PROJECT NAME: WESTWOOD TRAILS (FKA VILLA VERDE PUD) IMPROVEMENT PLAN

PROJECT NUMBER: 2023050058

APPLICATION: IMPROVEMENT PLAN #32544

1 DEPARTMENT: ENGDRN - STORMWATER REVIEW

REVIEW ITEM: 2.12.9/10 - Proposed Drainage Right-of-Way/Easements

STATUS OF REVIEW: INFO

REMARKS: Appropriate drainage tracts/ROW shall be included on the final plat.

2 DEPARTMENT: ENGDRN - STORMWATER REVIEW

REVIEW ITEM: 2.12.22 - Stormwater Tract/Right-of-Way

STATUS OF REVIEW: INFO

REMARKS: Appropriate drainage tracts/ROW shall be included on the final plat.

3 DEPARTMENT: ENGDRN - STORMWATER REVIEW

REVIEW ITEM: 6.13.10.B - Copy of NPDES Permit or NOI

STATUS OF REVIEW: INFO

REMARKS: Please provide a copy of the NPDES permit or NOI prior to construction.

4 DEPARTMENT: ENGDRN - STORMWATER REVIEW

REVIEW ITEM: Copy of District Permit (County Interest)

STATUS OF REVIEW: INFO

REMARKS: Please provide a copy of the District permit prior to construction.

5 DEPARTMENT: ENGDRN - STORMWATER REVIEW

REVIEW ITEM: 7.1.3 Drainage Construction Specifications

STATUS OF REVIEW: INFO

REMARKS: Deviation request has been submitted to County Engineer for consideration. If approved, letter

will be uploaded to eplans.

6 DEPARTMENT: ENGDRN - STORMWATER REVIEW

**REVIEW ITEM:** Additional Stormwater comments

STATUS OF REVIEW: INFO

REMARKS: If you have questions or would like to discuss the stormwater review comments, please contact

Kevin Vickers, PE at 352-671-8695 or kevin.vickers@marionfl.org.

7 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW

REVIEW ITEM: 2.12.4.K - List of approved waivers, conditions, date of approval

STATUS OF REVIEW: INFO

REMARKS: 3/20/25-add waivers if requested in future

8 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW

**REVIEW ITEM: Additional Development Review Comments** 

STATUS OF REVIEW: INFO

REMARKS: Establishment of an MSBU is required prior to final plat approval. Contact the MSTU

Department at (352)438-2650 to create an MSBU or obtain a waiver from BCC via DRC.

#### 9 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: 6.14.5.A(1) - Submittal Requirements - Existing on-site & off-site mains and service

connections

STATUS OF REVIEW: INFO

REMARKS: 7/18/25 Insure horizontal and vertical requirements are met for water main and sewer main proximity for the service to lot 16. Previous comment: C011 - Laterals from lots 15 and 16, not connected.

#### 10 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: 6.14.5.D - Hydraulic Analysis

STATUS OF REVIEW: INFO

REMARKS: 7/18/25 Reviewed by MCU - The Engineer of Record (EOR) is responsible for ensuring that the lift station is properly designed and adequately sized to function under both current and future system conditions, including potential changes in pressure within the Marion County Utilities (MCU) network. Previous comment: The Hydraulic Analysis has not been provided for this site.(LDC 6.14.5.C)

#### 11 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: 6.14.7 - Construction Inspection - PLAN NOTE:

STATUS OF REVIEW: INFO

REMARKS: 7/18/25 Change contact to Construction Coordinator 6013 (apologies for a redundant change). C001 - Construction Inspection Note: Remove Alejandro Rad, replace with Construction Officer at 352-307-6163.

#### 12 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: Utilities Plan Review Fee per Resolution 15-R-583 - payable to Marion County Utilities

STATUS OF REVIEW: INFO

REMARKS: 7/18/25 Review fee: \$130.00 Utilities Plan Review Fee: \$415.00 Fee(s) can be paid by calling 352-671-8686 or visiting the Development Review Office at 412 SE 25th Ave, Ocala, FL 34471. Reference AR# 32544

#### 13 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: Additional Utilities comments

STATUS OF REVIEW: INFO

REMARKS: For any questions regarding this review, please contact Heather Proctor, Utilities Development Review Officer, at Heather.Proctor@marionfl.org.

#### 14 DEPARTMENT: DOH - ENVIRONMENTAL HEALTH

REVIEW ITEM: Additional Health comments

STATUS OF REVIEW: INFO

REMARKS: Irrigation well will require permit through the Department of Health in Marion County

#### 15 DEPARTMENT: ZONE - ZONING DEPARTMENT

REVIEW ITEM: 2.12.9 - Location and dimensions of proposed right of ways and streets, including

easements, reservations or dedications

STATUS OF REVIEW: INFO

REMARKS: Initial review: Landscape Sheet L.04 calls street SW 74th Avenue, whereas other sheets call

street SW 74th Court

#### 16 DEPARTMENT: 911 - 911 MANAGEMENT

REVIEW ITEM: Additional 911 comments

STATUS OF REVIEW: INFO

REMARKS: Sheet L.00A has SW 79th Lane incorrectly labeled as SW 79th Lave.

17 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION

REVIEW ITEM: 6.8.5 - Landscape area requirements for residential and mixed use developments

STATUS OF REVIEW: INFO

REMARKS: To be provided with Final plat

18 DEPARTMENT: ENRAA - ACQ AGENT ENG ROW

REVIEW ITEM: Improvement Plan

STATUS OF REVIEW: INFO

REMARKS: Verified owner with Sunbiz and checked road project. 7/11/25- EMW

IF APPLICABLE:

Sec. 2.18.1.I - Show connections to other phases.

Sec.2.19.2.H – Legal Documents

Legal documents such as Declaration of Covenants and Restrictions, By-Laws, Articles of Incorporation, ordinances, resolutions, etc.

Sec. 6.3.1.B.1 – Required Right of Way Dedication (select as appropriate)

For Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated for the use and benefit of the public."

Sec. 6.3.1.B.2 – Required Right of Way Dedication

For Non-Public Streets. "[All streets and rights-of-way shown on this plat or name specifically if less than all] are hereby dedicated privately to the [entity name]. All public authorities and their personnel providing services to the subdivision are granted an easement for access. The Board of County Commissioners of Marion County, Florida, shall have no responsibility, duty, or liability whatsoever regarding such streets. Marion County is granted an easement for emergency maintenance in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk."

Sec. 6.3.1.D.3 - Cross Access Easements

For Cross Access Easements. "All parallel access easements shown on this plat are hereby dedicated for the use and benefit of the public, and maintenance of said easements is the responsibility of [entity name]." Sec. 6.3.1.C.1 - Utility Easements (select as appropriate)

"[All utility easements shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction, installation, maintenance, and operation of utilities by any utility provider." Sec. 6.3.1.C.2 – Utility Easements

"[All utility tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."

Sec. 6.3.1.D(c)(1)(2)(3) - Stormwater easements and facilities, select as appropriate:

- 1. "[All stormwater and drainage easements as shown or noted or name specifically if less than all] are dedicated [private or to the public] for the construction and maintenance of such facilities."
- 2. "[All stormwater management tracts or identify each tract as appropriate] as shown are dedicated [private or to the public] for the construction and maintenance of such facilities."
- 3. When any stormwater easement and/or management tract is not dedicated to the public or Marion County directly, the following statement shall be added to the dedication language: "Marion County is granted the right to perform emergency maintenance on the [stormwater easement and/or management tract, complete accordingly] in the event of a local, state, or federal state of emergency wherein the declaration includes this subdivision or an emergency wherein the health, safety, or welfare of the public is deemed to be at risk." Sec.6.3.1.D(f) –

If a Conservation Easement is required the following shall be provided: "A conservation easement [as shown or on tract and identify the tract, complete accordingly] is dedicated to [the Board of County Commissioners of Marion County, Florida or entity name, if not Marion County] for the purpose of preservation of [listed species, habitat, Karst feature and/or native vegetation, complete accordingly]."

19 DEPARTMENT: ENGDRN - STORMWATER REVIEW

REVIEW ITEM: 2.12.8 - Topographical Contours

STATUS OF REVIEW: NO

REMARKS: LDC requires that the survey have been performed in the last 12 months. Please submit waiver for improvement plan. Staff will support waiver for the site plan.

#### 20 DEPARTMENT: ENGDRN - STORMWATER REVIEW

REVIEW ITEM: 6.13.3 - Type of Stormwater Facility Criteria

STATUS OF REVIEW: NO

REMARKS: Retention/detention areas serving residential developments shall be designed with a minimum berm width of 12 feet stabilized at a maximum of six percent grade maximum around the entire perimeter of the facility.

#### 21 DEPARTMENT: ENGDRN - STORMWATER REVIEW

REVIEW ITEM: 6.10 Karst Topography and High Recharge Areas

STATUS OF REVIEW: NO

REMARKS: Please sign & seal Karst analysis.

#### 22 DEPARTMENT: ENGDRN - STORMWATER REVIEW

REVIEW ITEM: 6.13.12 - Operation and Maintenance

STATUS OF REVIEW: NO

REMARKS: Please provide a signed O&M manual.

#### 23 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: 6.14.2.A - Water Connection Requirements

STATUS OF REVIEW: NO

REMARKS: 7/18/25 Must use 12" tapping tee fully restrained for size on size tap for connection off SW 80th St. (2) A second water connection to SW 76th Avenue is required per MCU to ensure system redundancy. This secondary connection will provide an alternate feed to the neighborhood in the event of a service interruption or main break at the primary connection. Previous comment: C011 - Show the method of connection to the water main. (2) Connect the water main on SW 78th Place to the Water Main on SW 76th Ave for optimal flow rates and water quality. (Outside property boundary, E of proposed neighborhood)

### 24 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: 6.14.5.A(2) - Submittal Requirements - Proposed on-site & off-site mains and service connections

STATUS OF REVIEW: NO

REMARKS: 7/18/25 C017 Storm Pipe conflict identified, need to propose a remedy. (2) C015 Appears to be a conflict. See change marks.

#### 25 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: 6.14.5.A(3) - Submittal Requirements - Lift Stations layout, elevations, schedules

STATUS OF REVIEW: NO

REMARKS: 7/18/25 Does transformer have to be inside the fence? (2) is there anyway to create enough fall to connect to Melody Preserve's Lift Station or the Liberty Village Lift station? Previous comment: C011 - Lift station will require a plug valve inside fence. (2) MCU will hold further comments until Lift Station design is completed and shown on plans.

#### 26 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: 6.15.3 - Fire Protection/Fire Flow Capacity

STATUS OF REVIEW: NO

REMARKS: 7/18/25 Move hydrant between lots 68 & 69 to avoid driveway conflict. (2) Remove ARV in front of lot 67 and 68, make sewer laterals single for both lots. Previous comment: C011 - Move hydrant on lot 32 to between lot 32 and 31. (2)

#### 27 DEPARTMENT: UTIL - MARION COUNTY UTILITIES

REVIEW ITEM: 6.15.5 - Water Service and Connection

STATUS OF REVIEW: NO

REMARKS: 7/18/25 Install GV between lots 60& 61. (2) Move gate valve to between lots 24 & 25. Previous comment: C011 - WM extension into the neighborhood. "Install 8" x 12" TEE (1) 8" DV (2)". What is a DV? (2) Install gate valve in front of lot 23. (3) Section of WM in front of lots 33-35, can be reduced down to a 4" WM, then no blow off will be required. \*\* Unless there is a us PH that will require line or be 8". (4) Remove valve in front of lot 35. (5) Move water valve shown in asphalt (E to W) at the NE corner of the Proposed DRA 2. (6) Remove vale at the NE corner of the proposed DRA 2 to that is on the WM line N to S. (7) Section of WM in front of lots 1-3, can be reduced down to a 4" WM, then no blow off will be required. (8) If blow off in front of lot 33 is to stay on plans, it needs to be permanent.

#### 28 DEPARTMENT: ZONE - ZONING DEPARTMENT

REVIEW ITEM: 6.4.4.A - Project is consistent with preliminary plat

STATUS OF REVIEW: NO

REMARKS: Initial Review: The preliminary plat has not been approved yet. This item will remain [NO] until the preliminary plat has been approved per LDC. Sec. 2.1.3. "Order of Plan Approval."

#### 29 DEPARTMENT: ZONE - ZONING DEPARTMENT

REVIEW ITEM: 2.12.4.L(4) - Project is consistent with any and all zoning approvals, land use restrictions and developers agreements. Verify parcel is in compliance with LDR and Comprehensive Plan.

STATUS OF REVIEW: NO

REMARKS: Initial review: Staff cannot confirm whether the improvement plan is consistent with PUD zoning approval until the Master Plan is approved by the Board of County Commissioners.

#### 30 DEPARTMENT: ZONE - ZONING DEPARTMENT

REVIEW ITEM: 2.12.4.L(4) - Zoning requirements: lot width, area, setbacks, coverage (floor area ratios) and parking. Provide dimensions and location of all site improvements (proposed or existing); dimensions and location for all proposed easements/4.2

STATUS OF REVIEW: NO

REMARKS: Initial review: Add reference to the zoning ordinance approving the PUD (uploaded in the supplemental folder of this AR). Once Master Plan is approved add reference to that ordinance/approval letter as well. The approved zoning requirements (setbacks, lot area/width, building heights) will also need to be added. These items should be added to cover sheet, but may be added to a different sheet. State which sheet added to.

7/15 PUD ordinance 23-R-478 and master plan pending approval have been added to the cover sheet. However, master plan is still awaiting approval.

#### 31 DEPARTMENT: ZONE - ZONING DEPARTMENT

REVIEW ITEM: 2.12.23 - Show typical setback layout for primary uses, as well as accessory uses, dimensions for all improvements

STATUS OF REVIEW: NO

REMARKS: Initial review: Once the Master Plan is approved, add the lot typical to the Geometry plan sheet, IP-C003. Staff will then check for consistency between approved Master Plan and what is shown on the Improvement Plan document(s).

7/15 Lot typicals and setbacks have been added to C002 and C003, pending approval of master plan for consistency.

#### 32 DEPARTMENT: ZONE - ZONING DEPARTMENT

REVIEW ITEM: 2.12.24 - Preliminary buffer plan/6.8.6 - Buffering

STATUS OF REVIEW: NO

REMARKS: Initial review: Buffer plan shown, but cannot be approved until Master Plan and Preliminary Plat is approved.

33 DEPARTMENT: ZONE - ZONING DEPARTMENT

REVIEW ITEM: Additional Zoning comments

STATUS OF REVIEW: NO

REMARKS: Initial Review: (1) The PUD Master Plan is under review and has not yet been scheduled for the BCC hearing. Internal access and roads vary from the approved PUD concept plan. This item will remain as NO until PUD Master Plan and revised design is approved by BCC. Refer to LDC Sec. 2.1.3. "Order of Plan Approval."

(2) Remove the text Parcel No. 35461-000-00 / 18.18 Acres / LU/Z: LR/A-1 from the Villa Verde project area on IP-C003. This appears to be duplicated from a portion of land listed as "not a part of this survey" on IP-C003.

7/15 BCC hearing has been scheduled, pending approval.

34 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION

REVIEW ITEM: 6.7.3 - Tree protection

STATUS OF REVIEW: NO

REMARKS: 1. Show tree protection on plan and in detail 2. Per 6.7.3.(5), all trees to remain shall be assessed per this section, assessment to be submitted with the plan for review

35 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION

REVIEW ITEM: 6.8.6 - Buffers STATUS OF REVIEW: NO

REMARKS: 1 Sheet L.04 calls out a Type C buffer, only sod is shown, please clarify

Feel free to contact us at (352) 671-8686 or DevelopmentReview@marionfl.org with questions.

Sincerely,

Your Development Review Team Office of the County Engineer



# **Marion County Board of County Commissioners**

Office of the County Engineer

412 SE 25th Ave. Ocala, FL 34471 Phone: 352-671-8686 Fax: 352-671-8687

### DEVELOPMENT REVIEW COMMITTEE WAIVER REQUEST FORM

	Date: 07/29/2025 Parcel Number(s): 35461-000-00	Permit Number: 2023050058
A.	PROJECT INFORMATION: Fill in below as applicable:	_
	Project Name: WESTWOOD TRAILS IMPROVEMENT PLAN	Commercial Residential 🔽
	Subdivision Name (if applicable):	
	Subdivision Name (if applicable):UnitBlockLotTract	
B.	PROPERTY OWNER'S AUTHORIZATION: The property owner's si	gnature authorizes the applicant to act on the
	owner's behalf for this waiyer request. The signature may be obtained b	y email, fax, scan, a letter from the property
	owner, or original signature below.	
	1 1 42	
	Name (print) FUN N CAMES, LLC Signature:	·
	Signature:	
	Mailing Address: 230 NE 25TH AVE SUITE 100	City: OCALA
	State: FLORIDA Zip Code: 34471 Phone # (3.52-361-4.52.4	
	Email address: JONMKURTZ@YAHOO.COM	
	all correspondence.  Firm Name (if applicable): MASTROSERIO ENGINEERING, INC_Contact  Contact  Contact	ct Name; PAOLO MASTROSERIO
	Mailing Address:         170 SE 32ND PLACE           State:         FL         Zip Code:         34471         Phone #352-433-2185	City: OCALA
	State: FL Zip Code: 34471 Phone #352-433-2185	
	Email address: PAOLO@MASTROSERIOENG.COM	
D.	WAIVER INFORMATION:	
	Section & Title of Code (be specific): 6.13.3 TYPE OF STOP	
	Reason/Justification for Request (be specific): A waiver is requested to re	
	to 8 feet wide with a 6% cross slope. This allows us to provide a 6 feet dewith a 12 feet berm with 6% cross slope. Both DRAs are privately owned	
	with a 12 feet benn with 0 % cross slope. Both bitAs are privately owned	and manitamed.
DE	EVELOPMENT REVIEW USE:	
Red	ceived By:email7/30/2025Date Processed:8/1/2025 Project	t #2023050058_ AR #32544_
Zoi	ONING USE:       Parcel of record:       Yes □ No □       Eligible to apprend to apprend to a proper to	Plat Vacation Required: Yes \( \Boxed{1} \) No \( \Boxed{1} \)

Revised 6/2021



## Marion County Board of County Commissioners

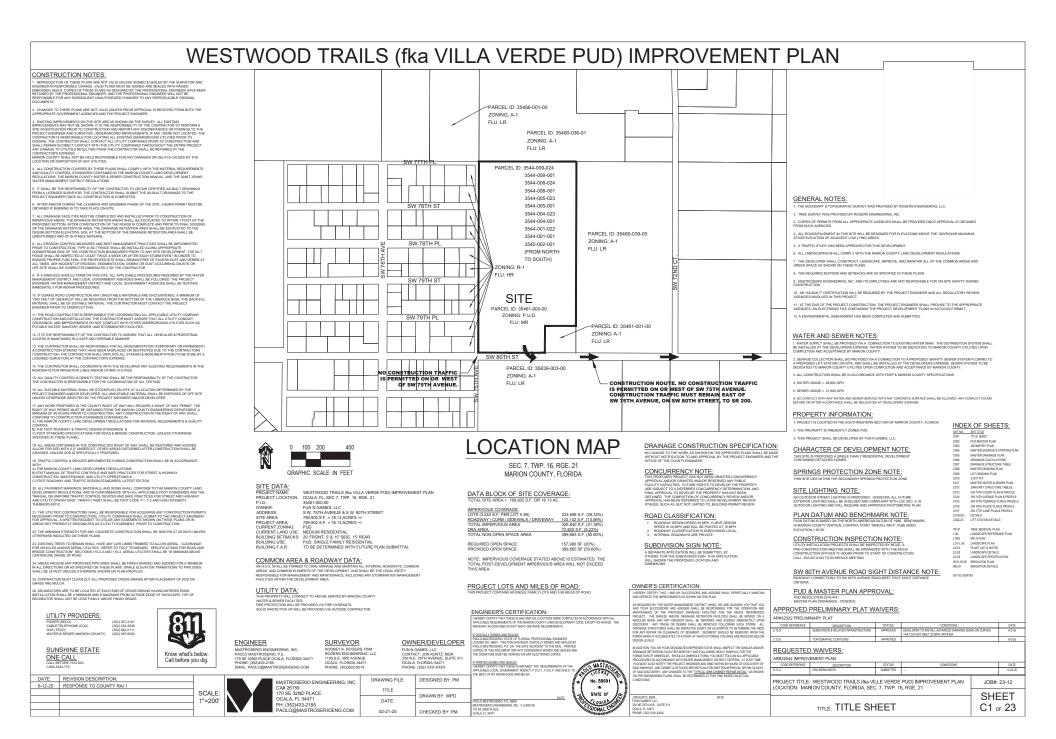
Office of the County Engineer

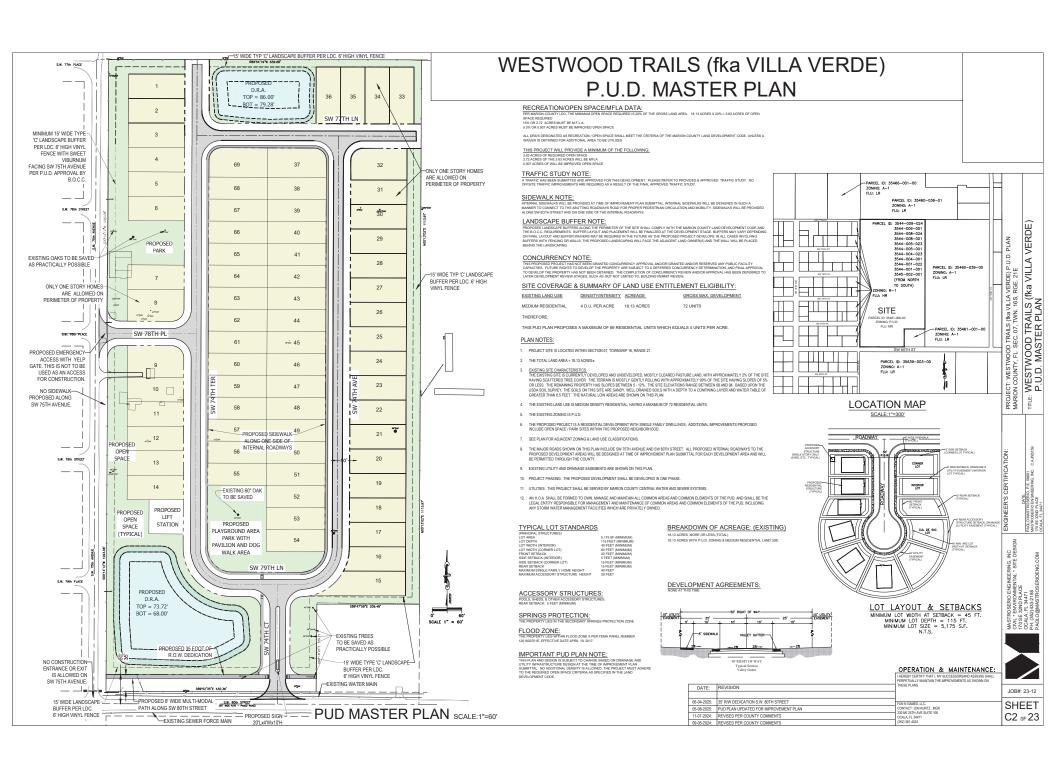
412 SE 25th Ave. Ocala, FL 34471 Phone: 352-671-8686 Fax: 352-671-8687

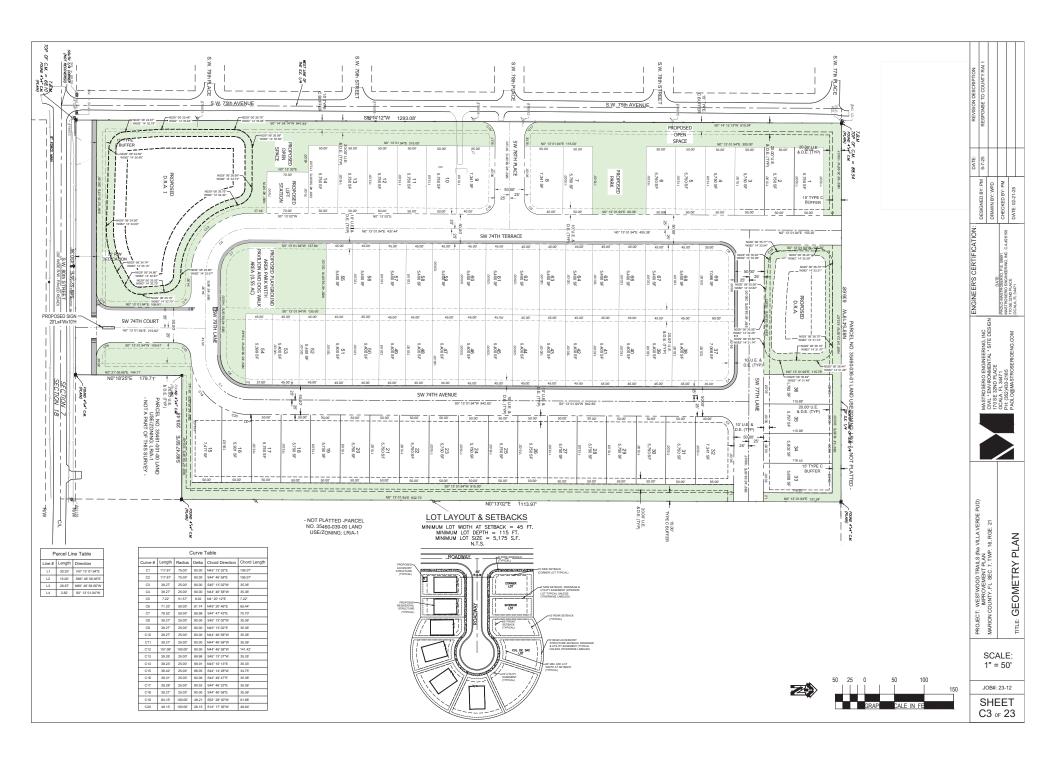
### DEVELOPMENT REVIEW COMMITTEE WAIVER REQUEST FORM

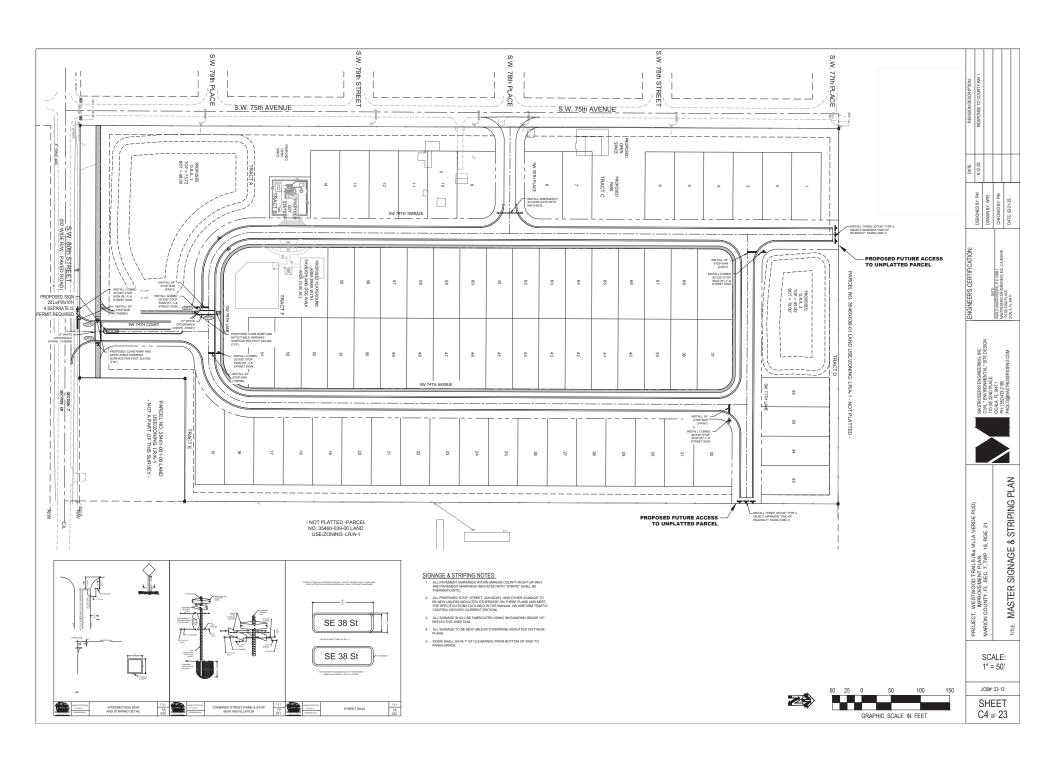
Section & Title of Code (be specific) LDC 2.12.8 - CURRENT BOUNDARY AND TOPOGRAPHIC SURVEY
Reason/Justification for Request (be specific): Request to reaffirm the waiver approved with the preliminary plat
on June 3, 2025 to use the survey submitted. No changes have been made to the site.
Section & Title of Code (be specific) 2.21.4 - CONSTRUCTION, COMPLETION, AND CLOSE OUT
Reason/Justification for Request (be specific): A waiver is requested to allow the commencement of
construction prior to improvment plan approval and approve early site work permit. Only earthwork is requested with this
waiver and this construction is at the developer's risk.
Section & Title of Code (be specific)
Reason/Justification for Request (be specific):
Section & Title of Code (be specific)
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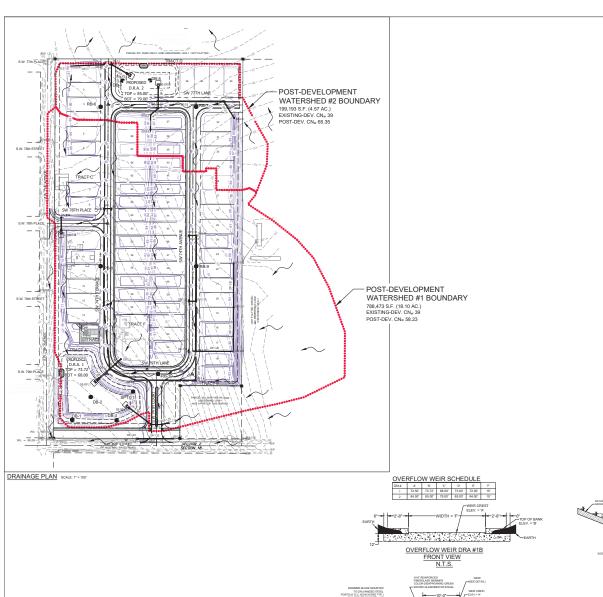
Revised 6/2021











300

GRAPHIC SCALE IN FEET

#### DRAINAGE DATA:

#### DRAINAGE SUMMARY:

- 2. THE RETENTION AREA SHALL TO BE MAINTAINED BY THE OWNER.
- THE INTENT IS TO ROUTE STORMWATER RUNOFF TO THE ONSITE FACILITY VIA SHEET FLOW & INLET AND PIPE SYSTEM.
- THE DESIGN STORM FOR THIS DEVELOPMENT SHALL BE THE 100YR/24HR STORM.

#### DRAINAGE NOTES

THE ENGINEER SHALL SUBMIT A COMPLETE COPY OF THE APPROVED SWEWIND PERMITTO MARION COUNTY TRANSPORTATION DEPARTMENT WHEN IT IS AVAILABLE.

THE CONTRACTOR SHALL ABIDE BY STANDARD PRACTICES AND PROCEDURES FOR EROSION AND SEDIMENT CONTROL. TYPE III SILT FENCE AND OPTIONAL DANDY BAGS SHALL BE USED AS PER DETAIL.

#### LOT COVERAGE CALCULATIONS

LOT COVERAGE 4		ROW C	OVERAGE -	45' LOT	
BLDG	2230	DRIVE	WAY	208 (16'w x 13'd)	
ACCESSORY	80				
DRIVEWAY	400				
AJC PAD	12				
WALKWAY	65				
TOTAL	2787	TOTAL		208	
LOT COVERAGE B	REAKDOWN		ROW	COVERAGE BREAKDO	OWN
# OF LOTS		1	# OF	LOTS	1
MPERVIOUS AREA		2787	MPE	RVIOUS AREA	200
TOTAL COVERAGE	OF LOT AND R	OW=	2995		

LOT COVERAGE 50		ROW	OVERAGE 50' LOT	
BLDG	2685	DRWE	WAY 208 (16'w x 13'd)	
ACCESSORY	80			
DRIVEWAY	400			
AJC PAD	12			
WALKWAY	65			
TOTAL	3242	TOTAL	208	
LOT COVERAGE BI	REAKDOWN		ROW COVERAGE BREAKDOWN	
# OF LOTS		1	# OF LOTS	- 1
MPERVIOUS AREA		3242	MPERVIOUS AREA	208

DRA# W B C D E F C H T
1 73.72 72.50 73.03 65.00 0.60 5.72 4:1 61.70 71.94

MAX. STACE W 100-24 YR STORM - 'C'

TREATMENT VOLUME RECOVERY BY INFILTRATION. D.R.A. CROSS SECTION

WSHOWL - Y'

#### DRAINAGE LEGEND:



ΡM

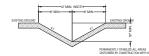
DATE: OMASTROSERIO: SZND PLACE , FL 34471

ENGINEER'S CERTIFICATION:

#### VERTICAL DATUM NOTE:

#### FLOOD HAZARD NOTE:

FINISHED FLOOR NOTE:



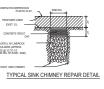




PLAN

POST DRAINAGE

SIZE @ 12 TO 13 THE DIA OF EXIST. SINO TYPICAL SINK CHIMNEY REPAIR DETAIL



OVERFLOW WEIR DRA #1B

SIDE VIEW N.T.S.

D.R.A. SCHEDULE

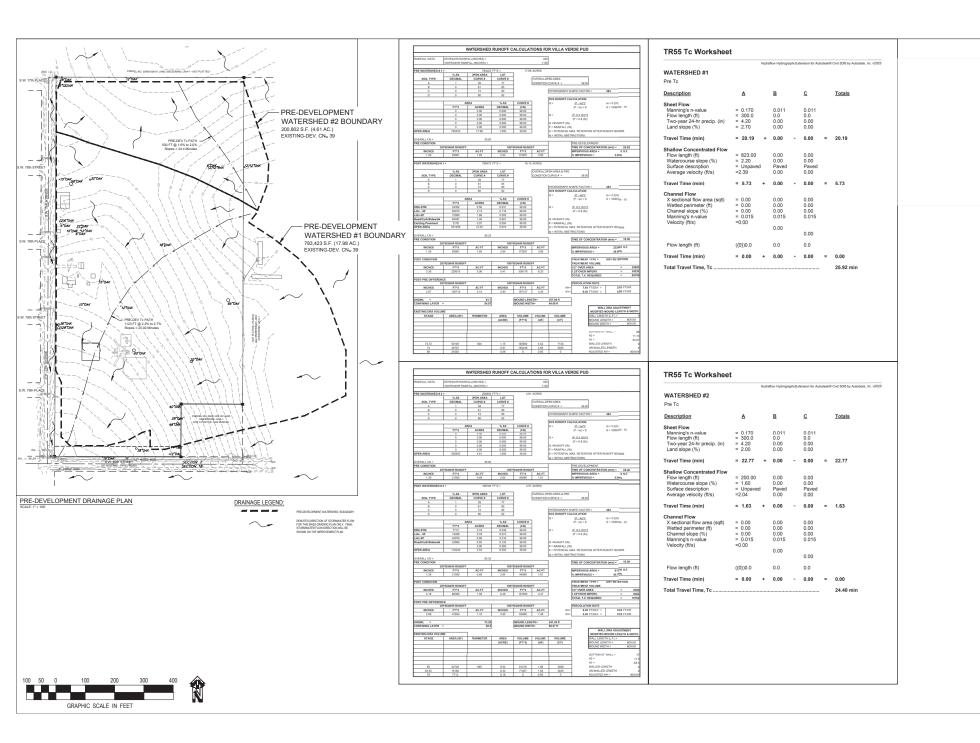


SCALE:

JOB#: 23-12

1" = 100'

SHEET C5 of 23



ENGINEER'S CERTIFICATION.

SN DATE: PAGE 18891
WASTROBENDERSON E 89991
WASTROBENDERSON SE 89991
WASTROBENDERSON SE 89991
OCALA TEATH

MASTROSERIO ENGINEERING, INC CIVIL\* ENVIRONMENTAL\* SITE DE 170 SE 32ND PLACE CACLA, A.F. 3477 PH: (32,2/32,2/88) PAOLO@MASTROSERIOENG, COM



FRALLS (Ka VILLA VERDE PUD)
C. 7, TWP. 16, RGE. 21

E. CALCULATIONS

PROJECT: WESTWOOD TRAILS (Ka V MARON COUNTY, FL. SEC. 7, TWF. 1TITLE: DRAINAGE CAL.

SCALE: 1" = 100'

JOB#: 23-12

SHEET C6 of 23

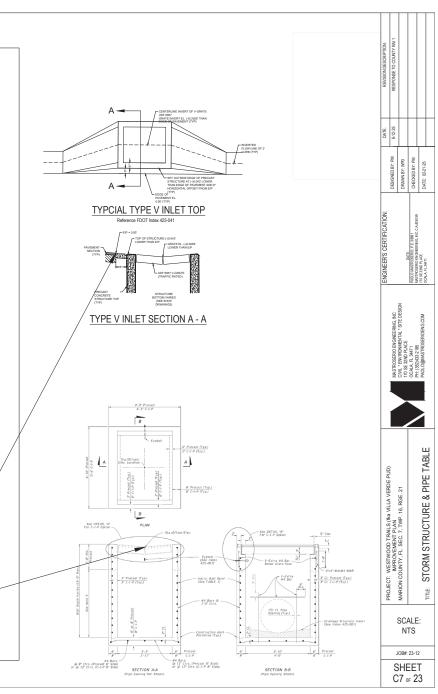
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
DS-1.1	TYPE V INLET 96" ROUND J-BTM E/P EL. = 76.38' IE. IN = 71.10' IE. IN = 70.27' IE. IN = 70.27' IE. OUT = 68.30'	DP-1.2, 24"HDPE IE. IN =71.10" DP-1.4, 24"HDPE IE. IN =70.27" DP-1.8, 24"HDPE IE. IN =70.27"	DP-1.1, 36"HDPE IE. OUT =68.30"
DS-1.2	TYPE V INLET 60" ROUND J-BTM E/P EL = 76.38" IE. IN = 71.33' IE. OUT = 71.23'	DP-1.3, 24"HDPE IE. IN =71.33"	DP-1.2, 24"HDPE IE. OUT =71.23'
DS-1.3	TYPE E INLET E/P EL. = 74.63' IE. OUT = 71.45'		DP-1.3, 24"HDPE IE. OUT =71.45"
DS-1.4	TYPE V INLET 48" ROUND P-BTM E/P EL. = 79.04" IE. IN = 73.00" IE. IN = 73.00" IE. OUT = 72.50"	DP-1.5, 18"HDPE IE. IN =73.00" DP-1.6, 18"HDPE IE. IN =73.00"	DP-1.4, 24"HDPE IE. OUT =72.50"
DS-1.5	TYPE V INLET 48" ROUND P-BTM E/P EL. = 79.21' IE. OUT = 73.27'		DP-1.5, 18"HDPE IE. OUT =73.27"
DS-1.6	TYPE V INLET 48" ROUND P-BTM E/P EL. = 84.38" IE. IN = 78.30" IE. OUT = 78.20"	DP-1.7, 18"HDPE IE. IN =78.30"	DP-1.6, 18"HDPE IE. OUT =78.20"
DS-1.7	TYPE V INLET 48" ROUND P-BTM E/P EL. = 84.38" IE. OUT = 78.55"		DP-1.7, 18"HDPE IE. OUT =78.55"
DS-1.8	48" MANHOLE RIM EL. = 77,16" IE. IN = 70.84" IE. OUT = 70.72"	DP-1.9, 24"HDPE IE. IN =70.84"	DP-1.8, 24"HDPE IE. OUT =70.72"
DS-1.9	TYPE E INLET GRATE = 77.70' IE. IN = 73.30' IE. OUT = 71.87'	DP-1.10, 24*HDPE IE. IN =73.30*	DP-1.9, 24"HDPE IE. OUT =71.87"
DS-1.10	TYPE V INLET 48" ROUND P-BTM E/P EL. = 79.99' IE. IN = 74.30' IE. IN = 74.70' IE. IN = 74.70' IE. OUT = 74.20'	DP-1.11, 24"HDPE IE. IN =74.30" DP-1.14, 18"HDPE IE. IN =74.70" DP-1.20, 18"HDPE IE. IN =74.70"	DP-1.10, 24"HDPE IE. OUT =74.20
DS-1.11	TYPE V INLET 48" ROUND P-BTM E/P EL. = 82.22" IE. IN = 76.80" IE. IN = 77.20" IE. OUT = 78.70"	DP-1.12, 24"HDPE IE. IN =76.80" DP-1.15, 18"HDPE IE. IN =77.20"	DP-1.11, 24"HDPE IE. OUT =76.70
DS-1.12	TYPE V INLET 48" ROUND P-BTM E/P EL. = 85.34" IE. IN = 80.10" IE. OUT = 79.60"	DP-1.13, 18"HDPE IE. IN =80.10"	DP-1.12, 24"HDPE IE. OUT =79.60
DS-1.13	TYPE V INLET 48" ROUND P-BTM E/P EL. = 85.34" IE. OUT = 80.35"		DP-1.13, 18"HDPE IE. OUT =80.35
DS-1.14	TYPE V INLET 48" ROUND P-BTM E/P EL. = 79.99' IE. OUT = 74.95'		DP-1.14, 18"HDPE IE. OUT =74.95
DS-1.15	TYPE V INLET 48" ROUND P-BTM E/P EL. = 82.22' IE. OUT = 77.45'		DP-1.15, 18"HDPE IE. OUT =77.45
DS-1.16	TYPE V INLET 48" ROUND P-BTM E/P EL = 74.94 IE. IN = 68.64' IE. OUT = 68.54'	DP-1.17, 18"HDPE IE. IN =68.64"	DP-1.16, 18"HDPE IE. OUT =68.54
DS-1.17	TYPE V INLET  48" ROUND P-BTM  E/P EL. = 74.94"  IE. IN = 69.11"  IE. OUT = 69.01"	DP-1.25, 18"HDPE IE. IN =69.11"	DP-1.17,-48CHDPE IE. OUT =69.01
DS-1.18	18" CMES FDOT 430-021 IE. = 79.00'	DP-1.18, 18"HDPE IE. IN =79.00"	
DS-1.19	TYPE E INLET GRATE = 81.91' IE. OUT = 79.20'		DP-1.18, 18"HDPE IE. OUT =79.20
DS-1.20	TYPE E INLET GRATE = 80.11' IE. IN = 76.10' IE. OUT = 76.00'	DP-1.21, 18"HDPE IE. IN =76.10"	DP-1.20, 18"HDPE IE. OUT =76.00

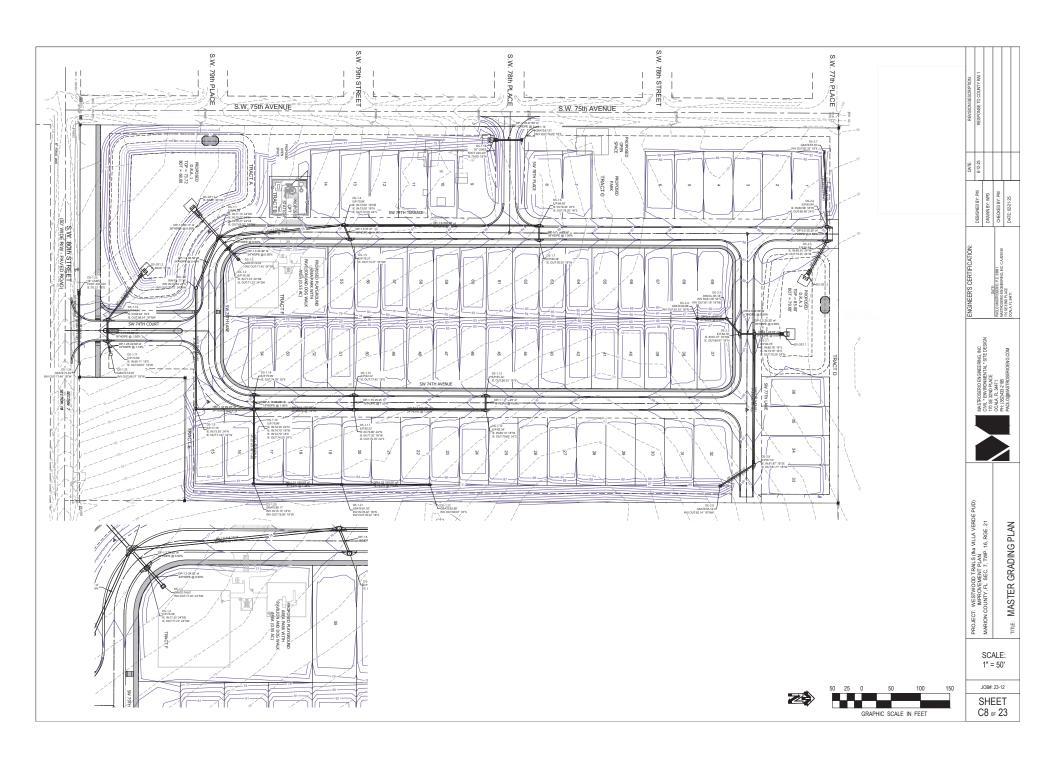
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
DS-1.21	TYPE E INLET GRATE = 81.92' IE. IN = 78.42' IE. OUT = 78.32'	DP-1.22, 18"HDPE IE. IN =78.42"	DP-1.21, 18"HDPE IE. OUT =7
DS-1.22	TYPE E INLET GRATE = 83.88° IE. OUT = 80.67°		DP-1.22, 18"HDPE IE. OUT =8
DS-1.23	18" CMES FDOT 430-022 IE. = 70.23'	DP-1.23, 18"HDPE IE. IN =70.23"	
DS-1.24	FDOT TYPE D INLET TRAVERSABLE SLOT EAST GRATE = 75.63', SLOT EL = IE. = 71.46'	75.05	DP-1.23, 18"HDPE IE. OUT =7
DS-1.25	TYPE E INLET GRATE = 74.50' IE. OUT = 69.37'		DP-1.25, 18"HDPE IE. OUT =6
DS-2.1	TYPE V INLET 48" ROUND P-BTM RIM EL. = 84.78" IE. IN = 80.78" IE. IN = 79.79" IE. OUT = 79.29'	DP-2.2, 18"HDPE IE. IN =80.78" DP-2.8, 18"HDPE IE. IN =79.79"	DP-2.1, 24"HDPE IE. OUT =79
DS-2.2	TYPE V INLET 48" ROUND P-BTM E/P EL. = 84.78" IE. IN = 81.01' IE. OUT = 80.91'	DP-2.3, 18"HDPE IE. IN =81.01"	DP-2.2, 18"HDPE IE. OUT =80
DS-2.3	48" MANHOLE RIM EL. = 85.18' IE. IN = 81.28' IE. OUT = 81.18'	DP-2.4, 18"HDPE IE. IN =81.28"	DP-2.3, 18"HDPE IE. OUT =81
DS-2.4	TYPE C INLET GRATE = 84.88' IE. OUT = 81.53'		DP-2.4, 18"HDPE IE. OUT =81
DS-2.5	TYPE V INLET 48" ROUND P-BTM E/P EL. = 85.84" IE. IN = 80.35' IE. OUT = 79.35'	DP-2.6, 24"HDPE IE. IN =80.35"	DP-2.5, 24"HDPE IE. OUT =79
DS-2.6	TYPE V INLET 48" ROUND P-BTM E/P EL. = 85.84" IE. IN = 80.98" IE. OUT = 80.48"	DP-2.7, 18"HDPE IE. IN =80.98"	DP-2.6, 24"HDPE IE. OUT =80
DS-2.7	TYPE E INLET GRATE = 85.50' IE. OUT = 82.35'		DP-2.7, 18*HDPE IE. OUT =82
DS-2.8	TYPE V INLET 48" ROUND P-BTM E/P EL. = 87.53' IE. IN = 81.87' IE. OUT = 81.77'	DP-2.9, 18"HDPE IE. IN =81.87"	DP-2.8, 18"HDPE IE. OUT =81
DS-2.9	TYPE E INLET GRATE = 85.14' IE. OUT = 82.14'		DP-2.9, 18"HDPE IE. OUT =82
DS-OF1.1	36" CMES FDOT 430-021 IE. = 68.00' IE. IN = 68.00'	DP-1.1, 36"HDPE IE. IN =68.00"	
DS-OF1.2	18" CMES IE. = 68.00" IE. IN = 68.00"	DP-1.16, 18*HDPE IE. IN =68.00*	
DS-OF2.1	18" CMES IE. = 79.00"		
DS-OF2.2	24" CMES IE. = 79.00'		

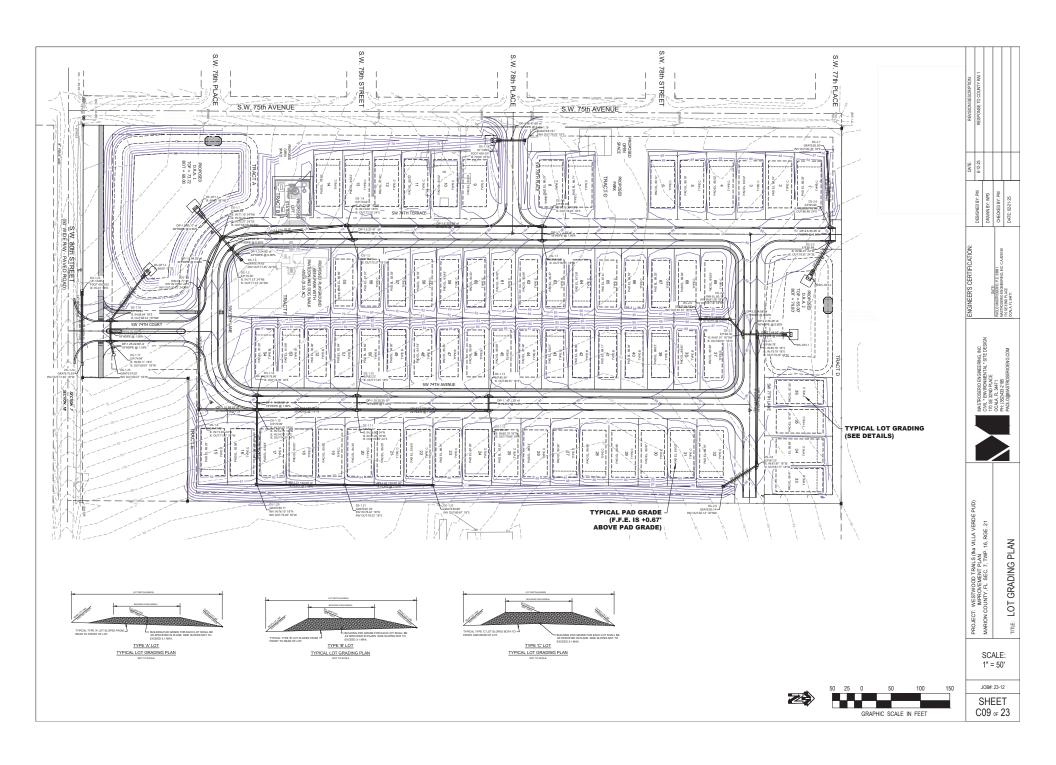
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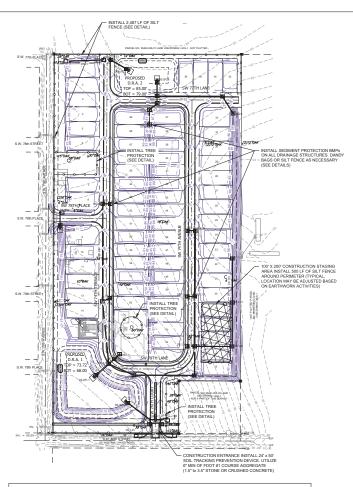
ALL V INLET STRUCTURE ELEVATIONS
SHOWN IN THE STRUCTURE TABLE ARE
THE AT THE E/P. CENTERLINE OF THE
ACTUAL GRATE INVERT IS 0.2058' LOWER
THAN THE EDGE OF PAVEMENT. SEE

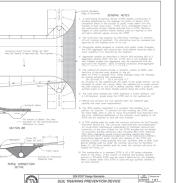
DETAIL THIS SHEET.

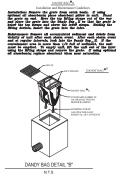


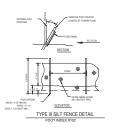




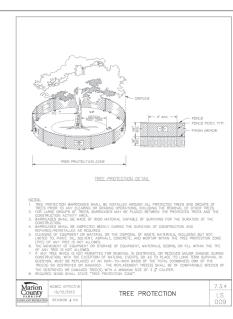








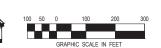
AREA OF DISTURBANCE 18.1 AC.



#### EROSION CONTROL NOTES:

- ES DURING THE ENTIRE CONSTRUCTION PERIOD. FACILITIES ARE NOT TO BE REMOVED UNTIL COMPLETION OF

- DOMINO, MEASURES DICCET THE REQUIRED BY RAP ARE TRANSPORMY CENCES. THESE TRANSPORMY DEVICES SHALL BE REMOVED PRIOR TO COMMENTATION ON ONCE SHALL BE REMOVED FROM TO COMMENTATION ON ONCE SHALL BE REMOVED FROM THE COMMENTATION OF THE COMMENTATION OF
- CTOR IS RESPONSIBLE FOR REPAIRS OR DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAMAGE, S, RAVEMENT, STREPMIQ, CURB, ETC., REPAIRS SHALLE BE COULT, TO OR SETTER THAN EXISTING CONCINTIONS. FERCE CETAL SET OFFER IS IT STREEK ORTOOT MORE VISI. SET PROME LOCATION SHOWN FOR ASSISTENCES ONLY, ACTUAL FENCE TO BE INSTALLED ON THE
- COMMISSION SHALL SHOTT HE DROBLEST HE SHOW SPECIAL TO SERREPLY AN EXERTING DISSIPATION SHALL SHOW HE COMMISSION SHALL SHOW AN EXECUTION SHALL SH





Æ r: WPD BY: PM

ENGINEER'S CERTIFICATION: PACLON MASTRO 170 SE 3 OCALA,

TROSERIO ENGINEERING, INC
L. ENVIRONMENTAL. SITE DESK:
SE 32ND PLACE
LA, FL 34471
S22433-2188
LQ@MASTRO SERIOENG, COM



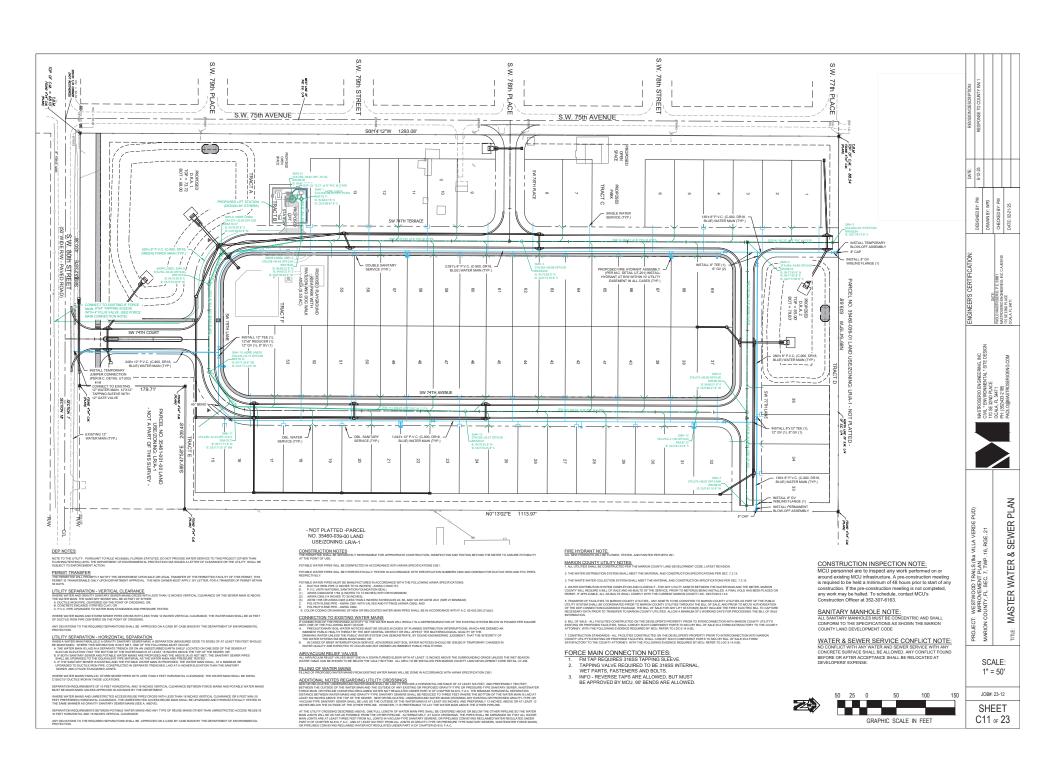
**EROSION CONTROL** WESTWOOD TRAILS (#a \ IMPROVEMENT PLAN OUNTY, FL SEC. 7, TWP. 16

PLAN

SCALE: 1" = 100'

JOB#: 23-12

SHEET C10 of 23



## SANITARY MANHOLE NOTE: ALL SANITARY MANHOLES MUST BE CONCENTRIC AND SHALL CONFORM TO THE SPECIFICATIONS AS SHOWN THE MARION COUNTY LAND DEVELOPMENT CODE

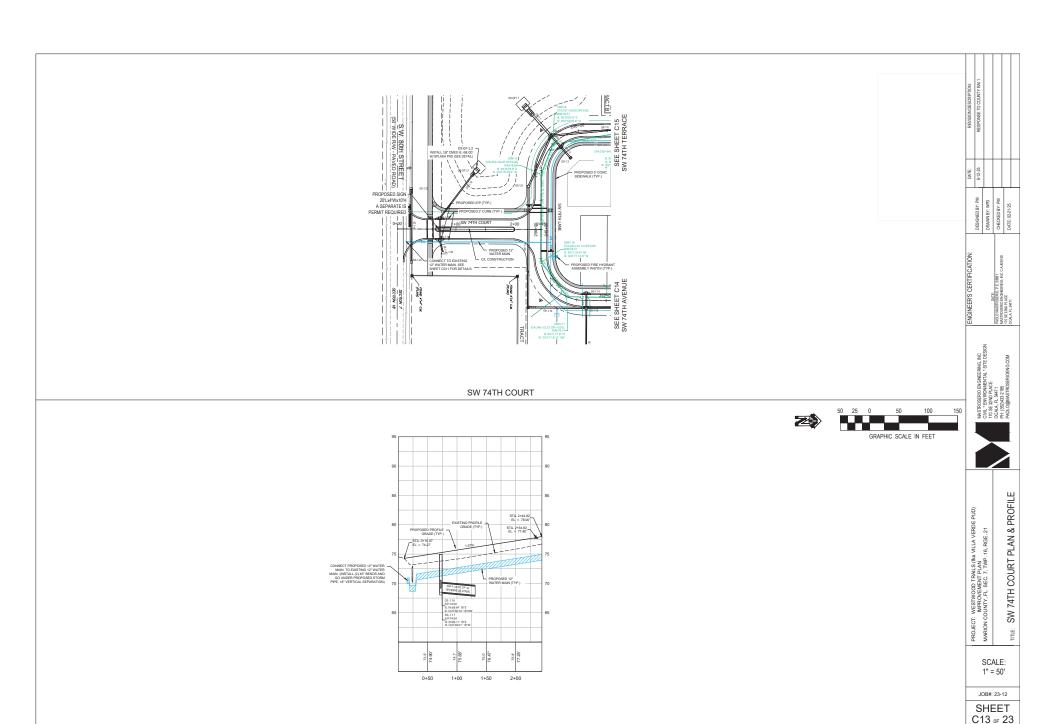
SANITARY STRUCTURE TABLE			
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
SMH1	48" MANHOLE HI RIM EL. = 79.11' INV IN = 68.67 INV OUT = 68.47	DPE LINED SSP-1, 8" PVC IE. IN =68.67"	SSP-LS, 8" PVC IE. OUT =68.47"
SMH2	48" MANHOLE HI RIM EL. = 78.06' INV IN = 69.22 INV IN = 69.22 INV OUT = 69.02	DPE LINED SSP-2, 8" PVC IE. IN =69.22' SSP-7, 8" PVC IE. IN =69.22'	SSP-1, 8" PVC IE. OUT =69.02"
SMH3	48" MANHOLE RIM EL. = 84.09' INV IN = 75.89 INV OUT = 75.79	SSP-3, 8" PVC IE. IN =75.89'	SSP-2, 8" PVC IE. OUT =75.79"
SMH4	48" MANHOLE RIM EL. = 88.35' INV IN = 77.95 INV IN = 77.95 INV OUT = 77.85	SSP-4, 8" PVC IE. IN =77.95' SSP-5, 8" PVC IE. IN =77.95'	SSP-3, 8" PVC IE. OUT =77.85"
SMH5	48" MANHOLE RIM EL. = 85.84' INV OUT = 78.73		SSP-4, 8" PVC IE. OUT =78.73"
SMH6	48" MANHOLE RIM EL. = 86.30' INV IN = 80.31 INV OUT = 80.21	SSP-6, 8" PVC IE. IN =80.31"	SSP-5, 8" PVC IE. OUT =80.21'
SMH7	48" MANHOLE RIM EL. = 88.45' INV OUT = 81.10		SSP-6, 8" PVC IE. OUT =81.10"
SMH8	48" MANHOLE HI RIM EL. = 76.57' INV IN = 70.02 INV OUT = 69.92	DPE LINED SSP-8, 8" PVC IE. IN =70.02"	SSP-7, 8" PVC IE. OUT =69.92"
SMH9	48" MANHOLE HI RIM EL. = 76.93' INV IN = 70.39 INV OUT = 70.29	DPE LINED SSP-9, 8" PVC IE. IN =70.39'	SSP-8, 8" PVC IE. OUT =70.29"
SMH10	48" MANHOLE HI RIM EL. = 78.72 INV IN = 71.24 INV OUT = 71.14	DPE LINED SSP-10, 8" PVC IE. IN =71.24"	SSP-9, 8" PVC IE. OUT =71.14"
SMH11	48" MANHOLE RIM EL. = 79.71' INV IN = 71.71 INV OUT = 71.61	SSP-11, 8" PVC IE. IN =71.71"	SSP-10, 8" PVC IE. OUT =71.61"
SMH12	48" MANHOLE RIM EL. = 84.97' INV IN = 76.55 INV OUT = 76.45	SSP-12, 8" PVC IE. IN =76.55"	SSP-11, 8° PVC IE. OUT =76.45'
SMH13	48" MANHOLE RIM EL. = 87.12' INV OUT = 81.53		SSP-12, 8" PVC IE. OUT =81.53'
SMHLS	72" MANHOLE HI RIM EL. = 80.00' INV IN = 68.39	DPE LINED SSP-LS, 8" PVC IE. IN =68.39'	

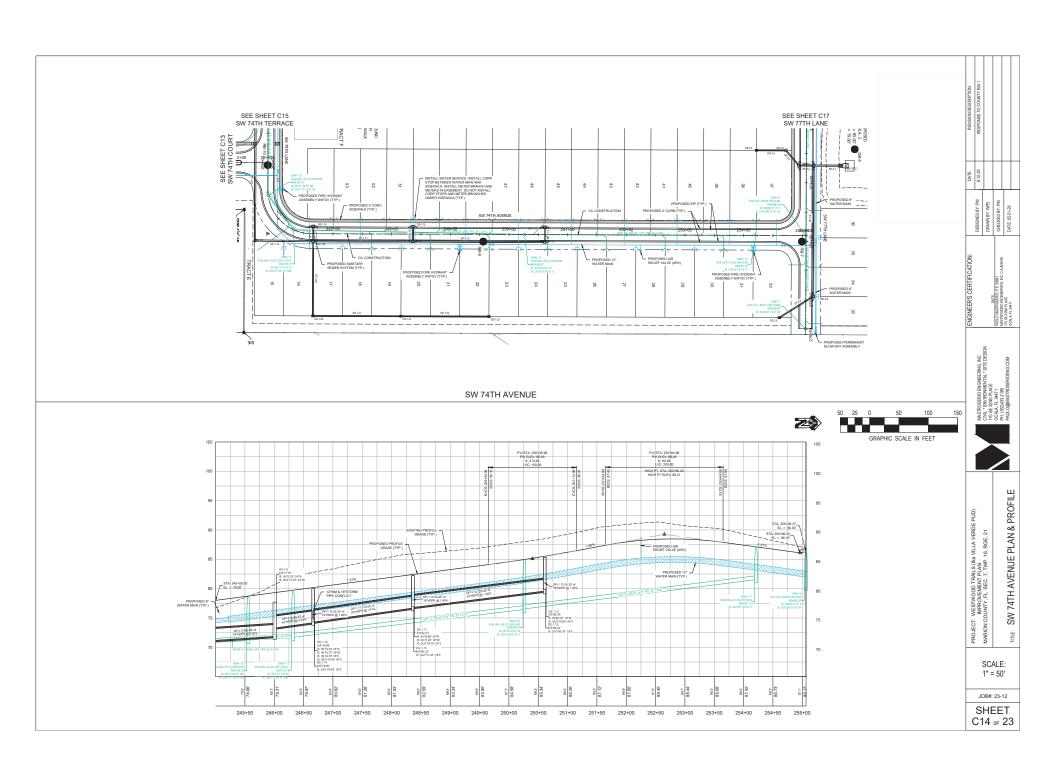
R'S CERTIFICATION:		DATE:	REVISION DESCRIPTION:
	DESIGNED BY: PM	6-12-25	RESPONSE TO COUNTY RAI 1
9140	DRAWN BY: WPD		
DSERD, P.E. 58891	CHECKED BY: PM		
ACE	DATE: 02:21:25		

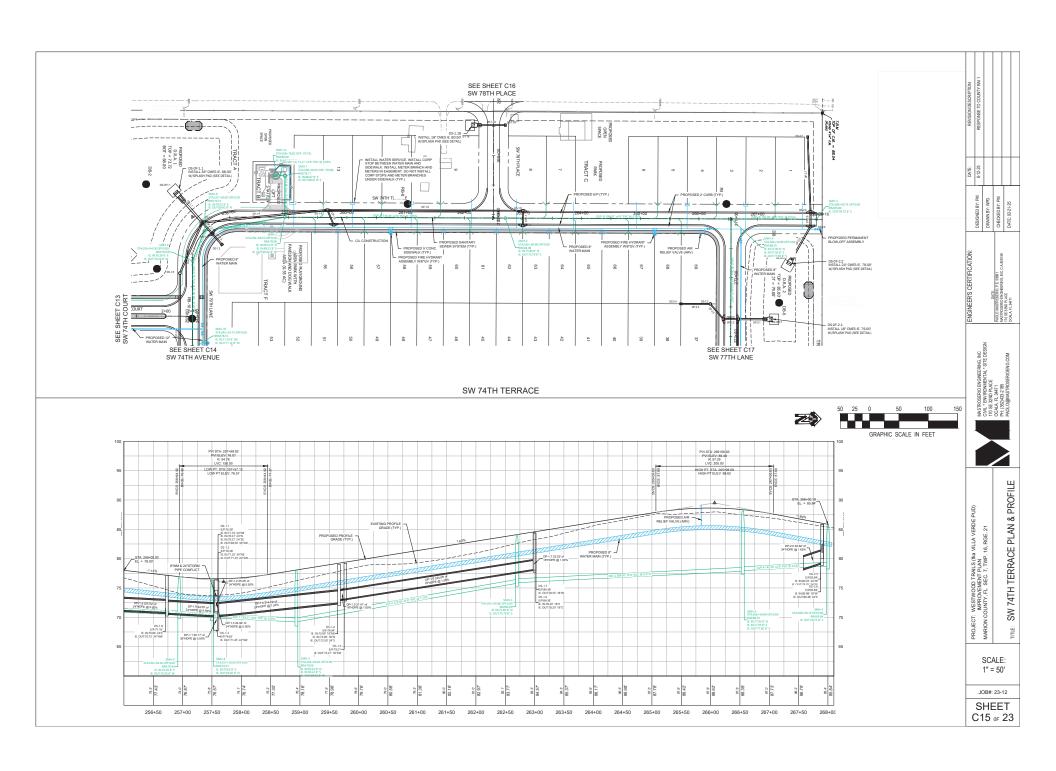
SANITARY STRUCTURE & PIPE TABLE

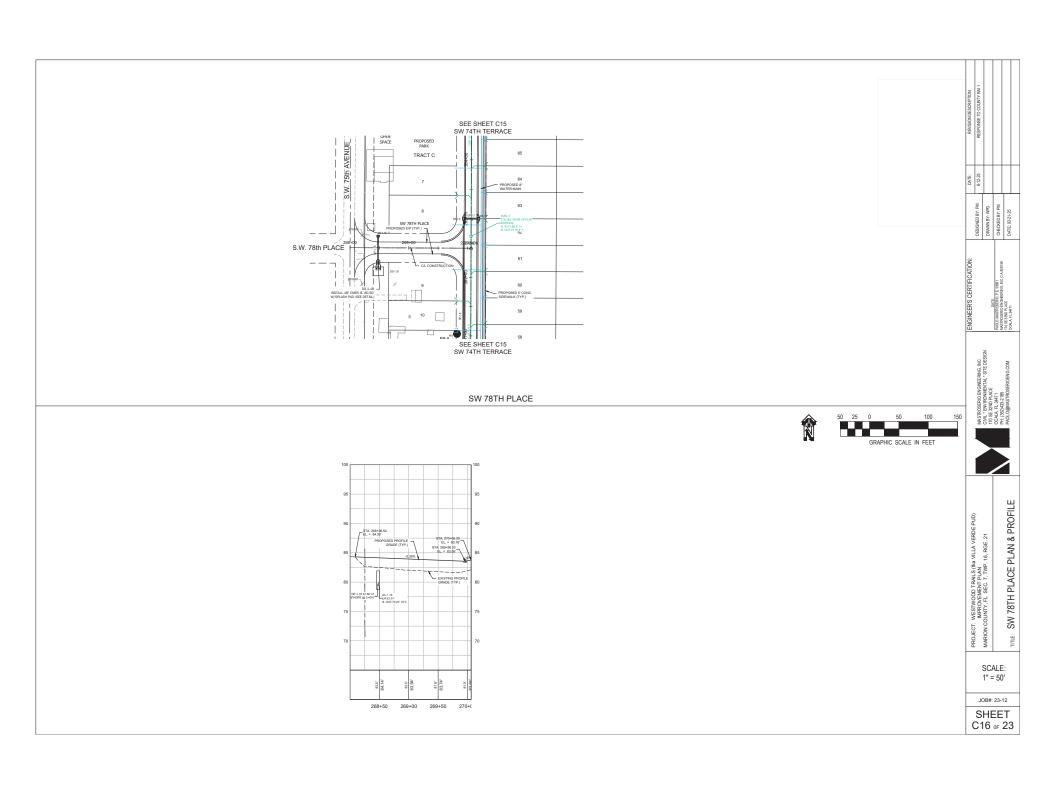
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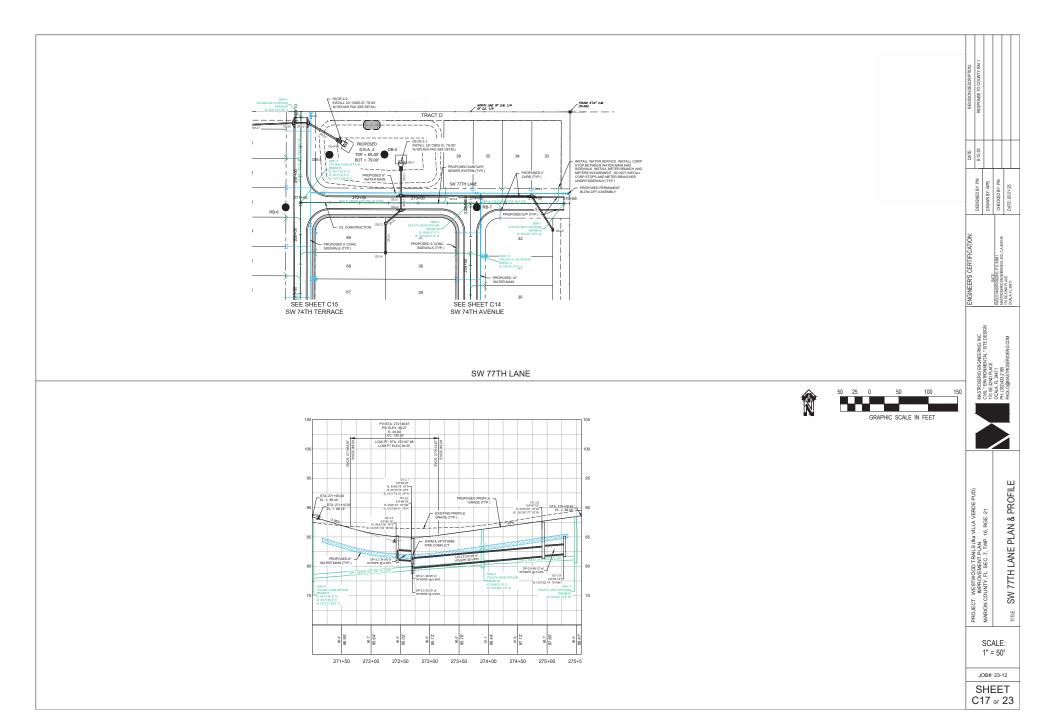
JOB#: 23-12 SHEET C12 of 23

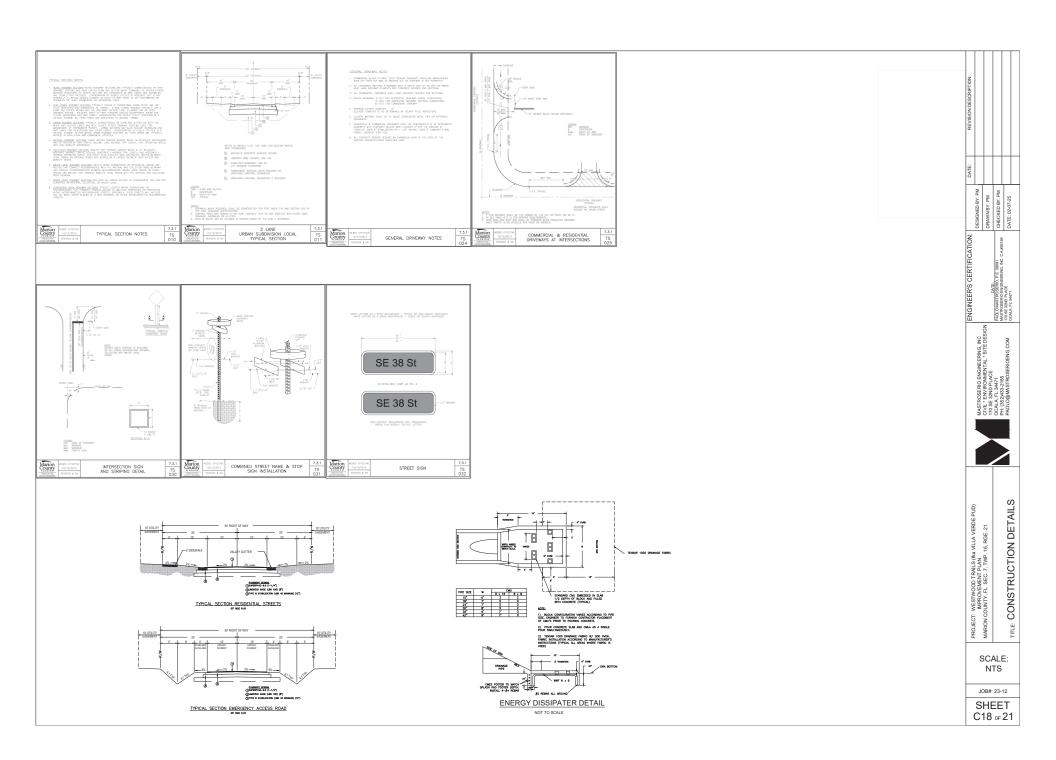


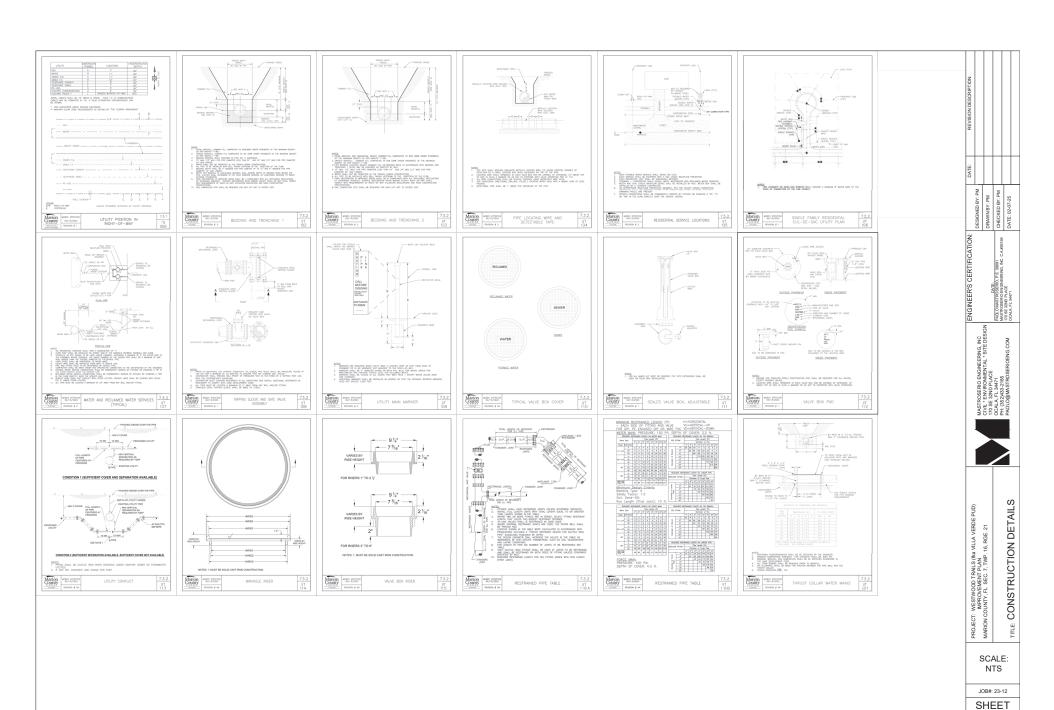




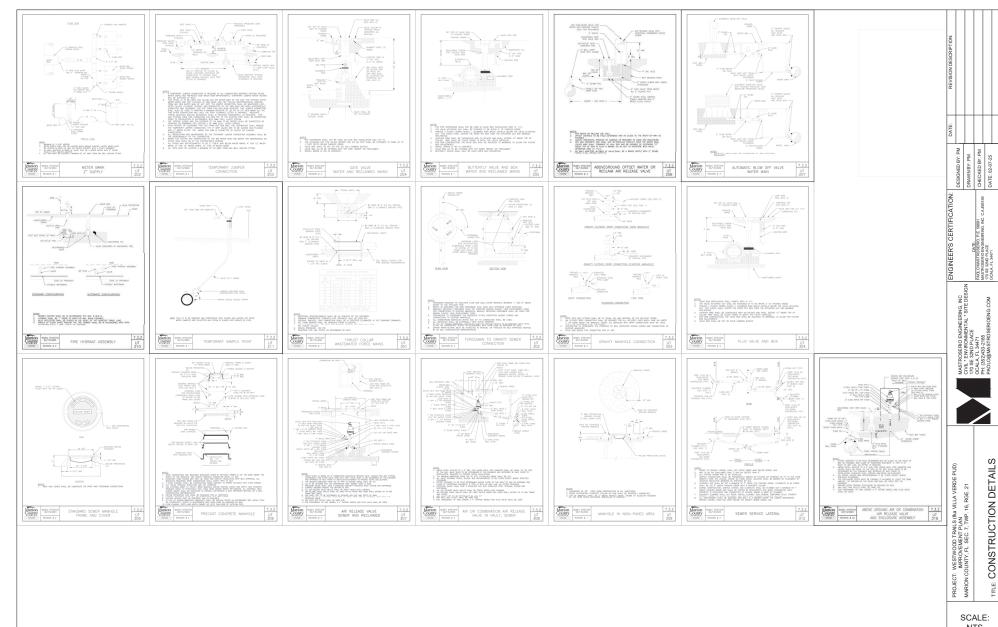








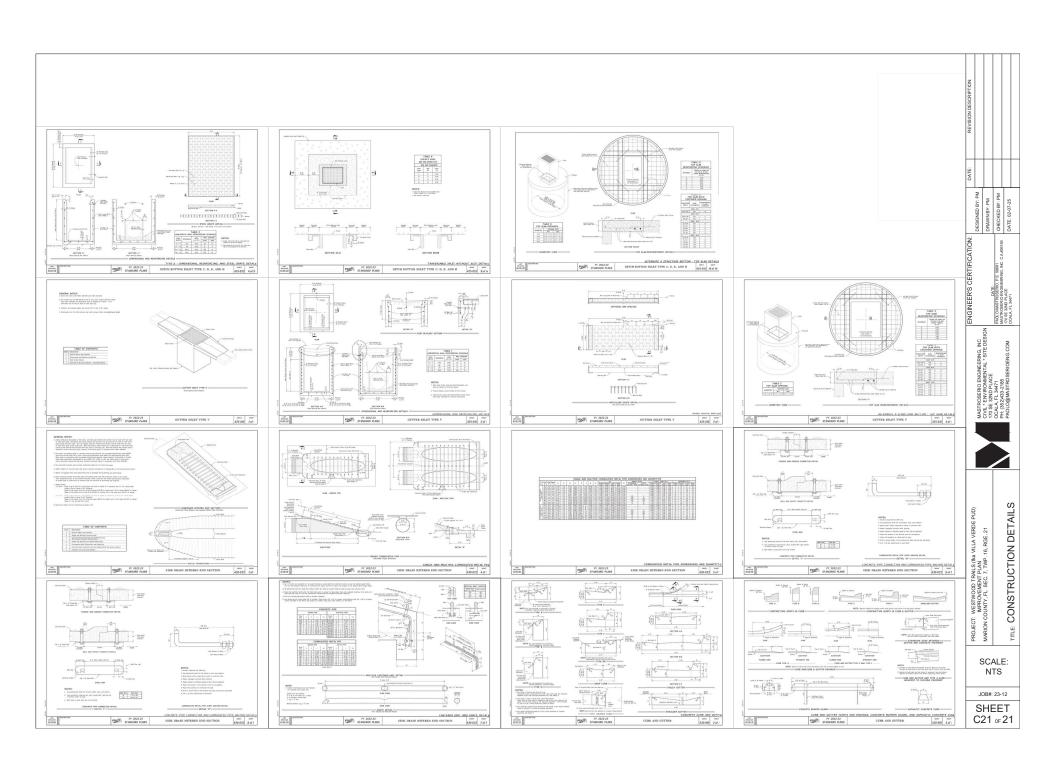
C19 of 21

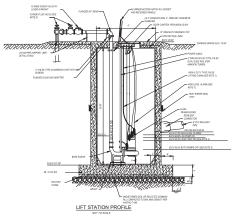


NTS

JOB#: 23-12

SHEET C20 of 21





#### MODIES, 3. EACH PUMP SMALL SE FITTED MITH 6 FEET (\$107) OF TYPE 1/6 98, 34" CHAIN AFTICHED TO THE LIFTING MECHANISM AND ARICONET RAITED (NE'S CARLE PROVIDED BETWEEN THE CARLE HOLDER AND THE CHAIN.

- 2. WALL SLEEVE AND COMPRESSION SEALS SHALL BE COMPATIBLE WITH LINER.
- 2 IF PLUG VALVE \$4.00, LEVER OPERATED; IF PLUG VALVE > 4.00, GGAR OPERATED WHEEL VALVE
- ELEVATION X ELEVATION Z ≥ 3 FEET.
- 6. SEE FIGURE UTS M FOR DESCRIPTIONS OF DIMENSION SYMBOLS.
- E. ALL FLANGES: PIPE, VALVES AND APPURTENANCES SHALL HAVE 316 SS HARDWARE.
- 9 EMENDANCY PUMP OUT CONNECTION SHALL BE A GO (GUICK DISCONNECT) MALE BY FLANGE (MIN. 4) ASSEMBLY. PLOWMETER AND METER BOX TO BE INSTALLED AS REQUIRED BY MCU, DETAIL SHOWING FLOWMETER AND COVER TO BE SUBMITTED TO AND APPROVED BY MCU.

DESCRIPTION	SYMBOL	DMENSION	ELEVATION
THICKNESS OF WALL	A	8" (MM)	
DIAMETER OF WET WELL	8	6	-
WIDTH OF BOTTOM FILLET	c	SEE NOTE 1	-
OIL OF WET WELL TO CIL OF PIPES	0	SEE NOTE I	
LENGTH OF PUMP ACCESS OPENING	E	SEE NOTE !	
WIDTH OF PUMP ACCESS OPENING	F	SEE NOTE /	-
CENTER OF WET WELL TO EDGE OF HATCH	G	SEE NOTE /	-
LIP WIDTH OF WETWELL BASE	8	16"	
THICKNESS OF WETWELL BASE	8	12"	-
TOP OF WET WELL	Т	-	80.00
FINISHED GRADE	U		79.50"
HIGH LEVEL ALARMS	V	-	67.39
LAG PUMP ON	w	-	66.89
LEAD PUMP ON / INFLUENT PIPE INVERT	×	-	66.39
PUMPS OFF (TOP OF PUMP VOLUTE)	Y	-	65.09"
BOTTOM OF PUMP TO FLOOR OF WET WELL	ρ	1 (21/844)	-
STEP HEIGHT (IF REQUIRED)	Q.	12" (MIN)	-
FLOOR OF WET WELL	Z	-	81.28"

- 2. ELENATION X ELENATION Z ≥ 5
- TOP ELEVATION OF WET MELL SHALL SEA MINIMUM OF 1 ABOVE THE 300 YEAR FLOOD ELEVATION AND THE ELEVATION OF THE DRIVING OF THE BOOK.
- 4. SYMBOLS SHOWN IN TABLE ARE USED IN DETAILS UTS IS AND UTS IS.
- 5. PUMPS MAY REQUIRE COOLING JACKETS OR ACJUSTMENTS PER MANUFACTURER

#### MCU DETAIL UT514 NOTES:

- MINUTURE THAT UTE 14 NOTES:

  DENDERS SHALL PROPER A SCALE (1" = 20" WK) SITE SPECIFO DENA.

  DENDERS SHALL PROPER A SCALE (1" = 20" WK) SITE SPECIFO DENA.

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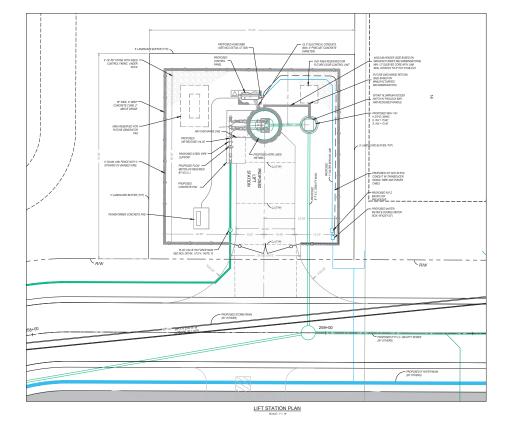
  DENDERS SHALL PROPER A SCALE (1" = 20" WK) SITE SPECIFO DENA.

  DENDERS SHALL PROPER SHALL PROPER SHALL SHALL PROPER TO POSTULATION.

  AND PROPERTY SHALL PROPERTY SHALL PROPERTY SHALL PROPERTY OF POSTULATION.

  THE CONCESSION DENGAN SHALL IS 6" THOSE WHIS "A" 6" WILLIES WEIGHT DENGALE THE OWNERS.

  DENGALE TO PROPERTY SHALL SHALL PROPERTY SHALL



#### **CONSTRUCTION NOTES:**

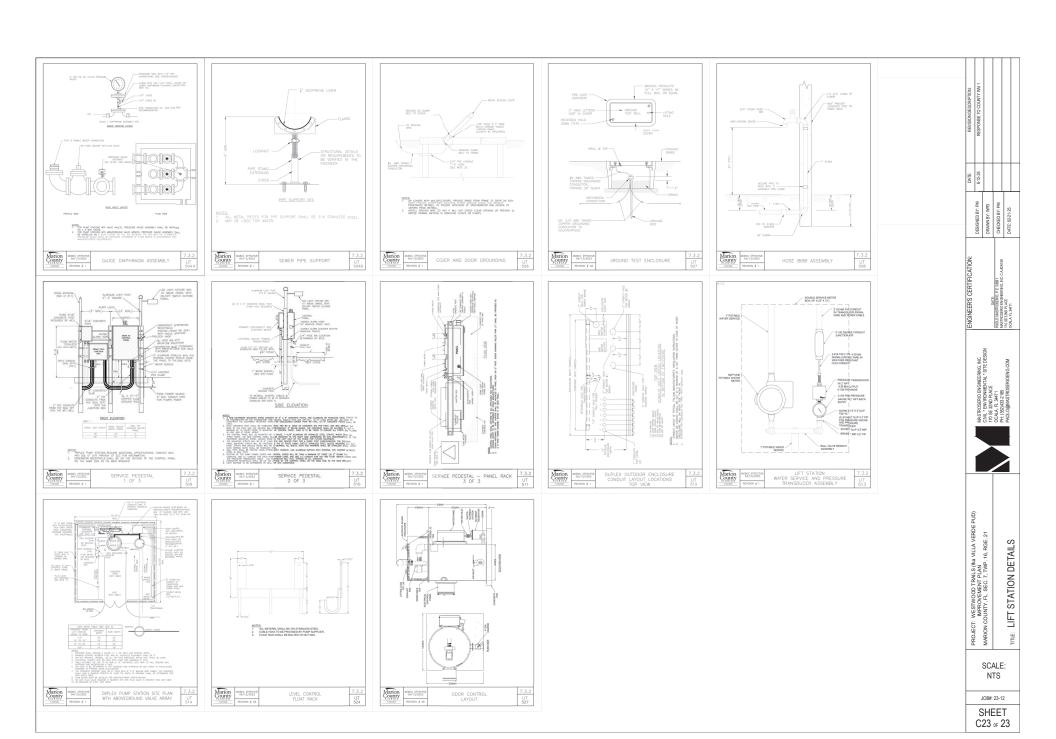
- ALL NOTES LISTED BELOW SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS STATED OTHERWISE.
- SEE MCU DETAILS FOR ADDITIONAL NOTES AND REQUIREMENTS.

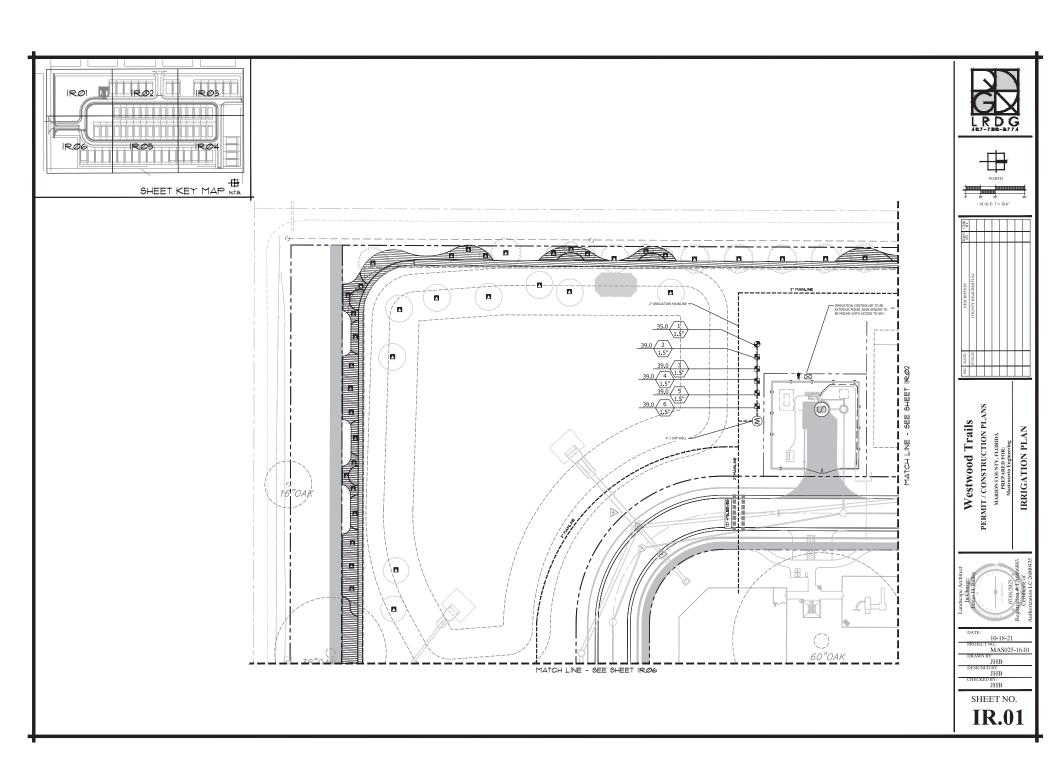


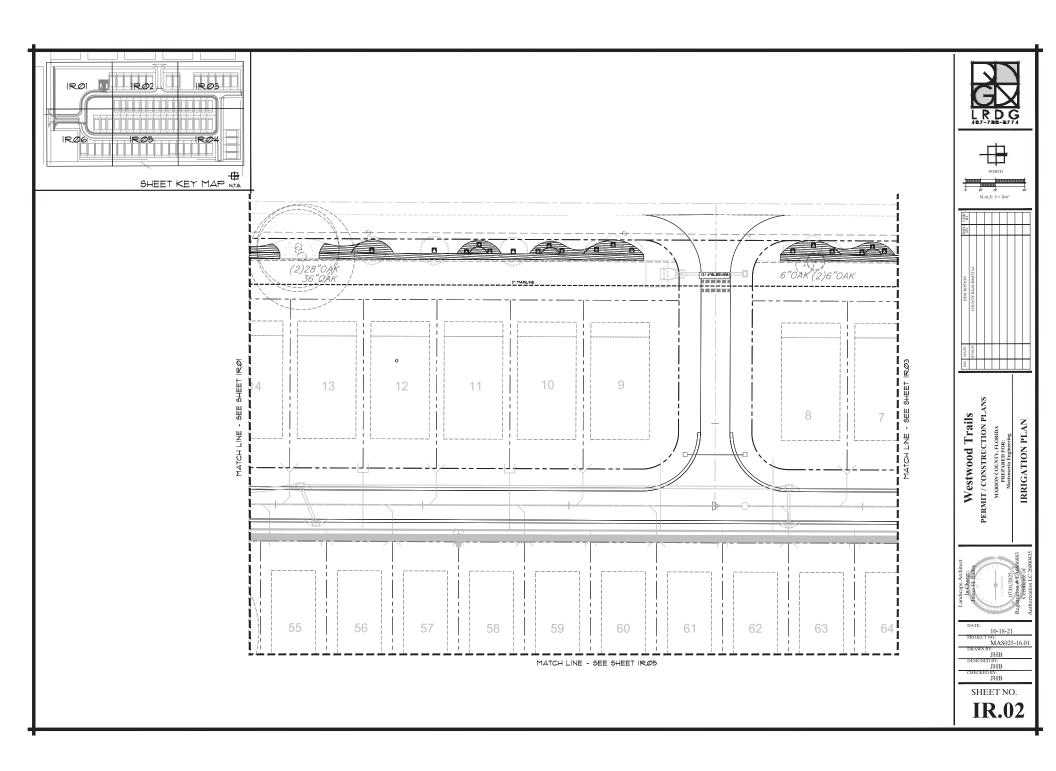
ENGINEER'S CERTIFICATION: NASTROSERIO ENGINEERING, INC COM. \* EMVIROXMENTIA. \* SITE DESIGN 170 SEXUD PA/OE COAAA, EJ 3471 PH-(1930)433-2198 PAOL OGINASTROSERIOENG.COM PROJECT: WESTWOOD TRAILS (#a VILLA VERDE PUD)
MPROVEMENT PLAN
MARION COUNTY, FL. SEC. 7, TWP. 16, RGE. 21 LIFT STATION DETAILS

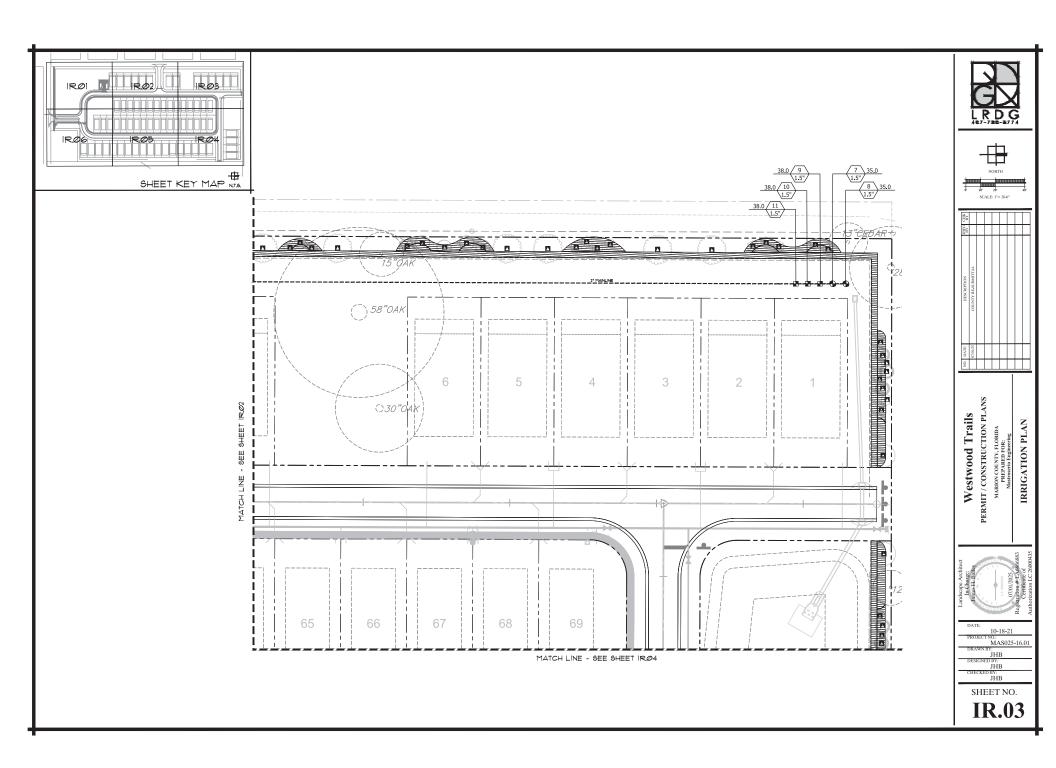
SCALE: 1" = 10' JOB#: 23-12

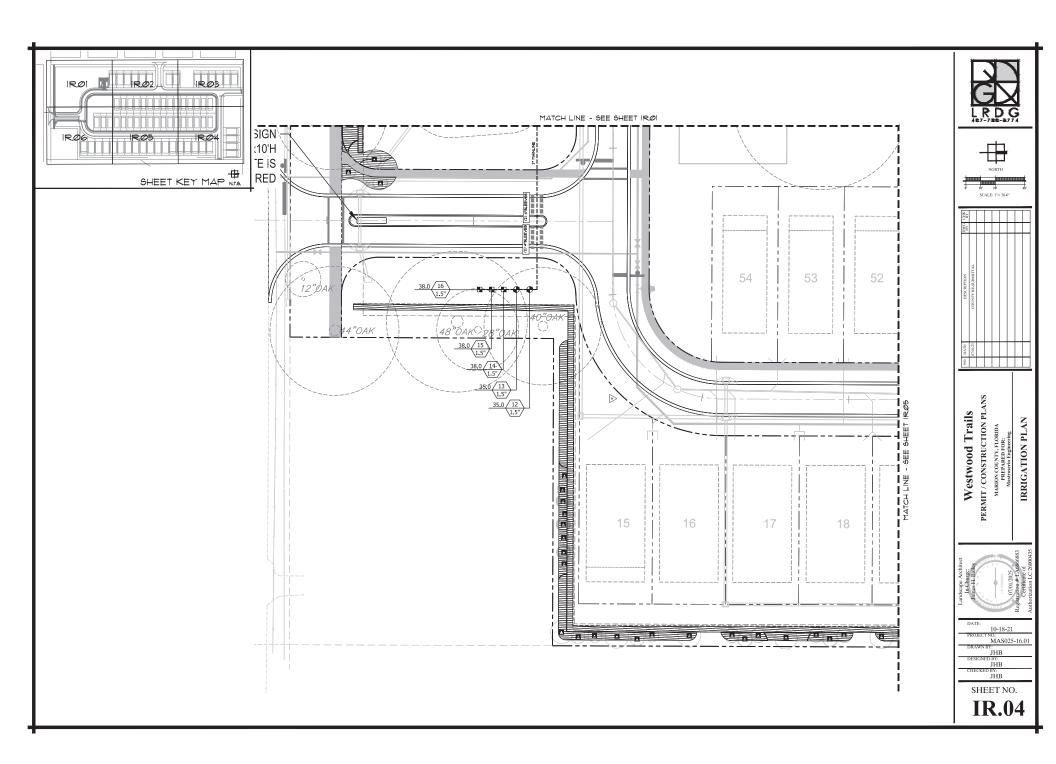
SHEET C22 of 23

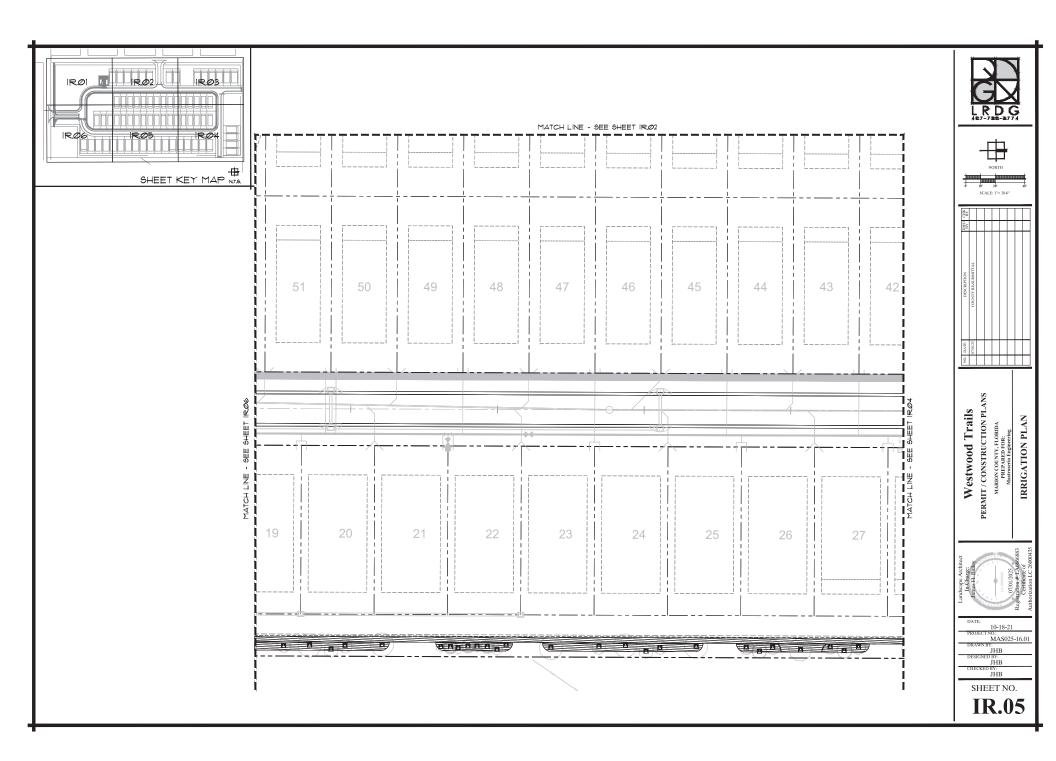


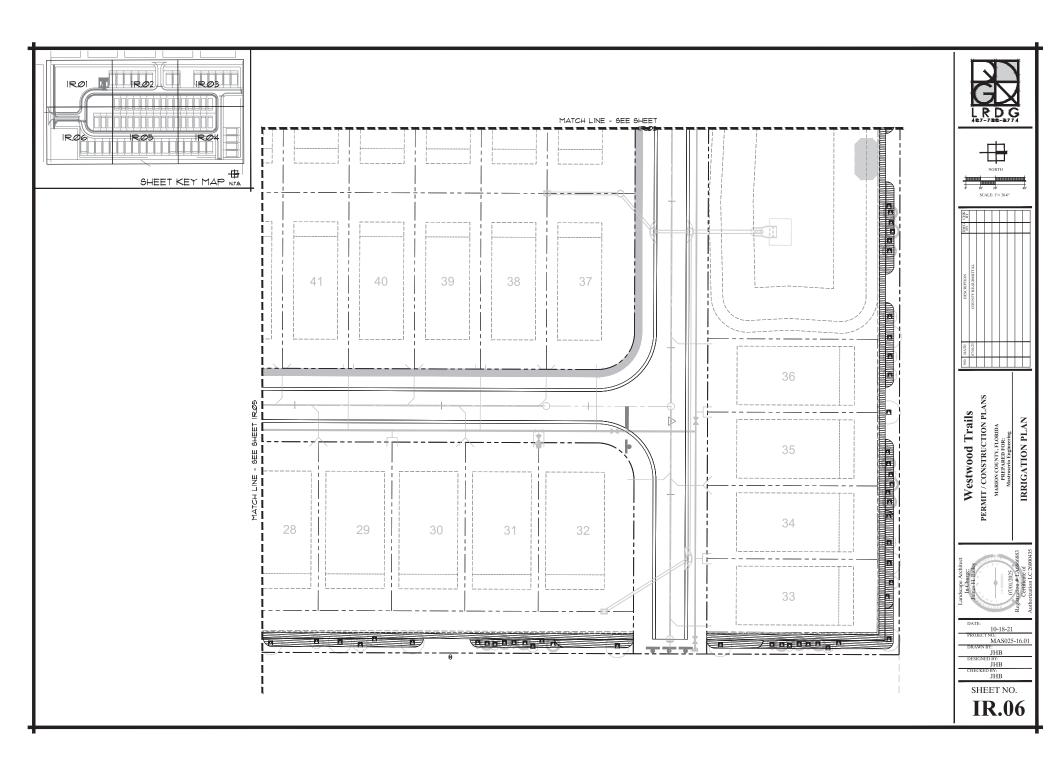


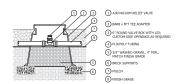












# AIR/ VACUUM RELIEF VALVE ON GRADE



2) PVC REDUCER AS REQUIRED 3) MPT TO POLY ADAPTER (4) POLY TUBING, 3' MIN. LENGTH (5) PVC LATERAL OR FLUSH HEADER (6) MPT CONNECTION FROM LATERAL 7) STANDARD VALVE BOX (8) BRICK SUPPORTS (4) 3/4" WASHED GRAVEL, 3" MIN. MULCH (1) FINISH GRADE

MANUAL FLUSH VALVE - PVC



1 BARB VALVE
2 POLY TUBING, 3' MIN. LENGTH
3 POLY TUBING (4) BARB ELL 6 STANDARD VALVE BOX BRICK SUPPORTS (4) (8) 3/4" WASHED GRAVEL, 3" MIN MULCH (II) FINISH GRADE

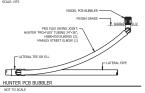
MANUAL FLUSH VALVE - POLY END RUN NOT TO SCALE

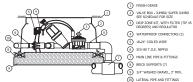


# DRIPLINE END FEED LAYOUT

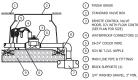


## IRREGULAR AREAS : ODD CURVES



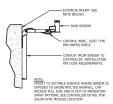


HUNTER DRIP CONTROL KIT

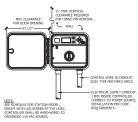


1 FINISH GRADE (2) STANDARD VALVE BOX 3 REMOTE CONTROL VALVE MODEL ICV WITH FLOW CONTROL (SEE PLAN FOR SIZE) (3) WATERPROOF CONNECTORS (2) (5) 18-24" COILED WIRE 6 SCH 80 T.O.E. NEPPLE (7) MAIN LINE PIPE & FITTINGS 8 BRICK SUPPORTS (4)

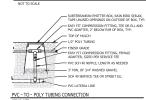
HUNTER ICV ELECTRIC GLOBE VALVE COMMERCIAL / MUNICIPAL



### HUNTER RAIN-CLIK SENSOR



### HUNTER CONTROLLER



### IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER / MODEL		TYPE	ARC	PSI GPM*	RAE
	Hunter PCB-50 (1 bubbler per tree)	Trickle	TREE	15-70 psi	1 @ 0.50 gpm	



Area to Receive Dripline
Hunter PLD-06-12 (12), Contractor to verify per plans
Dripline with 0.6 GPH emitters, non-draining, pressure
compensating, at 12" O.C., and row spacing at 12" O.C., off-set
emitters for triangular spacing.

W

Irrigation Well , Backflow prevention per county code. Well to produce 50 gpm/ 50 psi, min.

Hunter ICV-101 - 1" Electric Globe Valve w/ Flow Control Hunter ICV-151 - 1 1/2" Electric Globe Valve w/ Flow Control Hunter ICV-201 - 2" Electric Globe Valve w/ Flow Control

Hunter ICZ-151-40 Drip Controller (FLOW 20-60 GPM) w/ 1" HY100 Filter System. Super Jumbo Valve pit regu

Hunter PRO-C Modular Station Controller Model: PC Outdoor Provide PCM Modules as required Hunter Rain-Clik Sensor Mount in location with open view to sky,

 $\boxtimes$ Irrigation Mainline: 2" PVC Class 200 SDR 21

\_\_\_\_\_ Irrigation Lateral Line: PVC Class 160 SDR 26 (Not shown, Size per chart)

Sch 40 Irrigation Sleeve

NOTE: CONTRACTOR RESPONSIBLE FOR HIS OWN TAKE-OFFS, THE IRRIGATION PLAN IS DIAGRAMMATIC IN NATURE, LOCATIONS OF PIPING AND OTHER APPLICTENANCES ARE SHOWN FOR CLARITY. FIELD CHANGES MAY BE REQUIRED TO ACHIEVE PROPER IRRIGATION COVERAGE.

ALL PIPE SHALL BE LOCATED WITHIN PROPERTY BOUNDARIES.

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

- THE CONTROL OF SHARE AS EXPENSION FOR THE SHARE AND THE WORK, WHETHER THEY ARE BYILD OR STRUCK BY AND THE CONTROL OF SHARE AND THE SHARE AND T

- IN MODIFICATION DEPOSITION ENGAGES

  IN MODIFICATION DEPOSITION ENGAGES

  IN MODIFICATION DEPOSITION DECIDINATES

  IN MODIFICATION DECI
- C. THE BROCATION SYSTEM PROVIDED BY THE CONTRACTOR SHALL COVER THE BROCATION PROJECT AREA LIBRITS AS IDENTIFIED ON THE MARK, OR AS APPROVING BY THE OWNER. THE MERG SHALL BE 100% BROCATED WITH BALANCES HAD TO 16-BO COMPAGE, EXISTS DEPARKED TROSS FOR USE AND TRESS FOR BESIDES. THE BROCATION SYSTEMS SHALL BE EQUIPPED WITH AN AUTOMATIC CONTROLLER, AUTOMATIC PAIN CUT-OFF SWITCH, AND BACK-FLOW PREVENTION.
- E. ALL IRRIGATION INSTALLATION, MAINTENANCE PROFESSIONALS SHALL BE LICENSED AND CERTIFIED IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.

## IRRIGATION WATERING RESTRICTIONS, NON-RESIDENTIAL

- I REGISTRATO DE L'ATTRICE TOURNE DE L'ANDIE DE L'ANDIE

#### VALVE SIZING

		LOSS IN PSI	
How	1"	11/2"	2"
GPM.	Globe	Globe	Glob
1	1.1		
5	1.9		
10	1.9		
15	1.6		
20	3.3	3	1
30	9.1	3	1
35	16	3	2
40	20	3	2
50		4	2 3
60		5	2
80		4 5 5.5	3
100		9	5
120		11.5	6
135			8
190			10

Z	ONE SCHEDULE
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	TREE BUBBLER DRIP ZONE DRIP ZONE DRIP ZONE DRIP ZONE DRIP ZONE DRIP ZONE TREE BUBBLER DRIP ZONE DRIP ZONE DRIP ZONE TREE BUBBLER TREE B

# LATERAL ZONE LINE PIPE SIZING DOWNSTREAM

# OF EACH ZONE VALVE (UNLESS OTHERWISE NOTED ON THESE PLANS)

(UNILESS OTHERWISE NOT LED ON THESE PLANTS). THE BELOW GUIDE GIVES A GENERAL CULTURE FOR LATERAL ZONE LINE PIPE SIZING, SIZING SHOULD BE STARTED FROM THE FURTHEST MOST EXPENDITION FOR EACH ZONE AND WORKED BACK TO THE ZONE WAY. CARE SHOULD BE TAKEN TO TOTAL BACH INTERSECTION OF LATERAL ZONE LINE THE CAPH TO BE BACK ZONE LINE SHOULD BE TAKEN TO TOTAL BACH INTERSECTION OF LATERAL ZONE LINE CAPH TO BE CAPH TO BE CAPH TO BE CAPH TO BE SHOULD BE SH

THE GPH FOR EACH ZONE IS GEVEN AT	EACH WALVE CALLFOOL ON THE HOA
GALLONS PER MINUTE (GPM)	APPROPRIATE PIPE SIZE
0-10 GPM	3/4" PVC
11-16 GPM	1" PVC
17-25 GPM	1 1/4" PVC
26-35 GPM	1 1/2" PVC
36-55 GPM	2" PVC
56-85 GPM	2 1/2" PVC
86-120 GPM	3" PVC
121-220 GPM	4" PVC



VALVE LOCATION SYMBOL

ý d

PLANS

'estwood'

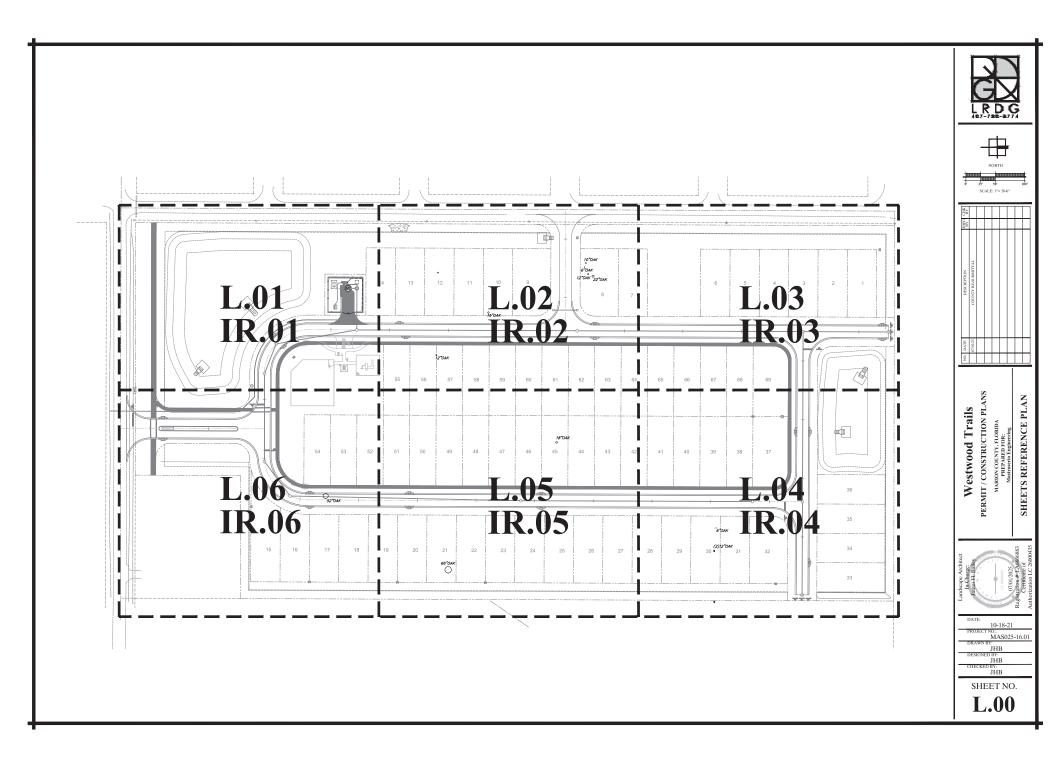
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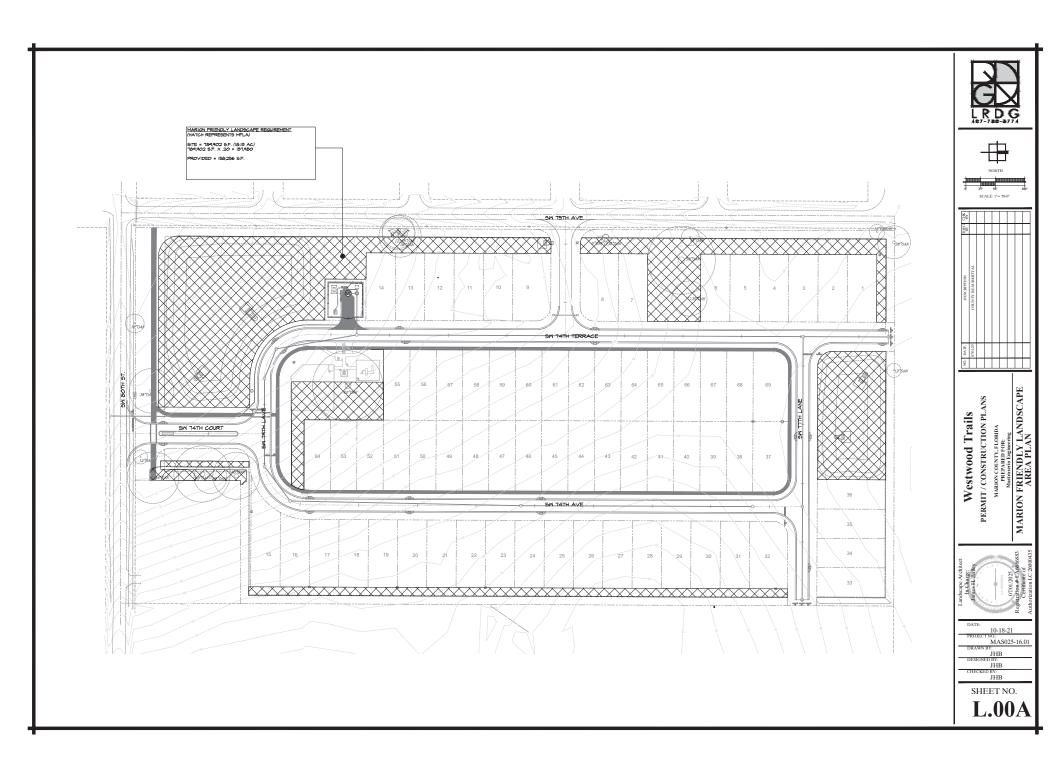
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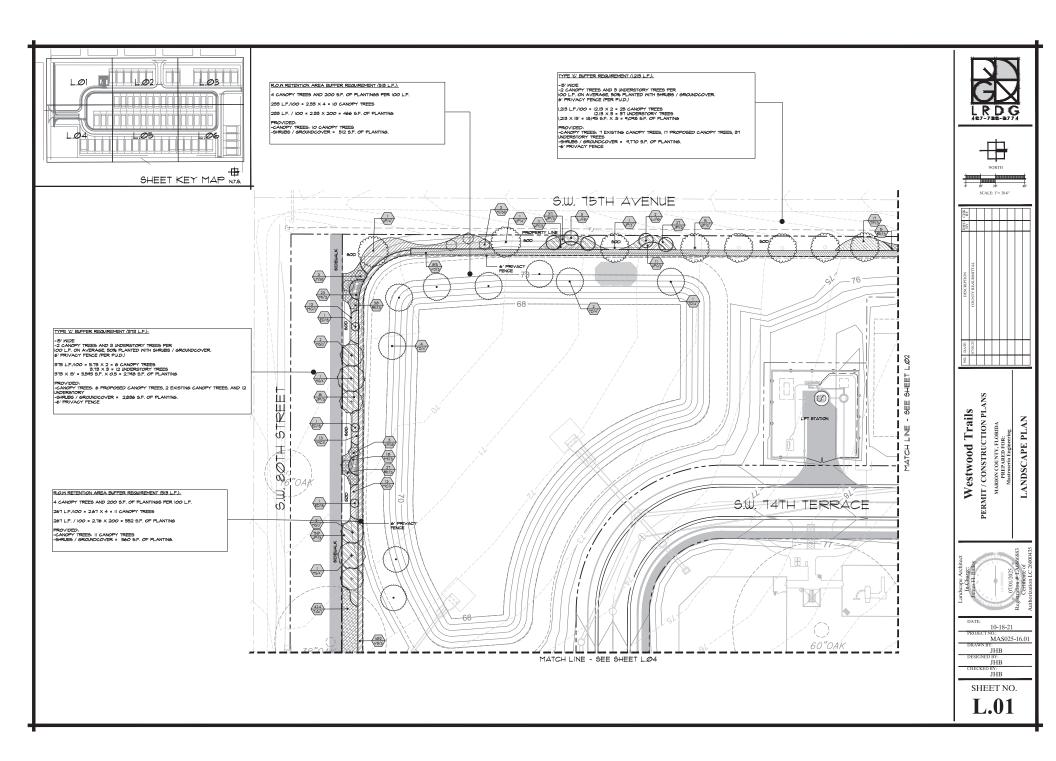
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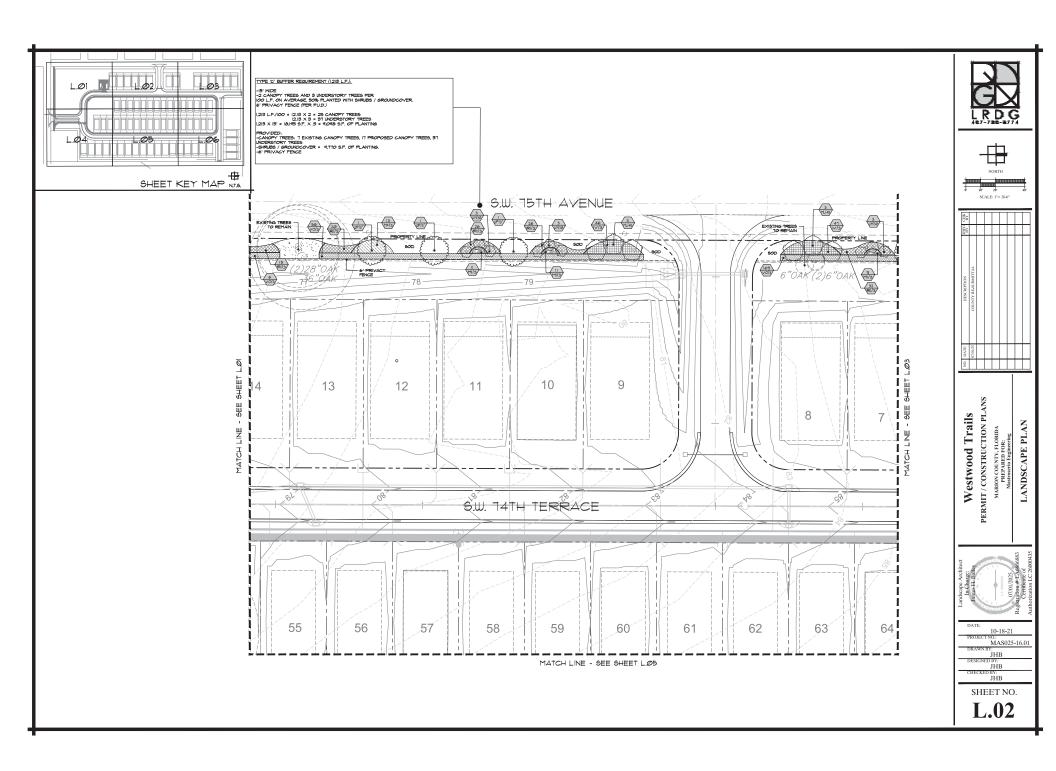
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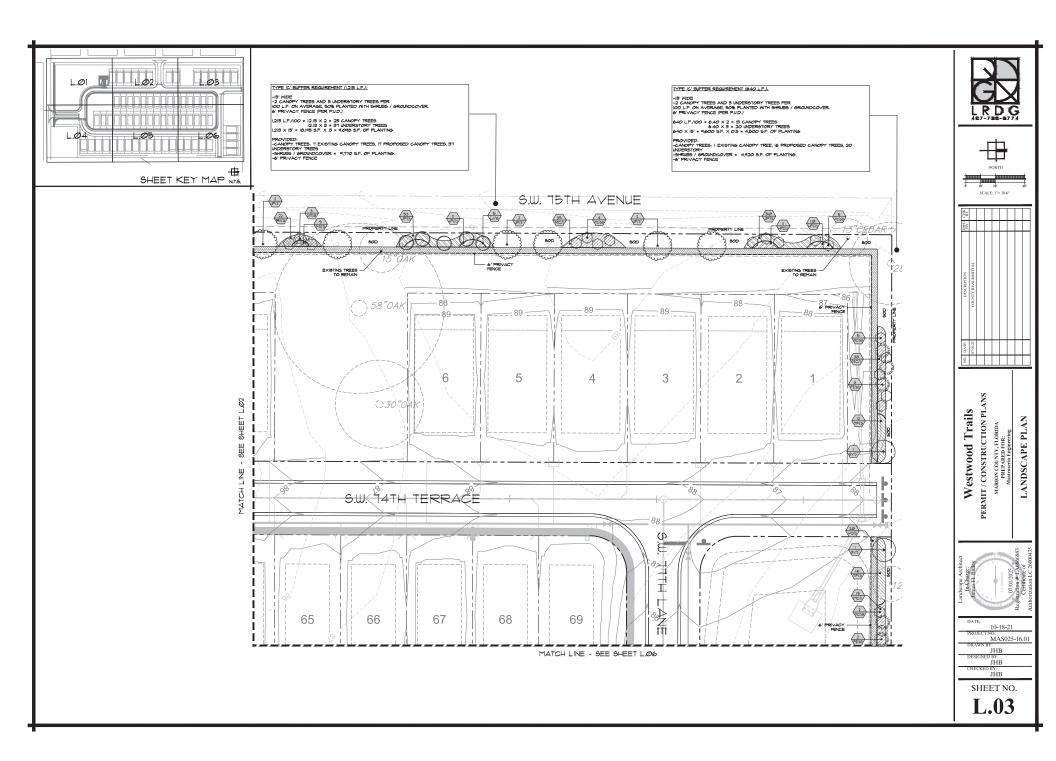
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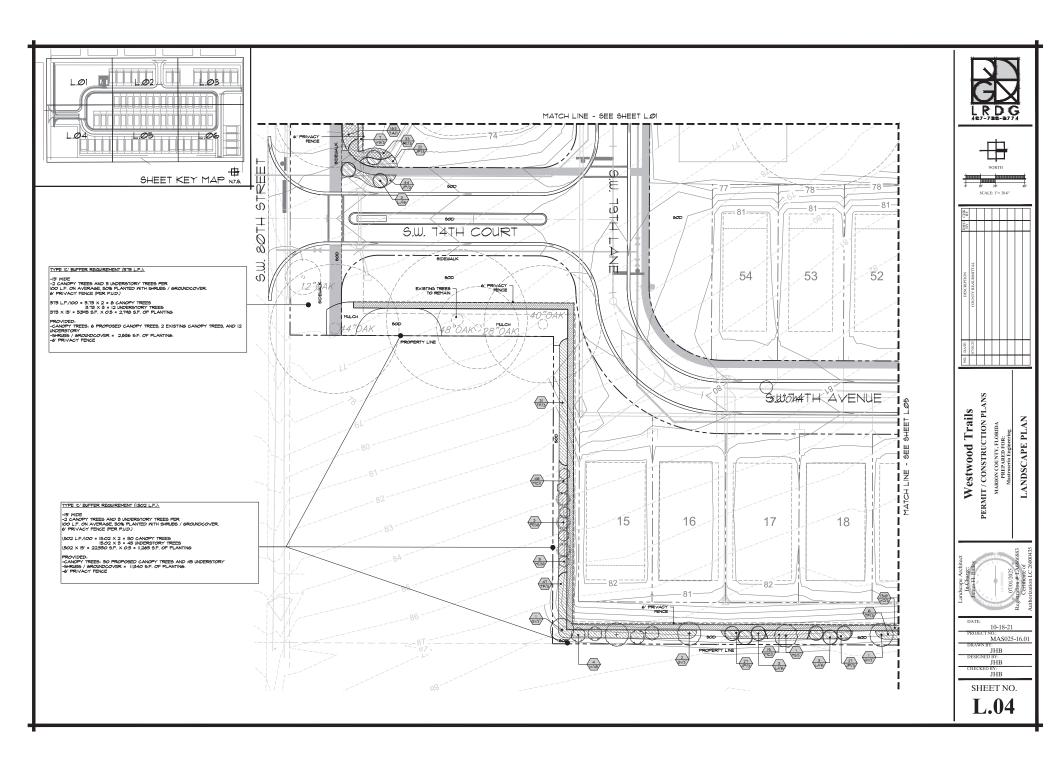


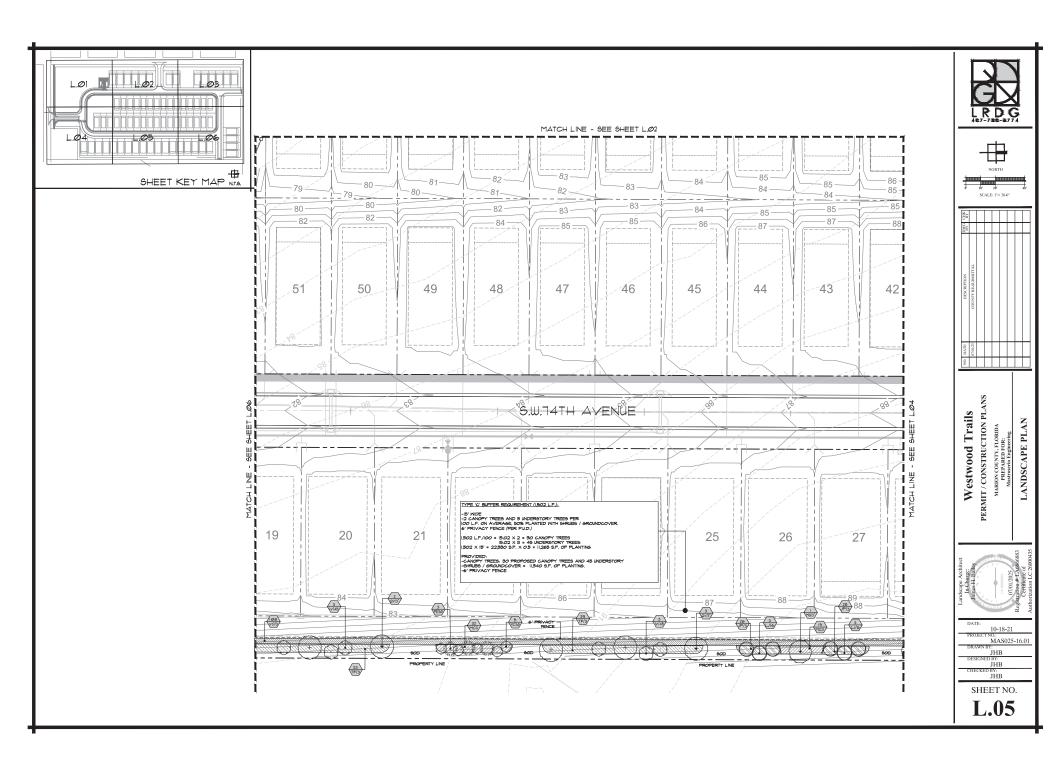


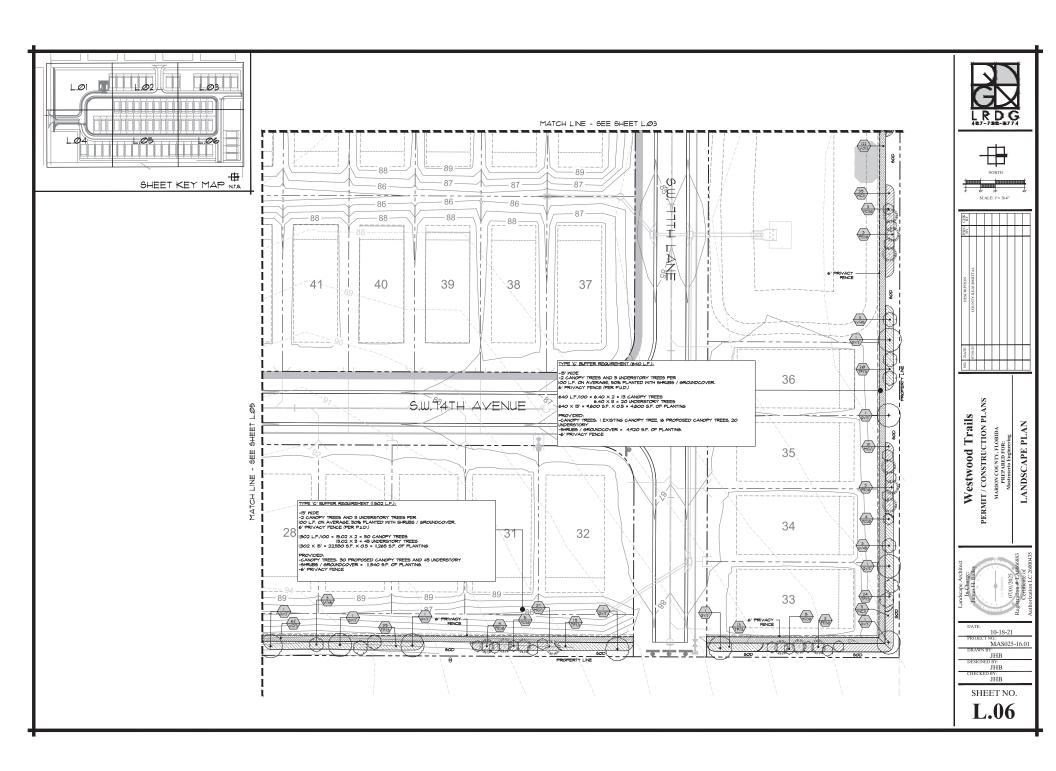












# **Westwood Trails**

Marion County, Florida

# **Landscape and Irrigation Permit / Construction Plans**

# **■ PROJECT TEAM**

#### LANDSCAPE ARCHITECT: Land Resource Design Group Inc. 2929 Wadsworth Avenue Orlando, FL 32806 Phone: (407) 730-5774

# CIVIL ENGINEER:

Mastroserio Engineering, Inc. 170 SE 32nd Place Ocala, FL 34471 Phone: (352) 572-3051

# VICINITY MAP





SHE	ET INDEX			
SHEET#	SHEET TITLE		SHEET#	SHEET TITLE
	COVER SHEET	1		
TR.01	TREE REMOVAL PLAN	1	IR.01	IRRIGATION PLAN
L.00	LANDSCAPE REFERENCE PLAN	1	IR.02	IRRIGATION PLAN
T 00 A	MARION FRIENDLY	1	IR.03	IRRIGATION PLAN
L.00A	LANDSCAPE AREA PLAN		IR.04	IRRIGATION PLAN
L.01	LANDSCAPE PLAN		IR.05	IRRIGATION PLAN
L.02	LANDSCAPE PLAN		IR.06	IRRIGATION PLAN
L.03	LANDSCAPE PLAN		IRD.01	IRRIGATION DETAILS
L.04	LANDSCAPE PLAN	1		
L.05	LANDSCAPE PLAN	1		
L.06	LANDSCAPE PLAN	1		
LD.01	PLANTLIST & NOTES	1		
LD.02	LANDSCAPE DETAILS	1		
LD.03	LANDSCAPE SPECIFICATION	1		
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Lands 03/08	stwood Trails  cape and Irrigatoin Permit / Construction Plans 8/2025  Project No. MAS025-16.01		G X
No.	Revisions	Date	Landscape Architect In Charge: James H. Bailey
	INITIAL COUNTY SUBMITTAL	03/14/2025	IA consess  Registration # LA6666883
			Certificate of Authorization LC 26000435 Land Resource Design Group

CODE	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
	JG/11	BOTANICAL NATIE	CONTINUN NAME	REITIARNS
TREES	_			145 GAL OR F.G., 8' HT. X 5'-6' SPRD., 2
IV/45	19	ILEX VOMITORIA	YAUPON HOLLY	DBH. MIN. TOTAL, MULTI-TRUNK.
ML/45	6	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM DWARF SOUTHERN MAGNOLIA	45 GAL OR B\$B, 8'-9' 9PRD. × 3'-4' HT 2"-2 1/2" CAL MIN.
CANOP	Y TREES	÷		
MG/4"	2	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	100 GAL OR RPG, 14'-15' HT., 6'-1' SPR
MG/3°	6	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	65 GAL OR RPG, 15' HT., 5'-6' SPR., 3
PE/30	24	PINUS ELLIOTTI 'DENSA'	DENSA SLASH PINE	B\$B. 1'-8' × 3'-4'. 3 1/2" CAL MIN:
QV/3"	20	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	65 GAL, OR RPG, 12'-13' HT., 6'-1' SPR 1/2" CAL MIN.
TD/3"	2	TAXODIUM DISTICHUM	BALD CYPRESS	65 GAL, OR RPG, 13'-14' HT., 4'-5' SPR. 1/2" CAL MN.: NATIVE
TD/4"	1	TAXODIUM DISTICHUM	BALD CYPRESS	100 GAL, OR RPG, 14'-15' HT., 5'-6' SPI 4" CAL MIN. NATIVE
uP/3*	15	ULMUS PARVIFOLIA 'EMER II'	'EMER II' ALLEE ELM	RPG OR 65 GAL, 12'-14' HT. X 5'-6' SPRD., 3.5" GAL, MN
uP/4°	2	ULMUS PARVIFOLIA 'EMER II'	'EMER II' ALLEE ELM	100 GAL OR RPG., 14'-15' HT. X 6'-1' SPRD., 4" GAL MIN.
			-	or no., 4 one rinc
UNDERS		T	I	30 GAL. 6'-1' × 3'-4'. MULTI-TRUNK. 5
LIM/30	18	LAGERSTROEMIA INDICA 'MUSKOGEE'	LAVENDER CRAPE MYRTLE	CANES
LJ/6	25	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	RPG, 6'-1 × 6'-1', MULTI-TRUNK, 5 TRUN MN, 1" CAL PER TRUNK, TOTAL OF 5" C FOR ALL TRUNKS COMBINED, TIGHTLY AND SYMMETRICALLY PRUNED
MC/30	46	MYRICA CERIFERA	WAX MYRTLE	30 GAL, 6' HT. MIN X 4'-5', MULTI-TRUN
E /EB/	DEEN A	CGENTS		1105117 E
ED/I5	3	ELAEOCARPUS DECIPIENS	JAPANESE BLUEBERRY TREE	15 GAL, 6' HT. × 2'-3' SPRD. (FULL TO GROUND)
SHRUB	ABEAG	•		
HPG/3	65	HAMELIA PATENS 'COMPACTA'	DWARF SCARLET BUSH	3 GAL,15"-18" HT., 15"-18" SPR., 14" HT N 30" O.C.
IV/3	93	ILEX VOMITORIA 'NANA'	DWARF YAUPON	3 GAL, 14"-15" HT., 14"-15" SPR.,14" HT N 30" O.C.: NATIVE
MI/3	81	MORAEA IRIDIOIDES	BUTTERFLY IRIS	3 GAL, 24° HT, FULL
RI/3	246	RHAPHIOLEPIS INDICA 'ALBA'	WHITE INDIAN HAWTHORN	3 GAL, 15"-18" HT., 10"-13" SPR., 30" O.
TF/3	329	TRIPSACUM FLORIDANUM	DWARF FAKAHATCHEE GRASS	3 GAL, 24° × 24°, 48° O.C.
V0/3	182	VIBURNUM ODORATISSIMUM	SWEET VIBURNUM	3 GAL, 18"-24" × 18"-24". 48" O.C.
vs/3	108	VIBURNUM SUSPENSUM	SANDANKWA VIBURNUM	3 GAL, 18"-20" × 18"-20",18" HT MIN, FU 36" O.C.
ORNAM	ENTAL C	3RASSES		
MC/I	510	MUHLENBERGIA CAPILLARIS	PINK MUHLY	I GAL, 18" HT. X 18"-20",18" HT MIN, 5PF 36" O.C.
GROUNI	O COVE	R6		
JP/3	512	JUNIPERUS CHINENSIS 'PARSONII'	PARSON JUNIPER	3 GAL, 12"-16" × 12"-16", 30" O.C.
	261	TRACHELOSPERMUM ASIATICUM	ASIAN JASMINE	I GAL, FULL, 12" RUNNERS, 18" O.C.

ABBREV.	BOTANICAL NAME	COMMON NAME	SIZE & SPACING
MULCH		Pinelpark Mulch	8" thick min.
900	Paspalum Natatum 'Angentine'	Argentine Bahla	

THE CONTRACTOR IS RESPONSIBLE FOR VERRICATION OF QUANTITIES IN THE PLANT LIST. IN THE EVENT OF A CONFLICT BETWEEN QUANTITIES IN THE EVENT OF A CONFLICT BETWEEN QUANTITIES IN THE LIST AND THE PLANS BHALL CONTROL AND THE DISCREPANCY SHALL BEE BROADER TO THE ATTENTION OF THE LANDSCAPE ARCHITECT ROUGHLIST PROVIDED THE ADDISCAPE ARCHITECT ROUGHLIST PLANS PLANS BE APPROVED BY HE LANDSCAPE ARCHITECT OR QUIED PLANS THAT BY APPROVED BY HE LANDSCAPE ARCHITECT OR QUANTION PROVIDED PLANS PLANS THE APPROVED BY HE LANDSCAPE ARCHITECT OR QUANTION PROVIDED PLANS PLANS PLANS PARKET STORY AND THE LANDSCAPE ARCHITECT OR QUANTION PLANS PLANS

AFTER COUNTY APPROVAL, CUNER RESERVES THE RIGHT TO REDUCE THE QUANTITY / SIZE OF ALL PLANTS AND TREES TO THE MINIMUM REQUIRED BY CODE WITHOUT ADDITIONAL REVIEW / APPROVAL.

#### GENERAL NOTES: (REFER TO SEPERATE SPECIFICATIONS SHEET FOR COMPLETE REQUIREMENTS)

- ALL PLANT MATERIAL SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS SPECIFIED IN GRADES AND STANDARDS FOR NURSERY, PLANTS, DIVISION OF PLANT INDUSTRY, FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, AND SHALL CONFORM TO AMERICAN STANDARDS FOR NURSERY STOCK, AMERICAN NURSERY AND LANDSCAPE ASSOCIATION, LATEST EDITION.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF QUANTITIES IN THE PLANT LIST. IN THE EVENT OF A CONFLICT BETWEEN QUANTITIES IN THE LIST AND THE PLANS, THE PLANS SHALL CONTROL AND THE DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BID. ANY DEVIATION FROM THESE PLANS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE BUILDING CODES, ORDINANCES AND LOCAL REGULATIONS, AND IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR THE WORK.
- 4. ALL LANDSCAPE INSTALLATION/ MAINTENANCE PROFESSIONALS SHALL BE LICENSED AND CERTIFIED IN ACCORDANCE WITH STATE AND LOCAL
- 5. THE CONTRACTOR SHALL EXAMINE EXISTING SITE CONDITIONS AND PROMPTLY REPORT ALL DISCREPANCIES AND INSUITABLE CONDITIONS (WETNESS, MICK DEBRIS, OBSTRUCTIONS, ETC.) TO THE LANDSCAPE ARCHITECT PRIOR TO BIDDING. THE CONTRACTOR IS RESPONSIBLE FOR SOIL ANALYSIS PRIOR TO INSTALLATION OF PLANTINGS, AND SHALL ENSURE ALL SOIL AMENDHENTS CONVENT TO SPECIFICATIONS.
- 6. THE CONTRACTOR SHALL ACQUAINT HIMSELF WITH THE SITE AND ALL UTILITIES, (INCLUDING WATER, SEWER AND ELECTRICAL SUPPLY). THE CONTRACTOR SHALL CALL FLORIDA SUBHINE SII AND AREA UTILITIES NOT LISTED ON THE LOCATE TICKET. THE EXACT LOCATION OF ALL EXISTING ABOVE GROUND AND INDERGROUND STRUCTURES, UTILITIES, SPRINKLERS AND PIPE MAY NOT BE INDICATED ON DRAWINGS. THE CONTRACTOR SHALL CONDUCT HIS WORK IN A MANNER TO PROTECT AND PREVENT INTERREPTION OR DAMAGE SUSTING SYSTEMS AND UTILITY SERVICES WHICH MUST REMAIN OPERATIONAL. THE CONTRACTOR IS RESPONSIBLE FOR THEIR REPLACEMENT IF DAMAGED BY HIM AT NO ADDITIONAL COST TO THE
- 1. CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN, AND IS RESPONSIBLE FOR THEIR COMPARABLE REPLACEMENT IF DAMAGED BY HIM AT NO ADDITIONAL COST TO THE OWNER.
- 8. ALL TREE MATERIAL SHALL BE CONTAINER GROWN UNLESS OTHERWISE SPECIFIED.
- 9. SOIL PROVIDED SHALL BE FREE OF LIMEROCK, PEBBLES OR OTHER CONSTRUCTION DEBRIS.
- 10. ALL PLANTING BEDS SHALL RECEIVE A 3" LAYER OF MULCH (1" OVER ROOTBALL), MEASURED AFTER MULCH HAS SETTLED.
- II. ALL PLANT BEDG SHALL BE FREE OF WEEDS, ROCKS, AND CONSTRUCTION DEBRIS, ETC., AT TIME OF INSPECTION BY LANDSCAPE ARCHITECT/ OWNER/ INSPECTIOR
- 12. MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA YARDS & NEIGHBORHOODS HANDBOOK http://ffl.ifas.ufl.edu
- 13. ALL LANDSCAPE MAINTENANCE SHALL BE IN ACCORDANCE WITH MARION COUNTY LDC SEC. 6.8.13.
- 14. FERTILIZER AND LANDSCAPE CHEMICAL USE SHALL COMPLY WITH MARION COUNTY LDC SEC. 6.8.14.
- B. ALL IRRIGATION SYSTEMS SHALL BE DESIGNED, OPERATED, AND MAINTAINED IN ACCORDANCE WITH MARION COUNTY LDC DIV. 9 IRRIGATION 6.96, AND ALL OTHER STATE AND LOCAL STATUES THAT APPLY. AN IRRIGATION PLAN SHALL BE PROVIDED PRIOR TO ISSUANCE OF A DEVELOPMENT OPERER OF BUILDING PROVIDED BY OTHERS. UPON COMPLETION OF THE OPERER OF BUILDING PROVIDED. IRRIGATION DESIGN, AND AS-BUILT PLANS SHALL BE PROVIDED TO THERE. UPON COMPLETION OF THE IRRIGATION SYSTEM INSTALLATION AND ACCEPTANCE OF THE AS-BUILT PLANS AND OPERATIONAL INFORMATION, A FINAL LANDSCAPE / IRRIGATION RELEASE SHALL BE SIGNED AND SEALED BY THE PROJECT LANDSCAPE ARCHITECT AND SUBMITTED TO MARION COUNTY.
- 16. ALL CERTIFICATION AND LICENSING OF LANDSCAPE PROFESSIONALS AND IRRIGATION INSTALLATION/MAINTENANCE PROFESSIONALS SHALL BE IN ACCORDANCE WITH MARION COUNTY LDC SEC. 6.8.15 AND SEC. 6.9.10.
- 11. NO CERTIFICATE OF OCCUPANCY SHALL BE 1894ED INTIL A COMPLETE SELF-CERTIFICATION CHECKLIST, AS UELL AS A CLEAR AND ACCURATE AS-BUILT SKETCH, HAVE BEEN SUBMITTED AND ACCEPTED BY THE COUNTY & AND THE FINAL INSPECTION AND LANDSCAPE/IRRIGATION RELEASE HAS BEEN RECEIVED OR THE COUNTY HAS CONDUCTED AND CERTIFIED A FINAL INSPECTION FEW TARION COUNTY LDC SEC, 6-31.

### LANDSCAPE COMPLETION INSPECTION REQUIREMENTS

- PRIOR TO THE 199UANCE OF A CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL DOCUMENT THE ACTUAL FIELD PRIOR TO THE 189JANCE OF A CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL DOCUMENT THE ACTUAL FIELD INSTALLATION OF THE LANDSCAPE AND SUBMIT TO WARRION COAUTY. A REQUIRED LANDSCAPE ADULT CERTIFICATION PLAN, SIGNED AND SEALED BY THE LANDSCAPE ARCHITECT (MARION COAUTY LDC DIV 8, SEC 6812). HONOLOGY HE INSTALLATION, AND AT A MINIMIM OF SEVEN (T) DAYS PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL PROVIDE A CLEAR AND LEGIBLE AS-BUILT DIAGRAM THAT ACCURATELY REPRESENTS THE LANDSCAPE PLAN AS INSTALLED, AND REQUEST AN ON-SITE INSPECTION BY THE LANDSCAPE ARCHITECT. WHEN ACCEPTABLE TO THE LANDSCAPE ARCHITECT, THE AS-BUILT PLANS WILL BE APPROVED AND A FINAL INSPECTION AND LANDSCAPE RELEASE AGRANTED.

THE CONTRACTOR SHALL MARK-UP A COPY OF THE APPROVED LANDSCAPE DESIGN PLAN WITH THE FOLLOWING AS-BUILT INFORTATION: (NOTE PRE-APPROVAL BY THE DESIGN PROFESSIONAL IS REQUIRED FOR ANY DESIGN CHANGE (INCLUDING PLANT SUBSTITUTIONS, LAVOUT, QUANTIES, MATERIALS, ETC.)

INSTALLED PLANT SPECIES AND SIZES

INSTALLED PLANT SPECIES AND SIZES

- OTHER INSTALLED MATERIALS DOCUMENTATION
- THE CONTRACTOR SHALL PROVIDE CONFIRMATION THAT THE OWNER HAS RECEIVED: WRITTEN MAINTENANCE, PRUNING, AND FERTILIZER INSTRUCTIONS AND SCHEDULE.



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DESCRIPTION	COUNTY RE-SUBMITTAL					
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PLANS PERMIT / CONSTRUCTION estwood

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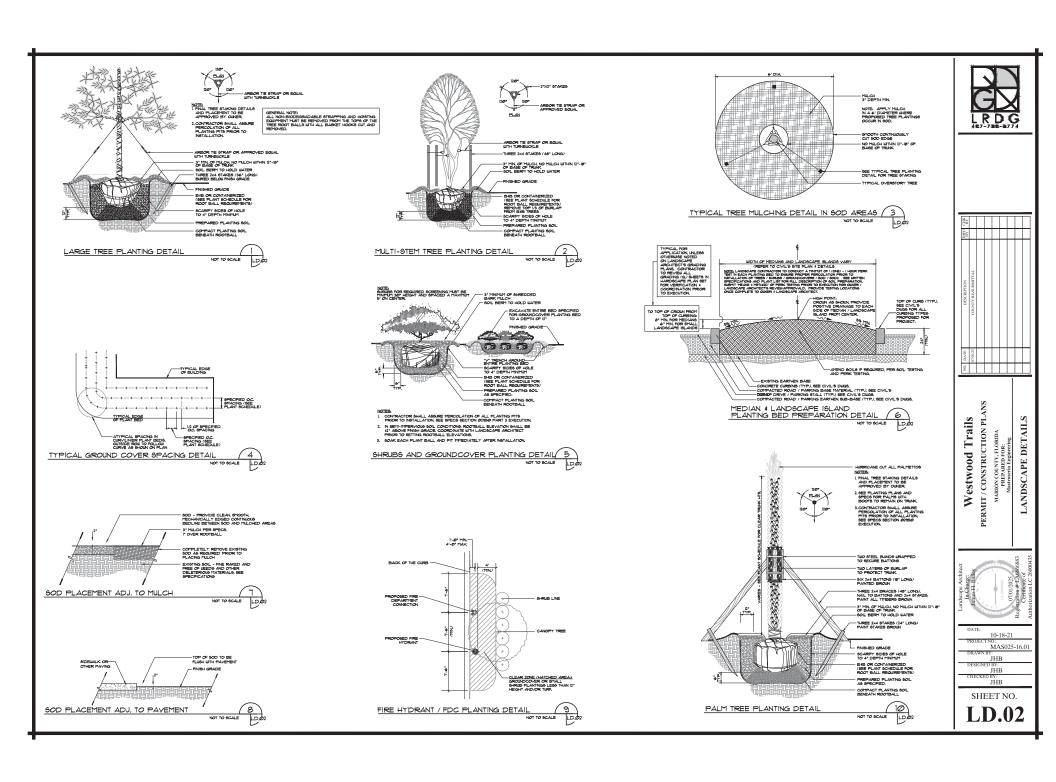
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LD.01



### LANDSCAPE WORK- SECTION 02950

- WORK INCLUDED

  - ACCICIATION of the state of the
  - B. RELATED WORK SPECIFIED ELSEWHERE

#### BID DOCIMENTS

- A. For bidding purposes, the value of the contract shall be based on the contractor's take offs from the graphically drawn plans. If quantities differ from plan list, the drawn plan controls.
- Bid documents shall include unit prices to justify the stated lump suns and provide unit costs in case of additions and for deletions required district costs in case of additions and for deletions required.

#### QUALITY ASSURANCE

- A REFERENCE SPECIFICATIONS AND STANDARDS
  L Standards as established by the Florida Nursery Grouers Association (RNGA).
- ISSN AD ADMINISTROM

  There a will be subject to Improvious and approval of the Quer's Representative at joins of growth and/or ignor delivery for conforming to appreciate and appreciate and an appreciate and appreciate appreciate and appreciate and appreciate appreciate and appreciate and appreciate appreciate and appreciate appreciate appreciate and appreciate appreciate and appreciate and appreciate appreciate and appreciate appreciate and appreciate appreciate and appreciate appreciate appreciate and appreciate apprecia

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# SUBMITTALS

- or pean naterals.

  Contractor whill be responsible for all naterial listed on the plant list unless noted othersites, day and all adultshuttons due to unwisiteting nest be requested in large to the contractor with the contractor and contractor and conclusions are selected in a disposation and approved to plants a propresentative, Contractor shall conclude a naterial tagging the sufficient of the pre-construction nest, specified and described to the pre-construction nest, specified and contractor shall contract the contractor shall contract the contractor that the contractor is the pre-construction nest specified in the pre-construction nest.

# PROJECT CONDITIONS

- Sequencing: Do not commence planting until site grading, soil import, and preparation has been completed.
- preparation real ceem completed.

  Impact and approve all aprinties work and finish grading prior to the start of shub and groundcover planting as specified. These may be planted in advance of irrigation system installation provided adequate provision is made for interin satering at the Contractor's our expense.

- ARRANITY
  The Convactor hall guarantee all tree and shipligroundcover plantings for a period of teather (17) anoths, and all load for three (1) anoths, after the date of fival period of teather (17) anoths, after the date of fival plants and guarantees such The Convactor with about 100 and 100 another period. The propose such The Convactor with about 100 and 40 and 100 another period. The propose of these reports is to set date systematic andirections period. The propose of these reports is to set date systematic andirections guarantees. Faither to extent reports eitherited any claims that the guarantee is not valid due to the propose and terminal tree of the control of the
- The Contractor shall notify the Owner and Lendscape Architect ten ((6)) days prior to the end of the guarantee period and used guarantee shall be extended until notification.
- At the end of the guarantee period, all plants that are dead or in unsatisfactory growth shall be replaced within two weeks.

### 1Ø1 PRODUCT HANDLING

- Delivery:
   Plant transportation shall comply with all Federal and State regulations.
- Deliver fertilizer to site in original unopened containers bearing manufacturer's guaranteed chemical analysis, rane, trademark and conformance to State Lau. The Contractor shall furnish Owner's Representative receipts for all amendments.
- Deliver all plants with legible identification labels.
- Laisel trees, evergreens, bundles of containers of like shrubs or groundcover plants.
- State correct plant name and size indicated on plant list.
- Use durable uaterproof labels with water-resistant ink, which will remain legible for at least 60 days.
- Protect plant material during delivery to prevent danage to root ball or deslocation of leaves.
- The Contractor shall notify the Queen's Representative three (3) days in advance of delivery of all plant naterials and shall submit an Itemized list of the plants in each delivery.
- Storage:
   Store plant material in shade and protect from ueather.
- C. Hardling: The Contractor is caustioned to exercise care in hardling, loading, unleading, and storing of plant materials. Plant naterials that have been danaged in any way shall be discarded. If they have been installed, they shall be replaced with underaged naterials at the Contractor's expense.

### LØS VERIFICATION OF DIMENSIONS AND QUANTITIES

All scaled dimensions are approximate. Before proceeding with any work, carefully check, and verify all dimensions and quantities, immediately inform the Camera Representative of any discrepancies between the Prawings, Specifications, and actual

conditions. Do not do work in any area where there is a significant discrepancy until approval to proceed has been received from the Owner's Representative.

#### 10% OWNER TAGGED MATERIALS

Contractor shall leave all tags on naterial previously tagged by the Owner's Representative until final acceptance.

#### UP JOB CONDITIONS

A. Protection. The Lendscape Contractor shall protect all naterials and sork against highly from any clauses and shall provide and nathrials all necessary safeguards for the protection of the public. Herbie shall be indeed responsible for any classage or highly to person or property which may occur as a result of the negligence in the protection of the sork.

- B. Existing Conditions: Entity Conditions.

  The Landscape contractor shall exercise care in digging and other sonk so as not to cleage an entiting sonk houlding, but not limited to plant seateral, from a condition of the condition of
- Should any objectionable naterials such as old concrete, bricks or other debre encountered during planting operations, the Landscape Contractor shall brit to the attention of the Owner to coordinate resoval of the naterial from
- The Landscape Contractor shall be responsible for proper plant grouth in real unanatable deviation where the importance for properly plant growth in existing on-the totals. Any unsate/actions conditions shall be brought to the immediate attention of the Owner/Landscape Architect for possible remedial exist or plant natural substitutions. The Owner/Landscape Architect reserves the right to make changes or substitutions by plant type or quantities for the purposes of insuring proper plant growth.

#### UI SAMPLES AND TESTS

A Curer's Representative reserves the right to take and analyze samples of naterials for conformity to specifications at any time. Contractor shall furnish samples upon request of Curer's Representative. Rejected naterials shall be inenditately moneyer from the site at Contractor's experse. Contractor shall pay cost of testing of

#### PART 2.1 - PRODUCTS

#### 201 MATERIALS

- All trees, sinuse and plants shall be true to rate as brothlined by the Asercan -Ook Comittee on Sertalities the Monachture publication 'Standard Plant Names'. The designated authority for the Identification of all naterals laid lie to the up politications of LH. Ballay, "Hortus III" and "Manual of Cultivated Plants", and all specimens shall be true to type, name, ca, de described thresh.
- Grade Standards and Cuality. All plants shall be rursery groun and shall comply with all required inspection, grading standards and plant regulations as set forth in the Brindla Department of Agriculture. 'Grades and Standards for Nursery Plants', Parts I and 2 including revisions.
- The strikms grade for all trees and shade shall be Borida No. I unless otherwise indicated and all plans shall be sound, healthy and vigorous, sell benchard and clenely foliated when in leaf. They shall have healthy until developed root systems and shall be free of cleases and insect, peets, egge or larva.

- ascrements. The entinus acceptable size of all plants, nessured after pruning, sith branches in nomal positions, shall conform to the specified sizes as alroun expension of the specified size specification. Specified sizes specification from these measurements must be approved by junicidency abortists. Colleger of the virtual shall be approved by junicidency abortists. Colleger of the virtual shall be desired to the specified size of the specified sizes also shall be a seasoned 6 inches above the noticelli for trees under 6 inches in caliper.
- in cauper.

  Clear trurk of all types of pairs shall be neasured from the finished grade to the beginning of the fronds. The booted portion of the head of the pairs shall be in proportion to the overall height of the pair.
- Plant Protection: Plants shall be protected upon arrival at the site, by being thoroughly ustered, kept molet, and properly maintained until planted.
- B. Plant Materials: In reference to method of cultivation, root system status, etc., plants for landscaping shall be classified under the following designations: for landscaping shall be classified under the following 'designations nations' cross Teach the for the root system to save developed used to for and for sufficient shall have been groun in a container large enough and for sufficient that for the root system to have developed used to fold the property of the same of the sufficient shall be sufficient to the same Plates, which have become root bound or for which the system is too large for the size of the constainer, will not be acceptable.
  - All containers shall be out and opened fully, in a namer such as utill not danage the root system. Container group plants shall not be removed from the container until immediately before planting, when all due care shall be taken to prevent danage to the root system.

  - Any container grown material that was previously tagged for the Job by the Owner/Landscape Architect, shall have the locking tag visible on the tree until substantial completion has been awarded.
- 2. Balled and Burlapped Trees (if applicable):
- attes and Brispped Press (I replicable). Perfers a collection dutil being a light from struct or control or anitive clients and soil control or anitive clients and soil control or a project control. The recollection as the project control. The recollection of these planes shill be properly supposed with budge plane, and the shaded collection of the project control or proj
- b. Burlap: Shall be pure burlap, II % organic material with the ability to
- Roots Plas. All Oek trees classified as balled and burlap shall be tagged as a roots plus product and the tag shall resain util substantial completion has been awarded. Any natural inpreviously tagged at a nursery by the Curent-landscape Architect shall have the nursery's locking tag visible on the three util substantial completion has been alarded.
- 3. Bare Root Plants. No bare root plants shall be used unless otherwise specified.

- reported that lies a frisble lose, updal of califated iopsols locally from the property of the
- Soil testing shall be performed and analyzed by a laboratory registered by the state. Testing shall include famility and suitability analysis with unition recommendations for fertilizer or anescheres, which shall label precadence over rates or analysis specified in this section, Soil testing shall be the Contractor's responsibility. Soint test requires to the Landscape Architect
- Soil Preparation: Prior to placing mix and backfill, or commencing with planting, rototill any or all areas that have been previously compected over 50 percent for other construction purposes.

- Fertilizer: Fertilizer shall be a complete balanced bland formula,
  of witch part of the alternate shall be derived from organic sources. It shall
  not also repeats to recognize the complete shall be completed from
  Nivogen shall be applied over all furf shall end use areas at a rate of I.
  Nivogen shall be applied over all furf shall end use areas at a rate of I.
  by the Landscape Architect. The complete fertilizer adults the approx
  by the Landscape Architect.
- . Weed Control: All planting bads shall be treated with the pre-emergent Treflan, as narufactured by Elanco Products Company, Division of Ell-Lilly Company, inclanapolis, Indian, or approved equal. Contractor shall apply the pre-emergent prior to mulching as per infunfacturer's instructions.
- Mulch: Wood mulch shall be designer brown, grade ¶, clean, bright and free of weeds, moss, sticks and other debris unless specified otherwise.
- Ulater: Suitable water for the imigation of the new plantings during the progress of construction shall be provided and polid for the by the Contractor, who shall also furnish adequate watering equipment.
- Stakes and Ties: Stakes and tree ties shall be provided in accordance with the recurrence of Paragraph 3,03,019 hereinsfler.

### PART 3.1 - EXECUTION

#### 3.01 INSPECTION

- insure that final grades to 4–0.6m (0.20) have been established prior to commening planting operations. Provide for inclusion of all amendments, settling, etc. Landscape Contractor shall be responsible for finish grading all planting areas as indicated on Civil Engineer's plans and as directed by the Owner's Representative
- Inspect trees, shrubs and liner stock plant naterial for injury, insect infestation and trees and shrubs for inproper pruning. C. Do not begin planting of trees until deficiencies are corrected or plants replaced.

### PREPARATION

- Soil Preparation:
   All planted areas to be planted shall be loosened to 360m (12\*) except 2:1 or steeper slopes.
- or steeper slopes.

  2. Soil to be used for planting shall be free of node over 18 on (12") in disneter, and free of Toreign debris, refuse, plants or roots, clock, useds, sides, solvents, services, procedure, covered, bear oct, or other deleterious of sustaining healthy plant life. Materials not nesting these specifications shall be removed.

- be renoved, deatheric deatilities regressional for grading of burns, reclaims, and pathong Contractor shall be respectation for grading plan. I'll dirt. I required will be locally obtained natural from exturally destined socraes, free from day organic destine, some steps than 1-in-th distincts and socraes, free from day organic destine, some steps than 1-in-th distincts and to such indeed and contain none only 10% planears made, so that is to such indeed and contain none only 10% planears made. Some size 3. Berns shall be gently rolling and practicult sufficient larves or slopes with Contractor will contact the Lindscape shorthest for approval of all several grading prior to any planting.

- Remove or reclastribute excess soil before application of fertilizer. Make allouances when establishing finished grades for earth excavation from planting pits and nulch.
- and much literality. Before and during preliminary and final grading, dig out all sends and grasses by the roots and dispose-of off the sits. Grasses not of the perential type less than 1/12\* fingly and to bearing seeds, nay be turned uniform. Ferential useds and grasses to be removed teclude, but are not limited to the following.

- b. 6. Augustine.
  C. Placuter Vine.
  d. Toming clieny.
  d. Toming clieny.
  d. Toming clieny.
  The common other nonloae or Invisive seads encountered on the site.
  Tractions: If appricing register his beam invalided after grading and familitary has been completed, not-life the remote baseline after titles to the depth specified for the zero. In conform to specified requirements.
  Elimited all enrouses prior to commonling softwareaux period.
  Elimited all enrouses prior to commonling softwareaux period.
- Disposal of excess soil: Dispose of any unacceptable or excess soil at an off-site location approved by Ower.

#### MATERIALS CONDITION

- All plant materials shall be approved by the Cuner's Representative as they are delivered to the job site, or other site inspections, and in all cases:
- Conditions. Flore shall be generated as spicel for the virtig and species in a condition of healthy and vigorous growth free from plast diseases, heact peaks, or their geges and with healthy monal root systems call filling their container, but not to the point of being rootboard. Plants shall not be privately from the shall not be private of their backless and fungua, and apply follar anti-vaniphese prior to deliberate.
- prior to delibrery.

  Dimensions: The height and spread of all plants shall be neasured uith branches in their normal position. Other deliberations of any plant, statefuls in contract from the Plant. List, plants shall be romed soon, for type I shad. Actual planting shall be performed during those periods when usesther and soft conditions are statefuls and in accordant shift beginning shall be performed during those periods when usesther and soft conditions are statefuls and in accordant shift beginning the product of the planting shall be produced by the planting shall be produ
- Only as many plants as can be planted and watered on that same day shall be distributed in a planting area.
- controvers in a penning erea.

  Containers shall be opened and plants shall be removed in such a namer that the ball of earth surrounding the roots is not broken and they shall be planted and ustered as herein specified inmediately after removal from the containers. Containers shall not be opened prior to placing the plants in the planting area.
- Do not do any plante, often the specime resp. util all operations the plants for both on the state of the specime trees, util all operations who util the metallation of the sprinkler system have been completed, fired grade have been established, the planting areas have been properly graded and prepared as herein specified, and the uork approved by the Cuner's Regresentation.
- The relative position of each tree and plant is subject to approval by the Ounce's Representative, and shall, if necessary to achieve project design objectives, be relocated as directed.
- Remove each plast from its containe and plant in such a series that she settled, it will been in the model that the plant from the contained and plant should be the settled. It will be the settled that the settled of the settled of
- on a crosse or regar cross.

  Layout of safe prestings: Locations for plants and outlines of areas to be planted attill be nested on the ground by the contractor before any planting plus are duly contractor before any planting plus are duty contractors of the present of the december of planting reads of the contraction or utility line is encounted to the excellent of planting reads on the contraction or utility line is sentent on the contraction of the contraction o

container size on each stake or alternate approved method. It shall be the contractor's responsibility to confirm with the Quiner and governing agercles the location and depth of all underground utilities and obstructions.

- Planting of trees shrulps and groundcovers: Excavation for planting shall include the stripping and stacking of all acceptable topsoll encountered within the areas to be excavated for trenches, tree holes, plant pits and planting beds
- Excess soil generated from the planting holes and not used as backfill or in establishing the final grades, shall be removed from the site.
- Protect all areas from excessive compaction when trucking plants or other material to the planting site. Compacted areas shall be cross-ripped to 12" and
- 4. Center plants to pit or trench
- 5. Face plants with fullest growth toward the best public views.
- Set plant plumb and hold rigidly in position until soil has been tamped firmly around ball or roots.
- around bell or roots.

  All excentsed noise shall have vertical sides with roughested surfaces and shall be of a size that its tution the clampton of the rootball for all strikes. These St gallion and shaller to be planted as shows, trees St gallion or larger to be excented for all or the depth of the rootball for all clampton or larger to be excented to the depth of the rootball (allow 1-1) for estilling) and as space allows, 14" claer of the rootball of all
- Layout areas and set stakes/flags for trees at locations indicated on Drawings Secure approval from Quier's Representative before excavating pits. Make necessary adjustments as directed.
- rootabil.

  When hindpan or muck is encountered, break through to class soil and backfill on this property and the state of the state of
- goung and recorning to restore vicinity and setting. Set tree in center of pit in a vertical position so that crown of ball utili be level with finished grade after allowing for watering and settling.
- Prepare satering been seen uicht as tree plant ball. Water thoroughly inmediately following planting. Backfill ell voide which develop with additional prepared planting soil to bring to finish grade. Remove all basins in laun areas, and snooth to finished grade prior to laying sool.
- 1. Monitor tree and shub root lobal for delequate notiture content. Deep sater and/or provide scaler hoses to relateth notiture supply.
  All plates shift notited deeper than the surrounding grade shall be raised to the content level. After the plant has been placed, additional bedoiff shall be add to the hole to cover approximating possible of the related. At the stage, sater will be added to the top of the party fitted hole to throughly added to be roottoil.
- an removals

  Cut care on two sides with an acceptable can cut

  Do not injure rootball.

  Do not cut care with spade or ax.

- Plent tablets.

  A During Installation (for-Poser 1 gren or Agroforn 21 gren tablets, or approved equal, shell be provided in each planting role as per quentities and Francisco or approved to the provided of the provided in the planting role as per quentities and Francisco or approved to the provided or provided in the planting of the provided in the planting or planting the planting or p

### Representative. Plant tablets shall be located 1/3 depth of the rootball

- 6. The destination of the hole shall then be its childred and septed from the first shall then be its childred and septed from the first shall be consequent around each plant. Each behavioral bill not of adepth reflects to hold at less that 0.71 breaks shall be consequently an extended benefit insertinis. The behavioral bill be consequently an extended benefit insertinis. The hole of the property of the shall be represented to entered the september of the shall be represented to entered trapes and breaks. Plusting may not be done prior to delivery of plants. It Sublage and plants present the shall be respectively to entered trapes and plants present the service of the contractions of the shall be represented to entered trapes and plants present the shall be respectively to entered trapes after plants, all states which the studied public and as disclosed in details. The Contractor shall remove the stating and guiging naturals once the trees are essentially.

- latting of Flouering Annuals.
  Flouering Annuals shall be grown in 4° pots as indicated on the plans, Annuals shall be grown in 4° pots as indicated on the plans, Annuals shall remain in their flats until transplanting. The flat's soil shall contain sufficient moleture so that it still not fall apart shan lifting the plants.
- artification notative as that it is also fall apart shee Titting the plants.

  The Annals will be planted in strategies care and evenly speaced, are proposed to the proposed t

- Preparing soil: Remove rocks, useds, and debris from area to be sodded. If dirt is compacted, work up soil to a depth of 6 inches and break up all clods soil prep all areas as noted elsewhere in specifications.
- Grading and rolling: Carefully snooth all surfaces to be sodded. Roll areas to expose soil depressions or surface trisgularities. Regrade as required.
- expose soil depressions or surface irregularities. Negation is required. Lighting soil. Light is stury of soil selling in time a sturing in time a sturing in Lighting soil. Light is stury of soil selling and soil selling studies, and studies of the soil soil selling soil soil. Like a stemp felfill, and soil to fit, corrus, edges and optional material light light stifts in 20 hours of harvesting and 2 frows from time of delivery. Littlering 1,00 not light similarities (Littlering Littlering Littl
- and to uster will installation is complete. Rolling social, there singly all social control significance of the Rolling social control between the social and social. Anotal a very teamy rolline or farm good contact between the social and social. Anotal a very teamy rolline or large social control social control social control social soc
- Replacement: Replace all dead or dying sod with equal naterial as directed by the Owner's Representative.

#### 3.04 CLEAN-UP

- After all planting operations have been completed, remove all triah excess soil, empty plant containers and rubbish from the property. All scars, ruts or other narish in the ground caused by this sun's wall be repaired and the ground last in a read and or the last sorting day of each used. All triah shall be removed completely from the sites.
- The Contractor shall leave the site area broom-clean and shall wash down all paved areas within the Contract area, leaving the prenises in a clean condition. All wake shall be left in a clean and safe condition.

- A. The Contractor shall be responsible for notifying the Owner's Representative in advance for the following site visits, according to the time indicated:
- Pre-Job conference T days free Tagging T days Final grade review 48 hours Flant material review 49 hours
- Plant layout revieu 48 hours Substantial completion walk-through 1 days
- T. Phill salk-through T days
   When observations are conducted by enterine other than the Owner's Representative, the Contractor shall show evidence in writing of when and by whom these observations were nade.

FIELD QUALITY CONTROL

A All inspections herein specified shall be made by the Quner's Representative or his representative as the uorit progresses.

### B. Protect work completed by other trades from damage

- 3.01 PROTECTION Continuously protect all laun areas, plant materials, and supports until final acceptance of the work.
- acceptance or the care. Inspect and approve all landscape irrigation surk and finish gracing prior to the start of shub planting as specified. Trees may be planted in advance of trigation system installation provided adequate provision is made for Interim satering at the Contractor's own expense.

- FINAL ACCEPTANCE OF INSTALLATION Maintain all planted areas free of debris and insects. Mos, cultivate, used and sater all areas until final acceptance of sork by the Osner's
- Authorized Representative Prior to final approval of work, do the following: I. Reseed, resod or replant areas where necessary for full and ever
- coverage.
  Remove all debris resulting from landscape work.
- Regrade, lightly compact and replant around sprinkler heads where neccessry to relation proper vertical positioning in relation to
- Pill all depressions and eroded ch ArN ets sith sufficient soil ritx to adjust grade to assure proper drainage, compact lightly and replant the filled areas in accord with Prawing requirement.
   Address any term noted in the punch list from the substantial completion walk-through.



Ы CONSTRUCTION RION COUNTY, FLORIDA PREPARED FOR:

poo.

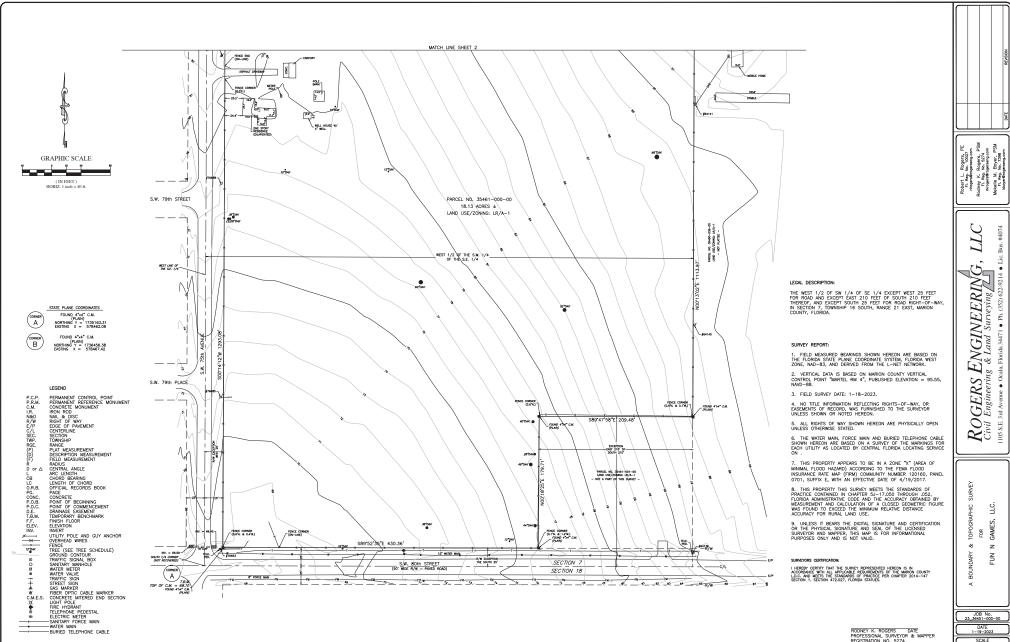
SPECIFICATIONS

PERMIT/

DATE: 10-18-21 MAS025-16.01 DRAWN BY THB JHB

JHB SHEET NO.

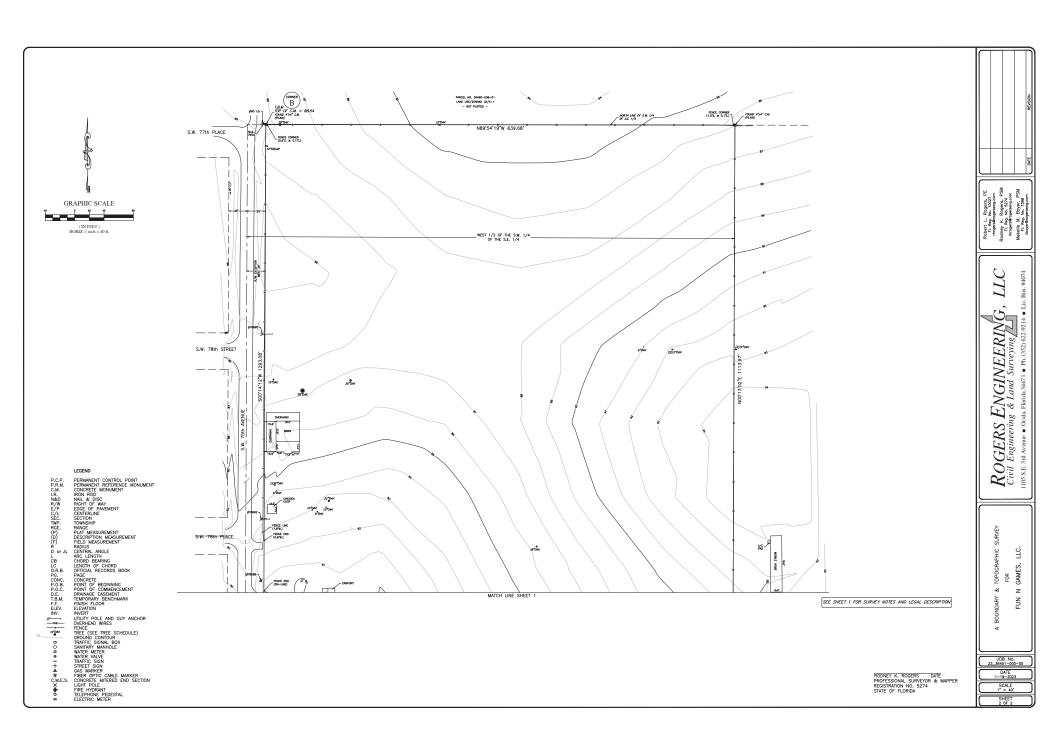
LD.03

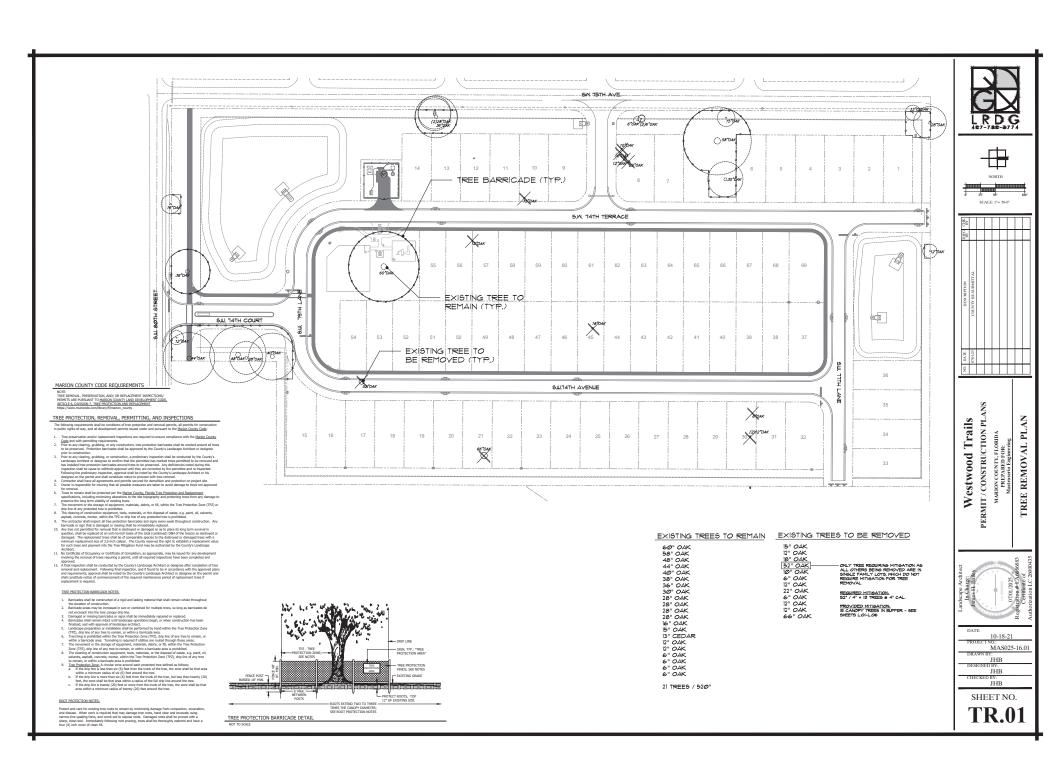


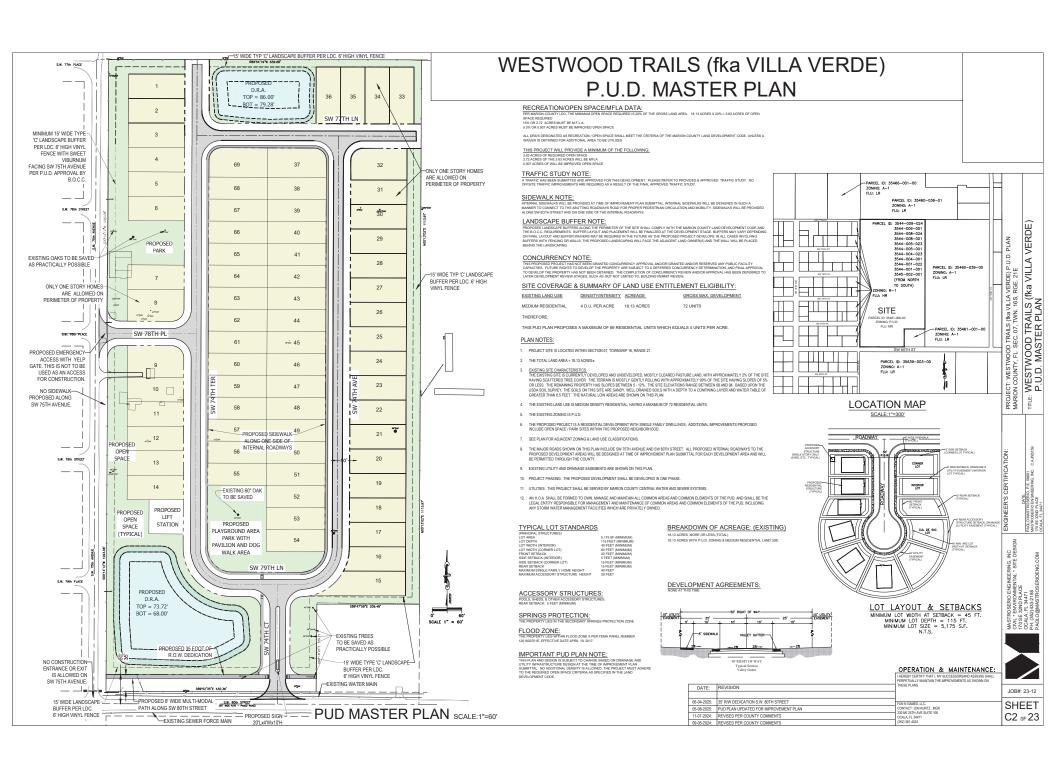
RODNEY K. ROGERS DATE PROFESSIONAL SURVEYOR & MAPPER REGISTRATION NO. 5274 STATE OF FLORIDA

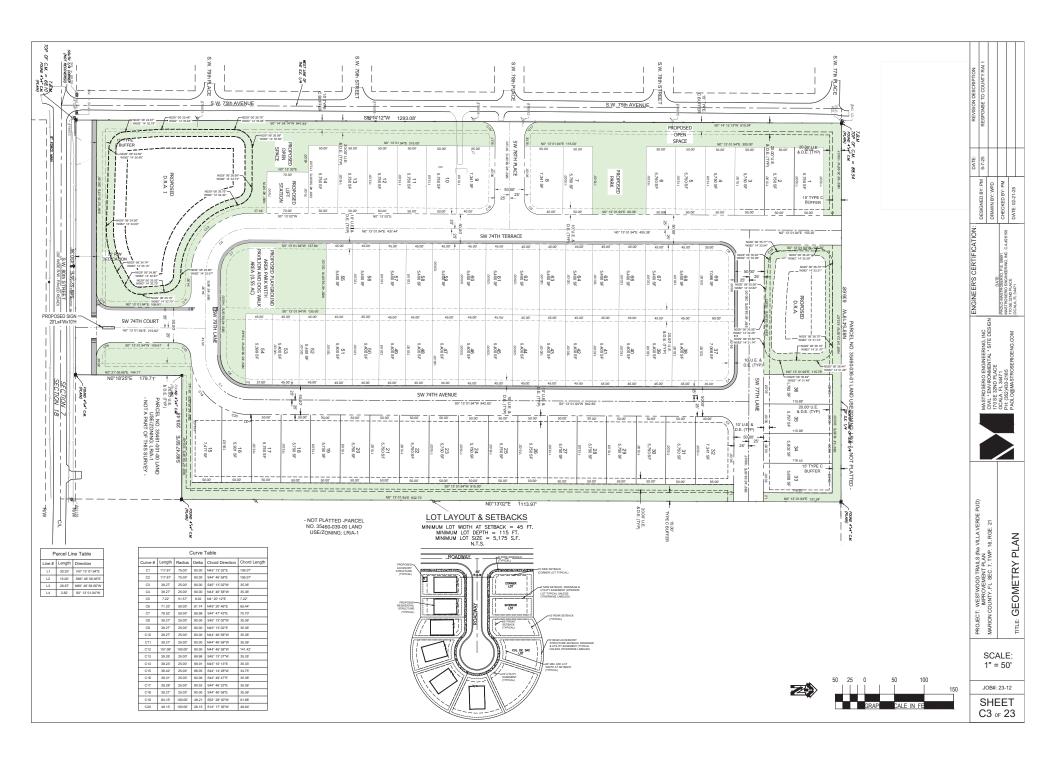
JOB No. 23\_36451-000-00 DATE -19-2023

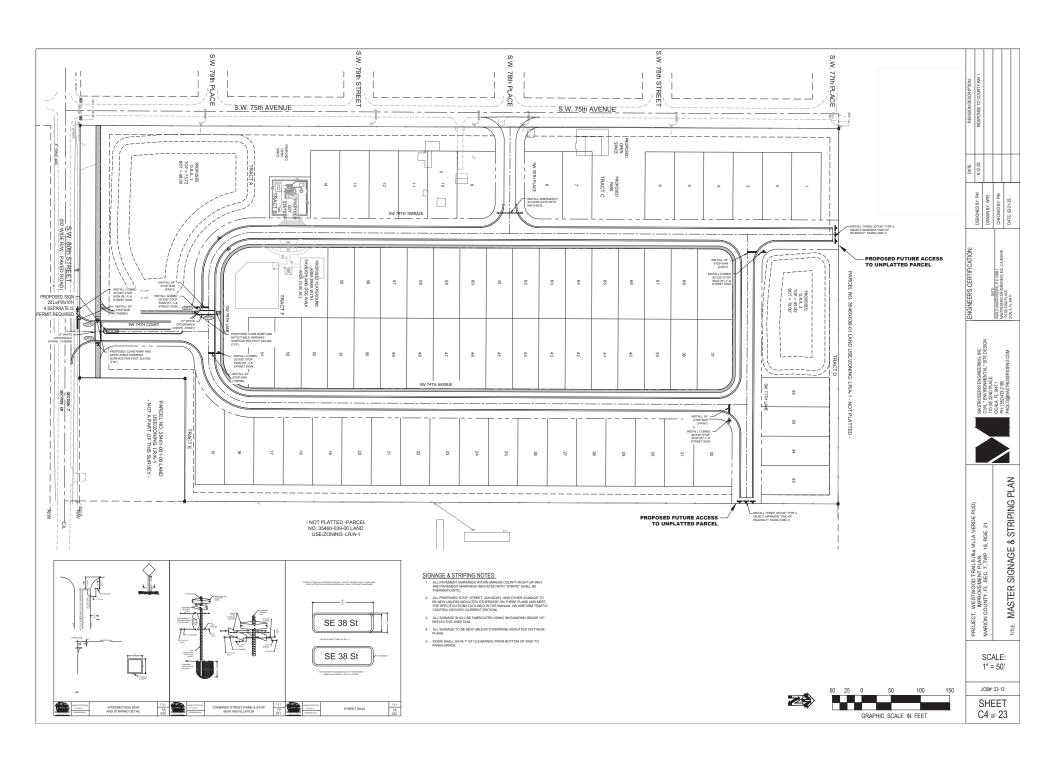
SCALE 1" = 40" SHEET 1 OF 2

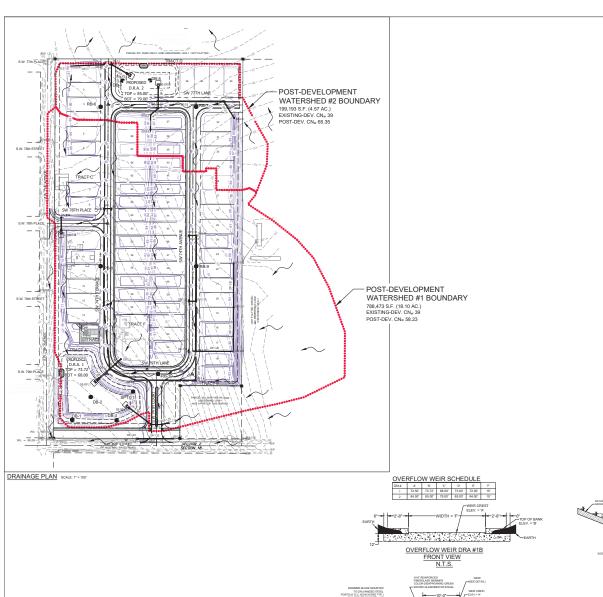












300

GRAPHIC SCALE IN FEET

# DRAINAGE DATA:

# DRAINAGE SUMMARY:

- 2. THE RETENTION AREA SHALL TO BE MAINTAINED BY THE OWNER.
- THE INTENT IS TO ROUTE STORMWATER RUNOFF TO THE ONSITE FACILITY VIA SHEET FLOW & INLET AND PIPE SYSTEM.
- THE DESIGN STORM FOR THIS DEVELOPMENT SHALL BE THE 100YR/24HR STORM.

### DRAINAGE NOTES

THE ENGINEER SHALL SUBMIT A COMPLETE COPY OF THE APPROVED SWEWIND PERMITTO MARION COUNTY TRANSPORTATION DEPARTMENT WHEN IT IS AVAILABLE.

THE CONTRACTOR SHALL ABIDE BY STANDARD PRACTICES AND PROCEDURES FOR EROSION AND SEDIMENT CONTROL. TYPE III SILT FENCE AND OPTIONAL DANDY BAGS SHALL BE USED AS PER DETAIL.

### LOT COVERAGE CALCULATIONS

LOT COVERAGE 4		ROW C	OVERAGE	45' LOT	
BLDG	2230	DRIVE	WAY	208 (16'w x 13'd)	
ACCESSORY	80				
DRIVEWAY	400				
AJC PAD	12				
WALKWAY	65				
TOTAL	2787	TOTAL		208	
LOT COVERAGE B	REAKDOWN		ROW	COVERAGE BREAKDO	OWN
# OF LOTS		1	# OF	LOTS	1
MPERVIOUS AREA		2787	MPE	RVIOUS AREA	200
TOTAL COVERAGE	OF LOT AND R	OW=	2995		

LOT COVERAGE 50		ROW C	OVERAGE 50' LOT	
BLDG	2685	DRIVE	WAY 208 (16'w x 13'd)	
ACCESSORY	80			
DRIVEWAY	400			
AJC PAD	12			
WALKWAY	65			
TOTAL	3242	TOTAL	208	
LOT COVERAGE BI	REAKDOWN		ROW COVERAGE BREAKDOWN	
# OF LOTS		1	# OF LOTS	- 1
MPERVIOUS AREA		3242	MPERVIOUS AREA	208

DRA# W B C D E F C H T
1 73.72 72.50 73.03 65.00 0.60 5.72 4:1 61.70 71.94

MAX. STACE W 100-24 YR STORM - 'C'

TREATMENT VOLUME RECOVERY BY INFILTRATION. D.R.A. CROSS SECTION

WSHOWL - Y'

### DRAINAGE LEGEND:



ΡM

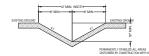
DATE: OMASTROSERIO: SZND PLACE , FL 34471

ENGINEER'S CERTIFICATION:

# VERTICAL DATUM NOTE:

### FLOOD HAZARD NOTE:

FINISHED FLOOR NOTE:



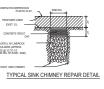




PLAN

POST DRAINAGE

SIZE @ 12 TO 13 THE DIA OF EXIST. SINO TYPICAL SINK CHIMNEY REPAIR DETAIL



OVERFLOW WEIR DRA #1B

SIDE VIEW N.T.S.

D.R.A. SCHEDULE

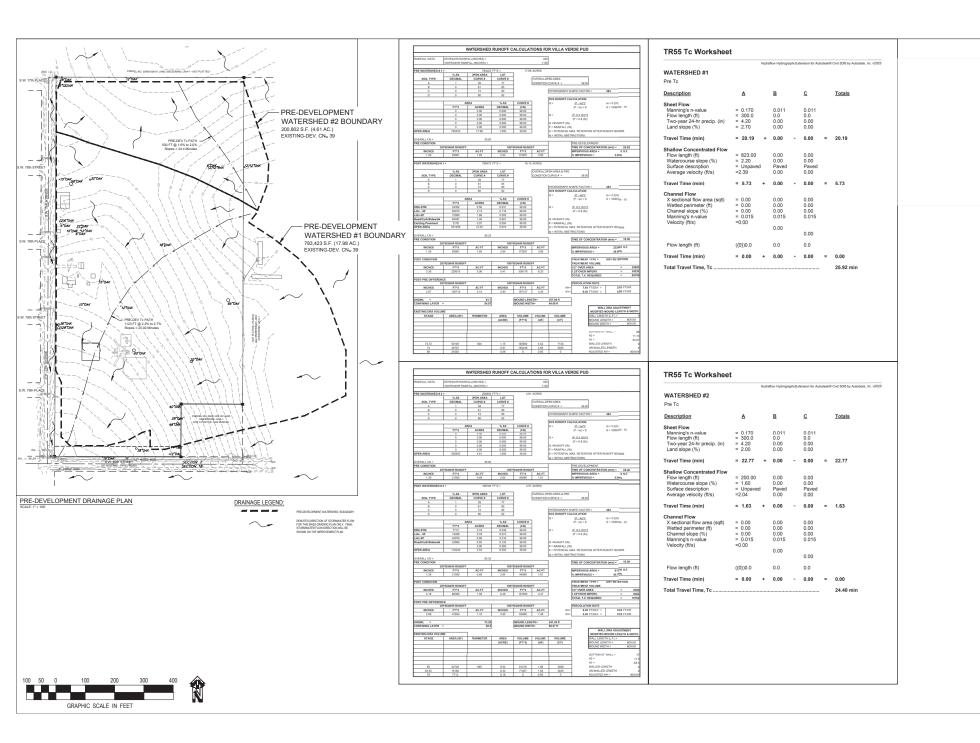


SCALE:

JOB#: 23-12

1" = 100'

SHEET C5 of 23



ENGINEER'S CERTIFICATION.

SN DATE: PAGE 18891
WASTROBENDERSON E 88991
WASTROBENDERSON SE 88991
WASTROBENDERSON SE 88991
OCALA TEATH

MASTROSERIO ENGINEERING, INC CIVIL\* ENVIRONMENTAL\* SITE DE 170 SE 32ND PLACE CACLA, A.F. 3477 PH: (32,2/32,2/88) PAOLO@MASTROSERIOENG, COM



FRALLS (Ka VILLA VERDE PUD)
C. 7, TWP. 16, RGE. 21

E. CALCULATIONS

PROJECT: WESTWOOD TRAILS (Ka V MARON COUNTY, FL. SEC. 7, TWF. 1TITLE: DRAINAGE CAL.

SCALE: 1" = 100'

JOB#: 23-12

SHEET C6 of 23

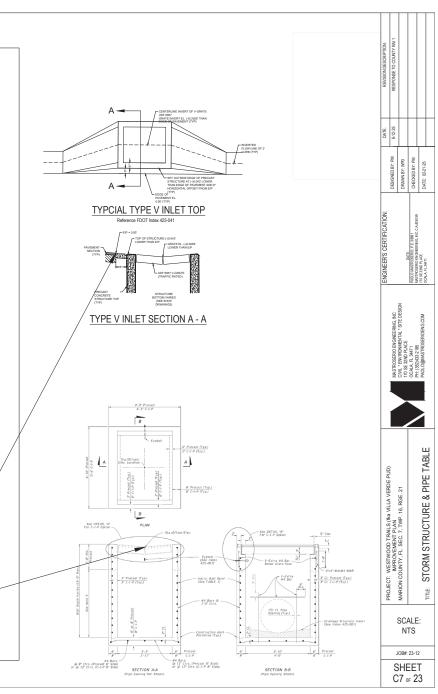
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
DS-1.1	TYPE V INLET 96" ROUND J-BTM E/P EL. = 76.38' IE. IN = 71.10' IE. IN = 70.27' IE. IN = 70.27' IE. OUT = 68.30'	DP-1.2, 24"HDPE IE. IN =71.10" DP-1.4, 24"HDPE IE. IN =70.27" DP-1.8, 24"HDPE IE. IN =70.27"	DP-1.1, 36"HDPE IE. OUT =68.30"
DS-1.2	TYPE V INLET 60" ROUND J-BTM E/P EL = 76.38" IE. IN = 71.33' IE. OUT = 71.23'	DP-1.3, 24"HDPE IE. IN =71.33"	DP-1.2, 24"HDPE IE. OUT =71.23'
DS-1.3	TYPE E INLET E/P EL. = 74.63' IE. OUT = 71.45'		DP-1.3, 24"HDPE IE. OUT =71.45"
DS-1.4	TYPE V INLET 48" ROUND P-BTM E/P EL. = 79.04" IE. IN = 73.00" IE. IN = 73.00" IE. OUT = 72.50"	DP-1.5, 18"HDPE IE. IN =73.00" DP-1.6, 18"HDPE IE. IN =73.00"	DP-1.4, 24"HDPE IE. OUT =72.50"
DS-1.5	TYPE V INLET 48" ROUND P-BTM E/P EL. = 79.21' IE. OUT = 73.27'		DP-1.5, 18"HDPE IE. OUT =73.27"
DS-1.6	TYPE V INLET 48" ROUND P-BTM E/P EL. = 84.38" IE. IN = 78.30" IE. OUT = 78.20"	DP-1.7, 18"HDPE IE. IN =78.30"	DP-1.6, 18"HDPE IE. OUT =78.20"
DS-1.7	TYPE V INLET 48" ROUND P-BTM E/P EL. = 84.38" IE. OUT = 78.55"		DP-1.7, 18"HDPE IE. OUT =78.55"
DS-1.8	48" MANHOLE RIM EL. = 77,16" IE. IN = 70.84" IE. OUT = 70.72"	DP-1.9, 24"HDPE IE. IN =70.84"	DP-1.8, 24"HDPE IE. OUT =70.72"
DS-1.9	TYPE E INLET GRATE = 77.70' IE. IN = 73.30' IE. OUT = 71.87'	DP-1.10, 24*HDPE IE. IN =73.30*	DP-1.9, 24"HDPE IE. OUT =71.87"
DS-1.10	TYPE V INLET 48" ROUND P-BTM E/P EL. = 79.99' IE. IN = 74.30' IE. IN = 74.70' IE. IN = 74.70' IE. OUT = 74.20'	DP-1.11, 24"HDPE IE. IN =74.30" DP-1.14, 18"HDPE IE. IN =74.70" DP-1.20, 18"HDPE IE. IN =74.70"	DP-1.10, 24"HDPE IE. OUT =74.20
DS-1.11	TYPE V INLET 48" ROUND P-BTM E/P EL. = 82.22" IE. IN = 76.80" IE. IN = 77.20" IE. OUT = 78.70"	DP-1.12, 24"HDPE IE. IN =76.80" DP-1.15, 18"HDPE IE. IN =77.20"	DP-1.11, 24"HDPE IE. OUT =76.70
DS-1.12	TYPE V INLET 48" ROUND P-BTM E/P EL. = 85.34" IE. IN = 80.10" IE. OUT = 79.60"	DP-1.13, 18"HDPE IE. IN =80.10"	DP-1.12, 24"HDPE IE. OUT =79.60
DS-1.13	TYPE V INLET 48" ROUND P-BTM E/P EL. = 85.34" IE. OUT = 80.35"		DP-1.13, 18"HDPE IE. OUT =80.35
DS-1.14	TYPE V INLET 48" ROUND P-BTM E/P EL. = 79.99' IE. OUT = 74.95'		DP-1.14, 18"HDPE IE. OUT =74.95
DS-1.15	TYPE V INLET 48" ROUND P-BTM E/P EL. = 82.22' IE. OUT = 77.45'		DP-1.15, 18"HDPE IE. OUT =77.45
DS-1.16	TYPE V INLET 48" ROUND P-BTM E/P EL = 74.94 IE. IN = 68.64' IE. OUT = 68.54'	DP-1.17, 18"HDPE IE. IN =68.64"	DP-1.16, 18"HDPE IE. OUT =68.54
DS-1.17	TYPE V INLET  48" ROUND P-BTM  E/P EL. = 74.94"  IE. IN = 69.11"  IE. OUT = 69.01"	DP-1.25, 18"HDPE IE. IN =69.11"	DP-1.17,-48CHDPE IE. OUT =69.01
DS-1.18	18" CMES FDOT 430-021 IE. = 79.00'	DP-1.18, 18"HDPE IE. IN =79.00"	
DS-1.19	TYPE E INLET GRATE = 81.91' IE. OUT = 79.20'		DP-1.18, 18"HDPE IE. OUT =79.20
DS-1.20	TYPE E INLET GRATE = 80.11' IE. IN = 76.10' IE. OUT = 76.00'	DP-1.21, 18"HDPE IE. IN =76.10"	DP-1.20, 18"HDPE IE. OUT =76.00

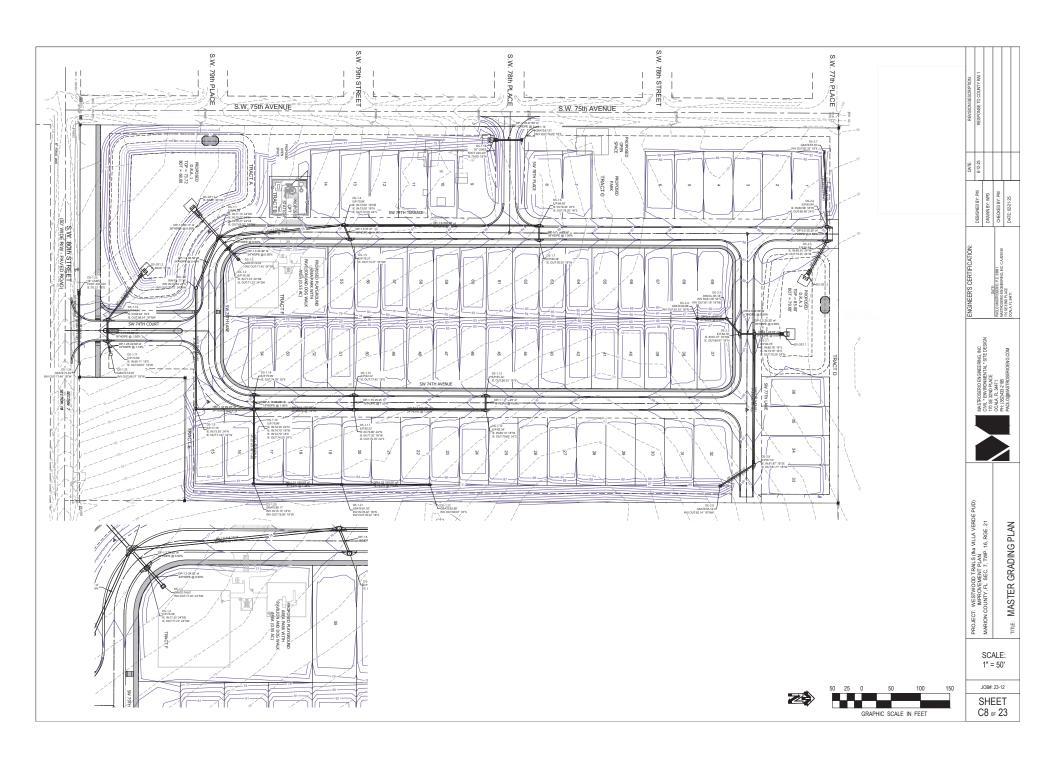
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
DS-1.21	TYPE E INLET GRATE = 81.92' IE. IN = 78.42' IE. OUT = 78.32'	DP-1.22, 18"HDPE IE. IN =78.42"	DP-1.21, 18"HDPE IE. OUT =7
DS-1.22	TYPE E INLET GRATE = 83.88° IE. OUT = 80.67°		DP-1.22, 18"HDPE IE. OUT =8
DS-1.23	18" CMES FDOT 430-022 IE. = 70.23'	DP-1.23, 18"HDPE IE. IN =70.23"	
DS-1.24	FDOT TYPE D INLET TRAVERSABLE SLOT EAST GRATE = 75.63', SLOT EL = IE. = 71.46'	75.05	DP-1.23, 18"HDPE IE. OUT =7
DS-1.25	TYPE E INLET GRATE = 74.50' IE. OUT = 69.37'		DP-1.25, 18"HDPE IE. OUT =6
DS-2.1	TYPE V INLET 48" ROUND P-BTM RIM EL. = 84.78" IE. IN = 80.78" IE. IN = 79.79" IE. OUT = 79.29'	DP-2.2, 18"HDPE IE. IN =80.78" DP-2.8, 18"HDPE IE. IN =79.79"	DP-2.1, 24"HDPE IE. OUT =79
DS-2.2	TYPE V INLET 48" ROUND P-BTM E/P EL. = 84.78" IE. IN = 81.01' IE. OUT = 80.91'	DP-2.3, 18"HDPE IE. IN =81.01"	DP-2.2, 18"HDPE IE. OUT =80
DS-2.3	48" MANHOLE RIM EL. = 85.18' IE. IN = 81.28' IE. OUT = 81.18'	DP-2.4, 18"HDPE IE. IN =81.28"	DP-2.3, 18"HDPE IE. OUT =81
DS-2.4	TYPE C INLET GRATE = 84.88' IE. OUT = 81.53'		DP-2.4, 18"HDPE IE. OUT =81
DS-2.5	TYPE V INLET 48" ROUND P-BTM E/P EL. = 85.84" IE. IN = 80.35' IE. OUT = 79.35'	DP-2.6, 24"HDPE IE. IN =80.35"	DP-2.5, 24"HDPE IE. OUT =79
DS-2.6	TYPE V INLET 48" ROUND P-BTM E/P EL. = 85.84" IE. IN = 80.98" IE. OUT = 80.48"	DP-2.7, 18"HDPE IE. IN =80.98"	DP-2.6, 24"HDPE IE. OUT =80
DS-2.7	TYPE E INLET GRATE = 85.50' IE. OUT = 82.35'		DP-2.7, 18*HDPE IE. OUT =82
DS-2.8	TYPE V INLET 48" ROUND P-BTM E/P EL. = 87.53' IE. IN = 81.87' IE. OUT = 81.77'	DP-2.9, 18"HDPE IE. IN =81.87"	DP-2.8, 18"HDPE IE. OUT =81
DS-2.9	TYPE E INLET GRATE = 85.14' IE. OUT = 82.14'		DP-2.9, 18"HDPE IE. OUT =82
DS-OF1.1	36" CMES FDOT 430-021 IE. = 68.00' IE. IN = 68.00'	DP-1.1, 36"HDPE IE. IN =68.00"	
DS-OF1.2	18" CMES IE. = 68.00" IE. IN = 68.00"	DP-1.16, 18*HDPE IE. IN =68.00*	
DS-OF2.1	18" CMES IE. = 79.00"		
DS-OF2.2	24" CMES IE. = 79.00'		

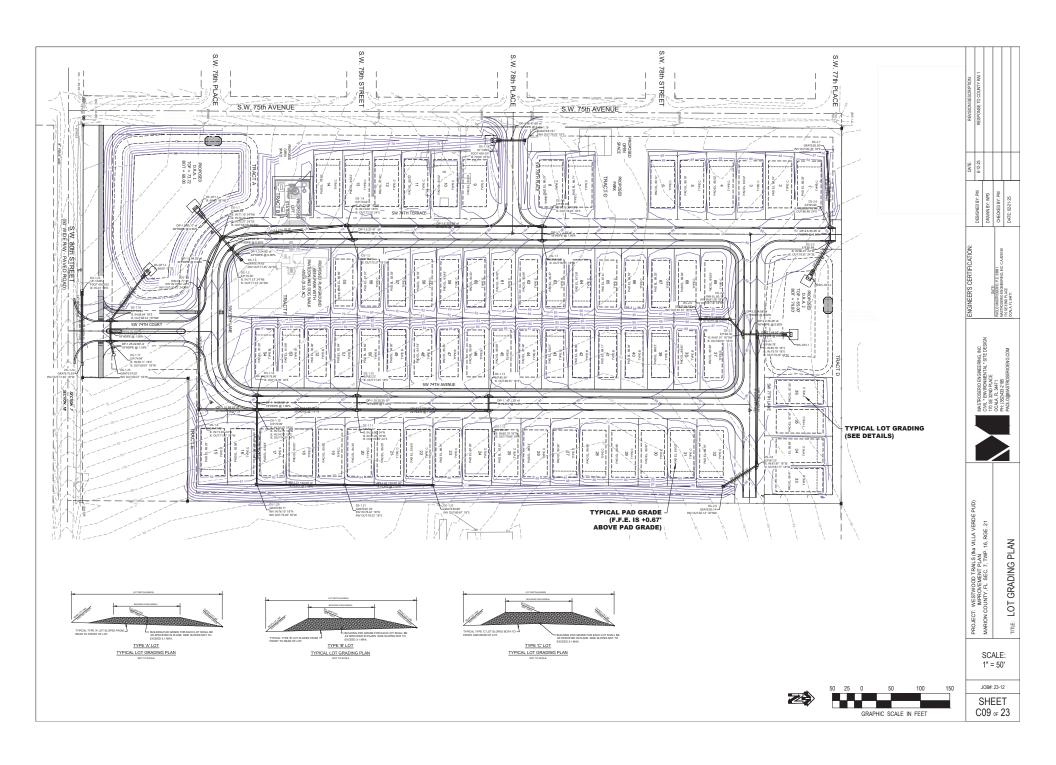
NOTE:

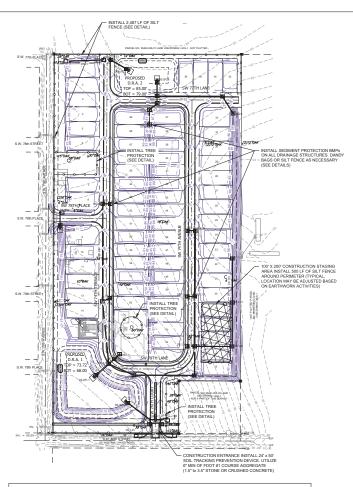
ALL V INLET STRUCTURE ELEVATIONS
SHOWN IN THE STRUCTURE TABLE ARE
THE AT THE E/P. CENTERLINE OF THE
ACTUAL GRATE INVERT IS 0.2058' LOWER
THAN THE EDGE OF PAVEMENT. SEE

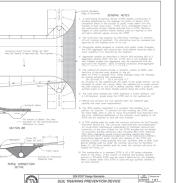
DETAIL THIS SHEET.

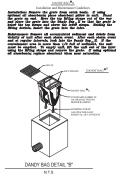


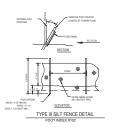




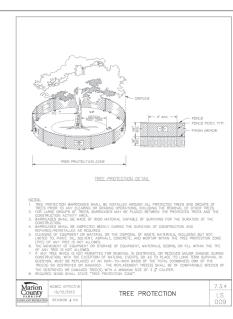








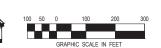
AREA OF DISTURBANCE 18.1 AC.



# EROSION CONTROL NOTES:

- ES DURING THE ENTIRE CONSTRUCTION PERIOD. FACILITIES ARE NOT TO BE REMOVED UNTIL COMPLETION OF

- DOMINO, MEASURES DICCET THE REQUIRED BY RAP ARE TRANSPORMY CENCES. THESE TRANSPORMY DEVICES SHALL BE REMOVED PRIOR TO COMMENTATION ON ONCE SHALL BE REMOVED FROM TO COMMENTATION ON ONCE SHALL DETERMINED AND FROM THE COMMENTATION OF THE COMMENTATIO
- CTOR IS RESPONSIBLE FOR REPAIRS OR DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAMAGE, S, RAVEMENT, STREPMIQ, CURB, ETC., REPAIRS SHALLE ES COULT, TO OR SETTER THAN EXISTING CONCINTIONS. FERCE CETAL SET OFFER IS IT STREEK ORTOOT MORE VISI. SET PROME COCKROIN SOWN FOR ASSISTENCES ONLY, ACTUAL FENCE TO BE INSTALLED ON THE
- COMMISSION SHALL SHOTT HE DROBLEST HE SHOW SPECIAL TO SERREPLY AN EXERTING DISSIPATION SHALL SHOW HE COMMISSION SHALL SHOW AN EXECUTION SHALL SH





Æ r: WPD BY: PM

ENGINEER'S CERTIFICATION: PACLON MASTRO 170 SE 3 OCALA,

TROSERIO ENGINEERING, INC
L. ENVIRONMENTAL. SITE DESK:
SE 32ND PLACE
LA, FL 34471
S22433-2188
LQ@MASTRO SERIOENG, COM



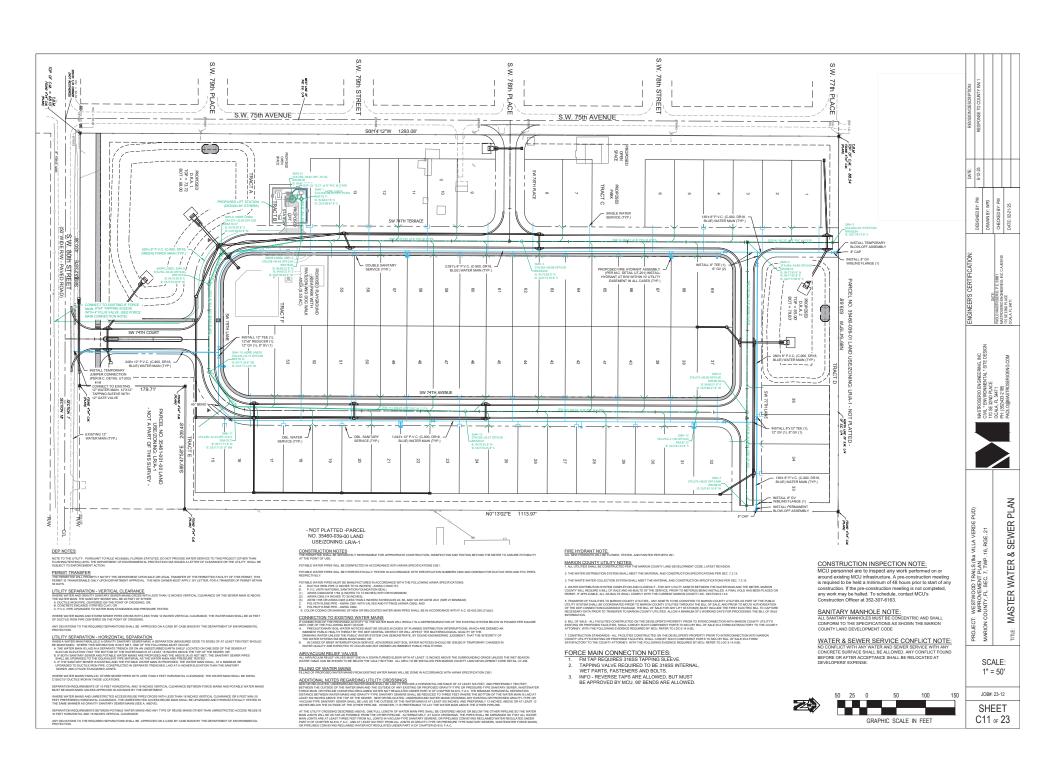
**EROSION CONTROL** WESTWOOD TRAILS (#a \ IMPROVEMENT PLAN OUNTY, FL SEC. 7, TWP. 16

PLAN

SCALE: 1" = 100'

JOB#: 23-12

SHEET C10 of 23



# SANITARY MANHOLE NOTE: ALL SANITARY MANHOLES MUST BE CONCENTRIC AND SHALL CONFORM TO THE SPECIFICATIONS AS SHOWN THE MARION COUNTY LAND DEVELOPMENT CODE

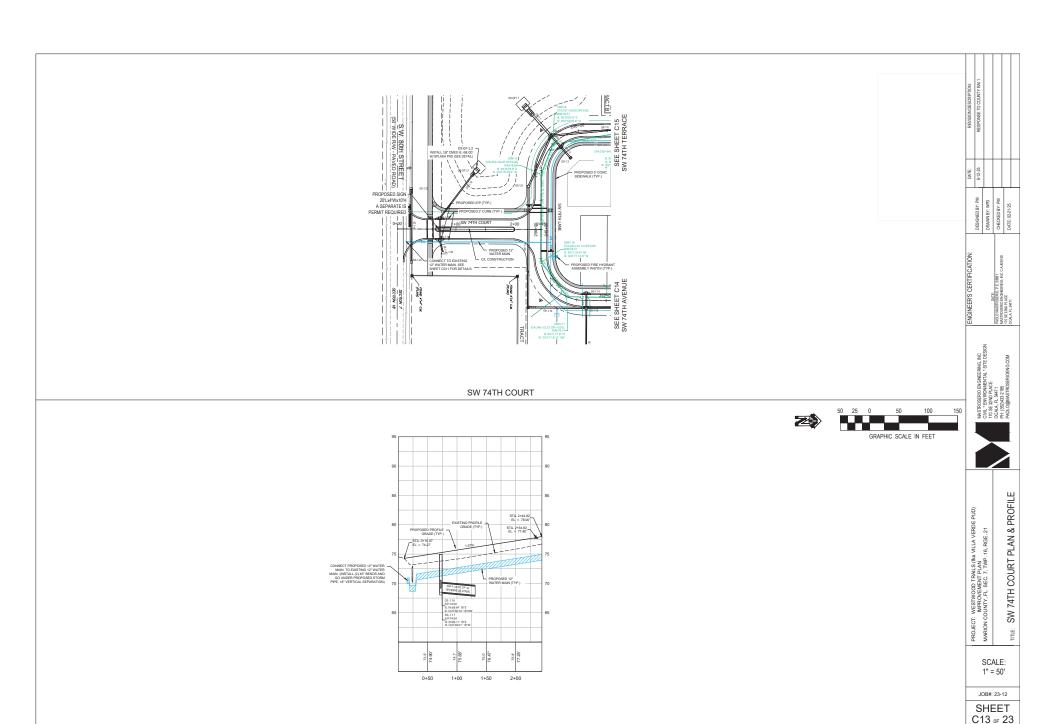
SANITARY STRUCTURE TABLE					
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT		
SMH1	48" MANHOLE HI RIM EL. = 79.11' INV IN = 68.67 INV OUT = 68.47	DPE LINED SSP-1, 8" PVC IE. IN =68.67"	SSP-LS, 8" PVC IE. OUT =68.47"		
SMH2	48" MANHOLE HI RIM EL. = 78.06' INV IN = 69.22 INV IN = 69.22 INV OUT = 69.02	DPE LINED SSP-2, 8" PVC IE. IN =69.22' SSP-7, 8" PVC IE. IN =69.22'	SSP-1, 8" PVC IE. OUT =69.02"		
SMH3	48" MANHOLE RIM EL. = 84.09' INV IN = 75.89 INV OUT = 75.79	SSP-3, 8" PVC IE. IN =75.89'	SSP-2, 8" PVC IE. OUT =75.79"		
SMH4	48" MANHOLE RIM EL. = 88.35' INV IN = 77.95 INV IN = 77.95 INV OUT = 77.85	SSP-4, 8" PVC IE. IN =77.95' SSP-5, 8" PVC IE. IN =77.95'	SSP-3, 8" PVC IE. OUT =77.85"		
SMH5	48" MANHOLE RIM EL. = 85.84' INV OUT = 78.73		SSP-4, 8" PVC IE. OUT =78.73"		
SMH6	48" MANHOLE RIM EL. = 86.30' INV IN = 80.31 INV OUT = 80.21	SSP-6, 8" PVC IE. IN =80.31"	SSP-5, 8" PVC IE. OUT =80.21'		
SMH7	48" MANHOLE RIM EL. = 88.45' INV OUT = 81.10		SSP-6, 8" PVC IE. OUT =81.10"		
SMH8	48" MANHOLE HI RIM EL. = 76.57' INV IN = 70.02 INV OUT = 69.92	DPE LINED SSP-8, 8" PVC IE. IN =70.02"	SSP-7, 8" PVC IE. OUT =69.92"		
SMH9	48" MANHOLE HI RIM EL. = 76.93' INV IN = 70.39 INV OUT = 70.29	DPE LINED SSP-9, 8" PVC IE. IN =70.39'	SSP-8, 8" PVC IE. OUT =70.29"		
SMH10	48" MANHOLE HI RIM EL. = 78.72 INV IN = 71.24 INV OUT = 71.14	DPE LINED SSP-10, 8" PVC IE. IN =71.24"	SSP-9, 8" PVC IE. OUT =71.14"		
SMH11	48" MANHOLE RIM EL. = 79.71' INV IN = 71.71 INV OUT = 71.61	SSP-11, 8" PVC IE. IN =71.71"	SSP-10, 8" PVC IE. OUT =71.61"		
SMH12	48" MANHOLE RIM EL. = 84.97' INV IN = 76.55 INV OUT = 76.45	SSP-12, 8" PVC IE. IN =76.55"	SSP-11, 8° PVC IE. OUT =76.45'		
SMH13	48" MANHOLE RIM EL. = 87.12' INV OUT = 81.53		SSP-12, 8" PVC IE. OUT =81.53'		
SMHLS	72" MANHOLE HI RIM EL. = 80.00' INV IN = 68.39	DPE LINED SSP-LS, 8" PVC IE. IN =68.39'			

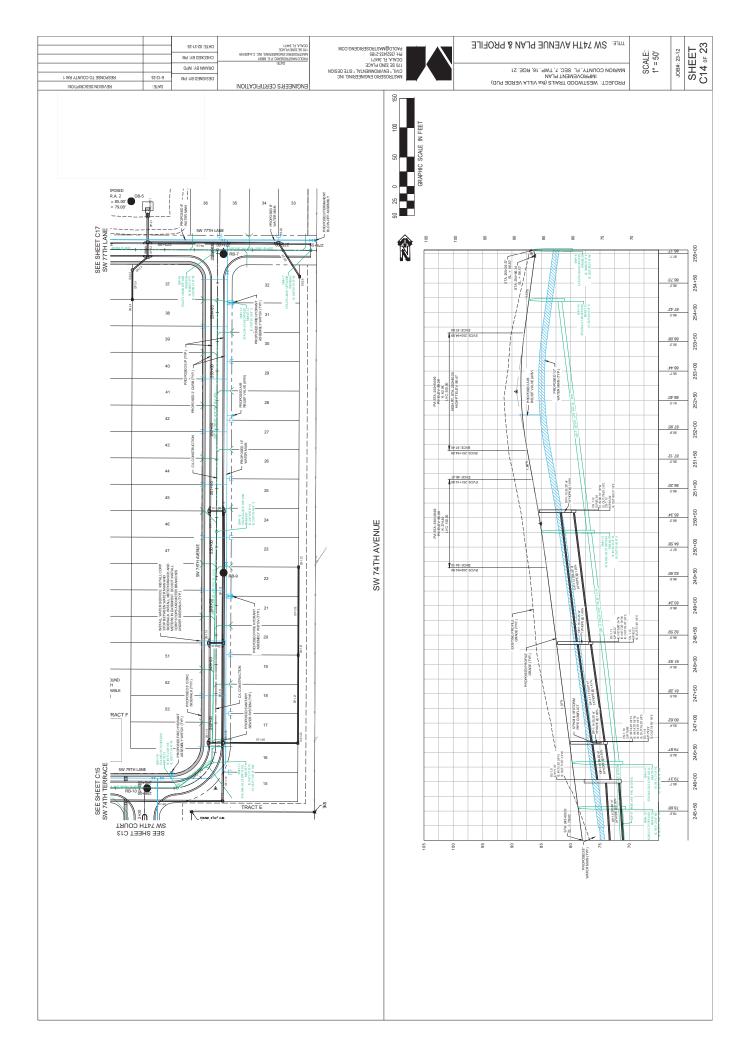
R'S CERTIFICATION:		DATE:	REVISION DESCRIPTION:
	DESIGNED BY: PM	6-12-25	RESPONSE TO COUNTY RAI 1
9140	DRAWN BY: WPD		
DSERD, P.E. 58891	CHECKED BY: PM		
ACE	DATE: 02:21:25		

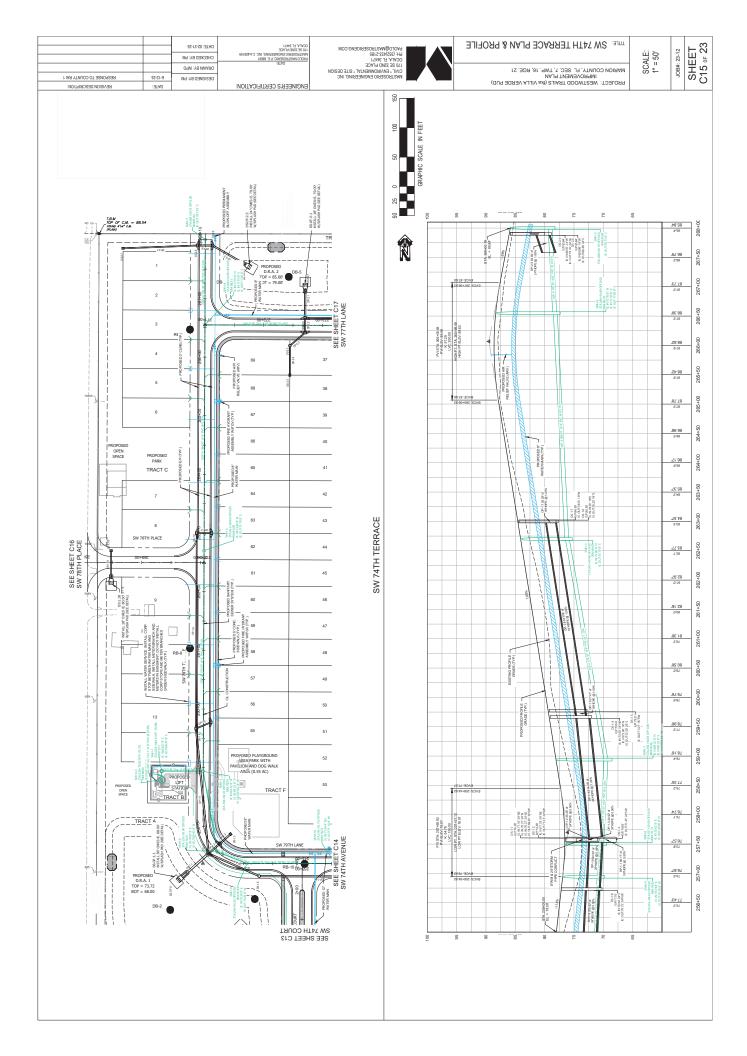
SANITARY STRUCTURE & PIPE TABLE

SCALE: NTS

JOB#: 23-12 SHEET C12 of 23







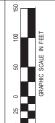
JOB#: 23-12 SHEET C16 oF 23 THE SM 181H PLACE PLAN & PROFILE SCALE: 1" = 50' PROJECT: WESTWOOD TRAILS (fixe VILLA VERDE PUD)
IMPROVEMENT PLAN
MARION COUNTY, FL SEC. 7, TWP. 16, RGE. 21

MASTROSERIOENG.COM PPI: (SES)A32-2185 POLALA, FL 3M471 TO SE 32MD PLACE TO CALLA, FL 3M471 TO SES 32MD PLACE TO SES 32MD

TAG	170 SE 32ND PLACE OCALA, FL 34471	
CHE	PAOLO MASTROSERIO, P.E. 58691 MASTROSERIO, P.E. 58691	
AAG	:3TAQ	
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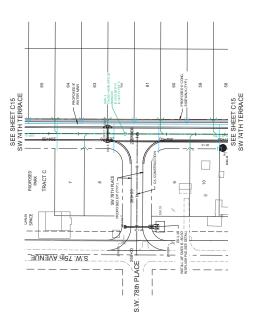
3TAQ	170 SE 32ND PLACE OCALA, FL 34471	Ī
CHEC	PAOLO MASTROSERIO, P.E. 58691 MASTROSERIO, P.E. 58691	
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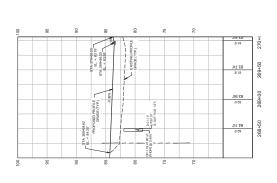
			LAME TH YOU
		DATE: 02-21-25	SE 35/ID LEVCE
		CHECKED BA: bW	DLO MASTROSERIO, P.E. 58691 STROSERIO ENGINEERING, INC. C.A.#26159
		DRAWN BY: WPD	:3TAQ
RESPONSE TO COUNTY RAI 1	9-15-52	DESIGNED BA: bW	
	:71147		AGINEERS SERVILION LONG.





SW 78TH PLACE





1 1	PH: (362)433-2185 PAOLO@MASTROSERIOENG.COM
	TYD SE 32ND PLACE OCALA, FL 34471
	CIVIL * ENVIRONMENTAL * SITE DESIGN
	MASTROSERIO ENGINEERING, INC

SW 77TH LANE PLAN & PROFILE

PROJECT: WESTWOOD TRAILS (fixe VILLA VERDE PUD)
IMPROVEMENT PLAN
MARION COUNTY, FL SEC. 7, TWP. 16, RGE. 21

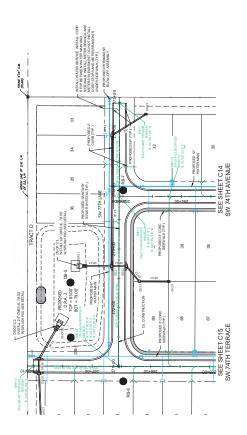
SCALE: 1" = 50'

SH ST		JOB#: 23-12	SHEET	C17 or 23
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SW 77TH LANE



DATE: 02-21-25

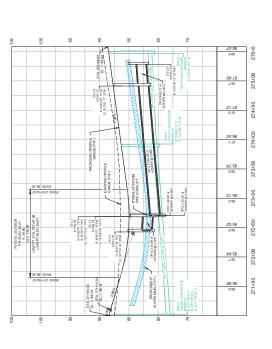
CHECKED BA: bW ORAWN BY: WPD

DESIGNED BA: bW

ENGINEER'S CERTIFICATION:

97-71-9

RESPONSE TO COUNTY RAI 1

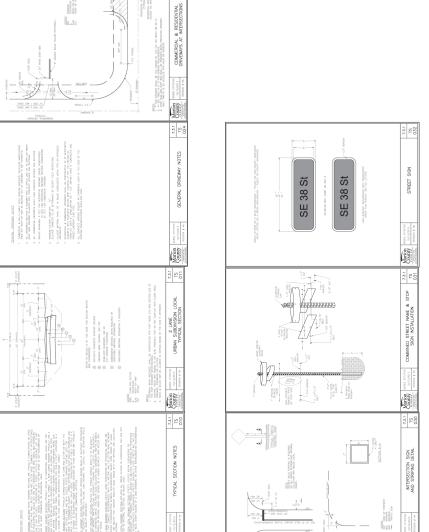


TILLE: CONSTRUCTION DETAILS SHEET C18 0F 21 SCALE: NTS PROJECT: WESTWOOD TRAILS (I% VILLA VERDE PUD) IMPROVEMENT PLAN MARION COUNTY, FL SEC. 7, TWP. 16, RGE. 21

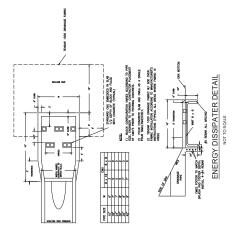
	170 SE 32ND PLACE	BTAO
	PAOLO MASTROSERIO, P.E. 58691 MASTROSERIO ENGINEERING, INC. C.A.#26159	CHEC
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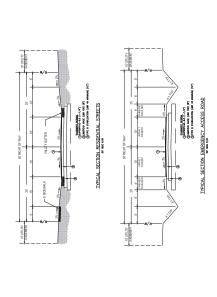
		П
C L	70 SE 32ND PLACE	١
	AOLO MASTROSERIO, P.E. 58691 MASTROSERIO ENGINEERING, INC. C.A.#26159	l
	:ETAG	ŀ
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		DATE: 02-07-25	170 SE 32ND PLACE OCALA, FL 34471
		CHECKED BA: bW	PAOLO MASTROSERIO, P.E. 68691 MASTROSERIO ENGINEERING, INC. C.A.#26169
		DRAWN BY: PM	:3TAG
		DESIGNED BA: PM	
REVISION DESCRIPTION:	:3TAG		ENGINEER'S CERTIFICATION:



Marion



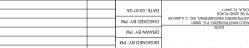


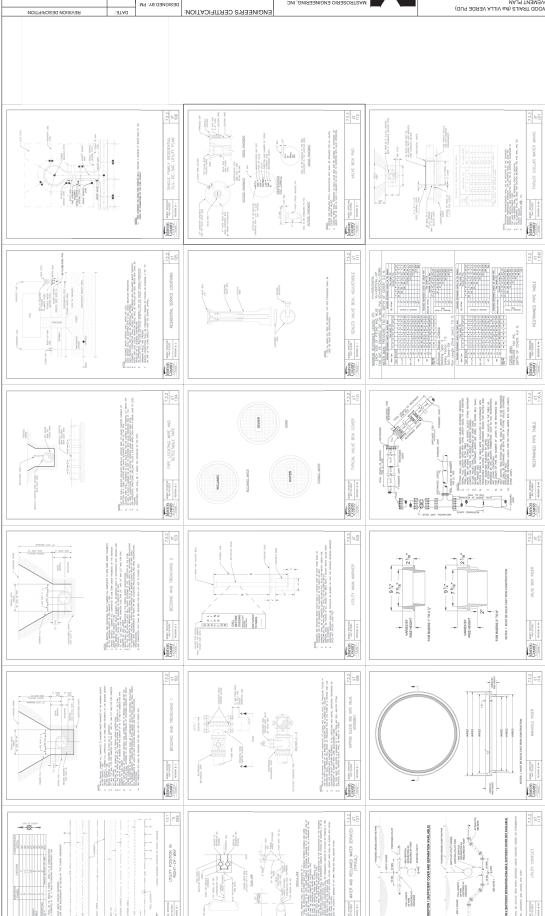
Marion

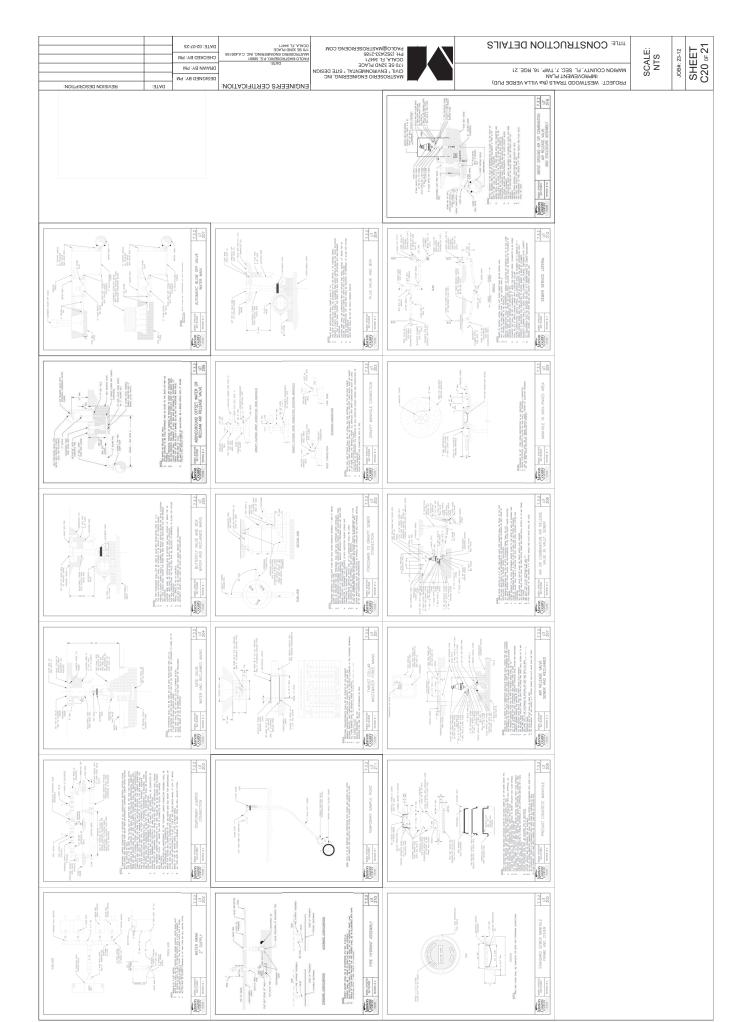
	170 SE 32ND PLACE OCALA, FL 34471	3TAQ
	PAOLO MASTROSERIO, P.E. 58691 MASTROSERIO ENGINEERING, INC. C.A.#26159	CHEC
NS	:31VQ	NAЯG
		DESIG

DATE: PAOLO MASTROSERIO MASTROSERIO ENGIN 170 SE 32ND PLACE OCALA, FL 34471	MASTROSERIO ENGINE E DESIGN (CIVIT - ENVIRONMENTAL * SITE DESIGN OCALA, FL 34471 PH: (362)435-2186 PAOLO@MASTROSERIO ENGING INC	

	110 SE 32ND 6FVCE	:3TAQ
	PAOLO MASTROSERIO, P.E. 58691 MASTROSERIO ENGINEERING, INC. C.A.#26159	CHECK
RN	:31/40	WAЯG
l		neau



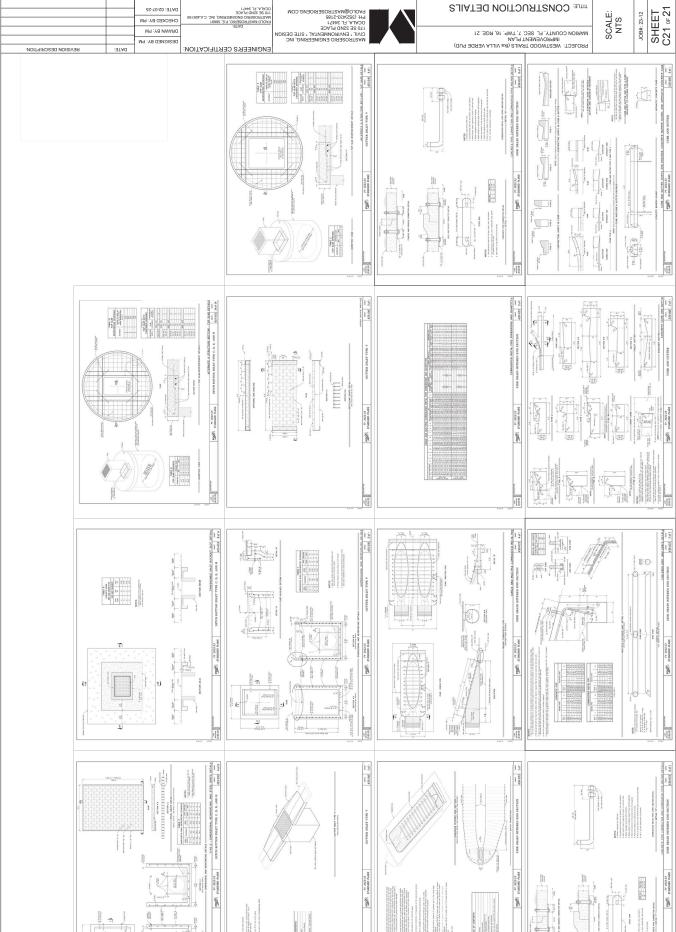




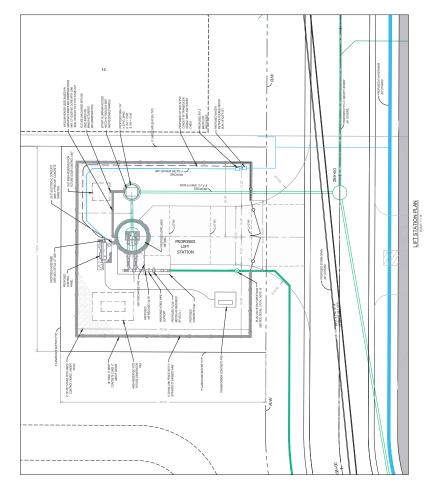
TITLE: CONSTRUCTION DETAILS SCALE: NTS PROJECT: WESTWOOD TRAILS (1%a VILLA VERDE PUD) IMPROVEMENT PLAN MARION COUNTY, FL SEC. 7, TWP. 16, RGE. 21

:3TAG	170 SE 32ND PLACE OCALA, FL 34471
CHECK	PAOLO MASTROSERIO, P.E. 58691 MASTROSERIO ENGINEERING, INC. C.A.#26159
IWAЯG	:9TAG

	2S-70-S0 :3TAG	SE 3ZND PLACE SE 3ZND PLACE
	CHECKED BA: bW	DLO MASTROSERIO, P.E. 58691 STROSERIO ENGINEERING, INC. C.A.#26159
	M4 :Y8 WWA90	:3TAQ
	DESIGNED BA: bW	



		DVIE: 05-51-59 CHECKED BA: bW D6VWN BA: WbD	OCHTY EF 2H1.1  11.0 RE AND ENCE  WHILOGEND DEMOREBUIC INC C YESRIR  BYOTO INVELOCESION E 2 8080.1	CIVIL * EUNIRONMENTAL * SITE DESIGN 170 SE 32ND PLACE OCALA, FL 34M71 PH: (352)M33-2185	MARION COUNTY, FL. SEC. 7, TWP. 16, RGE 21	SCALE: 1" = 10'	JOB#: 23-12	SHEET 322 ⋅ 23
RESPONSE TO COUNTY RAI 1	9-15-52	DESIGNED BA: bW		MASTROSERIO ENGINEERING, INC	NAJ9 TN3M3VO99MI	o ←	3	S 23
BEAISION DESCRIBLION:	:3TAQ		ENGINEER'S CERTIFICATION:		PROJECT: WESTWOOD TRAILS (fkg VILLA VERDE PUD)			



WOUNDERSON Y
RWIGE 2
HIP-II
BAX SOLID SOZE DIMANI, 3.125 N
CANYE MARRIER SI-20X-627

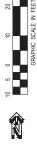
LIFT STATION PROFILE

# CONSTRUCTION NOTES: 1. ALL NOTES LISTED BELON SHALL BE THE RESPONSIBILITY OF THE CONTRACTION, UNLESS STATED OTHERWISE SE SEE MOLD UPPLIABLY FOR ADDITIONAL NOTES AND 2 SECONDEMENTS:

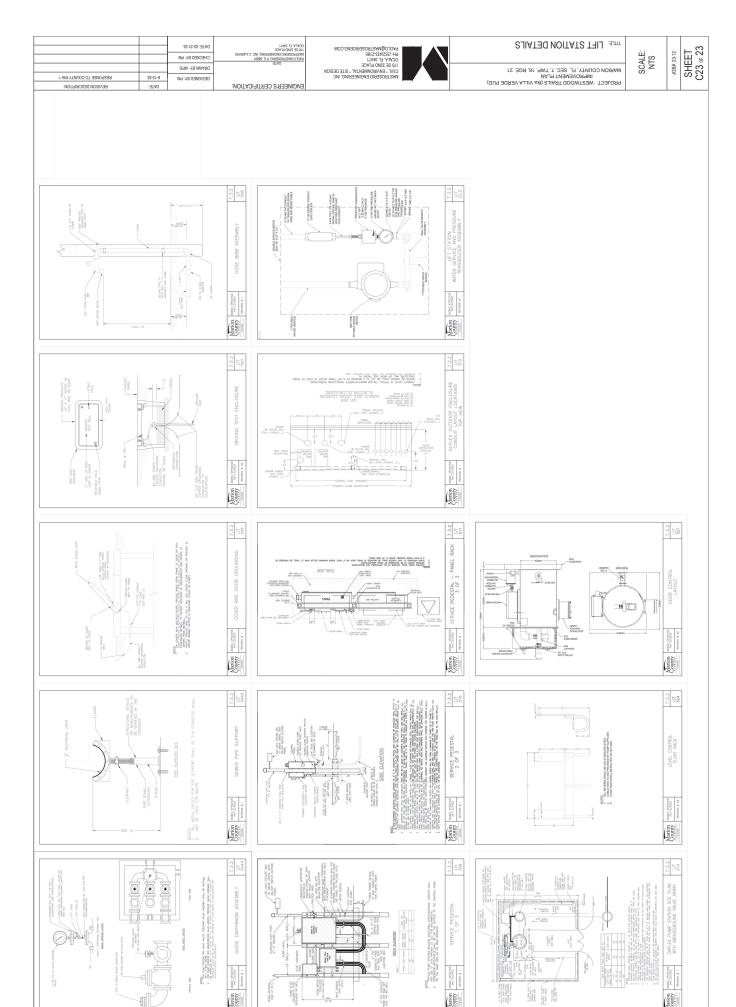


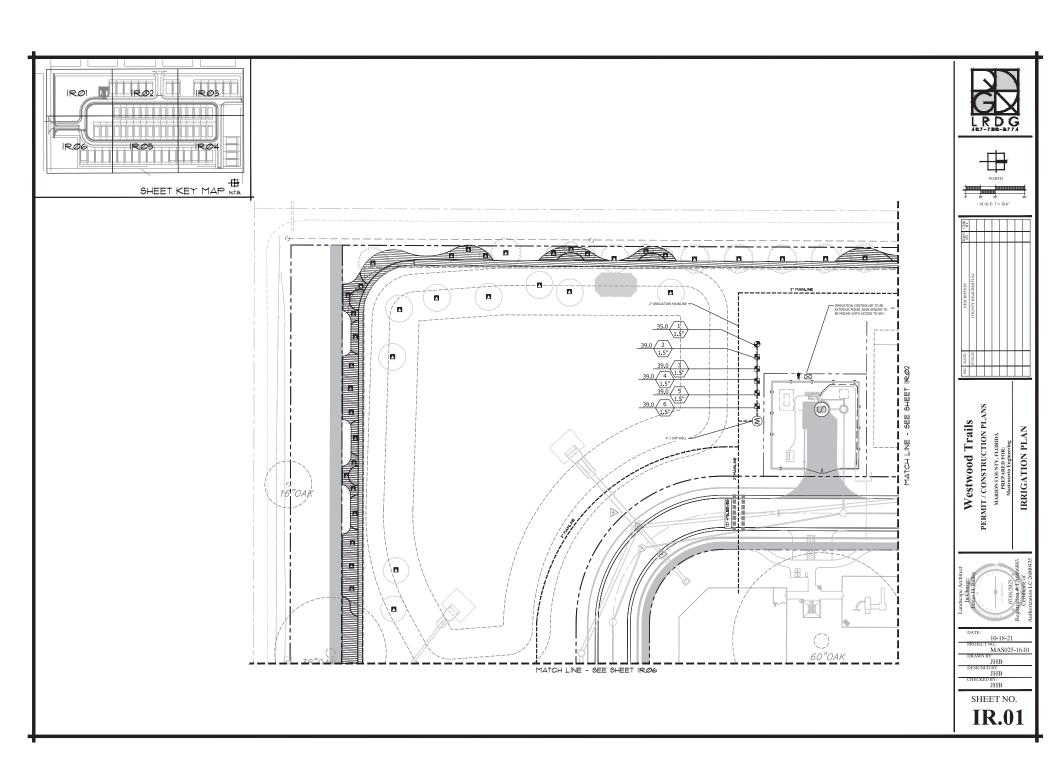


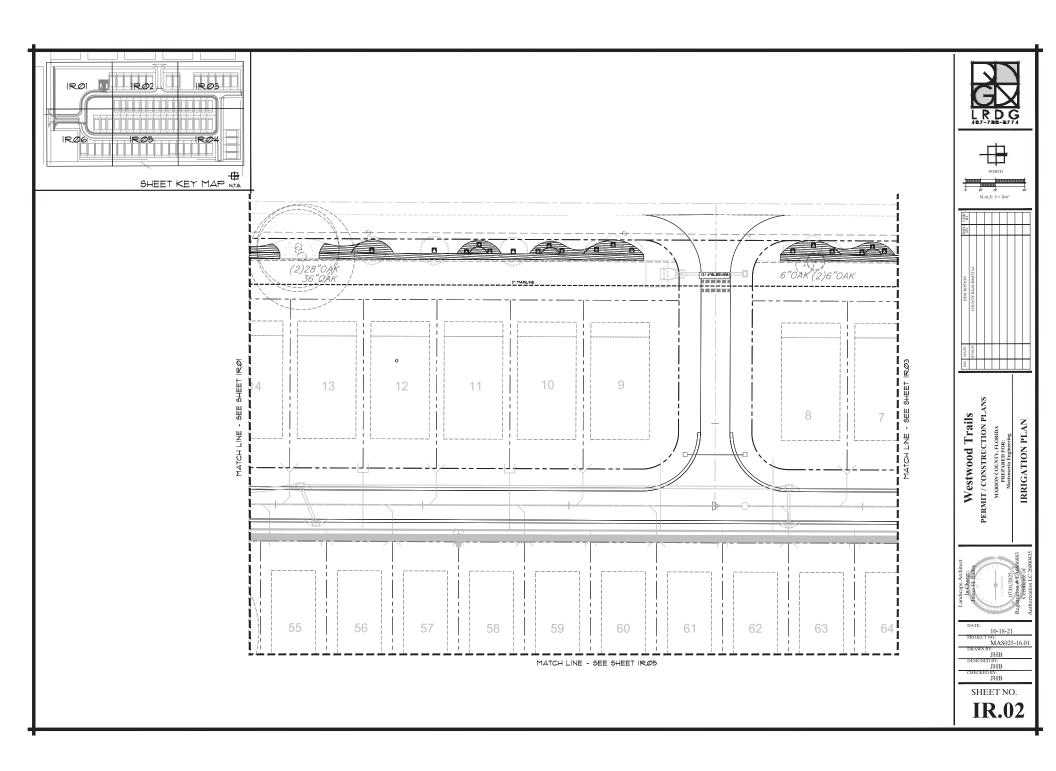
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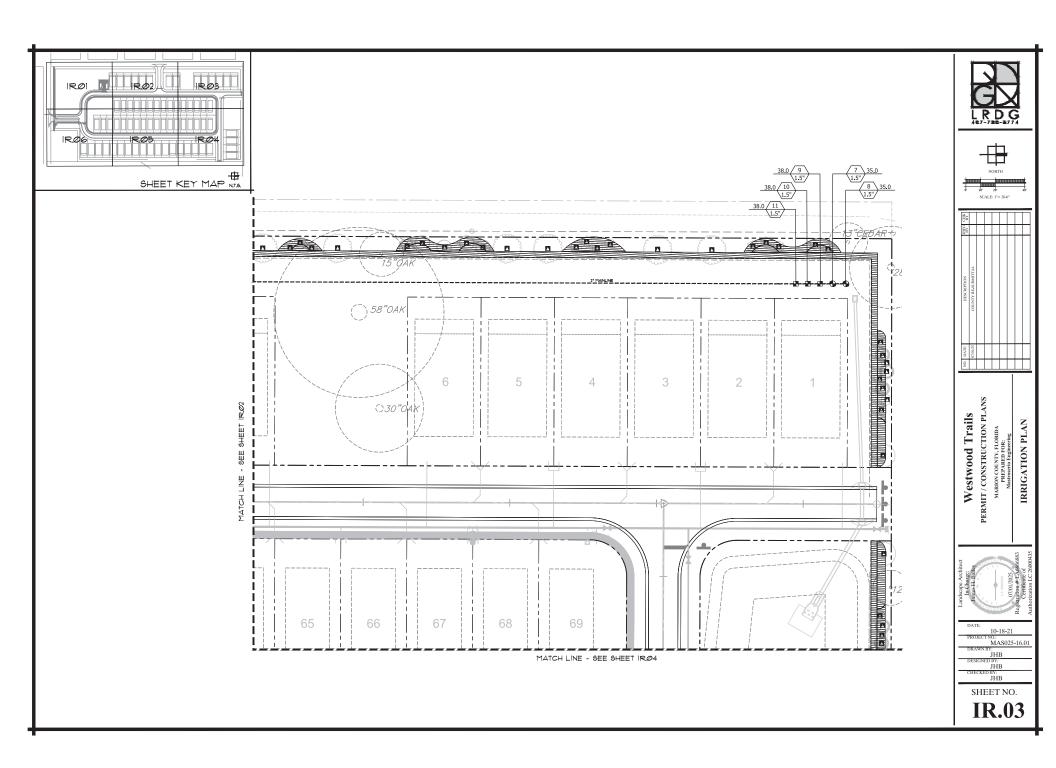


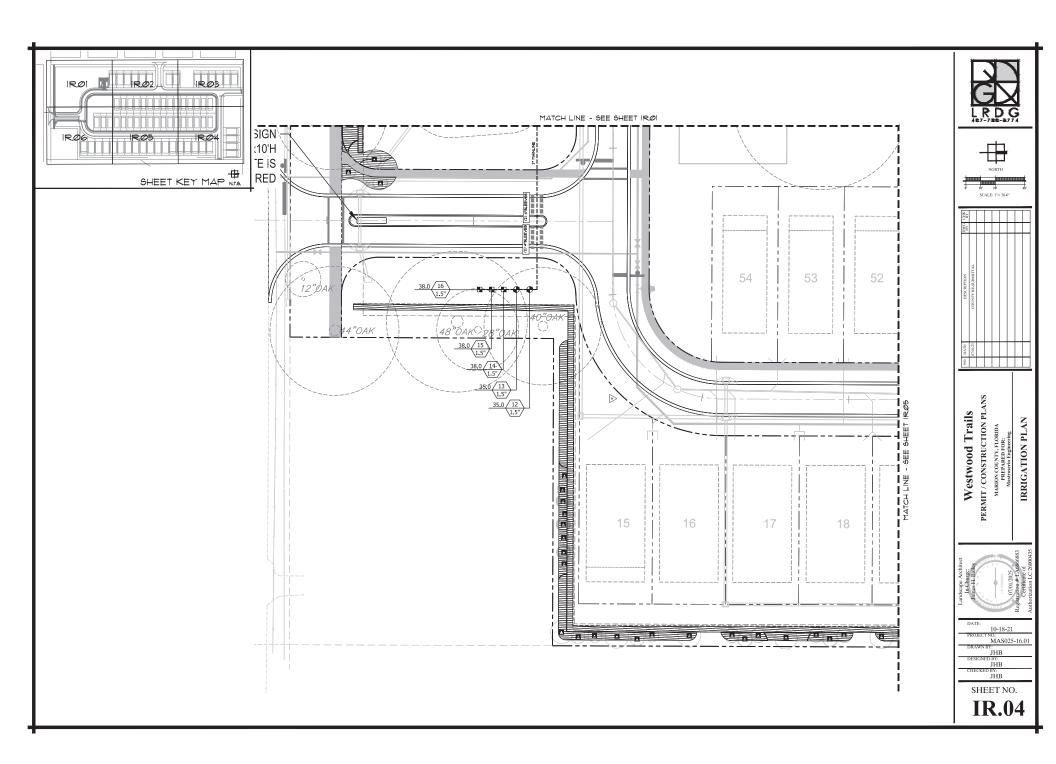


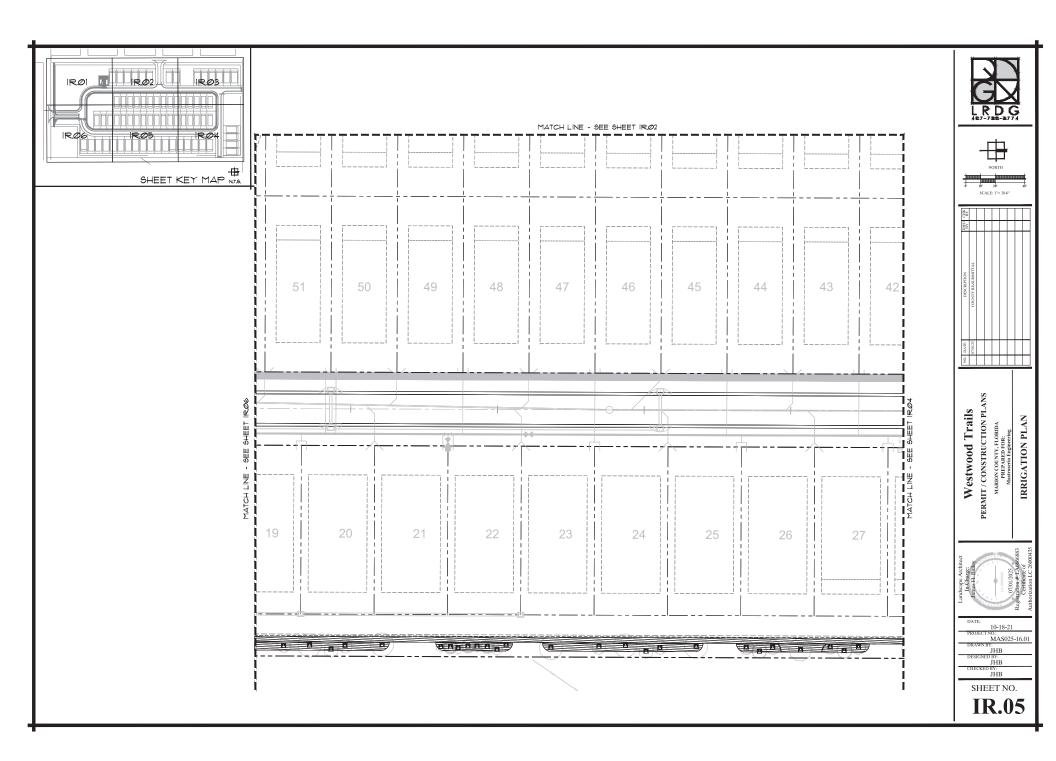


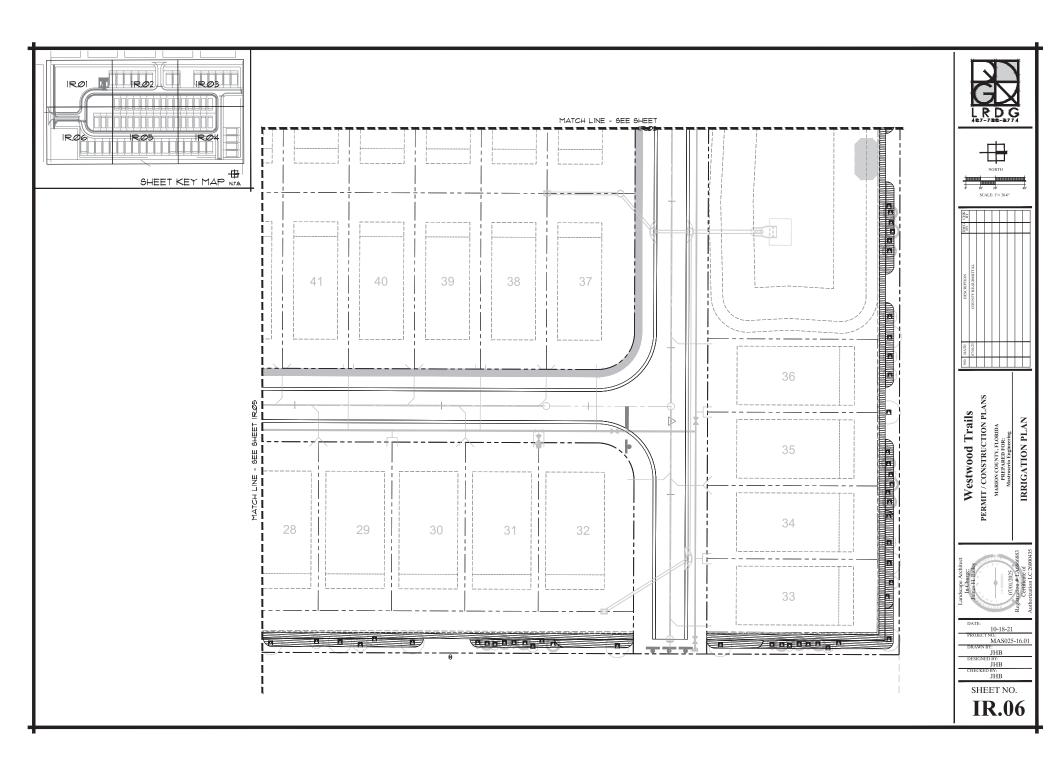


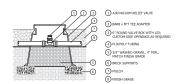












# AIR/ VACUUM RELIEF VALVE ON GRADE



2) PVC REDUCER AS REQUIRED 3) MPT TO POLY ADAPTER (4) POLY TUBING, 3' MIN. LENGTH (5) PVC LATERAL OR FLUSH HEADER (6) MPT CONNECTION FROM LATERAL 7) STANDARD VALVE BOX (8) BRICK SUPPORTS (4) 3/4" WASHED GRAVEL, 3" MIN. MULCH (1) FINISH GRADE

MANUAL FLUSH VALVE - PVC



1 BARB VALVE
2 POLY TUBING, 3' MIN. LENGTH
3 POLY TUBING (4) BARB ELL 6 STANDARD VALVE BOX 9 BRICK SUPPORTS (4) (8) 3/4" WASHED GRAVEL, 3" MIN MULCH (II) FINISH GRADE

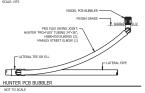
MANUAL FLUSH VALVE - POLY END RUN NOT TO SCALE

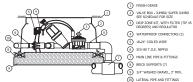


# DRIPLINE END FEED LAYOUT

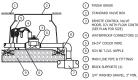


# IRREGULAR AREAS : ODD CURVES



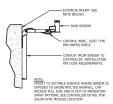


HUNTER DRIP CONTROL KIT

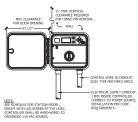


1 FINISH GRADE (2) STANDARD VALVE BOX 3 REMOTE CONTROL VALVE MODEL ICV WITH FLOW CONTROL (SEE PLAN FOR SIZE) (3) WATERPROOF CONNECTORS (2) (5) 18-24" COILED WIRE 6 SCH 80 T.O.E. NEPPLE (7) MAIN LINE PIPE & FITTINGS 8 BRICK SUPPORTS (4)

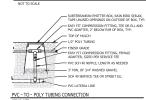
HUNTER ICV ELECTRIC GLOBE VALVE COMMERCIAL / MUNICIPAL



# HUNTER RAIN-CLIK SENSOR



# HUNTER CONTROLLER



# IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER / MODEL		TYPE	ARC	PSI GPM*	RAE
	Hunter PCB-50 (1 bubbler per tree)	Trickle	TREE	15-70 psi	1 @ 0.50 gpm	



Area to Receive Dripline
Hunter PLD-06-12 (12), Contractor to verify per plans
Dripline with 0.6 GPH emitters, non-draining, pressure
compensating, at 12" O.C., and row spacing at 12" O.C., off-set
emitters for triangular spacing.

W

Irrigation Well , Backflow prevention per county code. Well to produce 50 gpm/ 50 psi, min.

Hunter ICV-101 - 1" Electric Globe Valve w/ Flow Control Hunter ICV-151 - 1 1/2" Electric Globe Valve w/ Flow Control Hunter ICV-201 - 2" Electric Globe Valve w/ Flow Control

Hunter ICZ-151-40 Drip Controller (FLOW 20-60 GPM) w/ 1" HY100 Filter System. Super Jumbo Valve pit regu

Hunter PRO-C Modular Station Controller Model: PC Outdoor Provide PCM Modules as required Hunter Rain-Clik Sensor Mount in location with open view to sky,

 $\boxtimes$ Irrigation Mainline: 2" PVC Class 200 SDR 21

\_\_\_\_\_ Irrigation Lateral Line: PVC Class 160 SDR 26 (Not shown, Size per chart)

Sch 40 Irrigation Sleeve

NOTE: CONTRACTOR RESPONSIBLE FOR HIS OWN TAKE-OFFS, THE IRRIGATION PLAN IS DIAGRAMMATIC IN NATURE, LOCATIONS OF PIPING AND OTHER APPLICTENANCES ARE SHOWN FOR CLARITY. FIELD CHANGES MAY BE REQUIRED TO ACHIEVE PROPER IRRIGATION COVERAGE.

ALL PIPE SHALL BE LOCATED WITHIN PROPERTY BOUNDARIES.

- A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

- THE CONTROL OF SHARE AS EXPENSION FOR THE SHARE AND THE WORK, WHETHER THEY ARE BYILD OR STRUCK BY AND THE CONTROL OF SHARE AND THE SHARE AND T

- IN MODIFICATION DEPOSITION ENGAGES

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  IN MODIFICATION DECI
- C. THE BROCATION SYSTEM PROVIDED BY THE CONTRACTOR SHALL COVER THE BROCATION PROJECT AREA LIBRITS AS IDENTIFIED ON THE MARK, OR AS APPROVING BY THE OWNER. THE MERG SHALL BE 100% BROCATED WITH BALANCES HAD TO 16-BO COMPAGE, EXISTS DEPARKED TROSS FOR USE AND TRESS FOR BESIDES. THE BROCATION SYSTEMS SHALL BE EQUIPPED WITH AN AUTOMATIC CONTROLLER, AUTOMATIC PAIN CUT-OFF SWITCH, AND BACK-FLOW PREVENTION.
- E. ALL IRRIGATION INSTALLATION, MAINTENANCE PROFESSIONALS SHALL BE LICENSED AND CERTIFIED IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.

# IRRIGATION WATERING RESTRICTIONS, NON-RESIDENTIAL

- I REGISTRATO DE L'ATTRICE TOURNE DE L'ANDIE DE L'ANDIE

# VALVE SIZING

		LOSS IN PSI	
How	1.	11/2"	2"
GPM.	Globe	Globe	Glob
1	1.1		
5	1.9		
10	1.9		
15	1.6		
20	3.3	3	1
30	9.1	3	1
35	16	3	2
40	20	3	2
50		4	2 3
60		5	2
80		4 5 5.5	3
100		9	5
120		11.5	6
135			8
190			10

Z	ONE SCHEDULE
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	TREE BUBBLER DRIP ZONE DRIP ZONE DRIP ZONE DRIP ZONE DRIP ZONE DRIP ZONE TREE BUBBLER DRIP ZONE DRIP ZONE DRIP ZONE TREE BUBBLER TREE B

# LATERAL ZONE LINE PIPE SIZING DOWNSTREAM

# OF EACH ZONE VALVE (UNLESS OTHERWISE NOTED ON THESE PLANS)

(UNILESS OTHERWISE NOT LED ON THESE PLANTS). THE BELOW GUIDE GIVES A GENERAL CULTURE FOR LATERAL ZONE LINE PIPE SIZING, SIZING SHOULD BE STARTED FROM THE FURTHEST MOST EXPENDITION FOR EACH ZONE AND WORKED BACK TO THE ZONE WAY. CARE SHOULD BE TAKEN TO TOTAL BACH INTERSECTION OF LATERAL ZONE LINE SHOULD BE TAKEN TO TOTAL BACH INTERSECTION OF LATERAL ZONE LINE THE CHAPT FOR BACH ZONE LINE SHOULD AND THE CHAPT FOR BACH ZONE LINE SHOWN AT BOHN WAY. EACH COUNT ON THE PLANTS.

EACH VALVE CALL-OUT ON THE PLA
APPROPRIATE PIPE SIZE
3/4" PVC
1" PVC
1 1/4" PVC
1 1/2" PVC
2" PVC
2 1/2" PVC
3" PVC
4" PVC



VALVE CALLOUT - VALVE NUMBER GPM

VALVE FLOW (GPM)

VALVE SIZE (INCHES) VALVE LOCATION SYMBOL



ý d

NOTES PLANS SCHEDULE, I DETAILS MARION COUNTY, FLORIDA PREPARED FOR:

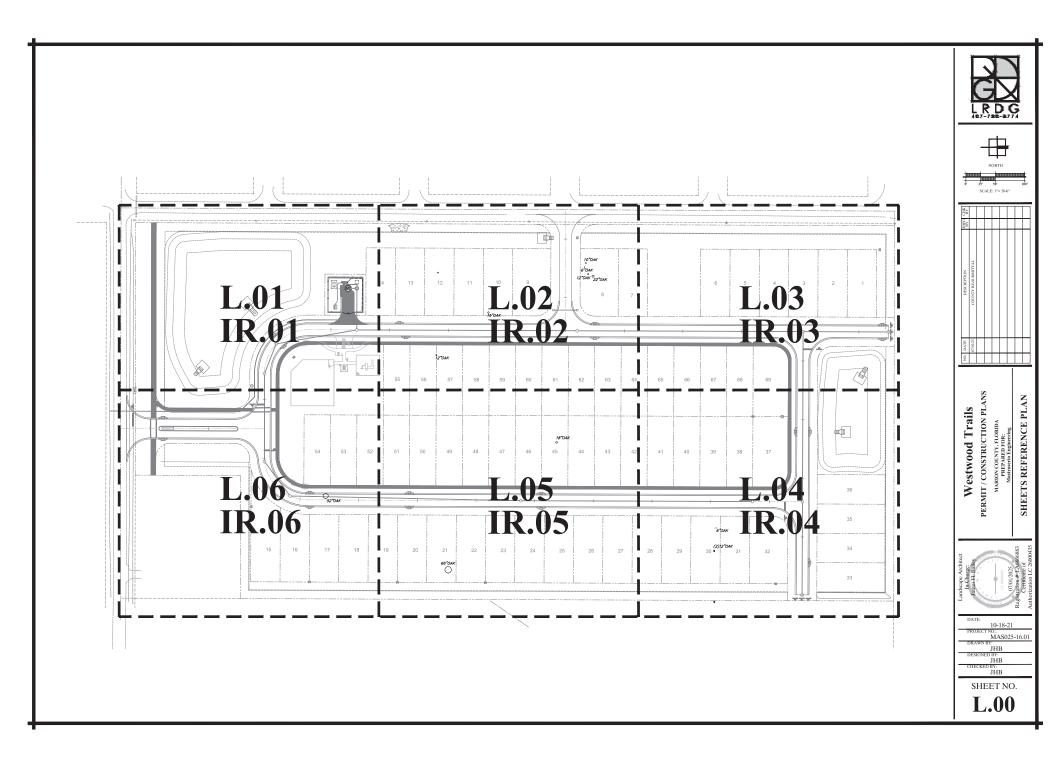
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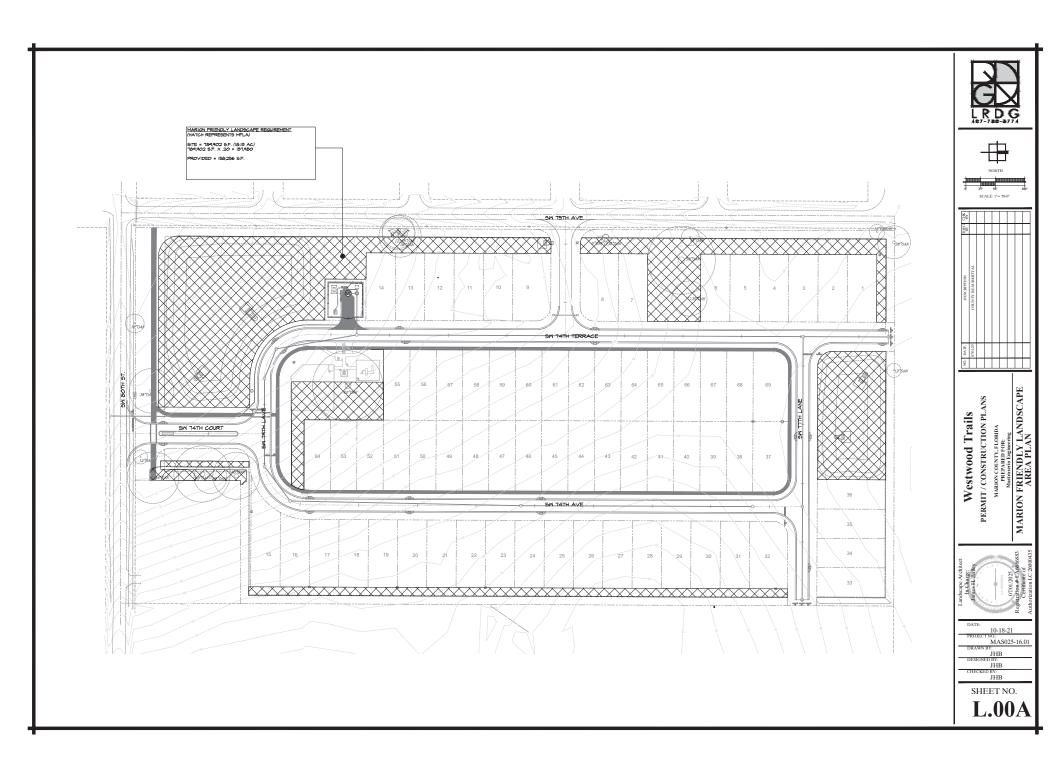
PERMIT / CONSTRUCTION IRRIGATION & I

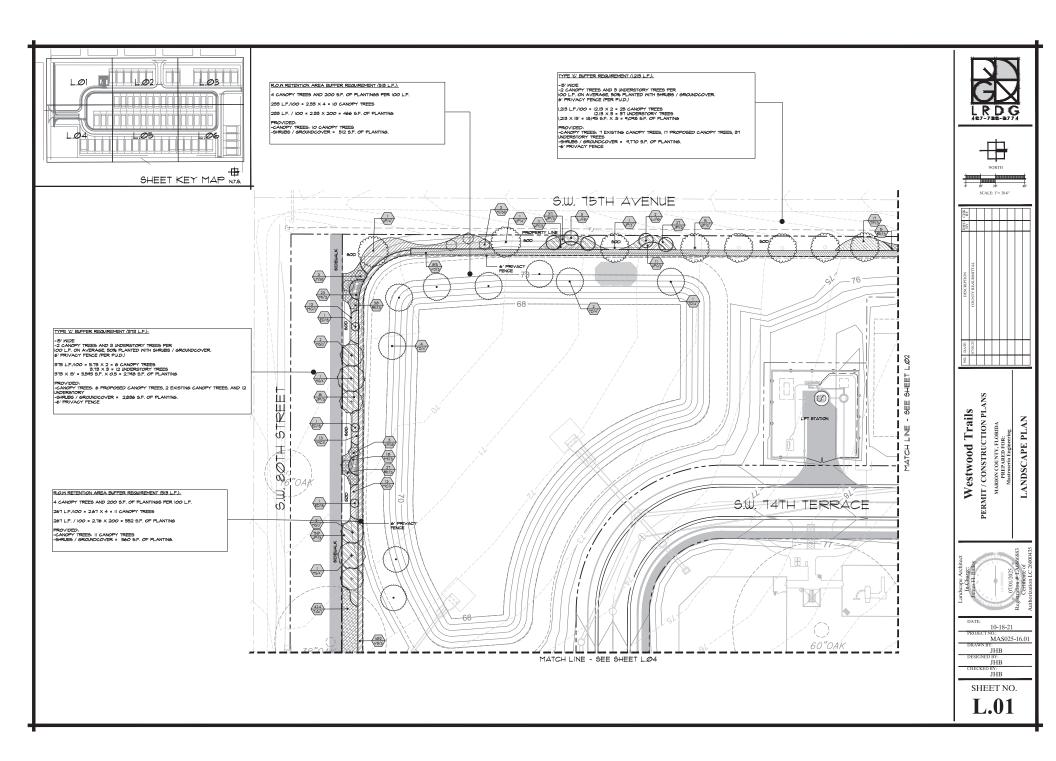
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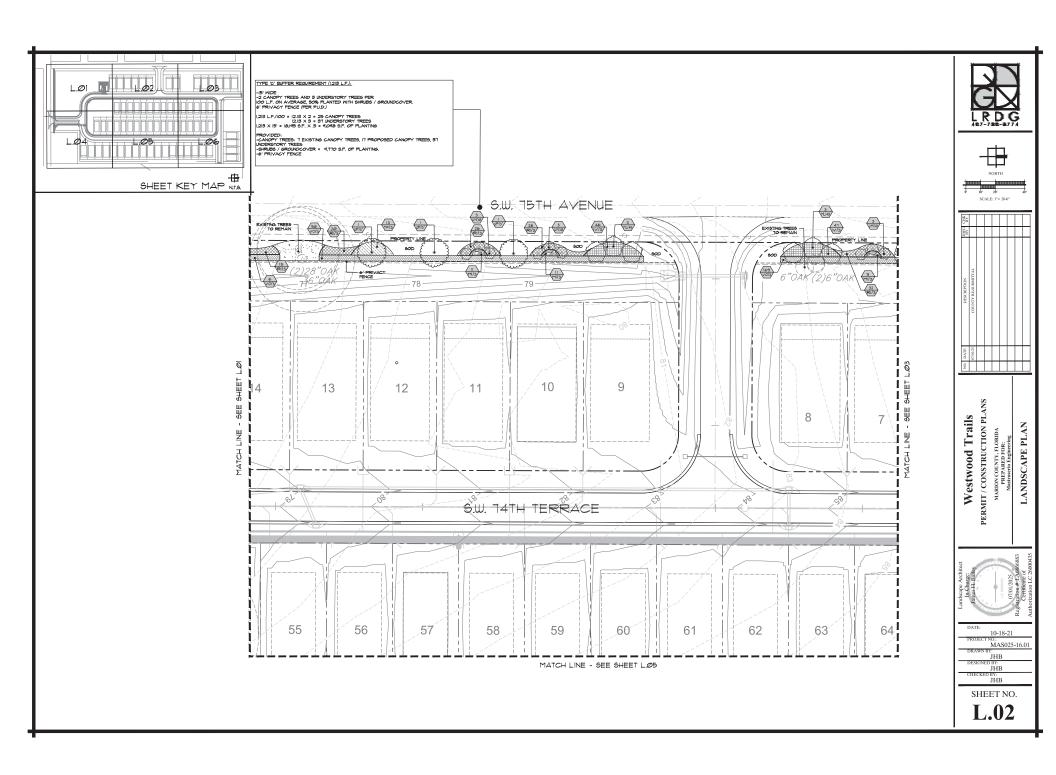
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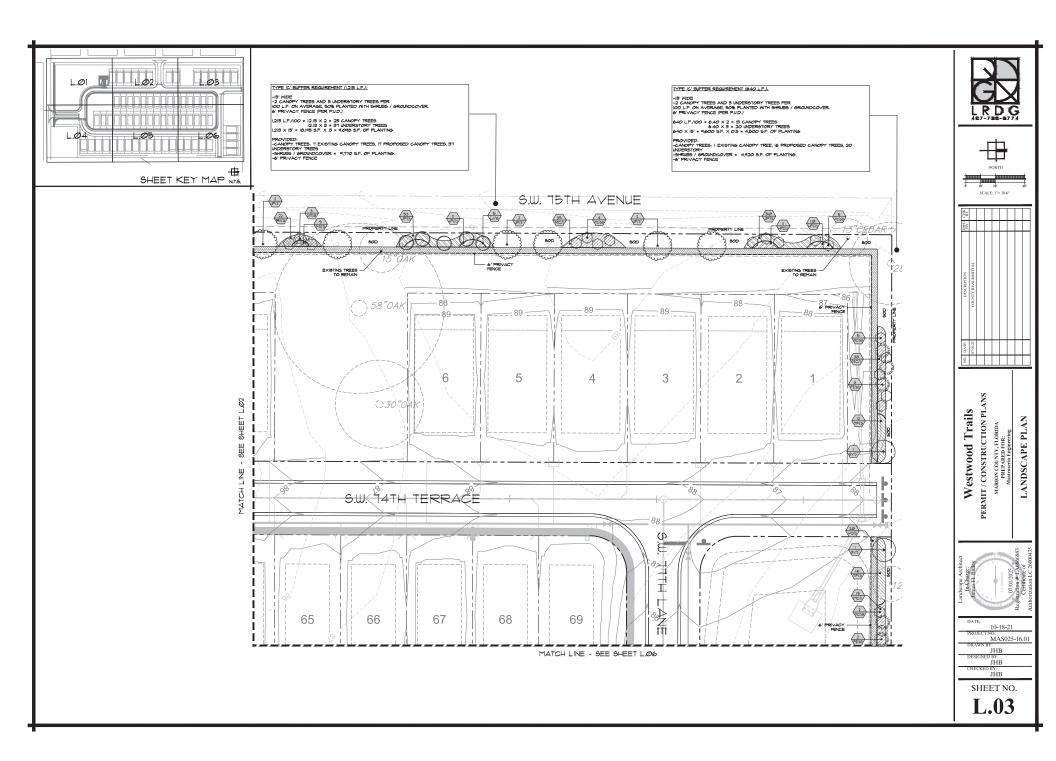
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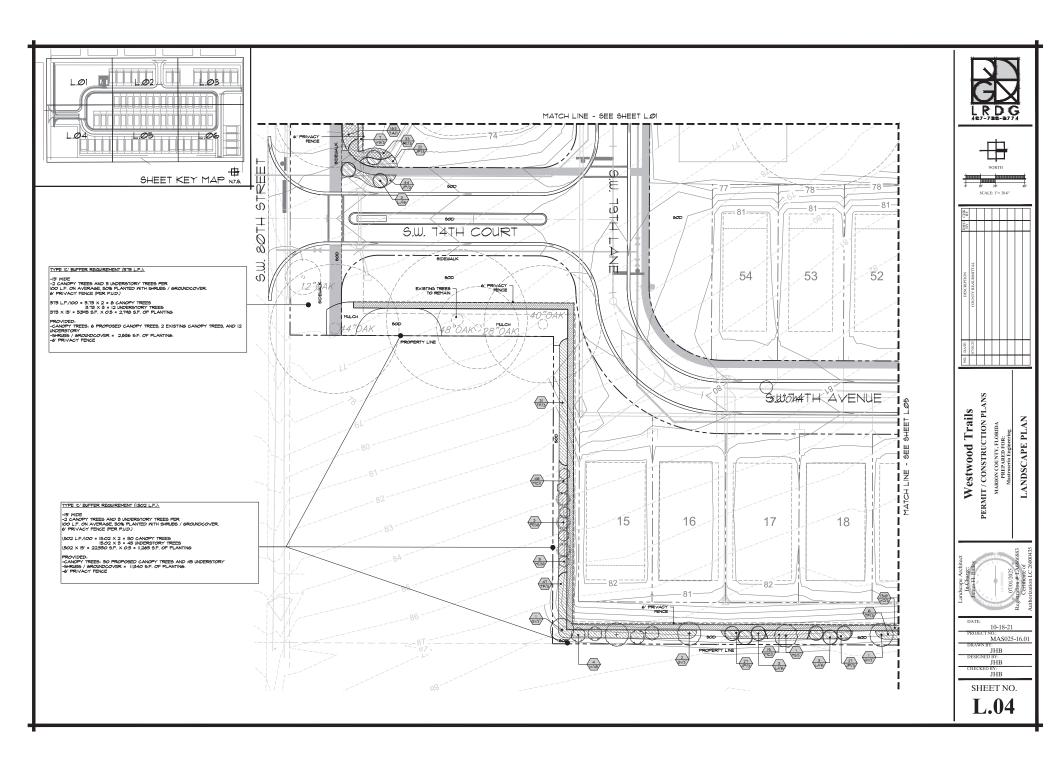


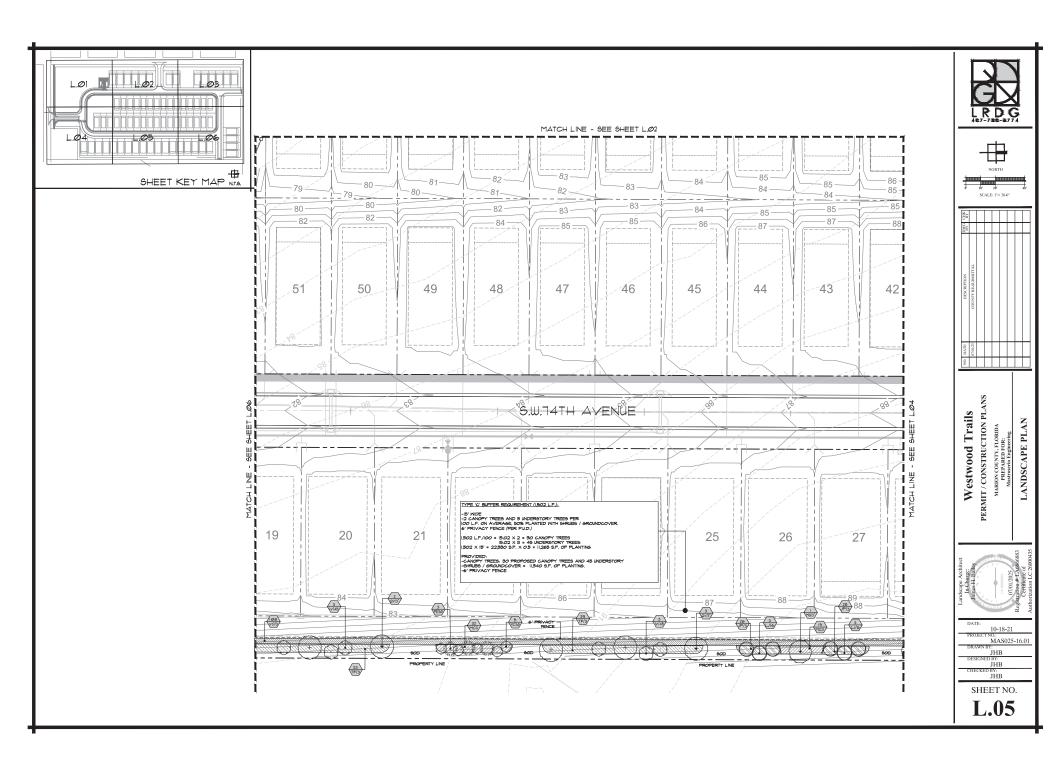


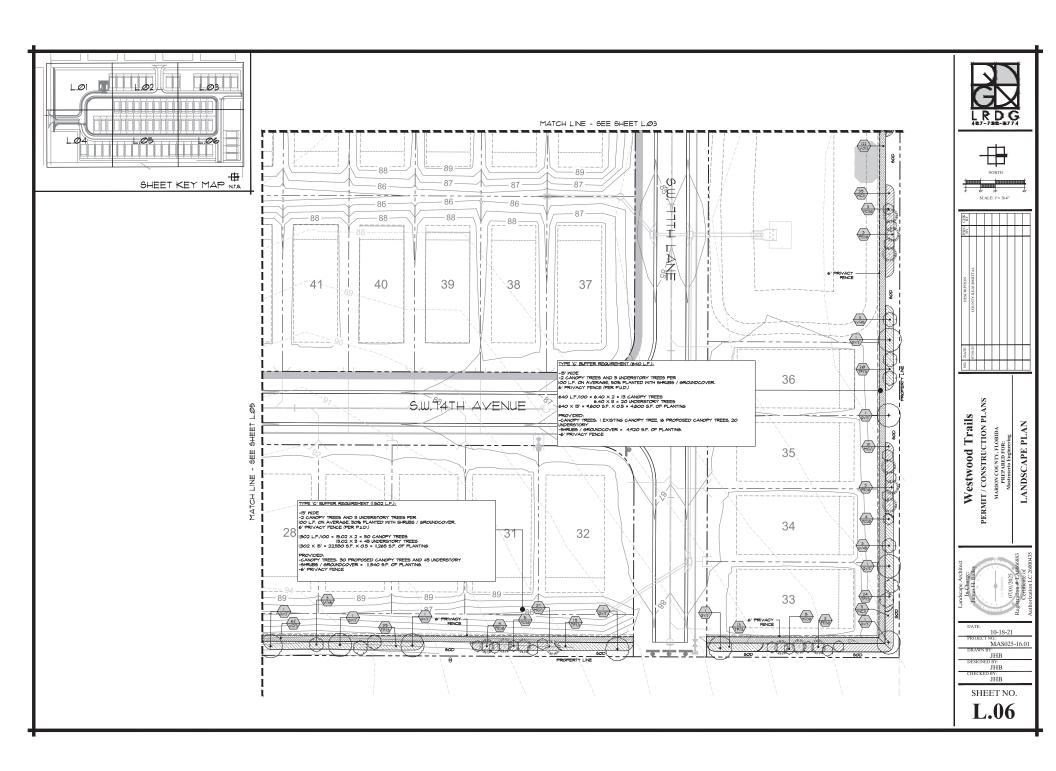












# **Westwood Trails**

Marion County, Florida

# **Landscape and Irrigation Permit / Construction Plans**

# **■ PROJECT TEAM**

# LANDSCAPE ARCHITECT: Land Resource Design Group Inc. 2929 Wadsworth Avenue Orlando, FL 32806 Phone: (407) 730-5774

# CIVIL ENGINEER:

Mastroserio Engineering, Inc. 170 SE 32nd Place Ocala, FL 34471 Phone: (352) 572-3051

# VICINITY MAP





SHE	ET INDEX			
SHEET#	SHEET TITLE		SHEET#	SHEET TITLE
	COVER SHEET	1		
TR.01	TREE REMOVAL PLAN	1	IR.01	IRRIGATION PLAN
L.00	LANDSCAPE REFERENCE PLAN	1	IR.02	IRRIGATION PLAN
T 00 A	MARION FRIENDLY	1	IR.03	IRRIGATION PLAN
L.00A	LANDSCAPE AREA PLAN		IR.04	IRRIGATION PLAN
L.01	LANDSCAPE PLAN		IR.05	IRRIGATION PLAN
L.02	LANDSCAPE PLAN		IR.06	IRRIGATION PLAN
L.03	LANDSCAPE PLAN		IRD.01	IRRIGATION DETAILS
L.04	LANDSCAPE PLAN	1		
L.05	LANDSCAPE PLAN	1		
L.06	LANDSCAPE PLAN	1		
LD.01	PLANTLIST & NOTES	1		
LD.02	LANDSCAPE DETAILS	1		
LD.03	LANDSCAPE SPECIFICATION	1		
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Lands 03/08	stwood Trails  cape and Irrigatoin Permit / Construction Plans 8/2025  Project No. MAS025-16.01		G X
No.	Revisions	Date	Landscape Architect In Charge: James H. Bailey
	INITIAL COUNTY SUBMITTAL	03/14/2025	IA consess  Registration # LA6666883
			Certificate of Authorization LC 26000435 Land Resource Design Group

CODE	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
TREES	1			1
IV/45	19	ILEX VOMITORIA	YAUPON HOLLY	45 GAL OR F.G, 8' HT. X 5'-6' SPRD., 2" DBH. MIN. TOTAL, MULTI-TRUNK.
ML/45	6	MAGNOLIA GRANDIFLORA 'LITTLE GEM'	LITTLE GEM DWARF SOUTHERN MAGNOLIA	45 GAL OR B\$B, 8'-9' 5PRD. × 3'-4' HT., 2"-2 1/2" CAL MIN.
CANOP	Y TREES	<del>3</del>		
MG/4"	2	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	100 GAL OR RPG, 14'-15' HT., 6'-1' SPR,
MG/3°	6	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	65 GAL OR RPG, 15"HT., 5"-6" SPR., 3 1/2" CAL. MIN.
PE/3@	24	PINUS ELLIOTTI 'DENSA'	DENSA SLASH PINE	B\$B., 1'-8' × 3'-4', 3 1/2" CAL MIN;
QV/3"	20	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	65 GAL, OR RPG, 12'-13' HT., 6'-1' SPR. 3. 1/2" CAL.MIN.
TD/3"	2	TAXODIUM DISTICHUM	BALD CYPRESS	65 GAL, OR RPG, 13'-14' HT., 4'-5' SPR., 1/2" CAL, MIN.; NATIVE
TD/4"	1	TAXODIUM DISTICHUM	BALD CYPRESS	100 GAL, OR RPG, 14"-15" HT., 5"-6" SPR 4" CAL, MIN.: NATIVE
uP/3*	15	ULMUS PARVIFOLIA 'EMER II'	'EMER II' ALLEE ELM	RPG OR 65 GAL., 12'-14' HT. X 5'-6' SPRD., 3.5" CAL MN
uP/4°	2	ULMUS PARVIFOLIA 'EMER II'	'EMER II' ALLEE ELM	100 GAL OR RPG., 14'-15' HT. X 6'-1' SPRD., 4" CAL MIN.
INDER	STORY T	PEFA		
LIM/3@	18	LAGERSTROEMIA INDICA 'MUSKOGEE'	LAVENDER CRAPE MYRTLE	30 GAL, 6'-1' × 3'-4', MULTI-TRUNK, 5 CANES
LJ/6	25	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	RPG, 6'-1 X 6'-1', MULTI-TRUNK, 5 TRUNK MN, 1" CALL PER TRUNK, TOTAL OF 5" CA FOR ALL TRUNKS COMBINED, TIGHTLY AND SYMMETRICALLY PRUNED
MC/30	46	MYRICA CERIFERA	WAX MYRTLE	30 GAL, 6' HT. MIN × 4'-5', MULTI-TRUNK NATIVE
EVERGE	REEN A	CCENTA		
ED/I5	3	ELAEOCARPUS DECIPIENS	JAPANESE BLUEBERRY TREE	15 GAL, 6' HT. × 2'-3' SPRD. (FULL TO GROUND)
SHRUB	ABEAG			
HPC/3	65	HAMELIA PATENS 'COMPACTA'	DWARF SCARLET BUSH	3 GAL,15"-18" HT., 15"-18" SPR., 14" HT MIN 30" O.C.
IV/3	93	ILEX VOMITORIA 'NANA'	DWARF YAUPON	3 GAL, 14"-15" HT., 14"-15" SPR.,14" HT MII 30" O.C.: NATIVE
MI/3	81	MORAEA IRIDIOIDES	BUTTERFLY IRIS	3 GAL, 24° HT, FULL
RI/3	246	RHAPHIOLEPIS INDICA 'ALBA'	WHITE INDIAN HAWTHORN	3 GAL, 15"-18" HT., 10"-13" SPR., 30" O.C
TF/3	329	TRIPSACUM FLORIDANUM	DWARF FAKAHATCHEE GRASS	3 GAL, 24" × 24", 48" O.C.
v0/3	782	VIBURNUM ODORATISSIMUM	SWEET VIBURNUM	3 GAL, 18"-24" × 18"-24". 48" O.C.
vs/3	108	VIBURNUM SUSPENSUM	SANDANKWA VIBURNUM	3 GAL, 18"-29" × 18"-29",18" HT MIN, FULL 36" O.C.
ORNAM	ENTAL C	3RASSES		
MC/I	510	MUHLENBERGIA CAPILLARIS	PINK MUHLY	I GAL, 18" HT. X 18"-20",18" HT MIN, 5PR. 36" O.C.
	2.60/5	P.		·
GROUND				
GROUND JP/3	512	JUNIPERUS CHINENSIS 'PARSONII'	PARSON JUNIPER	3 GAL, 12"-16" × 12"-16", 30" O.C.

ABBREV.	BOTANICAL NAME	COMMON NAME	SIZE & SPACING
мисн		Pinelpark Mulch	8" thick min.
500	Paspalum Notatum 'Argentine'	Argentine Bahla	

THE CONTRACTOR IS RESPONSIBLE FOR VERRICATION OF QUANTITIES IN THE PLANT LIST. IN THE EVENT OF A CONFLICT BETWEEN QUANTITIES IN THE EVENT OF A CONFLICT BETWEEN QUANTITIES IN THE LIST AND THE PLANS BALLL CONTROL, AND THE DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT REVOLUTION FOR DISC. ANY DESCRIPTION OF THE LANDSCAPE ARCHITECT REVOLUTION FOR THE LANDSCAPE ARCHITECT OR QUARTES

AFTER COUNTY APPROVAL, CUNER RESERVES THE RIGHT TO REDUCE THE QUANTITY / SIZE OF ALL PLANTS AND TREES TO THE MINIMUM REQUIRED BY CODE WITHOUT ADDITIONAL REVIEW / APPROVAL.

# GENERAL NOTES: (REFER TO SEPERATE SPECIFICATIONS SHEET FOR COMPLETE REQUIREMENTS)

- ALL PLANT MATERIAL SHALL BE FLORIDA GRADE NO. I OR BETTER AS SPECIFIED IN GRADES AND STANDARDS FOR NURSERY PLANTS, DIVISION OF PLANT INDUSTRY, FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, AND SHALL CONFORM TO AMERICAN STANDARDS FOR NURSERY STOCK, AMERICAN NURSERY AND LANDSCAPE ASSOCIATION, LATEST EDITION.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF QUANTITIES IN THE PLANT LIST. IN THE EVENT OF A CONFLICT BETWEEN QUANTITIES IN THE LIST AND THE PLANS, THE PLANS SHALL CONTROL AND THE DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BID. ANY DEVIATION FROM THESE PLANS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE BUILDING CODES, ORDINANCES AND LOCAL REGULATIONS, AND IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR THE WORK.
- 4. ALL LANDSCAPE INSTALLATION/ MAINTENANCE PROFESSIONALS SHALL BE LICENSED AND CERTIFIED IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
- 5. THE CONTRACTOR SHALL EXAMINE EXISTING SITE CONDITIONS AND PROMPTLY REPORT ALL DISCREPANCIES AND INSUITABLE CONDITIONS (WETNESS, MICK DEBRIS, OBSTRUCTIONS, ETC.) TO THE LANDSCAPE ARCHITECT PRIOR TO BIDDING. THE CONTRACTOR IS RESPONSIBLE FOR SOIL ANALYSIS PRIOR TO INSTALLATION OF PLANTINGS, AND SHALL ENSURE ALL SOIL AMENDHENTS CONVENT TO SPECIFICATIONS.
- 6. THE CONTRACTOR SHALL ACQUAINT HIMSELF WITH THE SITE AND ALL UTILITIES, (INCLUDING WATER, SEWER AND ELECTRICAL SUPPLY). THE CONTRACTOR SHALL CALL FLORIDA SUBHINE SII AND AREA UTILITIES NOT LISTED ON THE LOCATE TICKET. THE EXACT LOCATION OF ALL EXISTING ABOVE GROUND AND INDERGROUND STRUCTURES, UTILITIES, SPRINKLERS AND PIPE MAY NOT BE INDICATED ON DRAWINGS. THE CONTRACTOR SHALL CONDUCT HIS WORK IN A MANNER TO PROTECT AND PREVENT INTERREPTION OR DAMAGE SUSTING SYSTEMS AND UTILITY SERVICES WHICH MUST REMAIN OPERATIONAL. THE CONTRACTOR IS RESPONSIBLE FOR THEIR REPLACEMENT IF DAMAGED BY HIM AT NO ADDITIONAL COST TO THE
- 1. CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN, AND IS RESPONSIBLE FOR THEIR COMPARABLE REPLACEMENT IF DAMAGED BY HIM AT NO ADDITIONAL COST TO THE OWNER.
- 8. ALL TREE MATERIAL SHALL BE CONTAINER GROWN UNLESS OTHERWISE SPECIFIED.
- 9. SOIL PROVIDED SHALL BE FREE OF LIMEROCK, PEBBLES OR OTHER CONSTRUCTION DEBRIS.
- 10. ALL PLANTING BEDS SHALL RECEIVE A 3" LAYER OF MULCH (1" OVER ROOTBALL), MEASURED AFTER MULCH HAS SETTLED.
- II. ALL PLANT BEDG SHALL BE FREE OF WEEDS, ROCKS, AND CONSTRUCTION DEBRIS, ETC., AT TIME OF INSPECTION BY LANDSCAPE ARCHITECT/ OWNER/ INSPECTIOR
- 12. MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA YARDS & NEIGHBORHOODS HANDBOOK http://ffl.ifas.ufl.edu
- 13. ALL LANDSCAPE MAINTENANCE SHALL BE IN ACCORDANCE WITH MARION COUNTY LDC SEC. 6.8.13.
- 14. FERTILIZER AND LANDSCAPE CHEMICAL USE SHALL COMPLY WITH MARION COUNTY LDC SEC. 6.8.14.
- 15. ALL IRRIGATION SYSTEMS SHALL BE DESIGNED, OPERATED, AND MAINTAINED IN ACCORDANCE WITH MARION COUNTY LDC DIV. 9 IRRIGATION 6.3.6, AND ALL OTHER STATE AND LOCAL STATUSE THAT APPLY. AN IRRIGATION PLAN SHALL BE PROVIDED PRIOR TO ISSUANCE OF A DEVELOPMENT ORDER OR BUILDING PREMIT, IF REGISTION DESIGNATION DESIGN. AND AS-BUILT PLANS SHALL BE PROVIDED BY OTHERS, UPON COMPLETION OF THE IRRIGATION SYSTEM INSTALLATION AND ACCEPTANCE OF THE AS-BUILT PLANS AND OPERATIONAL INFORMATION, A FINAL LANDSCAPE / IRRIGATION RELEASE SHALL BE SIGNED AND SEALED BY THE PROJECT LANDSCAPE ARCHITECT AND SUBMITTED TO MARION COUNTY.
- 16, ALL CERTIFICATION AND LICENSING OF LANDSCAPE PROFESSIONALS AND IRRIGATION INSTALLATION/MAINTENANCE PROFESSIONALS SHALL BE IN ACCORDANCE WITH MARION COUNTY LDC SEC. 6.8.15 AND SEC. 6.9.10.
- 11. NO CERTIFICATE OF OCCUPANCY SHALL BE 1894ED INTIL A COMPLETE SELF-CERTIFICATION CHECKLIST, AS UELL AS A CLEAR AND ACCURATE AS-BUILT SKETCH, HAVE BEEN SUBMITTED AND ACCEPTED BY THE COUNTY & AND THE FINAL INSPECTION AND LANDSCAPE/IRRIGATION RELEASE HAS BEEN RECEIVED OR THE COUNTY HAS CONDUCTED AND CERTIFIED A FINAL INSPECTION FEW TARION COUNTY LDC SEC, 6-31.

# LANDSCAPE COMPLETION INSPECTION REQUIREMENTS

- PRIOR TO THE 199UANCE OF A CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL DOCUMENT THE ACTUAL FIELD PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE CONTRACTOR SHALL DOCUMENT THE ACTUAL FIELD MSTALLATION OF THE LANDSCAPE AND SUBMIT TO MARICA COUNTY A REQUIRED LANDSCAPE 49-BUILT CERTIFICATION PLAN, SIGNED AND SEALED BY THE LANDSCAPE ARCHITECT (MARICA COUNTY LDC DIV 8, SEC 6812). HE CONTRACTOR SHALL PROVIDE A CLEAR AND LEGIBLE AS-BUILT DIAGRAM THAT ACCURATELY REPRESENTS THE LANDSCAPE PLAN 49, MSTALLED, AND REQUIST AND ON-SITE INSPECTION BY THE LANDSCAPE ARCHITECT, WHEN ACCEPTABLE TO THE LANDSCAPE ARCHITECT, THE AS-BUILT PLANS WILL BE APPROVED AND A FINAL INSPECTION AND LANDSCAPE ARCHITECT.

THE CONTRACTOR SHALL MARK-UP A COPY OF THE APPROVED LANDSCAPE DESIGN PLAN WITH THE FOLLOWING AS-BUILT INFORTATION: (NOTE PRE-APPROVAL BY THE DESIGN PROFESSIONAL IS REQUIRED FOR ANY DESIGN CHANGE (INCLUDING PLANT SUBSTITUTIONS, LAVOUT, QUANTIES, MATERIALS, ETC.)

INSTALLED PLANT SPECIES AND SIZES

INSTALLED PLANT SPECIES AND SIZES

- OTHER INSTALLED MATERIALS DOCUMENTATION

THE CONTRACTOR SHALL PROVIDE CONFIRMATION THAT THE OWNER HAS RECEIVED: WRITTEN MAINTENANCE, PRUNING, AND FERTILIZER INSTRUCTIONS AND SCHEDULE.



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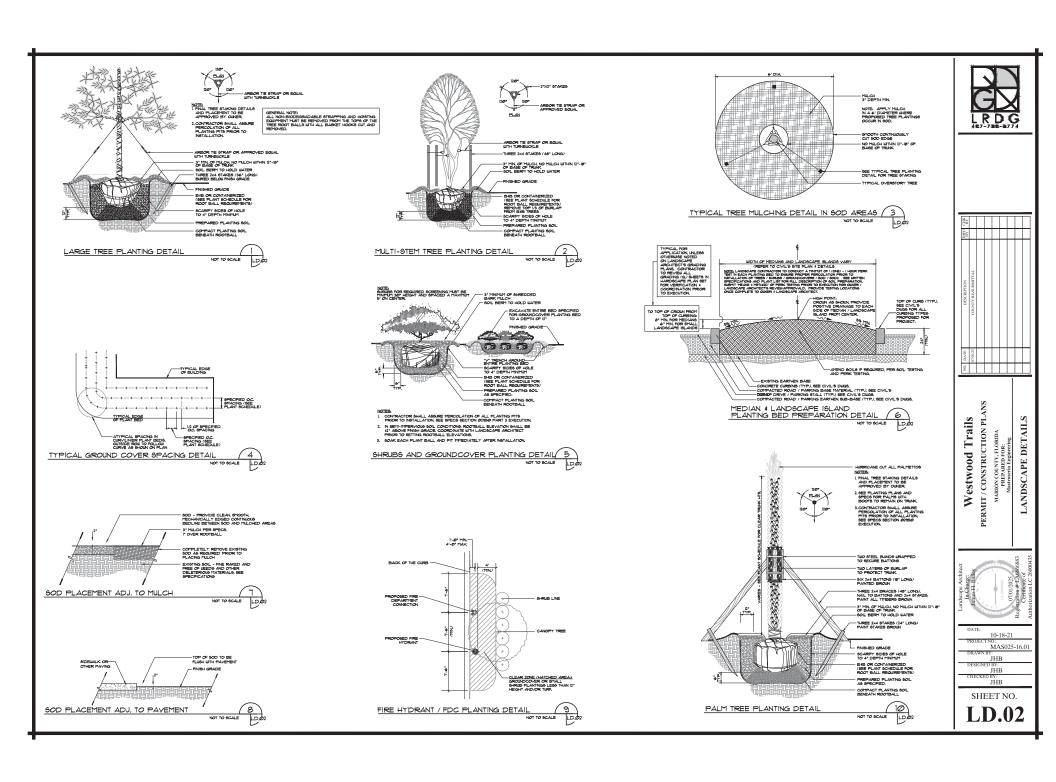
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SHEET NO. LD.01



# LANDSCAPE WORK- SECTION 02950

- WORK INCLUDED

  - ACCICIATION of the state of the
  - B. RELATED WORK SPECIFIED ELSEWHERE

## BID DOCIMENTS

- A. For bidding purposes, the value of the contract shall be based on the contractor's take offs from the graphically drawn plans. If quantities differ from plan list, the drawn plan controls.
- Bid documents shall include unit prices to justify the stated lump suns and provide unit costs in case of additions and for deletions required district costs.

# QUALITY ASSURANCE

- A REFERENCE SPECIFICATIONS AND STANDARDS
  L Standards as established by the Florida Nursery Grouers Association (RNGA).
- ISSN AD ADMINISTROM

  There a will be subject to Improvious and approval of the Quer's Representative at joins of growth and/or ignor delivery for conforming to appreciate and appreciate and an appreciate and appreciate appreciate and appreciate and appreciate appreciate and appreciate and appreciate appreciate and appreciate appreciate appreciate and appreciate appreciate and appreciate and appreciate appreciate and appreciate appreciate and appreciate appreciate and appreciate appreciate appreciate and appreciate apprecia

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# SUBMITTALS

- or pean naterals.

  Contractor whill be responsible for all naterial listed on the plant list unless noted othersites, day and all adultshuttons due to unwisiteting nest be requested in large to the contractor with the contractor and contractor and conclusions are selected in a disposation and approved to plants a propresentative, Contractor shall conclude a naterial tagging the suff the Lendscape Architect for all tree, specifien and account sealing as indicated in the pre-construction nest, specifien and

# PROJECT CONDITIONS

- Sequencing: Do not commence planting until site grading, soil import, and preparation has been completed.
- preparation real ceem completed.

  Impact and approve all aprinties work and finish grading prior to the start of shub and groundcover planting as specified. These may be planted in advance of irrigation system installation provided adequate provision is made for interin satering at the Contractor's our expense.

- ARRANITY
  The Convactor hall guarantee all tree and shipligroundcover plantings for a period of teather (17) anoths, and all load for three (1) anoths, after the date of fival period of teather (17) anoths, after the date of fival plants and guarantees such The Convactor with about 100 and 100 another period. The propose such The Convactor with about 100 and 40 and 100 another period. The propose of these reports is to set date systematic andirections period. The propose of these reports is to set date systematic andirections guarantees. Faither to extent reports eitherited any claims that the guarantee is not valid due to the propose of the state of the set of th
- The Contractor shall notify the Owner and Lendscape Architect ten ((6)) days prior to the end of the guarantee period and used guarantee shall be extended until notification.
- At the end of the guarantee period, all plants that are dead or in unsatisfactory growth shall be replaced within two weeks.

# 1Ø1 PRODUCT HANDLING

- Delivery:
   Plant transportation shall comply with all Federal and State regulations.
- Deliver fertilizer to site in original unopened containers bearing manufacturer's guaranteed chemical analysis, rane, trademark and conformance to State Lau. The Contractor shall furnish Owner's Representative receipts for all amendments.
- Deliver all plants with legible identification labels.
- Laisel trees, evergreens, bundles of containers of like shrubs or groundcover plants.
- 5. State correct plant name and size indicated on plant list.
- Use durable uaterproof labels with water-resistant ink, which will remain legible for at least 60 days.
- Protect plant material during delivery to prevent danage to root ball or deslocation of leaves.
- The Contractor shall notify the Queen's Representative three (3) days in advance of delivery of all plant naterials and shall submit an Itemized list of the plants in each delivery.
- Storage:
   Store plant material in shade and protect from ueather.
- C. Hardling: The Contractor is caustioned to exercise care in hardling, loading, unleading, and storing of plant materials. Plant naterials that have been danaged in any way shall be discarded. If they have been installed, they shall be replaced with underaged naterials at the Contractor's expense.

# LØS VERIFICATION OF DIMENSIONS AND QUANTITIES

All scaled dimensions are approximate. Before proceeding with any work, carefully check, and verify all dimensions and quantities, immediately inform the Camera Representative of any discrepancies between the Prawings, Specifications, and actual

conditions. Do not do work in any area where there is a significant discrepancy until approval to proceed has been received from the Owner's Representative.

# 10% OWNER TAGGED MATERIALS

Contractor shall leave all tags on naterial previously tagged by the Ouner's Representative until final acceptance.

# UP JOB CONDITIONS

A. Protection. The Lendscape Contractor shall protect all naterials and sork against highly from any clauses and shall provide and nathrials all necessary safeguards for the protection of the public. Herbie shall be indeed responsible for any classage or highly to person or property which may occur as a result of the negligence in the protection of the sork.

- B. Existing Conditions: Entity Conditions.

  The Landscape contractor shall exercise care in digging and other sonk so as not to cleage an entiting sonk houlding, but not limited to plant seateral, from a condition of the condition of
- Should any objectionable naterials such as old concrete, bricks or other debre encountered during planting operations, the Landscape Contractor shall brit to the attention of the Owner to coordinate resoval of the naterial from
- The Landscape Contractor shall be responsible for proper plant grouth in real unanatable deviation where the importance for properly plant growth in existing on-the totals. Any unsate/actions conditions shall be brought to the immediate attention of the Owner/Landscape Architect for possible remedial exist or plant natural substitutions. The Owner/Landscape Architect reserves the right to make changes or substitutions by plant type or quantities for the purposes of insuring proper plant growth.

# UI SAMPLES AND TESTS

A Curer's Representative reserves the right to take and analyze samples of naterials for conformity to specifications at any time. Contractor shall furnish samples upon request of Curer's Representative. Rejected naterials shall be inenditately moneyer from the site at Contractor's experse. Contractor shall pay cost of testing of

# PART 2.1 - PRODUCTS

# 201 MATERIALS

- All trees, sinuse and plants shall be true to rate as brothlinked by the Asercan -Ook Comittee on Sertalium Browneldure publication 'Standard Plant Names'. The designated authority for the identification of all naterals shall be the top polications of LH. Ballay, "Hortus III" and "Manual of Cultivated Plants", and all specimens shall be true to type, name, ca, de described thresh.
- Grade Standards and Cuality. All plants shall be rursery groun and shall comply with all required inspection, grading standards and plant regulations as set forth in the Bridda Department of Agriculture. 'Grades and Standards for Nursery Plants', Parts I and 2 including revisions.
- The strikms grade for all trees and shade shall be Borida No. I unless otherwise indicated and all plans shall be sound, healthy and vigorous, sell benched and densely foliated when in leaf. They shall have healthy until densely ordered when in leaf. They shall have healthy, sell-developed not systems and shall be free of cleases and insect peats, aggs or larvas.

- ascrements. The entinus acceptable size of all plants, nessured after pruning, sith branches in nomal positions, shall conform to the specified sizes as alroun expension of the specified size specification. Specified sizes specification from these measurements must be approved by junicidency abortists. Colleger of the virtual shall be approved by junicidency abortists. Colleger of the virtual shall be desired to the specified size of the specified sizes also shall be a seasoned 6 inches above the noticell for trees under 6 inches in caliper.
- in cauper.

  Clear trurk of all types of pairs shall be neasured from the finished grade to the beginning of the fronds. The booted portion of the head of the pairs shall be in proportion to the overall height of the pair.
- Plant Protection: Plants shall be protected upon arrival at the site, by being thoroughly ustered, kept molet, and properly maintained until planted. B. Plant Materials: In reference to method of cultivation, root system status, etc., plants for landscaping shall be classified under the following designations:
- for landscaping shall be classified under the following 'designations nations' cross Teaches shall have been grown in a container large enough and for sufficient shall have been grown in a container large enough and for sufficient that for the root system to have developed last to fold and for sufficient that for the container, and the sufficient Plants, which have become root bound or for which the system is too large for the size of the constainer, will not be acceptable.
- All containers shall be out and opened fully, in a namer such as utill not danage the root system. Container group plants shall not be removed from the container until immediately before planting, when all due care shall be taken to prevent danage to the root system.
- Any container grown material that was previously tagged for the Job by the Owner/Landscape Architect, shall have the locking tag visible on the tree until substantial completion has been awarded.
- 2. Balled and Burlapped Trees (if applicable):
- attes and Brispped Press (I replicable). Perfers a collection dutil being a light from struct or control or anitive clients and soil control or anitive clients and soil control or a project control. The recollection as the project control. The recollection of these planes shill be properly supposed with budge plane, and the shaded collection of the project control or proj
- b. Burlap: Shall be pure burlap, II % organic material with the ability to
- Roots Plas. All Oek trees classified as balled and burlap shall be tagged as a roots plus product and the tag shall resain util substantial completion has been awarded. Any natural inpreviously tagged at a nursery by the Curent-landscape Architect shall have the nursery's locking tag visible on the three util substantial completion has been alarded.
- 3. Bare Root Plants. No bare root plants shall be used unless otherwise specified.

- reported that lies a frisble lose, updal of califated iopsols locally from the property of the
- Soil testing shall be performed and analyzed by a laboratory registered by the state. Testing shall include famility and suitability analysis with unition recommendations for fertilizer or anescheres, which shall label precadence over rates or analysis specified in this section, Soil testing shall be the Contractor's responsibility. Soint test requires to the Landscape Architect
- Soil Preparation: Prior to placing mix and backfill, or commercing with planting, rototill any or all areas that have been previously compected over 50 percent for other construction purposes.

- Fertilizer: Fertilizer shall be a complete balanced bland formula,
  of witch part of the alternate shall be derived from organic sources. It shall
  not also repeats to recognize the complete shall be completed from
  Nivogen shall be applied over all furf shall end use areas at a rate of I.
  Nivogen shall be applied over all furf shall end use areas at a rate of I.
  by the Landscape Architect. The complete fertilizer adults the approx
  by the Landscape Architect.
- . Weed Control: All planting bads shall be treated with the pre-emergent Treflan, as narufactured by Elanco Products Company, Division of Ell-Lilly Company, inclanapolis, Indian, or approved equal. Contractor shall apply the pre-emergent prior to mulching as per infurfacturer's instructions.
- Mulch: Wood mulch shall be designer brown, grade ¶, clean, bright and free of weeds, moss, sticks and other debris unless specified otherwise.
- Ulater: Suitable water for the imigation of the new plantings during the progress of construction shall be provided and polid for the by the Contractor, who shall also furnish adequate watering equipment.
- Stakes and Ties: Stakes and tree ties shall be provided in accordance with the recurrence of Paragraph 3,03,019 hereinsfler.

# PART 3.1 - EXECUTION

# 3.01 INSPECTION

- insure that final grades to 4–0.6m ( $0.20^\circ$ ) have been established prior to commoning planting operations. Provide for inclusion of all amendments, settling, etc. Landscape Contractor shall be responsible for finish grading all planting areas as indicated on Civil Engineer's plans and as directed by the Owner's Representative
- Inspect trees, shrubs and liner stock plant naterial for injury, insect infestation and trees and shrubs for inproper pruning. C. Do not begin planting of trees until deficiencies are corrected or plants replaced.

# PREPARATION

- Soil Preparation:
   All planted areas to be planted shall be loosened to 360m (12\*) except 2:1 or steeper slopes.
- or steeper slopes.

  2. Soil to be used for planting shall be free of node over 18 on (12") in disneter, and free of Toreign debris, refuse, plants or roots, clock, useds, sides, solvents, services, procedure, covered, bear oct, or other deleterious of sustaining healthy plant life. Materials not nesting these specifications shall be removed.

- be renoved, deatheric deatilities regressional for grading of burns, reclaims, and pathong Contractor shall be respectation for grading plan. I'll dirt. I required will be locally obtained natural from exturally destined socraes, free from day organic destine, some steps than 1-in-th distincts and socraes, free from day organic destine, some steps than 1-in-th distincts and to such indeed and contain none only 10% planears made, so that is to such indeed and contain none only 10% planears made. Some size 3. Berns shall be gently rolling and practicult sufficient larves or slopes with Contractor will contact the Lindscape shorthest for approval of all several grading prior to any planting.

- Remove or reclastribute excess soil before application of fertilizer. Make allouances when establishing finished grades for earth excavation from planting pits and nulch.
- and much literality. Before and during preliminary and final grading, dig out all seads and grasses by the roots and dispose-of off the sits. Grasses not of the perential type less than 1/12\* fingly and to bearing seeds, nay be turned uniform. Ferential useds and grasses to be removed teclude, but are not limited to the following.

- b. 6. Augustine.
  C. Placuter Vine.
  d. Toming clieny.
  d. Toming clieny.
  d. Toming clieny.
  The common other nonloae or Invisive seads encountered on the site.
  Tractions: If appricing register his beam invalided after grading and familitary has been completed, not-life the remote baseline after titles to the depth specified for the zero. In conform to specified requirements.
  Elimited all enrouses prior to commonling softwareaux period.
  Elimited all enrouses prior to commonling softwareaux period.
- Disposal of excess soil: Dispose of any unacceptable or excess soil at an off-site location approved by Ower.

# MATERIALS CONDITION

- All plant materials shall be approved by the Cuner's Representative as they are delivered to the job site, or other site inspections, and in all cases:
- Conditions. Flore shall be generated as spicel for the virtig and species in a condition of healthy and vigorous growth free from plast diseases, heact peaks, or their geges and with healthy monal root systems call filling their container, but not to the point of being rootboard. Plants shall not be privately from the shall not be private of their backers, and shall not s
- prior to delibrery.

  Dimensions: The height and spread of all plants shall be neasured uith branches in their normal position. Other deliberations of any plant, statefuls in contract from the Plant. List, plants shall be romed soon, for type I shad. Actual planting shall be performed during those periods when usesther and soft conditions are statefuls and in accordant shift beginning shall be performed during those periods when usesther and soft conditions are statefuls and in accordant shift beginning the product of the planting shall be produced by the planting shall be produ
- Only as many plants as can be planted and ustered on that same day shall be distributed in a planting area.
- controvers in a penning erea.

  Containers shall be opened and plants shall be removed in such a namer that the ball of earth surrounding the roots is not broken and they shall be planted and ustered as herein specified inmediately after removal from the containers. Containers shall not be opened prior to placing the plants in the planting area.
- Do not do any plante, often the specime resp. util all operations the plants for both on the state of the specime trees, util all operations who util the metallation of the sprinkler system have been completed, fired grade have been established, the planting areas have been properly graded and prepared as herein specified, and the uork approved by the Cuner's Regresentation.
- The relative position of each tree and plant is subject to approval by the Ounce's Representative, and shall, if necessary to achieve project design objectives, be relocated as directed.
- Remove each plast from its containe and plant in such a series that she settled, it will been in the model that the plant from the contained and plant should be the settled. It will be the settled that the settled of the settled of
- on a crosse or regar cross.

  Layout of safe prestings: Locations for plants and outlines of areas to be planted attill be nested on the ground by the contractor before any planting plus are duly contractor before any planting plus are duty contractors of the present of the december of planting reads of the contraction or utility line is encounted to the excellent of planting reads on the contraction or utility line is encounted to the contraction or utility line is encounted to the contraction of the planting reads of the contraction of the planting plant of the contraction of the planting plant of the contraction of the planting planting of the contraction of the planting planting of the plan

container size on each stake or alternate approved method. It shall be the contractor's responsibility to confirm with the Quiner and governing agercles the location and depth of all underground utilities and obstructions.

- Planting of trees shrulps and groundcovers: Excavation for planting shall include the stripping and stacking of all acceptable topsoll encountered within the areas to be excavated for trenches, tree holes, plant pits and planting beds
- Excess soil generated from the planting holes and not used as backfill or in establishing the final grades, shall be removed from the site.
- Protect all areas from excessive compaction when trucking plants or other material to the planting site. Compacted areas shall be cross-ripped to 12" and
- 4. Center plants to pit or trench
- 5. Face plants with fullest growth toward the best public views.
- Set plant plumb and hold rigidly in position until soil has been tamped firmly around ball or roots.
- around bell or roots.

  All excentsed noise shall have vertical sides with roughested surfaces and shall be of a size that its tution the clampton of the rootball for all strikes. These St gallion and shaller to be planted as shows, trees St gallion or larger to be excented for all the control of the rootball for all clampton or larger to be excented to the depth of the rootball (allice 1-2") for extilling and as space allows, 34" claer of the rootball (allice 1-2") for extilling and as space allows, 34" claer of the rootball on all
- Layout areas and set stakes/flags for trees at locations indicated on Drawings Secure approval from Quier's Representative before excavating pits. Make necessary adjustments as directed.
- rootabil.

  When hindpan or muck is encountered, break through to class soil and backfill on this property and the state of goung and recorning to restore vicinity and setting. Set tree in center of pit in a vertical position so that crown of ball utili be level with finished grade after allowing for watering and settling.
- Prepare satering been seen uicht as tree plant ball. Water thoroughly inmediately following planting. Backfill ell voide which develop with additional prepared planting soil to bring to finish grade. Remove all basins in laun areas, and snooth to finished grade prior to laying sool.
- 1. Monitor tree and shub root lobal for delequate notiture content. Deep sater and/or provide scaler hoses to relateth notiture supply.
  All plates shift notited deeper than the surrounding grade shall be raised to the content level. After the plant has been placed, additional bedoiff shall be add to the hole to cover approximating powerful of the related or the root sold. At the stage, sater shall be added to the top of the partly fitted hole to throughly address the rootability and adjacent soil.
- an removals

  Cut care on two sides with an acceptable can cut

  Do not injure rootball.

  Do not cut care with spade or ax.

- Plent tablets.

  A During Installation (for-Poser 1 gren or Agroforn 21 gren tablets, or approved equal, shell be provided in each planting role as per quentities and Francisco or approved to the provided of the provided in the planting role as per quentities and Francisco or approved to the provided or provided in the planting of the provided in the planting or planting the planting the planting or planting the planti

# Representative. Plant tablets shall be located 1/3 depth of the rootball

- 6. The destination of the hole shall then be its childred and septed from the first shall then be its childred and septed from the first shall be consequent around each plant. Each behavioral bill not of adepth reflects to hold at less that 0.71 breaks shall be consequently an extended benefit insertinis. The behavioral bill be consequently an extended benefit insertinis. The hole of the property of the shall be represented to entered the september of the shall be represented to entered trapes and breaks. Plusting may not be done prior to delivery of plants. It Sublage and plants present the shall be respectively to entered trapes and plants present the service of the contractions of the shall be represented to entered trapes and plants present the shall be respectively to entered trapes after plants, all states which the studied public and as disclosed in details. The Contractor shall remove the stating and guiging naturals once the trees are essentially.

- latting of Flouering Annalis.
  Flouering Annalis shall be grown in 4° pots as indicated on the plans, Annalis shall be grown in 4° pots as indicated on the plans, Annalis shall remain in their flats until transplanting. The flat's soil shall contain sufficient moleture so that it still not fall apart shen lifting the plants.
- artification notative as that it is also fall apart shee Titting the plants.

  The Annals will be planted in strategies care and evenly speaced, are proposed to the proposed t

- Preparing soil: Remove rocks, useds, and debris from area to be sodded. If dirt is compacted, work up soil to a depth of 6 inches and break up all clods soil prep all areas as noted elsewhere in specifications.
- Grading and rolling: Carefully snooth all surfaces to be sodded. Roll areas to expose soil depressions or surface trisgularities. Regrade as required.
- expose soil depressions or surface irregularities. Negation is required. Lighting soil. Light is stury of soil selling in time a sturing in time a sturing in Lighting soil. Light is stury of soil selling and soil selling studies, and studies of the soil soil selling soil soil. Like a stemp felfill, and soil to fit, corrus, edges and optional material begin time felfill soil selling stifts. On a soil to fit, or have studies and if how felfill selling soil selling soil soil selling soil fit soil selling soil fit soil selling. Sittlesting. Do not lightly simulating soil selling selling soil selling sel
- and to uster will installation is complete. Rolling social, there singly all social control significance of the Rolling social control between the social and social. Anotal a very teamy rolline or farm good contact between the social and social. Anotal a very teamy rolline or large social control social control social control social soc
- Replacement: Replace all dead or dying sod with equal naterial as directed by the Owner's Representative.

# 3.04 CLEAN-UP

- After all planting operations have been completed, remove all triah excess soil, empty plant containers and rubbish from the property. All scars, ruts or other naries in the ground caused by this sunk wall be repaired and the ground last in a read and or the last sorting day of each used. All triah shall be removed completely from the sites.
- The Contractor shall leave the site area broom-clean and shall wash down all paved areas within the Contract area, leaving the prenises in a clean condition. All wake shall be left in a clean and safe condition.

- A. The Contractor shall be responsible for notifying the Owner's Representative in advance for the following site visits, according to the time indicated:

- Pre-Job conference T days free Tagging T days Final grade review 48 hours Flant material review 49 hours
- Plant layout revieu 48 hours Substantial completion walk-through 1 days
- T. Phill salk-through Tidays
   When observations are conducted by enterine other than the Owner's Representative, the Contractor shall show evidence in writing of when and by whom these observations were nade.

FIELD QUALITY CONTROL

A All inspections herein specified shall be made by the Quner's Representative or his representative as the uorit progresses.

# B. Protect work completed by other trades from damage

- 3.01 PROTECTION
- Continuously protect all laun areas, plant materials, and supports until final acceptance of the work. acceptance or the care. Inspect and approve all landscape irrigation surk and finish gracing prior to the start of shub planting as specified. Trees may be planted in advance of trigation system installation provided adequate provision is made for Intentin satering at the Contractor's own expense.

# FINAL ACCEPTANCE OF INSTALLATION

- Maintain all planted areas free of debris and insects. Mos, cultivate, used and sater all areas until final acceptance of work by the Ouner's
- Authorized Representative Prior to final approval of work, do the following: I. Reseed, resod or replant areas where necessary for full and ever coverage.
  Remove all debris resulting from landscape work.
- Regrade, lightly compact and replant around sprinkler heads where neccessry to relation proper vertical positioning in relation to
- Pill all depressions and eroded ch ArN ets sith sufficient soil ritx to adjust grade to assure proper drainage, compact lightly and replant the filled areas in accord with Prawing requirement.
   Address any term noted in the punch list from the substantial completion walk-through.





Ы CONSTRUCTION RION COUNTY, FLORIDA PREPARED FOR:

poo.

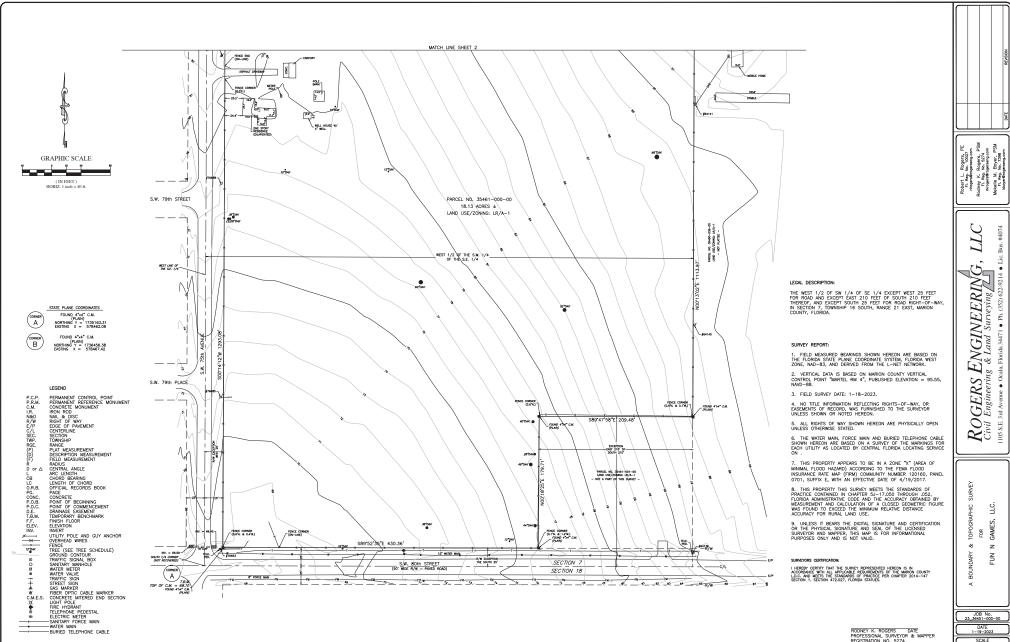
SPECIFICATIONS

PERMIT/

DATE: 10-18-21 MAS025-16.01 DRAWN BY THB JHB

JHB SHEET NO.

LD.03



RODNEY K. ROGERS DATE PROFESSIONAL SURVEYOR & MAPPER REGISTRATION NO. 5274 STATE OF FLORIDA

JOB No. 23\_36451-000-00 DATE -19-2023

SCALE 1" = 40" SHEET 1 OF 2

