APOPKA DEVELOPMENT REVIEW COMMITTEE AGENDA
January 8, 2025 9:00 AM
Apopka City Hall Council Chambers

SPECIAL EVENTS

PLAT

1. PL-24-4 Shoppes at East Shore - Plat, 2nd Submittal

SITE PLAN:

CONSTRUCTION SITE PLAN

1. CSP-24-6 Apopka Business Center - Revision to Construction Site Plan (CSP), 1st Submittal

SUBDIVISION:

MAJOR DEVELOPMENT PLAN

1. SP-24-41 Plymouth Harbor - Major Development Plan (MDP), 2nd Submittal
   Owner(s): Plymouth Harbor LLC
   Applicant(s): G L Summitt Engineering - Geoffrey L. Summitt
   Location: South of Plymouth Oaks Road, West of Plymouth Sorrento Road and North of Yothers Road
   Proposed Use: Residential
   Project Manager: Bobby Howell
   Presented by: Bobby Howell, Planning Manager

2. MDP-24-2 4101 Golden Gem Residential - Major Development Plan (MDP), 2nd Submittal
   Owner(s): Kelly Park VB Development, LLC
   Applicant(s): Kimley-Horn and Associates - Mackenzie Cerjan
   Location: 4101 Golden Gem Road
   Proposed Use: Residential Single Family
   Project Manager: Jean Sanchez
   Presented by: Jean Sanchez, Senior Planner

3. MDP-24-5 Golden Gem Subdivision - Major Development Plan (MDP), 1st Submittal
   Owner(s): Timothy Burchfield, Robert and Stacey Moss
   Applicant(s): G L Summitt Engineering, Inc. - Geoffrey L. Summitt
   Location: Northwest corner of Golden Gem Road and Trussell Trail
   Proposed Use: Residential - Single Family
   Project Manager: Jean Sanchez
   Presented by: Jean Sanchez, Senior Planner

DISCUSSION

ADJOURNMENT

Individuals with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk at least two (2) working days in advance of the meeting date and time at (407) 703-1704. F.S. 286.0105 If a person decides to appeal any decision or

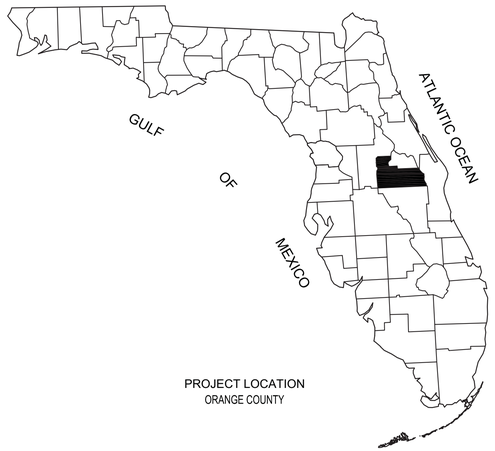
recommendation made by Council with respect to any matter considered at this meeting, he will need record of the proceedings, and that for such purposes he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Any opening invocation that is offered before the official start of the Council meeting shall be the voluntary offering of a private person, to and for the benefit of the Council. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the City Council or the city staff, and the City is not allowed by law to endorse the religious or non-religious beliefs or views of such speaker. Persons in attendance at the City Council meeting are invited to stand during the opening ceremony. However, such invitation shall not be construed as a demand, order, or any other type of command. No person in attendance at the meeting shall be required to participate in any opening invocation that is offered or to participate in the Pledge of Allegiance. You may remain seated within the City Council Chambers or exit the City Council Chambers and return upon completion of the opening invocation and/or Pledge of Allegiance if you do not wish to participate in or witness the opening invocation and/or the recitation of the Pledge of Allegiance.

SHOPPES AT EAST SHORE

BEING A PORTION OF SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST
CITY OF APOPKA
ORANGE COUNTY, FLORIDA

PLAT BOOK ___ PAGE ___



LEGAL DESCRIPTION:

A PORTION OF SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTH 1/4 CORNER OF SAID SECTION 20; THENCE RUN NORTH 00°31'31" EAST, ALONG THE EAST LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 20, A DISTANCE OF 30.03 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF WEST KEENE ROAD (A 60.00 FOOT WIDE PUBLIC RIGHT-OF-WAY PER OFFICIAL RECORDS BOOK 536, PAGES 680 AND 681, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA); THENCE DEPARTING SAID EAST LINE, RUN ALONG SAID NORTH RIGHT-OF-WAY LINE THE FOLLOWING TWO (2) COURSES AND DISTANCES: 1) THENCE RUN SOUTH 88°07'21" WEST, A DISTANCE OF 713.24 FEET TO THE POINT OF BEGINNING; 2) THENCE CONTINUE SOUTH 88°07'21" WEST, A DISTANCE OF 980.83 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF OCOEE-APOPKA ROAD (COUNTY ROAD 437A, A VARIABLE WIDTH PUBLIC RIGHT-OF-WAY); THENCE DEPARTING SAID NORTH RIGHT-OF-WAY LINE, RUN ALONG SAID EAST RIGHT-OF-WAY LINE THE FOLLOWING FIVE (5) COURSES AND DISTANCES: 1) THENCE RUN NORTH 18°51'04" EAST, A DISTANCE OF 160.47 FEET TO A POINT OF CURVATURE OF A 602.96 FOOT RADIUS CURVE, CONCAVE TO THE WEST, BEING SUBTENDED BY A CHORD BEARING OF NORTH 08°44'34" EAST AND A CHORD LENGTH OF 211.65 FEET; 2) THENCE RUN NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 20°13'00", AN ARC DISTANCE OF 212.75 FEET TO A POINT OF TANGENCY; 3) THENCE RUN NORTH 01°21'56" WEST, A DISTANCE OF 224.57 FEET TO A POINT OF CURVATURE OF A 1115.92 FOOT RADIUS CURVE, CONCAVE TO THE EAST, BEING SUBTENDED BY A CHORD BEARING OF NORTH 08°12'56" EAST AND A CHORD LENGTH OF 371.48 FEET; 4) THENCE RUN NORTHERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 19°09'45", AN ARC DISTANCE OF 373.22 FEET TO A POINT OF TANGENCY; 5) THENCE RUN NORTH 17°47'49" EAST, A DISTANCE OF 103.95 FEET TO A POINT ON THE SOUTH LINE OF THE LANDS DESCRIBED IN INSTRUMENT #20140486742, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID EAST RIGHT-OF-WAY LINE, RUN NORTH 88°54'46" EAST, ALONG SAID SOUTH LINE, A DISTANCE OF 1872.34 FEET TO A POINT ON THE EAST LINE OF THE LANDS DESCRIBED IN INSTRUMENT #20220679927, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID SOUTH LINE, RUN SOUTH 00°34'25" WEST, ALONG SAID EAST LINE, A DISTANCE OF 272.54 FEET TO A POINT ON THE NORTH LINE OF HILLTOP STABLE SUBDIVISION, AS RECORDED IN PLAT BOOK 17, PAGE 129, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; THENCE DEPARTING SAID EAST LINE, RUN ALONG THE NORTH AND WEST LINE OF SAID LANDS THE FOLLOWING THREE (3) COURSES AND DISTANCES: 1) THENCE RUN SOUTH 89°58'58" WEST, A DISTANCE OF 332.67 FEET; 2) THENCE RUN SOUTH 88°52'51" WEST, A DISTANCE OF 713.20 FEET; 3) THENCE RUN SOUTH 00°30'13" WEST, A DISTANCE OF 769.07 FEET TO THE POINT OF BEGINNING.

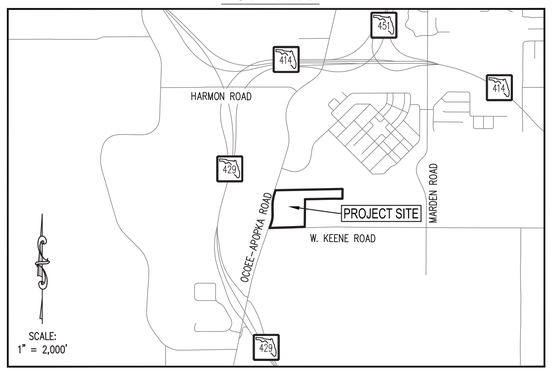
SAID LANDS CONTAINING 27.991 ACRES, MORE OR LESS.

PLAT NOTES:

1. BEARINGS SHOWN HEREON ARE BASED ON GRID NORTH AS ESTABLISHED BY THE NATIONAL OCEAN SERVICE (NOS) THROUGH ITS PROGRAM OFFICE NATIONAL GEODETIC SURVEY (NGS). AS A REFERENCE FOR THIS SURVEY, THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST HAS A BEARING OF SOUTH 88°07'21" WEST.
2. COORDINATES SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM (NAD) OF 1983 WITH 2011 ADJUSTMENT.
3. ALL PLATTED UTILITY EASEMENTS SHALL PROVIDE THAT SUCH EASEMENTS SHALL ALSO BE EASEMENTS FOR THE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES; PROVIDED, HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE TELEVISION SERVICES SHALL INTERFERE WITH THE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER PUBLIC UTILITY.
4. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM) NUMBER 12095C0120H, ORANGE COUNTY, FLORIDA, EFFECTIVE DATE OF SEPTEMBER 24, 2021, THE PROPERTY DESCRIBED HEREON LIES WITHIN ZONE "X".
5. LOT LINES ARE RADIAL UNLESS OTHERWISE NOTED.
6. ALL LOT CORNERS AND CHANGES IN DIRECTION OF LOTS AND TRACTS SHALL BE MONUMENTED WITH A 5/8" IRON ROD AND CAP STAMPED "CFB LB8498" SET IN ACCORDANCE WITH CHAPTER 177.091(9), FLORIDA STATUTES UNLESS OTHERWISE SHOWN.
7. ALL PERMANENT REFERENCE MONUMENTS HAVE BEEN SET IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES.
8. TRACT A IS HEREBY DEDICATED FOR PUBLIC RIGHT-OF-WAY PURPOSES.
9. TRACT B IS HEREBY RESERVED BY DEVELOPER FOR STORMWATER RETENTION.
10. THIS SUBDIVISION CONTAINS SIX (6) LOTS AND TWO (2) TRACTS.
11. THE ALIGNMENT FOR OCOEE-APOPKA ROAD DEPICTED HEREON IS BASED ON AN ALIGNMENT DEPICTED ON AN ORANGE COUNTY RIGHT-OF-WAY MAP PREPARED BY BOWYER-SINGLETON & ASSOCIATES FOR STATE ROAD NO. 429, PROJECT 75320-6460-604 AND FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP, SECTION 75520-2601.
12. AT THE TIME OF RECORDING, THIS PLAT IS AFFECTED BY THE FOLLOWING RECORDED INSTRUMENTS FOUND IN THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA:

- GENERAL PERMIT AND EASEMENT IN FAVOR OF SOUTHERN BELL TELEPHONE & TELEGRAPH COMPANY RECORDED IN DEED BOOK 582, PAGE 348, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. AFFECTS – BLANKET EASEMENT ACROSS SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST
- EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN OFFICIAL RECORD BOOK 2181, PAGE 308, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. SHOWN HEREON – SEE DETAIL SHEET 3 OF 3
- EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN OFFICIAL RECORDS BOOK 2234, PAGE 198, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. SHOWN HEREON – SEE DETAIL SHEET 3 OF 3
- EASEMENT IN FAVOR OF FLORIDA POWER CORPORATION RECORDED IN OFFICIAL RECORDS BOOK 2733, PAGE 874, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. SHOWN HEREON – SEE DETAIL SHEET 3 OF 3
- EASEMENTS CONTEMPLATED BY THAT CERTAIN TRANSPORTATION IMPROVEMENTS DEVELOPMENT AGREEMENT WITH THE CITY OF APOPKA RECORDED IN OFFICIAL RECORDS INSTRUMENT NO. 20240362206, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
- EASEMENTS CONTAINED IN THE DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS FOR THE SHOPPES AT EAST SHORE RECORDED IN OFFICIAL RECORDS BOOK _____ , PAGE _____. (AFFECTS PROPERTY-BLANKET IN NATURE-NOT PLOTTABLE)

VICINITY MAP



NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

CERTIFICATE OF SURVEYOR AND MAPPER:

I, THE UNDERSIGNED SURVEYOR, HEREBY CERTIFY THAT THIS PLATTED SUBDIVISION IS A CORRECT REPRESENTATION OF THE HEREON DESCRIBED LAND WHICH WAS RECENTLY SURVEYED AND PLATTED UNDER MY DIRECTION AND SUPERVISION, THAT PERMANENT REFERENCE MONUMENTS HAVE BEEN SET IN ACCORDANCE WITH CHAPTER 177, FLORIDA STATUTES, AND THAT THIS PLAT COMPLIES WITH ALL THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUES.

_____ DATE: _____

JEREMY D. HALLICK, FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER FLORIDA REGISTRATION NO. 6715
CLYMER FARNER BARLEY SURVEYING, LLC. – LICENSED BUSINESS NO. 8498
4450 NE 83RD ROAD, WILDWOOD, FLORIDA 34785

SEAL

CERTIFICATE OF REVIEW BY CITY SURVEYOR

PURSUANT TO SECTION 177.081, FLORIDA STATUTES, I HAVE REVIEWED THIS PLAT FOR CONFORMITY TO CHAPTER 177, PART 1 OF THE FLORIDA STATUTES AND THAT SAID PLAT COMPLIES WITH THE TECHNICAL REQUIREMENTS OF THAT CHAPTER; PROVIDED HOWEVER, THAT MY REVIEW DOES NOT INCLUDE FIELD VERIFICATION OF ANY OF THE COORDINATES, POINTS, OR MEASUREMENTS SHOWN ON THIS PLAT.

SIGNATURE: _____ DATE: _____

EDWIN MUNOZ JR., PSM
FLORIDA PROFESSIONAL SURVEYOR
AND MAPPER # 7288

SEAL

DEDICATION

KNOW ALL MEN BY THESE PRESENTS, THAT THE UNDERSIGNED, AS OWNER OF THE LAND DESCRIBED IN THE LEGAL DESCRIPTION HEREON, HEREBY DEDICATES THIS PLAT OF SHOPPES AT EAST SHORE FOR RECORD, DOES HEREBY STATE AND DECLARE THE FOLLOWING:

OWNER HEREBY DEDICATES THE FOLLOWING:

TRACT A TO THE PUBLIC FOR ADDITIONAL RIGHT-OF-WAY PURPOSES.

THE UTILITY EASEMENTS SHOWN HEREON ARE DEDICATED TO THE PROVIDERS OF PUBLIC UTILITIES FOREVER FOR THE PURPOSES OF INSTALLATION, OPERATION, REPAIR, AND MAINTENANCE OF PUBLIC UTILITIES.

SHOPPES AT EAST SHORE, LLC

WITNESS:

(1) _____
SIGNATURE

_____
PRINT NAME

(2) _____
SIGNATURE

_____
PRINT NAME

BY: _____

PRINT NAME CRAIG KOPKO

TITLE VICE PRESIDENT

ACKNOWLEDGEMENT:

STATE OF FLORIDA
COUNTY OF _____

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME, BY MEANS OF PHYSICAL PRESENCE OR ☐ ONLINE NOTARIZATION, THIS ____ DAY OF_____, 20 ____ , BY _____, AS _____ OF AND ON BEHALF OF SHOPPES AT EAST SHORE, LLC, FOR THE PURPOSES EXPRESSED HEREIN, WHO IS PERSONALLY KNOWN TO ME AND WHO DID NOT TAKE AN OATH.

_____
NOTARY PUBLIC – STATE OF FLORIDA

PRINT NAME: _____
COMMISSION NO.: _____
COMMISSION EXPIRES: _____

SEAL

CERTIFICATE OF APPROVAL: PLANNING COMMISSION
CITY OF APOPKA, STATE OF FLORIDA

THIS IS TO CERTIFY THAT ON _____, 2024, THE FOREGOING PLAT WAS APPROVED BY THE APOPKA PLANNING COMMISSION OF THE CITY OF APOPKA.

BY: _____ _____
CHAIRMAN DATE

CERTIFICATE OF APPROVAL: MUNICIPALITY
CITY OF APOPKA, STATE OF FLORIDA

THIS IS TO CERTIFY THAT ON _____, 2024, THE FOREGOING PLAT WAS APPROVED BY THE CITY COUNCIL OF THE CITY OF APOPKA.

BY: _____
BRYAN NELSON, MAYOR

ATTEST: _____
SUSAN M. BONE

CERTIFICATE OF APPROVAL: CITY ENGINEER
CITY OF APOPKA, STATE OF FLORIDA

EXAMINED AND APPROVED: _____ _____
CITY ENGINEER, RICHARD EARP, PE DATE

CERTIFICATE OF COUNTY COMPTROLLER
ORANGE COUNTY, STATE OF FLORIDA

I HEREBY CERTIFY THAT THE FOREGOING PLAT WAS RECORDED IN THE ORANGE COUNTY OFFICIAL RECORDS ON _____, 2024.

DOCUMENT NUMBER_____

BY: _____
COUNTY COMPTROLLER IN AND FOR ORANGE COUNTY, FLORIDA

SHEET 1 OF 3

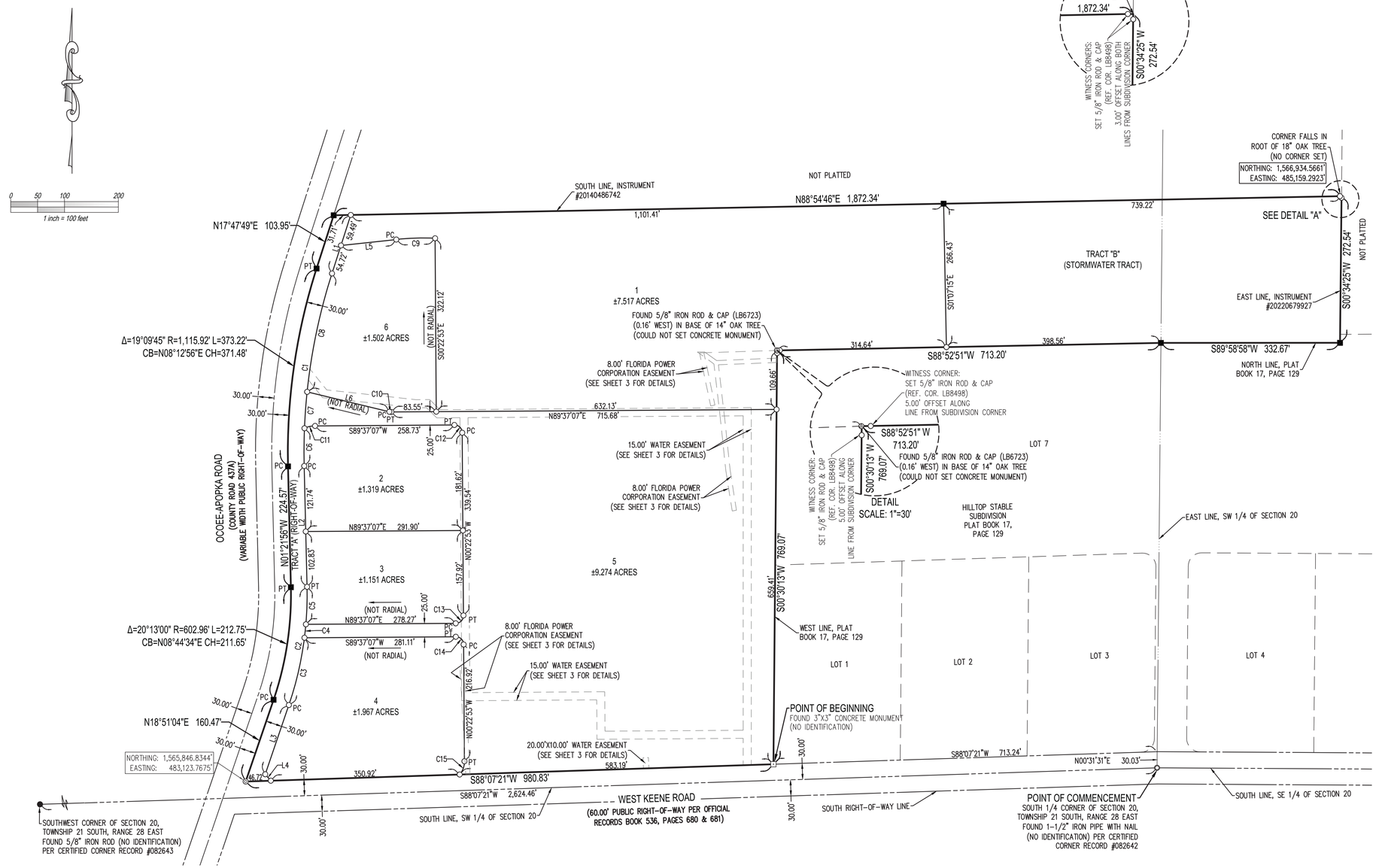
CFB | CLYMER FARNER BARLEY SURVEYING
4450 NE 83RD ROAD
WILDWOOD FLORIDA 34785
(352) 748-3126 LB8498

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PLAT BOOK ___ PAGE ___

SHOPPES AT EAST SHORE

BEING A PORTION OF SECTION 20, TOWNSHIP 21 SOUTH, RANGE 28 EAST
CITY OF APOPKA
ORANGE COUNTY, FLORIDA



LEGEND

- ⊡ = EXISTING CONCRETE MONUMENT (SIZE & TYPE AS NOTED)
- ◎ = EXISTING IRON ROD (SIZE & TYPE AS NOTED)
- ◉ = SET DISK (LB 8498)
- ○ = SET 5/8" IRON ROD & CAP (CFB LB 8498)
- ■ = SET 4"x4" CONCRETE MONUMENT (CFB-LB8498 PRM)

FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
LB = LICENSED BUSINESS
LS = LAND SURVEYOR
PRM=PERMANENT REFERENCE MONUMENT
ID = IDENTIFICATION
C1 = CURVE TAG LABEL (SEE CURVE TABLE)
L1 = LINE TAG LABEL (SEE LINE TABLE)
L LENGTH
R RADIUS
Δ CENTRAL ANGLE (DELTA)
CH CHORD LENGTH
CB CHORD BEARING
LINE BREAK

CURVE TABLE

CURVE TAG	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	1085.92'	19°09'45"	363.18'	S08°12'56"W	361.49'
C2	632.96'	20°13'00"	223.34'	S08°44'34"W	222.18'
C3	632.96'	11°37'54"	128.50'	S13°02'07"W	128.28'
C4	632.96'	2°16'39"	25.16'	S06°04'50"W	25.16'
C5	632.96'	6°18'27"	69.68'	S01°47'17"W	69.64'
C6	1085.92'	3°42'12"	70.19'	S00°29'10"W	70.18'
C7	1085.92'	3°34'46"	67.84'	S04°07'39"W	67.83'
C8	1085.92'	11°52'46"	225.15'	S11°51'25"W	224.75'

CURVE TABLE

CURVE TAG	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C9	475.50'	8°41'51"	72.18'	N88°13'17"E	72.11'
C10	14.50'	13°58'24"	3.54'	S83°23'41"E	3.53'
C11	48.00'	24°14'23"	20.31'	S77°29'56"W	20.16'
C12	14.50'	90°00'00"	22.78'	N45°22'53"W	20.51'
C13	14.50'	90°00'00"	22.78'	N44°37'07"E	20.51'
C14	14.50'	90°00'00"	22.78'	N45°22'53"W	20.51'
C15	38.00'	40°21'41"	26.77'	N19°47'58"E	26.22'

LINE TABLE

LINE TAG	BEARING	DISTANCE
L1	S17°47'49"W	114.21'
L2	S01°21'56"E	224.57'
L3	S18°51'04"W	136.02'
L4	S41°08'56"E	15.82'
L5	N83°52'22"E	103.32'
L6	S76°24'29"E	157.20'

NOTE: SEE SHEET 3 FOR EASEMENT DIMENSIONS

SHEET 2 OF 3

CFB CLYMER FARNER BARLEY SURVEYING
4450 NE 83RD ROAD
WILDWOOD FLORIDA 34785
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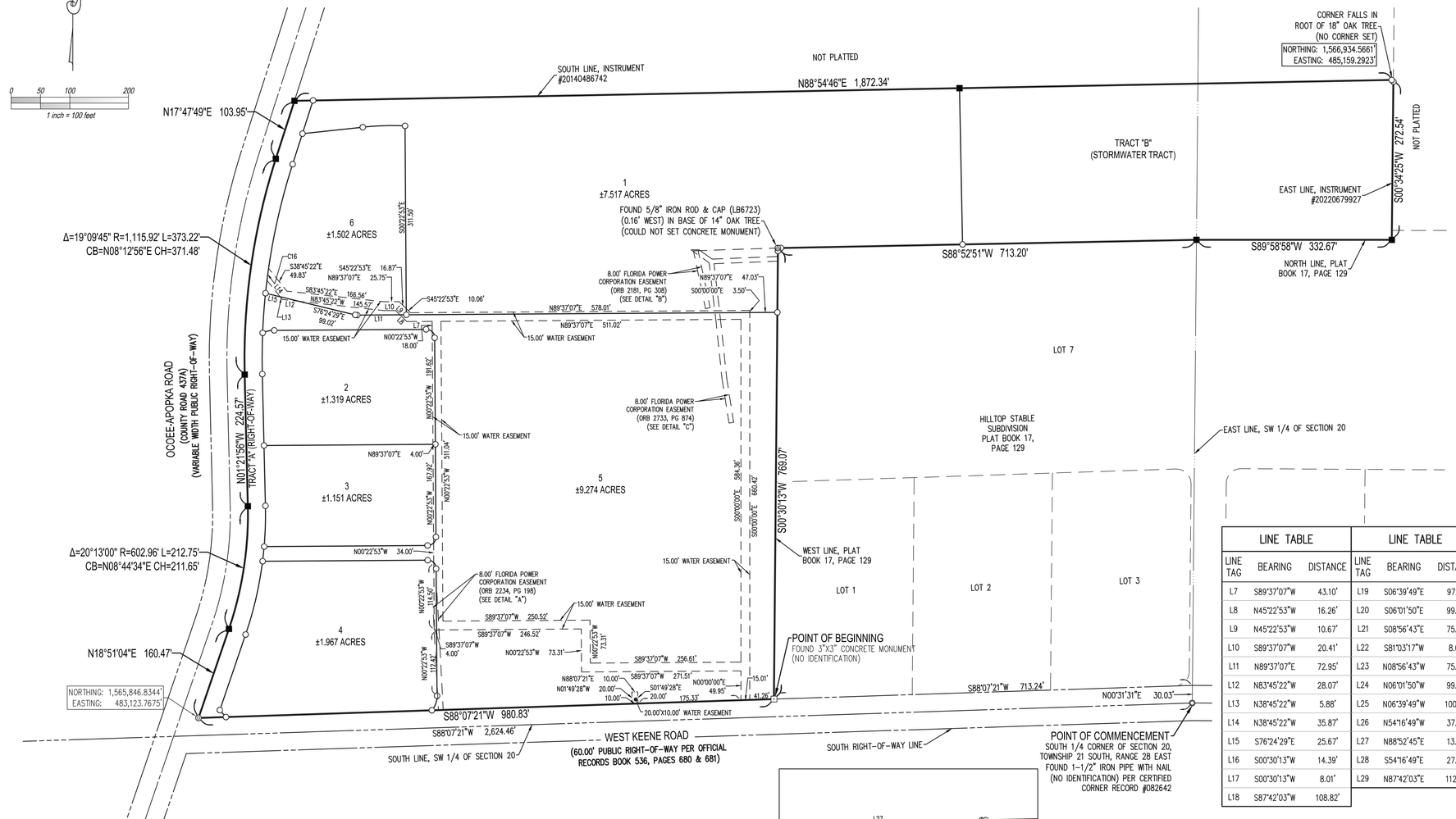
SHOPPES AT EAST SHORE

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CITY OF APOPKA
ORANGE COUNTY, FLORIDA

PLAT BOOK ___ PAGE ___

CURVE TABLE					
CURVE TAG	RADIUS	CENTRAL ANGLE	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C16	1085.92'	1°05'35"	20.72'	N07°37'44"E	20.72'

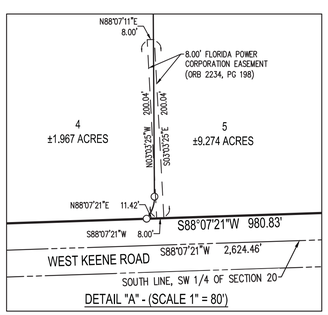
0 50 100 200
1 inch = 100 feet



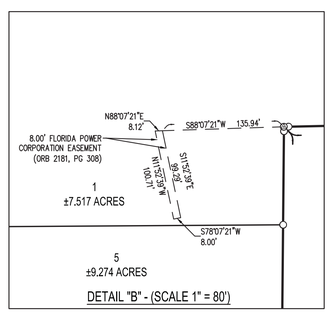
LINE TABLE			LINE TABLE		
LINE TAG	BEARING	DISTANCE	LINE TAG	BEARING	DISTANCE
L7	S89°37'07"W	43.10'	L19	S06°39'49"E	97.91'
L8	N45°22'53"W	16.26'	L20	S06°01'50"E	99.04'
L9	N45°22'53"W	10.67'	L21	S08°56'43"E	75.54'
L10	S89°37'07"W	20.41'	L22	S81°03'17"W	8.00'
L11	N89°37'07"E	72.95'	L23	N08°56'43"W	75.74'
L12	N83°45'22"W	28.07'	L24	N06°01'50"W	99.20'
L13	N38°45'22"W	5.88'	L25	N06°39'49"W	100.42'
L14	N38°45'22"W	35.87'	L26	N54°16'49"W	37.83'
L15	S76°24'29"E	25.67'	L27	N88°52'45"E	13.34'
L16	S00°30'13"W	14.39'	L28	S54°16'49"E	27.53'
L17	S00°30'13"W	8.01'	L29	N87°42'03"E	112.15'
L18	S87°42'03"W	108.82'			

LEGEND

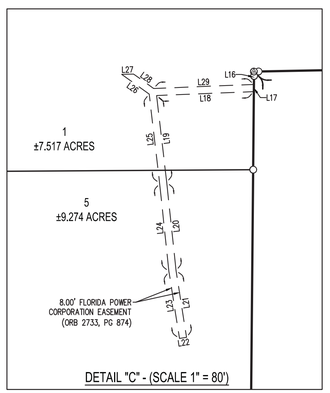
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- C1 = CURVE TAG LABEL (SEE CURVE TABLE)
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- L LENGTH
- R RADIUS
- Δ CENTRAL ANGLE (DELTA)
- CH CHORD LENGTH
- CB CHORD BEARING
- ⊬ LINE BREAK



DETAIL "A" - (SCALE 1" = 80')



DETAIL "B" - (SCALE 1" = 80')



DETAIL "C" - (SCALE 1" = 80')

NOTE: SEE SHEET 2 FOR LOT DIMENSIONS

SHEET 3 OF 3

CFB CLYMER FARNER BARLEY SURVEYING
4450 NE 83RD ROAD
WILDWOOD FLORIDA 34785
(352) 748-3126 LB8498

CFB | CLYMER FARNER BARLEY

ENGINEERING • SURVEYING • GEOSPATIAL • GIS • ENVIRONMENTAL

Via Fed-ex

December 12, 2024

City of Apopka
Community Development Department
Ms. Jean Sanchez
120 E. Main Street
Apopka, FL 32703-5346

RE: PL-24-4 SHOPPES AT EAST SHORE PLAT SUBMITTAL (CFB. JOB # SP2024.01442)

Enclosed please find the following with regards to the above-referenced record plat submittal.

Planning & Zoning
For questions, please contact the Planning Division at (407) 703-1712 or via email at planning@apopka.net.

1. Refer to document titled "Shoppes at East Shore - Plat Surv 102224" for comments from the City Surveyor.

RESPONSE: ACKNOWLEDGED.

2. The following has been ascertained through the Florida Division of Corporations: Shoppes at East Shore, LLC is registered as a Florida Limited Liability Company.

RESPONSE: ACKNOWLEDGED.

3. The plat dedication needs to be updated to indicate who will be signing on behalf of the business entity, and documentation provided that said individual has authority to act on behalf of the LLC.

RESPONSE: CRAIG KOPKO AND ATTACHED SUNBIZ DETAIL BY NAME.

4. The title certification is addressed to the Orange County Board of County Commissioners rather than the City of Apopka.

RESPONSE: TITLE CERTIFICATION HAS BEEN UPDATED.

5. 'APPROVAL' on all signature blocks is misspelled and needs to be corrected.

RESPONSE: ACKNKOWLEDGED AND REVISED.

6. The Certificate of Approval for the Municipality references the Planning Commission instead of the City Council of the City of Apopka.

RESPONSE: ACKNOWLEDGED AND REVISED.

7. Certificate of City Surveyor needs to be updated to reflect current surveyor.

RESPONSE: ACKNOWLEDGED AND REVISED.

Transportation Planning
For questions, please contact Richard Earp, City Engineer, at (407) 703-1627 or via email at rearp@apopka.net.
1. No comments.

Public Services and Engineering
For questions, please contact Richard Earp, City Engineer, at (407) 703-1627 or via email at rearp@apopka.net.
1. Tract A needs to be dedicated to the Public, not specifically to the City of Apopka.

RESPONSE: ACKNOWLEDGED. DEDICATED FOR PUBLIC RIGHT OF WAY PURPOSES.

Building
For questions, please contact John Hanson, Building Official, at (407) 703-1612 or via email at jhanson@apopka.net.
1. No comments at this time.

Fire
For questions please contact Jeremy Holderfield, Captain/Fire Inspector, at (407) 703-1754 or via email at jholderfield@apopka.net.
1. No comments.

Police

For questions, please contact Michael McKinley, Police Chief, at (407) 703-1771 or via email at mmckinley@apopka.net.

1. No comments at this time.

Property Appraiser

F.A.C. 12D-1.009 CMG 5.7.3 Mapping

Requirements: Lot numbers

1. Delete word "PARCEL" from Parcel 1 thru 6.

RESPONSE: ACKNOWLEDGED AND REVISED.

Surveyor

DEDICATION & ACKNOWLEDGMENT

[X] The "primary name" of the subdivision is shown in the dedication and coincides exactly with the subdivision name. Shows and is executed by all persons, corporations, or entities having record interest in the lands.(FS177.051.1)

Will review upon receipt of current title opinion.

RESPONSE: ACKNOWLEDGED AND REVISED.

[X] Dedications and approvals required by 177.071 and 177.081 are included.(FS177.091.12)

Cert of Surveyor must state the plat was prepared under my direction & supervision & complies will all the survey requirements of Chapter 177, Florida Statutes. Might be nice to have a border around & separations of the dedication & approvals. Change Andrew Perry to Edwin Munoz Jr., #7288.

RESPONSE: ACKNOWLEDGED AND REVISED.

DESCRIPTION

[X] Description agrees with title opinion.

Will review upon receipt of title opinion.

RESPONSE: ACKNOWLEDGED AND ATTACHED.

DIMENSIONS

[X] Sufficient survey data is shown to positively describe the bounds of every lot, block, street, easement and all other areas shown on the plat.(FS177.091.19).

Please show width of southern access to parcel 5 (25.00'?). Also on the parallel portion on the north access.

RESPONSE: ACKNOWLEDGED AND REVISED.

[X] All dimensions shown except irregular lines are shown to the one-hundredth of a foot. (FS177.091.19)

There are easement widths given on sheets 2 & 3 that should be to the hundredth of a foot.

RESPONSE: ACKNOWLEDGED AND REVISED.

STREETS & RIGHT OF WAYS

[X] The location, widths and names of all streets, waterways and other rights of way adjacent to or intersecting the subdivision are shown along with recording information.

Please show documentation for Ocoee-Apopka Road. R/W is said to be variable in width but the drawing shows it to be consistent. If it is plotted properly please show or state the width there.

RESPONSE: ACKNOWLEDGED AND REVISED.

EASEMENTS

[X] The location and width of proposed easements and existing easements identified in the Title Opinion or certification are shown on the plat along with their intended use. Where easements are not coincident with property lines, they are labeled with bearings and distances and are tied to the principal lot, tract or right of way.(FS177.091.16).

There are no "utility" easements as called for in the dedication & in note 3. There are "water" easements shown on the plat. These should be consistent (whatever they are). Will review existing easement when title opinion comes in. There is a telephone easement mentioned in the notes but I don't see it shown on the plat.

RESPONSE: ACKNOWLEDGED. TELEPHONE EASEMENT: AFFECTS BLANKET EASEMENT ACROSS SECTION 20, TOWNSHIP 21 EAST, RANGE 28 SOUTH.

[X] All dedicated parcels are clearly shown and their purposes clearly stated.(FS177.091.25)

To who or what is Tract B dedicated to?

RESPONSE: ACKNOWLEDGED. TRACT "B" RESERVED BY DEVELOPER. BLANKET EASEMENT SEE COVENANTS AND RESTRICTIONS.

SUPPORTING DOCUMENTATION TO BE FURNISHED BY SUBMITTING FIRM
[X] Copy of title opinion

RESPONSE: ACKNOWLEDGED AND ATTACHED.

1). Updated Title Opinion.
2). Two (2) copies of the Final Record Plat.
3). Two (2) copies of the Boundary Survey.
4). One (1) copy of the Draft Declaration.
5). Legal description in Word.
6). SunBiz for Shoppes at East Shore.

Sincerely,
CLYMER FARNER BARLEY SURVEY, LLC

Jeremy D. Hallick

Jeremy D. Hallick, P.S.M.
Vice-President
JDH/nt

APOPKA BUSINESS CENTER

CONSTRUCTION SITE PLAN

444 HERMIT SMITH ROAD, APOPKA, FLORIDA 32703
PART OF SECTION 01, TOWNSHIP 21 SOUTH, RANGE 27 EAST

ORANGE COUNTY PARCEL ID: 01-21-27-0000-00-024

PROPERTY OWNER
NANCY MANN TRUST
914 ELYSIUM BOULEVARD
MOUNT DORA, FLORIDA 32757
CONTACT: WILLIAM BLAINE
PHONE: (321) 228-7112
EMAIL: WBLAINE67@GMAIL.COM

APPLICANT
TC FLORIDA DEVELOPMENT, INC.
200 SOUTH ORANGE AVENUE, SUITE 2100
ORLANDO, FLORIDA 32801
CONTACT: BRENDON DEDEKIND
PHONE: (407) 404-5061
EMAIL: BDEDEKIND@TRAMMELLCROW.COM

SURVEYOR
LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
13485 VETERANS WAY, SUITE 120
ORLANDO, FLORIDA 32827
CONTACT: JOSEPH YANNUCCI
PHONE: (407) 974-2900
EMAIL: JYANNUCCI@LANGAN.COM

CIVIL ENGINEER
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13485 VETERANS WAY, SUITE 120
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EMAIL: JYANNUCCI@LANGAN.COM

GEOTECHNICAL ENGINEER
ECS FLORIDA, LLC
2815 DIRECTORS ROW, SUITE 500
ORLANDO, FLORIDA 32809
CONTACT: JOHN HICKS
PHONE: (407) 859-8378
EMAIL: JHICKS@ECSLIMITED.COM

ARCHITECT
C4 ARCHITECTURE
135 WEST CENTRAL BOULEVARD, SUITE 400
ORLANDO, FLORIDA 32801
CONTACT: CLARK STRANAHAN
PHONE: (407) 363-6136
EMAIL: CSTRANAHAN@C4ARCHITECTURE.COM

ECOLOGICAL CONSULTANT
ECS FLORIDA, LLC
2815 DIRECTORS ROW, SUITE 500
ORLANDO, FLORIDA 32809
CONTACT: JOE BRINSON
PHONE: (407) 859-8378
EMAIL: JLB@ECSLIMITED.COM



LOCATION MAP

SCALE: 1" = 1,000'

DRAWING LIST

C-01	COVER SHEET
C-02	ENGINEERING NOTES
C-03	EXISTING CONDITIONS
C-04	AERIAL PLAN
C-04A	PHASING PLAN
C-05	OVERALL SITE PLAN
C-06-09	PARTIAL SITE PLAN
C-10	VEHICULAR PAVEMENT PLAN
C-11	TURNING MOVEMENT PLAN - FIRE ACCESS
C-12	TURNING MOVEMENT PLAN - TRUCK
C-13	OVERALL GRADING AND DRAINAGE PLAN
C-14-17	PARTIAL GRADING AND DRAINAGE PLAN
C-17A-J	STORMWATER PROFILES
C-18-18A	SECTIONS
C-18B	POND SECTIONS
C-19	SOIL EROSION & SEDIMENT CONTROL PLAN
C-20	OVERALL UTILITY PLAN
C-21-24	PARTIAL UTILITY PLAN
C-24A-C	POTABLE WATER PROFILES
C-24D-H	FIRE WATER PROFILES
C-24I-K	SANITARY PROFILES
C-24L-M	FORCE MAIN PROFILES
C-25	EXISTING TREE INVENTORY AND SPECIMEN TREE SURVEY
C-26	SITE DETAILS
C-27-28A	GRADING AND DRAINAGE DETAILS
C-29-32B	UTILITY DETAILS
L-01	OVERALL LANDSCAPE PLAN
L-02-05	PARTIAL LANDSCAPE PLAN
L-06	LANDSCAPE NOTES & DETAILS
L-07	OVERALL AMENITY LANDSCAPE PLAN
L-08	AMENITY LANDSCAPE PLAN ENLARGEMENTS
L-09	AMENITY LANDSCAPE NOTES AND DETAILS
L-10	AMENITY LANDSCAPE SITE FURNISHINGS

14

LEGAL DESCRIPTION

THE LEGAL DESCRIPTION THAT FOLLOWS WAS PROVIDED IN TITLE COMMITTMENT DOCUMENTS FROM FIDELITY NATIONAL TITLE INSURANCE COMPANY:

THE NORTH 1/2 OF THE SW 1/4 OF SECTION 1, TOWNSHIP 21 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

PROJECT SUMMARY

THE PROPOSED PROJECT DEVELOPMENT PLAN INCLUDES THREE INDUSTRIAL WAREHOUSES WITHIN PARCEL 01-21-27-0000-00-024. SITE IMPROVEMENTS WILL INCLUDE AN ACCESS DRIVE, SURFACE PARKING, TRUCK LOADING AREAS, DRAINAGE AND UTILITY INFRASTRUCTURE, SITE LIGHTING, AND LANDSCAPING. THE PARCEL WILL BE SPLIT INTO TWO LOTS. THE EAST PHASE WILL BE THE EAST PARCEL AND WILL CONTAIN WAREHOUSE 300, WAREHOUSE 400, AND DRY POND E. THE WEST PHASE WILL BE THE WEST PARCEL AND WILL CONTAIN WAREHOUSE 500, DRY POND W AND WET POND W.

THIS PROJECT IS PURSUING LEED CERTIFICATION

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 FOOTPRINT REVISIONS	12
05/31/2024	SJRWMD COMMENTS	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/23/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/28/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #1	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

This item has been digitally signed and sealed by ***JOSEPH J. YANNUCCI JR., PE*** on the ***DATE shown in the digital signature.*** Printed copies of this document are not considered signed and sealed and the ***Digital Signature*** must be verified on any electronic copies.

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

LANGAN
Langan Engineering and Environmental Services, LLC.
13485 Veterans Way, Suite 120
Orlando, FL 32827
T: 407.974.2900 F: 407.974.2901 www.langan.com
FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project: APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title: COVER SHEET

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Drawing No. C-01

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Date: 11/21/2024 Time: 09:46 User: brlahore Style Table: Langan.stb Layout: C-01 Document Code: 342010601-0301-CS001-0101

SITE DATA

PROJECT SUMMARY

THE PROPOSED PROJECT DEVELOPMENT PLAN INCLUDES THREE INDUSTRIAL WAREHOUSES WITHIN PARCEL 01-21-27-0000-00-024. SITE IMPROVEMENTS WILL INCLUDE AN ACCESS DRIVE, SURFACE PARKING, TRUCK LOADING AREAS, DRAINAGE AND UTILITY INFRASTRUCTURE, SITE LIGHTING, AND LANDSCAPING. THE PARCEL WILL BE SPLIT INTO TWO LOTS. THE EAST PHASE WILL BE THE EAST PARCEL AND WILL CONTAIN WAREHOUSE 300, WAREHOUSE 400, AND DRY POND E. THE WEST PHASE WILL BE THE WEST PARCEL AND WILL CONTAIN WAREHOUSE 500, DRY POND W AND WET POND W.

TOTAL PROJECT AREA
3,477,476 SF ± OR 79.83 ACRES ±

EAST PHASE - PROJECT AREA
EAST PHASE PROJECT AREA = 1,418,912 SF ± OR 32.57 ACRES ± (100%)
EXISTING HERMIT SMITH ROAD CITY PUBLIC ACCESS EASEMENT = 38,515 SF ± OR 0.88 ACRES ± (2.7%)
WETLANDS = 91,549 SF ± OR 2.11 ACRES ± (6.5%)
WETLANDS BUFFER = 53,280 SF ± OR 1.22 ACRES (3.7%)
EXISTING WATER SURFACES = 286,024 SF ± OR 6.57 ACRES (20.2%)
DEVELOPABLE AREA = 949,349 SF ± OR 21.79 ACRES (66.9%)

EAST PHASE - DEVELOPABLE AREA BREAKDOWN (21.79 ACRES = 67%)
OPEN SPACE / PERVIOUS AREAS = 209,966 SF ± OR 4.82 ACRES ± (14.8%)
BUILDING (FOOTPRINT) = 266,967 ± SF OR 6.13 ACRES ± (18.8%)
VEHICULAR AREAS = 349,902 ± SF OR 8.03 ACRES ± (24.7%)
OTHER IMPERVIOUS AREAS = 25,103 ± SF OR 0.58 ACRES ± (1.8%)
STORMWATER MANAGEMENT AREAS = 97,379 SF ± OR 2.24 ACRES ± (6.9%)

WEST PHASE - PROJECT AREA
WEST PHASE PROJECT AREA = 2,058,564 SF ± OR 47.26 ACRES ± (100%)
PROPOSED CONRAD ROAD CITY PUBLIC ACCESS EASEMENT = 51,210 SF ± OR 1.18 ACRES ± (2.5%)
WETLANDS = 117,186 SF ± OR 2.69 ACRES ± (5.7%)
WETLANDS BUFFER = 71,214 SF ± OR 1.63 ACRES (3.4%)
EXISTING WATER SURFACES = 343,495 SF ± OR 7.88 ACRES (16.7%)
DEVELOPABLE AREA = 1,475,846 SF ± OR 33.88 ACRES (71.7%)

WEST PHASE - DEVELOPABLE AREA BREAKDOWN (33.88 ACRES = 72%)
OPEN SPACE / PERVIOUS AREAS = 286,767 SF ± OR 6.58 ACRES ± (13.9%)
BUILDING (FOOTPRINT) = 443,106 SF ± OR 10.17 ACRES ± (21.5%)
VEHICULAR AREAS = 493,562 SF ± OR 11.33 ACRES ± (24.0%)
OTHER IMPERVIOUS AREAS = 23,994 SF ± OR 0.55 ACRES ± (1.2%)
STORMWATER MANAGEMENT AREAS = 228,417 SF ± OR 5.24 ACRES ± (11.2%)

PROJECT ADDRESS
444 HERMIT SMITH ROAD, APOPKA, FL 32703
ORANGE COUNTY PARCEL 01-21-27-0000-00-024

EXISTING ZONING
I-L (LIGHT INDUSTRIAL DISTRICT)

FUTURE LAND USE (FLU) DESIGNATION
IND (INDUSTRIAL)

SURROUNDING ZONING
NORTH: I-L (LIGHT INDUSTRIAL DISTRICT)
EAST: PD (PLANNED DEVELOPMENT DISTRICT)
WEST: T (TRANSITION DISTRICT)
SOUTH (DEVELOPMENT): A-1 (CITRUS RURAL DISTRICT - UNINCORPORATED ORANGE COUNTY)
SOUTH (HERMIT LAKE): RSF-1A (RESIDENTIAL SINGLE-FAMILY ESTATE DISTRICT)

SURROUNDING FUTURE LAND USE (FLU) DESIGNATION
NORTH: IND (INDUSTRIAL)
EAST: IND (INDUSTRIAL)
WEST: IND (INDUSTRIAL)
SOUTH (DEVELOPMENT): R (RURAL - UNINCORPORATED ORANGE COUNTY)
SOUTH (HERMIT LAKE): IND (INDUSTRIAL)

MINIMUM REQUIRED SETBACKS
PER ARTICLE 3 - ZONING DISTRICTS: 3.53. - I-L: LIGHT INDUSTRIAL DISTRICT
NORTH - SIDE - 10 FT
EAST – FRONT - 10 FT
WEST – REAR - 10 FT
SOUTH - 10 FT
SOUTH (RESIDENTIAL) - 30 FT

LANDSCAPE BUFFER YARDS
PER ARTICLE 3 - ZONING DISTRICTS: 3.53. - I-L: LIGHT INDUSTRIAL DISTRICT
NORTH - N/A
EAST - N/A
WEST - N/A
SOUTH -TYPE D BUFFER
SOUTH - TYPE D BUFFER

BUILDING SUMMARY
WAREHOUSE 300: 120,192 SF
WAREHOUSE 400: 146,775 SF
TOTAL EAST PHASE BUILDING AREA: 266,967 SF
WAREHOUSE 500: 443,106 SF
TOTAL WEST PHASE BUILDING AREA: 443,106 SF
TOTAL EAST & WEST PHASE BUILDING AREA: 710,073 SF

FLOOR AREA RATIO (FAR)
PER ARTICLE 3 - ZONING DISTRICTS: 3.53. - I-L: LIGHT INDUSTRIAL DISTRICT
ALLOWABLE: 0.40
PHASE 1 PROVIDED: 0.19 (266,967 SF / 1,418,912 SF)
PHASE 2 PROVIDED: 0.22 (443,106 SF / 2,058,564 SF)

BUILDING HEIGHT
PER ARTICLE 3 - ZONING DISTRICTS: 3.53. - I-L: LIGHT INDUSTRIAL DISTRICT
ALLOWABLE: 45'
WAREHOUSE 300: 32'
WAREHOUSE 400: 32'
WAREHOUSE 500: 36'

VEHICULAR PARKING
PER SECTION 5.1 AND TABLE 5.1.6 A

MINIMUM REQUIRED
WAREHOUSE 300: (12,019.2 SF DISTRIBUTION WAREHOUSE OFFICE) * (2 SPACE / 1,000 SF) = 25
WAREHOUSE 400: (14,677.5 SF DISTRIBUTION WAREHOUSE OFFICE) * (2 SPACE / 1,000 SF) = 30
TOTAL EAST PHASE REQUIRED VEHICLE PARKING = 55 SPACES
WAREHOUSE 500: (44,310.6 SF DISTRIBUTION WAREHOUSE OFFICE) * (2 SPACE / 1,000 SF) = 89
TOTAL WEST PHASE REQUIRED VEHICLE PARKING = 89 SPACES

PROVIDED
WAREHOUSE 300: STANDARD PARKING = 116
WAREHOUSE 400: STANDARD PARKING = 138
TOTAL EAST PHASE PROVIDED VEHICLE PARKING = 254 SPACES
WAREHOUSE 500: STANDARD PARKING = 266
TOTAL WEST PHASE PROVIDED VEHICLE PARKING = 266 SPACES

TRUCK LOADING BERTHS
PER SECTION 5.1.12 AND TABLE 5.1.12 A

MINIMUM REQUIRED
WAREHOUSE 300: (1 BERTH / 10,000 SF BUILDING) * 120,192 SF = 13
WAREHOUSE 400: (1 BERTH / 10,000 SF BUILDING) * 146,775 SF = 15
TOTAL EAST PHASE REQUIRED LOADING BERTHS = 28 BERTHS
WAREHOUSE 500: (1 BERTH / 10,000 SF BUILDING) * 443,106 SF = 45
TOTAL WEST PHASE REQUIRED LOADING BERTHS = 45 BERTHS

PROVIDED
WAREHOUSE 300: 41
WAREHOUSE 400: 41
TOTAL EAST PHASE PROVIDED LOADING BERTHS = 82 BERTHS
WAREHOUSE 500: 106
TOTAL WEST PHASE PROVIDED LOADING BERTHS =106 BERTHS

BICYCLE PARKING
PER SECTION 5.1.11.A

REQUIRED
WAREHOUSE 300: (1 LONG TERM BICYCLE PARKING / 40,000 GSF)* 120,192 SF = 4
WAREHOUSE 400: (1 LONG TERM BICYCLE PARKING / 40,000 GSF)* 146,775 SF = 4
TOTAL EAST PHASE REQUIRED BICYCLE PARKING = 8 BERTHS
WAREHOUSE 500: (1 LONG TERM BICYCLE PARKING / 40,000 GSF)* 443,106 SF = 12
TOTAL WEST PHASE REQUIRED BICYCLE PARKING = 12 BERTHS

PROPOSED
WAREHOUSE 300: 4
WAREHOUSE 400: 4
TOTAL EAST PHASE PROPOSED BICYCLE PARKING = 8
WAREHOUSE 500: 12
TOTAL WEST PHASE PROPOSED BICYCLE PARKING = 12

AMENITIZED OPEN SPACE
PER SECTION 5.4.4. IS A MINIMUM OF 5% LAND AREA:

MINIMUM REQUIRED
EAST PHASE MINIMUM OPEN SPACE: 1,418,912 SF ± * 5% = 70,946 SF
WEST PHASE MINIMUM OPEN SPACE: 2,058,564 SF ± * 5% = 102,928 SF

PROVIDED
EAST PHASE MOKAY LAKE: 7,865 SF
EAST PHASE HERMIT LAKE: 278,159 SF
EAST PHASE 75% OF STORMWATER MANAGEMENT: 73,034 SF
EAST PHASE AMENITY 1/2: 274 SF
TOTAL EAST PHASE PROVIDED OPEN SPACE: 359,331 SF
WEST PHASE MCKAY LAKE: 325,133 SF
WEST PHASE 75% OF STORMWATER MANAGEMENT: 171,312 SF
WEST PHASE AMENITY 1/3/4: 526 SF
TOTAL WEST PHASE PROVIDED OPEN SPACE: 497,972 SF

MASTER LEGEND

- PROPOSED BUILDING FOOTPRINT
- PROPOSED DOOR LOCATION
- PROPOSED TYPE D CURBLINE
- PROPOSED DEPRESSED CURB
- PROPOSED SIGN
- PROPOSED STORM DRAINAGE LINE
- PW — PW — PROPOSED POTABLE WATER MAIN
- FW — FW — PROPOSED FIRE MAIN
- FM — FM — PROPOSED FORCE MAIN
- PROPOSED GRAVITY SANITARY MAIN
- ST–CB — PROPOSED STORM BASIN/DRAINAGE STRUCTURE
- ST/SAN–MH — PROPOSED STORM/SANITARY MANHOLE
- PROPOSED LIGHT FIXTURES (BY OTHERS)
- 8.00 — PROPOSED SPOT ELEVATION / PROPOSED BOTTOM OF CURB ELEVATION
- 80 — PROPOSED CONTOUR ELEVATION
- E — E — EXISTING ELECTRIC LINE
- D — D — EXISTING DRAINAGE
- S — S — EXISTING SANITARY SEWER
- W — W — EXISTING WATER
- EXISTING ELECTRIC DUCT BANK
- EXISTING TELEPHONE DUCT BANK

SUSTAINABILITY SUMMARY

OPTION	POINTS ACHIEVED
PROVIDE RAIN GARDENS, STREET-SIDE SWALES, OR OTHER APPROPRIATE STORM WATER INFILTRATION SYSTEM(S) THAT CAPTURES A MINIMUM OF 25 PERCENT OF SITE STORMWATER RUNOFF	1.0
PRESERVE LARGE, NON-EXOTIC TREES ON SITE (LARGE TREE DEFINED AS 20 FEET OR GREATER IN HEIGHT AND 24 INCHES OR GREATER DBH)	1.0 (5+ TREES PRESERVED)
ELEVATE NEW AND/OR EXISTING STRUCTURES MORE THAN 3 FEET ABOVE BASE FLOOD ELEVATION (BFE) 0.5 PER FOOT ABOVE BFE	3.0 (BUILDING 300 IS 8.5FT ABOVE POND TOP OF BANK)**
TOTAL	5

*PER SECTION 5.11.4.A.2.B THE MINIMUM AMOUNT OF POINTS REQUIRED FOR A BUILDING WITH MORE THAN 25,000 SF IS 4.0 POINTS.
**POND TOP OF BANK = 102.0 FT (WAREHOUSE 300 AND 400) AND 96.5 (WAREHOUSE 500)

Sunshine811

Call 811 or www.sunshine811.com two full business days before digging to have utilities located and marked.

Check positive response codes before you dig!

GENERAL CONTRACTOR NOTES:

1. THESE PLANS REPRESENT THE OVERALL SITE WORK IMPROVEMENTS REQUIRED FOR PROJECT CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITE WORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
2. THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE CONTRACT DOCUMENTS AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ADDITIONAL TOPOGRAPHIC SURVEYS HE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
3. THE CONTRACTOR SHALL, WHEN THEY DEEM NECESSARY, PROVIDE WRITTEN REQUESTS FOR INTERPRETATION (RFIS) TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITE WORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO OWNER AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF TWO WORK DAYS OR ADDITIONAL REASONABLE TIME FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE WORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
4. INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISH FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
5. THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL DRAINAGE AND UTILITY STRUCTURES AND MANUFACTURED PRODUCTS TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO COMMENCING WITH CONSTRUCTION. ALL MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS OF THE AUTHORITIES HAVING JURISDICTION.
7. CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL MAINTENANCE OF TRAFFIC MEASURES (INCLUDING DESIGN AND PERMITTING) AS REQUIRED BY THE LOCAL, COUNTY, OR STATE AGENCY HAVING JURISDICTION.
8. THE CONTRACTOR SHALL PROVIDE COMPLETED AS-BUILT SURVEY / RECORD DRAWINGS SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL LAND SURVEYOR TO THE ENGINEER OF RECORD OF ALL COMPLETED SITEWORK IMPROVEMENTS IN ACCORDANCE WITH ALL AUTHORITIES HAVING JURISDICTION. ALL CONSTRUCTED HORIZONTAL AND VERTICAL DIMENSIONING SHALL BE INCLUDED WITH CROSS-OUTS OF DESIGN DATA FOR COMPARISON. WHERE APPROPRIATE, ELECTRONIC FILES IN DWG FORMAT SHALL BE SUPPLIED TO THE ENGINEER OF RECORD IN ADDITION TO SIGNED AND SEALED HARD COPIES. SPECIFICALLY, ALL UNDERGROUND STRUCTURES, DRAINAGE, WATER, SANITARY, GAS, ELECTRIC, COMMUNICATIONS PIPING, CONDUIT OR APPURTENANCES AND ACCESSORIES AND ALL ABOVE GROUND FEATURES INCLUDING, BUT NOT LIMITED TO, FIRE HYDRANTS, WATER VALVES, DRAINAGE AND SEWER CLEANOUTS, LIGHT POLES AND SIGNS SHALL BE RECORDED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE THAT THE WORK IS PERFORMED. ELEVATIONS OF TOP OF WATER PIPING SHALL BE RECORDED AT ALL BENDS, TEES, AND AT ALL STORM DRAINAGE AND SANITARY SEWER CROSSINGS. SANITARY SEWER TOP OR BOTTOM OF PIPE ELEVATIONS SHALL BE RECORDED AT ALL CROSSINGS WITH WATER AND STORM DRAINAGE PIPING. FINISHED GRADE ELEVATIONS AT ALL WATER VALVES, FIRE HYDRANTS, SANITARY MANHOLES, DRAINAGE STRUCTURES AND CLEANOUT LOCATIONS WILL BE RECORDED. CURB AND PAVEMENT FINISHED GRADE ELEVATIONS AT ALL HIGH AN LOW POINTS, ALONG SWALES, CENTERLINES OF ROADS OR DRIVE AISLES, AND IN PARKING AREAS, SHALL BE RECORDED.
9. CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL) UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT RELY ON OR RE-ESTABLISH SURVEY CONTROL BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.
10. CONTRACTOR SHALL COORDINATE WITH AND NOTIFY ALL UTILITY COMPANIES/AGENCIES HAVING JURISDICTION PRIOR TO CONSTRUCTION COMMENCEMENT AND REQUEST PRE-CONSTRUCTION MEETINGS PER THEIR REQUIREMENTS. THE ENGINEER OF RECORD SHALL BE INVITED TO THE PRE-CONSTRUCTION MEETINGS.
11. ALL DEBRIS AND WASTE SHALL BE RECYCLED OR DISPOSED OF OFFSITE BYT THE CONTRACTOR IN ACCORDANCE WITH ALL APPLICABLE RECYCLING AND DISPOSAL LAWS.
12. CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTATION AND REPAIR AT HIS COST ANY MONUMENTATION THAT IS DAMAGED BY HIS WORK.

GENERAL SURVEY NOTES:

1. BOUNDARY SURVEY REFERENCED FROM DRAWING ENTITLED "ALTA / NSPS LAND TITLE SURVEY" PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. DATED 14 JANUARY 2022.
2. TOPOGRAPHIC SURVEY REFERENCED FROM DRAWING ENTITLED "HERMIT SMITH ROAD INDUSTRIAL - TOPOGRAPHIC SURVEY" - PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. DATED 11 APRIL 2022.
3. ELEVATIONS SHOWN ON THIS PLAN REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION CONTROL DEVICES SHALL FOLLOW STANDARDS AND DETAILS IN THE CURRENT FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL MANUAL.
2. THE CONTRACTOR SHALL INSTALL AND MAINTAIN SILT FENCE AROUND THE PERIMETER OF ALL EARTH DISTURBANCES. SILT FENCES SHALL REMAIN IN PLACE UNTIL PERMANENT STABILIZATION OF DISTURBED AREAS IS COMPLETED.
3. THE CONTRACTOR SHALL PROVIDE SILTATION REDUCTION DEVICES FOR THE DISCHARGE FROM ANY DEWATERING PROCESS SO THAT DIRECT DISCHARGE DOES NOT OCCUR. ALL DEWATERING ACTIVITIES ON SITE WITH RESPECT TO TREES SHALL BE SUPERVISED BY AN ARBORIST AND ANYAFFECTED TREES WILL BE PLACED ON A SCHEDULE FOR WATER AND/OR MONITORED BY THE ARBORIST.
4. THE CONTRACTOR SHALL CHECK ALL EROSION AND SILTATION CONTROL DEVICES AFTER EACH RAINFALL AND REPAIR OR REPLACE THEM AS REQUIRED. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES AND DEVICES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND / OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKDAY.
5. THE CONTRACTOR SHALL CONTROL ALL DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS APPROVED BY THE OWNER.
6. ALL PRACTICABLE AND NECESSARY EFFORT, INCLUDING BY NOT LIMITED TO THE USE OF STAKED SYNTHETIC BALES OR STAKED SILT SCREEN BARRIERS, SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIALS TO SURFACE WATER CONVEYANCE DITCHES, INLETS, SURFACE DRAINS, WETLANDS AND LAKE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED TO MITIGATE EROSION OR SEDIMENTATION EFFECTS OCCURRING DURING HIS WORK.
7. THE CONTRACTOR MUST SUBMIT A NPDES NOTICE OF TERMINATION FORM TO THE FDOT UPON COMPLETION OF CONSTRUCTION.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO PERMANENTLY STABILIZE ALL GROUND AREAS THAT ARE DISTURBED BY THE WORK. PERMANENT STABILIZATION SHALL INCLUDE SOD, PAVEMENTS AND HARDSCAPES, OR OTHER METHODS PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER OF RECORD, OWNER AND APPROPRIATE REGULATORY AUTHORITIES.
9. THE CONTRACTOR SHALL SEED AND MULCH OR SOD SWALES, PONDS, AND/OR GREEN AREAS IMMEDIATELY AFTER CONSTRUCTION OF THESE AREAS ARE COMPLETED.
10. THE CONTRACTOR SHALL PROVIDE SILTATION REDUCTION DEVICES FOR THE DISCHARGE FROM ANY DEWATERING PROCESS.
11. THE CONTRACTOR SHALL MARK OUT THE LANDWARD SIDE OF WETLAND / BUFFERS TO PREVENT UNINTENTIONAL WETLAND BUFFER IMPACTS DURING CONSTRUCTION.
12. CONTRACTOR SHALL IMPLEMENT THE CONSTRUCTION ENTRANCE POLLUTION PREVENTION FEATURES WHEREVER AN ENTRANCE TO THE SITE IS UTILIZED FOR CONSTRUCTION.
13. CONTRACTOR SHALL AVOID PLACING OR USING HEAVY EQUIPMENT IN THE PROPOSED SWALES AND DRY RETENTION AREAS. BOTTOM OF SWALES SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FINAL STABILIZATION. SOD SHALL NOT LIMIT THE DRY RETENTION AREAS OR SWALES ABILITY TO PERCOLATE STORMWATER RUNOFF.
14. SEDIMENTATION CONTROLS / BMPS SHALL PREVENT STORMWATER RUNOFF WITH TURBIDITY GREATER THAN 29 NTU'S FROM LEAVING THE CONSTRUCTION SITE.
15. NO EXCAVATING MATERIAL SHALL BE STOCKPILED IN A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING STAKED TURBIDITY BARRIERS AROUND WETLAND AREAS ADJACENT TO THE SITE BOUNDARY TO PREVENT FINE SEDIMENT PARTICLES FROM ENTERING WETLAND AREAS.
17. CONTRACTOR SHALL HAUL ALL EXCESS FILL MATERIAL OFFSITE.
18. THE REQUIREMENTS LISTED ABOVE SHALL BE CONSIDERED MINIMUM REQUIREMENTS AND THE CONTRACTOR SHALL USE WHATEVER METHODS HE DEEMS NECESSARY TO PREVENT EROSION AND SILTATION AS MAY BE REQUIRED FOR THE PROJECT, AND APPROVED BY THE AUTHORITIES HAVING JURISDICTION.

GENERAL SITE NOTES:

1. ALL SIGNAGE, PAVEMENT MARKINGS, AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF FHWA MUTCD.
2. UNLESS OTHERWISE NOTED ON THE PLANS, ALL CONCRETE COMPONENTS SHALL BE A MINIMUM 3,000 PSI.
3. ALL OFFSITE DISTURBED AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS.

EARTHWORK AND GRADING NOTES:

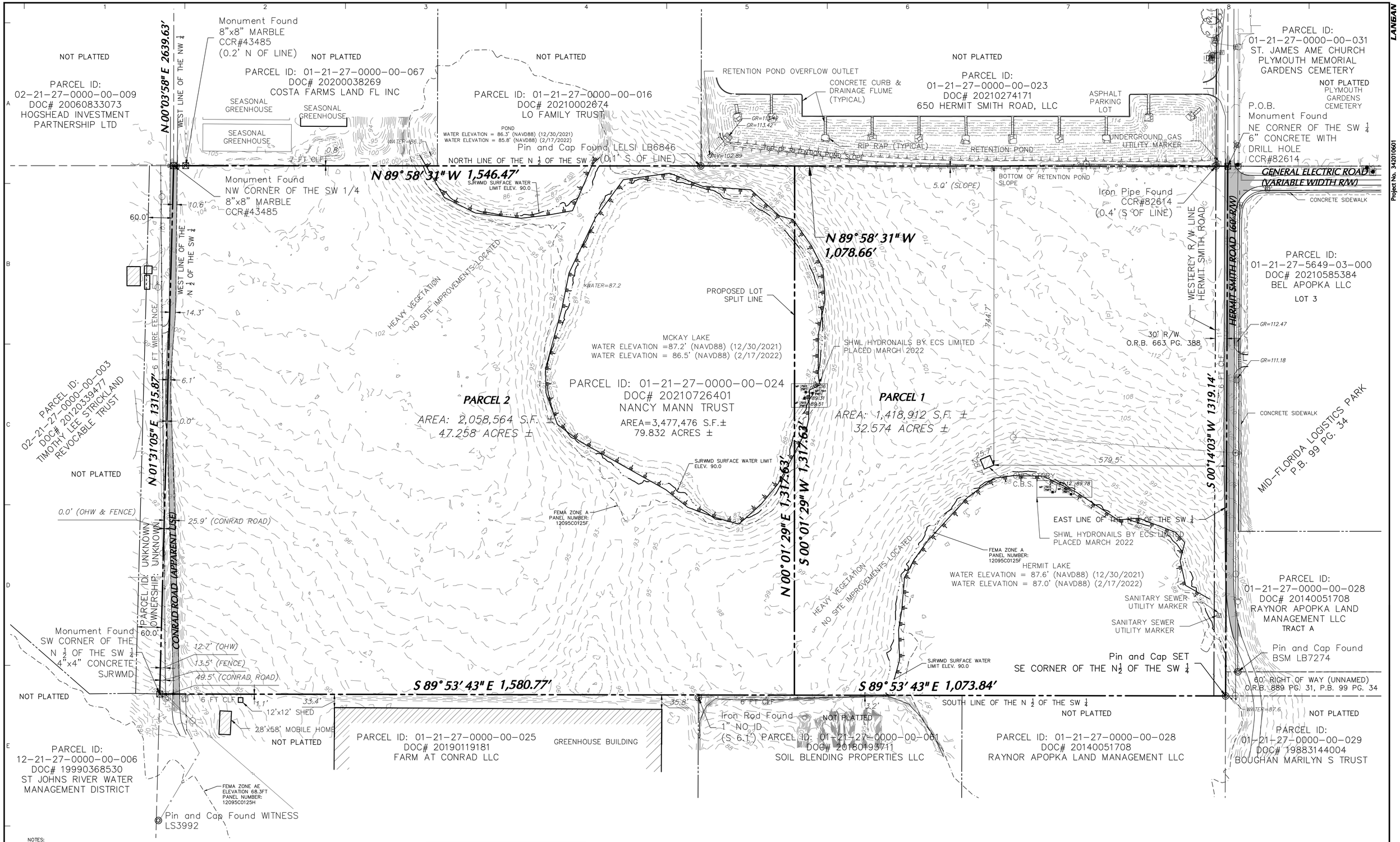
1. ALL EARTHWORK OPERATIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY ECS FLORIDA, LLC, DATED 03 FEBRUARY 2022, UPDATED 09 SEPTEMBER 2022.
2. EARTHWORK OPERATIONS SHALL NOT PROCEED UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
3. UNSUITABLE SOILS FOUND DURING ANY EARTHWORK OPERATIONS SHALL BE REMOVED AND NOT RE-USED WITHOUT SPECIFIC APPROVAL BY THE GEOTECHNICAL ENGINEER, ENGINEER OF RECORD, AND OWNER.
4. PRIOR TO EARTHWORK OPERATIONS WITHIN THE DESIGNATED AREAS OF CONSTRUCTION, THE SITE SHALL BE CLEARED, STRIPPED, AND GRUBBED OF ALL SURFACE AND SUBSURFACE VEGETATION (TOP SOIL, ROOTS AND OTHER DELETERIOUS MATERIALS). THE OWNERS GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE AREAS PRIOR TO FILL PLACEMENT.
5. ALL MUCK DEPOSITS SHALL BE REMOVED AND REPLACED WITH ENGINEERED FILL.
6. ALL IMPORTED MATERIALS SHALL COME FROM A KNOWN APPROVED SOURCE AND SHALL BE CERTIFIED AS FREE OF CONTAMINATION.
7. UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL ENGINEER, ENGINEERED FILL SHALL BE ON-SITE OR IMPORTED MATERIAL HAVING LESS THAN 15% PASSING THE NO. 200 SIEVE AND A MAXIMUM PARTICLE SIZE OF 3 INCHES, AND BE FREE OF ORGANIC MATERIALS AND DEBRIS.
8. ENGINEERED FILL SHALL BE PLACED IN MAXIMUM 12-INCH THICK LIFTS WHEN COMPACTING WITH VIBRATORY ROLLERS. WHEN COMPACTING FILL WITH SMALLER PLATE COMPACTORS, THE THICKNESS OF THE LIFT SHALL BE REDUCED TO A MAXIMUM OF 6-INCHES. EACH LIFT SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION TEST (ASTM D 1557). COMPACTION SHOULD BE VERIFIED BY PERFORMING FIELD DENSITY TESTS IN ACCORDANCE WITH ASTM D 2922. A MINIMUM OF ONE FIELD DENSITY TEST SHALL BE TAKEN FOR EACH 2,500 SF FOR EACH LIFT OF COMPACTED FILL PLACED. TRENCH BACKFILL SHALL INCLUDE A MINIMUM OF ONE FIELD DENSITY TEST FOR EVERY 100 LF FOR EACH LIFT OF COMPACTED BACKFILL PLACED. EACH COMPACTED FILL LIFT SHALL BE TESTED AND APPROVED BEFORE PLACING SUBSEQUENT FILL LIFTS. DEVIATIONS FROM ABOVE REQUIRE APPROVAL FROM THE GEOTECHNICAL ENGINEER, ENGINEER OF RECORD, AND OWNER.
9. SHEETING AND BRACING FOR OPEN CUTS SHALL BE IN ACCORDANCE WITH OSHA AND THE FLORIDA TRENCH SAFETY ACT.
10. ALL IMPERVIOUS SURFACES SHALL BE CONSTRUCTED TO DRAIN STORMWATER RUNOFF POSITIVELY TO A LANDSCAPE AREA OR DRAINAGE CATCHMENT DEVICE. PAVED AREAS SHALL NOT CONTAIN "BIRD BATHS". CONTRACTOR SHALL REQUEST CLARIFICATION IF THE DESIGN DOCUMENTS ILLUSTRATE AN IMPERVIOUS AREA TO NOT HAVE POSITIVE DRAINAGE PRIOR TO FINAL SURFACE PAVEMENT INSTALLATION.

DRAINAGE NOTES:

1. UNLESS OTHERWISE NOTED ON THE PLANS, ALL DRAINAGE PIPE SHALL BE HIGH DENSITY POLYETHYLENE PIPE (HDPE), OR AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
2. DRAINAGE PIPE LENGTHS ARE BASED ON CENTER OF STRUCTURE TO CENTER OF STRUCTURE (ACTUAL INSTALLED PIPE LENGTH WILL TYPICALLY BE LESS THAN THE ANNOTATED LENGTH).
3. CONTRACTOR SHALL REVIEW ALL DRAINAGE CONNECTIONS TO MANHOLES AND CATCH BASINS FOR CONSTRUCTION FEASIBILITY AND SHALL PROVIDE RFI'S TO THE ENGINEER OF RECORD PRIOR TO SHOP DRAWING ISSUANCE.
4. ALL DRAINAGE STRUCTURES SHALL MEET HS-20 TRAFFIC LOADING.
5. THE CONTRACTOR SHALL REMOVE ALL SEDIMENT AND DEBRIS FROM THE DRAINAGE PIPES UPON COMPLETION AND SHALL PROVIDE THE MANIFEST DOCUMENTING THE COMPLETION OF THE DRAINAGE SYSTEM CLEANING.
6. THE CONTRACTOR SHALL CCTV AND LASER PROFILED THE DRAINAGE PIPES UPON COMPLETION AND PROVIDE THE RESULTS TO THE ENGINEER OF RECORD FOR USE IN FINAL COMPLETION CERTIFICATIONS WITH THE AUTHORITY HAVING JURISDICTION.

SANITARY SEWER NOTES

1. UNLESS OTHERWISE NOTED ON THE PLANS, ALL SANITARY SEWER PIPE AND FITTINGS SHALL BE GREEN SDR-26 PVC, OR AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
2. THE SANITARY SEWER PIPE AND FITTINGS SHALL BE DIP CLASS 350 IF THE PIPE IS GREATER THAN 15 FEET DEEP.
3. THE SANITARY FORCE MAIN PIPE AND FITTINGS SHALL BE HDPE (DR-9 OR DR-11) WITH GREEN STRIPING AND HAVE A PRESSURE RATING OF NOT LESS THAN 160 PSI.
4. GRAVITY SANITARY SEWER PIPE LENGTHS ARE BASED ON CENTER OF STRUCTURE TO CENTER OF STRUCTURE (ACTUAL INSTALLED PIPE LENGTH WILL TYPICALLY BE LESS THAN THE ANNOTATED LENGTH).
5. CONTRACTOR SHALL REVIEW ALL SANITARY SEWER CONNECTIONS TO MANHOLES FOR CONSTRUCTION FEASIBILITY AND SHALL PROVIDE RFI'S TO THE ENGINEER OF RECORD PRIOR TO SHOP DRAWING ISSUANCE.
6. SANITARY DROP MANHOLES SHALL BE PROVIDED FOR DROPS GREATER THAN TWO FEET.
7. ALL SANITARY SEWER STRUCTURES SHALL MEET HS-20 TRAFFIC LOADING.
8. ALL SANITARY STRUCTURES SHALL BE PRE-CAST WITH BITUMASTIC COATINGS ON THE INSIDE AND OUTSIDE.
9. THE CONTRACTOR SHALL REMOVE ALL SEDIMENT AND DEBRIS FROM THE SANITARY SEWER PIPES UPON COMPLETION AND SHALL PROVIDE THE MANIFEST DOCUMENTING THE COMPLETION OF THE SANITARY SEWER SYSTEM CLEANING.
10. THE CONTRACTOR SHALL CCTV AND LASER PROFILE THE SANITARY SEWER PIPES UPON COMPLETION AND PROVIDE



NOTES:

1. BOUNDARY SURVEY REFERENCED FROM DRAWING ENTITLED "ALTA / NSPS LAND TITLE SURVEY" PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. DATED 14 JANUARY 2022.
2. TOPOGRAPHIC SURVEY REFERENCED FROM DRAWING ENTITLED "HERMIT SMITH ROAD INDUSTRIAL – TOPOGRAPHIC SURVEY" PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. DATED 11 APRIL 2022.
3. ELEVATIONS SHOWN ON THIS PLAN REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. WETLANDS REFERENCED FROM DRAWING ENTITLED "ECOLOGICAL DUE DILIGENCE" PREPARED BY ECS FLORIDA, LLC DATED 1 JANUARY 2022.

100 0 50 100
SCALE: 1" = 100'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
08/19/2024	WAREHOUSE 300' & 400 FUTURE DOOR LOCATIONS	14
07/31/2024	N. AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE ADD DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/29/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

This item has been digitally signed and sealed by **JOSEPH J. YANNUCCI, JR., PE** on the **DATE shown** ***in the digital signature***. Printed copies of this document are not considered signed and sealed and the ***Digital Signature*** must be verified on any electronic copies.

JOSEPH J. YANNUCCI, JR. LICENSE No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

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FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
EXISTING CONDITIONS

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Drawing No. C-03

LANGAN
Project No. 342010601

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Date: 11/21/2024 Time: 09:47 User: brlahore Style Table: Langan.stb Layout: C-3 Document Code: 342010601-0301-CS101-0102



Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/23/2024	AMENITY & LIFT STATION REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
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06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

100 0 50 100
SCALE: 1" = 100'

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Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
AERIAL PLAN

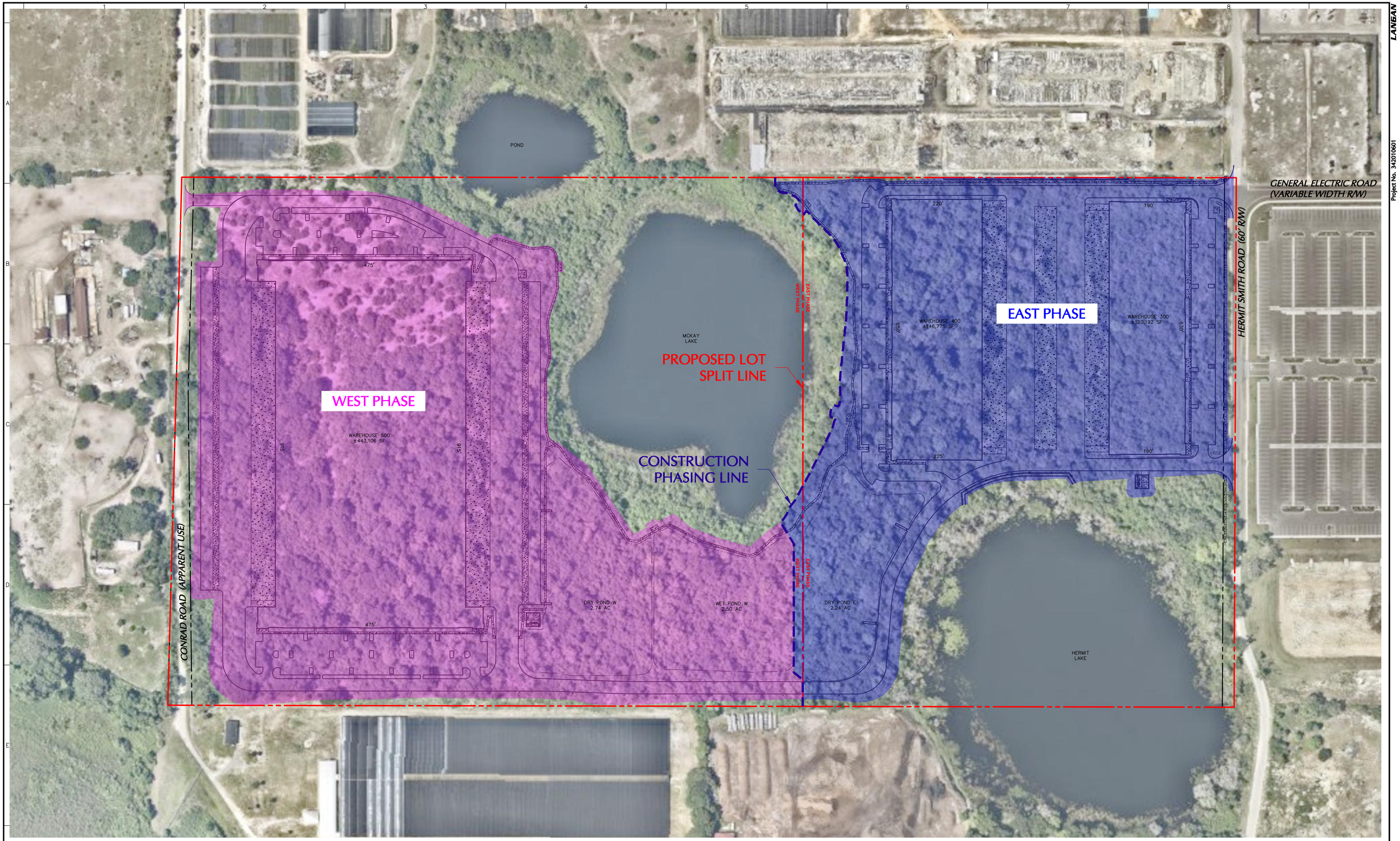
Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Drawing No. C-04

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LANGAN Project No. 342010601

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11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 400 & 500 DOOR LOCATIONS	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
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Date	Description	No.

Revisions

100 0 50 100
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Joseph J Yannucci

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Project
APOPKA
BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
PHASING PLAN

Project No. 342010601
Date 29 SEPTEMBER 2023
Drawn By CRB
Checked By JJY

Drawing No. C-04A

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LANGAN Project No. 342010601

Date: 11/21/2024 Time: 09:48 User: brlahore Style Table: Langan.stb Layout: C-04A Document Code: 342010601-0301-CS101-0108

SITE DATA

PROJECT SUMMARY

THE PROPOSED PROJECT DEVELOPMENT PLAN INCLUDES THREE INDUSTRIAL WAREHOUSES WITHIN PARCEL 01-21-27-0000-00-024. SITE IMPROVEMENTS WILL INCLUDE AN ACCESS DRIVE, SURFACE PARKING, TRUCK LOADING AREAS, DRAINAGE AND UTILITY INFRASTRUCTURE, SITE LIGHTING, AND LANDSCAPING. THE PARCEL WILL BE SPLIT INTO TWO LOTS. THE EAST PHASE WILL BE THE EAST PARCEL AND WILL CONTAIN WAREHOUSE 300, WAREHOUSE 400, AND DRY POND E. THE WEST PHASE WILL BE THE WEST PARCEL AND WILL CONTAIN WAREHOUSE 500, DRY POND W AND WET POND W.

TOTAL PROJECT AREA
3,477,476 SF ± OR 79.83 ACRES ±

EAST PHASE - PROJECT AREA
EAST PHASE PROJECT AREA = 1,418,912 SF ± OR 32.57 ACRES ± (100%)
EXISTING HERMIT SMITH ROAD CITY PUBLIC ACCESS EASEMENT = 38,515 SF ± OR 0.88 ACRES ± (2.7%)
WETLANDS = 91,848 SF ± OR 2.11 ACRES ± (6.5%)
WETLANDS BUFFER = 53,280 SF ± OR 1.22 ACRES (3.7%)
EXISTING WATER SURFACES = 266,024 SF ± OR 6.57 ACRES (20.2%)
DEVELOPABLE AREA = 949,349 SF ± OR 21.79 ACRES (66.9%)

EAST PHASE - DEVELOPABLE AREA BREAKDOWN (21.79 ACRES ± 67%)
OPEN SPACE / PERVIOUS AREAS = 209,968 SF ± OR 4.82 ACRES ± (14.8%)
BUILDING (FOOTPRINT) = 266,967 ± SF OR 6.13 ACRES ± (18.8%)
VEHICULAR AREAS = 349,902 ± SF OR 8.03 ACRES ± (24.7%)
OTHER IMPERVIOUS AREAS = 25,103 ± SF OR 0.58 ACRES ± (1.8%)
STORMWATER MANAGEMENT AREAS = 97,379 SF ± OR 2.24 ACRES ± (6.9%)

WEST PHASE - PROJECT AREA
WEST PHASE PROJECT AREA = 2,058,564 SF ± OR 47.26 ACRES ± (100%)
PROPOSED CONRAD ROAD CITY PUBLIC ACCESS EASEMENT = 51,210 SF ± OR 1.18 ACRES ± (2.5%)
WETLANDS = 117,196 SF ± OR 2.69 ACRES ± (5.7%)
WETLANDS BUFFER = 71,214 SF ± OR 1.63 ACRES (3.4%)
EXISTING WATER SURFACES = 343,465 SF ± OR 7.88 ACRES (16.7%)
DEVELOPABLE AREA = 1,475,846 SF ± OR 33.88 ACRES (71.7%)

WEST PHASE - DEVELOPABLE AREA BREAKDOWN (33.88 ACRES ± 72%)
OPEN SPACE / PERVIOUS AREAS = 286,787 SF ± OR 6.58 ACRES ± (13.9%)
BUILDING (FOOTPRINT) = 443,106 SF ± OR 10.17 ACRES ± (21.5%)
VEHICULAR AREAS = 493,562 SF ± OR 11.33 ACRES ± (24.0%)
OTHER IMPERVIOUS AREAS = 23,994 SF ± OR 0.55 ACRES ± (1.2%)
STORMWATER MANAGEMENT AREAS = 228,417 SF ± OR 5.24 ACRES ± (11.2%)

PROJECT ADDRESS
444 HERMIT SMITH ROAD, APOPKA, FL 32703
ORANGE COUNTY PARCEL 01-21-27-0000-00-024

EXISTING ZONING
I-L (LIGHT INDUSTRIAL DISTRICT)

FUTURE LAND USE (FLU) DESIGNATION
IND (INDUSTRIAL)

SURROUNDING ZONING
NORTH: I-L (LIGHT INDUSTRIAL DISTRICT)
EAST: PD (PLANNED DEVELOPMENT DISTRICT)
WEST: T (TRANSITION DISTRICT)
SOUTH (DEVELOPMENT): A-1 (CITRUS RURAL DISTRICT - UNINCORPORATED ORANGE COUNTY)
SOUTH (HERMIT LAKE): RSF-1A (RESIDENTIAL SINGLE-FAMILY ESTATE DISTRICT)

SURROUNDING FUTURE LAND USE (FLU) DESIGNATION
NORTH: IND (INDUSTRIAL)
EAST: IND (INDUSTRIAL)
WEST: IND (INDUSTRIAL)
SOUTH (DEVELOPMENT): R (RURAL - UNINCORPORATED ORANGE COUNTY)
SOUTH (HERMIT LAKE): IND (INDUSTRIAL)

MINIMUM REQUIRED SETBACKS
PER ARTICLE 3 - ZONING DISTRICTS: 3.53. - I-L: LIGHT INDUSTRIAL DISTRICT
NORTH - SIDE - 10 FT
EAST – FRONT - 10 FT
WEST – REAR - 10 FT
SOUTH - 10 FT
SOUTH (RESIDENTIAL) - 30 FT

LANDSCAPE BUFFER YARDS
PER ARTICLE 3 - ZONING DISTRICTS: 3.53. - I-L: LIGHT INDUSTRIAL DISTRICT
NORTH - N/A
EAST - N/A
WEST - N/A
SOUTH - TYPE D BUFFER
SOUTH - TYPE D BUFFER

BUILDING SUMMARY
WAREHOUSE 300: 120,192 SF
WAREHOUSE 400: 146,775 SF
TOTAL EAST PHASE BUILDING AREA: 266,967 SF
WAREHOUSE 500: 443,106 SF
TOTAL WEST PHASE BUILDING AREA: 443,106 SF
TOTAL EAST & WEST PHASE BUILDING AREA: 710,073 SF

FLOOR AREA RATIO (FAR)
PER ARTICLE 3 - ZONING DISTRICTS: 3.53. - I-L: LIGHT INDUSTRIAL DISTRICT
ALLOWABLE: 0.40
PHASE 1 PROVIDED: 0.19 (266,967 SF / 1,418,912 SF)
PHASE 2 PROVIDED: 0.22 (443,106 SF / 2,058,564 SF)

BUILDING HEIGHT
PER ARTICLE 3 - ZONING DISTRICTS: 3.53. - I-L: LIGHT INDUSTRIAL DISTRICT
ALLOWABLE: 45'
WAREHOUSE 300: 32'
WAREHOUSE 400: 32'
WAREHOUSE 500: 36'

VEHICULAR PARKING
PER SECTION 5.1 AND TABLE 5.1.6.A

MINIMUM REQUIRED
WAREHOUSE 300: (12,019.2 SF DISTRIBUTION WAREHOUSE OFFICE) * (2 SPACE / 1,000 SF) = 25
WAREHOUSE 400: (14,677.5 SF DISTRIBUTION WAREHOUSE OFFICE) * (2 SPACE / 1,000 SF) = 30
TOTAL EAST PHASE REQUIRED VEHICLE PARKING = 55 SPACES
WAREHOUSE 500: (44,310.6 SF DISTRIBUTION WAREHOUSE OFFICE) * (2 SPACE / 1,000 SF) = 89
TOTAL WEST PHASE REQUIRED VEHICLE PARKING = 89 SPACES

PROVIDED
WAREHOUSE 300: STANDARD PARKING = 116
WAREHOUSE 400: STANDARD PARKING = 138
TOTAL EAST PHASE PROVIDED VEHICLE PARKING = 254 SPACES
WAREHOUSE 500: STANDARD PARKING = 266
TOTAL WEST PHASE PROVIDED VEHICLE PARKING = 266 SPACES

TRUCK LOADING BERTHS
PER SECTION 5.1.12 AND TABLE 5.1.12.A

MINIMUM REQUIRED
WAREHOUSE 300: (1 BERTH / 10,000 SF BUILDING) * 120,192 SF = 13
WAREHOUSE 400: (1 BERTH / 10,000 SF BUILDING) * 146,775 SF = 15
TOTAL EAST PHASE REQUIRED LOADING BERTHS = 28 BERTHS
WAREHOUSE 500: (1 BERTH / 10,000 SF BUILDING) * 443,106 SF = 45
TOTAL WEST PHASE REQUIRED LOADING BERTHS = 45 BERTHS

PROVIDED
WAREHOUSE 300: 41
WAREHOUSE 400: 41
TOTAL EAST PHASE PROVIDED LOADING BERTHS = 82 BERTHS
WAREHOUSE 500: 106
TOTAL WEST PHASE PROVIDED LOADING BERTHS =106 BERTHS

BICYCLE PARKING
PER SECTION 5.1.11.A

REQUIRED
WAREHOUSE 300: (1 LONG TERM BICYCLE PARKING / 40,000 GSF)* 120,192 SF = 4
WAREHOUSE 400: (1 LONG TERM BICYCLE PARKING / 40,000 GSF)* 146,775 SF = 4
TOTAL EAST PHASE REQUIRED BICYCLE PARKING = 8 BERTHS
WAREHOUSE 500: (1 LONG TERM BICYCLE PARKING / 40,000 GSF)* 443,106 SF = 12
TOTAL WEST PHASE REQUIRED BICYCLE PARKING = 12 BERTHS

PROPOSED
WAREHOUSE 300: 4
WAREHOUSE 400: 4
TOTAL EAST PHASE PROPOSED BICYCLE PARKING = 8
WAREHOUSE 500: 12
TOTAL WEST PHASE PROPOSED BICYCLE PARKING = 12

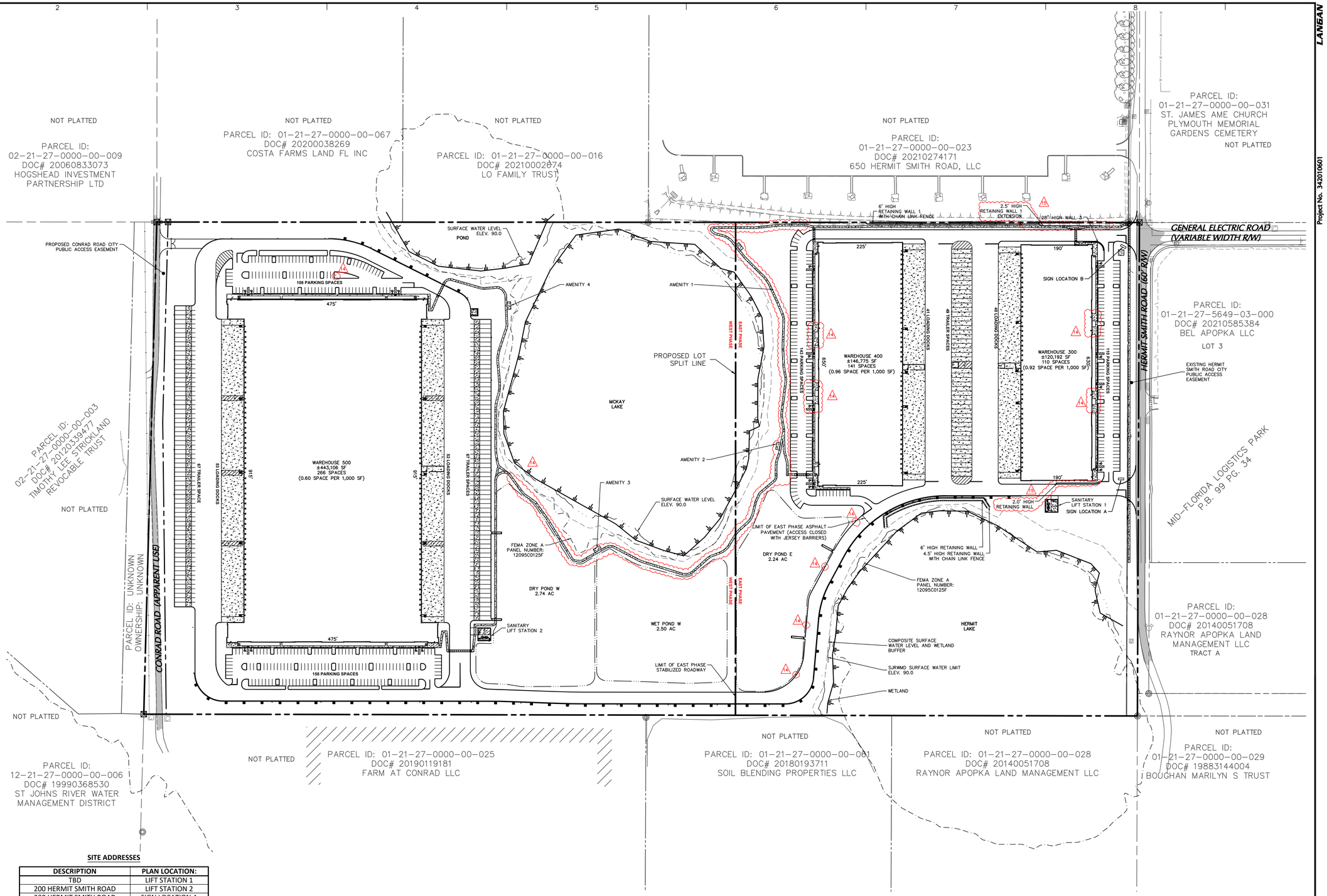
AMENITIZED OPEN SPACE
PER SECTION 5.4.4, IS A MINIMUM OF 5% LAND AREA:

MINIMUM REQUIRED
EAST PHASE MINIMUM OPEN SPACE: 1,418,912 SF ± * 5% = 70,946 SF
WEST PHASE MINIMUM OPEN SPACE: 2,058,564 SF ± * 5% = 102,928 SF

PROVIDED
EAST PHASE MCKAY LAKE: 7,985 SF
EAST PHASE HERMIT LAKE: 278,159 SF
EAST PHASE 75% OF STORMWATER MANAGEMENT: 73,034 SF
EAST PHASE AMENITY 1/2: 274 SF
TOTAL EAST PHASE PROVIDED OPEN SPACE: 359,331 SF
WEST PHASE MCKAY LAKE: 326,133 SF
WEST PHASE 75% OF STORMWATER MANAGEMENT: 171,312 SF
WEST PHASE AMENITY 1/3-4: 528 SF
TOTAL WEST PHASE PROVIDED OPEN SPACE: 497,972 SF

NOTES:

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3. LANDSCAPE AND IRRIGATION PLANS WILL BE DESIGNED IN ACCORDANCE WITH CITY ORDINANCE NO. 2069.



SITE ADDRESSES

DESCRIPTION	PLAN LOCATION:
TBD	LIFT STATION 1
200 HERMIT SMITH ROAD	LIFT STATION 2
220 HERMIT SMITH ROAD	SIGN LOCATION A
230 HERMIT SMITH ROAD	AMENITY 1
240 HERMIT SMITH ROAD	AMENITY 2
250 HERMIT SMITH ROAD	AMENITY 3
260 HERMIT SMITH ROAD	AMENITY 4
600 HERMIT SMITH ROAD	SIGN LOCATION B

120 0 60 120
SCALE: 1" = 120'

No.	Description	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	08/19/2024
13	PER CITY DRC COMMENTS	07/31/2024
12	WAREHOUSE 400 DOOR REVISIONS	06/27/2024
11	OWNER VE CHANGES	02/02/2024
10	REVISED PER CITY DRC CSP REVISION COMMENTS	09/28/2023
9	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	08/21/2023
8	REVISED PER PROJECT TEAM COMMENTS	02/08/2023
7	BID ADDENDUM #2	11/08/2022
6	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	10/24/2022
5	REVISED PER SJRWMD COMMENTS	10/11/2022
4	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	09/09/2022
3	REVISED PER CITY DRC COMMENTS	07/28/2022
2	BID ADDENDUM	07/15/2022
1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022

Revisions

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JOSEPH J. YANNUCCI LICENSE No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

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FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
OVERALL SITE PLAN

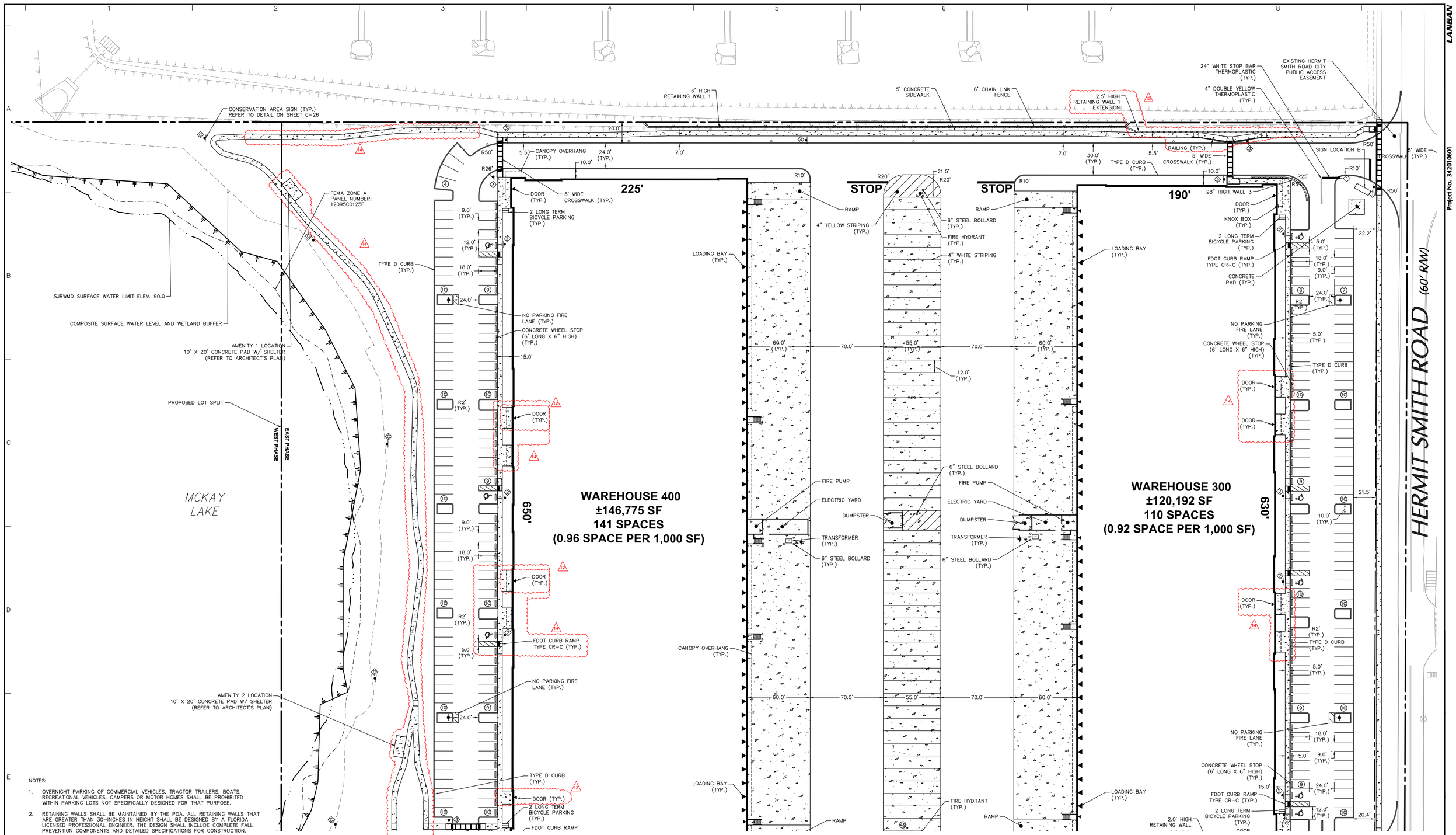
Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Drawing No. C-05

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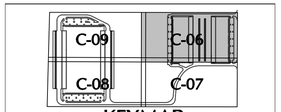
Project No. 342010601

Date: 11/21/2024 Time: 09:48 User: brlahore Style Table: Langan.stb Layout: C-05 Document Code: 342010601-0301-CS101-0101



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3. LANDSCAPE AND IRRIGATION PLANS WILL BE DESIGNED IN ACCORDANCE WITH CITY ORDINANCE NO. 2069.



KEYMAP
SCALE: 1" = 1000'

SIGN LEGEND

1. STOP SIGN (R1-1)
2. ACCESSIBLE PARKING SIGN
3. YIELD TO PEDESTRIANS
4. NO TRUCKS ALLOWED

SCALE: 1" = 40'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/12/2024	WAREHOUSE 400 DOOR REVISIONS	12
04/26/2024	ADDENDUM #2	11
04/08/2024	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/23/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #1	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMIT SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
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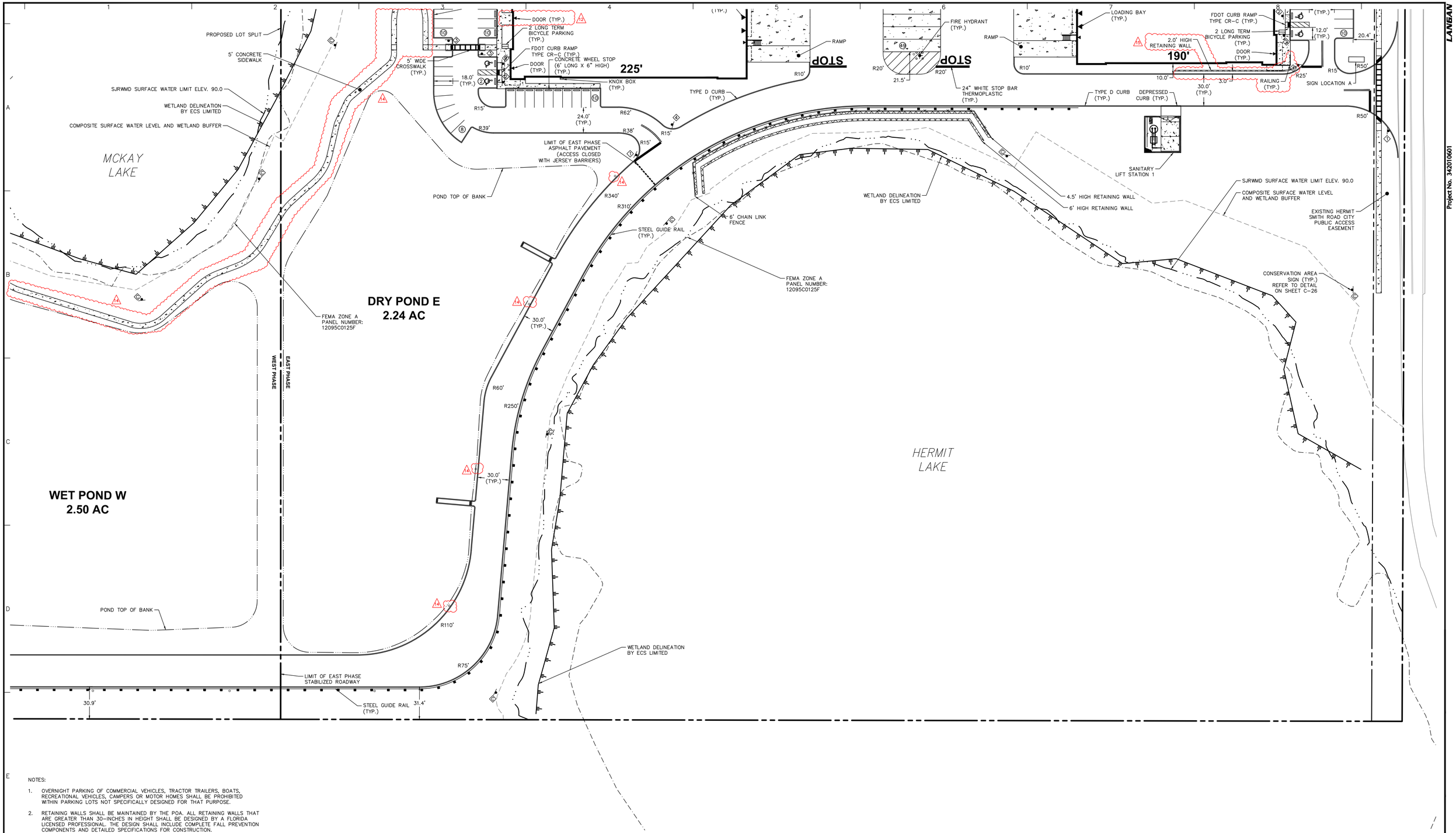
Project
APOPKA
BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
PARTIAL
SITE PLAN

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

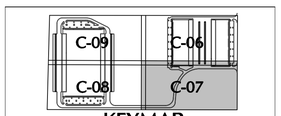
Drawing No. C-06

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KEYMAP

SCALE: 1" = 1000'

SIGN LEGEND

1. STOP SIGN (R1-1)
2. ACCESSIBLE PARKING SIGN
3. YIELD TO PEDESTRIANS
4. NO TRUCKS ALLOWED

40 0 10 25 40

SCALE: 1" = 40'

No.	Description	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE 300' & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	09/18/2024
13	WAREHOUSE 400 DOOR REVISIONS	08/27/2024
12	WAREHOUSE 400 DOOR REVISIONS	08/01/2024
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2	BID ADDENDUM #1	07/15/2022
1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022

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Joseph J Yannucci

SIGNATURE

JOSEPH J. YANNUCCI, JR. PROFESSIONAL ENGINEER FL Lic. No. 65969

DATE SIGNED

LANGAN

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FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project: APOPKA BUSINESS CENTER

CITY OF APOPKA

ORANGE COUNTY FLORIDA

Drawing Title: PARTIAL SITE PLAN

Project No. 342010601

Date 29 APRIL 2022

Drawn By CRB

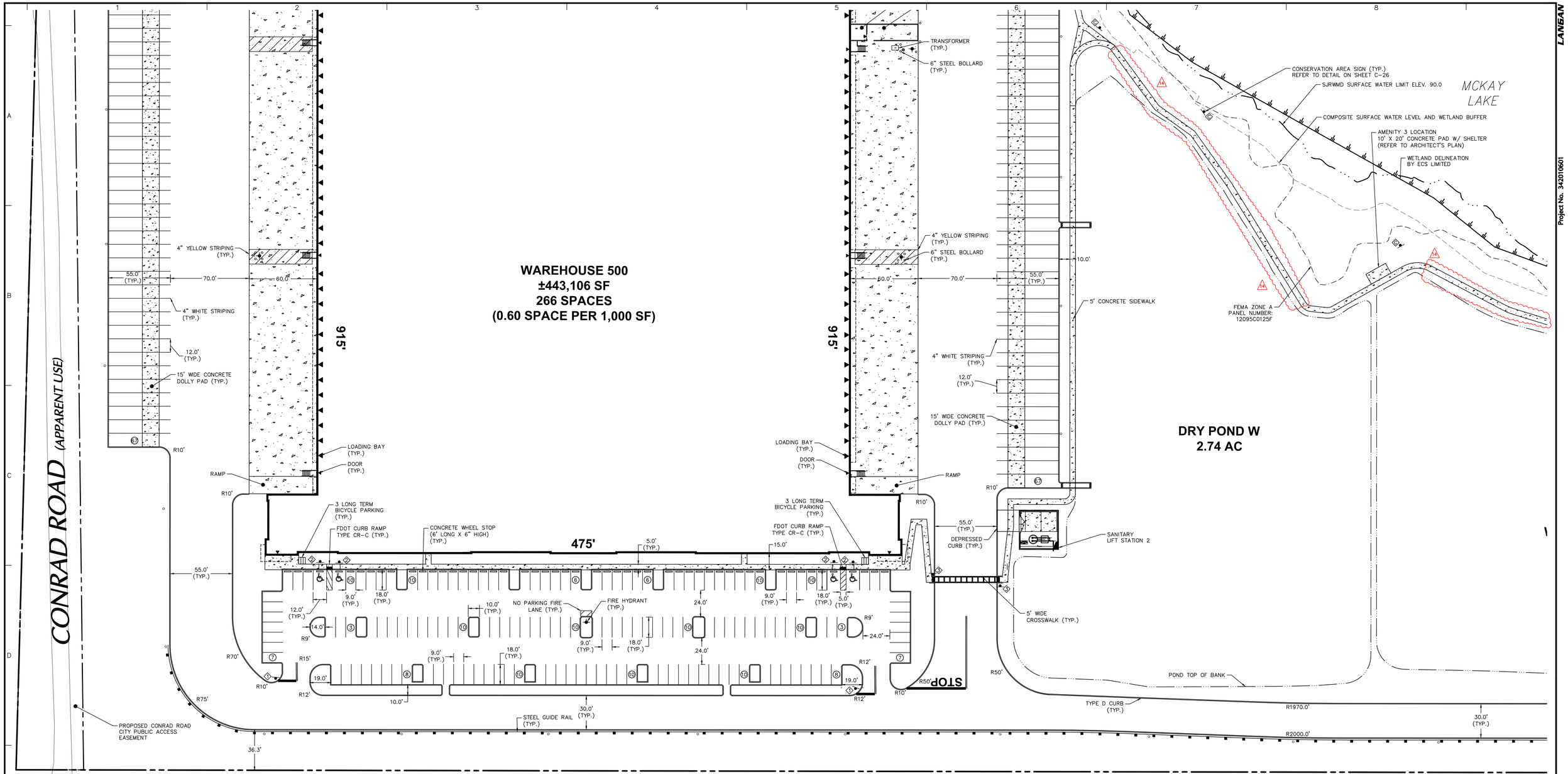
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Drawing No. C-07

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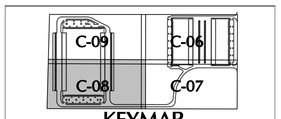
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KEYMAP
SCALE: 1" = 1000'

SIGN LEGEND

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40 0 10 25 40
SCALE: 1" = 40'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/19/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
04/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
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11/06/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
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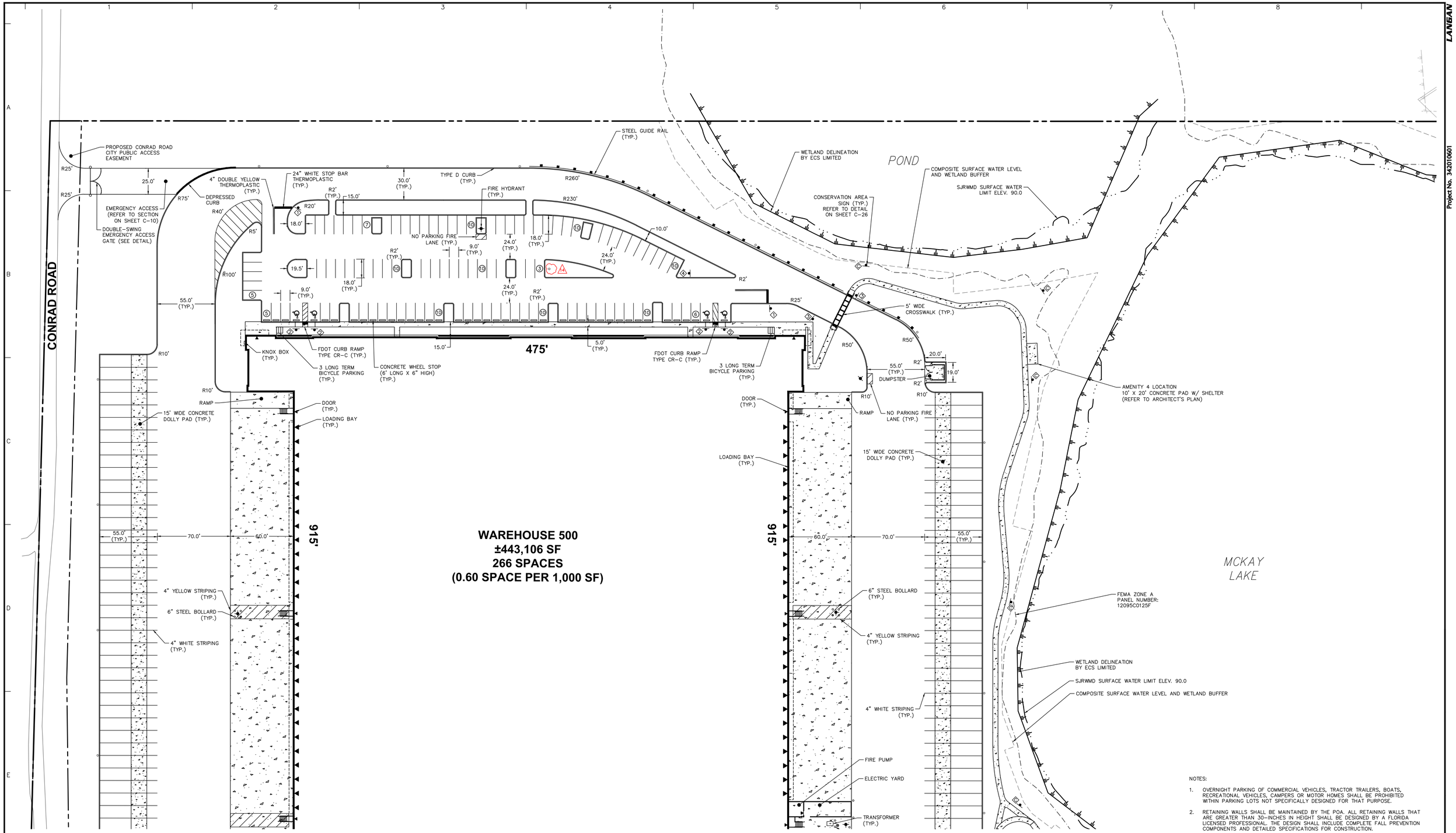
Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
PARTIAL SITE PLAN

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Drawing No. C-08

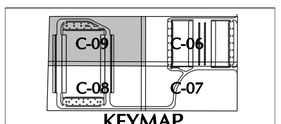
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WAREHOUSE 500
±443,106 SF
266 SPACES
(0.60 SPACE PER 1,000 SF)

NOTES:

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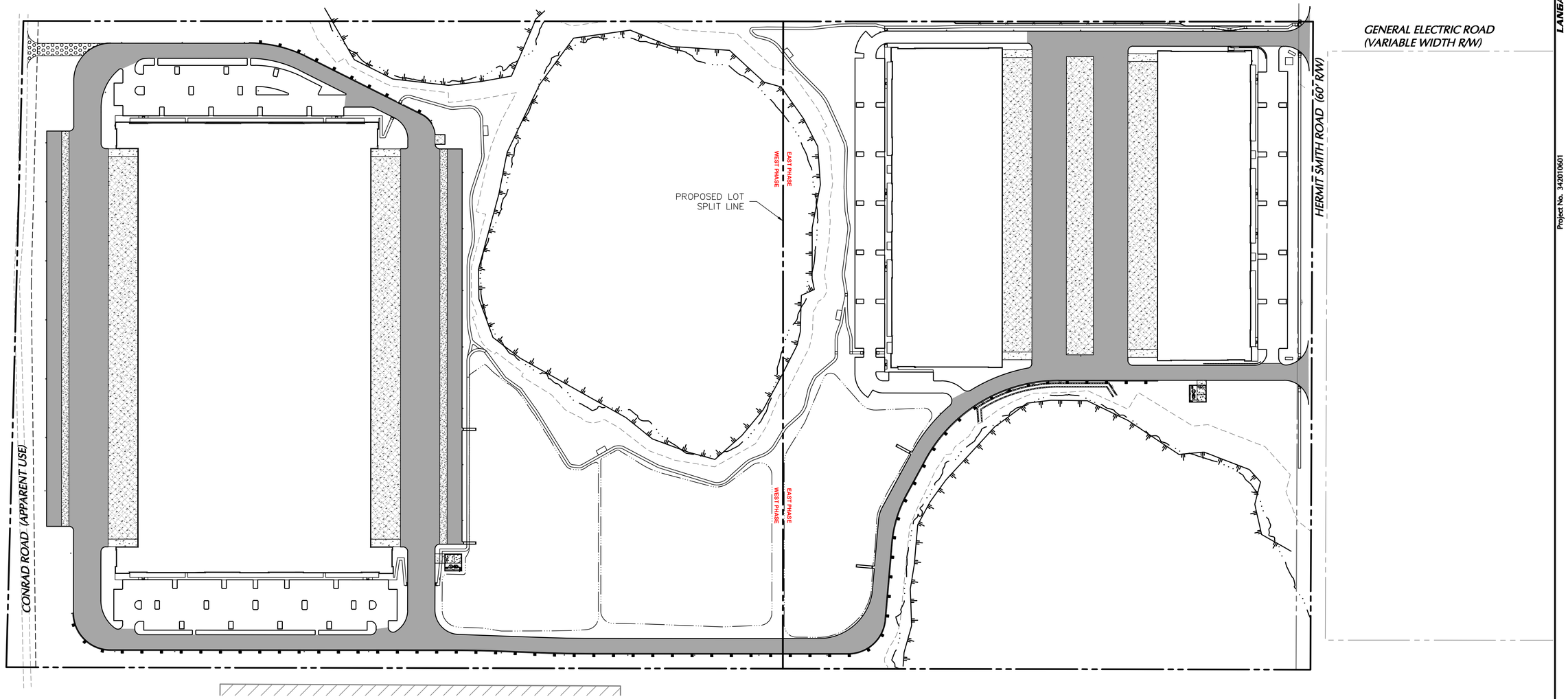
Joseph J Yannucci

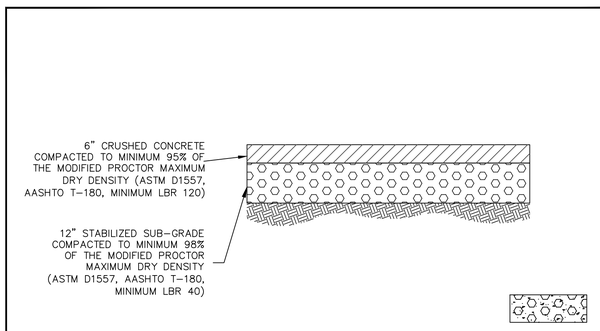
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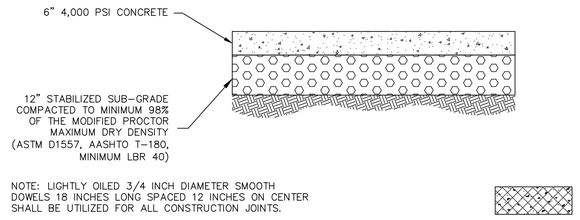
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Drawing Title	PARTIAL SITE PLAN
Project No.	342010601
Date	29 APRIL 2022
Drawn By	CRB
Checked By	JJY
Drawing No.	C-09

LANGAN
Project No. 342010601
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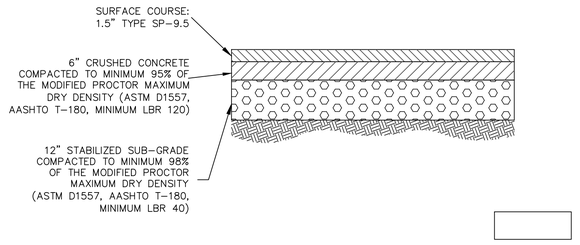




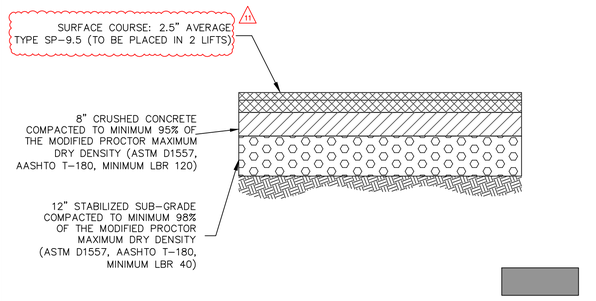
EMERGENCY ACCESS PAVEMENT SECTION



CONCRETE PAVEMENT SECTION (LOADING DOCK / TRAILER SPACES)



LIGHT DUTY ASPHALT PAVEMENT SECTION



HEAVY DUTY ASPHALT PAVEMENT SECTION

NOTES:

1. PAVEMENT SECTION STANDARDS REFERENCED FROM REPORT ENTITLED "PRELIMINARY SUBSURFACE EXPLORATION GEOTECHINAL ENGINEERING REPORT HERMIT SMITH INDUSTRIAL DEVELOPMENT" – PREPARED BY ECS FLORIDA, LLC. DATED 03 FEBRUARY 2022 UPDATED 09 SEPTEMBER 2022. PAVEMENT SECTIONS ARE PRELIMINARY AND ARE SUBJECT TO CHANGE.
2. CRUSHED CONCRETE SHOULD FOLLOW FDOT SPECIFICATION FOR MATERIAL QUALIFICATIONS AND PLACEMENT.
3. COMPLIANCE TESTING SHALL BE A FREQUENCY OF ONE TEST PER 5,000 SF UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL ENGINEER.
4. UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL ENGINEER, STABILIZED SUBGRADE SHALL HAVE LESS THAN 15% PASSING THE NO. 200 SIEVE AND A MAXIMUM PARTICLE SIZE OF 3 INCHES, FREE OF ORGANIC MATERIALS AND DEBRIS, WITH A MINIMUM LIMEROCK BEARING RATIO (LBR) OF 40.

100 0 50 100
SCALE: 1" = 100'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/19/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/29/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 & SITE REVISIONS	12
03/05/2024	OWNER CR CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

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JOSEPH J. YANNUCCI, JR. LICENSE No. 65969 STATE OF Florida PROFESSIONAL ENGINEER

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

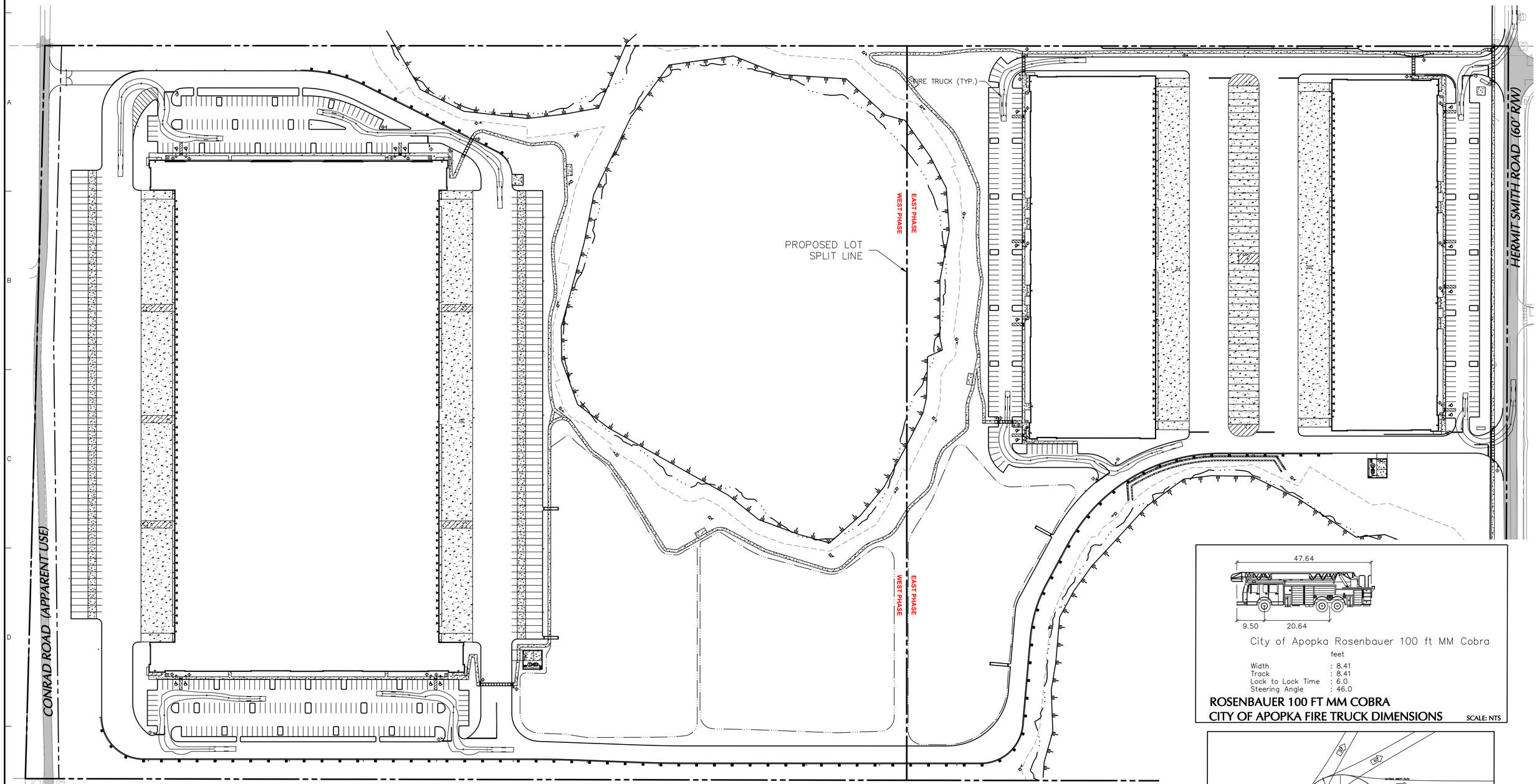
Drawing Title
VEHICULAR PAVEMENT PLAN

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

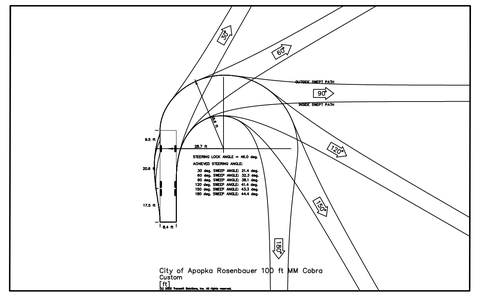
Drawing No. C-10

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Project No. 342010601

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ROSENBAUER 100 FT MM COBRA
CITY OF APOPKA FIRE TRUCK DIMENSIONS SCALE: NTS



FIRE TRUCK TURNING TEMPLATE SCALE: NTS

80 0 20 50 80
SCALE: 1" = 80'

No.	Revisions	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	09/19/2024
13	AMENITY PATH REVISION	07/31/2024
12	WAREHOUSE 400 DOOR REVISIONS	06/27/2024
11	OWNER VE CHANGES	02/02/2024
10	REVISED PER CITY DRC CSP REVISION COMMENTS	04/28/2023
9	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	08/21/2023
8	REVISED PER PROJECT TEAM COMMENTS	02/08/2023
7	BID ADDENDUM #2	11/06/2022
6	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	10/24/2022
5	REVISED PER SJRWMD COMMENTS	10/11/2022
4	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	09/09/2022
3	REVISED PER CITY DRC COMMENTS	07/28/2022
2	BID ADDENDUM #1	07/15/2022
1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022
No.	Description	Date

Revisions

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Joseph J Yannucci

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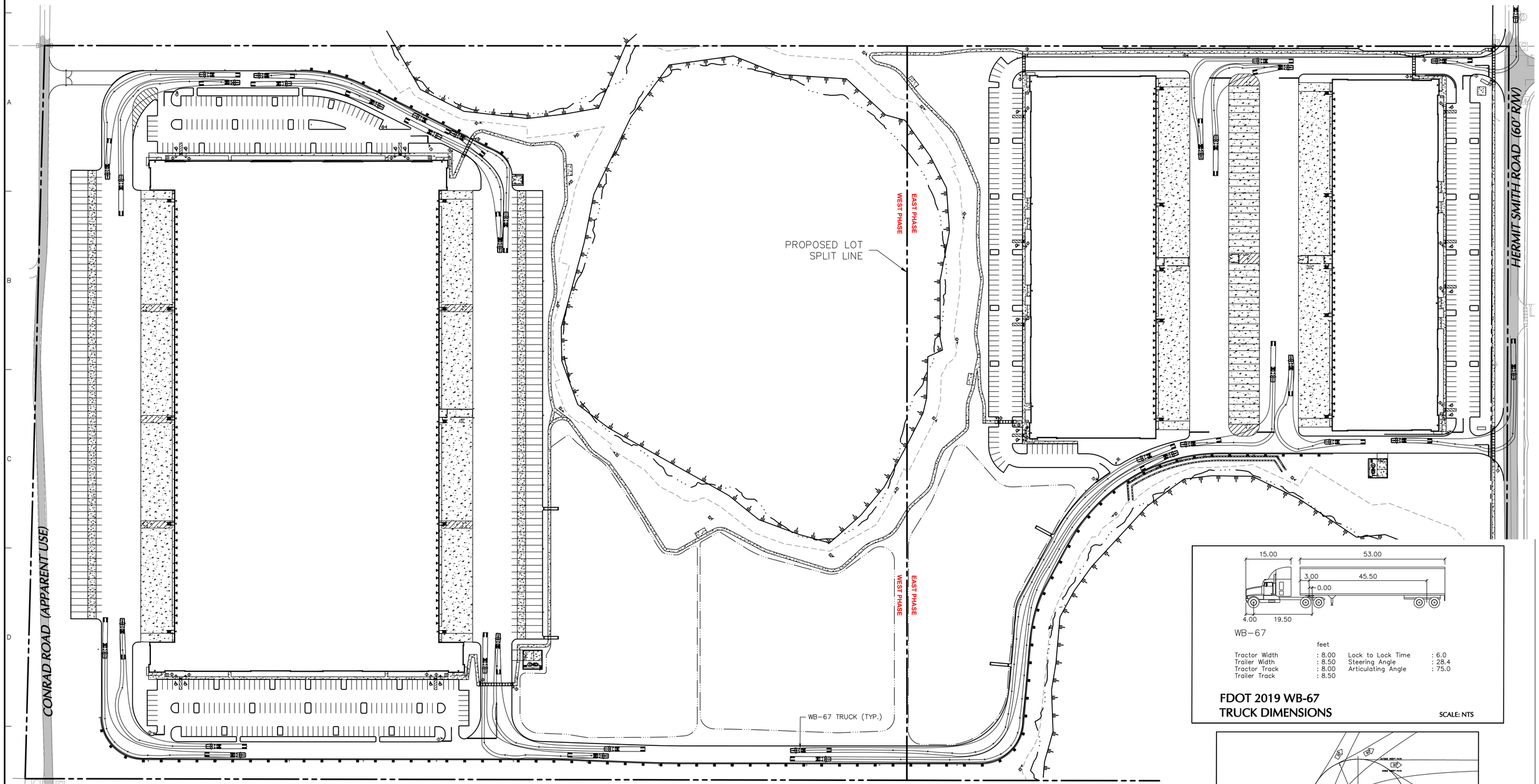
Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
TURNING MOVEMENT PLAN - FIRE ACCESS

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Drawing No. C-11

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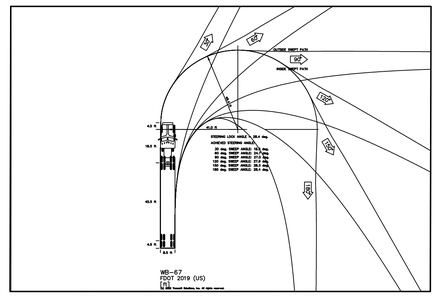


WB-67

feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

FDOT 2019 WB-67 TRUCK DIMENSIONS SCALE: NTS



WB-67 TRUCK TURNING TEMPLATE SCALE: NTS

80 0 20 50 80

SCALE: 1" = 80'

Date	Description	No.
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09/19/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400' DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
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Project

APOPKA BUSINESS CENTER

CITY OF APOPKA

ORANGE COUNTY **FLORIDA**

Drawing Title

TURNING MOVEMENT PLAN - TRUCK

Project No.	342010601
Date	29 APRIL 2022
Drawn By	CRB
Checked By	JJY

Drawing No. **C-12**

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Project No. 342010601

LANGAN

Date: 11/21/2024 Time: 09:50 User: brlahore Style Table: Langan.stb Layout: C-12 Document Code: 342010601-0301-CS101-0107

STRUCTURE TABLE		
STRUCTURE NAME:	STRUCTURE TYPE	DETAILS:
OCS-01	MODIFIED TYPE E	RIM = 0.00 INV OUT = 94.50
OCS-02	MODIFIED TYPE E	RIM = 99.24 INV OUT = 94.50
OCS-03	MODIFIED TYPE E	RIM = 95.50 INV OUT = 85.50
ST-CB-101	FDOT TYPE H - DOUBLE INLET	RIM = 96.65 INV OUT = 92.40
ST-CB-102	FDOT TYPE H - DOUBLE INLET	RIM = 96.65 INV IN = 91.80 INV OUT = 91.80
ST-CB-103	FDOT TYPE 6	RIM = 98.78 INV IN = 91.35 INV OUT = 91.35
ST-CB-104	FDOT TYPE H	RIM = 99.15 INV IN = 90.78 INV OUT = 90.78
ST-CB-105	FDOT TYPE H	RIM = 99.26 INV IN = 90.21 INV OUT = 90.21
ST-CB-106	FDOT TYPE 6	RIM = 98.04 INV IN = 89.34 INV OUT = 89.34
ST-CB-107	FDOT TYPE 6	RIM = 96.14 INV IN = 88.69 INV OUT = 88.69

STRUCTURE TABLE		
STRUCTURE NAME:	STRUCTURE TYPE	DETAILS:
ST-CB-108	FDOT TYPE 6	RIM = 95.77 INV IN = 87.90 INV OUT = 87.90
ST-CB-201	FDOT TYPE H - DOUBLE INLET	RIM = 96.65 INV OUT = 91.90
ST-CB-202	FDOT TYPE H - DOUBLE INLET	RIM = 96.65 INV IN = 91.30 INV OUT = 91.30
ST-CB-203	FDOT TYPE 6	RIM = 97.39 INV IN = 90.66 INV OUT = 90.86
ST-CB-204	FDOT TYPE H	RIM = 97.25 INV IN = 89.73 INV OUT = 89.73
ST-CB-205	FDOT TYPE H	RIM = 97.25 INV IN = 88.98 INV OUT = 88.98
ST-CB-206	FDOT TYPE 6	RIM = 96.60 INV IN = 87.85 INV OUT = 87.85
ST-CB-301	FDOT TYPE 6	RIM = 100.80 INV OUT = 96.07
ST-CB-302	FDOT TYPE 6	RIM = 100.80 INV IN = 95.17 INV OUT = 95.08
ST-CB-501	FDOT TYPE 6	RIM = 108.80 INV OUT = 104.90

STRUCTURE TABLE		
STRUCTURE NAME:	STRUCTURE TYPE	DETAILS:
ST-CB-502	FDOT TYPE 6	RIM = 108.80 INV IN = 104.30 INV OUT = 104.30
ST-CB-503	FDOT TYPE 6	RIM = 108.55 INV IN = 103.70 INV OUT = 103.70
ST-CB-504	FDOT TYPE 6	RIM = 106.00 INV OUT = 101.40
ST-CB-505	FDOT TYPE H	RIM = 104.06 INV IN = 98.91 INV OUT = 97.90
ST-CB-506	FDOT TYPE 6	RIM = 107.73 INV OUT = 101.99
ST-CB-507	FDOT TYPE 6	RIM = 105.84 INV OUT = 101.95
ST-CB-508	FDOT TYPE H - DOUBLE INLET	RIM = 104.05 INV IN = 99.77 INV OUT = 99.20
ST-CB-509	FDOT TYPE H - DOUBLE INLET	RIM = 104.05 INV IN = 98.30 INV OUT = 98.30
ST-CB-510	FDOT TYPE H - DOUBLE INLET	RIM = 104.15 INV IN = 97.73 INV IN = 97.20 INV OUT = 97.20
ST-CB-511	FDOT TYPE 6	RIM = 104.17 INV IN = 96.72 INV OUT = 96.72

STRUCTURE TABLE		
STRUCTURE NAME:	STRUCTURE TYPE	DETAILS:
ST-CB-512	FDOT TYPE 6	RIM = 106.73 INV OUT = 100.50
ST-CB-601	FDOT TYPE 6	RIM = 108.55 INV OUT = 104.37
ST-CB-602	FDOT TYPE 6	RIM = 108.55 INV IN = 103.77 INV OUT = 103.77
ST-CB-603	FDOT TYPE 6	RIM = 108.55 INV IN = 103.17 INV OUT = 103.17
ST-CB-604	FDOT TYPE 6	RIM = 107.88 INV IN = 99.50 INV OUT = 96.99
ST-DBI-01	FDOT TYPE H	RIM = 76.45 INV IN = 71.50
ST-DBI-101	FDOT TYPE H	RIM = 92.50 INV IN = 87.16
ST-DBI-201	FDOT TYPE H	RIM = 92.50 INV IN = 86.71
ST-DBI-401	FDOT TYPE H	RIM = 93.35 INV IN = 90.90
ST-MES-02	18IN MITERED END SECTION	RIM = 95.59 INV IN = 94.15

STRUCTURE TABLE		
STRUCTURE NAME:	STRUCTURE TYPE	DETAILS:
ST-MES-301	36 IN MITERED END SECTION	RIM = 96.75 INV IN = 95.00
ST-MES-501	48 IN MITERED END SECTION	RIM = 108.83 INV IN = 95.00
ST-MES-601	24 IN MITERED END SECTION	RIM = 97.25 INV IN = 95.00
ST-MH-01	FDOT TYPE P/J	RIM = 101.13 INV IN = 84.58 INV OUT = 84.58
ST-MH-02	FDOT TYPE P/J	RIM = 93.07 INV IN = 83.46 INV OUT = 83.46
ST-MH-03	FDOT TYPE P/J	RIM = 89.90 INV IN = 82.27 INV OUT = 82.27
ST-MH-04	FDOT TYPE P/J	RIM = 82.40 INV IN = 77.43 INV OUT = 72.75
ST-MH-101	FDOT TYPE P/J	RIM = 97.30 INV IN = 88.94 INV OUT = 88.94
ST-MH-102	FDOT TYPE P/J	RIM = 97.00 INV IN = 87.27 INV OUT = 87.27
ST-MH-201	FDOT TYPE P/J	RIM = 99.68 INV IN = 90.33 INV OUT = 90.33

STRUCTURE TABLE		
STRUCTURE NAME:	STRUCTURE TYPE	DETAILS:
ST-MH-501	FDOT TYPE P/J	RIM = 107.83 INV IN = 103.45 INV IN = 101.23 INV OUT = 101.13
ST-MH-503	FDOT TYPE P/J	RIM = 105.77 INV IN = 101.37 INV IN = 101.37 INV IN = 101.37 INV OUT = 101.37
ST-MH-504	FDOT TYPE P/J	RIM = 104.16 INV IN = 96.31 INV IN = 100.40 INV OUT = 96.21
ST-NYLOPLAST-01	NYLOPLAST STRUCTURE	RIM = 106.99 INV IN = 101.45 INV IN = 101.45 INV OUT = 101.45



SCALE: 1" = 100'

Revisions		
Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/31/2024	LIGHTING PLAN REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/26/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
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Joseph J Yannucci

Signature Date

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

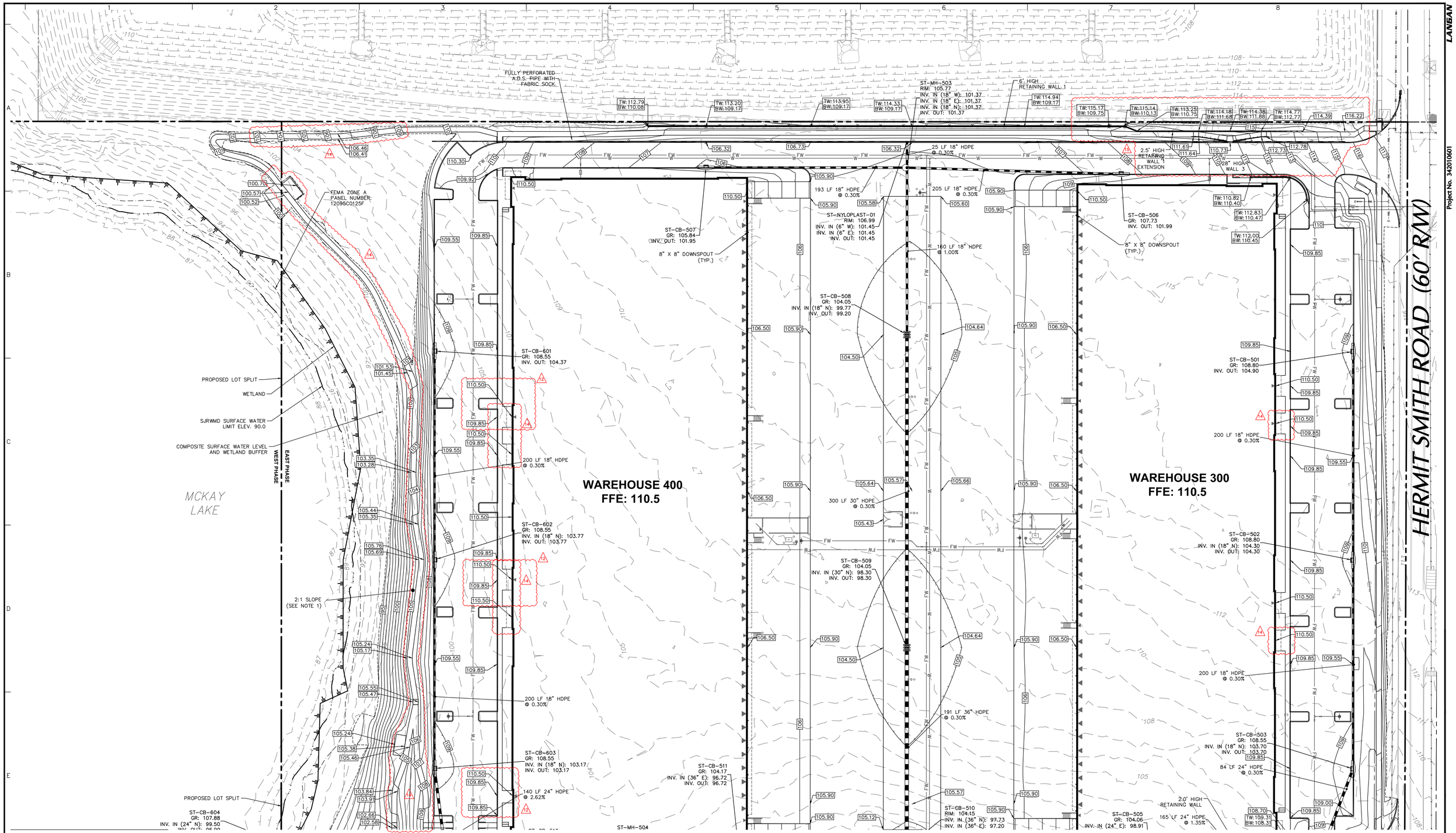
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OVERALL GRADING AND DRAINAGE PLAN

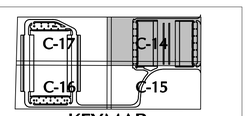
Project No. **342010601**
Date **29 APRIL 2022**
Drawn By **CRB**
Checked By **JJY**

Drawing No. **C-13**

LANGAN
Project No. 342010601

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KEYMAP
SCALE: 1" = 1000'

NOTES:

1. CONTRACTOR TO COORDINATE WITH GEOTECHNICAL ENGINEER REGARDING EMBANKMENT SLOPE STABILIZATION.

SCALE: 1" = 40'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 300 FFE REVISIONS	12
05/21/2024	CITY SUBMITTAL	11
04/26/2024	REVISED PER CITY DRC CSP REVISION COMMENTS	10
04/25/2024	REVISED TO ADD LOT SPLIT & RECORD LIFT STATION	9
02/08/2024	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2023	BID ADDENDUM #1	7
10/24/2023	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
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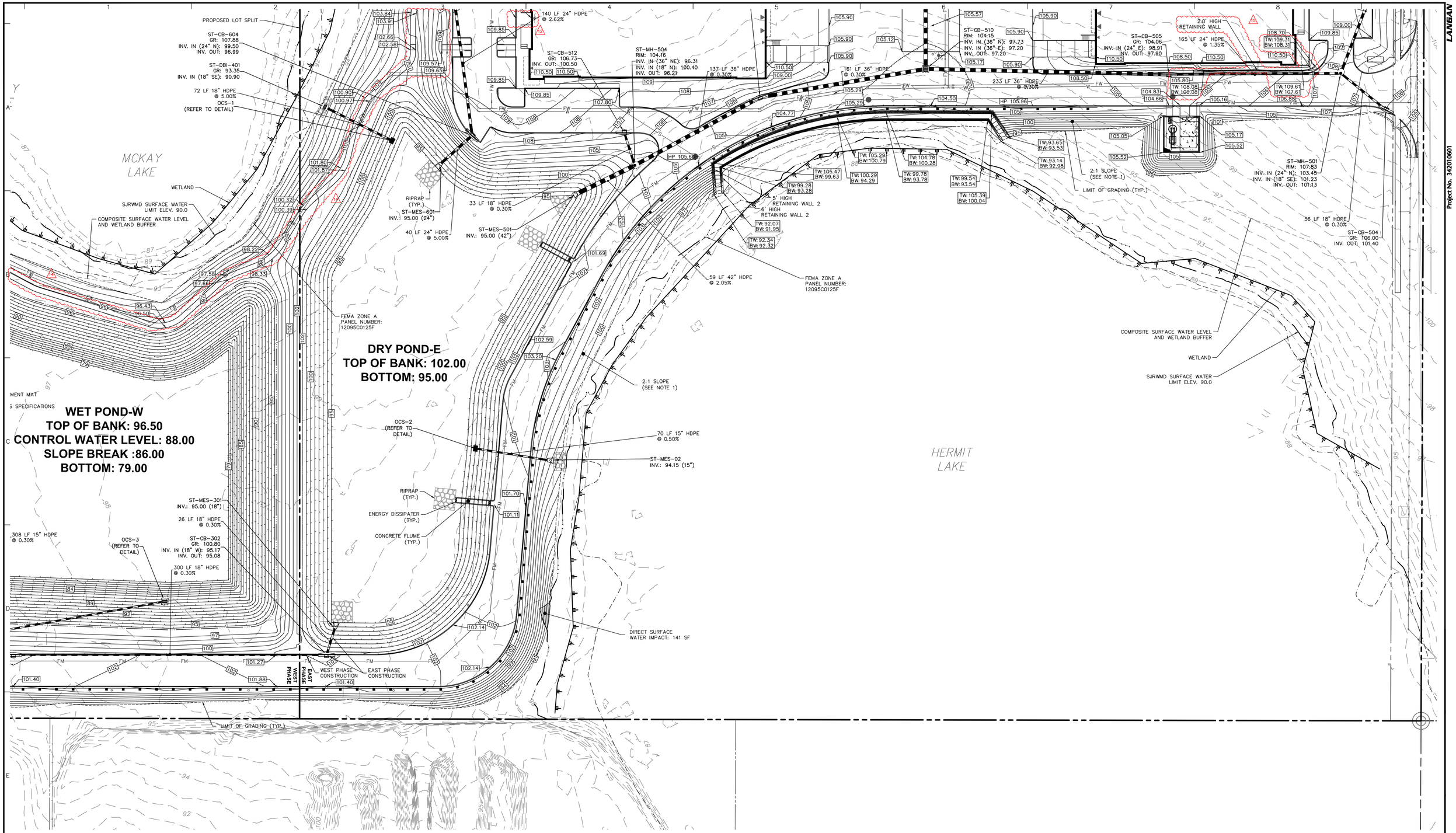
Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
PARTIAL GRADING AND DRAINAGE PLAN

Project No. 342010601
Date 27 JUNE 2024
Drawn By CRB
Checked By JJY

Drawing No. C-14

LANGAN
Project No. 342010601
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KEYMAP
SCALE: 1" = 1000'

NOTES:

1. CONTRACTOR TO COORDINATE WITH GEOTECHNICAL ENGINEER REGARDING EMBANKMENT SLOPE STABILIZATION.

SCALE: 1" = 40'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 AND 400 FUTURE DOOR LOCATIONS	14
07/25/2024	AMENITY & ASST. MANAGER	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
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Project
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CITY OF APOPKA
ORANGE COUNTY FLORIDA

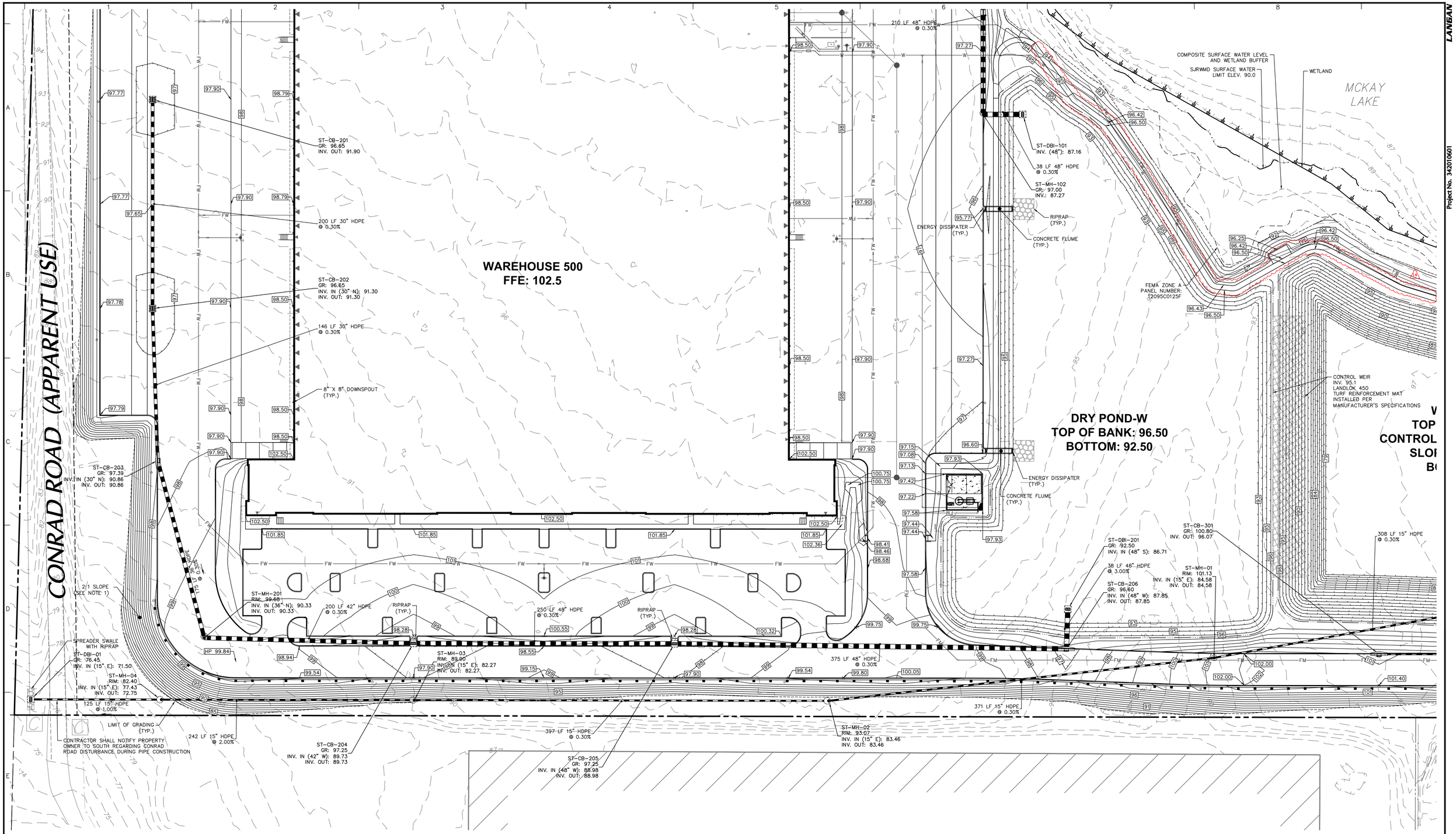
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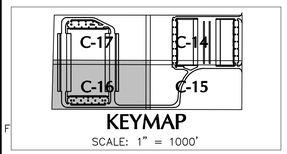
Project No. 342010601
Date 27 JUNE 2024
Drawn By CRB
Checked By JJY

Drawing No. C-15

LANGAN
Project No. 342010601

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KEYMAP
SCALE: 1" = 1000'

NOTES:

1. CONTRACTOR TO COORDINATE WITH GEOTECHNICAL ENGINEER REGARDING EMBANKMENT SLOPE STABILIZATION.

SCALE: 1" = 40'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS	14
	PLANNING PATH REVISION	
07/31/2024	WAREHOUSE 400' DOOR REVISIONS	13
02/02/2024	WAREHOUSE 400' DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

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Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
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13485 Veterans Way, Suite 120
Orlando, FL 32827

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

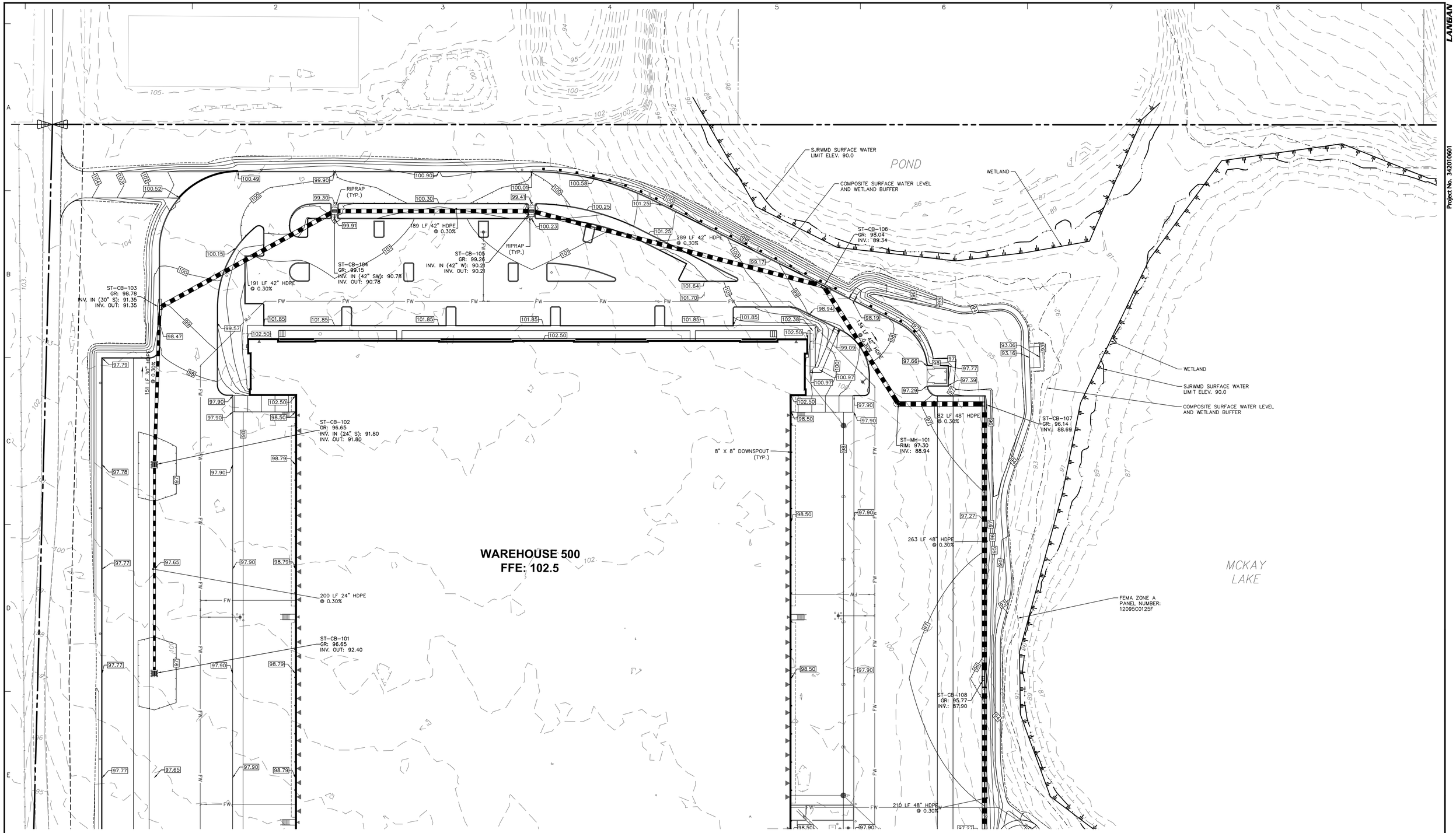
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PARTIAL GRADING AND DRAINAGE PLAN

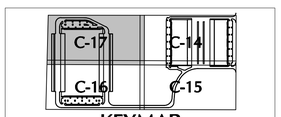
Project No. 342010601
Date 27 JUNE 2024
Drawn By CRB
Checked By JJY

Drawing No. C-16

LANGAN
Project No. 342010601
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Date: 11/21/2024 Time: 09:51 User: brlahore Style Table: Langan.stb Layout: C-16 Document Code: 342010601-0301-CG101-0102





KEYMAP
SCALE: 1" = 1000'

NOTES:

1. CONTRACTOR TO COORDINATE WITH GEOTECHNICAL ENGINEER REGARDING EMBANKMENT SLOPE STABILIZATION.

40 0 10 25 40
SCALE: 1" = 40'

Revisions		
Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & JIMMEY VALLEY REVISION	14
07/31/2024	WAREHOUSE 400 DOOR REVISIONS	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	ORDER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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JOSEPH J. YANNUCCI LICENSE No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
PARTIAL GRADING AND DRAINAGE PLAN

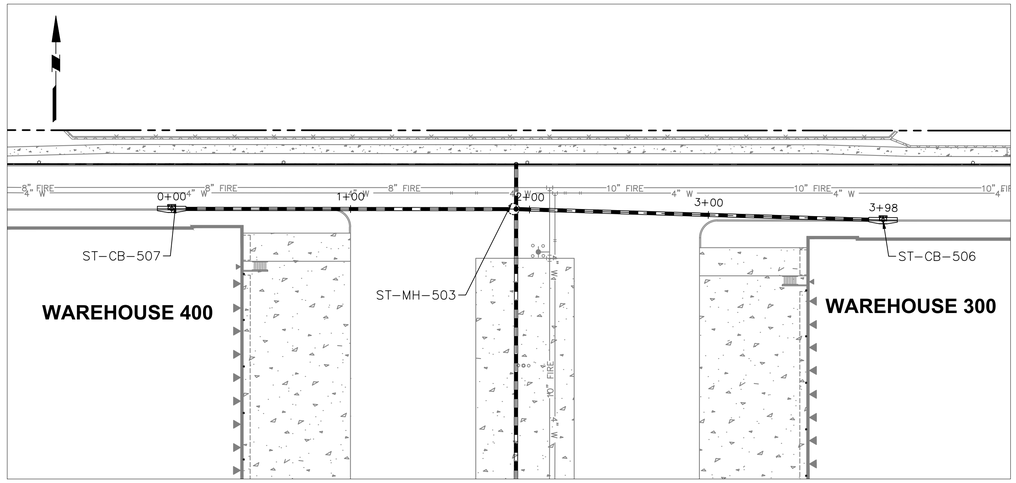
Project No. 342010601
Date 27 JUNE 2024
Drawn By JMW
Checked By JJY

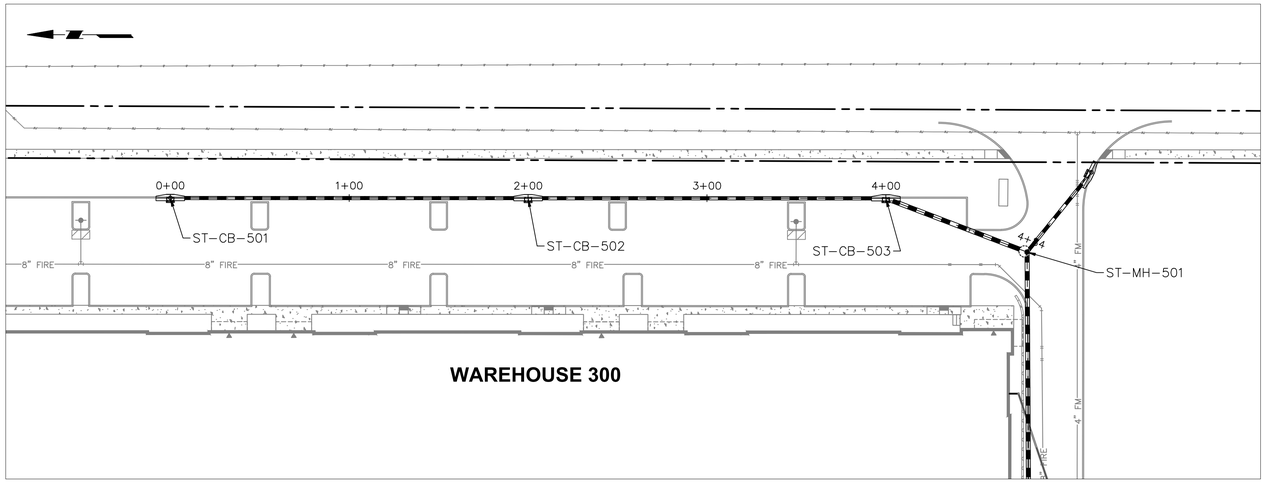
Drawing No. C-17

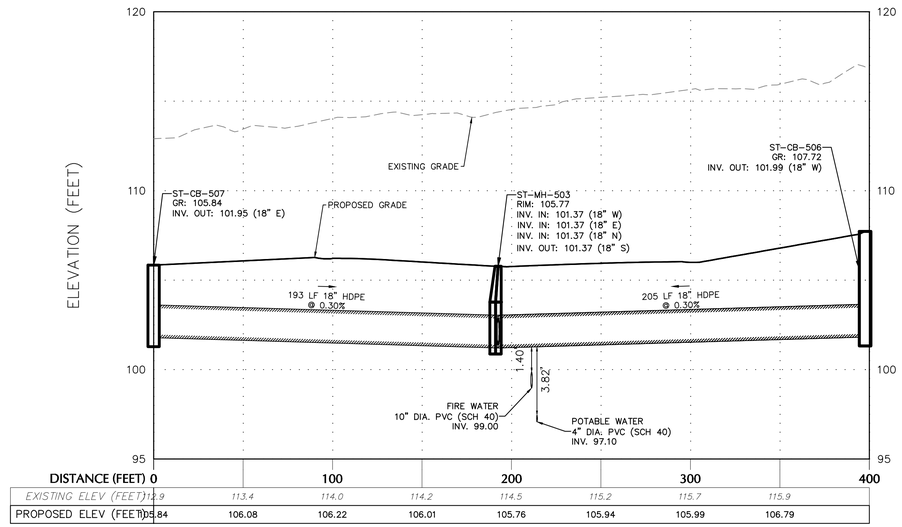
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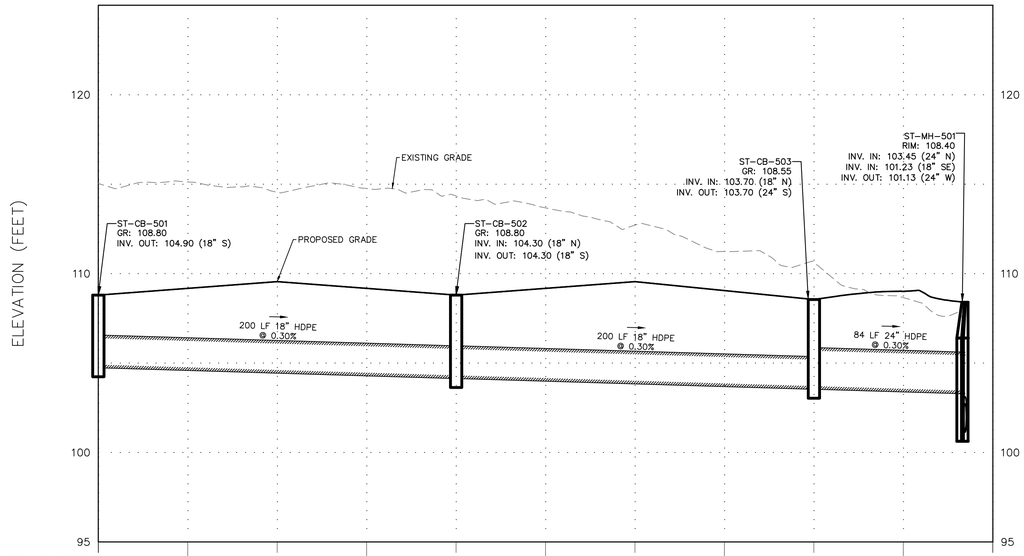






EXISTING ELEV (FEET)	112.9	113.4	114.0	114.2	114.5	115.2	115.7	115.9
PROPOSED ELEV (FEET)	105.84	106.08	106.22	106.01	105.76	105.94	105.99	106.79

ST-CB-508 TO ST-CB-507 PROFILE



EXISTING ELEV (FEET)	115.0	115.1	114.6	114.8	114.3	113.7	112.7	111.2	110.6	108.7
PROPOSED ELEV (FEET)	108.80	109.17	109.55	109.17	108.80	109.17	109.55	109.05	108.55	109.01

ST-CB-501 TO ST-MH-501 PROFILE

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/31/2024	CANOPY LAYOUT REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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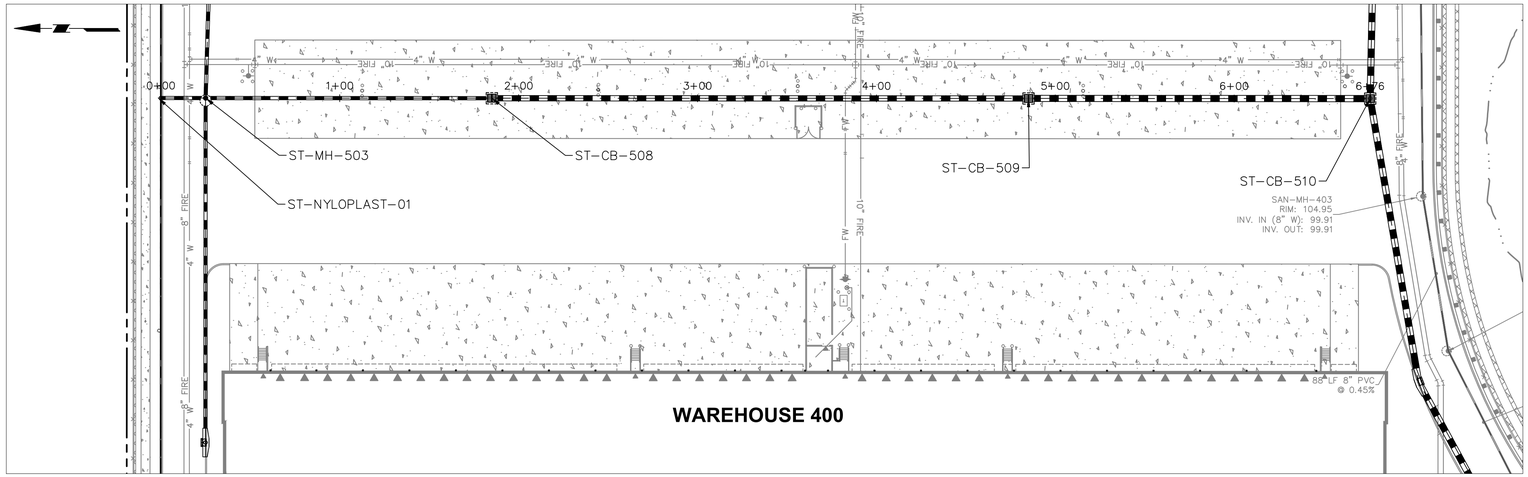
Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

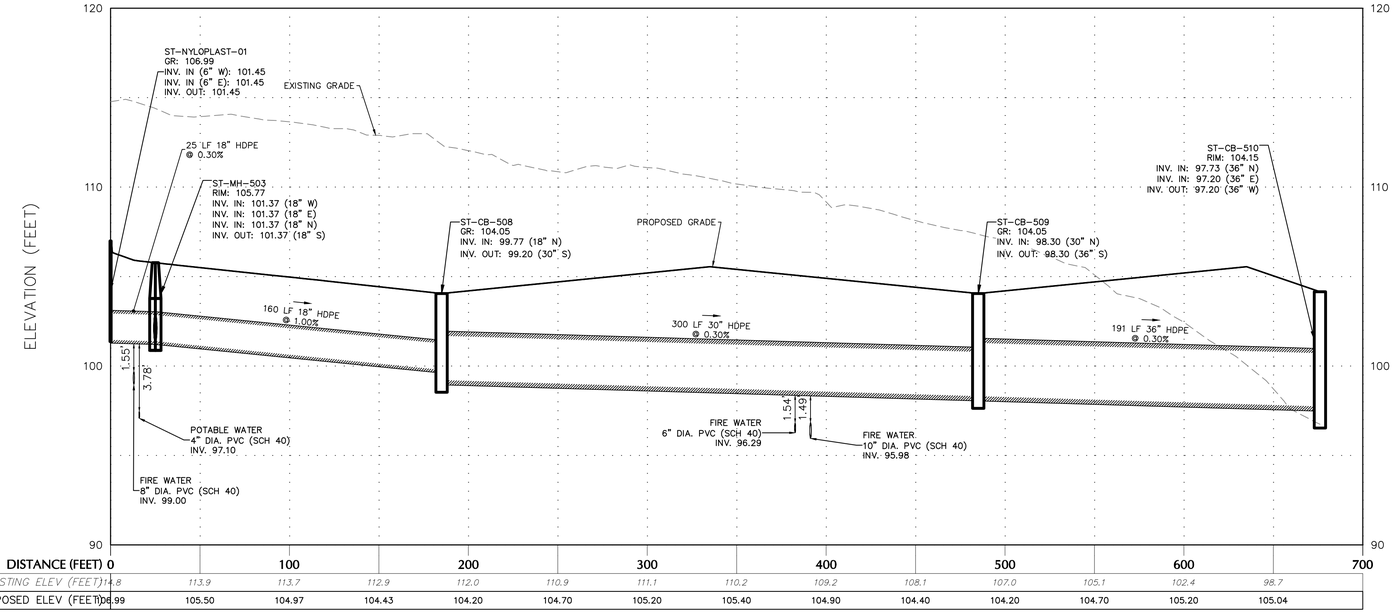
Drawing Title
STORMWATER PROFILES

Project No. 342010601
Date 1 SEPTEMBER 2022
Drawn By BML
Checked By JJY

Drawing No. C-17A

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Project No. 342010601
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DISTANCE (FEET)	0	100	200	300	400	500	600	700
EXISTING ELEV (FEET)	114.8	113.9	113.7	112.9	112.0	110.9	111.1	110.2	109.2	108.1	107.0	105.1	102.4	98.7
PROPOSED ELEV (FEET)	106.99	105.50	104.97	104.43	104.20	104.70	105.20	105.40	104.90	104.40	104.20	104.70	105.20	105.04

ST-NYLOPLAST-01 TO ST-CB-513 PROFILE

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/19/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/31/2024	N. AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
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07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Joseph J Yannucci

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

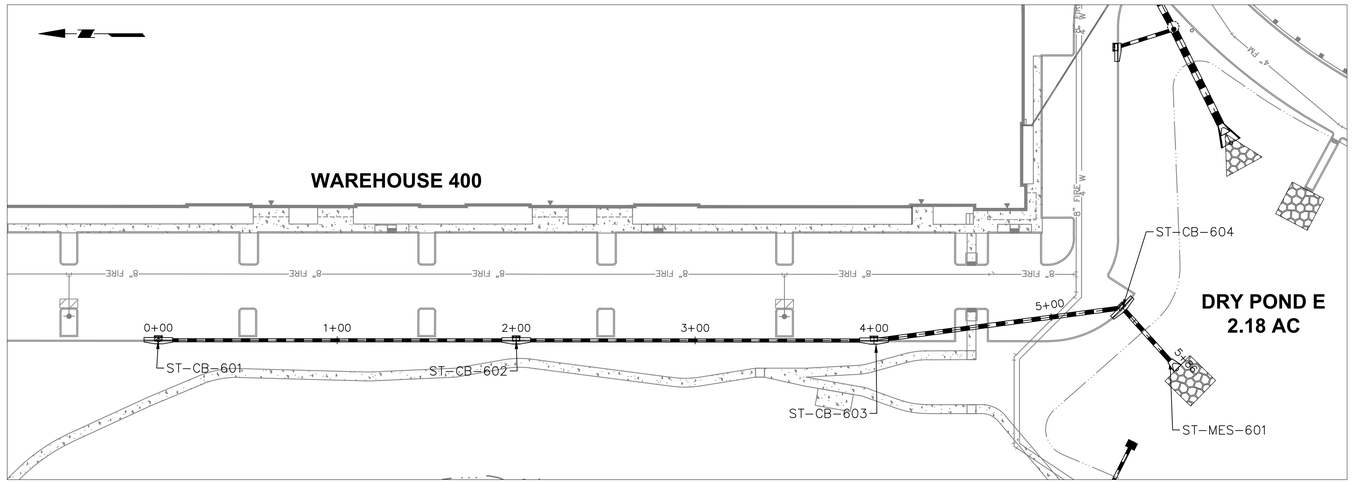
Drawing Title
STORMWATER PROFILES

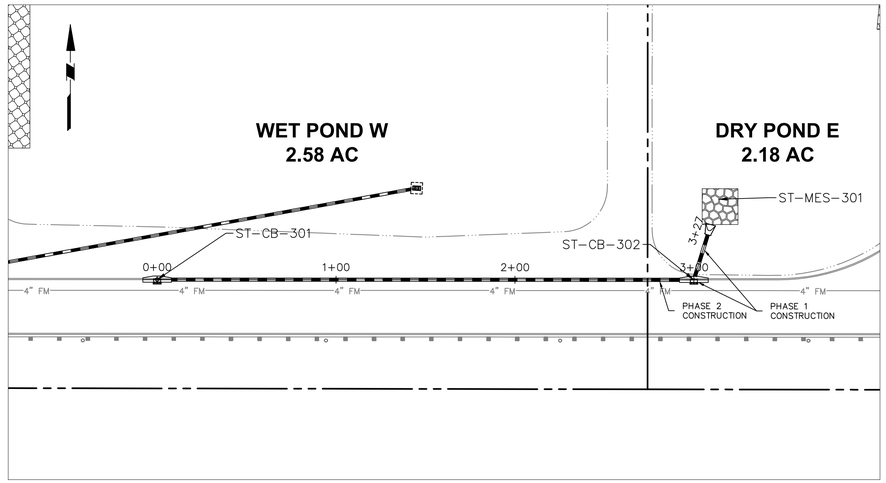
Project No. 342010601
Date 1 SEPTEMBER 2022
Drawn By BML
Checked By JJY

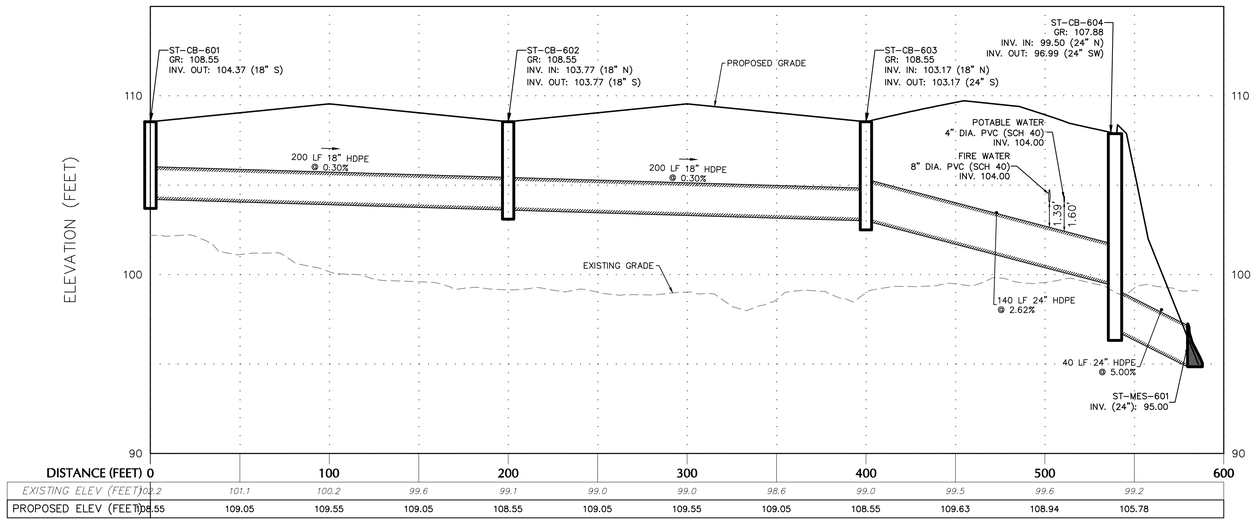
Drawing No. C-17B

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Project No. 342010601

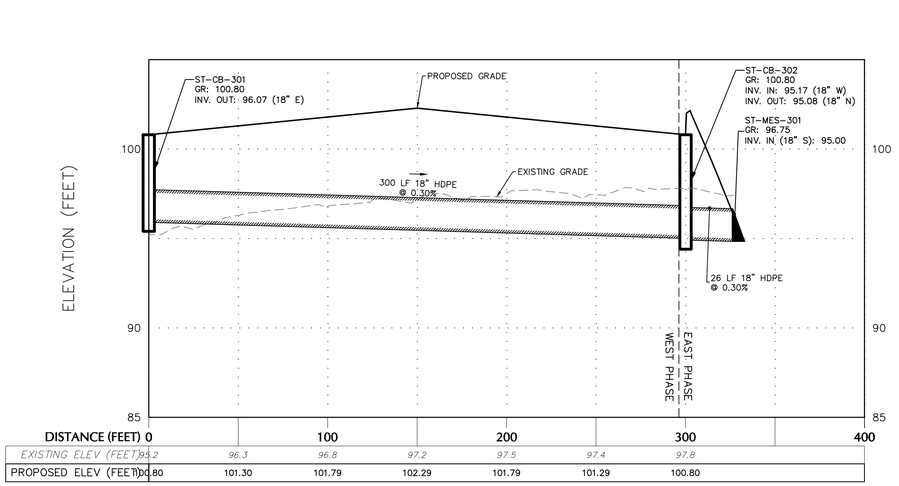
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ST-CB-601 TO ST-MES-601 PROFILE



ST-CB-301 TO ST-DBI-301 PROFILE

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

No.	Description	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	09/18/2024
13	AMENITY PATH TO SR 436	07/31/2024
12	WAREHOUSE 400 ADDITIONS	06/07/2024
11	OWNER'S CHANGES	05/02/2024
10	REVISED PER CITY DRC CSP REVISION COMMENTS	09/28/2023
9	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	08/21/2023
8	REVISED PER PROJECT TEAM COMMENTS	02/09/2023
7	BID ADDENDUM #2	11/06/2022
6	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	10/24/2022
5	REVISED PER SJRWMD COMMENTS	10/11/2022
4	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	09/09/2022
3	REVISED PER CITY DRC COMMENTS	07/28/2022
2	BID ADDENDUM #1	07/15/2022
1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

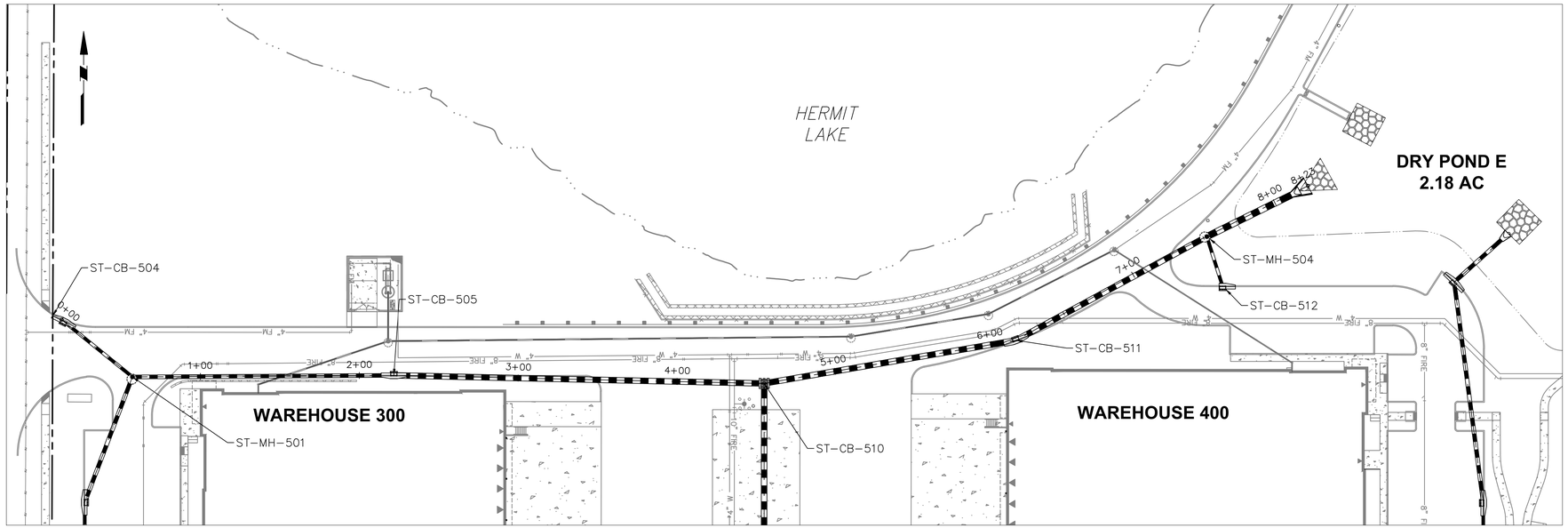
Drawing Title
STORMWATER PROFILES

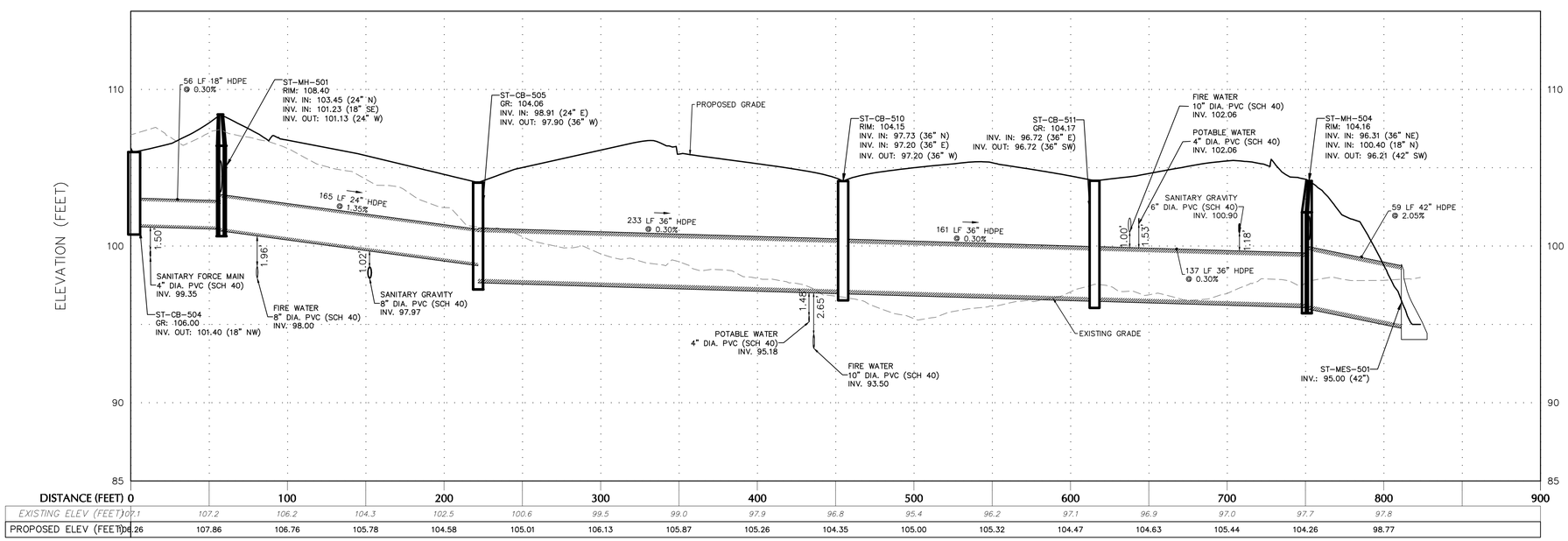
Project No. 342010601
Date 1 SEPTEMBER 2022
Drawn By BML
Checked By JJY

Drawing No. C-17C

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ST-CB-504 TO ST-MES-501 PROFILE

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/31/2024	N. AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/26/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
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Joseph J Yannucci

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY **FLORIDA**

Drawing Title
STORMWATER PROFILES

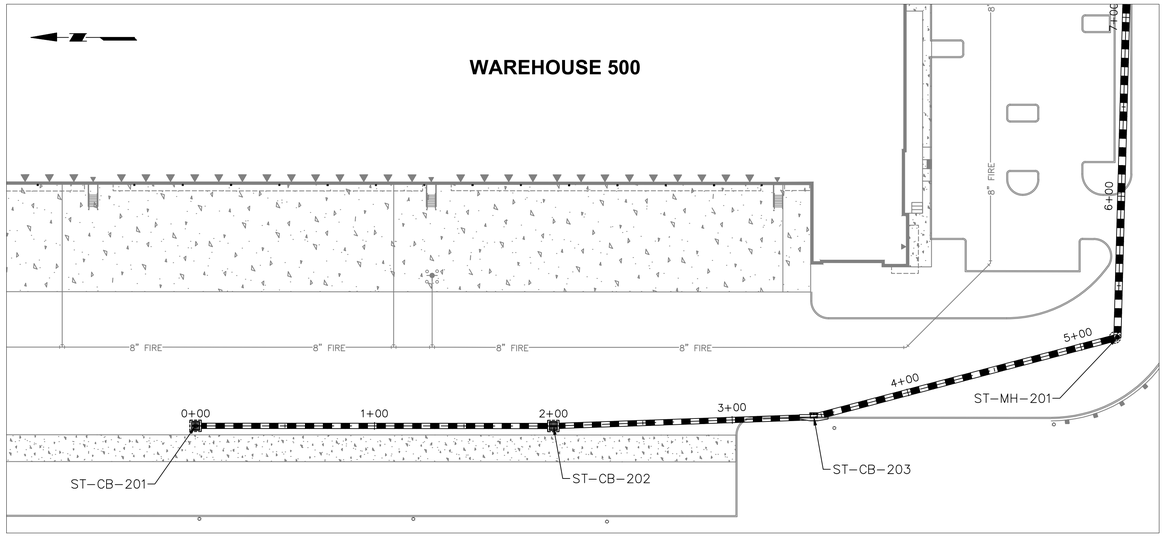
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Date **1 SEPTEMBER 2022**
Drawn By **BML**
Checked By **JJY**

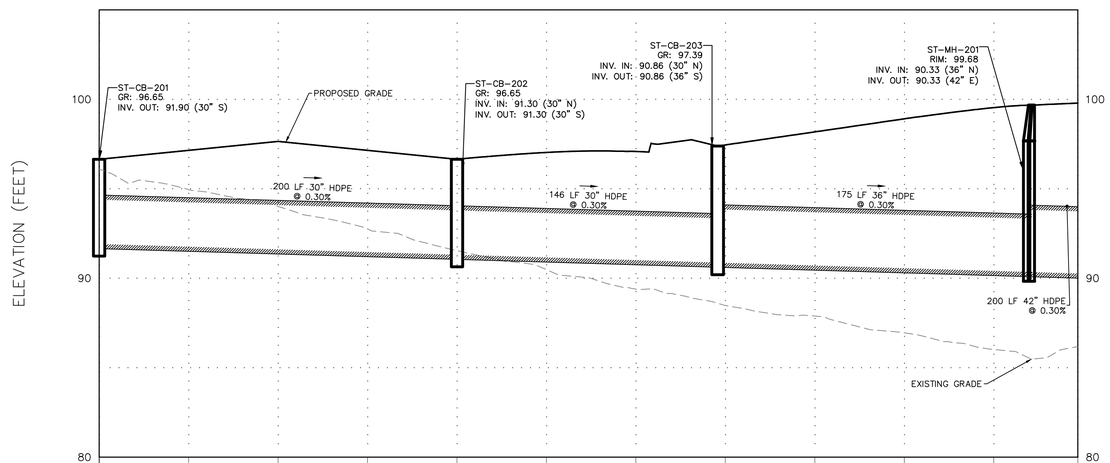
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Project No. 342010601

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Date: 11/21/2024 Time: 09:52 User: brlahore Style Table: Langan.stb Layout: C-17D Document Code: 342010601-0301-CG201-0104





DISTANCE (FEET)	0	100	200	300	400	500	547
EXISTING ELEV (FEET)	*95.1*	*95.0*	*94.0*	*92.8*	*91.5*	*90.5*	*89.4*	*88.5*	*87.9*	*86.9*	*86.0*	*86.2*
PROPOSED ELEV (FEET)	96.65	97.15	97.65	97.15	96.65	97.03	97.08	97.45	98.18	98.91	99.54	99.79

ST-CB-201 TO ST-MH-201 PROFILE

H: 40 V: 4 — 0 0 — 20 2 — 40 4

SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS ADDED PER CLIENT REVISION	14
07/25/2024	AMENITY POOL REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
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10/11/2022	REVISED PER SJRWMD COMMENTS	5
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CITY OF APOPKA
ORANGE COUNTY FLORIDA

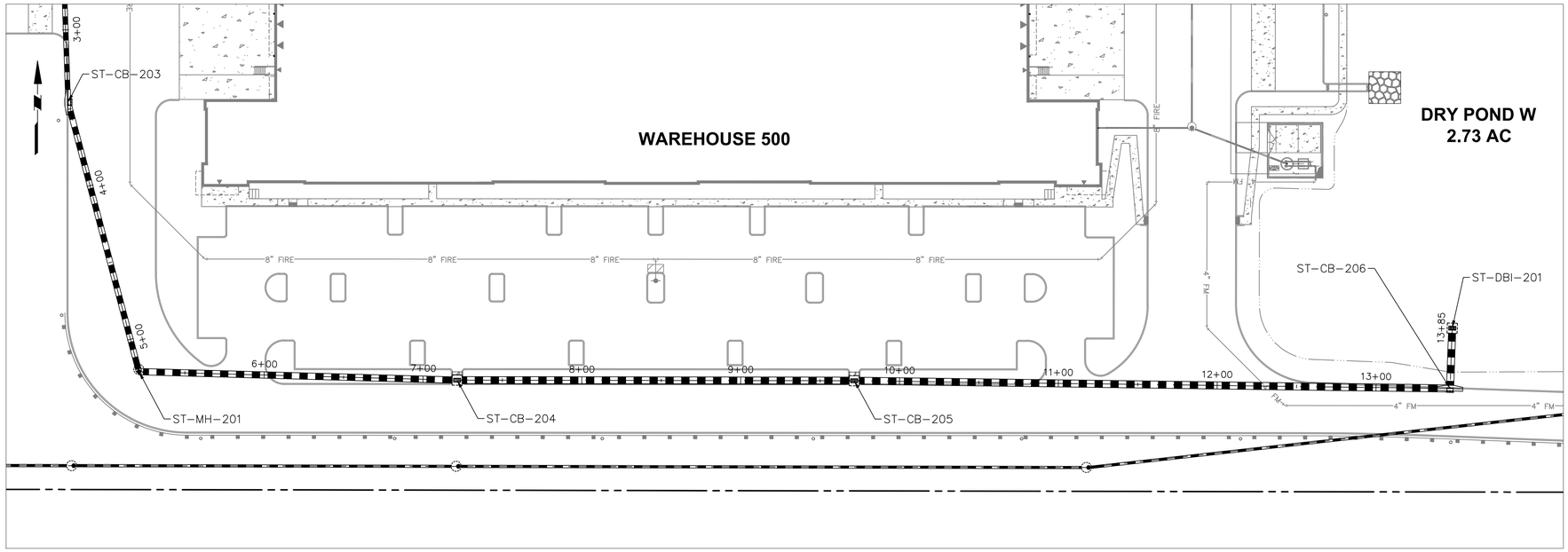
Drawing Title
STORMWATER PROFILES

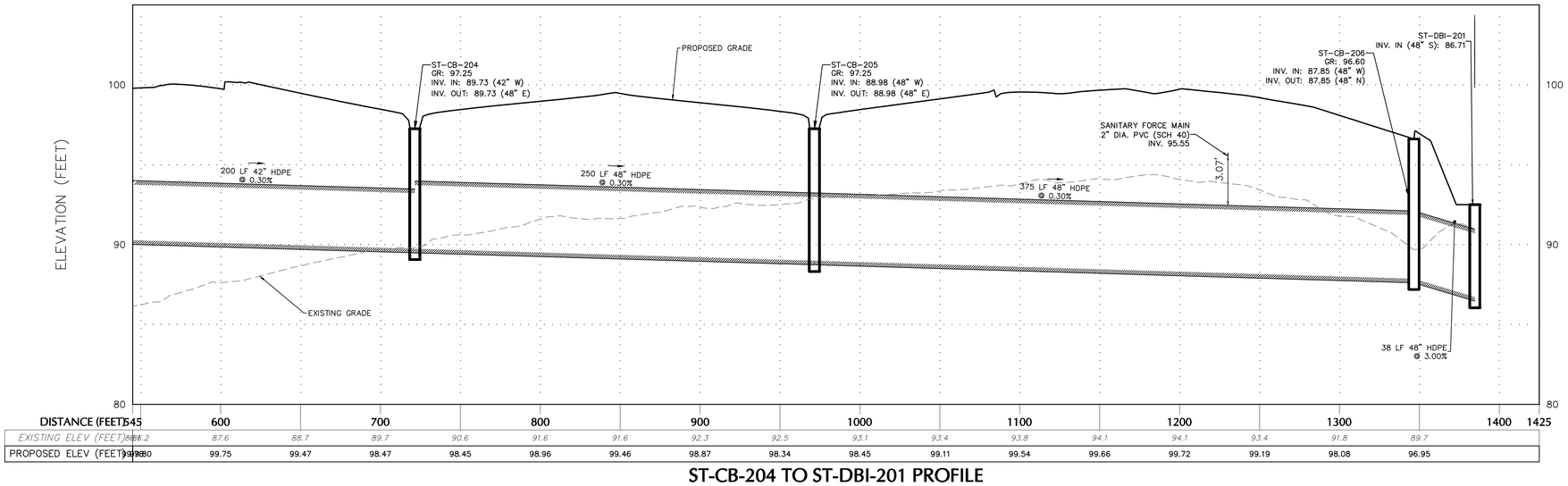
Project No. 342010601
Date 1 SEPTEMBER 2022
Drawn By BML
Checked By JJY

Drawing No. C-17E

LANGAN
Project No. 342010601

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DISTANCE (FEET)	545	600	700	800	900	1000	1100	1200	1300	1400	1425
EXISTING ELEV (FEET)	*86.2*	*87.6*	*88.7*	*89.7*	*90.6*	*91.6*	*91.6*	*92.3*	*92.5*	*93.1*	*93.4*	*93.8*	*94.1*	*94.1*	*93.4*	*91.8*	*89.7*
PROPOSED ELEV (FEET)	99.80	99.75	99.47	98.47	98.45	98.96	99.46	98.87	98.34	98.45	99.11	99.54	99.66	99.72	99.19	98.08	96.95

ST-CB-204 TO ST-DBI-201 PROFILE

H: 40 V: 4 — 0 0 — 20 2 — 40 4

SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/23/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
05/08/2024	CITY COMMENTS PROVIDED	11
04/15/2024	REVISED PER CITY DRC SUBMISSION COMMENTS	10
09/25/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #4	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

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JOSEPH J. YANNUCCI, JR. LICENSED No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED

PROFESSIONAL ENGINEER FL Lic. No. 65969

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FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

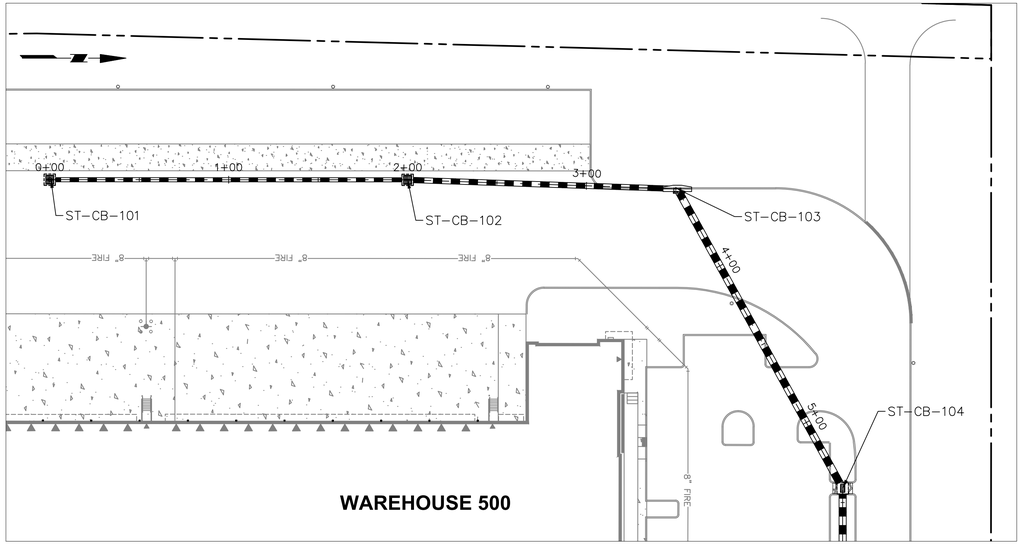
Drawing Title
STORMWATER PROFILES

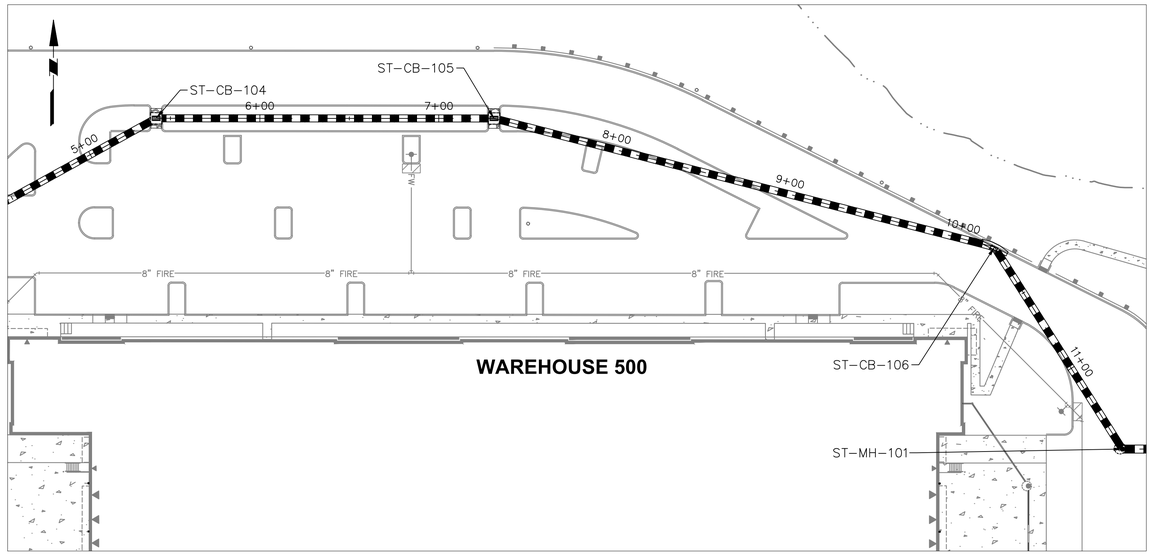
Project No. 342010601
Date 1 SEPTEMBER 2022
Drawn By BML
Checked By JJY

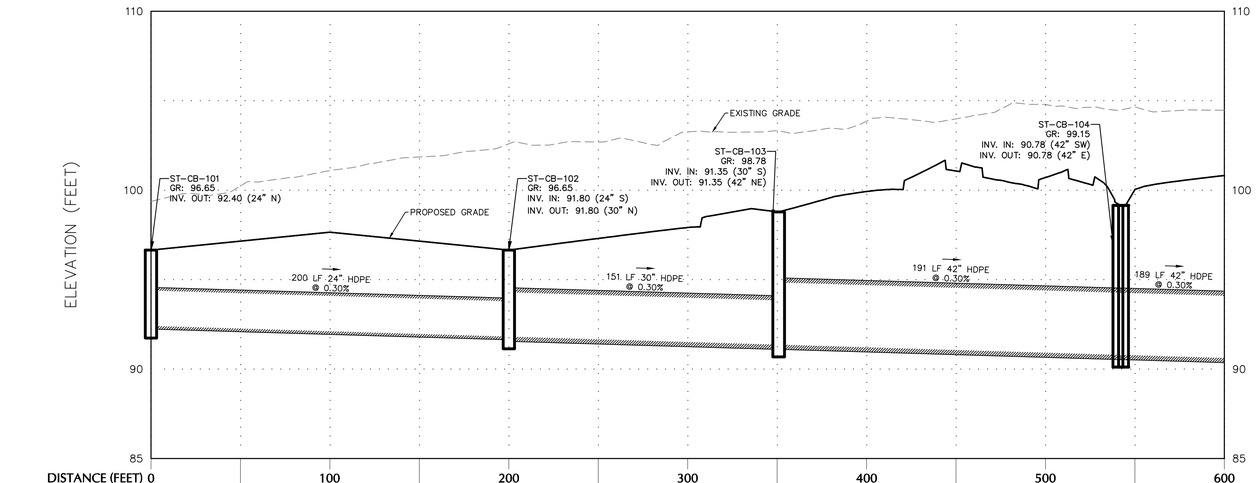
Drawing No. C-17F

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Project No. 342010601

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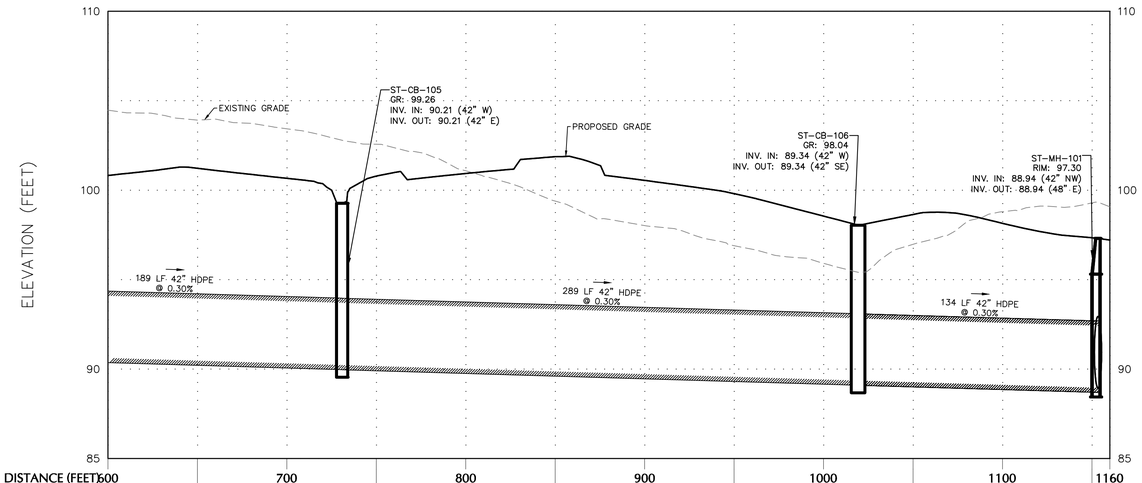






DISTANCE (FEET)	0	100	200	300	400	500	600
EXISTING ELEV (FEET)	*99.4*	*100.2*	*101.1*	*101.9*	*102.6*	*102.7*	*103.3*	*103.3*	*103.9*	*104.0*	*104.8*	*104.6*	*104.5*
PROPOSED ELEV (FEET)	96.65	97.15	97.65	97.15	96.65	97.30	97.91	98.79	99.92	101.07	100.71	100.03	100.82

ST-CB-101 TO ST-CB-104 PROFILE



DISTANCE (FEET)	600	700	800	900	1000	1100	1160
EXISTING ELEV (FEET)	*104.5*	*103.9*	*103.4*	*102.6*	*101.1*	*99.4*	*98.0*	*96.9*	*95.9*	*97.0*	*98.8*	*99.3*	*99.1*
PROPOSED ELEV (FEET)	100.82	101.22	100.66	100.78	100.93	101.87	100.55	99.80	98.55	98.64	98.15	97.30	97.21

ST-CB-105 TO ST-MH-101 PROFILE

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/25/2024	AMENITY POOL REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/09/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER PROJECT TEAM COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Joseph J Yannucci

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
STORMWATER PROFILES

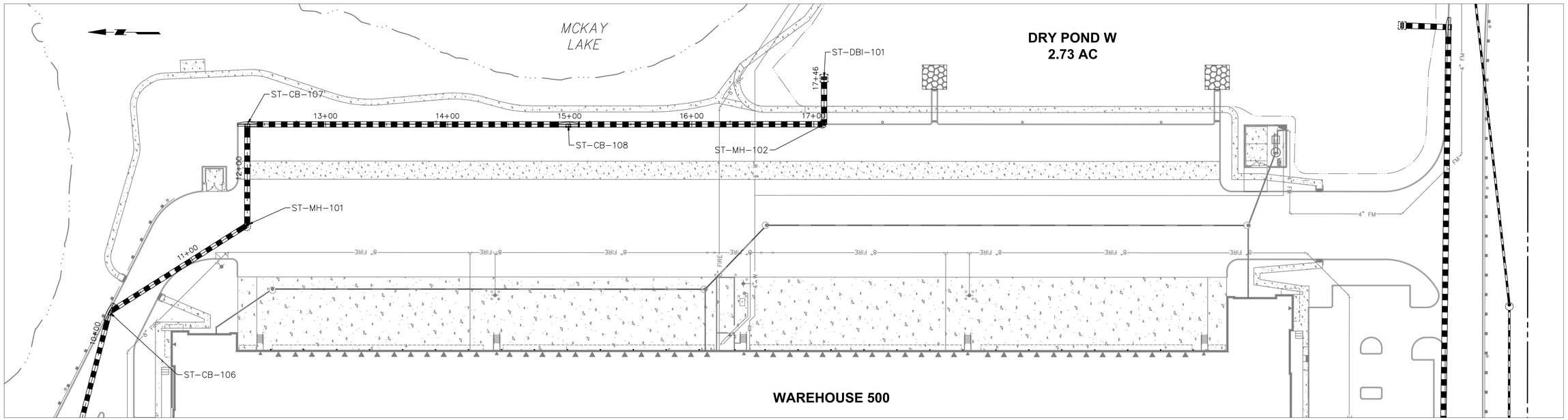
Project No. 342010601
Date 1 SEPTEMBER 2022
Drawn By BML
Checked By JJY

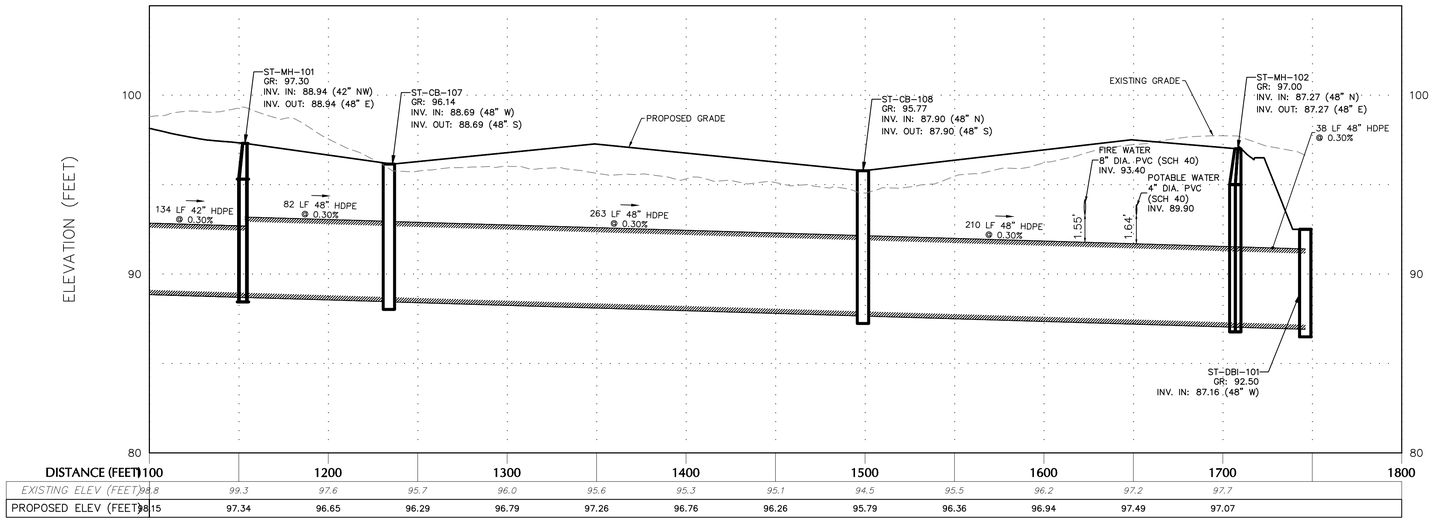
Drawing No. C-17G

LANGAN
Project No. 342010601

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Date: 11/21/2024 Time: 09:53 User: brlahore Style Table: Langan.stb Layout: C-17G Document Code: 342010601-0301-CG201-0104





DISTANCE (FEET)	1100	1200	1300	1400	1500	1600	1700	1800
EXISTING ELEV (FEET)	*98.8*	*99.3*	*97.6*	*95.7*	*96.0*	*95.6*	*95.3*	*95.1*	*94.5*	*95.5*	*96.2*	*97.2*	*97.7*
PROPOSED ELEV (FEET)	98.15	97.34	96.65	96.29	96.79	97.26	96.76	96.26	95.79	96.36	96.94	97.49	97.07

ST-MH-101 TO ST-DBI-101 PROFILE

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS	14
07/31/2024	CONSTRUCTION FIELD REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
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07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Project
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CITY OF APOPKA
ORANGE COUNTY FLORIDA

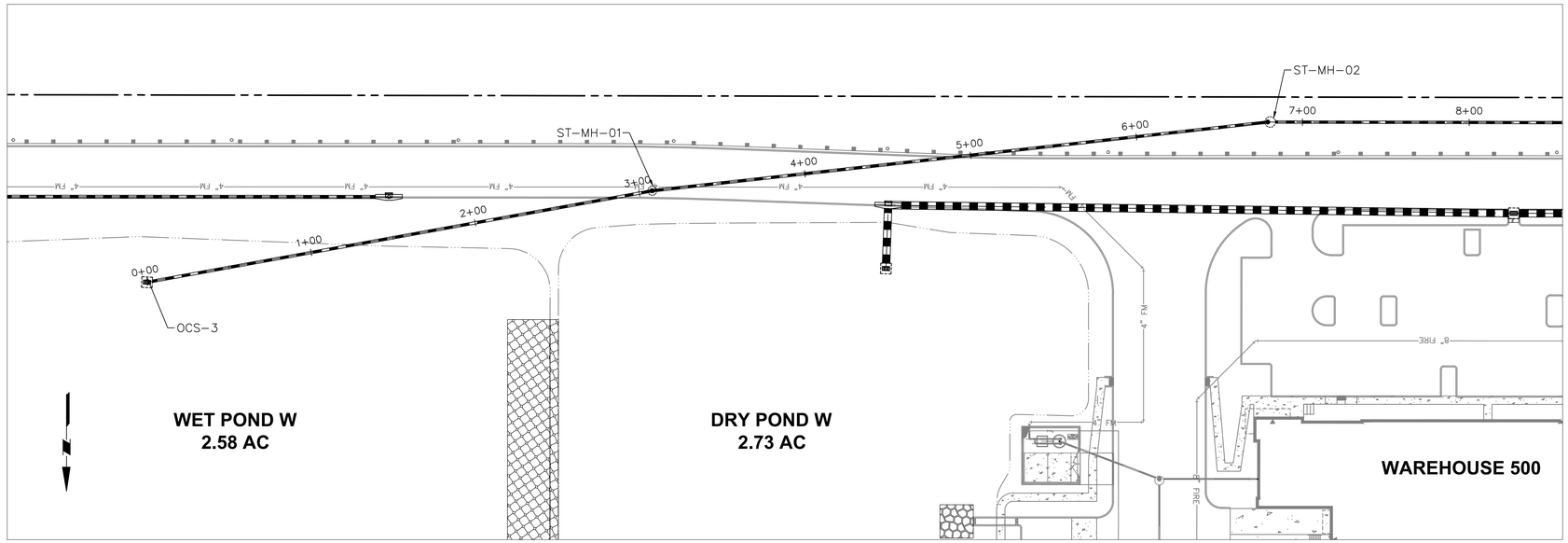
Drawing Title
STORMWATER PROFILES

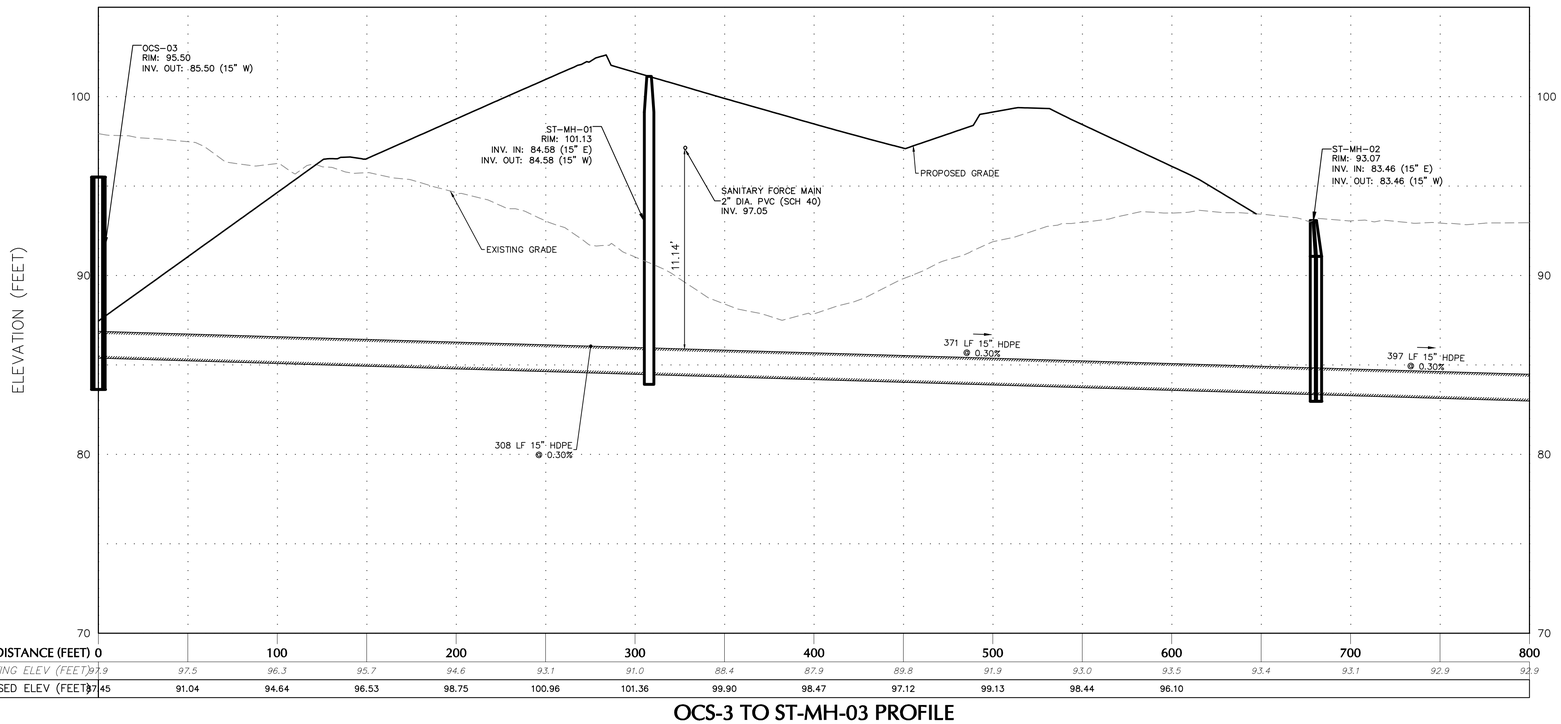
Project No. 342010601
Date 1 SEPTEMBER 2022
Drawn By BML
Checked By JJY

Drawing No. C-17H

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Project No. 342010601

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DISTANCE (FEET)	0	100	200	300	400	500	600	700	800
EXISTING ELEV (FEET)	*97.9*	*97.5*	*96.3*	*95.7*	*94.6*	*93.1*	*91.0*	*88.4*	*87.9*	*89.8*	*91.9*	*93.0*	*93.5*	*93.4*	*93.1*	*92.9*	*92.9*
PROPOSED ELEV (FEET)	97.45	91.04	94.64	96.53	98.75	100.96	101.36	99.90	98.47	97.12	99.13	98.44	96.10				

OCS-3 TO ST-MH-03 PROFILE

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/19/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

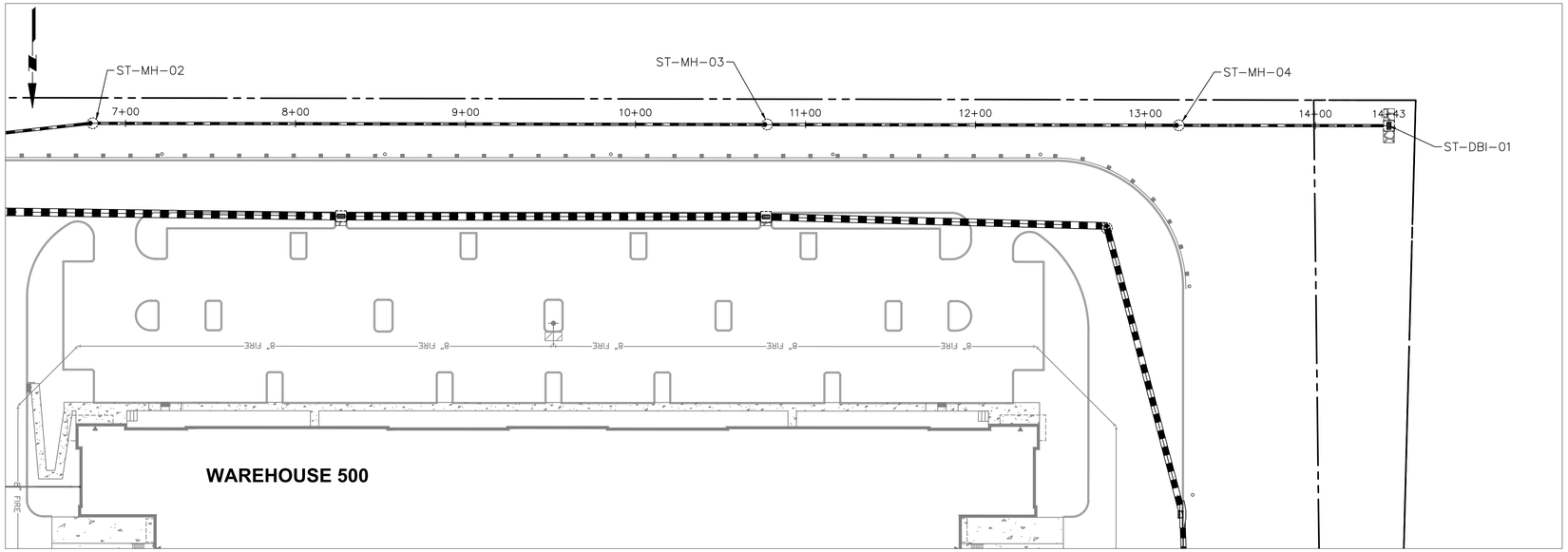
Drawing Title
STORMWATER PROFILES

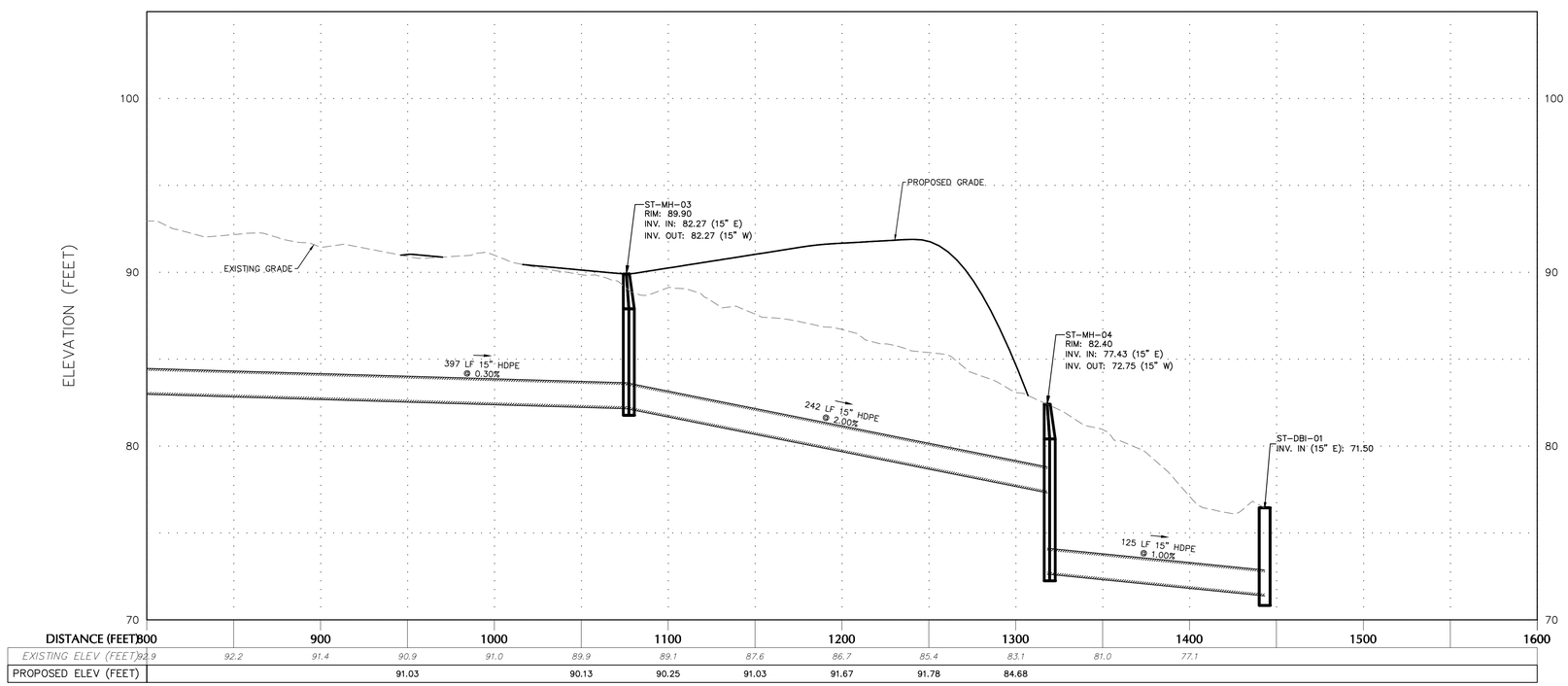
Project No. 342010601
Date 1 SEPTEMBER 2022
Drawn By BML
Checked By JJY

Drawing No. C-17I

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Project No. 342010601

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DISTANCE (FEET)	800	900	1000	1100	1200	1300	1400	1500	1600
EXISTING ELEV (FEET)	*92.9*	*92.2*	*91.4*	*90.9*	*91.0*	*89.9*	*89.1*	*87.6*	*86.7*	*85.4*	*83.1*	*81.0*	*77.1*
PROPOSED ELEV. (FEET)			91.03		90.13	90.25	91.03	91.67	91.78	84.68			

ST-MH-04 TO ST-DBI-01 PROFILE

H: 40 V: 4 — 0 0 — 20 2 — 40 4

SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS PLANNING LEVEL REVISION	14
07/31/2024	WAREHOUSE 400 DOOR REVISIONS	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	ORDER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Project: APOPKA BUSINESS CENTER

CITY OF APOPKA

ORANGE COUNTY FLORIDA

Drawing Title: STORMWATER PROFILES

Project No. 342010601

Date 1 SEPTEMBER 2022

Drawn By BML

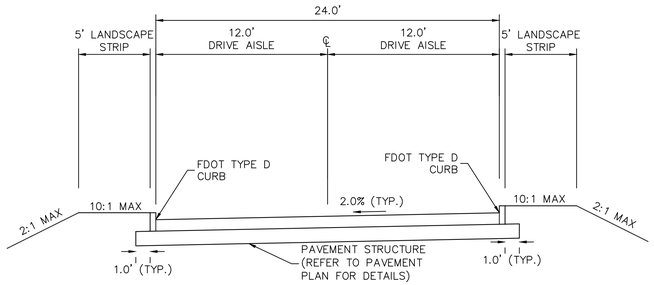
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Drawing No. C-17J

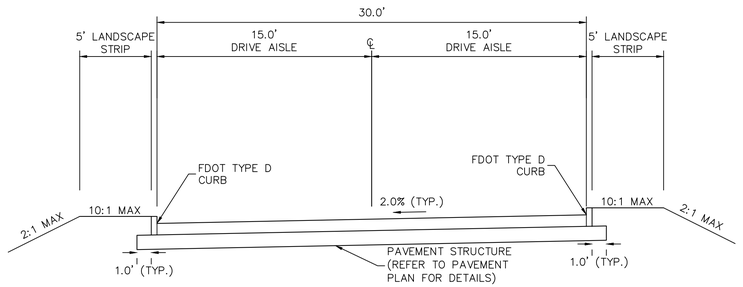
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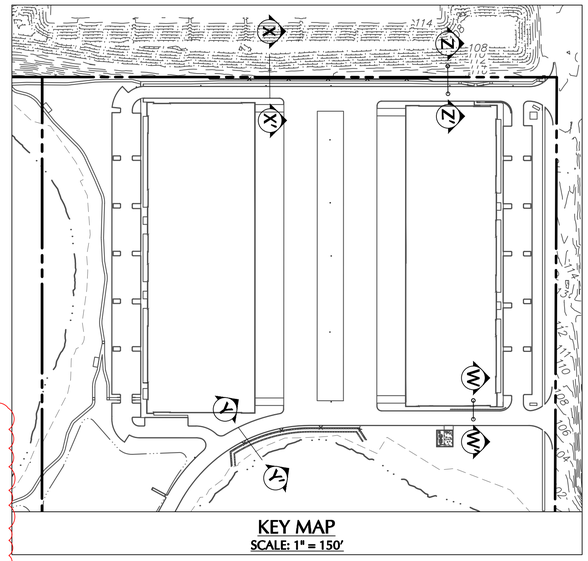
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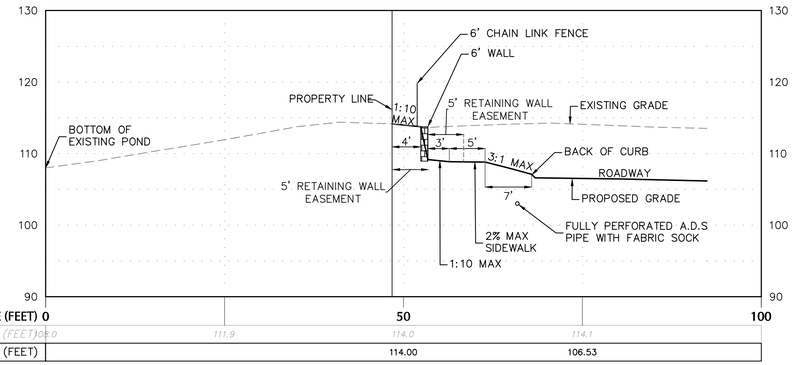
TYPICAL PRIVATE ROADWAY SECTION
24 FT WIDTH
N.T.S



TYPICAL PRIVATE ROADWAY SECTION
30 FT WIDTH
N.T.S

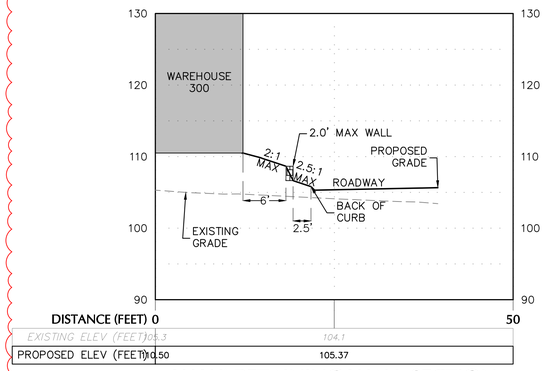


KEY MAP
SCALE: 1" = 150'



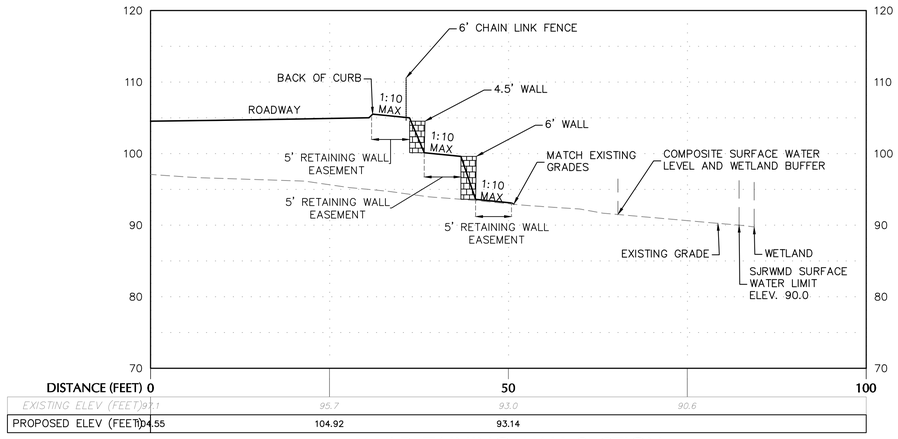
EXISTING ELEV (FEET)	108.0	111.9	114.0	114.1
PROPOSED ELEV (FEET)			114.00	106.53

X-X' RETAINING WALL SECTION
SCALE: 1" = 10'



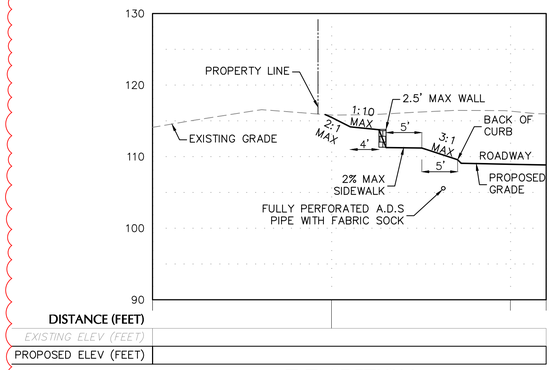
EXISTING ELEV (FEET)	105.3	104.1	
PROPOSED ELEV (FEET)	100.50	105.37	

W-W' RETAINING WALL SECTION
SCALE: 1" = 10'



EXISTING ELEV (FEET)	97.1	95.7	93.0	90.6
PROPOSED ELEV (FEET)	104.55	104.92	93.14	

Y-Y' RETAINING WALL SECTION
SCALE: 1" = 10'



EXISTING ELEV (FEET)	
PROPOSED ELEV (FEET)	

Z-Z' SECTION
SCALE: 1" = 10'

No.	Description	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS A- AMENITY PATH REVISION	09/18/2024
13	AMENITY & POOL REVISIONS	07/31/2024
12	WAREHOUSE 400 SQUARE FOOTAGE REVISIONS	03/22/2024
11	OWNER 'AS' CHANGES	02/02/2024
10	REVISED PER CITY DRC CSP REVISION COMMENTS	09/28/2023
9	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	06/21/2023
8	REVISED PER PROJECT TEAM COMMENTS	02/08/2023
7	BID ADDENDUM #2	11/06/2022
6	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	10/24/2022
5	REVISED PER SJRWMD COMMENTS	10/11/2022
4	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	09/09/2022
3	REVISED PER CITY DRC COMMENTS	07/28/2022
2	BID ADDENDUM #1	07/15/2022
1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022

Revisions

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Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

LANGAN
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13485 Veterans Way, Suite 120
Orlando, FL 32827
T: 407.974.2900 F: 407.974.2901 www.langan.com
FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY **FLORIDA**

Drawing Title
SECTIONS

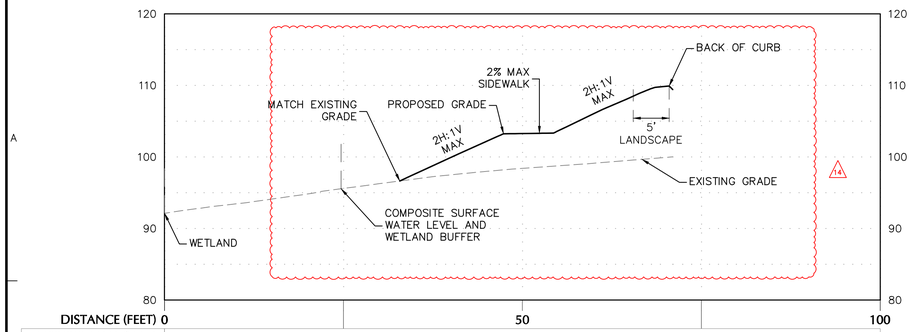
Project No. **342010601**
Date **29 APRIL 2022**
Drawn By **CRB**
Checked By **JJY**

Drawing No. **C-18**

LANGAN
Project No. 342010601

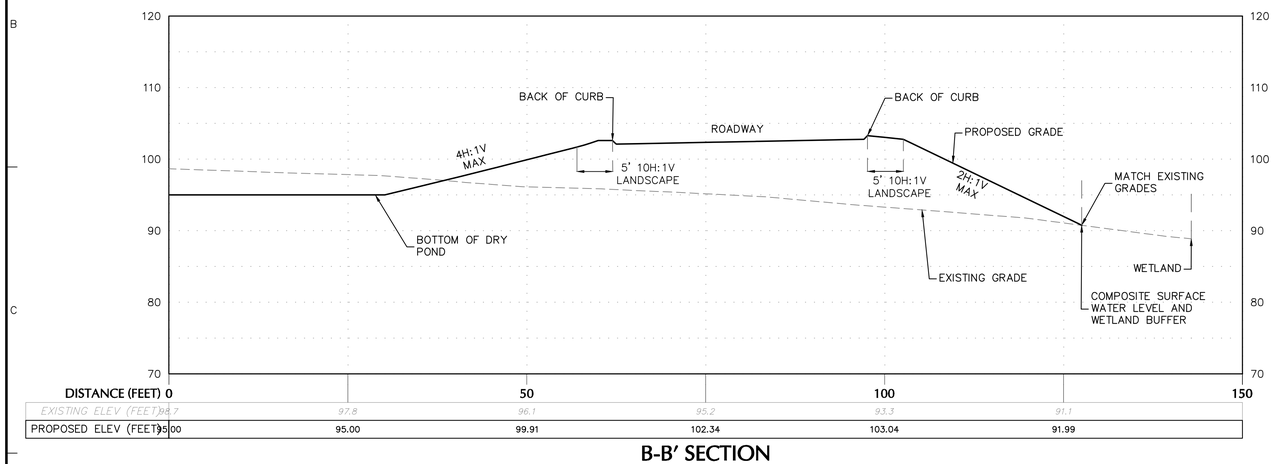
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Date: 11/21/2024 Time: 12:25 User: brlahore Style Table: Langan,stb Layout: C-18 Document Code: 342010601-0301-CG301-0101



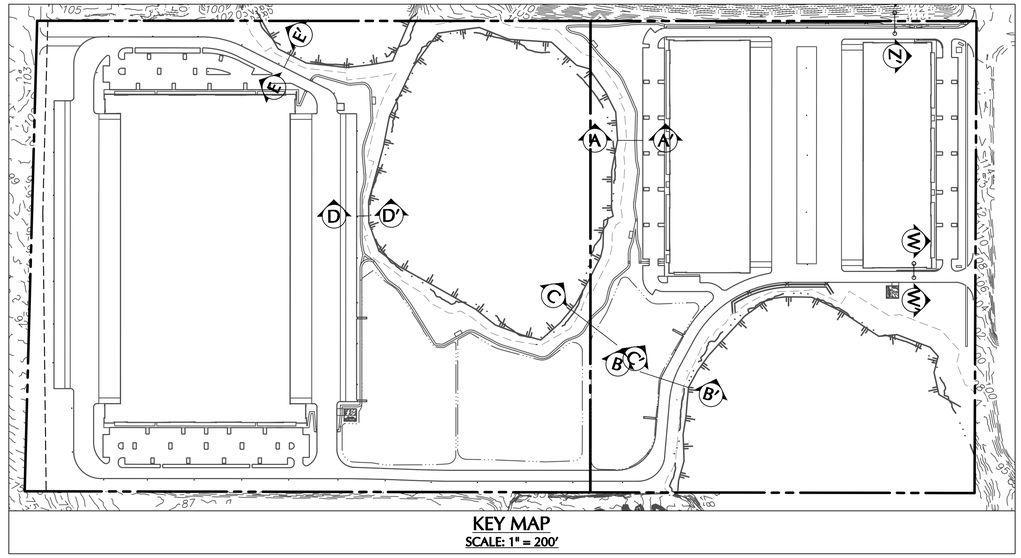
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EXISTING ELEV (FEET)	92.1	95.6	98.4		
PROPOSED ELEV (FEET)	101.77				

A-A' SECTION

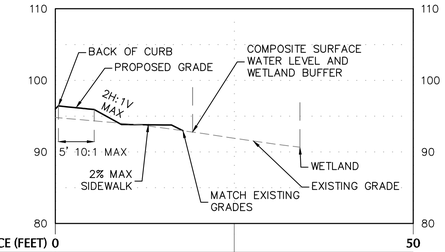


DISTANCE (FEET)	0		50		100		150
EXISTING ELEV (FEET)	98.7	97.8	96.1	95.2	93.3	91.1	
PROPOSED ELEV (FEET)	95.00	95.00	99.91	102.34	103.04	91.99	

B-B' SECTION

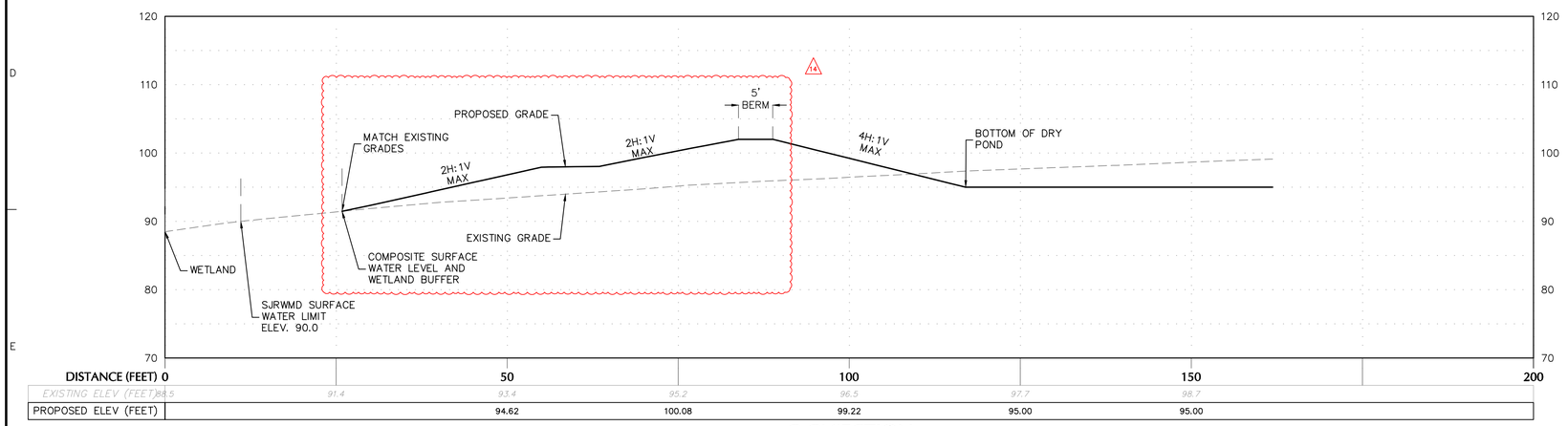


KEY MAP
SCALE: 1" = 200'



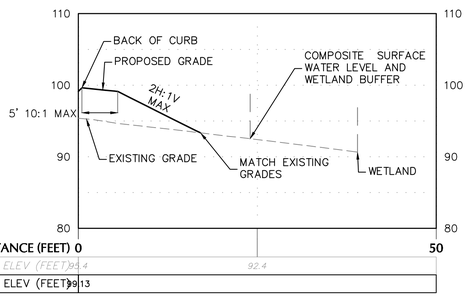
DISTANCE (FEET)	0		50
EXISTING ELEV (FEET)	94.8	91.9	
PROPOSED ELEV (FEET)	96.00		

D-D' SECTION



DISTANCE (FEET)	0		50		100		150		200
EXISTING ELEV (FEET)	94.5	91.4	93.4	95.2	96.5	97.7	98.7		
PROPOSED ELEV (FEET)		94.62	100.08	99.22	95.00	95.00			

C-C' SECTION



DISTANCE (FEET)	0		50
EXISTING ELEV (FEET)	93.4	92.4	
PROPOSED ELEV (FEET)	99.13		

E-E' SECTION

10 0 2 4 10
SCALE: 1" = 10'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/23/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
05/08/2024	WAREHOUSE EXPANSION	11
09/29/2023	REVISED PER CITY DRC SUBMISSION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #4	7
10/24/2022	REVISED PER CITY DRC CSD / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

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JOSEPH J. YANNUCCI, JR. No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

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Project
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CITY OF APOPKA
ORANGE COUNTY FLORIDA

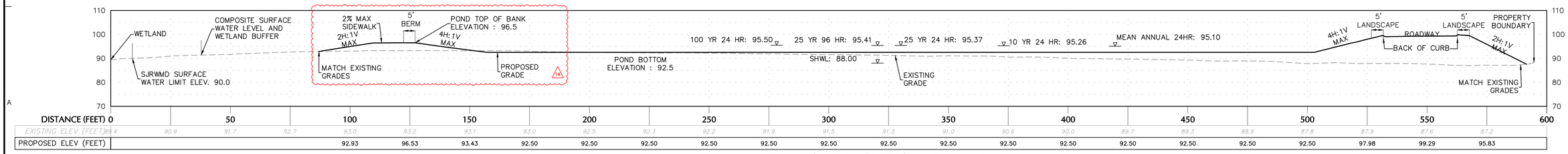
Drawing Title
SECTIONS

Project No. 342010601
Date 23 JUNE 2022
Drawn By LC
Checked By JJY

Drawing No. C-18A

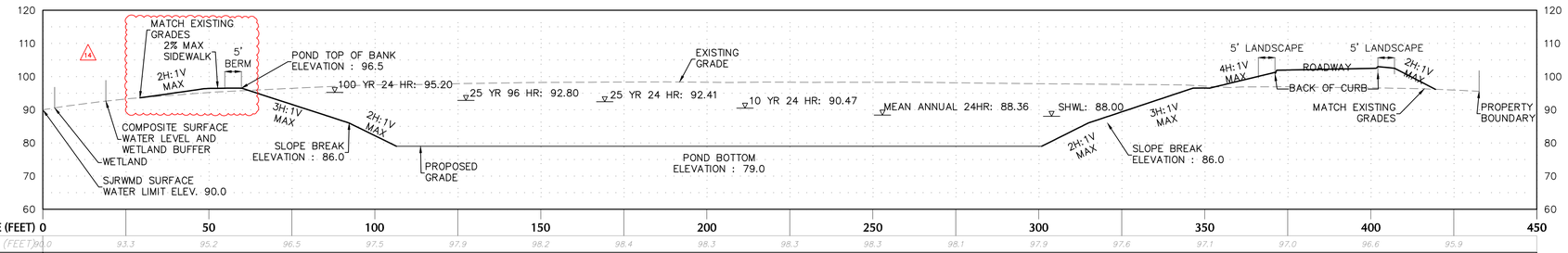
LANGAN
Project No. 342010601

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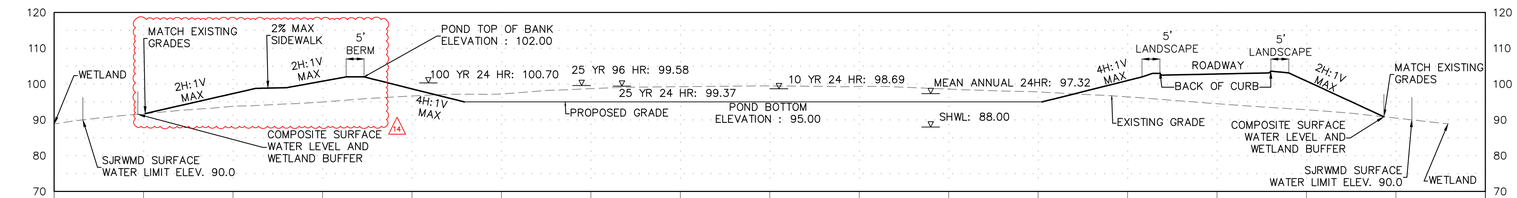
A-A' DRY POND W SECTION

SCALE: 1" = 20'



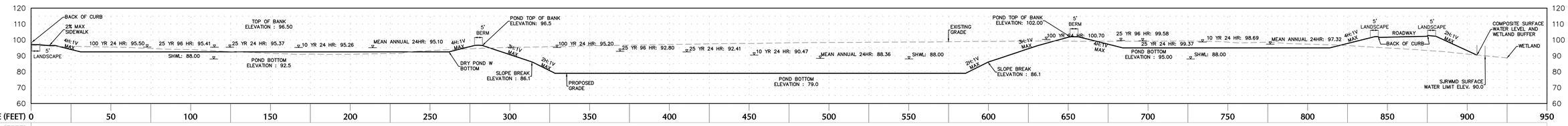
B-B' WET POND W SECTION

SCALE: 1" = 20'



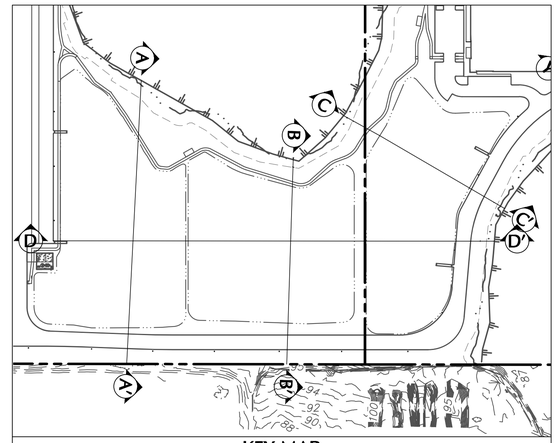
C-C' DRY POND E SECTION

SCALE: 1" = 20'



D-D' WET POND W SECTION

SCALE: 1" = 30'



KEY MAP

SCALE: 1" = 150'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS	14
07/31/2024	PERMIT PLAN REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER PROJECT TEAM COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

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JOSEPH J. YANNUCCI LICENSE No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

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CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
POND SECTIONS

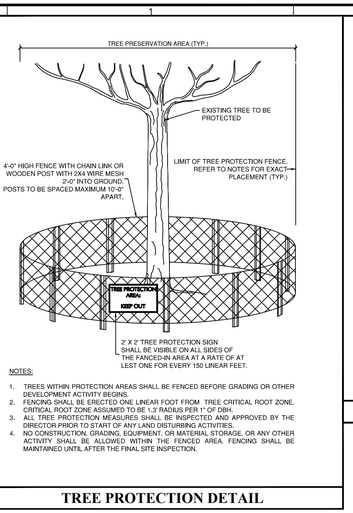
Project No. 342010601
Date 23 JUNE 2022
Drawn By LC
Checked By JJY

Drawing No. C-18B

LANGAN
Project No. 342010601

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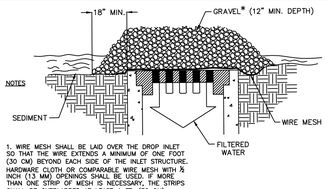
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NOTES:

1. TREES WITHIN PROTECTION AREAS SHALL BE FENCED BEFORE GRADING OR OTHER DEVELOPMENT ACTIVITY BEGINS.
2. FENCING SHALL BE ERECTED ONE LINEAR FOOT FROM TREE CRITICAL ROOT ZONE. CRITICAL ROOT ZONE ASSUMED TO BE 1.3' RADIUS PER 1" OF DBH.
3. ALL TREE PROTECTION MEASURES SHALL BE INSPECTED AND APPROVED BY THE DIRECTOR PRIOR TO START OF ANY LAND DISTURBING ACTIVITIES.
4. NO CONSTRUCTION, GRADING, EQUIPMENT, OR MATERIAL STORAGE, OR ANY OTHER ACTIVITY SHALL BE ALLOWED WITHIN THE FENCED AREA. FENCING SHALL BE MAINTAINED UNTIL AFTER THE FINAL SITE INSPECTION.

TREE PROTECTION DETAIL



NOTES

1. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF ONE FOOT (30 CM) BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH ½ INCH (13 MM) OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED AT LEAST 1 FT. (30 CM).

2. FOOT NO. 1 COARSE AGGREGATE (1.5" TO 3.5" STONE(4–9CM) SHALL BE PLACED OVER THE WIRE MESH AS SHOWN. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.

3. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.

4. THIS FILTERING DEVICE HAS NO OVERFLOW MECHANISM. THEREFORE, PONDING IS LIKELY ESPECIALLY IF SEDIMENT IS NOT REMOVED REGULARLY.

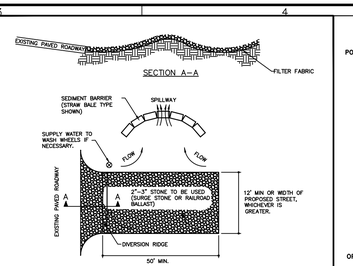
5. ALTERNATE STORM DRAIN INLET PROTECTION METHODS AS SHOWN IN THE FLORIDA EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL MAY BE USED, IF APPROVED BY THE GOVERNING AGENCIES AND THE ENGINEER OF RECORD.

SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

*– GRAVEL SHALL BE FDOT #3, #357 OR #5 COARSE AGGREGATE

INLET SEDIMENT FILTER



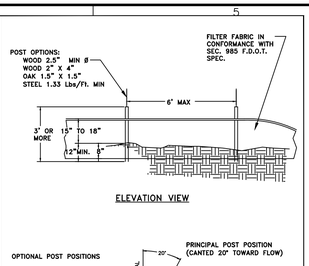
NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY.

3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABLIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

CONSTRUCTION ENTRANCE

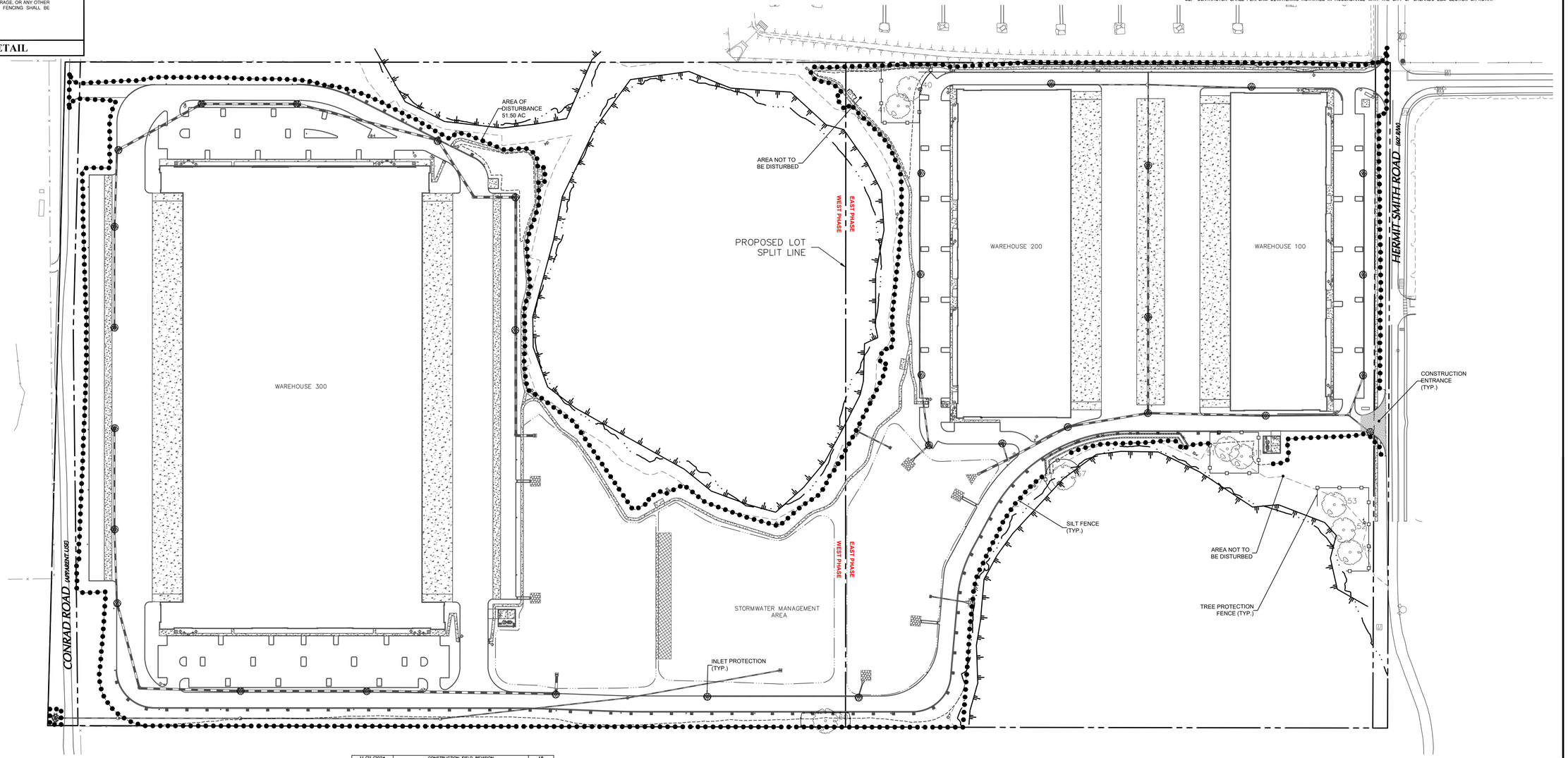


SILT FENCE INSTALLATION

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 602

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL INSTALL AND MAINTAIN SILT FENCE AROUND THE PERIMETER OF ALL EARTH DISTURBANCES. THE SILT FENCE SHALL BE INSPECTED AND REPAIRED FOLLOWING EVERY RAINFALL EVENT. SILT FENCES SHALL REMAIN IN PLACE UNTIL PERMANENT STABILIZATION OF DISTURBED AREAS IS COMPLETED.
2. THE CONTRACTOR SHALL PROVIDE SILTATION REDUCTION DEVICES FOR THE DISCHARGE FROM ANY DEWATERING PROCESS SO THAT DIRECT DISCHARGE DOES NOT OCCUR. ALL DEWATERING ACTIVITIES ON SITE WITH RESPECT TO TREES SHALL BE SUPERVISED BY AN ARBORIST AND ANY AFFECTED TREES WILL BE PLACED ON A SCHEDULE FOR WATER AND MONITORED BY THE ARBORIST.
3. THE CONTRACTOR SHALL CHECK ALL EROSION AND SILTATION CONTROL DEVICES AFTER EACH RAINFALL AND REPAIR OR REPLACE THEM AS REQUIRED.
4. THE REQUIREMENTS LISTED ABOVE SHALL BE CONSIDERED MINIMUM REQUIREMENTS AND THE CONTRACTOR SHALL USE WHATEVER METHODS HE DEEMS NECESSARY TO PREVENT EROSION AND SILTATION AS MAY BE REQUIRED FOR THE PROJECT, AND APPROVED BY THE AUTHORITIES HAVING JURISDICTION.
5. THE CONTRACTOR SHALL CONTROL ALL DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS APPROVED BY THE OWNER.
6. ALL PRACTICABLE AND NECESSARY EFFORT, INCLUDING BUT NOT LIMITED TO THE USE OF STAKED SYNTHETIC BALES OR STAKED SILT SCREEN BARRIERS, SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIALS TO SURFACE WATER CONVEYANCE DITCHES, INLETS, SURFACE DRAINS, WETLANDS AND LAKE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED TO MITIGATE EROSION OR SEDIMENTATION EFFECTS OCCURRING DURING HIS WORK.
7. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES AND DEVICES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND /OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKDAY.
8. EROSION CONTROL DEVICES SHALL FOLLOW STANDARDS AND DETAILS IN INDEX 102,103,104 OF THE (FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS). CONTROL DEVICES AND TECHNIQUES, AS PROVIDED IN THE FLORIDA EROSION AND SEDIMENT CONTROL MANUAL SHALL BE IMPLEMENTED TO COMPLY WITH CURRENT STATE REGULATIONS.
9. THE CONTRACTOR MUST SUBMIT A NPDES NOTICE OF TERMINATION FORM TO THE FDOT UPON COMPLETION OF CONSTRUCTION.
10. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO PERMANENTLY STABILIZE ALL GROUND AREAS THAT ARE DISTURBED BY HIS WORK. PERMANENT STABILIZATION SHALL INCLUDE SOD, PAVEMENTS AND HARDSCAPES, OR OTHER METHODS PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER OF RECORD, OWNER AND APPROPRIATE REGULATORY AUTHORITIES.
11. THE CONTRACTOR SHALL PROVIDE TEMPORARY BEST MANAGEMENT PRACTICES (BMPS) FOR TREATMENT OF STORMWATER FLOWS DURING CONSTRUCTION. THE BMP SHALL PROVIDE TREATMENT VOLUME FOR 1/2" OVER THE DISTURBED AREA AT ANY TIME DURING CONSTRUCTION. THE CONTRACTOR SHALL RESTORE ANY AREAS USED FOR TEMPORARY STORMWATER TREATMENT TO A PERMANENTLY STABILIZED CONDITION EQUIVALENT TO THE PRE–CONSTRUCTION CONDITION OR OTHER PROPOSED CONDITION AS APPROVED BY THE OWNER.
12. THE CONTRACTOR SHALL INSTALL AND MAINTAIN SILT FENCE, IN ACCORDANCE WITH FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL MANUAL, AROUND THE PERIMETER OF ALL EARTH DISTURBANCES. SILT FENCES SHALL REMAIN IN PLACE UNTIL PERMANENT STABILIZATION OF DISTURBED AREAS IS COMPLETED.
13. THERE IS ONE SOIL GROUP (SOIL SERIES 44 – SMYRNA, WET, FINE SAND, 0 TO 2 PERCENT SLOPES) WITHIN THE VICINITY OF THE PROPOSED PROJECT. SOIL SURVEY INFORMATION IS REFERENCED FROM GEOTECHNICAL ENGINEERING SERVICES REPORT PREPARED BY "PROFESSIONAL SERVICE INDUSTRIES, INC." DATED NOVEMBER 22, 2017.
14. THE CONTRACTOR SHALL SEED AND MULCH OR SOD SWALES, PONDS, AND/OR GREEN AREAS IMMEDIATELY AFTER CONSTRUCTION OF THESE AREAS ARE COMPLETED.
15. THE CONTRACTOR SHALL PROVIDE SILTATION REDUCTION DEVICES FOR THE DISCHARGE FROM ANY DEWATERING PROCESS SO THAT DIRECT DISCHARGE DOES NOT OCCUR.
16. THE CONTRACTOR SHALL CHECK ALL EROSION AND SILTATION CONTROL DEVICES WEEKLY AND/OR WITHIN 24 HOURS OF STORM EVENT THAT PRECIPITATES ½ INCH OR GREATER AND REPAIR OR REPLACE THEM AS REQUIRED. SILT FENCES SHALL REMAIN IN PLACE UNTIL PERMANENT STABILIZATION OF DISTURBED AREAS IS COMPLETED.
17. THE REQUIREMENTS LISTED ON THIS DOCUMENT SHALL BE CONSIDERED MINIMUM REQUIREMENTS AND THE CONTRACTOR SHALL USE WHATEVER METHODS DEEMED NECESSARY TO PREVENT EROSION AND SILTATION AS MAY BE REQUIRED FROM THE PROJECT, AND APPROVED BY THE AUTHORITIES HAVING JURISDICTION.
18. THE CONTRACTOR SHALL CONTROL ALL DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS APPROVED BY THE OWNER AND ENGINEER OF RECORD.
19. ALL PRACTICABLE AND NECESSARY EFFORT, INCLUDING BUT NOT LIMITED TO THE USE OF STAKED SYNTHETIC BALES OR STAKED SILT SCREEN BARRIERS, SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIALS TO SURFACE WATER CONVEYANCE DITCHES, INLETS, SURFACE DRAINS, WETLANDS AND LAKE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED TO MITIGATE EROSION OR SEDIMENTATION EFFECTS OCCURRING DURING THE WORK.
20. TEMPORARY SILTATION CONTROL BARRIERS (E.G. SILT FENCE) SHALL BE INSTALLED WHERE EARTH DISTURBANCES ARE WITHIN 100 FEET OF SURFACE WATER CONVEYANCE SYSTEMS AND WETLANDS.
21. IT IS REQUIRED THAT THE CONTRACTOR MARK OUT THE LANDWARD SIDE OF WETLAND / BUFFERS TO PREVENT UNINTENTIONAL WETLAND BUFFER IMPACTS DURING CONSTRUCTION.
22. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES AND DEVICES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKDAY.
23. ALL EROSION CONTROL DEVICES SHALL FOLLOW STANDARDS AND DETAILS IN THE CURRENT FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL MANUAL.
24. ON SLOPES OR DITCHES WHICH ARE TOO STEEP FOR THE USE OF GRASSING, SUITABLE EROSION PROTECTION SHALL BE PROVIDED BY DITCH OR SLOPE PAVEMENT, ADEQUATE FOR PERMANENT PROTECTION. IN NO CASE WILL ANY AREA WHICH IS SUBJECT TO DETRIMENTAL EROSION BE ACCEPTABLE UNLESS SUCH PROTECTION IS PROVIDED.
25. CONTRACTOR SHALL IMPLEMENT THE CONSTRUCTION ENTRANCE POLLUTION PREVENTION FEATURES WHEREVER AN ENTRANCE TO THE SITE IS UTILIZED FOR CONSTRUCTION.
26. CONTRACTOR SHALL AVOID PLACING OR USING HEAVY EQUIPMENT IN THE PROPOSED SWALES AND DRY RETENTION AREAS. BOTTOM OF SWALES SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FINAL STABILIZATION. SOD SHALL NOT LIMIT THE DRY RETENTION AREAS OR SWALES ABILITY TO PERCOLATE STORMWATER RUNOFF.
27. SEDIMENTATION CONTROLS/BMPS SHALL PREVENT STORMWATER RUNOFF WITH TURBIDITY GREATER THAN 29 NTU'S FROM LEAVING THE CONSTRUCTION SITE.
28. NO EXCAVATING MATERIAL SHALL BE STOCKPILED IN A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
29. CONTRACTOR SHALL CONDUCT INSPECTIONS TO DETERMINE THE EFFECTIVENESS OF EROSION/SEDIMENT CONTROL EFFORTS DAILY AND WITHIN 24 HOURS AFTER EACH .50 INCH OR GREATER RAINFALL EVENT.
30. SITE BOUNDARY ADJACENT TO WETLAND AREAS MUST USE STAKED TURBIDITY BARRIER TO PREVENT FINE SEDIMENT PARTICLES FROM ENTERING WETLAND.
31. ALL DESIGNATED ENTRANCES AND EXITS FOR THE CONSTRUCTION SITE SHALL BE STABILIZED USING FILTER FABRIC AND GRAVEL OR OTHER PRE–APPROVED METHODS TO PREVENT OFF–SITE TRACKING OF SEDIMENTS.
32. CONTRACTOR SHALL PERFORM DEWATERING ACTIVITIES IN ACCORDANCE WITH THE CITY OF ORLANDO ESM SECTION 6.14.01.H.



NOTES:

1. PROTECTED TREE INVENTORY AND SPECIMEN TREE INVENTORY REFERENCED FROM ECS FLORIDA, LLC SPECIMEN TREE REGISTRY AND PROTECTED TREE INVENTORY DATED FEBRUARY 2022. PLEASE REFER TO SHEET C–25.

100 0 50 100
SCALE: 1" = 100'

No.	Description	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	09/18/2024
13	AMENITY PATH REVISIONS	07/31/2024
12	WAREHOUSE 400 ADDITION REVISIONS	05/31/2024
11	CIVIL SITE CHANGES	02/02/2024
10	REVISED PER CITY DRC CSP REVISION COMMENTS	09/28/2023
9	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	06/21/2023
8	REVISED PER PROJECT TEAM COMMENTS	02/08/2023
7	BID ADDENDUM #2	11/08/2022
6	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	10/24/2022
5	REVISED PER SJRWMD COMMENTS	10/11/2022
4	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	09/09/2022
3	REVISED PER CITY DRC COMMENTS	07/28/2022
2	BID ADDENDUM #1	07/15/2022
1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022

Revisions

This item has been digitally signed and sealed by ***JOSEPH J. YANNUCCI, JR., PE*** on the ***DATE shown in the digital signature.*** Printed copies of this document are not considered signed and sealed and the ***Digital Signature*** must be verified on any electronic copies.

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Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
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FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

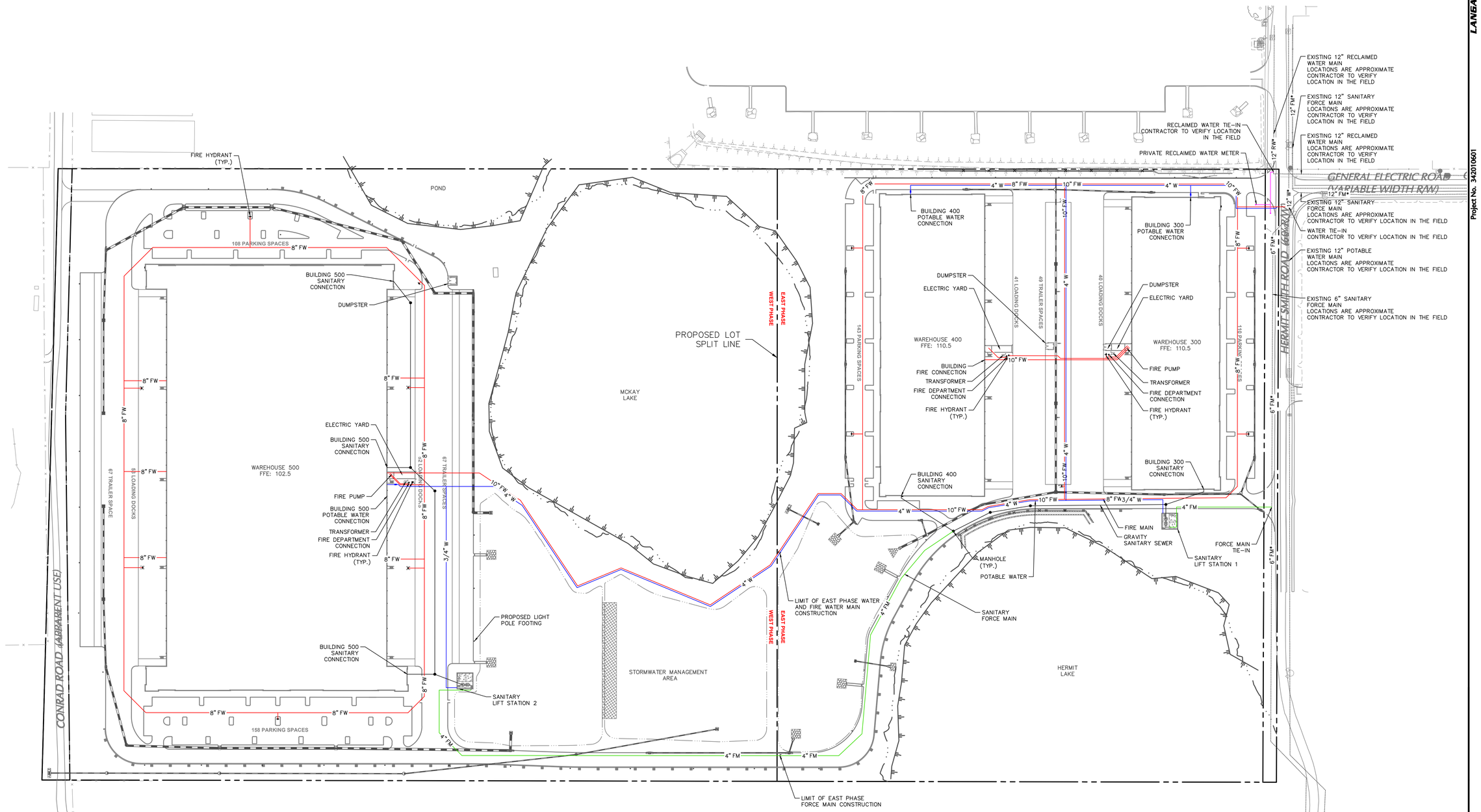
Drawing Title
SOIL EROSION & SEDIMENT CONTROL PLAN

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Drawing No. C-19

LANGAN
Project No. 342010601

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NOTES:

1. ALL UTILITY SYSTEM MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF APOPKA UTILITIES DESIGN AND CONSTRUCTION STANDARDS MANUAL.
2. SANITARY GRAVITY AND FORCE MAIN PIPES SHALL BE SDR-35 PVC.
3. POTABLE AND FIRE WATER MAINS SHALL BE C900 PVC.
4. THE LIFT STATIONS WILL REMAIN PRIVATELY OWNED AND MAINTAINED.
5. A YELP SIREN ACTIVATION WITH KEY CODE 1882 FOR EMERGENCY ACCESS AND KNOX KEY SWITCH MUST BE PROVIDED IF ACCESS GATES ARE INSTALLED.
6. IF RACKS ARE INSTALLED, ANY STORAGE OVER 10 FEET WILL REQUIRE AN ESFR SPRINKLER SYSTEM OR HEADS WILL NEED TO BE INSTALLED IN THE RACKS.

100 0 50 100
SCALE: 1" = 100'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
05/22/2024	WAREHOUSE 400 DOOR REVISIONS	12
04/17/2024	PER CITY COMMENTS	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/23/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/28/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

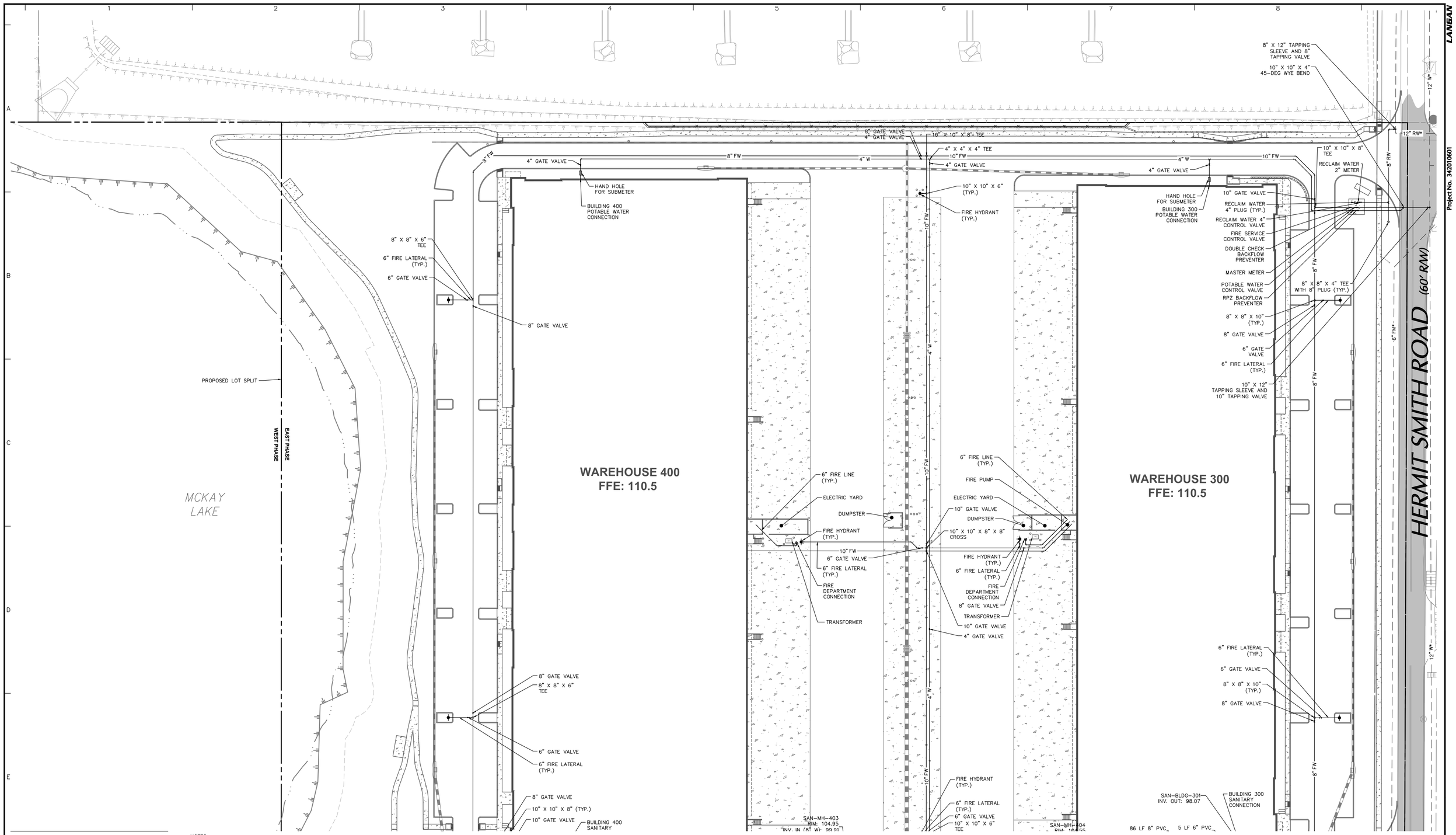
Drawing Title
OVERALL UTILITY PLAN

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Drawing No. C-20

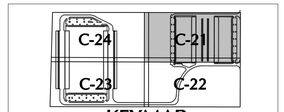
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LANGAN Project No. 342010601



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KEYMAP
SCALE: 1" = 1000'

40 0 10 25 40
SCALE: 1" = 40'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/12/2024	WAREHOUSE 400 DOOR REVISIONS	12
04/29/2024	CITY COMMENTS	11
08/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/23/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/28/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMIT RESUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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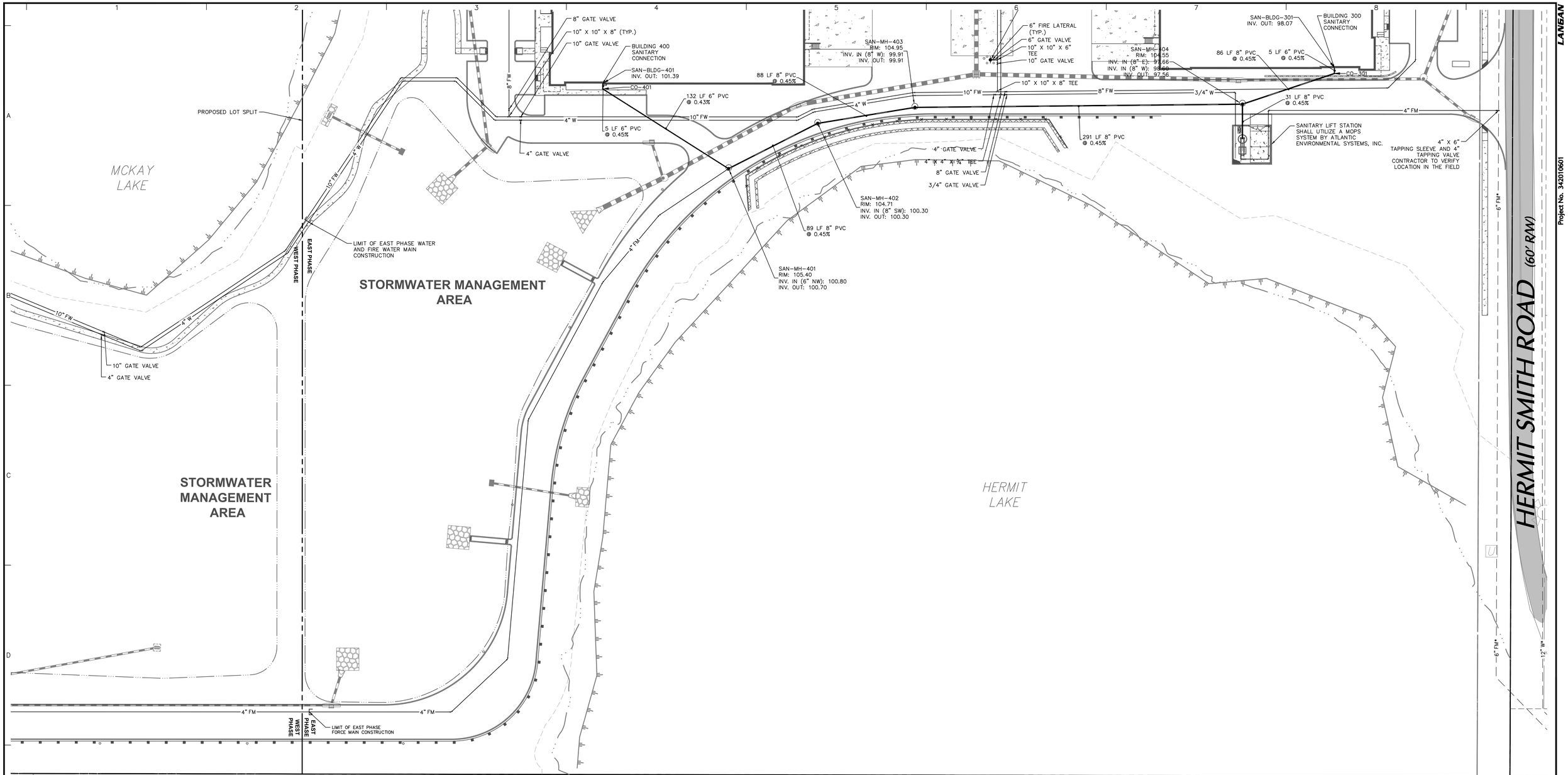
Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
PARTIAL UTILITY PLAN

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

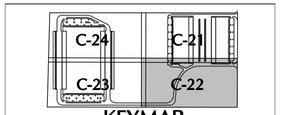
Drawing No. C-21

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KEYMAP
SCALE: 1" = 1000'

40 0 10 25 40
SCALE: 1" = 40'

No.	Description	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE, DOT & COT FLOW & SIGN LOCATIONS	09/18/2024
13	AMENITY PATH REVISION	07/23/2024
12	WAREHOUSE 400 DOOR REVISIONS	06/27/2024
11	OWNER VE CHANGES	02/02/2024
10	REVISED PER CITY DRC CSP REVISION COMMENTS	09/28/2023
9	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	08/21/2023
8	REVISED PER PROJECT TEAM COMMENTS	02/08/2023
7	BID ADDENDUM #2	11/08/2022
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5	REVISED PER SJRWMD COMMENTS	10/11/2022
4	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM	09/09/2022
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1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

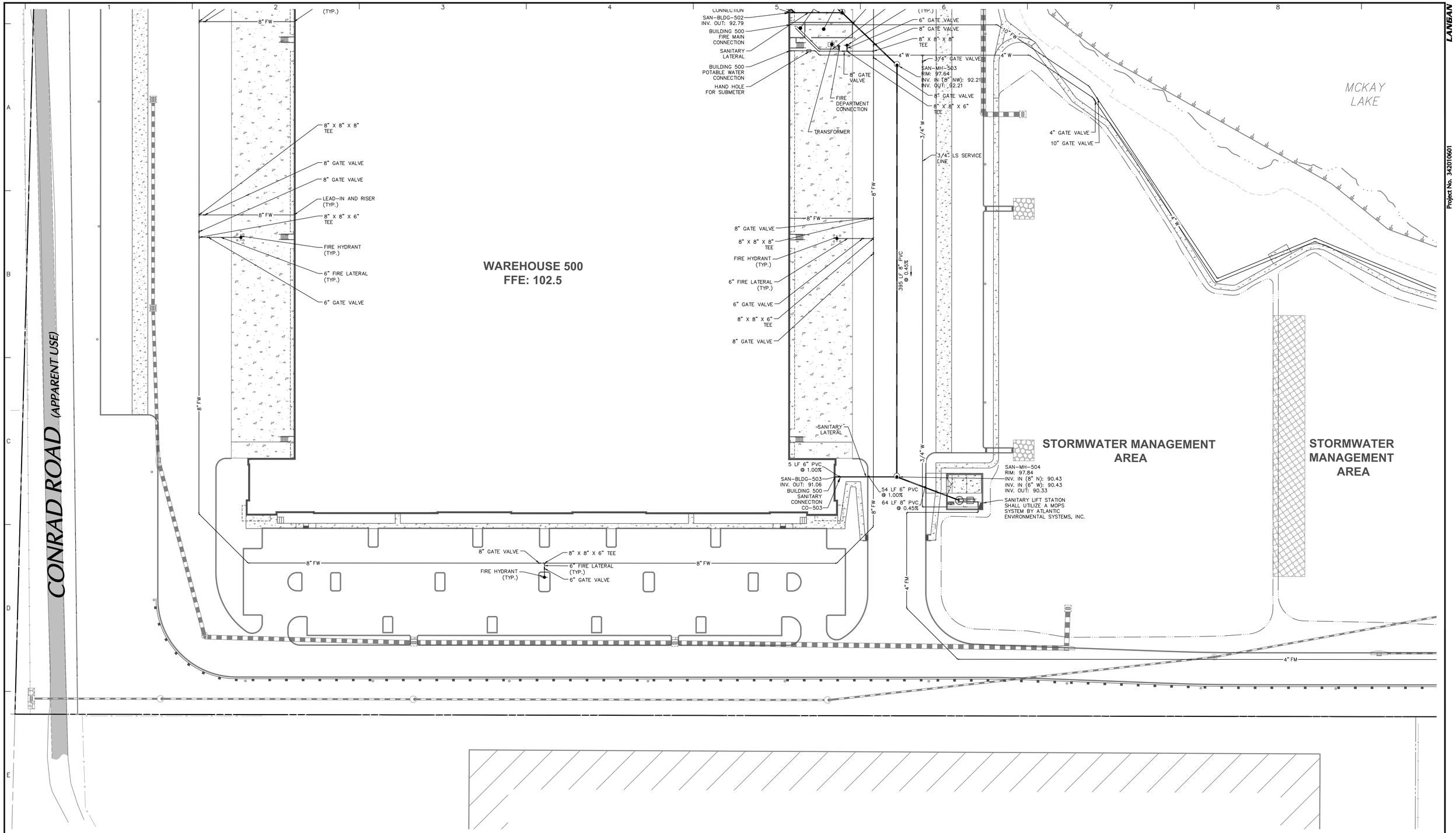
Drawing Title
PARTIAL UTILITY PLAN

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Drawing No. C-22

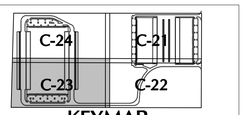
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KEYMAP
SCALE: 1" = 1000'

40 0 10 25 40
SCALE: 1" = 40'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	WAREHOUSE 400 DOOR REVISIONS	13
02/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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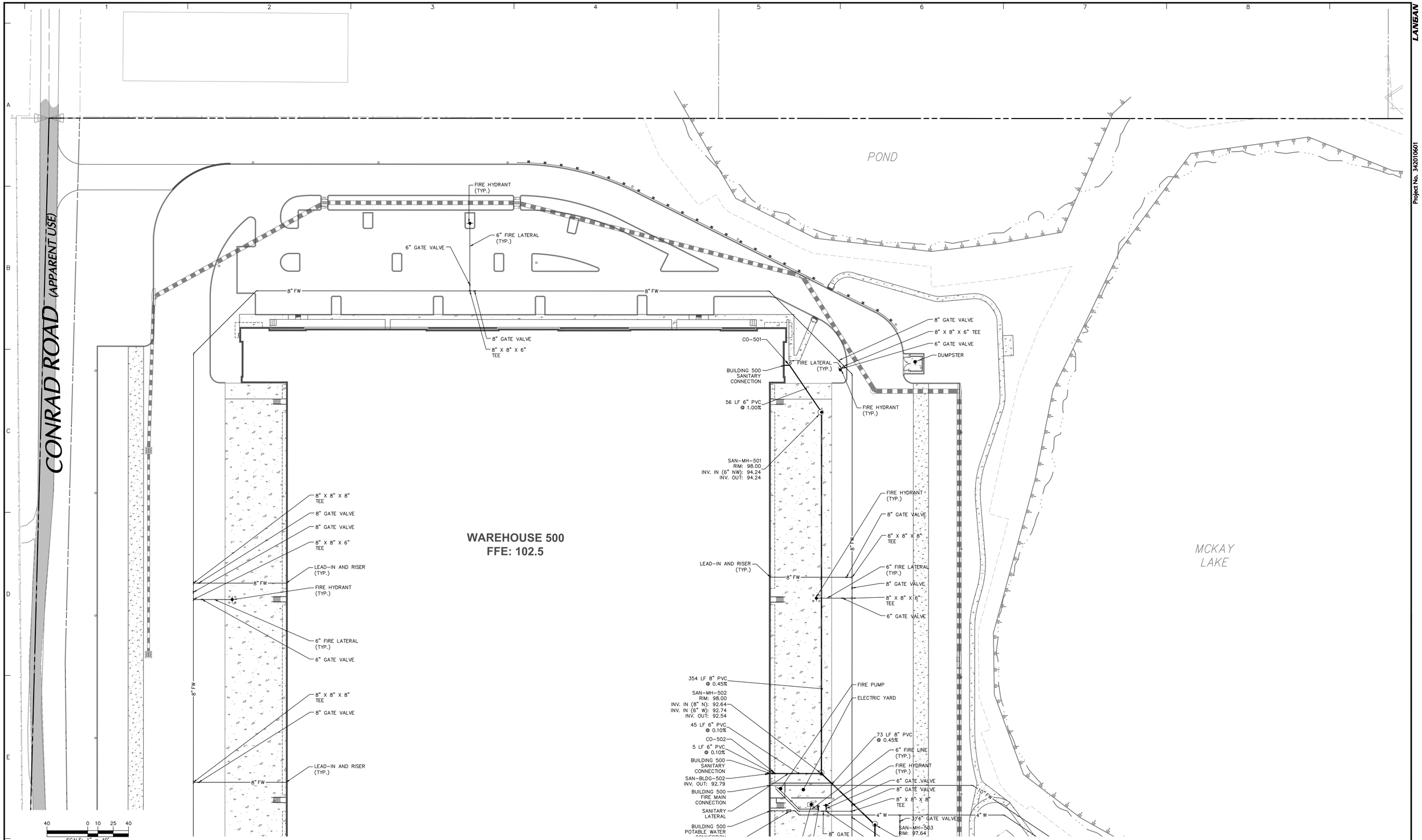
Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
PARTIAL UTILITY PLAN

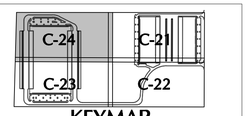
Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Drawing No. C-23

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Project No. 342010601
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SCALE: 1" = 40'



KEYMAP
SCALE: 1" = 1000'

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Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE "NOT to DO" FUTURE DOOR LOCATIONS	14
07/25/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/29/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/23/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/21/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
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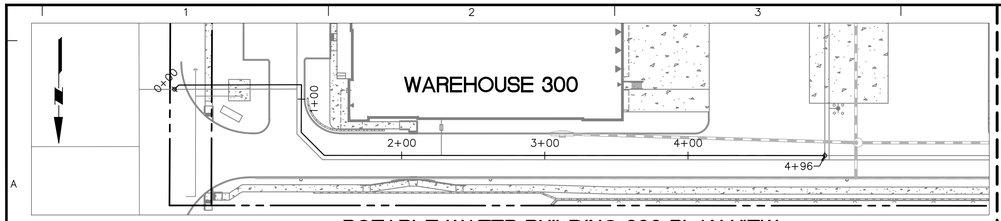
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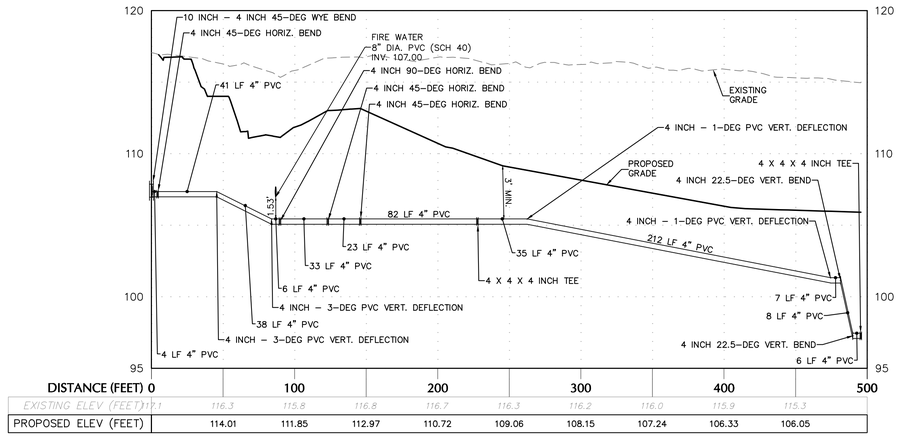
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Project	APOPKA BUSINESS CENTER
	CITY OF APOPKA
	ORANGE COUNTY FLORIDA
Drawing Title	PARTIAL UTILITY PLAN
Project No.	342010601
Date	29 APRIL 2022
Drawn By	CRB
Checked By	JJY
Drawing No.	C-24

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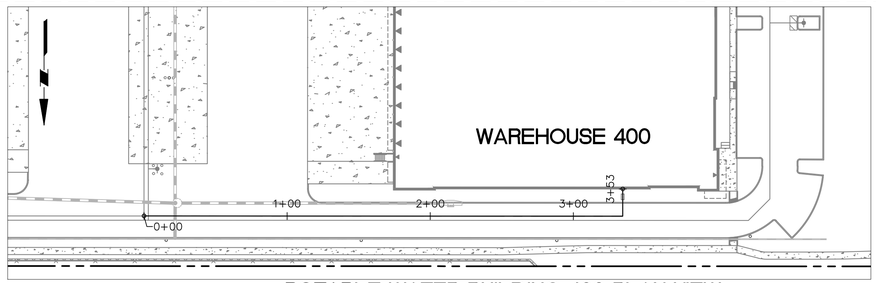


POTABLE WATER BUILDING 300 PLAN VIEW

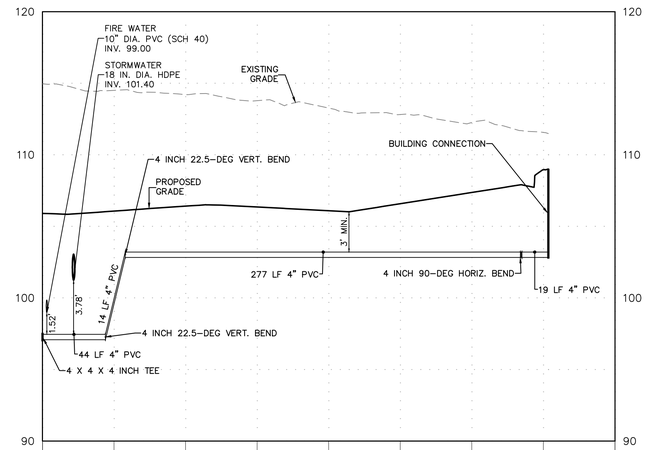


DISTANCE (FEET) 0	100	200	300	400	500
EXISTING ELEV (FEET) 117.1	116.3	115.8	116.8	116.7	116.3	116.2	116.0	115.9	115.3
PROPOSED ELEV (FEET)	114.01	111.85	112.97	110.72	109.06	108.15	107.24	106.33	106.05

POTABLE WATER BUILDING 300 PROFILE



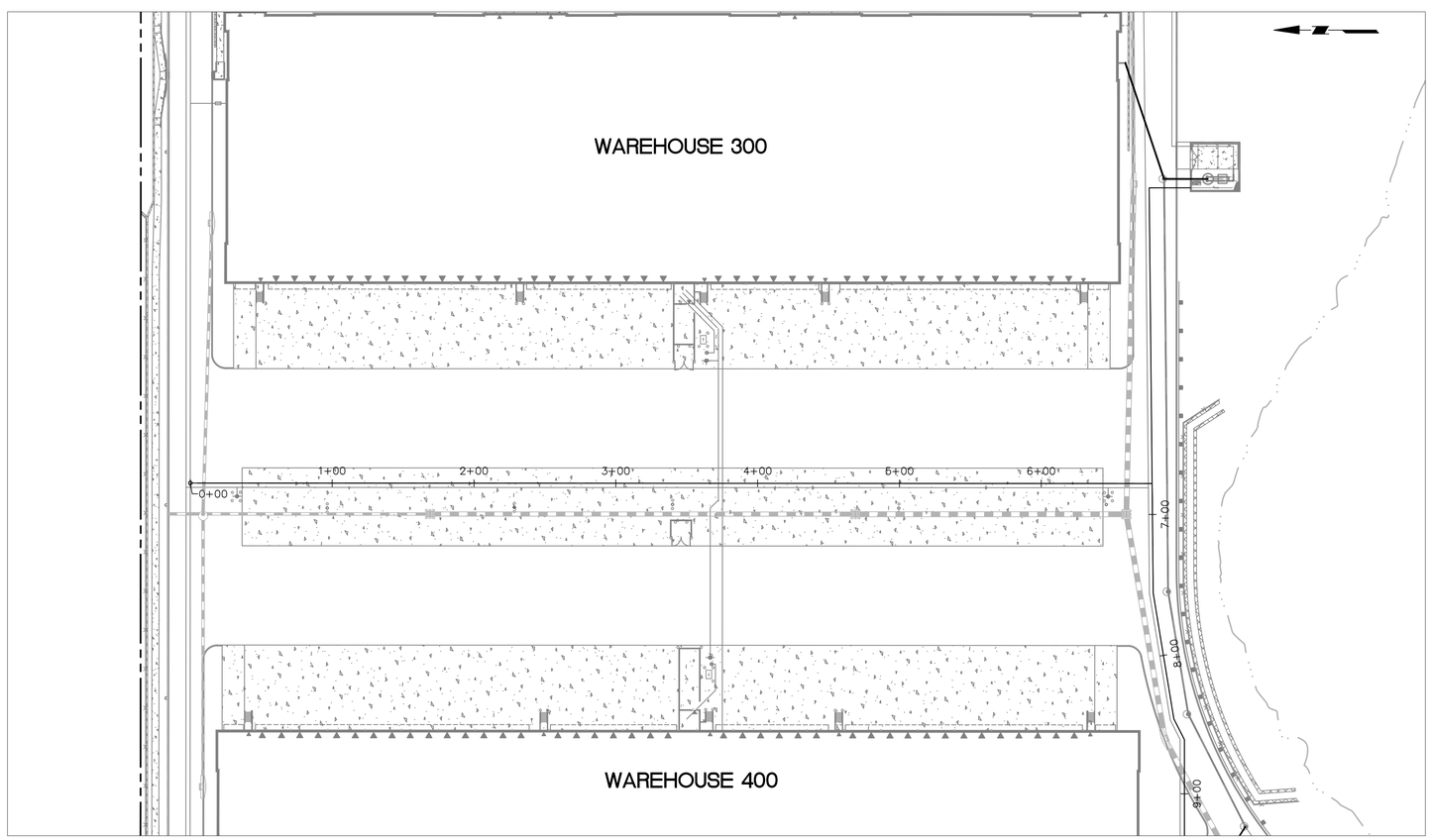
POTABLE WATER BUILDING 400 PLAN VIEW



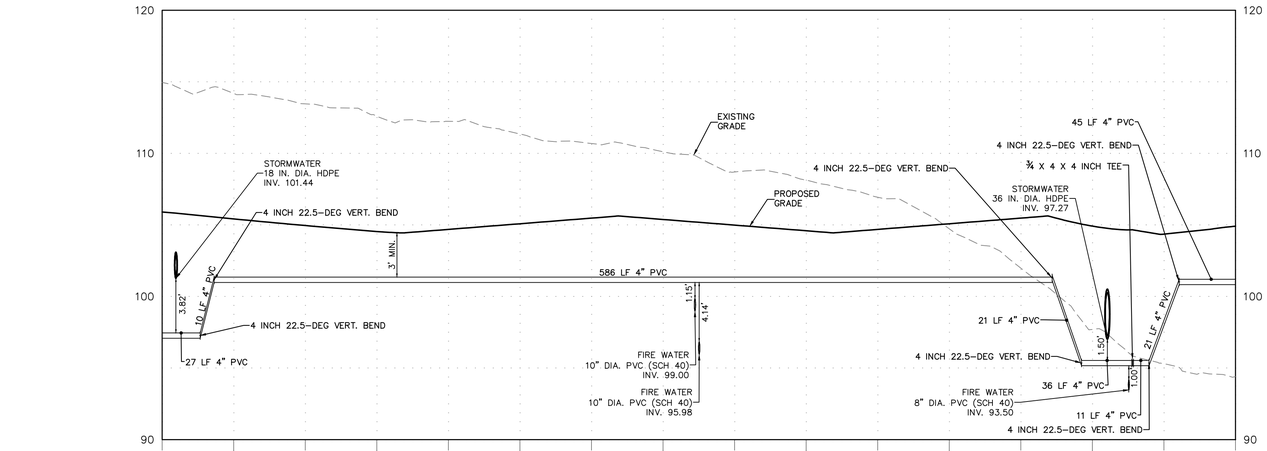
DISTANCE (FEET) 0	100	200	300	400
EXISTING ELEV (FEET) 115.0	114.5	114.2	113.8	113.3	112.8	112.3	111.6
PROPOSED ELEV (FEET) 105.91	106.07	106.42	106.35	106.09	106.58	107.37	108.96

POTABLE WATER BUILDING 400 PROFILE

H: 50 0 25 50
V: 5 0 2.5 5
SCALE IN FEET



POTABLE WATER BUILDING 500-A PLAN VIEW



DISTANCE (FEET) 0	100	200	300	400	500	600	700	750
EXISTING ELEV (FEET) 115.0	114.2	113.5	112.6	112.2	111.4	110.7	110.1	108.7	108.1	106.9	104.7	102.0	97.7	95.3	94.4
PROPOSED ELEV (FEET) 105.91	105.42	104.96	104.54	104.69	105.08	105.47	105.38	104.99	104.59	104.69	105.08	105.47	104.92	104.36	104.91

POTABLE WATER BUILDING 500-A PROFILE

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/31/2024	CONSTRUCTION FIELD REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/26/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION "J" PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER PROJECT TEAM COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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FL Certificate of Authorization No. 00006601/LB8172/LB8198

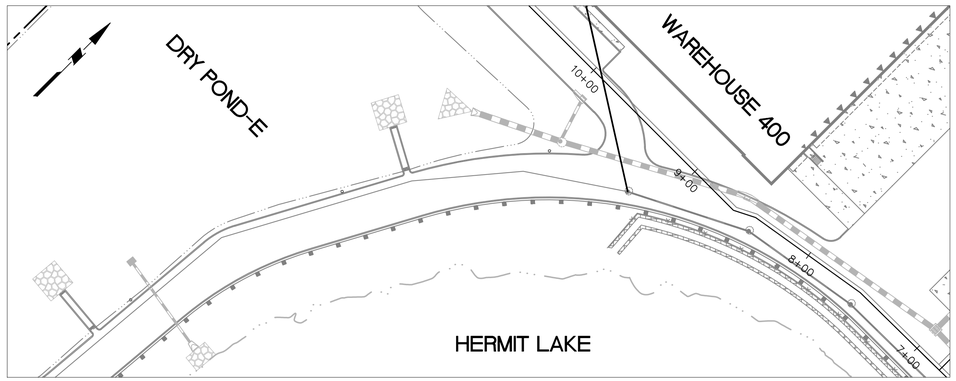
Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
POTABLE WATER PROFILES

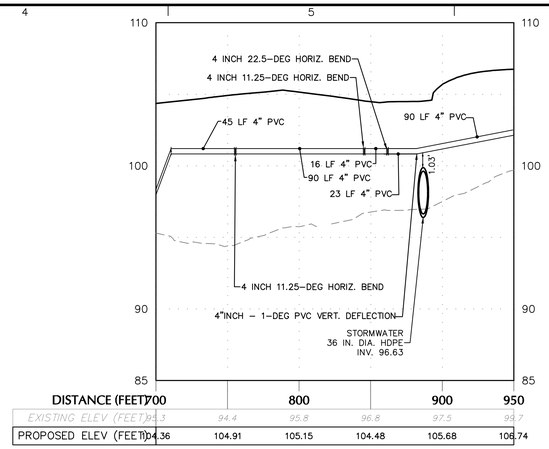
Project No.	Drawing No.
342010601	C-24A
Date: 29 AUGUST 2022	
Drawn By: LC	
Checked By: JJY	

Project No. 342010601

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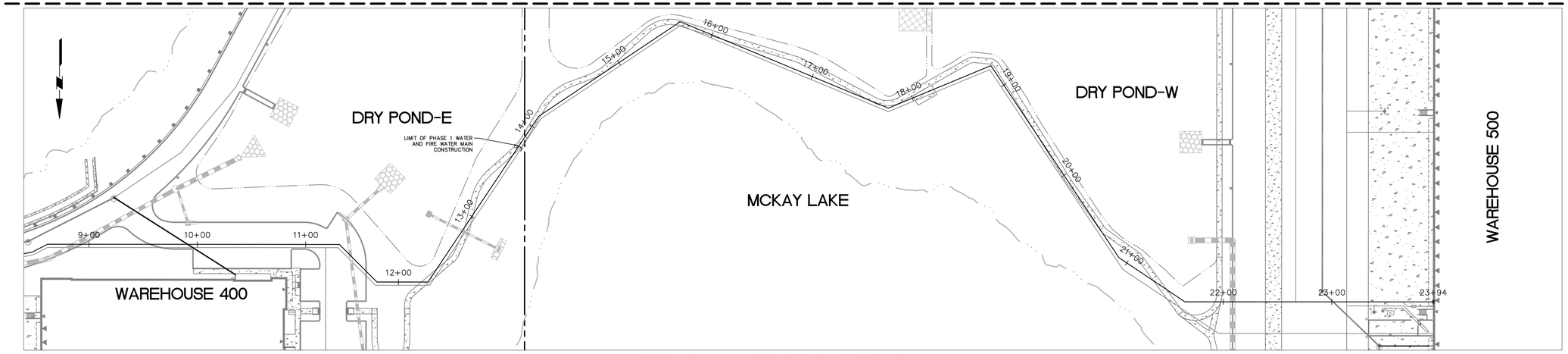


POTABLE WATER BUILDING 500-B PLAN VIEW

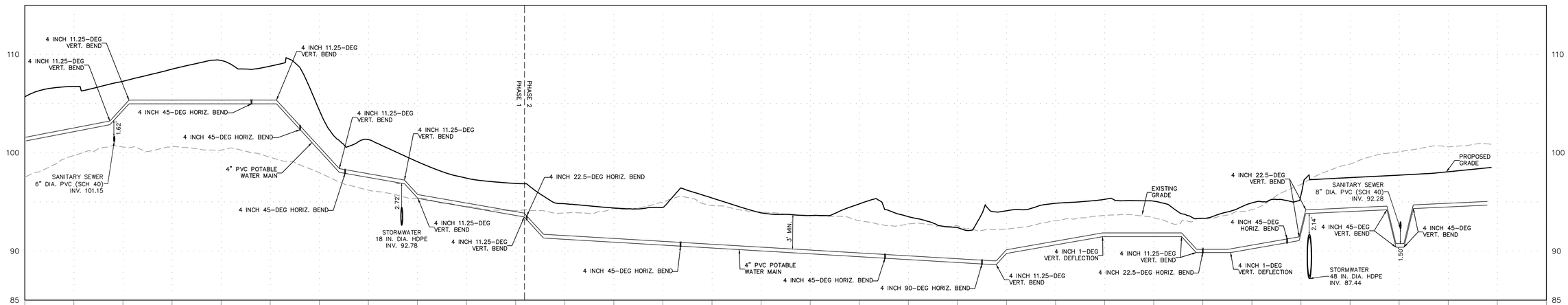


DISTANCE (FEET)	700	800	900	950
EXISTING ELEV (FEET)	93.3	94.4	95.8	96.8	97.5	98.7
PROPOSED ELEV (FEET)	104.36	104.91	105.15	104.48	105.68	106.74

POTABLE WATER BUILDING 500-B PROFILE



POTABLE WATER BUILDING 500-C PLAN VIEW



DISTANCE (FEET)	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2450
EXISTING ELEV (FEET)	99.5	99.7	100.6	100.6	100.3	99.5	98.0	96.2	95.3	94.5	94.1	93.9	94.3	95.0	94.6	94.0	93.6	93.1	92.7	92.6	92.2	93.1	93.6	93.4	93.3	94.2	96.8	98.8	100.1	100.6
PROPOSED ELEV (FEET)	105.68	106.74	107.26	108.50	109.39	108.81	104.32	101.34	99.08	97.41	96.87	94.81	94.37	94.45	95.39	93.88	93.61	94.79	93.50	92.39	94.09	94.85	95.26	95.07	93.32	94.90	95.69	97.47	97.72	98.06

POTABLE WATER BUILDING 500-C PROFILE

H:50 V:5 — 0 25 50 / 0 2.5 5
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	WAREHOUSE 400 DOOR REVISIONS	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

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Project: APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

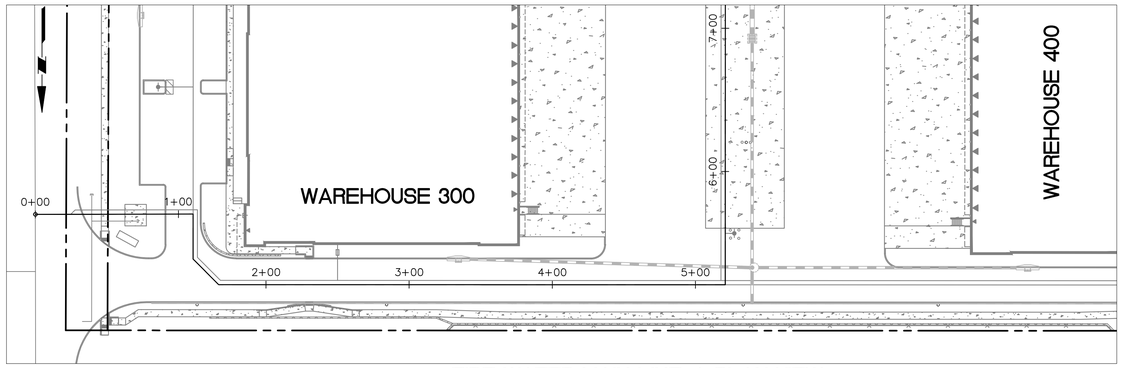
Drawing Title: POTABLE WATER PROFILES

Project No. 342010601
Date 29 AUGUST 2022
Drawn By LC
Checked By JJY

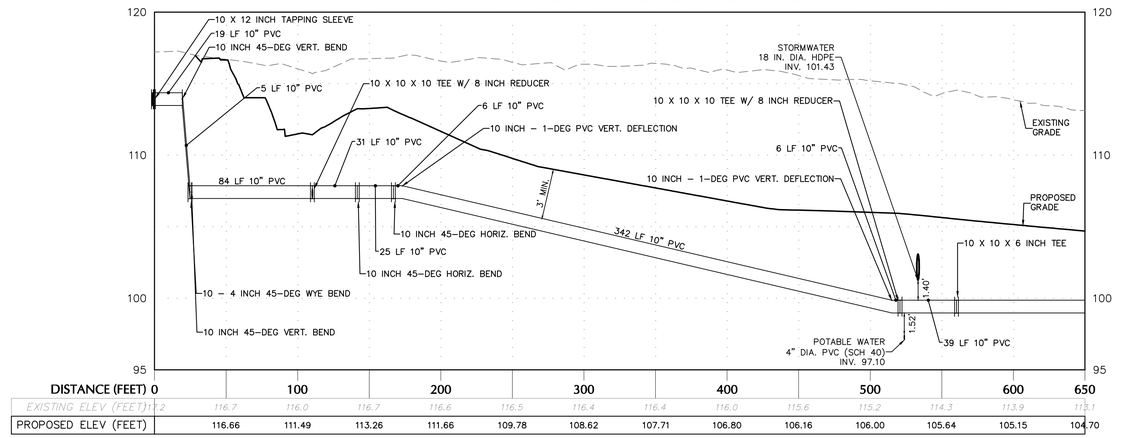
Drawing No. C-24B

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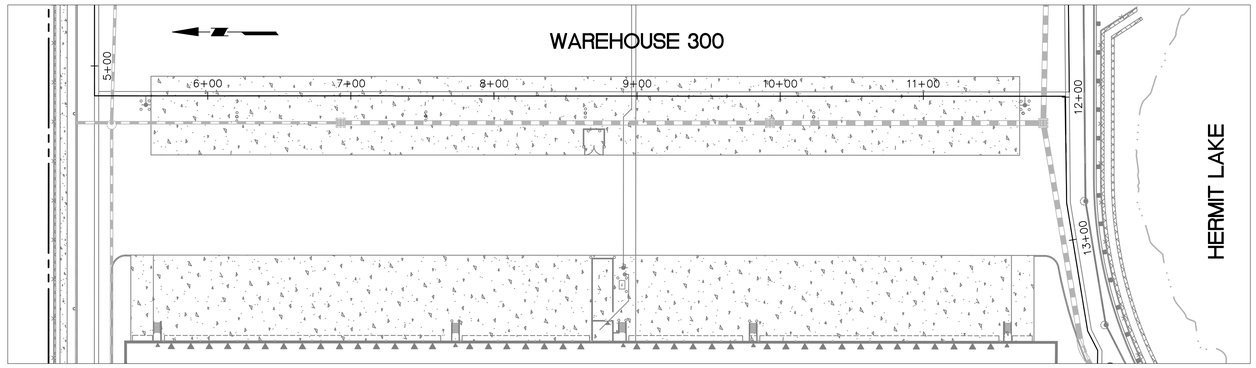
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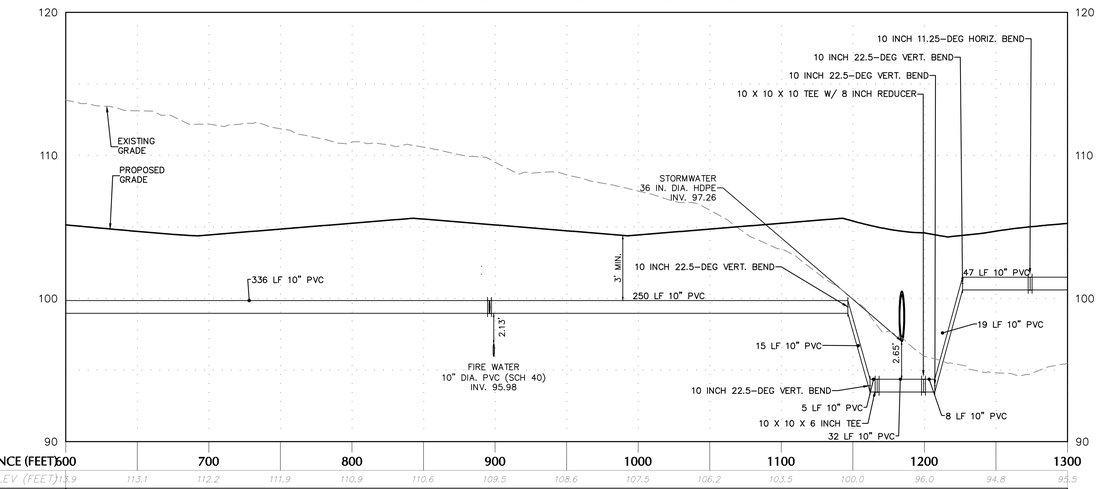
FIRE WATER MAIN LINE-A PLAN VIEW



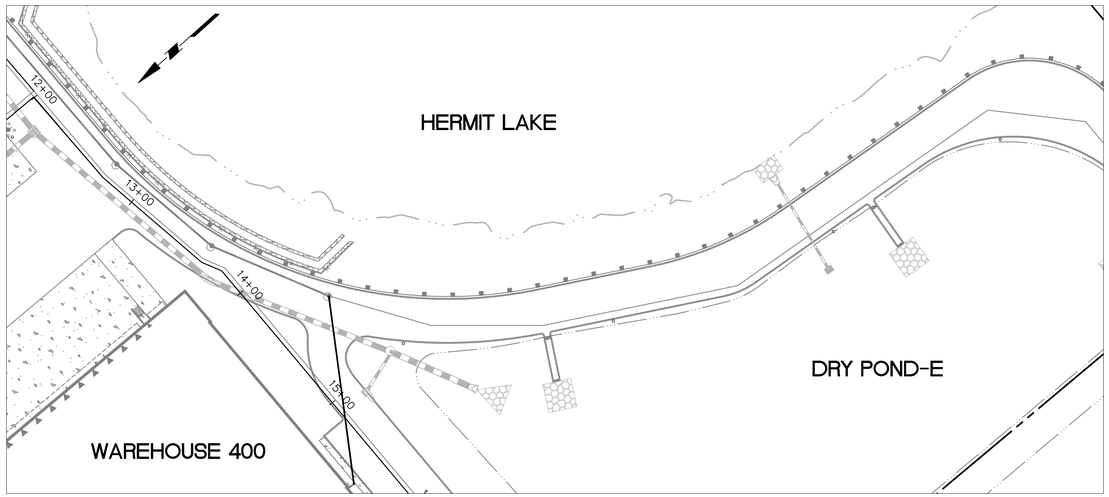
FIRE WATER MAIN LINE-A PROFILE



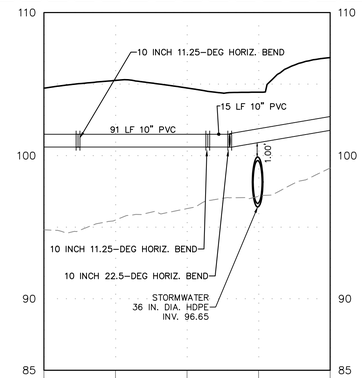
FIRE WATER MAIN LINE-B PLAN VIEW



FIRE WATER MAIN LINE-B PROFILE



FIRE WATER MAIN LINE-C PLAN VIEW



FIRE WATER MAIN LINE-C PROFILE

H:50 V:5 — SCALE IN FEET: 0 25 50 / 0 2.5 5

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS ADDED TO EAST ELEVATION	14
07/25/2024	AMENITY & LIFT STATION REVISIONS	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/21/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER PROJECT TEAM COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Joseph J Yannucci

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
POTABLE WATER PROFILES

Project No. 342010601
Date 29 AUGUST 2022
Drawn By LC
Checked By JJY

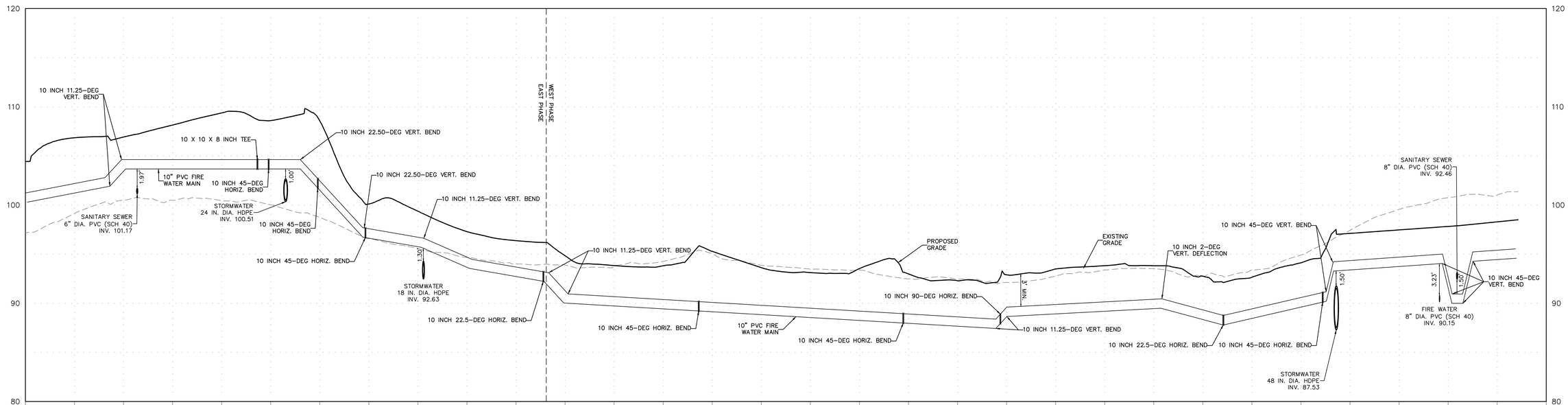
Drawing No. C-24C

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Project No. 342010601

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FIRE WATER MAIN LINE-D PLAN VIEW



DISTANCE (FEET)	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	2950
EXISTING ELEV (FEET)	99.1	100.5	100.5	100.4	100.0	98.7	96.6	95.6	94.7	94.0	93.9	93.7	94.3	95.0	93.9	93.5	93.5	92.7	93.4	94.9	97.4	99.5	100.7	101.0
PROPOSED ELEV (FEET)	104.43	106.84	106.92	108.14	109.37	108.60	108.57	100.10	99.37	97.29	96.37	94.83	93.84	93.82	95.28	93.62	93.12	93.53	92.98	92.30	92.90	93.49	93.82	93.82	92.75	92.65	94.12	97.11	97.47	97.82	98.29

FIRE WATER MAIN LINE-D PROFILE

H: 50 V: 5 — 0 2.5 5 — 0 25 50

SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS PLANNING CITY REVISION	14
07/31/2024	WAREHOUSE 400 DOOR REVISIONS	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	ORDER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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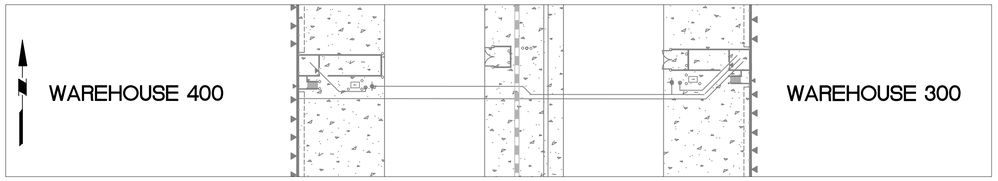
Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
FIRE WATER PROFILES

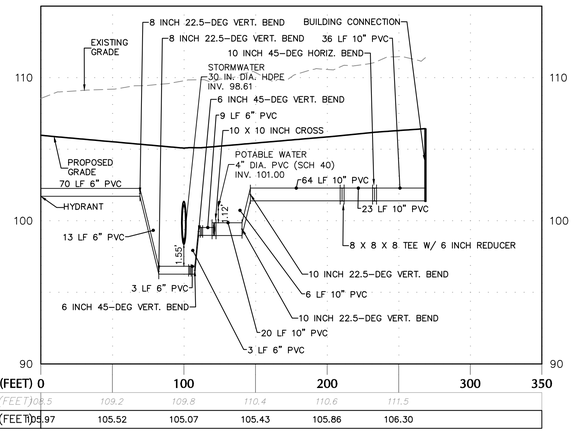
Project No. 342010601
Date 29 AUGUST 2022
Drawn By LC
Checked By JJY

Drawing No. C-24D

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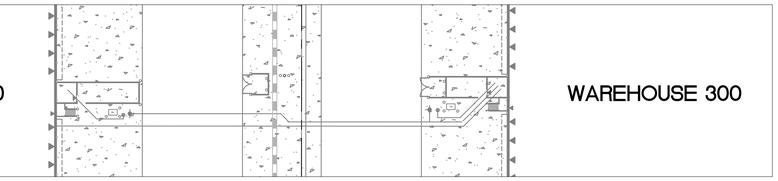


FIRE WATER BUILDING 300 CONNECTION PLAN VIEW

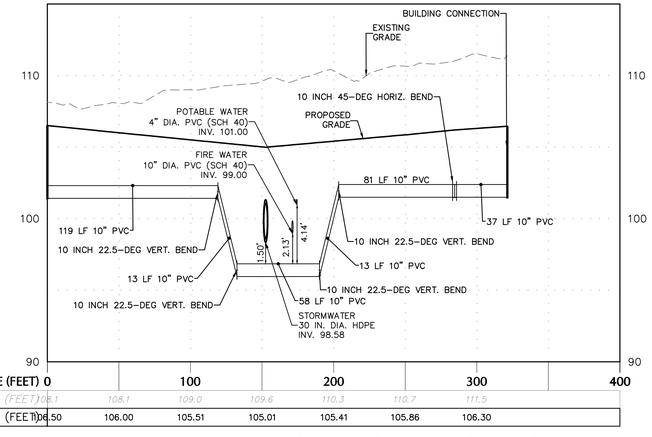


EXISTING ELEV (FEET)	108.5	109.2	109.8	110.4	110.6	111.5
PROPOSED ELEV (FEET)	105.97	105.52	105.07	105.43	105.86	106.30

FIRE WATER BUILDING 300 CONNECTION PROFILE

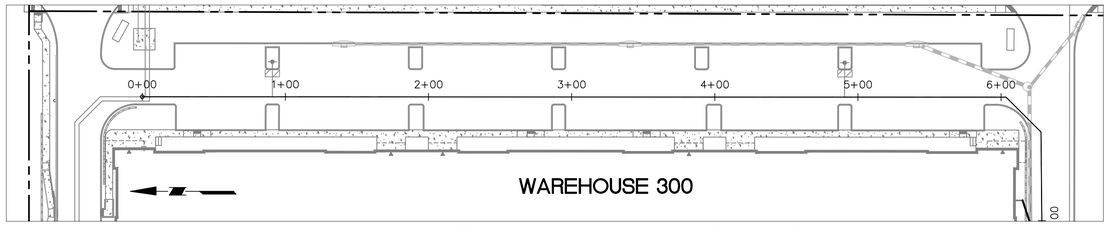


FIRE WATER BUILDING 400 CONNECTION PLAN VIEW

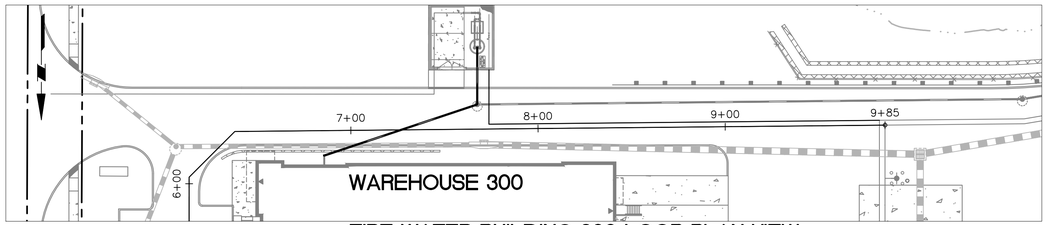


EXISTING ELEV (FEET)	108.1	108.1	109.0	109.6	110.3	110.7	111.5
PROPOSED ELEV (FEET)	106.50	106.00	105.51	105.01	105.41	105.86	106.30

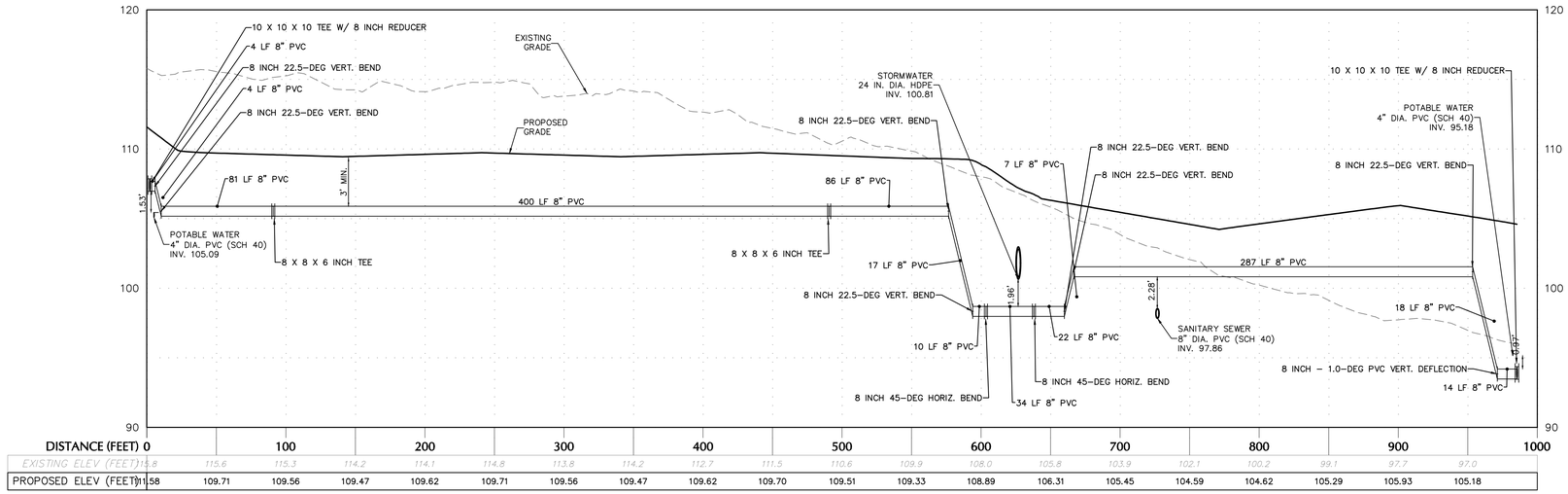
FIRE WATER BUILDING 400 CONNECTION PROFILE



FIRE WATER BUILDING 300 LOOP PLAN VIEW



FIRE WATER BUILDING 300 LOOP PLAN VIEW



EXISTING ELEV (FEET)	115.8	115.6	115.3	114.2	114.1	114.8	113.8	114.2	112.7	111.5	110.6	109.9	108.0	105.8	103.9	102.1	100.2	99.1	97.7	97.0
PROPOSED ELEV (FEET)	111.58	109.71	109.56	109.47	109.62	109.71	109.56	109.47	109.62	109.70	109.51	109.33	108.89	106.31	105.45	104.59	104.62	105.29	105.93	105.18

FIRE WATER BUILDING 300 LOOP PROFILE

H:50 0 25 50
V:5 0 2.5 5
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/19/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
04/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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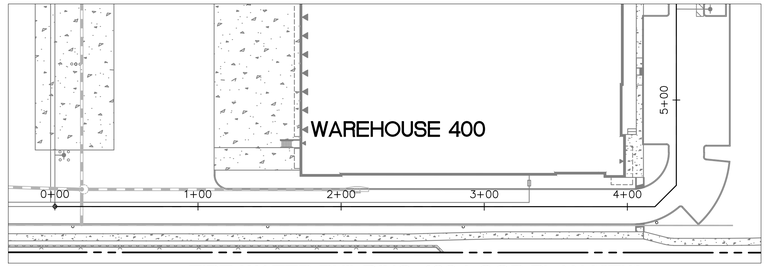
Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
FIRE WATER PROFILES

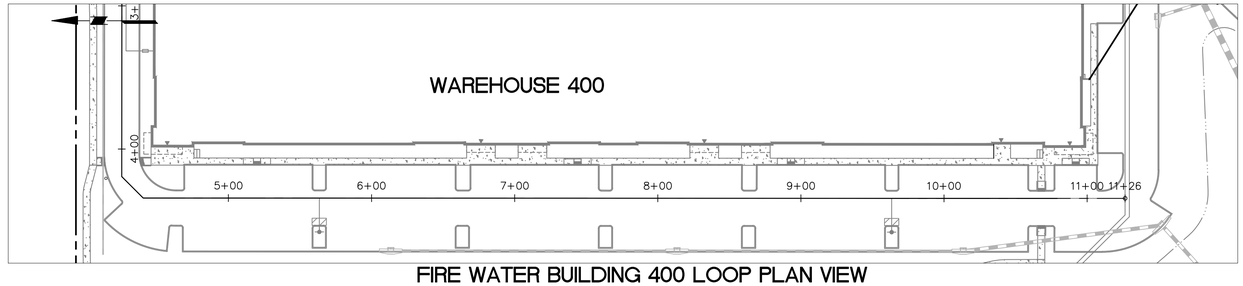
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Date 29 AUGUST 2022
Drawn By LC
Checked By JJY

Drawing No. C-24E

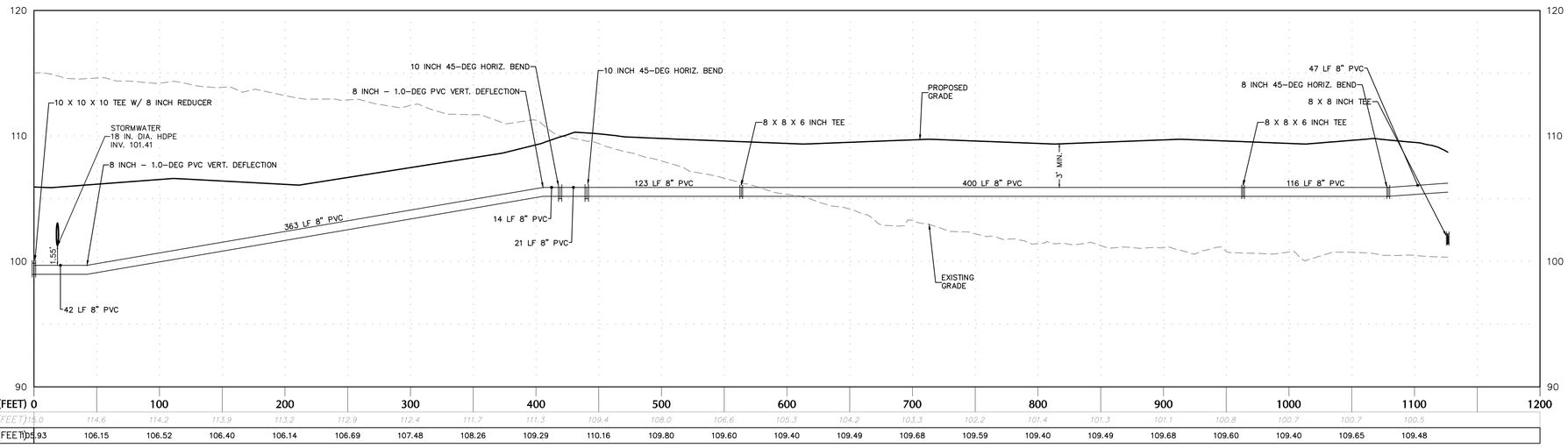
LANGAN
Project No. 342010601
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FIRE WATER BUILDING 400 LOOP PLAN VIEW

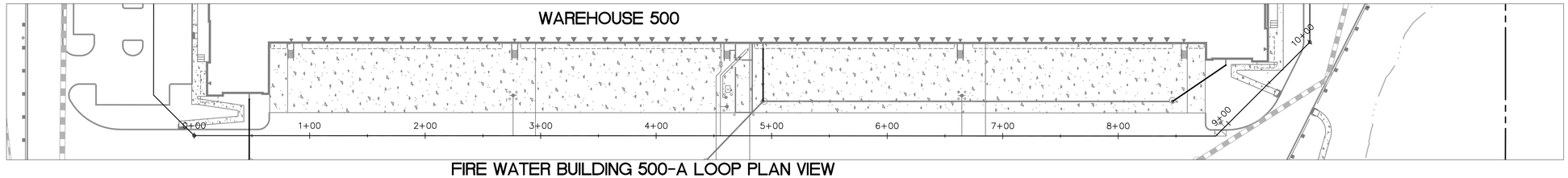


FIRE WATER BUILDING 400 LOOP PLAN VIEW

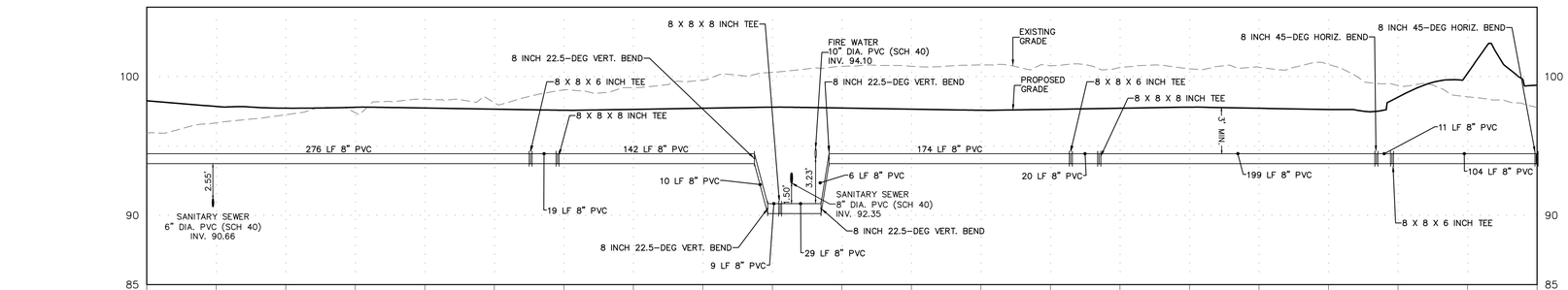


DISTANCE (FEET)	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
EXISTING ELEV (FEET)	*115.0*	*114.6*	*114.2*	*113.9*	*113.2*	*112.9*	*112.4*	*111.7*	*111.3*	*109.4*	*108.0*	*106.6*	*105.3*	*104.2*	*103.3*	*102.2*	*101.4*	*101.3*	*101.1*	*100.8*	*100.7*	*100.7*	*100.5*
PROPOSED ELEV (FEET)	105.93	106.15	106.52	106.40	106.14	106.69	107.48	108.26	109.29	110.16	109.80	109.60	109.40	109.49	109.68	109.59	109.40	109.49	109.68	109.60	109.40	109.65	109.48

FIRE WATER BUILDING 400 LOOP PROFILE



FIRE WATER BUILDING 500-A LOOP PLAN VIEW



DISTANCE (FEET)	0	100	200	300	400	500	600	700	800	900	1000
EXISTING ELEV (FEET)	*95.9*	*96.7*	*97.2*	*97.4*	*98.4*	*98.1*	*99.0*	*99.2*	*99.7*	*100.3*	*100.7*	*100.7*	*100.8*	*100.8*	*100.6*	*100.5*	*100.7*	*100.9*	*99.3*	*98.5*
PROPOSED ELEV (FEET)	99.25	97.84	97.72	97.78	97.73	97.65	97.57	97.63	97.71	97.79	97.73	97.65	97.57	97.63	97.71	97.79	97.71	97.62	98.51	100.23

FIRE WATER BUILDING 500-A LOOP PROFILE

H:50 0 25 50
V:5 0 2.5 5
SCALE IN FEET

No.	Description	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	09/18/2024
13	AMENITY PATH REVISIONS	07/31/2024
12	WAREHOUSE 400 ROOF REVISIONS	03/22/2024
11	CIVIL SF CHANGES	02/07/2024
10	REVISED PER CITY DRC CSP REVISION COMMENTS	09/28/2023
9	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	06/21/2023
8	REVISED PER PROJECT TEAM COMMENTS	02/08/2023
7	BID ADDENDUM #2	11/09/2022
6	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	10/24/2022
5	REVISED PER SJRWMD COMMENTS	10/11/2022
4	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	09/09/2022
3	REVISED PER CITY DRC COMMENTS	07/28/2022
2	BID ADDENDUM #1	07/15/2022
1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022

Revisions

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JOSEPH J. YANNUCCI, JR. LICENSE No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

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FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

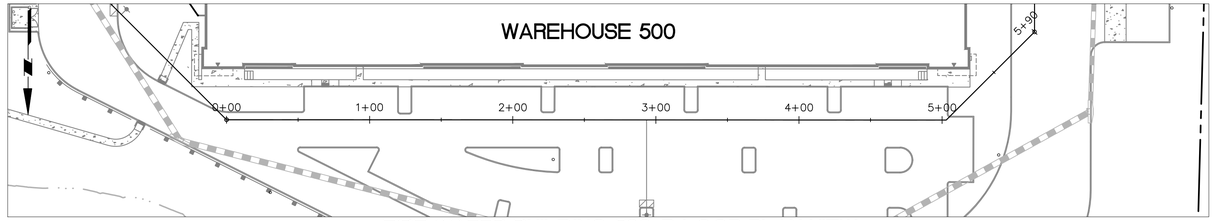
Drawing Title
FIRE WATER PROFILES

Project No. 342010601
Date 29 AUGUST 2022
Drawn By LC
Checked By JJY

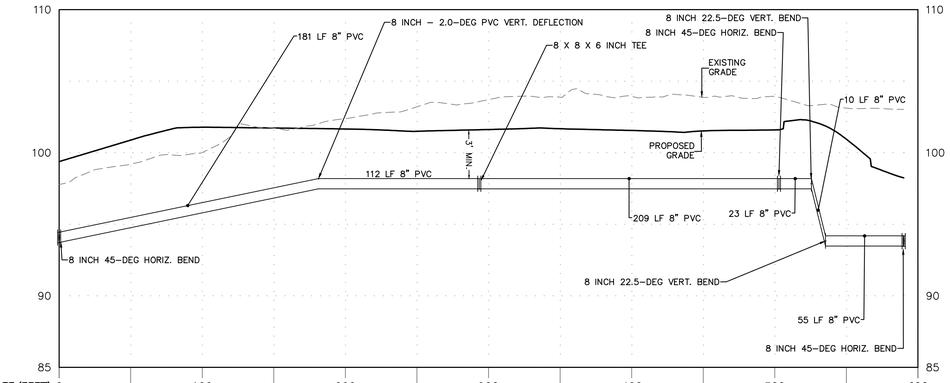
Drawing No. C-24F

LANGAN
Project No. 342010601

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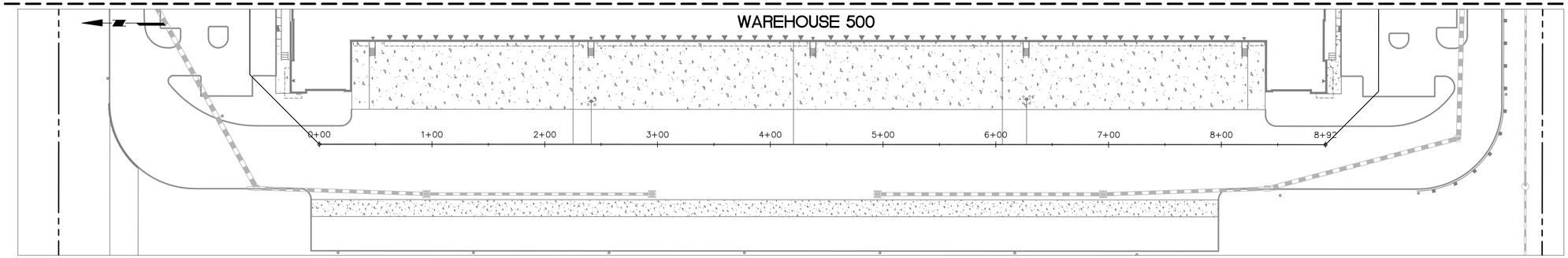


FIRE WATER BUILDING 500-B LOOP PLAN VIEW

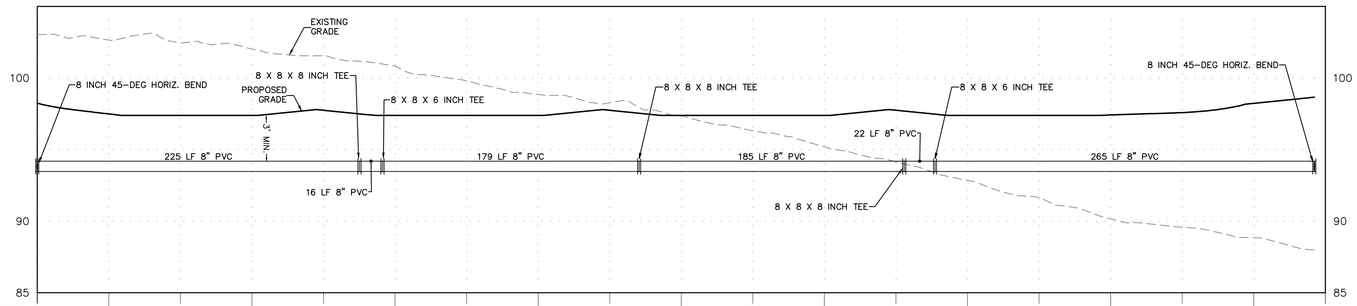


DISTANCE (FEET)	0	100	200	300	400	500	600
EXISTING ELEV (FEET)	99.8	99.2	100.0	101.7	102.4	103.2	103.7	103.9	103.9	103.9	103.9	103.1
PROPOSED ELEV (FEET)	99.37	100.88	101.78	101.72	101.66	101.50	101.62	101.67	101.55	101.52	101.59	100.95

FIRE WATER BUILDING 500-B LOOP PROFILE



FIRE WATER BUILDING 500-C LOOP PLAN VIEW



DISTANCE (FEET)	0	100	200	300	400	500	600	700	800	900
EXISTING ELEV (FEET)	102.0	102.7	102.5	102.0	101.6	100.8	99.8	98.8	98.3	97.3	96.3	95.2	94.1	92.9	91.6	90.2	89.6	88.8
PROPOSED ELEV (FEET)	98.24	97.49	97.38	97.38	97.75	97.38	97.38	97.38	97.75	97.38	97.38	97.38	97.75	97.38	97.38	97.42	97.58	98.23

FIRE WATER BUILDING 500-C LOOP PROFILE

H:50 V:5 — 0, 25, 50 / 0, 2.5, 5

SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400' DOOR REVISIONS	12
04/12/2024	PER CITY COMMENTS	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/25/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/28/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	PER ADDENDUM #1	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMIT RESUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Joseph J Yannucci

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Project: APOPKA BUSINESS CENTER

CITY OF APOPKA

ORANGE COUNTY FLORIDA

Drawing Title: FIRE WATER PROFILES

Project No. 342010601

Date 29 AUGUST 2022

Drawn By LC

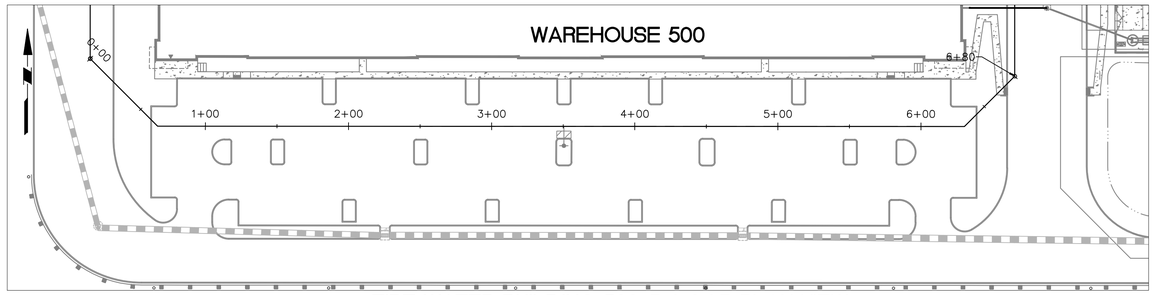
Checked By JJY

Drawing No. C-24G

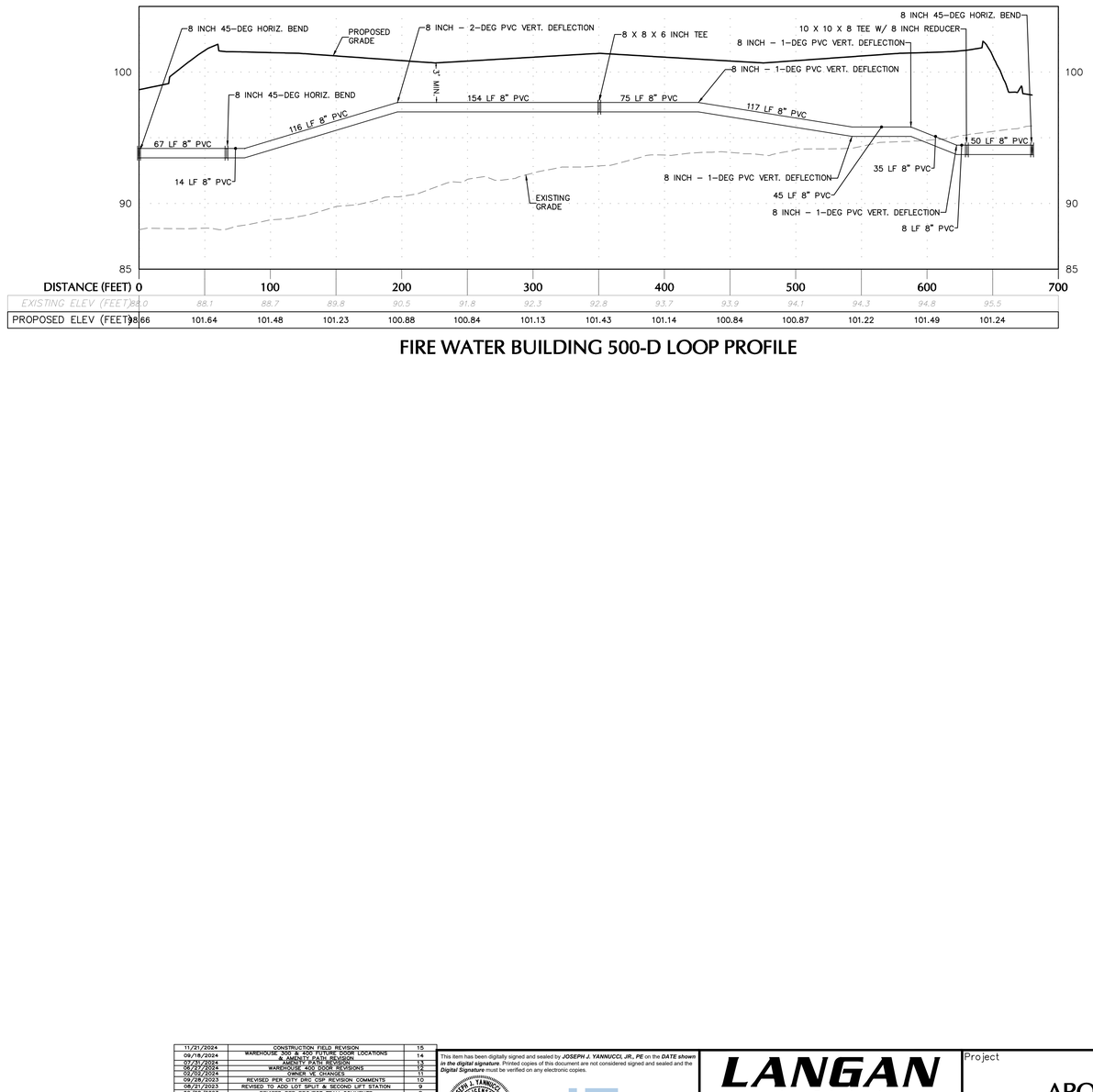
LANGAN Project No. 342010601

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Date: 11/21/2024 Time: 09:59 User: brlahore Style Table: Langan.stb Layout: C-24G Document Code: 342010601-0301-CG201-0102



FIRE WATER BUILDING 500-D LOOP PLAN VIEW



FIRE WATER BUILDING 500-D LOOP PROFILE

H: 50 V: 5 — 0 0 — 25 2.5 — 50 5
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS ADDED PER CLIENT REVISION	14
07/25/2024	AMENITY PLOT REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER PROJECT TEAM COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

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Project
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CITY OF APOPKA
ORANGE COUNTY FLORIDA

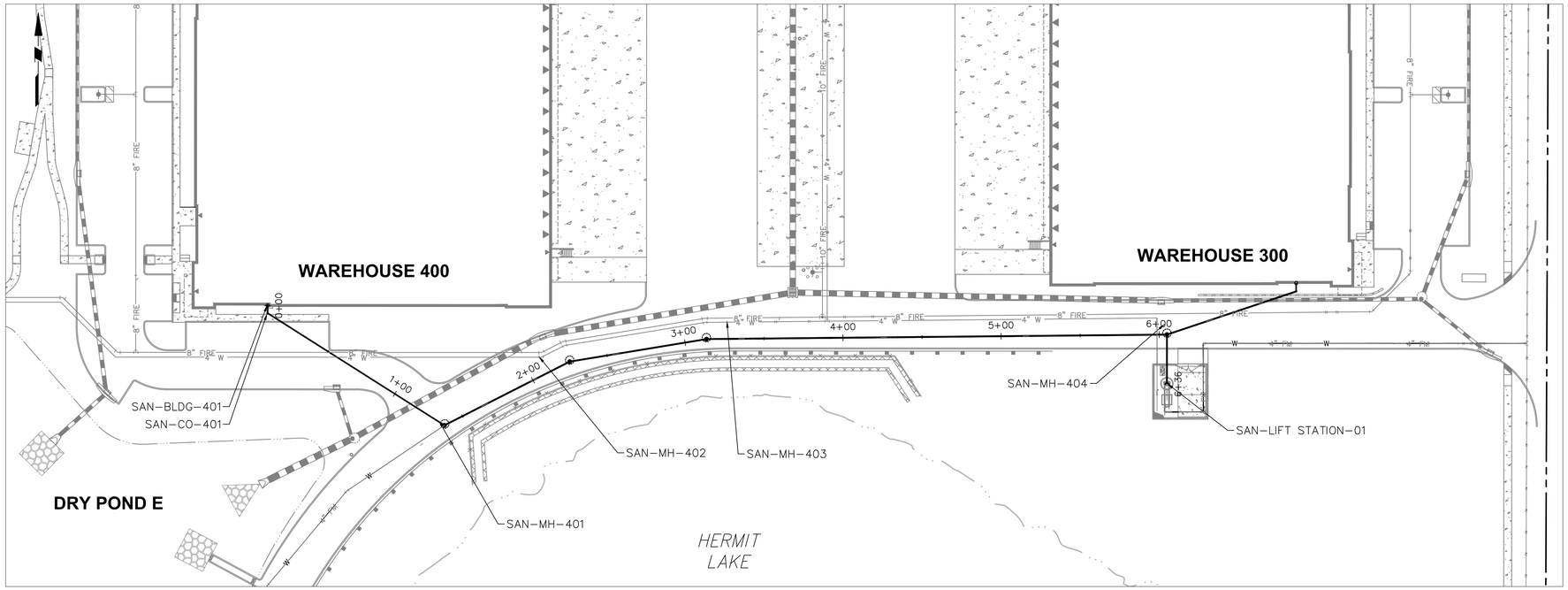
Drawing Title
FIRE WATER PROFILES

Project No. 342010601
Date 29 AUGUST 2022
Drawn By LC
Checked By JJY

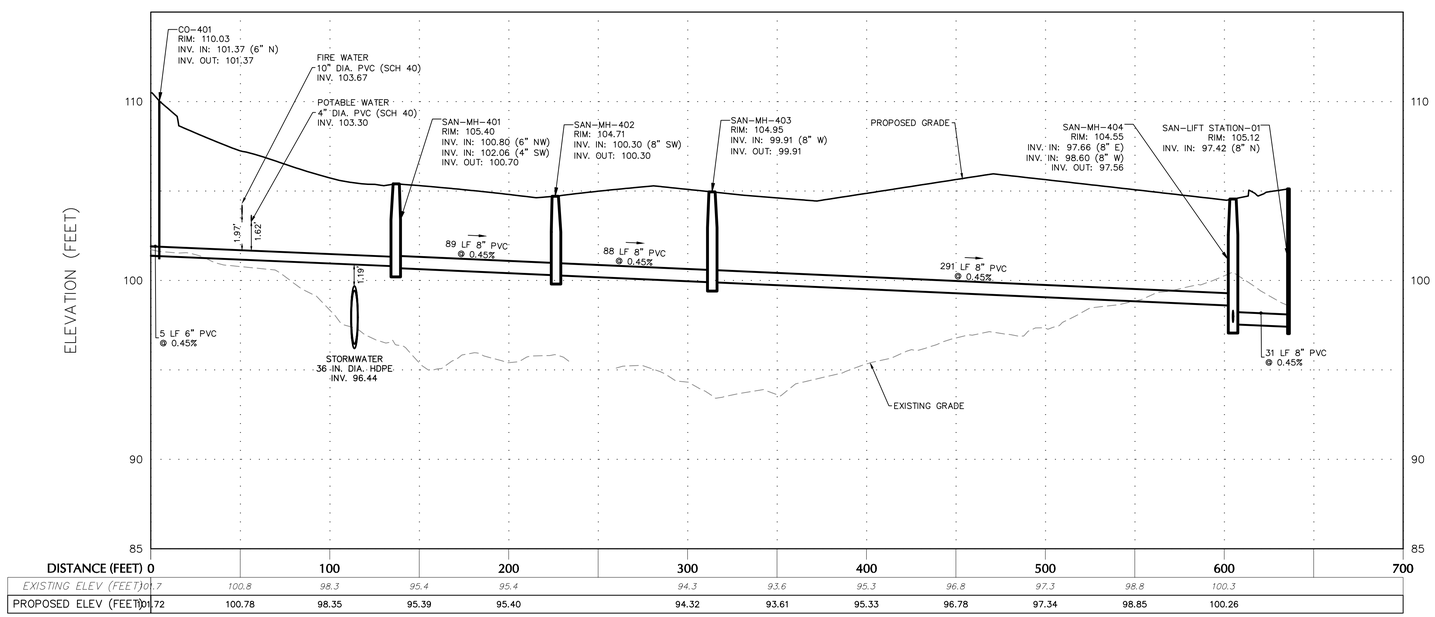
Drawing No. C-24H

LANGAN
Project No. 342010601

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SAN-BLDG-401 TO SAN-LIFT STATION-01



DISTANCE (FEET)	0	100	200	300	400	500	600	700
EXISTING ELEV (FEET)	*101.7*	*100.8*	*98.3*	*95.4*	*95.4*	*94.3*	*93.6*	*95.3*	*96.8*	*97.3*	*98.8*	*100.3*
PROPOSED ELEV (FEET)	101.72	100.78	98.35	95.39	95.40	94.32	93.61	95.33	96.78	97.34	98.85	100.26

WAREHOUSE 400 TO LS-01

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

No.	Description	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE 400 & 300 DOOR LOCATIONS & AMENITY PATH REVISION	09/18/2024
13	AMENITY PATH REVISION	07/31/2024
12	WAREHOUSE 400 DOOR REVISIONS	06/27/2024
11	OWNER VE CHANGES	02/02/2024
10	REVISED PER CITY DRC CSP REVISION COMMENTS	09/28/2023
9	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	08/21/2023
8	REVISED PER PROJECT TEAM COMMENTS	02/08/2023
7	BID ADDENDUM #2	11/06/2022
6	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	10/24/2022
5	REVISED PER SJRWMD COMMENTS	10/11/2022
4	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM	09/09/2022
3	REVISED PER CITY DRC COMMENTS	07/28/2022
2	BID ADDENDUM #1	07/15/2022
1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

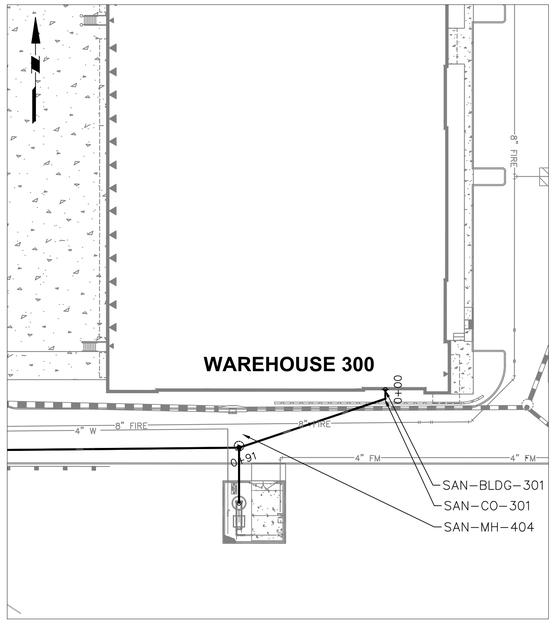
Drawing Title
SANITARY PROFILES

Project No. 342010601
Date 29 AUGUST 2022
Drawn By BML
Checked By JJY

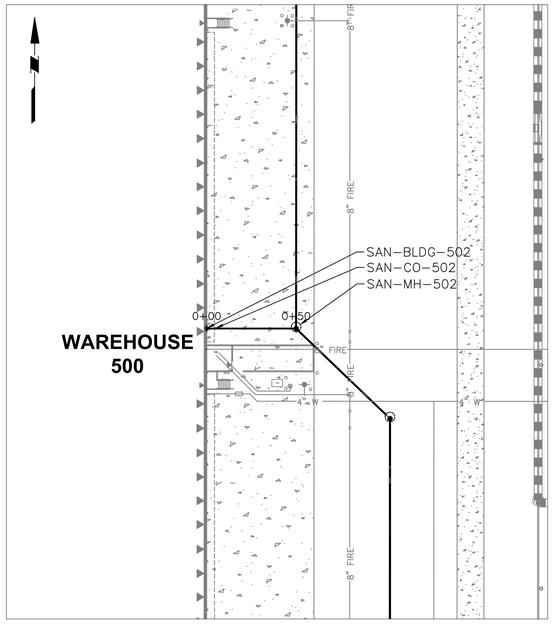
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LANGAN
Project No. 342010601

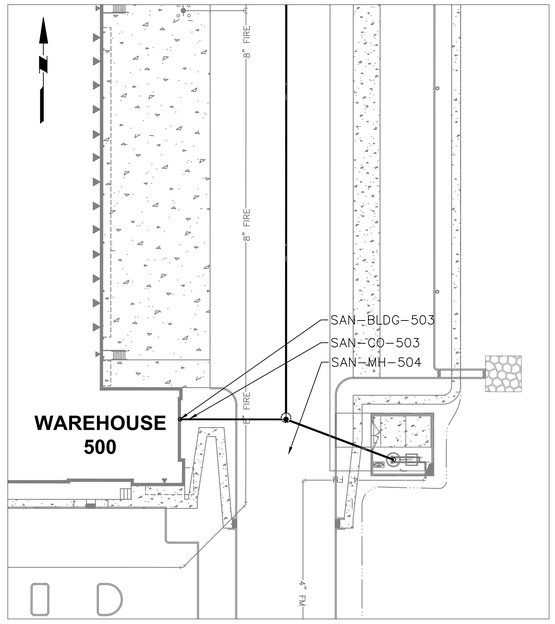
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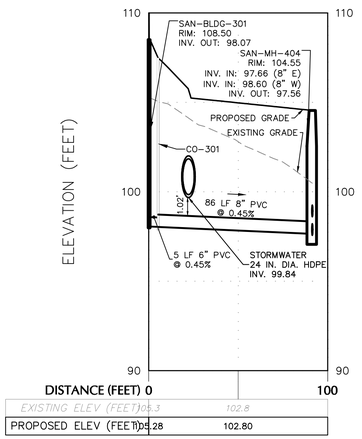
SAN-BLDG-301 TO SAN-MH-404



SAN-BLDG-502 TO SAN-MH-502

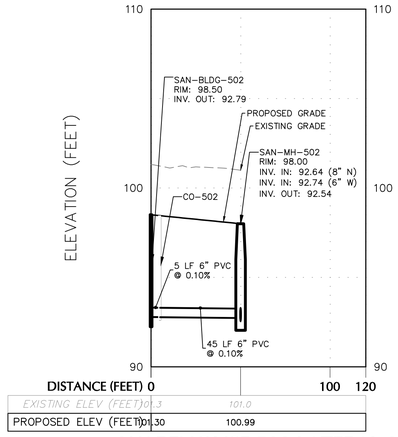


SAN-BLDG-503 TO SAN-MH-504



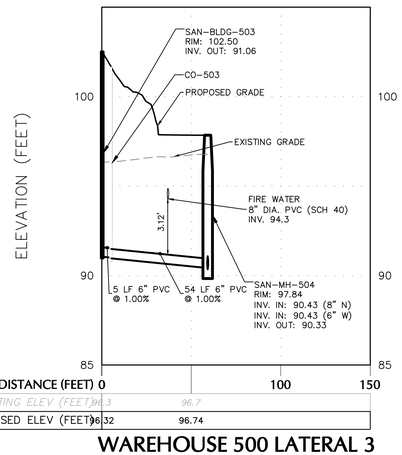
EXISTING ELEV (FEET)	105.3	102.8
PROPOSED ELEV (FEET)	105.28	102.80

WAREHOUSE 300 LATERAL



EXISTING ELEV (FEET)	101.3	101.0
PROPOSED ELEV (FEET)	101.30	100.99

WAREHOUSE 500 LATERAL 2



EXISTING ELEV (FEET)	96.3	96.7
PROPOSED ELEV (FEET)	96.32	96.74

WAREHOUSE 500 LATERAL 3

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/25/2024	AMENITY PLAZA REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT @ SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER PROJECT TEAM COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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CITY OF APOPKA
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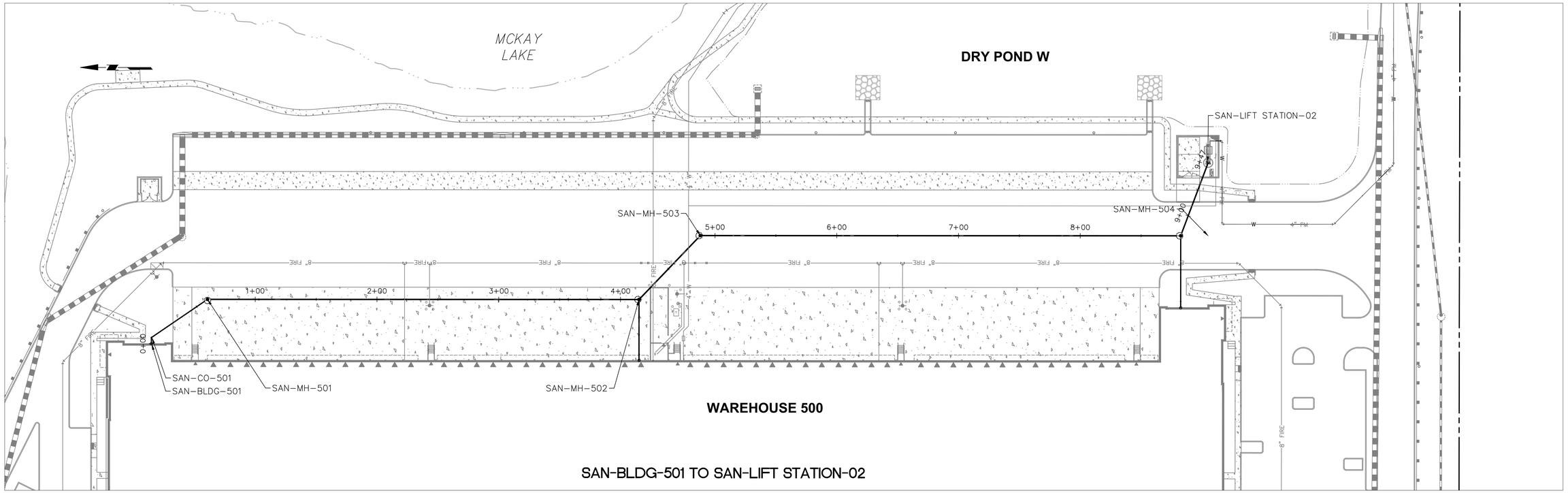
Drawing Title
SANITARY PROFILES

Project No. 342010601
Date 29 AUGUST 2022
Drawn By BML
Checked By JJY

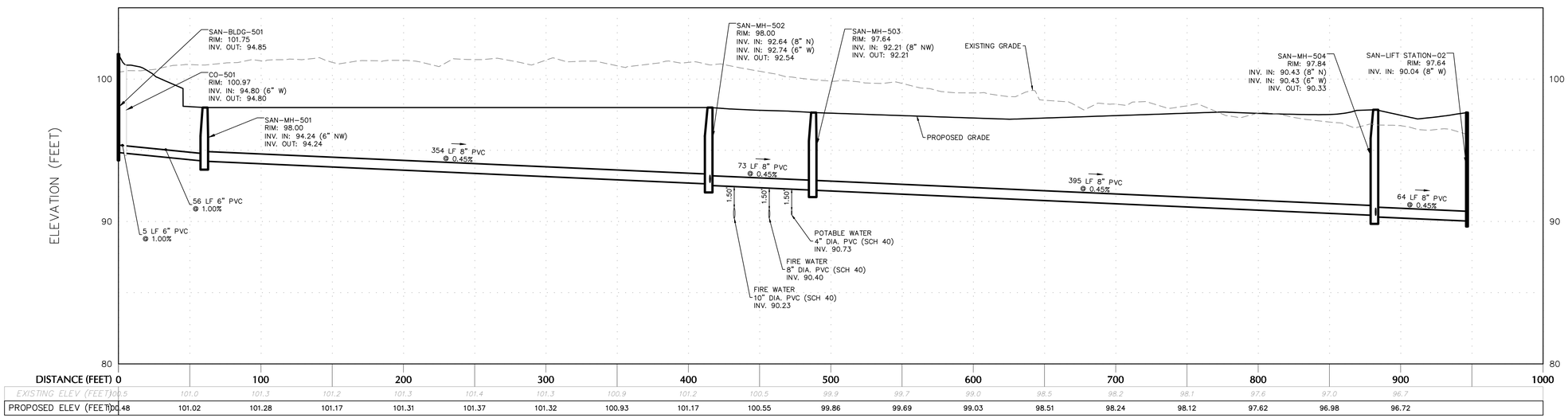
Drawing No. C-24J

LANGAN
Project No. 342010601

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SAN-BLDG-501 TO SAN-LIFT STATION-02



DISTANCE (FEET)	0	100	200	300	400	500	600	700	800	900	1000
EXISTING ELEV (FEET)	100.5	101.0	101.3	101.2	101.3	101.4	101.3	100.9	101.2	100.5	99.9	99.7	99.0	98.5	98.2	98.1	97.6	97.0	96.7
PROPOSED ELEV (FEET)	100.48	101.02	101.28	101.17	101.31	101.37	101.32	100.93	101.17	100.55	99.86	99.69	99.03	98.51	98.24	98.12	97.62	96.98	96.72

WAREHOUSE 500 TO LS-02

H: 40 V: 4 — 0 0 — 20 2 — 40 4

SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS ADDED TO FLOOR PLAN	14
07/25/2024	AMENITY POOL REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/21/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER PROJECT TEAM COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Project: APOPKA BUSINESS CENTER

CITY OF APOPKA

ORANGE COUNTY FLORIDA

Drawing Title: SANITARY PROFILES

Project No. 342010601

Date 29 AUGUST 2022

Drawn By BML

Checked By JJY

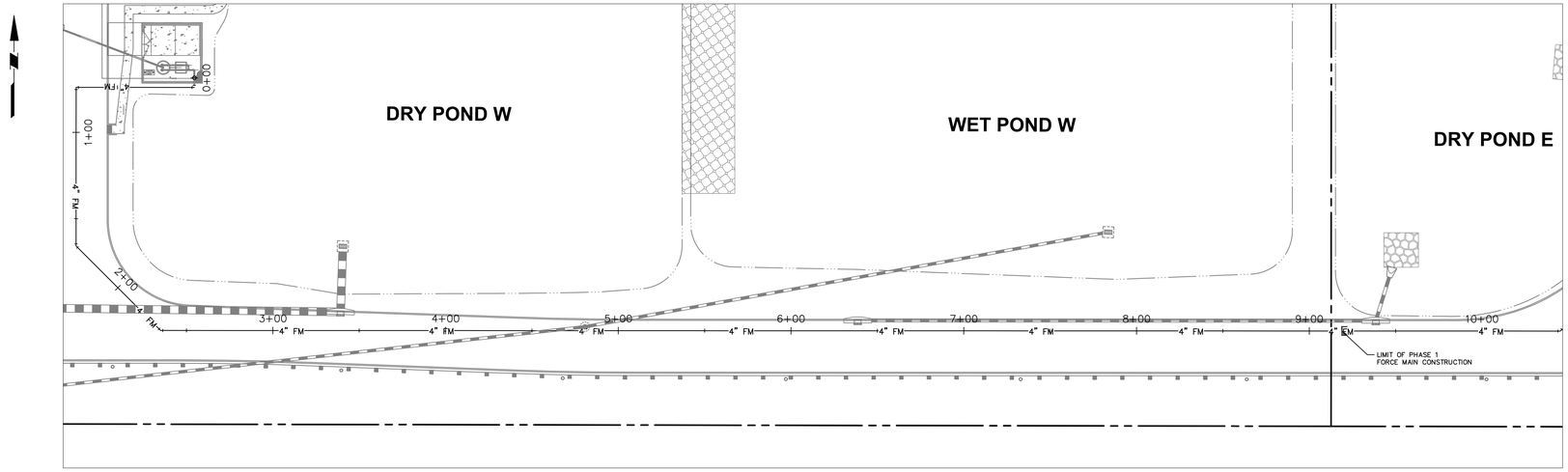
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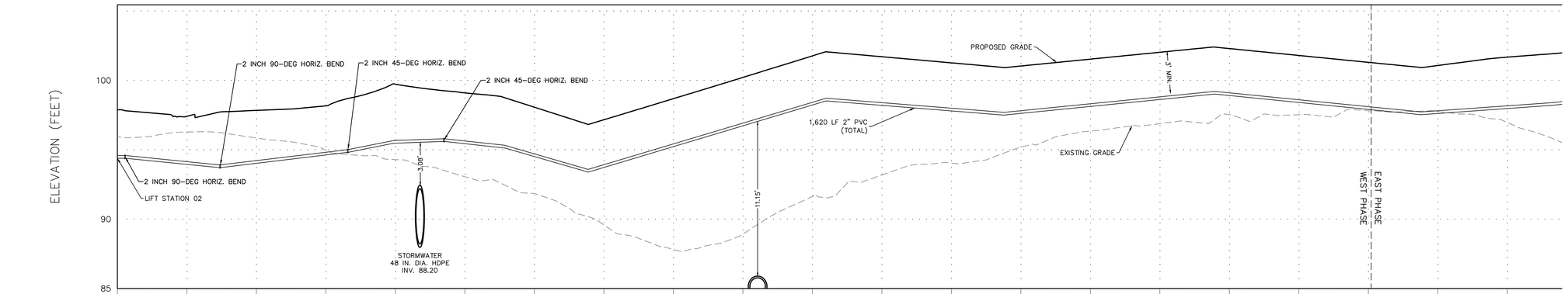
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Date: 11/21/2024 Time: 10:00 User: brlahore Style Table: Langan.stb Layout: C-24K Document Code: 342010601-0301-CG201-0101





DISTANCE (FEET)	0	100	200	300	400	500	600	700	800	900	1000
EXISTING ELEV (FEET)	*95.9*	*96.3*	*95.8*	*95.0*	*94.3*	*93.1*	*91.8*	*89.6*	*87.8*	*88.9*	*91.6*	*93.2*	*94.0*	*95.2*	*96.3*	*96.9*	*97.5*	*97.5*	*97.8*	*97.8*	*97.0*
PROPOSED ELEV (FEET)	97.87	97.40	97.84	98.16	99.73	99.09	98.06	97.16	98.68	100.21	101.76	101.70	101.26	101.03	101.53	102.02	102.29	101.79	101.30	101.07	101.67

LIFT STATION 02 TO MANHOLE PROFILE

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 100' FUTURE DOOR LOCATIONS	14
07/25/2024	AMENITY POOL REVISION	13
06/27/2024	WAREHOUSE 400' DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT @ SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/21/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

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JOSEPH J. YANNUCCI LICENSE No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

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13485 Veterans Way, Suite 120
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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

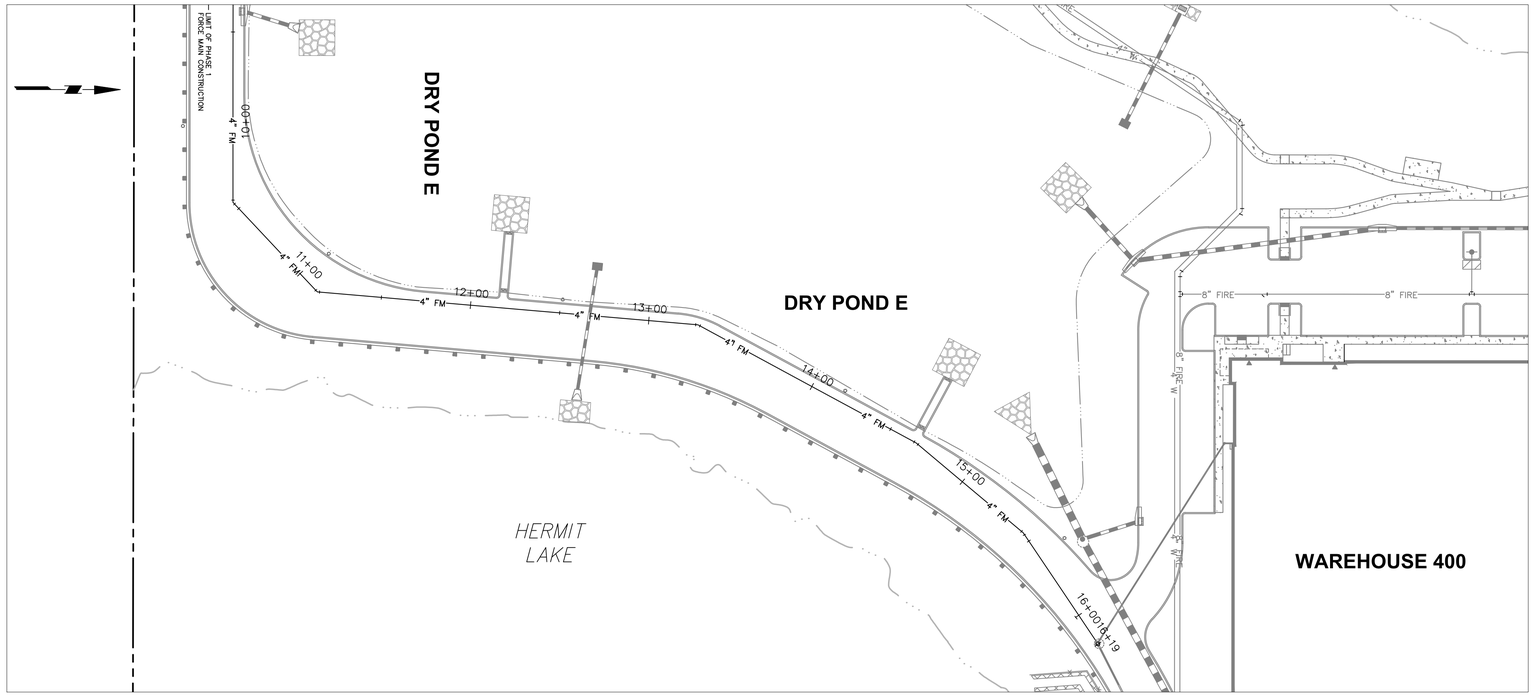
Drawing Title
FORCE MAIN PROFILES

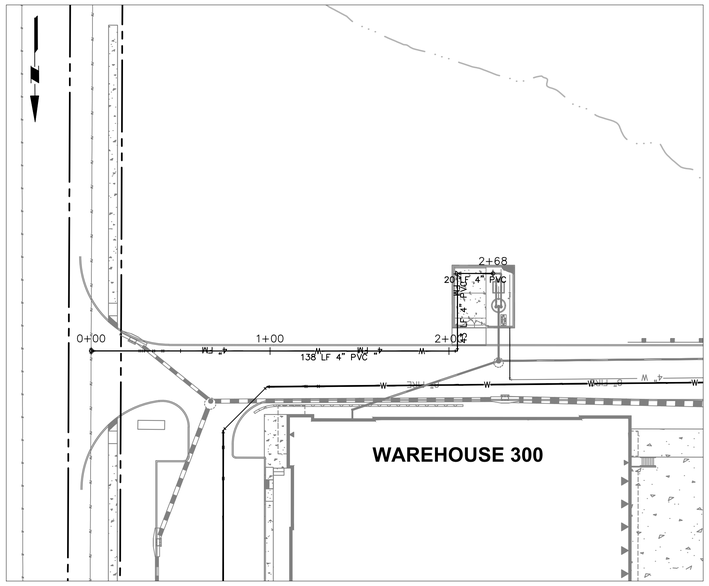
Project No. 342010601
Date 29 AUGUST 2022
Drawn By BML
Checked By JJY

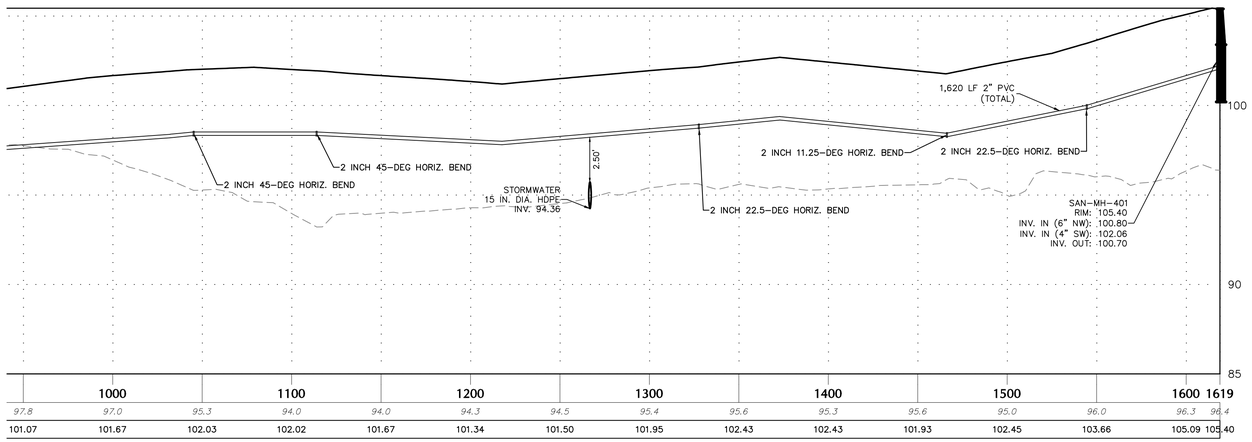
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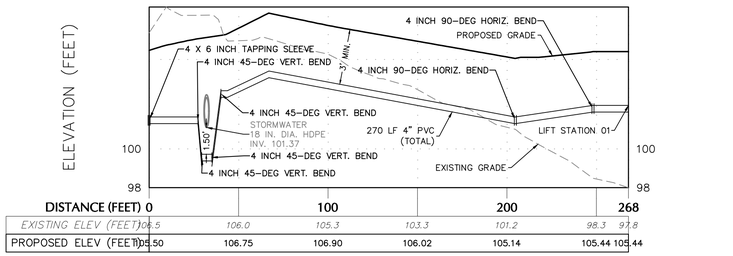
LANGAN
Project No. 342010601

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LIFT STATION 01 TO EXISTING MAIN PROFILE

H: 40 0 20 40
V: 4 0 2 4
SCALE IN FEET

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS ADDED TO FDOT SECTION	14
07/25/2024	AMENITY PLOT REVISIONS	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
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08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
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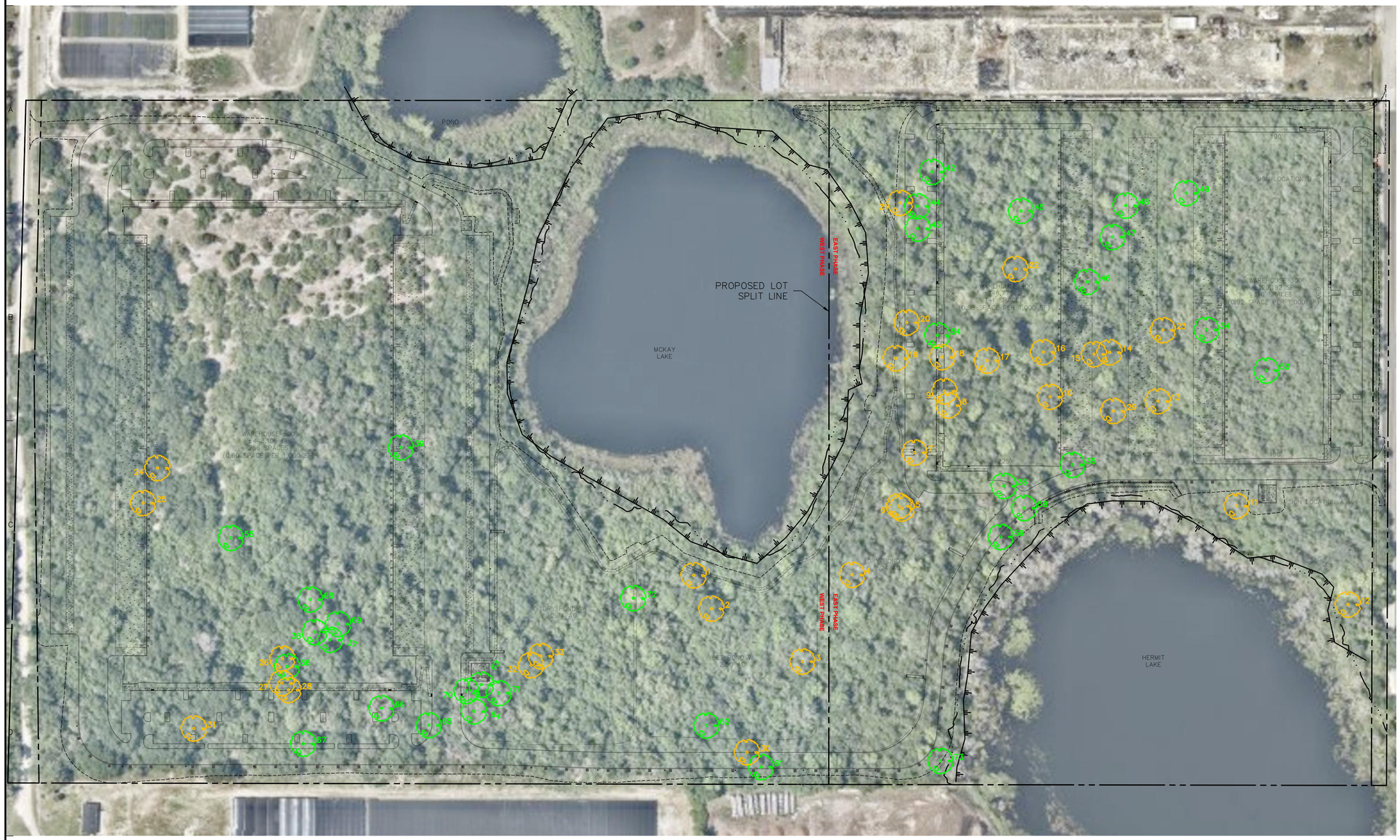
Drawing Title
FORCE MAIN PROFILES

Project No. 342010601
Date 29 AUGUST 2022
Drawn By BML
Checked By JJY

Drawing No. C-24M

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Project No. 342010601

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SPECIMEN TREE INVENTORY

Number	Genus	COM_NAME	DBH (IN)	Health Description	Height ≥ 20FT
1	388	Live oak	26	boll rot	Yes
2	368	Laurel oak	30	boll rot	Yes
3	388	Live oak	25	boll rot, major leaf loss	Yes
4	368	Laurel oak	24	boll rot	Yes
5	87	Pignut hickory	25	boll rot	Yes
6	87	Pignut hickory	25	boll rot	Yes
7	235	Southern magnolia	30	root rot, butt swell due to rot	Yes
8	368	Laurel oak	24	boll rot	Yes
9	87	Pignut hickory	30	boll rot	Yes
10	368	Laurel oak	28	boll rot	Yes
11	388	Live oak	25	boll rot	Yes
12	388	Live oak	28	boll rot	Yes
13	388	Live oak	28	boll rot	Yes
14	368	Laurel oak	25	boll rot	Yes
15	368	Laurel oak	30	rot in upper boll	Yes
16	368	Laurel oak	38	boll rot	Yes
17	388	Live oak	26	boll rot	Yes
18	87	Pignut hickory	26	boll rot, upper boll damge	No
19	87	Pignut hickory	27	boll rot	Yes
20	388	Live oak	37	boll rot	Yes
21	388	Live oak	28	boll rot	Yes
22	368	Laurel oak	29	boll rot	Yes
23	368	Laurel oak	25	boll rot,upper boll damage	No
24	368	Laurel oak	29	boll rot	Yes
25	368	Laurel oak	28	boll rot'	Yes
26	368	Laurel oak	30	boll rot	Yes
27	368	Laurel oak	37	boll rot	Yes
28	368	Laurel oak	27	rot in fork	Yes
29	368	Laurel oak	30	boll rot	Yes
30	368	Laurel oak	33	boll rot	Yes
31	368	Laurel oak	25	boll rot	Yes
32	388	Live oak	26	upper boll rot	Yes
33	368	Laurel oak	33	boll rot	Yes
34	388	Live oak	31	Healthy	Yes
35	388	Live oak	31	Healthy	Yes
36	87	Pignut hickory	24	Healthy	Yes
37	368	Laurel oak	28	Healthy	Yes
38	388	Live oak	36	Healthy	Yes
39	368	Laurel oak	38	Healthy	Yes
40	87	Pignut hickory	34	Healthy	Yes
41	388	Live oak	25	Healthy	Yes
42	388	Live oak	29	Healthy	Yes
43	388	Live oak	25	Healthy	Yes
44	388	Live oak	35	Healthy	Yes
45	87	Pignut hickory	35	Healthy	Yes
46	87	Pignut hickory	24	Healthy	Yes
47	388	Live oak	27	Healthy	Yes
48	235	Southern magnolia	25	Healthy	Yes
49	388	Live oak	25	Healthy	Yes
50	388	Live oak	25	Healthy	Yes
51	388	Live oak	25	Healthy	Yes
52	87	Pignut hickory	25	Healthy	Yes
53	388	Live oak	25	Healthy	Yes
54	388	Live oak	28	Healthy	Yes
55	368	Laurel oak	30	Healthy	Yes
56	368	Laurel oak	37	Healthy	Yes
57	388	Live oak	27	Healthy	Yes
58	388	Live oak	33	Healthy	Yes
59	388	Live oak	30	Healthy	Yes
60	368	Laurel oak	37	Healthy	Yes
61	368	Laurel oak	32	Healthy	Yes
62	368	Laurel oak	25	Healthy	Yes
63	388	Live oak	27	Healthy	Yes
64	388	Live oak	37	Healthy	Yes
65	368	Laurel oak	25	Healthy	Yes
66	388	Live oak	29	Healthy	Yes
67	87	Pignut hickory	26	Healthy	Yes
68	235	Southern magnolia	25	Healthy	Yes
69	87	Pignut hickory	25	Healthy	Yes
70	388	Live oak	26	Healthy	Yes
71	388	Live oak	28	Healthy	Yes
72	87	Pignut hickory	26	Healthy	Yes
73	388	Live oak	33	Healthy	Yes

PROTECTED TREE INVENTORY

	TPA	TPA Inches	Total Inches by Species[1]
American Holly	0.95	9.5	456.0
Black Cherry	1.43	21.45	1029.6
Laurel Oak	7.43	115.165	5527.9
Pignut Hickory	2.36	38.94	1869.1
Southern Magnolia	0.48	7.68	368.6
American Holly	0.95	6.65	319.2
Black Cherry	0.48	4.32	207.4
Cabbage Palmetto	1.43	20.735	995.3
Chokecherry	4.29	38.61	1853.3
Laurel Oak	1.9	14.25	684.0
Live Oak	16.52	265.972	12766.7
Pignut Hickory	0.95	7.125	342.0
Totals	39.17	550.397	**26419.1**

Note:
1. Per 48 acres of canopy tree area provided by ECS Florida LLC.

NOTES:
1. PROTECTED TREE INVENTORY AND SPECIMEN TREE INVENTORY REFERENCED FROM ECS FLORIDA, LLC SPECIMEN TREE REGISTRY AND PROTECTED TREE INVENTORY DATED FEBRUARY 2022 AND REVISED OCTOBER 2022.

SCALE: 1" = 100'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE #3 & AMENITY LOCATIONS	14
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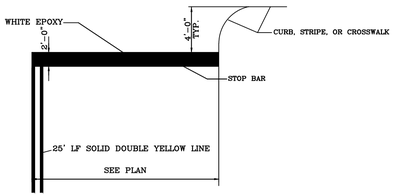
Drawing Title
EXISTING TREE INVENTORY AND SPECIMEN TREE SURVEY

Project No. 342010601
Date 29 APRIL 2022
Drawn By CRB
Checked By JJY

Exhibit C-25

LANGAN
Project No. 342010601

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STOP BAR

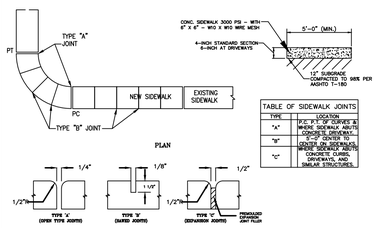
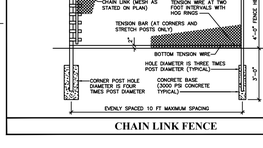
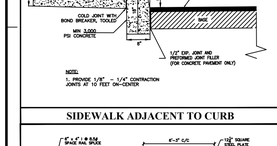


TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
"A"	R.C. P.T. OF CURVES & WHERE SIDEWALK ABUTS CURB, CURB & GUTTER
"B"	AT 20'-0" CENTERS TO CENTER OF SIDEWALKS, WHERE SIDEWALK ABUTS CONCRETE DRIVEWAYS, AND SIMILAR STRUCTURES.
"C"	

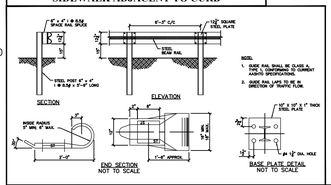
STANDARD CONCRETE SIDEWALK



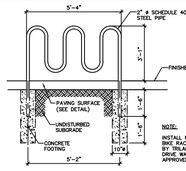
FDOT TYPE D CURB PER FDOT INDEX 300



SIDEWALK ADJACENT TO CURB

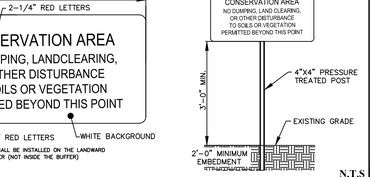


STEEL GUIDE RAIL

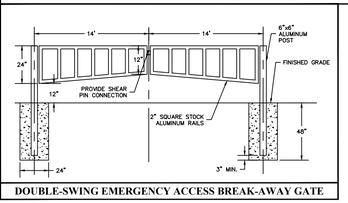


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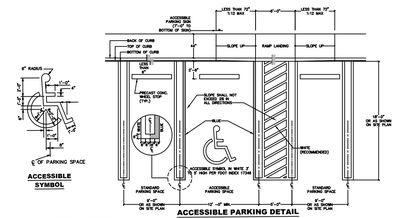
CHAIN LINK FENCE

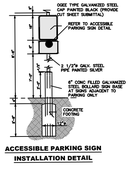


"CONSERVATION AREA" SIGN AND POST DETAIL ◇



DOUBLE-SWING EMERGENCY ACCESS BREAK-AWAY GATE







FTP-20-06		
2" RADII 3/8" BORDER		
1" SERIES C LEGEND		
COLOR	TOP	BOTTOM
BACKGROUND	BLUE	WHITE
LEGEND AND BORDER	WHITE	BLACK
1" RADII 3/8" BORDER		
1" SERIES C LEGEND		
COLOR		
BACKGROUND	WHITE	
LEGEND AND BORDER	BLACK	

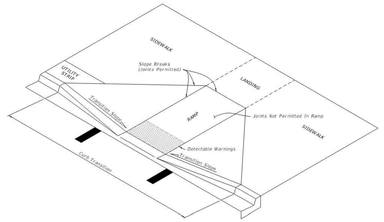
ACCESSIBLE PARKING SPACE DETAIL

QTY.	No.	LEGEND	DETAIL
9	1	STOP SIGN WITH 24" WHITE PAINTED STOP BAR (4' FROM CROSSWALK) PER FDOT INDEX 17346	30" STOP 36" R1-1 W/R
18	2	ADA ACCESSIBLE SIGN	SEE THIS SHEET
5	3	YIELD TO PEDESTRIANS	STATE LAW YIELD TO PEDESTRIANS R1-9
2	4	NO TRUCKS ALLOWED	R5-2

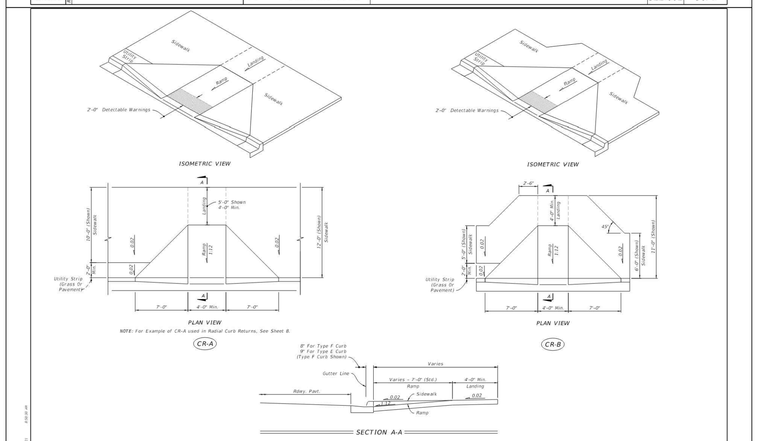
SIGN LEGEND

GENERAL NOTES:

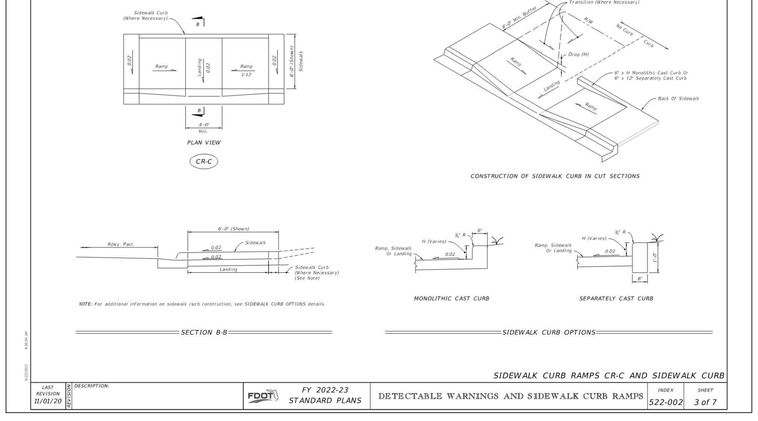
1. Cross Slopes and Grades:
   - A. Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1.12) shown in this Index are maximums. With approval of the Engineer, provide the minimum feasible slope where the requirements cannot be met.
   - B. Landings must have cross-slopes less than or equal to 0.02 in any direction.
   - C. Maintain a single longitudinal slope along each side of the curb ramp. Ramp slopes are not required to exceed 15 feet in length.
   - D. Joints permitted at the location of Slope Breaks. Otherwise locate joints in accordance with Index 520-001. No joints are permitted within the ramp portion of the Curb Ramp.
2. Curb, Curb and Gutter, and/or Sidewalk:
   - A. Refer to Index 522-001 for concrete thickness and sidewalk details.
   - B. Remove any existing curb, curb and gutter, or sidewalk to the nearest joint beyond the curb transition or to the extent that no remaining section is less than 5 feet long.
   - C. Width of Curb Ramp is 4'-0" minimum. Match sidewalk or Shared Use Path width as shown in the Plans.
3. Curb Ramp Alpha-Identification:
   - A. Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.
   - B. Alpha-identifications CR-I and CR-J are intentionally omitted.
4. Detectable Warnings:
   - A. Install detectable warnings in accordance with Specification 527.
   - B. Place detectable warnings across the full width of the ramp or landing, to a minimum depth of 2 feet measured perpendicular to the curb line and no greater than 5 feet from the back of the curb or edge of pavement.
   - C. If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp; otherwise, the truncated domes are not required to be aligned.



LAST REVISION 11/01/21	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 1 of 7



LAST REVISION 11/01/20	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 2 of 7



LAST REVISION 11/01/20	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 3 of 7

No.	Description	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS	09/18/2024
13	PE SIGNATURE / PATH REVISION	07/31/2024
12	WAREHOUSE 400 DOOR REVISIONS	02/27/2024
11	ORNDER VE CHANGES	02/19/2024
10	REVISED PER CITY DRC CSP REVISION COMMENTS	09/28/2023
9	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	08/21/2023
8	REVISED PER PROJECT TEAM COMMENTS	02/08/2023
7	BID ADDENDUM #2	11/08/2022
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5	REVISED PER SJRWMD COMMENTS	10/11/2022
4	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	09/09/2022
3	REVISED PER CITY DRC COMMENTS	07/28/2022
2	BID ADDENDUM #1	07/15/2022
1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022

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Project: APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title: SITE DETAILS

Project No. 342010601
Date 15 JULY 2022
Drawn By JMW
Checked By JJY

Drawing No. C-26

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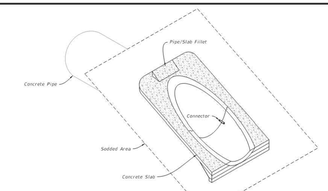
LANGAN Project No. 342010601

GENERAL NOTES:

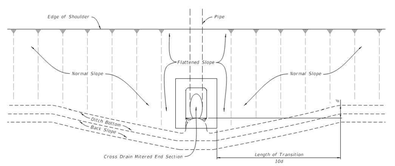
1. Unless otherwise designated in the plans, concrete pipe mitered end sections may be used with any type of cross drain pipe; corrugated steel pipe mitered end sections may be used with any type of cross drain pipe except aluminum pipe; and, corrugated aluminum mitered end sections may be used with any type of cross drain pipe except steel pipe. When bituminous coated metal pipe is specified for cross drain pipe, construct the mitered end sections with like pipe or concrete pipe. When the mitered end section pipe is dissimilar to the cross drain pipe, construct a concrete jacket in accordance with Index 430-001.
2. Use either corrugated metal or concrete mitered end sections for corrugated polyethylene pipe (HDPE); polyvinyl-chloride pipe (PVC); steel reinforced polyethylene pipe (SRPE); and polypropylene pipe (PP). When used in conjunction with corrugated mitered end sections, make connection using either a formed metal band specifically designated to join HDPE, PVC, SRPE, or PP pipe, with metal pipe. When used in conjunction with a concrete mitered end sections, construct concrete jacket in accordance with Index 430-001.
3. Class IV5 concrete cast-in-place reinforced slabs are required for all sizes of cross drain pipes. Construct slabs at 3/4" thick, unless 5" thickness is called for in the Plans.
4. Select lengths of concrete pipe that avoid excessive connections in the assembly of the mitered end section.
5. Repair corrugated metal pipe galvanizing that is damaged during beveling and perforating.
6. When existing multiple cross drain pipes are spaced other than the dimensions shown in this Index, have navigational aids, or non-uniform sections, either construct the mitered end sections separately as single pipe or collectively as multiple pipe end sections as directed by the Engineer.
7. Saddle Slope:
   1:4 Miter - Slope to ¼" pipe for round pipes less than or equal to 18" diameter and 1:1 for round pipes greater than or equal to 24" diameter.
   Slope to the major axis for elliptical pipes 24"x38" or smaller and 1:2 for pipes 29"x45" or larger. Slope to the span line for pipe arch 28"x20" or smaller and 1:2 for pipe arch 35"x24" or larger.
   1:2 Miter - Slope to ¼" pipe for round pipes less than or equal to 18"diameter and 1:2 for round pipes greater than or equal to 24" diameter.
   Slope to the major axis for elliptical pipes 29"x45" or smaller and 1:1 for pipes 34"x53" or larger. Slope 1:1 for all pipe arch sizes.
8. Quantities shown are for estimating purposes only.

TABLE OF CONTENTS:

Sheet	Description
1	General Notes and Contents
2	Simple and Multiple Concrete Pipe
3	Concrete Pipe Dimensions and Quantities
4	Simple and Multiple Corrugated Metal Pipe
5	Corrugated Metal Pipe Dimensions and Quantities
6	Concrete Pipe Connections and Corrugated Metal Pipe (CMP) Anchor Detail



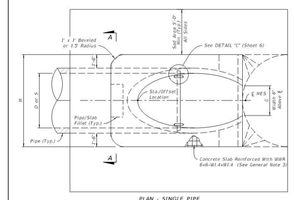
CROSS DRAIN MITERED END SECTION
(Concrete Pipe Shown; Corrugated Metal Pipe Similar)



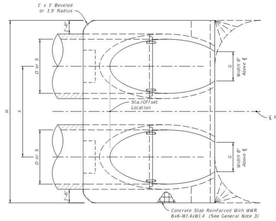
SLOPE AND DITCH TRANSITIONS

LAST REVISION 11/01/19 — DESCRIPTION: —

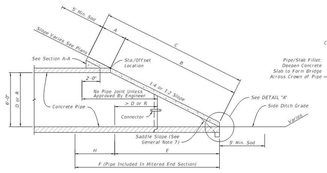
FDOT FY 2022-23 STANDARD PLANS | CROSS DRAIN MITERED END SECTION | INDEX 430-021 | SHEET 1 of 6



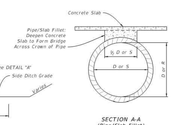
PLAN - SINGLE PIPE



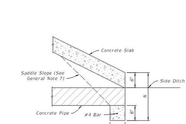
PLAN - MULTIPLE PIPE



ELEVATION



SECTION A-A
(Pipe/Slab Fillet)



DETAIL "A"

NOTE: See Table 1 on Sheet 3 for Dimensions and Quantities.

ROUND CONCRETE PIPE
(Elliptical Pipe Similar)

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FDOT FY 2022-23 STANDARD PLANS | CROSS DRAIN MITERED END SECTION | INDEX 430-021 | SHEET 2 of 6

SINGLE AND MULTIPLE CONCRETE PIPE

TABLE 1
SINGLE AND MULTIPLE CONCRETE PIPE DIMENSIONS AND QUANTITIES

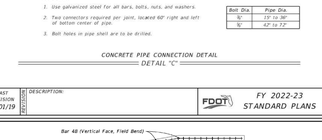
	Dia D (in)	Rise R (in)	Span S (in)	X	A	B	C	E	F	G	H	H: 90° SKEW SLAB (ft) Simple Pipe	H: 90° SKEW SLAB (ft) Doubled Pipe	H: 90° SKEW SLAB (ft) Triple Pipe	H: 90° SKEW SLAB (ft) Quad Pipe	H: 0° SKEW SLAB (ft) (See General Note 4) Simple Pipe	H: 0° SKEW SLAB (ft) (See General Note 4) Doubled Pipe	H: 0° SKEW SLAB (ft) (See General Note 4) Triple Pipe	H: 0° SKEW SLAB (ft) (See General Note 4) Quad Pipe	R	SODDING (SY) Simple Pipe	SODDING (SY) Doubled Pipe	SODDING (SY) Triple Pipe	SODDING (SY) Quad Pipe
Round Concrete Pipe — 1:2 Slope	12"	—	—	1'-7"	1'-0"	4'-10"	2'-10"	1'-0"	1'-2"	0'-8"	1'-4"	4'-6.7"	7'-0"	9'-7.8"	12'-3.5"	3'-10"	6'-0"	8'-2.8"	10'-5.5"	0'-8"	0.28	0.55	0.77	0.99
	15"	—	—	1'-10"	1'-3"	5'-1"	3'-0"	1'-0"	1'-2"	0'-8"	1'-4"	5'-0.2"	7'-9.2"	10'-7.4"	13'-5.7"	4'-3"	6'-7"	9'-0.8"	11'-5.7"	0'-9"	0.31	0.61	0.85	1.09
	18"	—	—	2'-1"	1'-6"	5'-4"	3'-2"	1'-0"	1'-2"	0'-8"	1'-4"	5'-5.7"	8'-5.2"	11'-4.7"	14'-4.2"	4'-8"	7'-3"	9'-10.8"	12'-5.8"	0'-10"	0.34	0.67	0.93	1.19
	24"	—	—	2'-7"	2'-0"	5'-10"	3'-6"	1'-0"	1'-2"	0'-8"	1'-4"	6'-0.7"	9'-4.2"	12'-7.7"	15'-11.2"	5'-2"	8'-0"	10'-10.8"	13'-9.5"	1'-0"	0.40	0.79	1.09	1.39
	30"	—	—	3'-1"	2'-6"	6'-4"	3'-10"	1'-0"	1'-2"	0'-8"	1'-4"	6'-5.7"	9'-11.2"	13'-4.7"	16'-10.2"	5'-8"	8'-9"	11'-9.8"	14'-10.7"	1'-1"	0.46	0.91	1.25	1.59
	36"	—	—	3'-7"	3'-0"	6'-10"	4'-2"	1'-0"	1'-2"	0'-8"	1'-4"	6'-10.7"	10'-6.2"	14'-2.7"	17'-10.2"	6'-1"	9'-5"	12'-8.8"	15'-11.7"	1'-2"	0.52	1.03	1.41	1.79
	42"	—	—	4'-1"	3'-6"	7'-4"	4'-6"	1'-0"	1'-2"	0'-8"	1'-4"	7'-3.7"	11'-1.2"	14'-11.7"	18'-9.2"	6'-7"	10'-1"	13'-7.8"	17'-1.7"	1'-3"	0.58	1.15	1.57	1.99
	48"	—	—	4'-7"	4'-0"	7'-10"	4'-10"	1'-0"	1'-2"	0'-8"	1'-4"	7'-8.7"	11'-9.2"	15'-8.7"	19'-8.2"	7'-0"	10'-9"	14'-5.8"	18'-1.7"	1'-4"	0.64	1.27	1.73	2.19
	54"	—	—	5'-1"	4'-6"	8'-4"	5'-2"	1'-0"	1'-2"	0'-8"	1'-4"	8'-1.7"	12'-5.2"	16'-8.7"	20'-7.2"	7'-5"	11'-4"	15'-3.8"	19'-1.7"	1'-5"	0.70	1.39	1.89	2.39
	60"	—	—	5'-7"	5'-0"	8'-10"	5'-6"	1'-0"	1'-2"	0'-8"	1'-4"	8'-6.7"	13'-1.2"	17'-8.7"	22'-1.2"	7'-11"	12'-0"	16'-1.8"	20'-2.7"	1'-6"	0.76	1.51	2.05	2.59
	18"	—	—	2'-1"	1'-6"	5'-4"	3'-2"	1'-0"	1'-2"	0'-8"	1'-4"	5'-5.7"	8'-5.2"	11'-4.7"	14'-4.2"	4'-8"	7'-3"	9'-10.8"	12'-5.8"	0'-10"	0.34	0.67	0.93	1.19
	24"	—	—	2'-7"	2'-0"	5'-10"	3'-6"	1'-0"	1'-2"	0'-8"	1'-4"	6'-0.7"	9'-4.2"	12'-7.7"	15'-11.2"	5'-2"	8'-0"	10'-10.8"	13'-9.5"	1'-0"	0.40	0.79	1.09	1.39
	30"	—	—	3'-1"	2'-6"	6'-4"	3'-10"	1'-0"	1'-2"	0'-8"	1'-4"	6'-5.7"	9'-11.2"	13'-4.7"	16'-10.2"	5'-8"	8'-9"	11'-9.8"	14'-10.7"	1'-1"	0.46	0.91	1.25	1.59
	36"	—	—	3'-7"	3'-0"	6'-10"	4'-2"	1'-0"	1'-2"	0'-8"	1'-4"	6'-10.7"	10'-6.2"	14'-2.7"	17'-10.2"	6'-1"	9'-5"	12'-8.8"	15'-11.7"	1'-2"	0.52	1.03	1.41	1.79
	42"	—	—	4'-1"	3'-6"	7'-4"	4'-6"	1'-0"	1'-2"	0'-8"	1'-4"	7'-3.7"	11'-1.2"	14'-11.7"	18'-9.2"	6'-7"	10'-1"	13'-7.8"	17'-1.7"	1'-3"	0.58	1.15	1.57	1.99
	48"	—	—	4'-7"	4'-0"	7'-10"	4'-10"	1'-0"	1'-2"	0'-8"	1'-4"	7'-8.7"	11'-9.2"	15'-8.7"	19'-8.2"	7'-0"	10'-9"	14'-5.8"	18'-1.7"	1'-4"	0.64	1.27	1.73	2.19
	54"	—	—	5'-1"	4'-6"	8'-4"	5'-2"	1'-0"	1'-2"	0'-8"	1'-4"	8'-1.7"	12'-5.2"	16'-8.7"	20'-7.2"	7'-5"	11'-4"	15'-3.8"	19'-1.7"	1'-5"	0.70	1.39	1.89	2.39
	60"	—	—	5'-7"	5'-0"	8'-10"	5'-6"	1'-0"	1'-2"	0'-8"	1'-4"	8'-6.7"	13'-1.2"	17'-8.7"	22'-1.2"	7'-11"	12'-0"	16'-1.8"	20'-2.7"	1'-6"	0.76	1.51	2.05	2.59
Elliptical Concrete Pipe — 1:2 Slope	—	19"	30"	2'-7"	2'-0"	5'-10"	3'-6"	1'-0"	1'-2"	0'-8"	1'-4"	6'-0.7"	9'-4.2"	12'-7.7"	15'-11.2"	5'-2"	8'-0"	10'-10.8"	13'-9.5"	1'-0"	0.40	0.79	1.09	1.39
	—	24"	38"	3'-3"	2'-6"	6'-4"	3'-10"	1'-0"	1'-2"	0'-8"	1'-4"	6'-5.7"	9'-11.2"	13'-4.7"	16'-10.2"	5'-8"	8'-9"	11'-9.8"	14'-10.7"	1'-1"	0.46	0.91	1.25	1.59
	—	29"	45"	3'-11"	3'-0"	6'-10"	4'-2"	1'-0"	1'-2"	0'-8"	1'-4"	6'-10.7"	10'-6.2"	14'-2.7"	17'-10.2"	6'-1"	9'-5"	12'-8.8"	15'-11.7"	1'-2"	0.52	1.03	1.41	1.79
	—	34"	53"	4'-7"	3'-6"	7'-4"	4'-6"	1'-0"	1'-2"	0'-8"	1'-4"	7'-3.7"	11'-1.2"	14'-11.7"	18'-9.2"	6'-7"	10'-1"	13'-7.8"	17'-1.7"	1'-3"	0.58	1.15	1.57	1.99
	—	38"	60"	5'-1"	4'-0"	7'-10"	4'-10"	1'-0"	1'-2"	0'-8"	1'-4"	7'-8.7"	11'-9.2"	15'-8.7"	19'-8.2"	7'-0"	10'-9"	14'-5.8"	18'-1.7"	1'-4"	0.64	1.27	1.73	2.19
	—	43"	68"	5'-7"	4'-6"	8'-4"	5'-2"	1'-0"	1'-2"	0'-8"	1'-4"	8'-1.7"	12'-5.2"	16'-8.7"	20'-7.2"	7'-5"	11'-4"	15'-3.8"	19'-1.7"	1'-5"	0.70	1.39	1.89	2.39
	—	48"	76"	6'-1"	5'-0"	8'-10"	5'-6"	1'-0"	1'-2"	0'-8"	1'-4"	8'-6.7"	13'-1.2"	17'-8.7"	22'-1.2"	7'-11"	12'-0"	16'-1.8"	20'-2.7"	1'-6"	0.76	1.51	2.05	2.59
	—	53"	83"	6'-7"	5'-6"	9'-4"	5'-10"	1'-0"	1'-2"	0'-8"	1'-4"	9'-1.7"	13'-9.2"	18'-4.7"	22'-11.2"	8'-4"	12'-7"	16'-9.8"	20'-11.7"	1'-7"	0.82	1.63	2.21	2.79
	—	58"	91"	7'-1"	6'-0"	9'-10"	6'-2"	1'-0"	1'-2"	0'-8"	1'-4"	9'-6.7"	14'-5.2"	19'-2.7"	23'-11.2"	8'-9"	13'-2"	17'-5.8"	21'-8.7"	1'-8"	0.88	1.75	2.37	2.99
	—	63"	98"	7'-7"	6'-6"	10'-4"	6'-6"	1'-0"	1'-2"	0'-8"	1'-4"	10'-1.7"	15'-1.2"	20'-0.7"	24'-11.2"	9'-2"	13'-9"	18'-2.8"	22'-8.7"	1'-9"	0.94	1.87	2.53	3.19
	—	68"	106"	8'-1"	6'-10"	10'-10"	6'-10"	1'-0"	1'-2"	0'-8"	1'-4"	10'-6.7"	15'-9.2"	20'-10.7"	25'-11.2"	9'-7"	14'-4"	18'-11.8"	23'-5.7"	1'-10"	1.00	1.99	2.69	3.39
	—	72"	113"	8'-7"	7'-0"	11'-4"	7'-2"	1'-0"	1'-2"	0'-8"	1'-4"	10'-11.7"	16'-5.2"	21'-10.7"	27'-3.2"	9'-11"	14'-11"	19'-8.8"	24'-5.7"	1'-11"	1.06	2.11	2.85	3.59
	—	77"	121"	9'-1"	7'-6"	11'-10"	7'-6"	1'-0"	1'-2"	0'-8"	1'-4"	11'-4.7"	17'-1.2"	22'-10.7"	28'-7.2"	10'-4"	15'-6"	20'-5.8"	25'-4.7"	2'-0"	1.12	2.23	3.01	3.79
	—	82"	129"	9'-7"	7'-10"	12'-4"	7'-10"	1'-0"	1'-2"	0'-8"	1'-4"	11'-9.7"	17'-9.2"	23'-8.7"	29'-7.2"	10'-8"	16'-1"	21'-2.8"	26'-3.7"	2'-1"	1.18	2.35	3.17	3.99
	—	87"	137"	10'-1"	8'-6"	12'-10"	8'-2"	1'-0"	1'-2"	0'-8"	1'-4"	12'-4.7"	18'-5.2"	24'-6.7"	30'-7.2"	11'-1"	16'-8"	21'-11.8"	27'-2.7"	2'-2"	1.24	2.47	3.33	4.19
	—	91"	144"	10'-7"	8'-6"	13'-4"	8'-6"	1'-0"	1'-2"	0'-8"	1'-4"	12'-9.7"	19'-1.2"	25'-4.7"	31'-7.2"	11'-5"	17'-2"	22'-8.8"	28'-1.7"	2'-3"	1.30	2.59	3.49	4.39
	—	96"	152"	11'-1"	8'-10"	13'-10"	8'-10"	1'-0"	1'-2"	0'-8"	1'-4"	13'-2.7"	19'-9.2"	26'-2.7"	32'-7.2"	11'-10"	17'-9"	23'-5.8"	29'-0.7"	2'-4"	1.36	2.71	3.65	4.59
	—	106"	167"	12'-1"	9'-10"	15'-4"	9'-10"	1'-0"	1'-2"	0'-8"	1'-4"	14'-4.7"	21'-5.2"	28'-6.7"	35'-7.2"	12'-10"	19'-3"	25'-5.8"	31'-8.7"	2'-6"	1.48	2.95	3.97	4.99
	—	116"	182"	13'-1"	10'-6"	16'-10"	10'-10"	1'-0"	1'-2"	0'-8"	1'-4"	15'-6.7"	23'-1.2"	30'-10.7"	38'-5.2"	13'-11"	20'-9"	27'-8.8"	34'-4.7"	2'-8"	1.60	3.19	4.29	5.39
	—	125"	197"	14'-1"	11'-6"	18'-4"	11'-6"	1'-0"	1'-2"	0'-8"	1'-4"	16'-8.7"	24'-9.2"	33'-2.7"	41'-7.2"	15'-0"	22'-3"	29'-8.8"	37'-1.7"	2'-10"	1.72	3.43	4.61	5.79
	—	135"	213"	15'-1"	12'-6"	19'-10"	12'-6"	1'-0"	1'-2"	0'-8"	1'-4"	17'-10.7"	26'-5.2"	35'-6.7"	44'-8.2"	16'-1"	23'-9"	31'-10.8"	39'-11.7"	3'-0"	1.84	3.67	4.93	6.19

B: 6.42 △ 6.25 Dimensions permitted to allow use of 8' standard pipe lengths.
E: ☆ 10.40 ☆ 10.10 Dimensions permitted to allow use of 12' standard pipe lengths.

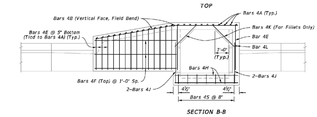
LAST REVISION 11/01/19 — DESCRIPTION: —

FDOT FY 2022-23 STANDARD PLANS | CROSS DRAIN MITERED END SECTION | INDEX 430-021 | SHEET 3 of 6

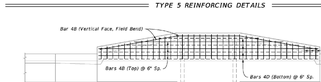
CONCRETE PIPE DIMENSIONS AND QUANTITIES



TONGUE AND GROOVE CONNECTOR DETAIL



BELL AND SPIGOT CONNECTOR DETAIL

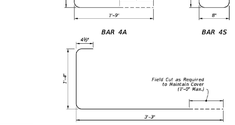


STEEL BAR

NOTES:
1. Use galvanized steel for all bars, bolts, nuts, and washers.
2. Two connectors required per joint, located 60° right and left of bottom center of pipe.
3. Bolt holes in pipe shell are to be drilled.

Bolt Dia.	Pipe Dia.
¾"	15" to 36"
⅞"	42" to 72"

CONCRETE PIPE CONNECTION DETAIL
DETAIL "C"



NOTES:
1. Anchors required for CMP only.
2. Use galvanized steel for all anchors, nuts, and washers.
3. Bend anchor where required to center in concrete slab.
4. Repair damaged surfaces after bending.
5. Space anchors a distance equal to four (4) corrugations.
6. Place the anchors in the outside crest of corrugation.
7. Place flat washers on inside wall of pipe.
8. Drill or punch holes in the mitered end pipe; burning not permitted.
9. A 6" x ½" bolt substitution is permitted.

CORRUGATED METAL PIPE (CMP) ANCHOR DETAIL
DETAIL "D"

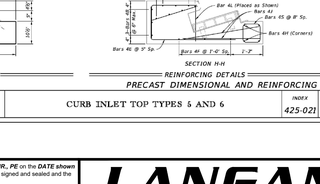
CONCRETE PIPE CONNECTION AND CORRUGATED PIPE ANCHOR DETAILS

LAST REVISION 11/01/19 — DESCRIPTION: —

FDOT FY 2022-23 STANDARD PLANS | CROSS DRAIN MITERED END SECTION | INDEX 430-021 | SHEET 6 of 6

GENERAL NOTES:

1. Back this Index with Index 425-061 and Index 425-010.
2. Confirm the finished grade and slope of the inlet tops with the finished cross slope and grade of the proposed sidewalk and/or border.
3. For inlets constructed on a curve, refer to the plans to determine the radius. Bend steel when necessary.
4. Use Grade 60 reinforcing bars with 1½" minimum cover unless otherwise shown, see Sheet 6 for equivalent area Welded Wire Reinforcement details.
5. Inlet tops may be either cast-in-place or precast concrete. Conform precast units to the dimensions shown or in accordance with approved shop drawings.
6. Corner Fillets are required at inlet opening for precast units or C-I-P units used in conjunction with circular inlet bottoms or skewed rectangular inlet bases. Finish top of fillets flush with drain throat bottom and match slope.
7. For Type E curb and gutter, transition the shape of the curb over the gutter transition length to match the face of the inlet (Type F5).
8. Meet the requirements of ASTM A36/A36M with steel used for frames and grates.
9. Use either cast iron grates or steel grates.



INLET TYPE 5
(Type F Curb and Gutter Shown)



INLET TYPE 6
(Type E Curb and Gutter Shown)

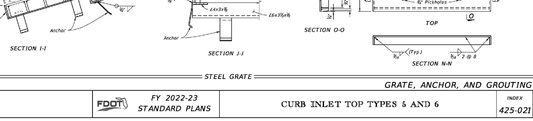
CURB INLETS TOPS

TABLE OF CONTENTS:

Sheet	Description
1	General Notes and Contents
2	Type 5 and 6 Dimensional Details
3	Type 5 and 6 Reinforcing and Bar Bending Details
4	Precast Dimensional and Reinforcing Details
5	Cast-in-Place Dimensional and Reinforcing Details
6	Alternate Welded Wire Reinforcing (WWR) Details
7	Grate, Anchor, and Grouting Details

LAST REVISION 11/01/20 — DESCRIPTION: —

FDOT FY 2022-23 STANDARD PLANS | CURB INLET TOP TYPES 5 AND 6 | INDEX 425-021 | SHEET 1 of 7



TYPE 5 DIMENSIONAL DETAILS

TYPE 6 DIMENSIONAL DETAILS

TYPE 5 AND 6 DIMENSIONAL DETAILS

LAST REVISION 11/01/20 — DESCRIPTION: —

FDOT FY 2022-23 STANDARD PLANS | CURB INLET TOP TYPES 5 AND 6 | INDEX 425-021 | SHEET 2 of 7

TYPE 5 REINFORCING DETAILS

TYPE 6 REINFORCING DETAILS

BILL OF REINFORCING STEEL					
MARK	SIZE	TYPE 5 INLET NO.	TYPE 5 INLET LENGTH	TYPE 6 INLET NO.	TYPE 6 INLET LENGTH
A (Precast)	4	25	3'-1"	38	3'-1"
A (C-I-P)	4	25	2'-10"	38	2'-10"
B	4	6	10'-3"	6	13'-9"
C	4	25	11" to 1'-11"	38	11" to 1'-11"
D	4	4	10'-3"	4	13'-9"
E	4	16	4'-11½"	30	4'-11½"
F	4	3	6'-0"	6	6'-0"
H	4	4	9'-6"	4	9'-6"
J	4	8	3'-0"	4	3'-0"
K (Fillet)	4	2	7'-3"	2	7'-3"
L (Precast)	4	1	1'-4"	0	---
L (C-I-P)	4	10	1'-4"	9	1'-4"
M	4	7	3'-2"	7	3'-2"

NOTES:
1. All bar dimensions in the bending diagrams are out to out.
2. Bars 4A and 4E may be combined into a single bar.
3. Welded Wire Reinforcement consists of smooth or deformed wire meeting the requirements of Specification 931.

TYPE 5 AND 6 REINFORCING AND BAR BENDING DETAILS

LAST REVISION 11/01/20 — DESCRIPTION: —

FDOT FY 2022-23 STANDARD PLANS | CURB INLET TOP TYPES 5 AND 6 | INDEX 425-021 | SHEET 3 of 7

NOTES:
1. For location of Sections D-D thru H-H see Sheet 2.
2. Match slope of adjacent curb with 2" top radius and ¾" bottom chamfer at 1½" radius.
3. See Plans for bottom and riser type.

DIMENSIONAL DETAILS

REINFORCING DETAILS

PRECAST DIMENSIONAL AND REINFORCING DETAILS

LAST REVISION 11/01/20 — DESCRIPTION: —

FDOT FY 2022-23 STANDARD PLANS | CURB INLET TOP TYPES 5 AND 6 | INDEX 425-021 | SHEET 4 of 7

CAST IRON GRATE

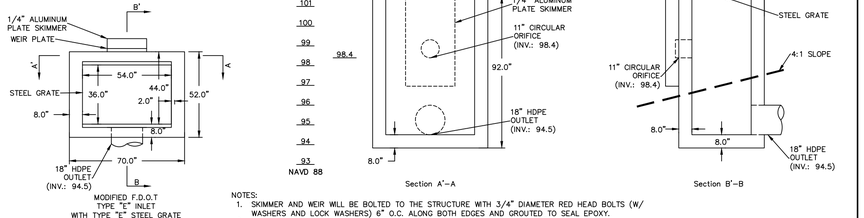
STEEL GRATE

GRATE, ANCHOR, AND GROUTING DETAILS

LAST REVISION 11/01/20 — DESCRIPTION: —

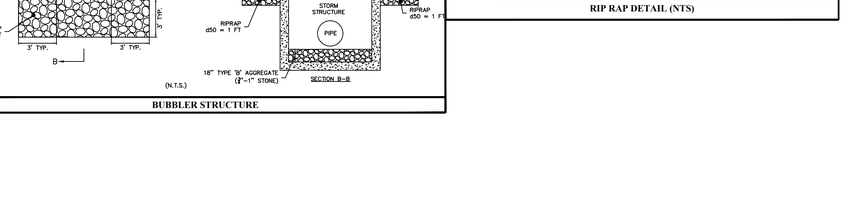
FDOT FY 2022-23 STANDARD PLANS | CURB INLET TOP TYPES 5 AND 6 | INDEX 425-021 | SHEET 7 of 7

11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY & POOL HOUSE REVISIONS	13
05/23/2024	WAREHOUSE 300' & 400' REVISIONS	12
02/02/2024	OWNER 'VE' CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP



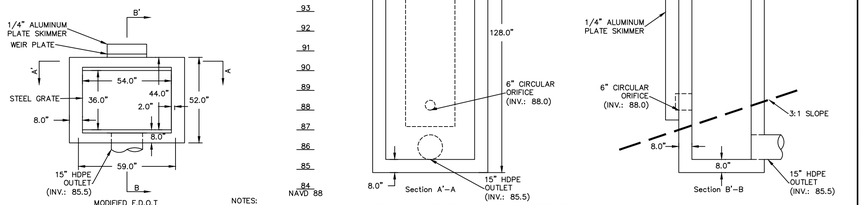
NOTES:
1. SKIMMER AND WEIR WILL BE BOLTED TO THE STRUCTURE WITH 3/4" DIAMETER RED HEAD BOLTS (W/ WASHERS AND LOCK WASHERS) 6" O.C. ALONG BOTH EDGES AND GROUTED TO SEAL EPOXY.
2. STRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT DESIGN STANDARDS.

OUTLET CONTROL STRUCTURE DETAIL - OCS-01 (LAKE MCKAY)



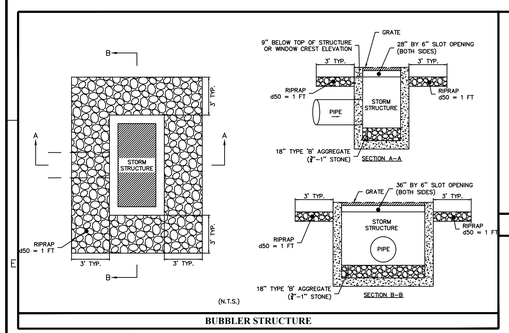
NOTES:
1. SKIMMER AND WEIR WILL BE BOLTED TO THE STRUCTURE WITH 3/4" DIAMETER RED HEAD BOLTS (W/ WASHERS AND LOCK WASHERS) 6" O.C. ALONG BOTH EDGES AND GROUTED TO SEAL EPOXY.
2. STRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT DESIGN STANDARDS.

OUTLET CONTROL STRUCTURE DETAIL - OCS-02 (HERMIT LAKE)

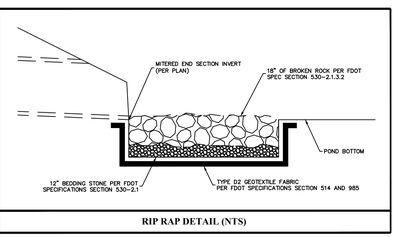


NOTES:
1. SKIMMER AND WEIR WILL BE BOLTED TO THE STRUCTURE WITH 3/4" DIAMETER RED HEAD BOLTS (W/ WASHERS AND LOCK WASHERS) 6" O.C. ALONG BOTH EDGES AND GROUTED TO SEAL EPOXY.
2. STRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT DESIGN STANDARDS.

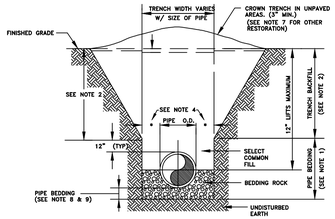
OUTLET CONTROL STRUCTURE DETAIL - OCS-03 (LAKE APOPKA)



BUBBLER STRUCTURE



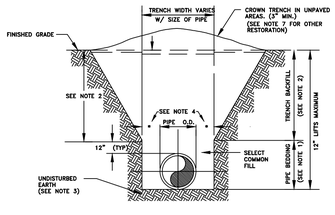
RIP RAP DETAIL (NTS)



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 PIPE. PSE, 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



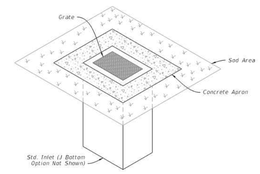
NOTES:
1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS TO AASHTO T-180.
3. TYPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE 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

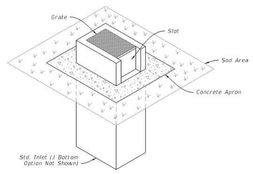
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 100

GENERAL NOTES:

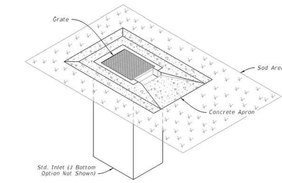
1. Work this Index with Index 425-001 and Index 425-010.
2. Chamfer all exposed edges and corners ½" chamfer or tooled to ½" radius.
3. All reinforcing is Grade 60 bars with 2" minimum cover unless otherwise noted. Cut or bend bars for 1½" clearance around pipe opening. Provide one additional #4 bar above and at each side of pipe opening.
4. Use Concrete Apron on inlets without slots and inlets with non-traversable slots only when called for in the Plans.
5. Quantities are for informational and estimating purposes only.



DITCH BOTTOM INLET TYPE C TRAVERSABLE
(Without Slot - Type D, E, and H Similar, Pipe Connection Not Shown)



DITCH BOTTOM INLET TYPE C NON-TRAVERSABLE
(Slot > 7" Shown - Type D, E, and H Similar, Pipe Connection Not Shown)



DITCH BOTTOM INLET TYPE C TRAVERSABLE
(Single Slot < 7" Shown, Double Slot, Type D, and E Similar, Pipe Connection Not Shown)

TABLE OF CONTENTS:

Sheet	Description
1	General Notes and Contents
2	Type C - Dimensional, Reinforcing, and Grate Details
3	Type D - Dimensional, Reinforcing, and Grate Details
4	Type E - Dimensional, Reinforcing, and Grate Details
5	Type H (2 & 3 Grate) - Dimensional, Reinforcing, and Steel Grate Details
6	Type H (4 Grate) - Dimensional, Reinforcing, and Steel Grate Details
7	Cast Iron Grate Details
8	Non-Traversable Inlet Details
9	Traversable Inlet Without Slot Details
10	Traversable Inlet With Slot Details
11	Case 1 - Add Traversable Slots to Existing Inlets
12	Case 2 - Add Traversable Slots (Partial) to Existing Inlets
13	Case 3 - Add Traversable Slots (Partial) to Existing Inlets and Ditch Block
14	Alternate A Structure Bottom - Top Slab Details

LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX 425-052	SHEET 1 of 14

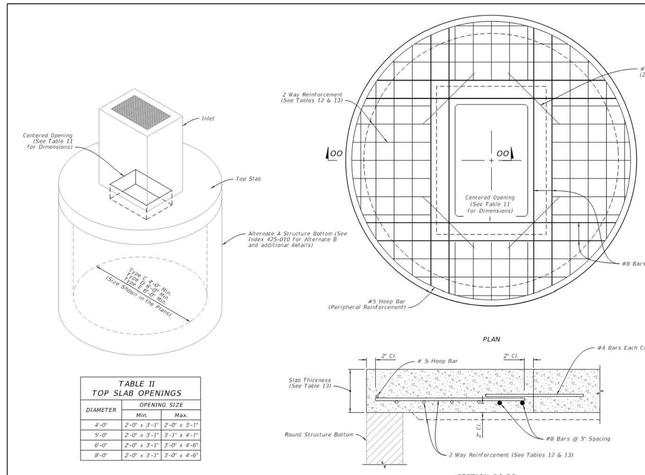


TABLE 11
TOP SLAB OPENINGS

DIAMETER	OPENING SIZE Min.	OPENING SIZE Max.
4'-0"	2'-0" x 3'-1"	2'-0" x 3'-1"
5'-0"	2'-0" x 3'-1"	3'-1" x 4'-1"
6'-0"	2'-0" x 3'-1"	3'-0" x 4'-0"
8'-0"	2'-0" x 3'-1"	3'-0" x 4'-0"

TABLE 12
TOP SLAB REINFORCING SCHEDULE

SCHEDULE	GRADE 60 (BAR) OR 65 KSI & 70 KSI (WIRE REINFORCING) In./Ft.
A	0.20
B	0.24
C	0.37
D	0.53
E	0.73
F	1.06
G	1.45

TABLE 13
TOP SLAB WITH CENTERED OPENING

STRUCTURE DEPTH	SLAB THICKNESS	REINFORCING 12 WAY SCHEDULE
SIZE: 4'-0"		
≥0.5'<40'	9½"	B
SIZE: 5'-0"		
≥0.5'<30'	9½"	C
30'-40'	9½"	D
SIZE: 6'-0"		
≥0.5'<8'	9½"	B
8'<18'	9½"	C
18'<30'	9½"	D
30'<37'	9½"	E
37'-40'	9½"	G
SIZE: 8'-0"		
≥0.5'<9'	11½"	C
9'<15'	11½"	D
15'<23'	11½"	E
23'<33'	11½"	E
33'-40'	11½"	G

ALTERNATE A STRUCTURE BOTTOM - TOP SLAB DETAILS

LAST REVISION 10/01/20	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX 425-052	SHEET 14 of 14

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS	14
07/31/2024	ADDRESS LAYOUT REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/28/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER SJRWMD COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

This item has been digitally signed and sealed by *JOSEPH J. YANNUCCI JR., PE* on the *DATE shown in the digital signature*. Printed copies of this document are not considered signed and sealed and the *Digital Signature* must be verified on any electronic copies.

JOSEPH J. YANNUCCI LICENSE No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

LANGAN
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Orlando, FL 32827
T: 407.974.2900 F: 407.974.2901 www.langan.com
FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project: APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title: GRADING AND DRAINAGE DETAILS

Project No. 342010601
Date 15 JULY 2022
Drawn By JMW
Checked By JJY

Drawing No. C-28

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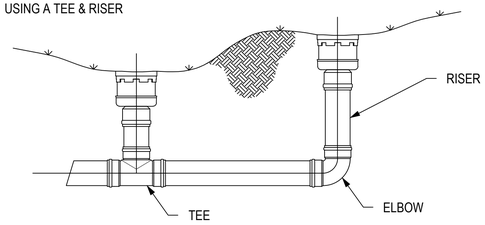
LANGAN Project No. 342010601

WHEN ARE INLINE DRAINS USED?

2708AG _ _ X
2710AG _ _ X
2712AG _ _ X
2715AG _ _ X
2718AG _ _ X
2724AG _ _ X
2730AG _ _ X

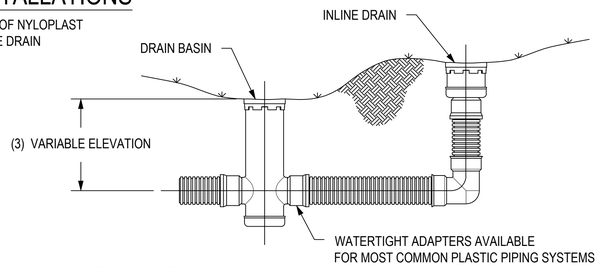
1: TO ENTER AN EXISTING LINE USING A TEE & RISER

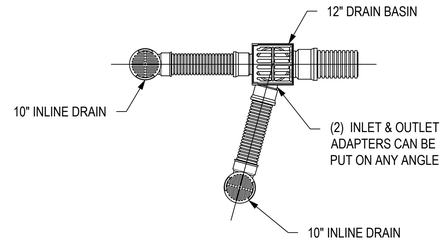
2: AT THE BEGINNING OF A DRAIN LINE USING AN ELBOW & RISER



TYPICAL INSTALLATIONS

TYPICAL INSTALLATION OF NYLOPLAST DRAIN BASIN AND INLINE DRAIN

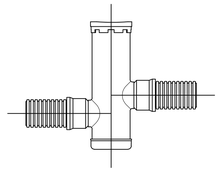




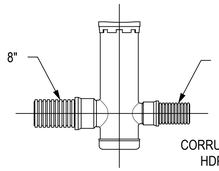
WHEN ARE DRAIN BASINS USED?

2808AG _ _ X
2810AG _ _ X
2812AG _ _ X
2815AG _ _ X
2818AG _ _ X
2824AG _ _ X
2830AG _ _ X

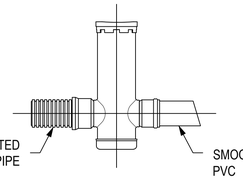
1: TO CHANGE ELEVATION



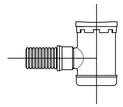
2: TO CHANGE PIPE DIAMETER



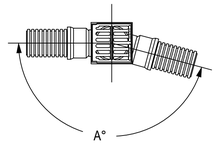
3: TO CHANGE PIPE TYPE



4: FOR SHALLOW APPLICATIONS



5: TO CHANGE DIRECTION



1 - STRUCTURES & ADAPTERS AVAILABLE IN SIZES 8" - 30"
2 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°, TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS SEE DRAWING NO. 7001-110-065

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DRAWN BY	AWA
DATE	8-10-00
REVISED BY	EBC
DATE	1-6-10
DWG SIZE	A
MATERIAL	
PROJECT NO./NAME	
SCALE	1:40
SHEET	1 OF 1

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BUFORD, GA 30518
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FAX (770) 932-2490
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TITLE
8 IN - 30 IN TYPICAL INSTALLATION OPTIONS

DWG NO. 7001-110-042 REV D

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE ADD DOOR REVISIONS	12
04/12/2024	REVISED PER CITY COMMENTS	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/25/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/28/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMIT/PRE-SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

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JOSEPH J. YANNUCCI, JR. LICENSE No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

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FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
GRADING AND DRAINAGE DETAILS

Project No. 342010601
Date 15 JULY 2022
Drawn By JMW
Checked By JJY

Drawing No. C-28A

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LANGAN Project No. 342010601

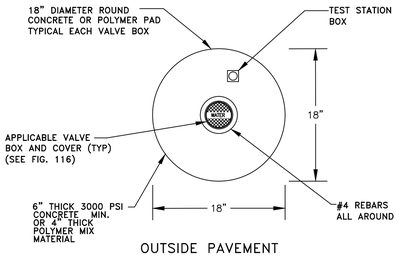
PROPOSED UTILITY	HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS									
	POTABLE WATER		RECLAIMED WATER*		SANITARY SEWER FORCE MAIN		SANITARY SEWER GRAVITY MAIN		STORM SEWER	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
POTABLE WATER	–	–	3'	12"	6'	12"	6'	6"ABOVE 12"BELOW	3'	6"
RECLAIMED* WATER	3'	12"	–	–	3'	12"	3'	12"	–	–
SANITARY SEWER FORCE MAIN	6'	12"	3'	12"	–	–	–	–	–	–
SANITARY SEWER GRAVITY MAIN	6'	6"ABOVE 12"BELOW	3'	12"	–	–	–	–	–	–

GENERAL NOTES:

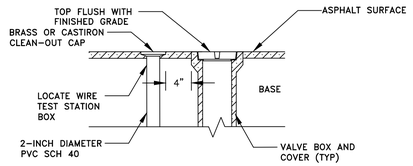
1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.). THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.
2. * FOR THE PURPOSE OF THIS TABLE, RECLAIMED 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 OR CONCRETE ENCASEMENT MUST BE USED UNTIL MINIMUM CLEARANCE IS REGAINED.
   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



OUTSIDE PAVEMENT

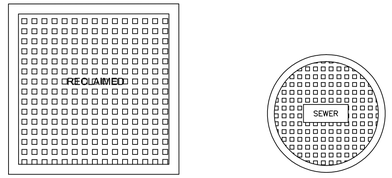


INSIDE PAVEMENT

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

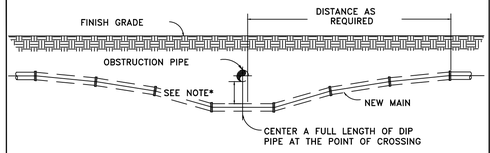
VALVE BOX

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 109



TYPICAL VALVE BOX COVER DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 116



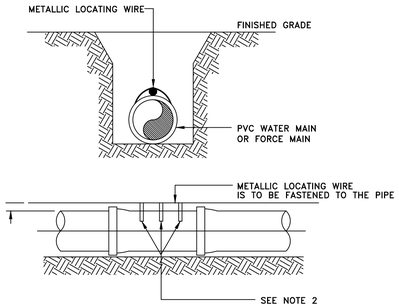
NOTES:

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

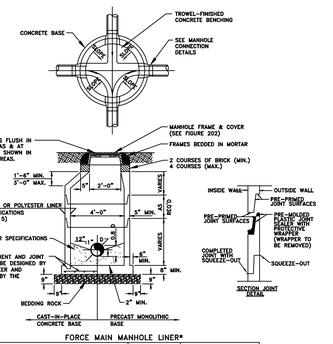


NOTES:

1. PVC 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.

PVC PIPE LOCATING WIRE DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 118



FORCE MAIN MANHOLE LINER*

THICKNESS (INCHES)					
DIAMETER (INCHES)	HEIGHT (FEET) 3-6	7-12	13-17	MATERIAL	MANUFACTURER
48					
60					
72					

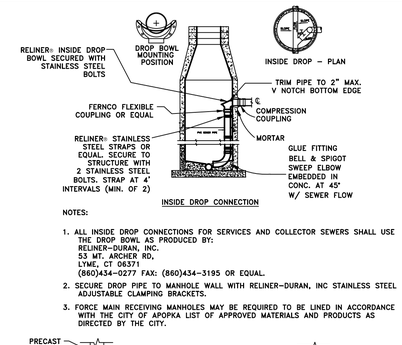
* TO BE COMPLETED BY THE ENGINEER

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 IN ACCORDANCE WITH THE CITY OF APOPKA LIST OF APPROVED MATERIALS AND PRODUCTS AS DIRECTED BY THE CITY.

TYPICAL MANHOLE

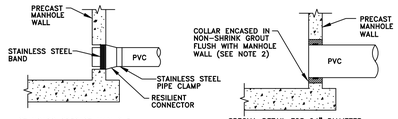
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 200



INSIDE DROP CONNECTION

NOTES:

1. ALL INSIDE DROP CONNECTIONS FOR SERVICES AND COLLECTOR SEWERS SHALL USE THE DROP BOWL AS PRODUCED BY:
   RELINER-DURAN, INC.
   53 MT. ARCHER RD,
   LYME, CT 06371
   (860)434-0277 FAX: (860)434-3195 OR EQUAL.
2. SECURE DROP PIPE TO MANHOLE WALL WITH RELINER-DURAN, INC STAINLESS STEEL ADJUSTABLE CLAMPING BRACKETS.
3. FORCE MAIN RECEIVING MANHOLES MAY BE REQUIRED TO BE LINED IN ACCORDANCE WITH THE CITY OF APOPKA LIST OF APPROVED MATERIALS AND PRODUCTS AS DIRECTED BY THE CITY.



STANDARD PRECAST MANHOLE PIPE CONNECTION

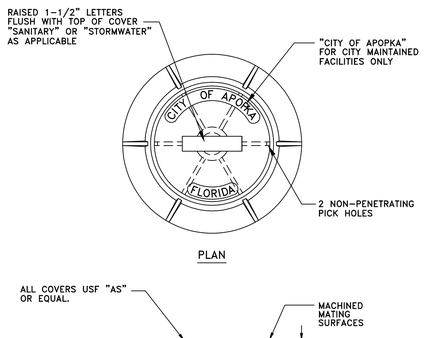
SPECIAL DETAIL FOR 24" DIAMETER PIPE AND LARGER

NOTES:

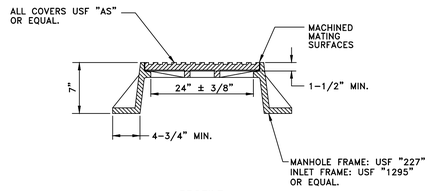
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. THE CITY MAY APPROVE ALTERNATE WATERTIGHT CONNECTION DETAILS FOR CONNECTION OF 24" DIAMETER PIPES AND LARGER.
3. AN INSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 24" OR MORE ABOVE THE OUTFLOW PIPE INVERT.
4. CONCRETE TO BE MINIMUM OF 3000 PSI.

MANHOLE CONNECTION DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 201



PLAN



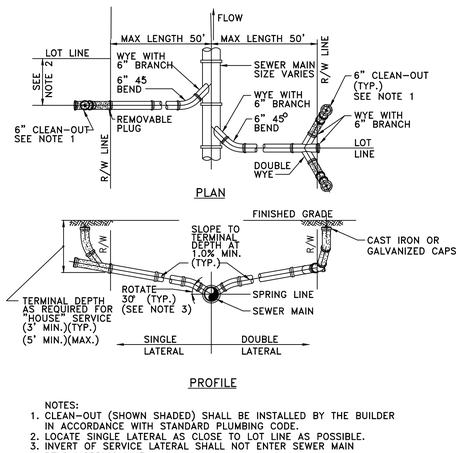
PROFILE

NOTES:

1. MANHOLE FRAME AND COVER ARE TO BE TRAFIC 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



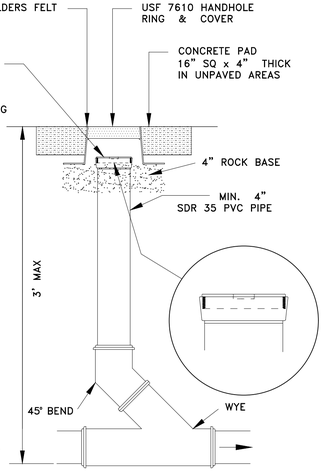
PROFILE

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



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

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS	14
07/31/2024	PERMIT SUBMITTAL REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

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Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

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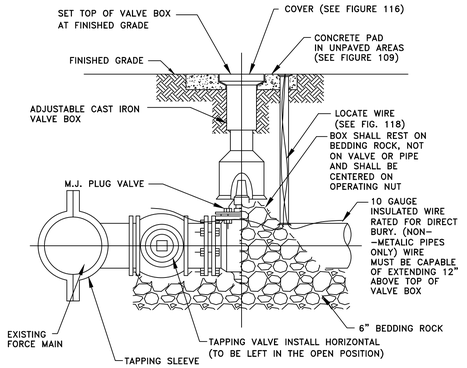
Project: APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title: UTILITY DETAILS

Project No. 342010601
Date 15 JULY 2022
Drawn By JMW
Checked By JJY

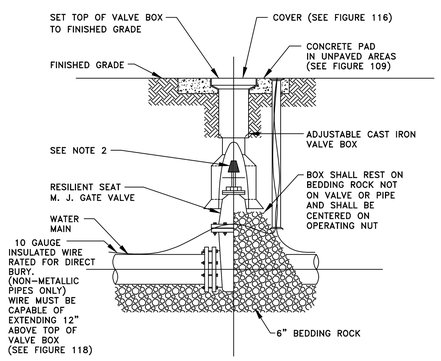
Drawing No. C-29

LANGAN Project No. 342010601
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FORCE MAIN WET TAP TIE-IN DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 206

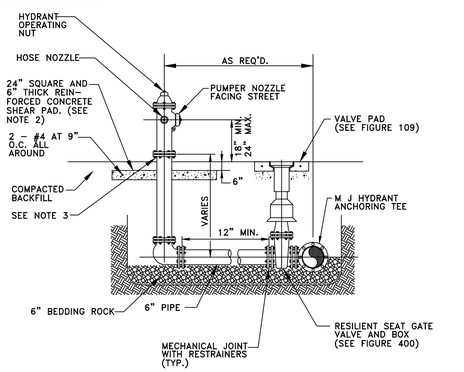


NOTES:

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

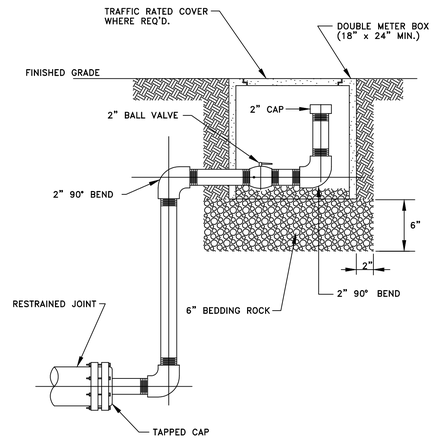


NOTES:

1. FIRE HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE, OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
2. THE SHEAR PAD SHALL BE RECESSED SIX (6) INCHES BELOW THE FINISHED GRADE AND THE RECESSED SECTION SODDED.
3. CLEARANCE BETWEEN BOTTOM OF BOLTS AND TOP OF SHEAR PAD SHALL BE A TWELVE (12) INCH MINIMUM.
4. FIRE HYDRANTS SHALL BE IDENTIFIED IN ACCORDANCE WITH THE CITY OF APOPKA UTILITIES DESIGN CONSTRUCTION STANDARDS MANUAL.

FIRE HYDRANT ASSEMBLY DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 402

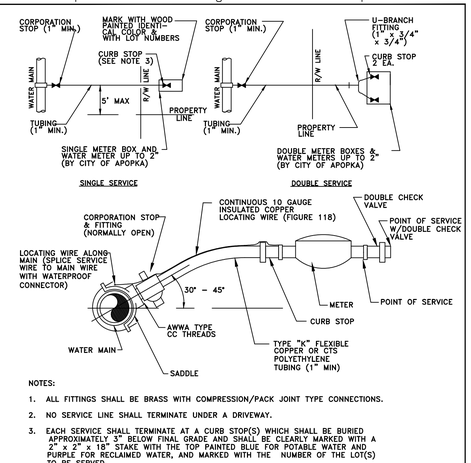


NOTES:

1. ALL 2 INCH PIPE AND FITTINGS SHALL BE SCHEDULE 40 GALVANIZED STEEL OR BRASS WITH THREADED (NPT) JOINTS. USE TEFLON TAPE ON JOINTS.
2. COLOR SHALL BE APPROPRIATE FOR USE.

BLOWOFF VALVE DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 403

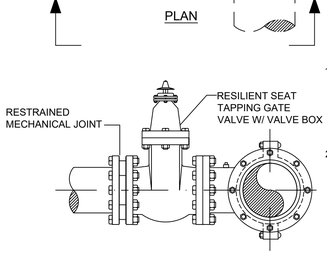


NOTES:

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 2016	FIG. 405



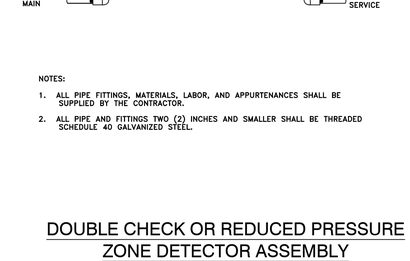
NOTES

1. SIZE ON SIZE WET TAPS WILL CALL FOR FULL ENCIRCLEMENT STAINLESS STEEL MJ TAPPING SLEEVE; MUELLER H-304, OR EQUAL.
2. ALL NEWLY INSTALLED TAPPING SLEEVES & TAPPING VALVES SHALL BE PNEUMATICALLY TESTED AT A TEST PRESSURE OF 150PSI FOR A PERIOD OF THIRTY MINUTES.

SECTION A - A

WATER AND RECLAIMED WATER MAINS WET TAP TIE-IN DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 406



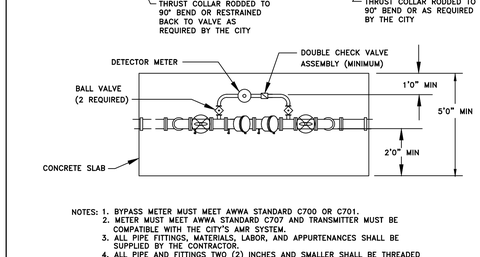
NOTES:

1. ALL PIPE FITTINGS, MATERIALS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED BY THE CONTRACTOR.
2. ALL PIPE AND FITTINGS TWO (2) INCHES AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL.

DOUBLE CHECK OR REDUCED PRESSURE ZONE DETECTOR ASSEMBLY

2 INCH AND BELOW ASSEMBLY

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 500 A

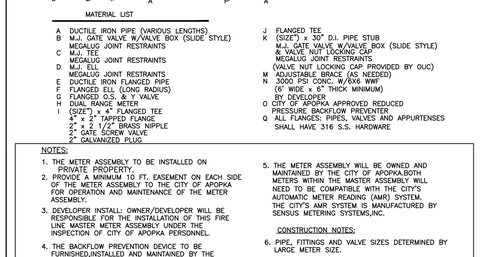


NOTES: 1. BYPASS METER MUST MEET AWWA STANDARD C700 OR C701.
2. METER MUST MEET AWWA STANDARD C707 AND TRANSMITTER MUST BE COMPATIBLE WITH THE CITY'S AMR SYSTEM.
3. ALL PIPE FITTINGS, MATERIALS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED BY THE CONTRACTOR.
4. ALL PIPE AND FITTINGS TWO (2) INCHES AND 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



MATERIAL LIST

A	DUCTILE IRON PIPE (VARIOUS LENGTHS)	J	FLANGED TEE
B	M.J. GATE VALVE W/VALVE BOX (SLIDE STYLE) MEGALUG JOINT RESTRAINTS	K	(SIZE") x 30" D.I. PIPE STUB M.J. GATE VALVE W/VALVE BOX (SLIDE STYLE) & VALVE NUT LOCKING CAP
C	M.J. TEE MEGALUG JOINT RESTRAINTS		MEGALUG JOINT RESTRAINTS (VALVE NUT LOCKING CAP PROVIDED BY OUC)
D	M.J. ELL MEGALUG JOINT RESTRAINTS	M	ADJUSTABLE BRACE (AS NEEDED)
E	DUCTILE IRON FLANGED PIPE	N	3000 PSI CONC. W/6X6 WWF (6" WIDE x 6" THICK MINIMUM) BY DEVELOPER
F	FLANGED ELL (LONG RADIUS)	O	CITY OF APOPKA APPROVED REDUCED PRESSURE BACKFLOW PREVENTER
G	FLANGED O.S. & Y VALVE	Q	ALL FLANGED PIPES, VALVES AND APPURTENSES SHALL HAVE 316 S.S. HARDWARE
H	DUAL RANGE METER		
I	(SIZE") x 4" FLANGED TEE 4" x 2" TAPPED FLANGE 2" x 2 1/2" BRASS NIPPLE 2" GATE SCREW VALVE 2" GALVANIZED PLUG		

NOTES:

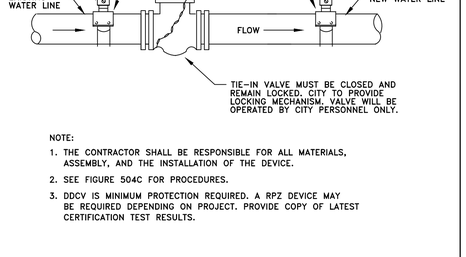
1. THE METER ASSEMBLY TO BE INSTALLED ON PRIVATE PROPERTY.
2. PROVIDE A MINIMUM 10 FT. EASEMENT ON EACH SIDE OF THE METER ASSEMBLY TO THE CITY OF APOPKA FOR OPERATION AND MAINTENANCE OF THE METER ASSEMBLY.
3. DEVELOPER INSTALL: OWNER/DEVELOPER WILL BE RESPONSIBLE FOR THE INSTALLATION OF THIS FIRE LINE MASTER METER ASSEMBLY UNDER THE INSPECTION OF CITY OF APOPKA PERSONNEL.
4. THE BACKFLOW PREVENTION DEVICE TO BE FURNISHED,INSTALLED AND MAINTAINED BY THE OWNER/DEVELOPER.THE BACKFLOW PREVENTION DEVICE WILL BE TESTED BY CERTIFIED BACKFLOW PREVENTION DEVICE TESTER AFTER INSTALLATION. A COPY OF THE TEST RESULTS WILL BE PROVIDED TO THE CITY OF APOPKA PUBLIC SERVICES DEPARTMENT.THE BACKFLOW PREVENTION DEVICE WILL NEED TO BE AN AMERICAN WATER WORKS ASSOCIATION (AWWA) APPROVED DEVICE.
5. THE METER ASSEMBLY WILL BE OWNED AND MAINTAINED BY THE CITY OF APOPKA.BOTH METERS WITHIN THE MASTER ASSEMBLY WILL NEED TO BE COMPATIBLE WITH THE CITY'S AUTOMATIC METER READING (AMR) SYSTEM. THE CITY'S AMR SYSTEM IS MANUFACTURED BY SENSUS METERING SYSTEMS,INC.

CONSTRUCTION NOTES:

6. PIPE, FITTINGS AND VALVE SIZES DETERMINED BY LARGE METER SIZE.
   4"X1.5" DRM W/4" BY-PASS
   6"X2" DRM W/6" BY-PASS
   8"X2" DRM W/8" BY-PASS
   10"X2" DRM W/10" BY-PASS
   MINIMUM SERVICE VALVE SIZE DETERMINED BY LARGE METER SIZE.

FIRE LINE MASTER METER ASSEMBLY W/ BY-PASS (TYPICAL)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 500 C



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

No.	Description	Date
15	CONSTRUCTION FIELD REVISION	11/21/2024
14	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	09/18/2024
13	AMENITY PATH REVISION	07/23/2024
12	WAREHOUSE 400 DOOR REVISIONS	06/27/2024
11	OWNER VE CHANGES	02/02/2024
10	REVISED PER CITY DRC CSP REVISION COMMENTS	09/29/2023
9	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	08/21/2023
8	REVISED PER PROJECT TEAM COMMENTS	02/08/2023
7	BID ADDENDUM #2	11/08/2022
6	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	10/24/2022
5	REVISED PER SJRWMD COMMENTS	10/17/2022
4	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM REVISIONS	09/09/2022
3	REVISED PER CITY DRC COMMENTS	07/28/2022
2	BID ADDENDUM #1	07/15/2022
1	REVISED PER CITY DRC AND SJRWMD COMMENTS	06/30/2022

Revisions

This item has been digitally signed and sealed by ***JOSEPH J. YANNUCCI, JR., PE*** on the ***DATE shown in the digital signature***. Printed copies of this document are not considered signed and sealed and the ***Digital Signature*** must be verified on any electronic copies.

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

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Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

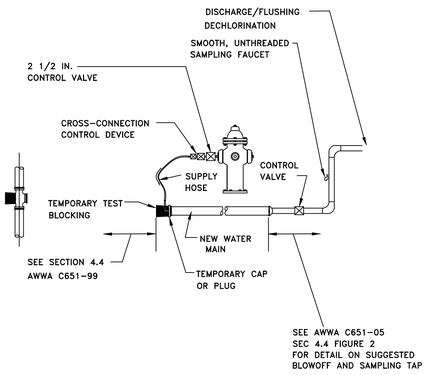
Drawing Title
UTILITY DETAILS

Project No. 342010601
Date 15 JULY 2022
Drawn By JMW
Checked By JJY

Drawing No. C-30

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LANGAN Project No. 342010601



NOTE:

1. SEE FIGURE 504C FOR PROCEDURES.

TEMPORARY JUMPER CONNECTION FROM FIRE HYDRANT

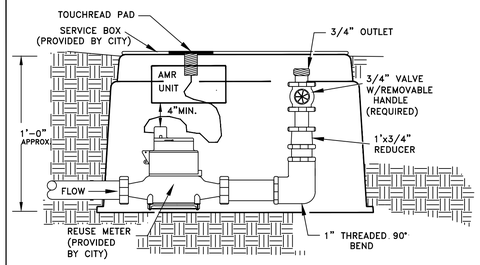
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 504 B

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 disinfection of the new main has been successfully completed and cleared for use 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 clearence letter is obtained. Thrust blocking and/or restraints shall be provided temporarily, as required. 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 II of AWWA C651-05.
3. Flushing of 10 inches in diameter and larger water mains may be done through the tie-in valve under very controlled conditions. The following procedures shall be followed:
   A. The tie-in valves shall be operated and pressure tested in the presence of the City engineer to verify water tightness prior to tie-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 tie-in valve.
   * Provide for and monitor the pressure in the tie-in point. The pressure in the existing main must not drop below 35 psi.
   * The tie-in valve shall be opened a few turns only, ensuring a pressure drop across the valve is greater than 10 psi.
   C. The tie-in valve shall be locked closed by the City personel until flushing begins.
   D. The tie-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 tie-in valve shall be closed and locked in the closed position by the City personel.
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 tie-in valve shall remain closed and shall be locked in the closed position by the City. The tie-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



RECLAIMED WATER SERVICE CONNECTION
(FOR SERVICES W/O AN IRRIGATION SYSTEM)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 506

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.

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
05/22/2024	WAREHOUSE 400' DOOR REVISIONS	12
04/17/2024	REVISED PER CITY COMMENTS	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/23/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/28/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

This item has been digitally signed and sealed by *JOSEPH J. YANNUCCI JR., PE* on the *DATE shown in the digital signature*. Printed copies of this document are not considered signed and sealed and the *Digital Signature* must be verified on any electronic copies.

JOSEPH J. YANNUCCI JR. LICENSE No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

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Project: APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title: UTILITY DETAILS

Project No. 342010601
Date 15 JULY 2022
Drawn By JMW
Checked By JJY

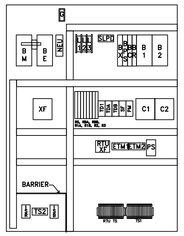
Drawing No. C-31

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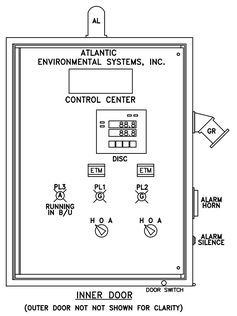
MOPS CONTROL CENTER

CONTROL CENTER DESIGNED & MANUFACTURED TO MEET ALL D.E.P. REQUIREMENTS

SEE SCHEDULE FOR ELECTRICAL SERVICE REQUIREMENTS



INTERIOR LAYOUT



INNER DOOR
(OUTER DOOR NOT NOT SHOWN FOR CLARITY)

PANEL COMPONENTS

ALT	ALTERNATOR (IN DISC)
AS	ALARM SILENCE SWITCH
B1-2	MOTOR BREAKERS
BC	CONTROL BREAKER
BE	EMERGENCY BREAKER
BM	MAIN BREAKER
BR	GFI RECEPTACLE BREAKER
BPS	POWER SUPPLY BREAKER
BX	TRANSFORMER BREAKER
C1-2	MOTOR START CONTACTORS
CR	GFI CONVENIENCE RECEPTACLE
DISC	DUPLEX INTRINSICALLY- SC100 SAFE CONTROLLER
ETM	ELAPSED TIME METER
G	GROUND
GR	GENERATOR RECEPTACLE
H	HORN
HOA	HAND-OFF-AUTO SWITCH- GE (ON DISC)
NEU	NEUTRAL
PL1,2,3	PILOT LIGHT (GE)
PM	PHASE MONITOR
PS	POWER SUPPLY
R2-3	RELAYS
RBA	BBATTERY RELAYS
RS	SILENCE RELAY
R1A	BRELAYS
RTUXF	RTU TRANSFORMER
SF	SEAL FAIL RELAY
SLPD	SURGE/LIGHTNING PROTECTION DEVICE
TS1	TERMINAL STRIP FOR PUMPS
TS2	TERMINAL STRIP FOR I.S.
XF	50/60Hz 0.5KVA TRANSFORMER

ENCLOSURE

NEMA 4X STAINLESS STEEL
SINGLE DOOR w/PADLOCK HASP
ALUMINUM INNER (DEAD FRONT) DOOR
30"H x 30"W x 8"D
PANEL LABELED FOR U.L. 508A "MOTOR CONTROL CENTERS" AND U.L. 698A "HAZARDOUS LOCATION PANELS"

NOTE:

SEE CONTROL PANEL DETAIL SHEET FOR ADDITIONAL NOTES.

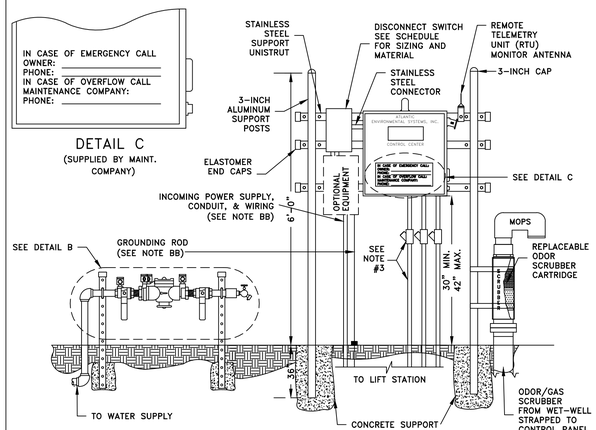
27	NEU	NEU	NEU	L1	L2	120	120	#1-20	COM	SF	SF	T1	T2	T3
XXXXX	NEU			120V				RTU TERMINALS		PUMP SEAL FAIL		MOTOR 1 LEADS		

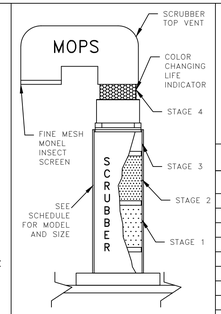
TS1 TERMINAL SCHEDULE

15	16	P1G	T1	T2	T3	17	18	P2G
MT1 MOTOR 1	G N D		MOTOR LEADS			MT2 MOTOR 2	G N D	

TS2 TERMINAL SCHEDULE

CONTROL CENTER ASSEMBLY AND INSTALLATION N.T.S.

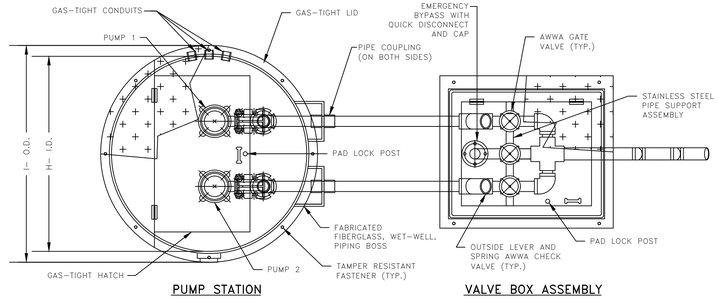




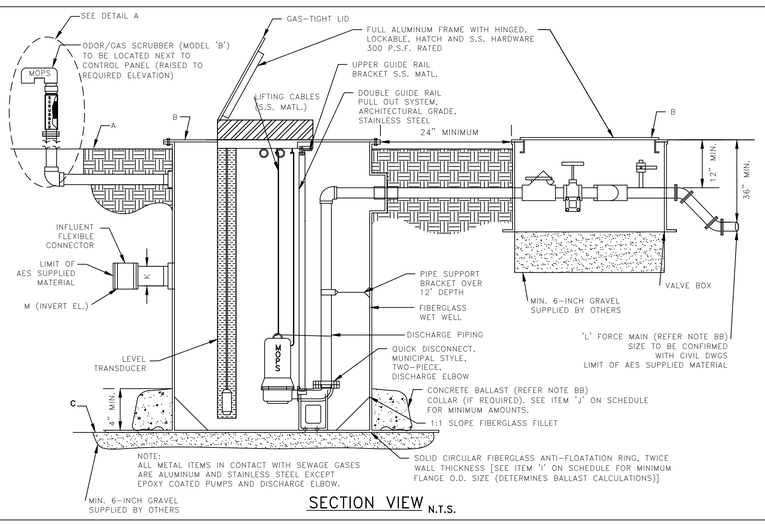
DETAIL A

MOPS ODOR/GAS SCRUBBER

NOTES:
1. SCRUBBER DESIGNED TO REMOVE TOXIC SEWAGE GASES, H2S, AND OFFENSIVE ODORS SUCH AS SKATOLES AND MERCAPTANS.
2. SCRUBBER'S LIFE EXPECTANCY CALCULATIONS ARE INCLUDED IN SHOP DRAWING SUBMITTALS.
3. SCRUBBER UNIT CAN BE MOUNTED INSIDE WET-WELL OR TOP MOUNTED.
4. MODEL 'B' SHOWN.

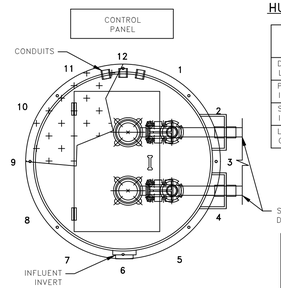


TOP VIEW N.T.S.



SECTION VIEW N.T.S.

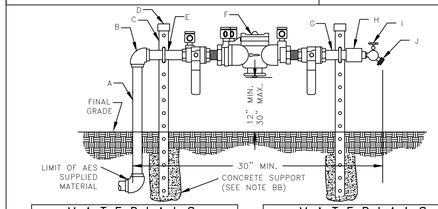
HUB AND INVERT LOCATION



ITEMS	CLOCK POSITION
DISCHARGE LINES	3:00
PRIMARY INVERT	6:00
SECONDARY INVERT	N/A
LOCATION OF CONTROL PANEL	12:00

SCHEMATIC BASED ON THE STATION'S DISCHARGE BEING LOCATED AT THE #3 CLOCK POSITION. SEE SCHEDULE FOR LOCATION OF INVERTS AND CONTROL PANEL. LOCATIONS SUBJECT TO CHANGE.

NOTE: BACKFILL AROUND LIFT STATION FROM ANTI-FLOATATION RING UP TO FINISHED GRADE SHALL BE COMMON FILL COMPACTED IN 12-INCH MAX. LIFTS TO 98% DENSITY PER AASHTO T-180. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE WETWELL DURING COMPACTION.



MATERIALS		
ITEM	QTY.	DESCRIPTION
A	1	3/4" x 36" S.S. NIPPLE
B	1	3/4" S.S. 90° ELBOW
C	2	1-5/8"x1-5/8"x40" S.S. SUPPORT BRACKET
D	2	SUPPORT BRACKET CAPS P/N 1795
E	2	3/4" S.S. PIPE BOLTS

MATERIALS		
ITEM	QTY.	DESCRIPTION
F	1	3/4" APP. BACKFLOW PREVENTER
G	1	3/4" x 6" S.S. NIPPLE
H	1	3/4" x 3/4" S.S. COUPLING
I	1	3/4" BRONZE HOSE BIB
J	1	3/4" VACUUM BREAKER

DETAIL B

R.P.Z. BACKFLOW PREVENTER ASSEMBLY DETAIL

U.S.C. AND A.S.S.E. APPROVED N.T.S.

MOPS

PRIVATE SERIES

MANUFACTURED ODORLESS PUMP STATION
ATLANTIC ENVIRONMENTAL SYSTEMS, INC.
LAKE WORTH, FL 33461
PH: (561) 547-8080 FAX: (561) 547-3999

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MOPS PUMP STATION SCHEDULE

MOPS SERIES			ITEM DESCRIPTION	
INITIAL DESIGN FLOW (G.P.M.)	135		100 YEAR FLOOD ELEVATION	95.00'
INITIAL DESIGN HEAD (T.D.H.)	51'		25 YEAR FLOOD ELEVATION	89.40'
SECONDARY DESIGN FLOW (G.P.M.)	285	A	GRADE ELEVATION	105.25'
SECONDARY DESIGN HEAD (T.D.H.)	39'	B	TOP ELEVATION OF WET WELL	105.25'
RATED PERFORMANCE SPEED	3450	C	BOTTOM ELEVATION OF WET WELL	89.25'
RATED MOTOR HORSEPOWER	7.5	D	ALL PUMPS OFF ELEVATION	92.30'
SUBMERSIBLE PUMP TYPE (P-1,P-2)	NON-CLOG	E	LEAD PUMP ON ELEVATION	95.00'
PUMP MODEL NUMBER	MOPS	F	LAG PUMP ON ELEVATION	96.00'
SERVICE ENTRANCE VOLTAGE	460	G	HIGH ALARM ELEVATION	97.00'
SERVICE ENTRANCE PHASE	3	H	INSIDE DIAMETER OF WET-WELL	72"
CONTROL CENTER FULL LOAD AMPS	29	I	OUTSIDE DIAMETER OF ANTI-FLOATATION RING	96"
NEMA 3R PAINTED STEEL DISCONNECT SWITCH, RATED AMPS	30	J	MINIMUM CUBIC FEET OF CONCRETE BALLAST (CU YDS)	243/(9)
WET WELL SCOURER SYSTEM	N/A	K	INVERT PIPE DIAMETER	8"
REMOTE STATION MONITOR (TELEMETRY)	N/A	L	FORCE MAIN DIAMETER	4"
ON-SITE GENERATOR SYSTEM	N/A	M	PRIMARY INVERT ELEVATION	97.65'
		N	SECONDARY INVERT ELEVATION	N/A

MOPS EQUIPMENT IDENTIFICATION	QTY.	MODEL DESIGNATION
MOPS PUMP STATION	1	A24-72192-D-7.5
MOPS VALVE BOX ASSEMBLY (VBA)	1	VBA-24
MOPS ODOR/GAS SCRUBBER (OGS)	1	OGS-B
MOPS R.P.Z. ASSEMBLY	1	75
MOPS CONTROL CENTER	1	PSC-232-7.5-T
MOPS DISCONNECT SWITCH	1	FDS-30-3-4-PS
MOPS CONTROL CENTER MOUNTING ASSEMBLY	1	CCMA-32AL
MOPS WET WELL SCOURER SYSTEM	0	N/A
MOPS REMOTE STATION MONITOR	0	N/A
1st YEAR SERVICE/MAINTENANCE CONTRACT	0	N/A
MOPS ON-SITE GENERATOR SYSTEM	0	N/A
MOPS FIELD SERVICE WORK	1	CONTROL INSTALLATION & START-UP

MOPS PUMP STATION COMPLIANCE NOTES:

THIS PUMP STATION DESIGN COMPLIES WITH THE FOLLOWING REQUIRED STANDARDS:

- STATE OF FLORIDA ENVIRONMENTAL PROTECTION STANDARDS
- FLORIDA ADMINISTRATIVE CODE (F.A.C.): 62-640.400- COLLECTION AND TRANSMISSION SYSTEMS
- NATIONAL ELECTRIC CODE (NEC) CLASS 1, DIVISION 1, GROUP D- HAZARDOUS LOCATIONS
- UNDERWRITER'S LABORATORIES (U.L.) 508A-MOTOR CONTROL CENTERS AND U.L. 698A-INSTRINSICALLY SAFE CONTROL CENTERS
- RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (2014 EDITION).

1. PUMPS ARE RATED BY FACTORY MUTUAL FOR CLASS 1, DIVISION 1, GROUP D ATMOSPHERES AS REQUIRED BY NEC.
2. THE CONTROL CENTER INCORPORATES INTRINSICALLY SAFE RELAYS AND IS LISTED TO UL 698A INTRINSICALLY SAFE FOR CLASS 1, DIVISION 1 ATMOSPHERES.
3. THE CONDUIT PROVIDED, ALONG WITH CONDUIT GAS-SEAL-OFFS, ARE RATED FOR CLASS 1, DIVISION 1 LOCATIONS.
4. THE WASTEWATER PUMPS AND THE CONTROL CENTER INCORPORATE A MECHANICAL SEAL FAILURE DETECTION AND NOTIFICATION SYSTEM.
5. THE CONTROL CENTER INCLUDES EITHER A REMOTE TELEMETRY UNIT (RTU) OR A SELF-CHARGING, BACK-UP ALARM SYSTEM TO OPERATE ON POWER FAILURE.
6. THE PUMP STATION INCORPORATES AN ODORLESS DESIGN WITH A SCRUBBER SYSTEM TO CONTROL TOXIC GASES AND ODORS FOR COMPLIANCE TO F.A.C. 62-604.400.
7. THE BOTTOM OF THE TOP RIM ELEVATION OF PUMP STATION MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 25 YEAR FLOOD ELEVATION. THE LISTED 25 YEAR FLOOD ELEVATION PROVIDED BY SITE CIVIL ENGINEER.
8. THE BOTTOM ELEVATION OF THE MOPS CONTROL CENTER MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 100 YEAR FLOOD ELEVATION. THE LISTED 100 YEAR FLOOD ELEVATION PROVIDED BY THE SITE CIVIL ENGINEER.

MOPS ENGINEERING NOTES:

AA. THE HORSEPOWER SHOWN ON THE SCHEDULE IS A MINIMUM HORSEPOWER REQUIREMENT BASED ON THE STATION'S DESIGN CRITERIA AND THE REQUIRE TORQUE. (LOWER RATED HORSEPOWER EQUIPMENT WILL NOT BE ACCEPTABLE.)
BB. THESE ITEMS ARE NOT SUPPLIED BY A.E.S. WITH THE MOPS STATION.
CC. INVERT ELEVATIONS BASED ON INSIDE BOTTOM OF PIPE.
DD. THE MOPS CONTROL ASSEMBLY CONSISTS OF THE FOLLOWING: CONTROL CENTER DISCONNECT SWITCH, MOUNTING ASSEMBLY, ELECTRICAL CONDUITS, AND SEAL-OFF. THESE ITEMS MUST BE SUPPLIED AND INSTALLED BY THE MOPS PUMP STATION MANUFACTURER TO VALIDATE MOPS WARRANTY PROGRAM.
EE. FOR STATIONS IN MIAMI-DADE COUNTY, THE MOPS PUMP STATION IS SUPPLIED WITH A REMOTE TELEMETRY MONITORING UNIT AND A.E.S. MAINTENANCE SERVICE. THE R.T.U. ALLOWS FOR MONITORING OF LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHAPTER 24.42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND IS INSTALLED ABOVE THE 100 YEAR FLOOD ELEVATION.

THE MOPS WASTEWATER PUMP STATION DESIGN AND EQUIPMENT SHOWN ON THIS DRAWING HAS BEEN REVIEWED, PERMITTED, AND CERTIFIED AS COMPLYING WITH ALL THE STATE OF FLORIDA D.E.P. AND LOCAL REQUIREMENTS. ANY SUBSTITUTION FROM THIS DESIGN MAY REQUIRE NEW PERMITS, APPLICATION FEES, AND ENGINEERING SERVICES FOR RE-CERTIFICATION AND DESIGN REVIEW.

P.E. CERTIFICATION:

Bonnie McLeod, P.E., Lic # 70797 V.P. of Engineering
Atlantic Environmental Systems, Inc., Certificate # 26398
2244 4th Ave. North, Lake Worth, Florida 33461
Ph: 561-547-8080 Fax: 561-547-3999

REVISION	DATE
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-	--/--/--
-	--/--/--
-	--/--/--

Project: APOPKA BUSINESS CENTER
Prepared For: LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES
13485 VETERNS WAY, SUITE 120, ORLANDO, FL 32827

AES. Project No.: 1795
Date: 08/16/2023

Page No. LS-1

PRIVATE PUMP STATION NOTES:

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F 2. THE PRIVATELY OWNED AND MAINTAINED PUMP STATIONS SHALL BE SURROUNDED BY A 6 FT HIGH CHAIN LINK FENCE WITH GATES.

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE & AMENITY CENTER LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 800 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
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07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

This item has been digitally signed and sealed by JOSEPH J. YANNUCCI, JR., PE on the DATE shown in the digital signature. Printed copies of this document are not considered signed and sealed and the Digital Signature must be verified on any electronic copies.

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

LANGAN
Langan Engineering and Environmental Services, LLC.
13485 Veterans Way, Suite 120
Orlando, FL 32827
T: 407.974.2900 F: 407.974.2901 www.langan.com
FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project: APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title: UTILITY DETAILS

Project No. 342010601
Date 15 JULY 2022
Drawn By JMW
Checked By JJY

Drawing No. C-32A

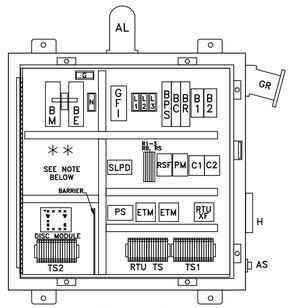
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LANGAN Project No. 342010601

CONTROL CENTER DESIGNED & MANUFACTURED TO MEET ALL D.E.P. REQUIREMENTS

MOPS CONTROL CENTER

SEE SCHEDULE FOR ELECTRICAL SERVICE REQUIREMENTS



INTERIOR LAYOUT
(DOOR NOT SHOWN FOR CLARITY)

PANEL COMPONENTS

AL	ALARM LIGHT
ALT	ALTERNATOR (ON DISC)
AS	ALARM SILENCE SWITCH
B1-2	MOTOR BREAKERS
BC	CONTROL BREAKER
BE	EMERGENCY BREAKER
BM	MAIN BREAKER
BPS	POWER SUPPLY BREAKER
BR	RECEPTACLE BREAKER
C1-2	CONTACTOR, MOTOR START
GFI	CONVENIENCE RECEPTACLE
DISC	DUPLEX INTRINSICALLY SAFE CONTROLLER
ETM	ELAPSED TIME METER
G	GROUND BLOCK
GR	GENERATOR RECEPTACLE
H	HORN
HOA	HAND-OFF-AUTO SWITCH (ON DISC)
L1,2,3	POWER DISTRIBUTION BLOCK
N	NEUTRAL BLOCK
PL	PILOT LIGHT (ON DISC)
PM	PHASE MONITOR
PS	POWER SUPPLY
R1-3	RELAYS
RB	BATTERY RELAY
RS	SILENCE RELAY
RSF	SEAL FAIL RELAY
RTUXF	RTU TRANSFORMER
SLPD	SURGE/LIGHTNING PROTECTION DEV.
TS1	TERMINAL STRIP FOR PUMPS
TS2	TERMINAL STRIP FOR FLOATS

ENCLOSURE

NEMA 4X Stainless Steel
Single Door w/ Padlock Hasp
30"H x 30"W x 8"D

NOTES:

1. PANEL LABELED FOR U.L 508A "MOTOR CONTROL CENTERS" AND U.L. 698A "HAZARDOUS LOCATION PANELS" (INTRINSICALLY SAFE)
2. COMPLETE BACK-UP, SELF-CHARGING BATTERY, WITH VISUAL/AUDIO ALARM SYSTEM PER RSWF-45.
3. SEE CONTROL CENTER DETAIL SHEET FOR ANY ADDITIONAL NOTES.

27																							
SPARE	NEU	NEU	LI1	120	120	+	-	GND	COM	SF1	SF2	T1	T2	T3	1	2	P1G	T1	T2	T3	1	2	P2G
	NEU		120V		RTU TERMINALS (IF USED)				PUMP SEAL FAIL			MOTOR 1 LEADS			MT1 MOTOR 1	G N D	MOTOR 2 LEADS			MT2 MOTOR 2	G N D	

TS1 TERMINAL SCHEDULE

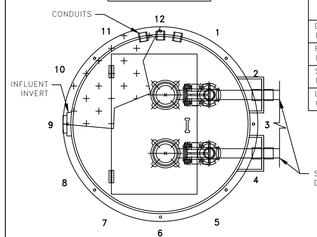
JUMPERS

1	2	3	4	5	6	7	8
FS1 ALL OFF		FS2 CALL LEAD		FS3 CALL LAG		FS4 HIGH ALARM	

TS2 TERMINAL SCHEDULE

** THIS SPACE AVAILABLE FOR CAPACITORS FOR SINGLE PHASE OR TRANSFORMER FOR 460V.

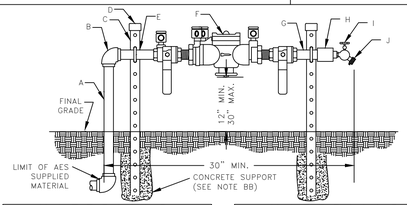
HUB AND INVERT LOCATION



ITEMS	CLOCK POSITION
DISCHARGE LINES	3:00
PRIMARY INVERT	9:00
SECONDARY INVERT	N/A
LOCATION OF CONTROL PANEL	12:00

SCHEMATIC BASED ON THE STATION'S DISCHARGE BEING LOCATED AT THE #3 CLOCK POSITION. SEE SCHEDULE FOR LOCATION OF INVERTS AND CONTROL PANEL. LOCATIONS SUBJECT TO CHANGE.

NOTE: BACKFILL AROUND LIFT STATION FROM ANTI-FLOATATION RING UP TO FINISHED GRADE SHALL BE COMMON FILL COMPACTED IN 12-INCH MAX. LIFTS TO 98% DENSITY PER AASHTO T-180. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE WETWELL DURING COMPACTION.



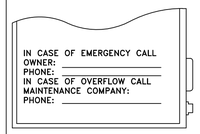
MATERIALS		
ITEM	QTY.	DESCRIPTION
A	1	3/4" x 36" S.S. NIPPLE
B	1	3/4" S.S. 90° ELBOW
C	2	1-5/8"x1-5/8"x40" ALUM. SUPPORT BRACKET
D	2	SUPPORT BRACKET CAPS P/N 2033
E	2	3/4" S.S. PIPE BOLTS

MATERIALS		
ITEM	QTY.	DESCRIPTION
F	1	3/4" APP. BACKFLOW PREVENTER
G	2	3/4" x 3" S.S. NIPPLE
H	1	3/4" x 3/4" S.S. COUPLING
I	1	3/4" BRONZE HOSE BIB
J	1	3/4" VACUUM BREAKER

DETAIL B

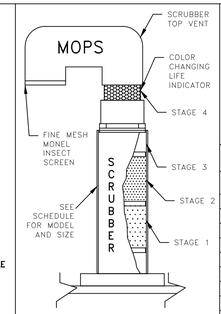
R.P.Z. BACKFLOW PREVENTER ASSEMBLY DETAIL

U.S.C. AND A.S.S.E. APPROVED N.T.S.



DETAIL C
(SUPPLIED BY MAINT. COMPANY)

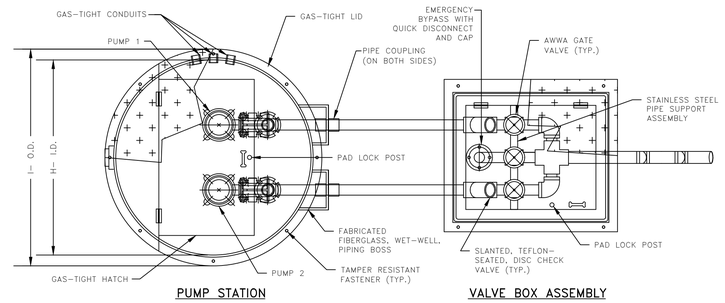
CONTROL CENTER ASSEMBLY AND INSTALLATION N.T.S.



DETAIL A

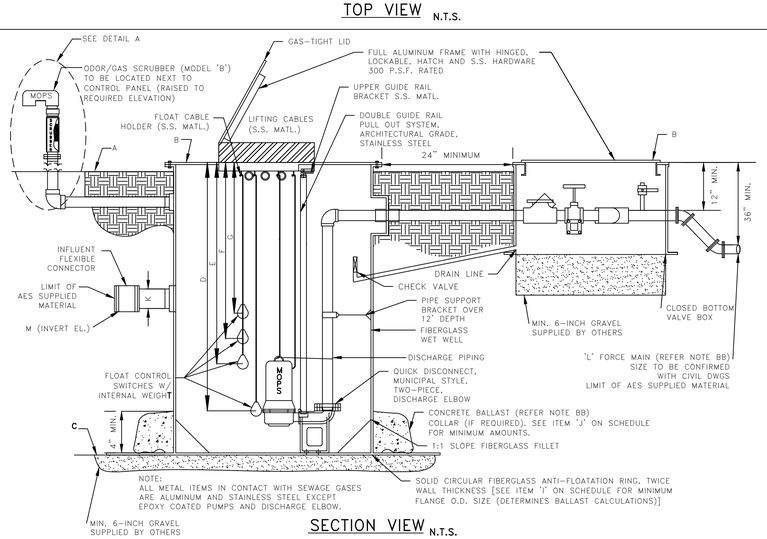
MOPS ODOR/GAS SCRUBBER

NOTES:
1. SCRUBBER DESIGNED TO REMOVE TOXIC SEWAGE GASES, H2S, AND OFFENSIVE ODORS SUCH AS SKATOLES AND MERCAPTANS.
2. SCRUBBER'S LIFE EXPECTANCY CALCULATIONS ARE INCLUDED IN SHOP DRAWING SUBMITTALS.
3. SCRUBBER UNIT CAN BE MOUNTED INSIDE WET-WELL OR TOP MOUNTED.
4. MODEL 'B' SHOWN.



PUMP STATION VALVE BOX ASSEMBLY

TOP VIEW N.T.S.



SECTION VIEW N.T.S.

MOPS

MANUFACTURED ODORLESS PUMP STATION
ATLANTIC ENVIRONMENTAL SYSTEMS, INC.
LAKE WORTH, FL 33461
PH: (561) 547-8080 FAX: (561) 547-3999

©2000

PRIVATE SERIES

THIS DRAWING AND THE DESIGN CONTAINED HEREIN IS PROPRIETARY AND IS AND SHALL REMAIN THE PROPERTY OF ATLANTIC ENVIRONMENTAL SYSTEMS, INC. THIS DRAWING AND DESIGN SHOULD BE USED ONLY FOR THE PURPOSE FOR WHICH IT IS INTENDED, AND ONLY WITH WRITTEN AUTHORIZATION FROM ATLANTIC ENVIRONMENTAL SYSTEMS, INC. ANY REPRODUCTION, IN WHOLE OR IN PART, MUST CLEARLY SHOW THE ATLANTIC ENVIRONMENTAL NAME AND ADDRESS IN THE REPRODUCTION.

MOPS PUMP STATION SCHEDULE

MOPS SERIES		ITEM DESCRIPTION		
INITIAL DESIGN FLOW (G.P.M.)	26		100 YEAR FLOOD ELEVATION	96.00'
INITIAL DESIGN HEAD (T.D.H.)	52'		25 YEAR FLOOD ELEVATION	95.00'
SECONDARY DESIGN FLOW (G.P.M.)	N/A	A	GRADE ELEVATION	97.64'
SECONDARY DESIGN HEAD (T.D.H.)	N/A	B	TOP ELEVATION OF WET WELL	97.64'
RATED PERFORMANCE SPEED	3450 RPM	C	BOTTOM ELEVATION OF WET WELL	83.64'
RATED MOTOR HORSEPOWER	2.0	D	ALL PUMPS OFF ELEVATION	86.00'
SUBMERSIBLE PUMP TYPE (P-1,P-2)	GRINDER	E	LEAD PUMP ON ELEVATION	87.00'
PUMP MODEL NUMBER	MOPS	F	LAG PUMP ON ELEVATION	88.00'
SERVICE ENTRANCE VOLTAGE	460	G	HIGH ALARM ELEVATION	89.00'
SERVICE ENTRANCE PHASE	3	H	INSIDE DIAMETER OF WET-WELL	48"
CONTROL CENTER FULL LOAD AMPS	10	I	OUTSIDE DIAMETER OF ANTI-FLOATATION RING	84"
NEMA 3R PAINTED STEEL DISCONNECT SWITCH, RATED AMPS	30	J	MINIMUM CUBIC FEET OF CONCRETE BALLAST (CU YDS)	000/(0)
WET WELL SCOURER SYSTEM	N/A	K	INVERT PIPE DIAMETER	8"
REMOTE STATION MONITOR (TELEMETRY)	N/A	L	FORCE MAIN DIAMETER	2"
ON-SITE GENERATOR SYSTEM	N/A	M	PRIMARY INVERT ELEVATION	90.04'
		N	SECONDARY INVERT ELEVATION	N/A

MOPS EQUIPMENT IDENTIFICATION	QTY.	MODEL DESIGNATION
MOPS PUMP STATION	1	B22-48168-D-2.0
MOPS VALVE BOX ASSEMBLY (VBA)	1	VBA-22
MOPS ODOR/GAS SCRUBBER (OGS)	1	OGS-B
MOPS R.P.Z. ASSEMBLY	1	75
MOPS CONTROL CENTER	1	PSC-232-2.0
MOPS DISCONNECT SWITCH	1	FDS-60-3-4-PS
MOPS CONTROL CENTER MOUNTING ASSEMBLY	1	CCMA-32AL
MOPS WET WELL SCOURER SYSTEM	0	N/A
MOPS REMOTE STATION MONITOR	0	N/A
1st YEAR SERVICE/MAINTENANCE CONTRACT	0	N/A
MOPS ON-SITE GENERATOR SYSTEM	0	N/A
MOPS FIELD SERVICE WORK	1	CONTROL INSTALLATION & START-UP

MOPS PUMP STATION COMPLIANCE NOTES:

THIS PUMP STATION DESIGN COMPLIES WITH THE FOLLOWING REQUIRED STANDARDS:

- STATE OF FLORIDA ENVIRONMENTAL PROTECTION STANDARDS
- FLORIDA ADMINISTRATIVE CODE (F.A.C.): 62-640.400- COLLECTION AND TRANSMISSION SYSTEMS
- NATIONAL ELECTRIC CODE (NEC) CLASS 1, DIVISION 1, GROUP D- HAZARDOUS LOCATIONS
- UNDERWRITER'S LABORATORIES (U.L.) 508A-MOTOR CONTROL CENTERS AND U.L. 698A-INSTRINSICALLY SAFE CONTROL CENTERS
- RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (2014 EDITION).

1. PUMPS ARE RATED BY FACTORY MUTUAL FOR CLASS 1, DIVISION 1, GROUP D ATMOSPHERES AS REQUIRED BY NEC.
2. THE CONTROL CENTER INCORPORATES INTRINSICALLY SAFE RELAYS AND IS LISTED TO UL 698A INTRINSICALLY SAFE FOR CLASS 1, DIVISION 1 ATMOSPHERES.
3. THE CONDUIT PROVIDED, ALONG WITH CONDUIT GAS-SEAL-OFFS, ARE RATED FOR CLASS 1, DIVISION 1 LOCATIONS.
4. THE WASTEWATER PUMPS AND THE CONTROL CENTER INCORPORATE A MECHANICAL SEAL FAILURE DETECTION AND NOTIFICATION SYSTEM.
5. THE CONTROL CENTER INCLUDES EITHER A REMOTE TELEMETRY UNIT (RTU) OR A SELF-CHARGING, BACK-UP ALARM SYSTEM TO OPERATE ON POWER FAILURE.
6. THE PUMP STATION INCORPORATES AN ODORLESS DESIGN WITH A SCRUBBER SYSTEM TO CONTROL TOXIC GASES AND ODORS FOR COMPLIANCE TO F.A.C. 62-604.400.
7. THE BOTTOM OF THE TOP RIM ELEVATION OF PUMP STATION MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 25 YEAR FLOOD ELEVATION. THE LISTED 25 YEAR FLOOD ELEVATION PROVIDED BY SITE CIVIL ENGINEER.
8. THE BOTTOM ELEVATION OF THE MOPS CONTROL CENTER MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 100 YEAR FLOOD ELEVATION. THE LISTED 100 YEAR FLOOD ELEVATION PROVIDED BY THE SITE CIVIL ENGINEER.

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EE. FOR STATIONS IN MIAMI-DADE COUNTY, THE MOPS PUMP STATION IS SUPPLIED WITH A REMOTE TELEMETRY MONITORING UNIT AND A.E.S. MAINTENANCE SERVICE. THE R.T.U. ALLOWS FOR MONITORING OF LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHAPTER 24.42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND IS INSTALLED ABOVE THE 100 YEAR FLOOD ELEVATION.

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Ph: 561-547-8080 Fax: 561-547-3999

REVISION	DATE
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Project: APOPKA BUSINESS CENTER BUILDING 500
Prepared For: LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES
13485 VETERANS HWY, SUITE 120, ORLANDO, FL 32827

AES Project No.: 2033
Date: 08/17/2023

Page No. LS-1

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09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS	14
07/30/2024	PLANNING & CITY COMMENTS REVISION	13
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07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
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Revisions

This item has been digitally signed and sealed by **JOSEPH J. YANNUCCI, JR., PE** on the **DATE shown in the digital signature**. Printed copies of this document are not considered signed and sealed and the **Digital Signature** must be verified on any electronic copies.

JOSEPH J. YANNUCCI, JR. LICENSE No. 65969 STATE OF FLORIDA PROFESSIONAL ENGINEER

Joseph J Yannucci

SIGNATURE JOSEPH J. YANNUCCI, JR. DATE SIGNED
PROFESSIONAL ENGINEER FL Lic. No. 65969

LANGAN
Langan Engineering and Environmental Services, LLC.
13485 Veterans Way, Suite 120
Orlando, FL 32827
T: 407.974.2900 F: 407.974.2901 www.langan.com
FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project: APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title: UTILITY DETAILS

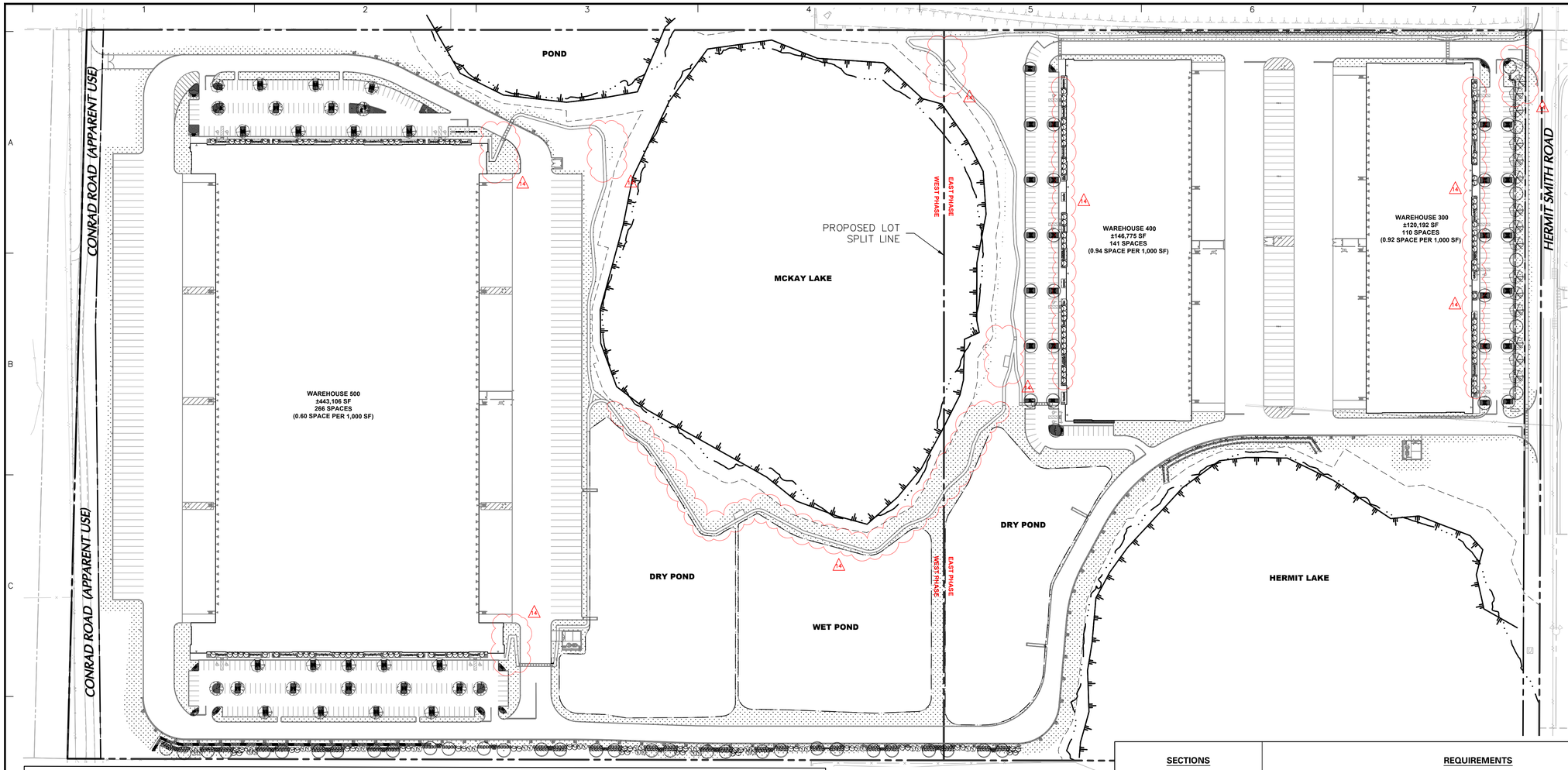
Project No.: 342010601
Date: 15 JULY 2022
Drawn By: JMW
Checked By: JJY

Drawing No.: C-32B

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Date: 11/21/2024 Time: 10:07 User: brlahore Style Table: Langan.stb Layout: C-32B Document Code: 342010601-0301-CS501-0101

LANGAN Project No. 342010601



TREE SUMMARY TABLE	
TOTAL INCHES ON-SITE[1]:	26,419
TOTAL INCHES REMOVED[1]:	24,988
TOTAL INCHES RETAINED:	1,431
TOTAL SPECIMEN INCHES RETAINED[1]:	214
TOTAL INCHES REQUIRED:	840
TOTAL INCHES REPLACED:	891
TOTAL INCHES POST DEVELOPMENT:	2,322
SITE CLEARNING IN SQUARE FEET:	2,243,340
SITE CLEARNING IN ACRES:	51.50

NOTE:
1. PROVIDED BY ECS FLORIDA LLC.

NOTES:
- REFER TO SHEETS L-02 THROUGH L-05 FOR PARTIAL LANDSCAPE PLANS.
- REFER TO SHEET L-06 FOR LANDSCAPE NOTES AND DETAILS.

PLANT SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
SHADE TREE(S)						
QH	32	QUERCUS HEMISPHAERICA	LAUREL OAK	3.5" CAL. MIN.(3"DBH)	B&B	–
QV	64	QUERCUS VIRGINIANA	LIVE OAK	3.5" CAL. MIN.(3"DBH)	B&B	–
UAP	11	ULMUS ALATA 'PRINCETON'	WINGED ELM	3.5" CAL. MIN.(3"DBH)	B&B	–
ORNAMENTAL TREE(S)						
ELDE	150	ELAEOCARPUS DECIPIENS	JAPANESE BLUEBERRY	3.5" CAL. MIN.(3"DBH)	B&B	–
EVERGREEN TREE(S)						
IVO	40	ILEX VOMITORIA	YAUPON HOLLY	8' HT MIN.	B&B	–
EVERGREEN SHRUB(S)						
JCP	297	JUNIPERUS CHINENSIS 'PARSONI'	PARSON'S JUNIPER	15–18" SPRD.	3 GAL.	spaced @ 36" o.c.
RI	589	RHAPHIOLEPIS INDICA SPP.	INDIAN HAWTHORN	30–36"	7 GAL.	–
DECIDUOUS SHRUB(S)						
VO	458	VIBURNUM ODORATISSIMUM	SWEET VIBURNUM	30–36"	3 GAL.	–
PALM(S)						
SERE	297	SERENOA REPENS	SAW PALMETTO	24–30"	7 GAL.	–
ORNAMENTAL GRASS(ES)						
ZP	46	ZAMIA PUMILA	COONTIE	3 GAL.	CONTAINER	–
MC	741	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	3 GAL.	CONTAINER	–
PERENNIAL(S)						
LM	666	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF	1 GAL.	CONTAINER	spaced @ 18" o.c.

NOTE:
1. IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.
2. TREE PLANTING MATERIALS SHALL BE FLORIDA GRADE NO.1 AND THE PLANS SHALL MEET LDC SECTION 5.2.5.D WATER-WISE STANDARDS.
3. CONTRACTOR TO PROVIDE IRRIGATION FOR PLANTING BEDS AND LAWNS.
4. REFER TO SHEET L-07 FOR SOD SPECIFICATIONS.

SECTIONS		REQUIREMENTS	PROPOSED	VARIANCE/ WAIVER REQUIRED
5.2.5. – LANDSCAPING AND BUFFER STANDARDS	A.FOUNDATION PLANTING	(1) THE FOUNDATION LANDSCAPING AREA SHALL CONTAIN: SHRUBS A MINIMUM OF 24" H, PLANTED A MINIMUM OF 30 " O.C., DEPENDING ON VARIETY AND APPROVED BY THE DRC; AND A MINIMUM OF ONE SMALL DECORATIVE OR ORNAMENTAL TREE THAT IS AT LEAST 15 GALLONS FOR EVERY 20 LF.	SHRUBS WERE PROPOSED EVERY 30" O.C. AND ONE SMALL DECORATED/ ORNAMENTAL TREE FOR EVERY 20 LF ON THE PLAN.	COMPLIES.
	B.OFF-STREET VEHICULAR PARKING AREA PLANTING	2.A.1.GENERAL PARKING LOT STANDARDS (C)MIN. PLANTINGS A MIN. OF 1 CANOPY SHADE TREE + AN ADDITIONAL 1 CANOPY SHADE TREE FOR EVERY 10 SPACES OR ANY PORTION THEREOF, SHALL BE REQUIRED FOR AN OFF-STREET VEHICULAR PARKING AREA. INTERIOR LANDSCAPING SHALL ACCOUNT FOR A MIN. 10% OF AN OFF-STREET VEHICULAR PARKING AREA. INTERIOR LANDSCAPING SHOULD CONSIST OF A MIX OF TREES, SHRUBS AND GROUND COVER. TREE CLUMPING WITHIN INTERIOR ISLANDS IS ENCOURAGED. SUFFICIENT SHADE TREES SHALL BE PLANTED SO THAT 30% OF GROSS PARKING LOT AREA SHALL BE COVERED BY CANOPY AT MATURE GROWTH. (J)AT LEAST 90% OF THE PARKING SPACES SHALL BE WITHIN 80 FEET OF THE TRUNK OF A TREE. LANDSCAPING IN BUFFERYARDS, OR OTHER REQUIRED PLANTINGS MAY BE USED TO MEET THIS REQUIREMENT.	PARKING SPACES=520 SHADE TREES REQUIRED=52 PROPOSED ON PLAN=54	COMPLIES.
		B. PERIMETER OFF-STREET VEHICULAR PARKING AREA LANDSCAPING A HEDGE ROW, CONSISTING OF SHRUBS A MIN. 36" H AND PLANTED 3'-6" O.C. OR OTHER APPROVED SCREENING SHALL BE REQUIRED WHERE OFF-STREET VEHICULAR PARKING AREAS ARE ADJACENT TO A STREET.	A HEDGE ROW OF SHRUBS WITH THE MIN. 36" H WERE PROPOSED 3'-6" O.C.	COMPLIES.
		3. BUFFERYARD FOR EVERY 100 LF, DESIGN PER TABLE 5.2.5.B.3.D-2: BUFFERYARDS AND TYPES DIAGRAM.	PROPOSED: 2 SHADE TREES + 8 UNDERSTORY TREES+29 SHRUBS FOR EVERY 100 LF IN THE BUFFERYARD AREAS.	COMPLIES.
	C. PLANT DIVERSITY	≥40 TREES----4+ SPECIES		COMPLIES.
		2. A.FLORIDA FRIENDLY LANDSCAPING GUIDE TO PLANT SELECTION & LANDSCAPE DESIGN MAINTAINED BY THE FLORIDA FRIENDLY LANDSCAPING PROGRAM.	SEE PLANT SCHEDULE AND PLANTING PLANS.	COMPLIES.
		2.C. LANDSCAPE SHALL BE INSTALLED A MINIMUM OF 2.5 FEET FROM THE FOUNDATION OF A BUILDING OR STRUCTURE.	SEE PLANTING PLANS.	COMPLIES.
		3.SELECTION OF GRASS SPECIES TO COMPLY WITH THE UF/IFAS FLORIDA YARDS AND NEIGHBORHOODS (FYN) PROGRAM FOR CENTRAL AND SOUTH FLORIDA. NO MORE THAN 50% OF THE GREEN SPACE AREA OR ONE-HALF ACRE, WHICHEVER IS LESS, MAY BE PLANTED WITH A LAWN GRASS THAT HAS A RATING OF LOW IN REGARDS TO DROUGHT TOLERANCE AS ESTABLISHED IN PROGRAM. GRASS WITH A RATING OF MEDIUM OR BETTER IS STRONGLY ENCOURAGED (E.G. BAHIA GRASS).	ONLY PROPOSED GRASSES WITH A RATING OF MEDIUM OR BETTER ARE PROPOSED: BAHIA GRASS AND BERMUDA GRASS.	COMPLIES.

100 0 50 100
SCALE: 1" = 100'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS ADDED, PLAT REVISION	14
07/23/2024	AGENCY FINAL REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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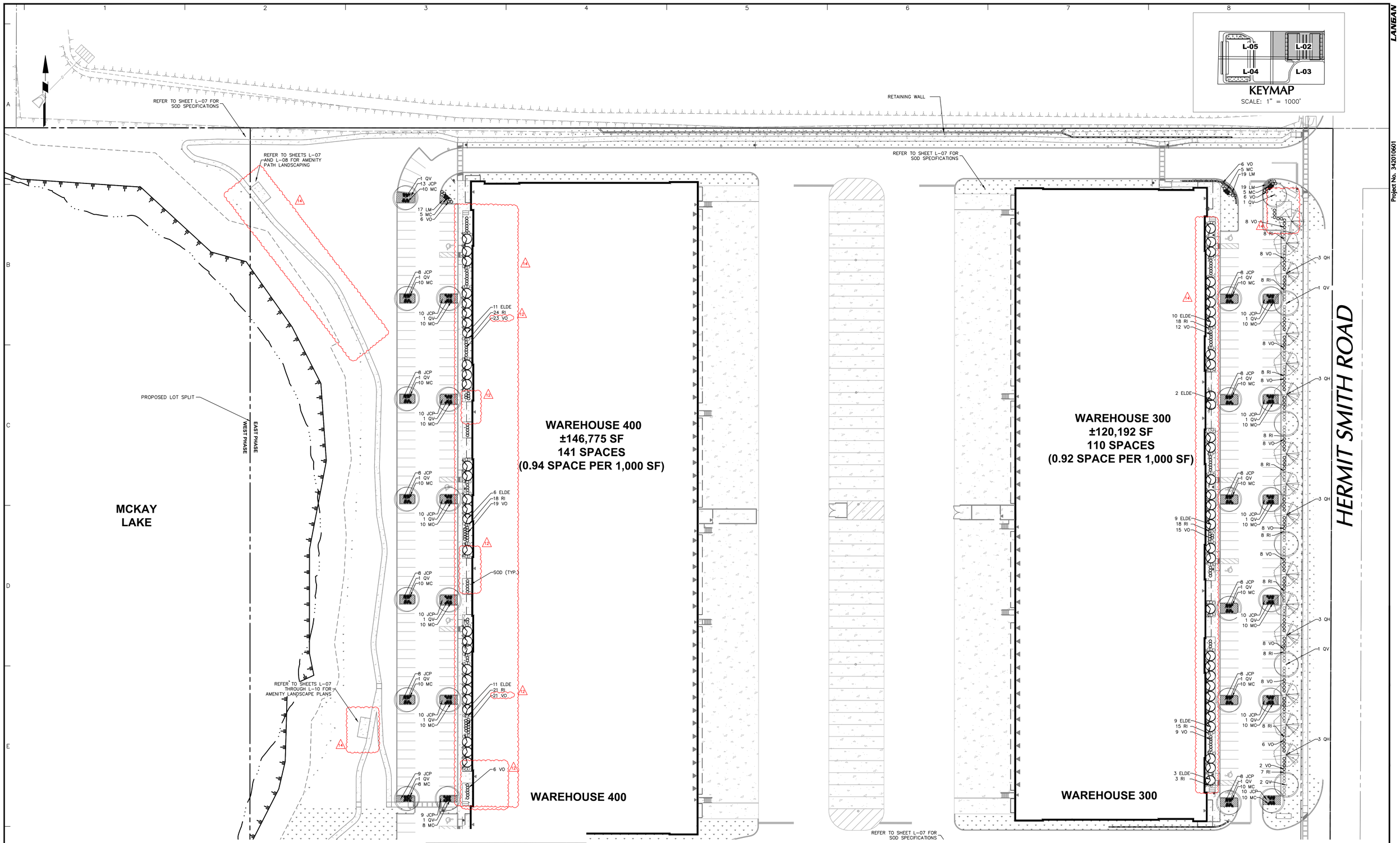
Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
OVERALL LANDSCAPE PLAN

Project No. 342010601
Date 04/29/2022
Drawn By IZ
Checked By SL/MS

Drawing No. L-01

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NOTES:
REFER TO SHEETS L-01 FOR PLANT SCHEDULE AND OVERALL LANDSCAPE PLAN.
REFER TO SHEETS L-06 FOR LANDSCAPE NOTES AND DETAILS.

SCALE: 1" = 40'

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300 & 400 FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
05/21/2024	WAREHOUSE 300 FOOTPRINT REVISIONS	12
04/12/2024	CITY SUBMITTAL	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/23/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/28/2023	REVISED PER PROJECT TEAM COMMENTS	8
01/06/2023	PRE ADDENDUM #1	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

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Project
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CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
PARTIAL LANDSCAPE PLAN

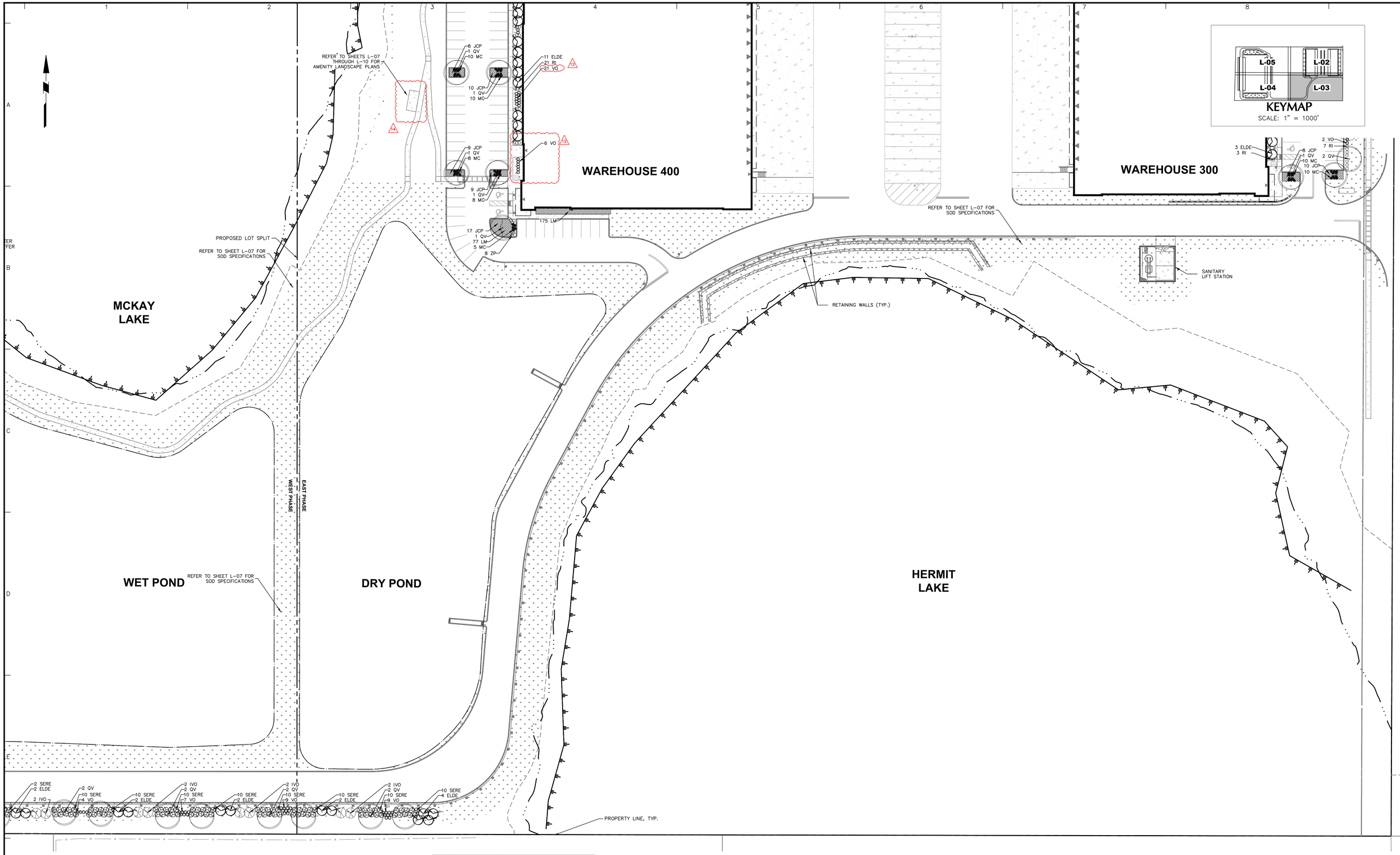
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Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 400 DOOR AND BUILDING LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
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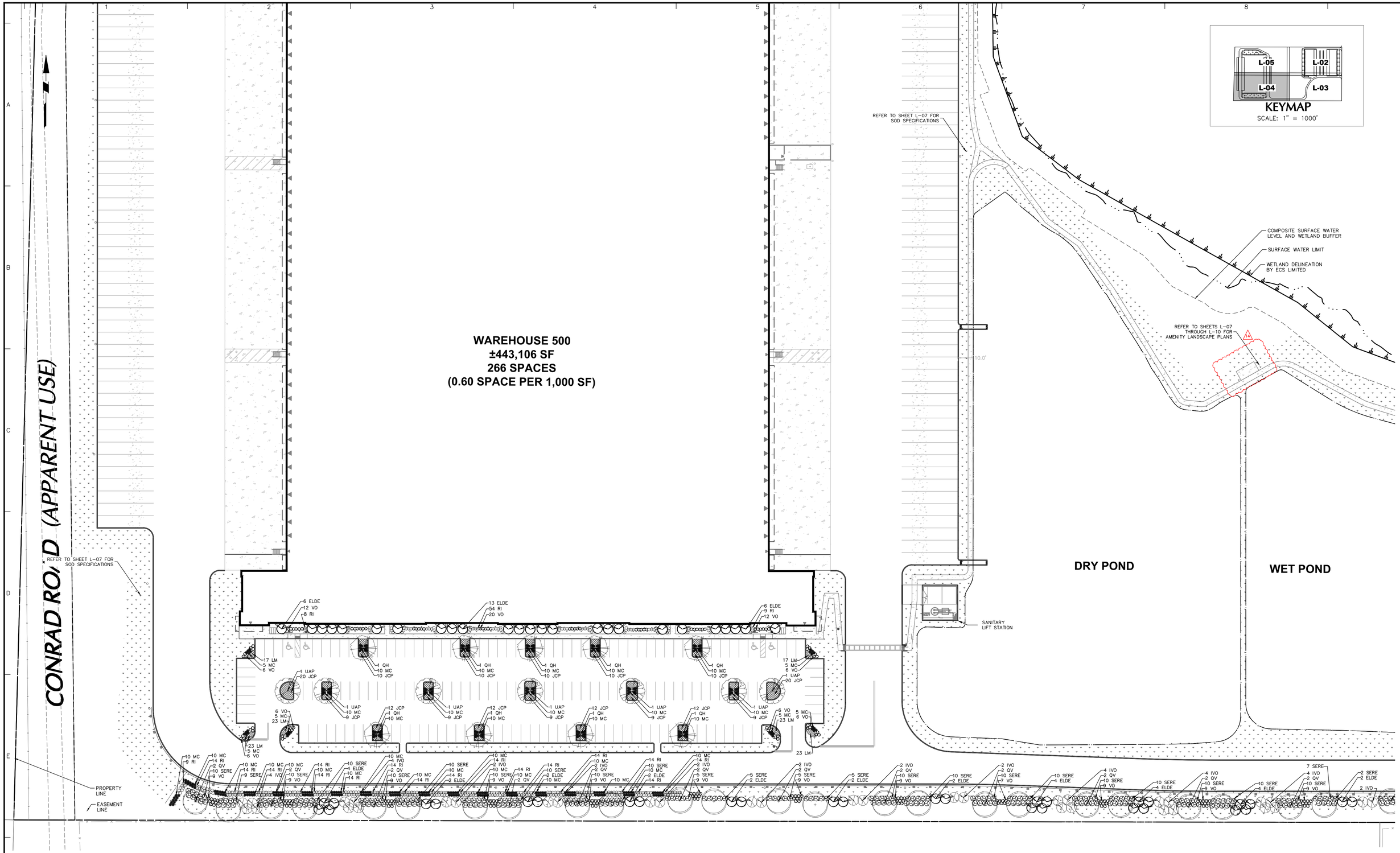
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Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	CITY COMMENTS	13
02/27/2024	WAREHOUSE 400' DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
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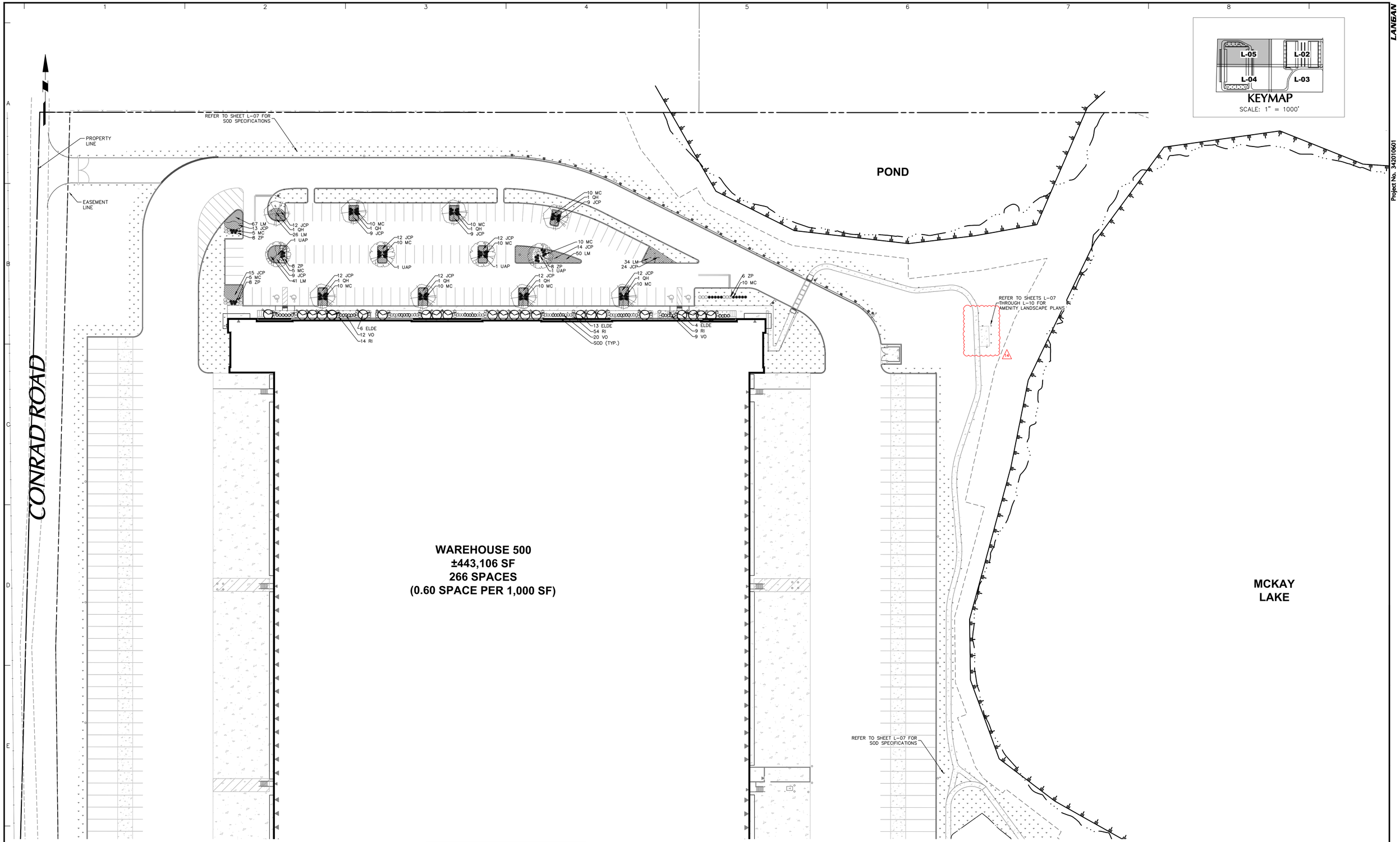
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Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS & AMENITY PATH REVISION	14
07/31/2024	AMENITY PATH TO SOD LIMITS	13
06/27/2024	WAREHOUSE & AMENITY REVISIONS	12
03/05/2024	OWNER OF CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/06/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
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GENERAL LANDSCAPE PLANTING NOTES

PLANTING MATERIALS

1. NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED THEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN NURSERY TRADE.
2. STANDARDS FOR NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH THE "FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS 2015" PUBLISHED BY FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS MUST MEET FLORIDA GRADE NO. 1 OR BETTER. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
3. NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANTS ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIFIED AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES.
4. THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
5. THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.
6. ALL PLANTS MUST MEET FLORIDA GRADE NO.1 OR BETTER AND SELECTED FROM THE FLORIDA FRIENDLY LANDSCAPE GUIDE AND THE INSTALLATION MUST FOLLOW THE FFL GUIDELINES AND BMPS.

DELIVERY, STORAGE, AND HANDLING

1. PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.
2. TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WILL BE PLANTED. DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING TRANSIT. DO NOT DROP OR BREAK BALLED STOCK DURING DELIVERY OR HANDLING.
3. ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT BALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL AT THE TIME OF PLANTING. IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8" INTO THE PLANTING HOLE. WITH CONTAINER-GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS.
4. THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.

INSTALLATION

1. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES PRIOR TO THE START OF EXCAVATION ACTIVITIES BASED ON AVAILABLE SURVEY INFORMATION AND BY CALLING 811 IN ACCORDANCE WITH WITH FLORIDA STATE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT, CHAPTER 556 AT LEAST TWO FULL BUSINESS DAYS PRIOR TO PLANNED EXCAVATION OR DEMOLITION ACTIVITIES. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND OWNER.
2. THE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
3. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
4. ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.
5. ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE PROCEDURES.
6. THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
7. AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION.
8. MAINTAIN A 2 TO 3" LAYER AROUND ESTABLISHED TREES, SHRUBS, AND BEDDING PLANTS. COARSE MATERIALS, SUCH AS PINE NUGGETS, MAY BE APPLIED TO A DEPTH OF 4", BUT DON'T ALLOW MULCH TO ACCUMULATE TO A GREATER DEPTH. CYPRESS MULCH WILL NOT BE ACCEPTED.
9. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
10. AFTER COMPLETION OF A PROJECT, ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, EXCEPT FOR THE AREA FROM THE BUILDING OUT TO THE SURROUNDING CURBS, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A SHREDDED HARDWOOD BARK OR APPROVED EQUAL MULCH THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST.
11. TREES MAY BE STAKED AT LANDSCAPE CONTRACTOR'S DISCRETION. CURRENT HORTICULTURAL PRACTICE DOES NOT RECOMMEND STAKING TREES EXCEPT IN CONDITIONS WHERE TREES ARE SUBJECT TO BLOW DOWNS DUE TO SOIL CONDITIONS, HEAVY PREVAILING WINDS OR A HIGH RATIO OF TOP GROWTH TO ROOT BALL. IF STAKING IS DEEMED NECESSARY BY CONTRACTOR, STAKE AND GUYS SHOULD BE LOCATED AND FLAGGED IN A MANNER TO PREVENT TRIPPING HAZARDS. WIRES OR GUYS SHALL BE LOCATED AND COVERED SO AS NOT TO PULL OR DAMAGE BRANCHES AND SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD.
12. NEW TREES MAY HAVE TEMPORARY DEER PROTECTION MEASURES INSTALLED AROUND TRUNKS AT THE LANDSCAPE CONTRACTOR'S DISCRETION. SUBMIT MATERIAL CUT SHEETS FOR REVIEW PRIOR TO PURCHASE AND INSTALLATION.

GUARANTEE

1. NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF ONE YEAR FOLLOWING ACCEPTANCE BY THE OWNER. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
2. ALL SCREENING AND REQUIRED LANDSCAPE PLANTINGS SHALL BE MAINTAINED FOR THE LIFE OF THE USE AND SHALL BE REPLACED OR RESTORED AS NECESSARY IN ORDER TO MAINTAIN THEIR EFFECTIVENESS. ANY LOSSES DUE TO STORM DAMAGE, DISEASE OR OTHER FACTORS SHALL BE REPLACED IN KIND WITHIN A PERIOD OF NOT MORE THAN SIX MONTHS.

PLANTING SOIL SPECIFICATIONS

1. PLANTING SOIL, ALTERNATELY MAY BE REFERRED TO AS TOPSOIL, SHOULD BE FRIABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, TOXINS, TRASH AND STONES OVER 1/2" DIA., IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO NOXIOUS ODORS.
2. PLANTING SOIL:

   REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOD, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN NOTES PLANS AND SPECIFICATIONS.

   SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR CONTAMINATED SITES.

   AT A MINIMUM, PLANTING SOILS MEETING THESE SPECIFICATIONS MAY BE OBTAINED FROM WECARE DENALI, P: 888-325-1522, OR APPROVED EQUAL.

   CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST. PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER, MATERIAL COMPOSITION, MANUFACTURER'S CERTIFIED ANALYSIS, AND THE WEIGHT OF THE MATERIALS. SOIL OR AMENDMENT MATERIALS SHALL BE STORED ON SITE TEMPORARILY IN STOCKPILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH A TARPAULIN, UNTIL TIME OF ACTUAL USE.

   ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO COUNTY EXTENSION OFFICES OR THE UNIVERSITY OF FLORIDA/IFAS EXTENSION SOIL TESTING LABORATORY, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.
3. WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.
4. CLEAN SOIL FILL IN LANDSCAPE AREAS:

   LANDSCAPE FILL MATERIAL, BELOW PLANTING SOILS, SHALL HAVE THE PHYSICAL PROPERTIES OF A SANDY LOAM WITH AN ORGANIC CONTENT OF LESS THAN 2% AND A PH BETWEEN 5 – 7.
5. SOIL PLACEMENT:

   A. IMPROVE ENTIRE DEPTH OF PLANTING BEDS RATHER THAN PROVIDING SELECT BACKFILL ONLY AROUND PLANTS. CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM DEPTH PLANTING SOIL LAYER IN LAWN AREAS, TWELVE INCHES (12") MINIMUM DEPTH PLANTING SOIL LAYER IN GROUNDCOVER AND PERENNIAL AREAS, EIGHTEEN INCHES (18") MINIMUM DEPTH PLANTING SOIL LAYER IN SHRUB AREAS, AND THIRTY-SIX INCHES (36") MINIMUM DEPTH PLANTING SOIL LAYER IN TREE PLANTING AREAS.

   B. SCARIFY AND/OR TILL COMPACTED SUBSOILS TO A MINIMUM DEPTH OF 6 INCHES. THOROUGHLY MIX A 6 INCH DEPTH LAYER OF PLANTING SOIL INTO THE SUBSOIL PRIOR TO PLACING PLANTING SOIL AT THE DEPTHS INDICATED ABOVE. PLANTING SOIL SHALL BE PLACED IN 12-18" LIFTS AND WATER THOROUGHLY BEFORE INSTALLING NEXT LIFT. REPEAT UNTIL DEPTHS AND FINISH GRADES HAVE BEEN ACHIEVED. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.

   C. PLANTING SOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE PLANTING SOIL UTILIZED IN ALL PLANTING AREAS.

   D. ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE.

LANDSCAPE MAINTENANCE NOTES

1. MAINTENANCE OPERATIONS BEFORE APPROVAL:
   A. PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND SHALL CONTINUE THROUGHOUT THE LIFE OF THE CONTRACT UNTIL FINAL ACCEPTANCE OF THE PROJECT.
   B. CARE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS AS ORIGINALLY INSTALLED, WATERING WHEN NEEDED OR DIRECTED, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.
   C. CONTRACTOR SHALL REMOVE AND REPLACE ALL DEAD, DEFECTIVE AND/OR REJECTED PLANTS AS REQUIRED BEFORE FINAL ACCEPTANCE.
2. MAINTENANCE DURING CONSTRUCTION:
   A. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED, AND OTHERWISE MAINTAINED AND PROTECTED UNTIL PROVISIONAL ACCEPTANCE. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE AND POSITION, PLANTING SAUCER RESTORED AND DEAD MATERIAL REMOVED. STAKES AND WIRES SHALL BE TIGHTENED AND REPAIRED. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.
   B. IF A SUBSTANTIAL NUMBER OF PLANTS ARE SICKLY OR DEAD AT THE TIME OF INSPECTION, ACCEPTANCE SHALL NOT BE GRANTED AND THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF ALL PLANTS SHALL BE EXTENDED FROM THE TIME REPLACEMENTS ARE MADE OR EXISTING PLANTS ARE DEEMED ACCEPTABLE BY THE LANDSCAPE ARCHITECT.
   C. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE SPECIFIED ON THE PLANT LIST OR THAT WHICH WAS TO REMAIN OR BE RELOCATED. THEY SHALL BE FURNISHED AND PLANTED AS SPECIFIED. THE COST SHALL BE BORNE BY THE CONTRACTOR. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.
   D. PLANTS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND PROVISIONAL ACCEPTANCE.
   E. AT THE END OF THE ESTABLISHMENT PERIOD, INSPECTION SHALL BE MADE AGAIN. ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR UNSATISFACTORY TO THE LANDSCAPE ARCHITECT OR OWNER SHALL BE REMOVED FROM THE SITE AND REPLACED DURING THE NORMAL PLANTING SEASON.
3. LAWN MAINTENANCE:
   A. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH PORTION OF LAWN IS PLANTED AND CONTINUE FOR 8 WEEKS AFTER ALL LAWN PLANTING IS COMPLETED.
   B. WATER TO KEEP SURFACE SOIL MOIST, REPAIR WASHED OUT AREAS BY FILLING WITH TOPSOIL, LIMING, FERTILIZING AND RE-SEEDING.
   C. MOW AT THE HIGHEST RECOMMENDED HEIGHT FOR THE GRASS SPECIES:
      BAHIAGRASS: 3.5 – 4"
      BERMUDA GRASS: 1 – 2"
   D. NEVER REMOVE MORE THAN 1/3 OF THE LEAF BLADE. "SCALPING" (MOWING TOO LOW) CAN BADLY STRESS YOUR TURF, LEAVING IT VULNERABLE TO DISEASE, DROUGHT, AND INSECT OR WEED INVASION.
   E. LEAVE GRASS CLIPPINGS ON THE GROUND. THESE ACTUALLY ACT AS COMPOST, RETURNING VALUABLE NUTRIENTS TO THE LAWN. GRASS CLIPPINGS CAN REDUCE LAWN FERTILITY REQUIREMENTS AND ADD ORGANIC MATTER TO THE SOIL.
   F. KEEP MOWER BLADES SHARP. DULL MOWERS TEAR LEAF BLADES, STRESSING THE GRASS AND MAKING IT MORE VULNERABLE TO PESTS AND DISEASE.
   G. DO NOT MOW WHEN LAWN IS WET. WET GRASS CLIPPINGS PREVENT MOWER BLADES FROM MAKING THE CLEANEST POSSIBLE CUT.

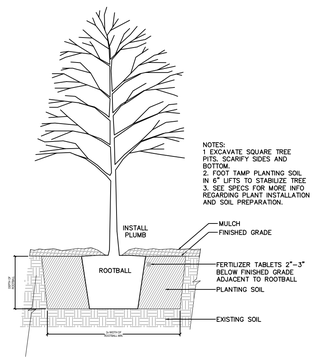
SOD SPECIFICATIONS

1. SOD IS TO BE THE BERMUDA GRASS (CYNODON DACTYLON) OR BAHIA GRASS (PASPALUM NOTATUM 'FLUGGE'). SOD IS TO BE INDIGENOUS TO THE AREA AND BE FURNISHED BY A REPUTABLE GROWER WITH A MINIMUM 5 YEARS EXPERIENCE.
2. PRIOR TO SODDING ALL AREAS ARE TO BE TOPSOILED, FINE GRADED, RAKED, WATERED LIGHTLY, AND FERTILIZED WITH A STARTER FERTILIZER.
3. ALL STONES GREATER THAN 2" DIAMETER SHALL BE REMOVED.
4. SOD TO BE INSTALLED PERPENDICULAR TO ALL SLOPED AREAS. SOD STRIPS TO BE LAID OUT SO JOINTS ARE NOT CLOSER THAN ONE FOOT (1'-0") FROM EACH OTHER.
5. SOD IS TO BE WATERED AT A RATE OF AT LEAST ONE AND A HALF INCHES ($1\frac{1}{2}$") PER WEEK UNTIL ROOT MASS MENDS WITH SOIL. AFTER THIS HAS OCCURRED NORMAL WATERING OF AT LEAST ONE INCH (1") PER WEEK IS TO COMMENCE.
6. ALL SOD AREAS ARE TO BE ROLLED IF ANY HEAVING OR DEPRESSIONS OCCUR.

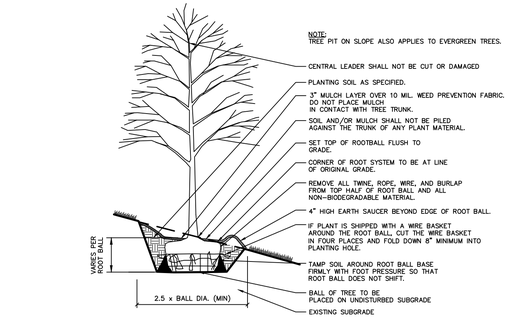
WEED CONTROL / MAINTENANCE

1. MOWING MEADOW AREAS SHALL BE DONE VIA STRING TRIMMER, WHERE LARGER MACHINES CANNOT REASONABLY BE USED AND WHERE DAMAGE OR BUTTING COULD OCCUR.
2. DURING THE ESTABLISHMENT YEAR, CONTRACTOR SHALL MOW SEEDING IF WEED HEIGHT EXCEEDS MEADOW MIX HEIGHT. MOW AT A HEIGHT OF 8"-10". DO NOT MOW CLOSE, AS SOME OF THE MEADOW MIX MAY BE DAMAGED.
3. AFTER THE FIRST GROWING SEASON, AND IF MEADOW MIX IS WELL ESTABLISHED, THE MEADOW MIX SHALL BE MOWED ONLY ONCE ANNUALLY. ANNUAL MAINTENANCE MOWING SHALL BE DONE IN LATE WINTER DURING THE MONTH OF MARCH.
4. MOW IN BASINS, WETLAND AND WETLAND TRANSITION AREAS DURING DRIER SITE CONDITIONS WHEN SOIL DISTURBANCE WILL NOT OCCUR. MAINTENANCE FOR WETLAND AND WETLAND TRANSITION AREAS SHALL OCCUR DURING LATE SUMMER (JULY 15 – AUGUST 15) WHEN THE WATER TABLE IS USUALLY AT ITS LOWEST POINT OF THE YEAR. DO NOT MOW IN WETLAND OR WETLAND TRANSITION AREAS AFTER ESTABLISHMENT OF MEADOW MIX.
5. DURING THE FIRST 2-4 YEARS OF ESTABLISHMENT, AND AFTER ESTABLISHMENT DEPENDING ON THE LOOK DESIRED, SELECTIVE WEEDING WITH A BROADLEAF WEED-CONTROL HERBICIDE, OVER-SEEDING BARE SPOTS AND WATERING TO PROMOTE A UNIFORM DROUGHT-TOLERANT STAND OF PLANTS MAY BE NECESSARY.
6. FERTILIZERS ARE NOT GENERALLY NEEDED OR RECOMMENDED FOR NATIVE MEADOWS UNLESS SOIL TEST RESULTS SHOW A SIGNIFICANT LACK OF NUTRIENTS. USE ONLY SLOW-RELEASE FERTILIZERS WITH LITTLE TO NO NITROGEN IN APRIL OR SEPTEMBER.

NOTE: THE PROJECT'S LANDSCAPE AND IRRIGATION PLANS WILL NEED TO BE DESIGNED IN ACCORDANCE WITH CITY ORDINANCE NO. 2069.

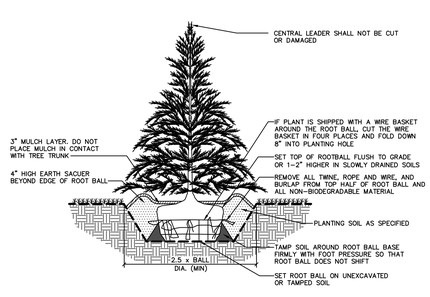


1 TREE PLANTING
NTS

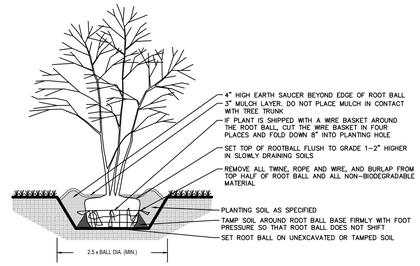


NOTE: TREE STAKING SHOULD BE CONSIDERED FOR TREES PLANTED ON SLOPES GREATER THAN 3:1 AND/OR ON WINDY SITES PER THE FOLLOWING: STAKE TREES WITH (1.5" X 1.5" X 6') CEDAR OR PRESSURE TREATED STAKES (2 PER TREE). STAKES SHALL BE PLACED ON EITHER SIDE OF THE TREE PERPENDICULAR TO THE SLOPE AND ARE TO BE DRIVEN OUTSIDE OF THE ROOT BALL. SECURE STAKES TO TREE USING 2 ARBORTIES BY LOOPING TIES AROUND TREE AND NAILING TO CEDAR STAKES; FOLLOW MANUFACTURER'S RECOMMENDATIONS. ARBORTIES, OR APPROVED EQUAL, AT GEMPLERS 1-800-332-6744 OR GEMPLERS.COM. ALL STAKING MATERIALS SHALL BE REMOVED FOLLOWING THE PLANT GUARANTEE PERIOD.

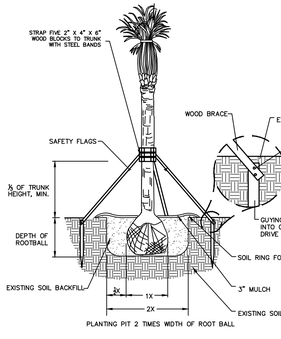
2 TREE PLANTING ON SLOPE
NTS



4 EVERGREEN TREE PLANTING
NTS



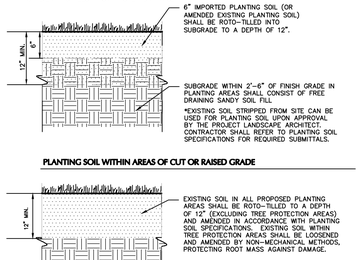
5 ORNAMENTAL TREE PLANTING
NTS



PLANTING PIT 2 TIMES WIDTH OF ROOT BALL

NOTE: WOOD BRACING FOR SINGLE TRUNK PALMS ONLY. ALL WOOD PRESSURE TREATED.

6 PALM PLANTING
NTS

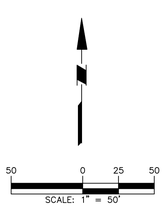


PLANTING SOIL WITHIN AREAS OF CUT OR RAISED GRADE

PLANTING SOIL WITHIN AREAS OF UNCHANGED GRADE

NOTES:

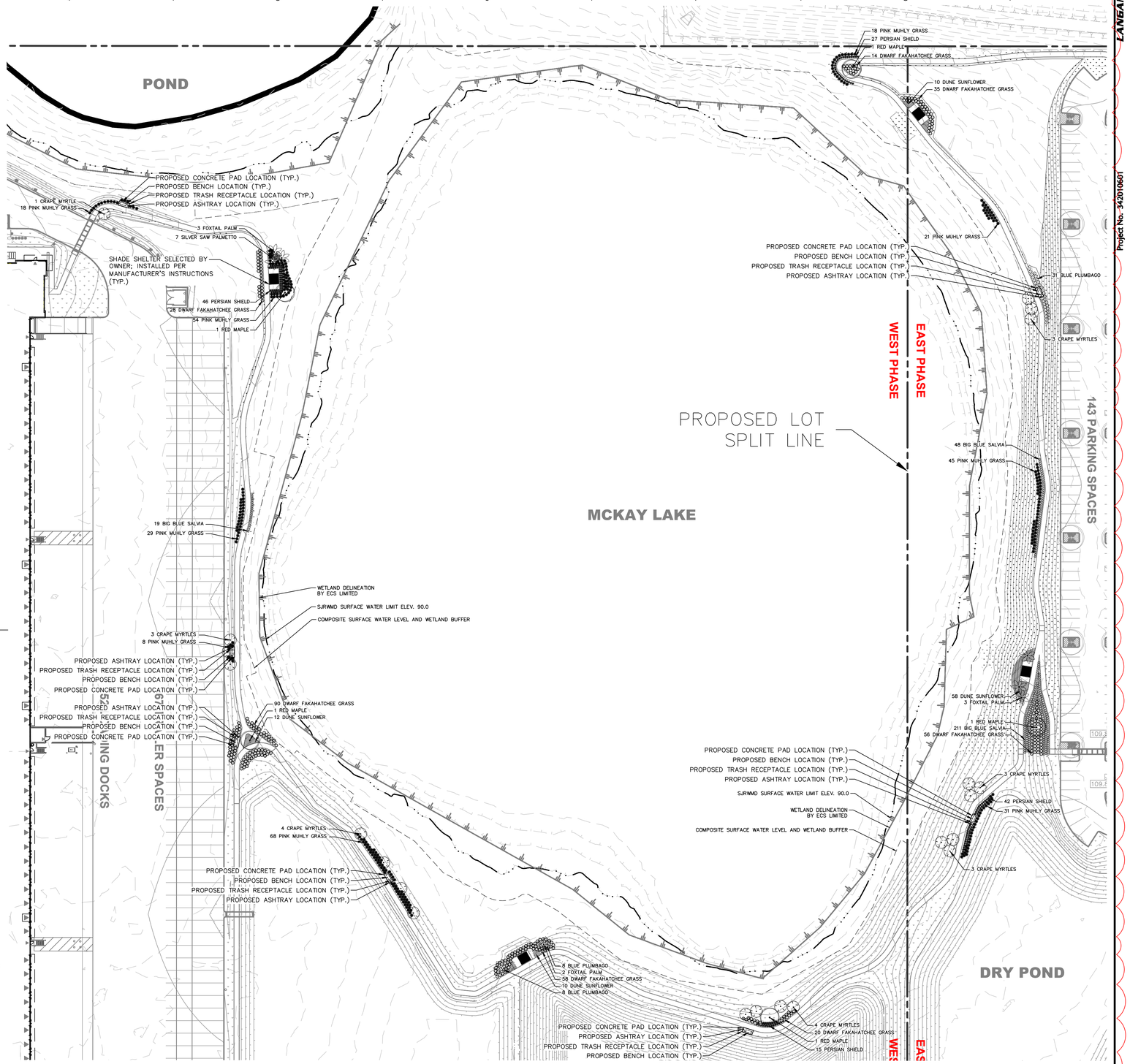
1. CONTRACTOR IS RESPONSIBLE TO SEND SAMPLES OF EXISTING SOILS INTENDED FOR USE IN PLANTING AREAS (1 PER 500 CY.) TO TESTING LABORATORY OR UNIVERSITY COOPERATIVE EXTENSION FOR TESTING. ALL TESTING COSTS ARE AT THE CONTRACTOR'S EXPENSE.
2. RECYCLED CRUSHED CONCRETE AND ASPHALT MILLINGS SHALL NOT BE PLACED WITHIN 2'-6" OF FINISH GRADE IN PROPOSED LANDSCAPE AREAS.
3. IMPORTED FILL SHALL CONTAIN NO CONTAMINATION IN EXCEEDENCE OF THE APPLICABLE STATE ENVIRONMENTAL STANDARDS AND MEET THE ENVIRONMENTAL REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR S



PLANT SCHEDULE

SYMBOL	KEY	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT	HEIGHT / SPREAD
TREES						
	AR	5	ACER RUBRUM / RED MAPLE	3" CAL.	B&B	12' HT.
	LI	21	LAGERSTROEMIA INDICA / CRAPE MYRTLE	2" CAL.	B&B	8' HT.
	WB	8	WODYETIA BIFURCATA / FOXTAIL PALM	10–12' HT.	B&B	
SHRUBS						
	MC	291	MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS	3 GAL.	CONTAINER	24" HT.
	PA	48	PLUMBAGO AURICULATA / BLUE PLUMBAGO	3 GAL.	CONTAINER	24" HT.
	SA	278	SALVIA LONGISPICATA X FARINACEA 'PAS1246577' / BIG BLUE SALVIA	3 GAL.	CONTAINER	24" HT.
	SC	7	SERENOA REPENS 'CINEREA' / SILVER SAW PALMETTO	3 GAL.	CONTAINER	12" HT.
	SD	145	STROBILANTHES DYERIANUS / PERSIAN SHIELD	3 GAL.	CONTAINER	24" HT.
	TD	301	TRIPSACUM DACTYLOIDES NANA / DWARF FAKAHATCHEE GRASS	3 GAL.	CONTAINER	24" HT.

SYMBOL	KEY	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT	HEIGHT / SPREAD	SPACING
GROUND COVERS							
	HD	90	HELIANTHUS DEBILIS / DUNE SUNFLOWER	1 GAL	CONTAINER	6" / 12"	36" o.c.
	PA2	277,963 SF	PASPALUM NOTATUM 'ARGENTINE' / ARGENTINE BAHIAGRASS	SOD			



NOTES:

- REFER TO SHEET L-08 FOR LANDSCAPE ENLARGEMENTS.
- REFER TO SHEET L-09 FOR PLANT MATERIAL IMAGES.
- REFER TO SHEET L-10 FOR LANDSCAPE NOTES, DETAILS, AND SHELTER SPECIFICATIONS.
- SCREENED LANDSCAPE MATERIAL HAS ALREADY BEEN PERMITTED. REFER TO SHEETS L-01 THROUGH L-06.

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE, NOTCH DOOR FIELD REVISION LOCATIONS	14
07/23/2024	AMENITY PATH REVISION	13
06/27/2024	WAREHOUSE 400 DOOR REVISIONS	12
02/02/2024	OWNER VE CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
08/23/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

This item has been digitally signed and sealed by ***THOMAS G. MEAD, RLA*** on the ***DATE shown in the digital signature***. Printed copies of this document are not considered signed and sealed and the ***Digital Signature*** must be verified on any electronic copies.

Signature THOMAS G. MEAD Date
FL. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. LA6667354

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13485 Veterans Way, Suite 120
Orlando, FL 32827
T: 407.974.2900 F: 407.974.2901 www.langan.com
FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

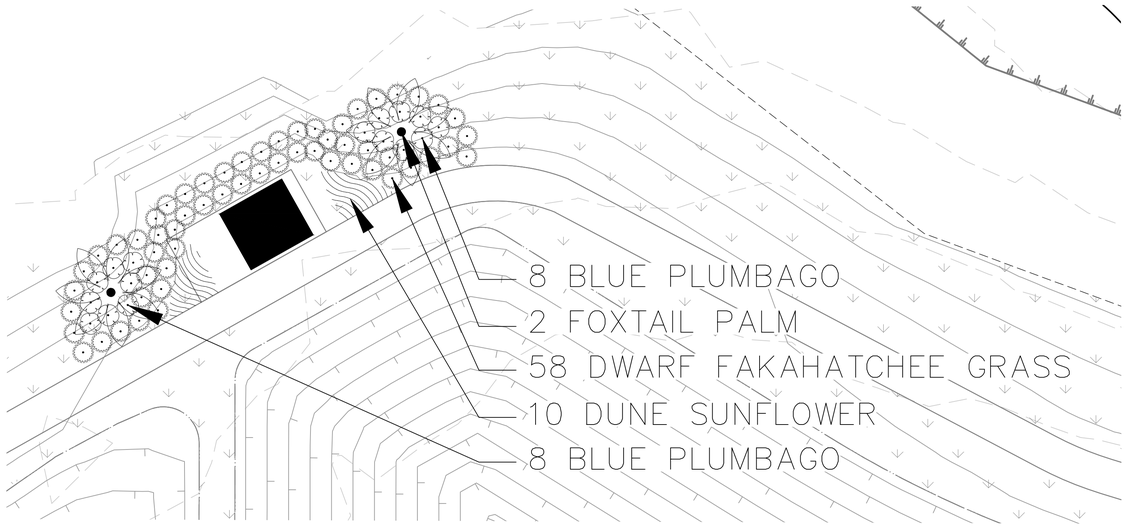
Drawing Title
OVERALL AMENITY LANDSCAPE PLAN

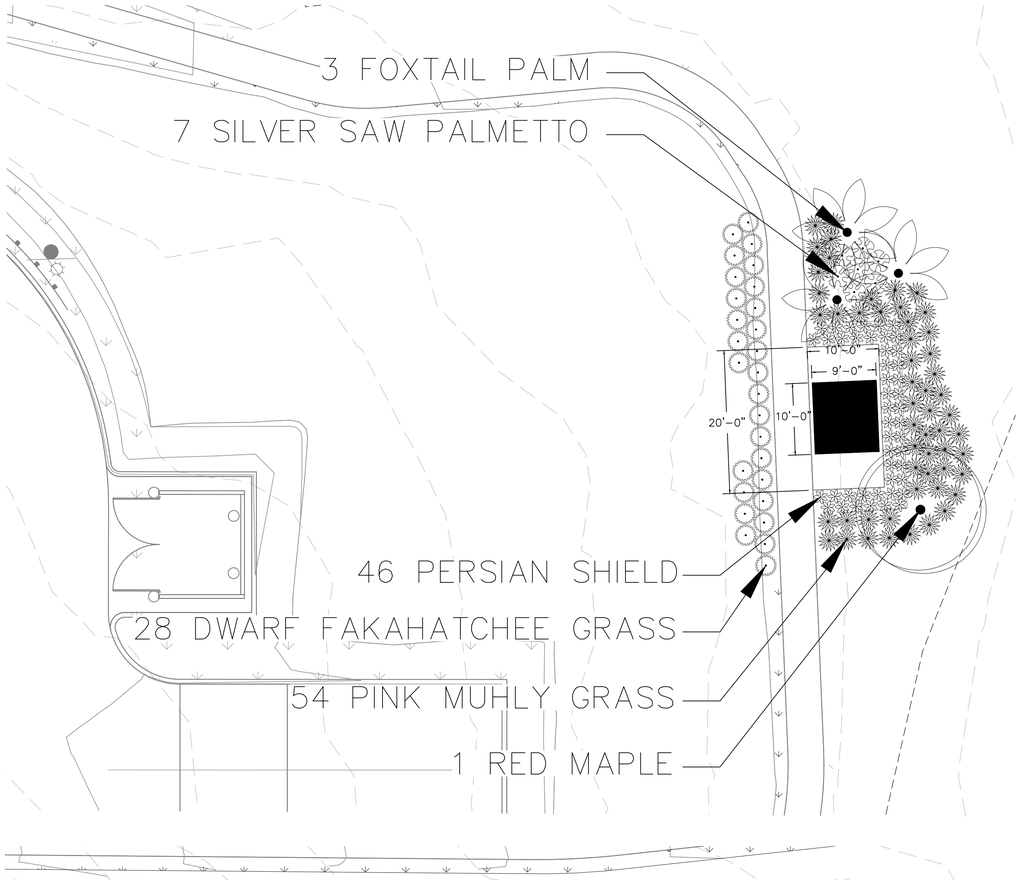
Project No.	342010601
Date	08/23/2024
Drawn By	LL
Checked By	TM

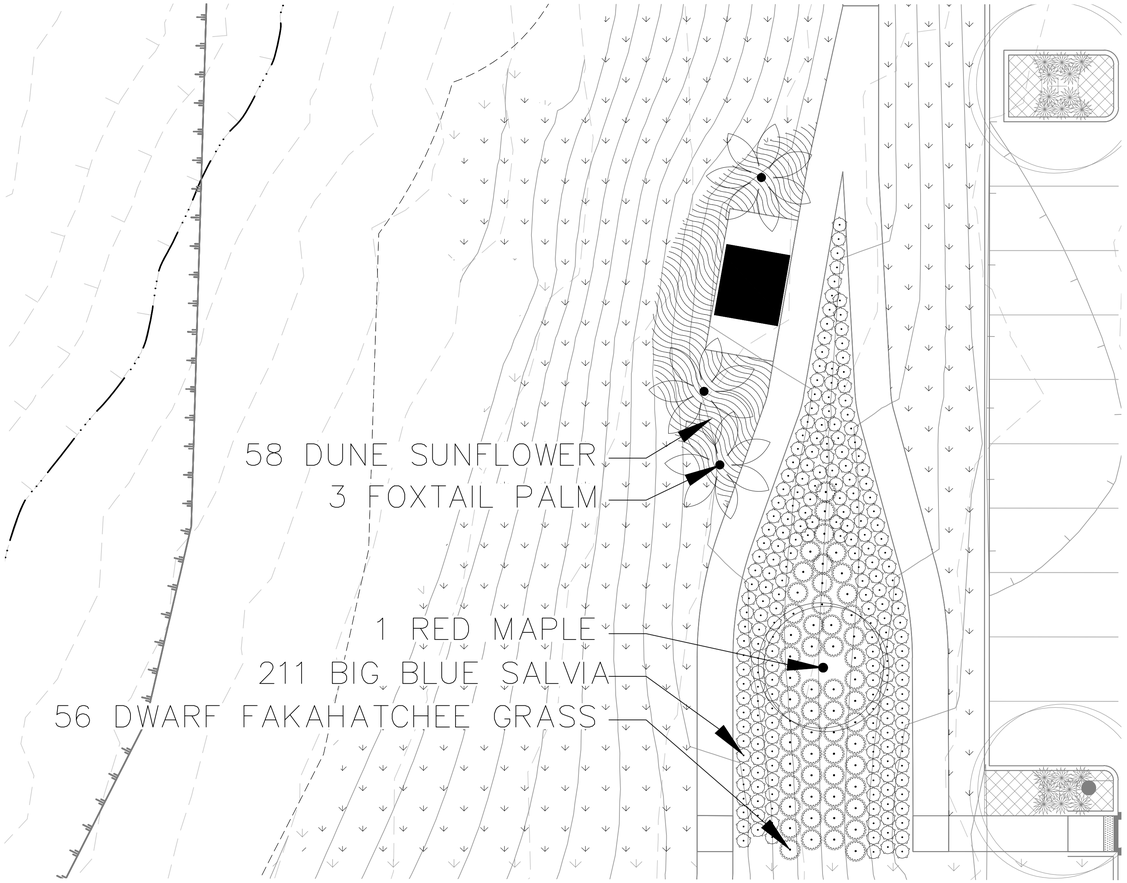
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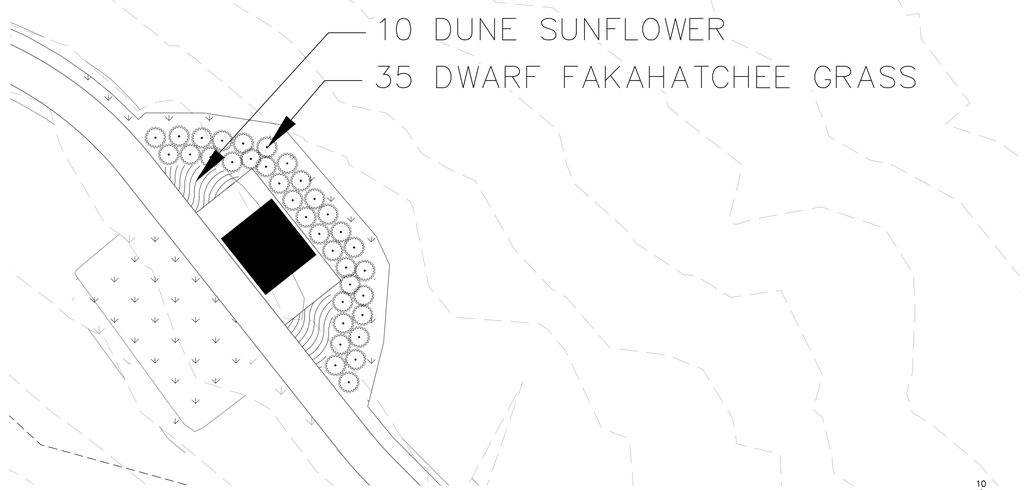
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Project No. 342010601









10 0 5 10
SCALE: 1" = 10'

NOTES:

- REFER TO SHEET L-07 FOR THE OVERALL LANDSCAPE PLAN.
- REFER TO SHEET L-09 FOR PLANT MATERIAL IMAGES.
- REFER TO SHEET L-10 FOR LANDSCAPE NOTES, DETAILS, AND SHELTER SPECIFICATIONS.
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06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

This item has been digitally signed and sealed by **THOMAS G. MEAD, RLA** on the **DATE shown in the digital signature**. Printed copies of this document are not considered signed and sealed and the **Digital Signature** must be verified on any electronic copies.

Signature THOMAS G. MEAD Date
FL. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. LA6667354

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Project: APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title: AMENITY LANDSCAPE PLAN ENLARGEMENTS

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GENERAL LANDSCAPE PLANTING NOTES

PLANTING MATERIALS

1. NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED THEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN NURSERY TRADE.
2. STANDARDS FOR NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH THE "FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS 2015" PUBLISHED BY FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS MUST MEET FLORIDA GRADE NO. 1 OR BETTER. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
3. NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANTS ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIFIED AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES.
4. THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
5. THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.
6. ALL PLANTS MUST MEET FLORIDA GRADE NO.1 OR BETTER AND SELECTED FROM THE FLORIDA FRIENDLY LANDSCAPE GUIDE AND THE INSTALLATION MUST FOLLOW THE FFL GUIDELINES AND BMPS.

DELIVERY, STORAGE, AND HANDLING

1. PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.
2. TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WILL BE PLANTED. DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING TRANSIT. DO NOT DROP OR BREAK BALLED STOCK DURING DELIVERY OR HANDLING.
3. ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT BALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL AT THE TIME OF PLANTING, IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8" INTO THE PLANTING HOLE. WITH CONTAINER-GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS.
4. THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.

INSTALLATION

1. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES PRIOR TO THE START OF EXCAVATION ACTIVITIES BASED ON AVAILABLE SURVEY INFORMATION AND BY CALLING 811 IN ACCORDANCE WITH WITH FLORIDA STATE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT, CHAPTER 556 AT LEAST TWO FULL BUSINESS DAYS PRIOR TO PLANNED EXCAVATION OR DEMOLITION ACTIVITIES. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND OWNER.
2. THE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
3. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
4. ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.
5. ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE PROCEDURES.
6. THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
7. AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION.
8. MAINTAIN A 2 TO 3" LAYER AROUND ESTABLISHED TREES, SHRUBS, AND BEDDING PLANTS. COARSE MATERIALS, SUCH AS PINE NUGGETS, MAY BE APPLIED TO A DEPTH OF 4", BUT DON'T ALLOW MULCH TO ACCUMULATE TO A GREATER DEPTH. CYPRESS MULCH WILL NOT BE ACCEPTED.
9. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
10. AFTER COMPLETION OF A PROJECT, ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, EXCEPT FOR THE AREA FROM THE BUILDING OUT TO THE SURROUNDING CURBS, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A SHREDDED HARDWOOD BARK OR APPROVED EQUAL MULCH THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST.
11. TREES MAY BE STAKED AT LANDSCAPE CONTRACTOR'S DISCRETION. CURRENT HORTICULTURAL PRACTICE DOES NOT RECOMMEND STAKING TREES EXCEPT IN CONDITIONS WHERE TREES ARE SUBJECT TO BLOW DOWNS DUE TO SOIL CONDITIONS, HEAVY PREVAILING WINDS OR A HIGH RATIO OF TOP GROWTH TO ROOT BALL. IF STAKING IS DEEMED NECESSARY BY CONTRACTOR, STAKE AND GUYS SHOULD BE LOCATED AND FLAGGED IN A MANNER TO PREVENT TRIPPING HAZARDS. WIRES OR GUYS SHALL BE LOCATED AND COVERED SO AS NOT TO PULL OR DAMAGE BRANCHES AND SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD.
12. NEW TREES MAY HAVE TEMPORARY DEER PROTECTION MEASURES INSTALLED AROUND TRUNKS AT THE LANDSCAPE CONTRACTOR'S DISCRETION. SUBMIT MATERIAL CUT SHEETS FOR REVIEW PRIOR TO PURCHASE AND INSTALLATION.

GUARANTEE

1. NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF ONE YEAR FOLLOWING ACCEPTANCE BY THE OWNER. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
2. ALL SCREENING AND REQUIRED LANDSCAPE PLANTINGS SHALL BE MAINTAINED FOR THE LIFE OF THE USE AND SHALL BE REPLACED OR RESTORED AS NECESSARY IN ORDER TO MAINTAIN THEIR EFFECTIVENESS. ANY LOSSES DUE TO STORM DAMAGE, DISEASE OR OTHER FACTORS SHALL BE REPLACED IN KIND WITHIN A PERIOD OF NOT MORE THAN SIX MONTHS.

PLANTING SOIL SPECIFICATIONS

1. PLANTING SOIL, ALTERNATELY MAY BE REFERRED TO AS TOPSOIL, SHOULD BE FRIABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, TOXINS, TRASH AND STONES OVER 1/2" DIA., IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO NOXIOUS ODORS.
2. PLANTING SOIL:

   REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOD, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN NOTES PLANS AND SPECIFICATIONS.

   SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR CONTAMINATED SITES.

   AT A MINIMUM, PLANTING SOILS MEETING THESE SPECIFICATIONS MAY BE OBTAINED FROM WECARE DENALI, P: 888-325-1522, OR APPROVED EQUAL.

   CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST. PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER, MATERIAL COMPOSITION, MANUFACTURER'S CERTIFIED ANALYSIS, AND THE WEIGHT OF THE MATERIALS. SOIL OR AMENDMENT MATERIALS SHALL BE STORED ON SITE TEMPORARILY IN STOCKPILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH A TARPAULIN UNTIL TIME OF ACTUAL USE.

   ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO COUNTY EXTENSION OFFICES OR THE UNIVERSITY OF FLORIDA/IFAS EXTENSION SOIL TESTING LABORATORY, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.
3. WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.
4. CLEAN SOIL FILL IN LANDSCAPE AREAS:
   LANDSCAPE FILL MATERIAL, BELOW PLANTING SOILS, SHALL HAVE THE PHYSICAL PROPERTIES OF A SANDY LOAM WITH AN ORGANIC CONTENT OF LESS THAN 2% AND A PH BETWEEN 5 – 7.
5. SOIL PLACEMENT:
   A. IMPROVE ENTIRE DEPTH OF PLANTING BEDS RATHER THAN PROVIDING SELECT BACKFILL ONLY AROUND PLANTS. CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM DEPTH PLANTING SOIL LAYER IN LAWN AREAS, TWELVE INCHES (12") MINIMUM DEPTH PLANTING SOIL LAYER IN GROUNDCOVER AND PERENNIAL AREAS, EIGHTEEN INCHES (18") MINIMUM DEPTH PLANTING SOIL LAYER IN SHRUB AREAS, AND THIRTY-SIX INCHES (36") MINIMUM DEPTH PLANTING SOIL LAYER IN TREE PLANTING AREAS.

   B. SCARIFY AND/OR TILL COMPACTED SUBSOILS TO A MINIMUM DEPTH OF 6 INCHES. THOROUGHLY MIX A 6 INCH DEPTH LAYER OF PLANTING SOIL INTO THE SUBSOIL PRIOR TO PLACING PLANTING SOIL AT THE DEPTHS INDICATED ABOVE. PLANTING SOIL SHALL BE PLACED IN 12-18"LIFTS AND WATER THOROUGHLY BEFORE INSTALLING NEXT LIFT. REPEAT UNTIL DEPTHS AND FINISH GRADES HAVE BEEN ACHIEVED. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.

   C. PLANTING SOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE PLANTING SOIL UTILIZED IN ALL PLANTING AREAS.

   D. ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE.

NOTE: THE PROJECT'S LANDSCAPE AND IRRIGATION PLANS WILL NEED TO BE DESIGNED IN ACCORDANCE WITH CITY ORDINANCE NO. 2069.

LANDSCAPE MAINTENANCE NOTES

1. MAINTENANCE OPERATIONS BEFORE APPROVAL:
   A. PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND SHALL CONTINUE THROUGHOUT THE LIFE OF THE CONTRACT UNTIL FINAL ACCEPTANCE OF THE PROJECT.
   B. CARE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS AS ORIGINALLY INSTALLED, WATERING WHEN NEEDED OR DIRECTED, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.
   C. CONTRACTOR SHALL REMOVE AND REPLACE ALL DEAD, DEFECTIVE AND/OR REJECTED PLANTS AS REQUIRED BEFORE FINAL ACCEPTANCE.
2. MAINTENANCE DURING CONSTRUCTION:
   A. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED, AND OTHERWISE MAINTAINED AND PROTECTED UNTIL PROVISIONAL ACCEPTANCE. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE AND POSITION, PLANTING SAUCER RESTORED AND DEAD MATERIAL REMOVED. STAKES AND WIRES SHALL BE TIGHTENED AND REPAIRED. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.
   B. IF A SUBSTANTIAL NUMBER OF PLANTS ARE SICKLY OR DEAD AT THE TIME OF INSPECTION, ACCEPTANCE SHALL NOT BE GRANTED AND THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF ALL PLANTS SHALL BE EXTENDED FROM THE TIME REPLACEMENTS ARE MADE OR EXISTING PLANTS ARE DEEMED ACCEPTABLE BY THE LANDSCAPE ARCHITECT.
   C. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE SPECIFIED ON THE PLANT LIST OR THAT WHICH WAS TO REMAIN OR BE RELOCATED. THEY SHALL BE FURNISHED AND PLANTED AS SPECIFIED. THE COST SHALL BE BORNE BY THE CONTRACTOR. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.
   D. PLANTS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND PROVISIONAL ACCEPTANCE.
   E. AT THE END OF THE ESTABLISHMENT PERIOD, INSPECTION SHALL BE MADE AGAIN. ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR UNSATISFACTORY TO THE LANDSCAPE ARCHITECT OR OWNER SHALL BE REMOVED FROM THE SITE AND REPLACED DURING THE NORMAL PLANTING SEASON.
3. LAWN MAINTENANCE:
   A. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH PORTION OF LAWN IS PLANTED AND CONTINUE FOR 8 WEEKS AFTER ALL LAWN PLANTING IS COMPLETED.
   B. WATER TO KEEP SURFACE SOIL MOIST, REPAIR WASHED OUT AREAS BY FILLING WITH TOPSOIL, LIMING, FERTILIZING AND RE-SEEDING.
   C. MOW AT THE HIGHEST RECOMMENDED HEIGHT FOR THE GRASS SPECIES:
      BAHIAGRASS: 3.5 – 4"
      BERMUDA GRASS: 1 – 2"
   D. NEVER REMOVE MORE THAN 1/3 OF THE LEAF BLADE. "SCALPING" (MOWING TOO LOW) CAN BADLY STRESS YOUR TURF, LEAVING IT VULNERABLE TO DISEASE, DROUGHT, AND INSECT OR WEED INVASION.
   E. LEAVE GRASS CLIPPINGS ON THE GROUND. THESE ACTUALLY ACT AS COMPOST, RETURNING VALUABLE NUTRIENTS TO THE LAWN. GRASS CLIPPINGS CAN REDUCE LAWN FERTILITY REQUIREMENTS AND ADD ORGANIC MATTER TO THE SOIL.
   F. KEEP MOWER BLADES SHARP. DULL MOWERS TEAR LEAF BLADES, STRESSING THE GRASS AND MAKING IT MORE VULNERABLE TO PESTS AND DISEASE.
   G. DO NOT MOW WHEN LAWN IS WET. WET GRASS CLIPPINGS PREVENT MOWER BLADES FROM MAKING THE CLEANEST POSSIBLE CUT.

SOD SPECIFICATIONS

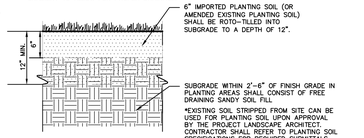
1. SOD IS TO BE THE BERMUDA GRASS (CYNODON DACTYLON) OR BAHIA GRASS (PASPALUM NOTATUM 'FLUGGE'). SOD IS TO BE INDIGENOUS TO THE AREA AND BE FURNISHED BY A REPUTABLE GROWER WITH A MINIMUM 5 YEARS EXPERIENCE.
2. PRIOR TO SODDING ALL AREAS ARE TO BE TOPSOILED, FINE GRADED, RAKED, WATERED LIGHTLY, AND FERTILIZED WITH A STARTER FERTILIZER.
3. ALL STONES GREATER THAN 2" DIAMETER SHALL BE REMOVED.
4. SOD TO BE INSTALLED PERPENDICULAR TO ALL SLOPED AREAS. SOD STRIPS TO BE LAID OUT SO JOINTS ARE NOT CLOSER THAN ONE FOOT (1'-0") FROM EACH OTHER.
5. SOD IS TO BE WATERED AT A RATE OF AT LEAST ONE AND A HALF INCHES ($1\frac{1}{2}$") PER WEEK UNTIL ROOT MASS MENDS WITH SOIL. AFTER THIS HAS OCCURRED NORMAL WATERING OF AT LEAST ONE INCH (1") PER WEEK IS TO COMMENCE.
6. ALL SOD AREAS ARE TO BE ROLLED IF ANY HEAVING OR DEPRESSIONS OCCUR.

WEED CONTROL / MAINTENANCE

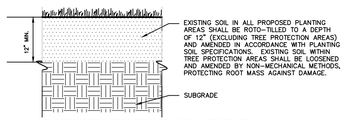
1. MOWING MEADOW AREAS SHALL BE DONE VIA STRING TRIMMER, WHERE LARGER MACHINES CANNOT REASONABLY BE USED AND WHERE DAMAGE OR CUTTING COULD OCCUR.
2. DURING THE ESTABLISHMENT YEAR, CONTRACTOR SHALL MOW SEEDING IF WEED HEIGHT EXCEEDS MEADOW MIX HEIGHT. MOW AT A HEIGHT OF 8"-10". DO NOT MOW CLOSE, AS SOME OF THE MEADOW MIX MAY BE DAMAGED.
3. AFTER THE FIRST GROWING SEASON, AND IF MEADOW MIX IS WELL ESTABLISHED, THE MEADOW MIX SHALL BE MOWED ONLY ONCE ANNUALLY. ANNUAL MAINTENANCE MOWING SHALL BE DONE IN LATE WINTER DURING THE MONTH OF MARCH.
4. MOW IN BASINS, WETLAND AND WETLAND TRANSITION AREAS DURING DRIER SITE CONDITIONS WHEN SOIL DISTURBANCE WILL NOT OCCUR. MAINTENANCE FOR WETLAND AND WETLAND TRANSITION AREAS SHALL OCCUR DURING LATE SUMMER (JULY 15 – AUGUST 15) WHEN THE WATER TABLE IS USUALLY AT ITS LOWEST POINT OF THE YEAR. DO NOT MOW IN WETLAND OR WETLAND TRANSITION AREAS AFTER ESTABLISHMENT OF MEADOW MIX.
5. DURING THE FIRST 2-4 YEARS OF ESTABLISHMENT, AND AFTER ESTABLISHMENT DEPENDING ON THE LOOK DESIRED, SELECTIVE WEEDING WITH A BROADLEAF WEED-CONTROL HERBICIDE, OVER-SEEDING BARE SPOTS AND WATERING TO PROMOTE A UNIFORM DROUGHT-TOLERANT STAND OF PLANTS MAY BE NECESSARY.
6. FERTILIZERS ARE NOT GENERALLY NEEDED OR RECOMMENDED FOR NATIVE MEADOWS UNLESS SOIL TEST RESULTS SHOW A SIGNIFICANT LACK OF NUTRIENTS. USE ONLY SLOW-RELEASE FERTILIZERS WITH LITTLE TO NO NITROGEN IN APRIL OR SEPTEMBER.

GENERAL NOTE:

DUE TO GENERAL CONSTRUCTION ACTIVITIES AND ADJACENT SITE COMPACTION REQUIREMENTS, SUBGRADE SOILS WITHIN PROPOSED PLANTING AREAS TEND TO BECOME HIGHLY COMPACTED. IN ORDER TO CREATE A HEALTHY GROWTH MEDIUM TO ALLOW PROPOSED PLANTINGS TO ESTABLISH A VIGOROUS ROOT MASS, THIS SUBGRADE SOIL MUST UNDERGO A RESTORATION PROCESS. IN ADDITION, IMPORTED OR AMENDED EXISTING SOILS SHALL BE MIXED WITH SUBGRADE SOILS WHERE THEY MEET IN ORDER TO CREATE A TRANSITIONAL GRADIENT TO ALLOW FOR PROPER DRAINAGE.



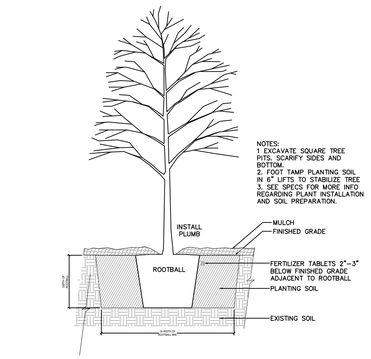
PLANTING SOIL WITHIN AREAS OF CUT OR RAISED GRADE



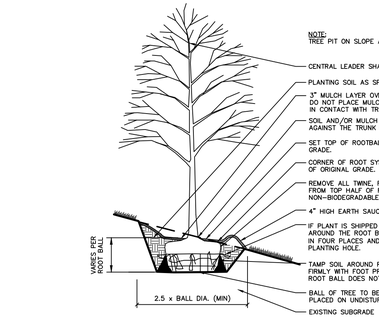
PLANTING SOIL WITHIN AREAS OF UNCHANGED GRADE

NOTES:

1. CONTRACTOR IS RESPONSIBLE TO SEND SAMPLES OF EXISTING SOILS INTENDED FOR USE IN PLANTING AREAS (1 PER 500 C.Y.) TO TESTING LABORATORY OR UNIVERSITY COOPERATIVE EXTENSION FOR TESTING. ALL TESTING COSTS ARE AT THE CONTRACTOR'S EXPENSE.
2. RECYCLED CRUSHED CONCRETE AND ASPHALT MILLINGS SHALL NOT BE PLACED WITHIN 2'-6" OF FINISH GRADE IN PROPOSED LANDSCAPE AREAS.
3. IMPORTED FILL SHALL CONTAIN NO CONTAMINATION IN EXCEEDENCE OF THE APPLICABLE STATE ENVIRONMENTAL STANDARDS AND MEET THE ENVIRONMENTAL REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF COMPLIANCE PRIOR TO DELIVERY OF ANY FILL TO THE SITE.
4. CONTRACTOR TO LIGHTLY COMPACT ALL PLACED PLANTING SOILS AND RAISE GRADES ACCORDINGLY TO ALLOW FOR FUTURE SETTLEMENT OF PLANTING SOILS (TYP.)
5. NO STONES, WOOD CHIPS, OR DEBRIS LARGER THAN 1/2" SHALL BE ACCEPTABLE WITHIN PLANTING AREAS.

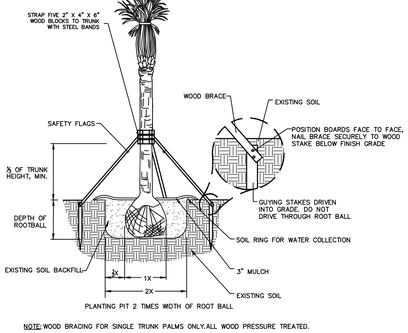


1 TREE PLANTING
NTS



NOTE: TREE STAKING SHOULD BE CONSIDERED FOR TREES PLANTED ON SLOPES GREATER THAN 3:1 AND/OR ON WINDY SITES PER THE FOLLOWING: STAKE TREES WITH (1.5" X 1.5" X 6') CEDAR OR PRESSURE TREATED STAKES (2 PER TREE). STAKES SHALL BE PLACED ON EITHER SIDE OF THE TREE PERPENDICULAR TO THE SLOPE AND ARE TO BE DRIVEN OUTSIDE OF THE ROOT BALL. SECURE STAKES TO TREE USING 2 ARBORTIES BY LOOPING TIES AROUND TREE AND NAILING TO CEDAR STAKES; FOLLOW MANUFACTURER'S RECOMMENDATIONS. ARBORTIES, OR APPROVED EQUAL, AT GEMPLERS 1-800-332-6744 OR GEMPLERS.COM. ALL STAKING MATERIALS SHALL BE REMOVED FOLLOWING THE PLANT GUARANTEE PERIOD.

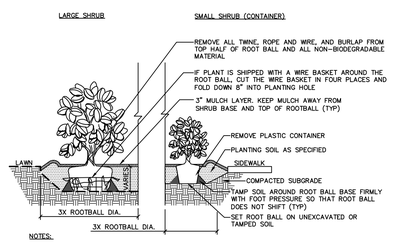
2 TREE PLANTING ON SLOPE
NTS



PLANTING PIT 2 TIMES WIDTH OF ROOT BALL

NOTE: WOOD BRACING FOR SINGLE TRUNK PALMS ONLY.ALL WOOD PRESSURE TREATED.

3 PALM PLANTING
NTS



NOTES:

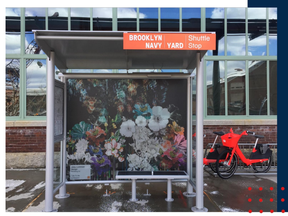
BRASCO INTERNATIONAL, INC. // STREETSCAPE FURNITURE
BENCHES

ECLIPSE BENCH

Brasco's Eclipse Series Bench is the perfect addition to compliment your streetscape project. Constructed with a welded aluminum frame, round legs, and your choice of HDPE slats or perforated aluminum seating, this bench is built to last. With optional aluminum armrests, backrest, and HDPE logo engraving available, you can customize this bench to fit your unique needs.

GET IN TOUCH

For more information on Brasco's bench selection, contact our team of dedicated sales representatives at info@brasco.com or call 313-393-0393 x 209.



OPTIONS & SPECIFICATIONS

DEPTH: 13.875"

LENGTH: 4', 6', 8'

SEAT HEIGHT: 18.000"

FRAME FINISH: Powder Coated Aluminum Frame

SEAT FINISH OPTIONS:
Brown HDPE
Cedar HDPE
Grey HDPE
Black HDPE
Perforated Aluminum

INCLUDED:
Mounting Hardware
Powder Coat Finish
Buy America Compliant

OPTIONAL:
Seat Divider
Backrest
Advertising Display Backrest
CNC Engraved HDPE

AMERICAN MADE. AMERICAN TRUSTED. SINCE 1993.
32400 INDUSTRIAL DRIVE, MADISON HEIGHTS, MI 48071

7 POTENTIAL BENCH TYPE
NTS

AERO

BRASCO'S #1 BIKE SHELTER

The Aero is constructed from steel and aluminum and was designed to provide a high functioning shelter with maximum shelter for narrow pathways. With its wide canopy and streamlined center columns, the Aero is ideal for high traffic, high vandalism areas.

The Aero has been used for rapid transit shelters, bus shelters, and park canopies, yet its most popular purpose is as a bike shelter.

Designed with a distinctive multiwall structured polycarbonate arch roof, the Aero is low maintenance and offers optimal wind and snow load capacities. Standard elements include powder coat painted finish. Choose from three column end cap accents.

Brasco's engineering team calculates all shelters to meet local wind, snow & seismic load requirements.

Below: Powder coat finish, open column style



Standard Specifications

WIDTH
(12) 12'

LENGTH
(10) 19', 25', 38'

COLUMNS
4" Steel

STANDARD ROOF GLAZING
Multiwall Structured Polycarbonate Batten Arch Only

STANDARD WALL GLAZING
Canopy Only (No Wall Panels)

WALL CONFIGURATION
Canopy Only (No Wall Panels)

INCLUDED
Concrete Mounting Hardware
Powder Coat Painted Aluminum Finish
1 Year Manufacturer's Warranty
Aluminum Will Never Rust
Made in America, Buy America Compliant

POPULAR ADD-ONS
Contour Leaning Rail
Classic Inverted-U Bike Rack
Solar Powered Lighting Package
Mounted or Freestanding Trash Receptacle
V-shaped Column Styles:


CNC Cut Out | Decal | Lattice

© 2020 Brasco International, Inc. | (313) 393-0393 | info@brasco.com | www.brasco.com

8 POTENTIAL SHELTER TYPE
NTS

BRASCO ECLIPSE 32G

9 POTENTIAL TRASH RECEPTACLE TYPE
NTS

BRASCO ASH URN

10 POTENTIAL ASHTRAY TYPE
NTS

DETAIL #	SITE FURNISHING	QUANTITY (WEST PHASE)	QUANTITY (EAST PHASE)
7	BENCH	5	2
8	SHELTER	2	2
9	TRASH RECEPTACLE	5	2
10	ASHTRAY	5	2

Date	Description	No.
11/21/2024	CONSTRUCTION FIELD REVISION	15
09/18/2024	WAREHOUSE 300' & 400' FUTURE DOOR LOCATIONS	14
07/31/2024	AMENITY PATH REVISION	13
07/22/2024	AMENITY & SOUTH ROW REVISIONS	12
02/02/2024	CANOPY VC CHANGES	11
09/28/2023	REVISED PER CITY DRC CSP REVISION COMMENTS	10
06/21/2023	REVISED TO ADD LOT SPLIT & SECOND LIFT STATION	9
02/08/2023	REVISED PER PROJECT TEAM COMMENTS	8
11/08/2022	BID ADDENDUM #2	7
10/24/2022	REVISED PER CITY DRC CSP / SJRWMD COMMENTS	6
10/11/2022	REVISED PER SJRWMD COMMENTS	5
09/09/2022	CONSTRUCTION PERMITTING SUBMISSION / PROJECT TEAM COMMENTS	4
07/28/2022	REVISED PER CITY DRC COMMENTS	3
07/15/2022	BID ADDENDUM #1	2
06/30/2022	REVISED PER CITY DRC AND SJRWMD COMMENTS	1

Revisions

This item has been digitally signed and sealed by ***THOMAS G. MEAD, RLA*** on the ***DATE shown in the digital signature***. Printed copies of this document are not considered signed and sealed and the ***Digital Signature*** must be verified on any electronic copies.

Signature THOMAS G. MEAD Date
FL. LICENSED LANDSCAPE ARCHITECT
LICENSE NO. LA6667354

LANGAN
Langan Engineering and Environmental Services, LLC.
13485 Veterans Way, Suite 120
Orlando, FL 32827
T: 407.974.2900 F: 407.974.2901 www.langan.com
FL Certificate of Authorization No. 00006601/LB8172/LB8198

Project
APOPKA BUSINESS CENTER
CITY OF APOPKA
ORANGE COUNTY FLORIDA

Drawing Title
AMENITY LANDSCAPE SITE FURNISHINGS

Project No. 342010601
Date 08/23/2024
Drawn By LL
Checked By TM

Drawing No. L-10

©2023 Langan

LANGAN Project No. 342010601

26 November 2024

Jean Sanchez
Senior Project Coordinator/Planner
120 E. Main Street
Apopka, Florida 32703

Re: CSP Minor Revision During Construction
Apopka Business Center
444 Hermit Smith Road, Apopka, FL 32703
Langan Project No.: 342010601

Dear Jean:
Langan has revised the Apopka Business Center construction site plan (CSP) civil and landscape set to address minor revisions that occurred during the construction phase. The following is a brief description of changes associated with revisions #10 to 15. These minor revisions comply with the City of Apopka's design requirements and does not substantially deviate from the approved CSP dated 6 November 2024.

- Cover Sheet C-01
  - Added amenity landscape sheets L-07 to L-10 to the CSP set
- Site Plan Sheets C-05 to C-09
  - Revised the site's amenity path horizontal geometry
  - Added Warehouse 300 and 400 future storefront door sidewalk locations
  - Relocated one handicap parking and curb ramp on Warehouse 400
  - Relocated site light poles located near Dry Pond E and Warehouse 500
  - Added a 30 inch high wall extension to the wall North of Warehouse 300
  - Added a 24 inch high wall south of Warehouse 300
- Vehicular Pavement Plan Sheet C-10
  - Revised heavy duty asphalt pavement section
- Grading and Drainage Sheets C-13 to C-16
  - Revised amenity path grading
  - Added a 30 inch high wall extension to the wall North of Warehouse 300
  - Added a 24 inch high wall south of Warehouse 300
- Section Sheets C-18A & C-18B
  - Revised amenity path grading section views
- Landscape Sheets L-01 to L-05
  - Revised amenity path landscaping
  - Relocated Warehouse 300 and 400 landscape along the building (no change in landscape quantity)
- New Landscape Sheets L-07 to L-10
  - Added detailed amenity path landscape plans and details

These revisions have been clouded on the revised CSP set.
Please do not hesitate to contact myself (jyannucci@langan.com, 201.835.3654) with questions about the contents of this submittal.

Sincerely,
Langan Engineering and Environmental Services, LLC.

Joseph Yannucci, PE
Associate Principal

FBPE Registry No. 6601
\\langan.com\data\ORL\data6\342010601\Project Data\Correspondence\Revision Narrative\2024-11-26 Apopka Business Center - CSP Minor Revision - Revision 15.docx

Ridgebrooke (aka Plymouth Harbor)
Major Development Plan

City of Apopka Florida Parcel I.D. # 25-20-27-0000-00-008; 021; 022
30-20-28-0484-00-040; 060; 085

for

Lennar Homes Orlando

LEGAL DESCRIPTION (PER TITLE COMMITMENT):

PARCEL 1:

LOTS 4 AND 5 OF BAILEY'S ADDITION TO PLYMOUTH, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 145, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; AND THAT EAST 1/2 PORTION OF SORRENTO AVENUE ADJACENT TO LOT 5 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #2022058372, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
SUBJECT TO A RIGHT-OF-WAY GRANTED TO ORANGE COUNTY ACROSS WEST 30 FEET OF LOT 5 IN DEED BOOK 997, PAGE 167, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 2:

THE NORTH QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, LESS THE WEST 393 FEET THEREOF; AND THAT WEST 1/2 PORTION OF SORRENTO AVENUE ADJACENT TO LOTS 4, 5 AND 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #2022058372, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 3:

THE EAST HALF (1/2) OF THE SOUTH HALF (1/2) OF THE NORTHWEST QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

PARCEL 4:

THE SOUTH HALF (1/2) OF THE NORTHEAST QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; AND THAT WEST 1/2 PORTION OF SORRENTO AVENUE ADJACENT TO LOTS 4, 5 AND 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #2022058372, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
SUBJECT TO AN EASEMENT FOR RIGHT-OF-WAY GRANTED TO ORANGE COUNTY ACROSS THE EAST 30 FEET IN DEED BOOK 997, PAGE 166, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

AS TO PARCELS 2, 3 AND 4, LESS AND EXCEPT:
THAT PORTION TAKEN BY THE FLORIDA EXPRESSWAY AUTHORITY, A BODY POLITIC AND CORPORATE AND AN AGENCY OF THE STATE UNDER THE LAWS OF THE STATE OF FLORIDA, BY THE STIPULATED ORDER OF TAKING RECORDED IN OFFICIAL RECORDS BOOK 10771, PAGE 1724 (NO LEGAL DESCRIPTION ATTACHED) AND DUPLICATE FILING WITH LEGAL DESCRIPTION IN OFFICIAL RECORDS BOOK 10779, PAGE 2159; OFFICIAL RECORDS BOOK 10780, PAGE 5828 (LEGAL DESCRIPTION UNREADABLE) AND OFFICIAL RECORDS BOOK 10780, PAGE 6572; AND STIPULATED FINAL JUDGMENT RECORDED IN OFFICIAL RECORDS INSTRUMENT # 20160259721, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 5:

PART OF LOT 6, OF BAILEY'S ADDITION TO PLYMOUTH, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 145, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, THENCE NORTH 00 DEGREES 06'17" EAST 1667.05 FEET ALONG THE EAST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 25; THENCE DEPARTING SAID SECTION LINE NORTH 87 DEGREES 56'33" EAST 20.01 FEET TO THE POINT OF BEGINNING, BEING NORTH 00 DEGREES 06'17" EAST 2.01 FEET TO THE SOUTHWEST CORNER OF SAID LOT 6; THENCE NORTH 00 DEGREES 06'17" EAST 326.52 FEET ALONG THE WEST LINE OF SAID LOT 6; THENCE DEPARTING SAID WEST LINE NORTH 87 DEGREES 59'04" EAST 601.92 FEET ALONG THE NORTH LINE OF SAID LOT 6 TO A POINT OF THE WEST RIGHT OF WAY LINE OF PLYMOUTH SORRENTO ROAD, A 60' RIGHT OF WAY; AND THE NORTHEAST CORNER OF SAID LOT 6; THENCE ALONG SAID RIGHT OF WAY LINE SOUTH 00 DEGREES 14'30" EAST 326.01 FEET TO A POINT BEING NORTH 00 DEGREES 14'30" WEST 2.01 FEET TO THE SOUTHEAST CORNER OF SAID LOT 6; THENCE SOUTH 87 DEGREES 56'33" WEST 603.91 FEET ALONG A LINE BEING 2.00 FEET NORTHERLY OF AND PARALLEL WITH THE SOUTH LINE OF SAID LOT 6 TO THE POINT OF BEGINNING; AND THAT EAST 1/2 PORTION OF SORRENTO AVENUE LYING ADJACENT TO LOT 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT # 2022058372, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. LESS EXISTING RIGHT-OF-WAY TO PLYMOUTH SORRENTO ROAD.
SUBJECT TO AN EASEMENT FOR RIGHT-OF-WAY GRANTED TO ORANGE COUNTY ACROSS WEST 30 FEET OF LOT 6 IN DEED BOOK 997, PAGE 167; AND SUBJECT TO AN INGRESS EGRESS EASEMENT OVER THE SOUTH 20 FEET THEREOF BY THE EASEMENT IN OFFICIAL RECORDS BOOK 5820, PAGE 3121, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 6:

1. THE NORTH 1/2 OF THE SOUTHEAST QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; AND THAT WEST 1/2 PORTION OF SORRENTO AVENUE LYING ADJACENT TO LOT 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #2022058372, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. LESS EXISTING RIGHT-OF-WAY TO PLYMOUTH SORRENTO ROAD. AND, LESS THE EAST 30 FEET THEREOF FOR ROAD RIGHT-OF-WAY PER RIGHT-OF-WAY AGREEMENT RECORDED IN DEED BOOK 997, PAGE 165, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 7:

THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ALL LYING AND BEING IN ORANGE COUNTY, FLORIDA.

LESS AND EXCEPT THAT PORTION THEREOF CONVEYED TO ORLANDO-ORANGE COUNTY EXPRESSWAY AUTHORITY BY STIPULATED ORDER OF TAKING RECORDED IN OFFICIAL RECORDS BOOK 10729, PAGE 4077 AND OFFICIAL RECORDS BOOK 10765, PAGE 6293, OF THE PUBLIC RECORDS OF ORANGE COUNTY FLORIDA.

PARCEL 8:

PART OF LOTS 6, 9, AND 10, BAILEY'S ADDITION TO PLYMOUTH, ACCORDING TO PLAT THEREOF AS RECORDED IN PLAT BOOK B, PAGE 145, OF THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; RUN NORTH 00 DEGREES 06 MINUTES 17 SECONDS EAST 1168.57 FEET ALONG THE EAST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 25 TO A POINT ON A LINE BEING 20.00 FEET WEST OF AND PARALLEL WITH THE WEST LINE OF SAID LOTS 6, 9 AND 10; THENCE DEPARTING SAID SECTION LINE NORTH 88 DEGREES 02 MINUTES 32 SECONDS EAST 20.01 FEET TO A POINT ON THE WEST LINE OF SAID LOT 10 AND THE EAST RIGHT OF WAY LINE OF SORRENTO AVENUE FOR A POINT OF BEGINNING; THENCE ALONG SAID EAST RIGHT OF WAY LINE NORTH 00 DEGREES 06 MINUTES 17 SECONDS EAST 498.51 FEET TO A POINT BEING 2.01 FEET NORTH 00 DEGREES 06 MINUTES 17 SECONDS EAST OF THE SOUTHWEST CORNER OF SAID LOT 6; THENCE DEPARTING SAID EAST RIGHT OF WAY LINE NORTH 87 DEGREES 56 MINUTES 33 SECONDS EAST 603.91 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF PLYMOUTH SORRENTO ROAD, A 60 FOOT RIGHT OF WAY, AND THE EAST LINE OF SAID LOTS 6, 9 AND 10, SAID POINT ALSO BEING 2.00 FEET NORTH 00 DEGREES 14 MINUTES 30 SECONDS WEST OF THE SOUTHEAST CORNER OF SAID LOT 6; THENCE ALONG SAID RIGHT OF WAY LINE AND THE EAST LINE OF SAID LOTS 6 AND 9 SOUTH 00 DEGREES 14 MINUTES 30 SECONDS EAST 32.02 FEET; THENCE DEPARTING SAID RIGHT OF WAY LINE SOUTH 87 DEGREES 56 MINUTES 33 SECONDS WEST 180.09 FEET; TO A POINT ON A LINE BEING 180.00 FEET WEST OF AND PARALLEL WITH SAID WEST RIGHT OF WAY LINE OF PLYMOUTH SORRENTO ROAD, THENCE ALONG SAID PARALLEL LINE SOUTH 00 DEGREES 14 MINUTES 30 SECONDS EAST 467.13 FEET; THENCE DEPARTING SAID PARALLEL LINE SOUTH 88 DEGREES 02 MINUTES 32 SECONDS WEST 426.81 FEET TO THE POINT OF BEGINNING.

by

G L SUMMITT
ENGINEERING INC

Project Team

Owner
Plymouth Harbor, LLC
P.O. Box 485
Mount Dora, FL 32756
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Fx:

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Ph:
Fx:

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Inverness, Florida 34450
Ph: (407) 647-1213
Fx:

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Apopka, FL 32703
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Fx: (407) 703-1748

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Apopka, FL 32703
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Apopka, FL 32703
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Apopka, FL 32703
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Sanford, FL 32771
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Orlando, FL 34805
Ph: (407) 351-7100

Cable Provider
Spectrum Networks
100 Gordon St.
Sanford, FL 32771
Ph: (321) 805-3081

Vicinity Map



STR: 20,28, 20S, 28E 1" = 1,000'

Drawing Index

No.	Title	Revised
1	Coversheet	12-08-24
2	Symbols & Abbreviations	12-08-24
3-6	Boundary & Topo Survey	12-08-24
7	Overall Site Plan	12-08-24
8	Open Space Rec. Plan	12-08-24
9	Design Standards Plan	12-08-24
10-11	Detailed Site Plan(s)	12-08-24
12-13	Utility Plan(s)	12-08-24
14-15	Drainage & Grading Plan(s)	12-08-24
16	Plymouth Sorrento Rd. Turn Lane Plan	12-08-24
17	Plymout Sorrento Rd. Offsite Utilties Connections	12-08-24
18-19	Truck Turning Plan(s)	12-08-24
20-21	Landscape Plan(s)	12-08-24
22	Landscape Details	12-08-24
23	General Details	12-08-24
24	Architectural Elevations	12-08-24

G L SUMMITT
ENGINEERING INC
Office: Lake Mary
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This item has been digitally signed and sealed by Geoffrey L. Summitt, P.E. on *Dec 12 2024*

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Lennar Homes Orlando
6675 Westwood Blvd.
Orlando, FL 32821

Ridgebrooke Subdivision
City of Apopka, Florida

Major Development Plan

Coversheet

Plans not valid unless Signed, Dated and Seal is Below.

GEOFFREY L. SUMMITT, P.E.
FL Registration #58775
Date: December 08, 2024
Certificate of Authorization #29665

Digitally signed by Geoffrey L. Summitt
Date: 2024.12.12 14:36:43 -05'00'

NO.	DATE	DESCRIPTION
1	[illegible]	[illegible]
2	[illegible]	[illegible]
3	[illegible]	[illegible]
4	[illegible]	[illegible]
5	[illegible]	[illegible]
6	[illegible]	[illegible]

SHEET NUMBER
1 OF 24

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
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
HDPE	HIGH DENSITY POLYETHYLENE
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

NORTH	NORTH
N	NORTH
NA	NOT APPLICABLE
N&C	NAIL AND CAP
NE	NORTHEAST
NG	NATURAL GROUND
NIC	NOT IN CONTRACT
NO OR #	NUMBER
NOM	NOMINAL
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
PFGP	PROFILE GRADE POINT
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
POB	POINT OF BEGINNING
POJ	PUSH ON JOINT
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
△	DELTA

EXISTING SYMBOLS

LINES

- CENTER LINE
- WIRE FENCE
- CHAIN LINK FENCE
- WOOD FENCE
- GUARDRAIL
- EXISTING PLATS
- RETAINING WALL
- R/W — RIGHT-OF-WAY LINE
- SHORELINE
- SWALE
- BUILDING LINE
- CONTOURS (81 / 80)
- RAILROAD TRACKS
- GAS — GAS MAIN
- UE — UNDERGROUND ELECTRIC
- UGT — UNDERGROUND TELEPHONE
- OVERHEAD ELECTRIC
- OVERHEAD TELEPHONE
- CTV — UNDERGROUND CABLE TELEVISION
- EASEMENT

SANITARY

- SANITARY SEWER LINE
- CLEANOUT
- FM — FORCE MAIN
- MANHOLE

WATER & REUSE WATER

- 6"WM — WATER MAIN 6" PVC PIPE
- RM — REUSE WATER MAIN
- BACKFLOW PREVENTOR
- WATER VALVE
- FIRE HYDRANT
- WATER METER

STORM DRAIN

- STORM SEWER
- MANHOLE
- MITERED END
- STORM INLET
- FDOT TYPE 6 INLET
- FDOT TYPE 1 INLET
- FDOT TYPE 2 INLET
- FDOT TYPE 3 INLET
- FDOT TYPE 4 INLET
- FDOT TYPE 5 INLET

HIGHWAY & UTILITIES

- BENCHMARK
- RECOVERED 4x4 CM
- SET 4x4 CM
- SET IRON ROD
- RECOVERED IRON ROD
- CONCRETE
- 520 — COUNTY ROADS
- 95 — INTERSTATE ROADS
- 50 — STATE ROADS
- WOOD AND/OR METAL LIGHT POLE
- CONCRETE LIGHT POLE
- YARD LIGHT
- MISCELLANEOUS SIGN
- 16 15 / 21 22 — SECTION CORNER
- EDGE OF PAVEMENT W/O CURB
- EDGE OF PAVEMENT W/CURB
- GUY POLE
- WOOD UTILITY POLE
- CONCRETE UTILITY POLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- TELEPHONE RISER
- ELECTRIC BOX / TRANSFORMER
- WELL
- MONITORING WELL
- DUMPSTER
- RR CROSSING SIGN
- RR CROSSING GATE
- TRAFFIC SIGNAL POLE
- SATALITE DISH
- GUY WIRE
- HANDICAP PARKING
- 99.50 — SPOT ELEVATION
- BRICK PAVERS
- DIRT ROAD
- 8" MAPLE TREE
- 8" OAK TREE
- 8" PINE TREE
- 8" PALM TREE
- 8" MISC. TREE

PROPOSED SYMBOLS

LINES

- BOUNDARY
- CONSERVATION SETBACK
- CENTER LINE
- CHAIN LINK FENCE
- CONTOUR (81 / 80)
- EASEMENT
- FENCE
- GUARDRAIL
- LOT LINE
- P/L — PROPERTY LINE
- RETAINING WALL
- R/W — RIGHT-OF-WAY LINE
- SETBACK LINE
- SHORELINE
- SWALE
- TREE LINE

SANITARY

- 100 LF SAN 8 PVC 0.40% — 100 LINEAR FEET SANITARY 8" PVC PIPE @ 0.40% SLOPE
- CLEANOUT
- DOUBLE SANITARY SERVICE
- FM — FORCE MAIN
- MANHOLE

WATER & REUSE WATER

- WM — WATER MAIN
- 11 1/2° BEND
- 22 1/2° BEND
- 45° BEND
- 90° BEND
- TEE
- CROSS
- CHECK VALVE
- DOUBLE DETECTOR CHECK VALVE
- DOUBLE WATER SERVICE
- GATE VALVE
- FIRE HYDRANT
- M — METER
- REDUCER
- BLOWOFF
- BACKFLOW PREVENTER
- SP 2 — SAMPLE POINT
- UNDERDRAIN CEANOUT
- RM — RECLAIMED WATER MAIN
- REUSE WATER SYSTEM CONNECTION
- DOUBLE REUSE WATER SERVICE

STORM DRAIN

- 100 LF STS 24 RCP @ 0.20% — 100 LINEAR FEET STORM PIPE 24" REINFORCED CONCRETE PIPE @ 0.20%
- UNDERDRAIN 6" PVC 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
- SLOPE DIRECTION ARROW FOR POND SIDE SLOPE
- 100.00 — SPOT ELEVATION
- STORM INLET

HIGHWAY & UTILITIES

- BOUND CORNER
- CONCRETE
- 520 — COUNTY ROADS
- 901 / 24 — DETAIL REFERENCE
- DUMPSTER PAD
- FF=98.76 / TYPE A — FINISHED FLOOR ELEVATION W/ FHA LOT TYPE
- GUY POLE
- HANDICAP PARKING
- 95 — INTERSTATE ROADS
- LIGHT POLE
- SIGNS
- 16 15 / 21 22 — SECTION CORNER
- 50 — STATE ROADS
- SILT FENCE
- TRAFFIC FLOW PAVEMENT MARKING
- UTILITY POLE
- BLDG OR STRUCTURE
- TYPE F CURB & GUTTER
- MIAMI CURB
- 901 / 24 — CROSS SECTION DETAIL

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Lennar Homes Orlando
6675 Westwood Blvd.
Orlando, FL 32821

Ridgebrooke Subdivision
City of Apopka, Florida

Major Development Plan

Symbols & Abbreviations

Plans not valid unless Signed, Dated and Sealed below.

GEOFFREY L. SUMMITT, P.E.
Date:December 08, 2024
FL Registration #58775
Certificate of Authorization #29665

Revisions

NO.	DATE	DESCRIPTION
1	#####	##########################
2	#####	##########################
3	#####	##########################
4	#####	
5	#####	
6	#####	
7	#####	
8	#####	
9	#####	
10	#####	

SHEET NUMBER
2 OF 24

LEGAL DESCRIPTION (PER TITLE COMMITMENT):

PARCEL 1:

LOTS 4 AND 5 OF BAILEY'S ADDITION TO PLYMOUTH, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 145, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; AND THAT EAST 1/2 PORTION OF SORRENTO AVENUE ADJACENT TO LOT 5 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #20220583272, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
SUBJECT TO A RIGHT-OF-WAY GRANTED TO ORANGE COUNTY ACROSS WEST 30 FEET OF LOT 5 IN DEED BOOK 997, PAGE 167, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 2:

THE NORTH QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, LESS THE WEST 393 FEET THEREOF; AND THAT WEST 1/2 PORTION OF SORRENTO AVENUE ADJACENT TO LOTS 4, 5 AND 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #20220583272, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 3:

THE EAST HALF (1/2) OF THE SOUTH HALF (1/2) OF THE NORTHWEST QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

PARCEL 4:

THE SOUTH HALF (1/2) OF THE NORTHEAST QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; AND THAT WEST 1/2 PORTION OF SORRENTO AVENUE ADJACENT TO LOTS 4, 5 AND 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #20220583272, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
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AS TO PARCELS 2, 3 AND 4, LESS AND EXCEPT:
THAT PORTION TAKEN BY THE FLORIDA EXPRESSWAY AUTHORITY, A BODY POLITIC AND CORPORATE AND AN AGENCY OF THE STATE UNDER THE LAWS OF THE STATE OF FLORIDA, BY THE STIPULATED ORDER OF TAKING RECORDED IN OFFICIAL RECORDS BOOK 10771, PAGE 1724 (NO LEGAL DESCRIPTION ATTACHED) AND DUPLICATE FILING WITH LEGAL DESCRIPTION IN OFFICIAL RECORDS BOOK 10779, PAGE 2159; OFFICIAL RECORDS BOOK 10780, PAGE 5828 (LEFIGAL DESCRIPTION UNREADABLE) AND OFFICIAL RECORDS BOOK 10780, PAGE 6572; AND STIPULATED FINAL JUDGMENT RECORDED IN OFFICIAL RECORDS INSTRUMENT # 20160259721, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 5:

PART OF LOT 6, OF BAILEY'S ADDITION TO PLYMOUTH, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 145, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, THENCE NORTH 00 DEGREES 06'17" EAST 1667.05 FEET ALONG THE EAST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 25; THENCE DEPARTING SAID SECTION LINE NORTH 87 DEGREES 56'33" EAST 20.01 FEET TO THE POINT OF BEGINNING, BEING NORTH 00 DEGREES 06'17" EAST 2.01 FEET TO THE SOUTHWEST CORNER OF SAID LOT 6; THENCE NORTH 00 DEGREES 06'17" EAST 326.52 FEET ALONG THE WEST LINE OF SAID LOT 6; THENCE DEPARTING SAID WEST LINE NORTH 87 DEGREES 59'04" EAST 601.92 FEET ALONG THE NORTH LINE OF SAID LOT 6 TO A POINT OF THE WEST RIGHT OF WAY LINE OF PLYMOUTH SORRENTO ROAD, A 60' RIGHT OF WAY; AND THE NORTHEAST CORNER OF SAID LOT 6; THENCE ALONG SAID RIGHT OF WAY LINE SOUTH 00 DEGREES 14'30" EAST 326.01 FEET TO A POINT BEING NORTH 00 DEGREES 14'30" WEST 2.01 FEET TO THE SOUTHEAST CORNER OF SAID LOT 6; THENCE SOUTH 87 DEGREES 56'33" WEST 603.91 FEET ALONG A LINE BEING 2.00 FEET NORTHERLY OF AND PARALLEL WITH THE SOUTH LINE OF SAID LOT 6 TO THE POINT OF BEGINNING; AND THAT EAST 1/2 PORTION OF SORRENTO AVENUE LYING ADJACENT TO LOT 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #2022058372, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. LESS EXISTING RIGHT-OF-WAY TO PLYMOUTH SORRENTO ROAD.
SUBJECT TO AN EASEMENT FOR RIGHT-OF-WAY GRANTED TO ORANGE COUNTY ACROSS WEST 30 FEET OF LOT 6 IN DEED BOOK 997, PAGE 167; AND SUBJECT TO AN INGRESS EGRESS EASEMENT OVER THE SOUTH 20 FEET THEREOF BY THE EASEMENT IN OFFICIAL RECORDS BOOK 5820, PAGE 3121, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 6:

THE NORTH 1/2 OF THE SOUTHEAST QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; AND THAT WEST 1/2 PORTION OF SORRENTO AVENUE LYING ADJACENT TO LOT 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #20220583272, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. LESS EXISTING RIGHT-OF-WAY TO PLYMOUTH SORRENTO ROAD. AND, LESS THE EAST 30 FEET THEREOF FOR ROAD RIGHT-OF-WAY PER RIGHT-OF-WAY AGREEMENT RECORDED IN DEED BOOK 997, PAGE 165, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

CHICAGO TITLE INSURANCE COMPANY
COMMITMENT NUMBER: 11372767
ISSUING OFFICE FILE NUMBER: 11041-000052-FL
COMMITMENT DATE: 09/13/2023 @ 11:00 PM

BII EXCEPTONS

ITEM 5: AFFECTS; BLANKET IN NATURE (PARCELS 1 & 5)
ITEM 6: AFFECTS; BLANKET IN NATURE (PARCEL 2)
ITEM 7: AS SHOWN; PARCELS 1, 4, 5 & 6
ITEM 8: AS SHOWN; PARCEL 5
ITEM 9: AFFECTS; NOT PLOTTABLE
ITEM 10: AFFECTS; BLANKET IN NATURE (PARCELS 1-4)

A. THIS MAP OF SURVEY IS CERTIFIED TO:

LENNAR HOMES, LLC
XXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXX

B. THE SURVEY SHOWN AND DESCRIBED HEREON WAS REVIEWED BY THE CERTIFYING SURVEYOR AND MAPPER IN THE OFFICE AND IN THE FIELD ON THE FOLLOWING DATE: 10/09/23. THE SURVEY WAS LAST REVIEWED IN THE FIELD ON THE FOLLOWING DATE: 10/2023.

C. THE LANDS SHOWN HEREON LIE WITHIN ZONE X ACCORDING TO "FIRM" MAP NUMBER 12095C0110H, EFFECTIVE 09/24/2021.

D. BEARINGS SHOWN HEREON ARE RELATIVE TO THE STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD 83-2011 ADJUSTMENT) FOR THE EAST ZONE OF FLORIDA.

E. ELEVATIONS SHOWN HEREON ARE BASED ON ORANGE COUNTY BENCHMARK S-1579-023 HAVING AN ELEVATION OF 127.46' (NAVD 88).

F. THE MEASUREMENTS SHOWN HEREON ARE IN U.S. SURVEY FEET. THE ACCURACY OF THIS SURVEY EXCEEDS THE REQUIREMENTS OF FLORIDA ADMINISTRATIVE CODE 5J-17.

G. UNDERGROUND UTILITIES WERE NOT LOCATED BY THIS SURVEYOR.

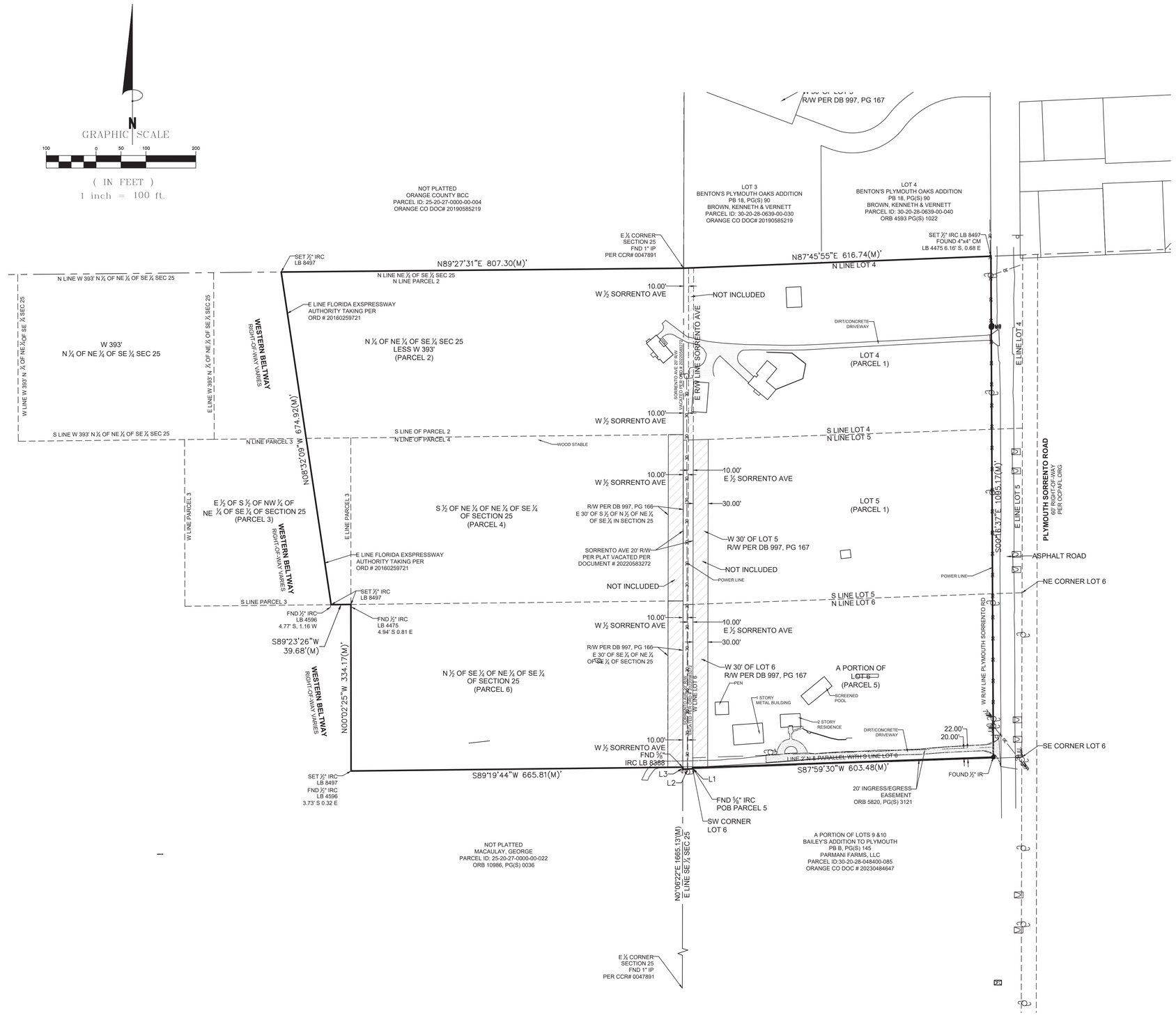
H. THERE WAS NO EVIDENCE OF RECENT EARTHWORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

I. THERE WAS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

J. THIS PROPERTY HAS DIRECT ACCESS TO PLYMOUTH SORRENTO RD, WHICH IS A PUBLIC RIGHT-OF-WAY.

K. THE LEGAL DESCRIPTION PREPARED BY THIS SURVEYOR DESCRIBES ONE AND THE SAME LANDS AS DESCRIBED IN THE TITLE COMMITMENT REFERENCED ON THIS SURVEY.

L. EACH OF THE LOTS WITHIN PARCEL XXXXX ARE CONTIGUOUS ALONG THEIR RESPECTIVE BOUNDARIES WITHOUT ANY GAPS, GORE OR HIATUSES.



MIZO & ASSOCIATES, LLC
PROFESSIONAL LAND SURVEYORS
1407 CUMBIE STREET
ORLANDO, FL 32804
(321) 200-4904
LICENSE BUSINESS NUMBER 8497

10/09/23

ALTA/NSPS LAND TITLE SURVEY

PREPARED FOR:
LENNAR HOMES
6675 WESTWOOD BOULEVARD #500
ORLANDO, FLORIDA 32821-8061

BOUNDARY, TOPOGRAPHIC & TREE SURVEY
LYING IN
SECTIONS 30, TOWNSHIP 20 SOUTH, RANGE 30 EAST

SHEET
1 OF 4

LEGAL DESCRIPTION (PER TITLE COMMITMENT):

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PARCEL 5:

PART OF LOT 6, OF BAILEY'S ADDITION TO PLYMOUTH, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 145, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, THENCE NORTH 00 DEGREES 06'17" EAST 1667.05 FEET ALONG THE EAST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 25; THENCE DEPARTING SAID SECTION LINE NORTH 87 DEGREES 56'33" EAST 20.01 FEET TO THE POINT OF BEGINNING, BEING NORTH 00 DEGREES 06'17" EAST 2.01 FEET TO THE SOUTHWEST CORNER OF SAID LOT 6; THENCE NORTH 00 DEGREES 06'17" EAST 326.52 FEET ALONG THE WEST LINE OF SAID LOT 6; THENCE DEPARTING SAID WEST LINE NORTH 87 DEGREES 59'04" EAST 601.92 FEET ALONG THE NORTH LINE OF SAID LOT 6 TO A POINT OF THE WEST RIGHT OF WAY LINE OF PLYMOUTH SORRENTO ROAD, A 60' RIGHT OF WAY; AND THE NORTHEAST CORNER OF SAID LOT 6; THENCE ALONG SAID RIGHT OF WAY LINE SOUTH 00 DEGREES 14'30" EAST 326.01 FEET TO A POINT BEING NORTH 00 DEGREES 14'30" WEST 2.01 FEET TO THE SOUTHEAST CORNER OF SAID LOT 6; THENCE SOUTH 87 DEGREES 56'33" WEST 603.91 FEET ALONG A LINE BEING 2.00 FEET NORTHERLY OF AND PARALLEL WITH THE SOUTH LINE OF SAID LOT 6 TO THE POINT OF BEGINNING; AND THAT EAST 1/2 PORTION OF SORRENTO AVENUE LYING ADJACENT TO LOT 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #20220583272, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. LESS EXISTING RIGHT-OF-WAY TO PLYMOUTH SORRENTO ROAD.
SUBJECT TO AN EASEMENT FOR RIGHT-OF-WAY GRANTED TO ORANGE COUNTY ACROSS WEST 30 FEET OF LOT 6 IN DEED BOOK 997, PAGE 167; AND SUBJECT TO AN INGRESS EGRESS EASEMENT OVER THE SOUTH 20 FEET THEREOF BY THE EASEMENT IN OFFICIAL RECORDS BOOK 5820, PAGE 3121, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 6:

THE NORTH 1/2 OF THE SOUTHEAST QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; AND THAT WEST 1/2 PORTION OF SORRENTO AVENUE LYING ADJACENT TO LOT 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #20220583272, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. LESS EXISTING RIGHT-OF-WAY TO PLYMOUTH SORRENTO ROAD. AND, LESS THE EAST 30 FEET THEREOF FOR ROAD RIGHT-OF-WAY PER RIGHT-OF-WAY AGREEMENT RECORDED IN DEED BOOK 997, PAGE 165, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

CHICAGO TITLE INSURANCE COMPANY
COMMITMENT NUMBER: 11372767
ISSUING OFFICE FILE NUMBER: 11041-000052-FL
COMMITMENT DATE: 09/13/2023 @ 11:00 PM

BII EXCEPTONS

ITEM 5: AFFECTS; BLANKET IN NATURE (PARCELS 1 & 5)
ITEM 6: AFFECTS; BLANKET IN NATURE (PARCEL 2)
ITEM 7: AS SHOWN; PARCELS 1, 4, 5 & 6
ITEM 8: AS SHOWN; PARCEL 5
ITEM 9: AFFECTS; NOT PLOTTABLE
ITEM 10: AFFECTS; BLANKET IN NATURE (PARCELS 1-4)

A. THIS MAP OF SURVEY IS CERTIFIED TO:

LENNAR HOMES, LLC
XXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXX

B. THE SURVEY SHOWN AND DESCRIBED HEREON WAS REVIEWED BY THE CERTIFYING SURVEYOR AND MAPPER IN THE OFFICE AND IN THE FIELD ON THE FOLLOWING DATE: 10/09/23. THE SURVEY WAS LAST REVIEWED IN THE FIELD ON THE FOLLOWING DATE: 10/2023.

C. THE LANDS SHOWN HEREON LIE WITHIN ZONE X ACCORDING TO "FIRM" MAP NUMBER 12095C0110H, EFFECTIVE 09/24/2021.

D. BEARINGS SHOWN HEREON ARE RELATIVE TO THE STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD 83-2011 ADJUSTMENT) FOR THE EAST ZONE OF FLORIDA.

E. THE MEASUREMENTS SHOWN HEREON ARE IN U.S. SURVEY FEET. THE ACCURACY OF THIS SURVEY EXCEEDS THE REQUIREMENTS OF FLORIDA ADMINISTRATIVE CODE 5J-17.

F. UNDERGROUND UTILITIES WERE NOT LOCATED BY THIS SURVEYOR.

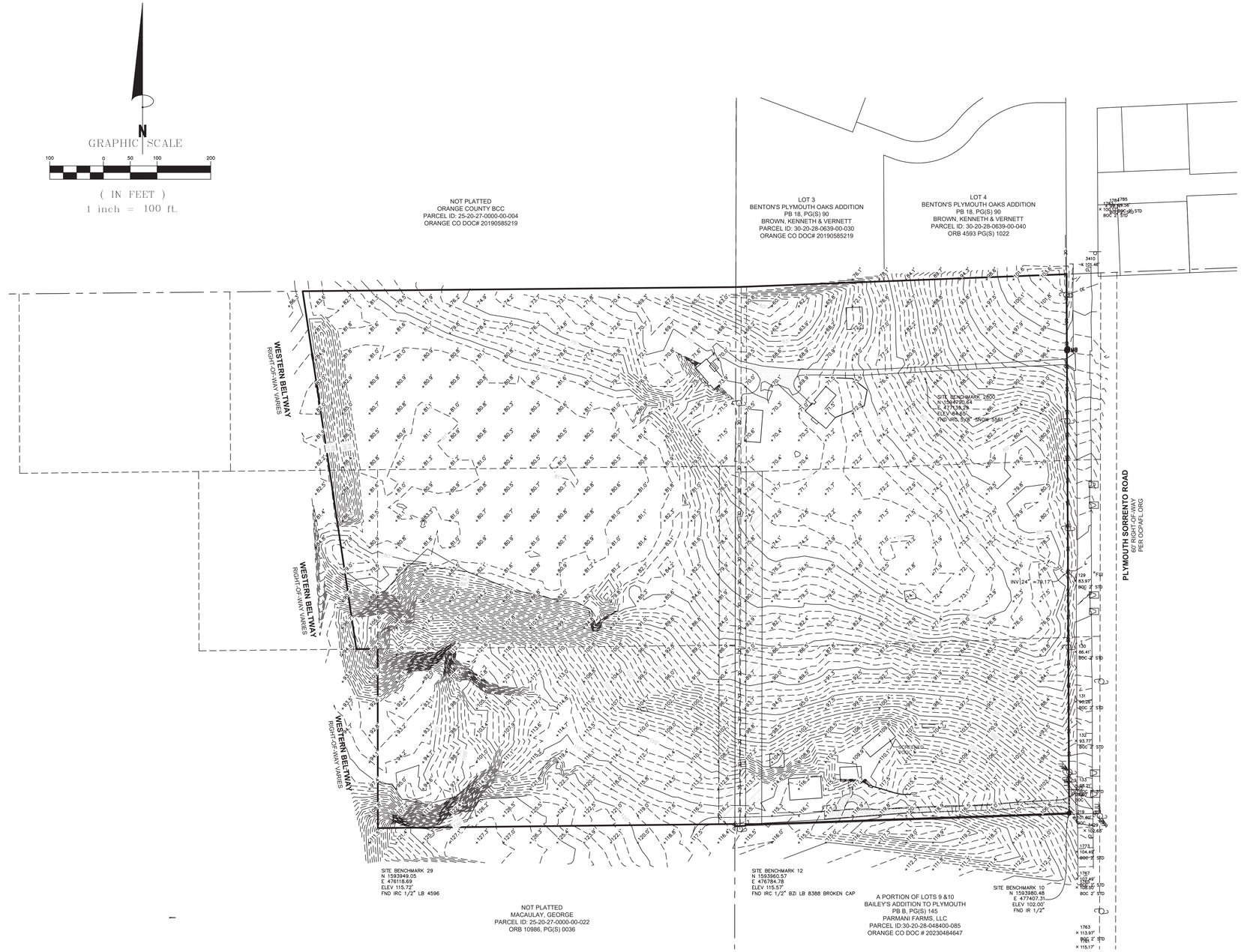
G. THERE WAS NO EVIDENCE OF RECENT EARTHWORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

H. THERE WAS NO EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION REPAIRS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

I. THIS PROPERTY HAS DIRECT ACCESS TO PLYMOUTH SORRENTO RD, WHICH IS A PUBLIC RIGHT-OF-WAY.

J. THE LEGAL DESCRIPTION PREPARED BY THIS SURVEYOR DESCRIBES ONE AND THE SAME LANDS AS DESCRIBED IN THE TITLE COMMITMENT REFERENCED ON THIS SURVEY.

K. EACH OF THE LOTS WITHIN PARCEL XXXXXX ARE CONTIGUOUS ALONG THEIR RESPECTIVE BOUNDARIES WITHOUT ANY GAPS, GORE OR HIATUSES.



MIZO & ASSOCIATES, LLC
PROFESSIONAL LAND SURVEYORS
1407 CUMBIE STREET
ORLANDO, FL 32804
(321) 200-4904
LICENSE BUSINESS NUMBER 8497

10/09/23

ALTA/NSPS LAND TITLE SURVEY

PREPARED FOR:
LENNAR HOMES
6675 WESTWOOD BOULEVARD #500
ORLANDO, FLORIDA 32821-8061

ALTA/NSPS LAND TITLE SURVEY
LYING IN
SECTIONS 30, TOWNSHIP 20 SOUTH, RANGE 30 EAST

SHEET
2 OF 4

LEGAL DESCRIPTION (PER TITLE COMMITMENT):

PARCEL 1:

LOTS 4 AND 5 OF BAILEY'S ADDITION TO PLYMOUTH, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 145, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA; AND THAT EAST 1/2 PORTION OF SORRENTO AVENUE ADJACENT TO LOT 5 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #20220583272, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
SUBJECT TO A RIGHT-OF-WAY GRANTED TO ORANGE COUNTY ACROSS WEST 30 FEET OF LOT 5 IN DEED BOOK 997, PAGE 167, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 2:

THE NORTH QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, LESS THE WEST 393 FEET THEREOF; AND THAT WEST 1/2 PORTION OF SORRENTO AVENUE ADJACENT TO LOTS 4, 5 AND 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #20220583272, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 3:

THE EAST HALF (1/2) OF THE SOUTH HALF (1/2) OF THE NORTHWEST QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

PARCEL 4:

THE SOUTH HALF (1/2) OF THE NORTHEAST QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; AND THAT WEST 1/2 PORTION OF SORRENTO AVENUE ADJACENT TO LOTS 4, 5 AND 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #20220583272, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
SUBJECT TO AN EASEMENT FOR RIGHT-OF-WAY GRANTED TO ORANGE COUNTY ACROSS THE EAST 30 FEET IN DEED BOOK 997, PAGE 166, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

AS TO PARCELS 2, 3 AND 4, LESS AND EXCEPT:
THAT PORTION TAKEN BY THE FLORIDA EXPRESSWAY AUTHORITY, A BODY POLITIC AND CORPORATE AND AN AGENCY OF THE STATE UNDER THE LAWS OF THE STATE OF FLORIDA, BY THE STIPULATED ORDER OF TAKING RECORDED IN OFFICIAL RECORDS BOOK 10771, PAGE 1724 (NO LEGAL DESCRIPTION ATTACHED) AND DUPLICATE FILING WITH LEGAL DESCRIPTION IN OFFICIAL RECORDS BOOK 10779, PAGE 2159; OFFICIAL RECORDS BOOK 10780, PAGE 5828 (LEGAL DESCRIPTION UNREADABLE) AND OFFICIAL RECORDS BOOK 10780, PAGE 6572; AND STIPULATED FINAL JUDGMENT RECORDED IN OFFICIAL RECORDS INSTRUMENT # 20160259721, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 5:

PART OF LOT 6, OF BAILEY'S ADDITION TO PLYMOUTH, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK B, PAGE 145, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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SUBJECT TO AN EASEMENT FOR RIGHT-OF-WAY GRANTED TO ORANGE COUNTY ACROSS WEST 30 FEET OF LOT 6 IN DEED BOOK 997, PAGE 167; AND SUBJECT TO AN INGRESS EGRESS EASEMENT OVER THE SOUTH 20 FEET THEREOF BY THE EASEMENT IN OFFICIAL RECORDS BOOK 5820, PAGE 3121, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

PARCEL 6:

THE NORTH 1/2 OF THE SOUTHEAST QUARTER (1/4) OF THE NORTHEAST QUARTER (1/4) OF THE SOUTHEAST QUARTER (1/4) OF SECTION 25, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA; AND THAT WEST 1/2 PORTION OF SORRENTO AVENUE LYING ADJACENT TO LOT 6 BY RESOLUTION GRANTING PETITION TO VACATE #20-01-002 RECORDED IN OFFICIAL RECORDS INSTRUMENT #2022058372, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA. LESS EXISTING RIGHT-OF-WAY TO PLYMOUTH SORRENTO ROAD. AND, LESS THE EAST 30 FEET THEREOF FOR ROAD RIGHT-OF-WAY PER RIGHT-OF-WAY AGREEMENT RECORDED IN DEED BOOK 997, PAGE 165, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

CHICAGO TITLE INSURANCE COMPANY
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MIZO & ASSOCIATES, LLC
PROFESSIONAL LAND SURVEYORS
1407 CUMBIE STREET
ORLANDO, FL 32804
(321) 200-4904
LICENSE BUSINESS NUMBER 8497

ALTA/NSPS LAND TITLE SURVEY

10/09/23

PREPARED FOR:
LENNAR HOMES
6675 WESTWOOD BOULEVARD #500
ORLANDO, FLORIDA 32821-8061

ALTA/NSPS LAND TITLE SURVEY
LYING IN
SECTIONS 30, TOWNSHIP 20 SOUTH, RANGE 30 EAST

SHEET
3 OF 4

TREE TABLE			
Point #	Northing	Easting	Description
6000	1594001	477088	OAK 8"
6001	1594002	477075	OAK 14"
6002	1594010	477075	OAK 14"
6003	1594015	477074	OAK 14"
6004	1594007	477097	OAK 10"
6005	1594000	477101	OAK 16"
6006	1594003	477109	OAK 20"
6007	1594002	477123	OAK 16"
6008	1594009	477126	OAK 10"
6009	1594010	477120	OAK 8"
6010	1593997	477036	OAK 12"
6011	1593998	477054	OAK 18"
6012	1593998	477033	OAK 12"
6013	1594032	477026	OAK 30"
6014	1594058	477099	OAK 16"
6015	1594100	477096	OAK 24"
6016	1594081	477075	OAK 36"
6017	1594080	477003	OAK 48"
6018	1594003	477149	OAK 14"
6019	1594012	477147	OAK 16"
6020	1594010	477152	OAK 16"
6021	1594011	477160	OAK 12"
6022	1594014	477172	OAK 22"
6023	1594034	477148	OAK 30"
6024	1594056	477119	OAK 20"
6025	1594060	477122	OAK 24"
6026	1594057	477127	OAK 16"
6027	1594062	477149	OAK 18"
6028	1593993	476971	PAL 14"
6033	1594093	477338	PIN 20"
6034	1594123	477311	OAK 24"
6035	1594094	477277	OAK 24"
6036	1594086	477274	OAK 24"
6037	1594008	477300	OAK 30"
6038	1594011	477300	OAK 16"
6039	1594011	477325	OAK 42"
6040	1594015	477347	OAK 24"
6041	1594007	477281	OAK 8"
6042	1594006	477276	OAK 30"
6043	1594033	477381	OAK 12"
6044	1594048	477378	PAL 14"
6045	1594034	477382	PIN 20"
6046	1594056	477367	PIN 16"
6047	1594071	477379	OAK 8"
6048	1594060	477387	OAK 36"
6049	1594014	477296	OAK 16"
6050	1594011	477273	OAK 18"
6051	1594087	477225	OAK 16"
6052	1594073	477218	OAK 24"
6053	1594061	477223	OAK 20"
6054	1594036	477222	OAK 12"
6055	1594031	477221	OAK 12"
6056	1594005	477218	OAK 42"
6057	1594157	477277	PIN 12"
6058	1594179	477255	PIN 12"
6059	1594179	477253	OAK 28"
6060	1594214	477218	OAK 48"
6061	1594200	477192	PIN 12"
6062	1594152	477222	OAK 20"
7000	1594624	476397	OAK 32"

TREE TABLE			
Point #	Northing	Easting	Description
7001	1594682	476460	OAK 36"
7002	1594759	476581	OAK 32"
7003	1594542	476696	OAK 12"
7004	1594525	476684	OAK 16"
7005	1594487	476673	OAK 12"
7006	1594457	476656	OAK 10"
7007	1594417	476617	OAK 10"
7008	1594398	476596	OAK 36"
7009	1594356	476597	OAK 30"
7010	1594713	476778	OAK 54"
7011	1594732	476776	OAK 24"
7012	1594599	476747	OAK 24"
7013	1594764	476629	OAK 10"
7014	1594772	476732	OAK 36"
7015	1594597	476877	OAK 54"
7016	1594558	476895	OAK 28"
7017	1594557	476807	OAK 28"
7018	1594535	476888	OAK 24"
7019	1594537	476889	OAK 22"
7020	1594592	476951	OAK 30"
7021	1594616	476980	OAK 16"
7022	1594528	477124	OAK 72"
7023	1594411	477085	OAK 44"
7024	1594310	476887	OAK 32"
7025	1594289	476922	OAK 18"
7026	1594291	476927	OAK 24"
7027	1594285	476952	OAK 16"
7028	1594294	477001	OAK 24"
7029	1594293	477039	OAK 12"
7030	1594391	477130	OAK 42"
7031	1594316	477137	OAK 42"
7032	1594312	477197	OAK 48"
7033	1594300	477110	OAK 24"
7035	1594346	477226	OAK 14"
7036	1594311	477235	OAK 28"
7037	1594315	477249	OAK 20"
7038	1594303	477260	OAK 12"
7039	1594302	477298	OAK 14"
7040	1594294	477336	OAK 16"
7041	1594306	477344	OAK 54"
7042	1594398	477399	OAK 12"
7043	1594400	477401	OAK 12"
7044	1594447	477242	OAK 28"
7045	1594847	477016	OAK 28"
7046	1594859	477017	OAK 32"
7047	1594762	476979	OAK 28"
7048	1594768	476980	OAK 44"
7049	1594807	477166	OAK 36"
7050	1594761	476911	OAK 48"
7051	1594741	476843	OAK 32"
7052	1594738	476847	OAK 24"
7053	1594727	476850	OAK 26"
7054	1594712	476846	OAK 40"
7055	1594809	476775	OAK 32"
7056	1594814	476761	OAK 52"
7057	1594861	476733	OAK 44"
7058	1594878	476731	OAK 10"
7059	1594896	476705	OAK 14"
7060	1594215	477392	OAK 10"
7061	1594290	477379	PAL 14"
7062	1594255	477224	OAK 16"
7063	1594278	477226	OAK 20"
7064	1594208	477150	OAK 54"
7065	1594226	477143	OAK 28"
7066	1594209	477135	OAK 20"
7067	1594165	477078	OAK 20"
7068	1594172	477078	OAK 24"
7069	1594264	477073	OAK 30"
7070	1594263	477036	OAK 36"
7071	1594227	477072	OAK 52"
7072	1594276	477006	OAK 30"
7073	1594259	476999	OAK 44"
7074	1594205	477000	OAK 28"
7075	1594201	476998	OAK 18"
7076	1594144	477029	OAK 24"

TREE TABLE			
Point #	Northing	Easting	Description
7077	1594154	477003	OAK 24"
7078	1594264	476927	OAK 26"
7079	1594265	476925	OAK 14"
7080	1594265	476881	OAK 16"
7081	1594285	476872	OAK 18"
7082	1594216	476839	OAK 26"
7083	1594182	476832	OAK 24"
7084	1594163	476832	OAK 22"
7085	1594145	476880	OAK 28"
7086	1594114	476977	OAK 14"
7087	1594116	476943	OAK 22"
7088	1594112	476963	MAP 26"
7089	1594112	476902	PAL 10"
7090	1594071	476951	OAK 40"
7091	1594055	476887	OAK 28"
7092	1594104	476864	OAK 28"
7093	1594119	476827	OAK 24"
7094	1594090	476841	OAK 10"
7095	1594082	476830	OAK 16"
7096	1594078	476842	OAK 14"
7097	1594071	476810	OAK 12"
7098	1594068	476812	OAK 12"
7099	1594053	476846	OAK 32"
7100	1594059	476850	OAK 10"
7101	1594059	476839	OAK 14"
7102	1594054	476871	MAP 10"
7103	1594048	476867	MAP 10"
7104	1594943	476435	OAK 52"
7105	1594919	476594	OAK 10"
7106	1594297	477400	OAK 10"
7107	1594309	477409	OAK 18"
7108	1594310	477407	OAK 24"
7109	1594327	477407	OAK 20"
7110	1594338	477405	OAK 12"
7111	1594059	476774	OAK 24"
7112	1594057	476764	OAK 24"
7113	1594029	476767	OAK 42"
7114	1593982	476779	OAK 42"
7115	1594008	476755	OAK 30"
7116	1593984	476727	OAK 54"
7117	1594025	476728	OAK 26"
7118	1594032	476694	OAK 26"
7119	1594007	476694	OAK 36"
7120	1594133	476780	OAK 16"
7121	1594113	476778	OAK 16"
7122	1594121	476780	OAK 14"
7123	1594091	476774	OAK 12"
7124	1594094	476769	OAK 10"
7125	1594097	476767	OAK 10"
7126	1594038	476715	OAK 16"
7127	1594030	476718	OAK 16"
7128	1594071	476744	OAK 32"
7129	1594108	476730	OAK 12"
7130	1594125	476766	OAK 12"
7131	1594143	476751	OAK 14"
7132	1594129	476725	OAK 16"
7133	1594133	476728	OAK 20"
7134	1594181	476731	OAK 10"
7135	1594178	476726	OAK 12"
7136	1594201	476714	OAK 68"
7137	1594234	476706	OAK 12"
7138	1594242	476681	OAK 24"
7139	1594250	476829	OAK 14"
7140	1594255	476842	OAK 16"
7141	1594273	476821	OAK 10"
7142	1594264	476843	OAK 26"
7143	1594265	476776	OAK 14"
7144	1594291	476860	OAK 16"
7145	1594262	476729	OAK 22"
7146	1594266	476749	OAK 14"
7147	1594270	476744	OAK 18"
7148	1594271	476741	OAK 12"
7149	1593967	476686	OAK 10"
7150	1593968	476678	OAK 12"
7151	1593973	476679	OAK 16"

TREE TABLE			
Point #	Northing	Easting	Description
7152	1593980	476658	OAK 54"
7153	1593973	476625	OAK 18"
7154	1593981	476612	OAK 24"
7155	1593996	476631	OAK 16"
7156	1594005	476624	OAK 18"
7157	1593967	476595	OAK 28"
7158	1593973	476582	OAK 28"
7159	1593981	476597	OAK 10"
7160	1593968	476576	OAK 12"
7161	1593970	476572	OAK 12"
7162	1593971	476566	OAK 16"
7163	1593972	476563	OAK 14"
7164	1593970	476548	OAK 14"
7165	1593970	476546	OAK 24"
7167	1593980	476485	OAK 14"
7168	1593971	476468	OAK 16"
7169	1593982	476473	OAK 12"
7170	1593984	476468	OAK 12"
7171	1594016	476491	OAK 10"
7172	1594015	476486	OAK 10"
7173	1594013	476511	OAK 14"
7176	1593977	476444	OAK 96"
7177	1593976	476456	OAK 24"
7178	1593995	476450	OAK 16"
7179	1593995	476425	OAK 14"
7180	1593974	476428	OAK 14"
7183	1593968	476360	OAK 14"
7184	1593994	476378	OAK 16"
7185	1594005	476396	OAK 24"
7186	1593971	476350	OAK 36"
7187	1594008	476335	OAK 28"
7188	1593988	476332	OAK 12"
7189	1593973	476325	OAK 16"
7190	1593974	476323	OAK 24"
7191	1593982	476322	OAK 24"
7192	1593987	476355	OAK 12"
7193	1593994	476367	OAK 24"
7194	1594000	476303	OAK 68"
7195	1594011	476297	OAK 16"
7196	1593999	476296	OAK 16"
7197	1594012	476287	OAK 16"
7198	1593968	476281	OAK 14"
7199	1593964	476286	OAK 14"
7200	1594011	476303	OAK 32"
7203	1593957	476247	OAK 16"
7207	1593958	476237	OAK 12"
7209	1593988	476212	OAK 26"
7210	1593979	476194	OAK 16"
7211	1593968	476201	OAK 10"
7212	1593968	476194	OAK 12"
7213	1593966	476181	OAK 24"
7214	1593973	476164	OAK 10"
7216	1593954	476145	OAK 14"
7217	1593967	476156	OAK 18"
7218	1593964	476147	OAK 18"
7219	1594039	476139	OAK 12"
7220	1594033	476142	OAK 12"
7221	1593973	476154	OAK 12"
7222	1593989	476149	OAK 12"
7223	1594041	476151	OAK 10"
7224	1594030	476170	OAK 10"
7225	1594017	476168	OAK 10"
7226	1594043	476164	OAK 10"
7227	1594045	476156	OAK 10"
7228	1594048	476161	OAK 10"
7229	1594020	476186	OAK 10"
7230	1594017	476191	OAK 10"
7231	1594068	476167	OAK 12"
7232	1594037	476204	OAK 12"
7233	1594062	476193	OAK 16"
7234	1594066	476216	OAK 14"
7235	1594131	476170	OAK 12"
7236	1594146	476156	OAK 12"
7237	1594124	476189	OAK 14"
7238	1594109	476185	OAK 10"

TREE TABLE			
Point #	Northing	Easting	Description
7239	1594100	476189	OAK 10"
7240	1594100	476182	OAK 10"
7241	1594059	476251	OAK 10"
7242	1594025	476227	OAK 10"
7243	1594023	476246	OAK 10"
7244	1594024	476226	OAK 12"
7245	1594025	476246	OAK 12"
7246	1594032	476300	OAK 30"
7247	1594029	476299	OAK 10"
7248	1594034	476344	OAK 14"
7249	1594093	476342	PAL 14"
7250	1594077	476351	OAK 14"
7251	1594091	476365	OAK 12"
7252	1594069	476351	OAK 14"
7253	1594094	476374	OAK 12"
7254	1594011	476390	OAK 12"
7255	1594004	476401	OAK 12"
7256	1594035	476424	OAK 14"
7257	1594035	476426	OAK 12"
7258	1594016	476427	OAK 10"
7259	1594035	476433	OAK 36"
7260	1594120	476396	OAK 16"
7261	1594063	476522	OAK 14"
7262	1594063	476547	OAK 16"
7263	1594060	476550	OAK 28"
7264	1594094	476516	OAK 10"
7265	1594099	476504	OAK 16"
7266	1594006	476573	OAK 20"
7267	1594007	476567	OAK 18"
7268	1594025	476564	OAK 14"
7269	1594282	476687	OAK 14"
7270	1594271	476706	OAK 14"
7271	1594280	476709	OAK 16"
7272	1594255	476730	OAK 16"
7273	1594267	476680	OAK 10"
7274	1594247	476662	OAK 18"
7275	1594245	476661	OAK 16"
7276	1594238	476663	OAK 16"
7277	1594232	476664	OAK 16"
7278	1594277	476671	OAK 32"
7279	1594281	476661	OAK 18"
7280	1594284	476661	OAK 18"
7281	1594279	476631	OAK 12"
7282	1594281	476630	OAK 12"
7283	1594283	476628	OAK 12"
7284	1594288	476617	OAK 16"
7285	1594276	476617	OAK 14"
7286	1594261	476613	OAK 10"
7287	1594255	476615	OAK 28"
7288	1594226	476622	OAK 10"
7289	1594224	476623	OAK 10"
7290	1594280	476646	OAK 10"
7291	1594213	476584	OAK 16"
7292	1594215	476586	OAK 14"
7293	1594208	476601	OAK 14"
7294	1594168	476593	OAK 16"
7295	1594165	476595	OAK 16"
7296	1594254	476555	OAK 14"
7297	1594257	476555	OAK 14"
7298	1594287	476558	OAK 14"
7299	1594274	476570	OAK 16"
7300	1594280	476588	OAK 24"
7301	1594196	476536	OAK 16"
7302	1594184	476539	OAK 24"
7303	1594188	476552	OAK 18"
7304	1594192	476557	OAK 16"
7305	1594198	476559	OAK 12"
7306	1594283	476529	OAK 12"
7307	1594296	476539	OAK 14"
7308	1594276	476519	OAK 10"
7309	1594295	476512	OAK 16"
7310	1594280	476446	OAK 30"
7311	1594277	476470	OAK 20"
7312	1594257	476445	OAK 20"
7313	1594301	476448	OAK 18"

TREE TABLE			
Point #	Northing	Easting	Description
7314	1594302	476457	OAK 14"
7315	1594301	476472	OAK 18"
7316	1594299	476475	OAK 18"
7317	1594297	476474	OAK 12"
7318	1594299	476477	OAK 12"
7319	1594308	476428	OAK 14"
7320	1594253	476478	OAK 14"
7321	1594257	476431	OAK 12"
7322	1594244	476439	OAK 10"
7323	1594285	476421	OAK 20"
7324	1594275	476419	OAK 14"
7325	1594296	476374	OAK 28"
7326	1594270	476392	OAK 48"
7327	1594290	476377	OAK 16"
7328	1594299	476356	OAK 14"
7329	1594291	476347	OAK 16"
7330	1594299	476351	OAK 12"
7331	1594269	476369	OAK 12"
7332	1594255	476350	OAK 24"
7333	1594309	476324	OAK 26"
7334	1594284	476321	OAK 28"
7335	1594277	476317	OAK 18"
7336	1594283	476298	OAK 26"
7337	1594277	476298	OAK 20"
7338	1594308	476304	OAK 10"
7339	1594313	476300	OAK 16"
7340	1594358	476305	OAK 36"
7341	1594347	476253	OAK 24"
7342	1594349	476263	OAK 16"
7343	1594345	476262	OAK 10"
7344	1594351	476246	OAK 10"
7345	1594315	476268	OAK 12"
7346	1594315	476241	OAK 16"
7347	1594304	476249	OAK 16"
7348	1594272	476268	OAK 18"
7349	1594264	476267	OAK 18"
7350	1594296	476257	OAK 10"
7351	1594299	476244	OAK 10"
7352	1594292	476226	OAK 14"
7353	1594285	476224	OAK 16"
7354	1594285	476221	OAK 10"
7355	1594294	476214	OAK 14"
7356	1594273	476217	OAK 18"
7357	1594308	476199	OAK 16"
7358	1594300	476198	OAK 16"
7359	1594291	476195	OAK 16"
7360	1594302	476188	OAK 20"
7361	1594291	476189	OAK 16"
7362	1594340	476185	OAK 18"
7363	1594342	476189	OAK 18"
7364	1594346	476181	OAK 14"
7365	1594305	476170	OAK 18"
7366	1594296	476162	OAK 10"
7367	1594288	476161	OAK 14"
7368	1594286	476156	OAK 14"
7369	1594301	476142	OAK 16"
7370	1594290	476143	OAK 16"
7371	1594282	476136	OAK 18"
7372	1594294	476144	OAK 28"
7373	1594317	476147	OAK 14"
7374	1594354	476152	OAK 16"
7375	1594348	476163	OAK 14"
7376	1594338	476179	OAK 16"
7377	1594335	476184	OAK 16"
7378	1594335	476187	OAK 16"
7379	1594353	476123	OAK 14"
7380	1594365	476139	OAK 14"
7381	1594331	476121	OAK 16"
7382	1594353	476109	OAK 12"
7383	1594353	476115	OAK 16"
7384	1594348	476092	OAK 16"
7385	1594366	476094	OAK 16"
7386	1594351	476086	OAK 16"
7387	1594387	476115	OAK 18"
7388	1594345	476082	OAK 12"

TREE TABLE			
Point #	Northing	Easting	Description
7389	1594286	476120	OAK 12"
7390	1594294	476120	OAK 16"
7391	1594155	476497	OAK 26"
7392	1594166	476503	OAK 16"
7393	1594166	476496	OAK 16"
7394	1594187	476503	OAK 18"
7395	1594182	476497	OAK 14"
7396	1594181	476496	OAK 26"
7397	1594187	476470	OAK 14"
7398	1594189	476469	OAK 14"
7399	1594190	476472	OAK 16"
7400	1594188	476474	OAK 14"
7401	1594112	476482	OAK 18"
7402	1594172	476365	OAK 16"
7403	1594235	476283	OAK 16"
7404	1594222	476287	OAK 16"
7405	1594214	476302	OAK 18"
7406	1594238	476302	OAK 10"
7407	1594232	476257	OAK 12"
7408	1594232	476309	OAK 10"
7409	1594190	476249	OAK 10"
7410	1594205	476246	OAK 10"
7411	1594204	476235	OAK 16"
7412	1594207	476231	OAK 12"
7413	1594194	476232	OAK 12"
7414	1594198	476249	OAK 12"
7415	1594182	476288	OAK 12"
7416	1594256	476239	OAK 12"
7417	1594235	476217	OAK 12"
7418	1594235	476196	OAK 12"
7419	1594232	476186	OAK 16"
7420	1594270	476167	OAK 16"
7421	1594236	476196	OAK 12"
7422	1594217	476208	OAK 12"
7423	1594204	476216	OAK 10"
7424	1594199	476201	OAK 12"
7425	1594196	476189	OAK 10"
7426	1594184	476200	OAK 10"
7427	1594184	476191	OAK 10"
7428	1594167	476209	OAK 10"
7429	1594167	476217	OAK 10"
7430	1594162	476216	OAK 10"
7431	1594158	476226	OAK 12"
7432	1594123	476217	OAK 12"
7433	1594117	476223	OAK 10"
7434	1594121	476225	OAK 10"
7435	1594112	476227	OAK 16"
7436	1594134	476238	OAK 10"
7437	1594130	476272	OAK 10"
7438	1594139	476243	OAK 10"
7439	1594092	476256	OAK 12"
7440	1594100	476240	OAK 10"
7441	1594112	476205	OAK 14"
7442	1594130	476185	OAK 14"
7443	1594131	476190	OAK 12"
7444	1594162	476185	OAK 16"
7445	1594179	476165	OAK 16"
7446	1594171	476153	OAK 10"
7447	1594168	476144	OAK 10"
7448	1594141	476125	OAK 10"
7449	1594149	476136	OAK 14"
7450	1594227	476178	OAK 14"
7451	1594129	476307	OAK 10"
7452	1594131	476306	OAK 10"
7453	1594131	476302	OAK 10"
7454	1594314	476820	OAK 14"
7455	1594325	476820	OAK 16"
7456	1594299	476809	OAK 12"
7457	1594290	476838	OAK 12"
7458	1594313	476783	OAK 14"
7459	1594320	476786	OAK 14"
7460	1594319	476784	OAK 10"
7461	1594363	476793	OAK 10"
7462	1594352	476796	OAK 12"
7463	1594381	476795	OAK 12"

TREE TABLE			
Point #	Northing	Easting	Description
7464	1594355	476794	OAK 16"
7465	1594357	476798	OAK 16"
7466	1594367	476796	OAK 16"
7467	1594415	476805	OAK 18"
7468	1594402	476803	OAK 18"
7469	1594428	476804	OAK 12"
7470	1594452	476827	OAK 12"
7471	1594446	476827	OAK 18"
7472	1594453	476796	OAK 16"
7473	1594405	476697	OAK 36"
7474	1594336	476722	OAK 28"
7475	1594486	476789	OAK 36"
7476	1594494	476803	OAK 14"
7477	1594503	476802	OAK 16"
7478	1594375	476499	OAK 12"
7479	1594362	476460	OAK 12"
7480	1594353	476479	OAK 10"
7481	1594350	476494	OAK 10"
7482	1594327	476467	OAK 10"
7483	1594335	476464	OAK 10"
7484	1594363	476448	OAK 12"
7485	1594360	476411	OAK 10"
7486	1594361	476400	OAK 10"
7487	1594372	476425	OAK 20"
7488	1594402	476369	OAK 10"
7489	1594383	476364	OAK 10"
7490	1594357	476384	OAK 10"
7491	1594377	476345	OAK 14"
7492	1594413	476373	OAK 10"
7493	1594397	476302	OAK 10"
7494	1594400	476269	OAK 12"
7495	1594405	476274	OAK 14"
7496	1594426	476320	OAK 14"
7497	1594347	476237	OAK 10"
7498	1594360	476224	OAK 10"
7499	1594348	476228	OAK 12"
7500	1594362	476237	OAK 12"
7501	1594359	476221	OAK 18"
7502	1594365	476234	OAK 24"
7503	1594356	476201	OAK 16"
7504	1594376	476187	OAK 14"
7505	1594371	476169	OAK 16"
7506	1594370	476163	OAK 16"
7507	1594387	476184	OAK 12"
7508	1594392	476180	OAK 16"
7509	1594412	476191	OAK 20"
7510	1594379	476139	OAK 12"
7511	1594393	476139	OAK 10"
7512	1594388	476122	OAK 12"
7513	1594389	476117	OAK 14"
7514	1594384	476114	OAK 20"
7515	1594382	476094	OAK 16"
7516	1594422	476063	OAK 16"
7517	1594449	476090	OAK 10"
7518	1594460	476140	OAK 18"
7519	1594451	476075	PAL 12"
7520	1594468	476065	OAK 10"
7521	1594438	476214	OAK 10"
7522	1594458	476200	OAK 12"

MIZO & ASSOCIATES, LLC
PROFESSIONAL LAND SURVEYORS
1407 CUMBIE STREET
ORLANDO, FL 32804
(321) 200-4904
LICENSE BUSINESS NUMBER 8497

10/09/23

ALTA/NSPS LAND TITLE SURVEY

PREPARED FOR:
LENNAR HOMES
6675 WESTWOOD BOULEVARD #500
ORLANDO, FLORIDA 32821-8061

BOUNDARY, TOPOGRAPHIC & TREE SURVEY
LYING IN
SECTIONS 30, TOWNSHIP 20 SOUTH, RANGE 30 EAST

SHEET
4 OF 4

GRAPHIC SCALE

(IN FEET)
1 inch = 80 ft.

SOILS LEGEND:

USGS SOILS LINE

CHANDLER-APOPKA FINE SANDS 5 TO 12% SLOPES

PIT

SANIBEL MUCK

TAVARES-MILLHOPPER COMPLEX 0 TO 5% SLOPES

NOT PLATTED
ORANGE COUNTY BCC
PARCEL ID: 25-20-27-0000-00-004
ORANGE CO DOC# 20190585219

FUTURE LAND USE: RURAL
ZONING: A-1 (COUNTY)
EXISTING USE: VACANT

LOT 3
BENTON'S PLYMOUTH OAKS ADDITION
PB 18, PG(S) 90
BROWN, KENNETH & VERNETT
PARCEL ID: 30-20-28-0639-00-030
ORANGE CO DOC# 20190585219

LOT 4
BENTON'S PLYMOUTH OAKS ADDITION
PB 18, PG(S) 90
BROWN, KENNETH & VERNETT
PARCEL ID: 30-20-28-0639-00-040
ORANGE CO DOC# 20190585219

FUTURE LAND USE: RURAL
ZONING: R-CE-2 (COUNTY)
EXISTING USE: RESIDENTIAL

10+00 11+00 12+00 SAN SEWER STA:11+84.91

WESTERN BELTWAY
RIGHT-OF-WAY VARIES

PLYMOUTH SORRENTO ROAD
60' RIGHT-OF-WAY
PER OCPAFL.ORG

FUTURE LAND USE: LDR
ZONING: R-1AAAA (COUNTY)
EXISTING USE: RESIDENTIAL

FUTURE LAND USE: RURAL
ZONING: A-1
EXISTING USE: S.R. 429

FUTURE LAND USE: RLS
ZONING: RSF-1A
EXISTING USE: RESIDENTIAL

FUTURE LAND USE: RLS
ZONING: RSF-1A
EXISTING USE: RESIDENTIAL

CITY OF APOPKA KARST GIS LINE

NOT PLATTED
MACAULAY, GEORGE
PARCEL ID: 25-20-27-0000-00-022
ORB 10986, PG(S) 0036

A PORTION OF LOTS 9 & 10
BAILEY'S ADDITION TO PLYMOUTH
PB B, PG(S) 145
PARMANI FARMS, LLC
PARCEL ID: 30-20-28-048400-085
ORANGE CO DOC # 20230484647

TRACT TABLE

TRACT LABEL	TRACT TYPE	Area (Ac.)	TRACT DEDICATED TO	EASEMENT DEDICATED TO
-	Rights-of-Way	6.43	City of Apopka	
RW-1	Right-of-Way Dedication	0.71	Orange County	
OS-1	Open Space/Recreation Area	4.97	City of Apopka	
OS-2	Open Space/Recreation Area	1.66	HOA	
OS-3	Open Space/Wall Tract	0.38	HOA	
OS-4	Open Space/Wall Tract	1.49	HOA	
SW-1	Stormwater Tract	6.14	HOA	City of Apopka
LS-1	Lift Station Tract	0.06	City of Apopka	

SITE DATA:

Parcel I.D. #: 25-20-27-0000-00-008; 021; 022
30-20-28-0484-00-040; 060; 085

Property FLU: RLS
Property Zoning: RSF-1B

Gross Land Area:	40.55 acres
Lakes/Wetland Area:	0.03 acres
Gross Developable Area:	40.52 acres
Net Developable Area:	40.52 acres
Stormwater Management Area:	6.14 acres
Right-of-Way Area:	6.43 acres
Right-of-Way Dedication:	0.71 acres
Public Open Space Tracts:	7.08 acres
Proposed Residential Units:	86 Single-Family Detached Lots
Net Residential Density:	2.16 dwelling units/Net Developable Acre
Minimum Living Area:	1,600 sqft. (Heated/cooled space)RSF-1B
Maximum Building Height:	Two Stories, 35'
Minimum Lot Width:	75' (RSF-1B)
Minimum Lot Depth:	N/A
Minimum Lot Size:	8,000 (RSF-1B)
Maximum Lot Coverage:	60%
Minimum Open Space %:	25%

Setbacks:

Front:	25' (RSF-1B)
Side:	10' (RSF-1B)
Side Street:	25' (RSF-1B)
Rear:	25' (RSF-1B)

Open Space Requirements:

Land Development Code (Residential 20%)
40.52ac. * .20 = 8.10 acres (required)
Open Space Provided:

Tract OS-1:	4.97 acres
Tract OS-2:	1.66 acres
Tract OS-3:	0.38 acres
Tract OS-4:	1.49 acres
Tract SW-1:	6.14 acres
Total:	14.64 acres (8.10 required)

Major Street Setbacks:

Plymouth Sorrento Road. 30' (setback from right-of-way line)

Additional Notes:

1. Billboards and pole signs shall be prohibited.
2. There is no proposed 100 yr. Flood Plain encroachment.
3. All Conservation Easements associated buffers area will be owned & maintained by the HOA with a development rights Easement dedicated to the City of Apopka via plat.
4. A Homeowner's Association will be created for maintenance and ownership of common area tracts as reflected in the tract table.
5. Fire Protection will be provided by City of Apopka in accordance with the 2023 Florida Fire Prevention Code.
6. The project will be constructed in a single phase.

Off-Street Parking:

Required Parking:

2.0 spaces per Unit (for Single-Family Residences): (86 units x 2.0 spaces/unit) = 172
Total Required Parking: 172 spaces

Provided Parking:
2 Garage Spaces per Unit: 172
2 Driveway Spaces per Unit:
Total Parking Provided: 172 spaces

Phasing: 172 spaces
172 spaces

This project is to be developed in a single phase.

Traffic:

Single-Family Residential: 86 d.u. * 9.57 trip/d.u. = 823 A.D.T.

Stormwater Management:

The project will meet the requirements of City of Apopka Land Development Code and the St. Johns River Water Management District.

School Age Population:

86 d.u. * .478 children/unit = 41 children

Needed Fire Flow (NFF): (Based on FFPC 2012 Edition Chapter 18 & Annex I)

Single-Family (less than 5,000 sqft.): 1,000 gpm

Water, Sewer and Solid Waste Demand:

Water Demand:
86 Units * 300 gallons/day = 25,800 gallons/day

Sewer Demand:
86 Units * 280 gallons/day = 24,080 gallons/day

Solid Waste Demand:
86 Units * 2.6 persons/unit * 4.3 Lb./person/day = 961 Lb/day

Recreational/Open Space Demand:
86 Units * 2.6 persons/unit /1,000 * 3.0 ac/1,000 persons = 0.67 ac.

Green Building Standards Points Allocation:

- Install a "cool roof" on a minimum of 50 percent of the dwelling units in a subdivision. The cool roof shall cover the entire roof of the building. Install a "cool roof" on a minimum of 50 percent of the buildings in a multi-building development. The cool roof shall cover the entire roof of the building. — 1.50 points
- Installation of Energy Star HVAC. — 0.50 points
- Construction of Vegetated Structures to shade HVAC Units: — 0.25 points
- Pre-Wire a Minimum of 75 percent of residential dwelling units in the development for solar panels. — 1.50 points
- Install Operable Windows to Allow for Natural Ventilation in the event of power failures: — 0.25 points

G L SUMMITT
ENGINEERING INC
Office: Lake Mary
3667 Simonton Place
Lake Mary, Florida 32746
phone: 407-323-0705
fax: 407-992-8650
www.GLSeng.com

Lennar Homes Orlando
6675 Westwood Blvd.
Orlando, FL 32821

Ridgebrooke Subdivision
City of Apopka, Florida

Major Development Plan

Overall Site Plan

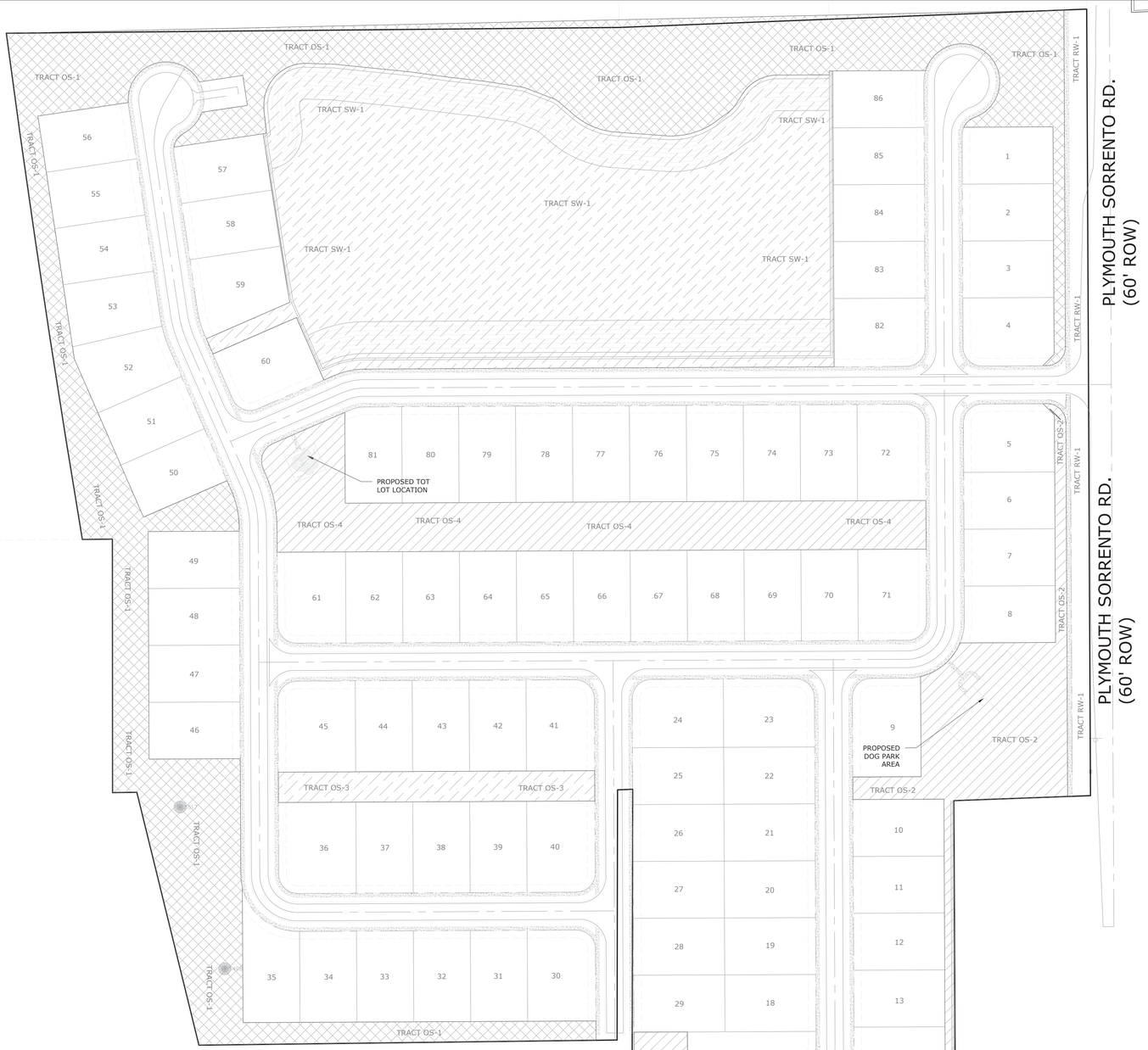
Plans not valid unless Signed, Dated and Sealed below.

GEOFFREY L. SUMMITT, P.E.
Date: December 08, 2024
FL Registration #58775
Certificate of Authorization #29665

Revisions

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

SHEET NUMBER
7 OF 24



OPEN SPACE SET-ASIDE HATCH LEGEND

ACTIVE RECREATIONAL AREA

PASSIVE RECREATIONAL AREA

GENERAL OPEN SPACE

Open Space Requirements:

Land Development Code (Residential 20%)
40.52ac. * .20 = 8.10 acres (required)
Open Space Provided:

Tract OS-1:	4.97 acres
Tract OS-2:	1.66 acres
Tract OS-3:	0.38 acres
Tract OS-4:	1.49 acres
Tract SW-1:	6.14 acres
Total:	

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

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Orlando, FL 32821

Ridgebrooke Subdivision

City of Apopka, Florida

Major Development Plan

Open Space Rec Plan

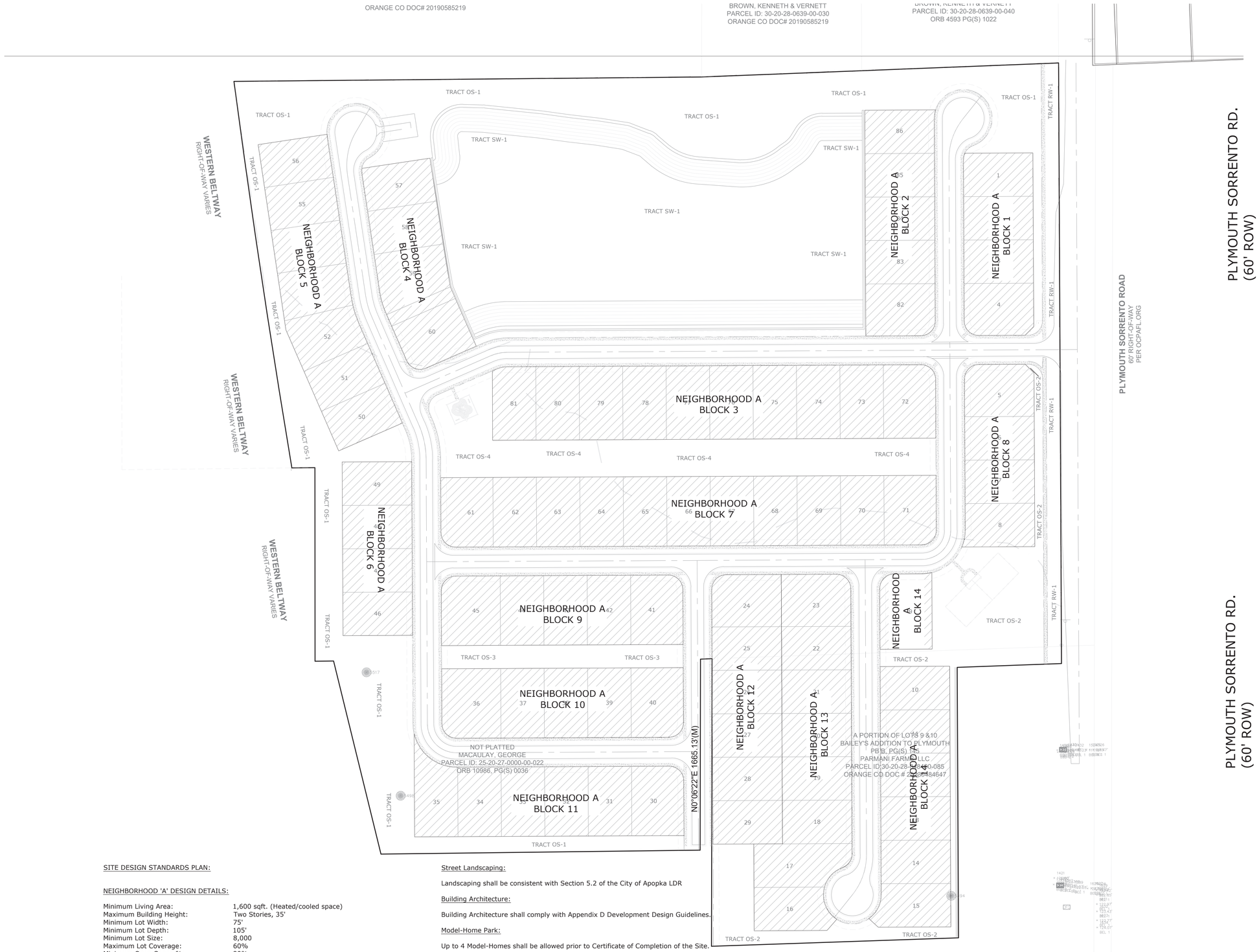
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Certificate of Authorization #29665

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SHEET NUMBER
8 OF 24



SITE DESIGN STANDARDS PLAN:

NEIGHBORHOOD 'A' DESIGN DETAILS:

Minimum Living Area:	1,600 sqft. (Heated/cooled space)
Maximum Building Height:	Two Stories, 35'
Minimum Lot Width:	75'
Minimum Lot Depth:	105'
Minimum Lot Size:	8,000
Maximum Lot Coverage:	60%
Minimum Open Space %:	20%
Garage Location:	Front-Entry (2-Car)
Setbacks:	
Front:	25' (RSF-1B)
Side:	10' (RSF-1B)
Side Street:	25' (RSF-1B)
Rear:	25' (RSF-1B)
Accessory Uses:	Those permitted by code
Architectural Design:	Consistent with Appendix D Development Design Guidelines

Street Landscaping:

Landscaping shall be consistent with Section 5.2 of the City of Apopka LDR

Building Architecture:

Building Architecture shall comply with Appendix D Development Design Guidelines.

Model-Home Park:

Up to 4 Model-Homes shall be allowed prior to Certificate of Completion of the Site.

GRAPHIC SCALE

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Design Standards Plan

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SHEET NUMBER
9 OF 24

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

NOT PLATTED
ORANGE COUNTY BCC
PARCEL ID: 25-20-27-0000-00-004
ORANGE CO DOC# 20190585219

LOT 3
BENTON'S PLYMOUTH OAKS ADDITION
PB 18, PG(S) 90
BROWN, KENNETH & VERNETT
PARCEL ID: 30-20-28-0639-00-030
ORANGE CO DOC# 20190585219

LOT 4
BENTON'S PLYMOUTH OAKS ADDITION
PB 18, PG(S) 90
BROWN, KENNETH & VERNETT
PARCEL ID: 30-20-28-0639-00-040
ORB 4593 PG(S) 1022

10+00

PROPERTY LINE

TRACT OS-1

TRACT LS-1

TRACT SW-1

TRACT RW-1

TRACT OS-2

TRACT OS-4

WESTERN BELTWAY
RIGHT-OF-WAY VARIES

50.0' ROW

22.0' PAVEMENT

10.0' UTILITY EASEMENT

30.0' ROW DEDICATION

6.0' SIDEWALK

15.0' LANDSCAPE BUFFER

5.0' SIDEWALK

PROPOSED TOT LOT

Lots 51–86 and 1–6 with 10.0' SIDE SETBACK, 25.0' REAR SETBACK, 25.0' FRONT SETBACK, 25.0' SIDE STREET SETBACK

SEE SHEET 11 OF 24

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City of Apopka, Florida

Major Development Plan

Detailed Site Plan 1

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Major Development Plan

Detailed Site Plan 2

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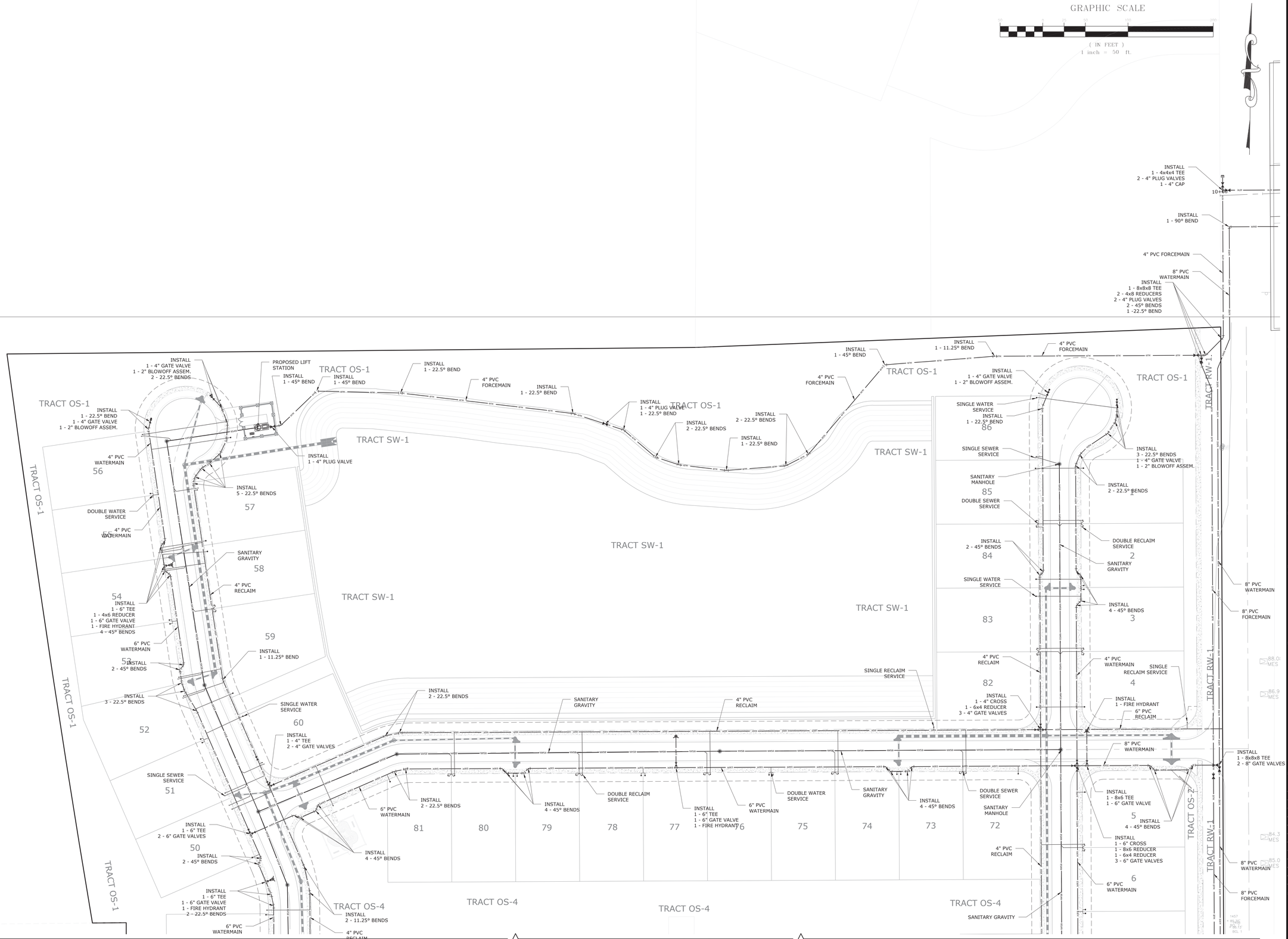
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SHEET NUMBER
11 OF 24

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft



SEE SHEET 13 OF 24

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Major Development Plan

Utility Plan 1

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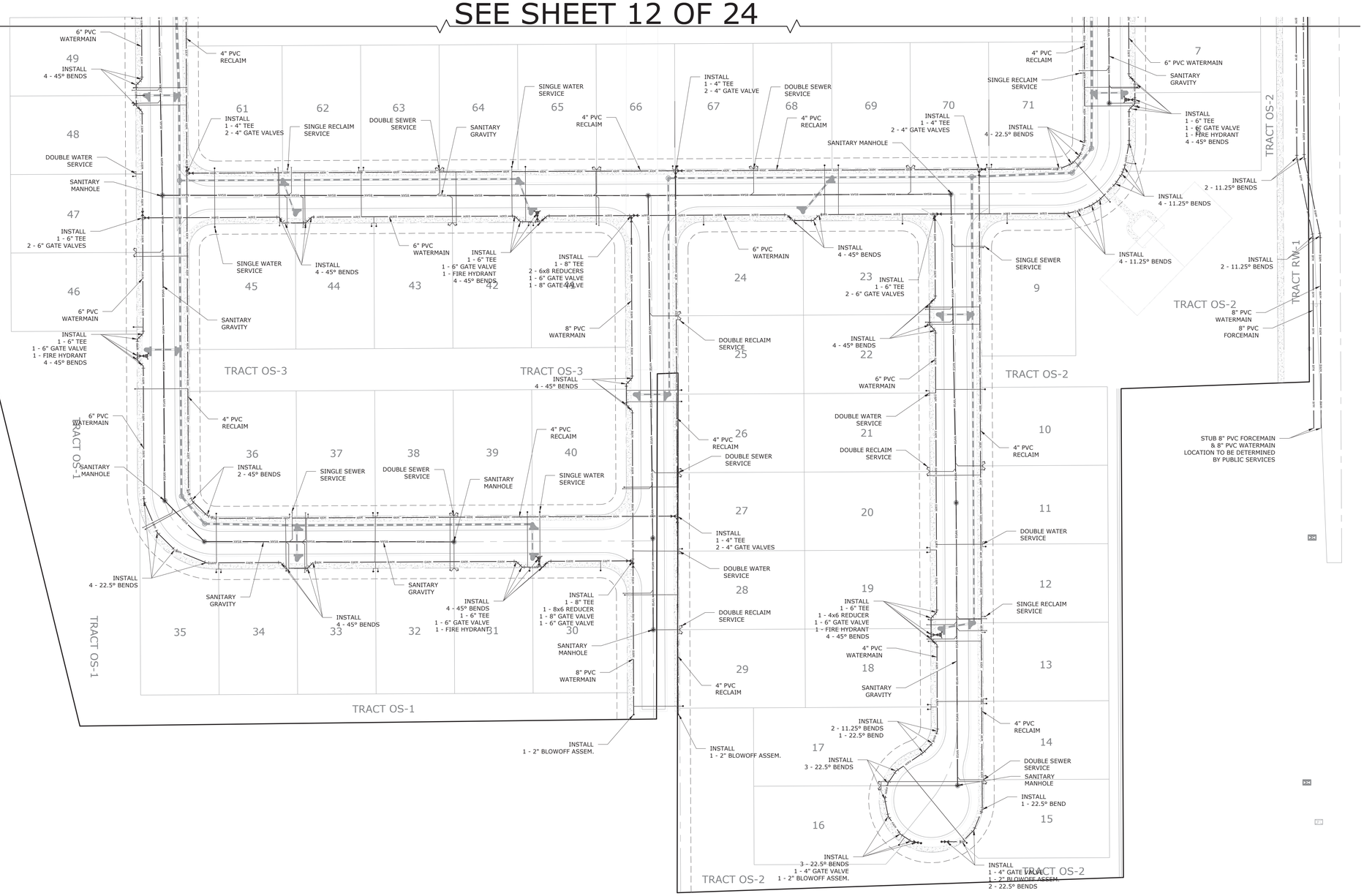
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SHEET NUMBER
12 OF 24

SEE SHEET 12 OF 24



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

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GRAPHIC SCALE

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10+00

WESTERN BELTWAY
RIGHT-OF-WAY VARIES

TRACT OS-1
TRACT SW-1
TRACT RW-1
TRACT OS-2
TRACT OS-4
5' SIDEWALK
STORM INLET
STORM PIPE
MITERED END SECTION
50' ROW ROAD SECTION
TYPE 'F' CURB
6' BLOCK RETAINING WALL
DRY RETENTION POND DETAIL
VALLEY GUTTER
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SEE SHEET 15 OF 24

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Major Development Plan

Drainage & Grading Plan 1

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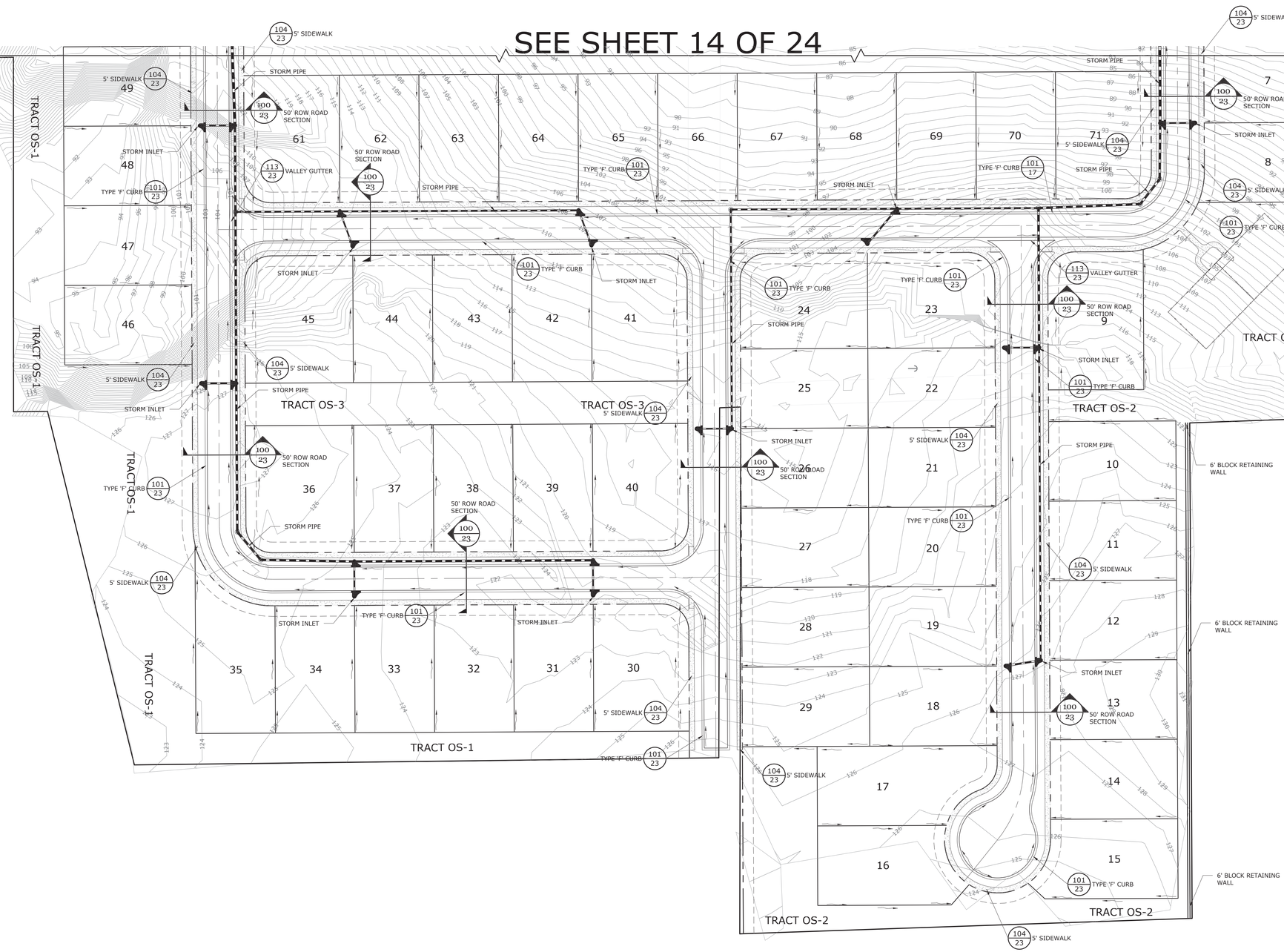
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14 OF 24

SEE SHEET 14 OF 24



GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

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City of Apopka, Florida

Major Development Plan

Drainage & Grading Plan 2

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SHEET NUMBER
15 OF 24





PLYMOUTH HARBOR RD. IMPROVEMENT PLAN

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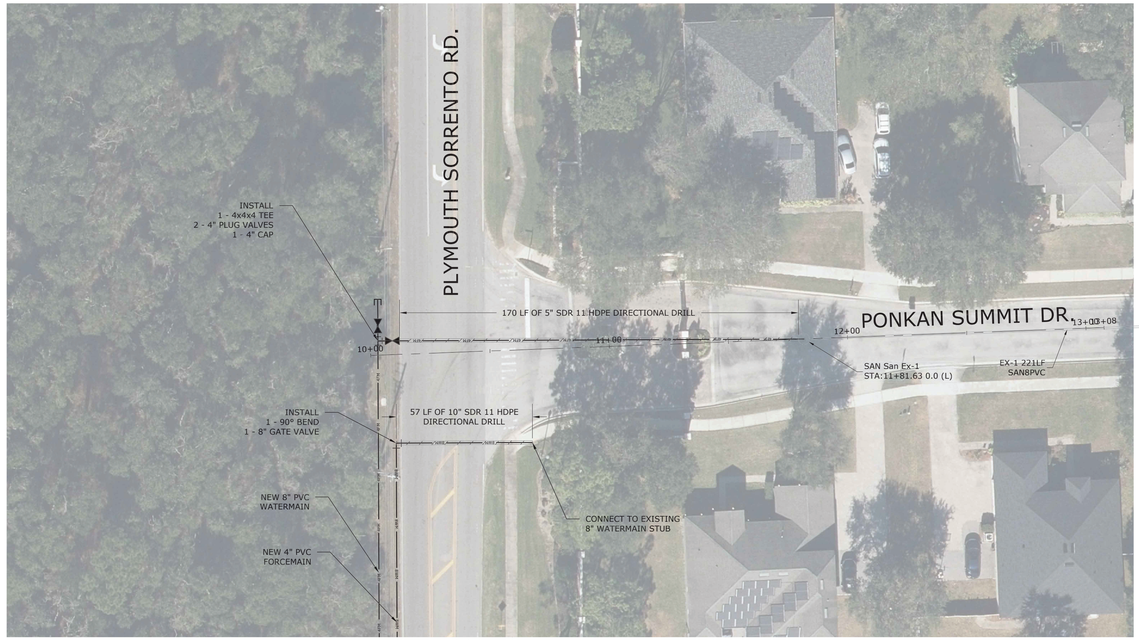
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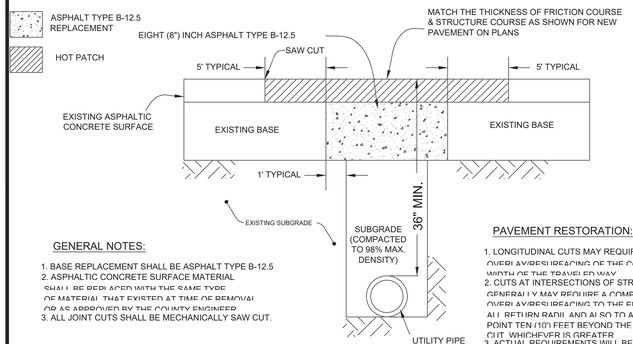
(IN FEET)
1 inch = 30 ft.



PONKAN SUMMIT DRIVE: STA: 10+00 - 10+75

NOTE:

SUB-GRADE CUT TO BE COMPACTED TO 98% MAX. DENSITY AS DETERMINED BY AASHTO T - 180.
CUT TO BE REPLACED WITH AN EIGHT (8") INCH 3000 PSI HIGH EARLY CONCRETE TO TOP OF EXISTING BASE.
CUT AREA TO BE PLATED OR PROTECTED ON DAY OF POUR. EXISTING SURFACE TO BE SAW CUT
TO AN AREA FIVE (5') FEET, BEYOND THE BASE CUT.



GENERAL NOTES:

1. BASE REPLACEMENT SHALL BE ASPHALT TYPE B-12.5
2. ASPHALTIC CONCRETE SURFACE MATERIAL
SHALL BE REPLACED WITH THE SAME TYPE
OF MATERIAL THAT EXISTED AT TIME OF REMOVAL
OR AS APPROVED BY THE COUNTY ENGINEER.
3. ALL JOINT CUTS SHALL BE MECHANICALLY SAW CUT.

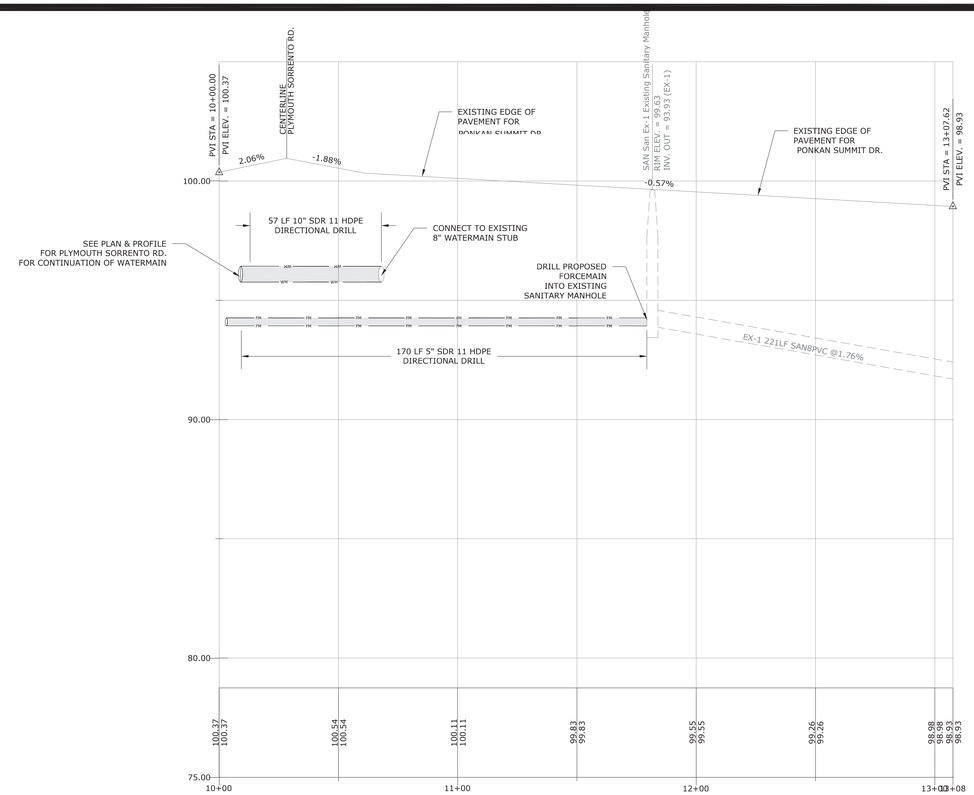
PAVEMENT RESTORATION:

1. LONGITUDINAL CUTS MAY REQUIRE
OVERLAY/RESURFACING OF THE COMPLETE
WIDTH OF THE TRAVELED WAY.
2. CUTS AT INTERSECTIONS OF STREETS
GENERALLY MAY REQUIRE A COMPLETE
OVERLAY/RESURFACING TO THE END OF
ALL RETURN RADII AND ALSO TO A
POINT TEN (10') FEET BEYOND THE
CUT, WHICHEVER IS GREATER.
3. ACTUAL REQUIREMENTS WILL BE AS
STATED ON THE APPROVED PERMIT
OR AS DIRECTED BY INSPECTION.

STANDARD ROADWAY OPENCUT CROSS SECTION DETAIL

FINAL RESTORATION - TYPICAL OF MAJOR OPEN CUTS

NOTE: CONTRACTOR TO CORE DRILL
AND MATCH EXISTING SECTION OR
SPECIFIED SECTION WHICHEVER IS
GREATER.



PROFILE SCALE:
HORZ: 1" = 30'
VERT: 1" = 3'

NOTE:
IF SEASONAL HIGH WATER IS NOT SHOWN ON PROFILE THEN ELEVATION IS LOWER THAN PROFILE DATUM ELEVATION.

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Major Development Plan

Wekiva Run Sewer Connection

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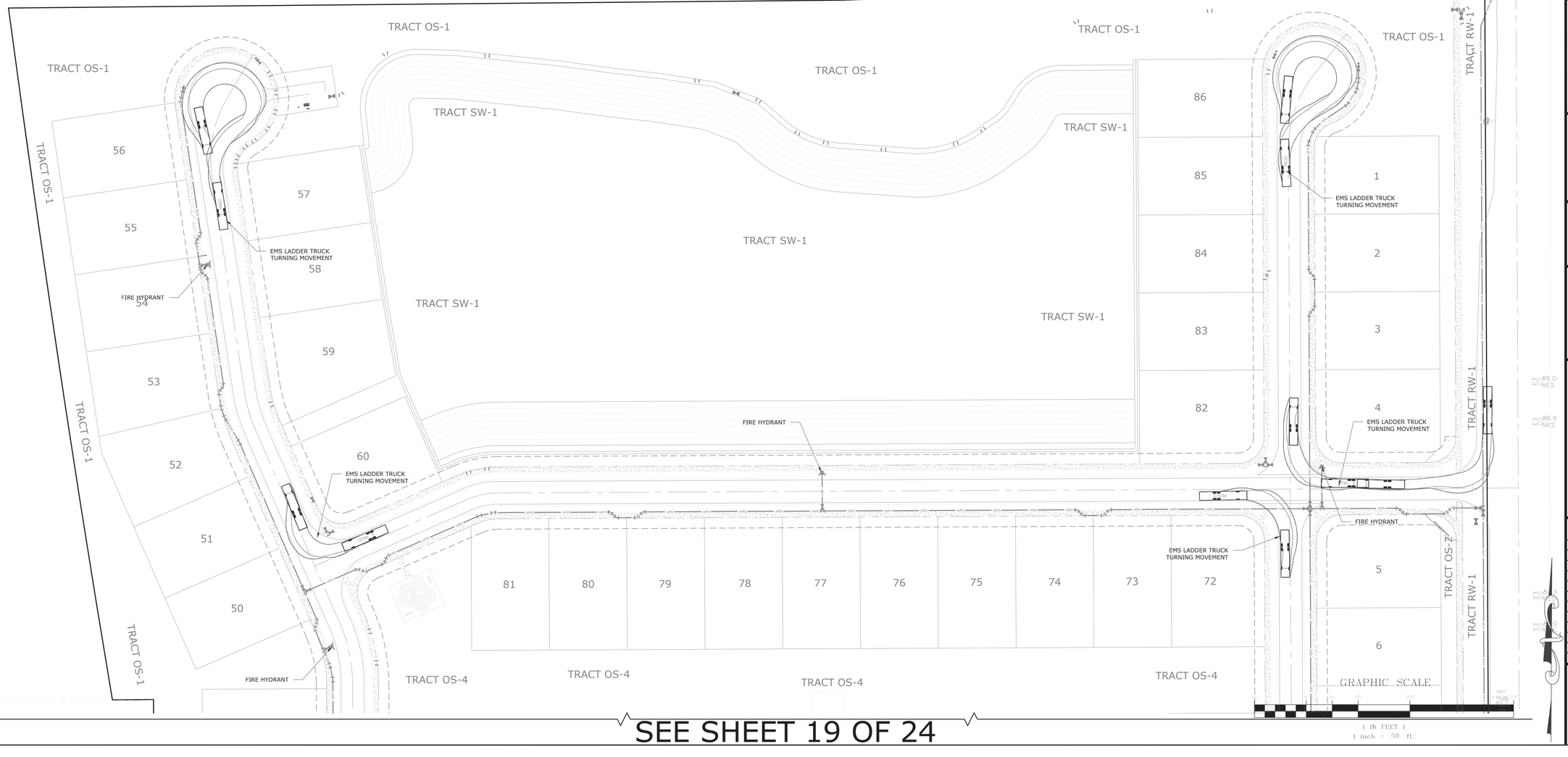
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SHEET NUMBER
17 OF 24

NOTES:

1. Fire flow based on FFPC 7th (NFPA 1 and 101 2023 edition) for building is 1,000 gpm or based Table 18.1.
2. Fire hydrants within 250' of building via Fire Department Access Road shall be allowed 1,500 gpm max fire flow credit, over 250' from building max. fire flow credit shall be 1,000 gpm.
3. Non-Sprinklered building shall provide 150' hose lay to all exterior points on the building from the approved Fire Department Access Road(s).
4. Overall Length (Bumper to Bumper)- 45.7 feet Width - 8.33 feet Track - 8.33 feet Lock to Lock Time - 6.0 Steering Angle- 44.2 degrees Min Centerline Radius - 29 feet
5. Fire hydrants shall be marked with blue reflectors in the pavement adjacent to the hydrant.



SEE SHEET 19 OF 24

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Ridgebrooke Subdivision

City of Apopka, Florida

Major Development Plan

Truck Turning Plan 1

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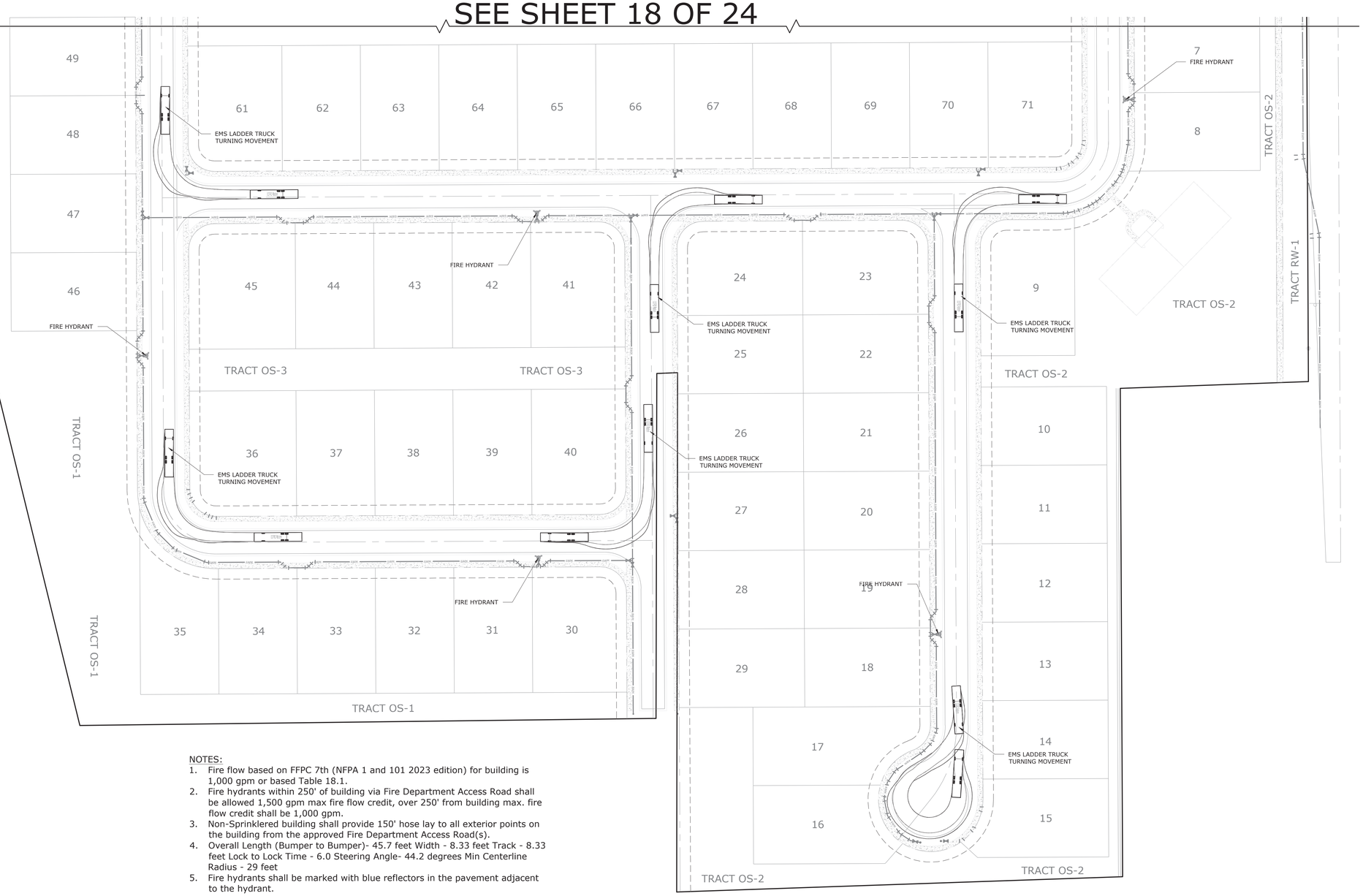
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SHEET NUMBER
18 OF 24

SEE SHEET 18 OF 24



NOTES:

1. Fire flow based on FFPC 7th (NFPA 1 and 101 2023 edition) for building is 1,000 gpm or based Table 18.1.
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GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

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City of Apopka, Florida

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Truck Turning Plan 2

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SHEET NUMBER
19 OF 24

GRAPHIC SCALE

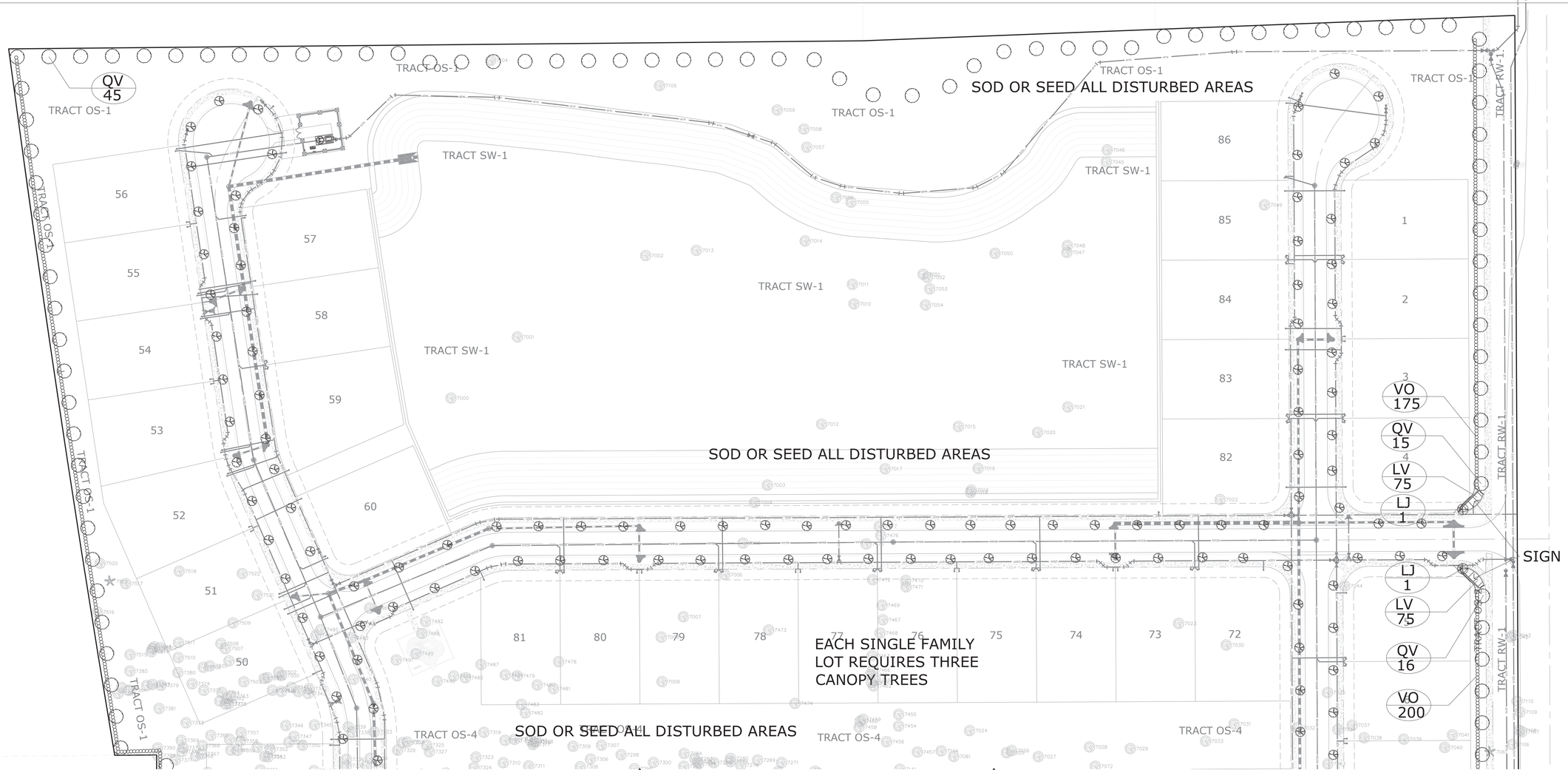
(IN FEET)
1 inch = 50 ft.

Ravensdale Planning & Design

Land Planning • Landscape Architecture • Project Management • Expert Witness

3208 C East Colonial Drive #294 Orlando, Florida 32803

(407) 647-1213



SEE SHEET 21 OF 24

REGISTERED LANDSCAPE ARCHITECT
SCOTT V. MOORE
LA1020
STATE OF FLORIDA

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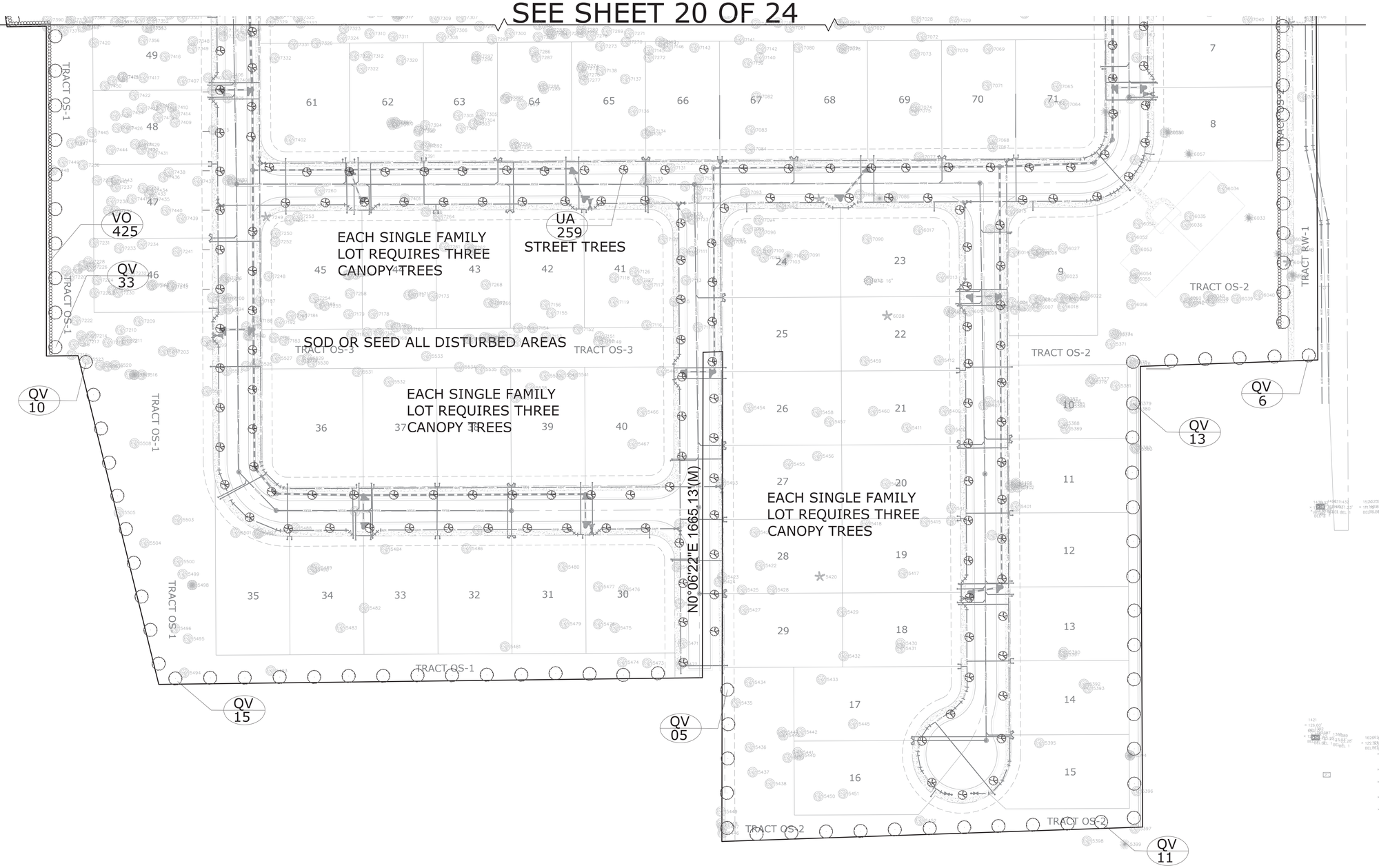
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REGISTERED LANDSCAPE ARCHITECT
SCOTT V. MOORE
LA1020
STATE OF FLORIDA

Ravensdale Planning & Design
Land Planning • Landscape Architecture • Project Management • Expert Witness
3206 C East Colonial Drive #294 Orlando, Florida 32803
(407) 647-1213

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

SHEET NUMBER
21 OF 24

TREE CALCULATIONS:

TOTAL PROTECTED INCHES ON SITE:	13,321"
TOTAL INCHES REMOVED:	13,321"
TOTAL INCHES RETAINED:	0
TOTAL SPECIMEN INCHES RETAINED:	0
TOTAL INCHES REQUIRED:	13,321"
TOTAL INCHES REPLACED:	2,058"
TOTAL INCHES POST DEVELOPMENT:	2,058"
SITE CLEARING AREA IN SQUARE FEET/ACRES:	30 acres

TREE CALCULATION

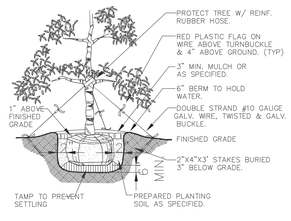
	REMOVED	SAVED
# OF SPECIMEN TREES	188	0
# OF CANOPY TREES	512	0
# OF UNDERSTORY TREES	0	0
TOTAL INCHES REMOVED	11,321"	SAVED 0"

TREE REMOVAL CALCULATION

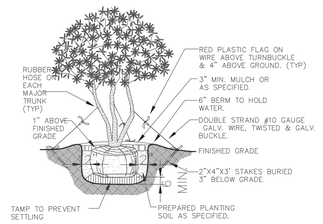
13,321" OAK TREES

13,321" TOTAL INCHES REMOVED
00" TOTAL INCHES SAVED
2,058" TOTAL INCHES INSTALLED
13,321" MINUS 2,058" INSTALLED= 11,263 X $15/IN.= $168,945
TO BE PAID INTO TREE MITIGATION BANK

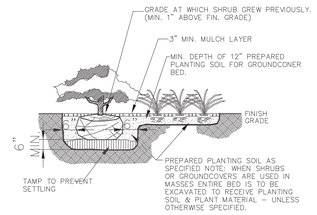
ALL LANDSCAPE AND IRRIGATION SHALL COMPLY WITH THE WATER WISE STANDARDS (SECTION 5.2.5.D)



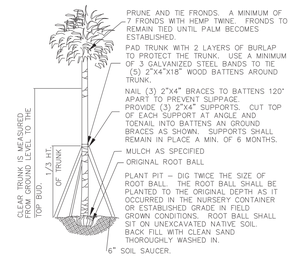
TREE PLANTING DETAIL



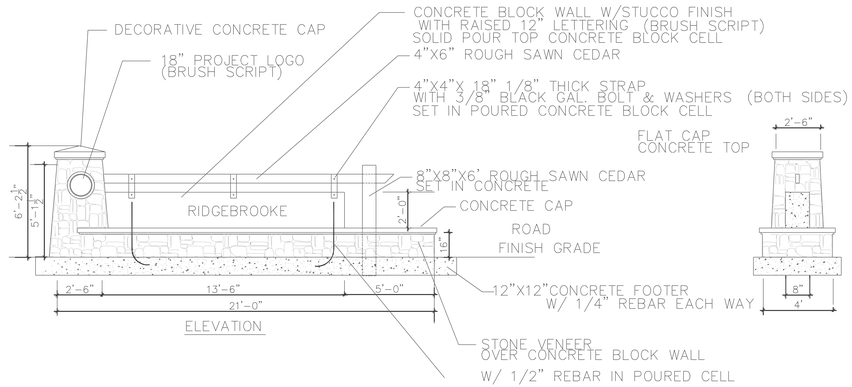
MULTI-TRUNK DETAIL



SHRUB AND GROUND COVER DETAIL



PALM PLANTING DETAIL



ENTRY SIGN-ELEVATION

NTS

PLANT LIST

SYMBOL	BOTANICAL NAME (COMMON NAME)	MINIMUM SIZE/SPACING	DROUGHT TOLERANCE	NATIVE FLORIDA	QUANTITY
QV	QUERCUS VIRGINIANA (LIVE OAK)	10' MIN.HT. 3" CAL.. 4'-5'MIN.SPREAD.	YES	YES	169
LJ	LIGUSTRUM JAPONICUM (LIGUSTRUM)	8' MIN.HT. 2.5" CAL.. 4'-5'MIN.SPREAD.	YES	NO	2
VO	VIBURNUM ODORATISSIMUM (SWEET VIBURNUM)	30" MIN.HT. 24" MIN.SPREAD 7 GAL. 30" O.C.	YES	NO	800
LV	LIRIOPE VARIEGATA (AZTEC GRASS)	1 GAL. 24" O.C.	YES	NO	150
	SINGLE FAMILY LOTS				
QV	QUERCUS VIRGINIANA (LIVE OAK) OR OTHER APPROVED CANOPY TREE	10' MIN.HT. 3" CAL.. 4'-5'MIN.SPREAD.	YES	YES	258
	STREET TREES (ROOT BARRIER REQUIRED FOR ALL STREET TREES)				
UA	ULMUS ALATA (WINGED ELM)	10' MIN.HT. 3" CAL.. 4'-5'MIN.SPREAD.	YES	YES	259
BAHIA SOD	QUANTITY TO BE CALCULATED BY CONTRACTOR		YES	YES	

PLANT SYMBOL 00 XX PLANT QUANITY

NOTE:
WHERE GALLON REFERENCES MAY CONFLICT WITH HEIGHT/SPREAD AND CALIPER MEASUREMENTS, THE HEIGHT/SPREAD AND CALIPER MEASUREMENTS SHALL GOVERN.

GENERAL LANDSCAPE NOTES

1. ALL PLANTS TO BE FLORIDA NO. 1, OR BETTER AS OUTLINED UNDER 'GRADES AND STANDARDS FOR NURSERY PLANTS, PART I, 1963 AND PART II, STATE OF FLORIDA DEPARTMENT OF AGRICULTURE, TALLAHASSEE, FLORIDA, AND ANY AMENDMENTS THERETO.
2. ALL TREES AND PLANT MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS DESCRIBED IN THE STATE DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF FORESTRY, "TREE PROTECTION MANUAL FOR BUILDERS AND DEVELOPERS", OCTOBER, 1980.
3. THE LANDSCAPE CONTRACTOR (CONTRACTED BY OWNER, N.I.C.) SHALL BE RESPONSIBLE FOR ALL MATERIALS AND ALL WORK AS CALLED FOR ON THE LANDSCAPE PLANS. THE LIST OF PLANT QUANTITIES ACCOMPANYING THE PLANS SHALL BE USED AS A GUIDE ONLY. IF A VARIATION OCCURS BETWEEN THE PLANS AND THE PLANT LIST, THE PLANS SHALL CONTROL.
4. ALL TREES, SHRUBS AND GROUND COVERS SHALL BE PLANTED USING A SOIL MIXTURE PREPARED ACCORDINGLY (2/3 EXISTING SOIL, 1/3 PEAT).
5. THE LANDSCAPE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS. VERTICAL DRILLING THROUGH ANY COMPACTED FILL TO NATIVE SOIL SHALL BE ACCOMPLISHED TO AID DRAINAGE.
6. ALL PLANT BEDS AND TREE WATERING BASINS SHALL BE TOP DRESSED WITH THREE INCHES (3") OF PINE BARK MULCH.
7. NO TREES SHALL BE PLANTED CLOSER THAN 3 FEET (3') FROM THE EDGE OF PAVEMENT TO ALLOW ADEQUATE TREE TRUNK PROTECTION .
8. LANDSCAPE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR STABILITY AND PLUMB CONDITION OF ALL TREES AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY THE INSTABILITY OF ANY PLANT MATERIAL.
9. ALL LAWN AREAS TO RECEIVE SOD SHALL BE DISKED FOUR(4) TO SIX(6) INCHES AND DRAGGED TO ESTABLISH A LEVEL FINISH GRADE. ALL DEBRIS TO BE REMOVED FROM THE SITE.
10. SOD SHALL BE FREE OF WEEDS AND PESTS. IT SHALL BE LAID EVENLY AND ROLLED, WITH TIGHT FITTING JOINTS. THE SOD SHALL CONTAIN MOIST SOIL WHICH DOES NOT FALL APART OR TEAR WHEN LIFTED. ALL AREAS NOT PAVED OR OTHERWISE LANDSCAPED SHALL BE SODDED. SOD SHALL BE ARGENTINE BAHIA'.
11. ALL LANDSCAPE AREAS TO BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND SYSTEM, DIRECT SPRAY HEADS AWAY FROM ANY NATURAL AREAS AND PAVED SURFACES.
12. THE TREE CALIPER OF ALL TREES SPECIFIED ON THE PLANT LIST SHALL BE AT LEAST TWO &HALF (2.5) INCHES IN DIAMETER WHEN MEASURED AT SIX (6) INCHES ABOVE GRADE.

REGISTERED LANDSCAPE ARCHITECT SCOTT V. MOORE LA1020 STATE OF FLORIDA

Ravensdale Planning & Design
Land Planning Landscape Architecture Project Management Expert Witness
5106 South Pointe Drive Inverness, Florida 34450
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Lennar Homes Orlando
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Orlando, FL 32821

Ridgebrooke Subdivision
City of Apopka, Florida

Major Development Plan

Landscape Details

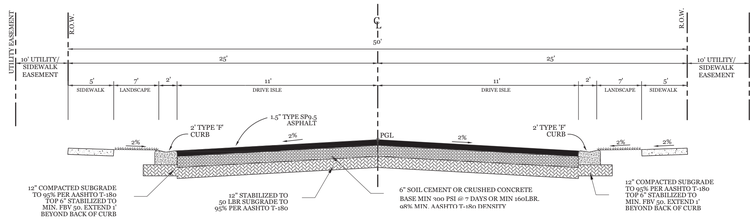
Plans not valid unless Signed. Dated and Sealed below.

GEOFFREY L. SUMMITT, P.E.
Date: December 08, 2024
FL Registration #58775
Certificate of Authorization #29665

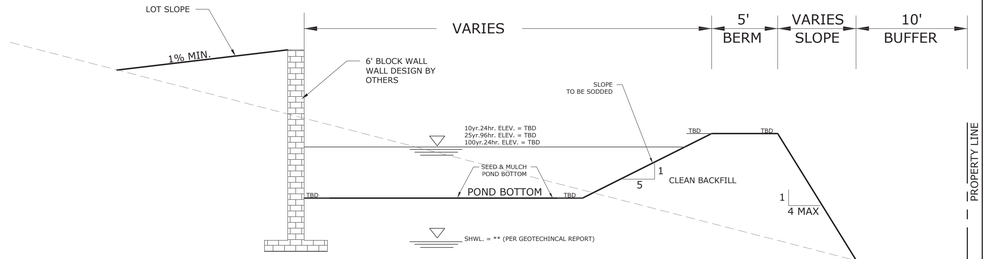
Revisions

NO.	DATE	DESCRIPTION
1	#####	##########################
2	#####	##########################
3	#####	##########################
4	#####	
5	#####	
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7	#####	
8	#####	
9	#####	
10	#####	

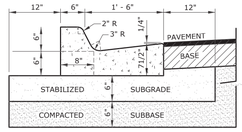
SHEET NUMBER
22 OF 24



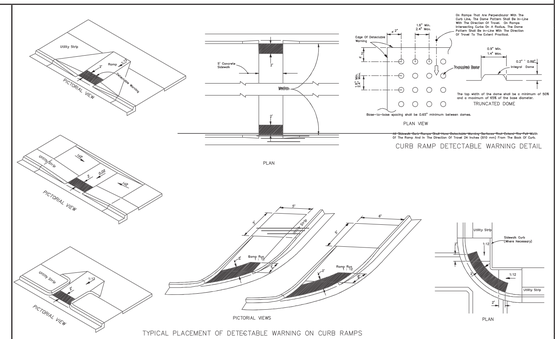
100 TYPICAL 50' ROW ROADWAY CROSS SECTION DETAIL
N.T.S.



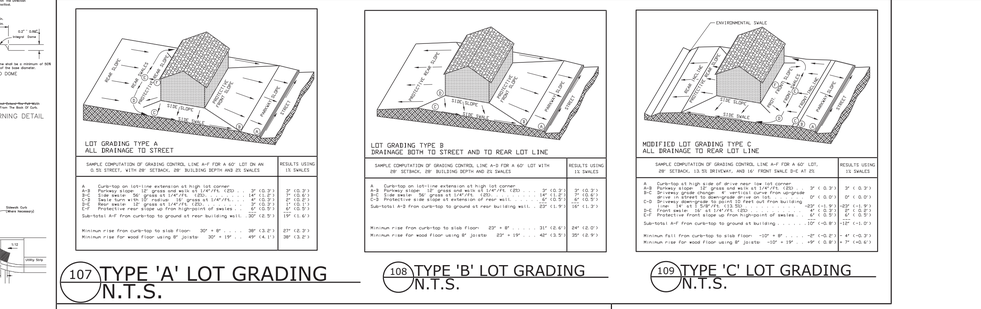
106 DRY RETENTION POND CROSS SECTION
N.T.S.



101 TYPE 'F' CURB DETAIL
N.T.S.



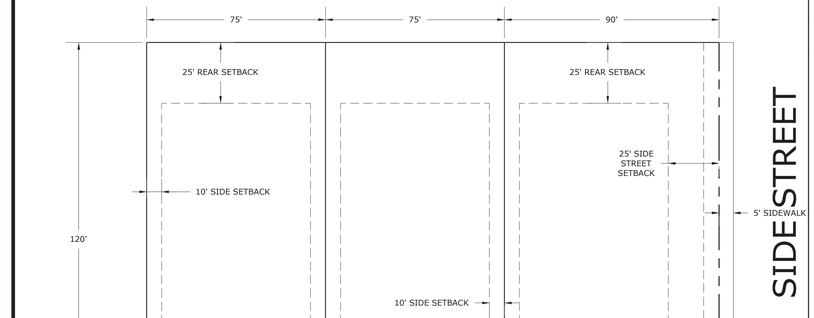
102 TRUNCATED DOME DETAIL
N.T.S.



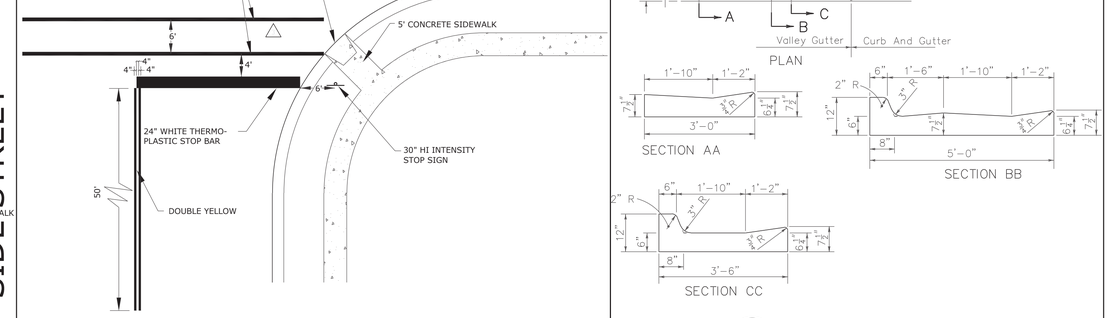
107 TYPE 'A' LOT GRADING
N.T.S.

108 TYPE 'B' LOT GRADING
N.T.S.

109 TYPE 'C' LOT GRADING
N.T.S.



103 TYPICAL RSF-1B LOT LAYOUT PLAN
N.T.S.



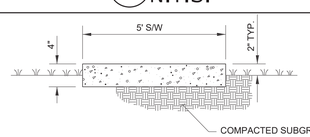
110 STOP SIGN, STOP BAR & CROSSWALK
N.T.S.

113 VALLEY GUTTER DETAIL
N.T.S.

Lot Area Table				
Lot Number	Gross Area (sqft)	Gross Area (ac.)	Lot Width (ft)	Zoning
1	8,991.00	0.21	75	RSF-1B
2	9,000.00	0.21	75	RSF-1B
3	9,000.00	0.21	75	RSF-1B
4	10,553.00	0.24	90	RSF-1B
5	10,553.37	0.24	90	RSF-1B
6	9,000.00	0.21	75	RSF-1B
7	9,000.00	0.21	75	RSF-1B
8	9,055.48	0.21	75	RSF-1B
9	10,636.00	0.24	75	RSF-1B
10	9,000.00	0.21	75	RSF-1B
11	9,000.00	0.21	75	RSF-1B
12	9,000.00	0.21	75	RSF-1B
13	9,000.00	0.21	85	RSF-1B
14	9,000.00	0.21	85	RSF-1B
15	9,463.20	0.22	75	RSF-1B
16	9,544.89	0.22	75	RSF-1B
17	11,371.17	0.26	75	RSF-1B
18	9,000.00	0.21	75	RSF-1B
19	9,000.00	0.21	75	RSF-1B
20	9,000.00	0.21	75	RSF-1B
21	9,000.00	0.21	75	RSF-1B
22	9,000.00	0.21	75	RSF-1B
23	10,665.87	0.24	75	RSF-1B
24	10,665.87	0.24	75	RSF-1B
25	9,000.00	0.21	75	RSF-1B
26	9,000.00	0.21	75	RSF-1B
27	9,000.00	0.21	75	RSF-1B
28	9,000.00	0.21	75	RSF-1B
29	9,000.00	0.21	75	RSF-1B
30	10,665.87	0.24	75	RSF-1B
31	9,000.00	0.21	75	RSF-1B
32	9,000.00	0.21	85	RSF-1B
33	9,000.00	0.21	75	RSF-1B
34	9,000.00	0.21	75	RSF-1B
35	10,083.03	0.23	75	RSF-1B
36	12,099.87	0.28	75	RSF-1B
37	9,000.00	0.21	75	RSF-1B
38	9,000.00	0.21	75	RSF-1B
39	9,000.00	0.21	75	RSF-1B
40	10,665.87	0.24	75	RSF-1B
41	10,665.87	0.24	75	RSF-1B
42	9,000.00	0.21	90	RSF-1B
43	9,000.00	0.21	90	RSF-1B
44	9,000.00	0.21	75	RSF-1B
45	12,099.87	0.28	75	RSF-1B
46	9,000.00	0.21	75	RSF-1B
47	9,000.00	0.21	75	RSF-1B
48	9,000.00	0.21	75	RSF-1B
49	9,000.00	0.21	75	RSF-1B
50	9,000.00	0.21	75	RSF-1B
51	9,000.00	0.21	75	RSF-1B
52	9,944.63	0.23	75	RSF-1B
53	9,355.21	0.21	90	RSF-1B
54	9,000.00	0.21	75	RSF-1B
55	9,000.00	0.21	75	RSF-1B
56	9,000.17	0.21	75	RSF-1B
57	8,997.18	0.21	75	RSF-1B
58	9,000.00	0.21	75	RSF-1B
59	10,979.79	0.25	75	RSF-1B
60	10,665.87	0.24	75	RSF-1B
61	10,665.87	0.24	75	RSF-1B
62	9,000.00	0.21	75	RSF-1B

Lot Area Table				
Lot Number	Gross Area (sqft)	Gross Area (ac.)	Lot Width (ft)	Zoning
63	9,000.00	0.21	90	RSF-1B
64	9,000.00	0.21	75	RSF-1B
65	9,000.00	0.21	75	RSF-1B
66	9,000.00	0.21	75	RSF-1B
67	9,000.00	0.21	75	RSF-1B
68	9,000.00	0.21	75	RSF-1B
69	9,000.00	0.21	75	RSF-1B
70	9,000.00	0.21	75	RSF-1B
71	10,665.87	0.24	75	RSF-1B
72	11,284.39	0.26	75	RSF-1B
73	9,515.43	0.22	75	RSF-1B
74	9,515.43	0.22	75	RSF-1B
75	9,515.43	0.22	75	RSF-1B
76	9,515.43	0.22	75	RSF-1B
77	9,515.43	0.22	75	RSF-1B
78	9,515.43	0.22	75	RSF-1B
79	9,515.43	0.22	75	RSF-1B
80	9,515.43	0.22	75	RSF-1B
81	9,453.46	0.22	75	RSF-1B
82	10,665.87	0.24	75	RSF-1B
83	9,000.00	0.21	75	RSF-1B
84	9,000.00	0.21	75	RSF-1B
85	9,000.00	0.21	75	RSF-1B
86	9,011.41	0.21	75	RSF-1B

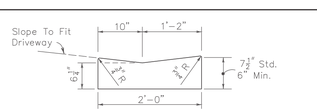
111 LOT AREA TABLE
N.T.S.



CONCRETE WALK AT 3,000 PSI
WOOD FLOAT FINISH. SAW CUT CONTRACTION JOINTS AT 5' O.C. MIN.
EXPANSION JOINT AT 20' O.C. MIN

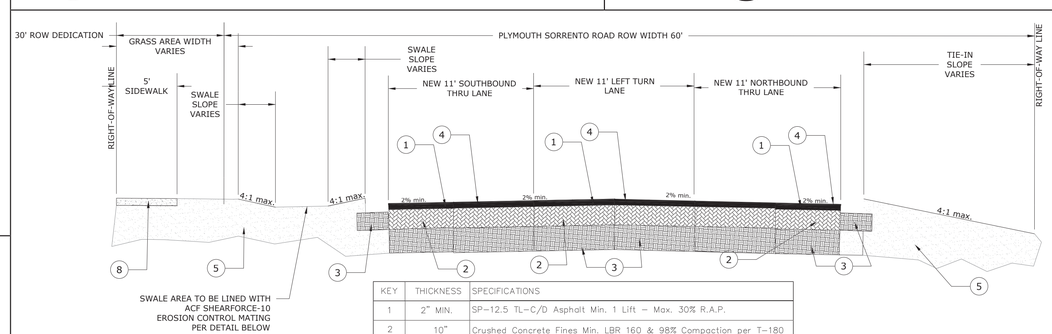
NOTE: ALL SIDEWALK TO BE CONSTRUCTED AS PART OF INFRASTRUCTURE

104 STANDARD SIDEWALK DETAIL
N.T.S.



For curb, gutter, curb and gutter and traffic separators provide 4" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers.

105 MIAMI CURB
N.T.S.



KEY	THICKNESS	SPECIFICATIONS
1	2" MIN.	SP-12.5 TL-C/D Asphalt Min. 1 Lift – Max. 30% R.A.P.
2	10"	Crushed Concrete Fines Min. LBR 160 & 98% Compaction per T-180
3	12"	Type B Stabilized Subgrade, 98% Min. Compaction, LBR 40 or FBV 75 Alt SG-1: (6" additional of Key Item #2 specified above) Extend 1' beyond curb as needed
4	1.25" MIN.	FC-9.5 TL-C Asphalt Friction Course/Leveling Course 1 Lift Max. 20% R.A.P.
5	N/A	Earth / Soil
6	1.25" – 2.5"	Mill & Resurface w/ FC-9.5 TL-C Asphalt Friction Course 1 Lift Max 20% R.A.P.
7	N/A	Type 'F' Curb & Gutter
8	4"	5' Wide 4000 PSI Fiber Reinforced Sidewalk

112 PLYMOUTH SORRENTO ROAD LEFT TURN WIDENING SECTION
N.T.S.(DESIGN SPEED 50 MPH; POSTED 45MPH)

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fax: 407-992-8650
www.GLSeng.com

Lennar Homes Orlando
6675 Westwood Blvd.
Orlando, FL 32821

Ridgebrooke Subdivision
City of Apopka, Florida

Major Development Plan

General Details 1

Plans not valid unless Signed, Dated and Sealed below.

GEOFFREY L. SUMMITT, P.E.
Date:December 08, 2024
FL Registration #58775
Certificate of Authorization #29665

Revisions

NO.	DATE	DESCRIPTION
1	#####	##########################
2	#####	##########################
3	#####	##########################
4	#####	
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8	#####	
9	#####	
10	#####	

SHEET NUMBER
23 OF 24













200 CONCEPTUAL ARCHITECTURAL ELEVATIONS
N.T.S.

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fax: 407-992-8650
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Orlando, FL 32821

Ridgebrooke Subdivision
City of Apopka, Florida

Major Development Plan

Architectual Elevations

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Revisions

NO.	DATE	DESCRIPTION
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2	##/##/##	##########################
3	##/##/##	##########################
4	##/##/##	##########################
5	##/##/##	##########################
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7	##/##/##	##########################
8	##/##/##	##########################
9	##/##/##	##########################
10	##/##/##	##########################

SHEET NUMBER
24 OF 24

G L SUMMITT
ENGINEERING INC

December 8th, 2024

Mr. Bobby Howell
Planning Manager
Community Development
City of Apopka
120 E. Main St.
Apopka, Florida 32704

RE: Plymouth Harbor – Major Development Plan Comment Response

Planning & Zoning Comments:

1. The applicant will be required to enter into an MSBU agreement for streetlight assessment and potentially retention pond assessment. Please contact Chuck Vavrick at cvavrick@apopka.net for information.

Response: We have coordinated with city staff to address the required MSBU agreement.

2. The City's GIS database shows the presence of Karst formations on the property. Provide information in relation to Karst formations on the property. Comprehensive Plan Future Land Use Element Policy 15.2 requires a minimum of a 200-foot buffer measured from the drainage divide.

Response: The karst line from the City's GIS overlay is shown on Sheet 7 of the MDP. We have submitted a copy of the geotechnical analysis for the property that shows the site is not subject to the presence of karst formations and no restrictions or remediation is needed to support development of the property.

3. Provide confirmation that there are no gopher tortoise burrows or other species of concern located on site.

Response: Page 21 of the provided EA reflects the environmental results of the gopher tortoise survey performed on the subject property by Bio-Tech Consulting. There are several active burrows that will need to be relocated prior to development, however a new survey must be performed within 90 days of the relocation. An updated survey will be performed prior to the formal submittal of the relocation permit to FWC.

: (407) 323-0705
: (407) 992-8650
: www.glseng.com
Civil Engineering, Planning & Project Management
3667 Simonton Place
Lake Mary, FL 32746

4. Per Section 4.2.3.C.1.e(b) of the Land Development Code, an equivalent of 2.5 lots is required to be reserved as a pocket park. This shall provide both active and passive amenities.

Response: Please see the revised MDP Sheet 8 for the open space and recreational amenities proposed for the subdivision. As noted on Sheet 8 the site proposes a dog park area in Tract OS-2 and a tot lot in Tract OS-4 exceeding the required 2.5 lot equivalent park area. Both tracts are designed as pocket open space tracts with active amenities to break up the residential block structure and provide streetscape variation.

5. Consult LDC Table 5.4.5 for required open space set-aside features. Show the location and type of open space set-aside on the plan. A minimum of 20-percent of the site area is required to be an open-space set aside area.

Response: Please see the revised MDP Sheet 8 for the Open Space plan. The plan denotes the location of open space tracts along with active and passive amenities and includes an area calculation to show the site far exceeds the required 20% requirement per the LDC.

6. The site data table states there is 30.98 acres. Sheet 8 states the site acreage is 55.5 acres. Please clarify the site acreage and ensure consistency throughout the plan set.

Response: Please see the revised MDP Sheet 7 and Sheet 8 for consistency of the developable area for the site.

7. LDC Section 5.6.3 requires the submittal of a lighting plan with a Major Development Plan. Consult LDC Section 5.6 in the preparation of this plan and provide this plan with the resubmittal.

Response: We request that we be allowed to submit the lighting plan with the Construction Site Plan as the lighting will be designed and installed by Duke Energy and the timing of the design is far out beyond the MDP.

8. Provide elevations of the wall proposed along Plymouth Sorrento Road.

Response: Please see the landscape plans for the buffering along the perimeter of the site. We are not proposing a wall along Plymouth Sorrento Road, just landscape buffering. The required 30' of the right-of-way dedication along Plymouth Sorrento as well as the elevation difference and landscaping creates a substantial buffer from the road.

9. How many phases are proposed for development.

Response: Please see the revised MDP Sheet 7 for the phasing section of the site data which reflects only a single phase of development is proposed.

: (407) 323-0705
: (407) 992-8650
: www.glseng.com
Civil Engineering, Planning & Project Management
3667 Simonton Place
Lake Mary, FL 32746

10. LDC Section 5.11.4.C requires the submittal of documentation of techniques that are used to satisfy green building standards.

Response: Please see the revised MDP Sheet 7 for the Green Building Standards requirements proposed for the project. The project will meet the required 4 points for the developments size as noted in the site data.

11. Per LDC Section 5.11.5, failure to install or maintain approved green building elements that are to be provided to comply with this section is a violation of this LDC, and may result in revocation of the development approval or permit, and revocation of the authorization for use of green building incentives in accordance with Section 5.12, Green Building Incentives.

Response: Acknowledged.

12. LDC Section 5.12.2 allows an incentive of an increase of the maximum allowable lot coverage by 15 percent beyond the maximum allowed in the base zoning district for developments incorporating green building features as outlined within Section 5.12.

Response: Acknowledged.

13. The tree replacement mitigation payment of $128,805 will be required to be paid prior to the issuance of the site clearing permit.

Response: Acknowledged.

14. LDC Section 5.13.1.C.8.b requires the following:
Residential development shall employ measures to interrupt direct vehicle flow on linear street segments over 800 linear feet long, to the maximum extent practicable (see Figure 5.13.1.C.2.c.8: Traffic Calming Measures). Such measures may include, but shall not be limited to:

    i. Stop signs at street intersections;

    ii. Mini-roundabouts at intersections;

    iii. Curvilinear street segments to slow traffic and interrupt monotonous streetscapes;

    iv. Traffic-diverting physical devices such as neckdowns, chicanes, and diverter islands;

    v. Roadway striping to limit vehicular cartway widths or accommodate bike lanes; and

    vi. Raised intersections or elevated pedestrian street crossings.

Response: Please see the revised MDP Sheets 10 and 11 for the required design needed to meet the LDC Figure 5.13.1.C.2.c.8 by showing stop signs, curvilinear roads and dead-end streets to meet the LDC requirements.

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15. Consult LDC Section 5.13.10, Complete Streets in the design of this project.

Response: Please see the revised MDP for compliance with 5.13.10.

Building Review Comments

16. No Comments.

Response: Acknowledged.

Police Department Review Comments

17. The police department does not have any comments at this time.

Response: Acknowledged.

Fire Department Review Comments

18. No Comments.

Response: Acknowledged.

Transportation Planning Review Comments

19. No Comments.

Response: Acknowledged.

Public Services Department and Engineering Division Review Comments

20. No Comments.

Response: Acknowledged.

If you have any questions, please do not hesitate to contact me at your convenience.

Sincerely,

Geoffrey L. Summitt, P.E.
President

: (407) 323-0705
: (407) 992-8650
: www.glseng.com
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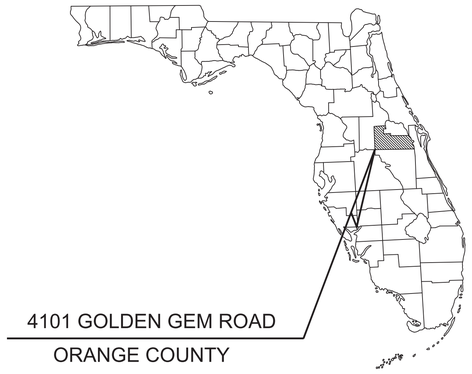
MAJOR DEVELOPMENT PLANS

FOR

KELLY PARK VB DEVELOPMENT LLC

LOCATED AT

4101 GOLDEN GEM ROAD
APOPKA, FL 32712



PROJECT TEAM

OWNER
KELLY PARK VB DEVELOPMENT LLC
660 BEACHLAND BLVD, SUITE 301
VERO BEACH, FL 32963

DEVELOPER
DOUBLE B DEVELOPMENT, LLC
660 BEACHLAND BLVD., SUITE 301
VERO BEACH, FL 32963
(772) 234-2410
CONTACT: JOE BENINATI

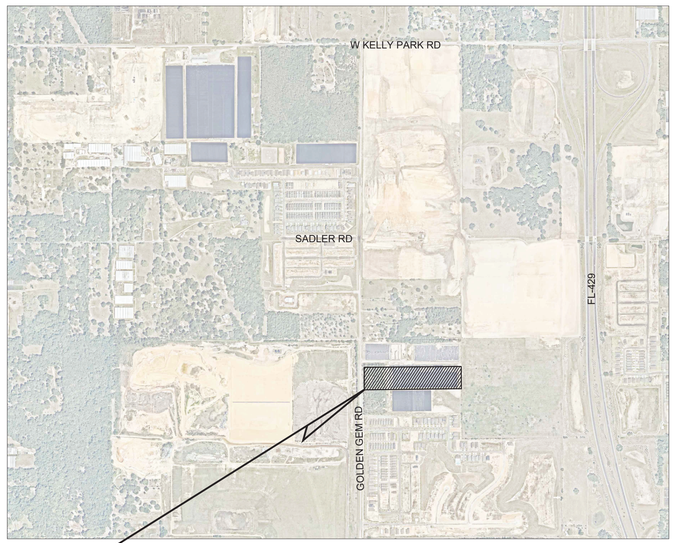
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SBRAYGTTPSURVEY@GMAIL.COM
CONTACT: STEVE BRAY

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
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VERO BEACH, FL 32960
(772) 794-4100
CONTACT: MACKENZIE CERJAN, P.E.

LANDSCAPE ARCHITECT
KIMLEY-HORN AND ASSOCIATES, INC.
200 SOUTH ORANGE AVE, SUITE 600
ORLANDO, FL 32801
(407)247-8404
ED.LINQUIST@KIMLEY-HORN.COM
CONTACT: ED LINQUIST

GEOTECHNICAL CONSULTANT
S&ME
1615 EDGEWATER DRIVE SUITE 200
ORLANDO, FL 32804
(407) 652-0043
CONTACT: WILLIAM L. FOX, P.E.



VICINITY MAP
N.T.S.

Sheet List Table

Sheet Number	Sheet Title
C-000	COVER SHEET
C-100	GENERAL NOTES
C-150	OVERALL PLAN
C-200	DEMOLITION AND EROSION CONTROL PLAN
C-201	DEMOLITION AND EROSION CONTROL PLAN
C-220	EROSION CONTROL DETAILS
C-300	SITE PLAN
C-301	SITE PLAN
C-400	GRADING PLAN
C-401	GRADING PLAN
C-402	PAVING AND DRAINAGE PLAN
C-403	PAVING AND DRAINAGE PLAN
~~C-405~~	~~DRAINAGE PROFILE~~
~~C-407~~	~~DRAINAGE PROFILE~~
~~C-406~~	~~DRAINAGE PROFILE~~
~~C-450~~	~~PAVING GRADING AND DRAINAGE DETAILS~~
~~C-451~~	~~PAVING GRADING AND DRAINAGE DETAILS~~
C-500	UTILITY PLAN
C-501	UTILITY PLAN
~~C-510~~	~~UTILITY PROFILE~~
C-550	UTILITY DETAILS
~~C-551~~	~~UTILITY DETAILS~~
C-600	TRUCK MOVEMENT PLAN
~~LS-1~~	~~LIFT STATION PLAN~~
~~SLC-01~~	~~SITE LIGHTING PLAN~~

STRIKETHROUGH NOTE:

THE STRIKETHROUGHS ABOVE INDICATE SHEETS THAT WILL BE INCLUDED DURING THE CSP PHASE, BUT ARE NOT PART OF THIS CURRENT APPLICATION

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) 703-1731
CONTACT: RICHARD EARP

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) 703-1739
CONTACT: PAMELA RICHMOND

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) 703-1731
REARP@APAPKA.NET
CONTACT: RICHARD EARP

PROJECT SCOPE:

THIS PROJECT INCLUDES THE DEVELOPMENT OF 54 SINGLE FAMILY DETACHED LOTS. CONSTRUCTION IS EXPECTED TO BE COMPLETED IN A SINGLE PHASE. THIS PROJECT IS PART OF THE LARGER DEVELOPMENT, WYLD OAKS (FKA KELLY PARK CROSSINGS). THIS APPLICATION (4101 GOLDEN GEM RESIDENTIAL, ALSO REFERRED TO AS ONX) IS PART OF THE NEIGHBORHOOD DISTRICT IDENTIFIED ON THE WYLD OAKS PROJECT.

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.

PREPARED BY:
Kimley»Horn

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.

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No.	REVISIONS	DATE	BY
1	ADDED BUILDING FOOTPRINTS AND DRIVEWAYS	12/16/2024	TPC
2	REVISED LIFT STATION TO CITY REQUIREMENTS	12/16/2024	TPC
3	ADDED GAS MAIN FOR THE SITE	12/16/2024	TPC

Kimley»Horn
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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
12/16/2024

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 147864008
DATE 8/7/2024
SCALE AS SHOWN
DESIGNED BY ---
DRAWN BY ---
CHECKED BY ---

COVER SHEET

4101 GOLDEN GEM RESIDENTIAL
PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-000

Plotted By:Cosmos, Troy Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-000 COVER SHEET December 16, 2024 05:03:19pm K:\VRB_Dev\147864008 — 4101 Golden Gem Res\CADD\PlanSheets\C-000 COVER SHEET.dwg
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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

No.	REVISIONS	DATE	BY

Kimley»Horn
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PHONE: 772-794-4100
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12/16/2024

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CHECKED BY	----

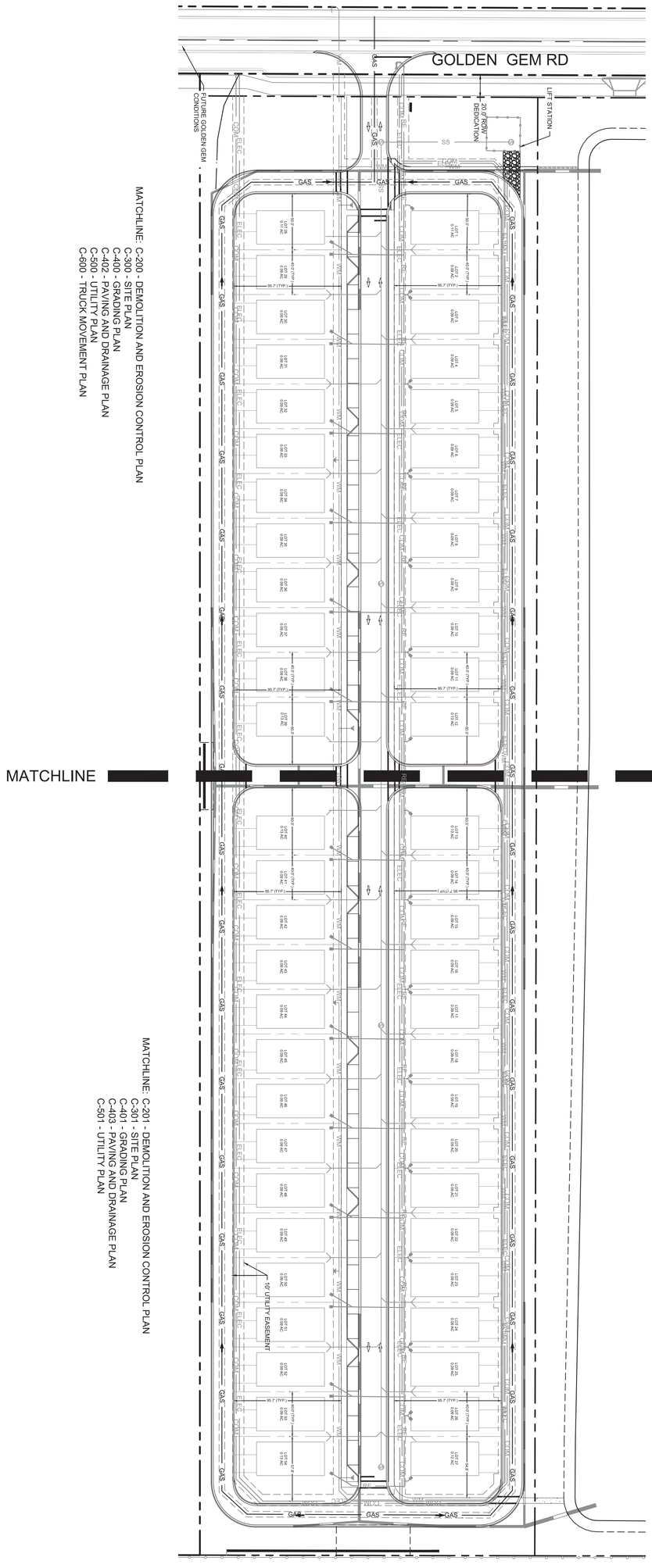
GENERAL NOTES

4101 GOLDEN GEM RESIDENTIAL
PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-100

Plotted By:Cormac Troy Street Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-100 GENERAL NOTES December 16, 2024 05:03:32pm K:\ORB_DFW\147864008 - 4101 Golden Gem Resi\CADD\PlanSheets\C-100 GENERAL NOTES.dwg
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0 25 50 100

NORTH

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

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SHEET NUMBER
C-150

4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

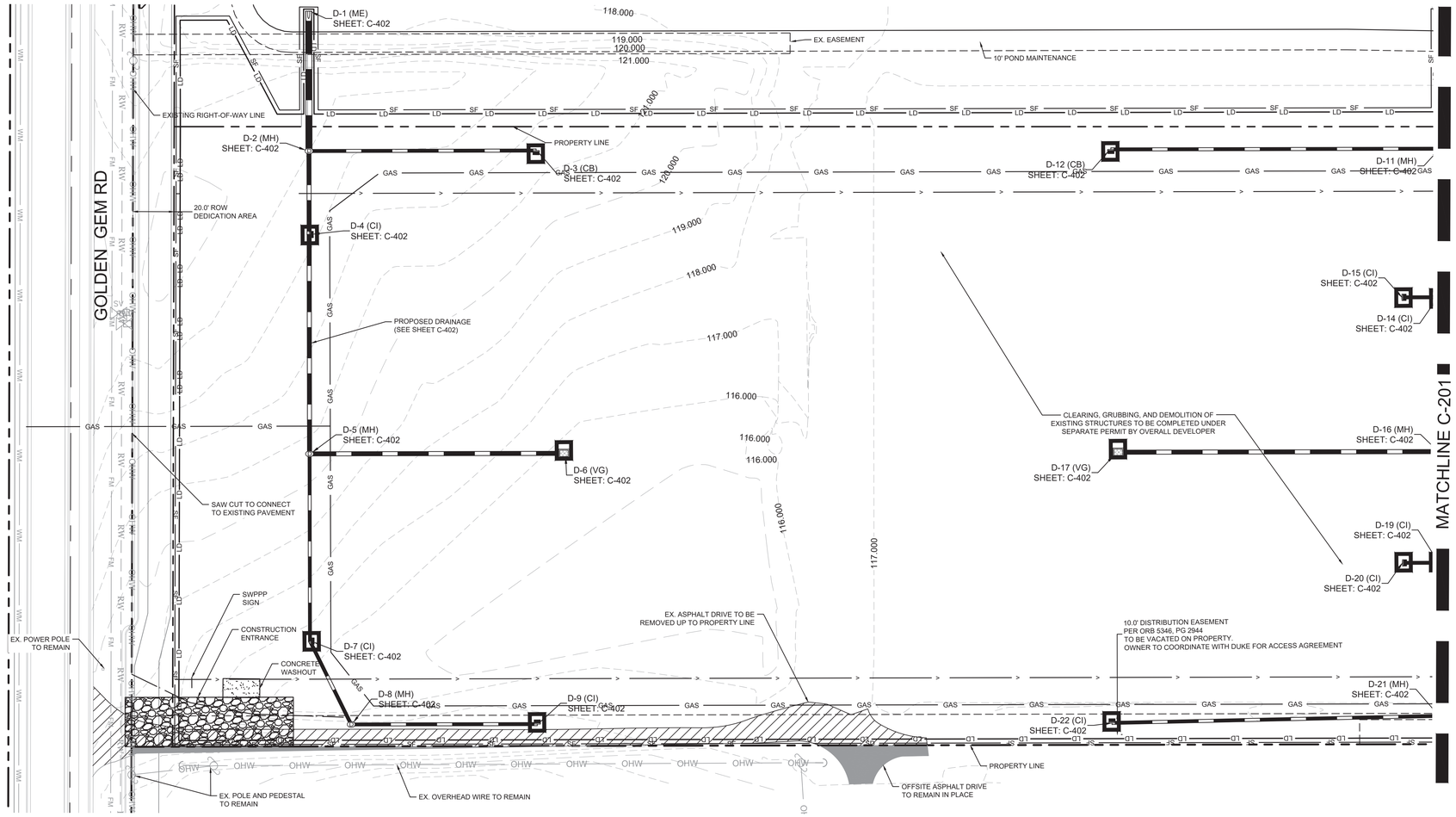
OVERALL PLAN

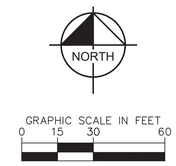
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SEQUENCE OF CONSTRUCTION

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. CONSTRUCT AND STABILIZE SEDIMENT BASIN AND DRAINAGE SWALES WITH APPROPRIATE OUTFALL STRUCTURES (CLEARLY ONLY THOSE AREAS NECESSARY TO INSTALL CONTROL DEVICES LISTED ABOVE).
3. INSTALL INLET PROTECTION AT EXISTING INLET(S).
4. INSTALL AND STABILIZE ANY NECESSARY HYDRAULIC CONTROL STRUCTURES (DIKES, CHECK DAMS, OUTLET TRAPS, RISER PIPE DISCHARGE POINT, ETC.)
5. 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:

6. ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
7. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
8. 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. ELEVATIONS SHOWN HEREON ARE IN THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988 BASED ON ORANGE COUNTY BENCHMARK L708026, ELEVATION 127.968 (REFER TO SURVEY BY JIM SHANNON DATED 2/21/2023.
15. SEE SHEET C-220 FOR EROSION CONTROL NOTES.

LEGEND

- PROPERTY LINE
- EXISTING WATERMAIN (WM)
- EXISTING SANITARY SEWER (SS)
- EXISTING DRAINAGE
- EXISTING FORCE MAIN (FM)
- EXISTING RECLAIMED WATER (RW / GAS)
- EXISTING OVERHEAD WIRE (OHW)
- LIMITS OF DISTURBANCE (LD)
- SILT FENCE/TREE PROTECTION FENCE (SF)
- SILT DIKE (SD)
- TEMPORARY WINDROW (>)
- CURB TO REMAIN
- SWPPP INFORMATION SIGN
- CONSTRUCTION ENTRANCE
- INLET PROTECTION

ACREAGE SUMMARY	
TOTAL PROJECT AREA	9.01 AC
ON-SITE DISTURBED AREA	9.01 AC
OFF-SITE DISTURBED AREA	0.93 AC
TOTAL DISTURBED AREA	9.94 AC
IMPERVIOUS AREA AT COMPLETION	5.17 AC
PERVIOUS / SEEDED AREA AT COMPLETION	3.84 AC

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

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.

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DRAWN BY ###
CHECKED BY ###
12/16/2024

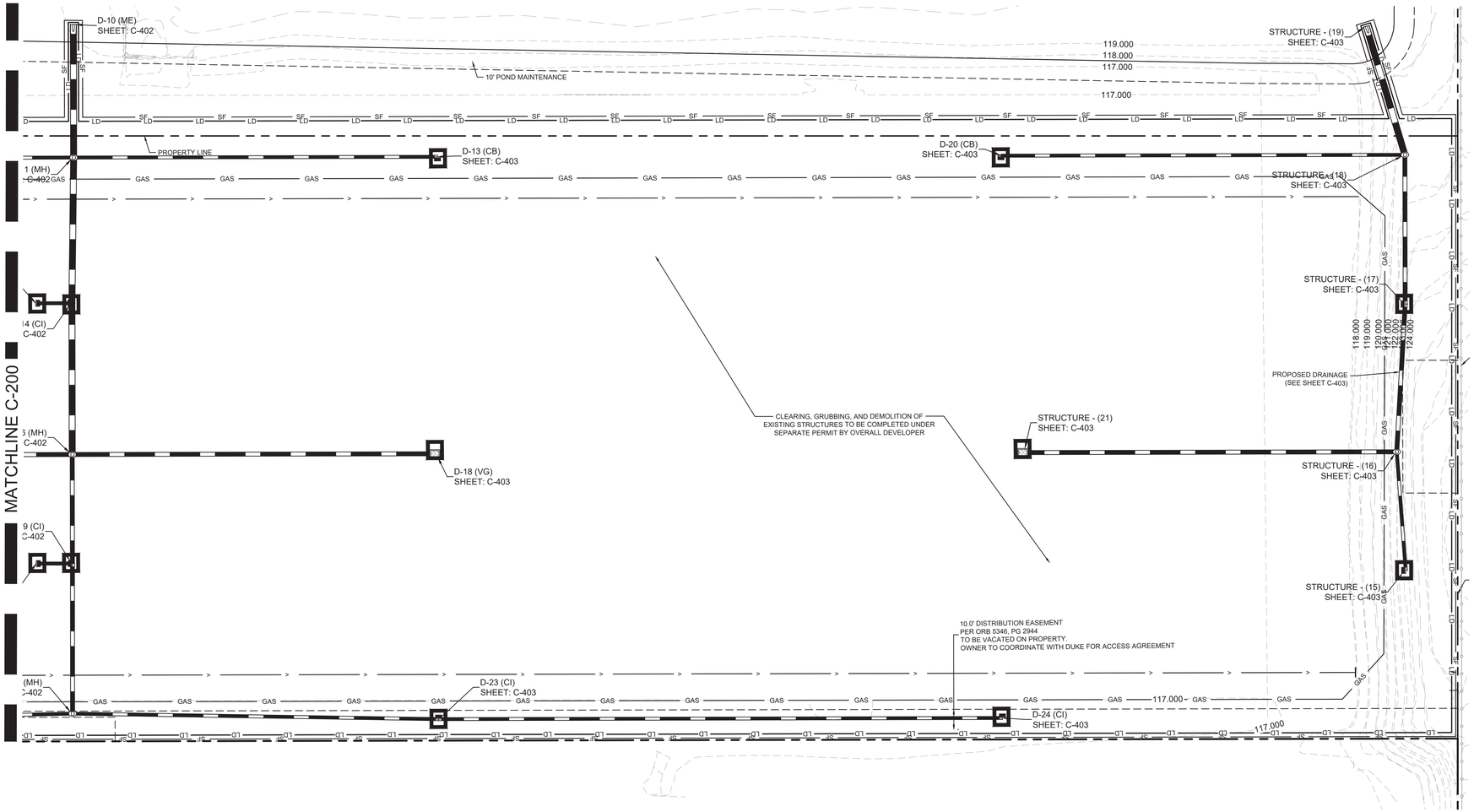
DEMOLITION AND EROSION CONTROL PLAN

4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

SHEET NUMBER
C-200

Plotted By: Cosmas, Troy Sheet Set: 4101 GOLDEN GEM RESIDENTIAL Layout: C-200 DEMOLITION AND EROSION CONTROL PLAN December 18, 2024 05:04:24pm K:\ORB_LOE\V\147864008 - 4101 Golden Gem Res\CADD\PlanSheets\C-200 DEMOLITION AND EROSION CONTROL PLAN.dwg
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NORTH

GRAPHIC SCALE IN FEET
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LEGEND

- PROPERTY LINE
- EXISTING WATERMAIN
- EXISTING SANITARY SEWER
- EXISTING DRAINAGE
- EXISTING FORCE MAIN
- EXISTING RECLAIMED WATER
- EXISTING OVERHEAD WIRE
- LIMITS OF DISTURBANCE
- SILT FENCE/TREE PROTECTION FENCE
- SILT DIKE
- TEMPORARY WINDROW
- CURB TO REMAIN
- SWPPP INFORMATION SIGN
- CONSTRUCTION ENTRANCE
- INLET PROTECTION

NOTES:

1. SEE SHEET C-220 FOR EROSION CONTROL NOTES.
2. SEE SHEET C-200 FOR DEMOLITION NOTES, DEWATERING NOTES, AND SEQUENCE OF CONSTRUCTION.

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
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
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MACKENZIE CERJAN ★ LICENSE No. 90545 ★ STATE OF FLORIDA ★ PROFESSIONAL ENGINEER

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KHA PROJECT	147864008
DATE	8/7/2024
SCALE	AS SHOWN
DESIGNED BY	###
DRAWN BY	###
CHECKED BY	###

DEMOLITION AND EROSION CONTROL PLAN

4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-201

12/16/2024

Plotted By:Cosmos, Troy Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-201 DEMOLITION AND EROSION CONTROL PLAN December 16, 2024 09:04:31pm K:\ORL_LEGY\147864008 - 4101 Golden Gem Res\CADD\PlanSheets\C-200 DEMOLITION AND EROSION CONTROL PLAN.dwg
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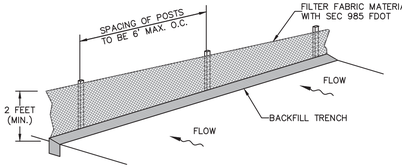
Section 1	Project Name and location information:	4101 GOLDEN GEM ROAD APOPKA, FL 32712
Section 2	Describe the nature of the construction activity:	CONSTRUCTION OF INFRASTRUCTURE FOR NEW SINGLE-FAMILY RESIDENTIAL
Section 3	Describe the intended sequence of major soil disturbing activities:	CONSTRUCTION OF EROSION AND SEDIMENT CONTROLS, GRADING AND CONSTRUCTION OF STORM SEWER
Section 4	Total area of the site:	9.01 AC.
Section 5	Total area of the site to be disturbed:	9.01 AC.
Section 6	Existing data describing the soil or quality of any stormwater discharge from the site:	BASED ON THE SOIL SURVEY OF ORANGE COUNTY, FLORIDA, AS PREPARED BY THE U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCE CONSERVATION SERVICE (FORMERLY THE SOIL CONSERVATION SERVICE), THE PROPERTY IS UNDERLAIN BY BROAD AREAS OF SANDY SOILS IDENTIFIED AS VARIANTS OF "CANDLER FINE SANDS'. THESE SANDY SOILS ARE COMMONLY FOUND ON KNOLLS AND RIDGES ON MARINE TERRACES. THESE SOILS REPORTEDLY ARE MODERATELY TO STEEPLY SLOPING AND EXCESSIVELY WELL DRAINED. DEPTHS TO GROUNDWATER ARE TYPICALLY MORE THAN 80 INCHES BELOW THE NATURAL GROUND SURFACE FOR MOST OF THE YEAR.
Section 7	Estimate the drainage area size for each discharge point:	DISCHARGE POINT N= 3.01 AC DISCHARGE POINT NW= 3.00 AC DISCHARGE POINT NE= 3.00 AC
Section 8	Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	DISCHARGE POINT: WYLD OAKS MASTER DEVELOPMENT SYSTEM LAT: 28°44'59.15" LONG: 81°34'20.75"
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 AND SHALL BE INSTALLED AROUND THE PERIMETER OF THE CONSTRUCTION SITE.	
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.	
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	
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	

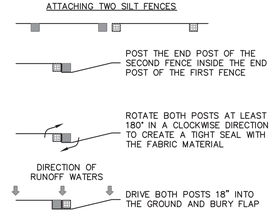
Section 14	Waste disposal, this may include construction debris, chemicals, litter, and sanitary wastes:	All construction materials and debris will be placed in a dumpster and hauled off site to a landfill or other proper disposal site. No materials will be buried on site.
Section 15	Offsite vehicle 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 polluted 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."	

Section 22	Name	Title	Company Name, Address and Phone Number	Date

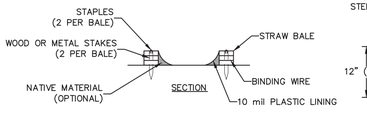
EROSION CONTROL NOTES

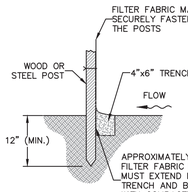
1. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UP-SLOPE LAND DISTURBANCE TAKES PLACE.
2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED 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.



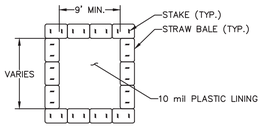


NOTES:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.





NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.



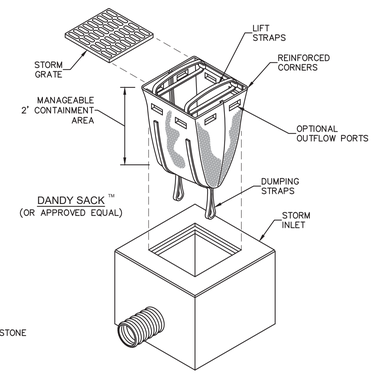
PLAN

SILT FENCE INSTALLATION
N.T.S

CONCRETE & STUCCO WASTE MANAGEMENT

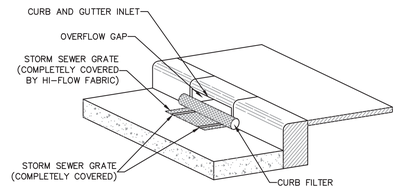
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CONCRETE WASHOUT SIGN
N.T.S

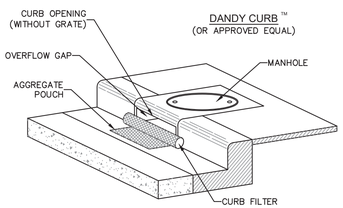


DANDY SACK ™
(OR APPROVED EQUAL)

INLET INSERT
N.T.S

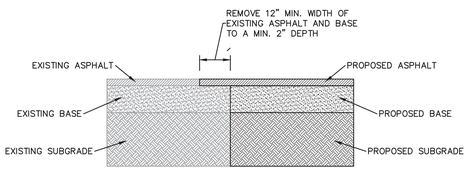


DANDY CURB ™
(OR APPROVED EQUAL)

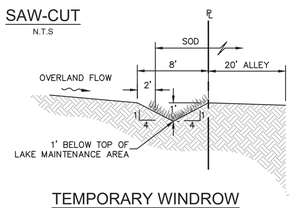


CURB INLET SEDIMENT CONTROL
N.T.S

VIEW

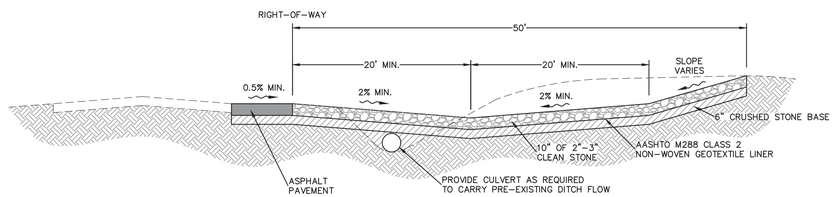


SAW-CUT
N.T.S

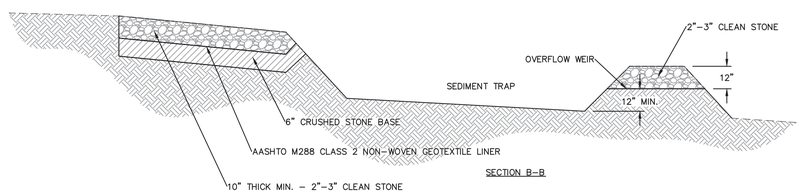


NOTES:
1. TEMPORARY WINDROW TO BE INSTALLED AT THE BACK OF ALL LOTS.

TEMPORARY WINDROW
N.T.S

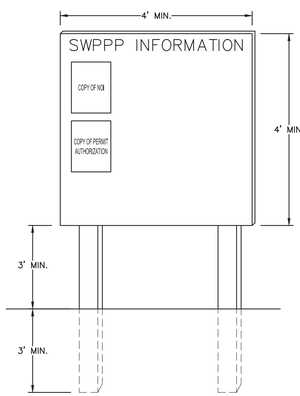


SECTION A-A



SECTION B-B

CONSTRUCTION EXIT
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.

SWPPP INFORMATION SIGN
N.T.S

No.	REVISIONS	DATE	BY

Kimley»Horn

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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
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MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER

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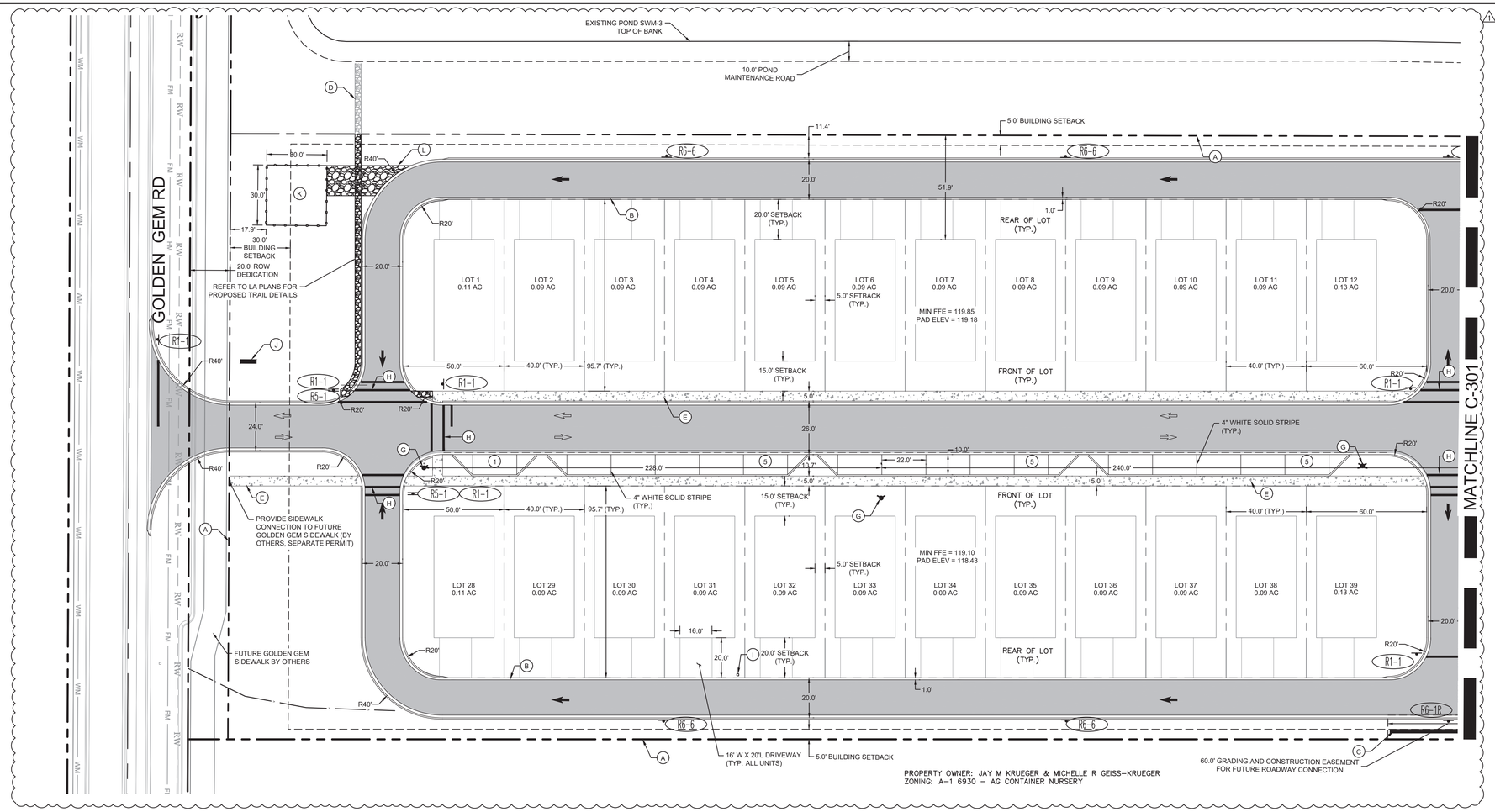
KHA PROJECT 147864008
DATE 8/7/2024
SCALE AS SHOWN
DESIGNED BY ——
DRAWN BY ——
CHECKED BY ——

EROSION CONTROL DETAILS

4101 GOLDEN GEM RESIDENTIAL
PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

SHEET NUMBER
C-220

Plotted By: Cosmos, Troy Sheet Set: 4101 GOLDEN GEM RESIDENTIAL Layout: C-220 EROSION CONTROL DETAILS December 18, 2024 05:04:38pm K:\ORB_LDEV\147864008 — 4101 Golden Gem Res\CAD\PlanSheets\C-220 EROSION CONTROL DETAILS.dwg
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SIGN LEGEND

	R1-1	STOP SIGN MUTCD 24" x 24"
	R5-1	DO NOT ENTER SIGN MUTCD 24" x 24"
	R6-1L	LEFT ONE WAY SIGN MUTCD 8" x 24"
	R6-1R	RIGHT ONE WAY SIGN MUTCD 8" x 24"
	R6-6	ONE WAY SIGN MUTCD 18" x 24"

LEGEND

- (A) PROPERTY LINE
- (B) 12" HEADER CURB
- (C) RETAINING WALL
- (D) TRAIL TO INTERCONNECT WITH WYLD OAKS (NOT PART OF THIS APPLICATION)
- (E) CONCRETE SIDEWALK (REFER TO DETAIL, SHEET C-450)
- (F) ACCESSIBLE CURB RAMP (REFER TO DETAIL, SHEET C-450)
- (G) FIRE HYDRANT (SEE NOTE 5)
- (H) CROSSWALK PER FDOT INDEX #711-001
- (I) MAILBOX - (SEE NOTE 6)
- (J) MONUMENT SIGN (REFER TO ARCH. DRAWINGS AND SIGNAGE PACKAGE)
- (K) LIFT STATION - CITY OWNED AND MAINTAINED
- (L) LIFT STATION ACCESS ROAD (2" #57 STONE OVER 8" STABILIZED BASE)

SYMBOL LEGEND

- (#) PARKING STALL COUNT - DO NOT PAINT
- T TRANSFORMER PAD
- PROPERTY LINE
- LIGHT POLE
- DIRECTIONAL ARROW FOR REFERENCE ONLY - DO NOT STRIPE
- DIRECTIONAL ARROW TO BE STRIPED

SITE DATA

PROJECT DESCRIPTION:	CONSTRUCTION OF 54 SINGLE FAMILY LOTS
PARCEL ID:	13-20-27-0000-00-024
LOCATION:	SECTION 13, TOWNSHIP 20, RANGE 27
ADDRESS:	4101 GOLDEN GEM ROAD, APOPKA, FL 32712
ZONING:	(MU-N) -KPI-NEIGHBORHOOD
LAND USE:	MU MIXED USE
FLOOD ZONE:	ZONE X, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 12095C0125H, EFFECTIVE DATE 9/24/2021

	REQUIRED	PROVIDED
MAX. BUILDING HEIGHT	35' HEIGHT MAX.	
PROPERTY AREA:		392,331 S.F. (9.01 AC.)
DWELLING UNITS:		54
DENSITY:	54 UNITS / 9.01 AC	5.99 DU/AC[4]

SITE COVERAGE:	REQUIRED	PROVIDED		
SITE AREA:		392,331 S.F.	(9.01 AC)	100.00%
BUILDING AREA[1]:		98,334 S.F.	(2.26 AC)	25.06%
DRIVEWAYS[2]:		17,280 S.F.	(0.40 AC)	4.40%
ROADWAY AND SIDEWALK:		114,507 S.F.	(2.63 AC)	29.19%
PERVIOUS AREA:		162,210 S.F.	(3.72 AC)	41.35%

[1] BUILDING AREA ASSUMES ONE (1) 30' x 60.7' BUILDING PER LOT.
[2] DRIVEWAYS ASSUME 20' x 16' PER LOT.
[3] UP TO 75% ALLOWED BY CODE, PLUS THE TEXT AMENDMENT CURRENTLY BEING PROCESSED FOR WYLD OAKS.
[4] MAX DENSITY BY CODE IS 5 DU/AC; HOWEVER, THE WYLD OAKS DEVELOPMENT AGREEMENT ALLOWS FOR HIGHER DENSITY GIVEN THAT THE TOTAL NUMBER OF ALLOWABLE UNITS (PER DISTRICT) IS NOT EXCEEDED. SEE TABLE BELOW FOR REFERENCE.

HOMES WILL BE 4 BEDROOMS.

TYPICAL LOT SIZE IS 40' W X 95.7' L UNLESS OTHERWISE NOTED ON THE PLAN.

OPEN SPACE:
REQUIRED OPEN SPACE (15% OF SITE): 58,850 S.F. (1.35 AC)
PROVIDED OPEN SPACE (FROM SWM-3): (1.35 AC)

BUILDING SETBACKS:	REQUIRED	PROVIDED
FRONT/STREET		20'
SIDE	15' MIN. 30' MAX.	15'
REAR/ALLEY	5' MIN. N/A MAX.	5'

PARKING
REQUIRED: 108 SPACES (2.0 SPACES PER UNIT X 54 UNITS)
PROVIDED: 253 SPACES:
- 108 GARAGE SPACES
- 108 DRIVEWAY SPACES
- 37 ON STREET SPACES

WYLD OAKS KPI NEIGHBORHOOD DISTRICT			
ALLOWABLE DU'S	PREVIOUSLY PERMITTED DU'S	D.U.'S PROPOSED WITH THIS APPLICATION	REMAINING DU'S
199	0	54	145

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 DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. BLUE RPM TO BE INSTALLED IN PAVEMENT AT EACH HYDRANT LOCATION. OFFSET 6"
6. MAILBOX LOCATION TO BE PROVIDED AT EACH LOT BY BUILDING CONTRACTOR (TYP.) AND TO BE COORDINATED WITH PROPOSED DRIVEWAY LOCATIONS.

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No.	REVISIONS	DATE	BY
1	ADDED BUILDING FOOTPRINTS AND DRIVEWAYS	12/16/2024	TPC

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

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MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
12/16/2024

KHA PROJECT 147864008
DATE 8/7/2024
SCALE AS SHOWN
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DRAWN BY ---
CHECKED BY ---

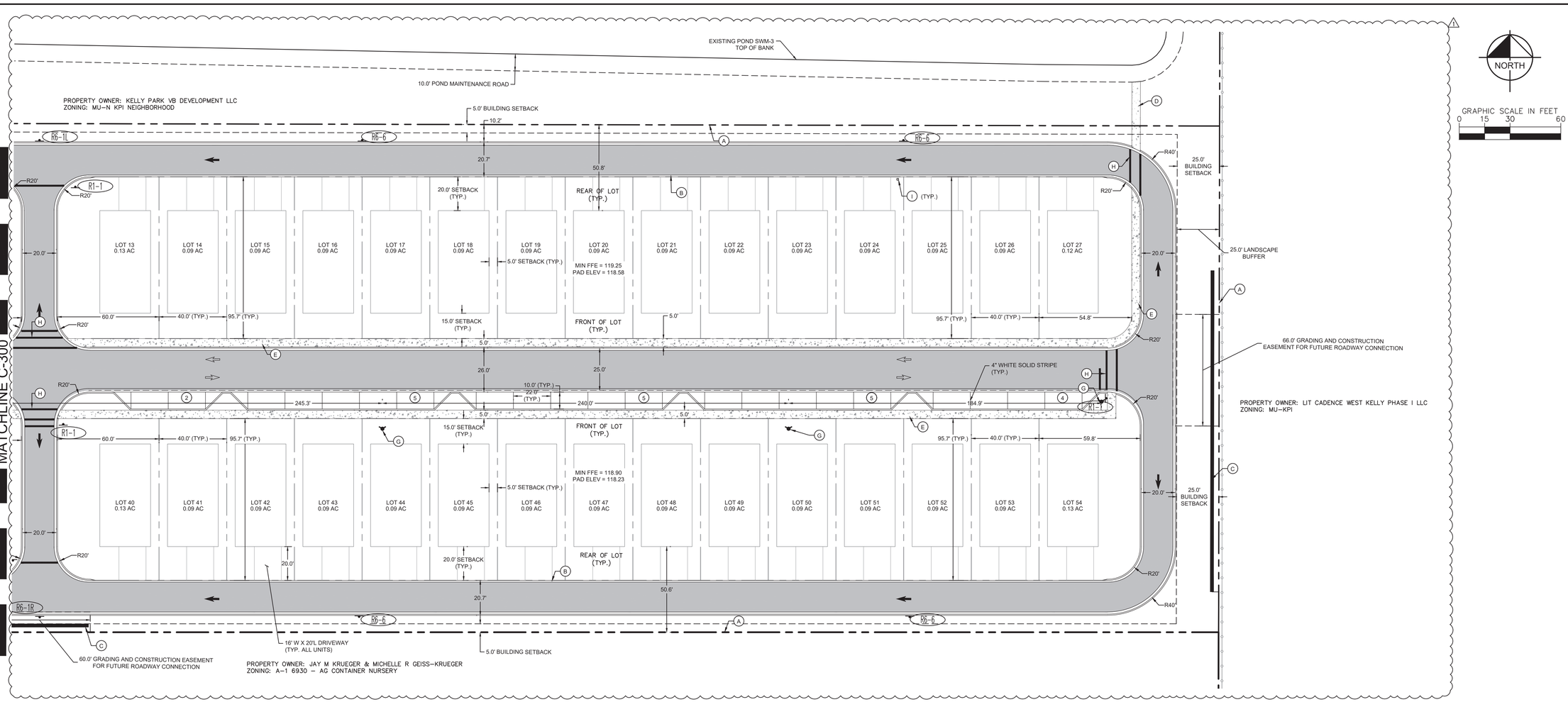
SITE PLAN

4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-300

Plotted By: Cosmos, Troy Sheet Set: 4101 GOLDEN GEM RESIDENTIAL Layout: C-300 SITE PLAN December 18, 2024 05:04:46pm K:\ORB_LOC\V\147864008 - 4101 Golden Gem Res\CADD\PlanSheets\C-300 SITE PLAN.dwg
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SIGN LEGEND



R1-1 — STOP SIGN
MUTCD 24" x 24"



R5-1 — DO NOT ENTER SIGN
MUTCD 24" x 24"



R6-1L — LEFT ONE WAY SIGN
MUTCD 8" x 24"



R6-1R — RIGHT ONE WAY SIGN
MUTCD 8" x 24"



R6-6 — ONE WAY SIGN
MUTCD 18" x 24"

LEGEND

- (A) PROPERTY LINE
- (B) 12" HEADER CURB
- (C) RETAINING WALL
- (D) TRAIL TO INTERCONNECT WITH WYLD OAKS (NOT PART OF THIS APPLICATION)
- (E) CONCRETE SIDEWALK (REFER TO DETAIL, SHEET C-450)
- (F) ACCESSIBLE CURB RAMP (REFER TO DETAIL, SHEET C-450)
- (G) FIRE HYDRANT (SEE NOTE 5)
- (H) CROSSWALK PER FDOT INDEX #711-001
- (I) MAILBOX - (SEE NOTE 6)
- (J) MONUMENT SIGN (REFER TO ARCH. DRAWINGS AND SIGNAGE PACKAGE)
- (K) LIFT STATION - CITY OWNED AND MAINTAINED
- (L) LIFT STATION ACCESS ROAD (2" #57 STONE OVER 8" STABILIZED BASE)

SYMBOL LEGEND

- (#) PARKING STALL COUNT - DO NOT PAINT
- T TRANSFORMER PAD
- PROPERTY LINE
- LIGHT POLE
- DIRECTIONAL ARROW FOR REFERENCE ONLY - DO NOT STRIPE
- DIRECTIONAL ARROW TO BE STRIPED

WYLD OAKS KPI NEIGHBORHOOD DISTRICT			
ALLOWABLE DU'S	PREVIOUSLY PERMITTED DU'S	D.U.'S PROPOSED WITH THIS APPLICATION	REMAINING DU'S
199	0	54	145

NOTES:

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12/16/2024

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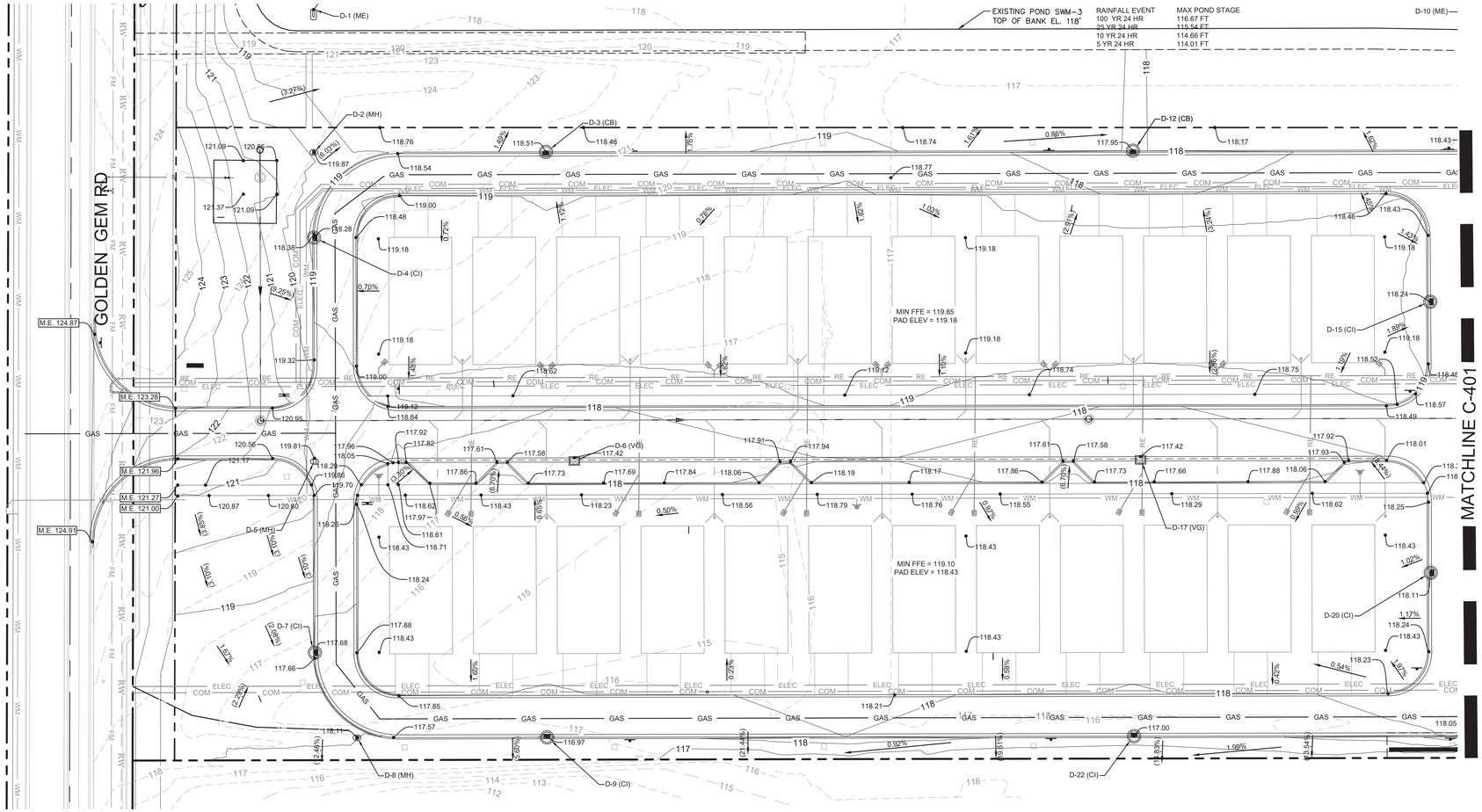
SITE PLAN

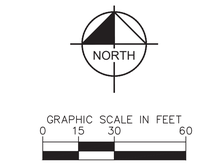
4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-301

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XX.XX / XX.XX — PROPOSED TOP OF CURB GRADE / PROPOSED EDGE OF PAVEMENT GRADE

XX.XX — PROPOSED GRADE

9.77' — EXISTING GRADES (FROM SURVEY)

DRAINAGE FLOW DIRECTION

H.P. — HIGH POINT

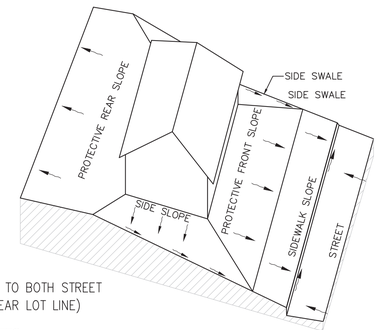
TOC — TOP ~~OF CURB~~ GRADE

TOS — TOP OF SIDEWALK GRADE

EX — DENOTES EXISTING FEATURE

PAVING AND GRADING NOTES

1. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY LAND SURVEYORS. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY 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.
2. 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.
3. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
4. ALL MATERIALS AND CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST FDOT DESIGN STANDARDS AND LATEST STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE SPECIFICATIONS AND LOCAL JURISDICTIONAL AGENCY. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
6. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
7. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
8. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
9. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW-CUT THE FULL DEPTH OF PAVEMENT FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
10. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW-CUT THE FULL DEPTH OF EXISTING PAVEMENT FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.
11. ELEVATIONS SHOWN AT CURB LINE ARE EDGE OF PAVEMENT UNLESS SPECIFIED OTHERWISE.
12. CONTRACTOR SHALL EXCAVATE EXISTING PAVEMENT/SIDEWALK AREAS THAT ARE TO BE LANDSCAPED A MINIMUM OF 30" OR AS DEEP AS NECESSARY TO ENSURE ALL STONE BASE / PAVEMENT MATERIAL IS REMOVED (WHICHEVER IS GREATER) AND BACKFILL WITH CLEAN / DRAINING SAND TO WITHIN 4" OF TOP OF CURB TO ENSURE PROPER SOIL FOR PLANT MATERIALS.
13. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND/OTHER PLANTING AREAS ARE NOT OVER-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.
14. ALL CUT OR FILL SLOPES SHALL BE 4H:1V OR FLATTER UNLESS OTHERWISE NOTED.
15. ALL UN-SURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
16. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL RE-GRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
17. LANDSCAPE ISLANDS IN PARKING AREA TO BE BERMED 18" ABOVE BACK OF CURB ELEVATION.
18. FINISHED FLOOR ELEVATIONS (FFE) AND GARAGE SHALL BE NO LOWER THAN BASE FLOOD ELEVATION PLUS 2 FEET.
19. DRIVEWAYS FOR LOTS SHALL BE NO STEEPER THAN 7%.
20. 14. ELEVATIONS SHOWN HEREON ARE IN THE NORTH AMERICAN VERTICAL DATUM (NAVD) 1988 BASED ON ORANGE COUNTY BENCHMARK L708026, ELEVATION 127.968 (REFER TO SURVEY BY JIM SHANNON DATED 2/21/2023.
21. 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.
22. ALL CLEANOUT COVERS SHOULD BE RATED FOR HEAVY DUTY TRAFFIC.
23. ALL EXISTING PAVEMENT AND CONCRETE TO BE JOINED SHALL BE SAWCUT.
24. 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.
25. EXISTING INFORMATION HAS BEEN TAKEN FROM A SURVEY PREPARED BY TERRAMETRIX, LLC., DATED NOVEMBER 16, 2020. ELEVATIONS BASED ON NAVD 1988 DATUM.
26. FLOOD ZONE: AE, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 1251480218G, EFFECTIVE DATE SEPTEMBER 3, 2003. BASE FLOOD ELEVATION = 9.0.



(DRAINAGE TO BOTH STREET AND REAR LOT LINE)

NOTES

1. ALL SLOPES GREATER THAN 6:1 SHALL BE SODDED.
2. ROOF RUNOFF FROM SIDES AND REAR OF HOUSES SHALL BE DIRECTED TOWARD SIDE AND REAR YARD SWALES ACCORDINGLY.

TYPICAL LOT GRADING DETAIL

N.T.S.

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12/19/2024

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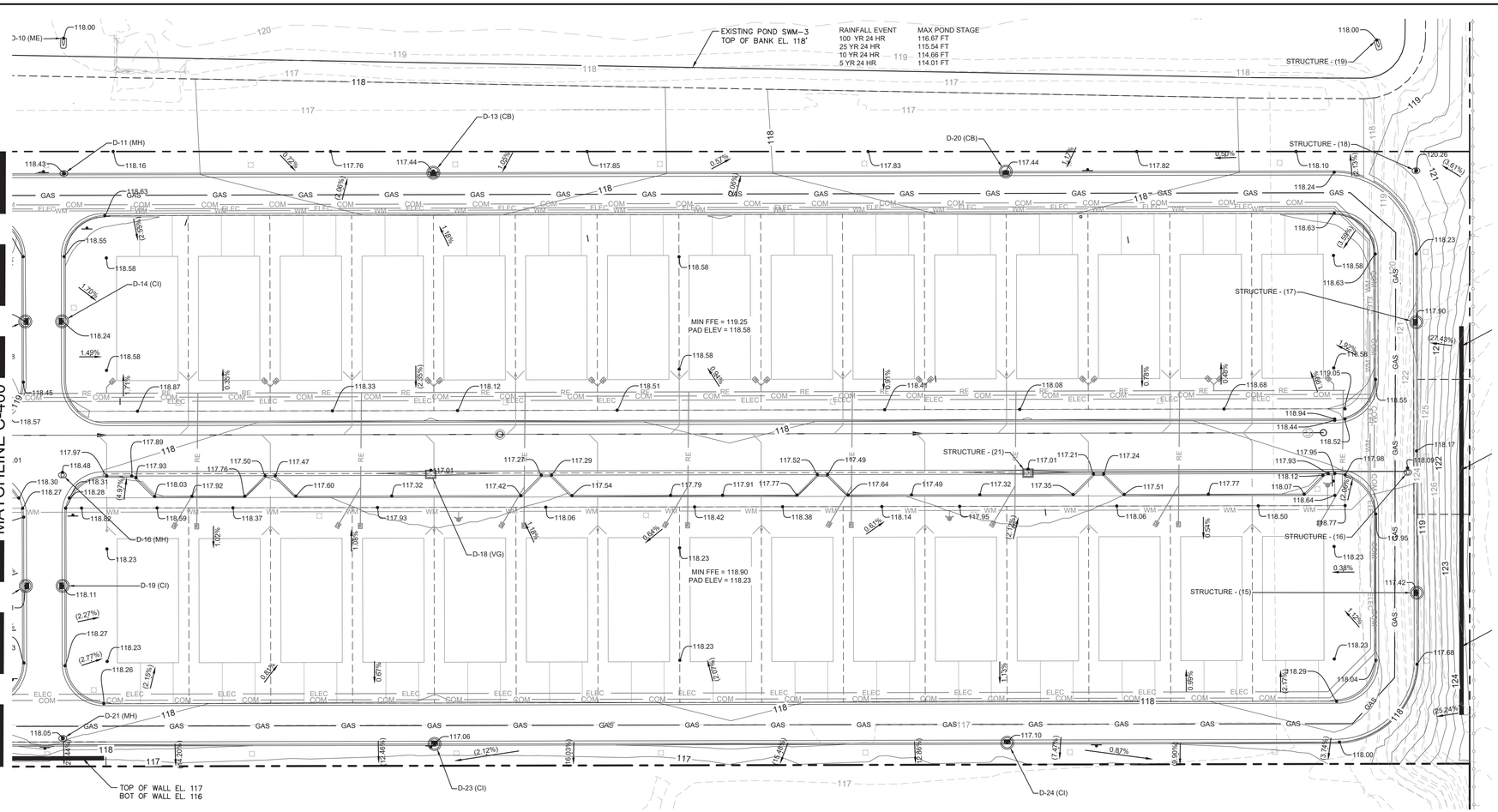
GRADING PLAN

4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-400

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NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

XX.XX / XX.XX — PROPOSED TOP OF CURB GRADE / PROPOSED EDGE OF PAVEMENT GRADE

XX.XX — PROPOSED GRADE

9.77' — EXISTING GRADES (FROM SURVEY)

DRAINAGE FLOW DIRECTION

H.P. — HIGH POINT

TOC — TOP ~~OF CURB~~ GRADE

TOS — TOP OF SIDEWALK GRADE

EX — DENOTES EXISTING FEATURE

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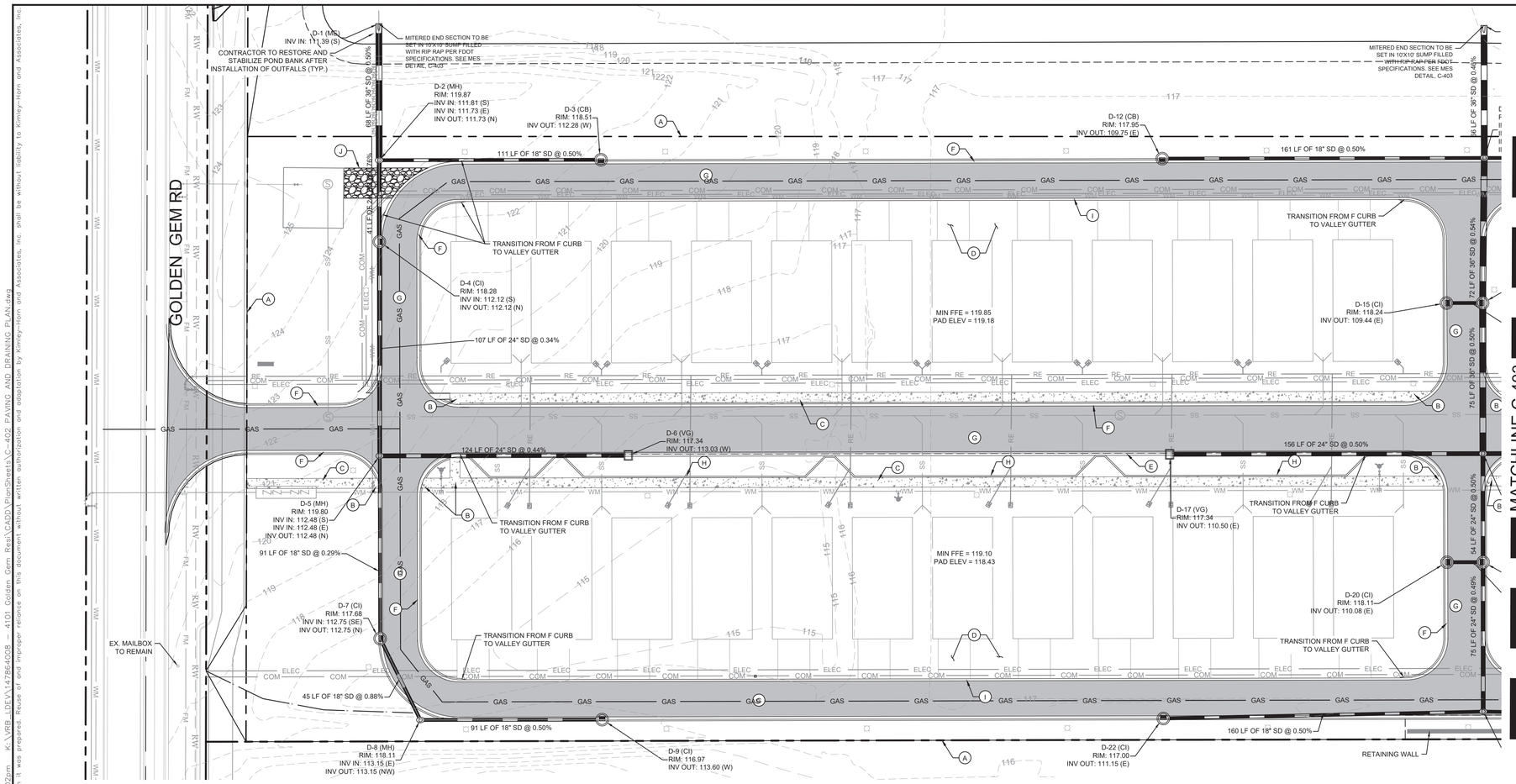
GRADING PLAN

4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

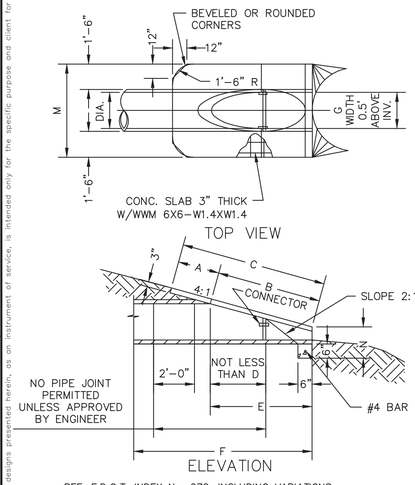
SHEET NUMBER
C-401

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LEGEND

- (A) PROPERTY LINE
- (B) ACCESSIBLE RAMP (SEE DETAIL SHEET C-450)
- (C) STANDARD CONCRETE SIDEWALK (SEE DETAIL SHEET C-450)
- (D) DRIVEWAYS BY BUILDING CONTRACTOR (TYP. 1 PER LOT)
- (E) 24" VALLEY GUTTER
- (F) FDOT TYPE "F" CURB (SEE DETAIL SHEET C-450)
- (G) STANDARD DUTY ASPHALT (SEE DETAIL SHEET C-450)
- (H) FDOT TYPE D CURB (SEE DETAIL SHEET C-450)
- (I) 12" RIBBON CURB
- (J) 15' WIDE LIFT STATION ACCESS ROAD (2" #57 STONE OVER 8" STABILIZED BASE)



REF. F.D.O.T. INDEX No. 272, INCLUDING VARIATIONS FOR MULTIPLE PIPES & ELLIPTICAL PIPES.

DIA.	A	B	C	E	F	G	M	N
18"	1.97'	2.74'	4.71'	2.56'	6.00'	1.41'	4.92'	1.21'
24"	2.06'	3.85'	5.91'	3.56'	7.00'	1.73'	5.50'	1.25'
30"	2.15'	4.95'	7.10'	4.56'	8.00'	2.00'	6.08'	1.29'
36"	2.25'	6.08'	8.33'	5.56'	9.00'	2.24'	6.67'	1.33'
42"	2.34'	7.21'	9.55'	6.56'	10.00'	2.45'	7.25'	1.38'

M.E.S. DETAIL

N.T.S

DRAINAGE NOTES

1. CONTRACTOR TO CONSTRUCT DRAINAGE STRUCTURES WITH USF GRATES, RIMS AND COVERS AS CALLED OUT OR APPROVED EQUAL. SHOP DRAWINGS ARE TO BE PROVIDED TO ENGINEER FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
2. CONTRACTOR TO REFER TO FDOT DESIGN STANDARD (AND NOT LIMITED TO) INDEX'S 425-010, 425-001, 425-020, 425-021, 425-024, 425-052 & 425-053 FOR MANHOLE, INLET AND GRATE SPECIFICATIONS.
3. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED WITH (4) SIDED BEARING HEAVY DUTY H-20 RATED TRAFFIC RIMS AND GRATES.
4. 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.
5. ALL CLEAN-OUT COVERS SHOULD BE RATED FOR HEAVY DUTY TRAFFIC.
6. 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.
7. ALL DRAINAGE PIPE JOINTS SHALL BE FILTER FABRIC WRAPPED PER FDOT INDEX #280. ALL DRAINAGE PIPE JOINTS NEED TO BE FILTER FABRIC WRAPPED REGARDLESS OF MATERIAL.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
9. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE.
10. EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
11. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION.
12. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
13. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
14. ALL CATCH BASINS WITHIN PROPOSED TRAFFIC AREAS SHALL HAVE BICYCLE PROOF GRATES.
15. CONTRACTOR TO FLUSH AND VACUUM ENTIRE ON-SITE STORM WATER SYSTEM UPON COMPLETION OF PROPOSED WORK.
16. ALL DRAINAGE STRUCTURES TO BE CONSTRUCTED WITH NO SUMPS PER FDOT INDEX 425-001.
17. STORM DRAIN PIPE ALTERNATES MAY BE APPROVED BY THE ENGINEER AS FOLLOWS:
    - 17.A. RCP CLASS III PER ASTM C-76
    - 17.B. ALUMINIZED STEEL TYPE 2 ULTRA FLO
      - 48"Ø AND SMALLER SHALL BE 3/4"X3/4"X7-1/2" CORRUGATION 16 GA WITH A MINIMUM THICKNESS OF 0.064"
      - 54"Ø AND LARGER SHALL BE 3/4"X3/4"X7-1/2" CORRUGATION 14 GA WITH A MINIMUM THICKNESS OF 0.079"
    - A. CORRUGATED POLYETHYLENE PIPE PER AASHTO M294 JOINTS SHALL BE WATER TIGHT

ANY STORM PIPE USED MUST BE APPROVED BY LOCAL AUTHORITIES. CONTRACTOR SHALL SELECT THE MOST ECONOMICAL PRODUCT.

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. EXISTING INFORMATION HAS BEEN TAKEN FROM A SURVEY PREPARED BY TERRAMETRIX, LLC., DATED NOVEMBER 16, 2020. ELEVATIONS BASED ON NAVD 1988 DATUM.
7. FLOOD ZONE: AE, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 12514802018G, EFFECTIVE DATE SEPTEMBER 3, 2003. BASE FLOOD ELEVATION = 9.0.

EX	DENOTES EXISTING FEATURE
SD	STORM DRAIN (SEE NOTE 18)
G	STANDARD DUTY ASPHALT PAVEMENT
C	STANDARD CONCRETE SIDEWALK
	CATCH BASIN (CB) FDOT TYPE C
	CURB INLET (CI) FDOT TYPE 9
	MANHOLE (MH)
	MITERED END (ME)
	VALLEY GUTTER (VG)

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

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No.	REVISIONS	DATE	BY

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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

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DATE 8/7/2024
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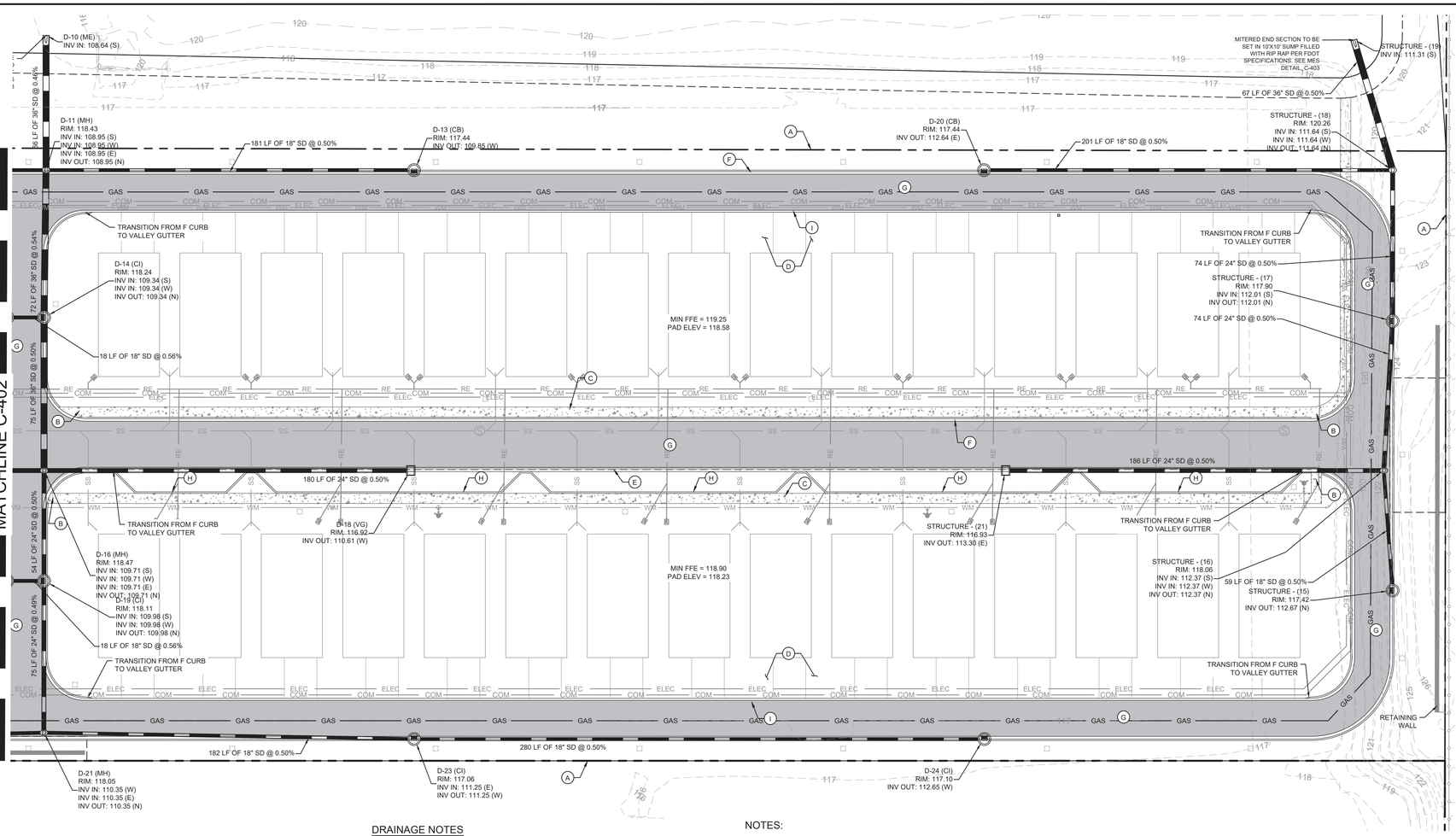
PAVING AND DRAINAGE PLAN

4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-402

Plotted By: Cosmas, Troy Sheet Set: 4101 GOLDEN GEM RESIDENTIAL Layout: C-402 PAVING AND DRAINAGE PLAN December 18, 2024 05:06:02pm K:\VRB_LDEV\147864008 — 4101 Golden Gem Res\CADD\PlanSheets\C-402 PAVING AND DRAINAGE PLAN.dwg
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LEGEND

- (A) PROPERTY LINE
- (B) ACCESSIBLE RAMP (SEE DETAIL SHEET C-450)
- (C) STANDARD CONCRETE SIDEWALK (SEE DETAIL SHEET C-450)
- (D) DRIVEWAYS BY BUILDING CONTRACTOR (TYP. 1 PER LOT)
- (E) 24" VALLEY GUTTER
- (F) FDOT TYPE "F" CURB (SEE DETAIL SHEET C-450)
- (G) STANDARD DUTY ASPHALT (SEE DETAIL SHEET C-450)
- (H) FDOT TYPE D CURB (SEE DETAIL SHEET C-450)
- (I) 12" RIBBON CURB
- (J) 15' WIDE LIFT STATION ACCESS ROAD (2" #57 STONE OVER 8" STABILIZED BASE)

DRAINAGE NOTES

1. CONTRACTOR TO CONSTRUCT DRAINAGE STRUCTURES WITH USF GRATES, RIMS AND COVERS AS CALLED OUT OR APPROVED EQUAL. SHOP DRAWINGS ARE TO BE PROVIDED TO ENGINEER FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
2. CONTRACTOR TO REFER TO FDOT DESIGN STANDARD (AND NOT LIMITED TO) INDEX'S 425-010, 425-001, 425-020, 425-021, 425-024, 425-052 & 425-053 FOR MANHOLE, INLET AND GRATE SPECIFICATIONS.
3. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED WITH (4) SIDED BEARING HEAVY DUTY H-20 RATED TRAFFIC RIMS AND GRATES.
4. 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.
5. ALL CLEAN-OUT COVERS SHOULD BE RATED FOR HEAVY DUTY TRAFFIC.
6. 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.
7. ALL DRAINAGE PIPE JOINTS SHALL BE FILTER FABRIC WRAPPED PER FDOT INDEX #280. ALL DRAINAGE PIPE JOINTS NEED TO BE FILTER FABRIC WRAPPED REGARDLESS OF MATERIAL.
8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
9. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE.
10. EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
11. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION.
12. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
13. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
14. ALL CATCH BASINS WITHIN PROPOSED TRAFFIC AREAS SHALL HAVE BICYCLE PROOF GRATES.
15. CONTRACTOR TO FLUSH AND VACUUM ENTIRE ON-SITE STORM WATER SYSTEM UPON COMPLETION OF PROPOSED WORK.
16. ALL DRAINAGE STRUCTURES TO BE CONSTRUCTED WITH NO SUMPS PER FDOT INDEX 425-001.
17. STORM DRAIN PIPE ALTERNATES MAY BE APPROVED BY THE ENGINEER AS FOLLOWS:
    - 17.A. RCP CLASS III PER ASTM C-76
    - 17.B. ALUMINIZED STEEL TYPE 2 ULTRA FLO
      - 48"Ø AND SMALLER SHALL BE 3/4"X3/4"X7-1/2" CORRUGATION
      - 16 GA WITH A MINIMUM THICKNESS OF 0.064"
      - 54"Ø AND LARGER SHALL BE 3/4"X3/4"X7-1/2" CORRUGATION
      - 14 GA WITH A MINIMUM THICKNESS OF 0.079"
    - A. CORRUGATED POLYETHYLENE PIPE PER AASHTO M294
      - JOINTS SHALL BE WATER TIGHT

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ME	MITERED END (ME)
VG	VALLEY GUTTER (VG)

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MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER

12/18/2024

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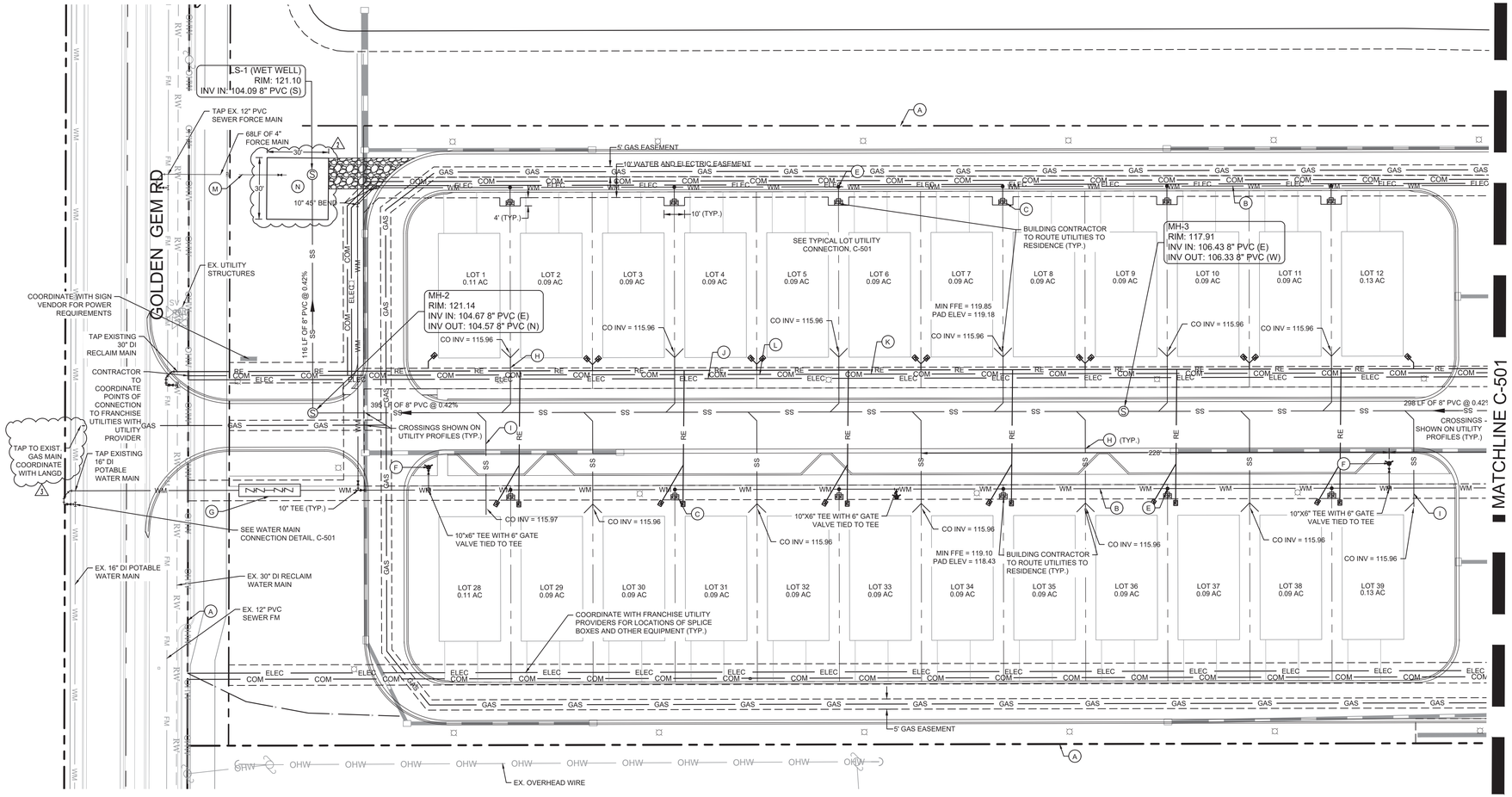
PAVING AND DRAINAGE PLAN

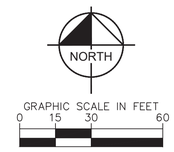
4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-403

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LEGEND

- (A) PROPERTY LINE
- (B) 10" PVC WATER MAIN
- (C) DUAL WATER SERVICE WITH (2) 5/8" METERS (TYP)
- (D) SINGLE WATER SERVICE WITH (1) 5/8" METER
- (E) 1.5" CORP STOP (TYP)
- (F) FIRE HYDRANT ASSEMBLY (TYP)
- (G) 10" FIRE LINE MASTER METER ASSEMBLY W/ BY-PASS (PER CITY OF APOPKA DETAIL, SHEET C-551)
- (H) DUAL SEWER SERVICE (TYP.)
- (I) SINGLE SEWER SERVICE
- (J) ELECTRIC SERVICE
- (K) COMMUNICATION SERVICE
- (L) LIGHT POLE (TYP.), REFER TO PHOTOMETRIC PLANS
- (M) PVC FORCEMAIN
- (N) LIFT STATION - OWNED AND MAINTAINED BY THE CITY OF APOPKA

LEGEND

- COM — PROPOSED COMMUNICATION LINE
- WM — DOMESTIC WATER SERVICE LINE
- RE — PROPOSED RECLAIMED WATER LINE
- SS — SANITARY SEWER LATERAL
- PROPOSED SANITARY MANHOLE
- WM — EXISTING WATER MAIN
- SS — EXISTING SANITARY SEWER MAIN
- OHW — EXISTING ELECTRIC LINE
- PROPOSED DRAINAGE
- GAS — PROPOSED GAS MAIN
- EXISTING POWER POLE
- PROPOSED PIPE BEND
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- GAS — PROPOSED SINGLE WATER SERVICE (1" LINE W/ 5/8" METER UNLESS OTHERWISE NOTED) (P.O.S.)
- PROPOSED DOUBLE WATER SERVICE (1.5" LINE W/ (2) 5/8" METERS UNLESS OTHERWISE NOTED) (P.O.S.)
- PROPOSED SINGLE SEWER SERVICE W/ CO (P.O.S.)
- PROPOSED DOUBLE SEWER SERVICE W/ CO (P.O.S.)
- PROPOSED TEE
- PROPOSED WATER BENDS
- PROPOSED WATER REDUCER
- PROPOSED LIGHT POLE
- CORP STOP
- MASTER METER ASSEMBLY PER CITY DETAILS

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 CITY ROADS, OTHERWISE CLASS 150
   - 6" AND LARGER DUCTILE IRON PIPE PER AWWA C150
   - SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI 816.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241 (ADS POLYFLEX OR APPROVED EQUAL).
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 (CITY OF APOPKA) 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. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
21. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
22. 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.
23. 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.
24. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE FLORIDA STATUTES.
25. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE.
26. CONTRACTOR TO PROVIDE A SIGN AT EACH FDC.
27. UTILITY CROSSING PIPE DEFLECTIONS PER C.O.A FIG 117.
28. ALL PIPE LENGTHS ARE APPROXIMATIONS AND THE CONTRACTOR SHALL NOT USE FOR BIDDING PURPOSES.

FOLLOW CURRENT NFPA AND FLORIDA FIRE PREVENTION CODE 7TH EDITION CONCERNING FIRE AND LIFE SAFETY.

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.

NOTE:
PRIVATE FIRE SERVICE MAIN SHOWN FOR ALIGNMENT PURPOSES ONLY. FIRE SERVICE MAIN TO BE DESIGNED BY A LICENSED FIRE SERVICE DESIGNER. PRIVATE FIRE SYSTEM MAIN DESIGN INSTALLATION IS PER NFPA 24. PLUMBING CONTRACTOR MUST SECURE FIRE SERVICE PERMIT.

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No.	REVISIONS	DATE	BY
2	REVISED LIFT STATION TO CITY REQUIREMENTS	12/18/2024	TPC
3	ADDED GAS MAIN FOR THE SITE	12/18/2024	TPC

Kimley»Horn
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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
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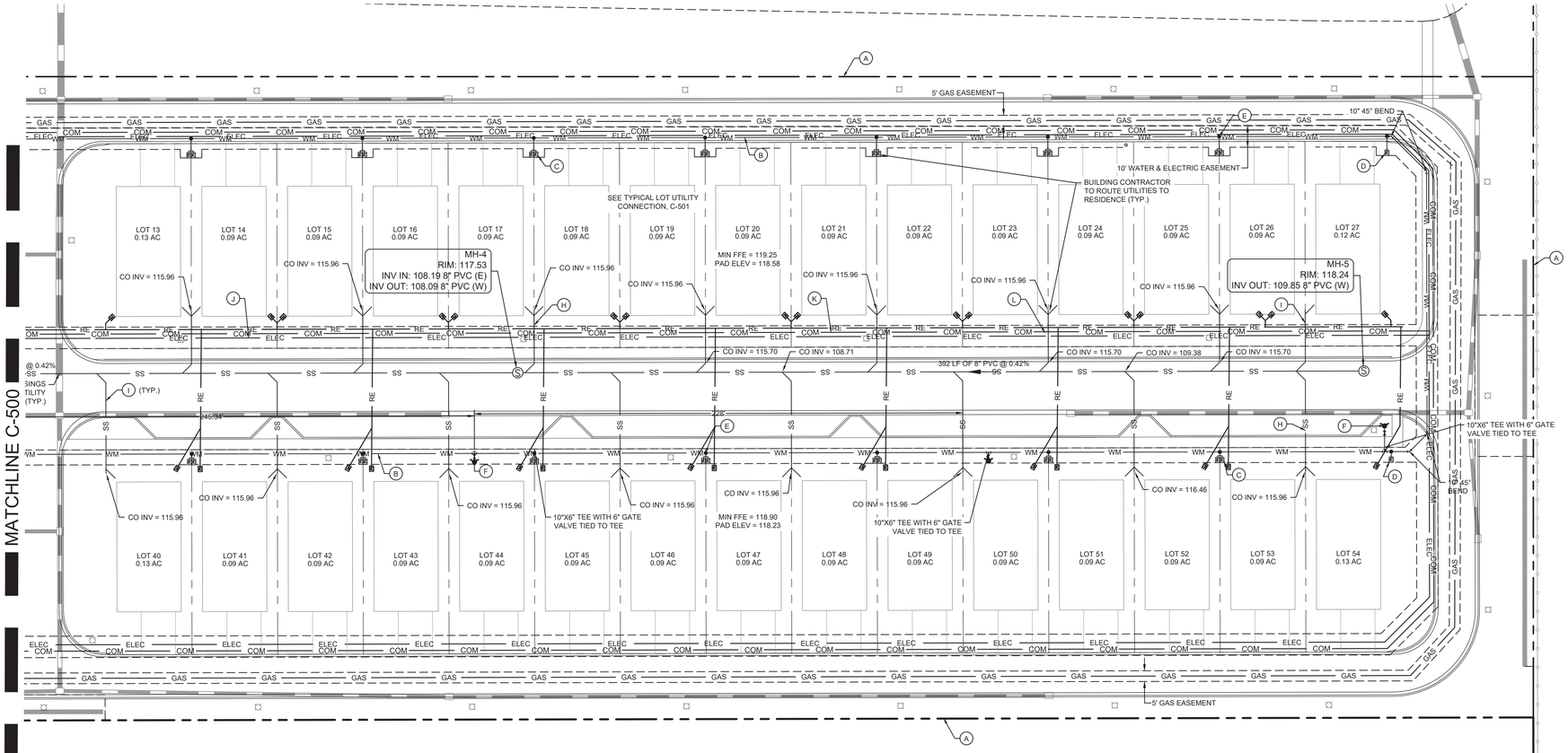
UTILITY PLAN

4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-500

Plotted By:Cormac Troy Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-500 UTILITY PLAN December 18, 2024 09:07:06pm K:\VRB_LDE\K\147864008 - 4101 Golden Gem Resi\CADD\PlanSheets\C-500 UTILITY PLAN.dwg
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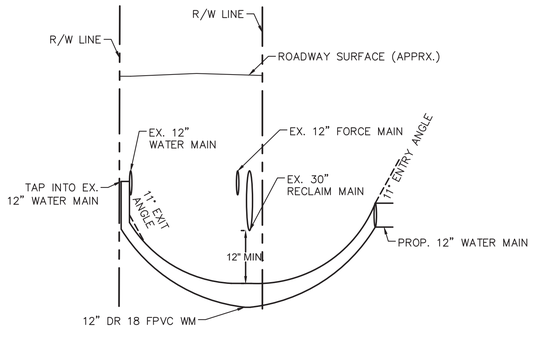


NORTH

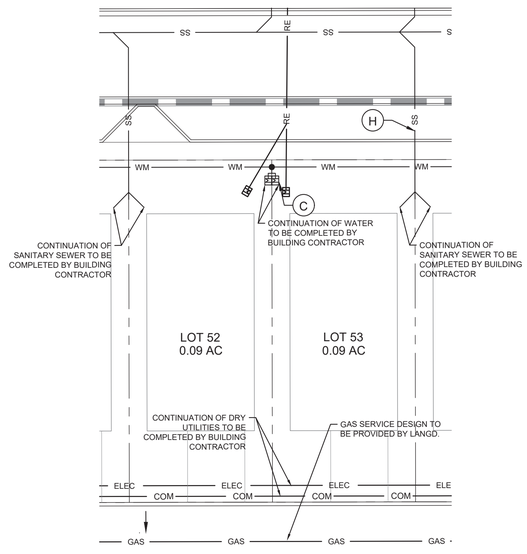
GRAPHIC SCALE IN FEET
0 15 30 60

LEGEND

- (A) PROPERTY LINE
- (B) 10" PVC WATER MAIN
- (C) DUAL WATER SERVICE WITH (2) 5/8" METERS (TYP)
- (D) SINGLE WATER SERVICE WITH (1) 5/8" METER
- (E) 1.5" CORP STOP (TYP)
- (F) FIRE HYDRANT ASSEMBLY (TYP)
- (G) 10" FIRE LINE MASTER METER ASSEMBLY W/ BY-PASS (PER CITY OF APOPKA DE
- (H) DUAL SEWER SERVICE (TYP.)
- (I) SINGLE SEWER SERVICE
- (J) ELECTRIC SERVICE
- (K) COMMUNICATION SERVICE
- (L) LIGHT POLE (TYP.), REFER TO PHOTOMETRIC PLANS
- (M) PVC FORCEMAIN
- (N) LIFT STATION - OWNED AND MAINTAINED BY THE CITY OF APOPKA



WATER MAIN CONNECTION DETAIL
SCALE: N.T.S.



TYPICAL LOT UTILITY CONNECTION

GRAPHIC SCALE IN FEET
0 10 20 40

LEGEND

- COM — PROPOSED COMMUNICATION LINE
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- RE — PROPOSED RECLAIMED WATER LINE
- SS — SANITARY SEWER LATERAL
- PROPOSED SANITARY MANHOLE
- WM — EXISTING WATER MAIN
- SS — EXISTING SANITARY SEWER MAIN
- OHW — EXISTING ELECTRIC LINE
- PROPOSED DRAINAGE
- GAS — PROPOSED GAS MAIN
- EXISTING POWER POLE
- PROPOSED PIPE BEND
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- GAS — PROPOSED SINGLE WATER SERVICE (1" LINE W/ 5/8" METER UNLESS OTHERWISE NOTED) (P.O.S.)
- PROPOSED DOUBLE WATER SERVICE (1.5" LINE W/ (2) 5/8" METERS UNLESS OTHERWISE NOTED) (P.O.S.)
- PROPOSED SINGLE SEWER SERVICE W/ CO (P.O.S.)
- PROPOSED DOUBLE SEWER SERVICE W/ CO (P.O.S.)
- PROPOSED TEE
- PROPOSED WATER BENDS
- PROPOSED WATER REDUCER
- PROPOSED LIGHT POLE
- CORP STOP
- MASTER METER ASSEMBLY PER CITY DETAILS

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

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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
12/16/2024

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DATE 8/7/2024
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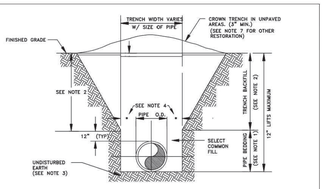
UTILITY PLAN

4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-501

Plotted By: Cosmos, Troy Sheet Set: 4101 GOLDEN GEM RESIDENTIAL Layout: C-501 UTILITY PLAN December 18, 2024 05:07:30pm K:\ORB_LDEV\147864008 — 4101 Golden Gem Res\CADD\PlanSheets\C-500 UTILITY PLAN.dwg
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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 TO 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"	3'	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 PROPOSED PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.
2. *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 DUCTILE IRON PIPE EQUIVALENT MUST BE USED WITH MINIMUM CLEARANCE OF 3 INCHES.
   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'

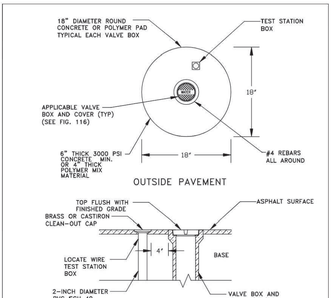
NOTES:

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.** ** FM = 100 P.S.I. / WW OR RWM = 150 P.S.I.
   SOIL DESIGNATION:SM/SW/SP SILT
   LAYING CONDITIONS:_____ 3
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)

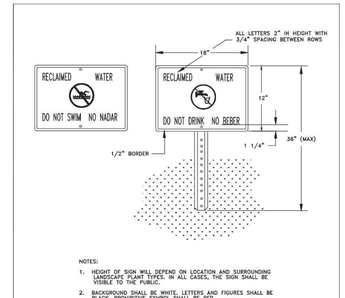
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 105



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

VALVE BOX

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 109

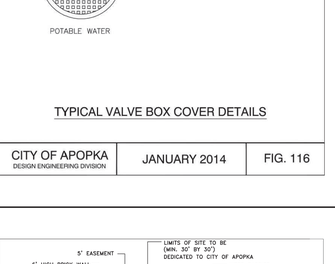


NOTES:

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. NOT ROLLED HIGH TENSILE RAIL OR BILLET STEEL, NOT 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.

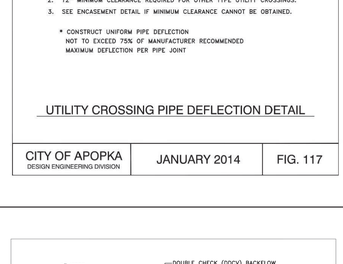
RECLAIMED WATER ADVISORY SIGN

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



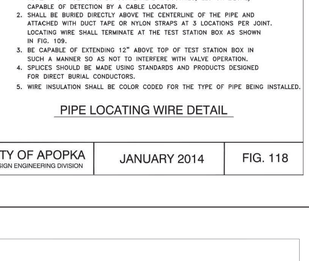
NOTES:

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

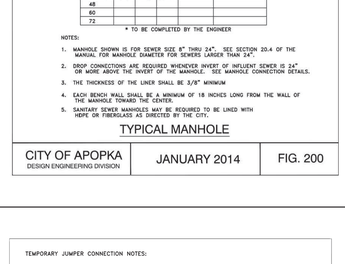


NOTES:

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



FORCE MAIN MANHOLE LINER

THICKNESS (INCHES)			MATERIAL	MANUFACTURER
DIAMETER (INCHES)	HEIGHT (FEET)			
	3–6	7–12	13–17	
48				
60				
72				

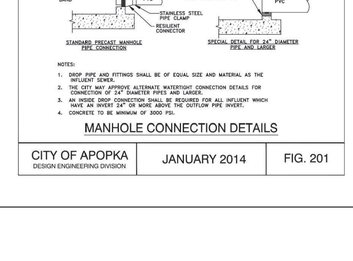
* TO BE COMPLETED BY THE ENGINEER

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. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. THE CITY MAY APPROVE ALTERNATE WATERTIGHT CONNECTION DETAILS FOR SEWERS OF 24" DIAMETER PIPES AND LARGER.
3. AN INSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 24" OR MORE ABOVE THE OUTFLOW PIPE INVERT.
4. CONCRETE TO BE MINIMUM OF 3000 PSI.

MANHOLE CONNECTION DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 201

NOTES:

1. DRIVEWAY AND APRON SHALL BE SIX (6) INCH THICK, 3000 P.S.I. CONCRETE. WITH No.6X6 WIRE MESH OR FIBER MESH.
2. POWER TO THE PUMP STATION SHALL BE THROUGH UNDERGROUND CONDUIT FROM SUPPLY SOURCE IN RIGHT-OF-WAY.
3. GATE TO BE DECORATIVE BLACK POWDER COATED ALUMINUM W/PICKET SPACING = OR < 4"
4. WALLS ARE TO BE BRICK OR DECORATIVE STONE.
5. WET WELL LID MUST OPEN TOWARD CONTROL PANEL (HINGE SIDE TOWARD PANEL).
6. LIFT STATION WALL TO BE PLACED AT LEAST 15FT. BEHIND THE R/W LINE.

PUMP STATION TYPICAL SITE PLAN

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 300

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 of 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 at any size from any existing water main. The jumper connection shall be sized to provide velocity (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 disinfection of the new main has been successfully completed and cleared for use from the Florida Department of Environmental Protection (FDEP) and other pertinent agencies and the pressure in the new main is equalized with the existing main to maintain a pressure of 20 psi in the new mains after disinfection and until the FDEP clearance letter is obtained. Thrust blocking and/or restraints shall be provided temporarily, as required, for the jumper connection assembly. All pipe, fittings, and valves for 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 5 of AWWA C651-05.
3. Flushing of 10 inches in diameter and longer water mains may be done through the tie-in valve under very controlled conditions. The following procedures shall be followed:
   A. The tie-in valves shall be operated and pressure tested in the presence of the City engineer or his designee. Any valve found to leak or not operate in the proper sight 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 tie-in valve.
   - Provide for and monitor the pressure in the tie-in point. The pressure in the existing main must not drop below 35 psi.
   - The tie-in valve shall be opened a few turns only, ensuring a pressure drop across the valve is greater than 10 psi.

   C. The tie-in valve shall be locked closed by the City personnel until flushing begins.
   D. The tie-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 tie-in valve shall be closed and locked in the closed position by the City personnel.
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 tie-in valve shall remain closed and shall be locked in the closed position by the City. The tie-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

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12/16/2024

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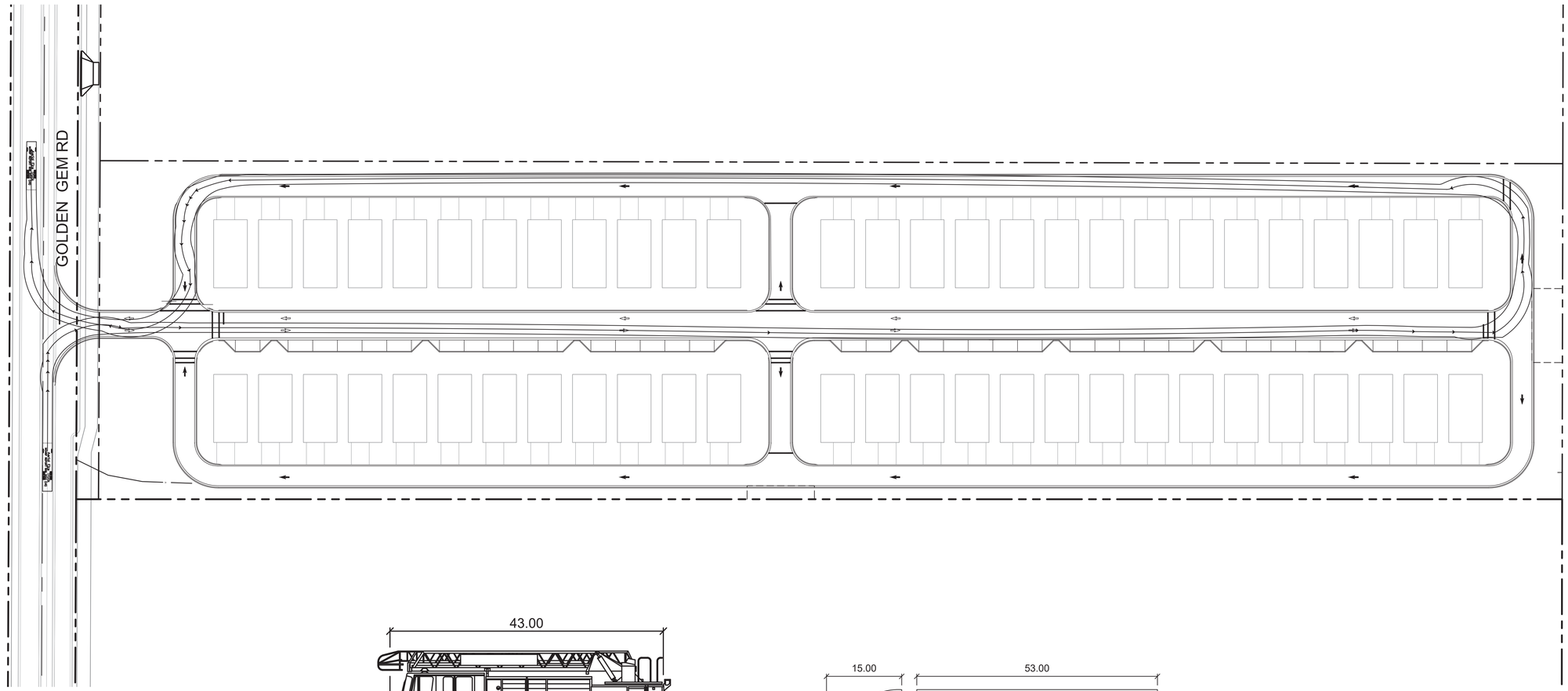
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CHECKED BY ——

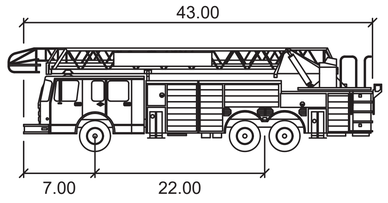
UTILITY DETAILS

4101 GOLDEN GEM RESIDENTIAL
PREPARED FOR
DOUBLE B DEVELOPMENT FL
APOPKA

SHEET NUMBER
C-550

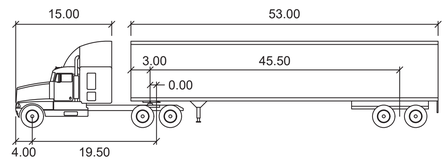
Plotted By:Cosmos, Troy Sheet Set:4101 GOLDEN GEM RESIDENTIAL Layout:C-550 UTILITY DETAILS December 18, 2024 05:07:48pm K:\VRB_LDEV\147864008 - 4101 Golden Gem Res\CADD\PlanSheets\C-550 UTILITY DETAILS.dwg
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Aerial Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 33.3



WB-67

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		

No.	REVISIONS	DATE	BY

Kimley»Horn
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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
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MACKENZIE CERJAN LICENSE No. 90545 STATE OF FLORIDA PROFESSIONAL ENGINEER
12/16/2024

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KHA PROJECT 147864008
DATE 8/7/2024
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DESIGNED BY ____
DRAWN BY ____
CHECKED BY ____

TRUCK MOVEMENT PLAN

4101 GOLDEN GEM RESIDENTIAL

PREPARED FOR
DOUBLE B DEVELOPMENT
APOPKA FL

SHEET NUMBER
C-600

Plotted By: Cosmas, Troy Sheet Set: 4101 GOLDEN GEM RESIDENTIAL Layout: C-600 TRUCK MOVEMENT PLAN December 18, 2024 05:08:10pm K:\VRB_LDEV\147864008 — 4101 Golden Gem Resi\CADD\PlanSheets\C-600 TRUCK MOVEMENT PLAN.dwg
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December 20, 2024
147864008

City of Apopka Planning & Zoning
Development Review Committee
120 E. Main Street
Apopka, FL 32703
407-703-1712

RE: ***Request for Additional Information***
Project Name: 4101 Golden Gem Road Residential

Kimley-Horn and Associates, Inc. (Kimley-Horn) is in receipt of the review comments dated November 19, 2024 for the Golden Gem Residential project. The DRC staff comments are shown below, followed by our responses.

Planning & Zoning
Planning Division, (407) 703-1712 or via email at planning@apopka.net

1. Project Scope. Are these lots proposed to be single-family ATTACHED or DETACHED? Clarify.

Response: The proposed lots are to be single-family detached. Each of the identified lots shall have one home. This has been clarified in the project scope section on the cover page

2. Cover Sheet. Why are there strikethroughs on the Sheet List Table?

Response: These represent pages that we understand the City to request during the CSP but are not part of the MDP (based on previous comments received on other MDP applications). The intent of the crossed through sheets is to indicate the intent to provide these plans but noting that they are not part of this current application. We have added a note below the sheet index to convey this as well.

3. Connectivity is required by the Form-Based Code (FBC). Demonstrate connections to the north, east, and south adjacent properties.

Response:
- ***North: The property to the north will contain a large stormwater area (SWM-3); a trail is being proposed that will connect the properties and provide pedestrian connectivity.***
- ***South: A construction and grading easement has been provided at the south side of the property, which will allow for a future continuation to extend from the center north/south roadway to the adjacent property to the south. Due to the unknown nature of the future connection of the southern parcel, this will provide for added flexibility once a site plan is available. Furthermore, the most reasonable location for future interconnectivity has a significant change in elevation; a retaining wall is currently proposed to accommodate this. Construction of the roadway connection to tie to existing would not be practical prior to grading of the adjacent property. This approach was noted as acceptable in an email response from Jean Sanchez on 12/9/2024.***

- ***East: Similarly to the above, the adjacent development (industrial user) did not provide for connectivity to this site and there is a significant grade change between required FFE and the existing grade that results in the need for a retaining wall. Because of this, a construction and grading easement has been provided at the east side of the property, which will allow for a future continuation to extend from the center east/west roadway to the adjacent property to the east.***

4. Provide another sheet of the site plan that includes the entire subdivision.

Response: The Overall Plan, Sheet C-150, shows the entire subdivision. This response has been noted as acceptable in an email response from Jean Sanchez on 12/9/2024.

5. Show building pad and indicate the front and rear areas of each lot.

Response: Building pads have been added for each lot. Text added to site plan sheets to clarify the front and rear of lots.

6. Building Setback under "provided' column is confounding, stating that over 96', 66' and 42' are provided from the front, rear and side respectively.

Response: The provided setbacks as previously submitted were representing the minimum provided setbacks from the parcel boundary to the proposed lots. With the addition of the building footprints, this column has been updated to dimension the provided setbacks from the lot boundary to the proposed building pads.

7. School concurrency is required.

Response: Acknowledged. This will be provided upon completion.

8. Plat is required, may be submitted concurrent with the Construction Site Plan (CSP) review.

Response: This property is Lot 6 of the Wyld Oaks Plat. A replat of Lot 6 will be submitted to the City concurrently with the CSP.

9. While Staff and Wyld Oaks developer are discussing text amendment that would increase density for Wyld Oaks at-large. However, no amendment to increase density in this overlay has been adopted. Therefore, Staff will not approve the proposed density of 5.99 du/ac for this project until such amendment is adopted.

Response: The MDP specifies that the max density is 5 DU/A; however, the approved Developers Agreement (DA), Section 8 on Page 8, states that the density can be increased provided that the number of allowable units for the district type is not exceeded. In this case, for the Neighborhood District, a total of 199 units are allowed per the DA. This project is proposing 54 units and is the first application in the Neighborhood District. A table has been added to the site plan sheets showing 199 allowable units, 0 previously permitted from applications on other parcels, and 54 being submitted with this application. A similar table will be submitted with future applications to keep track of the allowable vs proposed unit counts for each district.

10. Submit home models and elevations. Residential building entrances shall be designed with porches or stoops (FBC Section J.6.e). Floor plans with dimensions will be required for approval of models and elevations before Building Permits may be approved.

Response: A floor plan and elevations are included with this resubmittal.

11. What are the proposed lot width and lot area? Include this information in the Site Data Table as a proposal. Remove statement regarding assumption of 30' x 50' per lot.

Response: The lots have been dimensioned on the plans. For further clarity, a "typ" suffix has been added to the dimension to demonstrate that the lot dimension provided is the typical lot dimension unless otherwise indicated. Please note that the lots from the first submittal all had the same dimensions; on this resubmittal the end lots have been revised and thus dimensioned accordingly. Additionally, lot areas have been provided under each lot label.

Also, the building area statement has been clarified in the site coverage table by stating that this is the building footprint dimension. A separate line has been added under site data to clarify that the typical lot dimensions are 40' W x 95.7' L, unless otherwise noted on the plans.

12. The site data table does not speak to proposed parking. Demonstrate that FBC Table 8 Off-Street Parking Requirements is met. Ensure that parking area is labeled. If parking requirements are intended to be met by parking spaces in other parts of the Wyld Oaks Development, outside of this project area, then it is more of a reason to provide internal pedestrian and vehicular connectivity.

Response: Table 9: Off street parking requires 2 parking spaces per unit. This development proposes 54 units, requiring a total of 108 spaces. Each unit will have a 2-car garage and a 20' long driveway for 2 cars. There are also 37 parallel parking spaces along the roadway. A total of 253 parking spaces are provided. This information has been added to the site data table.

13. Alley-loaded products should be positioned within 20-25 feet of the alley. This placement allows for two cars to park behind the garage without obstructing the alley while maximizing the front yard space, which serves as the primary outdoor area for residents. Long stretches of unused alley space should be avoided. Please refer to the document in the Attachments section titled "MDP-24-2 4101 Golden Gem Residential - Consultant Comment" for an example of what is not appropriate.

Response: Building footprints have been received and added to the plans to demonstrate compliance with this requirement. Each building has been placed to include a 20' driveway on the alley/rear side of the lot, and 15' on the front side of the building. Dimensions have been added to the plans for clarity.

14. Sheet C-300. Site plan sheet states that proposed open space and trail details are on the LA plans. Details of the open space and trail on the LA plans are not sufficient. Elaborate on the trail material and clarify if there are any recreation equipment etc. to be included in the open space. If this is intended to be included at CSP, state as such on the plans.

Response: Acknowledged. The open space and trail north of the Onx site are located on the adjacent SWM #3 parcel. The improvements are future and shown for reference only.

15. What is the plant width from center and plant area for the shade trees? Include root barriers for all shade trees proposed to be installed.

Response: Acknowledged. Plant width from center to planting area boundary has been specified for all proposed shade trees. Root Barriers have been added for all proposed shade trees adjacent to hardscape elements.

16. Plant schedule does not list Palms as proposed planting materials. Landscape Details sheet includes a cut sheet referring to Palms. Explain.

Response: Acknowledged. All palm details on landscape detail sheet L1.50 has been removed. No palms are currently proposed for installation on the property.

17. Provide and demonstrate understory trees in the area of each lot vacant of any trees. Staff is unable to discern if this is the front or the rear area.

Response: Acknowledged. Each lot includes proposed shade trees within the parcel boundaries in accordance with the "City of Apopka" Code of Ordinance Section 5.2.5.F.1, which requires that lots smaller than 5,000 square feet must contain at least one canopy tree. As a result, understory trees are not applicable in this case. Front and Rear area of buildings are noted.

18. Note that Irrigation plan is required at CSP review and shall comply with Water-Wise Standards, LDC Section 5.2.5.D.

Response: Acknowledged. Irrigation Plans and details shall be provided with the CSP application.

Public Services and Engineering

Richard Earp, City Engineer, at (407) 703-1627 or via email at rearp@apopka.net

1. Please clarify in the plans that the lift station will be owned and maintained by the City and built to City Standards.

Response: Per discussion in the November 2024 DRC meeting, a private lift station as originally proposed is not acceptable for single-family developments. The plans have been updated with this resubmittal to indicate a City-owned lift station. Standard City Details have been added to the plans. Please note that full lift station design shall be provided during the CSP application.

2. Please demonstrate that the stormwater pond north of this project is permitted to take this stormwater runoff.

Response: Please refer to the drainage statement included with this resubmittal which demonstrates that this property was accounted for in the design of SWM-3 in the overall Wyld Oaks Development.

Should you have any additional questions please do not hesitate to contact me at (772) 794- 4132 or Mackenzie.Cerjan@kimley-horn.com.

Sincerely,

Mackenzie Cerjan, P.E.
Associate

Golden Gem Estates
KPI Master/Major Development Plan
City of Apopka Florida Parcel I.D. # 14-20-27-0000-00-025; 083

for

K. Hovnanian Orlando Division, LLC

LEGAL DESCRIPTION:

(PARCEL 2)
THE NORTH 3330 FEET OF THE SOUTH 660 FEET OF THE NORTHEAST $\frac{1}{4}$ OF THE SOUTHEAST $\frac{1}{4}$ OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, LESS THE EAST 30.00 FEET THEREOF.

AND

(PARCEL 3)
THE SOUTH 330 FEET OF THE NORTHEAST $\frac{1}{4}$ OF THE SOUTHEAST $\frac{1}{4}$ OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA. LESS AND EXCEPT ANY PORTION OF THE ABOVE DESCRIBED LANDS LYING WITHIN ROAD RIGHT-OF-WAY.

by

G L SUMMITT
ENGINEERING INC

Project Team

Owner
Timothy Burchfield
422 Kentucky Blue Cir.
Apopka, FL 32712
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Fx:

Robert & Stacy Moss
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Ph:
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Utilities

Drinking Water
City of Apopka
748 E. Cleveland St.
Apopka, FL 32703
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Sanitary Sewer
City of Apopka
748 E. Cleveland St.
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Garbage Disposal
City of Apopka
748 E. Cleveland St.
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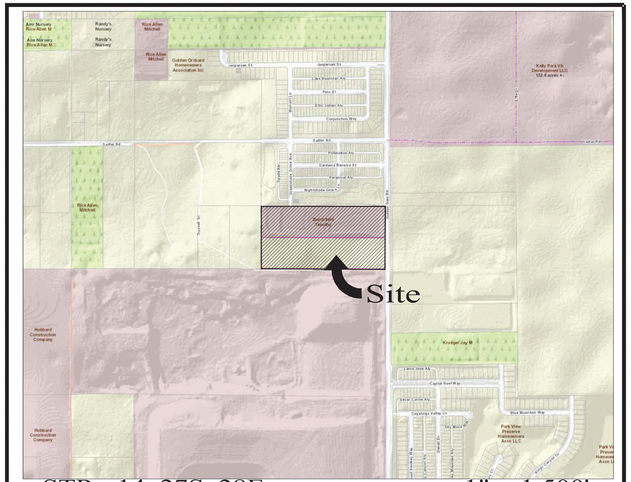
Reclaim Water
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Electric Service
Duke Energy
3250 Bonnet Creek Rd,
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Ph: (800) 700-8744

Phone Provider
AT&T
1227 S. Division Ave.
Orlando, FL 34805
Ph: (407) 351-7100

Cable Provider
Spectrum Networks
100 Gordon St.
Sanford, FL 32771
Ph: (321) 805-3081

Vicinity Map



STR: 14, 27S, 28E 1" = 1,500'

Drawing Index

No.	Title	Revised
1	Coversheet	10-30-24
2	Symbols & Abbreviations	10-30-24
3-3e	Boundary, Topo & Tree Survey	10-30-24
4	Overall Site Plan	10-30-24
5	Open Space Rec. Plan	10-30-24
6	Neighborhood Block Plan	10-30-24
7	Design Standards Plan	10-30-24
8	Key Map Plan	10-30-24
9-10	Detailed Site Plan(s)	10-30-24
11-12	Utility Plan(s)	10-30-24
13-14	Drainage & Grading Plan(s)	10-30-24
15-16	Landscape Plan(s)	10-30-24
17	Landscape Details	10-30-24
18-19	Truck Turning Plan(s)	10-30-24
20-21	General Details	10-30-24
22	Architectural Elevations	10-30-24

G L SUMMITT
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This item has been digitally signed and sealed by Geoffrey L. Summitt, P.E. on *Oct 30 2024*

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

K. Hovnanian Orlando Division, LLC
2301 Lucien Way, Suite 260
Maitland, FL 32751

Golden Gem Estates
Subdivision
City of Apopka, Florida

KPI Master/Major Development Plan

Coversheet

Plans not valid unless Signed, Dated and Sealed below.

GEOFFREY L. SUMMITT, P.E.
Date: October 30, 2024
FL Registration #58775
Certificate of Authorization #29665

Digitally signed by Geoffrey L Summitt
Date: 2024.10.30 16:57:41 -04'00'

NO.	DATE	DESCRIPTION
1	10-30-24	Comments

SHEET NUMBER
1 OF 22

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
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
HDPE	HIGH DENSITY POLYETHYLENE
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	
NORTH	NORTH
N	NORTH
NA	NOT APPLICABLE
N&C	NAIL AND CAP
NE	NORTHEAST
NG	NATURAL GROUND
NIC	NOT IN CONTRACT
NO OR #	NUMBER
NOM	NOMINAL
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
PFGP	PROFILE GRADE POINT
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
POB	POINT OF BEGINNING
POJ	PUSH ON JOINT
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
△	DELTA

EXISTING SYMBOLS

LINES

- CENTER LINE
- WIRE FENCE
- CHAIN LINK FENCE
- WOOD FENCE
- GUARDRAIL
- EXISTING PLATS
- RETAINING WALL
- R/W — RIGHT-OF-WAY LINE
- SHORELINE
- SWALE
- BUILDING LINE
- CONTOURS (81 / 80)
- RAILROAD TRACKS
- GAS — GAS MAIN
- UE — UNDERGROUND ELECTRIC
- UGT — UNDERGROUND TELEPHONE
- OVERHEAD ELECTRIC
- OVERHEAD TELEPHONE
- CTV — UNDERGROUND CABLE TELEVISION
- EASEMENT

SANITARY

- SANITARY SEWER LINE
- CLEANOUT
- FM — FORCE MAIN
- MANHOLE

WATER & REUSE WATER

- 6"WM — WATER MAIN 6" PVC PIPE
- RM — REUSE WATER MAIN
- BACKFLOW PREVENTOR
- WATER VALVE
- FIRE HYDRANT
- WATER METER

STORM DRAIN

- STORM SEWER
- MANHOLE
- MITERED END
- STORM INLET
- FDOT TYPE 6 INLET
- FDOT TYPE 1 INLET
- FDOT TYPE 2 INLET
- FDOT TYPE 3 INLET
- FDOT TYPE 4 INLET
- FDOT TYPE 5 INLET

HIGHWAY & UTILITIES

- BENCHMARK
- RECOVERED 4x4 CM
- SET 4x4 CM
- SET IRON ROD
- RECOVERED IRON ROD
- CONCRETE
- 520 — COUNTY ROADS
- 95 — INTERSTATE ROADS
- 50 — STATE ROADS
- WOOD AND/OR METAL LIGHT POLE
- CONCRETE LIGHT POLE
- YARD LIGHT
- MISCELLANEOUS SIGN
- 16 15 / 21 22 — SECTION CORNER
- EDGE OF PAVEMENT W/O CURB
- EDGE OF PAVEMENT W/CURB
- GUY POLE
- WOOD UTILITY POLE
- CONCRETE UTILITY POLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- TELEPHONE RISER
- E — ELECTRIC BOX / TRANSFORMER
- WELL
- MONITORING WELL
- DUMPSTER
- RR CROSSING SIGN
- RR CROSSING GATE
- TRAFFIC SIGNAL POLE
- SATALITE DISH
- GUY WIRE
- HANDICAP PARKING
- 99.50 — SPOT ELEVATION
- BRICK PAVERS
- DIRT ROAD
- 8" MAPLE TREE
- 8" OAK TREE
- 8" PINE TREE
- 8" PALM TREE
- 8" MISC. TREE

PROPOSED SYMBOLS

LINES

- BOUNDARY
- CONSERVATION SETBACK
- CENTER LINE
- CHAIN LINK FENCE
- CONTOUR (81 / 80)
- EASEMENT
- FENCE
- GUARDRAIL
- LOT LINE
- P/L — PROPERTY LINE
- RETAINING WALL
- R/W — RIGHT-OF-WAY LINE
- SETBACK LINE
- SHORELINE
- SWALE
- TREE LINE

SANITARY

- 100 LF SAN 8 PVC 0.40% — 100 LINEAR FEET SANITARY 8" PVC PIPE @ 0.40% SLOPE
- CLEANOUT
- DOUBLE SANITARY SERVICE
- FM — FORCE MAIN
- MANHOLE

WATER & REUSE WATER

- WM — WATER MAIN
- 11 1/2° BEND
- 22 1/2° BEND
- 45° BEND
- 90° BEND
- TEE
- CROSS
- CHECK VALVE
- DOUBLE DETECTOR CHECK VALVE
- DOUBLE WATER SERVICE
- GATE VALVE
- FIRE HYDRANT
- M — METER
- REDUCER
- BLOWOFF
- BACKFLOW PREVENTER
- SP 2 — SAMPLE POINT
- UNDERDRAIN CEANOUT
- RM — RECLAIMED WATER MAIN
- REUSE WATER SYSTEM CONNECTION
- DOUBLE REUSE WATER SERVICE

STORM DRAIN

- 100 LF STS 24 RCP @ 0.20% — 100 LINEAR FEET STORM PIPE 24" REINFORCED CONCRETE PIPE @ 0.20%
- UNDERDRAIN 6" PVC 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
- SLOPE DIRECTION ARROW FOR POND SIDE SLOPE
- 100.00 — SPOT ELEVATION
- STORM INLET

HIGHWAY & UTILITIES

- BOUND CORNER
- CONCRETE
- 520 — COUNTY ROADS
- 901 / 24 — DETAIL REFERENCE
- DUMPSTER PAD
- FF=98.76 / TYPE A — FINISHED FLOOR ELEVATION W/ FHA LOT TYPE
- GUY POLE
- HANDICAP PARKING
- 95 — INTERSTATE ROADS
- LIGHT POLE
- SIGNS
- 16 15 / 21 22 — SECTION CORNER
- 50 — STATE ROADS
- SILT FENCE
- TRAFFIC FLOW PAVEMENT MARKING
- UTILITY POLE
- BLDG OR STRUCTURE
- TYPE F CURB & GUTTER
- MIAMI CURB
- 901 / 24 — CROSS SECTION DETAIL

G L SUMMITT
ENGINEERING INC
Office: Lake Mary
3667 Simonton Place
Lake Mary, Florida 32746
phone: 407-323-0705
fax: 407-992-8650
www.GLSeng.com

K. Hovnanian Orlando Division, LLC
2301 Lucien Way, Suite 260
Maitland, FL 32751

Golden Gem Estates
Subdivision
City of Apopka, Florida

KPI Master/Major Development Plan

Symbols & Abbreviations

Plans not valid unless Signed, Dated and Sealed below.

GEOFFREY L. SUMMITT, P.E.
Date: October 30, 2024
FL Registration #58775
Certificate of Authorization #29665

Revisions

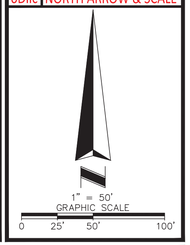
NO.	DATE	DESCRIPTION
1	10/30/2024	Initial Submittal
2		
3		
4		
5		
6		
7		
8		
9		
10		

SHEET NUMBER
2 OF 22

6Diie VICINITY MAP



6Diic NORTH ARROW & SCALE



5Ciii SURVEYOR OBSERVED POSSIBLE ENCROACHMENTS

- (A) FIELD FENCE CROSSES BOUNDARY BY AT MOST 0.2'.
- (B) FIELD FENCE CROSSES BOUNDARY BY AT MOST 0.7'.
- (C) FIELD FENCE CROSSES BOUNDARY BY AT MOST 1.2'.
- (D) FIELD FENCE CROSSES BOUNDARY BY AT MOST 5.8'.
- (E) WIRE FENCE CROSSES BOUNDARY BY AT MOST 0.5'.

3 FLOOD INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN ZONE "X", AS SHOWN ON THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 120179 0125 H (MAP NO. 12095C0125H), WHICH BEARS AN EFFECTIVE DATE OF 9/24/2021, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE. ZONE "X" DENOTES AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

6Diid LEGEND AND ABBREVIATIONS

CONC	CONCRETE SURFACE	E	ELECTRIC BOXES/STRUCTURES
GRAVEL	GRAVEL	UPM	UTILITY POLE WITH METER
BRICK	BRICK PAVERS	UP	UTILITY POLE
			GUY ANCHOR
			LIGHT POLE
(C)	CALCULATED DATA		GROUND LIGHT
CCR	CERTIFIED CORNER RECORD	TF	ELECTRIC TRANSFORMER
CLF	CHAIN LINK FENCE	AC	AIR CONDITIONER
EP	EDGE OF PAVEMENT	EV	ELECTRIC VAULT
FF	FIELD FENCE	KP	KEY PAD
LB	LICENSED BUSINESS	ER	ELECTRIC RISER
MF	METAL FENCE	UPB	UTILITY PULL BOX
PSM	PROFESSIONAL SURVEYOR AND MAPPER	CO	CLEANOUT
RW	RETAINING WALL	ICV	IRRIGATION CONTROL VALVE
TOB	TOP OF BANK	HB	HOSE BIBB
TOE	TOE OF SLOPE	W	WELL
		TR	TELEPHONE RISER
		GMK	GAS UTILITY MARKER
			SIGN
			FLAGPOLE

CENTERLINE	RECOVERED MONUMENT AS NOTED
RIGHT-OF-WAY LINE	SET ½" IRON ROD WITH CAP "LB 6393"
SECTIONAL LINE	

6Cvii PLATTED SETBACK OR RECORDED BUILDING RESTRICTION LINES

NONE PROVIDED TO THIS SURVEYOR.

5Ei "SCHEDULE B - SECTION 2" ITEMS

4 — EASEMENT RECORDED MARCH 7, 1968 IN OFFICIAL RECORDS BOOK 1712, PAGE 307. (AS TO PARCEL 1).
(DOES NOT AFFECT – EASEMENT LOCATED NORTHWESTERLY OF THE SUBJECT PROPERTY)

5 — EASEMENT RECORDED MARCH 15, 1976 IN OFFICIAL RECORDS BOOK 2684, PAGE 1892. (AS TO PARCELS 1 AND 4).
(DOES NOT AFFECT – EASEMENT LOCATED WESTERLY OF THE SUBJECT PROPERTY)

6 — DISTRIBUTION EASEMENT RECORDED JUNE 28, 1979 IN OFFICIAL RECORDS BOOK 3023, PAGE 1284. (AS TO PARCEL 1).
(DOES NOT AFFECT – EASEMENT LOCATED IN SW 1/4 OF SECTION 14-20-27)

7 — INTENTIONALLY DELETED.

8 — INTENTIONALLY DELETED.

9 — INTENTIONALLY DELETED.

10 — ROAD MAINTENANCE AGREEMENT RECORDED APRIL 14, 1997 IN OFFICIAL RECORDS BOOK 5233, PAGE 2028. (AS TO PARCEL 1).
(AFFECTS – BLANKET IN NATURE OVER ROADWAY TO PARCEL 1)

11 — DISTRIBUTION EASEMENT RECORDED JULY 22, 1999 IN OFFICIAL RECORDS BOOK 5800, PAGE 633. (AS TO PARCEL 2).
(AFFECTS – AS SHOWN)

12 — DISTRIBUTION EASEMENT RECORDED AUGUST 26, 2003 IN OFFICIAL RECORDS BOOK 7068, PAGE 2657. (AS TO PARCEL 3).
(AFFECTS – AS SHOWN)

13 — INTENTIONALLY DELETED.

14 — ROAD MAINTENANCE AGREEMENT RECORDED JUNE 5, 2009 IN OFFICIAL RECORDS BOOK 9882, PAGE 6566. (AS TO PARCEL 4).
(MAY OR MAY NOT AFFECT – EXHIBIT "A" NOT INCLUDED IN THE DOCUMENT)

15 — ROAD MAINTENANCE AGREEMENT RECORDED MARCH 7, 2013 IN OFFICIAL RECORDS BOOK 10533, PAGE 1993. (AS TO PARCEL 4).
(MAY OR MAY NOT AFFECT – EXHIBIT "A" NOT INCLUDED IN THE DOCUMENT)

ALTA/NSPS LAND TITLE SURVEY IDENTIFICATION TABLE

2	"TABLE A" PROPERTY ADDRESS	6Biv	BEARING BASIS	7	SURVEYOR'S CERTIFICATE
3	"TABLE A" FLOOD INFORMATION	6Bvii	CONTIGUITY STATEMENT	7b	"TABLE A" BUILDING AREA
4	"TABLE A" LAND AREA	6Bxii	TITLE COMMITMENT INFORMATION	7c	"TABLE A" BUILDING HEIGHT
5Biii	ACCESS TO PROPERTY	6Cvii	RECORDED SETBACKS/RESTRICTIONS PROVIDED BY INSURED	9	"TABLE A" PARKING SPACES
5Ciii	SURVEYOR OBSERVED POSSIBLE ENCROACHMENTS	6Diic	NORTH ARROW & SCALE	13	"TABLE A" ADJOINING OWNERS
5Ei	"SCHEDULE B – SECTION 2" ITEMS	6Diid	LEGEND & ABBREVIATIONS	14	"TABLE A" INTERSECTING STREET
5F	CEMETERY NOTE	6Diie	VICINITY MAP	16	"TABLE A" EARTH MOVING NOTE
6Bi	TITLE DESCRIPTION	6Dig	SURVEYOR'S NOTES		
		6Diik	TYPE OF SURVEY		

SEE SHEET 2 OF 2 FOR SURVEY DRAWING

DATE	REVISIONS	TECH
02/15/24	ADDED TITLE	EGW
03/20/24	PARCELS 1 & 4 REMOVED	EGW

DATE	REVISIONS	TECH

FIELD	JS	DRAWING SCALE	1"=50'
DRAWN BY	JLS	QC BY	
DRAWING NAME	230903_4146 GOLDEN GEM RD_ALTA.DWG		

6Bxii TITLE COMMITMENT INFORMATION

THE TITLE DESCRIPTION AND SCHEDULE "B" ITEMS HEREON ARE FROM: FIDELITY NATIONAL TITLE INSURANCE COMPANY, COMMITMENT FILE NO.: FLX1564, HAVING AN EFFECTIVE DATE OF JANUARY 4, 2024.

SHEET 1 OF 2

6Bi TITLE DESCRIPTION

PARCEL 2:

THE NORTH 330 FEET OF THE SOUTH 660 FEET OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, **LESS** THE EAST 30.00 FEET THEREOF.

PARCEL 3:

THE SOUTH 330 FEET OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.
LESS AND EXCEPT ANY PORTION OF THE ABOVE DESCRIBED LANDS LYING WITHIN ROAD RIGHT-OF-WAY.

THIS SURVEY DESCRIBES AND DEPICTS THE SAME LAND AS DESCRIBED IN THE TITLE COMMITMENT AS REFERENCED ABOVE.

6Dig SURVEYOR'S NOTES

1. NO UNDERGROUND UTILITIES ARE SHOWN ON THIS SURVEY, ONLY ABOVE GROUND VISIBLE EVIDENCE OF UTILITIES ARE SHOWN.
2. ALL STATEMENTS WITHIN THE CERTIFICATION, AND OTHER REFERENCES LOCATED ELSEWHERE HEREON, RELATED TO: UTILITIES, IMPROVEMENTS, STRUCTURES, BUILDINGS, PARTY WALLS, PARKING, EASEMENTS, SERVITUDES, AND ENCROACHMENTS ARE BASED SOLELY ON ABOVE GROUND, VISIBLE EVIDENCE, UNLESS ANOTHER SOURCE OF INFORMATION IS SPECIFICALLY REFERENCED HEREON.
3. THIS SURVEY MEETS OR EXCEEDS THE SURVEY STANDARDS/STANDARDS OF CARE AS SET FORTH IN SECTION 3 OF THE 2021 ALTA/NSPS SURVEY REQUIREMENTS.

4 LAND AREA

860,852± SQUARE FEET 19.762± ACRES

6Biv BEARING BASIS

BEARINGS SHOWN HEREON ARE BASED ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, WHICH BEARS N00°21'14"W, FLORIDA STATE PLANE EAST COORDINATE SYSTEM DATUM OF NAD83(1990).

5F CEMETERY NOTE

THERE IS NO VISIBLE EVIDENCE OF CEMETERIES, BURIAL GROUNDS OR ISOLATED GRAVESITES ON SUBJECT PROPERTY.

9 PARKING SPACES

THERE IS NO STRIPED PARKING ON SUBJECT PROPERTY.

5Biii ACCESS TO PROPERTY

THE SUBJECT PROPERTY HAS DIRECT PHYSICAL ACCESS TO GOLDEN GEM ROAD, A DEDICATED PUBLIC STREET OR HIGHWAY & INDIRECT ACCESS TO SADLER ROAD, A DEDICATED PUBLIC STREET OR HIGHWAY, VIA EASEMENT INSTRUMENT #20160323528.

16 EARTH MOVING NOTE

THERE IS NO OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS.

6Bvii CONTIGUITY STATEMENT

THE PARCELS CONTAINED IN THE LEGAL DESCRIPTION ARE CONTIGUOUS WITHOUT ANY GAPS, GORES OR OVERLAPS.

7 SURVEYOR'S CERTIFICATE

TO: FIDELITY NATIONAL TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 7(a), 7(b)(1), 7(c), 8, 9, 13, 14, 16, AND 19 OF TABLE A THEREOF.
THE FIELD WORK WAS COMPLETED ON 09/25/2023.
DATE OF PLAT OR MAP: 10/03/2023.

E. GLENN TURNER — DATE

PROFESSIONAL SURVEYOR & MAPPER NO: 5643
STATE OF: FLORIDA
PROJECT NO: 230903

SURVEY PREPARED BY:
AMERICAN SURVEYING AND MAPPING, INC.
221 CIRCLE DRIVE
MAITLAND, FL 32751
CERTIFICATE OF AUTHORIZATION # LB6393
PHONE: (407) 426-7979
FAX: (407) 426-9741
INFO@ASMCORPORATE.COM

NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR & MAPPER PER F.S. 472.025 OR THE CERTIFIED ELECTRONIC SIGNATURE AND SEAL OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR & MAPPER PER F.A.C. 5J-17.062(2) AND 5J17.062(3).

6Diik ALTA/NSPS LAND TITLE SURVEY
2
BOUNDARY SURVEY OF
GOLDEN GEM
4350 & 4362 TRUSSEL TRAIL AND
4146 & 4160 GOLDEN GEM ROAD
APOPKA, FLORIDA
ORANGE COUNTY

AMERICAN SURVEYING & MAPPING, INC.
NDDS NATIONAL DUE DILIGENCE SERVICES
A DIVISION OF AMERICAN SURVEYING & MAPPING, INC.
Phone: (407) 426-7979
nationaldueddiligenceservices.com
221 Circle Drive, Maitland, FL 32751

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SHEET 2
OF 2

6Diic NORTH ARROW & SCALE

1" = 50'
GRAPHIC SCALE
0 25' 50' 100'

GREENSHADE GROVE AVENUE
UNKNOWN WIDTH RIGHT-OF-WAY

13 OWNER: MATTAMY ORLANDO LLC
APN: 14-20-27-0000-00-089
INSTRUMENT #20220438442

11 15.00' WIDE, DISTRIBUTION EASEMENT PER ORB 5800, PG 633

S89°50'11"E 1302.84'(M)

FOUND 4"x4" CONCRETE MONUMENT ILLEGIBLE (0.03' W, 0.16' S)

FOUND 4"x4" CONCRETE MONUMENT (ILLEGIBLE)

14 ±660' TO SOUTH RIGHT-OF-WAY LINE OF SADLER ROAD

E¼ CORNER, SECTION 14-20S-27E
FOUND NAIL NO IDENTIFICATION
(COR #16645)

13 OWNER: BAUTISTA JOSANDI & FELIX JOSE
APN: 14-20-27-0000-00-068
INSTRUMENT #20160323528

WOOD SHED
METAL SHED
ASPHALT
6' CLF
4' FF
GRADE BREAK
ASPHALT
ACCESS
TOE
TOB

PARCEL 2
N 330', S 660' NE 1/4, SE 1/4,
SECTION 14-20S-27E

660.00'(C)

FOUND 1/2" IRON ROD & CAP (ILLEGIBLE)

COOPS

1 STORY WOOD BUILDING 652± SQ.FT.

WOOD SHED

4' WF

6' CLF

4' FF

660.01'(C)

FOUND 1/4" IRON ROD (NO IDENTIFICATION) (0.24' E, 0.20' S)

GMK

S00°21'14"E

E LINE, SE¼, SECTION 14-20S-27E

EP

N00°21'14"W 2689.40'(C)(M)
(BEARING BASIS)

GOLDEN GEM ROAD
PUBLIC ROAD RIGHT-OF-WAY
INSTRUMENT #9983052948 & #20190336053

N00°05'35"W

PARCEL 3
S 330' NE 1/4, SE 1/4,
SECTION 14-20S-27E

1 STORY WOOD BUILDING
7b 806± SQ.FT.
7c HEIGHT=12.8'±

1 STORY WOOD BUILDING
7b 548± SQ.FT.
7c HEIGHT=13.3'±

WOOD DECK

SEE DETAIL A

487.85'

114.70'

91.19'

12 15.00' WIDE, DISTRIBUTION EASEMENT PER ORB 7068, PG 2657

FOUND 4" IRON PIPE NO IDENTIFICATION (0.38' E, 2.66' S)

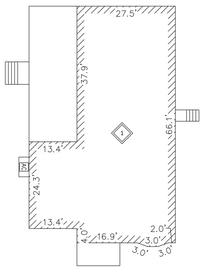
N89°50'12"W 1305.84'(C)

FOUND 2" IRON PIPE NO IDENTIFICATION (0.07' E, 0.20' S)

SE CORNER, SECTION 14-20S-27E
FOUND PK NAIL & DISK ILLEGIBLE

GATE

13 OWNER: HUBBARD CONSTRUCTION CO
APN: 14-20-27-0000-00-019
INSTRUMENT #19965818155



1 STORY FRAME BUILDING
7b 2,150± SQ.FT.
7c HEIGHT=15.0'±

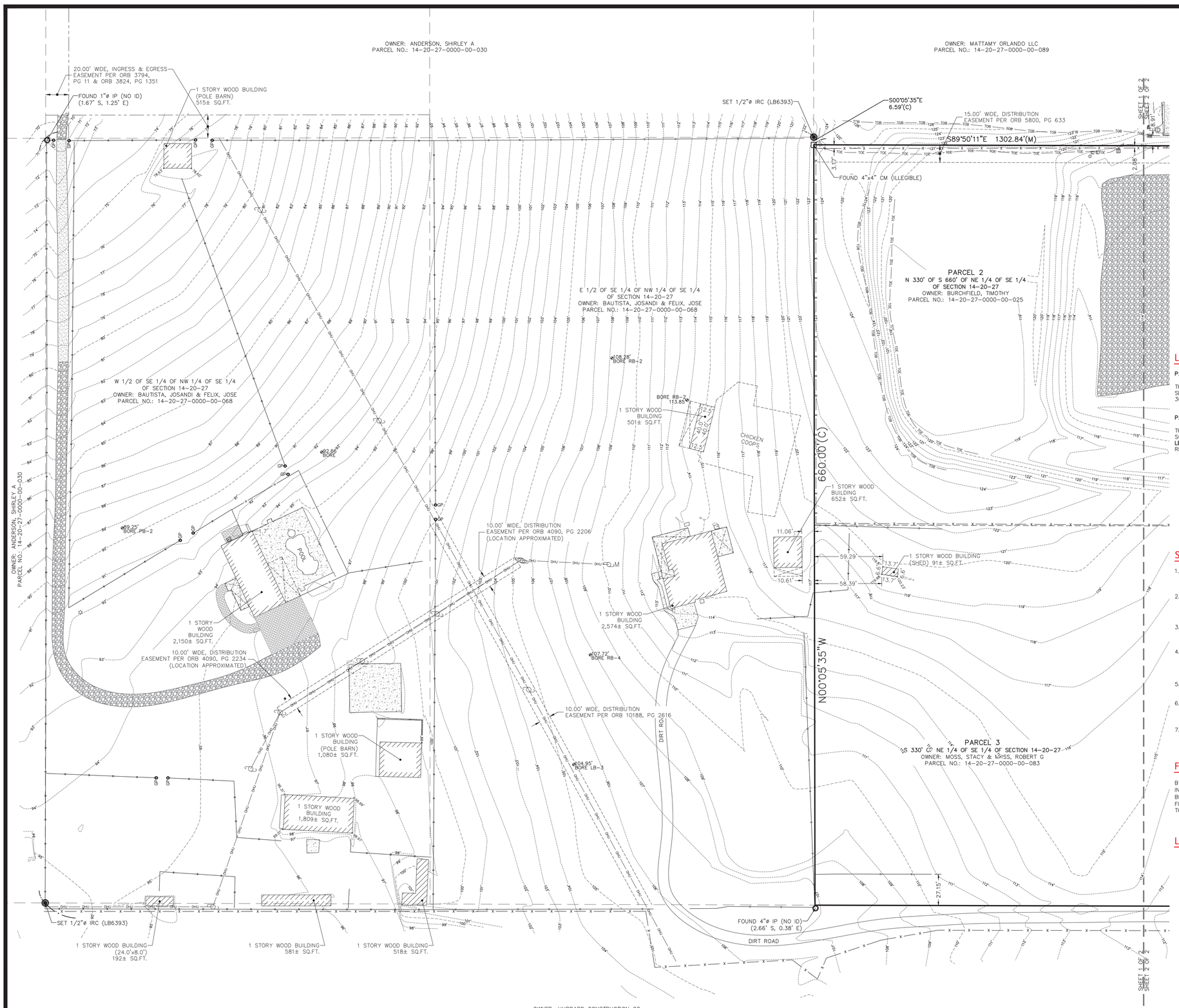
DETAIL A
SCALE 1"=20'

6Diik ALTA/NSPS LAND TITLE SURVEY
2 BOUNDARY SURVEY OF
GOLDEN GEM
4350 & 4362 TRUSSEL TRAIL AND
4146 & 4160 GOLDEN GEM ROAD
ORANGE COUNTY APOPKA, FLORIDA

AMERICAN SURVEYING & MAPPING, INC.
NDDS NATIONAL DUE DILIGENCE SERVICES
A DIVISION OF AMERICAN SURVEYING & MAPPING, INC.
221 Creole Drive, Maitland, FL 32751 Phone: (407) 426-7979 nationaldueldiligenceservices.com

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LEGAL DESCRIPTION

PARCEL 2:

THE NORTH 330 FEET OF THE SOUTH 660 FEET OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, **LESS** THE EAST 30.00 FEET THEREOF.

PARCEL 3:

THE SOUTH 330 FEET OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.
LESS AND EXCEPT ANY PORTION OF THE ABOVE DESCRIBED LANDS LYING WITHIN ROAD RIGHT-OF-WAY.

SURVEYOR'S NOTES

1. BEARINGS SHOWN HEREON ARE BASED ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, WHICH BEARS NORTH 00°21'14" WEST, STATE PLANE COORDINATE SYSTEM DATUM.
2. ALL STATEMENTS WITHIN THE CERTIFICATION, AND OTHER REFERENCES LOCATED ELSEWHERE HEREON, RELATED TO: UTILITIES, IMPROVEMENTS, STRUCTURES, BUILDINGS, PARTY WALLS, PARKING, EASEMENTS, SERVITUDES, AND ENCROACHMENTS ARE BASED SOLELY ON ABOVE GROUND, VISIBLE EVIDENCE, UNLESS ANOTHER SOURCE OF INFORMATION IS SPECIFICALLY REFERENCED HEREON.
3. THE SURVEYOR HAS NOT ABSTRACTED THE LAND SHOWN HEREON FOR EASEMENTS, RIGHT-OF-WAY OR RESTRICTIONS OF RECORD WHICH MAY AFFECT THE TITLE OR USE OF LAND, NOR WAS ANY TITLE WORK PROVIDED TO THIS SURVEYOR BY THE CLIENT.
4. NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR & MAPPER PER F.S. 472.025 **OR** THE CERTIFIED ELECTRONIC SIGNATURE AND SEAL OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR & MAPPER PER F.A.C. 5J-17.062(2) AND 5J17.062(3).
5. ALL RECORDING INFORMATION CITED HEREON REFERS TO THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
6. VERTICAL INFORMATION BASED ON: BENCHMARK 'L708026' HAVING A PUBLISHED ELEVATION OF 127.968' (NAVD 88)
DESCRIBED AS: 2"ø ORANGE COUNTY BRASS DISK IN 1'ø CONCRETE MONUMENT.
7. THIS IS **NOT** A BOUNDARY SURVEY, IT IS INTENDED TO BE USED FOR TOPOGRAPHIC PURPOSES ONLY.

FLOOD INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN ZONE "X", AS SHOWN ON THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 120179 0125 H (MAP NO. 12095C0125H), WHICH BEARS AN EFFECTIVE DATE OF 09/24/2021, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE. ZONE "X" DENOTES AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

LEGEND

	ASPHALT		SIGN
	BRICK PAVERS	TEL	TELEPHONE RISER
	GRAVEL	UP	UTILITY POLE
X	CHAIN LINK FENCE	UP,M	UTILITY POLE WITH METER
OHU	OVERHEAD UTILITY LINE(S)	UPB	UTILITY PULL BOX
	WIRE FENCE	W	WELL
	WOOD FENCE		
AC	AIR CONDITIONER		FOUND MONUMENT AS NOTED
CO	CLEANOUT		SET MONUMENT AS NOTED
E	ELECTRIC BOX(ES)/STRUCTURE(S)		
E	ELECTRIC RISER	(C)	CALCULATED DATA
TT	ELECTRIC TRANSFORMER	CCR	CERTIFIED CORNER RECORD
EV	ELECTRIC VAULT	CLF	CHAIN LINK FENCE
	FLAGPOLE	CW	CONCRETE WALL
GMK	GAS UTILITY MARKER	EP	EDGE OF PAVEMENT
	GROUND LIGHT	FFE	FINISHED FLOOR ELEVATION
	GUY ANCHOR	LB	LICENSED BUSINESS
HB	HOSE BIBB	PSM	PROFESSIONAL SURVEYOR & MAPPER
IC	IRRIGATION CONTROL VALVE	RW	RETAINING WALL
KP	KEY PAD	TOB	TOP OF BANK
	LIGHT POLE	TOE	TOE OF SLOPE

SHEET 1 OF 2

I HEREBY CERTIFY THAT THIS SURVEY, SUBJECT TO THE SURVEYOR'S NOTES CONTAINED HEREON, MEETS THE APPLICABLE "STANDARDS OF PRACTICE" AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

FOR THE FIRM

E. GLENN TURNER PSM #6643 DATE

DATE	REVISIONS	TECH
02/14/24	ADDED LEGAL DESCRIPTION & EASEMENTS	EGW
03/20/24	PARCELS 1 & 4 REMOVED	EGW

TOPOGRAPHIC SURVEY OF 4146 & 4160 GOLDEN GEM ROAD AND 4350 & 4362 TRUSSEL TRAIL

A PORTION OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST

APOPKA, FLORIDA

ORANGE COUNTY

AMERICAN SURVEYING & MAPPING, INC.
NDDS NATIONAL DISABLED DEVELOPMENT SERVICES
A Subsidiary of National Disabled Development Services, Inc.
2201 Cantu Drive, Midland, FL 32751 Phone: 407-426-7979
LB6393 americansurveyingmapping@yahoo.com

JOB NO.:	230903
SCALE:	1"=40'
FIELD DATE:	01/02/2024
FIELD BY:	BY
DRAWN BY:	EGW
APPROVED BY:	
DRAWING FILE #	230903 4146 GOLDEN GEM RD_TOPO.DWG

NORTH LINE OF SE 1/4 OF SECTION 14-20-27

EAST 1/4 CORNER OF SE 1/4 OF SECTION 14-20-27
FOUND NAIL (NO ID)
(CCR NO. 116343)

GREENSHADE GROVE AVENUE
UNKNOWN WIDTH RIGHT-OF-WAY

1 STORY WOOD BUILDING
(SHED)
389± SQ.FT.

OWNER: MATTAMY ORLANDO LLC
PARCEL NO.: 14-20-27-0000-00-089

15.00' WIDE, DISTRIBUTION
EASEMENT PER ORB 5800, PG 633

S89°50'11"E 1302.84'(M)

S89°50'21"E 1302.84'(M)

16" ø RCP
INVERT = 106.02'

FOUND 4"x4" CM (ILLEGIBLE)

S00°21'14"E
1344.70'(C)
2689.40'(M)

EAST LINE OF SE 1/4 OF SECTION 14-20-27

GATE MOTOR

ø109.94'
BORE LB-1

ø113.01'
BORE PB-5

ø108.61'
BORE PB-4

PARCEL 2
N 330' OF S 660' OF NE 1/4 OF SE 1/4
OF SECTION 14-20-27
OWNER: BURCHFIELD, TIMOTHY
PARCEL NO.: 14-20-27-0000-00-025

ø106.64'
BORE

SITE BENCHMARK #2
FOUND 1/2"ø IRC
(TRAVERSE-LB6393)
ELEVATION=11.56'

ø107.53'
BORE LB-5

S00°21'14"E 660.01'(M) 660.43'

GOLDEN GEM ROAD
60.00' WIDE PUBLIC RIGHT-OF-WAY
ORI NO. 19983052949 & ORI NO. 20190136053

1 STORY WOOD
BUILDING
(SHED)
64± SQ.FT.

ø112.37'
BORE RB-5

1 STORY WOOD
BUILDING
652± SQ.FT.

1 STORY WOOD
BUILDING
806± SQ.FT.

1 STORY WOOD
BUILDING
548± SQ.FT.

PARCEL 3
S 330' OF NE 1/4 OF SE 1/4 OF SECTION 14-20-27
OWNER: MOSS, STACY & MOSS, ROBERT G
PARCEL NO.: 14-20-27-0000-00-083

487.85'

BORE LB-B1
108.49

ø107.86'
BORE LBB-2

SITE BENCHMARK #1
FOUND 1/2"ø IRC
(TRAVERSE-LB6393)
ELEVATION=108.60'

ø113.57'
BORE PB-6

15.00' WIDE, DISTRIBUTION
EASEMENT PER ORB 7068, PG 2657

N89°50'12"W 1305.84'(C)

DIRT ROAD

FOUND 2"ø IP (NO ID)

N00°21'14"W 1,344.70'(C)
BEARING BASIS

OWNER: HUBBARD CONSTRUCTION CO.
PARCEL NO.: 14-20-27-0000-00-019

SOUTHEAST CORNER OF SE 1/4 OF SECTION 14-20-27
FOUND N&D (ILLEGIBLE)

SOUTH LINE OF SE 1/4 OF SECTION 14-20-27

1" = 40'
GRAPHIC SCALE
0 20' 40' 80'

SEE SHEET 1 OF 2 FOR LEGEND

SHEET 2
OF 2

DATE	REVISIONS	TECH
02/14/24	ADDED LEGAL DESCRIPTION & EASEMENTS	EGW
03/20/24	PARCELS 1 & 4 REMOVED	EGW

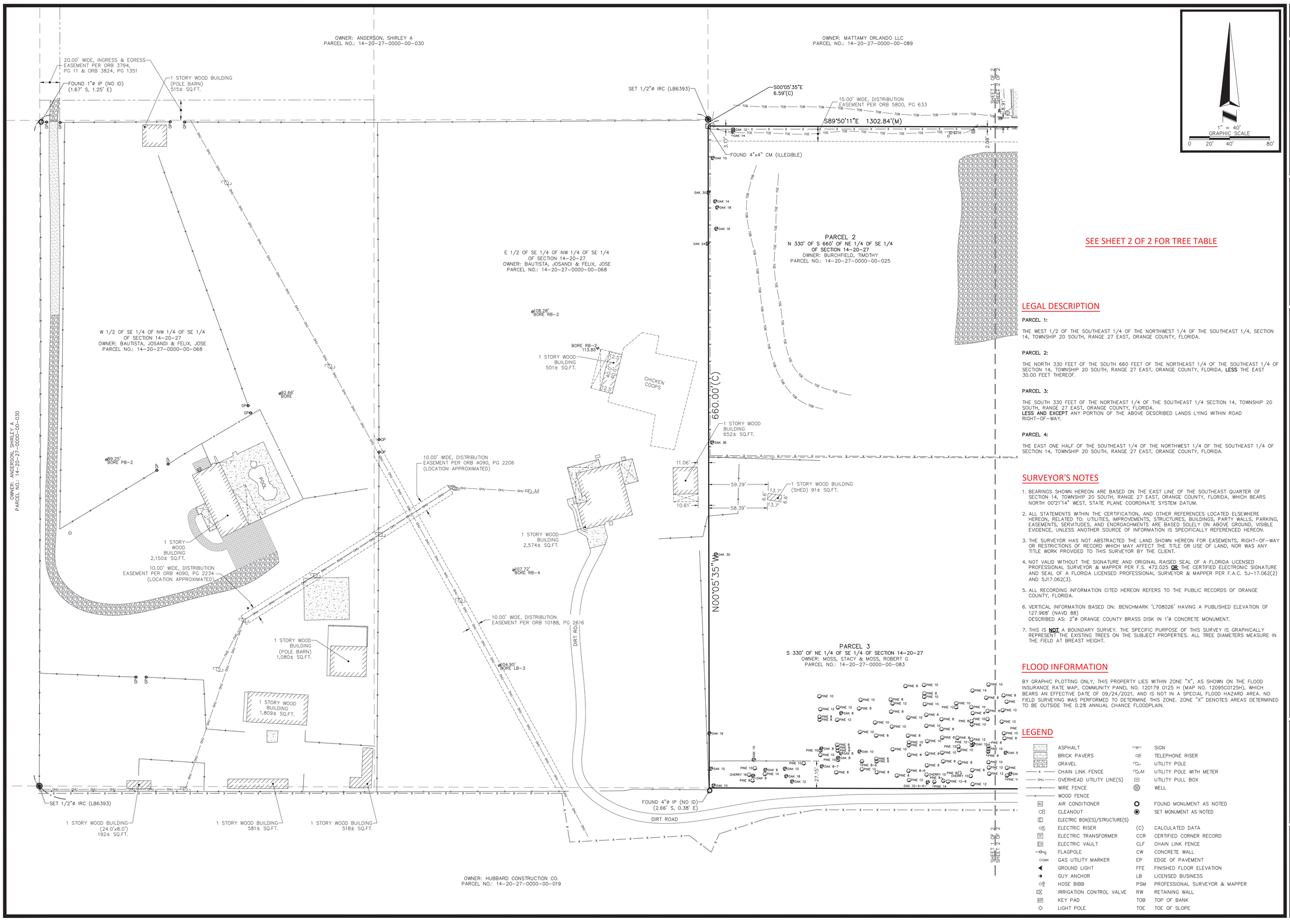
TOPOGRAPHIC SURVEY OF
4146 & 4160 GOLDEN GEM ROAD
AND 4350 & 4362 TRUSSEL TRAIL
A PORTION OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST
ORANGE COUNTY
APOPKA, FLORIDA

AMERICAN SURVEYING & MAPPING, INC.
NDDS NATIONAL DBE DISADVANTAGED BUSINESS ENTERPRISE
A Subsidiary of American Surveying & Mapping, Inc.
2210 Forest Drive, Panama City, FL 32405 Phone: 407-629-9979
LB6393 ASMmail@asmgeomatics.com

JOB NO.:	230903
SCALE:	1" = 40'
FIELD DATE:	01/02/2024
FIELD BY:	BY
DRAWN BY:	EGW
APPROVED BY:	
DRAWING FILE #:	
2023 4146 GOLDEN GEM RD_TOPO.DWG	

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1" = 40'
GRAPHIC SCALE
0 20' 40' 80'

SEE SHEET 2 OF 2 FOR TREE TABLE

LEGAL DESCRIPTION

PARCEL 1:

THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

PARCEL 2:

THE NORTH 330 FEET OF THE SOUTH 660 FEET OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, **LESS** THE EAST 30.00 FEET THEREOF.

PARCEL 3:

THE SOUTH 330 FEET OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.
LESS AND EXCEPT ANY PORTION OF THE ABOVE DESCRIBED LANDS LYING WITHIN ROAD RIGHT-OF-WAY.

PARCEL 4:

THE EAST ONE HALF OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA.

SURVEYOR'S NOTES

1. BEARINGS SHOWN HEREON ARE BASED ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST, ORANGE COUNTY, FLORIDA, WHICH BEARS NORTH 00°21'14" WEST, STATE PLANE COORDINATE SYSTEM DATUM.
2. ALL STATEMENTS WITHIN THE CERTIFICATION, AND OTHER REFERENCES LOCATED ELSEWHERE HEREON, RELATED TO: UTILITIES, IMPROVEMENTS, STRUCTURES, BUILDINGS, PARTY WALLS, PARKING, EASEMENTS, SERVITUDES, AND ENCROACHMENTS ARE BASED SOLELY ON ABOVE GROUND, VISIBLE EVIDENCE, UNLESS ANOTHER SOURCE OF INFORMATION IS SPECIFICALLY REFERENCED HEREON.
3. THE SURVEYOR HAS NOT ABSTRACTED THE LAND SHOWN HEREON FOR EASEMENTS, RIGHT-OF-WAY OR RESTRICTIONS OF RECORD WHICH MAY AFFECT THE TITLE OR USE OF LAND, NOR WAS ANY TITLE WORK PROVIDED TO THIS SURVEYOR BY THE CLIENT.
4. NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR & MAPPER PER F.S. 472.025 **OR** THE CERTIFIED ELECTRONIC SIGNATURE AND SEAL OF A FLORIDA LICENSED PROFESSIONAL SURVEYOR & MAPPER PER F.A.C. 5J-17.062(2) AND 5J17.062(3).
5. ALL RECORDING INFORMATION CITED HEREON REFERS TO THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.
6. VERTICAL INFORMATION BASED ON: BENCHMARK 'L708026' HAVING A PUBLISHED ELEVATION OF 127.968' (NAVD 88)
DESCRIBED AS: 2"ø ORANGE COUNTY BRASS DISK IN 1'ø CONCRETE MONUMENT.
7. THIS IS **NOT** A BOUNDARY SURVEY. THE SPECIFIC PURPOSE OF THIS SURVEY IS GRAPHICALLY REPRESENT THE EXISTING TREES ON THE SUBJECT PROPERTIES. ALL TREE DIAMETERS MEASURE IN THE FIELD AT BREAST HEIGHT.

FLOOD INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN ZONE "X", AS SHOWN ON THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 120179 0125 H (MAP NO. 12095C0125H), WHICH BEARS AN EFFECTIVE DATE OF 09/24/2021, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE. ZONE "X" DENOTES AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

LEGEND

	ASPHALT		SIGN
	BRICK PAVERS		TELEPHONE RISER
	GRAVEL		UTILITY POLE
x	CHAIN LINK FENCE		UTILITY POLE WITH METER
OHU	OVERHEAD UTILITY LINE(S)		UTILITY PULL BOX
	WIRE FENCE	W	WELL
	WOOD FENCE		
AC	AIR CONDITIONER		FOUND MONUMENT AS NOTED
CO	CLEANOUT		SET MONUMENT AS NOTED
E	ELECTRIC BOX(ES)/STRUCTURE(S)		
	ELECTRIC RISER	(C)	CALCULATED DATA
TF	ELECTRIC TRANSFORMER	CCR	CERTIFIED CORNER RECORD
EV	ELECTRIC VAULT	CLF	CHAIN LINK FENCE
	FLAGPOLE	CW	CONCRETE WALL
OAK	GAS UTILITY MARKER	EP	EDGE OF PAVEMENT
	GROUND LIGHT	FFE	FINISHED FLOOR ELEVATION
	GUY ANCHOR	LB	LICENSED BUSINESS
HB	HOSE BIBB	PSM	PROFESSIONAL SURVEYOR & MAPPER
IC	IRRIGATION CONTROL VALVE	RW	RETAINING WALL
KP	KEY PAD	TOB	TOP OF BANK
	LIGHT POLE	TOE	TOE OF SLOPE

SHEET 1 OF 2

I HEREBY CERTIFY THAT THIS SURVEY, SUBJECT TO THE SURVEYOR'S NOTES CONTAINED HEREON, MEETS THE APPLICABLE "STANDARDS OF PRACTICE" AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

FOR THE FIRM

E. GLENN TURNER PSM #6643 DATE

DATE	REVISIONS	TECH
02/14/24	ADDED LEGAL DESCRIPTION & EASEMENTS	EGW
03/20/24	PARCELS 1 & 4 REMOVED	EGW

SPECIFIC PURPOSE SURVEY OF 4146 & 4160 GOLDEN GEM ROAD AND 4350 & 4362 TRUSSEL TRAIL

A PORTION OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST

APOPKA, FLORIDA

ORANGE COUNTY

AMERICAN SURVEYING & MAPPING, INC.
NDDS NATIONAL DISASTER DATA SERVICES
A Subsidiary of American Surveying & Mapping, Inc.
2201 Cantu Drive, Maitland, FL 32751 Phone: 407-426-7979
LB6393 americansurveyingandmapping.com

JOB NO.:	230903
SCALE:	1"=40'
FIELD DATE:	01/29/2024
FIELD BY:	BY
DRAWN BY:	EGW
APPROVED BY:	
DRAWING FILE #	4146 & 4160 GOLDEN GEM RD_TOPO.DWG

NORTH LINE OF SE 1/4 OF SECTION 14-20-27

EAST 1/4 CORNER OF SE 1/4 OF SECTION 14-20-27
FOUND NAIL (NO ID)
(CCR NO. 116343)

GREENSHADE GROVE AVENUE
UNKNOWN WIDTH RIGHT-OF-WAY

1 STORY WOOD BUILDING
(SHED)
389± SQ.FT.

OWNER: MATTAMY ORLANDO LLC
PARCEL NO.: 14-20-27-0000-00-089

15.00' WIDE, DISTRIBUTION
EASEMENT PER ORB 5800, PG 633

S89°50'11"E 1302.84'(M)

16"ø RCP
INVERT = 106.02'

FOUND 4"x4" CM (ILLEGIBLE)

S00°21'14"E
1344.70'(C)
2689.40'(M)

EAST LINE OF SE 1/4 OF SECTION 14-20-27

GATE MOTOR

ø109.94'
BORE LB-1

ø113.01'
BORE PB-5

ø108.61'
BORE PB-4

PARCEL 2
N 330' OF S 660' OF NE 1/4 OF SE 1/4
OF SECTION 14-20-27
OWNER: BURCHFIELD, TIMOTHY
PARCEL NO.: 14-20-27-0000-00-025

ø106.64'
BORE

660.01'(M)

SITE BENCHMARK #2
FOUND 1/2"ø IRC
(TRAVERSE-LB6393)
ELEVATION=11.56'

ø107.53'
BORE LB-5

GOLDEN GEM ROAD
60.00' WIDE RIGHT-OF-WAY
ORI NO. 20190336053

1 STORY WOOD BUILDING
(SHED)
64± SQ.FT.

ø112.17'
BORE RB-5

1 STORY WOOD BUILDING
806± SQ.FT.

1 STORY WOOD BUILDING
548± SQ.FT.

1 STORY WOOD BUILDING
652± SQ.FT.

PARCEL 3
S 330' OF NE 1/4 OF SE 1/4 OF SECTION 14-20-27
OWNER: MOSS, STACY & MOSS, ROBERT G
PARCEL NO.: 14-20-27-0000-00-083

487.85'

ø107.86'
BORE LBB-2

BORE LB-B1
108.49'

SITE BENCHMARK #1
FOUND 1/2"ø IRC
(TRAVERSE-LB6393)
ELEVATION=108.60'

15.00' WIDE, DISTRIBUTION
EASEMENT PER ORB 7068, PG 2657

ø113.57'
BORE PB-6

FOUND 2"ø IP (NO ID)

N00°21'14"W 1344.70'(C)
BEARING BASIS

N89°50'12"W 1305.84'(C)

DIRT ROAD

OWNER: HUBBARD CONSTRUCTION CO.
PARCEL NO.: 14-20-27-0000-00-019

SOUTHEAST CORNER OF SE 1/4 OF SECTION 14-20-27
FOUND N&D (ILLEGIBLE)

SOUTH LINE OF SE 1/4 OF SECTION 14-20-27

SEE SHEET 1 OF 2 FOR LEGEND

1" = 40'
GRAPHIC SCALE
0 20' 40' 80'

TREE TABLE		
TYPE	DIAMETER (ø)	QUANTITY
CAMPHOR	6"	1
CAMPHOR	6"/6"	1
CAMPHOR	7"/6"/6"	1
CAMPHOR	8"/6"	1
CAMPHOR	12"/6"	1
CAMPHOR	36" CLUSTER	3
CHERRY	8"	3
CHERRY	9"	1
CHERRY	10"	3
CHERRY	12"/6"	1
CHERRY	14"	1
CHERRY	16"	2
CHERRY	18"	2
CHERRY	22"/10"	1
CHERRY	24"	1
CHERRY	24"/14"	1
CHINABERRY	20"/12"/9"	1
OAK	6"	12
OAK	6"/4"	1
OAK	7"/6"/6"	1
OAK	8"	36
OAK	8"/5"	1
OAK	8"/7"	1
OAK	8"/8"/6"/5"	1
OAK	9"	1
OAK	9"/8"	1
OAK	10"	17
OAK	10"/4"/4"	1
OAK	12"	15
OAK	12"/9"	1
OAK	14"	7
OAK	15"	1
OAK	16"	4
OAK	18"	4
OAK	20"	1
OAK	24"	3
OAK	26"	1
OAK	30"	3
OAK	36"	1
PALM	12"	1
PALM	14"	1
PINE	8"	50
PINE	8"/6"	2
PINE	9"	1
PINE	10"	67
PINE	10"/6"	1
PINE	12"	79
PINE	12"/6"	1
PINE	12"/8"	2
PINE	12"/8"/8"	1
PINE	14"	39
PINE	15"	2
PINE	16"	27
PINE	18"	12
PINE	20"	3
PINE	22"	3
PINE	24"	1
PINE	28"	2

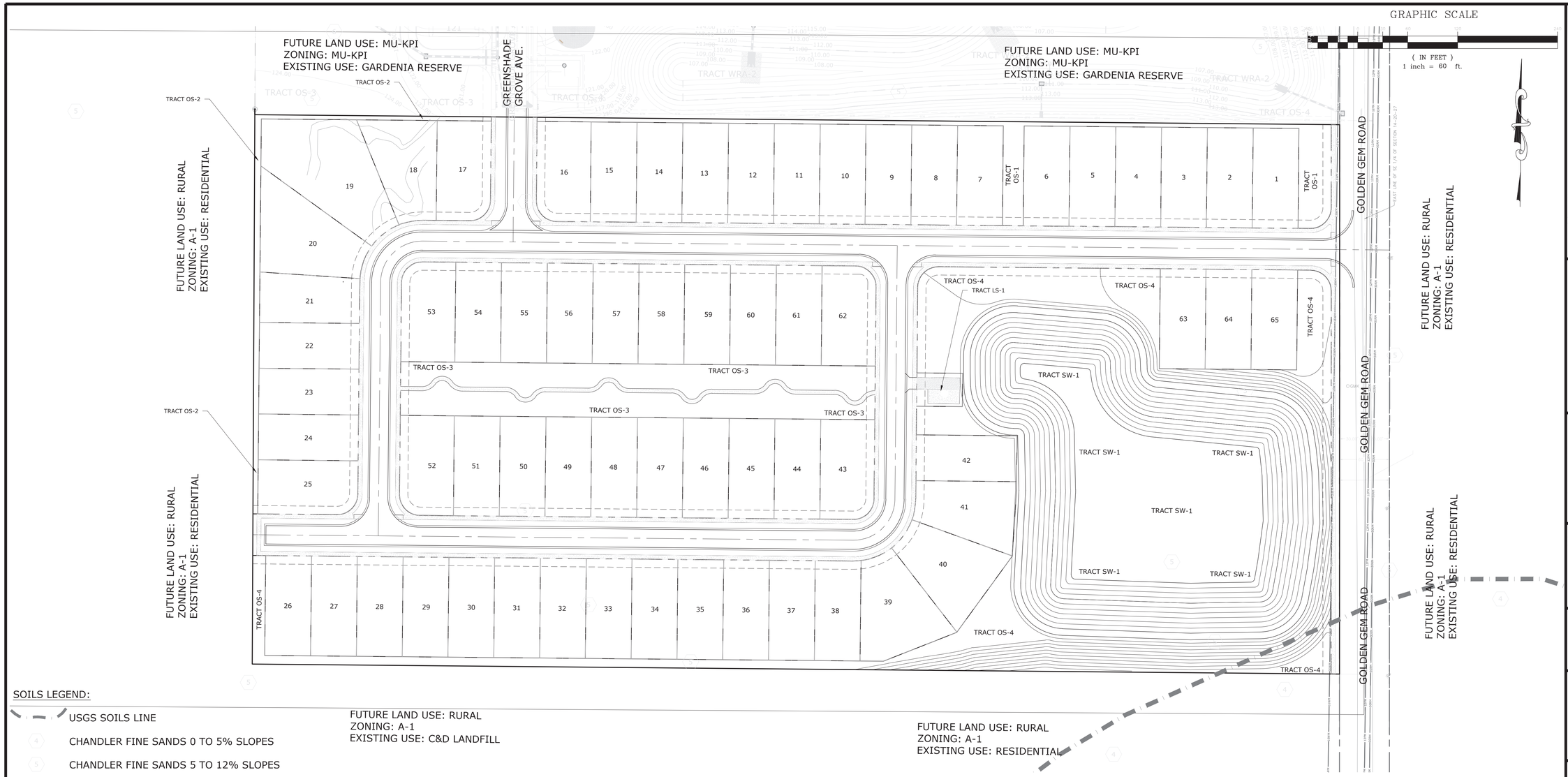
DATE	REVISIONS	TECH
02/14/24	ADDED LEGAL DESCRIPTION & EASEMENTS	EGW
03/20/24	PARCELS 1 & 4 REMOVED	EGW

SPECIFIC PURPOSE SURVEY OF
4146 & 4160 GOLDEN GEM ROAD
AND 4350 & 4362 TRUSSEL TRAIL
A PORTION OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 27 EAST
ORANGE COUNTY
APOPKA, FLORIDA

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2261 Lee Drive, Kissimmee, FL 34744 Phone: 407-426-7979
LB #6393 americansurveyingandmapping.com

JOB NO.:	230903
SCALE:	1" = 40'
FIELD DATE:	01/02/2024
FIELD BY:	BY
DRAWN BY:	EGW
APPROVED BY:	
DRAWING FILE #	23-0903-ALTA GOLDEN GEM RD_TOPO.DWG

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SOILS LEGEND:

USGS SOILS LINE

CHANDLER FINE SANDS 0 TO 5% SLOPES

CHANDLER FINE SANDS 5 TO 12% SLOPES

SITE DATA:

Parcel I.D. #:	14-20-27-0000-00-025; 083
Property FLU:	Wekiva Parkway Interchange Mixed-Use
Property Zoning:	Wekiva Parkway Interchange Mixed-Use
Character Zone:	Neighborhood
Gross Land Area:	19.76 acres
Lakes/Wetland Area:	0.00 acres
Gross Developable Area:	19.76 acres
Net Developable Area:	19.76 acres
Stormwater Management Area:	
Right-of-Way Area:	2.93 acres
Right-of-Way Dedication:	3.08 acres
Public Open Space Tracts:	0.15 acres (Golden Gem Rd.)
	2.99 acres
Proposed Residential Units:	65 Single-Family Detached Lots
Net Residential Density:	3.29 dwelling units/Net Developable Acre
Minimum Living Area:	1,600 sqft. (Heated/cooled space)
Maximum Building Height:	Two Stories, 35'
Minimum Lot Width:	55'
Minimum Lot Depth:	N/A
Minimum Lot Size:	6,600
Maximum Lot Coverage:	70%
Minimum Open Space %:	20%
Setbacks:	
Front:	20' (15' front porch)
Side:	5.0'
Side Street:	15'
Rear:	20'

Open Space Requirements:

Land Development Code (Neighborhood 20%)
19.76 ac. * .20 = 3.95 acres (required)

Open Space Provided:

Tract OS-1:	0.28 acres
Tract OS-2:	0.11 acres
Tract OS-3:	0.84 acres
Tract OS-4:	1.76 acres
Tract SW-1:	2.93 acres
Total:	5.92 acres (3.95 required)

Major Street Setbacks:

Golden Gem Road. 50' (setback from right-of-way line)

Additional Notes:

1. Billboards and pole signs shall be prohibited.
2. There is no proposed 100 yr. Flood Plain encroachment.
3. All Conservation Easements associated buffers area will be owned & maintained by the HOA with a development rights Easement dedicated to the City of Apopka via plat.
4. A Homeowner's Association will be created for maintenance and ownership of common area tracts as reflected in the tract table.
5. Fire Protection will be provided by City of Apopka in accordance with the 2017 Florida Fire Prevention Code.
6. All construction access to the site will be from Golden Gem Rd.
7. Per Section 5.6.3 review for compliance with exterior subdivision lighting must occur prior to final plat or building permit which ever occurs first.
8. Subdivision lighting shall comply with Section 5.6 of the City of Apopka LDR.
9. All fire hydrants shall be marked with blue reflectors in the adjacent pavement.

Off-Street Parking:

Required Parking:

2.0 spaces per Unit (for Townhome Residences): (65 units x 2.0 spaces/unit) = 130

Total Required Parking:	130
Provided Parking:	
2 Garage Spaces per Unit:	
Driveway Spaces per Unit:	
Total Parking Provided:	
	130 spaces
	130 spaces

Phasing:

This project is to be developed in a single file.

Traffic:

Single-Family Residential: 65 d.u. * 9.57 trip/d.u. = 622 A.D.T.

Stormwater Management:

The project will meet the requirements of City of Apopka Land Development Code and the St. Johns River Water Management District.

School Age Population:

65 d.u. * .400 children/unit = 26 children

Needed Fire Flow (NFF): (Based on FFPC 2024 Edition Chapter 18 & Annex I)

Single-Family (less than 5,000 sqft.): 1,000 gpm

Water, Sewer and Solid Waste Demand:

Water Demand:
65 Units * 350 gallons/day = 22,750 gallons/day

Sewer Demand:
65 Units * 300 gallons/day = 19,500 gallons/day

Solid Waste Demand:
65 Units * 2.6 persons/unit * 4.3 Lb./person/day = 727 Lb/day

Recreational/Open Space Demand:
65 Units * 2.6 persons/unit /1,000 * 3.0 ac/1,000 persons = 0.51 ac.

Green Building Standards Points Allocation:

- Pre-wire a minimum 75% of residential dwelling units in the development for solar panels (all Lots to be pre-wired): 1.50 points
- Install operable windows to all for natural ventilation in the event of power failures (all Lots to have operable windows): 0.25 points
- Installation of Paver driveways to create pervious pavement areas (all Lots): 1.00 points
- Provide rain gardens, street-side swales, or other apporpate storm water infiltration systems that capture 25% min. of site stormwater runoff: 1.00 points
- Use vegetation or vegetated shade structures to shade HVAC units (all Lots): 0.25 points

TRACT TABLE

TRACT LABEL	TRACT TYPE	Area (Ac.)	TRACT DEDICATED TO	EASEMENT DEDICATED TO
-	Rights-of-Way	3.08	City of Apopka	
RW-1	Rights-of-Way Dedications	0.15	City of Apopka	
OS-1	Open Space Tract	0.28	HOA	
OS-2	Open Space Tract	0.11	HOA	
OS-3	Open Space/Recreational Tract	0.84	HOA	
OS-4	Open Space/Recreational Tract	1.76	HOA	
SW-1	Stormwater Retention Area	2.93	HOA	City of Apopka
LS-1	Lift Station Tract	0.05	City of Apopka	

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Lake Mary, Florida 32746
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fax: 407-992-8650
www.GLSeng.com

K. Hovnanian Orlando Division, LLC
2301 Lucien Way, Suite 260
Maitland, FL 32751

Golden Gem Estates Subdivision
City of Apopka, Florida

KPI Master/Major Development Plan

Overall Site Plan

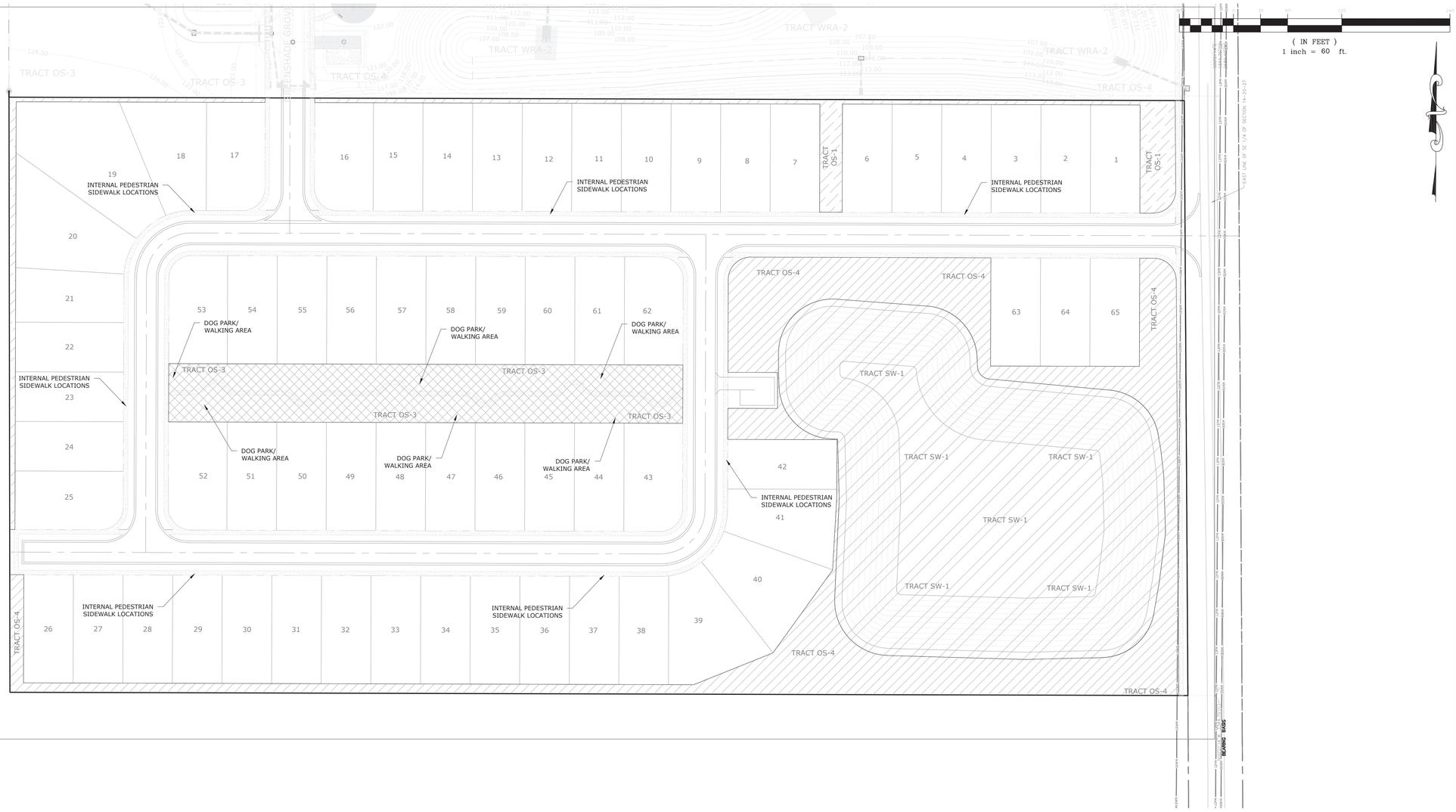
Plans not valid unless Signed, Dated and Sealed below.

GEOFFREY L. SUMMITT, P.E.
Date: October 30, 2024
FL Registration #58775
Certificate of Authorization #29665

Revisions

NO.	DATE	DESCRIPTION
1	10/30/2024	Initial Submittal
2	---	---
3	---	---
4	---	---
5	---	---
6	---	---
7	---	---
8	---	---
9	---	---
10	---	---

SHEET NUMBER
4 OF 22



Open Space Requirements:

Land Development Code (Neighborhood 20%)
19.76 ac. * .20 = 3.95 acres (required)
Open Space Provided:

Tract OS-1:	0.28 acres
Tract OS-2:	0.11 acres
Tract OS-3:	0.84 acres
Tract OS-4:	1.76 acres
Tract SW-1:	2.93 acres
Total:	5.92 acres (3.95 required)

OPEN SPACE SET-ASIDE HATCH LEGEND

- ACTIVE RECREATIONAL OPEN SPACE
- COMMUNITY SQUARE OPEN SPACE AREAS
- GREEN OPEN SPACE AREAS
- GENERAL OPEN SPACE AREAS

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Golden Gem Estates
Subdivision
City of Apopka, Florida

KPI Master/Major Development Plan

Open Space Rec Plan

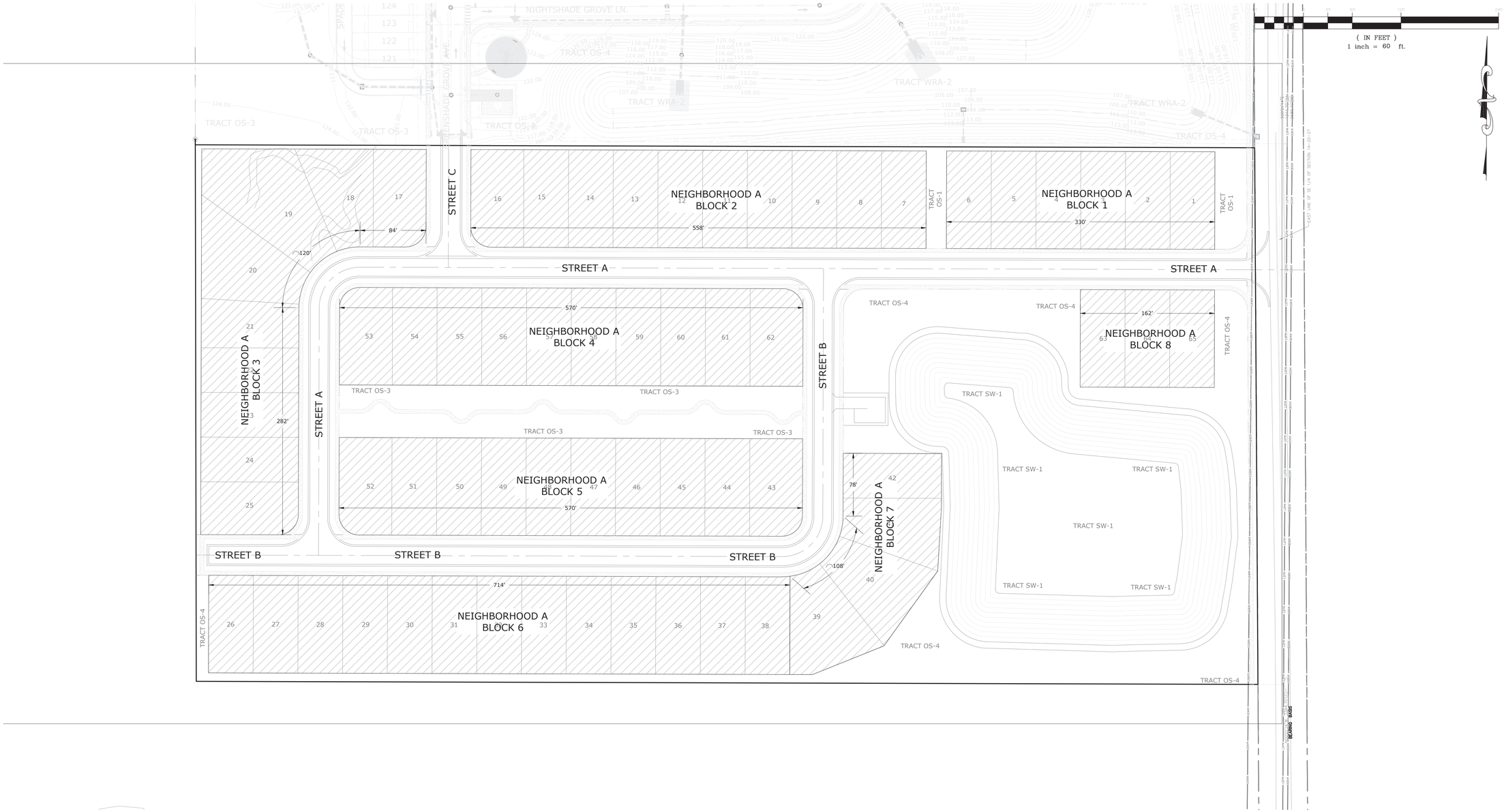
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7	---	---
8	---	---
9	---	---
10	---	---

SHEET NUMBER
5 OF 22



NEIGHBORHOOD LOT SIZE HATCH LEGEND

NEIGHBORHOOD 'A' 55' SINGLE-FAMILY LOTS

NEIGHBORHOOD STREETS DESIGNATION

STREET NAME	STREET DESIGNATION
STREET 'A' 50' RIGHT-OF-WAY	STREET TYPE 'D'
STREET 'B' 50' RIGHT-OF-WAY	STREET TYPE 'D'
STREET 'C' 55' RIGHT-OF-WAY	STREET TYPE 'D'

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Maitland, FL 32751

Golden Gem Estates Subdivision

City of Apopka, Florida

KPI Master/Major Development Plan

Neighborhood Block Plan

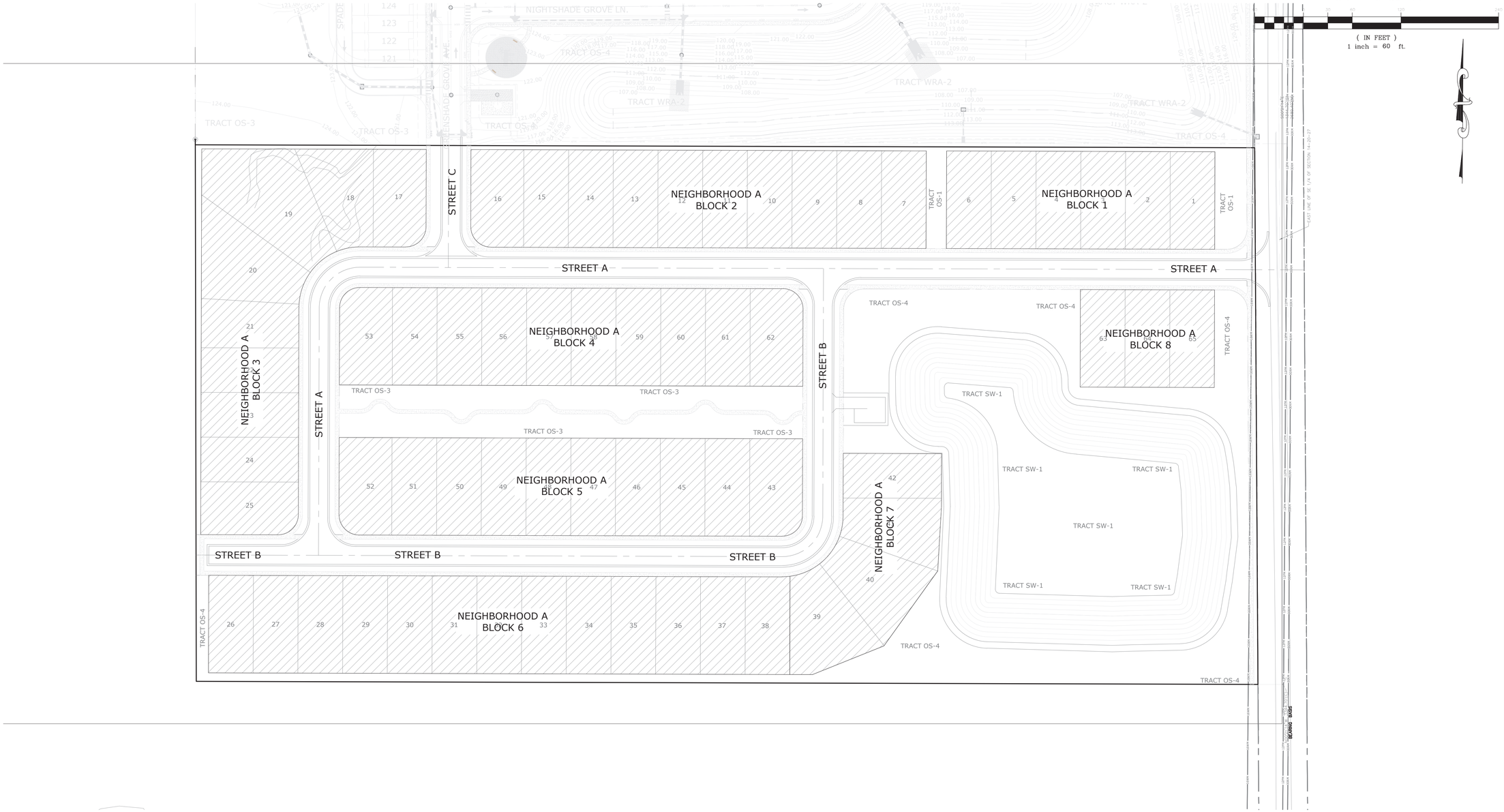
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8	---	---
9	---	---
10	---	---

SHEET NUMBER
6 OF 22



SITE DESIGN STANDARDS PLAN:

NEIGHBORHOOD 'A' DESIGN DETAILS:

Minimum Living Area:	1,600 sqft. (Heated/cooled space)
Maximum Building Height:	Two Stories, 35'
Minimum Lot Width:	55'
Minimum Lot Depth:	120'
Minimum Lot Size:	6,600
Maximum Lot Coverage:	70%
Minimum Open Space %:	20%
Garage Location:	FRONT-Entry (2-Car)
Setbacks:	
Front:	20' (15' Porch)
Side:	5.0'
Side Street:	15'
Rear:	20' max.
Accessory Uses:	Those permitted by code
Architectural Design:	Consistent with Section K of the form-based code

Street Landscaping:

Landscaping shall be consistent with Section M of the form-based code or the City of Apopka LDR

Building Architecture:

Building Architecture shall comply with Section K of the form-based code. Elevations for proposed product types for Neighborhood's A, B and Pool Cabana have been included in the plans for reference as to compliance with the requirements of Section K.

Model-Home Park:

The model home park will be provided along Street A. The model park will consist of 4 homes. A model site plan will be provided after the Construction Plan approval for staff to review with the model home permit requests.

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Maitland, FL 32751

Golden Gem Estates Subdivision

City of Apopka, Florida

KPI Master/Major Development Plan

Design Standards Plan

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Date: October 30, 2024
FL Registration #58775
Certificate of Authorization #29665

Revisions

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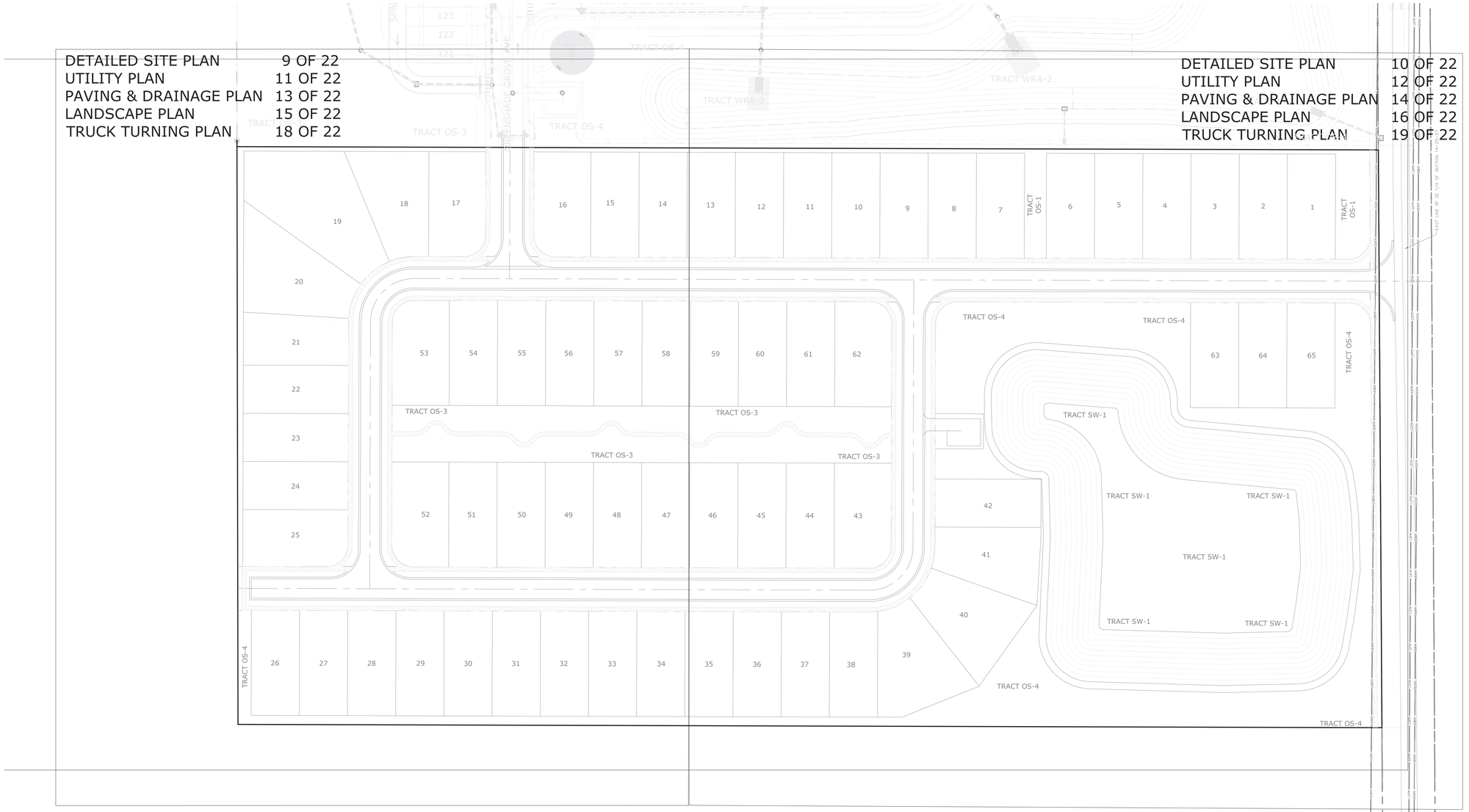
SHEET NUMBER
7 OF 22

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

DETAILED SITE PLAN 9 OF 22
UTILITY PLAN 11 OF 22
PAVING & DRAINAGE PLAN 13 OF 22
LANDSCAPE PLAN 15 OF 22
TRUCK TURNING PLAN 18 OF 22

DETAILED SITE PLAN 10 OF 22
UTILITY PLAN 12 OF 22
PAVING & DRAINAGE PLAN 14 OF 22
LANDSCAPE PLAN 16 OF 22
TRUCK TURNING PLAN 19 OF 22



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Key Map Plan

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SHEET NUMBER
8 OF 22

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.



SEE SHEET 10 OF 22

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City of Apopka, Florida

KPI Master/Major Development Plan

Site Plan 1

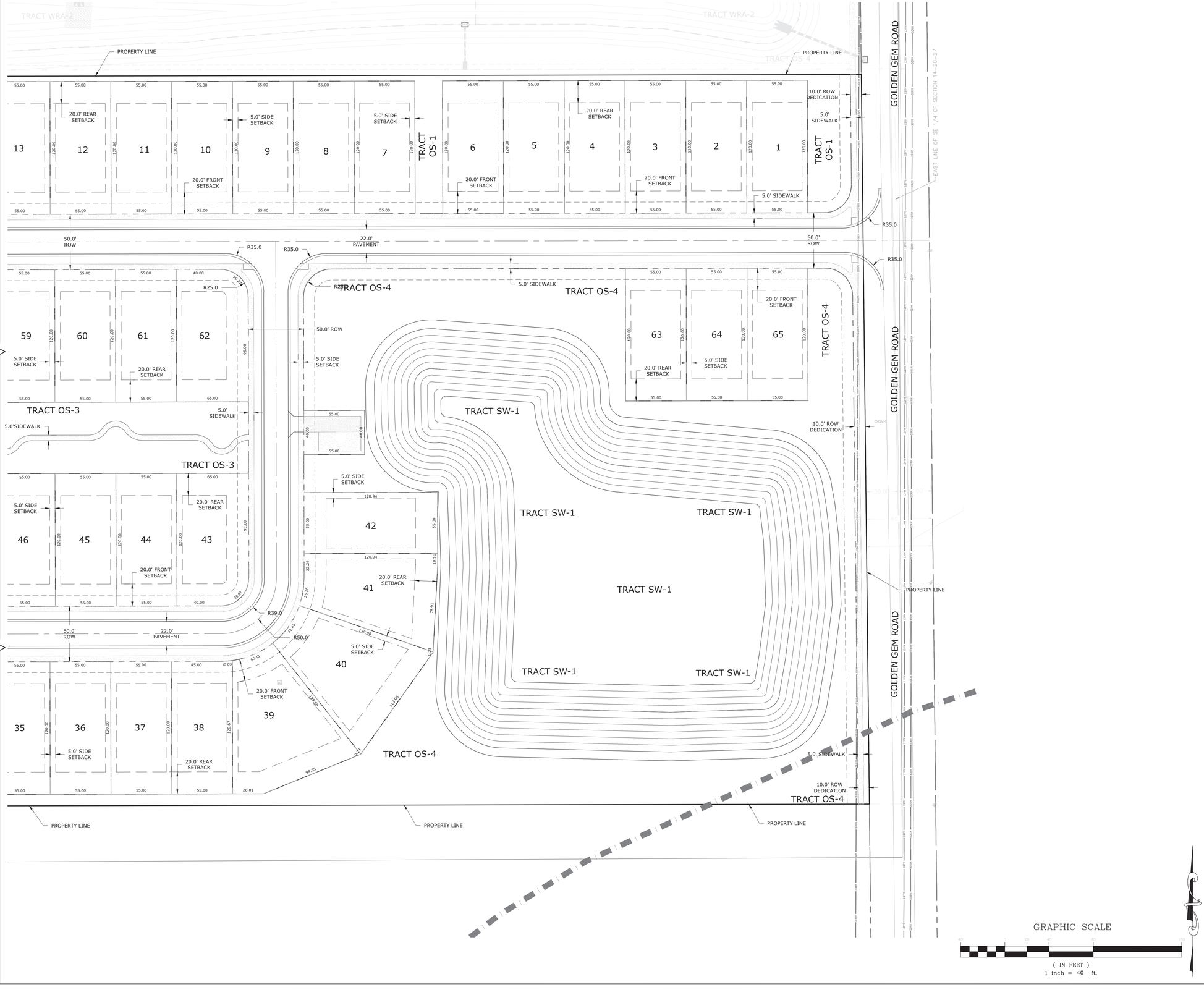
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SHEET NUMBER
9 OF 22



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Site Plan 2

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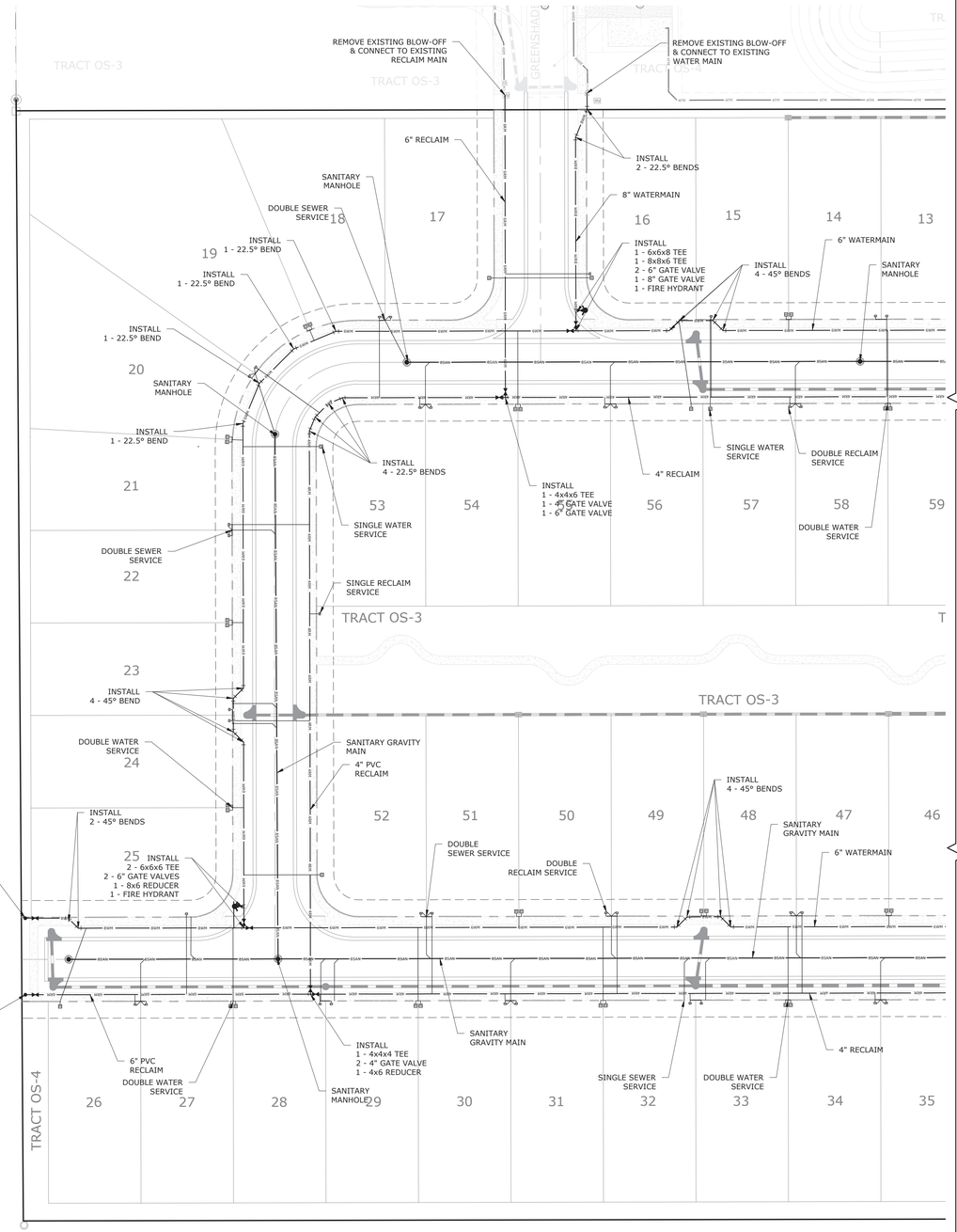
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SHEET NUMBER
10 OF 22

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.



SEE SHEET 12 OF 22

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Utility Plan 1

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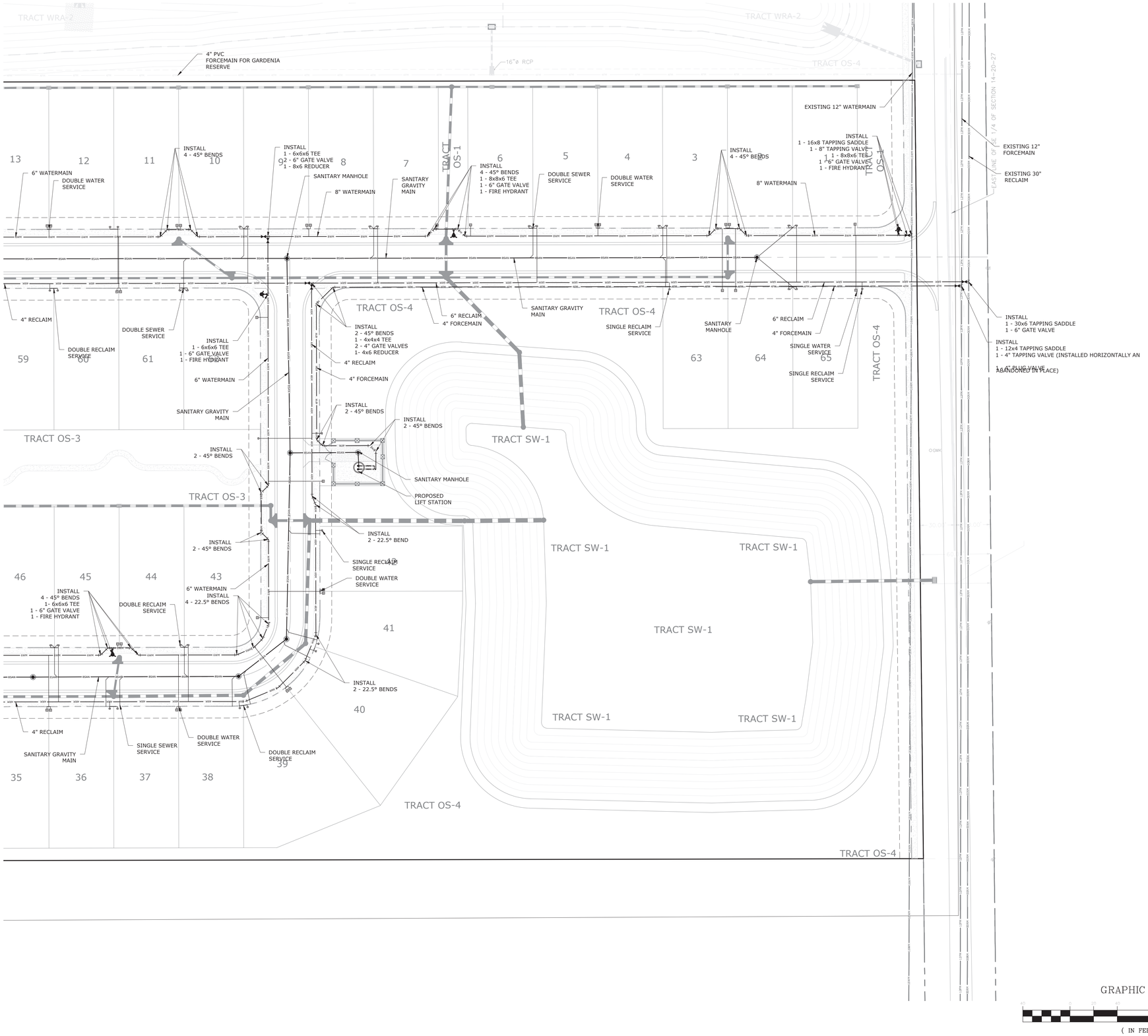
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SHEET NUMBER
11 OF 22

SEE SHEET 11 OF 22



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
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City of Apopka, Florida

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Utility Plan 2

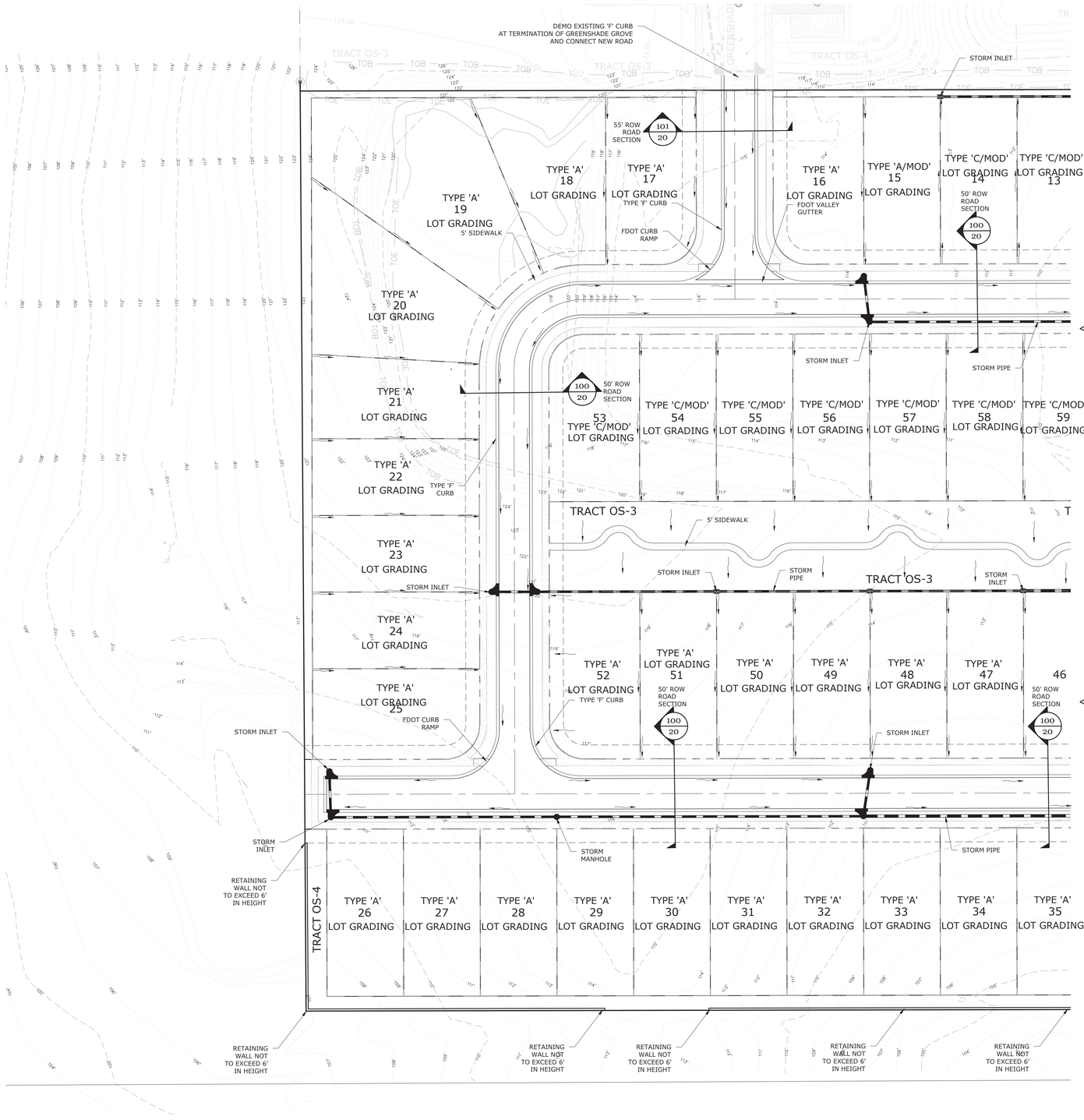
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SHEET NUMBER
12 OF 22



SEE SHEET 14 OF 22

GRAPHIC SCALE

(IN FEET)
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Paving & Drainage Plan 1

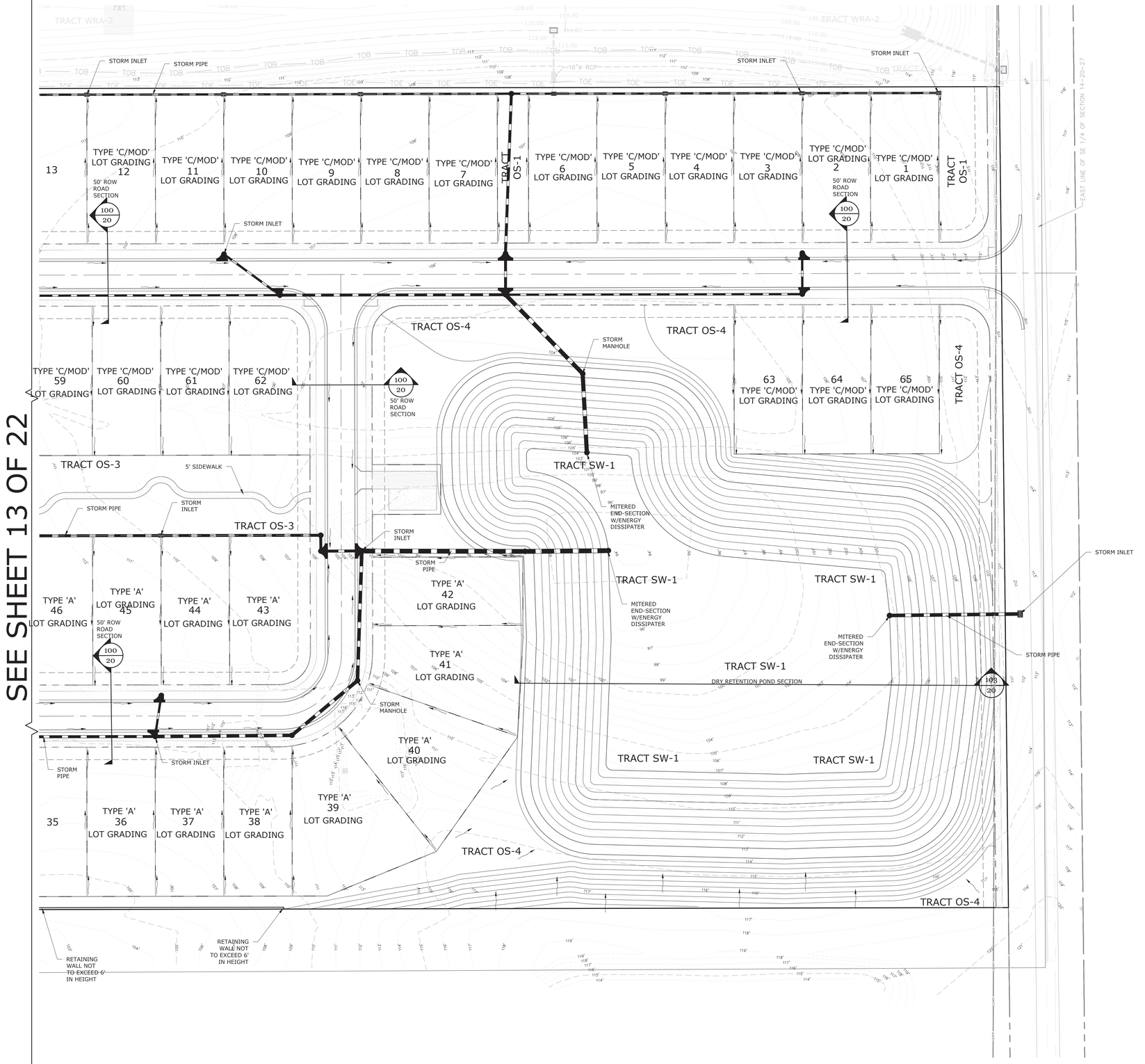
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SHEET NUMBER
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GRAPHIC SCALE

(IN FEET)
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Paving & Drainage Plan 2

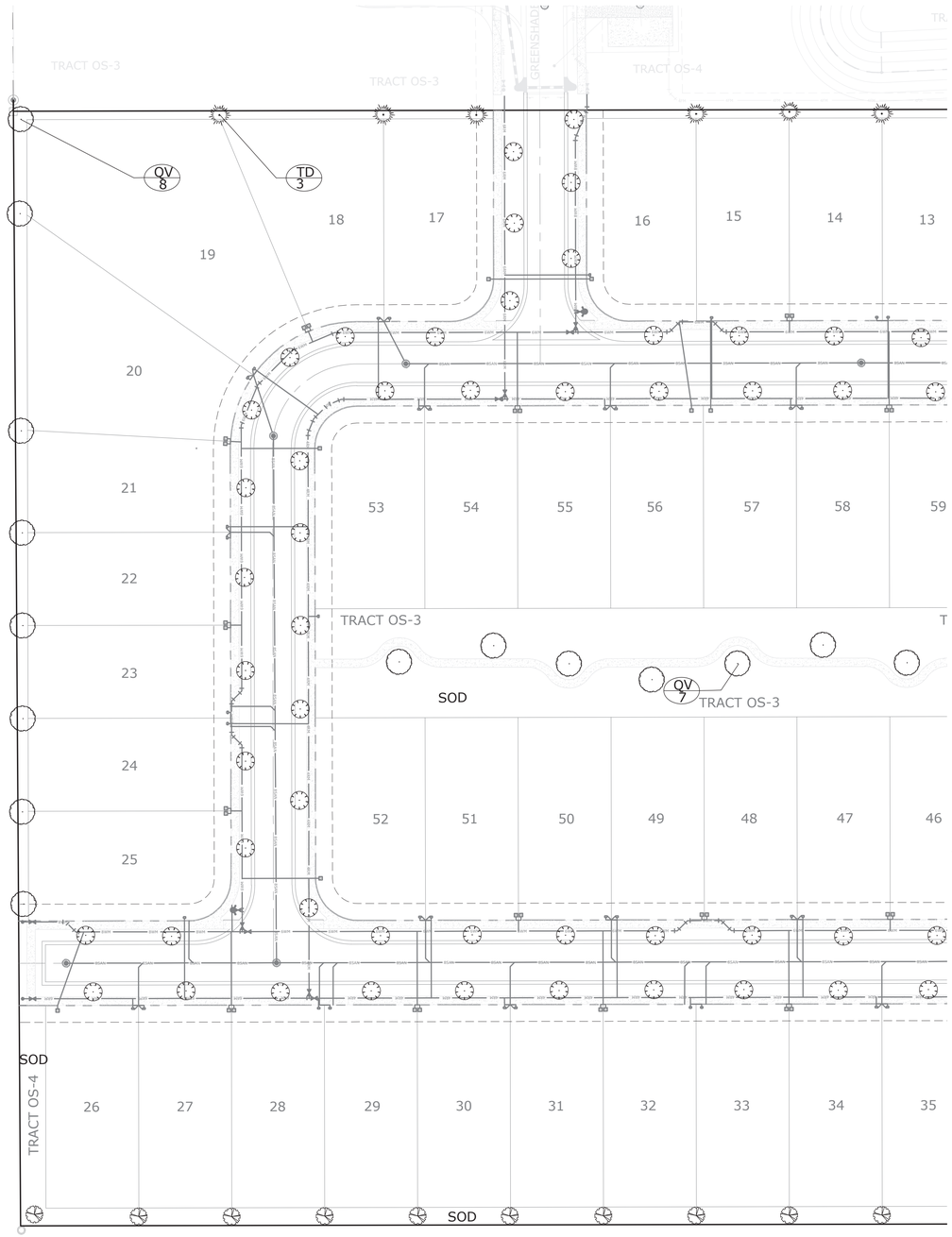
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SHEET NUMBER
14 OF 22



SEE SHEET 15 OF 22

GRAPHIC SCALE

(IN FEET)
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Landscape Plan 1

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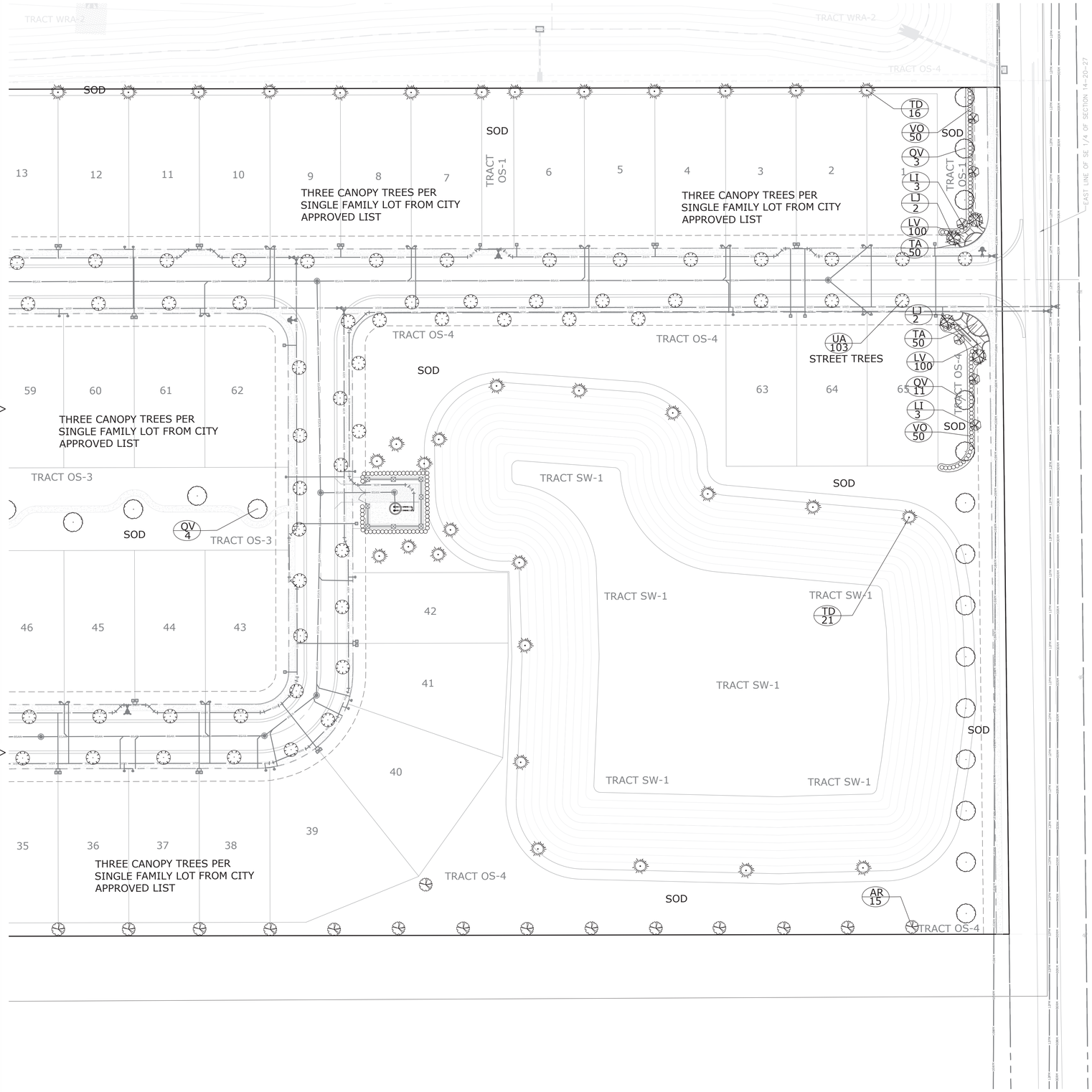
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8	"	"
9	"	"
10	"	"

REGISTERED LANDSCAPE ARCHITECT
SCOTT V. MOORE
1020
STATE OF FLORIDA

SHEET NUMBER
15 OF 22



SEE SHEET 15 OF 22

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

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Golden Gem Estates Subdivision

City of Apopka, Florida

KPI Master/Major Development Plan

Landscape Plan 2

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REGISTERED LANDSCAPE ARCHITECT
SCOTT V. MOORE
NO. 1020
STATE OF FLORIDA

Revisions

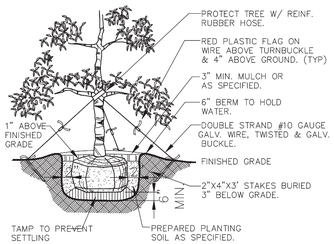
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SHEET NUMBER
16 OF 22

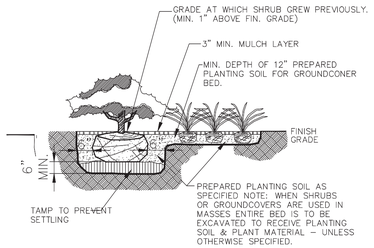
PLANT LIST

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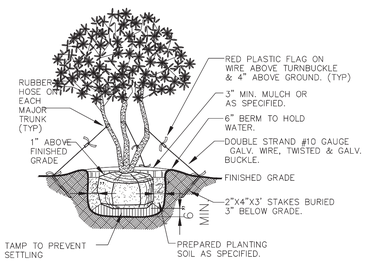
QTY.	SYM.	BOTANICAL NAME	COMMON NAME	SIZE
TREES				
33	QV	QUERCUS VIRGINIA	LIVE OAK	10'; 3" CAL.
25	AR	ACER RUBRUM	RED MAPLE	10'; 3" CAL.
103	UA	ULMUS ALATA	WINGED ELM	10'; 3" CAL.
6	LI	LAGERSTROEMIA INDICA	CREPE MYRTLE	8'; 2" CAL. MT
4	LJ	LIGUSTRUM JAPONICUM	LIGUSTRUM	8'; 2" CAL. 5-6 TRUNKS
40	TD	TAXODIUM DISTCHUM	BALD CYPRESS	10'; 3" CAL.
		SINGLE FAMILY LOTS		
195		CANOPY TREES FROM CITY OF APOPKA APPROVED LIST		10'; 3" CAL.
SHRUBS				
100	VO	VIBURNUM ODORATISSIMUM	SWEET VIBURNUM	30"X24"; 30" OC
GROUND COVER				
100	TA	TRACH. ASIATICUM	MINIMA	FULL GLS., 24" OC
200	LV	LIRIOPE VARIEGATA	AZTEC GRASS	FULL GLS., 24" OC



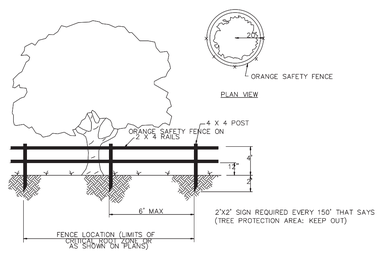
TREE PLANTING DETAIL



SHRUB AND GROUND COVER DETAIL



MULTI-TRUNK DETAIL



TREE PROTECTION FENCE DETAIL

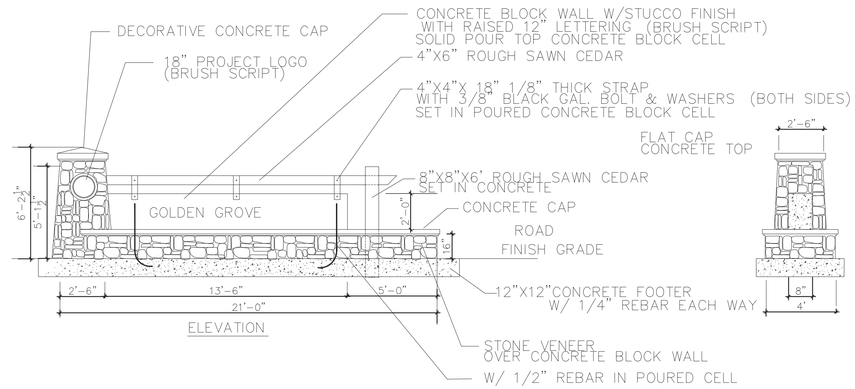
TREE REQUIREMENT DATA AND ARBOR MITIGATION CALCULATION

Tree Requirement (Max Tree Stock Calculation) :

SITE ACREAGE :	19.76 ACRES
SITE SQUARE FOOTAGE AREA :	860,745 SF
NUMBER OF TREES REQUIRED :	108 TREES
NUMBER OF TREES SHOWN :	396 TREES

Arbor Mitigation Calculation

TOTAL INCHES REMOVED	1,187"
OAKS 8"-23" = 963"	
SPECIMEN OAKS 24" & LARGER = 224"	
TOTAL REQUIRED REPLACEMENT INCHES:	1,187"
PROPOSED INCHES TO BE PLANTED :	1,188"
STREET TREES & OPEN SPACE (201) CANOPY TREES= 603"	
SINGLE FAMILY LOTS (195) CANOPY TREES = 585"	
TOTAL REMAINING TO BE MITIGATED :	0.00
MITIGATION RATE PER INCH ($15 PER INCH)/TREE MITIGATION FEE	0.00
BALANCE:	$0.00



ENTRY SIGN-ELEVATION

NTS

GENERAL LANDSCAPE NOTES

1. ALL PLANTS TO BE FLORIDA NO. 1, OR BETTER AS OUTLINED UNDER 'GRADES AND STANDARDS FOR NURSERY PLANTS, PART I, 1963 AND PART II, STATE OF FLORIDA DEPARTMENT OF AGRICULTURE, TALLAHASSEE, FLORIDA, AND ANY AMENDMENTS THERETO.
2. ALL TREES AND PLANT MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE SPECIFICATIONS DESCRIBED IN THE STATE DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF FORESTRY, "TREE PROTECTION MANUAL FOR BUILDERS AND DEVELOPERS", OCTOBER, 1980.
3. THE LANDSCAPE CONTRACTOR (CONTRACTED BY OWNER, N.I.C.) SHALL BE RESPONSIBLE FOR ALL MATERIALS AND ALL WORK AS CALLED FOR ON THE LANDSCAPE PLANS. THE LIST OF PLANT QUANTITIES ACCOMPANYING THE PLANS SHALL BE USED AS A GUIDE ONLY. IF A VARIATION OCCURS BETWEEN THE PLANS AND THE PLANT LIST, THE PLANS SHALL CONTROL.
4. ALL TREES, SHRUBS AND GROUND COVERS SHALL BE PLANTED USING A SOIL MIXTURE PREPARED ACCORDINGLY (2/3 EXISTING SOIL, 1/3 PEAT).
5. THE LANDSCAPE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS. VERTICAL DRILLING THROUGH ANY COMPACTED FILL TO NATIVE SOIL SHALL BE ACCOMPLISHED TO AID DRAINAGE.
6. ALL PLANT BEDS AND TREE WATERING BASINS SHALL BE TOP DRESSED WITH THREE INCHES (3") OF PINE BARK MULCH.
7. NO TREES SHALL BE PLANTED CLOSER THAN 3 FEET (3') FROM THE EDGE OF PAVEMENT TO ALLOW ADEQUATE TREE TRUNK PROTECTION .
8. LANDSCAPE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR STABILITY AND PLUMB CONDITION OF ALL TREES AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY THE INSTABILITY OF ANY PLANT MATERIAL.
9. ALL LAWN AREAS TO RECEIVE SOD SHALL BE DISKED FOUR(4) TO SIX(6) INCHES AND DRAGGED TO ESTABLISH A LEVEL FINISH GRADE. ALL DEBRIS TO BE REMOVED FROM THE SITE.
10. SOD SHALL BE FREE OF WEEDS AND PESTS. IT SHALL BE LAID EVENLY AND ROLLED, WITH TIGHT FITTING JOINTS. THE SOD SHALL CONTAIN MOIST SOIL WHICH DOES NOT FALL APART OR TEAR WHEN LIFTED. ALL AREAS NOT PAVED OR OTHERWISE LANDSCAPED SHALL BE SODDED. SOD SHALL BE ARGENTINE BAHIA..
11. ALL LANDSCAPE AREAS TO BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND SYSTEM,
11. WITH 100% COVERAGE, BACK FLOW PREVENTOR, & RAIN SENSOR DEVICE. DIRECT SPRAY HEADS AWAY FROM ANY NATURAL AREAS AND PAVED SURFACES.
12. THE TREE CALIPER OF ALL TREES SPECIFIED ON THE PLANT LIST SHALL BE MEASURED AT SIX (6) INCHES ABOVE GRADE.



Ravensdale Planning & Design

Land Planning Landscape Architecture • Project Management Expert Witness

5106 South Pointe Drive Inverness, Florida 34450

(407) 647-1213

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KPI Master/Major Development Plan

Landscape Details 1

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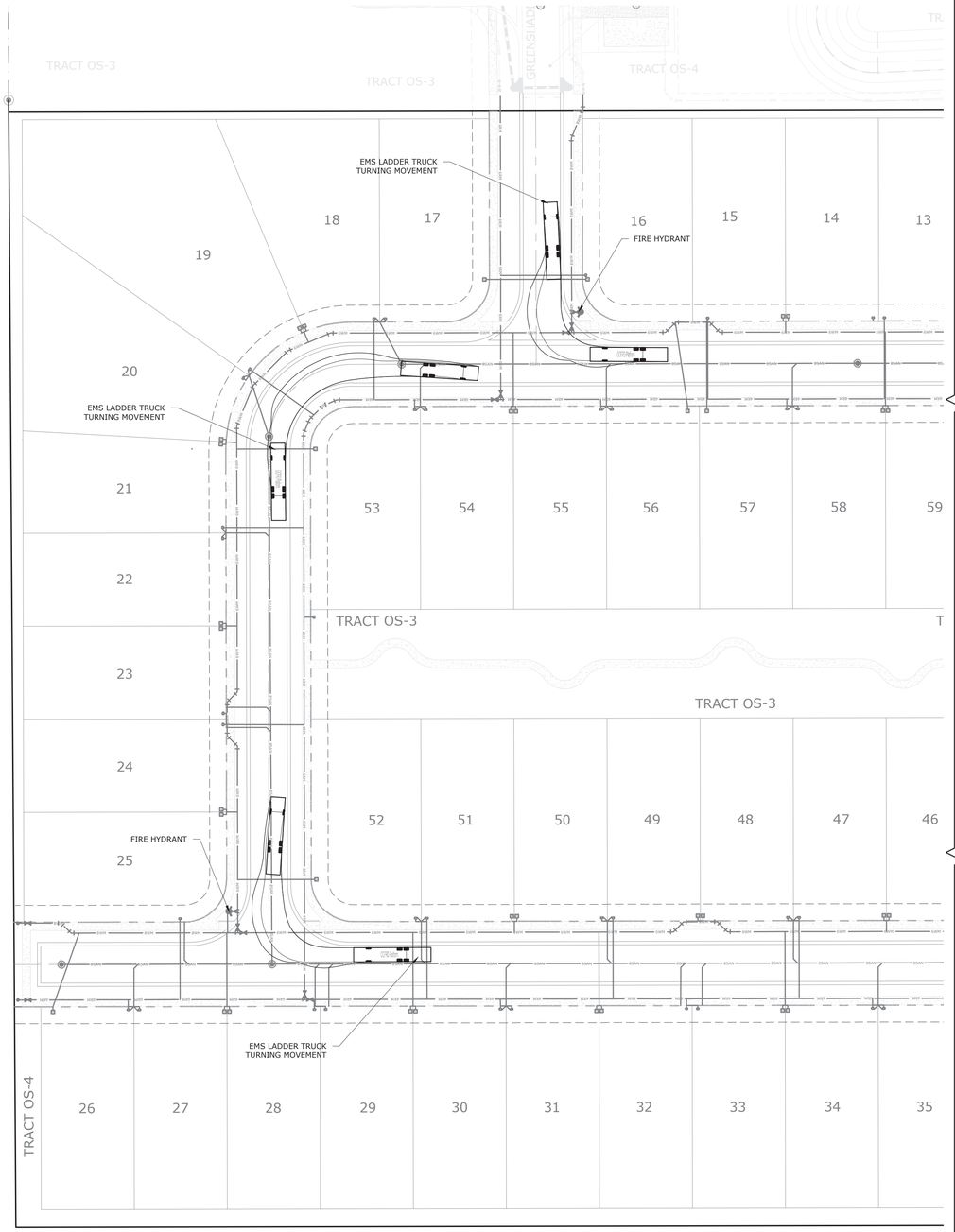
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SHEET NUMBER

17 OF 22

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.



SEE SHEET 18 OF 22

NOTES:

1. Fire flow based on FFPC 8th (NFPA 1 and 101 2023 edition) for building is 1,000 gpm or based Table 18.1.
2. Fire hydrants within 250' of building via Fire Department Access Road shall be allowed 1,500 gpm max fire flow credit, over 250' from building max. fire flow credit shall be 1,000 gpm.
3. Non-Sprinklered building shall provide 150' hose lay to all exterior points on the building from the approved Fire Department Access Road(s).
4. Overall Length (Bumper to Bumper)- 45.7 feet Width - 8.33 feet Track - 8.33 feet Lock to Lock Time - 6.0 Steering Angle- 44.2 degrees Min Centerline Radius - 29 feet
5. Fire hydrants shall be marked with blue reflectors in the pavement adjacent to the hydrant.

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Truck Turning Plan 1

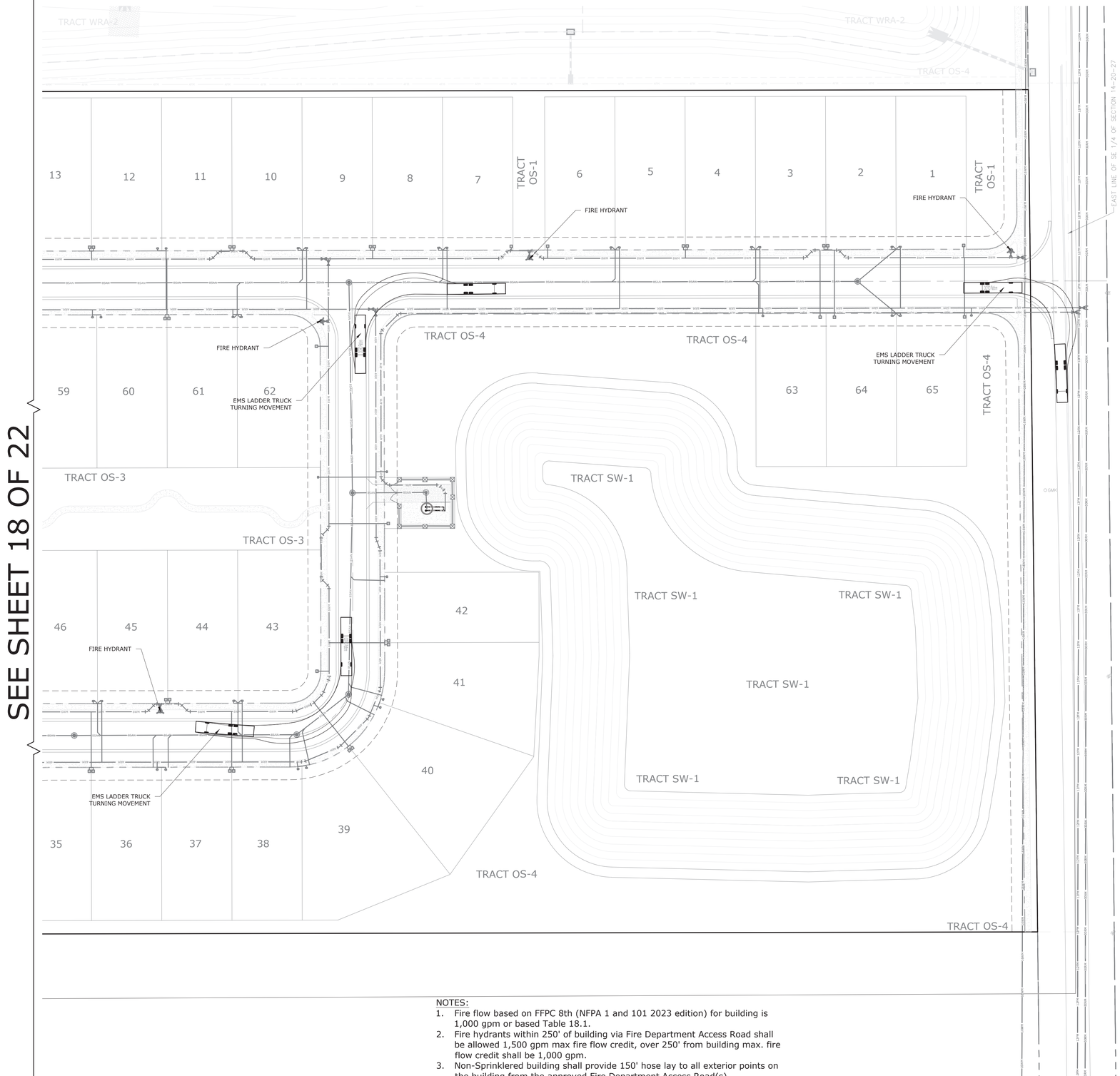
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SHEET NUMBER
18 OF 22



SEE SHEET 18 OF 22

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2. Fire hydrants within 250' of building via Fire Department Access Road shall be allowed 1,500 gpm max fire flow credit, over 250' from building max. fire flow credit shall be 1,000 gpm.
3. Non-Sprinklered building shall provide 150' hose lay to all exterior points on the building from the approved Fire Department Access Road(s).
4. Overall Length (Bumper to Bumper)- 45.7 feet Width - 8.33 feet Track - 8.33 feet Lock to Lock Time - 6.0 Steering Angle- 44.2 degrees Min Centerline Radius - 29 feet
5. Fire hydrants shall be marked with blue reflectors in the pavement adjacent to the hydrant.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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Golden Gem Estates
Subdivision
City of Apopka, Florida

KPI Master/Major Development Plan

Truck Turning Plan 2

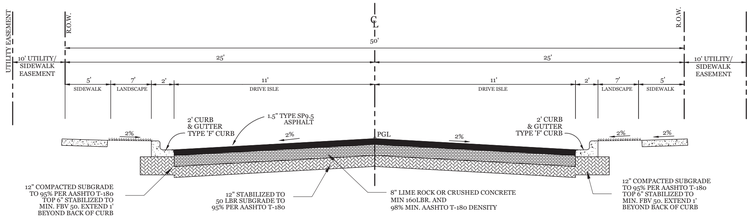
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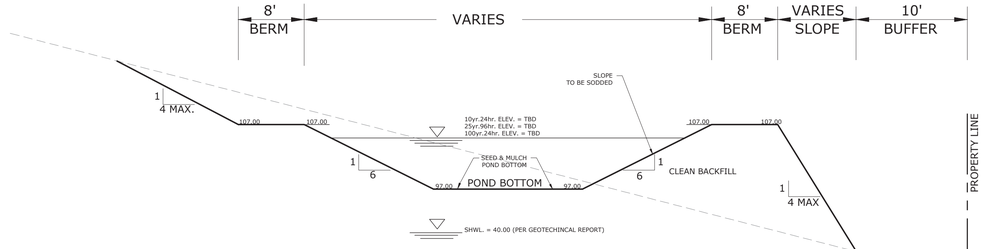
Revisions

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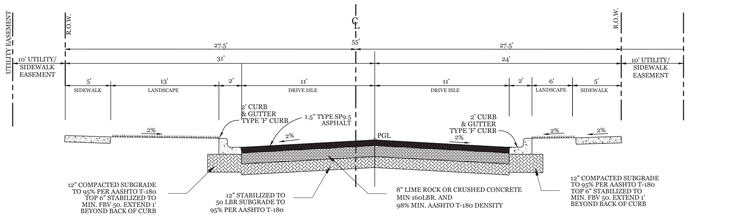
SHEET NUMBER
19 OF 22



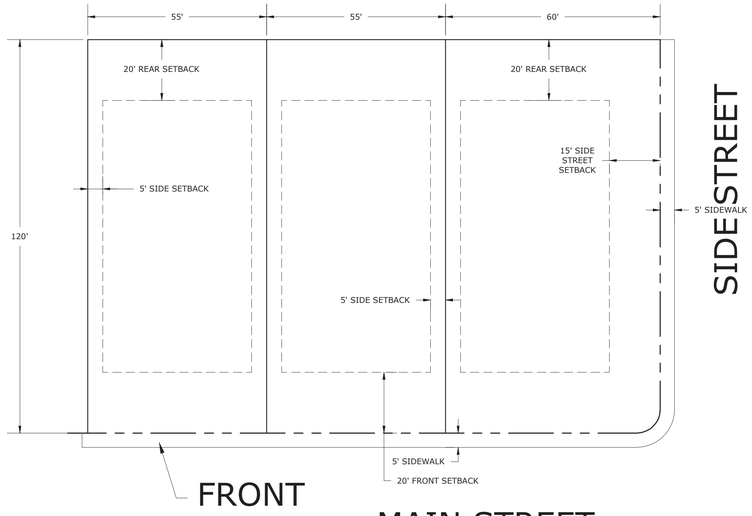
100 - TYPICAL 50' ROW ROADWAY CROSS SECTION DETAIL
N.T.S.



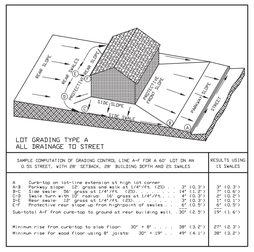
103 - DRY RETENTION POND CROSS SECTION
N.T.S.



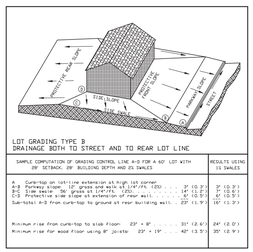
101 - TYPICAL 55' ROW ON-STREET PARKING CROSS SECTION DETAIL
N.T.S.



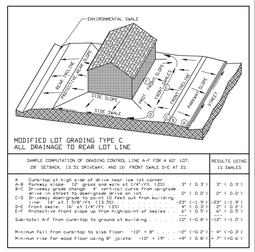
102 - TYPICAL 55' LOT LAYOUT PLAN
N.T.S.



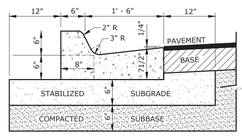
406 - TYPE 'A' LOT GRADING
N.T.S.



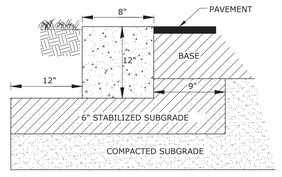
407 - TYPE 'B' LOT GRADING
N.T.S.



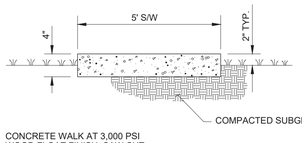
408 - TYPE 'C' LOT GRADING
N.T.S.



402 - FDOT TYPE 'F' CURB
N.T.S.



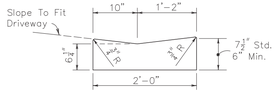
401 - CONCRETE RIBBON CURB
N.T.S.



CONCRETE WALK AT 3,000 PSI
WOOD FLOAT FINISH. SAW CUT
CONTRACTION JOINTS AT 5' O.C. MIN.
EXPANSION JOINT AT 20' O.C. MIN

NOTE: ALL SIDEWALK TO BE CONSTRUCTED AS PART OF INFRASTRUCTURE

105 - STANDARD SIDEWALK DETAIL
N.T.S.



For curb, gutter, curb and gutter and traffic separators provide 1/2" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers.

1/2"-

300M - MIAMI CURB
N.T.S.

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General Detail 1

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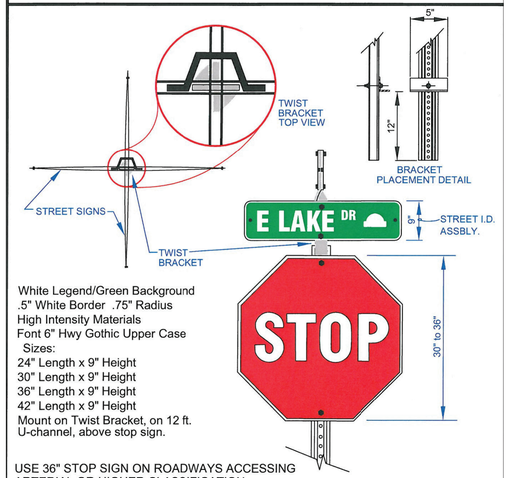
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9	####	
10	####	

SHEET NUMBER
20 OF 22

SIGNAGE : STOP SIGN & STREET NAME



White Legend/Green Background
.5" White Border .75" Radius
High Intensity Materials
Font 6" Hwy Gothic Upper Case
Sizes:
24" Length x 9" Height
30" Length x 9" Height
36" Length x 9" Height
42" Length x 9" Height
Mount on Twist Bracket, on 12 ft.
U-channel, above stop sign.

USE 36" STOP SIGN ON ROADWAYS ACCESSING ARTERIAL OR HIGHER CLASSIFICATION
INTERNAL STOP SIGN = 30"
MAIN ENTRANCE STOP SIGN = 36"

(In compliance with [redacted] Florida Statue Chapter 316)

200 - STOP SIGN & STREET SIGN DETAIL
N.T.S.

DUKE ENERGY.

Mini Bell LED



The Mini Bell LED is an energy-efficient luminaire with a classic, sophisticated design. This fixture is an excellent choice for illuminating pathways and residential communities.

LED (light-emitting diode)	50 watts
Mounting height	12'
Color	Black
Poles	Colonial concrete Victorian concrete Washington concrete
Applications	Neighborhoods Parks Shopping centers Streets

DUKE ENERGY.

Outdoor Lighting

Mini Bell LED

Light source: LED (white)
Wattage: 50
Lumens: 2,889
Light pattern: IESNA Type III (oval)
IESNA cutoff classification: Semi-cutoff
Color temperature: 4,000K
Warm-up and restrike time: Instant on (no warm-up or restrike time)



light distribution pattern

Pole available:

Name	Mounting height	Color
Colonial concrete	12'	Black
Victorian concrete		Black, Gray-green
Washington concrete		Black, Gray

Features	Benefits
Little or no installation cost	Frees up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance included	Eliminates high and unexpected repair bills
Electricity included	Less expensive than metered service
Warranty included	Worry-free
One low monthly cost on your electric bill	Convenience and savings for you
Turnkey operation	Provides hassle-free installation and service
Backed by over 40 years of experience	A name you can trust today … and tomorrow

201 - DUKE ENERGY STREET LIGHT FIXTURE DETAIL
N.T.S.

Lot Area Table

Lot Number	Gross Area (sqft)	Gross Area (ac.)	Lot Width (ft)
1	6,600.00	0.15	55
2	6,600.00	0.15	55
3	6,600.00	0.15	55
4	6,600.00	0.15	55
5	6,600.00	0.15	55
6	6,600.00	0.15	55
7	6,600.00	0.15	55
8	6,600.00	0.15	55
9	6,600.00	0.15	55
10	6,600.00	0.15	55
11	6,600.00	0.15	55
12	6,600.00	0.15	55
13	6,600.00	0.15	55
14	6,600.00	0.15	55
15	6,600.00	0.15	55
16	7,665.87	0.18	65
17	7,666.00	0.18	65
18	8,696.27	0.20	55
19	15,078.87	0.35	55
20	10,847.10	0.25	55
21	6,863.82	0.16	55
22	6,600.00	0.15	55
23	6,600.00	0.15	55
24	6,600.00	0.15	55
25	7,665.87	0.18	65
26	6,600.00	0.15	55
27	6,600.00	0.15	55
28	6,600.00	0.15	55
29	6,600.00	0.15	55
30	6,600.00	0.15	55
31	6,600.00	0.15	55
32	6,600.00	0.15	55
33	6,600.00	0.15	55
34	6,600.00	0.15	55
35	6,600.00	0.15	55
36	6,600.00	0.15	55
37	6,600.00	0.15	55
38	6,602.23	0.15	55
39	9,873.79	0.23	55
40	9,455.21	0.22	55
41	8,286.53	0.19	55
42	6,651.81	0.15	55
43	7,665.87	0.18	55
44	6,600.00	0.15	55
45	6,600.00	0.15	55
46	6,600.00	0.15	55
47	6,600.00	0.15	55

Lot Area Table

Lot Number	Gross Area (sqft)	Gross Area (ac.)	Lot Width (ft)
48	6,600.00	0.15	55
49	6,600.00	0.15	55
50	6,600.00	0.15	55
51	6,600.00	0.15	55
52	7,665.87	0.18	65
53	7,665.87	0.18	65
54	6,600.00	0.15	55
55	6,600.00	0.15	55
56	6,600.00	0.15	55
57	6,600.00	0.15	55
58	6,600.00	0.15	55
59	6,600.00	0.15	55
60	6,600.00	0.15	55
61	6,600.00	0.15	55
62	7,665.87	0.18	65
63	6,600.00	0.15	55
64	6,600.00	0.15	55
65	6,600.00	0.15	55

202 - LOT DIMENSIONS AND AREA TABLE
N.T.S.

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General Detail 2

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8	---	---
9	---	---
10	---	---

SHEET NUMBER
21 OF 22





AA SANTA FE ELEVATIONS
N.T.S.







BB SANTA ROSA ELEVATIONS
N.T.S.







CC VALLEJO ELEVATIONS
N.T.S.

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Architectural Elevations 1

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10	"	"

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22 OF 22