APOPKA DEVELOPMENT REVIEW COMMITTEE AGENDA

July 29, 2026 9:00 AM

Apopka City Hall Commission Chambers

PUBLIC COMMENT PERIOD

SPECIAL EVENTS

1. **E-26-19 - Jalen Carter Foundation Back to School Giveaway - Kit Land Nelson Park, 10 North Forest Avenue - August 5th 2026, 3:00pm-6:00pm**
   Owner(s): Jalen Carter Foundation
   Applicant(s): Tonique Brown
   Location: Kit Land Neslon Park - 10 North Forest Avenue
   Proposed Use: Back to School Backpack Giveaway
   Project Manager: Carolyn Ray

2. **E-26-12 - Fall Family Festival - Kit Land Neslon Park/Edwards Field, 10 North Forest Ave - November 5th - November 8th 2026**
   Owner(s): The Rotary Club Foundation Inc
   Applicant(s): Jonathan DeClue
   Location: Kit Land Nelson Park/Edwards Field - 10 North Forest Avenue
   Proposed Use: Fall Family Festival/Carnival
   Project Manager: Carolyn Ray

SITE PLAN:

CONSTRUCTION SITE PLAN

1. **CSP-26-3 NW Recreational Complex Tennis and Pickleball Courts - Construction Site Plan (CSP), (2nd Submittal)**
   Owner(s): City of Apopka
   Applicant(s): Newkirk Engineering Inc - Michael Munier PE
   Location: 2500 Bush Drive
   Proposed Use: New Tennis and Pickle Ball Courts
   Project Manager: Amer Hamza

2. **CSP-26-29 - Wyld Oaks C Store - Construction Site Plan (CSP), (1st Submittal)**
   Owner(s): M&R United Inc
   Applicant(s): Kimley-Horn and Associates Inc - Mackenzie Cerjan
   Location: W Kelly Park Road between Effie Drive and Highway 429
   Proposed Use: 6300 SF Multi Tenant Retail/Restaurant Buildings and Fueling Station
   Project Manager: Jean Sanchez

3. **CSP-26-12 - AutoZone Store No FL 10995 - Construction Site Plan (CSP), (3rd Submittal)**
   Owner(s): Sabal Hospitality Group LLC
   Applicant(s): CPH - Matthew D' Angelo
   Location: 1788 Rock Springs Road
   Proposed Use: Construction of a 6,815 SF AotoZone Retail Building
   Project Manager: Jun Sohn

4. **CSP-26-32 - Wekiva Shopping Center Building H - Revision to Construction Site Plan (CSP), (1st Submittal)**
   Owner(s): Woolbright Wekiva LLC

Applicant(s): Sun-Tech Engineering Inc - Clifford Louta
Location: 2121 East Semoran Boulevard
Proposed Use: Revision for an 8,288 SF building
Project Manager: Jun Sohn

5. **CSP-26-26 - Springhaven Amenity - Construction Site Plan (CSP), (1st Submittal)**
   Owner(s): Jen Florida 61 LLC
   Applicant(s): Ovidio Sanchez - 1828 Engineering LLC
   Location: 2126, 2136, 2228, 2250, 2350, 2454 & 2809 W Kelly Park Road, 4481, 4501, 4506, 4509, 4514, 4613, 4625 & 4641 Chandler Road, & Jason Dwelley Parkway
   Proposed Use: Amenity Site Plan within Springhaven Subdivision
   Project Manager: Bobby Howell

SUBDIVISION PLAN

1. **CSP-25-47 - The Villas at Wekiva CSP - Construction Site Plan (CSP), (1st Submittal)**
   Owner(s): Tatiana Gonzalez
   Applicant(s): AIP Design - Ernesto Gonzalez
   Location: 734 Piedmont Wekiwa Road
   Proposed Use: 16 Unit Multifamily Residential Project
   Project Manager: Jun Sohn

ITEMS FOR DISCUSSION

ADJOURNMENT

Record No: E-26-19

Apopka Special Event Permit

Status: Active

Submitted On: 7/17/2026

Primary Location

No location

Owner

No owner information

Applicant

Tonique Brown

[redacted]

Special Event Permit Application

Visit City of Apopka Events Page to learn more about what is happening in the City.

Name of the Event*

Jalen Carter Foundation Back to School Giveaway

Event Date*

08/05/2026

Type of Event*

Other

If Other, please indicate event category*

Backpack Giveaway Gathering

Facility or Location*

Kit Land Nelson Park

Additional event details*

This event is endorsed by the City of Apopka. Hours will be 3pm-6pm

Event Applicant

A completed Special Event Permit application is required for all events with the City of Apopka. All events will be reviewed by our Development Review Committee for approval. The City of Apopka has the exclusive right to permit or deny an individual or organization facility use.

Once we have the complete special event application we will schedule for review and approval. Please note this may take time, as we suggest that all applications submitted at least 60 days prior to the event. Incomplete applications will not be reviewed.

Organization Name*

Jalen Carter Foundation

Organization Address*

[redacted]

Contact Person's Email*

[redacted]

Is your organization a Non-Profit (501 c3) or Tax Exempt Organization?*

Yes

Dates & Times

Event Start Date*

08/05/2026

Event End Date*

08/05/2026

Is your event multiple days?*

No

Event Time (Start & End Time)*

3pm-6pm

Load in date

08/05/2026

Load in Time

12pm

Load out Date

08/05/2026

Load out time*

8pm

Expected Attendance*

80

Event Details

Does your event include food concession? Please list the food concessionaire*

Will there be food food trucks?*

No

Will you be bringing in portable toilets?

–

Event Cleanup Plan: Promoters are responsible for cleaning up the site area and surrounding areas. Trash cans will be available for use. Large events (over 1,000 people) will require a cleaning company company onsite for their event.

Please provide the name of the cleaning company and how many staff will be on site for the duration of your event.

Will your event include tents?

Yes

Please indicate the size of tents (10x20 or large require additional permits)

10x10

Will you be serving alcohol at your event?*

No

Does your event require a road closure?*

No

Will you be hiring private security?*

No

Acknowledgements

INDEMNIFICATION AND HOLD HARMLESS AGREEMENT Renter/Applicant/Event Organizer/Organization agrees to waive, release and agrees to indemnify and hold harmless the City of Apopka its officers, agents, employees or any other person for any claim, demand, liability, costs, suits, charges or compensation for loss or injury of any kind arising out of a loss or bodily injury, including death at any time resulting therefrom, sustained by any person or persons, or on account of damage to property arising out of or in consequence of this agreement, in whole or in part, whether such injuries to persons or damage to property are due or claim to be due to any passive negligence of, or arising from, the negligence of the City of Apopka, its employees or agents, or any other person, including attorneys' fees, by reason of the liability imposed by law upon the City of Apopka except in case of the City of Apopka's sole negligence, for damage because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons, or on account of damage to property arising out of or in consequence of this agreement, in whole or in part, whether such injuries to persons or damage to property are due or claim to be due to any passive negligence of its employees or agents or any other person. It is further understood and agreed that Renter/Applicant/Event Organizer/Organization shall, at the option of the City of Apopka, defend the City of Apopka with appropriate counsel and shall further bear all costs and expenses, including the expense of counsel, in the defense of any suit arising hereunder. This Waiver, Release and Hold Harmless/Indemnification Agreement is in consideration of the City of Apopka permitting the Renter/Applicant/Event Organizer/Organization to utilize property and/or facilities owned by the City of Apopka. Nothing herein shall be construed to extend the City of Apopka's liability beyond that

provided in section 768.28, Florida Statutes. This agreement shall be governed by the laws of the State of Florida, and venue shall lie exclusively in Orange County, Florida.*

☑

Insurance Requirements for Events

POLICY # 3DS5477-M4243289

The acknowledges below indicates receipt of the Policy and Procedures for events that has been attached at the end of this document. *

☑

Applicant covenants and agrees that it will indemnify and hold harmless the City and all of the City's officer's, agents, and employees from claim, loss, damage, costs, charge or expense arising out of any act, action, neglect or omission by applicant during the performance of the event, whether direct, or indirect, and whether to any person or property to which the City of said parties may be subject.*

☑

The acknowledgement below indicates receipt of the Policy and Procedures for events that has been attached at the end of this document. *

☑

Curfew Policy Acknowledgment: I understand and agree that events must end by 8:00 PM (Sun–Thu) and 10:00 PM (Fri–Sat), and that exceeding curfew may result in deposit forfeiture and/or fees ($500 for 5–30 minutes over, $500+ for 30+ minutes over).*

☑

Applicant Signature*

Tonique Brown
Jul 17, 2026

Date*

07/17/2026

SPECIAL EVENT INSURANCE REQUIREMENTS
INSURANCE REQUIREMENTS Before activity setup or any other site activity begins, the Renter/Applicant/Event Organizer/Organization must provide a Certificate of Insurance (including all required endorsements) to the City's Risk Management Division. All insurance policies must remain in effect from load-in through completion of load-out. The required limits may be satisfied through a combination of primary and excess/umbrella liability policies. Commercial General Liability Minimum limits: $1,000,000 Each Occurrence $2,000,000 General Aggregate Coverage must include: Premises and Operations Products and Completed Operations Contractual Liability Personal and Advertising Injury Damage to Rented Premises Sexual Abuse and Molestation Liability (if applicable) Spectator Liability (if applicable) Assault and Battery (if applicable) If alcohol is served: Liquor Liability $1,000,000 per occurrence Host Liquor acceptable only if alcohol is served free of charge Automobile Liability Applies to owned, hired, and non-owned autos. $300,000 Combined Single Limit (personal vehicles) $1,000,000 Combined Single Limit (commercial vehicles, food trucks, CMVs) Workers' Compensation Statutory compliance with: $1,000,000 Each Accident $1,000,000 Disease – Policy Limit $1,000,000 Disease – Each Employee Proof of exemption required if applicable. Additional Requirements All insurance policies shall: Name the City of Apopka as Additional Insured (except Workers' Compensation). Provide Waiver of Subrogation in favor of the City on all lines. Be Primary and Non-Contributory. Provide 30 days written notice of cancellation. Be issued by carriers rated A- VIII or better by A.M. Best. Include copies of all endorsement pages and form list schedules. Be subject to approval by the City. The insurance requirements set forth herein shall not be construed to limit or reduce the indemnification obligations of the Renter/Applicant/Event Organizer/Organization. Nothing herein shall be construed to extend the City's liability beyond that

provided in §768.28, Florida Statutes. The original insurance certificates, and all requested extensions to the insurance certificate, shall be sent to: City of Apopka 120 East Main Street Apopka, Florida 32703 Renter/Applicant/Event Organizer/Organization is solely responsible for all applicable policy premiums, deductibles, and/or self-insured retention attached to any required coverages. Said insurance coverages procured by Renter/Applicant/Event Organizer/Organization as required herein, including but not limited to any excess and/or umbrella coverages, shall be considered, and Renter/Applicant/Event Organizer/Organization agrees that said insurance coverages it procures as required herein shall be considered, as primary insurance over and above any other insurance, or self–insurance, available to the City, and that any other insurance, or self-insurance available to the City shall be considered secondary to, or in excess of, the insurance coverage(s) procured by Renter/Applicant/ Event Organizer/Organization, as required herein. Renter/Applicant/Event Organizer/Organization shall require and verify that all subcontractors, including but not limited to concessionaires, vendors, exhibitors, event security firm(s), concert technical and/or production firm(s), and entertainers, maintain insurance meeting all of the requirements stated herein, and include the City of Apopka as an additional insured. Furthermore, the insurance policy held by the Renter/Applicant/Event Organizer/Organization shall have no endorsement(s) restricting, limiting or excluding the subcontractors or work on behalf of the Renter/Applicant/Event Organizer/Organization by a subcontractor. Upon written request, the Renter/Applicant/ Event Organizer/Organization shall provide copies of documentation that verifies the additional insured status of the City of Apopka from these subcontractors. The Renter/Applicant/Event Organizer/Organization shall remain fully liable and responsible for the performance and compliance of all contracted work, regardless of whether the work was performed in full or in part

by a subcontractor. The subcontracting of any part of this Agreement shall not relieve the Renter/Applicant/Event Organizer/Organization from any liability or obligation under the Agreement, and the acts, errors, or omissions of the Renter/Applicant/Event Organizer/Organization's subcontractors shall be deemed to be the acts, errors, or omissions of the Renter/Applicant/Event Organizer/Organization. The insurance requirements set forth herein shall not be construed to limit or reduce the indemnification obligations of the Renter/Applicant/Event Organizer/Organization.



Record No: E-26-12

Apopka Special Event Permit

Status: Active

Submitted On: 6/22/2026

Primary Location

No location

Owner

No owner information

Applicant

Jonathan DeClue

[redacted]

Special Event Permit Application

Visit City of Apopka Events Page to learn more about what is happening in the City.

Name of the Event*

Fall Family Festival

Event Date*

11/05/2026

Type of Event*

Festival/Celebration

Facility or Location*

Kit Land Nelson Park

Additional event details*

Nov 5th - Nov8th

Event Applicant

A completed Special Event Permit application is required for all events with the City of Apopka. All events will be reviewed by our Development Review Committee for approval. The City of Apopka has the exclusive right to permit or deny an individual or organization facility use.

Once we have the complete special event application we will schedule for review and approval. Please note this may take time, as we suggest that all applications submitted at least 60 days prior to the event. Incomplete applications will not be reviewed.

Organization Name*

The Rotary Club Foundation Inc

Organization Address*

[redacted]

Contact Person's Email*

[redacted]

Is your organization a Non-Profit (501 c3) or Tax Exempt Organization?*

Yes

Dates & Times

Event Start Date*

11/05/2026

Event End Date*

11/08/2026

Is your event multiple days?*

Yes

Event Time (Start & End Time)*

5:00 and 10:00 pm

Event Time(s) for additional event day(s)*

Friday and Saturday close at 11, Sunday close at 8:00

Load in date

11/01/2026

Load in Time

3:00pm

Load out Date

11/08/2026

Load out time*

8:00 to 8:00am

Expected Attendance*

2500

Event Details

Does your event include food concession? Please list the food concessionaire*

Will there be food food trucks?*

Yes

Will you be bringing in portable toilets?

Yes

How many portable toilets will you be bringing?

6

Describe facilities that you will be bringing in. (Trailer, ADA, Reg units)*

ADA and reg units

Event Cleanup Plan: Promoters are responsible for cleaning up the site area and surrounding areas. Trash cans will be available for use. Large events (over 1,000 people) will require a cleaning company company onsite for their event.

Please provide the name of the cleaning company and how many staff will be on site for the duration of your event.

Provided by parks and recs as in the past

Will your event include tents?

Yes

Please indicate the size of tents (10x20 or large require additional permits)

10x20

Will you be serving alcohol at your event?*

Yes

What is the name of the alcohol vendor?*

Rotary will serve

Does your event require a road closure?*

Yes

Time of road Closure

We coordinate with Police at night to close side streets as needed on Orange St and Forrest to the Fran Carlton Ctr and E 1st St to Highland.

Will you be hiring private security?*

No

Acknowledgements

INDEMNIFICATION AND HOLD HARMLESS AGREEMENT Renter/Applicant/Event Organizer/Organization agrees to waive, release and agrees to indemnify and hold harmless the City of Apopka its officers, agents, employees or any other person for any claim, demand, liability, costs, suits, charges or compensation for loss or injury of any kind arising out of a loss or bodily injury, including death at any time resulting therefrom, sustained by any person or persons, or on account of damage to property arising out of or in consequence of this agreement, in whole or in part, whether such injuries to persons or damage to property are due or claim to be due to any passive negligence of, or arising from, the negligence of the City of Apopka, its employees or agents, or any other person, including attorneys' fees, by reason of the liability imposed by law upon the City of Apopka except in case of the City of Apopka's sole negligence, for damage because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons, or on account of damage to property arising out of or in consequence of this agreement, in whole or in part, whether such injuries to persons or damage to property are due or claim to be due to any passive negligence of its employees or agents or any other person. It is further understood and agreed that Renter/Applicant/Event Organizer/Organization shall, at the option of the City of Apopka, defend the City of Apopka with appropriate counsel and shall further bear all costs and expenses, including the expense of counsel, in the defense of any suit arising hereunder. This Waiver, Release and Hold Harmless/Indemnification Agreement is in consideration of the City of Apopka permitting the Renter/Applicant/Event Organizer/Organization to utilize property and/or facilities owned by the City of Apopka. Nothing herein shall be construed to extend the City of Apopka's liability beyond that

provided in section 768.28, Florida Statutes. This agreement shall be governed by the laws of the State of Florida, and venue shall lie exclusively in Orange County, Florida.*

☑

Insurance Requirements for Events

The acknowledges below indicates receipt of the Policy and Procedures for events that has been attached at the end of this document. *

☑

Applicant covenants and agrees that it will indemnify and hold harmless the City and all of the City's officer's, agents, and employees from claim, loss, damage, costs, charge or expense arising out of any act, action, neglect or omission by applicant during the performance of the event, whether direct, or indirect, and whether to any person or property to which the City of said parties may be subject.*

☑

The acknowledgement below indicates receipt of the Policy and Procedures for events that has been attached at the end of this document. *

☑

Curfew Policy Acknowledgment: I understand and agree that events must end by 8:00 PM (Sun–Thu) and 10:00 PM (Fri–Sat), and that exceeding curfew may result in deposit forfeiture and/or fees ($500 for 5–30 minutes over, $500+ for 30+ minutes over).*

☑

Applicant Signature*

Jonathan DeClue
Jun 22, 2026

Date*

06/22/2026

SPECIAL EVENT INSURANCE REQUIREMENTS
INSURANCE REQUIREMENTS Before activity setup or any other site activity begins, the Renter/Applicant/Event Organizer/Organization must provide a Certificate of Insurance (including all required endorsements) to the City's Risk Management Division. All insurance policies must remain in effect from load-in through completion of load-out. The required limits may be satisfied through a combination of primary and excess/umbrella liability policies. Commercial General Liability Minimum limits: $1,000,000 Each Occurrence $2,000,000 General Aggregate Coverage must include: Premises and Operations Products and Completed Operations Contractual Liability Personal and Advertising Injury Damage to Rented Premises Sexual Abuse and Molestation Liability (if applicable) Spectator Liability (if applicable) Assault and Battery (if applicable) If alcohol is served: Liquor Liability $1,000,000 per occurrence Host Liquor acceptable only if alcohol is served free of charge Automobile Liability Applies to owned, hired, and non-owned autos. $300,000 Combined Single Limit (personal vehicles) $1,000,000 Combined Single Limit (commercial vehicles, food trucks, CMVs) Workers' Compensation Statutory compliance with: $1,000,000 Each Accident $1,000,000 Disease – Policy Limit $1,000,000 Disease – Each Employee Proof of exemption required if applicable. Additional Requirements All insurance policies shall: Name the City of Apopka as Additional Insured (except Workers' Compensation). Provide Waiver of Subrogation in favor of the City on all lines. Be Primary and Non-Contributory. Provide 30 days written notice of cancellation. Be issued by carriers rated A- VIII or better by A.M. Best. Include copies of all endorsement pages and form list schedules. Be subject to approval by the City. The insurance requirements set forth herein shall not be construed to limit or reduce the indemnification obligations of the Renter/Applicant/Event Organizer/Organization. Nothing herein shall be construed to extend the City's liability beyond that

provided in §768.28, Florida Statutes. The original insurance certificates, and all requested extensions to the insurance certificate, shall be sent to: City of Apopka 120 East Main Street Apopka, Florida 32703 Renter/Applicant/Event Organizer/Organization is solely responsible for all applicable policy premiums, deductibles, and/or self-insured retention attached to any required coverages. Said insurance coverages procured by Renter/Applicant/Event Organizer/Organization as required herein, including but not limited to any excess and/or umbrella coverages, shall be considered, and Renter/Applicant/Event Organizer/Organization agrees that said insurance coverages it procures as required herein shall be considered, as primary insurance over and above any other insurance, or self–insurance, available to the City, and that any other insurance, or self-insurance available to the City shall be considered secondary to, or in excess of, the insurance coverage(s) procured by Renter/Applicant/ Event Organizer/Organization, as required herein. Renter/Applicant/Event Organizer/Organization shall require and verify that all subcontractors, including but not limited to concessionaires, vendors, exhibitors, event security firm(s), concert technical and/or production firm(s), and entertainers, maintain insurance meeting all of the requirements stated herein, and include the City of Apopka as an additional insured. Furthermore, the insurance policy held by the Renter/Applicant/Event Organizer/Organization shall have no endorsement(s) restricting, limiting or excluding the subcontractors or work on behalf of the Renter/Applicant/Event Organizer/Organization by a subcontractor. Upon written request, the Renter/Applicant/ Event Organizer/Organization shall provide copies of documentation that verifies the additional insured status of the City of Apopka from these subcontractors. The Renter/Applicant/Event Organizer/Organization shall remain fully liable and responsible for the performance and compliance of all contracted work, regardless of whether the work was performed in full or in part

by a subcontractor. The subcontracting of any part of this Agreement shall not relieve the Renter/Applicant/Event Organizer/Organization from any liability or obligation under the Agreement, and the acts, errors, or omissions of the Renter/Applicant/Event Organizer/Organization's subcontractors shall be deemed to be the acts, errors, or omissions of the Renter/Applicant/Event Organizer/Organization. The insurance requirements set forth herein shall not be construed to limit or reduce the indemnification obligations of the Renter/Applicant/Event Organizer/Organization.



INDEX OF SHEETS	
SHEET No.	SHEET TITLE
01	COVER
02	BOUNDARY AND TOPOGRAPHIC SURVEY
03	DEVELOPMENT INFORMATION
04	DEMOLITION AND SWPPP PLAN
05	EROSION CONTROL PLAN
06	OVERALL DEVELOPMENT PLAN
07	PARKING LOT LAYOUT
08	ROW IMPROVEMENTS SHEET
09	DRAINAGE PLAN
10	OVERALL GRADING
11	PARKING LOT GRADING
12	CROSS SECTIONS
13	POND 1 LAYOUT AND CROSS SECTIONS
14	POND 2 LAYOUT AND CROSS SECTIONS
15	MISCELLANEOUS DETAILS
16	AUTOTURN PLAN - FIRE TRUCK
L1	LANDSCAPE PLAN
L2	LANDSCAPE PLAN
L3	LANDSCAPE DETAILS AND NOTES
L4	IRRIGATION PLAN
L5	IRRIGATION PLAN
L6	IRRIGATION DETAILS AND NOTES
TP1	TREE PROTECTION PLAN
TP2	TREE PROTECTION PLAN
P-1	PHOTOMETRIC PLAN

LEGAL DESCRIPTION

THAT PORTION OF SECTION 20-20-28 MORE PARTICULARLY DESCRIBED AS: COMMENCE AT THE NW CORNER OF SECTION 20-20-28; THENCE S00°05'19"W 1671.64 FEET; THENCE S89°54'41"E 737.99 FEET TO THE POINT OF BEGINNING ALSO BEING A POINT ON THE EASTERLY R/W LINE OF JASON DWELLEY PARKWAY; THENCE N63°25'38"E 109.55 FEET TO POINT OF CURVE CONCAVE NORTHWESTERLY, HAVING RADIUS OF 162 FEET & CENTRAL ANGLE OF 44°40'37" & ARC LENGTH OF 126.32 FEET THENCE N18°45'01"E 212.89 FEET TO POINT OF CURVE CONCAVE SOUTHEASTERLY HAVING RADIUS OF 178 FEET & CENTRAL ANGLE OF 23°08'08" ARC LENGTH OF 71.88 FEET THENCE N41°53'10"E 195.19 FEET THENCE S48°06'53"E 262.49 FEET THENCE S00°00'04"W 1258.60 FEET TO THE NORTHERLY R/W LINE OF RECREATION WAY THENCE S89°55'02"W 99.98 FEET THENCE N00°00'00"E 277.73 FEET THENCE S90°00'00"W 361.46 FEET TO THE AFOREMENTIONED EASTERLY R/W LINE & POINT OF CURVE CONCAVE WESTERLY HAVING RADIUS OF 1551.23 FEET & CENTRAL ANGLE OF 23°11'34" & CHORD BEARING OF N13°41'44"W & ARC LENGTH OF 627.92 FEET TO THE POINT OF BEGINNING.

CONTAINS 530,956 SQUARE FEET OR 12.19 ACRES MORE OR LESS.

PROJECT STATEMENT

PROPOSED 118 SPACE PARKING LOT, ASSOCIATED DRIVEWAY AND SIDEWALK CONNECTIONS, AS WELL AS A MASTER STORMWATER SYSTEM TO SUPPORT NEW TENNIS AND PICKLEBALL RECREATIONAL FACILITY FOR THE CITY OF APOPKA.

THE PROPOSED COURTS, PARKING, AND STORMWATER SYSTEM WILL BE CONSTRUCTED ON A SITE TOTALING 12.190 ACRES WITH THE STORMWATER SYSTEM DESIGNED TO ACCOMMODATE 4.843 ACRES OF IMPERVIOUS COVERAGE.

THE STORM WATER SYSTEM WILL COLLECT STORMWATER RUNOFF BY SURFACE CONVEYANCE AS WELL AS CURB INLETS AND PIPE CULVERTS. TWO (2) DRY RETENTION PONDS WILL PROVIDE WATER QUALITY TREATMENT AND FLOOD ATTENUATION.

JURISDICTIONAL AGENCY — PERMIT No.

FDEP (STORMWATER) .

THE GENERAL CONTRACTOR SHALL ENSURE THAT ANY SUBCONTRACTOR HAS A COMPLETE SET OF CONSTRUCTION DRAWINGS FOR ITS RESPECTIVE WORK. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR SUBCONTRACTORS ONLY UTILIZING INDIVIDUAL DRAWINGS FOR ITS WORK WHERE ADDITIONAL INFORMATION MAY BE CONTAINED ON OTHER DRAWINGS WITHIN THE SET.

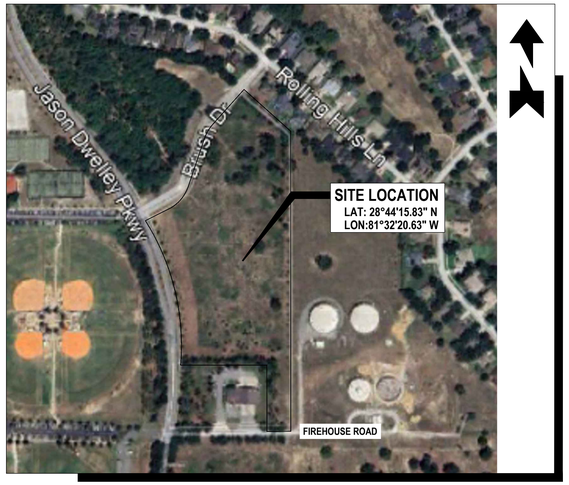
THESE DRAWINGS ARE THE PROPERTY OF NEWKIRK ENGINEERING, INC. ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING, INC. COPYRIGHT 2013 ALL RIGHTS RESERVED.

CONSTRUCTION SITE PLAN FOR

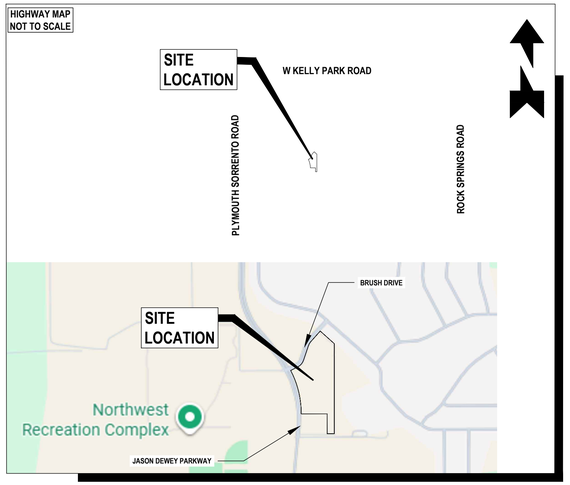
NW RECREATIONAL COMPLEX TENNIS AND PICKLEBALL COURTS

SECTION 20, TOWNSHIP 20 S., RANGE 28 E.
TAX PARCEL ID # 20-20-28-0000-00-027
2500 BRUSH DRIVE
APOPKA, FL 34712

REVISED FEBRUARY 2026



AERIAL MAP
SCALE: 1" = 300'



LOCATION MAP
SCALE: 1" = 1000'



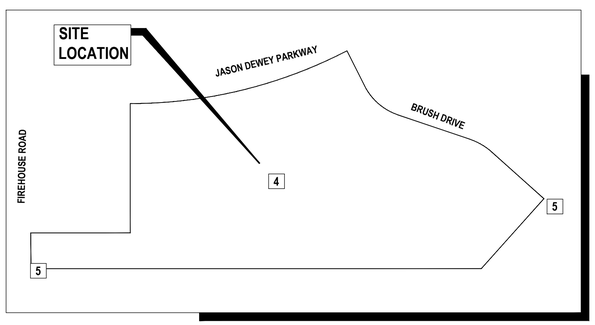
FLOOD ZONE MAP
SCALE: 1" = 500'

FLOOD ZONE "X"
PANEL No. 12095C0110H
DATED SEPTEMBER, 24,2021



ZONING MAP
SCALE: 1" = 1000'

ZONING : O - OFFICE



SOILS MAP
SCALE: 1" = 200'

SOIL TYPES: (4) CANDLER SANDS, 0% TO 5% SLOPES
(5) CANDLER SANDS, 5% TO 12% SLOPES

PROJECT TEAM

APPLICANT/ PROPERTY OWNER: CHRIS RICHTER (PM)
CITY OF APOPKA
120 E. MAIN ST
APOPKA, FL 32703
PHONE: (407) 703-1784
EMAIL: CRICHTER@APOPKA.NET

CIVIL ENGINEER: NEWKIRK ENGINEERING, INC.
1230 NORTH US HIGHWAY 1, SUITE 3
ORMOND BEACH, FL 32174
PHONE: (386) 872-7794
EMAIL: MICHAEL@NEWKIRK-ENGINEERING.COM

SURVEYOR: CENTRAL FLORIDA SURVEYING
509 BOXELDER AVENUE
ALTAMONTE SPRINGS, FL 32714
PHONE: (321) 972-5660
EMAIL: ORDERS@CFLLS.COM

GEOTECHNICAL: GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC.
919 LAKE BALDWIN LANE
ORLANDO, FL 32814
PHONE: (407) 898-1818
EMAIL: DCSTANFILL@GECFLA.COM

ENVIRONMENTAL CONSULTANTS: STANTEC CONSULTING SERVICES, INC.
300 PRIMERA BOULEVARD, SUITE 300
LAKE MARY, FL 32746
PHONE: (407) 710-3378
EMAIL: MIKE.DINARDO@STANTEC.COM

CONTACT NUMBERS

PLANNING AND ZONING - CITY OF APOPKA (407) 703-1712
PUBLIC SERVICES - CITY OF APOPKA (407) 703-1731
EMERGENCY (407) 703-1757



1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
© 2013

Civil Engineering,
Transportation, CEI &
Landscape Architecture

NEWKIRK ENGINEERING INC.

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL T. MUNIER, PE # 97442 ON

Michael T Munier

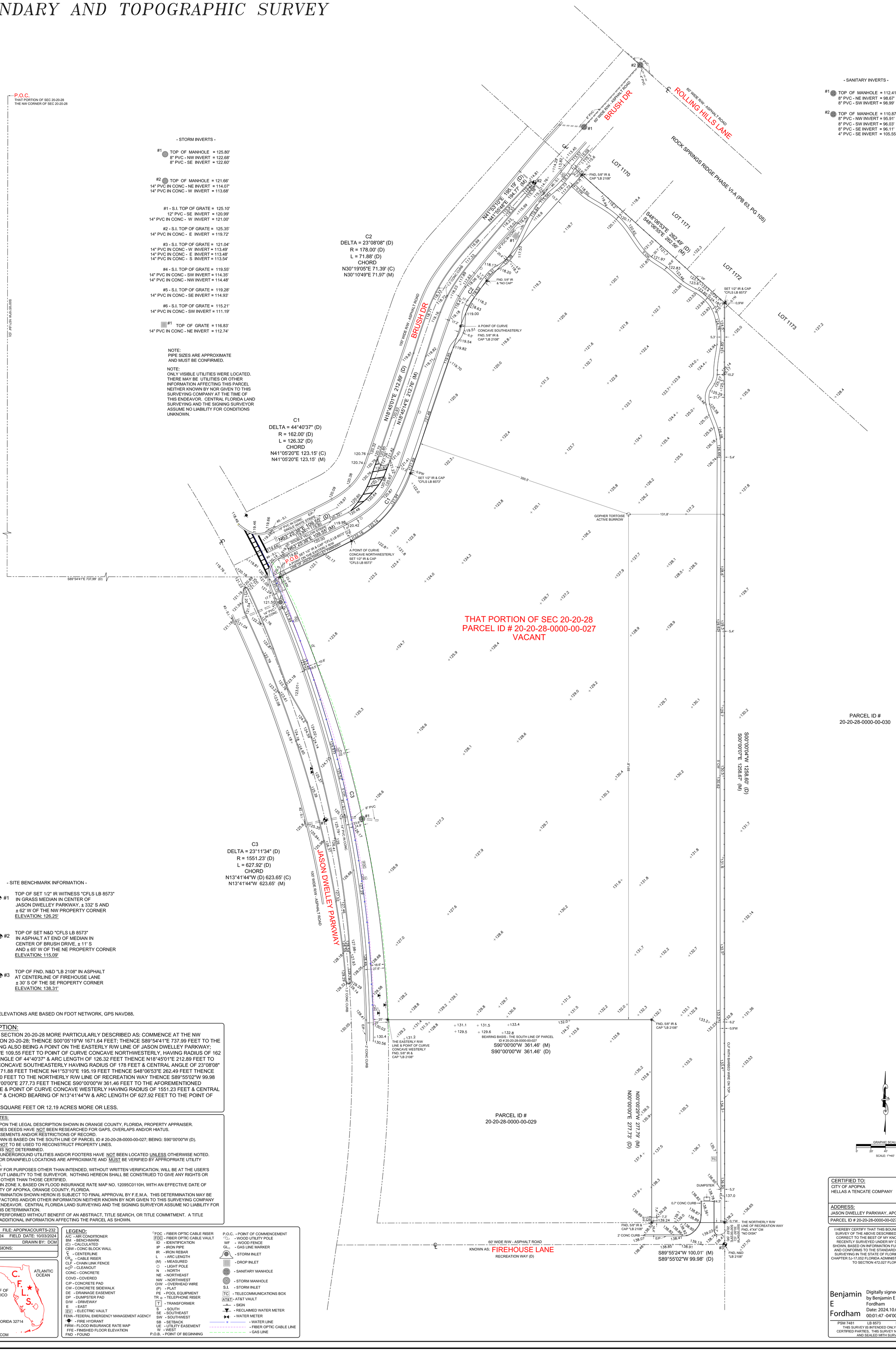
MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DRAWING NUMBER

01

BOUNDARY AND TOPOGRAPHIC SURVEY



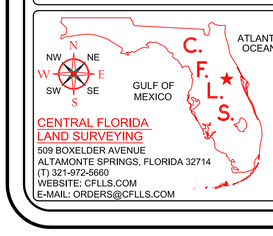
LEGAL DESCRIPTION:

THAT PORTION OF SECTION 20-20-28 MORE PARTICULARLY DESCRIBED AS: COMMENCE AT THE NW CORNER OF SECTION 20-20-28; THENCE S00°05'19"W 1671.64 FEET; THENCE S89°54'41"E 737.99 FEET TO THE POINT OF BEGINNING ALSO BEING A POINT ON THE EASTERLY R/W LINE OF JASON DWELLEY PARKWAY; THENCE N63°25'38"E 109.55 FEET TO POINT OF CURVE CONCAVE NORTHWESTERLY, HAVING RADIUS OF 162 FEET & CENTRAL ANGLE OF 44°40'37" & ARC LENGTH OF 126.32 FEET THENCE N18°45'01"E 212.89 FEET TO POINT OF CURVE CONCAVE SOUTHEASTERLY HAVING RADIUS OF 178 FEET & CENTRAL ANGLE OF 23°08'08" & ARC LENGTH OF 71.88 FEET THENCE N41°53'10"E 195.19 FEET THENCE S48°06'53"E 262.49 FEET THENCE S00°00'04"W 1258.60 FEET TO THE NORTHERLY R/W LINE OF RECREATION WAY THENCE S89°55'02"W 99.98 FEET THENCE N00°00'00"E 277.73 FEET THENCE S90°00'00"W 361.46 FEET TO THE AFOREMENTIONED EASTERLY R/W LINE & POINT OF CURVE CONCAVE WESTERLY HAVING RADIUS OF 1551.23 FEET & CENTRAL ANGLE OF 23°11'34" & CHORD BEARING OF N13°41'44"W & ARC LENGTH OF 627.92 FEET TO THE POINT OF BEGINNING.
CONTAINS 530,956 SQUARE FEET OR 12.19 ACRES MORE OR LESS.

GENERAL SURVEY NOTES:

1. SURVEY IS BASED UPON THE LEGAL DESCRIPTION SHOWN IN ORANGE COUNTY, FLORIDA, PROPERTY APPRAISER.
2. ABUTTING PROPERTIES DEEDS HAVE NOT BEEN RESEARCHED FOR GAPS, OVERLAPS AND/OR HIATUS.
3. SUBJECT TO ANY EASEMENTS AND/OR RESTRICTIONS OF RECORD.
4. BEARING BASIS SHOWN IS BASED ON THE SOUTH LINE OF PARCEL ID # 20-20-28-0000-00-027; BEING: S90°00'00"W (D).
5. BUILDING TIES ARE NOT TO BE USED TO RECONSTRUCT PROPERTY LINES.
6. FENCE OWNERSHIP IS NOT DETERMINED.
7. ROOF OVERHANGS, UNDERGROUND UTILITIES AND/OR FOOTERS HAVE NOT BEEN LOCATED UNLESS OTHERWISE NOTED.
8. SEPTIC TANKS AND/OR DRAINFIELD LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED BY APPROPRIATE UTILITY LOCATION COMPANIES.
9. USE OF THIS SURVEY FOR PURPOSES OTHER THAN INTENDED, WITHOUT WRITTEN VERIFICATION, WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO THE SURVEYOR. NOTHING HEREON SHALL BE CONSTRUED TO GIVE ANY RIGHTS OR BENEFITS TO ANYONE OTHER THAN THOSE CERTIFIED.
10. THIS PROPERTY IS IN ZONE X, BASED ON FLOOD INSURANCE RATE MAP NO. 12095C0110H, WITH AN EFFECTIVE DATE OF 09/24/2021, LYING IN CITY OF APOPKA, ORANGE COUNTY, FLORIDA.
11. FLOOD ZONE DETERMINATION SHOWN HERON IS SUBJECT TO FINAL APPROVAL BY F.E.M.A. THIS DETERMINATION MAY BE AFFECTED BY FLOOD FACTORS AND/OR OTHER INFORMATION NEITHER KNOWN BY NOR GIVEN TO THIS SURVEYING COMPANY AT THE TIME OF THIS ENDEAVOR. CENTRAL FLORIDA LAND SURVEYING AND THE SIGNING SURVEYOR ASSUME NO LIABILITY FOR THE ACCURACY OF THIS DETERMINATION.
12. THIS SURVEY WAS PERFORMED WITHOUT BENEFIT OF AN ABSTRACT, TITLE SEARCH, OR TITLE COMMITMENT. A TITLE SEARCH MAY REVEAL ADDITIONAL INFORMATION AFFECTING THE PARCEL AS SHOWN.

JOB # 232	FILE: APOPKACOURTS-232
SIGNED DATE: 09/13/2024	FIELD DATE: 10/03/2024
SCALE: 1" = 40'	DRAWN BY: DCM
REVISIONS:	



CENTRAL FLORIDA LAND SURVEYING
509 BOXELDER AVENUE
ALTAMONTE SPRINGS, FLORIDA 32714
(T) 321-972-5660
WEBSITE: CFLLS.COM
E-MAIL: ORDERS@CFLLS.COM

LEGEND:

A/C - AIR CONDITIONER	°FOC - FIBER OPTIC CABLE RISER
BM - BENCHMARK	FOC - FIBER OPTIC CABLE VAULT
(C) - CALCULATED	ID - IDENTIFICATION
CBW - CONC BLOCK WALL	IP - IRON PIPE
℄ - CENTERLINE	IR - IRON REBAR
CR - CABLE RISER	L - ARC LENGTH
CLF - CHAIN LINK FENCE	(M) - MEASURED
o - CLEANOUT	- LIGHT POLE
CONC - CONCRETE	N - NORTH
COVD - COVERED	NE - NORTHEAST
C/P - CONCRETE PAD	NW - NORTHWEST
C/W - CONCRETE SIDEWALK	O/W - OVERHEAD WIRE
DE - DRAINAGE EASEMENT	(P) - PLAT
DP - DUMPSTER PAD	PE - POOL EQUIPMENT
D/W - DRIVEWAY	TR - TELEPHONE RISER
E - EAST	T - TRANSFORMER
EV - ELECTRIC VAULT	S - SOUTH
FEMA - FEDERAL EMERGENCY MANAGEMENT AGENCY	SE - SOUTHEAST
- FIRE HYDRANT	SW - SOUTHWEST
FIRM - FLOOD INSURANCE RATE MAP	SB - SETBACK
FFE - FINISHED FLOOR ELEVATION	UE - UTILITY EASEMENT
FND - FOUND	W - WEST
	P.O.B. - POINT OF BEGINNING

P.O.C. - POINT OF COMMENCEMENT	
- WOOD UTILITY POLE	
WF - WOOD FENCE	
GL - GAS LINE MARKER	
- STORM INLET	
- DROP INLET	
- SANITARY MANHOLE	
- STORM MANHOLE	
S.I. - STORM INLET	
TC - TELECOMMUNICATIONS BOX	
AT&T - AT&T VAULT	
- SIGN	
- RECLAIMED WATER METER	
- WATER METER	
- WATER LINE	
- FIBER OPTIC CABLE LINE	
- GAS LINE	

CERTIFIED TO:
CITY OF APOPKA
HELLAS A TENCATE COMPANY

ADDRESS:
JASON DWELLEY PARKWAY, APOPKA, FLORIDA 32712

PARCEL ID # 20-20-28-0000-00-027

I HEREBY CERTIFY THAT THIS BOUNDARY AND TOPOGRAPHIC SURVEY OF THE ABOVE DESCRIBED PROPERTY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AS RECENTLY SURVEYED UNDER MY DIRECTION ON THE DATE SHOWN, BASED ON INFORMATION FURNISHED TO ME AS NOTED AND CONFORMS TO THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN THE STATE OF FLORIDA IN ACCORDANCE WITH CHAPTER 5J-17.052 FLORIDA ADMINISTRATIVE CODES, PURSUANT TO SECTION 472.027 FLORIDA STATUTES.

BENJAMIN E. FORDHAM License Number LS7481 STATE OF FLORIDA Professional Surveyor and Mapper

Benjamin E Fordham
Digitally signed by Benjamin E Fordham
Date: 2024.10.04 00:01:47 -04'00'

PSM 7481 LB 8573 BENJAMIN E. FORDHAM

THIS SURVEY IS INTENDED ONLY FOR THE USE OF SAID CERTIFIED PARTIES. THIS SURVEY NOT VALID UNLESS SIGNED AND SEALED WITH SURVEYOR'S SEAL.

GENERAL CONSTRUCTION NOTES

1. CITY GOVERNING SPECIFICATIONS: CITY OF APOPKA LAND DEVELOPMENT CODE, CITY OF APOPKA STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, LATEST EDITION.
2. ALL CONSTRUCTION WITHIN THE CITY OF APOPKA RIGHT-OF-WAY SHALL CONFORM TO THE LATEST EDITION OF THE FDOT DESIGN MANUAL, THE FDOT STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE FDOT UTILITY ACCOMMODATIONS MANUAL.
3. ALL UTILITY MATERIAL, CONSTRUCTION AND TESTING COVERED BY THESE DRAWINGS SHALL COMPLY WITH THE CITY OF APOPKA STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, LATEST EDITION.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER OF ANY DEFICIENCIES OR DISCREPANCIES AMONG THE DIVISIONS OF THE DRAWING AND SPECIFICATIONS PRIOR TO THE BID DATE. NEITHER THE OWNER OR ENGINEER WILL BE RESPONSIBLE FOR ANY DEFICIENCIES OR DISCREPANCIES RAISED AFTER THE BID OPENING. ACCORDINGLY, IN LIGHT OF THESE OBLIGATIONS, THE ENGINEER IS OBLIGATED TO INTERPRET THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT WILL PROVIDE THE OWNER WITH A COMPLETE, FUNCTIONING FACILITY FOR THE BID PRICE.
5. THESE DRAWINGS AND OTHER BID DOCUMENTS ARE COMPLEMENTARY, AND ANY REQUIREMENT OF ONE SHALL BE A REQUIREMENT OF THE OTHER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS AND TO COMPARE THE REQUIREMENTS OF EACH DIVISION AND ENSURE THAT EACH TRADE OR SUBCONTRACTOR IS MAKING THE ALLOWANCES NECESSARY TO PROVIDE THE OWNER A COMPLETE FACILITY, OPERATIONAL IN ALL RESPECTS, UNLESS OTHERWISE SPECIFICALLY STATED IN THE DRAWINGS.
6. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR INSTRUCTING THE CONTRACTOR IN THE METHODS OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE METHOD TO CONSTRUCT THE IMPROVEMENTS AS SHOWN ON THE PLANS.
7. LITTER CONTROL MEASURES TO PREVENT WIND-DRIVEN DEBRIS SHALL BE IMPLEMENTED THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEBRIS SHALL BE REMOVED AND THE PROJECT SITE CLEANED WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION.
8. AT NO TIME SHALL EXCAVATIONS BE LEFT UNCOVERED AFTER WORKING HOURS. CONTRACTOR SHALL SECURE THE WORK AREA AT THE END OF EACH DAY'S WORK.
9. AT ALL TIMES, THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT UNDERGROUND UTILITIES, STRUCTURES AND OTHER ASSOCIATED FACILITIES FROM DAMAGE DURING CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEASURES OF PROTECTION. ANY DAMAGED FACILITIES SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE CITY OR ENGINEER AT THE CONTRACTORS EXPENSE.
10. THERE SHALL BE NO DEVIATIONS FROM THESE PLANS UNLESS APPROVED IN WRITING BY THE ENGINEER AND THE OWNER.
11. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER, TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND BASE DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS, STRUCTURES. TEST SHALL INCLUDE ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC.
13. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
14. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
15. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES.
16. CONCRETE WALKS SHALL BE 4 INCHES THICK HAVING A 3,000 PSI STRENGTH, POURED OVER PROPERLY PREPARED SUBGRADE. 1/2 INCH EXPANSION JOINTS SHALL BE PLACED AT A MAXIMUM OF 50'. CRACK CONTROL JOINTS SHALL BE 5' ON CENTERS.
17. CORE TESTS SHALL BE TAKEN TO VERIFY THICKNESS AND SUBSURFACE COMPACTION. PROVIDE THREE SAMPLES, RANDOMLY LOCATED. TEST FOR EXTRACTION, GRADATION, LABORATORY DENSITY, AND MARSHALL'S STABILITY. PROVIDE A CERTIFICATE FROM THE TESTING AGENCY THAT MATERIALS AND INSTALLATION COMPLY WITH SPECIFICATIONS, SIGNED BY THE ASPHALTIC CONCRETE PRODUCER AND CONTRACTOR. ALL COSTS OF TESTS SHALL BE PAID BY THE CONTRACTOR. IF TESTS SHOW THE INSTALLATION DOES NOT MEET SPECIFICATIONS, THE PAVMENT SHALL BE REMOVED, REPLACED, AND RETESTED.
18. IF ANY MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
19. FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY (98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER AASHTO T-180).
20. NO BURYING OF ANY ORGANIC MATERIALS ALLOWED.

LEGEND

NOTE: NOT ALL SYMBOLS SHOWN HERE MAY BE APPLICABLE TO THESE DRAWINGS, ALSO THERE MAY BE ADDITIONAL SYMBOLS WITHIN PLANS NOT SHOWN HERE, SEE INDIVIDUAL DRAWING LEGEND WHERE APPLICABLE.

- BENCHMARK ID
- BORING ID
- EXISTING CABLE TV PEDESTAL
- EXISTING CAP OR PLUG
- EXISTING CLEAN OUT
- EXISTING CONDUIT RISER/ MARKER
- EXISTING ELECTRIC METER
- EXISTING ELEVATION (SOFT)
- PROPOSED ELEVATION (SOFT)
- EXISTING ELEVATION (HARD)
- PROPOSED ELEVATION (HARD)
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING FLOW DIRECTION
- PROPOSED FLOW DIRECTION
- EXISTING GAS METER
- EXISTING GAS VALVE
- EXISTING GUY WIRE & ANCHOR PIN
- EXISTING MAIL BOX
- EXISTING MANHOLE (UNKNOWN)
- PROPOSED MANHOLE
- EXISTING SANITARY SEWER CLEANOUT
- EXISTING SANITARY SEWER MANHOLE
- EXISTING ROAD SIGNS AND POSTS
- PROPOSED SIGN AND POST
- EXISTING TEE
- EXISTING UTILITY POLE
- EXISTING VALVE IRRIGATION
- EXISTING VALVE WATER
- PROPOSED WATER VALVE
- EXISTING WATER METER
- EXISTING STORM SEWER WITH INLET
- PROPOSED STORM SEWER WITH INLET
- FOUND 1/2" CAPPED IRON ROD L.B. #3724
- FOUND 1/2" IRON ROD (NO I.D.)
- FOUND 4" BY 4" CONCRETE MONUMENT L.B. #3724
- EXISTING EASEMENT
- EXISTING UNDERGROUND FIBER OPTIC CABLE
- EXISTING FORCE MAIN (# INDICATES SIZE)
- EXISTING GAS MAIN
- EXISTING OVERHEAD ELECTRIC CABLES
- EXISTING OVERHEAD TRAFFIC SIGNAL CABLE
- EXISTING RAW WATER MAIN (# INDICATES SIZE)
- EXISTING RECLAIM WATER MAIN (# INDICATES SIZE)
- PROPOSED SANITARY SEWER (# INDICATES SIZE)
- PROPOSED WATER MAIN (# INDICATES SIZE)
- EXISTING CONTOUR
- PROPOSED CONTOUR (SOFT)
- PROPOSED CONTOUR (HARD)
- EXISTING UNDERGROUND TELEPHONE CABLE
- EXISTING UNDERGROUND TELEVISION CABLE
- EXISTING UNDERGROUND ELECTRICAL POWER CABLE
- JURISDICTIONAL WETLAND LINE
- EXISTING SANITARY SEWER (# INDICATES SIZE)
- EXISTING WATER MAIN (# INDICATES SIZE)
- EXISTING PIPE OR CONDUIT (TYPE SPECIFIED)
- EXISTING SWALE OR CENTER OF DITCH
- PROPOSED SWALE OR CENTER OF DITCH
- EXISTING TOP OF DITCH BANK
- EXISTING BOTTOM OF DITCH BANK
- EXISTING WOOD FENCE
- EXISTING WIRE OR CHAIN LINK FENCE
- PROPOSED WIRE OR CHAIN LINK FENCE
- PROPOSED SILT/SEDIMENT FENCE
- PROPOSED COIR ROLL OR WATTLE
- PROPOSED FLOATING TURBIDITY BARRIER
- PROPOSED TREE PROTECTION

SITE AND GENERAL INFORMATION

THE PROPERTY AREA BOUNDARY CONSISTS OF 531,032 SF OR 12.191 ACRES. FOR BOUNDARY AND TOPOGRAPHIC SURVEY REFER TO THE SURVEY PERFORMED BY CENTRAL FLORIDA LAND SURVEYING, JOB No. 232, SIGNED: OCTOBER 4, 2025.

1. THE EXISTING AND PROPOSED ZONING IS PO (PROFESSIONAL OFFICE).
2. THE TAX PARCEL NUMBER IS 20-20-28-3000-000-027.
6. THE EXISTING SITE CONDITION IS OPEN LAND THE FLUCFCS LAND USE IS (1900) .
7. PER THE USDA NATURAL RESOURCES CONSERVATION SERVICE FOR ORAGE COUNTY, THE SCS SOILS MAP INDICATES THE SITE CONSISTS OF (4) CANDLER SANDS WITH 0% TO 5% SLOPES AND (5) CANDLER SANDS WITH 5% TO 12% SLOPES.
8. THE SITE IS LOCATED WITHIN ZONE "X" PER FEMA MAP PANEL No. 12095C0110H, DATED SPETEMBER 24, 2021.
9. THE SITE IS NOT LOCATED WITHIN THE LIMITS OF A WELLHEAD PROTECTION ZONE AND THERE IS NO ORDINARY HIGH WATER (OHW) LINE WITHIN THE SITE.
10. STORM WATER TREATMENT AND ATTENUATION WILL BE PROVIDED BY TWO DRY RETENTION PONDS.

SITE PREPARATION FOR PAVEMENT

1. PRIOR TO CONSTRUCTION, THE LOCATION OF EXISTING UNDERGROUND UTILITY LINES WITHIN THE CONSTRUCTION AREA SHOULD BE ESTABLISHED. PROVISIONS SHOULD BE MADE TO RELOCATE INTERFERING UTILITIES TO APPROPRIATE LOCATIONS. IT SHOULD BE NOTED THAT IF UNDERGROUND PIPES ARE NOT PROPERLY REMOVED OR PLUGGED, THEY MAY SERVE AS CONDUITS FOR SUBSURFACE EROSION WHICH MAY SUBSEQUENTLY LEAD TO EXCESSIVE SETTLEMENT OF THE OVERLYING STRUCTURES.
2. STRIP THE PROPOSED CONSTRUCTION LIMITS OF ALL GRASS, ROOTS, TOPSOIL AND OTHER DELETERIOUS MATERIALS WITHIN AND 3 FEET BEYOND THE PROPOSED PAVEMENT LIMITS. EXPECT INITIAL CLEARING AND GRUBBING TO DEPTHS OF APPROXIMATELY 6 TO 12-INCHES.
3. PROOF-COMPACT THE EXPOSED SURFACE WITH LIGHT TO MEDIUM ROLLER UNTIL YOU MAINTAIN DENSITY OF AT LEAST 98 PERCENT SHOULD BE OBTAINED IN THE UPPER 12 INCHES BELOW BASE COURSE. THE COMPACTED SOILS SHALL EXHIBIT MOISTURE CONTENT WITHIN 2 PERCENT OF THE SOILS OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557). VIBRATORY EQUIPMENT SHOULD BE OPERATED IN STATIC MODE WITHIN 75 FEET OF ADJACENT STRUCTURES.
4. SHOULD THE SOILS EXPERIENCE PUMPING AND SOIL STRENGTH LOSS DURING THE COMPACTION OPERATIONS, COMPACTION WORK SHOULD BE IMMEDIATELY TERMINATED AND (1) THE DISTURBED SOILS REMOVED AND BACKFILLED WITH DRY STRUCTURAL FILL SOILS WHICH ARE THEN COMPACTED, OR (2) THE EXCESS MOISTURE CONTENT WITHIN THE DISTURBED SOILS IS ALLOWED TO DISSIPATE BEFORE RECOMPACTING.
5. TEST THE COMPACTED SURFACE FOR COMPLIANCE AT A MINIMUM OF ONE (1) LOCATION PER 10,000 SQUARE FEET WITHIN THE PAVEMENT AREA (MINIMUM 3 LOCATIONS).
6. PLACE THE COMPACT BACKFILL MATERIAL AS REQUIRED. THE FILL SHALL CONSIST OF "CLEAN" FINE SAND WITH LESS THAN 5 PERCENT SOIL FINES. PLACE FILL IN UNIFORM 10 TO 12-INCH LOOSE LIFTS AND COMPACT EACH LIFT TO A MINIMUM DENSITY OF 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DENSITY WITH THE EXCEPTION THAT DENSITIES OF AT LEAST 98 PERCENT PERCENT SHALL BE OBTAINED WITHIN THE UPPER ONE FOOT BELOW BASE COURSE. COMPACTED SOILS SHALL EXHIBIT MOISTURE CONTENT WITHIN 2 PERCENT OF THE SOILS OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557). IF LIGHT EQUIPMENT IS USED, THEN THE LIFT THICKNESS SHALL BE REDUCED TO 8-INCH THICK LIFTS.
7. PERFORM COMPLIANCE TESTS WITHIN EACH LIFT OR FILL AT A FREQUENCY OF NOT LESS THAN ONE TEST PER 10,000 SQUARE FEET OF PAVEMENT AREA (MINIMUM 3 LOCATIONS).

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC STANDARD PLANS - 2025 / 2026 AND QUALIFIED PRODUCTS LIST

STANDARD PLANS INDEX No.	DESCRIPTION	STANDARD PLANS INDEX No.	DESCRIPTION
102-600	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES	425-020	CURB INLET TOPS - TYPES 1, 2, 3 AND 4
		425-024	CURB INLET TOP - TYPE 9
102-601	TWO-LANE AND MULTILANE ROADWAY, WORK BEYOND THE SHOULDER	430-010	U-TYPE CONCRETE ENDWALLS WITH GRATES - 15" TO 30" PIPE
102-602	TWO-LANE AND MULTILANE, WORK ON SHOULDER	520-001	CURB AND GUTTER
102-603	TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY	522-001	CONCRETE SIDEWALK
102-660	SIDEWALK CLOSURE	522-002	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS
110-100	TREE PROTECTION AND PRESERVATION	700-101	TYPICAL SECTIONS FOR PLACEMENT OF SINGLE AND MULTIPLE-COLUMN SIGNS
350-001	CONCRETE PAVEMENT JOINTS		
425-001	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	700-010	SINGLE COLUMN GROUND SIGNS
		706-001	TYPICAL PLACEMENT OF RAISED PAVEMENT MARKINGS
425-010	STRUCTURE BOTTOMS - TYPES J AND P	711-001	PAVEMENT MARKINGS

ABBREVIATIONS

AWWA WORKS	AMERICAN WATER ASSOCIATION	GW	GROUND WATER	R	RADIUS
CMP PIPE	CORRUGATED METAL	H/C	HANDICAP	RCP	REINFORCED CONCRETE PIPE
		HDPE	HIGH DENSITY POLYETHYLENE	RPM	REFLECTIVE PAVEMENT MARKER
CPP	CORRUGATED PLASTIC PIPE	INV	INVERT		
		K_H	HORIZONTAL PERMEABILITY	R/W	RIGHT-OF-WAY
CTV	CABLE TELEVISION			SAN	SANITARY
DIP	DUCTILE IRON PIPE	K_V	VERTICAL PERMEABILITY	SH	SEASONAL HIGH
ESMT	EASEMENT	KO	KNOCK OUT	SMH	SANITARY MANHOLE
EXIST	EXISTING	LF	LINEAL FEET	SJRWMD	ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
FAC	FLORIDA ADMINISTRATIVE CODE	MB	MAP BOOK		
		MES	MITERED END SECTION	SS	SANITARY SEWER
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	MJ	MECHANICAL JOINT	SWPPP	STORMWATER POLLUTION PREVENTION PLAN
		N/A	NOT APPLICABLE		
		NIC	NOT IN CONTRACT	TSB	TEMPORARY SEDIMENT BASIN
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	NGVD	NATIONAL GEODETIC VERTICAL DATUM	TYP	TYPICAL
				UGE	UNDERGROUND ELECTRIC
FH	FIRE HYDRANT	OHE	OVERHEAD ELECTRIC	UGT	UNDERGROUND TELEPHONE
FOC	FIBER OPTIC CABLE	OR	OFFICIAL RECORD		
FF EL	FINISH FLOOR ELEVATION	PG	PAGE	USACOE	UNITED STATES ARMY CORP OF ENGINEERS
FM	FORCE MAIN	PSI	POUNDS PER SQUARE INCH		
FPD	FEET PER DAY			W	WATER (POTABLE)
G	GAS	PVC	POLYVINYL CHLORIDE		
GPC	GULF POWER COMPANY	PVMT	PAVEMENT		

PROPERTY INFORMATION	
FUTURE LAND USE (FLU)	PR -PARKS AND RECREATION
ZONING (W/ OVERLAY)	O - OFFICE
FLOODZONE	X
BUILDING USES	N/A

SITE COVERAGE			
AREA TYPE	SF	ACRE	% SITE
TENNIS AND PICKLEBALL COURTS	148668	3.413	28.0%
PAVEMENT & CURBING	49340	1.133	9.3%
SIDEWALKS	13007	0.299	2.4%
TOTAL IMPERVIOUS	211015	4.844	39.7%
DRY RETENTION POND	73172	1.680	13.8%
OTHER GREEN SPACE	246767	5.665	46.5%
TOTAL OPEN SPACE	319939	7.345	60.3%
TOTAL SITE	530954	12.190	100.0%

SET BACKS	REQUIRED		PROVIDED	
FRONT (NORTHWEST)	25.0	FEET	64.7	FEET
SIDE (NORTHEAST)	25.0	FEET	426.3	FEET
SIDE (EAST)	10.0	FEET	20.3	FEET
REAR/FRONT (SOUTH)	25.0	FEET	117.9	FEET
SIDE (WEST)	25.0	FEET	40.6	FEET

REQUIRED PARKING		
4 PEOPLE PER COURT X 20 COURTS = 80 SPACES		
PROVIDED PARKING		
TYPE	DIMENSIONS	#
STANDARD SPACE	10-FT X 20-FT	110
HANDICAPPED SPACE	12-FT X 20-FT W/ 5-FT AISLE	8

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

DEVELOPMENT INFORMATION
NW REC COMPLEX TENNIS AND PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL T. MUNIER, PE # 97442 ON

Michael T Munier

MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

03

DEMOLITION AND SWPPP NOTES:

1. ALL EROSION CONTROL DEVICES AND VISIBLE BARRICADES SHALL BE INSTALLED AND APPROVED BY THE ENGINEER PRIOR TO THE START OF CLEARING AND GRUBBING.
2. THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH THE CITY AS SPECIFIED PRIOR TO START OF CONSTRUCTION.
3. THE SITE SHALL BE CLEARED AND GRUBBED OF ALL VEGETATION AND DEBRIS WITHIN THE APPROXIMATE LIMITS OF CLEARING AS INDICATED ON THE DRAWING.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE CITY OF APOPKA UTILITY DEPARTMENT, FLORIDA SUNSHINE AND EMERGENCY SERVICES FOR RESPECTIVE UTILITY LOCATIONS AND "NOTICE" OF CONSTRUCTION ACTIVITY.
5. ALL REMOVED MATERIAL SHALL BE HAULED OFF-SITE TO AN APPROVED LANDFILL. TREES MAY BE LOGGED OR MULCHED FOR OFF-SITE DISPOSAL AT THE CONTRACTOR'S DISCRETION.
6. ALL EROSION CONTROL DEVICES SHALL BE PLACED PRIOR TO THE START OF WORK AND REMAIN IN PLACE UNTIL ALL WORK IS COMPLETE.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR PERIODIC INSPECTION AND REMOVAL OF DEBRIS AND SILT BEHIND EROSION CONTROL DEVICES..
8. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION BY INLET PROTECTION MEASURES TO PREVENT SILTATION IN THE DRAINAGE SYSTEM (SEE DETAILS THIS DRAWING). THE ENTIRE DRAINAGE SYSTEM SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
9. ALL OFF-SITE AREAS DISTURBED DURING CONSTRUCTION ACTIVITY SHALL BE IMMEDIATELY RESTORED TO PRIOR CONDITION UPON COMPLETION OF WORK.
10. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION, BLOWING SAND AND THE IMPACT TO NEIGHBORING PROPERTIES.
11. THE CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD AND CITY A MOT PLAN AT PRECONSTRUCTION MEETING. TRAFFIC SHALL BE ALLOWED TO CONTINUE DURING WORK. PROVIDE MEASURES TO DETOUR TRAFFIC AROUND OPEN EXCAVATION WITH ADEQUATE BARRICADES, SIGNAGE AND FLAGPERSON TO DIRECT TRAFFIC. EMERGENCY SERVICES SHALL BE NOTIFIED 48 HOUR IN ADVANCE.
12. EXISTING DRIVEWAYS SHOWN ADJACENT TO OR OUTSIDE LIMITS OF CONSTRUCTION SHALL REMAIN IN-SERVICE. EXISTING UTILITIES AND DRIVEWAYS SHALL NOT BE REMOVED UNLESS OTHERWISE NOTED.
13. IF ANY DEWATERING IS TO OCCUR DURING ANY PHASE OF CONSTRUCTION THEN DEWATERING ACTIVITY SHALL ADHERE TO CHAPTER 40C-22 FAC MORE SPECIFICALLY AS FOLLOWS. PER 40C-22.030(3) A "NOTICED GENERAL SHORT-TERM DEWATERING PERMIT" IS REQUIRED "ONLY IF" DEWATERING EXCEEDS 4 MILLION GALLONS PER DAY, EXCEPT DURING THE FIRST 120 HOURS OF DEWATERING WHEN THE DAILY AND INSTANTANEOUS PUMPAGE RATES SHALL NOT EXCEED 6 MILLION GALLONS PER DAY. AVERAGE DAILY WITHDRAWAL SHALL NOT EXCEED 2 MILLION GALLONS PER DAY FOR THE FIRST 60 DAYS OF THE DEWATERING ACTIVITY AND SHALL NOT EXCEED ONE MILLION GALLONS PER DAY OF A 180 DAY DURATION. EACH SPECIFIC DEWATERING PROJECT SHALL NOT EXCEED 180 DAYS. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ANY DEWATERING ACTIVITY IS BELOW THE SPECIFIED THRESHOLD. OTHERWISE A PERMIT WILL BE REQUIRED AT THE EXPENSE OF THE CONTRACTOR. THE CONTRACTOR SHALL FAMILIARIZE ITSELF WITH CHAPTER 40C-22 FAC AND BE SOLELY RESPONSIBLE FOR OBTAINING AND SUBMITTING FORM RDS-50 TO SJRWMD A MINIMUM OF 10 DAYS PRIOR TO ANY DEWATERING ACTIVITY. SUBMITTAL OF FORM RDS-50 IS NOT REQUIRED IF DEWATERING IS 300,000 GALLONS PER DAY OR LESS AND WILL NOT EXCEED 30 DAYS IN DURATION.

SWPPP INSPECTIONS AND RECORD KEEPING:

INSPECTIONS ARE REQUIRED AT LEAST EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS FOLLOWING A RAINFALL EVENT OF ONE-HALF (½) OF AN INCH OF RAINFALL OR GREATER AND SHALL CONTINUE UNTIL THE SITE COMPLIES WITH FINAL STABILIZATION (NOTICE OF TERMINATION). INSPECTIONS MUST BE CONDUCTED BY A "QUALIFIED" INSPECTOR. "QUALIFIED" IS DEFINED AS A PERSON THAT A). HAS SUCCESSFULLY COMPLETED AND MET ALL REQUIREMENTS NECESSARY TO BE FULLY CERTIFIED THROUGH THE FDEP STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM; B). HAS SUCCESSFULLY COMPLETED AN EQUIVALENT FORMAL TRAINING PROGRAM; OR C). THAT IS QUALIFIED BY OTHER TRAINING OR PRACTICAL EXPERIENCE IN THE FIELD OF STORMWATER POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL. EACH INSPECTION MUST BE FOLLOWED UP BY A REPORT DOCUMENTING THE INSPECTOR'S FINDINGS AND REQUEST THE REQUIRED MAINTENANCE AND/OR REPAIR FOR THE EROSION AND SEDIMENTATION CONTROL MEASURES. THESE RECORDS ARE USED TO PROVE THAT THE REQUIRED INSPECTION AND MAINTENANCE WERE PERFORMED AND SHALL BE PLACED IN THE SWPPP LEDGER. IN ADDITION TO INSPECTION AND MAINTENANCE REPORTS, RECORDS SHOULD BE KEPT OF CONSTRUCTION ACTIVITIES THAT OCCUR ON THE SITE. THE CONTRACTOR SHALL RETAIN COPIES OF THE SWPPP, ALL REPORTS AND DATA FOR A MINIMUM OF FIVE (5) YEARS AFTER THE PROJECT IS COMPLETE IN PAPER AND CD FORMAT.

EROSION CONTROL NOTES:

1. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE SWPPP DURING CONSTRUCTION OPERATIONS.
2. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL DEVICES HAVE BEEN INSTALLED.
3. THE CONTRACTOR SHALL POST "NO TRESPASSING" SIGNAGE AT ALL SITE ENTRANCES PRIOR TO CONSTRUCTION.
4. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
5. GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
6. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
7. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OF NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
8. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
9. PROVIDE DUST CONTROL FOR ALL EARTHWORK OPERATIONS. COVER AREA WITH LIGHT COATING OF WATER OR OTHER APPROVED METHOD.
10. SILT FENCES AND TREE BARRICADES ARE TO BE INSPECTED AND APPROVED BY THE CITY PRIOR TO THE START OF CONSTRUCTION.

BENCHMARK INFORMATION:

#1 SET 1/2" IRON ROD "LB 8573"
ELEVATION = 126.25

#2 SET NAIL AND DISK "LB 8573"
ELEVATION = 115.09

#3 FIND NAIL AND DISK "LB 2108"
ELEVATION = 138.31

VERTICAL DATA
ELEVATIONS ARE BASED ON FDOT NETWORK, GPS NAVD88.

LEGEND:

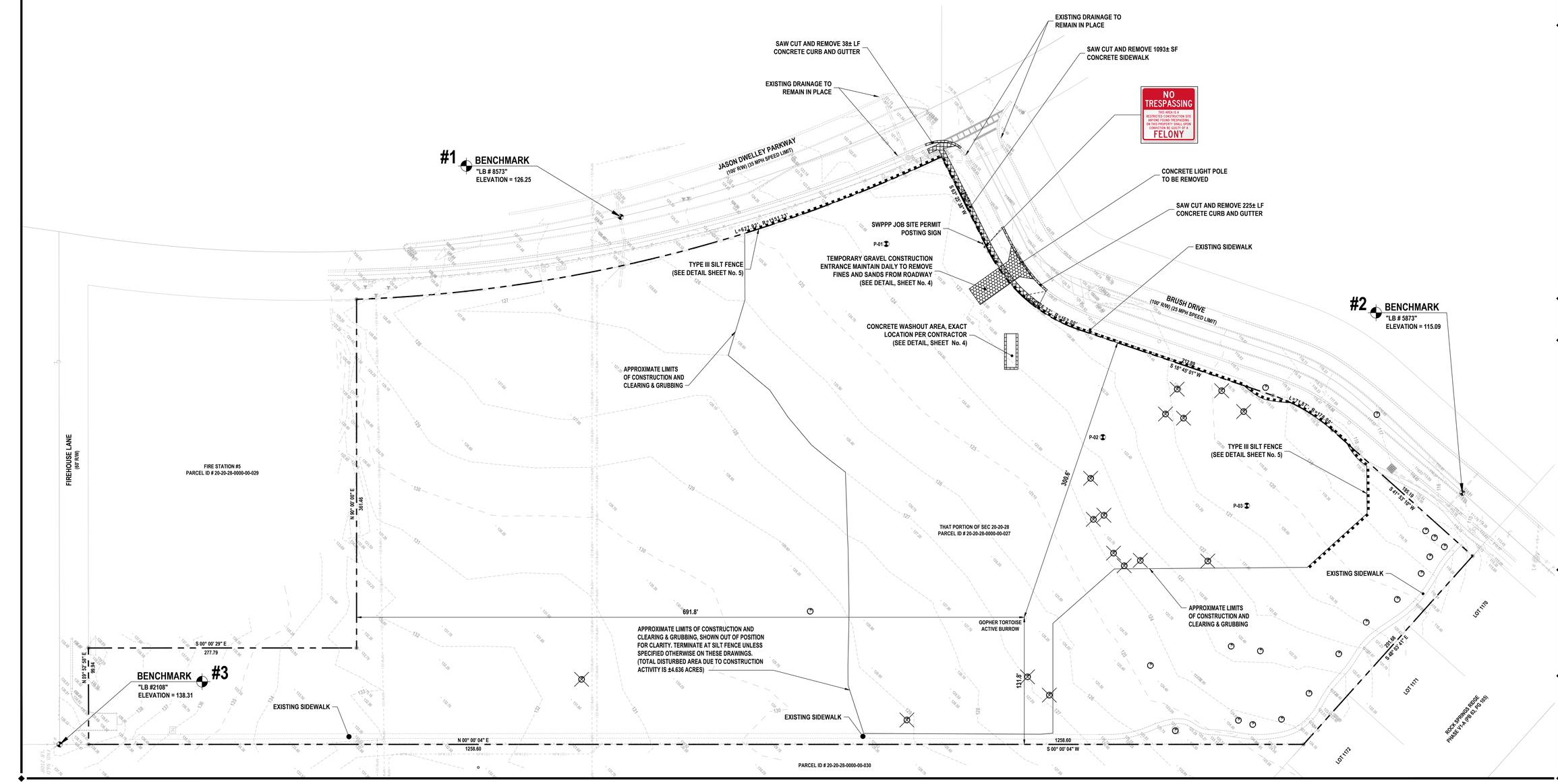
- PROPOSED SILT FENCE (SEE DETAIL, SHEET No. 5)
- TP — PROPOSED TREE BARRICADE (SEE CITY DETAIL DOCUMENT, SHEET No. 5)
- TREE TO BE REMOVED
- SIDEWALK AND CURB DEMOLITION



50 0 50 100
GRAPHIC SCALE
1"=50'



WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.



1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

REVISIONS

DATE	DESCRIPTION

DEMOLITION AND SWPPP PLAN
NW REC COMPLEX
PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

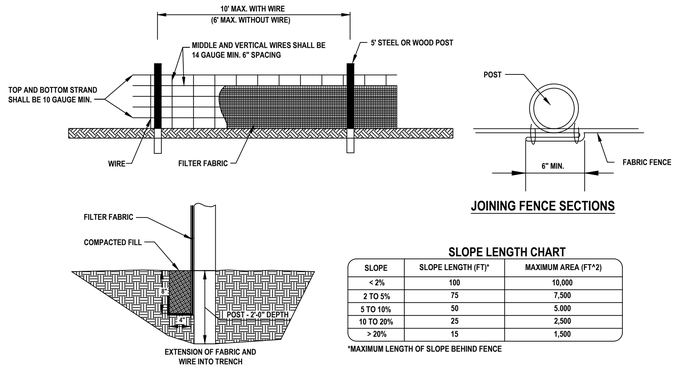
MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

04



JOINING FENCE SECTIONS

SLOPE LENGTH CHART

SLOPE	SLOPE LENGTH (FT)*	MAXIMUM AREA (FT*2)
< 2%	100	10,000
2 TO 5%	75	7,500
5 TO 10%	50	5,000
10 TO 20%	25	2,500
> 20%	15	1,500

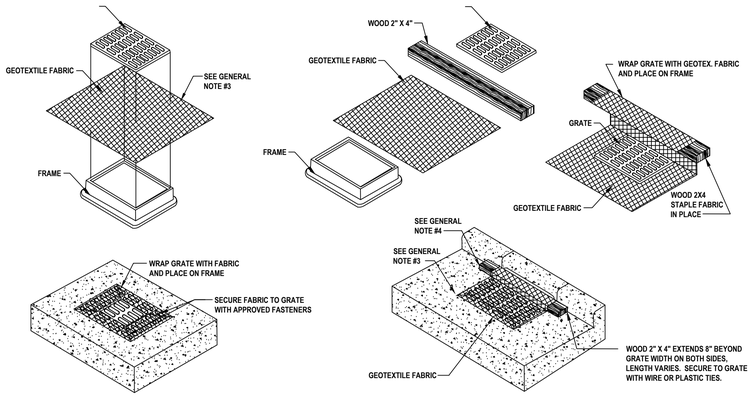
*MAXIMUM LENGTH OF SLOPE BEHIND FENCE

NOTES:

1. WWM MINIMUM 32" WIDTH WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. FILTER FABRIC SHALL BE 36" WIDE AND SHALL BE FASTENED ADEQUATELY TO THE WIRE.
3. STEEL POST SHALL BE 5'-0" IN LENGTH AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
4. WOOD POST SHALL BE 5'-0" IN LENGTH AND 2" IN DIAMETER.
5. SUPPORT POSTS SHALL BE INSTALLED ON THE DOWNHILL SIDE OF THE SEDIMENT FENCE (DOWNSTREAM FROM EXPECTED FLOWS)
6. ACCUMULATED SEDIMENT SHALL REMOVED WHEN 25% THE HEIGHT OF FENCE.
7. MAXIMUM DRAINAGE AREA 10,000 SF PER 100' OF FENCE.
8. MAXIMUM LENGTH UPSLOPE FROM FENCE PER CHART.

SEDIMENT FENCE DETAIL

NOT TO SCALE



YARD INLET PROTECTION
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)

CURB INLET PROTECTION

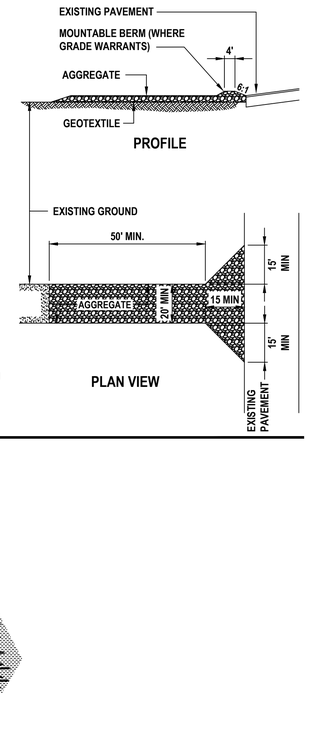
GENERAL NOTES:

1. GEOTEXTILE TO BE MIRAFI FILTERWEAVE 402 OR GEOTEX 111F. ALTERNATIVES INCLUDE APPROVED EQUAL ASTM D4491 OR 100 TO 150 GALLON PER MINUTE PER SQUARE FOOT.
2. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
3. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
4. FOR CURB INLET PROTECTION AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
5. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
6. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS, OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

GEOTEXTILE FABRIC INLET PROTECTION

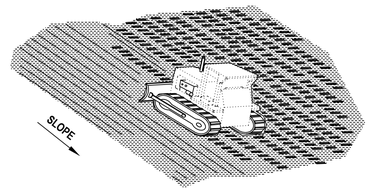
NOT TO SCALE

1. STONE SIZE - #2 COARSE AGGREGATE, OR RECLAIMED/RECYCLED CONCRETE.
2. LENGTH - AS EFFECTIVE BUT NOT LESS THAN 50'
3. DEPTH - 8" MINIMUM (COMPACTED)
4. WIDTH - 20' MINIMUM
5. GEOTEXTILE - 100% POLYPROPYLENE, 4 OZ/SY OVER THE ENTIRE AREA PRIOR TO PLACEMENT OF AGGREGATE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 6:1 SLOPES IS ACCEPTABLE.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. MAINTAIN PERIODIC TOP DRESSING OF ADDITIONAL AGGREGATE AS CONDITIONS REQUIRE AND REPAIR AND/OR CLEANOUT ANY AREAS USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, WASHING SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE WHICH DRAINS INTO AN APPROVED SEDIMENT POND OR SWALE.
9. INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN OR WEEKLY AT A MINIMUM.



CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



NOTE:

USE DOZER TRACKS TO CREATE GROOVES PERPENDICULAR TO THE SLOPE. GROOVES WILL CATCH SEED, FERTILIZER, MULCH, RAINFALL AND DECREASE SEDIMENT IN RUNOFF.

TRACKING DETAIL

NOT TO SCALE

SEEDING/MULCHING NOTES

GENERAL

SEEDING CAN BE USED FOR TEMPORARY STABILIZATION. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 7 DAYS SHALL BE TEMPORARILY SEEDED AND WATERED. AREAS WHERE FINAL GRADING HAS BEEN COMPLETED FOR MORE THAN 7 DAYS SHALL BE TEMPORARILY SEEDED. TEMPORARY SEED MIXTURE IS SPECIFIED BELOW.

SEEDING MIXTURES

SEED MIXTURE SHALL BE BERMUDA COMMON 90 LB PURE LIVE SEED PER ACRE, FIBER 2000 LB PER ACRE, STABILIZER 120 LB PER ACRE AND FERTILIZER 300 LB PER ACRE.

ALL SLOPES AND FLAT GRADE

APPLY 6:20:20 COMMERCIAL ORGANIC FERTILIZER AT A RATE OF 300 LB PER ACRE AND SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

TEMPORARY SEEDING

PLANTING DATES	SEED VARIETY	APPLICATION RATE
MARCH 15 -	PENSACOLA BAHIA (SCARIFIED)	90
OCTOBER 15	BERMUDA COMMON (50% HULLED)	25
0CTOBER 16 -	PENSACOLA BAHIA (SCARIFIED)	100
MARCH 14	BERMUDA COMMON (50% HULLED)	35
	ANNUAL RYE GRASS	10
	RYE GRAIN	30

MULCH SEEDED AREA WITH 2 TONS PER ACRE CLEAN GRAIN STRAW. ANCHOR STRAW WITH HYDRAULIC WOOD FIBER MULCH AT THE RATE OF 1000 LB PER ACRE, OR 150-200 POUNDS OF ORGANIC MULCH TACKIFIER PER ACRE, OR USE NETTING.

HYDRO FIBER MULCH MIXTURE SHALL BE PERFORMED IN A TANK WITH A CONTINUOUS AGITATION AND RECIRCULATION SYSTEM WITH SUFFICIENT OPERATING CAPACITY TO PRODUCE A HOMOGENOUS SLURRY AND DISCHARGE SYSTEM WHICH WILL APPLY THE SLURRY AT A CONTINUOUS AND UNIFORM RATE. MIXTURE SHALL CONTAIN A GREEN FUGITIVE DYE AS AN APPLICATION INDICATOR.

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK
ENGINEERING INC.

EROSION CONTROL PLAN
NW REC COMPLEX TENNIS AND PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

MICHAEL T. MUNIER
LICENSE
NO. 97442
STATE OF FLORIDA
PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

05

NW RECREATIONAL COMPLEX
BASEBALL FIELDS

CITY OF APOPKA
VACANT

#1 BENCHMARK
"LB # 8573"
ELEVATION = 126.25

JASON DWELLEY PARKWAY

L=627.92', R=1551.23'

POND-1

S 83° 25' 36" W
109.35

141.7

LIMITS OF CONSTRUCTION

L=126.32', R=162.00'

BRUSH DRIVE

#2 BENCHMARK
"LB # 8573"
ELEVATION = 115.09

213.89
S 18° 45' 01" W

L=71.87', R=178.00'

POND-2

185.19
S 41° 53' 10" W

117.9'

51.9'

365.46
N 90° 00' 00" E

FIRE STATION #5

277.79
S 00° 00' 29" E

395.7'

99.94
N 89° 52' 58" E

61.4'

TENNIS AND PICKLEBALL COURTS TO BE CONSTRUCTED AND DESIGNED BY HELLAS CONSTRUCTION UNDER A SEPARATE PERMIT

61.4'

N 00° 00' 04" E
1258.60

GOPHER TORTOISE
ACTIVE BURROW

LIMITS OF CONSTRUCTION

N 48° 06' 53" W
262.48

FIREHOUSE LANE

BENCHMARK #3
"LB #2108"
ELEVATION = 138.31

WATER STORAGE FACILITY

ROCK SPRINGS RIDGE SUBDIVISION

ROLLING HILLS LANE

50 0 50 100
GRAPHIC SCALE
1"=50'

One Nation... One Number... 811
Know what's below. Call before you dig.

WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 672-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013

Civil Engineering
Transportation, CEI &
Landscape Architecture

NEWKIRK ENGINEERING INC.

OVERALL DEVELOPMENT PLAN

NW REC COMPLEX TENNIS AND PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

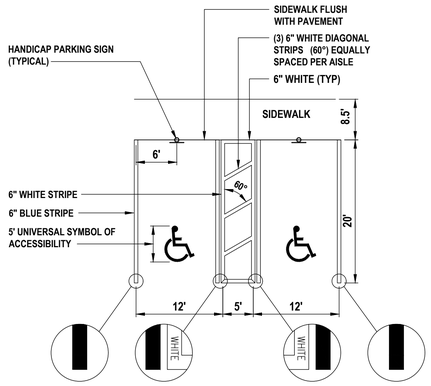
MICHAEL T. MUNIER
LICENSE
NO. 97442
STATE OF FLORIDA
PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

06



ACCESSBILE PARKING STRIPING

(UNIVERSAL SPACES PER FLORIDA ADA)

SCALE: 1" = 10'

GENERAL NOTES:

1. CITY OF APOPKA BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, SCREEN WALLS AND MONUMENT SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, SHOP DRAWINGS, ETC.).
2. ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION OR GPS. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR'S RISK.
3. THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING ADJACENT BUSINESSES TO ENSURE THERE IS NO DISRUPTION TO THEIR RESPECTIVE OPERATIONS.
4. THE CONTRACTOR AT ITS OWN DISCRETION SHALL MAINTAIN THE CONSTRUCTION SITE SECURE FROM TRESPASS.
5. SOD ALL DISTURBED AREAS BESIDES THE DRY POND BOTTOM WITH BAHIA SOD. THE POND BOTTOM MUST BE SEED AND MULCH

PAVEMENT MARKING NOTES:

1. PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
2. ALL REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX No. 706-001.
3. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX No. 700-101 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
4. LOCATION OF SIGNS IS APPROXIMATE ONLY AND IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
5. FOR ADDITIONAL DETAILS SEE FDOT STANDARD PLANS INDEX No. 522-002, 700-010, 700-101, 706-001 AND 711-001.

PROPERTY INFORMATION	
FUTURE LAND USE (FLU)	PR -PARKS AND RECREATION
ZONING (W/ OVERLAY)	O - OFFICE
FLOODZONE	X
BUILDING USES	N/A

SITE COVERAGE			
AREA TYPE	SF	ACRE	% SITE
TENNIS AND PICKLEBALL COURTS	148668	3.413	28.0%
PAVEMENT & CURBING	49340	1.133	9.3%
SIDEWALKS	13007	0.299	2.4%
TOTAL IMPERVIOUS	211015	4.844	39.7%
DRY RETENTION POND	73172	1.680	13.8%
OTHER GREEN SPACE	246767	5.665	46.5%
TOTAL OPEN SPACE	319939	7.345	60.3%
TOTAL SITE	530954	12.190	100.0%

SET BACKS				
	REQUIRED		PROVIDED	
FRONT (NORTHWEST)	25.0	FEET	64.7	FEET
SIDE (NORTHEAST)	25.0	FEET	426.3	FEET
SIDE (EAST)	10.0	FEET	20.3	FEET
REAR/FRONT (SOUTH)	25.0	FEET	117.9	FEET
SIDE (WEST)	25.0	FEET	40.6	FEET

REQUIRED PARKING		
4 PEOPLE PER COURT X 20 COURTS = 80 SPACES		
PROVIDED PARKING		
TYPE	DIMENSIONS	#
STANDARD SPACE	10-FT X 20-FT	110
HANDICAPPED SPACE	12-FT X 20-FT W/ 5-FT AISLE	8

STRIPING LEGEND:

1. 6" SOLID WHITE LINE (TYPICAL) PER FDOT STANDARD PLANS INDEX No. 711-001
2. 24" WHITE STOP BAR (THERMOPLASTIC) PER FDOT STANDARD PLANS INDEX No. 711-001
3. 6" SOLID DOUBLE YELLOW LINE (TYPICAL) PER FDOT STANDARD PLANS INDEX No. 711-001
4. 12" WHITE CROSSWALK (THERMOPLASTIC) PER FDOT STANDARD PLANS INDEX No. 711-001
5. 18" YELLOW CHEVRON (THERMOPLASTIC) PER FDOT STANDARD PLANS INDEX No. 711-001
6. 24" DETECTABLE WARNING MAT PER FDOT STANDARD PLANS INDEX No. 522-002

PAVEMENT AND SIDEWALK LEGEND:

ASPHALT PAVEMENT
1.5" THICK TYPE SP-12.5 (TL-B) ASPHALT
8" LIMEROCK OR OTHER APPROVED OBG-06 COMPACTED TO A 98% MAXIMUM DRY DENSITY PER AASHTO T-180 AND CONSTRUCTED IN TWO LIFTS
12" STABILIZED SUBGRADE COMPACTED TO A 98% MAXIMUM DRY DENSITY PER AASHTO T-180

CONCRETE SIDEWALK
4" THICK CONCRETE (MIN. 3,000 P.S.I. @ 28 DAYS)
APPROVED FDOT DESIGN MIX

CONCRETE SIDEWALK
6" THICK CONCRETE (MIN. 3,000 P.S.I. @ 28 DAYS)
APPROVED FDOT DESIGN MIX

CONCRETE SIDEWALK WITH THICKENED EDGE
6" THICK CONCRETE (MIN. 3,000 P.S.I. @ 28 DAYS)
APPROVED FDOT DESIGN MIX

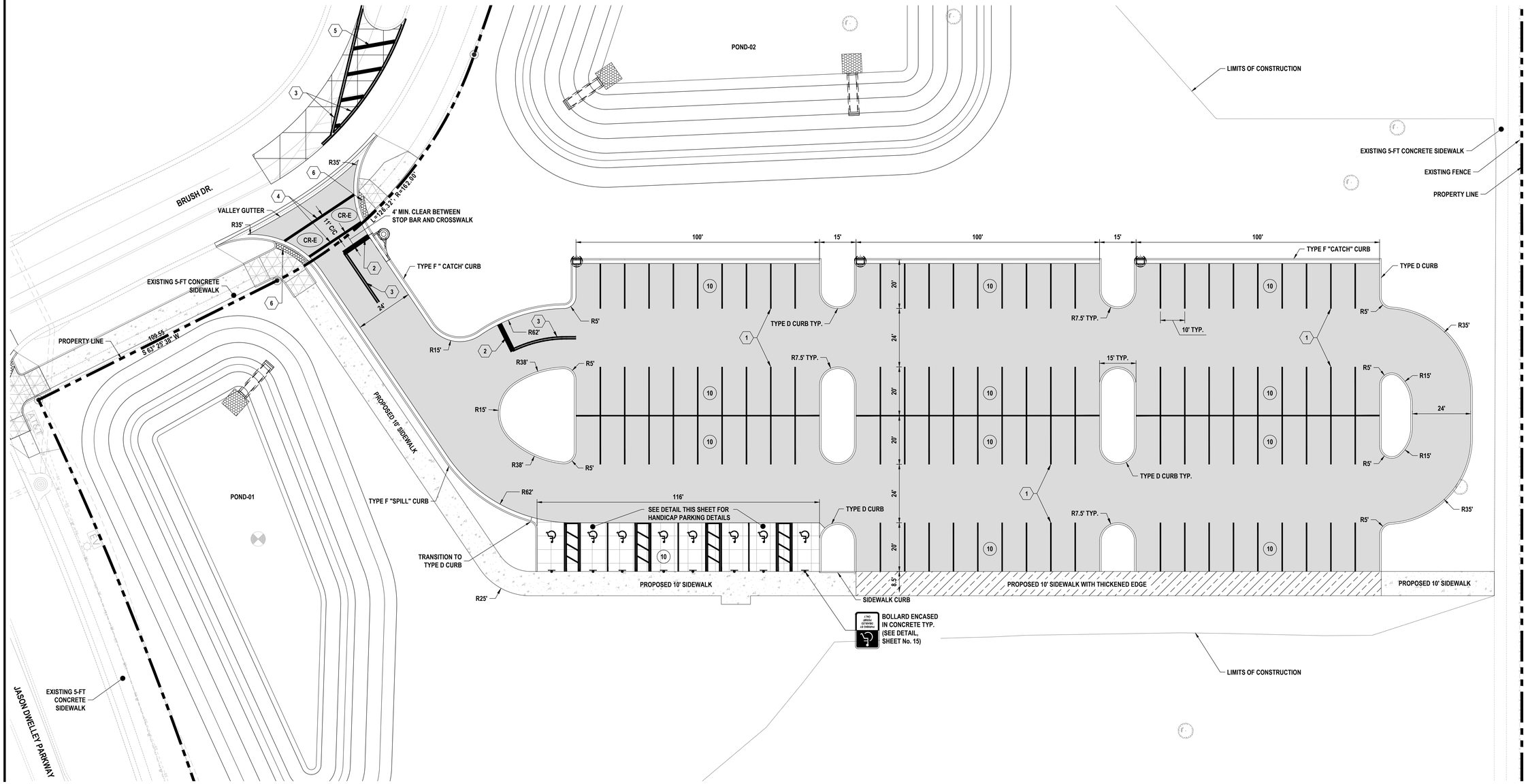
CONCRETE PAVEMENT
6" CONCRETE (MIN. 4,000 P.S.I. @ 28 DAYS)
SUBGRADE COMPACTED TO A 98% MAXIMUM DRY DENSITY PER ASTM D-1557

MILLING AND RESURFACING

20 0 20 40
GRAPHIC SCALE
1"=20'

One Nation... One Number... 811
Know what's below. Call before you dig.

WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.



REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013

Civil Engineering
Transportation, CEI &
Landscape Architecture

NEWKIRK ENGINEERING INC.

PARKING LOT LAYOUT

NW REC COMPLEX PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

07

GENERAL NOTES:

1. CITY OF APOPKA BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, SCREEN WALLS AND MONUMENT SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, SHOP DRAWINGS, ETC.).
2. ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION OR GPS. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR'S RISK.
3. THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING ADJACENT BUSINESSES TO ENSURE THERE IS NO DISRUPTION TO THEIR RESPECTIVE OPERATIONS.
4. THE CONTRACTOR AT ITS OWN DISCRETION SHALL MAINTAIN THE CONSTRUCTION SITE SECURE FROM TRESPASS.
5. SOD ALL DISTURBED AREAS BESIDES THE DRY POND BOTTOM WITH BAHIA SOD. THE POND BOTTOM MUST BE SEED AND MULCH

PAVEMENT MARKING NOTES:

1. PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
2. ALL REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX No. 706-001.
3. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX No. 700-101 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
4. LOCATION OF SIGNS IS APPROXIMATE ONLY AND IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
5. FOR ADDITIONAL DETAILS SEE FDOT STANDARD PLANS INDEX No. 522-002, 700-010, 700-101, 706-001 AND 711-001.

STRIPING LEGEND:

1. 6" SOLID WHITE LINE (TYPICAL) PER FDOT STANDARD PLANS INDEX No. 711-001
2. 24" WHITE STOP BAR (THERMOPLASTIC) PER FDOT STANDARD PLANS INDEX No. 711-001
3. 6" SOLID DOUBLE YELLOW LINE (TYPICAL) PER FDOT STANDARD PLANS INDEX No. 711-001
4. 12" WHITE CROSSWALK (THERMOPLASTIC) PER FDOT STANDARD PLANS INDEX No. 711-001
5. 18" YELLOW CHEVRON (THERMOPLASTIC) PER FDOT STANDARD PLANS INDEX No. 711-001
6. 24" DETECTABLE WARNING MAT PER FDOT STANDARD PLANS INDEX No. 522-002
7. 24" WHITE (PREFORMED THERMOPLASTIC) PER FDOT STANDARD PLANS INDEX No. 711-001

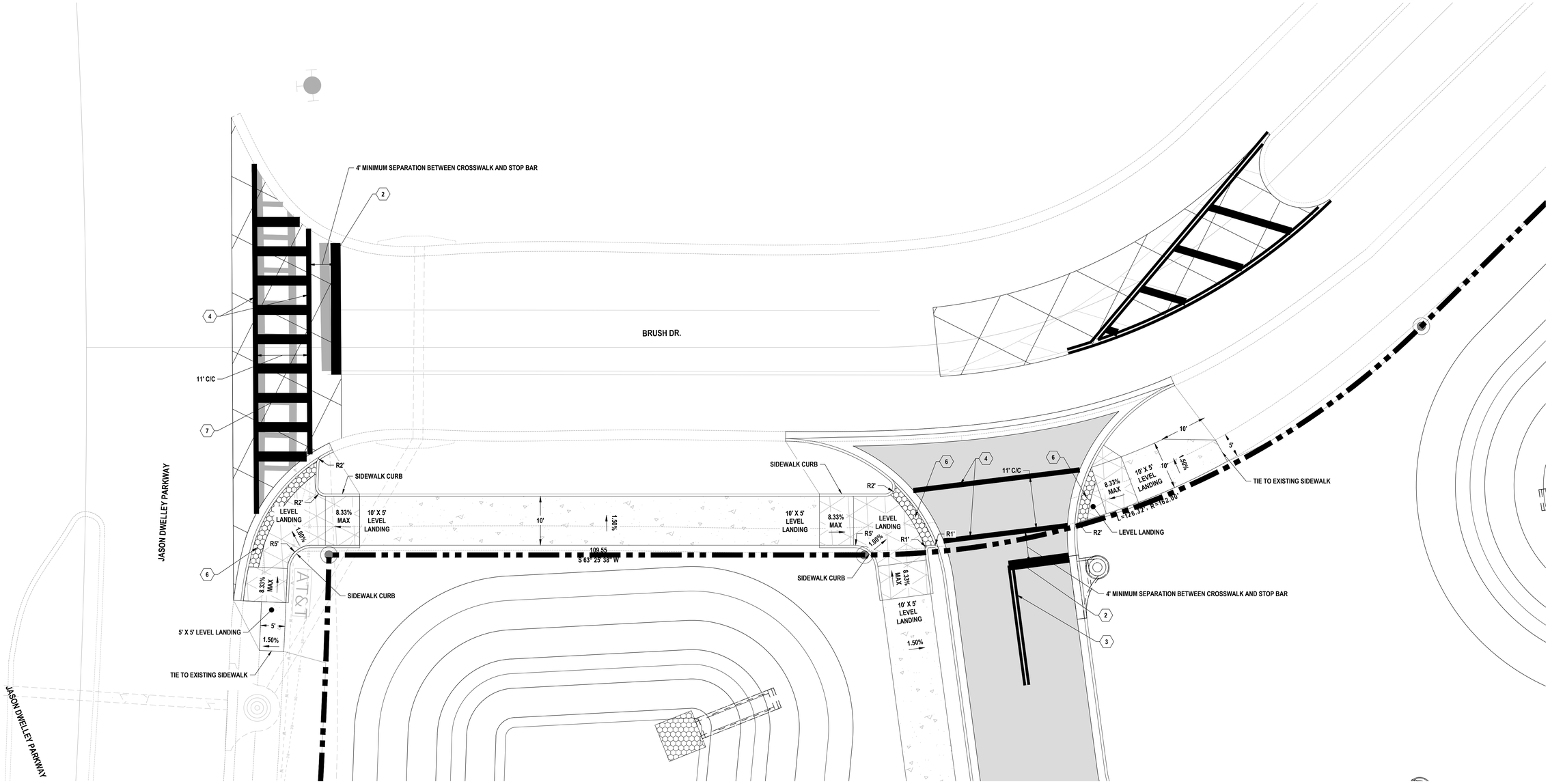
PAVEMENT AND SIDEWALK LEGEND:

- ASPHALT PAVEMENT
  1.5" THICK TYPE SP-12.5 (TL-B) ASPHALT
  8" LIMEROCK OR OTHER APPROVED OBG-06 COMPACTED TO A 98% MAXIMUM DRY DENSITY PER AASHTO T-180 AND CONSTRUCTED IN TWO LIFTS
  12" STABILIZED SUBGRADE COMPACTED TO A 98% MAXIMUM DRY DENSITY PER AASHTO T-180
- CONCRETE SIDEWALK
  4" THICK CONCRETE (MIN. 3,000 P.S.I. @ 28 DAYS)
  APPROVED FDOT DESIGN MIX
- CONCRETE SIDEWALK
  6" THICK CONCRETE (MIN. 3,000 P.S.I. @ 28 DAYS)
  APPROVED FDOT DESIGN MIX
- CONCRETE SIDEWALK WITH THICKENED EDGE
  6" CONCRETE (MIN. 3,000 P.S.I. @ 28 DAYS)
  APPROVED FDOT DESIGN MIX
- CONCRETE PAVEMENT
  6" CONCRETE (MIN. 4,000 P.S.I. @ 28 DAYS)
  SUBGRADE COMPACTED TO A 98% MAXIMUM DRY DENSITY PER ASTM D-1557
- MILLING AND RESURFACING

10 0 10 20
GRAPHIC SCALE
1"=10'

One Nation... One Number... 811 Know what's below. Call before you dig.

WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.



REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

ROW IMPROVEMENTS SHEET
NW REC COMPLEX PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

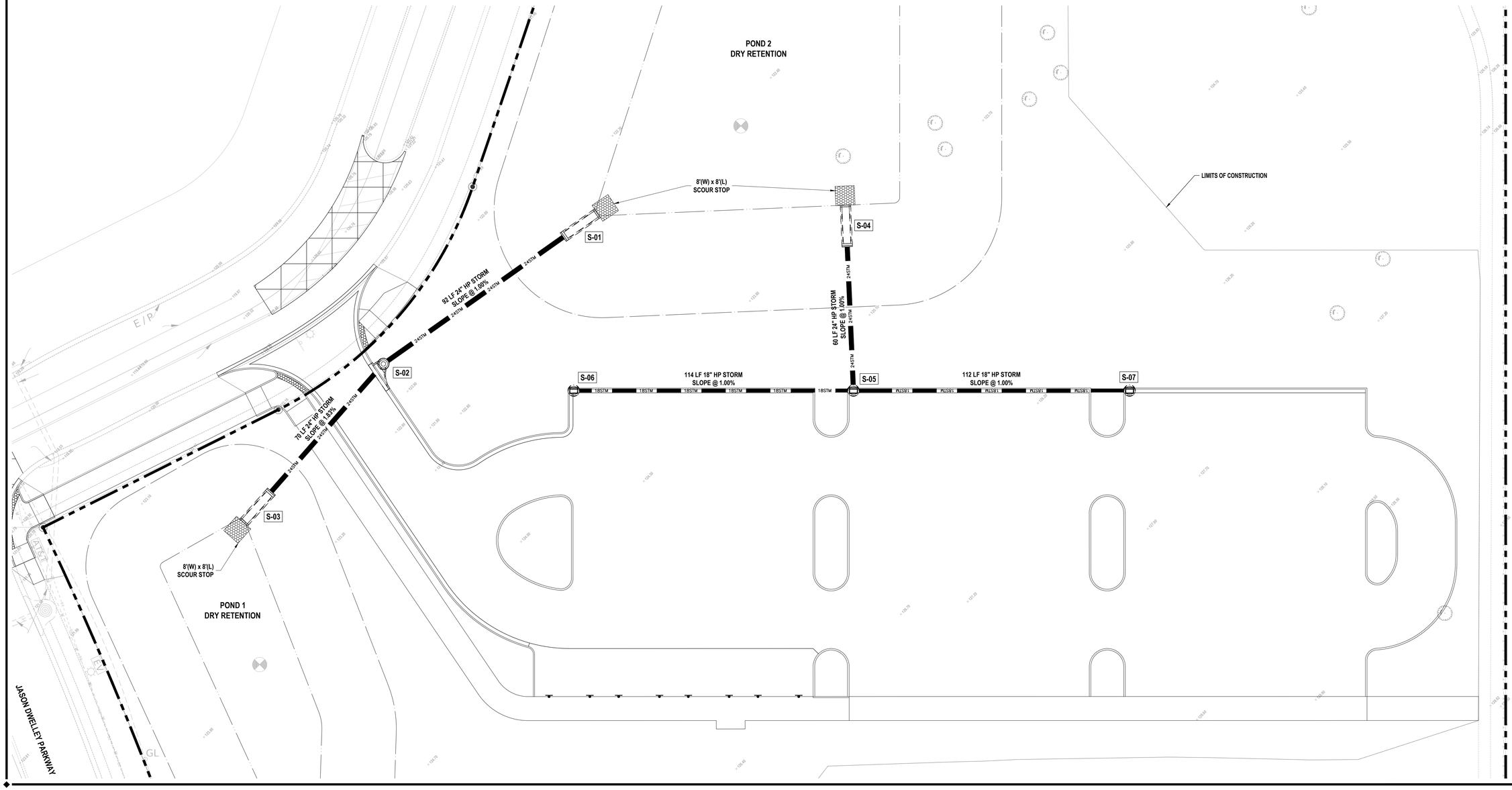
08

GENERAL DRAINAGE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO DRAINAGE SYSTEM AND SHALL RESTORE ANY DAMAGED STRUCTURES.
2. ALL STORM PIPE SHALL BE CONSTRUCTED OF CLASS III REINFORCED CONCRETE PIPE (RCP) WITH CERTIFIED WATERTIGHT JOINTS BY THE MANUFACTURER.
3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL MATERIAL AND STRUCTURES TO THE ENGINEER (NEWKIRK ENGINEERING, INC.) FOR APPROVAL PRIOR TO THE PRECONSTRUCTION MEETING.
4. CONTRACTOR TO PLACE FILTER FABRIC BETWEEN DRAINAGE STRUCTURES AND TOPS TO PREVENT SOIL INTRUSION. THE FABRIC SHALL BE PERIODICALLY CLEANED OF SAND A DEBRIS FABRIC SHALL REMAIN IN PLACE UNTIL PAVING IS COMPLETE.
5. ALL EXISTING STRUCTURES UNLESS OTHERWISE NOTED, ARE TO REMAIN. FENCING TREES, & ETC., WITHIN THE CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFFSITE.
6. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST PER FDOT SPECIFICATIONS.
7. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY PER FDOT STANDARD SPECIFICATIONS AND MANUFACTURES SPECIFICATIONS RESPECTIVELY.
8. ALL DRAINAGE STRUCTURES AND PIPES SHALL BE CLEANED OF SAND AT THE LAST STAGE OF CONSTRUCTION PRIOR TO THE FINAL INSPECTION.
9. ALL STORM INLET GRATES SHALL BE STEEL (TRAFFIC RATED TO MINIMUM H-20 LOADING).

STORM STRUCTURE SCHEDULE:

STRUCTURE ID	STRUCTURE TYPE	EOP/GRATE ELEV	BOTTOM ELEV	N INV	S INV	E INV	W INV	NOTES
S-01	U-ENDWALL W/ GRATE	NA	114.25				24" RCP 114.25	24", 1:6 SLOPE
S-02	CURB INLET TYPE 1 W/ ROUND BOTTOM	121.57	115.85			24" RCP 115.18	24" RCP 116.35	
S-03	U-ENDWALL W/ GRATE	NA	117.67			24" RCP 117.67		24", 1:6 SLOPE
S-04	U-ENDWALL W/ GRATE	NA	114.25		24" RCP 114.25			24", 1:6 SLOPE
S-05	CURB INLET TYPE 9 W/ ROUND BOTTOM	124.58	115.54	24" RCP 116.04		18" RCP 119.55	18" RCP 117.83	STEEL RETICULINE, H-20 RATED GRATE
S-06	CURB INLET TYPE 9 W/ ROUND BOTTOM	123.70	118.50			18" RCP 119.00		STEEL RETICULINE, H-20 RATED GRATE
S-07	CURB INLET TYPE 9 W/ ROUND BOTTOM	125.44	120.20				18" RCP 120.70	STEEL RETICULINE, H-20 RATED GRATE



40 0 20 40

GRAPHIC SCALE
1"=20'

One Nation... One Number... 811 Know what's below. Call before you dig.

WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26010584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

DRAINAGE PLAN
NW REC COMPLEX PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

09

BENCHMARK INFORMATION:

#1 SET 1/2" IRON ROD "LB 8573"
ELEVATION = 126.25

#2 SET NAIL AND DISK "LB 8573"
ELEVATION = 115.09

#3 FIND NAIL AND DISK "LB 2108"
ELEVATION = 138.31

VERTICAL DATA
ELEVATIONS REFER TO (NAVD) NATIONAL AMERICAN VERTICAL DATUM 1988. FEET AND DECIMAL PART THEREOF. BENCHMARK REFERENCE NAVD DATUM OF 1988. BENCHMARK, DESIGNATION IS A SEMINOLE COUNTY G.P.S. CONTROL, DESIGNATION: 426040264, ELEVATION= 51.21' (88 DATUM).

GENERAL GRADING NOTES:

1. CROSS SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL NOT EXCEED 1:48 IN ACCORDANCE WITH SECTION 502.4 OF FACBC.
2. ALL SIDEWALKS SHALL HAVE A MINIMUM 1 PERCENT AND MAXIMUM 2 PERCENT CROSS SLOPE.
3. ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEY OR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR.

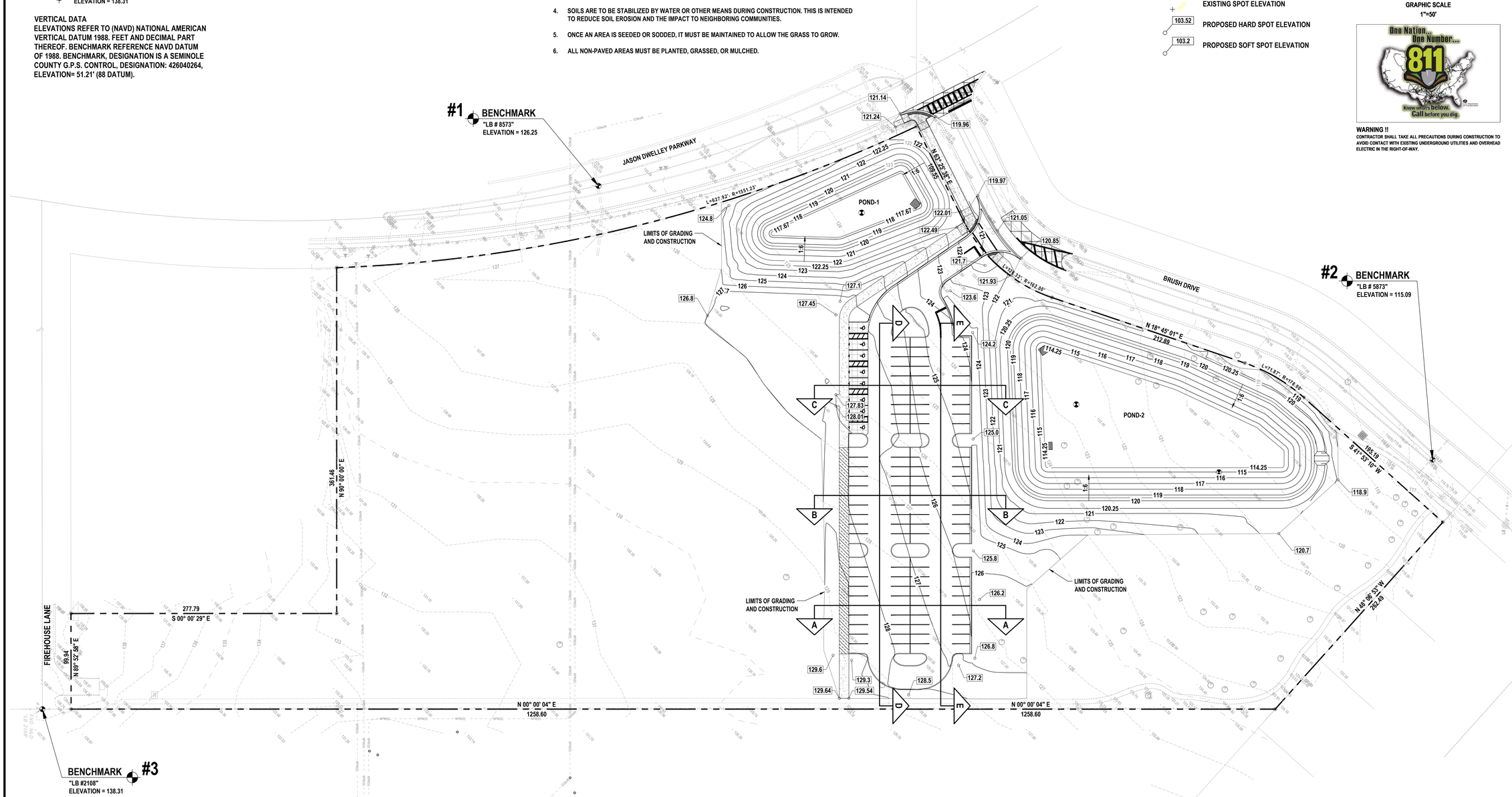
GENERAL EARTHWORK NOTES:

1. IF ANY MUCK OR MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
2. ALL FILLING IS TO BE PERFORMED IN ONE-FOOT LIFTS. THE COMPACTION REQUIREMENT IS 98% FOR PAVED AREAS AND 95% FOR UNPAVED AREAS PER AASHTO T-180 MODIFIED PROCTOR TEST.
3. TEMPORARY FILL STOCKPILING IS NOT PERMITTED IN LIFTS GREATER THAN SIX FEET.
4. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES.
5. ONCE AN AREA IS SEEDED OR SODDED, IT MUST BE MAINTAINED TO ALLOW THE GRASS TO GROW.
6. ALL NON-PAVED AREAS MUST BE PLANTED, GRASSED, OR MULCHED.

GRADING LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DRAINAGE FLOW ARROW
- EXISTING SPOT ELEVATION
- PROPOSED HARD SPOT ELEVATION
- PROPOSED SOFT SPOT ELEVATION

GRAPHIC SCALE
50 0 50 100
1"=50'



WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

REVISIONS	
DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

OVERALL GRADING

NW REC COMPLEX PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

10

GRADING LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DRAINAGE FLOW ARROW
- EXISTING SPOT ELEVATION
- PROPOSED HARD SPOT ELEVATION
- PROPOSED SOFT SPOT ELEVATION

GRAPHIC SCALE
20 0 20 40
1"=20'

One Nation... One Number... 811
Know what's below. Call before you dig.

WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

EXISTING SIDEWALK
POND-2
LIMITS OF GRADING AND CONSTRUCTION
BRUSH DR.
VALLEY GUTTER
LIMITS OF GRADING AND CONSTRUCTION
TYPE F " CATCH' CURB AND GUTTER
TYPE F "CATCH" CURB AND GUTTER
TYPE D CURB TYP.
TYPE D CURB
TYPE F "SPILL" CURB AND GUTTER
TRANSITION TO TYPE D CURB
POND-1
SIDEWALK CURB
EXISTING SIDEWALK
JASON DWELLEY PARKWAY

NEWKIRK ENGINEERING INC.
1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture

REVISIONS

DATE	DESCRIPTION

PARKING LOT GRADING
NW REC COMPLEX PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEGIN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

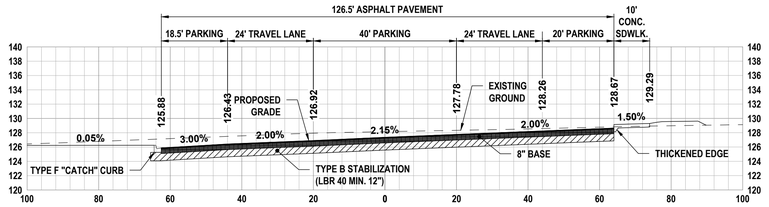
MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

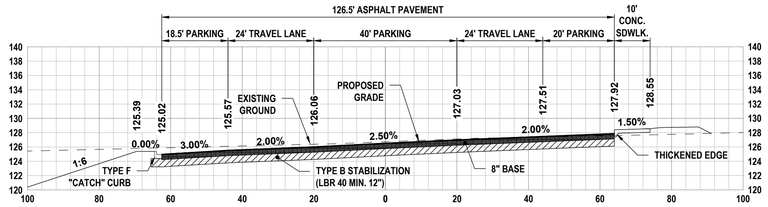
PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

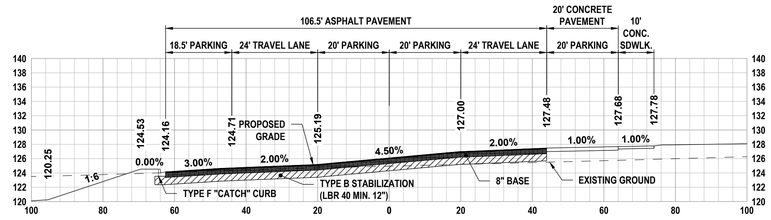
11



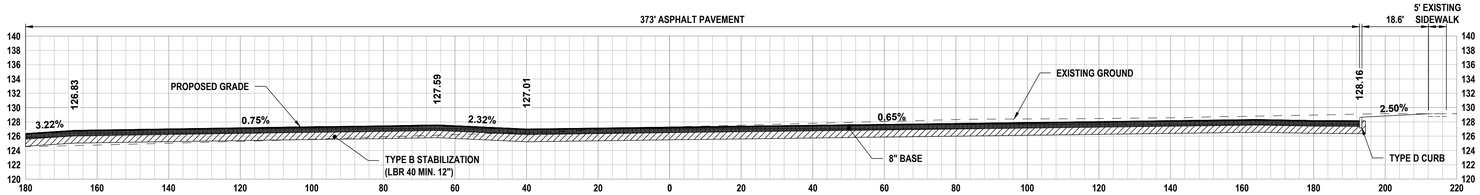
SECTION A-A



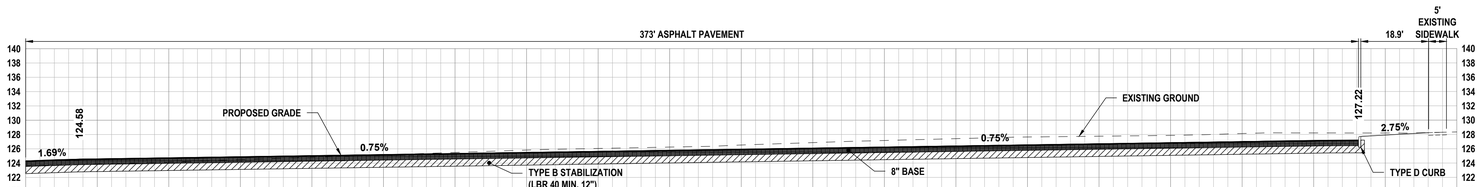
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

1" = 20' HORIZONTAL
1" = 10' VERTICAL

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013

Civil Engineering
Transportation, CEI &
Landscape Architecture

NEWKIRK ENGINEERING INC.

CROSS SECTIONS

NW REC COMPLEX PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

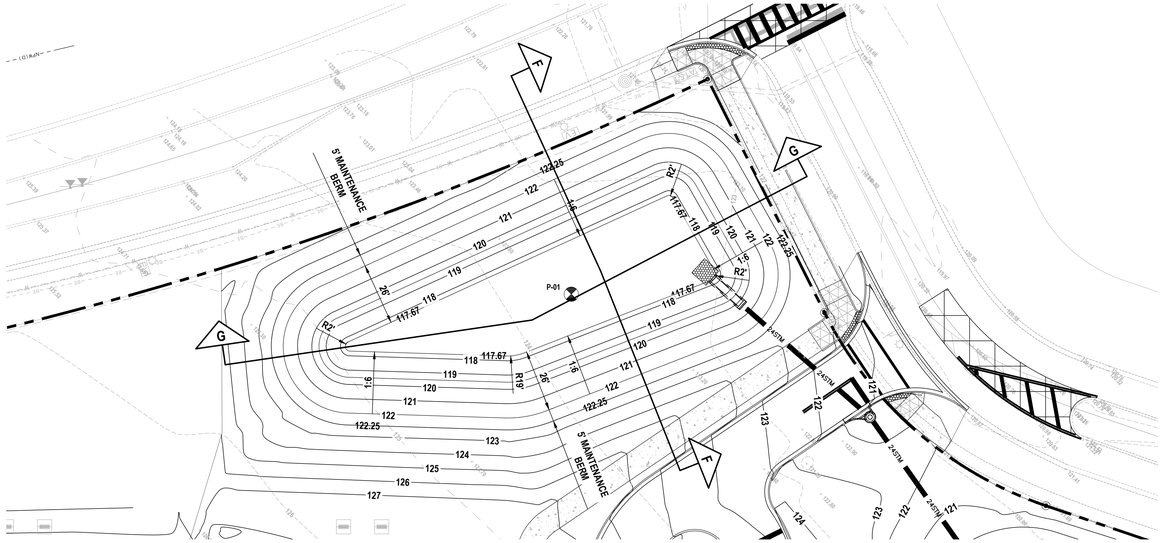
MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

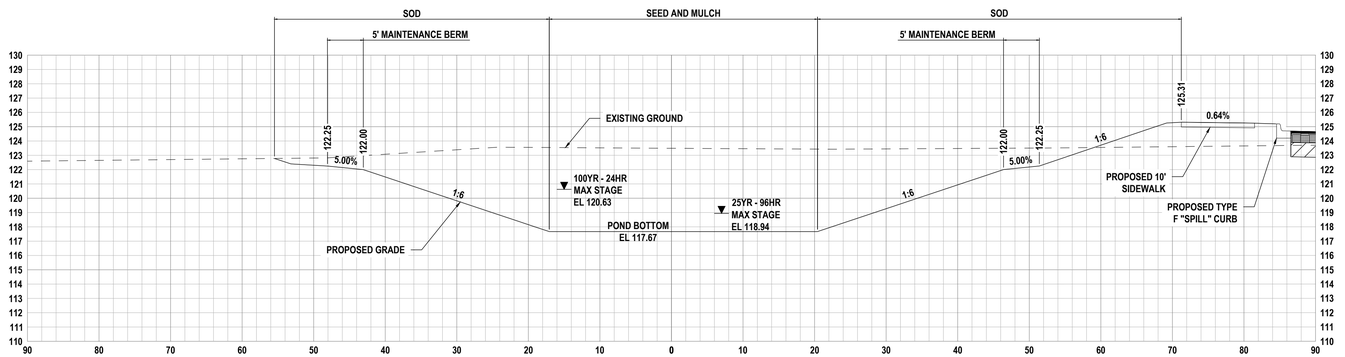
PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

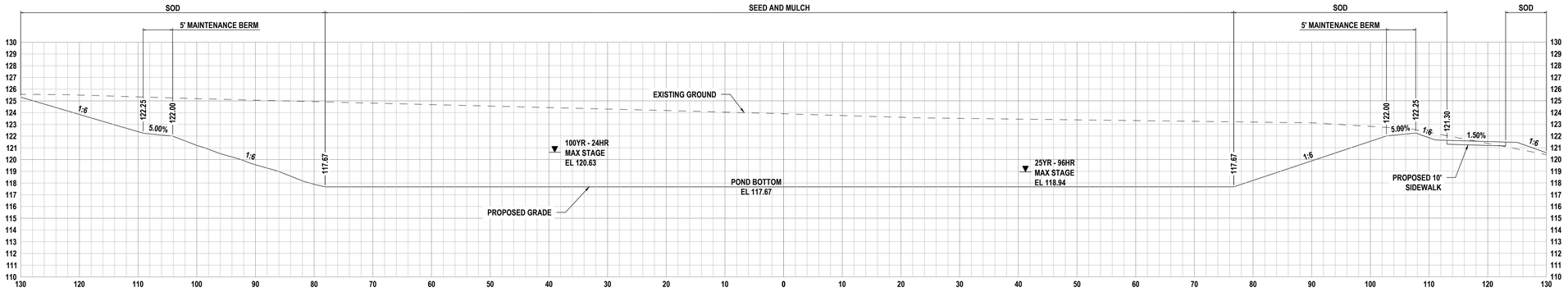
12



POND 1 PLAN



POND 1 SECTION F-F



POND 1 SECTION G-G

1" = 10' HORIZONTAL
1" = 5' VERTICAL



GRAPHIC SCALE
1"=30'



WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013

Civil Engineering
Transportation, CEI &
Landscape Architecture

NEWKIRK
ENGINEERING INC.

POND 1 LAYOUT AND CROSS SECTIONS

NW REC COMPLEX PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

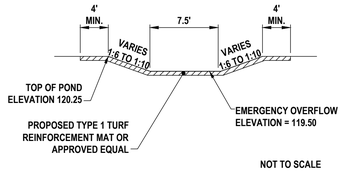
MICHAEL T. MUNIER
LICENSE
NO. 97442
STATE OF FLORIDA
PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

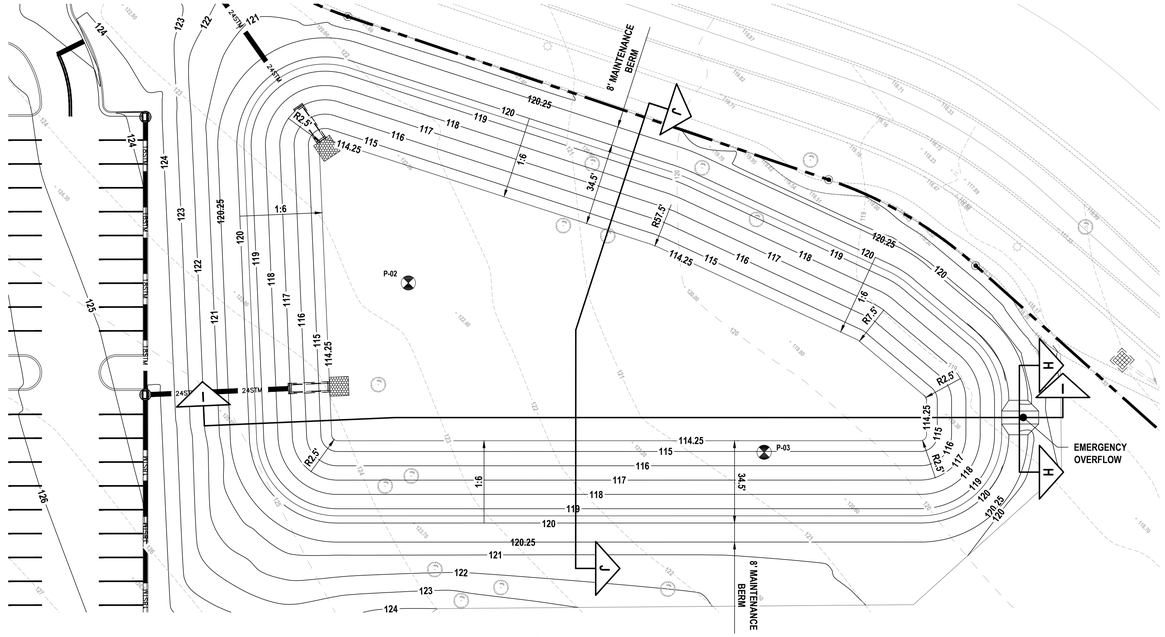
PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

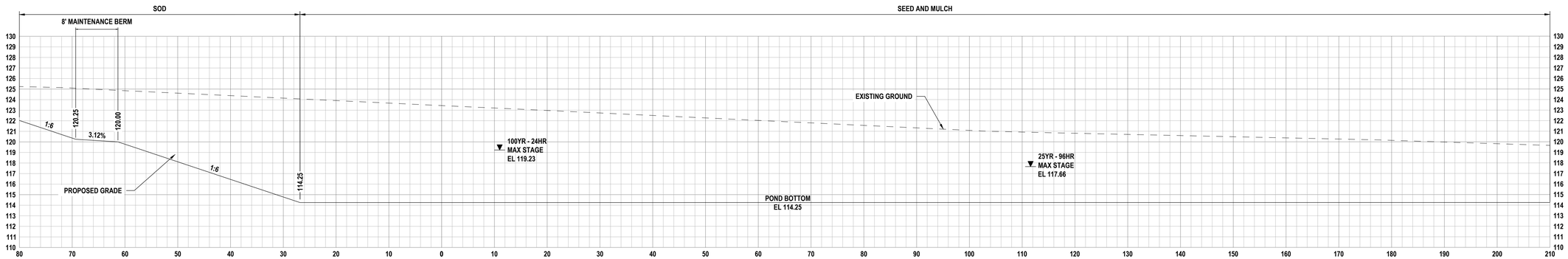
13



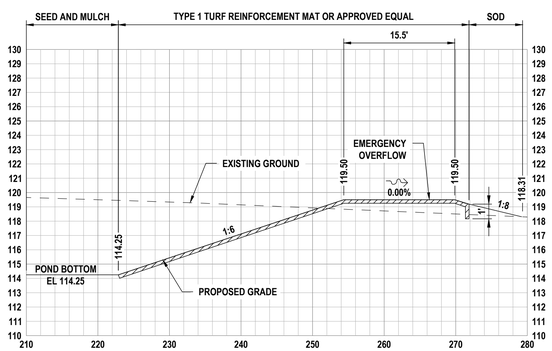
POND 2 SECTION H-H



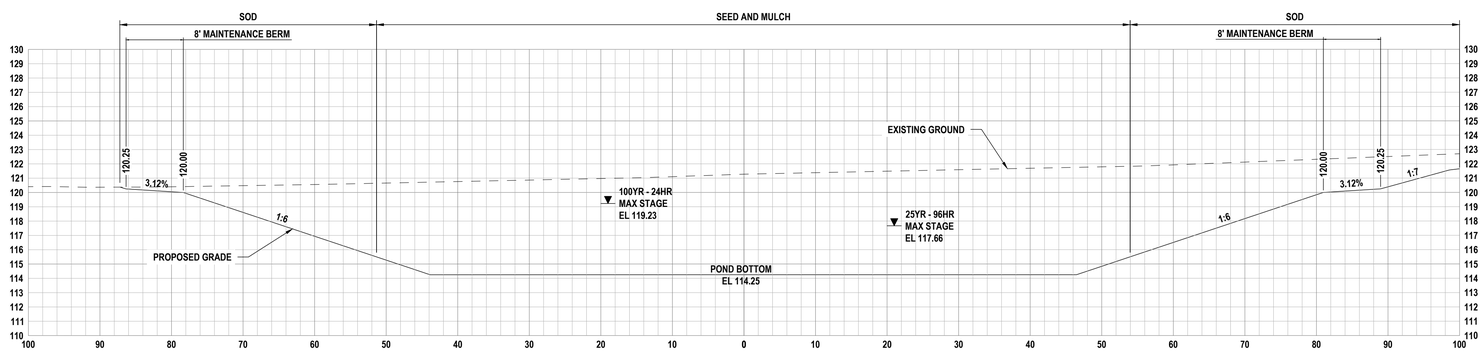
POND 2 PLAN



POND 2 SECTION I-I

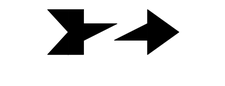


POND 2 SECTION I-I (CONT.)



POND 2 SECTION J-J

1" = 10' HORIZONTAL
1" = 5' VERTICAL





WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture

NEWKIRK ENGINEERING INC.

POND 2 LAYOUT AND CROSS SECTIONS

NW REC COMPLEX PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

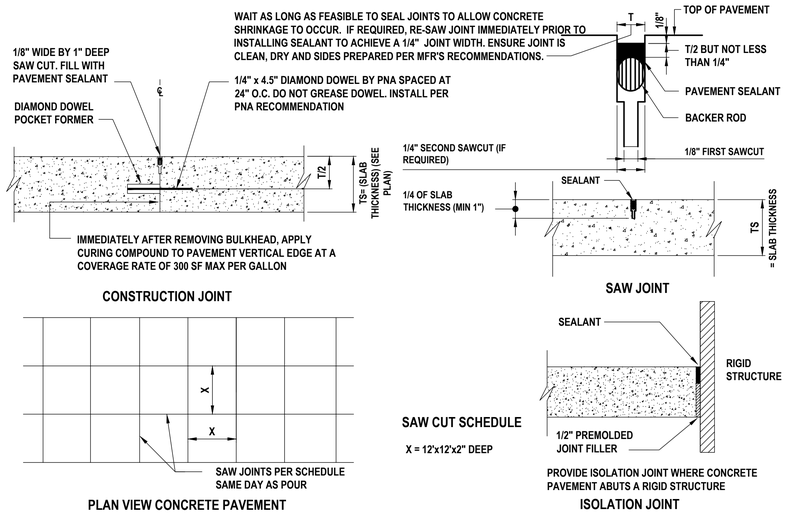
MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

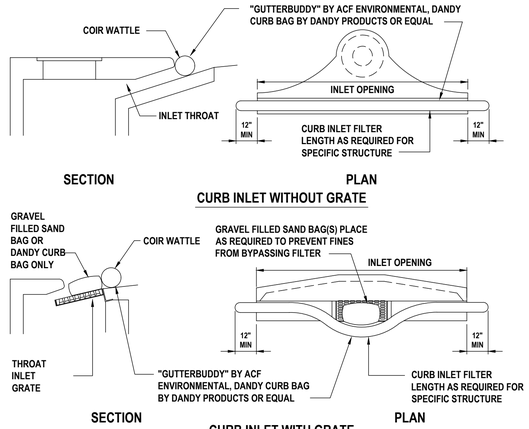
DRAWING NUMBER

14



CONCRETE PAVEMENT JOINT DETAILS

NOT TO SCALE

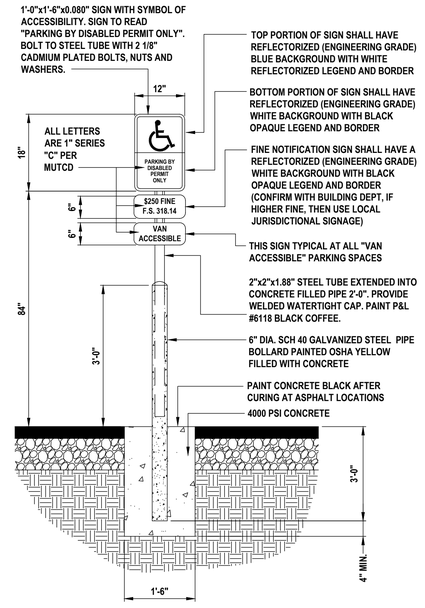


NOTES:

1. INSTALL FILTER PRIOR TO BEGINNING CONSTRUCTION.
2. INSPECT ONCE EACH WEEK AND AFTER ANY RAIN EVENT. REMOVE ANY FINES AND DEBRIS THAT MAY HAVE ACCUMULATED AND DISPOSE OF PROPERLY.

CURB INLET SEDIMENT PREVENTION DETAIL

NOT TO SCALE



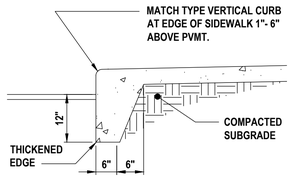
NOTE:

1. PARKING SPACE IDENTIFICATION SIGN SHALL CONFORM WITH CURRENT STATE, LOCAL AND FEDERAL CODES AND REGULATIONS.
2. ALL SIGNS SHALL BE DESIGNATED TO WITHSTAND 130 MPH WIND SPEED.

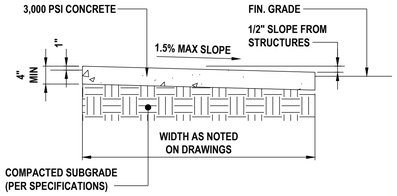
HANDICAP PARKING SIGN

NOT TO SCALE

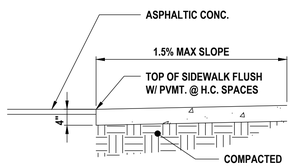
CONCRETE WALKS SHALL BE 4 INCHES THICK, CLASS I, HAVING A 3,000 PSI STRENGTH @ 28 DAYS, POURED OVER PROPERLY PREPARED SUBGRADE. ALL CONCRETE SIDEWALKS SHALL BE 8 INCHES THICK ACROSS DRIVEWAYS. 1/2 INCH EXPANSION JOINTS SHALL BE PLACED AT A MAXIMUM OF 50'. CRACK CONTROL JOINTS SHALL BE 5' ON CENTERS.



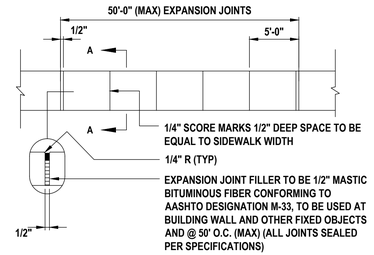
THICKENED EDGE ADJACENT TO PAVEMENT



SECTION A-A



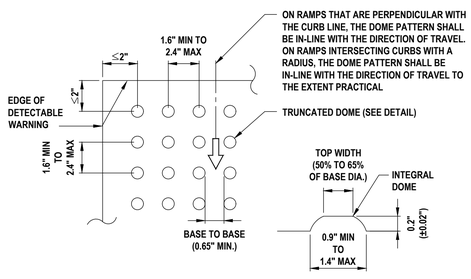
THICKENED EDGE ADJACENT TO ADA WALKWAY



PLAN

SIDEWALK DETAILS

NOT TO SCALE

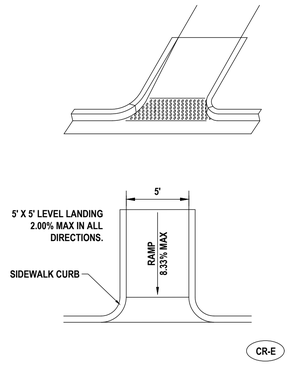


NOTES:

1. CURB RAMP DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24" FROM THE BACK OF CURB. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATION 527 (SEE DETAIL ABOVE). TRANSITION SLOPES SHALL NOT HAVE DETECTABLE WARNINGS.
2. DETECTABLE WARNING SURFACES SHALL BE SURFACE APPLIED PRODUCTS SUCH AS THOSE MANUFACTURED BY ARMOR TILE OR THEIR EQUAL. SURFACE COLOR SHALL BE YELLOW OR RED.
3. THE ACCEPTANCE CRITERIA FOR DETECTABLE WARNING ARE AS FOLLOWS:
   a. THE RAMP DETECTABLE WARNING SURFACE SHALL BE COMPLETE AND UNIFORM IN COLOR AND TEXTURE.
   b. 90% OF THE INDIVIDUAL DOMES MUST COMPLY WITH THE DESIGN CRITERIA.
   c. THERE MAY BE NO MORE THAN 4 NON-COMPLYING DOMES IN ANY ONE SQUARE FOOT OF SURFACE.
   d. NO TWO ADJACENT DOMES MAY BE NON-COMPLIANT.
   e. SURFACE MAY NOT DEVIATE MORE THAN 0.1" FROM A TRUE PLANE.
4. SEE FDOT STANDARD PLANS INDEX No. 502-002, LATEST EDITION, FOR MORE DETAILS.

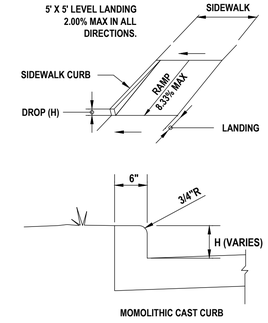
CURB RAMP DETECTABLE WARNING DETAIL

NOT TO SCALE



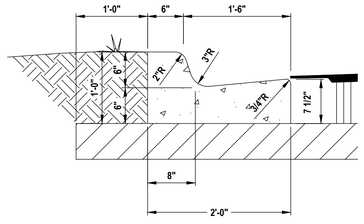
SIDEWALK CURB RAMP DETAIL

NOT TO SCALE



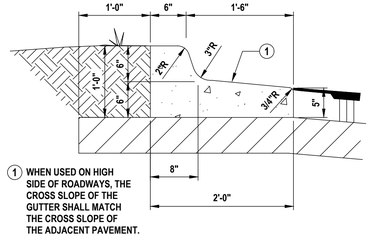
SIDEWALK CURB DETAIL

NOT TO SCALE



TYPE "F" CATCH CURB DETAIL

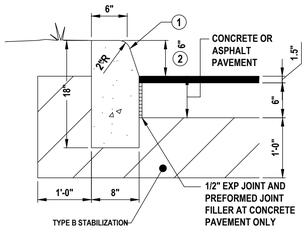
NOT TO SCALE



1. WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT.

TYPE "F" SPILLOUT CURB DETAIL

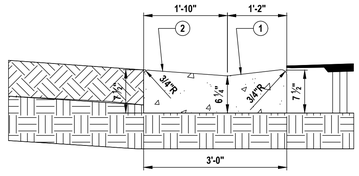
NOT TO SCALE



1. PROVIDE CONTRACTION JOINTS @ 10' O.C. AND EXPANSION JOINTS @ 50' O.C. ALL JOINTS SEALED PER SPECIFICATIONS
2. 6" HEIGHT SHALL BE UNIFORM, IF HEIGHT VARIES ± 1/2" THEN CURB WILL BE REPLACED AT THE DISCRETION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

TYPE "D" CURB DETAIL

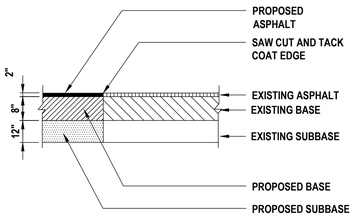
NOT TO SCALE



1. WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT.
2. SLOPE TO FIT DRIVEWAY

VALLEY GUTTER DETAIL

NOT TO SCALE



PAVEMENT BUTT JOINT DETAIL

NOT TO SCALE

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013

Civil Engineering
Transportation, CEI &
Landscape Architecture

NEWKIRK ENGINEERING INC.

MISCELLANEOUS DETAILS
NW REC COMPLEX TENNIS AND PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL T. MUNIER, PE # 97442 ON

Michael T Munier

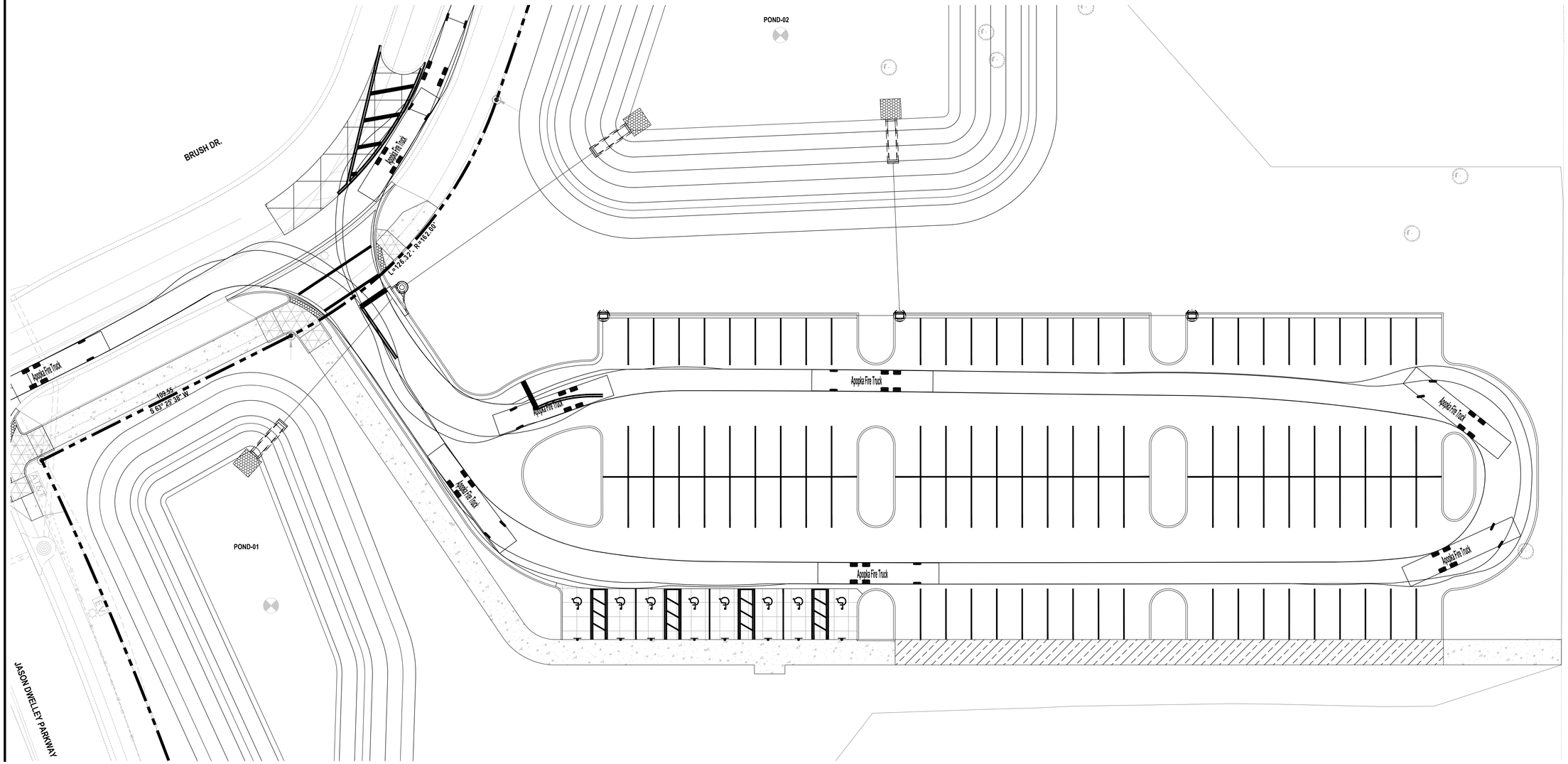
MICHAEL T. MUNIER LICENSE NO. 97442 STATE OF FLORIDA PROFESSIONAL ENGINEER

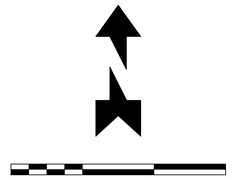
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

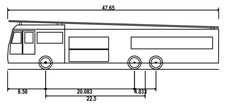
PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

15







Apopka Fire Truck	
Overall Length	47.650ft
Overall Width	8.333ft
Overall Body Height	11.000ft
Min Body Ground Clearance	1.422ft
Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	39.50°

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 672-7794
www.Newkirk-Engineering.com

C.A. # 30209
L.C. # 26000584
C 2013

Civil Engineering
Transportation, CEI &
Landscape Architecture

NEWKIRK
ENGINEERING INC.

AUTOTURN PLAN - FIRE TRUCK

NW REC COMPLEX PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MICHAEL MUNIER, PE # 97442 ON

Michael T Munier

MICHAEL T. MUNIER
LICENSE
NO. 97442
STATE OF FLORIDA
PROFESSIONAL ENGINEER

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	MTM
DRAWN BY:	MTM
CHECKED BY:	TJM

DRAWING NUMBER

16

30 20 10 0 30 60

GRAPHIC SCALE
1"=30'

EXISTING TREE LEGEND

CODE	SCIENTIFIC NAME	COMMON NAME
MG	MAGNOLIA SPECIES	MAGNOLIA
PE	PINUS ELLIOTTI	PINE
QN	QUERCUS NIGRA	WATER OAK
QV	QUERCUS VIRGINIANA	LIVE OAK

LEGEND

ST. AUGUSTINE SOD

BAHIA SOD

EXISTING TREE

JASON DWELLEY PARKWAY

627.92'

FIRE STATION #5

395.49'

FIREHOUSE LANE

277.79'

99.94'

POND-1

BAHIA SOD

SOD

CHANGE IN SOD TYPE

LIMITS OF CONSTRUCTION

TENNIS AND PICKLEBALL COURTS TO BE CONSTRUCTED BY HELLAS CONSTRUCTION UNDER A SEPARATE PERMIT

EXISTING 5-FT CONCRETE SIDEWALK

EXISTING FENCE

PROPERTY LINE

EXISTING BAMBOO TO REMAIN

MATCH-LINE SEE SHEET L2

8" QV 4" MG PMP 45 PMP 33 PMP 44 PMP 97 PMP 22 PMP 24 TRA 42 TRA 99 QV 1 18" QV 13" PE 10" PE 12" PE 9" PE 15" PE 8" PE 11" PE 14" PE 19" QV 4" QV 5" QV 6" QV

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7784
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

REVISIONS

DATE	DESCRIPTION

LANDSCAPE PLAN
NW REC COMPLEX PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712

CITY OF APOPKA

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY LAUREN ADAMS, RLA # 6667278 ON

Lauren Adams

Digitally signed by Lauren Adams
DN: CN=Lauren Adams
Reason: I am approving this document
Location: Orlando
Date: 2026.06.15 14:54:44-04'00'

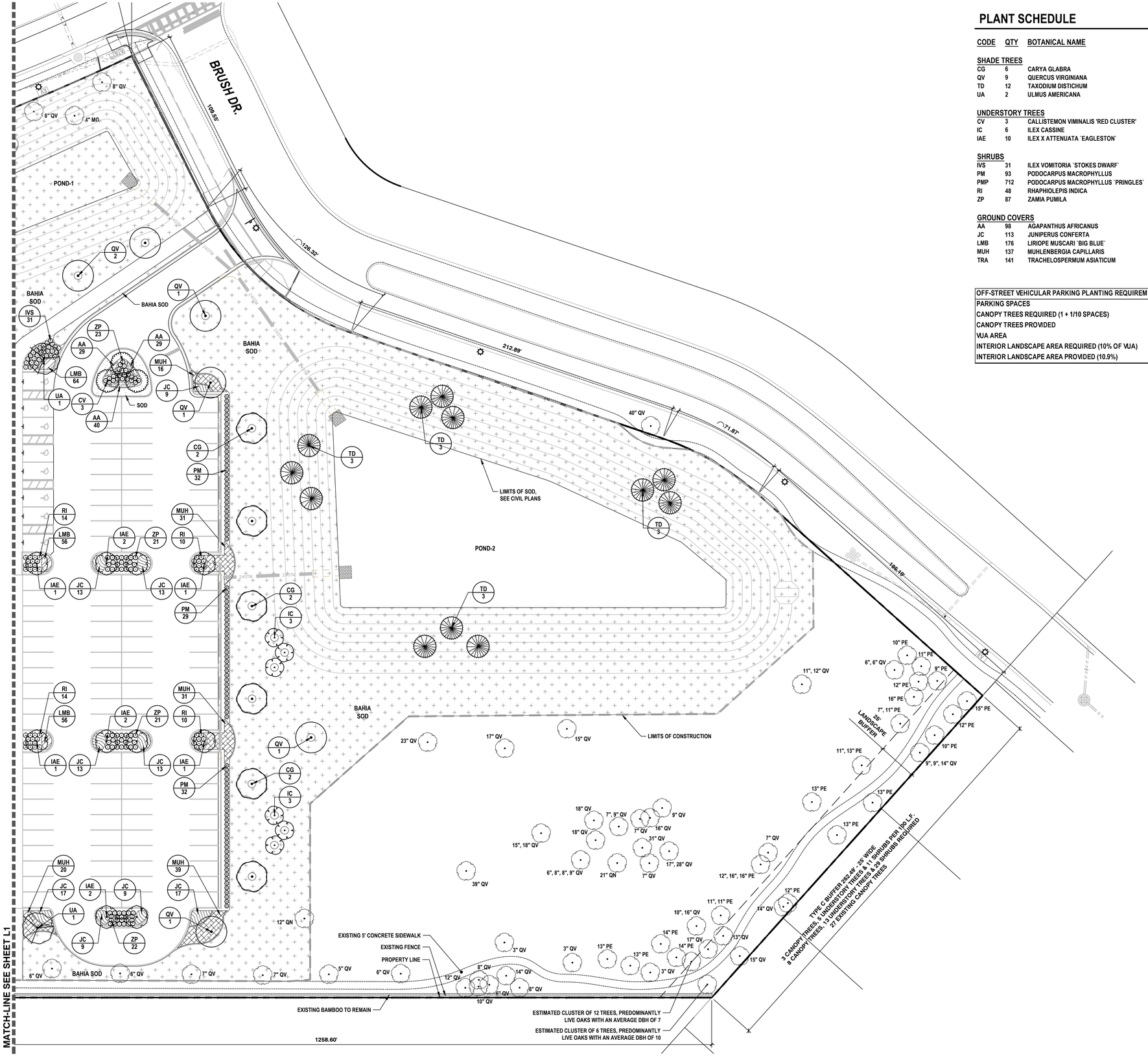
LAUREN ADAMS LICENSE NO. 6667278 STATE OF FLORIDA LANDSCAPE ARCHITECT

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 30'

DRAWING NUMBER

L1



PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
SHADE TREES					
CG	6	CARYA GLABRA	PIGNUT HICKORY	3" CAL., 8' HT.	
QV	9	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	3" CAL., 8' HT.	
TD	12	TAXODIUM DISTICHUM	BALD CYPRESS	3" CAL., 8' HT.	
UA	2	ULMUS AMERICANA	AMERICAN ELM	3" CAL., 8' HT.	
UNDERSTORY TREES					
CV	3	CALLISTEMON VIMINALIS 'RED CLUSTER'	RED CLUSTER WEEPING BOTTLEBRUSH	2.5" CAL., 6' HT.	
IC	6	ILEX CASSINE	DAHOON HOLLY	2.5" CAL., 6' HT.	3' C.T.
IAE	10	ILEX X ATTENUATA `EAGLESTON`	EAGLESTON HOLLY	2.5" CAL., 6' HT.	4' C.T., MIN.
SHRUBS					
IVS	31	ILEX VOMITORIA `STOKES DWARF`	STOKES DWARF YAUPON HOLLY	3 GAL., 12" HT. X 18" SPRD.	36" O.C.
PM	93	PODOCARPUS MACROPHYLLUS	YEW PINE	7 GAL., 36" HT.	36" O.C.
PMP	712	PODOCARPUS MACROPHYLLUS `PRINGLES`	DWARF PODOCARPUS	3 GAL.	30" O.C.
RI	48	RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	3 GAL., 15" HT. X 15" SPRD.	36" O.C.
ZP	87	ZAMIA PUMILA	COONTIE CYCAD	3 GAL.	36" O.C.
GROUND COVERS					
AA	98	AGAPANTHUS AFRICANUS	AFRICAN LILY	1 GAL.	12" O.C.
JC	113	JUNIPERUS CONFERTA	SHORE JUNIPER	1 GAL.	30" O.C.
LMB	176	LIRIOPE MUSCARI `BIG BLUE`	BIG BLUE LILYTURF	1 GAL.	12" O.C.
MUH	137	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	3 GAL.	36" O.C.
TRA	141	TRACHELOSPERMUM ASIATICUM	ASIAN JASMINE	1 GAL.	12" O.C.

OFF-STREET VEHICULAR PARKING PLANTING REQUIREMENTS	
PARKING SPACES	118
CANOPY TREES REQUIRED (1 + 1/10 SPACES)	13
CANOPY TREES PROVIDED	13
VUA AREA	48,012
INTERIOR LANDSCAPE AREA REQUIRED (10% OF VUA)	4,801
INTERIOR LANDSCAPE AREA PROVIDED (10.9%)	5,273

EXISTING TREE LEGEND

CODE	SCIENTIFIC NAME	COMMON NAME
MG	MAGNOLIA SPECIES	MAGNOLIA
PE	PINUS ELLIOTTI	PINE
QN	QUERCUS NIGRA	WATER OAK
QV	QUERCUS VIRGINIANA	LIVE OAK

LEGEND

ST. AUGUSTINE SOD

BAHIA SOD

EXISTING TREE

GRAPHIC SCALE
30 20 10 0 30 60
1"=30'

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

LANDSCAPE PLAN
NW REC COMPLEX PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY LAUREN ADAMS, RLA # 6667278 ON

Lauren Adams

Digitally signed by Lauren Adams
DN: C=US, E=lauren.adams@newkirk-engineering.com, O=Newkirk Engineering Inc, OU=Professional, CN=Lauren Adams
Date: 2026.06.15 14:56:05-04'00'

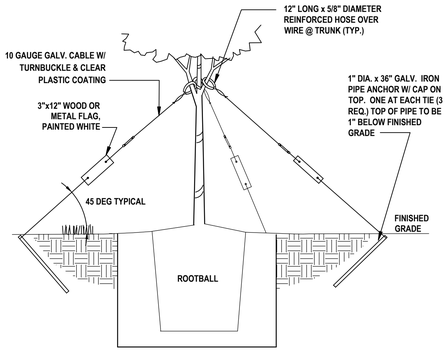
LAUREN ADAMS LICENSE NO. 6667278 STATE OF FLORIDA LANDSCAPE ARCHITECT

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

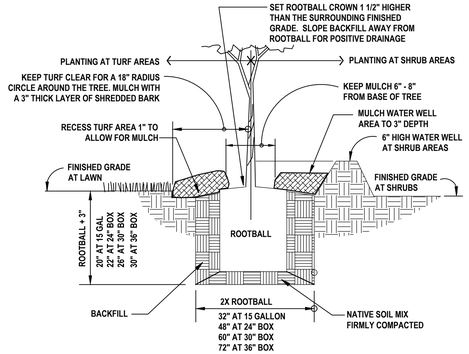
PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 30'

DRAWING NUMBER

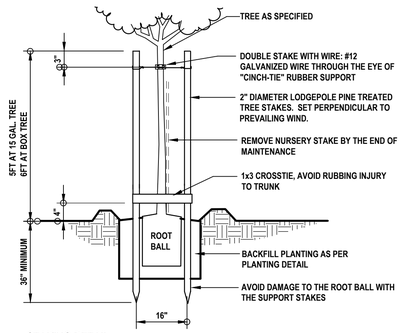
L2



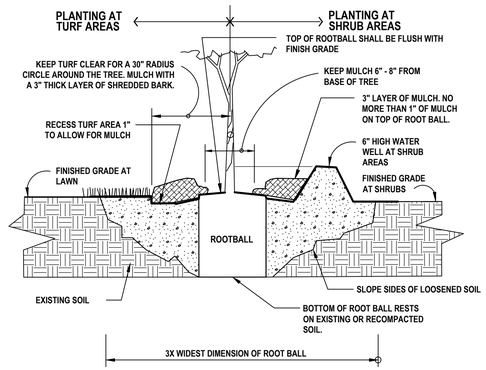
STAKING DETAIL



PLANT PIT DETAIL



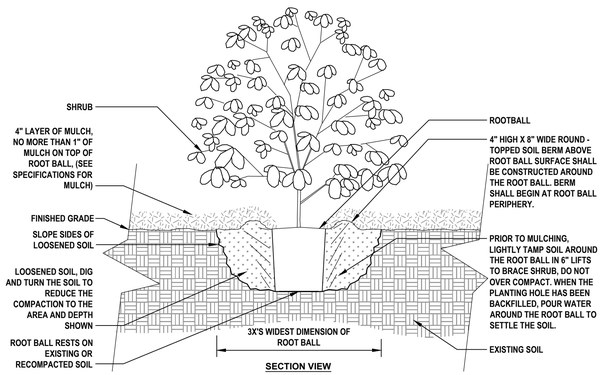
STAKING DETAIL



PLANT PIT DETAIL

1 TREE PLANTING DETAIL

1" = 1'-0" P-CO-2026-2004-01



NOTES:
1. SHRUBS SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

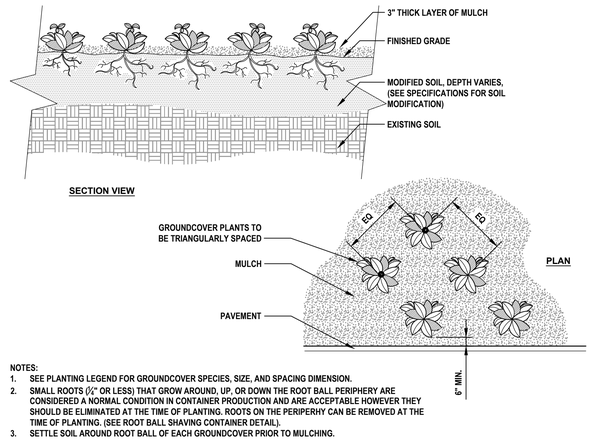
3 SHRUB PLANTING DETAIL

NTS P-CO-2026-2004-04

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE

2 SMALL TREE PLANTING DETAIL

1" = 1'-0" P-CO-2026-2004-03



NOTES:
1. SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
2. SMALL ROOTS (½" OR LESS) THAT GROW AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPERHY CAN BE REMOVED AT THE TIME OF PLANTING. (SEE ROOT BALL SHAVING CONTAINER DETAIL).
3. SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

4 GROUNDCOVER LAYOUT

1/16" = 1'-0" P-CO-2026-2004-02

LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS FOR FLORIDA #1 OR BETTER AS DESCRIBED IN THE CURRENT "GRADES AND STANDARDS FOR NURSERY PLANTS", STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, OR THEIR EQUAL AS DETERMINED BY THE LANDSCAPE ARCHITECT. PLANT MATERIAL SHALL BE CLEARLY IDENTIFIED AS FLORIDA #1 OR BETTER ON EITHER LABELS OR INVOICES.
2. ALL PLANT SPECIFICATIONS MUST BE MET OR EXCEEDED. SIZES IN PLANT SCHEDULE ARE MINIMUMS AND EACH MUST BE MET. CONTAINERS MAY NEED TO BE UP SIZED TO MEET ALL SPECIFICATIONS.
3. ALL MULCH SHALL BE PINE BARK AND INSTALLED 3" DEEP. TREES IN SOD TO BE IN A 5' MINIMUM-MULCHED RING. ALL PALMS TO BE IN A 3' MULCH RING. MULCH TO BE INSTALLED 6" FROM TRUNK AND 2" FROM PLANTS.
4. SOD SHALL BE ST. AUGUSTINE "FLORITAM" UNLESS OTHERWISE NOTED ON THE PLAN AND SHALL BE 95% WEED-FREE. WHERE SPECIFIED, BAHIA SOD SHALL BE 85% WEED-FREE. ALL SOD SHALL BE INSTALLED WITH TIGHT JOINTS, ROLLED AND FERTILIZED. ALL UNIMPROVED AREA NOT OTHERWISE PLANTED OR MULCHED SHALL BE SODDED WITH BAHIA UNLESS OTHERWISE NOTED ON THE LANDSCAPE PLAN.
5. ALL DIMENSIONS SHALL BE FIELD-CHECKED BY THE LANDSCAPE CONTRACTOR PRIOR TO CONSTRUCTION, WITH ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT.
6. THE PLANT MATERIALS SCHEDULE IS PROVIDED FOR THE CONVENIENCE OF THE LANDSCAPE CONTRACTOR; SHOULD THERE BE ANY DISCREPANCY BETWEEN THE PLAN AND THE PLANT LIST, THE PLAN WILL PREVAIL.
7. ALL MATERIALS MUST BE AS SPECIFIED AS ON THE LANDSCAPE PLAN. IF MATERIALS OR LABOR DO NOT ADHERE TO THE SPECIFICATIONS, THEY WILL BE REJECTED AT NO ADDITIONAL COST TO THE OWNER.
8. NO SUBSTITUTIONS OR CHANGES OF ANY KIND WILL BE ALLOWED AT THE TIME OF BIDDING SO AS TO PROVIDE FOR FAIR COMPARISON.
9. VERIFY EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND CONDITIONS PRIOR TO HIS COMMENCEMENT OF THE ANY WORK.
10. ALL BUILDING MATERIALS AND LABOR SHALL CONFORM TO THE FLORIDA BUILDING CODE AND ALSO TO ALL LOCAL CODES THAT HAVE JURISDICTION.
11. PRIOR TO CONSTRUCTION OF PLANTING BEDS, ALL AREAS ARE TO HAVE SOIL TESTS CONDUCTED TO DETERMINE pH AND SOIL FERTILITY. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO AMEND THE SOIL TO MEET ADEQUATE FERTILITY AND pH FOR CORRESPONDING PLANT MATERIAL. ALL TEST RESULTS SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT.
12. WHERE AZALEAS, ROSES OR LOROPETALUMS ARE TO BE PLANTED, THE SOIL SHALL BE AMENDED BY REMOVING SOME OF THE NATIVE SOIL AND REPLACING WITH SOIL WITH A PH RANGE OF BETWEEN 5.5 - 6.5.
13. EQUIPMENT SHALL BE OPERATED IN A MANNER AS NOT TO INJURE OR DESTROY ANY TREES SHOWN TO REMAIN. CONTRACTOR SHALL NOT CAUSE OR ALLOW THE CLEANING OF EQUIPMENT OR MATERIAL WITHIN THE DRIP LINE OF ANY TREE OR GROUPS OF TREES TO BE RETAINED OR THOSE PROPOSED. NOR SHALL THE CONTRACTOR ALLOW THE DISPOSAL OF WASTE MATERIAL, SUCH AS PAINT, OIL SOLVENTS, ASPHALT, CONCRETE, MORTAR OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF A TREE WITHIN THE DRIP LINE OF ANY TREE OR GROUP OF TREES. NO ATTACHMENT, WIRES (OTHER THAN PROTECTIVE GUY WIRES), SIGNS, OR PERMITS MAY BE FASTENED TO A TREE.
14. ANY EXISTING TREES CREDITED TOWARDS REQUIRED BUFFERS OR LANDSCAPE REQUIREMENTS REMOVED FOR ANY REASON SHALL BE REPLACED WITH TREES MEETING CITY APPROVAL WITH REGARDS TO SPECIES AND SIZE.
15. ALL QUESTIONS CONCERNING THE PLAN AND/OR SPECIFICATIONS SHALL BE DIRECTED TO THE LANDSCAPE ARCHITECT (386) 872-7794.
16. ALL TREES AND PALMS MUST BE STAKED USING THE DETAILS PROVIDED OR ARBORGUY STAKING SYSTEMS. ANY STAKING SYSTEM NOT INCLUDED MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.
17. ALL DISTURBED AREA SHALL BE SODDED WITH BAHIA UNLESS OTHERWISE NOTED ON THE LANDSCAPE PLAN.
18. THE CONTRACTOR SHALL GUARANTEE ALL INSTALLED PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR AFTER ACCEPTANCE IN WRITING BY OWNER OR OWNER'S REPRESENTATIVE. ALL PLANT MATERIAL SHALL BE WATERED REGULARLY AS NEEDED UNTIL ESTABLISHED. FOR TREES, UP TO ONE YEAR AND FOR SHRUBS/GROUNDCOVER, GENERALLY 2 -3 MONTHS.
19. REMOVE ALL CONSTRUCTION DEBRIS, LIMEROCK, EXCESS OF BUILDERS SAND, CONCRETE AND MORTAR DEBRIS, EXISTING WEEDS AND GRASS, AND ALL FOREIGN MATERIALS IN THE PLANTING BED AND SOD AREAS.
20. ALL EXISTING TREES AND PALMS WILL BE PROPERLY PRUNED AND CLEANED OF DEADWOOD, BROKEN BRANCHES, DEAD FROND AND VINES AS NEEDED. ALL STRUCTURAL PRUNING OF HARDWOOD TREES SHALL BE PERFORMED UNDER THE DIRECTION OF A CERTIFIED ARBORIST.
21. ALL NOXIOUS OR EXOTIC VEGETATION THAT DETRACTS FROM THE APPEARANCE OF THE EXISTING OR PLANTED VEGETATION WITHIN THE TREE PROTECTION AREA OR BUFFERS SHALL BE REMOVED. THE EDGE OF THE AREAS TO REMAIN NATURAL SHALL BE MULCHED WITH PINE STRAW TO A DEPTH OF 3 INCHES, 5 FEET IN BEHIND BED LINE AND A CURVILINEAR BED LINE SHALL BE CREATED ADJACENT TO SODDED AREAS.
22. ALL PLANTS SHALL BE INSTALLED ACCORDING TO THE FLORIDA FRIENDLY BEST MANAGEMENT PRACTICES FOR PROTECTION OF WATER RESOURCES BY THE GREEN INDUSTRIES.
23. NATURAL AREA: AREAS TO REMAIN NATURAL SHALL BE CLEANED OF ALL INVASIVE PLANT SPECIES AND UNDERBRUSH SHOULD BE REMOVED WITHIN 5' OF EDGE. PINE STRAW MULCH SHOULD BE APPLIED CREATING A CURVED BEDLINE.
24. CONTRACTOR MUST PROVIDE AS-BUILT MARK UPS TO THE LANDSCAPE ARCHITECT FOR ANY CHANGES MADE TO THE PLANS.

PLANT SPECIFICATION NOTES

1. PLANT DESCRIPTIONS ARE FOR MINIMUM ACCEPTABLE SPECIFICATIONS. ALL CRITERIA LISTED FOR CONTAINER SIZE, CALIPER, HEIGHT, SPREAD, ETC. MUST BE MET FOR PLANT MATERIAL ACCEPTANCE. FOR EXAMPLE, IF A THREE (3) GALLON SHRUB DOES NOT MEET THE HEIGHT OR SPREAD SPECIFICATION, IT WILL NOT BE ACCEPTED.
2. IF SPECIFIED PLANTS ARE UNAVAILABLE AT THE TIME OF CONSTRUCTION, CONTRACTOR MAY REPLACE SPECIFIED PLANTS WITH PLANTS APPROVED BY LANDSCAPE ARCHITECT AND CITY STAFF.

LANDSCAPE SOIL SPECIFICATIONS

1. CONTRACTOR WILL BE RESPONSIBLE FOR ANY REQUIRED EXCAVATION AND FOR RAKING AND SMOOTHING OF GRADE. IT IS RECOMMENDED THAT LANDSCAPE CONTRACTOR COORDINATE WITH GRADING CONTRACTOR TO ESTABLISH SUBGRADES FOR PLANTING AREAS AS REQUIRED BELOW.
2. LANDSCAPE SOIL REFERS TO STOCKPILED TOPSOIL OR THE PLANTING MIXTURE AS SPECIFIED BELOW. STRUCTURAL SOIL OR FILL DIRT SHALL NOT BE USED IN PLANTED AREAS.
3. TOPSOIL SHALL BE STOCKPILED IF THE SITE CONSISTS OF NATIVE PLANT COMMUNITIES. IF NOXIOUS AND/OR INVASIVE PLANT SPECIES ARE PRESENT, TOPSOIL SHALL NOT BE STOCKPILED AND THE PLANTING MIXTURE BELOW SHALL BE USED.
4. IF STOCKPILED, THE TOPSOIL SHALL BE SALVAGED TO A DEPTH OF 4 TO 6 INCHES AND STOCKPILED NO HIGHER THAN 3 FEET IN HEIGHT.
5. TOPSOIL SHALL BE STORED FOR AS SHORT A DURATION AS POSSIBLE TO ENSURE SURVIVAL OF SEEDS AND SOIL ORGANISMS.
6. IF TOPSOIL HAS NOT BEEN STOCKPILED, PLANTING MIXTURE FOR TREES AND SHRUBS SHALL CONSIST OF 1/3 "COMPOST", 1/3 COARSE SAND, AND 1/3 EXISTING SOIL, THOROUGHLY MIXED. IF THE EXISTING SOIL IS NOT NATIVE AND FREE OF INVASIVES, THEN TOPSOIL SHALL BE IMPORTED FOR THIS COMPONENT.
7. MIXTURE FOR PALMS SHALL BE 50 PERCENT COARSE SAND AND 50 PERCENT EXISTING SOIL. MIX THOROUGHLY WITH EXISTING SOIL.
8. LANDSCAPE SOIL SHALL BE USED IN ALL PLANT BEDS CONSISTING OF SHRUBS AND GROUNDCOVER TO A DEPTH OF 6" AND MULCH TO A DEPTH OF 3".
9. LANDSCAPE SOIL SHALL BE FREE OF DEBRIS, WEEDS, PARTICLES LARGER THAN 0.50 INCHES AND RINSATE CONTAINING LIME OR TOXIC MATERIALS.
10. EXISTING SOIL SHOULD NOT BE CONTINUOUSLY EXCAVATED BENEATH THE DRIP LINE OF EXISTING TREES. IN THIS CASE, IF SHRUBS OR GROUNDCOVER ARE PROPOSED, THEY SHOULD BE PLANTED IN NATIVE SOIL WITHOUT AMENDMENT.

REFER TO LANDSCAPE DETAILS FOR MINIMUM PLANTING PIT DIMENSIONS.

EXISTING TREE NOTES

1. PRUNE ALL TREES TO REMAIN IN ACCORDANCE WITH ANSI A 300 PRUNING STANDARDS AS PERFORMED BY AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) OR A REGISTERED CONSULTING ARBORIST WITH THE AMERICAN SOCIETY OF CONSULTING ARBORISTS (ASCA).
2. REMOVE ALL EXISTING MULCH AND ENSURE ONE OR TWO LARGE ROOTS ARE EXPOSED. ADD NEW MULCH TO A DEPTH OF 3" TO BED SURROUNDING TREES. KEEP MULCH 6" FROM TRUNK. DO NOT PILE MULCH AGAINST TRUNK.

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 872-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

LANDSCAPE DETAILS AND NOTES

NW REC COMPLEX PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

CITY OF APOPKA

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY LAUREN ADAMS, RLA # 6667278 ON

Digitally signed by Lauren Adams
DN: CN=Lauren Adams
Date: 2026.06.15 14:59:43-04'00'

Lauren Adams

LAUREN ADAMS LICENSE NO. 6667278 STATE OF FLORIDA LANDSCAPE ARCHITECT

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	AS SHOWN

DRAWING NUMBER

L3

IRRIGATION SCHEDULE

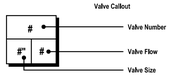
SYMBOL	MANUFACTURER/MODEL	QTY
ES LCS RCS CS SS	HUNTER PROS-06-PRS30-CV-F-R 5` STRIP SPRAY	10
Q T H F	HUNTER PROS-06-PRS30-CV-F-R 8` RADIUS	4
Q T H TT TQ F	HUNTER PROS-06-PRS30-CV-F-R 15` RADIUS	80
8 9 10 12 15 17	HUNTER PROS-06-PRS30-CV-F-R ADJUSTABLE ARC	22

SYMBOL	MANUFACTURER/MODEL	QTY
1.0	HUNTER I-20-06-PRB-SR 1.0	2
1.5	HUNTER I-20-06-PRB-SR 1.5	27
1.0	HUNTER PGJ-06-R (2) 1.0	1
2.5	HUNTER PGJ-06-R (2) 2.5	3
3.0	HUNTER PGJ-06-R (2) 3.0	1
5.0	HUNTER PGJ-06-R (2) 5.0	20

SYMBOL	MANUFACTURER/MODEL	QTY
	HUNTER ICZ-101-25	5
	TREE RING - TWO DRIP RINGS - 30 PSI	48
	AREA TO RECEIVE DRIPLINE HUNTER HDL-09-12-R	6,086 LF

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G-FS-R 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE. WITH FILTER SENTRY FACTORY INSTALLED OPTION, AND RECLAIMED WATER ID, PURPLE HANDLE.	11
C	HUNTER I2C-2400-M 24 STATION OUTDOOR MODULAR CONTROLLER. WITH TWO ICM-800 MODULE. COMMERCIAL USE. METAL CABINET.	1
SS	HUNTER SOLAR-SYNC SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE, CONNECTS TO HUNTER PCC, PRO-C, AND I-CORE CONTROLLERS, INSTALL AS NOTED. INCLUDES 10 YEAR LITHIUM BATTERY AND RUBBER MODULE COVER, AND GUTTER MOUNT BRACKET. WIRED.	1
M	WATER METER 1-1/2" 1.5" RECLAIM METER	1
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	6,171 LF
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21	1,096 LF
	PIPE SLEEVE: PVC SCHEDULE 40	498.4 LF

Valve Callout

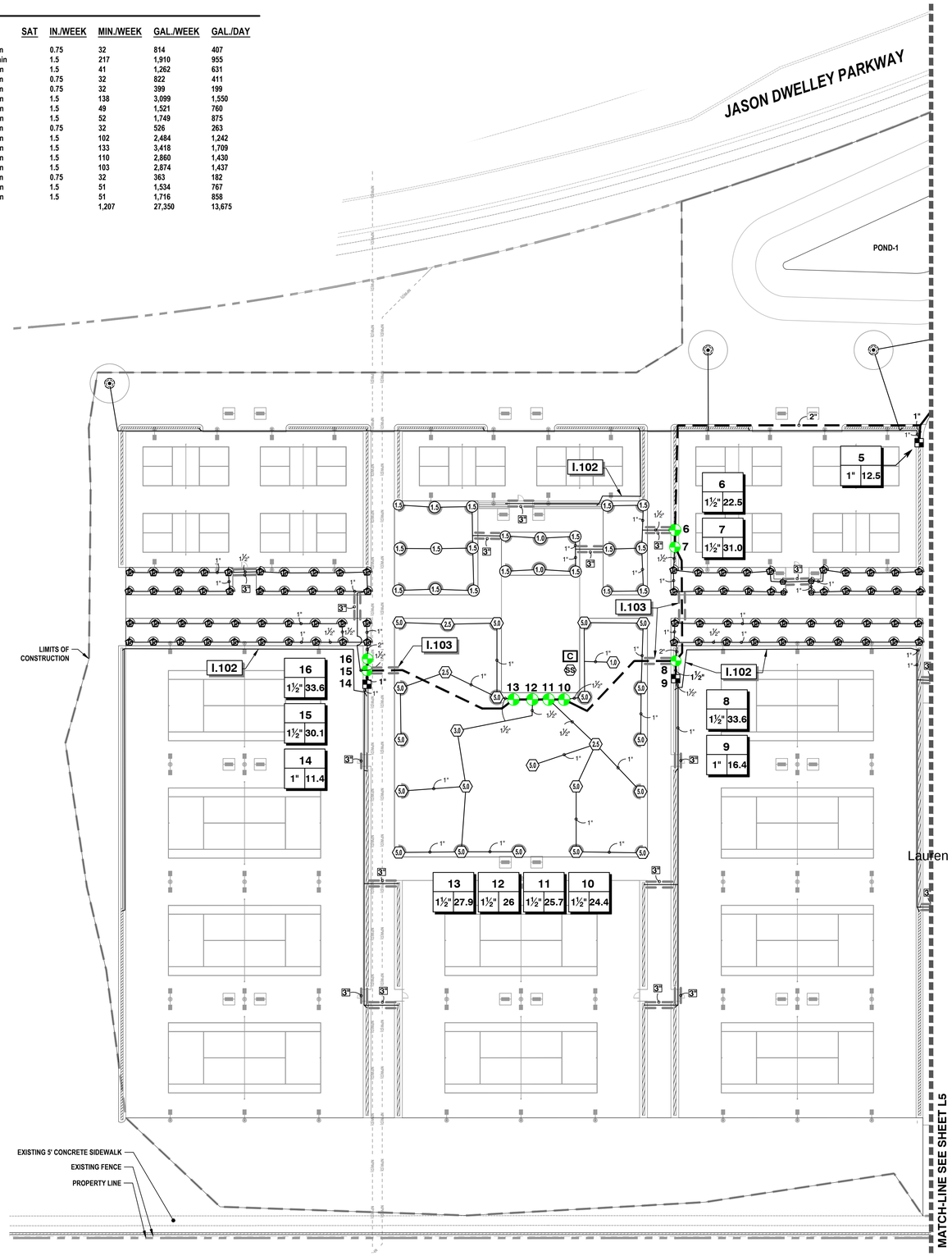


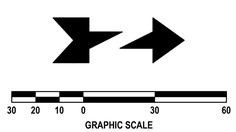
REFERENCE NOTES SCHEDULE

CODE	DESCRIPTION
IRRIGATION	
I.101	ALL IRRIGATION EQUIPMENT AND LINES TO BE LOCATED IN LANDSCAPE BEDS.
I.102	IRRIGATION LINES SHOWN OUT OF LANDSCAPE BEDS FOR CLARITY ONLY.
I.103	4" SLEEVE WATER, 2" SLEEVE WIRE

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	SUN	MON	TUE	WED	THU	FRI	SAT	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	HUNTER ICZ-101-25	AREA FOR DRIPLINE	1.44 in/h			16 min			16 min		0.75	32	814	407
2	HUNTER ICV-G-FS-R	TURF ROTOR	0.41 in/h			109 min			109 min		1.5	217	1,910	955
3	HUNTER ICV-G-FS-R	TURF SPRAY	2.24 in/h			21 min			21 min		1.5	41	1,262	631
4	HUNTER ICZ-101-25	AREA FOR DRIPLINE	1.44 in/h			16 min			16 min		0.75	32	822	411
5	HUNTER ICZ-101-25	AREA FOR DRIPLINE	1.45 in/h			16 min			16 min		0.75	32	399	199
6	HUNTER ICV-G-FS-R	TURF ROTOR	0.65 in/h			69 min			69 min		1.5	138	3,099	1,550
7	HUNTER ICV-G-FS-R	TURF SPRAY	1.87 in/h			25 min			25 min		1.5	49	1,521	760
8	HUNTER ICV-G-FS-R	TURF SPRAY	1.76 in/h			26 min			26 min		1.5	52	1,749	875
9	HUNTER ICZ-101-25	AREA FOR DRIPLINE	1.45 in/h			16 min			16 min		0.75	32	526	263
10	HUNTER ICV-G-FS-R	TURF ROTOR	0.89 in/h			51 min			51 min		1.5	102	2,484	1,242
11	HUNTER ICV-G-FS-R	TURF ROTOR	0.68 in/h			67 min			67 min		1.5	133	3,418	1,709
12	HUNTER ICV-G-FS-R	TURF ROTOR	0.82 in/h			55 min			55 min		1.5	110	2,860	1,430
13	HUNTER ICV-G-FS-R	TURF ROTOR	0.88 in/h			52 min			52 min		1.5	103	2,874	1,437
14	HUNTER ICZ-101-25	AREA FOR DRIPLINE	1.45 in/h			16 min			16 min		0.75	32	363	182
15	HUNTER ICV-G-FS-R	TURF SPRAY	1.79 in/h			26 min			26 min		1.5	51	1,534	767
16	HUNTER ICV-G-FS-R	TURF SPRAY	1.77 in/h			26 min			26 min		1.5	51	1,716	858
		TOTALS:				607			607			1,207	27,350	13,675





REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 672-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

IRRIGATION PLAN
NW REC COMPLEX PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712

CITY OF APOPKA

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY LAUREN ADAMS, RLA # 6667278 ON

Lauren Adams

Digitally signed by Lauren Adams
DN: CN=Lauren Adams
Reason: I am approving this document
Location:
Date: 2026.06.15 14:58:27-04'00'

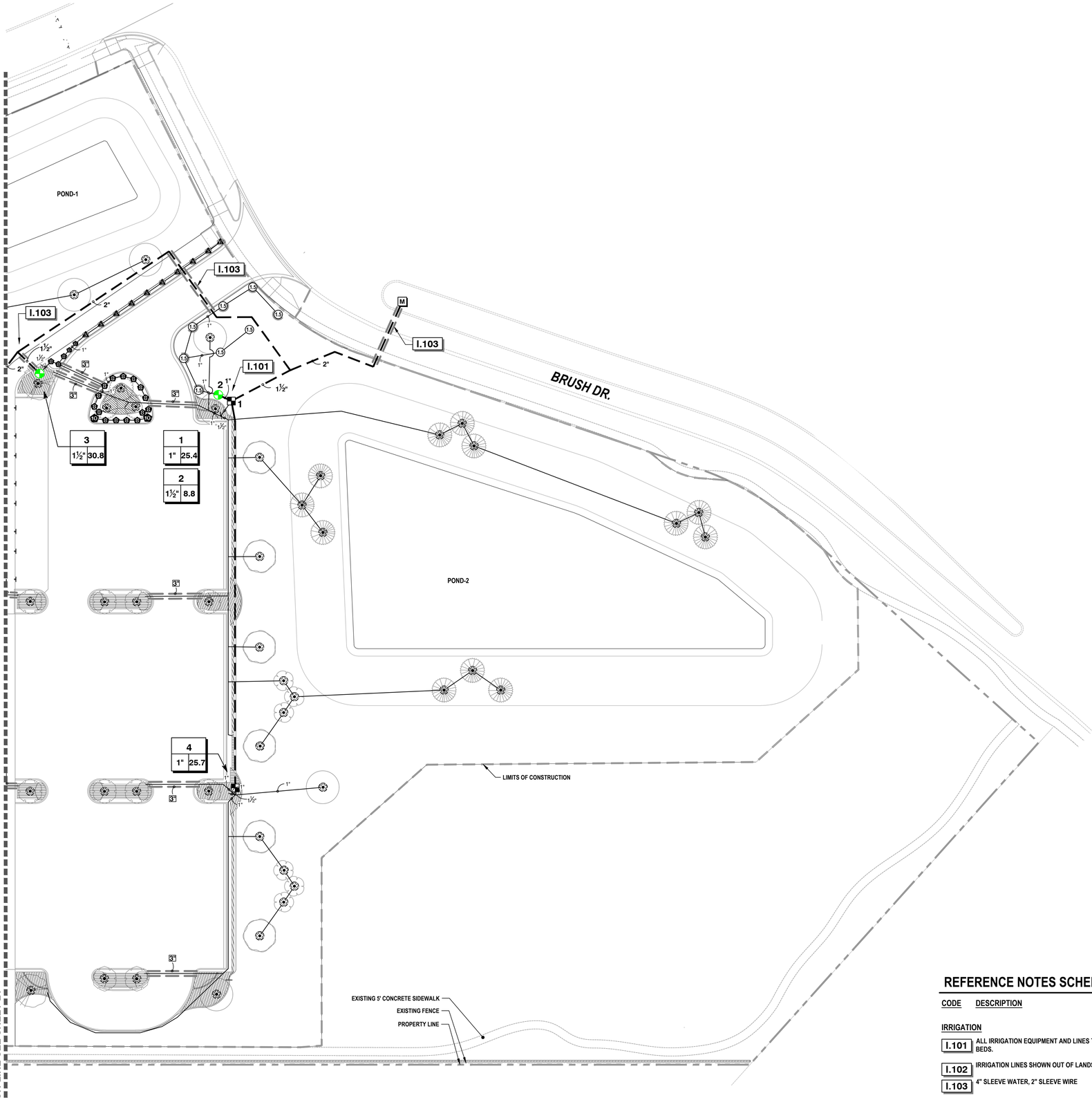
LAUREN ADAMS LICENSE NO. 6667278 STATE OF FLORIDA LANDSCAPE ARCHITECT

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 30'

DRAWING NUMBER

L4



REFERENCE NOTES SCHEDULE

CODE	DESCRIPTION
IRRIGATION	
I.101	ALL IRRIGATION EQUIPMENT AND LINES TO BE LOCATED IN LANDSCAPE BEDS.
I.102	IRRIGATION LINES SHOWN OUT OF LANDSCAPE BEDS FOR CLARITY ONLY.
I.103	4" SLEEVE WATER, 2" SLEEVE WIRE

GRAPHIC SCALE
1"=30'
30 20 10 0 30 60

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 672-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

IRRIGATION PLAN
NW REC COMPLEX PICKLEBALL COURTS
BRUSH DRIVE, APOPKA FL 32712
CITY OF APOPKA

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY LAUREN ADAMS, RLA # 6667278 ON

Lauren Adams

Digitally signed by Lauren Adams
DN: cn=Lauren Adams, o=Newkirk Engineering Inc, ou=Landscape Architecture, email=LAdams@Newkirk-Engineering.com, c=US
Date: 2025-06-13 14:55:46-04'00'

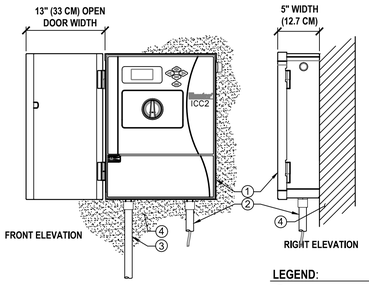
LAUREN ADAMS LICENSE NO. 6667278 STATE OF FLORIDA LANDSCAPE ARCHITECT

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 30'

DRAWING NUMBER

L5



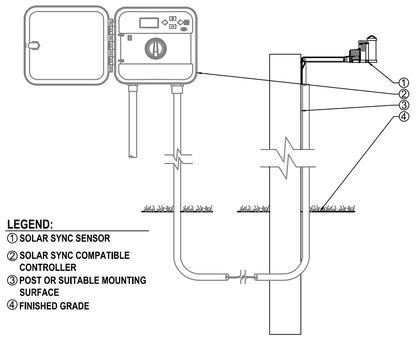
NOTE:
MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL, CONTROLLER SHALL BE HARD-WIRED TO GROUNDED 110 VAC POWER SOURCE

LEGEND:

1. IRRIGATION CONTROLLER (12C-800-M) PER PLAN
2. IRRIGATION CONTROL WIRE IN CONDUIT SIZE AND TYPE PER LOCAL CODES
3. ELECTRICAL SUPPLY CONDUIT CONNECT TO POWER SOURCE, J-BOX INSIDE CONTROLLER
4. ADJACENT SURFACE TO MOUNT CONTROLLER PER PLAN

1 HUNTER ICC2 CONTROLLER

1/8" = 1'-0" P-CO-2026-2004-21



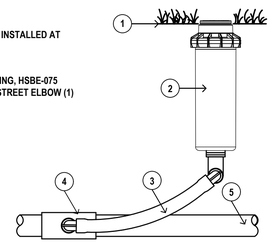
LEGEND:

1. SOLAR SYNC SENSOR
2. SOLAR SYNC COMPATIBLE CONTROLLER
3. POST OR SUITABLE MOUNTING SURFACE
4. FINISHED GRADE

2 HUNTER SOLAR SYNC SENSOR

1/8" = 1'-0" P-CO-2026-2004-22

1. FINISH GRADE
2. SPRAY OR ROTOR HEAD INSTALLED AT FINISH GRADE
3. SWING JOINT: HUNTER 'PRO-FLEX' TUBING, HSBE-075 ELBOWS (2), & MARLEX STREET ELBOW (1)
4. LATERAL TEE OR ELL
5. LATERAL PIPE

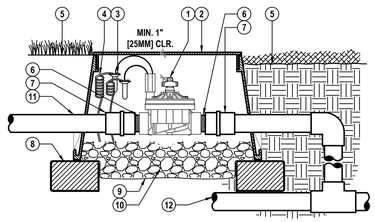


3 SPRAY HEAD AND ROTOR DETAIL

1/4" = 1'-0" P-CO-2026-2004-17

LEGEND

1. HUNTER REMOTE CONTROL VALVE (ICV) WITH FLOW CONTROL
2. IRRIGATION VALVE BOX: HEAT STAMP LID WITH 'RCV' IN 2" LETTERS
3. WATERPROOF CONNECTORS (2)
4. 18"-24" COILED WIRE TO CONTROLLER
5. FINISH GRADE AT ADJACENT SURFACE (TURF OR MULCH)
6. SCH. 80 CLOSE NIPPLE, SIZE PER RCV
7. PVC SLIP X FPT ADAPTOR
8. BRICK SUPPORTS (4)
9. FILTER FABRIC - WRAP TWICE AROUND BRICK SUPPORTS
10. 3/4" WASHED GRAVEL - 4" MIN. DEPTH
11. IRRIGATION LATERAL
12. MAINLINE AND FITTINGS



4 HUNTER REMOTE CONTROL VALVE (ICV)

1 1/2" = 1'-0" P-CO-2026-2004-20

NOTES:
AIR RELIEF VALVE (PLD-AVR) INSTALLED IN VALVE BOX AT OPTIMAL HIGHEST POINT FROM CONTROL ZONE KIT. MULTIPLE AIR RELIEF VALVES MAY BE NEEDED TO ACCOMMODATE DIFFERENCES IN GRADE.

ECO-INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN POPPED UP.

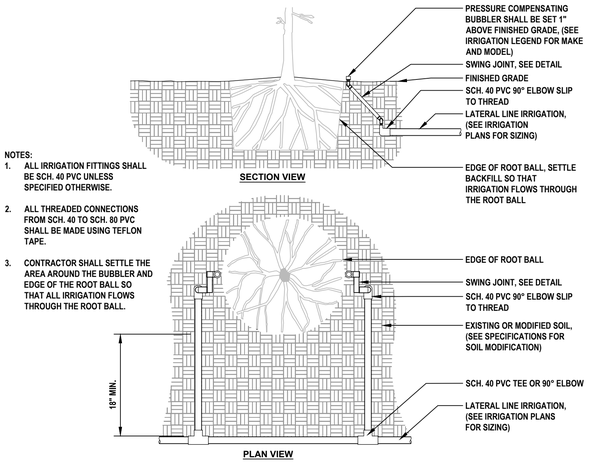
FLUSH POINT TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT TO ALLOW FOR MAXIMUM DEBRIS FLUSH IN SYSTEM.

LEGEND:

1. HUNTER DRIPLINE (HDL) PER PLAN
2. TREE (SEE PLANTING PLAN)
3. PLD OR PLD-LOC FITTING TYP.
4. PVC TO DRIP LINE TUBING CONNECTION (PLD OR PLD-LOC FITTINGS) TYP.
5. PVC LATERAL LINE

5 TREE RING - SHADE/CANOPY TREE

1 1/2" = 1'-0" P-CO-2026-2004-12

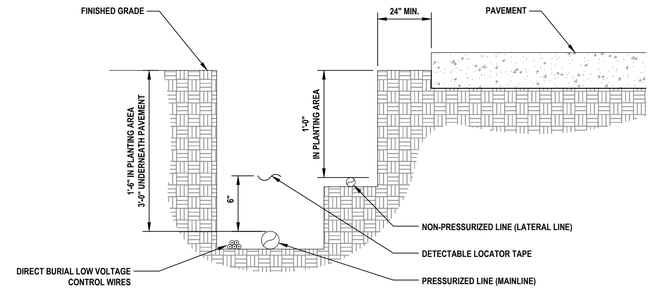


NOTES:
1. ALL IRRIGATION FITTINGS SHALL BE SCH. 40 PVC UNLESS SPECIFIED OTHERWISE.
2. ALL THREADED CONNECTIONS FROM SCH. 40 TO SCH. 80 PVC SHALL BE MADE USING TEFLON TAPE.
3. CONTRACTOR SHALL SETTLE THE AREA AROUND THE BUBBLER AND EDGE OF THE ROOT BALL SO THAT ALL IRRIGATION FLOWS THROUGH THE ROOT BALL.

6 IRRIGATION BUBBLER (2) W/ LAYOUT

URBAN TREE FOUNDATION © 2014 OPEN SOURCE FREE TO USE

3/4" = 1'-0" P-CO-2026-2004-05



NOTES:
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. DIRECT BURIAL CONTROL WIRES SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT IF REQUIRED.
3. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
4. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

7 IRRIGATION TRENCHING

URBAN TREE FOUNDATION © 2014 OPEN SOURCE FREE TO USE

1 1/2" = 1'-0" P-CO-2026-2004-15

IRRIGATION NOTES

1. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES AND CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
2. *CHECK PRESSURE AND GPM OF WATER SUPPLY BEFORE BEGINNING JOB AND REPORT FINDING TO LANDSCAPE ARCHITECT. LANDSCAPE ARCHITECT WILL MAKE ANY ADJUSTMENT NECESSARY TO MAKE SYSTEM WORK AT ITS BEST.*
3. THE PLAN IS SCHEMATIC ONLY. THE CONTRACTOR SHALL INSTALL PIPING IN A MINIMUM NUMBER OF TRENCHES AND SHALL INSTALL PIPE IN A MINIMUM LENGTH.
4. IRRIGATION LINES ARE SHOWN DIAGRAMMATICALLY AND ARE INTENDED TO SHOW DISTRIBUTION ZONES ONLY. LINES LOCATED UNDER PAVEMENT SHALL BE KEPT TO A MINIMUM AND ALL PIPING UNDER PAVED AREAS SHALL BE SLEEVED.
5. WHEN INSTALLING IRRIGATION PIPING IN ISLAND AND OTHER NARROW PLANTING AREAS RUN PIPING CLOSE TO CURB AND NOT DOWN THE MIDDLE OF THE PLANTING AREA. (BEFORE DOING IRRIGATION GET A COPY OF THE LANDSCAPE PLAN AND KEEP IRRIGATION LINES OUT OF PLANTING AREAS WHERE POSSIBLE.)
6. QUANTITIES FOR IRRIGATION MATERIALS MAY BE ESTIMATES. CONTRACTOR SHALL DO THEIR OWN TAKEOFF.
7. INSTALL SLEEVE PIPING WHERE SHOWN ON THE DRAWINGS AT THE PROPER DEPTH. ALL SLEEVE PIPE SHALL BE SCHEDULE 40 PVC PIPE INSTALLED A MINIMUM OF 20" BELOW FINISHED PAVING GRADES. ALL SLEEVES WHEN PLACED IN FIELD ARE TO BE LOCATED BY A METAL PIPE AT EACH END AND LOCATED FROM TWO STATIONARY POINTS BY TAPE MEASUREMENTS.
8. ALL LATERAL PIPE SHALL BE INSTALLED A MINIMUM OF 12" BELOW GRADE.
9. ALL TRENCHING SHALL BE KEPT OUT OF THE DRIP LINE AREA OF ALL EXISTING TREES. USE RADIAL LINES OR TUNNELING WHEN NECESSARY TO ENCROACH INTO THE DRIP LINE AREA OF TREES.
10. LOCATE ALL VALVES AND OTHER IRRIGATION EQUIPMENT IN PLANT BED AREAS WITHIN THE PROJECT LIMITS FOR CONCEALMENT PURPOSES.
11. RISERS ARE TO BE HIDDEN COMPLETELY IN SHRUBBERY OR PAINTED BLACK AND IN NO CASE BE HIGHER THAN THE SHRUBBERY INSTALLED.
12. ALL VALVES SHALL BE INSTALLED IN VALVE BOXES. PROVIDE A 6" GRAVEL SUMP AT THE BOTTOM OF ALL VALVE BOXES AND INSTALL 1/2" TO 1" DIAMETER GRAVEL AT THE BOTTOM OF THE VALVE PIT.
13. IRRIGATION SHALL MEET ALL APPLICABLE CURRENT MUNICIPAL, COUNTY, STATE OR FEDERAL CODES, ORDINANCES AND REGULATIONS THAT HAVE JURISDICTION.
14. THERE SHALL BE A MINIMUM OF FOUR (4) INCHES OFFSET BETWEEN THE IRRIGATION EQUIPMENT AND PAVEMENT.
15. THERE SHALL BE A MINIMUM OF TWELVE (12) INCHES BETWEEN THE IRRIGATION EQUIPMENT AND STRUCTURES.
16. THERE SHALL BE NO DIRECT SPRAY ON WALKWAYS, BUILDINGS, DRIVES OR ROADWAYS.
17. ALL TURF IRRIGATION HEADS SHALL PROVIDE 100% HEAD TO HEAD COVERAGE.
18. ALL FITTINGS SHALL BE SCHEDULE 40 PVC.
19. ALL SPRAY HEADS ARE TO BE A MINIMUM OF 6" POP-UP AND ALL HEADS IN PLANTING AREAS TO BE 12" POP-UP OR RISERS. RISERS SHALL BE PAINTED HUNTER GREEN.
20. ALL DRIP ZONES SHALL INCLUDE AN AIR RELIEF VALVE INSTALLED IN A VALVE BOX AT OPTIMAL HIGHEST POINT FROM THE CONTROL ZONE KIT. MULTIPLE AIR RELIEF VALVES MAY BE NEEDED TO ACCOMMODATE DIFFERENCES IN GRADE. ECO-INDICATOR TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT IN CLEAR VIEW WHEN POPPED UP. FLUSH POINT TO BE INSTALLED AT OPTIMAL FURTHEST POINT FROM CONTROL ZONE KIT TO ALLOW FOR MAXIMUM DEBRIS FLUSH IN SYSTEM.
21. ALL DRIP ROWS SHALL BE SPACED A MINIMUM OF 12" APART AND A MAXIMUM OF 18" APART.
22. ELECTRICAL TO CONTROLLER SHALL BE SUPPLIED BY ELECTRICAL CONTRACTOR (NOT IRRIGATION CONTRACTOR).
23. TREE PROTECTION AREA. HAND TRENCH ALL PIPING IN THESE AREAS TO AVOID IMPACTING THE CRITICAL PROTECTION ZONE OF THE EXISTING TREES TO REMAIN (TYP).
24. CONTRACTOR TO PROVIDE CONTROLLER HANDBOOK AND OPERATION INSTRUCTIONS, AS-BUILT ZONE DIAGRAM, INCLUDING LOCATIONS AND SIZE OF COMPONENTS, AND SOLID MOISTURE SENSOR PROBE LOCATION IF APPLICABLE, PRECIPITATION RATES FOR EACH ZONE, AND SCHEDULE RUN TIMES, WINTER AND SUMMER TO THE OWNER.
25. CONTRACTOR MUST PROVIDE AS-BUILT MARK UPS TO THE LANDSCAPE ARCHITECT FOR ANY CHANGES MADE TO THE PLANS.
26. *PURPLE IRRIGATION EQUIPMENT MUST BE USED FOR ALL IRRIGATION IF REUSE WATER IS BEING USED.*

PLANT ESTABLISHMENT

1. IRRIGATE EVERY DAY FOR ONE MONTH.
2. IRRIGATE EVERY OTHER DAY FOR ONE ADDITIONAL MONTH.
3. IRRIGATE TWICE A WEEK THEREAFTER OR MORE OFTEN DURING DRY PERIODS IF PLANTS ARE SHOWING SIGNS OF DISTRESS SUCH AS WILTING OR BROWNING.
4. ENSURE RAIN SENSOR IS OPERATING CORRECTLY AND SYSTEM IS NOT WATERING ON DAYS WHEN IT RAINS.

BAHIA SOD TEMPORARY IRRIGATION NOTES

1. SOURCE: HAND WATERING OR ABOVE GROUND TEMPORARY IRRIGATION.
2. FREQUENCY: ONCE PER DAY IN WEEKS 1 THRU 3, THEN EVERY OTHER DAY IN WEEKS 4 THRU 6.
3. DURATION PER SESSION: 15 TO 30 MINUTES.

SYSTEM MINIMUM REQUIREMENTS

1. THIS SYSTEM ASSUMES A MINIMUM PRESSURE OF 50 PSI.
2. IF THE WATER SUPPLY DOES NOT MEET THE MINIMUM PRESSURE, A BOOSTER PUMP MAY BE REQUIRED FOR PROPER SYSTEM FUNCTION.

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 672-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

IRRIGATION DETAILS AND NOTES

NW REC COMPLEX PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

CITY OF APOPKA

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY LAUREN ADAMS, RLA # 6667278 ON

Lauren Adams

Digitally signed by Lauren Adams
DN: cn=Lauren Adams, o=Newkirk Engineering Inc, ou=Landscape Architect, email=LAdams@newkirk-engineering.com, c=US
Date: 2026.06.15 14:55:43-04'00'

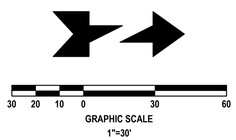
LAUREN ADAMS LICENSE NO. 6667278 STATE OF FLORIDA LANDSCAPE ARCHITECT

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	AS SHOWN

DRAWING NUMBER

L6



TREE CANOPY RETENTION REQUIREMENTS	S.F.
TOTAL SITE AREA	531,032
EXISTING TREE CANOPY (11%)	57,655
TREE CANOPY RETENTION REQUIRED (18%)	10,378
TREE CANOPY RETAINED (62%)	35,774

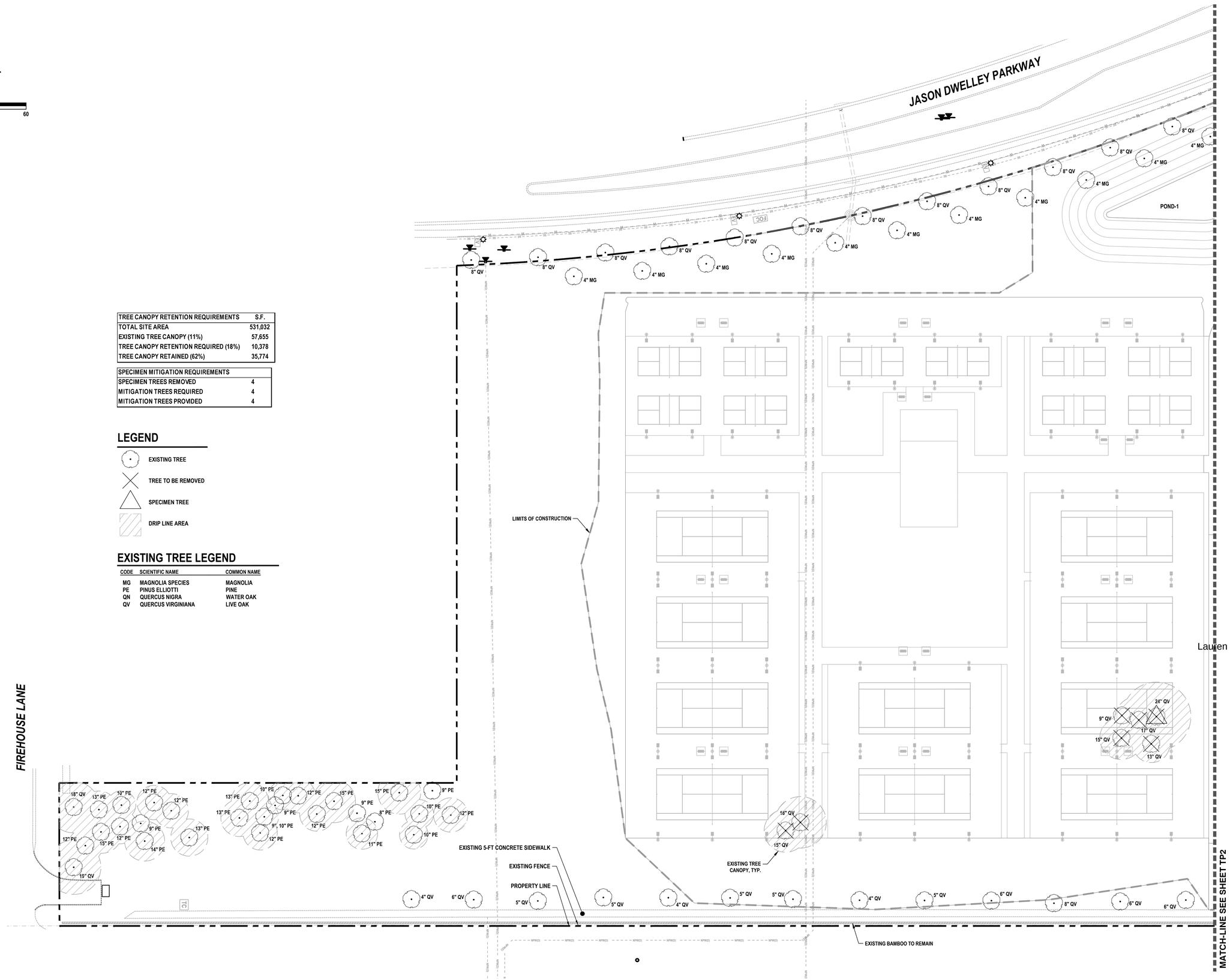
SPECIMEN MITIGATION REQUIREMENTS	
SPECIMEN TREES REMOVED	4
MITIGATION TREES REQUIRED	4
MITIGATION TREES PROVIDED	4

LEGEND

- EXISTING TREE
- TREE TO BE REMOVED
- SPECIMEN TREE
- DRIP LINE AREA

EXISTING TREE LEGEND

CODE	SCIENTIFIC NAME	COMMON NAME
MG	MAGNOLIA SPECIES	MAGNOLIA
PE	PINUS ELLIOTTI	PINE
QN	QUERCUS NIGRA	WATER OAK
QV	QUERCUS VIRGINIANA	LIVE OAK



1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 672-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013

Civil Engineering
Transportation, CEI &
Landscape Architecture

NEWKIRK ENGINEERING INC.

REVISIONS

DATE	DESCRIPTION

TREE PROTECTION PLAN

NW REC COMPLEX PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

CITY OF APOPKA

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY LAUREN ADAMS, RLA # 6667278 ON

Lauren Adams

Digitally signed by Lauren Adams
DN: CN=Lauren Adams, C=US, E=laadams@newkirk-engineering.com, O=Newkirk Engineering Inc, OU=A01410D0000019097543D8600C58FFA, SN=Adams, G=Lauren
Date: 2026.06.13 14:56:46-04'00'

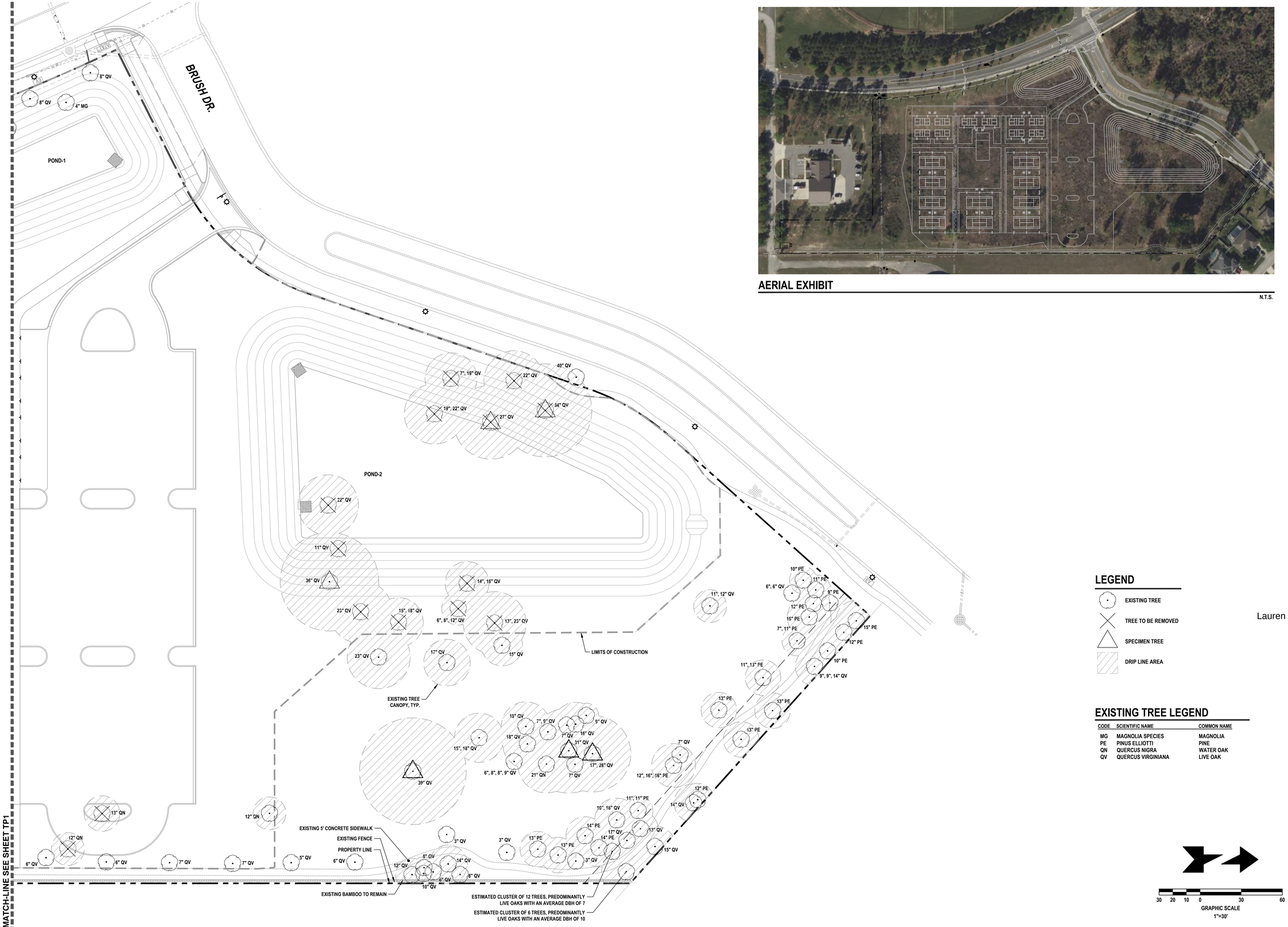
LAUREN ADAMS LICENSE NO. 6667278 STATE OF FLORIDA LANDSCAPE ARCHITECT

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 30'

DRAWING NUMBER

TP1



AERIAL EXHIBIT

N.T.S.

LEGEND

- EXISTING TREE
- TREE TO BE REMOVED
- SPECIMEN TREE
- DRIP LINE AREA

EXISTING TREE LEGEND

CODE	SCIENTIFIC NAME	COMMON NAME
MG	MAGNOLIA SPECIES	MAGNOLIA
PE	PINUS ELLIOTTI	PINE
QN	QUERCUS NIGRA	WATER OAK
QV	QUERCUS VIRGINIANA	LIVE OAK

30 20 10 0 30 60

GRAPHIC SCALE
1"=30'

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 672-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
C 2013
Civil Engineering
Transportation, CEI &
Landscape Architecture
NEWKIRK ENGINEERING INC.

TREE PROTECTION PLAN

NW REC COMPLEX PICKLEBALL COURTS

BRUSH DRIVE, APOPKA FL 32712

CITY OF APOPKA

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT 2013 ALL RIGHTS RESERVED

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY LAUREN ADAMS, RLA # 6667278 ON

Lauren Adams

Digitally signed by Lauren Adams
DN: CN=Lauren Adams, emailAddress=ADAMS0000019606754D86000C8FFA, OU=Unaffiliated, C=US
Date: 2026.06.15 14:50:40-04'00'

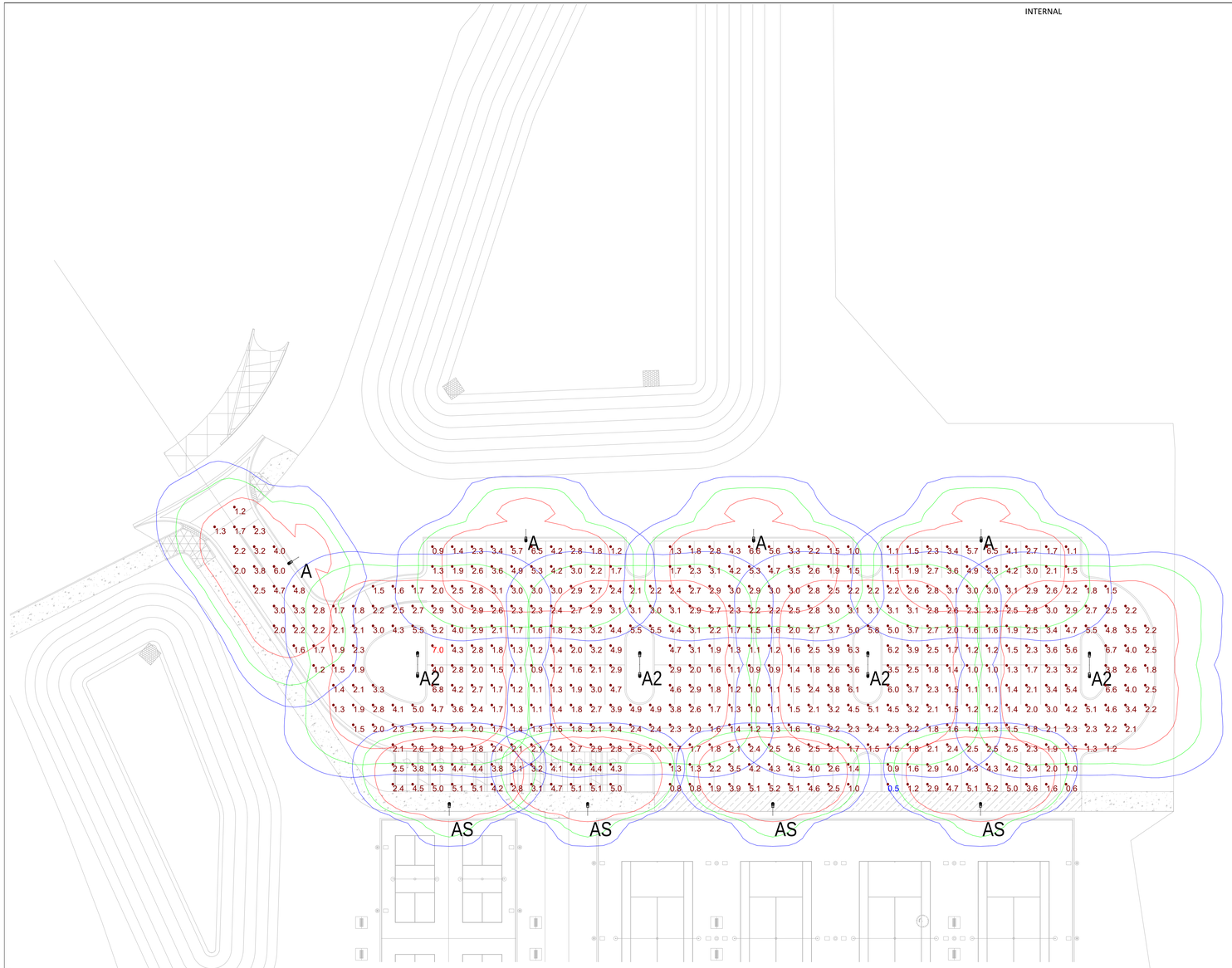
LAUREN ADAMS
LICENSE
NO. 6667278
STATE OF FLORIDA
LANDSCAPE ARCHITECT

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

PROJECT No:	2025-2004
DATE:	DECEMBER 2025
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 30'

DRAWING NUMBER

TP2



Photometric Template Coverage & Photometric Plan

Scale: 1" = 30'

Luminaire Schedule								
Symbol	Label	Qty	LLF	Description	Lum Watts	Lamp	Color	Mounting Height (AFG)
	A	4	0.95 0	110W, LED ROADWAY III 3K, BLACK	110	LED LIGHT ENGINE	BLACK	20'
	A2	4	0.95 0	110W, LED ROADWAY III 3K, BLACK	110	LED LIGHT ENGINE	BLACK	20'
	AS	4	0.95 0	110W, LED ROADWAY III 3K, BLACK HS VISOR	110	LED LIGHT ENGINE	BLACK	20'

Statistics					
Description	Avg	Max	Min	Avg/Min	Max/Min
Parking & Drives	2.75	7.0	0.5	5.50	14.00

General Notes:

1. Poles are 25' OAL direct buried Concrete with a fixture mounting height of 20' AFG
2. All poles are 4' behind B.O.C or 2' behind sidewalk, unless otherwise noted.
3. Owner shall be responsible for coordinating any landscape conflicts with landscape architect. Owner shall be responsible for any necessary future trimming or pruning of proposed landscaped plantings.

N

PRELIMINARY

0' 15' 30' 60'

SCALE: 1"=30'

Outdoor Lighting

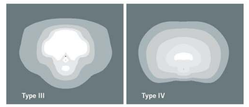




ROADWAY LED
(Meets Dark Sky Criteria)

LED (Light-emitting diode)	110 | 150 | 220 | 280 watts
Mounting height	25'-40'
Color	Black | Gray
Pole	DOT aluminum Static cast concrete Wood
Applications	Neighborhoods Roadways Shopping centers

Light source: LED *(white)*
Wattage: 110 | 150 | 220 | 280 watts
Light pattern: IESNA Type III | Type IV (forward throw)
IESNA cutoff classification: Full-cutoff
BUG rating:
Type III = B2U0G2 (110W), B3U0G3 (150W), B3U0G4 (220W/280W)
Type IV = B3U0G3 (150W), B3U0G4 (220W), B3U0G5 (280W)
Color temperature: 3,000K | 4,000



light distribution patterns

POLE AVAILABLE	MOUNTING HEIGHT	COLOR
DOT aluminum	30'-40'	Satin Aluminum, Black
Static cast concrete	25'-40'	Gray
Wood	25'-40'	Standard

FEATURES	BENEFITS
Turnkey operation	Provides hassle-free installation and service
Little or no installation cost	Frees up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance, electricity & warranty included	Eliminates high and unexpected repair bills
One low monthly cost on your electric bill	Convenience and savings for you

For additional information, contact us at **ODLFlorida@duke-energy.com.**

DUKE ENERGY.
BUILDING A SMARTER ENERGY FUTURE®

©2021 Duke Energy Corporation 210342-2 DEF 10/21

DUKE ENERGY®
Outdoor Lighting Solutions
3300 Exchange Place
Lake Mary, Florida 32746
www.duke-energy.com

Lighting Design Tolerance: Calculated footcandle levels in this lighting design are maintained in accordance with industry standards. Actual performance of any manufactured luminaire may vary due to tolerances in electrical components and field conditions. Duke Energy reserves the right to substitute luminaires of equal or greater performance.

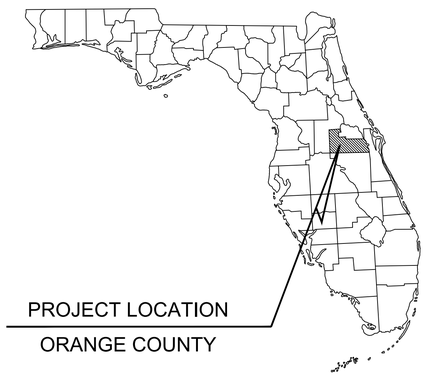
Proprietary & Confidential: This document together with the concepts and designs presented herein, as an instrument of service, is intended only for the property of Duke Energy, and is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization by Duke Energy, and without adaptation by Duke Energy for the specific purpose intended, will be at user's sole risk and without liability or exposure to Duke Energy. Unauthorized use of or reliance on this document for any purpose other than that authorized by Duke Energy is prohibited.

Apopka Pickleball and Tennis Courts Parking Lot - Site Lighting Plan

Apopka, FL

Designer
Gerald Rooks
Date
3/5/2026
Scale
1"=30'
Drawing No.
SLC-01

P-1



CONSTRUCTION SITE PLAN

FOR

WYLD OAKS C-STORE

LOCATED AT

W KELLY PARK ROAD BETWEEN EFFIE DRIVE AND HWY 429
APOPKA, FL 32712

PROJECT TEAM

APPLICANT
M & R UNITED, INC.
402 HIGH POINT DRIVE, STE 101
COCOA, FL 32926
(321) 631-0245
CARMEL32927@GMAIL.COM

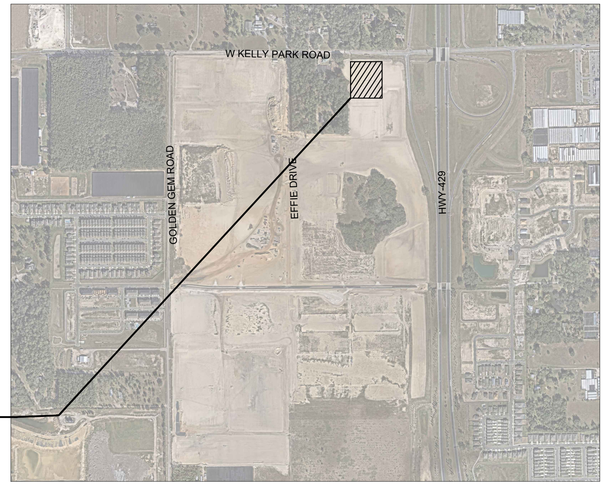
ARCHITECT
ANDREW SISSON
CENTERLINE ARCHITECTURE AND DESIGN
1675 S JOHN RODES BLVD,
MELBOURNE, FL 32904
(716)969-3789
ASISSON@CENTERLINEAD.COM

SURVEYOR
STEPHEN BRAY
GET TO THE POINT SURVEYING, LLC
34414 ALICANTE CT
SORRENTO, FL 32776
SBRAYGTTPSURVEY@GMAIL.COM

CIVIL ENGINEER
MACKENZIE CERJAN, P.E.
KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4132
MACKENZIE.CERJAN@KIMLEY-HORN.COM

LANDSCAPE ARCHITECT
ED LINQUIST, PLA
KIMLEY-HORN AND ASSOCIATES, INC.
200 SOUTH ORANGE AVENUE, SUITE 600
ORLANDO, FL 32801
(407) 789-2221
ED.LINQUIST@KIMLEY-HORN.COM

AS-BUILT SURVEYOR
FLORIDA DESIGN CONSULTANT, INC.
17907 APRILE DRIVE, SUITE 150
LAND O LAKES, FL 34638
GSTEELE@FLDESIGN.COM
CONTACT: JARED T. PATENAUDE



VICINITY MAP
N.T.S.

Sheet List Table

Sheet Number	Sheet Title
C-000	COVER SHEET
C-100	GENERAL NOTES
C-200	DEMOLITION AND EROSION CONTROL PLAN
C-250	EROSION CONTROL DETAILS
C-300	SITE PLAN
C-400	PAVING GRADING AND DRAINAGE PLAN
C-401	PAVING GRADING AND DRAINAGE DETAILS
C-402	PAVING GRADING AND DRAINAGE DETAILS
C-500	UTILITY PLAN
C-501	UTILITY DETAILS
C-502	UTILITY DETAILS
C-600	DELIVERY TRUCK MOVEMENT PLAN
C-601	FIRE TRUCK MOVEMENT PLAN
L-100	LANDSCAPE PLAN
L-101	LANDSCAPE DETAILS
L-200	IRRIGATION PLAN
L-201	IRRIGATION DETAILS

LIST OF CONTACTS

PLANNING AND ZONING
CITY OF APOPKA
120 E. MAIN ST, 2ND FLOOR
APOPKA, FL 32703
(407) 703-1684
CONTACT: JEAN SANCHEZ

STORMWATER
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
4049 REID STREET
PALATKA, FL 32177
(386) 329-4500

WATER AND SANITARY SEWER
CITY OF APOPKA PUBLIC SERVICES
748 E CLEVELAND ST
APOPKA, FL 32703
(407) 703-1627
CONTACT: VLADIMIR SIMONOVSKI

FIRE PREVENTION
CITY OF APOPKA FIRE DEPARTMENT
175 E 5TH ST
APOPKA, FL 32703
(407) 703-1754
CONTACT: JEREMY HOLDERFIELD

TRANSPORTATION
CITY OF APOPKA
120 E. MAIN ST, 2ND FLOOR
APOPKA, FL 32703
(407) 703-1627
CONTACT: VLADIMIR SIMONOVSKI

TELEPHONE PROVIDER
LUMEN (CENTURYLINK)
555 LAKE BORDER DR.
APOPKA, FL 32703
(407) 814-5310

CABLE PROVIDER
SPECTRUM
3301 E STATE RD 436
APOPKA, FL 32703
(407) 532-8509

NATURAL GAS PROVIDER
LAKE APOPKA NATURAL GAS
1320 WINTER GARDEN VINELAND RD
WINTER GARDEN, FL 34787
(407) 656-2734

ELECTRIC PROVIDER
DUKE ENERGY
RDT SUBDIVISIONS - APOPKA
P.O. BOX 14042
SAINT PETERSBURG, FL 33733
(321) 280-3534
CONTACT: KRISTIN CORDELL

RECLAIMED WATER
CITY OF APOPKA PUBLIC SERVICES
748 E CLEVELAND ST
APOPKA, FL 32703
(407) 703-1627
VSIMONOVSKI@APOPKA.NET
CONTACT: VLADIMIR SIMONOVSKI

PREPARED BY:
Kimley»Horn

PROJECT SCOPE:

THE PROPOSED DEVELOPMENT CONSISTS OF 1.24–ACRE COMMERCIAL SITE TO BE IMPROVED WITH A 6,300–SQUARE–FOOT MULTI–TENANT RETAIL/RESTAURANT BUILDING AND FUELING STATION CONTAINING 16 GAS PUMPS (8 DUAL–SIDED DISPENSERS). THE PROJECT WILL INCLUDE FULL SITE DEVELOPMENT AND IS INTENDED TO SUPPORT THREE TENANT SPACES, INCLUDING ONE CONVENIENCE STORE ANCHOR TENANT AND TWO SMALLER TENANTS.

SCREEN READER TECHNOLOGY TAG:

IF YOU REQUIRE FURTHER CLARIFICATION OF WHAT THIS DOCUMENT REPRESENTS, PLEASE CONTACT THE ADA COORDINATOR OF CITY OF APOPKA AT 407–703–1700.

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY
1	CITY MDP COMMENTS	01/14/26	TJL

Kimley»Horn
© 2026 KIMLEY–HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772–794–4100
WWW.KIMLEY–HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
6/23/2026

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

KHA PROJECT 247022000
DATE 6/23/2026
SCALE AS SHOWN
DESIGNED BY AKR
DRAWN BY MCM
CHECKED BY MRC

COVER SHEET

WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
APOPKA FL

SHEET NUMBER
C-000

Plotted By: Lamm, Toby Sheet Set: WYLD OAKS C-STORE Layout: C-000 COVER SHEET June 23, 2026 04:14:05pm K:\VRB_LDE\VA247022000 — Wyld Oaks C-Store\CADD\PlanSheets\C-000 COVER SHEET.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

Plotted By:Lomm, Toby Sheet Set:WYLD OAKS C-STORE Layout:C-100 GENERAL NOTES June 23, 2026 04:14:14pm K:\VRB_LDEV\247022000 — Wyld Oaks C-Store\CADD\PlanSheets\C-100 GENERAL NOTES.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, AND, UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.

3. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.

4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. AN APPROXIMATE LIST OF THE UTILITY COMPANIES WHICH THE CONTRACTOR MUST CALL BEFORE COMMENCING WORK IS PROVIDED ON THE COVER SHEET OF THESE CONSTRUCTION PLANS. THIS LIST SERVES AS A GUIDE ONLY AND IS NOT INTENDED TO LIMIT THE UTILITY COMPANIES WHICH THE CONTRACTOR MAY WISH TO NOTIFY.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.

6. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.

7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.

8. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER AND DESIGN ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTORS RESPONSIBILITY.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.

11. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.

12. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.

DEMOLITION NOTES

1. ALL MATERIAL REMOVED FROM THIS SITE BY THE CONTRACTOR SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LEGAL MANNER.

2. REFER TO THE TOPOGRAPHIC SURVEY FOR ADDITIONAL DETAILS OF EXISTING STRUCTURES, ETC., LOCATED WITHIN THE PROJECT SITE. UNLESS OTHERWISE NOTED, ALL EXISTING BUILDINGS, STRUCTURES, SLABS, CONCRETE, ASPHALT, DEBRIS PILES, SIGNS, AND ALL APPURTENANCES ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND PROPERLY DISPOSED OF IN A LEGAL MANNER AS PART OF THIS CONTRACT. SOME ITEMS TO BE REMOVED MAY NOT BE DEPICTED ON THE TOPOGRAPHIC SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND DETERMINE THE FULL EXTENT OF ITEMS TO BE REMOVED. IF ANY ITEMS ARE IN QUESTION, THE CONTRACTOR SHALL CONTACT THE OWNER PRIOR TO REMOVAL OF SAID ITEMS.

3. THE CONTRACTOR SHALL REFER TO THE DEMOLITION PLAN AND TREE INVENTORY PLAN FOR DEMOLITION/PRESERVATION OF EXISTING TREES. ALL TREES NOT SPECIFICALLY SHOWN TO BE PRESERVED OR RELOCATED SHALL BE REMOVED AS A PART OF THIS CONTRACT. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY DEMOLITION.

4. CONTRACTOR SHALL ADJUST GRADE OF ANY EXISTING UTILITIES TO REMAIN.

PAVING, GRADING AND DRAINAGE NOTES

1. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN JURISDICTION'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR FDOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.

2. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.

3. TRAFFIC CONTROL ON ALL FDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

4. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.

5. ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SODDED UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN.

6. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.

7. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.

8. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.

9. THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.

10. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.

11. STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE OWNER.

12. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO FDOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

13. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.

14. ALL CUT OR FILL SLOPES SHALL BE 4 (HORIZONTAL) :1 (VERTICAL) OR FLATTER UNLESS OTHERWISE SHOWN.

15. THE CONTRACTOR SHALL TAKE ALL REQUIRED MEASURES TO CONTROL TURBIDITY, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THEREAFTER, THE CONTRACTOR MUST REMOVE THE BARRIERS. AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE WHICH VIOLATES THE WATER QUALITY STANDARDS IN CHAPTER 17-302, FLORIDA ADMINISTRATIVE CODE.

16. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.

17. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE ENVIRONMENTAL RESOURCE PERMIT COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.

18. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.

19. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.

RECORD DRAWINGS

1. CONTRACTOR SHALL PROVIDE TO THE ENGINEER AND OWNER A MINIMUM OF 2 HARD COPIES OF A PAVING, GRADING AND DRAINAGE RECORD DRAWING AND A SEPARATE UTILITY RECORD DRAWING, AS WELL AS BOTH IN AUTOCAD 2007 OR LATER, BOTH PREPARED BY A FLORIDA REGISTERED SURVEYOR. THE RECORD DRAWINGS SHALL VERIFY ALL DESIGN INFORMATION INCLUDED ON THE DESIGN PLANS OF THE SAME NAME.

WATER AND SEWER UTILITY NOTES

1. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES GRAVITY SEWER LINES AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

2. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.

3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.

4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.

5. ALL PHASES OF INSTALLATION, INCLUDING UNLOADING, TRENCHING, LAYING AND BACK FILLING, SHALL BE DONE IN A FIRST CLASS WORKMANLIKE MANNER. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

6. WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.

7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.

8. UNDERGROUND LINES SHALL BE SURVEYED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR PRIOR TO BACK FILLING.

9. CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.

EROSION CONTROL NOTES

1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THIS EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.

2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERIC PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.

3. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.

4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.

5. EROSION CONTROL PLAN MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.

6. THE CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERIC PERMIT.

7. CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.

8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.

9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.

EROSION CONTROL NOTES (CONT.)

13. STABILIZATION PRACTICES SHOULD BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS WHERE CONSTRUCTION HAS TEMPORARILY CEASED.

14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRED IN THESE AREAS. REFER TO SECTION 981 OF THE STANDARD SPECIFICATIONS FOR SEEDING AND MAINTENANCE REQUIREMENTS.

15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.

16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED AS SOON AS POSSIBLE.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.

18. ON-SITE & OFF SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE EROSION CONTROL PLAN AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

19. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

20. DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.

21. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACK FILLING OF TRENCHES FOR UTILITY CONSTRUCTION.

MAINTENANCE

ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.

2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED. FOR MAINTENANCE REQUIREMENTS REFER THE STANDARD SPECIFICATIONS.

3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.

4. THE CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.

5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.

6. OUTLET STRUCTURES, IF APPLICABLE, IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 55 CUBIC YARDS / ACRE.

7. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

TYPICAL ENGINEER OBSERVATIONS

CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS IN ADVANCE OF THE FOLLOWING ACTIVITIES:

- PRE-CONSTRUCTION MEETING
- SUBGRADE PREPARATION
- BASE INSTALLATION
- ASPHALT INSTALLATION
- UNDERGROUND PIPING AND UTILTIES INSTALLATION
- INSTALLATION OF STRUCTURES, DDCV, HYDRANTS, METERS, ETC.
- SIDEWALK INSTALLATION
- CONNECTIONS TO WATER AND SEWER MAINS
- TESTS OF UTILITIES

3RD PARTY TEST REPORTS REQ'D

TEST REPORTS REQUIRED FOR CLOSE OUT INCLUDE, BUT ARE NOT LIMITED TO:

- DENSITY TEST REPORTS
- BACTERIOLOGICAL TESTS OF WATER SYSTEM
- PRESSURE TEST OF WATER/SEWER
- LEAK TESTS ON SEWER SYSTEM AND GREASE TRAPS
- ANY OTHER TESTING REQUIRED BY THE AGENCY

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN — LICENSE No. 90545 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
6/23/2026

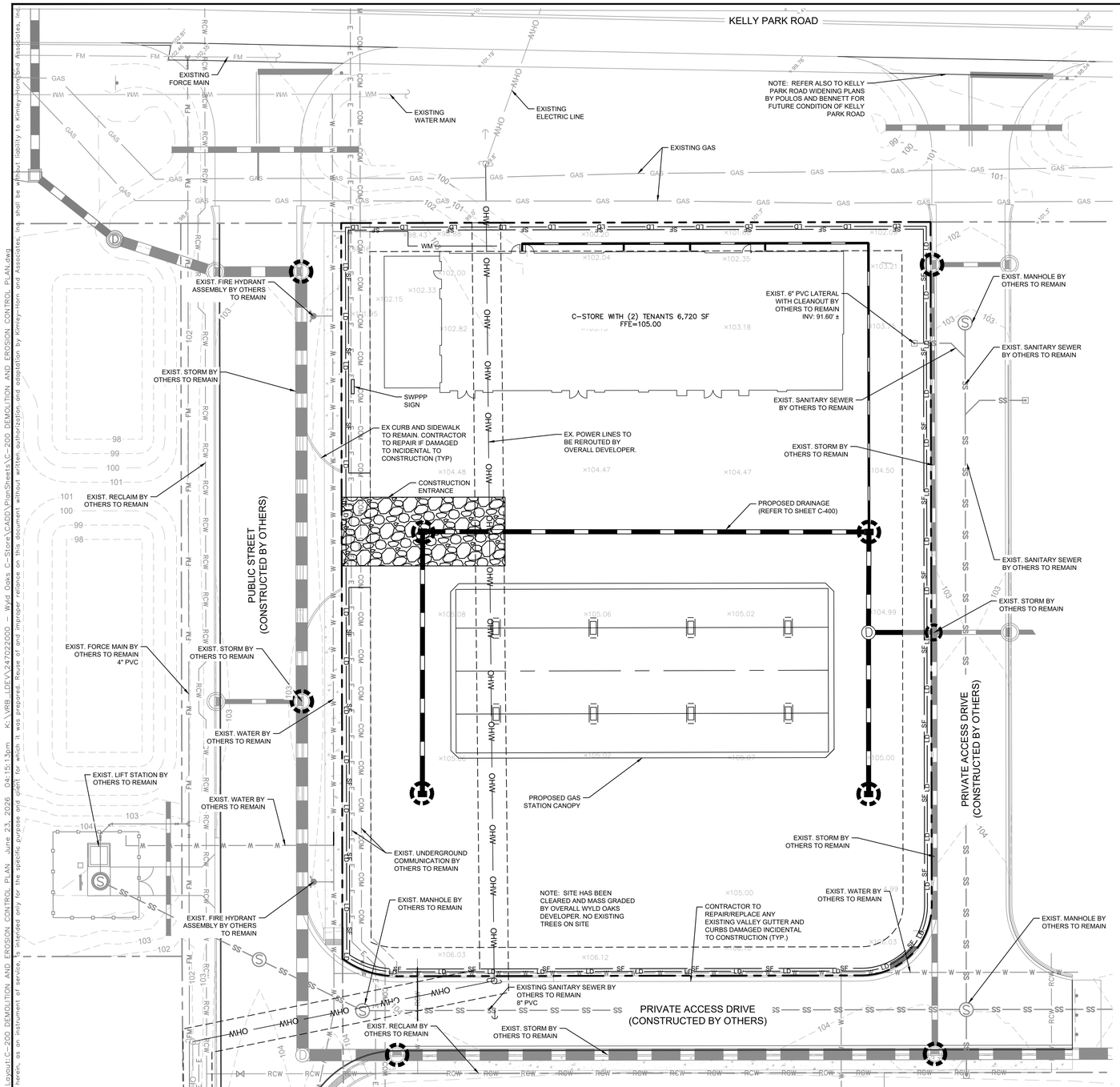
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

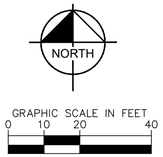
KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

GENERAL NOTES

WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
APOPKA FL

SHEET NUMBER
C-100





LEGEND

- PROPERTY LINE
- WM — EXISTING WATERMAIN
- SS — EXISTING SANITARY SEWER
- EXISTING DRAINAGE
- LD — LD — LIMITS OF DISTURBANCE
- SF — SILT FENCE/TREE PROTECTION FENCE
- INLET PROTECTION
- CURB TO REMAIN
- CURB TO REMOVED

NOTES:

1. CONTRACTOR TO CONSIDER DEWATERING ACTIVITIES WHEN PREPARING BID DOCUMENTS FOR THIS PROJECT.
2. CONTRACTOR SHALL OBTAIN ANY NECESSARY DEWATERING PERMITS AS SITE CONDITIONS AND CONSTRUCTION ACTIVITIES REQUIRE.
3. CONTRACTOR TO USE BEST MANAGEMENT PRACTICES TO ENSURE COMPLIANCE WITH NPDES AND WATER MANAGEMENT DISTRICT REGULATIONS FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES AND DEWATERING OPERATIONS.

SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION

ACREAGE SUMMARY	
TOTAL PROJECT AREA	1.24 AC
ON-SITE DISTURBED AREA	1.24 AC
OFF-SITE DISTURBED AREA	0.00 AC
TOTAL DISTURBED AREA	1.24 AC
IMPERVIOUS AREA AT COMPLETION	0.81 AC
PERVIOUS / SEEDED AREA AT COMPLETION	0.29AC

SEQUENCE OF CONSTRUCTION

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

PHASE 1:
1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (1) AND INSTALL SILT FENCE.
2. INSTALL INLET PROTECTION AT EXISTING INLET(S).
3. INSTALL AND STABILIZE ANY NECESSARY HYDRAULIC CONTROL STRUCTURES (DIKES, CHECK DAMS, OUTLET TRAPS, RISER PIPE DISCHARGE POINT, ETC.)
4. PREPARE CLEARING AND GRUBBING OF THE SITE IF, APPLICABLE.

HALT ALL ACTIVITIES AND CONTACT THE CONSULTANT TO PERFORM INSPECTION AND CERTIFICATION OF BMPS. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE-CONSTRUCTION MEETING WITH CONSULTANT AND ALL GROUND-DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

PHASE 2:
5. ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
6. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
7. TEMPORARILY SEED WITH PURE LIVE SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE OR AS REQUIRED BY GENERIC PERMIT.

CONTRACTOR TO BE RESPONSIBLE FOR OBTAINING ALL DEWATERING PERMITS NECESSARY FOR CONSTRUCTION

MAINTENANCE

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.

DEMOLITION NOTES:

1. THE INTENT OF THE DEMOLITION PLAN IS TO DEPICT EXISTING FEATURES THAT ENCUMBER THE PROPOSED CONSTRUCTION AREA AND ARE SCHEDULED FOR REMOVAL. SOME INCIDENTAL ITEMS MAY HAVE BEEN INADVERTENTLY OMITTED FROM THE PLAN. THE CONTRACTOR IS ENCOURAGED TO THOROUGHLY INSPECT THE SITE AS WELL AS REVIEW THE PLANS AND SPECIFICATIONS PRIOR TO SUBMITTING PRICING. CONTRACTOR WILL NOT RECEIVE ADDITIONAL COMPENSATION FOR INCIDENTAL ITEMS NOT SHOWN ON THIS DEMOLITION PLAN.
2. THIS DEMOLITION PLAN IS BASED ON AVAILABLE UTILITY INFORMATION AND MAY OR MAY NOT BE ALL INCLUSIVE FOR THIS SITE. ANY UTILITIES ENCOUNTERED DURING DEMOLITION THAT ARE NOT DEPICTED/ADDRESSED ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER IMMEDIATELY.
3. CONTRACTOR IS REQUIRED TO OBTAIN ALL DEMOLITION PERMITS.
4. ALL FEATURES IDENTIFIED ON THIS PLAN WHICH ARE LISTED TO BE DEMOLISHED ARE TO BE REMOVED FROM THE SITE. AFTER DEMOLITION IS COMPLETE THE SITE SHALL BE DELIVERED IN A CONDITION SUITABLE FOR DEVELOPMENT.
5. CONTRACTOR SHALL LIMIT ALL DEMOLITION ACTIVITIES TO THOSE AREAS DELINEATED ON THE CONSTRUCTION DRAWINGS UNLESS OTHERWISE DIRECTED BY THE DEVELOPER OR AS REQUIRED FOR CONSTRUCTION OF IMPROVEMENTS.
6. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING AIRBORNE DUST AND POLLUTANTS BY USING WATER SPRINKLING OR OTHER SUITABLE MEANS OF CONTROL.
7. CONTRACTOR TO USE CARE IN HANDLING DEBRIS FROM SITE TO ENSURE THE SAFETY OF THE PUBLIC. HAUL ROUTE TO BE CLOSELY MONITORED FOR DEBRIS OR MATERIALS TRACKED ONTO ADJOINING ROADWAYS, SIDEWALKS, ETC. ROADWAYS AND WALKWAYS TO BE CLEARED DAILY OR AS NECESSARY TO MAINTAIN PUBLIC SAFETY.
8. DEWATERING SHOULD BE ANTICIPATED AND INCLUDED.
9. ALL ASPHALT TO BE REMOVED SHALL BE SAW CUT ADJACENT TO REMAINING IMPROVEMENTS.
10. WHERE REMAINING, INLETS, MANHOLE COVERS, AND VALVE COVERS TO BE PROTECTED IN PAVEMENT REMOVAL AREAS. CONTRACTOR SHALL REPLACE DAMAGED STRUCTURES AT THEIR EXPENSE.
11. CONTRACTOR SHALL INSTALL A CONTINUOUS SCREENED CONSTRUCTION FENCING ALONG PROJECT BOUNDARY.
12. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC. AS APPROVED BY ORANGE COUNTY AND CONSTRUCTION MANAGER.
13. CONTINUOUS ACCESS SHALL BE MAINTAINED FOR SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF EXISTING FACILITIES AND CONSTRUCTION OF NEW FACILITIES. SIGNAGE SHALL BE POSTED TO DIRECT THE PUBLIC TO THE PATH OF TRAVEL.
14. EXISTING RETAIL BUILDING SHALL HAVE UNDISRUPTED ACCESS AT ALL TIMES. ALL PARKING SPACES AND DRIVE AISLES OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL BE ACCESSIBLE AND SHIELDED FROM CONSTRUCTION ACTIVITIES AT ALL TIMES.

SURVEY NOTES:

1. INFORMATION ON THE PLAN BASED UPON ALTA/ASCM LAND TITLE SURVEY PREPARED BY GET TO THE POINT SURVEY, LLC., DATED JUNE 8, 2025.
2. TOPOGRAPHIC INFORMATION IS TAKEN FROM AN AS-BUILT SURVEY OF THE WYLD OAKS MASS GRADING DEVELOPMENT BY FLORIDA DESIGN CONSULTANTS, INC. DATED JANUARY 23, 2025. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHIC AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 ADJUSTMENT (NAVD 1988).

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TEMPORARY CONSTRUCTION EXITS																								
TEMPORARY CONTROL MEASURES																								
SEDIMENT CONTROL BASINS																								
STRIP & STOCKPILE TOPSOIL																								
ROUGH GRADE																								
STORM FACILITIES																								
SITE CONSTRUCTION																								
PERMANENT CONTROL STRUCTURES																								
FOUNDATION / BUILDING CONSTRUCTION																								
FINISH GRADING																								
LANDSCAPING/SEED/FINAL STABILIZATION																								

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2026 KIMLEY-HORN AND ASSOCIATES, INC.

445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
6/23/2026

KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

DEMOLITION AND EROSION CONTROL PLAN

WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
APOPKA FL

SHEET NUMBER
C-200

Plotted By:Lomm, Toby Sheet Set:WYLD OAKS C-STORE Layout:C-200 DEMOLITION AND EROSION CONTROL PLAN June 23, 2026 04:15:13pm K:\VRB_LDEV\247022000 — Wyld Oaks C-Store\CAD\PlanSheets\C-200 DEMOLITION AND EROSION CONTROL PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

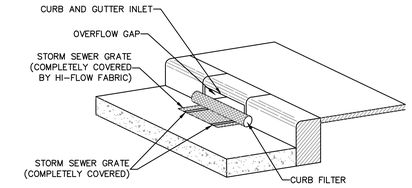
Section 1	Project Name and location information:	W KELLLY PARK ROAD BETWEEN EFFIE DRIVE AND HWY 429 APOPKA, FL 32712
Section 2	Describe the nature of the construction activity:	CONSTRUCTION OF INFRASTRUCTURE FOR CONVENIENCE STORE
Section 3	Describe the intended sequence of major soil disturbing activities:	CONSTRUCTION OF EROSION AND SEDIMENT CONTROLS, GRADING AND CONSTRUCTION OF STORM SEWER
Section 4	Total area of the site:	1.24 AC.
Section 5	Total area of the site to be disturbed:	1.24 AC.
Section 6	Existing data describing the soil or quality of any stormwater discharge from the site:	EXISTING SOILS INFORMATION CAN BE FOUND IN THE GEOTECHNICAL REPORT
Section 7	Estimate the drainage area size for each discharge point:	1.24 AC DISCHARGES TO MASTER STORMWATER SYSTEM
Section 8	Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	PROJECT LOCATION: LAT: 28°45'21.8" N LONG: 81°34'10.0" W RECEIVING WATER: BY DEVELOPER DRAINAGE SYSTEM
Section 9	Give a detailed description of all controls, Best Management Practices (BMPs) and measures that will be implemented at the construction site for each activity identified in the intended sequence of major soil disturbing activities section. Provide time frames in which the controls will be implemented. NOTE: All controls shall be consistent with performance standards for erosion and sediment control and stormwater treatment set forth in s. 62-40.432, F.A.C., the applicable Stormwater or Environmental Resource Permitting requirements of the Department or a Water Management District, and the guidelines contained in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDOT, FDEP, and any subsequent amendments.	
	SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF THE CONSTRUCTION SITE. SILT DIKE TO BE INSTALLED OVER EXISTING PAVED DRIVEWAYS INTO THE SITE THAT ARE NOT IN USE. ALL DRIVEWAYS IN USE SHALL HAVE CONSTRUCTION EXIT INSTALLED.	
Section 10	Describe all temporary and permanent stabilization practices. Stabilization practices include temporary seeding, mulching, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, vegetative preservations, etc.	
	THE PERIMETER SILT FENCE SHALL BE MAINTAINED AROUND THE ENTIRE PROJECT SITE UNTIL LANDSCAPE HAS BEEN INSTALLED. SITE SHALL BE SEEDED PER LANDSCAPE PLAN.	
Section 11	Describe all structural controls to be implemented to divert stormwater flow from exposed soils and structural practices to store flows, retain sediment on-site or in any other way limit stormwater runoff. These controls include silt fences, earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, coagulating agents and temporary or permanent sediment basins.	
	SILT FENCE/SILT DIKE	
Section 12	Describe all sediment basins to be implemented for areas that will disturb 10 or more acres at one time. The sediment basins (or an equivalent alternative) should be able to provide 3,600 cubic feet of storage for each acre drained. Temporary sediment basins (or an equivalent alternative) are recommended for drainage areas under 10 acres.	
	N/A	
Section 13	Describe all permanent stormwater management controls such as, but not limited to, detention or retention systems or vegetated swales that will be installed during the construction process.	
	N/A	
Section 22		

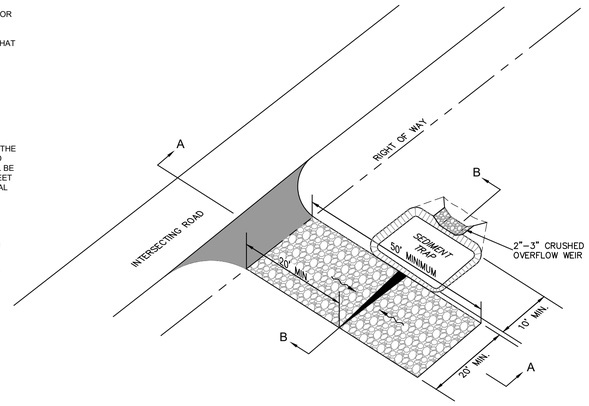
Name	Title	Company Name, Address and Phone Number	Date

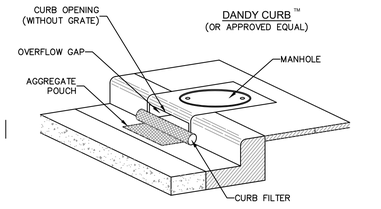
Section 14	Waste disposal, this may include construction debris, chemicals, litter, and sanitary wastes:	All construction materials and debris will be placed in a dumpster and hauled off site to a landfill or other proper disposal site. No materials will be buried on site.
Section 15	Offsite vehicle tracking from construction entrances/exits:	Off site vehicle tracking of sediments and dust generation will be minimized via a rock construction entrance, , street sweeping and the use of water to keep dust down.
Section 16	The proper application rates of all fertilizers, herbicides and pesticides used at the construction site:	Florida-friendly fertilizers and pesticides will be used at a minimum and in accordance with the manufacturer's suggested application rates.
Section 17	The storage, application, generation and migration of all toxic substances:	All paints and other chemicals will be stored in a locked covered shed.
Section 18	Other:	Port-o-lets will be placed away from storm sewer systems, storm inlet(s), surface waters and wetlands. No vehicle maintenance shall be conducted on-site. A washdown area shall be designated at all times and will not be located in any area that will allow for the discharge of pollutted runoff.
Section 19	Provide a detailed description of the maintenance plan for all structural and non-structural controls to assure that they remain in good and effective operating condition.	
	Contractor shall provide routine maintenance of permanent and temporary sediment and erosion control features in accordance with the technical specifications or as follows, whichever is more stringent: • Silt fence shall be inspected at least weekly. Any required repairs shall be made immediately. Sediment deposits shall be removed when they reach approximately one-half the height of the barrier. • Maintenance shall be performed on the rock entrance when any void spaces are full of sediment. • Inlet(s)/outfalls shall be inspected immediately after each rain event and any required repairs to the filter inlets, silt fence, or filter fabric shall be performed immediately. • Bare areas of the site that were previously seeded shall be reseeded per manufactures' instructions. • Mulch and sod that has been washed out shall be replaced immediately. • Maintain all other areas of the site with proper controls as necessary.	
Section 20	Inspections: Describe the inspection and inspection documentation procedures, as required by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	
	Qualified personnel will inspect all points of discharges, all disturbed areas of construction that have not been stabilized, constructed areas and locations where vehicles enter and exit the site, and all BMPs at least once every 7 calendar days and within 24 hours of the end of a rainfall event that is 0.5 inches or greater. Where sites have been finally stabilized, said inspections shall be conducted at least once every month until the Notice of Termination is filed.	
Section 21	Identify and describe all sources of non-stormwater discharges as allowed by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.	
	N/A	
Section 22	All contractor(s) and subcontractor(s) identified in the SWPPP must sign the following certification:	
	"I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder."	

EROSION CONTROL NOTES

1. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
4. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES SHALL BE STABILIZED, COVERED OR CONTAINED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
5. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED.
6. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
7. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, SLOPE DRAIN STRUCTURE OR APPROVED CONTROL.
8. SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM WATER SYSTEM, DITCH OR CHANNEL. ALL STORM WATER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
9. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION.
10. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND/OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT CONTROLS. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
11. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE WITH CURBS AND GUTTERS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND DISTURBING ACTIVITIES.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
13. PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND EROSION AT ALL TIMES DURING CONSTRUCTION.
14. EROSION CONTROL DESIGN AND CONSTRUCTION SHALL FOLLOW THE REQUIREMENTS IN THE "FLORIDA EROSION AND SEDIMENT CONTROL MANUAL" AND COUNTY PERMITS.
15. CONTRACTOR IS RESPONSIBLE FOR ALL SURFACE WATER DISCHARGES, RAINFALL RUN OFF OR DEWATERING ACTIVITIES.
16. CONTRACTOR MUST INCORPORATE ALL BMP'S NECESSARY TO MEET OR EXCEED STATE WATER QUALITY AND SWPPP REQUIREMENTS.
17. THE POLLUTION PREVENTION PLAN IS A MINIMUM GUIDELINE ONLY. ADDITIONAL BMP'S MAY BE NECESSARY AT CONTRACTOR'S EXPENSE.
18. NOI TO BE POSTED ON SITE.
19. FILTER FABRIC MUST BE INSTALLED UNTIL THE SITE IS STABLE.

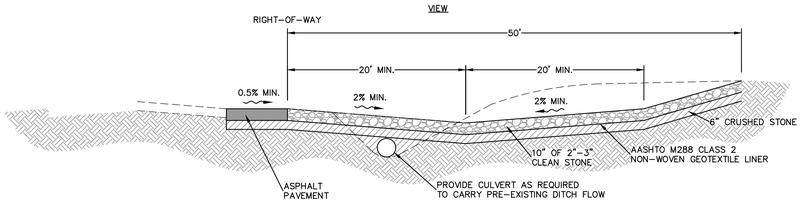




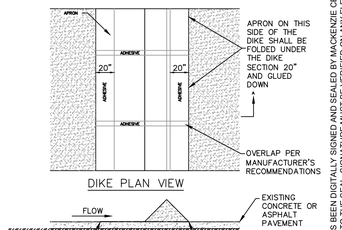


CURB INLET SEDIMENT CONTROL
N.T.S

NOTES:
1. INSTALLED SILT DIKE UNIT SHALL HAVE CONTINUOUS AND FIRM CONTACT WITH PAVEMENT.
2. ADHESIVES SHALL BE LIQUID NAIL OR APPROVED EQUAL FOR CONCRETE PAVEMENT APPLICATIONS AND EMULSIFIED ASPHALT FOR ASPHALT APPLICATIONS. ADHESIVE SHALL BE PLACED WHERE THE UNITS OVERLAP AND A 20" STRIP ALONG BOTH EDGES.



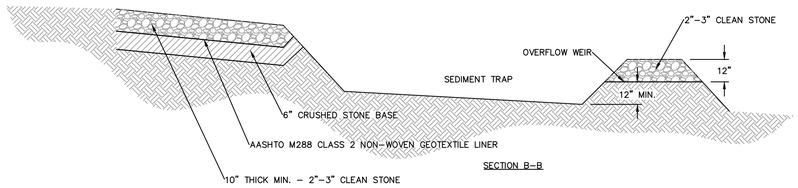
SECTION A-A



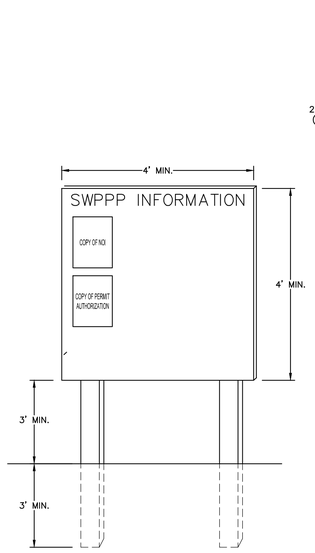
DIKE PLAN VIEW

SECTION A-A

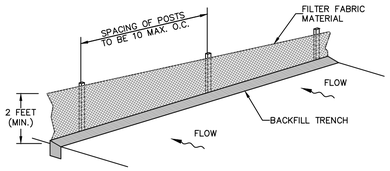
SILT DIKE ON EXISTING PAVEMENT
N.T.S

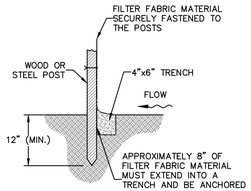


SECTION B-B



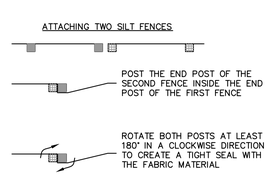
SWPPP INFORMATION SIGN
N.T.S



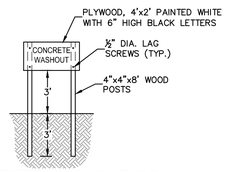


SILT FENCE INSTALLATION
N.T.S

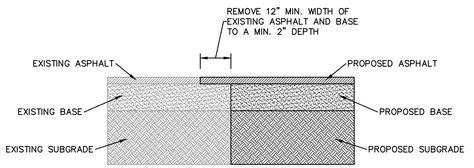
NOTES:
1. "SWPPP INFORMATION" MUST BE DISPLAYED PROMINENTLY ACROSS THE TOP OF THE SIGN, AS SHOWN IN THE DETAIL.
2. SIGN TO BE CONSTRUCTED OF A RIGID MATERIAL, SUCH AS PLYWOOD OR OUTDOOR SIGN BOARD. SIGN MUST BE CONSTRUCTED IN A MANNER TO PROTECT DOCUMENTS FROM DAMAGE DUE TO WEATHER (WIND, SUN, MOISTURE, ETC.).
3. THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE ENTRANCE/EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE/VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
4. ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
5. CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE LOCAL AGENCY.
6. SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
7. CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THIS SWPPP INFORMATION SIGN.



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

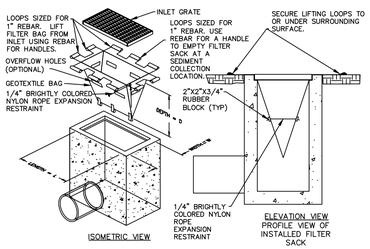


CONCRETE WASHOUT SIGN
N.T.S



SAW-CUT
N.T.S

CONSTRUCTION EXIT
N.T.S



1. EMPTY FILTER SACK WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. GEOTEXTILE WILL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
3. AN OIL ADSORBENT PAD OR PILLOW CAN BE PURCHASED WHEN OIL SPILLS ARE A CONCERN.
4. INSPECT PER REGULATORY REQUIREMENTS.
5. THE WIDTH, "W", OF THE FILTER SACK WILL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
6. THE DEPTH, "D", OF THE FILTER SACK WILL BE BETWEEN 18 INCHES AND 36 INCHES.
7. THE LENGTH, "L", OF THE FILTER SACK WILL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

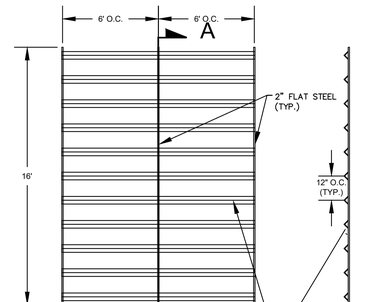
LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	15 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	600 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC $^{-1}$

MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	315 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	15 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	435 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	70 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC $^{-1}$

FILTER SACKS (GRATED INLETS)
DO NOT USE ON ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.



RUMBLE PAD
N.T.S

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	DATE	BY
	REVISIONS	

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
6/23/2026

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

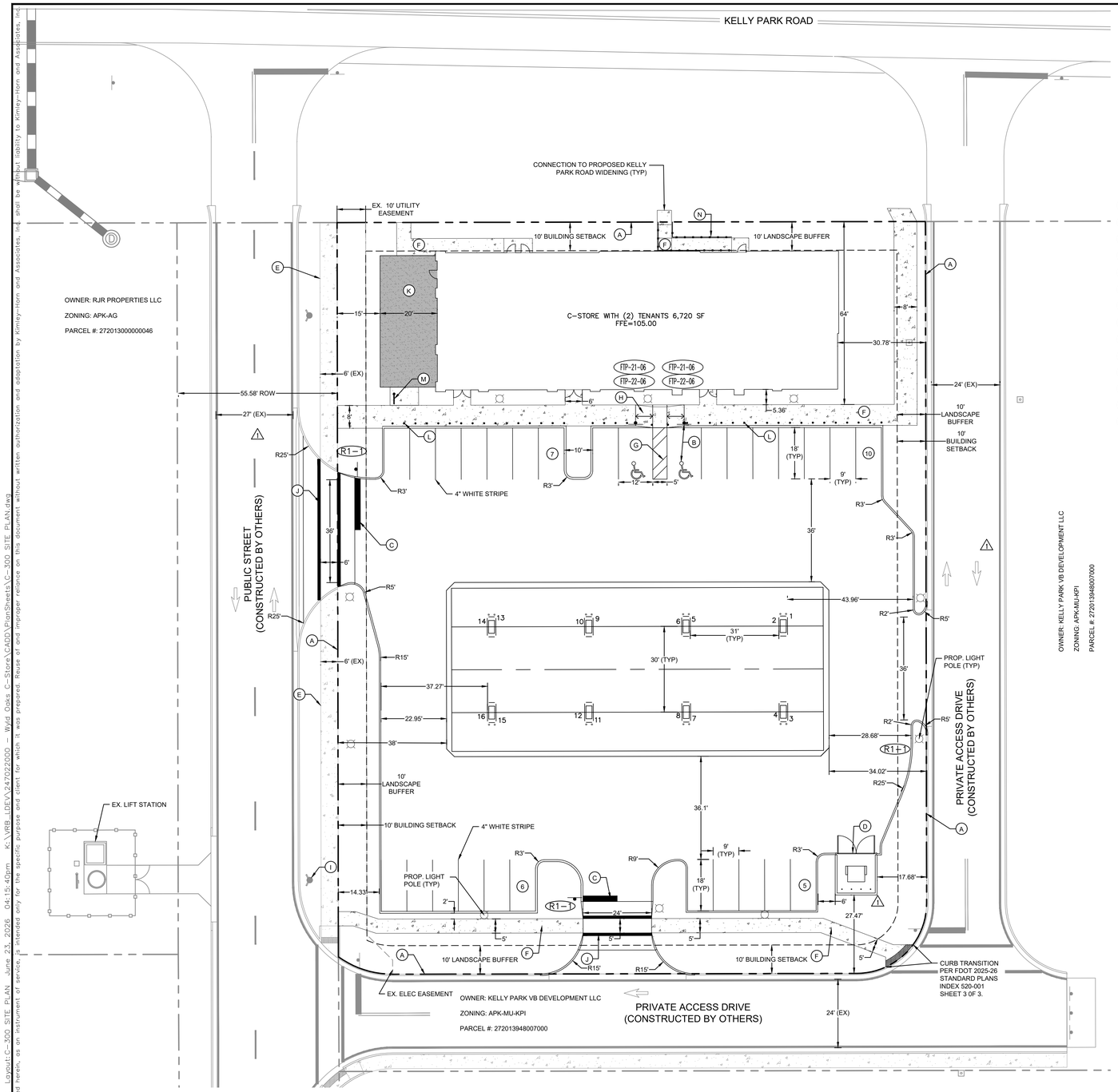
KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

EROSION CONTROL DETAILS

WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
APOPKA FL

SHEET NUMBER
C-250

Plotted By: Lamm, Toby Sheet Set: WYLD OAKS C-STORE Layout: C-250 EROSION CONTROL DETAILS June 23, 2026 04:16:18pm K:\VRB_LOF\247022000 - Wyld Oaks C-Store\CADD\PlanSheets\C-250 EROSION CONTROL DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- (A) PROPERTY LINE
- (B) ACCESSIBLE PARKING SPACE AND SIGN (TYP OF 2) (REFER TO DETAIL, SHEET C-450)
- (C) 24" PAINTED STOP BAR WITH STOP SIGN
- (D) DUMPSTER (ENCLOSURE BY ARCHITECT)
- (E) EXISTING SIDEWALK
- (F) CONCRETE SIDEWALK (REFER TO DETAIL, SHEET C-450)
- (G) ACCESSIBLE PAVEMENT MARKING PER DETAIL (TYP)
- (H) ACCESSIBLE CURB RAMP. SEE DETAIL SHEET C-450
- (I) EXISTING FIRE HYDRANT
- (J) RAISED CROSSWALK STRIPE PER FDOT INDEX #711-001
- (K) OUTDOOR SEATING AREA (REFER TO ARCH. PLANS)
- (L) BOLLARDS SPACED 4' O.C. (TYP)
- (M) BIKE RACK (REFER TO DETAIL, SHEET C-450)
- (N) PEDESTRIAN RAIL PER FDOT INDEX #515-062

SITE DATA

PROJECT DESCRIPTION:	CONSTRUCTION OF C-STORE
PARCEL ID:	13-20-27-9480-07-000
LOCATION:	SECTION 13, TOWNSHIP 20, RANGE 27E
ADDRESS:	W KELLY PARK ROAD BETWEEN EFFIE DRIVE AND HWY 429 APOPKA, FL 32712. PORTION OF LOT 7 OF WYLD OAKS PLAT ORB116 PG116-119
ZONING DISTRICT:	KPI-MU (MIXED USE/INTERCHANGE DISTRICT)
LAND USE:	COMMERCIAL
FLOOD ZONE:	ZONE X, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 12095C0050H, EFFECTIVE DATE 9/24/2021

	REQUIRED	PROVIDED
MAX. BUILDING HEIGHT	2 STORIES MAX.	26'-8" (1 STORY)
CANOPY HEIGHT	1 STORIES MAX.	10'-4" (1 STORY)

PROPERTY AREA: 53,973 S.F. (1.24 AC.)
FLOOR AREA RATIO: 6,300 S.F. /53,973 S.F.= 0.12

SITE COVERAGE:	PROVIDED		
SITE AREA:	53,973 S.F.	(1.24 AC)	100.0%
BUILDING AREA:	6,300 S.F.	(0.15 AC)	11.67%
IMPERVIOUS AREA:	36,701.86 S.F.	(0.84 AC)	68.04%
PERVIOUS AREA (15% MIN.):	10,971.14 S.F.	(0.25 AC)	20.29%

BUILDING SETBACKS:	REQUIRED	PROVIDED
FRONT	10'	10'
REAR	10'	10'
SIDE	10'	10'

BUFFER	REQUIRED	PROVIDED
FRONT	10'	10'
REAR	10'	10'
SIDE	10'	10'

PARKING SUMMARY:	REQUIRED	PROVIDED
STANDARD	23	26
*ACCESSIBLE	2	2
FUELING POSITIONS		16
TOTAL		44

* 2 SPACES REQUIRED BASED ON TOTAL PROVIDED PARKING PER ADA CODE

PARKING CALCULATION:
(3.5 SPACES/1,000 SF) * 6,300 SF = 23 STALLS

SIGN LEGEND

- FTP-21-06 — ACCESSIBLE PARKING
- FTP-22-06 — ACCESSIBLE PENALTY
- R1-1 — STOP SIGN

SYMBOL LEGEND

- ACCESSIBLE PARKING SPACE
- (#) PARKING STALL COUNT - DO NOT PAINT
- (T) TRANSFORMER PAD
- PROPERTY LINE
- SIGN POST
- LIGHT POLE (CONTRACTOR TO COORDINATE WITH DUKE ENERGY)

NOTES:

1. REFER TO PAVING, GRADING AND DRAINAGE DETAILS SHEET FOR PAVEMENT DETAILS.
2. REFER TO LANDSCAPE PLANS FOR LANDSCAPE DETAILS.
3. ALL STRIPING ON ROADWAYS AND DRIVE AISLES (STOP BARS, CROSSWALKS, LANE STRIPING) SHALL BE THERMOPLASTIC.
4. ALL LANDSCAPE ISLAND RADII ARE TO BE 10' OUTSIDE ADJACENT TO MAIN DRIVE AISLE AND 3' INSIDE RADII ADJACENT TO PARKING SPACE UNLESS OTHERWISE NOTED.
5. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
6. ACCESS, DRAINAGE, AND UTILITY EASEMENT TO BR GRANTED OVER PRIVATE ACCESS DRIVES BY ADJACENT DEVELOPMENT.

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY
1	CITY MDP COMMENTS	01/14/26	TJL

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

MACKENZIE CERJAN * LICENSE No. 90545 * STATE OF FLORIDA * PROFESSIONAL ENGINEER
6/23/2026

KHA PROJECT 247022000
DATE 6/23/2026
SCALE AS SHOWN
DESIGNED BY AKR
DRAWN BY MCM
CHECKED BY MRC

SITE PLAN

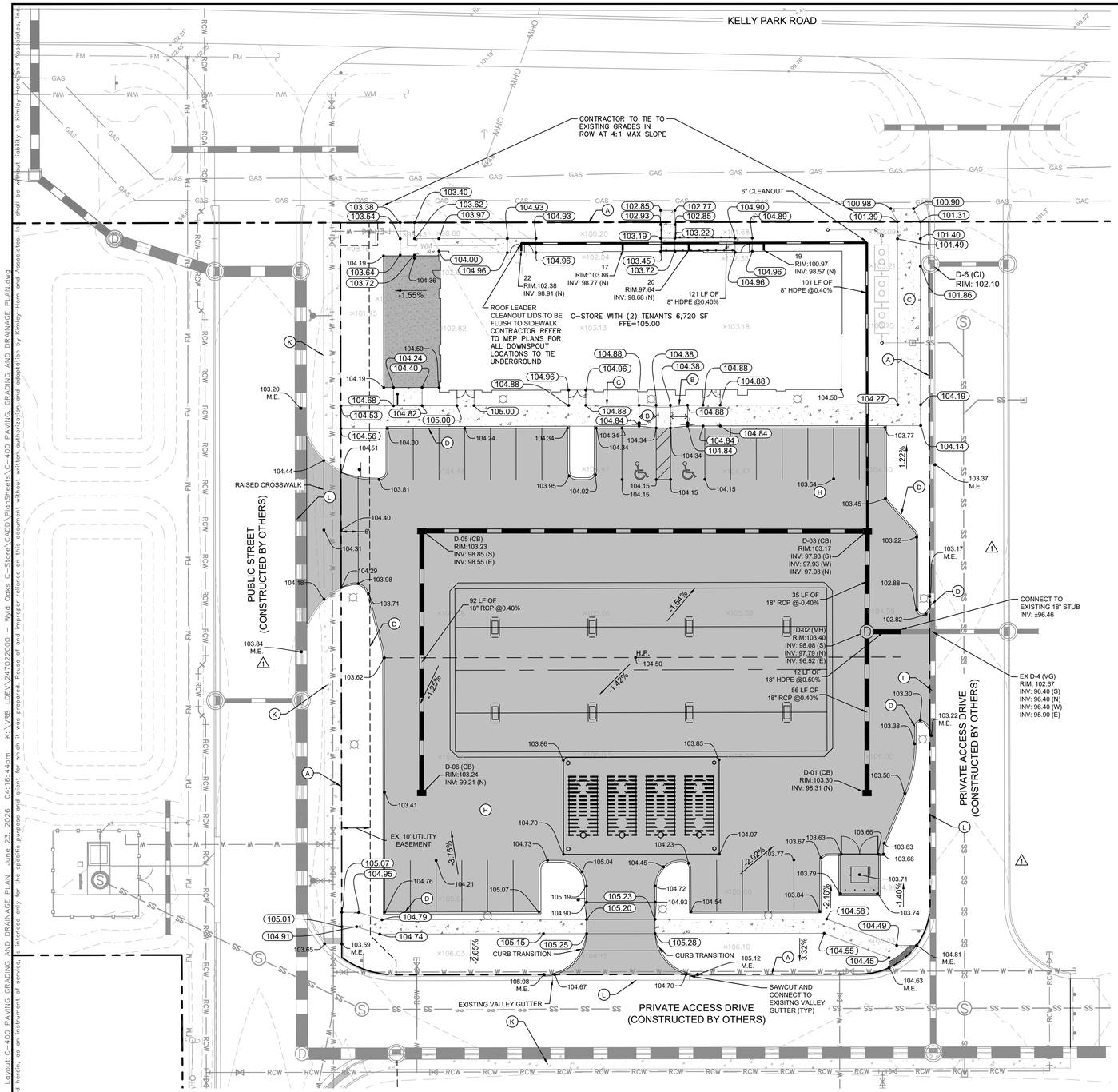
WYLD OAKS C-STORE

PREPARED FOR
M & R UNITED, INC.

APOPKA FL

SHEET NUMBER
C-300

Plotted By:Lamm, Toby Sheet Set:WYLD OAKS C-STORE Layout:C-300 SITE PLAN June 23, 2026 04:15:40pm K:\VRB_LDEV\247022000 — Wyld Oaks C-Store\CADD\PlanSheets\C-300 SITE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- (A) PROPERTY LINE
- (B) ACCESSIBLE RAMP (SEE DETAIL SHEET C-401)
- (C) STANDARD CONCRETE SIDEWALK (SEE DETAIL SHEET C-401)
- (D) FDOT TYPE "D" CURB (SEE DETAIL SHEET C-401)
- (E) EXISTING CURB AND GUTTER
- (F) EXISTING VALLEY GUTTER
- (H) HEAVY DUTY CONCRETE (SEE DETAIL SHEET C-401)
- (K) EXISTING SIDEWALK
- (L) TIE INTO EXISTING VALLEY GUTTER. CONTRACTOR TO REPLACE VALLEY GUTTER IF DAMAGED DURING CONSTRUCTION.

LEGEND

XX.XX	PROPOSED GRADE (NAVD) EDGE OF PAVEMENT
XX.XX	PROPOSED GRADE (NAVD) TOP OF CURB/SIDEWALK GRADE
+9.37	EXISTING GRADES (SEE NOTE 6)
H.P.	HIGH POINT
CB	CATCH BASIN
VG	VALLEY GUTTER INLET
EX	DENOTES EXISTING FEATURE
MH	STORM MANHOLE
SD	STORM DRAIN (SEE NOTE 9)
(H)	HEAVY DUTY CONCRETE PAVEMENT
(C)	STANDARD CONCRETE SIDEWALK

NOTES:

1. CONTRACTOR TO VERIFY ALL EXISTING UTILITY RINGS AND COVERS ON SITE ARE HEAVY DUTY TRAFFIC RATED. CONTRACTOR TO REPLACE DEFICIENT RINGS AND COVERS WITH HEAVY DUTY TRAFFIC RATED RINGS AND COVERS. CONTRACTOR TO ADJUST RIM ELEVATIONS OF ANY UTILITIES THAT CHANGE IN ELEVATION DURING CONSTRUCTION. ALL EXISTING COVERS TO REMAIN SHALL BE ADJUSTED TO FINAL GRADE.
2. ALL CLEANOUT COVERS SHOULD BE RATED FOR HEAVY DUTY TRAFFIC.
3. ALL EXISTING PAVEMENT AND CONCRETE TO BE JOINED SHALL BE SAWCUT.
4. SIDEWALKS AND CROSSWALKS SHALL NOT EXCEED 2% CROSS SLOPE NOR 5% LONGITUDINALLY. GRADES IN ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION. IN CASES OF SIDEWALK LANDINGS AT BUILDING ENTRANCES, GRADES SHALL NOT EXCEED 2% IN ANY DIRECTION. ACCESSIBLE CURB RAMPS SHALL NOT EXCEED 6' IN LENGTH AND 1:12 SLOPE. LANDINGS AT CHANGES IN DIRECTION SHALL BE MINIMUM 60"x60" AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.
5. SPOT ELEVATIONS ARE AT FACE OF CURB UNLESS OTHERWISE NOTED.
6. INFORMATION ON THE PLAN BASED UPON ALTA/ASCM LAND TITLE SURVEY PREPARED BY GET TO THE POINT SURVEY, LLC., DATED JUNE 8, 2025.

   TOPOGRAPHIC INFORMATION IS TAKEN FROM AN AS-BUILT SURVEY OF THE WYLD OAKS MASS GRADING DEVELOPMENT BY FLORIDA DESIGN CONSULTANTS, INC. DATED JANUARY 23, 2025. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHIC AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 ADJUSTMENT (NAVD 1988).
7. FLOOD ZONE: X, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 12095C0050H, EFFECTIVE DATE 9/24/2021.
8. ROOF DRAIN CONNECTIONS TO DRAINAGE PIPE SHALL BE AS FOLLOWS:
   A. FOR ADS N-12 CORRUGATED POLYETHYLENE DRAINAGE PIPE USE ADS DUAL WALL FABRICATED REDUCING SADDLE TEE 4"-24" DIAMETER.
   B. FOR SD DRAINAGE PIPE MAKE CONNECTION PER FDOT INDEX 280,CONCRETE COLLAR FOR JOINING MAINLINE PIPE AND STUB PIPE DETAIL
   C. NOTIFY CONSULTANT FOR CONNECTION METHOD TO STEEL PIPE.
9. THE SELECTION OF STORM PIPE MATERIAL FOR THIS PROJECT IS AT THE DISCRETION OF THE DEVELOPER AND CONTRACTOR. EITHER REINFORCED CONCRETE PIPE (RCP) OR *HIGH-DENSITY POLYETHYLENE (HDPE) MAY BE UTILIZED, PROVIDED ALL INSTALLATIONS COMPLY WITH APPLICABLE CITY OF APOPKA STANDARDS AND SPECIFICATIONS.
   * IF HDPE STORM PIPE IS UTILIZED, THE CONTRACTOR SHALL PERFORM A LASER ALIGNMENT (LINE AND GRADE) VERIFICATION OF THE INSTALLED PIPE PRIOR TO BACKFILLING
10. HEAVY DUTY CONCRETE PAVEMENT MAY BE EXCHANGED FOR HEAVY DUTY ASPHALT IN PARKING AND DRIVEWAYS AT DEVELOPER'S DISCRETION. SEE PAVEMENT SECTION, SHEET C-450.

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY
1	CITY MDP COMMENTS	01/14/26	TJL

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
6/23/2026

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

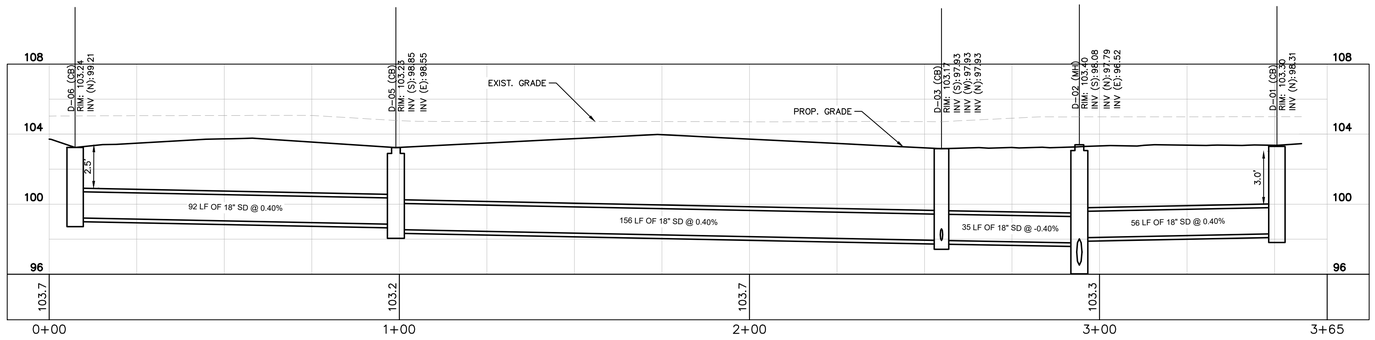
KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

PAVING GRADING AND DRAINAGE PLAN

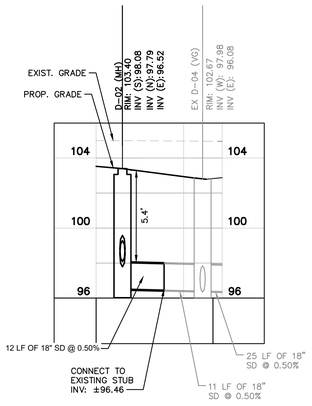
WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
APOPKA FL

SHEET NUMBER
C-400

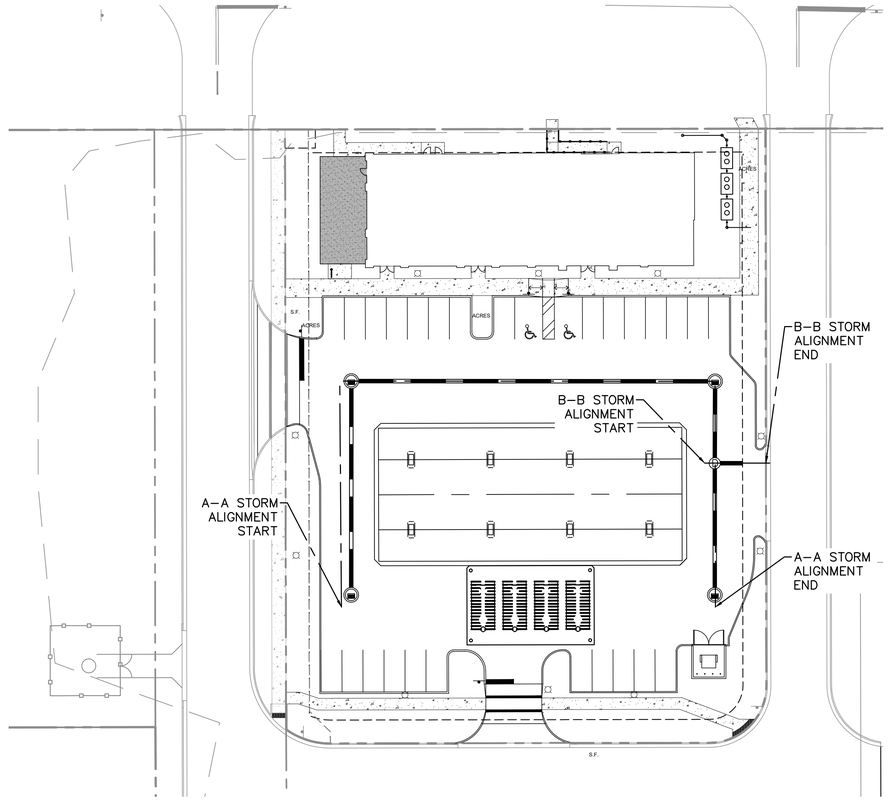
Plotted By: Lamm, Toby Sheet Set: WYLD OAKS C-STORE Layout: C-400 PAVING GRADING AND DRAINAGE PLAN June 23, 2026 04:16:44pm K:\VRB_LDEV\247022000 — Wyld Oaks C-Store\CADD\PlanSheets\C-400 PAVING, GRADING AND DRAINAGE PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



A-A STORM WATER PROFILE



B-B STORM WATER PROFILE



PROFILES ALIGNMENTS LAYOUT
N.T.S

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER

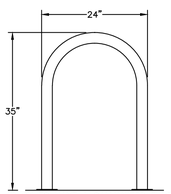
KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

DRAINAGE PROFILE

WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
APOPKA FL

SHEET NUMBER
C-401

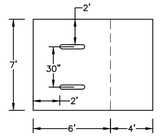
Plotted By: tommy.tidy Sheet Set: WYLD OAKS C-STORE Layout: C-401 DRAINAGE PROFILE June 23, 2026 04:17:11pm K:\VRB_LDE\247022000 - Wyld Oaks C-Store\CADD\Plan Sheets\C-401 DRAINAGE PROFILE.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



RACK TO HAVE A GALVANIZED FINISH AND BE SURFACE MOUNTED UNLESS OTHERWISE NOTED

DERO BIKE RACK CO.
504 MALCOLM AVENUE SE
MINNEAPOLIS, MN 55414
PHONE: 800-891-9298

HOOP RACK
(OR APPROVED EQUAL)



SPACE REQUIREMENTS AND CLEARANCES

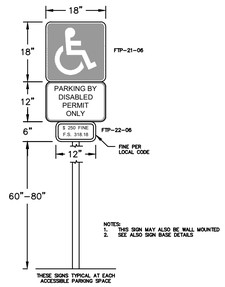
PLACEMENT CONSIDERATIONS
IF RACKS ARE TO BE PLACED IN 'PARALLEL,' PLEASE ALLOW A MINIMUM OF 30" (INCHES) ON CENTER TO ALLOW SPACING BETWEEN BICYCLES.

IF RACKS ARE TO BE PLACED IN 'SERIES,' PLEASE ALLOW 14' ON CENTER OF SPACING BETWEEN THE RACKS. THIS PERMITS 6' (FEET) CLEARANCE FOR BICYCLES ON EACH RACK WITH A 4' (FEET) COMMON AREA IN BETWEEN FOR INGRESS AND EGRESS.

BICYCLE RACK

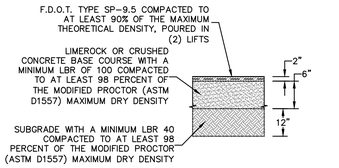
CONTRACTOR TO SUBMIT SHOP DRAWINGS TO DEVELOPER FOR APPROVAL

N.T.S



ACCESSIBLE PARKING SIGN

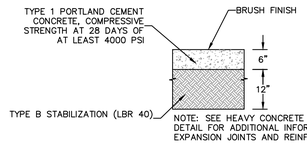
N.T.S



STANDARD DUTY ASPHALT

N.T.S

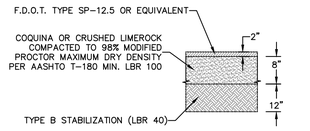
NOTE:
CONTRACTOR TO REFER TO THE GEOTECHNICAL REPORT FOR SITE WORK SPECIFICATIONS.



NOTE: SEE HEAVY CONCRETE PAVEMENT DETAILS DETAIL FOR ADDITIONAL INFORMATION REGARDING EXPANSION JOINTS AND REINFORCEMENT

HEAVY DUTY CONCRETE

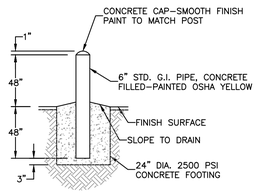
N.T.S



HEAVY DUTY ASPHALT

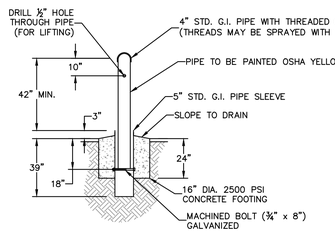
N.T.S

NOTE:
CONTRACTOR TO REFER TO NOTE 10 ON PGD PLAN.



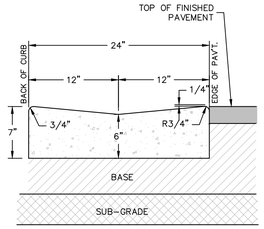
PIPE BOLLARD

N.T.S



REMOVABLE PIPE BOLLARD

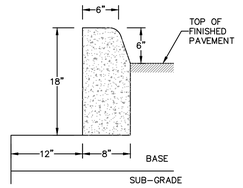
N.T.S



ALL CONCRETE SHALL BE 3,000 PSI

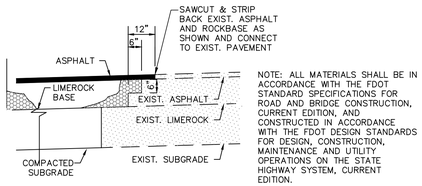
VALLEY GUTTER

N.T.S



TYPE "D" CURB

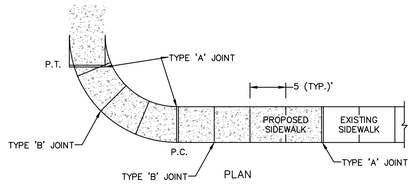
N.T.S



NOTE: ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND CONSTRUCTED IN ACCORDANCE WITH THE FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, CURRENT EDITION.

CONNECTION TO EXISTING PAVEMENT

scale: N.T.S. ref. C7.1

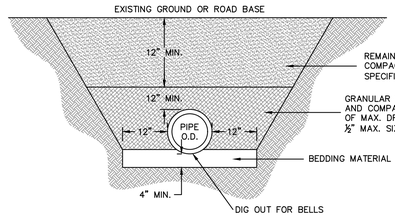


PLAN

SEE NOTE 3, SHEET C-200

CONTROL JOINT DETAIL

N.T.S

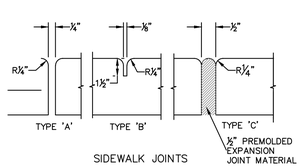


TRENCH WITHOUT EXFILTRATION

N.T.S

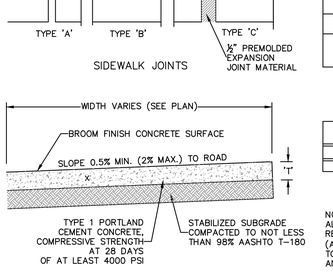
NOTES:
1. BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL (2" MAX SIZE). UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCK SHALL BE REMOVED.
2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGER ROCK, MUCK AND DEBRIS.
5. ALL WORK SHALL CONFORM TO STATE OF FLORIDA TRENCH SAFETY ACT.

* COMPACT TO 98%OF AASHTO T-180 MAXIMUM DRY DENSITY UNDER EXISTING AND PROPOSED PAVEMENT AREAS. COMPACT TO 95% ON ALL OTHER AREAS UNLESS OTHERWISE NOTED..



3' CURB TRANSITION

N.T.S



SIDEWALK JOINTS

STANDARD CROSS SECTION

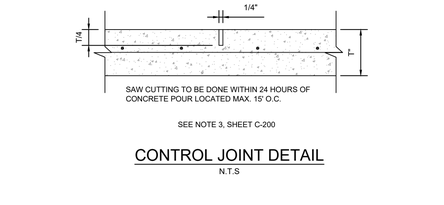
TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
'A'	100' MAX. SPACING, P.C./P.T. OF CURVES, JUNCTION OF EXISTING AND NEW SIDEWALKS.
'B'	5'-0" CENTER TO CENTER
'C'	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES.

TABLE OF SIDEWALK THICKNESS	
LOCATION	'T'
PEDESTRIAN ONLY AREAS	4"

NOTE:
ALL SIDEWALK STREET CROSSINGS MUST MEET THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (ADA) COMPLIANCE GUIDE. TRANSITIONS FROM RAMPS TO WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.

CONCRETE SIDEWALK

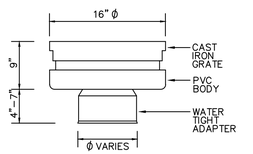
N.T.S

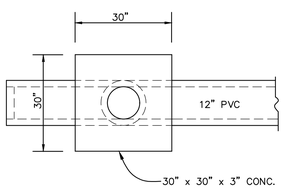


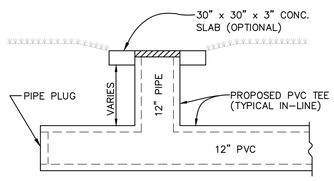
SEE NOTES 4 & 5, SHEET C-200

EXPANSION JOINT DETAIL

N.T.S

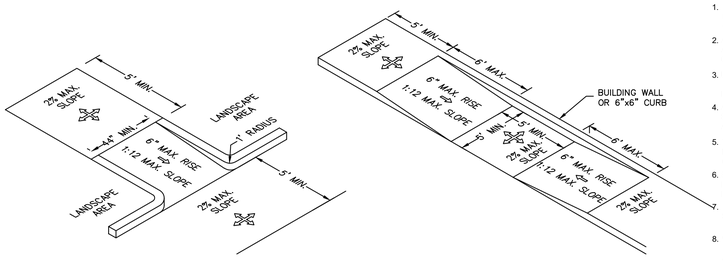






YARD DRAIN DETAIL

N.T.S.

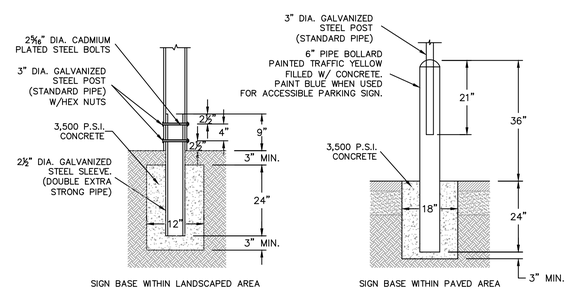


ACCESSIBLE RAMPS

N.T.S

DETECTABLE WARNINGS REQUIRED FOR RAMPS LOCATED IN PROPOSED ROW.

1. ALL ACCESSIBLE COMPONENTS CONSTRUCTED AS PART OF THESE PLANS SHALL COMPLY WITH CHAPTER 11 OF THE FLORIDA BUILDING CODE.
2. ACCESSIBLE ROUTE TO ACCESSIBLE SPACES, BUILDING ENTRANCES, AND PUBLIC STREETS SHALL NOT EXCEED 5% RUNNING SLOPE AND 2% CROSS SLOPE.
3. UNLESS OTHERWISE SHOWN ON THE PLANS, THE MINIMUM CLEAR ROUTE SHALL BE 36" WIDE WITH A 60" X 60" PASSING SPACE EVERY 200 FEET.
4. ACCESSIBLE ROUTES THROUGH PLANTERS SHALL BE LEVEL WITH THE SURROUNDING PAVEMENT OR PROVIDE CURB RAMPS AT EACH END WITH A MINIMUM 48" LEVEL LANDING IN BETWEEN.
5. THE ACCESSIBLE ROUTE IN FRONT OF PULL - IN PARKING SHALL BE A MINIMUM OF 44" WIDE AND NOT REDUCED BY VEHICLE OVERHANGS, CURBING, SIGN POSTS, OR OTHER OBSTRUCTIONS.
6. SPECIAL RAMP RULES APPLY FOR ANY RISE GREATER THAN 6" INCLUDING BUT NOT LIMITED TO RESTRICTION ON SLOPE, TOTAL RISE BETWEEN LANDINGS, AND USE OF HANDRAILS, PER F.B.C 11-4.8.
7. PUBLIC SIDEWALK CURB RAMPS CONSTRUCTED WITHIN A PUBLIC RIGHT-OF -WAY, IN ABSENCE OF LOCAL ROADWAY GUIDELINES, SHALL MEET THE REQUIREMENTS OF F.D.O.T INDEX 304.
8. WHEN ACCESSIBLE PARKING ABUTS CURB OR EDGE OF PAVEMENT, PLEASE REFER TO DETAIL FOR STRIPING COLOR, STALL DIMENSIONS AND SLOPE.
9. CHANGE IN LEVEL ALONG ACCESSIBLE ROUTE IS NOT TO EXCEED 1/4" WITHOUT A RAMP PER SECTION 11-4.3.8.
10. ALL HANDICAPPED PARKING SPACES SHALL BE SIGNED AND MARKED IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS INDEX 17346.



NOTE:
SIGNS INSTALLED WITHIN SIDEWALKS SHALL BE SET DIRECTLY IN THE CONCRETE AND SHALL UTILIZE A 3" DIAMETER SIGN POST PER THE SPECIFICATIONS.

SIGN BASE

N.T.S

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN * LICENSE No. 90545 * STATE OF FLORIDA * PROFESSIONAL ENGINEER
6/23/2026

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

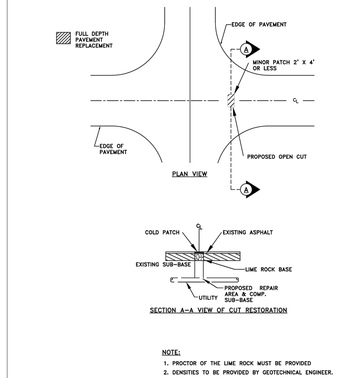
KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

PAVING GRADING AND DRAINAGE DETAILS

WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
FL
APOPKA

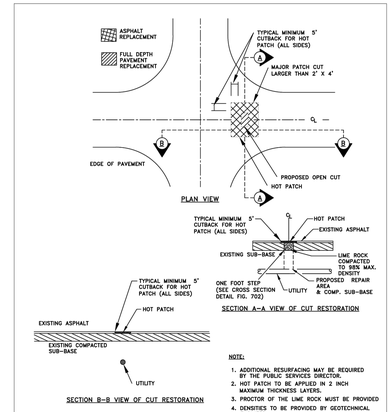
SHEET NUMBER
C-450

Plotted By:Lamm, Toby Sheet Set:WYLD OAKS C-STORE Layout:C-450 PAVING GRADING AND DRAINAGE DETAILS June 23, 2026 04:17:20pm K:\ORB_DFE\V247022000 - Wyld Oaks C-Store\CADD\PlanSheets\C-401 PAVING, GRADING AND DRAINAGE DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc



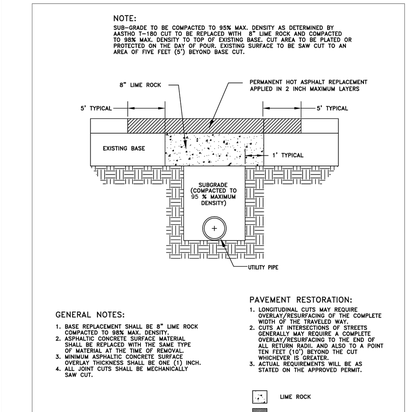
OPEN-CUT DETAIL - MINOR PATCH

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 700



OPEN-CUT DETAIL - MAJOR PATCH

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 701



OPEN-CUT CROSS SECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 702

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
6/23/2026

Kimley»Horn

© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

No.	REVISIONS	DATE	BY

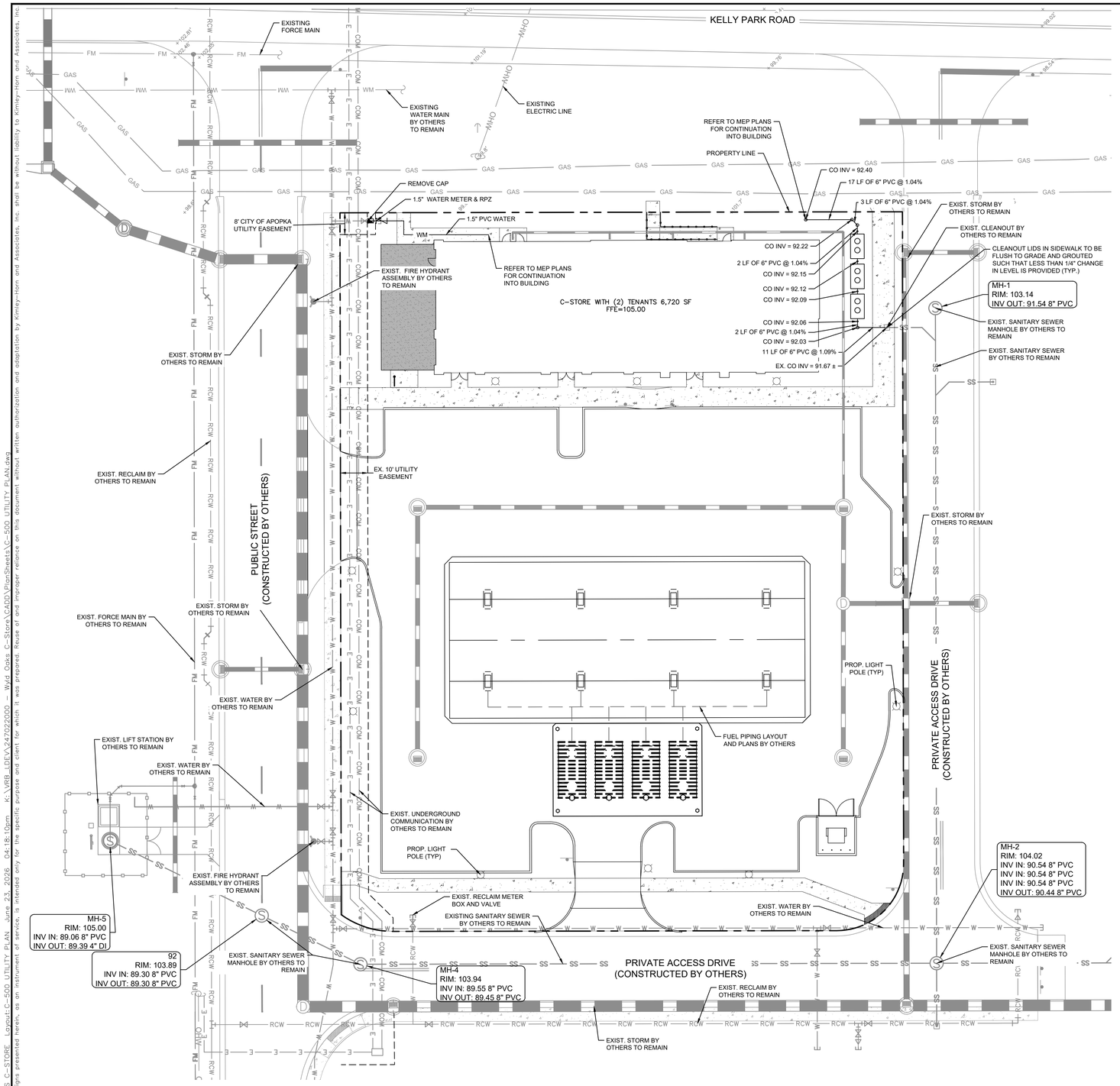
KHA PROJECT 247022000
DATE 6/23/2026
SCALE AS SHOWN
DESIGNED BY AKR
DRAWN BY MCM
CHECKED BY MRC

PAVING GRADING AND DRAINAGE DETAILS

WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
APOPKA FL

SHEET NUMBER
C-451

Plotted By:Lamm, Toby Sheet Set:WYLD OAKS C-STORE Layout:C-451 PAVING GRADING AND DRAINAGE DETAILS June 23, 2026 04:17:22pm K:\ORB_LSE\A247022000 — Wyld Oaks C-Store\CADD\PlanSheets\C-401 PAVING, GRADING AND DRAINAGE DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc



UTILITY NOTES

1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
3. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
   8" PVC SDR35 PER ASTM D 3034, FOR PIPES LESS THAT 12' DEEP
   8" PVC SDR26 PER ASTM D 3034, FOR PIPES MORE THAN 12' DEEP
   6" PVC SCHEDULE 40
   DUCTILE IRON PIPE PER AWWA C150
4. WATER LINES SHALL BE AS FOLLOWS:
   6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER COUNTY ROADS, OTHERWISE CLASS 150
   6" AND LARGER DUCTILE IRON PIPE PER AWWA C150
   SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI B16.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241.
5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN SPECIFICATIONS.
7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES.
9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
10. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
11. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS WITHIN PAVED AREAS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATER TIGHT LIDS WITHIN LANDSCAPED AREAS.
12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
16. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
17. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
19. REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER MAINS, FORCE MAINS, SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND SPECIFICATIONS.
21. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
22. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE.
23. ACCESS, DRAINAGE, AND UTILITY EASEMENT TO BE GRANTED OVER PRIVATE ACCESS DRIVES BY ADJACENT DEVELOPMENT.

CITY OF APOPKA (C.O.A.) UTILITY NOTES

1. THE DEVELOPER'S CONTRACTOR SHALL ACCOMPLISH ALL WATER MAIN & SERVICE WORK THROUGH THE POINT OF CONNECTION/FIRE SERVICE CONTROL VALVE & WATER METERS. C.O.A. WILL OWN & OPERATE UP TO & INCLUDING THE POINT OF CONNECTION/FIRE SERVICE CONTROL VALVE & METERS ONLY. THE REQUIRED WORK SHALL BE PERFORMED PER CURRENT C.O.A. MATERIAL SPECIFICATION & WATER DETAIL SHEET UNDER C.O.A. INSPECTION. TO SCHEDULE A C.O.A. INSPECTION, CALL 407-703-1718.
2. THE DEVELOPER/CONTRACTOR SHALL FILED VERIFY THE VERTICAL & HORIZONTAL LOCATION OF EXISTING C.O.A. WATER FACILITIES BEFORE COMMENCEMENT OF CONSTRUCTION.
3. THE DEVELOPER/CUSTOMER IS RESPONSIBLE FOR ALL REQUIRED PERMITS.

LEGEND

- WM — DOMESTIC WATER SERVICE LINE
- SS — SANITARY SEWER LATERAL
- WM — EXISTING WATER MAIN
- SS — EXISTING SANITARY SEWER MAIN
- OHW — EXISTING ELECTRIC LINE
- ELEC — PROPOSED ELECTRIC LINE
- DRAINAGE
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- T — EXISTING TRANSFORMER
- PROPOSED PIPE BEND
- PROPOSED METER AND RPZ ASSEMBLY

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
6/23/2026

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

UTILITY PLAN

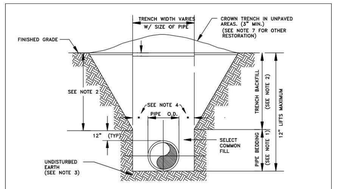
WYLD OAKS C-STORE

PREPARED FOR
M & R UNITED, INC.

APOPKA FL

SHEET NUMBER
C-500

Plotted By:Lamm, Toby Sheet Set:WYLD OAKS C-STORE Layout:C-500 UTILITY PLAN June 23, 2026 04:18:10pm K:\VRB_LDEV\247022000 - Wyld Oaks C-Store\CAD\PlanSheets\C-500 UTILITY PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETERS LESS THAN 24", AND 24" FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES.
8. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.
9. ALL UNPAVED DISTURBED AREAS SHALL BE SODDED TO MATCH ADJACENT DOMINATE GRASS SPECIES.

TYPE "B" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 100

PROPOSED UTILITY	HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS									
	POTABLE WATER		RECLAIMED WATER**		SANITARY SEWER FORCE MAIN		SANITARY SEWER GRAVITY MAIN		STORM SEWER	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
POTABLE WATER	--	--	3'	12"	6'	12"	6'	12"(MIN.) 24"(MAX)	6'	6"
RECLAIMED WATER	3'	12"	--	--	3'	12"	6'	12"	--	--
SANITARY SEWER FORCE MAIN	6'	12"	3'	12"	--	--	--	--	--	--
SANITARY SEWER GRAVITY MAIN	6'	6"ABOVE 12"BELOW	3'	12"	--	--	--	--	--	--

GENERAL NOTES:

1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.). THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN EXISTING PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.
2. (*): FOR THE PURPOSE OF THIS TABLE, RECLAIMED WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 17-610. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.
3. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATER CLEARANCE SHALL BE USED.

   C/C = DENOTES CENTER OF PIPE TO CENTER OF PIPE.

   O/O = DENOTES OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
4. ACCEPTABLE VARIANCES:
   A. WHERE HORIZONTAL SEPARATION IS NOT ATTAINABLE, PVC-C-900 SDR-14 OR CONCRETE ENCASEMENT MUST BE USED FOR THE SANITARY SEWER LINE FOR AT LEAST ONE OF THE PIPES. PVC-C-900 SDR-14 FOR SANITARY SEWERS OR ENCASED PIPE CENTERED AT THE POINT OF CROSSING SPECIAL SUPPORT MAY BE REQUIRED.
   B. WHERE 18 INCH VERTICAL SEPARATION IS NOT ATTAINABLE AT CROSSINGS, USE ONE FULL LENGTH OF PVC-C-900 SDR-14 FOR SANITARY SEWERS OR ENCASED PIPE CENTERED AT THE POINT OF CROSSING SPECIAL SUPPORT MAY BE REQUIRED.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
6. CONCRETE ENCASEMENT SHALL NOT BE USED UNLESS APPROVED BY PUBLIC SERVICES DIRECTOR OR HIS DESIGNEE.

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 104

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *											
	PIPE SIZE										
	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"	48"
90° BEND	33	43	51	60							
45° BEND	14	18	22	25							
22-1/2° BEND	7	9	11	12							
11-1/4° BEND	4	5	6	6							
TEE**	1	7	24	44							
REDUCER (ONE SIZE SMALLER)		41	39	40							
DEAD END	74	96	115	136							

* ONLY RESTRAIN BRANCH PIPE FOR TEES. ONLY RESTRAIN LARGER PIPE FOR REDUCERS
** LENGTH ALONG RUN ASSUMED TO BE 18'

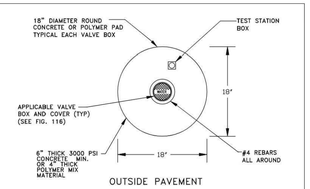
NOTES:

1. FITTINGS SHALL BE DUCTILE IRON RESTRAINED JOINT TYPE. FM FITTINGS TO BE LINED WITH PROTECTO 401.
2. INSTALL FULL LENGTHS OF PIPE WITH TOTAL LENGTH CONTAINING ONLY RESTRAINED JOINTS EQUAL TO OR GREATER THAN LENGTH SHOWN IN TABLE.
3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, FOR PVC WITH THE FOLLOWING ASSUMPTIONS:

   TYPE OF PIPE:_____ PVC
   WORKING PRESSURE:_150___P.S.I.** ** FW = 100 P.S.I. /
   SOIL DESIGNATION:SW/SM/SP SILT WW OR RWW = 150 P.S.I.
   LAYING CONDITIONS:_____
6. FOR PIPE ENCASED IN POLYETHYLENE INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5.
7. VALUES NOT LISTED IN THE TABLE TO BE COMPLETED BY THE ENGINEER.

RESTRAINED PIPE TABLE (PVC)

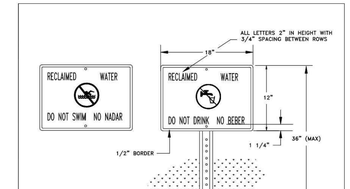
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 105



VALVE IDENTIFICATION TAG
TO BE INSTALLED BY CITY
& PAID FOR BY DEVELOPER

VALVE BOX

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 109

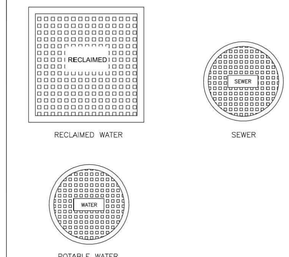


NOTES:

1. HEIGHT OF SIGN WILL DEPEND ON LOCATION AND SURROUNDING LANDSCAPE PLANT TYPES. IN ALL CASES, THE SIGN SHALL BE VISIBLE TO THE PUBLIC.
2. BACKGROUND SHALL BE WHITE, LETTERS AND FIGURES SHALL BE BLACK. PROHIBITIVE SYMBOL SHALL BE RED.
3. ENGINEERING GRADE REFLECTIVE MATERIALS SHALL BE USED.
4. POST SHALL BE U CHANNEL 12 FT. 2 LB. HOT ROLLED HIGH TENSILE RAIL OR BILLET STEEL, HOT DIP GALVANIZED PER ASTM A-123.
5. MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
6. SIGNS SHALL BE PLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY APPROVED ENGINEERING PLANS AND/OR AS APPROVED BY PUBLIC SERVICES DEPARTMENT.

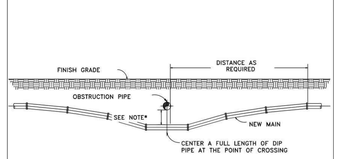
RECLAIMED WATER ADVISORY SIGN

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 115



TYPICAL VALVE BOX COVER DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 116



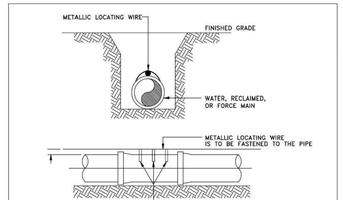
NOTES:

1. 18" MINIMUM CLEARANCE FOR WATER, SEWER AND RECLAIMED WATER MAIN CROSSINGS
2. 12" MINIMUM CLEARANCE REQUIRED FOR OTHER TYPE UTILITY CROSSINGS.
3. SEE ENCASEMENT DETAIL IF MINIMUM CLEARANCE CANNOT BE OBTAINED.

* CONSTRUCT UNIFORM PIPE DEFLECTION NOT TO EXCEED 75% OF MANUFACTURER RECOMMENDED MAXIMUM DEFLECTION PER PIPE JOINT

UTILITY CROSSING PIPE DEFLECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 117

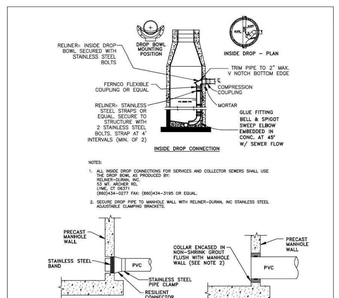


NOTES:

1. ALL PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 AWG-SOLID CCS REINFORCED TRACER WIRE-INSULATED 30 MIL HDPE – 30 VOLT MFG. BY COPPERHEAD INDUSTRIES, LLC OR EQUAL) CAPABLE OF DETECTION BY A CABLE LOCATOR.
2. SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND ATTACHED WITH DUCT TAPE OR NYLON STRAPS AT 3 LOCATIONS PER JOINT. LOCATING WIRE SHALL TERMINATE AT THE TEST STATION BOX AS SHOWN IN FIG. 109.
3. BE CAPABLE OF EXTENDING 12" ABOVE TOP OF TEST STATION BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
4. SPLICES SHOULD BE MADE USING STANDARDS AND PRODUCTS DESIGNED FOR DIRECT BURIAL CONDUCTORS.
5. WIRE INSULATION SHALL BE COLOR CODED FOR THE TYPE OF PIPE BEING INSTALLED.

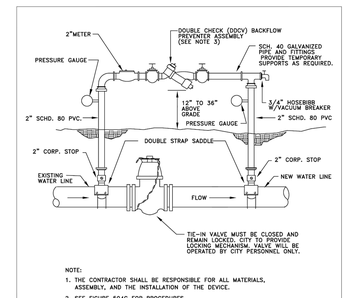
PIPE LOCATING WIRE DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 118



MANHOLE CONNECTION DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 201

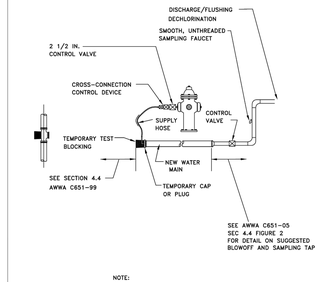


NOTE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS, ASSEMBLY, AND THE INSTALLATION OF THE DEVICE.
2. SEE FIGURE 504C FOR PROCEDURES.
3. DDCV IS MINIMUM PROTECTION REQUIRED. A RPZ DEVICE MAY BE REQUIRED DEPENDING ON PROJECT. PROVIDE COPY OF LATEST CERTIFICATION TEST RESULTS.

TEMPORARY JUMPER CONNECTION

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 504 A



NOTE:
1. SEE FIGURE 504C FOR PROCEDURES.

TEMPORARY JUMPER CONNECTION FROM FIRE HYDRANT

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 504 B

TEMPORARY JUMPER CONNECTION NOTES:

1. A temporary jumper connection is required at all connections between existing active water mains and proposed new water main improvements.
2. Figures 504 A and 504 B to be used for filling any new water main of any size from existing active water mains and for flushing of new mains up to 8 inches in diameter (2.5 FPS minimum velocity) and for pulling bacteriological samples from any new water main of any size. The jumper connection shall be maintained until after filling, flushing testing and sampling of the new main is completed, satisfactory results are received, and clearance from the Florida Department of Environmental Protection (FDEP) and other pertinent agencies have been received. The jumper connection shall also be used to maintain a minimum pressure of 20 psi in the new mains after disinfection and until the FDEP clearance letter is received. Pipe and fittings used for connecting the new pipe to the existing pipe shall be disinfected prior to installation in accordance with AWWA C651, 2005 edition. The tapping sleeve and the exterior of the main to be tapped shall be disinfected by spraying or swabbing per section 11 of AWWA C651-05.
3. Flushing of 10 inches in diameter and larger water mains may be done through the fire-in valve. Flushing and sampling procedures for the fire-in valve shall be as follows:
   A. The fire-in valve shall be installed and positioned and gasketed to the satisfaction of the City engineer to verify water tightness prior to fire-in. Valves which are not water tight shall be replaced with a new valve installed immediately adjacent to the leaking valve.
   B. The temporary jumper connection shall be constructed as detailed. The jumper connection shall be used to fill the new water main and for providing water for bacteriological sampling of the new main as required by the FDEP permit.
   * Flushing shall not be attempted during peak demand hours of the existing water mains.
   * All downstream valves in the system must be open prior to opening the fie-in valve.
   * Provide for and monitor the pressure in the fie-in point. The pressure in the existing main must not drop below 35 psi.
   * The fie-in valve shall be opened a few turns only, ensuring a pressure drop across the valve is greater than 10 psi.
   C. The fie-in valve shall be locked closed by the City personal until flushing begins.
   D. The fie-in valve shall be opened only for flushing of the new main. The procedure shall be directed by the City and observed by the engineer.
   E. After flushing, the fie-in valve shall be closed and locked in the closed position by the City personal.
4. The contractor shall provide documentation demonstrating that the double check backflow prevention device has been tested and is in good working order at the time of installation.
5. Except as required to flush lines of greater than 8 inches in diameter, the fie-in valve shall remain closed and shall be locked in the closed position by the City. The fie-in valve shall remain locked closed until the new system has been cleared for use by FDEP and all other pertinent agencies.
6. Upon receipt of clearance for use from FDEP and all other pertinent agencies, the contractor shall remove the temporary jumper connection. The corporation stops are to be closed and plugged with 2 inch brass plugs.
7. All installation and maintenance of the temporary jumper connection and associated backflow prevention device, fittings, valve, etc. shall be the responsibility of the contractor.

PROCEDURES FOR TEMPORARY JUMPER CONNECTION

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 504 C

NOTE:

CONTRACTOR SHALL OBTAIN A COPY OF AND ABIDE BY THE CITY OF APOPKA STANDARD DETAILS AND CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION MANUAL, LATEST EDITION.

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
6/23/2026

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

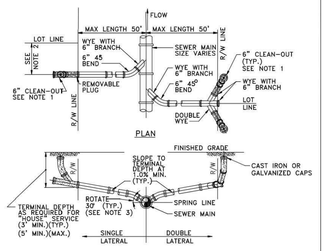
KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

UTILITY DETAILS

WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
APOPKA FL

SHEET NUMBER
C-501

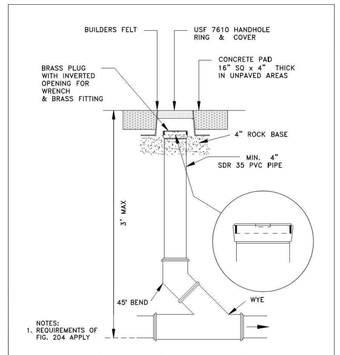
Plotted By:Lamm, Toby Sheet Set:WYLD OAKS C-STORE Layout:C-501 UTILITY DETAILS June 23, 2026 04:18:22pm K:\ORL_LSE\247022000 — Wyld Oaks C-Store\CADD\PlanSheets\C-501 UTILITY DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



NOTES:
1. CLEAN-OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE.
3. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
4. RESIDENTIAL SERVICES SHALL BE 4 INCHES & NON-RESIDENTIAL SERVICES SHALL BE 6 INCHES IN DIAMETER AS A MINIMUM.
5. GALVANIZED, OR CAST IRON CLEAN-OUT CAP SHALL BE USED ON THE STUBOUT FOR EACH SERVICE.
6. LATERAL SHALL BE MARKED WITH AN "S" STAMPED OR CUT IN THE CURB.

SERVICE LATERAL DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 204

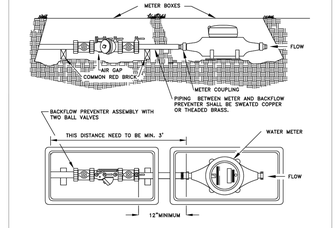


NOTES:
1. REQUIREMENTS OF FIG. 204 APPLY

SANITARY SEWER SERVICE TRAFFIC RATED CLEAN-OUT DETAIL

NTS

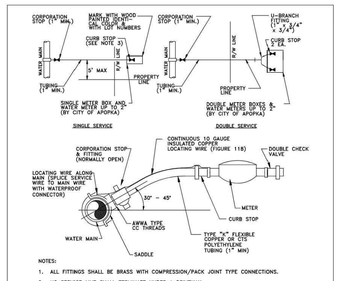
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 205



1. A 3' PIECE OF STRAIGHT PIPE MUST BE CONNECTED TO METER USING THE DESIGNATED HOLES IN THE METER BOX BEFORE ANY ANGLES ARE CONNECTED. THE SAME RULES APPLY FOR DOUBLE METER HOOK-UPS.
2. BACKFLOW DEVICE AND METER ARE TO BE SET BY THE CITY FOR METERS 2-INCH OR LESS IN SIZE.

POTABLE WATER SERVICE DETAIL FOR LOTS SERVED WITH RECLAIMED WATER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 505



NOTES:
1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK JOINT TYPE CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE AT A CURB STOP(S) WHICH SHALL BE BURIED APPROXIMATELY 3" BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" x 2" x 18" STAKE WITH THE TOP PAINTED BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER, AND MARKED WITH THE NUMBER OF THE LOT(S) TO BE SERVED.
4. RECLAIMED WATER SERVICES SHALL USE PURPLE COLORED CTS POLYETHYLENE TUBING.
5. POTABLE WATER SERVICES SHALL USE BLUE COLORED CTS POLYETHYLENE TUBING.
6. ALL SERVICE UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE INSTALLED IN A MINIMUM 2" PVC SLEEVE.

WATER SERVICE CONNECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 405

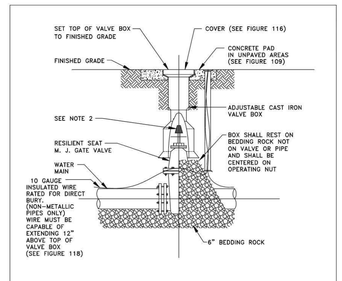


GENERAL NOTES

1. Governing standards and specifications on this project are as constructed the Florida Department of Transportation (FDOT) Design Standards (2015 Edition), FDOT Standard Specifications for Road and Bridge Construction (2016 Edition), and City of Apopka Utilities Design and Construction Standards Manual (2014 Edition).
2. All personal property, except small houses located within the public right-of-way (see coloured Plans), shall be removed by the Owner before the Contractor shall be required to perform work on the project in accordance with the Construction Plans. Shed houses shall be relocated by the Contractor in accordance with FDOT Index No. 310.
3. All utility locates, both temporary and permanent, will be the responsibility of the Contractor. Approval of disposal sites shall be obtained from their Eng of Australia prior to disposal.
4. All existing trees and stumps within the right-of-way and limit of the project are to be removed unless otherwise noted on the Construction Plans.
5. Sod and mulch all disturbed areas not covered by rock unless otherwise directed.
6. All pavement offsets shown are to the proposed centerline of construction, as where radius points are shown, unless otherwise noted on the Construction Plans.
7. Control locations and traffic flows in the Construction Plans are subject to modification by the Engineer during construction. Any such modifications shall be executed in accordance with FDOT Index No. 711.
8. Unit prices bid for all items listed in the bid specification payment are included in the bid price for System 100. The Contractor shall perform his work in accordance with the requirements of "Excavation, Control, and Abatement of Erosion and Water Pollution", excluding items specifically listed in the bid specification payment shall be used at locations designated in the plans and/or designated by the Engineer.
9. The information shown on these drawings concerning type and location of underground and surface utilities is not guaranteed to be complete or accurate. It is the responsibility of the Contractor to all inclusive. The Contractor shall make his own determination as to the type and location of utilities as may be necessary to avoid damage there to, and is responsible for coordinating with utilities.
10. Prior to utilizing drainage structures, the Contractor shall determine if drainage utility conflicts exist. Information about possible conflicts shall be submitted to the Engineer in writing for resolution before proceeding with the work.
11. The Contractor shall notify all gas utility companies a minimum of two working days prior to excavation in the vicinity of their facilities. Gas utilities are:
12. All watermains, gas mains shall be filled with non-shrink grout, covered with an asphaltic concrete patch, and compacted with a Mini-Hitty material per Section 110-05 of the Orange County Roads and Streets Standards.
13. All curb inlets, ditch bottom inlets, and manholes shall have rectly bearing frames and covers installed to the elevations shown on the Construction Plans.
14. Changes of plan records not accessible plan or where one foot will not be considered as a basis for additional compensation for the pertinent pipe bid item or for modification of contract time.
15. All benchmarks (iron and monuments) shown in the Construction Plans, or found, shall be preserved. Those shown or proposed pavement shall be protected with a cover iron valve box.
16. Any Control Point (CP) or benchmark shown on the plans that is lost or destroyed or rendered is in danger of being destroyed or disturbed, the Contractor shall notify the Engineer, without delay, by telephone. The Contractor shall provide written follow up confirmation within three working days thereafter.
17. Prior to beginning of any construction, the Contractor shall submit to the Engineer a set of field notes verifying the benchmark elevations and the reference point connections on the existing monuments. The Contractor shall be responsible for the accuracy of the benchmark and reference point connections prepared to be used in constructing the project with their locations, elevations and elevations. Based on North American Vertical Datum (NAVD88). Where the Contractor's field notes indicate discrepancies, he shall immediately notify the Engineer in writing.
18. Within 15 calendar days after notice to proceed, the Contractor shall stake the public right-of-way at 50 foot intervals and the right-of-way breaks with corresponding stations shown on the stakes. No invoice for payment for mobilization (Pay Item No. 101-1) will be processed until the right-of-way has been staked to the satisfaction of the Engineer.
19. Any United States Coast (USC) and National Geodetic Survey (NGS) monuments within the limits of construction shall be protected. If in danger of damage, the Contractor shall notify the Engineer, without delay.
20. The Contractor shall be responsible for verifying the City within 48 hours before any inspections. Also, the Contractor shall be responsible for meeting all inspectors criteria, schedules and signing each inspections.
21. The Contractor shall not excavate, remove or otherwise disturb any material, structure or part of a driveway which is located outside the lines, grades or grading sections, established for this work, except as may be specifically authorized or provided on the Contract Construction Plans or Technical Specifications.
22. All work and all materials furnished shall be in conformity with the lines, grades, grading sections, cross sections, dimensions, material requirements, and testing requirements that are specified in the Contract Construction Plans or Technical Specifications.
23. All work shall be accomplished in strict accordance with all applicable federal, state and local laws, ordinances, rules and regulations.
24. Apparent errors, discrepancies or omissions in the Construction Plans shall be brought to the Engineer's attention before bidding.
25. Prior to Substantial Completion, the Contractor shall provide to the City a completed as-built plan set ready prior to the final inspection. Before the final inspection, it shall be the responsibility of the Contractor to clean up the project area and remove all debris, surplus materials, and equipment to prevent the project site clean and in good order.
26. The Contractor shall be responsible for the protection and preservation of property of job or site conditions affecting the work as described in the Technical Specifications or shown on the Construction Plans. The Contractor shall not take advantage of any apparent error or omission on the Construction Plans or Technical Specifications. In the event such error is discovered or made, corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the Contract Documents. By entering the bidding process the Contractor shall assume responsibility for such discovery.
27. The Contractor shall submit four (4) sets of detailed shop drawings of all major items proposed for this project to the Engineer prior to ordering any of the equipment or material for review. The Contractor shall not proceed with any work affected by shop drawings until the Contractor's receipt of approved shop drawings from the Engineer; the Contractor may proceed with the work.
28. The Contractor shall comply with the legal load restrictions or hauling of materials in public roads beyond the limits of construction work. A special permit will not relieve the Contractor of liability for damage which may result from the moving of materials and equipment.
29. During construction, any dewa discharge of water or downstream receiving waters will be the responsibility of the Contractor. The Contractor shall provide and operate such facilities as may be necessary to maintain adequately remove all plant to runoff from the site.
30. Contractor shall determine how to which utility type of the Contract must contact, the following work shall be performed:
   A. Expose buried lines to overflow or determine end connection, pipe material and diameter.
   B. Furnishing and installing gaging and making proper connections.

IRRIGATION METER AND DOUBLE CHECK VALVE OR REDUCED PRESSURE BACKFLOW PREVENTER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. GN

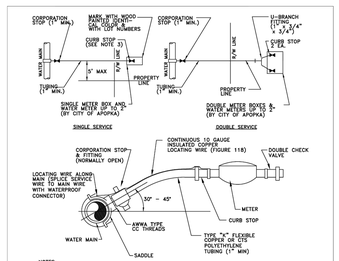


NOTES:
1. A POSITIVE DIELECTRIC CONNECTION SHALL BE MADE BETWEEN ALL GALVANIZED AND BRASS COMPONENTS.
2. METER SHALL BE INSTALLED JUST INSIDE THE ROW LINE OR PROPERTY LINE AND IN NO CASE SHALL IT BE INSTALLED IN THE SIDEWALK OR OTHER PAVED AREA.
3. DOUBLE CHECK VALVES MAY BE USED AS LONG AS THEIR ARE NO CHEMICALS OR A WELL ON SITE.
4. A PVB DEVICE SHALL BE 12-INCHES MINIMUM ABOVE HIGHEST OUTLET OR SPRAYHEAD
5. ALL BACKFLOW PREVENTION DEVICES ARE TO BE AWWA APPROVED.

NOTES:
1. PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO WITHIN A 3 FEET BELOW FINISHED GRADE.

GATE VALVE AND BOX DETAIL

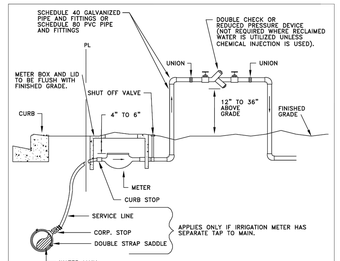
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 400



NOTES:
1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK JOINT TYPE CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE AT A CURB STOP(S) WHICH SHALL BE BURIED APPROXIMATELY 3" BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" x 2" x 18" STAKE WITH THE TOP PAINTED BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER, AND MARKED WITH THE NUMBER OF THE LOT(S) TO BE SERVED.
4. RECLAIMED WATER SERVICES SHALL USE PURPLE COLORED CTS POLYETHYLENE TUBING.
5. POTABLE WATER SERVICES SHALL USE BLUE COLORED CTS POLYETHYLENE TUBING.
6. ALL SERVICE UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE INSTALLED IN A MINIMUM 2" PVC SLEEVE.

WATER SERVICE CONNECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 405



NOTES:
1. A POSITIVE DIELECTRIC CONNECTION SHALL BE MADE BETWEEN ALL GALVANIZED AND BRASS COMPONENTS.
2. METER SHALL BE INSTALLED JUST INSIDE THE ROW LINE OR PROPERTY LINE AND IN NO CASE SHALL IT BE INSTALLED IN THE SIDEWALK OR OTHER PAVED AREA.
3. DOUBLE CHECK VALVES MAY BE USED AS LONG AS THEIR ARE NO CHEMICALS OR A WELL ON SITE.
4. A PVB DEVICE SHALL BE 12-INCHES MINIMUM ABOVE HIGHEST OUTLET OR SPRAYHEAD
5. ALL BACKFLOW PREVENTION DEVICES ARE TO BE AWWA APPROVED.

IRRIGATION METER AND DOUBLE CHECK VALVE OR REDUCED PRESSURE BACKFLOW PREVENTER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 502

NOTE:

CONTRACTOR SHALL OBTAIN A COPY OF AND ABIDE BY THE CITY OF APOPKA STANDARD DETAILS AND CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION MANUAL, LATEST EDITION.

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
6/23/2026

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

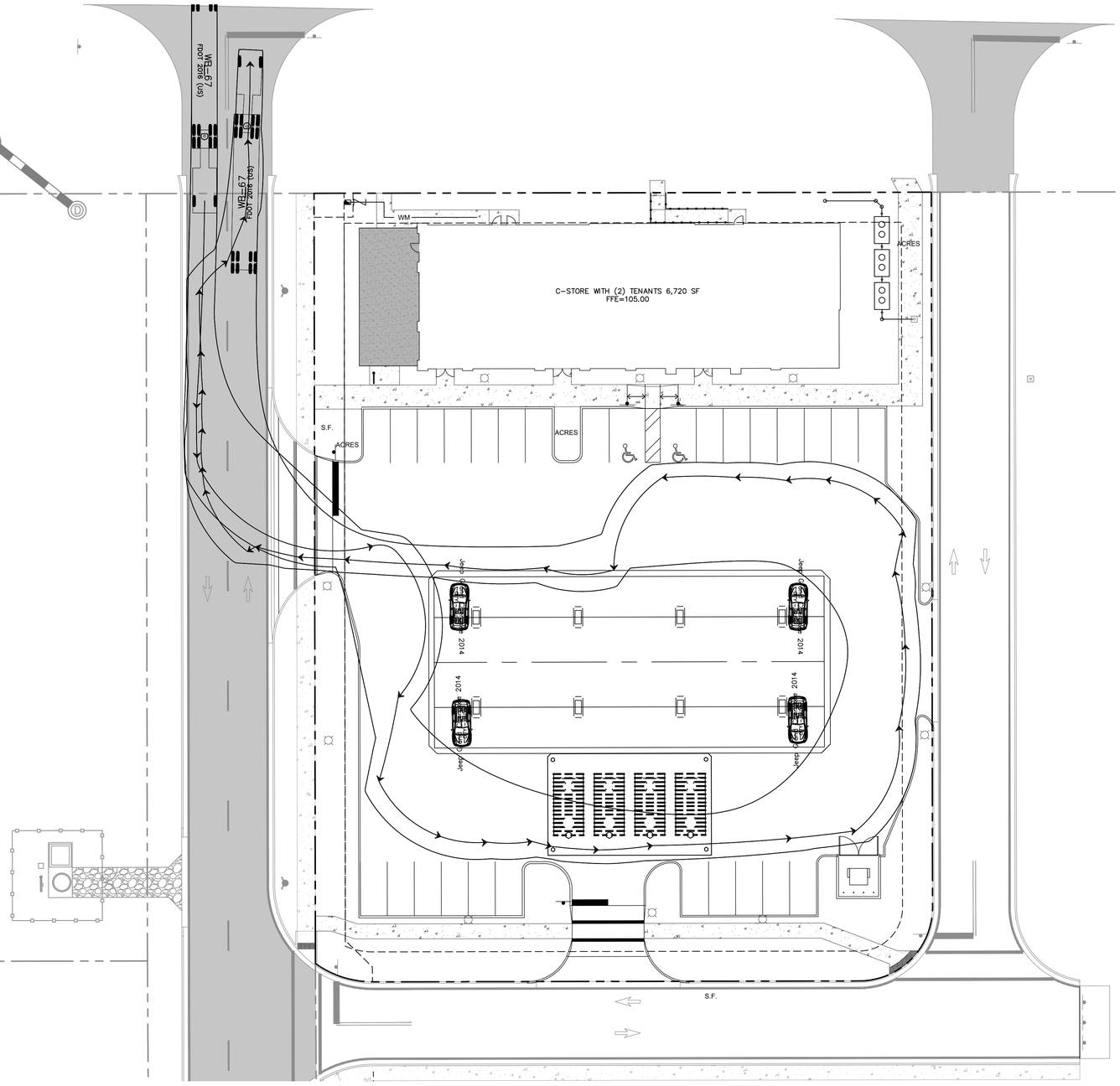
KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

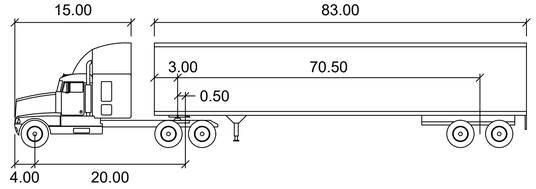
UTILITY DETAILS

WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
APOPKA FL

SHEET NUMBER
C-502

Posted By:Lomm, Toby Sheet Set:WYLD OAKS C-STORE Layout:C-502 UTILITY DETAILS June 23, 2026 04:18:30pm K:\VRB_LDEV\247022000 - Wyld Oaks C-Store\CADD\PlanSheets\C-501 UTILITY DETAILS.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, inc





FDOT WB-67 - Long

feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 40.0
Tractor Track	: 8.00	Articulating Angle	: 68.5
Trailer Track	: 8.50		

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn

© 2026 KIMLEY-HORN AND ASSOCIATES, INC.

445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN ★ PROFESSIONAL ENGINEER ★ LICENSE No. 90545 ★ STATE OF FLORIDA

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

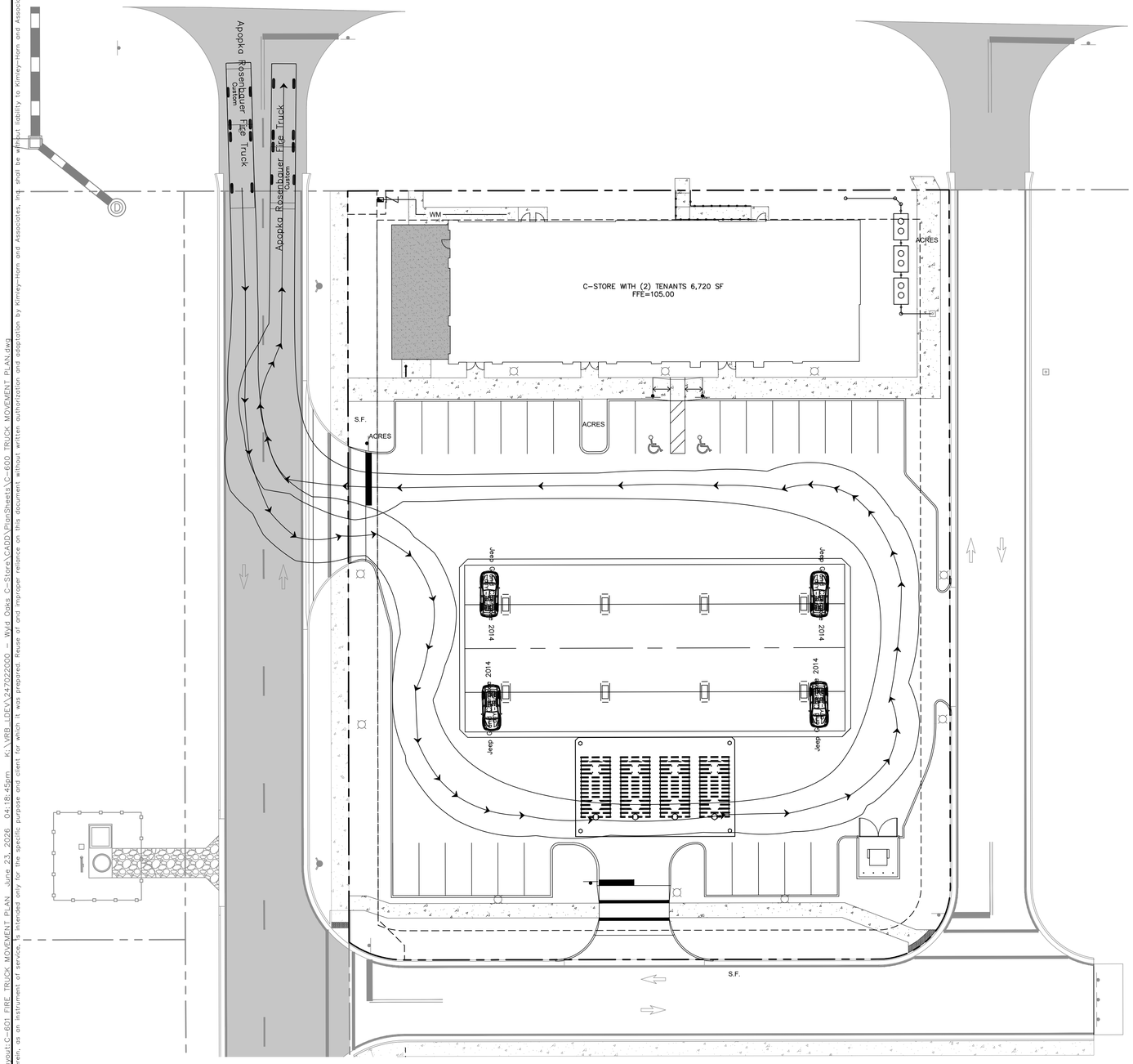
KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

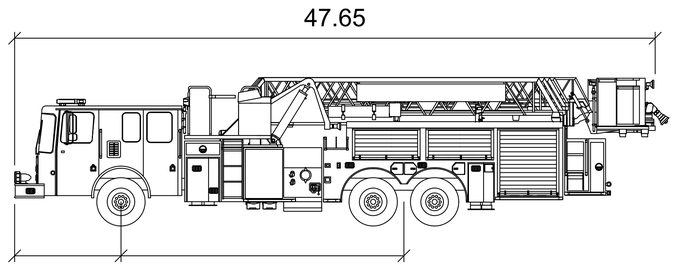
DELIVERY TRUCK MOVEMENT PLAN

WYLD OAKS C-STORE
PREPARED FOR
M & R UNITED, INC.
APOPKA FL

SHEET NUMBER
C-600

Plotted By:Lomm, Toby Sheet Set:WYLD OAKS C-STORE Layout:C-600 DELIVERY TRUCK MOVEMENT PLAN June 23, 2026 04:18:40pm K:\VRB_LDE\V247022000 - WYLD OAKS C-STORE\CAD\PlanSheets\C-600 TRUCK MOVEMENT PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.





Apopka Rosenbauer Fire Truck

	feet
Width	: 8.41
Track	: 7.75
Lock to Lock Time	: 6.0
Steering Angle	: 46.0

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

MACKENZIE CERJAN ★ LICENSE No. 90545 ★ STATE OF FLORIDA ★ PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MACKENZIE CERJAN ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

KHA PROJECT	247022000
DATE	6/23/2026
SCALE	AS SHOWN
DESIGNED BY	AKR
DRAWN BY	MCM
CHECKED BY	MRC

FIRE TRUCK MOVEMENT PLAN

WYLD OAKS C-STORE

PREPARED FOR
M & R UNITED, INC.

APOPKA FL

SHEET NUMBER
C-601

Plotted By:Lomm, Toby Sheet Set:WYLD OAKS C-STORE Layout:C-601 FIRE TRUCK MOVEMENT PLAN June 23, 2026 04:18:43pm K:\VRB_DEV\247022000 — Wyld Oaks C-Store\CAD\PlanSheets\C-600 TRUCK MOVEMENT PLAN.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

© COPYRIGHT 2007

CONSTRUCTION SITE PLANS FOR

® COPYRIGHT 2013

VERTICAL DATUM: NAVD '88

NOTICE
THE SIZE OF THESE PLANS MAY HAVE BEEN SLIGHTLY ALTERED BY REPRODUCTION PROCESSES, THIS MUST BE CONSIDERED WHEN SCALING ANY REPRODUCED PLANS FOR THE PURPOSE OF COLLECTING DATA.

Matthew S D'Angelo

Digitally signed by Matthew S D'Angelo
DN: CN=Matthew S D'Angelo, dnQualifier=A01410C000001979EDF19720015A747, C=Unaffiliated, C=US
Date: 2026.06.03 13:38:33-04'00'

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

1788 ROCK SPRINGS RD, APOPKA, FL 32712
SECTION 33 - TOWNSHIP 20 NORTH - RANGE 28 EAST
PARCEL ID: 33-20-28-5115-01-000

CONSULTANTS

OWNER
AUTOZONE, INC.
123 S. FRONT STREET
MEMPHIS, TENNESSEE 38103
PHONE: (901) 495-8701
ATTN.: WADE DAVIS
EMAIL: WADE.DAVIS@AUTOZONE.COM

ENGINEER
CPH, INC.
5601 MARINER STREET
SUITE 105
TAMPA, FL 33609
PHONE: (813) 288-0233
ATTN.: MATTHEW S. D'ANGELO
EMAIL: MDANGELO@CPHCORP.COM

SURVEYOR
STANG PROFESSIONAL SERVICES
LAKE PLACID, FL 33852
PHONE: (218) 766-4358
ATTN: CAMERON STANG, PSM

ARCHITECT
AUTOZONE, INC.
123 S. FRONT STREET
MEMPHIS, TENNESSEE 38103
PHONE: (901) 495-8707
ATTN.: GEORGE CALLOW, AIA

GEOTECH
PACIFICA ENGINEERING SERVICES
601 N. CONGRESS AVE.
DELRAY BEACH, FLORIDA 33445
PHONE: (561) 419-8460

LANDSCAPE ARCHITECT
CPH, INC.
500 WEST FULTON STREET
SANFORD, FLORIDA 32771
PHONE: (407) 322-6841
ATTN.: DANITA BRYANT

UTILITY PROVIDERS

ELECTRIC
DUKE ENERGY
2955 E. SEMORAN BLVD
APOPKA, FLORIDA 32703
PHONE: (404) 928-6680

TELEPHONE
AT&T
3210 LAKE EMMA RD
LAKE MARY, FLORIDA 32746

WATER
CITY OF APOPKA
120 E MAIN ST,
APOPKA, FLORIDA 32703
PHONE: (407) 703-1700

SEWER
CITY OF APOPKA
120 E MAIN ST,
APOPKA, FLORIDA 32703
PHONE: (407) 703-1700

APPROVAL AGENCIES

CITY OF APOPKA
CITY OF APOPKA
120 E MAIN ST,
APOPKA, FLORIDA 32703
PHONE: (407) 703-1700

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
NORTH WEST DISTRICT
2600 BLAIR STONE ROAD,
TALLAHASSEE, FLORIDA 32399-2400, U.S.
PHONE: (850) 717-9000

FIRE DEPARTMENT
APOPKA FIRE DEPARTMENT
175 E. 5TH ST
APOPKA, FLORIDA 32703
PHONE: (407) 703-1756

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF ORANGE, STATE OF FLORIDA, AND IS DESCRIBED AS FOLLOWS:

LOTS 1, 2, 3 AND TRACT A OF THE PLAT OF LUX CAR WASH, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 116, PAGE 100, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

INDEX OF SHEETS

C0.1	COVER SHEET
C0.2	GENERAL NOTES SHEET
C0.3	GENERAL NOTES SHEET
D0.1	DEMOLITION PLAN
C1.1	STORMWATER POLLUTION PREVENTION PLAN
C1.2	STORMWATER POLLUTION PREVENTION PLAN
C2.1	SITE DIMENSION PLAN
C2.2	PARKING PLAN
C3.1	GRADING AND STORM DRAINAGE PLAN
C4.1	COMPOSITE UTILITY PLAN
C5.1	AUTOZONE DETAILS SHEET
TTE0.1	TRUCK TURN EXHIBIT
TTE0.2	TRUCK TURN EXHIBIT
PH0.1	PHOTOMETRIC PLAN
T1.0	TREE RETENTION PLAN, DATA AND DETAIL
L1.0	LANDSCAPE PLAN
L5.0	LANDSCAPE NOTES PLANT LIST, AND DETAILS
I1.0	IRRIGATION PLAN
I5.0	IRRIGATION NOTES AND DETAILS
I5.1	IRRIGATION NOTES AND DETAILS

FLOOD ZONE:

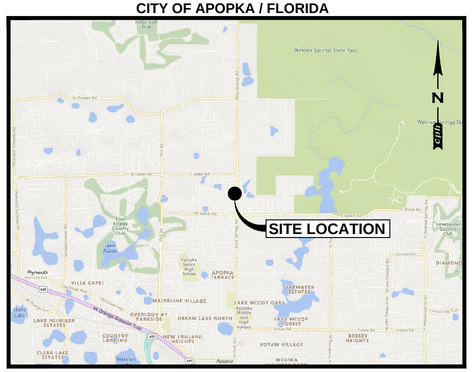
BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 12095C0110H, WHICH BEARS AN EFFECTIVE DATE OF 09/24/2021 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

ZONE "X" - AREA OF MINIMAL FLOOD HAZARD USUALLY DEPICTED ON FIRMS AS ABOVE THE 500-YEAR FLOOD LEVEL. ZONE "X" IS THE AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD AND PROTECTED BY LEVEE FROM 100-YEAR FLOOD.

MAPS



LOCATION MAP
SCALE: 1" = 400'
CITY OF APOPKA / FLORIDA



VICINITY MAP
SCALE: 1" = 5,000'
CITY OF APOPKA / FLORIDA

NOTES

SUMMARY:

This project consists of the development of an AutoZone retail store located at 1788 Rock Springs Road in Apopka, Florida. The proposed development includes construction of a single-story commercial building with associated parking, access drives, loading area, utility infrastructure, and stormwater management facilities to support the site.

Always call 811 two full business days before you dig
Sunshine811.com
www.sunshine811.com

Plans Prepared By:
CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298
www.cphcorp.com

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

REVISIONS

1	2	3
4	5	6

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

COVER SHEET

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL: 901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics. Tel. 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO
LICENSE No.91885 STATE OF FLORIDA PROFESSIONAL ENGINEER
MATTHEW S. D'ANGELO, P.E. No. 91885
6/3/26

1/15/2026

65W2

C0.1

J:\2501494\CAD\xtWD\WS_Current_Plan_Set\2501494 - C0.1 - COVER.dwg, 6/3/2026 12:41:30 PM, Erek MacArthur, CPH FULLSIZE.ctb

© COPYRIGHT 2007

GENERAL PROVISIONS

1. THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF ALL AVAILABLE REGULATORY AGENCY PERMITS AND LOCAL AGENCY PERMITS.
2. CONTRACTOR, AS PART OF THE BASE BID, SHALL FIELD LOCATE ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA WITHIN THE 30 DAYS OF PROJECT AWARD. CONTRACTOR SHALL REVIEW THE PLANS AND SHALL NOTE ANY DISCREPENCIES TO THE ENGINEER IMMEDIATELY.
3. CONTRACTORS, AS PART OF THE BASE BID, SHALL PROVIDE ALL COORDINATION WITH UTILITY PROVIDERS TO PROVIDE FOR THE MATERIALS AND WORK NEEDED TO PROVIDE SERVICES TO THE PROJECT.
4. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE FOR ALL DEMOLITION OF ABOVE GROUND AND UNDERGROUND IMPROVEMENTS IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS NOTED ON THE PLANS. UNLESS APPROVED IN WRITING FROM THE OWNER, ALL MATERIALS SHALL BE REMOVED FROM THE SITE AS PART OF THE BASE BID.
5. ALL DETAILS AND REFERENCES TO FDOT REFER TO THE LATEST EDITION OF THE FDOT STANDARD PLANS.
6. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES, IN SUCH A MANNER AS TO AVOID CONFLICT AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH UTILITY REQUIREMENTS AS TO LOCATION AND SCHEDULING FOR TIE-INS/ CONNECTIONS PRIOR TO CONNECTING TO EXISTING UTILITIES.
7. CONTRACTOR AND HIS SURVEYOR SHALL NOTE THE PROJECT BENCHMARK INFORMATION PROVIDED IN THE PLANS AND VERIFY PRIOR TO CONSTRUCTION.
8. ALL CONSTRUCTION PROJECTS 1 OR MORE ACRES IN SIZE THAT DISCHARGE TO OFFSITE AREAS ARE REQUIRED TO COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORMWATER DISCHARGE FROM SMALL AND LARGE CONSTRUCTION ACTIVITIES. IN ORDER TO MEET NPDES REQUIREMENTS, THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING, INSPECTING, MAINTAINING, AND REPORTING ON ALL ELEMENTS OF THE SWPPP, COMPLETING AND SUBMITTING THE REQUIRED NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (NOT) FORMS AS THE OPERATOR, AND PAYING ALL ASSOCIATED FEES. FOR PROJECTS LESS THAN 1 ACRE IN SIZE THAT ARE NOT REQUIRED TO COMPLY WITH THE NPDES GENERAL PERMIT, THE CONTRACTOR IS STILL RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO AND DURING CONSTRUCTION IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
9. UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL USE THE GEOMETRY PROVIDED ON THE CONSTRUCTION PLANS. BENCHMARK INFORMATION SHALL BE PROVIDED TO THE CONTRACTOR BY THE OWNER OR OWNER'S SURVEYOR. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND CONSTRUCTION PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
10. BASE SURVEY INFORMATION INCLUDING BUT NOT LIMITED TO ELEVATIONS, EASEMENTS, RIGHTS OF WAY, AND OTHER TOPOGRAPHIC INFORMATION HAS BEEN PREPARED BY OTHER PROFESSIONALS. CPH, INC. ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION.
11. THIS SET OF PLANS MAY CONTAIN DRAWINGS PREPARED BY OTHER PROFESSIONALS, WHICH CONTAIN THE NAME, ADDRESS, AND LOGO OF THE PROFESSIONAL. CPH, INC. IS NOT RESPONSIBLE FOR DRAWINGS PREPARED BY OTHER PROFESSIONALS.
12. THE CONTRACTOR SHALL SUBMIT ONE ELECTRONIC COPY OF SHOP DRAWINGS TO THE ENGINEER TO KEEP FOR HIS RECORDS. THE ENGINEER WILL NOT PROVIDE FOR APPROVAL OF SHOP DRAWINGS, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL MATERIALS FOR ACCURACY PRIOR TO ORDERING THE MATERIALS. ANY DESCREPENCIES IDENTFIED BY THE CONTRACTOR SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
13. PROTECT BENCHMARKS, PROPERTY CORNERS, AND OTHER SURVEY MONUMENTS FROM DAMAGE OR DISPLACEMENT. IF MARKER NEEDS TO BE REMOVED IT SHALL BE REFERENCED BY LICENSED LAND SURVEYOR AND REPLACED, AS NECESSARY, BY SAME.
14. THE CONTRACTOR IS RESPONSIBLE FOR ALL QUALITY CONTROL TESTING. AS A MINIMUM, TESTING SHALL INCLUDE A) PIPING AND STRUCTURAL EXCAVATION, BEDDING AND BACKFILL MATERIALS AND DENSITY TESTS; B) DETERMINATION OF COMPACTIVE EFFORT NEEDED FOR COMPLIANCE WITH THE DENSITY REQUIREMENTS; C) PORTLAND CEMENT CONCRETE AND ASPHALT PAVING QUALITY CONTROL TESTING INCLUDING DESIGN MIX REVIEW, MATERIALS, FIELD SLUMP AND AIR CONTENT, AND FIELD AND LAB CURED STRENGTH SAMPLES AND TESTING.
15. IN ADDITION TO QUALITY CONTROL TESTING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REQUIRED TESTING OR APPROVALS FOR ANY WORK OR ANY PART THEREOF IF LAWS OR REGULATIONS OF ANY PUBLIC BODY HAVING JURISDICTION SPECIFICALLY REQUIRE TESTING, INSPECTIONS OR APPROVAL. THE CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION THEREWITH AND SHALL FURNISH THE OWNER AND ENGINEER THE REQUIRED CERTIFICATES OF INSPECTION, TESTING OR APPROVAL.
16. ANY DESIGN OR TESTING LABORATORY UTILIZED BY THE CONTRACTOR SHALL BE AN INDEPENDENT LABORATORY ACCEPTABLE TO THE OWNER AND THE ENGINEER, APPROVED IN WRITING, AND COMPLYING WITH THE LATEST EDITION OF THE "RECOMMENDED REQUIREMENTS FOR INDEPENDENT LABORATORY QUALIFICATION", PUBLISHED BY THE AMERICAN COUNCIL OF INDEPENDENT LABORATORIES.
17. TESTING RESULTS SHALL BE PROVIDED TO THE OWNER/OPERATOR AND THE ENGINEER. ALL TEST RESULTS SHALL BE PROVIDED (PASSING AND FAILING) ON A REGULAR AND IMMEDIATE BASIS.
18. THE ENTIRE PROJECT SITE SHALL BE THOROUGHLY CLEANED AT THE COMPLETION OF THE WORK. CLEAN ALL INSTALLED PIPELINES, STRUCTURES, SIDEWALKS, PAVED AREAS, ACCUMULATED SILT IN PONDS, PLUS ALL ADJACENT AREAS AFFECTED BY CONSTRUCTION, AS DIRECTED BY THE OWNER OR JURISDICTIONAL AGENCY. EQUIPMENT TO CLEAN THESE SURFACES SHALL BE SUBJECT TO APPROVAL BY THE OWNER.
19. ALL DISTRUBED AREAS WITHIN RIGHT OF WAYS SHALL BE SODDED.
20. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS TO INCLUDE BUT NOT BE LIMITED, FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
21. THE CONTRACTOR SHALL RECOGNIZE AND ABIDE BY ALL OSHA EXCAVATION SAFETY STANDARDS, INCLUDING THE FLORIDA TRENCH SAFETY ACT (90-96, LAWS OF FLORIDA). ANY MATERIAL, CONSTRUCTION METHODS, OR MATERIAL COST TO COMPLY WITH THESE LAWS SHALL BE INCIDENTAL TO THE CONTRACT.
22. CONTRACTOR MUST STOP OPERATION AND NOTIFY THE OWNER FOR PROPER DIRECTION IF ANY ENVIRONMENTAL OR HEALTH RELATED CONTAMINATE IS ENCOUNTERED DURING EXCAVATION.

UTILITY GENERAL NOTES

1. THE UTILITY DATA SHOWN ON THESE PLANS WAS LOCATED BY THE RESPECTIVE UTILITY, OR IS BASED ON UTILITY DRAWINGS, MAPS, OR FIELD RECONNAISSANCE.
2. THE LOCATION, MATERIAL TYPE, AND SIZE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ANY UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT, THAT INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE CLOSELY COORDINATED WITH THE ENGINEER AND THE RESPECTIVE UTILITY COMPANY FOR RELOCATION OR PROPER INSTRUCTION.
3. A SINGLE POINT UTILITY IDENTIFICATION SERVICE HAS BEEN SET UP FOR EXISTING UTILITIES. THE CONTRACTOR IS TO CONTACT THE SUNSHINE STATE ONE CALL CENTER BY DIALING "811" AT LEAST TWO (2) AND NO MORE THAN FIVE (5) WORKING DAYS PRIOR TO THE SPECIFIC CONSTRUCTION ACTIVITY FOR FIELD LOCATION. NOTE THAT NOT ALL UTILITIES PARTICIPATE IN THIS PROGRAM. THE CONTRACTOR SHOULD CONTACT ALL NON-PARTICIPATING UTILITIES SEPARATELY FOR FIELD LOCATION OF THEIR FACILITIES AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.
4. THE UTILITY PROVIDERS NOTED ON THE COVER SHEET HAVE PREVIOUSLY INDICATED THAT THEY MAY HAVE FACILITIES IN THE VICINITY OF THE CONSTRUCTION AREA.
5. THE CONTRACTOR SHALL KEEP LOCATE TICKETS UP TO DATE AT ALL TIMES.
6. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION WITH EACH UTILITY AND ALL COSTS ASSOCIATED WITH THE PROTECTION OF EXISTING FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL ALSO COORDINATE NECESSARY RELOCATIONS OR OTHER CONSTRUCTION RELATED MATTERS WITH THE OWNER.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN IN SERVICE ALL EXISTING PIPING ENCOUNTERED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED IN THE DRAWINGS. ANY PIPING WHICH CAN BE REMOVED DURING CONSTRUCTION WITHOUT UNDUE INTERRUPTION OF SERVICE MAY BE REMOVED AND REPLACED BY THE CONTRACTOR WITH THE PERMISSION OF THE OWNER AND THE ENGINEER.
8. TYPICAL DETAILS AND PROPOSED CONSTRUCTION AS SHOWN ILLUSTRATE THE ENGINEER'S INTENT AND ARE NOT PRESENTED AS A SOLUTION TO ALL CONSTRUCTION PROBLEMS ENCOUNTERED IN THE FIELD. THE CONTRACTOR MAY ALTER THE PROPOSED CONSTRUCTION TO SUIT FIELD CONDITIONS, PROVIDED IT COMPLIES WITH THE PROJECT SPECIFICATIONS AND APPROVAL IS RECEIVED FROM THE ENGINEER. WHERE SUCH PROPOSED REVISIONS DEVIATE FROM THE FDEP CONSTRUCTION PERMIT, THEN SUCH REVISIONS WILL ALSO REQUIRE APPROVAL FROM FDEP.
9. FOR EACH RESPECTIVE PIPELINE CONSTRUCTION REQUIRED, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, DEPTH, SIZE, MATERIAL TYPE, AND ALIGNMENT OF ALL EXISTING PIPES, CABLES, ETC. TO BE CROSSED OR CONNECTED TO. IF THE CONTRACTOR DEEMS NECESSARY (A) A CHANGE IN ALIGNMENT OR DEPTH, OR THE NEED FOR ADDITIONAL FITTINGS, BENDS, OR COUPLINGS, WHICH REPRESENT A DEPARTURE FROM THE CONTRACT DRAWING, OR (B) A NEED FOR RELOCATION OF EXISTING UTILITIES, THEN DETAILS OF SUCH DEPARTURES, RELOCATIONS, OR ADDITIONAL FITTINGS, INCLUDING CHANGES IN RELATED PORTIONS OF THE PROJECT AND THE REASONS THEREFORE, SHALL BE SUBMITTED WITH SHOP DRAWINGS. APPROVED DEPARTURES FOR THE CONTRACTOR'S CONVENIENCE SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
10. THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE ALL NECESSARY TEST PUMPING EQUIPMENT, WATER, WATER METERS, PRESSURE GAUGES, AND OTHER EQUIPMENT, MATERIAL AND FACILITIES REQUIRED FOR ALL HYDROSTATIC, LEAKAGE, AND PRESSURE TESTING. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND THE OWNER IN WRITTEN FORM, FORTY-EIGHT (48) HOURS IN ADVANCE OF PROPOSED TESTING. THE CONTRACTOR SHALL PERFORM SATISFACTORY PRETESTING PRIOR TO NOTIFICATION.

AS-BUILT DRAWING REQUIREMENTS

1. AS-BUILT drawings SHALL BE PROVIDED BY THE CONTRACTOR TO THE ENGINEER AT LEAST THREE WEEKS PRIOR TO FINAL INSPECTION. ALL AS-BUILT DATA SHALL BE PROVIDED BY A FLORIDA LICENSED SURVEYOR, SIGNED, SEALED AND DATED BY THE RESPONSIBLE PARTY. THE CONTRACTOR SHALL BE RESPONSIBLE TO IDENTIFY ALL AS-BUILT SURVEY REQUIREMENTS BY THE GOVERNING AGENCIES PRIOR TO START OF CONSTRUCTION TO ENSURE THAT AS-BUILT INFORMATION IS PROVIDED FOR.
2. ALL RECORD DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR IN ACAD FORMAT USING CONSTRUCTION PLAN SHEETS PROVIDED BY THE ENGINEER. AS-BUILT INFORMATION SHALL BE FIELD VERIFIED, MEASURED, ADDED TO THE ACAD FILES OF THE CONSTRUCTION PLAN SHEETS PROVIDED BY THE ENGINEER, AND CERTIFIED, SIGNED AND SEALED BY THE CONTRACTOR'S LICENSED SURVEYOR WHO WILL BE RESPONSIBLE FOR THE ACCURACY OF ALL DIMENSIONS AND ELEVATIONS.
3. THE AS-BUILT INFORMATION IS TO INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
   A. HORIZONTAL LOCATIONS AND VERTICAL ELEVATIONS FOR ALL UTILITY AND STORM STRUCTURES INCLUDING BUT NOT LIMITED TO MANHOLES, INLETS AND CLEANOUTS, INCLUDING STRUCTURE TOP AND INVERT ELEVATIONS.
   B. DISTANCE ALONG PIPELINES BETWEEN STRUCTURES.
   C. STORMWATER POND TOP OF BERM AND POND BOTTOM ELEVATIONS AND HORIZONTAL DIMENSIONS MEASURED AT A MINIMUM OF TEN LOCATIONS PER POND, AT LOCATIONS DESIGNATED BY THE ENGINEER. TOP OF POND HORIZONTAL DIMENSIONS ARE ALSO TO BE TIED TO PROPERTY CORNERS, EASEMENTS, AND RIGHTS-OF-WAY.
   D. STORMWATER CONTROL STRUCTURE DIMENSIONS AND ELEVATIONS, INCLUDING ALL WEIRS, SLOTS, ORIFICES, GRATES, AND SKIMMERS.
   E. STORMWATER CONVEYANCE SYSTEMS INCLUDING DIMENSIONS, ELEVATIONS, CONTOURS, AND CROSS SECTIONS.
   F. HORIZONTAL LOCATIONS AND VERTICAL ELEVATIONS OF ALL UTILITY VALVES, FITTINGS, CONNECTION POINTS, ETC.
   G. VERTICAL ELEVATIONS OF ALL PIPELINES AT CROSSINGS OF POTABLE WATER MAINS (WHETHER THE WATER MAIN IS EXISTING OR NEW) IN ORDER TO DOCUMENT THAT THE MINIMUM REQUIRED VERTICAL SEPARATION HAS BEEN MET.
   H. UTILITY PIPELINE TIED HORIZONTALLY TO EDGE OF PAVEMENT AND RIGHT-OF-WAY LINES, LOCATED EVERY 200-FT PLUS ALL CHANGES IN HORIZONTAL OFFSET.
   I. PAVEMENT WIDTH AND ELEVATIONS AT THE CENTERLINE AND EDGE OF PAVEMENT EVERY 200 FEET PLUS AT ALL CHANGES IN LONGITUDINAL SLOPE, CROSS SLOPE, INLET LOCATIONS, AND AT ALL DRIVEWAY AND STREET INTERSECTIONS. FOR PARKING LOTS, RECORD CENTERLINE AND EDGE OF PAVEMENT ELEVATIONS ALONG ALL DRIVE AISLES AND ISLANDS.
   J. ALL PARKING AREAS AND SIDEWALK RAMPS DESIGNATED FOR HANDICAP ACCESS SHALL CONTAIN HORIZONTAL AND VERTICAL MEASUREMENTS IN ORDER TO VERIFY REQUIRED WIDTHS AND SLOPES HAVE BEEN MET.
   K. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION THAT DEVIATES FROM THE APPROVED ENGINEERING DRAWINGS.
   L. WHERE THE PLANS CONTAIN SPECIFIC HORIZONTAL LOCATION DATA, SUCH AS STATION AND OFFSET, THE AS-BUILT DRAWINGS ARE TO REFLECT THE ACTUAL HORIZONTAL LOCATION.
   M. WHERE THE PLANS CONTAIN SPECIFIC VERTICAL ELEVATION DATA, THE AS-BUILT DRAWINGS ARE TO REFLECT THE ACTUAL MEASURED VERTICAL ELEVATION.
   N. ANY ADDITIONAL INFORMATION REQUIRED BY GOVERNING AGENCIES.
4. IN CASES WHERE THE OWNER DETERMINES PARTIAL CLEARANCES FROM PERMITTING AGENCIES ARE BENEFICIAL TO THE OWNER FOR COMPLETED PORTIONS OF THE PROJECT, PROVIDE PRELIMINARY AS-BUILT DRAWINGS (ACAD FORMAT) TO THE ENGINEER FOR ITS USE IN PREPARING THE PARTIAL CLEARANCE APPLICATIONS FOR THE OWNER.
5. COMPLETE AS-BUILT DRAWINGS THAT ARE FOUND TO BE SATISFACTORY AS A RESULT OF THE ENGINEER'S REVIEW WILL BE USED AS THE BASIS FOR THE FINAL PROJECT RECORD DRAWINGS PREPARED BY THE ENGINEER USING THE CONTRACTOR PROVIDED AS-BUILT DRAWINGS PLUS ENGINEER ADDED INFORMATION.

TRAFFIC CONTROL

1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A MAINTENANCE OF TRAFFIC (M.O.T.) PLAN PRIOR TO CONSTRUCTION. THE M.O.T. PLAN SHALL SHOW ALL PROPOSED TRAFFIC CONTROL SIGNS, PAVEMENT MARKINGS, AND BARRICADES, AND SHALL DETAIL ALL PROPOSED CONSTRUCTION SEQUENCING. THE M.O.T. PLAN AND INSTALLED TRAFFIC CONTROL MEASURES SHALL BE APPROVED BY THE ENGINEER, OWNER, AND ROADWAY JURISDICTIONAL AGENCY PRIOR TO CONSTRUCTION. IN GENERAL, ROADWAY AND DRIVEWAY LANE CLOSURES ARE PROHIBITED DURING CONSTRUCTION UNLESS SPECIFICALLY DETAILED ON THESE PLANS. IN THE EVENT IT IS DETERMINED THAT ROADWAY AND DRIVEWAY LANE CLOSURES WILL BE ALLOWED, THE CLOSURES SHALL BE RESTRICTED TO THE HOURS BETWEEN 9:00 A.M. AND 4:00 P.M. UNLESS OTHERWISE AUTHORIZED IN THE APPROVED M.O.T.
2. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 102-600 AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MAINTAINED DURING CONSTRUCTION.
3. INSPECT TRAFFIC CONTROL DEVICES ON A DAILY BASIS TO ENSURE PLACEMENT OF BARRICADES AND FUNCTION OF LIGHTS IS MAINTAINED THROUGHOUT CONSTRUCTION.
4. CONTACT PROPERTY OWNERS AFFECTED BY CONSTRUCTION. COORDINATE TEMPORARY DRIVEWAY CLOSURES AND SEQUENCING. MAINTAIN ACCESS FOR ALL PROPERTY OWNERS DURING CONSTRUCTION.
5. WET UNSTABILIZED AREAS AS NECESSARY TO CONTROL DUST.
6. ADJUST TRAFFIC CONTROL DEVICES AS REQUIRED UNDER EMERGENCY CONDITIONS.
7. THE CONTRACTOR IS EXPECTED TO COORDINATE ITS ACTIVITIES WITH OTHER CONTRACTORS WHO MAY BE WORKING IN THE IMMEDIATE VICINITY.
8. WHEN WORK OCCURS WITHIN 15-FT OF ACTIVE ROAD TRAVEL LANES BUT NO CLOSER THAN 2-FT FROM THE EDGE OF PAVEMENT, SIGNAGE AND WARNING DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 102-600 AND 102-602.
9. TYPE I OR TYPE II BARRICADES AT 20-FT CENTERS SHALL BE PLACED AND MAINTAINED ALONG THE EDGE OF THE ROAD WHEREVER DROP-OFFS OR OTHER HAZARDS EXIST AND TO BLOCK ENTRANCE INTO COMPLETED OR PARTIALLY COMPLETED PAVEMENTS UNTIL SUCH PAVEMENTS ARE OPEN TO PUBLIC USE.

SITE PREPARATION

1. UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER, THE CONTRACTOR IS EXPECTED TO CONTAIN ALL CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY, RIGHT-OF-WAY, AND EASEMENTS AS INDICATED ON THE DRAWINGS. AT NO TIME SHALL THE CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FROM THE PROPERTY OWNER. ANY REPAIR OR RECONSTRUCTION OF DAMAGED AREAS IN SURROUNDING PROPERTIES SHALL BE REPAIRED BY THE CONTRACTOR ON AN IMMEDIATE BASIS. ALL COSTS FOR REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION SHALL BE PROVIDED.
2. STAKE OUT THE CONSTRUCTION, ESTABLISH LINES AND LEVELS, TEMPORARY BENCH MARKS, BATTER BOARDS, CENTERLINES, BASELINES, AND REFERENCE POINTS FOR THE WORK, AND VERIFY ALL DIMENSIONS RELATING TO INTERCONNECTION WITH EXISTING FEATURES. REPORT ANY INCONSISTENCIES IN THE PROPOSED GRADES, LINES AND LEVELS, DIMENSIONS AND LOCATIONS TO THE ENGINEER BEFORE COMMENCING WORK.
3. PROTECT ALL TREES AND SHRUBS LOCATED OUTSIDE THE RIGHT-OF-WAY, EASEMENTS, AND OWNER SECURED PROPERTY, PARTICULARLY THOSE TREES AND SHRUBS LOCATED ADJACENT TO WORK AREAS.
4. WITHIN THE RIGHT-OF-WAY, EASEMENTS, AND OWNER SECURED PROPERTY, THE INTENT IS TO ALLOW TREES AND SHRUBS TO REMAIN IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: NEW ROADWAY CONSTRUCTION - TREES AND SHRUBS TO REMAIN WHERE LOCATED MORE THAN 15 FEET FROM THE BACK OF CURB, OR OUTSIDE THE LIMITS OF EXCAVATION OR FILL AREAS, WHICHEVER IS FURTHER. UTILITY PIPELINE CONSTRUCTION - TREES AND SHRUBS TO REMAIN OUTSIDE A 15 FOOT WIDE PATH, CENTERED ON THE PIPELINE.
5. TREES TO REMAIN IN THE CONSTRUCTION AREA SHALL BE BOXED, FENCED OR OTHERWISE PROTECTED IN ACCORDANCE WITH DETAILS ON THE DRAWINGS. DO NOT PERMIT HEAVY EQUIPMENT OR STOCKPILES WITHIN BRANCH SPREAD
6. AREAS TO RECEIVE CLEARING AND GRUBBING SHALL INCLUDE ALL AREAS TO BE OCCUPIED BY THE PROPOSED IMPROVEMENTS, AREAS FOR FILL AND SITE GRADING, AND BORROW SITES. REMOVE TREES OUTSIDE OF THESE AREAS ONLY AS INDICATED ON THE DRAWINGS OR AS APPROVED IN WRITING BY THE ENGINEER.
7. CLEARING SHALL CONSIST OF REMOVING TREES AND BRUSH AND DISPOSAL OF OTHER MATERIALS THAT ENCROACH UPON OR OTHERWISE OBSTRUCT THE WORK.
8. EXERCISE EXTREME CARE DURING THE CLEARING AND GRUBBING OPERATIONS. DO NOT DAMAGE EXISTING STRUCTURES, PIPES OR UTILITIES.
9. GRUBBING SHALL CONSIST OF REMOVING AND DISPOSING OF STUMPS, ROOTS LARGER THAN 2" IN DIAMETER, AND MATTED ROOTS. REMOVE TO A DEPTH OF NOT LESS THAN 18" BELOW THE ORIGINAL SURFACE LEVEL OF THE GROUND.
10. ALL COMBUSTIBLE DEBRIS AND REFUSE FROM SITE PREPARATION OPERATIONS SHALL BE REMOVED TO LEGAL OFFSITE DISPOSAL AREAS.

DEWATERING

1. DESIGN AND PROVIDE A DEWATERING SYSTEM USING ACCEPTED AND PROFESSIONAL METHODS CONSISTENT WITH CURRENT INDUSTRY PRACTICE. PROVIDE A DEWATERING SYSTEM OF SUFFICIENT SIZE AND CAPACITY TO CONTROL GROUNDWATER IN A MANNER THAT PRESERVES STRENGTH OF FOUNDATION SOILS, DOES NOT CAUSE INSTABILITY OR RAVELING OF EXCAVATION SLOPES, AND DOES NOT RESULT IN DAMAGE TO EXISTING STRUCTURES. WHERE NECESSARY TO THESE PURPOSES, LOWER WATER LEVEL IN ADVANCE OF EXCAVATION, UTILIZING WELLS, WELLPOINTS, OR SIMILAR POSITIVE METHODS. MAINTAIN THE GROUNDWATER LEVEL TO A MINIMUM OF 2 FEET BELOW EXCAVATIONS. PROVIDE PIEZOMETERS IF DIRECTED BY THE ENGINEER TO DOCUMENT THE GROUNDWATER LEVEL IS BEING MAINTAINED.
2. CONTROL, BY ACCEPTABLE MEANS, ALL WATER REGARDLESS OF SOURCE AND BE FULLY RESPONSIBLE FOR DISPOSAL OF THE WATER. NO ADDITIONAL PAYMENT WILL BE MADE FOR ANY SUPPLEMENTAL MEASURES TO CONTROL SEEPAGE, GROUNDWATER, OR ARTESIAN HEAD.
3. DEWATERING DISCHARGE FROM THE SITE SHALL COMPLY WITH ALL NPDES GENERAL PERMIT REQUIREMENTS, WATER MANAGEMENT DISTRICT AND STATE WATER QUALITY STANDARDS. PROVIDE ALL TESTING AND PERMITTING REQUIRED AND COMPLY WITH ALL TREATMENT OR DISPOSAL METHODS REQUIRED TO MEET ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
4. OPEN PUMPING WITH SUMPS AND DITCHES SHALL BE ALLOWED, PROVIDED IT DOES NOT RESULT IN BOILS, LOSS OF FINES, SOFTENING OF THE GROUND, OR INSTABILITY OF SLOPES. SUMPS SHALL BE LOCATED OUTSIDE OF LOAD BEARING AREAS SO THE BEARING SURFACES WILL NOT BE DISTURBED. WATER CONTAINING SILT IN SUSPENSION SHALL NOT BE PUMPED INTO SEWER LINES OR ADJACENT STREAMS. DURING NORMAL PUMPING, AND UPON DEVELOPMENT OF WELL(S), LEVELS OF FINE SAND OR SILT IN THE DISCHARGE WATER SHALL NOT EXCEED 5 PPM.
5. IF DEWATERING EQUIPMENT NEEDED EXCEEDS ANY OF THE FOLLOWING: 1) 6" PUMP VOLUTE; 2) 100,000 GPD TOTAL 24 HOUR (1 DAY) DEWATERING, AND; 3) 1,000,000 GPD PUMP CAPACITY, THE CONTRACTOR SHALL BE REQUIRED TO PERMIT THE DEWATERING SYSTEM WITH THE WATER MANAGEMENT DISTRICT.
6. CONTINUOUSLY MAINTAIN EXCAVATIONS IN A DRY CONDITION WITH POSITIVE DEWATERING METHODS DURING PREPARATION OF SUBGRADE, INSTALLATION OF PIPE, AND CONSTRUCTION OF STRUCTURES UNTIL THE CRITICAL PERIOD OF CONSTRUCTION AND/OR BACKFILL IS COMPLETED TO PREVENT DAMAGE OF SUBGRADE SUPPORT, PIPING, STRUCTURE, SIDE SLOPES, OR ADJACENT FACILITIES FROM FLOTATION OR OTHER HYDROSTATIC PRESSURE IMBALANCE.
7. WHEN CONSTRUCTION IS COMPLETE, REMOVE ALL DEWATERING EQUIPMENT FROM THE SITE, INCLUDING WELLS AND RELATED TEMPORARY ELECTRICAL SERVICE.

GRADING

1. SMOOTH TRANSITIONS SHALL BE PROVIDED BETWEEN CONTOURS OR SPOT ELEVATIONS AS SHOWN ON THE PLANS TO ACCOMPLISH THE GRADING INTENT. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING HAS BEEN COMPLETED. CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER PRIOR TO DEMOBILIZATION OF GRADING EQUIPMENT TO DETERMINE THAT THE GRADING INTENT HAS BEEN ACHIEVED.
2. ALL PROPOSED ELEVATIONS ON THE PLANS WITHIN PAVED AREAS ARE SHOWN AT PAVEMENT, UNLESS OTHERWISE NOTED.
3. ALL PAVING SURFACES IN INTERSECTIONS AND ADJACENT SECTIONS SHALL BE GRADED TO DRAIN POSITIVELY AND TO PROVIDE A SMOOTHLY TRANSITIONED DRIVING SURFACE FOR VEHICLES WITH NO SHARP BREAKS IN GRADE, AND NO UNUSUALLY STEEP OR REVERSE CROSS SLOPES. THE STANDARD CROWN MAY HAVE TO BE CHANGED IN ORDER TO DRAIN POSITIVELY IN THE AREA OF INTERSECTIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH THE ABOVE AND THE ENGINEER SHALL BE CONSULTED SO THAT HE MAY MAKE ANY AND ALL REQUIRED INTERPRETATIONS OF THE PLANS OR GIVE SUPPLEMENTARY INSTRUCTIONS TO ACCOMPLISH THE INTENT OF THE PLANS.
4. UNIFORMLY SMOOTH GRADE THE SITE. DEPRESSIONS FROM SETTLEMENT SHALL BE FILLED AND COMPACTED. TOPS OF EMBANKMENTS AND BREAKS IN GRADE SHALL BE ROUNDED. FINISHED SURFACES SHALL BE REASONABLY SMOOTH, COMPACTED, FREE FROM IRREGULAR SURFACE CHANGES AND COMPARABLE TO THE SMOOTHNESS OBTAINED BY BLADE-GRADER OPERATIONS.
5. NEWLY GRADED AREAS SHALL BE PROTECTED FROM TRAFFIC AND EROSION. ALL SETTLEMENT OR WASHING AWAY THAT MAY OCCUR FROM ANY CAUSE PRIOR TO SEEDING OR ACCEPTANCE SHALL BE REPAIRED AND GRADES RE-ESTABLISHED TO THE REQUIRED ELEVATIONS AND SLOPES AT NO ADDITIONAL COST TO THE OWNER.

EXCAVATION, TRENCHING, AND FILL

1. THE CONTRACTOR SHALL RECOGNIZE AND ABIDE BY ALL OSHA EXCAVATION SAFETY STANDARDS, INCLUDING THE FLORIDA TRENCH SAFETY ACT (FS 553.60-553.64). ANY MATERIAL, CONSTRUCTION METHODS, OR MATERIAL COST TO COMPLY WITH THESE LAWS SHALL BE INCIDENTAL TO THE CONTRACT.
2. ROUGH EXCAVATE AND GRADE ANY PROPOSED STORMWATER PONDS AT THE START OF SITE GRADING ACTIVITIES. DIRECT SITE RUNOFF TO THE PONDS TO MINIMIZE RUNOFF TO OFFSITE AREAS.
3. POND CONSTRUCTION SHALL RESULT IN THE FINISHED POND HAVING SIDE SLOPES AND DIMENSIONS THAT ARE IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS. IT IS THE CONTRACTOR'S SOLE RES

© COPYRIGHT 2007

FIRE PROTECTION SYSTEMS

1. COMBUSTIBLE CONSTRUCTION CANNOT OCCUR UNTIL PROPER DOCUMENTATION HAS BEEN SUBMITTED TO THE LOCAL FIRE MARSHAL. DOCUMENTATION SHALL SHOW THAT HYDRANTS HAVE BEEN INSTALLED, TESTED, AND ARE IN PROPER WORKING ORDER.

2. INSTALL ALL FIRE LINE PIPING AT A MINIMUM 36 INCHES OF COVER.

3. THE CONTRACTOR INSTALLING THE UNDERGROUND FIRE PROTECTION PIPING SHALL HOLD A CLASS I, II, OR LEVEL V CERTIFICATION AS ISSUED BY THE STATE OF FLORIDA, AS REQUIRED BY FS 633.021(5).

4. ALL FIRE PROTECTION SPRINKLER SYSTEMS INSTALLED SHALL COMPLY WITH NFPA 13, AND SHALL BE MONITORED BY A COMPANY LISTED AS A CENTRAL STATION.

5. HYDRANTS SHALL CONFORM TO AWWA C502 AND SHALL BE FURNISHED COMPLETE WITH WRENCH AND OTHER APPURTENANCES. MANUFACTURER'S CERTIFICATION OF COMPLIANCE WITH AWWA C502 AND TESTS LISTED THEREIN WILL BE REQUIRED.

6. ALL HYDRANTS SHALL BE OF BREAKABLE TYPE, WITH THE BREAKABLE SECTION LOCATED SLIGHTLY ABOVE THE FINISH GROUND LINE. HYDRANTS SHALL CONTAIN TWO-TWO AND A HALF INCH (2-1/2") HOSE CONNECTIONS AND ONE-FOUR AND A HALF INCH (4-1/2") STEAMER CONNECTIONS WITH NATIONAL STANDARD FIRE HOSE COUPLING SCREW THREADS, FIVE AND ONE QUARTER INCH (5-1/4") VALVE OPENING, SIX INCH (6") DIAMETER MECHANICAL JOINT INLET, ONE AND ONE-HALF INCH (1-1/2") PENTAGON OPERATING NUT. THE HYDRANTS SHALL OPEN COUNTERCLOCKWISE.

7. ALL HYDRANTS SHALL BE PAINTED IN AN APPROVED MANNER WITH THE PRIMER PAINT BEING KOPPER'S "GLAMORTEX" NO. 622 RUST PRIMER AND THE FINISH PAINT SHALL BE TWO COATS OF ENAMEL OR SPECIAL COATING TO COLOR AS REQUIRED BY THE LOCAL FIRE DEPARTMENT.

8. BLUE PAVEMENT REFLECTORS (CAT EYES) SHALL BE PLACED IN THE CENTERLINE OF THE DRIVING LANE DIRECTLY IN FRONT OF ALL FIRE HYDRANTS. THERE SHALL BE NO TREES, SHRUBS, OR LANDSCAPING PLANTED AROUND THE FIRE HYDRANTS OR IN AREAS DESIGNATED AS FIRE LANES.

9. THE SEQUENCE OF TESTING AND DISINFECTION SHALL BE AS FOLLOWS: 1) CONDUCT FIRE FLOW, PRESSURE AND LEAKAGE TESTING; 2) PERFORM FLUSHING PER UTILITY REQUIREMENTS AND AWWA C651; 3) DISINFECT THE WATER MAIN, INCLUDING VALVES AND FITTINGS; AND 4) FLUSH AFTER DISINFECTION.

10. THE CONTRACTOR SHALL PROVIDE A POST-CONSTRUCTION FIRE FLOW TEST WITNESSED AND APPROVED BY THE ENGINEER AND THE UTILITY. HYDRANTS SHALL DELIVER A MINIMUM OF 1250 GPM WITH A RESIDUAL PRESSURE OF 20 PSI.

11. APPLY HYDROSTATIC TEST PRESSURE OF 200 PSI (FIRE MAINS) FOR 10 MINUTES AND FOR SUCH ADDITIONAL PERIOD NECESSARY FOR THE ENGINEER TO COMPLETE THE INSPECTION OF THE LINE UNDER TEST. DO NOT EXCEED PIPE MANUFACTURER'S SUGGESTED TIME DURATION AT THE TEST PRESSURE. IF DEFECTS ARE NOTED, REPAIRS SHALL BE MADE AND THE TEST REPEATED UNTIL ALL PARTS OF THE LINE WITHSTAND THE TEST PRESSURE.

12. APPLY LEAKAGE TEST PRESSURE OF 200 PSI (FIRE MAINS) MAINTAIN PRESSURE AT A MAXIMUM VARIATION OF 5% DURING THE ENTIRE LEAKAGE TEST. THE DURATION OF THE LEAKAGE TEST SHALL BE TWO HOURS MINIMUM, AND FOR SUCH ADDITIONAL TIME NECESSARY FOR THE ENGINEER TO COMPLETE INSPECTION OF THE SECTION OF LINE UNDER TEST. LEAKAGE MEASUREMENTS SHALL NOT BE STARTED UNTIL A CONSTANT TEST PRESSURE HAS BEEN ESTABLISHED. THE LINE LEAKAGE SHALL BE MEASURED BY MEANS OF A WATER METER INSTALLED ON THE SUPPLY SIDE OF THE PRESSURE PUMP.

13. NO LEAKAGE IS ALLOWED IN EXPOSED PIPING, BURIED PIPING WITH FLANGED, THREADED, OR WELDED JOINTS OR BURIED NON-POTABLE PIPING IN CONFLICT WITH POTABLE WATER LINES.

14. TESTED SECTIONS OF BURIED PIPING WITH SLIP-TYPE OR MECHANICAL JOINTS WILL NOT BE ACCEPTED IF IT HAS A LEAKAGE RATE IN EXCESS OF THAT RATE DETERMINED BY THE FORMULA L = SDP/148000 WHERE L = MAXIMUM PERMISSIBLE LEAKAGE RATE, IN GALLONS PER HOUR, THROUGHOUT THE ENTIRE LENGTH OF LINE BEING TESTED; S = LENGTH OF LINE TESTED (IN FEET); D = NOMINAL INTERNAL DIAMETER (IN INCHES) OF THE PIPE; AND P = THE SQUARE ROOT OF THE ACTUAL PRESSURE IN PSIG ON ALL JOINTS IN THE TESTED PORTION OF THE LINE. THIS ACTUAL PRESSURE SHALL BE DETERMINED BY FINDING THE DIFFERENCE BETWEEN THE AVERAGE ELEVATION OF ALL TESTED PIPE JOINTS AND THE ELEVATION OF THE PRESSURE GAUGE AND ADDING THE DIFFERENCE IN ELEVATION HEAD TO THE AUTHORIZED TEST PRESSURE.

15. DISINFECT ALL POTABLE WATER LINES, FIRE LINES, VALVES, FITTINGS, HYDRANTS.

16. ALL DISINFECTION WORK SHALL BE ACCEPTABLE TO THE STATE HEALTH AUTHORITY. IF ANY REQUIREMENTS OF THIS SECTION ARE IN CONFLICT WITH REQUIREMENTS OF THE AUTHORITY FOR DISINFECTION, THOSE OF THE AUTHORITY SHALL GOVERN. THE WATER MAIN DISINFECTION AND BACTERIOLOGICAL SAMPLING AND METHODS OF DISINFECTION FOR ALL WATER CONTAINMENT DEVICES AND PIPING SYSTEMS SHALL CONFORM TO AWWA C651.

SANITARY SEWER SYSTEMS

1. THE ENTITY THAT WILL OPERATE AND MAINTAIN THE SEWER SYSTEM SHOWN ON THESE PLANS IS AUTOZONE STORES LLC. THE CONTRACTOR SHALL MEET ALL THE REQUIREMENTS OF CITY OF APOPKA UTILITIES.

2. INSTALL ALL SEWER MAINS AT A MINIMUM 36 INCHES OF COVER.

3. JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3212 USING RUBBER GASKETS CONFORMING TO ASTM F477.

4. FITTINGS SHALL CONFORM TO THE SAME REQUIREMENTS AS THE PIPE. PROVIDE ADAPTERS AS REQUIRED TO JOIN PVC PIPE TO PIPE, FITTINGS AND EQUIPMENT OF OTHER MATERIALS. SOLVENT CEMENT SHALL BE AS RECOMMENDED BY THE PIPE MANUFACTURER.

5. SEWER PIPE SHALL BE COLOR CODED GREEN, STENCILED "SEWER LINE" (2" LETTERING ON TWO SIDES OF THE PIPE IN AT LEAST THREE AREAS PER PIPE SECTION).

6. INSTALL ADHESIVE IDENTIFICATION TAPE ALONG PIPELINE. TAPE SHALL BE MINIMUM THICKNESS 4 MILS, WIDTH 6 INCHES, LETTER SIZE 1 INCH. TAPE COLOR AND LETTERING SHALL BE "SEWER LINE", BLACK PRINTING ON GREEN BACKGROUND. PLACE TAPE AS FOLLOWS: 2" - 8" PIPE - CENTER ALONG TOP HALF OF PIPE; 10" - 18" PIPE - PLACE ALONG BOTH SIDES OF THE TOP HALF OF PIPE; 20" PIPE AND LARGER - PLACE ON BOTH SIDES OF TOP HALF OF PIPE WITH A THIRD STRIP CENTERED ALONG TOP HALF OF PIPE.

7. INSTALL WARNING TAPE ALONG ALL SEWER PIPELINES. TAPE SHALL BE 6-INCH WIDE VINYL CONTINUOUS TAPE, COLORED GREEN WITH BLACK LETTERING CODED AND WORDED "CAUTION: SEWER BURIED BELOW". INSTALL ALONG PIPELINE, 2 FEET ABOVE PIPE, MINIMUM OF 1 FOOT BELOW GRADE.

8. CONNECTIONS TO EXISTING SEWER SHALL BE CONDUCTED IN SUCH A MANNER THAT THE EXISTING SEWER REMAINS IN OPERATION. PROVIDE BY PASS PUMPING OF EXISTING FLOWS OR COLLECT AND LEGALLY DISPOSE OF EXISTING SEWER FLOW AS NEEDED TO ACCOMMODATE CONSTRUCTION WHILE KEEPING EXISTING SEWER IN SERVICE.

9. PRIOR TO INSPECTIONS AND TESTING, CLEAN ALL INSTALLED LINES AND MANHOLES. TEST PROCEDURES SHALL BE APPROVED BY THE ENGINEER. ALL TESTS SHALL BE MADE IN THE PRESENCE OF THE ENGINEER AND UTILITY. NOTIFY THE ENGINEER AND THE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY WORK IS TO BE INSPECTED OR TESTED.

10. PROVIDE ALL EQUIPMENT FOR TESTING. INCREMENTS ON GAGES USED FOR LOW PRESSURE AIR TESTING SHALL BE OF SCALED TO THE NEAREST 0.1 PSI. GAGES, PUMPS, AND HOSES SHALL BE IN GOOD WORKING ORDER WITH NO NOTICEABLE LEAKS.

11. ALL SERVICE LATERALS SHALL BE COMPLETED PRIOR TO TESTING, AND ARE SUBJECT TO THE SAME TESTING REQUIREMENTS AS THE MAIN LINE.

12. PROVIDE LIGHT SOURCE AND MIRRORS FOR LAMPING OF SEWER. ANY SEWER IN WHICH THE DIRECT LIGHT OF A LAMP CANNOT BE VIEWED IN EITHER DIRECTION, FULL CIRCLE, BETWEEN ADJACENT MANHOLES SHALL BE CONSIDERED UNSATISFACTORY, UNLESS THE LINE IS DESIGNED WITH HORIZONTAL DEFLECTIONS, AND SHALL BE REPAIRED BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION.

13. CONDUCT LOW PRESSURE AIR TESTING (4.0 PSI INITIAL PRESSURE) OF INSTALLED SEWER PIPING IN ACCORDANCE WITH ASTM F1417. MAXIMUM ALLOWABLE LEAKAGE IS 0.0015 CUBIC FEET PER MINUTE PER SQUARE FOOT INTERNAL SURFACE AREA BEING TESTED. ALLOWABLE AIR PRESSURE DROP DURING THE TEST IS 0.5 PSIG. MINIMUM REQUIRED TEST TIME (DURATION) IS: A) 4" PIPE = 1 MIN 53 SEC; B) 6" PIPE = 2 MIN 50 SEC, OR 0.427 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER; C) 8" PIPE = 3 MIN 47 SEC, OR 0.760 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER; D) 10" PIPE = 4 MIN 43 SEC, OR 1.187 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER; E) 12" PIPE = 5 MIN 40 SEC, OR 1.709 X LENGTH OF PIPE TESTED, WHICHEVER IS GREATER.

14. CONDUCT DEFLECTION TESTING OF PIPELINE AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. MAXIMUM ALLOWABLE PIPE DEFLECTION IS 5%. MEASURE DEFLECTION BY MANUALLY PULLING A MANDREL THROUGH THE PIPE. THE MINIMUM MANDREL OUTER DIAMETER SHALL BE IN ACCORDANCE WITH THE FOLLOWING: 6" SEWER = 5.45" MANDREL; 8" SEWER = 7.28" MANDREL; 10" SEWER = 9.08" MANDREL; 12" SEWER = 10.79" MANDREL; 15" SEWER = 13.20" MANDREL; 18" SEWER = 16.13" MANDREL; 21" SEWER = 19.00" MANDREL; 24" SEWER = 21.36" MANDREL; 27" SEWER = 24.06" MANDREL.

15. DEFLECTION TESTING IS CONSIDERED SATISFACTORY IF THE MANDREL CAN BE PULLED BY HAND THROUGH THE PIPE BEING TESTED. IF THE MANDREL CANNOT BE PULLED THROUGH THE PIPE, REPLACE OR CORRECT THE PIPE AND RETEST UNTIL TESTING IS SATISFACTORY. ANY PIPE REMOVED OR CORRECTED DUE TO FAILING DEFLECTION TESTING SHALL ALSO BE RE-TESTED FOR LEAKAGE.

PAVING, SIDEWALKS, AND CURBING

1. MATERIALS AND CONSTRUCTION METHODS FOR THE ROADWAY AND PAVING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, OR AS NOTED ON PLANS.

2. ROADWAY PAVING, BASE, AND SUBGRADE THICKNESSES SHALL BE IN ACCORDANCE WITH DETAILS ON THESE DRAWINGS.

3. SIDEWALKS ARE TO BE CONSTRUCTED IN THE AREAS AS SHOWN ON THE CONSTRUCTION PLANS. HANDICAPPED RAMPS SHALL BE PROVIDED AT ALL INTERSECTIONS AND SHALL BE IN ACCORDANCE WITH THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION, LATEST EDITION.

4. CURBING SHALL BE CONSTRUCTED WHERE NOTED ON THE CONSTRUCTION PLANS. ALL CURBS SHALL HAVE SAW CUT CONTRACTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 10'-0" ON CENTER. CONSTRUCTION OF CURBS SHALL BE IN CONFORMANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION) SECTION 520 AND DETAILS PROVIDED ON THE CONSTRUCTION PLANS.

5. FIELD COMPACTION DENSITY, STABILITY, AND THICKNESS TESTING FREQUENCIES OF SUB-BASE, BASE, AND ASPHALT SHALL BE TESTED ONCE EVERY 300 LINEAR FEET OF PAVING PER 24-FT WIDE STRIP, STAGGERED LEFT, CENTER AND RIGHT OF CENTERLINE. WHERE LESS THAN 300 LINEAR FEET OF SUB-BASE, BASE, AND ASPHALT IS PLACED IN ONE DAY, PROVIDE MIN. OF ONE TEST FOR EACH PER DAY'S CONSTRUCTION AT A LOCATION DESIGNATED BY THE ENGINEER. ASPHALT EXTRACTION GRADATION SHALL BE TESTED FROM GRAB SAMPLES COLLECTED ONCE EVERY 1800 SQUARE YARDS OF ASPHALT DELIVERED TO THE SITE (OR A MINIMUM OF ONCE PER DAY).

PRECAST STRUCTURES AND APPURTENANCES

1. ALL MANHOLES SHALL BE PRECAST CONSTRUCTION. THE MINIMUM SIZE DIAMETER OF MANHOLES SHALL BE 48" FOR SEWER LINES 21" IN DIAMETER OR LESS. INTEGRALLY CAST STEPS WITHIN PRECAST STRUCTURES ARE NOT ALLOWED.

2. BASES SHALL BE ONE-PIECE PRECAST BASE SECTIONS CONSISTING OF INTEGRALLY CAST SLAB, BOTTOM RING SECTION AND CONCRETE FLOW CHANNELS. BASE SECTIONS SHALL HAVE INTEGRAL INVERTS WITH GASKETS TO MATCH THE PIPE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ALL INVERT ANGLES. PROVIDE OUTLET STUBS WITH JOINTS TO MATCH THE PIPE.

3. RISERS SHALL BE PRECAST REINFORCED CONCRETE PER ASTM C478, MANUFACTURED USING SULFATE RESISTANT CEMENT (ASTM C150, TYPE II). RISERS SHALL BE 48-INCH DIAMETER UNLESS OTHERWISE INDICATED AND SHALL HAVE A MINIMUM WALL THICKNESS OF 5 INCHES.

4. GASKETS FOR SEATING PRECAST SECTIONS SHALL BE COLD ADHESIVE PREFORMED PLASTIC GASKETS CONFORMING TO FDOT SPECIFICATION 942-2, UNLESS OTHERWISE INDICATED.

5. UNLESS OTHERWISE INDICATED, CONE TOP SECTIONS SHALL BE PRECAST, ECCENTRIC TYPE WITH 24-INCH DIAMETER TOP OPENING CONFORMING TO ASTM C478. PROVIDE 8-INCH MINIMUM THICKNESS FLAT SLAB TOPS WITH ECCENTRIC 24 INCH DIAMETER OPENING, UNLESS OTHERWISE INDICATED.

6. PROVIDE A FLEXIBLE WATERTIGHT SEAL OF THE PIPE TO THE MANHOLE. CONNECTION OF CONCRETE PIPE TO THE MANHOLE SHALL BE MADE WITH NON-SHRINK METALLIC GROUT. CONNECTION OF DUCTILE IRON OR PVC PIPE TO THE MANHOLE SHALL PROVIDE A WATERTIGHT CONNECTION PER ASTM C923. WHERE CONNECTORS ARE USED, THEY SHALL BE INSTALLED IN THE MANHOLE WALL BY ACTIVATING THE EXPANDING MECHANISM IN STRICT ACCORDANCE WITH THE RECOMMENDATION OF THE CONNECTOR MANUFACTURER. THE USE OF ADHESIVES OR LUBRICANTS FOR INSTALLATION OF RUBBER CONNECTORS IS PROHIBITED.

7. FRAMES AND COVERS SHALL BE GREY IRON PER ASTM A48, CLASS 30B AND SHALL BE U.S. FOUNDRY TYPE 227AS, TRAFFIC BEARING (AASHTO H-20 LOADING), UNLESS OTHERWISE NOTED IN THE DRAWINGS. CASTINGS SHALL BE SMOOTH, CLEAN, FREE FROM BLISTERS, BLOWHOLES, AND SHRINKAGE. RAISED LETTERING ON COVERS SHALL BE "STORM", "SEWER", OR AS DETAILED ON THE DRAWINGS.

8. PROVIDE CAST IRON INLETS, FRAMES, AND GRATES IN ACCORDANCE WITH DETAILS ON THE DRAWINGS. ALL FRAMES AND INLET GRATES SHALL BE PRODUCTS OF U.S. FOUNDRY & MANUFACTURING CORPORATION, OR EQUAL.

9. ALL INLET GRATES SHALL BE SECURED BY CHAIN AND EYEBOLT TO THE TOP OF THE STRUCTURE.

10. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISHED GRADE. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN GRASSED AREAS SHALL BE 4" ABOVE FINISHED GRADE (UNLESS NOTED OTHERWISE).

11. ALL MANHOLES AND CLEAN OUTS CONSTRUCTED WITHIN PAVED AREAS SHALL BE INSTALLED WITH TRAFFIC BEARING RINGS AND COVERS.

12. MANHOLE COATINGS AND FINISHES SHALL BE:

    A. SANITARY SEWER MANHOLE INTERIOR - BITUMINOUS EPOXY COATING, MINIMUM DRY FILM THICKNESS = 16 MILS.

    B. INTERIOR OF MANHOLES WHICH RECEIVE FORCE MAIN DISCHARGE - INTEGRALLY ATTACHED INTERIOR LINER, FULL HEIGHT, FIBERGLASS LINER. LINER THICKNESS TO BE IN ACCORDANCE WITH THE DRAWINGS.

    C. EXTERIOR - BITUMINOUS EPOXY COATING, MINIMUM DRY FILM THICKNESS = 16 MILS.

PRECAST STRUCTURES AND APPURTENANCES

1. ALL MANHOLES SHALL BE PRECAST CONSTRUCTION. THE MINIMUM SIZE DIAMETER OF MANHOLES SHALL BE 48" FOR SEWER LINES 21" IN DIAMETER OR LESS. INTEGRALLY CAST STEPS WITHIN PRECAST STRUCTURES ARE NOT ALLOWED.

2. BASES SHALL BE ONE-PIECE PRECAST BASE SECTIONS CONSISTING OF INTEGRALLY CAST SLAB, BOTTOM RING SECTION AND CONCRETE FLOW CHANNELS. BASE SECTIONS SHALL HAVE INTEGRAL INVERTS WITH GASKETS TO MATCH THE PIPE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ALL INVERT ANGLES. PROVIDE OUTLET STUBS WITH JOINTS TO MATCH THE PIPE.

3. RISERS SHALL BE PRECAST REINFORCED CONCRETE PER ASTM C478, MANUFACTURED USING SULFATE RESISTANT CEMENT (ASTM C150, TYPE II). RISERS SHALL BE 48-INCH DIAMETER UNLESS OTHERWISE INDICATED AND SHALL HAVE A MINIMUM WALL THICKNESS OF 5 INCHES.

4. GASKETS FOR SEATING PRECAST SECTIONS SHALL BE COLD ADHESIVE PREFORMED PLASTIC GASKETS CONFORMING TO FDOT SPECIFICATION 942-2, UNLESS OTHERWISE INDICATED.

5. UNLESS OTHERWISE INDICATED, CONE TOP SECTIONS SHALL BE PRECAST, ECCENTRIC TYPE WITH 24-INCH DIAMETER TOP OPENING CONFORMING TO ASTM C478. PROVIDE 8-INCH MINIMUM THICKNESS FLAT SLAB TOPS WITH ECCENTRIC 24 INCH DIAMETER OPENING, UNLESS OTHERWISE INDICATED.

6. PROVIDE A FLEXIBLE WATERTIGHT SEAL OF THE PIPE TO THE MANHOLE. CONNECTION OF CONCRETE PIPE TO THE MANHOLE SHALL BE MADE WITH NON-SHRINK METALLIC GROUT. CONNECTION OF DUCTILE IRON OR PVC PIPE TO THE MANHOLE SHALL PROVIDE A WATERTIGHT CONNECTION PER ASTM C923. WHERE CONNECTORS ARE USED, THEY SHALL BE INSTALLED IN THE MANHOLE WALL BY ACTIVATING THE EXPANDING MECHANISM IN STRICT ACCORDANCE WITH THE RECOMMENDATION OF THE CONNECTOR MANUFACTURER. THE USE OF ADHESIVES OR LUBRICANTS FOR INSTALLATION OF RUBBER CONNECTORS IS PROHIBITED.

7. FRAMES AND COVERS SHALL BE GREY IRON PER ASTM A48, CLASS 30B AND SHALL BE U.S. FOUNDRY TYPE 227AS, TRAFFIC BEARING (AASHTO H-20 LOADING), UNLESS OTHERWISE NOTED IN THE DRAWINGS. CASTINGS SHALL BE SMOOTH, CLEAN, FREE FROM BLISTERS, BLOWHOLES, AND SHRINKAGE. RAISED LETTERING ON COVERS SHALL BE "STORM", "SEWER", OR AS DETAILED ON THE DRAWINGS.

8. PROVIDE CAST IRON INLETS, FRAMES, AND GRATES IN ACCORDANCE WITH DETAILS ON THE DRAWINGS. ALL FRAMES AND INLET GRATES SHALL BE PRODUCTS OF U.S. FOUNDRY & MANUFACTURING CORPORATION, OR EQUAL.

9. ALL INLET GRATES SHALL BE SECURED BY CHAIN AND EYEBOLT TO THE TOP OF THE STRUCTURE.

10. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN PAVED AREAS SHALL MATCH FINISHED GRADE. THE TOP ELEVATION OF MANHOLES CONSTRUCTED IN GRASSED AREAS SHALL BE 4" ABOVE FINISHED GRADE (UNLESS NOTED OTHERWISE).

11. ALL MANHOLES AND CLEAN OUTS CONSTRUCTED WITHIN PAVED AREAS SHALL BE INSTALLED WITH TRAFFIC BEARING RINGS AND COVERS.

12. MANHOLE COATINGS AND FINISHES SHALL BE:

    A. SANITARY SEWER MANHOLE INTERIOR - BITUMINOUS EPOXY COATING, MINIMUM DRY FILM THICKNESS = 16 MILS.

    B. INTERIOR OF MANHOLES WHICH RECEIVE FORCE MAIN DISCHARGE - INTEGRALLY ATTACHED INTERIOR LINER, FULL HEIGHT, FIBERGLASS LINER. LINER THICKNESS TO BE IN ACCORDANCE WITH THE DRAWINGS.

    C. EXTERIOR - BITUMINOUS EPOXY COATING, MINIMUM DRY FILM THICKNESS = 16 MILS.

STORM SEWER SYSTEMS

1. REINFORCED CONCRETE PIPE (RCP) JOINTS SHALL COMPLY WITH ASTM C443 AND FDOT SPECIFICATION SECTION 430, AND RUBBER GASKETS SHALL COMPLY WITH FDOT SPECIFICATION SECTION 942. MINIMUM COVER OVER THE PIPE, INCLUDING COVER OVER THE BELL OF THE PIPE WHERE APPLICABLE, SHALL BE 30 INCHES.

2. RCP PIPE SHALL NOT BE SHIPPED FROM MANUFACTURER UNTIL THE COMPRESSIVE STRENGTH OF THE PIPE HAS REACHED 4000 PSI AND A MINIMUM OF 5 DAYS HAVE PASSED SINCE THE MANUFACTURING OR REPAIR OF THE PIPE HAS BEEN COMPLETED.

3. UNDERDRAIN PIPE SHALL BE PERFORATED POLYVINYL CHLORIDE PIPE IN ACCORDANCE WITH ASTM F758. FILTER FABRIC UNDERDRAIN SOCK SHALL BE TYPE D-3 IN ACCORDANCE WITH SPECIFICATIONS SECTION 985.

4. ALL PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC. FILTER FABRIC SHALL BE IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX 430-001, TYPE D-3, A.O.S. 70-100. INSTALL IN ACCORDANCE WITH FDOT INDEX NO. 280. PROVIDE MINIMUM 12" OVERLAP.

5. INSTALL POLYETHYLENE PIPE IN ACCORDANCE WITH ASTM D2321. BACKFILL AND COMPACT EVENLY ON EACH SIDE TO PREVENT DISPLACEMENT. MINIMUM COVER OVER POLYETHYLENE PIPE SHALL BE AS FOLLOWS: A) PIPE UNDER FLEXIBLE PAVEMENT, RIGID PAVEMENT, OR UNPAVED AREAS WHERE BEDDING IS SUITABLE SOILS AS DEFINED IN THE GENERAL NOTES; MINIMUM COVER SHALL BE 36 INCHES OR ONE PIPE DIAMETER, WHICHEVER IS GREATER; B) PIPE UNDER FLEXIBLE PAVEMENT, RIGID PAVEMENT, OR UNPAVED AREAS WHERE BEDDING IS MANUFACTURED AGGREGATES CLASS 1A OR 1B AS DEFINED IN ASTM D2321: MINIMUM COVER SHALL BE 30 INCHES OR ONE PIPE DIAMETER, WHICHEVER IS GREATER.

6. INSTALL UNDERDRAINS IN ACCORDANCE WITH FDOT SPECIFICATION SECTION 440. INSTALL CLEANOUTS AS SHOWN ON THE DRAWINGS.

7. PRIOR TO INSPECTIONS AND TESTING, CLEAN ALL INSTALLED LINES AND STRUCTURES.

SIGNS AND PAVEMENT MARKINGS

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE LATEST IMPLEMENTED EDITION OF FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS.

2. ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC WITH RAISED PAVEMENT MARKERS (TYPE 911 - 4" x 4"). RAISED PAVEMENT MARKERS ARE TO BE INSTALLED IN ACCORDANCE WITH THESE PLANS AND FDOT STANDARD PLANS INDEX 706-001.

3. PARKING STALL PAVEMENT MARKINGS SHALL BE PAINTED. PAINT SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 971, NON-REFLECTIVE WHITE TRAFFIC PAINT, TWO COATS.

4. ALL ROADWAY TRAFFIC SIGNS SHALL BE MANUFACTURED USING HIGH INTENSITY RETROREFLECTIVE MATERIALS. THE BACK OF ALL FINISHED PANELS SHALL BE STENCILED WITH THE DATE OF FABRICATION, THE FABRICATOR'S INITIALS, AND THE NAME OF THE SHEETING IN THREE-INCH LETTERS.

5. INTERNAL SITE TRAFFIC SIGNS ARE NOT REQUIRED TO BE RETROREFLECTIVE.

6. THE CONTRACTOR SHALL VERIFY THE REQUIRED LENGTH OF THE SIGN COLUMN SUPPORTS IN THE FIELD PRIOR TO FABRICATION.

7. CONTRACTOR SHALL PROVIDE AND INSTALL ALL SIGNS, BASES, ANCHOR BOLTS, CONDUITS, WIRING, ETC.

8. ALL PAVEMENT MARKINGS REQUIRE LAYOUT APPROVAL IN THE FIELD BY THE ENGINEER PRIOR TO INSTALLATION.

9. PRIOR TO FINAL PAVEMENT MARKING INSTALLATION, A TWO WEEK CURE TIME OF THE ASPHALT IS REQUIRED.

cph
www.cphcorp.com
Plans Prepared By:
CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298
THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS			
1	2	3	4
			5
			6

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

GENERAL NOTES SHEET

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL: 901-495-8709 FAX: (901) 495-8969
For Bidding & Contractor Information Contact:
Dodge Data & Analytics, Tel. 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO LICENSE No.91885 STATE OF FLORIDA PROFESSIONAL ENGINEER
MATTHEW S. D'ANGELO, Fl. P.E. No. 91885
1/15/2026

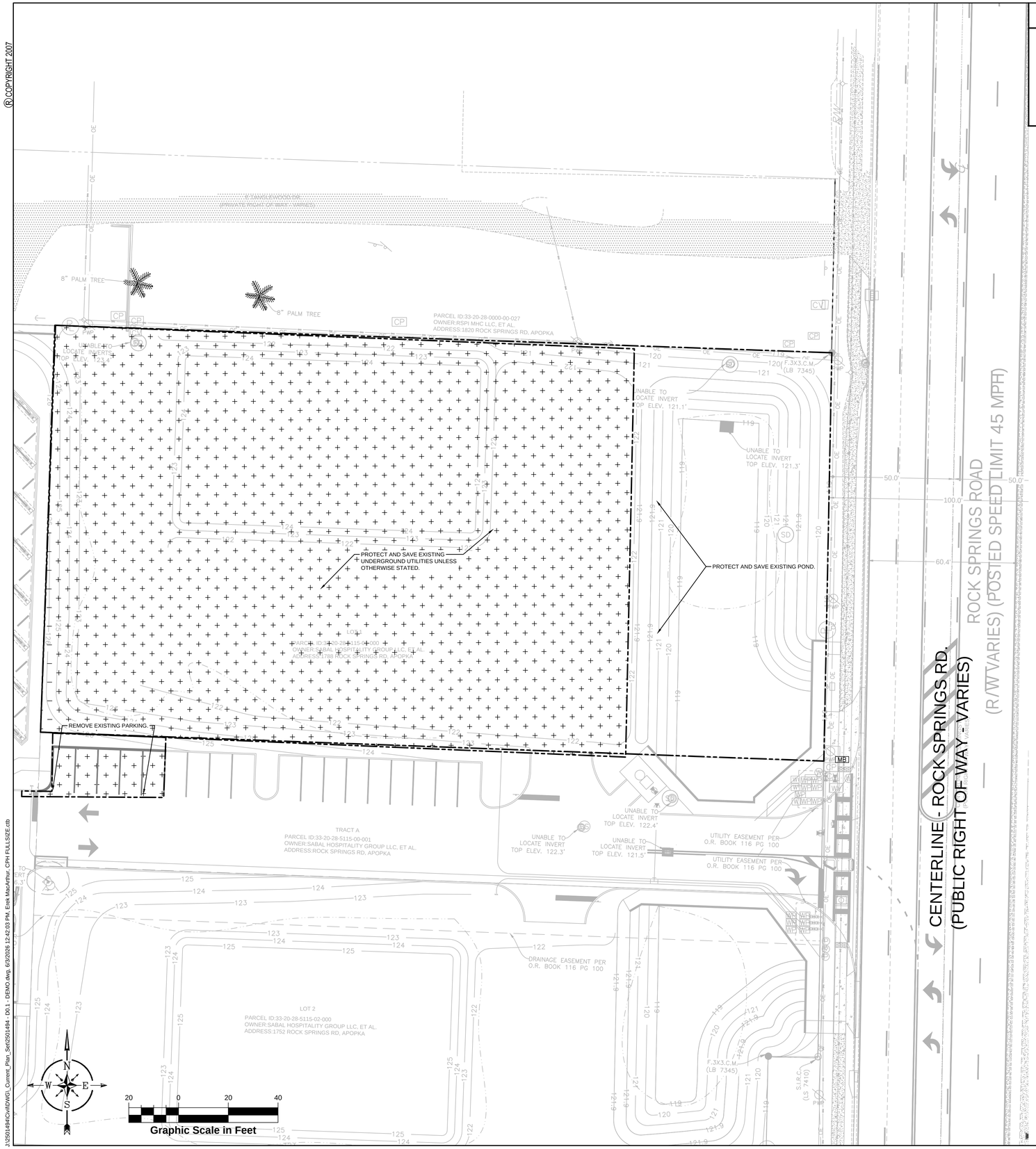
1/15/2026

65W2

C0.3

J:\2502\149\Civil\DWG_Current_Plan_Set\2502149 - C0.2-C0.3 - GEN NOTES.dwg, 6/3/2026 12:41:45 PM, Erik MacArthur, CPH FULLSIZE.ctb

© COPYRIGHT 2007



LEGEND:

PROPERTY LINE

EXISTING ON SITE LANDSCAPE / GROUND COVER TO BE REMOVED.

DEMOLITION NOTES:

1. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON SITE LOCATIONS OF EXISTING UTILITIES.
2. CHAPTER 553.851 OF THE FLORIDA STATUTES REQUIRES THAT AN EXCAVATOR NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO EXCAVATING.
3. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, SUPERVISION, AND EQUIPMENT REQUIRED FOR THE ORDERLY DEMOLITION AND REMOVAL OF EXISTING STRUCTURES, PAVEMENT AND UTILITIES AS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN.
4. THE CONTRACTOR IS REQUIRED TO FAMILIARIZE HIMSELF WITH THE STRUCTURES TO BE DEMOLISHED. A BRIEF DESCRIPTION OF THE STRUCTURES IS INCLUDED FOR THE CONTRACTOR'S CONVENIENCE ONLY.
5. THE FOLLOWING LIST OF STRUCTURES REQUIRING DEMOLITION IS INCLUDED FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE DRAWINGS INDICATE THE SCOPE OF DEMOLITION WHERE DEMOLITION IS REQUIRED.
   A. DEMOLITION AND REMOVAL OF EXISTING BUILDING.
   B. DEMOLITION AND REMOVAL OF EXISTING ON SITE ASPHALT, CONCRETE PAVING AND CURBING TO LIMITS SHOWN.
   C. REMOVAL OF EXISTING ONSITE ABOVE-GROUND AND UNDERGROUND UTILITIES, INCLUDING REMOVAL AND/OR PLUGGING OF EXISTING UTILITIES AS SHOWN ON PLANS.
6. PRIOR TO REMOVAL OF ANY UNDERGROUND SEWAGE TANK AND COMPONENTS FROM SERVICE, CONTRACTOR MUST COMPLETELY DRAIN THE SYSTEMS TO AN APPROVED SANITATION TANK FOR DISPOSAL AT AN APPROVED LOCATION AND IN ACCORDANCE WITH LOCAL & STATE REQUIREMENTS.
7. ALL ON SITE UNDERGROUND STRUCTURES AND PIPING MUST BE COMPLETELY REMOVED AND OVEREXCAVATED BY A MINIMUM OF 12" BENEATH THE STRUCTURES. CONTRACTOR SHALL USE APPROVED FILLING MATERIAL FOR FILLING THESE AREAS. FILL SHALL BE OF CLEAN, FINE SAND AASHTO CLASS A-3 AND SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8" IN THICKNESS AND COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557).
8. ALL EXISTING STRUCTURES, PAVEMENTS, SLABS, FOUNDATIONS, STEPS, AND OTHER EXISTING FEATURES INDICATED ON THE DRAWINGS TO BE REMOVED SHALL BE DEMOLISHED AND REMOVED BY THE CONTRACTOR. REMOVE NO STRUCTURE SUBSTANTIALLY AS A WHOLE. DEMOLISH COMPLETE ON THE PREMISES.
9. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.
10. ELECTRICAL, TELEPHONE, CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY PRIOR TO COMMENCEMENT OF CONSTRUCTION. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS A NECESSITY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE.
11. PROVIDE ADEQUATE PROTECTION FOR PERSONS AND PROPERTY AT ALL TIMES. EXECUTE THE WORK IN A MANNER TO AVOID HAZARDS TO PERSONS AND PROPERTY AND PREVENT INTERFERENCE WITH THE USE OF AND ACCESS TO ADJACENT BUILDINGS. STREETS AND SIDEWALKS SHALL NOT BE BLOCKED BY DEBRIS AND EQUIPMENT.
12. AIR HAMMERS OR OTHER DEVICES WILL BE PERMITTED ON EXTERIOR WORK.
13. CONTRACTOR MUST STOP OPERATION AND NOTIFY THE OWNER FOR PROPER DIRECTION IF ANY ENVIRONMENTAL OR HEALTH RELATED CONTAMINATE IS ENCOUNTERED DURING THE DEMOLITION/EXCAVATION PROCESS.
14. REMOVE AND LEGALLY DISPOSE OF ALL OTHER RUBBISH, RUBBLE, AND DEBRIS. COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS GOVERNING DISPOSAL OF WASTES AND DEBRIS.
15. PAVEMENT REMOVAL:
   A. WHERE EXISTING PAVEMENT IS TO BE REMOVED, SAW-CUT THE SURFACING LEAVING A UNIFORM AND STRAIGHT EDGE WITH MINIMUM DISTURBANCE TO THE REMAINING ADJACENT SURFACING. IF CONSTRUCTION RESULTS IN RAVELING OF THE SAW-CUT SURFACE, RECUT BACK FROM THE RAVELED EDGE PRIOR TO RESTORATION.
   B. WHERE EXISTING PAVEMENT, CURB, CURB AND GUTTER, SIDEWALK, DRIVEWAY, OR VALLEY GUTTER IS REMOVED FOR THE PURPOSE OF CONSTRUCTING OR REMOVING BOX CULVERTS, PIPE, INLETS. MANHOLES, APPURTENANCES, FACILITIES OR STRUCTURES, SAID PAVEMENT, ETC., SHALL BE REPLACED AND RESTORED IN EQUAL OR BETTER CONDITION THAN THE ORIGINAL, CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, MATERIALS, EQUIPMENT, TOOLS, SUPPLIES, AND OTHER EQUIPMENT AS REQUIRED.
16. CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
17. PERMITTING: IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY REQUIRED PERMITTING FOR DEMOLITION FROM RESPONSIBLE REGULATORY AGENCIES AND FULLY ACKNOWLEDGE AND COMPLY WITH ALL REQUIREMENTS PRIOR TO COMMENCING DEMOLITION WORK.
18. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE EXTENT OF DEMOLITION REQUIRED IN ORDER TO PERFORM THE CONTRACT WORK FOR THIS PROJECT. THE CONTRACTOR SHALL CONDUCT SITE VISITS AND SHALL EXAMINE ALL OF THE INFORMATION WITHIN THESE DOCUMENTS. ALL DISCREPANCIES AND/OR OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BID SUBMITTAL.
19. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
20. THE CONTRACTOR SHALL COORDINATE WITH OWNER PRIOR TO COMMENCEMENT OF ANY WORK. ACTUAL REMOVAL AND/OR RELOCATION OF ALL EXISTING PLANTS IS TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR. IT IS THE RESPONSIBILITY OF THE SITEWORK CONTRACTOR TO COORDINATE DEMOLITION ACTIVITIES WITH THE LANDSCAPE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND PRESERVING TREES AS INDICATED BY THE OWNER.
21. CONTRACTOR SHALL LIMIT ALL DEMOLITION ACTIVITY TO THAT AREA DELINEATED IN THE DRAWING. ALL OTHER EXIST. UTILITIES INCLUDING : STORM DRAINAGE, GAS, ELECTRIC, TELEPHONE, WATER & SEWER SHALL BE PRESERVED & PROTECTED.
22. A SEPARATE DEMOLITION PERMIT IS REQUIRED FOR THE DEMOLITION OF THE ACTUAL BUILDING.
23. CONTRACTOR MAY LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THIS SHEET BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, SIDEWALK, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR.
24. CONTRACTOR WILL BE PROVIDED ASBESTOS SURVEY. CONTRACTOR SHALL OBTAIN FDEP PERMIT AS REQUIRED.
25. CONTRACTOR TO TAKE EXTRA PRECAUTIONS TO PROTECT UNDERGROUND STORM SEWER SYSTEMS LOCATED ON THE NORTH AND SOUTH SIDES OF THE BUILDING. LIMITS SHOWN ARE APPROXIMATED FROM THE ORIGINAL DESIGN PLAN AS-BUILTS.

Plans Prepared By:
CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298
www.cphcorp.com

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS

1	2	3
4	5	6

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

DEMOLITION PLAN

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL.: 901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics. Tel. 413-930-4215
Cindy.searcy@construction.com

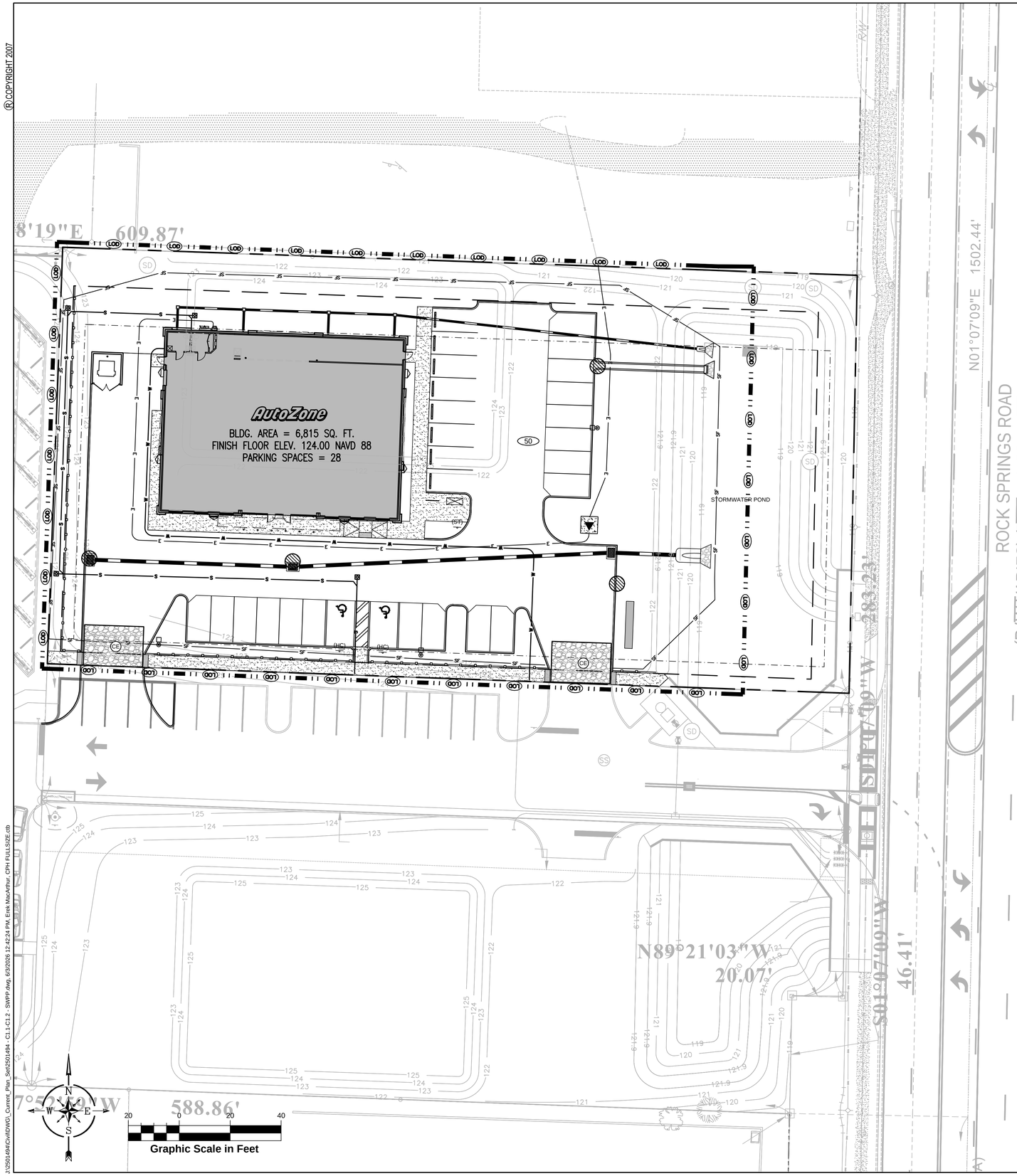
MATTHEW S. D'ANGELO LICENSE No.91885 STATE OF FLORIDA PROFESSIONAL ENGINEER
MATTHEW S. D'ANGELO, PE, P.E. No. 91885
6/3/26

1/15/2026

65W2

D0.1

© COPYRIGHT 2007



"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name (Operator and/or Responsible Authority

Date

Project Name and location information:

ACREAGE SUMMARY

TOTAL SITE AREA	**1.18 A.C.**
TOTAL ON-SITE DISTURBED AREA	**1.01 A.C.**
TOTAL OFF-SITE DISTURBED AREA	**0.0 A.C.**
TOTAL DISTURBED AREA	**1.01 A.C.**

LEGEND:

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- SILT FENCE PER STATE OF FLORIDA EROSION AND SEDIMENT CONTROL MANUAL (LATEST EDITION)
- INLET PROTECTION
- CONSTRUCTION ENTRANCE PER STATE OF FLORIDA EROSION AND SEDIMENT CONTROL MANUAL (LATEST EDITION)
- SOIL TYPE: URBAN LAND, 0 TO 2 PERCENT SLOPES
- FLOW ARROWS

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS

1		2		3	
			4		5		6

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

STORMWATER POLLUTION PREVENTION PLAN

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL: 901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics. Tel. 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO, PE, P.E. No. 91885
1/15/2026

1/15/2026

65W2

C1.1

Plans Prepared By:
CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298
www.cphcorp.com

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

J:\2501494\Cvil\4DWG_Current_Plan_Set\2501494 - C1.1-C1.2 - SWPP.dwg, 6/3/2026 12:42:24 PM, Erek.MacArthur, CPH FULLSIZE.ctb

© COPYRIGHT 2007

STORMWATER POLLUTION PREVENTION NOTES

THESE PLANS HAVE BEEN PREPARED TO ASSIST THE CONTRACTOR IN OBTAINING COVERAGE UNDER THE FDEP GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE PERMIT REQUIREMENTS AND MODIFY THESE PLANS AS NEEDED TO BE IN COMPLIANCE WITH THE PERMIT REQUIREMENTS.

SITE DESCRIPTION

A. SITE LOCATION
THE SITE IS LOCATED AT
1788 ROCK SPRINGS RD.
APOPKA, FLORIDA 32712
SECTION 33, TOWNSHIP 20 SOUTH, RANGE 28 EAST
LATITUDE: 28°42'35.47"N LONGITUDE: 81°30'44.1"W

B. SITE CONDITIONS & ACTIVITIES NARRATIVE:
THE EXISTING CONDITION OF THE SITE IS DEVELOPED. DURING CONSTRUCTION THE SITE WILL BE CLEARED AND GRUBBED. THIS PROJECT WILL HAVE NO MAJOR EFFECT ON ANY THE ABUTTING PROPERTIES.

WETLANDS/BUFFERS
NO WETLANDS ARE WITHIN OR ADJACENT TO THE PROPOSED DEVELOPMENT AREA.

SWPPP INTENT
THE INTENT OF THIS SWPPP IS TO COMPLY WITH THE INTENT OF THE GENERIC PERMIT AND TO PREVENT THE RELEASE OF SOILS, TRASH, CHEMICALS, TOXINS AND OTHER POLLUTANTS, BY WATER , AIR, VEHICLE TRANSPORT OR OTHER MEANS THAT CAN IMPACT STORM WATER QUALITY. THE CONTRACTOR SHALL OBTAIN A COPY OF THE GENERIC PERMIT AND RETAIN ON-SITE FOR FUTURE REFERENCE. THE CONTRACTOR SHALL READ AND UNDERSTAND THE PERMIT, AND ENSURE THAT THE BMP'S ARE INSTALLED AND THE EXECUTION OF THE WORK IS PERFORMED TO MEET THE INTENT OF THE GENERIC PERMIT AND THE SWPPP.

POTENTIAL SOURCES OF POLLUTION
THE POTENTIAL SOURCES OF POLLUTION THAT MAY REASONABLY BE EXPECTED TO AFFECT THE QUALITY OF STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY INCLUDE: SEDIMENT, PESTICIDES, FERTILIZER, PLASTER, CLEANING SOLVENTS, ASPHALT, CONCRETE, GLUE, ADHESIVES, PAINTS, CURING COMPOUNDS, WOOD PRESERVATIVES, HYDRAULIC OIL FLUIDS, GASOLINE, DIESEL FUEL AND KEROSENE.

SEQUENCE OF CONSTRUCTION

THE SEQUENCE OF CONSTRUCTION HAS BEEN DEVELOPED AS A GUIDE FOR THE CONTRACTOR. THE CONTRACTOR SHALL SEQUENCE THE CONSTRUCTION AS NEEDED BASED ON BEST MEANS AND METHODS IN ORDER TO BE IN COMPLIANCE WITH STATE AND LOCAL REQUIREMENTS. THE INSTALLATION OR REMOVAL OF BMPS, EARTH DISTURBANCE, GRADING, TEMPORARY STABILIZATION AND PERMANENT STABILIZATION SHALL BE IMMEDIATELY NOTED IN THE SWPPP IMPLEMENTATION LOG. ALL TEMPORARY BMPS SHALL BE REPAIRED AND MAINTAINED UNTIL STABILIZATION HAS OCCURRED AND THERE IS NO RISK OF DISCHARGE. TEMPORARILY SEED, IMMEDIATELY AND THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.

1. POST A COPY OF THE NOI OR LETTER FROM FDEP CONFIRMING COVERAGE UNDER THE GENERIC PERMIT, AND THE NAME AND PHONE NUMBER OF THE CONTRACTOR'S REPRESENTATIVE RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROL INSTALLATION AND MAINTENANCE ON A 24 HOUR BASIS.
2. INSTALL PERIMETER CONTROLS IMMEDIATELY DOWNSTREAM OF THE PLANNED LOCATION OF THE CONSTRUCTION EXIT.
3. INSTALL STABILIZED CONSTRUCTION EXIT.
4. INSTALL PERIMITER CONTROLS. THE CONTRACTOR SHALL INSTALL THE REMAINING BMPS AS SHOWN AND AS REQUIRED TO MEET PERMIT REQUIREMENTS. SOME BMP INSTALLATIONS MAY NOT BE POSSIBLE AT THE BEGINNING OF THE PROJECT BUT MUST BE INSTALLED AS SOON AS POSSIBLE TO ENSURE COMPLIANCE.
5. INSTALL TEMPORARY STAGING AND STORAGE AREAS.
6. CONSTRUCT AND STABILIZE THE SEDIMENT BASINS AND SEDIMENT TRAPS WITH APPROPRIATE OUTFALL STRUCTURES, IF REQUIRED.
7. CONSTRUCT AND STABILIZE HYDRAULIC CONTROLS (DITCHES, SWALES, DIKES, CHECK DAMS, ETC.), IF REQUIRED.
8. BEGIN DEMOLITION, CLEARING AND GRUBBING OPERATIONS AS APPLICABLE.
9. BEGIN CONSTRUCTION OF SITE IMPROVEMENTS.
10. PAVE SITE AND STABILIZE PER PLAN.
11. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER SITE HAS ACHIEVED FINAL STABILIZATION.
12. SUBMIT NOTICE OF TERMINATION (NOT) ONCE ALL CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED PER PLAN.

GENERAL NOTES

A. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FILE "NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES" (DEP FORM 62-621.300(4)(B) OR LATEST VERSION) TO FDEP TO THE FOLLOWING ADDRESS OR THROUGH THE FDEP ON-LINE SYSTEM AT LEAST TWO (2) DAYS BEFORE COMMENCEMENT OF CONSTRUCTION:

NPDES STORMWATER NOTICES CENTER, MS #2510 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 2600 BLAIR STONE ROAD, TALLAHASSEE, FLORIDA 32399-2400

THE CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (NOT) WITHIN 14 CALENDAR DAYS AFTER THE SITE HAS ACHIEVED FINAL STABILIZATION (I.E. ALL DISTURBED SOILS AT THE SITE HAVE BEEN FINAL STABILIZED), TEMPORARY BMPS HAVE BEEN REMOVED, AND STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE SITE AUTHORIZED BY THE PERMIT HAVE BEEN ELIMINATED.

AN ENVIRONMENTAL RESOURCE PERMIT IS REQUIRED FOR THE PROJECT. CONTRACTOR SHALL PROVIDE THE PERMIT INFORMATION ON THE NOI APPLICATION.

THE CONTRACTOR SHALL PROVIDE A COPY OF THE NOI AND SUBSEQUENT NOT OR THE ACKNOWLEDGEMENT LETTERS FOR THE NOI OR NOT TO THE MS4 WITHIN 7 DAYS OF RECEIPT. THE CONTRACTOR SHALL ALSO COORDINATE WITH THE MS4 TO ENSURE THAT ALL SPECIFIC REQUIREMENTS ARE MET.

B. WHERE PRACTICAL, STORMWATER SHALL BE CONVEYED BY SWALES. SWALES SHALL BE CONSTRUCTED AS SHOWN ON PLANS.

C. EROSION CONTROL MEASURES SHALL BE EMPLOYED TO MINIMIZE TURBIDITY OF SURFACE WATERS LOCATED DOWNSTREAM OF ANY CONSTRUCTION ACTIVITY. WHILE THE VARIOUS MEASURES REQUIRED WILL BE SITE SPECIFIC, THEY SHALL BE EMPLOYED AS NEEDED IN ACCORDANCE WITH THE FOLLOWING:
I. IN GENERAL, EROSION SHALL BE CONTROLLED AT THE FURTHEST PRACTICAL UPSTREAM LOCATION.
II. NEW AND EXISTING STORMWATER INLETS AND OUTFALL STRUCTURES SHALL BE PROTECTED DURING CONSTRUCTION. PROTECTION MEASURES SHALL BE EMPLOYED IMMEDIATELY AS REQUIRED DURING THE VARIOUS STAGES OF CONSTRUCTION.
III. PERIMETER EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL FINAL SITE STABILIZATION HAS BEEN ESTABLISHED

D. CLEARING AND GRUBBING OPERATIONS SHALL BE CONTROLLED SO AS TO MINIMIZE UNPROTECTED ERODIBLE AREAS EXPOSED TO WEATHER. GENERAL EROSION CONTROL BMP'S SHALL BE EMPLOYED TO MINIMIZE SOIL EROSION AND OFF-SITE SEDIMENTATION. WHILE THE VARIOUS TECHNIQUES REQUIRED WILL BE SITE AND PLAN SPECIFIC, THEY SHOULD BE EMPLOYED PRIOR TO ANY CONSTRUCTION ACTIVITY.

E. THE CONTRACTOR SHALL FURNISH, INSTALL PER THE SEQUENCE OF CONSTRUCTION, MAINTAIN AND SUBSEQUENTLY REMOVE, ALL NECESSARY TEMPORARY BMPS. THE CONTRACTOR WILL FURNISH AND INSTALL ALL NECESSARY PERMANENT BMPS.

F. THE CONTRACTOR SHALL ADJUST, ADD OR MODIFY BMPS AS NECESSARY TO COMPLY WITH THE INTENT OF THE GENERIC NPDES PERMIT AND THE SWPPP FOR NO ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER PRIOR TO ADJUSTING, ADDING OR MODIFYING BMPS THAT AFFECT THE HYDRAULICS OF THE SITE OR BEFORE ADDING BMPS NOT DETAILED IN THE SWPPP.

G. THE CONTRACTOR IS ADVISED THAT THE CONTRACT DRAWINGS ONLY INDICATE EROSION, SEDIMENT, AND TURBIDITY CONTROLS AT LOCATIONS DETERMINED IN THE DESIGN PROCESS. HOWEVER, THE CONTRACTOR IS REQUIRED TO PROVIDE ANY ADDITIONAL CONTROLS NECESSARY TO PREVENT THE POSSIBILITY OF SILTING ANY ADJACENT LOWLAND PARCEL OR RECEIVING WATER.

H. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. THE EROSION CONTROL SYSTEM DESCRIBED WITHIN THE CONSTRUCTION DOCUMENTS SHOULD BE CONSIDERED TO REPRESENT THE MINIMUM ACCEPTABLE STANDARDS FOR THIS PROJECT. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DEPENDENT UPON THE STAGE OF CONSTRUCTION, THE SEVERITY OF THE RAINFALL EVENT AND/OR AS DEEMED NECESSARY AS A RESULT OF ON-SITE INSPECTIONS BY THE OWNER, THEIR REPRESENTATIVES, OR THE APPLICABLE JURISDICTIONAL AUTHORITIES. THESE ADDITIONAL MEASURES (IF NEEDED) SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE OWNER. IT SHOULD BE NOTED THAT THE MEASURES IDENTIFIED ON THIS PLAN ARE ONLY SUGGESTED BEST MANAGEMENT PRACTICES (BMPS). THE CONTRACTOR SHALL PROVIDE POLLUTION PREVENTION AND EROSION CONTROL MEASURES AS SPECIFIED IN FDOT INDEXES #100 THROUGH #102 AND AS NECESSARY FOR EACH SPECIFIC APPLICATION. IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO ASSURE THAT THE STORMWATER DISCHARGE FROM THE SITE DOES NOT EXCEED THE TOLERANCES ESTABLISHED BY ANY OF THE APPLICABLE JURISDICTIONAL AUTHORITIES.

I. THE CONTRACTOR SHALL KEEP THE SWPPP CURRENT AT ALL TIMES. THE CONTRACTOR SHALL SIGN AND DATE ANY CHANGES TO THE SWPPP AND KEEP THEM AS ATTACHMENTS TO THE ORIGINAL PLAN. WHENEVER ANY OF THE FOLLOWING EVENTS OCCUR, THE CONTRACTOR SHALL UPDATE THE SWPPP WITHIN 7 DAYS:

I. THERE IS A CHANGE IN DESIGN, CONSTRUCTION OPERATION OR MAINTENANCE THAT HAS A SIGNIFICANT EFFECT ON THE DISCHARGE FROM THE PROJECT
II. THERE IS A NEW DISCHARGE POINT OUR OUTFALL
III. THERE IS A CHANGE IN THE LOCATION OF A DISCHARGE POINT OF OUTFALL
IV. AN INSPECTION REVEALS THAT BMPS ARE INEFFECTIVE AT ELIMINATING OR MINIMIZING POLLUTANTS IN THE STORMWATER DISCHARGED FROM THE SITE.
V. THERE IS A NEW SUBCONTRACTOR IMPLEMENTING ANY PORTION OF THE SWPPP
VI. A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR GREATER THAN A REPORTABLE QUANTITY OCCURS DURING A 24-HOUR PERIOD

J. THE CONTRACTOR SHALL ENSURE THAT THE CONTRACTOR AND ALL SUBCONTRACTORS RESPONSIBLE FOR IMPLEMENTING SWPPP CONTROL MEASURES FILL OUT THE CONTRACTOR / SUBCONTRACTOR CERTIFICATION TABLE INCLUDED IN THIS SWPPP.

K. THE CONTRACTOR SHALL COMPLETE THE CONSTRUCTION SEQUENCE TABLE INCLUDING IN THIS SWPPP PRIOR TO PROCEEDING WITH THE INSTALLATION OF BMPS AND PRIOR TO GROUND DISTURBING ACTIVITIES. THE CONTRACTOR SHALL COMPLETE THE TABLE WITH ANTICIPATED DATES IN WHICH THE BMP WILL BE UTILIZED OR THE ACTIVITY WILL OCCUR.

TURBIDITY

A. TURBIDITY REDUCTION TO NO MORE THAN 29 NTUs ABOVE BACKGROUND LEVEL PRIOR TO DISCHARGE OFF SITE.

B. CONTRACTOR TO FILE FOR A FDEP NOTICE OF INTENT (NOI) WITHIN 14 DAYS OF CONSTRUCTION COMPLETION.

CONSTRUCTION SEQUENCING TABLE

ANTICIPATED CONSTRUCTION SEQUENCE*	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CONSTRUCTION ENTRANCE												
TEMPORARY CONTROL MEASURES												
STORM FACILITIES												
ROUGH GRADE / SEDIMENT CONTROL												
FOUNDATION / BUILDING CONSTRUCTION												
SITE CONSTRUCTION												
FINISH GRADING												
PERMANENT CONTROL MEASURES												

* THIS IS ONLY A GUIDE, CONTRACTOR IS TO USE HIS JUDGMENT TO MODIFY AS NEEDED.

STABILIZATION

A. STABILIZATION MEASURES SHALL BE INITIATED IMMEDIATELY IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED AND WILL REMAIN UNDISTURBED FOR 7 DAYS OR MORE. STABILIZE BY COVERING WITH ADEQUATE AMOUNTS OF MULCH OVER SEED AND PERIODICALLY WATER TO PROMOTE AND MAINTAIN GROWTH OF THE TEMPORARY GROUNDCOVER, OR BY THE USE OF AN APPROPRIATE ALTERNATIVE BMP.

B. PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES OR ANY DISTURBED LAND AREAS SHALL BE COMPLETED IMMEDIATELY AFTER FINAL GRADING. WHEN IT IS NOT POSSIBLE TO PERMANENTLY PROTECT A DISTURBED AREA IMMEDIATELY AFTER GRADING OPERATIONS, TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED. ALL TEMPORARY PROTECTION SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE AND ESTABLISHED.

C. ALL GRASS SLOPES CONSTRUCTED STEEPER THAN 4H:1V SHALL BE SODDED IMMEDIATELY AFTER FINAL GRADE IS ESTABLISHED.

DUST CONTROL

A. BARE EARTH AREAS SHALL BE WATERED DURING CONSTRUCTION AS NECESSARY TO MINIMIZE THE TRANSPORT OF FUGITIVE DUST. IN NO CASE SHALL FUGITIVE DUST BE ALLOWED TO LEAVE THE SITE UNDER CONSTRUCTION.

B. AS REQUIRED AFTER COMPLETION OF CONSTRUCTION, BARE EARTH AREAS SHALL BE VEGETATED.

AT ANY TIME BOTH DURING AND AFTER SITE CONSTRUCTION THAT WATERING AND/OR VEGETATION ARE NOT EFFECTIVE IN CONTROLLING WIND EROSION AND/OR TRANSPORT OF FUGITIVE DUST, OTHER METHODS AS ARE NECESSARY FOR SUCH CONTROL SHALL BE EMPLOYED. THESE METHODS MAY INCLUDE ERECTION OF DUST CONTROL FENCES.

WASTE MANAGEMENT

A. THE CONTRACTOR SHALL ENSURE THAT ALL WASTE AND DEBRIS ARE MANAGED DAILY SUCH THAT THEY WILL NOT IMPACT STORMWATER OR LEAVE THE PERMITTED AREA, AND DISPOSED OF PROPERLY IN ACCORDANCE WITH APPLICABLE STATE, LOCAL AND FEDERAL REGULATIONS.

B. THE CONTRACTOR SHALL ENSURE THAT ALL CHEMICALS, OILS, FUELS, HAZARDOUS WASTE, UNIVERSAL WASTE AND TOXIC SUBSTANCES ARE PROPERLY MANAGED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE STATE, LOCAL AND FEDERAL REGULATIONS. THE CONTRACTOR SHALL ENSURE THAT WASTE IS NOT DISCHARGED FROM THE SITE, AND DOES NOT IMPACT STORMWATER OR GROUNDWATER.

C. THE CONTRACTOR SHALL PROVIDE APPROPRIATE AND ADEQUATE WASHOUT FACILITIES TO ENSURE THAT CHEMICALS AND WASTE IS NOT DISCHARGED FROM THE SITE, AND DO NOT IMPACT STORMWATER OR GROUNDWATER. (E.G. CONCRETE/MASONRY WASHOUT, PAINT WASHOUT, EIFS, ETC.) THE CONTRACTOR SHALL CLEAN UP SPILLS PROMPTLY AND ENSURE THAT WASHOUT AREAS ARE PROPERLY MAINTAINED TO PROVIDE ADEQUATE VOLUME TO PREVENT OVERFLOW.

D. THE CONTRACTOR SHALL PROVIDE ADEQUATE SANITARY FACILITIES FOR SITE PERSONNEL, MAINTAIN THROUGHOUT CONSTRUCTION, AND PROVIDE FOR PROPER DISPOSAL IN ACCORDANCE WITH APPLICABLE STATE, LOCAL AND FEDERAL REGULATIONS. SANITARY FACILITIES SHALL BE PROPERLY SECURED TO PREVENT TIPPING.

E. A SPILL CONTROL AND CONTAINMENT KIT (CONTAINING FOR EXAMPLE, ABSORBENT MATERIAL SUCH AS KITTY LITTER OR SAWDUST, ACID, BASE, NEUTRALIZING AGENT, BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, PLASTIC AND METAL TRASH CONTAINERS, ETC.) SHALL BE PROVIDED AT THE CONSTRUCTION SITE AND IT'S LOCATION(S) SHALL BE IDENTIFIED WITH LEGIBLE SIGNAGEAND SHOWN ON THE SITE MAPS.
A. THE SPILL CONTROL AND CONTAINMENT KIT SHALL BE OF SUFFICIENT QUANTITIES AND APPROPRIATE CONTENT TO CONTAIN A SPILL FROM THE LARGEST ANTICIPATED PIECE OF EQUIPMENT AND FROM THE LARGEST ANTICIPATED QUANTITIES OF PRODUCTS STORED ON THE SITE AT ANY GIVEN TIME.

F. WHEN A SPILL OF REPORTABLE QUANTITIES IS DISCOVERED ON THE SITE, THE CONTRACTOR SHALL CLEAN UP ALL SPILLED MATERIALS AND DISPOSE OF IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AUTHORITIES IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS, THE OWNER AND PROJECT ENGINEER. THE CONTRACTOR SHALL RETAIN CLEANUP INFORMATION AS WELL AS DISPOSAL MANIFESTS WITH THEIR SWPPP.

MATERIALS MANAGEMENT, AND EQUIPMENT STAGING AND MAINTENANCE

A. EXCAVATED MATERIAL SHALL NOT BE DEPOSITED IN LOCATIONS WHERE IT COULD BE WASHED AWAY BY HIGH WATER OR STORM WATER RUNOFF. STOCKPILED MATERIAL SHALL BE COVERED OR ENCIRCLED WITH SEDIMENT CONTAINMENT DEVICES.

B. HEAVY CONSTRUCTION EQUIPMENT PARKING AND MAINTENANCE AREAS SHALL BE DESIGNED TO PREVENT OIL, GREASE, AND LUBRICANTS FROM ENTERING SITE DRAINAGE FEATURES INCLUDING STORMWATER COLLECTION AND TREATMENT SYSTEMS. CORES CONTAINING SHALL PROVIDE BROAD DIKES OR SILT SCREENS AROUND, AND SEDIMENT SUMPS WITHIN, SUCH AREAS AS REQUIRED TO CONTAIN SPILLS OR OIL, GREASE, LUBRICANTS, OR OTHER CONTAMINANTS. CONTRACTOR SHALL HAVE AVAILABLE, AND SHALL USE, ABSORBENT FILTER PADS TO CLEAN UP SPILLS IMMEDIATELY AFTER ANY OCCURRENCE.

C. THE CONTRACTOR SHALL ENSURE THAT ALL TOXIC / HAZARDOUS SUBSTANCES AND CHEMICALS ARE PROPERLY STORED, OUT OF THE WEATHER, AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL ENSURE THAT THESE PRODUCTS ARE STORED AND USED IN SUCH A MANNER THAT WILL NOT NEGATIVELY IMPACT STORMWATER, GROUNDWATER OR PROTECTED SPECIES.

D. THE CONTRACTOR SHALL ENSURE THAT ALL MATERIALS, EQUIPMENT, DEBRIS, WASTE, TRAILERS, AND OTHER SUPPORT RELATED ITEMS ARE CONTAINED WITHIN THE PERMITTED LIMITS OF DISTURBANCE. THE CONTRACTOR SHALL ENSURE THAT THE STORAGE AND USE OF SUCH ITEMS DOES NOT NEGATIVELY IMPACT STORMWATER OR GROUNDWATER.

OFFSITE VEHICLE TRACKING

A. THE CONTRACTOR SHALL ENSURE THAT THE CONSTRUCTION EXIT IS USED BY ALL VEHICLES AND EQUIPMENT ENTERING OR LEAVING THE JOBSITE. THE CONTRACTOR SHALL MONITOR AND MAINTAIN THE CONSTRUCTION EXIT TO ENSURE THAT NO SOILS ARE TRACKED OFFSITE BY TIRES OR TRACKS, AND THAT NO SOILS ARE SPILLED BY TRUCKS OR EQUIPMENT LEAVING THE SITE. ALL TRACKED OR SPILLED SOILS SHALL BE SHOVELED OR SWEPT FROM THE ROADWAY AND RETURNED TO THE SITE. WATER SHALL NOT BE USED TO CLEAN THE SOILS FROM THE ROADWAY UNLESS THE WATER AND SOILS ARE RECOVERED BY THE USE OF A VACUUM TRUCK OR SIMILAR DEVICE.

FERTILIZERS, HERBICIDES AND PESTICIDES

A. THE CONTRACTOR SHALL ENSURE THAT ALL FERTILIZERS, HERBICIDES, PESTICIDES AND SIMILAR PRODUCTS ARE PROPERLY STORED, OUT OF THE WEATHER, AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL ENSURE THAT THESE PRODUCTS ARE USED IN SUCH A MANNER THAT WILL NOT NEGATIVELY IMPACT STORMWATER, GROUNDWATER OR PROTECTED SPECIES.

B. NUTRIENTS SHALL BE APPLIED ONLY AT RATES NECESSARY TO ESTABLISH AND MAINTAIN VEGETATION.

INSPECTIONS AND MAINTENANCE

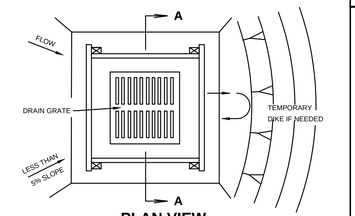
A. THE CONTRACTOR SHALL INSPECT BMPS (I.E. DISCHARGE LOCATIONS, CONSTRUCTION EXIT, PERIMETER CONTROLS, INLET PROTECTION, STABILIZATION, EROSION CONTROL, DOCUMENTATION, WASTE DISPOSAL AREAS, MATERIAL STORAGE AREAS, ETC.) TO ENSURE THAT BMPS ARE NOT CAUSING OR CONTRIBUTION TO VIOLATIONS OF WATER QUALITY STANDARDS OR RESULTING IN OFFSITE SEDIMENTATION; ENSURE THAT BMPS ARE INSTALLED, MAINTAINED AND OPERATING CORRECTLY AND EFFECTIVELY; ENSURE THAT BMPS ASSOCIATED WITH STORAGE AND WASTE DISPOSAL AREAS ARE BEING USED AND MAINTAINED PROPERLY; ENSURE THAT THE CONSTRUCTION EXIT IS FUNCTION PROPERLY TO PREVENT OFFSITE TRACKING OF SEDIMENT; ENSURE THAT EROSION PREVENTION MEASURES ARE MAINTAINED TO PREVENT VISIBLE EROSION OF DISTURBED AREAS AND SEDIMENTATION AT THE DISCHARGE POINTS; AND DETERMINE IF CONSTRUCTION ACTIVITIES HAVE ALTERED THE EFFECTIVENESS OF BMPS. INSPECTIONS MUST BE COMPLETED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS, AND WITHIN 24 HOURS AFTER A RAINSTORM OF 0.50 INCHES OR GREATER EVEN IF IT RAINS ON THE WEEKEND OR A HOLIDAY.

B. THE CONTRACTOR SHALL REPORT ALL INSPECTION FINDINGS AND CORRECTIVE ACTIONS TAKEN AS A RESULT OF THE INSPECTION USING THE STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT FORM PROVIDED BY FDEP OR AN EQUIVALENT FORM. INSPECTION REPORTS SHALL BE SIGNED BY THE INSPECTOR AND A RESPONSIBLE AUTHORITY AS DEFINED BY THE PERMIT. INSPECTION REPORTS SHALL BE MAINTAINED WITH THE SWPPP. THE INSPECTOR MUST BE A QUALIFIED EROSION AND SEDIMENT CONTROL INSPECTOR AS DEFINED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

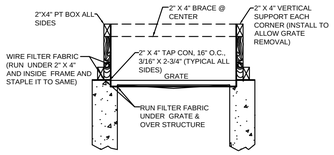
C. ANY MAINTENANCE, REPAIR AND NECESSARY REVISIONS TO BMP ITEMS SHALL BE ADDRESSED IN A TIMELY MANNER, BUT IN NO CASE LATER THAN 7 CALENDAR DAYS FOLLOWING THE INSPECTION OR IDENTIFICATION OF THE ISSUE. UNLESS OTHERWISE SPECIFIED, ACCUMULATED SEDIMENTS SHOULD BE REMOVED BEFORE THEY REACH ONE-HALF OF THE CAPACITY OF THE CONTROL DEVICE.

ALLOWABLE NON-STORMWATER DISCHARGES

THE GENERIC PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES PROHIBIT MOST NON-STORMWATER DISCHARGES DURING THE CONSTRUCTION PHASE. CERTAIN DISCHARGES ARE ALLOWED BY THE PERMIT, PROVIDED APPROPRIATE BMPS ARE UTILIZED AND THE DISCHARGE DOES NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS. ALLOWABLE NON-STORMWATER DISCHARGES THAT OCCUR DURING CONSTRUCTION ON THIS PROJECT PER PART 3.2 OF THE GENERIC PERMIT ARE:
DISCHARGES FROM FIRE FIGHTING ACTIVITIES.
FIRE HYDRANT FLUSHINGS.
WATERS WITHOUT DETERGENTS USED TO SPRAY OFF LOOSE SOLIDS FROM VEHICLES.
WATERS USED TO CONTROL DUST.
POTABLE WATER SOURCES SUCH AS WATERLINE FLUSHINGS.
LANDSCAPE IRRIGATION AND DRAINAGE.
ROUTINE EXTERNAL BUILDING WASHDOWN PROVIDED NO DETERGENTS ARE USED.
PAVEMENT WASHWATERS THAT DO NOT CONTAIN DETERGENTS, LEAKS, SPILLS OF TOXIC OR HAZARDOUS MATERIALS.
AIR CONDITIONING CONDENSATE.
SPRING WATER.
FOUNDATION OR FOOTING DRAIN FLOWS THAT ARE NOT CONTAMINATED WITH PROCESS MATERIAL SUCH AS SOLVENTS.
NONCONTAMINATED GROUND WATER ASSOCIATED WITH DEWATERING ACTIVITIES AS DESCRIBED IN PART 3.4 OF THE GENERIC PERMIT.



PLAN VIEW

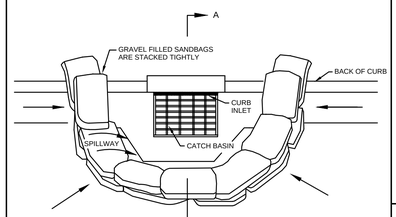


SECTION A - A

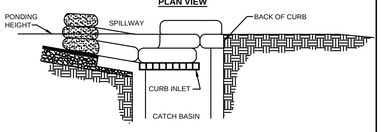
NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%).
2. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.
3. FASTEN FRAMING TO STRUCTURE TO ALLOW GRATE REMOVAL.
4. LEAVE EXPOSED EDGE TO ALLOW FOR PAVING TO GRADE

FILTER FABRIC INLET PROTECTION DETAIL
N.T.S.

NOTE:
AVOID USING IN TRAFFIC AREAS AS THIS CAN CAUSE A HAZARD.



PLAN VIEW

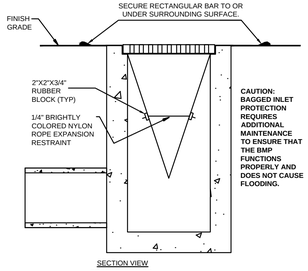


SECTION A-A

NOTES:
1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
3. LEAVE ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AS NECESSARY. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

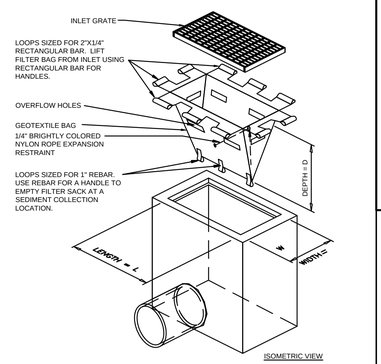
CURB INLET PROTECTION DETAIL
N.T.S.

1. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
3. PLACE AN OIL ADSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
4. INSPECT PER REGULATORY EQUIREMENTS.
5. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
6. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES.
7. THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.
8. EXTRA CARE SHALL BE TAKEN TO ENSURE REGULAR MAINTENANCE OF FILTER SACKS USED IN RIGHT OF WAY TO ENSURE ADEQUATE DRAINAGE CAPACITY.



PROFILE VIEW OF INSTALLED FILTER SACK

CAUTION: BAGGED INLET PROTECTION REQUIRES ADDITIONAL MAINTENANCE TO ENSURE THAT THE BMP FUNCTIONS PROPERLY AND DOES NOT CAUSE FLOODING.

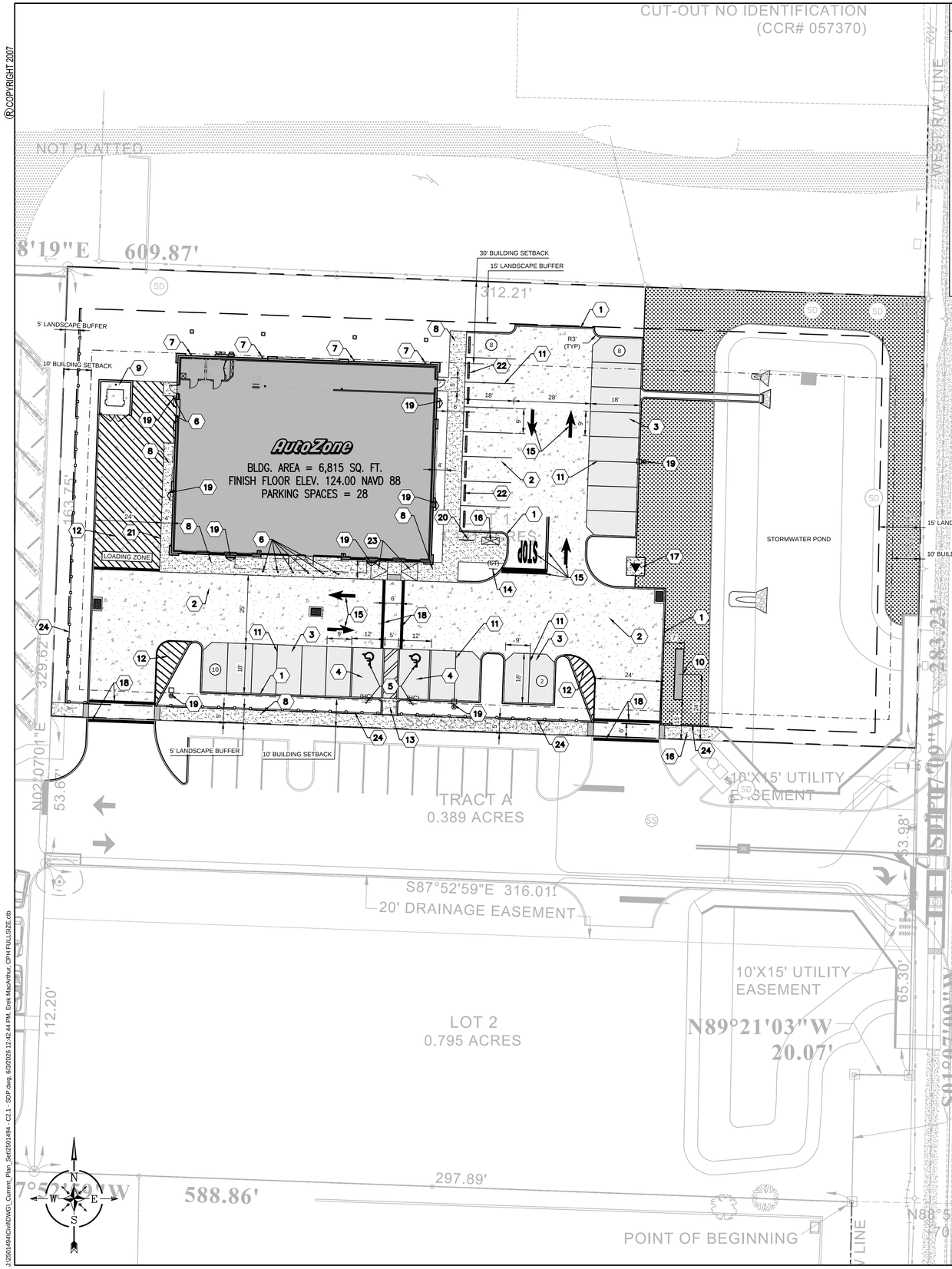


ISOMETRIC VIEW

GEOTEXTILE BAG INLET PROTECTION DETAIL
N.T.S.

| LOW TO MODERATE FL

© COPYRIGHT 2007



LEGEND:

- PROPERTY LINE
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER LINE
- CONCRETE SIDEWALK
- CONCRETE. REF. GEOTECHNICAL REPORT
- STANDARD DUTY ASPHALT PAVEMENT. REF. GEOTECHNICAL REPORT FOR PAVEMENT SPECIFICATIONS
- OPEN SPACE SET ASIDE
- (10) PARKING SPACE COUNT
- SIDEWALK CURB RAMP 1:12 SLOPE (MAX)
- (HC) HANDICAP (FTP-25) (12" X 18")
- (ST) STOP (R1-1) (36" X 36")
- (PE) PEDESTRIAN CROSSING (30" X 30")

KEY NOTES:

1. CONCRETE CURB – SEE DETAILS 1 & 2/C5.1
2. CONCRETE PAVING – SEE DETAIL 4/C5.1 EXPANSION AND CONTROL JOINTS – SEE DETAILS 20, 21, & 22/C5.1. MAXIMUM SPACING FOR CONTROL JOINTS IS 15'–0" O.C. EACH WAY GC TO PROVIDE BID ALTERNATE FOR ALL CONCRETE PAVEMENT.
3. ASPHALT PAVING – SEE DETAIL 5/C5.1
4. HANDICAP PARKING (IN ACCORDANCE WITH FDOT STANDARD PLANS 711–001) – SEE DETAILS 6 & 7/C5.1
5. HANDICAP PARKING SYMBOL AND SIGNAGE (IN ACCORDANCE WITH FDOT STANDARD PLANS 711–001) – SEE DETAIL 7, 12/C5.1
6. PIPE GUARD – SEE DETAILS 15, 16, & 18/C5.1
7. BUILDING ROOF DRAIN DOWN SPOUTS, SEE GRADING PLAN FOR CONNECTION. SEE DETAIL 25/C5.1
8. CONCRETE SIDEWALK, 2% MAXIMUM CROSS SLOPE, 5% MAXIMUM LONGITUDINAL SLOPE – SEE DETAIL 19 & 20/C5.1 FOR SIDEWALKS AROUND BUILDING.
9. MASONRY WALL DUMPSTER LAYOUT (REF. STRUCTURAL PLANS) – SEE DETAILS 8, 9, 10 & 11/C5.1
10. MONUMENT SIGN – 5.0'X 8.0' . OVERALL HEIGHT WITH MASONRY BASE TO MATCH BUILDING HEIGHT.
11. 4" WIDE PARKING STRIPE PAINTED WHITE (TYP.)
12. 4" WIDE DIAGONAL STRIPES PAINTED WHITE @ 2 FT. O.C.
13. CONCRETE HANDICAP RAMP – MAXIMUM SLOPE 1:12 (8.33%) (PER A.D.A. REQUIREMENTS). MAXIMUM CROSS SLOPE 1:50 (2.00%). REF. FDOT STANDARD PLANS #522–002
14. STOP SIGN (36" X 36") – SEE DETAIL 3/C5.1
15. PAVEMENT MARKINGS – SEE DETAIL 23 & 24/C5.1
16. BELSON BIKE LOCKER SINGLE D1, COLOR LIGHT GREY
17. CONCRETE TRANSFORMER PAD. CONTRACTOR TO COORDINATE WITH ELECTRIC UTILITY PROVIDER
18. 12" SOLID WHITE (TYP) PER FDOT STANDARD PLANS #711–001
19. SITE LIGHTING – SEE DETAIL 13 /C5.1, SEE PHOTOMETRIC PLAN, SHEET PH0.1
20. PROPOSED BIKE RACK 4 SPACES, REF. DETAIL 26/C5.1
21. CURB 6"
22. CONCRETE WHEEL STOP, SEE DETAIL 17/C5.1
23. HANDICAP RAMP MAXIMUM SLOPE 1:12(8.33%) (PER ADA REQUIREMENTS) MAXIMUM SLOPE 1:50 (2.00%) REF DETAIL 27/C5.1
24. 4' – 50% OPAQUE FENCE, REF. LANDSCAPE PLANS FOR DETAIL.

PARKING DATA TABLE:

DESCRIPTION:	REQUIREMENT:	PROVIDED:
BUILDING AREA:	6,815 S.F.	—
PARKING RATIO	1/ 250 SF.	—
VEHICULAR PARKING	28 SPACES.	28 SPACES.
ACCESSIBLE PARKING	2 SPACES.	2 SPACES
BICYCLE PARKING	5 SPACES.	5 SPACES. (4 SHORT, 1 LONG)

SITE DATA INFORMATION:

SITE ADDRESS:
1788 ROCK SPRINGS RD,
APOPKA, FLORIDA 32819

SITE PARCEL NUMBER:
33-20-28-5115-01-000

SECTION - 33 / TOWNSHIP - 20 SOUTH / RANGE - 28 EAST

NUMBER OF STORIES: 1

TOTAL SQUARE FOOTAGE UNDER ROOF (CONDITIONED AND NON-CONDITIONED): 6,815 S.F.

SPRIKLER INTENTION FOR NEW STRUCTURE: UNSPRINKLERED

ON-SITE LAND INFORMATION:

CURRENT LAND USE: VACANT
PROPOSED LAND USE: AUTO PARTS STORE

AREA OF PROPOSED IMPROVEMENTS: 51,488 S.F. (1.18± ACRES)

ADJACENT LAND INFORMATION:

	NORTH	EAST	SOUTH	WEST
EXIST. LAND USE	R.O.W.	R.O.W.	APK-C-C	R.O.W.
FUTURE LAND USE	R.O.W.	R.O.W.	APK-C-C	R.O.W.
EXIST. ZONING	R.O.W.	R.O.W.	APK-C-C	R.O.W.
PROPOSED ZONING	R.O.W.	R.O.W.	APK-C-C	R.O.W.

BLDG. SETBACKS AND LANDSCAPE BUFFERS:

BLDG. SETBACKS:	NORTH	EAST	SOUTH	WEST
REQUIRED:	30.0'	10.0'	10.0'	10.0'
PROVIDED :	30.0'	176.68'	61.96'	41.39'
LANDSCAPE BUFFERS:	**NORTH**	**EAST**	**SOUTH**	**WEST**
REQUIRED:	15.0'	15.0'	5.0'	5.0'
PROVIDED :	15.0'	15.0'	5.0'	5.0'

PERVIOUS / IMPERVIOUS AREAS:

EXISTING CONDITIONS:

PERVIOUS AREA:	7,443 S.F. (0.17 AC.)	(21.2%)
IMPERVIOUS AREA:	27,660 S.F. (0.64 AC.)	(78.8%)
TOTAL SITE AREA:	35,103 S.F. (0.81 AC.)	(100.0%)

PROPOSED CONDITIONS:

PERVIOUS AREA:	11,995 S.F. (0.27 AC.)	(34.2%)
IMPERVIOUS AREA:	16,152 S.F. (0.37 AC.)	(46.0%)
BUILDING AREA:	6,956 S.F. (0.16 AC.)	(19.8%)
TOTAL SITE AREA:	35,103 S.F. (0.81 AC.)	(100.0%)

PARKING INFORMATION:

USE TYPE: BUSINESS, COMMERCIAL

PARKING REQUIRED:
BUSINESS, COMMERCIAL:
1 SPACE PER 250 SF OF GROSS FLOOR AREA
(6,815 / 250 SF) = 28 SPACES

PARKING PROVIDED = 28 (INC. 2 ADA SPACES)

MISC. SPACES PROVIDED (IN ADDITION TO THE 28 ABOVE)

ONE LOADING SPACE

BUILDING INFORMATION:

BUILDING AREA: 6,815 S.F.

MAXIMUM BUILDING HEIGHT (COUNTY CODE): 35'

FLOOR AREA RATIO:
(FAR) MAXMUM: 25%
(FAR) PROVIDED: 13.2%

IMPERVIOUS SURFACE RATIO:
(ISR) MAXIMUM: 0.75 AC.

OPEN SPACE CALCULATION:

TOTAL SITE AREA :	35,284 S.F.
MINIMUM REQUIRED OPEN SPACE	7.5% = 2,646 S.F.
PROVIDED OPEN SPACE	5,775 S.F

NOTE:
PER SECTIONS 5.4 OPEN SPACE SET ASIDES, OPEN SPACE PROVIDED BY AREAS OCCUPIED BY REQUIRED LANDSCAPING AREAS, TREE PROTECTION AREAS, PERIMETER BUFFERS, VEGETATIVE BUFFERS, EXCEPT LANDSCAPED AREA WITHIN VEHICULAR USED AREAS.

20 0 20 40
Graphic Scale in Feet

Always call 811 two full business days before you dig.
Sunshine811.com
www.sunshine811.com

cph
www.cphcorp.com
Plans Prepared By: CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS

1	2	3
4	5	6

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

SITE DIMENSION PLAN

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL: 901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics. Tel. 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO LICENSE No.91885 STATE OF FLORIDA PROFESSIONAL ENGINEER
MATTHEW S. D'ANGELO, PE, P.E. No. 91885
1/13/26

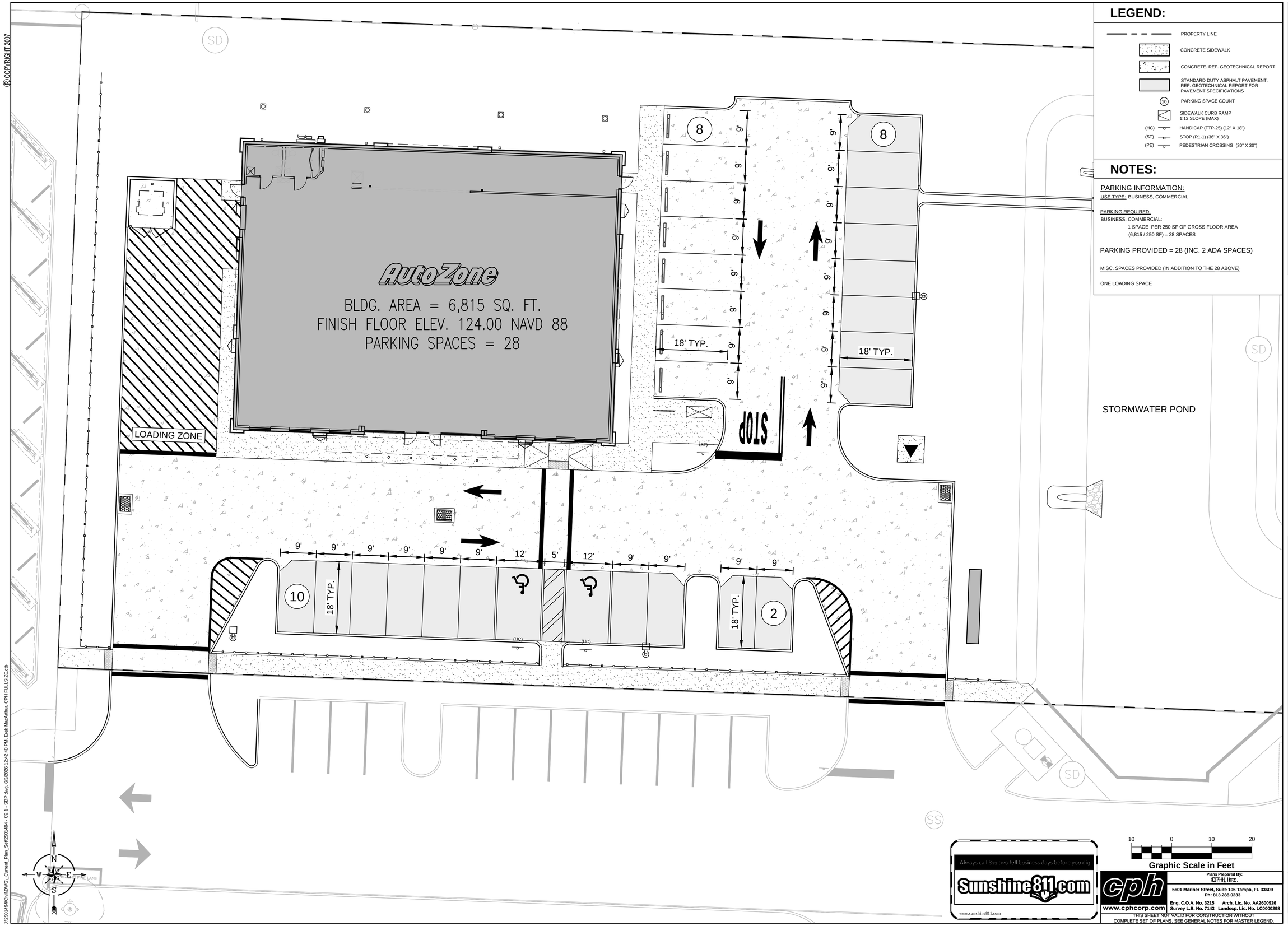
1/15/2026

65W2

C2.1

J:\2501494\Cvil\4DWG\ Current_Plan_Set\2501494 - C2.1 - SDP.dwg, 6/30/2026 12:42:44 PM, Erek MacArthur, CPH FULLSIZE.ctb

© COPYRIGHT 2007



LEGEND:

- PROPERTY LINE
- CONCRETE SIDEWALK
- CONCRETE. REF. GEOTECHNICAL REPORT
- STANDARD DUTY ASPHALT PAVEMENT. REF. GEOTECHNICAL REPORT FOR PAVEMENT SPECIFICATIONS
- (10) PARKING SPACE COUNT
- SIDEWALK CURB RAMP 1:12 SLOPE (MAX)
- (HC) HANDICAP (FTP-25) (12" X 18")
- (ST) STOP (R1-1) (36" X 36")
- (PE) PEDESTRIAN CROSSING (30" X 30")

NOTES:

PARKING INFORMATION:

USE TYPE: BUSINESS, COMMERCIAL

PARKING REQUIRED:

BUSINESS, COMMERCIAL:

1 SPACE PER 250 SF OF GROSS FLOOR AREA
(6,815 / 250 SF) = 28 SPACES

PARKING PROVIDED = 28 (INC. 2 ADA SPACES)

MISC. SPACES PROVIDED (IN ADDITION TO THE 28 ABOVE)

ONE LOADING SPACE

Graphic Scale in Feet
10 0 10 20

Always call 811 two full business days before you dig!
Sunshine811.com
www.sunshine811.com

cph
www.cphcorp.com
Plans Prepared By:
CPH, INC.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS

1	2	3
4	5	6

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

PARKING PLAN

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL.: 901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics. Tel. 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO LICENSE No.91885 STATE OF FLORIDA PROFESSIONAL ENGINEER
MATTHEW S. D'ANGELO, FL. P.E. NO. 91885
6/3/26

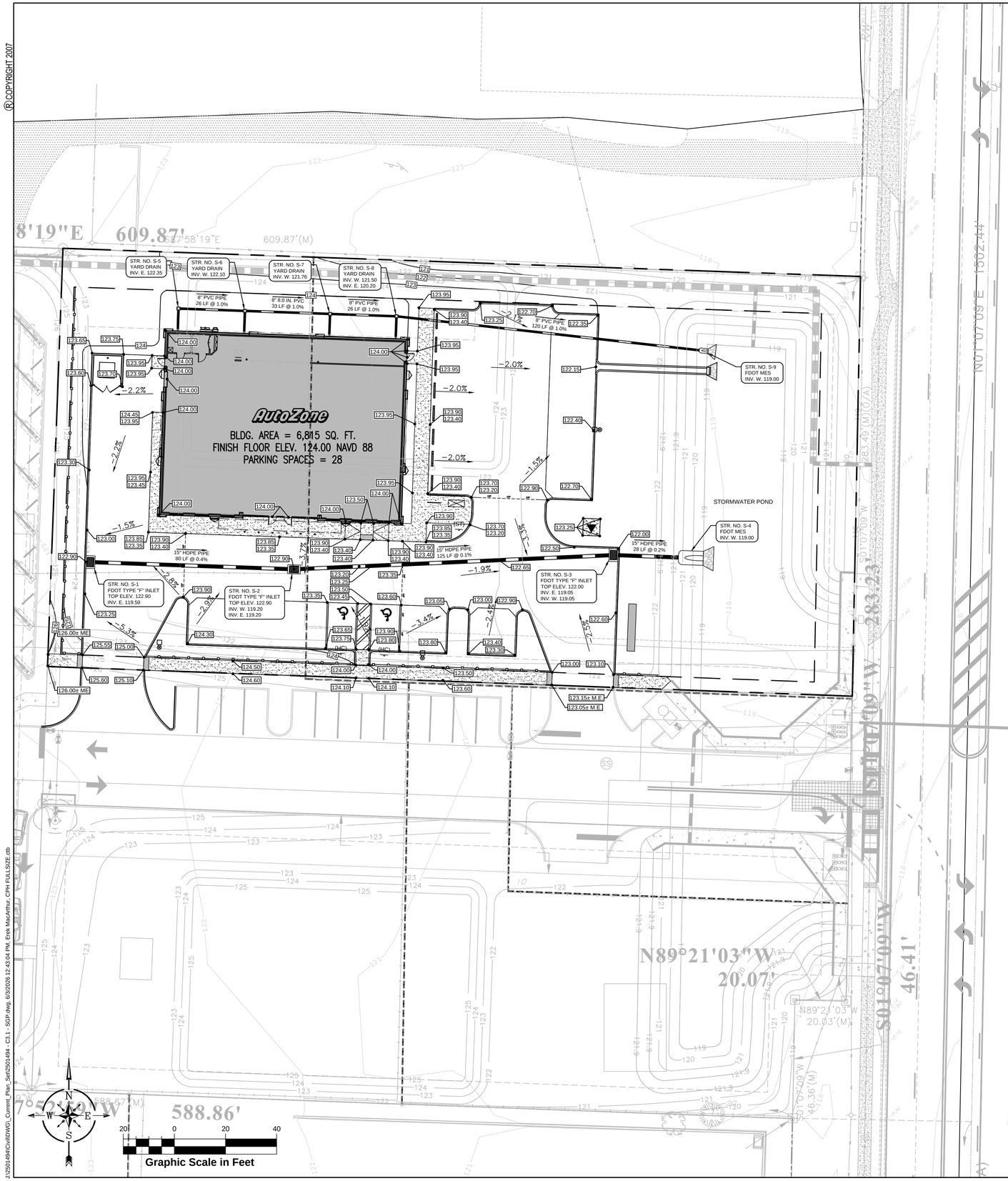
1/15/2026

65W2

C2.2

J:\250149\4CM\EDW\01_Current_Plan_Set\250149 - C2.1 - SDP.dwg, 6/3/2026 12:42:48 PM, Erek MacArthur, CPH FULLSIZE.ctb

© COPYRIGHT 2007



LEGEND:

- PROPERTY LINE
- HIGH POINT
- STORM PIPE
- CONCRETE SIDEWALK
- CONCRETE. REF. ARCH. PLANS
- XX.XX / XX.XX — TOP OF CURB ELEV. / PAVEMENT ELEV.
- XX.XX — PAVEMENT ELEV.
- XX.XX± M.E. — MEET EXISTING GRADE
- DIRECTION OF FLOW
- HANDICAP RAMP 1:12 SLOPE (MAX)
- STORM INLET PER FDOT STANDARD PLANS
- RIPRAP

PIPE MATERIALS:

STORMWATER PIPE

RCP PIPE SHALL COMPLY WITH ASTM C76
ERCP PIPE SHALL COMPLY WITH ASTM C507
HDPE PIPE SHALL COMPLY WITH ASTM D3350 AND D2321
PVC PIPE SHALL COMPLY WITH ASTM D3034, SDR 35
PP PIPE SHALL COMPLY WITH ASTM F2881 AND AASHTO M330

NOTES:

1. GRADING SHOWN ON THESE PLANS IS PROVIDED TO THE CONTRACTOR TO EXPRESS THE GENERAL GRADING INTENT OF THE PROJECT. THE CONTRACTOR SHALL BE EXPECTED TO GRADE THE ENTIRE SITE TO ENSURE POSITIVE DRAINAGE IN ALL AREAS THROUGHOUT THE SITE. THE FOLLOWING MINIMUM SLOPES SHALL BE PROVIDED BY THE CONTRACTOR:

   A. ASPHALT PAVEMENT: MIN. 1% SLOPE
   B. CONCRETE PAVEMENT: MIN. 1% SLOPE
   C. GUTTERS: MIN 0.5%

2. STRUCTURE BOTTOMS SHALL BE TYPE 'P' BOTTOMS PER FDOT REQUIREMENTS, UNLESS PIPE SIZES AND LOCATION REQUIRE A TYPE 'J' BOTTOM. CONTRACTOR SHALL REVIEW DESIGN AND PROVIDE APPROPRIATELY SIZED BOTTOMS PER FDOT REQUIREMENTS.

3. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ADA AREAS ARE CONSTRUCTED IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION. IF THE CONTRACTOR DETERMINES THAT ANY INFORMATION SHOWN ON THIS PLAN MAY NOT BE IN COMPLIANCE THEY SHALL NOTIFY THE ENGINEER PRIOR TO THE WORK BEING COMPLETED.

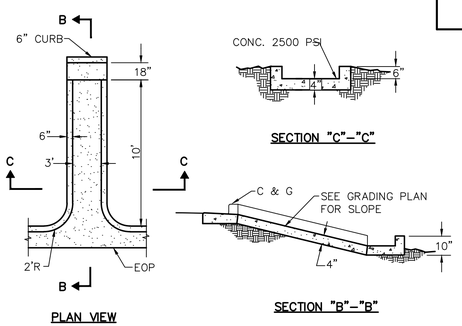
4. TV VIDEO INSPECTION IS REQUIRED FOR ALL RCP STORMWATER PIPES (PUBLIC OR PRIVATE).

   LASER PROFILE IS REQUIRED FOR ALL ADS/HDPE STORMWATER PIPES. FOR PIPE 48 INCHES OR LESS IN DIAMETER, PROVIDE THE ENGINEER A VIDEO DVD AND REPORT USING LOW BARREL DISTORTION VIDEO EQUIPMENT WITH LASER PROFILE TECHNOLOGY, NON-CONTACT MICROMETER AND ASSOCIATED SOFTWARE (OR APPROVED EQUAL) THAT PROVIDES:

   1. ACTUAL RECORDED LENGTH AND WIDTH MEASUREMENTS OF ALL CRACKS WITHIN THE PIPE.
   2. ACTUAL RECORDED SEPARATION MEASUREMENT OF ALL PIPE JOINTS.
   3. PIPE OVALITY REPORT.
   4. DEFLECTION MEASUREMENTS AND GRAPHICAL DIAMETER ANALYSIS REPORT IN TERMS OF X AND Y AXIS.
   5. FLAT ANALYSIS REPORT.
   6. REPRESENTATIVE DIAMETER OF THE PIPE.

5. DATUM IS NAVD88, NAVD88 TO NGVD29, CONVERSION FACTOR: NAVD88 - NGVD29 = -1.59'

6. ITEMS SHOWN SCREENED REPRESENT EXISTING CONDITIONS. ITEMS SHOWN BOLD REPRESENT PROPOSED CONDITIONS.



CONCRETE: 28 DAY COMPRESSION STRENGTH, 2,500 P.S.I., 4" THICK MINIMUM W/ 6X6–W1.4XW1.4 WWF.

FLUME DETAIL
N.T.S.

Plans Prepared By:
CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298
www.cphcorp.com

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS

1	2	3
4	5	6

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

GRADING AND STORM DRAINAGE PLAN

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL:901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics. Tel. 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO LICENSE No.91885 STATE OF FLORIDA PROFESSIONAL ENGINEER
MATTHEW S. D'ANGELO, P.E. No. 91885
1/15/2026

1/15/2026

65W2

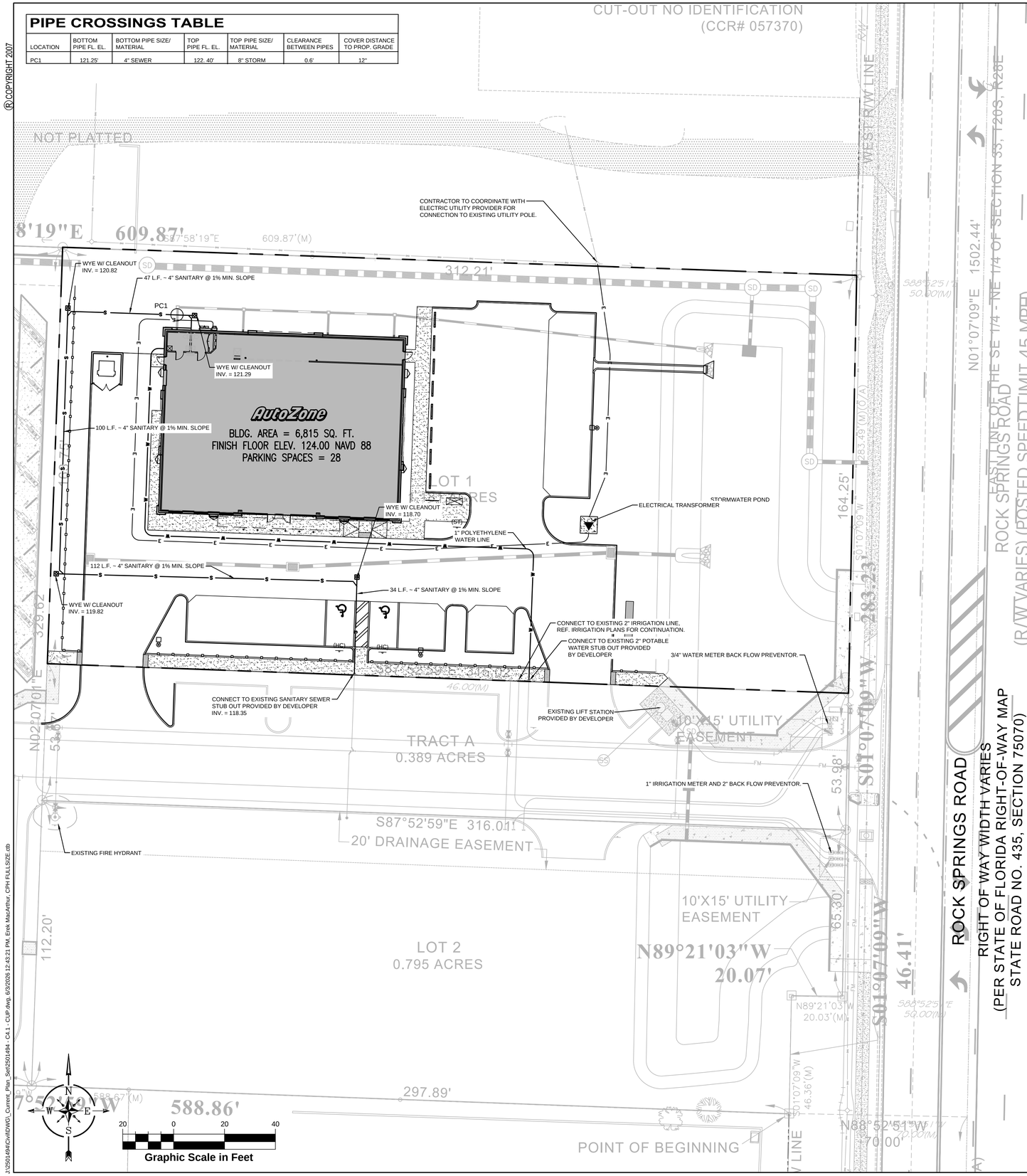
C3.1

J:\2501494\Civil\DWG_Current_Plan_Set\2501494 - C3.1 - SGP.dwg, 6/3/2026 12:43:04 PM, Erek MacArthur, CPH FULL SIZE.ctb

© COPYRIGHT 2007

PIPE CROSSINGS TABLE

LOCATION	BOTTOM PIPE FL. EL.	BOTTOM PIPE SIZE/ MATERIAL	TOP PIPE FL. EL.	TOP PIPE SIZE/ MATERIAL	CLEARANCE BETWEEN PIPES	COVER DISTANCE TO PROP. GRADE
PC1	121.25'	4" SEWER	122. 40'	8" STORM	0.6'	12"



LEGEND:

- PROPERTY LINE
- S — SANITARY SEWER
- W — WATER MAIN
- E — ELECTRIC LINE
- WATER LINE ELEMENTS
- BACK FLOW PREVENTER (BFP)
- WATER METER
- TRANSFORMER PAD
- C.O. — CLEAN OUT
- ELECTRICAL EQUIPMENT
- YARD HYDRANT, REF. BLDG. PLUMBING PLANS

UTILITY LINE MATERIALS:

POTABLE WATER LINE

ALL UNDERGROUND PIPING LESS THAT 3" DIAMETER SHALL BE:
ASTM D2737, PRESSURE CLASS 200, SDR 9 HDPE

GRAVITY SEWER LINE

PVC PIPE 4"-12" DIAMETER SHALL BE:
ASTM D-3034, SDR 26

UTILITY SERVICE NOTES:

WATER SERVICE:
GENERAL CONTRACTOR TO PROVIDE AND INSTALL A 1" PEX (HDPE) WATER LINE FROM EXISTING WATER MAIN TO BUILDING.

ELECTRIC SERVICE:
"POWER CO." TO PROVIDE UNDERGROUND 120/208/3 PHASE SERVICE. GENERAL CONTRACTOR TO PROVIDE AND INSTALL TWO 4" DIA. CONDUIT W/ SECONDARY WIRE TO UTILITY COMPANY POINT OF CONNECTION.

SANITARY SERVICE:
GENERAL CONTRACTOR TO PROVIDE AND INSTALL A 4" SCHEDULE 40 PVC FROM EXISTING SEWER TO LAST CLEAN OUT OUTSIDE OF BUILDING, GENERAL CONTRACTOR TO PROVED A 6" CAST IRON UNDER BUILDING SLAB. (MIN. 1% SLOPE). PROVIDE CLEAN OUTS EVERY 60' (TYPICAL).

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS

1	2	3
4	5	6

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

COMPOSITE UTILITY PLAN

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL: 901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics. Tel. 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO
FL. P.E. No. 91885
6/3/26

1/15/2026

65W2

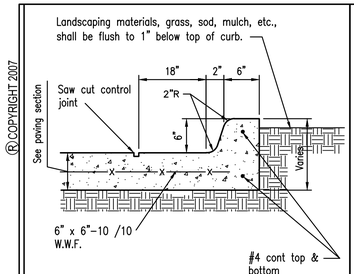
C4.1

Plans Prepared By:
CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298
www.cphcorp.com

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

J:\2501494\CIV\dwg_Current_Plan_Set\2501494 - C4.1 - CUP.dwg, 6/3/2026 12:43:21 PM, Erik MacArthur, CPH FULLSIZE.ctb

© COPYRIGHT 2007

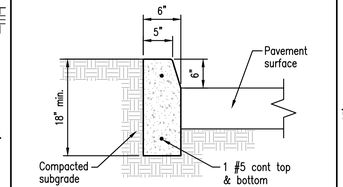


N.T.S.

1 CONCRETE MONOLITHIC CURB

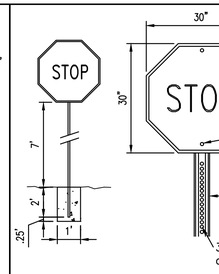
Notes:

1. Concrete to test 4,000 PSI minimum on 28 day test. Air entrainment 7%, slump to be 3" maximum.
2. Transverse joints 1/2" wide shall be installed in the curb 20' apart and shal be filled with preformed bituminous joint filler.
3. Landscaping materials, grass, sod, mulch, etc. shall be flush to 1" below top of curb/paving/drainage openings.



NO SCALE SEC-C01

2 CONCRETE CURB



Note: All regulatory and warning signs shall be high intensity reflective sheeting.

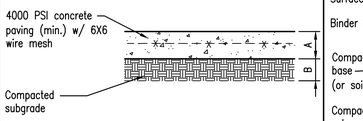
NO SCALE

3 STOP SIGN DETAIL

DIMENSION & TYPE

Concrete Section	A	B
Standard Duty	5"	12"
Heavy Duty	6"	12"

NOTE: Compacted subgrade should be as specified in soils report.



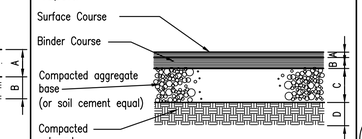
NO SCALE SEC-C04

4 CONCRETE PAVING SECTION

DIMENSION & TYPE

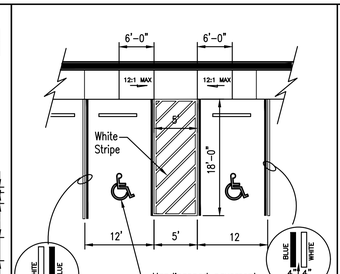
Asphalt Section	A	B	C	D
Heavy Duty	1.0"	1.5"	6"	12"

NOTE: All asphalt paving to be "Heavy Duty". Compacted subgrade should be as specified in soils report.



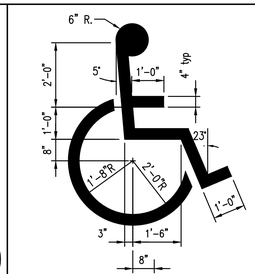
NO SCALE

5 ASPHALT PAVING SECTION



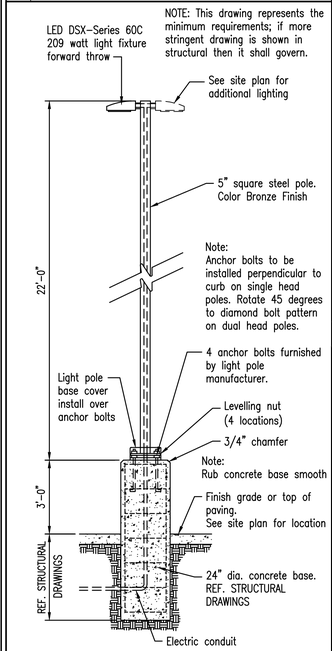
NO SCALE

6 HANDICAP PARKING DETAIL



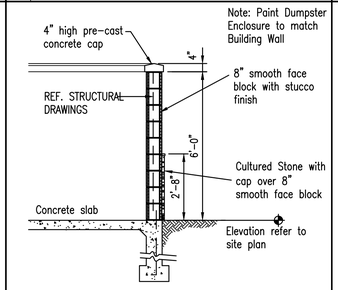
NO SCALE

7 INT'L BARRIER FREE SYMBOL



NO SCALE SEC-C13

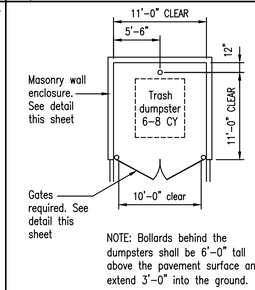
13 TYPICAL LIGHT POLE



Note: Paint Dumpster Enclosure to match Building Wall

NO SCALE MDUMPSEC

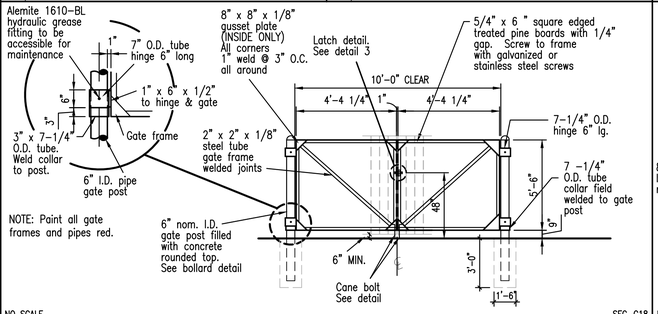
8 MASONRY WALL DUMPSTER SECTION



NOTE: Bollards behind the dumpsters shall be 6'-0" tall above the pavement surface and extend 3'-0" into the ground.

NO SCALE SEC-C17M

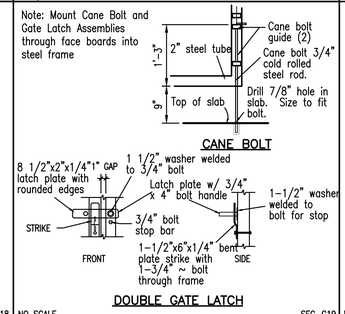
9 MASONRY WALL DUMPSTER LAYOUT



NO SCALE SEC-C18

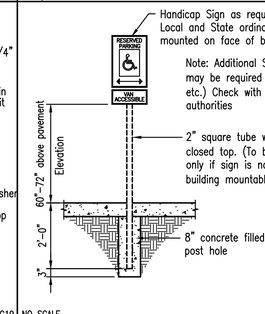
10 GATE DETAIL FOR MASONRY WALL DUMPSTER ENCLOSURE

Note: Mount Cane Bolt and Gate Latch Assemblies through face boards into steel frame



NO SCALE SEC-C19

11 GATE LATCH / BOLT DETAILS

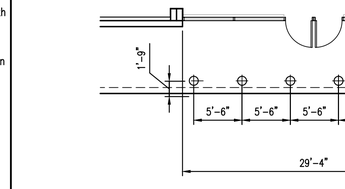


NO SCALE

12 TYPICAL HANDICAP SIGN

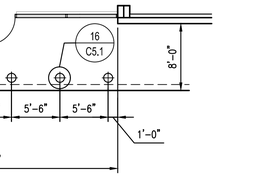
NO SCALE

23 TYPICAL PAVEMENT MARKINGS



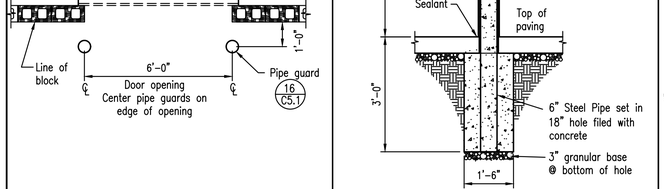
NO SCALE

24 TYPICAL PAVEMENT MARKINGS



NO SCALE

25 DOWNSPOUT DETAIL

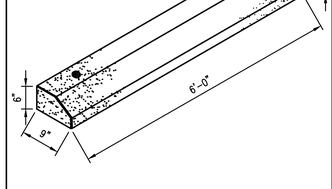


NO SCALE

26 BIKE RACK

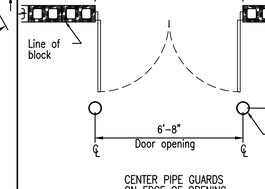
NO SCALE SEC-C07

16 TYPICAL PIPE GUARD SECTION



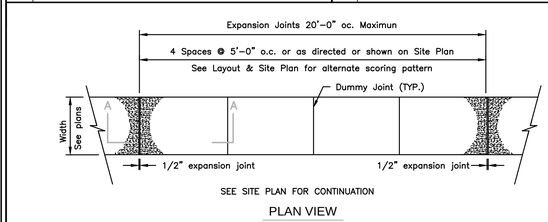
NO SCALE SEC-C18

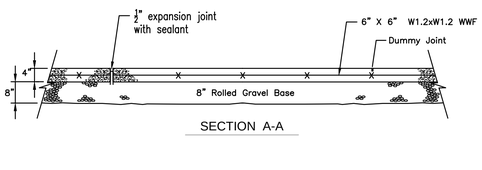
17 WHEEL STOP DETAIL

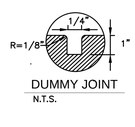


NO SCALE

18 PIPE GUARD @ SERVICE DOOR

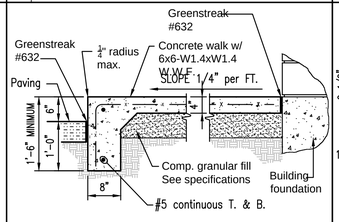






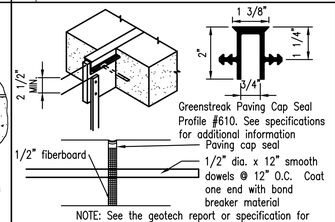
NO SCALE

19 CONCRETE SIDEWALK



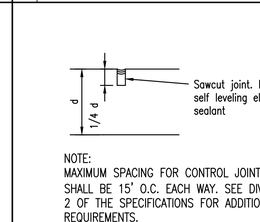
3/4" = 1'-0"

20 TYPICAL WALK SECTION



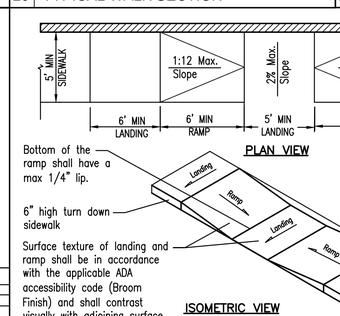
NO SCALE

21 TYPICAL EXPANSION JOINT



NO SCALE

22 TYPICAL CONTROL JOINT



NOTES:

1. ADA RAMPS SHALL COMPLY WITH **FDOT STANDARD PLANS #522-002**
2. 1:12 (8.33%) MAXIMUM RAMP RUNNING SLOPE; 1:50 (2.0%) MAXIMUM CROSS SLOPE. LANDINGS SHALL BE 1:50 (2.0%) MAXIMUM SLOPE ALL DIRECTIONS.

NO SCALE

27 HANDICAP PARKING RAMP

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS

1	2	3
4	5	6

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

AUTOZONE DETAILS SHEET

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL: 901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics, Tel. 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO LICENSE No.91885 STATE OF FLORIDA PROFESSIONAL ENGINEER
MATHEW S. D'ANGELO, PE
FL. P.E. No. 91885
1/15/2026

1/15/2026

65W2

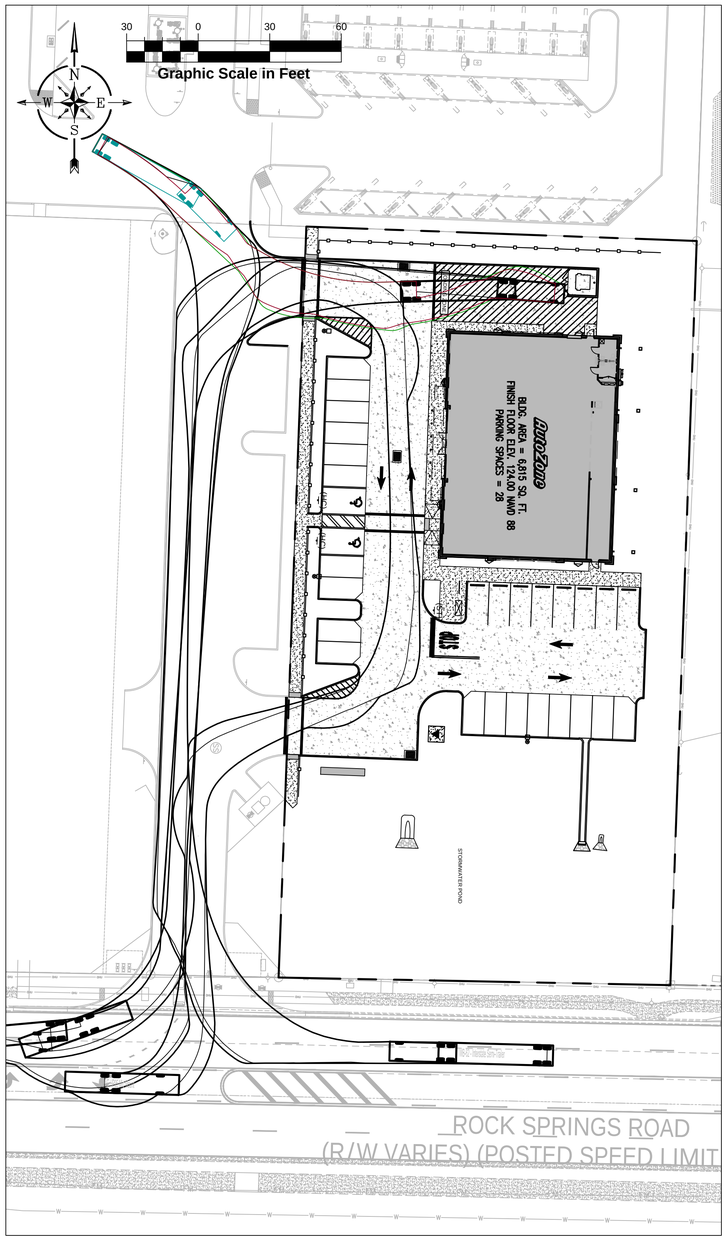
C5.1

Plans Prepared By:
CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298
www.cphcorp.com

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

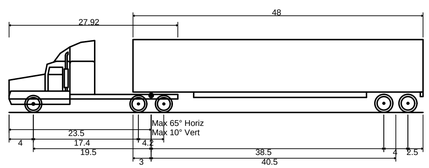
J:\2501484\CPlot\DWG_Current_Plan_Set\2501484 - C5.1 - AZ DETAILS.dwg, 6/3/2026 12:43:34 PM, Erik MacArthur, CPH FULLSIZE.ctb

© COPYRIGHT 2007

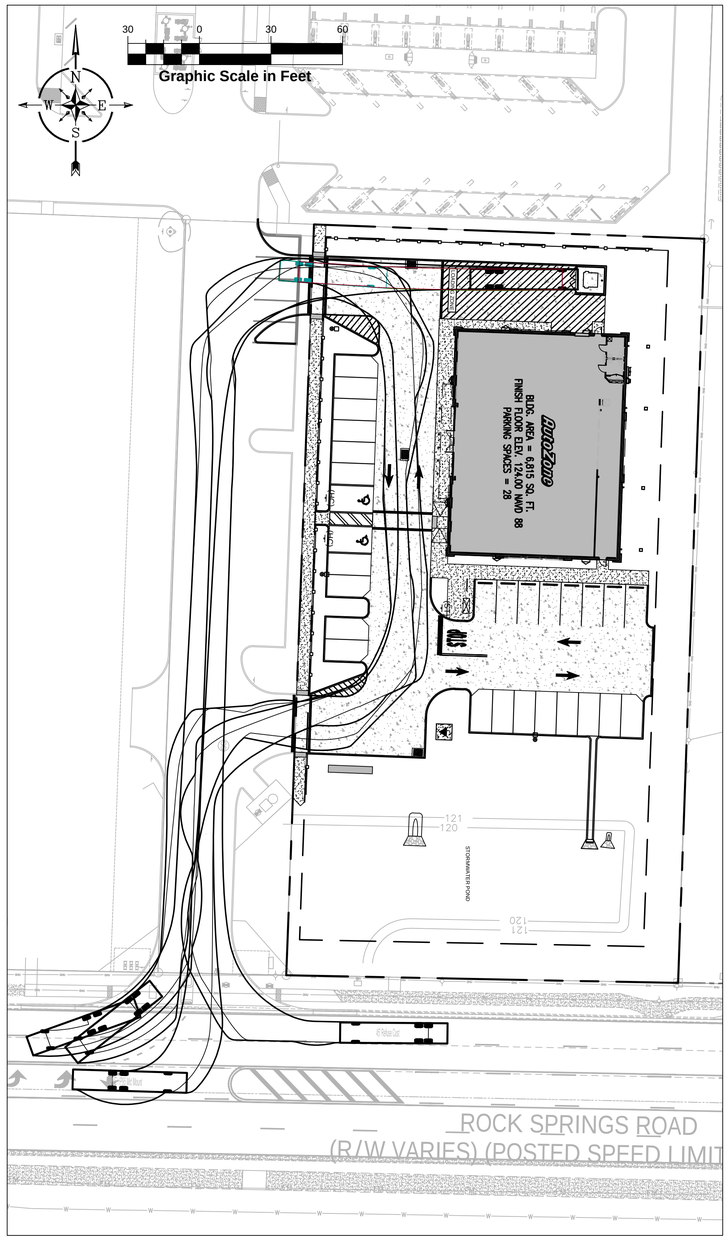


WB-62 TRUCK TURN

1" = 30'

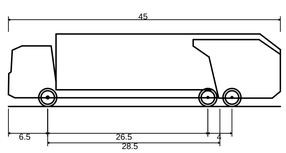


WB-62 - Interstate Semi-Trailer	
Overall Length	68.500ft
Overall Width	8.500ft
Overall Body Height	12.052ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°



GARBAGE TRUCK TURN

1" = 30'



45' Refuse Cust	
Overall Length	45.000ft
Overall Width	8.500ft
Overall Body Height	12.007ft
Min Body Ground Clearance	1.398ft
Track Width	8.500ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	45.20°

cph
www.cphcorp.com
Plans Prepared By:
CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298
THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT
COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS

1		4	
2		5	
3		6	

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

TRUCK TURN EXHIBIT

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL: 901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics. Tel. 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO
LICENSE No.91885 STATE OF FLORIDA PROFESSIONAL ENGINEER
MATTHEW S. D'ANGELO, PE
FL. P.E. No. 91885
1/15/2026

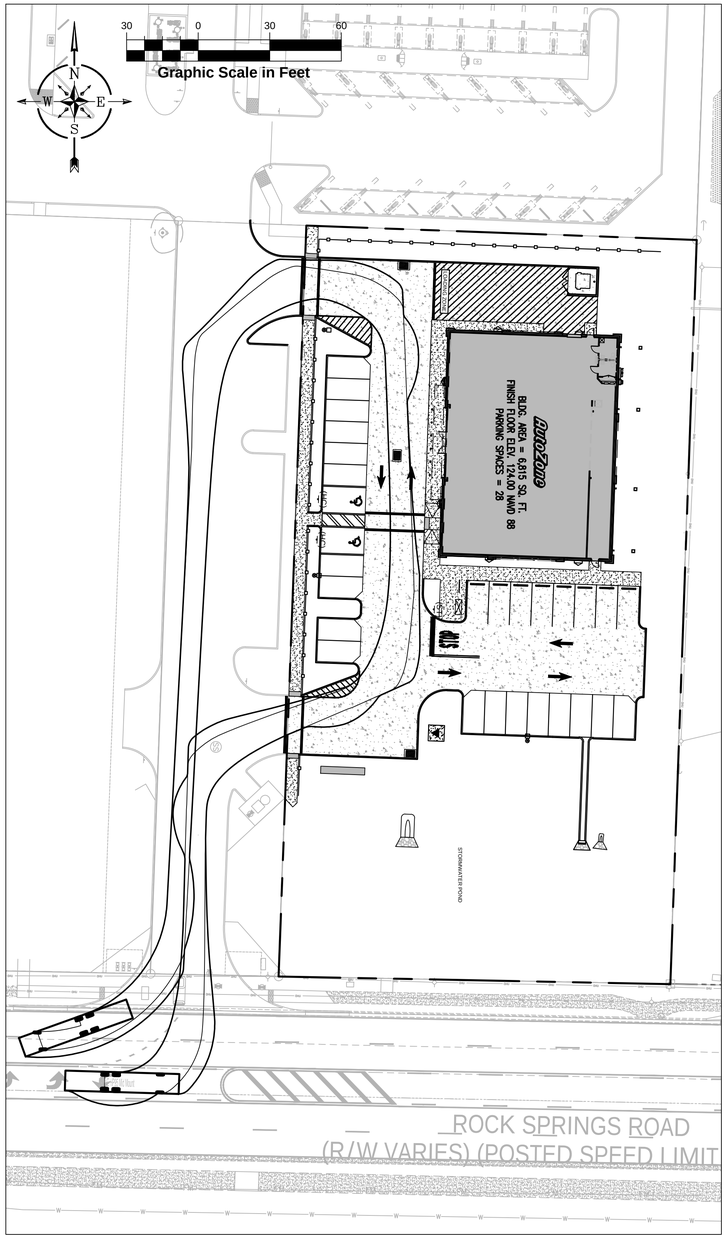
1/15/2026

65W2

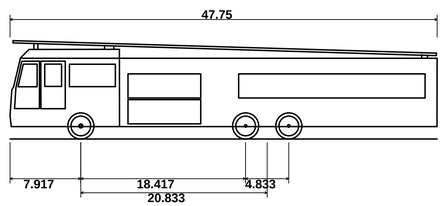
TTE0.1

J:\2501494\CAD\WG_Current_Plan_Set\2501494 - TTE0.1 - TRUCK TURN EXHIBIT.dwg, 6/3/2026 12:43:52 PM, Erik MacArthur, CPH FULLSIZE.ctb

© COPYRIGHT 2007



FIRE TRUCK TURN
1" = 30'



E-ONE HP95 Mid Mount	
Overall Length	**47.750ft**
Overall Width	**8.333ft**
Overall Body Height	**11.000ft**
Min Body Ground Clearance	**1.393ft**
Track Width	**8.333ft**
Lock-to-lock time	**6.00s**
Max Wheel Angle	**45.00°**

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS

1		4	
2		5	
3		6	

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

TRUCK TURN EXHIBIT

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL.: 901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics. Tel. 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO, P.E. No. 91885
6/3/26

1/15/2026

65W2

TTE0.2

cph
www.cphcorp.com
Plans Prepared By:
CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298
THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT
COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

J:\2501494\CIVil\DWG_Current_Plan_Set\2501494 - TTE0.1 - TRUCK TURN EXHIBIT.dwg, 6/3/2026 12:43:55 PM, Erik MacArthur, CPH FULLSIZE.ctb

© COPYRIGHT 2007

LUMINAIRE SCHEDULE

TYP	SYMBOL	DESCRIPTION	LAMP	LUMENS	LLF	QTY
S1		LITHONIA – DSX1 LED 60C P6 40K T4M MVOLT w/ HS IES FULL CUTOFF DISTRIBUTION MOUNTED 0' DOWN POSITION OVERALL MOUNTED HEIGHT = 25'–0"	LED – 166 WATTS	ABSOLUTE	0.95	3
W1		LITHONIA – DSW1 LED 10C 1000 40K T3M MVOLT IESNA FULL CUTOFF DISTRIBUTION MOUNTED 0' DOWN POSITION MOUNTED HEIGHT = 12'–0"	LED – 40 WATTS	ABSOLUTE	0.95	6

STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
CALC ZONE	+	1.1 fc	4.0 fc	0.1 fc	40.0:1	11.0:1
PARKING LOT	x	2.7 fc	4.0 fc	1.2 fc	3.3:1	2.3:1

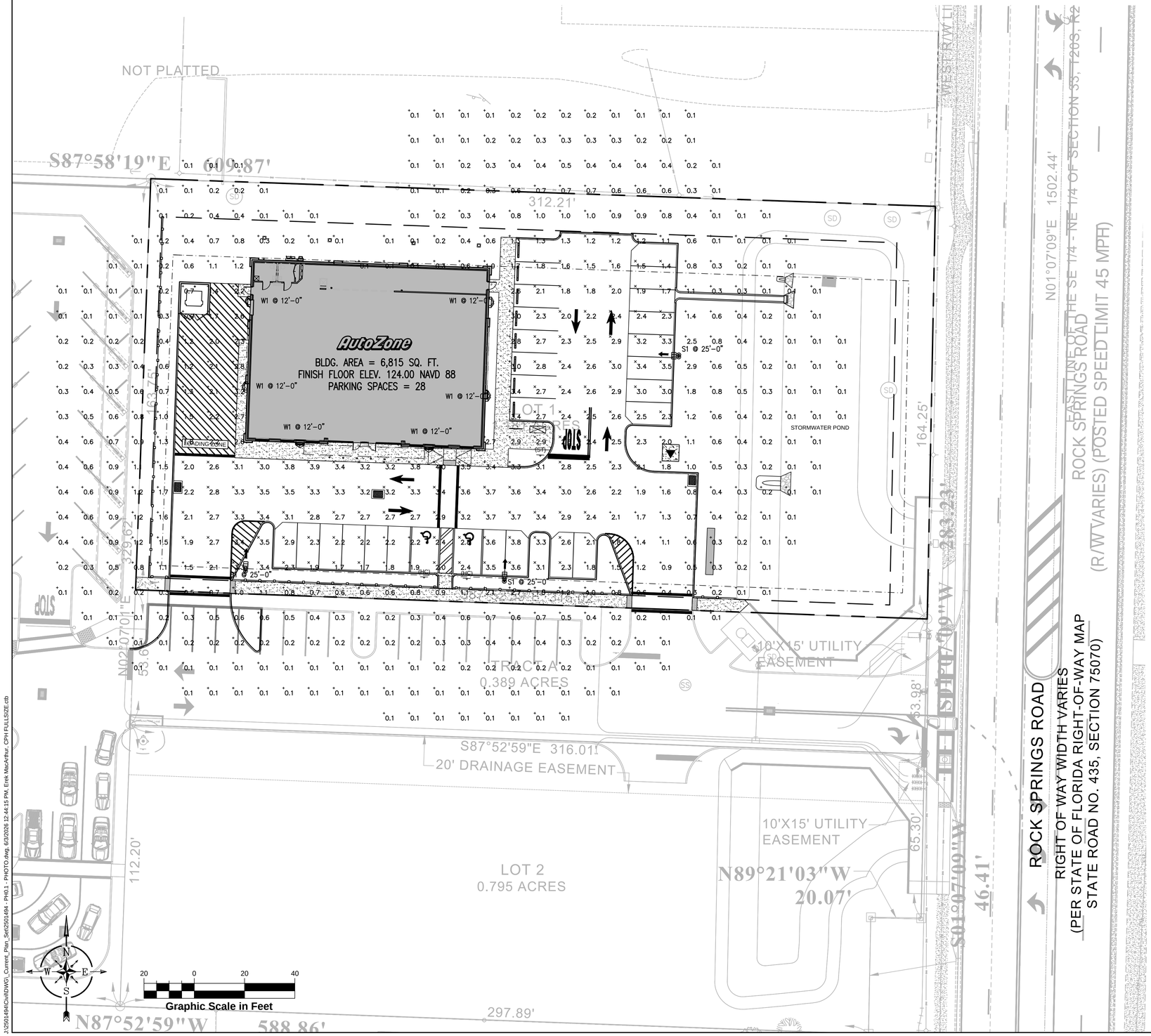
LIGHTING NOTES:

1. TIME CONTROLS: ALL SITE LIGHTING IS CONTROLLED AND MONITORED BY AN ENERGY MANAGEMENT SYSTEM CALLED VENSTAR WHICH IS CONTROLLED AT AUTOZONE CORPORATE OFFICES. ALL SITE LIGHTING IS PROGRAMMED TO AUTOMATICALLY TURN ON AT DUSK AND TURN OFF 30 MINUTES AFTER THE CLOSE OF BUSINESS.

2. ALL FIXTURES ARE FULL CUTOFF DISTRIBUTION AND MOUNTED @ 0° DOWN POSITION.

3. NO FLOODLIGHTS ARE PROPOSED.

4. THE LIGHTING PLAN COMPLIES WITH THE PROVISIONS OF THE ZONING ORDINANCE - CODE OF ORDINANCES CITY OF APOPKA, FLORIDA - PART 3 - LAND DEVELOPMENT CODE - ARTICLE 5 - DEVELOPMENT STANDARDS - SECTION 5.6 - EXTERIOR LIGHTING - 5.6.7 - GENERAL STANDARDS FOR EXTERIOR LIGHTING.





D-Series Size 1
LED Wall Luminaire

d-series

Specifications

Luminaire

Width:	13-3/4" (34.9 cm)	Weight:	12 lbs (5.4 kg)
Depth:	10" (25.4 cm)		
Height:	6-3/8" (16.2 cm)		

Back Box (BBW, E20WC)

Width:	13-3/4" (34.9 cm)	BBW Weight:	5 lbs (2.3 kg)
Depth:	4" (10.2 cm)	E20WC Weight:	10 lbs (4.5 kg)
Height:	6-3/8" (16.2 cm)		



Introduction

The D-Series Wall luminaire is a stylish, fully integrated LED solution for building-mount applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Catalog Number | Notes | Type

Hit the Tab key or mouse over the page to see all interactive elements.

Ordering Information

EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBTXD

DSXW1 LED

Series	LEDs	Drive Current	Color temperature	Distribution	Voltage	Mounting	Control Options
DSXW1 LED	10C 10 LEDs (one engine) 20C 20 LEDs (two engines) [1]	350 350 mA 530 530 mA 700 700 mA 1000 1000 mA (1 A) [1]	30K 3000K 40K 4000K 50K 5000K AMBPC Amber phosphor converted	T2S Type II Short T2M Type II Medium T3S Type III Short T3M Type III Medium T4M Type IV Medium TFTM Forward Throw Medium	MVOLT [2] 120 [3] 208 [3] 240 [3] 277 [3] 347 [4] 480 [4]	Shipped included (blank) Surface mounting bracket BBW Surface-mounted back box (for conduit entry) [5]	Shipped installed PE Photoelectric cell, button type [6] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) PIR 180° motion/ambient light sensor, <15' mtg ht [7,8] PIRH 180° motion/ambient light sensor, 15–30' mtg ht [7,8] PIR1FC3V Motion/ambient sensor, 8–15' mounting height, ambient sensor enabled at 1fc [7,8] PIRH1FC3V Motion/ambient sensor, 15–30' mounting height, ambient sensor enabled at 1fc [7,8] E20WC Emergency battery backup (includes external component enclosure), CA Title 20 compliant [9]

Other Options		Finish (required)			
Shipped installed	**Shipped separately** [11]	DDBXD Dark bronze	DSSXD Sandstone	DWHGXD Textured white	
SF Single fuse (120, 277 or 347V) [1,10]	BSW Bird-deterrent spikes	DBLXD Black	DDBTXD Textured dark bronze	DSSTXD Textured sandstone	
DF Double fuse (208, 240 or 480V) [1,10]	VG Vandal guard	DNAXD Natural aluminum	DBLBXD Textured black		
HS House-side shield [5]	DDL Diffused drop-lens	DWHXD White	DNATXD Textured natural aluminum		
SPD Separate surge protection [12]					

Accessories

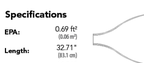
Ordered and shipped separately.

DSHSM U House-side shield (one per light engine)
DSXBSBW U Bird-deterrent spikes
DSXWTVG U Vandal guard accessory

NOTES
1 20C 1000 is not available with PIR, PIRH, PIR1FC3V or PIRH1FC3V.
2 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
3 Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
4 Only available with 20C, 700mA or 1000mA. Not available with PIR or PIRH.
5 Back box ships installed on fixture. Cannot be field installed. Cannot be ordered as an accessory.
6 Photocontrol (PE) requires 120, 208, 240, 277 or 347 voltage option. Not available with motion/ambient light sensors (PIR or PIRH).
7 Reference Motion Sensor table on page 3.
8 Same as old ELCW. Cold weather (-20C) rated. Not compatible with conduit entry applications. Not available with BBW mounting option. Not available with fusing. Not available with 347 or 480 voltage options. Emergency components located in back box housing. Emergency mode IES files located on product page at www.lithonia.com
9 Not available with SPD.
10 Not available with E20WC.
11 Also available as a separate accessory; see Accessories information.
12 Not available with E20WC.

LITHONIA LIGHTING.
COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
© 2013-2021 Acuity Brands Lighting, Inc. All rights reserved.
DSXW1-LED
Rev. 6/02/21

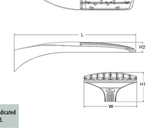


D-Series Size 1
LED Area Luminaire

d-series

Specifications

EPA:	0.69 ft² (0.06 m²)
Length:	32.71" (83.1 cm)
Width:	14.26" (36.2 cm)
Height H1:	7.88" (20.0 cm)
Height H2:	2.73" (6.9 cm)
Weight:	34 lbs (15.4 kg)



Design Select options indicated by this color background.

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details

Catalog Number | Notes | Type

Hit the Tab key or mouse over the page to see all interactive elements.

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature [1]	Color Rendering Index [1]	Distribution	Voltage	Mounting
DSX1 LED	Forward optics P1 P6 P2 P7 P3 P8 P4 P9 P5 Rotated optics P10 [1] P12 [1] P11 [1] P13 [1]	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3S Type III short T3LG Type III low glare [2] T4M Type IV medium T4LG Type IV low glare [2] TFTM Forward throw medium T5M Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control [3] BLC4 Type IV backlight control [3] LCCO Left corner cutoff [3] RCCO Right corner cutoff [3]	MVOLT (120V-277V) [4] HVOLT (347V-480V) [5] XVOLT (277V - 480V) [6] 120 [4,5] 208 [4,5] 240 [4,5] 277 [4,5] 347 [4,5] 480 [4,5]	Shipped included SPA Square pole mounting (#8 drilling) RPA Round pole mounting (#8 drilling) SPAS Square pole mounting #5 drilling* RPAS Round pole mounting #5 drilling* SPAXR Square narrow pole mounting #8 drilling WBA Wall bracket [4] MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options		Other options		Finish (required)	
Shipped installed	PER7 Seven-pin receptacle only (controls ordered separately) [4,21]	**Shipped installed**		DDBXD Dark Bronze	DWHGXD Textured white
NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8–40' mounting height, ambient sensor enabled at 3fc [5,7,8,9,21]	FAO Field adjustable output [8,21]	SPD20KV 20KV surge protection		DBLXD Black	DSSTXD Textured sandstone
PIR High/low, motion/ambient sensor, 8–40' mounting height, ambient sensor enabled at 3fc [5,8,9,21]	BL30 Bi-level switched dimming, 30% [8,21]	HS Houseside shield (black finish standard) [22]		DNAXD Natural Aluminum	
PER NEMA twist-lock receptacle only (controls ordered separately) [4]	BL50 Bi-level switched dimming, 50% [8,21]	L90 Left rotated optics [1]		DWHXD White	
PER5 Five-pin receptacle only (controls ordered separately) [4,21]	DMG 0–10V dimming wires pulled outside fixture (for use with an external control, ordered separately) [8]	R90 Right rotated optics [1]		DDBTXD Textured dark bronze	
	DS Dual switching [8,10,21]	CCE Coastal Construction [22]		DBLBXD Textured black	
		HA 50°C ambient operation [24]		DNATXD Textured natural aluminum	
		BAA Buy America(n) Act and/or Build America Buy America Qualified		DWHGXD Textured white	
		SF Single fuse (120, 277, 347V) [8]			
		DF Double fuse (208, 240, 480V) [8]			
		Shipped separately			
		EGSR External Glare Shield (reversible, field install required, matches housing finish)			
		BSDB Bird Spikes (field install required)			

LITHONIA LIGHTING.
COMMERCIAL OUTDOOR

1 Acuity Way • Decatur, Georgia 30035 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
© 2011-2025 Acuity Brands Lighting, Inc. All rights reserved.
DSX1-LED
Rev. 08/28/25
Page 1 of 10

Always call 811 two full business days before you dig.
Sunshine811.com
www.sunshine811.com

cph
www.cphcorp.com
Plans Prepared By:
CPH, Inc.
5601 Mariner Street, Suite 105 Tampa, FL 33609
Ph: 813.288.0233
Eng. C.O.A. No. 3215 Arch. Lic. No. AA2600926
Survey L.B. No. 7143 Landscp. Lic. No. LC0000298

THIS SHEET NOT VALID FOR CONSTRUCTION WITHOUT COMPLETE SET OF PLANS. SEE GENERAL NOTES FOR MASTER LEGEND.

This item has been digitally signed and sealed by Matthew S. D'Angelo, PE on the date indicated here.

REVISIONS

1	2	3
4	5	6

AutoZone Store No. FL10995
1788 ROCK SPRINGS RD,
APOPKA, FL 32712

PHOTOMETRIC PLAN

Owner / Developer: AUTOZONE STORES LLC
123 South Front Street, 3rd Floor
Memphis, Tennessee 38103
TEL: 901-495-8709 FAX: (901) 495-8969

For Bidding & Contractor Information Contact:
Dodge Data & Analytics. Tel 413-930-4215
Cindy.searcy@construction.com

MATTHEW S. D'ANGELO LICENSE No.91885 STATE OF FLORIDA PROFESSIONAL ENGINEER
MATTHEW S. D'ANGELO, PE, P.E. No. 91885
1/15/2026

1/15/2026

65W2

PH0.1

J:\2501494\CAD\DWG_Current_Plan_Set\2501494 - PH0.1 - PHOTO.dwg, 6/3/2026 12:44:15 PM, Erek MacArthur, CPH FULLSIZE.ctb

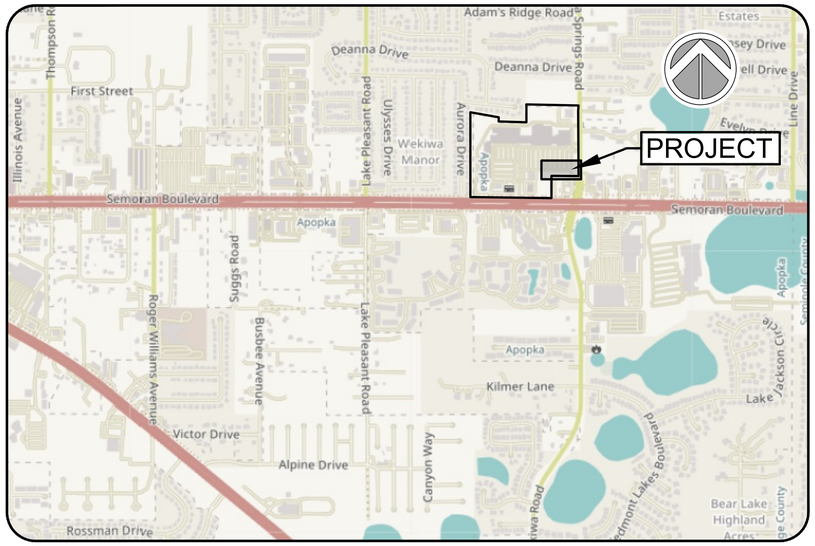
WEKIVA RIVERWALK SHOPPING CENTER
BUILDING 'H'
City of Apopka, Florida
CONSTRUCTION SITE PLAN

OWNER:
WOOLBRIGHT WEKIVA, LLC
SORAYA TYRIVER
3200 N. MILITARY TRAIL, 4th FLOOR
BOCA RATON, FLORIDA 33431
styriver@woolbright.net
(561)989-2241

ENGINEER:
SUN-TECH ENGINEERING, INC.
CLIFFORD R. LOUTAN, P.E.
4577 NOB HILL ROAD, SUITE 102
SUNRISE, FL. 33351
cloutan@suntecheng.com
(954) 777-3123

SURVEYOR:
ACCURIGHT SURVEYS OF ORLANDO, INC.
RONALD K. SMITH, PSM
2012 E. ROBINSON STREET
ORLANDO, FL 32803
accu@accurightsurveys.net
(407) 894-6314

LANDSCAPE ARCHITECT:
ARCHITECTURAL ALLIANCE LANDSCAPE
HUGH JOHNSON
612 SW 4th AVENUE
FT. LAUDERDALE, FL 33315
hjohnson@archall.net
(954) 764-8858



SECTION 12, TOWNSHIP 21 SOUTH, RANGE 28 EAST

LOCATION MAP

N.T.S.

INDEX OF DRAWINGS	
SHEET NO.	TITLE
	COVER SHEET
MDP-1	MASTER SITE PLAN
MPP-1	MASTER PARKING PLAN
SP-1	SITE PLAN
SPR-1	SITE PLAN REVISION EXHIBIT
D-1	DEMOLITION PLAN
PD-1	PAVING, GRADING AND DRAINAGE PLAN
PD-2	PAVING AND DRAINAGE DETAILS
PMS-1	PAVEMENT MARKING AND SIGNAGE PLAN
SWPP-1	STORMWATER POLLUTION PREVENTION PLAN
SWPP-2	STORMWATER POLLUTION PREVENTION DETAILS
WS1	WATER AND SEWER PLAN
WS2 - WS5	WATER AND SEWER DETAILS
A-1.1	ARCHITECTURAL FLOOR PLAN
A-2.1	ARCHITECTURAL ELEVATIONS
L200 - L201	LANDSCAPE PLAN AND DETAILS
L210	TREE DISPOSITION PLAN
L300 - L302	IRRIGATION PLAN AND DETAILS

LEGAL DESCRIPTION:

PARCEL 1:

LOTS 1, 2, 4 AND 5, WEKIVA RIVER WALK REPLAT, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 77, PAGES 26 AND 27, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 2:

A NON-EXCLUSIVE EASEMENT FOR INGRESS, EGRESS AND VEHICULAR AND PEDESTRIAN PASSAGE AS DESCRIBED IN THAT CERTAIN RECIPROCAL INGRESS-EGRESS EASEMENT AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 4543, PAGE 1155, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

CONTAINS 1,162,250 SQUARE FEET OR 26.682 ACRES MORE OR LESS.

PROJECT NARRATIVE:

CONSTRUCTION OF AN 8,288 S.F. SINGLE STORY RETAIL BUILDING, KNOWN AS BUILDING "H" WITHIN THE SOUTHEAST PORTION OF THE EXISTING WEKIVA RIVERWALK SHOPPING CENTER PARKING LOT.

STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors
4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.suntecheng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

Digitally signed by Clifford R Loutan
Date: 2026.07.01 15:31:02-04'00'

Always call 811 two full business days before you dig to have underground utilities located and marked.
Sunshine811.com

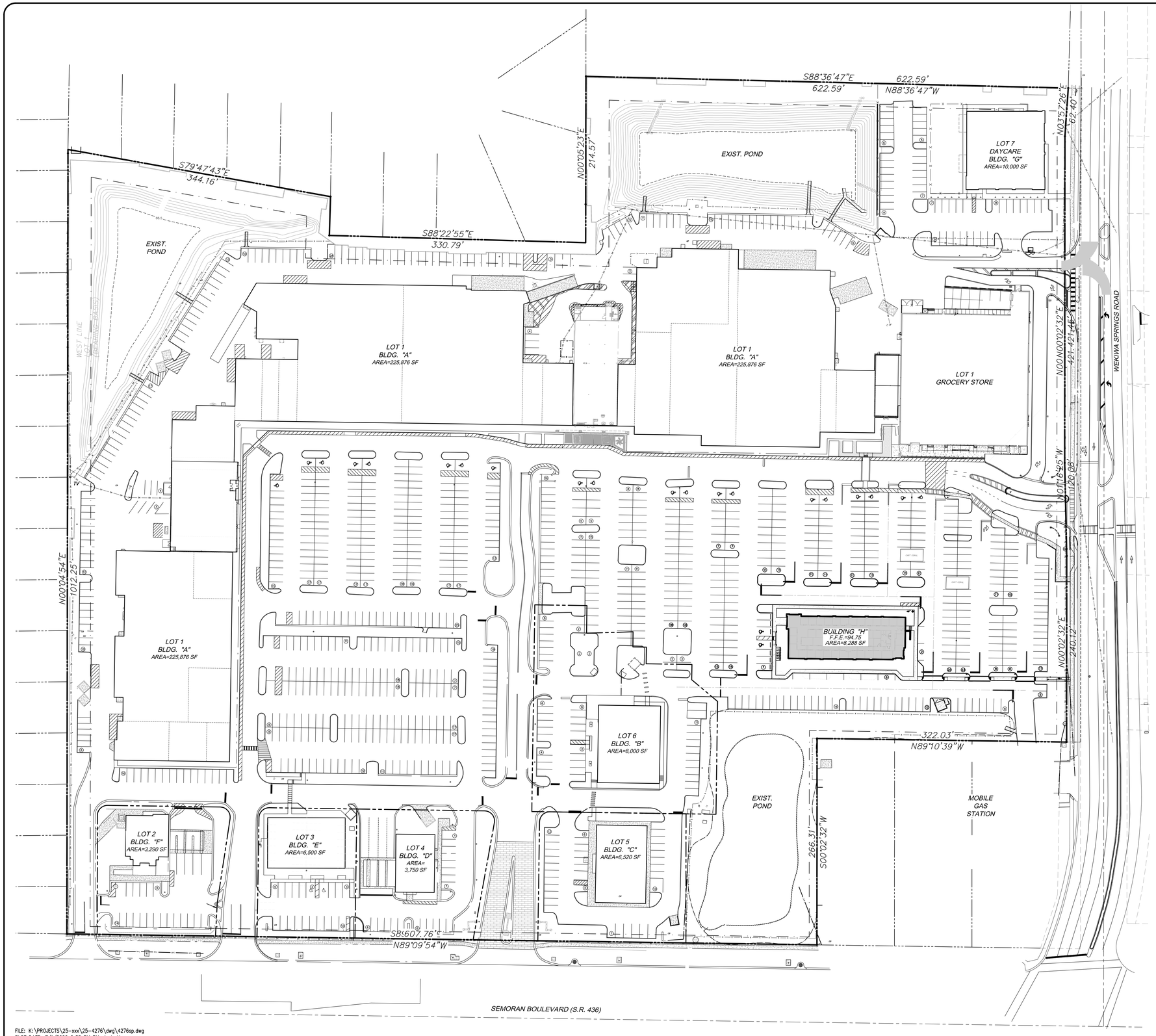
REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

PROJECT NO. 25-4276
DESIGN DATE: MAY 2025

DRAWINGS MAY BE OUT OF SCALE DUE TO XEROX REPRODUCTION ERROR.

K:\PROJECTS\25-xxx\25-4276\dwg\4276c.dwg, COV-CSP, 7/1/2026 2:55:19 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)



60 30 0 60 120

GRAPHIC SCALE
1" = 60'

PROJECT DATA	
OVERALL PARCEL DATA TABLE	
PROJECT NAME	WEKIVA RIVERWALK SHOPPING CENTER
ADRESS:	2121 EAST SEMORAN BLVD. APOPKA, FLORIDA 32703
PARCEL ID	LOT 1: 12-21-28-9093-00-010 LOT 2: 12-21-28-9093-00-020 LOT 3: 12-21-28-9093-00-030 LOT 4: 12-21-28-9093-00-040 LOT 5: 12-21-28-9093-00-050 LOT 6: 12-21-28-9093-00-060 LOT 7: 12-21-28-9098-07-000
FUTURE LAND USE	COMMERCIAL
ZONING	C-C (COMMUNITY COMMERCIAL)
ADJACENT LAND USE	NORTH: R-1 EAST: C-1 SOUTH: C-1 WEST: R-1
ADJACENT ZONING	NORTH: R-1 EAST: C-1 SOUTH: C-1 WEST: R-1
ACREAGE/SQUARE FOOTAGE	ACRES: 28.38 PARCEL S.F. 1,236,651.98 BUILDING S.F. 272,224
BUILDING HEIGHT	MAX : 35'
FLOOR AREA RATIO	MAX : 0.25 ACTUAL : 0.22
BUILDING HEIGHT	EXISTING: FRONT: 50' SIDE: 10' REAR: 30' CORNER REQUIRED: FRONT: 50' SIDE: 10' REAR: 30' CORNER

LANDUSE TABULATION:		
	AREA (SF)	%
BUILDING	272,224.00	22%
PERVIOUS AREA	260,924.40	21%
IMPERVIOUS AREA	648,359.97	52%
SURFACE WTR. MANAGEMENT AREAS	55,143.61	4%
TOTAL	1,236,651.98	100%
OPEN SPACE CALCULATION:		
REQUIRED:		7.5%
PROVIDED (PERVIOUS AREA):		21%

Green Building Point System Calculation Per LDC 5.11.4

Section	Item	Points	Points Earned
Transportation	Provide more bicycle parking than required by Sec. 5.1.11, Bicycle Parking Standards, while ensuring that all other bicycle parking standards in Section 5.1, Off-Street Parking, Bicycle Parking, and Loading Standards are met	0.50 points per additional 5 percent bicycle parking spaces	4
Energy Conservation	Use of only solar or tank-less water heating systems throughout the structure	0.50	0.50
TOTAL			4.50

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276sp.dwg
PLOT DATE: 7/1/2026 2:55 PM BY: Andy Venneman
LAYOUT: [MDP-1]

K:\PROJECTS\25-xxx\25-4276\dwg\4276sp.dwg, MDP-1, 7/1/2026 2:55:30 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.suntecheng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER

CITY OF APOPKA FLORIDA

MASTER SITE PLAN

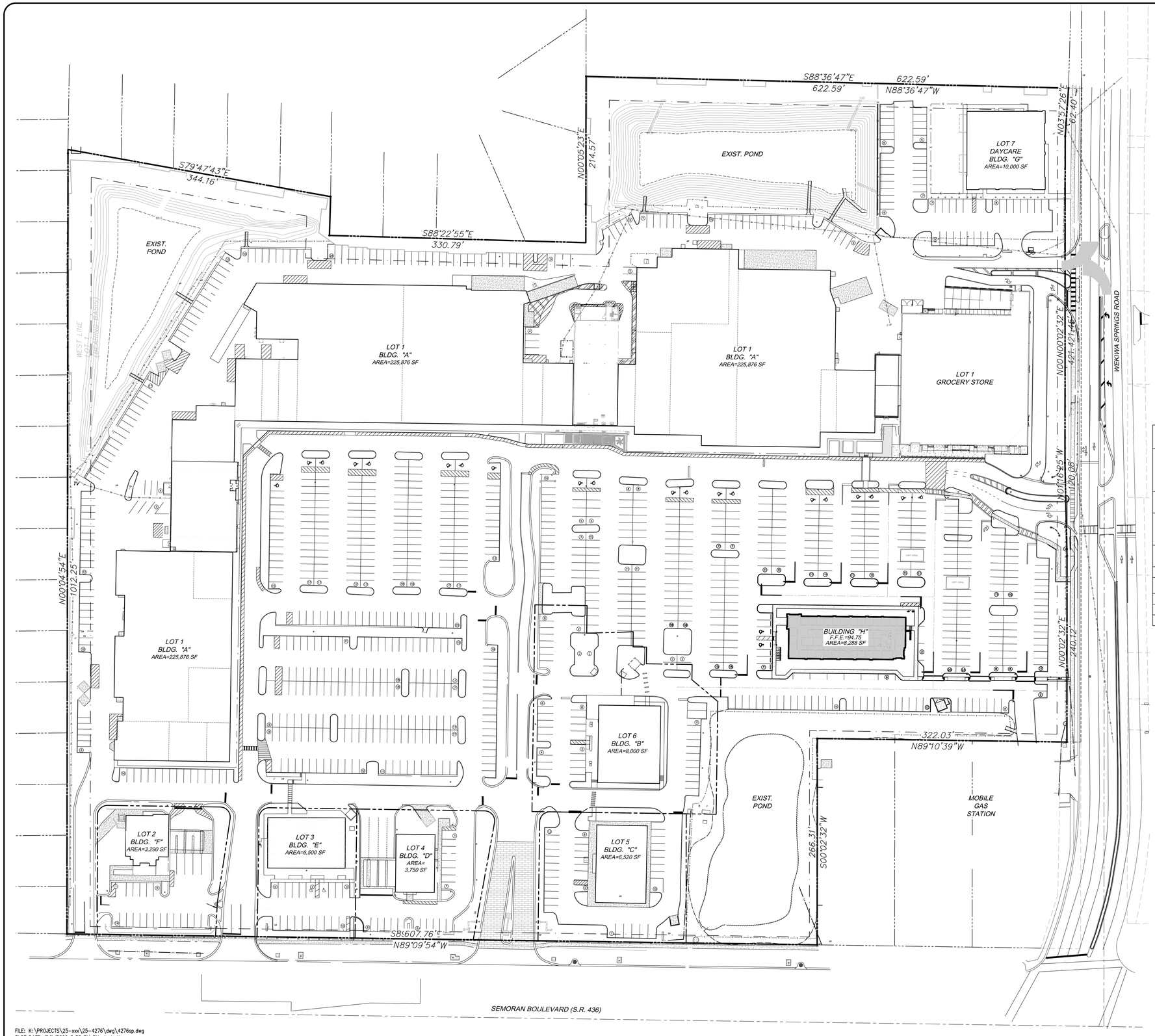
DATE: 05-21-2025
SCALE: 1"=60'
DESIGNED BY: C.L.
DRAWN BY: A.V.
JOB #: 25-4276

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
MDP-1



60 30 0 60 120

GRAPHIC SCALE
1" = 60'

BUILDING DATA	SQ. FT.
BUILDING A	225,876
BUILDING B	8,000
BUILDING C	6,520
BUILDING D	3,750
BUILDING E	6,500
BUILDING F	3,290
BUILDING G	10,000
BUILDING H	8,288
TOTAL CENTER	272,224

PARKING DATA	
TOTAL SPACES REQUIRED (PER SECT. 5.1.4 CITY OF APOPKA LAND DEVELOPMENT CODE)	1,190
TOTAL SPACES PROVIDED	1,134
REGULAR SPACES	1,099
HANDICAP SPACES	35
BICYCLE PARKING PROVIDED	
BICYCLE PARKING REQUIRED (8,288 SF @ 1 SP/2000 SF) = 4.14	5
BICYCLE PARKING PROVIDED	7

Principal Use Category	Type	Building SF	Parking Space Criteria	Parking Spaces Required
Personal Service	Barbershop / massage / nail	3,000	2.5/1000 SF	8
	Confectionary store, ice cream, candy	1,400	2.5/1000 SF	4
	Beauty salon	8,288	2.5/1000 SF	21
	Personal or household goods repair	1,170	2.5/1000 SF	3
Recreation/Entertainment	Cinema (632 seats)	25,806	Per 1/4 seats	158
	Recreation facility, indoor	27,860	6/1000 SF	168
Retail Sales	Consumer goods establishment	116,969	1/250	468
	Grocery store and food market	28,867	3.5/1000	102
	Bank	8,540	1/400	22
Health Care	Clinic	10,273	1/250	42
	Laboratory, medical or dental	2,972	1/250	12
Community Service	Child care facility (172 children)	10,000	Per 1/10	18
Eating and Drinking Establishment	Restaurant (630 seats)	23,475	Per 1/4 seats	158
Office	Office space	3,210	3/1000	6
Utility Room	Storage	394	N/A	0
		272,224		**1,190**

FILE: K:\PROJECTS\25--xxx\25--4276\dwg\4276sp.dwg
PLOT DATE: 7/1/2026 2:55 PM BY: Andy Venneman
LAYOUT: [MPP-1]

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.sunteceng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114

STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER

CITY OF APOPKA FLORIDA

MASTER PARKING PLAN

DATE: 05-21-2025
SCALE: 1"=60'
DESIGNED BY: C.L.
DRAWN BY: A.V.
JOB #: 25-4276

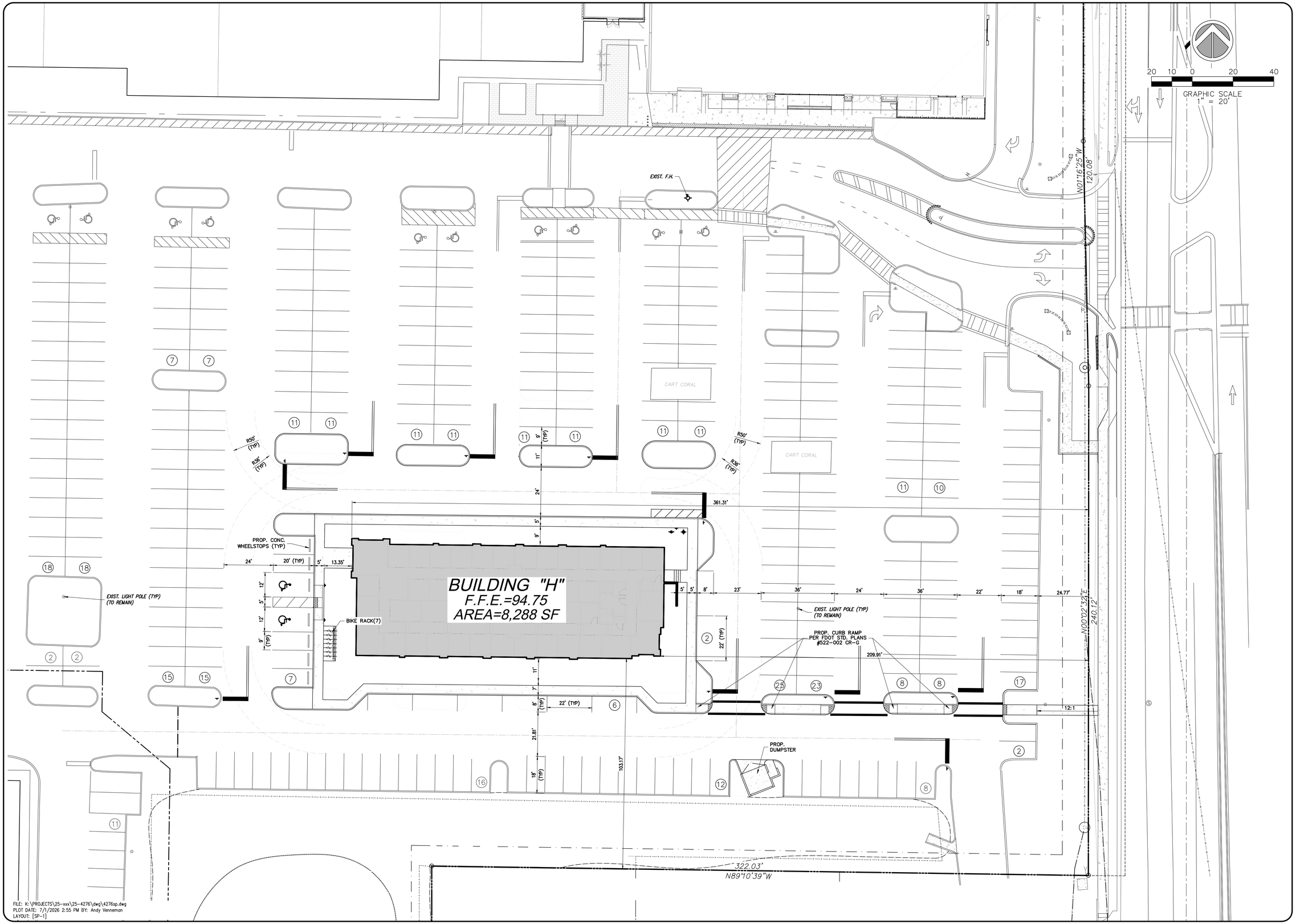
CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
MPP-1

K:\PROJECTS\25-xxx\25-4276\dwg\4276sp.dwg, MPP-1, 7/1/2026 2:55:37 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)



FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276sp.dwg
PLOT DATE: 7/1/2026 2:55 PM BY: Andy Venneman
LAYOUT: [SP-1]

K:\PROJECTS\25-xxx\25-4276\dwg\4276sp.dwg, SP-1, 7/1/2026 2:55:43 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.suntecheng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER

CITY OF APOPKA

FLORIDA

SITE PLAN

DATE:	05-21-2025
SCALE:	1"=20'
DESIGNED BY:	C.L.
DRAWN BY:	A.V.
JOB #:	25-4276

CLIFFORD R. LOUTAN
LICENSE
No. 56890
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
SP-1

80'
1115'
20'
50'
30'
165.33'
CART CORAL
CART CORAL
AREA=8,288 SF
AREA=8,046 SF
N01°16'25"W
120.08'
N00°02'32"E
240.12'
322.03'
N89°10'39"W
12:1
WEKIVA SPRINGS ROAD
20 10 0 20 40
GRAPHIC SCALE
1" = 20'
FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276sp-EXHIBIT.dwg
PLOT DATE: 7/1/2026 2:55 PM BY: Andy Vennemon
LAYOUT: [SPR-1]

K:\PROJECTS\25-xxx\25-4276\dwg\4276sp-EXHIBIT.dwg, SPR-1, 7/1/2026 2:55:54 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.suntecheng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION

WEKIVA SHOPPING CENTER

CITY OF APOPKA FLORIDA

SITE PLAN REVISION EXHIBIT

DATE:	05-21-2025
SCALE:	1"=20'
DESIGNED BY:	C.L.
DRAWN BY:	A.V.
JOB #:	25-4276

CLIFFORD R. LOVAN
LICENSE
No. 56890
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Date: **July 1, 2026**

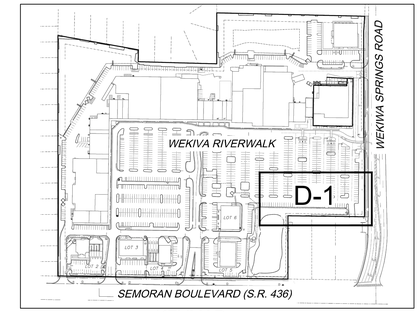
SHEET No.
SPR-1

DEMOLITION NOTES

1. THIS PLAN DEPICTS THE DEMOLITION OF ALL EXISTING BUILDINGS, PAVEMENT AND OTHER IMPROVEMENTS WITHIN THE LIMIT OF WORK BOUNDARY, AS INDICATED.
2. CONTRACTOR SHALL CONTACT THE UNDERGROUND UTILITIES NOTIFICATION CENTER SUNSHINE STATE ONE CALL AT 1-800 432-4770, F.P.& L., THE CITY OF APOPKA, ORANGE COUNTY WATER AND SEWER AUTHORITY AND ALL OTHER UTILITY COMPANIES 48 HOURS PRIOR TO DIGGING TO VERIFY THE EXACT LOCATION OF EXISTING UTILITIES.
3. EXISTING UTILITIES ARE PLOTTED FROM BEST AVAILABLE INFORMATION. CONTACT UTILITY AGENCIES BEFORE CONSTRUCTION IS STARTED TO VERIFY LOCATION AND DEPTH OF UNDERGROUND UTILITIES.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UNDERGROUND FACILITIES PRIOR TO THE START OF CONSTRUCTION AND COORDINATE WITH THE VARIOUS UTILITIES TO RELOCATE, BYPASS OR OTHERWISE ENSURE THAT UTILITY SERVICES WILL NOT BE INTERRUPTED DURING CONSTRUCTION.
5. IT IS THE INTENT OF THESE PLANS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION, ANY DISCREPANCY BETWEEN THESE PLANS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
6. MONUMENTS OR PROPERTY LINE MARKERS LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED.
7. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR LEAVE EXCAVATED TRENCHES, OR PARTS OF, EXPOSED OR OPEN AT THE END OF THE WORKING DAY, WEEKENDS, HOLIDAYS OR OTHER TIMES WHEN THE CONTRACTOR IS NOT WORKING, UNLESS OTHERWISE DETERMINED, ALL TRENCHES SHALL BE COVERED, FIRMLY SECURED AND MARKED ACCORDINGLY FOR PEDESTRIAN AND VEHICULAR TRAFFIC.
8. ALL ELEVATIONS SHOWN REFER TO N.A.V.D. OF 1988.
9. CONTRACTOR TO COMPLY WITH THE REQUIREMENTS OF THE 'TRENCH SAFETY ACT' FOR ALL TRENCHING OPERATIONS.
10. CONTRACTOR TO COORDINATE AND OBTAIN ALL NECESSARY PERMITS FROM LOCAL, STATE AND FEDERAL AGENCIES HAVING JURISDICTION OVER THE SITE OR REGULATING CONSTRUCTION OPERATIONS.
11. EXISTING DRAINAGE INLETS NOTED TO REMAIN SHALL BE COVERED TO PREVENT THE ENTRY OF CONSTRUCTION DEBRIS.
12. CONTRACTOR TO DISPOSE DEBRIS TO AN APPROVED SITE.
13. CARE SHALL BE TAKEN TO PROTECT EXISTING IMPROVEMENTS OUTSIDE THE SCOPE OF WORK.
14. CONTRACTOR TO PROTECT EXISTING FACILITIES (CATCH BASIN, EXFILTRATION TRENCH, ETC.) NOT BEING DEPICTED AS DEMOLISHED ON THIS PLAN.
15. EXIST. TREES TO BE REMOVED/RELOCATED IN ACCORDANCE W/LANDSCAPE PLANS & COORDINATE W/LANDSCAPE ARCHITECT.
16. THIS DRAWING IS BASED ON A 'BOUNDARY & TOPOGRAPHIC SURVEY' PREPARED BY LEITER, PEREZ & ASSOC. DATED JANUARY 13TH 2017.
17. ALL REMOVED MATERIAL CANNOT BE RE-USED OR RELOCATED; FIRE HYDRANTS CANNOT BE RELOCATED.

20 10 0 20

GRAPHIC SCALE
1" = 20'



KEYMAP

EXIST. CURB & LANDSCAPE ISLAND (TO BE REMOVED)
EXIST. PAVEMENT (TO BE REMOVED)
EXIST. CURB & LANDSCAPE ISLAND (TO BE REMOVED)
CART CORAL
CART CORAL
EXIST. FORCE MAIN (TO REMAIN)
EXIST. STORM DRAIN (TO REMAIN)
EXIST. CATCH BASIN (TO REMAIN)
EXIST. SAN. SWR. MAIN (TO REMAIN)
EXIST. STORM DRAIN (TO REMAIN)
EXIST. SAN. SWR. M.H. (TO REMAIN)
EXIST. CURB & LANDSCAPE ISLAND (TO BE REMOVED)
EXIST. PAVEMENT (TO BE REMOVED)
EXIST. CATCH BASIN (TO REMAIN)
EXIST. CURB & LANDSCAPE ISLAND (TO BE REMOVED)
EXIST. PAVEMENT (TO BE REMOVED)
N00°02'32"E 240.12'

LEGEND:

- EXIST. ASPHALT & CURBING TO BE REMOVED. AREA TO BE LEVELED OFF.
- EXIST. OPEN SPACE TO BE CLEARED & GRUBBED AND LEVELED OFF.

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276demo.dwg
PLOT DATE: 7/1/2026 2:56 PM BY: Andy Venneman
LAYOUT: [D-1]

K:\PROJECTS\25-xxx\25-4276\dwg\4276demo.dwg, D-1, 7/1/2026 2:56:07 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.sunteceng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER

CITY OF APOPKA FLORIDA

DEMOLITIO PLAN

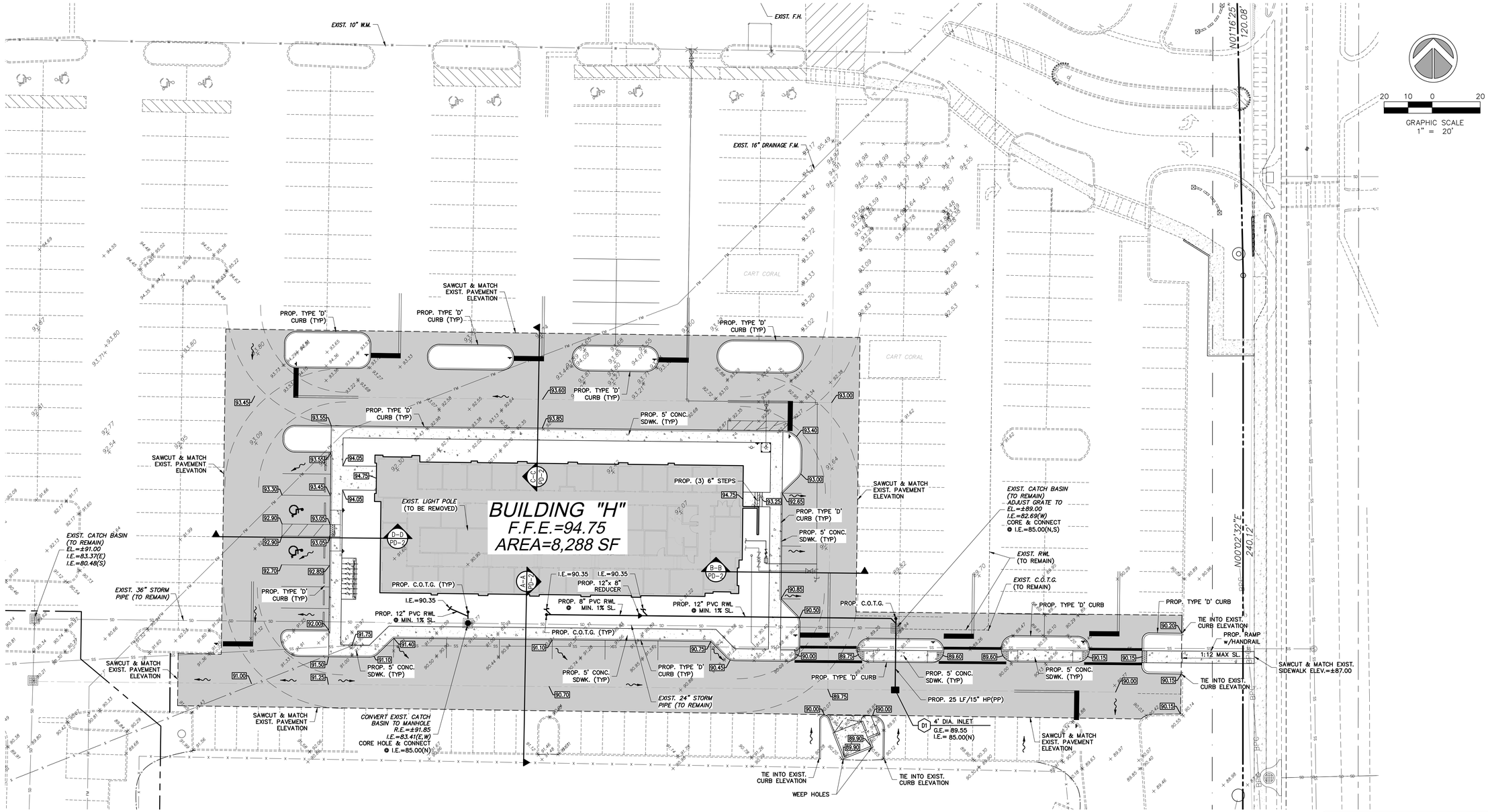
DATE: 05-21-2025
SCALE: 1"=20'
DESIGNED BY: C.L.
DRAWN BY: A.V.
JOB #: 25-4276

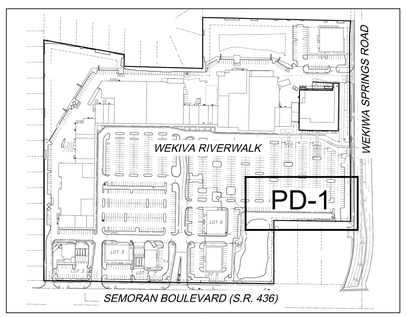
CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
D-1





KEYMAP

PAVING & DRAINAGE LEGEND

	PROPERTY LINE
	RIGHT-OF-WAY LINE
R.E.	RIM ELEVATION
G.E.	GRATE ELEVATION
I.E.	INVERT ELEVATION
	DIRECTION OF FLOW
150' @ 0.5%	PAVEMENT SLOPE
P.R.B.	POLLUTION RETARDANT BASIN
F.F.= 10.00	FINISHED FLOOR ELEVATION
	EXISTING OR FUTURE UTILITIES
CATCH BASIN G.E.= I.E.=	STRUCTURE DESIGNATION
100 LF / 15"	LENGTH, SIZE OF STORM DRAIN
	EXISTING GRADE
0.00	PROPOSED GRADE
	D.I.P. PIPE
	EXIST. ASPHALT TO BE REMOVED & LIMEROCK BASE REWORKED TO PROP. ELEVATIONS. RESURFACE w/1-1/2" TYPE SP 9.5 IN (2) 3/4" LIFTS

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276d.dwg
PLOT DATE: 7/1/2026 2:56 PM BY: Andy Venneman
LAYOUT: [PD-1]

K:\PROJECTS\25-xxx\25-4276\dwg\4276d.dwg, PD-1, 7/1/2026 2:56:23 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.suntecheng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	4/9/262	REV PER CITY & COUNTY DEPTS.
3	04/17/26	SITE PLAN APPROVAL
4	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER

CITY OF APOPKA — FLORIDA

PAVING, GRADING & DRAINAGE PLAN

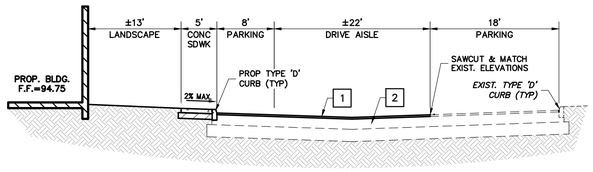
DATE:	05-21-2025
SCALE:	1"=20'
DESIGNED BY:	C.L.
DRAWN BY:	A.V.
JOB #:	25-4276

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

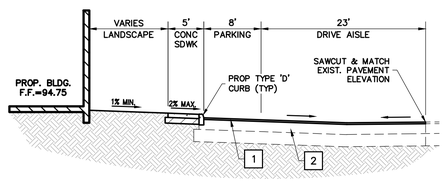
This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
PD-1



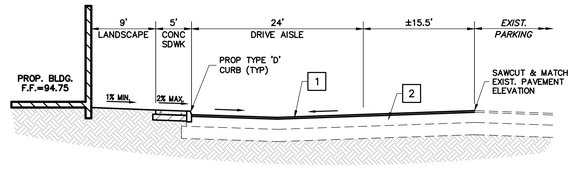
SECTION A-A

SCALE: 1"=10'



SECTION B-B

SCALE: 1"=10'

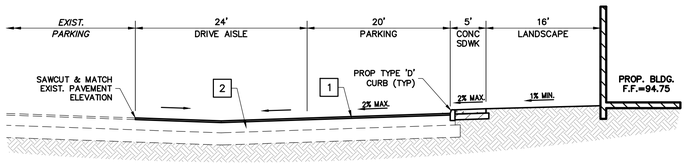


SECTION C-C

SCALE: 1"=10'

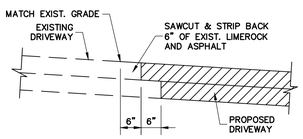
ON-SITE PAVEMENT NOTES:

1. THE WEARING SURFACE SHALL BE 1½" THICK TYPE SP 9.5 ASPHALT INSTALLED IN (2) ¾" LIFTS. LIMEROCK TO BE PRIMED AND TACK COAT TO BE APPLIED BETWEEN FIRST AND SECOND LIFT OF ASPHALT.
2. REWORK EXISTING LIMEROCK BASE COURSE TO PROPOSED ELEVATIONS

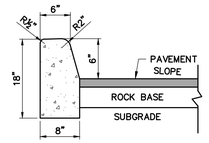


SECTION D-D

SCALE: 1"=10'

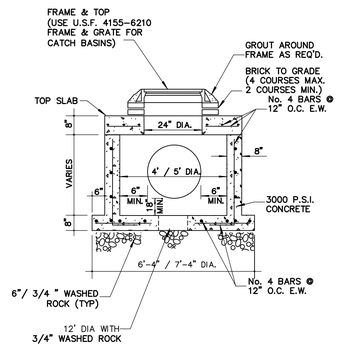


ASPHALT TIE-IN DETAIL



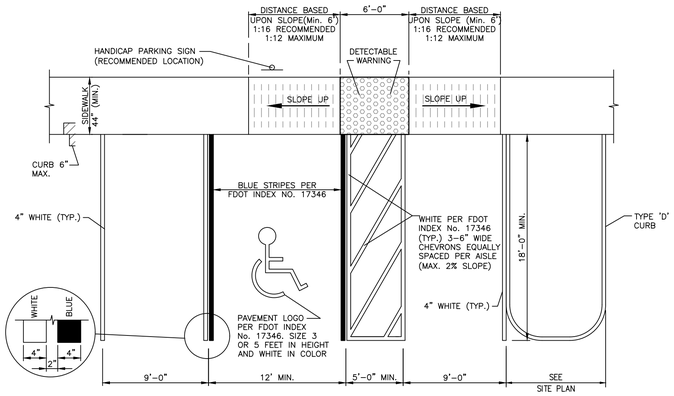
TYPE "D" CURB

N.T.S.



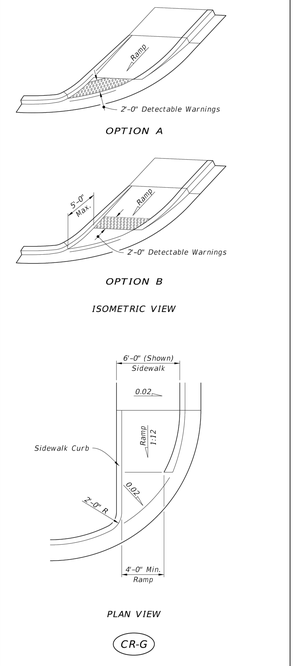
4' / 5' DIAMETER CATCH BASIN

N.T.S.



TYPICAL HANDICAP PARKING DETAIL

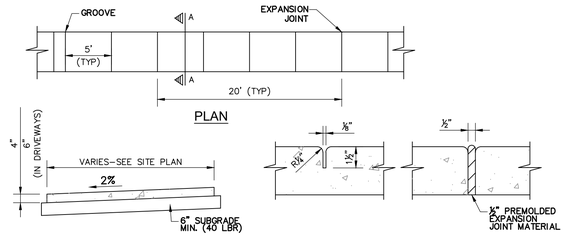
N.T.S.



SIDEWALK CURB RAMPS

N.T.S.

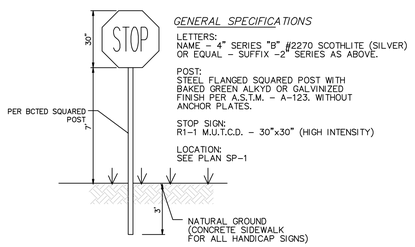
CONCRETE WHEEL STOP DETAIL



NOTE:
1. ALL CONCRETE SHALL BE 3000 P.S.I., 4" THICK 6" THICK w/6"x 6" W.W.M. AT DRIVEWAYS ONLY.
2. SIDEWALK CROSS SLOPES SHALL NOT EXCEED 2% AND SIDEWALK RUNS SHALL NOT EXCEED 5% UNLESS IT IS A RAMP. ALL RAMPS IN EXCESS OF 6 FT. REQUIRE HANDRAILS.

SIDEWALK DETAIL

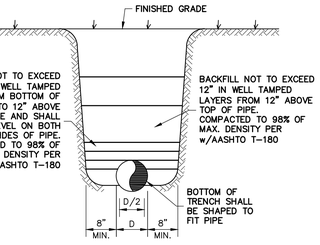
N.T.S.



NOTE:
ALL HANDICAP SIGNS SHALL BE LOCATED 2' FROM THE EDGE OF PAVEMENT.

SIGN DETAIL

NOT TO SCALE



PIPE BEDDING DETAIL

N.T.S.

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276ddt.dwg
PLOT DATE: 7/1/2026 2:56 PM BY: Andy Venneman
LAYOUT: [PD-2]

K:\PROJECTS\25-xxx\25-4276\dwg\4276ddt.dwg, PD-2, 7/1/2026 2:56:38 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.sunteceng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER
CITY OF APOPKA FLORIDA
PAVING AND DRAINAGE DETAILS

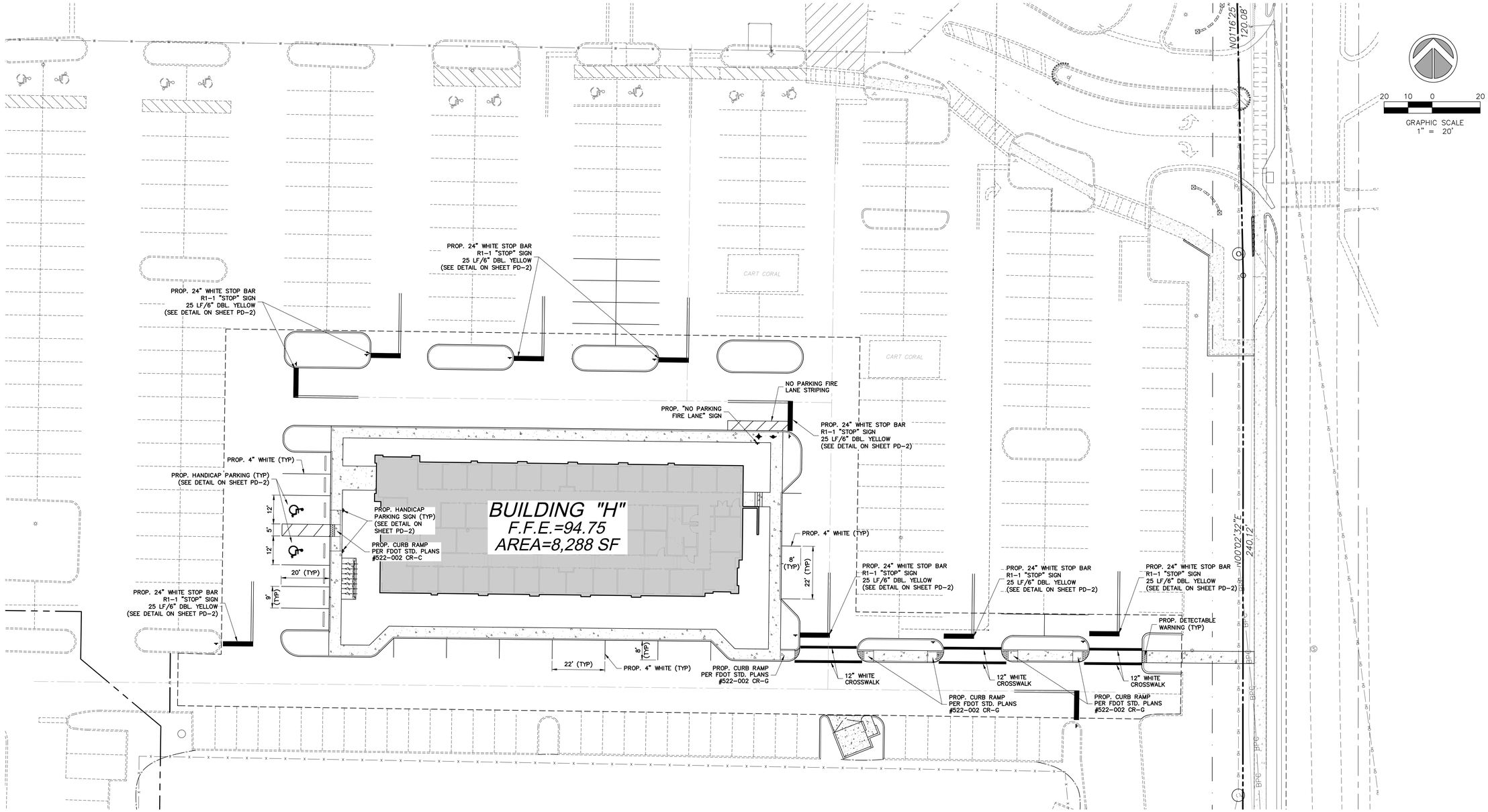
DATE:	05-21-2025
SCALE:	N.T.S.
DESIGNED BY:	C.L.
DRAWN BY:	A.V.
JOB #:	25-4276

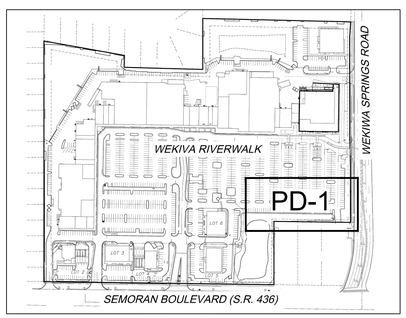
CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
PD-2





KEYMAP

PAVING & DRAINAGE LEGEND

	PROPERTY LINE
	RIGHT-OF-WAY LINE
R.E.	RIM ELEVATION
G.E.	GRATE ELEVATION
I.E.	INVERT ELEVATION
	DIRECTION OF FLOW
150' @ 0.5%	PAVEMENT SLOPE
P.R.B.	POLLUTION RETARDANT BASIN
F.F.= 10.00	FINISHED FLOOR ELEVATION
	EXISTING OR FUTURE UTILITIES
CATCH BASIN G.E. = I.E. =	STRUCTURE DESIGNATION
100 L.F./ 15"	LENGTH, SIZE OF STORM DRAIN
9.99	EXISTING GRADE
0.00	PROPOSED GRADE
	D.I.P. PIPE

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276pms.dwg
PLOT DATE: 7/1/2026 2:56 PM BY: Andy Venneman
LAYOUT: [PMS-1]

K:\PROJECTS\25-xxx\25-4276\dwg\4276pms.dwg, PMS-1, 7/1/2026 2:56:49 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.suntecheng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER

CITY OF APOPKA FLORIDA

PAVEMENT MARKING AND SIGNAGE PLAN

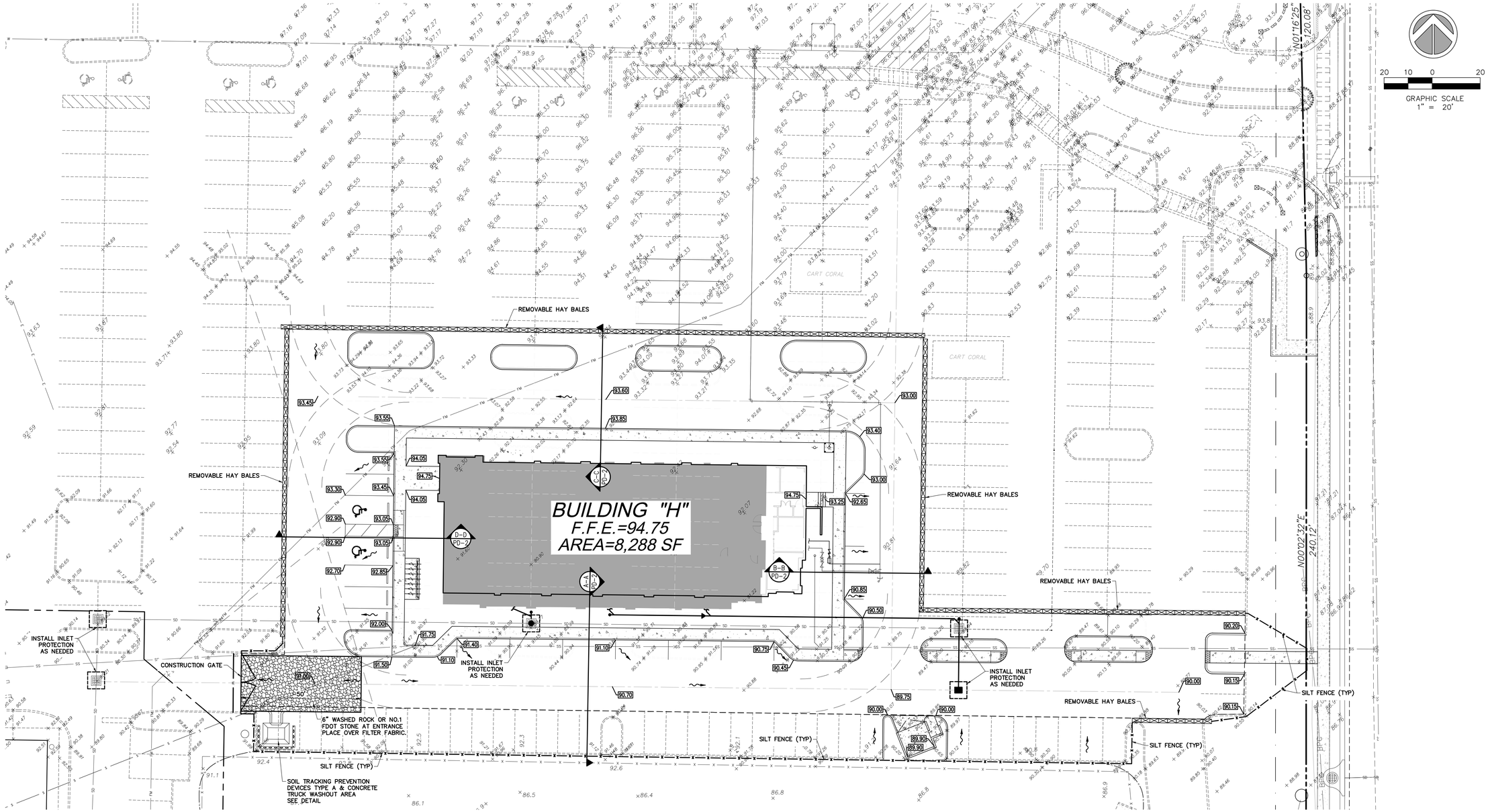
DATE:	05-21-2025
SCALE:	1"=20'
DESIGNED BY:	C.L.
DRAWN BY:	A.V.
JOB #:	25-4276

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
PMS-1



LEGEND

- OVERLAND FLOW
- 0.00 PROPOSED GRADE
- SILT FENCE
- REMOVABLE HAY BALES

NOTES:

1. PLACE FILTER FABRIC IN INLET GRATES AFTER INSTALLATION.
2. AREAS THAT HAVE BEEN DISTURBED AND ARE INACTIVE FOR MORE THAN 7 DAYS SHALL BE STABILIZED WITH RYE GRASS AND/OR MULCH APPLIED PER MANUFACTURER'S RECOMMENDATIONS.
3. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE STABILIZED WITH PERMANENT SOD AND/OR SEEDING NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. PERMANENT SEEDING SHALL BE MULCHED IMMEDIATELY UPON COMPLETION OF SEED APPLICATION.
4. DRAINAGE SWALES OR EARTH DIKES SHALL BE CONSTRUCTED IF NECESSARY TO DIRECT SEDIMENT-LADEN RUNOFF TO THE SEDIMENT TRAP/BASIN(S).
5. CONTRACTOR TO INSTALL INLET PROTECTION ON ALL EXISTING INLETS WITHIN PROXIMITY OF CONSTRUCTION LIMITS.
6. SPILL KIT MUST BE PROVIDED ON-SITE DURING ENTIRE DURATION OF PROJECT OR UNTIL REMOVAL IS APPROVED BY THE CITY. SPILL KIT MUST BE APPROPRIATE FOR SCOPE OF WORK AND EQUIPMENT ON-SITE

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276swpp.dwg
PLOT DATE: 7/1/2026 2:57 PM BY: Andy Venneman
LAYOUT: [SWPP-1]

K:\PROJECTS\25-xxx\25-4276\dwg\4276swpp.dwg, SWPP-1, 7/1/2026 2:57:06 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc (AEV)

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.sunteceng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER

CITY OF APOPKA FLORIDA

STORMWATER POLLUTION PREVENTION PLAN

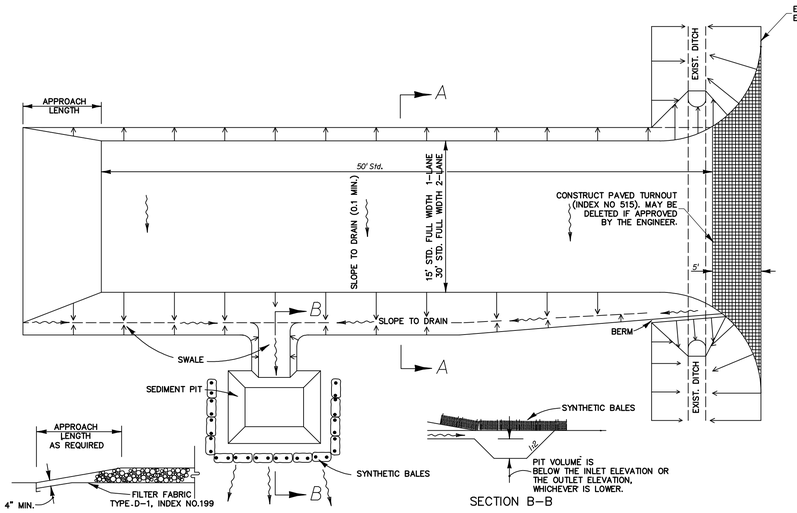
DATE:	05-21-2025
SCALE:	1"=20'
DESIGNED BY:	C.L.
DRAWN BY:	A.V.
JOB #:	25-4276

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
SWPP-1



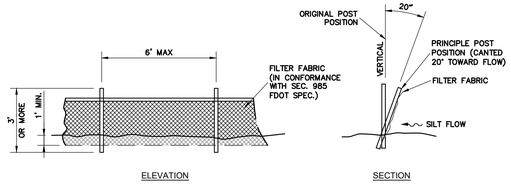
GENERAL NOTES

1. A SOIL TRACKING PREVENTION DEVICE (S.T.P.D.) SHALL BE CONSTRUCTED AT ALL LOCATIONS DESIGNATED BY THE ENGINEER FOR POINTS OF EGRESS FROM UNSTABILIZED AREAS OF THE PROJECT TO PUBLIC ROADS WHERE OFFSITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE CONSTRUCTION PROJECT SHALL BE DIRECTED THRU A S.T.P.D. BARRIERS, FLAGGING, OR OTHER POSITIVE MEANS SHALL BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE S.T.P.D.
2. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFFSITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER APPROVED TO ITS USE.
3. ALL MATERIALS SPILLED, DROPPED OR TRACKED ONTO PUBLIC ROADS (INCLUDING THE S.T.P.D. AGGREGATE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER.
4. AGGREGATES SHALL BE AS DESCRIBED IN SECTION 901 EXCLUDING 901-2.3. AGGREGATES SHALL BE FDOT SIZE #1. IF THIS SIZE IS NOTE AVAILABLE, THE NEXT AVAILABLE SMALLER SIZE AGGREGATE MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER. SIZES CONTAINING EXCESSIVE SMALL AGGREGATE WILL TRACK OFF THE PROJECT AND ARE UNSUITABLE.
5. THE SEDIMENT PIT SHOULD PROVIDE A RETENTION VOLUME OF 3600 CUBIC FEET/ACRE OF SURFACE AREA DRAINING TO THE PIT. WHEN THE S.T.P.D. IS ISOLATED FROM OTHER DRAINAGE AREAS, THE FOLLOWING PIT VOLUMES WILL SATISFY THIS REQUIREMENT:

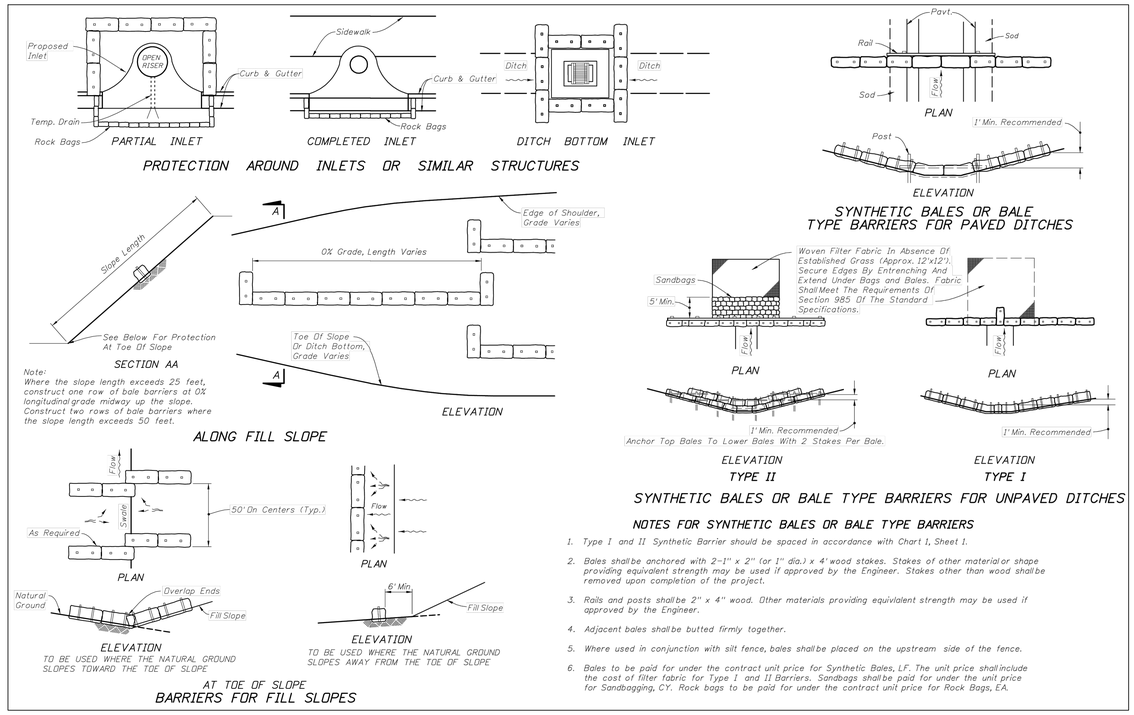
   $15'x50' = 100\ FT^3$ $30'x50' = 200\ FT^3$

   AS AN OPTION TO THE SEDIMENT PIT, THE WIDTH OF THE SWALE BOTTOM CAN BE INCREASED TO OBTAIN THE VOLUME. WHEN THE SEDIMENT PIT OR SWALE VOLUME HAS BEEN REDUCED TO ONE HALF, IT SHALL BE CLEANED. WHEN A SWALE IS USED, SYNTHETIC BALES OR SILT FENCE SHALL BE PLACE ALONG THE ENTIRE LENGTH.
7. THE SWALE DITCH DRAINING THE S.T.P.D, SHALL HAVE A 0.2% MINIMUM AND A 1.0% MAXIMUM GRADE ALONG THE S.T.P.D. AND TO THE SEDIMENT PIT.
6. MITERED END SECTIONS ARE NOT REQUIRED WHEN THE SIDE DRAIN PIPE SATISFIES THE CLEAR ZONE REQUIREMENTS.
8. THE S.T.P.D. SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION. TO PREVENT OFFSITE TRACKING, THE S.T.P.D. SHALL BE RINSED (DAILY WHEN IN USE) TO MOVE ACCUMULATED MUD DOWNWARD THRU THE STONE. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE S.T.P.D. MAY BE REQUIRED TO LIMIT THE MUD TRACKED.
9. A S.T.P.D. SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SOIL TRACKING PREVENTION DEVICE, EA. THE UNIT PRICE SHALL CONSTITUTE FULL COMPENSATION FOR CONSTRUCTION, MAINTENANCE, REPLACEMENT OF MATERIALS, REMOVAL, AND RESTORATION OF THE AREA UTILIZED FOR THE S.T.P.D.; INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING, TEMPORARY PIPE (INCLUDING M.E.S. WHEN REQUIRED), FILTER FABRIC, AGGREGATE, PAVED TURNOUT (INCLUDING ASPHALT AND BASE CONSTRUCTION), DITCH STABILIZATION, APPROACH ROUTE STABILIZATION, SEDIMENT REMOVAL AND DISPOSAL, WATER, RINSING AND CLEANING OF THE S.T.P.D. AND CLEANING OF PUBLIC ROADS, GRASSING AND SOD. SYNTHETIC BALES OR BALE TYPE BARRIER SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR SYNTHETIC HAY BALES, LF. SILT FENCE SHALL BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE, LF.
10. THE NOMINAL SIZE OF A STANDARD S.T.P.D. IS 15'x50' UNLESS OTHERWISE SHOWN IN THE PLANS. IF THE VOLUME OF ENTERING AND EXITING VEHICLES WARRANT, A 30' WIDTH S.T.P.D. MAY BE USED IF APPROVED BY THE ENGINEER. WHEN A DOUBLE WIDTH (30') S.T.P.D. IS USED, THE PAY QUANTITY SHALL BE 2 FOR EACH LOCATION.

SOIL TRACKING PREVENTION DEVICE - TYPE 'A'



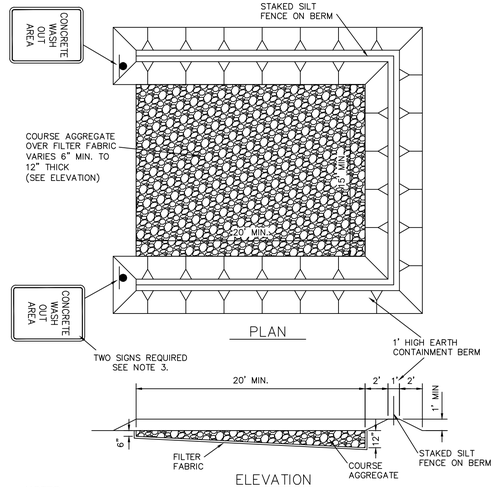
SILT FENCE DETAIL



NOTES FOR SYNTHETIC BALES OR BALE TYPE BARRIERS

1. Type I and II Synthetic Barrier should be spaced in accordance with Chart 1, Sheet 1.
2. Bales shall be anchored with 2-1" x 2" (or 1" dia.) x 4' wood stakes. Stakes of other material or shape providing equivalent strength may be used if approved by the Engineer. Stakes other than wood shall be removed upon completion of the project.
3. Rails and posts shall be 2" x 4" wood. Other materials providing equivalent strength may be used if approved by the Engineer.
4. Adjacent bales shall be butted firmly together.
5. Where used in conjunction with silt fence, bales shall be placed on the upstream side of the fence.
6. Bales to be paid for under the contract unit price for Synthetic Bales, LF. The unit price shall include the cost of filter fabric for Type I and II Barriers. Sandbags shall be paid for under the unit price for Sandbagging, CY. Rock bags to be paid for under the contract unit price for Rock Bags, EA.

HAY BALES (TEMPORARY SEDIMENT & EROSION CONTROL)



NOTES:
1. ALL MATERIAL SHALL BE REMOVED FROM THE SITE AT THE END OF THE PROJECT.
2. AGGREGATE SHALL BE REPLACED AS DIRECTED BY THE ENGINEER OF RECORD AND/OR THE CITY WHEN EXCESSIVE MATERIALS BUILDUP RENDERS THE WASH OUT AREA NO LONGER FUNCTIONAL.
3. SIGNS SHALL BE 18" X 12" MIN. SIZE WITH 2" BLACK LETTERING ON A WHITE BACKGROUND AND MOUNTED A MINIMUM OF 7 FEET ABOVE GRADE FROM THE LOWEST EDGE OF THE SIGN FACE.

CONCRETE TRUCK WASH OUT AREA (D-26)
NOT TO SCALE

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.sunteceng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER
CITY OF APOPKA FLORIDA
STORMWATER POLLUTION PREVENTION DETAILS

DATE:	05-21-2025
SCALE:	N.T.S.
DESIGNED BY:	C.L.
DRAWN BY:	A.V.
JOB #:	25-4276

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

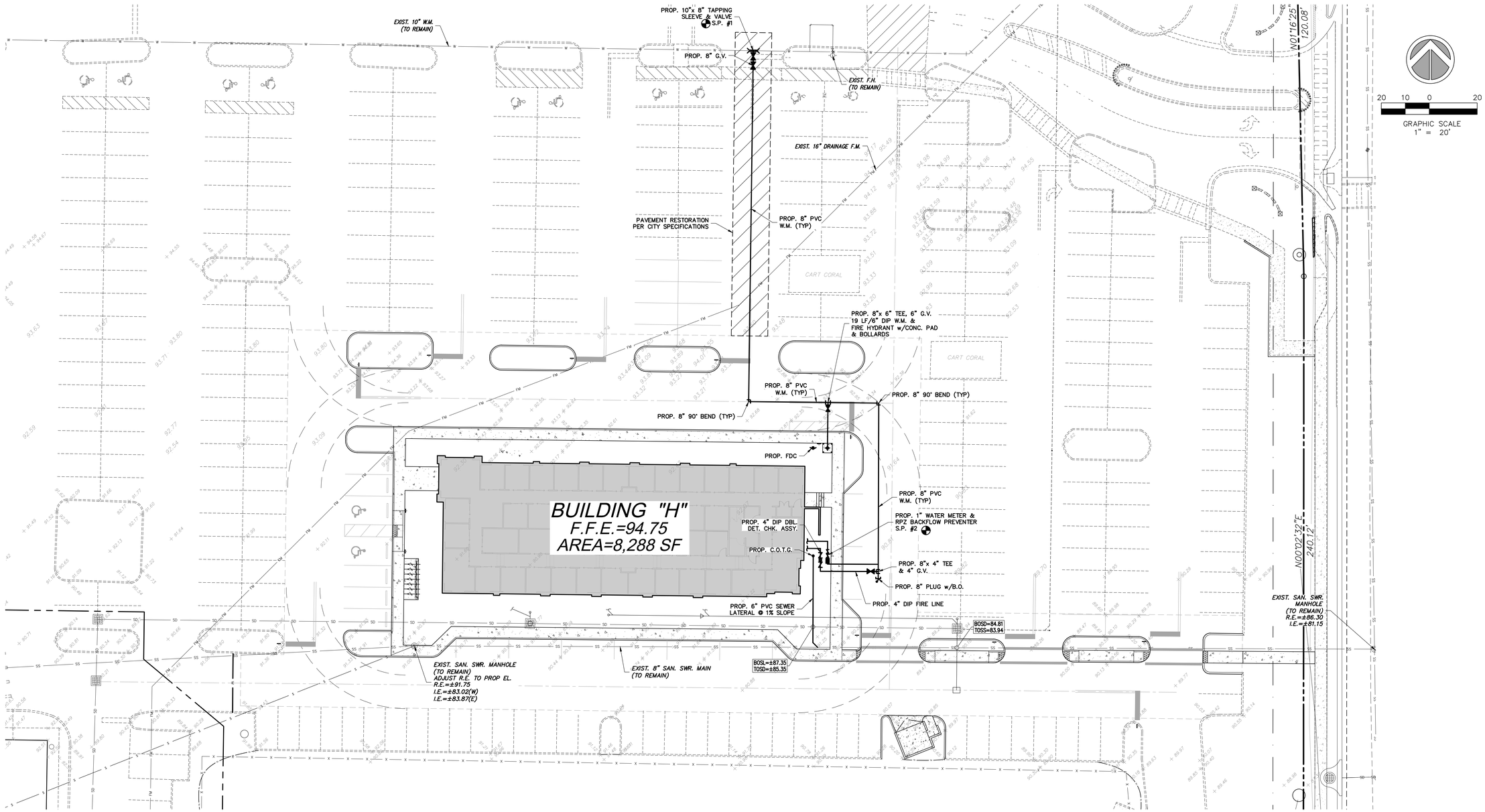
Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

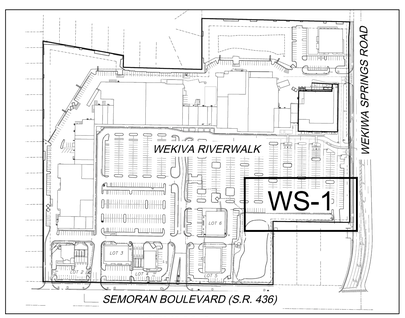
SHEET No.
SWPP-2

K:\PROJECTS\25-xxx\25-4276\dwg\4276swpp.dwg, SWPP-2, 7/1/2026 2:57:12 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276swpp.dwg
PLOT DATE: 7/1/2026 2:57 PM BY: Andy Venneman
LAYOUT: [SWPP-2]



NOTES:
1. ALL EXISTING UTILITIES SHALL BE FIELD VERIFIED (VERTICALLY AND HORIZONTALLY) AT ALL POINTS OF CONNECTION AND AT AREAS OF CONFLICT WITH OCU INFRASTRUCTURE.
2. ALL UTILITIES LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
3. A MINIMUM COVER OF 36 INCHES SHALL BE PROVIDED OVER THE PROPOSED WATER MAIN.



KEYMAP

WATER & SEWER LEGEND

PROPERTY LINE	EXISTING OR FUTURE UTILITIES
RIGHT-OF-WAY LINE	DRAINAGE STRUCTURE w/PIPE
DOUBLE WATER METER SERVICE	D.I.P. PIPE
SINGLE WATER METER SERVICE	EXIST. UTILITY DEMOLITION
85 L.F./8" W.M. — LENGTH, SIZE & TYPE OF WATER MAIN	R.E. — RIM ELEVATION
FIRE HYDRANT, GATE VALVE & TEE ASSEMBLY	I.E. — INVERT ELEVATION
PROPOSED GATE VALVE	MANHOLE C.E. = 0.00 I.E. = 0.00 — MANHOLE DESIGNATION
PROPOSED CHECK VALVE	25 L.F./8" S.S. @ 0.42% — LENGTH & SLOPE OF PIPE
S.P.#2 — BACTERIOLOGICAL SAMPLING POINT	DOUBLE SEWER LATERAL
PROP LIGHT POLE	SINGLE SEWER LATERAL
	C.O.T.G. — CLEAN OUT TO GRADE

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276ws.dwg
PLOT DATE: 7/1/2026 2:57 PM BY: Andy Venneman
LAYOUT: [WS-1]

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.sunteceng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	4/9/262	REV PER CITY & COUNTY DEPTS.
3	04/17/26	SITE PLAN APPROVAL
4	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER
CITY OF APOPKA FLORIDA
WATER & SEWER PLAN

DATE:	05-21-2025
SCALE:	1"=20'
DESIGNED BY:	C.L.
DRAWN BY:	A.V.
JOB #:	25-4276

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

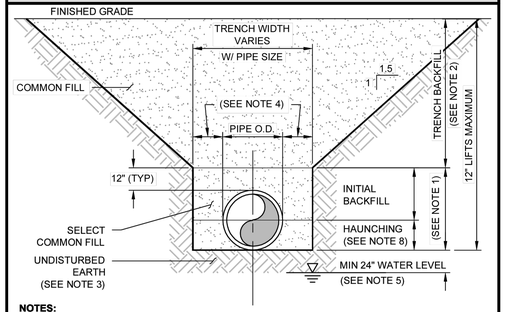
SHEET No.
WS-1

K:\PROJECTS\25-xxx\25-4276\dwg\4276ws.dwg, WS-1, 7/1/2026 2:57:28 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

OCU GENERAL NOTES

1. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN EXCAVATING IN PROXIMITY OF INCLUDING, BUT NOT LIMITED TO; WATER MAINS, WASTEWATER FORCE MAINS, GRAVITY MAINS, RECLAIMED WATER MAINS, ELECTRIC, GAS, CABLE TV, TELECOMMUNICATIONS, STORM WATER, FIBER OPTIC AND OTHER UNDERGROUND FACILITIES. MAIN LOCATIONS SHOWN ON PLANS MAY NOT BE EXACT. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING UTILITY LOCATIONS.
2. SHOULD A PIPE EMERGENCY OCCUR, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OCU DISPATCH OPERATOR (407-836-2777) AND THE OCU INSPECTOR.
3. THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION INSPECTION SECTION, FIELD SERVICES DIVISION AT LEAST 10 CALENDAR DAYS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION PROJECT BY CALLING (407) 254-9798.
4. THE CONTRACTOR SHALL NOTIFY THE OCU CONSTRUCTION INSPECTOR IN ACCORDANCE WITH TABLE 4110-1 "UTILITIES' SCHEDULE OF NOTIFICATIONS IN THIS MANUAL.
5. THE MATERIALS, PRODUCTS, AND CONSTRUCTION OF ALL UTILITIES CONNECTING TO THE OCU SYSTEM SHALL BE IN CONFORMANCE WITH THE STANDARDS, CONSTRUCTION SPECIFICATIONS, AND APPENDIX D IN THIS MANUAL.
6. ALL EXISTING UTILITIES INCLUDING BUT NOT LIMITED TO; WATER MAINS, FORCE MAINS, RECLAIMED WATER MAIN, SANITARY GRAVITY PIPES, STORM WATER PIPES, ELECTRIC, TELEPHONE, GAS, POLES AND STAYS, CABLE TV AND OTHER UTILITY FACILITIES WITHIN THE LIMITS OF THE PROJECT WILL BE SUPPORTED AND PROTECTED AGAINST DAMAGE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL ADJUST ALL EXISTING OCU MAINS AND FACILITIES IN CONFLICT WITH NEW GRADE, NEW OR ALTERED ROADWAYS, SIDEWALKS, DRIVEWAYS, CURBS, OR STORM WATER IMPROVEMENTS. OCU FACILITIES TO BE ADJUSTED INCLUDE, BUT ARE NOT LIMITED TO; PIPELINES, PUMP STATIONS, VALVE BOXES, AIR RELEASE VALVES, FIRE HYDRANTS, MANHOLE COVERS, AND METERS. ALL ADJUSTMENTS SHALL BE MADE TO CURRENT STANDARDS.
8. ONLY OCU PERSONNEL SHALL OPERATE EXISTING OCU WATER, WASTEWATER, AND RECLAIMED WATER VALVES. THE CONTRACTOR IS RESPONSIBLE FOR OPERATING ANY NEWLY INSTALLED VALVE THAT HAS NOT BEEN CLEARED FOR USAGE BY FDEP AND OCU. THE CONTRACTOR SHALL COORDINATE VALVE OPERATION WITH THE OCU INSPECTOR. FOR OPERATION OF MAINS NOT OWNED BY OCU, IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE APPROPRIATE UTILITY REPRESENTATIVE.
9. CONSTRUCTION ACTIVITIES SHALL NOT CAUSE INTERRUPTIONS IN WATER, WASTEWATER, OR RECLAIMED WATER SERVICE. THE CONTRACTOR SHALL COORDINATE PRE-APPROVED INTERRUPTIONS OF SERVICE WITH THE OCU INSPECTOR 7 WORKING DAYS IN ADVANCE AND WRITTEN NOTICE SHALL BE GIVEN TO AFFECTED CUSTOMERS AT LEAST 4 WORKING DAYS IN ADVANCE.
10. THE CONTRACTOR SHALL PROVIDE FOR BYPASSING AND / OR HAULING OF WASTEWATER DURING APPROVED INTERRUPTIONS OF WASTEWATER FLOWS AND CONNECTIONS. THE CONTRACTOR SHALL SUBMIT A BYPASS OR HAUL PLAN, REVIEWED AND APPROVED BY A PROFESSIONAL ENGINEER TO OCU DEVELOPMENT ENGINEERING AND TO THE INSPECTOR FOR APPROVAL PRIOR TO IMPLEMENTATION BY CONTRACTOR.
11. ALL VALVES INSTALLED AS PART OF THIS CONSTRUCTION PROJECT SHALL REMAIN CLOSED DURING CONSTRUCTION. KEEP VALVES ON ALL WET TAPS CLOSED UNTIL CLEARED BY FDEP. DO NOT CONNECT NEWLY CONSTRUCTED WATER MAINS TO ANY EXISTING WATER MAINS UNLESS CLEARED BY FDEP AND OCU.
12. THE CONTRACTOR SHALL PROVIDE A JUMPER ASSEMBLY WITH AN APPROVED BACKFLOW PREVENTER FOR MAKING TEMPORARY CONNECTIONS TO AN EXISTING POTABLE WATER SOURCE IN ORDER TO CHLORINATE AND FLUSH NEW WATER MAINS WITH POTABLE WATER. ANY TEMPORARY POTABLE WATER CONNECTIONS TO RECLAIMED WATER OR FORCE MAIN SHALL ALSO BE EQUIPPED WITH AN APPROVED BACKFLOW PREVENTER.
13. FOR PVC PIPE, NO JOINT DEFLECTION OR PIPE BENDING IS ALLOWED. ALIGNMENT CHANGE SHALL BE MADE ONLY WITH FITTINGS.
14. FOR DIP PIPE, LONG RADIUS CURVES, EITHER HORIZONTAL OR VERTICAL, MAY BE INSTALLED WITH STANDARD PIPE BY DEFLECTIONS AT THE JOINTS. MAXIMUM DEFLECTIONS AT PIPE JOINTS, FITTINGS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75 PERCENT OF THE PIPE MANUFACTURER'S RECOMMENDATION.
15. FOR APPROVED PVC OR HDPE PIPE USED IN A HORIZONTAL DIRECTIONAL DRILL INSTALLATION, THE CURVATURE AND/OR DEFLECTION SHALL NOT EXCEED THE PARAMETERS ESTABLISHED IN THIS MANUAL.
16. ALL DAMAGE TO ORANGE COUNTY INFRASTRUCTURE, PIPELINES, AND ASSETS SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE WITH AN APPROVED METHOD BY THE COUNTY. IF THE REPAIR IS NOT PERFORMED IN A TIMELY MANNER, AS DETERMINED BY THE ORANGE COUNTY UTILITY INSPECTOR, ORANGE COUNTY MAY PERFORM REPAIRS AND THE CONTRACTOR WILL BE CHARGED FOR ALL EXPENSES ASSOCIATED WITH THE REPAIR.
17. THE CONTRACTOR SHALL BE LIABLE FOR ANY AND ALL SANITARY SEWER OVERFLOWS (SSO) ASSOCIATED WITH THE WORK, REGARDLESS OF FAULT. THE CONTRACTOR WILL BE ASSESSED PENALTIES FOR ANY AND EACH SSO AS SPECIFIED IN SECTION 3110, GENERAL CONSTRUCTION REQUIREMENTS.

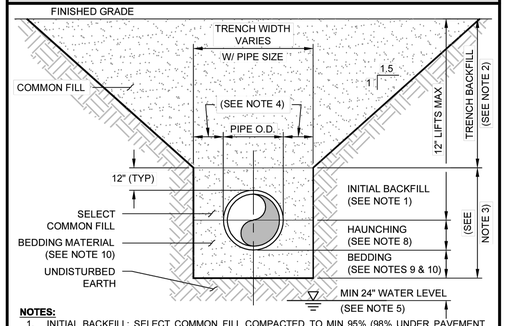
BEDDING & TRENCHING - TYPE A



NOTES:

1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL IN ACCORDANCE WITH "TYPE B" BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
4. 15-IN MAX. (12-IN MIN.) FOR PIPE DIAMETER LESS THAN 24-IN AND 24-IN MAX (12-IN MIN) FOR PIPE DIAMETER 24-IN AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION. DEWATERING AS REQUIRED.
6. ALL PIPE SHALL BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
8. FOR GRAVITY SEWER, THE FIRST LIFT SHALL BE PLACED TO THE SPRING LINE OF THE PIPE AND COMPACTED BY HAND TAMP.
9. CONTRACTOR SHALL USE BEDDING AND TRENCHING - TYPE B DETAIL FOR OVER EXCAVATION AND WHEN UNSUITABLE MATERIALS ARE ENCOUNTERED IN THE EXCAVATION.

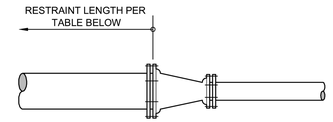
BEDDING & TRENCHING - TYPE B



NOTES:

1. INITIAL BACKFILL: SELECT COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO MIN 95% (98% UNDER PAVEMENT OR FUTURE PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL IN ACCORDANCE WITH "TYPE B" BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
4. 15-IN MAX. (12-IN MIN.) FOR PIPE DIAMETER LESS THAN 24-IN AND 24-IN MAX (12-IN MIN) FOR PIPE DIAMETER 24-IN AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION. DEWATERING AS REQUIRED.
6. ALL PIPE SHALL BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN ORANGE COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF R/W UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.
8. FOR GRAVITY SEWER, THE FIRST LIFT SHALL BE PLACED TO THE SPRING LINE OF THE PIPE AND COMPACTED BY HAND TAMP.
9. BEDDING DEPTH SHALL BE 4-IN MINIMUM FOR PIPE DIAMETER UP TO 12-IN AND 6-IN MINIMUM FOR PIPE DIAMETER 16-IN AND LARGER.
10. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF REQUIRED BEDDING MATERIAL BELOW THE PIPE. UTILITIES SHALL DETERMINE REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION IN THE FIELD.

RESTRAINED PIPE TABLE - REDUCERS - WATER, WASTEWATER FORCE, & RECLAIMED WATER MAINS (150 PSI)



MINIMUM LENGTH (FEET) TO BE RESTRAINED ON LARGE SIDE OF REDUCER

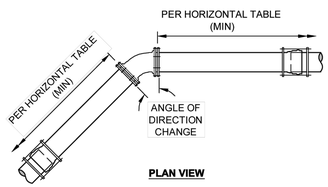
PVC & DI PIPE	REDUCER SMALL SIZE (IN)										
DIA (INCH)	4	6	8	12	16	20	24	30	36	42	48
6	31										
8	56	33									
12		79	58								
16			101	59							
20				105	59						
24				205	151	83					
30					233	180	116				
36						259	208	115			
42							281	205	110		
48								281	201	109	
54									282	204	112
60										253	170
64											222

* BASED ON WORKING PRESSURE 150 PSI

NOTES:

1. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH THE PROCEDURES IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE", GUIDELINES PUBLISHED BY DIPRA AND AWWA M23 "PVC PIPE - DESIGN AND INSTALLATION.
2. THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATED AND LAYING CONDITIONS.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. RESTRAINING REQUIREMENTS APPLY TO BOTH EXISTING AND PROPOSED MAINS.

RESTRAINED HORIZONTAL PIPE - WATER, WASTEWATER FORCE, & RECLAIMED WATER MAINS (150 PSI)



PLAN VIEW

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

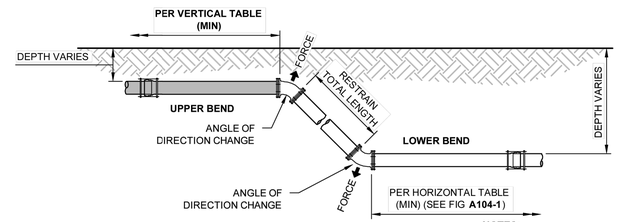
	TYPE	PVC AND DUCTILE IRON PIPE SIZE (IN)													
		4	6	8	12	16	20	24	30	36	42	48	54	60	64
HORIZONTAL	90° BEND	21	29	37	52	65	78	104	122	143	154	167	180	188	195
	45° BEND	9	12	16	22	27	33	43	51	60	64	70	75	78	81
	22-1/2° BEND	5	6	8	11	13	16	21	25	29	31	34	36	38	39
	11-1/4° BEND	2	3	4	6	7	8	11	12	15	16	17	18	19	20
	5 5/8° BEND OR MJ SLEEVE	1	2	2	3	4	4	6	6	8	8	9	9	10	10
	PLUG OR BRANCH OF TEE OR DEAD END	43	59	78	109	139	167	277	330	415	424	465	506	529	551
	VALVE OR LINE STOP	22	30	39	55	70	84	139	165	208	212	233	253	265	276
	HDPE CONNECTION	19	26	34	49	62	75	125	151	174	203	223			

NOTES:

1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL INLINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW:
   - WORKING PRESSURE: 150 PSI
   - SOIL DESIGNATION: SM (SAND SILT)
   - LAYING CONDITIONS: 3
   - DEPTH OF COVER: 3-FT
   - SAFETY FACTOR: 1.5

   THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.
7. 90° BENDS ON VERTICAL PIPE ARE SUBJECT TO REVIEW AND APPROVAL OF UTILITIES.
8. IF 4-IN THRU 20-IN PIPE IS POLYETHLYENE ENCASED, USE 1.25 MULTIPLIER ON RESTRAINT LENGTH.
9. RESTRAINING REQUIREMENTS APPLY TO BOTH EXISTING AND PROPOSED MAINS.

RESTRAINED VERTICAL PIPE - WATER, WASTEWATER FORCE, & RECLAIMED WATER MAINS (150 PSI)



PROFILE VIEW

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S)

	TYPE	PVC AND DUCTILE IRON PIPE SIZE (IN)													
		4	6	8	12	16	20	24	30	36	42	48	54	60	64
VERTICAL (UPPER)	90° BEND	43	59	78	109	139	167	277	330	415	424	465	506	529	551
	45° BEND	18	25	32	45	58	69	115	137	172	176	193	210	219	229
	22-1/2° BEND	9	12	16	22	28	34	56	66	83	85	93	101	106	110
	11-1/4° BEND	5	6	8	11	14	17	28	33	41	42	46	50	53	55
	5 5/8° BEND OR MJ SLEEVE	3	3	4	6	7	9	14	17	21	21	23	25	26	28

NOTES:

1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL INLINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA, USING THE ASSUMPTIONS SHOWN BELOW:
   - WORKING PRESSURE: 150 PSI
   - SOIL DESIGNATION: SM (SAND SILT)
   - LAYING CONDITIONS: 3
   - DEPTH OF COVER: 3-FT
   - SAFETY FACTOR: 1.5

   THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE-SPECIFIC PARAMETERS, SUCH AS SOIL DESIGNATIONS AND LAYING CONDITIONS.
7. 90° BENDS ON VERTICAL PIPE ARE SUBJECT TO REVIEW AND APPROVAL OF UTILITIES.
8. IF 4-IN THRU 20-IN PIPE IS POLYETHYLENE ENCASED, USE 1.25 MULTIPLIER ON RESTRAINT LENGTH.
9. RESTRAINING REQUIREMENTS APPLY TO BOTH EXISTING AND PROPOSED MAINS.

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.sunteceng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER
CITY OF APOPKA
FLORIDA
WATER AND SEWER DETAILS

DATE: 05-21-2025
SCALE: 1"=30'
DESIGNED BY: C.L.
DRAWN BY: A.V.
JOB #: 25-4276

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

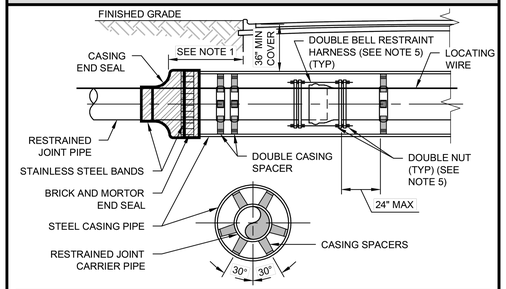
SHEET No.
WS-2

K:\PROJECTS\25-xxx\25-4276\dwg\4276wsdt.dwg, WS-2, 7/1/2026 2:57:43 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276wsdt.dwg
PLOT DATE: 7/1/2026 2:57 PM BY: Andy Venneman
LAYOUT: [WS-2]

62--NOTES--REV

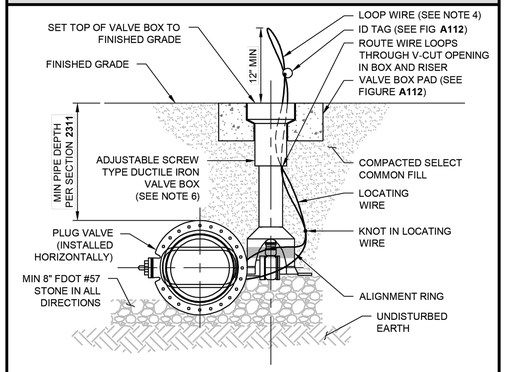
JACK & BORE - DETAIL A



CARRIER PIPE NOMINAL DIAMETER (IN)	4	6	8	10	12	16	20	24	30	36	42
MINIMUM CASING OUTSIDE DIAMETER (IN)	16	16	18	20	24	30	36	42	48	54	60
MINIMUM CASING WALL THICKNESS (IN)	0.25	0.25	0.25	0.25	0.25	0.31	0.38	0.50	0.50	0.50	0.50

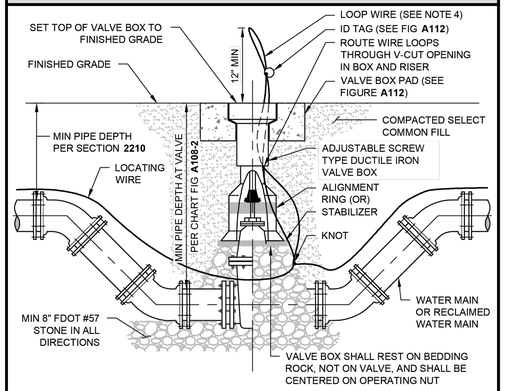
NOTES:
1. CASING SHALL EXTEND A MINIMUM OF 10-FT BEYOND THE EDGE OF PAVEMENT OR MEET FDOT REQUIREMENTS, WHICHEVER IS GREATER.
2. REQUIREMENTS OF OTHER JURISDICTIONS SHALL BE MET. WHEN CONSTRUCTION IS WITHIN FDOT JURISDICTION, ADDITIONAL REQUIREMENTS OF THE "FDOT UTILITY ACCOMMODATION GUIDE" SHALL BE MET.
3. DISTANCE BETWEEN SPACERS TO BE PER MANUFACTURER'S SPECIFICATIONS, OR MAX OF 6.5-FT, WHICHEVER IS MORE STRINGENT.
4. USE OF FLOWABLE FILL IN THE ANNULAR SPACE BETWEEN THE CASING AND CARRIER PIPE IS PROHIBITED.
5. PVC PIPE IN CASING SHALL HAVE A DOUBLE MECHANICAL BELL RESTRAINT HARNESS PER JOINT WHERE RODS ARE DOUBLE NUTTED TO PRECLUDE OVER-HOMING THE JOINT DURING INSTALLATION. BELL RESTRAINT PAIRS INSTALLED FACE TO FACE ON EACH SIDE OF BELL TO ALLOW FOR PROPER NUT INSTALLATION AND PREVENT BOTH OVER-HOMING AND BELL SEPARATION.
6. DI PIPE SHALL BE INTERNAL PUSH-ON RESTRAINED.
7. SEE DETAIL **A107-2** FOR FULL JACK AND BORE SECTION.

PLUG VALVE & BOX - WASTEWATER



NOTES:
1. PVC PIPE OR DUCTILE IRON PIPE SHALL NOT BE USED AS VALVE BOX.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED TO BE WITHIN 3-FT OF FINISHED GRADE.
3. PROVIDE A STABILIZER OR PLASTIC DEBRIS SHIELD / ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THE DEVICE SHALL CENTER THE RISER VALVE BOX OVER THE ACTUATING NUT AND MINIMIZE DEBRIS.
4. LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12-IN ABOVE TOP OF COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED. WIRE SHALL BE COILED BACK INTO BOX AWAY FROM VALVE STEM.
5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
6. REFER TO FIGURE **A111** FOR INSTALLATIONS WHERE THE OPERATING NUT IS DEEPER THAN 36-IN BELOW FINISHED GRADE.
7. DRILL HOLE IN ID TAG AND INSTALL ON TRACING WIRE.

GATE VALVE & BOX - WATER & RECLAIMED WATER MAINS



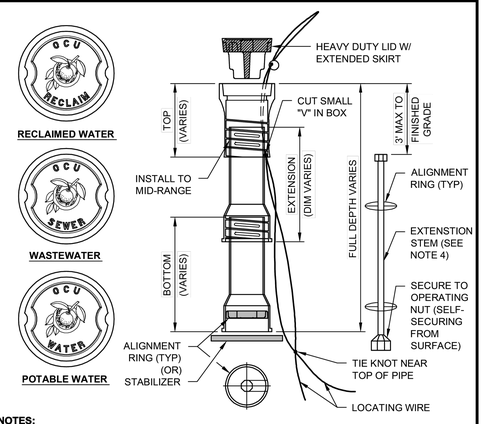
NOTES:
1. PVC PIPE OR DUCTILE IRON PIPE SHALL NOT BE USED AS VALVE BOX.
2. THE VALVE ACTUATING NUT SHALL BE EXTENDED TO BE WITHIN 3-FT OF FINISHED GRADE.
3. PROVIDE A STABILIZER OR PLASTIC DEBRIS SHIELD / ALIGNMENT RING WHICH INSTALLS BELOW THE VALVE ACTUATING NUT. THE DEVICE SHALL CENTER THE RISER VALVE BOX OVER THE ACTUATING NUT AND MINIMIZE DEBRIS.
4. LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12-IN ABOVE TOP OF COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED. WIRE SHALL BE COILED BACK INTO BOX AWAY FROM VALVE STEM.
5. FOR NEW CONSTRUCTION, THE VALVE BOX SHALL BE ADJUSTED TO MIDRANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.
6. REFER TO FIGURE **A111** FOR INSTALLATIONS WHERE THE OPERATING NUT IS DEEPER THAN 36-IN BELOW FINISHED GRADE.
7. DRILL HOLE IN ID TAG AND INSTALL ON TRACING WIRE.

GATE VALVE & BOX - MINIMUM PIPE DEPTH AT VALVE PER MANUFACTURER

APPROVED APPENDIX D PRODUCTS VALVE SIZE (INCHES)	AMERICAN FLOW CONTROL	CLOW COMPANY	MUELLER COMPANY
	MIN COVER TO TOP OF PIPE (INCHES)	MIN COVER TO TOP OF PIPE (INCHES)	MIN COVER TO TOP OF PIPE (INCHES)
16	53	54	54
20	57	72	62
24	63	75	66
30	80	81	80
36	89	88	89
42	102	102	101
48	109	102	110
54	106		
60	122		
66	119		

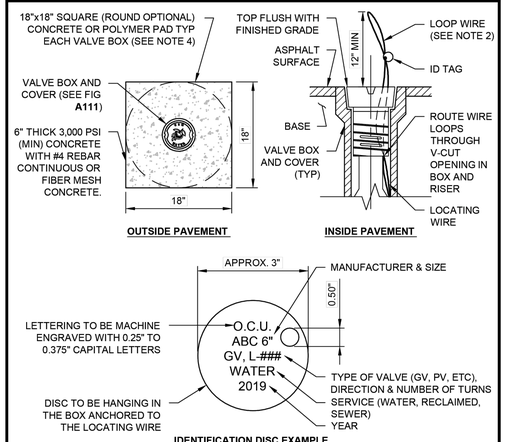
NOTES:
1. MINIMUM COVER OVER PIPE IS CALCULATED BASED ON INSTALLATION OF THE GATE VALVE OPERATING NUT AT 24-IN BELOW GRADE.
2. ADDITIONAL DEPTH MAY BE REQUIRED BASED ON SITE CONDITIONS OR ROAD DESIGN.
3. REFERENCE FIGURE **A108-1** FOR TYPICAL GATE VALVE STANDARD DRAWING.

TYPICAL VALVE BOX & COVER



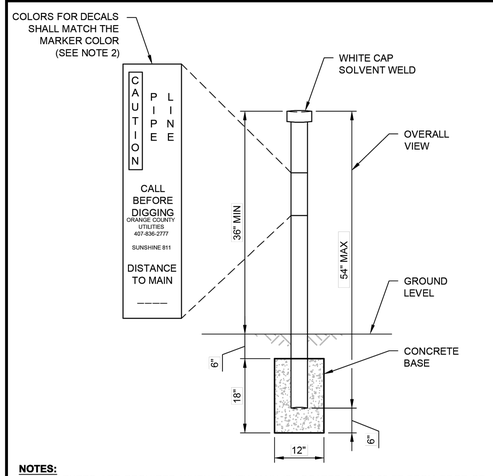
NOTES:
1. HEAVY DUTY VALVE BOX LIDS ARE REQUIRED FOR ALL VALVE BOXES.
2. TOP SECTION SHALL BE INSTALLED AT MID-RANGE FOR FUTURE ADJUSTMENT.
3. HEAVY DUTY VALVE BOX LID SHALL HAVE A 5-IN MIN DEPTH AND WEIGH A MINIMUM OF 22-LBS. LID SHALL HAVE POWDER COATING PAINT AT A MIN OF 3 MILL.
4. EXTENSION STEMS AND ALIGNMENT RING/WALL BRACKETS SHALL BE PROVIDED ON ALL BURIED VALVES SO THAT THE OPERATING NUT SHALL BE NO MORE THAN 36-IN BELOW FINISHED GRADE. MATERIAL SHALL BE MINIMUM 304 SST.
5. ADD ADD'L SCREW EXTENSION AS REQUIRED AFTER SCREW EXTENSION EXCEEDS 24-IN.
6. STACKING OF VALVE BOX BOTTOM SECTIONS IS NOT PERMITTED.
7. VALVE BOX SHALL REST ON BEDDING ROCK, NOT ON VALVE, AND SHALL BE CENTERED ON OPERATING NUT.

VALVE BOX PAD



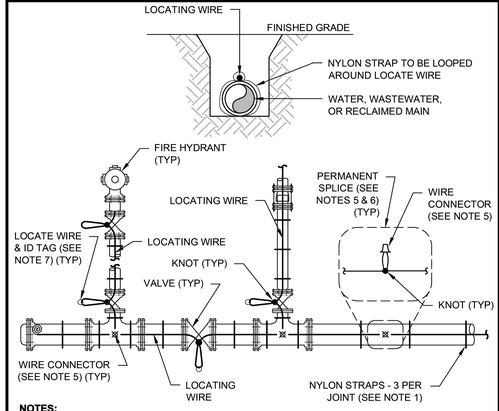
NOTES:
1. BRONZE, BRASS, OR STAINLESS STEEL IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.
2. LOCATING WIRE SHALL BE CONTINUOUS WITH NO SPLICES AND SHALL EXTEND 12-IN ABOVE TOP COLLAR. WIRE SHALL BE COLOR CODED TO MATCH THE UTILITY INSTALLED. WIRE SHALL BE COILED BACK INTO BOX AWAY FROM VALVE STEM.
3. NO VALVE SHALL BE DESIGNED OR INSTALLED WITHIN THE CURB.
4. ROUND OR SQUARE VALVE PAD TO BE UNIFORM PER PROJECT.

UTILITY MAIN MARKER



NOTES:
1. MARKERS ARE REQUIRED WHEN UTILITY MAIN IS LOCATED OVER 30-FT FROM EDGE OF PAVEMENT OR IN AN EASEMENT NOT ADJACENT TO THE RIGHT OF WAY.
2. MARKERS SHALL BE 4-IN DIAMETER SCH 80 OR DR18 PVC: BLUE FOR WATER; GREEN FOR WASTEWATER; AND PANTONE PURPLE 522C FOR RECLAIMED WATER.
3. MARKERS SHALL BE PLACED AT ALL DIRECTIONAL CHANGES AND AT ALL VALVES EXCEPT WATER VALVES NEAR FIRE HYDRANTS. ADDITIONAL MARKERS SHALL BE INSTALLED AS NEEDED SO THAT THE DISTANCE BETWEEN MARKERS DOES NOT EXCEED 500-FT.

PIPE LOCATING WIRE



NOTES:
1. ALL PIPE SHALL REQUIRE INSULATED LOCATING WIRE (10 GAUGE SOLID COPPER) CAPABLE OF DETECTION BY A CABLE LOCATOR AND SHALL BE WRAPPED WITH NYLON STRAPS, LOOPED AND SECURED TO TOP CENTERLINE OF THE PIPE.
2. LOCATING WIRE SHALL BE CONTINUOUS INSIDE VALVE BOXES AND SHALL EXTEND 12-IN ABOVE TOP OF COLLAR.
3. WIRE INSULATION SHALL BE COLOR CODED FOR THE TYPE OF PIPE BEING INSTALLED.
4. WIRE SHALL BE CONTINUOUS AND CONNECTED FOR LOCATING IN ALL DIRECTIONS.
5. PERMANENT SPLICES MUST BE MADE IN THE LENGTH OF THE WIRE USING WIRE CONNECTORS SPECIFICALLY DESIGNED FOR DIRECT BURIAL, DIELECTRIC SILICONE GEL OR MOISTURE-RESISTANT GREASE FILLED.
6. AT ALL TRACING WIRE SPLICES, TEES, AND VALVE COLLARS, A KNOT IN THE WIRE SHALL BE MADE TO PREVENT THE WIRE FROM COMING APART.
7. REFER TO VALVE DETAILS FOR LOCATE WIRE UP AND IN VALVE BOX.

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.sunteceng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER

CITY OF APOPKA FLORIDA

WATER AND SEWER DETAILS

DATE:	05-21-2025
SCALE:	1"=30'
DESIGNED BY:	C.L.
DRAWN BY:	A.V.
JOB #:	25-4276

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
WS-3

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276wsdl.dwg
PLOT DATE: 7/1/2026 2:58 PM BY: Andy Venneman
LAYOUT: [WS-3]

K:\PROJECTS\25-xxx\25-4276\dwg\4276wsdl.dwg, WS-3, 7/1/2026 2:57:55 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

HORIZONTAL PIPELINE SEPARATION REQUIREMENTS

HORIZONTAL SEPARATION REQUIREMENTS (NOTES 1 & 2)

PROPOSED UTILITY		POTABLE WATER (NOTE 3)		RECLAIMED WATER MAIN (SEE NOTE 7)		WASTEWATER FORCEMAIN		SANITARY SEWER	STORM SEWER	STRUCTURAL FOUNDATION, WALLS, ETC. (SEE NOTE 8)
		4"-12"	16"-UP	4"-12"	16"-UP	4"-12"	16"-UP	ALL SIZES	ALL SIZES	ALL SIZES
POTABLE WATER (NOTE 3)	4"-12"	3'	5'	3'	5'	6'	6'	6'	3'	10'
	16"-UP	5'	5'	5'	5'	6'	6'	6'	5'	15' (NOTE 5)
RECLAIMED WATER MAIN (SEE NOTE 7)	4"-12"	3'	5'	3'	5'	3'	5'	3'	3'	10'
	16"-UP	5'	5'	5'	5'	5'	5'	5'	5'	15' (NOTE 5)
WASTEWATER FORCEMAIN	4"-12"	6'	6'	3'	5'	3'	5'	3'	3'	10'
	16"-UP	6'	6'	5'	5'	5'	5'	5'	5'	15' (NOTE 5)
SANITARY SEWER	ALL SIZES	6'	6'	3'	5'	3'	5'	3'	5'	VARIES PER DEPTH

NOTES:
1. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
2. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. FOR PIPES INSTALLED AT GREATER DEPTHS THAN THE MINIMUM OCU DESIGN STANDARDS, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
3. THIS SEPARATION REQUIREMENT COMPLIES WITH THE MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND UTILITIES PRIOR TO INSTALLATION.
4. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
5. PRESSURE MAINS 16-IN TO 24-IN MAY HAVE 10-FT SEPARATION FROM STRUCTURAL FOUNDATION, WALLS, ETC IF NEW MAINS ARE RESTRAINED FOR THE ENTIRE LENGTH.
6. REFERENCE FIGURE **A116-2** FOR VERTICAL PIPELINE SEPARATION REQUIREMENTS.
7. RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
8. ADDITIONAL SEPARATION SHALL BE REQUIRED BY UTILITIES FOR CONSTRUCTION OF, INCLUDING, BUT NOT LIMITED TO: LIVE LOADS, MULTI-STORY COMMERCIAL BUILDINGS, SUPERSTRUCTURES, EMBANKMENTS, RETAINING WALLS, BRIDGES, RAILROADS, HIGH VOLTAGE TRANSMISSION MAINS, GAS MAINS, ETC.

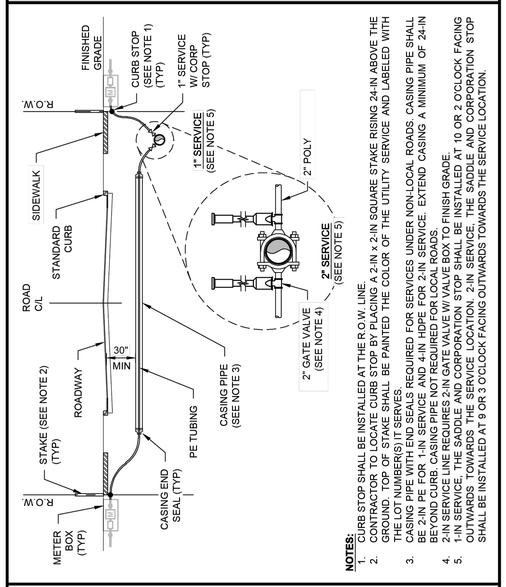
VERTICAL PIPELINE SEPARATION REQUIREMENTS

VERTICAL SEPARATION REQUIREMENTS (NOTES 1 & 2)

PROPOSED UTILITY	POTABLE WATER (NOTE 4)	RECLAIMED WATER MAIN	WASTEWATER FORCEMAIN	SANITARY SEWER	STORM SEWER (NOTE 3)
POTABLE WATER (NOTE 4)	12"	12"	12" / 18"	12" / 18"	12" / 18"
RECLAIMED WATER MAIN	12"	12"	12"	12"	12" / 18"
WASTEWATER FORCEMAIN	12"	12"	12"	12"	12" / 18"
SANITARY SEWER	12" / 18"	12"	12"	12"	12" / 18"

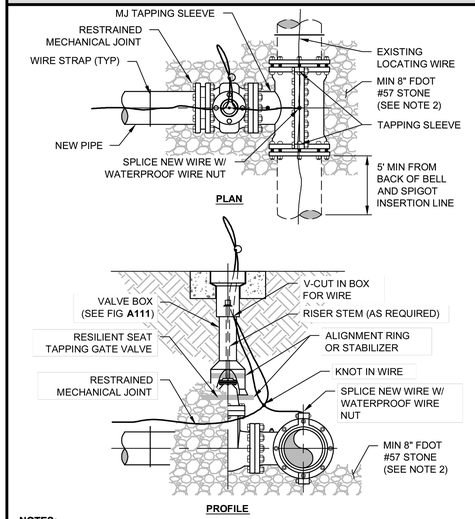
NOTES:
1. DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
2. THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE.
3. THE 18-IN SEPARATION REQUIREMENT APPLIES WHEN THE STORM PIPE OR SANITARY SEWER CROSSES ABOVE THE UTILITY MAIN, AND WHEN THE STORM PIPE HAS A DIAMETER EQUAL TO OR GREATER THAN 24-IN. OTHERWISE, THE REQUIRED SEPARATION IS 12-IN.
4. THIS SEPARATION REQUIREMENT COMPLIES WITH THE MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND UTILITIES.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
6. REFERENCE FIGURE **A116-1** FOR HORIZONTAL PIPELINE SEPARATION REQUIREMENTS.
7. JOINT SPACING AT CROSSING SHALL COMPLY WITH THE MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, F.A.C.

WATER & RECLAIMED WATER SERVICES (TYPICAL)



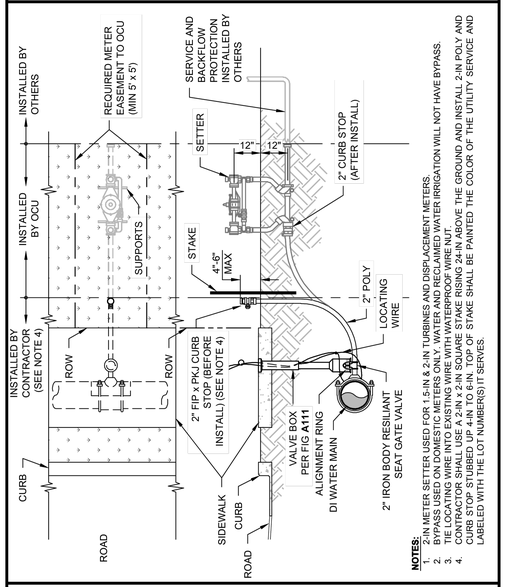
NOTES:
1. CURB STOP SHALL BE INSTALLED AT THE R.O.W. LINE.
2. CURB STOP, TOP OF CURB, AND ROADWAY PLANE. A 2-IN x 2-IN SQUARE STAKE RISING 24-IN ABOVE THE GROUND. TOP OF STAKE SHALL BE PAINTED THE COLOR OF THE UTILITY SERVICE AND LABELED WITH THE LOT NUMBER(S) IT SERVES
3. CASING PIPE WITH END SEALS REQUIRED FOR SERVICES UNDER NON-LOCAL ROADS. CASING PIPE SHALL BE 2-IN PE FOR 1-IN SERVICE AND 4-IN HDPE FOR 2-IN SERVICE. EXTEND CASING A MINIMUM OF 24-IN BEYOND CURB. CASING PIPE NOT REQUIRED FOR LOCAL ROADS.
4. 2-IN SERVICE LINE REQUIRES 2-IN GATE VALVE W/ VALVE BOX TO FINISH GRADE.
5. CURB STOP STUBBED UP 4-IN TO 6-IN, TOP OF STAKE SHALL BE PAINTED THE COLOR OF THE UTILITY SERVICE AND LABELED WITH THE LOT NUMBER(S) IT SERVES.

MJ TAPPING SLEEVE & GATE VALVE ASSEMBLY FOR WATER & RECLAIMED WATER



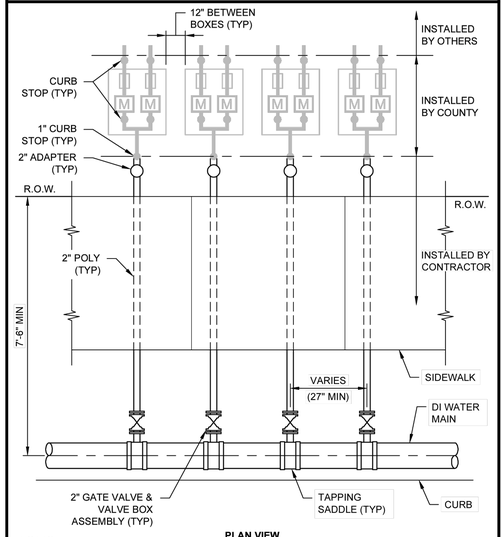
NOTES:
1. TAPPING SLEEVE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION **3117**-SYSTEM CONNECTIONS.
2. BEDDING ROCK SHALL BE FULLY AND UNIFORMALLY SUPPORTING THE TAPPING SLEEVE & VALVE AT A MIN OF 8-IN IN ALL DIRECTIONS.

METER INSTALLATION DETAIL - 1 1/2" & 2"



NOTES:
1. 2-IN METER SETTER USED FOR 1.5-IN & 2-IN TURBINES AND DISPLACEMENT METERS.
2. BYPASS USED ON DOMESTIC METERS ONLY. WATER AND RECLAIMED WATER IRRIGATION WILL NOT HAVE BYPASS.
3. TIE LOCATING WIRE INTO EXISTING WIRE WITH WATERPROOF WIRE NUT.
4. CONTRACTOR SHALL USE A 2-IN x 2-IN SQUARE STAKE RISING 24-IN ABOVE THE GROUND AND INSTALL 2-IN POLY AND CURB STOP STUBBED UP 4-IN TO 6-IN. TOP OF STAKE SHALL BE PAINTED THE COLOR OF THE UTILITY SERVICE AND LABELED WITH THE LOT NUMBER(S) IT SERVES.

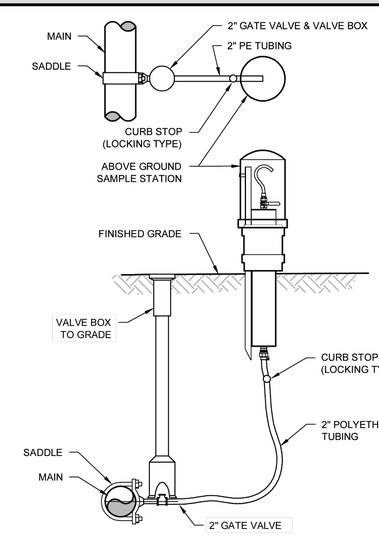
METER BANKS - SHORT SERVICE, MAINS GREATER THAN 7.5-FT FROM R.O.W.



PLAN VIEW

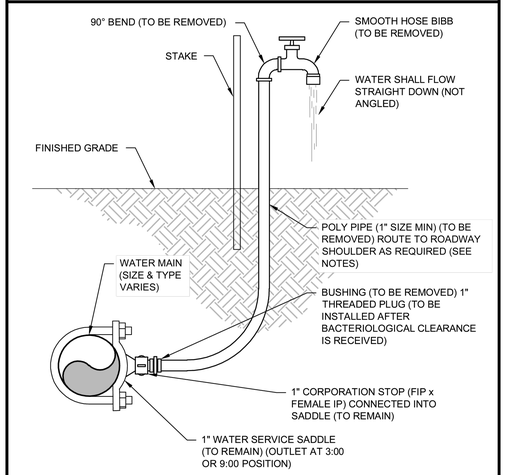
NOTES:
1. DI PIPE SHALL EXTEND A MIN OF 5-FT PAST FIRST AND LAST SERVICE CONNECTION ON ALL METER BANK INSTALLS.

WATER SAMPLE STATION



NOTES:
1. A 2-IN SAMPLE STATION INSTALLED AT THE END OF A CUL-DE-SAC CAN ALSO SERVE AS A BLOW-OFF VALVE WHEN BOTH ARE REQUIRED.

TEMPORARY SAMPLE TAP



NOTES:
1. LOCATION OF SAMPLE POINT BIBB SHALL NOT BE WITHIN THE ROADWAY BUT ROUTED TO THE ROADWAY SHOULDERS (NON-TRAFFIC AREAS).
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY PIPING & FITTINGS (AS NOTED) AFTER BACTERIOLOGICAL CLEARANCE IS RECEIVED.
3. THE USE OF THE ABOVE CONSTRUCTION FOR A TEMPORARY SAMPLE POINT SHALL BE LIMITED TO AREAS WHERE A SAMPLE TAP BY ALTERNATIVE METHODS IS NOT FEASIBLE IF DIRECTED OTHERWISE BY OCU.

Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors
4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.sunfleching.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER

CITY OF APOPKA FLORIDA

WATER AND SEWER DETAILS

DATE:	05-21-2025
SCALE:	1"=30'
DESIGNED BY:	C.L.
DRAWN BY:	A.V.
JOB #:	25-4276

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

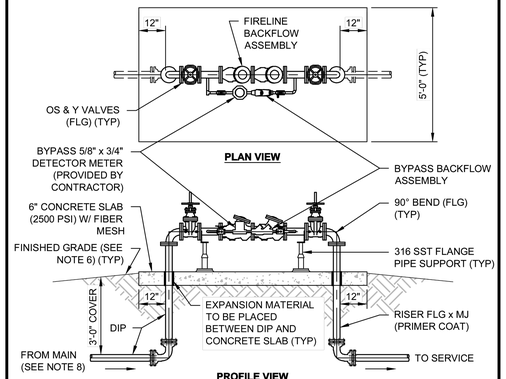
This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
WS-4

K:\PROJECTS\25-xxx\25-4276\dwg\4276wsdt.dwg, WS-4, 7/1/2026 2:58:06 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276wsdt.dwg
PLOT DATE: 7/1/2026 2:58 PM BY: Andy Venneman
LAYOUT: [WS-4]

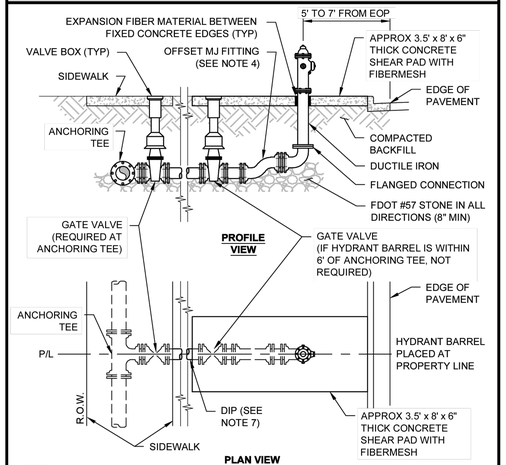
DOUBLE DETECTOR CHECK VALVE ASSEMBLY



NOTES:

1. REQUIRED FOR SITES WITH SEPARATE DOMESTIC AND FIRE SYSTEM SUPPLY PIPING.
2. BACKFLOW ASSEMBLY SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER. UTILITIES SHALL OWN AND MAINTAIN THE METER.
3. UTILITY EASEMENT REQUIRED FOR BY-PASS METER READING. MINIMUM EASEMENT SIZE IS 10-FT x 15-FT.
4. DETAIL NOT APPLICABLE WHEN AN RPZ IS REQUIRED IN ACCORDANCE WITH THE BACKFLOW PREVENTION MANUAL.
5. ALL FLANGES: PIPE, VALVES AND APPURTENANCES SHALL HAVE 316 SST HARDWARE.
6. FINISH GRADE AROUND METER ASSEMBLY SLAB SHALL ENSURE A SAFE WORK ENVIRONMENT. GRADING SLOPE DROP OFF SHALL NOT EXCEED 6-IN WITHIN 5-FT OF SLAB.
7. ASSEMBLY SHALL BE PAINTED IN ACCORDANCE WITH SECTION **3119**.
8. SERVICES 4-INCH AND LARGER SHALL BE DIP FROM THE POINT OF CONNECTION AT THE MAIN TO THE METER ASSEMBLY IF THE MAIN IS ON THE SAME SIDE OF THE STREET AS THE ASSEMBLY. IF THE MAIN IS ON THE OPPOSITE SIDE OF THE STREET AS THE ASSEMBLY, A MINIMUM OF ONE SEGMENT OF PIPE IMMEDIATELY UPSTREAM FROM THE METER ASSEMBLY SHALL BE DIP.

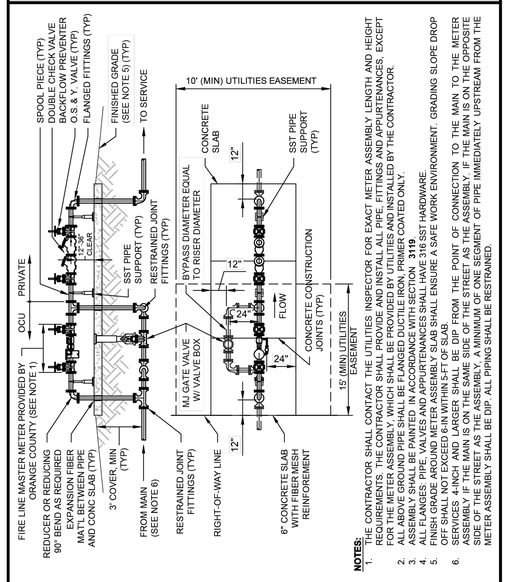
FIRE HYDRANT ASSEMBLY (STANDARD CONFIGURATION)



NOTES:

1. CENTER OF THE FLANGE CONNECTION SHALL BE 4-IN TO 6-IN FROM THE TOP OF THE SLAB.
2. BARREL COLORS: PRIVATE HYDRANTS - RED; PUBLIC HYDRANTS - SILVER.
3. BONNET COLORS: TO BE DETERMINED BY FLOW TEST.
4. OFFSET MJ FITTING ROTATED AS REQUIRED FOR HYDRANT BURY DEPTH ADJUSTMENT. HYDRANT EXTENSION RISERS SHALL NOT BE PERMITTED. ADDITIONAL RESTRAINT FITTINGS AS REQUIRED.
5. HYDRANT SHALL BE CENTERED ON SHEAR PAD.
6. PUMPER NOZZLE SHALL FACE ROADWAY.
7. ALL PIPE SHALL BE RESTRAINED DIP FROM ANCHORING TEE TO HYDRANT.
8. HYDRANT SHALL BE 5-FT TO 7-FT FROM EDGE OF PAVEMENT.

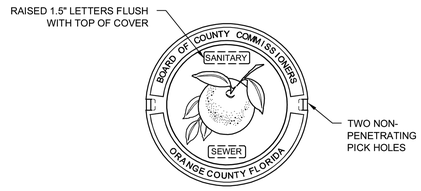
FIRE LINE MASTER METER ASSEMBLY

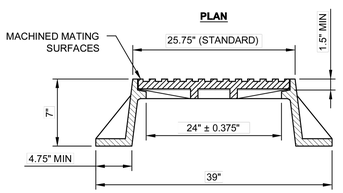


NOTES:

1. THE CONTRACTOR SHALL CONTACT THE UTILITIES INSPECTOR FOR EXACT METER ASSEMBLY LENGTH AND HEIGHT REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL PIPE, FITTINGS AND APPURTENANCES. EXCEPT FOR THE METER ASSEMBLY WHICH SHALL BE PROVIDED BY UTILITIES AND INSTALLED BY THE CONTRACTOR.
2. ALL FLANGES: PIPE, VALVES AND APPURTENANCES SHALL BE 316 SST HARDWARE.
3. ASSEMBLY SHALL BE PAINTED IN ACCORDANCE WITH SECTION **3119** FOR BURIED PIPE AND FITTINGS COATED ONLY.
4. ALL FLANGES: PIPE, VALVES AND APPURTENANCES SHALL HAVE 316 SST HARDWARE.
5. FINISH GRADE AROUND METER ASSEMBLY SLAB SHALL ENSURE A SAFE WORK ENVIRONMENT. GRADING SLOPE DROP OFF SHALL NOT EXCEED 6-IN WITHIN 5-FT OF SLAB.
6. SERVICES 4-INCH AND LARGER SHALL BE DIP FROM THE POINT OF CONNECTION TO THE MAIN TO THE METER ASSEMBLY IF THE MAIN IS ON THE SAME SIDE OF THE STREET AS THE ASSEMBLY. IF THE MAIN IS ON THE OPPOSITE SIDE OF THE STREET AS THE ASSEMBLY, A MINIMUM OF ONE SEGMENT OF PIPE IMMEDIATELY UPSTREAM FROM THE METER ASSEMBLY SHALL BE DIP. ALL PIPING SHALL BE RESTRAINED.

STANDARD MANHOLE FRAME & COVER

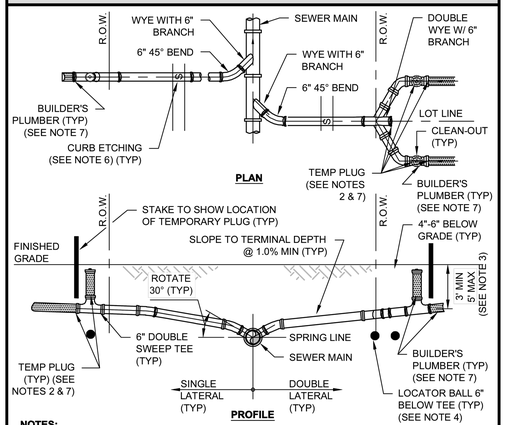




NOTES:

1. ONLY APPLIES TO UTILITIES OWNED AND MAINTAINED MANHOLES. "ORANGE COUNTY" SHALL NOT APPEAR ON PRIVATE MANHOLES.

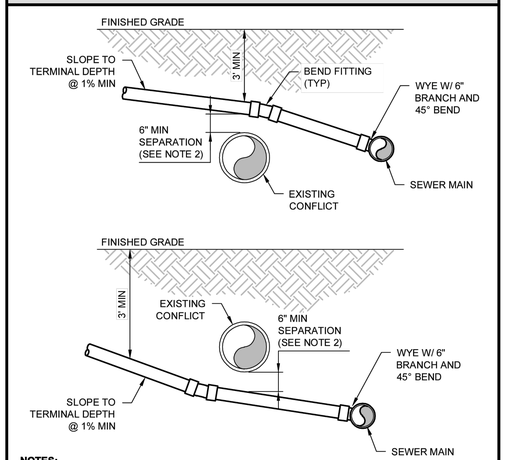
SERVICE LATERAL



NOTES:

1. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
2. SERVICE LATERAL AND DOUBLE SWEEP TEES SHALL BE CAPPED BY DEVELOPER'S SITE-WORK CONTRACTOR.
3. TEE & WYE SHALL BE NO SHALLOWER THAN 3-FT AND NO DEEPER THAN 5-FT.
4. LOCATOR BALLS TO BE INSTALLED BY DEVELOPER'S SITE-WORK CONTRACTOR, TWO PER DOUBLE SERVICE AND ONE PER SINGLE SERVICE AT MINIMUM.
5. ALL FITTINGS SHOWN ARE TO BE INSTALLED.
6. SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY CUTTING AN "S" IN THE CURB DIRECTLY OVER THE LATERAL.
7. BUILDER'S PLUMBER WILL REMOVE PLUG(S), INSTALL CLEANOUT ON DOUBLE SWEEP TEE, AND CONNECT SERVICE LATERAL TO HOUSE. NO DIRT OR DEBRIS SHALL ENTER THE SERVICE LATERAL THROUGHOUT CONSTRUCTION.

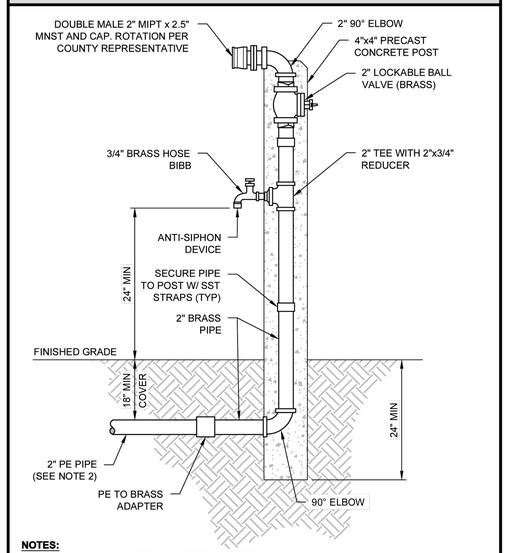
SERVICE LATERAL - PIPE CONFLICT



NOTES:

1. GRADE MAX CHANGE TO INSTALL SEWER LATERAL OVER OR UNDER AN EXISTING CONFLICT.
2. ALL CONFLICT SEPARATIONS LESS THAN THE MINIMUM SHALL NOT BE PERMITTED UNLESS APPROVED BY THE UTILITIES INSPECTOR.
3. MINIMUM SLOPE SHALL NOT BE LESS THAN 1%.
4. BEND FITTINGS SHALL BE USED TO ENSURE PROPER SEPARATION FROM ALL HORIZONTAL CONFLICTS.
5. IF A CONFLICT AT THE PROPERTY LINE EXISTS, TWO SINGLE SEWER SERVICES SHALL BE INSTALLED IN AN APPROVED LOCATION BY UTILITIES.

YARD HYDRANT / HOSE BIBB AT PUMP STATION



NOTES:

1. ALL PIPING AND FITTINGS AFTER ADAPTER SHALL BE BRASS.
2. CONNECT 2-IN PE TO EITHER 2-IN OCU METER OR 5/8-IN OUC METER.

4577 Nob Hill Road, Suite 102
Sunrise, FL 33351
www.sunteceng.com
Certificate of Auth. #7097/LB 7019
Phone (954) 777-3123
Fax (954) 777-3114
STE Sun-Tech Engineering, Inc.
Engineers • Planners • Surveyors

REVISIONS

NO.	DATE:	DESCRIPTION
1	12/10/25	SITE PLAN SUBMITTAL
2	04/17/26	SITE PLAN APPROVAL
3	06/15/26	BLDG. FOOTPRINT REVISION

WEKIVA SHOPPING CENTER

CITY OF APOPKA

WATER AND SEWER DETAILS

FLORIDA

DATE: 05-21-2025
SCALE: 1"=30'
DESIGNED BY: C.L.
DRAWN BY: A.V.
JOB #: 25-4276

CLIFFORD R. LOUTAN LICENSE No. 56890 STATE OF FLORIDA PROFESSIONAL ENGINEER

Date: **July 1, 2026**

This item has been digitally signed and sealed by CLIFFORD R. LOUTAN, P.E. on the date adjacent to the seal. Signature must be verified on any electronic copies.

SHEET No.
WS-5

K:\PROJECTS\25-xxx\25-4276\dwg\4276wsdt.dwg, WS-5, 7/1/2026 2:58:16 PM, 1:1, Sun-Tech Engineering, Inc. (AEV), Sun-Tech Engineering, Inc. (AEV)

FILE: K:\PROJECTS\25-xxx\25-4276\dwg\4276wsdt.dwg
PLOT DATE: 7/1/2026 2:58 PM BY: Andy Venneman
LAYOUT: [WS-5]

CONSTRUCTION SITE PLAN

FOR

SPRINGHAVEN - AMENITY TRACTS

CITY OF APOPKA, FLORIDA

OCPA PARCEL ID # 18-20-28-0000-00-031, 18-20-28-0000-00-032, 18-20-28-0000-00-033, 18-20-28-0000-00-034, 18-20-28-0000-00-035, 18-20-28-0000-00-037, 18-20-28-0000-00-046, 18-20-28-0000-00-047, 18-20-28-0000-00-048, 18-20-28-0000-00-049, 18-20-28-0000-00-050, 18-20-28-0000-00-051, 18-20-28-0000-00-052, 18-20-28-0000-00-061, 18-20-28-0000-00-080, 18-20-28-0000-00-105, 18-20-28-0000-00-106, 18-20-28-0000-00-119, 18-20-28-0000-00-132

LEGAL DESCRIPTION PER ALLEN & COMPANY PROFESSIONAL SURVEYORS & MAPPERS
DATED: JULY 15, 2024

1GO MHK LM

PARCEL 1:

THAT PART OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF SAID NORTHEAST 1/4; THENCE S 89°49'30" W ALONG THE NORTH LINE OF SAID NORTHEAST 1/4 FOR A DISTANCE OF 698.00 FEET; THENCE S 0°59'49" W, 30.00 FEET FOR A POINT OF BEGINNING; THENCE CONTINUE S 0°59'49" W 773.01 FEET; THENCE N 89°49'30" W 317.30 FEET; THENCE N 0°49'54" W 135.00 FEET; THENCE N 89°49'54" W 135.00 FEET; THENCE N 0°49'54" E 129.86 FEET; THENCE S 89°50'39" E 327.30 FEET; THENCE N 0°59'49" E 480.00 FEET; THENCE S 89°50'39" E 284.02 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

PARCEL NOS. 7 AND 8 AS PER PLAT OF SURVEY RECORDED IN DEED BOOK 921, PAGE 429, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; AND MORE PARTICULARLY DESCRIBED AS: BEGIN 30 FEET SOUTH AND 1560 FEET WEST OF THE NE CORNER OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST; RUN SOUTH 1284.22 FEET; WEST 337.0 FEET; NORTH 1284 FEET; AND EAST 337.3 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH THE NORTH HALF OF 15.00 FEET WIDE RIGHT OF WAY AS SHOWN ON THE UNRECORDED PLAT RECORDED IN DEED BOOK 921, PAGE 429 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, LYING SOUTH OF AND ADJACENT TO THE PARCEL 2.

PARCEL 3:

PARCEL NO. 21 AS PER PLAT OF SURVEY RECORDED IN DEED BOOK 921, PAGE 429, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; AND MORE PARTICULARLY DESCRIBED AS: NORTH 1/2 OF THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, LESS THE WEST 15 FEET THEREOF, SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST.

TOGETHER WITH THE SOUTH HALF OF 15.00 FEET WIDE RIGHT OF WAY AS SHOWN ON THE UNRECORDED PLAT RECORDED IN DEED BOOK 921, PAGE 429 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, LYING NORTH OF AND ADJACENT TO THE PARCEL 3.

PARCEL 4:

BEGIN 30 FEET SOUTH AND 1702.2 FEET WEST OF THE NORTHEAST CORNER OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST; THENCE RUN SOUTH 1284 FEET; WEST 675 FEET; NORTH 1283.56 FEET; AND EAST 675 FEET TO THE POINT OF BEGINNING, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. A/K/A LOTS 3, 4, 5 AND 6 AS DESCRIBED IN DEED BOOK 921, PAGE 429.

TOGETHER WITH THE NORTH HALF OF 15.00 FEET WIDE RIGHT OF WAY AS SHOWN ON THE UNRECORDED PLAT RECORDED IN DEED BOOK 921, PAGE 429 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, LYING SOUTH OF AND ADJACENT TO THE PARCEL 4.

PARCEL 5:

BEGIN 30 FEET SOUTH AND 699 FEET WEST OF THE NORTHEAST CORNER OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, RUN SOUTH 1284.66 FEET; THENCE WEST 675.00 FEET; THENCE NORTH 1284.22 FEET; THENCE EAST 675.00 FEET TO THE POINT OF BEGINNING, BEING PARCELS 9, 10, 11 AND 12 AS DEPICTED ON THE PLAT RECORDED IN DEED BOOK 921, PAGE 429, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

TOGETHER WITH THE NORTH HALF OF 15.00 FEET WIDE RIGHT OF WAY AS SHOWN ON THE UNRECORDED PLAT RECORDED IN DEED BOOK 921, PAGE 429 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, LYING SOUTH OF AND ADJACENT TO THE PARCEL 5.

LESS: THAT PART OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA, DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHEAST CORNER OF SAID NORTHEAST 1/4; THENCE S 89°49'30" W ALONG THE NORTH LINE OF SAID NORTHEAST 1/4 FOR A DISTANCE OF 698.00 FEET; THENCE S 0°59'49" W, 30.00 FEET; THENCE S 89°49'30" W 317.30 FEET; THENCE S 0°59'49" W 773.01 FEET; THENCE S 89°49'30" W 317.30 FEET; THENCE N 0°49'54" W 135.00 FEET; THENCE N 89°49'54" E 270.00 FEET; THENCE S 89°49'30" E 150.00 FEET; THENCE N 0°59'49" E 480.00 FEET; THENCE S 89°50'39" E 327.30 FEET; THENCE N 0°59'49" E 1287.86 FEET TO THE POINT OF BEGINNING.

ALSO LESS: BEING AT A POINT 30 FEET SOUTH AND 972.5 FEET WEST OF THE NORTHEAST CORNER OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, RUN THENCE SOUTH 480 FEET; THENCE WEST 180 FEET; THENCE NORTH 480 FEET; THENCE EAST 180 FEET TO THE POINT OF BEGINNING.

BOUDREAU

THE SOUTH 550 FEET OF THE NORTH 1320 FEET OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, LESS THE WEST 15 FEET THEREOF, AND DESCRIBED AS TRACT 22, UNRECORDED PLAT.

MARTIN

THE EAST 402.5 FEET OF THE NORTH 1/2 OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 BEING THE EAST 1/2 OF TRACT 23 OF UNRECORDED PLAT, SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA.

PM NO BDY, LLC

PARCEL 1:

BEGINNING 15 FEET SOUTH AND 7.5 FEET WEST OF THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, RUN WEST 661.20 FEET; THENCE SOUTH 330 FEET; THENCE EAST 661.8 FEET; THENCE NORTH 330 FEET TO THE POINT OF BEGINNING, BEING TRACT NO. 20 OF AN UNRECORDED PLAT AS SHOWN IN DEED BOOK 921, PAGE 429, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 2:

THAT CERTAIN PARCEL OF REAL ESTATE SITUATED IN SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST AND DESCRIBED AS PARCEL NO. 20, AS PER PLAT THEREOF RECORDED IN DEED BOOK 921, PAGE 429, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGIN 345 NOR TH AND 7.5 FEET WEST OF THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4; RUN WEST 661.20 FEET; SOUTH 330 FEET; EAST 661.7 FEET; NORTH 330 FEET TO THE POINT OF BEGINNING.

ROBINSON

PARCEL 1:

THAT CERTAIN PARCEL OF REAL ESTATE LYING IN SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, AND DESCRIBED AS PARCEL 24, AS PER PLAT THEREOF, RECORDED IN DEED BOOK 921, PAGE 429, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, AND MORE PARTICULARLY DESCRIBED AS THE SOUTH 1/2 OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4; LESS THE WEST 15 FEET, SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, LAND LYING AND BEING IN ORANGE COUNTY, FLORIDA.

PARCEL 2:

BEGINNING AT NW CORNER SE 1/4 OF THE NE 1/4, SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, RUN SOUTH 660.6 FEET, RUN THENCE EAST 660.14 FEET, THENCE NORTH 660.6 FEET, RUN THENCE WEST 660.6 FEET TO THE POINT OF BEGINNING, LYING IN ORANGE COUNTY, FLORIDA.

TOGETHER WITH THE SOUTH HALF OF 15.00 FEET WIDE RIGHT OF WAY AS SHOWN ON THE UNRECORDED PLAT RECORDED IN DEED BOOK 921, PAGE 429 OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, LYING SOUTH OF AND ADJACENT TO THE PARCEL 2, LESS THE EAST 30.00 FEET THEREOF.

TOGETHER WITH THE EASEMENT FOR INGRESS AND EGRESS CONTAINED IN THE DOCUMENT RECORDED IN OFFICIAL RECORDS BOOK 5876, PAGE 4982, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

SNAVELY

THAT CERTAIN PARCEL OF REAL ESTATE SITUATE, LYING AND BEING IN SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA, AND DESCRIBED AS PARCEL NO. 53 OF THAT CERTAIN SURVEY MADE BY G.R. SHEWEY, DATED JUNE 10, 1955, RLG. SURVEYOR NO. 623, AND ALSO BEING PART OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CONVEYED BY DEED RECORDED IN DEED BOOK 1027, PAGE 466, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS: PARCEL NO. 53: FROM A POINT 30 FEET SOUTH OF NORTHWEST CORNER OF NORTHEAST QUARTER OF NORTHEAST QUARTER RUN SOUTH 352.5 FEET; EAST 660.66 FEET; NORTH 352.42 FEET; WEST 660.66 FEET TO POINT OF BEGINNING.

SHAW

THAT CERTAIN PARCEL OF REAL ESTATE SITUATE, LYING AND BEING IN SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA, AND DESCRIBED AS PARCEL NO. 53 OF THAT CERTAIN SURVEY MADE BY G.R. SHEWEY, DATED JUNE 10, 1955, RLG. SURVEYOR NO. 623, AND ALSO BEING PART OF THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, CONVEYED BY DEED RECORDED IN DEED BOOK 1027, PAGE 466, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS: PARCEL NO. 53: FROM A POINT 30 FEET SOUTH OF NORTHWEST CORNER OF NORTHEAST QUARTER OF NORTHEAST QUARTER RUN SOUTH 352.5 FEET; EAST 660.66 FEET; NORTH 352.42 FEET; WEST 660.66 FEET TO POINT OF BEGINNING.

ORCHID ESTATES COMMUNITY HOMEOWNERS ASSOCIATION, INC

PARCEL 1:

WEST 15 FEET OF THE NORTHEAST QUARTER AND THE NORTH 15 FEET OF THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER, SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA. LESS AND EXCEPT ANY LAND CONTAINED IN COUNTY DEED RECORDED IN OFFICIAL RECORDS BOOK 10006, PAGE 8043, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

ALSO DESCRIBED AS:

BEGIN AT THE NORTHEAST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 18; THENCE ALONG THE WEST LINE OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 18, SOUTH 00°53'15"W 955.42 FEET TO A POINT ON A LINE THAT IS 15.00 SOUTHERLY OF AND PERPENDICULAR TO THE NORTH LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 18; THENCE ALONG A LINE THAT IS 15 FEET SOUTHERLY OF AND PARALLEL TO SAID NORTH LINE SOUTH 88°59'55" WEST, 1330.19 FEET TO THE WEST LINE OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 18; THENCE ALONG SAID WEST LINE NORTH 00°53'15" EAST, 15.00 FEET TO THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 18; THENCE ALONG THE SOUTHERLY RIGHT OF WAY LINE NORTH 89°06'47" EAST, 1345 FEET TO A POINT ON A LINE THAT IS 15.00 FEET EASTERLY OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 18; THENCE ALONG SAID PARALLEL LINE SOUTH 00°53'15" WEST, 267.68 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 18; THENCE ALONG SAID NORTH LINE NORTH 89°06'31" EAST, 1315.19 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA, LESS AND EXCEPT THE NORTH 15 FEET; AND

LESS AND EXCEPT THE LAND CONTAINED IN THE CERTIFICATE OF TITLE RECORDED APRIL 1, 2019 IN OFFICIAL RECORDS INSTRUMENT NUMBER 20190194709, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; AND

MEGA ENG, LLLP

THAT PART OF THE NORTHEAST 1/4 OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF SAID NORTHEAST 1/4; THENCE NORTH 89°49'30" WEST, ALONG THE NORTHLINE OF SAID NORTHEAST 1/4 OF A DISTANCE 710.81 FEET; THENCE SOUTH 0°09'47" WEST, 30.00 FEET A POINT OF BEGINNING; THENCE CONTINUE SOUTH 0°09'47" WEST, 480.00 FEET; THENCE NORTH 89°50'39" WEST, 257.68 FEET; THENCE NORTH 0°09'47" EAST, 480.00 FEET; THENCE SOUTH 89°50'39" EAST, 257.68 FEET TO THE POINT OF BEGINNING.

1GO MHK LM DIRECTCABLE TRUST

BEGINNING AT A POINT 30 FEET SOUTH AND 972.5 FEET WEST OF THE NORTHEAST CORNER OF SECTION 18, TOWNSHIP 20 SOUTH, RANGE 28 EAST, RUN THENCE SOUTH 480 FEET; THENCE WEST 180 FEET; THENCE NORTH 480 FEET; THENCE EAST 180 FEET TO THE POINT OF BEGINNING.

PROJECT TEAM:

APPLICANT/DEVELOPER
ASHTON WOODS
CONTACT: DANE HAMILTON
1064 GREENWOOD BLVD., SUITE 124
LAKE MARY, FLORIDA 32746
PHONE: (407) 415-3583
EMAIL: DANE.HAMILTON@ASHTONWOODS.COM

ENGINEER
1828 ENGINEERING, LLC
ENGINEER: OVIDIO SANCHEZ, P.E.
2400 MAITLAND CENTER PKWY
SUITE #107
MAITLAND, FLORIDA 32751
PHONE: (407) 558-2228
EMAIL: OSANCHEZ@1828ENG.COM

SURVEYOR
JOHNSTON'S SURVEYING, INC.
SURVEYOR: BARRY W. PREWITT, P.S.M.
900 CROSS PRAIRE PARKWAY
KISSIMMEE, FLORIDA 34744
PHONE: (407) 847-6140
EMAIL: BARRY@JSURVEYING.COM

ENVIRONMENTAL CONSULTANT
BIO-TECH CONSULTING
ENVIRONMENTALIST: JOSEPH GALLETTI
3025 EAST SOUTH STREET
ORLANDO, FLORIDA 32803
PHONE: (407) 894-5969
EMAIL: JOE@BIO-TECHCONSULTING.COM

GEOTECHNICAL ENGINEER
DEVO ENGINEERING
ENGINEER: DEVO SEERERAM, PH.D., P.E.
5500 ALHAMBRO DRIVE,
ORLANDO, FLORIDA 32808
PHONE: (407) 290-2371
EMAIL: DEVO@DEVOENG.COM

TRAFFIC ENGINEER
TRAFFIC & MOBILITY CONSULTANTS, LLC
ENGINEER: AYMAN HASAN AS-SAIDI, P.E.
3101 MAGUIRE BOULEVARD, SUITE 265
ORLANDO, FLORIDA 32803
PHONE: (407) 531-5332
EMAIL: AYMANA@TRAFFICMOBILITY.COM

UTILITY PROVIDERS

WATER/SEWER/RECLAIMED:
CITY OF APOPKA
748 E. CLEVELAND STREET
APOPKA, FLORIDA 32703
CONTACT: DIANA ALMODOVAR P.E.
PHONE: (407) 703-1731

SOLID WASTE COLLECTION:
CITY OF APOPKA
748 EAST CLEVELAND STREET
APOPKA, FLORIDA 32703
PHONE: (407) 703-1731

CABLE:
CHARTER COMMUNICATIONS
(A.K.A. SPECTRUM)
3767 ALL AMERICAN BOULEVARD
ORLANDO, FLORIDA 32810
CONTACT: TRACEY DOMOSTOY
PHONE: (407) 532-8509

TELEPHONE/FIBER:
CENTURY LINK
33 NORTH MAIN STREET, ROOM 144
WINTER GARDEN, FLORIDA 34787
CONTACT: BILLY HAGER
PHONE: (407) 814-5329

GAS
LAKE APOPKA NATURAL GAS DISTRICT
1320 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
CONTACT: MINGO COLON
PHONE: (407) 656-2734

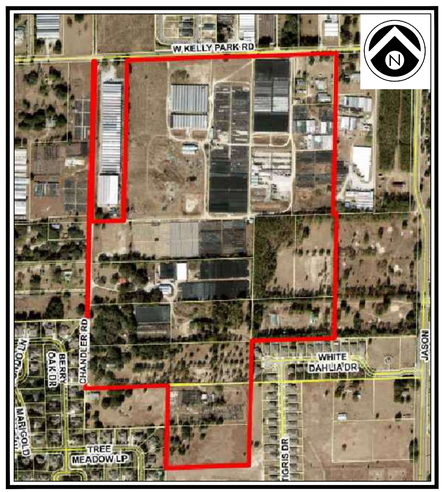
POWER:
DUKE ENERGY
3250 BONNETT CREEK ROAD
PO BOX 10000
LAKE BUENA VISTA, FLORIDA 32830
CONTACT: JENNIFER NAZARIAN
PHONE: (407) 938-6611

SHEET INDEX

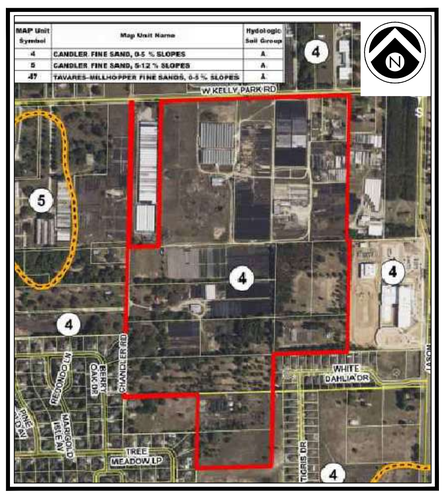
SHEET NO.	SHEET TITLE
	COVER
C1.0	GENERAL NOTES
C1.1	ABBREVIATIONS & SYMBOLS
C2.0	GEOMETRY PLAN
C2.1	GEOMETRY PLAN
C3.0	UTILITY NOTES
C3.1	UTILITY PLAN
C3.2	UTILITY PLAN
C4.0	DRAINAGE PLAN
C4.1	DRAINAGE PLAN
C5.0	PAVING & GRADING PLAN
C5.1	PAVING & GRADING PLAN
C6.0	CIVIL DETAILS
C7.0	UTILITY DETAILS
C8.0	DRAINAGE DETAILS
	LANDSCAPE COVER
K-100	KEY SHEET
L-001	AMENITY LANDSCAPE SCHEDULE & DETAILS
L-002	PARK LANDSCAPE SCHEDULE & DETAILS
L-101	AMENITY LANDSCAPE PLAN
L-102	PARK LANDSCAPE PLAN
H-201	AMENITY AREA HARDSCAPE PLAN
H-202	PARK AREA HARDSCAPE PLAN
H-203	PARK AREA DETAILS & ELEVATIONS
I-001	AMENITY IRRIGATION SCHEDULE & DETAILS
I-002	PARK IRRIGATION SCHEDULE & DETAILS
I-301	AMENITY IRRIGATION PLAN
I-302	PARK IRRIGATION PLAN



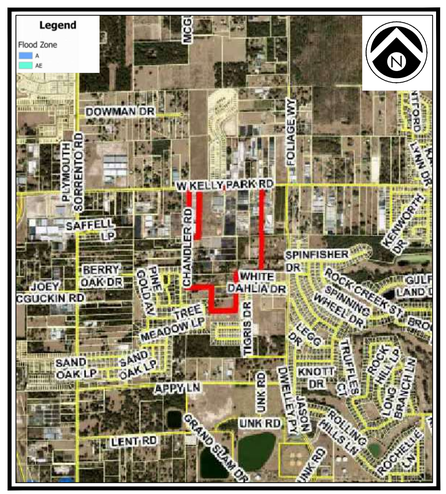
VICINITY MAP
SCALE: 1" = 2,000'



AERIAL MAP
SCALE: 1" = 500'



SOILS MAP
SCALE: 1" = 500'



FEMA FLOOD MAP
SCALE: 1" = 2,000'

Call 48 hours before you dig
It's the Law! 1-800-432-4770
Sunshine State One Call of Florida, Inc.

1828 ENGINEERING

2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228

BOARD OF PROFESSIONAL ENGINEERING REGISTRY
NO. 39060

PERMITS REQUIRED

AGENCY	PERMIT TYPE	DATE APPLIED	DATE APPROVED	APPROVAL NO.
CITY OF APOPKA	BUILDING PERMIT			

REV.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

OVIDIO SALVADOR SANCHEZ LICENSE No. 86492 STATE OF FLORIDA PROFESSIONAL ENGINEER
Ovidio Sanchez
6/2/26
This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\COVER SHEET.dwg Plotted: 6/2/2026 By:osanchez

GENERAL NOTES

1. UNLESS OTHERWISE SPECIFIED, ALL WORK SHALL BE PERFORMED CONSISTENT WITH THE FOLLOWING SPECIFICATIONS:
   - CITY OF APOPKA, FLORIDA
   - ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
   - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
   - NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
2. THE GEOTECHNICAL REPORT SHALL BE REVIEWED BY THE CONTRACTOR, AND THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE, INCLUDING ALL SURFACE AND SUBSURFACE CONDITIONS, THE WORK REQUIRED, AND ALL OTHER CONDITIONS THAT MAY AFFECT THE SUCCESSFUL COMPLETION OF THE JOB PRIOR TO COMMENCEMENT OF WORK.
3. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND PERMIT CONDITIONS BEARING ON THE CONDUCT OF THE WORK, AS DRAWN AND SPECIFIED. IF THE CONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT VARIANCE THEREWITH, HE SHALL PROMPTLY NOTIFY THE ENGINEER, IN WRITING, AND ANY NECESSARY CHANGES SHALL BE ADJUSTED, AS PROVIDED IN THE AGREEMENT FOR CHANGES IN THE WORK.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER AND THE ENGINEER FOR THE ACTS AND OMISSIONS OF CONTRACTOR'S EMPLOYEES AND ALL HIS SUBCONTRACTORS AND THEIR AGENTS AND EMPLOYEES AND OTHER PERSONS PERFORMING ANY OF THE WORK UNDER A CONTRACT WITH THE CONTRACTOR.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS WITH GOVERNMENTAL DEPARTMENTS, PUBLIC UTILITIES, PUBLIC CARRIERS, SERVICE COMPANIES, AND CORPORATIONS OWNING OR CONTROLLING ROADWAYS, RAILWAYS, WATER, SEWER, GAS, ELECTRICAL, TELEPHONE, AND TELEGRAPH FACILITIES SUCH AS PAVEMENTS, TRACKS, PIPING, WIRES, CABLES, CONDUITS, POLES, GUYS, OR OTHER SIMILAR FACILITIES, INCLUDING INCIDENTAL STRUCTURES CONNECTED THEREWITH THAT ARE ENCOUNTERED IN THE WORK IN ORDER THAT SUCH ITEMS MAY BE PROPERLY SUPPORTED, PROTECTED OR LOCATED.
6. UNLESS OTHERWISE SPECIFIED IN THE GENERAL CONDITIONS, ALL CONSTRUCTION IS TO BE GOVERNED BY THE PLANS, APPLICABLE PERMITS, AND SPECIFICATIONS HEREIN, AND ALL APPLICABLE FEDERAL, STATE AND LOCAL BUILDING AND SAFETY CODES, LAWS AND ORDINANCES.
7. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC OR UTILITY RIGHT-OF-WAY, CONTRACTOR SHALL OBTAIN AUTHORIZATION AND PERMIT FROM JURISDICTION RESPONSIBLE FOR SUCH RIGHT-OF-WAY. IN ADDITION, CONTRACTOR SHALL OBTAIN GAS I.D. NUMBER FROM LOCAL GAS COMPANY AND NOTIFY SUNSHINE STATE ONE-CALL UTILITY NOTIFICATION CENTER AT 1-800-432-4770 AT LEAST 48 HOURS PRIOR TO START OF WORK.
8. PRIOR TO PERFORMING ANY WORK WITHIN ANY PUBLIC RIGHT-OF-WAY, CONTRACTOR SHALL DEVELOP AND IMPLEMENT A TRAFFIC CONTROL PLAN CONSISTENT WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, AND SUBMIT TO THE COUNTY ENGINEER FOR APPROVAL.
9. IN THE EVENT THE CONTRACTOR DISCOVERS ANY ERRORS OR OMISSIONS IN THE PLANS HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND/OR OWNER OR OWNER'S AGENT.
10. CONTRACTOR SHALL PRESERVE AND PROTECT ALL PERMANENT REFERENCE MONUMENTS, PERMANENT CONTROL POINTS, PERMANENT BENCH MARKS AND PROPERTY CORNERS. IN THE EVENT THE MONUMENTS, POINTS OR MARKERS ARE DISTURBED THE CONTRACTOR SHALL EMPLOY A FLORIDA REGISTERED LAND SURVEYOR TO RESET OR REPLACE THEM.
11. THE OWNER, OWNER'S AGENT AND INSPECTORS OF APPLICABLE GOVERNMENT JURISDICTIONS, SHALL AT ALL TIMES HAVE ACCESS TO THE WORK WHEREVER AND WHENEVER IT IS IN PREPARATION OR PROGRESS; AND THE CONTRACTOR SHALL PROVIDE PROPER FACILITIES FOR SUCH ACCESS AND FOR THE INSPECTION.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO TAKE ALL REASONABLE AND PRUDENT PRECAUTIONS TO INSURE THAT ALL COMPLETED WORK, MATERIALS AND EQUIPMENT STORED ON SITE ARE SAFE AND SECURED FROM UNAUTHORIZED ACCESS, USE, THEFT, OR VANDALISM. SUCH PRECAUTIONS MAY INCLUDE INSTALLATION OF SIGNS, FENCES, OR POSTING OF SECURITY GUARDS.
13. CONTRACTOR SHALL, AT ALL TIMES, UTILIZE ALL NORMALLY ACCEPTED AND REASONABLY EXPECTED SAFETY PRACTICES AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES AND GUIDELINES PERTAINING TO SAFE UTILIZATION OF EQUIPMENT OR MATERIALS AS PUBLISHED BY THEIR MANUFACTURER'S.
14. PRIOR TO INITIATING ANY EXCAVATION (INCLUDING BUT NOT LIMITED TO TUNNELS, DITCHES, STORM WATER PONDS, CANALS, ARTIFICIAL LAKES) CONTRACTOR SHALL INSTALL FENCES AND/OR TAKE ALL OTHER REASONABLE AND PRUDENT STEPS TO INSURE THAT ACCESS TO EXCAVATION BY UNAUTHORIZED PERSONNEL IS PREVENTED.
15. CONTRACTOR SHALL COMPLY IN EVERY RESPECT WITH THE PROVISIONS OF THE FLORIDA STATE TRENCH SAFETY ACT.
16. THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE ALL REASONABLE PROTECTION TO PREVENT DAMAGE, INJURY OR LOSS TO:
    A. ALL EMPLOYEES ON THE WORK AND ALL OTHER PERSONS WHO MAY BE AFFECTED THEREBY;
    B. ALL THE WORK AND ALL MATERIALS AND EQUIPMENT TO BE INCORPORATED THEREIN, WHETHER IN STORAGE ON OR OFF THE SITE, UNDER THE CARE, CUSTODY OR CONTROL OF THE CONTRACTOR OR ANY OF ITS SUBCONTRACTORS;
    C. OTHER PROPERTY AT THE SITE OR ADJACENT THERETO, INCLUDING TREES, SHRUBS, LAWNS, WALKS, PAVEMENTS, ROADWAY, STRUCTURES AND UTILITIES NOT DESIGNATED FOR DEMOLITION IN THE COURSE OF CONSTRUCTION.
17. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC, QUASI PUBLIC OR OTHER AUTHORITY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY OR FOR THEIR PROTECTION AGAINST DAMAGE, INJURY OR LOSS, OR DESIGNED TO PROTECT THE ENVIRONMENT. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY EXISTING CONDITIONS AND PROGRESS OF THE WORK, ALL REASONABLE SAFEGUARDS FOR SAFETY AND PROTECTION, INCLUDING POSTING DANGER SIGNS AND OTHER WARNINGS AGAINST HAZARDS, PROMULGATING SAFETY REGULATIONS AND NOTIFYING OWNERS AND USERS OF ADJACENT UTILITIES OF THE EXISTENCE OF HAZARDS AND OF THE SAFETY REGULATIONS.
18. ALL DAMAGE OR LOSS TO ANY PROPERTY CAUSED IN WHOLE OR IN PART BY THE CONTRACTOR, A SUBCONTRACTOR, OR BY ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, SHALL BE REMEDIED BY THE CONTRACTOR, EXCEPT DAMAGE OR LOSS PROPERLY ATTRIBUTABLE SOLELY TO THE ACTS OR OMISSIONS OF THE OWNER, OR THE ENGINEER OR ANYONE EMPLOYED BY THEM, OR FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, AND NOT PROPERLY ATTRIBUTABLE IN WHOLE OR IN PART, TO THE FAULT OR NEGLIGENCE OF THE CONTRACTOR.
19. THOSE PARTS OF WORK IN PLACE WHICH ARE SUBJECT TO DAMAGE BECAUSE OF OPERATIONS BEING CARRIED ON ADJACENT THERETO SHALL BE COVERED, BOARDED UP OR SUBSTANTIALLY ENCLOSED WITH ADEQUATE PROTECTION BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
20. UNTIL FINAL ACCEPTANCE OF THE WORK BY OWNER, THE CONTRACTOR SHALL HAVE THE CHARGE AND CARE OF AND SHALL BEAR THE RISK OF INJURY OR DAMAGE, LOSS OR EXPENSE TO ANY PART THEREOF, OR TO ANY MATERIALS STORED ON SITE, BY THE ACTION OF THE ELEMENTS OR FROM ANY OTHER CAUSE WHETHER ARISING FROM THE EXECUTION OR NON-EXECUTION OF THE WORK. THE CONTRACTOR SHALL REBUILD, REPAIR, RESTORE AND MAKE GOOD ALL INJURIES OR DAMAGES TO ANY PORTION OF THE WORK OCCASIONED BY ANY OF THE ABOVE CAUSES BEFORE FINAL ACCEPTANCE AND SHALL BEAR THE EXPENSES THEREOF.
21. ADEQUATE TRAFFIC CONTROL, BARRICADES AND FLAGMAN SERVICES SHALL BE FURNISHED AND MAINTAINED BY THE CONTRACTOR AT ALL POINTS WHERE CONVEYING EQUIPMENT ENGAGED ON THE WORK REGULARLY ENTERS ONTO OR CROSSES TRAFFIC-CARRYING ROADS.
22. THE CONTRACTOR SHALL COMPLY IN EVERY RESPECT WITH THE FEDERAL OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970 AND ALL RULES AND REGULATIONS NOW OR HEREAFTER IN EFFECT UNDER SAID ACT, AND THE CONTRACTOR FURTHER AGREES TO COMPLY WITH ANY AND ALL APPLICABLE STATE LAWS AND REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH.
23. CONTRACTOR AND ITS SUBCONTRACTORS SHALL USE, HANDLE, TRANSPORT, AND DISPOSE OF ALL MATERIALS (HAZARDOUS OR OTHERWISE) IN COMPLIANCE WITH ALL PRESENT FEDERAL, STATE AND LOCAL ENVIRONMENTAL, HEALTH OR SAFETY LAW, INCLUDING, BUT NOT LIMITED TO, ALL SUCH STATUTES, REGULATIONS, RULES, ORDINANCES, CODES, AND RULES OF COMMON LAW.
24. CONTRACTOR FURTHER AGREES THAT CONTRACTOR AND ITS SUBCONTRACTORS SHALL NOT CAUSE THE DISCHARGE, RELEASE OR DISPOSAL OF ANY HAZARDOUS MATERIAL CREATED BY ITS WORK ON OR ABOUT THE JOB SITE. IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE, CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.
25. THE CONTRACTOR SHALL PROTECT AND KEEP OWNER (INCLUDING THEIR AGENTS AND EMPLOYEES) FREE AND HARMLESS FROM ANY AND ALL LIABILITY, PUBLIC OR PRIVATE, PENALTIES, CONTRACTUAL OR OTHERWISE, LOSSES, DAMAGES, COSTS, ATTORNEY'S FEES, EXPENSES, CAUSES OF ACTION, CLAIMS OR JUDGMENTS RESULTING FROM THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AS AMENDED OR ANY RULE OR REGULATION PROMULGATED THEREUNDER OR OF ANY STATE LAWS OR REGULATIONS PERTAINING TO JOB SAFETY AND HEALTH ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, AND CONTRACTOR SHALL INDEMNIFY OWNER FROM ANY SUCH CLAIMS, PENALTIES, SUITS OR ACTIONS, PUBLIC OR PRIVATE, ADMINISTRATIVE OR JUDICIAL, INCLUDING ATTORNEY'S FEES PAID OR INCURRED BY OR ON BEHALF OF OWNER, JOINTLY OR SEVERALLY, AND/OR THEIR AGENTS AND EMPLOYEES. THE CONTRACTOR FURTHER AGREES, IN THE EVENT OF A CLAIMED VIOLATION OF ANY FEDERAL OR STATE SAFETY AND HEALTH LAW OR REGULATION ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF WORK OR WORK TO BE PERFORMED UNDER THIS CONTRACT, OWNER MAY IMMEDIATELY TAKE WHATEVER ACTION IS DEEMED NECESSARY BY OWNER TO REMEDY THE CLAIMED VIOLATION. ANY AND ALL COSTS OR EXPENSES PAID OR INCURRED BY OWNER IN TAKING SUCH ACTION SHALL BE BORNE BY CONTRACTOR, AND CONTRACTOR AGREES TO PROTECT, HOLD HARMLESS AND INDEMNIFY OWNER AGAINST ANY AND ALL SUCH COSTS OR EXPENSES.
26. CONTRACTOR AND ITS SUBCONTRACTORS SHALL, UPON COMPLETION OF PERFORMANCE OF ALL DUTIES UNDER THIS CONTRACT, REMOVE ALL SUPPLIES, MATERIALS, AND WASTE CONTAINING AND HAZARDOUS MATERIAL FROM THE JOB SITE. CONTRACTOR SHALL BEAR FULL FINANCIAL RESPONSIBILITY, AS BETWEEN THE PARTIES OF THIS CONTRACT, FOR THE COMPLIANCE OF CONTRACTOR AND ITS SUBCONTRACTORS WITH THE PROVISIONS OF THIS CONTRACT.
27. CONTRACTOR AGREES TO INDEMNIFY, DEFEND, PROTECT AND HOLD THE OWNER HARMLESS FROM AND AGAINST ANY CLAIMS INCLUDING, WITHOUT LIMITATION, ACTUAL ATTORNEY'S FEES AND ANY COSTS OF INVESTIGATION, SOILS TESTING, GOVERNMENTAL APPROVALS, REMEDIATION AND CLEANUP ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE FAILURE OF CONTRACTOR OR ITS SUBCONTRACTORS, OR THEIR AGENTS, EMPLOYEES, OFFICERS, OR REPRESENTATIVES, TO COMPLY WITH THE TERMS OF THESE CONSTRUCTION DOCUMENTS.
28. SHOULD CONTRACTOR OR ITS SUBCONTRACTORS DISCHARGE, RELEASE OR DISPOSE OF ANY HAZARDOUS MATERIAL ON OR ABOUT THE JOB SITE IN VIOLATION OF THESE CONSTRUCTION DOCUMENTS, CONTRACTOR SHALL IMMEDIATELY SO INFORM OWNER & ENGINEER IN WRITING. IN THE EVENT OF ANY SPILL, RELEASE OR ANY OTHER REPORTABLE OCCURRENCE, CONTRACTOR SHALL NOTIFY THE APPROPRIATE GOVERNMENTAL AGENCY, OWNER & ENGINEER AND SHALL TAKE SUCH ACTION AS MAY BE NECESSARY TO MINIMIZE THE DELETERIOUS EFFECT OF SUCH SPILL ON PERSONS OR PROPERTY.
29. IN THE EVENT CONTRACTOR OR ITS SUBCONTRACTORS ENCOUNTER ON THE PREMISES ANY PIPELINE, UNDERGROUND STORAGE TANK OR OTHER CONTAINER, OF ANY KIND, THAT MAY CONTAIN A HAZARDOUS MATERIAL, OR ENCOUNTER MATERIAL REASONABLY BELIEVED TO BE A HAZARDOUS MATERIAL, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA AFFECTED AND REPORT THE CONDITION TO OWNER AND/OR ENGINEER IN WRITING.
30. "HAZARDOUS MATERIAL" MEANS ANY SUBSTANCE: (A) THE PRESENCE OF WHICH REQUIRES INVESTIGATION OR REMEDIATION UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, ORDINANCE, RULE, CODE, ORDER, ACTION, POLICY OR COMMON LAW, OR (B) WHICH IS OR BECOMES DEFINED AS A "HAZARDOUS WASTE," "HAZARDOUS SUBSTANCE," POLLUTANT OR CONTAMINANT UNDER ANY PRESENT FEDERAL, STATE OR LOCAL STATUTE, REGULATION, RULE OR ORDINANCE OR AMENDMENTS THERETO INCLUDING, WITHOUT LIMITATION, THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (42 U.S.C. SECTIONS 9601 ET SEQ.) AND/OR THE RESOURCE CONSERVATION AND RECOVERY ACT (42 U.S.C. SECTIONS 6901 ET SEQ.), OR (C) WHICH IS TOXIC, EXPLOSIVE, CORROSIVE, FLAMMABLE, INFECTIOUS, RADIOACTIVE, CARCINOGENIC, MUTAGENIC, OR OTHERWISE HAZARDOUS AND IS REGULATED BY ANY GOVERNMENTAL AUTHORITY, AGENCY, DEPARTMENT, COMMISSION, BOARD, AGENCY OR INSTRUMENTALITY OF THE UNITED STATES, THE STATE IN WHICH THE PREMISES ARE LOCATED OR ANY POLITICAL SUBDIVISION THEREOF, OR (D) THE PRESENCE OF WHICH ON THE PREMISES CAUSES OR THREATENS TO CAUSE A NUISANCE UPON THE PREMISES OR TO ADJACENT PROPERTIES OR POSES OR THREATENS TO POSE A HAZARD TO THE HEALTH OR SAFETY OF PERSONS ON OR ABOUT THE PREMISES, OR (E) WHICH CONTAINS GASOLINE, DIESEL FUEL OR OTHER PETROLEUM HYDROCARBONS, OR (F) WHICH CONTAINS POLYCHLORINATED BIPHENYLS (PCBS), ASBESTOS, LEAD OR UREA FORMALDEHYDE FOAM INSULATION.
31. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AS TO SIZE, LOCATION, AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL CONFLICTS, DEVIATIONS OR OMISSIONS TO THESE CONSTRUCTION DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
32. IF ANY TESTING, INSPECTION OR APPROVAL REVEAL DEFECTIVE WORK, CONTRACTOR SHALL NOT BE ALLOWED TO RECEIVE ANY ASSOCIATED COSTS AND THE OWNER SHALL BE ENTITLED TO DEDUCT FROM THE CONTRACT PRICE, BY ISSUING A CHANGE ORDER, OWNER'S COSTS ARISING OUT OF THE DEFECTIVE WORK, INCLUDING COSTS OF REPEATED PROCEDURES, COMPENSATION FOR ENGINEER'S AND DESIGN ENGINEER'S SERVICES AND ALL OTHER RELATED COSTS.

ADDITIONAL NOTES

1. BEARINGS SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLAN COORDINATE SYSTEM, EAST ZONE. (NAD 83, 1990 ADJUSTMENT) AS DETERMINED FROM GLOBAL POSITIONING SYSTEM (GPS)
2. ACCORDING TO THE FLOOD INSURNACE RATE MAP NO. 12097C0000 G DATED JUNE 18, 2013, THE LAND AND THE IMPROVEMENTS AS SHOWN HEREON ARE NOT WITHIN A 100-YEAR FLOOD HAZARD ZONE. THE LAND IS IN ZONE "X".
3. ELEVATIONS SHOWN HEREON ARE BASED ON N.A.V.D. 1988 DATUM.

HANDICAP ACCESSIBILITY NOTES:

1. ALL CONSTRUCTION MUST MEET OR EXCEED ALL REQUIREMENTS AS OUTLINED IN THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE FLORIDA ACCESSIBILITY CODE, MOST RECENT EDITIONS. BOTTOM OF CURB RAMP ELEVATION (B.O. RAMP) IS RELATIVE TO EACH CURB RAMP CONDITION. ACTUAL ELEVATIONS SHALL BE BASED ON EXISTING GRADE OF CURB FLOW LINE AT THE B.O. RAMPS.
2. TOP OF CURB ELEVATION ADJACENT TO B.O. RAMP = 0.50 FT. MAX. UNLESS OTHERWISE NOTED.
3. ADA REQUIREMENTS SUPERSEDE SPOT GRADES AT LOT LINES. CONTRACTOR TO CUT BACK SLOPE AT 3:1 OR FLATTER AS NEEDED FOR RAMP AND SIDEWALK CONNECTION.
4. REFER TO PLAN SHEETS AND SECTIONS FOR LOCATIONS AND SIDEWALK WIDTHS.
5. THE DETECTABLE WARNING STRIP SHALL CONSIST OF A 24 INCH WIDE TACTILE PATTERN OF RAISED TRUNCATED DOMES (ALIGNED PATTERN). DOMES SHALL HAVE A DIAMETER OF 0.9 INCH, A HEIGHT OF 0.2 INCH, AND A CENTER TO CENTER SPACING OF 2.35 INCHES. THE RAMP DETECTABLE WARNING STRIP SHALL BE CONTRASTING IN COLOR. THE MATERIAL USED TO PROVIDE CONTRAST SHALL CONTRAST BY AT LEAST 70%.
6. THE CROSS SLOPE OF RAMP SURFACES AND ADJACENT STREET GRADES SHALL BE NO MORE THAN 1:50 OR 2% MAXIMUM.
7. CURB RAMPS CONSTRUCTED BY THE CONTRACTOR SHALL MEET ALL CURRENT APPLICABLE A.D.A. REQUIREMENTS AND SHALL HAVE DETECTABLE WARNING COMPLYING WITH A.D.A. REQUIREMENTS. ACCESSIBILITY ROUTES SHALL MEET ALL APPLICABLE A.D.A. REQUIREMENTS.
8. CONTRACTOR TO REFER TO CITY OF APOPKA DETAILS AS NEEDED.
9. DRIVEWAY/ROADWAY CROSS SLOPES AT CROSSWALKS SHALL BE MAXIMUM 2% PER ADA REQUIREMENTS.
10. SIDEWALK CROSS SLOPES SHALL BE MAXIMUM 2% PER ADA REQUIREMENTS.
11. CURB RAMP FLARES & LANDINGS SHALL MEET ADA REQUIREMENTS.
12. ACCESSIBLE ROUTE WITH RUNNING SLOPES GREATER THAN 1:20 IS A RAMP AND SHALL COMPLY WITH ADA RAMP REQUIREMENTS.
13. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO MEET ALL CURRENT ADA STANDARDS. CONTRACTOR SHALL REFER TO FDOT STANDARDS. (INDEX 304, MOST CURRENT EDITION)

RECORD DRAWING AS-BUILT REQUIREMENTS:

AS-BUILT DRAWINGS SHALL BE PREPARED BY AND CERTIFIED (SIGNED AND SEALED) BY A REGISTERED SURVEYOR, AND SHALL BE PROVIDED TO THE ENGINEER OF RECORD UPON COMPLETION OF THE PROJECT SITE IMPROVEMENTS A MINIMUM OF 1 WEEK PRIOR TO CONTRACTORS ATTEMPT FOR FINAL CERTIFICATE OF OCCUPANCY (CO). AS-BUILT DRAWINGS SHALL REFLECT ANY CHANGES TO THE IMPROVEMENTS MADE DURING CONSTRUCTION AND MUST MEET THE MINIMUM REQUIREMENTS OF ALL REGULATORY AGENCIES HAVING JURISDICTION AS WELL AS THE CRITERIA OUTLINED BELOW. BOTH THE ORIGINAL DESIGN AND REVISED AS-BUILT DATA, AS APPLICABLE, MUST BE CLEARLY SHOWN. THE AS-BUILT DRAWINGS MUST BE CLEARLY LABELED AS AS-BUILT OR RECORD DRAWING. THE FOLLOWING INFORMATION, AT A MINIMUM, SHALL BE CERTIFIED ON THE AS-BUILT DRAWINGS:

WATER DISTRIBUTION SYSTEM:

A. LOCATION AND DIMENSIONS OF PIPES, VALVES, FITTINGS, CHANGE OF DIRECTION, AND OTHER ASSOCIATED FACILITIES.

WASTEWATER COLLECTION/TRANSMISSION SYSTEM:

A. LOCATION, DIMENSION, AND INVERT ELEVATIONS OF PIPES, MANHOLES (INCLUDING RIM ELEVATION), LIFTSTATION, FORCEMAIN, FITTINGS, CHANGE IN DIRECTION AND OTHER ASSOCIATED FACILITIES.

PAVING AND DRAINAGE SYSTEM:

A. DIMENSIONS AND ELEVATIONS OF ALL DISCHARGE STRUCTURES INCLUDING ALL WEIRS, SLOTS, GATES, PIPES, AND SKIMMERS;
B. LOCATIONS, DIMENSIONS, AND ELEVATIONS OF ALL FILTER, EXFILTRATION, OR UNDERDRAIN SYSTEMS INCLUDING CLEANOUTS, PIPES, CONNECTIONS TO CONTROL STRUCTURES, AND POINTS OF DISCHARGE TO THE RECEIVING WATERS;
C. DIMENSIONS, ELEVATIONS, CONTOURS, OR CROSS-SECTIONS OF ALL STORMWATER TREATMENT POND STORAGE AREAS SUFFICIENT TO DETERMINE STAGE-STORAGE RELATIONSHIPS OF THE STORAGE AREA, AND THE POND DEPTH AND VOLUME BELOW THE CONTROL WATER ELEVATION FOR NORMALLY WET SYSTEMS;
D. DIMENSIONS, ELEVATIONS, CONTOURS, FINAL GRADES, OR CROSS-SECTIONS OF THE DRAINAGE SYSTEM IMPROVEMENTS TO DETERMINE FLOW DIRECTIONS AND CONVEYANCE OF RUNOFF TO THE TREATMENT SYSTEM;
E. DIMENSIONS, ELEVATIONS, CONTOURS, FINAL GRADES, OR CROSS-SECTIONS OF ALL CONVEYANCE SYSTEMS UTILIZED TO CONVEY OFF-SITE RUNOFF AROUND THE SYSTEM;
F. EXISTING WATER ELEVATION OF SURFACE WATERS AND THE DATE DETERMINED;
G. ELEVATION AND LOCATION OF BENCHMARK'S FOR THE SURVEY.

ADA FACILITIES:

A. ELEVATIONS AT THE FOUR CORNERS OF ALL HANDICAP PARKING SPACES AND ADJACENT LOADING AISLES.
B. ELEVATIONS AND LOCATIONS FOR ALL ACCESSIBLE RAMPS WHICH ADEQUATELY REFLECT THE BUILT SLOPES.
C. ELEVATIONS AND LOCATIONS ALONG THE PATHS OF CONVEYANCE FOR PEDESTRIAN TRAFFIC AND ALL ADA ACCESSIBLE ROUTES EVERY 25 FT. WHICH ADEQUATELY REFLECT THE SLOPE AND CROSS SLOPE.

Call 48 hours before you dig
It's the Law! 1-800-432-4770
Sunshine State One Call of Florida, Inc.

REV.	DATE	DESCRIPTION	BY

1828 ENGINEERING
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 538-2228
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

GENERAL NOTES
CONSTRUCTION SITE PLAN

SPRINGHAVEN - AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN: K. GOMEZ
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 5/12/2026

SCALE: N.T.S.
PROJECT: ASH-014
SHEET: C1.0

OLDIS SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER
6/2/26

This item has been digitally signed and sealed by Oldis S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\GENERAL NOTES.dwg Modified:5/12/2026 By:kgomez Plotted By:brian killela

ABBREVIATIONS

A	
A	AREA
AB	ANCHOR BOLT
ABD	ABANDON(ED)
AC	ACRE(S)
AC-FT	ACRE FOOT/FEET
ACP	ASBESTOS CEMENT PIPE
ADDL	ADDITIONAL
ADT	AVERAGE DAILY TRAFFIC
AL	ALUMINUM
ALT	ALTERNATE
AM	BEFORE NOON
AMP	AMPERE(S)
APPROX	APPROXIMATE
ARV	AIR RELEASE VALVE
ARVV	AIR RELEASE VACUUM VALVE
ASPH	ASPHALT
ASSY	ASSEMBLY
AVE	AVENUE
AVG	AVERAGE
AZ	AZIMUTH
B	
BFP	BACKFLOW PREVENTER
BL	BASELINE
BLDG	BUILDING
BLVD	BOULEVARD
BM	BENCH MARK
BND	BOUNDARY
BO	BLOWOFF
BOC	BACK OF CURB
BOT	BOTTOM
BRG	BEARING
BS	BOTTOM OF SLOPE
BV	BUTTERFLY VALVE
C	
CAP	CAPACITY
CB	CATCH BASIN
CC	CENTER TO CENTER
CEM	CEMENT
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
C&G	CURB AND GUTTER
CI	CAST IRON
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
C/L	CENTER LINE
CLP	CONCRETE LIGHT POLE
CLR	CLEAR/CLEARANCE
CLS	CLASS
CM	CONCRETE MONUMENT
CMP	CORRUGATED METAL PIPE
CMPA	CORRUGATED METAL PIPE ARCH
CND	CONDUIT
CO.	COUNTY
CO	CLEANOUT
COL	COLUMN
COMP	COMPLETE
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCT(ION)
CONT	CONTINUOUS
COORD	COORDINATE(S)
COR	CORNER
CPLG	COUPLING
CPP	CONCRETE POWER POLE
CS	CONTROL STRUCTURE
CTG	COATING
CTR	CENTER
CTV	CABLE TELEVISION
CULV	CULVERT
CY	CUBIC YARD
CYL	CYLINDER
D	
DBL	DOUBLE
DEG OR °	DEGREE
DEFL	DEFLECT(ION)
DEPT	DEPARTMENT
DET	DETAIL
DHWL	DESIGN HIGH WATER LEVEL
DI	DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DISCH	DISCHARGE
DIST	DISTANCE
DMH	DROP MANHOLE
DN	DOWN
DRN	DRAIN
DWG	DRAWING
DWY	DRIVEWAY
E	
E	EAST
EA	EACH
EC	EDGE OF CONCRETE
ED	ENERGY DISSIPATOR
EF	EACH FACE
EFF	EFFLUENT
EG	EXISTING GRADE
E/L	EASEMENT LINE
ELB	ELBOW
ELEC	ELECTRIC
ELEV	ELEVATION
ELLIP	ELLIPSE/ELLIPTICAL
ENC	ENCASEMENT
ENG	ENGINEER(ING)
EOP	EDGE OF PAVEMENT
EQ	EQUAL/EQUATION
EQUIP	EQUIPMENT
EQUIV	EQUIVALENT
ESMT	EASEMENT
EST	ESTIMATE
EW	EACH WAY
EWL	ENDWALL
EXC	EXCAVATE/EXCAVATION
EXIST	EXISTING
EXP	EXPAND/EXPANSION
EXT	EXTEND/EXTENSION

F	
F&C	FRAME AND COVER
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FDN	FOUNDATION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
F&I	FURNISH AND INSTALL
FIG	FIGURE
FIN	FINISHED
FIT	FITTING
FL	FENCE LINE
FLR	FLOOR
FLEX	FLEXIBLE
FLG	FLANGE
FM	FORCE MAIN
FND	FOUND
FPH	FEET PER HOUR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET/FOOT
FTG	FOOTING
G	
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GM	GAS MAIN
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GPS	GALLONS PER SECOND
GR	GUARD RAIL
GRD	GROUND/GRADE
GSP	GALVANIZED STEEL PIPE
GV	GATE VALVE
GV&B	GATE VALVE AND BOX
GW	GUY WIRE
GWT	GROUND WATER TABLE
H	
HB	HOSE BIBB
HDW	HARDWARE
HORIZ	HORIZONTAL
HP	HORSEPOWER
HR	HOUR
HT	HEIGHT
HW	HEADWALL
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
HYD	HYDRAULIC
I	
I-4	INTERSTATE HIGHWAY
IA	INTERSECTION ANGLE
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCHES
INL	INLET
INS	INSERT
INST	INSTALL
IP	IRON PIPE
IR	IRON ROD
INT	INTERSECT/INTERSECTION
INV	INVERT
J	
JB	JUNCTION BOX
JCT	JUNCTION
JST	JOIST
JT	JOINT
L	
L	LENGTH
LAT	LATITUDE
LATL	LATERAL
LB	POUND
LF	LINEAR FEET/FOOT
LG	LONG
LIM	LIMIT(S)
LP	LIGHT POLE
LONG	LONG
LT	LEFT
LWL	LOW WATER LEVEL
M	
MAINT	MAINTENANCE
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
ME	MITERED END
MFR	MANUFACTURER
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MHC	MANHOLE COVER
MHWL	MEAN HIGH WATER LEVEL
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MLP	METAL LIGHT POLE
MLWL	MEAN LOW WATER LEVEL
MON	MONUMENT
MPH	MILES PER HOUR
MSL	MEAN SEA LEVEL
MTG	MOUNTING
N	
N	NORTH
NA	NOT APPLICABLE
N&C	NAIL AND CAP
NE	NORTHEAST
NG	NATURAL GROUND
NIC	NOT IN CONTRACT
NO OR #	NUMBER
NOM	NOMINAL
NTP	NOTICE TO PROCEED
NTS	NOT TO SCALE
NW	NORTHWEST
NWL	NORMAL WATER LEVEL
O	
OC	ON CENTER
OD	OUTSIDE DIAMETER
OE	OR EQUAL
OPNG	OPENING
OPP	OPPOSITE
ORCP	OVAL REINFORCED CONCRETE PIPE
OS	OUTFALL STRUCTURE
OVFL	OVERFLOW
OVHD	OVERHEAD

P	
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PEP	POLYETHYLENE PIPE
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
P/L	PROPERTY LINE
POB	POINT OF BEGINNING
POJ	PUSH ON JOINT
POS	POINT OF SERVICE
PP	POWER POLE
PR	PHONE RISER
PRC	POINT OF REVERSE CURVATURE
PRESS	PRESSURE
PROJ	PROJECT
PROP	PROPOSED
PRVC	POINT OF REVERSE VERTICAL CURVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PWR	POWER
Q	
Q	FLOW RATE
R	
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RCPA	REINFORCED CONCRETE PIPE ARCH
RD	ROAD
RDY	ROADWAY
RED	REDUCER
REF	REFERENCE
REINF	REINFORCE(D)
REQD	REQUIRED
REV	REVISE/REVISION
RPM	REVOLUTIONS PER MINUTE
RR	RAILROAD
RT	RIGHT
RV	RELIEF VALVE
R/W	RIGHT-OF-WAY
RWM	REUSE WATER MAIN
S	
S	SOUTH
SAN	SANITARY SEWER
SB	SPLASH BLOCK
SCH	SCHEDULE
SD	SIDE DRAIN
SDN	SHELF DRAIN
SE	SOUTHEAST
SEC	SECONDS
SECT	SECTION
SH	SHEET
SHGWT	SEASONAL HIGH GROUND WATER TABLE
SIM	SIMILAR
S/L	SETBACK LINE
SL	SLOPE
SM	SHEET METAL
SPEC	SPECIFICATION(S)
SQ	SQUARE
SQ IN	SQUARE INCH(ES)
SQ FT	SQUARE FOOT/FEET
SQ YD	SQUARE YARD(S)
SR	STATE ROAD
SS	STAINLESS STEEL
ST	STREET
STA	STATION
STD	STANDARD
STL	STEEL
STR	STRUCTURE
STS	STORM SEWER
SUP	SUPPORT
SUSP	SUSPEND/SUSPENSION
SVC	SERVICE
SW	SOUTHWEST
SWK	SIDEWALK
SYM	SYMBOL(S)
SYMM	SYMMETRICAL
SYS	SYSTEM
T	
T	TANGENT
TB	TURFBLOCK
T&B	TOP AND BOTTOM
TBM	TEMPORARY BENCH MARK
TC	TIME OF CONCENTRATION
TD	TRENCH DRAIN
TDH	TOTAL DYNAMIC HEAD
TECH	TECHNICIAN/TECHNICAL
TEMP	TEMPORARY
TL	TERMINAL LAMPHOLE
TOB	TOP OF BANK
TOC	TOP OF CURB
TOS	TOE OF SLOPE
TOT	TOTAL
TS	TOP OF SLOPE
TWP	TOWNSHIP
TYP	TYPICAL
U	
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UTC	UNDERGROUND TELEPHONE CABLE
V	
VB	VALVE BOX
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VPC	VERTICAL POINT OF CURVE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	
W	WEST
W/	WITH
WM	WATER MAIN
W/O	WITHOUT
WP	WATER/WEATHER PROOF
WPP	WOOD POWER POLE
WS	WATER SURFACE
WSWT	WET SEASON WATER TABLE
WT	WEIGHT
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
Y	
YD	YARD
YR	YEAR
MISC	
&	AND
@	AT
Δ	DELTA

EXISTING SYMBOLS

LINES

- CENTER LINE
- CHAIN LINK FENCE
- CONTOUR
- EASEMENT
- FENCE
- GUARDRAIL
- EXISTING PLATS
- RETAINING WALL
- RIGHT-OF-WAY LINE
- SHORELINE
- SWALE
- SOIL BOUNDARY

SANITARY SEWER

- SANITARY SEWER LINE
- CLEANOUT
- FORCE MAIN
- MANHOLE

POTABLE WATER

- WATER MAIN
- EXISTING VALVE
- FIRE HYDRANT
- WATER METER

STORM DRAIN

- STORM SEWER
- CURB INLET
- MANHOLE
- MITERED END
- STORM INLET
- SPOT ELEVATION
- FDOT TYPE 1 INLET
- FDOT TYPE 2 INLET
- FDOT TYPE 3 INLET
- FDOT TYPE 4 INLET
- FDOT TYPE 5 INLET
- FDOT TYPE 6 INLET

HIGHWAY & UTILITIES

- BENCHMARK
- BOUND CORNER
- CONCRETE
- COUNTY ROADS
- INTERSTATE ROADS
- LIGHT POLE
- SIGN
- EDGE OF PAVEMENT W/O CURB
- STATE ROADS
- GUY POLE
- UTILITY POLE
- YARD LIGHT
- GAS MAIN
- OVER HEAD WIRE
- ELECTRIC CABLE OR CONDUIT, BURIED
- UNDERGROUND TELEPHONE CABLE
- EDGE OF PAVEMENT W/CURB

PROPOSED SYMBOLS

LINES

- PROPERTY BOUNDARY
- LOT LINE
- CENTER LINE
- EASEMENT
- BUILDING SETBACK LINE
- WETLAND LINE
- WETLAND BUFFER LINE
- FENCE
- SILT FENCE
- GUARDRAIL
- ENTRY WALL
- RETAINING WALL
- SWALE
- CONTOUR

SANITARY SEWER

100 LF OF 8" PVC @ 0.40%

- SANITARY PIPE
- CLEANOUT
- SINGLE SANITARY SERVICE
- DOUBLE SANITARY SERVICE
- MANHOLE
- FORCE MAIN
- PLUG VALVE

POTABLE WATER

- WATER MAIN
- FIRE MAIN
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE
- FIRE HYDRANT ASSEMBLY
- FIRE DEPARTMENT CONNECTION
- METER
- SAMPLE POINT

RECLAIMED WATER

- RECLAIMED WATER MAIN
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE

GENERIC UTILITIES

- 11 1/2° BEND
- 22 1/2° BEND
- 45° BEND
- 90° BEND
- TEE
- CROSS
- GATE VALVE
- REDUCER

STORM

100 LF OF 24" RCP @ 0.20%

- STORM PIPE
- DRAINAGE FLOW DIRECTION
- FDOT INLET TYPE 1
- FDOT INLET TYPE 2
- FDOT INLET TYPE 3
- FDOT INLET TYPE 4
- FDOT INLET TYPE 5
- FDOT INLET TYPE 6
- MANHOLE
- MITERED END SECTION
- STORM INLET

ROADWAY & GRADING

- CONCRETE
- BLDG OR STRUCTURE
- TYPE F CURB & GUTTER
- MIAMI CURB
- DETAIL REFERENCE (10 / C1.0)
- SPOT ELEVATION (×100.00)
- FINISHED FLOOR ELEVATION W/ FHA LOT TYPE (LOT TYPE "A" FFE=100.00)
- HANDICAP PARKING
- INTERSTATE ROADS (95)
- LIGHT POLE
- STATE ROADS (50)
- SIGN
- TRAFFIC FLOW PAVEMENT MARKING
- UTILITY POLE
- CROSS SECTION DETAIL (A A)

NOTES:
1. TREE TYPES SHALL BE REFERENCED BY LEGEND ON APPLICABLE DRAWING SHEETS.
2. EXISTING CONSTRUCTION FEATURES MAY BE SCREENED ON DRAWING SHEETS TO PROVIDE CLARITY.

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

BY	DESCRIPTION	REV.	DATE

1828 ENGINEERING
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 538-2228
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

ABBREVIATIONS & SYMBOLS
CONSTRUCTION SITE PLAN

SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

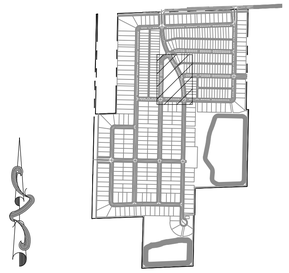
DRAWN: K. GOMEZ
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 4/29/2026

SCALE: N.T.S.
PROJECT: ASH-014
SHEET: C1.1

OMAR SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/2/26
PROFESSIONAL ENGINEER

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\ABBREVIATIONS & SYMBOLS.dwg Modified: 5/12/2026 By:kgomez Plotted By:brian killela

PLEASE REFER TO APPROVED CONSTRUCTION SITE PLAN FOR SPRINGHAVEN. SHOWN FOR REFERENCE PURPOSES ONLY.



KEY MAP

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.

5' SIDEWALK

DOG PARK (BY OTHERS)

MAIL KIOSK (BY OTHERS)

SIDEWALK ACCESSIBLE RAMP

LARGE DOG PARK

MAIL KIOSK

GATHERING AREA (BY OTHERS)

1' RIBBON CURB

PLAYGROUND (BY OTHERS)

TRACT "I" AMENITY/PARK 2.12 AC

SMALL DOG PARK

GATHERING AREA

PLAYGROUND

5' SIDEWALK

PICKLEBALL COURTS

PICKLEBALL COURTS (BY OTHERS)

10' UTILITY EASEMENT

STREET 'G'

STREET 'F'

STREET 'E'

STREET 'D'

TYPE F CURB (TYP.)

TRACT "HP" OPEN SPACE 0.04 AC

Call 48 hours before you dig

It's the Law!
1-800-432-4770

Sunshine State One Call of Florida, Inc.

BY	DESCRIPTION	REV.	DATE

1828 ENGINEERING

2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228

BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

GEOMETRY PLAN
CONSTRUCTION SITE PLAN

SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN:	DESIGNED:	CHECKED:	DATE:
K. GOMEZ	O. SANCHEZ	O. SANCHEZ	6/1/2026

SCALE	PROJECT	SHEET
1" = 20'	ASH-014	C2.0

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/2/26
PROFESSIONAL ENGINEER

The seal has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent.

Printed copies of this document are not considered signed and sealed and the digitally signature must be verified on any electronic copies.

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\GEOMETRY PLAN.dwg Modified:6/1/2026 By:osanchez Plotted By:brian killela

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\GEOMETRY PLAN.dwg Modified:6/1/2026 By:osanchez Plotted By:brian killela

20' DRAINAGE EASEMENT

TRACT "J" AMENITY/PARK 1.09 AC

PLEASE REFER TO APPROVED CONSTRUCTION SITE PLAN FOR SPRINGHAVEN. SHOWN FOR REFERENCE PURPOSES ONLY.

TYPE 'D' CURB 4/C6.0

CABANA (BY OTHERS)

HANDICAP STRIPING 10/C6.0

SIDEWALK ACCESSIBLE RAMP 6/C6.0

CABANA

POOL

POOL AND DECK (BY OTHERS)

ACCESSIBLE PARKING SIGN 9/C6.0

BIKE RACK (BY OTHERS)

POOL EQUIPMENT (BY OTHERS)

5' SIDEWALK 5/C6.0

7' MONOLITHIC SIDEWALK 11/C6.0

3/C6.0 DETECTABLE WARNINGS (TYP.)

1/C6.0 STOP BAR & STOP SIGN

VALLEY GUTTER (TYP.) 7/C6.0

CROSSWALK (TYP.) 2/C6.0

P.I. SIDEWALK

TYPE 'F' CURB

TYPE 'A' CURB

STREET 'F'

5' | 8' | 18' | 10' (TYP.) | 5' | 12' | 10' | 24' | 10' | 18' | 10' (TYP.) | 10' | 10'

S88°54'36"E 165.67'

S1°05'24"W 643.17'

S1°05'24"W 153.31'

S1°05'24"W 153.91'

S1°05'24"W 69.00'

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10 ft.

KEY MAP

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

REV.	DATE	DESCRIPTION	BY

1828 ENGINEERING
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

GEOMETRY PLAN
CONSTRUCTION SITE PLAN

SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN: K. GOMEZ
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/1/2026

SCALE 1" = 10'
PROJECT ASH-014
SHEET C2.1

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/2/26
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the digital signature must be verified on any electronic copies.

GENERAL UTILITY NOTES:

1. BACTERIOLOGICAL TESTS WITH CHLORINE RESIDUALS INDICATED (TAKEN ON TWO CONSECUTIVE DAYS) SHALL BE CONDUCTED AT EACH POTABLE WATER METER FOR EVERY BUILDING, AT EVERY WET-TAP CONNECTION AND EVERY LOCATION INDICATED WITHIN THESE PLANS. RESULTS OF THE BACTERIOLOGICAL TESTS SHALL BE PROVIDED TO THE ENGINEER OF RECORD IMMEDIATELY UPON COMPLETION. BACTERIOLOGICAL TEST RESULTS SHALL BE CONSIDERED UNACCEPTABLE IF THE TESTS WERE COMPLETED MORE THAN 30 DAYS BEFORE THE ENGINEER RECEIVED THE RESULTS.
2. ALL WATERMAINS SHALL BE INSTALLED A MINIMUM OF 36" BELOW FINISHED GRADE.
3. ALL WATERMAINS AND FIRELINES PIPES SHALL BE RESTRAINED VIA MECHANICAL JOINTS.
4. WATER MAIN PVC PIPES LESS THAN 4 INCHES MUST CONFORM TO THE SPECIFICATIONS OF ASTM 1785 (SCHEDULE 40, 80, 120) OR ASTM 2241 SDR21 AND MUST BEAR THE NSF LOGO ON EACH INSTALLED LENGTH.
5. UNDERGROUND MARKING TAPE FOR ALL SANITARY FORCEMAINS SHALL BE INSTALLED 4 TO 8 INCHES BELOW THE FINISHED GRADE SURFACE DIRECTLY OVER THE PIPELINE. MARKER TAPE SHALL BE MADE OF AN INERT POLYETHYLENE MATERIAL HAVING A MINIMUM THICKNESS OF 4 MILS AND BE COLOR CODED "SAFETY GREEN".
6. CONTRACTOR SHALL CONDUCT AND PROVIDE RESULTS IMMEDIATELY TO THE ENGINEER OF RECORD FOR PRESSURE AND LEAKAGE TESTS ON THE FORCE MAIN TRUNK LINE ONCE THE PRESSURE SEWER HAS BEEN INSTALLED AND PARTLY BACKFILLED. FINAL BACKFILL AND COMPACTION SHALL NOT COMMENCE UNTIL APPROVAL OF THE PRESSURE AND LEAKAGE TESTS HAS BEEN PROVIDED BY THE ENGINEER OF RECORD.
7. FOLLOWING SATISFACTORY PRESSURE TEST RESULTS, THE CONTRACTOR SHALL DISINFECT ALL SECTIONS OF THE WATER DISTRIBUTION SYSTEM, AND RECEIVE APPROVAL THEREOF FROM APPROPRIATE AGENCIES PRIOR TO PLACING THE SYSTEM INTO SERVICE.
8. FIRE HYDRANTS SHALL BE PLACED A MINIMUM OF 3 FT. AND A MAXIMUM OF 5 FT. FROM THE CURB OR PAVED ROAD SURFACE UNLESS OTHERWISE APPROVED. NO FENCE, TREE, POST, SHRUB, OR OTHER OBJECT WHICH COULD BLOCK THE HYDRANT FROM NORMAL VIEW OR OBSTRUCT THE HYDRANT'S USE SHALL BE LOCATED WITHIN FOUR (4) FEET OF THE HYDRANT. THE FOUR-AND-ONE-HALF INCH (4-1/2") LARGE VOLUME CONNECTION SHALL FACE THE NEAREST ROADWAY. THE CENTER OF THE STEAMER PORT SHALL BE 18 INCHES MINIMUM AND 24 INCHES MAXIMUM ABOVE FINISHED GRADE.
9. ALL FIRE HYDRANT LEADS SHALL HAVE AN INSIDE DIAMETER OF AT LEAST SIX INCHES AND INCLUDE AUXILARY VALVES.
10. WHEN NECESSARY, DEWATERING SHALL BE PROVIDED TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW MAIN BEING LAID.
11. ALL UTILITIES SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.
12. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO CITY OF WINTER PARK WITH A MINIMUM COMPACTION OF 98% IN PAVED AREAS AND 95% IN UNPAVED AREAS IN ACCORDANCE WITH AASHTO T-180 MODIFIED PROCTOR TEST.
13. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 12 INCHES ABOVE THE PIPE AND AT 12 INCHES VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET.
14. ALL WATER SERVICE ENDINGS SHALL BE MARKED WITH A 2" X 4" LUMBER (PRESSURE TREATED) EXTENDING 4 FEET ABOVE GRADE, WITH WATER SERVICES SECURED 12" MAXIMUM ABOVE THE GROUND.
15. ALL WATER VALVES, INCLUDING CONCRETE COLLAR (WITH DEBRIS CAP), SHALL BE ADJUSTED TO FINISHED GRADE AND THE VALVE BOX LID, PAINTED BLUE TO MAKE THEM PLAINLY VISIBLE.
16. UPON FINAL ACCEPTANCE OF NEW WATER SYSTEMS, WATER VALVES SHALL BE COMPLETELY OPENED BY PUBLIC UTILITIES PERSONNEL. AT NO TIME SHALL CONTRACTOR OPERATE ANY EXISTING VALVES WITHOUT CITY OF WINTER PARK INSPECTOR PRESENT.
17. ALL WATER MAINS SHALL BE NSF-APPROVED FOR POTABLE WATER USE.
18. PIPE USED IN WATER DISTRIBUTION SYSTEMS SHALL BE EITHER POLYVINYL CHLORIDE (PVC), OR DUCTILE IRON PIPE (DIP).

    (a) ALL PVC PIPE OF NOMINAL DIAMETER FOUR (4) INCHES THROUGH TWELVE (12) INCHES SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900, LATEST EDITION. THE PVC PIPE SHALL HAVE A MINIMUM WORKING PRESSURE RATING OF 150PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 18.
    (b) ALL DUCTILE IRON PIPE SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA A21.51/C151 AND HAVE A MINIMUM 350 PRESSURE CLASS RATING
19. PIPE USED IN GRAVITY SEWER CONSTRUCTION SHALL BE POLYVINYL CHLORIDE (PVC) OR DUCTILE IRON PIPE (DIP). WHERE REFERENCE IS MADE TO AN ASTM, ANSI, OR AASHTO DESIGNATION, IT SHALL BE THE LATEST REVISION.

    (a) PVC GRAVITY SEWER PIPE (4 INCH – 15 INCH), ASTM D3034, SDR 35 – UNIFORM MINIMUM "PIPE STIFFNESS" AT FIVE (5) PERCENT DEFLECTION SHALL BE 46PSI. THE JOINTS SHALL BE INTEGRAL BELL ELASTOMERIC GASKET JOINTS MANUFACTURED IN ACCORDANCE WITH ASTM D3212 AND ASTM F477. APPLICABLE UNI-BELL PLASTIC PIPE ASSOCIATION STANDARD IS UNI-B-4. ALL PVC PIPE SHALL BEAR THE NSF-DW SEAL AND BE GREEN IN OVERALL COLOR. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE THIRTEEN (13) FEET.
    (b) DUCTILE IRON PIPE SHALL CONFORM TO ANSI/AWWA A21.51/C151, CLASS THICKNESS DESIGNED PER ANSI/AWWA A21.50/C150, WITH MECHANICAL OR PUSH ON JOINTS. AN INTERIOR PROTECTIVE LINING OF COAL TAR EPOXY SHALL BE PROVIDED WITH A MINIMUM DRY THICKNESS OF 30 MILS. DUCTILE IRON GRAVITY SEWERS, WHERE REQUIRED BY CITY OF WINTER PARK BASED ON GEOTECHNICAL INVESTIGATIONS, SHALL BE WRAPPED WITH POLYETHYLENE FILM, AWWA C105. SEE APPENDIX C. THE MINIMUM STANDARD LENGTH OF PIPE SHALL BE EIGHTEEN (18) FEET.

WATER SYSTEM TESTING REQUIREMENTS:

1. THE CONTRACTOR SHALL PERFORM HYDROSTATIC TESTING OF ALL WATER DISTRIBUTION SYSTEMS, AS SET FORTH IN THE FOLLOWING AND SHALL CONDUCT SAID TESTS IN THE PRESENCE OF REPRESENTATIVES FROM CITY OF WINTER PARK AND/OR OTHER AUTHORIZED AGENCIES. THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCED NOTICE PRIOR TO TESTING OF THE WATER DISTRIBUTION SYSTEM.
2. ALL TESTING REQUIRED BY CITY OF WINTER PARK SHALL BE PAID FOR BY THE DEVELOPER / CONTRACTOR.
3. ALL PROPOSED WATER MAINS SHALL BE TESTED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.
4. PRIOR TO HYDROSTATIC TESTING A PRELIMINARY FLUSHING SHALL BE REQUIRED THROUGH FULL DIAMETER FLUSHING OR SWABBING. PRELIMINARY FLUSHING/SWABBING SHALL BE PERFORMED PER AWWA C651 STANDARD – "DISINFECTING WATER MAINS". ALL PIPING SHALL BE THOROUGHLY CLEANED AND FLUSHED PRIOR TO TESTING TO CLEAR THE LINES OF ALL FOREIGN MATTER. WHILE THE PIPING IS BEING FILLED WITH WATER, CARE SHALL BE EXERCISED TO PERMIT THE ESCAPE OF AIR FROM EXTREMITIES ALONG THE TEST SECTION.
5. HYDROSTATIC TESTING SHALL CONSIST OF PRESSURE TEST AND LEAKAGE TEST. PIPING AND APPURTENANCES TO BE TESTED SHALL BE WITHIN SECTIONS BETWEEN VALVES, NOT EXCEEDING 2,000 FEET, UNLESS ALTERNATE METHODS HAVE RECEIVED PRIOR APPROVAL FROM CITY OF WINTER PARK. TESTING SHALL NOT PROCEED UNTIL CONCRETE THRUST BLOCKS ARE IN PLACE AND CURED, OR OTHER RESTRAINING DEVICES INSTALLED.
6. HYDROSTATIC TESTING SHALL BE PERFORMED AT 150 POUNDS PER SQUARE INCH PRESSURE, UNLESS OTHERWISE APPROVED BY CITY OF WINTER PARK, FOR A PERIOD OF NOT LESS THAN TWO (2) HOURS.
7. THE ALLOWABLE RATE OF LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

WHERE:
L = ALLOWABLE LEAKAGE, IN GALLONS PER HOUR
S = LENGTH OF PIPE TESTED, IN FEET
D = NOMINAL DIAMETER OF PIPE, IN INCHES
P = AVERAGE TEST PRESSURE DURING THE LEAKAGE TEST, IN POUNDS PER SQUARE INCH (GAUGE)

8. SHOULD THE TEST FAIL, NECESSARY REPAIRS SHALL BE ACCOMPLISHED BY THE CONTRACTOR AND THE TEST REPEATED UNTIL WITHIN PASSING LIMITS. THE CONTRACTOR SHALL FURNISH ALL THE NECESSARY LABOR, PUMPS, GAUGES AND ALL OTHER ITEMS NECESSARY TO CONDUCT THE REQUIRED WATER DISTRIBUTION SYSTEM TESTING AND PERFORM NECESSARY REPAIRS.

SEWER SYSTEM TESTING REQUIREMENTS:

1. THE CONTRACTOR SHALL PERFORM TESTING OF ALL SANITARY SEWAGE GRAVITY COLLECTION SYSTEMS, AS SET FORTH IN THE FOLLOWING AND SHALL CONDUCT SAID TESTS IN THE PRESENCE OF REPRESENTATIVES FROM CITY OF WINTER PARK AND/OR OTHER AUTHORIZED AGENCIES. THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCED NOTICE PRIOR TO TESTING OF THE WASTEWATER DISTRIBUTION SYSTEM.
2. ALL TESTING REQUIRED BY CITY OF WINTER PARK SHALL BE PAID FOR BY THE DEVELOPER / CONTRACTOR.
3. GRAVITY MAINS SHALL BE INSPECTED WITH CCTV FOR ALIGNMENT, GRADE VARIATIONS, SEPARATED PIPES, LEAKS, DEFLECTION, CRACKED, BROKEN OR OTHERWISE DEFECTIVE PIPE TO ENSURE OVERALL PIPE INTEGRITY. THE APPROVED CCTV INSPECTION CONTRACTOR SHALL SUBMIT THE REPORT TO THE UTILITIES DEPARTMENT AS REQUIRED.
4. LEAKAGE TESTING FOR GRAVITY MAINS SHALL BE BY LOW-PRESSURE AIR TEST. LEAKAGE TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURE FOR "RECOMMENDED PRACTICE FOR LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE" AS ESTABLISHED BY THE UNI-BELL PVC PIPE ASSOCIATION.
5. EACH GRAVITY MAIN LEAKAGE TEST SECTION SHALL NOT EXCEED 400 FEET IN LENGTH AND SHALL BE TESTED BETWEEN ADJACENT MANHOLES.

LOCATION OF PUBLIC WATER SYSYEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)	Water Main 3 ft. minimum	Water Main 12 inches is the minimum, except for storm sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 3 ft. minimum Water Main
Vacuum Sanitary Sewer	Water Main 10 ft. preferred 3 ft. minimum	Water Main 12 inches preferred 6 inches minimum	Alternate 3 ft. minimum Water Main
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)	Water Main 10 ft. preferred 6 ft. minimum (3)	Water Main 12 inches is the minimum, except for gravity sewer, then 6 inches is the minimum and 12 inches is preferred	Alternate 6 ft. minimum Water Main
On-Site Sewage Treatment & Disposal System	10 ft. minimum	---	---

(1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.
(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.
(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.
(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

Disclaimer – This document is provided for your convenience only. Please refer to F.A.C. Rule 62-555.314 for additional construction requirements.

FDEP UTILITY CONSTRUCTION NOTES:

1. NOTE TO THE UTILITY: PURSUANT TO 62-555.345; DO NOT PROVIDE WATER SERVICE TO THIS PROJECT (OTHER THAN FLUSHING/TESTING) UNTIL THE DEPARTMENT OF ENVIRONMENTAL PROTECTION HAS ISSUED A LETTER OF CLEARANCE OR THE UTILITY SHALL BE SUBJECT TO ENFORCEMENT ACTION.
2. THE PERMITTEE WILL PROMPTLY NOTIFY THE DEPARTMENT UPON SALE OR LEGAL TRANSFER OF THE PERMITTED FACILITY
3. ALL WATER MAINS AND APPURTENANCES SHALL BE DISINFECTED AND BACTERIOLOGICALLY EVALUATED IN ACCORDANCE WITH RULE 62-555.340, F.A.C.
4. ALL WATER MAIN PIPE, INCLUDING FITTINGS SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE, SHALL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.

FDEP UTILITY SEPARATION REQUIREMENTS

(62-555.314, F.A.C. LOCATION OF PUBLIC WATER SYSTEM MAINS)

FOR THE PURPOSE OF THIS SECTION, THE PHRASE "WATER MAINS" SHALL MEAN MAINS, INCLUDING TREATMENT PLANT PROCESS PIPING, CONVEYING EITHER RAW, PARTIALLY TREATED, OR FINISHED DRINKING WATER; FIRE HYDRANT LEADS; AND SERVICE LINES THAT ARE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER.

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

- (a) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THEOUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- (b) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
- (c) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
- (d) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

- (a) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- (b) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- (c) AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES.

- (a) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
- (b) EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

1828 ENGINEERING
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 538-2228
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

BY	DESCRIPTION	REV.	DATE

UTILITY NOTES
CONSTRUCTION SITE PLAN
SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN: K. GOMEZ
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 4/29/2026

SCALE: N.T.S.
PROJECT: ASH-014
SHEET: C3.0

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/2026
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the electronic signature must be verified on any electronic copies.

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\UTILITY NOTES.dwg Modified:4/30/2026 By:osanchez Plotted By:brian killela

PLEASE REFER TO APPROVED CONSTRUCTION SITE PLAN FOR SPRINGHAVEN. SHOWN FOR REFERENCE PURPOSES ONLY.

STREET 'G'

STREET 'F'

STREET 'E'

STREET 'D'

TRACT 'PP' OPEN SPACE 0.04 AC

TRACT 'TT' TRAFFIC CIRCLE 0.00 AC

TRACT 'T' AMENITY/PARK 2.12 AC

6" FORCE MAIN

6" RECLAIMED WATER MAIN

8" POTABLE WATER MAIN

PROPOSED POTABLE WATER SERVICE

10' UTILITY EASEMENT

PROPOSED IRRIGATION METER

LARGE DOG PARK

SMALL DOG PARK

PLAYGROUND

PICKLEBALL COURTS

MAIL KIOSK

GATHERING AREA

KEY MAP

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

BY	DESCRIPTION	REV.	DATE

1828 ENGINEERING
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

UTILITY PLAN
CONSTRUCTION SITE PLAN

SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN: K. GOMEZ
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 5/20/2026

SCALE: 1" = 20'
PROJECT: ASH-014
SHEET: C3.1

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/2/26
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\UTILITY PLAN.dwg Modified:6/1/2026 By:osanchez Plotted By:brian kilela

PLEASE REFER TO APPROVED CONSTRUCTION SITE PLAN FOR SPRINGHAVEN. SHOWN FOR REFERENCE PURPOSES ONLY.

TRACT 'U'
AMENITY/PARK
1.00 AC

CABANA

POOL

10' UTILITY EASEMENT

PROPOSED POTABLE WATER SERVICES

PROPOSED SANITARY SEWER LATERAL

PROPOSED IRRIGATION METER

6" FORCE MAIN

6" RECLAIMED WATER MAIN

8" POTABLE WATER MAIN

STREET 'F'

TRACT 'SS'
TRAFFIC CIRCLE

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10 ft.

KEY MAP

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

NO.	DESCRIPTION	REV. DATE	BY

1828 ENGINEERING
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

UTILITY PLAN
CONSTRUCTION SITE PLAN

SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN: K. GOMEZ
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 5/20/2026

SCALE: 1" = 10'
PROJECT: ASH-014
SHEET: C3.2

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/2/26
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\UTILITY PLAN.dwg Modified:6/1/2026 By:osanchez Plotted By:brian kilela

PLEASE REFER TO APPROVED CONSTRUCTION SITE PLAN FOR SPRINGHAVEN. SHOWN FOR REFERENCE PURPOSES ONLY.

KEY MAP

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 inch = 20 ft.

STREET 'G'

STREET 'F'

STREET 'E'

STREET 'D'

TRACT 'TT' TRAFFIC CIRCLE 0.00 AC

TRACT 'PP' OPEN SPACE 0.04 AC

F-7 TYPE 3L INLET RIM = 113.07 INV SW = 107.30

23 LF 18" ADS HP @ 0.48%

F-8 72" DIA MANHOLE RIM = 112.77 INV NW = 105.38 INV NE = 107.19 INV S = 105.38

F-9 TYPE 3L INLET RIM = 112.02 INV SW = 106.49

161 LF 18" ADS HP @ 0.40%

F-10 TYPE 3R INLET RIM = 111.76 INV N = 104.73 INV W = 105.82 INV S = 103.73 INV NE = 106.27

55 LF 12" ADS HP @ 0.20%

72 LF 12" ADS HP @ 0.40%

YD-4 12" YARD DRAIN RIM = 110.20 INV N = 106.20

CO-4 CLEAN OUT RIM = 110.60 INV NW = 108.60

PLEASE REFER TO UNDERDRAIN DETAIL ON SHEET C8.0 (TYP.) (8)

52 LF 4" ADS HP @ 0.20%

CO-3 CLEAN OUT RIM = 110.76 INV SE = 108.50 INV W = 108.50

25 LF 4" ADS HP @ 2.67%

14 LF 4" ADS HP @ 0.20%

14 LF 4" ADS HP @ 0.20%

CO-2 CLEAN OUT RIM = 111.67 INV E = 108.47 INV SW = 108.47

55 LF 4" ADS HP @ 0.20%

46 LF 12" ADS HP @ 0.20%

53 LF 12" ADS HP @ 0.20%

CO-1 CLEAN OUT RIM = 110.58 INV NE = 108.58

YD-3 12" YARD DRAIN RIM = 110.24 INV N = 106.24

79 LF 12" ADS HP @ 1.00%

YD-5 TYPE C INLET RIM = 110.15 INV S = 107.80 INV E = 106.02 INV W = 106.04 INV N = 106.15

YD-6 12" YARD DRAIN RIM = 112.92 INV S = 106.93 INV N = 106.93

130 LF 12" ADS HP @ 1.00%

YD-7 12" YARD DRAIN RIM = 113.11 INV S = 108.23

68 LF 12" ADS HP @ 0.20%

F-11 TYPE 3R INLET RIM = 109.94 INV S = 101.90 INV N = 101.90 INV E = 104.50 INV W = 104.98

YD-8 12" YARD DRAIN RIM = 109.11 INV E = 105.11

F-26 TYPE 3L INLET RIM = 110.08 INV W = 104.58

41 LF 18" ADS HP @ 0.20%

72 LF 42" ADS HP @ 0.61%

D-10 108" DIA MANHOLE RIM = 109.25 INV W = 100.71 INV E = 98.71 INV N = 101.25

MAIL KIOS

41 LF 18" ADS HP @ 0.50%

D-8 TYPE 4 INLET RIM = 108.68 INV S = 103.26

D-9 TYPE 4 INLET RIM = 108.80 INV N = 103.06 INV W = 100.89 INV E = 100.89

LARGE DOG PARK

SMALL DOG PARK

ACT 'TT' UTILITY/PARK 0.12 AC

GATHERING AREA

PICKLEBALL COURTS

E-11 TYPE 4 INLET RIM = 109.19 INV W = 103.46 INV N = 103.46 INV S = 103.46

104 LF 18" ADS HP @ 0.20%

D-7 72" DIA MANHOLE RIM = 109.60 INV W = 101.60 INV E = 101.60 INV N = 103.26

228 LF 18" ADS HP @ 0.79%

E-13 TYPE 3L INLET RIM = 110.99 INV W = 105.26 INV S = 105.26

48 LF 18" ADS HP @ 0.50%

E-12 TYPE 3R INLET RIM = 111.00 INV E = 105.50

92 LF 42" ADS HP @ 0.61%

E-10 TYPE 4 INLET RIM = 109.20 INV E = 103.70

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

REV.	DATE	DESCRIPTION	BY

1828 ENGINEERING
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

DRAINAGE PLAN
CONSTRUCTION SITE PLAN

SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN: K. GOMEZ
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/1/2026

SCALE: 1" = 20'
PROJECT: ASH-014
SHEET: C4.0

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/2/26
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\DRAINAGE PLAN.dwg Modified: 6/1/2026 By:osanchez Plotted By:brian killela

PIPE CONNECTION TO POND 2. PLEASE REFER TO APPROVED CONSTRUCTION SITE PLAN FOR SPRINGHAVEN

20' DRAINAGE EASEMENT

154 LF 18" ADS HP @ 4.89%

TRACT "J"
AMENITY/PARK
1.50 AC

PLEASE REFER TO APPROVED CONSTRUCTION SITE PLAN FOR SPRINGHAVEN. SHOWN FOR REFERENCE PURPOSES ONLY.

YD-2
12" YARD DRAIN
RIM = 106.41
INV W = 100.82
INV N = 100.82

42 LF 12" ADS HP @ 2.00%

ST-1
TYPE C INLET
RIM = 105.56
INV S = 99.98
INV E = 99.98

84 LF 12" ADS HP @ 2.00%

CABANA

POOL

33 LF 12" ADS HP @ 1.00%

INV N = 102.82

YD-1
12" YARD DRAIN
RIM = 107.04
INV E = 102.50
INV S = 102.50

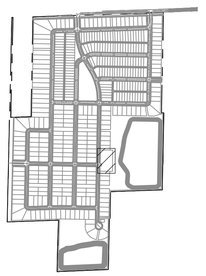
CONNECTION TO POOL EQUIPMENT (BY OTHERS(

STREET 'F'

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10 ft.



KEY MAP

NO.	DESCRIPTION	DATE	BY
1			

1828 ENGINEERING

2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228

BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

DRAINAGE PLAN
CONSTRUCTION SITE PLAN

SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN: K. GOMEZ
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/1/2026

SCALE: 1" = 10'
PROJECT: ASH-014
SHEET: C4.1

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/2/26
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are considered signed and sealed and the signature must be verified on any electronic copies.

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\DRAINAGE PLAN.dwg Modified:6/1/2026 By:osanchez Plotted By:brian kilela

PLEASE REFER TO APPROVED CONSTRUCTION SITE PLAN FOR SPRINGHAVEN. SHOWN FOR REFERENCE PURPOSES ONLY.

KEY MAP

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

STREET 'G'
STREET 'F'
STREET 'E'
STREET 'D'

LARGE DOG PARK
SMALL DOG PARK
TRACT 'I' AMENITY/PARK 1.12 AC
PLAYGROUND
GATHERING AREA
PICKLEBALL COURTS
MAIL KIOSK
TRACT 'TT' TRAFFIC CIRCLE 0.00 AC

LOT TYPE 'B' MOD FFE=112.39
LOT TYPE 'B' MOD FFE=112.80
LOT TYPE 'B' MOD FFE=113.26
LOT TYPE 'B' MOD FFE=113.20
LOT TYPE 'B' MOD FFE=113.37
LOT TYPE 'B' MOD FFE=114.68
LOT TYPE 'B' MOD FFE=112.67
LOT TYPE 'B' MOD FFE=112.49
LOT TYPE 'B' MOD FFE=112.24
LOT TYPE 'B' MOD FFE=111.99
LOT TYPE 'B' MOD FFE=111.74

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

1828 ENGINEERING
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

REV.	DATE	DESCRIPTION	BY

PAVING & GRADING PLAN
CONSTRUCTION SITE PLAN

SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN: K. GOMEZ
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 5/20/2026

SCALE 1" = 20'
PROJECT ASH-014
SHEET C5.0

OVIDIO SALVADOR SANCHEZ
LICENSE No. 86492
STATE OF FLORIDA
6/2/26
PROFESSIONAL ENGINEER

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\PAVING & GRADING PLAN.dwg Modified:6/1/2026 By:osanchez Plotted By:brian killela

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\PAVING & GRADING PLAN.dwg Modified:6/1/2026 By:osanchez Plotted By:brian killela

PLEASE REFER TO APPROVED CONSTRUCTION SITE PLAN FOR SPRINGHAVEN. SHOWN FOR REFERENCE PURPOSES ONLY.

TRACT 'U' AMENITY/PARK 1.59 AC

CABANA

FFE=108.10

POOL

STREET 'F'

EXISTING TREES TO REMAIN WITHIN THE AMENITY TRACT PLANS. PLEASE REFER TO THE LANDSCAPING PLANS FOR EXACT TREES TO BE REMAIN (TYP.)

LOT TYPE 'B' MOD FFE=108.66

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10 ft.

KEY MAP

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

BY	DESCRIPTION	REV.	DATE

1828 ENGINEERING

2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228

BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

PAVING & GRADING PLAN
CONSTRUCTION SITE PLAN

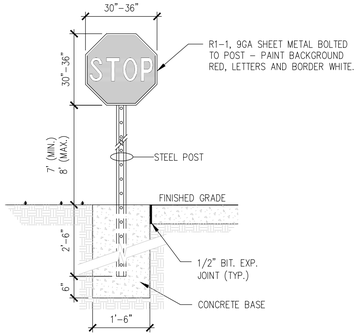
SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN:	DESIGNED:	CHECKED:	DATE:
K. GOMEZ	O. SANCHEZ	O. SANCHEZ	5/20/2026

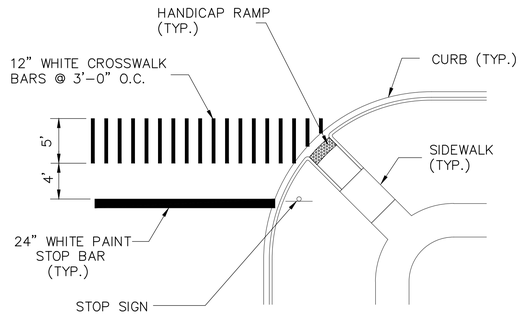
SCALE	PROJECT	SHEET
1" = 10'	ASH-014	C5.1

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/2026
PROFESSIONAL ENGINEER

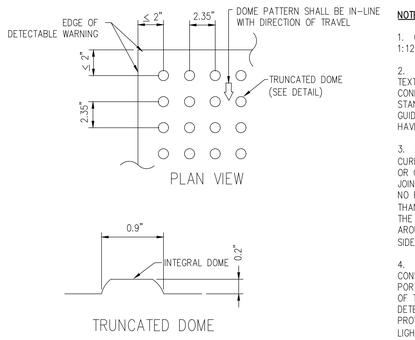
This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



1 STOP SIGN
N.T.S.



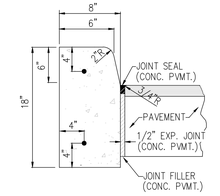
2 INTERSECTION CROSSWALK/ STOP BAR DETAIL
N.T.S.



3 DETECTABLE WARNING
N.T.S.

NOTE:

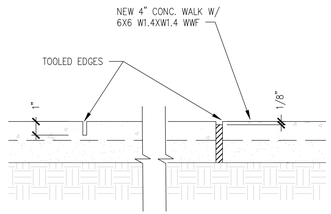
1. CURB RAMP RUNNING SLOPES SHALL NOT BE STEEPER THAN 1:12 AND CROSS SLOPE SHALL BE 0.02 OR FLATTER.
2. DETECTABLE WARNING SURFACES SHALL BE CONSTRUCTED BY TEXTURING OR APPLYING A TRUNCATED DOME MATERIAL IN CONFORMANCE WITH THE U.S. DEPARTMENT OF JUSTICE A.D.A. STANDARDS FOR ACCESSIBLE DESIGN, A.D.A. ACCESSIBILITY GUIDELINES, SECTION 4.29.2. TRANSITION SLOPES ARE NOT TO HAVE DETECTABLE WARNINGS.
3. WHERE A CURB RAMP IS CONSTRUCTED WITHIN AN EXISTING CURB, CURB AND GUTTER AND/OR SIDEWALK, THE EXISTING CURB OR CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE CURB TRANSITIONS OR TO THE EXTENT THAT NO REMAINING SECTION OF CURB OR CURB AND GUTTER IS LESS THAN 5' LONG. THE EXISTING SIDEWALK SHALL BE REMOVED TO THE NEAREST JOINT BEYOND THE TRANSITION SLOPE WALK AROUND OR TO THE EXTENT THAT NO REMAINING SECTION OF SIDEWALK IS LESS THAN 5'.
4. WHERE ADJACENT WALKING SURFACES ARE COLORED OR ARE CONSTRUCTED WITH MATERIALS OTHER THAN STANDARD CLASS I PORTLAND CEMENT CONCRETE IN ACCORDANCE WITH SECTION 522 OF THE SPECIFICATIONS, THE PLAN MUST PROVIDE FOR DETECTABLE WARNING SURFACE COLORS OR MATERIALS THAT PROVIDE THE NECESSARY CONTRAST, EITHER DARK–ON–LIGHT OR LIGHT–ON–DARK. (SAFETY YELLOW OR BRICK RED)
5. RECOMMENDED MANUFACTURER: ENGINEERED PLASTICS, INC. (ARMOR TILE) OLYMPIC TOWERS, 300 PEARL STREET, SUITE 200, BUFFALO, NY 14202. PHONE: (800) 682–2525



NOTES:

1. COST OF 2–#4 BARS (CONT.) SHALL BE INCLUDED.
2. PROVIDE 2–#6 SMOOTH BARS W/ EXPANSION CAPS AT EACH EXPANSION JOINT, 20'–0" O.C. MAX.
3. CONTRACTION JOINTS – CONTRACTION JOINTS SHALL BE PLACED AT EQUAL SPACES (10' MAX.) BETWEEN NORMAL EXPANSION JOINTS. CONTRACTION JOINTS SHALL BE SAW CUT IN THE UPPER 1/3 OF CURB AND GUTTER WITHIN 24 HOURS OF PLACEMENT.
4. ENDS OF VERTICAL CURB SHALL TRANSITION FROM FULL TO ZERO HEIGHTS IN 3 FEET.

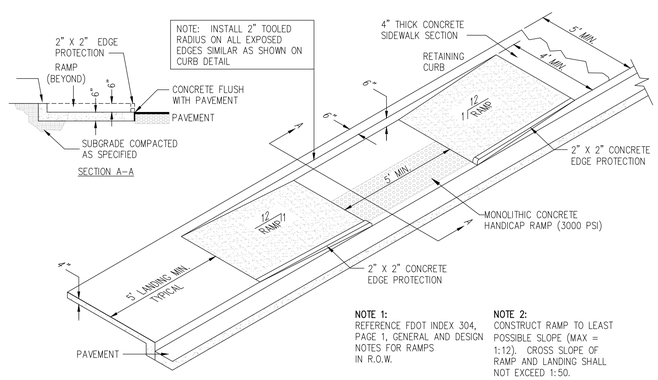
4 TYPE 'D' CURB
(3,500 PSI (MIN)) N.T.S.



NOTE:
EXPANSION JOINTS SHALL BE LOCATED AT ALL CONCRETE WALK INTERSECTIONS, AT ALL DOOR OPENINGS AND AT 12' O.C. MAXIMUM.

EXPANSION JOINT (1/4" PREMOLDED ASPHALT STRIP) SHALL BE SET 1/8" BELOW TOP OF WALK.
SCORE MARK (1" DEPTH) SHALL BE 4' (MAX.) O.C.

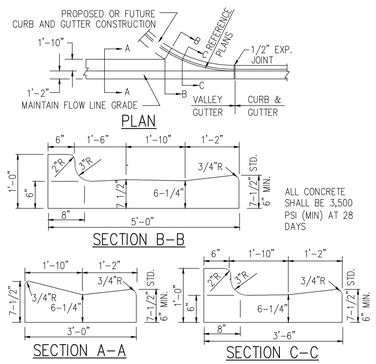
5 CONCRETE WALK
N.T.S.



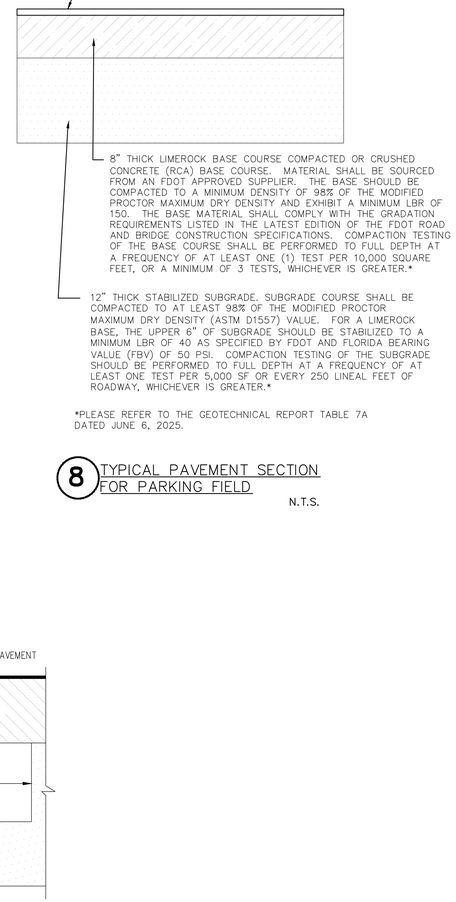
NOTE 1:
REFERENCE FDOT INDEX 304, PAGE 1, GENERAL AND DESIGN NOTES FOR RAMPS IN R.O.W.

NOTE 2:
CONSTRUCT RAMP TO LEAST POSSIBLE SLOPE (MAX = 1:12). CROSS SLOPE OF RAMP AND LANDING SHALL NOT EXCEED 1:50.

6 SIDEWALK HANDICAP RAMP
3000 PSI (MIN.) CONCRETE N.T.S.

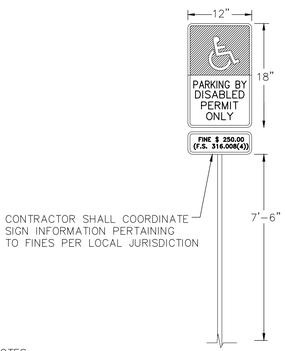


7 VALLEY GUTTER N.T.S.
(REFER TO F.D.O.T. INDEX 300)



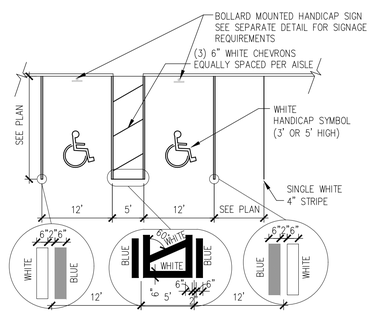
*PLEASE REFER TO THE GEOTECHNICAL REPORT TABLE 7A DATED JUNE 6, 2025.

8 TYPICAL PAVEMENT SECTION FOR PARKING FIELD
N.T.S.



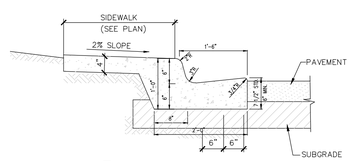
NOTES:
1. ALL LETTERS ARE 1" SERIES "C", PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
4. ONE (1) SIGN IS REQUIRED FOR EACH PARKING SPACE.
5. HEIGHT OF SIGN SHALL 7'–6" FROM FINISHED GROUND TO BOTTOM OF SIGN.

9 HANDICAP SIGN
N.T.S.

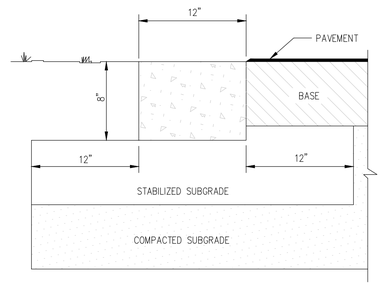


NOTE: FINISHED GRADES OF PAVEMENT IN HC PARKING AND ACCESSIBILITY AISLE SHALL NOT EXCEED 1:50 SLOPE IN ANY DIRECTION. SEE PLAN FOR STYLE OF HANDICAP RAMP. HANDICAP STRIPING SHALL CONFORM TO FDOT INDEX 17346 SHEET 11 OF 14 (LATEST EDITION)

10 HANDICAP STRIPING
N.T.S.



11 MONOLITHIC SIDEWALK
N.T.S.



12 RIBBON CURB
3500 PSI (MIN.) N.T.S.

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

OVIDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
6/2026
PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the digital signature must be verified on any electronic copies.

BY	DESCRIPTION	REV.	DATE

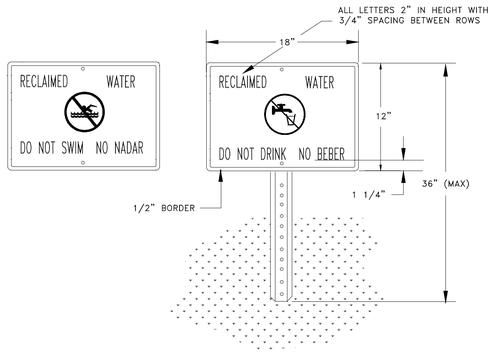
1828 ENGINEERING
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558–2228

CIVIL DETAILS
CONSTRUCTION SITE PLAN
SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN:	DESIGNED:	CHECKED:	DATE:
K. GOMEZ	O. SANCHEZ	O. SANCHEZ	6/1/2026

SCALE	PROJECT	SHEET
N.T.S.	ASH–014	C6.0

P:_PROJECT DRAWINGS\ASH–014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\CIVIL DETAILS.dwg Modified:6/1/2026 By:osanchez Plotted By:brian killela

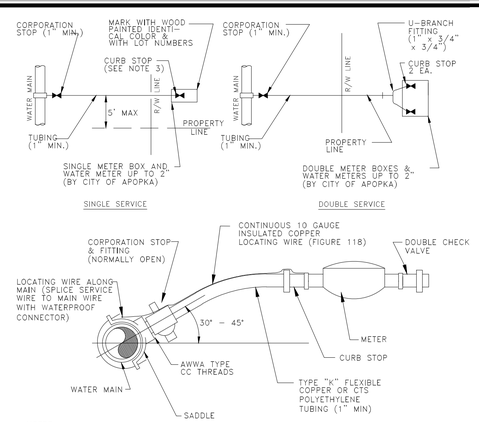


NOTES:

1. HEIGHT OF SIGN WILL DEPEND ON LOCATION AND SURROUNDING LANDSCAPE PLANT TYPES. IN ALL CASES, THE SIGN SHALL BE VISIBLE TO THE PUBLIC.
2. BACKGROUND SHALL BE WHITE. LETTERS AND FIGURES SHALL BE BLACK. PROHIBITIVE SYMBOL SHALL BE RED.
3. ENGINEERING GRADE REFLECTIVE MATERIALS SHALL BE USED.
4. POST SHALL BE U CHANNEL 12 FT. 2 LB. HOT ROLLED HIGH TENSILE RAIL OR BILLET STEEL, HOT DIP GALVANIZED PER ASTM A-123.
5. MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
6. SIGNS SHALL BE PLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY APPROVED ENGINEERING PLANS AND/OR AS APPROVED BY PUBLIC SERVICES DEPARTMENT.

RECLAIMED WATER ADVISORY SIGN

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 115

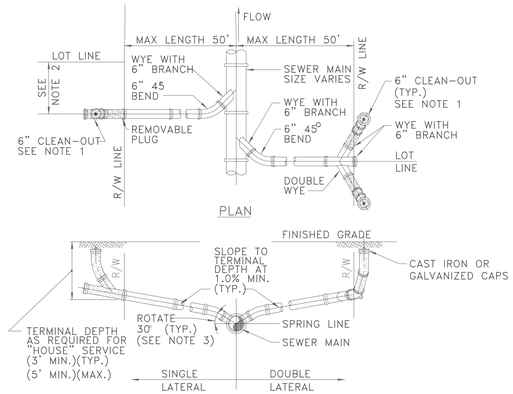


NOTES:

1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK JOINT TYPE CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE AT A CURB STOP(S) WHICH SHALL BE BURIED APPROXIMATELY 3" BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" x 2" x 18" STAKE WITH THE TOP PAINTED BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER, AND MARKED WITH THE NUMBER OF THE LOT(S) TO BE SERVED.
4. RECLAIMED WATER SERVICES SHALL USE PURPLE COLORED CTS POLYETHYLENE TUBING.
5. POTABLE WATER SERVICES SHALL USE BLUE COLORED CTS POLYETHYLENE TUBING.
6. ALL SERVICE UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE INSTALLED IN A MINIMUM 2" PVC SLEEVE.

WATER SERVICE CONNECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 405



PROFILE

NOTES:

1. CLEAN-OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE.
3. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
4. RESIDENTIAL SERVICES SHALL BE 4 INCHES & NON-RESIDENTIAL SERVICES SHALL BE 6 INCHES IN DIAMETER AS A MINIMUM.
5. GALVANIZED, OR CAST IRON CLEAN-OUT CAP SHALL BE USED ON THE STUBOUT FOR EACH SERVICE.
6. LATERAL SHALL BE MARKED WITH AN "S" STAMPED OR CUT IN THE CURB.

SERVICE LATERAL DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 204

Call 48 hours before you dig

It's the Law!
1-800-432-4770

Sunshine State One Call of Florida, Inc.

BY	DESCRIPTION	DATE	REV.

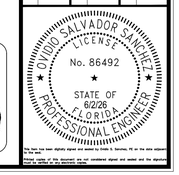
1828 ENGINEERING
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

CIVIL DETAILS
CONSTRUCTION SITE PLAN

SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

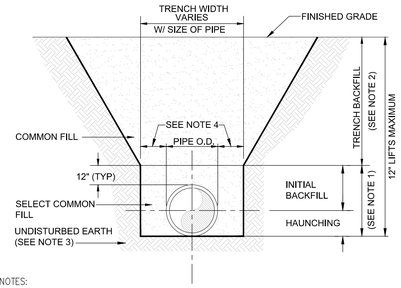
DRAWN:	DESIGNED:	CHECKED:	DATE:
K. GOMEZ	O. SANCHEZ	O. SANCHEZ	5/1/2026

SCALE	PROJECT	SHEET
N.T.S.	ASH-014	C7.0



The Seal appearing on this document was authorized by Ovidio S. Sanchez, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

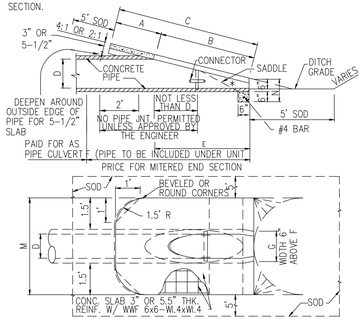
P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\UTILITY DETAILS.dwg Modified:5/1/2026 By:kgomez Plotted By:brian killela



NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING SHALL BE COMPACTED TO 95% (MIN) OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. BEDDING ROCK CAN BE USED FOR BEDDING IF SUBGRADE SOILS ARE TOO WET TO COMPACT, OR AS DIRECTED BY THE ENGINEER.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES.

1 TRENCH DETAIL
N.T.S.

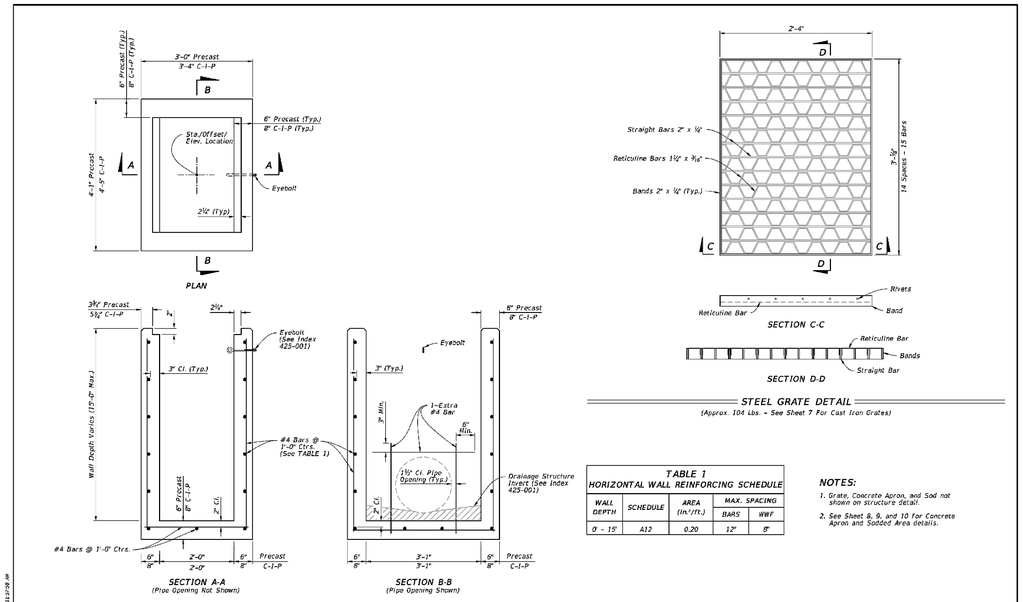
STORM SEWER PIPE LENGTHS NOTED IN THE DRAWINGS REFLECT ONLY THE PIPE ITSELF. WHERE A MITERED END SECTION IS INSTALLED ON SAID PIPE, ITS ADDITIONAL PIPE LENGTH SHALL BE INCLUDED IN THE COST OF THE MITERED END SECTION.



✳ SLOPE- 4:1 MITER – TO C PIPE FOR PIPES 18" AND SMALLER
2:1 FOR PIPES 24" AND LARGER
2:1 MITER – TO C PIPE FOR PIPES 18" AND SMALLER
1:1 FOR PIPES 24" AND LARGER

DIMENSIONS AND QUANTITIES											
								M			
	D	A	B	C	E	F	G	SINGLE PIPE	DOUBLE PIPE	TRIPLE PIPE	QUAD PIPE
2:1 SLOPE	15"	1.92'	2.18'	4.10'	2.06'	5'	1.22'	4.63'	7.21'	9.79'	12.37'
	18"	1.97'	2.74'	4.71'	2.56'	6'	1.41'	4.92'	7.75'	10.58'	13.42'
	24"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	5.50'	8.92'	12.33'	15.75'
	30"	2.15'	4.95'	7.10'	4.56'	8'	2.00'	6.08'	10.33'	14.58'	18.83'
	36"	2.25'	6.08'	8.33'	5.56'	9'	2.24'	6.67'	11.75'	16.83'	21.92'
	42"	2.34'	7.21'	9.55'	6.56'	10'	2.45'	7.25'	13.25'	19.25'	25.25'
	48"	2.43'	8.33'	10.76'	7.56'	11'	2.65'	7.83'	14.58'	21.33'	28.08'
	54"	2.52'	9.44'	11.96'	8.56'	12'	2.83'	8.42'	16.08'	23.75'	31.42'
	60"	2.62'	10.56'	13.18'	9.56'	14'	3.00'	9.00'	17.50'	26.00'	34.50'
	66"	2.71'	11.68'	14.39'	10.56'	15'	3.18'	9.58'	18.75'	27.92'	37.08'
	72"	2.80'	12.80'	15.60'	11.56'	16'	3.30'	10.16'	20.16'	30.16'	40.16'
4:1 SLOPE	15"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.63'	7.21'	9.79'	12.37'
	18"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.92'	7.75'	10.58'	13.42'
	24"	2.53'	7.18'	9.71'	7.03'	11'	1.73'	5.50'	8.92'	12.33'	15.75'
	30"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	6.08'	10.33'	14.58'	18.83'
	36"	2.87'	11.31'	14.18'	11.03'	15'	2.24'	6.67'	11.75'	16.83'	21.92'
	42"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	7.25'	13.25'	19.25'	25.25'
	48"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	7.83'	14.58'	21.33'	28.08'
	54"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	8.42'	16.08'	23.75'	31.42'
	60"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	9.00'	17.50'	26.00'	34.50'
	66"	3.73'	21.62'	25.35'	21.03'	25'	3.18'	9.58'	18.75'	27.92'	37.08'
	72"	3.91'	22.68'	26.59'	23.03'	27'	3.30'	10.16'	20.16'	30.16'	40.16'

2 MITERED END SECTION (RCP)
FDOT STD. INDEX 430-021 N.T.S.



STEEL GRATE DETAIL
(Approx. 104 Lbs. - See Sheet 7 For Cast Iron Grates)

TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in.²/Ft.)	MAX. SPACING BARS	MAX. SPACING WWF
0' - 15'	A12	0.20	12"	8"

NOTES:
1. Grate, Concrete Apron, and Sod not shown on structure detail.
2. See Sheet 8, 9, and 10 for Concrete Apron and Sodded Area details.

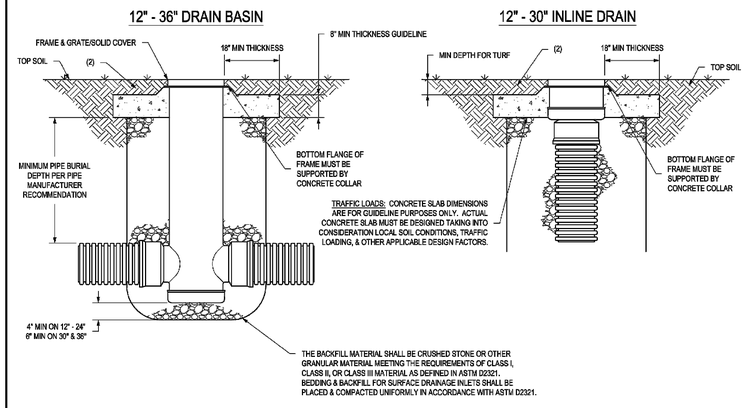
DIMENSIONAL AND REINFORCING DETAILS

TYPE C - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2026-27 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E, AND H	INDEX 425-052	SHEET 2 of 14

3 TYPE C INLET
N.T.S.

NYLOPLAST TURF TRAFFIC INSTALLATION



1. GRATES/SOLID COVERS SHALL MEET H-20 LOAD RATING FOR 30" PEDESTRIAN & 12" - 30" STANDARD & SOLID)
2. DESIGN SHOULD ACCOUNT FOR ROOT DEPTH TO ALLOW TURF TO GROW AND PREVENT EROSION AROUND GRATE SO THAT HAZARDS DO NOT FORM.

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST.

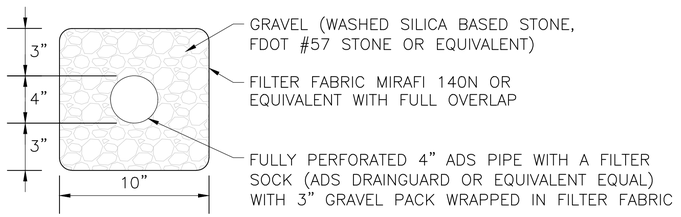
DRAWN BY	EBC	MATERIAL
DATE	01-05-09	
REVISED BY	NMH	PROJECT NO./NAME
DATE	06-12-18	
DWG SIZE	A	SCALE 1:25 SHEET 1 OF 1

Nyloplast
3130 VERONA AVE
BUFORD, GA 30518
PHN (770) 933-3443
FAX (770) 933-3496
www.nyloplastusa.com

TITLE: DRAIN BASIN & INLINE DRAIN TURF TRAFFIC INSTALLATION

DWG NO. 7901-110-340 REV G

4 CONCRETE COLLAR
N.T.S.



5 UNDERDRAIN DETAIL
N.T.S.

Call 48 hours before you dig
It's the Law!
1-800-432-4770
Sunshine State One Call of Florida, Inc.

1828 ENGINEERING
2400 MAITLAND CENTER PKWY, SUITE 107
MAITLAND, FLORIDA 32751
(407) 558-2228
BOARD OF PROFESSIONAL ENGINEERING REGISTRY NO. 39060

REV.	DATE	DESCRIPTION	BY

DRAINAGE DETAILS
CONSTRUCTION SITE PLAN
SPRINGHAVEN – AMENITY TRACTS
CITY OF APOPKA, FLORIDA

DRAWN: K. GOMEZ
DESIGNED: O. SANCHEZ
CHECKED: O. SANCHEZ
DATE: 6/1/2026
SCALE: N.T.S.
PROJECT: ASH-014
SHEET: C8.0

CLAUDIO SALVADOR SANCHEZ
LICENSE
No. 86492
STATE OF FLORIDA
PROFESSIONAL ENGINEER
6/2/26

This item has been digitally signed and sealed by Claudio S. Sanchez, PE on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

P:_PROJECT DRAWINGS\ASH-014 Kelly Park South Assemblage\Drawings\CAD Civil3D\Layouts\06 AMENITY\DRAINAGE DETAILS.dwg Modified:6/1/2026 By:osanchez Plotted By:brian killela

LEGAL DESCRIPTIONS

YOO SHK UM
PARCEL 1:
That part of the Northeast 1/4 of Section 18, Township 20 South, Range 28 East, Orange County, Florida, described as follows:Commence at the Northeast corner of said Northeast 1/4; thence N 89°50'38" W along the North line of said Northeast 1/4 for a distance of 690.00 feet; thence S 03°08'43" W 30.00 feet for a Point of Beginning; thence continue S 03°08'43" W 773.16 feet; thence N 89°49'33" W 317.50 feet; thence N 09°40'34" W 135.00 feet; thence N 03°08'43" E 239.86 feet; thence S 89°50'38" E 327.48 feet; thence N 03°08'43" E 400.00 feet; thence S 89°50'38" E 20.02 feet to the Point of Beginning.

PARCEL 2:
Parcel Nos. 7 and 8 as per plat of survey recorded in Deed Book 921, page 429, Public Records of Orange County, Florida; and more particularly described as: Begin 30 feet South and 1365 feet West of the NE corner of Section 18, Township 20 South, Range 28 East, run South 1284.22 feet, West 337.5 feet, North 1284 feet and East 337.5 feet to the Point of Beginning.

PARCEL 3:
Parcel No. 21 as per plat of survey recorded in Deed Book 921, Page 429, Public Records of Orange County, Florida; and more particularly described as: North 1/2 of the North 1/2 of the Southwest 1/4 of the Northeast 1/4, LESS the West 15 feet thereof, Section 18, Township 20 South, Range 28 East.

PARCEL 4:
Begin 30 feet South and 1702.5 feet West of the Northeast corner of Section 18, Township 20 South, Range 28 East, thence run South 1284 feet, West 675 feet, North 1283.56 feet, and East 675 feet to the Point of Beginning, of the Public Records of Orange County, Florida a/k/a Lots 3, 4, 5 and 6 as described in Deed Book 921, Page 429.

PARCEL 5:
Begin 30 feet South and 690 feet West of the Northeast corner of Section 18, Township 20 South, Range 28 East, run South 1284.66 feet; thence West 675.00 feet; thence North 1284.22 feet; thence East 675.00 feet to the Point of Beginning. Being Parcels 9, 10, 11 and 12 as depicted on the plat recorded in Deed Book 921, Page 429, of the Public Records of Orange County, Florida. Less: that part of the Northeast 1/4 of Section 18, Township 20 South, Rang 28 East, Orange County, Florida, described as follows: Commence at the Northeast corner of said Northeast 1/4; thence N 89°50'38" W along the North line of said Northeast 1/4 for a distance of 690.00 feet; thence S 03°08'43" W 30.00 feet for a Point of Beginning; thence continue S 03°08'43" W 773.16 feet; thence N 89°49'33" W 317.50 feet; thence N 09°40'34" W 135.00 feet, thence N 03°08'43" E 239.86 feet; thence S 89°50'38" E 110.00 feet; thence N 03°08'43" E 400.00 feet; thence S 89°50'38" E 237.50 feet to the Point of Beginning. ALSO LESS: Being at a point 30 feet South and 927.5 feet West of the Northeast corner of Section 18, Township 20 South, Range 28 East, run thence South 400 feet, thence West 100 feet, thence North 400 feet, thence East 100 feet to the Point of Beginning.

BOUDREAU
The South One-Half (1/2) of the North One-Half (1/2) of the Southwest One-Quarter (1/4) of the Northeast One-Quarter (1/4), Section 18, Township 20 South, Range 28 East, less the West 15 feet thereof, and described as Tract 22, unrecorded plat.

MARTIN
The East 652.5 feet of the North 1/2 of the South 1/2 of the Southwest 1/4 of the Northeast 1/4 being the East $\frac{1}{2}$ of Tract 23 of unrecorded plat, Section 18, Township 20 South, Range 28 East, Orange County, Florida.

PM S-1 REO, LLC
Parcel 1:
Beginning 15 feet South and 7.5 feet West of the Northeast corner of the Northwest 1/4 of the Southeast 1/4 of Section 18, Township 20 South, Range 28 east, run West 661.25 feet, thence South 330 feet, thence East 661.51 feet, thence North 330 feet to the Point of Beginning; Being Tract No. 26 of an unrecorded plat as shown in Deed Book 921, Page 429, Public Records of Orange County, Florida.

Parcel 2:
That certain parcel of real estate situated in Section 18, Township 20 South, Range 28 East and described asb Parcel No. 28, as per plat thereof recorded in Deed Book 921, Page 429, Public Records of Orange County, Florida, more particularly described as follows: Begin 345 South and 7.5 feet West of the Northeast corner of the Northwest 1/4 of the Southeast 1/4, run West 661.51 feet, South 330 feet, East 661.77 feet, North 330 feet to the Point of Beginning.

ROBINSON
Parcel 1:
That certain parcel of real estate lying in Section 18, Township 20 South, Range 28 East, and described as Parcel 24, as per plat thereof, recorded in Deed Book 921, Page 429, Public Records of Orange County, Florida, and more particularly described as the South 1/2 of the South 1/2 of the Southwest 1/4 of the Northeast 1/4, less the West 15 feet, Section 18, Township 20 South, Range 28 East, land lying and being in Orange County, Florida.

Parcel 2:
Beginning At NW corner SE 1/4 of the NE 1/4, Section 18, Township 20 South, Range 28 East, run South 664.6 feet, run thence East 668.14 feet, thence North 664.6 feet, run thence West 668.14 feet to the Point of Beginning, lying in Orange County, Florida.
Together with the easement for ingress and egress contained in the document recorded in Official Records Book 5876, Page 4902, Public Records of Orange County, Florida.

SNAVELY
That certain parcel of real estate situate, lying and being in Section 18, Township 20 South, Range 28 East, Orange County, Florida, and described as Parcel No. 53 of that certain survey made by C.R. Shewey, dated June 10, 1955, Reg. Surveyor No. 623, and also being part of the Southeast quarter of the Northeast quarter of Section 18, Township 20 South, Range 28 East, conveyed by Deed recorded in Deed Book 1027, Page 466, and more particularly described as follows: Parcel No. 53: From a point 664.6 feet South of Northwest corner of Southeast quarter of Northeast quarter run South 332.3 feet; East 668.44 feet; North 332.42 feet; West 668.14 feet to Point of Beginning.

SHAW
The West 652.5 feet of the East 1305 feet of the following description: The North one half of the South one half of the Southwest quarter of the Northeast quarter; less the West 15 feet thereof, lying in Section 18, Township 20 South, Range 28 East. All lying and being situate in Orange County, Florida.
All Lying and being situate in Orange County, Florida.

ORCHID ESTATES COMMUNITY HOMEOWNERS ASSOCIATION INC>
Parcel 1:
West 15 feet of the Northeast Quarter and the North 15 feet of the Northwest Quarter of the Southeast Quarter, Section 18, Township 20 South, Range 28 East, Orange County, Florida. Less and except any land contained in County Deed recorded in Official Records Book 10606, Page 8543, Public Records of Orange County, Florida. Also described as: Begin at the Northeast corner of the Northeast 1/4 of the Northwest 1/4 of the Southeast 1/4 of Section 18; thence along the West line of the Northeast 1/4 of the Southeast 1/4 of said Section 18, South 01°11'56" West, 15.02 feet to a point on a line that is 15.00 Southerly of and perpendicular to the North line of the Southeast 1/4 of said Section 18; thence along a line that is 15 feet Southerly of and parallel to said North line South 88°08'31" West, 1330.15 feet to the West line of the Southeast 1/4 of said Section 18; thence along said West line North 01°19'12" East, 2642.70 feet to a point on the Southerly right of way line of Kelly Park Road; thence along said Southerly right of way line North 88°06'16" East, 15.02 feet to a point on a line that is 15.00 feet Easterly of and parallel to the West line of the Northeast 1/4 of said Section 18; thence along said parallel line South 01°19'12" West, 2627.68 feet to a point on the North line of the Southeast 1/4 of said Section 18; thence along said North line North 88°08'31" East, 1315.10 feet to the Point of Beginning.

Parcel 2:
The Northeast 1/4 of the Northwest 1/4 of the Southeast 1/4, Section 18, Township 20 South, Range 28 East, Orange County, Florida, less and except the North 15 feet; and
Less and except the land contained in the Certificate of Title recorded April 1, 2019 in Official Records Instrument Number 20190194789, Public Records of Orange County, Florida, and

daly design group inc.
Urban Planning • Landscape Architecture • Project Management
913 N Pennsylvania Ave, Winter Park, FL 32789
Phone 407.740.7373 • www.dalydesign.com

Springhaven

Amenity & Park Area

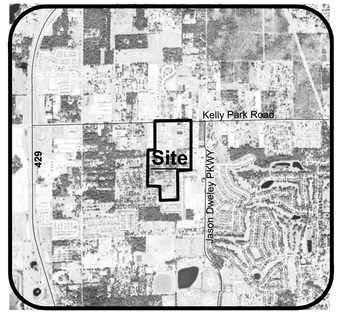
PARCEL ID #
#18-20-28-0000-00-035; #18-20-28-0000-00-034; #18-20-28-0000-00-032; #18-20-28-0000-00-119; #18-20-28-0000-00-047; #18-20-28-0000-00-046; #18-20-28-0000-00-105; #18-20-28-0000-00-061; #18-20-28-0000-00-048; #18-20-28-0000-00-049; #18-20-28-0000-00-050; #18-20-28-0000-00-051; #18-20-28-0000-00-037; #18-20-28-0000-00-033; #18-20-28-0000-00-032

Landscape, Hardscape and Irrigation Plans

City of Apopka, Florida
May, 2026

Prepared For:
Ashton Woods - Starlight Homes - Orlando Division
1064 Greenwood BLVD, Suite 124
Lake Mary, FL 32746

Revisions



Location Map
NORTH
NTS

SHEET	DESCRIPTION
K-100	Key Sheet
L-001	Amenity Landscape Schedule & Details
L-002	Park Landscape Schedule & Details
L-101	Amenity Landscape Plan
L-102	Park Landscape Plan
H-201	Amenity Area Hardscape Plan
H-202	Park Area Hardscape Plan
H-203	Park Area Details & Elevations
I-001	Amenity Irrigation Schedule & Details
I-002	Park Irrigation Schedule & Details
I-301	Amenity Irrigation Plan
I-302	Park Irrigation Plan

Team Members

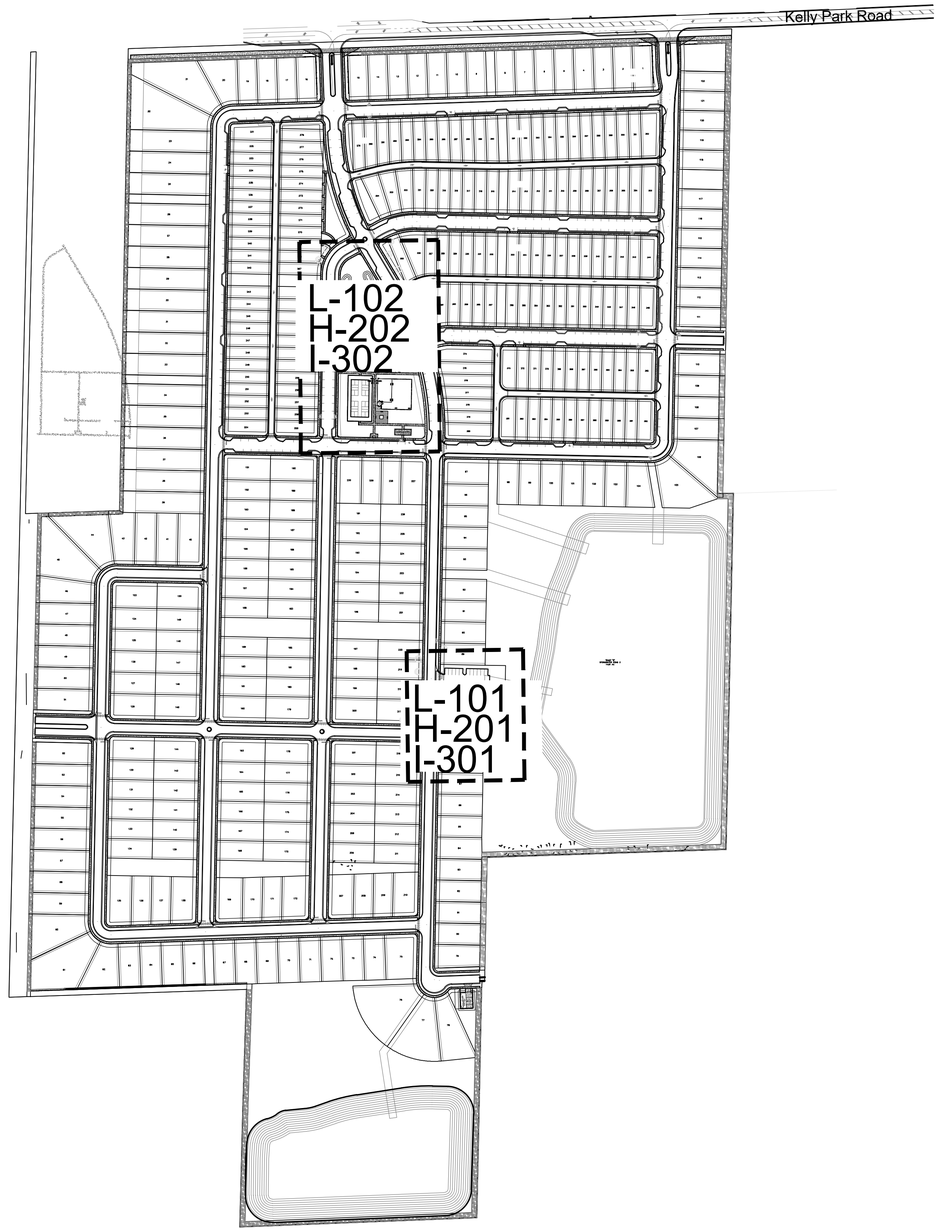
Owner Developer
Ashton Woods-Starlight Homes - Orlando Division
1064 Greenwood BLVD, Suite 124
Lake Mary, FL 32746
(407)708-0160

Engineer
1828 Engineering
2400 Maitland Center PKWY, Suite 107
Maitland, FL 32751
(407)558-2228

Surveyor
Johnston's Surveying
900 Cross Prairie PKWY
Kissimmee, FL 34744
(407)847-2179

Landscape Architect / Land Planner
Daly Design Group
913 N Pennsylvania Ave
Winter Park, Florida 32789
(407) 740-7373

24215



200' 0' 200' 400'

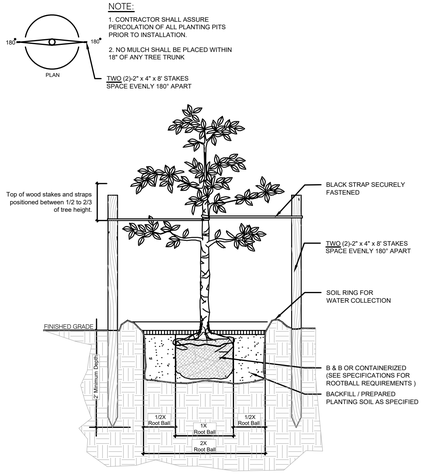
daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

REV.	DATE	DESCRIPTION	BY

Key Sheet
Landscape Plans
Springhaven
Apopka, Florida

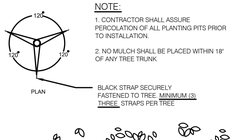
PROJECT NO.
24215
SCALE
1" = 200'
DATE
May 2026
SHEET
K-100

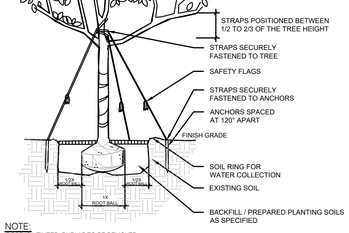
Details



SMALL TREE GUYING DETAIL

Detail for trees between 1" and 2.5" cal. NOT TO SCALE

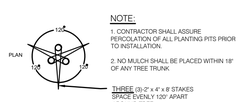


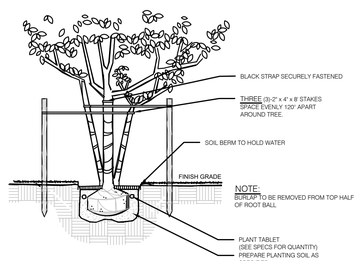


NOTE:
IF BASS IS UTILIZED, BURLAP TO BE REMOVED FROM TOP HALF OF ROOT BALL

LARGE TREE GUYING DETAIL

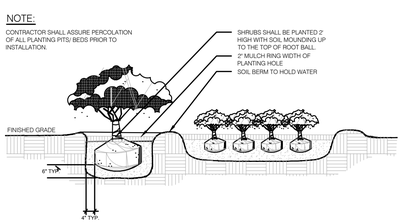
Detail for trees greater than 3" cal. NOT TO SCALE





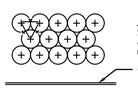
MULTI-TRUNK TREE GUYING DETAIL

Detail for trees with more than 1 trunk NOT TO SCALE



SHRUB AND GROUND COVER DETAIL

NOT TO SCALE

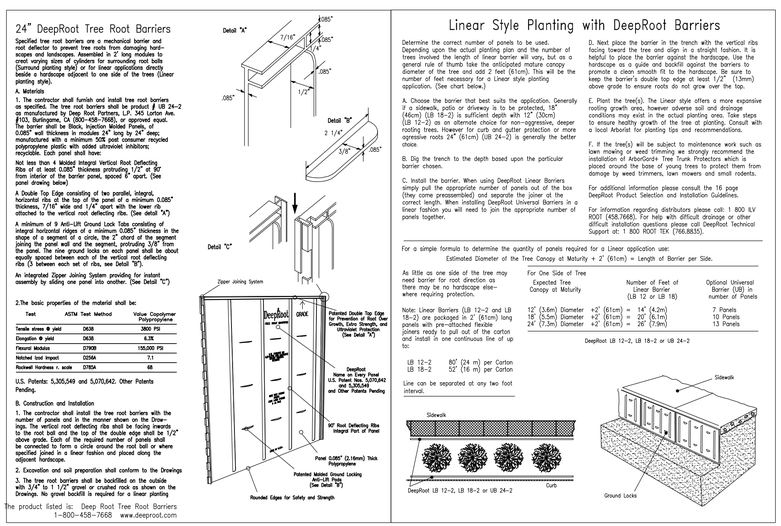


TYPICAL PLANT SPACING

NOT TO SCALE

Amenity Plant Schedule

Quantity	Sym	Botanical	Common	Specifications
20	BM	Buxus microphylla	Littleleaf Boxwood	Min. 7 gal., 18' ht., 18' spd., 30" o.c.
5	BN	x Butiagrus nabonnandii	Mule Palm	FG., See Plans for clear trunk ht.
2	EF	Eugenia foetida	Spanish Stopper	Min., 25 gal., 6` ht., Full to base, Cone, Matched.
67	HP	Hamelia patens 'Dwarf'	Dwarf Firebush	Min. 3 gal., 18" ht., 18" spd., 24" o.c.
6	HRS	Hibiscus rosa-sinensis 'Seminole Pink'	Seminole Pink Chinese Hibiscus	Min. 15 gal., 4' ht., Standard,matched, full head
48	ICB	Ilex cornuta `Burfordii Nana`	Dwarf Burford Holly	Min. 7 gal., 18" ht., 18" spd., 36" o.c.
3	LD	Livistona decipiens	Ribbon Palm	FG., See Plans for clear trunk ht.
314	LEG	Liriope muscari `Evergreen Giant`	Evergreen Giant Lilyturf	Min. 3 gal., full pot, 18" o.c.
11	LJT	Ligustrum japonicum	Japanese Privet	Min. 65 gal., 10'-12' ht., 2.5" cal. Multitrunk
2	MG	Magnolia grandiflora	Southern Magnolia Alta	Min. 100 gal., 12'ht., 3' dbh (4" cal)
90	NOD	Nerium oleander `Dwarf`	Dwarf Oleander	Min. 7 gal., 18' ht., 18' spd., 30" o.c.
64	PM	Podocarpus macrophyllus	Podocarpus macrophyllus	Min. 7 gal., 24" ht., 24" spd., 36" o.c.
39	PSX	Philodendron xanadu	Xanadu Philodendron	Min. 3 gal., 12" ht., 12" spd., 36" o.c.
6	QV	Quercus virginiana	Southern Live Oak	Min. 100 gal., 12'ht., 3' dbh (4" cal)
272	RIA	Rhaphiolepis indica `Alba`	White Indian Hawthorn	Min. 3 gal., 12" ht., 12" spd., 24" o.c.
77	TAM	Trachelospermum asiaticum	Asian Jasmine	Min. 1 gal., full pot, 18" o.c.
81	VO	Viburnum odoratissimum	Sweet Viburnum	Min. 3 gal., 12" ht., 12" spd., 36" o.c.
81	VSD	Viburnum obovatum 'Mrs. Schiller's Delight'	Mrs. Schillers Delight Walter's Viburnum	Min. 3 gal., 12" ht., 12" spd., 30" o.c.
21,083 SF	Sod B	Paspalum notatum	Bahia Sod	



Tree Root Barrier Detail

General Landscape Notes:

1. Landscape Contractor shall be responsible for all materials and plants as called for on the landscape plans. The list of plant quantities accompanying the plans shall be used as a guide only. Contractor shall verify all quantities and report any discrepancies at time of bidding.

2. All plant material shall be graded Florida No. 1 or better, as outlined by "Grades and Standards for Nursery Plants", Florida Department of Agriculture and Consumer Services, division of Plant Industry.

3. All planting shall be top dressed with a minimum 2" pine bark mini nuggets.

4. The Landscape Contractor shall be wholly responsible for the stability and plumb condition of all trees and shrubs and shall be legally liable for any damage caused by instability of plant material. The staking method, if not shown by detail on this plan, shall be approved by the owner or his/her authorized representative.

5. Every possible safeguard shall be taken to protect existing trees that are shown on the landscape plan to be preserved.

6. The Landscape Contractor is responsible for cleaning all debris associated with their work.

7. Height and spread specifications refer to the overall plant form. Singular branches may not be used to meet minimum requirements. Tree caliper size to be measured 12" above grade.

8. All landscaping shall be installed according to accepted commercial planting procedures. Soil, shall be free of limerock, pebbles, or other construction debris.

9. All landscaping shall conform to the standards set forth in the City of Apopka LDC.

10. Landscaping shall not interfere with power lines, sewer or water pipes or any other existing or proposed utilities.

11. All landscaping areas shall be 100% irrigated with an automatic irrigation system consistent with the City of Apopka LDC. NO SHRUB RISERS SHALL BE UTILIZED

12. Prior to the issuance of any permits or the removal of any trees, protective tree barriers shall be installed around those trees that will remain on site and shall be inspected by the county.

13. Ball & burlap material shall be an acceptable alternative to container grown trees.

14. Occasionally there is the potential for site modification due to revised field grading, clearing of existing tree canopy or other unforeseen conditions. The Landscape Contractor shall be responsible for informing the Owner and Landscape Architect of site conditions adverse to the healthy establishment of any plant material prior to planting so that a resolution may be achieved.

15. The Landscape Contractor shall be responsible for arranging a pre-construction meeting with the Owner and Landscape architect in order to address and clarify any questions, concerns and/or conditions related to these drawings or the existing site.

16. Landscape Contractor shall use appropriate container size to meet minimum plant height, if minimum plant height can not be met with specified container size.

17. All proposed tress shall be measured at DBH (Diameter Breast Height) 54 inches above grade.

daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

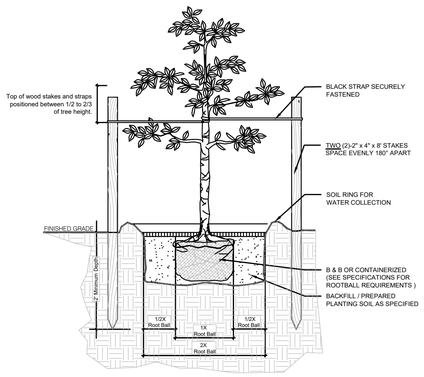
REV	DATE	DESCRIPTION	BY

Plant Schedule and Details
Landscape Plans
Springhaven
Apopka, Florida

PROJECT NO. 24215
SCALE NTS
DATE May 2026
SHEET L-001

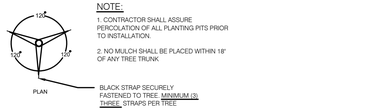
Details

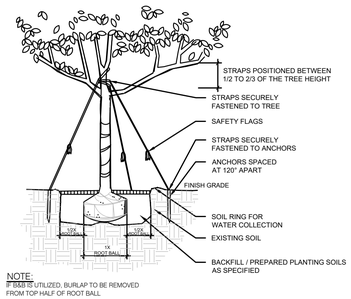




SMALL TREE GUYING DETAIL

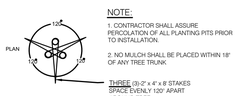
Detail for trees between 1" and 2.5" cal. NOT TO SCALE

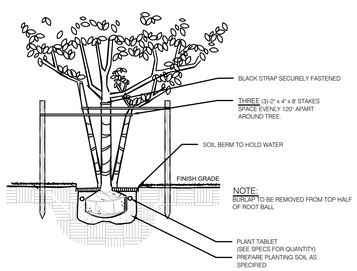




LARGE TREE GUYING DETAIL

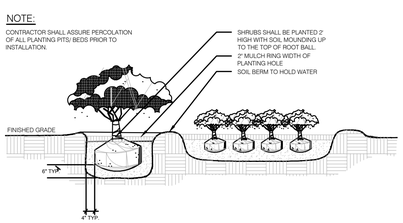
Detail for trees greater than 3" cal. NOT TO SCALE





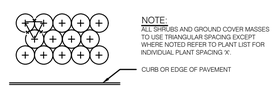
MULTI-TRUNK TREE GUYING DETAIL

Detail for trees with more than 1 trunk NOT TO SCALE



SHRUB AND GROUND COVER DETAIL

NOT TO SCALE



TYPICAL PLANT SPACING

NOT TO SCALE

Park Area Plant Schedule

Quantity	Sym	Botanical	Common	Specifications
44	AA	Agapanthus africanus	Lily of the Nile	Min. 1 gal., full pot, 18" o.c.
45	BM	Buxus microphylla	Littleleaf Boxwood	Min. 7 gal., 24" ht., 24" spd., 30" o.c.
15	CI	Chrysobalanus icaco 'Red Tip'	Red Tip Coco Plum	Min. 15 gal., 4' ht., 3' spd, 5' o.c.
187	EG	Evolvulus glomeratus 'Blue Daze'	Blue Daze	Min. 3 gal., full pot, 18" o.c.
53	LEG	Liriope muscari "Evergreen Giant"	Liriope Evergreen Giant	Min. 3 gal., full pot, 18" o.c.
4	LJT	Ligustrum japonicum	Japanese Privet	Min. 65 gal., 10'-12' ht., 2.5" cal. Multitrunk
4	MG	Magnolia grandiflora	Southern Magnolia Alta	Min. 100 gal., 12'ht., 3' dbh (4" cal)
27	QV	Quercus virginiana	Southern Live Oak	Min. 100 gal., 12'ht., 3' dbh (4" cal)
158	RIA	Rhaphiolepis indica `Alba`	White Indian Hawthorn	Min. 3 gal., 12" ht., 12" spd., 24" o.c.
1	UP	Ulmus parvifolia	Drake Elm	Min. 100 gal., 12'ht., 3' dbh (4" cal)
247	VB	Viburnum obovatum	Walter`s Viburnum	Min. 3 gal., 12" ht., 12" spd., 36" o.c.
50	VSD	Viburnum obovatum `Mrs. Schillers Delight`	Mrs. Schillers Delight Viburnum	Min. 3 gal., 12" ht., 12" spd., 30" o.c.
68,293 SF	Sod B	Paspalum notatum	Bahia Sod	

General Landscape Notes:

1. Landscape Contractor shall be responsible for all materials and plants as called for on the landscape plans. The list of plant quantities accompanying the plans shall be used as a guide only. Contractor shall verify all quantities and report any discrepancies at time of bidding.

2. All plant material shall be graded Florida No. 1 or better, as outlined by "Grades and Standards for Nursery Plants", Florida Department of Agriculture and Consumer Services, division of Plant Industry.

3. All planting shall be top dressed with a minimum 2" pine bark mini nuggets.

4. The Landscape Contractor shall be wholly responsible for the stability and plumb condition of all trees and shrubs and shall be legally liable for any damage caused by instability of plant material. The staking method, if not shown by detail on this plan, shall be approved by the owner or his/her authorized representative.

5. Every possible safeguard shall be taken to protect existing trees that are shown on the landscape plan to be preserved.

6. The Landscape Contractor is responsible for cleaning all debris associated with their work.

7. Height and spread specifications refer to the overall plant form. Singular branches may not be used to meet minimum requirements. Tree caliper size to be measured 12" above grade.

8. All landscaping shall be installed according to accepted commercial planting procedures. Soil, shall be free of limerock, pebbles, or other construction debris.

9. All landscaping shall conform to the standards set forth in the City of Apopka LDC.

10. Landscaping shall not interfere with power lines, sewer or water pipes or any other existing or proposed utilities.

11. All landscaping areas shall be 100% irrigated with an automatic irrigation system consistent with the City of Apopka LDC. NO SHRUB RISERS SHALL BE UTILIZED

12. Prior to the issuance of any permits or the removal of any trees, protective tree barriers shall be installed around those trees that will remain on site and shall be inspected by the county.

13. Ball & burlap material shall be an acceptable alternative to container grown trees.

14. Occasionally there is the potential for site modification due to revised field grading, clearing of existing tree canopy or other unforeseen conditions. The Landscape Contractor shall be responsible for informing the Owner and Landscape Architect of site conditions adverse to the healthy establishment of any plant material prior to planting so that a resolution may be achieved.

15. The Landscape Contractor shall be responsible for arranging a pre-construction meeting with the Owner and Landscape architect in order to address and clarify any questions, concerns and/or conditions related to these drawings or the existing site.

16. Landscape Contractor shall use appropriate container size to meet minimum plant height, if minimum plant height can not be met with specified container size.

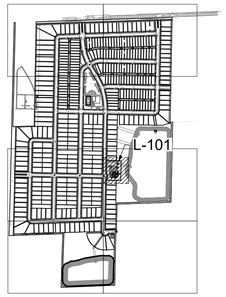
17. All proposed tress shall be measured at DBH (Diameter Breast Height) 54 inches above grade.

daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

REV	DATE	DESCRIPTION	BY

Plant Schedule and Details
Landscape Plans
Springhaven
Apopka, Florida

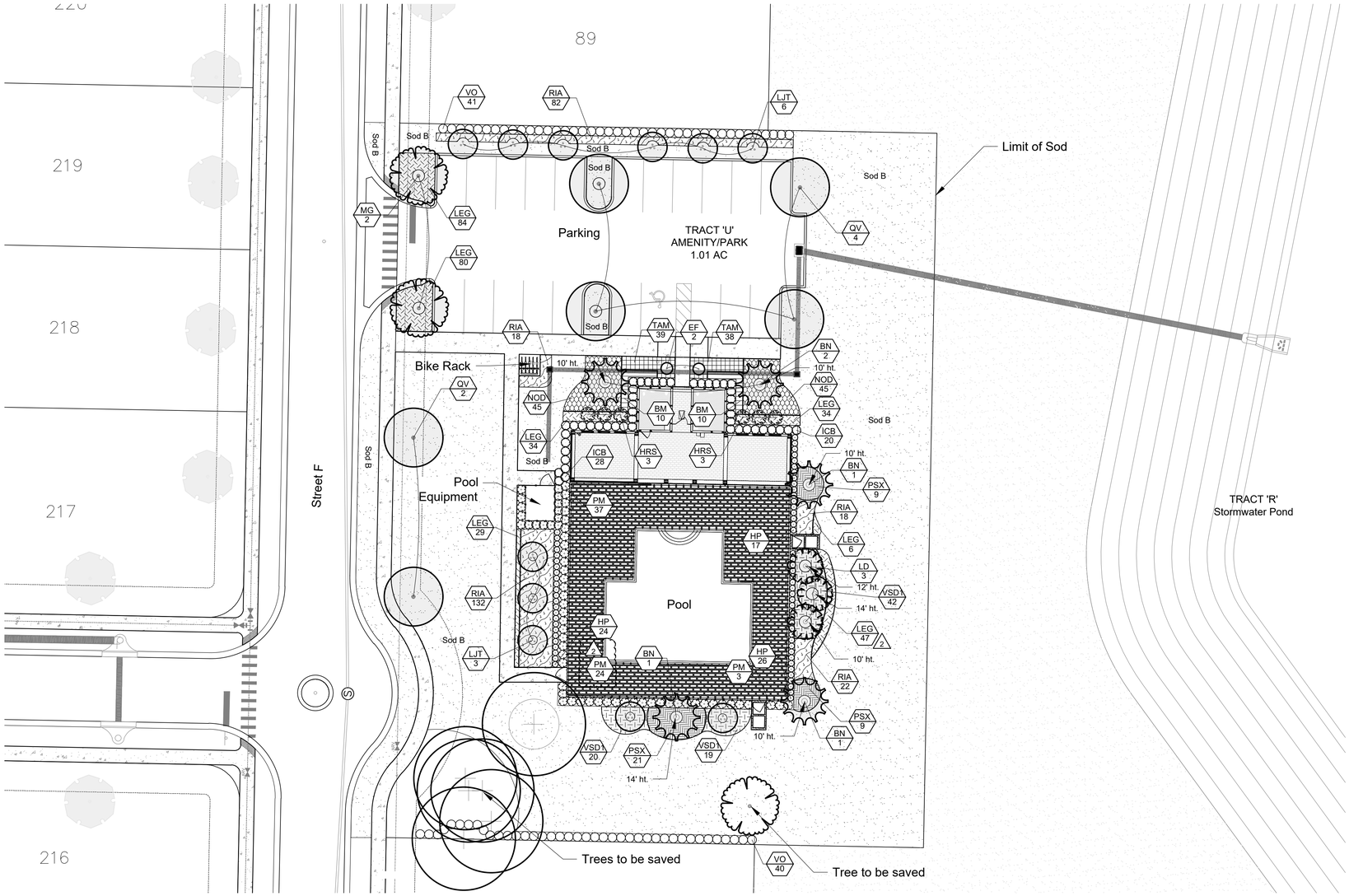
PROJECT NO. 24215
SCALE NTS
DATE May 2026
SHEET L-002



Key Map
NTS

Legend

BM	Buxus microphylla
BN	x Butiagrus nabonnandii
EF	Eugenia foetida
HP	Hamelia patens 'Dwarf'
HRS	Hibiscus rosa-sinensis 'Seminole Pink'
ICB	Ilex cornuta `Burfordii Nana`
LD	Livistona decipiens
LEG	Liriope muscari `Evergreen Giant`
LJT	Ligustrum japonicum
MG	Magnolia grandiflora
NOD	Nerium oleander `Dwarf`
PM	Podocarpus macrophyllus
PSX	Philodendron xanadu
QV	Quercus virginiana
RIA	Rhaphiolepis indica `Alba`
TAM	Trachelospermum asiaticum
VO	Viburnum odoratissimum
VSD	Viburnum obovatum 'Mrs. Schiller's Delight'
Sod B	Paspalum notatum



20' 0' 20' 40'

daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

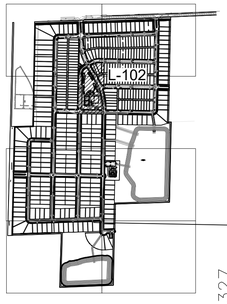
REV.	DATE	DESCRIPTION	BY

Tract U Amenity Area
Landscape Plans
Springhaven
Apopka, Florida

PROJECT NO.
24215
SCALE
1" = 20'
DATE
May 2026
SHEET
L-101

Legend

Sym	Botanical
AA	Agapanthus africanus
BM	Buxus microphylla
CI	Chrysobalanus icaco 'Red Tip'
EF	Eugenia foetida
EG	Evolvulus glomeratus 'Blue Daze'
LJT	Ligustrum japonicum
MG	Magnolia grandiflora
QV	Quercus virginiana
RIA	Rhaphiolepis indica `Alba`
UP	Ulmus parvifolia
LEG	Liriope muscari "Evergreen Giant"
VB	Viburnum obovatum
VSD	Viburnum obovatum `Mrs. Schillers Delight`



Key Map
NTS

327
326
325

Street F
Sod B
2' ht. Berm of Sod
TRACT 'T'
AMENITY / PARK
2.12 AC
Open Space
Sod B
Pavillion
Sidewalk
Large Dog Park
Sod B
Small Dog Park
Sod B
Sidewalk
Pickleball Court
Pickleball Court
Parking Street
Street D
Street E
Sidewalk
Parking Street
Sod B

QV 3
VB 111
LJT 1
EG 26
MG 2
BM 8
VSD 25
BM 9
VSD 25
EG 27
EG 67
UP 1
MG 2
RIA 65
CI 8
LEG 17
LEG 19
LJT 1
LEG 17
EG 67
RIA 65
BM 11
VB 124
AA 22
LJT 1
BM 11
QV 17
QV 4

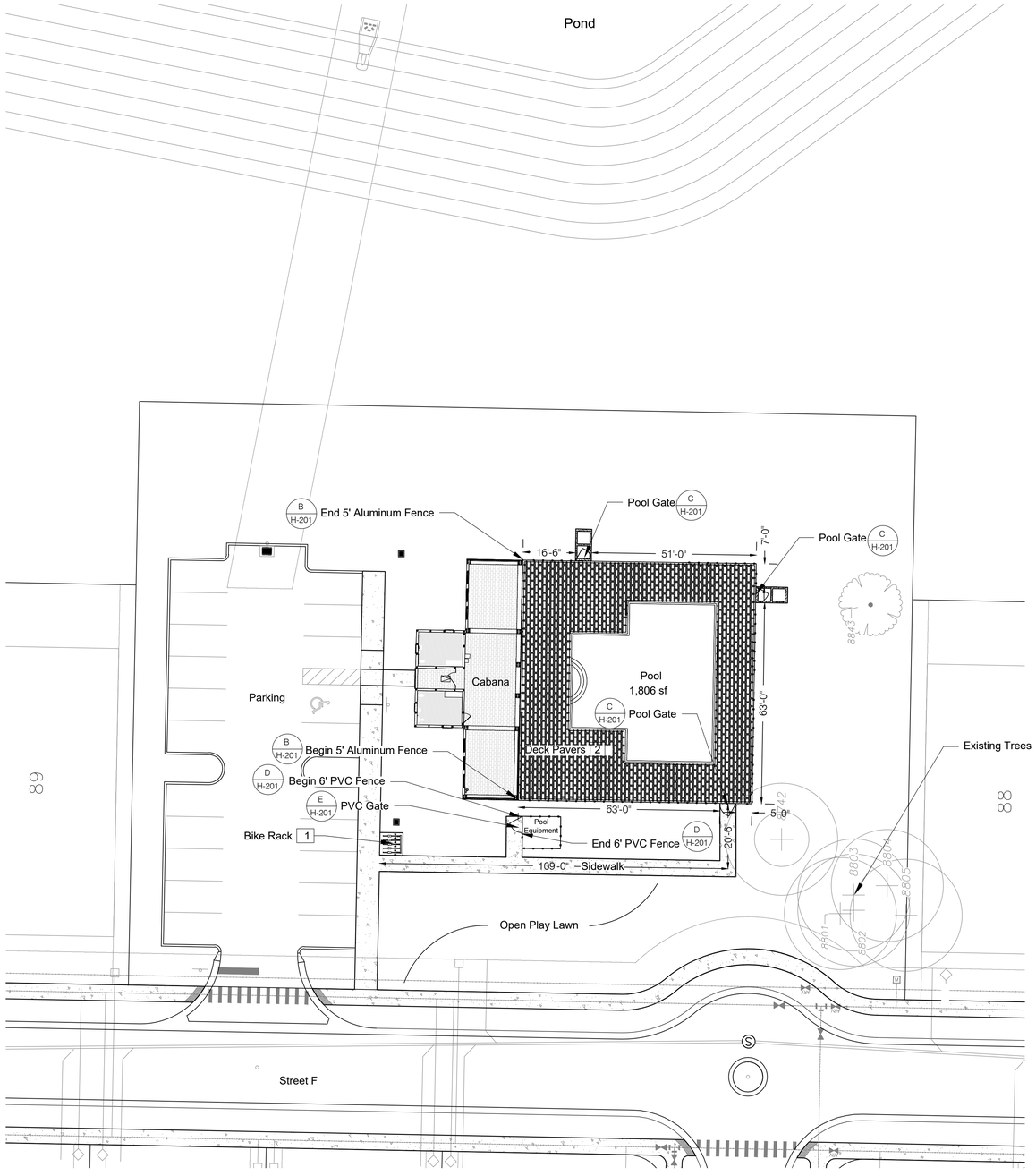
20' 0' 20' 40'

daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

REV.	DATE	DESCRIPTION	BY

Tract T Park Area
Landscape Plans
Springhaven
Apopka, Florida

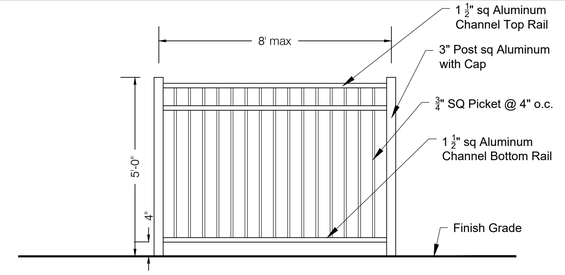
PROJECT NO. 24215
SCALE 1" = 20'
DATE May 2026
SHEET L-102



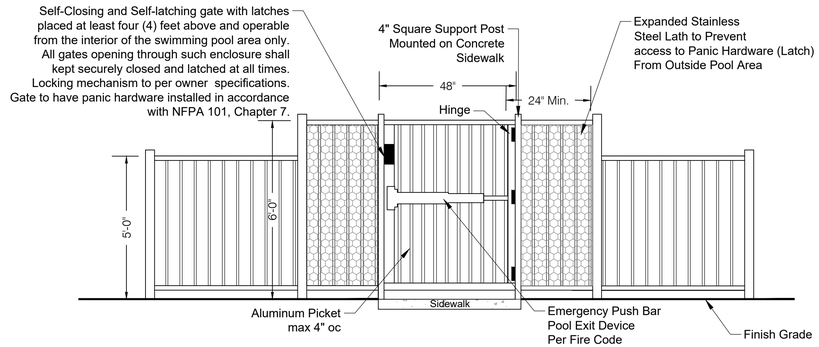
A H-201 **Amenity Area-Tract U**
Site Plan SCALE: 1"=20'

Hardscape Schedule

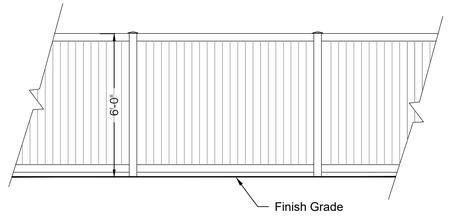
No.	Item:	Manufacturer or Distributer:	Catalogue # or Description:	Notes:
1	BIKE RACK	ANOVA https://www.anovafurnishings.com	ITEM #LBR5PVCSURF; STREETSIDE 5-BIKE/3 LOOP BIKE RACK, FUSION ADVANTAGE FINISH, SURFACE MOUNT; COLOR GRAY	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
2	DECK PAVERS	BELGARD https://belgard.com	PAPYRUS; ARTISAN; 3 PIECES SYSTEM; COLOR SCANDINA GRAY; PATERN A	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL



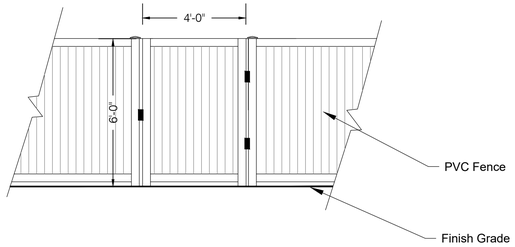
B H-201 **Aluminum Fence**
Elevation SCALE: NTS



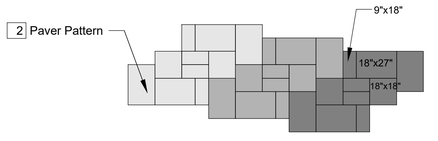
C H-201 **Pool Access Gate**
Elevation SCALE: NTS



D H-201 **6' PVC Fence**
Elevation SCALE: NTS



E H-201 **6' PVC Gate**
Elevation SCALE: NTS



3 Pieces Paver Pattern A
Plan View SCALE: NTS

HARDSCAPE NOTES:

1. CONSTRUCTION DETAILS SHOWN ON THESE PLANS ARE FOR DESIGN PURPOSES ONLY. **THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND STRUCTURAL ENGINEERING TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OF ITEMS SHOWN ON THESE PLANS.**

2. **CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION OF DOCUMENTS, PERMIT APPLICATION AND THE SECURING OF BUILDING PERMITS FOR THE PROPOSED IMPROVEMENTS**.

3. PLANS AND DETAILS ARE BASED UPON PLANS PREPARED BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY DISCREPANCIES.

4. ALL DIMENSIONS SHOWN ARE "ON-CENTER" UNLESS OTHERWISE NOTED.

5. UNLESS OTHERWISE NOTED, ALL PRODUCTS IDENTIFIED ON THE PLANS ARE CONSIDERED "OR EQUAL". CONTRACTOR MAY PROPOSE ALTERNATE PRODUCTS AND FINISHES TO OWNER FOR REVIEW AND APPROVAL.

6. ALL STUCCO FINISHES ON WALLS, COLUMNS & CAPS WILL BE PAINTED ON BOTH SIDES. OWNER WILL REQUEST PAINT SAMPLES TO BE PROVIDED ON SITE AS PART OF THE SELECTION PROCESS.

8. CONTRACTOR TO VERIFY ALL QUANTITIES AND REPORT ANY DISCREPANCIES AT TIME OF BIDDING.

9. UNLESS OTHERWISE NOTED ALL ALUMINUM GATES AND FENCING TO BE POWDER COATED BLACK.

10. UNLESS OTHERWISE NOTED ALL COLUMNS SHALL BE A MINIMUM 18" FROM THE BACK OF CURB AND OR THE BACK OF SIDEWALK.

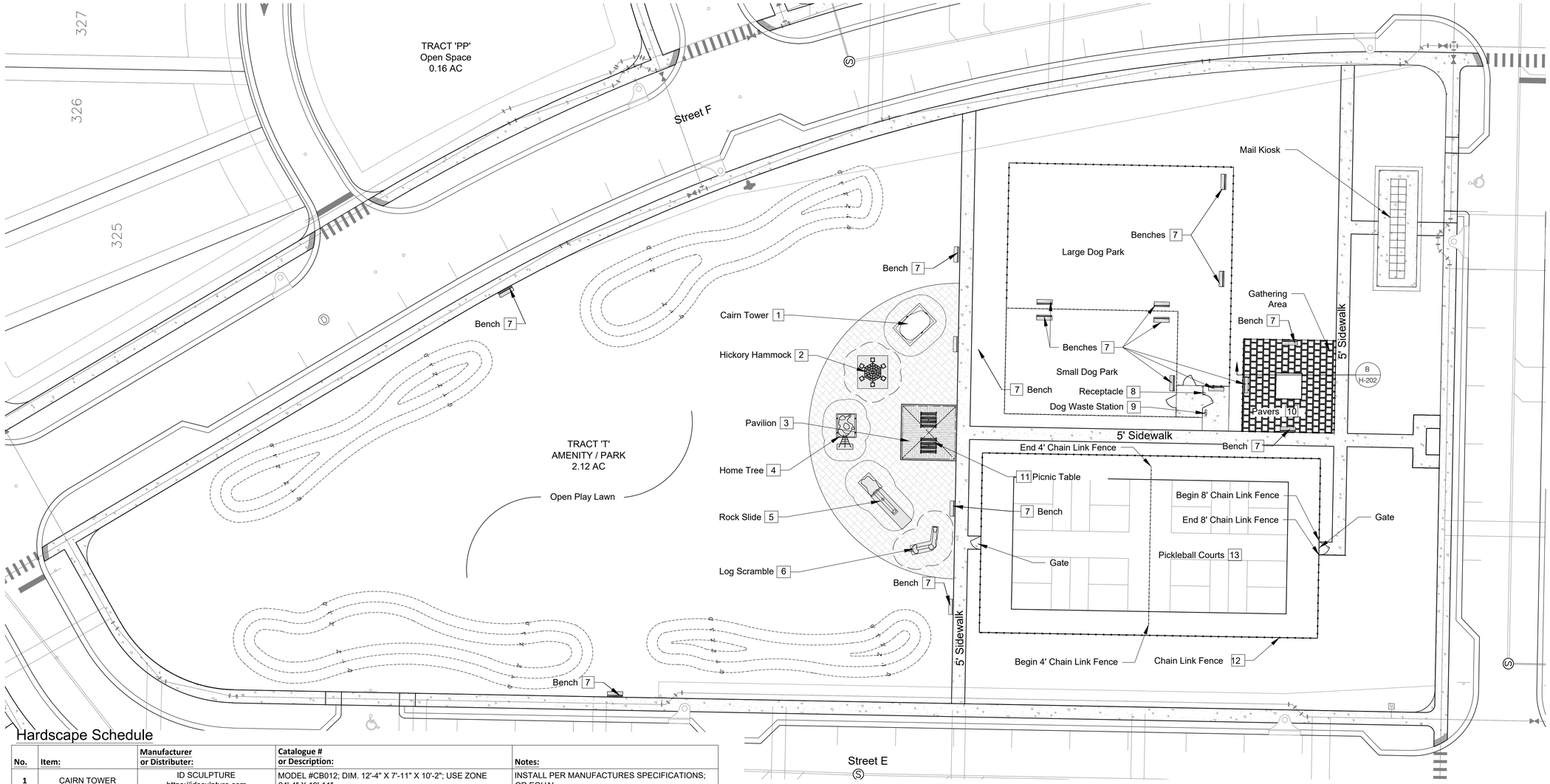
10' 0' 10' 20'

daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

REV.	DATE	DESCRIPTION	BY

Amenity Area-Tract U
Hardscape Plan
Springhaven
Apopka, Florida

PROJECT NO. 24215
SCALE 1" = 20'
DATE May 2026
SHEET H-201

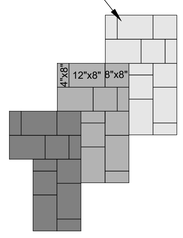


A H-202 **Amenity Central Park-Tract T**
Site Plan SCALE: 1"=20'

Hardscape Schedule

No.	Item:	Manufacturer or Distributer:	Catalogue # or Description:	Notes:
1	CAIRN TOWER	ID SCULPTURE https://idsculpture.com	MODEL #CB012; DIM. 12'-4" X 7'-11" X 10'-2"; USE ZONE 24'-4" X 19'-11"	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
2	HICKORY HAMMOCK	ID SCULPTURE https://idsculpture.com	MODEL #AP006V2; DIM 10'-9" X 9'-7" X 1'-7"; USE ZONE 22'-9" X 21'-7"	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
3	PAVILION	Poligon https://www.poligon.com	MODEL # SQR42-67085b; SQUARE PAVILION 20 X 20; METAL ROOF	INSTALL ON CONCRETE PATH, PER MANUFACTURES SPECIFICATIONS; OR EQUAL
4	HOME TREE	ID SCULPTURE https://idsculpture.com	MODEL #AP004; DIM. 11'-5" X 6'-3" X 6'-4"; USE ZONE 23'-5" X 18'-3"	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
5	ROCK SLIDE	ID SCULPTURE https://idsculpture.com	MODEL #CB019; DIM 18'-0" X 5'-2" X 10'-2"; USE ZONE 30'-0" X 17'-2"	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
6	LOG SCRAMBLE	ID SCULPTURE https://idsculpture.com	MODEL #AP041; DIM. 13'-11" X 6'-2" X 3'-7"; USE ZONE 25'-11" X 18'-2"	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
7	BENCH	ANOVA https://www.anovafurnishings.com	ITEM #AL1980R; ALLURE ALUMINUM PLASTIC 6' CONTOUR BENCH; DIM 33" H X 25"W X 73"L; PLASTIC SLAT COLOR DRIFTWOOD-WOODGRAIN; FRAME COLOR TEXTURED CHARCOAL	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
8	RECEPTACLE	ANOVA https://www.anovafurnishings.com	ITEM #CR1835RBT; CORONADO 35 GAL. RECYCLED PLASTIC RECEPTACLE, BONNET TOP; PLASTIC SLAT COLOR DRITWOOD GRAY - WOODGRAIN; FRAME COLOR TEXTURED CHARCOAL	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
9	DOG WASTE STATION	REP SERVICES, INC; WWW.REPSERVICES.COM	DOGIPOT POLY PET STATION WITH BAG DISPENSER; POWDER COAT GREEN; KDP1010	ON CONCRETE PAD INSTALLATION; INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
10	PAVERS	BELGARD https://belgard.com	CATALINA GRANA; METROPOLITAN; 3 PIECES SYSTEM; COLOR TITANIUM; PATERN B	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
11	6' PICNIC TABLE	ANOVA WWW.ANOVAFURNISHINGS.COM	ITEM # RCPWT63; WAINWRIGHT 6' PICNIC TABLE AND BENCHES SET; PLASTIC SLAT COLOR BIRCHWOOD-WOODGRAIN; FRAME COLOR TEXTURED CHARCOAL	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
12	8' CHAIN LINK FENCE	BY CONTRACTOR	8' BLACK VINYL COAT FENCE (TOP & BOTTOM RAIL REQUIRED)	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL
13	PICKLEBALL COURT	BY CONTRACTOR	ASPHALT WITH PAINTED SURFACE	INSTALL PER MANUFACTURES SPECIFICATIONS; OR EQUAL

10 Paver Pattern



3 Pieces Paver Pattern B
Plan View SCALE: NTS

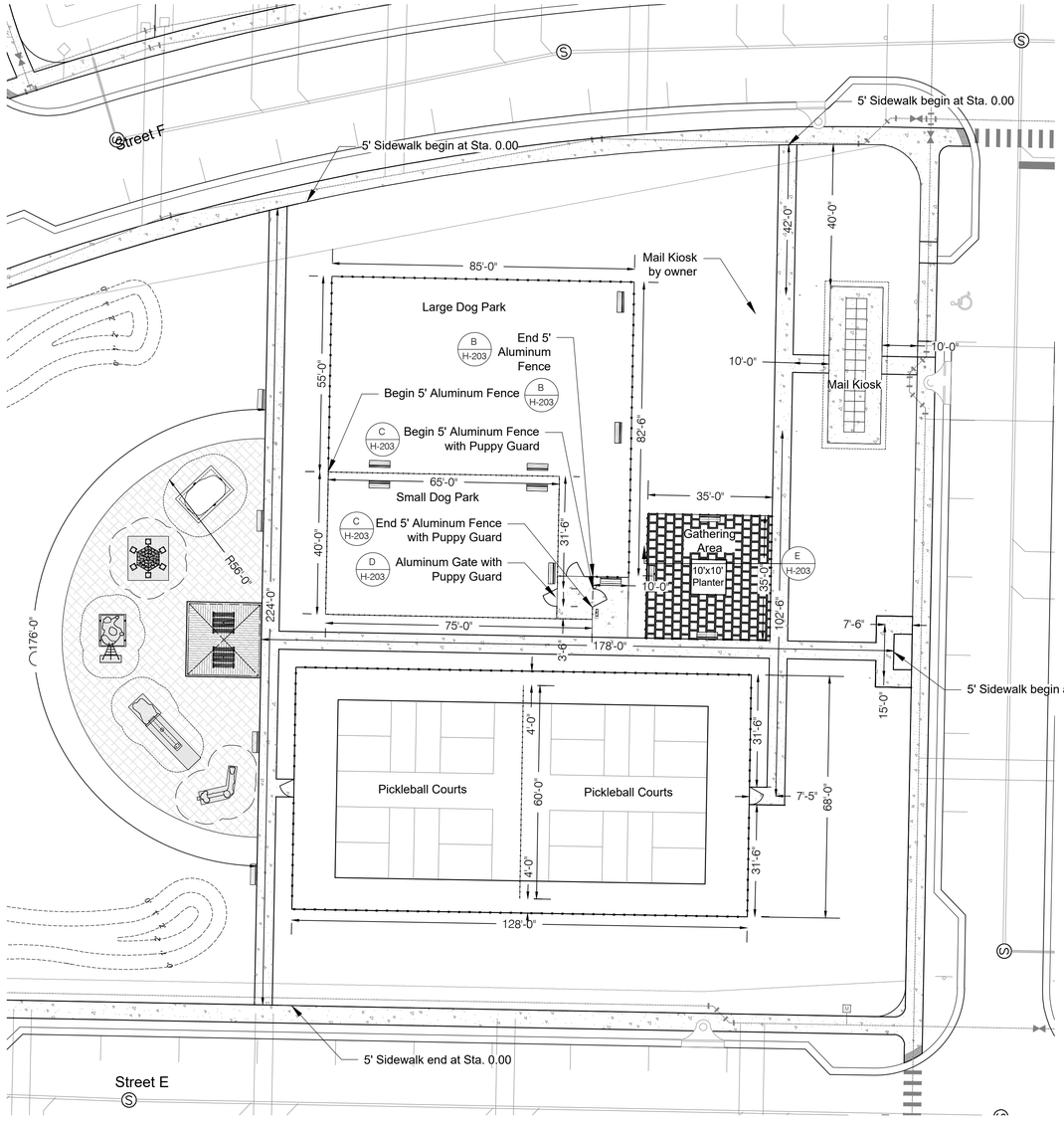
10' 0' 10' 20'

daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

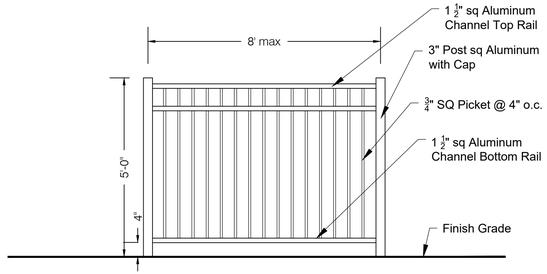
REV.	DATE	DESCRIPTION	BY

Park Tract T Hardscape Schedule
Hardscape Plan
Springhaven
Apopka, Florida

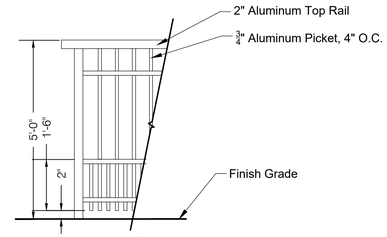
PROJECT NO. 24215
SCALE NTS
DATE May 2026
SHEET H-202



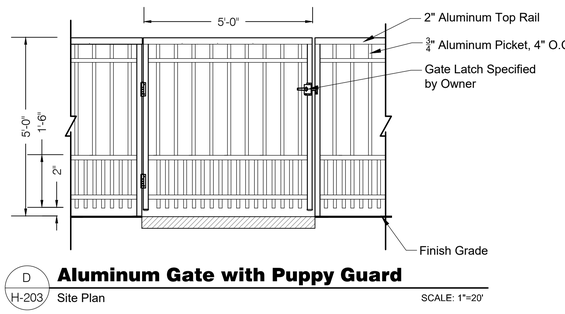
A H-202 **Amenity Central Park-Tract T**
Site Plan SCALE: 1"=20'



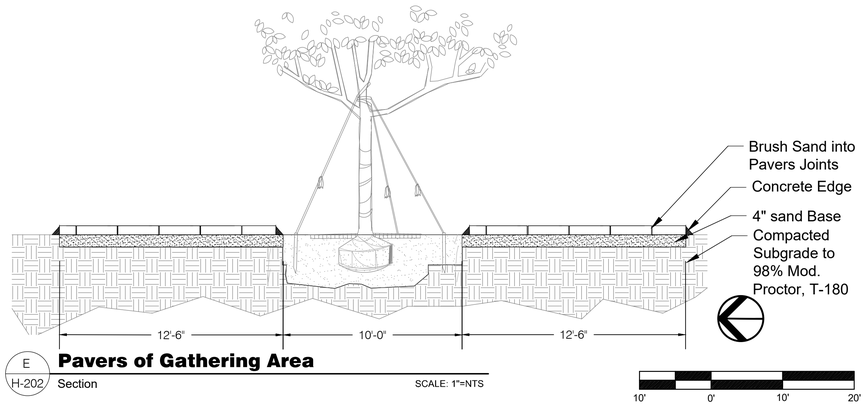
B H-203 **Aluminum Fence**
Site Plan SCALE: 1"=20'



C H-203 **Aluminum Fence with Puppy Guard**
Site Plan SCALE: 1"=20'



D H-203 **Aluminum Gate with Puppy Guard**
Site Plan SCALE: 1"=20'



E H-202 **Pavers of Gathering Area**
Section SCALE: 1"=NTS

10' 0' 10' 20'

HARDSCAPE NOTES:

1. CONSTRUCTION DETAILS SHOWN ON THESE PLANS ARE FOR DESIGN PURPOSES ONLY. **THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND STRUCTURAL ENGINEERING TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OF ITEMS SHOWN ON THESE PLANS.**

2. **CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION OF DOCUMENTS, PERMIT APPLICATION AND THE SECURING OF BUILDING PERMITS FOR THE PROPOSED IMPROVEMENTS**.

3. PLANS AND DETAILS ARE BASED UPON PLANS PREPARED BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY DISCREPANCIES.

4. ALL DIMENSIONS SHOWN ARE "ON-CENTER" UNLESS OTHERWISE NOTED.

5. UNLESS OTHERWISE NOTED, ALL PRODUCTS IDENTIFIED ON THE PLANS ARE CONSIDERED "OR EQUAL". CONTRACTOR MAY PROPOSE ALTERNATE PRODUCTS AND FINISHES TO OWNER FOR REVIEW AND APPROVAL.

6. ALL STUCCO FINISHES ON WALLS, COLUMNS & CAPS WILL BE PAINTED ON BOTH SIDES. OWNER WILL REQUEST PAINT SAMPLES TO BE PROVIDED ON SITE AS PART OF THE SELECTION PROCESS.

8. CONTRACTOR TO VERIFY ALL QUANTITIES AND REPORT ANY DISCREPANCIES AT TIME OF BIDDING.

9. UNLESS OTHERWISE NOTED ALL ALUMINUM GATES AND FENCING TO BE POWDER COATED BLACK.

10. UNLESS OTHERWISE NOTED ALL COLUMNS SHALL BE A MINIMUM 18" FROM THE BACK OF CURB AND OR THE BACK OF SIDEWALK.

daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

REV.	DATE	DESCRIPTION	BY

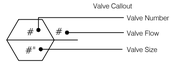
Park Tract T Details & Elevations
Hardscape Plan
Springhaven
Apopka, Florida

PROJECT NO. 24215
SCALE NTS
DATE May 2026
SHEET H-203

IRRIGATION SCHEDULE POOL

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI		
EST LCS RCS CST SST	Rain Bird 1806 (MPR) 15 Strip Series Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	19	30		
Q T H F	Rain Bird 1806 (MPR) 8 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	66	30		
Q T H F	Rain Bird 1806 (MPR) 10 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	4	30		
Q T H TQ F	Rain Bird 1806 (MPR) 12 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	4	30		
Q T H TQ F	Rain Bird 1806 (MPR) 15 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	5	30		
1401 1402 1404 1408	Rain Bird 1804-1400 Flood Tree Bubbler 1401 Flood Bubbler 4.0" popup	35	20		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
25	Rain Bird 5006-R-NP-PC,FC-MPR 25 Turf Rotor, 6.0" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle). Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover. Pressure Regulating.	7	35		24'
30	Rain Bird 5006-R-NP-PC,FC-MPR 30 Turf Rotor, 6.0" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle). Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover. Pressure Regulating.	10	35		30'
35	Rain Bird 5006-R-NP-PC,FC-MPR 35 Turf Rotor, 6.0" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle). Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover. Pressure Regulating.	27	35		34'
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
	Area to Receive Dripline Rain Bird XFCV-06-18 (Ground Cover) XFCV On-Surface Landscape Dripline with a Heavy-Duty 3.5 psi Check Valve. 0.6 GPH emitters at 18" O.C. Dripline laterals spaced at 18" apart, with emitters offset for triangular pattern. Great for elevation change. Specify XF insert fittings.	534.8 lf			
	Area to Receive Dripline Rain Bird XFCV-06-18 (Shrub Bedding) XFCV On-Surface Landscape Dripline with a Heavy-Duty 3.5 psi Check Valve. 0.6 GPH emitters at 18" O.C. Dripline laterals spaced at 18" apart, with emitters offset for triangular pattern. Great for elevation change. Specify XF insert fittings.	2,938 lf			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
	Rain Bird PESBR 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, and Purple Flow Control Handle.	10			
	Rain Bird PESBR-PRS-D (2) 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, Purple Flow Control Handle, and Pressure Regulator Module.	5			
BF	Febco 825YA 1" Reduced Pressure Backflow Preventer	1			
C1	Rain Bird ESP8LXME-LXMM with (03) ESPLXMSM4 20 Station Capable Commercial Controller. Mounted on a Powder-Coated Metal Cabinet.	1			
RG	Rain Bird RSD-BEx Rain Sensor, with metal latching bracket, extension wire.	1			
M1	Water Meter 1" 1" Potable Water Meter with Backflow Preventer	1			
	Irrigation Lateral Line: PVC Class 200 SDR 21	3,867 lf			
	Irrigation Mainline: PVC Class 200 SDR 21 (2"Mainline)	374.0 lf			
	Pipe Sleeve: PVC Class 200 SDR 21	140.7 lf			

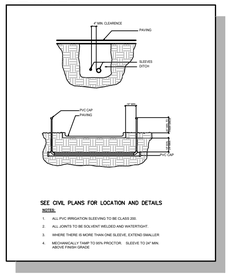
Valve Callout

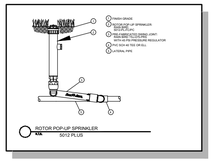


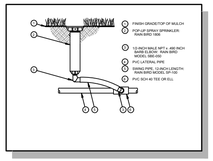
WATERING SCHEDULE POOL

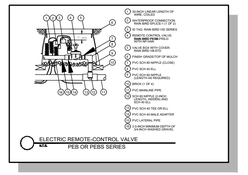
NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL/WEEK	GAL/DAY
1	Rain Bird PESBR-PRS-D (2)	Area for Dripline	0.43 in/h	0.5	71	218	109
2	Rain Bird PESBR-PRS-D (2)	Bubbler	3.43 in/h	0.5	9	171	85.5
3	Rain Bird PESBR	Turf Spray	2.69 in/h	0.5	12	266	133
4	Rain Bird PESBR	Turf Spray	1.38 in/h	0.5	22	411	205
5	Rain Bird PESBR-PRS-D (2)	Area for Dripline	0.43 in/h	0.5	70	250	125
6	Rain Bird PESBR	Turf Rotor	0.6 in/h	0.5	50	1,057	528
7	Rain Bird PESBR	Turf Rotor	0.66 in/h	0.5	46	1,052	526
8	Rain Bird PESBR	Turf Rotor	0.54 in/h	0.5	56	746	373
9	Rain Bird PESBR-PRS-D (2)	Area for Dripline	0.43 in/h	0.5	71	1,172	586
10	Rain Bird PESBR	Turf Spray	1.47 in/h	0.5	21	480	240
11	Rain Bird PESBR	Turf Rotor	0.63 in/h	0.5	48	954	477
12	Rain Bird PESBR-PRS-D (2)	Bubbler	3.42 in/h	0.5	9	144	72
13	Rain Bird PESBR	Turf Rotor	0.68 in/h	0.5	45	944	472
14	Rain Bird PESBR	Turf Rotor	0.69 in/h	0.5	44	967	483
15	Rain Bird PESBR	Turf Rotor	0.62 in/h	0.5	49	848	424
		TOTALS:			623	9,679	4,840

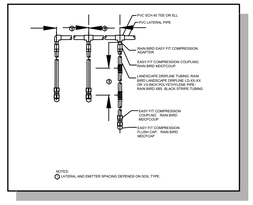
DETAILS











IRRIGATION SYSTEM PERFORMANCE NOTES

1) IRRIGATION SYSTEM AS SHOWN IS DESIGNED TO OPERATE OFF A RECLAIM WATER SOURCE WITH A PROVIDING A MINIMUM PSI OF 45 AT THE SOURCE

2) HEAD LAYOUT BASED ON BASE INFORMATION PROVIDED. HEADS SHALL BE ADJUSTED TO ACCOMMODATE FIELD VARIATIONS WHILE MAINTAINING 100% COVERAGE AND MINIMIZING OVER SPRAY ONTO PAVED AREAS AND BUILDINGS.

3) LATERAL PIPE SHALL BE SIZED SO THAT WATER VELOCITY DOES NOT EXCEED 5 FEET PER SECOND. MAXIMUM GPM PER PIPE SIZE AS FOLLOWS:

3/4 PIPE	8 GPM
1" PIPE	14 GPM
1 1/4" PIPE	24 GPM
1 1/2" PIPE	36 GPM
2" PIPE	50 GPM
2 1/2" PIPE	80 GPM
3" PIPE	120 GPM
4" PIPE	200 GPM
6" PIPE	450 GPM

NOTE:

1. LAND F/X IRRIGATION WAS UTILIZED TO DESIGN THE IRRIGATION SYSTEM.

2. MAINLINE, LATERAL PIPE & CONTROL VALVES SHOWN IN HARDSCAPE/BUILDINGS AREA'S OR OUTSIDE OF PROPERTY LINES IS FOR CLARITY ONLY. INSTALL PIPE AND EQUIPMENT IN GREEN SPACE AND WITHIN PROPERTY LINES.

GENERAL NOTES

1. REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREE AND SHRUB LOCATIONS.
2. ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER AND ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.
3. ALL POP-UP ROTOR AND SPRAY HEADS SHALL BE INSTALLED USING AN 18" PVC FLEX PIPE CONNECTION. CONTRACTOR SHALL NOT USE FUNNY PIPE.
4. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS, THE SMALLEST LATERAL, PIPE SIZE TO A SINGLE SPRAY OR ROTOR HEAD SHALL BE $\frac{3}{4}$".
5. ALL RISERS SHALL BE STAKED WITH A 1" METAL DOWEL AND SECURED WITH UV RESISTANT PLASTIC CABLE TIES. RISERS AND DOWEL SHALL BE PAINTED FLAT BLACK.
6. ALL REMOTE CONTROL VALVES, GATE VALVES AND QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES.
7. THE EXACT HEIGHT OF ANY 12" POP-UP THAT IS SHOWN IN A SHRUB BED SHALL BE DETERMINED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
8. CONTROL WIRE SHALL BE 14-1 UF DIRECT BURIAL COLORED RED FOR CONTROL WIRES AND WHITE FOR COMMON WIRE. NO CROSS CONNECTION BETWEEN CONTROLLERS SHALL BE ALLOWED. WIRE SPLICES SHALL BE MADE ONLY IN VALVE BOXES USING RAINBIRD "SNAP-TITE" CONNECTORS.
9. ANY PIPING OR VALVES SHOWN OUTSIDE THE PROPERTY LINE OR OUTSIDE OF A LANDSCAPE AREA IN SHOWN THERE FOR DESIGN CLARITY ONLY. ALL PIPING AND VALVES SHALL BE INSTALLED ON THE PROPERTY AND WITHIN LANDSCAPE AREAS.
10. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH, AND EXERCISE CARE SO AS TO NOT DAMAGE ANY EXISTING BERMS, WALLS, STRUCTURES, PLANT MATERIALS AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIR OR REPLACEMENT OF ALL ITEMS DAMAGE BY HIS WORK. HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF SLEEVES AND PIPING THROUGH WALLS, UNDER ROADWAYS AND PAVING, ETC.
11. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN ARE DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATIONS IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS.
12. FINAL LOCATION OF THE AUTOMATIC CONTROLLER(S) SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.
13. ELECTRICAL SERVICE TO ALL EQUIPMENT SHALL BE PROVIDED TO A JUNCTION BOX AT THE EQUIPMENT LOCATION, (BY OTHERS, NOT A PART OF THIS CONTRACT) THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL CONNECTION FROM THE JUNCTION BOX TO ALL EQUIPMENT.
14. THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES TO PROVIDE OPTIMUM COVERAGE WITH MINIMAL OVERSPRAY ONTO WALKS, STREETS, WALLS, ETC. IN ORDER TO ACCOMPLISH THIS, THE CONTRACTOR MAY SUBSTITUTE VARIABLE ARC NOZZLES IN PLACE OF THE SPECIFIED FIXED ARC NOZZLES WHERE NECESSARY. PRESSURE COMPENSATING SCREENS MAY ALSO BE USED TO REDUCE SPRAY DISTANCE.
15. THE CONTRACTOR SHALL COMPLETE ALL WORK IN ACCORDANCE WITH ALL PREVAILING LAWNS, CODES AND REGULATIONS.
16. ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
17. THE CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING SHOWING ALL IRRIGATION INSTALLATION. A COPY OF THE ORIGINAL PLAN MAY BE OBTAINED FROM THE LANDSCAPE ARCHITECT FOR A FEE. THE AS-BUILT DRAWING SHALL LOCATE ALL MAINLINE AND VALVES BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES.
18. ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN EQUIPMENT AND WORKMANSHIP.
19. SLEEVES SHALL BE PLACE UNDER PAVEMENT AS SHOWN ON PLANS AND SHALL BE A MINIMUM OF 2X THE SIZE OF THE IRRIGATION PIPE.
20. CONTRACTOR SHALL PERFORM PRESSURE AND VOLUME TEST ON IRRIGATION WATER SOURCE OVER A CONTINUOUS 24 HOUR PERIOD PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORK, SHOULD THE AVAILABLE SUPPLY NOT BE ADEQUATE TO MEET THE DEMANDS OF THE IRRIGATION SYSTEM AS DESIGNED THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION FOR DESIGN MODIFICATIONS.
21. ALL IRRIGATION PIPES, SPRINKLER CAPS AND VALVE BOX COVERS SHALL BE PURPLE TO DENOTE REUSE WATER. CONTRACTOR TO PROVIDE SIGNAGE AT ALL PROJECT ENTRANCES DENOTING REUSE IRRIGATION WATER. SEE CIVIL PLAN FOR LOCATION AND DETAIL.

daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

REV	DATE	DESCRIPTION	BY

Irrigation Schedule and Details
Irrigation Plan
Springhaven
Apopka, Florida

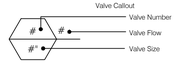
Date:

PROJECT NO. 24215
SCALE NTS
DATE May 2026
SHEET I-001

IRRIGATION SCHEDULE PARK

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI		
EST LCS RCS CST SST	Rain Bird 1806 (MPR) 15 Strip Series Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	116	30		
Q T H F	Rain Bird 1806 (MPR) 8 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	34	30		
Q T H F	Rain Bird 1806 (MPR) 10 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	86	30		
Q T H TQ F	Rain Bird 1806 (MPR) 12 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	8	30		
Q T H TQ F	Rain Bird 1806 (MPR) 15 Series MPR Turf Spray 6.0" Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2" NPT Female Threaded Inlet.	4	30		
1401 1402 1404 1408	Rain Bird 1804-1400 Flood Tree Bubbler 1401 Flood Bubbler 4.0" popup	36	20		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
25	Rain Bird 5006-R-NP-PC,FC-MPR 25 Turf Rotor, 6.0" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle). Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover. Pressure Regulating.	18	35		24'
30	Rain Bird 5006-R-NP-PC,FC-MPR 30 Turf Rotor, 6.0" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle). Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover. Pressure Regulating.	12	35		30'
35	Rain Bird 5006-R-NP-PC,FC-MPR 35 Turf Rotor, 6.0" Pop-Up, Plastic Riser, Matched Precipitation Rotor (MPR nozzle). Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Non-Potable Purple Cover. Pressure Regulating.	73	35		34'
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
	Area to Receive Dripline Rain Bird XFCV-06-18 (Ground Cover) XFCV On-Surface Landscape Dripline with a Heavy-Duty 3.5 psi Check Valve. 0.6 GPH emitters at 18" O.C. Dripline laterals spaced at 18" apart, with emitters offset for triangular pattern. Great for elevation change. Specify XF insert fittings.	672.8 lf			
	Area to Receive Dripline Rain Bird XFCV-06-18 (Shrub Bedding) XFCV On-Surface Landscape Dripline with a Heavy-Duty 3.5 psi Check Valve. 0.6 GPH emitters at 18" O.C. Dripline laterals spaced at 18" apart, with emitters offset for triangular pattern. Great for elevation change. Specify XF insert fittings.	2,310 lf			
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY			
	Rain Bird PESBR 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, and Purple Flow Control Handle.	29			
	Rain Bird PESBR-PRS-D (2) 1", 1-1/2", and 2" Durable Chlorine-Resistant Valves for Reclaimed Water Applications. With Scrubber Mechanism Technology, Purple Flow Control Handle, and Pressure Regulator Module.	4			
C2	Rain Bird ESPLXME2 w/ (2) ESPLXMSM12 36 Station, Traditionally-Wired, Commercial Controller. (1) ESPLXME2 12-Station, Indoor/Outdoor, Plastic Wall-Mount Enclosure w/ (2) ESPLXMSM12 - 12-Station Expansion Modules.	1			
RG	Rain Bird RSD-BEx Rain Sensor, with metal latching bracket, extension wire.	1			
M3	Water Meter 1" 1" Reclam Water Irrigation Meter	1			
	Irrigation Lateral Line: PVC Class 200 SDR 21	7,737 lf			
	Irrigation Mainline: PVC Class 200 SDR 21 (3" Mainline)	1,308 lf			
	Pipe Sleeve: PVC Class 200 SDR 21	57.2 lf			

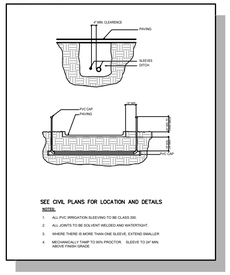
Valve Callout

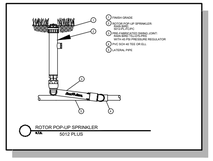


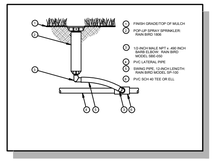
WATERING SCHEDULE PARK

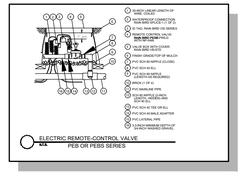
NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
16	Rain Bird PESBR	Turf Rotor	0.58 in/h	0.5	52	1,048	524
17	Rain Bird PESBR	Turf Rotor	0.6 in/h	0.5	50	1,083	541
18	Rain Bird PESBR	Turf Rotor	0.6 in/h	0.5	50	1,160	580
19	Rain Bird PESBR	Turf Spray	1.46 in/h	0.5	21	474	237
20	Rain Bird PESBR	Turf Rotor	0.55 in/h	0.5	55	1,191	595
21	Rain Bird PESBR	Turf Rotor	0.59 in/h	0.5	51	1,015	507
22	Rain Bird PESBR	Turf Rotor	0.56 in/h	0.5	54	1,086	543
23	Rain Bird PESBR-PRS-D (2)	Bubbler	3.4 in/h	0.5	9	180	90
24	Rain Bird PESBR	Turf Rotor	0.67 in/h	0.5	45	978	489
25	Rain Bird PESBR	Turf Rotor	0.65 in/h	0.5	47	913	456
26	Rain Bird PESBR	Turf Spray	1.52 in/h	0.5	20	458	229
27	Rain Bird PESBR	Turf Rotor	0.65 in/h	0.5	47	893	447
28	Rain Bird PESBR	Turf Spray	1.15 in/h	0.5	27	669	335
29	Rain Bird PESBR-PRS-D (2)	Area for Dripline	0.43 in/h	0.5	71	1,093	547
30	Rain Bird PESBR	Turf Spray	1.49 in/h	0.5	21	416	208
31	Rain Bird PESBR-PRS-D (2)	Area for Dripline	0.43 in/h	0.5	71	302	151
32	Rain Bird PESBR	Turf Rotor	0.67 in/h	0.5	46	872	436
33	Rain Bird PESBR	Turf Spray	1.12 in/h	0.5	27	524	262
34	Rain Bird PESBR	Turf Spray	1.78 in/h	0.5	17	377	188
35	Rain Bird PESBR	Turf Rotor	0.55 in/h	0.5	56	1,054	527
36	Rain Bird PESBR-PRS-D (2)	Bubbler	3.4 in/h	0.5	9	144	72
37	Rain Bird PESBR	Turf Spray	2.48 in/h	0.5	13	283	142
38	Rain Bird PESBR	Turf Rotor	0.63 in/h	0.5	48	1,101	550
39	Rain Bird PESBR	Turf Spray	1.42 in/h	0.5	22	343	172
40	Rain Bird PESBR	Turf Rotor	0.55 in/h	0.5	55	1,278	639
41	Rain Bird PESBR	Turf Spray	1.93 in/h	0.5	16	359	179
42	Rain Bird PESBR	Turf Rotor	0.56 in/h	0.5	54	1,169	585
43	Rain Bird PESBR	Turf Rotor	0.58 in/h	0.5	53	1,229	615
44	Rain Bird PESBR	Turf Rotor	0.61 in/h	0.5	50	829	414
45	Rain Bird PESBR	Turf Rotor	0.57 in/h	0.5	53	1,229	615
46	Rain Bird PESBR	Turf Spray	2.1 in/h	0.5	15	340	170
47	Rain Bird PESBR	Turf Rotor	0.58 in/h	0.5	53	969	484
48	Rain Bird PESBR	Turf Spray	1.29 in/h	0.5	24	540	270
		TOTALS:			1,302	25,596	12,798

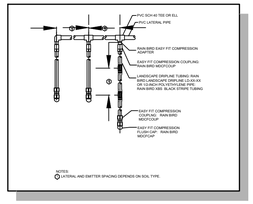
DETAILS











IRRIGATION SYSTEM PERFORMANCE NOTES

1) IRRIGATION SYSTEM AS SHOWN IS DESIGNED TO OPERATE OFF A RECLAIM WATER SOURCE WITH A PROVIDING A MINIMUM PSI OF 45 AT THE SOURCE

2) HEAD LAYOUT BASED ON BASE INFORMATION PROVIDED. HEADS SHALL BE ADJUSTED TO ACCOMMODATE FIELD VARIATIONS WHILE MAINTAINING 100% COVERAGE AND MINIMIZING OVER SPRAY ONTO PAVED AREAS AND BUILDINGS.

3) LATERAL PIPE SHALL BE SIZED SO THAT WATER VELOCITY DOES NOT EXCEED 5 FEET PER SECOND. MAXIMUM GPM PER PIPE SIZE AS FOLLOWS:

3/4 PIPE	8 GPM
1" PIPE	14 GPM
1 1/4" PIPE	24 GPM
1 1/2" PIPE	36 GPM
2" PIPE	50 GPM
2 1/2" PIPE	80 GPM
3" PIPE	120 GPM
4" PIPE	200 GPM
6" PIPE	450 GPM

NOTE:

1. LAND F/X IRRIGATION WAS UTILIZED TO DESIGN THE IRRIGATION SYSTEM.

2. MAINLINE, LATERAL PIPE & CONTROL VALVES SHOWN IN HARDSCAPE/BUILDINGS AREA'S OR OUTSIDE OF PROPERTY LINES IS FOR CLARITY ONLY. INSTALL PIPE AND EQUIPMENT IN GREEN SPACE AND WITHIN PROPERTY LINES.

GENERAL NOTES

1. REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREE AND SHRUB LOCATIONS.
2. ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER AND ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.
3. ALL POP-UP ROTOR AND SPRAY HEADS SHALL BE INSTALLED USING AN 18" PVC FLEX PIPE CONNECTION. CONTRACTOR SHALL NOT USE FUNNY PIPE.
4. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS, THE SMALLEST LATERAL, PIPE SIZE TO A SINGLE SPRAY OR ROTOR HEAD SHALL BE $\frac{3}{4}$".
5. ALL RISERS SHALL BE STAKED WITH A 1" METAL DOWEL AND SECURED WITH UV RESISTANT PLASTIC CABLE TIES. RISERS AND DOWEL SHALL BE PAINTED FLAT BLACK.
6. ALL REMOTE CONTROL VALVES, GATE VALVES AND QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES.
7. THE EXACT HEIGHT OF ANY 12" POP-UP THAT IS SHOWN IN A SHRUB BED SHALL BE DETERMINED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
8. CONTROL WIRE SHALL BE 14-1 UF DIRECT BURIAL COLORED RED FOR CONTROL WIRES AND WHITE FOR COMMON WIRE. NO CROSS CONNECTION BETWEEN CONTROLLERS SHALL BE ALLOWED. WIRE SPLICES SHALL BE MADE ONLY IN VALVE BOXES USING RAINBIRD "SNAP-TITE" CONNECTORS.
9. ANY PIPING OR VALVES SHOWN OUTSIDE THE PROPERTY LINE OR OUTSIDE OF A LANDSCAPE AREA IN SHOWN THERE FOR DESIGN CLARITY ONLY. ALL PIPING AND VALVES SHALL BE INSTALLED ON THE PROPERTY AND WITHIN LANDSCAPE AREAS.
10. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH, AND EXERCISE CARE SO AS TO NOT DAMAGE ANY EXISTING BERMS, WALLS, STRUCTURES, PLANT MATERIALS AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIR OR REPLACEMENT OF ALL ITEMS DAMAGE BY HIS WORK. HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF SLEEVES AND PIPING THROUGH WALLS, UNDER ROADWAYS AND PAVING, ETC.
11. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN ARE DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATIONS IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS.
12. FINAL LOCATION OF THE AUTOMATIC CONTROLLER(S) SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.
13. ELECTRICAL SERVICE TO ALL EQUIPMENT SHALL BE PROVIDED TO A JUNCTION BOX AT THE EQUIPMENT LOCATION, (BY OTHERS, NOT A PART OF THIS CONTRACT) THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL CONNECTION FROM THE JUNCTION BOX TO ALL EQUIPMENT.
14. THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES TO PROVIDE OPTIMUM COVERAGE WITH MINIMAL OVERSPRAY ONTO WALKS, STREETS, WALLS, ETC. IN ORDER TO ACCOMPLISH THIS, THE CONTRACTOR MAY SUBSTITUTE VARIABLE ARC NOZZLES IN PLACE OF THE SPECIFIED FIXED ARC NOZZLES WHERE NECESSARY. PRESSURE COMPENSATING SCREENS MAY ALSO BE USED TO REDUCE SPRAY DISTANCE.
15. THE CONTRACTOR SHALL COMPLETE ALL WORK IN ACCORDANCE WITH ALL PREVAILING LAWNS, CODES AND REGULATIONS.
16. ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
17. THE CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING SHOWING ALL IRRIGATION INSTALLATION. A COPY OF THE ORIGINAL PLAN MAY BE OBTAINED FROM THE LANDSCAPE ARCHITECT FOR A FEE. THE AS-BUILT DRAWING SHALL LOCATE ALL MAINLINE AND VALVES BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES.
18. ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN EQUIPMENT AND WORKMANSHIP.
19. SLEEVES SHALL BE PLACE UNDER PAVEMENT AS SHOWN ON PLANS AND SHALL BE A MINIMUM OF 2X THE SIZE OF THE IRRIGATION PIPE.
20. CONTRACTOR SHALL PERFORM PRESSURE AND VOLUME TEST ON IRRIGATION WATER SOURCE OVER A CONTINUOUS 24 HOUR PERIOD PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORK, SHOULD THE AVAILABLE SUPPLY NOT BE ADEQUATE TO MEET THE DEMANDS OF THE IRRIGATION SYSTEM AS DESIGNED THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION FOR DESIGN MODIFICATIONS.
21. ALL IRRIGATION PIPES, SPRINKLER CAPS AND VALVE BOX COVERS SHALL BE PURPLE TO DENOTE REUSE WATER. CONTRACTOR TO PROVIDE SIGNAGE AT ALL PROJECT ENTRANCES DENOTING REUSE IRRIGATION WATER. SEE CIVIL PLAN FOR LOCATION AND DETAIL.

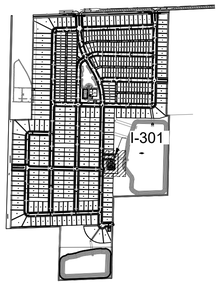
daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

REV	DATE	DESCRIPTION	BY

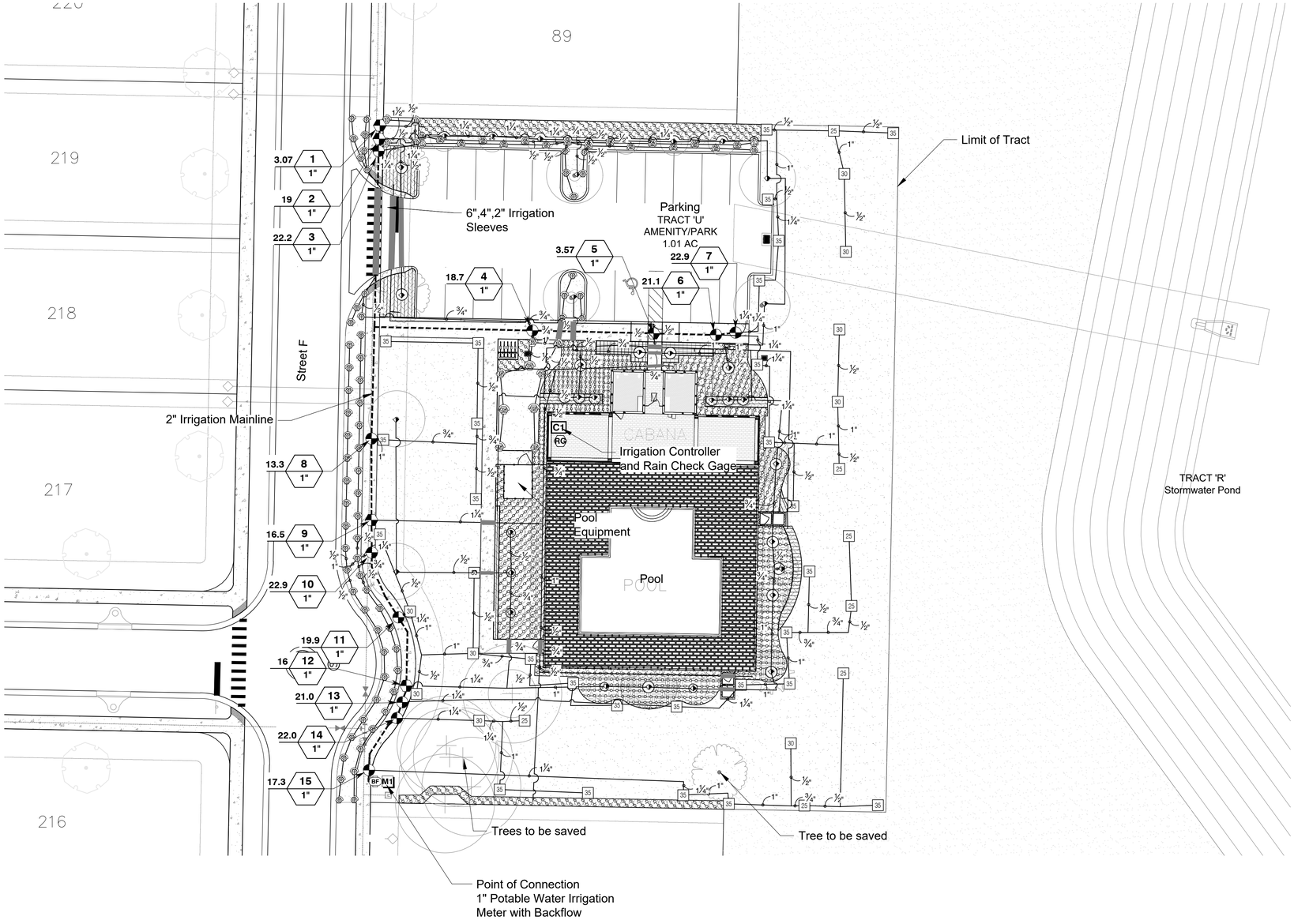
Irrigation Schedule and Details
Irrigation Plan
Springhaven
Apopca, Florida

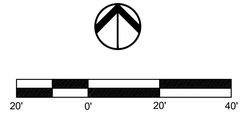
Date:

PROJECT NO. 24215
SCALE NTS
DATE May 2026
SHEET I-002



Key Map
NTS



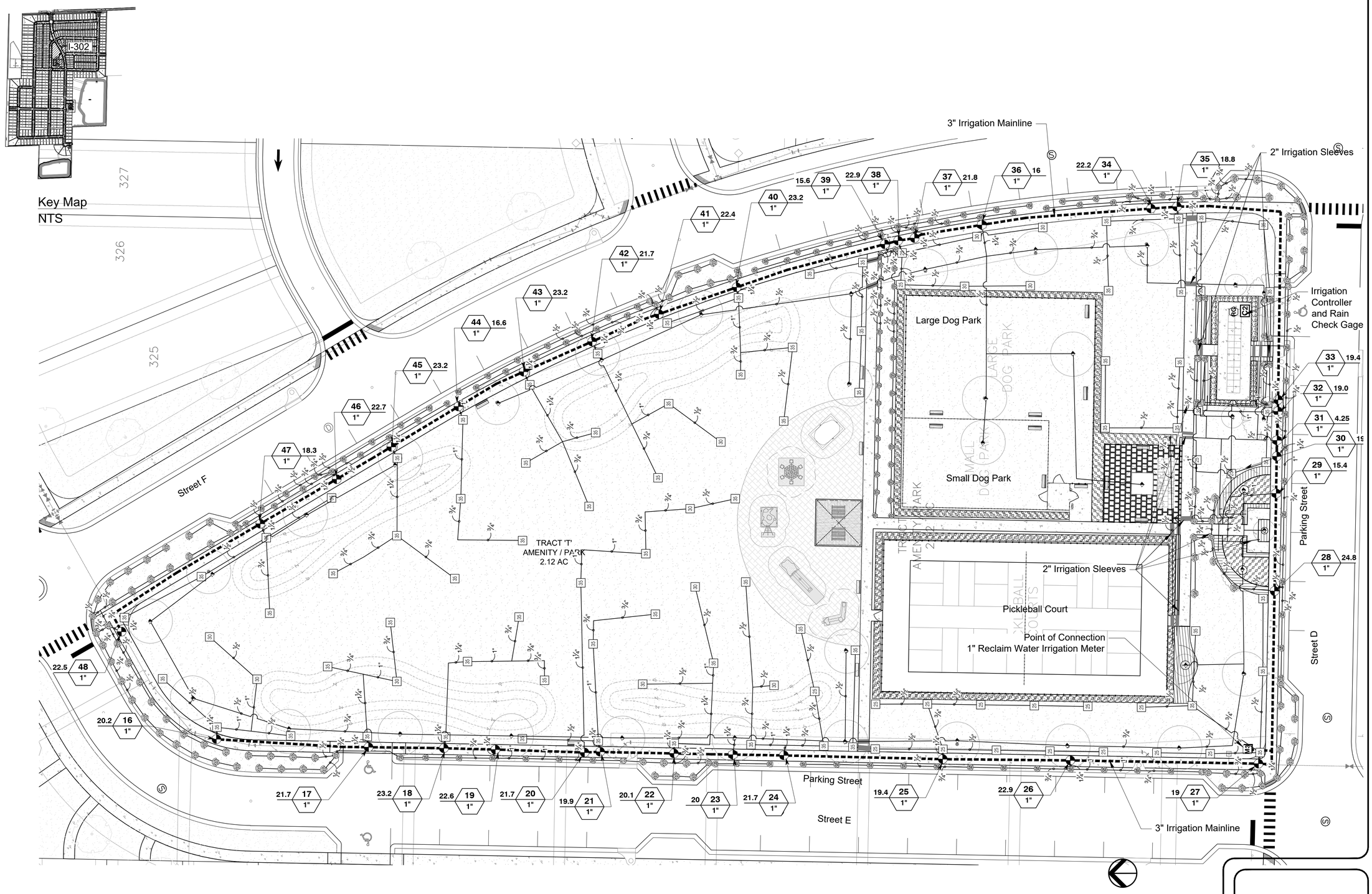


daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

REV.	DATE	DESCRIPTION	BY

Tract U Amenity Area
Irrigation Plan
Springhaven
Apopka, Florida

PROJECT NO.
24215
SCALE
1" = 20'
DATE
May 2026
SHEET
I-301



daly design group inc.
Urban Planning, Landscape Architecture, Project Management, Development Consulting
913 N Pennsylvania Ave, Winter Park, FL 32789 (407) 740-7373 www.dalydesign.com

REV.	DATE	DESCRIPTION	BY

Tract T Park Area
Irrigation Plans
Springhaven
Apopka, Florida

PROJECT NO. 24215
SCALE 1" = 20'
DATE May 2026
SHEET I-302

COPYRIGHT © ENRIQUE A. TORRENS,P.E.

CONSTRUCTION SITE PLAN

16 UNITS APARTMENTS

734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

PARCEL ID: 13-21-28-0000-00-001

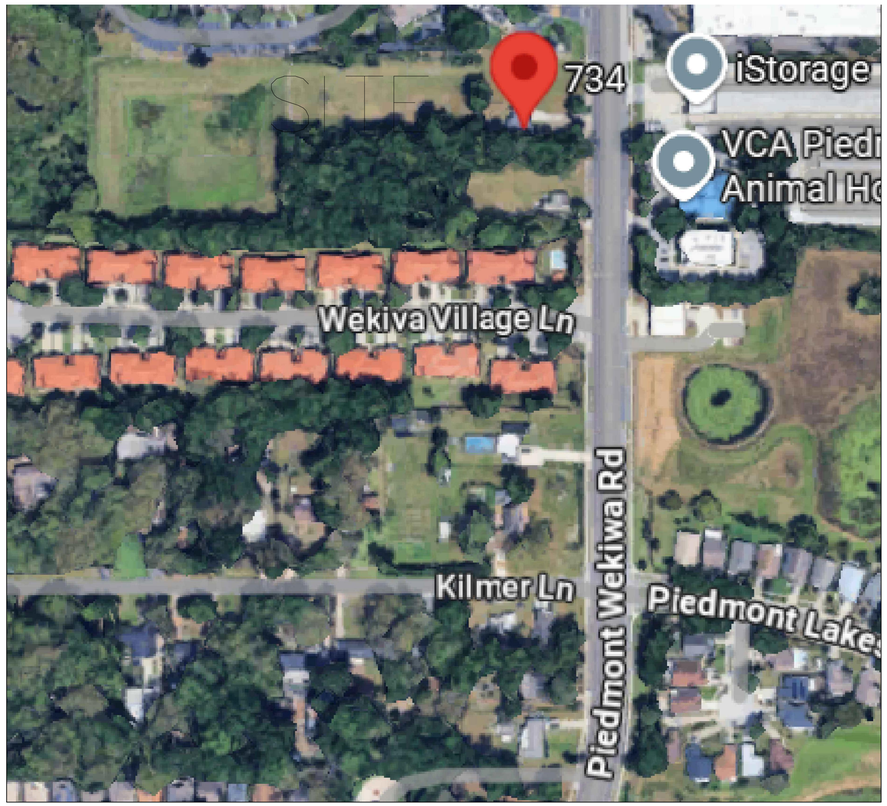
OWNER : TATIANA GONZALEZ
ENGINEER: ENRIQUE A. TORRENS, P.E.
SURVEYOR: JON M SHOEMAKER, PSM LS 5144

UTILITIES:

WATER: CITY OF APOPKA
SEWER: CITY OF APOPKA
POWER: DUKE ENERGY
GAS: N/A

SITE DATA

ZONE : RESIDENTIAL MULTY FAMILY
SITE AREA = 71,010.00 S.F. = 1.63 ACRES
EXISTING USE : SINGLE RESIDENT FAMILY
PROPOSED USE : RESIDENTIAL MULTY FAMILY(RMF)
FLOOD PLAIN : SITE IS NOT LOCATED
WITHIN THE 100 YR. FLOOD



LOCATION MAP

NTS

SHEET INDEX
C-1 COVER SHEET
C-2 BOUNDARY AND TOPOGRAPHIC SURVEY
C-3 STORM WATER MANAGEMENT POLLUTION CONTROL & DEMOLITION PLAN
C-4 DRAINAGE AND GRADING PLAN
C-5 GEOMETRIC SITE PLAN
C-6 TRAFFIC PLAN
C-7 DETAIL PLAN
C-8 DETAIL PLAN-2
C-9 FIRE TRUCK TURNING PLAN
U-1 UTILITIES PLAN
U-2 LIFT STATION -SHEET 1
U-3 LIFT STATION - SHEET-2
U-4 UTILITIES DETAILS

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
OVIEDO, FL 32765
eato1944@gmail.com

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D00000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:15:41 -04'00'

SEAL:

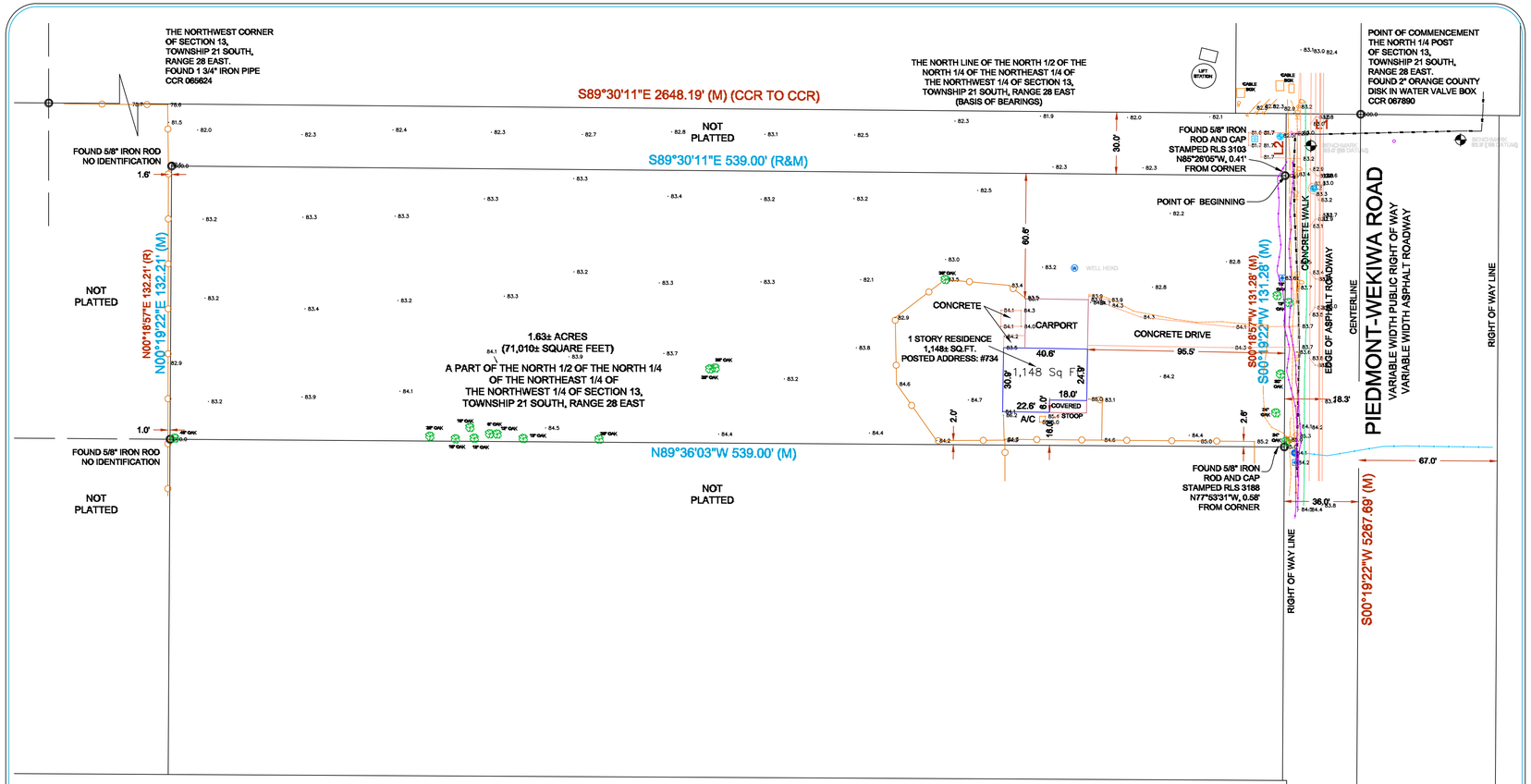
DATE:
11/30/22

SCALE:
AS NOTED

REVISIONS: PER

SHEET NO:
C-1

COPYRIGHT C. ENRIQUE A. TORRENS, P.E.



LEGEND OF SYMBOLS & ABBREVIATIONS

- POWER POLE
- LIGHT POLE
- GUY WIRE
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC BOX
- TRANSFORMER
- AIR CONDITIONER UNIT
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- CABLE BOX
- STORM DRAIN MANHOLE
- STORM DRAIN INLET
- STORM PIPE
- GREASE TRAP
- SET 5/8" IRON ROD & CAP PSM #5144, UNLESS OTHERWISE NOTED
- TRAFFIC SIGNAL BOX
- GROUND LIGHT
- SIGNAL LIGHT
- PHONE VAULT
- SIGN (AS NOTED)
- TOWER
- MONITORING WELL
- FLAG POLE
- WATER VALVE
- FIRE HYDRANT
- SIAMESE FIRE HYDRANT
- WATER MANHOLE
- BACKFLOW PREVENTER
- WATER METER
- WELL HEAD
- POINT OF ACCESS
- SANITARY MANHOLE
- CLEAN OUT
- GAS MANHOLE
- GAS VALVE
- VENT PIPE
- HANDICAPPED PARKING
- MITERED END SECTION
- BENCHMARK
- (R) RECORD
- (M) MEASURED
- (C) CALCULATED
- (P) PLAT
- PG PAGE(S)
- O.R. OFFICIAL RECORDS
- P.B. PLAT BOOK
- L.D.U.E. LANDSCAPE, DRAINAGE AND UTILITY EASEMENT
- CCR CERTIFIED CORNER RECORD

SCALE : 1" = 30'

0' 15' 30' 60'

LINE TABLE		
LINE	LENGTH	BEARING
L1 (R&C)	36.00	N89°30'11"W
L2 (R)	30.00	S00°18'57"W
L2 (C)	30.00	S00°19'22"W

THE SOUTH 1/4 POST OF SECTION 13, TOWNSHIP 21 SOUTH, RANGE 28 EAST. FOUND RAILROAD SPIKE IN BOX CUT CCR 114833

FLOOD NOTE

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE(S) **X (UNSHADED)** OF THE FLOOD INSURANCE RATE MAP OF THE COMMUNITY NO. **120180** MAP NUMBER **12095C0140F** WHICH BEARS AN EFFECTIVE DATE OF **SEPTEMBER 25, 2009** AND **IS NOT** IN A SPECIAL FLOOD HAZARD AREA **AS SHOWN ON THE FEMA WEBSITE (HTTP://MSC.FEMA.GOV) BY FIRMETTE CREATED ON JANUARY 15, 2025** THIS HAVE CHECKED THIS COMMUNITY'S CURRENT FLOOD MAP AND **DOES** / DOES NOT LOCATE THE SUBJECT TO DETERMINE IF IT IS IN A SPECIAL FLOOD HAZARD ZONE. **AND A FLOOD ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.**

PROJECT REVISION RECORD

DATE	DESCRIPTION	DATE	DESCRIPTION
04/25/2022	FIRST DRAFT		
01/12/2025	UTILITIES LOCATIONS		
FIELD WORK: ALM	DRAFTED: ALM	CHECKED BY: JS	FB & PG:

SIGNIFICANT OBSERVATIONS

NONE APPARENT.

LEGAL

THE USE OF THIS DOCUMENT'S FORMAT IS STRICTLY PROHIBITED AND CONTINGENT UPON THE WRITTEN CONSENT AND PERMISSION OF MTC, INC.

THIS SURVEY WAS PREPARED FOR THE PURPOSE OF THIS REAL ESTATE TRANSACTION ONLY AND NO FURTHER PARTIES OTHER THAN THOSE CERTIFIED ABOVE SHALL RELY ON IT FOR ANY OTHER PURPOSE OR TRANSACTION

LEGAL DESCRIPTION

PROVIDED BY OTHERS:

That part of the North 1/2 of the North 1/4 of the Northeast 1/4 of the Northwest 1/4 of Section 13, Township 21 South, Range 28 East, Orange County, Florida, LESS road right of way.

Being more particularly described as follows:

Commence at the Northeast corner of the North 1/2 of the North 1/4 of the Northwest 1/4 of the Northwest 1/4 of said Section 13, thence run N 89° 30' 11" W, along the North line of said North 1/2, a distance of 36.00 feet to a point on the West right of way line of Piedmont-Weikiwa Springs Road; thence run S 00° 18' 57" E, along said West right of way line, a distance of 30.00 feet to the Point of Beginning; thence continue S 00° 18' 57" W, a distance of 131.26 feet to a point on the South line of said North 1/2; thence run N 89° 36' 03" W, along said South line, a distance of 539.00 feet; thence run N 00° 18' 57" E, along a line parallel to the East line of said North 1/2, a distance of 132.21 feet; thence run S 89° 30' 11" E, along a line parallel to the North line of said North 1/2, a distance of 539.00 feet to the Point of Beginning.

MISCELLANEOUS NOTES

1. SURVEY COORDINATED BY MTC, INC., AND PREPARED BY: JON M. SHOEMAKER, PSM #5144. 1520 PERKINS ROAD, BELLE ISLE, FLORIDA 32809. PHONE (407)463-0019 OR EMAIL: MTCINC21@GMAIL.COM.
2. ONLY OBSERVABLE SURFACE AND ABOVE GROUND STRUCTURES WERE LOCATED. NO UNDERGROUND IMPROVEMENTS, SUCH AS FOUNDATION FOOTINGS, WERE LOCATED. SOME FEATURES SHOWN ON THIS PLAT MAY BE SHOWN OUT OF SCALE FOR CLARITY. ALL DIMENSIONS SHOWN ARE IN FEET AND DECIMALS THEREOF.
3. ONLY OBSERVABLE ABOVE GROUND UTILITIES WERE LOCATED. NO UNDERGROUND UTILITIES WERE LOCATED. ALWAYS CALL SUNSHINE 811 BEFORE YOU DIG. THEY NOTIFY UTILITY COMPANIES WHERE YOU ARE PLANNING TO DIG. THE UTILITY SENDS A LOCATOR TO MARK THE APPROXIMATE LOCATION OF UNDERGROUND LINES, PIPES AND CABLES ON THE SURVEYED PROPERTY. THE PROCESS TAKES TWO FULL BUSINESS DAYS - DAY 1 STARTS THE DAY AFTER YOU CALL: LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED, WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION AND/OR A PRIVATE UTILITY LOCATE REQUEST MAY BE NECESSARY.
4. OWNERSHIP OF FENCES, IF ANY, WAS NOT DETERMINED UNDER THE SCOPE OF THIS SURVEY.
5. BEARINGS SHOWN HEREON ARE BASED ON THE NORTH LINE OF THE NORTH 1/2 OF THE NORTH 1/4 OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 13, TOWNSHIP 21 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA TO BEAR S 89°30'11" E, **AND ARE RELATIVE TO STATE PLANE COORDINATE SYSTEM FLORIDA EAST ZONE (NAD83 DATUM).**
6. THIS SURVEY IS NOT INTENDED FOR CONSTRUCTION OR CONSTRUCTION DESIGN PURPOSES.
7. ADJOINER INFORMATION IF SHOWN HEREON WAS OBTAINED FROM THE COUNTY'S PROPERTY APPRAISER WEB SITE.
8. THIS SURVEYOR HAS NOT ABSTRACTED THE LAND SHOWN HEREON FOR EASEMENTS, RIGHTS OF WAY OR RESTRICTIONS OF RECORD WHICH MAY AFFECT THE TITLE OR USE OF THE LAND.
9. DO NOT RECONSTRUCT PROPERTY LINES FROM INTERIOR IMPROVEMENTS. (BUILDINGS, FENCES ECT...)
10. NO FOOTINGS OR OVERHANGS HAVE BEEN LOCATED EXCEPT AS SHOWN.
11. NO WETLANDS AND/OR OTHER NATURAL FEATURES HAVE BEEN LOCATED EXCEPT AS SHOWN.

BOUNDARY SURVEY

TO:

734 PIEDMONT-WEKIWA ROAD
APOPKA, FLORIDA 32703

PARCEL IDENTIFICATION NUMBER:
13-21-28-0000-00-001

TO: **Exotic Stones & Homes LLC**

ALSO:
I, JON M. SHOEMAKER, HEREBY CERTIFY THAT THIS SKETCH OR THE BOUNDARY SURVEY REPRESENTED HEREON MEETS THE STANDARDS OF PRACTICE FOR SURVEYING IN THE STATE OF FLORIDA AS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS, PURSUANT TO CHAPTER 472 OF THE FLORIDA STATUTES AND CHAPTER 5J-17 OF THE FLORIDA ADMINISTRATIVE CODE.

JON M. SHOEMAKER
REGISTRATION NO. PSM 5144 **JANUARY 15, 2025**
IN THE STATE OF FLORIDA.
DATE OF FIELD SURVEY: **JANUARY 12, 2025**
DATE OF LAST REVISION: **01-12-2025**
THIS SURVEY IS CERTIFIED TO DATE OF FIELD SURVEY, NOT DATE OF SIGNATURE. NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OR ELECTRONIC OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

JON M. SHOEMAKER LICENSED NUMBER PSM-5144 STATE OF FLORIDA LICENSED SURVEYOR

SHEET 1 OF **1**

JOB NUMBER: MTC 611 LEG **734 PIEDMONT-WEKIWA**

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
OVIEDO, FL 32765
eato1944@gmail.com

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D00000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:16:36 -04'00'

SEAL:

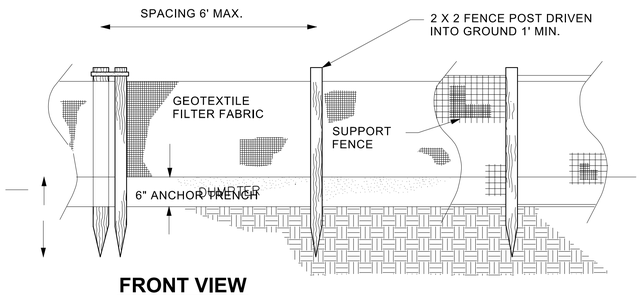
DATE:
11/30/22

SCALE:
AS NOTED

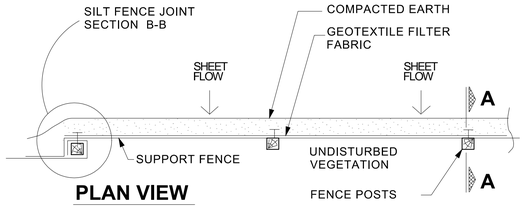
REVISIONS: PER

SHEET NO:
C-2

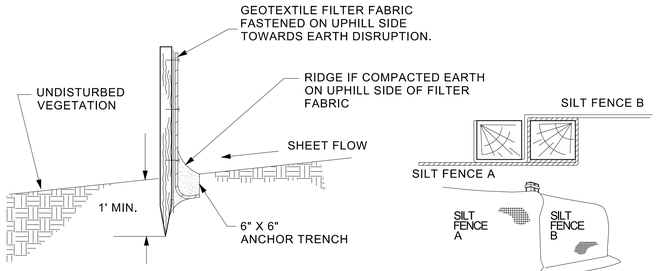
COPYRIGHT © ENRIQUE A. TORRENS,P.E.



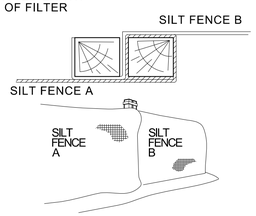
FRONT VIEW



PLAN VIEW



SECTION A-A



SECTION B-B

SILT FENCE

NO SCALE

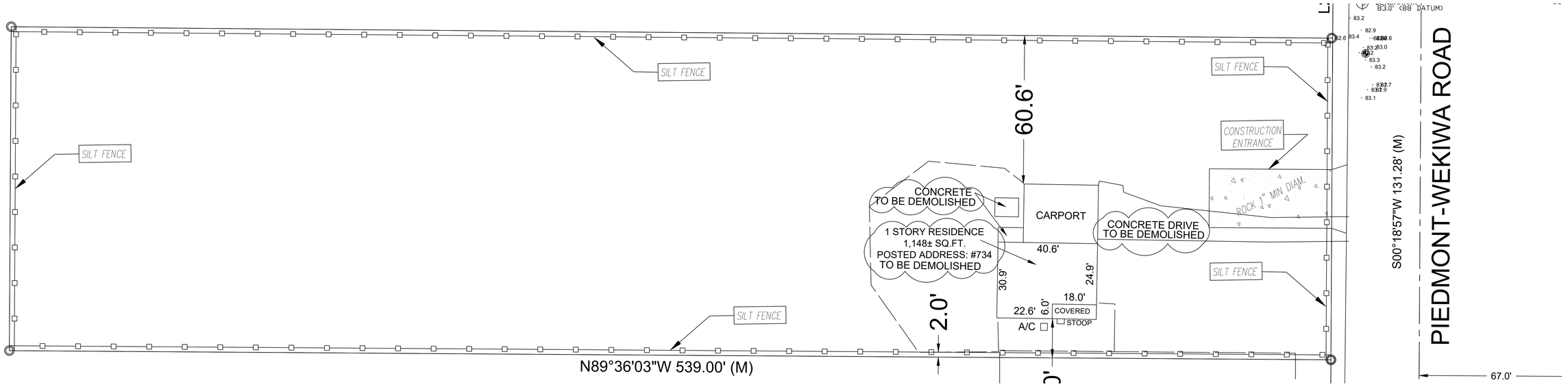
D-SESC-silt fence

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ X 1¾ ± 1/16 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

NOTES

1. THE COR SHALL PROVIDE AND INSTALL EROSION CONTROL DEVICES(SILT FENCE OR OTHER METHOD) AT LIMITS OF CONSTRUCTION AND AROUND EACH STORM INLET PRIOR TO CONSTRUCTION, ALL IN CONFORMANCE WITH CURRENT LOCAL, CITY, TOWN, COUNTY AND STATE CRITERIA.
2. THE CONTRACTOR SHALL CONTACT SUNSHINE 811 (BY CALLING 800-432- 4770 OR 811) AT LEAST TWO (2) FULL BUSINESS DAYS BEFORE BEGINNING ANY EXCAVATION OR DEMOLITION TO ALLOW ALL UTILITIES TO MARK THEIR FACILITIES AND RESPOND TO THE POSITIVE RESPONSES SYSTEM. THE CONTRACTORS ARE REQUIRED TO COMPLY WITH THE FS 556 THE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT



STORM WATER POLLUTION PREVENTION & DEMOLITION PLAN

SCALE 1"= 30'-00"

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
DVIEDO, FL 32765
eato1944@gmail.com

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D00000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:16:59 -04'00'

SEAL:

DATE: 11/30/22

SCALE: AS NOTED

REVISIONS: PER

SHEET NO:

C-3

COPYRIGHT © ENRIQUE A. TORRENS,P.E.

LAND USE	AREA S.F.	%
BUILDING	13,506.00	19.02
NEW PAVEMENT	14,163.00	19.94
GAZEBO & DUMSPTER	780.00	01.10
RETENTION AREA	5,081.00	07.16
OPEN SPACE	37,480.00	52.78
TOTAL	71,010.00	100.00

PARKING CALCULATIONS

PARKINGS REQUIRETMENTS FOR THE PROPOSED 16 UNIT APARTMENTS

1. MULTY FAMILY RESIDENCE
   TWO SPACE FOR EVERY APARTMENT
   16 x 2 = 32 PARKING SPACE
2. TOTAL PARKING REQUIRED = 32 SPACES
6. TOTAL PARKING PROVIDED = 34 SPACES
   A. REGULAR PARKING = 16 SPACES
   B. BUILDING PARKING = 16 SPACES
   B. HANDYCAP PARKING = 2 SPACES
   TOTAL ---------- = 34 SPACES

SITE DATA

PARCEL ID: 13-21-28-0000-00-001
SITE AREA = 71,010.0 S.F. = 1.63 ACRES

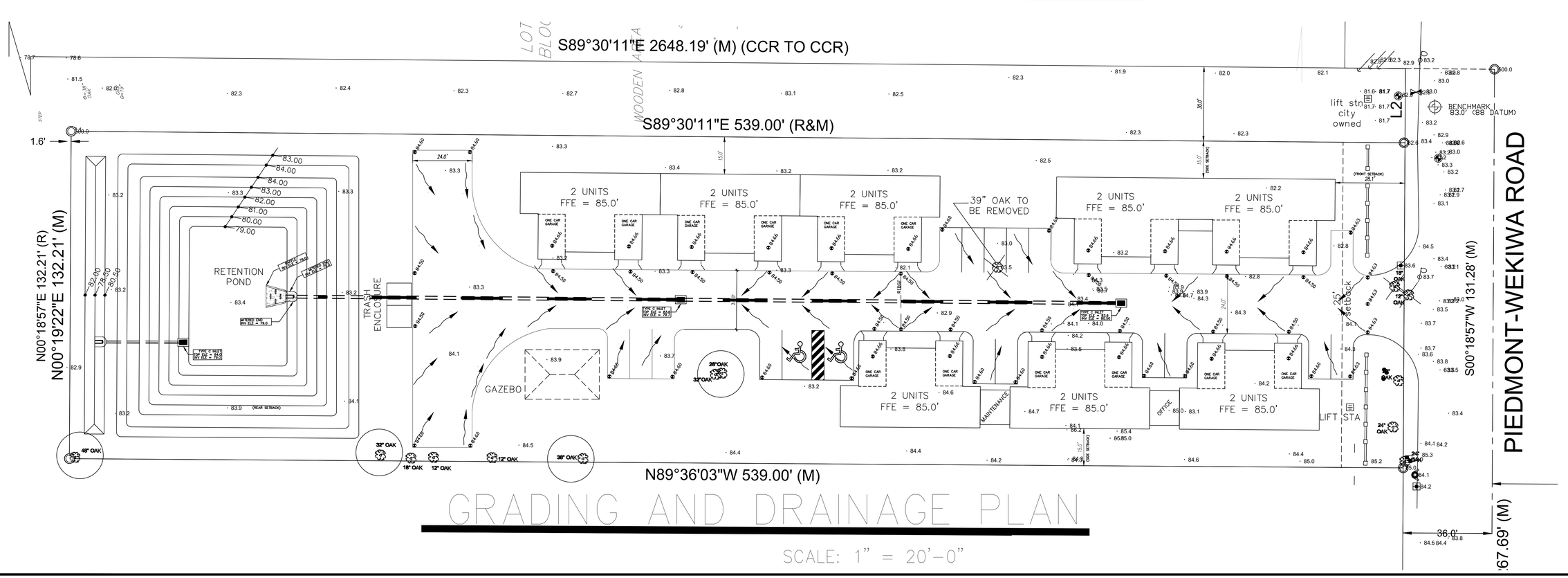
ZONE : MFR
EXISTING USE : SINGLE FAMILY RESIDENCE
PROPOSED USE : MULTY FAMILY RESIDENCE
FOOD PLAIN : SITE IS NOT LOCATED WITHIN THE 100 YR. FLOOD

SET BACK DATA

MULTY FAMILY RESIDENCE(MFR)	REQUIRED	PROVIDED
WEST SIDE SET BACK(REAR)	25 FEET	35 FEET
SOUTH SIDE SET BACK(LEFT)	15 FEET	15 FEET
NORTH SIDE SET BACK(RIGHT)	15 FEET	15 FEET
EAST SIDE SET BACK(FRONT)	25 FEET	25 FEET

LEGEND:

x 88.3 DENOTES EXISTING SPOT ELEVATION
88.0 DENOTES PROPOSED SPOT ELEVATION
88 - - - DENOTES EXISTING GRADE
DENOTES PROPOSED GRADE
DENOTES WATER FLOW
DENOTES PROPOSED ASPHALT



GRADING AND DRAINAGE PLAN

SCALE: 1" = 20'-0"

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
OVIEDO, FL 32765
eato1944@gmail.com

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D00000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:17:28 -04'00'

SEAL:

DATE: 11/30/22

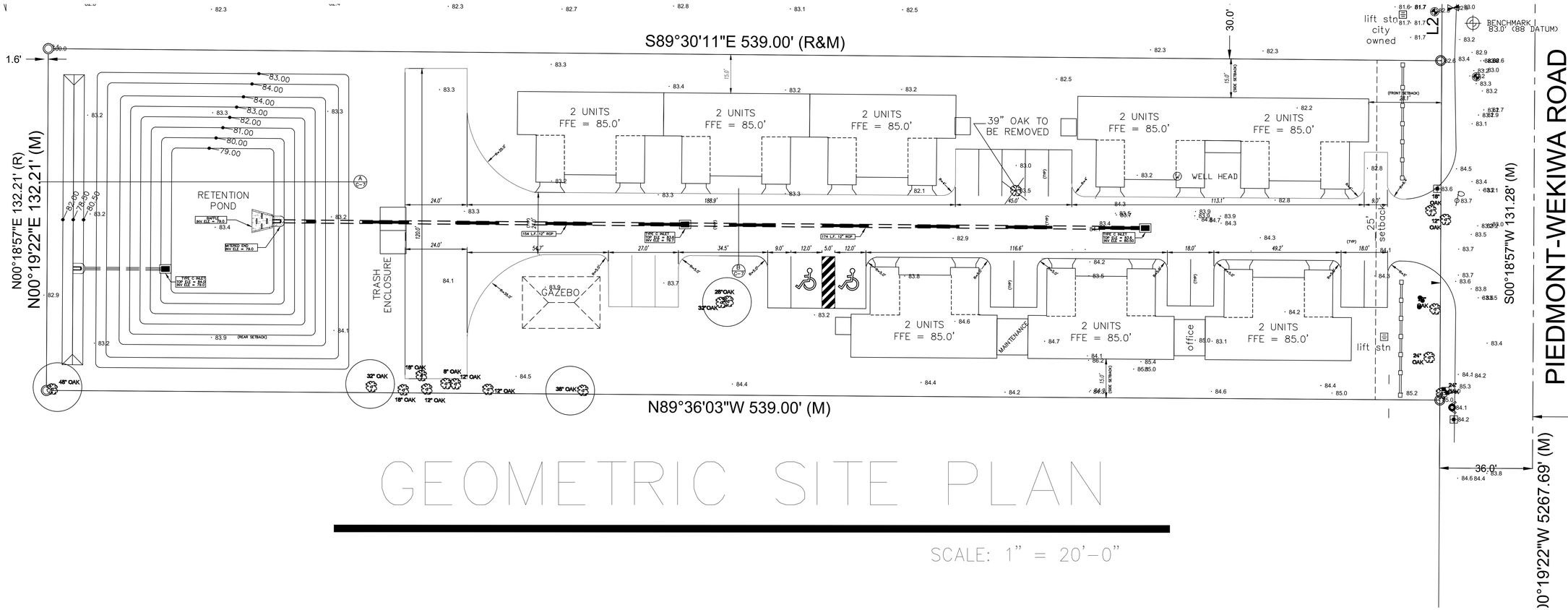
SCALE: AS NOTED

REVISIONS: PER

SHEET NO:

C-4

COPYRIGHT © ENRIQUE A. TORRENS,P.E.



GEOMETRIC SITE PLAN

SCALE: 1" = 20'-0"

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
DVIEDO, FL 32765
eato1944@gmail.com

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D00000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:17:58 -04'00'

SEAL:

DATE:
11/30/22

SCALE:
AS NOTED

REVISIONS: PER

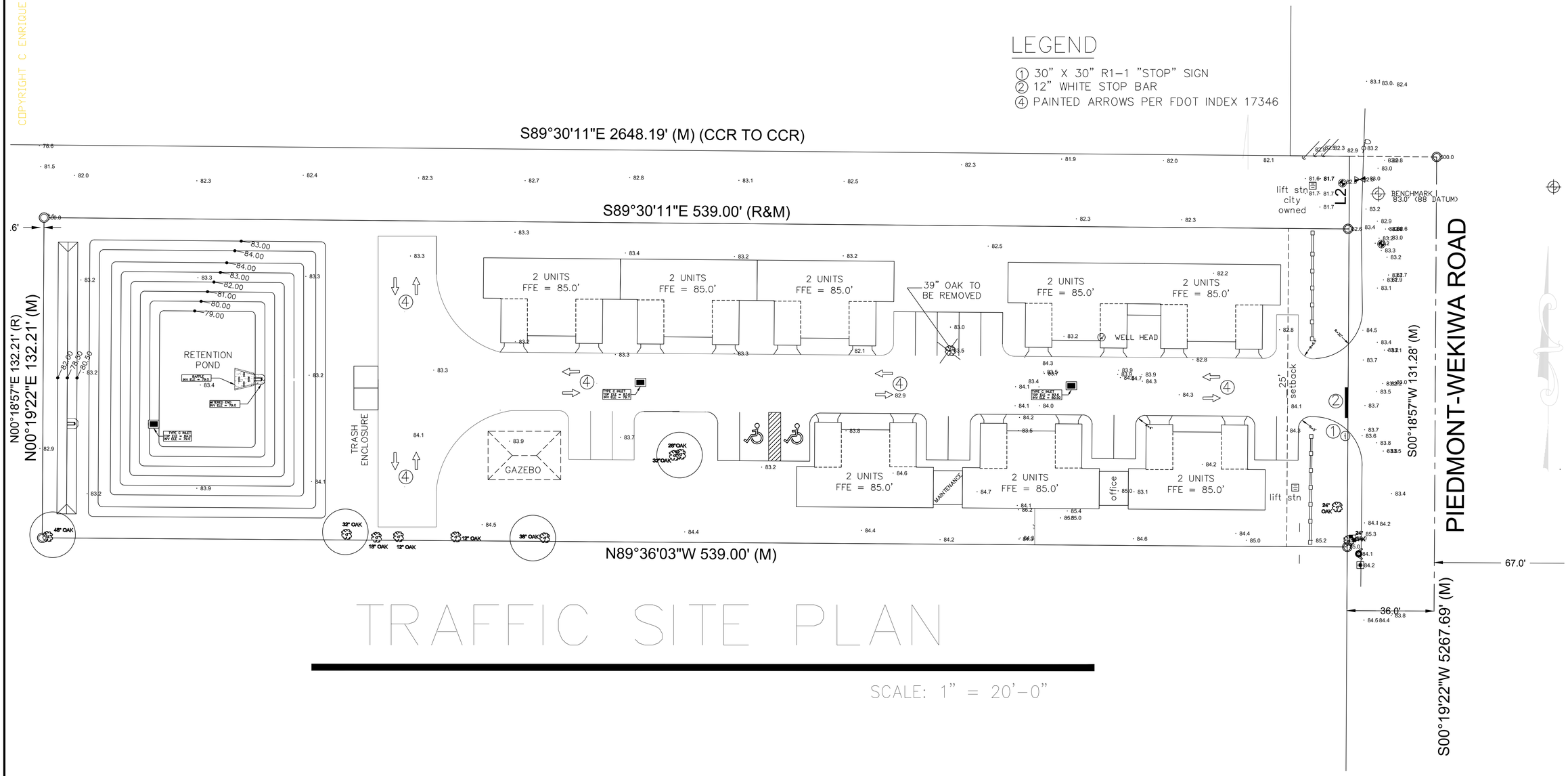
SHEET NO:

C-5

COPYRIGHT © ENRIQUE A. TORRENS,P.E.

LEGEND

① 30" X 30" R1-1 "STOP" SIGN
② 12" WHITE STOP BAR
④ PAINTED ARROWS PER FDOT INDEX 17346



TRAFFIC SITE PLAN

SCALE: 1" = 20'-0"

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
OVIEDO, FL 32765
eato1944@gmail.com

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D00000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:18:23 -04'00'

SEAL:

DATE: 11/30/22

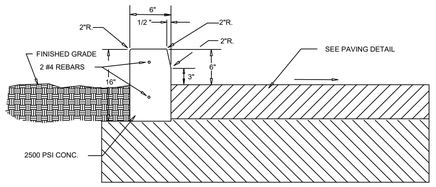
SCALE: AS NOTED

REVISIONS: PER

SHEET NO:

C-6

COPYRIGHT © ENRIQUE A. TORRENS, P.E.



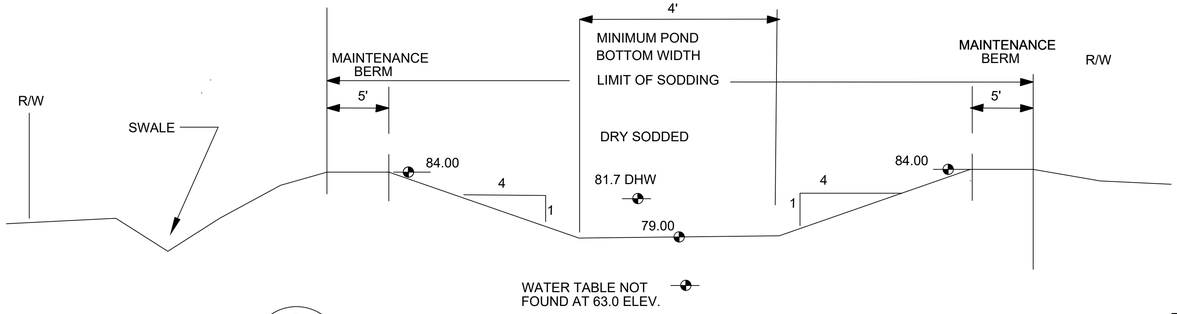
CAST-IN-PLACE CURB DETAIL

N.T.S.

CURB TYPE "D"SECTION

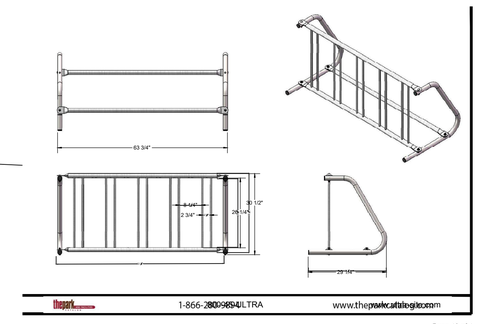
N.T.S.

DETAIL 3 / NTS C-7

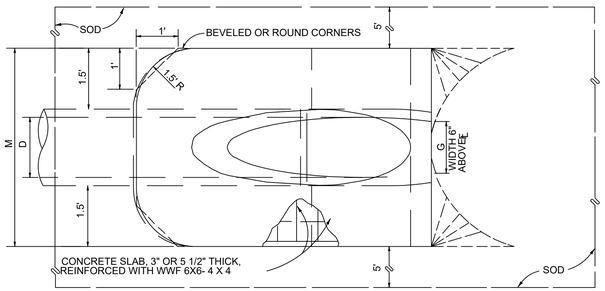


WATER TABLE NOT FOUND AT 63.0 ELEV.

A / C-7 RETENTION POND CROSS SECTION



BIKE RACK



TOP VIEW-SINGLE PIPE

DIMENSIONS AND QUANTITIES

		D	X	A	B	C	E	F	G	M	N
2:1 SLOPE		15"	2'-7"	1.92'	2.18'	4.10'	2.06'	5'	1.22'	4.63'	1.19'
		18"	2'-10"	1.97'	2.74'	4.71'	2.56'	6'	1.41'	4.92'	1.21'
		24"	3'-5"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	5.50'	1.25'
		30"	4'-3"	2.15'	4.95'	7.10'	4.56'	8'	2.00'	6.08'	1.29'
		36"	5'-1"	2.25'	6.08'	8.33'	5.56'	9'	2.24'	6.67'	1.33'
		42"	6'-0"	2.34'	7.21'	9.55'	6.56'	10'	2.45'	7.25'	1.38'
		48"	6'-9"	2.43'	8.33'	10.76'	7.56'	11'	2.65'	7.83'	1.42'
		54"	7'-8"	2.52'	9.44'	11.96'	8.56'	12'	2.83'	8.42'	1.46'
		60"	8'-6"	2.62'	10.56'	13.18'	9.56'	14'	3.00'	9.00'	1.50'
		66"	9'-2"	2.71'	11.68'	14.39'	10.56'	15'	3.18'	9.58'	1.54'
		72"	10'-0"	2.80'	12.80'	15.60'	11.56'	16'	3.30'	10.16'	1.58'
4:1 SLOPE		15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.63'	1.19'
		18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.92'	1.21'
		24"	3'-5"	2.53'	7.18' △	9.71'	7.03' △	11'	1.73'	5.50'	1.25'
		30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	6.08'	1.29'
		36"	5'-1"	2.87'	11.31'◇	14.18'	11.03'◇	15'	2.24'	6.67'	1.33'
		42"	6'-0"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	7.25'	1.38'
		48"	6'-9"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	7.83'	1.42'
		54"	7'-8"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	8.42'	1.46'
		60"	8'-6"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	9.00'	1.50'
		66"	9'-2"	3.73'	21.62'	25.35'	21.03'	25'	3.18'	9.58'	1.54'
		72"	10'-0"	3.91'	22.68'	26.59'	23.03'	27'	3.30'	10.16'	1.58'

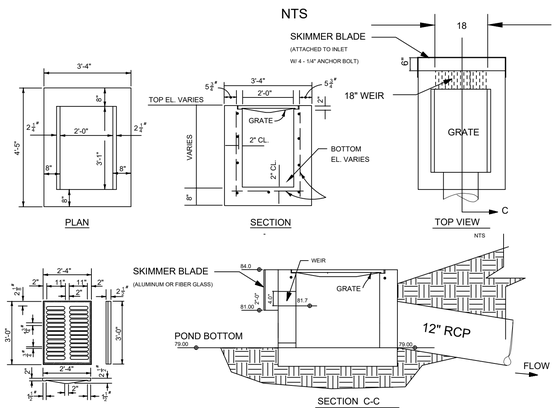
B E

△6.42' 6.25' DIMENSIONS PERMITTED TO ALLOW USE OF 8' STANDARD PIPE LENGTHS.

◇ 10.40' 10.10' DIMENSIONS PERMITTED TO ALLOW USE OF 12' STANDARD PIPE LENGTHS.

△◇ CONCRETE SLAB SHALL BE DEEPENED TO FORM BRIDGE ACROSS CROWN OF PIPE. SEE SECTION BELOW.

NTS

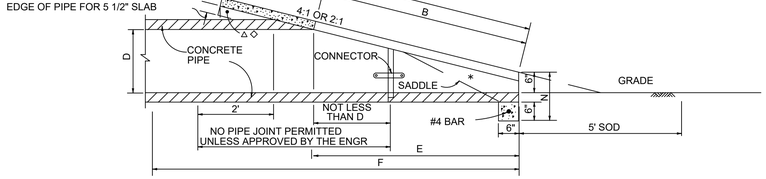


GRATE

TYPE"C"INLET(MODIFIED)

DETAIL 2 / NTS C-7

NTS



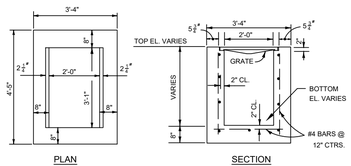
SECTION

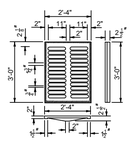
MITERED-END

FDOT INDEX 272 (1994)

DETAIL 3 / NTS C-7

*SLOPE: 4:1 MITER: TO C PIPE FOR PIPES 18" AND SMALLER.
2:1 FOR PIPES 24" AND LARGER.
2:1 MITER: TO C PIPE FOR PIPES 18" AND SMALLER.
1:1 FOR PIPES 24" AND LARGER.

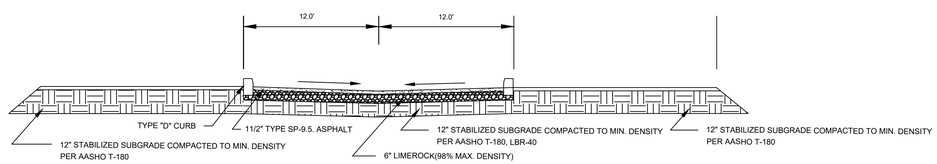




GRATE

TYPE"C"INLET

DETAIL 1 / NTS C-7



B / C-7 PARKING PAVEMENT SECTION

DETAILS

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
OVIEDO, FL 32765
eato1944@gmail.com

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D00000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:18:49 -04'00'

SEAL:

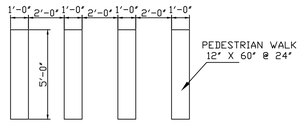
DATE: 11/30/22

SCALE: AS NOTED

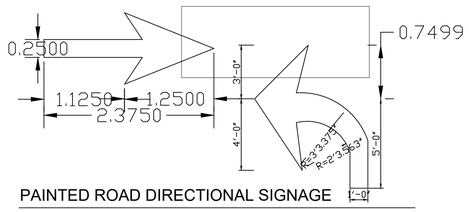
REVISIONS: PER

C-7

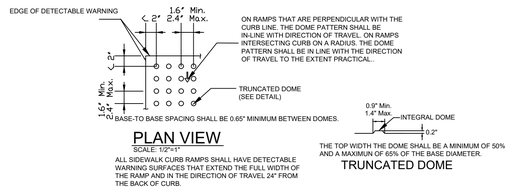
COPYRIGHT © ENRIQUE A. TORRENS,P.E.



CROSSWALK MARKINGS DETAILS



PAINTED ROAD DIRECTIONAL SIGNAGE

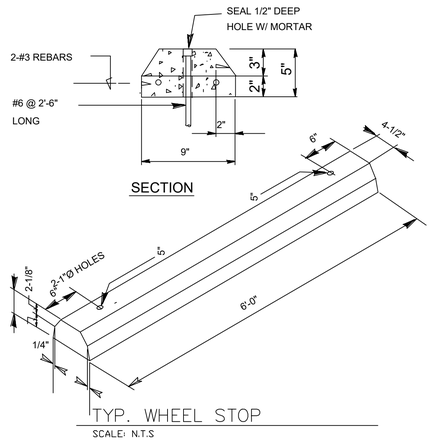


PLAN VIEW
SCALE: 1/2"=1"

ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24" FROM THE BACK OF CURB.

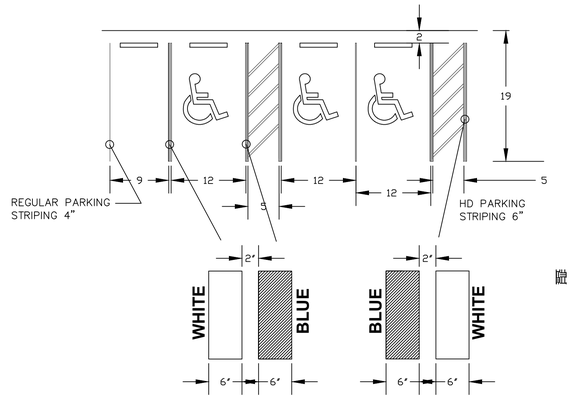
TRUNCATED DOME

CURB RAMP DETECTABLE WARNING SURFACE
(per fdot index 304)

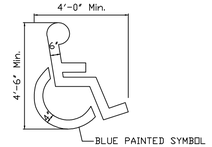


SECTION

TYP. WHEEL STOP
SCALE: N.T.S

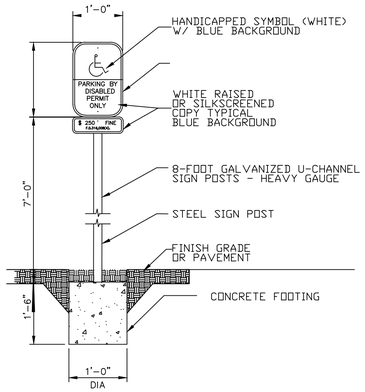


HANDICAP & REGULAR PARKING STRIPING DETAILS
SCALE: N.T.S



INTERNATIONAL
HANDICAP SYMBOL

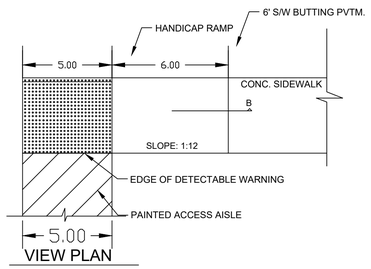
PAVEMENT MARKINGS DETAILS



TYP. HANDICAP PARKING SIGN
SCALE:N.T.S'

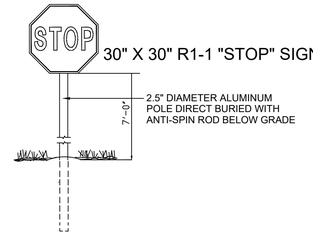


SECTION B-B



VIEW PLAN

HANDICAP RAMP DETAIL
SCALE: NTS



TYP. STOP SIGN
SCALE:N.T.S'

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
OVIEDO, FL 32765
eato1944@gmail.com

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D00000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:19:13 -04'00'

SEAL:

DATE:
11/30/22

SCALE:
AS NOTED

REVISIONS: PER

SHEET NO:

C-8

COPYRIGHT © ENRIQUE A. TORRENS,P.E.

Definitions:

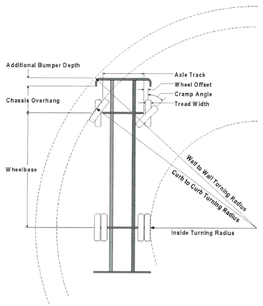
Inside CrampAngle	Maximum turning angle of the front inside fire.
Axle Track	King-pin to King-pin distance of front axle.
Wheel Offset	Offset from the center line of the wheel to the King-pin.
Tread Width	Width of the tire tread.
Chassis Overhang	Distance of the center line of the front axle to the front edge of the cab. This does not include the bumper depth.
Additional Bumper Wheel	Depth that the bumper assembly adds to the front overhang.
Wheelbase	Distance between the center lines of the vehicles front and rear axles.
Inside Turning Radius	Radius of the smallest circle around which the vehicle can turn.
Curb to Curb Turning Radius	Radius of the smallest circle around which the vehicle's tires can turn. This measures assumes a curb height of 9 inches.
Wall to Wall Turning Radius	Radius of the smallest circle around which the vehicle's tires can turn. This measures takes into account any front overhang due to chassis , bumper extensions and or aerial devices.

Turning Performance Analysis

10/11/2019

Bid Number: 27
Department: Sanford Fire Department

Chassis: Arrow-XT Chassis, PAP, MUX, PUC
Body: Aerial, Platform 100', PUC, Alum Body



Parameters:

Inside Cramp Angle:	40°
Axle Track:	82.92 in.
Wheel Offset:	5.30 in.
Tread Width:	17.5 in.
Chassis Overhang:	68.99 in.
Additional Bumper Depth:	22 in.
Front Overhang:	90.99 in.
Wheelbase:	270 in.

Calculated Turning Radii:

Inside Turn:	25 ft. 7 in.
Curb to curb:	41 ft. 8 in.
Wall to wall:	48 ft. 5 in.

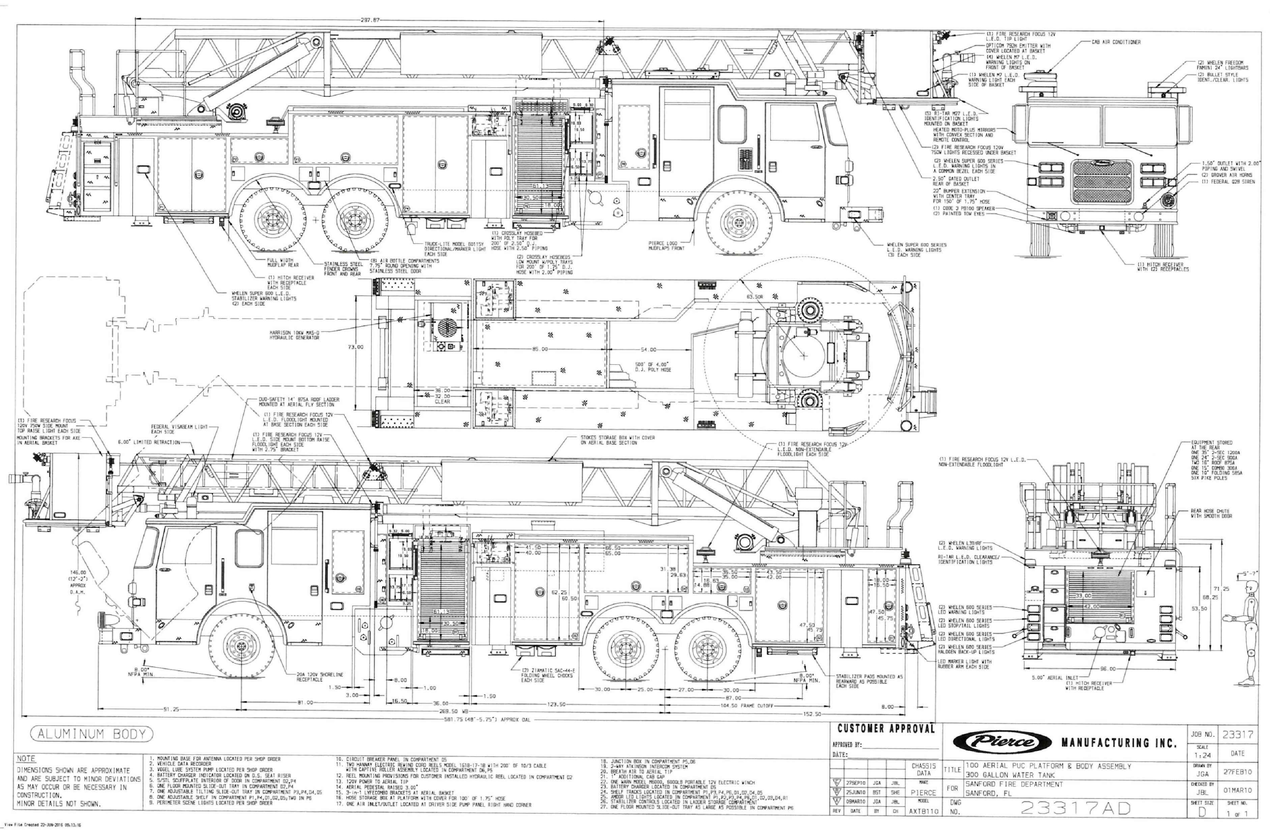
Comments:

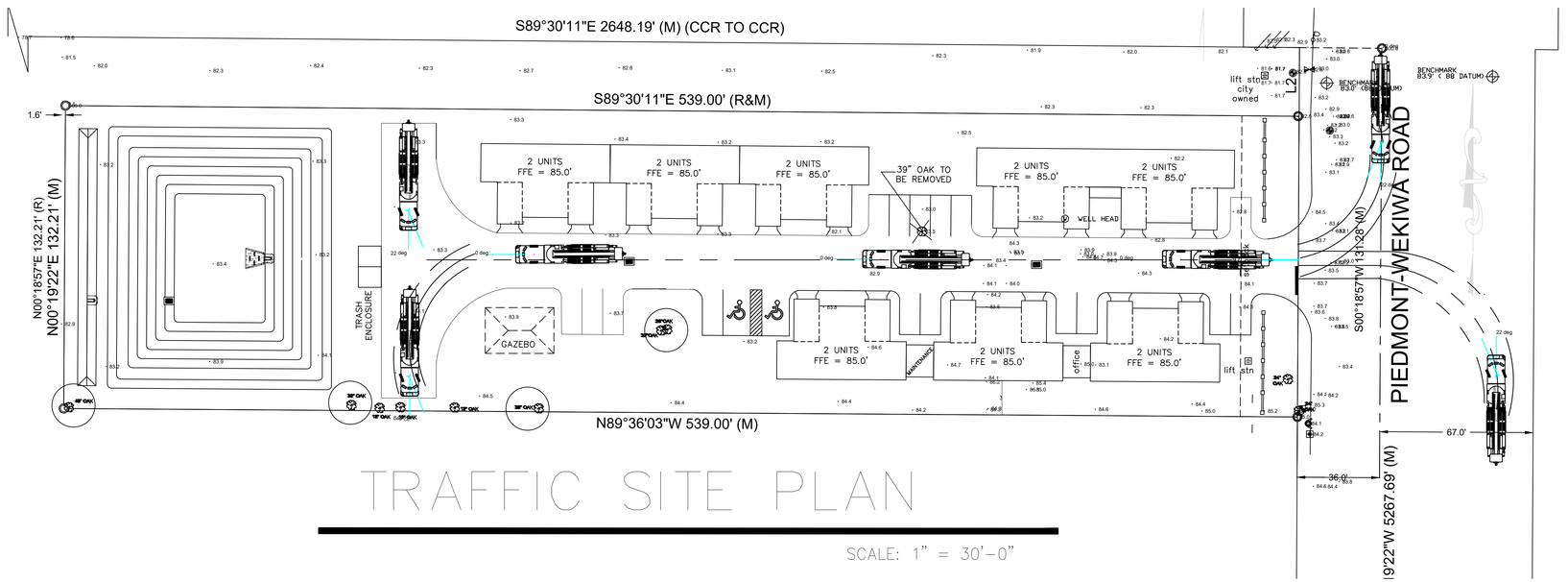
Category	Option	Description
Axle, Front, Custom	0090913	Axle, Front, Oshkosh TAK-4, Non Drive, 24,000 lb, Qtm/AXT/DCF
Wheels, Front	0019618	Wheels, Front, Alcoa, 22.50" x 13.00", Aluminum, Hub Pilot
Tires, Front	0582746	Tires, Front, Goodyear, G296 MSA, 445/65R22.50, 20 ply
Bumpers	0550017	Bumper, 22" Extended, Arrow XT
Aerial Devices	0022160	Aerial, 100' Pierce Platform

Notes:

Actual Inside cramp angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for 9.00 inch curb.





TRAFFIC SITE PLAN

SCALE: 1" = 30'-0"

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
DVIEDO, FL 32765
eato1944@gmail.com

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D00000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:19:44 -04'00'

SEAL:

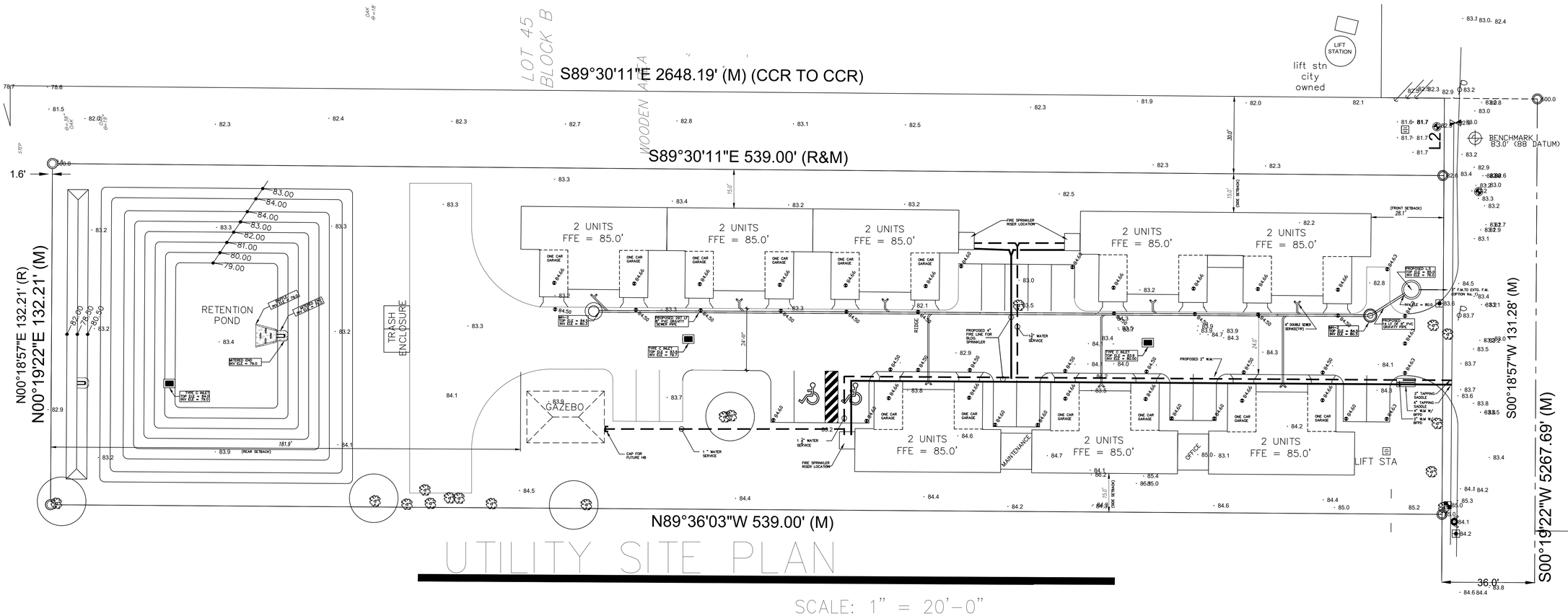
DATE: 11/30/22

SCALE: AS NOTED

REVISIONS: PER

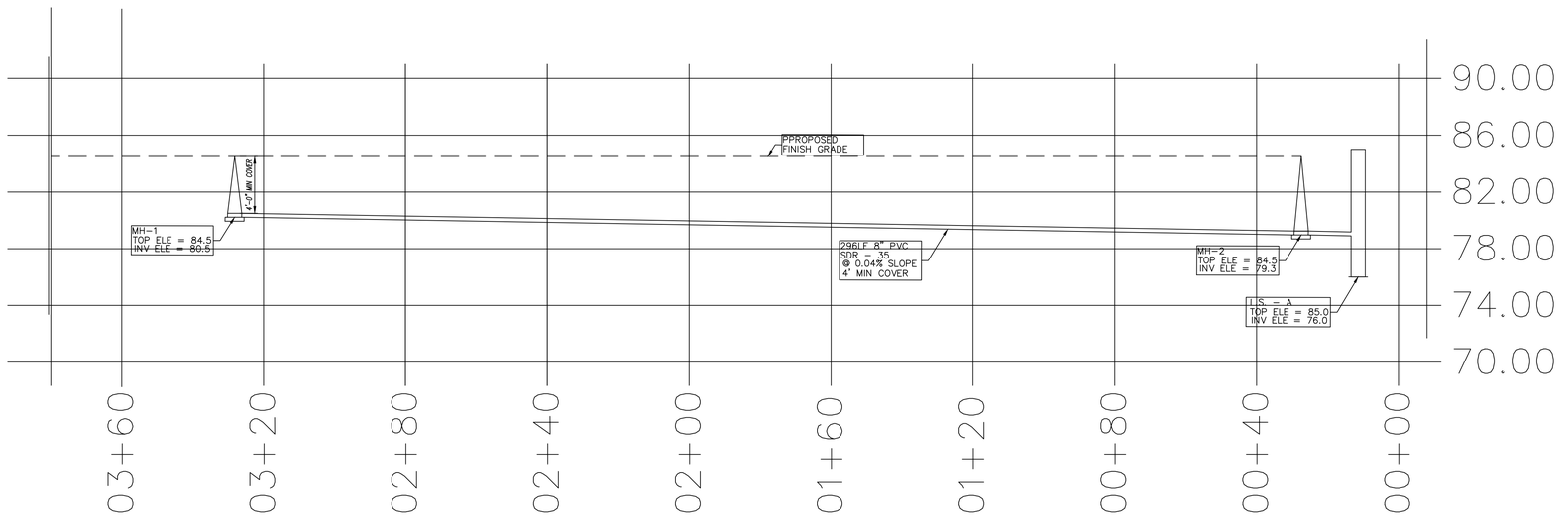
SHEET NO: **C-9**

COPYRIGHT © ENRIQUE A. TORRENS,P.E.



UTILITY SITE PLAN

SCALE: 1" = 20'-0"



8"PVC GRAVITY SEWER MAIN PROFILE LINE

HORZ. SCALE 1"=20'-00"
VERT. SCALE 1"=4'-00"

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
OVIEDO, FL 32765
eato1944@gmail.com

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

PIEDMONT-WEKIWA ROAD

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D00000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:20:12 -04'00'

SEAL:

DATE:
11/30/22

SCALE:
AS NOTED

REVISIONS: PER

SHEET NO:

U-1

GRINDER PUMP STATION DATA TABLE

PUMP STATION NUMBER	MODEL NUMBER	TOTAL STATION HEIGHT (IN.)	CONCRETE ANCHOR VOLUME (CF) (MIN.)
N/A	SPD	108"	13.5

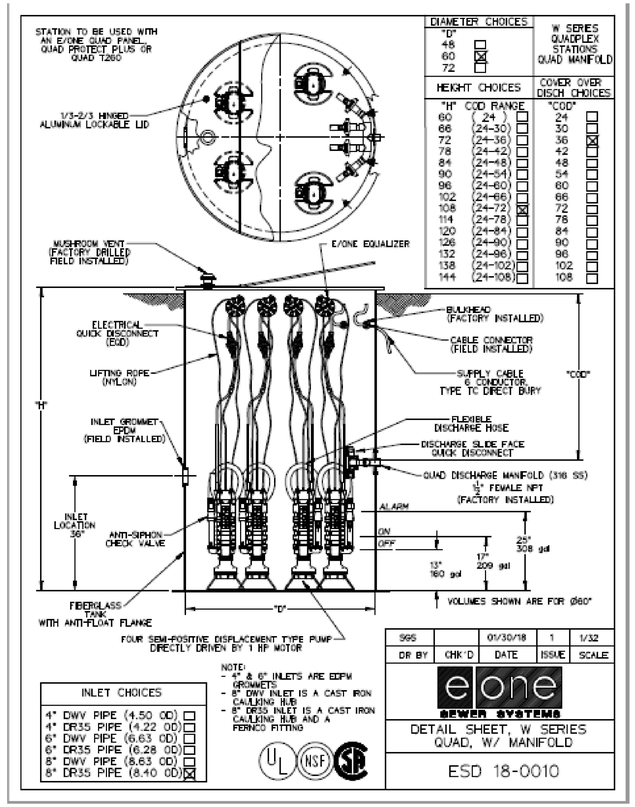
"W-SERIES FIBERGLASS 60" x 108" LIFT STATTION""

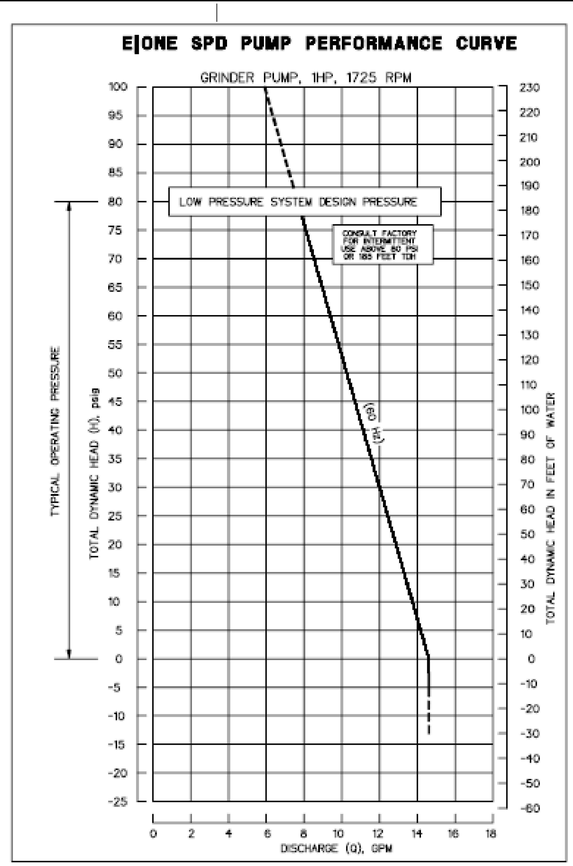
GENERAL NOTES:

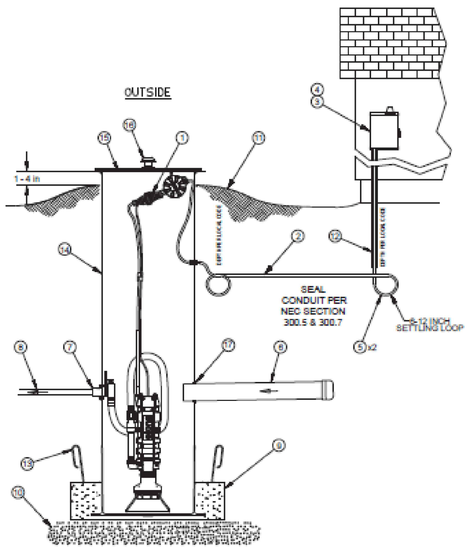
1. THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UNDERGROUND FACILITIES PRIOR TO EXCAVATION.
2. UNDERGROUND UTILITIES SHOWN ON THESE PLANS WERE OBTAINED FROM UTILITY MAPS PROVIDED BY THE OWNERS AND THE BOUNDARY SURVEY PROVIDED BY THE PROPERTY OWNER. CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS TO FIELD LOCATE ALL UNDERGROUND UTILITIES AT LEAST 72 HOURS PRIOR TO CONSTRUCTION.
3. LOCATION OF EXISTING STRUCTURES, EQUIPMENT, ROADWAY, TREES, GROUND AND OTHER TOPOGRAPHIC FEATURES ARE BASED ON THE TOPOGRAPHIC SURVEY PROVIDED BY THE PROPERTY OWNER. FIELD LOCATIONS WERE NOT PERFORMED, THEREFORE, ACCURACY OF FIELD LOCATED ITEMS IS NOT GUARANTEED.
4. THE CONTRACTOR SHALL PRESERVE AND MAINTAIN ALL UTILITIES WITHIN THE CONSTRUCTION AREA.
5. CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS AND PAY ALL COSTS FOR THE RELOCATION OF ANY EXISTING ELECTRIC, GAS OR TELEPHONE FACILITY (BURIED CABLE, POLES, ANCHORS, PEDESTALS, ETC.) WHICH ARE SHOWN ON THE PLANS TO BE RELOCATED OR WHICH CANNOT BE ADEQUATELY PROTECTED DURING CONSTRUCTION OF THE PIPELINE FACILITIES.
6. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE RELOCATION OF ALL EXISTING UTILITIES THAT FALL WITHIN THE LIMITS OF EXCAVATION FOR THE PIPELINE AND PAY ALL COSTS CONNECTED THEREWITH.
7. ALL PAVED CROSSINGS ARE TO BE OPEN CUT EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS. MAINTAIN AT LEAST ONE LANE OF TRAFFIC OPEN AT ALL TIMES WITH FLAGMEN FOR TRAFFIC CONTROL.
8. CONTRACTOR SHALL AVOID ENCROACHMENT ONTO PRIVATE PROPERTY AND MAINTAIN CONSTRUCTION WITHIN LIMITS OF CONSTRUCTION.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF DISTURBED MATERIAL (INCLUDING DRIVEWAYS, SIDEWALKS, MAILBOXES, VEGETATION AND SIGNAGE) TO EQUAL OR BETTER CONDITION AS PRIOR TO CONSTRUCTION.
10. WHEN USING SCALED DATA, CONSIDER THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE DURING REPRODUCTION.
11. AIR RELEASE VALVES SHALL BE REQUIRED AT ALL HIGH POINTS.

GENERAL NOTES FOR SANITARY SEWER GRAVITY & FORCE MAINS:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "ORANGE COUNTY UTILITIES STANDARD AND REGULATIONS.
2. ALL FORCE MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES.
3. ALL FORCE MAINS SHALL BE TESTED FOR TIGHTNESS FOR TWO HOURS UNDER A CONSTANT HYDROSTATIC GAUGE PRESSURE OF 100 PSI. UNLESS OTHERWISE SPECIFIED, THE ALLOWABLE LEAKAGE RATE SHALL NOT EXCEED THAT REQUIRED BY AWWA C600.
4. MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18 INCHES WALL TO WALL AND MINIMUM HORIZONTAL SEPARATION OF 10 FEET WALL TO WALL FROM ALL POTABLE WATER MAINS AND STORM SEWERS. WHERE THE MINIMUM SEPARATION CANNOT BE MAINTAINED, THE FORCE MAIN SHALL BE DUCTILE IRON AND SHALL EXTEND TEN FEET EITHER SIDE OF CROSSING, OR SHALL BE ENCASED IN CONCRETE FOR A MINIMUM OF TEN FEET ON BOTH SIDES OF CROSSING
5. ALL PIPING SHALL BE RESTRAINED IN ACCORDANCE WITH MANUFACTURER RECOMENDATIONS.
6. DEFLECT PIPE AS NECESSARY AT CROSSINGS TO MAINTAIN COVER.
7. CONTRACTOR SHALL MAINTAIN A MINIMUM HORIZONTAL CENTERLINE TO CENTERLINE SEPARATION OF 5 FEET OR A MINIMUM HORIZONTAL WALL TO WALL SEPARATION OF 3 FEET, WHICHEVER IS GREATEST, AND A MINIMUM VERTICAL WALL TO WALL SEPARATION OF 18 INCHES BETWEEN THE PROPOSED FORCE MAIN AND WASTEWATER REUSE MAINS. WHEN THIS SEPARATION CANNOT BE MAINTAINED, THE FORCE MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON AND/OR CONCRETE ENCASED.







Environment One Grinder Pump Feature Identification

1. Electrical Quick Disconnect (EQD) – Electrical lead from pump core terminates here (NEMA 6P).

2. Power and Alarm Lead – Circuits to be installed in accordance with local codes.

3. Alarm Panel – Rainproof (NEMA 4X) enclosure. Equipped with circuit breakers. Locate according to local codes.

4. Alarm Device – Every installation is to have an alarm device to alert the homeowner of a potential malfunction. Visual devices should be placed in conspicuous locations.

5. Settling Loop – Coil wire to protect against soil settling.

6. Gravity Service Line – Standard configuration 4-inch DWV (4.5 inches OD). Supplied by others.

7. Discharge Outlet – Standard configuration 1 ¼-inch solvent weld

8. Discharge Line – 1 ¼-inch nominal pipe size. Supplied by others.

9. Concrete Anchor – See Charts 1 and 2 for correct ballast weight. Supplied by others.

10. Bedding Material – 6-inch minimum depth, rounded aggregate (gravel). Supplied by others.

11. Finished Grade – Grade line should be below the cover and slope away from the accessway.

12. Conduit – 1 ¼-inch PVC to burial depth required by local code. Supplied by others.

13. Rebar – Required to lift tank after pre-cast ballast has been attached (4 places, evenly spaced around tank). Supplied by others.

14. Grinder Pump Basin – Fiberglass

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
OVIEDO, FL 32765
eato@bellsouth.net

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D000000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:20:40 -04'00'

DATE:
02/18/21

SCALE:
AS NOTED

REVISIONS: PER
△ 11/05/2023 O.U.C.

U-2

COPYRIGHT © ENRIQUE A. TORRENS, P.E.

Grinder Pump Station Ballast Calculations

Any buried vessel that is submerged, or partially submerged, in water will be acted on by an upward buoyant force that attempts to return the vessel to a non-submerged state. The magnitude of this buoyant force is equal to the volume of the vessel that is submerged multiplied by the density of water. On most in-ground installations a ballast, or concrete anchor, of proper volume and weight is required to resist the buoyant force.

The amount of ballast needed is equal to the weight it would take to counterbalance the buoyant forces that are exerted on the station. The total ballast is a combination of the concrete poured to create a ring around the bottom of the station and the soil above that ring which act as a weight. The ballast force, the force holding the station down, must be greater than the buoyant force, the force pushing the station up, in order to have an acceptable installation.

Calculate the Buoyant Force:

STATION VOLUME X THE WEIGHT OF WATER PER CUBIC FOOT (62.4 LBS/CU FT) = BUOYANT FORCES

BUOYANT FORCES – STATION WEIGHT = NET BUOYANT FORCE

Example: 90x24
23.56 cu ft X 62.4 lbs/cu ft = 1470.1 lbs
1470.1 lbs - 210 lbs = 1260.1 lbs

Calculate the Ballast Force:

VOLUME OF CONCRETE X WEIGHT OF CONCRETE WATER (87.6 LBS/CU FT) = BALLAST FROM CONCRETE

VOLUME OF CONTRIBUTING SOIL X WEIGHT OF SATURATED SOIL (70 LBS/CU FT) = BALLAST FROM SOIL

BALLAST FROM CONCRETE + BALLAST FROM SOIL = NET BALLAST FORCE

Example: 90x24
concrete: 3.3 cu ft X 87.6 lbs/cu ft = 289.1 lbs
soil: 26.0 cu ft X 70 lbs/cu ft = 1820 lbs
289.1 lbs + 1820 lbs = 2109.1 lbs

Net Ballast Force @ 2109.1 lbs > Net Buoyant Force @ 1260.1 lbs

Acceptable

Example, 90x24:
Station Volume = 23.56 cu ft
Station Weight = 210 lbs
Contributing Soil Volume = 26.0 cu ft
Recommended Concrete Volume = 3.3 cu ft (O.D. = 36")

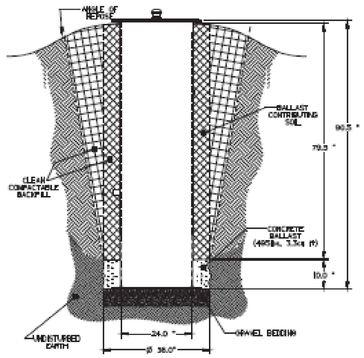


Chart 2

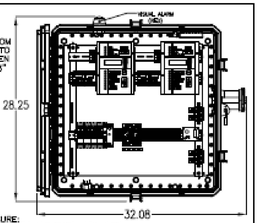
*Ballast is calculated with ground water at grade

MODEL	STATION TYPE	MATERIAL	DIAMETER (inches)	STATION HEIGHT (inches)	STATION WEIGHT (pounds) station, cone, cover	STATION VOLUME (cubic feet)	NET BUOYANT FORCE (pounds)	NET BALLAST FORCE (pounds)	CONCRETE DIAMETER (inches) (ballast 10" thick)	CONCRETE VOLUME (cubic feet)	CONCRETE WEIGHT (pounds)
60x24	Simplex	Fiberglass	24	60	172	15.71	805	1421	36	3.3	490.9
72x24	Simplex	Fiberglass	24	72	178	18.85	998	1895	36	3.3	490.9
90x24	Simplex	Fiberglass	24	90	210	23.56	1260	2109	36	3.3	490.9
120x24	Simplex	Fiberglass	24	120	232	31.42	1726	2795	36	3.3	490.9
144x24	Simplex	Fiberglass	24	144	250	37.70	2102	3345	36	3.3	490.9
60x30	Simplex	Fiberglass	30	60	195	24.54	1336	1705	42	3.9	569.0
72x30	Simplex	Fiberglass	30	72	234	29.45	1604	2035	42	3.9	569.0
90x30	Simplex	Fiberglass	30	90	295	36.81	2342	2629	42	3.9	569.0
120x30	Simplex	Fiberglass	30	120	339	49.09	2724	3354	42	3.9	569.0
144x30	Simplex	Fiberglass	30	144	376	58.90	3298	4014	42	3.9	569.0
60x36	Simplex	Fiberglass	36	60	240	35.34	1985	2180	49	5.0	783.3
72x36	Simplex	Fiberglass	36	72	257	42.41	2389	2810	49	5.0	783.3
90x36	Simplex	Fiberglass	36	90	282	53.01	3026	3298	49	5.0	783.3
120x36	Simplex	Fiberglass	36	120	376	70.68	4033	4289	49	5.0	783.3
144x36	Simplex	Fiberglass	36	144	469	84.82	4804	5133	49	5.0	783.3
60x42	Duplex	Fiberglass	42	60	296	48.10	2706	2930	57	6.7	1012.4
72x42	Duplex	Fiberglass	42	72	314	57.73	3288	3497	57	6.7	1012.4
90x42	Duplex	Fiberglass	42	90	373	72.16	4130	4347	57	6.7	1012.4
96x42	Duplex	Fiberglass	42	96	375	76.97	4430	4651	57	6.7	1012.4
120x42	Duplex	Fiberglass	42	120	432	96.21	5571	5795	57	6.7	1012.4
128x42	Duplex	Fiberglass	42	128	432	101.02	5872	6048	57	6.7	1012.4
144x42	Duplex	Fiberglass	42	144	526	115.45	6858	6936	57	6.7	1012.4
60x48	Duplex	Fiberglass	48	60	325	62.83	3596	3790	65	8.7	1309.6
72x48	Duplex	Fiberglass	48	72	344	75.40	4381	4523	65	8.7	1309.6
90x48	Duplex	Fiberglass	48	90	424	94.25	5457	5624	65	8.7	1309.6
120x48	Duplex	Fiberglass	48	120	556	125.66	7285	7457	65	8.7	1309.6
144x48	Duplex	Fiberglass	48	144	552	150.79	8787	8924	65	8.7	1309.6
60x60	Quad	Fiberglass	60	60	781	98.17	5345	5842	81	13.5	2018.7
96x60	Quad	Fiberglass	60	96	947	157.08	8854	9233	81	13.5	2018.7
120x60	Quad	Fiberglass	60	120	1106	196.34	11144	11464	81	13.5	2018.7
144x60	Quad	Fiberglass	60	144	1264	235.61	13468	13755	81	13.5	2018.7

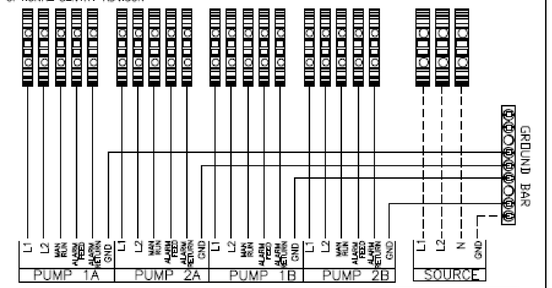
SENTRY PROTECT PLUS QUAD

EXTERNAL VISUAL & AUDIBLE ALARM
REMOTE SENTRY DRY CONTACTS FOR OPTIONAL POWER LOSS HIGH LEVEL ALARM (POWER LOSS ALARM FOR WIRELESS)
MANUAL ALARM SILENCE
MANUAL RUN
STATUS LED'S: NORMAL, PUMP RUNNING, HIGH LEVEL
TROUBLE INDICATIONS: RUN DRY, OVERPRESSURE, BROWNOUT, VOLTAGE, EXTENDED RUN TIME
DRY CONTACTS
CONFORMAL COATED CIRCUIT BOARD (BOTH SIDES)
PADLOCK
PREDICTIVE ALARMS
REAL TIME PUMP PERFORMANCE
ADJUSTABLE ALARM DELAY
ADJUSTABLE RUN TIME DELAY
HOUR/CYCLE COUNTER
NEMA 4X ENCLOSURE ASSEMBLY
GENERATOR RECEPTACLE W/ AUTO TRANSFER
OPTIONAL SENTRY ADVISOR

DIMENSION FROM BACK PANEL TO FRONT OF OPEN DOOR = 37.13"



ENCLOSURE:
CORROSION PROOF THERMOPLASTIC POLYCARBONATE APPROVED BY UL FOR ELECTRICAL CONTROL ENCLOSURE



NOTES:
1. ONLY EXTERNAL PUMP AND POWER CONNECTIONS SHOWN.
2. REFER TO PACKET FOR FULL WIRE DETAIL.

A DEDICATED 50A CIRCUIT BREAKER IS REQUIRED

OLD / NEW WIRE COLOR MAP

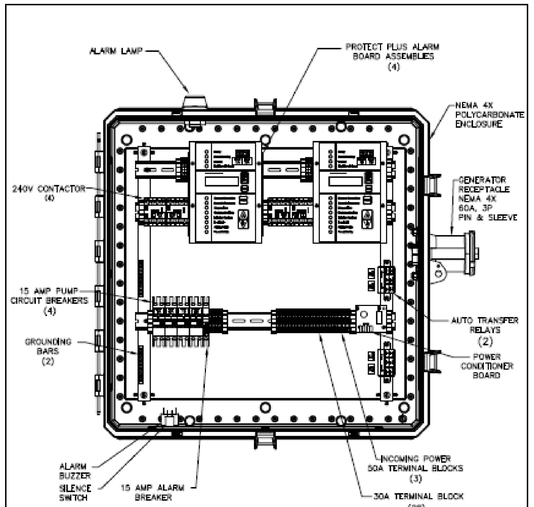
PIN	FUNCTION	2000S	EXTREME
1	MANUAL RUN	RED	BROWN
2	L1	BLACK	RED
3	L2	WHITE	BLACK
4	GND	GREEN	GRNYEL
5	ALARM FEED	ORANGE	YELLOW
6	ALARM RETURN	BLUE	BLUE

LEGEND
HIGH VOLTAGE
LOW VOLTAGE CABLE

CONTROL CABLE:
TYPE TC: DIRECT BURIAL SIX CONDUCTOR

NKS	07/12/17	SGS	–	N/A
DR BY	DATE	CHK'D	ISSUE	SCALE

e|one
SEWER SYSTEMS
SENTRY PROTECT PLUS PANEL, QUAD
240V 60Hz DOUBLE POLE POWER
NA0632P02



MODEL QUAD PROTECT PLUS
PART NUMBER NC0412G02

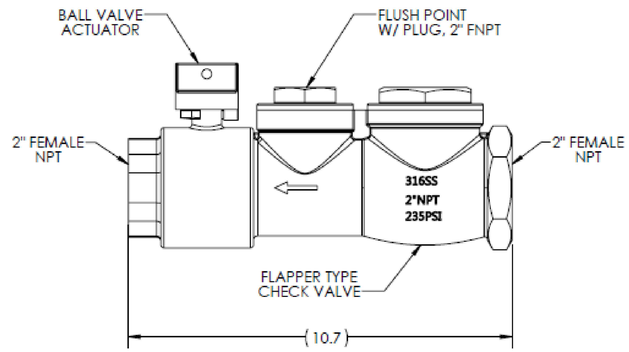
PIN	FUNCTION	2000S	EXTREME
1	MANUAL RUN	RED	BROWN
2	L1	BLACK	RED
3	L2	WHITE	BLACK
4	GND	GREEN	GRNYEL
5	ALARM FEED	ORANGE	YELLOW
6	ALARM RETURN	BLUE	BLUE

LISTED 5060

NKS	SGS	07-17-17	–	N/A
DR BY	CHK'D	DATE	ISSUE	SCALE

e|one
SEWER SYSTEMS
QUAD PROTECT PLUS PANEL W/ GEN
240V 60Hz DOUBLE POLE POWER
WIRED LEVEL CONTROL
NA0632P04

STAINLESS STEEL 2" LATERAL ASSEMBLY NO FITTINGS



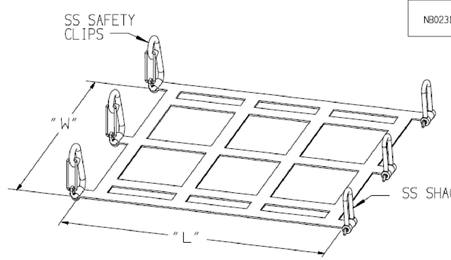
PART IS A BALL VALVE CURB STOP WITH FEMALE PIPE THREADS, VALVE POSITION STOPS (OPEN/CLOSED), WITH FLUSH POINT AND INTEGRAL CHECK VALVE

NOTES:
1. MATERIAL: 316 STAINLESS STEEL
2. PRESSURE RATING: 235 PSI
3. TO ORDER SS 2" LATERAL, NO FITTINGS USE PART NUMBER NC0443P01

NKS	11/06/17	DN	-	N/A
DR BY	DATE	CHK'D	ISSUE	SCALE

e|one
SEWER SYSTEMS
2" LATERAL ASSEMBLY
316 STAINLESS STEEL
NA0330P06

PART NUMBER	BASIN I.D. (IN)	FOR HATCH TYPE:	DIM "W" (IN)	DIM "L" (IN)	USF P/N
N80231P01	30	GAS TIGHT/WATER TIGHT	10	11	NET 13x17A
N80231P02	30	STANDARD			reserved
N80231P03	36	GAS TIGHT/WATER TIGHT	14	16	NET 17x22A
N80231P04	36	STANDARD	16	21	NET 19x27A
N80231P05	42	GAS TIGHT/WATER TIGHT	17	20	NET 20x26A
N80231P06	42	STANDARD	19	26	NET 22x32A
	48	GAS TIGHT/WATER TIGHT			
N80231P07	48	STANDARD	21	30	NET 24x36A
	60	GAS TIGHT/WATER TIGHT			
	60	STANDARD			
N80231P08	72	GAS TIGHT/WATER TIGHT	27	42	NET 30x48A
	72	STANDARD			



NOTES:
1. ALL LIDS SHOWN INCLUDE SAFETY NET SUPPORTS AND ARE SAFETY NET READY

SGS		05/08/12	1	
DR BY	CHK'D	DATE	ISSUE	SCALE

e|one
SEWER SYSTEMS
SAFETY NET FOR USE WITH HATCHED LIDS, W SERIES
ESD 12-0063

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
OVIEDO, FL 32765
eato@bellsouth.net

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

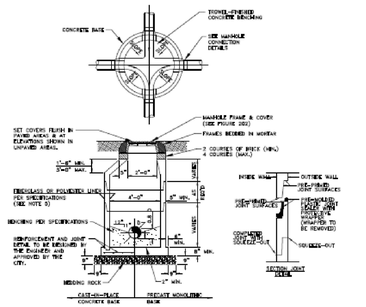
Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D000000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:21:11 -04'00'

DATE:
02/18/21

SCALE:
AS NOTED

REVISIONS: PER
Q.U.C.
11/05/2023

U-3



FORCE MAIN MANHOLE LINER

DIAMETER (INCHES)	HEIGHT (FEET)	THICKNESS (INCHES) 3-8 | 7-12 | 13-17	MATERIAL	MANUFACTURER
48				
60				
72				

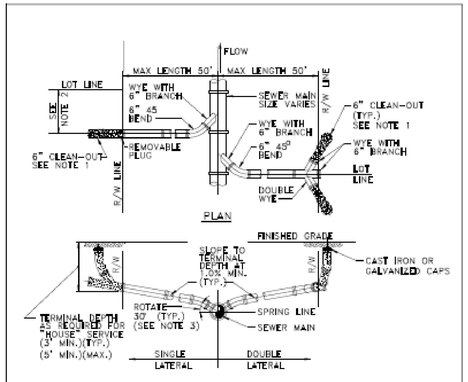
* TO BE COMPLETED BY THE ENGINEER

NOTES:

1. MANHOLE SHOWN IS FOR SEWER SIZE 8" THRU 24". SEE SECTION 20.4 OF THE MANUAL FOR MANHOLE DIAMETER FOR SEWERS LARGER THAN 24".
2. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS.
3. THE THICKNESS OF THE LINER SHALL BE 3/8" MINIMUM
4. EACH BENCH WALL SHALL BE A MINIMUM OF 18 INCHES LONG FROM THE WALL OF THE MANHOLE TOWARD THE CENTER.
5. SANITARY SEWER MANHOLES MAY BE REQUIRED TO BE LINED WITH HDPE OR FIBERGLASS AS DIRECTED BY THE CITY.

TYPICAL MANHOLE

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 200

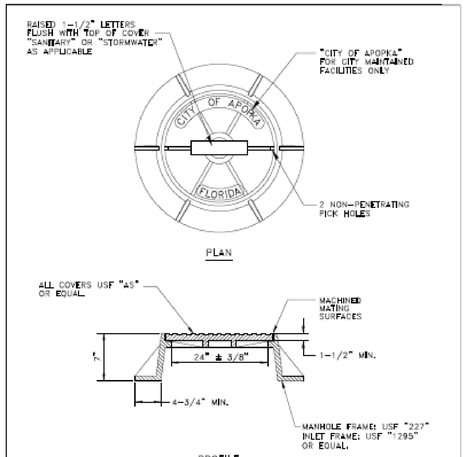


NOTES:

1. CLEAN-OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE.
3. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
4. RESIDENTIAL SERVICES SHALL BE 4 INCHES & NON-RESIDENTIAL SERVICES SHALL BE 6 INCHES IN DIAMETER AS A MINIMUM.
5. GALVANIZED, OR CAST IRON CLEAN-OUT CAP SHALL BE USED ON THE STUBOUT FOR EACH SERVICE.
6. LATERAL SHALL BE MARKED WITH AN "S" STAMPED OR CUT IN THE CURB.

SERVICE LATERAL DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 204

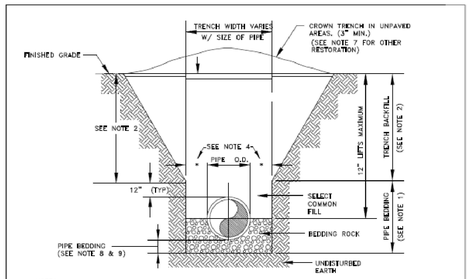


NOTES:

1. MANHOLE FRAME AND COVER ARE TO BE TRAFFIC BEARING RATED H-20, CLASS 30 MEETING ASTM A 48.

STANDARD MANHOLE FRAME AND COVER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 202

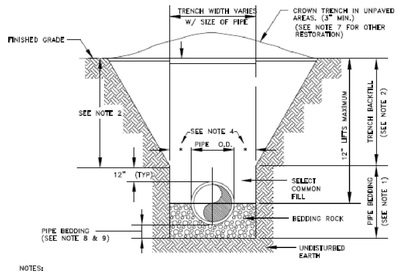


NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. USE OF TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING IF REQUIRED BY THE CITY. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15" AND 6" MINIMUM FOR PIPE DIAMETER 18" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL COVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE CITY SHALL DETERMINE IN THE FIELD IF REMOVAL OF UNSUITABLE MATERIAL IS REQUIRED TO REACH A SUITABLE FOUNDATION.
9. ALL UNPAVED DISTURBED AREAS SHALL BE SODDED TO MATCH ADJACENT DOMINATE GRASS SPECIES.
10. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF THE GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.

TYPE "A" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 101

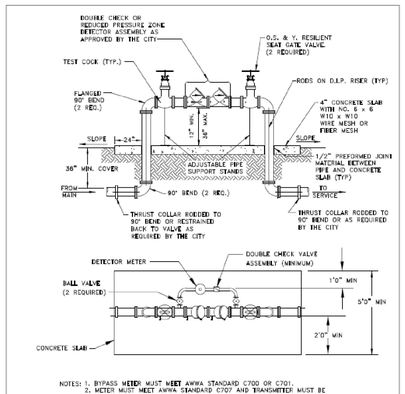


NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. USE OF TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING IF REQUIRED BY THE CITY. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15" AND 6" MINIMUM FOR PIPE DIAMETER 18" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE CITY SHALL DETERMINE IN THE FIELD IF REMOVAL OF UNSUITABLE MATERIAL IS REQUIRED TO REACH A SUITABLE FOUNDATION.
9. ALL UNPAVED DISTURBED AREAS SHALL BE SODDED TO MATCH ADJACENT DOMINATE GRASS SPECIES.
10. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF THE GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.

TYPE "A" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 101



NOTES: 1. BYPASS METER MUST MEET AWWA STANDARD C700 OR C701;
2. METER MUST MEET AWWA STANDARD C707 AND TRANSMITTER MUST BE COMPATIBLE WITH THE CITY'S AMR SYSTEM.
3. ALL PIPE FITTINGS, MATERIALS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED BY THE CONTRACTOR.
4. ALL PIPE AND FITTINGS TWO (2) INCHES AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL, OR BRASS.

ABOVE GROUND DEVICE WITH DETECTOR BY-PASS

2 INCH AND ABOVE ASSEMBLY

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 500 B

DETAILS

NOTE:
PLEASE REFER TO:
CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL
FOR DETAILS NOT INCLUDED IN THIS SHEET.

ENRIQUE A. TORRENS, P.E
CIVIL ENGINEER
P.E No. 33379
624 BUCKINGHAM DR.
OVIEDO, FL 32765
eato@bellsouth.net

PROJECT: 16 APARTMENT UNITS
734 PIEDMONT WEKIWA RD.
APOPKA, FL 32703

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY ENRIQUE A. TORRENS, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED & SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Digitally signed by ENRIQUE TORRENS
DN: c=US, o=Unaffiliated, dnQualifier=A01410D000000197EB2A24130003E41D, cn=ENRIQUE TORRENS
Date: 2026.05.11 11:22:23 -04'00'

DATE:
02/18/21

SCALE:
AS NOTED

REVISIONS: PER
⚠ 11/05/2023 O.U.C.

U-4