUN WEST AND PARALLEL TO THE QUARTER SECTION LINE A DISTANCE OF 316.0 FT.; THENCE RUN NORTH AND PARALLEL TO THE EAST SECTION LINE A DISTANCE OF 200.0 FT. TO THE SOUTH RIGHT-OF-WAY LINE OF CANAL NO. 101; THENCE RUN EAST A DISTANCE OF 316.0 FT. TO THE POINT OF BEGINNING; SAID LAND LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

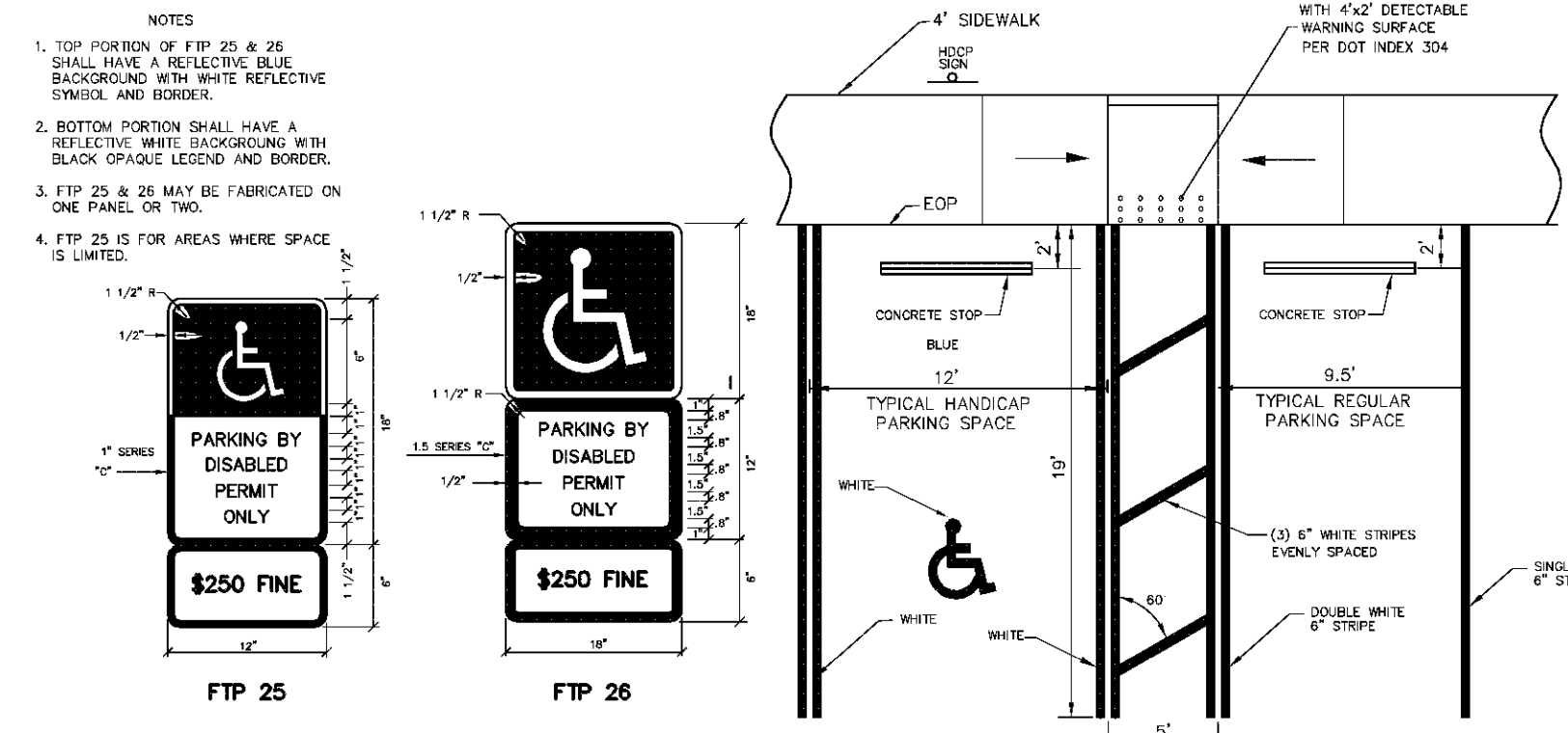
LESS AND EXCEPT ALL THAT PORTION CONVEYED TO THE BOARD OF COUNTY COMMISSIONERS OF ST. LUCIE COUNTY, FLORIDA, AS CONTAINED IN DEED RECORDED IN OFFICIAL RECORDS BOOK 659, AT PAGE 1136, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

SAID PARCEL CONTAINS 1.36 ACRES MORE OR LESS.

RICHARD M. LADYKO, P.E. FL. REG. NO. 34288



DUMPSTER ENCLOSURE DETAIL



PARKING SPACE DETAIL

- REVISIONS -

REVISIONS PER CITY OF FORT PIERCE T.R.C.	BY	DATE
	RML	9/24/18

COMPUTER FILE REF.	FIELD BK./PG.

Ladyko Design Group, LLC
ENGINEERS, PLANNERS & CONSTRUCTION MANAGERS
STATE OF FLORIDA CERTIFICATE OF AUTHORIZATION NO. 26409

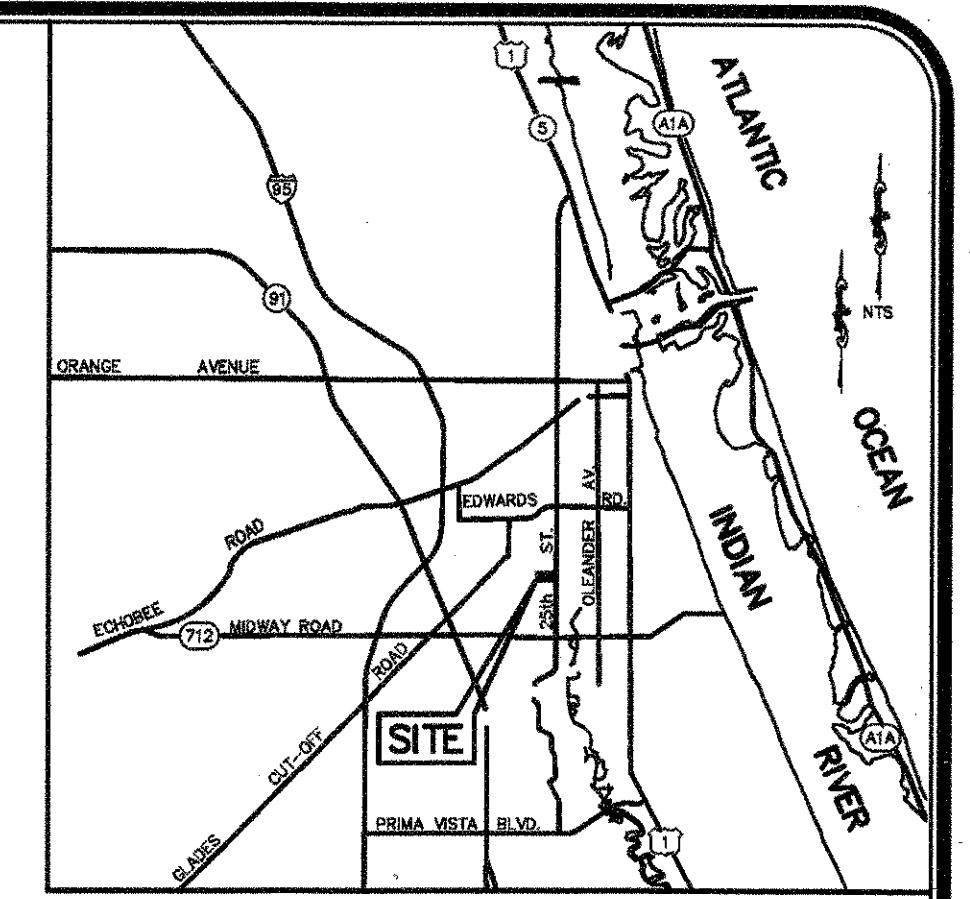
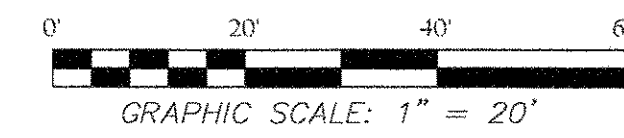
4400 BELLE GROVE DRIVE
FT. PIERCE, FL. 34981
PHONE: 772-530-8261
FAX: 772-464-1383
enginpod225@aol.com

DESIGNED	BY	DATE
CALCS.	RML	8-17-18
DRAWN	RML	8-17-18
DETAILED		
CHECKED	RML	8-27-18
APPROVED		

THE MANOR ADULT LIVING

PROPOSED SITE PLAN

DATE: 8/17/18
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=20'
JOB No. 18-065
SHEET 1 OF 1

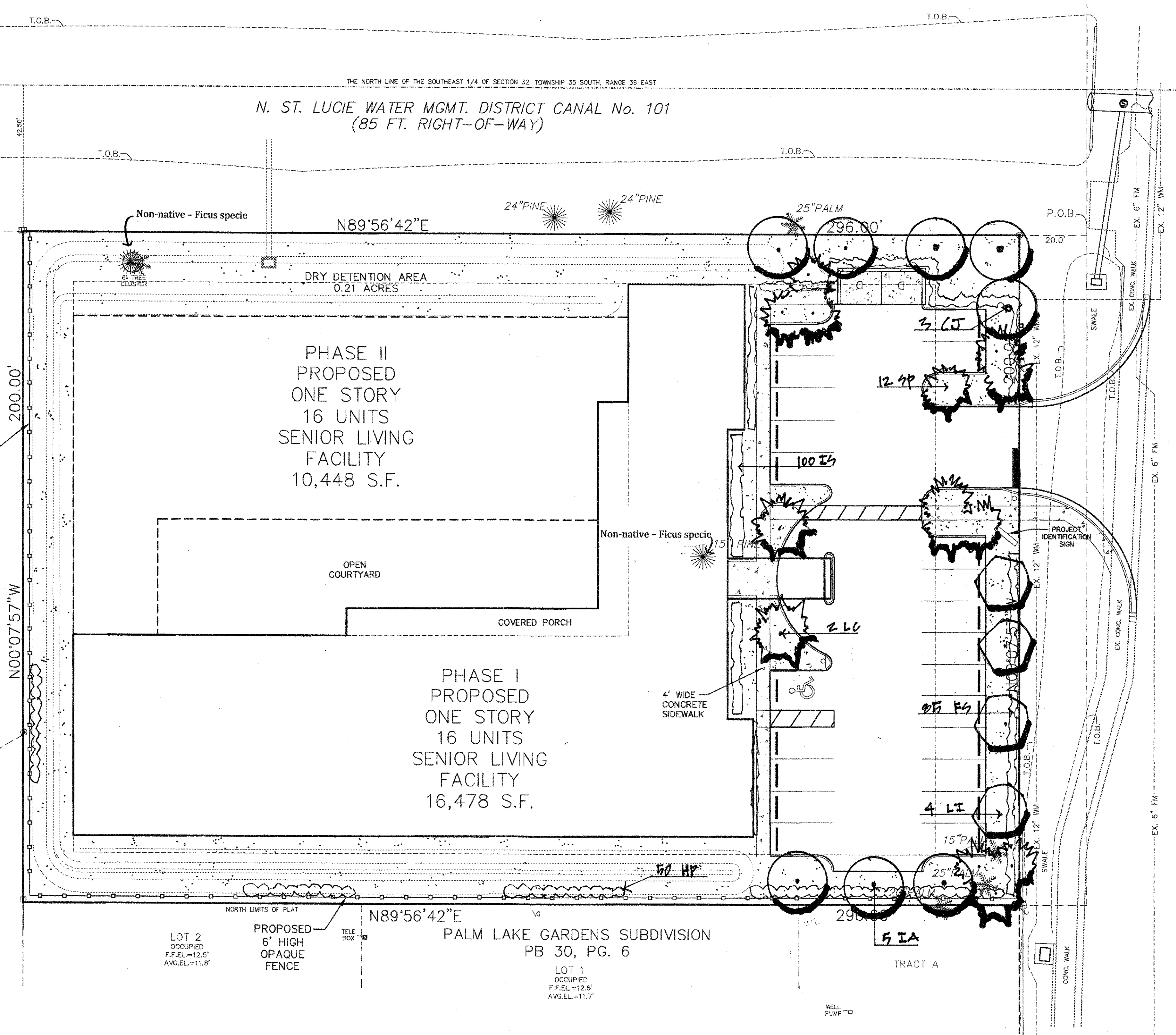


LOCATION MAP

N. ST. LUCIE WATER MGMT. DISTRICT CANAL No. 101
(85 FT. RIGHT-OF-WAY)

TREE LEGEND:

- OAK TREE (X"=DIAMETER)
- PINE TREE (X"=DIAMETER)
- PALM TREE (X"=HEIGHT)



SOUTH 25TH STREET

Landscape Data

Vehicular Use Area along Right of Way

101 + 39 = 140 linear feet x 10 = 1,400 square feet of required landscape area
1,400/300 = 5 trees required

Vehicular Use Area along Property Line

39 (north) + 64 (south) linear feet x 10 = 1,030 square feet of required landscape area
1,030/200 = 5 trees required

Interior Vehicular Use Area

9,739 square feet of Vehicular Use Area
9,739/15 = 649.26 square feet of required landscape area
649.46/100 = 6 trees required

Mitigation Requirement

2 - 15" Pines previously shown as mitigated have been field verified as non-native species.
Non-native Ficus species are the on-site trees (2) that will be removed, with a Norfolk Island Pine (non-native) being the remaining tree also removed without mitigation.

Total Trees Required = 16 Trees @ 2.5 inch D.B.H.

Total Landscape Area Provided = 1,400 +/- square feet

Total Trees Provided =

- 5 - 2.5" Holly 12.5"
- 4 - 2.5" Grape Myrtle 10"
- 3 - 2.5" Cassia 7.5"
- 12 - 10-15' ht. cabbage palm (12/3=4 trees)
- 2 - Chinese Fan Palm 10' ht.

Plant List

Qty	Botanical Name	Common Name	Specification
5	Ilex attenuata 'Eagleston'	'Eagleston' Holly	12', 2.5" dbh., min
4	Lagerstroemia indica	Grape Myrtle cultivar	12', 2.5" dbh., min.
3	Cassia javanica	Apple Blossom Cassia	12', 2.5" dbh., min.
2	Livistona chinensis	Chinese Fan Palm	10', double trunk
12	Sabal palmetto	Cabbage Palm	10-15' ht., mix ht.
85	Forsteria segregata	Florida Privet	24" ht., 30" o.c.
50	Hamelia patens	Firebush	24" ht., 30" o.c.
100	Ilex shillings	Dwarf Yaupon Holly	18" ht., 18" o.c.

Note:

Per Section 22-187(10), 296' + 200' = 496' property length/10; 50 shrubs required along 6' fence adjacent to residential.

Sod to be Argentine Bahia

All Plants Florida # 1 Grade

All Beds mulched with 3" recycled vegetative mulch

All Landscape to be irrigated with an in-ground irrigation system

LOT 3 OCCUPIED
F.F.EL.=14.0'
AVG.EL.=13.2'

LOT 2 OCCUPIED
F.F.EL.=12.5'
AVG.EL.=11.8'

LOT 1 OCCUPIED
F.F.EL.=12.6'
AVG.EL.=11.7'

PALM LAKE GARDENS SUBDIVISION
PB 30, PG. 6

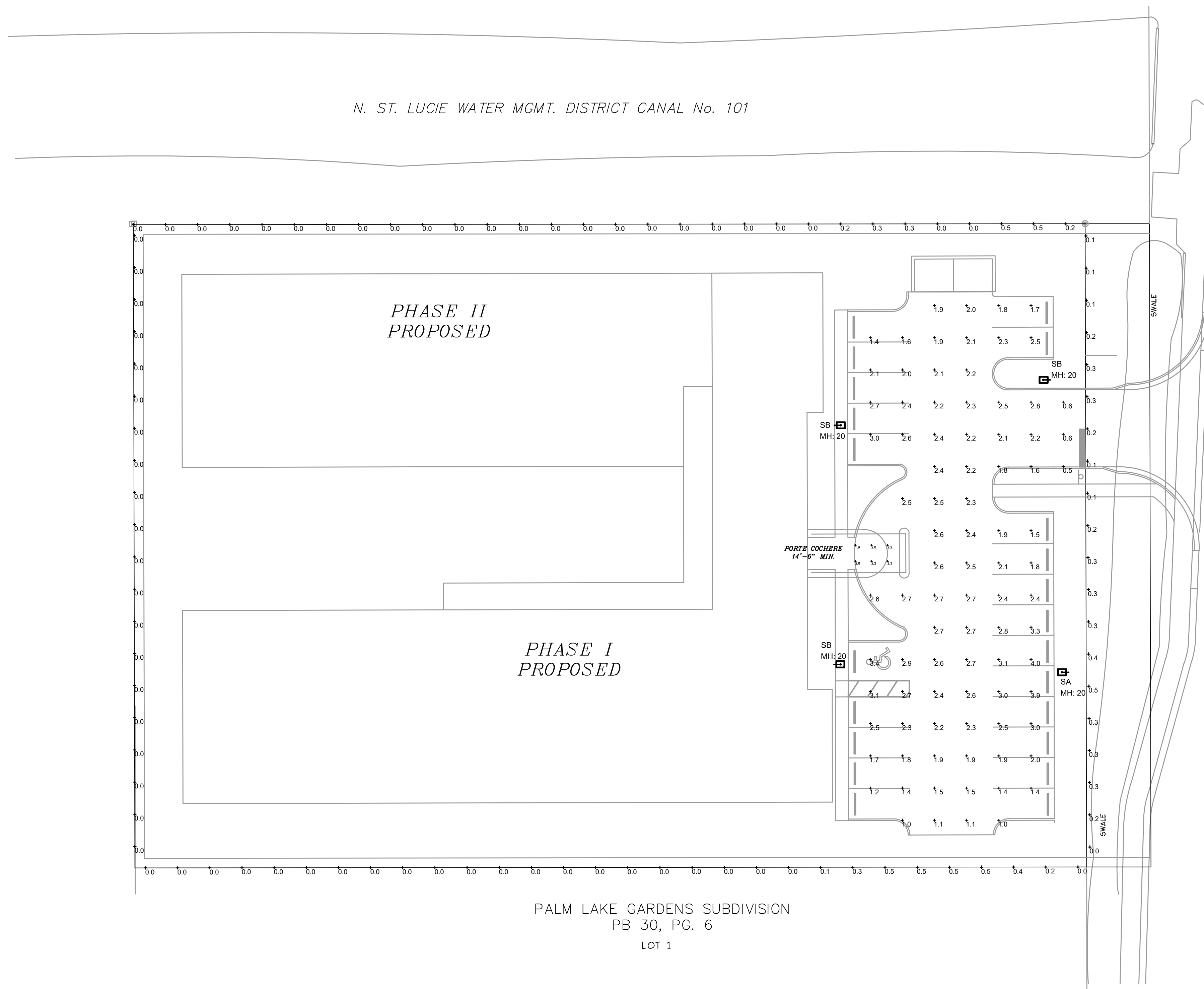
- REVISIONS -		BY	DATE
REVISIONS PER CITY OF FORT PIERCE T.R.C.		GLB	9/24/18

COMPUTER FILE REF.	FIELD BK./PC.

	BY	DATE
DESIGNED	GLB	9/24/18
CALCS.		
DRAWN		
DETAILED		
CHECKED		
APPROVED		

THE MANOR ADULT LIVING
PRELIMINARY LANDSCAPE PLAN

DATE:	HORIZ. SCALE: 1"=20'
	VERT. SCALE: 1"=20'
JOB No.	
SHEET	OF



SITE PHOTOMETRIC PLAN

1"=20'-0"

Symbol	Qty	Label	Description	Lumens/Lamp	LLD	LDD	BF	LLF	Lum. Watts	Total Watts
SA	1	SA	PHILIPS GARDCO ECF-S-48L-1A-NW-G2-4-HIS POLE MOUNT 20' AFG	N.A.	0.900	0.900	1.000	0.810	161	161
SB	3	SB	PHILIPS GARDCO ECF-S-32L-1A-NW-G2-3-HIS POLE MOUNT 20' AFG	N.A.	0.900	0.900	1.000	0.810	110.7	332.1

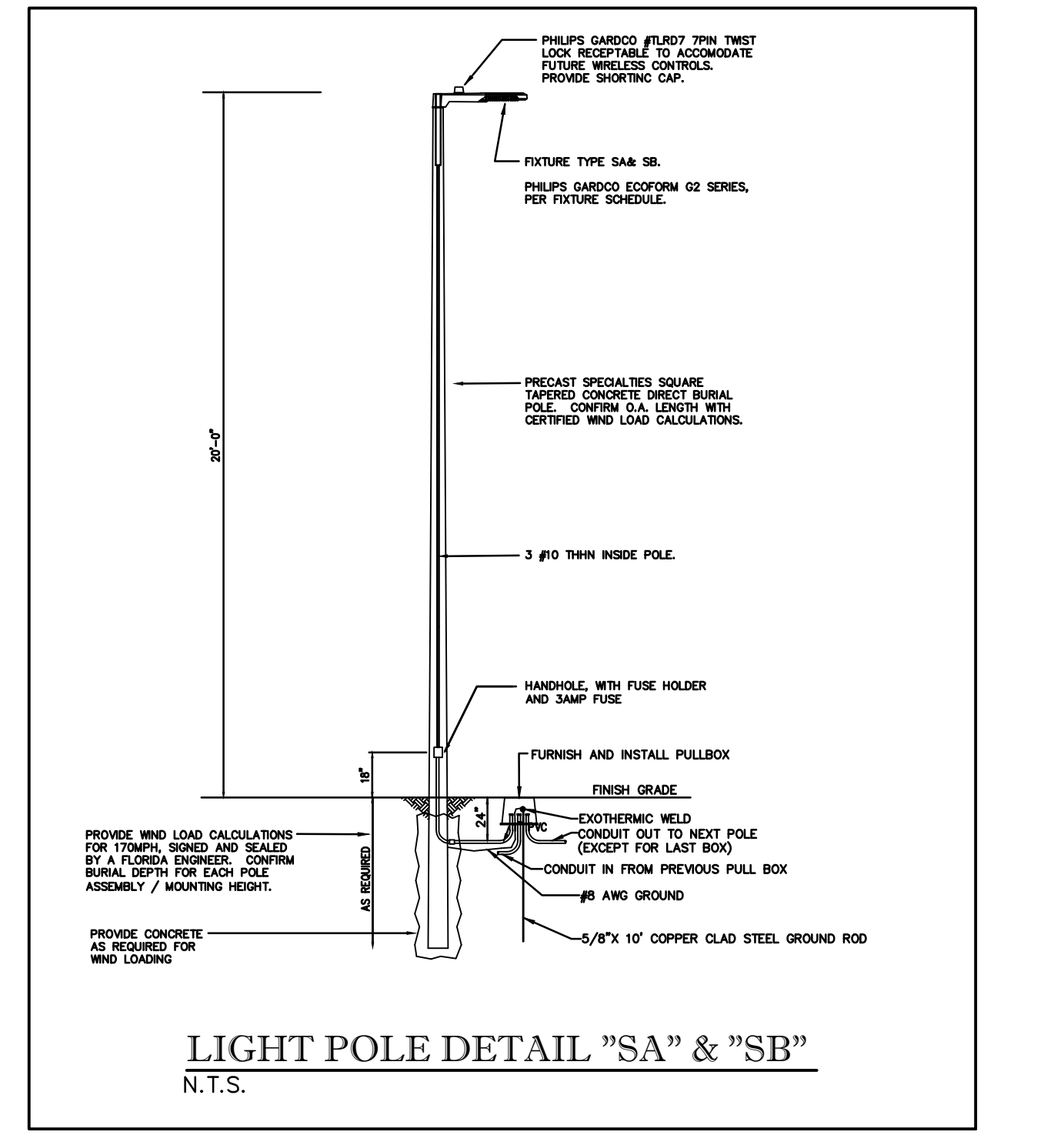
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
COVERED ENTRY_Top_1	Illuminance	Fc	2.10	2.3	1.9	1.11	1.21
PROPERTY LINE	Illuminance	Fc	0.10	0.5	0.0	N.A.	N.A.
DRIVE	Illuminance	Fc	2.13	2.8	0.5	4.26	5.60
PARKING	Illuminance	Fc	2.29	4.0	1.0	2.29	4.00



Ordering guide

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	Dimming controls	Motion sensing	Photo-sensing	Electrical	Luminaire	Finish
ECF-S	32L	350mA	WW-G2	AF	Type 2	120V	0-10V External	IMR0	Integral with PCB	PHI Single (105, 277, 347VAC)	Square Pole Adapter	Black
	48L	500mA	WW-G2	AF	Type 2	240V	0-10V External	IMR0	Integral with PCB	PHI Single (105, 277, 347VAC)	Square Pole Adapter	Black
	64L	700mA	WW-G2	AF	Type 2	277V	0-10V External	IMR0	Integral with PCB	PHI Single (105, 277, 347VAC)	Square Pole Adapter	Black

1. Available only on 120, 208, 240, and 277 (or 120V)
 2. Subject to change
 3. Not available with 347 or 480 voltage
 4. Not available with 347 or 480 voltage
 5. Not available with 347 or 480 voltage
 6. Not available with 347 or 480 voltage
 7. Not available with 347 or 480 voltage
 8. ECF-IMR0 equipped with out-boarded sensor housing when voltage is 120V-277V
 9. Motion sensor is 4" round pole with adapter included for 120V-277V
 10. Not available with LLED. Dimming module is supplied through back of luminaire. Mount the sensor housing on the sensor page.
 11. Limited to a maximum of 45 degrees aiming above horizontal.
 12. SW option not available with other control options with the exception of IMR0, IMR7 and SW IMR0 motion response options.



LIGHT POLE DETAIL "SA" & "SB"
N.T.S.

PERMIT ISSUED
CONSTRUCTION ISSUED

date	
revision	

example: ECF-S-64L-900-NW-G2-AR-S-120-HIS-MGY

1408 Orange Avenue, Suite 34050
 Ft. Lauderdale, FL 33309
 Phone: 954.448.0792
 Fax: 954.448.0793
 Email: info@kammconsulting.com
 Certification of Authority: 0818189
 08/27/18
 date signed

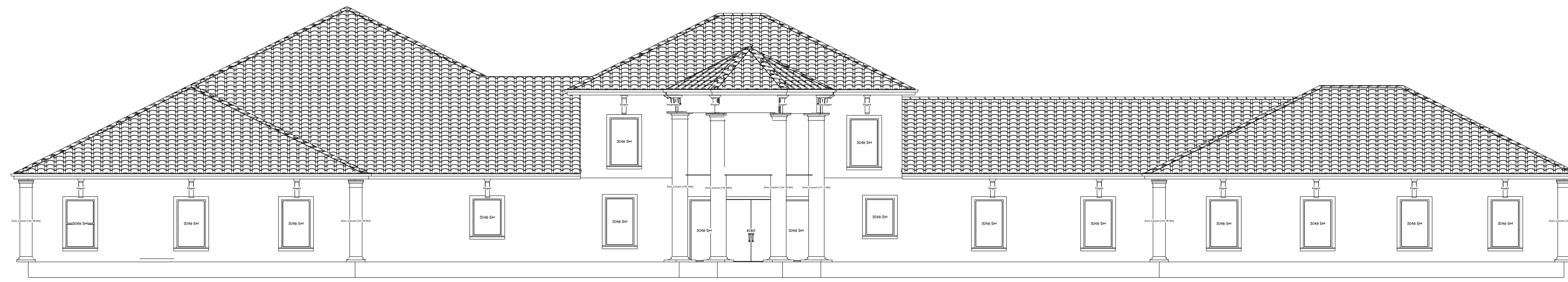
KAMM CONSULTING
 PRINCIPAL: Brady L. Brown
 Florida License #FEEET

LEGACY SENIOR LIVING CENTER
FORT PIERCE, FLORIDA

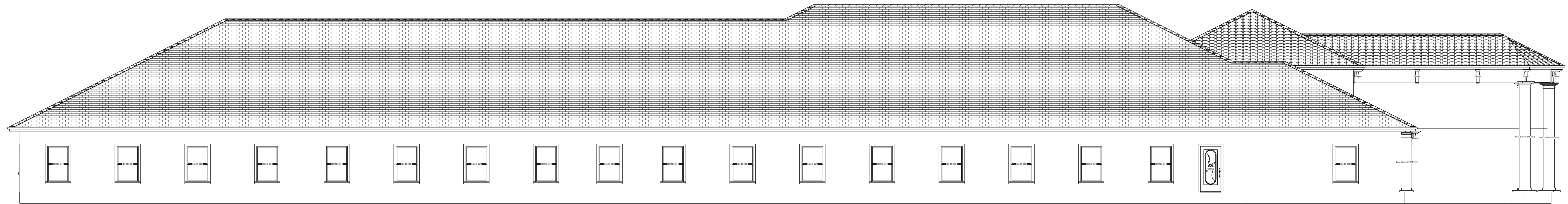
project title: LEGACY SENIOR LIVING CENTER
sheet title: PHOTOMETRIC PLAN

proj. no.: 2018-0695
 project manager: JM
 checked by: BB
 scale: AS NOTED
 date: 08/27/2018

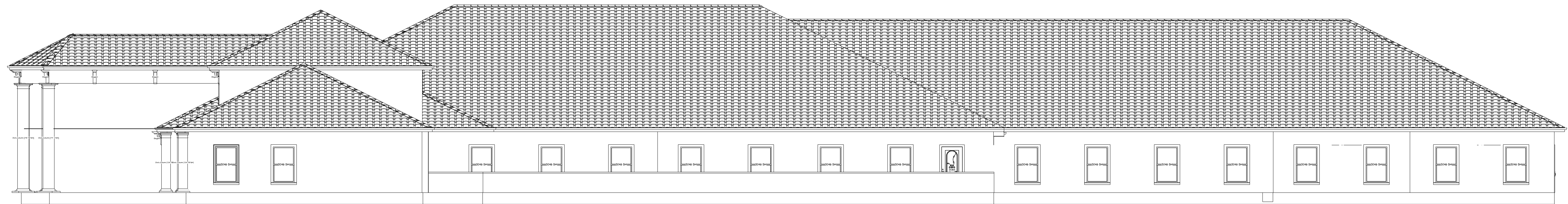
sheet
E1.1
 project



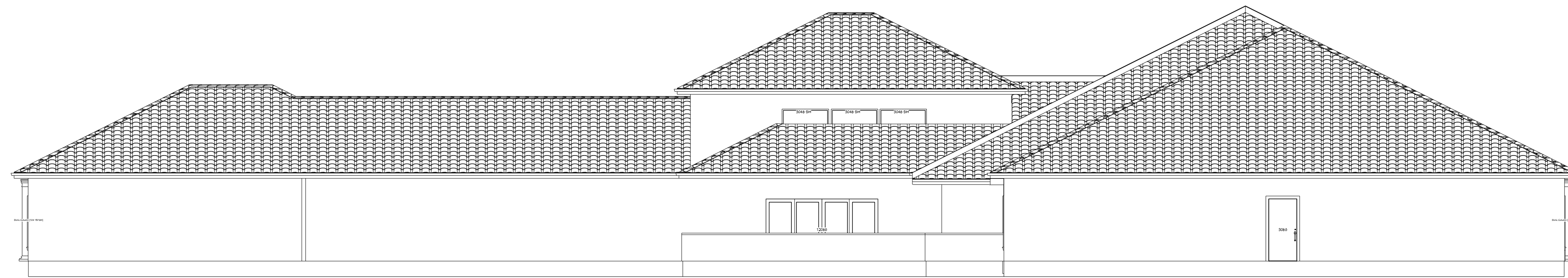
FRONT ELEV



LEFT ELEV



RIGHT ELEV



REAR ELEV

ISSUE & REVISIONS

TOM MCAULIFFE
PROFESSIONAL DRAFT & DESIGN
PORT ST. LUCIE, FL. 34952
772.398.2612

SCOTT R. SANDERS, P.E., FL.
FLA. REG # 64781
5911 PESCARA DRIVE
PAGE, FL. 32571
772.774.9086

PROJECT NAME
The Manor
Ft. Pierce, Fla.

NEW HOME DESIGNED FOR:

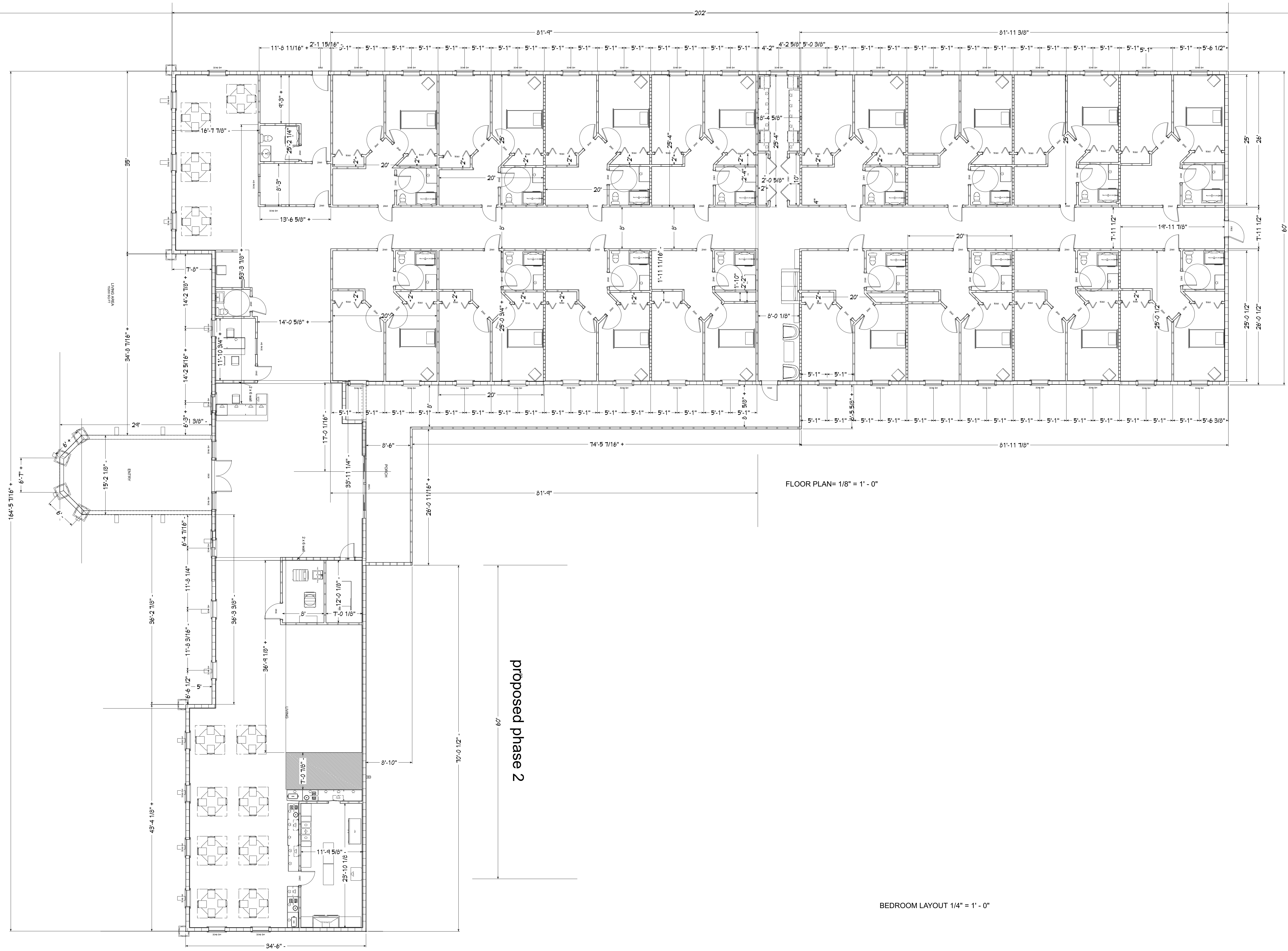
SHASHI AND KASHMIRI BATRA

SHEET CONTENTS

CLIENT APPROVAL: _____ DATE: _____

PROJ. _____
DRWN. _____
DATE. _____
SHEET

1 OF 2



FLOOR PLAN= 1/8" = 1' - 0"

BEDROOM LAYOUT 1/4" = 1' - 0"

2 əsəɹ pəɹɔʊd

To the best of our knowledge these plans are drawn to comply with owner's specifications. The contractor and/or homeowner shall verify all dimensions and enclosed drawings. Tom McAuliffe Professional Draft & Design, is not liable for errors once construction has begun. While every effort has been made in the preparation of these plans to avoid mistakes, the maker can not guarantee against human error. The contractor of the job must check all dimensions and other details prior to construction and be solely responsible thereafter. Contractor is responsible for all code and governing body compliance and all

NEW HOME DESIGNED FOR: SHASHI AND KASHMIRI BATRA	PROJECT NAME The Manor Ft. Pierce, Fla.	ISSUE & REVISIONS	TOM MCAULIFFE PROFESSIONAL DRAFT & DESIGN PORT ST. LUCIE, FL. 34952 772.398.2612
SHEET CONTENTS			
CLIENT APPROVAL: _____ DATE: _____			
PROJ. DRWN. _____ DATE _____ SHEET			
2 OF 2			

THE MANOR
SENIOR LIVING



Elevation 1

wilmington tan

HC-34

BENJAMIN MOORE®
COLOR PREVIEW® HC

Painted Stucco Wall Color

Benjamin Moore : Wilmington Tan HC-34



Barclay

Roof – Barrel-Vault Tile
Color -Barclay

HC-71

HC-71

Painted Trim , Facia, Soffit

Benjamin Moore : Hasbrouck Brown HC-71



THE MANOR ADULT LIVING FACILITY

CONCURRENCY ANALYSIS

The enclosed analysis is based upon the proposed Conditional Use of an Adult Congregate Living Facility in a Commercial Office (C-1) Zoning District as opposed to a Low Density Residential Land Use and Low Density Zoning of 5.0 Units per acres. Based upon a total parcel size of 1.36 acres the low density residential zoning would allow a maximum of 8 development units on the property.

Thus, the analysis will compare the impacts of the proposed 32 units Adult Congregate Living Facility against the 8 units single family residential development.

1. - TRAFFIC IMPACT ANALYSIS

The enclosed analysis is based upon data published within the Institute of Transportation Engineering (ITE) Trip Generation Manual, 9th Edition. The existing traffic use is based upon Code 210, Single Family Homes based upon the Low Density Residential Land Use rates and the proposed traffic use is prepared based upon Code 253, Adult Congregate Living Facility.

Analysis shall be further broken down to compare Average Annual Daily Trips (AADT), A.M Peak Hour and P.M. Peak Hour rates. The current land use would allow 8 Single Family Residential Units. Upon approval of the proposed Conditional Use Approval, the site will consist of a 23 Unit, Adult Congregate Living Facility

EXISTING SINGLE FAMILY RESIDENTIAL USE

Annual Average Daily Trips	8 Units/9.24 Trips/Unit	74 Trips AADT
A.M. Peak Hour Trips	8 Units/0.75 Trips/Unit	6 Trips Peak
P.M. Peak Hour Trips	8 Units/1.00 Trips/Unit	8 Trips Peak

PROPOSED USES

The proposed site will consist of 32 Unit Adult Congregate Living Facility. The 9th Edition of the ITE Manual was consulted for trip generation from the Congregate Care Facility Code (253).

Atlantic Wellness center & Resort

Annual Average Daily Trips	32 Units/2.15 Trips/Bed	69 Trips AADT
A.M. Peak Hour Trips	32 Units/0.06 Trips/Bed	2 Trips AM Peak
P.M. Peak Hour Trips	32 Units/0.17 Trips/Bed	6 Trips PM Peak



Summary

The proposed Use Change decreases the traffic generated from the project from 74 trips AADT to 69 trips AADT, AM and PM Peak Hour Trips will rise from 6 Trips and 8 Trips to 2 Trips and 6 trips each respectively.

The current Level of Service identified in the Fall 2017 Traffic Counts for the South 25th Street link from Midway Road to Edwards Road south is Level C. As a result the proposed traffic will have no effect on the Level of Service on South 25th Street and surrounding roadway.

2. - POTABLE WATER USE ANALYSIS

There is a change for Potable Water Use associated with this Conditional Use Application. The property is located within the Fort Pierce Utilities Authority (FPUA) service area.

The water demand, gallons per day (g.p.d.) that will be generated by this property is based on the adopted flows from Fort Pierce Utilities Authority. Unless not identified by F.P.U.A., then Chapter 64E-6 of the State of Florida Department Health will be utilized.

EXISTING SINGLE FAMILY RESIDENTIAL USE

Average Daily Flow (GC)	8 Units x 2.6 Persons x 100 GP.D.	2,080 g.p.d.
-------------------------	-----------------------------------	--------------

PROPOSED USES

Average Daily Flow (GC)	32 Units x 100 G.P.D./Unit	3,200 g.p.d.
Per Meal Prepared (max.)	32 Units x 3 Meals/Day/Bed x 5G.P.D./Meal	480 g.p.d.

Summary

The proposed Conditional Use increases the potable water demand from the project from 2,080 gallons per day (gpd) to 3,680 gallons per day (gpd).

Please be advised that Fort Pierce Utilities Authority (FPUA) has sufficient currently has capacity available to handle this proposed increase in demand. F.P.U.A. indicates that service is available to the site pending the payment of fees and the completion of the required infrastructure.

3. - SANITARY SEWER COLLECTION ANALYSIS

There is a change for Wastewater generation associated with this Conditional Use Application. The property is located within the Fort Pierce Utilities Authority (FPUA) service area.

The wastewater flow, gallons per day (g.p.d.) that will be generated by this property is based on the adopted flows from Fort Pierce Utilities Authority. Unless not identified by F.P.U.A., then Chapter 64E-6 of the State of Florida Department Health will be utilized.



EXISTING SINGLE FAMILY RESIDENTIAL USE

Average Daily Flow (GC)	8 Units x 2.6 Persons x 100 GPD/person	2,080 g.p.d.
-------------------------	--	--------------

PROPOSED USES

Average Daily Flow (GC)	32 Units x 100 G.P.D./Bed	2,200 g.p.d.
Per Meal Prepared (max)	32 Units x 3 Meals/Day/Bed x 5G.P.D./Meal	480 g.p.d.

Summary

The proposed Conditional Use increases the wastewater flow from the project from 2,080 gallons per day (gpd) to 3,680 gallons per day (gpd).

Please be advised that Fort Pierce Utilities Authority (FPUA) has sufficient currently has capacity available to handle this proposed increase in demand. F.P.U.A. indicates that service is available to the site pending the payment of fees and the completion of the required infrastructure.

4. - DRAINAGE ANALYSIS

The stormwater management system in each case would will consist of a dry detention system which will provide both water quality and storm attenuation. Discharge will be to the adjacent North St. Lucie River Water Control District (N.S.L.R.W.C.D.) Canal No 101, located on the north side of the property. Additional water quality (150%) will be provided as the discharge is to an Outstanding Florida Water (OFW). Permitting entities will include the City of Fort Pierce St. Lucie County, South Florida Water Management District and North St. Lucie River Water Control District.

Summary

The proposed Conditional Use change will have no additional impacts on the adjacent facilities or receiving bodies. Water management criteria will be design accordingly based upon the proposed use and the system discharges will not exceed any regulatory requirements.

5. – PUBLIC SCHOOLS

EXISTING SINGLE FAMILY RESIDENTIAL USE

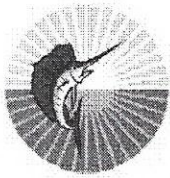
School Students	8 Units x 0.45 Students/Unit	4 Students
-----------------	------------------------------	------------

PROPOSED USES

School Students	32 Units x 0.00 Students/Units	0 Students
-----------------	--------------------------------	------------

Summary

The proposed Use change decreases the numbers of students that may attend the St. Lucie County Public School system.



CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	INSTITUTIONAL FT. PIERCE HIGH SCHOOL	RL	S.F. INTERMEDIATE DENSITY (R2)
South	RESIDENTIAL	RL	PLANNED DEVELOPMENT (PD)
East	RESIDENTIAL	RL	S.F. LOW DENSITY RES. (R1)
West	RESIDENTIAL	RL	PLANNED DEVELOPMENT (PD)

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	RL	C1	5.0 UNITS/AC.	1.36	N/A
**Proposed	RL	C1	26,926 S.F.	1.36	N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day 2,080 G.P.D.
**Proposed Zoning/FLU	Total gallons per day 3,680 G.P.D.
**Change in Demand	Total gallons per day +1,600 G.P.D.

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day 2080 G.P.D.
**Proposed Zoning/FLU	Total gallons per day 3680 G.P.D.
**Change in Demand	Total gallons per day +1600 G.P.D.

C. Parks and Recreation (Residential Classifications Only): (Du x 2.6 = persons + 44,227 = population /LOS)				
Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people			
Urban District	5 acres per 1,000 people			
Community	2.5 acres per 1,000 people	44,248	- 0 -	
Neighborhood	1.36 acres per 1,000 people			

D. Public Schools (Residential Classifications Only): Single Family: (du x 0.405 = students/70% K-8/30% High) Multi-family: (du x 0.207 = students/70% K-8/30% High)		
	K-8	High
School Name	FOREST GROVE	FT. PIERCE CENTRAL
City	FT. PIERCE	FT. PIERCE
Distance	1 mi.	0.1 mi.
Current Zoning/FLU Enrollment Demand	2	1
**Proposed Zoning/FLU Enrollment Demand	0	0
**Change in Demand	- 2	- 1

E. Solid Waste: Residential (2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units)	
Demand Analysis	Maximum
Current Zoning/FLU	102 lbs / WEEK
**Proposed Zoning/FLU	652 lbs / WEEK
*Change in Demand	+ 550 lbs / WEEK

F. Stormwater:
Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

Impact	<i>No NET IMPACT</i>
--------	----------------------

III. Transportation Analysis: Complete ITE Trip Generation Form (Attached)

G. Transportation Analysis: Complete ITE Trip Generation Data Form		
Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	AM/PM Peak Hour Trips
Demand Analysis	Maximum	Maximum
Current Zoning/FLU	<i>74</i>	<i>6/8</i>
**Proposed Zoning/FLU	<i>69</i>	<i>2/6</i>
*Change in Demand	<i>-5</i> Trips	Trips <i>-4</i>
Impact to Capacity	<i>No LEVEL OF SERVICE CHANGES</i>	

IV. Project Description

PHASING		
Is this project (phase) part of a larger project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.		
Total Project:	Residential Units:	Single Family: Multifamily:
	Non-residential (square footage):	
	Mixed-use (describe use):	
(If this is a single phase project, name it Phase I – Total)		

RESIDENTIAL DATA					
Type	Phase	Number of Units	Acres	Expected beginning date	Expected completion date
Single-family, detached					
Single-family, attached					
Multi-family					
Other (specify)					

NON-RESIDENTIAL DATA					
Type(s) specify	Phase	Square footage	Acres	Expecting beginning date	Expected completion date
ADULT CONGREGATE LIVING FACILITY	1	16478	1.36	11-2018	10-2019
	2	10,448	-	1-2020	12/2020

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. Yes No

- B. 1. Does this application involve demolition or re-use of any structure(s)? Yes No
 If yes, what is the size of the structure(s) to be demolished or re-used? _____
2. What is the current use of the structure to be demolished or re-used? _____
3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? Yes No
 If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested:

** Complete section if requesting a change in zoning, future land use, or expanding

TRAFFIC IMPACT REPORT

For

THE MANOR ADULT LIVING FACILITY

In

**The City of Fort Pierce
St. Lucie County**

Prepared for

Red Lion Construction, Inc.
7548 South U.S. Highway #1
Port St. Lucie, Florida 34952
727-463-3800

Prepared By

Ladyko Design Group, LLC
4400 Belle Grove Drive
Ft. Pierce, FL 34981
772-530-8261

August 2018

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Study Methodology	3
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Trip Distribution	6
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PROJECT DESCRIPTION

The proposed residential development known as THE MANOR ADULT LIVING FACILITY is located on the west side of South 25th Street approximately 3/4 mile north of Midway Road (See Figure No. 1, Location Map). The property is approximately 1.43 acres in size and is proposed to consist of a 32 room senior living facility and is located in Section 29, Township 35 South, Range 41 East, City of Fort Pierce, St. Lucie County, Florida.

The construction of the project is anticipated to commence in 2019 and is anticipated for buildout in 2020.

This report has been prepared to study the traffic generated by the proposed development. In developing the scope and methodology of the report, data from the Institute of Transportation Engineers Trip Generation Manual, 9th Edition, St. Lucie Urban Area Metropolitan Planning Organization, Fall 2015 and Fall 2017 Traffic Counts and Level of Service Report, and the Florida Department of Transportation were used to determine the appropriate traffic values.

The project's traffic assignment and net external trips were utilized to determine the number of project trips on each segment. 2018 FDOT's Q/LOS Manual adopted level of Service (E) was used to develop the roadway capacities.

Figure 1

STUDY METHODOLOGY

SECTION A: DEFINITION OF STUDY AREA

The study area, as defined by the St. Lucie County Land Development Code, Section 11.02.09.9B shall be a 2 mile radius of the site which includes all major roadways and intersections within the zone of influence. The study area was reviewed with St. Lucie County Planning Staff and will not require the study of any major intersections.

SECTION B: INVENTORY OF EXISTING FACILITIES

Roadways:

South 25th Street

South 25th Street is classified as a County two-way, Arterial Uninterrupted Flow roadway. The portion of South 25th Street, which is located within the study area, is primarily a 4-lane divided rural roadway with right and left turn lanes both north and south of the subject property. All of the travel lanes are 12' in width, including the right and left turn lanes located along the roadway. The existing South 25th Street right-of-way for this section of roadway is 120' in width.

South 25th Street is maintained by the St. Lucie County. South 25th Street currently operates at LOS C. The LOS is based on the Annual Average Daily Traffic volumes as established in the "St. Lucie Urban Area Metropolitan Planning Organization Fall, 2017 Traffic Counts" and applied to the 2013 FDOT Generalized Daily Level of Service, Table 3, Uninterrupted Flow Highway, Rural Development.

Bell Avenue

Bell Avenue is classified as a County two-way, Collector Uninterrupted Flow roadway. The portion of Bell Avenue which is located within the study area, is primarily a 2-lane un-divided rural roadway with no turn lanes within the study area. All of the travel lanes are 12' in width, including the right and left turn lanes located along the roadway. The existing South 25th Street right-of-way for this section of roadway is 60' in width.

Bell Avenue is maintained by the St. Lucie County. Bell Avenue currently operates at LOS C. The LOS is based on the Annual Average Daily Traffic volumes as established in the "St. Lucie Urban Area Metropolitan Planning Organization Fall, 2017 Traffic Counts" and applied to the 2013 FDOT Generalized Daily Level of Service, Table 3, Uninterrupted Flow Highway, Rural Development.

Midway Road

Midway Road is currently classified as a County Class II, two-way Arterial Uninterrupted Flow roadway. The portion of Midway Road, which is located within the study area, is currently a non-state, signalized, 2-lane undivided urban roadway with residential streets located on the north and south sides, both east and west of the subject property and with a posted speed limit of 35 m.p.h. or less and exclusive left turn lanes at intersections.

Midway Road is maintained by St. Lucie County. Midway Road currently operates at LOS "F". The LOS is based on the Annual Average Daily Traffic volumes as established in the "St. Lucie Urban Area Metropolitan Planning Organization Fall 2016 Traffic Counts" and applied to the FDOT Generalized Daily Level of Service tables.

Based upon the initial review of the traffic impact report by St. Lucie County, their consultant has asked that the section of Midway road in question be analyzed as a 4-lane, divided section based upon it's Spring 2020 anticipated completion date.

This request will classify the Roadway under the 2018 Level of Service Handbook as a Non-State, Interrupted Flow, Minor (1 signal per ¼ mile), divided roadway with exclusive left and right turn lanes.

EXISTING TRAFFIC CONDITIONS

The Annual Average Daily Traffic volumes for the roadways located within the study area were obtained from the “St. Lucie Urban Area Metropolitan Planning Organization Fall, 2016 Traffic Counts” and AM and M Peak Volumes were obtained from the Fall 2015 Report.:

AVERAGE DAILY TRIPS

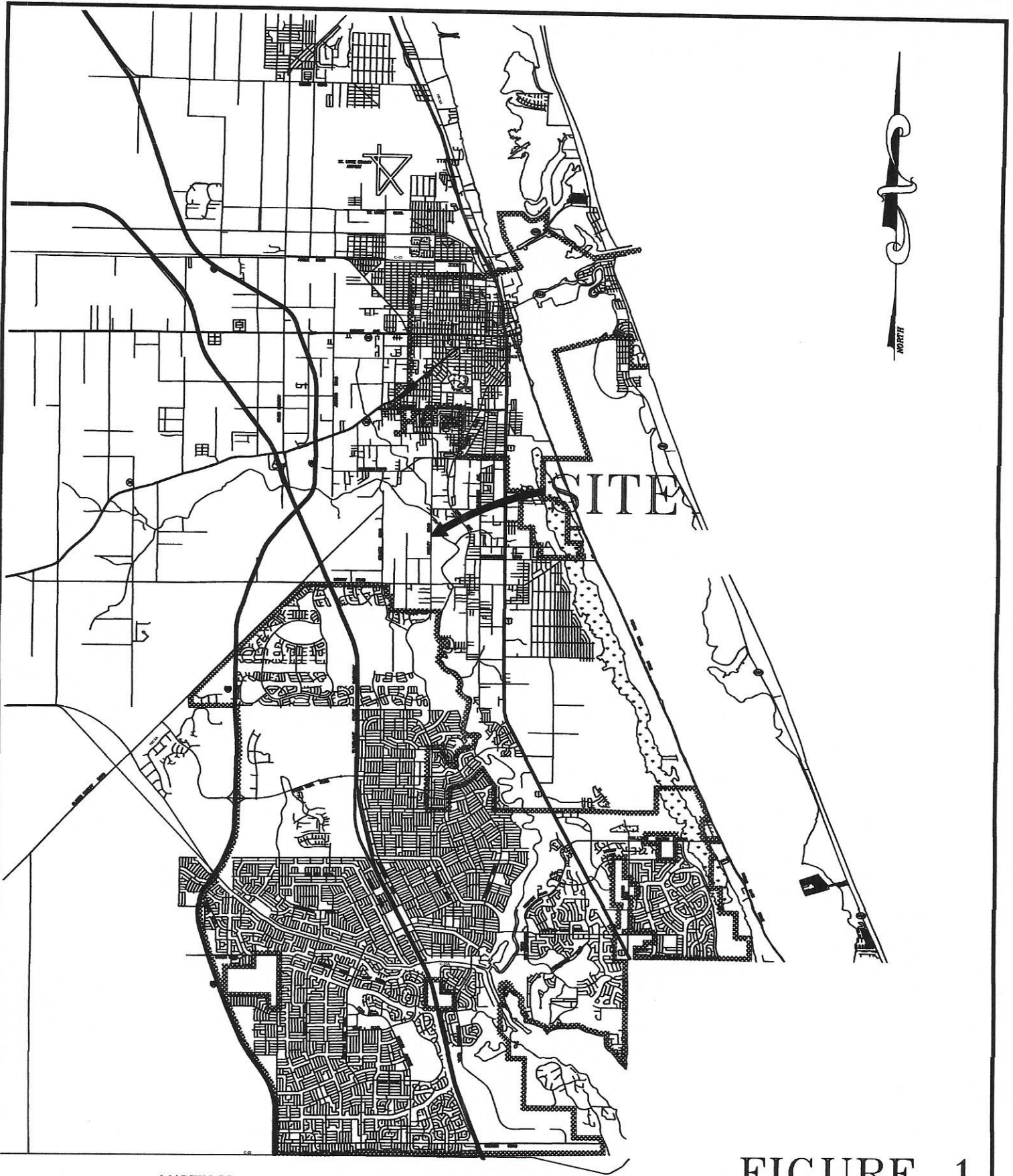
<u>Roadway</u>	<u>Link</u>	<u>LOS(C) Capacity</u>	<u>AADT</u>	<u>Available Capacity</u>
South 25 th St.	Midway Rd. to Bell Ave.	26,370	19,423	6,947
South 25 th St.	Bell Ave. to Edwards Rd.	26,370	16,637	9,733
Bell Avenue	South 25 th St. to Sunrise Blvd.	14,600	3,411	11,189
Midway Road	S. 25 th St. to Christensen	26,370	17,500	8,870
Midway Road	S. 25 th St. to Sunrise	26,370	16,663	9,707

AM PEAK HOUR TRIPS

<u>Roadway</u>	<u>Link</u>	<u>LOS(E) Capacity</u>	<u>AM Peak Directional</u>	<u>Available Capacity</u>
South 25 th St.	Midway Rd. to Bell Ave.	1,870	1,184	686
South 25 th St.	Bell Ave. to Edwards Rd.	1,870	1,075	795
Bell Avenue	S. 25 th St. to Sunrise Blvd	837	207	630
Midway Road	S. 25 th St. to Christensen	1,870	912	912
Midway Road	S. 25 th St. to Sunrise Blvd.	1,870	1,018	852

PM PEAK HOUR TRIPS

<u>Roadway</u>	<u>Link</u>	<u>LOS(E) Capacity</u>	<u>PM Peak Directional</u>	<u>Available Capacity</u>
South 25 th St.	Midway Rd. to Bell Ave.	1,870	1,105	765
South 25 th St.	Bell Ave. to Edwards Rd.	1,870	1,092	778
Bell Avenue	S. 25 th St. to Sunrise Blvd	837	250	587
Midway Road	S. 25 th St. to Christensen	1,870	896	974
Midway Road	S. 25 th St. to Sunrise Blvd.	1,870	935	935



MARTIN CO.

FIGURE 1

Ladyko
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enginpod225@aol.com
C.A. No. 28610

THE MANOR ADULT LIVING FACILITY
4201 SOUTH 25TH STREET

LOCATION MAP



FIGURE 2

Ladyko
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TRIP DISTRIBUTION BY PERCENT

TRIP GENERATION

The Trip Generation for the proposed THE MANOR ADULT LIVING FACILITY development was developed by utilizing the Institute of Transportation Engineers Trip Generation Manual, 9th Edition. The project will consist of 32 room senior living facility and be analyzed as such.

In developing the Trip Generation Rates, ITE Code 253 "ADULT CONGREGATE LIVING FACILITY" was reviewed for the ADT volume generations. The facility will contain 32 living units and will be constructed in two phases. The first phase will consist of 16 units and the full development of the site and the second phase will include the remaining 16 units. Peak Hour movements were analyzed in the AM and the PM as well.

Table I has been provided to depict the Trip Generation Rates for this development as follows:

**TRIP GENERATION
Table I**

Average Daily Traffic

<u>Land Use</u>	<u>Units</u>	<u>Rate</u>	<u>Volume</u>
Adult Congregate Living (ITE 253)	32 Units	2.15 trips/unit	69 vpd

AM Peak Hour

<u>Land Use</u>	<u>Units</u>	<u>Rate</u>	<u>Volume</u>
Adult Congregate Living (ITE 253)	32 Units	0.06 trips/room	2 vph 34% In - 1 vph 66% Out - 1 vph

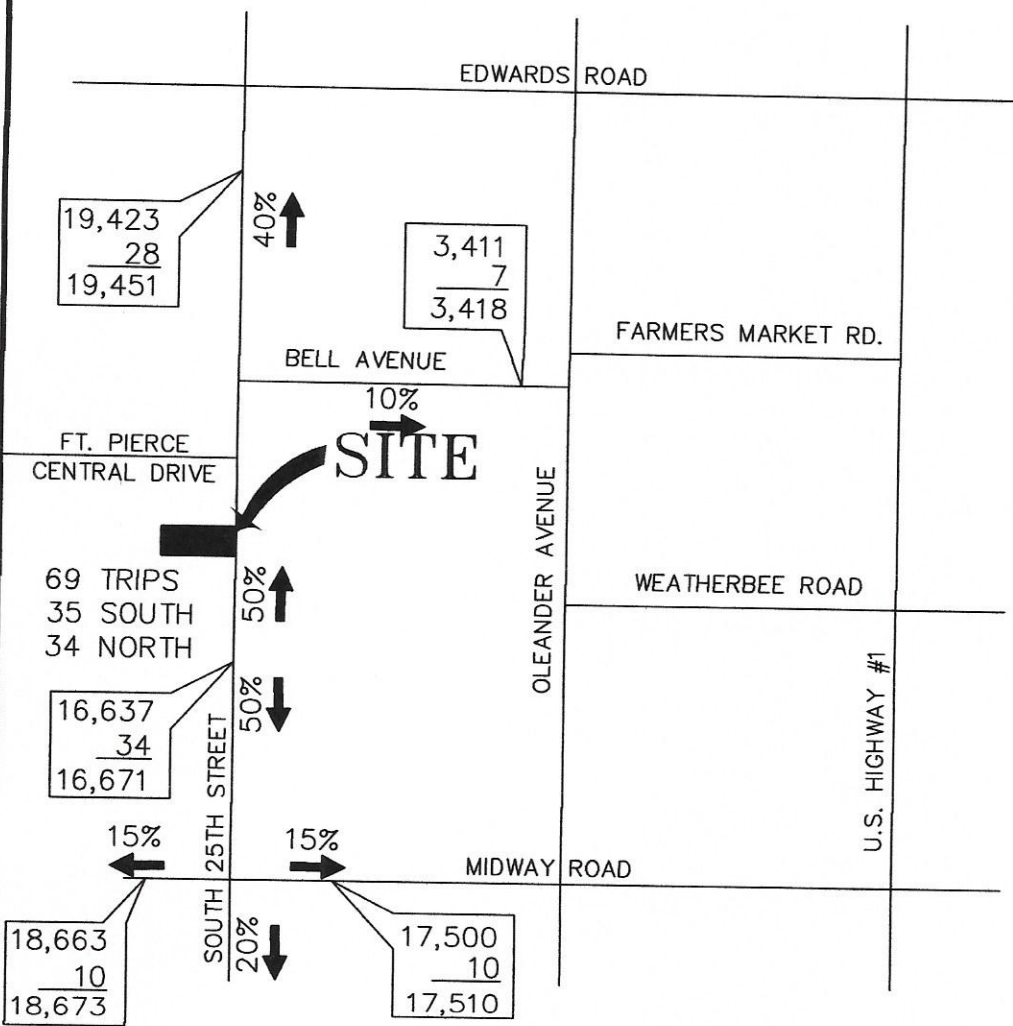
PM Peak Hour

<u>Land Use</u>	<u>Units</u>	<u>Rate</u>	<u>Volume</u>
Adult Congregate Living (ITE 253)	32 Units	0.17 trips/room	6 vph 54% In - 4 vph 46% Out - 2 vph

TRIP DISTRIBUTION

The distribution of trips to and from the site was based on the majority of traffic coming from the north. A summary of the major trip assignments are estimated as follows:

<u>Roadway Link</u>	<u>Percentage</u>	<u>AADT Trips</u>	<u>AM Peak Hour Directional Trips</u>	<u>PM Peak Hour Directional Trips</u>
South 25 th St. South	50%	35 vpd	1 vph	3 vph
South 25 th St. North	50%	34 vpd	1 vph	3 vph



LEGEND

- 341 EXISTING TRIPS (A.A.D.T.)
- 175 ADDITIONAL TRIPS ADDED BY PROJECT
- 516 TOTAL TRIPS (A.A.D.T.)

FIGURE 3

Ladyko Design Group, LLC
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THE MANOR ADULT LIVING FACILITY
 4201 SOUTH 25TH STREET

**TRIP DISTRIBUTION
 BY PERCENT AND AADT**

CAPACITY ANALYSIS

Link Analysis:

Average Daily Traffic Volumes

The Pre-Development Volumes used herein reflect the rates for year 2020, the buildout of the facility.

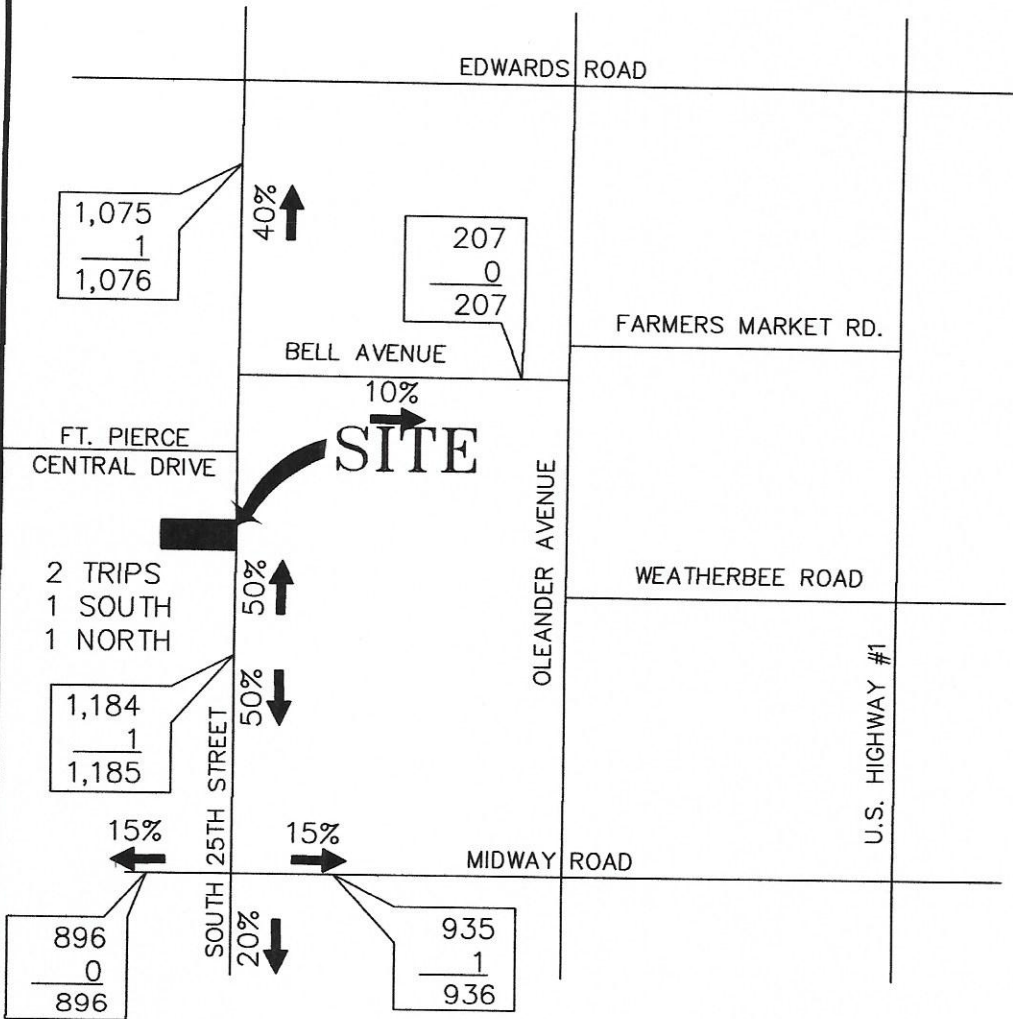
<u>Roadway</u>	<u>Link</u>	<u>LOS (C) Capacity</u>	<u>Volume/LOS Pre-Development</u>	<u>Volume/LOS Post-Development</u>
South 25 th St.	Midway Rd. to Bell Ave.	26,370	19,423(C)	19,451(C)
South 25 th St.	Bell Ave. to Edwards Rd.	26,370	16,637(C)	16,671(C)
Bell Avenue	South 25 th St. to Sunrise Blvd.	14,600	3,411(C)	3,418(C)
Midway Road	S. 25 th St. to Christensen	26,370	18,663(C)	18,673(C)
Midway Road	S. 25 th St. to Sunrise	26,370	17,500(C)	17,510(C)

AM Peak Hour Directional Volumes

<u>Roadway</u>	<u>Link</u>	<u>LOS (C) Capacity</u>	<u>Volume/LOS Pre-Development</u>	<u>Volume/LOS Post-Development</u>
South 25 th St.	Midway Rd. to Bell Ave.	1,870	1,184(C)	1,185(C)
South 25 th St.	Bell Ave. to Edwards Rd.	1,870	1,075(C)	1,076(C)
Bell Avenue	S. 25 th St. to Sunrise Blvd	837	207(C)	207(C)
Midway Road	S. 25 th St. to Christensen	1,870	896(C)	896(C)
Midway Road	S. 25 th St. to Sunrise Blvd.	1,870	935(C)	936(C)

PM Peak Hour Directional Volumes

<u>Roadway</u>	<u>Link</u>	<u>LOS(C) Capacity</u>	<u>Volume/LOS Pre-Development</u>	<u>Volume/LOS Post-Development</u>
South 25 th St.	Midway Rd. to Bell Ave.	1,870	1,105(C)	1,108(C)
South 25 th St.	Bell Ave. to Edwards Rd.	1,870	1,092(C)	1,094(C)
Bell Avenue	S. 25 th St. to Sunrise Blvd	837	250(C)	251(C)
Midway Road	S. 25 th St. to . Christensen	1,870	896(C)	897(C)
Midway Road	S. 25 th St. to Sunrise Blvd.	1,870	912(C)	913(C)



LEGEND

341	EXISTING TRIPS (A.M. PEAK HOUR)
<u>36</u>	ADDITIONAL TRIPS ADDED BY PROJECT
368	TOTAL TRIPS (A.M. PEAK HOUR)

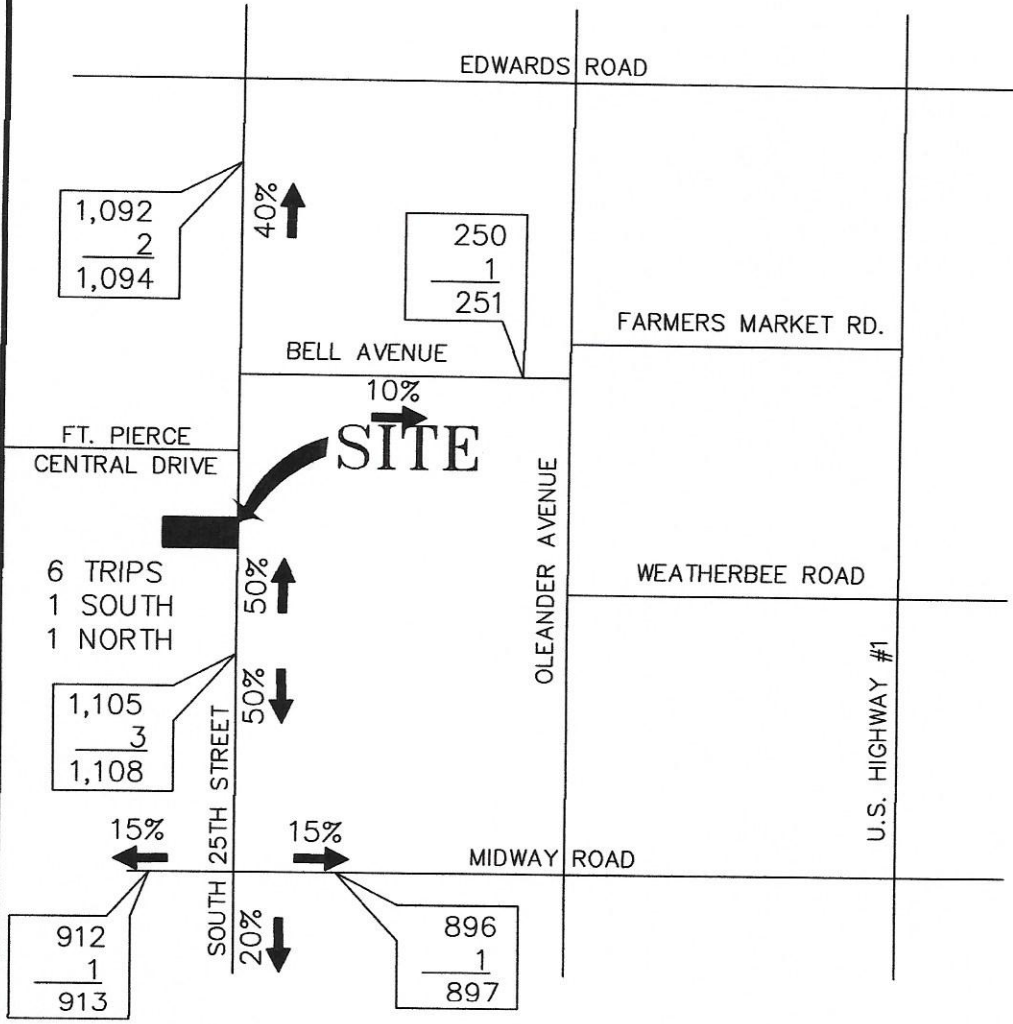
FIGURE 4

L Dadyko
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THE MANOR ADULT LIVING FACILITY
 4201 SOUTH 25TH STREET

TRIP DISTRIBUTION
BY PERCENT AND A.M. PEAK HOUR



LEGEND

341	EXISTING TRIPS (A.M. PEAK HOUR)
<u>36</u>	ADDITIONAL TRIPS ADDED BY PROJECT
368	TOTAL TRIPS (A.M. PEAK HOUR)

FIGURE 5

Ladyko Design Group, LLC
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THE MANOR ADULT LIVING FACILITY
4201 SOUTH 25TH STREET

TRIP DISTRIBUTION
BY PERCENT AND P.M. PEAK HOUR

Figure 3

CONCLUSION

The results of the report prepared for the proposed THE MANOR ADULT LIVING FACILITY indicate that the traffic impacts of the project will not decrease the capacity of any roadway link on the roadway network of St. Lucie County and the F.D.O.T. to an unacceptable level within the study area and no capacity related roadway improvements would be required.

In keeping with the standards required by the Florida Department of Transportation it is recommended that a left turn lane southbound into the project be constructed as the number of trips does not warrant the need. Additionally, 25th Street is a four lane divided roadway with existing turn lanes currently in place. North bound traffic wishing to enter the facility will need to make a U-turn at the left turn lane at the Fort Pierce Central School facility and then proceed south.

Submitted By

Richard M. Ladyko, P.E.
President
Florida Registration No. 34288

REFERENCES

1. F.D.O.T. – St. Lucie County Fall 2015 and Fall 2017 Traffic Counts & Level of Service Report
2. State of Florida Department of Transportation, Quality/Level of Service Handbook, 2018.
3. Institute of Transportation Engineers, Trip Generation Manual, 9th Edition.

**APPENDIX A
TRAFFIC DATA**

TABLE 7

Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas¹

03/14/2018

INTERRUPTED FLOW FACILITIES						UNINTERRUPTED FLOW FACILITIES						
STATE SIGNALIZED ARTERIALS						FREEWAYS						
Principal (1 signal per half mile)						Lanes	B	C	D	E		
Lanes	Median	B	C	D	E	2	2,510	3,410	4,230	4,330		
1	Undivided	*	200	690	930	3	3,660	5,030	6,240	6,500		
2	Divided	50	1,350	1,790	1,870	4	4,820	6,670	8,310	8,670		
3	Divided	80	2,040	2,690	2,820	5	6,580	9,240	10,840	**		
						6	8,150	10,990	13,000	**		
Minor (1 signal per quarter mile)						Freeway Adjustments						
Lanes	Median	B	C	D	E	Auxiliary Lane		Ramp Metering				
1	Undivided	*	*	210	710	+ 1,000		+ 5%				
2	Divided	*	470	1,390	1,840							
3	Divided	*	880	2,190	2,780							
930 minus 10% = 837												
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)												
Non-State Signalized Roadways - 10%												
Median & Turn Lane Adjustments												
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors								
1	Divided	Yes	No	+5%								
1	Undivided	No	No	-20%								
Multi	Undivided	Yes	No	-5%								
Multi	Undivided	No	No	-25%								
-	-	-	Yes	+ 5%								
One-Way Facility Adjustment Multiply the corresponding directional volumes in this table by 1.2												
BICYCLE MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)												
Paved Shoulder/Bicycle Lane Coverage		B	C	D	E							
0-49%		*	150	390	1,000							
50-84%		110	340	1,000	>1,000							
85-100%		470	1,000	>1,000	**							
PEDESTRIAN MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)												
Sidewalk Coverage		B	C	D	E							
0-49%		*	*	140	480							
50-84%		*	80	440	800							
85-100%		200	540	880	>1,000							
BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)												
Sidewalk Coverage		B	C	D	E							
0-84%		> 5	≥ 4	≥ 3	≥ 2							
85-100%		> 4	≥ 3	≥ 2	≥ 1							
						UNINTERRUPTED FLOW HIGHWAYS						
Lanes	Median	B	C	D	E							
1	Undivided	610	930	1,260	1,690							
2	Divided	1,840	2,660	3,350	3,760							
3	Divided	2,770	3,990	5,020	5,640							
Uninterrupted Flow Highway Adjustments												
Lanes	Median	Exclusive left lanes		Adjustment factors								
1	Divided	Yes		+5%								
Multi	Undivided	Yes		-5%								
Multi	Undivided	No		-25%								
						¹ Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.						
						² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.						
						³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.						
						* Cannot be achieved using table input value defaults.						
						** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.						
						Source: Florida Department of Transportation Systems Planning Office www.dot.state.fl.us/planning/systems/sm/los/default.shtm						

Traffic Counts and Level of Service Report Fall 2017

Roadway Name	Location	STATION ID	AADT	Last Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
AVENUE Q	17TH ST to 13TH ST	701	3,747	2016	540	267	C	0.989	299	D	0.554
AVENUE O	13TH ST to US 1	685	1,900	2017	540	107	C	0.396	110	C	0.407
AVENUE C	10TH ST to 7TH ST	631	350	2017	540	20	C	0.074	21	C	0.078
BAYSHORE BLVD	MOUNTWELL ST to PORT ST LUCIE BLVD	621	6,900	2016	830	368	C	0.472	321	C	0.412
BAYSHORE BLVD	PORT ST LUCIE BLVD to THORNHILL DR	309	28,500	2017	2,100	1,406	C	0.700	1,325	C	0.659
BAYSHORE BLVD	THORNHILL DR to CROSSTOWN PKWY	948508	21,610	2015	2,100	-	-	-	-	-	-
BAYSHORE BLVD	CROSSTOWN PKWY to PRIMA VISTA BLVD	307	24,500	2017	2,100	1,197	C	0.596	1,166	C	0.580
BAYSHORE BLVD	PRIMA VISTA BLVD to FLORESTA DR	305	16,648	2016	920	931	F	1.012	828	C	0.952
BAYSHORE BLVD	FLORESTA DR to SELVITZ RD	622	13,500	2017	790	680	C	0.907	679	C	0.905
BAYSHORE BLVD	SELVITZ RD to 25TH ST	622	13,500	2017	750	680	D	0.907	679	D	0.905
BEACH AVE	OLEANDER AVE to RIO MAR DR	623	3,400	2017	540	240	C	0.889	205	C	0.759
BECKER RD	VILLAGE PKWY to I-95	624	2,500	2017	3,170	196	C	0.063	178	C	0.058
BECKER RD	I-95 to SAVONA BLVD	625	17,000	2017	2,000	1,556	C	0.815	1,408	C	0.737
BECKER RD	SAVONA BLVD to PORT ST LUCIE BLVD	626	15,000	2017	2,100	1,006	C	0.500	1,008	C	0.501
BECKER RD	ALBACORE ST to DARWIN BLVD	302	11,500	2017	1,500	746	C	0.522	685	C	0.479
BECKER RD	PORT ST LUCIE BLVD to ALBACORE ST	302	11,500	2017	2,100	746	C	0.371	685	C	0.341
BECKER RD	ATHENA DR to FLORIDA'S TURNPIKE	627	14,500	2017	1,500	1,246	C	0.871	1,157	C	0.809
BECKER RD	DARWIN BLVD to ATHENA DR	627	14,500	2017	2,000	1,246	C	0.652	1,157	C	0.606
BECKER RD	FLORIDA'S TURNPIKE to SOUTHBEND BLVD	628	16,000	2017	2,100	1,074	C	0.534	1,386	C	0.690
BECKER RD	SOUTHBEND BLVD to GILSON RD	629	13,000	2017	920	1,064	F	1.157	1,099	F	1.195
BELL AVE	25TH ST to SUNRISE BLVD	104	3,411	2015	790	207	C	0.531	250	C	0.641
BELL AVE	SUNRISE BLVD to OLEANDER AVE	102	3,309	2015	600	217	C	0.723	213	C	0.710
CASHMERE BLVD	PEACOCK BLVD to TORINO PKWY	676	9,900	2017	630	678	F	1.076	576	C	0.960
CALIFORNIA BLVD	CAMEO BLVD to DEL RIO BLVD	633	7,800	2015	750	547	D	0.729	448	D	0.597
CALIFORNIA BLVD	DEL RIO BLVD to SAVONA BLVD	634	13,500	2017	920	668	C	0.768	677	C	0.778

* Note: A six digit number in the "STATION ID" column identifies segment counted by FDOT
 * Volumes shown were adjusted using FDOT Seasonal Factors
 * AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
 * Volumes, LOS and V/C values with "-" designation are associated with FDOT Count Stations and will need to have current FDOT volume data supplied before values can be generated properly.

Traffic Counts and Level of Service Report Fall 2017

Roadway Name	Location	STATION ID	AADT	Last Count Year	PK Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
17TH ST	ORANGE AVE to AVENUE D	608	3,967	2016	750	232	C	0.627	222	C	0.600
17TH ST	AVENUE D to AVENUE Q	608	3,967	2016	750	232	C	0.627	222	C	0.600
25TH ST	MIDWAY RD to BELL AVE	940016	16,637	2015	2,100	-	-	-	-	-	-
25TH ST	BELL AVE to EDWARDS RD	159	19,423	2016	2,100	1,075	C	0.535	1,092	C	0.543
25TH ST	EDWARDS RD to CORTEZ BLVD	940021	21,613	2015	2,000	-	-	-	-	-	-
25TH ST	CORTEZ BLVD to VIRGINIA AVE	529	22,000	2017	2,000	1,150	C	0.602	1,204	C	0.630
25TH ST	VIRGINIA AVE to NEBRASKA AVE	940015	21,031	2015	2,000	-	-	-	-	-	-
25TH ST	NEBRASKA AVE to OKEECHOBEE RD	940015	21,031	2015	2,000	-	-	-	-	-	-
25TH ST	OKEECHOBEE RD to GEORGIA AVE	609	21,500	2017	1,630	1,104	D	0.677	1,049	D	0.644
25TH ST	GEORGIA AVE to DELAWARE AVE	609	21,500	2017	1,630	1,104	D	0.677	1,049	D	0.644
25TH ST	DELAWARE AVE to ORANGE AVE	940014	18,928	2015	1,630	-	-	-	-	-	-
25TH ST	ORANGE AVE to AVENUE D	610	14,000	2016	1,630	606	C	0.830	595	C	0.815
25TH ST	AVENUE D to AVENUE Q	940050	14,241	2015	1,630	-	-	-	-	-	-
25TH ST	AVENUE Q to JUANITA AVE	945152	13,061	2015	2,000	-	-	-	-	-	-
25TH ST	JUANITA AVE to ST LUCIE BLVD	940791	13,814	2013	2,100	-	-	-	-	-	-
25TH ST	ST LUCIE BLVD to US 1	945165	5,210	2015	2,100	-	-	-	-	-	-
33RD ST	OKEECHOBEE RD to DELAWARE AVE	611	5,767	2016	750	337	C	0.911	277	C	0.749
33RD ST	DELAWARE AVE to ORANGE AVE	948507	5,850	2015	790	-	-	-	-	-	-
35TH ST	KIRBY LOOP RD to CORTEZ BLVD	612	6,800	2016	540	542	E	0.934	406	D	0.752
35TH ST	CORTEZ BLVD to VIRGINIA AVE	612	6,800	2016	790	542	D	0.686	406	D	0.514
35TH ST	VIRGINIA AVE to OKEECHOBEE RD	613	4,467	2016	750	270	C	0.730	272	C	0.735
53RD ST	ANGLE RD to JUANITA AVE	614	2,633	2016	540	140	C	0.519	155	C	0.574
AE BACKUS AVE	7TH ST to US 1	632	1,000	2017	750	68	C	0.184	78	C	0.211
AIROSO BLVD	PORT ST LUCIE BLVD to THORNHILL DR	303	17,500	2017	2,100	1,141	C	0.568	947	C	0.471
AIROSO BLVD	THORNHILL DR to CROSSTOWN PKWY	303	17,500	2017	2,100	1,141	C	0.568	947	C	0.471

* Note: A six digit number in the "STATION ID" column identifies segment counted by FDOT
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 * **Volumes, LOS and V/C values with " - " designation are associated with FDOT Count Stations and will need to have current FDOT volume data supplied before values can be generated properly.**

Traffic Counts and Level of Service Report Fall 2017

Roadway Name	Location	STATION ID	AADT	Last Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
MCCARTY RD	WILLIAMS RD to MIDWAY RD	680	350	2017	540	30	C	0.111	32	C	0.119
MCCARTY RD	MIDWAY RD to OKEECHOBEE RD	681	300	2015	540	29	C	0.107	22	C	0.081
MELALEUCA BLVD	LENNARD RD to GREEN RIVER PKWY	683	10,500	2017	920	684	C	0.786	630	C	0.724
MIDWAY RD	EAST TORINO PKWY to MILNER DR	134	20,500	2017	880	1,084	F	1.232	1,085	F	1.233
MIDWAY RD	MILNER DR to W OF SELVITZ RD	134	20,500	2017	790	1,084	F	1.372	1,085	F	1.373
MIDWAY RD	OKEECHOBEE RD to SHINN RD	940732	4,742	2015	760	-	-	-	-	-	-
MIDWAY RD	SHINN RD to MCCARTY RD	940732	4,742	2015	630	-	-	-	-	-	-
MIDWAY RD	MCCARTY RD to I-95	940732	4,742	2015	700	-	-	-	-	-	-
MIDWAY RD	I-95 to GLADES CUT-OFF RD	945140	16,293	2015	2,100	-	-	-	-	-	-
MIDWAY RD	GLADES CUT-OFF RD to EAST TORINO PKWY	228	18,000	2017	2,100	1,105	C	0.550	1,037	C	0.516
MIDWAY RD	W OF SELVITZ RD to SELVITZ RD	134	20,500	2017	920	1,084	F	1.178	1,085	F	1.179
MIDWAY RD	SELVITZ RD to CHRISTENSEN RD	132	17,500	2017	920	912	D	0.991	896	D	0.974
MIDWAY RD	CHRISTENSEN RD to 25TH ST	132	17,500	2017	790	912	F	1.086	896	F	1.067
MIDWAY RD	25TH ST to SUNRISE BLVD	130	18,663	2016	790	1,018	F	1.212	935	F	1.113
MIDWAY RD	SUNRISE BLVD to OLEANDER AVE	130	18,663	2016	790	1,018	F	1.212	935	F	1.113
MIDWAY RD	OLEANDER AVE to US 1	242	15,533	2016	790	820	E	0.976	811	E	0.965
MIDWAY RD	US 1 to WALLACE ST	940023	3,600	2015	790	-	-	-	-	-	-
MIDWAY RD	WALLACE ST to WEATHERBEE RD	940023	3,600	2015	920	-	-	-	-	-	-
MIDWAY RD	WEATHERBEE RD to INDIAN RIVER DR	940023	3,600	2015	630	-	-	-	-	-	-
MORNINGSIDE BLVD	WESTMORELAND BLVD to PORT ST LUCIE BLVD	333	2,700	2017	920	162	C	0.186	155	C	0.178
MORNINGSIDE BLVD	PORT ST LUCIE BLVD to LYNNGATE DR	331	4,637	2016	880	315	C	0.380	303	C	0.365
NEBRASKA AVE	25TH ST to 13TH ST	684	3,900	2017	1,710	242	C	0.314	204	C	0.265
OAKRIDGE DR	MOUNTWELL ST to OAKLYN ST	621	6,900	2016	700	368	C	0.558	321	C	0.486

* Note: A six digit number in the "STATION ID" column identifies segment counted by FDOT
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DRAINAGE REPORT

For

**The Manor
Adult Living Facility
4201 South 25th Street
Ft. Pierce, Florida**

In

St. Lucie County

Prepared for

Red Lion Construction, Inc.
7548 South U.S. Highway #1
Port St. Lucie, Florida 34952
727-463-3800

Prepared By

Richard M. Ladyko, P.E.
Fla. Registration #34288
Ladyko Design Group, LLC
Engineers, Planners, Construction Managers
4400 Belle Grove Drive
Ft. Pierce, FL 34981
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Certificate of Authorization #28610

August 2018

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Phase II Drainage Calculations.....	Section II
Phase II Storm.....	Section III
Drainage Summary	Section IV

Applicable Codes the Design is Intended to Meet:

City of Fort Pierce Land Development Code.
North St. Lucie River Water Control District Requirement
South Florida Water Management District Water Quality and Quantity
Standards for Environmental Resource Permits (Volume IV).

Computer Programs used for the specifications and/or calculations:

S.F.W.M.D. Cascade.

Prepared by:

Richard M. Ladyko, P.E.
Fla. Registration #34288

SECTION "I"

Drainage Narrative

The Manor Adult Living Facility
4201 South 25th Street
Fort Pierce, Florida

Drainage Narrative

The proposed development is located approx. 0.50 miles north of Midway Road on the west side of South 25th Street, in Fort Pierce, Florida. The site is 1.36 acres in size and is currently vacant.

The Future Land Use Designation of the property is Low Density Residential (RL) with a Zoning Designation of Commercial Office (C-1). The new owner, Red Lion Construction, Inc., proposes to develop an Adult Congregate Living Facility on the property. The proposed facility will consist of 26,926 s.f. of building to be constructed in two phases, 10,961 s.f. of pavement and sidewalk, 9,067 s.f. of dry detention area and 12,246 s.f. of open space.

It is the intent of the developer of construct the project in two phases, with all of the pavement, sidewalk and dry detention area to be constructed with the first phase. The phase will include 16,478 s.f. of the proposed building structure.

The project will be designed with consideration of the rules and requirements of the City of Fort Pierce, South Florida Water Management District and the North St. Lucie River Water Control District.

Consideration will be given to the Minimum Finished Floor Elevation will be based upon the 100 year, 3 day, zero discharge event stage, the minimum perimeter grade, based upon the 25 year, 3 day event, the minimum discharge from the site, based upon the N.S.L.R. W.C.D., 10 year, 3 day event and the minimum pavement elevation which will be based upon the 10 year, 1 day storm event.

Discharge from the site will be to the North St. Lucie River Water Control District Canal #101 after water quality and storm attenuation is provided. Discharge is ultimately to the North Fork of the St. Lucie River, thence to the Intracoastal Waterway. Both bodies are Outstanding Florida Waterways (OFW) and as a result water quality will be provided to the extent of 150% of the required amount.

SECTION "II"

Drainage Calculations

STORMWATER MANAGEMENT CALCULATIONS FOR THE MANOR

THE PROJECT CONSISTS OF A 1.36 ACRE PARCEL LOCATED ON THE WEST SIDE OF SOUTH 25TH STREET IN THE CITY OF FORT PIERCE, FLORIDA. THE PROJECT WILL CONSIST OF 26,926 S.F. OF BUILDING TO BE CONSTRUCTED IN TWO PHASES, 10,961 S.F. OF PAVEMENT AND SIDEWALK, 9,067 S.F. OF DRY DETENTION AND 12,246 S.F. OF OPEN/GREEN SPACE.

WATER QUALITY AND STORM ATTENUATION WILL BE PROVIDED IN THE DRY DETENTION AREA PRIOR TO DISCHARGE TO THE NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT CANAL #101. FLOW IS ULTIMATELY TO THE NORTH FORK OF THE ST. LUCIE RIVER, SO AS A RESULT 150% OF THE REQUIRED ATTENUATION AMOUNT WILL BE PROVIDED

LAND USE BREAKDOWN

	<u>AREA</u>	<u>% IMP</u>	<u>IMP. AREA</u>
BUILDING	0.62 Ac	100%	0.62 Ac
PAVEMENTS WALKS	0.25 Ac	100%	0.25 Ac
DRY DETENTION	0.21 Ac	0%	0.00
OPEN/GREEN SPACE	0.28 Ac	0%	0.00
	<u>1.36 Ac</u>		<u>0.87 Ac</u>

% IMPERVIOUS

$$\frac{0.87}{1.36} \times 100 = 63.97\%$$

PERVIOUS AREA

$$1.36 - 0.87 = 0.49 \text{ Ac.}$$

COMPUTE SCS CURVE NUMBER

AUG. GRADE ELEV. = 10.00

CONTROL ELEV = 5.00

5.00 DEPTH TO WATER TABLE
(USE 4.0' MAX.)

USE S.F.W.M.D.

S.W.E.R.P. HANDBOOK

4.0' → USE 10.9"

$10.9 \times 0.75 = \underline{8.18''}$

AVAILABLE SOIL STORAGE

$\frac{8.18}{12} \times 0.49 \text{ Ac} = 0.334$

EQUIVALENT SOIL STORAGE

$\frac{0.334}{1.36} \times 12 = 2.95''$

$CN = \frac{1000}{10 + 2.95} = \frac{1000}{12.95} = \underline{77}$

THE MANOR ADULT LIVING FACILITY
JOB #18-065

STAGE VERSES STORAGE CALCULATIONS

Elevation Ft.	DRY BOT. 0.05 Ac. 7.5 up (v)	DRY SLOPES 0.17 Ac. 7.5-9.0(L)	PAVEMENT 0.22 Ac. 9.0 -10.5.0(L)	OPEN SPACE 0.28 Ac. 9.0 -10.0 (L)	TOTAL AC-FT
6.5	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000
7.5	0.000	0.000	0.000	0.000	0.000
8	0.025	0.014	0.000	0.000	0.039
8.5	0.050	0.057	0.000	0.000	0.107
9	0.075	0.128	0.000	0.000	0.203
9.5	0.100	0.213	0.018	0.035	0.366
10	0.125	0.298	0.073	0.140	0.636
10.5	0.150	0.383	0.165	0.280	0.978
11	0.175	0.468	0.275	0.420	1.338
11.5	0.200	0.553	0.385	0.560	1.698
12	0.225	0.638	0.495	0.700	2.058
12.5	0.250	0.723	0.605	0.840	2.418
13	0.275	0.909	0.715	0.980	2.879
13.5	0.300	0.893	0.825	1.120	3.138
14	0.325	0.978	0.935	1.260	3.498

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COMPUTE MINIMUM RETENTION/DETENTION FOR WATER QUALITY

PROVIDE WATER QUALITY TREATMENT EQUIVALENT TO THE GREATER OF THE FIRST INCH OF RUNOFF OR 2.5 TIMES THE PERCENT IMPERVIOUS

1) FIRST INCH

$$\frac{1}{12} \times 1.36 = 0.113 \text{ Ac} \cdot \text{FT}$$

2) 2.5 TIMES % IMPERVIOUS

a) SITE AREA FOR WATER QUALITY

$$\text{SITE AREA} - (\text{LAKES} + \text{ROOFS} + \text{WETLANDS}) \\ 1.36 - (0 + 0.62 + 0) = 0.74 \text{ Ac}$$

b) IMPERVIOUS AREA

$$0.74 \text{ Ac} - 0.49 \text{ Ac} = 0.25 \text{ Ac}$$

c) % IMPERVIOUS

$$\frac{0.25}{0.74} \times 100\% = 33.78\%$$

d) 2.5 TIMES % IMPERVIOUS

$$.3378 \times 2.5 = 0.845$$

e) VOLUME TO BE DETAINED

$$\frac{.845}{12} \times 0.74 = .052 \text{ Ac} \cdot \text{FT}$$

FIRST INCH CONTROLS → 0.113 Ac·FT

PROVIDE 150% OF THE REQUIRED AMOUNT FOR WATER QUALITY AS THE DISCHARGE IS TO THE NORTH FORK OF THE ST. LUCIE RIVER, AN OUTSTANDING FLORIDA WATER (O.F.W.)

$$0.113 \times 1.50 = 0.1695 \text{ Ac. FT}$$

SET CONTROL STRUCTURE BLEEDER TOP ELEVATION

$$\frac{0.1695 - 0.102}{0.203 - 0.107} = \frac{.0625}{.096} = 0.65 \times .5 = 0.33$$

$$9.0 + 0.33 = 9.33 \text{ (min)}$$

COMPUTE MINIMUM FINISHED FLOOR ELEV., 100yr, 3DAY, 0 DISCH

$$P_{100}(3) = 12.23'' \quad Q = \frac{(12.23 - 0.2(2.95))^2}{12.23 + 0.8(2.95)} = \frac{135.486}{14.59} = 9.28''$$

$$S = 2.95''$$

$$\frac{9.28}{12} \times 1.36 = 1.052 \text{ Ac. FT}$$

$$\frac{1.052 - 0.978}{1.338 - 0.978} = \frac{.074}{0.360} = 0.205 \times .5 = .11$$

$$10.5 + 0.11 = 10.61'$$

USE 11.00' (MIN)

Compute 25 year, 3 DAY, 0 DISCHARGE STAGE

$$P_{25(3)} = 9.5'$$

$$S = 2.95''$$

$$Q = \frac{(9.5 - 0.2(2.95))^2}{9.5 + 0.8(2.95)} = \frac{79.383}{11.860} = 6.69'$$

$$\frac{6.69'}{12} \times 1.36 = 0.758 \text{ Ac. Ft}$$

$$\frac{0.758 - 0.636}{0.978 - 0.636} = \frac{0.122}{0.342} = 0.36 \times .5 = 0.18$$

$$10.00 + 0.18 = 10.18'$$

ALLOWABLE DISCHARGE

DISCHARGE WILL BE TO THE N.S.L.R.W.C.D.
CANAL #101

DISCHARGE IS BASED UPON A VOLUMETRIC
BASIS OF 2.0 INCHES PER DAY OVER THE
1.36 ACRE PARCEL

$$2.0'' \times 1.36 \text{ Ac} = 2.72 \text{ Ac. INCH}$$

$$\frac{2.72 \text{ Ac. IN} / 1 \text{ FT}}{12 \text{ INCH} / 1 \text{ ACRE}} \times \frac{43560 \text{ SF}}{1 \text{ Acre}} = 9873.6 \text{ ft}^3 / \text{DAY}$$

$$\frac{9873.6 \text{ ft}^3 / 1 \text{ DAY}}{\text{DAY} / 86400 \text{ SEC}} = 0.114 \text{ C.F.S.}$$

USE MINIMUM SIZE BLEEDER \rightarrow 3" ϕ

SECTION "III"

**PHASE TWO
STORM ROUTINGS**

10 YEAR, 24 HOUR EVENT
MINIMUM ROAD CROWN
5.5 INCHES OF RAINFALL

Project Name: The Manor Adult Living Facility

Reviewer: R. Ladyko

Project Number: 18-065

Period Begin: Jan 01, 2000;0000 hr End: Jan 05, 2000;0000 hr Duration: 96 hr

Time Step: 0.2 hr, Iterations: 10

Basin 1: on-site

Method: Santa Barbara Unit Hydrograph

Rainfall Distribution: SFWMD - 24 hr

Design Frequency: 10 year

1 Day Rainfall: 5.5 inches

Area: 1.36 acres

Ground Storage: 2.95 inches

Time of Concentration: 0.5 hours

Initial Stage: 6.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
6.50	0.00
7.00	0.00
7.50	0.00
8.00	0.04
8.50	0.11
9.00	0.20
9.50	0.37
10.00	0.64
10.50	0.98
11.00	1.34
11.50	1.70
12.00	2.06
12.50	2.42
13.00	2.88

Offsite Receiving Body: Offsite

Time (hr)	Stage (ft NGVD)
0.00	0.00
1000.00	0.00

Structure: 1

From Basin: on-site

To Basin: Offsite

Structure Type: Gravity

Weir: Sharp Crested, Crest Elev = 9.8 ft NGVD, Length = 3 ft

Bleeder: Circular, Invert Elev = 6.5 ft NGVD, Diameter = 0.25 ft

Default Coefs: Weir Coef = 0.6, Orifice Coef = 0.6

Pipe: Diameter = 1.5 ft, Manning's n = 0.024, Length = 35 ft

US Invert Elev = 6 ft NGVD, DS Invert Elev = 5.8 ft NGVD, no flap gate

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	6.50	0.00
1.00	0.05	0.00	0.00	0.00	6.50	0.00
2.00	0.11	0.00	0.00	0.00	6.50	0.00
3.00	0.18	0.00	0.00	0.00	6.50	0.00
4.00	0.25	0.00	0.00	0.00	6.50	0.00
5.00	0.34	0.00	0.00	0.00	6.50	0.00
6.00	0.46	0.00	0.00	0.00	6.50	0.00
7.00	0.59	0.00	0.00	0.00	7.50	0.00
8.00	0.75	0.01	0.00	0.00	7.51	0.00
9.00	0.94	0.04	0.00	0.00	6.50	0.00
10.00	1.17	0.08	0.00	0.01	7.50	0.00
11.00	1.48	0.16	0.22	0.02	7.50	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
12.00	3.61	2.22	0.28	0.03	8.06	0.00
13.00	4.22	0.79	0.34	0.06	8.65	0.00
14.00	4.50	0.36	0.34	0.09	8.73	0.00
15.00	4.68	0.22	0.34	0.12	8.70	0.00
16.00	4.84	0.19	0.34	0.15	8.64	0.00
17.00	4.94	0.12	0.33	0.17	8.56	0.00
18.00	5.04	0.12	0.32	0.20	8.45	0.00
19.00	5.14	0.11	0.31	0.23	8.33	0.00
20.00	5.24	0.11	0.30	0.25	8.22	0.00
21.00	5.30	0.08	0.29	0.27	8.10	0.00
22.00	5.37	0.08	0.27	0.30	7.96	0.00
23.00	5.43	0.08	0.25	0.32	7.76	0.00
24.00	5.50	0.08	0.23	0.34	7.59	0.00
25.00	5.50	0.01	0.00	0.35	7.50	0.00
26.00	5.50	0.00	0.00	0.35	7.51	0.00
27.00	5.50	0.00	0.00	0.35	7.51	0.00
28.00	5.50	0.00	0.00	0.35	7.51	0.00
29.00	5.50	0.00	0.00	0.35	7.51	0.00
30.00	5.50	0.00	0.00	0.35	7.51	0.00
31.00	5.50	0.00	0.00	0.35	7.51	0.00
32.00	5.50	0.00	0.00	0.35	7.51	0.00
33.00	5.50	0.00	0.00	0.35	7.51	0.00
34.00	5.50	0.00	0.00	0.35	7.51	0.00
35.00	5.50	0.00	0.00	0.35	7.51	0.00
36.00	5.50	0.00	0.00	0.35	7.51	0.00
37.00	5.50	0.00	0.00	0.35	7.51	0.00
38.00	5.50	0.00	0.00	0.35	7.51	0.00
39.00	5.50	0.00	0.00	0.35	7.51	0.00
40.00	5.50	0.00	0.00	0.35	7.51	0.00
41.00	5.50	0.00	0.00	0.35	7.51	0.00
42.00	5.50	0.00	0.00	0.35	7.51	0.00
43.00	5.50	0.00	0.00	0.35	7.51	0.00
44.00	5.50	0.00	0.00	0.35	7.51	0.00
45.00	5.50	0.00	0.00	0.35	7.51	0.00
46.00	5.50	0.00	0.00	0.35	7.51	0.00
47.00	5.50	0.00	0.00	0.35	7.51	0.00
48.00	5.50	0.00	0.00	0.35	7.51	0.00
49.00	5.50	0.00	0.00	0.35	7.51	0.00
50.00	5.50	0.00	0.00	0.35	7.51	0.00
51.00	5.50	0.00	0.00	0.35	7.51	0.00
52.00	5.50	0.00	0.00	0.35	7.51	0.00
53.00	5.50	0.00	0.00	0.35	7.51	0.00
54.00	5.50	0.00	0.00	0.35	7.51	0.00
55.00	5.50	0.00	0.00	0.35	7.51	0.00
56.00	5.50	0.00	0.00	0.35	7.51	0.00
57.00	5.50	0.00	0.00	0.35	7.51	0.00
58.00	5.50	0.00	0.00	0.35	7.51	0.00
59.00	5.50	0.00	0.00	0.35	7.51	0.00
60.00	5.50	0.00	0.00	0.35	7.51	0.00
61.00	5.50	0.00	0.00	0.35	7.51	0.00
62.00	5.50	0.00	0.00	0.35	7.51	0.00
63.00	5.50	0.00	0.00	0.35	7.51	0.00
64.00	5.50	0.00	0.00	0.35	7.51	0.00
65.00	5.50	0.00	0.00	0.35	7.51	0.00
66.00	5.50	0.00	0.00	0.35	7.51	0.00
67.00	5.50	0.00	0.00	0.35	7.51	0.00
68.00	5.50	0.00	0.00	0.35	7.51	0.00
69.00	5.50	0.00	0.00	0.35	7.51	0.00
70.00	5.50	0.00	0.00	0.35	7.51	0.00
71.00	5.50	0.00	0.00	0.35	7.51	0.00
72.00	5.50	0.00	0.00	0.35	7.51	0.00
73.00	5.50	0.00	0.00	0.35	7.51	0.00
74.00	5.50	0.00	0.00	0.35	7.51	0.00
75.00	5.50	0.00	0.00	0.35	7.51	0.00
76.00	5.50	0.00	0.00	0.35	7.51	0.00
77.00	5.50	0.00	0.00	0.35	7.51	0.00
78.00	5.50	0.00	0.00	0.35	7.51	0.00
79.00	5.50	0.00	0.00	0.35	7.51	0.00
80.00	5.50	0.00	0.00	0.35	7.51	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
81.00	5.50	0.00	0.00	0.35	7.51	0.00
82.00	5.50	0.00	0.00	0.35	7.51	0.00
83.00	5.50	0.00	0.00	0.35	7.51	0.00
84.00	5.50	0.00	0.00	0.35	7.51	0.00
85.00	5.50	0.00	0.00	0.35	7.51	0.00
86.00	5.50	0.00	0.00	0.35	7.51	0.00
87.00	5.50	0.00	0.00	0.35	7.51	0.00
88.00	5.50	0.00	0.00	0.35	7.51	0.00
89.00	5.50	0.00	0.00	0.35	7.51	0.00
90.00	5.50	0.00	0.00	0.35	7.51	0.00
91.00	5.50	0.00	0.00	0.35	7.51	0.00
92.00	5.50	0.00	0.00	0.35	7.51	0.00
93.00	5.50	0.00	0.00	0.35	7.51	0.00
94.00	5.50	0.00	0.00	0.35	7.51	0.00
95.00	5.50	0.00	0.00	0.35	7.51	0.00
96.00	5.50	0.00	0.00	0.35	7.51	0.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.34	14.00	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
on-site	8.73	14.00	6.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
on-site	0.35	0.00	0.35	0.00	0.00	0.00

10 YEAR, 72 HOUR EVENT
DESIGN DISCHARGE
N.S.L.R.W.C.D. CRITERIA
7.47 INCHES OF RAINFALL

Project Name: The Manor Adult Living Facility

Reviewer: R. Ladyko

Project Number: 18-065

Period Begin: Jan 01, 2000;0000 hr End: Jan 16, 2000;0000 hr Duration: 360 hr
 Time Step: 0.2 hr, Iterations: 10

Basin 1: on-site

Method: Santa Barbara Unit Hydrograph

Rainfall Distribution: SFWMD - 3day

Design Frequency: 10 year

3 Day Rainfall: 7.47 inches

Area: 1.36 acres

Ground Storage: 2.95 inches

Time of Concentration: 0.5 hours

Initial Stage: 6.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
6.50	0.00
7.00	0.00
7.50	0.00
8.00	0.04
8.50	0.11
9.00	0.20
9.50	0.37
10.00	0.64
10.50	0.98
11.00	1.34
11.50	1.70
12.00	2.06
12.50	2.42
13.00	2.88

Offsite Receiving Body: Offsite

Time (hr)	Stage (ft NGVD)
0.00	0.00
1000.00	0.00

Structure: 1

From Basin: on-site

To Basin: Offsite

Structure Type: Gravity

Weir: Sharp Crested, Crest Elev = 9.8 ft NGVD, Length = 3 ft

Bleeder: Circular, Invert Elev = 6.5 ft NGVD, Diameter = 0.25 ft

Default Coefs: Weir Coef = 0.6, Orifice Coef = 0.6

Pipe: Diameter = 1.5 ft, Manning's n = 0.024, Length = 35 ft

US Invert Elev = 6 ft NGVD, DS Invert Elev = 5.8 ft NGVD, no flap gate

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	6.50	0.00
1.00	0.03	0.00	0.00	0.00	6.50	0.00
2.00	0.07	0.00	0.00	0.00	6.50	0.00
3.00	0.10	0.00	0.00	0.00	6.50	0.00
4.00	0.13	0.00	0.00	0.00	6.50	0.00
5.00	0.17	0.00	0.00	0.00	6.50	0.00
6.00	0.20	0.00	0.00	0.00	6.50	0.00
7.00	0.23	0.00	0.00	0.00	6.50	0.00
8.00	0.27	0.00	0.00	0.00	6.50	0.00
9.00	0.30	0.00	0.00	0.00	6.50	0.00
10.00	0.33	0.00	0.00	0.00	6.50	0.00
11.00	0.37	0.00	0.00	0.00	6.50	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)	
12.00	0.40	0.00	0.00	0.00	6.50	0.00	
13.00	0.43	0.00	0.00	0.00	6.50	0.00	
14.00	0.47	0.00	0.00	0.00	6.50	0.00	
15.00	0.50	0.00	0.00	0.00	6.50	0.00	
16.00	0.54	0.00	0.00	0.00	6.50	0.00	
17.00	0.57	0.00	0.00	0.00	6.50	0.00	
18.00	0.60	0.00	0.00	0.00	6.50	0.00	
19.00	0.64	0.00	0.00	0.00	7.50	0.00	
20.00	0.67	0.00	0.00	0.00	7.50	0.00	
21.00	0.70	0.00	0.00	0.00	7.50	0.00	
22.00	0.74	0.00	0.00	0.00	7.50	0.00	
23.00	0.77	0.00	0.00	0.00	7.51	0.00	
24.00	0.80	0.01	0.00	0.00	7.51	0.00	
25.00	0.85	0.01	0.00	0.00	7.52	0.00	
26.00	0.90	0.01	0.00	0.00	6.50	0.00	
27.00	0.95	0.01	0.00	0.00	6.50	0.00	
28.00	1.00	0.01	0.00	0.00	7.50	0.00	
29.00	1.05	0.02	0.00	0.00	7.52	0.00	
30.00	1.10	0.02	0.00	0.01	6.50	0.00	
31.00	1.14	0.02	0.00	0.01	7.50	0.00	
32.00	1.19	0.02	0.00	0.01	7.52	0.00	
33.00	1.24	0.02	0.00	0.01	6.50	0.00	
34.00	1.29	0.02	0.00	0.01	7.52	0.00	
35.00	1.34	0.02	0.00	0.01	6.50	0.00	
36.00	1.39	0.02	0.00	0.01	7.52	0.00	
37.00	1.44	0.02	0.00	0.02	6.50	0.00	
38.00	1.49	0.03	0.22	0.02	7.50	0.00	
39.00	1.53	0.03	0.00	0.02	7.51	0.00	
40.00	1.58	0.03	0.00	0.03	6.50	0.00	
41.00	1.63	0.03	0.00	0.03	7.52	0.00	
42.00	1.68	0.03	0.00	0.03	7.50	0.00	
43.00	1.73	0.03	0.00	0.03	6.50	0.00	
44.00	1.78	0.03	0.00	0.03	7.52	0.00	
45.00	1.83	0.03	0.00	0.04	7.51	0.00	
46.00	1.88	0.03	0.00	0.04	6.50	0.00	
47.00	1.92	0.03	0.00	0.04	6.50	0.00	
48.00	1.97	0.04	0.00	0.04	7.52	0.00	
49.00	2.03	0.04	0.00	0.05	7.51	0.00	
50.00	2.08	0.04	0.00	0.05	7.51	0.00	
51.00	2.15	0.05	0.00	0.05	7.50	0.00	
52.00	2.22	0.06	0.00	0.06	7.50	0.00	
53.00	2.31	0.08	0.22	0.07	7.51	0.00	
54.00	2.43	0.10	0.22	0.08	7.51	0.00	
55.00	2.57	0.12	0.00	0.08	7.51	0.00	
56.00	2.73	0.14	0.22	0.10	7.51	0.00	
57.00	2.91	0.17	0.22	0.11	7.53	0.00	
58.00	3.14	0.22	0.22	0.12	7.51	0.00	
59.00	3.45	0.31	0.23	0.14	7.52	0.00	
60.00	5.58	2.80	0.30	0.17	7.56	0.00	
61.00	6.19	0.92	0.36	0.19	8.27	0.00	
62.00	6.47	0.41	0.36	0.19	8.91	0.00	
63.00	6.65	0.24	0.36	0.22	0.25	8.99	0.00
64.00	6.81	0.21	0.36	0.28	0.28	8.99	0.00
65.00	6.91	0.13	0.35	0.31	0.31	8.93	0.00
66.00	7.01	0.12	0.34	0.34	0.34	8.84	0.00
67.00	7.11	0.12	0.34	0.37	0.37	8.75	0.00
68.00	7.21	0.12	0.33	0.40	0.40	8.65	0.00
69.00	7.27	0.09	0.32	0.42	0.42	8.56	0.00
70.00	7.34	0.08	0.31	0.42	0.42	8.45	0.00
71.00	7.40	0.08	0.29	0.45	0.45	8.31	0.00
72.00	7.47	0.08	0.28	0.47	0.47	8.18	0.00
73.00	7.47	0.01	0.26	0.50	0.50	8.05	0.00
74.00	7.47	0.00	0.23	0.52	0.52	7.84	0.00
75.00	7.47	0.00	0.00	0.54	0.54	7.59	0.00
76.00	7.47	0.00	0.00	0.54	0.54	7.52	0.00
77.00	7.47	0.00	0.00	0.54	0.54	7.52	0.00
78.00	7.47	0.00	0.00	0.54	0.54	7.52	0.00
79.00	7.47	0.00	0.00	0.54	0.54	7.52	0.00
80.00	7.47	0.00	0.00	0.54	0.54	7.52	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
81.00	7.47	0.00	0.00	0.54	7.52	0.00
82.00	7.47	0.00	0.00	0.54	7.52	0.00
83.00	7.47	0.00	0.00	0.54	7.52	0.00
84.00	7.47	0.00	0.00	0.54	7.52	0.00
85.00	7.47	0.00	0.00	0.54	7.52	0.00
86.00	7.47	0.00	0.00	0.54	7.52	0.00
87.00	7.47	0.00	0.00	0.54	7.52	0.00
88.00	7.47	0.00	0.00	0.54	7.52	0.00
89.00	7.47	0.00	0.00	0.54	7.52	0.00
90.00	7.47	0.00	0.00	0.54	7.52	0.00
91.00	7.47	0.00	0.00	0.54	7.52	0.00
92.00	7.47	0.00	0.00	0.54	7.52	0.00
93.00	7.47	0.00	0.00	0.54	7.52	0.00
94.00	7.47	0.00	0.00	0.54	7.52	0.00
95.00	7.47	0.00	0.00	0.54	7.52	0.00
96.00	7.47	0.00	0.00	0.54	7.52	0.00
97.00	7.47	0.00	0.00	0.54	7.52	0.00
98.00	7.47	0.00	0.00	0.54	7.52	0.00
99.00	7.47	0.00	0.00	0.54	7.52	0.00
100.00	7.47	0.00	0.00	0.54	7.52	0.00
101.00	7.47	0.00	0.00	0.54	7.52	0.00
102.00	7.47	0.00	0.00	0.54	7.52	0.00
103.00	7.47	0.00	0.00	0.54	7.52	0.00
104.00	7.47	0.00	0.00	0.54	7.52	0.00
105.00	7.47	0.00	0.00	0.54	7.52	0.00
106.00	7.47	0.00	0.00	0.54	7.52	0.00
107.00	7.47	0.00	0.00	0.54	7.52	0.00
108.00	7.47	0.00	0.00	0.54	7.52	0.00
109.00	7.47	0.00	0.00	0.54	7.52	0.00
110.00	7.47	0.00	0.00	0.54	7.52	0.00
111.00	7.47	0.00	0.00	0.54	7.52	0.00
112.00	7.47	0.00	0.00	0.54	7.52	0.00
113.00	7.47	0.00	0.00	0.54	7.52	0.00
114.00	7.47	0.00	0.00	0.54	7.52	0.00
115.00	7.47	0.00	0.00	0.54	7.52	0.00
116.00	7.47	0.00	0.00	0.54	7.52	0.00
117.00	7.47	0.00	0.00	0.54	7.52	0.00
118.00	7.47	0.00	0.00	0.54	7.52	0.00
119.00	7.47	0.00	0.00	0.54	7.52	0.00
120.00	7.47	0.00	0.00	0.54	7.52	0.00
121.00	7.47	0.00	0.00	0.54	7.52	0.00
122.00	7.47	0.00	0.00	0.54	7.52	0.00
123.00	7.47	0.00	0.00	0.54	7.52	0.00
124.00	7.47	0.00	0.00	0.54	7.52	0.00
125.00	7.47	0.00	0.00	0.54	7.52	0.00
126.00	7.47	0.00	0.00	0.54	7.52	0.00
127.00	7.47	0.00	0.00	0.54	7.52	0.00
128.00	7.47	0.00	0.00	0.54	7.52	0.00
129.00	7.47	0.00	0.00	0.54	7.52	0.00
130.00	7.47	0.00	0.00	0.54	7.52	0.00
131.00	7.47	0.00	0.00	0.54	7.52	0.00
132.00	7.47	0.00	0.00	0.54	7.52	0.00
133.00	7.47	0.00	0.00	0.54	7.52	0.00
134.00	7.47	0.00	0.00	0.54	7.52	0.00
135.00	7.47	0.00	0.00	0.54	7.52	0.00
136.00	7.47	0.00	0.00	0.54	7.52	0.00
137.00	7.47	0.00	0.00	0.54	7.52	0.00
138.00	7.47	0.00	0.00	0.54	7.52	0.00
139.00	7.47	0.00	0.00	0.54	7.52	0.00
140.00	7.47	0.00	0.00	0.54	7.52	0.00
141.00	7.47	0.00	0.00	0.54	7.52	0.00
142.00	7.47	0.00	0.00	0.54	7.52	0.00
143.00	7.47	0.00	0.00	0.54	7.52	0.00
144.00	7.47	0.00	0.00	0.54	7.52	0.00
145.00	7.47	0.00	0.00	0.54	7.52	0.00
146.00	7.47	0.00	0.00	0.54	7.52	0.00
147.00	7.47	0.00	0.00	0.54	7.52	0.00
148.00	7.47	0.00	0.00	0.54	7.52	0.00
149.00	7.47	0.00	0.00	0.54	7.52	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
150.00	7.47	0.00	0.00	0.54	7.52	0.00
151.00	7.47	0.00	0.00	0.54	7.52	0.00
152.00	7.47	0.00	0.00	0.54	7.52	0.00
153.00	7.47	0.00	0.00	0.54	7.52	0.00
154.00	7.47	0.00	0.00	0.54	7.52	0.00
155.00	7.47	0.00	0.00	0.54	7.52	0.00
156.00	7.47	0.00	0.00	0.54	7.52	0.00
157.00	7.47	0.00	0.00	0.54	7.52	0.00
158.00	7.47	0.00	0.00	0.54	7.52	0.00
159.00	7.47	0.00	0.00	0.54	7.52	0.00
160.00	7.47	0.00	0.00	0.54	7.52	0.00
161.00	7.47	0.00	0.00	0.54	7.52	0.00
162.00	7.47	0.00	0.00	0.54	7.52	0.00
163.00	7.47	0.00	0.00	0.54	7.52	0.00
164.00	7.47	0.00	0.00	0.54	7.52	0.00
165.00	7.47	0.00	0.00	0.54	7.52	0.00
166.00	7.47	0.00	0.00	0.54	7.52	0.00
167.00	7.47	0.00	0.00	0.54	7.52	0.00
168.00	7.47	0.00	0.00	0.54	7.52	0.00
169.00	7.47	0.00	0.00	0.54	7.52	0.00
170.00	7.47	0.00	0.00	0.54	7.52	0.00
171.00	7.47	0.00	0.00	0.54	7.52	0.00
172.00	7.47	0.00	0.00	0.54	7.52	0.00
173.00	7.47	0.00	0.00	0.54	7.52	0.00
174.00	7.47	0.00	0.00	0.54	7.52	0.00
175.00	7.47	0.00	0.00	0.54	7.52	0.00
176.00	7.47	0.00	0.00	0.54	7.52	0.00
177.00	7.47	0.00	0.00	0.54	7.52	0.00
178.00	7.47	0.00	0.00	0.54	7.52	0.00
179.00	7.47	0.00	0.00	0.54	7.52	0.00
180.00	7.47	0.00	0.00	0.54	7.52	0.00
181.00	7.47	0.00	0.00	0.54	7.52	0.00
182.00	7.47	0.00	0.00	0.54	7.52	0.00
183.00	7.47	0.00	0.00	0.54	7.52	0.00
184.00	7.47	0.00	0.00	0.54	7.52	0.00
185.00	7.47	0.00	0.00	0.54	7.52	0.00
186.00	7.47	0.00	0.00	0.54	7.52	0.00
187.00	7.47	0.00	0.00	0.54	7.52	0.00
188.00	7.47	0.00	0.00	0.54	7.52	0.00
189.00	7.47	0.00	0.00	0.54	7.52	0.00
190.00	7.47	0.00	0.00	0.54	7.52	0.00
191.00	7.47	0.00	0.00	0.54	7.52	0.00
192.00	7.47	0.00	0.00	0.54	7.52	0.00
193.00	7.47	0.00	0.00	0.54	7.52	0.00
194.00	7.47	0.00	0.00	0.54	7.52	0.00
195.00	7.47	0.00	0.00	0.54	7.52	0.00
196.00	7.47	0.00	0.00	0.54	7.52	0.00
197.00	7.47	0.00	0.00	0.54	7.52	0.00
198.00	7.47	0.00	0.00	0.54	7.52	0.00
199.00	7.47	0.00	0.00	0.54	7.52	0.00
200.00	7.47	0.00	0.00	0.54	7.52	0.00
201.00	7.47	0.00	0.00	0.54	7.52	0.00
202.00	7.47	0.00	0.00	0.54	7.52	0.00
203.00	7.47	0.00	0.00	0.54	7.52	0.00
204.00	7.47	0.00	0.00	0.54	7.52	0.00
205.00	7.47	0.00	0.00	0.54	7.52	0.00
206.00	7.47	0.00	0.00	0.54	7.52	0.00
207.00	7.47	0.00	0.00	0.54	7.52	0.00
208.00	7.47	0.00	0.00	0.54	7.52	0.00
209.00	7.47	0.00	0.00	0.54	7.52	0.00
210.00	7.47	0.00	0.00	0.54	7.52	0.00
211.00	7.47	0.00	0.00	0.54	7.52	0.00
212.00	7.47	0.00	0.00	0.54	7.52	0.00
213.00	7.47	0.00	0.00	0.54	7.52	0.00
214.00	7.47	0.00	0.00	0.54	7.52	0.00
215.00	7.47	0.00	0.00	0.54	7.52	0.00
216.00	7.47	0.00	0.00	0.54	7.52	0.00
217.00	7.47	0.00	0.00	0.54	7.52	0.00
218.00	7.47	0.00	0.00	0.54	7.52	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
219.00	7.47	0.00	0.00	0.54	7.52	0.00
220.00	7.47	0.00	0.00	0.54	7.52	0.00
221.00	7.47	0.00	0.00	0.54	7.52	0.00
222.00	7.47	0.00	0.00	0.54	7.52	0.00
223.00	7.47	0.00	0.00	0.54	7.52	0.00
224.00	7.47	0.00	0.00	0.54	7.52	0.00
225.00	7.47	0.00	0.00	0.54	7.52	0.00
226.00	7.47	0.00	0.00	0.54	7.52	0.00
227.00	7.47	0.00	0.00	0.54	7.52	0.00
228.00	7.47	0.00	0.00	0.54	7.52	0.00
229.00	7.47	0.00	0.00	0.54	7.52	0.00
230.00	7.47	0.00	0.00	0.54	7.52	0.00
231.00	7.47	0.00	0.00	0.54	7.52	0.00
232.00	7.47	0.00	0.00	0.54	7.52	0.00
233.00	7.47	0.00	0.00	0.54	7.52	0.00
234.00	7.47	0.00	0.00	0.54	7.52	0.00
235.00	7.47	0.00	0.00	0.54	7.52	0.00
236.00	7.47	0.00	0.00	0.54	7.52	0.00
237.00	7.47	0.00	0.00	0.54	7.52	0.00
238.00	7.47	0.00	0.00	0.54	7.52	0.00
239.00	7.47	0.00	0.00	0.54	7.52	0.00
240.00	7.47	0.00	0.00	0.54	7.52	0.00
241.00	7.47	0.00	0.00	0.54	7.52	0.00
242.00	7.47	0.00	0.00	0.54	7.52	0.00
243.00	7.47	0.00	0.00	0.54	7.52	0.00
244.00	7.47	0.00	0.00	0.54	7.52	0.00
245.00	7.47	0.00	0.00	0.54	7.52	0.00
246.00	7.47	0.00	0.00	0.54	7.52	0.00
247.00	7.47	0.00	0.00	0.54	7.52	0.00
248.00	7.47	0.00	0.00	0.54	7.52	0.00
249.00	7.47	0.00	0.00	0.54	7.52	0.00
250.00	7.47	0.00	0.00	0.54	7.52	0.00
251.00	7.47	0.00	0.00	0.54	7.52	0.00
252.00	7.47	0.00	0.00	0.54	7.52	0.00
253.00	7.47	0.00	0.00	0.54	7.52	0.00
254.00	7.47	0.00	0.00	0.54	7.52	0.00
255.00	7.47	0.00	0.00	0.54	7.52	0.00
256.00	7.47	0.00	0.00	0.54	7.52	0.00
257.00	7.47	0.00	0.00	0.54	7.52	0.00
258.00	7.47	0.00	0.00	0.54	7.52	0.00
259.00	7.47	0.00	0.00	0.54	7.52	0.00
260.00	7.47	0.00	0.00	0.54	7.52	0.00
261.00	7.47	0.00	0.00	0.54	7.52	0.00
262.00	7.47	0.00	0.00	0.54	7.52	0.00
263.00	7.47	0.00	0.00	0.54	7.52	0.00
264.00	7.47	0.00	0.00	0.54	7.52	0.00
265.00	7.47	0.00	0.00	0.54	7.52	0.00
266.00	7.47	0.00	0.00	0.54	7.52	0.00
267.00	7.47	0.00	0.00	0.54	7.52	0.00
268.00	7.47	0.00	0.00	0.54	7.52	0.00
269.00	7.47	0.00	0.00	0.54	7.52	0.00
270.00	7.47	0.00	0.00	0.54	7.52	0.00
271.00	7.47	0.00	0.00	0.54	7.52	0.00
272.00	7.47	0.00	0.00	0.54	7.52	0.00
273.00	7.47	0.00	0.00	0.54	7.52	0.00
274.00	7.47	0.00	0.00	0.54	7.52	0.00
275.00	7.47	0.00	0.00	0.54	7.52	0.00
276.00	7.47	0.00	0.00	0.54	7.52	0.00
277.00	7.47	0.00	0.00	0.54	7.52	0.00
278.00	7.47	0.00	0.00	0.54	7.52	0.00
279.00	7.47	0.00	0.00	0.54	7.52	0.00
280.00	7.47	0.00	0.00	0.54	7.52	0.00
281.00	7.47	0.00	0.00	0.54	7.52	0.00
282.00	7.47	0.00	0.00	0.54	7.52	0.00
283.00	7.47	0.00	0.00	0.54	7.52	0.00
284.00	7.47	0.00	0.00	0.54	7.52	0.00
285.00	7.47	0.00	0.00	0.54	7.52	0.00
286.00	7.47	0.00	0.00	0.54	7.52	0.00
287.00	7.47	0.00	0.00	0.54	7.52	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
288.00	7.47	0.00	0.00	0.54	7.52	0.00
289.00	7.47	0.00	0.00	0.54	7.52	0.00
290.00	7.47	0.00	0.00	0.54	7.52	0.00
291.00	7.47	0.00	0.00	0.54	7.52	0.00
292.00	7.47	0.00	0.00	0.54	7.52	0.00
293.00	7.47	0.00	0.00	0.54	7.52	0.00
294.00	7.47	0.00	0.00	0.54	7.52	0.00
295.00	7.47	0.00	0.00	0.54	7.52	0.00
296.00	7.47	0.00	0.00	0.54	7.52	0.00
297.00	7.47	0.00	0.00	0.54	7.52	0.00
298.00	7.47	0.00	0.00	0.54	7.52	0.00
299.00	7.47	0.00	0.00	0.54	7.52	0.00
300.00	7.47	0.00	0.00	0.54	7.52	0.00
301.00	7.47	0.00	0.00	0.54	7.52	0.00
302.00	7.47	0.00	0.00	0.54	7.52	0.00
303.00	7.47	0.00	0.00	0.54	7.52	0.00
304.00	7.47	0.00	0.00	0.54	7.52	0.00
305.00	7.47	0.00	0.00	0.54	7.52	0.00
306.00	7.47	0.00	0.00	0.54	7.52	0.00
307.00	7.47	0.00	0.00	0.54	7.52	0.00
308.00	7.47	0.00	0.00	0.54	7.52	0.00
309.00	7.47	0.00	0.00	0.54	7.52	0.00
310.00	7.47	0.00	0.00	0.54	7.52	0.00
311.00	7.47	0.00	0.00	0.54	7.52	0.00
312.00	7.47	0.00	0.00	0.54	7.52	0.00
313.00	7.47	0.00	0.00	0.54	7.52	0.00
314.00	7.47	0.00	0.00	0.54	7.52	0.00
315.00	7.47	0.00	0.00	0.54	7.52	0.00
316.00	7.47	0.00	0.00	0.54	7.52	0.00
317.00	7.47	0.00	0.00	0.54	7.52	0.00
318.00	7.47	0.00	0.00	0.54	7.52	0.00
319.00	7.47	0.00	0.00	0.54	7.52	0.00
320.00	7.47	0.00	0.00	0.54	7.52	0.00
321.00	7.47	0.00	0.00	0.54	7.52	0.00
322.00	7.47	0.00	0.00	0.54	7.52	0.00
323.00	7.47	0.00	0.00	0.54	7.52	0.00
324.00	7.47	0.00	0.00	0.54	7.52	0.00
325.00	7.47	0.00	0.00	0.54	7.52	0.00
326.00	7.47	0.00	0.00	0.54	7.52	0.00
327.00	7.47	0.00	0.00	0.54	7.52	0.00
328.00	7.47	0.00	0.00	0.54	7.52	0.00
329.00	7.47	0.00	0.00	0.54	7.52	0.00
330.00	7.47	0.00	0.00	0.54	7.52	0.00
331.00	7.47	0.00	0.00	0.54	7.52	0.00
332.00	7.47	0.00	0.00	0.54	7.52	0.00
333.00	7.47	0.00	0.00	0.54	7.52	0.00
334.00	7.47	0.00	0.00	0.54	7.52	0.00
335.00	7.47	0.00	0.00	0.54	7.52	0.00
336.00	7.47	0.00	0.00	0.54	7.52	0.00
337.00	7.47	0.00	0.00	0.54	7.52	0.00
338.00	7.47	0.00	0.00	0.54	7.52	0.00
339.00	7.47	0.00	0.00	0.54	7.52	0.00
340.00	7.47	0.00	0.00	0.54	7.52	0.00
341.00	7.47	0.00	0.00	0.54	7.52	0.00
342.00	7.47	0.00	0.00	0.54	7.52	0.00
343.00	7.47	0.00	0.00	0.54	7.52	0.00
344.00	7.47	0.00	0.00	0.54	7.52	0.00
345.00	7.47	0.00	0.00	0.54	7.52	0.00
346.00	7.47	0.00	0.00	0.54	7.52	0.00
347.00	7.47	0.00	0.00	0.54	7.52	0.00
348.00	7.47	0.00	0.00	0.54	7.52	0.00
349.00	7.47	0.00	0.00	0.54	7.52	0.00
350.00	7.47	0.00	0.00	0.54	7.52	0.00
351.00	7.47	0.00	0.00	0.54	7.52	0.00
352.00	7.47	0.00	0.00	0.54	7.52	0.00
353.00	7.47	0.00	0.00	0.54	7.52	0.00
354.00	7.47	0.00	0.00	0.54	7.52	0.00
355.00	7.47	0.00	0.00	0.54	7.52	0.00
356.00	7.47	0.00	0.00	0.54	7.52	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
357.00	7.47	0.00	0.00	0.54	7.52	0.00
358.00	7.47	0.00	0.00	0.54	7.52	0.00
359.00	7.47	0.00	0.00	0.54	7.52	0.00
360.00	7.47	0.00	0.00	0.54	7.52	0.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.37	62.20	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
on-site	9.01	62.20	6.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
on-site	0.55	0.00	0.54	0.00	0.00	0.00

25 YEAR, 72 HOUR EVENT
MINIMUM PERIMETER GRADE
9.50 INCHES OF RAINFALL

Project Name: The Manor Adult Living Facility

Reviewer: R. Ladyko

Project Number: 18-065

Period Begin: Jan 01, 2000;0000 hr End: Jan 16, 2000;0000 hr Duration: 360 hr

Time Step: 0.2 hr, Iterations: 10

Basin 1: on-site

Method: Santa Barbara Unit Hydrograph

Rainfall Distribution: SFWMD - 3day

Design Frequency: 25 year

3 Day Rainfall: 9.5 inches

Area: 1.36 acres

Ground Storage: 2.95 inches

Time of Concentration: 0.5 hours

Initial Stage: 6.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
6.50	0.00
7.00	0.00
7.50	0.00
8.00	0.04
8.50	0.11
9.00	0.20
9.50	0.37
10.00	0.64
10.50	0.98
11.00	1.34
11.50	1.70
12.00	2.06
12.50	2.42
13.00	2.88

Offsite Receiving Body: Offsite

Time (hr)	Stage (ft NGVD)
0.00	0.00
1000.00	0.00

Structure: 1

From Basin: on-site

To Basin: Offsite

Structure Type: Gravity

Weir: Sharp Crested, Crest Elev = 9.8 ft NGVD, Length = 3 ft

Bleeder: Circular, Invert Elev = 6.5 ft NGVD, Diameter = 0.25 ft

Default Coefs: Weir Coef = 0.6, Orifice Coef = 0.6

Pipe: Diameter = 1.5 ft, Manning's n = 0.024, Length = 35 ft

US Invert Elev = 6 ft NGVD, DS Invert Elev = 5.8 ft NGVD, no flap gate

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	6.50	0.00
1.00	0.04	0.00	0.00	0.00	6.50	0.00
2.00	0.09	0.00	0.00	0.00	6.50	0.00
3.00	0.13	0.00	0.00	0.00	6.50	0.00
4.00	0.17	0.00	0.00	0.00	6.50	0.00
5.00	0.21	0.00	0.00	0.00	6.50	0.00
6.00	0.26	0.00	0.00	0.00	6.50	0.00
7.00	0.30	0.00	0.00	0.00	6.50	0.00
8.00	0.34	0.00	0.00	0.00	6.50	0.00
9.00	0.38	0.00	0.00	0.00	6.50	0.00
10.00	0.43	0.00	0.00	0.00	6.50	0.00
11.00	0.47	0.00	0.00	0.00	6.50	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
12.00	0.51	0.00	0.00	0.00	6.50	0.00
13.00	0.55	0.00	0.00	0.00	6.50	0.00
14.00	0.60	0.00	0.00	0.00	7.50	0.00
15.00	0.64	0.00	0.00	0.00	7.50	0.00
16.00	0.68	0.00	0.00	0.00	7.50	0.00
17.00	0.72	0.00	0.00	0.00	7.51	0.00
18.00	0.77	0.01	0.00	0.00	7.51	0.00
19.00	0.81	0.01	0.00	0.00	7.52	0.00
20.00	0.85	0.01	0.00	0.00	6.50	0.00
21.00	0.89	0.01	0.00	0.00	6.50	0.00
22.00	0.94	0.01	0.00	0.00	6.50	0.00
23.00	0.98	0.01	0.00	0.00	7.51	0.00
24.00	1.02	0.01	0.22	0.01	7.50	0.00
25.00	1.08	0.02	0.00	0.01	6.50	0.00
26.00	1.14	0.02	0.00	0.01	7.52	0.00
27.00	1.21	0.03	0.00	0.01	7.50	0.00
28.00	1.27	0.03	0.22	0.01	7.51	0.00
29.00	1.33	0.03	0.00	0.01	7.51	0.00
30.00	1.39	0.03	0.00	0.02	6.50	0.00
31.00	1.45	0.03	0.00	0.02	6.50	0.00
32.00	1.52	0.03	0.00	0.02	7.52	0.00
33.00	1.58	0.04	0.00	0.03	7.51	0.00
34.00	1.64	0.04	0.00	0.03	7.51	0.00
35.00	1.70	0.04	0.00	0.03	6.50	0.00
36.00	1.77	0.04	0.00	0.04	6.50	0.00
37.00	1.83	0.04	0.00	0.04	6.50	0.00
38.00	1.89	0.04	0.00	0.04	6.50	0.00
39.00	1.95	0.04	0.00	0.05	6.50	0.00
40.00	2.01	0.05	0.00	0.05	6.50	0.00
41.00	2.08	0.05	0.00	0.05	6.50	0.00
42.00	2.14	0.05	0.00	0.06	6.50	0.00
43.00	2.20	0.05	0.00	0.06	7.50	0.00
44.00	2.26	0.05	0.00	0.07	7.51	0.00
45.00	2.32	0.05	0.00	0.07	7.51	0.00
46.00	2.39	0.05	0.00	0.07	7.52	0.00
47.00	2.45	0.05	0.22	0.08	7.50	0.00
48.00	2.51	0.05	0.00	0.08	6.50	0.00
49.00	2.58	0.06	0.00	0.09	7.50	0.00
50.00	2.65	0.06	0.00	0.09	7.52	0.00
51.00	2.73	0.07	0.00	0.10	7.50	0.00
52.00	2.82	0.08	0.22	0.11	7.51	0.00
53.00	2.94	0.11	0.00	0.11	7.50	0.00
54.00	3.09	0.14	0.22	0.12	7.52	0.00
55.00	3.26	0.17	0.00	0.14	7.52	0.00
56.00	3.47	0.20	0.22	0.15	7.50	0.00
57.00	3.70	0.25	0.23	0.17	7.55	0.00
58.00	4.00	0.31	0.23	0.19	7.60	0.00
59.00	4.39	0.44	0.25	0.21	7.73	0.00
60.00	7.10	3.78	0.33	0.23	8.57	0.00
61.00	7.87	1.23	0.38	0.26	9.23	0.00
62.00	8.23	0.54	0.39	0.29	9.33	0.00
63.00	8.45	0.31	0.39	0.33	9.33	0.00
64.00	8.66	0.27	0.39	0.36	9.31	0.00
65.00	8.79	0.18	0.38	0.39	9.26	0.00
66.00	8.91	0.16	0.38	0.42	9.21	0.00
67.00	9.04	0.16	0.38	0.45	9.15	0.00
68.00	9.16	0.16	0.37	0.48	9.10	0.00
69.00	9.25	0.11	0.37	0.51	9.04	0.00
70.00	9.33	0.11	0.36	0.54	8.96	0.00
71.00	9.42	0.11	0.35	0.57	8.85	0.00
72.00	9.50	0.11	0.34	0.60	8.75	0.00
73.00	9.50	0.01	0.33	0.63	8.62	0.00
74.00	9.50	0.00	0.32	0.66	8.47	0.00
75.00	9.50	0.00	0.30	0.68	8.28	0.00
76.00	9.50	0.00	0.29	0.71	8.11	0.00
77.00	9.50	0.00	0.27	0.73	7.89	0.00
78.00	9.50	0.00	0.24	0.75	7.62	0.00
79.00	9.50	0.00	0.00	0.76	7.50	0.00
80.00	9.50	0.00	0.00	0.76	7.50	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
81.00	9.50	0.00	0.00	0.76	7.50	0.00
82.00	9.50	0.00	0.00	0.76	7.50	0.00
83.00	9.50	0.00	0.00	0.76	7.50	0.00
84.00	9.50	0.00	0.00	0.76	7.50	0.00
85.00	9.50	0.00	0.00	0.76	7.50	0.00
86.00	9.50	0.00	0.00	0.76	7.50	0.00
87.00	9.50	0.00	0.00	0.76	7.50	0.00
88.00	9.50	0.00	0.00	0.76	7.50	0.00
89.00	9.50	0.00	0.00	0.76	7.50	0.00
90.00	9.50	0.00	0.00	0.76	7.50	0.00
91.00	9.50	0.00	0.00	0.76	7.50	0.00
92.00	9.50	0.00	0.00	0.76	7.50	0.00
93.00	9.50	0.00	0.00	0.76	7.50	0.00
94.00	9.50	0.00	0.00	0.76	7.50	0.00
95.00	9.50	0.00	0.00	0.76	7.50	0.00
96.00	9.50	0.00	0.00	0.76	7.50	0.00
97.00	9.50	0.00	0.00	0.76	7.50	0.00
98.00	9.50	0.00	0.00	0.76	7.50	0.00
99.00	9.50	0.00	0.00	0.76	7.50	0.00
100.00	9.50	0.00	0.00	0.76	7.50	0.00
101.00	9.50	0.00	0.00	0.76	7.50	0.00
102.00	9.50	0.00	0.00	0.76	7.50	0.00
103.00	9.50	0.00	0.00	0.76	7.50	0.00
104.00	9.50	0.00	0.00	0.76	7.50	0.00
105.00	9.50	0.00	0.00	0.76	7.50	0.00
106.00	9.50	0.00	0.00	0.76	7.50	0.00
107.00	9.50	0.00	0.00	0.76	7.50	0.00
108.00	9.50	0.00	0.00	0.76	7.50	0.00
109.00	9.50	0.00	0.00	0.76	7.50	0.00
110.00	9.50	0.00	0.00	0.76	7.50	0.00
111.00	9.50	0.00	0.00	0.76	7.50	0.00
112.00	9.50	0.00	0.00	0.76	7.50	0.00
113.00	9.50	0.00	0.00	0.76	7.50	0.00
114.00	9.50	0.00	0.00	0.76	7.50	0.00
115.00	9.50	0.00	0.00	0.76	7.50	0.00
116.00	9.50	0.00	0.00	0.76	7.50	0.00
117.00	9.50	0.00	0.00	0.76	7.50	0.00
118.00	9.50	0.00	0.00	0.76	7.50	0.00
119.00	9.50	0.00	0.00	0.76	7.50	0.00
120.00	9.50	0.00	0.00	0.76	7.50	0.00
121.00	9.50	0.00	0.00	0.76	7.50	0.00
122.00	9.50	0.00	0.00	0.76	7.50	0.00
123.00	9.50	0.00	0.00	0.76	7.50	0.00
124.00	9.50	0.00	0.00	0.76	7.50	0.00
125.00	9.50	0.00	0.00	0.76	7.50	0.00
126.00	9.50	0.00	0.00	0.76	7.50	0.00
127.00	9.50	0.00	0.00	0.76	7.50	0.00
128.00	9.50	0.00	0.00	0.76	7.50	0.00
129.00	9.50	0.00	0.00	0.76	7.50	0.00
130.00	9.50	0.00	0.00	0.76	7.50	0.00
131.00	9.50	0.00	0.00	0.76	7.50	0.00
132.00	9.50	0.00	0.00	0.76	7.50	0.00
133.00	9.50	0.00	0.00	0.76	7.50	0.00
134.00	9.50	0.00	0.00	0.76	7.50	0.00
135.00	9.50	0.00	0.00	0.76	7.50	0.00
136.00	9.50	0.00	0.00	0.76	7.50	0.00
137.00	9.50	0.00	0.00	0.76	7.50	0.00
138.00	9.50	0.00	0.00	0.76	7.50	0.00
139.00	9.50	0.00	0.00	0.76	7.50	0.00
140.00	9.50	0.00	0.00	0.76	7.50	0.00
141.00	9.50	0.00	0.00	0.76	7.50	0.00
142.00	9.50	0.00	0.00	0.76	7.50	0.00
143.00	9.50	0.00	0.00	0.76	7.50	0.00
144.00	9.50	0.00	0.00	0.76	7.50	0.00
145.00	9.50	0.00	0.00	0.76	7.50	0.00
146.00	9.50	0.00	0.00	0.76	7.50	0.00
147.00	9.50	0.00	0.00	0.76	7.50	0.00
148.00	9.50	0.00	0.00	0.76	7.50	0.00
149.00	9.50	0.00	0.00	0.76	7.50	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
150.00	9.50	0.00	0.00	0.76	7.50	0.00
151.00	9.50	0.00	0.00	0.76	7.50	0.00
152.00	9.50	0.00	0.00	0.76	7.50	0.00
153.00	9.50	0.00	0.00	0.76	7.50	0.00
154.00	9.50	0.00	0.00	0.76	7.50	0.00
155.00	9.50	0.00	0.00	0.76	7.50	0.00
156.00	9.50	0.00	0.00	0.76	7.50	0.00
157.00	9.50	0.00	0.00	0.76	7.50	0.00
158.00	9.50	0.00	0.00	0.76	7.50	0.00
159.00	9.50	0.00	0.00	0.76	7.50	0.00
160.00	9.50	0.00	0.00	0.76	7.50	0.00
161.00	9.50	0.00	0.00	0.76	7.50	0.00
162.00	9.50	0.00	0.00	0.76	7.50	0.00
163.00	9.50	0.00	0.00	0.76	7.50	0.00
164.00	9.50	0.00	0.00	0.76	7.50	0.00
165.00	9.50	0.00	0.00	0.76	7.50	0.00
166.00	9.50	0.00	0.00	0.76	7.50	0.00
167.00	9.50	0.00	0.00	0.76	7.50	0.00
168.00	9.50	0.00	0.00	0.76	7.50	0.00
169.00	9.50	0.00	0.00	0.76	7.50	0.00
170.00	9.50	0.00	0.00	0.76	7.50	0.00
171.00	9.50	0.00	0.00	0.76	7.50	0.00
172.00	9.50	0.00	0.00	0.76	7.50	0.00
173.00	9.50	0.00	0.00	0.76	7.50	0.00
174.00	9.50	0.00	0.00	0.76	7.50	0.00
175.00	9.50	0.00	0.00	0.76	7.50	0.00
176.00	9.50	0.00	0.00	0.76	7.50	0.00
177.00	9.50	0.00	0.00	0.76	7.50	0.00
178.00	9.50	0.00	0.00	0.76	7.50	0.00
179.00	9.50	0.00	0.00	0.76	7.50	0.00
180.00	9.50	0.00	0.00	0.76	7.50	0.00
181.00	9.50	0.00	0.00	0.76	7.50	0.00
182.00	9.50	0.00	0.00	0.76	7.50	0.00
183.00	9.50	0.00	0.00	0.76	7.50	0.00
184.00	9.50	0.00	0.00	0.76	7.50	0.00
185.00	9.50	0.00	0.00	0.76	7.50	0.00
186.00	9.50	0.00	0.00	0.76	7.50	0.00
187.00	9.50	0.00	0.00	0.76	7.50	0.00
188.00	9.50	0.00	0.00	0.76	7.50	0.00
189.00	9.50	0.00	0.00	0.76	7.50	0.00
190.00	9.50	0.00	0.00	0.76	7.50	0.00
191.00	9.50	0.00	0.00	0.76	7.50	0.00
192.00	9.50	0.00	0.00	0.76	7.50	0.00
193.00	9.50	0.00	0.00	0.76	7.50	0.00
194.00	9.50	0.00	0.00	0.76	7.50	0.00
195.00	9.50	0.00	0.00	0.76	7.50	0.00
196.00	9.50	0.00	0.00	0.76	7.50	0.00
197.00	9.50	0.00	0.00	0.76	7.50	0.00
198.00	9.50	0.00	0.00	0.76	7.50	0.00
199.00	9.50	0.00	0.00	0.76	7.50	0.00
200.00	9.50	0.00	0.00	0.76	7.50	0.00
201.00	9.50	0.00	0.00	0.76	7.50	0.00
202.00	9.50	0.00	0.00	0.76	7.50	0.00
203.00	9.50	0.00	0.00	0.76	7.50	0.00
204.00	9.50	0.00	0.00	0.76	7.50	0.00
205.00	9.50	0.00	0.00	0.76	7.50	0.00
206.00	9.50	0.00	0.00	0.76	7.50	0.00
207.00	9.50	0.00	0.00	0.76	7.50	0.00
208.00	9.50	0.00	0.00	0.76	7.50	0.00
209.00	9.50	0.00	0.00	0.76	7.50	0.00
210.00	9.50	0.00	0.00	0.76	7.50	0.00
211.00	9.50	0.00	0.00	0.76	7.50	0.00
212.00	9.50	0.00	0.00	0.76	7.50	0.00
213.00	9.50	0.00	0.00	0.76	7.50	0.00
214.00	9.50	0.00	0.00	0.76	7.50	0.00
215.00	9.50	0.00	0.00	0.76	7.50	0.00
216.00	9.50	0.00	0.00	0.76	7.50	0.00
217.00	9.50	0.00	0.00	0.76	7.50	0.00
218.00	9.50	0.00	0.00	0.76	7.50	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
219.00	9.50	0.00	0.00	0.76	7.50	0.00
220.00	9.50	0.00	0.00	0.76	7.50	0.00
221.00	9.50	0.00	0.00	0.76	7.50	0.00
222.00	9.50	0.00	0.00	0.76	7.50	0.00
223.00	9.50	0.00	0.00	0.76	7.50	0.00
224.00	9.50	0.00	0.00	0.76	7.50	0.00
225.00	9.50	0.00	0.00	0.76	7.50	0.00
226.00	9.50	0.00	0.00	0.76	7.50	0.00
227.00	9.50	0.00	0.00	0.76	7.50	0.00
228.00	9.50	0.00	0.00	0.76	7.50	0.00
229.00	9.50	0.00	0.00	0.76	7.50	0.00
230.00	9.50	0.00	0.00	0.76	7.50	0.00
231.00	9.50	0.00	0.00	0.76	7.50	0.00
232.00	9.50	0.00	0.00	0.76	7.50	0.00
233.00	9.50	0.00	0.00	0.76	7.50	0.00
234.00	9.50	0.00	0.00	0.76	7.50	0.00
235.00	9.50	0.00	0.00	0.76	7.50	0.00
236.00	9.50	0.00	0.00	0.76	7.50	0.00
237.00	9.50	0.00	0.00	0.76	7.50	0.00
238.00	9.50	0.00	0.00	0.76	7.50	0.00
239.00	9.50	0.00	0.00	0.76	7.50	0.00
240.00	9.50	0.00	0.00	0.76	7.50	0.00
241.00	9.50	0.00	0.00	0.76	7.50	0.00
242.00	9.50	0.00	0.00	0.76	7.50	0.00
243.00	9.50	0.00	0.00	0.76	7.50	0.00
244.00	9.50	0.00	0.00	0.76	7.50	0.00
245.00	9.50	0.00	0.00	0.76	7.50	0.00
246.00	9.50	0.00	0.00	0.76	7.50	0.00
247.00	9.50	0.00	0.00	0.76	7.50	0.00
248.00	9.50	0.00	0.00	0.76	7.50	0.00
249.00	9.50	0.00	0.00	0.76	7.50	0.00
250.00	9.50	0.00	0.00	0.76	7.50	0.00
251.00	9.50	0.00	0.00	0.76	7.50	0.00
252.00	9.50	0.00	0.00	0.76	7.50	0.00
253.00	9.50	0.00	0.00	0.76	7.50	0.00
254.00	9.50	0.00	0.00	0.76	7.50	0.00
255.00	9.50	0.00	0.00	0.76	7.50	0.00
256.00	9.50	0.00	0.00	0.76	7.50	0.00
257.00	9.50	0.00	0.00	0.76	7.50	0.00
258.00	9.50	0.00	0.00	0.76	7.50	0.00
259.00	9.50	0.00	0.00	0.76	7.50	0.00
260.00	9.50	0.00	0.00	0.76	7.50	0.00
261.00	9.50	0.00	0.00	0.76	7.50	0.00
262.00	9.50	0.00	0.00	0.76	7.50	0.00
263.00	9.50	0.00	0.00	0.76	7.50	0.00
264.00	9.50	0.00	0.00	0.76	7.50	0.00
265.00	9.50	0.00	0.00	0.76	7.50	0.00
266.00	9.50	0.00	0.00	0.76	7.50	0.00
267.00	9.50	0.00	0.00	0.76	7.50	0.00
268.00	9.50	0.00	0.00	0.76	7.50	0.00
269.00	9.50	0.00	0.00	0.76	7.50	0.00
270.00	9.50	0.00	0.00	0.76	7.50	0.00
271.00	9.50	0.00	0.00	0.76	7.50	0.00
272.00	9.50	0.00	0.00	0.76	7.50	0.00
273.00	9.50	0.00	0.00	0.76	7.50	0.00
274.00	9.50	0.00	0.00	0.76	7.50	0.00
275.00	9.50	0.00	0.00	0.76	7.50	0.00
276.00	9.50	0.00	0.00	0.76	7.50	0.00
277.00	9.50	0.00	0.00	0.76	7.50	0.00
278.00	9.50	0.00	0.00	0.76	7.50	0.00
279.00	9.50	0.00	0.00	0.76	7.50	0.00
280.00	9.50	0.00	0.00	0.76	7.50	0.00
281.00	9.50	0.00	0.00	0.76	7.50	0.00
282.00	9.50	0.00	0.00	0.76	7.50	0.00
283.00	9.50	0.00	0.00	0.76	7.50	0.00
284.00	9.50	0.00	0.00	0.76	7.50	0.00
285.00	9.50	0.00	0.00	0.76	7.50	0.00
286.00	9.50	0.00	0.00	0.76	7.50	0.00
287.00	9.50	0.00	0.00	0.76	7.50	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
288.00	9.50	0.00	0.00	0.76	7.50	0.00
289.00	9.50	0.00	0.00	0.76	7.50	0.00
290.00	9.50	0.00	0.00	0.76	7.50	0.00
291.00	9.50	0.00	0.00	0.76	7.50	0.00
292.00	9.50	0.00	0.00	0.76	7.50	0.00
293.00	9.50	0.00	0.00	0.76	7.50	0.00
294.00	9.50	0.00	0.00	0.76	7.50	0.00
295.00	9.50	0.00	0.00	0.76	7.50	0.00
296.00	9.50	0.00	0.00	0.76	7.50	0.00
297.00	9.50	0.00	0.00	0.76	7.50	0.00
298.00	9.50	0.00	0.00	0.76	7.50	0.00
299.00	9.50	0.00	0.00	0.76	7.50	0.00
300.00	9.50	0.00	0.00	0.76	7.50	0.00
301.00	9.50	0.00	0.00	0.76	7.50	0.00
302.00	9.50	0.00	0.00	0.76	7.50	0.00
303.00	9.50	0.00	0.00	0.76	7.50	0.00
304.00	9.50	0.00	0.00	0.76	7.50	0.00
305.00	9.50	0.00	0.00	0.76	7.50	0.00
306.00	9.50	0.00	0.00	0.76	7.50	0.00
307.00	9.50	0.00	0.00	0.76	7.50	0.00
308.00	9.50	0.00	0.00	0.76	7.50	0.00
309.00	9.50	0.00	0.00	0.76	7.50	0.00
310.00	9.50	0.00	0.00	0.76	7.50	0.00
311.00	9.50	0.00	0.00	0.76	7.50	0.00
312.00	9.50	0.00	0.00	0.76	7.50	0.00
313.00	9.50	0.00	0.00	0.76	7.50	0.00
314.00	9.50	0.00	0.00	0.76	7.50	0.00
315.00	9.50	0.00	0.00	0.76	7.50	0.00
316.00	9.50	0.00	0.00	0.76	7.50	0.00
317.00	9.50	0.00	0.00	0.76	7.50	0.00
318.00	9.50	0.00	0.00	0.76	7.50	0.00
319.00	9.50	0.00	0.00	0.76	7.50	0.00
320.00	9.50	0.00	0.00	0.76	7.50	0.00
321.00	9.50	0.00	0.00	0.76	7.50	0.00
322.00	9.50	0.00	0.00	0.76	7.50	0.00
323.00	9.50	0.00	0.00	0.76	7.50	0.00
324.00	9.50	0.00	0.00	0.76	7.50	0.00
325.00	9.50	0.00	0.00	0.76	7.50	0.00
326.00	9.50	0.00	0.00	0.76	7.50	0.00
327.00	9.50	0.00	0.00	0.76	7.50	0.00
328.00	9.50	0.00	0.00	0.76	7.50	0.00
329.00	9.50	0.00	0.00	0.76	7.50	0.00
330.00	9.50	0.00	0.00	0.76	7.50	0.00
331.00	9.50	0.00	0.00	0.76	7.50	0.00
332.00	9.50	0.00	0.00	0.76	7.50	0.00
333.00	9.50	0.00	0.00	0.76	7.50	0.00
334.00	9.50	0.00	0.00	0.76	7.50	0.00
335.00	9.50	0.00	0.00	0.76	7.50	0.00
336.00	9.50	0.00	0.00	0.76	7.50	0.00
337.00	9.50	0.00	0.00	0.76	7.50	0.00
338.00	9.50	0.00	0.00	0.76	7.50	0.00
339.00	9.50	0.00	0.00	0.76	7.50	0.00
340.00	9.50	0.00	0.00	0.76	7.50	0.00
341.00	9.50	0.00	0.00	0.76	7.50	0.00
342.00	9.50	0.00	0.00	0.76	7.50	0.00
343.00	9.50	0.00	0.00	0.76	7.50	0.00
344.00	9.50	0.00	0.00	0.76	7.50	0.00
345.00	9.50	0.00	0.00	0.76	7.50	0.00
346.00	9.50	0.00	0.00	0.76	7.50	0.00
347.00	9.50	0.00	0.00	0.76	7.50	0.00
348.00	9.50	0.00	0.00	0.76	7.50	0.00
349.00	9.50	0.00	0.00	0.76	7.50	0.00
350.00	9.50	0.00	0.00	0.76	7.50	0.00
351.00	9.50	0.00	0.00	0.76	7.50	0.00
352.00	9.50	0.00	0.00	0.76	7.50	0.00
353.00	9.50	0.00	0.00	0.76	7.50	0.00
354.00	9.50	0.00	0.00	0.76	7.50	0.00
355.00	9.50	0.00	0.00	0.76	7.50	0.00
356.00	9.50	0.00	0.00	0.76	7.50	0.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
357.00	9.50	0.00	0.00	0.76	7.50	0.00
358.00	9.50	0.00	0.00	0.76	7.50	0.00
359.00	9.50	0.00	0.00	0.76	7.50	0.00
360.00	9.50	0.00	0.00	0.76	7.50	0.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.39	62.40	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
on-site	9.34	62.40	6.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
on-site	0.76	0.00	0.76	0.00	0.00	0.00

SECTION "IV"

DRAINAGE SUMMARY

The following is a summary of the design storms analyzed and the corresponding stage and discharge results;

	<u>Stage</u>	<u>Rate</u>
1. Minimum Finished Floor Elevation. 100 Year, 3 Day 0 Discharge event	10.61 (11.00)	0.0
2. Minimum Perimeter Grade Elevation. 25 Year, 3 Day Event	9.34'	0.39 c.f.s.
3. Design Discharge Event 10 Year, 3 Day N.S.L.R.W.C.D	9.01'	0.37 c.f.s.
4. Minimum Road Crown Elevation. Year, 1 Day Event	8.73'	0.34 c.f.s.