MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT
SAINT LUCIE COUNTY
FILE # 5331252 04/29/2024 03:32:05 PM
OR BOOK 5142 PAGE 58 - 109 Doc Type: RESO
RECORDING: $443.50

RESOLUTION 2024-3

A RESOLUTION APPROVING SITE PLAN FOR STOW & GO STORAGE, LLC, AND PROVIDING TERMS AND CONDITIONS OF APPROVAL

WHEREAS, Stow & Go Storage, LLC ("Applicant"),has applied for site plan approval for a site plan on the following described properties:

a. Parcel ID (Parcel 1): 1433-123-0006-000-3;
Legal Description of Property: 33 34 40 BEG AT PT WHERE S BDRY OLSONS S/D INT E RD R/W LI OF HWY US 1, TH N 89 25 19 E 400.80 FT, TH S 01 23 41 E 245.29 FT, TH S 89 29 08 W 320.61 FT TO E RD R/W LI OF HWY US 1, TH NWLY ON CURVE CONC NE, R OF 11, 359.2 TH NWLY ALG ARC 258.82 FT TO POB (2.04 AC)

b. Parcel ID (Parcel 2): 1433-124-0005-010-2;
Legal Description of Property: 33 34 40 FROM INT OF S BDRY OLSONS S/D AND E RD R/W LI OF HWY US 1 AND CURVE CONC NE, R OF 11,359.2 FT, TH SELY ALG ARC 258.82 FT TO POB; TH CONT ALG ARC 110.64 FT, TH N 89 29 08 E 268.08 FT, TH S 21 31 34 E 228.78 FT, TH N 68 28 26 E 125 FT, TH N 21 31 34 W 407.92 FT, TH S 89 25 19 W 39.78 FT, TH S 01 23 41 E 108.33 FT, TH S 89 29 08 W 320.61 FT TO POB (1.69 AC)

c. Parcel ID (Parcel 3): 1433-124-0005-020-5;
Legal Description of Property: 33 34 40 FROM INT OF S BDRY LI OLSON`S S/D WITH ELY R/W LI US #1 RUN SELY ALG ELY R/W 369.46 FT TO POB, TH CONT SELY ALG SD ELY R/W 240 FT, TH N 87 DEG 09 MIN 04 SEC E 265.12 FT, TH N 21 DEG 31 MIN 34 SEC W 228.78 FT, THS 89 DEG 29 MIN 08 SEC W 268.08 FT TO POB (1.35 AC)

Total Size of Property (Parcel 1, 2, 3): 5.08 Acres

WHEREAS, the site plan is submitted for the permitted use, Outdoor Storage Facilities for Families and Businesses, which is permitted subject to site plan approval in the commercial zoning district, in which the properties are located.

WHEREAS, the Applicant, in its submittal, has described the types of vehicles to be stored at the subject facility as:

> The site is considered an Outdoor Open–Air Storage business. The items being proposed for storage vary ranging from boats on trailers, recreational vehicles including travel trailers, motorhomes, and accessory trailers. All units stored, will be required to be portable.

WHEREAS, Applicants submittal also provided that, "no semi-trucks or trailers will be stored on this property" and the Applicant had previously described the desired storage to be boat and RV storage.

WHEREAS, the entrance/exit gate at the north end of the property cannot be used in accordance with FDOT regulations without reconfiguration but Applicant desires to maintain the entrance for emergency use.

WHEREAS, the Applicant's plan is based on access through the south gate which will be a manned gate that will be opened and closed each day and,

WHEREAS, Applicant has submitted, and the Village engineer has reviewed and approved as in compliance, the site plan submitted as attached Exhibit A.

WHEREAS, the Applicant has submitted the landscape plan attached as Exhibit B which was deemed in compliance by the Village landscape architect.

WHEREAS, the Applicant has secured a variance, a copy of which is attached as Exhibit C, and submitted the revised landscape plan attached as Exhibit D which meets the requirements of the code after the variance relief.

WHEREAS, the Applicant has submitted construction plans copies attached as Exhibit E.

WHEREAS, the Applicant has submitted irrigation plans copies attached as Exhibit F.

WHEREAS, the Applicant has submitted drainage calculations copy attached as Exhibit G.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE TOWN OF ST. LUCIE VILLAGE, FLORIDA, that:

1. The plans and submittals attached as Exhibits A and D – G are approved, subject to the terms and conditions herein.
2. No changes to the approved plans or calculations shall be made without submittal to the Board of Aldermen of the Town of St. Lucie Village for review and approval.
3. This site plan approval is for the entire site, that is for the three parcels which make up the site, together, and not separately.
4. Applicant, having commenced work adjacent to the St. Lucie School property and having encroached onto the St. Lucie School property, shall sod and irrigate and maintain the property until ground cover is securely established.
5. In addition, any work, including sloping shall be removed from the St. Lucie School property so that the entirety of Applicant's and improvements are located solely on Applicants property and not the Village's property. In that regard, Applicant's contractor shall coordinate with the Village's surveyor to confirm the boundary line around the St. Lucie School and shall construct the project accordingly.

6. Upon completion of the proposed paving, grading and drainage improvements, the engineer of record shall provide final certification to the Town of St. Lucie Village , upon completion of the project that the project or system and its components, as approved hereby, have been constructed in substantial conformance with the approved plans, including certified "as-builts" completed by a Florida registered land surveyor.
7. Applicant and any successors in interest shall be responsible for maintaining in good order and repair the improvements, including the swales and retention areas, trees and shrubberies, the opaque green screen fence, and the like, which responsibility shall include repair and replacement of the same, if necessary; and, in particular, dead trees, shrubs, and sod shall be replaced within 90 days with plants conforming to the approved plan.
8. Applicant shall reimburse the Village's engineer and landscape architect expenses before commencing work.
9. The items stored on the subject property shall be limited to boats on trailers, recreational vehicles including travel trailers, motorhomes, accessory trailers and campers, as well as boat trailers, cars and pick-up trucks, and storage pods.
10. Semi-tractors and trailers, commercial vehicles with more than two axles, and heavy machinery and heavy equipment (except in conjunction with licensed businesses on the Parcel 3 (the parcel at 2450 N. US 1) and stored on that property only) are not permitted. Also prohibited are junk vehicles or items that may be stored in a junk yard, yard waste or other debris, unserviceable vehicles, or cargo containers.
11. While the northern emergency access may be maintained, its use shall be limited to emergencies and project access shall be limited to the south gate at 2450 N US 1, which shall be a manned gate that is opened and closed each day. Any deviation from the stated entry gate operation should be reviewed by FDOT and submitted as a modification of the site plan approval.
12. The applicant shall provide irrigation for the new landscaping south of that depicted on Exhibit F pursuant to a plan designed by a qualified professional, and the applicant's design professional shall approve and provide the plan to St. Lucie Village and shall, in the certification referenced at paragraph 6 above, reference completion of those improvements in accordance with that plan.

(Signature page and attestation follow)

PASSED AND APPROVED by the Board of Aldermen of the Town of St. Lucie Village on the 16th day of April, 2024.

APPROVED:
BOARD OF ALDERMEN OF THE TOWN OF
ST. LUCIE VILLAGE, FLORIDA

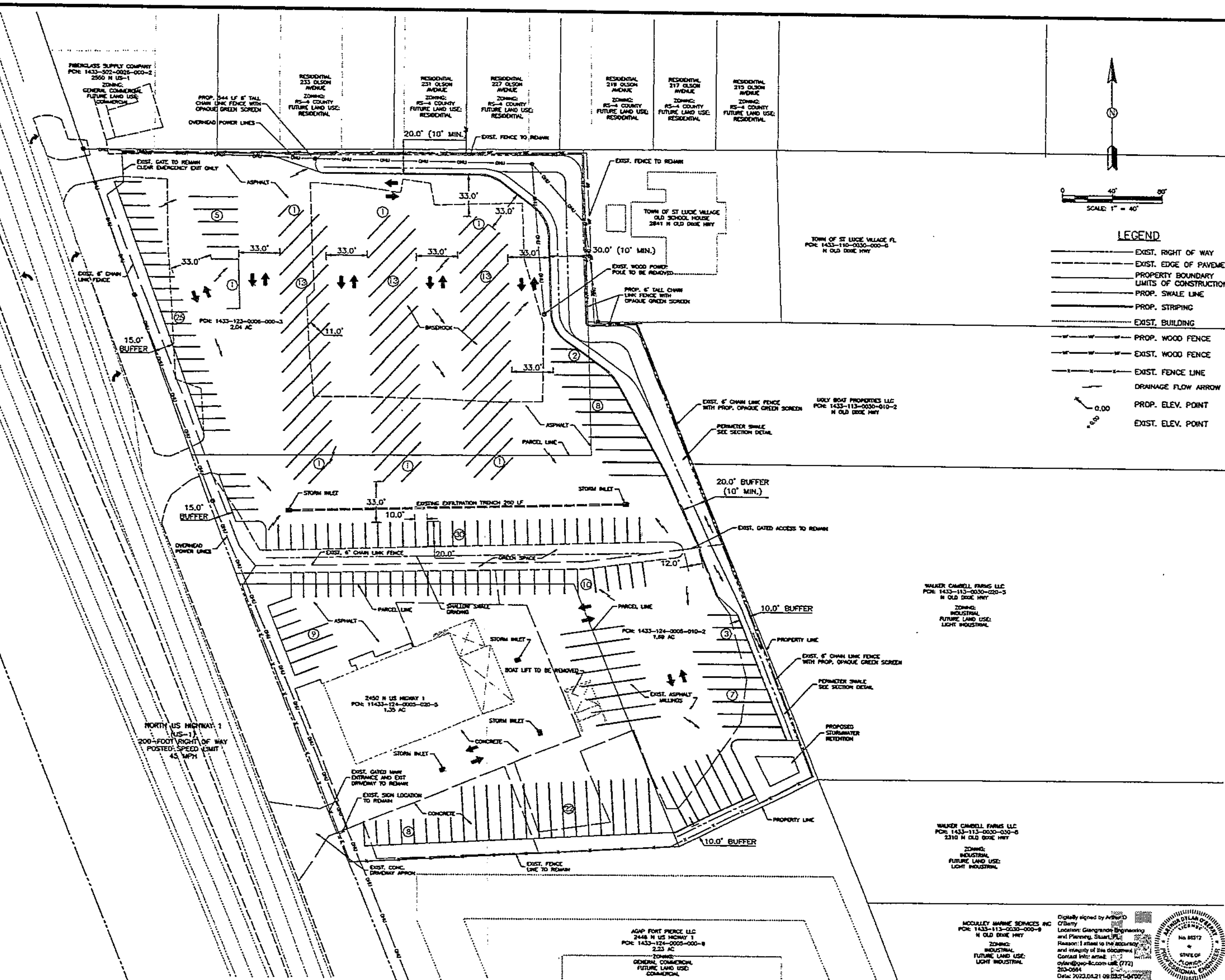
By: _____
William G. Thiess, Mayor

ATTESTED:

By: _____
Paulette T. Burgess, Acting Clerk

I, Paulette T. Burgess, Acting Clerk of the TOWN OF ST. LUCIE VILLAGE, FLORIDA, do hereby certify that this is a true and accurate copy of Resolution **2024-3** which was duly introduced, read, and adopted at the regular meeting of the Board of Aldermen of the TOWN OF ST. LUCIE VILLAGE, FLORIDA, held the 16th day of April, 2024.

_____
Paulette T. Burgess, Acting Clerk



STOW & GO STORAGE
772-812-7603

SITE PLAN SUMMARY

PARCEL #	1433-123-0006-000-3 1433-124-0005-010-2 1433-124-0005-020-5
TOTAL SITE AREA:	2.04 AC. 1.69 AC. 1.35 AC. 5.08 AC.
ZONING:	GENERAL COMMERCIAL
FUTURE LAND USE:	COMMERCIAL

EXISTING SITE DATA PCN: 1433-123-0006-000-3

Total Pervious			
Green Space	11,124 SF.	0.26 AC.	12.6%
Total Impervious	77,400 SF.	1.78 AC.	87.5%
Building Footprint	29,548 SF.	0.68 AC.	33.4%
Existing Asphalt	47,852 SF.	1.10 AC.	54.1%
Total Site Area	88,524 SF.	2.04 AC.	

PROPOSED SITE DATA PCN: 1433-123-0006-000-3
(Allowable Impervious Max. 88.6% per Variance Order dated 1/10/23)

Total Pervious			
Green Space	13,835 SF.	0.32 AC.	15.7%
Total Impervious	74,689 SF.	1.72 AC.	84.3% (88.6%)
Baserock Surface	33,041 SF.	0.76 AC.	37.3%
Existing Asphalt	41,648 SF.	0.96 AC.	47.0%
Total Site Area	88,524 SF.	2.04 AC.	100.0%

EXISTING SITE DATA PCN: 1433-124-0005-010-2

Total Pervious			
Green Space	20,840 SF.	0.48 AC.	28.4%
Total Impervious			
Existing Millings	52,776 SF.	1.21 AC.	71.6%
Total Site Area	73,616 SF.	1.69 AC.	100.0%

PROPOSED SITE DATA PCN: 1433-124-0005-010-2

Total Pervious (Allowable Min. 25% per Town Code)			
Green Space	20,115 SF.	0.46 AC.	27.2%
Total Impervious (Allowable Max. 75% per Town Code)			
Existing Millings	53,501 SF.	1.23 AC.	72.8%
Total Site Area	73,616 SF.	1.69 AC.	100.0%

STORAGE SPACES SUMMARY
11' X 40' = 81 Spaces
10' X 20' = 121 Spaces
TOTAL = 202 Spaces

TRAFFIC STATEMENT:
ITE TRIP GENERATION 11TH EDITION
WAREHOUSING (STORAGE) CODE 150 FITTED CURVE EQUATION
INDEPENDENT VARIABLE = 60 – 1,000 SQ FT GFA (SUM OF STORAGE SPACES)
WEEKDAY = 133 TRIPS (ADT) TOTAL – 67 ENTRY AND 66 EXITING
AM PEAK HOUR OF GENERATOR = 35 TRIPS TOTAL –23 ENTRY AND 12 EXITING
PM PEAK HOUR OF GENERATOR= 29 TRIPS TOTAL –7 ENTRY AND 22 EXITING

NOTE:
STORAGE LAYOUT DEPICTS 100% BUILD OUT OF STORAGE FACILITY AND CONFIGURATION OF STORAGE MAY DEVIATE AS SEEN FIT BY THE APPLICANT WITH THE PROGRESSION OF THE BUSINESS.
ALL GATES TO BE EQUIPPED WITH KNOX LOCK/BOX AS REQUIRED.
NO UTILITIES ARE PROPOSED AS PART OF THE PROJECT.

Digitally signed by Arthur D O'Berry
Location: Giangrande Engineering and Planning, Stuart, FL
Reason: I attest to the accuracy and integrity of this document
Contact Info: email: dylan@gep-llc.com cell: (772) 203-0664
Date: 2023.06.21

DATE	BY	REVISIONS
6/9/23	DO	REVISED FENCING NOTE PER TOWN COMMENTS
6/7/23	DO	FINAL SITE PLAN

Date: 6/15/22
Scale: 1"=40
Design By: DO
Drawn By: DOM
Check By:

MEGHAN AND BRANDON HAYNES
STOW & GO STORAGE
TOWN OF ST LUCIE VILLAGE, FLORIDA

FINAL SITE PLAN

GIANGRANDE ENGINEERING AND PLANNING
710 SE OCEAN BLVD.
STUART, FLORIDA 34994
PH. (772) 888-9076
dylan@gep-llc.com
Cert. No. 30901

A. DYLAN O'BERRY, P.E.
License No: 88512

PROJECT #: 22-014
S-1

Ex A

LANDSCAPE CONTRACTOR NOTES

ALL PLANT MATERIAL SHALL BE FLORIDA #1 OR BETTER. PLANTS WILL BE INSPECTED BY THE LANDSCAPE ARCHITECT. THOSE PLANTS THAT DO NOT MEET THE SPECIFICATIONS IN SIZE OR GRADE WILL BE REJECTED.

THE LANDSCAPE CONTRACTOR SHALL HAVE A COMPETENT FOREMAN IDENTIFIED AT THE BEGINNING OF THE JOB WHO WILL BE ON THE JOB THROUGHOUT THE INSTALLATION OF PLANTING. THIS PERSON SHALL BE RESPONSIBLE FOR DIRECTING THE CREW AND ANY SUBCONTRACTORS WORKING FOR THE LANDSCAPE CONTRACTOR AND SHALL ACT AS THE LANDSCAPE CONTRACTOR'S REPRESENTATIVE TO THE OWNER AND LANDSCAPE ARCHITECT.

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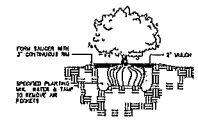
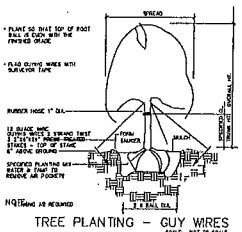
WITH WATER PRIOR TO PLANTING IF WATER DOES NOT COMPLETELY DRAIN FROM HOLE WITHIN FOUR HOURS, CONTACT THE LANDSCAPE ARCHITECT FOR APPROVAL BEFORE PLANTING. PLANT HOLES ARE TO BE BACKFILLED WITH A HOMOGENOUS SOIL MIX CONSISTING OF 2 PARTS SANDY TOPSOIL, 2 PARTS PEAT MOSS AND 1 PART COW MANURE OR MILORGANITE. AGRIFORM 20-10-05 PLANTING TABLETS SHALL BE ADDED TO EACH PLANT HOLE ACCORDING TO THE MANUFACTURERS RECOMMENDED APPLICATION RATES. BACKFILL HALFWAY UP THE ROOTBALL, PLACE THE TABLETS BESIDE THE ROOTBALL ABOUT 1 INCH FROM THE ROOT TIPS. DO NOT PLACE TABLET(S) IN BOTTOM OF HOLE.

THE CONTRACTOR SHALL PROVIDE THE SPECIFIED MULCH. INSTALL 3" DEPTH OF SPECIFIED MULCH TO ALL AREAS INDICATED ON THE PLAN. THE MULCH SHALL BE INSTALLED AS SHOWN ON THE DETAILS TO ENSURE THAT IT IS NOT INSTALLED TOO CLOSE TO THE PLANT TRUNK OR STEM.

THE LANDSCAPE CONTRACTOR SHALL GUARANTEE THAT ALL PLANT MATERIAL SHALL BE ALIVE AND THRIVING FOR A PERIOD OF ONE YEAR FOLLOWING PLANTING. THE LANDSCAPE CONTRACTOR SHALL REPLACE DEAD OR SICK PLANTS AT NO ADDITIONAL COST TO THE OWNER.



SHRUB PLANTING
SCALE: NOT TO SCALE



TREE PLANTING - GUY WIRES
SCALE: NOT TO SCALE

PLANT MATERIAL LIST

TREES & PALMS (* indicates native tree)

	Code Name	Quantity	Scientific Name	Common Name	Planting Size
*	IC	26	ILEX CASSINE	DAHOON HOLLY	12' X 5', 4"CT 4' DBH
*	IXA	26	ILEX ATTENUATA	EAST PALATKA HOLLY	12' X 5', 4"CT 4' DBH
*	MAG	18	MAGNOLIA GRANDIFLORA	BRACKEN'S BROWN BEAUTY	12' X 5', 4"CT 4' DBH
*	QV	3	QUERCUS VIRGINIANA	LIVE OAK	12' X 5', 4"CT 4' DBH

SHRUBS & GROUNDCOVERS

	Code Name	Quantity	Scientific Name	Common Name	Planting Size
*	HP	266	HAMELIA PATENS 2'	FIREBUSH	24" X 18", #3, 24" OC
*	HP	293	HAMELIA PATENS 4'	FIREBUSH	42" X 36", #10, 48" OC

OTHER MATERIALS

MULCH	32	CU. YDS. ENVIRO MULCH (EST.)
SOD	34,000	SQ. FT. BAHIA SOD (EST.)

TREE CALCULATIONS:

ROW WEST PL 610 L. FT. - TOTAL 70' ACCESS WAY = 540 L. FT.

NORTH PL 401 L. FT. - 15' ACCESS WAY = 386 L. FT.

EAST PL 138 L. FT.

NORTH PL 39 L. FT.

EAST PL 396 L. FT.

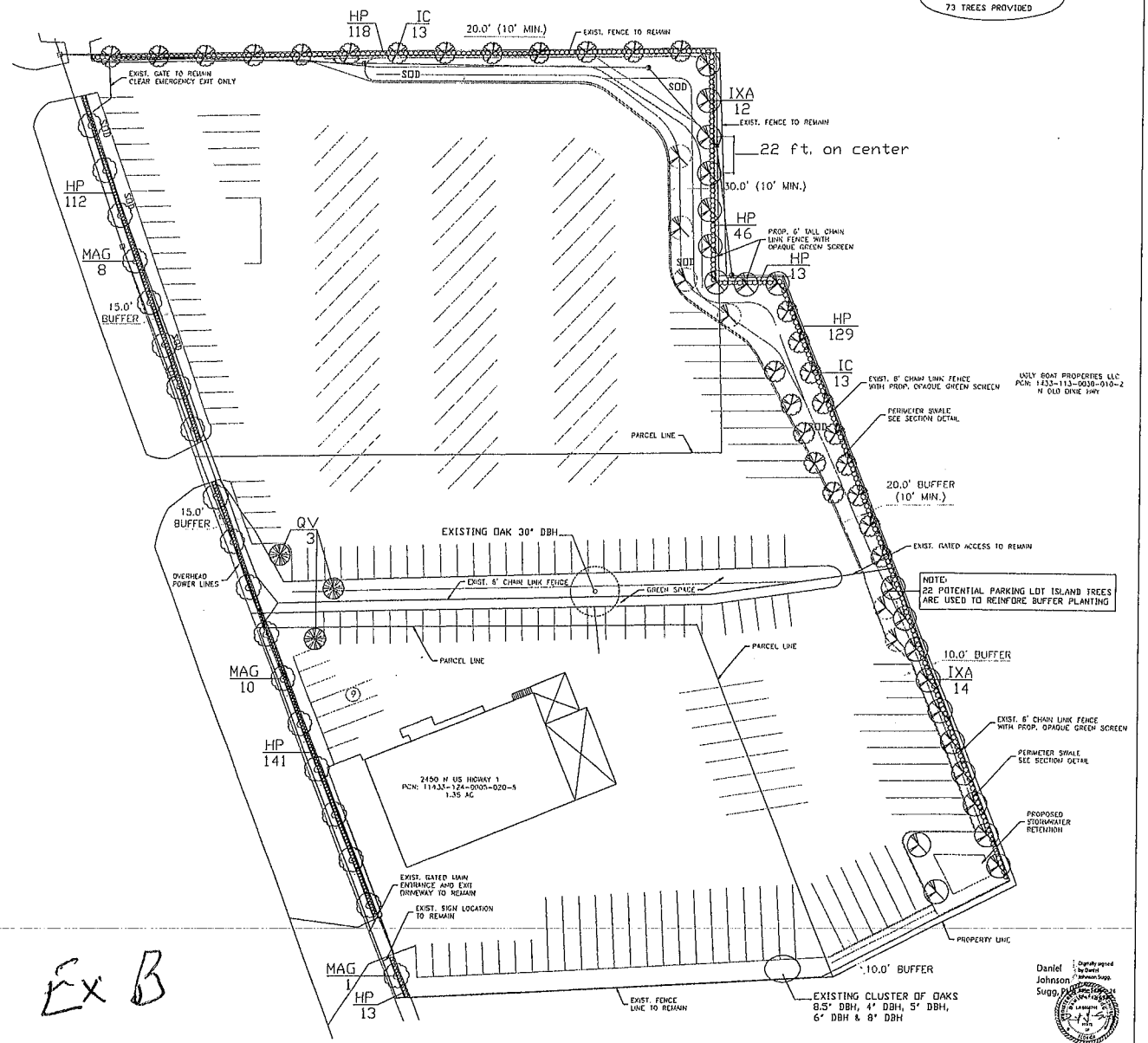
SOUTH PL EXEMPT 0 L. FT.

TOTAL 1499 L. FT. DIVIDED BY 30 = 49.9 / 50 TREES PERIMETER TREES REQUIRED

22 PARKING ISLAND TREES IF REQUIRED

72 TREES REQUIRED

73 TREES PROVIDED



Ex B

Daniel Johnson Sugg, PLA — Digitally signed by Daniel Johnson Sugg

SHEET L-2 OF TWO	SCALE: 1" = 30'	LANDSCAPE PLAN STOW & GO STORAGE	DANIEL J. SUGG LANDSCAPE ARCHITECT / SITE PLANNER POST OFFICE BOX 335, JENSEN BEACH, FL 34958 PHONE: (772) 463-1776

DATE:	6/11/22
REV	8/21/23
REV	10/16/23 tree sizes
REV	12/8/23 add 2 trees east & calc.
REV	12/20/23 north & south combined
REV	12/30/23 e. palatka noted as native
REV	1/17/24 add trees, shrubs s. e. p.l.
REV	1/22/24 tree calculations

IN RE: PETITION FOR VARIANCE OF STOW & GO, LLC

ORDER

This matter came before the Board of Adjustment of the Town of St. Lucie Village, Florida, on March 20, 2024, at 6:30 p.m. at the Village Hall on the request of Stow & Go, LLC for relief from provisions of the St. Lucie Village Land Development Code applicable to its property.

The Board of Adjustment, having considered the petition of Stow & Go, LLC, having heard from Brandon and Meghan Haynes, Dylan O'Berry, PE, and the public, and having otherwise given the matter full consideration, finds as follows:

1. The hearing was properly noticed by publication and mailed notices, as required by the St. Lucie Village Land Development Code.

2. The subject property is three contiguous properties, zoned commercial, currently improved with pavement and fencing, located at 2500 N US Hwy 1, Fort Pierce, Florida 34946, and the tax I.D. number and legal description is as follows:

a. Parcel ID (Parcel 1): 1433-123-0006-000-3;
Legal Description of Property: 33 34 40 BEG AT PT WHERE S BDRY OLSONS S/D INT E RD R/W LI OF HWY US 1, TH N 89 25 19 E 400.80 FT, TH S 01 23 41 E 245.29 FT, TH S 89 29 08 W 320.61 FT TO E RD R/W LI OF HWY US 1, TH NWLY ON CURVE CONC NE, R OF 11, 359.2 TH NWLY ALG ARC 258.82 FT TO POB (2.04 AC)

b. Parcel ID (Parcel 2): 1433-124-0005-010-2;
Legal Description of Property: 33 34 40 FROM INT OF S BDRY OLSONS S/D AND E RD R/W LI OF HWY US 1 AND CURVE CONC NE, R OF 11,359.2 FT, TH SELY ALG ARC 258.82 FT TO POB; TH CONT ALG ARC 110.64 FT, TH N 89 29 08 E 268.08 FT, TH S 21 31 34 E 228.78 FT, TH N 68 28 26 E 125 FT, TH N 21 31 34 W 407.92 FT, TH S 89 25 19 W 39.78 FT, TH S 01 23 41 E 108.33 FT, TH S 89 29 08 W 320.61 FT TO POB (1.69 AC)

Ex C

c. Parcel ID (Parcel 3): 1433-124-0005-020-5;

Legal Description of Property: 33 34 40 FROM INT OF S BDRY LI OLSON'S S/D WITH ELY R/W LI US #1 RUN SELY ALG ELY R/W 369.46 FT TO POB, TH CONT SELY ALG SD ELY R/W 240 FT, TH N 87 DEG 09 MIN 04 SEC E 265.12 FT, TH N 21 DEG 31 MIN 34 SEC W 228.78 FT, THS 89 DEG 29 MIN 08 SEC W 268.08 FT TO POB (1.35 AC)

Total Size of Property (Parcel 1, 2, 3): 5.08 Acres

3. Stow & Go Storage, LLC requests five variances for relief from Ordinance 2012-4 (now incorporated into the St. Lucie Village Land Development Code at Section 3.6.1, et seq.), particularly,

a. From Section 3.6.4(B)(2)(a) Perimeter Landscaping Relating to Abutting Properties, requiring a 42" planting height in a seven-gallon container, so as to allow a planting height of 18" in a three-gallon container,

b. From Section 3.6.4(B)(2)(b) Perimeter Landscaping Relating to Abutting Properties, requiring a tree be provided or preserved for each 30 linear feet or major fraction thereof, so as to provide relief from the requirement along a portion of the north perimeter of the property, as shown in the attached plan provided that the total tree count required for that portion of the north perimeter will remain on the property;

c. From Section 3.6.4(B)(2)(c) Perimeter Landscaping Relating to Abutting Properties (Proposed Parking Abutting Existing Barrier), requiring that when a proposed parking area abuts an existing hedge wall or durable landscape barrier on an abutting property, so that the landscape buffer and tree count requirements are not required to be included in the landscape plan on the east side of the property, as shown on the attached plan;

d. From Section 3.6.4(B)(3) Parking area interior landscaping, so as to eliminate the requirement for interior landscaping; and

e. From Section 3.6.4(2), Planting requirements (tree count) so that the total tree count (of new/additional trees) to be added to the site is 37 rather than 72.

4. Concerning the variance requests described at paragraph 3(a) above, the standards at Section 9.2.0, including particularly any hardship beyond cost, have not been met.

5. The variance requests described at paragraphs 3(b) through 3(e) ("those requests") arise from conditions that are unique to the land or structures involved.

6. As to those requests, literal enforcement of the Code would deprive Property Owners of rights commonly enjoyed by other property owners in the same zoning district.

7. Granting those requests as specified herein will not be materially detrimental or injurious to other property or improvements in the neighborhood.

8. Granting the below variances will not confer any special privilege to Property Owners which is denied to owners of similar properties.

9. The variances set forth below are the minimum variance which will make possible the reasonable use.

10. The spirit and intent of the Zoning Ordinance and Town Comprehensive Plan are not opposed to the specified variance.

It is thereupon,

ORDERED as follows:

1. The Petition for relief from Section 3.6.4(B)(2)(a) Perimeter Landscaping Relating to Abutting Properties is DENIED.

2. The requested variance is GRANTED so that Property Owners are granted relief from Section 3.6.4(B)(2)(b), that is from the requirement for landscaping along the west portion of the north perimeter of the property, as shown in the attached plan, provided, however, that the total tree count required for that portion of the north perimeter will remain on the property.

3. The requested variance is GRANTED so that Property Owners are granted relief from Section 3.6.4(B)(2)(c), so that the landscape buffer and tree count requirements are not required to be met on the east side of the property extending south from the St. Lucie School, as shown on the attached plan.

4. The requested variance is granted so that Property Owners are granted relief from Section 3.6.4(B)(3), so as to eliminate the requirement for interior landscaping.

5. The requested variance is granted so that Property Owners are granted relief from Section 3.6.4(2) so that the total tree count (of new/additional trees) to be added to the site is 37 rather than 72.

6. Property Owners are not otherwise granted relief from the provisions of the Ordinance, the applicable building code(s), or any permit requirement(s).

7. This variance expires automatically in twelve (12) months unless a permit has been issued for the proposed improvement(s).

DONE AND ORDERED by the Board of Adjustment of the Town of St. Lucie Village, Florida, this ___ day of April, 2024.

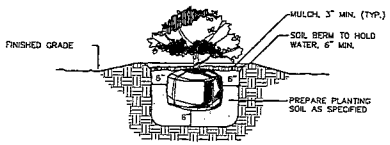
BOARD OF ADJUSTMENT TOWN OF
ST. LUCIE VILLAGE, FLORIDA

By: _____
Jim Van Hekken, Chair

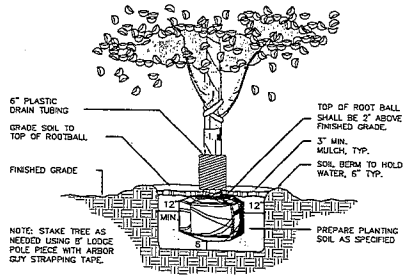
Copies furnished to:

Stow & Go, LLC
Board of Adjustment
William G. Thiess, Mayor
Board of Aldermen
Paulette T. Burgess, Acting Clerk
Carl Peterson, Building Official

SHRUB PLANTING DETAIL



TREE PLANTING DETAIL



TREE CALCULATIONS

ROW WEST PL 370 LF - TOTAL 55' ACCESS WAY=	315 LF
NORTH PL 401 LF - 15' ACCESS WAY=	386 LF
EAST PL=	138 LF
NORTH PL=	39 LF
EAST PL (EXEMPT, SCREED ABUTTING PROP. LANDSCAPE BARRIER)=	0 LF
SOUTH PL(EXEMPT, SCREEN ABUTTING PROP. CONCRETE WALL)=	0 LF
TOTAL=	878 LF / 30

TREES PERIMETER REQUIRED=	29
INTERIOR PARKING ISLAND TREES=	22
EXISTING TREE CREDITS= (14)	
TOTAL TREES REQUIRED=	37
TOTAL TREE PROVIDED=	37

LANDSCAPE CONTRACTOR NOTES

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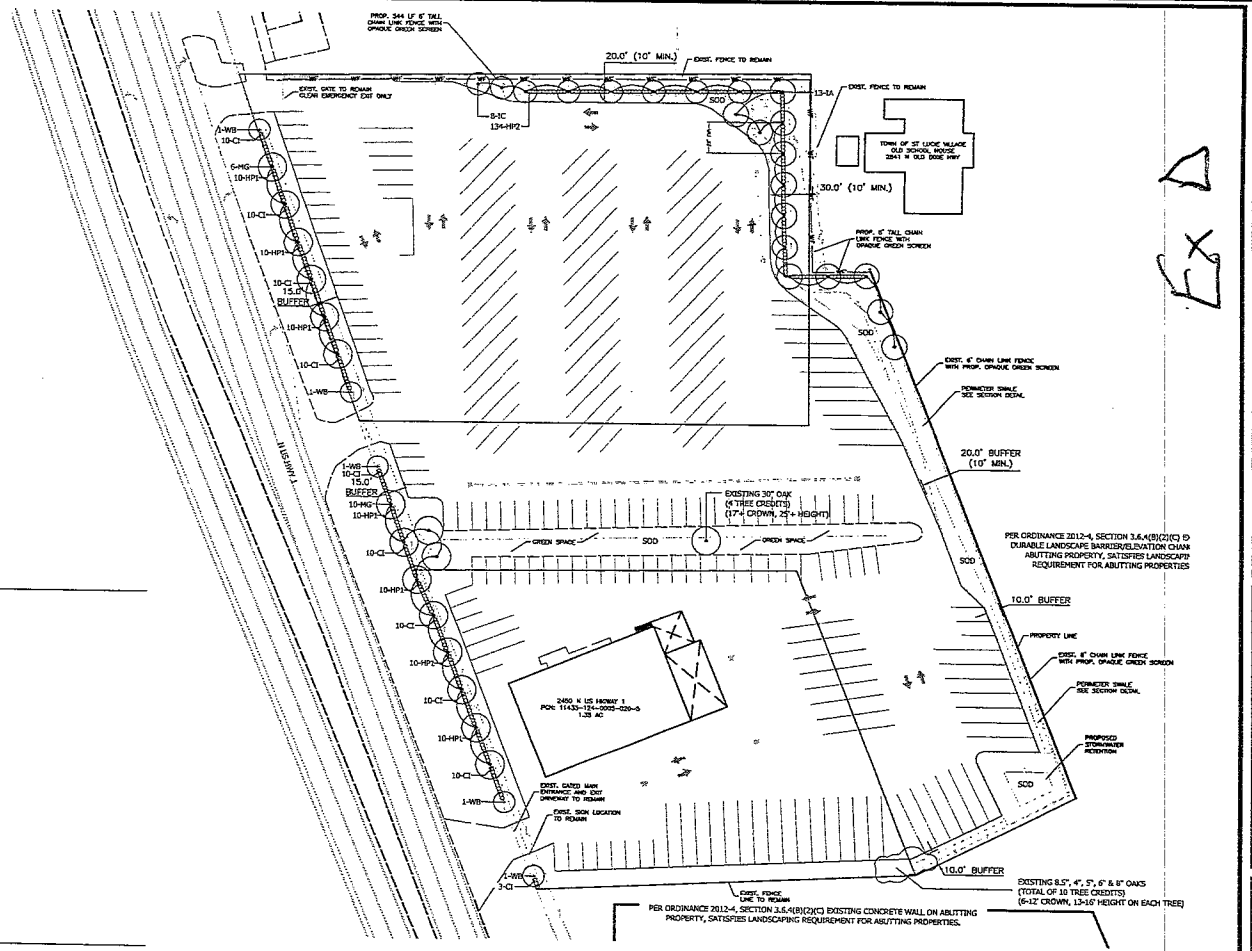
THE CONTRACTOR SHALL PROVIDE THE SPECIFIED MULCH. INSTALL 3" DEPTH OF SPECIFIED MULCH TO ALL AREAS INDICATED ON THE PLAN. THE MULCH SHALL BE INSTALLED AS SHOWN ON THE DETAILS TO ENSURE THAT IT IS NOT INSTALLED TOO CLOSE TO THE PLANT TRUNK OR STEM.

THE LANDSCAPE CONTRACTOR SHALL GUARANTEE THAT ALL PLANT MATERIAL SHALL BE ALIVE AND THRIVING FOR A PERIOD OF ONE YEAR FOLLOWING PLANTING. THE LANDSCAPE CONTRACTOR SHALL REPLACE DEAD OR SICK PLANTS AT NO ADDITIONAL COST TO THE OWNER.



PLANT SCHEDULE

		*INDICATES NATIVE TREE		
TREES & PALMS				
IC*	8	ILEX CASSINE	DAHOON HOLLY	MIN. 12' HT., 5' SPR., 2" CAL., FL.#1
IA*	13	ILEX ATTENUATA	'EAST PALATKA' HOLLY	MIN. 12' HT., 5' SPR., 2" CAL., FL.#1
MG*	16	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	'LITTLE GEM' MAGNOLIA	MIN. 12' HT., 5' SPR., 2" CAL., FL.#1
WB	5	WODYETIA BIFURCATA	FOXTAIL PALM	FIELD GROWN, 12' CT., FL.#1
SHRUBS				
CI	93	CHRYSOBALANUS ICACO	COCOPLUM	3 GAL., MIN. 18" HT.
HP1	70	HAMELIA PATENS	FIREBUSH	3 GAL., MIN. 18" HT.
HP2	134	HAMELIA PATENS	FIREBUSH	7 GAL., MIN. 42" HT.
OTHER MATERIALS				
SOD		PASPALUM NOTATUM	'ARGENTINE' BAHIA	
MULCH			ENVIROMENTAL MULCH	

GRAPHIC SCALE
0' 20 40 80

NORTH

Ex 4

MAGNOLIA
LANDSCAPE GROUP
13401 NW 173RD STREET ALACHUA, FL
(352) 256 - 9750

PROJECT TITLE/LOCATION:
STOW & GO STORAGE
2450 N US HWY 1
FT. PIERCE, FLORIDA

SHEET TITLE:
LANDSCAPE PLAN

SEAL:
REGISTERED LANDSCAPE ARCHITECT
JORDAN S. YOUNG
LA 6667350
STATE OF FLORIDA

DRAWN BY:	JSY
CHECKED BY:	
DATE:	FEBRUARY 14, 2024
REVISIONS: PLANT SIZES	APRIL 8, 2024
ADDITIONAL TREES	APRIL 12, 2024
DRAWING SCALE:	AS SHOWN
PROJECT NUMBER:	24-004
SHEET:	L-101

STOW & GO STORAGE
772-812-7503

CONSTRUCTION PLANS & SPECIFICATIONS FOR STOW & GO STORAGE TOWN OF SAINT LUCIE VILLAGE, FLORIDA

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS, LATEST EDITION (FY 2023-24).

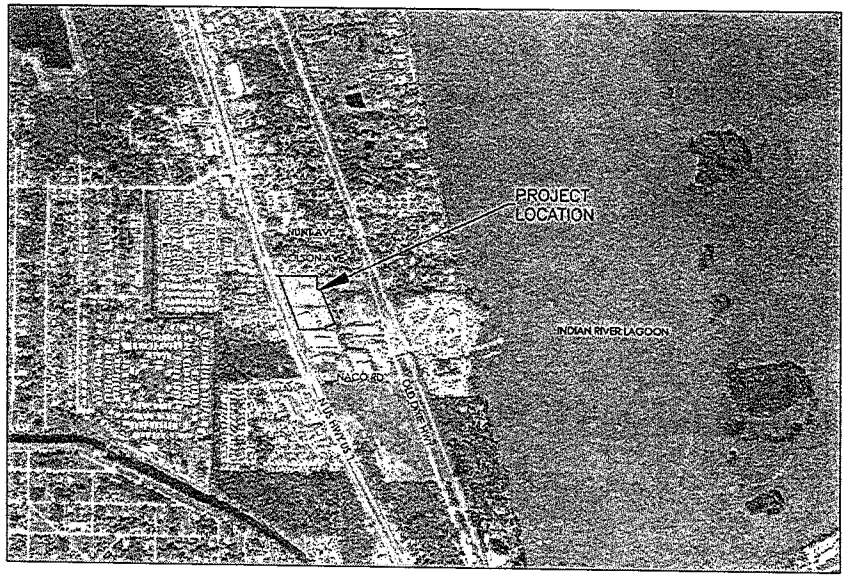
GOVERNING SPECIFICATIONS:
FDOT STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION (FY 2023-24)

THE FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, LATEST EDITION (FY 2023-24).

THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS (GREENBOOK), LATEST EDITION (2018).

THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), LATEST REVISION 3, JULY 2022.

AND THE ST. LUCIE COUNTY LAND DEVELOPMENT REGUALTIONS, LATEST EDITION AND STANDARDS SET FORTH BY THE TOWN OF SAINT LUCIE VILLAGE.



VICINITY MAP
1" = 600'

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C-1	COVER SHEET
G-1	GENERAL NOTES
S-1	FINAL SITE PLAN
P-1	PAVING, GRADING, & DRAINAGE PLAN
P-2	PAVING, GRADING, & DRAINAGE PLAN
EC-1	STORMWATER POLLUTION PREVENTION PLAN
D-1	DETAILS AND CROSS SECTIONS

CLIENT AND PROPERTY OWNER
BRANDON AND MEGHAN HAYNES
STOW & GO STORAGE
2500 N US HWY-1
FORT PIERCE, FL 34946
(772) 812-7503

CIVIL ENGINEER
GIANGRANDE ENGINEERING & PLANNING
710 SE OCEAN BLVD
STUART, FL 34994
(772) 888-9076

Digitally signed by Arthur D O'Berry
Location: Giangrande Engineering and Planning, LLC, Stuart, FL
Reason: I attest to the accuracy and integrity of this document
Contact Info: email: dylan@gep-llc.com cell: (772) 200-0664
Date: 2024.04.10 18:47:48-04'00'

Know what's below. Call before you dig.

JANUARY 2024
FINAL CONSTRUCTION PLANS

REV 3	1/26/24	DO	REVISED SECTION B-B PER TOWN COMMENTS
REV 2	8/18/23	DO	REVISED FENCING AND SECTIONS PER TOWN COMMENTS
REV 1	6/07/23	DO	FINAL SITE PLAN

GIANGRANDE ENGINEERING AND PLANNING
710 SE OCEAN BLVD.
STUART, FLORIDA 34994
PH. (772) 888-9076
dylan@gep-llc.com
Cert. No. 30801
A. DYLAN O'BERRY, PE
License No. 88512

SHEET C-1

SUPPLEMENTAL CONDITIONS

SCOPE OF WORK: THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, SUPERVISION, TRANSPORTATION AND INCIDENTALS NECESSARY TO CONSTRUCT THE PAVING, DRAINAGE, UTILITIES AND ASSOCIATED IMPROVEMENTS, IN ACCORDANCE WITH THE PROVISIONS OF THESE SUPPLEMENTAL CONDITIONS, SPECIFICATIONS AND THE DRAWINGS, ENTITLED, "CONSTRUCTION PLANS & SPECIFICATIONS FOR "DIRECTION FT. PIERCE SITE DEVELOPMENT", PREPARED BY GIANGRANDE ENGINEERING AND PLANNING, LLC, 710 SE OCEAN BLVD., STUART, FLORIDA 34994, (772) 888-9076. IT IS THE OBJECTIVE OF THESE DOCUMENTS TO ASSURE THE TOTAL COMPLETION OF THE WORK REQUIRED TO PROVIDE PAVING, GRADING, AND DRAINAGE IMPROVEMENTS ACCORDING TO THE STANDARDS SET FORTH BY THE TOWN OF SAINT LUCIE VILLAGE.

PERMITS AND LICENSES: CONSTRUCTION PERMITS FOR CERTAIN ELEMENTS OF THE PROJECT WORK ARE REQUIRED, AND THE DESIGN AND CONSTRUCTION REQUIREMENTS OF THE PROJECT REFLECT CONSTRAINTS AND CONDITIONS IMPOSED BY THESE PERMITS. THESE INCLUDE CONSTRUCTION PERMITS FROM THE CITY OF FORT PIERCE, AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

THE CONTRACTOR SHALL PERFORM HIS WORK AND SHALL CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE REQUIREMENTS OF THESE "DESIGN" PERMITS AND APPROVALS, COPIES OF WHICH ARE AVAILABLE FOR REVIEW AND USE FROM THE ENGINEER. UPON REQUEST, THE CONTRACTOR SHALL SECURE ALL WORK PERMITS, APPROVALS AND LICENSES REQUIRED TO PERFORM THE WORK, AND HE SHALL PERFORM THE WORK IN STRICT ACCORDANCE WITH THOSE PERMITS, APPROVALS AND LICENSES.

REFERENCE TO OTHER DOCUMENTS: FOR BREVITY, REFERENCE MAY BE MADE TO OTHER SPECIFICATIONS OR DOCUMENTS WHICH WILL BE USED TO SPECIFY OR CONTROL THE MATERIALS PLACED IN THE WORK, THE CONSTRUCTION METHODS TO BE USED, THE TOLERANCES THAT WILL BE ACCEPTABLE, AND CONTRACTUAL OR LEGAL OBLIGATIONS. THE SPECIFICATIONS OR DOCUMENTS SHALL INCLUDE:

1. "STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT," THE LATEST EDITION, PREPARED BY THE ENGINEER'S JOINT CONTRACT DOCUMENTS COMMITTEE AND PUBLISHED BY THE NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS. REFERENCE SHALL BE MADE: "GENERAL CONDITIONS."
2. "FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2023-2024," PUBLISHED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION. REFERENCE SHALL BE MADE: "FDOT SPECIFICATIONS."
3. "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, 2023-2024" PUBLISHED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION. REFERENCE SHALL BE MADE "FDOT INDEX" OR "FDOT STANDARDS."
4. "AMERICAN SOCIETY FOR TESTING AND MATERIALS SPECIFICATIONS", LATEST EDITION REFERENCE SHALL BE MADE: "ASTM."
5. "ST LUCIE COUNTY MINIMUM CONSTRUCTION STANDARDS", LATEST EDITION. REFERENCE SHALL BE MADE AS "COUNTY CODE" OR "COUNTY STANDARDS" OR "COUNTY SPECIFICATIONS."

BY REFERENCE, THE DOCUMENTS CITED ABOVE ARE MADE PART OF THESE SUPPLEMENTAL CONDITIONS AND SPECIFICATIONS. THE CONTRACTOR SHALL HAVE COPIES OF EACH IN HIS POSSESSION FOR USE THROUGHOUT THE BIDDING AND CONSTRUCTION OF THIS PROJECT WORK AND/OR BE FAMILIAR WITH THE APPLICABLE SECTIONS OF EACH DOCUMENT AND BE ABLE TO VERIFY THAT ALL MATERIALS AND CONSTRUCTION METHODS ARE CONFORMANCE WITH THESE DOCUMENTS AND REQUIREMENTS.

ADDITIONALLY, THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL OTHER APPLICABLE LOCAL, REGIONAL, STATE AND FEDERAL LAWS, REGULATIONS AND CODES, ESPECIALLY OSHA STANDARD 29 CFR, SECTION 1926.650 SUBPART P, WHICH IS PART OF THE TRENCH SAFETY ACT AS PART OF LAWS OF FLORIDA, CHAPTER 90-96.

CONTRACT ISSUES

GENERAL CONDITIONS: UNLESS OTHERWISE STATED IN THESE SUPPLEMENTAL CONDITIONS, THE PROVISIONS OF THE "STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT," REFERENCED ABOVE, SHALL BE USED TO GOVERN ALL ISSUES ADDRESSED IN THOSE GENERAL CONDITIONS FOR THIS PROJECT.

OWNER-ENGINEER RELATIONSHIP: ANY AGREEMENT BETWEEN OWNER AND ENGINEER SHALL NOT BE CONSTRUED TO PROVIDE ANY OBLIGATION FROM THE ENGINEER TO ANY THIRD PARTIES INCLUDING, BUT NOT LIMITED TO, ARCHITECTS, OTHER ENGINEERS, ANY CONTRACTORS (GENERAL OR SUB), NOR TO ANY SUCCESSORS TO THE OWNER. THE RIGHTS UNDER ANY AGREEMENT BETWEEN OWNER AND ENGINEER INURE ONLY TO THOSE TWO PARTIES.

ERRORS OR OMISSIONS IN THE DRAWINGS OR SPECIFICATIONS: PRIOR TO INITIATION OF THE WORK, THE CONTRACTOR SHALL CHECK DIMENSIONS, GRADES, ELEVATIONS AND THE SUMMARY OF ESTIMATED QUANTITIES SHOWN ON THE DRAWINGS TO ASSURE HIMSELF THAT THEY ARE CORRECT AND THAT THE WORK CAN BE ACCOMPLISHED AS INTENDED. THE CONTRACTOR SHALL TAKE NO ADVANTAGE OF ANY APPARENT ERROR OR OMISSION WHICH HE MIGHT DISCOVER, BUT SHALL IMMEDIATELY NOTIFY THE ENGINEER OF SUCH DISCOVERY, WHO WILL THEN MAKE SUCH CORRECTIONS AND INTERPRETATIONS AS HE DEEMS NECESSARY FOR REFLECTING THE ACTUAL SPIRIT AND INTENT OF THE DRAWINGS AND SPECIFICATIONS.

BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION WAS PROVIDED BY CULPEPPER & TERPENING, INC. , (772) 464-3537.

HORIZONTAL AND VERTICAL CONTROL: THE CONTRACTOR SHALL CONSTRUCT THE REQUIRED IMPROVEMENTS IN THE LOCATIONS SHOWN ON THE DRAWINGS, AND SHALL USE AS HORIZONTAL CONTROL POINTS THE EXISTING PROPERTY CORNERS AS SHOWN ON THE PLAN SHEET. THE HORIZONTAL CONTROL POINTS WERE PROVIDED BY CULPEPPER & TERPENING, INC., (772) 464-3537, AS VERTICAL CONTROL, BENCHMARKS SHALL BE PROVIDED AT THE SITE, FOR USE IN ESTABLISHING THE NECESSARY ELEVATIONS AND GRADES AT THE LOCATIONS SHOWN ON THE PLANS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL CONTROL POINTS AND TO RE-ESTABLISH SAID POINTS AS NECESSARY, REMAINING HORIZONTAL AND VERTICAL CONTROL WORK SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND DETAILS.

WRITTEN DIMENSIONS ARE PROVIDED FOR CLARITY. WHERE WRITTEN AND SCALED DIMENSIONS CONFLICT, WRITTEN DIMENSIONS SHALL GOVERN.

COORDINATION OF WORK WITH OTHERS: THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OR IMPROVEMENTS OF OTHERS WITH REGARD TO NEW CONSTRUCTION, OR FOR THE NEED OF REMOVAL, RELOCATION OR ALTERATION OF EXISTING IRRIGATION AND DRAINAGE FACILITIES. THIS INCLUDES, BUT IS NOT LIMITED TO, THE OWNER, HIS CONTRACTORS, SUBCONTRACTORS OR AGENTS.

THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE PUBLIC AGENCIES PRIOR TO COMMENCING THE WORK WITHIN THEIR JURISDICTION.

SHOP DRAWINGS: ONE DIGITAL COPY OF SIGNED SHOP DRAWINGS AND SIGNED AND SEALED DESIGN DATA SHALL BE SUBMITTED PRIOR TO ORDERING MATERIALS. ALLOW 10 WORK DAYS TURNAROUND FOR SUBMITTALS.

STANDARDS FOR QUALITY AND WORKMANSHIP: ALL MATERIALS, EQUIPMENT AND SUPPLIES FURNISHED BY THE CONTRACTOR FOR PERMANENT INCORPORATION IN THE WORK SHALL BE NEW AND OF THE QUALITY STANDARDS SPECIFIED. WORKMANSHIP SHALL BE FIRST-CLASS AND THE FINISHED PRODUCT EQUAL TO THE BEST ACCEPTED STANDARDS OF THE TRADE FOR THE CATEGORY OF WORK PERFORMED.

TEMPORARY UTILITIES: ALL ARRANGEMENTS AND COSTS FOR TEMPORARY POWER, WATER AND WASTEWATER FACILITIES DURING CONSTRUCTION SHALL BE RESPONSIBILITY OF THE CONTRACTOR.

OBSERVING THE WORK: THE PROGRESS AND QUALITY OF THE WORK WILL BE OBSERVED BY THE OWNER'S ENGINEER OR ENGINEER'S APPOINTED EMPLOYEE. NO OBSERVER IS AUTHORIZED TO CHANGE ANY PROVISIONS OF THE SPECIFICATIONS WITHOUT WRITTEN AUTHORIZATION OF THE OWNER'S ENGINEER, NOR SHALL THE PRESENCE NOR THE ABSENCE OF AN OBSERVER RELIEVE THE CONTRACTOR FROM ANY REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS.

THE CONTRACTOR SHALL GIVE THE ENGINEER A MINIMUM OF 48 HOURS NOTICE PRIOR TO REQUIRED INSPECTIONS, AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.

IN ADDITION TO THE REQUIREMENTS PREVIOUSLY REFERENCED, THE FOLLOWING MINIMUM CONSTRUCTION CONTROL CHECKPOINTS SHALL BE ADHERED TO, AND THE CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE FOR OBSERVATION:

1. PRIOR TO ANY DEVIATION FROM THE DRAWINGS;
2. PRIOR TO ANY BACKFILLING TRENCHES CONTAINING HYDRAULIC CONDUITS, SO THAT JOINTING MAY BE INSPECTED;
3. PRIOR TO TESTING OF ALL HYDRAULIC CONDUITS,
4. PRIOR TO PLACEMENT OF ROADWAY BASE MATERIAL, CONCRETE OR ASPHALTIC CONCRETE.
5. UPON COMPLETION OF CONSTRUCTION FOR FINAL INSPECTION WITH THE CONTRACTOR OR HIS REPRESENTATIVE.

TESTING: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE INDEPENDENT TESTING LABORATORY DESIGNATED BY THE OWNER, THE TESTING AND RETESTING NECESSARY TO ASSURE THAT THE WORK HAS BEEN PERFORMED IN STRICT COMPLIANCE WITH THE SPECIFICATIONS. COST FOR THE INITIAL TESTING SHALL BE BORNE BY THE OWNER. ANY RETESTS REQUIRED DUE TO FAILURE TO MEET THE MINIMUM REQUIREMENTS SHALL BE PERFORMED AT THE EXPENSE OF THE CONTRACTOR, THE NAME OF OWNER'S TESTING LABORATORY SHALL BE SUPPLIED AT THE PRECONSTRUCTION MEETING.

EXISTING UTILITIES AND STRUCTURES: EXISTING UTILITIES, STRUCTURES AND FACILITIES SHOWN ON THE DRAWINGS WERE LOCATED AS ACCURATELY AS POSSIBLE FROM THE RECORDS EXAMINED. NO GUARANTEE IS MADE THAT ALL EXISTING FACILITIES ARE SHOWN OR THAT THOSE SHOWN ARE ENTIRELY ACCURATE. THE CONTRACTOR SHALL ASSURE HIMSELF OF THE ACTUAL LOCATION OF THE UTILITIES, STRUCTURES OR FACILITIES PRIOR TO PERFORMANCE OF ANY WORK IN THE VICINITY. THE UTILITY COMPANIES OR UTILITY AGENCIES WILL CO-OPERATE WITH THE CONTRACTOR IN LOCATING UNDERGROUND UTILITIES THAT MAY BE SUBJECT TO DAMAGE OR INTERRUPTION OF SERVICES DURING THE CONTRACTOR'S OPERATIONS. PRIOR TO START OF THE WORK, THE CONTRACTOR SHALL REQUEST THAT EACH UTILITY AGENCY ADVISE HIM OF THE LOCATION OF THEIR FACILITIES IN THE VICINITY. THE OWNER WILL ASSUME NO LIABILITY FOR DAMAGES SUSTAINED OR COSTS INCURRED BECAUSE OF THE CONTRACTOR'S OPERATION IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, OR TO THE TEMPORARY BRACING AND SHORING OF SAME. IN THE EVENT THAT IT IS NECESSARY TO SHORE, BRACE OR SWING A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION SECURED AS TO THE METHOD USED FOR ANY SUCH WORK.

THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF OVERHEAD TRANSMISSION LINES AND UNDERGROUND UTILITIES.

THE CONTRACTOR SHALL NOTIFY UTILITY OWNER THROUGH SUNSHINE STATE ONE CALL OF FLORIDA (800-432-4770) AND UTILITY OWNERS LISTED BELOW AT LEAST TWO BUSINESS DAYS (OR 10 DAYS IF ON THE JOB SITE).

RESTORATION OF DAMAGED STRUCTURES OR UTILITIES: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR, REBUILD OR RESTORE TO ITS FORMER CONDITION, ANY AND ALL PORTIONS OF EXISTING UTILITIES, STRUCTURES, EQUIPMENT, APPURTENANCES OR FACILITIES, OTHER THAN THOSE TO BE PAID FOR UNDER THIS CONTRACT, WHICH MAY BE DISTURBED OR DAMAGED DUE TO THIS CONSTRUCTION OPERATION, AT NO COST TO THE OWNER.

FINAL CLEANUP: UPON COMPLETION OF THE WORK BUT BEFORE FINAL PAYMENT WILL BE MADE, THE CONTRACTOR SHALL CLEAR AND REMOVE FROM THE PROJECT AREA, ALL FALSE WORK, EQUIPMENT, SURPLUS AND DISCARDED MATERIALS, RUBBISH AND TEMPORARY STRUCTURES WHICH RESULT FROM THE WORK UNDER THIS AGREEMENT, AND SHALL RESTORE IN AN ACCEPTABLE MANNER ALL PROPERTY WHICH HAS BEEN DAMAGED DURING THE EXECUTION OF THE WORK.

TECHNICAL SPECIFICATIONS

MATERIALS, CONSTRUCTION METHODS, TESTING AND TOLERANCES FOR ALL WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS, AND WITH THE SPECIFICATIONS REFERENCED UNDER THE "SUPPLEMENTAL CONDITIONS." IN THE EVENT OF CONFLICT, THE MORE STRINGENT PROVISION SHALL APPLY.

1. MOBILIZATION/DEMOBILIZATION: THE WORK SPECIFIED IN THIS SECTION CONSISTS OF THE PREPARATORY WORK AND OPERATIONS IN MOBILIZING FOR BEGINNING WORK ON THE PROJECT, INCLUDING, BUT NOT LIMITED TO, THOSE OPERATIONS NECESSARY FOR THE MOVEMENT OF PERSONNEL, EQUIPMENT, SUPPLIES, AND INCIDENTALS TO THE PROJECT SITE, AND FOR THE ESTABLISHMENT OF TEMPORARY OFFICES, BUILDINGS, SAFETY EQUIPMENT AND FIRST AID SUPPLIES, SANITARY AND OTHER FACILITIES, AS REQUIRED BY THESE SPECIFICATIONS, THE SPECIAL PROVISIONS, AND STATE AND LOCAL LAWS AND REGULATIONS. ALL COSTS FOR BONDS, PERMITS AND ANY REQUIRED INSURANCE, AND ANY OTHER PRECONSTRUCTION EXPENSE NECESSARY FOR THE START OF THE WORK, AS WELL THE COST OF THE REMOVAL OF THE ABOVE ITEMS, SHALL ALSO BE INCLUDED IN THIS SECTION.
2. CONSTRUCTION SURVEYING: THE CONTRACTOR SHALL CONSTRUCT THE REQUIRED IMPROVEMENTS AT THE LOCATIONS SHOWN ON THE PLANS, AS OUTLINED IN THE "SUPPLEMENTAL CONDITIONS." THE OWNER SHALL PROVIDE BASIC REFERENCE POINTS FOR HORIZONTAL CONTROL AND BENCHMARKS IN THE VICINITY OF THE WORK. ALL OTHER CONSTRUCTION STAKING FOR BOTH HORIZONTAL AND VERTICAL CONTROL NEEDED BY THE CONTRACTOR FOR CONTROL OF HIS WORK SHALL BE PERFORMED BY THE CONTRACTOR.
3. DRAINAGE IMPROVEMENTS: THE CONTRACTOR SHALL PROVIDE ALL THE MATERIALS AND LABOR NECESSARY TO COMPLETE THE PROJECT WORK FOR THE DRAINAGE IMPROVEMENTS AT THE LOCATION, SIZE AND TYPE SHOWN ON THE PLANS FOR THE FOLLOWING ITEMS IN ACCORDANCE WITH FDOT SPECIFICATIONS, INCLUDED IN THE UNIT COSTS FOR EACH ITEM SHALL BE THE COSTS ASSOCIATED WITH THE DESIGN AND CONSTRUCTION, BY THE CONTRACTOR, TO COMPLY WITH THE TRENCH SAFETY ACT, LAWS OF FLORIDA, CHAPTER 90-96.
6. FENCING AND GATES: THE CONTRACTOR SHALL FURNISH AND CONSTRUCT CHAIN-LINK FENCE AND GATES IN ACCORDANCE WITH FPL CHAIN LINK FENCE SPECIFICATIONS AND DETAILS. MATERIALS AND LOCATION OF FENCE ARE INDICATED ON THE PLANS.
7. EROSION AND POLLUTION CONTROL: THE CONTRACTOR SHALL TAKE SUFFICIENT PRECAUTIONS TO PREVENT WATER POLLUTION WITH AQUATIC WEEDS, FUELS, OILS, BITUMINOUS, CALCIUM CHLORIDE OR OTHER HARMFUL MATERIALS. ALSO, THEY SHALL CONDUCT AND SCHEDULE HIS OPERATIONS SO AS TO AVOID POLLUTION OR SILTATION OF WATER BODIES OR TO INTERFERE WITH INDIGENOUS WILDLIFE. THE INSTALLATION OF TEMPORARY EROSION AND POLLUTION CONTROL FEATURES SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONTRACT. ANY EROSION OR SHOALING SHALL BE CORRECTED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE. DUE TO UNANTICIPATED CONDITIONS, THE ENGINEER MAY DIRECT THE USE OF CONTROL FEATURES OR METHODS OTHER THAN THOSE INCLUDED IN THE ORIGINAL CONTRACT, IN SUCH EVENT THIS ADDITIONAL WORK WILL BE PAID FOR AS UNFORESEEABLE WORK.

1) SEDIMENT BARRIERS SHALL BE PLACED PRIOR TO ANY WORK ON THE SITE. SEDIMENT BARRIERS SHALL BE PLACED AS DEPICTED AS SHOWN ON THE CONSTRUCTION PLANS.
2) DAMAGED TURBIDITY CONTROLS SHALL BE REPAIRED PROMPTLY AND BEFORE ANY SUBSEQUENT RAINFALL.
3) TURBIDITY CONTROLS SHALL REMAIN IN PLACE AND MAINTAINED AND REMOVED ONLY AFTER UPLAND CONSTRUCTION AREAS HAVE BEEN STABILIZED AS APPROVED BY THE ENGINEER OF RECORD.
4) CONTRACTOR SHALL COMPLY WITH NPDES AND EPA DISCHARGE ELIMINATION PERMIT, IN PARTICULAR SEDIMENT AND EROSION CONTROLS AND STORM WATER MANAGEMENT MEASURES SHALL BE STRICTLY FOLLOWED.
5) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF THE NPDES AND RELATED STORM WATER PLAN FOR THE DURATION OF THE PROJECT. UPON COMPLETION THE CONTRACTOR SHALL REMOVE ALL TEMPORARY STORM WATER MANAGEMENT MEASURES AND SHALL DISPOSE OF THEM AS REQUIRED.
6) DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 21 DAYS SHALL BE STABILIZED WITH SEED & MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THOSE AREAS. THE SEEDING SHALL FOLLOWING TYPICAL CONSTRUCTION PRACTICES TO INSURE A YEAR ROUND STABILIZED AREA.
7) CONTRACTOR SHALL COMPLY WITH SPILL PREVENTION, CONTROL AND COUNTER MEASURES (SPEC) REQUIREMENTS PURSUANT TO EPA RULES AND REGULATIONS.
8) ALL CONSTRUCTION WASTE MATERIAL, INCLUDING BUT NOT LIMITED TO THE EXISTING BARB WIRE FENCING AND POSTS, SHALL BE COLLECTED AND STORED IN A SECURED METAL DUMPSTER RENTED / LEASED FROM A LOCAL WASTE MANAGEMENT COMPANY. THE DUMPSTER SHALL MEET ALL LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURES FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES SHALL BE POSTED IN THE OFFICE TRAILER / CONSTRUCTION TRAILER AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.
9) ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS AT A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.
10) TRUCKS / EQUIPMENT IMPORTING OR EXPORTING FILL SHALL COVER THEIR LOADS WITH A TARPAULIN TO AVOID UNNECESSARY GENERATION OF DUST.
11) ALL HAZARDOUS WATER MATERIAL SHALL BE DISPOSED OF AS PER LOCAL / STATE REGULATIONS OR AS RECOMMENDED BY THE MANUFACTURER. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES AND THE CONTRACTOR IS RESPONSIBLE TO FOLLOW THESE PRACTICES.
12) DRIVEWAY ACCESS SHALL BE CONSTRUCTED PER FDOT INDEX 106 TO MINIMIZE THE VEHICLES TRACKED SEDIMENTS TRANSPORTED OFFSITE.
13) THE GENERAL CONTRACTOR'S SITE SUPERINTENDENT SHALL SELECT INDIVIDUALS, TYPICALLY THREE, WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES AND FILLING OUT OF INSPECTION REPORTS. PERSONNEL SELECTED SHALL RECEIVE PROPER TRAINING, AT THE CONTRACTORS EXPENSE, PRIOR TO SITE CONSTRUCTION COMMENCEMENT.
14) ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE INSPECTED EVERY 7 DAYS OR WITHIN 24 HOURS OF A STORM OF 0.5 INCHES OR MORE IN RAINFALL. ALL CONTROLS MUST BE IN PROPER ORDER AS REQUIRED UNTIL SITE COMPLETION.
15) SILT FENCE SHALL BE INSPECTED FOR TEARS, DEPTH OF SEDIMENT, AND TO INSURE THE FENCE IS SECURELY FASTENED TO THE POSTS AND ALSO THAT POSTS ARE FIRMLY IN PLACE. SEDIMENT SHALL BE REMOVED IF THE DEPTH OF SEDIMENT IS GREATER THAN ONE-THIRD THE HEIGHT OF THE SILT FENCE.
16) THE INSPECTOR SHALL RECORD ANY DAMAGES OR DEFICIENCIES IN THE TURBIDITY CONTROLS IN THE REPORT FORM FOR THIS PURPOSE. A COPY OF ALL RECORDING AND REPORTS SHALL BE FORWARDED TO THE ENGINEER FOR REVIEW.

GENERAL SEQUENCE OF MAJOR EROSION AND POLLUTION CONTROL EVENTS:

1) INSTALL EROSION CONTROL AT LOCATIONS SHOWN ON THE CONSTRUCTION PLANS.
2) COMMENCE SITE CONSTRUCTION ACTIVITIES.
3) AS PROPOSED DRAINAGE IS CONSTRUCTED, INSTALL SILT FENCE AND/OR TURBIDITY CONTROL MEASURES AT EACH.
4) INSTALL TEMPORARY SEED AND MULCH IN AREAS WHERE CONSTRUCTION TEMPORARILY CEASES FOR AT LEAST 21 DAYS, NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITIES IN THAT AREA.
5) INSTALL PERMANENT SEED/MULCH OR APPROVED STABILIZATION METHOD AND/OR PLANTING IN AREAS WHERE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITIES.
6) REMOVE ACCUMULATED SEDIMENT.
7) REMOVED TEMPORARY POLLUTION PREVENTION MEASURES AFTER ALL CONSTRUCTION ON SITE HAS BEEN COMPLETED AND DISPOSED OF MATERIALS ACCORDING TO APPLICABLE FDEP REGULATIONS AND/OR LOCAL GOVERNMENTAL CODES, ETC.

9. RECORD DRAWINGS: AFTER COMPLETION OF THE CONTRACT WORK, BUT PRIOR TO SUBMITTAL OF THE REQUEST FOR FINAL PAYMENT, THE CONTRACTOR SHALL PROVIDE FINAL RECORD DRAWINGS TO THE OWNER OF THE IMPROVEMENTS. THE RECORD DRAWINGS SHALL ALSO BE SUBMITTED DIGITALLY IN AUTOCAD / DWG FORMAT. THE RECORD DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF SAINT LUCIE VILLAGE, ST. LUCIE COUNTY, AND FDEP, AND SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

THE FINAL LOCATION, BY REFERENCE TO AT LEAST TWO COMPLETED VISIBLE IMPROVEMENTS OR OTHER PERMANENT POINTS, OF ALL PAVING AND DRAINAGE ELEMENTS, AND SHALL INCLUDE ELEVATIONS OF PERTINENT POINTS IN THE PAVEMENT AND DRAINAGE IMPROVEMENTS. ALL REVISIONS TO THE ORIGINAL PLANS, VERIFICATION OF ALL DESIGN DIMENSIONS, ELEVATIONS, PIPE SLOPES, PIPE LENGTHS, INLETS AND CONTROL STRUCTURES LOCATION AND ELEVATIONS AND ALL OTHER INFORMATION NECESSARY TO HORIZONTALLY AND VERTICALLY LOCATE AND OPERATE THE IMPROVEMENTS CONSTRUCTED UNDER THIS CONTRACT.

DRAWINGS SHALL INCLUDE:

A. INDICATION OF ANY CHANGES OR VERIFICATIONS GET MARKED
B. INDICATION OF ALL "PROPOSED" OR "CONSTRUCTS"
C. CHANGES TO LOCATIONS OF PIPE, VALVES, FITTINGS OR MANHOLES, ETC.
D. DETAIL SIZE OF ANY SUBSTANTIAL CHANGES
E. ALL ELEVATIONS FOR MANHOLES AND LIFT STATIONS
F. ALL GRADES AND FOOTAGE ON SANITARY RUNS

THE CONTRACTOR SHALL PROVIDE RECORD DRAWING PRINTS AND ONE COPY OF CERTIFIED FIELD NOTES TO THE OWNER THAT ARE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR. PAYMENT FOR THE RECORD DRAWINGS SHALL BE ON A LUMP SUM BASIS.

DATE	BY	REVISIONS
1/26/24	DD	REVISED SECTION 5-8 PER TOWN COMMENTS
8/16/23	DD	REVISED PENCING AND SECTIONS PER TOWN COMMENTS
6/7/23	DD	FINAL SITE PLAN

Date: 6/15/22
Scale: N/A
Design By: DD
Drawn By: DD/I
Check By: G

MEGHAN AND BRANDON HAYNES
STOW & GO STORAGE
TOWN OF ST LUCIE VILLAGE, FLORIDA

GENERAL NOTES

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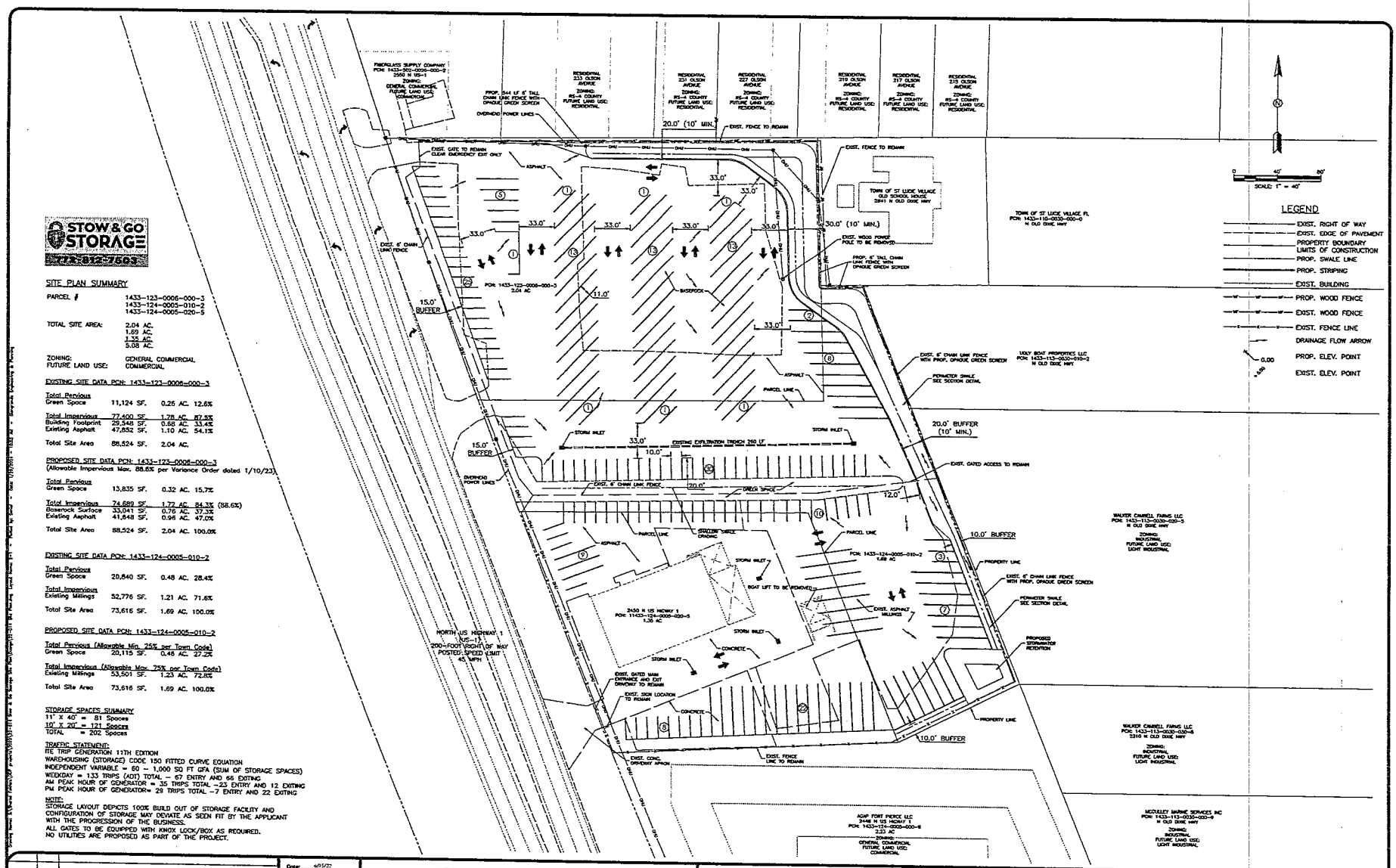
License No: 86512

PROJECT #: 22-014

G-1



DATE	BY	REVISIONS
1/24/24	DO	REVISED SECTION 9-8 PER TOWN COMMENTS
8/9/23	DO	REVISED FENCING NOTE PER TOWN COMMENTS
4/7/23	DO	FINAL SITE PLAN

Date: 4/15/22
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Design By: DO
Drawn By: DON
Check By: F

MEGHAN AND BRANDON HAYNES
STOW & GO STORAGE
TOWN OF ST LUCIE VILLAGE, FLORIDA

FINAL SITE PLAN

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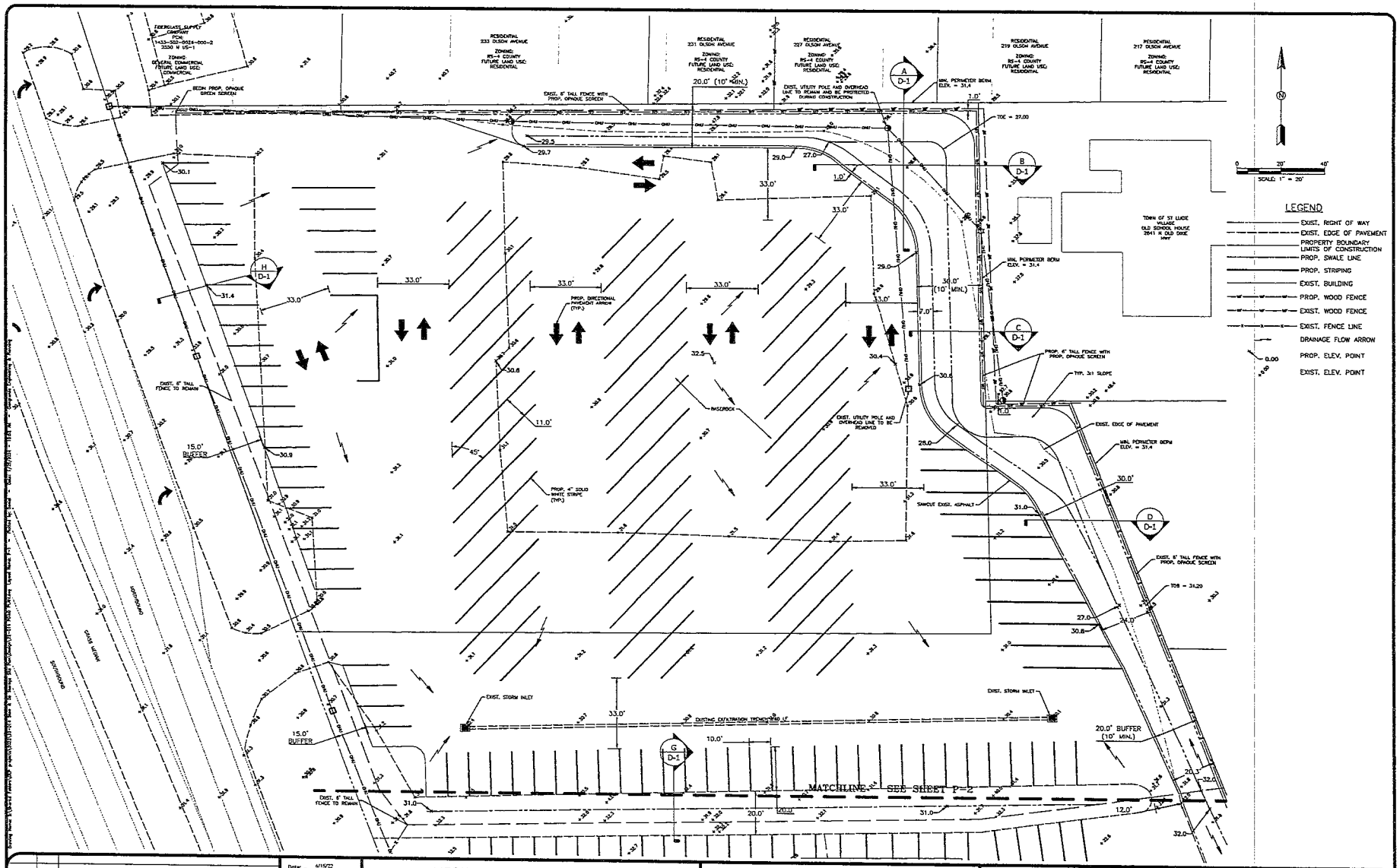
PROJECT # 22-014

S-1



DATE	BY	REVISIONS
1/24/24	DO	REVISED SECTION B-B PER TOWN COMMENTS
6/16/23	DO	REVISED FENCING AND SECTIONS PER TOWN COMMENTS
4/7/23	DO	FINAL SITE PLAN

Date: 4/15/22
Scale: 1"=20'
Design By: DO
Drawn By: DO/A
Check By: G

MEGHAN AND BRANDON HAYNES
STOW & GO STORAGE
TOWN OF ST LUCIE VILLAGE, FLORIDA

PAVING, GRADING, & DRAINAGE PLAN

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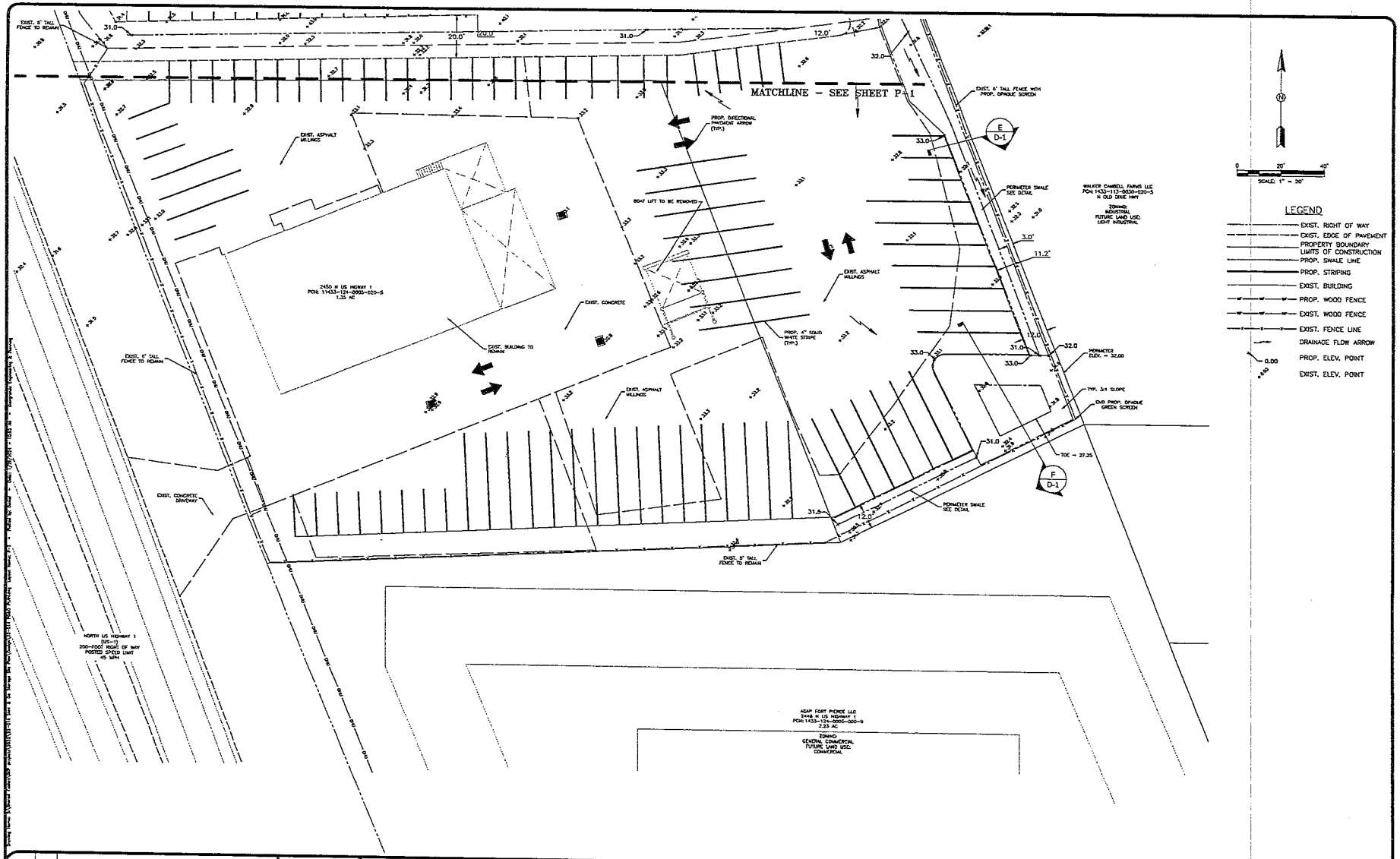
PROJECT #: 22-014

P-1



DATE	BY	REVISIONS
1/26/24	DO	REVISED SECTION 3-B PER TOWN COMMENTS
9/15/23	DO	REVISED PAVING AND SECTIONS PER TOWN COMMENTS
6/7/23	DO	INITIAL SITE PLAN

Date: 6/15/22
Scale: 1"=20'
Design By: DO
Drawn By: DOM
Check By: JS

MEGHAN AND BRANDON HAYNES
STOW & GO STORAGE
TOWN OF ST LUCIE VILLAGE, FLORIDA

PAVING, GRADING, & DRAINAGE PLAN

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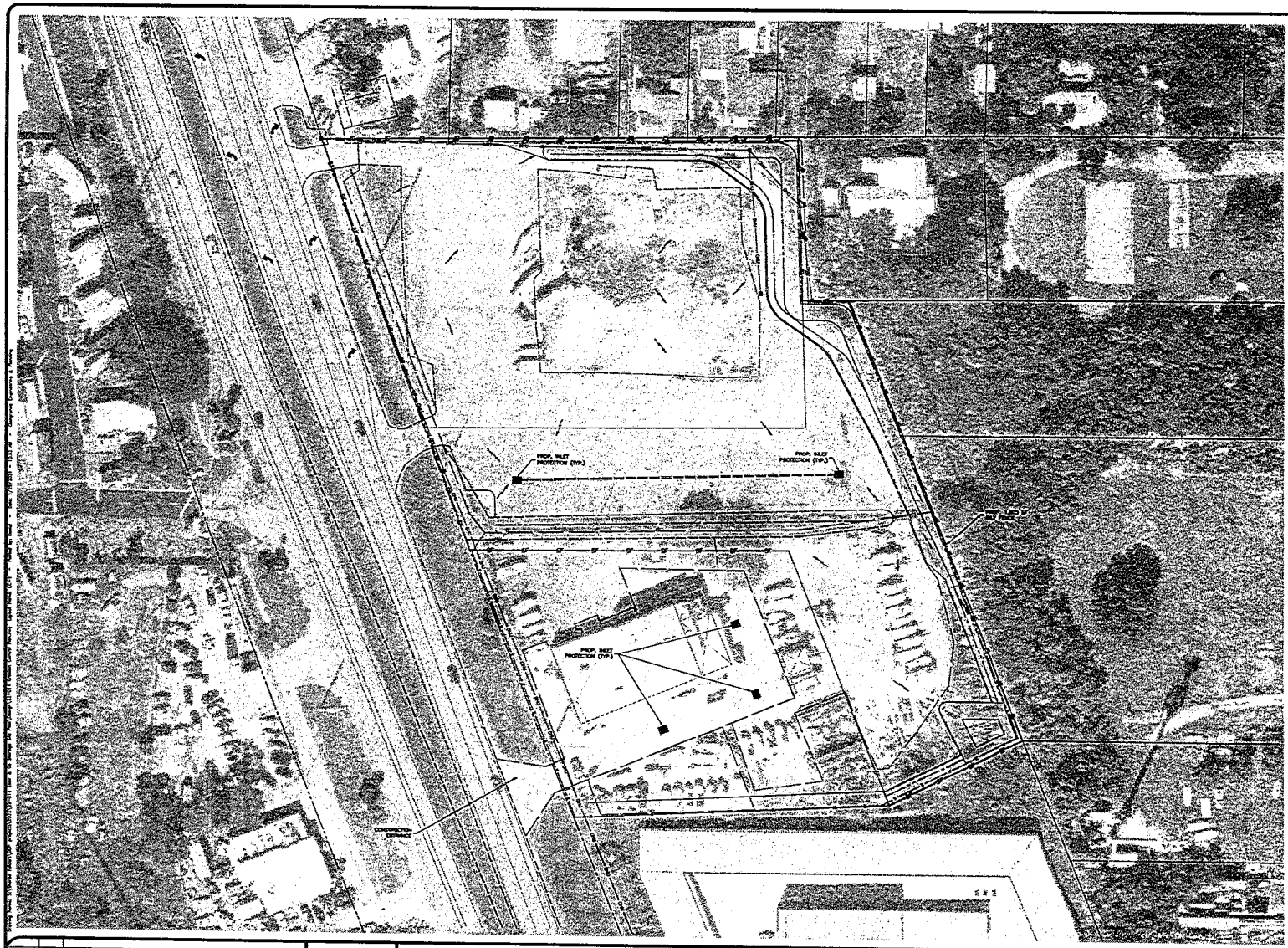
PROJECT #: 22-014

P-2



N

0 60' 120'
SCALE: 1" = 60'

LEGEND

- SF —— PROP. SILT FENCE
- X —— CHAINLINK SECURITY FENCE
- TB —— PROP. SILT FENCE
- ———— PROP. CONTINUOUS BERM

NOTE: REFER TO EROSION CONTROL NOTES ON SHEET G-1

811 Know what's below. Call before you dig.

DATE	BY	REVISIONS
1/26/24	DO	REVISED SECTION 748 PER TOWN COMMENTS
6/18/23	DO	REVISED FENCING AND SECTIONS PER TOWN COMMENTS
6/7/23	DO	INITIAL SITE PLAN

Date: 6/15/23
Scale: 1"=60'
Design By: DO
Drawn By: DOH
Check By: JC

MEGHAN AND BRANDON HAYNES
STOW & GO STORAGE
TOWN OF ST LUCIE VILLAGE, FLORIDA

STORMWATER POLLUTION PREVENTION PLAN

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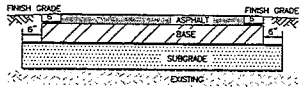
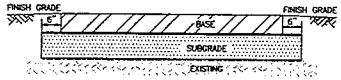
PROJECT #: 22-014

EC-1



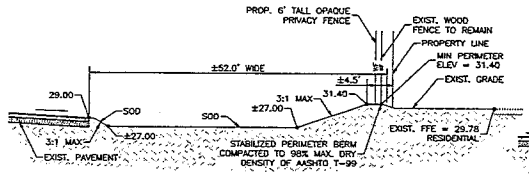
ASPHALT CONCRETE
PAVEMENT: 1.5" FOOT TYPE SP-9.5
BASE: 8" COMPACTED LIMEROCK OR COQUINA BASE (LBR-100) SAME DENSITY AS SUBGRADE
SUBGRADE: 12" THICK STABILIZED SUBGRADE (LBR-40) DENSITY SHALL BE 98% OF MAXIMUM AS DETERMINED BY AASHTO T-180 METHOD

EXISTING TYPICAL PAVEMENT SECTION
SCALE: N.T.S.

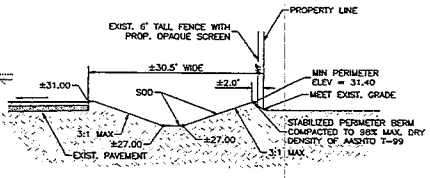


ASPHALT CONCRETE
BASE: 8" COMPACTED LIMEROCK OR COQUINA BASE (LBR-100) SAME DENSITY AS SUBGRADE
SUBGRADE: 12" THICK STABILIZED SUBGRADE (LBR-40) DENSITY SHALL BE 98% OF MAXIMUM AS DETERMINED BY AASHTO T-180 METHOD

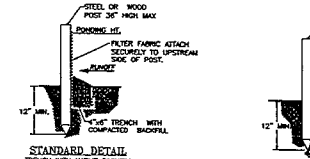
PROPOSED STABILIZED BASEROCK SECTION
SCALE: N.T.S.



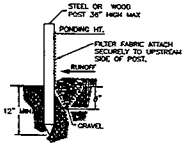
RETENTION AREA AND PERIMETER BERM TYPICAL SECTION DETAIL
A-A
N.T.S



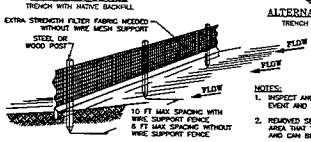
RETENTION AREA AND PERIMETER BERM TYPICAL SECTION DETAIL
D-D
N.T.S



STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL



ALTERNATE DETAIL
TRENCH WITH GRAVEL

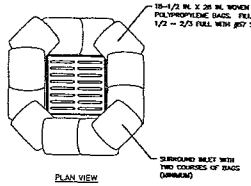


SILT FENCE DETAIL
N.T.S.

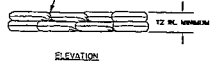
NOTES:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOUR TO MAXIMIZE PONDING EFFICIENCY.
4. OVERLAP ALL JOINTS AT LEAST 6 FEET.

NOTES:
1. STONE FILL BAGS SHALL BE WOVEN POLYPROPYLENE BAGS WITH APPROXIMATE DIMENSIONS OF 18-1/2 INCHES BY 28 INCHES.
2. THE BAGS SHALL BE FILLED 1/2 TO 2/3 FULL WITH #057 STONE. TIE THE ENDS OF FILLED BAGS USING EITHER DRAW STRINGS OR WIRE TIES.
3. INTERWEAVE THE LOOSE ENDS OF THE BAGS SO THAT THE GAPS BETWEEN BAGS ARE FILLED AND THE ENDS OF THE BAGS ARE SEALED.
4. COMPLETELY SURROUND THE INLET WITH A MINIMUM OF TWO (2) ROWS OF BAGS TO A MINIMUM OF 12 INCHES IN HEIGHT.

GRAVEL FILTER BAGS INLET PROTECTION DETAIL
NTS

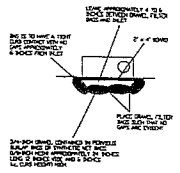


PLAN VIEW



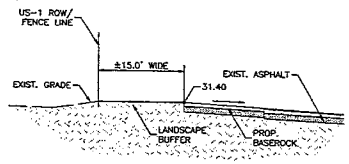
ELEVATION

DROP INLETS

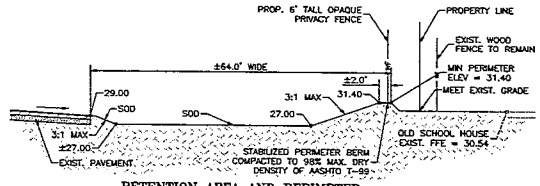


FRONT VIEW

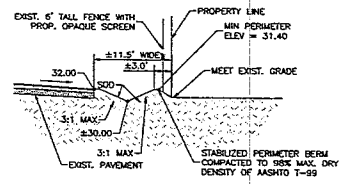
CURB INLETS



SHALLOW SWALE SECTION DETAIL
G-G
N.T.S

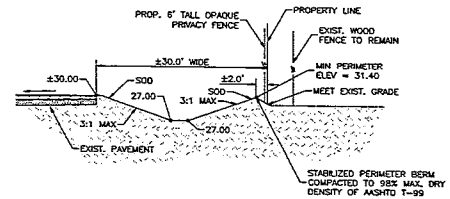


RETENTION AREA AND PERIMETER BERM TYPICAL SECTION DETAIL
B-B
N.T.S

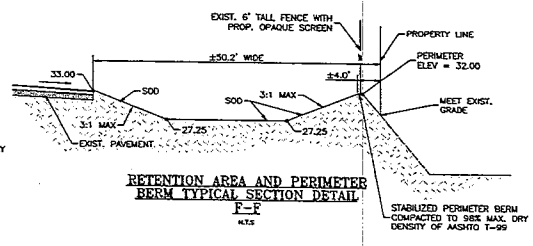


PERIMETER SWALE AND BERM TYPICAL SECTION DETAIL
E-E
N.T.S

TYPICAL SECTION DETAIL
H-H
N.T.S



RETENTION AREA AND PERIMETER BERM TYPICAL SECTION DETAIL
C-C
N.T.S



RETENTION AREA AND PERIMETER BERM TYPICAL SECTION DETAIL
F-F
N.T.S

DATE	BY	REVISIONS
1/26/24	DO	REVISED SECTION S-8 PER TOWN COMMENTS
8/16/23	DO	REVISED PERIMETER AND SECTIONS PER TOWN COMMENTS
4/7/23	DO	FINAL SITE PLAN

Date: 4/15/22
Scale: N/A
Design By: DO
Drawn By: DO/M
Check By: ID

MEGHAN AND BRANDON HAYNES
STOW & GO STORAGE
TOWN OF ST LUCIE VILLAGE, FLORIDA

DETAILS AND CROSS SECTIONS

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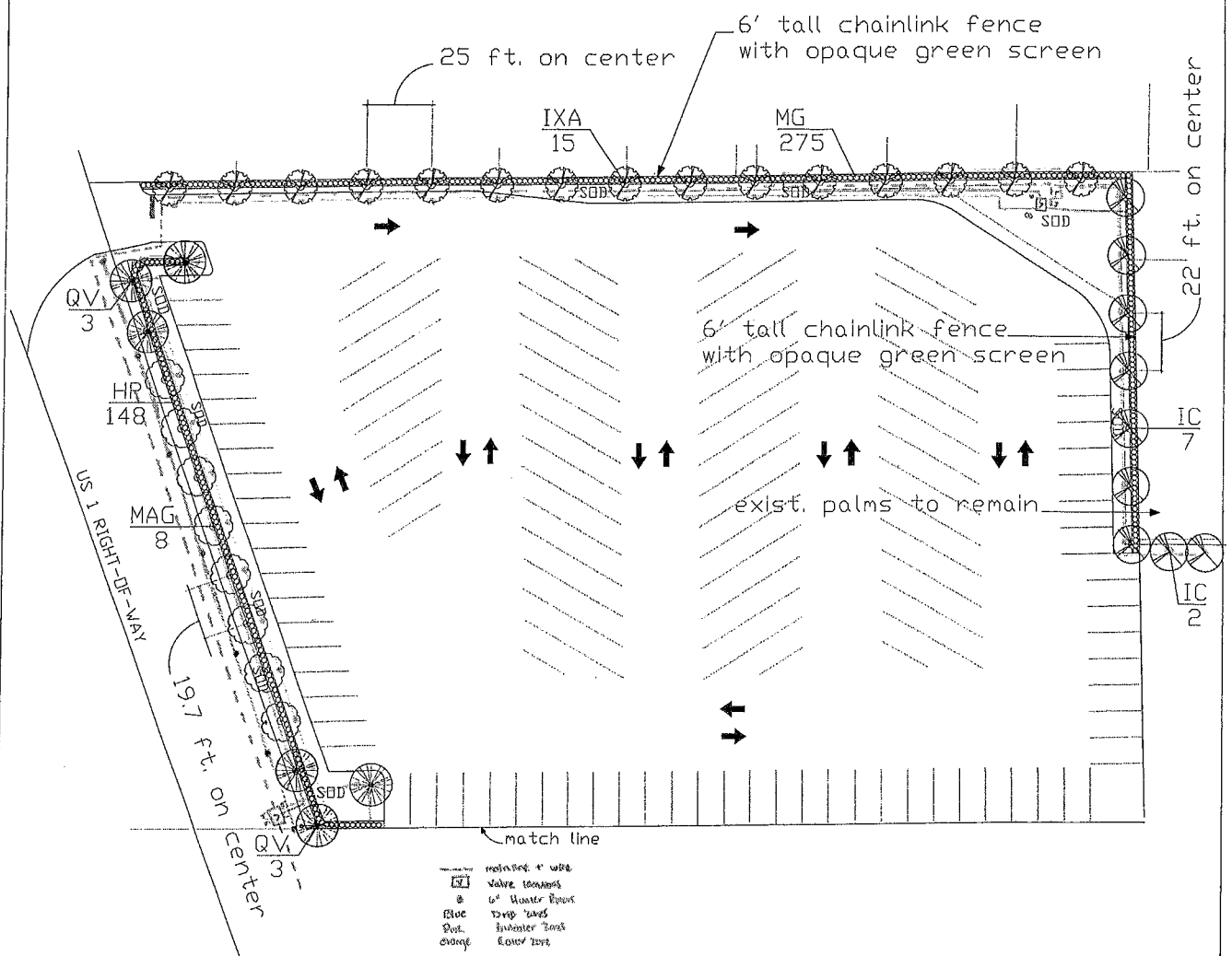
PROJECT #: 22-014
D-1



ST. LUCIE VILLAGE LANDSCAPE ODINANCE:

ONE TREE FOR EVERY 2500 SQ. FT. OF DEVELOPED AREA 88072 DIVIDED BY 2500 = 35.22 = 36 TREES

4 SPECIES OF TREES REQUIRED FOR 31 TO 40 TREES

4 SPECIES OF TREES PROVIDED TOTALING 36 TREES

2 TREES ADDED EAST OF PROPERTY 2 TREES

TOTAL 38 TREES

PLANT MATERIAL LIST

TREES & PALMS (* indicates native tree)

	Code Name	Quantity	Scientific Name	Common Name	Planting Size
*	IC	7	ILEX CASSINE	DAHOON HOLLY	12' X 5', 4'CT 4 'DBH
*	IXA	17	ILEX ATTENUATA	EAST PALATKA HOLLY	12' X 5', 4'CT 4 'DBH
*	MAG	8	MAGNOLIA GRANDIFLORA	MAGNOLIA	12' X 5', 4'CT 4 'DBH
*	QV	6	QUERCUS VIRGINIANA	LIVE OAK	12' X 5', 4'CT 4 'DBH

SHRUBS & GROUNDCOVERS

Code Name	Quantity	Scientific Name	Common Name	Planting Size
HP	128	HAMELIA PATENS	FIREBUSH	20' X 18' #3, 24' OC
MG	275	MISCANTHUS GIGANTEUS	GIANT CHINESE SILVER GRASS	18' X 16' #3, 24' OC

OTHER MATERIALS

MULCH	30	CU. YDS. ENVIRO MULCH (EST.)
SOD	7,600	SQ. FT. BAHIA SOD (EST.)

LANDSCAPE CONTRACTOR NOTES

ALL PLANT MATERIAL SHALL BE FLORIDA #1 OR BETTER. PLANTS WILL BE INSPECTED BY THE LANDSCAPE ARCHITECT. THOSE PLANTS THAT DO NOT MEET THE SPECIFICATIONS IN SIZE OR GRADE WILL BE REJECTED.

THE LANDSCAPE CONTRACTOR SHALL HAVE A COMPETENT FOREMAN IDENTIFIED AT THE BEGINNING OF THE JOB WHO WILL BE ON THE JOB THROUGHOUT THE INSTALLATION OF PLANTING. THIS PERSON SHALL BE RESPONSIBLE FOR DIRECTING THE CREW AND ANY SUBCONTRACTORS WORKING FOR THE LANDSCAPE CONTRACTOR AND SHALL ACT AS THE LANDSCAPE CONTRACTOR'S REPRESENTATIVE TO THE OWNER AND LANDSCAPE ARCHITECT.

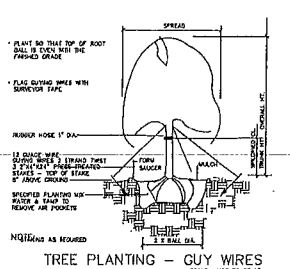
THE LANDSCAPE CONTRACTOR SHALL LAY OUT AREAS TO BE PLANTED AND ARRANGE A MEETING WITH THE LANDSCAPE ARCHITECT FOR APPROVAL BEFORE PLANTING.

THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION OF ALL AREAS TO RECEIVE PLANTS. ALL PLANTS, GRASSES AND WEEDS SHALL BE REMOVED BY HAND, ROTOTILLING OR BY SCRAPING

WITH WATER PRIOR TO PLANTING. IF WATER DOES NOT COMPLETELY DRAIN FROM HOLE WITHIN FOUR HOURS, CONTACT THE LANDSCAPE ARCHITECT FOR APPROVAL BEFORE PLANTING PLANT HOLES ARE TO BE BACKFILLED WITH A HOMOGENEOUS SOIL MIX CONSISTING OF 2 PARTS SANDY TOPSOIL, 2 PARTS PEAT MOSS AND 1 PART COW MANURE OR MILORGANITE. AGRIFORM 20-10-15 PLANTING TABLETS SHALL BE ADDED TO EACH PLANT HOLE ACCORDING TO THE MANUFACTURERS RECOMMENDED APPLICATION RATES. BACKFILL HALFWAY UP THE ROOTBALL, PLACE THE TABLETS BESIDE THE ROOTBALL ABOUT 1 INCH FROM THE ROOT TIPS. DO NOT PLACE TABLET(S) IN BOTTOM OF HOLE.

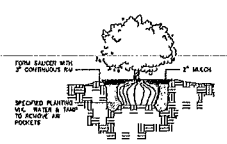
THE CONTRACTOR SHALL PROVIDE THE SPECIFIED MULCH. INSTALL 3" DEPTH OF SPECIFIED MULCH TO ALL AREAS INDICATED ON THE PLAN. THE MULCH SHALL BE INSTALLED AS SHOWN ON THE DETAILS TO ENSURE THAT IT IS NOT INSTALLED TOO CLOSE TO THE PLANT TRUNK OR STEM.

THE LANDSCAPE CONTRACTOR SHALL GUARANTEE THAT ALL PLANT MATERIAL SHALL BE ALIVE AND THRIVING FOR A PERIOD OF ONE YEAR FOLLOWING PLANTING. THE LANDSCAPE CONTRACTOR SHALL REPLACE DEAD OR SICK PLANTS AT NO ADDITIONAL COST TO THE OWNER.



TREE PLANTING – GUY WIRES

SCALE: NOT TO SCALE



SHRUB PLANTING

SCALE: NOT TO SCALE

Ex F

SHEET L-1 OF TWO	SCALE: 1" = 20'	LANDSCAPE PLAN NORTH PORTION STOW & GO STORAGE	DANIEL J. SUGG LANDSCAPE ARCHITECT / SITE PLANNER POST OFFICE BOX 335, JENSEN BEACH, FL 34958 PHONE: (772) 485-1776	DATE: 6/11/22 REV. 8/17/23 REV. 8/21/23 REV. 10/16/23 tree sizes REV. 12/8/23 add 2 trees east

Stormwater Management Report

Engineering Calculations & Supplementary Documents
Supporting a Surface Water Management System Serving

Stow & Go Storage

Location:
Town of St Lucie Village, FL
St Lucie County, PCN:
1433-123-0006-000-3

Prepared by:

GIANGRANDE
Engineering & Planning
Consulting Civil Engineers
710 SE Ocean Boulevard
Stuart, Florida 34994
772-888-9076
FL Certification: 3093

Revised: December 2023

Signed by:

Dylan O'Berry, PE
PE Reg #88512
Date: 12/12/2023

ARTHUR DYLAN O'BERRY LICENSE No. 88512 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Arthur D O'Berry
Location: Giangrande Engineering and Planning, Stuart, FL
Reason: I am the author of this document
Contact Info: email: dylan@gep-llc.com cell: (772) 203-0664
Date: 2023.12.12 14:15:59-05'00'

Ex G

Table of Contents

Appendices

1. PROJECT DESCRIPTION

The Stow & Go Storage facility is owned and operated by Haynes & Son Holdings LLC. It is conveniently situated on the eastern side of US Hwy-1, approximately one mile north of the intersection of US Hwy 1 and SR-A1A. The establishment will be developed utilizing the remnants of a previously demolished building and the existing boat maintenance facility, aiming to provide comprehensive storage solutions for boats, recreational vehicles (RVs), and other similar items. The planned enhancements for the site encompass the refurbishment of the existing asphalt pavement, the utilization shell rock base to stabilize the old building footprint, and the establishment of an on-site stormwater drainage system to ensure water quality and accommodate the full storage capacity of the 100-year, 1-day storm event. Additionally, the site presently incorporates a 260 linear foot exfiltration trench with two inlets.

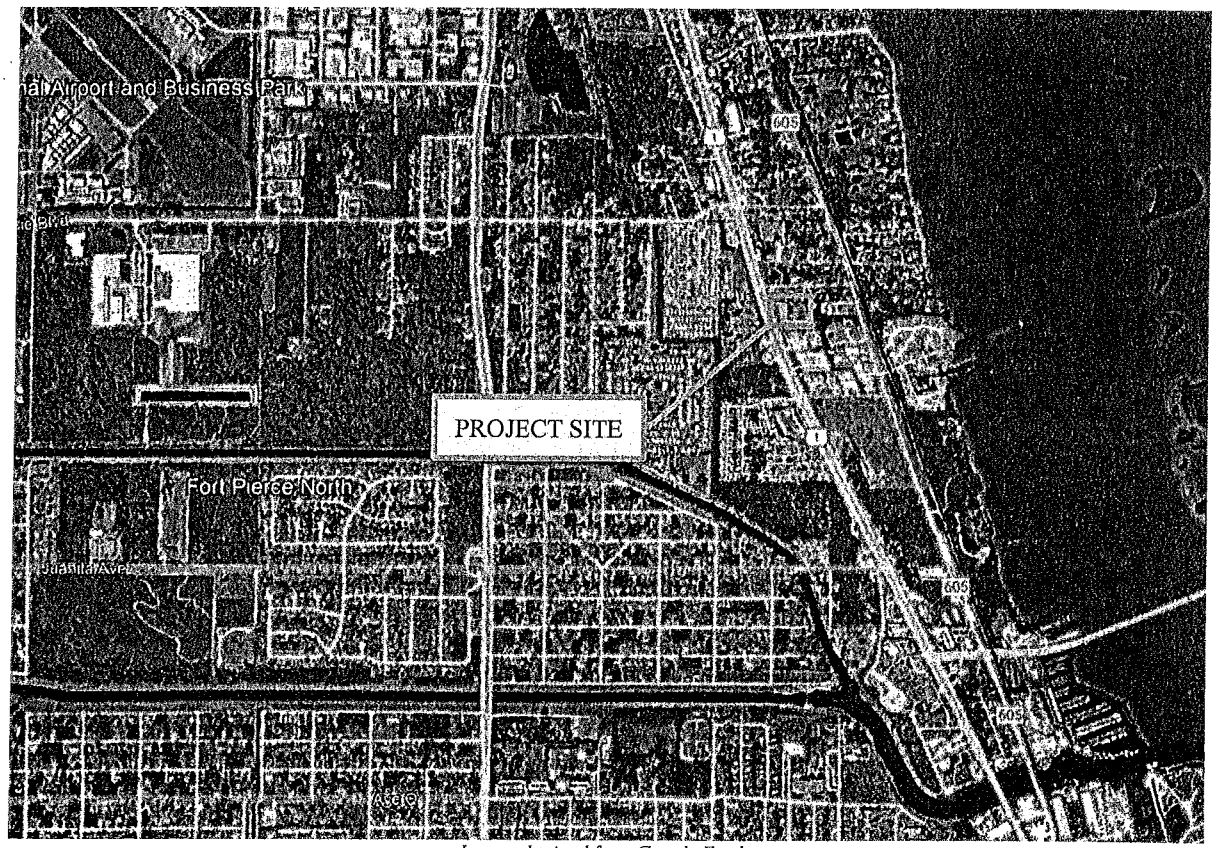


Image obtained from Google Earth.

Figure 1– Location Map

Location - Section 33, Township 34S, Range 40E, St. Lucie County, FL
27°28'51.51"N, 80°20'19.61"W

2. EXISTING CONDITIONS

2.1. EXISTING SITE

The subject site encompasses 3 parcels of land totaling 5.08 acres of land, situated to the east of US Hwy-1. It benefits from convenient accessibility via three FDOT driveways that connect directly to US Hwy-1. According to historical aerials and public records, the site was originally developed prior to 1992 and

subsequently subdivided in 2009. In 2007, the building on the premises was demolished, resulting in the presence of the existing asphalt pavement and drainage inlets. For a comprehensive understanding of the existing site conditions, please refer to the provided aerials and existing conditions maps on Sheet EX-1.

2.2. Existing Site Drainage

The current site drainage involves four sub basins according to the historical drainage patterns of the original site. Sub-Basin "A" drains 1.35 acres towards the northeast corner retention area and lowest point on site. This flow causes flooding in that section during significant storm events. Sub-Basin "B" historically drains 1.21 acres to the south draining into two existing inlets connected by exfiltration trench, effectively preventing any flooding during significant storm events. The Sub-Basin "C" drains 0.39 acres westerly into the pervious area on-site. The Sub-Basin "D" drainages the remaining 2.13 acres to three storm inlets, these inlets are not included in this analysis since no changes were made to this area. A Sub-Basin map is provided in Appendix D.

2.3. Control Elevation

From the Geotechnical report provided by Andersen Andre Consulting Engineers, Inc. (AACE). It was found that the ground was table was lower then 72 inches from existing grade. This was from hand augers done on 4/12/2022 onsite. These finds are correlated from the USGA Soils Map also estimating the ground water to be deeper then 80 inches. With the average ground elevation for the site at 30.65 ft NVAD and both the estimated water table elevations be deeper the 72 and 80 inches. The estimated control elevation was set as 23.17 ft NVAD.

3. Proposed Conditions

3.1. Project Description

The proposed improvements for the site will be to stabilize the old building footprint with an impervious section consisting of 8" shell rock base (LBR 100), and 12" stabilized subgrade (LBR 40) to allow for boat/RV storage, an on-site stormwater drainage area to treat water quality in the northeast corner, and perimeter fencing and landscaping. The water quality treatment volume will be mitigated by the retention area in the East and the exfiltration trench in the middle of the site. See the proposed site plan, on Sheet S-1, for the layout of the future site.

3.2. Land use

Table 1 shows a breakdown of the proposed land use compared to the existing land use for the site. The drainage features of the area outside of the stormwater management area will not be altered from existing conditions. This is why the table below 3.83 acres in total compared to the overall 5.08 acres. The pond bottom for the proposed retention area is at elevation 27.0 ft-NAVD.

Table 1 – Land Use Summary

Land Use Summary			
Land Use	**Pre-Dev (ac)**	**Post-Dev (ac)**	**Difference (ac)**
Open-Space	0.56	0.74	0.18
Old Building Space	0.67	0.00	(-)0.67
Existing Asphalt	2.60	2.42	(-)0.18
Shell Rock Base	0.00	0.67	0.67
Parcel Total	**3.83**	**3.83**	

3.3. WATER QUALITY

Water quality storage is provided for the site based on the greater of 1 inch of rainfall over the project area or the total runoff of 2.5 inches times the percent impervious. Net impervious area was assumed to be inclusive of the existing pavement area, the gravel storage area, and the open space. The required 0.32 ac-ft of storage will be provided in the proposed retention pond based on the 1-ich over project area. Calculations are provided in Appendix C.

3.4. STORMWATER RUNOFF VOLUME

The proposed site conditions have a net neutral generation of stormwater runoff. The following design storms were analyzed.

- The minimum road crown elevation will be above the 5-yr / 1-day.
- The 100-year / 1-day storm was used to review pre vs. post discharge and used for the retention recovery analysis.

Table 1 – Pre vs. Post Runoff Volume Summary

Runoff Volume			
Design Storm	**Pre-Development (ac-ft)**	**Post-Development (ac-ft)**	**Difference (ac-ft)**
5-yr / 1-day	1.45	1.45	0.00
25-yr / 3-day	3.11	3.11	0.00
100-yr / 1-day	3.36	3.36	0.00

Proposed stormwater calculations are provided in Appendix C.

3.5. STORMWATER DESIGN ELEVATION

The proposed dry retention area is sized to contain the required water quality volume for the site. The storage area will be set at or above the peak stage from the 100-year / 1-day storm event. The existing roadway/parking area are set above the 5-year / 1-day. Table 2 below provides a summary of the design stage for this project. Proposed stormwater calculations are provided in Appendix C.

Table 2 – Design Elevation Summary

Design Elevations			
Design Storm	**Post-Development (ft NAVD)**	**Design Elev (ft NAVD)**	**Category**
Water Quality	29.43	33.00	WQ
5-yr / 1-day	30.41	33.30	Road
100-yr / 1-day	31.35	31.40	Stored Elevation

Additional project design information is listed as follows:

- Rainfall: The design storm for this analysis was the 100-year, 24-hour and 5-year, 24-hour rainfall event was estimated to by 12.0 inches and 5.9 inches per Appendix C of SFWMD's Environment Resource Permit Applicant's Handbook Volume II.

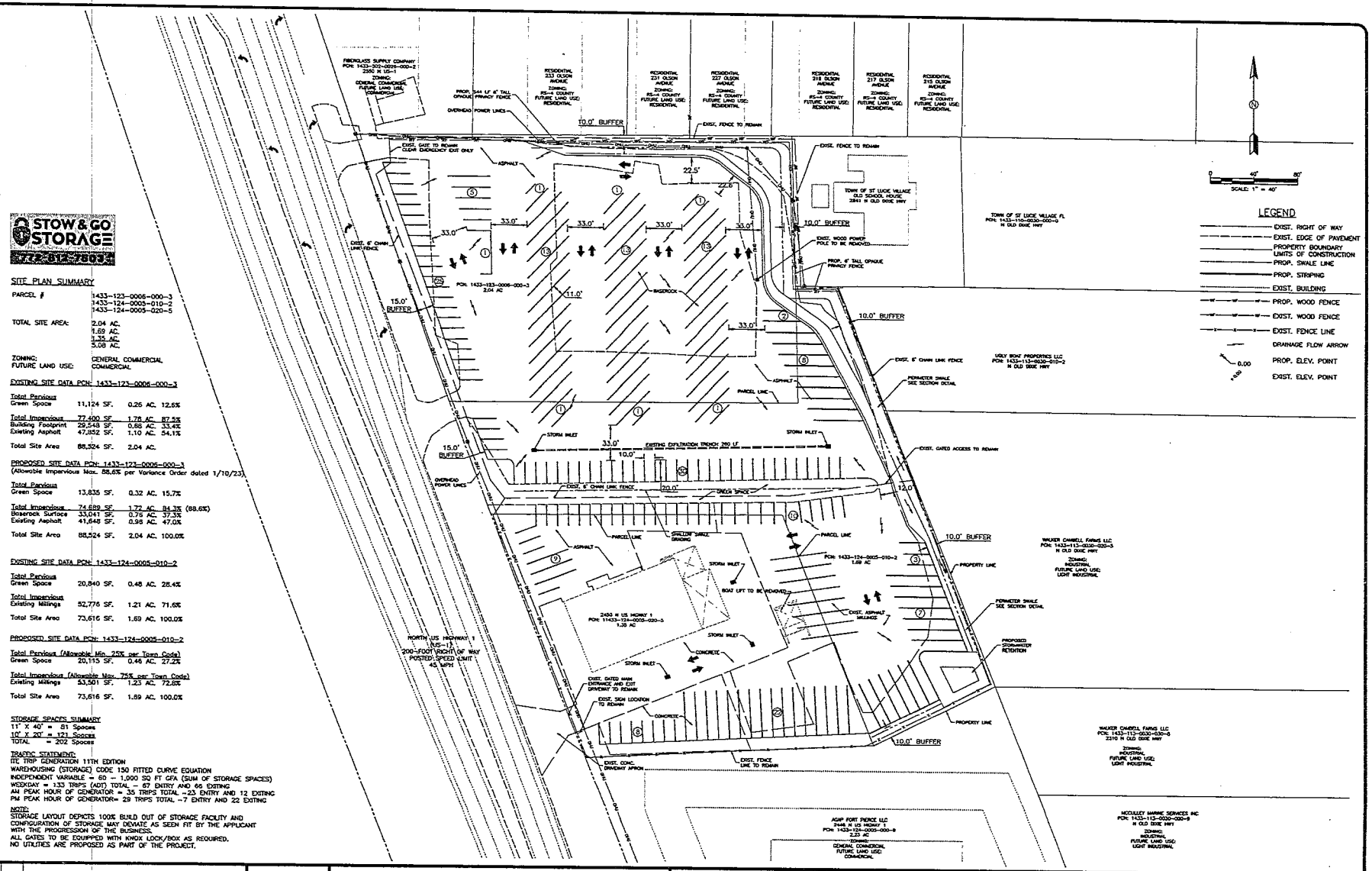
- Outfall: There is no outfall on site, as the site will fully contain the runoff up to the 100 year / 1-day storm event.

- Recovery: The dry retention pond must recover half of its treatment volume in less than five days. In addition, the pond must recover 90% of the 25-year, 3-day runoff volume (evaluated based on the 100-year, 1-day runoff volume) within 12 days from the cessation of the storm event. The 50% treatment volume and 90% runoff volume are recovered 0.061 days and 0.16 days, respectively. The retention area's recovery calculations are provided with the post development calculations in Appendix C.

  Geotechnical Information: The soils onsite were evaluated by Andersen Andre Consulting Engineers, Inc. The soils were to found to be a mixture of poorly graded sands ranging from dark gray to light brown, with trace amounts of rock fragments found within the 0 to 32 inch range. Orange-brown poorly graded sands with a trace amount of clay was found within the 10 to 72 inch range, sampling was terminated at 72 inches.

APPENDICES

Appendix A
Site Plan



DATE	BY	REVISIONS
6/7/23	DO	FINAL SITE PLAN

Date: 6/15/22
Scale: 1" = 40'
Design By: DO
Drawn By: DO/TH
Check By: DG

MEGHAN AND BRANDON HAYNES
STOW & GO STORAGE
TOWN OF ST LUCIE VILLAGE, FLORIDA

FINAL SITE PLAN

GIANGRANDE ENGINEERING AND PLANNING
710 SE OCEAN BLVD.
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Cert. No. 30901

A. DYLAN O'BERRY, P.E.
License No: 88512

PROJECT #: 22-014

S-1

Appendix B

Stormwater Calculations – Existing Conditions

GIANGRANDE
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Pre-Development Land Use Calculations
Project Explanation

Project Name:	**Stow & Go Storage**		
Project #:	**22-014**		
Engineer:	**DCC**	**Engineer:**	
Date:	**8/23/2022**	**Revision Date:**	

Computation Type: Land Use & Stage-Storage
Datum: NAVD

Average Ground Elevation (EL_{grnd}) = 30.65 ft-NAVD **Source: USDA Soil Map**
Control Elevation (CE) = 23.17 ft-NAVD

Site Land Use

	Green Space	Compacted Coquina	Existing Asphalt	Exist. Area 4	Exist. Area 5	Total
	(ac)	(ac)	(ac)	(ac)	(ac)	(ac)
Percentage of On-Site	20.1%	19.8%	60.1%	0.00%	0.00%	
Total Areas (SF)	33,637 SF	33,041 SF	100,333 SF	0 SF	0 SF	167,011 SF
Total Areas (A_t)	0.77	0.76	2.30	0.00	0.00	3.83
Bldg. %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bldg. Area (A_r)	0.00	0.00	0.00	0.00	0.00	0.00
Pervious %	100.00%	0.00%	0.00%	0.00%	0.00%	20.14%
Pervious Area (A_p)	0.77	0.00	0.00	0.00	0.00	0.77
Impervious %	0.00%	100.00%	100.00%	0.00%	0.00%	79.86%
Impervious Area (A_i)	0.00	0.76	2.30	0.00	0.00	3.06
Open Water %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Open Water Area (Ac.)	0.00	0.00	0.00	0.00	0.00	0.00

GIANGRANDE
Engineering & Planning

Pre-Development Stage-Storage Calculations
Project Explanation

Storage Type: Stage-Volume
Starting Stage = 27.00
Ending Stage = 34.00
Stage Increment = 0.10

Name	Green Space	Compacted Coquina	Existing Asphalt	
Area	**0.77**	**0.76**	**2.30**	
Start Elev	**28.50**	**29.07**	**28.57**	
End Elev	**32.80**	**31.61**	**33.30**	
Stage Feet NAVD	Linear Storage Ac-ft	Linear Storage Ac-ft	Linear Storage Ac-ft	Total Storage Ac-ft
27.00	0.00	0.00	0.00	0.00
27.10	0.00	0.00	0.00	0.00
27.20	0.00	0.00	0.00	0.00
27.30	0.00	0.00	0.00	0.00
27.40	0.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00	0.00
27.60	0.00	0.00	0.00	0.00
27.70	0.00	0.00	0.00	0.00
27.80	0.00	0.00	0.00	0.00
27.90	0.00	0.00	0.00	0.00
28.00	0.00	0.00	0.00	0.00
28.10	0.00	0.00	0.00	0.00
28.20	0.00	0.00	0.00	0.00
28.30	0.00	0.00	0.00	0.00
28.40	0.00	0.00	0.00	0.00
28.50	0.00	0.00	0.00	0.00
28.60	0.00	0.00	0.00	0.00
28.70	0.00	0.00	0.00	0.01
28.80	0.01	0.00	0.01	0.02
28.90	0.01	0.00	0.03	0.04
29.00	0.02	0.00	0.05	0.07
29.10	0.03	0.00	0.07	0.10
29.20	0.04	0.00	0.10	0.14
29.30	0.06	0.01	0.13	0.20
29.40	0.07	0.02	0.17	0.26
29.50	0.09	0.03	0.21	0.33
29.60	0.11	0.04	0.26	0.41
29.70	0.13	0.06	0.31	0.50
29.80	0.15	0.08	0.37	0.60
29.90	0.18	0.10	0.43	0.71
30.00	0.20	0.13	0.50	0.83
30.10	0.23	0.16	0.57	0.96
30.20	0.26	0.19	0.65	1.10
30.30	0.29	0.23	0.73	1.25
30.40	0.32	0.26	0.82	1.40
30.50	0.36	0.31	0.91	1.57

Pre-Development Stage-Area Calculations
Project Explanation

Storage Type:	**Stage-Area**
Starting Stage =	**3.00**
Ending Stage =	**6.50**
Stage Increment =	**0.10**

Name	**Green Space**	**Compacted Coquina**	**Existing Asphalt**	
Area	**0.77**	**0.76**	**2.30**	
Start Elev	**28.50**	**29.07**	**28.57**	
End Elev	**32.80**	**31.61**	**33.30**	
Stage Feet NAVD	Linear Area Ac	Linear Area Ac	Linear Area Ac	Total Area Ac
3.00	0.00	0.00	0.00	0.00
3.10	0.00	0.00	0.00	0.00
3.20	0.00	0.00	0.00	0.00
3.30	0.00	0.00	0.00	0.00
3.40	0.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	0.00
3.60	0.00	0.00	0.00	0.00
3.70	0.00	0.00	0.00	0.00
3.80	0.00	0.00	0.00	0.00
3.90	0.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	0.00
4.10	0.00	0.00	0.00	0.00
4.20	0.00	0.00	0.00	0.00
4.30	0.00	0.00	0.00	0.00
4.40	0.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	0.00
4.60	0.00	0.00	0.00	0.00
4.70	0.00	0.00	0.00	0.00
4.80	0.00	0.00	0.00	0.00
4.90	0.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	0.00
5.10	0.00	0.00	0.00	0.00
5.20	0.00	0.00	0.00	0.00
5.30	0.00	0.00	0.00	0.00
5.40	0.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	0.00
5.60	0.00	0.00	0.00	0.00
5.70	0.00	0.00	0.00	0.00
5.80	0.00	0.00	0.00	0.00
5.90	0.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	0.00
6.10	0.00	0.00	0.00	0.00
6.20	0.00	0.00	0.00	0.00
6.30	0.00	0.00	0.00	0.00
6.40	0.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	0.00

PRE-Development Stormwater Calculations

GIANGRANDE Engineering & Planning

Project Explanation

Revised:

Project: Stow & Go Storage
Project #: 22-014

Engineer: DCC
Date: 8/23/2022

Land Use Table

Use	Imp. (ac)	Bldg. (ac)	Pervious (ac)	Total (ac)
Basin =	3.06	0.00	0.77	3.83
TOTAL =	3.06	0.00	0.77	3.83

Find Curve Number:

Avg. Pervious Ground El. =	30.65
Control Elev. =	23.17
Distance to Water Table =	7.48

Soil Storage Table

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depression Storage (in)
0.0	0.0	0.0	0.0
1.0	0.6	0.6	0.6
1.5	1.6	1.6	1.4
2.0	2.5	2.5	2.1
2.5	4.6	4.0	3.3
3.0	6.6	5.4	4.4
3.5	8.8	7.2	5.6
4.0	10.9	9.0	6.8

Find the basin's soil classification and input below as "Soil Storage" using the above "Depth to W.T.".

Soil Type =	Flatwoods		
Max. Available Soil Storage (S_{max}) =	9.00	inches	
Compaction Factor ($F_{compact}$) =	25%		(Use 25% for developed site)
Compacted Soil Storage ($S_{compact}$) =	6.75	inches	$(S_{max})(F_{compact})$
Available Soil Storage (S_{avail}) =	1.36	inches	$(A_p)(S_{compact})/(A_t)$
Curve Number (CN) =	88		$1000 / (S_{avail}+10)$

Notes:
1. Soil Storage Table taken from Section 5.7.4.2 of the SFWMD ERP Applicant's Handbook Volume II.
2. Curve Number determination based on method presented in USDA NRCS Technical Release 55 (TR-55) "Urban Hydrology for Small Watersheds".

Appendix C

Stormwater Calculations – Proposed Conditions

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Post-Development Land Use Calculations
Project Explanation

Project Name:	Stow & Go Storage		
Project #:	22-014		
Engineer:	DCC	Engineer:	
Date:	8/23/2022	Revision Date:	

Computation Type: Land Use & Stage-Storage
Datum: NAVD

Average Ground Elevation (EL_{gmd}) = 30.65 ft-NAVD Source: USDA Soil Map
Control Elevation (CE) = 23.17 ft-NAVD

Site Land Use

	Open Space	Compacted Coquina	Existing Asphalt	Retention Pond Bottom	Exist. Area 5	Total
	(ac)	(ac)	(ac)	(ac)	(ac)	(ac)
Percentage of On-Site	17.5%	19.8%	60.1%	2.68%	0.00%	
Total Areas (SF)	29,159 SF	33,041 SF	100,333 SF	4,478 SF	0 SF	167,011 SF
Total Areas (A_t)	0.67	0.76	2.30	0.10	0.00	3.83
Bldg. %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Bldg. Area (A_r)	0.00	0.00	0.00	0.00	0.00	0.00
Pervious %	100.00%	0.00%	0.00%	100.00%	0.00%	20.14%
Pervious Area (A_p)	0.67	0.00	0.00	0.10	0.00	0.77
Impervious %	0.00%	100.00%	100.00%	0.00%	0.00%	79.86%
Impervious Area (A_i)	0.00	0.76	2.30	0.00	0.00	3.06
Open Water %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Open Water Area (Ac.)	0.00	0.00	0.00	0.00	0.00	0.00

GIANGRANDE
Engineering & Planning

Post-Development Stage-Storage Calculations
Project Explanation

Storage Type: Stage-Volume
Starting Stage = 25.00
Ending Stage = 32.60
Stage Increment = 0.10

Name	Open Space	Compacted Coquina	Existing Asphalt	Retention Pond	Exist. Area 8	Exist. Area 9	
Area	0.67	0.76	2.30	0.10	0.00	0.00	
Start Elev	28.50	29.07	28.57	27.00	0.00	0.00	
End Elev	33.00	32.50	33.00	33.00	0.00	0.00	
Stage Feet NAVD	Linear Storage Ac-ft	Linear Storage Ac-ft	Linear Storage Ac-ft	Linear Storage Ac-ft	Vert Storage Ac-ft	Vert Storage Ac-ft	Total Storage Ac-ft
25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.80	0.00	0.00	0.00	0.01	0.00	0.00	0.01
27.90	0.00	0.00	0.00	0.01	0.00	0.00	0.01
28.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
28.10	0.00	0.00	0.00	0.01	0.00	0.00	0.01
28.20	0.00	0.00	0.00	0.01	0.00	0.00	0.01
28.30	0.00	0.00	0.00	0.01	0.00	0.00	0.01
28.40	0.00	0.00	0.00	0.02	0.00	0.00	0.02
28.50	0.00	0.00	0.00	0.02	0.00	0.00	0.02

GIANGRANDE
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Post-Development Stage-Area Calculations
Project Explanation

Storage Type:	**Stage-Area**
Starting Stage =	**3.00**
Ending Stage =	**6.50**
Stage Increment =	**0.10**

Name	**Open Space**	**Compacted Coquina**	**Existing**	**Retention Pond**	
Area	**0.67**	**0.76**	**2.30**	**0.10**	
Start Elev	**28.50**	**29.07**	**28.57**	**27.00**	
End Elev	**33.00**	**32.50**	**33.00**	**33.00**	
Stage Feet NAVD	Linear Area Ac	Linear Area Ac	Linear Area Ac	Linear Area Ac	Total Area Ac
3.00	0.00	0.00	0.00	0.00	0.00
3.10	0.00	0.00	0.00	0.00	0.00
3.20	0.00	0.00	0.00	0.00	0.00
3.30	0.00	0.00	0.00	0.00	0.00
3.40	0.00	0.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	0.00	0.00
3.60	0.00	0.00	0.00	0.00	0.00
3.70	0.00	0.00	0.00	0.00	0.00
3.80	0.00	0.00	0.00	0.00	0.00
3.90	0.00	0.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	0.00	0.00
4.10	0.00	0.00	0.00	0.00	0.00
4.20	0.00	0.00	0.00	0.00	0.00
4.30	0.00	0.00	0.00	0.00	0.00
4.40	0.00	0.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	0.00	0.00
4.60	0.00	0.00	0.00	0.00	0.00
4.70	0.00	0.00	0.00	0.00	0.00
4.80	0.00	0.00	0.00	0.00	0.00
4.90	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	0.00	0.00
5.10	0.00	0.00	0.00	0.00	0.00
5.20	0.00	0.00	0.00	0.00	0.00
5.30	0.00	0.00	0.00	0.00	0.00
5.40	0.00	0.00	0.00	0.00	0.00
5.50	0.00	0.00	0.00	0.00	0.00
5.60	0.00	0.00	0.00	0.00	0.00
5.70	0.00	0.00	0.00	0.00	0.00
5.80	0.00	0.00	0.00	0.00	0.00
5.90	0.00	0.00	0.00	0.00	0.00
6.00	0.00	0.00	0.00	0.00	0.00
6.10	0.00	0.00	0.00	0.00	0.00
6.20	0.00	0.00	0.00	0.00	0.00
6.30	0.00	0.00	0.00	0.00	0.00
6.40	0.00	0.00	0.00	0.00	0.00
6.50	0.00	0.00	0.00	0.00	0.00

Post-Development Stormwater Calculations

Project Explanation

Revised: _____

Project: Stow & Go Storage
Project #: 22-014

Engineer: DCC
Date: 8/23/2022

Land Use Table

Use	Imp. (ac)	Bldg. (ac)	Pervious (ac)	Total (ac)
Basin =	3.06	0.00	0.77	3.83
TOTAL =	3.06	0.00	0.77	3.83

Find Curve Number:

Avg. Pervious Ground El. =	30.65
Control Elev. =	23.17
Distance to Water Table =	7.48

Soil Storage Table

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depression Storage (in)
0.0	0.0	0.0	0.0
1.0	0.6	0.6	0.6
1.5	1.6	1.6	1.4
2.0	2.5	2.5	2.1
2.5	4.6	4.0	3.3
3.0	6.6	5.4	4.4
3.5	8.8	7.2	5.6
4.0	10.9	9.0	6.8

Find the basin's soil classification and input below as "Soil Storage" using the above "Depth to W.T.".

Soil Type =	Flatwoods		
Max. Available Soil Storage (S_{max}) =	9.00	inches	
Compaction Factor ($F_{compact}$) =	25%		(Use 25% for developed site)
Compacted Soil Storage ($S_{compact}$) =	6.75	inches	$(S_{max})(F_{compact})$
Available Soil Storage (S_{avail}) =	1.36	inches	$(A_p)(S_{compact})/(A_t)$
Curve Number (CN) =	**85**		$1000 / (S_{avail}+10)$

Notes:
1. Soil Storage Table taken from Section 5.7.4.2 of the SFWMD ERP Applicant's Handbook Volume II.
2. Curve Number determination based on method presented in USDA NRCS Technical Release 55 (TR-55) "Urban Hydrology for Small Watersheds".

Post-Development Water Quality Calculations

GIANGRANDE Engineering & Planning

Revised: _____

Project: Stow & Go Storage — Engineer: DCC

Project #: 22-014 — Date: 23-Aug-22

1-inch Over the Project Area

(Treated Volume) 1-inch * 1-ft/12-in * 3.83 (PROJECT AREA) = 0.32 (TREATED VOLUME) ac-ft

2.5-inches Times the Percent Impervious

(Site Area) 3.83 (PROJECT AREA (AC)) - (0.00 (LAKES (AC)) + 0.00 (ROOFS (AC))) = 3.83 (SITE AREA) ac

(Impervious Area) 3.83 (SITE AREA (AC)) - 0.77 (PERVIOUS AREA (AC)) = 3.06 (IMPERVIOUS AREA) ac

(% Impervious) IMPERVIOUS AREA * 100% / SITE AREA (AC) = 79.86%

(2.5-in * % Imp.) 2.5-inches * 79.86% (PERCENT IMPERVIOUS) = 2.00 (INCHES TO BE TREATED) in

(Treated Volume) 2.00 (TREATED (IN)) * 1-ft/12-in * 3.83 (PROJECT AREA - LAKES (AC)) = 0.64 (TREATED VOLUME) ac-ft

Required Wet Detention =	**0.64**	ac-ft
Required Dry Detention (75% of Wet Detention) =	**0.48**	ac-ft
Required Retention (50% of Wet Detention) =	**0.32**	ac-ft
Treatment System Type	**Retention**	
Treatment Volume Required =	**0.32**	ac-ft
Direct Discharge to OFW?	**No**	
Total Treatment Volume Required =	**0.32**	ac-ft
Water Quality Elevation (EL_{wq}) =	**29.43**	ft NAVD

EXFILTRATION TRENCH DESIGN

Project: Stow & Go Storage **Engineer:** DCC
Project #: 22-014 **Date:** 8/23/2022

Water Quality Volume = **0.32** **Ac-ft**

$$L = \frac{V}{(K(H_2*W+2*H_2*D_u-D_u^2+2*H_2*D_s)+(1.39*10^{-4})*W*D_u)}$$ (Dry System)

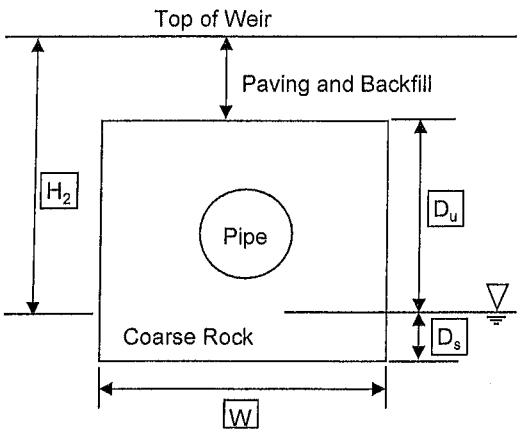
$$L = \frac{V}{(K(2*H_2*D_u-D_u^2+2*H_2*D_s)+(1.39*10^{-4})*W*D_u)}$$ (Wet System)

V	Volume Treated	**3.83**	Ac-in
W	Trench Width	**3.00**	ft
K	Hydraulic Conductivity *	**6.55E-04**	cfs/ft^2-ft.head
H_2	Depth to Water Table	**6.65**	ft
D_u	Non Saturated Trench Depth	**3.00**	ft
D_s	Saturated Trench Depth (feet)	**0.00**	ft
L	**Length of Trench Required**	**111**	ft

$$V = L*(K(H_2*W+2*H_2*D_u-D_u^2+2*H_2*D_s)+(1.39*10^{-4})*W*D_u)$$ (Dry System)

$$V = L*(K(2*H_2*D_u-D_u^2+2*H_2*D_s)+(1.39*10^{-4})*W*D_u)$$ (Wet System)

L	Length of Trench Provided	**260**	ft
W	Trench Width	**3.00**	ft
K	Hydraulic Conductivity (cfs/ft^2-ft.head)	**6.55E-04**	
H_2	Depth to Water Table	**6.65**	ft
D_u	Non Saturated Trench Depth	**3.00**	ft
D_s	Saturated Trench Depth	**0.00**	ft
V	**Volume Treated**	**8.99**	Ac-in
		0.749	Ac-ft



30.15 NAVD
29.35 NAVD
Pipe Invert **27.85 NAVD**
23.50 NAVD
26.35 NAVD

* Hydraulic Conductivity based on AACE Geotechnical Investigation, file No. 22-245

Estimated Required Attenuation

Project Explanation

GIANGRANDE Engineering & Planning

Revised:

Project: Stow & Go Storage — Engineer: DCC

Project #: 22-014 — Date: 8/23/2022

Pre-Developed Runoff

5 Year - 1 Day

Area, A (ac) = 3.83

Soil Storage, S (inches) = 1.36

Curve Number, CN = 1000/(S+10)

= 88

5 Year - 1 Day Rainfall, P (inches) = 5.9 (From Figure C-8 SFWMD ERP Applicant's Handbook Volume II

Depth of Runoff, Q (inches) = $(P - 0.2S)^2/(P + 0.8S)$

= 4.53

Volume, V (AC-FT) = A * Q

= 1.45

Post Developed Runoff

5 Year - 1 Day

Area, A (ac) = 3.83

Soil Storage, S (inches) = 1.36

Curve Number, CN = 1000/(S+10) =

85

5 Year - 1 Day Rainfall, P (inches) = 5.9 (From Figure C-8 SFWMD ERP Applicant's Handbook Volume II

Depth of Runoff, Q (inches) = $(P - 0.2S)^2/(P + 0.8S)$

= 4.53

Volume, V (AC-FT) = A * Q

= 1.45

5Y-1D Elevation = 30.41 ft NAVD

GIANGRANDE
Engineering & Planning

Estimated Required Attenuation

Project Explanation

Revised:

Project: Stow & Go Storage Engineer: DCC

Project #: 22-014 Date: 8/23/2022

Pre-Developed Runoff

100 Year - 1 Day

Area, A (ac) = 3.83

Soil Storage, S (inches) = 1.36

Curve Number, CN = 1000/(S+10)

= 88

100 Year - 1 Day Rainfall, P (inches) = 12 (From Figure C-8 SFWMD ERP Applicant's Handbook Volume II

Depth of Runoff, Q (inches) = $(P - 0.2S)^2/(P + 0.8S)$

= 10.51

Volume, V (AC-FT) = A * Q

= 3.36

Post Developed Runoff

100 Year - 1 Day

Area, A (ac) = 3.83

Soil Storage, S (inches) = 1.36

Curve Number, CN = 1000/(S+10) = 31

85

100 Year - 1 Day Rainfall, P (inches) = 12 (From Figure C-8 SFWMD ERP Applicant's Handbook Volume II

Depth of Runoff, Q (inches) = $(P - 0.2S)^2/(P + 0.8S)$

= 10.51

Volume, V (AC-FT) = A * Q

= 3.36

100Y-1D Elevation = 31.35 ft NAVD

Pond Recovery Calculations

Methodology for Estimating Vertical Unsaturated Flow -- Modified Green and Ampt Infiltration
Methodology for Estimating Lateral Saturated Flow -- Andreyev and Wiseman (1989)

Project: Stow & Go Storage
Project #: 22-014
Engineer: DCC
Date: 6/5/2023

Project Area =	**3.83**	acres		
% Impervious =	**79.86%**			
Off-site Drainage Area =	**0**	acres		
Pond Bottom Elevation =	**27.00**	FT-NAVD		
Wet Season Water Table =	**23.17**	FT-NAVD		
Impervious Layer Elevation =	**0.00**	FT-NAVD		
100y/1d Storage Volume =	**3.358**	ac-ft		
=	**146,271**	ft^3	at EL	**31.25** FT-NAVD
90% of 100y/1d Storage Volume =	**3.022**	ac-ft		
=	**131,644**	ft^3	at EL	**31.26** FT-NAVD
50% of 100y/1d Storage Treatment Volume =	**1.679**	ac-ft		
=	**73,136**	ft^3	at EL	**31.26** FT-NAVD
Fillable porosity (f) =	**0.3**			
Factor of Safety (FS) =	**2**			
Hydraulic Conductivity (K) =	**6.55E-04**	cfs/ft^2-ft.head		
=	**56.59**	ft/day		
Pond Bottom Area (A_b) =	**0.10**	acres		
=	**4356.0**	ft^2	Assume a rect. Pond	
			L =	**350.0** ft
			W =	**17.5** ft

Time to Recover Half of Treatment Volume:

Height of water above pond bottom (h_v) =	**4.26**	ft
Height of pond bottom above WSWT (h_b) =	**3.83**	ft
Height of water reqd to saturate soil (h_u) =	**1.149**	ft
Unsaturated Vol. (V_u) = $A_b h_b f$ =	**5,005**	ft^3

Is Treatment Volume ≤ V_u? **NO**
Is $h_v \leq h_u$? **NO**
If either of the above answers is YES, then infiltration is entirely under vertical unsaturated flow, otherwise it also is under saturated lateral flow

Vertical Unsaturated Flow

Unsaturated K = 2/3*K =	**37.73**	ft/day	
Infiltration Rate (I_d) = K/2 =	**18.86**	ft/day	
time to saturation (t_{sat}) =	**0.061**	days	**< 5 days, so OK**

Time to Recover 90% of Volume:

Height of water above pond bottom (h_v) =	**4.26**	ft
Height of pond bottom above WSWT (h_b) =	**3.83**	ft
Height of water reqd to saturate soil (h_u) =	**1.149**	ft
Unsaturated Vol. (V_u) = $A_b h_b f$ =	**5,005**	ft^3

Is Treatment Volume ≤ V_u? **NO**

Is $h_v \leq h_u$? **NO**

If either of the above answers is YES, then infiltration is entirely under vertical unsaturated flow, otherwise it also is under saturated lateral flow

Vertical Unsaturated Flow

Unsaturated K = 2/3*K =	**37.73**	ft/day		
Infiltration Rate (I_d) = K/2 =	**18.86**	ft/day		
time to saturation (t_{sat}) =	**0.061**	days		
Remaining Volume =	**126,639**	ft^3		
=	**2.907**	ac-ft	at EL	**31.20** FT-NAVD

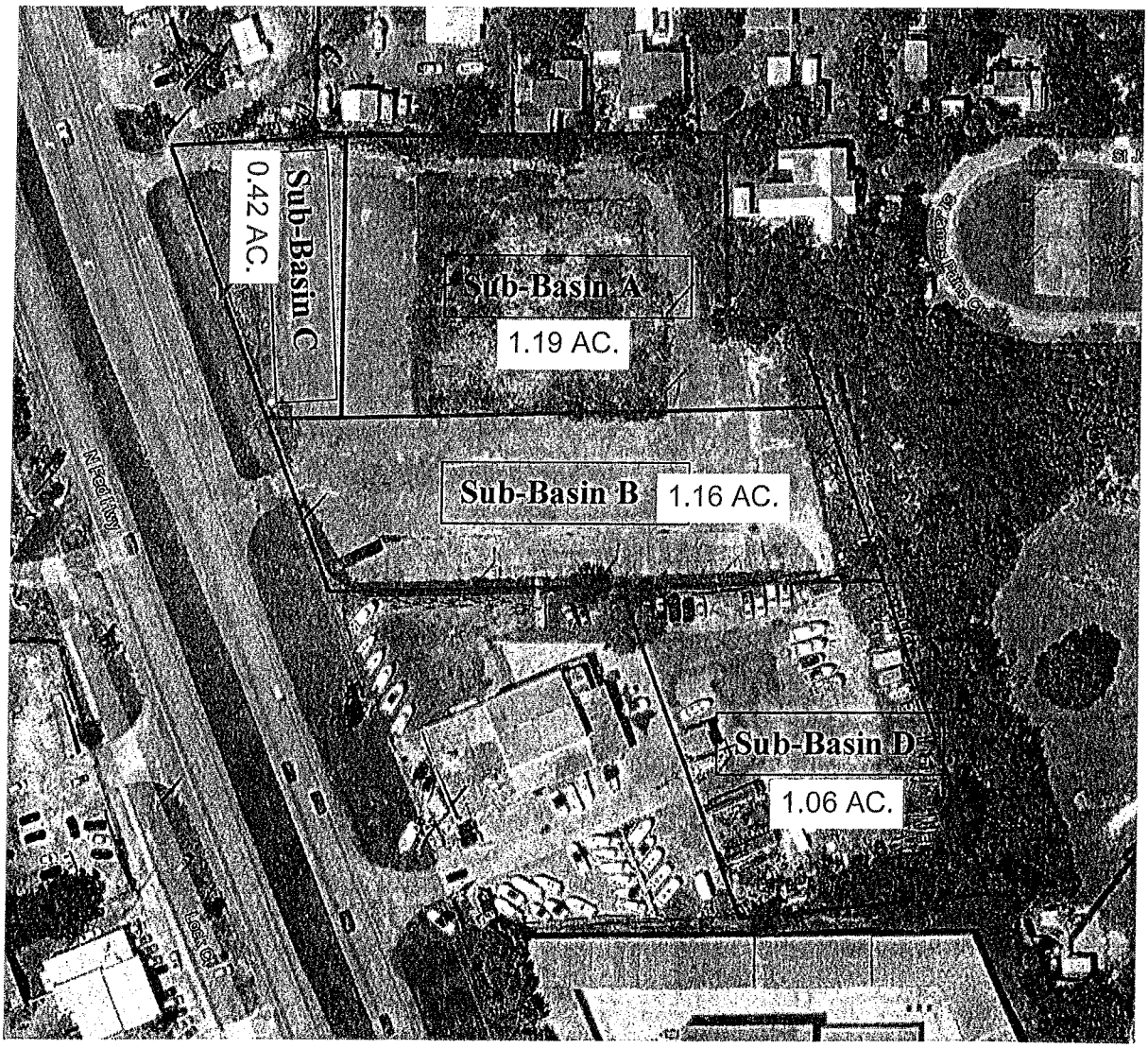
Saturated Lateral Flow

Height of water above WSWT at time t (h_c) =	**3.83**	ft (at $t = t_{total}$, $h_c = h_b$)
Height above pond bottom for remaining vol. (h_2) =	**4.20**	ft
$H_T = h_2 + h_b$ =	**8.03**	ft
$F_Y = h_c / H_T$ =	**0.48**	
L:W ratio = L/W =	**20.00**	
therefore, F_x =	**0.75**	
Initial saturated thickness of aquifer (H) =	**23.17**	ft
Avg saturated thickness of aquifer (D) = $H + h_c/2$ =	**25.09**	ft
$t = W^2 / 4*K*D*F_x^2$ =	**0.10**	days
$t_{total} = t_{sat} + t$ =	**0.16 days**	**< 12 days, so OK**

Notes:

1. Impervious layer elevation assumed from USGS Water Resources Investigations Report 03-4242
2. Fillable porosity (f) assumed based on typical value for sandy soils
3. F_x from Dimensionless Curves Relating Basin Design Parameters to Basin Water Level in a Rectangular Basin over an Unconfined Aquifer (f=0.3) (Source: Andreyev and Wiseman, 1989)

Appendix D
Sub-Basin Map



SUB-BASIN
A = 1.19 AC.
B = 1.16 AC.
C = 0.42 AC.
D = 1.06 AC.
3.83 AC.

REV 12/12/23

Appendix E

Geotechnical Report

(Provided by: Andersen Andre Consulting Engineers, Inc.)

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.
Geotechnical Engineering
Construction Materials Testing
Environmental Consulting

AACE File No. 22-245
August 7, 2022

Giangrande Engineering & Planning, Inc.
22081 SE Ocean Boulevad, Suite 1A
Stuart, FL 34996

Attention: Mr. Dylan O'Berry, P.E.

SUMMARY REPORT
GEOTECHNICAL ENGINEERING CONSULTING
STOW & GO | 2500 NORTH US HIGHWAY ONE
FORT PIERCE, ST. LUCIE COUNTY, FLORIDA

INTRODUCTION

In accordance with your request and authorization, Andersen Andre Consulting Engineers, Inc. (AACE) has completed the scope of work outlined in our Proposal No. P22-2272 (dated 04/12/22). This report documents our field work and presents our findings.

PROJECT UNDERSTANDING

The subject site is located at 2500 North US Highway One in Fort Pierce, St. Lucie County, Florida. Based on our review of the provided project-related information, we understand that it is proposed to improve the site for the purpose of constructing a boat storage yard. We further understand that no Geotechnical Engineering services are being requested.

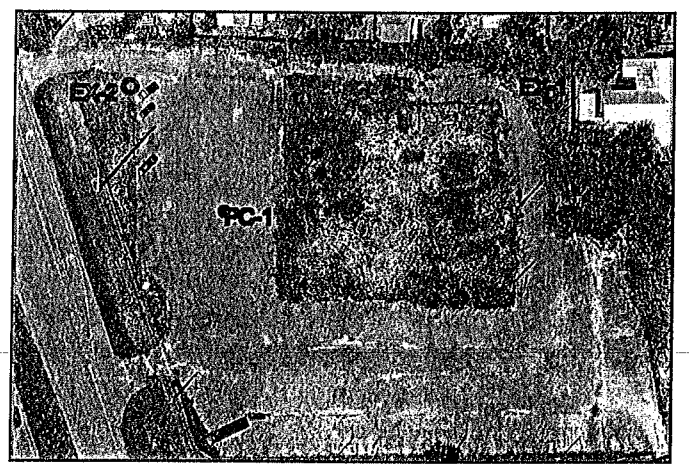
FIELD EXPLORATION PROGRAM

To explore the site conditions, the following requested exploration program was completed:

Field Exploration Program

Field Work Type	Standard	# of Borings/Tests	Depth Below Grade [feet]	Location
Pavement Core and Auger Boring (PC-#)	ASTM D1452	1	4	See Below
Soil Hydraulic Conductivity Test (EX-#)	SFWMD ERPIM[1]	2	6	See Below

(1) SFWMD Environmental Resource Permit Information Manual



Our field exploration program was completed August 5, 2022. The shown field work locations were determined in the field by our field crew using the provided schematic, aerial photographs, existing site features, and tape/wheel measurements. The locations should be considered accurate only to the degree implied by the method of measurement used.

FINDINGS

Soil Hydraulic Conductivity Tests

The soil hydraulic conductivity (exfiltration) tests were performed in accordance with methods described in the South Florida Water Management District (SFWMD) Permit Information Manual.

In summary, the exfiltration tests yielded the following results:

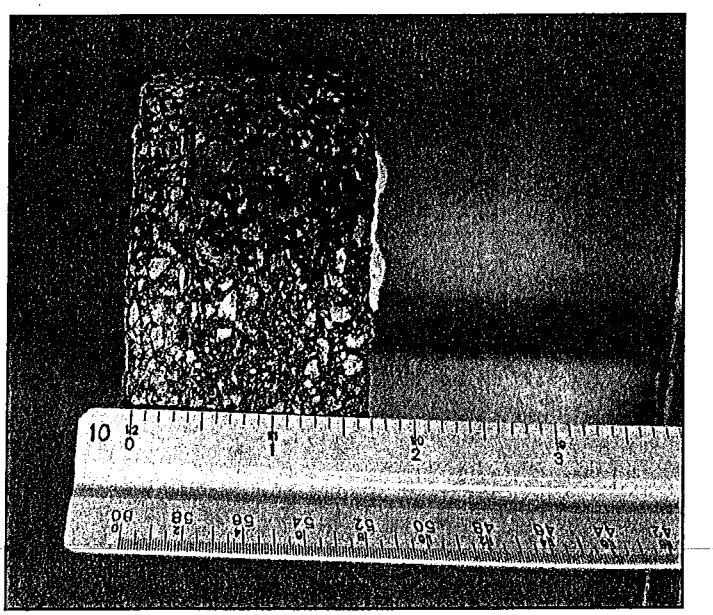
- EX-1; $K = 7.4 \times 10^{-4}$ cfs/ft^2-ft. head
- EX-2; $K = 5.7 \times 10^{-4}$ cfs/ft^2-ft. head

The exfiltration test reports are attached hereto.

Pavement Core

The pavement coring was performed using a 4-inch diameter core barrel and a hand (bucket) auger so as to determine the thicknesses of the various elements in the existing pavement section (i.e. asphaltic wearing surface, base course and subgrade soils) to a depth of 4 feet below the asphalt surface. Following the coring and hand augering, the borehole was backfilled with accumulated soil cuttings and the core hole was filled with asphaltic "cold-patch" material.

In brief, the pavement core (PC-1) encountered 1¾ inches of asphalt over 8¼ inches of light brown coquina rock, in turn followed by light brown fine sand (AASHTO 'A-3') to a depth of 4 feet below grade. A photograph of the recovered asphalt core is presented below.



CLOSURE

We are pleased to be of assistance to you on this phase of your project. When we may be of further service to you or should you have any questions, please contact us.

Sincerely,
ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

Peter G. Andersen, P.E.
Principal Engineer
Fla. Reg. No. 57956

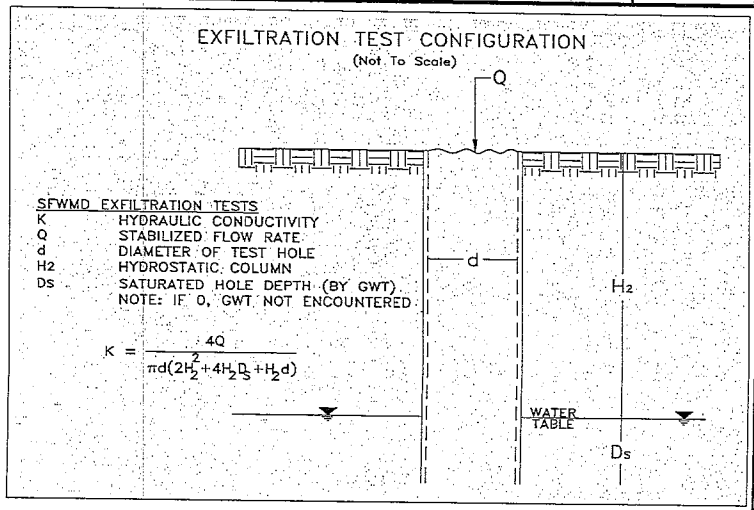
This report has been digitally signed by Peter G. Andersen, P.E. on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

SFWMD Usual Open Hole Test

Test Number	**EX-1**	**Project Name**	**Stow and Go | 2500 N. US Hwy One**	**Weather Conditions**	Pt. Cloudy
		Project Number	**22-245**	**Temperature**	91F
		Test Location	**NEC of Site**	**Technician**	RL/TM
		Date	**08/05/2022**	**Engineer**	PA

DIAMETER OF TEST HOLE (FEET): d =	0.5	
DEPTH OF TEST HOLE (FEET): H_1 =	6	
DEPTH TO WATER TABLE (FEET): H_2 =	6	+
SATURATED HOLE DEPTH (FEET): D_s =	0	
METER READING (Gallons): V_I =	0	@ 0.00 MIN
METER READING (Gallons): V_F =	98	@ 10.00 MIN
AVERAGE FLOW RATE (GPM) =	9.80	
"STABILIZED" FLOW RATE (CFS): Q =	**2.2E-02**	
HYDRAULIC CONDUCTIVITY (CFS / FT^2 - FT. HEAD): K =	**7.4E-04**	



Soil Profile	
Depth (in-bls)	**Description**
0 - 10	Dark gray fine sand (SP), t/o rock fragments
10 - 72	Orange-brown fine sand (SP)
Groundwater not encountered	

NOTES:

The hydraulic conductivity test was performed in general accordance with the methods described in the South Florida Water Management District (SFWMD) Environmental Resource Permit Information Manual (Volume IV).

The K-value was calculated based on the exfiltration test procedure as shown hereon.

The presented hydraulic conductivity (K) value is applicable for an exfiltration trench installed at the same depth as the borehole test. The K-value represents an ultimate value. The designer should decide on the required factor of safety (minimum of 2, per SFWMD).

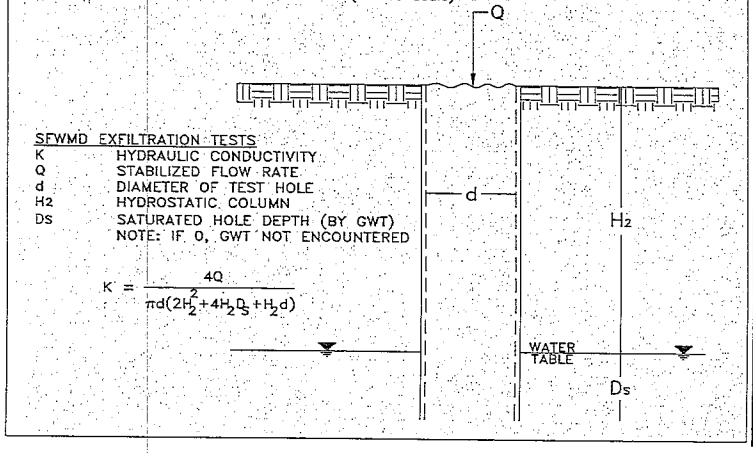
ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

SFWMD Usual Open Hole Test

Test Number	**EX-2**	**Project Name**	**Stow and Go | 2500 N. US Hwy One**	**Weather Conditions**	Pt. Cloudy
		Project Number	**22-245**	**Temperature**	90F
		Test Location	**NEC of Site**	**Technician**	RL/TM
		Date	**08/05/2022**	**Engineer**	PA

DIAMETER OF TEST HOLE (FEET): d =	0.5	
DEPTH OF TEST HOLE (FEET): H_1 =	6	
DEPTH TO WATER TABLE (FEET): H_2 =	6	+
SATURATED HOLE DEPTH (FEET): D_s =	0	
METER READING (Gallons): V_i =	0	@ 0.00 MIN
METER READING (Gallons): V_F =	75	@ 10.00 MIN
AVERAGE FLOW RATE (GPM) =	7.50	
"STABILIZED" FLOW RATE (CFS): Q =	**1.7E-02**	
HYDRAULIC CONDUCTIVITY (CFS / FT^2 - FT. HEAD): K =	**5.7E-04**	

EXFILTRATION TEST CONFIGURATION
(Not To Scale)



SFWMD EXFILTRATION TESTS
K HYDRAULIC CONDUCTIVITY
Q STABILIZED FLOW RATE
d DIAMETER OF TEST HOLE
H2 HYDROSTATIC COLUMN
DS SATURATED HOLE DEPTH (BY GWT)
NOTE: IF 0, GWT NOT ENCOUNTERED

$$K = \frac{4Q}{\pi d(2H_2^2 + 4H_2D_S + H_2 d)}$$

Soil Profile	
Depth (in-bls)	**Description**
0 - 32	Gray-brown fine sand (SP) with rock fragments
32 - 63	Light brown fine sand (SP)
63 - 72	Orange-brown fine sand (SP), t/o clay
Groundwater not encountered	

NOTES:

The hydraulic conductivity test was performed in general accordance with the methods described in the South Florida Water Management District (SFWMD) Environmental Resource Permit Information Manual (Volume IV).

The K-value was calculated based on the exfiltration test procedure as shown hereon.

The presented hydraulic conductivity (K) value is applicable for an exfiltration trench installed at the same depth as the borehole test. The K-value represents an ultimate value. The designer should decide on the required factor of safety (minimum of 2, per SFWMD).