



**CITY OF DELAND
REGULAR MEETING OF THE PLANNING BOARD
SEPTEMBER 21, 2022 AT 5:00 PM
CITY HALL, COMMISSION CHAMBERS
120 SOUTH FLORIDA AVENUE**

AGENDA

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

VERBAL REPORT ON CITY COMMISSION MEETINGS

MINUTES

1. Approval of the minutes from the August 17, 2022 meeting.

VARIANCE OLD BUSINESS

VARIANCE NEW BUSINESS

1. Applicant Name: Rebecca Storm
Project Number: V22-156
Project Location: 120 N. Colorado Ave.
Project Description: Variance to be exempted from the two-car garage per unit requirement.
2. Applicant Name: Cheryl Hankins
Project Number: V22-160
Project Location: 232 N. Adelle Ave.
Project Description: Variance to reduce side setback from 7.5' to 1' and rear setback from 7.5' to 20" for an RV carport cover.

PUBLIC PARTICIPATION PROCEEDINGS

PLANNING - OLD BUSINESS

PLANNING - NEW BUSINESS

1. **(CONTINUED)**
Applicant Name: Jean Alepin
Project Number: Z22-118 – Rezoning for multi-family units
Project Location: S. Salisbury Ave, between W. New York and W. Howry and east of Stone St. on S. Salisbury Ave.
Project Description: Rezone 0.2324 acres from R-2 (two-family dwelling) to R-8 (multi-family)

2. Applicant Name: Nicole Martin
Project Number: SP22-124 – Site Plan for DeLand Commons
Project Location: 5.36 acres located at 225 S. Woodland Blvd.
Project Description: Development of 180 residential units (apartments, townhouses, carriage houses)
3. Applicant Name: Nicole Martin
Project Number: SSB22-132 – Sketch Plan for Summit Place
Project Location: NW corner of I-4 and N Summit Ave (County Road 4139)
Project Description: Subdivision Sketch Plan for 304 townhomes on 59.88 acre site located within the Summit Place PD
4. Applicant Name: Carolyn Haslam
Project Number: Z22-139 – Rezoning for Aquarius Landing
Project Location: 1325 Aquarius Ave.
Project Description: Rezone 2.95 acres from R-1B (Single Family) to Aquarius Landing Planned Development to develop a multi-family residential project
5. Applicant Name: Slava Yedlin
Project Number: AN22-100 – Annexation for 4.87 acres
Project Location NE Corner of E. Wisconsin Ave. and Miller Rd.
Project Description: Annex 4.87 acres
6. Applicant Name: Slava Yedlin
Project Number: SMLU22-142 – Comprehensive Plan Amendment
Project Location: NE Corner of E. Wisconsin Ave. and Miller Rd.
Project Description: Land use change for 4.87 acres from County ULI to City ULI
7. Applicant Name: Slava Yedlin
Project Number: Z22-143 – Rezoning for The Canopy at Blue Lake PD
Project Location: NE Corner of E. Wisconsin Ave. and Miller Rd.
Project Description: Rezone 4.87 acres from County R-3A to City Planned Development (The Canopy at Blue Lake PD) for a 12-lot single-family residential subdivision

OTHER BUSINESS

ADJOURNMENT



**CITY OF DELAND
PLANNING BOARD REGULAR MEETING
MINUTES
WEDNESDAY, AUGUST 17, 2022 -5:00 P.M.
CITY HALL**

CALL TO ORDER

The meeting began at 5:00 p.m.

PLEDGE OF ALLEGIANCE

Pledge of Allegiance – Ms. Comella, Chairperson

ROLL CALL

Nora Lewis	Absent
Don Liska	Present
Buz Nesbit	Present
Dan Reed	Present
Albert Neumann	Present
Jeremy Owens, <i>Vice Chairperson</i>	Present
Virginia Comella, <i>Chairperson</i>	Present

Quorum: Yes

Present – Mike Holmes, Planning Director; Rick Werbiskis, Community Development Director; Carol Kuhn, Deputy Planning Director; Darren Elkind, City Attorney; Kendall Story, Senior Planner; Danevsky Joseph, Planner; Vivian Ford, Administrative Coordinator; applicants; and members of the public.

VERBAL REPORT ON CITY COMMISSION MEETINGS

Mr. Holmes provided the verbal report.

MINUTES

1. Mr. Owens moved to approve the July 17, 2022 Meeting Minutes. Mr. Reed seconded the motion. The motion passed unanimously.

VARIANCE OLD BUSINESS

1. Applicant Name: Jarod Stubbs
Project Number: V22-095
Project Location: 1601 N. Woodland Blvd.
Project Description: Variance to: Reduce required landscape buffers: (1) along N Woodland Blvd from 40' to 10'; (2) along Old Daytona Rd from 30' to 10'; and (3) along the eastern local access road from 30' to 10'.

Public Participation: Staff stated that applicant has withdrawn their application.

VARIANCE NEW BUSINESS

None.

PUBLIC PARTICIPATION PROCEEDINGS

Ms. Comella read the Public Participation procedures.

PLANNING – OLD BUSINESS

None.

PLANNING – NEW BUSINESS

1. Applicant Name: Carolyn Haslam
Project Number: SMLU22-141 – Comprehensive Plan Amendment
Project Location: 1325 Aquarius Ave – Aquarius Landing
Project Description: Land use change for 2.95 acres from Low Density Residential to High Density Residential

Public Participation: Applicant, Carolyn Haslam, spoke and answered questions from the board.

Mr. Owens moved to recommend denial to City Commission. Mr. Nesbit seconded the motion. The motion to deny passed 5-1 with Chairwoman Comella dissenting.

2. Applicant Name: Carolyn Haslam
Project Number: Z22-144 – LDR Text Amendment
Project Location: N/A
Project Description: Ordinance on Affordable Housing

Public Participation: Applicant, Carolyn Haslam, spoke and answered questions from the board. Pastor Mark Schade spoke and answered questions from the board. Rob Cassata, project coordinator spoke and answered questions from the board.

Mr. Reed moved to recommend approval to City Commission, with the condition that the density bonus will be up to 50%, at the discretion of the City. Mr. Liska seconded the motion. The motion passed unanimously.

OTHER BUSINESS

None.

ADJOURNMENT

The meeting ended at 7:14 p.m.

**PLANNING STAFF
REPORT TO
CITY OF DELAND PLANNING
BOARD**

September 21, 2022

A. APPLICATION NO: V22-156

APPLICANT: Rebecca D Storm (Applicant)

REQUEST: To be reduced from 2 car garage per unit to 1 car garage.

APPLICABLE ORDINANCES: *Sec. 33-87.01 Setbacks, building separation, and lot coverage. Sec. 33-17.07 R-2 Two-Family Dwelling*

B. SITE FACTORS:

LOCATION: 120 N Colorado Ave

PARCEL SIZE: +/- 14700' Square Feet

EXISTING ZONING/USE: R-2 Two-Family Dwelling

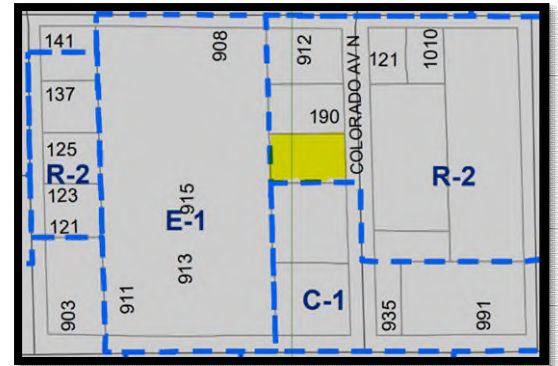
Required Minimum Setbacks in Feet			
Front	Rear	Side	Street Side
30'	25'	7.5'	15'



SURROUNDING USE:

NORTH:	Two- Family Residential	R-2
SOUTH:	Neighborhood Commercial	C-1
EAST:	Two- Family Residential	R-2
WEST:	Educational	E-1

SURROUNDING ZONING:



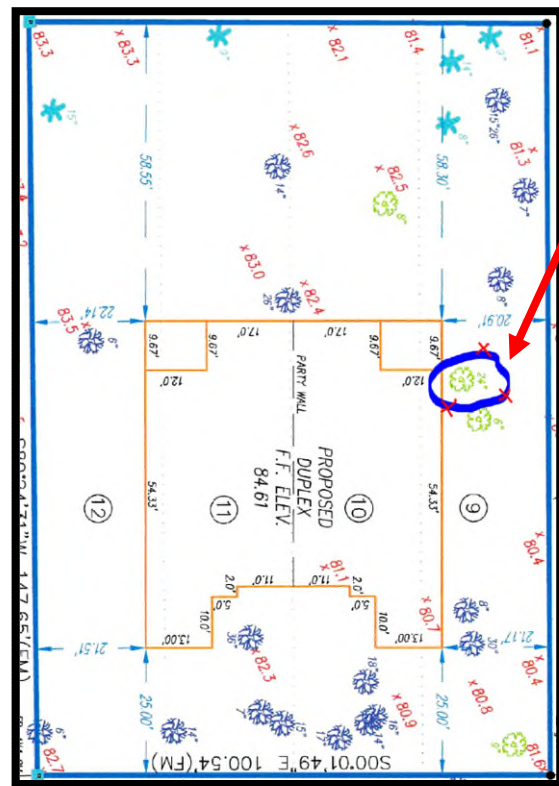
DOES THE APPLICANT OWN PROPERTY WHICH IS
ADJACENT TO THE PROPERTY FORWHICH HE OR SHE
SEEKS A VARIANCE?

Yes ☐ No ☒

- ### C. LAND USE PLAN DESIGNATION: Medium Density Residential

CHRONOLOGY:

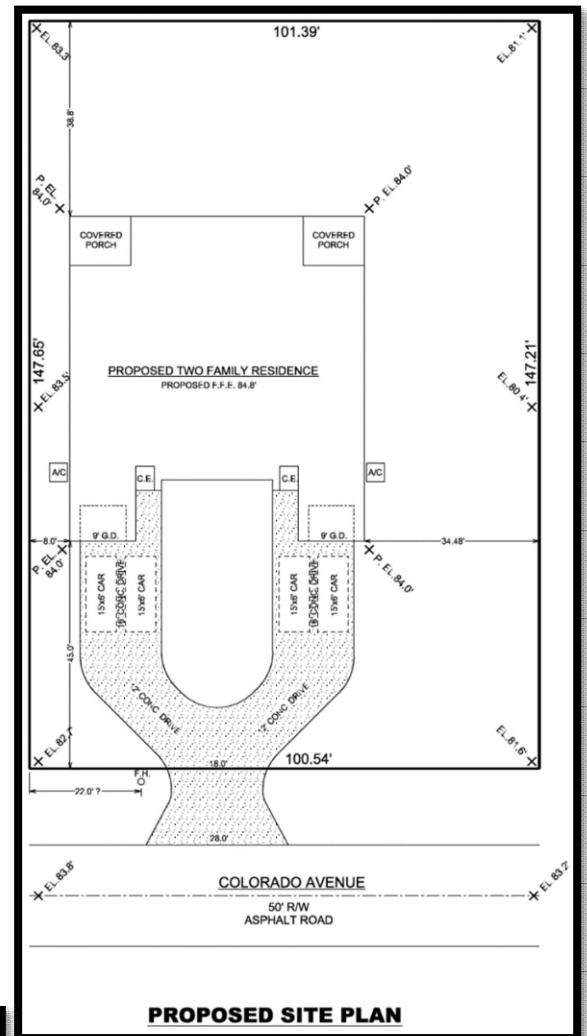
The property located on North Colorado Ave is in a R-2, two family residential dwelling zone. The applicant is seeking a variance to be exempted from the two-car garage per unit requirement. Per the applicant, after attending a hearing at the Tree Review Committee, the applicant was informed that the historic tree present on the property cannot be removed. The tree encroaches the proposed property causing the applicant to reposition the duplex on the property to meet the committee's requirements. The duplex must be relocated from original survey to the South by 12ft, only leaving a 10ft side setback on the South. To further accommodate the council, the applicant extended the shift an addition 2ft to leave an 8ft setback on the South side of the duplex. The applicant also added an additional 5ft in width to inside of each drive to create an 18ft driveway on each side; they set the property back an additional 10ft from original 25ft setback at front of property to allow for a 35ft driveway. Lastly the applicant limited the building area significantly to accommodate the Tree Committee and as an attempt to limit the impact the building will have on a historical tree.



25" Historic Live Oak

D. ANALYSIS:

This property abuts two single family homes on the north side and vacant properties on the south. The applicant is requesting a variance to build a duplex with one garage on each unit instead of two. The applicant is unable to build meeting R-2 standard due to a 25" historical Live Oak being on the north side of the property. On July 18th the Tree Advisory Committee recommended denial of the removal of the historic tree based on the finding that the project does not meet the requirements of **Section 33-57.05(d) Historic tree protection**. Without this variance the applicant will lose the ability to utilize the land to its full potential. The subject property presents a special condition and circumstance. The tree removal being denied presents the applicant with a hardship. The special conditions and circumstances are not the results of the applicant or owner. Therefore, the new location of the duplex is unlikely to be injurious to the surrounding properties and this is the minimum variance necessary to make this project possible and reasonable use of the land.



RESOLUTION NO. 2022 - 60

A RESOLUTION OF THE CITY COMMISSION OF DELAND, FLORIDA, DENYING THE REMOVAL OF ONE HISTORIC TREE LOCATED AT 120 NORTH COLORADO AVENUE; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the applicant, Miamex Properties, LLC, is requesting permission to remove one historic tree located at 120 N. Colorado Avenue, for the construction of a duplex; and

WHEREAS, the City's Forester has determined that the proposed tree for removal is a 25" DBH historic Live Oak in good condition; and

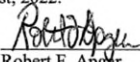
WHEREAS, on July 18, 2022, the Tree Advisory Committee recommended denial of the removal of the historic tree based on the finding that the project does not meet the requirements of Section 33-57.05(d).

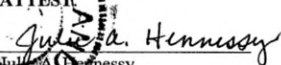
NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF DELAND, FLORIDA:

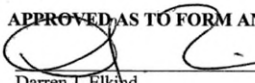
Section 1. The City Commission hereby denies the request for removal of one historic tree located 120 North Colorado Ave..

Section 2. This Resolution shall become effective immediately upon its adoption.

PASSED AND ADOPTED this 1st day of August, 2022.


Robert F. Apper
Mayor-Commissioner


ATTEST

Julie A. Hennessy
City Clerk-Auditor

APPROVED AS TO FORM AND LEGALITY:

Darren J. Elkind
City Attorney

E. VARIANCE CRITERIA: Per Section 33-103.03, as amended, the Planning Board will consider the following criteria in making a determination concerning the granting or denial of the requested variance:

1. Special conditions and circumstances exist which are peculiar to the land, structure, or building involved, and which are not applicable to other lands, structures, or buildings in the same zoning district.

The subject property presents a special condition and circumstance which is out of the applicant's control. There is a historic Live Oak present on the property which cannot be removed. In order to build the duplex, the applicant needs to downsize to one garage per unit.

2. Granting of the variance request will not confer on the applicant any special privilege that is denied by the development code to other lands, building, or structures in the same zoning district.

Granting of the variance would not confer special privileges, as the historic tree cannot be removed.

3. Literal interpretation and enforcement of the development code regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district under the terms of the development code, and would work unnecessary and undue hardship on the applicant such as natural site conditions, size or shape of lot, or existing structures(s).

The literal interpretation and enforcement of the code would not deprive the applicant of rights commonly enjoyed by other properties in the neighborhood. The existing historic Live Oak makes it difficult to build the home meeting standards.

4. The granting of the variance will be in harmony with the general intent and purpose of this code and the Comprehensive Plan, as amended, and will not be injurious to the surrounding properties or detrimental to the public welfare.

The duplex is unlikely to be injurious to the surrounding properties or detrimental to the public welfare.

5. The Variance, if granted, is the minimum variance necessary to make possible the reasonable use of the land, building or structure.

Requiring the applicant to follow current codes would deny the applicant the ability to utilize the land in the same manner if there wasn't a historic tree present.

6. The special conditions or circumstances are not the result of actions of the applicant or owner.

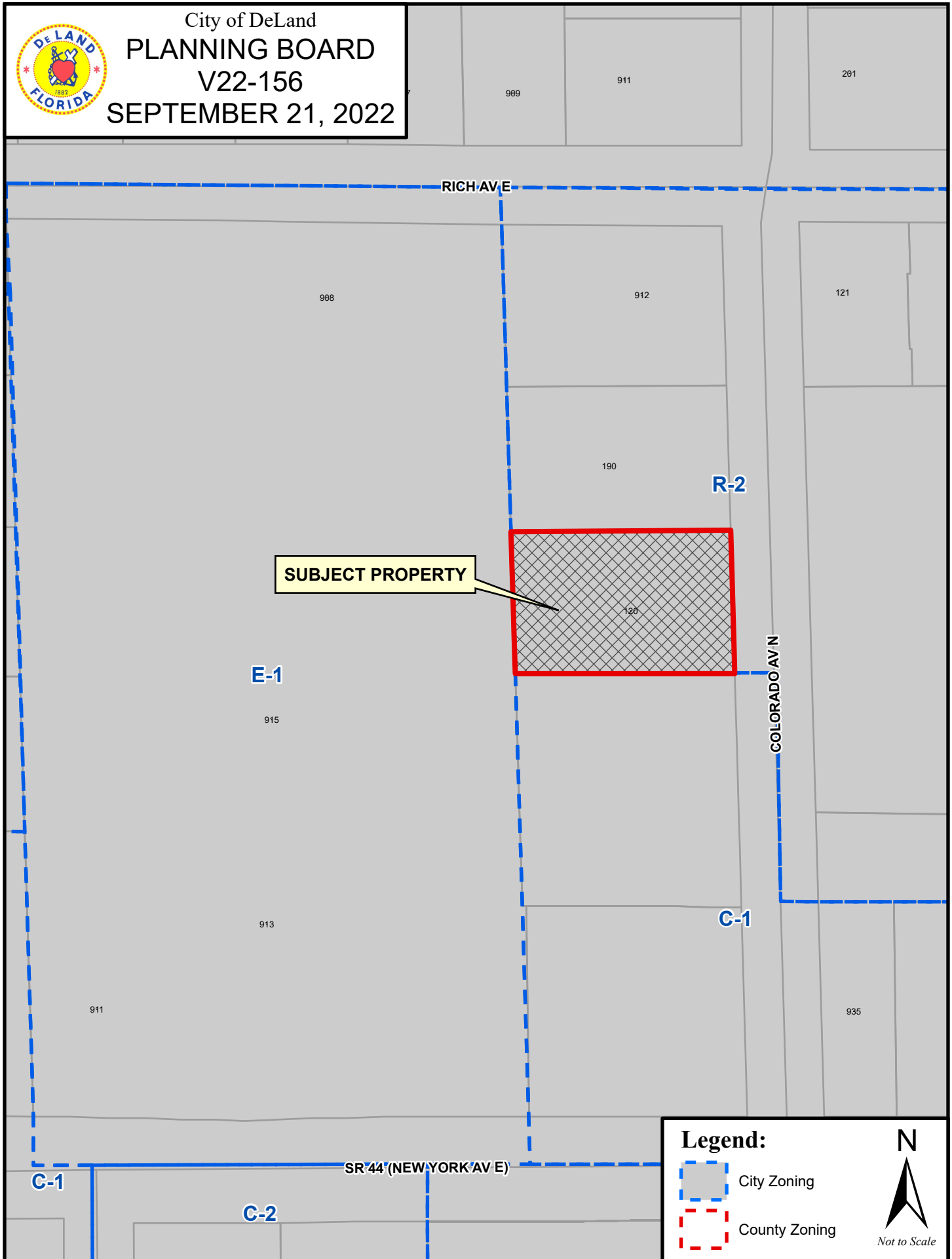
The special conditions or circumstance is not the result of applicant.

F. STAFF SUMMARY:

The applicant is seeking a variance to be exempted from the two-car garage per unit requirement, and to reduce to one car garage. Per the applicant, after attending a hearing at the Tree Review Committee, the applicant was informed that the historic tree present on the property cannot be removed. The tree encroaches the proposed property causing the applicant to reposition the duplex on the property to meet the committee's requirements. This property abuts two single family homes on the north side and vacant properties on the south. The applicant is unable to build meeting R-2 standard due to a 25" historical Live Oak being placed on the north side of the property. Without this variance the applicant will lose the ability to utilize the land to its full potential. The subject property presents a special condition and circumstances not in result of the applicants doing. The tree removal being denied presents the applicant with a hardship, granting of the variance would not confer special privileges, as the historic tree cannot be removed to accommodate space for the proposed duplex



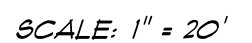
City of DeLand
PLANNING BOARD
V22-156
SEPTEMBER 21, 2022



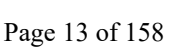


City of DeLand
PLANNING BOARD
V22-156
SEPTEMBER 21, 2022





Darren Phegley P.E.
603 Sugar Ridge Drive
DeLand, FL 32720
PE #72372
Certificate of Authority #L20000220391



**PLANNING STAFF
REPORT TO
CITY OF DELAND PLANNING
BOARD**

September 21, 2022

A. APPLICATION NO: V22-160

APPLICANT: Cheryl Hankins (Applicant/Owner)

REQUEST: To reduce the required Accessory Structure setbacks from 7.5' on the side to 1' and 7.5' from the rear to 20 inches.

APPLICABLE ORDINANCES: *Sec. 33-28.01(c)(3). Accessory Structures General standards and requirements. / Sec. 33-87.01(c) Setbacks, building separation, and lot coverage.*

B. SITE FACTORS:

LOCATION: 232 N Adelle Ave

PARCEL SIZE: +/- 7250 Square Feet

EXISTING ZONING/USE: R-1B Single-Family Dwelling

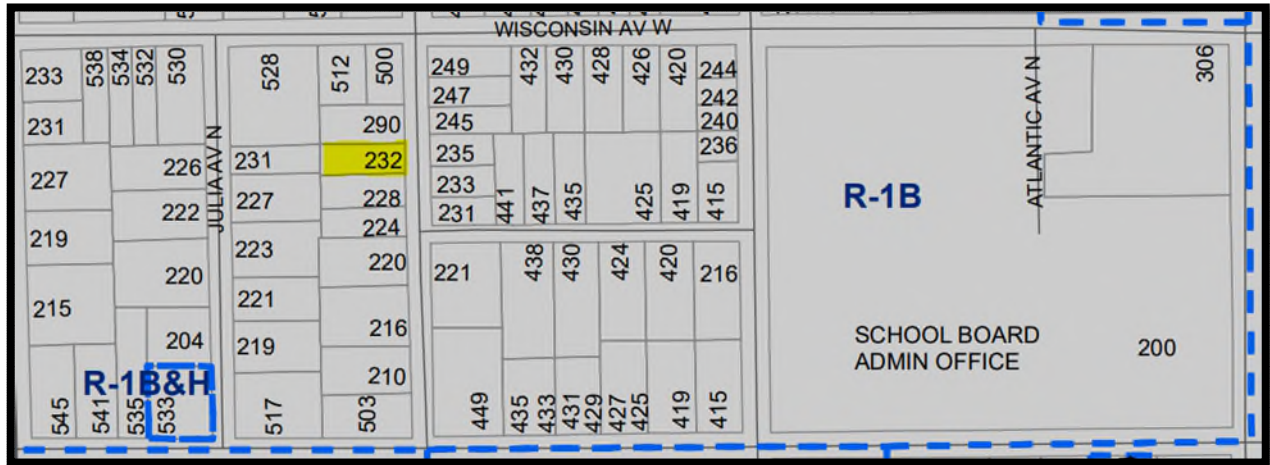
Required Minimum Setbacks in Feet				
Front	Rear Setback	Side Setback	Corner lot: Street side Setback	Accessory Uses & Structures
20'	25'	10'	20'	7.5'



SURROUNDING USE:

SURROUNDING ZONING:

NORTH: Single-Family Dwelling R-1B
SOUTH: Single-Family Dwelling R-1B
EAST: Single-Family Dwelling R-1B
WEST: Single-Family Dwelling R-1B



DOES THE APPLICANT OWN PROPERTY WHICH IS ADJACENT TO THE PROPERTY FORWHICH HE OR SHE SEEKS A VARIANCE?

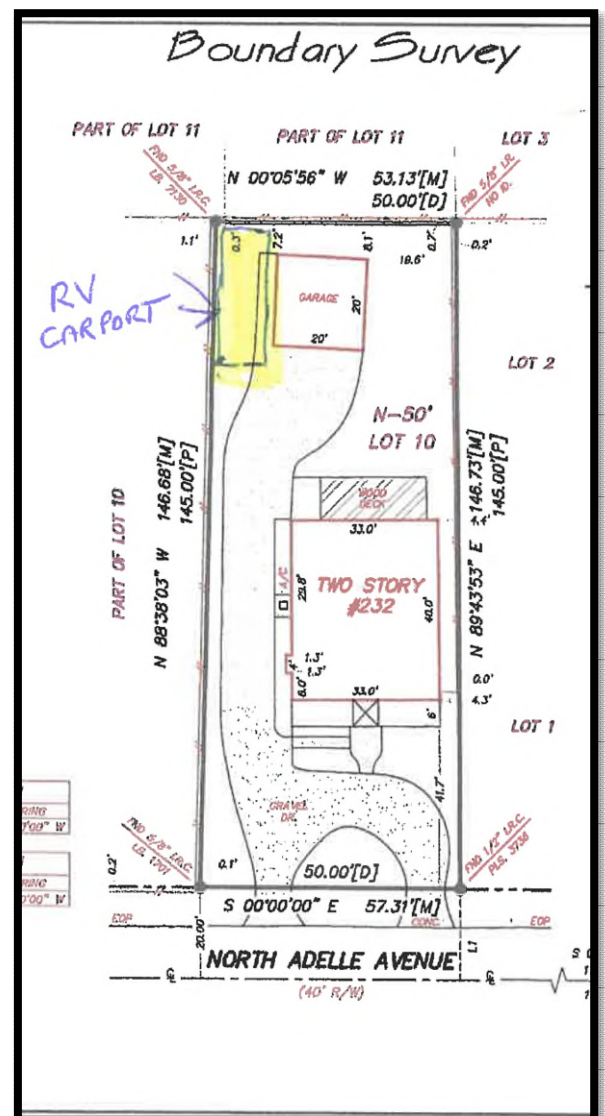
Yes ☐ No ☒

C. LAND USE PLAN DESIGNATION: Low Density Residential

CHRONOLOGY:

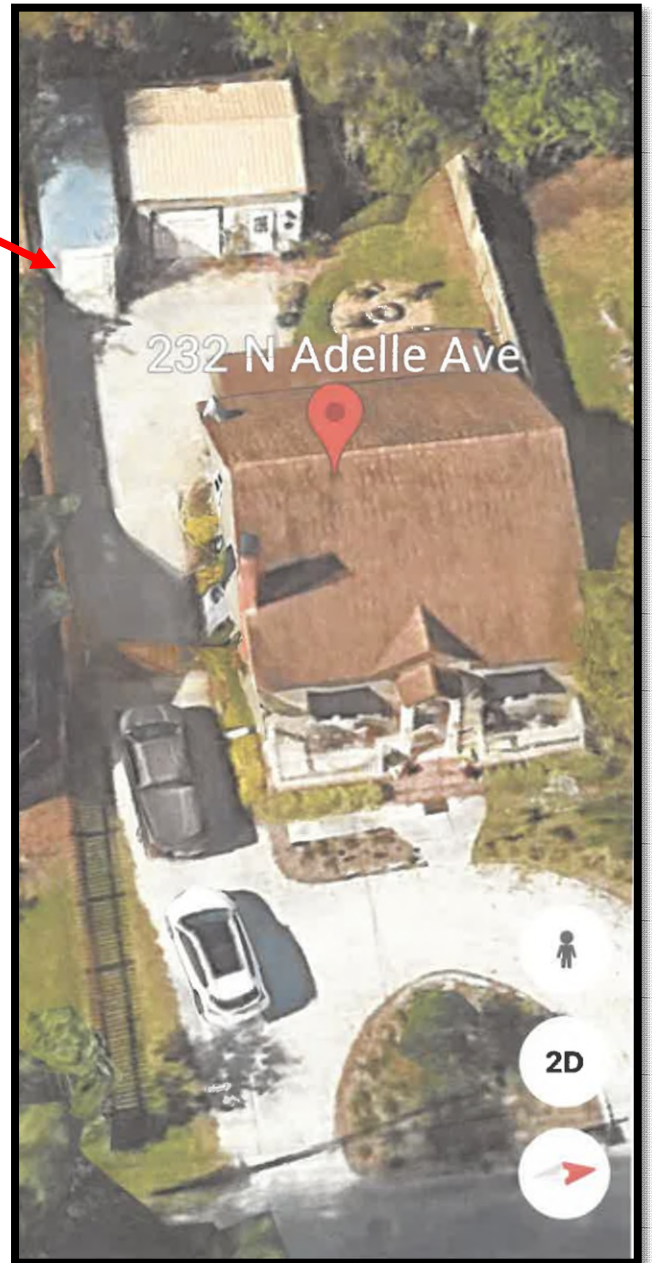
The property located on North Adelle Ave, is in a R-1B Single-Family Dwelling zoning district. The property is surrounded by similar single-family homes with varying lot sizes.

The applicant is seeking a variance to reduce the required Accessory Structure setbacks from 7.5' on the side to 1' and 7.5' from the rear to 20 inches. The applicants home sits on a parcel that has a width of 57.31'. The minimum width for lots in the R-1B district is 75', lots fronting on a curve must have a minimum 50-foot width at the street line. This lot is not fronting on a curve nor is it on a corner. Thus, placing a RV carport on this property is difficult if the applicant were to meet R-1B standards.



D. ANALYSIS:

The property size not meeting minimum standards hinders the applicant to enjoy the same rights as other neighboring lots. The property has circular style driveway which leads to the back where a garage is placed. There is little to no space on the property to add this carport. The only allowable space is on the south west quadrant of the property near the garage. To be placed there the applicant is proposing to have a setback of 1' on its' side and 20 inches on its rear. This RV carport will measure 35' long, 13 ½ 'tall, and 11 ½ 'wide.



E. VARIANCE CRITERIA: Per Section 33-103.03, as amended, the Planning Board will consider the following criteria in making a determination concerning the granting or denial of the requested variance:

1. Special conditions and circumstances exist which are peculiar to the land, structure, or building involved, and which are not applicable to other lands, structures, or buildings in the same zoning district.

The subject property is undersized, the R-1B minimum width is 75' and this property is 57.31'. This qualifies as a special condition/ circumstance since other properties in this district have bigger lots.

2. Granting of the variance request will not confer on the applicant any special privilege that is denied by the development code to other lands, building, or structures in the same zoning district.

Granting of the variance would not confer special privileges.

3. Literal interpretation and enforcement of the development code regulations would deprive the applicant of rights commonly enjoyed by other properties in the same zoning district under the terms of the development code, and would work unnecessary and undue hardship on the applicant such as natural site conditions, size or shape of lot, or existing structures(s).

The literal interpretation and enforcement of the code would deprive the applicant of rights commonly enjoyed by other properties in the neighborhood due to the size of said property. (57.31')

4. The granting of the variance will be in harmony with the general intent and purpose of this code and the Comprehensive Plan, as amended, and will not be injurious to the surrounding properties or detrimental to the public welfare.

The RV Carport is unlikely to be injurious to the surrounding properties. The carport will not encroach into any neighboring properties and it meets the accessory structure height restrictions.

5. The Variance, if granted, is the minimum variance necessary to make possible the reasonable use of the land, building or structure.

The property already contains an accessory structure at the rear of the property.

6. The special conditions or circumstances are not the result of actions of the applicant or owner.

The circumstance is not the result of applicant

F. STAFF SUMMARY:

The applicant is requesting a variance to reduce the required Accessory Structure setbacks from 7.5' on the side to 1' and 7.5' from the rear to 20 inches. The property is surrounded by similar single-family homes with varying lot sizes. The applicants home sits in a parcel that has a width of 57.31'. The minimum width for lots in the R-1B district is 75', the subject property is undersized. Placing a RV carport on this property is difficult if the applicant were to meet R-1B standards. The applicant is proposing to have a setback of 10' on its' side and 20 inches on its rear. This RV carport will measure 35' long, 13 ½ 'tall, and 11 ½ 'wide. The literal interpretation and enforcement of the code would deprive the applicant of rights commonly enjoyed by other properties in the neighborhood due to the size of said property. Moreover, the RV Carport is unlikely to be injurious to the surrounding properties. The carport will not encroach into any neighboring properties and it meets the accessory structure height restrictions. The property already contains an accessory structure at the rear of the property.

L:\COMMDEV\PLANNING\SR\V22-160\2022



City of DeLand
PLANNING BOARD
V22-160
SEPTEMBER 21, 2022

WISCONSIN AV W

JULIA AV N

ADELLE AV N

SUBJECT PROPERTY

R-1B

Legend:



City Zoning



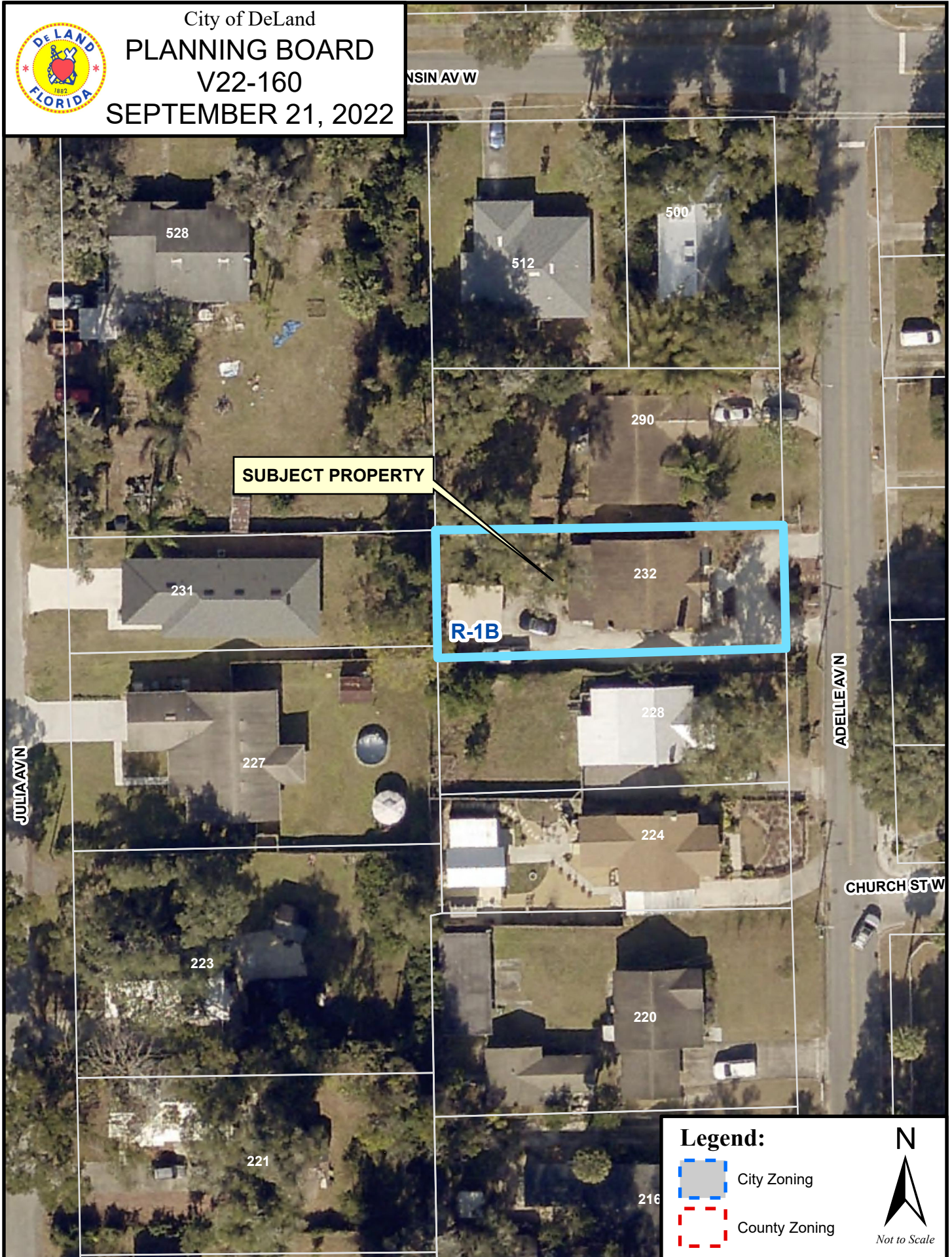
County Zoning



Not to Scale



City of DeLand
PLANNING BOARD
V22-160
SEPTEMBER 21, 2022



Legend:

-  City Zoning
-  County Zoning



LEGAL DESCRIPTION: THE NORTH 50 FEET OF LOT 10, L.T. DADE'S SUBDIVISION, ACCORDING TO MAP OR PLAT THEREOF AS RECORDED IN MAP BOOK 4, PAGE 73 AND AS REFILED IN MAP BOOK 15, PAGE 180, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.



232 NORTH ADELLE AVENUE
DELAND, FL.

TRIDENT TITLE



Long Surveying, Inc.

"Specializing in Residential Surveying"

LB No. 7371

1061 S. Sun Dr. Ste. #1113

Lake Mary, FL 32746

Office 407-330-9717 or 407-330-9716

Fax 407-330-9775

www.longsurveying.com

DRAWN BY:
KZR MM

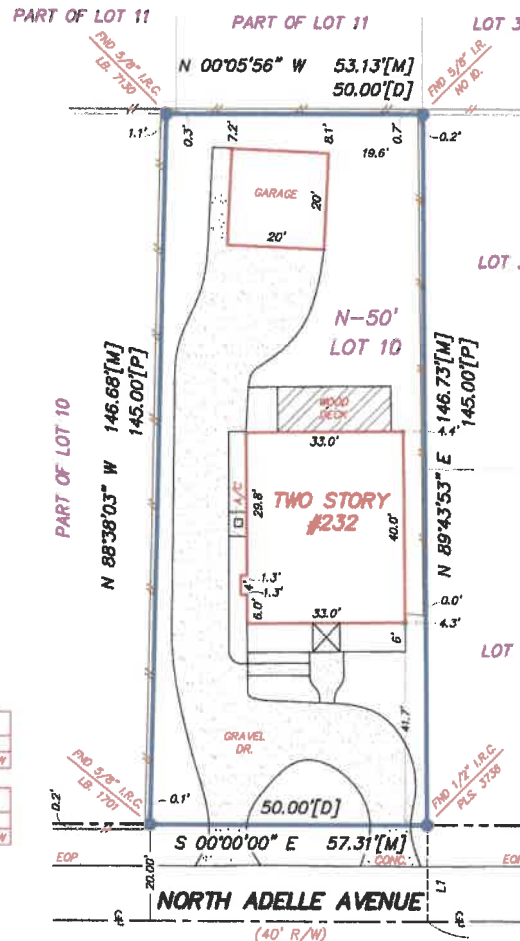
CHECKED BY:
BRETT

CERTIFIED TO:
CHERYL HANKINS
TRIDENT TITLE
COMMONWEALTH LAND TITLE INSURANCE COMPANY

COMMUNITY NO:
120307
PANEL: 0470
FLOOD ZONE: X
SUFFIX: H
F.I.R.M. DATE: 02/19/14

SURVEY NO.
113841
FIELD DATE: 02/01/21

Boundary Survey



SCALE: 1"=30'

- A/C - AIR CONDITIONER
- A.E - ALLEY EASEMENT
- B.C - BLOCK CORNER
- BLK - BLOCK
- C.B - CONCRETE BLOCK
- C.B.S - CONCRETE BLOCK STRUCTURE
- C.M - CONCRETE MONUMENT
- CONC - CONCRETE
- D - DEED
- D.E - DRAINAGE EASEMENT
- E.O.P - EDGE OF PAVEMENT
- F.C.C - FOUND CROSS CUT
- F.F.E - FINISHED FLOOR ELEVATION
- FND - FOUND
- ID - IDENTIFICATION
- I.P - IRON PIPE
- I.R - IRON ROD
- I.R.C - IRON ROD & CAP
- L - ARC LENGTH
- L.B - LAND SURVEYING BUSINESS
- L.S - LAND SURVEYOR
- L.E - LANDSCAPE EASEMENT
- M - MEASURED
- M.E - MAINTENANCE EASEMENT
- N&D - NAIL AND DISK
- P - PLAT
- P.E - PEDESTRIAN EASEMENT
- P.C - POINT OF CURVATURE
- P.C.C - POINT OF COMPOUND CURVATURE
- P.C.P - PERMANENT CONTROL POINT
- P.L - PROPERTY LINE
- P.O.B - POINT OF BEGINNING
- P.O.C - POINT OF COMMENCEMENT
- P.O.L - POINT ON LINE
- P.R.C - POINT OF REVERSE CURVE
- P.R.M - PERMANENT REFERENCE MONUMENT
- P.R.D.A.E - PRIVATE DRAINAGE AND ALLEY EASEMENT
- P.T - POINT OF TANGENT
- R - RADIUS
- R/W - RIGHT OF WAY
- S/W - SIDEWALK
- U.E - UTILITY EASEMENT
- W.F.S - WOOD FRAME STRUCTURE

- RIGHT-OF-WAY LINE
- CENTERLINE
- BARB WIRE FENCE
- WOOD FENCE
- CHAIN LINK FENCE
- PLASTIC FENCE

BEARINGS SHOWN HEREON ARE BASED UPON THE CENTERLINE OF NORTH ADELLE AVENUE BEING S 00°00'00" E ASSUMED

- NOTES:
- 1) This survey is based on the legal description as provided by the Client
 - 2) This Surveyor has not abstracted the land shown hereon for easements, rights of way or restrictions of record which may affect the title or use of the land
 - 3) Do not reconstruct property lines from building ties
 - 4) No footing or overhangs have been located except as shown
 - 5) No improvements or utilities have been located except as shown
 - 6) Not valid without a signature and the authenticated electronic seal or the original raised seal of a Florida Licensed Surveyor and Mapper

Certification: I certify that this survey was made under my direction and that it meets the minimum technical standards set forth by the Board of Professional Land Surveyors and Mappers in Chapter 47, Part 1, Florida Administrative Code, pursuant to Section 479.04, Florida Statutes.

No. 5910
STATE OF FLORIDA
LEON L. HAMPTON P.S.M. NO. 5910

LEGAL DESCRIPTION: THE NORTH 50 FEET OF LOT 10, L.T. DADE'S SUBDIVISION, ACCORDING TO MAP OR PLAT THEREOF AS RECORDED IN MAP BOOK 4, PAGE 73 AND AS REFILED IN MAP BOOK 15, PAGE 180, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.



232 NORTH ADELLE AVENUE
DELAND, FL.

TRIDENT TITLE



Long Surveying, Inc.

"Specializing in Residential Surveying"

L.B. No. 7371
1061 S. Sun Dr. Ste. #1113
Lake Mary, FL 32746
Office 407-330-9717 or 407-330-9716
Fax 407-330-9775
www.longsurveying.com

DRAWN BY: KZR MM
CHECKED BY: BRETT

CERTIFIED TO:
CHERYL HANKINS
TRIDENT TITLE
COMMONWEALTH LAND TITLE INSURANCE COMPANY

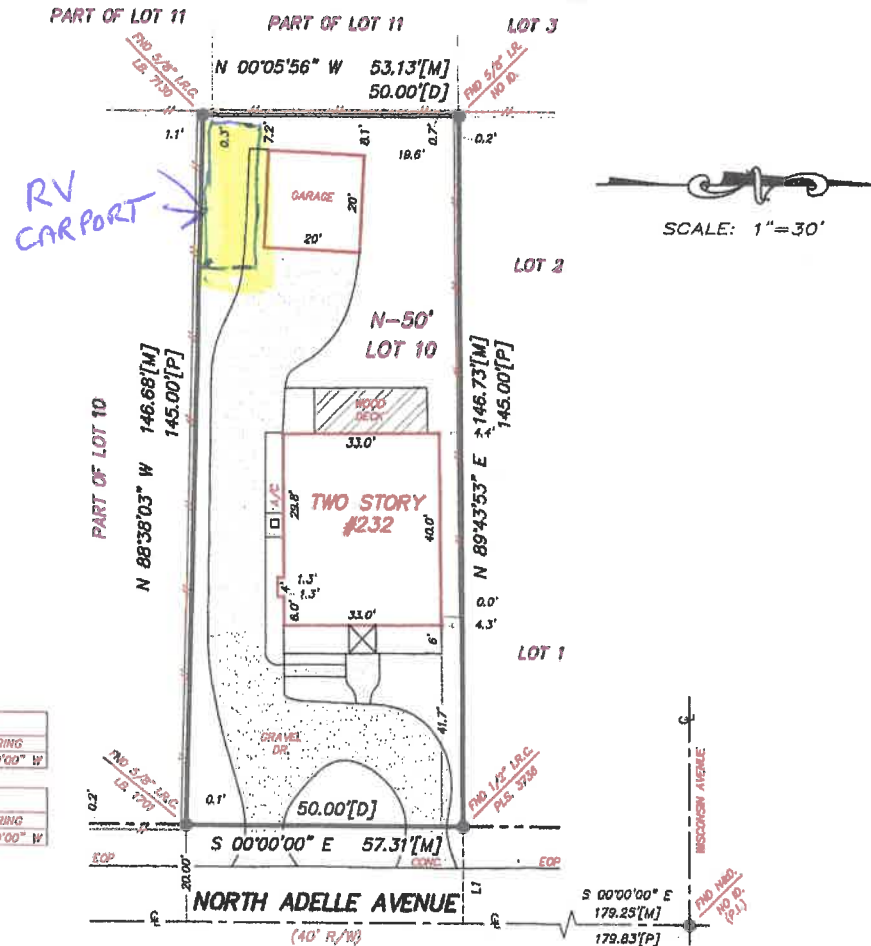
COMMUNITY NO:
120307
PANEL: 0470
FLOOD ZONE: X
SUFFIX: H
F.I.R.M. DATE: 02/19/14

SURVEY NO:
113841
FIELD DATE: 02/01/21

LINE TABLE [P]		
LINE	LENGTH	BEARING
L1	29.00'	S 80°00'00" W

LINE TABLE [M]		
LINE	LENGTH	BEARING
L1	18.33'	S 80°00'00" W

Boundary Survey



A/C	AIR CONDITIONER
A.E.	ALLEY EASEMENT
B.C.	BLOCK CORNER
BLK	BLOCK
C.B.	CONCRETE BLOCK
C.B.S.	CONCRETE BLOCK STRUCTURE
C.M.	CONCRETE MONUMENT
CONC.	CONCRETE
D	DEED
D.E.	DRAINAGE EASEMENT
E.O.P.	EDGE OF PAVEMENT
F.C.C.	FOUND CROSS CUT
F.F.E.	FINISHED FLOOR ELEVATION
FND	FOUND
ID.	IDENTIFICATION
I.P.	IRON PIPE
I.R.	IRON ROD
I.R.C.	IRON ROD & CAP
L	ARC LENGTH
L.B.	LAND SURVEYING BUSINESS
L.S.	LAND SURVEYOR
L.E.	LANDSCAPE EASEMENT
M	MEASURED
M.E.	MAINTENANCE EASEMENT
N&D	MAIL AND DISK
P	PLAT
P.E.	PEDESTRIAN EASEMENT
P.C.	POINT OF CURVATURE
P.C.C.	POINT OF COMPOUND CURVATURE
P.C.P.	PERMANENT CONTROL POINT
P.L.	PROPERTY LINE
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCEMENT
P.O.L.	POINT ON LINE
P.R.C.	POINT OF REVERSE CURVE
P.R.M.	PERMANENT REFERENCE MONUMENT
P.D.A.E.	PRIVATE DRAINAGE AND ALLEY EASEMENT
P.T.	POINT OF TANGENT
R	RADIUS
R/W	RIGHT OF WAY
S/W	SIDEWALK
U.E.	UTILITY EASEMENT
W.F.S.	WOOD FRAME STRUCTURE
---	RIGHT-OF-WAY LINE
—+—	CENTERLINE
—x—	BARB WIRE FENCE
— —	WOOD FENCE
—X—	CHAIN LINK FENCE
—+—	PLASTIC FENCE

BEARINGS SHOWN HEREON ARE BASED UPON THE CENTERLINE OF NORTH ADELLE AVENUE BEING S 00°00'00" E ASSUMED

- NOTES:
- 1) This survey is based on the legal description as provided by the Client
 - 2) This Surveyor has not abstracted the land shown hereon for easements, rights of way or restrictions of record which may affect the title or use of the land
 - 3) Do not reconstruct property lines from building ties
 - 4) No footing or overhangs have been located except as shown
 - 5) No improvements or utilities have been located except as shown
 - 6) Not valid without a signature and the authenticated electronic seal or the original raised seal of a Florida licensed Surveyor and Mapper

Certification: I certify that this survey was made under my direction and that it meets the minimum technical standards set forth by the Board of Professional Land Surveyors and Mappers in Chapter 112, Part I, Florida Administrative Code, pursuant to Section 112.01, Florida Statutes.

No. 5910
STATE OF FLORIDA
LEON L. HAMPTON P.S.M. NO. 5910

CITY OF DELAND
Request for Commission Action
September 21, 2022

SUBJECT: Applicant Name: Nicole Martin
Project Number: SP22-124 – Site Plan for DeLand Commons
Project Location: 5.36 acres located at 225 S. Woodland Blvd.
Project Description: Development of 180 residential units (apartments, townhouses, carriage houses)

DEPARTMENT: Planning

PREPARED BY: Mike Holmes, Planning Director

ATTACHMENTS: SP22-124 Staff Report - ADA, SP22-124 Zoning and Location Map - ADA, SP22-124 Aerial Map - ADA, SP22-124 DeLand Commons PB Plan Set - ADA

APPROVED BY: Vivian Ford, Admin. Coordinator, September 16, 2022

SUMMARY/HIGHLIGHT:

**PLANNING STAFF REPORT
TO
CITY OF DELAND PLANNING BOARD
September 15, 2022**

A. APPLICATION NO.: SP22-124
APPLICANT: Mark Watts, Cobb Cole
REQUEST: Class IV Site Plan – DeLand Commons
APPLICABLE SECTIONS: Article XII, Section 33-132

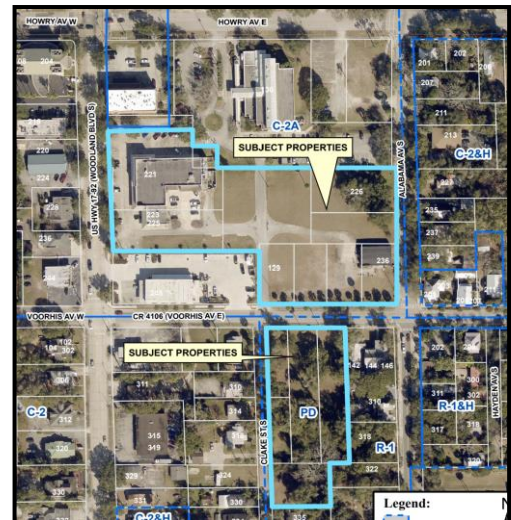
B. SITE CONDITIONS:

Location: 225 W. Woodland Blvd.
Parcel Size: 5.36 ± acres
Existing Zoning: C-2A (Downtown Commercial)
Existing Land Use: Downtown Commercial

This is a proposal for creation of a multi-family residential development with a commercial component. The residential development will include a total of 180 units made up of 173 apartments, 5 townhomes and 2 carriage houses. The commercial development will consist of 11 storefront units facing Woodland Blvd.



Vicinity map

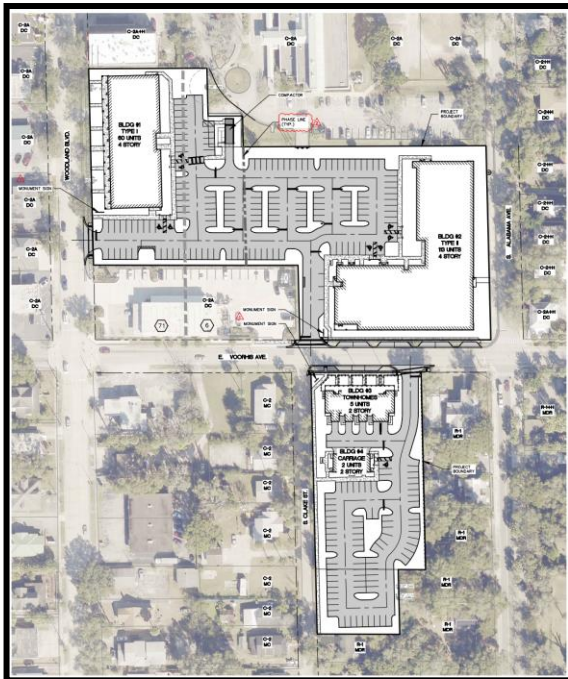


Aerial photo

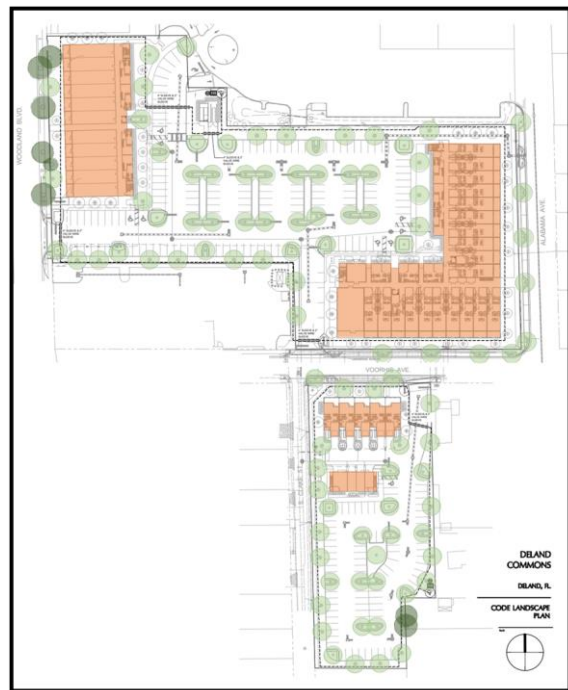
C. LAND USE PLAN: The subject property is located in the core of the city directly adjacent to the Downtown Historic District. The 5.36-acre project is dissected by E. Voorhis Ave., between Woodland Blvd and Alabama Ave., and consists of a 3.89-acre parcel north of Voorhis Ave and a 1.47-acre parcel on the south side of Voorhis. The northernmost parcel has both a Downtown Commercial land use and zoning designation (C-2A). The southernmost parcel was recently the subject of a land use amendment and rezoning to make it consistent with the other parcel.

Other actions for which this property has been the subject, leading up to the development of this site plan, are a demolition request and review of architecture by the Historic Preservation Board.

The site is located directly adjacent to the Downtown Historic District and the Historic Garden District. The property is to be developed in a single phase.



Site layout



Landscape layout

- D. ANALYSIS:** The surrounding area of the larger parcel is developed primarily with a number of residential structures along Alabama Ave. and Voorhis and commercial uses toward the north and west. The smaller parcel is surrounded by residential uses on 3 sides and commercial uses on

the north along Voorhis Ave. Because the site has a Downtown Commercial zoning designation, there are no setbacks required and buildings are permitted generally to be constructed up to the property line. The provision of adequate parking for the development has been addressed by the placement of the majority of the parking on the interior of the larger site and overflow parking located on the south parcel.

The applicant has suggested that a reduction in the parking requirement will be necessary. The number of spaces required based upon the types of units is 358 spaces (including visitor spaces). The site plan includes 267 spaces including 19 off-site/on-street spaces that can be counted in the C-2A zoning district and may be approved by the City Commission. This is a shortage of 91 spaces.

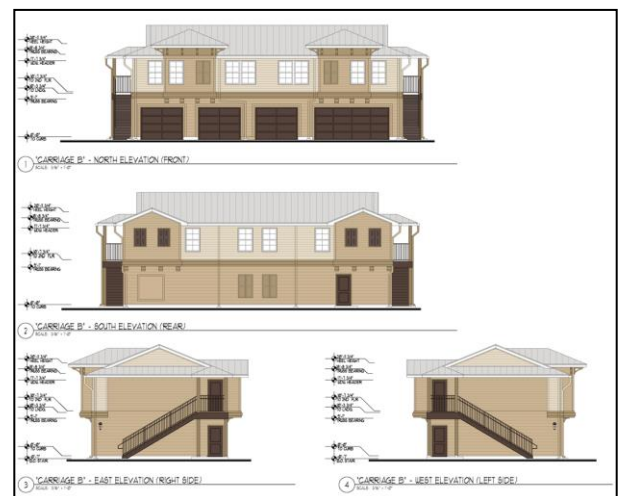


Mixed-use building located along Woodland Blvd.

Upon the recommendation of the HPB the elevation of this building was changed to add additional features as shown above. (This may not be reflected in the attached plans.)



Townhouse units



Carriage house

SP22-124 (BC)
3 of 4

- A Phase I ESA (Environmental Site Assessment) was conducted to identify potential sources of contamination. No environmental concerns were noted.
- An application has been submitted to the Volusia County School Board to determine the impacts to school concurrency.
- Stormwater will be handled by the use of an exfiltration system located throughout the site.
- Information regarding the necessity for a traffic impact analysis will be provided and handled as appropriate.
- The site has no significant existing vegetation on the northernmost parcel. There are some trees that will be preserved for the development. The southernmost site has a large number of trees and several will be preserved on the site.

At the August 18, 2022 meeting of the Technical Review Committee (TRC) it was moved to forward the application to the September 21, 2022 Planning Board meeting conditioned upon receiving revised plans by August 24, 2022 (*attached*). The following comments remain to be addressed:

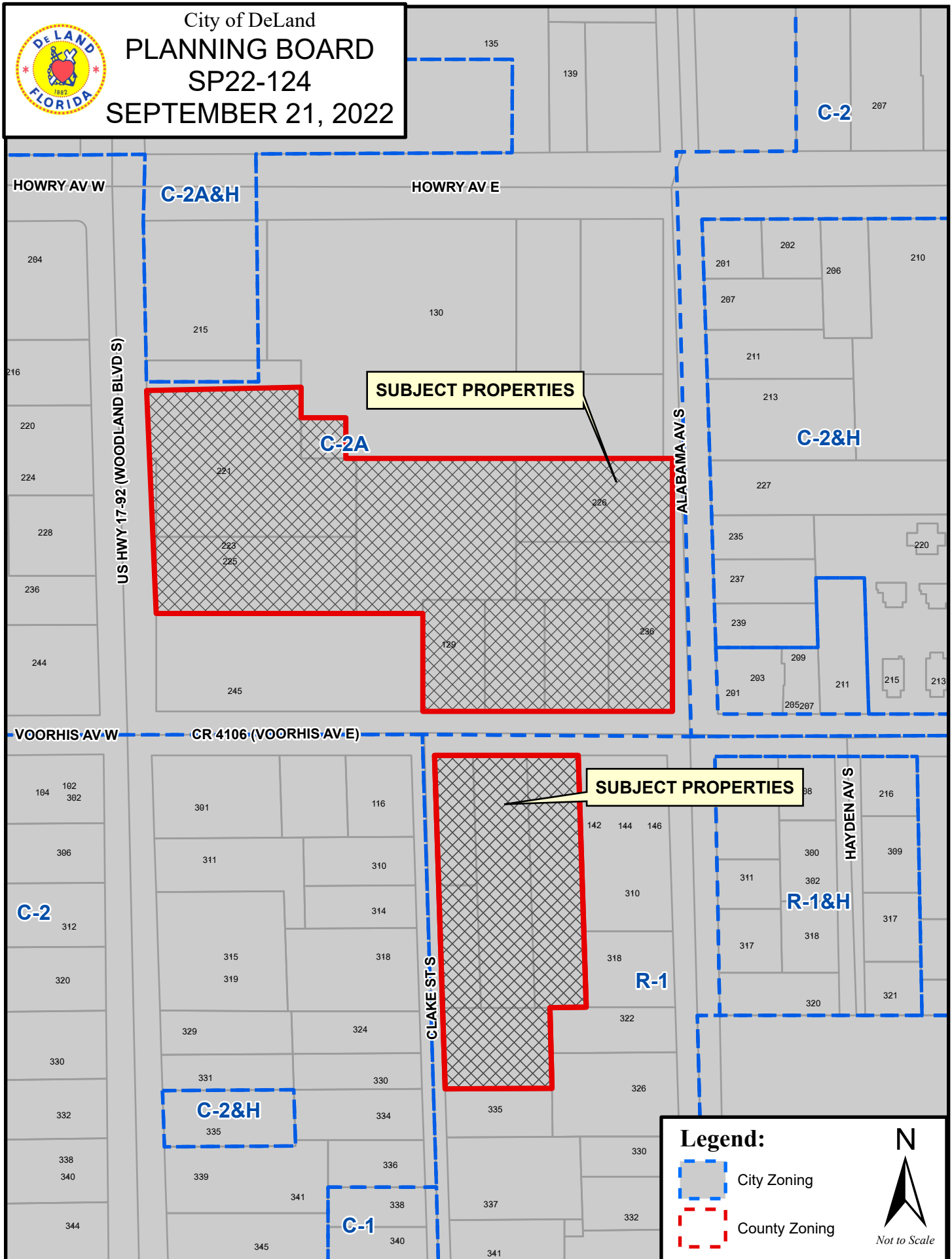
Fire	Open	Fire Flow Analysis
		One of the fire flows taken from an 8 inch line but a 6 inch is the service provided. Refer to the Utilities comments. Last comment from reviewer: Recent flow test was conducted on the wrong hydrant. Flow test needs to be conducted on the hydrant on Voorhis Ave which is a 6" main, not 8".
Utilities	Open	Water Service connection
		Water services needs to come off existing water main on Woodland and Voorhis with a separate tap and not the fire line.
Utilities	Open	Alabama Main Line
		Need to show valve for tap on Voorhis for the line that runs down Alabama. Hydrant Assembly needs to be connected to a Tee off of main line. A valve needs installed to the north of Tee and stubbed to end of property with a cap and 2" blow off.
Utilities	Open	Water Tap
		Domestic meters need to be on a stand alone tap and not connected into fire system. Last comment from reviewer: Lines were separated, but need to have two taps coming off of Woodland. One for Fire and one for domestic. The same is required off of Voorhis.

E. STAFF RECOMMENDATION:

Staff recommends **approval** of the Class IV Site Plan for DeLand Commons, *Because of the size of the development, the final decision on all Class IV developments is made by the City Commission.* The City Commission will hear the application at the October 17, 2022 meeting.

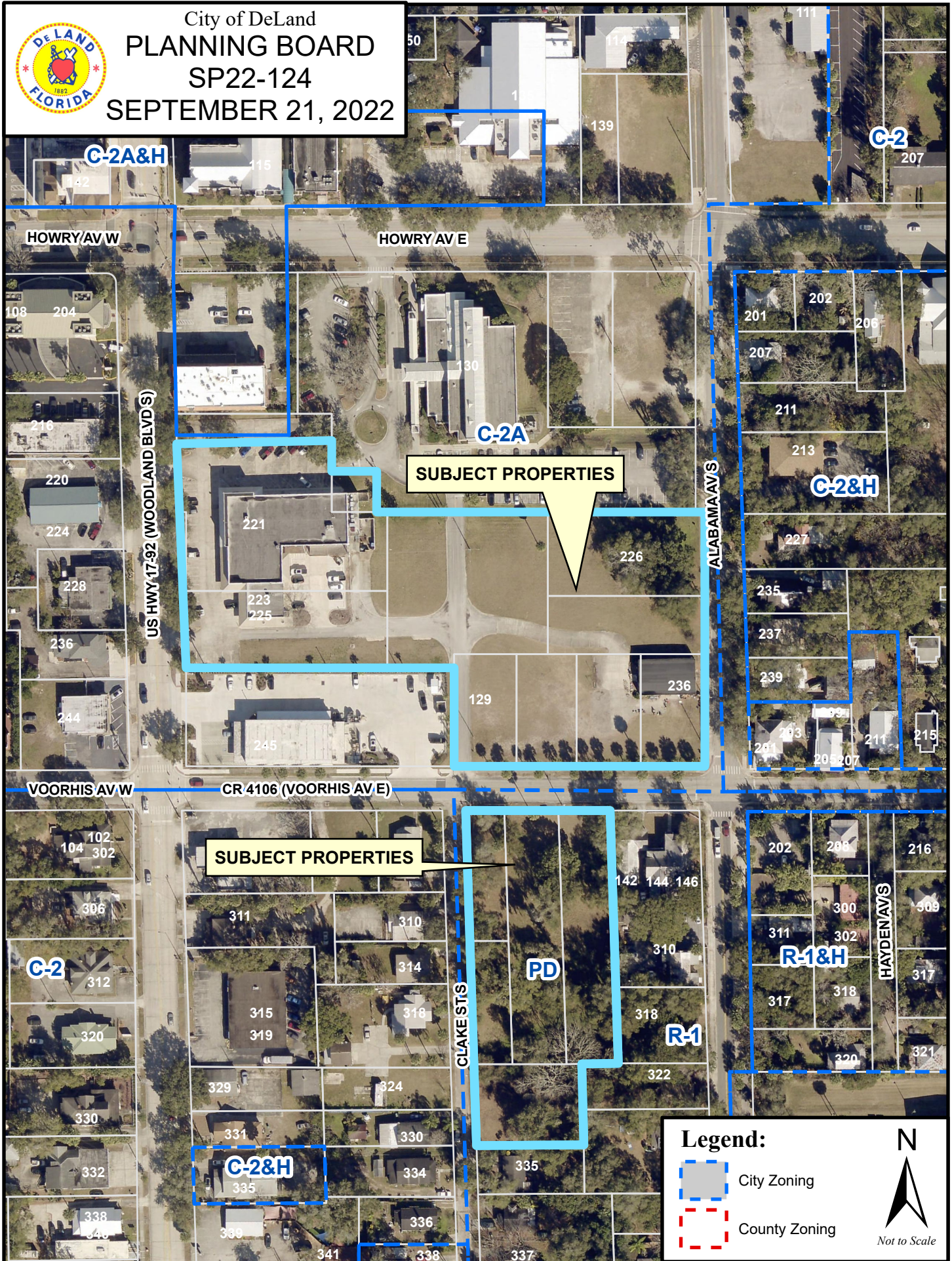


City of DeLand
PLANNING BOARD
SP22-124
SEPTEMBER 21, 2022





City of DeLand
PLANNING BOARD
SP22-124
SEPTEMBER 21, 2022



LEGAL DESCRIPTION:

THE WESTERLY 182 FEET OF THE SOUTH 2/5 OF LOT 2, BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE PLAT THEREOF AS RECORDED IN DEED BOOK G, PAGE 701, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA;

AND

LOT 1 OF THE RESUBDIVISION OF THE SOUTH ONE-HALF (S1/2) OF BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE PLAT THEREOF AS RECORDED IN MAP BOOK 6, PAGE 51, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

LOT 2, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

THE NORTH 16 FEET OF LOT 6 LYING EAST OF LOT 2, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S DDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

THE NORTH 16 FEET OF LOT 7 AND THE EAST 3.5 FEET OF LOT 7, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

LOT(S) 8, 9, 10, 11, 12, 13 AND 14, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

LOT A, CLAKE'S RESUBDIVISION OF BLOCK 14, HOWRY'S ADDITION TO DELAND, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 5, PAGE 2 AND MAP BOOK 15, PAGE 179, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT B, CLAKE'S RESUBDIVISION OF BLOCK 14, HOWRY'S ADDITION TO DELAND, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 5, PAGE 2 AND MAP BOOK 15, PAGE 179, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT 3, BLOCK 14, MAP OF J.W. HOWRY'S SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 1, PAGE 137 AND MAP BOOK 21, PAGE 191, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT 4, BLOCK 14, MAP OF J.W. HOWRY'S SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 1, PAGE 137 AND MAP BOOK 21, PAGE 191, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

A PARCEL OF LAND BEING A PORTION OF LOT 2, BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE PLAT THEREOF AS RECORDED IN DEED BOOK G, PAGE 701, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA;

BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NW CORNER OF LOT 5, HAMMOND'S SUBDIVISION, ACCORDING TO MAP BOOK 12, PAGE 175, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN IN A SOUTHERLY DIRECTION ALONG THE WEST LINE OF LOTS 5 & 6 OF THE SAID HAMMOND'S SUBDIVISION A DISTANCE OF 282 FEET (MORE OR LESS) TO THE SW CORNER OF LOT 6; THENCE RUN IN A WESTERLY DIRECTION 64.85 FEET (MORE OR LESS) TO THE NW CORNER OF LOT 12 OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 5, PAGE 51, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; BEING THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING, RUN NORTHERLY AND PARALLEL WITH THE WEST LINE OF LOT 6, A DISTANCE OF 47.66 FEET TO A POINT; THENCE RUN WESTERLY ON A LINE PARALLEL WITH THE NORTH LINE OF LOT 12, A DISTANCE OF 92.35 FEET (MORE OR LESS) TO A POINT 182 FEET EAST OF THE WEST LINE OF LOT 2, BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN DEED BOOK G, PAGE 701, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; (THE WEST LINE OF LOT 2 IS THE EAST RIGHT OF WAY LINE OF SOUTH WOODLAND BOULEVARD, A 66 FOOT WIDE STREET) AND 233.51 FEET SOUTH OF THE NORTH LINE OF THE SAID LOT 2; THENCE RUN SOUTHERLY ON A LINE PARALLEL WITH THE WEST LINE OF LOT 6 A DISTANCE OF 54.49 FEET (MORE OR LESS) TO THE SOUTH LINE OF THE SAID LOT 2; THENCE RUN IN AN EASTERLY DIRECTION ALONG THE SOUTH LINE OF SAID LOT 2, AND PARALLEL TO THE NORTH LINE OF LOT 12, TO THE POINT OF BEGINNING.

AND

THE WEST 127 FEET OF LOTS 15 AND 16, CLAKE'S RESUBDIVISION IN BLOCK 14, HOWRY'S ADDITION TO THE CITY OF DELAND, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 5, PAGE 2, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

INDEX OF SHEETS

CIVIL				
SHEET NO.	ISS. DATE	REV. NO.	REV. DATE	SHEET NAME
C001	6/17/22	—	—	COVER SHEET
C002	6/17/22	—	—	SYMBOLS AND ABBREVIATIONS
C003	6/17/22	1	8/3/22	GENERAL NOTES
C010	6/17/22	2	8/23/22	DEMOLITION PLAN
C100	6/17/22	1	8/3/22	OVERALL SITE PLAN
C101—C102	6/17/22	2	8/23/22	SITE PLAN
C201—C202	6/17/22	2	8/23/22	UTILITY PLAN
C301—C302	6/17/22	1	8/3/22	DRAINAGE PLAN
C401—C402	6/17/22	—	—	GRADING PLAN
C700	6/17/22	—	—	EROSION CONTROL PLAN
C800—C801	6/17/22	—	—	VEHICLE CIRCULATION PLAN
C900—C901	6/17/22	1	8/3/22	CONSTRUCTION DETAILS
C910—C916	6/17/22	1	8/3/22	CITY DETAILS
C920—C923	6/17/22	—	—	FDOT DETAILS
BY OTHERS				
1 of 3 – 3 of 3		—	—	ALTA/NSPS LAND TITLE SURVEY
PL—001	6/17/22	1	8/2/22	TREE PRESERVATION PLAN
PL—002	6/17/22	—	—	KEY PLANS
PL—300 – 302	6/17/22	1	8/2/22	LANDSCAPE CODE PLAN
PL—303	6/17/22	1	8/2/22	CODE LANDSCAPE PLANT LIST & NOTES
PL—304	6/17/22	—	—	SIGN ELEVATIONS
PL—305	6/17/22	1	8/2/22	LANDSCAPE DETAILS
PL—400 – 401	6/17/22	—	—	IRRIGATION CODE PLANS
PL—500 – 501	6/17/22	—	—	LIGHTING PHOTOMETRIC PLAN
PL—502	6/17/22	—	—	LIGHTING SCHEDULE & CUT SHEETS

FINAL ENGINEERING PLAN FOR DELAND COMMONS

PARCEL ID'S: 701601110027, 701601110028, 7016190000020,
7016190000120, 7016190000130, 7016190000140, 7016190000080,
7016190000090, 7016190000100, 7016190000110, 7016120000010,
7016120000020, 701601140040, 701601140030, 7016120000150
SECTION 16, TOWNSHIP 17 SOUTH, RANGE 30 EAST

CITY OF DELAND, FLORIDA

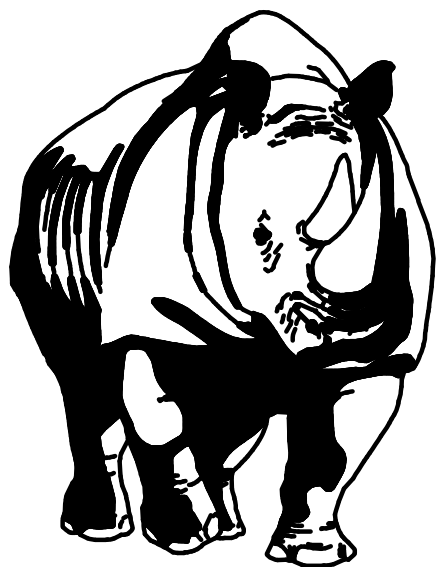
FOR

DELAND COMMONS PARTNERS, LTD.

200 EAST CANTON AVENUE, SUITE 101

WINTER PARK, FLORIDA 32789

PH (407) 741-8500



MADDEN

MOORHEAD & STOKES, LLC

CIVIL ENGINEERS

431 E. HORATIO AVENUE, SUITE 260
MAITLAND, FLORIDA 32751
PHONE (407) 629-8330
FAX (407) 629-8336

UTILITY PROVIDERS:

CABLE:

CHARTER COMMUNICATIONS
1195 S. WOODLAND BLVD,
DELAND, FL 32720
PHONE: (407) 532-8614
CONTACT: STACY STAFFORD

POWER:

DUKE ENERGY
400 N. SPRING GARDEN AVE.
DELAND, FL 32720
PHONE: (407) 938-6602
CONTACT: KELLY BEARD

GAS:

FLORIDA PUBLIC UTILITIES
450 S. HIGHWAY 17-92
DEBARY, FL 32713
PHONE: (863) 220-1510
CONTACT: KATIE L. COLE

PHONE:

AT&T
1500 HERBERT ST.
PORT ORANGE, FL 32129
PHONE: (386) 281-6955
CONTACT: JAMES FRANKLIN

WATER & WASTE WATER:

CITY OF DELAND
1101 S. AMELIA AVE.
DELAND, FL 32724
PHONE: (386) 626-7250

PROJECT TEAM MEMBERS:

OWNER:

DELAND COMMONS PARTNERS, LTD.
200 E CANTON AVE, SUITE 102
WINTER PARK, FL 32789

DEVELOPER:

DELAND COMMONS PARTNERS, LTD.
MARC GAUTHIER
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FLORIDA 32789

ENGINEER:

MADDEN, MOORHEAD, & STOKES, LLC
431 E HORATIO AVE., SUITE 260
MAITLAND, FLORIDA 32751
PHONE: (407) 629-8330

GEOTECHNICAL:

YOVAISH ENGINEERING SERVICES, LLC
953 SUNSHINE LANE
ALTAMONTE SPRINGS, FL 32714
PHONE: (407) 774-9383

ENVIRONMENTAL:

E SCIENCES, INCORPORATED
34 EAST PINE STREET
ORLANDO, FL 32801
PHONE: (407) 481-9006

SURVEYOR:

ALLEN & COMPANY, INC.
16 EAST PLANT STREET
WINTER GARDEN, FL 34787
PHONE: (407) 654-5355

ARCHITECT:

SLOCUM PLATTS
670 NORTH ORLANDO AVE, SUITE 1001
MAITLAND, FL 32751
PHONE: (407) 645-3019

LANDSCAPE ARCHITECT:

FOSTER CONANT & ASSOCIATES
120 W ROBINSON ST,
ORLANDO, FL 32801
PHONE: (407) 648-2225



This plan has been electronically signed and sealed by William Henry Zeh, P.E., using a digital signature. The original signature is not required for this document to be valid. The signature must be verified on any electronic copies.

Digitally signed by

William H Zeh

DN: c=US, o=Florida,

dnQualifier=A0141OC00

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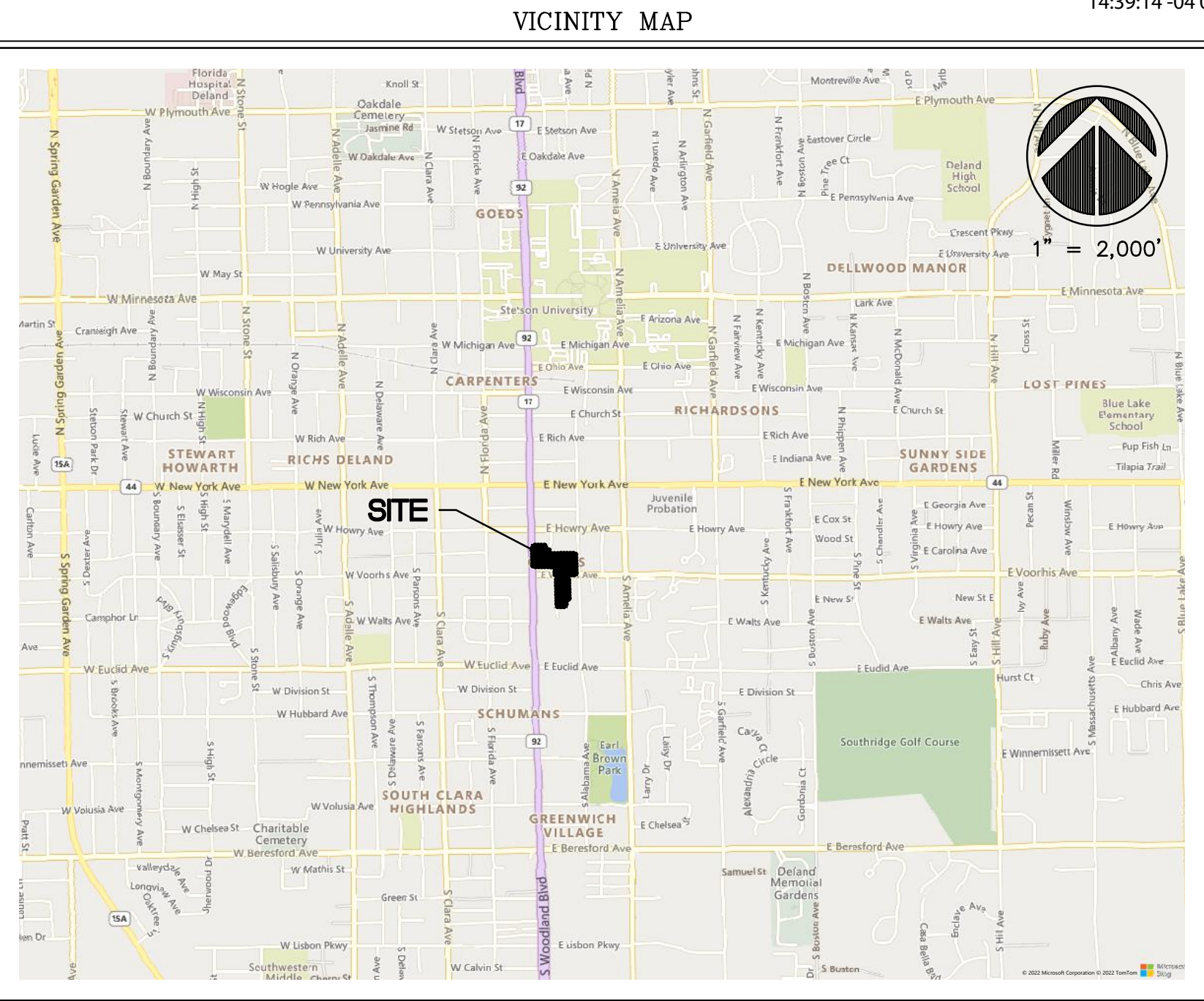
E6A, cn=William H Zeh

Date: 2022.08.24

14:39:14 -04'00'

WILLIAM HENRY ZEH, P.E. #81427
August 23, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

DELAND COMMONS (18029)



ABBREVIATIONS

A	AREA ANCHOR BOLT ABANDON(ED) ACRE(S) ACRE FOOT/FEET ASBESTOS CEMENT PIPE ADDITIONAL AVERAGE DAILY TRAFFIC ALUMINUM ALTERNATE AM BEFORE NOON AMPERE(S) APPROXIMATE AIR RELEASE VALVE AIR RELEASE VACUUM VALVE ASPHALT ASSEMBLY AVENUE AVERAGE AZIMUTH	F	FRAME AND COVER FLOOR DRAIN FOUNDATION FLORIDA DEPARTMENT OF TRANSPORTATION FINISHED FLOOR FINISHED GRADE FIRE HYDRANT FURNISH AND INSTALL FIGURE FINISHED FITTING FENCE LINE FLOOR FLEXIBLE FLANGE FORCE MAIN FOUND FEET PER HOUR FEET PER MINUTE FEET PER SECOND FEET/FOOT FOOTING	P	POINT OF CURVATURE POINT OF COMPOUND CURVATURE POLYETHYLENE PIPE PROFILE GRADE POINT POINT OF INTERSECTION PROPERTY LINE POINT OF BEGINNING ON JOINT POLYPROPYLENE PHONE RISER POINT OF REVERSE CURVATURE PRESSURE PROJECT PROPOSED POINT OF REVERSE VERTICAL CURVE POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH POINT OF TANGENCY POLYVINYL CHLORIDE PAVEMENT POWER
B	BACKFLOW PREVENTER BASELINE BUILDING BOULEVARD BENCH MARK BOUNDARY BLOWOFF BACK OF CURB BOTTOM BEARING BS BOTTOM OF SLOPE BUTTERFLY VALVE	G	GAUGE GALLON GALVANIZED GAS MAIN GALLONS PER DAY GALLONS PER HOUR GALLONS PER MINUTE GALLONS PER SECOND GUARD RAIL GROUND/GRADE GALVANIZED STEEL PIPE GATE VALVE GATE VALVE AND BOX GUY WIRE GROUND WATER TABLE	Q	FLOW RATE
C	CAPACITY CATCH BASIN CENTER TO CENTER CEMENT CUBIC FEET CUBIC FEET PER MINUTE CUBIC FEET PER SECOND CURB AND GUTTER CAST CAST IRON PIPE CONSTRUCTION JOINT CENTER LINE CONCRETE LIGHT POLE CLEAR/CLEARANCE CLASS CONCRETE MONUMENT CORRUGATED METAL PIPE CORRUGATED METAL PIPE ARCH CONDUIT COUNTY CLEANOUT COLUMN COMPLETE CONCRETE CONNECTION CONSTRUCTION(ION) CONTINUOUS COORDINATE(S) CORNER COUPLING CONCRETE POWER POLE CONTROL STRUCTURE COATING CENTER CABLE TELEVISION CULVERT CUBIC YARD CYLINDER	H	HOSE BIBB HIGH DENSITY POLYETHYLENE HARDWARE HOME OWNERS ASSOCIATION HORIZONTAL HORSEPOWER HOUR HEIGHT HEADWALL HIGH WATER LEVEL HIGHWAY HYDRAULIC	R	RADIUS REINFORCED CONCRETE PIPE REINFORCED CONCRETE PIPE ARCH ROAD ROADWAY REDUCER REFERENCE REINFORCE(D) REQUIRED REVISE/REVISION REVOLUTIONS PER MINUTE RAILROAD RIGHT RELIEF VALVE RIGHT-OF-WAY REUSE WATER MAIN
D	DOUBLE DEGREE DEFLECT(ION) DEPARTMENT DETAIL DESIGN HIGH WATER LEVEL DUCTILE IRON DIAGONAL DIMENSION DUCTILE IRON PIPE DISCHARGE DISTANCE DROP MANHOLE DOWN DRAIN DRAWING DRIVEWAY	I	INTERSTATE HIGHWAY INTERSECTION ANGLE INSIDE DIAMETER INSIDE FACE INCHES INLET INSERT INSTALL IRON PIPE IRON ROD INTERSECT/INTERSECTION INVERT	S	SOUTH SANITARY SEWER SPLASH BLOCK SCHEDULE SIDE DRAIN SHELF DRAIN SE SOUTHEAST SECONDS SECTION SHEET SEASONAL HIGH GROUND WATER TABLE SIMILAR SETBACK LINE SLOPE SHEET METAL SPECIFICATION(S) SQUARE SQ IN SQUARE INCH(ES) SQ FT SQUARE FOOT/FEET SQ YD SQUARE YARD(S) STATE ROAD STAINLESS STEEL STREET STATION STANDARD STEEL STRUCTURE STORM SEWER SUPPORT SUSPEND/SUSPENSION SERVICE SOUTHWEST SIDEWALK SYMBOL(S) SYMMETRICAL SYSTEM
E	EAST EACH EDGE OF CONCRETE ENERGY DISSIPATOR EACH FACE EFFLUENT EXISTING GRADE EASEMENT LINE ELBOW ELECTRIC ELEVATION ELLIPSE/ELLIPTICAL ENCASEMENT ENGINEERING EDGE OF PAVEMENT EQUAL/EQUATION EQUIPMENT EQUIVALENT EASEMENT ESTIMATE EACH WAY ENDWALL EXCAVATION/EXCAVATION EXISTING EXPAND/EXPANSION EXTEND/EXTENSION	L	LENGTH LATITUDE LATERAL POUND LINEAR FEET/FOOT LONG LIMIT(S) LIGHT POLE LONG LEFT LOW WATER LEVEL	T	TANGENT TURFBLOCK TOP AND BOTTOM TEMPORARY BENCH MARK TIME OF CONCENTRATION TRENCH DRAIN TOTAL DYNAMIC HEAD TECHNICIAN/TECHNICAL TEMPORARY TERMINAL LAMPHOLE TOP OF BANK TOP CURB TOE OF SLOPE TOTAL TOP OF SLOPE TOWNSHIP TYPICAL
F		M	MAINTENANCE MATERIAL MAXIMUM MECHANICAL MITERED END MANUFACTURER MILLION GALLONS PER DAY MANHOLE MANHOLE COVER MEAN HIGH WATER LEVEL MINIMUM MISCELLANEOUS MECHANICAL JOINT METAL LIGHT POLE MEAN LOW WATER LEVEL MONUMENT MILES PER HOUR MEAN SEA LEVEL MOUNTING	U	UNDERDRAIN UNDERGROUND UNLESS OTHERWISE NOTED UNDERGROUND TELEPHONE CABLE
G		N	NORTH NORTH NORTH NAIL AND CAP NORTHEAST NATURAL GROUND NOT IN CONTRACT NUMBER NOMINAL NOT TO SCALE NORTHWEST NORMAL WATER LEVEL	V	VALVE BOX VERTICAL VERTICAL CLAY PIPE VERTICAL VERTICAL POINT OF CURVE VERTICAL POINT OF INTERSECTION VERTICAL POINT OF TANGENCY
H		O	ON CENTER OUTSIDE DIAMETER OR EQUAL OPENING OPPOSITE OVAL REINFORCED CONCRETE PIPE OUTFALL STRUCTURE OVERFLOW OVERHEAD	W	WEST WITH WATER MAIN WITHOUT WATER/WEATHER PROOF WOOD POWER POLE WATER SURFACE WET SEASON WATER TABLE WEIGHT WATER VALVE WELDED WIRE FABRIC WELDED WIRE MESH
I		P		Y	YARD YEAR
MISC					

EXISTING SYMBOLS

LINES			
	CENTER LINE		BUILDING LINE
	WIRE FENCE		CONTOURS
	CHAIN LINK FENCE		RAILROAD TRACKS
	WOOD FENCE		GAS MAIN
	GUARDRAIL		UNDERGROUND ELECTRIC
	EXISTING PLATS		UNDERGROUND TELEPHONE
	RETAINING WALL		OVERHEAD ELECTRIC
	RIGHT-OF-WAY LINE		OVERHEAD TELEPHONE
	SHORELINE		UNDERGROUND CABLE TELEVISION
	SWALE		EASEMENT
SANITARY			
	SANITARY SEWER LINE		FORCE MAIN
	CLEANOUT		MANHOLE
WATER & REUSE WATER			
	WATER MAIN DIP PIPE		WATER VALVE
	REUSE WATER MAIN		FIRE HYDRANT
	BACKFLOW PREVENTOR		WATER METER
STORM DRAIN			
	STORM SEWER		FDOT TYPE 1 INLET
	MANHOLE		FDOT TYPE 2 INLET
	MITERED END		FDOT TYPE 3 INLET
	STORM INLET		FDOT TYPE 4 INLET
	FDOT TYPE 6 INLET		FDOT TYPE 5 INLET
HIGHWAY & UTILITIES			
	BENCHMARK		BRICK PAVERS
	RECOVERED 4x4 CM		DIRT ROAD
	SET 4x4 CM		8" MAPLE TREE
	SET IRON ROD		8" OAK TREE
	RECOVERED IRON ROD		8" PINE TREE
	CONCRETE		8" PALM TREE
	COUNTY ROADS		8" MISC. TREE
	INTERSTATE ROADS		WELL
	STATE ROADS		MONITORING WELL
	WOOD AND/OR METAL LIGHT POLE		RR CROSSING SIGN
	CONCRETE LIGHT POLE		RR CROSSING GATE
	YARD LIGHT		TRAFFIC SIGNAL POLE
	MISCELLANEOUS SIGN		SATELLITE DISH
	SECTION CORNER		GUY WIRE
	EDGE OF PAVEMENT W/O CURB		HANDICAP PARKING
	EDGE OF PAVEMENT W/CURB		SPOT ELEVATION

PROPOSED SYMBOLS

LINES		STORM DRAIN	
	PROPERTY LINE		100 LINEAR FEET STORM PIPE 24" HIGH DENSITY POLYETHELENE PIPE @ 0.20%
	CONSERVATION SETBACK		UNDERDRAIN 6" HDPE PIPE
	CENTER LINE		DRAINAGE FLOW DIRECTION
	CHAIN LINK FENCE		FDOT INLET TYPE 1
	CONTOUR		FDOT INLET TYPE 2
	EASEMENT		FDOT INLET TYPE 3
	FENCE		FDOT INLET TYPE 4
	GUARDRAIL		FDOT INLET TYPE 5
	LOT LINE		FDOT INLET TYPE 6
	RETAINING WALL		MANHOLE
	RIGHT-OF-WAY LINE		MITERED END SECTION
	SETBACK LINE		SLOPE DIRECTION ARROW FOR POND SIDE SLOPE
	SHORELINE		SPOT ELEVATION
	SWALE		STORM INLET
	TREE LINE		
SANITARY		HIGHWAY & UTILITIES	
	100 LF SAN 8 PVC 0.40%		BOUND CORNER
	100 LINEAR FEET SANITARY 8" PVC PIPE @ 0.40% SLOPE		CONCRETE
	CLEANOUT		COUNTY ROADS
	DOUBLE SANITARY SERVICE		DETAIL REFERENCE
	FORCE MAIN PVC PIPE		DUMPSTER
	MANHOLE		FINISHED FLOOR ELEVATION W/ FHA LOT TYPE
			GUY POLE
			HANDICAP PARKING
			INTERSTATE ROADS
			LIGHT POLE
			SIGNS
			SECTION CORNER
			STATE ROADS
			SILT FENCE
			TRAFFIC FLOW PAVEMENT MARKING
			UTILITY POLE
			BLDG OR STRUCTURE
			TYPE F CURB & GUTTER
			MIAMI CURB
			VERTICAL CURB
			CROSS SECTION DETAIL
	WATER MAIN PVC PIPE		
	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		
	METER		
	REDUCER		
	BLOWOFF		
	BACKFLOW PREVENTER		
	SAMPLE POINT		
	CEANOUT		
	RECLAIM WATER MAIN		
	DOUBLE RECLAIM WATER SERVICE		

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SYMBOLS AND ABBREVIATIONS

FOR

DELAND COMMONS

FLORIDA

CITY OF DELAND

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
June 17, 2022

CERTIFICATE OF AUTHORIZATION NO. CA-0007723

DATE: 06/17/2022

SCALE: N.T.S.

DESIGNED BY: PAB

DRAWN BY: PAB

APPROVED BY: WHZ

JOB # 18029

DATE: 06/17/2022

SCALE: N.T.S.

DESIGNED BY: PAB

DRAWN BY: PAB

APPROVED BY: WHZ

C002

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	ALTERATE
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
BRTG	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
CIP	CAST IRON PIPE
CJ	CONSTRUCTION JOINT
CN	CENTER LINE
CLP	CONCRETE, LIGHT POLE
CLR	CLEAR/CLEARANCE
CLS	CLASS
CM	CONCRETE MONUMENT
OMP	CORRUGATED METAL PIPE
OMPA	CORRUGATED METAL PIPE ARCH
CON	CONDUIT
CO	COUNTY
CO	CLEANOUT
COL	COLUMN
OMP	COMPLETE
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION(ION)
CONT	CONTINUOUS
COORD	COORDINATE(S)
COR	CORNER
CPLG	COUPLING
OPP	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
DWN	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
EXCAV	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
FBM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET/FOOT
FTG	FOOTING
G	
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GM	GAS MAIN
QPD	GALLONS PER DAY
QPH	GALLONS PER HOUR
QPM	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
HOA	HOME OWNERS ASSOCIATION
HORIZ	HORIZONTAL
HP	HORSEPOWER
HOUR	HOUR
HT	HEIGHT
HW	HEADWALL
HWL	HIGH WATER LEVEL
HWY	HIGHWAY
HYD	HYDRAULIC
I	
I-4	INTERSTATE HIGHWAY
IA	INTERSECTION ANGLE
ID	INSIDE DIAMETER
IDSF	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
JO	JOIST
JT	JOINT
L	

EXISTING SYMBOLS			
LINES			
	CENTER LINE		BUILDING LINE
	WIRE FENCE		CONTOURS
	CHAIN LINK FENCE		RAILROAD TRACKS
	WOOD FENCE		GAS MAIN
	GUARDRAIL		UNDERGROUND ELECTRIC
	EXISTING PLATS		UNDERGROUND TELEPHONE
	RETAINING WALL		OVERHEAD ELECTRIC
	RIGHT-OF-WAY LINE		OVERHEAD TELEPHONE
	SHORELINE		UNDERGROUND CABLE TELEVISION
	SWALE		EASEMENT
SANITARY			
	SANITARY SEWER LINE		FORCE MAIN
	CLEANOUT		MANHOLE
WATER & REUSE WATER			
	WATER MAIN DIP PIPE		WATER VALVE
	REUSE WATER MAIN		FIRE HYDRANT
	BACKFLOW PREVENTOR		WATER METER
STORM DRAIN			
	STORM SEWER		FDOT TYPE 1 INLET
	MANHOLE		FDOT TYPE 2 INLET
	MITERED END		FDOT TYPE 3 INLET
	STORM INLET		FDOT TYPE 4 INLET
	FDOT TYPE 6 INLET		FDOT TYPE 5 INLET
HIGHWAY & UTILITIES			
	BENCHMARK		GUY POLE
	RECOVERED 4x4 CM		WOOD UTILITY POLE
	SET 4x4 CM		CONCRETE UTILITY POLE
	SET IRON ROD		ELECTRIC MANHOLE
	RECOVERED IRON ROD		TELEPHONE MANHOLE
	CONCRETE		TELEPHONE RISER
	COUNTY ROADS		ELECTRIC BOX / TRANSFORMER
	INTERSTATE ROADS		WELL
	STATE ROADS		MONITORING WELL
	WOOD AND/OR METAL LIGHT POLE		DUMPSTER
	CONCRETE LIGHT POLE		RR CROSSING SIGN
	YARD LIGHT		RR CROSSING GATE
	MISCELLANEOUS SIGN		TRAFFIC SIGNAL POLE
	SECTION CORNER		SATELLITE DISH
	EDGE OF PAVEMENT W/O CURB		GUY WIRE
	EDGE OF PAVEMENT W/CURB		HANDICAP PARKING
			SPOT ELEVATION

PROPOSED SYMBOLS	
LINES	STORM DRAIN
PROPERTY LINE CONSERVATION SETBACK CENTER LINE CHAIN LINK FENCE CONTOUR EASEMENT FENCE GUARDRAIL LOT LINE RETAINING WALL RIGHT-OF-WAY LINE SETBACK LINE SHORELINE SWALE TREE LINE	100 LF 24 HDPE @ 0.20% 100 LINEAR FEET STORM PIPE 24" HIGH DENSITY POLYETHELENE PIPE @ 0.20% UNDERDRAIN 6" HDPE 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 000.00 SPOT ELEVATION STORM INLET
SANITARY	HIGHWAY & UTILITIES
100 LF SAN 8 PVC 0.40% CLEANOUT DOUBLE SANITARY SERVICE FORCE MAIN PVC PIPE MANHOLE	BOUND CORNER CONCRETE 520 COUNTY ROADS 711-001 C900 DUMPSTER FF=98.76 TYPE A 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 VERTICAL CURB 901 24 CROSS SECTION DETAIL
WATER & REUSE WATER	
WATER MAIN PVC PIPE 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 METER REDUCER BLOWOFF BACKFLOW PREVENTER SP 2 SAMPLE POINT CEANOUT RECLAIM WATER MAIN DOUBLE RECLAIM WATER SERVICE	



SYMBOLS AND ABBREVIATIONS
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ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #91427
August 23, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

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	DATE	REVISIONS

JOB # _____ 18029
DATE: _____ 06/17/2022
SCALE: _____ N.T.S.
DESIGNED BY: _____ PAB
DRAWN BY: _____ PAB
APPROVED BY: _____ WHZ

C002

GENERAL NOTES

1. ALL CONSTRUCTION WORK SHALL BE IN ACCORDANCE WITH THE LATEST LOCAL AGENCY DETAILS, THE FDOT "STANDARD" SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITIONS, OF, AND THE FDOT "STANDARD PLANS", WHICHEVER IS MORE STRINGENT.
2. ALL FDOT DESIGN INDICES ARE HEREBY INCORPORATED AS PLAN REFERENCES HEREIN. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COMPLETE COPIES OF ALL APPLICABLE INDEX DRAWINGS AND CONSTRUCTING ALL WORKS IN CONFORMANCE WITH THE FDOT STANDARD PLANS, LATEST EDITION.
3. THE LOCATIONS OF EXISTING UTILITIES SUCH AS WATER MAINS, SEWER MAINS, GAS LINES, ETC., AS SHOWN ON THE PLANS, WITH THE EXCEPTION OF THE LOCATIONS OF EXISTING UTILITIES AT ALL POINTS OF CONNECTION TO AND AT ALL AREAS OF CONFLICT WITH UTILITY PROVIDER MAINS, WHICH HAVE BEEN FIELD VERIFIED, HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE ENGINEER AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE SIZES AND LOCATIONS SHOWN OF THE SIZE AND LOCATION OF ALL EXISTING UTILITIES SHOWN AND NOT SHOWN ON THESE PLANS.
4. CONTRACTOR, INCLUDING ANY SUB-CONTRACTORS, IS RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND AT THE JOB SITE PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL CONDITIONS CONTAINED THEREIN. PERMITS INCLUDED (BUT NOT NECESSARILY LIMITED TO) ARE:
- ACCE NATIONALWIDE OR INDIVIDUAL DREDGE AND FILL
 - FDOT WATER DISTURBANCE PERMIT
 - FDEP SANITARY SEWER COLLECTION AND TRANSMISSION
 - FDEP REUSE
 - FDEP DREDGE AND FILL
 - FDEP NPDES GEMENT PERMIT FOR STORMWATERDISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES
 - FDOT DRIVEWAY CONNECTION
 - FDOT UTILITY
 - FDOT STORMWATER DRAINAGE CONNECTION
 - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION PERMIT FOR IMPACTS TO PROTECTED SPECIES
 - LOCAL RIGHT OF WAY USE
 - LOCAL UNDERGROUND UTILITIES
 - WATER MANAGEMENT DISTRICT CONSUMPTIVE USE FOR CONSTRUCTION DEWATERING (CUP)
 - WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMIT (ERP)
5. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SETBACKS AND EASEMENTS BEFORE BEGINNING CONSTRUCTION.
6. BENCHMARKS AND OTHER REFERENCE POINTS SHALL BE CAREFULLY MAINTAINED THROUGHOUT THE PROJECT. IF DISTURBED, DESTROYED, THESE POINTS SHALL BE REPLACED BY A LICENSED FLORIDA PROFESSIONAL LAND SURVEYOR (P.L.S.) AT CONTRACTOR'S EXPENSE.
7. DIFFERING SITE CONDITIONS FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON, OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND OWNER IN WRITING. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS WILL BE ALLOWED IF CONTRACTOR FAILS TO PROVIDE THE REQUIRED WRITTEN NOTIFICATION OF SUCH CONDITIONS TO THE ENGINEER AND OWNER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND REMOVAL OF ALL EXISTING STRUCTURES, ETC., UNLESS OTHERWISE NOTED. ALL SOIL STRIPPINGS AND ANY UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR UNLESS OTHERWISE DIRECTED BY THE OWNER.
9. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES AND UTILITIES NOTED TO REMAIN FROM DAMAGE OR DISPLACEMENT DURING CONSTRUCTION. IN THE EVENT OBSTRUCTIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER AND THE UTILITY COMPANY. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS INCURRED TO REPAIR DAMAGE OR CORRECT DISPLACEMENT.
10. CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES WHICH ARE TO BE SAVED, WHETHER SHOWN IN THE PLANS OR DESIGNATED IN THE FIELD. CONTRACTOR SHALL BECOME FAMILIAR WITH AND CONFORM WITH ALL TREE PROTECTION/PRESERVATION PROVISIONS OF THE PRELIMINARY SUBDIVISION PLAN / DEVELOPMENT PLAN AND LOCAL GOVERNMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT AND MITIGATION COSTS FOR ANY TREES REMOVED THAT WERE DESIGNATED TO BE PRESERVED.
11. WHEN DETAILS ARE PROVIDED, CONTRACTOR SHALL CONSTRUCT JOB PER SPECIFIC DETAILS, AND NOT BY SCALING FROM THESE PLANS.
12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY REQUIRED TRAFFIC CONTROL PLANS. ALL WORK SHALL BE EXECUTED UNDER THE ESTABLISHED PLAN AND FDOT, AND LOCAL AGENCY APPROVED PROCEDURES.
13. THE CONTRACTOR SHALL RESTORE OFF SITE CONSTRUCTION AREAS TO EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
14. AS-BUILT DRAWINGS SHALL BE KEPT BY THE CONTRACTOR AND SUBMITTED TO THE PROJECT ENGINEER UPON PROJECT COMPLETION.
15. CONTRACTOR SHALL COMPLY WITH ALL LOCAL AGENCY REQUIREMENTS FOR INSPECTION AND TESTING.
16. ALL NEW UTILITIES AND UPGRADED UTILITIES PROVIDED TO OR ON THE SITE MUST BE INSTALLED UNDERGROUND.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY TRAFFIC SIGNAL EQUIPMENT INCLUDING, BUT NOT LIMITED TO FIBER LOOP SENSORS, PULL BOXES, CONDUIT TRAFFIC SIGNALS, AND CABINETS. ANY ITEMS DAMAGED BY THE CONTRACTOR WILL BE RESTORED TO THEIR ORIGINAL CONDITIONS UNLESS OTHERWISE AGREED UPON BY THE COUNTY TRAFFIC ENGINEER.
18. ALL CONSTRUCTION MUST BE IN ACCORDANCE WITH UTILITY PROVIDER'S STANDARDS AND CONSTRUCTION SPECIFICATIONS, LATEST EDITION.
19. CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS; INCLUDING BUT NOT LIMITED TO, WATER, RECLAIMED WATER, SEWER, POWER, TELEPHONE, GAS AND CABLE TV COMPANIES.
20. PRIOR TO COMMENCEMENT, CONTRACTOR SHALL PROVIDE ENGINEER WITH CONSTRUCTION SCHEDULE FOR VARIOUS SITE WORK ELEMENTS SO THAT PERIODIC SITE VISITS MAY BE COORDINATED TO ENSURE TIMELY CERTIFICATION OF COMPLETION TO AGENCIES AND AVOID DELAYS IN ISSUANCE OF CERTIFICATES OF OCCUPANCY/COMPLETION.
21. ALL RECOMMENDATIONS AND REQUIREMENTS OF INSPECTION PERSONNEL OTHER THAN OWNER/OWNER'S REPRESENTATIVE SHALL BE REPORTED TO ENGINEER/OWNER/OWNER'S REPRESENTATIVE. PRIOR TO IMPLEMENTATION, COMPENSATION WILL NOT BE ALLOWED FOR WORK THAT IS NOT AUTHORIZED BY ENGINEER/OWNER/OWNER'S REPRESENTATIVE.
22. CONTRACTOR SHALL CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING SHOP DRAWING AND MATERIALS ORDERING PHASE OF PROJECT AND ADVISE ENGINEER OF ANY DISCREPANCIES.
23. NO EXISTING MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING APPROVAL PROCESS BY ENGINEER/OWNER/OWNER'S REPRESENTATIVE IN WRITING.

GENERAL NOTES (CONTINUED)

24. CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING THE PLAT(S), ROAD AND CEMETERY AND BUILDING COORDINATES PROVIDED. IN THESE PLANS, CONTRACTOR SHALL CONFORM WITH THE ENGINEER THAT THE PLAT IS CURRENT PRIOR TO CONSTRUCTION.
25. CONTRACTOR SHALL CONFIRM THE BUILDING DIMENSIONS SHOWN HEREIN WITH THOSE IN THE FINAL ARCHITECTURAL DRAWINGS PRIOR TO STAKEOUT. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL, INCLUDING MINIMUM BUILDING SETBACKS PRIOR TO THE INSTALLATION OF ANY IMPROVEMENT.

PAVING AND DRAINAGE

1. THE CONTRACTOR SHALL CONSTRUCT PAVEMENT IN ACCORDANCE WITH TYPICAL PAVEMENT SECTIONS AND LOCAL AGENCY SPECIFICATIONS. THE FINISHED PAVEMENT GRADES SHALL CONFORM TO THOSE SPECIFIED ON THE GRADING PLAN.
2. FLORIDA LAW (F.S. 553.851) PROTECTION OF UNDERGROUND PIPELINES MANDATES THAT "NO EXCAVATOR SHALL COMMENCE OR PERFORM ANY EXCAVATION IN ANY PUBLIC OR PRIVATE STREET, ALLEY, RIGHT-OF-WAY DEDICATED TO THE PUBLIC USE, OR GAS UTILITY EASEMENT WITHOUT FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF THE PROPOSED EXCAVATION." THIS INCLUDES ANY OPERATION UTILIZING HAND TOOLS OR POWER TOOLS WHICH MOVES OR REMOVES ANY STRUCTURE, EARTH, ROCK, OR OTHER MASS OF MATERIAL BY SUCH METHODS AS DIGGING, BACKFILLING, DEMOLITION, GRADING, DITCHING, DRILLING, BORING AND CABLE PLOWING. THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 48 HOURS AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATING (EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS).
3. EXCAVATION, PAVING, AND STORM SEWER WORK SHALL BE DONE IN ACCORDANCE WITH FDOT "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, AND LOCAL AGENCY SPECIFICATIONS.
4. UNLESS OTHERWISE NOTED, GRADE TO MEET EXISTING ELEVATIONS AT PROPERTY LINES. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE OF THE SITE TO THE RETENTION PONDS AS SHOWN BY PROPOSED GRADES AND FLOW ARROWS.
5. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE AND PROPER SOIL EROSION CONTROL MEASURES FOR PROTECTION OF ALL DRAINAGE AND SEWER STRUCTURES AND AT ALL ADJACENT LANDS AND ROADS.
6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL GEOTECHNICAL REPORTS PREPARED FOR THE SITE. GEOTECHNICAL RECOMMENDATIONS ARE NOT THE RESPONSIBILITY OF ENGINEER. ENGINEER HAS RELIED ON THE GEOTECHNICAL REPORT(S) IN PREPARATION OF THE DRAWINGS, ANY CONFLICT BETWEEN INFORMATION WITHIN THE REPORT AND THESE DRAWINGS SHALL BE REPORTED TO ENGINEER/OWNER /OWNER'S REPRESENTATIVE. ENGINEER ASSUMES NO RESPONSIBILITY FOR THE CORRECTNESS, COMPLETENESS, OR ACCURACY OF GEOTECHNICAL INFORMATION.
7. THE SITE SHALL BE CLEARED OF ALL TREES EXCEPT THOSE WHICH ARE DESIGNATED TO BE SAVED OR RELOCATED. BEFORE CONSTRUCTION, THE CONTRACTOR SHALL MEET AT THE SITE WITH THE OWNER, AT THIS TIME, ANY TREES TO BE SAVED SHALL BE POINTED OUT AND TAGGED. THESE TREES SHALL BE PROTECTED FROM DAMAGE.
8. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE SUPERVISING ENGINEER IF A PAVEMENT OR FOUNDATION STAKE IS DISTURBED.
9. THE CONTRACTOR SHALL INSTALL DUMP CURBS AND HANDICAP RAMPS AT ALL INTERSECTIONS OF SIDEWALK WITH THE PROPOSED PAVEMENT, UNLESS OTHERWISE SPECIFIED.
10. FOR HORIZONTAL AND VERTICAL CLEARANCES BETWEEN STORM PIPES AND WATER MAINS/SERVICES, SEE WATER NOTES ON THIS SHEET AND FDEP SEPARATION TABLE ON UTILITY PLAN.
11. ALL PUBLIC STORM PIPE MATERIALS SHALL BE REINFORCED CONCRETE PIPE (RCP) ASTM C-76 CLASS III, UNLESS OTHERWISE SPECIFIED. LIFTING HOLES ARE PROHIBITED.
12. ALL PRIVATE STORM PIPE MATERIALS SHALL BE AS FOLLOWS:
- 12.1. DIAMETERS LESS THAN OR EQUAL TO 12-INCH SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) PIPE
- 12.2. DIAMETERS GREATER THAN OR EQUAL TO 15-INCH SHALL BE POLYPROPYLENE (PP) PIPE
13. MINIMUM COVER OVER ALL PIPE SHALL BE 36-INCHES FROM TOP OF PIPE TO FINISHED GRADE, UNLESS OTHERWISE NOTED.
14. ALL STORM SYSTEM MANHOLE AND INLET STRUCTURES SHALL BE PRECAST CONCRETE.
15. THE CONTRACTOR SHALL USE CONCRETE WITH A MINIMUM 28 DAY STRENGTH OF 3,000 P.S.I..
16. ALL SIDEWALK WIDTHS SHALL BE AS NOTED ON THE SITE PLAN AND SHALL HAVE 1-INCH DEEP CONNECTION JOINTS EVERY 5- FEET AND AN EXPANSION JOINT EVERY 20- FEET (MINIMUM). MAXIMUM SIDEWALK CROSS SLOPES SHALL BE 2.00% AND MAXIMUM SIDEWALK RUNNING SLOPES SHALL BE 5.00% EXCEPT AT RAMP LOCATIONS. MAXIMUM RAMP SLOPES SHALL BE 8.33%.
17. PROVIDE FDOT TYPE III SILT FENCE ALONG THE PROPERTY LINES AND PHASE LINES AS WELL AS ANY CONSTRUCTION WITHIN THE OTHER PHASES THAT IS DEEMED NECESSARY.
18. ALL TEST REPORTS GENERATED BY A TESTING FIRM ARE TO HAVE COPIES SENT DIRECTLY TO THE LOCAL AGENCY AS SOON AS THEY ARE GENERATED. CLEARANCE FROM THE LOCAL AGENCY SHALL BE RECEIVED PRIOR TO PAVING.
19. THE BASE COURSE SHALL NOT BE CONSTRUCTED UNTIL AFTER SUBGRADE CONSTRUCTION HAS BEEN COMPLETED AND REQUIRED SUBGRADE TEST RESULTS HAVE BEEN SUBMITTED TO AND APPROVED BY THE LOCAL AGENCY'S ENGINEER.
20. THE FINISHED BASE COURSE SHALL BE PRIMED WITHOUT DELAY, PROTECTED FROM HEAVY TRAFFIC, AND CONTINUOUSLY MAINTAINED FREE OF DAMAGE UNTIL THE WEARING SURFACE IS APPLIED. ALL BAD AREAS SHALL BE CUT OUT AND REPLACED PRIOR TO APPLYING WEARING SURFACE.
21. ASSUMING ACCEPTABLE CURING, THE WEARING SURFACE SHALL BE APPLIED NO SOONER THAN SEVEN (7) DAYS AND NO LATER THAN THIRTY (30) DAYS AFTER BASE COMPLETION.
22. ALL CONCRETE PIPE JOINTS SHALL BE WRAPPED IN FILTER FABRIC.
23. ROADWAY MARKING, STRIPING, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (MUTCD), INCLUDING SUBSEQUENT REVISIONS AND ADDENDUMS, AS PUBLISHED BY THE USDOT FEDERAL HIGHWAY ADMINISTRATION AS WELL AS FDOT AND LOCAL AGENCY STANDARDS AND SPECIFICATIONS.
24. ALL OFFSITE ROADWAY MARKING/STRIPING MATERIAL SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
25. ALL ONSITE ROADWAY MARKING/STRIPING MATERIAL SHALL BE PAINT UNLESS OTHERWISE SPECIFIED.
26. REGULATORY SIGNS AND MARKINGS SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS.

PAVING AND DRAINAGE (CONTINUED)

27. PAVEMENT RETURN RADII SHALL BE MEASURED TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
28. POND SLOPES AND BERMS SHALL BE SODDED TO TWO (2) FEET BELOW THE NORMAL WATER LINE (N.W.L.). IN THE CASE OF DRY BOTTOM PONDS, THE BOTTOM WILL BE SEEDED AND MULCHED UNLESS OTHERWISE SPECIFIED.
29. ALL PRECAST DRAINAGE STRUCTURES TO HAVE STEEL FRAME. ALL STRUCTURES IN PAVED AREAS TO HAVE STEEL RECTILINEAR GRATES WITH H=20 LOADING.
30. CONTRACTOR SHALL NOT COMPACT, STABILIZE, OR CONSTRUCT BASE COURSE WITHIN LANDSCAPE ISLANDS, TRACTS OR MEDIANS. WHERE SUCH TREATMENT DOES OCCUR, IT SHALL BE REMOVED AND REPLACED WITH SUITABLE PLANTING SOILS ACCEPTABLE TO LANDSCAPE ARCHITECT.
31. YARD DRAINS SHALL BE NYOPLAST INLINE DRAINS AND DRAIN BASINS, OR APPROVED EQUAL, WITH CAST IRON GRATES AND WATERTIGHT ADAPTER CONNECTIONS. DOMED GRATES SHALL BE PROVIDED IN NON-SODDED AREAS.
32. ALL FIRE HYDRANT LOCATIONS SHALL BE MARKED BY PLACING BLUE REFLECTIVE PAVEMENT MARKERS IN THE CENTER OF THE NEAREST TRAVEL LANE.
33. MINIMUM LONGITUDINAL SLOPE OF CURB SHALL BE 0.30% UNLESS SPECIFIED OTHERWISE.
34. FINISHED FLOOR ELEVATION IS TYPICALLY 8" INCHES ABOVE DESIGN FINISHED GRADE AT OUTSIDE PERIMETER OF BUILDINGS EXCEPT AT ENTRIES AND WHERE OTHERWISE SHOWN.
35. CONTRACTOR SHALL REMOVE ALL MUCK DEPOSITS IN CONSTRUCTION AREAS AND AREAS TO BE FILLED. SEE GEOTECHNICAL REPORT.
36. DRAINAGE MANHOLES AND INLETS (NOT INCLUDING CONTROL STRUCTURES) IN THE PLANS ARE IDENTIFIED BY TOP TYPE ONLY. CONTRACTOR SHALL PROVIDE STANDARD DITCH BOTTOM INLET TOPS AND TYPE 'J' OR 'P' STRUCTURE BOTTOMS, SIZED AS REQUIRED TO ACCOMMODATE PIPE SIZES AND ORIENTATIONS SHOWN. SHOP DRAWINGS SHALL BE SUBMITTED WHICH CLEARLY REPRESENT SUCH DATA.
37. CONTRACTOR SHALL STABILIZE AND PROTECT ALL END WALL, MITERED END SECTION, FLARED END SECTION, ETC. STRUCTURES THROUGHOUT THE PROJECT UNTIL THE BANK SLOPES OF THE RECEIVING WATER BODY ARE STABILIZED AND ACCEPTED BY OWNER.
38. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE SUPERVISING ENGINEER IF A PAVEMENT OR FOUNDATION STAKE IS DISTURBED.
39. THE CONTRACTOR SHALL INSTALL DUMP CURBS AND HANDICAP RAMPS AT ALL INTERSECTIONS OF SIDEWALK WITH THE PROPOSED PAVEMENT, UNLESS OTHERWISE SPECIFIED.
40. FOR HORIZONTAL AND VERTICAL CLEARANCES BETWEEN STORM PIPES AND WATER MAINS/SERVICES, SEE WATER NOTES ON THIS SHEET AND FDEP SEPARATION TABLE ON UTILITY PLAN.
41. ALL PUBLIC STORM PIPE MATERIALS SHALL BE REINFORCED CONCRETE PIPE (RCP) ASTM C-76 CLASS III, UNLESS OTHERWISE SPECIFIED. LIFTING HOLES ARE PROHIBITED.
42. ALL PRIVATE STORM PIPE MATERIALS SHALL BE AS FOLLOWS:
- 12.1. DIAMETERS LESS THAN OR EQUAL TO 12-INCH SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) PIPE
- 12.2. DIAMETERS GREATER THAN OR EQUAL TO 15-INCH SHALL BE POLYPROPYLENE (PP) PIPE
43. MINIMUM COVER OVER ALL PIPE SHALL BE 36-INCHES FROM TOP OF PIPE TO FINISHED GRADE, UNLESS OTHERWISE NOTED.
44. ALL STORM SYSTEM MANHOLE AND INLET STRUCTURES SHALL BE PRECAST CONCRETE.
45. THE CONTRACTOR SHALL USE CONCRETE WITH A MINIMUM 28 DAY STRENGTH OF 3,000 P.S.I..
46. ALL SIDEWALK WIDTHS SHALL BE AS NOTED ON THE SITE PLAN AND SHALL HAVE 1-INCH DEEP CONNECTION JOINTS EVERY 5- FEET AND AN EXPANSION JOINT EVERY 20- FEET (MINIMUM). MAXIMUM SIDEWALK CROSS SLOPES SHALL BE 2.00% AND MAXIMUM SIDEWALK RUNNING SLOPES SHALL BE 5.00% EXCEPT AT RAMP LOCATIONS. MAXIMUM RAMP SLOPES SHALL BE 8.33%.
47. PROVIDE FDOT TYPE III SILT FENCE ALONG THE PROPERTY LINES AND PHASE LINES AS WELL AS ANY CONSTRUCTION WITHIN THE OTHER PHASES THAT IS DEEMED NECESSARY.
48. ALL TEST REPORTS GENERATED BY A TESTING FIRM ARE TO HAVE COPIES SENT DIRECTLY TO THE LOCAL AGENCY AS SOON AS THEY ARE GENERATED. CLEARANCE FROM THE LOCAL AGENCY SHALL BE RECEIVED PRIOR TO PAVING.
49. THE BASE COURSE SHALL NOT BE CONSTRUCTED UNTIL AFTER SUBGRADE CONSTRUCTION HAS BEEN COMPLETED AND REQUIRED SUBGRADE TEST RESULTS HAVE BEEN SUBMITTED TO AND APPROVED BY THE LOCAL AGENCY'S ENGINEER.
50. THE FINISHED BASE COURSE SHALL BE PRIMED WITHOUT DELAY, PROTECTED FROM HEAVY TRAFFIC, AND CONTINUOUSLY MAINTAINED FREE OF DAMAGE UNTIL THE WEARING SURFACE IS APPLIED. ALL BAD AREAS SHALL BE CUT OUT AND REPLACED PRIOR TO APPLYING WEARING SURFACE.
51. ASSUMING ACCEPTABLE CURING, THE WEARING SURFACE SHALL BE APPLIED NO SOONER THAN SEVEN (7) DAYS AND NO LATER THAN THIRTY (30) DAYS AFTER BASE COMPLETION.
52. ALL CONCRETE PIPE JOINTS SHALL BE WRAPPED IN FILTER FABRIC.
53. ROADWAY MARKING, STRIPING, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (MUTCD), INCLUDING SUBSEQUENT REVISIONS AND ADDENDUMS, AS PUBLISHED BY THE USDOT FEDERAL HIGHWAY ADMINISTRATION AS WELL AS FDOT AND LOCAL AGENCY STANDARDS AND SPECIFICATIONS.
54. ALL OFFSITE ROADWAY MARKING/STRIPING MATERIAL SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
55. ALL ONSITE ROADWAY MARKING/STRIPING MATERIAL SHALL BE PAINT UNLESS OTHERWISE SPECIFIED.
56. REGULATORY SIGNS AND MARKINGS SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS.

SEWER (CONTINUED)

22. INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED FLEXIBLE WATER-TIGHT CONNECTION OR ANOTHER WATER-TIGHT CONNECTION ARRANGEMENT THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL.
23. WATER-TIGHT MANHOLE COVERS SHALL BE USED WHEREVER THE MANHOLE TOPS MAY BE FLOODED BY STREET RUNOFF OF HIGH WATER.
24. CONTRACTOR SHALL CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING SHOP DRAWING AND MATERIALS ORDERING PHASE OF PROJECT AND ADVISE ENGINEER OF ANY DISCREPANCIES.
25. CONTRACTOR SHALL CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING SHOP DRAWING AND MATERIALS ORDERING PHASE OF PROJECT AND ADVISE ENGINEER OF ANY DISCREPANCIES.
26. REGULATORY SIGNS AND MARKINGS SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS.
27. PAVEMENT RETURN RADII SHALL BE MEASURED TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
28. POND SLOPES AND BERMS SHALL BE SODDED TO TWO (2) FEET BELOW THE NORMAL WATER LINE (N.W.L.). IN THE CASE OF DRY BOTTOM PONDS, THE BOTTOM WILL BE SEEDED AND MULCHED UNLESS OTHERWISE SPECIFIED.
29. ALL PRECAST DRAINAGE STRUCTURES TO HAVE STEEL FRAME. ALL STRUCTURES IN PAVED AREAS TO HAVE STEEL RECTILINEAR GRATES WITH H=20 LOADING.
30. CONTRACTOR SHALL NOT COMPACT, STABILIZE, OR CONSTRUCT BASE COURSE WITHIN LANDSCAPE ISLANDS, TRACTS OR MEDIANS. WHERE SUCH TREATMENT DOES OCCUR, IT SHALL BE REMOVED AND REPLACED WITH SUITABLE PLANTING SOILS ACCEPTABLE TO LANDSCAPE ARCHITECT.
31. YARD DRAINS SHALL BE NYOPLAST INLINE DRAINS AND DRAIN BASINS, OR APPROVED EQUAL, WITH CAST IRON GRATES AND WATERTIGHT ADAPTER CONNECTIONS. DOMED GRATES SHALL BE PROVIDED IN NON-SODDED AREAS.
32. ALL FIRE HYDRANT LOCATIONS SHALL BE MARKED BY PLACING BLUE REFLECTIVE PAVEMENT MARKERS IN THE CENTER OF THE NEAREST TRAVEL LANE.
33. MINIMUM LONGITUDINAL SLOPE OF CURB SHALL BE 0.30% UNLESS SPECIFIED OTHERWISE.
34. FINISHED FLOOR ELEVATION IS TYPICALLY 8" INCHES ABOVE DESIGN FINISHED GRADE AT OUTSIDE PERIMETER OF BUILDINGS EXCEPT AT ENTRIES AND WHERE OTHERWISE SHOWN.
35. CONTRACTOR SHALL REMOVE ALL MUCK DEPOSITS IN CONSTRUCTION AREAS AND AREAS TO BE FILLED. SEE GEOTECHNICAL REPORT.
36. DRAINAGE MANHOLES AND INLETS (NOT INCLUDING CONTROL STRUCTURES) IN THE PLANS ARE IDENTIFIED BY TOP TYPE ONLY. CONTRACTOR SHALL PROVIDE STANDARD DITCH BOTTOM INLET TOPS AND TYPE 'J' OR 'P' STRUCTURE BOTTOMS, SIZED AS REQUIRED TO ACCOMMODATE PIPE SIZES AND ORIENTATIONS SHOWN. SHOP DRAWINGS SHALL BE SUBMITTED WHICH CLEARLY REPRESENT SUCH DATA.
37. CONTRACTOR SHALL STABILIZE AND PROTECT ALL END WALL, MITERED END SECTION, FLARED END SECTION, ETC. STRUCTURES THROUGHOUT THE PROJECT UNTIL THE BANK SLOPES OF THE RECEIVING WATER BODY ARE STABILIZED AND ACCEPTED BY OWNER.
38. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE SUPERVISING ENGINEER IF A PAVEMENT OR FOUNDATION STAKE IS DISTURBED.
39. THE CONTRACTOR SHALL INSTALL DUMP CURBS AND HANDICAP RAMPS AT ALL INTERSECTIONS OF SIDEWALK WITH THE PROPOSED PAVEMENT, UNLESS OTHERWISE SPECIFIED.
40. FOR HORIZONTAL AND VERTICAL CLEARANCES BETWEEN STORM PIPES AND WATER MAINS/SERVICES, SEE WATER NOTES ON THIS SHEET AND FDEP SEPARATION TABLE ON UTILITY PLAN.
41. ALL PUBLIC STORM PIPE MATERIALS SHALL BE REINFORCED CONCRETE PIPE (RCP) ASTM C-76 CLASS III, UNLESS OTHERWISE SPECIFIED. LIFTING HOLES ARE PROHIBITED.
42. ALL PRIVATE STORM PIPE MATERIALS SHALL BE AS FOLLOWS:
- 12.1. DIAMETERS LESS THAN OR EQUAL TO 12-INCH SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) PIPE
- 12.2. DIAMETERS GREATER THAN OR EQUAL TO 15-INCH SHALL BE POLYPROPYLENE (PP) PIPE
43. MINIMUM COVER OVER ALL PIPE SHALL BE 36-INCHES FROM TOP OF PIPE TO FINISHED GRADE, UNLESS OTHERWISE NOTED.
44. ALL STORM SYSTEM MANHOLE AND INLET STRUCTURES SHALL BE PRECAST CONCRETE.
45. THE CONTRACTOR SHALL USE CONCRETE WITH A MINIMUM 28 DAY STRENGTH OF 3,000 P.S.I..
46. ALL SIDEWALK WIDTHS SHALL BE AS NOTED ON THE SITE PLAN AND SHALL HAVE 1-INCH DEEP CONNECTION JOINTS EVERY 5- FEET AND AN EXPANSION JOINT EVERY 20- FEET (MINIMUM). MAXIMUM SIDEWALK CROSS SLOPES SHALL BE 2.00% AND MAXIMUM SIDEWALK RUNNING SLOPES SHALL BE 5.00% EXCEPT AT RAMP LOCATIONS. MAXIMUM RAMP SLOPES SHALL BE 8.33%.
47. PROVIDE FDOT TYPE III SILT FENCE ALONG THE PROPERTY LINES AND PHASE LINES AS WELL AS ANY CONSTRUCTION WITHIN THE OTHER PHASES THAT IS DEEMED NECESSARY.
48. ALL TEST REPORTS GENERATED BY A TESTING FIRM ARE TO HAVE COPIES SENT DIRECTLY TO THE LOCAL AGENCY AS SOON AS THEY ARE GENERATED. CLEARANCE FROM THE LOCAL AGENCY SHALL BE RECEIVED PRIOR TO PAVING.
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51. ASSUMING ACCEPTABLE CURING, THE WEARING SURFACE SHALL BE APPLIED NO SOONER THAN SEVEN (7) DAYS AND NO LATER THAN THIRTY (30) DAYS AFTER BASE COMPLETION.
52. ALL CONCRETE PIPE JOINTS SHALL BE WRAPPED IN FILTER FABRIC.
53. ROADWAY MARKING, STRIPING, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (MUTCD), INCLUDING SUBSEQUENT REVISIONS AND ADDENDUMS, AS PUBLISHED BY THE USDOT FEDERAL HIGHWAY ADMINISTRATION AS WELL AS FDOT AND LOCAL AGENCY STANDARDS AND SPECIFICATIONS.
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55. ALL ONSITE ROADWAY MARKING/STRIPING MATERIAL SHALL BE PAINT UNLESS OTHERWISE SPECIFIED.
56. REGULATORY SIGNS AND MARKINGS SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS.

WATER

1. ALL MATERIALS AND CONSTRUCTION REQUIREMENTS FOR THE FIRE SERVICE, WATER LINES, CHECK VALVES, BACKFLOW PREVENTERS, GATE VALVES, ETC. SHALL BE IN ACCORDANCE WITH LOCAL AGENCY STANDARD DETAILS AND CONSTRUCTION SPECIFICATIONS.
2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH AWWA STANDARDS AND IN ACCORDANCE WITH LOCAL AGENCY STANDARDS.
3. ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL COME INTO CONTACT WITH DRINKING WATER WILL CONFORM TO NSF INTERNATIONAL STANDARD 61 AND WILL BE MARKED WITH THE NSF SEAL OF APPROVAL.
4. CONTRACTOR SHALL VERIFY SIZE AND TYPE OF EXISTING MAIN PRIOR TO ORDERING TAPPING MATERIALS FOR TIE-INS.
5. SITE CONTRACTOR SHALL COORDINATE AND VERIFY ALL UTILITY SERVICES WITH FINAL ARCHITECTURAL DRAWINGS AND BUILDING CONTRACTOR.
6. SITE UTILITY WORK SHALL TERMINATE 5- FEET FROM BUILDINGS UNLESS OTHERWISE NOTED.
7. MINIMUM COVER OVER ALL PIPE SHALL BE 36-INCHES FROM TOP OF PIPE TO FINISHED GRADE, UNLESS OTHERWISE NOTED.
8. THE WATER MAIN SHALL BE LOCATED ABOVE THE STORMWATER AND SANITARY MAINS AT CONFLICTS, WHERE POSSIBLE.
9. VERTICAL SEPARATION BETWEEN UNDERGROUND POTABLE WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES:
- 9.1. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
- 9.2. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
10. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS:
- 10.1. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
- 10.2. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
- 10.3. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
- 10.4. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.006(2), F.S., AND RULE 64E-6.002, F.A.C.
11. AT THE UTILITY CROSSINGS DESCRIBED IN NOTES 8 AND 9 ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSING, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THIRTY TWO FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
12. WATER LINES 2-INCHES, OR LESS, IN DIAMETER SHALL BE POLYETHYLENE TUBING.
13. WATER LINES 4-INCH TO 12-INCH IN DIAMETER SHALL BE NSF LOGO PVC PIPE CONFORMING TO AWWA C-900 AND BE DR-18.
14. ALL FITTINGS SHALL BE DUCTILE IRON (D.I.) OR GRAY IRON MECHANICAL JOINTS WITH A MINIMUM PRESSURE RATING OF 250 P.S.I. CONFORMING TO ANSI A-21.10 / AWWA C-110, OR D.I. COMPACT FITTINGS FOR DIAMETERS 4-INCH TO 12-INCH CONFORMING TO ANSI A-21.53 / AWWA C-153.
15. FROM THE POINT OF SERVICE (P.O.S.) FORWARD AS DESIGNATED BY F.S. 633, FIRE SUPPLY PIPE SHALL BE DR-14 AND TESTED AT 200 PSI FOR TWO HOURS.
16. GATE VALVES SHALL CONFORM TO AWWA C-509-87, WITH WRNCH NUT EXTENSION STEMS AND OTHER APPURTENANCES AS REQUIRED AND SHALL BE IRON BODY, FULL BRONZE MOUNTED, DOUBLE DISK, PARALLEL SEAT, NON-RISING STEM VALVES WITH O-RING SEALS AND END CONNECTIONS AS CALLED FOR ON THE PLANS. ALL TEES, CAPS, PLUGS, BENDS, VALVES, ETC., SHALL BE PROVIDED WITH GRIP RING RESTRAINTS.
17. ALL NON-METALLIC WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED TO GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. IN ADDITION, ALL PVC WATER MAINS SHALL BE A SOLID BLUE COLOR. ALL LITERING SHALL APPEAR LEGIBLY ON PIPE AND SHALL RUN THE ENTIRE LENGTH OF THE PIPE. LITERING SHALL READ AS IS ACCEPTABLE FOR THE INTENDED USE.
18. SERVICE MAINS FOR FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 24, LATEST EDITION.
19. NEW FIRE HYDRANTS SHALL BE INSTALLED SO THAT 5-1/4" INCH PORT IS FACING THE ROADWAY BY WHICH IT IS ACCESSED. HYDRANTS SHALL BE POSITIONED NOT MORE THAN 5 FEET AWAY FROM THE CURB OR BERM OF THE ROADWAY.

WATER (CONTINUED)

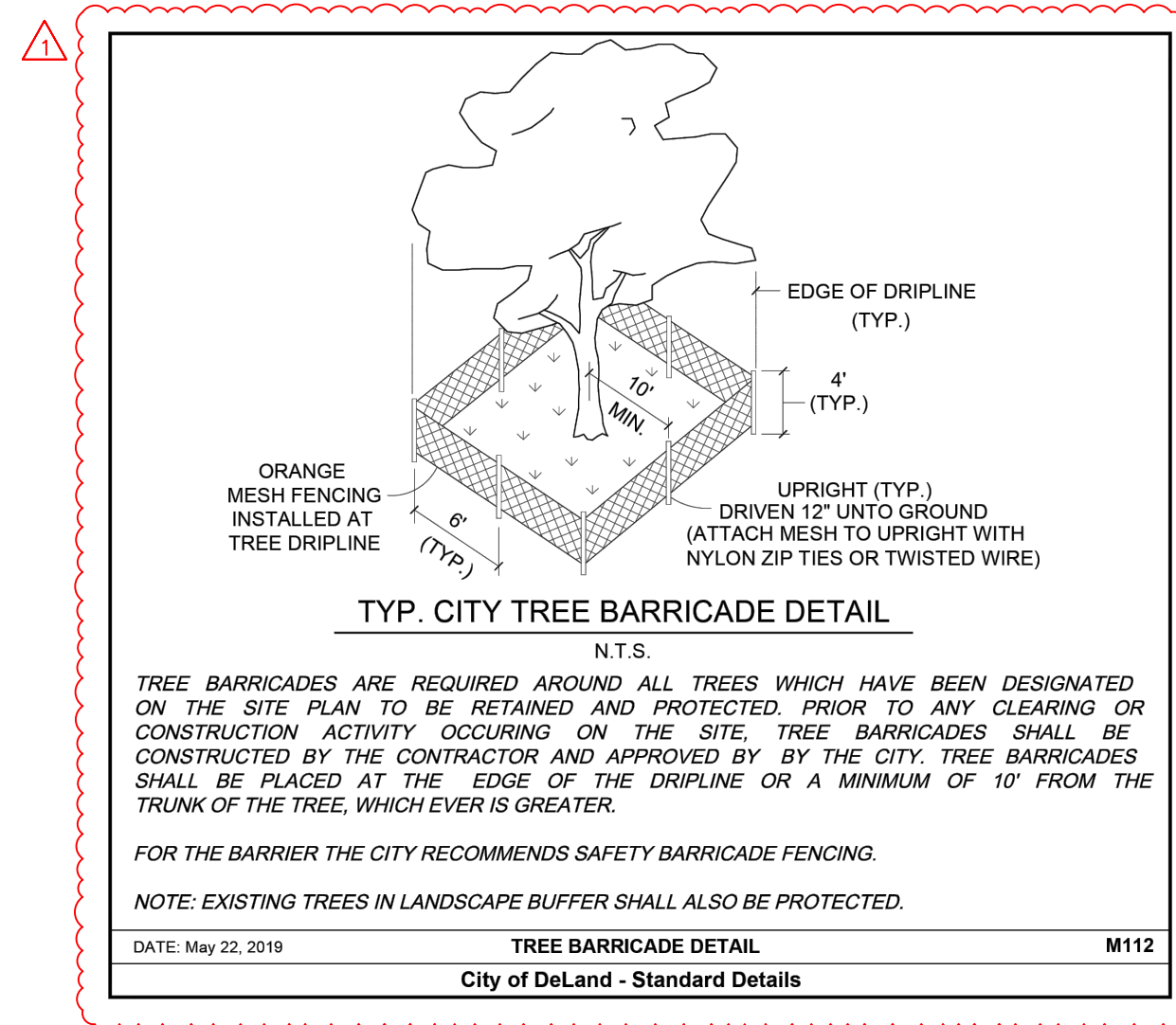
20. HYDROSTATIC TESTING AND THE DISINFECTION OF THE WATER DISTRIBUTION SYSTEM SHALL BE DONE IN ACCORDANCE WITH AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600 FOR DUCTILE IRON PIPE AND C-605 FOR PVC PIPE. DISINFECTION AND BACTERIOLOGICAL EVALUATION TO BE DONE IN ACCORDANCE WITH AWWA C-651 AND RULE 62-555.340 F.A.C.
21. THE CONTRACTOR SHALL SUPPLY COMPLETE AS-BUILT INFORMATION RELATED TO LOCATION AND ELEVATION OF ALL WATER LINES AND SERVICES. THE INFORMATION SHALL BE SUBMITTED TO THE ENGINEER, MARKED-UP PRINTS TO THE ENGINEER WITHIN TWO (2) WEEKS OF THE COMPLETION OF THE WATER LINE CONSTRUCTION.
22. CONTRACTOR SHALL COORDINATE ALL UTILITIES SYSTEMS TEST SCHEDULING TO ALLOW ENGINEER'S ADVANCE PROPOSAL MINIMUM NOTICE OF FIVE (5) WORKING DAYS. CONTRACTOR'S FAILURE TO PROPERLY NOTIFY ENGINEER MAY RESULT IN RETESTING AT ENGINEER'S OPTION AND AT CONTRACTOR'S EXPENSE.
23. NEW HYDRANTS SHALL BE TESTED AND IN PROPER WORKING ORDER WITH UTILITY PROVIDER/MENTATION SUPPLIED TO THE FIRE MARSHAL PRIOR TO ANY COMBUSTIBLE CONSTRUCTION. (I.E. FIRE FLOW TEST SHALL BE PERFORMED)
24. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THE LESSOR OF THOSE RECOMMENDED BY THE PIPE MANUFACTURER OR UTILITY PROVIDER'S CONSTRUCTION SPECIFICATIONS.
25. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED IN ACCORDANCE WITH SUB PARAGRAPH 62-555.320(2)(b)3, F.A.C. USING BLUE AS A PREDOMINANT COLOR. ALL DUCTILE IRON WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE BLUE IN COLOR. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION FOR PIPE WITH AN INTERNAL DIAMETER OF 24" OR GREATER. TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES A LONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.
26. MARK RESIDENTIAL SERVICES WITH 6-FOOT HIGH PIECE OF 2"x4" PLANK PAINTED BLUE WITH LOT AND INVERT CLEARLY MARKED AND A "W" IMPRESSED IN THE CURB. IT IS THE INTENT THAT EVERY LOT IS PROVIDED WITH A WATER SERVICE; THEREFORE IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A WATER SERVICE TO EACH LOT.
27. PIPE MATERIALS:
- PVC MAINS - ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS AND SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900, LATEST EDITION. PVC SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900. THE PVC SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 P.S.I. AND SHALL HAVE A DIMENSION RATIO (DR) OF 18. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON PIPE. PVC JOINTS SHALL BE IN ACCORDANCE WITH ASTM D3139.
- DUCTILE IRON MAINS - ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS AND SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C150/C151. A MINIMUM OF CLASS 50 PIPE SHALL BE SUPPLIED.
- DUCTILE IRON JOINTS - SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.
- SERVICES - SHALL BE IN ACCORDANCE WITH AWWA C901/C900 STANDARDS FOR POLYETHYLENE TUBING, CLASS 160.
28. WATER MAIN CONNECTION SHALL BE MADE UNDER THE SUPERVISION OF THE UTILITY PROVIDER. ALL VALVES SHALL BE OPERATED BY UTILITY PROVIDER PERSONNEL ONLY.
29. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL LEAD FREE.
30. NEW OR ALTERED FIRE HYDRANT LEADS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 6-INCH AND SHALL INCLUDE AN AUXILIARY VALVE.
31. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND WATER MAINS. THE BACKFILL SHALL BE COMPACTED MATERIAL WILL TAMPED IN LAYERS AROUND UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT.
32. CONTRACTOR SHALL NOT ACTIVATE WATER SERVICE UNTIL FDEP HAS CLEARED THE SYSTEM FOR USE AND THE CLEARANCE LETTER HAS BEEN RECEIVED BY THE OWNER.
33. ENGINEER RESERVES THE RIGHT TO WITHHOLD AUTHORIZATION OF PAYMENT FOR ANY PORTION OF THE UTILITIES PIPE WORK WHICH HAS NOT BEEN TESTED, OBSERVED BY ENGINEER, AND REPORTED TO CONFORM TO PROJECT SPECIFICATIONS.

RECLAIMED WATER

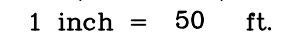
1. POLYVINYL CHLORIDE PLASTIC PIPE (PVC) 4-INCH THROUGH 12-INCH SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA C900 (LATEST EDITION) AND SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI AND HAVE A DR (DIMENSION RATIO) OF 18. PIPE SHALL BE PURPLE AND LABELED "RECLAIMED WATER" OR "NON POTABLE WATER" PROMINENTLY ON EACH PIPE JOINT. JOINTS SHALL BE OF THE FLANGED END TYPE. PIPE AND COUPLINGS SHALL CONFORM TO ASTM D3139 DR18 PIPE.
2. DUCTILE IRON PIPE (DIP) SHALL BE STANDARD PRESSURE CLASS 350 IN SIZES 4-INCH THROUGH 12-INCH AND CONFORM TO ANSI/AWWA C150/A21.50 (LATEST EDITION). ALL DUCTILE IRON PIPE SHALL HAVE CEMENT MORTAR LINING AS SPECIFIED IN ANSI/AWWA C104/A21.4 (LATEST EDITION). PIPE JOINTS SHALL BE OF THE PUSH-ON RUBBER GASKET TYPE CONFORMING TO ANSI/AWWA C111/A21.11 (LATEST EDITION).
3. PIPE SIZES GREATER THAN 12" IN BOTH PVC AND DUCTILE IRON SHALL BE SEPARATELY SPECIFIED ON THE PLANS. WITH THICKNESS CLASSES TO BE SHOWN BASED ON WORKING PRESSURES, PIPE DEPTH AND TRENCH CONDITIONS.
4. COMPACT FITTINGS FOR DUCTILE IRON PIPE AND PVC C900 PIPE SHALL BE DUCTILE IRON AND SHALL CONFORM TO ANSI/AWWA C153/A21.53 (LATEST EDITION) AND SHALL BE CEMENT LINED IN CONFORMANCE WITH ANSI/AWWA C104/A21.4 (LATEST EDITION). 350 PSI MINIMUM PRESSURE RATING.
5. GATE VALVES SHALL BE RESILIENT SEAT AND SHALL CONFORM TO ANSI/AWWA C509 (LATEST EDITION) WITH 2-INCH SQUARE WRENCH NUT, EXTENSION STEMS AND OTHER APPURTENANCES AS REQUIRED. MANUFACTURER'S CERTIFICATION OF THE VALVES' COMPLIANCE WITH AWWA C509 (LATEST EDITION) AND TESTS LISTED THEREIN WILL BE REQUIRED. VALVES SHALL BE CLOW, MUELLER, KENNEDY, M&H, AMERICAN DARLING, OR APPROVED EQUAL.
6. VALVE BOX PADS SHALL BE 18"x18"x4" THICK CONCRETE WITH FOUR (4) REINFORCING BARS. PAD IS TO BE SET AT FINISH GRADE.
7. UNDERGROUND VALVE IDENTIFICATION (UVI) MARKERS SHALL BE PROVIDED AT EACH VALVE LOCATION. MARKERS SHALL BE 3-INCH DIAMETER AND 1/8-INCH THICK SOLID HARD BRASS WITH 1/4-INCH ROD ANCHOR WITH "TAMPER-PROOF" HOOK END. SURFACE SHALL BE ENGRAVED WITH 1/4-INCH TO 3/8-INCH CAPITAL LETTERS APPROXIMATELY .015-INCH DEEP HAND PUNCHED LETTERS NOT ACCEPTABLE. FOR MARKER TO BE READING UNDERGROUND VALVE. MARKER DETAIL, SURFACE GROUND SMOOTH AND EPOXY COATED TO PREVENT TARNISHING. MARKERS ARE TO BE WAGCO MARKERS, OR APPROVED EQUAL.

RECLAIMED WATER (CONTINUED)

9. AIR RELEASE VALVES SHALL BE PLACED AT HIGH POINTS OF THE TRANSMISSION MAIN TO PERMIT ESCAPE OF TRAPPED AIR. THE VALVE SIZE, LOCATION, AND METHOD OF INSTALLATION SHALL BE INDICATED ON THE DRAWINGS, OR AS DIRECTED BY THE ENGINEER. AIR RELEASE VALVES SHALL BE VALMATIC OR APPROVED EQUAL.
10. VALVE BOXES ON BURIED RECLAIMED WATER SHALL BE ADJUSTABLE, CAST IRON CONSTRUCTION, WITH A MINIMUM INTERIOR DIAMETER OF 5-INCH WITH COVERS CAST WITH THE INSCRIPTION IN LEGIBLE LETTERING ON THE TOP. RECLAIMED WATER BOXES SHALL BE SUITABLE FOR THE APPLICABLE SURFACE LOADING AND VALVE SIZE, AND SHALL BE MANUFACTURED BY MUELLER COMPANY, MODEL 10364, OR APPROVED EQUAL.
11. PIPE INSTALLATION OF PVC RECLAIMED WATER MAIN SHALL BE IN CONFORMANCE WITH ASTM D2774 (LATEST EDITION). INSTALLATION OF DUCTILE IRON PIPE RECLAIMED WATER MAIN SHALL BE IN CONFORMANCE WITH AWWA C600 (LATEST EDITION).
12. RECLAIMED WATER SYSTEM PIPES SHALL BE INSTALLED SO AS TO GIVE A MINIMUM HORIZONTAL SEPARATION OF 5 FEET (CENTER OF PIPE TO CENTER OF PIPE) FROM POTABLE WATER LINES AND MINIMUM 3-FOOT SEPARATION FORM OUTSIDE WALL TO OUTSIDE WALL AS WELL AS 18-INCH VERTICAL SEPARATION. IN THE CASE OF A CONFLICT WHERE THESE SEPARATIONS CANNOT BE MAINTAINED THE REUSE MAIN SHALL BE UPGRADED TO DIP.
13. COMPACTED BACKFILL SHALL BE TO 98 % MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 UNDER ALL PAVEMENTS WITH 12-INCH MAXIMUM LIFT THICKNESS. OTHER COMPACTION OF BACKFILL SHALL BE TO 95% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 WITH 1



☐ TREE TO BE SAVED



1. THE SITE SHALL BE VISUALLY INSPECTED BY THE CONTRACTOR, PRIOR TO COMMENCEMENT OF THE WORK, TO DETERMINE THE FULL SCOPE OF WORK INVOLVED AND ITS RELATION TO ANY OTHER WORK IN THE AREA, PRIOR TO THE COMMENCEMENT OF ANY WORK, INCLUDING POSSIBLE INTERFERENCE FROM OTHER SIDE ACTIVITIES.
2. ALL ACTIONS REQUIRED BY LAW SHALL BE ACCOMPLISHED PRIOR TO PERMITTING AND ALL PERMITS REQUIRED BY LAW SHALL BE ACQUIRED, AT THE EXPENSE OF THE CONTRACTOR, PRIOR TO DEMOLITION. ALL PERMITS SHALL BE PROMINENTLY POSTED OR DISPLAYED DURING THE DEMOLITION PROCESS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ANY AND ALL DEBRIS FROM THE JOB SITE DURING AND AFTER THE PERIOD OF THE WORK. DEBRIS REMOVAL IS DEFINED AS THE REMOVAL, FROM A DEMOLITION SITE, OF DEBRIS RESULTING DIRECTLY FROM THE DEMOLITION. SUCH DEBRIS MAY CONSIST, BUT NOT BE LIMITED TO, PILES OF TRASH, BOARDS, SHINGLES, FALLEN TREES, WOODEDILES, ETC. THE CHARGE FOR REMOVING SUCH DEBRIS SHALL INCLUDE ALL EXPENSES ASSOCIATED WITH ITS REMOVAL.
4. ALL MATERIALS DEEMED NON-HAZARDOUS SHALL BE TRANSPORTED AND DISPOSED OF BY THE CONTRACTOR AT AN APPROVED LANDFILL FACILITY.
5. THE CONTRACTOR SHALL ASSURE THAT ALL UTILITIES HAVE BEEN DISCONNECTED AND ALL UTILITY LINES ARE REMOVED FROM THE PROPERTY, IF APPLICABLE, PRIOR TO COMMENCEMENT OF ANY WORK.
6. THE CONTRACTOR SHALL PROVIDE FLAGMAN'S TRAFFIC CONTROL AND SAFETY AT ANY TIME THE DEMOLITION REQUIRES THE BLOCKING OF ANY ROAD OR HIGHWAY FOR ANY LENGTH OF TIME. THIS SHALL INCLUDE THE LOADING AND UNLOADING OF HEAVY EQUIPMENT. A COUNTY OR STATE R/W USE PERMIT IS REQUIRED FOR ANY WORK, INCLUDING EQUIPMENT CIRCULATION, ETC. WITHIN THE APPROPRIATE JURISDICTIONAL AREAS.
7. SALVAGING OF ANY PROPERTY SHALL BE THE PRIVILEGE OF THE CONTRACTOR; HOWEVER NO PERSON OR PERSONS OTHER THAN THE CONTRACTOR MAY SALVAGE ANY PROPERTY WHILE DEMOLITION IS IN PROCESS.
8. THE CONTRACTOR SHALL ASSUME ANY AND ALL LIABILITY FOR PERSONS AND PROPERTY DIRECTLY ON THE DEMOLITION SITE DURING THE DEMOLITION PROCESS.
9. ANY KNOWN WATER WELL LOCATED ON THE PROPERTY SHALL BE HANDLED BY ALL APPLICABLE CODES AND REGULATIONS.
10. THE CONTRACTOR SHALL FILL THE PROPERTY WITH CLEAN FILL DIRT IN ORDER TO MAINTAIN A LEVELLED AND GRADED APPEARANCE. THE COST FOR FILL DIRT SHALL INCLUDE ALL COSTS ASSOCIATED WITH PROVIDING THE FILL DIRT.
11. ALL FILL DIRT REMAINING AFTER DEMOLITION SHALL BE LEFT ON SITE FOR FINAL DISPOSITION.
12. THE CONTRACTOR SHALL LOCATE, DRAIN AND CRUSH IN PLACE ANY SEPTIC TANK(S) ON SITE. THE SEPTIC TANK DEBRIS SHALL BE COMPLETELY REMOVED. SEPTIC TANK(S) REMOVAL SHALL INCLUDE PUMPING OF DRAIN FILL. THIS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS, CODES AND ORDINANCES.
13. THE CONTRACTOR SHALL ENSURE THAT NO RUBBLE IS BURIED ON SITE.
14. ALL STRUCTURES SHALL BE DEMOLISHED USING THE "WET METHOD" WITHOUT EXCEPTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND/ OR FURNISH THE NECESSARY WATER TO ACCOMPLISH THIS REQUIREMENT.
15. THE BOARDING UP OF STRUCTURES SHALL CONSIST OF THE BOARDING OF DOORS, WINDOWS AND ANY OTHER ENTRANCE/EGRESS POINT(S) INCLUDING, BUT NOT LIMITED TO, GARAGE DOOR OPENINGS, SLIDING GLASS DOORS, ETC.
16. THE BOARDING UP OF STRUCTURES SHALL BE ACCOMPLISHED BY AFFIXING THE PLYWOOD BOARDS, (CUT TO OPTIMUM SIZE) TO ALL AREAS AS SPECIFIED ABOVE, AND SHALL BE SCREWED INTO DOOR/ WINDOW FRAMES IN SUCH A MANNER AS TO PREVENT/ HINDER ENTRANCE TO THE STRUCTURE. EACH PLYWOOD BOARD (SHEET) SHALL BE AT LEAST (3) PLY, FOUR (4") FOOT BY EIGHT (8') FOOT AND ONE HALF (1/2) INCH THICK. THE BOARDING UP OF STRUCTURES SHALL TAKE PLACE IN ACCORDANCE WITH ALL STATE, COUNTY, AND LOCAL LAWS, REGULATIONS AND ORDINANCES.
17. IT IS UNDERSTOOD THAT ACTIONS MAY BE TAKEN BY A PERSON OR PERSONS TO ACCESS THE STRUCTURE AFTER IT IS BOARDED UP. THE BOARDING UP OF STRUCTURES SHALL BE ACCOMPLISHED AS TO MAKE THIS POSSIBILITY AS DIFFICULT AS POSSIBLE. SHOULD A BOARDED UP AREA BE BREACHED, THE CONTRACTOR, UPON NOTIFICATION BY THE OWNER/ DEVELOPER, SHALL RETURN TO THE STRUCTURE AND AFFIX NEW BOARDS TO THE AREA OR AREAS AFFECTED, IF DEEMED NECESSARY OR PRUDENT BY THE CONTRACTOR. THE APPROPRIATE LAW ENFORCEMENT AGENCY SHALL BE NOTIFIED IN ORDER TO ASSURE THAT THE STRUCTURE IS NOT OCCUPIED PRIOR TO THE RE-BOARDING PROCESS.
18. IF REQUESTED BY THE OWNER/ DEVELOPER, THE CONTRACTOR SHALL AFFIX, AT NO ADDITIONAL COST, "NO TRESPASSING" SIGNAGE TO THE BOARDED UP STRUCTURE SO AS TO ACHIEVE MAXIMUM VISIBILITY.
19. THE LOCATION OF STRUCTURES, UTILITIES, ETC. ARE PROVIDED BY OTHERS. THE ENGINEER IS NOT RESPONSIBLE FOR ERRORS OR OMISSIONS RESULTING FROM INACCURACY OR THE INFORMATION OBTAINED. CONTRACTOR IS TO FIELD VERIFY LOCATIONS OF STRUCTURES, UTILITIES, ETC.
20. ALL EXISTING UTILITY AND STRUCTURE LOCATIONS ARE BASED ON INFORMATION PROVIDED BY OTHERS. ADDITIONAL UTILITIES AND STRUCTURES MAY BE PRESENT. SHOULD UNCHARTED UTILITIES OR STRUCTURES BE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE FOR INSTRUCTIONS.
21. CONTRACTOR SHALL REMOVE ONLY TREES MARKED FOR REMOVAL AND PROTECT TREES MARKED TO BE SAVED.



DEMOLITION PLAN
FOR
DELAND COMMONS
CITY OF DELAND
FLORIDA

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

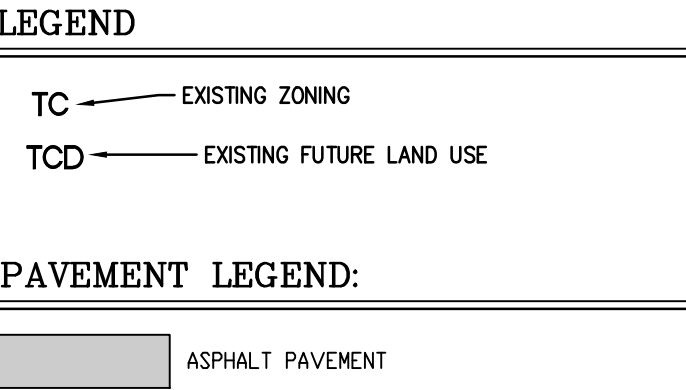
WILLIAM HENRY ZEH, P.E. #81427

August 20, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

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	DATE	REVISIONS

JOB # 18029
DATE: 06/17/2022
SCALE: 1"=50'
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

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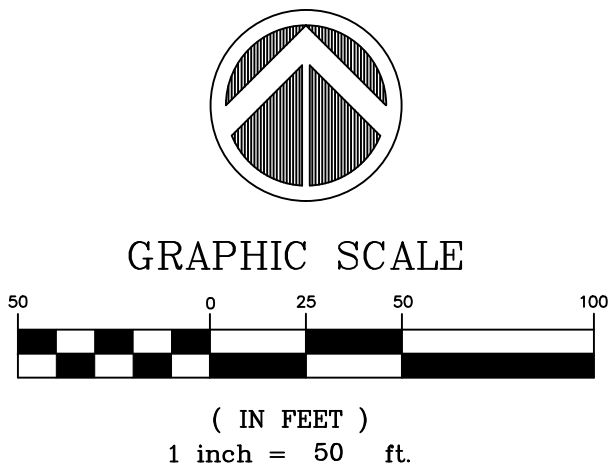
SOILS LEGEND		
 SOILS LINE		
SOIL NUMBER	SOIL NAME	HYDROLOGIC GROUP
	ASTATULA--URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	A
	URBAN LAND, 0 TO 2 PERCENT SLOPES	N/A

SOURCE: USGS SOILS SURVEY, NATURAL RESOURCE CONSERVATION SERVICE – VOLUSIA COUNTY, FLORIDA 2022

WATER SERVICE DEMANDS							
LAND USE	UNIT	GPD/UNIT	# UNITS	ADD (GPD)	ADD (GPM)	MDD (GPM)	PHF (GPM)
MULTI-FAMILY RESIDENTIAL	DWELLING UNIT	350	180	63,000	43.75	87.50	175.00

SEWER SERVICE DEMANDS							
LAND USE	UNIT	GPD/UNIT	# UNITS	ADD (GPD)	ADD (GPM)	MDD (GPM)	PHF (GPM)
MULTI-FAMILY RESIDENTIAL	DWELLING UNIT	300	180	54,000	37.50	75.00	150.00

TRAFFIC GENERATION								
ITU CODE	LAND USE	# UNITS	DAILY		PM PEAK HOUR			
			RATE	TRIPS	RATE	TOTAL	ENTER	EXIT
221	MULTI-FAMILY RESIDENTIAL	180	7.42	1,336	0.53	95	60	35



SITE DATA:

- | | | |
|--------------|--|--|
| 1. | TOTAL PROPERTY AREA: | 5.36 ACRES |
| 2. | PARCEL ID'S: | 701601110027, 701601110028, 701619000020, 701619000020, 701619000030, 701619000040, 701619000090, 701619000100, 701619000110, 701612000010, 701612000020, 701611400040, 701610140030, 701612000150 |
| 3. | JURISDICTION: | CITY OF DELAND |
| 4. | EXISTING FUTURE LAND USE: | DOWNTOWN COMMERCIAL |
| 5. | EXISTING ZONING: | C-2A (DOWNTOWN COMMERCIAL DISTRICT) |
| 6. | BUFFER REQUIREMENTS: | NONE |
| 7. | PROPOSED USE: | MULTI-FAMILY |
| 8. | TOTAL DWELLING UNITS (DU): | 180 UNITS |
| 9. | OPEN SPACE REQUIRED PROVIDED | NONE
1.50 AC. (27.99%) |
| 10. | MAX. IMPERVIOUS SURFACE RATIO REQUIRED PROVIDED | NONE
72.01% |
| 11. | IMPERVIOUS AREA:
TOTAL BUILDINGS:
TOTAL SIDEWALK, PAVEMENT, MISC. CONCRETE: |
3.86 AC (72.01%)
2.49 AC (46.45%) |
| | TOTAL IMPERVIOUS AREA:
TOTAL PERVIOUS AREA:
TOTAL AREA: |
1.50 AC (27.99%)
5.36 AC (100.00%) |
| 12. | MAX. BUILDING HEIGHT | 80 FT |
| 13. | BUILDING SETBACKS: | NONE |
| 14. | PARKING:
A) REQUIRED: | |
| | APARTMENTS: | |
| | STUDIO - 1 SPACE/UNIT X 28 UNITS = | 28 SPACES |
| | 1 BEDROOM - 1.5 SPACES/UNIT X 128 = | 192 SPACES |
| | 2 BEDROOMS - 2 SPACES/UNIT X 17 = | 34 SPACES |
| | VISITOR PARKING - 0.5 SPACES/UNIT = | 88 SPACES |
| | SUBTOTAL = | 342 SPACES |
| | CARRIAGE HOMES: | |
| | 2 BEDROOMS - 2 SPACES/UNIT X 2 = | 4 SPACES |
| | SUBTOTAL = | 4 SPACES |
| | TOWNHOMES: | |
| | 3 BEDROOMS - 2 SPACES/UNIT X 5 = | 10 SPACES |
| | SUBTOTAL = | 10 SPACES |
| | TOTAL = | 356 SPACES |
| B) PROVIDED: | | |
| | APARTMENTS: | |
| | REGULAR (9'x19') = | 177 SPACES |
| | REGULAR (9'x20') = | 51 SPACES |
| | ACCESSIBLE (12'x20') = | 9 SPACES |
| | PARALLEL (ON-SITE, 8.5'x20') = | 4 SPACES |
| | SUBTOTAL = | 241 SPACES |
| | *19' DEPTH TOTAL, 17' PAVED W/2' NON-PAVED OVERHANG, OVERHANG IS NOT PART OF A LANDSCAPE AREA | |
| | CARRIAGE HOMES: | |
| | GARAGE (10'x20') = | 5 SPACES |
| | SUBTOTAL = | 5 SPACES |
| | TOWNHOMES: | |
| | GARAGE (10'x20') = | 5 SPACES |
| | DRIVEWAY (10'x20') = | 5 SPACES |
| | SUBTOTAL = | 10 SPACES |
| | TOTAL = | 256 SPACES |
| | OFF-SITE PARALLEL (8.5'x20')** = | 10 SPACES |
| 2. | **NOT INCLUDED IN OVERALL PROVIDED PARKING COUNT | |
| 15. | BICYCLE PARKING: | |
| A) REQUIRED: | | |
| | 1/EVERY 4 DWELLING UNITS = 180/4 = | 45 SPACES |
| | TOTAL = | 45 SPACES |
| B) PROVIDED: | | |
| | BICYCLE SPACES = | 45 SPACES |
| | TOTAL = | 45 SPACES |
| 16. | SITE TO BE DEVELOPED IN ONE PHASE, BUILDINGS MAY BE SEQUENCED. | |
| 17. | PER FEMA FIRM PANEL NO. 12127C0470H, DATED FEBRUARY 19, 2014, THE ENTIRE SITE LIES WITHIN FLOOD ZONE 'X' (AREAS TO BE DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN). | |
| 18. | WATER, RECLAIM, AND SEWER ARE TO BE PROVIDED BY THE CITY OF DELAND. | |
| 19. | ALL UTILITY LINES TO MEET CITY OF DELAND SPECIFICATIONS AND STORM SYSTEM TO MEET ALL APPLICABLE CITY OF DELAND AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT SPECIFICATIONS. | |
| 20. | IRRIGATION ON SITE TO BE PROVIDED BY WELLS. | |
| 21. | THE SITE IS NOT LOCATED WITHIN A WELL FIELD PROTECTION ZONE. | |
| 22. | THE SITE IS NOT LOCATED WITHIN AN AQUIFER RECHARGE AREA. | |



OVERALL SITE PLAN
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FLORIDA

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WINTER PARK, FL 32789
(407) 741-8500

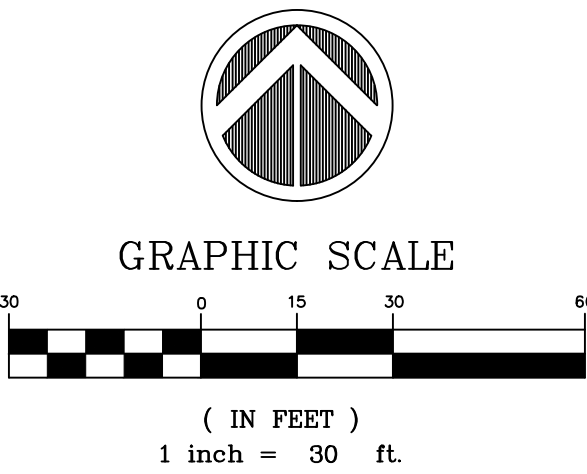
WILLIAM HENRY ZEH, P.E. #81427
August 23, 2022

CERTIFICATE OF AUTHORIZATION NO. CA-0007723

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	DATE	REVISIONS

JOB # 18029
DATE: 06/17/2022
SCALE: 1"=50'
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C100



PAVEMENT LEGEND:
ASPHALT PAVEMENT

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

SITE PLAN
FOR
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CITY OF DELAND
FLORIDA

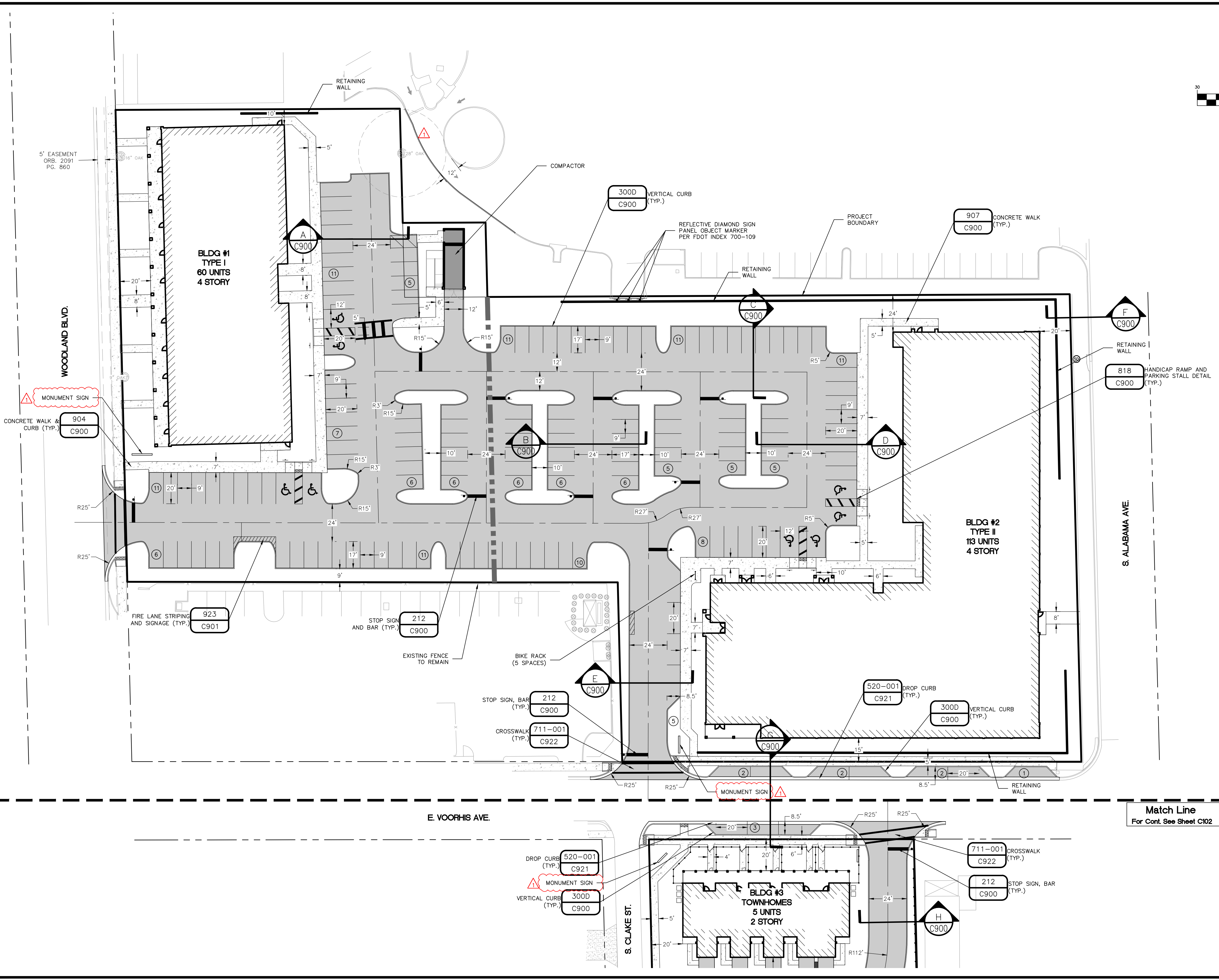
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SITE PLAN FOR DELAND COMMONS CITY OF DELAND FLORIDA

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

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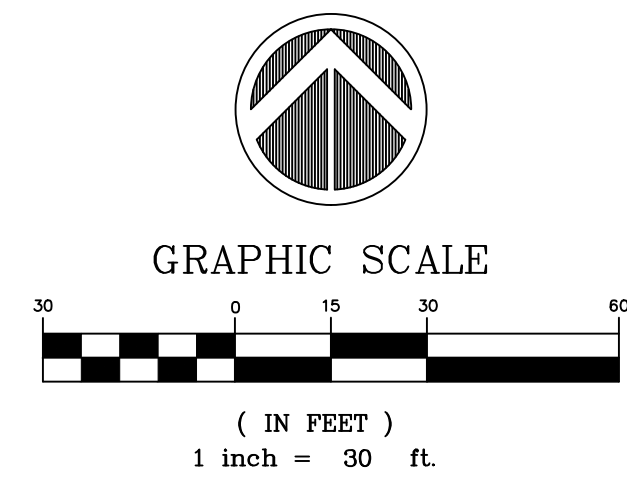
WILLIAM HENRY ZEH, P.E. #81427

WILLIAM HENRIK ZETZ, P.E. #01427
June 17, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

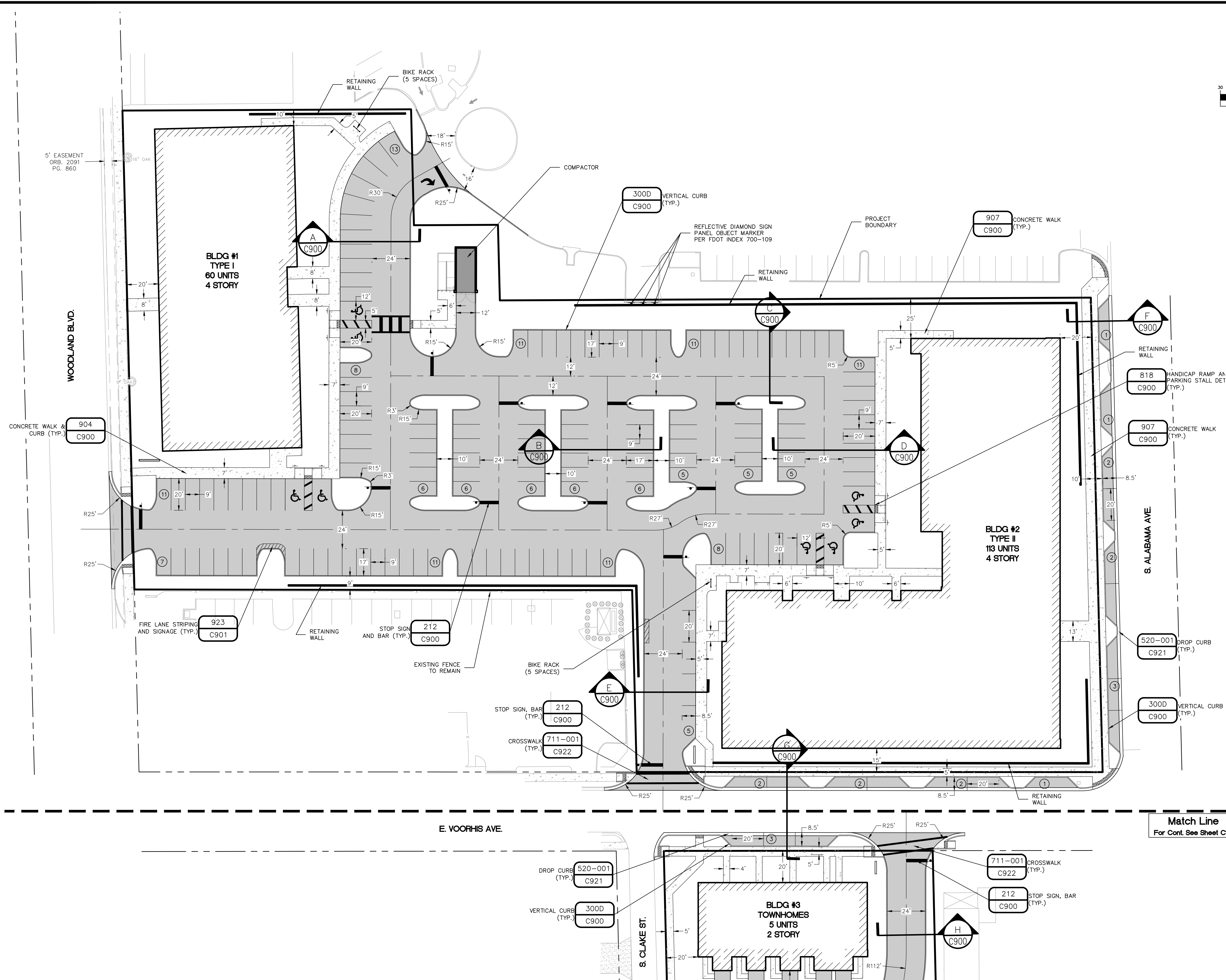
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JOB # _____ 18029
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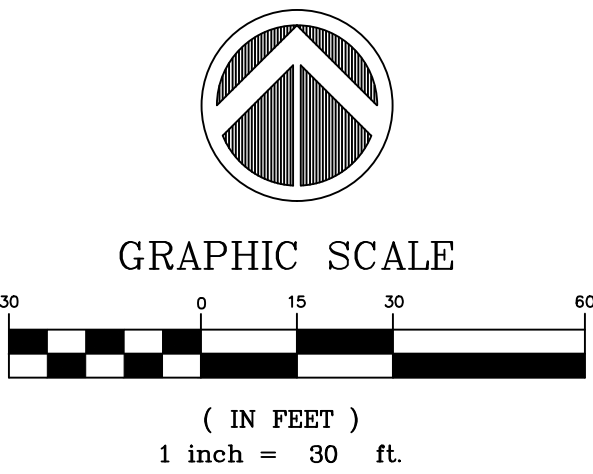
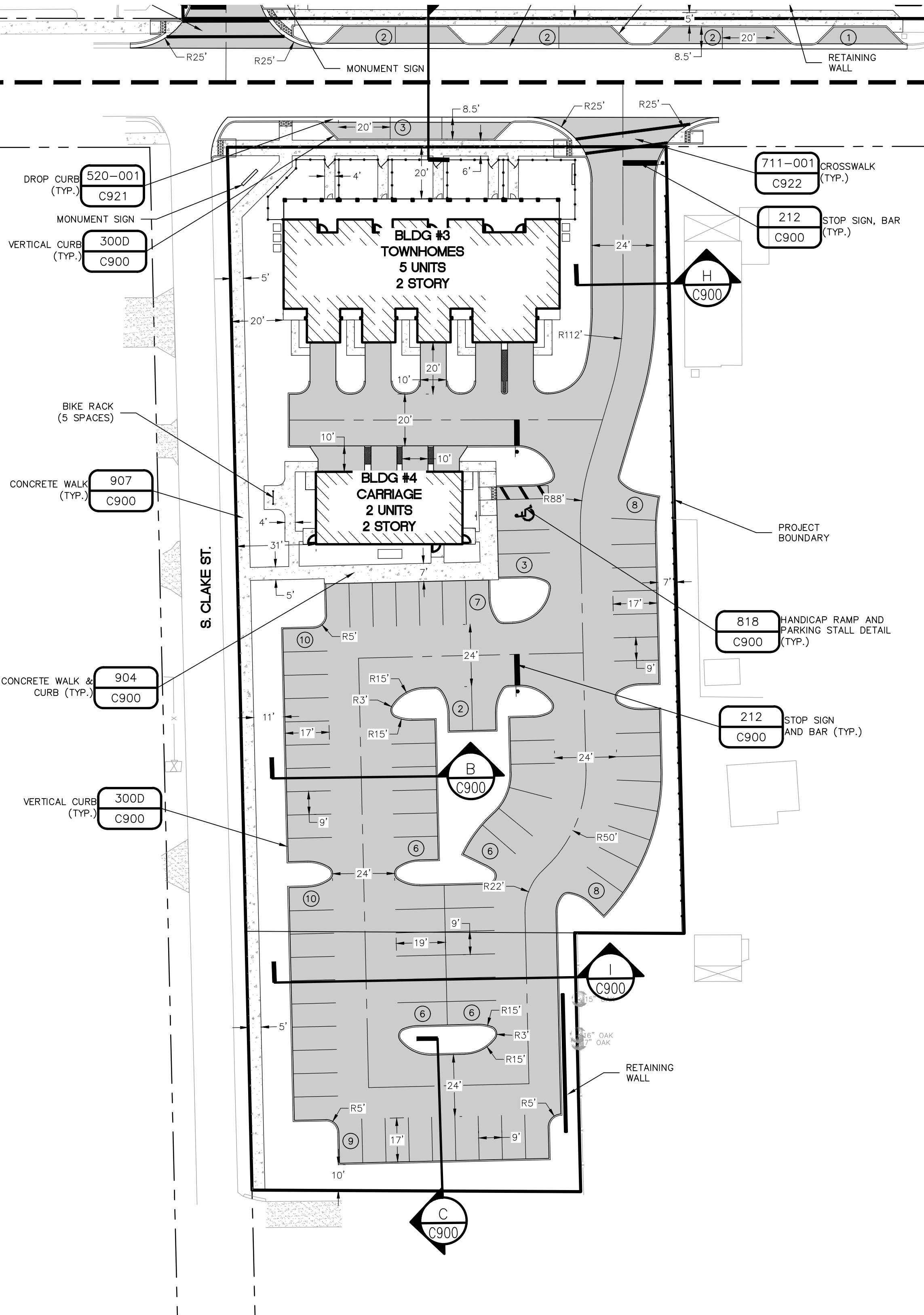


PAVEMENT LEGEND:



Match Line
For Cont. See Sheet C101

E. VOORHIS AVE.



PAVEMENT LEGEND:
ASPHALT PAVEMENT

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
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ENGINEER IN CHARGE:
WILLIAM HENRY ZEH, P.E. #81427
August 23, 2022
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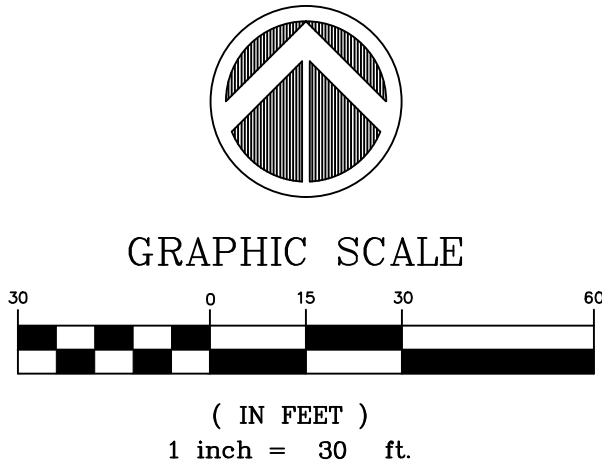
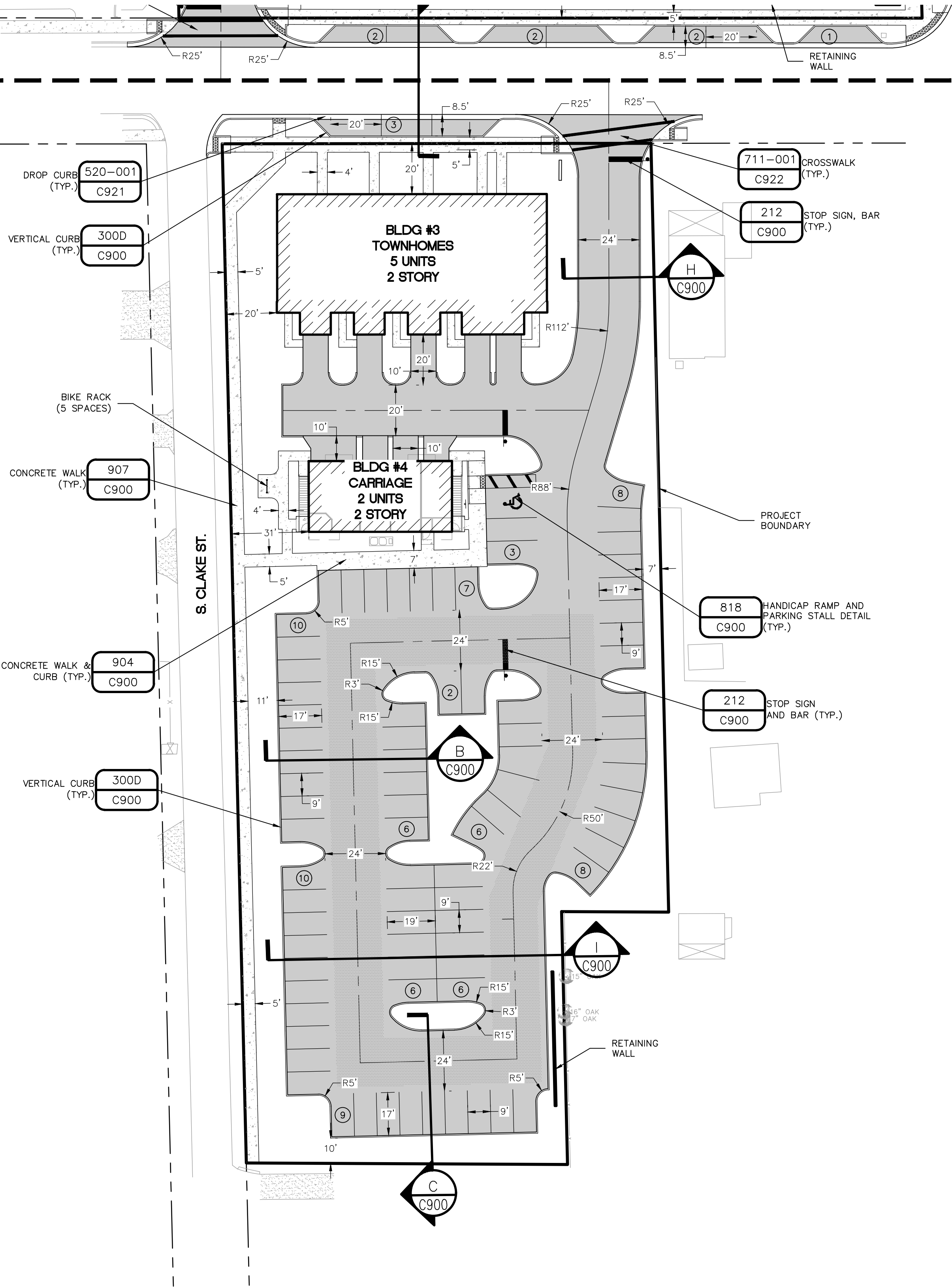
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C102

Match Line
For Cont. See Sheet C101

E. VOORHIS AVE.



PAVEMENT LEGEND:
ASPHALT PAVEMENT



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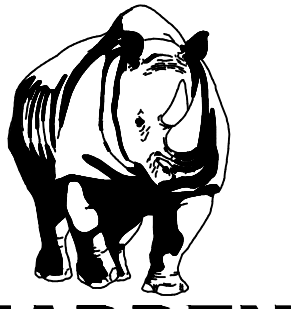
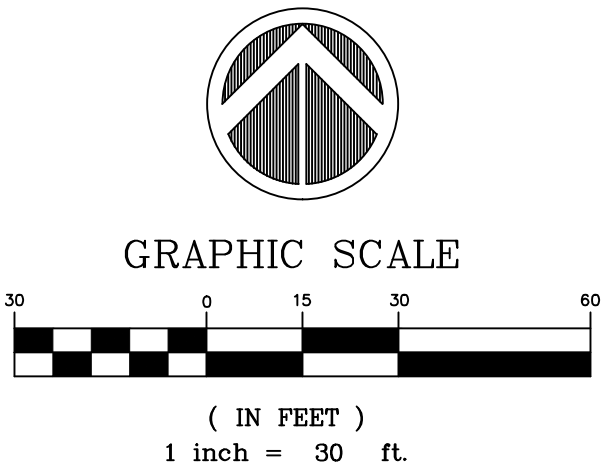
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DRAWN BY: PAB
APPROVED BY: WHZ

C102

FDEP SEPARATION REQUIREMENTS UNDER 62-555.314 EFFECTIVE 8-28-2003				
HAZARD	HORIZONTAL SEPARATION	VERTICAL SEPARATION		JOINT SPACING
		WATER ABOVE	WATER BELOW	
STORM SEWER	3FT MIN	12IN PREF, 6IN MIN	12IN MIN	3FT MIN
STORM FORCE MAIN	3FT MIN	12IN MIN	12IN MIN	3FT MIN
RECLAIMED WATER IF REGULATED UNDER 62-610	3FT MIN	12IN MIN	12IN MIN	3FT MIN
RECLAIMED WATER IF NOT REGULATED UNDER 62-610	10FT PREF, 6FT MIN	12IN MIN	12IN MIN	6FT MIN
VACUUM SANITARY SEWER	10FT PREF, 3FT MIN	12IN PREF, 6IN MIN	12IN MIN	3FT MIN
GRAVITY SANITARY SEWER	10FT PREF, 6FT MIN, 3FT MIN IF WATER MAIN IS 6IN ABOVE GRAVITY SANITARY SEWER	12IN PREF, 6IN MIN	12IN MIN	6FT MIN
SANITARY SEWER FORCE MAIN	10FT PREF, 6FT MIN	12IN MIN	12IN MIN	6FT MIN
SEWAGE TREATMENT & DISPOSAL SYSTEM	10FT MIN	NONE	NONE	NONE

NOTES:

1. CONTRACTOR SHALL COORDINATE AND ATTEND A PRE-CONSTRUCTION MEETING WITH THE CITY OF DELAND UTILITIES DEPARTMENT AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
2. MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER AND WASTEWATER LINES.
3. ALL EXISTING FACILITIES HAVE BEEN FIELD VERIFIED AT ALL POINTS OF CONNECTION TO, AND AT ALL AREAS OF CONFLICT WITH PUBLIC MAINS.
4. ALL UTILITIES LOCATED OUTSIDE OF PUBLIC RIGHTS-OF-WAY AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
5. FLOW TESTS OF ALL FIRE HYDRANTS SHALL BE CONDUCTED AND FLOW TEST RESULTS PROVIDED TO CITY OF DELAND FIRE DEPARTMENT PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
6. WATER MAINS AND FIRE HYDRANTS SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING BROUGHT ON TO THE SITE.
7. ALL SANITARY SEWER LATERALS SHALL HAVE A MINIMUM SLOPE OF 1%.
8. ALL FIRE HYDRANT VALVES SHALL BE LOCATED ON THE DOWNSTREAM END OF THE FIRE HYDRANT SUPPLY LINE AT THE TEE.
9. IRRIGATION WATER TO BE PROVIDED VIA WELLS.
10. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE RECLAIMED WATER AND POTABLE WATER MASTER METER ASSEMBLIES (MASTER METERS, BACKFLOW PREVENTORS, CONCRETE PADS, ETC.) FOR REVIEW AND APPROVAL BY THE CITY OF DELAND PRIOR TO CONSTRUCTION.
11. ELEVATIONS SHOWN ARE BASED ON DATUM NAVD88.
12. SANITARY SEWER LINES MUST BE TELEVIEWED, AND A JUMP DRIVE PROVIDED TO THE CITY FOR REVIEW AND APPROVAL.
13. WATER MAINS SHALL BE FLUSHED WITH A SWAB PRIOR TO HYDROSTATIC TESTING.
14. SITE IRRIGATION SHALL BE CONNECT TO THE CITY OF DELAND RECLAIMED WATER DISTRIBUTION SYSTEM WHEN SUCH FACILITIES ARE INSTALLED ALONG ALABAMA AVENUE AND DEEMED OPERATIONAL AT SUCH TIME, THE TEMPORARY IRRIGATION WELLS SHALL BE DISCONNECTED AND REMOVED.



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UTILITY PLAN
FOR
DELAND COMMONS
CITY OF DELAND
FLORIDA

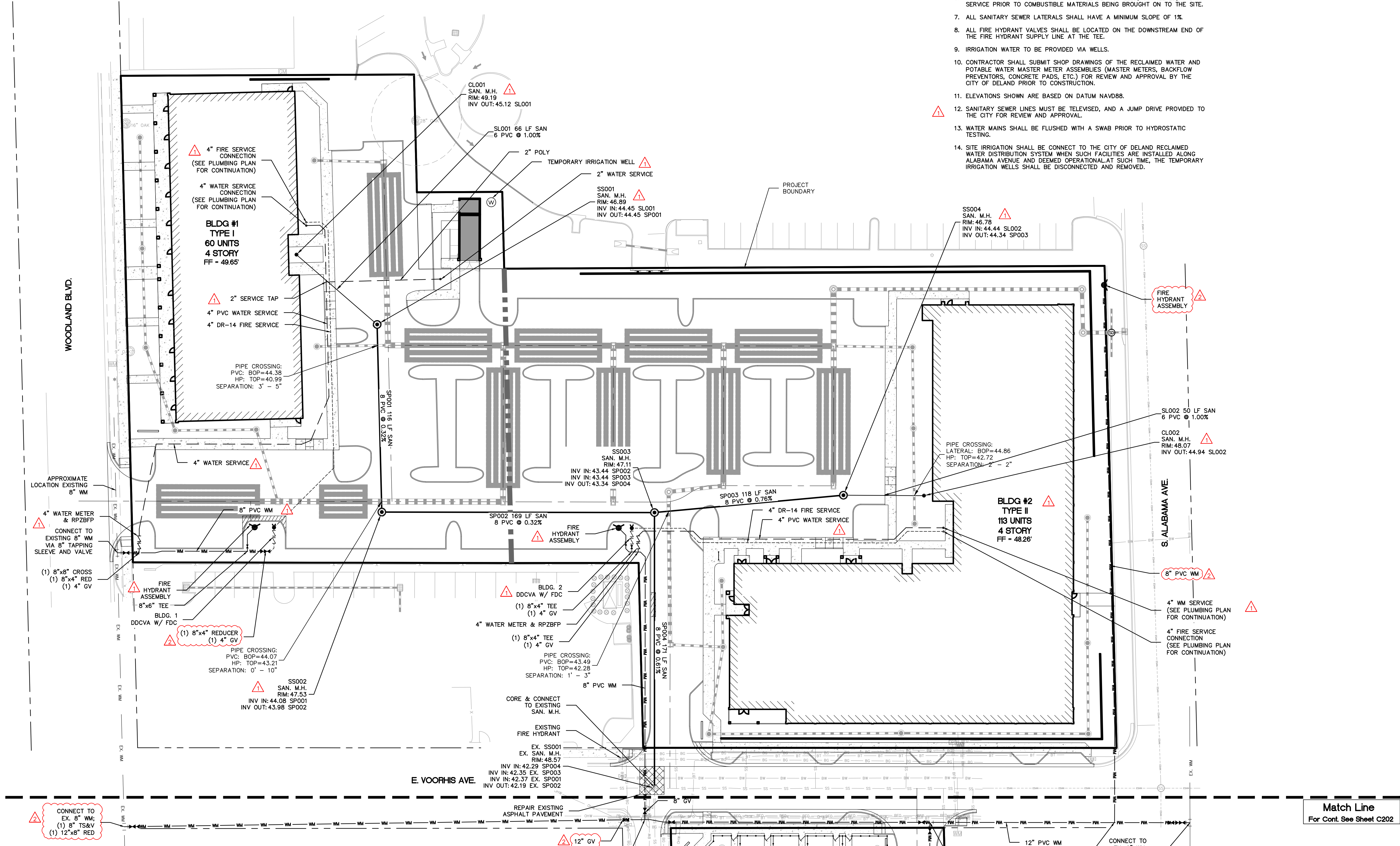
DELAND COMMONS PARTNERS, LTD.
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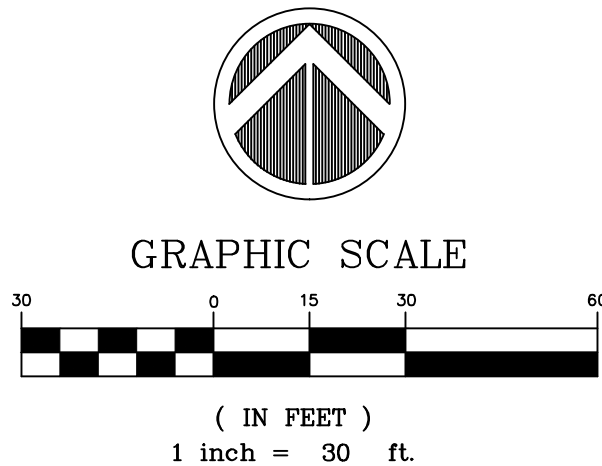
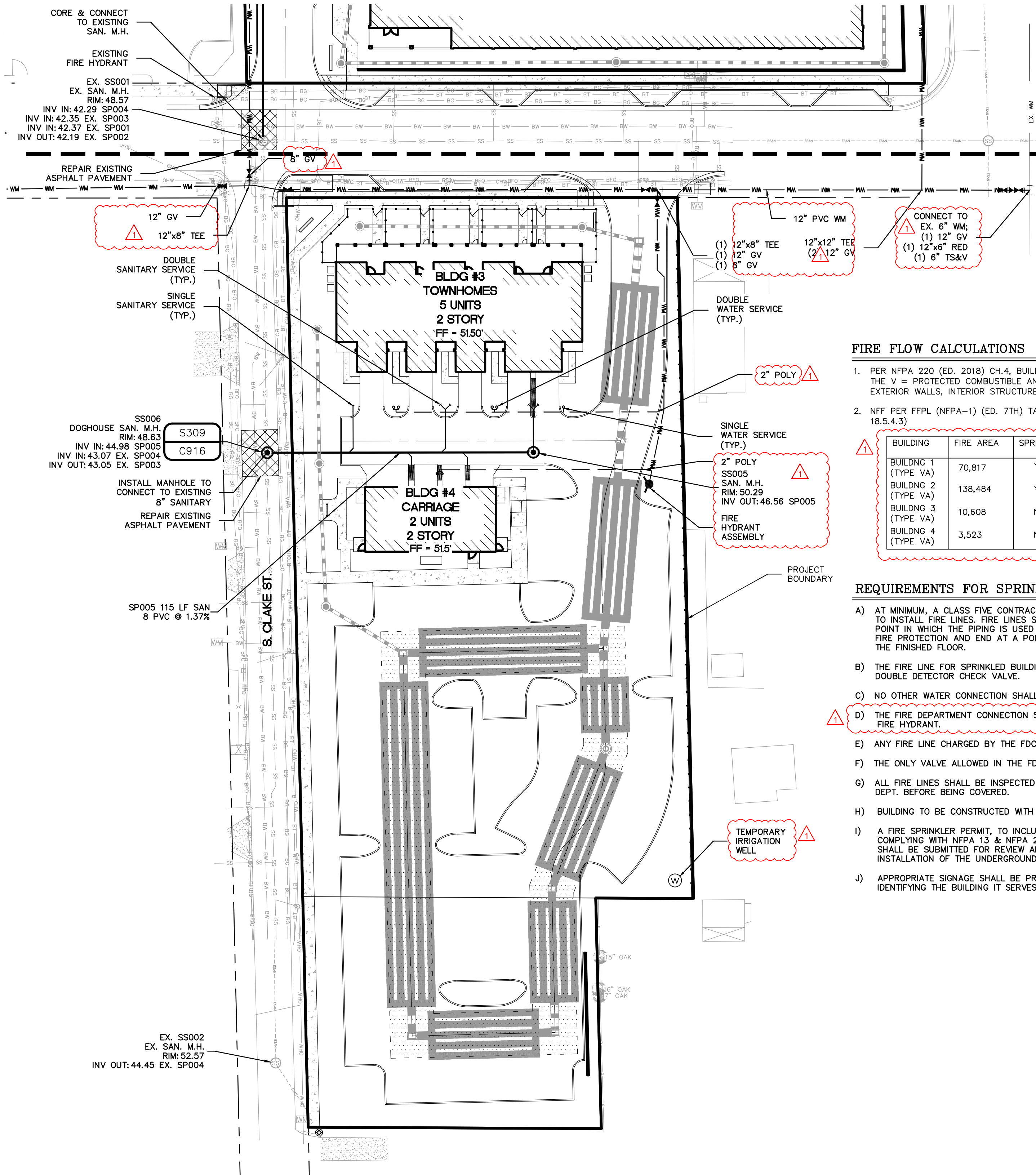
ENGINEER IN CHARGE:
WILLIAM HENRY ZEH, P.E. #81427
August 23, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

DATE	REVISIONS
1	08/02/22 REVISED PER CITY COMMENTS
2	08/22/22 REVISED PER CITY COMMENTS
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JOB # 18029
DATE: 06/17/2022
SCALE: 1"=30'
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C201





TYPICAL UTILITY LEGEND	
SYMBOL	DESCRIPTION
[Symbol]	FIRE HYDRANT ASSEMBLY
[Symbol]	DOUBLE SANITARY SERVICE
[Symbol]	SINGLE SANITARY SERVICE
[Symbol]	DOUBLE WM SERVICE
[Symbol]	SINGLE WM SERVICE
[Symbol]	DOUBLE RWM SERVICE
[Symbol]	SINGLE RWM SERVICE
[Symbol]	GATE VALVE
[Symbol]	WM OR RWM CROSS
[Symbol]	WM OR RWM TEE
[Symbol]	BLOW-OFF AND VALVE

Match Line
For Cont. See Sheet C201

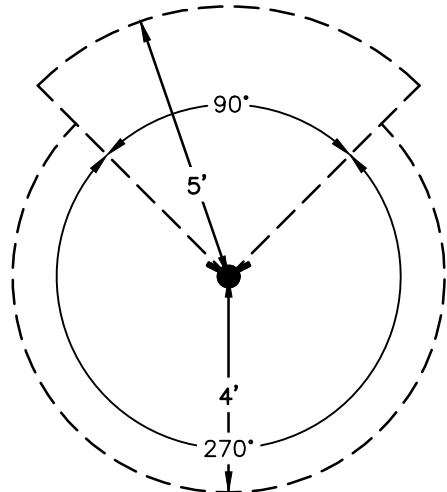
FIRE FLOW CALCULATIONS

- PER NFPA 220 (ED. 2018) CH.4, BUILDINGS THAT ARE CONSTRUCTION TYPE V (111): THE V = PROTECTED COMBUSTIBLE AND THE (111) = ONE HOUR PROTECTION FOR EXTERIOR WALLS, INTERIOR STRUCTURES, AND FLOORS (ASSUMED).
- NFF PER FFPL (NFPA-1) (ED. 7TH) TABLE 18.4.5.2.1: (# OF HYDRANTS PER TABLE 18.5.4.3)

BUILDING	FIRE AREA	SPRINKLED?	NFF (1,000 MIN)	#OF HYDRANTS
BUILDING 1 (TYPE VA)	70,817	Y	1,188	1
BUILDING 2 (TYPE VA)	138,484	Y	1,688	1
BUILDING 3 (TYPE VA)	10,608	N	1,750	1
BUILDING 4 (TYPE VA)	3,523	N	1,500	1

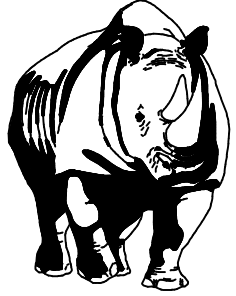
REQUIREMENTS FOR SPRINKLED BUILDINGS:

- AT MINIMUM, A CLASS FIVE CONTRACTOR IS REQUIRED TO INSTALL FIRE LINES. FIRE LINES SHALL BEGIN AT THE POINT IN WHICH THE PIPING IS USED EXCLUSIVELY FOR FIRE PROTECTION AND END AT A POINT 1-FOOT ABOVE THE FINISHED FLOOR.
- THE FIRE LINE FOR SPRINKLED BUILDINGS STARTS AT THE DOUBLE DETECTOR CHECK VALVE.
- NO OTHER WATER CONNECTION SHALL BE OFF OF THE FIRE LINE.
- THE FIRE DEPARTMENT CONNECTION SHALL BE WITHIN 50 FEET OF THE FIRE HYDRANT.
- ANY FIRE LINE CHARGED BY THE FDC SHALL BE DR-14 OR CPVC PIPE.
- THE ONLY VALVE ALLOWED IN THE FDC LINE IS A CHECK VALVE.
- ALL FIRE LINES SHALL BE INSPECTED BY THE FIRE INSPECTION DEPT. BEFORE BEING COVERED.
- BUILDING TO BE CONSTRUCTED WITH NFPA 13 R SPRINKLER SYSTEM.
- A FIRE SPRINKLER PERMIT, TO INCLUDE ADEQUATE WORKING PLANS COMPLYING WITH NFPA 13 & NFPA 24 MINIMUM REQUIREMENTS, SHALL BE SUBMITTED FOR REVIEW AND APPROVED PRIOR TO INSTALLATION OF THE UNDERGROUND FIRE SPRINKLER LINE.
- APPROPRIATE SIGNAGE SHALL BE PROVIDED AT EACH FDC LOCATION IDENTIFYING THE BUILDING IT SERVES.



NOTES:
1. NO OBSTRUCTIONS SHALL BE PLACED WITHIN A 4' CLEARANCE DISTANCE FROM THE REAR AND SIDES OF A FIRE HYDRANT.
2. NO OBSTRUCTIONS SHALL BE PLACED OR GROWN IN FRONT OF A FIRE HYDRANT.

FIRE HYDRANT CLEARANCE DETAIL



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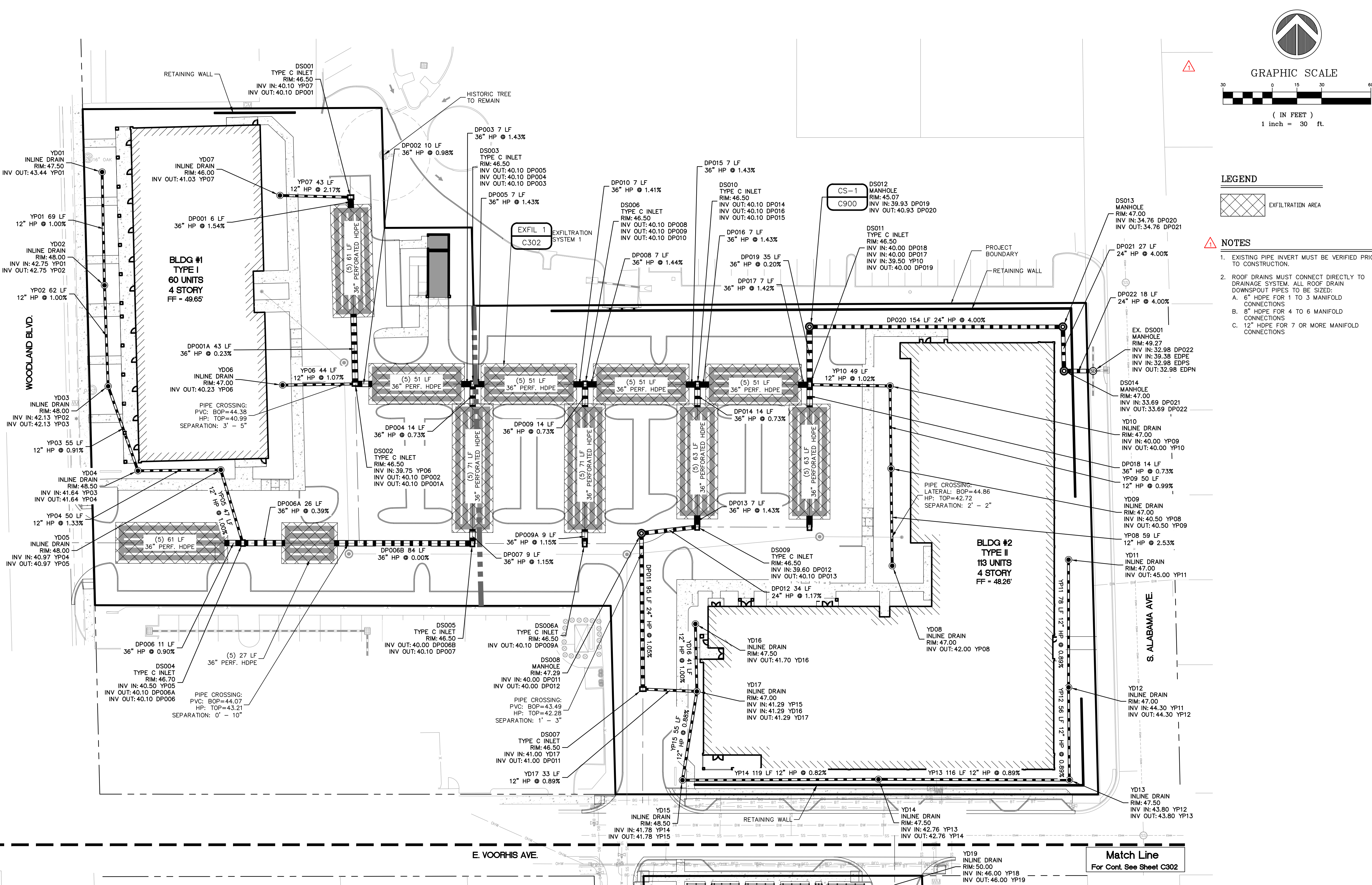
ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
August 24, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

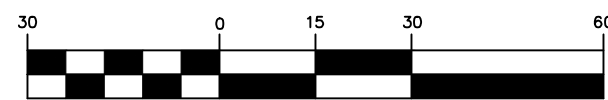
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C202



GRAPHIC SCALE



(IN FEET)
1 inch = 30 ft.

LEGEND



NOTES

- EXISTING PIPE INVERT MUST BE VERIFIED PRIOR TO CONSTRUCTION.
- ROOF DRAINS MUST CONNECT DIRECTLY TO DRAINAGE SYSTEM. ALL ROOF DRAIN DOWNSPOUT PIPES TO BE SIZED:
 - 6" HDPE FOR 1 TO 3 MANIFOLD CONNECTIONS
 - 8" HDPE FOR 4 TO 6 MANIFOLD CONNECTIONS
 - 12" HDPE FOR 7 OR MORE MANIFOLD CONNECTIONS



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DRAINAGE PLAN

FOR
DELAND COMMONS
CITY OF DELAND, FLORIDA

DELAND COMMONS PARTNERS, L.P.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
August 23, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

1 08/02/22 REVISED PER CITY COMMENTS

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C301



DRAINAGE PLAN
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CITY OF DELAND
FLORIDA

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ENGINEER IN CHARGE:

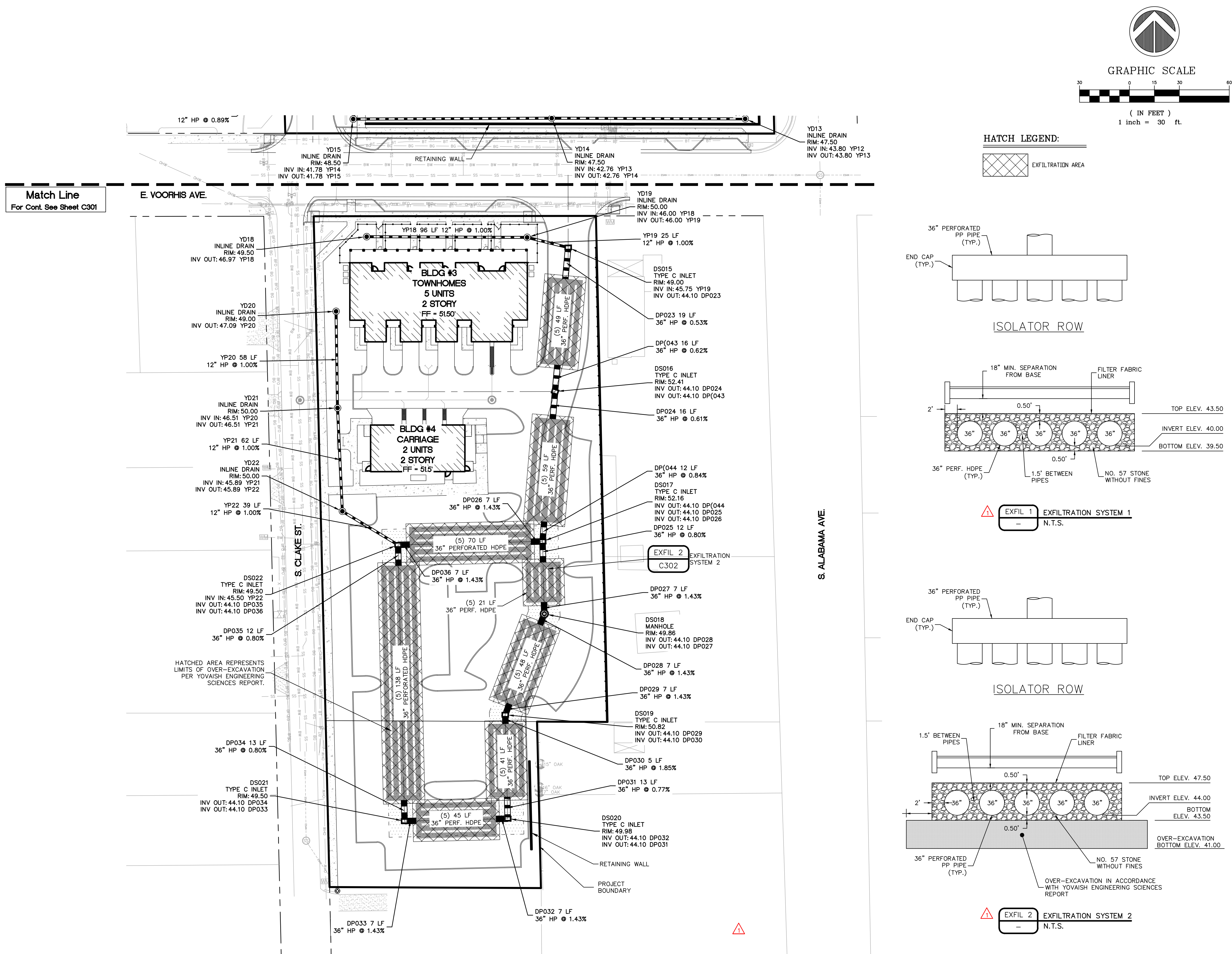
WILLIAM HENRY ZEH, P.E. #81427

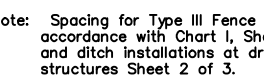
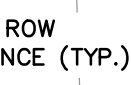
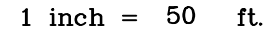
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C302





Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS



TYPE III SILT FENCE

Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF)

NOTES:
1. HAY OR STRAW BALES ARE PROHIBITED.

120 SILT FENCE
- N.T.S.

THE CONTRACTOR SHALL PERFORM EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF DELAND AND THE S.J.R.W.M.D., DETAILS CONTAINED IN THE PLANS, THE FOLLOWING NOTES AND AS DIRECTED BY THE ENGINEER.

1. STOCKPILING MATERIAL. NO EXCAVATING MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATERBODY OR STORMWATER COLLECTION FACILITY.

2. INLET PROTECTION – INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT– LADEN STORM RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATERBODY OR STORMWATER COLLECTION FACILITY.
 3. TEMPORARY SEEDING / STRIP SODDING – AREAS OCCUPIED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN THIRTY DAYS SHALL BE STRIP–SODDED ALONG ALL DEDICATED ROW's. THIS WILL PREVENT SEDIMENT RUNOFF FROM INDIVIDUAL LOTS INTO THE ROW AND DRAINAGE SYSTEMS, AND WILL NOT LATER COMPETE WITH THE PERMANENT LOT GRASSING.
 4. TEMPORARY SEEDING AND MULCHING – SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN NOTE 3 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA TO A DEPTH OF 4 INCHES.
 5. TEMPORARY GRASSING – THE SEEDED OR THE SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED AS REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.
 6. TEMPORARY REGRESSING – IF AFTER FOURTEEN DAYS, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75% GOOD GRASS COVER THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATION COVER.
 7. THE CONTRACTOR SHALL PLACE HAY BALES AROUND ALL EXISTING AND NEWLY CONSTRUCTED INLETS TO CONTROL EROSION DURING CONSTRUCTION.
 8. MAINTENANCE – ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.
- B. PERMANENT EROSION CONTROL

THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON OFF-SITE FACILITIES. ALL STORMWATER DISCHARGE FROM THE PROJECT LIMITS SHALL BE ROUTED THROUGH DETENTION BASINS TO TRAP SUSPENDED SEDIMENTS AND DISCHARGE FACILITIES FROM THESE BASINS SHALL BE PROVIDED WITH A SKIMMER DEVICE TO TRAP FLOATABLE DEBRIS.

1. PERMANENT SEEDING - ALL AREAS WHICH HAVE BEEN DISTURBED BY THE CONSTRUCTION WILL, AS A MINIMUM, BE FERTILIZED AND SEED.
2. PERMANENT SEEDING AND MULCHING - SLOPES OF 6:1 TO 4:1 INCLUSIVE WILL BE MULCHED WITH A UNIFORM THICKNESS OF APPROXIMATELY TWO INCHES, LOOSE MEASURE, OF MULCH MATERIAL INCORPORATED INTO THE SOIL BY MIXING TO A DEPTH OF FOUR INCHES.
3. PERMANENT SODDING - ALL RETENTION/DETENTION BASINS SHALL BE SODDED WITHIN THEIR LIMITS. ALL EXPOSED AREAS WITHIN PUBLIC RIGHT-OF-WAYS WILL BE SOLID SODDED. OTHER AREAS WITH AREAS WITH SLOPES STEEPER THAN 4:1 WILL BE SODDED.
4. STRIP SODDING - STRIP SOD SHALL BE PLACED ADJACENT TO ALL CURBS, WALKS AND PAVEMENTS.
5. REGRASSING - ALL GRASSED AREAS WILL BE MAINTAINED TO ASSURE A GOOD STAND AND SUFFICIENT GROUND COVER TO MINIMIZE EROSION. IF, AFTER 60 DAYS AN ADEQUATE GROUND COVER HAS NOT BEEN ESTABLISHED, THE AREA WILL BE REGRASSED.
6. ADDITIONAL FERTILIZATION - GRASSED AREAS NOT ACCEPTED WITHIN 90 DAYS OF THEIR COMPLETION SHALL BE FERTILIZED.
7. FOR ADDITIONAL SODDING REQUIREMENTS, REFER TO THE LANDSCAPE PLANS.

1. THE CONTRACTOR SHALL EXECUTE ALL MEASURES NECESSARY TO LIMIT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT TO THE VOLUME AND AMOUNT THAT ARE EXISTING PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THIS CONDITION WILL BE SATISFIED FOR THE TOTAL ANTICIPATED CONSTRUCTION PERIOD. PROVISION MUST BE MADE TO PRESERVE THE INTEGRITY GRADING PATTERNS, ETC. REQUIRED TO MAINTAIN PROTECTION THROUGHOUT THE LIFE OF THE CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE SILT BARRIERS, TEMPORARY GRASSING, ETC. AS REQUIRED TO FULLY COMPLY WITH THE INTENT OF THIS SPECIFICATION.

4. NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
5. THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL BE CONTROLLED, SO THAT THIS OPERATION WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.
6. INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT LADEN STORMWATER RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
7. AREAS OPENED BY CONSTRUCTION OPERATIONS THAT ARE NOT ANTICIPATED TO BE DRESSED OR RECEIVE FINAL GRASSING TREATMENT WITHIN THIRTY DAYS SHALL BE SEEDDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROTECT AGAINST EROSION. DURING CONSTRUCTION, WHEN IT IS PLANNED TEMPORARY SEEDING SHALL BE CONTROLLED SO AS TO NOT ALTER OR COMPLETE WITH PERMANENT GRASSING. THE RATE OF SEEDING SHALL BE 30 POUNDS PER ACRE.
8. THE SEEDDED OR SEEDDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED AS REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.
9. IF AFTER 14 DAYS, THE TEMPORARY GRASSES AREAS HAVE NOT ATTAINED A MINIMUM OF 75% GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED TO ESTABLISH THE DESIRED VEGETATION COVER.
10. ALL FEATURES OF THE PROJECT SHALL BE CONSTRUCTED TO PREVENT EROSION AND SEDIMENT AND SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION PROPERLY WITHOUT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT.
11. ALL DISTURBED AREAS OUTSIDE THE EXCAVATION AND FILL LIMITS WILL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THEIR CONDITION PRIOR TO CONSTRUCTION.
12. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL NEWLY PLANTED GRASSES OR VEGETATION AND RETENTION/DETENTION FACILITIES UNTIL THE WORK HAS BEEN ACCEPTED BY THE CITY.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF EMBANKMENTS AND SHALL REPLACE ANY PORTION, WHICH, IN THE OPINION OF THE ENGINEER, HAS BECOME DISPLACED DUE TO EROSION OR DUE TO CARELESSNESS OR NEGLIGENCE ON THE PART OF THE CONTRACTOR.
14. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS CONTROLLING POLLUTION OF THE ENVIRONMENT. MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PREVENT EROSION AND SEDIMENT RUNOFF FROM THE SITE DURING CONSTRUCTION. SUCH METHODS SHALL BE IN ACCORDANCE WITH THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
15. ABSOLUTELY NO WORK WILL BE ALLOWED WITHIN ANY CONSERVATION AREA, BUFFER AREA, MITIGATION AREA OR DESIGNATED WETLAND UNLESS SO SPECIFICALLY DESCRIBED BY THE PLANS AND GRANTED BY REASON OF PERMIT FROM THE GOVERNMENTAL ENTITY HAVING JURISDICTION OVER SAID AREA.
16. PRIOR TO CLEARING AND GRUBBING, THE LIMITS OF WETLANDS, BUFFERS WETLANDS, BUFFERS AND MITIGATION AREAS SHALL BE CLEARLY MARKED ALONG THE PROPOSED RIGHT OF WAY LINE TO PROTECT THESE AREAS FROM ENCROACHMENT FROM CONSTRUCTION ACTIVITIES.
17. ALL FILL EMBANKMENT AND GRADED AREAS SHALL BE PROTECTED AGAINST EROSION BY METHODS STATED IN SECTION 104, F.D.O.T. STANDARD SPECIFICATIONS FOR BRIDGE AND ROAD CONSTRUCTION. SIDE SLOPE MUST BE SEED AND MULCHED, PROVIDING THAT THE MULCH VARIATIONS ARE DISC HARROWED AND THE SIDE SLOPES ARE NEITHER GREATER THAN 3:1 NOR PART OF A DRAINAGE CONVEYANCE.
18. REFER TO POND DETAIL SHEETS FOR EROSION CONTROL MEASURES AT POND OUTFALLS.
19. EROSION CONTROL AT ALL INLET DRAINAGE STRUCTURES DURING CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH FDOT INLET NO. 102.
20. INSPECTIONS ON EROSION CONTROL MEASURES WILL BE PERFORMED BY THE CONTRACTOR ONCE PER WEEK AND WITHIN 24 HOURS AFTER 1/4 INCH OF RAINFALL. THE INSPECTIONS MUST BE LOGGED BY THE CONTRACTOR AND KEPT WITH THE APPROVED PLANS AND SWPPP.
21. GRAVEL CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO MINIMIZE EXPORT OF ONSITE DIRT. IF GRAVEL IS NOT ALLOWED, THE CONSTRUCTION ENTRANCES SHALL BE SWEEP PERIODICALLY AND LOGGED BY THE CONTRACTOR.



FOR

DELAND COMMONS

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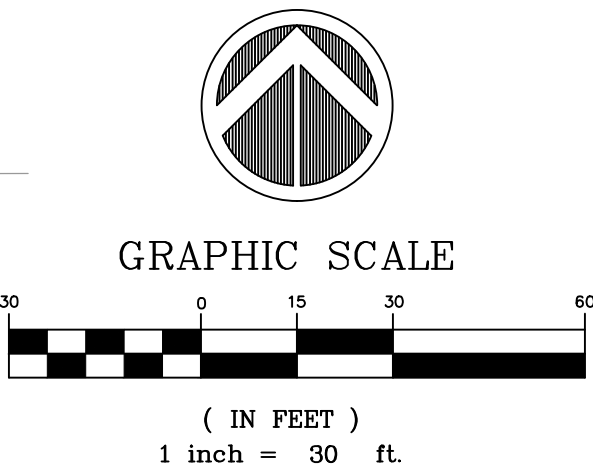
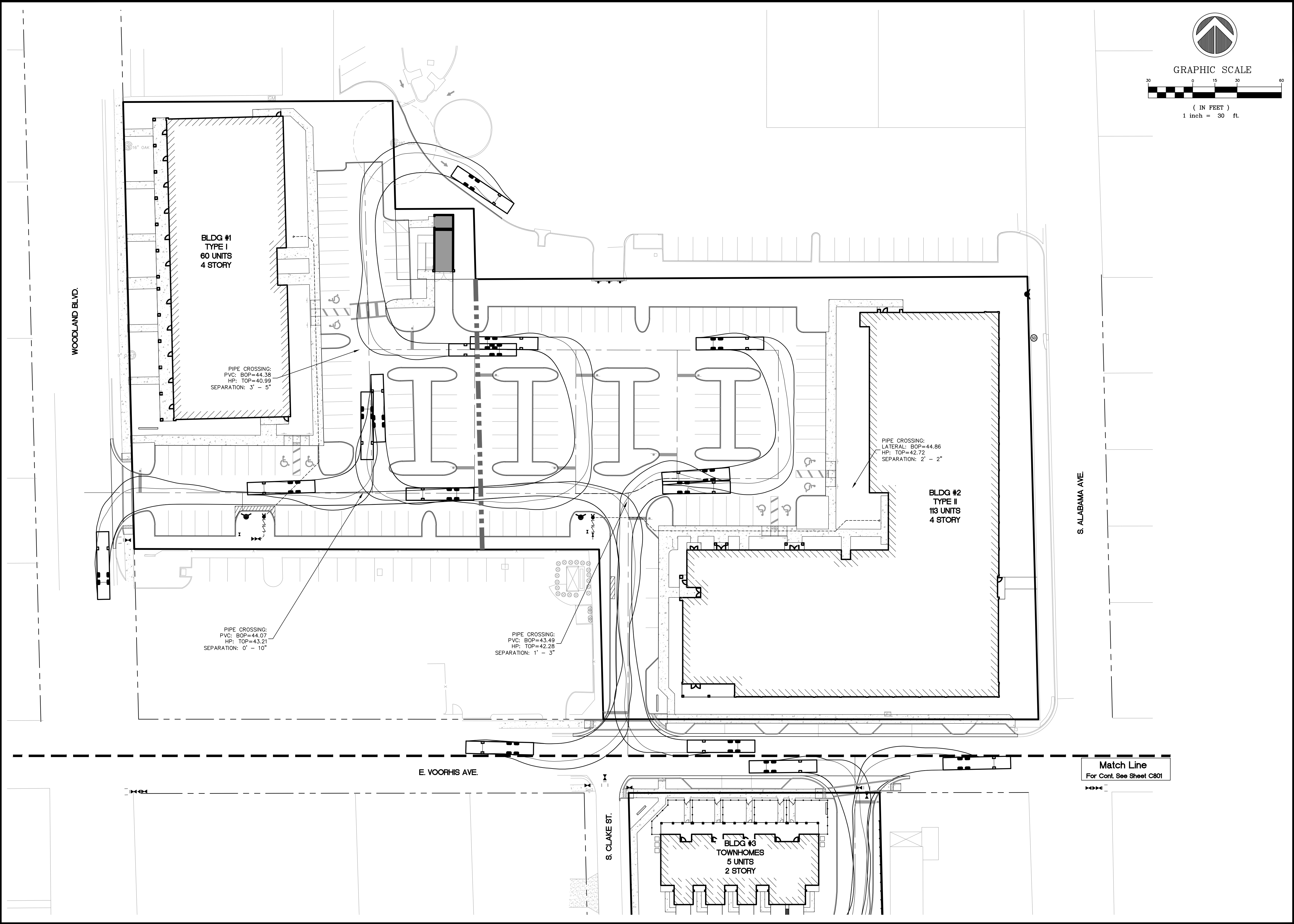
ENGINEER IN CHARGE:

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JOB # 18029
DATE: 06/17/2022
SCALE: 1"=50'
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C700



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VEHICULAR CIRCULATION PLAN
FOR
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CITY OF DELAND
FLORIDA

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August 23, 2022
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NO.	DATE	REVISIONS
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C800



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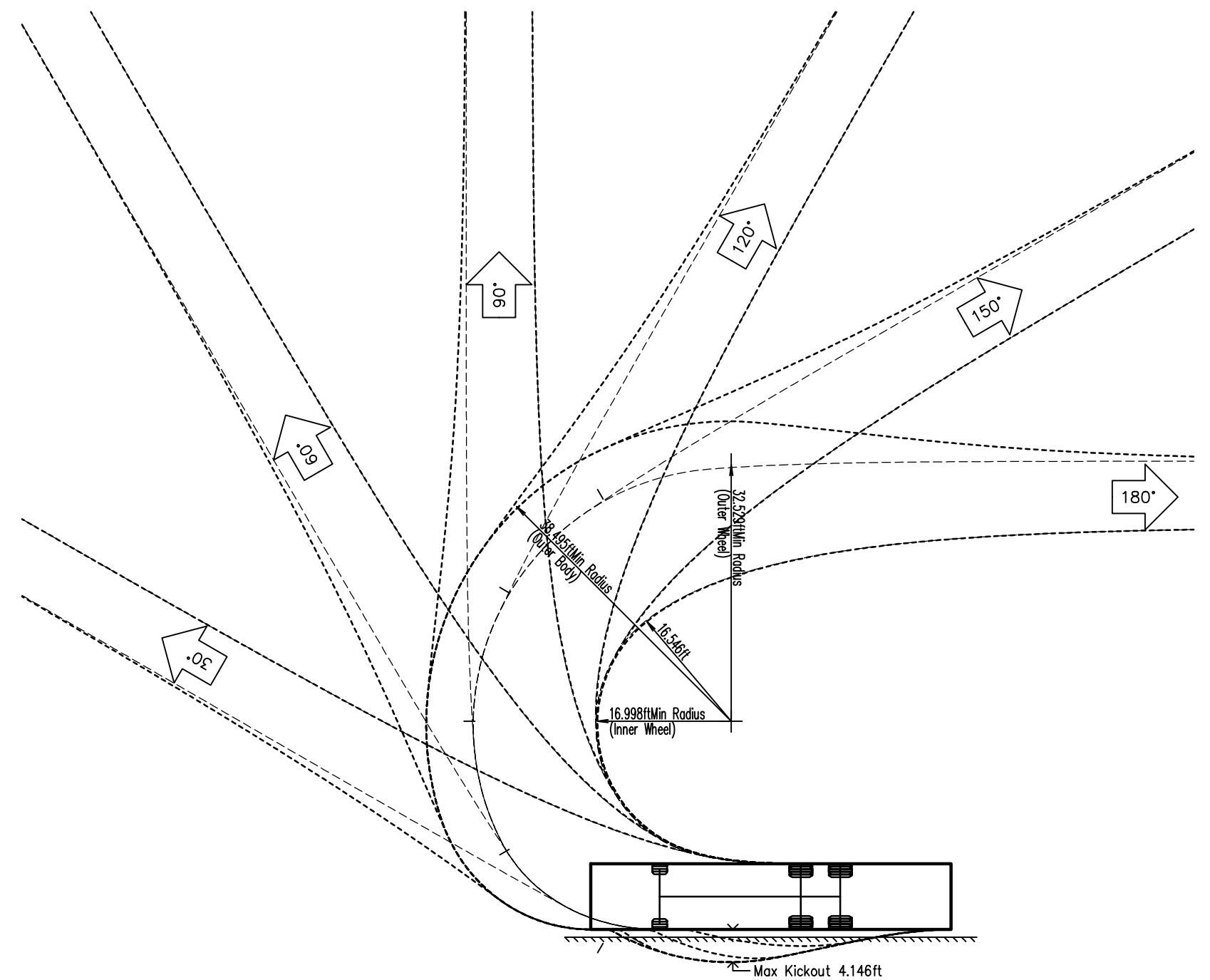
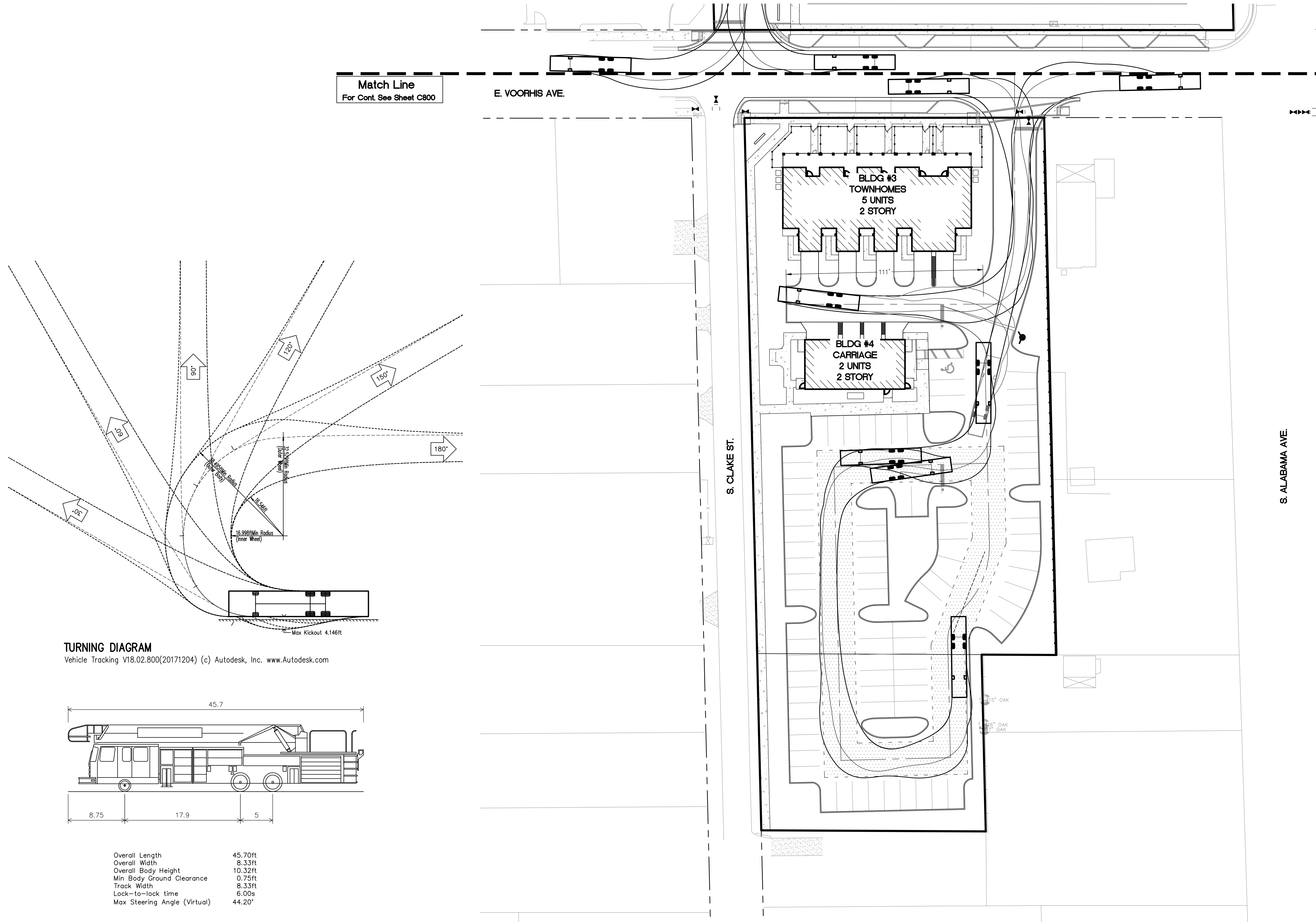
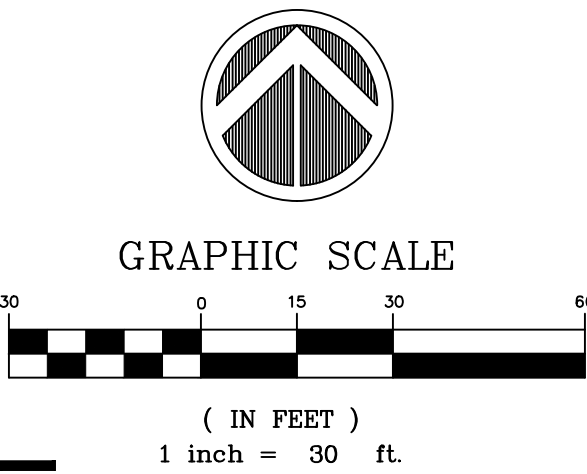
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August 23, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

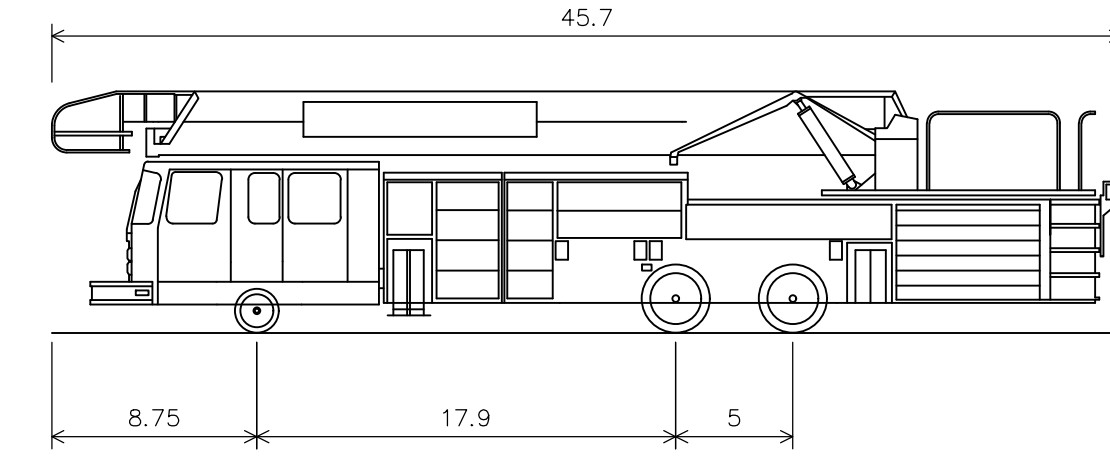
NO.	DATE	REVISIONS
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2	06/17/2022	REVISED
3	06/17/2022	REVISED
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8	06/17/2022	REVISED
9	06/17/2022	REVISED
10	06/17/2022	REVISED
11	06/17/2022	REVISED

JOB # 18029
DATE: 06/17/2022
SCALE: 1"=30'
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C801



TURNING DIAGRAM
Vehicle Tracking V18.02.800(20171204) (c) Autodesk, Inc. www.Autodesk.com

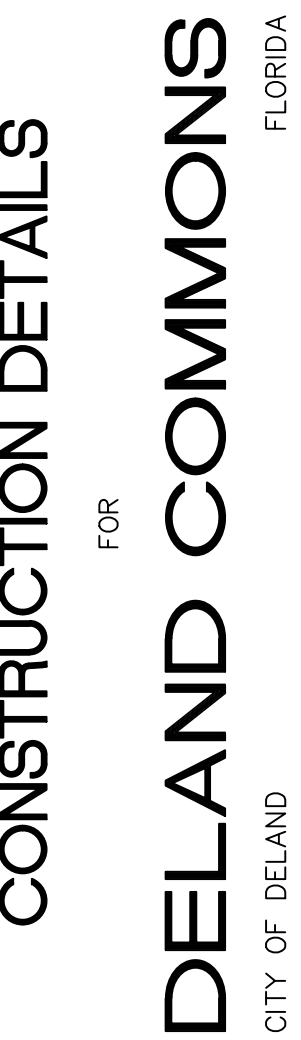
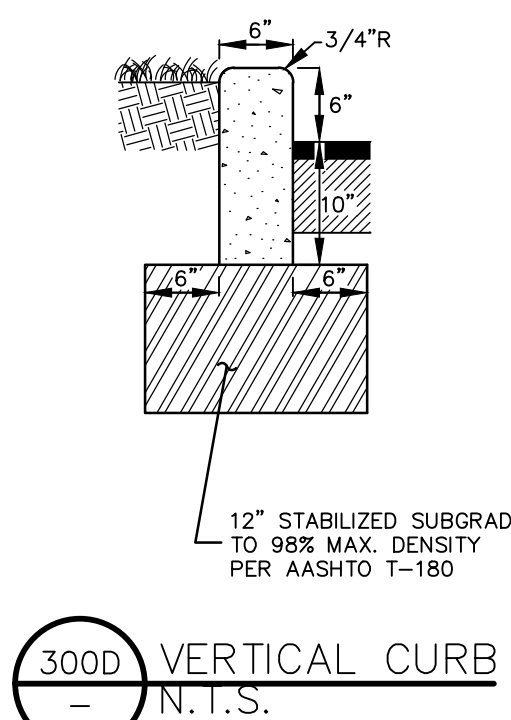
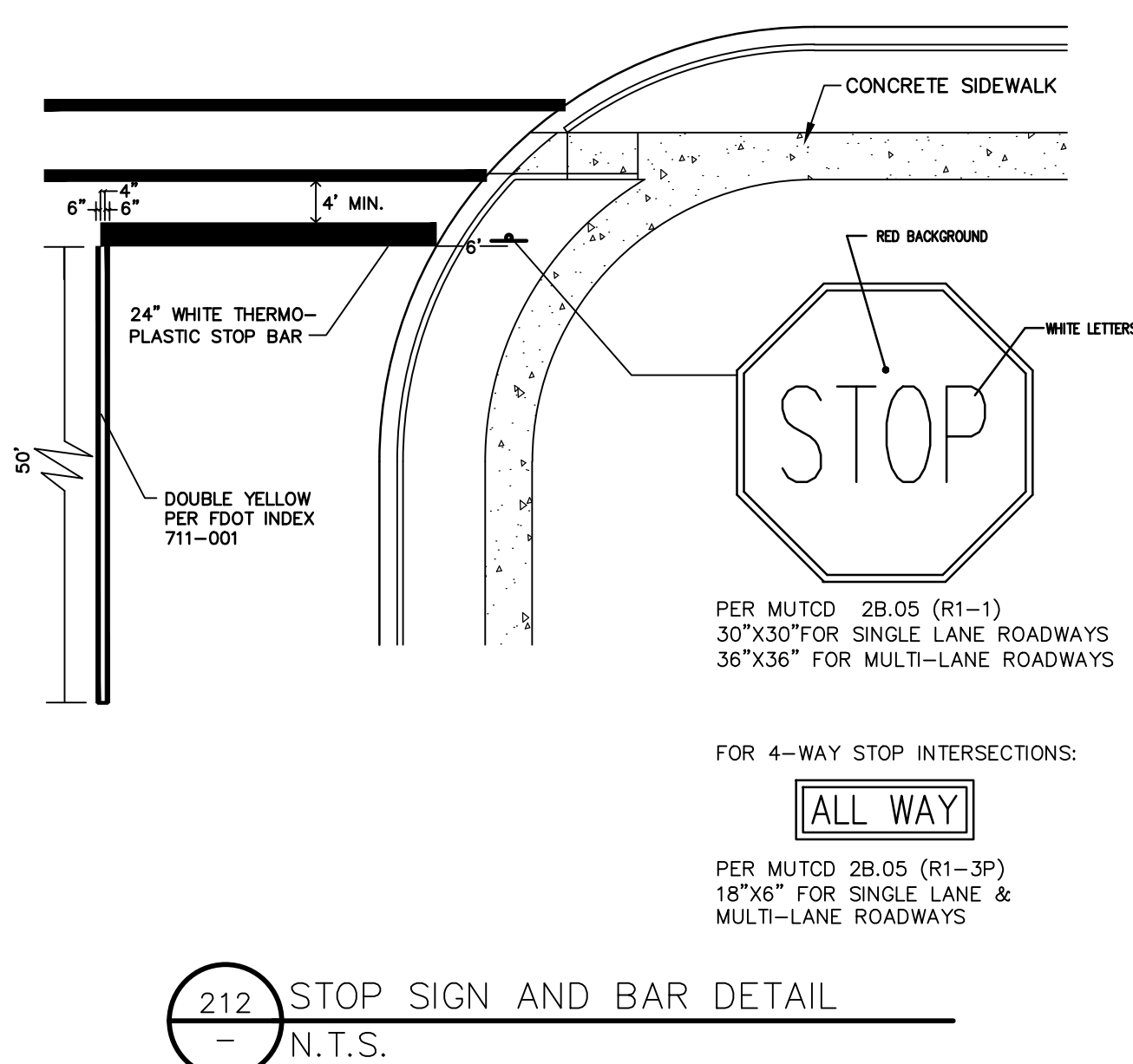
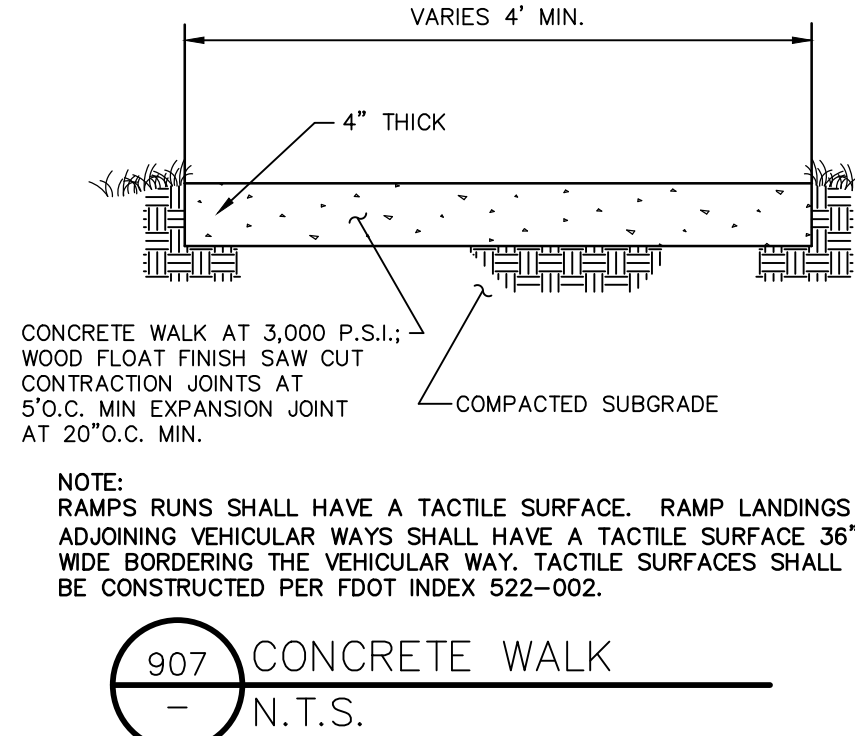
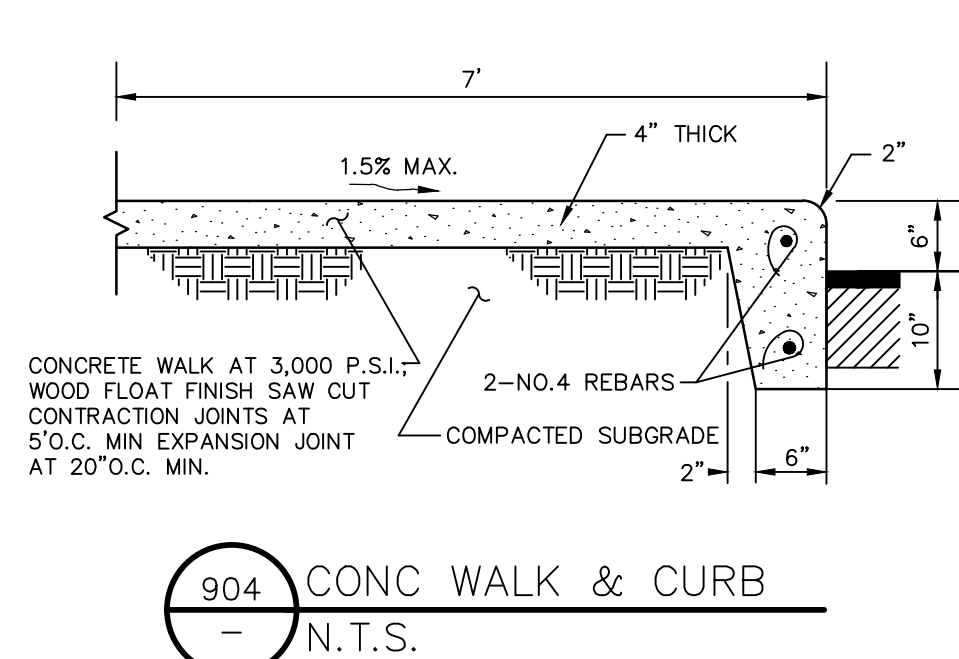
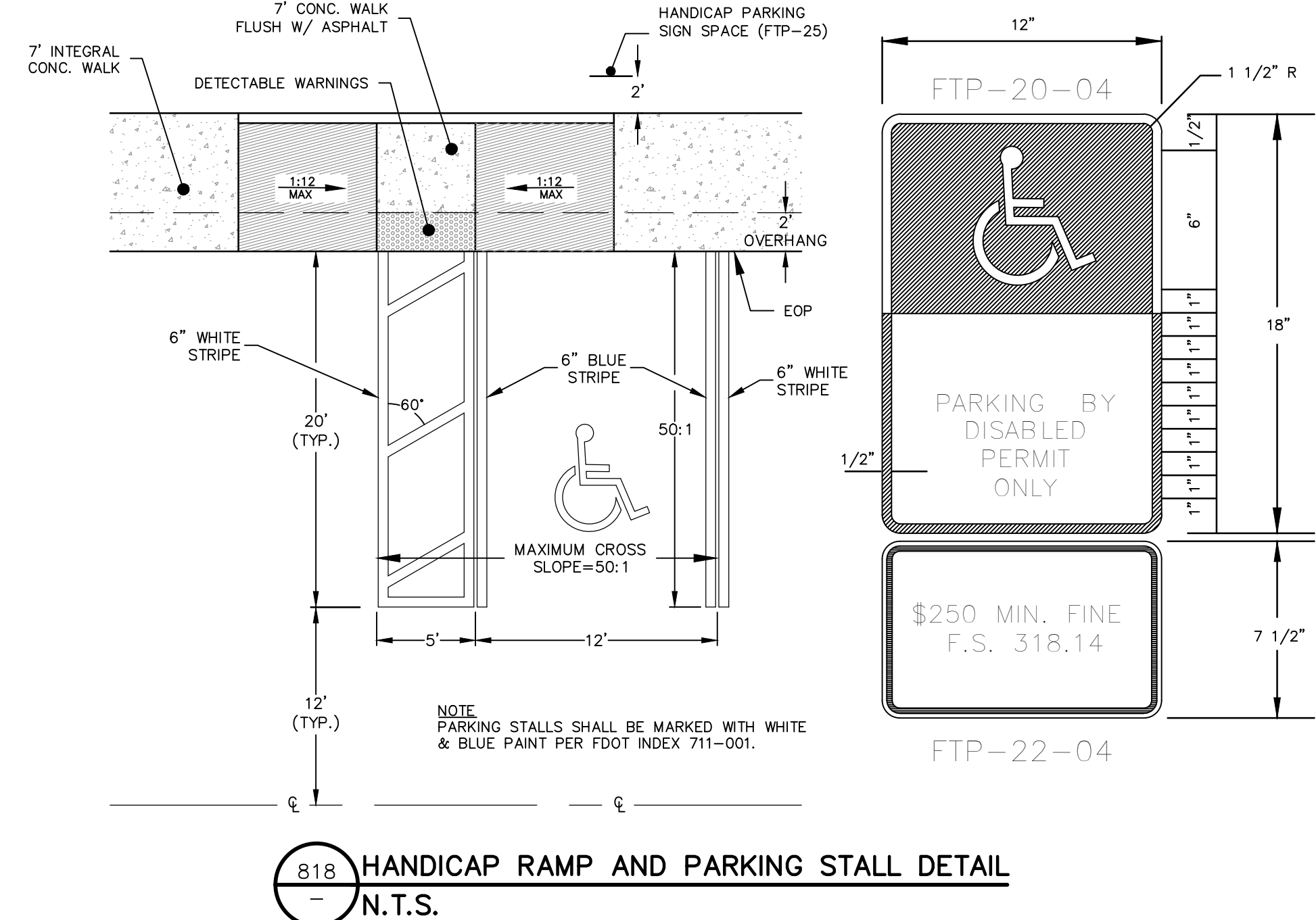


Overall Length	45.70ft
Overall Width	8.33ft
Overall Body Height	10.32ft
Min Body Ground Clearance	0.75ft
Track Width	8.33ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	44.20°



2 INCHES OF FLORIDA DOT ASPHALTIC CONCRETE MIX OF TYPE S-III AND COMPACTED TO A MINIMUM DENSITY OF 95 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY THE MARSHALL STABILITY TEST METHOD (ASTM D6927-04).

12" OF STABILIZED SUBGRADE, MINIMUM LBR EQUAL TO 40, AND COMPACTED TO A MINIMUM DENSITY EQUIVALENT TO 98 PERCENT OF THE SOIL'S MODIFIED PROCTOR DENSITY VALUE AS DETERMINED BY AASHTO T-180 TEST METHOD.



DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

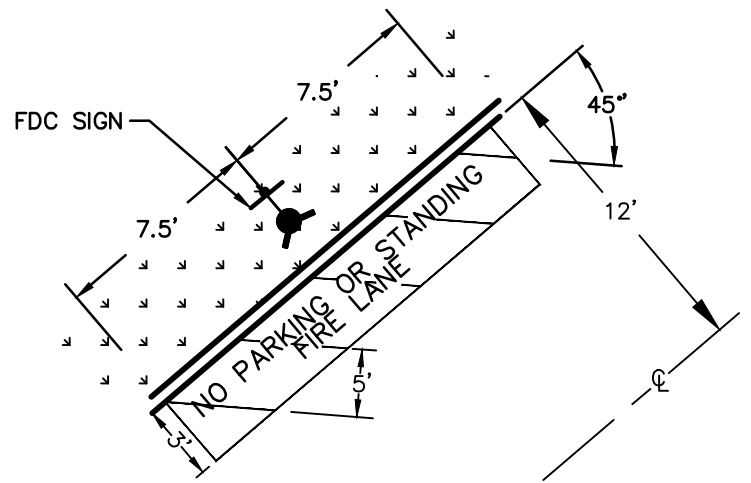
ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
August 23, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-00077

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	DATE	REVISIONS

JOB # _____ 18029
DATE: _____ 06/17/2022
SCALE: _____ AS SHOWN
DESIGNED BY: _____ PAB
DRAWN BY: _____ PAB
APPROVED BY: _____ WHZ

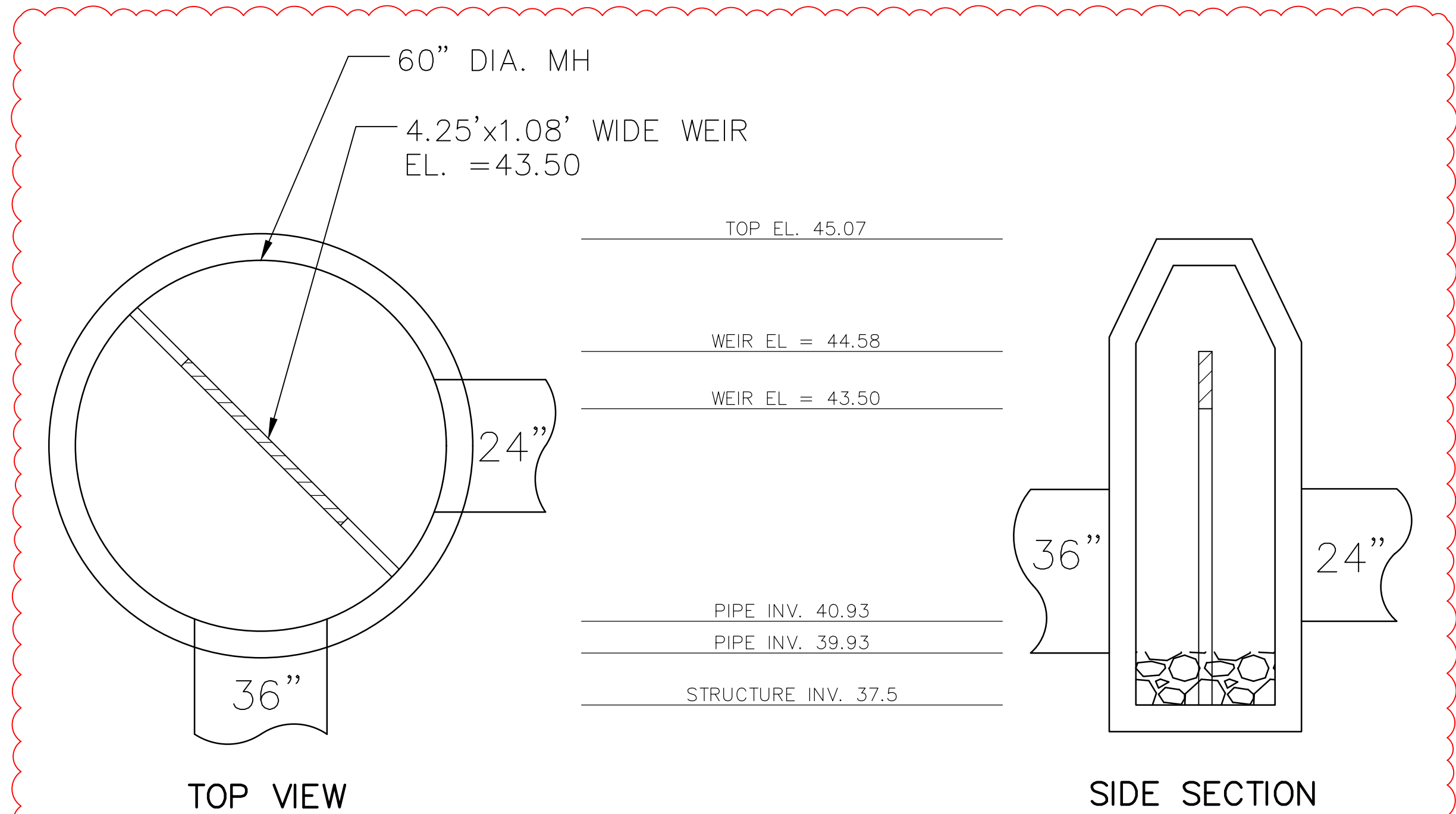
C900



FIRE LANE STRIPING TO MEET THE FOLLOWING DESIGN CTITERIA

MARKING COLOR: SAFETY YELLOW
MATERIAL: ADHESIVE THERMOPLASTIC
STRIPES: 4-INCHES WIDE, CENTERED
5- FEET APART, TO EXTEND
3- FEET FROM CURB OR BUILDING, AND BE
SLANTED
AT 45° (AGAINST
THE FLOW OF TRAFFIC).
THE LINES OF EACH LETTER SHALL BE 4-INCHES
WIDE,
EACH LETTER SHALL BE 18 TO 24-INCHES HIGH.
MESSAGE: "NO PARKING OR STANDING - FIRE LANE
LOCATION: CENTRED IN FRONT OF ANY FIRE HYDRANT OR
FIRE DEPARTMENT CONNECTION.

923 FIRE LANE STRIPING
N.T.S.



CS1 CONTROL STRUCTURE
N.T.S.

STATE OF FLORIDA E&SC DESIGNER & REVIEWER MANUAL, LATEST EDITION: JULY 2013

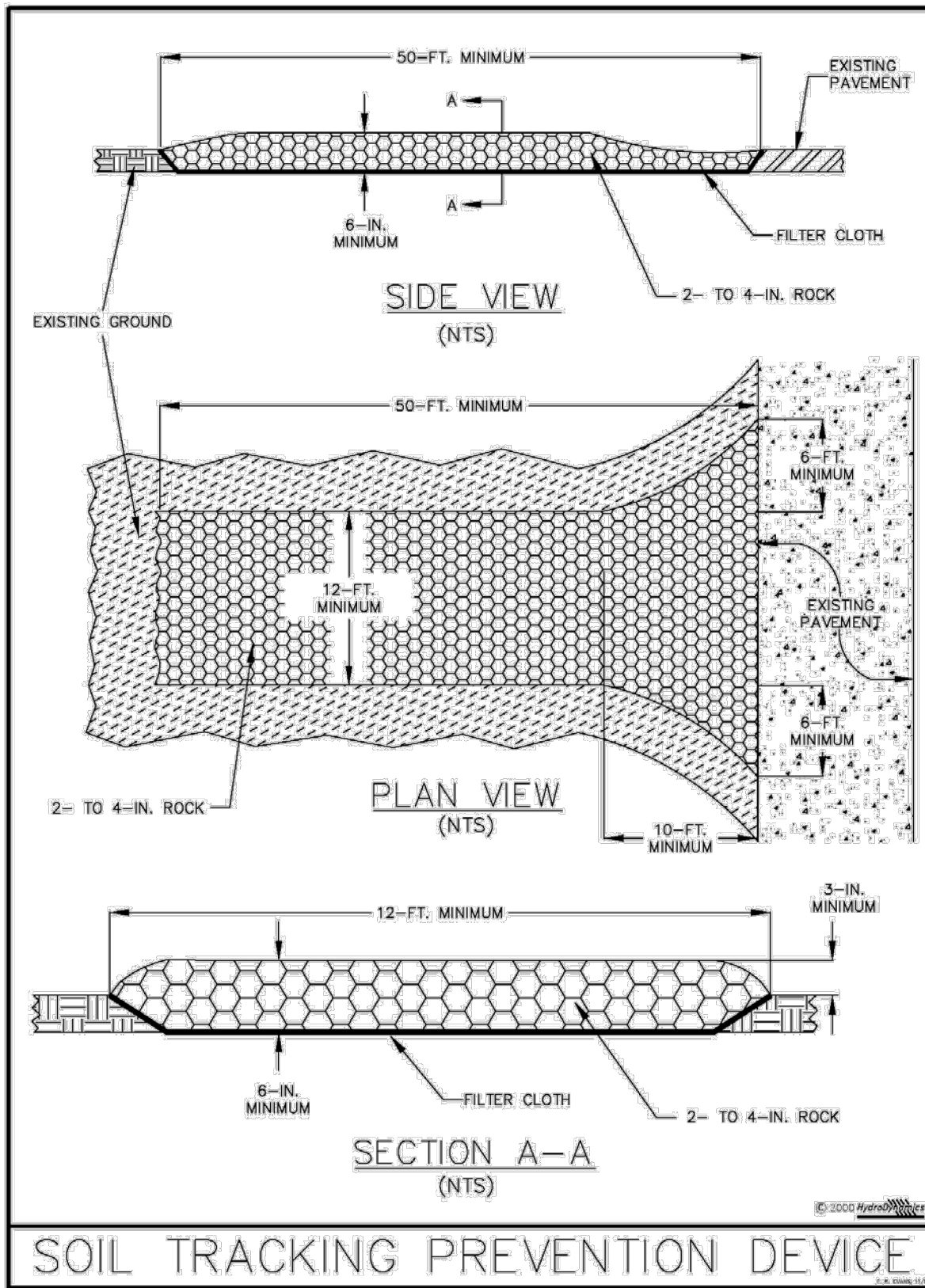
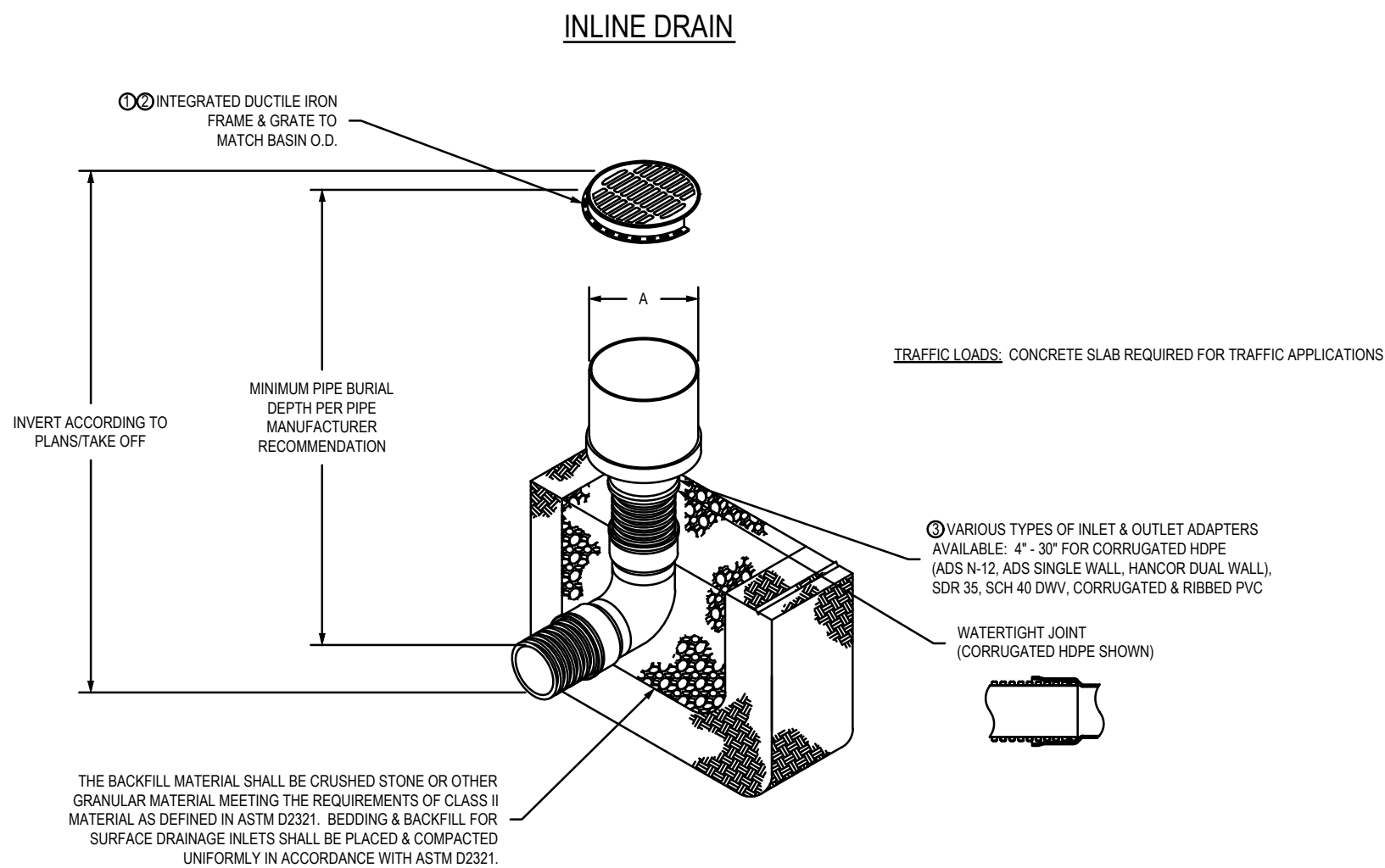
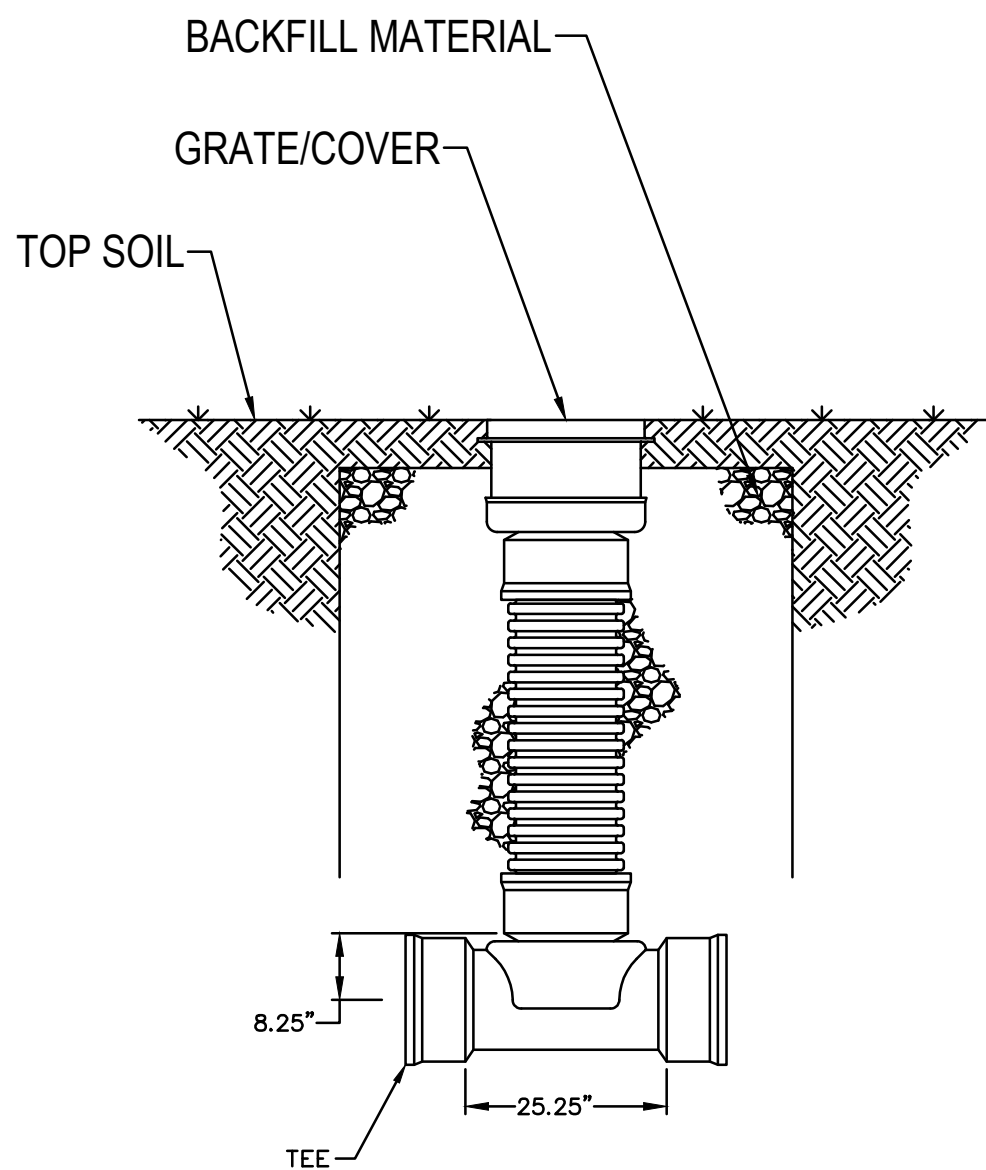


Figure V-19: Illustration of a Soil Tracking Prevention Device

106 SOIL TRACKING PREVENTION DEVICE
N.T.S.



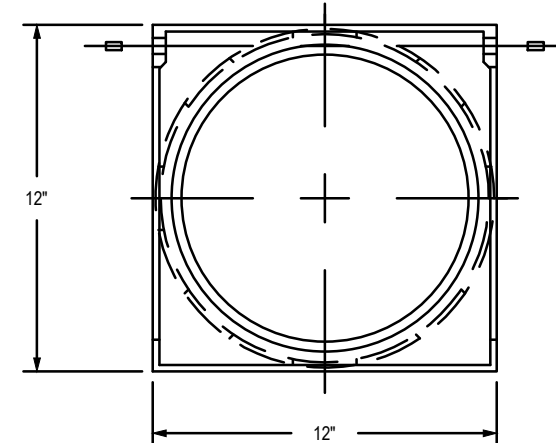
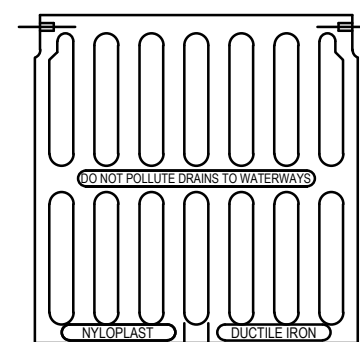
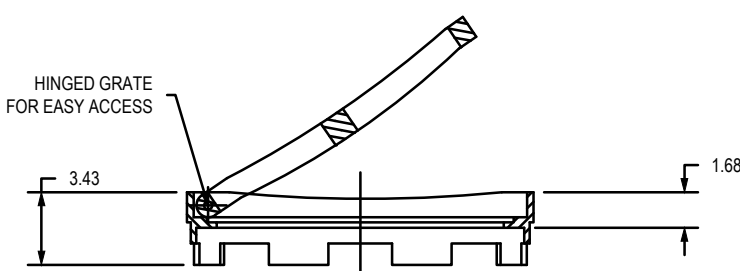
12" - 30" GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
DRAINAGE CONNECTION (T&B JOINT) TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR
CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
4" GRATES SHALL MEET H-20 LOAD RATING FOR 12" - 24" PED



NOTE:
1. FLAT GRATE FOR PAVED AREAS ONLY, DOME GRATE TO BE
USED FOR ALL OTHER APPLICATIONS.

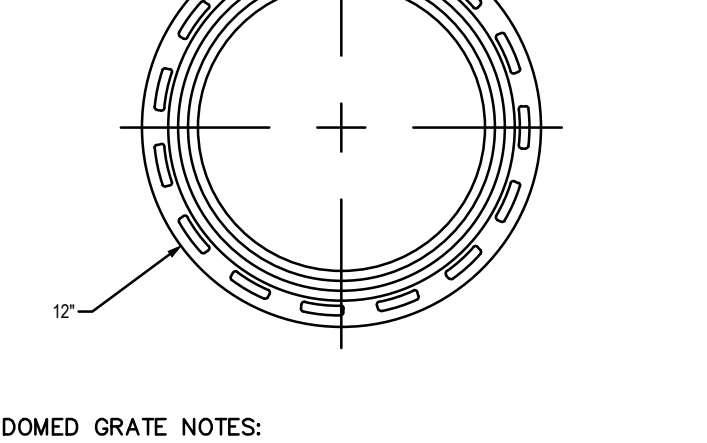
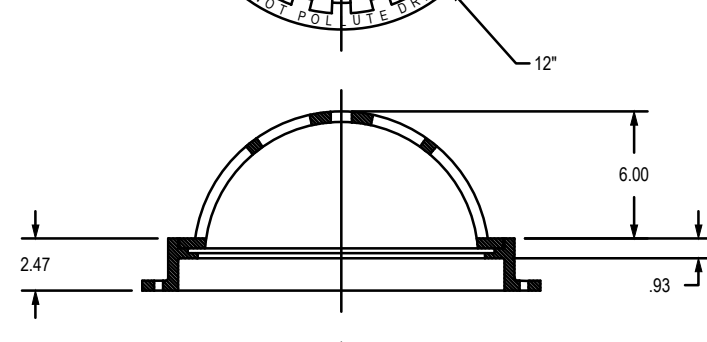
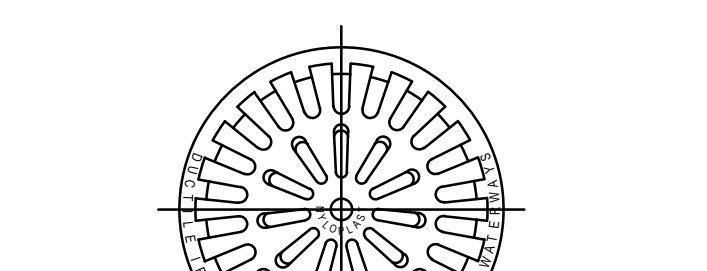
985 YARD DRAIN DETAIL
N.T.S.

FLAT GRATE
APPROX. DRAIN AREA = 92.70 SQ IN
APPROX. WEIGHT WITH FRAME = 59.62 LBS



FLAT GRATE NOTES:
1. ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE.
2. GRATE MEETS H-20 LOAD RATING.
3. MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05.
4. CASTINGS SHALL BE FURNISHED WITH BLACK PAINT.

DOMED GRATE
APPROX. DRAIN AREA = 115.49 SQ IN
APPROX. WEIGHT WITH FRAME = 47.30 LBS



DOMED GRATE NOTES:
1. ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE.
2. MATERIAL SHALL CONFORM TO ASTM A536 GRADE 70-50-05.
3. CASTINGS SHALL BE FURNISHED WITH BLACK PAINT.



CONSTRUCTION DETAILS
FOR
DELAND COMMONS
CITY OF DELAND
FLORIDA

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
August 23, 2022

CERTIFICATE OF AUTHORIZATION NO. CA-0007723

108/02/22H REVISED PER CITY COMMENTS

JOB # 18029
DATE: 06/17/2022
SCALE: AS SHOWN
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C901



DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
August 23, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-000772

	DATE	REVISIONS
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JOB # _____
18029

DATE:
06/17/2022

SCALE:
N.T.S.

DESIGNED BY:
PAB

DRAWN BY:
PAB

APPROVED BY:
WHZ

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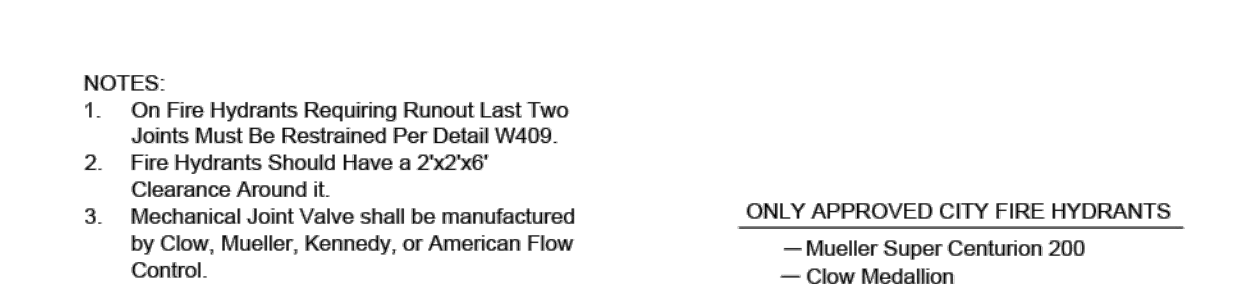
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TO SCALE
ERIC SAMPSON

ENGINEER IN CHARGE:

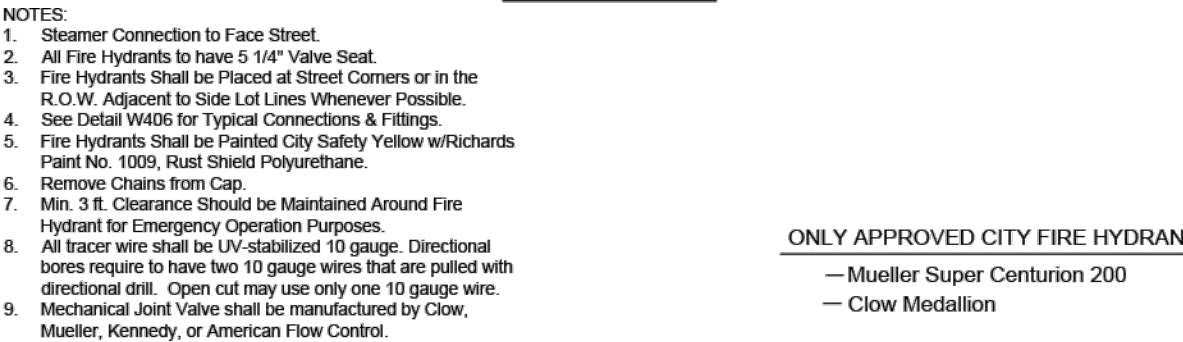
drive letter/details locations

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Notes:

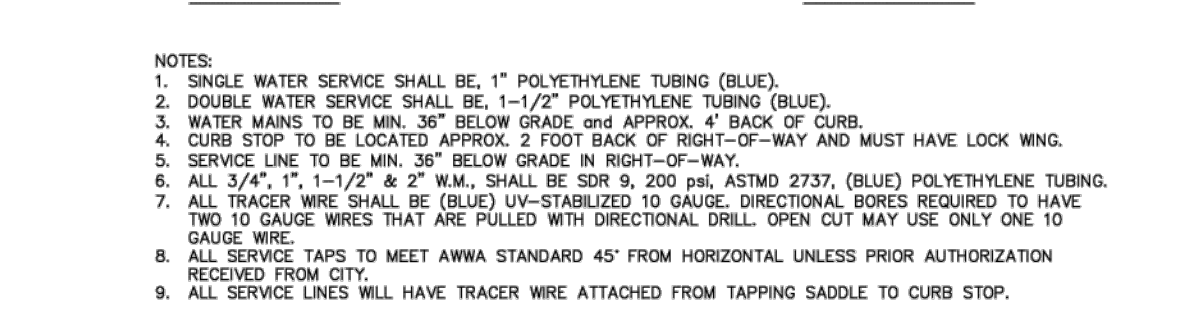
1. All tracer wire shall be UV-stabilized 10 gauge. Directional bores require to have two 10 gauge wires that are pulled with directional drill. Open cut may use only one 10 gauge wire.
2. Mechanical Joint Valve shall be manufactured by Clow, Mueller, Kennedy, or American Flow Control.



NOM PIPE SIZE	ELBOWS (deg.)				VALVE TEES
11.25	22	45	90		
4	3	5	8	12	9
6	4	6	10	15	11
8	4	7	13	20	14
10	5	9	15	25	18
12	6	10	17	29	21
16	6	13	26	43	26
18	9	17	36	56	38
20	10	19	39	64	43
24	11	22	45	109	145

NOTE: THRUST RESTRAINT ON SLURPORT DUCTILE IRON PIPE SHALL BE U.S. PIPE FLEX LOCK GASKETS FOR TYTON JOINT PIPE OF AMERICAN FLEX JOINT GASKETS FOR AMERICAN FASTITE PIPE. THRUST RESTRAINT ON DUCTILE IRON FITTING SHALL BE PROVIDED BY THE USE OF MECHANICAL RETAINERS AND MECHANICAL JOINT FITTINGS.

20	8	16	33	80	85
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2. Mechanical Joint Valve shall be manufactured by Clow, Mueller, Kennedy, or American Flow Control.



DELAND COMMONS PARTNERS, LTD.,
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
June 17, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

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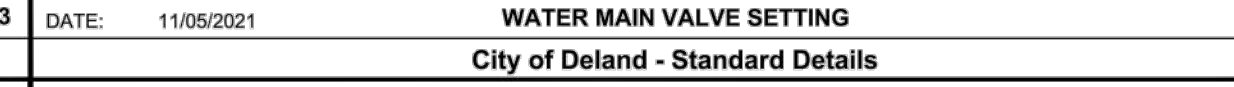
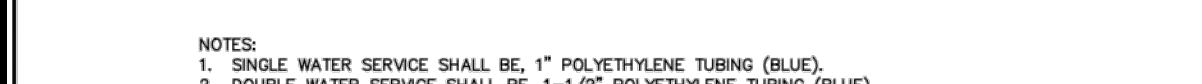
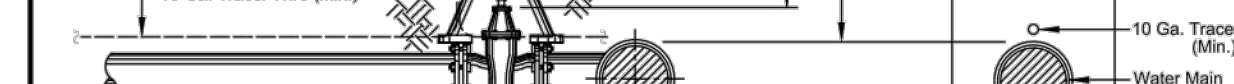
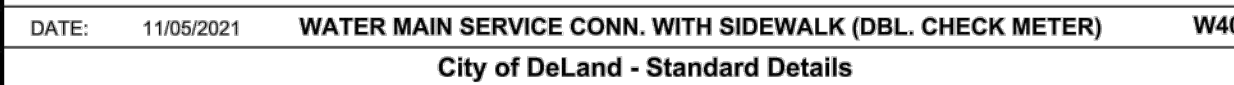
JOB # 18029
DATE: 06/17/2022
SCALE: N.T.S.
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

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N.T.S.		10		
PAB		11		
PAB			DATE	REVISIONS
WHZ				



LE: WATER SYSTEM DETAILS (Sheet 1)

FILE: *drive letter/details locations*





FOR

FLORIDA

(407) 741-8500

June 17, 2022

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C911



DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427

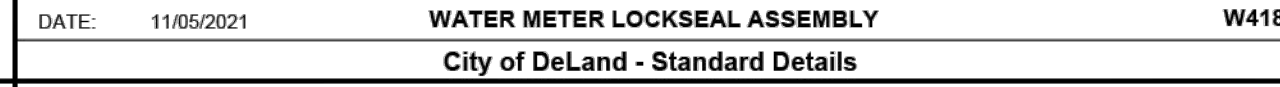
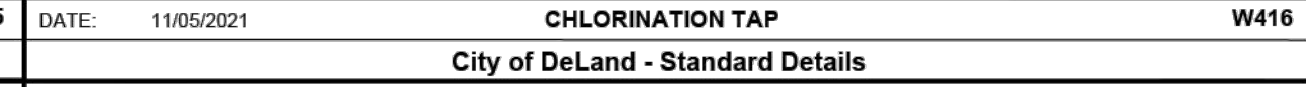
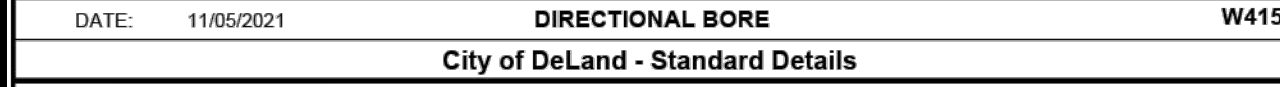
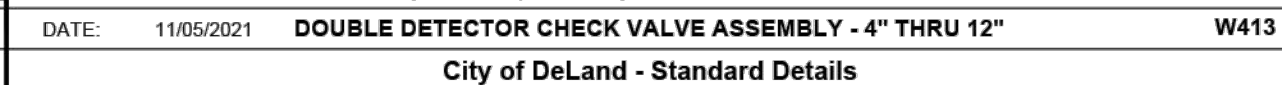
August 23, 2022

CERTIFICATE OF AUTHORIZATION NO. CA-0007723

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JOB # _____ 18029
DATE: _____ 06/17/2022
SCALE: _____ N.T.S.
DESIGNED BY: _____ PAB

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SCALE: NOT TO SCALE	DATE: 11/05/2021
DRAWN BY: EDIC SAMPSON	CHECKED BY: NAME

WATER SYSTEM DETAILS (Sheet 2)

FILE: *drive letter/details locations*

FIRE HYDRANT

LEFT TRAVEL LANE

RIGHT TRAVEL LANE

BLUE RAISED PAVEMENT MARKER, GLUED WITH (2) PART EPOXY (E-BOND) OR EQUIV. TO THE CENTERLINE OF PAVED TRAVEL LANE IN FRONT OF ALL FIRE HYDRANT LOCATIONS. (per MUTCD and FDOT Specifications)

DATE: 11/05/2021 REFLECTIVE PAVEMENT MARKER FOR FIRE HYDRANT LOCATION W423

City of DeLand - Standard Details

Approved Ford Valve for Service Lines

1" SERVICE

Pack Joint for Copper or Plastic Tubing (CTS) Inlet by Meter Swivel Nut

CATALOG NUMBER	VALVE SIZE	SERV. LINE SIZE	METER SIZE	APPROX. WT. LBS.
B43-211W-NL	5/8"	1/2"	5/8"x3/4" & 3/4"	1.4
B43-212W-NL	5/8"	1/2"	5/8"x3/4" & 3/4"	1.5
B43-211W-NL	5/8"	3/4"	5/8"	1.6
B43-232W-NL	5/8"	3/4"	5/8"x3/4" & 3/4"	1.7
B43-331W-NL	3/4"	3/4"	5/8"	2.1
B43-332W-NL	3/4"	3/4"	5/8"x3/4" & 3/4"	2.4
B43-334W-NL	3/4"	3/4"	1"	2.3
B43-341W-NL	3/4"	1"	5/8"	2.7
B43-342W-NL	3/4"	1"	5/8"x3/4" & 3/4"	2.4
B43-344W-NL	3/4"	1"	1"	2.7
B43-444W-NL	1"	1"	1"	3.2
B43-454W-NL	1"	1-1/4"	1"	3.4

2" SERVICE

Pack Joint for Copper or Plastic Tubing (CTS) by Female Iron Pipe Thread

CATALOG NUMBER	VALVE SIZE	CTS END	FIP END	APPROX. WT. LBS.
B41-333-NL	3/4"	3/4"	3/4"	2.0
B41-334-NL	3/4"	3/4"	1"	2.1
B41-343-NL	3/4"	1"	3/4"	2.2
B41-344-NL	3/4"	1"	1"	2.4
B41-344-4-875-NL	3/4"	1"	1"	3.1
B41-444-NL	1"	1"	1"	2.8
B41-454-NL	1"	1-1/4"	1"	3.2
B41-455-NL	1"	1-1/4"	1-1/4"	3.7
B41-555-NL	1-1/4"	1-1/4"	1-1/4"	5.6
B41-666-NL	1-1/2"	1-1/2"	1-1/2"	7.0
B41-677-NL	1-1/2"	2"	2"	9.6
B41-777-NL	2"	2"	2"	11.1

DATE: 11/05/2021 VALVE FOR WATER AND RECLAIM SERVICE LINE W424

City of DeLand - Standard Details

Approved Muller Valve for Service Lines

1" SERVICE

P-24350N

Mueller 300 Ball Straight Meter Valve
Mueller Pack Joint Connection for CTS O.D.* tubing x meter swivel nut**.
Quarter turn check - lock wing; 360° turn option available by adding -3 suffix to catalog number.
Example: P-24350-3

Catalog size	3/4"x5/8" R	3/4" R	3/4"	5/8"x3/4"x1"	1" R	1"
Meter size	5/8"	5/8"x3/4", 3/4"	5/8"x3/4", 3/4"	5/8"x3/4", 3/4"	1"	1"
Tubing size	3/4"	3/4"	3/4"	1"	1"	1"

2" SERVICE

P-25172N

Mueller 300 Ball Curb Valve
Inlet: Mueller Pack Joint
Connection for CTS O.D.* tubing
Outlet: F.I.P. thread
Quarter turn check-this valve may be ordered with 360° turn option by adding -3 to end of catalog number
(P-25172-3)

3/4"R	3/4"	1"R	1"	1-1/2"	2"

DATE: 11/05/2021 VALVE FOR WATER AND RECLAIM SERVICE LINE W425

City of DeLand - Standard Details

P.T. 2x4 POST

ALL CURB STOPS SHALL BE BULLET LOCKED OFF BY THE CONTRACTOR. SEE CITY DETAIL W418

1" CTS CURB STOP B43-342W-NL

2" CTS CURB STOP B41-777-NL

B-25172N

NEW 1" CTS OR 2" CTS BLUE SERVICE WHIP

10 GAUGE BLUE UV-STABILIZED TRACER WIRE

TIE STRAPS - SECURELY FASTENED TO 2x4 POST, TYP. OF 3

48" Above Grade

36" Min. Above Grade

DATE: 11/05/2021 NEW POTABLE SERVICE WHIP W426

City of DeLand - Standard Details

CITY OF DELAND, FLORIDA

1102 S. GARFIELD AVENUE, DELAND, FLORIDA 32724

WATER SYSTEM DETAILS (Sheet 3)

FILE: drive letter/details locations

SCALE: NOT TO SCALE

DRAWN BY: ERIC SAMPSON

CHECKED BY: NAME

DATE: 11/05/2021

DATE: 11/05/2021

CHECKED BY: NAME

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

CITY DETAILS FOR
DELAND COMMONS
CITY OF DELAND, FLORIDA

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:
WILLIAM HENRY ZEH, P.E. #81427
June 17, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-002723

NO.	DATE	REVISIONS
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JOB # 18029
DATE: 06/17/2022
SCALE: N.T.S.
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C912

3M LOCATING MARKER BALLS PROGRAMMABLE AND NON-PROGRAMMABLE NOTES:

- Programmable and Non-Programmable Marking Balls will be used on all Sewer, Potable and Reclaim projects
- For information on the Programmable and Non-Programmable Balls that the City requires see spec sheet for details
- Programmable Balls will be placed at all fittings ie. Tees, Couplings, 90, 45, and 22.
- Information will be recorded on a spread sheet. For information that needs to be recorded see spec sheet for an example template for the 3M Marker Balls
- Non-Programmable Marking Balls will used as follow:

- Potable: End of Service Line when buried
- Wastewater: Ball will be placed at the curb line to mark lateral location prior to end of service.
- Reclaim: End of Service Line when buried

- Desired bury depth is 1.5 feet to 3 feet. Five foot is the maximum depth for these devices

1420-LOCATER FOR MARKER BALLS

3M™ Dynatel™ Electronic Marker System (EMS) Marker Locators 1420 series is microprocessor-based systems that quickly and efficiently locate underground markers—years after construction or maintenance. -

The 3M™ Dynatel™ 1420 Marker Locators are designed to be accurate, fast and integrated allowing you to accurately and easily:

- Locate, read and write to 3M iD markers
- Pinpoint the depth and location of all existing models of properly installed underground passive EMS markers
- Conduct direct depth reading of markers
- Locate two different marker frequencies simultaneously

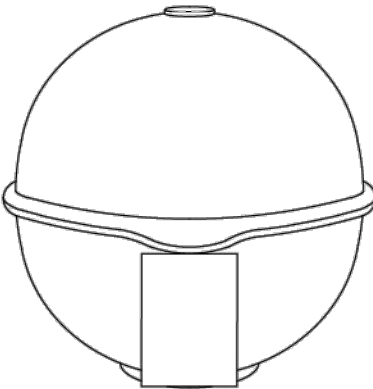
Specifications

2200RB Rechargeable Battery Not Included
Cable/Pipe Locate No
Carrying Bag Included No
Coupler Size No Coupler
Direct Connect Cable N/A
EMS Caution Tape Finding Capability No
Family 1420 Series
Fault Finding Capability No
Locator Type Marker

2200RB Rechargeable Battery Not Included
Cable/Pipe Locate No
Carrying Bag Included No
Coupler Size No Coupler
Direct Connect Cable N/A
EMS Caution Tape Finding Capability No
Family 1420 Series
Fault Finding Capability No
Locator Type Marker

3M DYNATEL LOCATING AND MARKING ELECTRONIC MARKER SYSTEM:

1423-XR/ID-POTABLE



The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

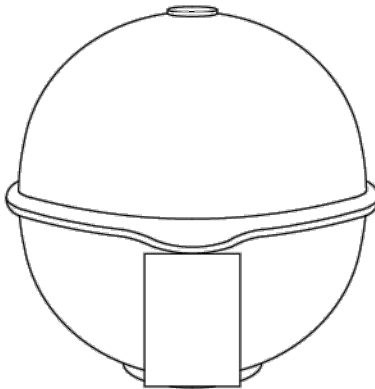
Featured Benefits

- Positive identification of underground water facilities
- iD Marker allows for programming of customer specific information
- Unique self leveling design simplifies installation
- No external power source needed
- Resistant to elements
- 5 foot (1.5 meter) detection distance
- Color conforms to APWA standards

SPECIFICATIONS:

COLOR: BLUE
DIAMETER (METRIC): 10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY: N/A
MARKER DEPTH: 5 FEET (1.5M)
MARKER DIMENSION (INCH): 4 INCH DIAMETER
MARKER TYPE: BALL
PROGRAMMABLE/PASSIVE: PROGRAMMABLE
RANGE: 0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant: UNDETERMINED
RoHS EU Comments: CONTACT 3M FOR INFORMATION
Solution for: ACCESS NETWORK: xDSL, LONG-HAUL/METRO
LOOP NETWORK: OUTDOOR
WIRELESS NETWORK: BACKHAUL

1424-XR/ID-SEWER



The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

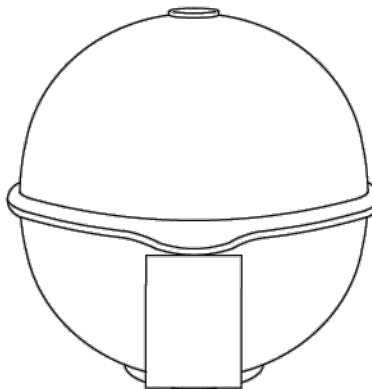
Featured Benefits

- Positive identification of underground wastewater facilities
- iD Marker allows for programming of customer specific information
- Unique self leveling design simplifies installation
- No external power source needed
- Resistant to elements
- 5 foot (1.5 meter) detection distance
- Color conforms to APWA standards

SPECIFICATIONS:

COLOR: GREEN
DIAMETER (METRIC): 10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY: N/A
MARKER DEPTH: 5 FEET (1.5M)
MARKER DIMENSION (INCH): 4 INCH DIAMETER
MARKER TYPE: BALL
NUMBER OF FREQUENCIES: N/A
PROGRAMMABLE/PASSIVE: PROGRAMMABLE
RANGE: 0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant: UNDETERMINED
RoHS EU Comments: CONTACT 3M FOR INFORMATION
Solution for: ACCESS NETWORK: FTTH/FTTB/CATV
ACCESS NETWORK: xDSL, LONG-HAUL/METRO
LOOP NETWORK: OUTDOOR
WIRELESS NETWORK: BACKHAUL

1428-XR/ID-RECLAIMED



The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

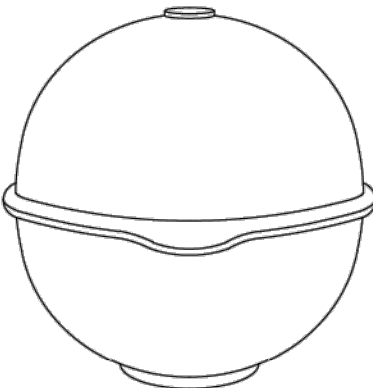
Featured Benefits

- Positive identification of underground general purpose / reclaimed water facilities
- iD Marker allows for programming of customer specific information
- Unique self leveling design simplifies installation
- No external power source needed
- Resistant to elements
- 5 foot (1.5 meter) detection distance
- Color conforms to APWA standards

SPECIFICATIONS:

COLOR: PURPLE
DIAMETER (METRIC): 10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY: N/A
MARKER DEPTH: 5 FEET (1.5M)
MARKER DIMENSION (INCH): 4 INCH DIAMETER
MARKER TYPE: BALL
NUMBER OF FREQUENCIES: N/A
PROGRAMMABLE/PASSIVE: PROGRAMMABLE
RANGE: 0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant: UNDETERMINED
RoHS EU Comments: CONTACT 3M FOR INFORMATION
Solution for: ACCESS NETWORK: FTTH/FTTB/CATV
ACCESS NETWORK: xDSL, LONG-HAUL/METRO
LOOP NETWORK: OUTDOOR
WIRELESS NETWORK: BACKHAUL

1403-XR-POTABLE



The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

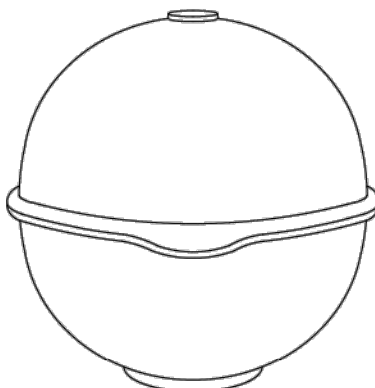
Featured Benefits

- Positive identification of underground water facilities
- Unique self leveling design simplifies installation
- No external power source needed
- Resistant to elements
- 5 foot (1.5 meter) detection distance
- Color conforms to APWA standards

SPECIFICATIONS:

COLOR: BLUE
DIAMETER (METRIC): 10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY: N/A
MARKER DEPTH: 5 FEET (1.5M)
MARKER DIMENSION (INCH): 4 INCH DIAMETER
MARKER TYPE: BALL
NUMBER OF FREQUENCIES: N/A
PROGRAMMABLE/PASSIVE: PASSIVE
RANGE: 0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant: UNDETERMINED
RoHS EU Comments: CONTACT 3M FOR INFORMATION
Solution for: ACCESS NETWORK: FTTH/FTTB/CATV
ACCESS NETWORK: xDSL, LONG-HAUL/METRO
LOOP NETWORK: OUTDOOR
WIRELESS NETWORK: BACKHAUL

1404-XR-SEWER



The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

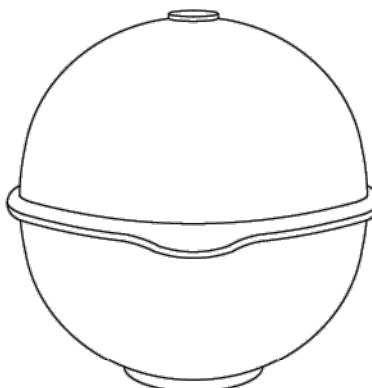
Featured Benefits

- Positive identification of underground wastewater facilities
- Unique self leveling design simplifies installation
- No external power source needed
- Resistant to elements
- 5 foot (1.5 meter) detection distance
- Color conforms to APWA standards

SPECIFICATIONS:

COLOR: GREEN
DIAMETER (METRIC): 10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY: N/A
MARKER DEPTH: 5 FEET (1.5M)
MARKER DIMENSION (INCH): 4 INCH DIAMETER
MARKER TYPE: BALL
NUMBER OF FREQUENCIES: N/A
PROGRAMMABLE/PASSIVE: PASSIVE
RANGE: 0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant: UNDETERMINED
RoHS EU Comments: CONTACT 3M FOR INFORMATION
Solution for: ACCESS NETWORK: FTTH/FTTB/CATV
ACCESS NETWORK: xDSL, LONG-HAUL/METRO
LOOP NETWORK: OUTDOOR
WIRELESS NETWORK: BACKHAUL

1408-XR-RECLAIMED



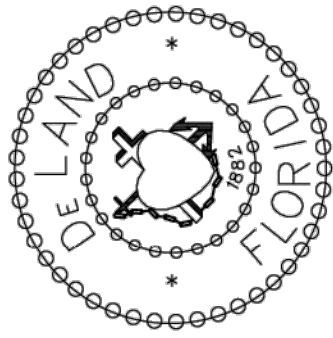
The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

Featured Benefits

- Positive identification of underground general purpose facilities
- Unique self leveling design simplifies installation
- No external power source needed
- Resistant to elements
- 5 foot (1.5 meter) detection distance
- Color conforms to APWA standards

SPECIFICATIONS:

COLOR: PURPLE
DIAMETER (METRIC): 10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY: N/A
MARKER DEPTH: 5 FEET (1.5M)
MARKER DIMENSION (INCH): 4 INCH DIAMETER
MARKER TYPE: BALL
NUMBER OF FREQUENCIES: N/A
PROGRAMMABLE/PASSIVE: PASSIVE
RANGE: 0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant: UNDETERMINED
RoHS EU Comments: CONTACT 3M FOR INFORMATION
Solution for: ACCESS NETWORK: FTTH/FTTB/CATV
ACCESS NETWORK: xDSL, LONG-HAUL/METRO
LOOP NETWORK: OUTDOOR
WIRELESS NETWORK: BACKHAUL



CITY OF DELAND, FLORIDA
1102 S. GARFIELD AVENUE, DELAND, FLORIDA 32724

DATE: 11/05/2021

CHECKED BY: ERIC M. SAMPSON

SCALE: NOT TO SCALE

DRAWN BY: MARK LA GRECA

UTILITY MARKER BALL LOCATORS

TITLE:

FILE: drive letter/details locations

CITY DETAILS

FOR

DELAND COMMONS

FLORIDA

CITY OF DELAND

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
August 23, 2022

CERTIFICATE OF AUTHORIZATION NO. CA-0007723

1	2	3	4	5	6	7	8	9	10	11	DATE	REVISIONS
1	08/03/22	REVISED PER CITY COMMENTS										
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												

JOB # 18029
DATE: 06/17/2022
SCALE: N.T.S.
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C913

3M LOCATING MARKER BALLS PROGRAMMABLE AND NON-PROGRAMMABLE NOTES:

- Programmable and Non-Programmable Marking Balls will be used on all Sewer, Potable and Reclaim projects
 - For information on the Programmable and Non-Programmable Balls that the City requires see spec sheet for details
 - Programmable Balls will be placed at all fittings ie. Tees, Couplings, 90, 45, and 22.
 - Information will be recorded on a spread sheet. For information that needs to be recorded see spec sheet for an example template for the 3M Marker Balls
 - Non-Programmable Marking Balls will be used as follow:
- Potable: End of Service Line when buried
 - Wastewater: Ball will be placed at the curb line to mark lateral location prior to end of service.
 - Reclaim: End of Service Line when buried
- Desired bury depth is 1.5 feet to 3 feet. Five foot is the maximum depth for these devices

1420-LOCATER FOR MARKER BALLS

3M™ Dynatel™ Electronic Marker System (EMS) Marker Locators 1420 series is microprocessor-based systems that quickly and efficiently locate underground markers—years after construction or maintenance. -

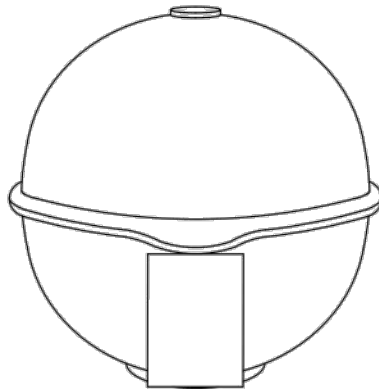
The 3M™ Dynatel™ 1420 Marker Locators are designed to be accurate, fast and integrated allowing you to accurately and easily:

- Locate, read and write to 3M ID markers
- Pinpoint the depth and location of all existing models of properly installed underground passive EMS markers
- Conduct direct depth reading of markers
- Locate two different marker frequencies simultaneously

Specifications

2200RB Rechargeable Battery	Not Included
Cable/Pipe Locate	No
Carrying Bag Included	No
Coupler Size	No Coupler
Direct Connect Cable	N/A
EMS Caution Tape Finding Capability	No
Family	1420 Series
Fault Finding Capability	No
Locator Type	Marker

1423-XR/ID-POTABLE



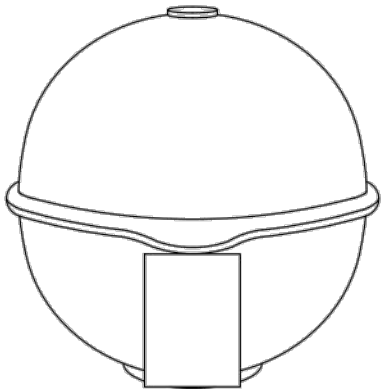
The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

- Featured Benefits**
- Positive identification of underground water facilities
 - ID Marker allows for programming of customer specific information
 - Unique self leveling design simplifies installation
 - No external power source needed
 - Resistant to elements
 - 5 foot (1.5 meter) detection distance
 - Color conforms to APWA standards

SPECIFICATIONS:

COLOR:	BLUE
DIAMETER (METRIC):	10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY:	N/A
MARKER DEPTH:	5 FEET (1.5M)
MARKER DIMENSION (INCH):	4 INCH DIAMETER
MARKER TYPE:	BALL
PROGRAMMABLE/PASSIVE:	PROGRAMMABLE
RANGE:	0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant:	UNDETERMINED
RoHS EU Comments:	CONTACT 3M FOR INFORMATION
Solution for:	ACCESS NETWORK: FTTB/FTTB/CATV
	ACCESS NETWORK: xDSL, LONG-HAUL/METRO
	LOOP NETWORK: OUTDOOR
	WIRELESS NETWORK: BACKHAUL

1424-XR/ID-SEWER



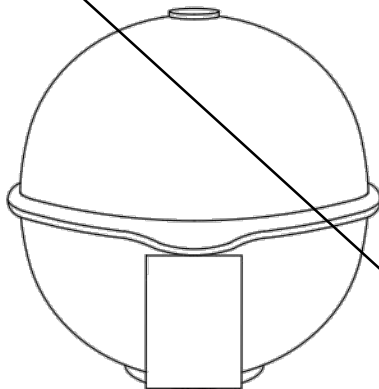
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- Positive identification of underground wastewater facilities
 - ID Marker allows for programming of customer specific information
 - Unique self leveling design simplifies installation
 - No external power source needed
 - Resistant to elements
 - 5 foot (1.5 meter) detection distance
 - Color conforms to APWA standards

SPECIFICATIONS:

COLOR:	GREEN
DIAMETER (METRIC):	10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY:	N/A
MARKER DEPTH:	5 FEET (1.5M)
MARKER DIMENSION (INCH):	4 INCH DIAMETER
MARKER TYPE:	BALL
NUMBER OF FREQUENCIES:	N/A
PROGRAMMABLE/PASSIVE:	PROGRAMMABLE
RANGE:	0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant:	UNDETERMINED
RoHS EU Comments:	CONTACT 3M FOR INFORMATION
Solution for:	ACCESS NETWORK: FTTB/FTTB/CATV
	ACCESS NETWORK: xDSL, LONG-HAUL/METRO
	LOOP NETWORK: OUTDOOR
	WIRELESS NETWORK: BACKHAUL

1428-XR/ID-RECLAIMED



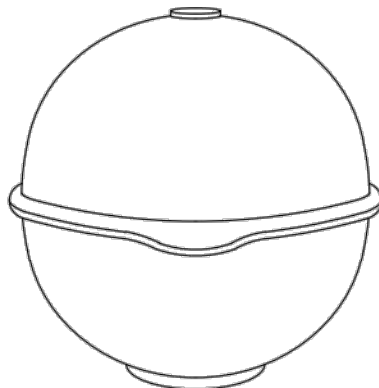
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- Featured Benefits**
- Positive identification of underground general purpose / reclaimed water facilities
 - ID Marker allows for programming of customer specific information
 - Unique self leveling design simplifies installation
 - No external power source needed
 - Resistant to elements
 - 5 foot (1.5 meter) detection distance
 - Color conforms to APWA standards

SPECIFICATIONS:

COLOR:	PURPLE
DIAMETER (METRIC):	10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY:	N/A
MARKER DEPTH:	5 FEET (1.5M)
MARKER DIMENSION (INCH):	4 INCH DIAMETER
MARKER TYPE:	BALL
NUMBER OF FREQUENCIES:	N/A
PROGRAMMABLE/PASSIVE:	PROGRAMMABLE
RANGE:	0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant:	UNDETERMINED
RoHS EU Comments:	CONTACT 3M FOR INFORMATION
Solution for:	ACCESS NETWORK: FTTB/FTTB/CATV
	ACCESS NETWORK: xDSL, LONG-HAUL/METRO
	LOOP NETWORK: OUTDOOR
	WIRELESS NETWORK: BACKHAUL

1403-XR-POTABLE



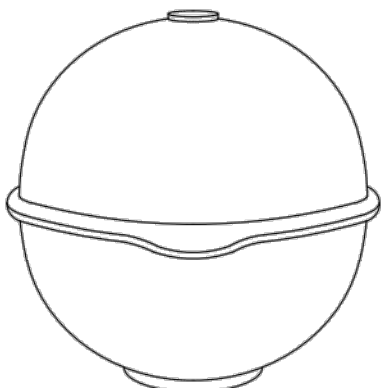
The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

- Featured Benefits**
- Positive identification of underground water facilities
 - Unique self leveling design simplifies installation
 - No external power source needed
 - Resistant to elements
 - 5 foot (1.5 meter) detection distance
 - Color conforms to APWA standards

SPECIFICATIONS:

COLOR:	BLUE
DIAMETER (METRIC):	10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY:	N/A
MARKER DEPTH:	5 FEET (1.5M)
MARKER DIMENSION (INCH):	4 INCH DIAMETER
MARKER TYPE:	BALL
NUMBER OF FREQUENCIES:	N/A
PROGRAMMABLE/PASSIVE:	PASSIVE
RANGE:	0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant:	UNDETERMINED
RoHS EU Comments:	CONTACT 3M FOR INFORMATION
Solution for:	ACCESS NETWORK: FTTB/FTTB/CATV
	ACCESS NETWORK: xDSL, LONG-HAUL/METRO
	LOOP NETWORK: OUTDOOR
	WIRELESS NETWORK: BACKHAUL

1404-XR-SEWER



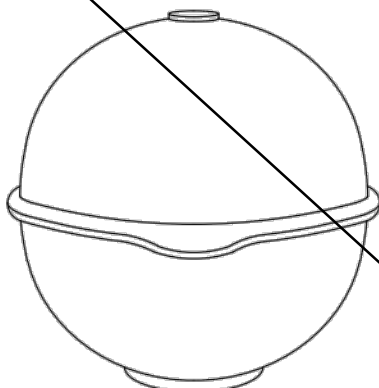
The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

- Featured Benefits**
- Positive identification of underground wastewater facilities
 - Unique self leveling design simplifies installation
 - No external power source needed
 - Resistant to elements
 - 5 foot (1.5 meter) detection distance
 - Color conforms to APWA standards

SPECIFICATIONS:

COLOR:	GREEN
DIAMETER (METRIC):	10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY:	N/A
MARKER DEPTH:	5 FEET (1.5M)
MARKER DIMENSION (INCH):	4 INCH DIAMETER
MARKER TYPE:	BALL
NUMBER OF FREQUENCIES:	N/A
PROGRAMMABLE/PASSIVE:	PASSIVE
RANGE:	0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant:	UNDETERMINED
RoHS EU Comments:	CONTACT 3M FOR INFORMATION
Solution for:	ACCESS NETWORK: FTTB/FTTB/CATV
	ACCESS NETWORK: xDSL, LONG-HAUL/METRO
	LOOP NETWORK: OUTDOOR
	WIRELESS NETWORK: BACKHAUL

1408-XR-RECLAIMED

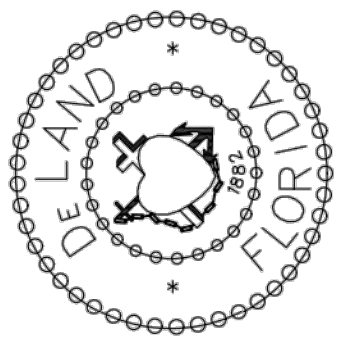


The 3M™ EMS Extended-Range Ball Markers have a self-leveling design providing accurate, horizontal position regardless of how it is placed in the ground, making the job of precisely locating underground facilities easier.

- Featured Benefits**
- Positive identification of underground general purpose facilities
 - Unique self leveling design simplifies installation
 - No external power source needed
 - Resistant to elements
 - 5 foot (1.5 meter) detection distance
 - Color conforms to APWA standards

SPECIFICATIONS:

COLOR:	PURPLE
DIAMETER (METRIC):	10.4 CM
EMS CAUTION TAPE FINDING CAPABILITY:	N/A
MARKER DEPTH:	5 FEET (1.5M)
MARKER DIMENSION (INCH):	4 INCH DIAMETER
MARKER TYPE:	BALL
NUMBER OF FREQUENCIES:	N/A
PROGRAMMABLE/PASSIVE:	PASSIVE
RANGE:	0 TO 5 LINEAR FOOT
RoHS 2011/65/EU Compliant:	UNDETERMINED
RoHS EU Comments:	CONTACT 3M FOR INFORMATION
Solution for:	ACCESS NETWORK: FTTB/FTTB/CATV
	ACCESS NETWORK: xDSL, LONG-HAUL/METRO
	LOOP NETWORK: OUTDOOR
	WIRELESS NETWORK: BACKHAUL



CITY OF DELAND, FLORIDA
1102 S. GARFIELD AVENUE, DELAND, FLORIDA 32724

DATE: 11/05/2021
CHECKED BY: ERIC M. SAMPSON

SCALE: NOT TO SCALE
DRAWN BY: MARK LA GRECA

TITLE: UTILITY MARKER BALL LOCATORS

FILE: drive letter/details locations

MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

CITY DETAILS
FOR
DELAND COMMONS
CITY OF DELAND
FLORIDA

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:
WILLIAM HENRY ZEH, P.E. #81427
June 17, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

NO.	DATE	REVISIONS
1		
2		
3		
4		
5		
6		
7		
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9		
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11		

JOB # 18029
DATE: 06/17/2022
SCALE: N.T.S.
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C913



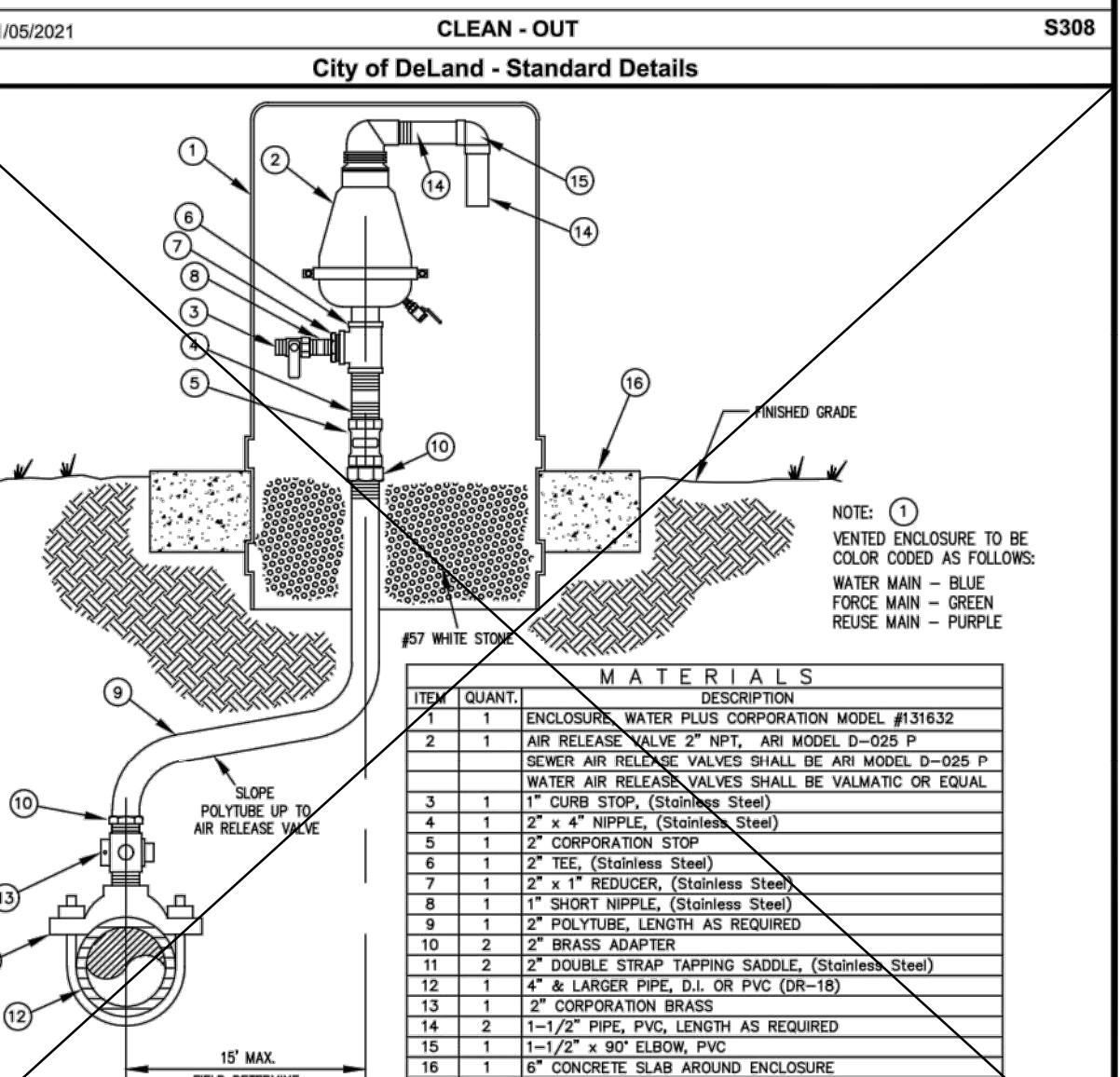
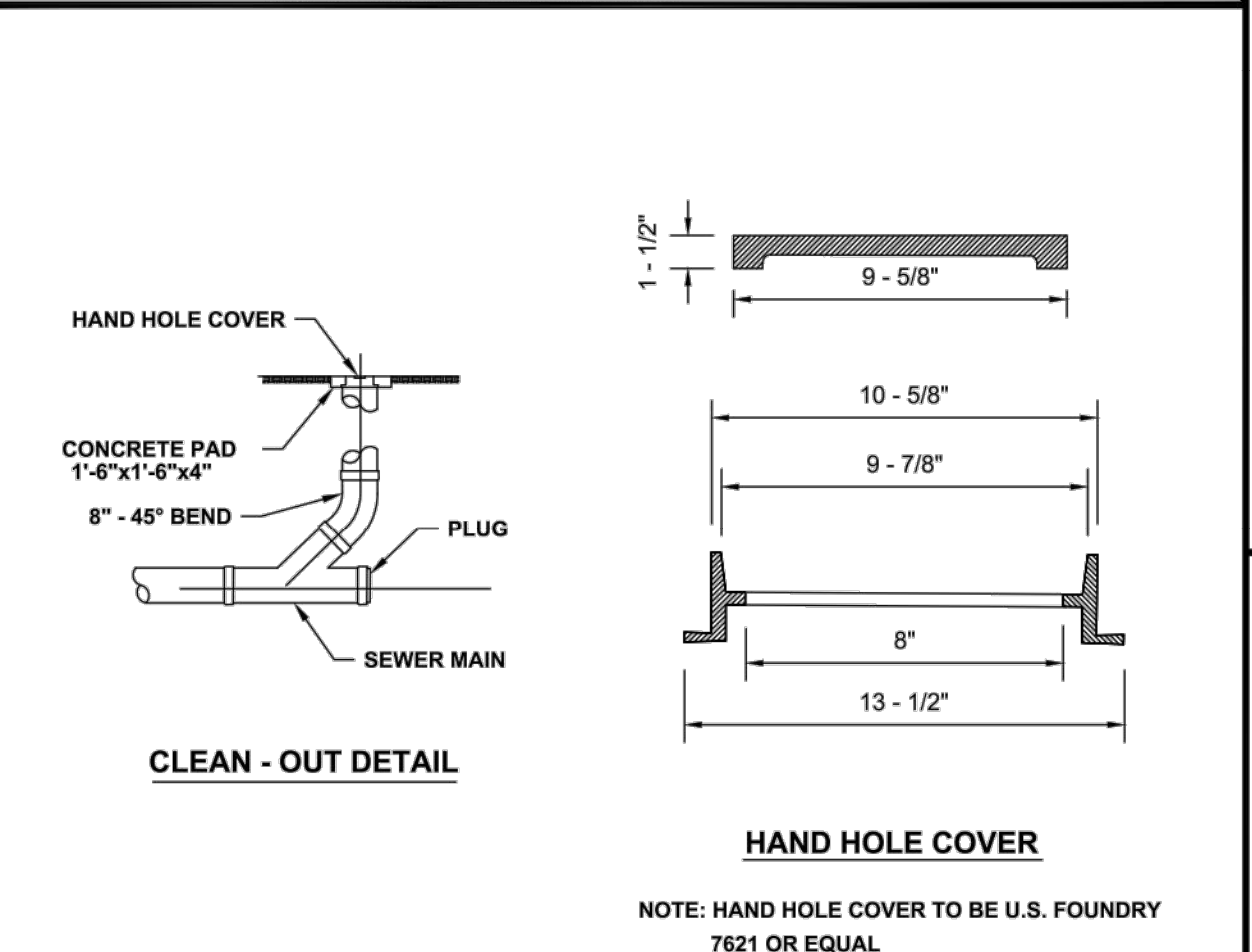
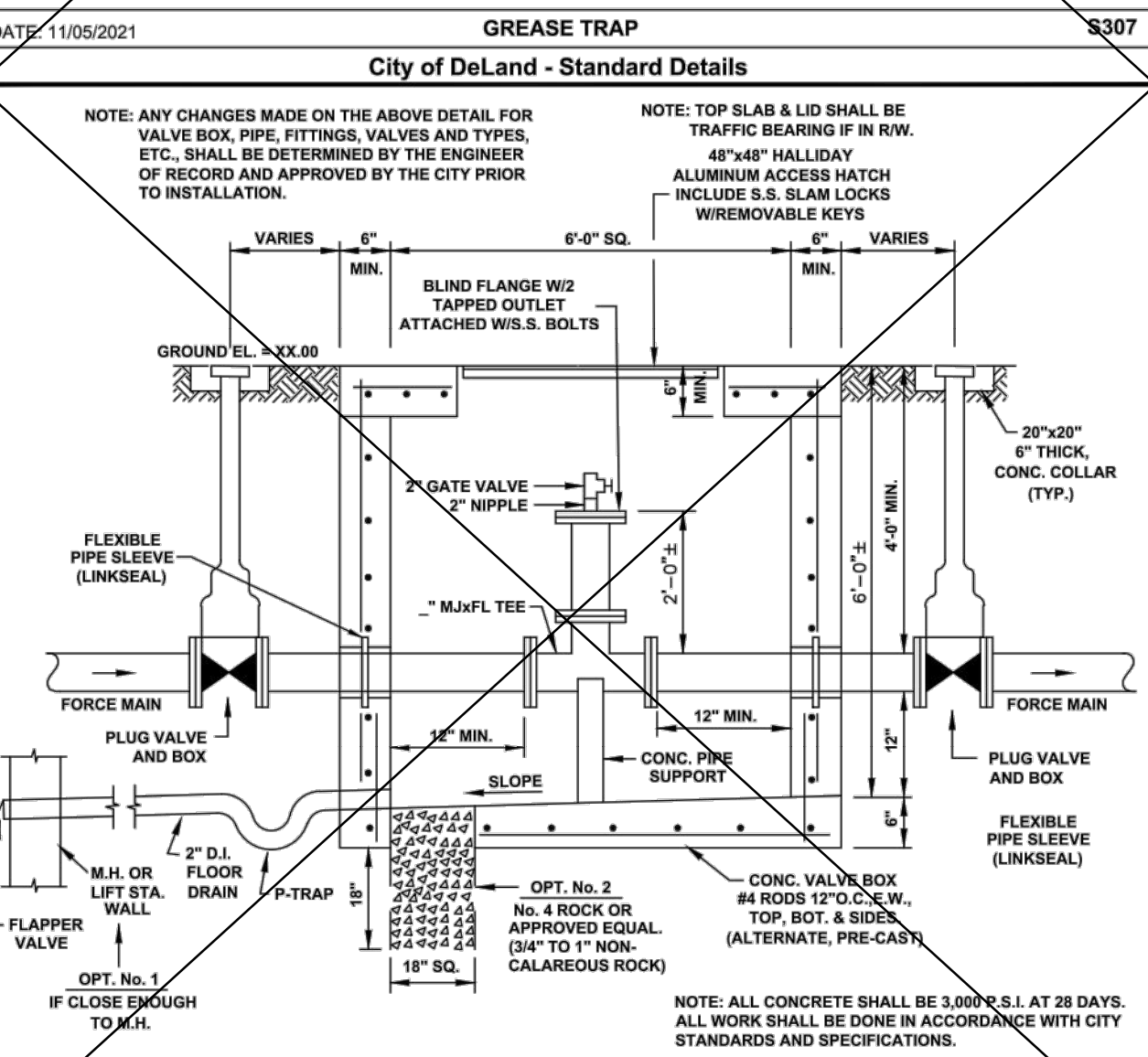
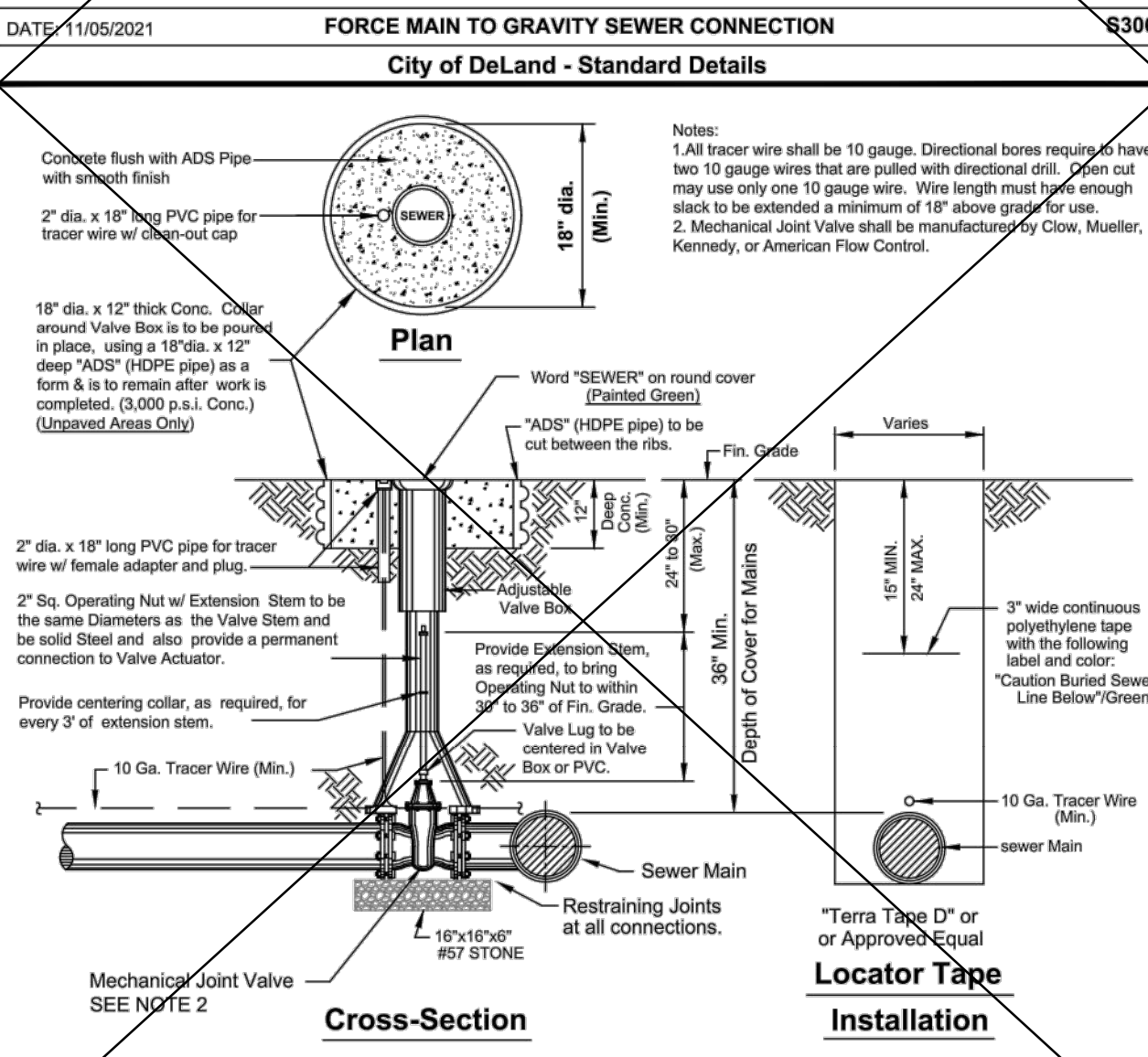
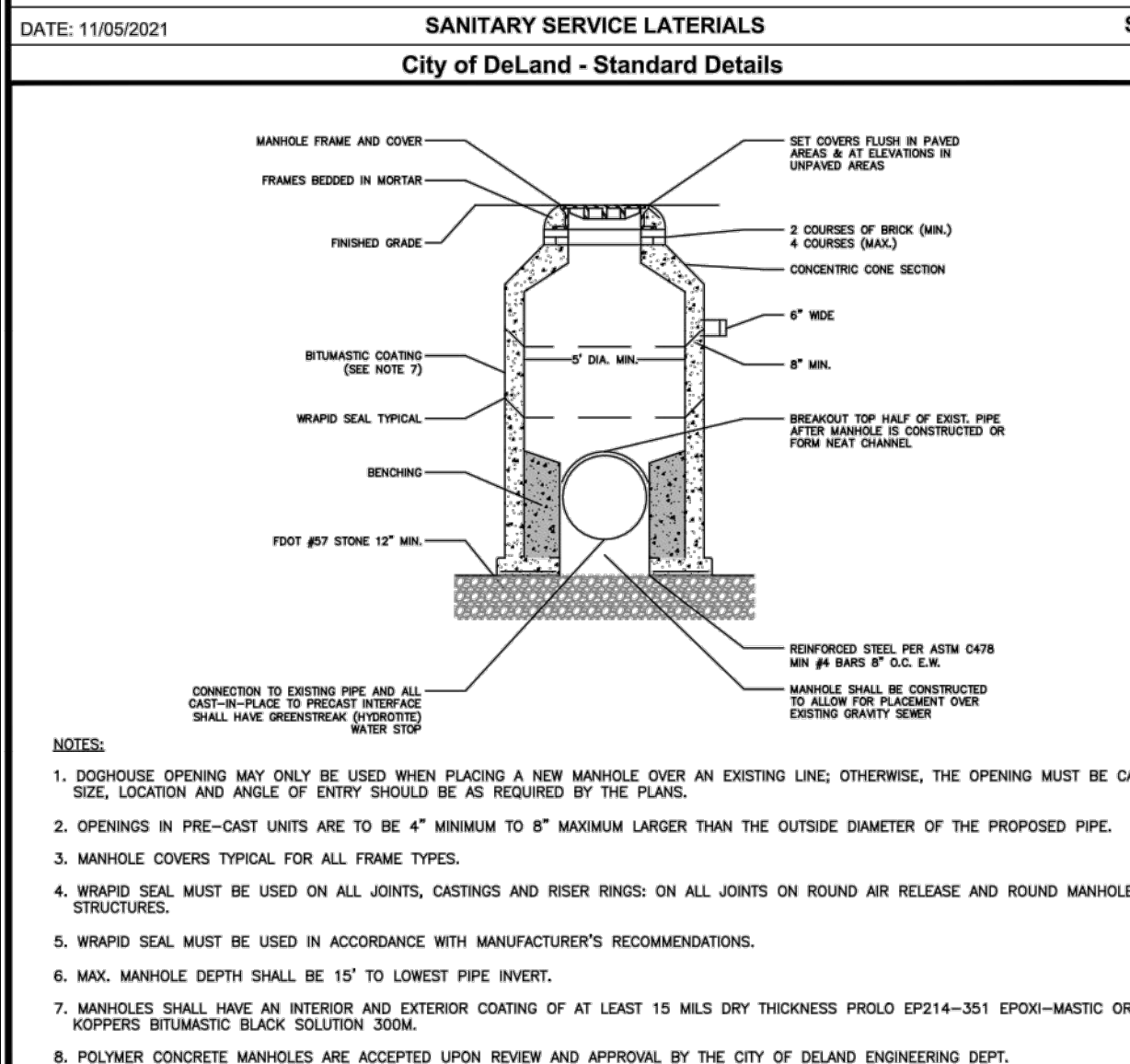
FOR
DELAND COMMONS

WINTER PARK, FL 32789
(407) 741-8500

WILLIAM HENRY ZEH. P.E. #81427

0		
1		
	DATE	REVISIONS

C914

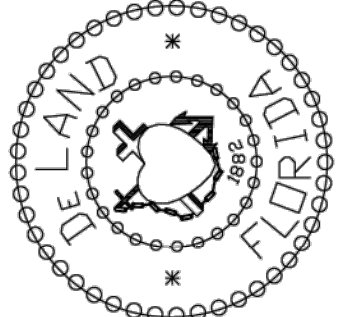


CITY OF DELAND, FLORIDA
1102 S. GARFIELD AVENUE, DELAND, FLORIDA 32724

DRAWN BY: *ERIC SAMPSON*

SANITARY DETAILS

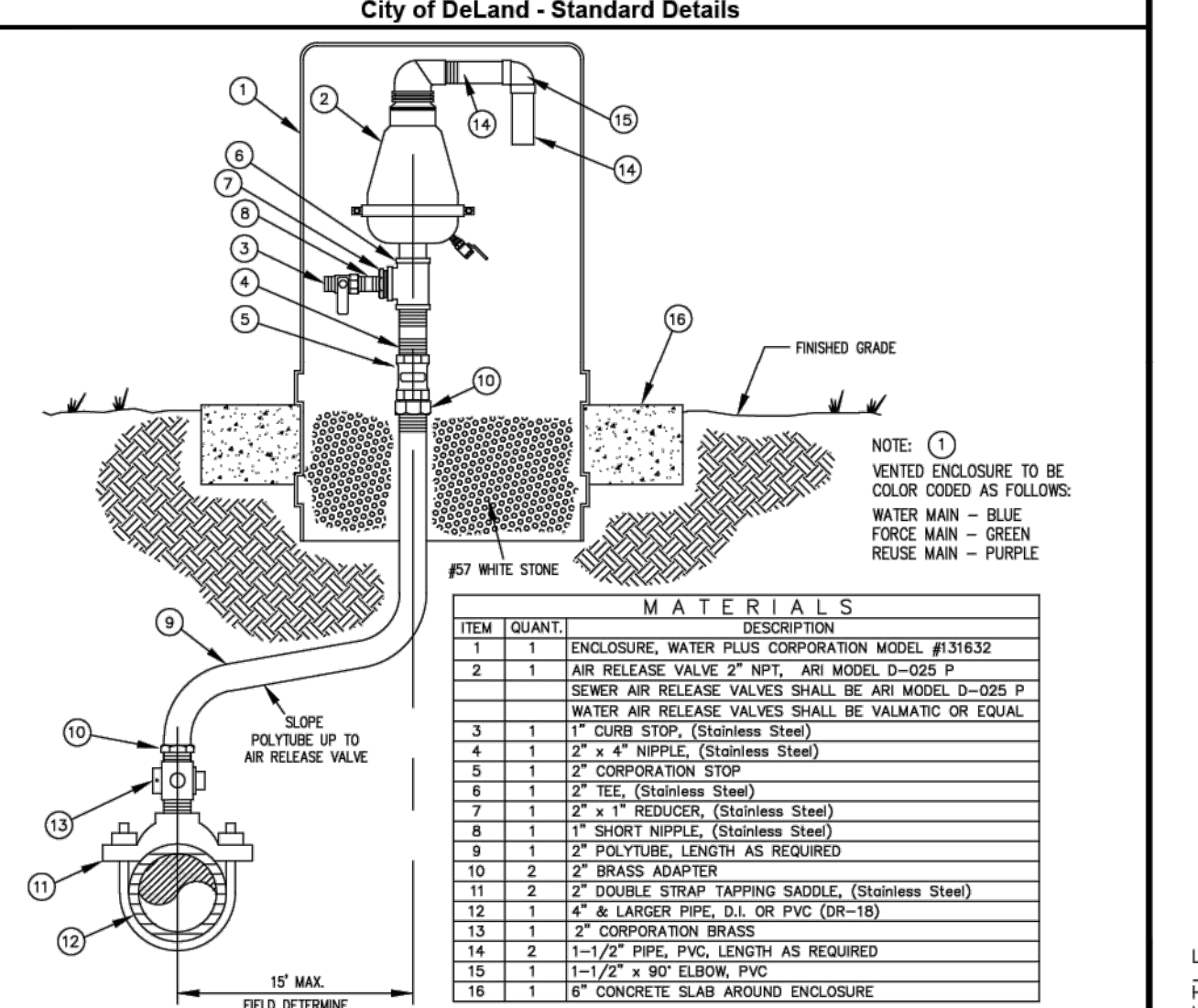
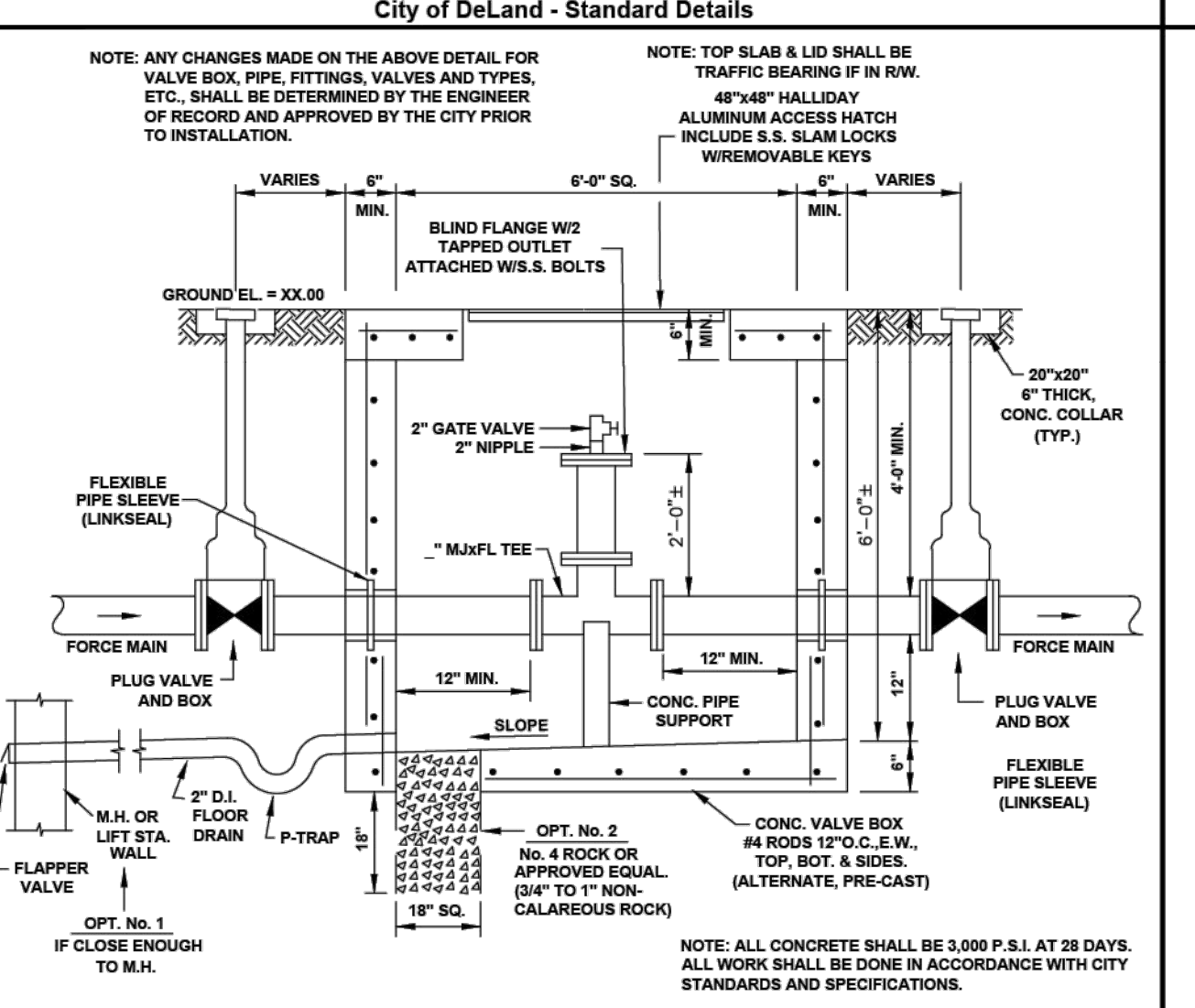
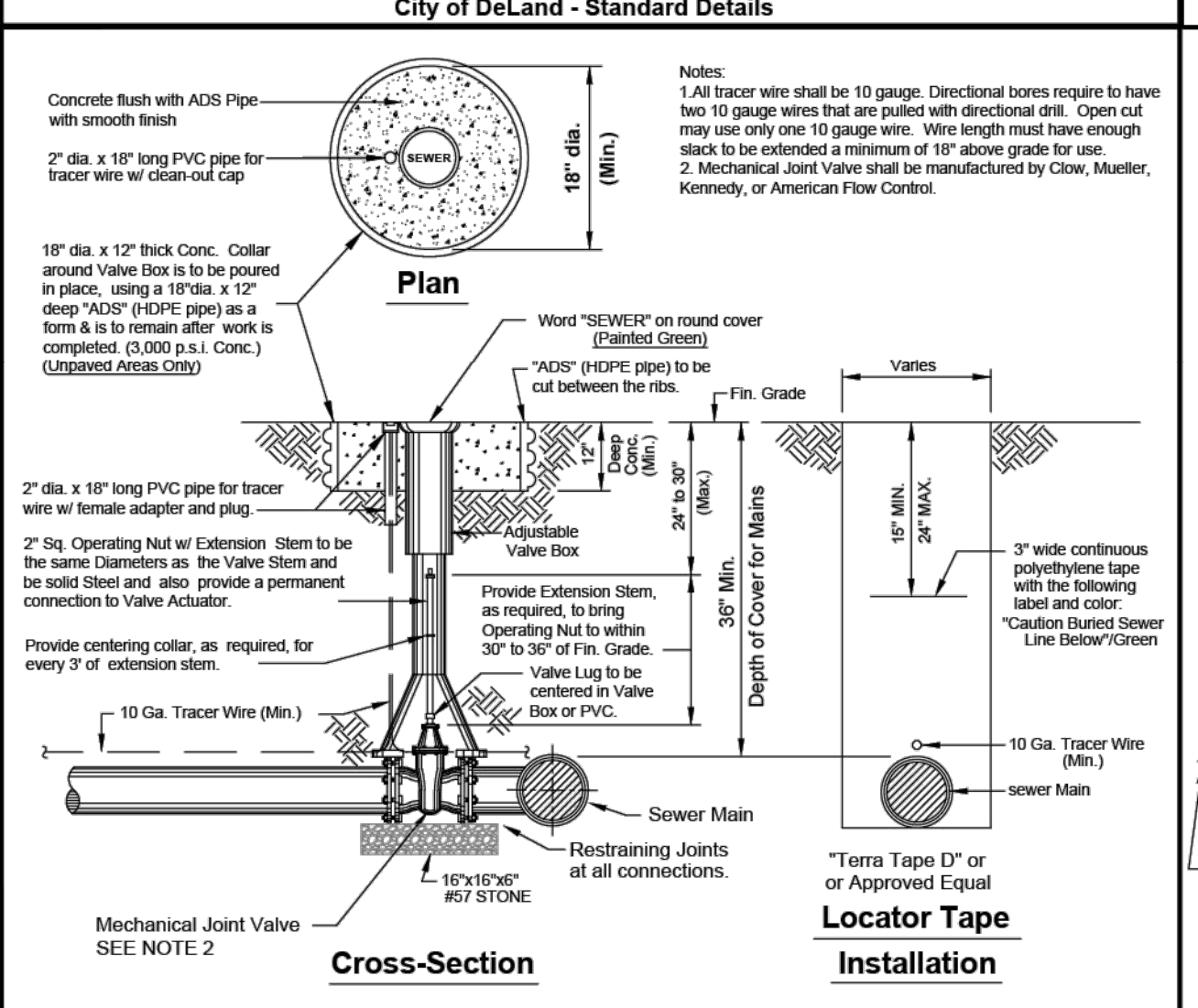
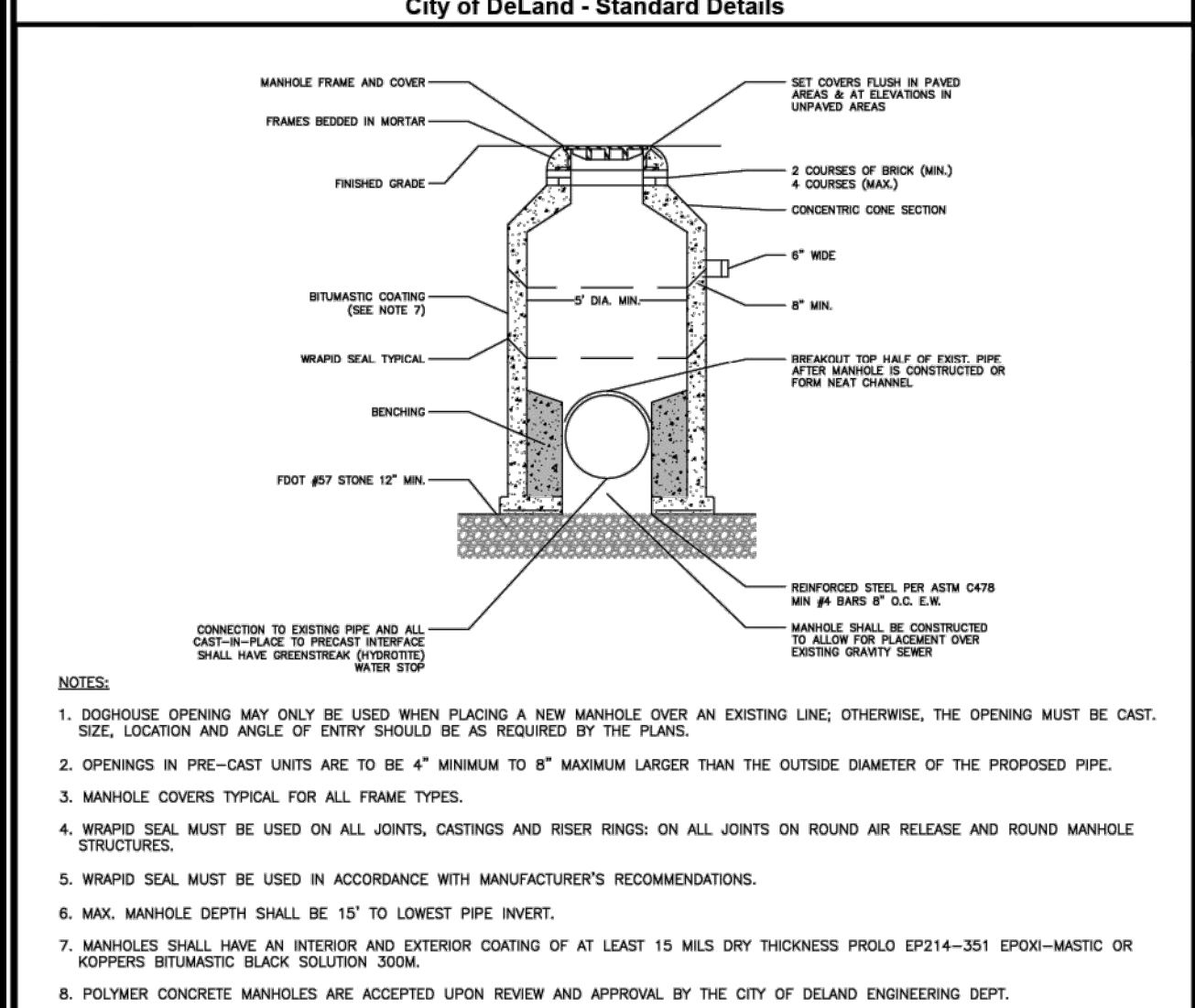
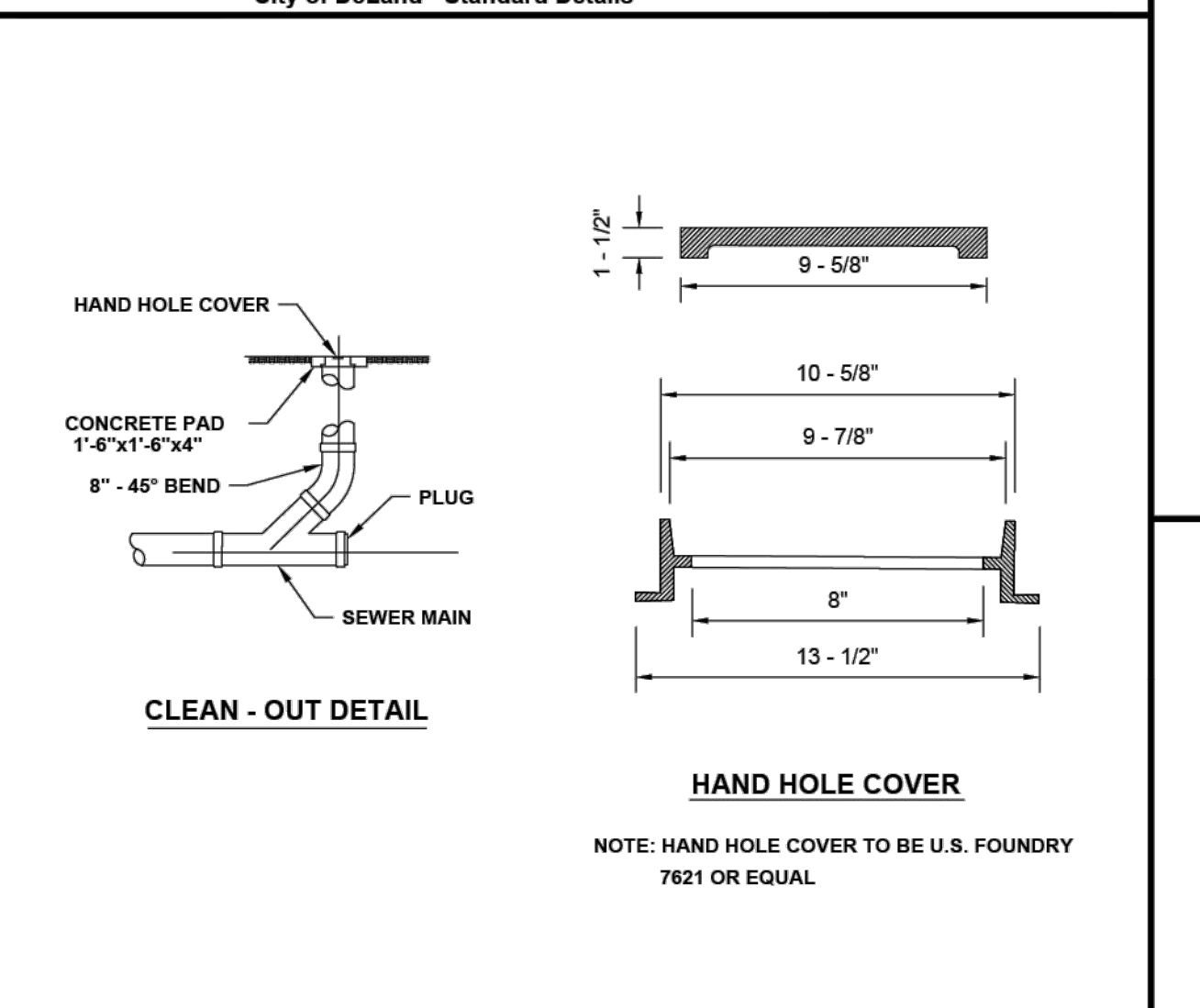
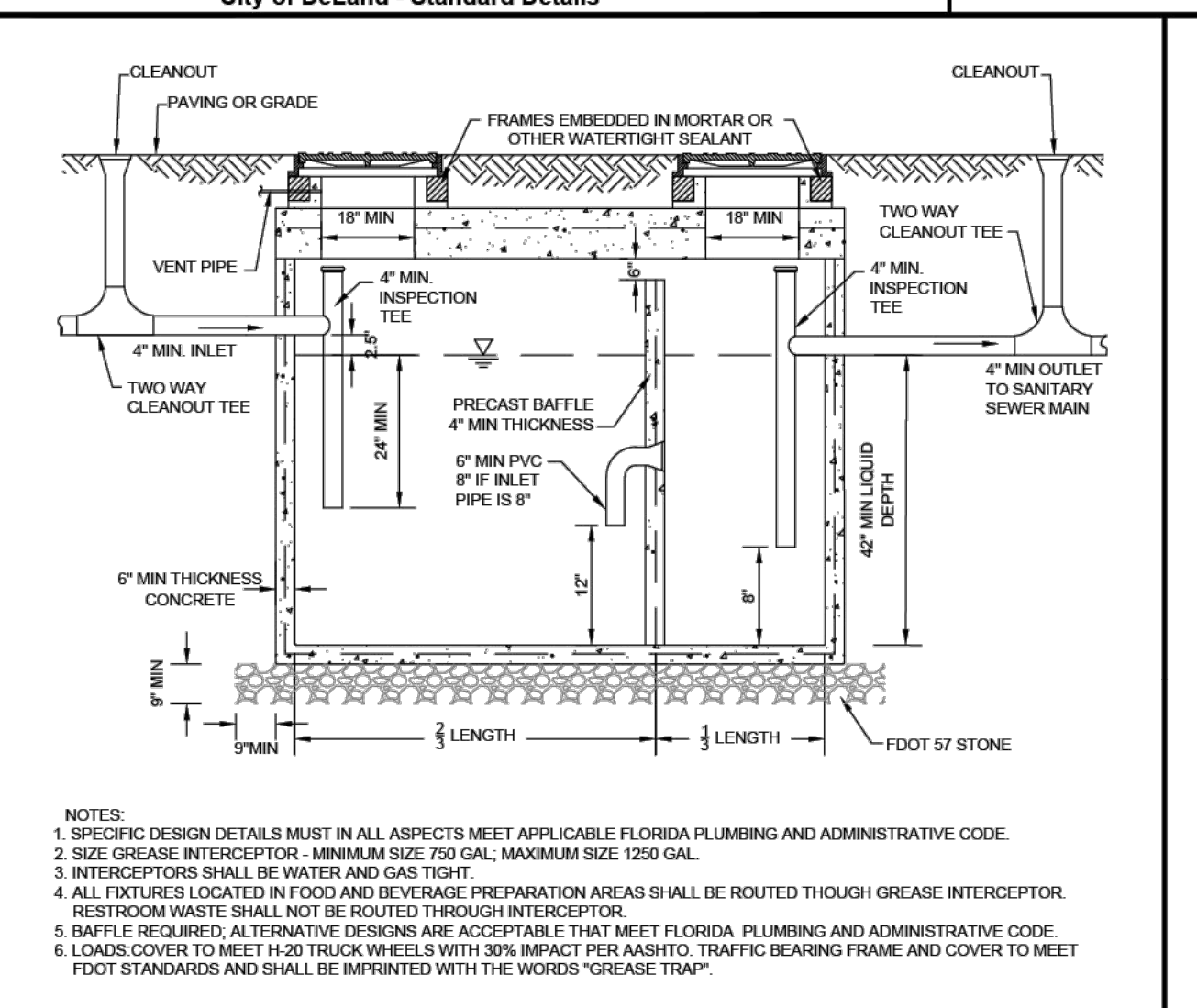
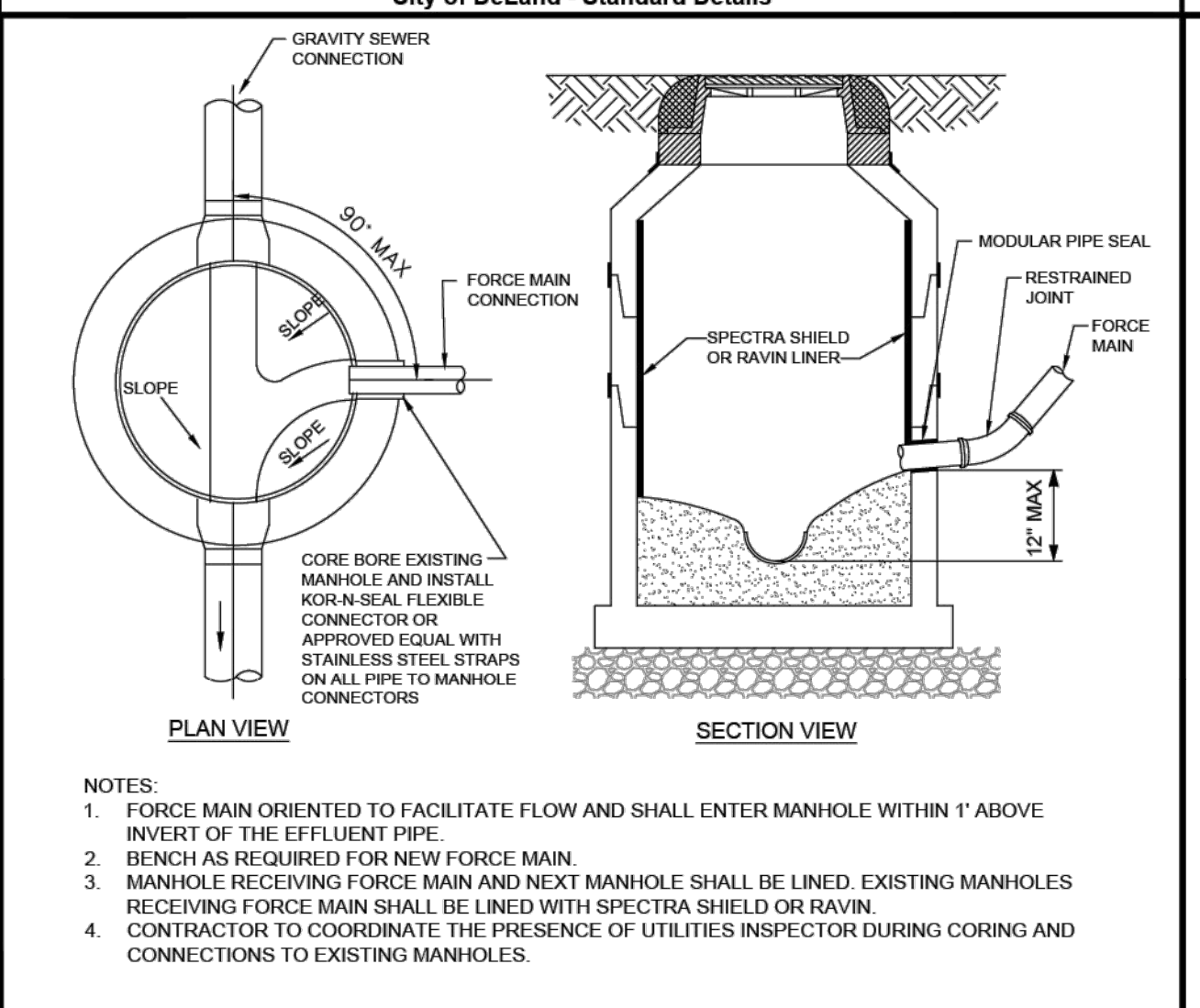
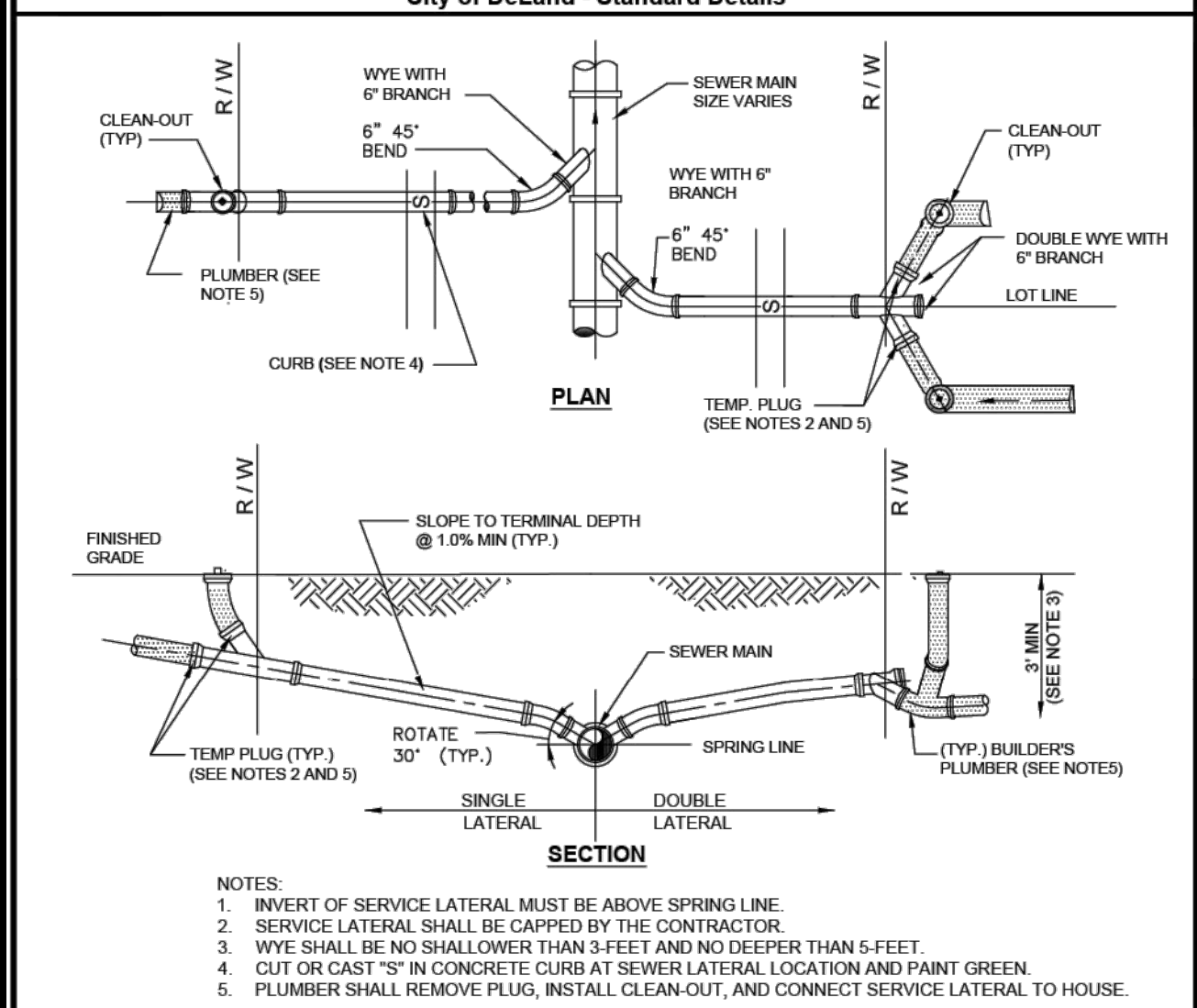
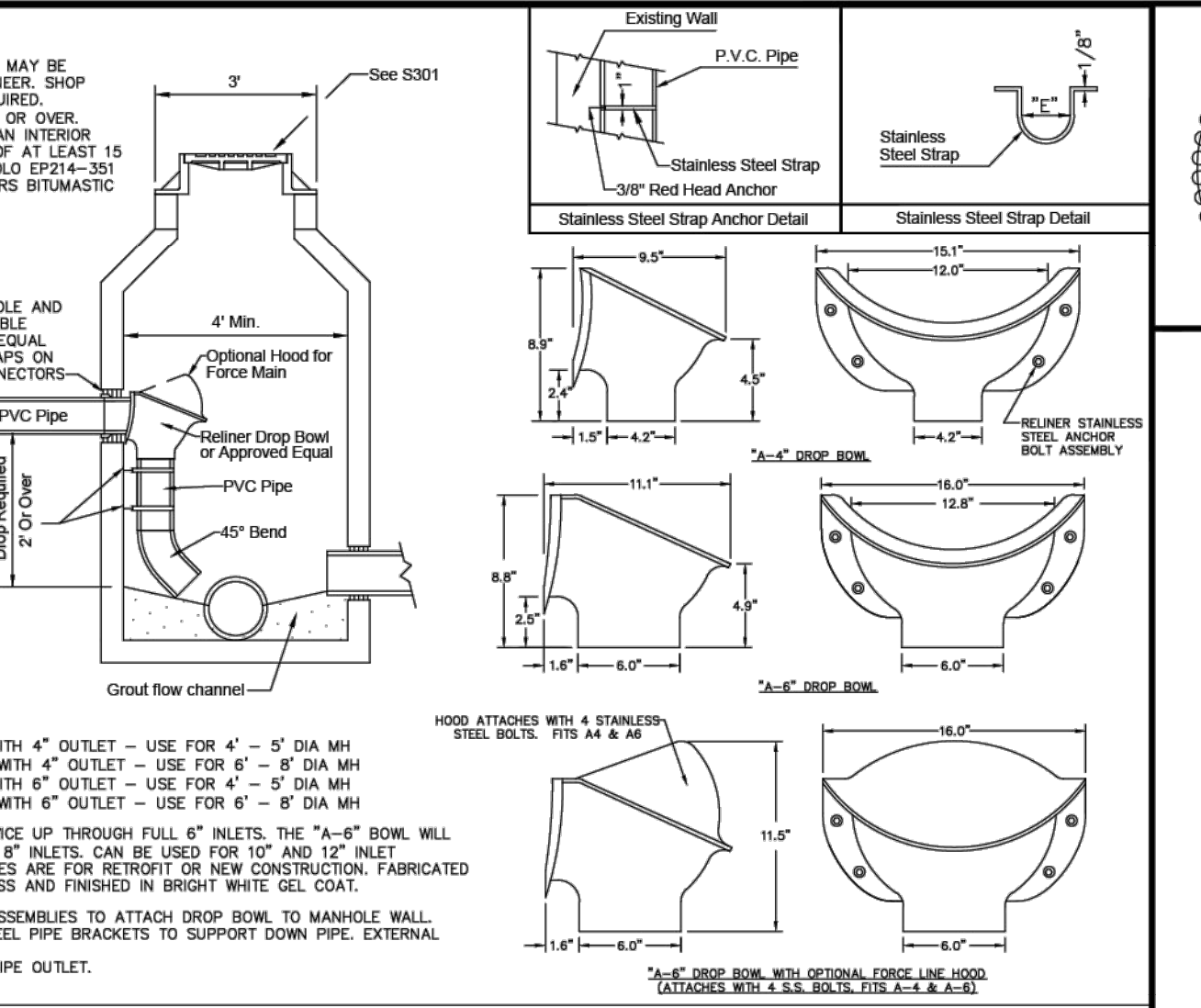
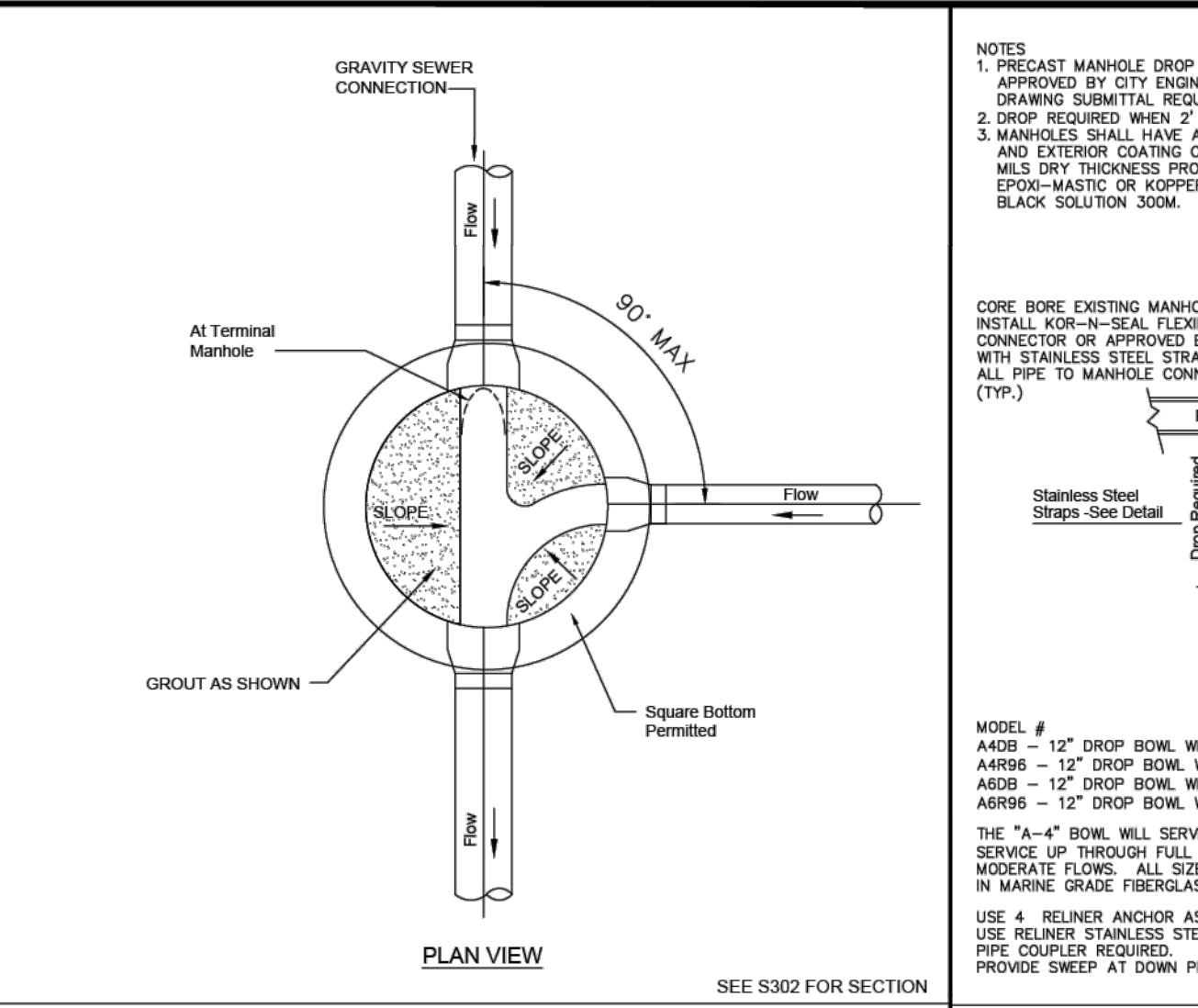
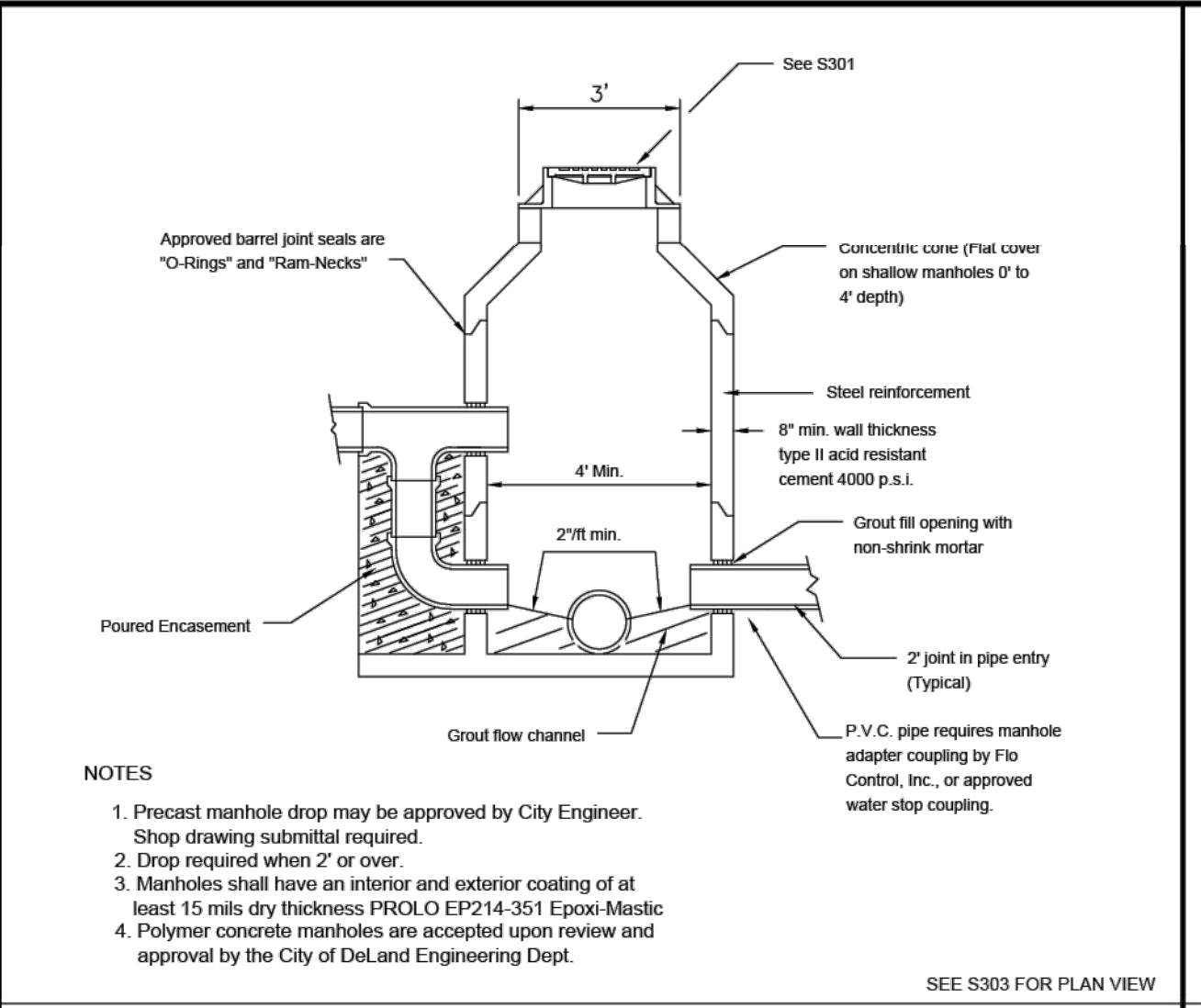
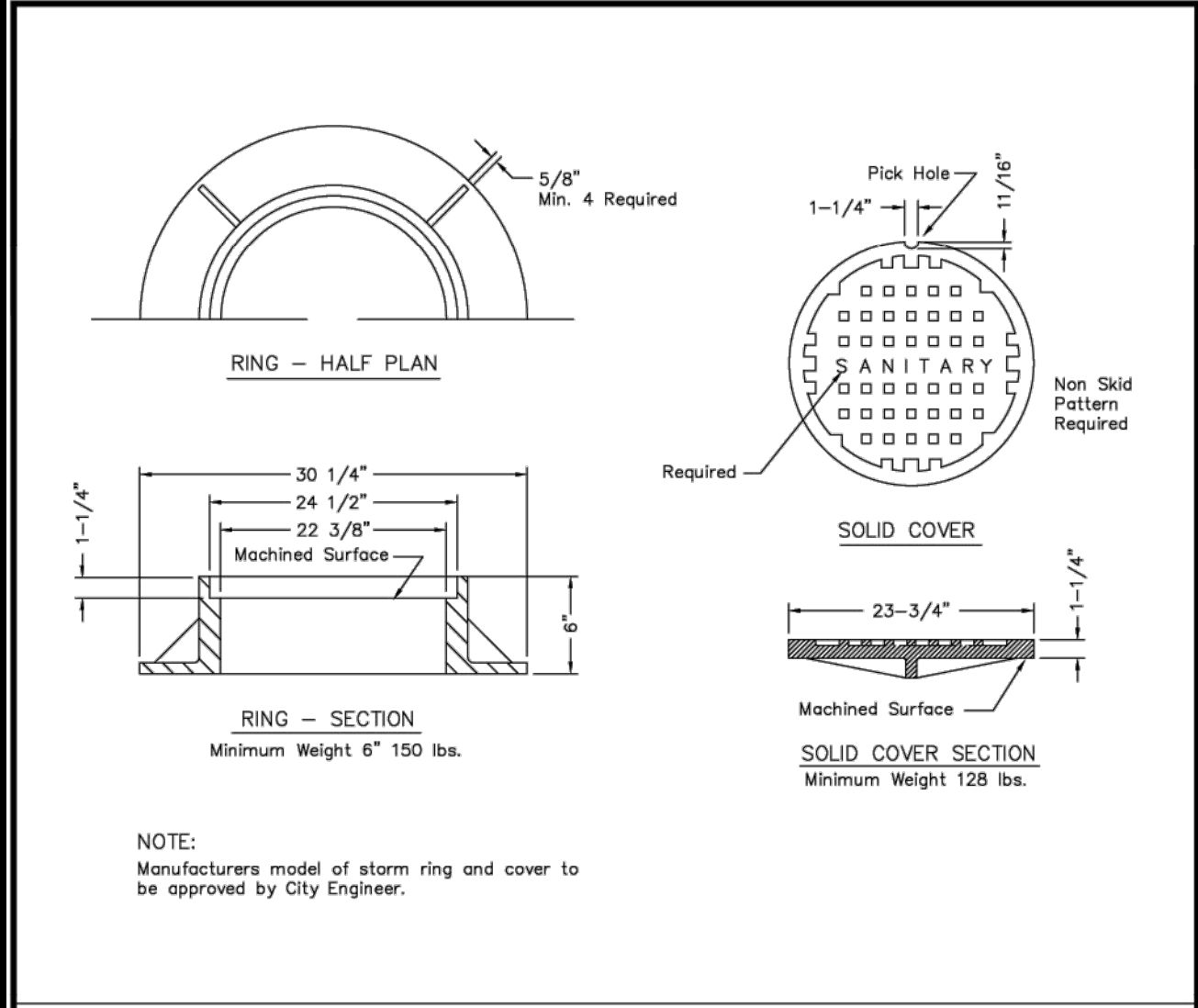
TITLE: PAGE 2 OF 5



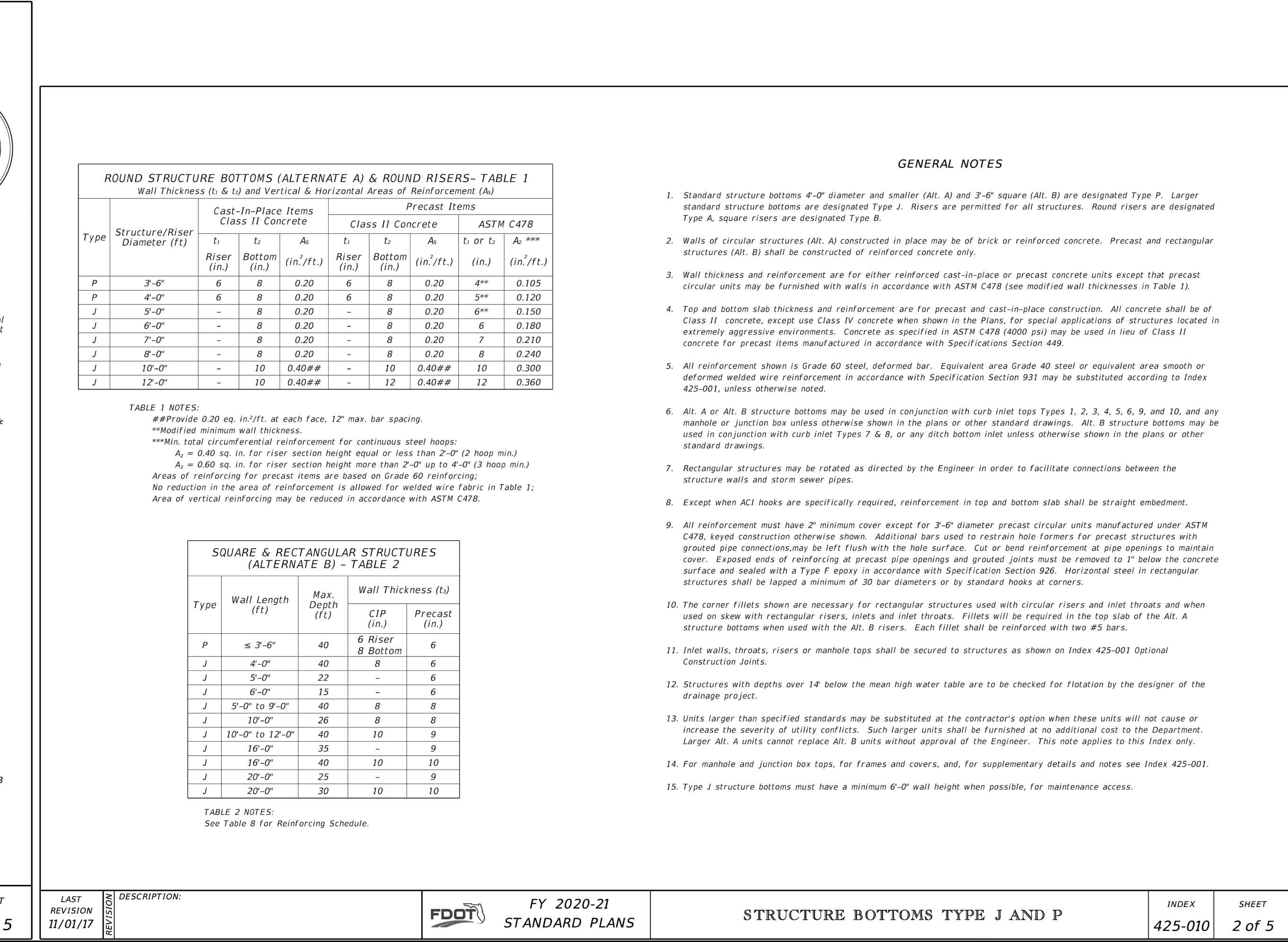
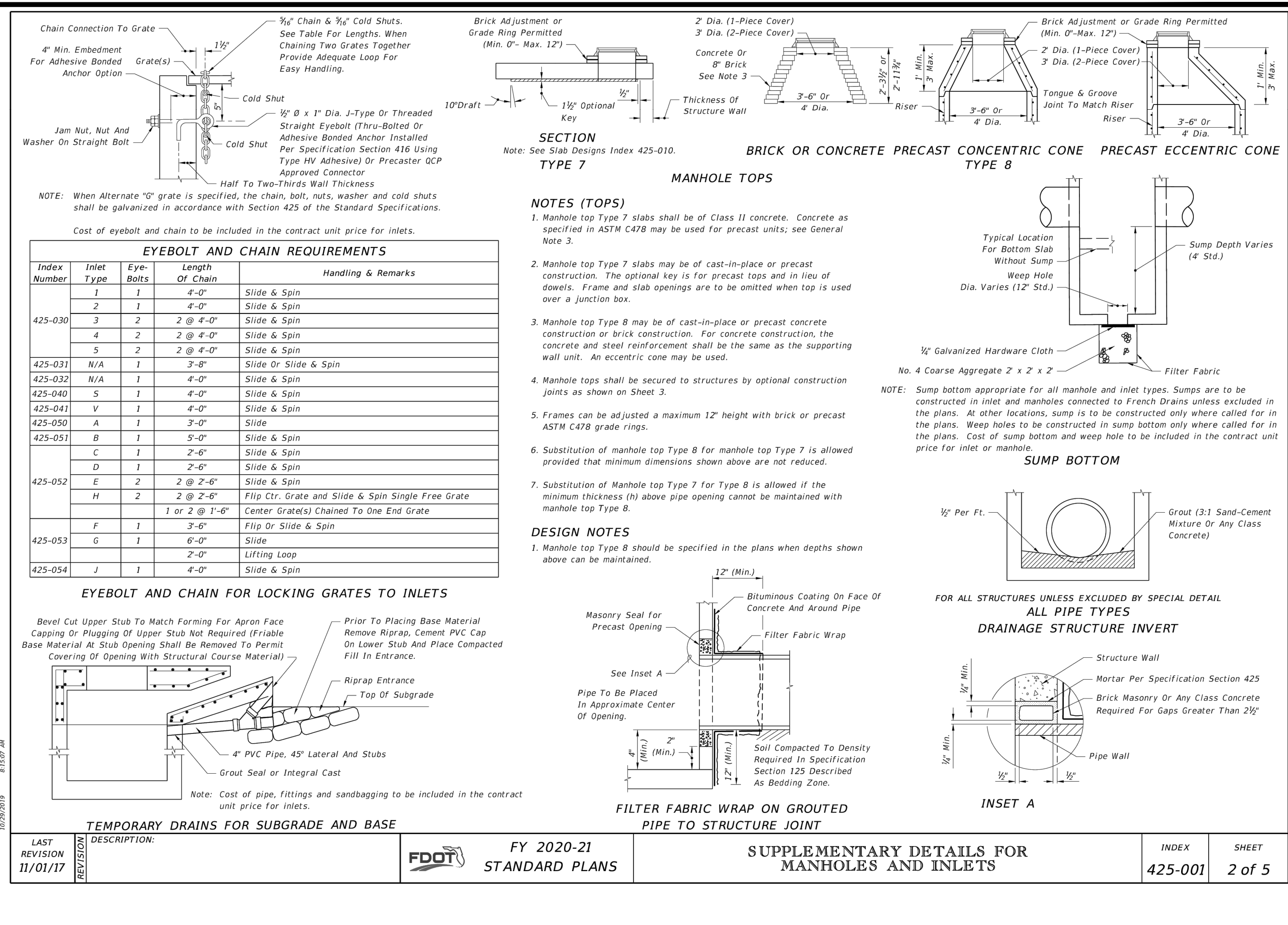
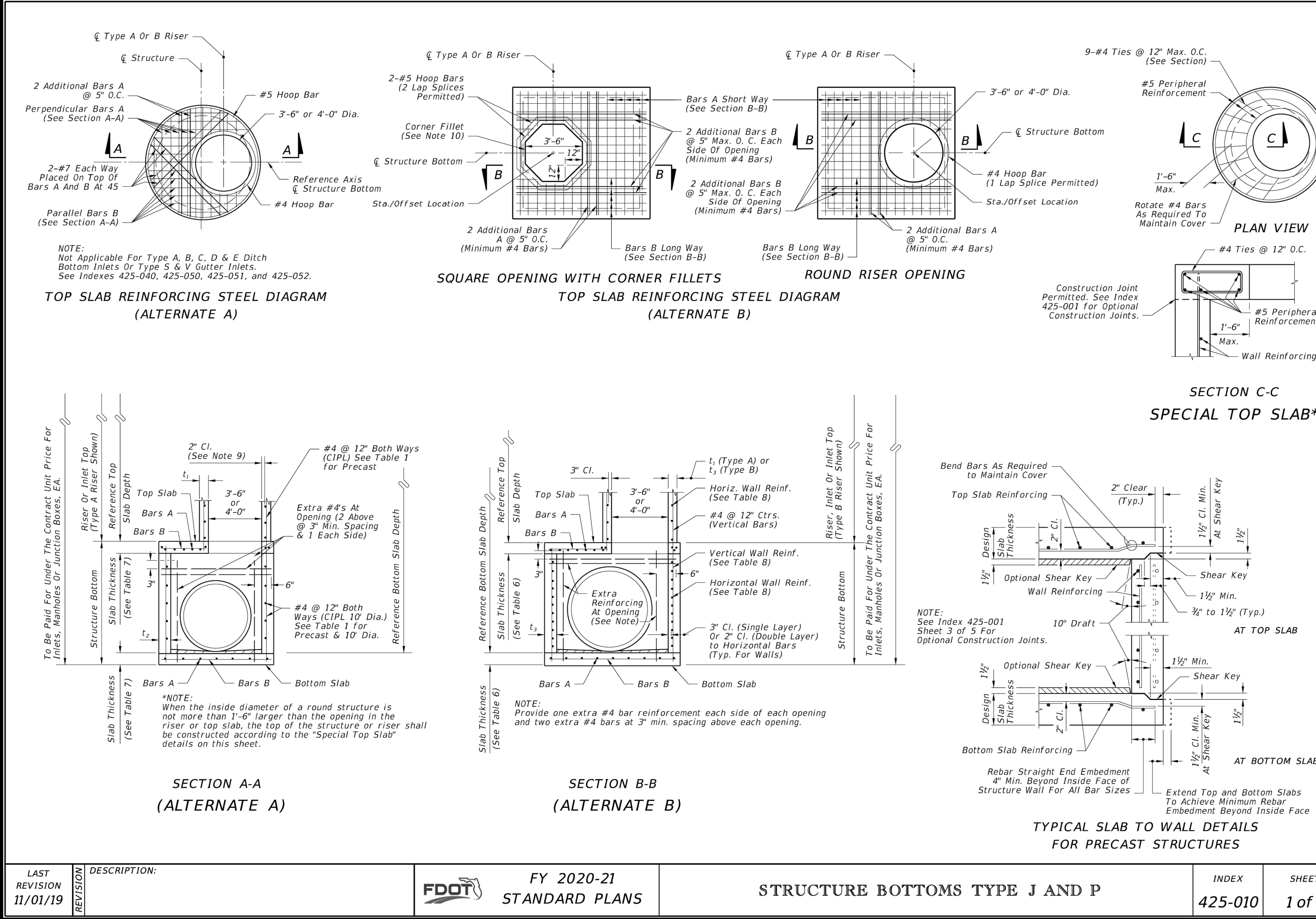
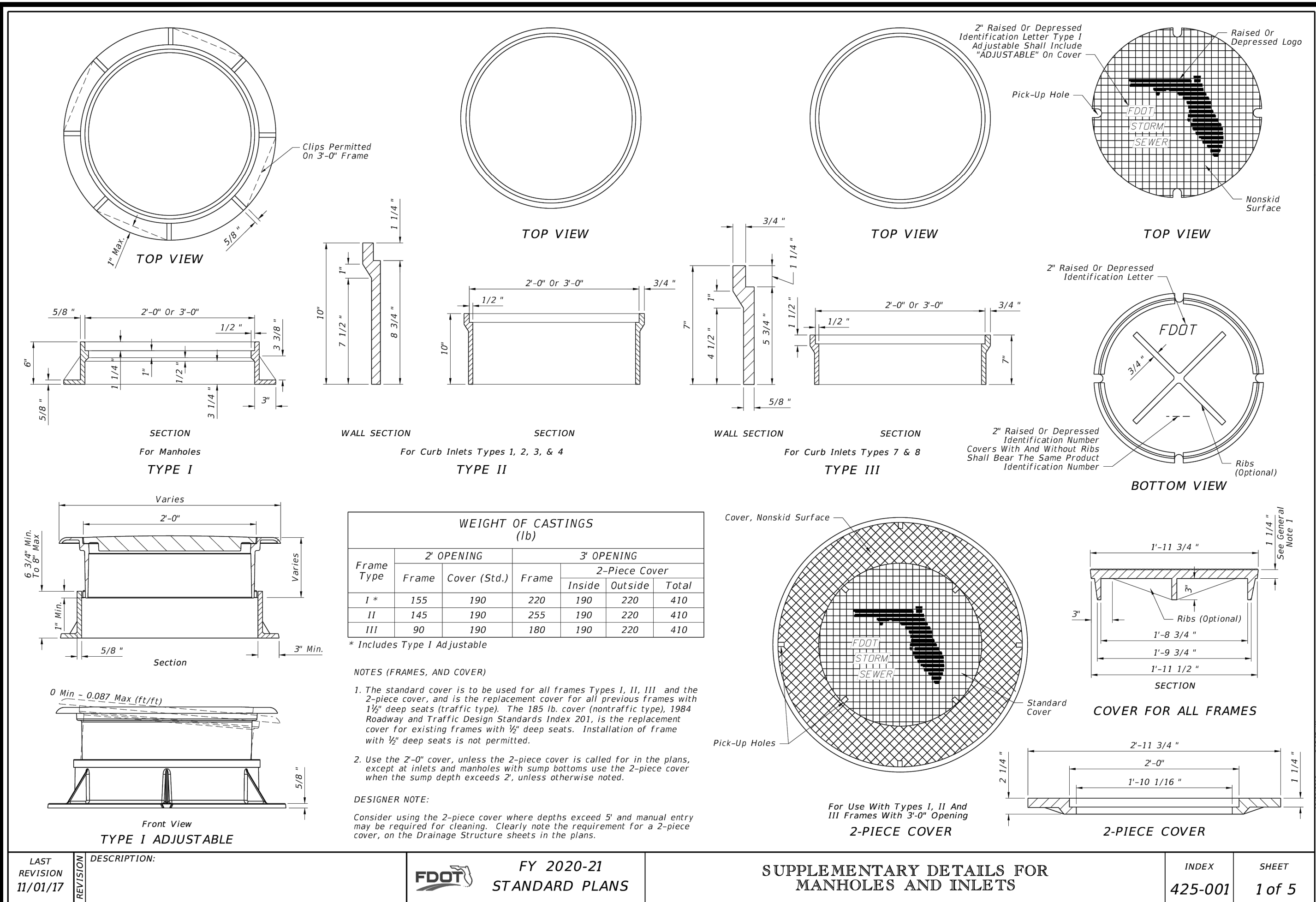
CITY OF DELAND, FLORIDA
1102 S. GARFIELD AVENUE, DELAND, FLORIDA 32724

SANITARY DETAILS

PAGE 2 OF 5



FILE: drive letter/details locations



MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

FDOT DETAILS

FOR

DELAND COMMONS

CITY OF DELAND

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427

August 23, 2022

CERTIFICATE OF AUTHORIZATION NO. CA-000723

DATE: 06/17/2022

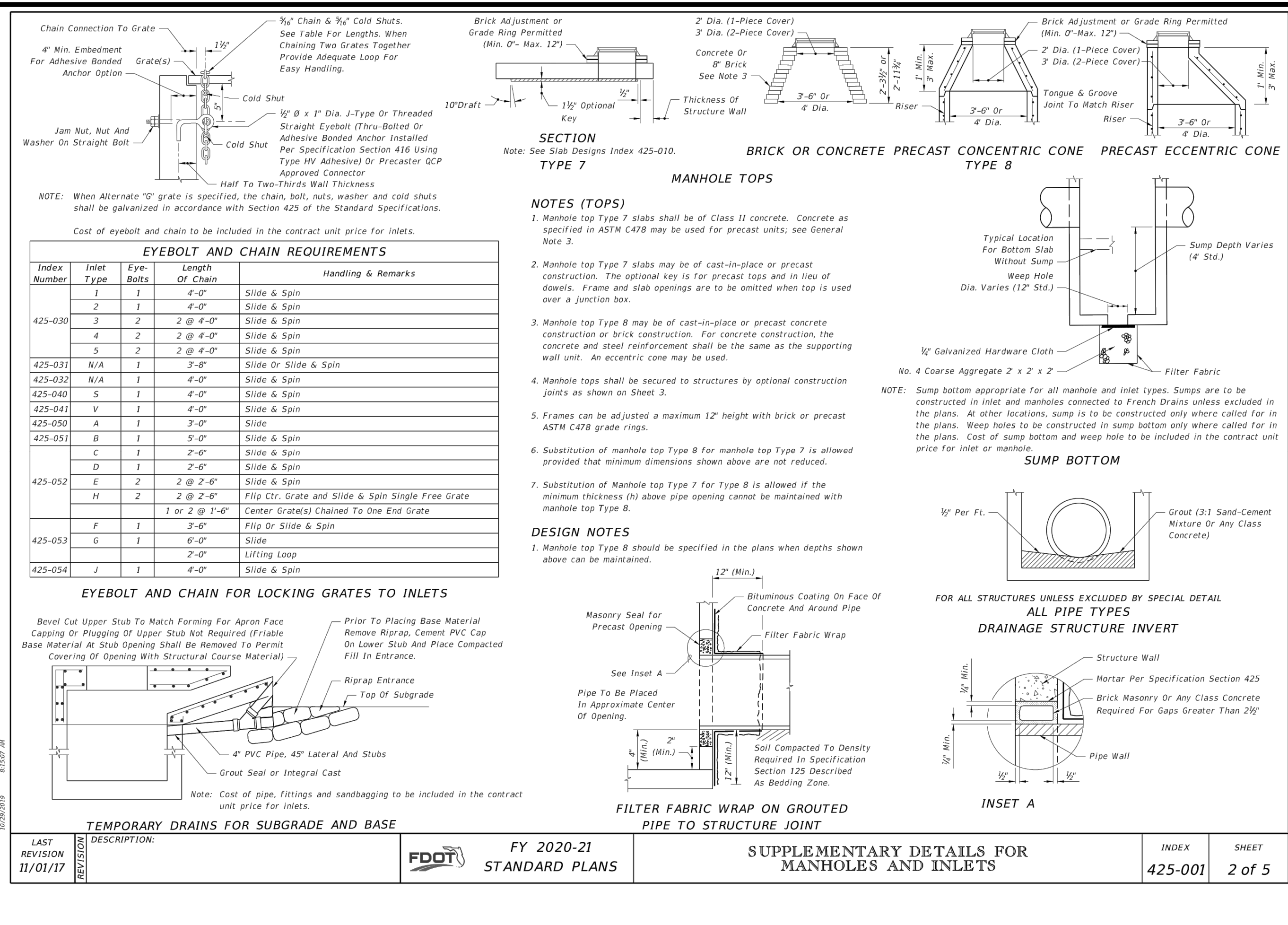
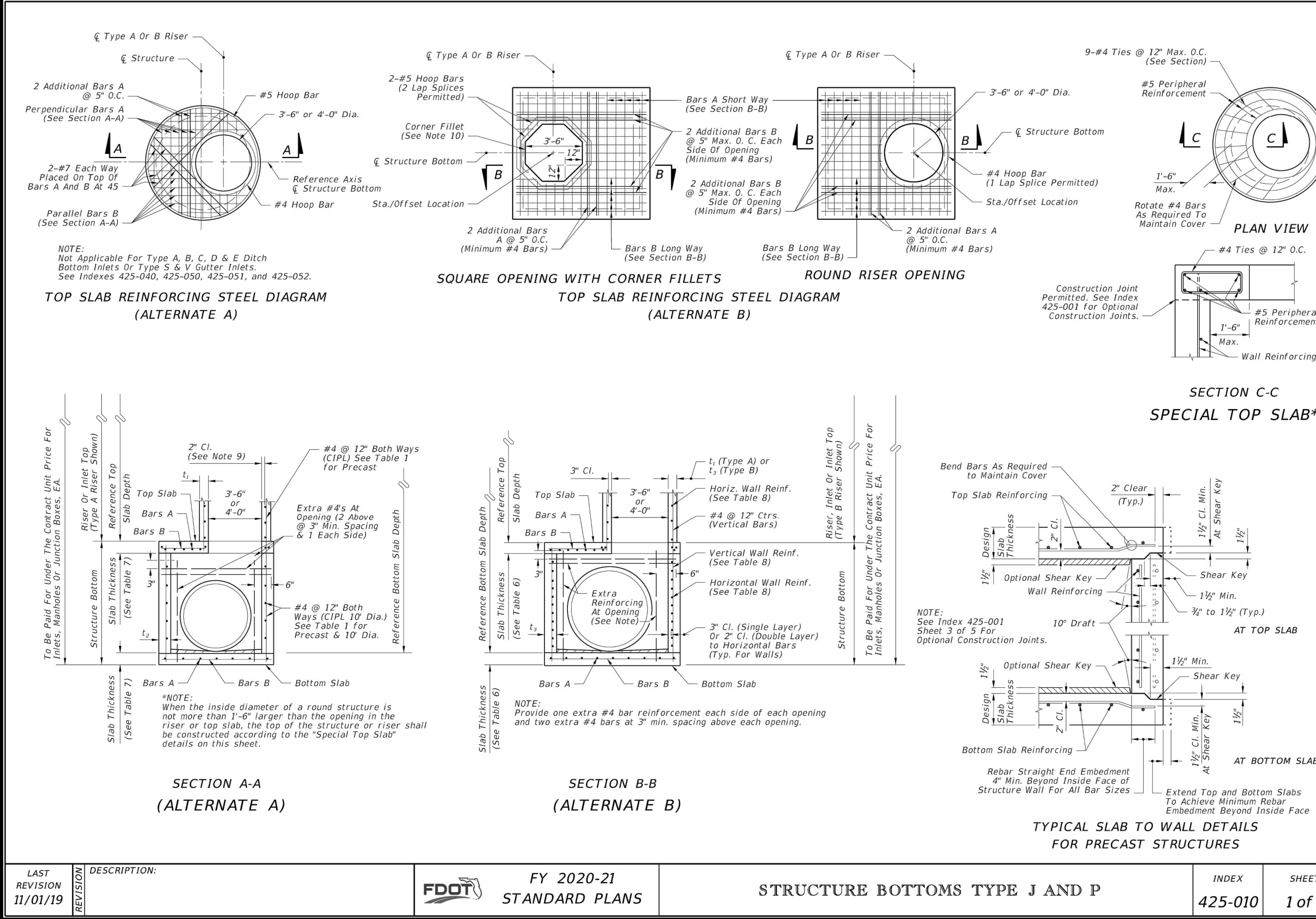
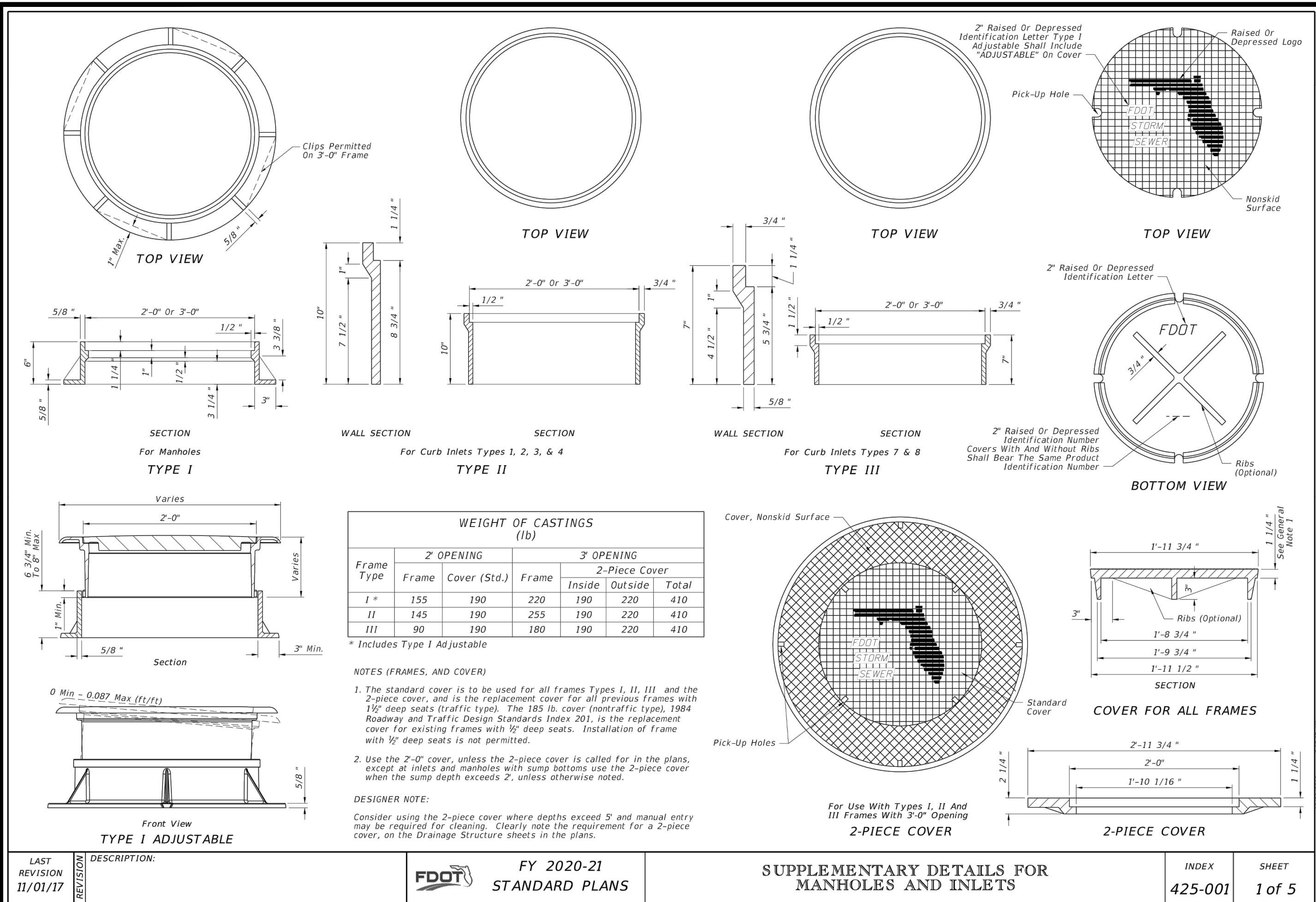
SCALE: N.T.S.

DESIGNED BY: PAB

DRAWN BY: PAB

APPROVED BY: WHZ

C920



MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS
431 E. Horatio Avenue
Suite 260
Maitland, Florida 32751
(407) 629-8330

FDOT DETAILS

FOR

DELAND COMMONS

CITY OF DELAND

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
June 17, 2022

CERTIFICATE OF AUTHORIZATION NO. CA-000723

DATE: 06/17/2022

SCALE: N.T.S.

DESIGNED BY: PAB

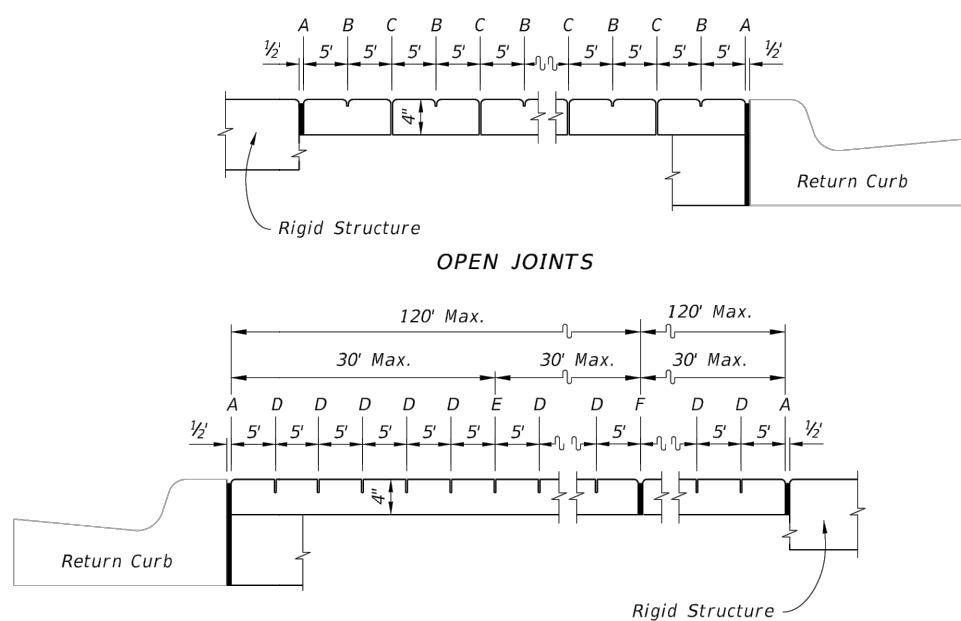
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C920

GENERAL NOTES:

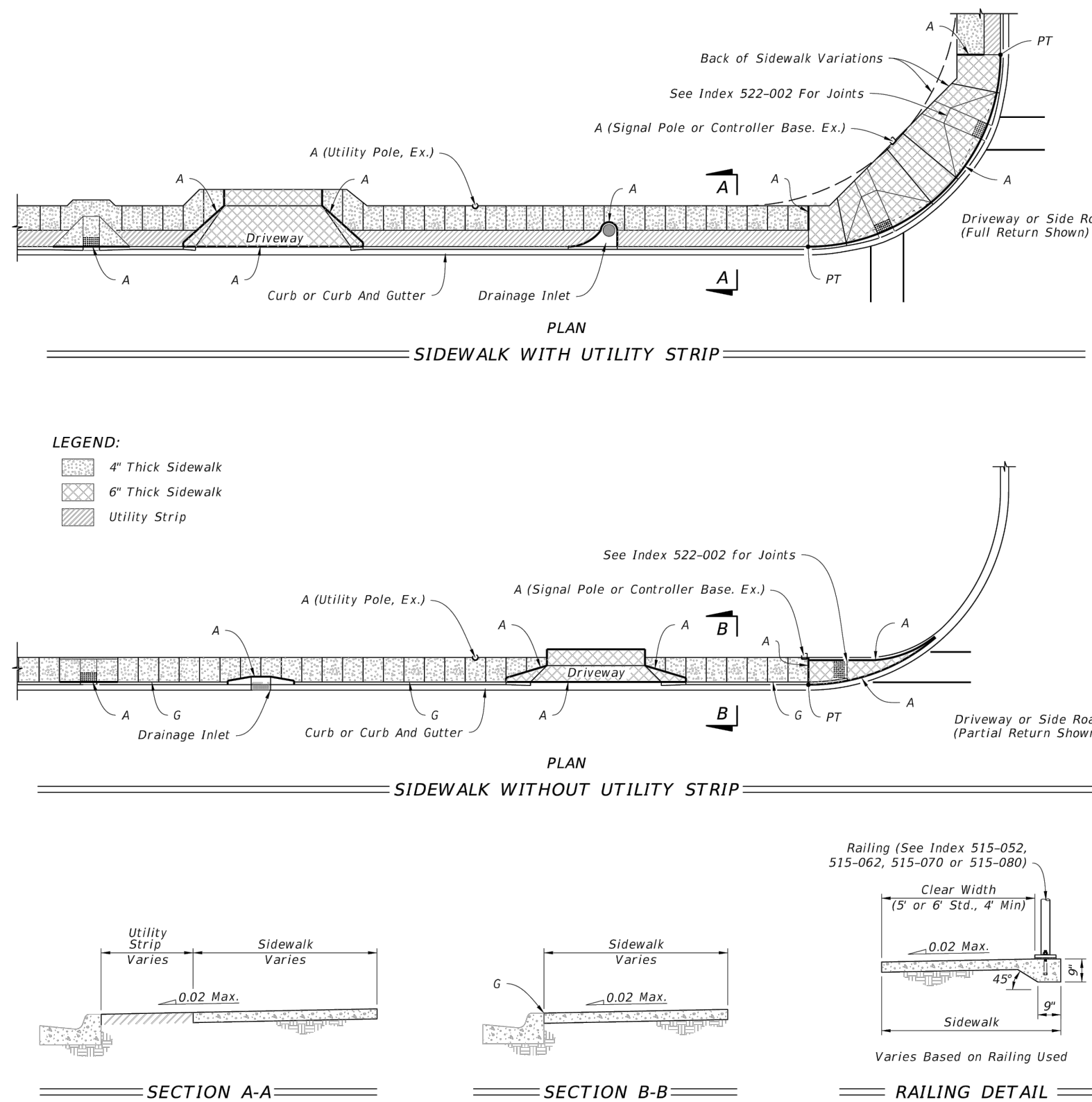
1. Construct sidewalks in accordance with Specification 522. Use 6" concrete for Sidewalks and Curb Ramps Located within Curb Returns (See Plan View). Install all other concrete with thickness as shown, unless otherwise detailed in the Plans.
2. Include detectable warnings on sidewalk curb ramps in accordance with Index 522-002.
3. For Driveways see Index 522-003.
4. Bond breaker material can be any impermeable coated or sheet membrane or preformed material having a thickness of not less than 6 mils and not more than 1/2".
5. Construct sidewalks with Edge Beam through the limits of any surface mounted Pedestrian/Bicycle Railing or Pipe Guiderail shown in the plans. (See RAILING DETAIL)



LEGEND:

- A- 1/2" Expansion Joints (Preformed Joint Filler) between the sidewalk and; driveways, sidewalk-intersections, and all other fixed objects (e.g. drainage inlets and utility poles).
- B- 1/2" Dummy Joints, Tooled
- C- 1/2" Formed Open Joints
- D- 3/4" Saw Cut Joints, 1 1/2" Deep (within 96 hours) Max. 5' Centers
- E- 3/4" Saw Cut Joints, 1 1/2" Deep (within 12 hours) Max. 30' Centers (Joint(s) Required When Length Exceeds 30')
- F- 1/2" Expansion Joint When Run Of Sidewalk Exceeds 120'. Intermediate locations when called for in the plans or at locations as directed by the Engineer.
- G- Cold Joint With Bond Breaker, Tooled

SIDEWALK JOINTS

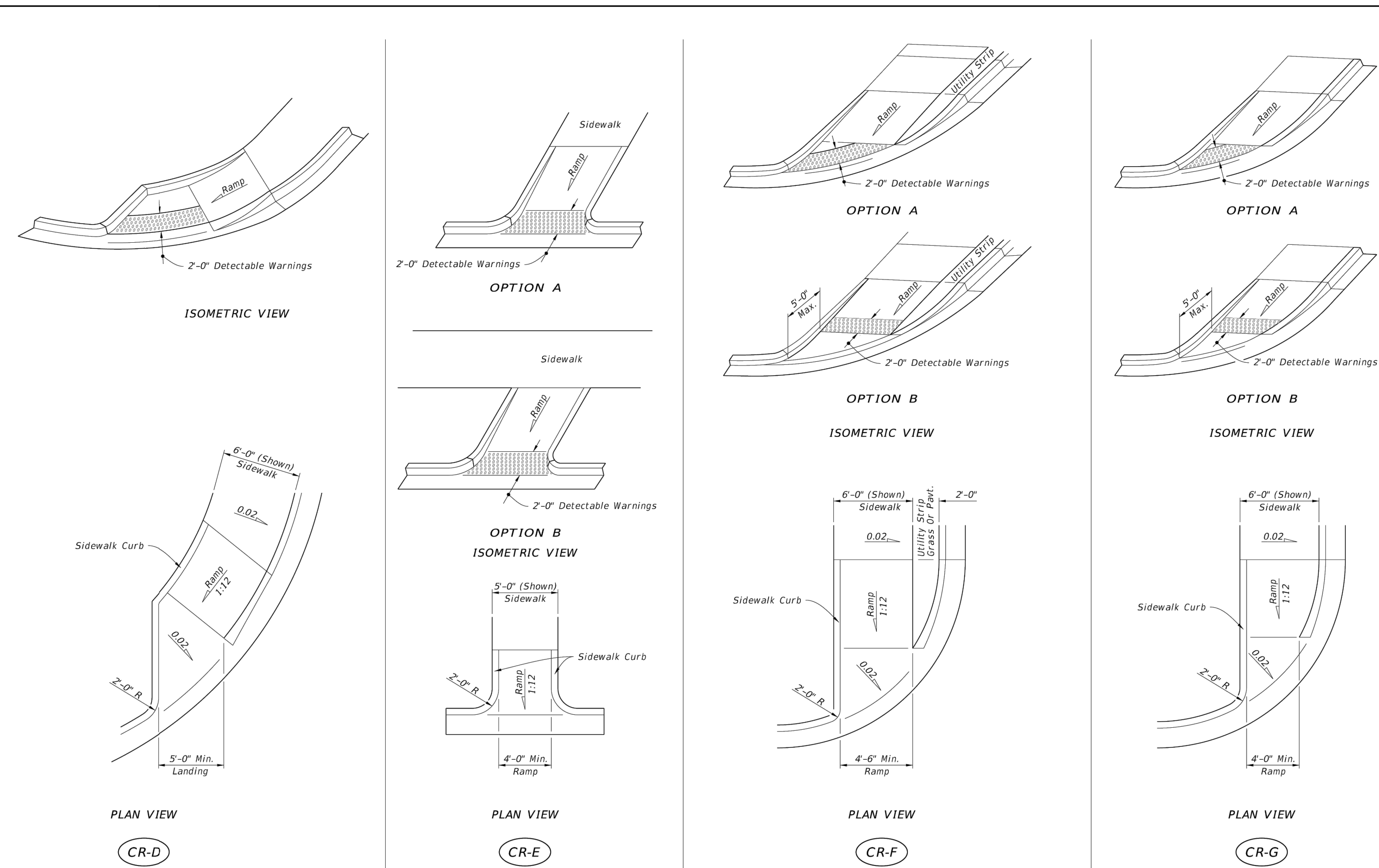


LEGEND:

- 4" Thick Sidewalk
- 6" Thick Sidewalk
- Utility Strip

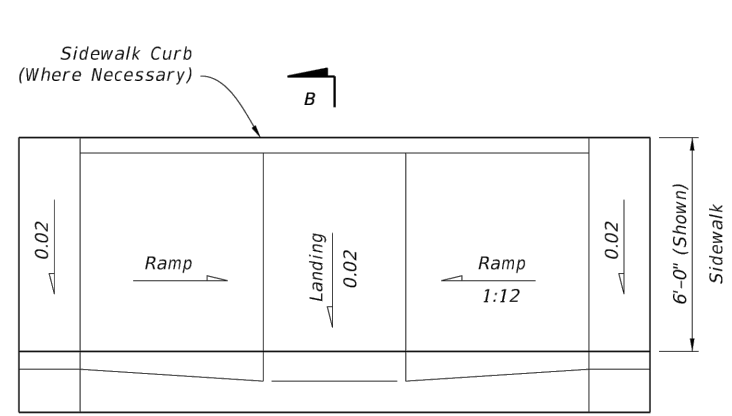
GENERAL NOTES AND CONCRETE SIDEWALK ON CURBED ROADWAYS

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	INDEX	SHEET
11/01/18			CONCRETE SIDEWALK	522-001	1 of 2



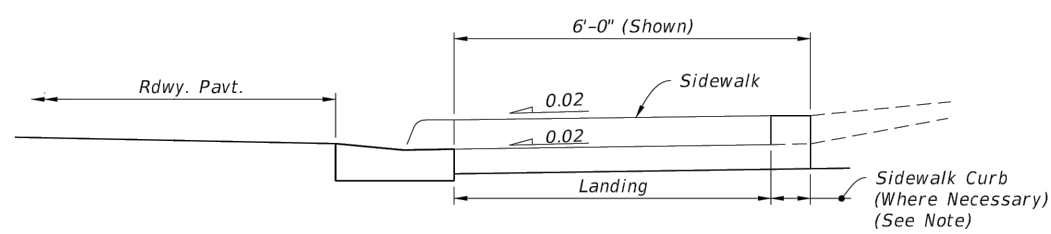
SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	INDEX	SHEET
11/01/20			DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	522-002	4 of 7

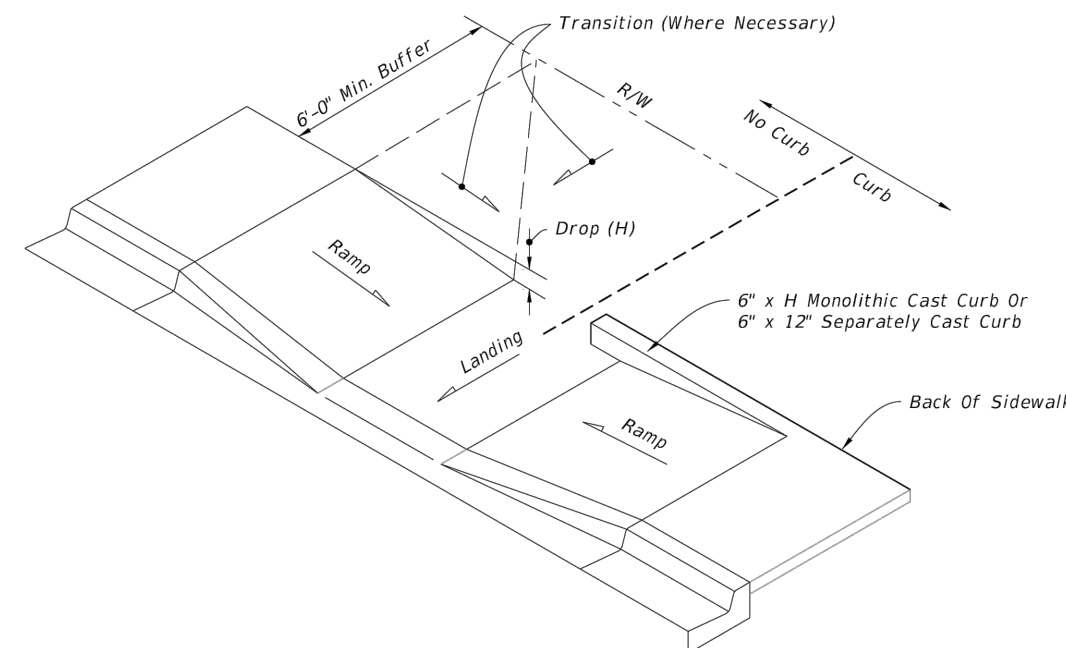


PLAN VIEW

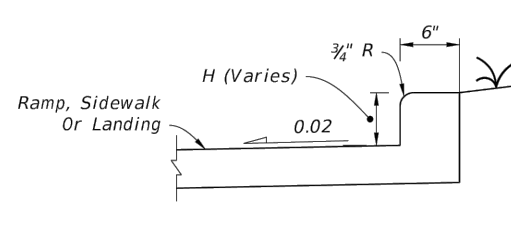
CR-C



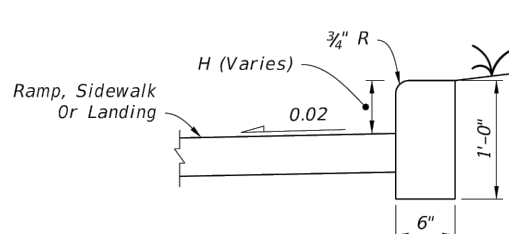
SECTION B-B



CONSTRUCTION OF SIDEWALK CURB IN CUT SECTIONS



MONOLITHIC CAST CURB



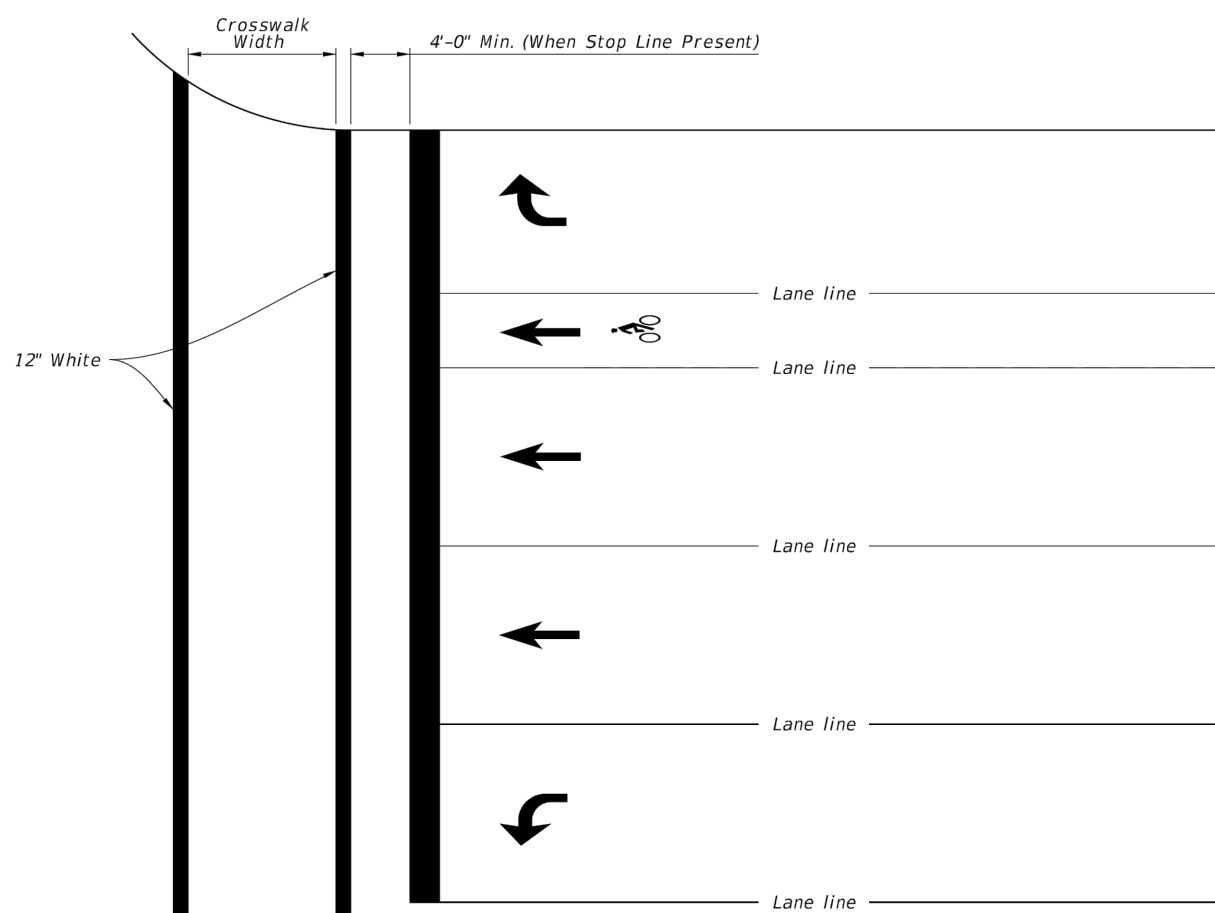
SEPARATELY CAST CURB

SIDEWALK CURB OPTIONS

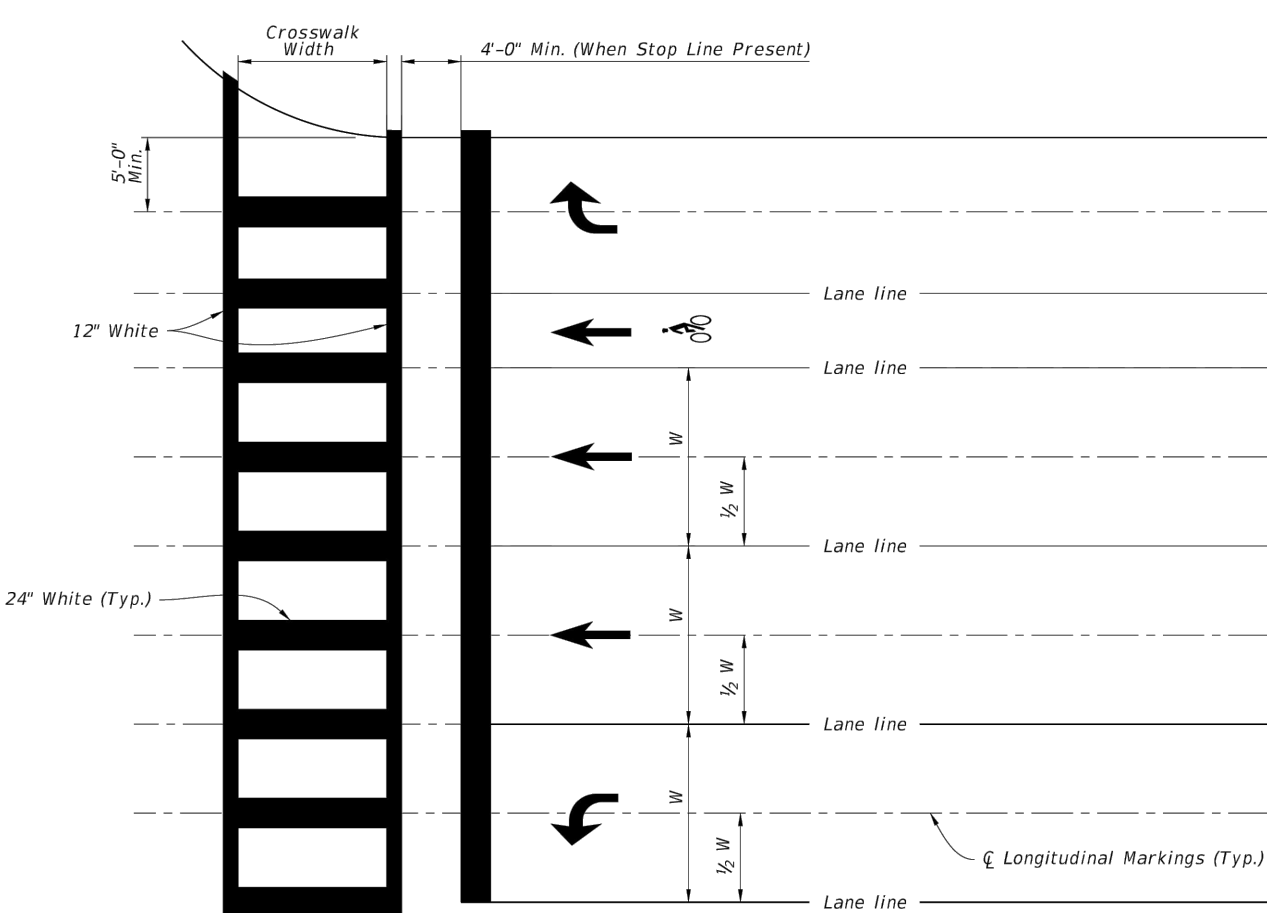
NOTE: For additional information on sidewalk curb construction, see SIDEWALK CURB OPTIONS details.

SIDEWALK CURB RAMPS CR-C AND SIDEWALK CURB

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	INDEX	SHEET
11/01/20			DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	522-002	3 of 7



STANDARD CROSSWALK DETAILS



SPECIAL EMPHASIS CROSSWALK DETAILS

NOTES:

1. For crosswalk width, exceed width of the adjacent sidewalk, but do not make width less than 6' for intersection crosswalks and 10' for midblock crosswalks. Measure width from the inside of the transverse crosswalk markings.
2. When the Special Emphasis Crosswalk is not perpendicular to the lane lines, make the longitudinal markings parallel to the lane lines.
3. Refer to Index 522-002 when Curb Ramps are present.

LAST REVISION	DESCRIPTION:	FDOT	FY 2020-21 STANDARD PLANS	INDEX	SHEET
11/01/18			PAVEMENT MARKINGS	711-001	10 of 13



FDOT DETAILS
FOR
DELAND COMMONS
CITY OF DELAND
FLORIDA

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
August 23, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

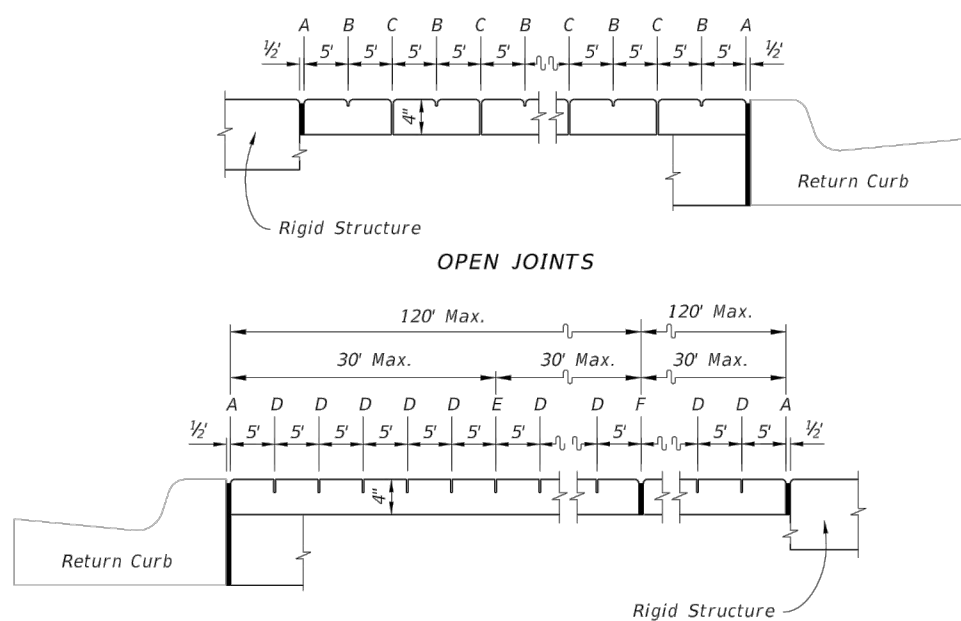
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JOB # 18029
DATE: 06/17/2022
SCALE: N.T.S.
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C922

GENERAL NOTES:

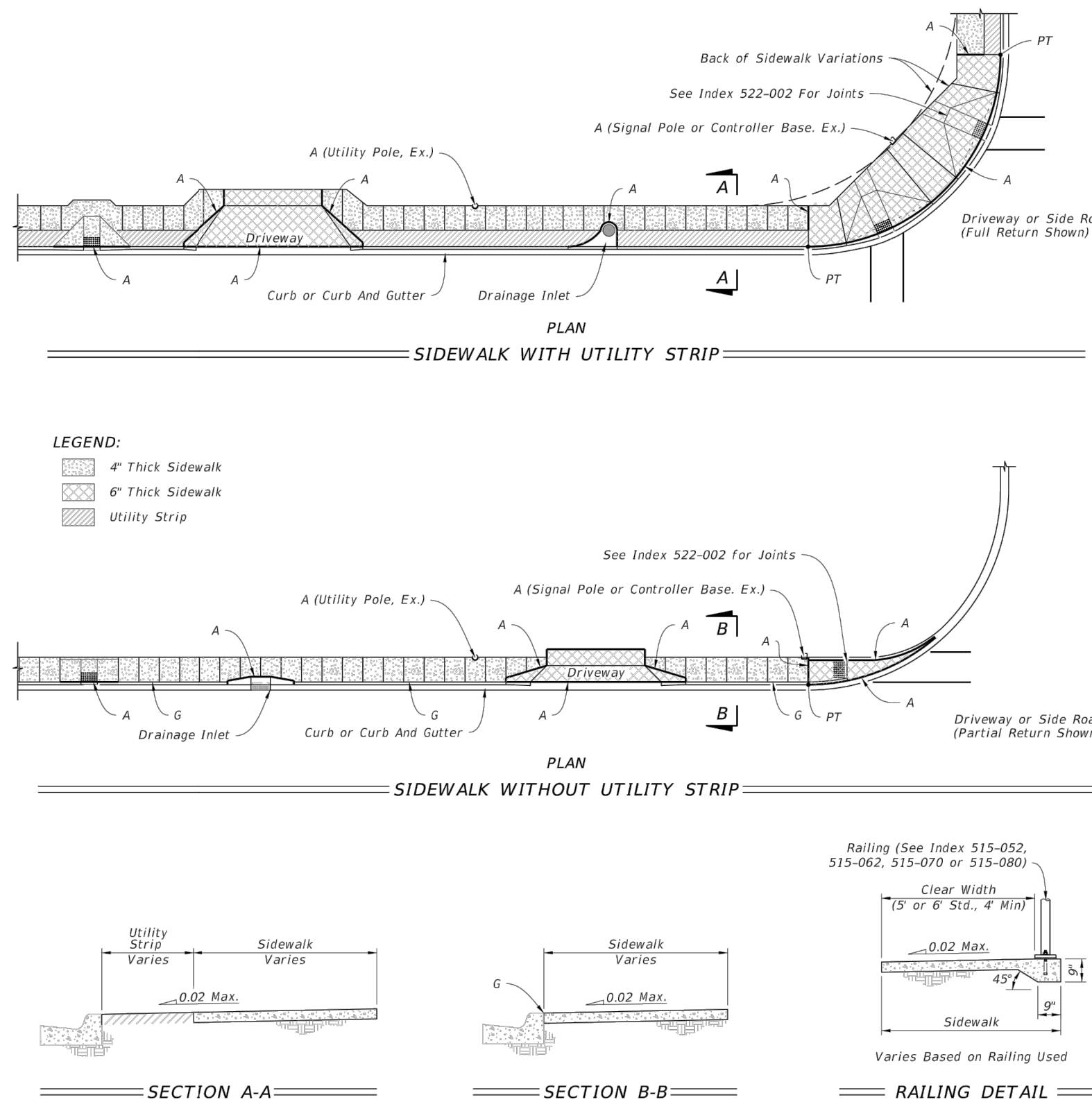
1. Construct sidewalks in accordance with Specification 522. Use 6" concrete for Sidewalks and Curb Ramps Located within Curb Returns (See Plan View). Install all other concrete with thickness as shown, unless otherwise detailed in the Plans.
2. Include detectable warnings on sidewalk curb ramps in accordance with Index 522-002.
3. For Driveways see Index 522-003.
4. Bond breaker material can be any impermeable coated or sheet membrane or preformed material having a thickness of not less than 6 mils and not more than 1/2".
5. Construct sidewalks with Edge Beam through the limits of any surface mounted Pedestrian/Bicycle Railing or Pipe Guardrail shown in the plans. (See RAILING DETAIL)



LEGEND:

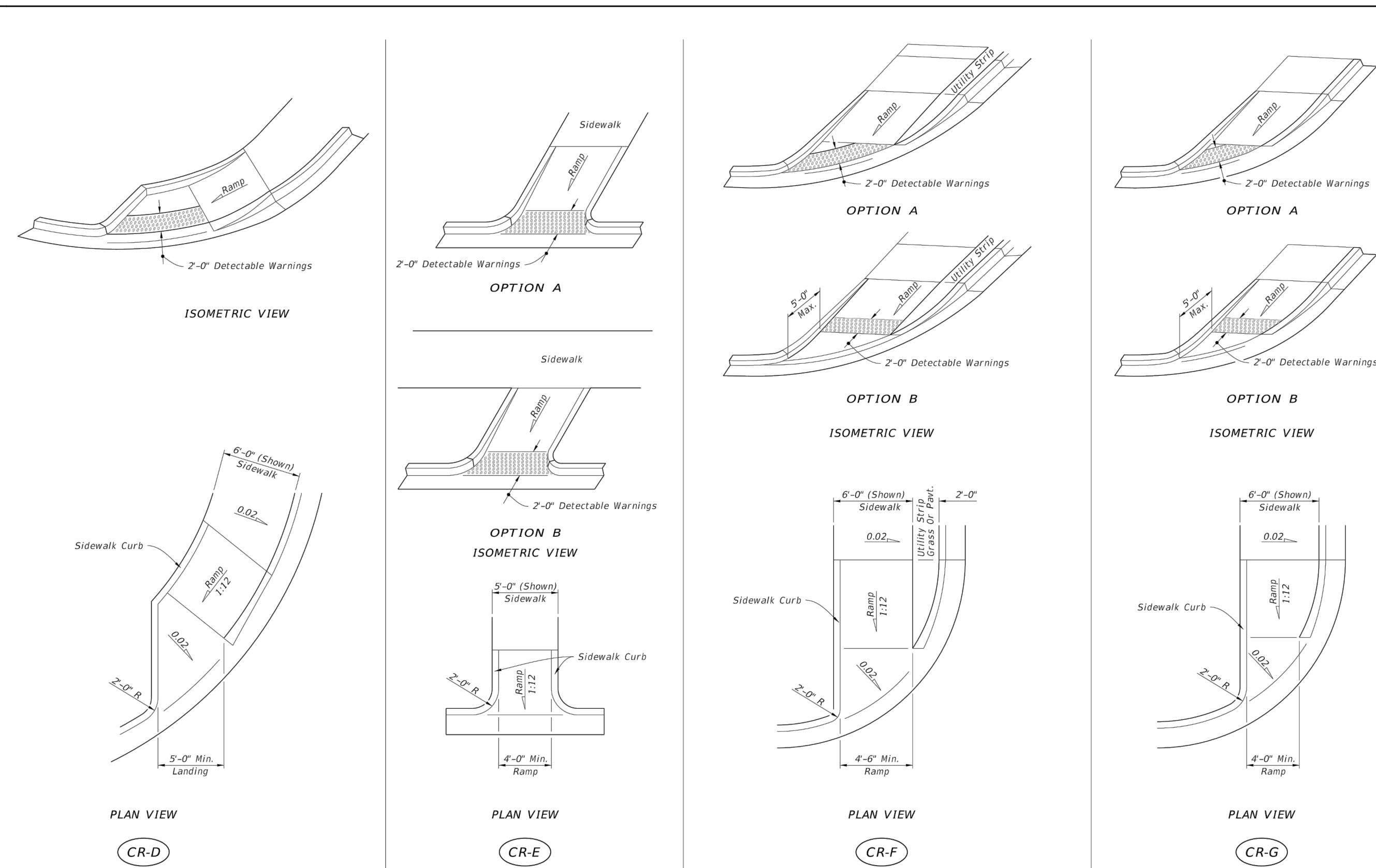
- A- 1/2" Expansion Joints (Preformed Joint Filler) between the sidewalk and; driveways, sidewalk-intersections, and all other fixed objects (e.g. drainage inlets and utility poles).
- B- 1/2" Dummy Joints, Tooled
- C- 1/2" Formed Open Joints
- D- 3/4" Saw Cut Joints, 1 1/2" Deep (within 96 hours) Max. 5' Centers
- E- 3/4" Saw Cut Joints, 1 1/2" Deep (within 12 hours) Max. 30' Centers (Joint(s) Required When Length Exceeds 30')
- F- 1/2" Expansion Joint When Run Of Sidewalk Exceeds 120'. Intermediate locations when called for in the plans or at locations as directed by the Engineer.
- G- Cold Joint With Bond Breaker, Tooled

- LEGEND:
- 4" Thick Sidewalk
 - 6" Thick Sidewalk
 - Utility Strip



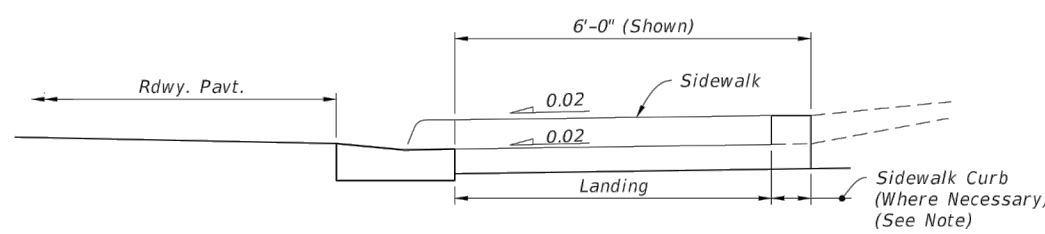
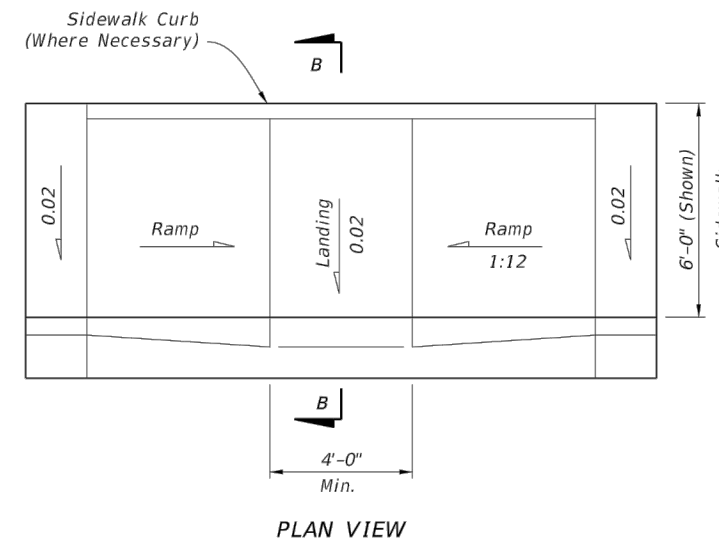
GENERAL NOTES AND CONCRETE SIDEWALK ON CURBED ROADWAYS

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	INDEX	SHEET
11/01/18			CONCRETE SIDEWALK	522-001	1 of 2

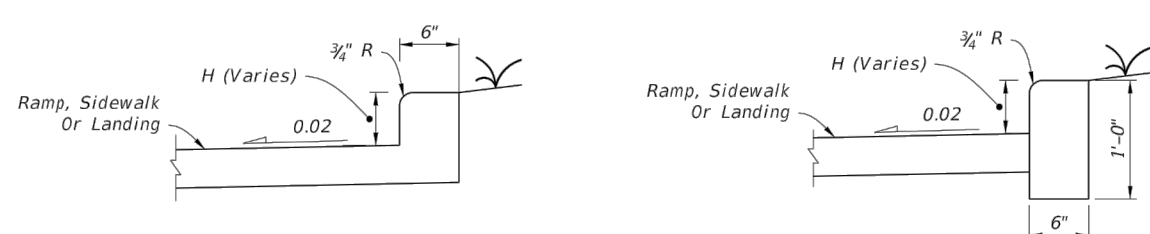
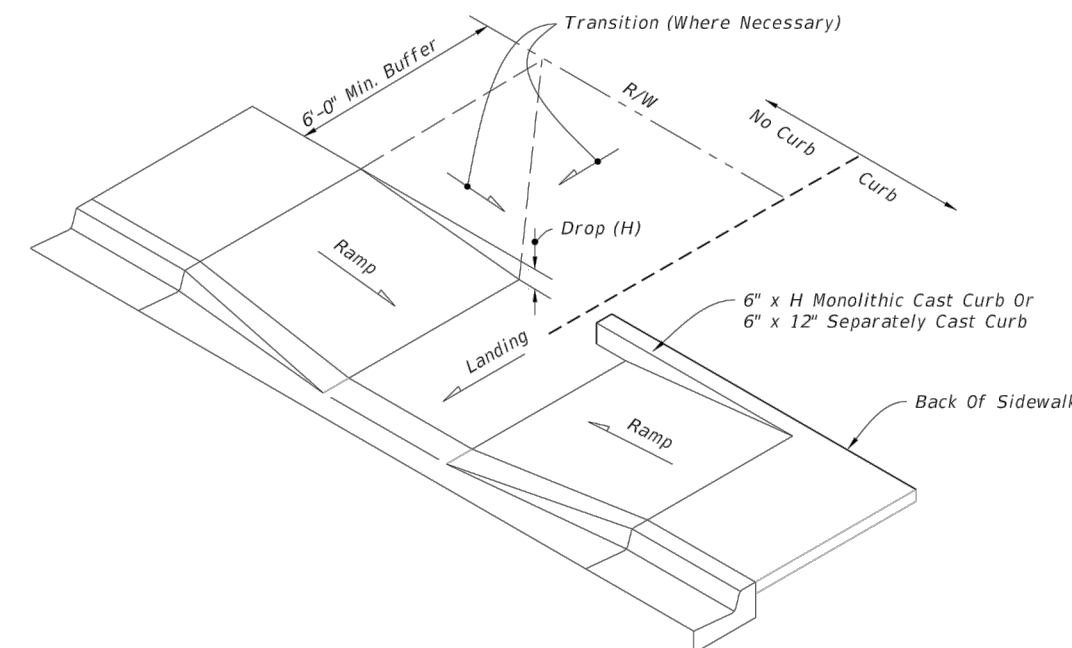


SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	INDEX	SHEET
11/01/20			DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	522-002	4 of 7

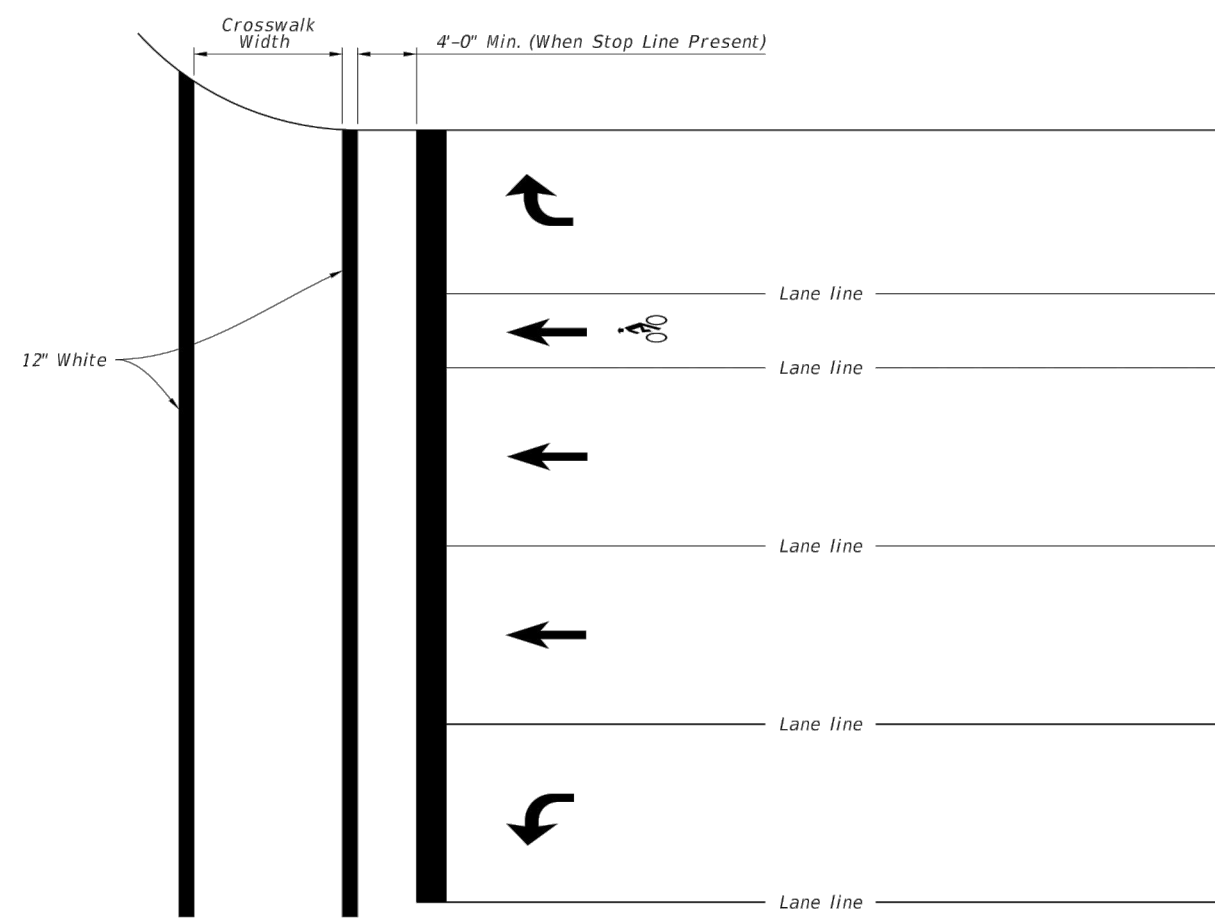


NOTE: For additional information on sidewalk curb construction, see SIDEWALK CURB OPTIONS details.

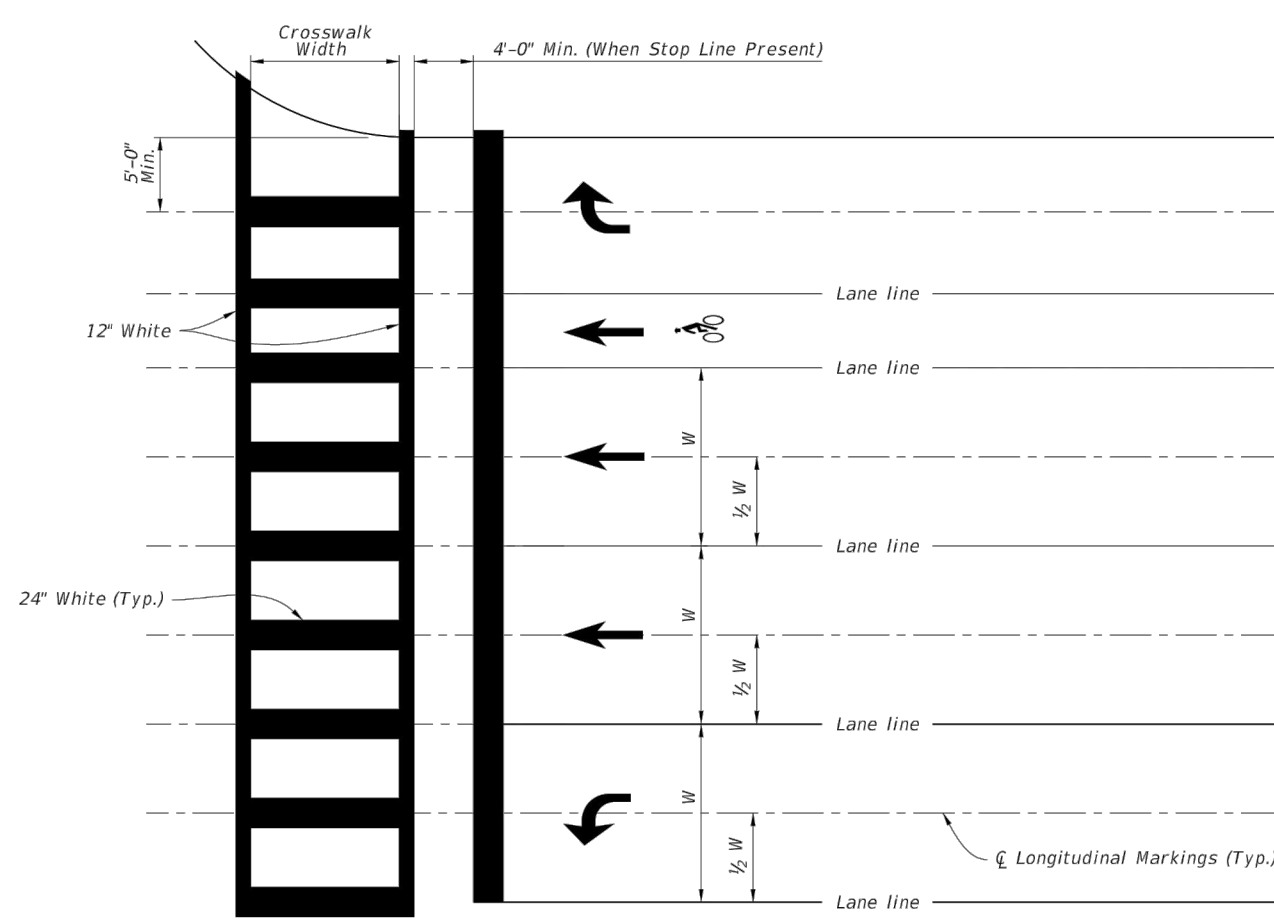


SIDEWALK CURB RAMPS CR-C AND SIDEWALK CURB

LAST REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	INDEX	SHEET
11/01/20			DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	522-002	3 of 7



STANDARD CROSSWALK DETAILS



SPECIAL EMPHASIS CROSSWALK DETAILS

NOTES:

1. For crosswalk width, exceed width of the adjacent sidewalk, but do not make width less than 6' for intersection crosswalks and 10' for midblock crosswalks. Measure width from the inside of the transverse crosswalk markings.
2. When the Special Emphasis Crosswalk is not perpendicular to the lane lines, make the longitudinal markings parallel to the lane lines.
3. Refer to Index 522-002 when Curb Ramps are present.

LAST REVISION	DESCRIPTION:	FDOT	FY 2020-21 STANDARD PLANS	INDEX	SHEET
11/01/18			PAVEMENT MARKINGS	711-001	10 of 13



FDOT DETAILS
FOR
DELAND COMMONS
CITY OF DELAND
FLORIDA

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

WILLIAM HENRY ZEH, P.E. #81427
June 17, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

NO.	DATE	REVISIONS
1	06/17/2022	1

JOB # 18029
DATE: 06/17/2022
SCALE: N.T.S.
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C922



FDOT DETAILS
FOR
DELAND COMMONS
CITY OF DELAND
FLORIDA

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

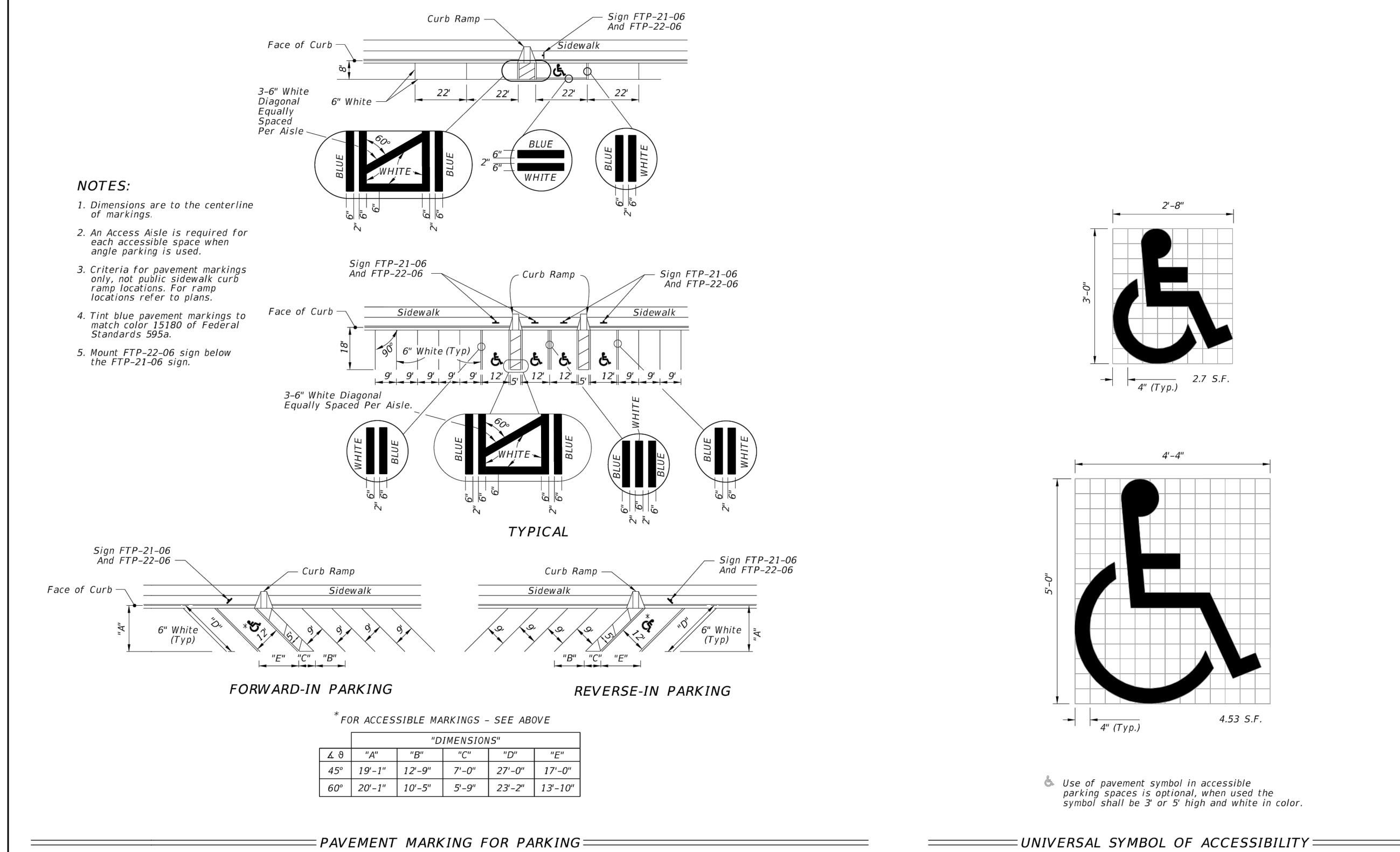
WILLIAM HENRY ZEH, P.E. #81427

August 23, 2022

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11	DATE REVISIONS

JOB # 18029
DATE: 06/17/2022
SCALE: N.T.S.
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C923



LAST REVISION 11/01/18	DESCRIPTION:	 FY 2019-20 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 12 of 13
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FDOT DETAILS
FOR
DELAND COMMONS
CITY OF DELAND
FLORIDA

DELAND COMMONS PARTNERS, LTD.
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FL 32789
(407) 741-8500

ENGINEER IN CHARGE:

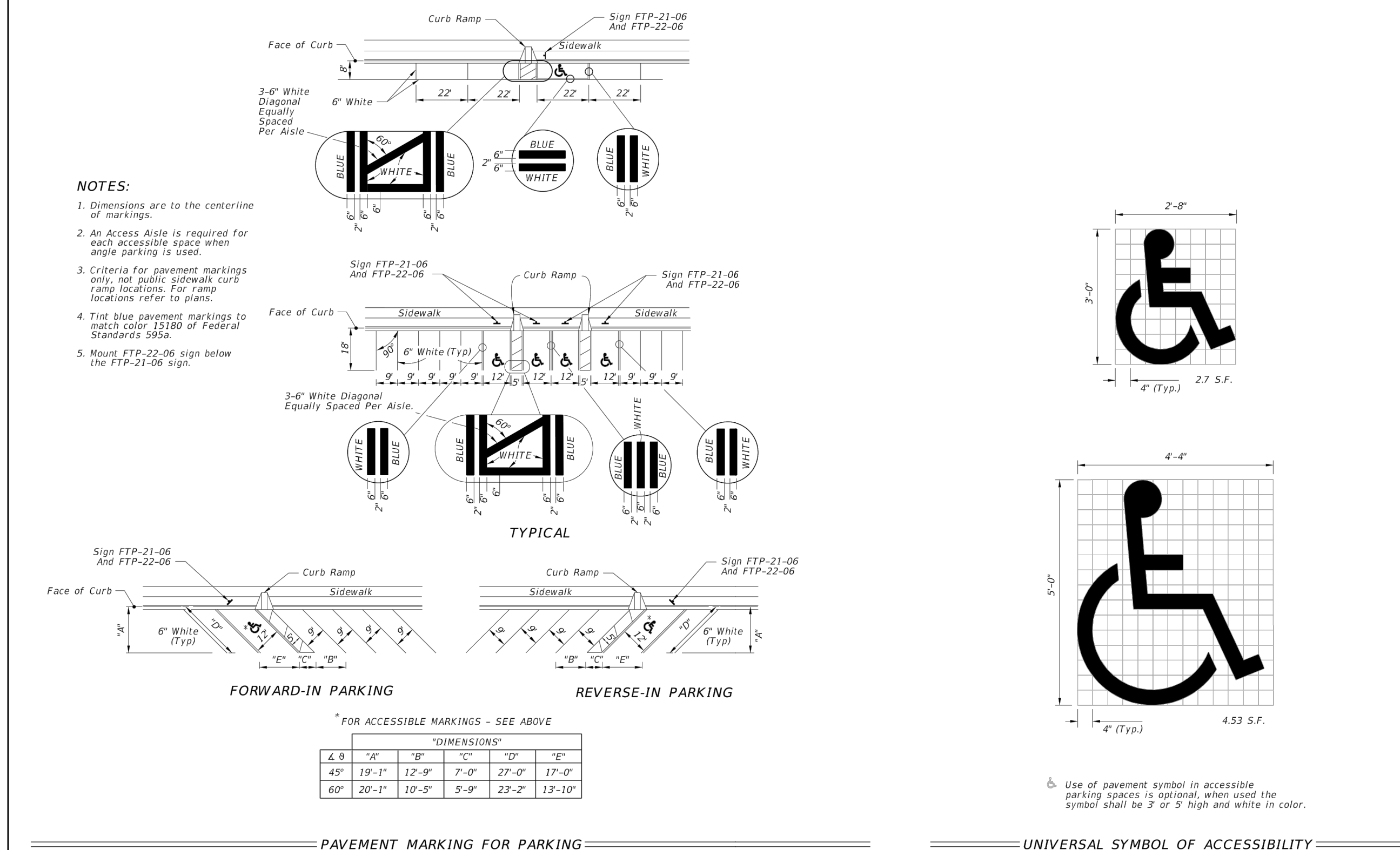
WILLIAM HENRY ZEH, P.E. #81427

CERTIFICATE OF AUTHORIZATION NO. CA-0007723

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11	DATE REVISIONS

JOB # 18029
DATE: 06/17/2022
SCALE: N.T.S.
DESIGNED BY: PAB
DRAWN BY: PAB
APPROVED BY: WHZ

C923



LAST REVISION 11/01/18	DESCRIPTION:  FY 2019-20 STANDARD PLANS	INDEX 711-001	SHEET 12 of 13
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LEGAL DESCRIPTION:

THE WESTERLY 182 FEET OF THE SOUTH 2/5 OF LOT 2, BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE PLAT THEREOF AS RECORDED IN DEED BOOK G, PAGE 701, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA;

AND

LOT 1 OF THE RESUBDIVISION OF THE SOUTH ONE-HALF (S1/2) OF BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE PLAT THEREOF AS RECORDED IN MAP BOOK 6, PAGE 51, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

LOT 2, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

THE NORTH 16 FEET OF LOT 6 LYING EAST OF LOT 2, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S DDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

THE NORTH 16 FEET OF LOT 7 AND THE EAST 3.5 FEET OF LOT 7, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

LOT(S) 8, 9, 10, 11, 12, 13 AND 14, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

LOT A, CLAKE'S RESUBDIVISION OF BLOCK 14, HOWRY'S ADDITION TO DELAND, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 5, PAGE 2 AND MAP BOOK 15, PAGE 179, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT B, CLAKE'S RESUBDIVISION OF BLOCK 14, HOWRY'S ADDITION TO DELAND, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 5, PAGE 2 AND MAP BOOK 15, PAGE 179, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT 3, BLOCK 14, MAP OF J.W. HOWRY'S SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 1, PAGE 137 AND MAP BOOK 21, PAGE 191, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT 4, BLOCK 14, MAP OF J.W. HOWRY'S SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 1, PAGE 137 AND MAP BOOK 21, PAGE 191, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

AND

A PARCEL OF LAND BEING A PORTION OF LOT 2, BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE PLAT THEREOF AS RECORDED IN DEED BOOK G, PAGE 701, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA;

BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NW CORNER OF LOT 5, HAMMOND'S SUBDIVISION, ACCORDING TO MAP BOOK 12, PAGE 175, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN IN A SOUTHERLY DIRECTION ALONG THE WEST LINE OF LOTS 5 & 6 OF THE SAID HAMMOND'S SUBDIVISION A DISTANCE OF 282 FEET (MORE OR LESS) TO THE SW CORNER OF LOT 6; THENCE RUN IN A WESTERLY DIRECTION 64.85 FEET (MORE OR LESS) TO THE NW CORNER OF LOT 12 OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 5, PAGE 51, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; BEING THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING, RUN NORTHERLY AND PARALLEL WITH THE WEST LINE OF LOT 6, A DISTANCE OF 47.66 FEET TO A POINT; THENCE RUN WESTERLY ON A LINE PARALLEL WITH THE NORTH LINE OF LOT 12, A DISTANCE OF 52.35 FEET (MORE OR LESS) TO A POINT 182 FEET EAST OF THE WEST LINE OF LOT 2, BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN DEED BOOK G, PAGE 701, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; (THE WEST LINE OF LOT 2 IS THE EAST RIGHT OF WAY LINE OF SOUTH WOODLAND BOULEVARD, A 66 FOOT WIDE STREET) AND 233.51 FEET SOUTH OF THE NORTH LINE OF THE SAID LOT 2; THENCE RUN SOUTHERLY ON A LINE PARALLEL WITH THE WEST LINE OF LOT 6 A DISTANCE OF 54.49 FEET (MORE OR LESS) TO THE SOUTH LINE OF THE SAID LOT 2; THENCE RUN IN AN EASTERLY DIRECTION ALONG THE SOUTH LINE OF SAID LOT 2, AND PARALLEL TO THE NORTH LINE OF LOT 12, TO THE POINT OF BEGINNING.

AND

THE WEST 127 FEET OF LOTS 15 AND 16, CLAKE'S RESUBDIVISION IN BLOCK 14, HOWRY'S ADDITION TO THE CITY OF DELAND, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 5, PAGE 2, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

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C002	SYMBOLS AND ABBREVIATIONS
C003	GENERAL NOTES
C010	DEMOLITION PLAN
C100	OVERALL SITE PLAN
C101-C102	SITE PLAN
C201-C202	UTILITY PLAN
C301-C302	DRAINAGE PLAN
C401-C402	GRADING PLAN
C700	EROSION CONTROL PLAN
C800-C801	VEHICLE CIRCULATION PLAN
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C910-C916	CITY DETAILS
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1 of 3 - 3 of 3	ALTA/NSPS LAND TITLE SURVEY
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PL-002	KEY PLANS
PL-300 - 302	LANDSCAPE CODE PLAN
PL-303	CODE LANDSCAPE PLANT LIST & NOTES
PL-304	SIGN ELEVATIONS
PL-305	LANDSCAPE DETAILS
PL-400 - 401	IRRIGATION CODE PLANS
PL-500 - 501	LIGHTING PHOTOMETRIC PLAN
PL-502	LIGHTING SCHEDULE & CUT SHEETS

FINAL ENGINEERING PLAN FOR DELAND COMMONS

PARCEL ID'S: 701601110027, 701601110028, 7016190000020,
7016190000120, 7016190000130, 7016190000140, 7016190000080,
7016190000090, 7016190000100, 7016190000110, 7016120000010,
7016120000020, 701601140040, 701601140030, 7016120000150
SECTION 16, TOWNSHIP 17 SOUTH, RANGE 30 EAST

CITY OF DELAND, FLORIDA

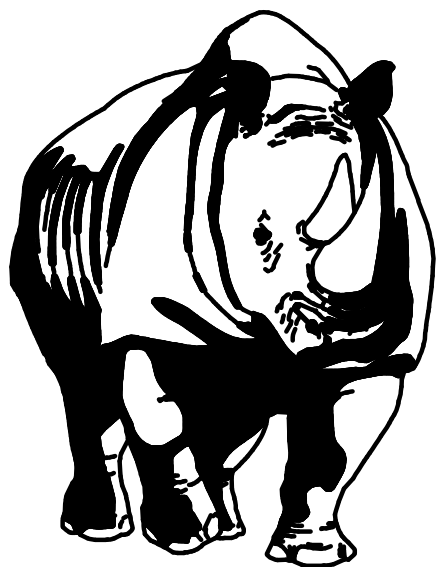
FOR

DELAND COMMONS PARTNERS, LTD.

200 EAST CANTON AVENUE, SUITE 101

WINTER PARK, FLORIDA 32789

PH (407) 741-8500



MADDEN
MOORHEAD & STOKES, LLC
CIVIL ENGINEERS

431 E. HORATIO AVENUE, SUITE 260
MAITLAND, FLORIDA 32751
PHONE (407) 629-8330
FAX (407) 629-8336

UTILITY PROVIDERS:

CABLE:

CHARTER COMMUNICATIONS
1195 S. WOODLAND BLVD,
DELAND, FL 32720
PHONE: (407) 532-8614
CONTACT: STACY STAFFORD

POWER:

DUKE ENERGY
400 N. SPRING GARDEN AVE.
DELAND, FL 32720
PHONE: (407) 938-6602
CONTACT: KELLY BEARD

GAS:

FLORIDA PUBLIC UTILITIES
450 S. HIGHWAY 17-92
DEBARY, FL 32713
PHONE: (863) 220-1510
CONTACT: KATIE L. COLE

PHONE:

AT&T
1500 HERBERT ST.
PORT ORANGE, FL 32129
PHONE: (386) 281-6955
CONTACT: JAMES FRANKLIN

WATER & WASTE WATER:

CITY OF DELAND
1101 S. AMELIA AVE.
DELAND, FL 32724
PHONE: (386) 626-7250

PROJECT TEAM MEMBERS:

OWNER:

DELAND COMMONS PARTNERS, LTD.
200 E CANTON AVE, SUITE 102
WINTER PARK, FL 32789

DEVELOPER:

DELAND COMMONS PARTNERS, LTD.
MARC GAUTHIER
200 EAST CANTON AVENUE, SUITE 101
WINTER PARK, FLORIDA 32789

ENGINEER:

MADDEN, MOORHEAD, & STOKES, LLC
431 E HORATIO AVE., SUITE 260
MAITLAND, FLORIDA 32751
PHONE: (407) 629-8330

GEOTECHNICAL:

YOVAISH ENGINEERING SERVICES, LLC
953 SUNSHINE LANE
ALTAMONTE SPRINGS, FL 32714
PHONE: (407) 774-9383

ENVIRONMENTAL:

E SCIENCES, INCORPORATED
34 EAST PINE STREET
ORLANDO, FL 32801
PHONE: (407) 481-9006

SURVEYOR:

ALLEN & COMPANY, INC.
16 EAST PLANT STREET
WINTER GARDEN, FL 34787
PHONE: (407) 654-5355

ARCHITECT:

SLOCUM PLATTS
670 NORTH ORLANDO AVE, SUITE 1001
MAITLAND, FL 32751
PHONE: (407) 645-3019

LANDSCAPE ARCHITECT:

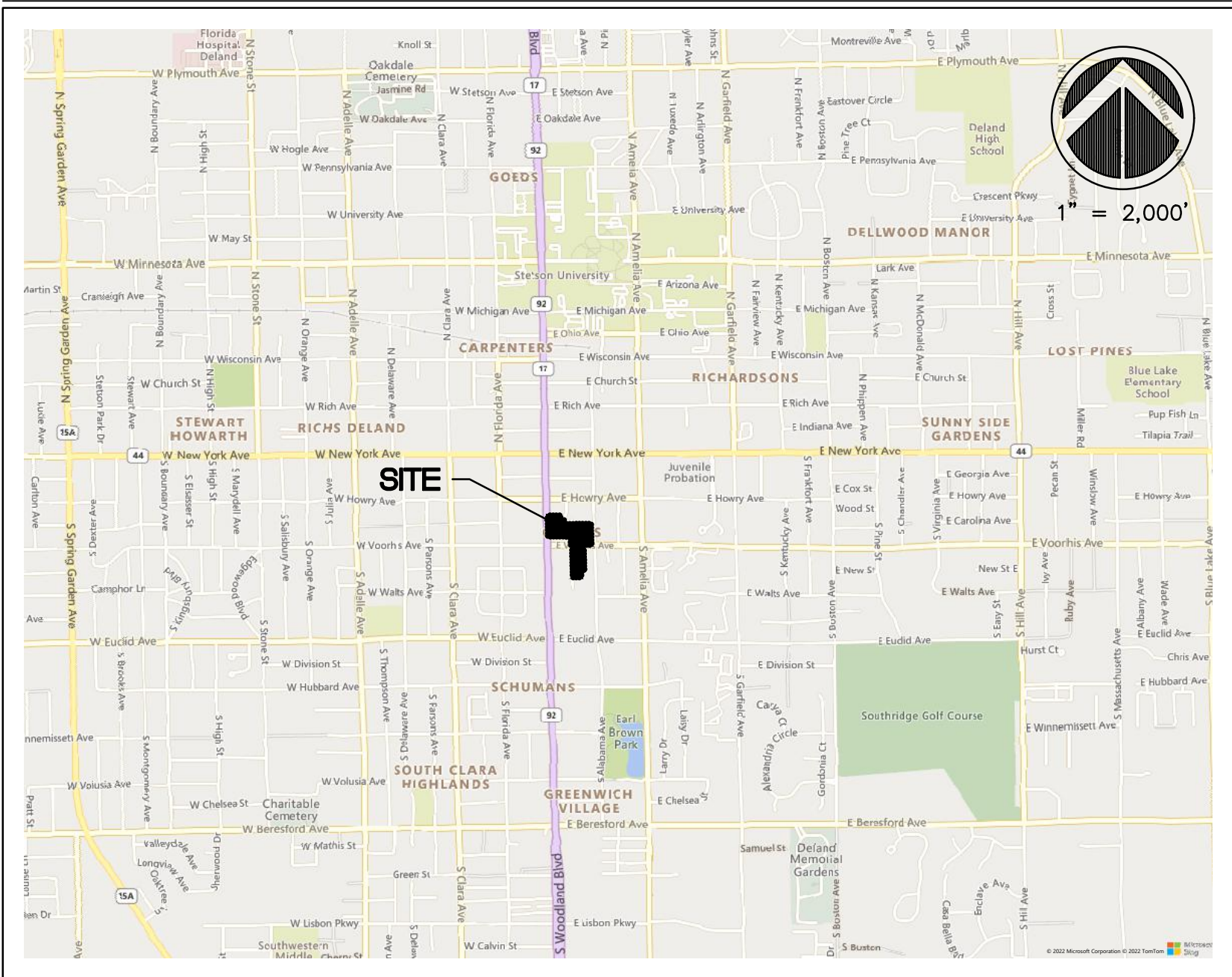
FOSTER CONANT & ASSOCIATES
120 W ROBINSON ST,
ORLANDO, FL 32801
PHONE: (407) 648-2225



This item has been electronically signed and sealed by William Henry Zeh, P.E. using a digital signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Digitally signed by William H Zeh
DN: c=US, o=Florida, dnQualifier=A01410C0000017E458A52020000E6A, cn=William H Zeh
Date: 2022.06.17 13:38:19 -04'00'

VICINITY MAP



WILLIAM HENRY ZEH, P.E. #81427
June 17, 2022
CERTIFICATE OF AUTHORIZATION NO. CA-0007723

DELAND COMMONS (18029)

H:\Data\18029\Eng\Final\18029_0001-COV.dwg Jun 17, 2022--12:58:40 pm



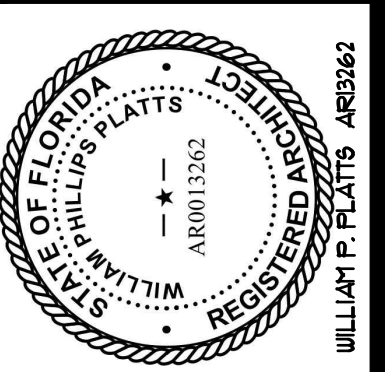
1 EAST ELEVATION (REAR)
SCALE: 3/32" = 1'-0"

RESERVED FOR DIGITAL SIGNATURE

REVISIONS	
DD	SET
06-01-22	

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670 NORTH ORLANDO AVENUE SUITE 1001 MAITLAND, FL 32751
TEL: (407) 445-3015 FAX: (407) 445-2771
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BUILDING TYPE I - ELEVATIONS

DELAND COMMONS
APARTMENTS

DELANDFLORIDA

DRAWN
WTB Jr

CHECKED
WFP

DATE
06-01-22

SCALE
AS NOTED

JOB NO.
21-048

SHEET
A6.1b

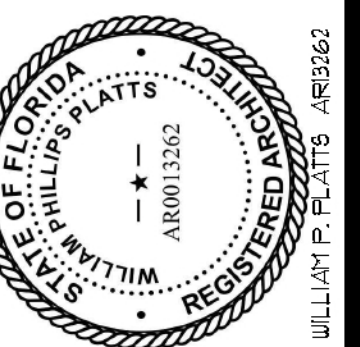
	REVISIONS
	DD SET
	06-01-22



1 FRONT ELEVATION
SCALE: 1/8" = 1'-0"



2 RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



FRONT + RIGTH ELEVATIONS

DELAND COMMONS APARTMENTS

[illegible]

DRAWN	WTBJr
CHECKED	WPP
DATE	06-20-22
SCALE	AS NOTED
JOB NO.	21-048
SHEET	

A6.1



1 WEST ELEVATION (FRONT)
SCALE: 3/32" = 1'-0"



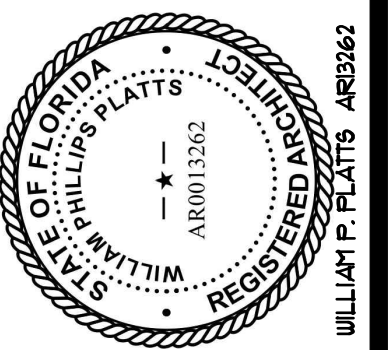
2 SOUTH ELEVATION (RIGHT SIDE)
SCALE: 3/32" = 1'-0"



3 EAST ELEVATION (LEFT SIDE)
SCALE: 3/32" = 1'-0"

REVISIONS	
DD SET	06-01-22

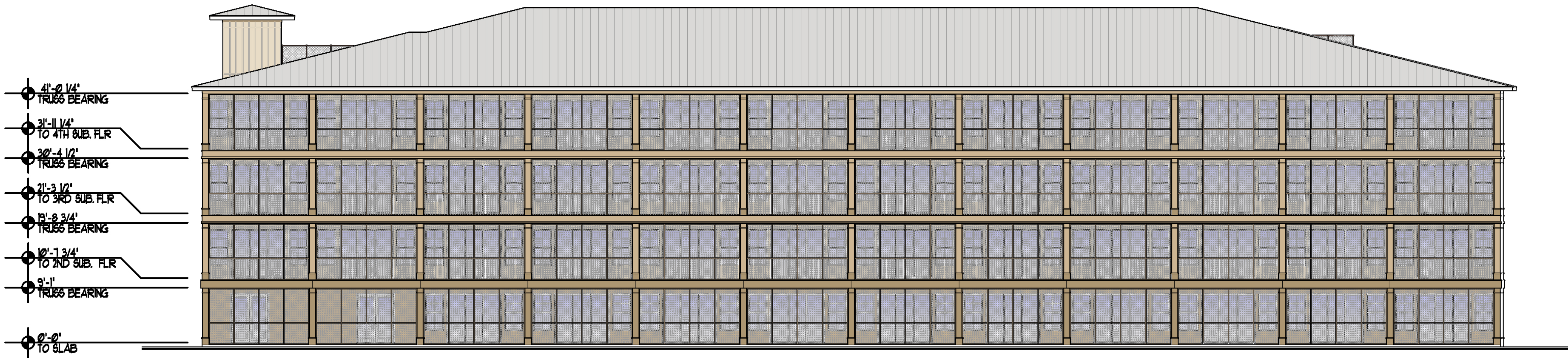
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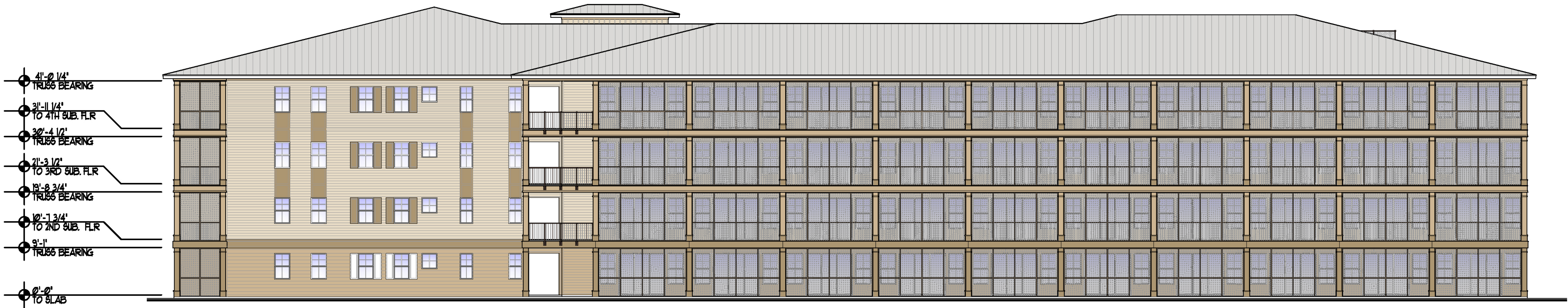
BUILDING TYPE I - ELEVATIONS
DELAND COMMONS
APARTMENTS
FLORIDA
DELAND

DRAWN	WTBjr
CHECKED	WFP
DATE	06-01-22
SCALE	AS NOTED
JOB NO.	21-048
SHEET	A6.1a

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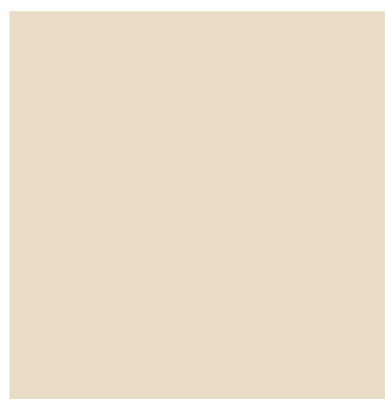
1 SOUTH ELEVATION (REAR)
SCALE: 3/32" = 1'-0"



1 EAST ELEVATION (LEFT SIDE)
SCALE: 3/32" = 1'-0"



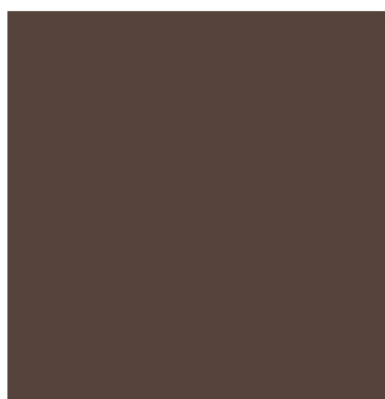
SW 2161
WHOLE WHEAT
205 181 146



SW 6126
NAVAJO WHITE
233 220 198



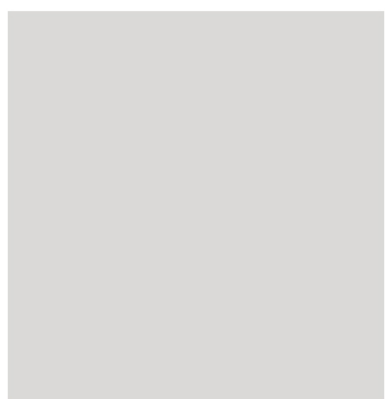
SW 6137
BURLAP
172 149 113



SW 6041
OTTER
86 67 59



BRONZE
ANODIZED
ALUMINUM



SILVER
STANDING SEAM
METAL ROOF

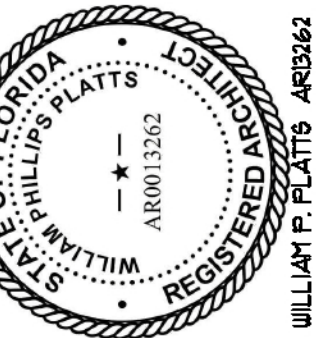
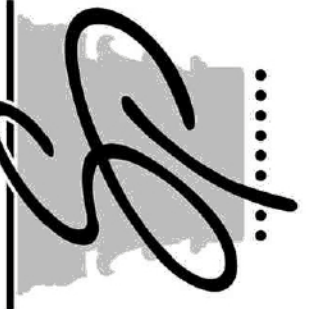


13 CRK

REVISIONS	
DD SET	06-01-22

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BUILDING TYPE II - ELEVATIONS
DELAND COMMONS
APARTMENTS
FLORIDA
DELAND

DRAWN
WTB/Jr
CHECKED
WPP
DATE
06-20-22
SCALE
AS NOTED
JOB NO.
21-048
SHEET

A6.2b



1 NORTH ELEVATION (FRONT)
SCALE: 3/32" = 1'-0"



2 WEST ELEVATION (RIGHT SIDE)
SCALE: 3/32" = 1'-0"



SW 2161
WHOLE WHEAT
205 181 146



SW 6126
NAVAJO WHITE
233 220 198



SW 6137
BURLAP
172 149 113



SW 6041
OTTER
86 67 59



BRONZE
ANODIZED
ALUMINUM



SILVER
STANDING SEAM
METAL ROOF



BACK

REVISIONS	
DD 8ET	06-01-22

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BUILDING TYPE II - ELEVATIONS
DELAND COMMONS
APARTMENTS
FLORIDA
DELAND

DRAWN
WTB/Jr
CHECKED
WPP
DATE
06-20-22
SCALE
AS NOTED
JOB NO.
21-048
SHEET

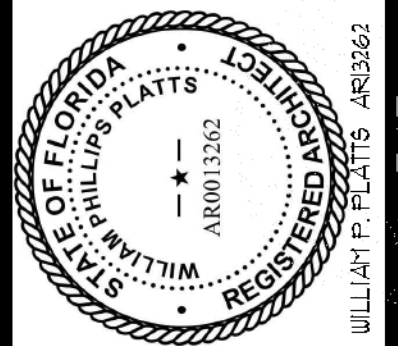
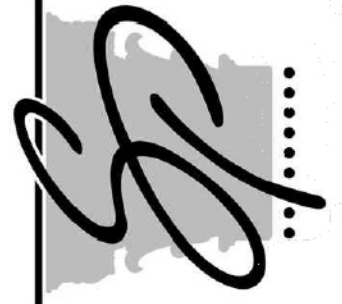
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REAR + LEFT ELEVATIONS

**DELAND COMMONS
APARTMENTS**

DELAND FLORIDA

DRAWN	WTEJr
CHECKED	WPP
DATE	06-20-22
SCALE	AS NOTED
JOB NO.	21-048
SHEET	

A6.2

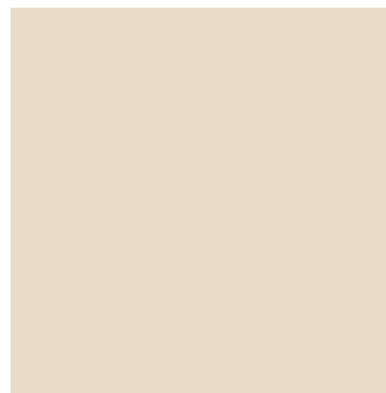
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1 REAR ELEVATION
SCALE: 1/8" = 1'-0"



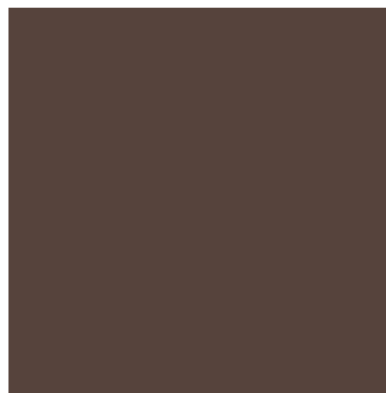
SW 2161
WHOLE WHEAT
205 181 146



SW 6126
NAVAJO WHITE
233 220 198



SW 6137
BURLAP
172 149 113



SW 6041
OTTER
86 67 59



BRONZE
ANODIZED
ALUMINUM



SILVER
STANDING SEAM
METAL ROOF



BRICK



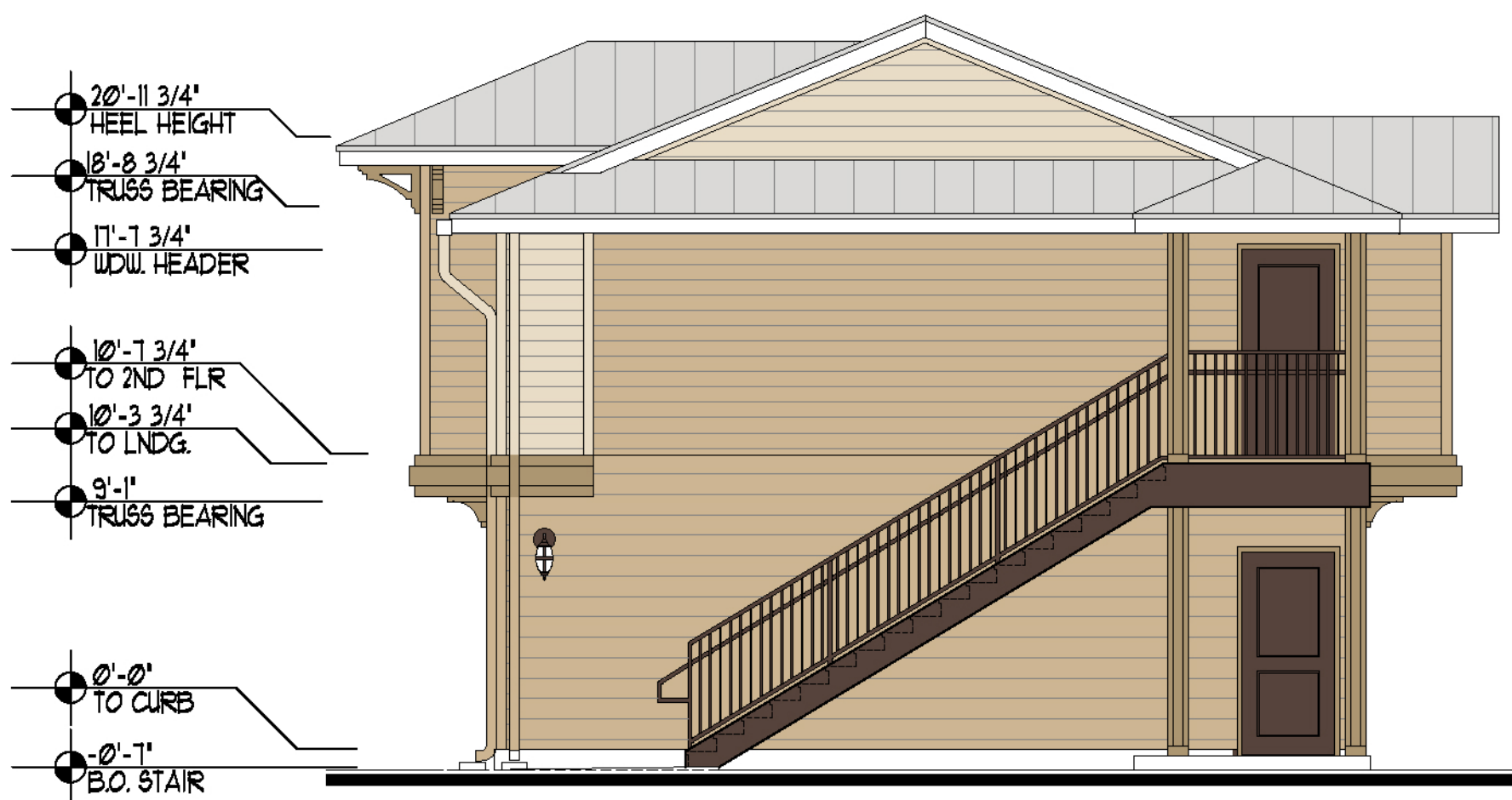
2 LEFT ELEVATION
SCALE: 1/8" = 1'-0"



1 "CARRIAGE B' - NORTH ELEVATION (FRONT)
SCALE: 3/16" = 1'-0"



2 "CARRIAGE B' - SOUTH ELEVATION (REAR)
SCALE: 3/16" = 1'-0"



3 "CARRIAGE B' - EAST ELEVATION (RIGHT SIDE)
SCALE: 3/16" = 1'-0"



4 "CARRIAGE B' - WEST ELEVATION (LEFT SIDE)
SCALE: 3/16" = 1'-0"



SW 2161
WHOLE WHEAT
205 181 146



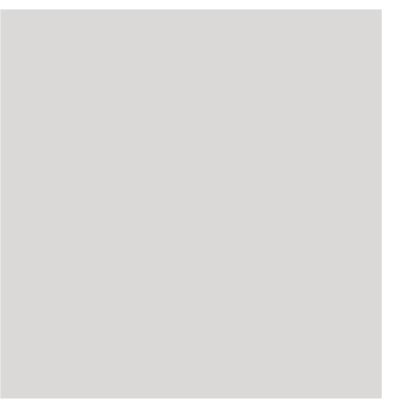
SW 6126
NAVAJO WHITE
233 220 198



SW 6137
BURLAP
172 149 113



SW 6041
OTTER
86 67 59



SILVER
STANDING SEAM
METAL ROOF

REVISIONS	
DD SET	06-01-22

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TEL. (407) 445-3019 FAX (407) 445-2771
WWW.SLOCUMPLATTS.COM



"CARRIAGE B' EXTERIOR ELEVATIONS

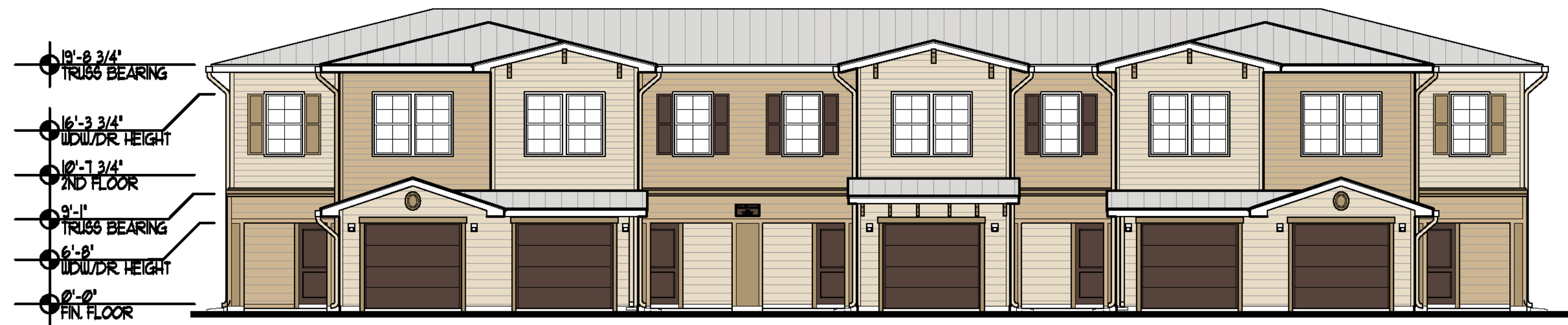
DELAND COMMONS
APARTMENTS

FLORIDA
DELAND

DRAWN	WTEBjr
CHECKED	WPP
DATE	06-01-22
SCALE	AS NOTED
JOB NO.	21-048
SHEET	

A6.4

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1 BUILDING TYPE TH-5 - SOUTH ELEVATION (FRONT)
SCALE: 1/8" = 1'-0"



2 BUILDING TYPE TH-5 - NORTH ELEVATION (REAR)
SCALE: 1/8" = 1'-0"



3 TYPICAL EAST ELEVATION (RIGHT SIDE)
SCALE: 1/8" = 1'-0"



4 TYPICAL WEST ELEVATION (LEFT SIDE)
SCALE: 1/8" = 1'-0"



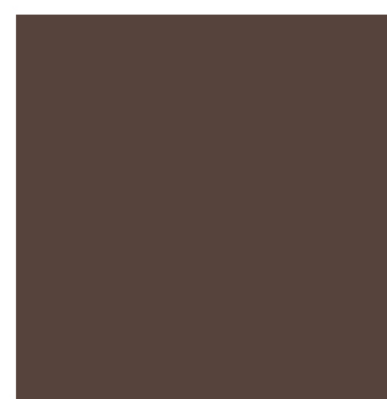
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WHOLE WHEAT
205 181 146



SW 6126
NAVAJO WHITE
233 220 198



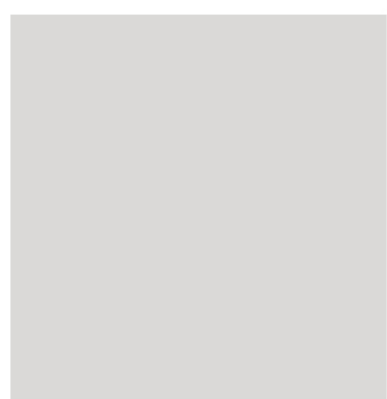
SW 6137
BURLAP
172 149 113



SW 6041
OTTER
86 67 59



BRONZE
ANODIZED
ALUMINUM



SILVER
STANDING SEAM
METAL ROOF



BRICK

REVISIONS	
DD SET	06-01-22

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GP



BUILDING TYPE TH-5 - EXTERIOR ELEVATIONS

DELAND COMMONS
APARTMENTS

DELAND
FLORIDA

DRAWN	WTBJ
CHECKED	WPP
DATE	06-01-22
SCALE	AS NOTED
JOB NO.	21-048
SHEET	A6.5

THE WESTERLY 182 FEET OF THE SOUTH 2/5 OF LOT 2, BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE PLAT THEREOF AS RECORDED IN DEED BOOK G, PAGE 701, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA;

LOT 1 OF THE RESUBDIVISION OF THE SOUTH ONE-HALF (S1/2) OF BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE PLAT THEREOF AS RECORDED IN MAP BOOK 6, PAGE 51, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT 2, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

THE NORTH 16 FEET OF LOT 6 LYING EAST OF LOT 2, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S DDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

THE NORTH 16 FEET OF LOT 7 AND THE EAST 3.5 FEET OF LOT 7, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT(S) 8, 9, 10, 11, 12, 13 AND 14, REDIVISION OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT 4, CLAKE'S RESUBDIVISION OF BLOCK 14, HOWRY'S ADDITION TO DELAND, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 5, PAGE 2 AND MAP BOOK 15, PAGE 179, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT B, CLAKE'S RESUBDIVISION OF BLOCK 14, HOWRY'S ADDITION TO DELAND, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 5, PAGE 2 AND MAP BOOK 15, PAGE 179, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT 3, BLOCK 14, MAP OF J.W. HOWRY'S SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 1, PAGE 137 AND MAP BOOK 21, PAGE 191, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

LOT 4, BLOCK 14, MAP OF J.W. HOWRY'S SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN MAP BOOK 1, PAGE 137 AND MAP BOOK 21, PAGE 191, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

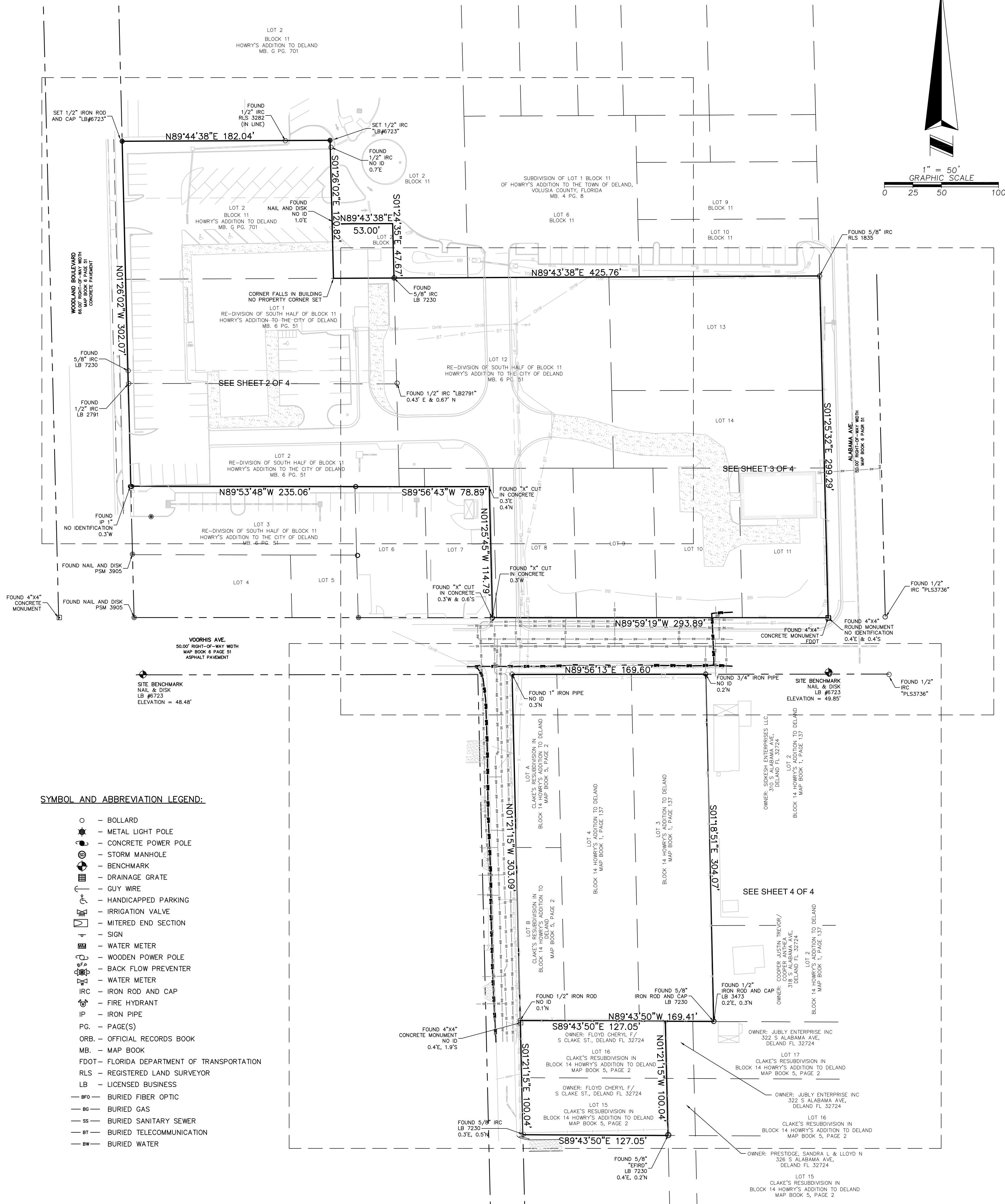
A PARCEL OF LAND BEING A PORTION OF LOT 2, BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE PLAT THEREOF AS RECORDED IN DEED BOOK C, PAGE 701, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA;

COMMENCING AT THE NW CORNER OF LOT 5, HAMMOND'S SUBDIVISION, ACCORDING TO MAP BOOK 12, PAGE 175, OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN IN A SOUTHERLY DIRECTION ALONG THE WEST LINE OF LOTS 5 & 6 OF THE SAID HAMMOND'S SUBDIVISION A DISTANCE OF 282 FEET (MORE OR LESS) TO THE SW CORNER OF LOT 6; THENCE RUN IN A WESTERLY DIRECTION 64.85 FEET (MORE OR LESS) TO THE NW CORNER OF LOT 12 OF THE SOUTH 1/2 OF BLOCK 11, HOWRY'S ADDITION TO THE CITY OF DELAND, AS RECORDED IN MAP BOOK 6, PAGE 51, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, BEING THE POINT OF BEGINNING; FROM THE POINT OF BEGINNING, RUN NORTHERLY AND PARALLEL WITH THE WEST LINE OF LOT 6, A DISTANCE OF 47.66 FEET TO A POINT; THENCE RUN WESTERLY ON A LINE PARALLEL WITH THE NORTH LINE OF LOT 12, A DISTANCE OF 52.35 FEET (MORE OR LESS) TO A POINT 182 FEET EAST OF THE POINT OF BEGINNING; THENCE RUN EASTERLY ALONG THE WEST LINE OF LOT 6, A DISTANCE OF 109.50 FEET TO THE NW CORNER OF LOT 12, BLOCK 11, HOWRY'S DELAND, ACCORDING TO THE MAP PLAT THEREOF, AS RECORDED IN DEED BOOK 10, PAGE 101, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA; THENCE RUN WESTERLY ALONG THE WEST LINE OF LOT 2, A DISTANCE OF 108.00 FEET TO THE INTERSECTION OF SAID WEST LINE OF LOT 2 AND 233.51 FEET SOUTH OF THE NORTH LINE OF THE SAID LOT 2; THENCE RUN SOUTHERLY ON A LINE PARALLEL WITH THE WEST LINE OF LOT 6 A DISTANCE OF 54.49 FEET (MORE OR LESS) TO THE SOUTH LINE OF THE SAID LOT 2; THENCE RUN IN AN EASTERLY DIRECTION ALONG THE SOUTH LINE OF SAID LOT 2, AND PARALLEL TO THE NORTH LINE OF LOT 12, TO THE POINT OF BEGINNING.

THE WEST 127 FEET OF LOTS 15 AND 16, CLAKE'S RESUBDIVISION IN BLOCK 14, HOWRY'S ADDITION TO THE CITY OF DELAND, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 5, PAGE 2, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

1. BEARINGS SHOWN HEREON ARE BASED ON THE EAST RIGHT OF WAY LINE OF WOODLAND BOULEVARD AS BEING N01°26'02"W. (AN ASSUMED BEARING FOR ANGULAR DESIGNATION ONLY)
2. POSITIONAL ACCURACY MEETS NATIONAL GEODETIC SURVEY (NGS) THIRD ORDER, CLASS ONE, SPECIFICALLY 1:10,000, VERIFIED BY REDUNDANT MEASUREMENTS.
3. HORIZONTAL POSITIONS FOR ALL FEATURES SHOWN ON THE MAP ARE RELATIVE TO NORTH AMERICAN DATUM OF 1983 (NAD83), 1990 ADJUSTMENT, STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE.
4. THERE MAY BE EASEMENTS AND RESTRICTIONS OF RECORD AND/OR PRIVATE AGREEMENTS NOT FURNISHED TO THIS SURVEYOR OR SHOWN ON THIS BOUNDARY SURVEY THAT MAY AFFECT PROPERTY RIGHTS AND/OR LAND USE RIGHTS OF THE SUBJECT PROPERTY.
5. THE LEGAL DESCRIPTION HEREON IS IN ACCORD WITH THE DESCRIPTION PROVIDED BY THE CLIENT.
6. THERE MAY BE ENVIRONMENTAL ISSUES AND/OR OTHER MATTERS REGULATED BY VARIOUS DEPARTMENTS OF FEDERAL, STATE OR LOCAL GOVERNMENTS AFFECTING THE SUBJECT PROPERTY NOT SHOWN ON THIS SURVEY.
7. THIS SURVEY WAS PERFORMED FOR THE SOLE AND EXCLUSIVE BENEFIT OF THE ENTITIES LISTED HEREON AND SHALL NOT BE RELIED UPON BY ANY OTHER ENTITY OR INDIVIDUAL WHOMSOEVER.
8. ADJOINING PARCEL OWNER AND RECORDING INFORMATION DELINEATED HEREON WAS OBTAINED FROM THE VOLUSIA COUNTY PROPERTY APPRAISER'S PUBLIC ACCESS SYSTEM.
9. ELEVATIONS SHOWN HEREON ARE BASED ON THE U.S. NATIONAL GEODETIC SURVEY, BENCHMARK T 474, SURVEY DISK IN TOP OF CONCRETE MONUMENT, ELEVATION BEING 38.16', NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
10. THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
11. UNDERGROUND UTILITIES AND IMPROVEMENTS WERE NOT LOCATED, UNLESS SHOWN HEREON.
12. UNLESS OTHERWISE NOTED OR SHOWN HEREON, APPARENT AND/OR VISIBLE, UNOBSTRUCTED, ABOVE GROUND IMPROVEMENTS WERE LOCATED. UNDERGROUND IMPROVEMENTS, SUCH AS FOUNDATIONS AND UTILITIES, WERE NOT LOCATED, UNLESS NOTED OTHERWISE.
13. THE LANDS SHOWN HEREON LIE ENTIRELY WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN) ACCORDING TO "FIRM" MAP NO. 12127C0470H AND COMMUNITY NO. 120307 0470 H, DATED FEBRUARY 19, 2014. THE ABOVE STATEMENT IS FOR INFORMATION ONLY AND THIS SURVEYOR ASSUMES NO LIABILITY FOR THE CORRECTNESS OF THE CITED MAP(S). IN ADDITION, THE ABOVE STATEMENT DOES NOT REPRESENT THIS SURVEYOR'S OPINION OF THE PROBABILITY OF FLOODING.
14. THE ABOVE DESCRIBED PARCEL(S) CONTAINS 233,569 SQUARE FEET OR 5.36 ACRES, MORE OR LESS.

- — BOLLARD
- ☀ — METAL LIGHT POLE
- ⦿ — CONCRETE POWER POLE
- ⊕ — STORM MANHOLE
- ⊗ — BENCHMARK
- ⦶ — DRAINAGE GRATE
- — GUY WIRE
- ♿ — HANDICAPPED PARKING
- ⦿ — IRRIGATION VALVE
- ⌢ — MITERED END SECTION
- — SIGN
- ⦶ — WATER METER
- ⦿ — WOODEN POWER POLE
- ⦿ — BACK FLOW PREVENTER
- ⦿ — WATER METER
- IRC — IRON ROD AND CAP
- ⦿ — FIRE HYDRANT
- IP — IRON PIPE
- PG. — PAGE(S)
- ORB. — OFFICIAL RECORDS BOOK
- MB. — MAP BOOK
- FDOT — FLORIDA DEPARTMENT OF TRANSPORTATION
- RLS — REGISTERED LAND SURVEYOR
- LB — LICENSED BUSINESS
- BFU — BURIED FIBER OPTIC
- BG — BURIED GAS
- SS — BURIED SANITARY SEWER
- BT — BURIED TELECOMMUNICATION
- BW — BURIED WATER



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WINTER GARDEN, FLORIDA 34787
(407) 654-5355**

BOUNDARY, TOPOGRAPHIC AND
TREE SURVEY
OF
WOODLAND BLVD, DELAND SITE
SECTION 16, TOWNSHIP 17 SOUTH, RANGE 30 EAST
VOLUSIA COUNTY, FLORIDA

OR:
ATLANTIC HOUSING

FOR THE LICENSED BUSINESS #6723 BY:

JAMES L. RICKMAN, P.S.M. #5633

[illegible]

JOB #: 20180335
DATE: 11/05/21
SCALE: 1" = 20'
CALC BY: MR
FIELD BY: EL,DB
DRAWN BY: WB,CH
CHECKED BY: MR

[SHEET 1 OF 4]



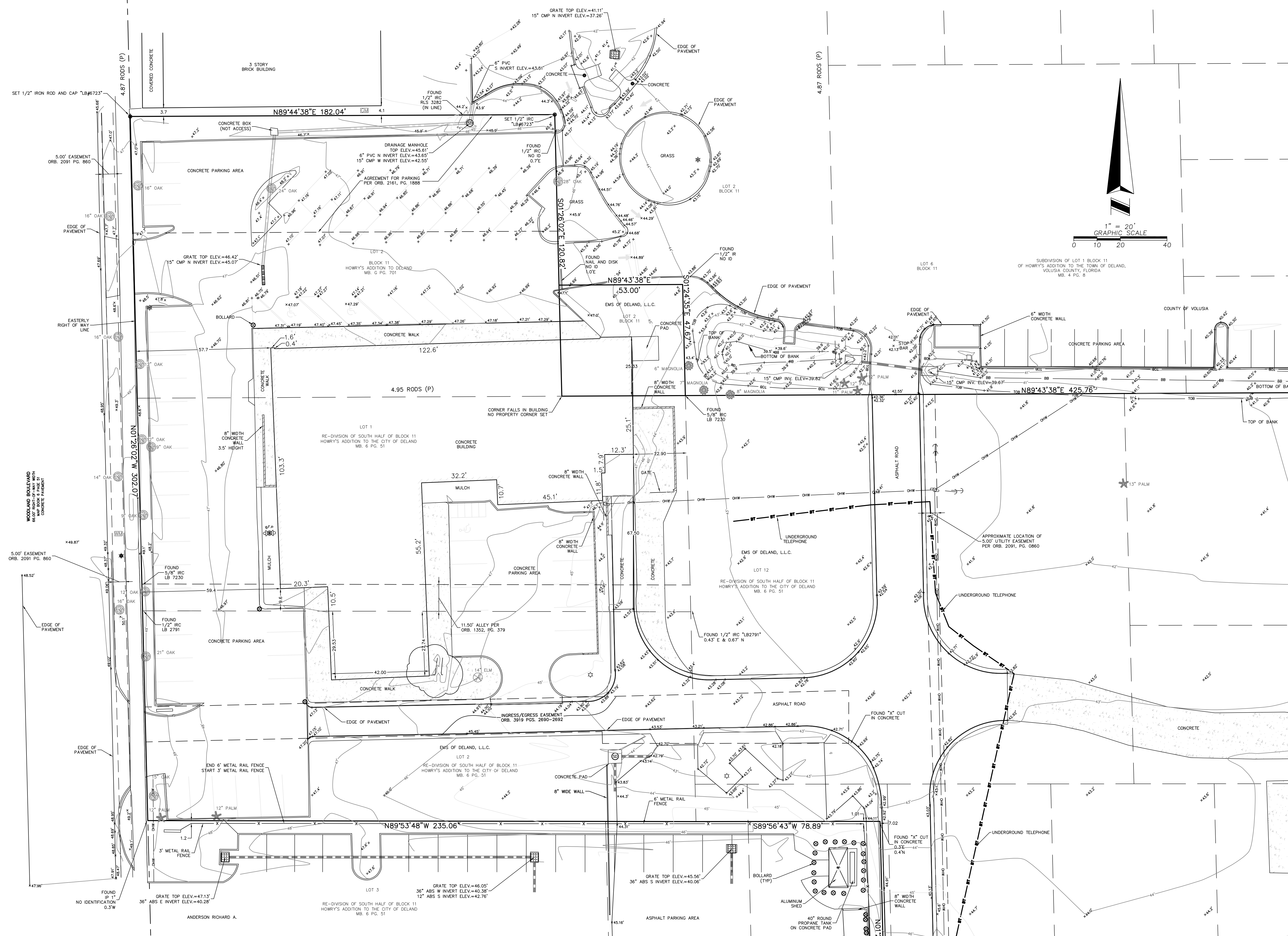
BOUNDARY, TOPOGRAPHIC AND
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OF
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SECTION 16, TOWNSHIP 17 SOUTH, RANGE 30 EAST
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SHEET 2 OF 4





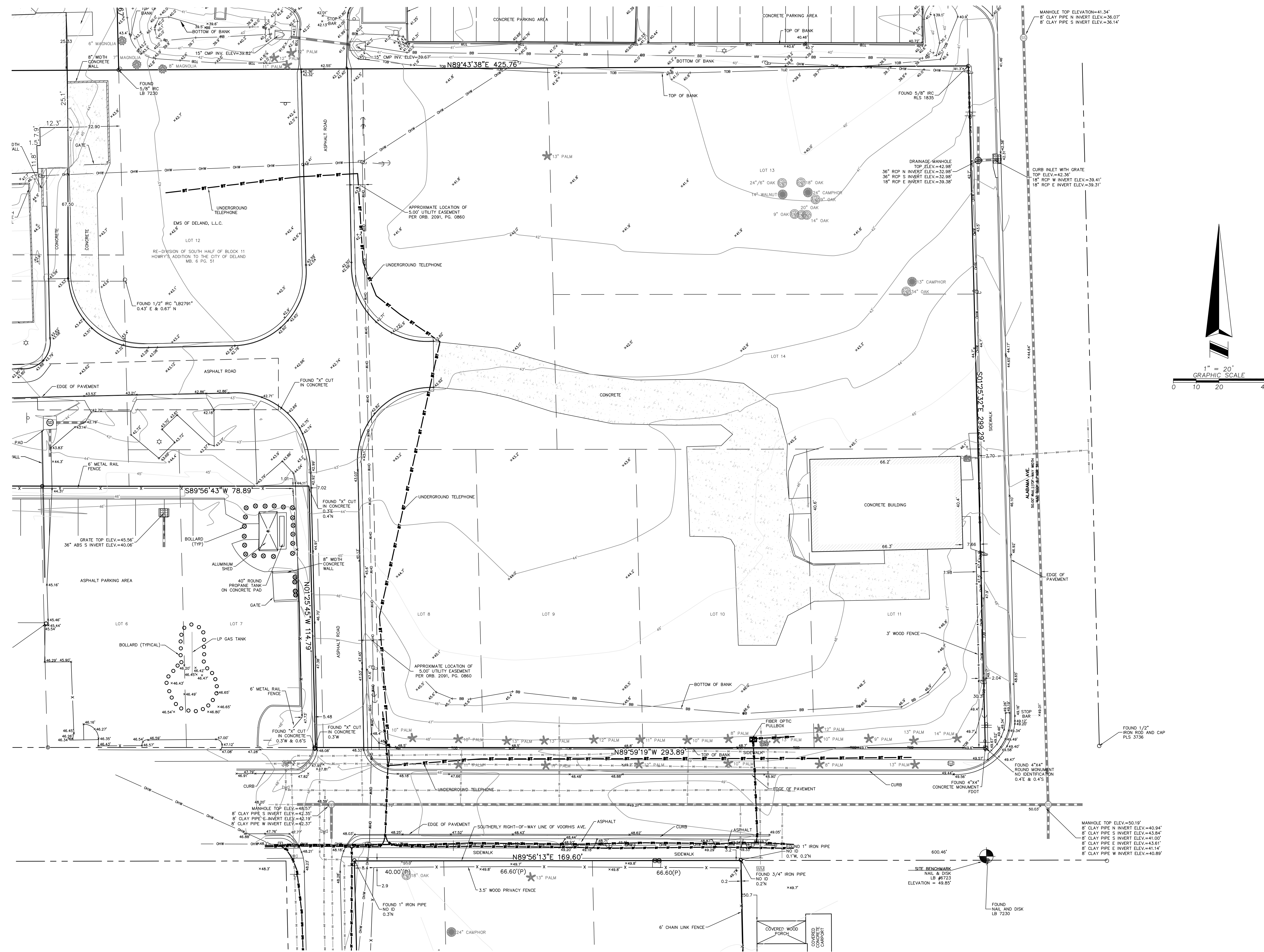
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VOLUSIA COUNTY, FLORIDA

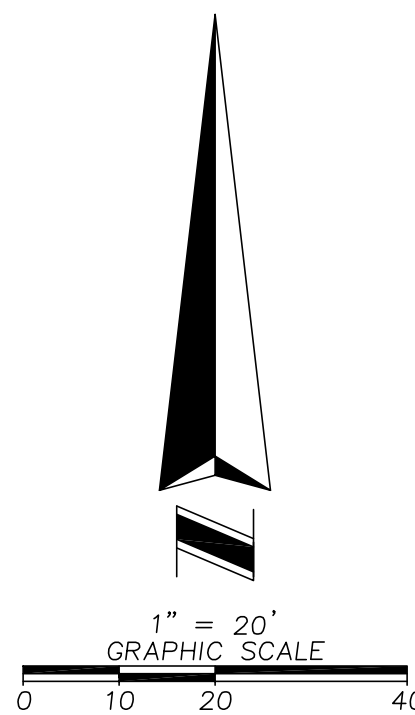
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SHEET 3 OF 4





OR:
ATLANTIC HOUSING

JOB #: 20180335
DATE: 11/05/21
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CALC BY: MR
FIELD BY: EL,DB
DRAWN BY: WB,CH
CHECKED BY: MR

SHEET 4 OF 4

DELAND COMMONS

LANDSCAPE ARCHITECTURAL DRAWINGS

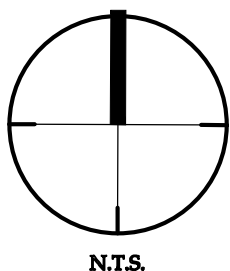
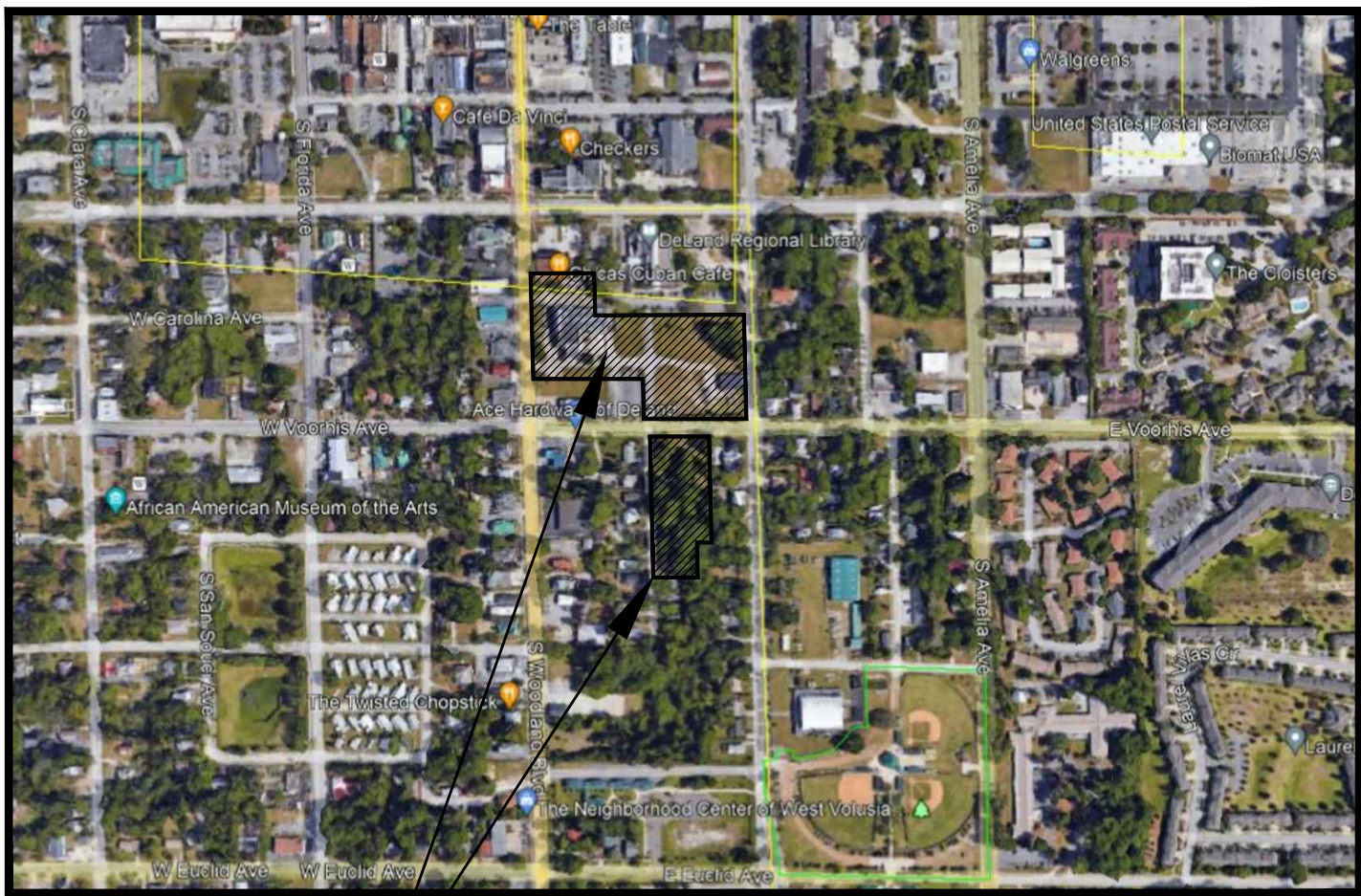
CITY OF DELAND, FLORIDA

ISSUED FOR SITE PERMIT- 06.17.22

REVISED - 08.02.22

REVISED - 08.23.22

SITE PLAN



SITE

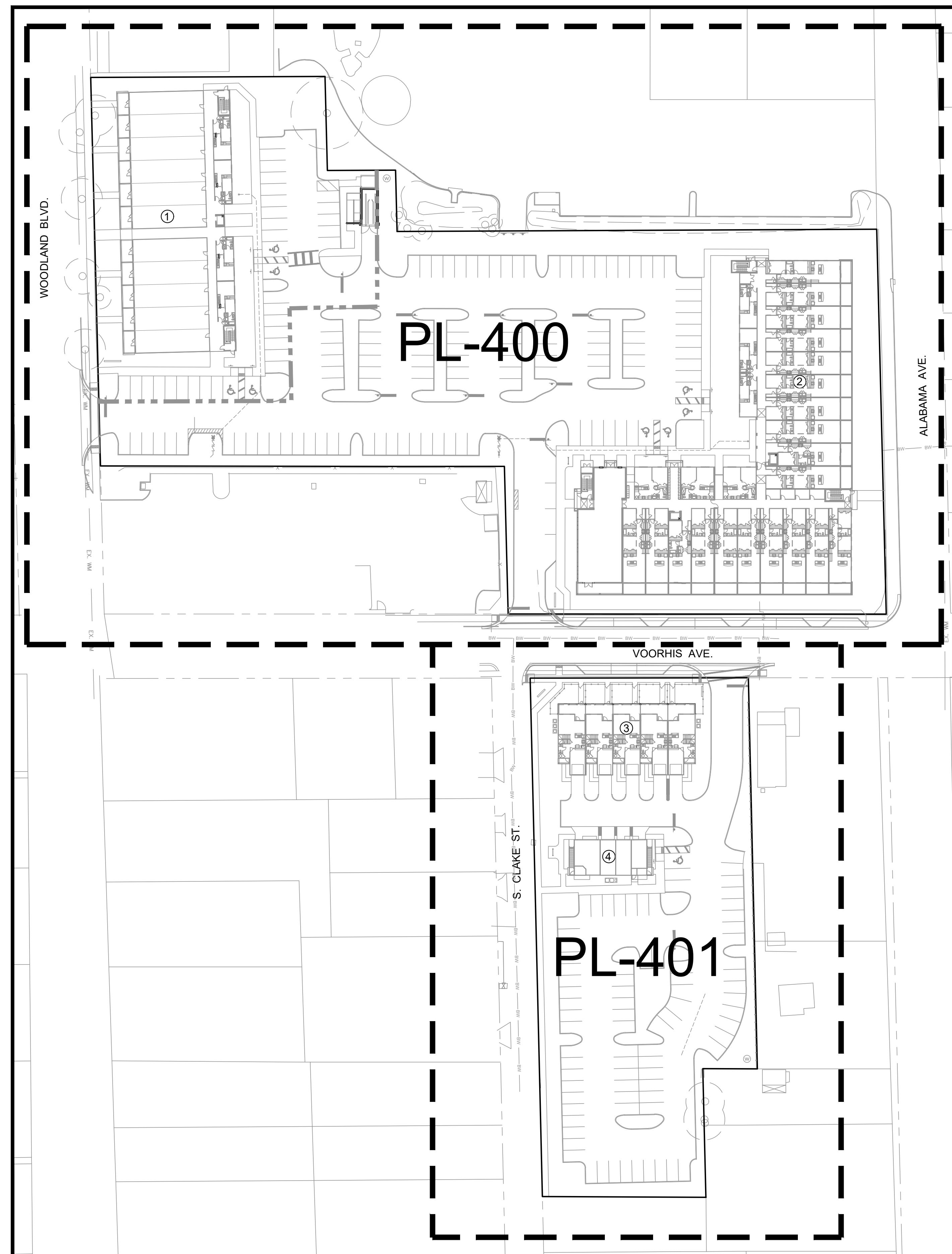
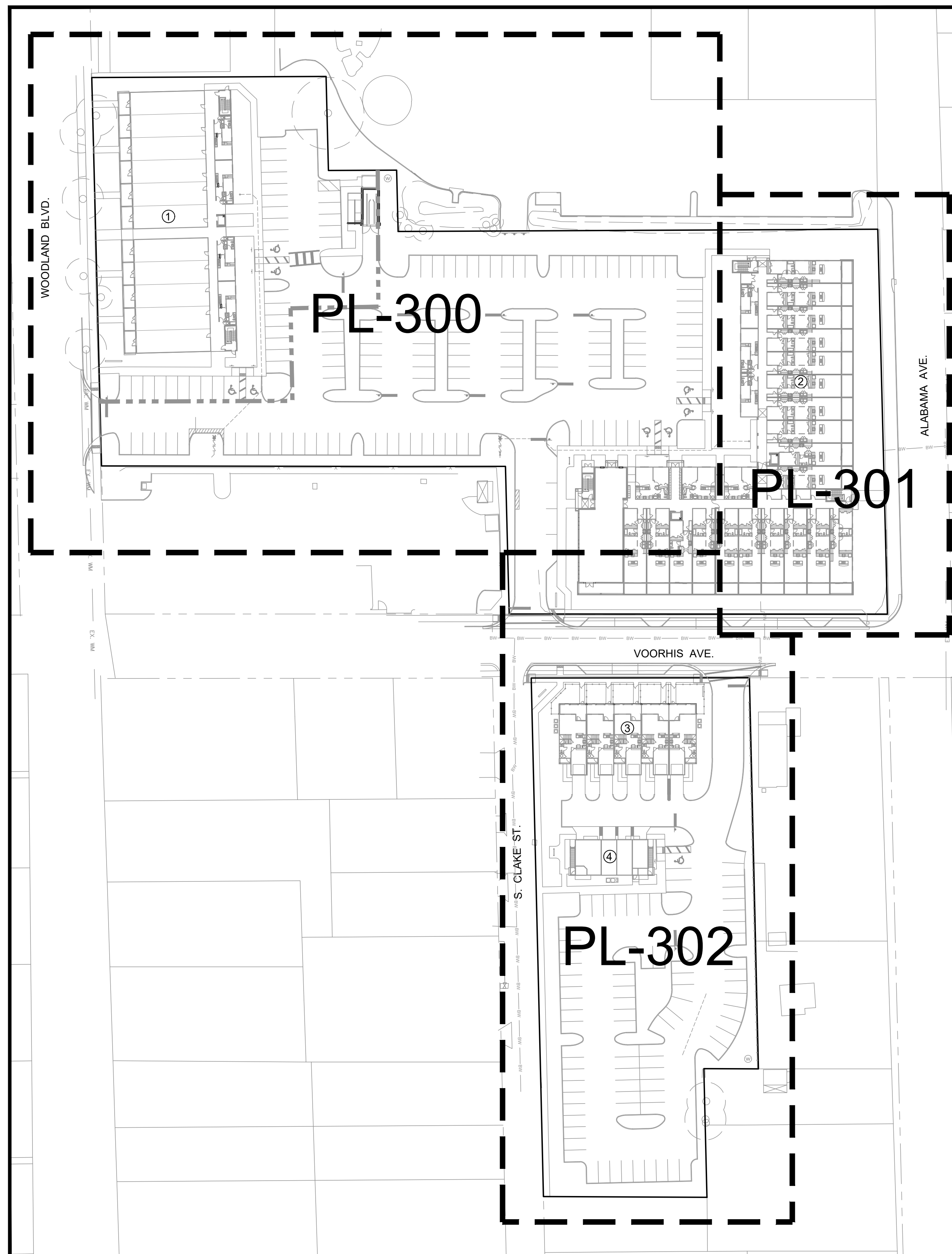
INDEX OF DRAWINGS

SHT. NO.	ISSUE DATE	REV. NO.	REV. DATE	SHEET TITLE
PL-001	06.17.22	2	08.23.22	TREE PRESERVATION PLAN
PL-002	06.17.22	--	--	KEY PLANS
PL-300	06.17.22	1	08.02.22	LANDSCAPE CODE PLAN
PL-301	06.17.22	2	08.23.22	LANDSCAPE CODE PLAN
PL-302	06.17.22	1	08.02.22	LANDSCAPE CODE PLAN
PL-303	06.17.22	2	08.23.22	CODE LANDSCAPE PLANT LIST & NOTES
PL-304	06.17.22	--	--	SIGN ELEVATIONS
PL-305	06.17.22	2	08.23.22	LANDSCAPE DETAILS
PL-400	06.17.22	--	--	CODE IRRIGATION PLAN & DETAILS
PL-401	06.17.22	--	--	CODE IRRIGATION PLAN, SCHEDULE & NOTES
PL-500	06.17.22	--	--	LIGHTING PHOTOMETRIC PLAN
PL-501	06.17.22	--	--	LIGHTING PHOTOMETRIC PLAN
PL-502	06.17.22	--	--	LIGHTING SCHEDULE & CUT SHEETS



Digitally signed
by Matthew J
Allen:A01410D0
0000178231F5D
4200003747
Date: 2022.08.22
16:51:54 -04'00'



[illegible]

DELAND
COMMONS

DELAND, FL

KEY PLANS

Date: 06.17.22

Scale: NTS

Drawn: CPB Checked: RRC

File Name: DECOPL002.DWG

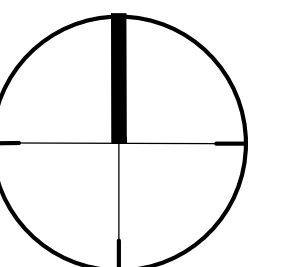
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Scale: NTS

Drawn: CPB Checked: RRC

File Name: DEC061002.DWG

North



Sheet

PL-002



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DELAND, FL

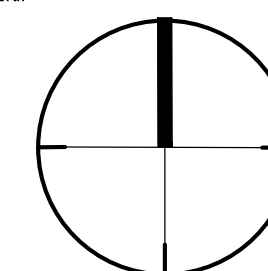
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Drawn: CPB Checked: RRC

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North



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SEE SHEET PL-303 FOR LANDSCAPE NOTES & PLANT LIST

WOODLAND BLVD.

5.00' EASEMENT
ORB. 2091 PG. 860

- PROPOSED MONUMENT
SIGN: SEE NORTH
- PARCEL WOODLAND
BLVD. SIGN ELEVATION
SHEET PL - 304

BUILDING PERIMETER LANDSCAPING
REQUIRED: BUILDING LANDSCAPING SHALL BE LOCATED ADJACENT
TO PRIMARY FACADES
ONE CANOPY TREE PER 75 FEET OF BUILDING PERIMETER
582' PERIMETER / 75 = 8 CANOPY TREES REQUIRED
PROVIDED: CONTINUOUS SHRUB LANDSCAPING ALONG PRIMARY
FACADES
6 PROPOSED CANOPY TREES, 2 EXISTING CANOPY TREES AND 16
UNDERSTORY TREES

BUILDING PERIMETER LANDSCAPING
REQUIRED: BUILDING LANDSCAPING SHALL BE LOCATED ADJACENT
 TO PRIMARY FACADES
 ONE CANOPY TREE PER 75 FEET OF BUILDING PERIMETER
 987' PERIMETER / 75 = 13 CANOPY TREES REQUIRED
PROVIDE: CONTINUOUS SHRUB LANDSCAPING ALONG PRIMARY
 FACADES
 17 CANOPY TREES AND 27 UNDERSTORY TREES

INTERIOR VEHICULAR USE AREA
263 TOTAL PARKING SPACES
REQUIRED: 13 SQ. FT. LANDSCAPE AREA PER PARKING SPACE
MIN. ONE CANOPY TREE PER 75 SQ. FT. OF REQUIRED LANDSCAPE AREA
263 X 13 = 3419 SQ. FT. LANDSCAPE AREA REQUIRED
3419 / 75 = 46 CANOPY TREES REQUIRED
PROVIDED: 14,708 SQ. FT. LANDSCAPE AREA
55 CANOPY TREES

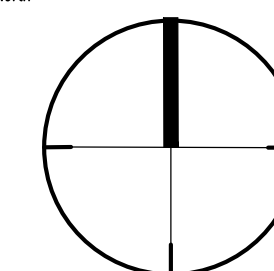
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DELAND, FL

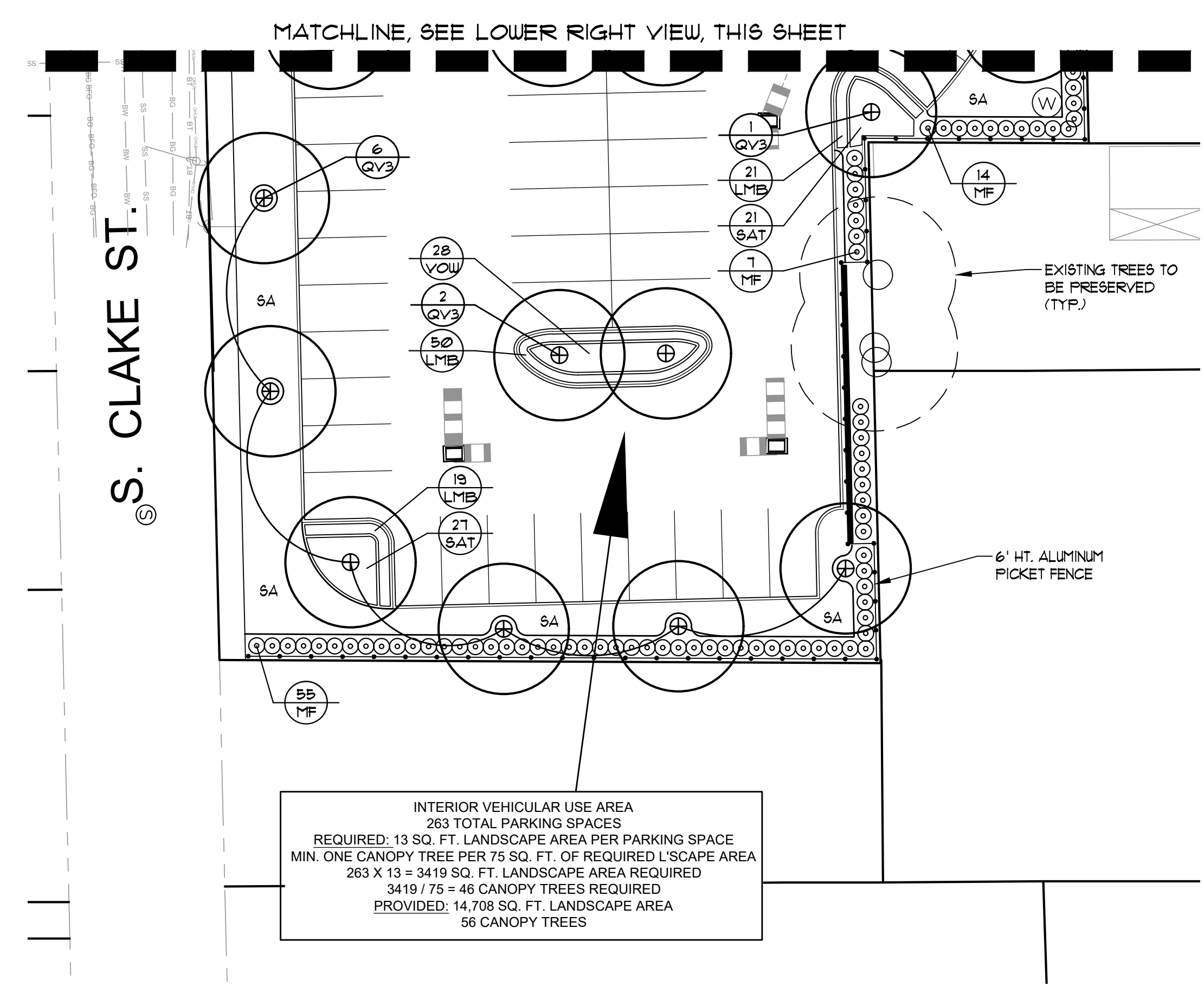
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North



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[illegible]

**CODE LANDSCAPE
PLAN**

PL-302

SEE SHEET PL-303 FOR LANDSCAPE NOTES & PLANT LIST

GENERAL NOTES

1. ALL UNPAVED AREAS NOT DESIGNATED AS A LANDSCAPE SHRUB BED SHALL BE COVERED WITH SOD AS INDICATED ON PLANS.

2. ALL SHRUBS SHALL BE PLANTED 1-1/2' AND TREES 2-1/2' ABOVE GRADE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLANT HEALTH IN ON-SITE SOILS.

3. NEWLY INSTALLED TREES SHALL HAVE THEIR DBH CALIPER MEASURED 45' ABOVE THE GROUND.

4. ALL PLANT MATERIAL SHALL MEET OR EXCEED THE GRADE STANDARDS OF FLORIDA NO. 1 AS PROVIDED IN 'GRADES AND STANDARDS FOR NURSERY PLANTS' (LATEST EDITION), STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, AND ANY AMENDMENTS THERETO.

5. THE LANDSCAPE ARCHITECT MAY REJECT ANY PLANT MATERIAL BROUGHT TO THE SITE WHICH HE DEEMS TO BE OF INFERIOR QUALITY, DOES NOT MEET FLORIDA NO. 1 GRADE OR THAT DOES NOT MEET SPECIFIED SIZE.

6. ALL TREES WITH THE EXCEPTION OF PALMS SHALL BE EITHER CONTAINER GROWN OR FIELD GROWN. NO GROW BAGS WILL BE ACCEPTED.

7. ALL PLANT BEDS AND DESIGNATED 'MULCH' AREAS SHALL BE TOP-DRESSED WITH A MINIMUM OF 3" PINE BARK 'MINI-NUGGETS' MULCH. MULCH SHALL BE INSTALLED TO AVOID TOUCHING THE TRUNKS OF TREES.

8. ALL TREES SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL INSPECTION.

9. ALL TREES SHALL HAVE ALL SYNTHETIC BURLAP REMOVED FROM THE ENTIRE ROOT BALL. THE TOP THREE ROWS OF SQUARES ON ALL CAGES AROUND THE ROOT BALLS SHALL BE CLIPPED OFF AND REMOVED.

10. THE CONTRACTOR SHALL READ AND ADHERE TO ALL WRITTEN SPECIFICATIONS.

11. THE CONTRACTOR SHALL SUBMIT UNIT PRICES FOR ALL BID ITEMS.

12. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO LANDSCAPE INSTALLATION.

13. THE CONTRACTOR SHALL VISUALLY INSPECT THE SOILS CONDITION OF THE SITE AND SHALL PERFORM PERCOLATION TESTS PER THE GUIDELINES OUTLINED IN SECTION 3.03 OF THE LANDSCAPE SPECIFICATIONS.

14. THE CONTRACTOR SHALL PROVIDE A SOIL TEST IN 4 LOCATIONS AND PROVIDE RECOMMENDATIONS FOR AMENDMENTS BASED ON THE RESULTS IN ORDER TO ACHIEVE A BALANCED PH FOR THE PLANTING BACKFILL. (SEE SECTION 2.01B OF THE LANDSCAPE SPECIFICATIONS). IMPROPER SOIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL RECTIFY ALL INCURRED DAMAGES AT NO ADDITIONAL COST TO THE OWNER.

15. SUCCESSFUL BIDDER SHALL LOOK UP ALL MATERIALS IMMEDIATELY AFTER CONTRACT ASSIGNMENT. PLANTS SHALL BE HELD DURING THE PERIOD FROM CONTRACT TO INSTALLATION TO ALLOW FOR ADDITIONAL GROWTH. ALL PLANTS WILL BE REQUIRED TO BE FULL AND HEALTHY. CONTRACTOR SHALL ARRANGE FOR PLANT APPROVAL PRIOR TO DELIVERY EITHER BY SAMPLES, PHOTOS OR NURSERY VISITS.

16. THE CONTRACTOR SHALL REVIEW THE SOILS REPORT ON FILE WITH THE OWNER.

17. THE INSTALLATION OF PLANT MATERIAL SHALL BE VIEWED AS ACCEPTANCE BY THE CONTRACTOR OF EXISTING GRADES AS GIVEN TO HIM.

18. THE CONTRACTOR SHALL PROVIDE TO THE LANDSCAPE ARCHITECT A WRITTEN LETTER OF ACCEPTABILITY OF GRADES. FAILURE TO DO SO WILL BE VIEWED AS AN ACCEPTANCE OF EXISTING GRADES BY THE CONTRACTOR.

19. CONTRACTOR SHALL ANTICIPATE THAT THE FIRST 5 FEET AROUND THE BUILDING PERIMETER WILL BE COMPACTED. THESE AREAS SHALL BE TILLED AND IMPROVED IN ORDER TO SUSTAIN VIGOROUS, HEALTHY PLANT GROWTH.

20. IN THE EVENT OF A VARIATION BETWEEN THE PLANT LIST AND THE ACTUAL QUANTITY OF PLANTS SHOWN ON THE PLAN DRAWINGS, THE PLANS SHALL CONTROL. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING A QUANTITY COUNT AS A CHECK FOR DISCREPANCIES.

21. WHERE LIGHT POLES AND TREES OR STREET SIGNS AND TREES OCCUR IN PROXIMITY TO EACH OTHER, A MINIMUM SEPARATION OF 10 FEET SHALL BE MAINTAINED.

22. THE CONTRACTOR WILL BE REQUIRED TO SAND AREAS OF SOD THAT ARE NOT SMOOTHLY APPLIED TO ELIMINATE SMALL IRREGULARITIES IN GRADES. LARGE GRADE IRREGULARITIES WILL REQUIRE REGRADING AND RESEEDING.

23. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF THE SITE INCLUDING ALL MOUING, EDGING, TRIMMING, PRUNING AND SPRAYING OF PESTICIDES AND FUNGICIDES UNTIL THE TIME OF FINAL ACCEPTANCE BY THE OWNER. IF PROJECT IS INSTALLED IN PHASES, OWNER WILL PROVIDE PHASING INFORMATION AT TIME OF BIDDING PROCESS.

24. CONTRACTOR SHALL BE RESPONSIBLE FOR RECEIVING THE LANDSCAPE ARCHITECT'S APPROVAL OF ALL PLANT BED LAYOUTS AND TREE LOCATIONS PRIOR TO INSTALLATION. IF PLANT MATERIAL IS INSTALLED PRIOR TO LANDSCAPE ARCHITECT'S APPROVAL, CONTRACTOR WILL BE SUBJECT TO RELOCATING THE MATERIAL AT THE LANDSCAPE ARCHITECT'S REQUEST AND AT THE CONTRACTOR'S OWN EXPENSE.

25. PRIOR TO THE REMOVAL OF ANY TREES, THE TREES TO BE RETAINED SHALL HAVE PROTECTIVE TREE BARRIERS PER THE TREE BARRICADE DETAIL.

26. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE NORMAL HIGH WATER ELEVATION OF THE RETENTION POND(S) WITH THE CIVIL ENGINEER PRIOR TO PLANTING ANY SPECIFIED TREES OR LITTORAL PLANTINGS IN THE IMMEDIATE POND VICINITY. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IF THE NORMAL HIGH WATER ELEVATION IS NOT AS SHOWN ON THE LANDSCAPE PLANS SO THAT PROPER REVISIONS CAN BE MADE.

27. CONTRACTOR IS EXPECTED TO CARRY OUT ALL RESPONSIBILITIES AS SET FORTH IN THESE LANDSCAPE NOTES AND IN THE LANDSCAPE SPECIFICATIONS. THEY WILL BE STRICTLY ENFORCED BY THE OWNER/LANDSCAPE ARCHITECT.

LANDSCAPE CODE NOTES

1. PLANT MATERIALS SPECIFIED SHALL CONFORM TO FLORIDA NO. 1 STANDARDS OR BETTER AS GIVEN IN THE CURRENT 'GRADES AND STANDARDS FOR NURSERY PLANTS,' STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE, TALLAHASSEE, OR EQUAL THERETO.
2. ALL PLANTS SHALL BE HEALTHY AND FREE OF DISEASE AND PESTS.
3. TREES PLANTED WITHIN 12 FEET OF A PUBLIC STREET RIGHT-OF-WAY OR OTHER PUBLIC WORK SHALL BE SELECTED FROM A LIST OF TREES PREPARED AND PERIODICALLY UPDATED BY THE PUBLIC WORKS DEPARTMENT.
4. SHRUBS AND HEDGES SHALL HAVE A MINIMUM 30 INCHES HEIGHT WHEN MEASURED IMMEDIATELY AFTER PLANTING. HEDGES, WHERE REQUIRED, SHALL BE PLANTED AND MAINTAINED SO AS TO FORM A CONTINUOUS, UNBROKEN VISUAL SCREEN WITHIN ONE YEAR AFTER PLANTING.
5. SOD SHALL BE CLEAN AND REASONABLY FREE OF WEEDS AND NOXIOUS PESTS OR DISEASES.
6. OTHER GROUND COVERS MUST PRESENT A FINISHED APPEARANCE AND HAVE REASONABLY COMPLETE COVERAGE AT TIME OF PLANTING.
7. LANDSCAPING SHALL BE PROTECTED FROM VEHICULAR AND PEDESTRIAN ENCROACHMENT BY MEANS OF RAISED PLANING SURFACES, DEPRESSED WALKS, CURBS, EDGES AND THE LIKE.
8. WHETHER AT OR BEFORE MATURITY, THE LANDSCAPING SHALL NOT INTERFERE WITH POWER, CABLE TELEVISION, TELEPHONE LINES, SEWER OR WATER LINES, OR ANY OTHER EXISTING OR PROPOSED OVERHEAD OR UNDERGROUND UTILITY SERVICE APPEARING IN SECTION 33-38, UTILITIES.
9. ALL PLANTS SHALL BE INSTALLED ACCORDING TO STANDARDS ADOPTED BY THE PLANNING DEPARTMENT.
10. THE DEVELOPER SHALL PROVIDE SUFFICIENT SOIL AND WATER TO SUSTAIN HEALTHY GROWTH OF ALL PLANTS.
11. WHERE NO LANDSCAPING EXISTS ON SITES UNDERGOING REDEVELOPMENT OR WHERE EXISTING LANDSCAPING IS BEING ALTERED, THE LANDSCAPING PROPOSED SHALL BE DESIGNED BY A FLORIDA LICENSED LANDSCAPE ARCHITECT.
12. NINETY PERCENT OF CANOPY AND UNDERSTORY TREES AND SHRUBS SHALL BE SELECTED FROM THOSE LISTED IN THE DOCUMENT ENTITLED 'LIST OF PERMITTED SHRUBS AND TREES FOR LANDSCAPING AND TREE PROTECTION' (CONTAINED IN ARTICLE VI, ADDENDUM A) TO SATISFY THE LANDSCAPING AND TREE REQUIREMENTS OF THE CITY. SEVENTY-FIVE PERCENT OF THE TOTAL NUMBER OF INDIVIDUAL PLANTS SELECTED FROM EACH OF THE CATEGORIES ON THE LIST AND USED TO SATISFY THE REQUIREMENTS OF THE CITY LANDSCAPE CODE SHALL BE SELECTED FROM THE LIST OF NATIVE SPECIES IN THE CATEGORY.

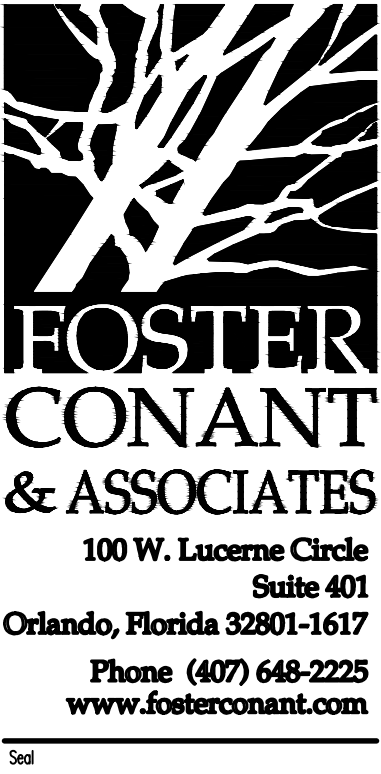
IRRIGATION CODE NOTES

1. UNDERGROUND AUTOMATIC IRRIGATION SYSTEMS THAT CONFORM TO THE TECHNICAL CONSTRUCTION STANDARDS MAINTAINED BY THE CITY ENGINEER OR TO THE STANDARDS OF VOLUSIA COUNTY'S WATER WISE LANDSCAPE IRRIGATION ORDINANCE ARE REQUIRED FOR ALL DEVELOPMENT.
2. IRRIGATION OF REESTABLISHED NATIVE VEGETATION COMMUNITIES SHALL BE REQUIRED FOR A MINIMUM OF ONE YEAR AFTER INITIAL INSTALLATION. ONCE THE LANDSCAPE MATERIALS HAVE BEEN FIRMLY ESTABLISHED, THE IRRIGATION SYSTEM MAY BE ABANDONED.
3. CULTIVATED LANDSCAPE AREAS SHALL BE WATERED WITH AN UNDERGROUND IRRIGATION SYSTEM DESIGNED TO PROVIDE 100 PERCENT COVERAGE ON A DAY WHEN WINDS ARE NO MORE THEN 5 MILES AND HOUR. CULTIVATED LANDSCAPE AREAS SHALL INCLUDE ALL AREAS NOT DESCRIBED IN NO. 2 ABOVE.
4. ALL LANDSCAPE IRRIGATION SYSTEMS SHALL BE LOW VOLUME IRRIGATION SYSTEMS REGULATED BY AN AUTOMATIC TIMER OR CONTROLLER.
5. THE DESIGN OF THE SYSTEM SHALL INCLUDE SPRINKLER HEADS AND DEVICES APPROPRIATE FOR THE LANDSCAPE MATERIAL TO BE IRRIGATED.
6. LOW-TRAJECTORY HEADS OR LOW-VOLUME WATER DISTRIBUTING DEVICES SHALL BE USED TO IRRIGATE CONFINED AREAS IN ORDER TO PREVENT OVERSPRAY ONTO IMPERVIOUS SURFACES.
7. IRRIGATION SYSTEMS SHALL BE DESIGNED TO PLACE HIGH WATER DEMAND AREAS SUCH AS LAUNDS, ON SEPARATE ZONES FROM THOSE AREAS WITH REDUCED WATER REQUIREMENTS.
8. AUTOMATICALLY CONTROLLED IRRIGATION SYSTEMS SHALL BE OPERATED BY AN IRRIGATION CONTROLLER THAT IS CAPABLE OF IRRIGATING HIGH REQUIREMENT AREAS ON A DIFFERENT SCHEDULE FROM LOW WATER REQUIREMENT AREAS, PROVIDED THAT SEPARATE ZONES EXIST AS DESCRIBED IN NO. 1 ABOVE.
9. MOISTURE SENSING DEVICES (I.E. RAIN CHECK VALVE) SHALL BE INSTALLED TO REGULATE THE CONTROLLER'S OPERATION DURING WET WEATHER.
10. PRECIPITATION RATES FOR EACH ZONE SHALL BE CALCULATED AND NOTED ON THE IRRIGATION PLANS.
11. THE WATERING SCHEDULE RECOMMENDED BY THE URBAN FORESTER SHALL BE NOTED ON THE IRRIGATION PLANS.
12. THE USE OF RECLAIMED WATER, WHERE AVAILABLE, SHALL BE REQUIRED FOR ALL USES WITH THE EXCEPTION OF ONE AND TWO FAMILY RESIDENTIAL USES.

CODE PLANT LIST

TREES						
SYM	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATION	TOTAL DBH INCHES	NATIVE
ED	1	ELAEOCARPUS DECIPIENS	JAPANESE BLUEBERRY	MIN. 10' HT. X 36" SPRD., 3" MIN. DBH, 100 G CONTAINER OR 40" ROOT BALL	3	NO
IA1	3	ILEX ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	MIN. 10' HT. X 36" SPRD., 3" MIN. DBH, 100 G CONTAINER OR 40" ROOT BALL	9	NO
IAE	30	ILEX ATTENUATA 'EAGLESTON'	EAGLESTON HOLLY	MIN. 8' HT. X 28" SPRD., 2" MIN. DBH, 45 G CONTAINER OR 32" ROOT BALL	60	NO
JVB	18	JUNIPERUS VIRGINIANA 'BRODIE'	BRODIE JUNIPER	MIN. 8' HT. X 28" SPRD., 2" MIN. DBH, 45 G CONTAINER OR 32" ROOT BALL	36	YES
QV3	88	QUERCUS VIRGINIANA	LIVE OAK	MIN. 10' HT. X 6" SPRD., 3" MIN. DBH, 100 G CONTAINER OR 40" ROOT BALL	264	YES
GRAND TOTAL					372	
SHRUBS & GROUNDCOVERS						
SYM	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATION		NATIVE
AG	58	AGAPANTHUS AFRICANUS	LILY OF THE NILE	1 GAL., 14"-16" HT., FULL IN POT, 18" O.C.		NO
IVS	74	ILEX VOMITORIA 'STOKES DWARF'	DWARF YAUPOH HOLLY	3 GAL., 12"-14" HT. X 12"-14" SPRD., 24" O.C., FULL		YES
LMB	1987	LIRIOPE MUSCARI 'EMERALD GODDESS'	BIG BLUE BORDER GRASS	1 GAL., 8"-10" HT., FULL IN POT, 18" O.C.		NO
MC	178	MYRICA CERIFERA	WAX MYRTLE	MIN. 30" HT. X 24"-28" SPRD., 36" O.C., FULL		YES
MF	158	MYRCIANTHES FRAGRANS	SIMPSON STOPPER	MIN. 30" HT. X 24"-28" SPRD., 36" O.C., FULL		YES
PM	106	PODOCARPUS MACROPHYLLUS	YEW PODOCARPUS	MIN. 30" HT. X 16"-18" SPRD., 24" O.C., FULL		NO
SAT	270	SCHIEFFLERA ARBORICOLA 'TRINETTE'	TRINETTE DWARF SCHEFFLERA	3 GAL., 14"-16" HT. X 14"-16" SPRD., 24" O.C., FULL		NO
TAM	183	TRACHELOSPERMUM ASIATICUM 'MINIMA'	DWARF ASIATIC JASMINE	1 GAL., 4"-6" HT. X 12"-18" SPRD., 12" O.C.		NO
TAS	71	TRACHELOSPERMUM ASIATICUM 'SUMMER SUNSET'	SUMMER SUNSET JASMINE	1 GAL., 4"-6" HT. X 12"-18" SPRD., 12" O.C.		NO
TF	374	TRIPSACUM FLORIDANUM	DWARF FAKAHATCHEE GRASS	MIN. 30" HT. X 24"-30" SPRD., 36" O.C., FULL		YES
VO	33	VIBURNUM OBOVATUM	WALTERS VIBURNUM	MIN. 30" HT. X 24"-30" SPRD., 36" O.C., FULL		YES
VOW	555	VIBURNUM OBOVATUM 'MRS. SHILLERS DELIGHT'	DWARF WALTERS VIBURNUM	3 GAL., 12"-14" HT. X 12"-14" SPRD., 24" O.C., FULL		YES
GRASS						
SYM	QTY	BOTANICAL NAME	COMMON NAME	SPECIFICATION		
SA	TBD	STENOTAPHRUM SECUNDATUM 'FLORATAM'	FLORATAM ST. AUGUSTINE	FULL, DENSE FOLIAGE, PEST AND DISEASE FREE		

- NOTES:
- 1) A TOTAL OF 372" OF REPLACEMENT TREE DBH IS PROPOSED, THUS MEETING AND EXCEEDING THE 368" OF REQUIRED REPLACEMENT DBH INCHES FOR TREES REMOVED FROM THE SITE
- 2) A TOTAL OF 105 OF THE 139 PROPOSED TREES ARE NATIVE (76%), THUS MEETING THE 75% CODE REQUIREMENT FOR NATIVE TREES
- 3) A TOTAL OF 1372 OF THE 1748 PROPOSED SHRUBS ARE NATIVE (78%), THUS MEETING AND EXCEEDING THE 75% CODE REQUIREMENT FOR NATIVE SHRUBS. (GROUND COVERS NOT INCLUDED IN THIS CALC.)



- Revisions
- 1 08/02/22 - CITY COMMENTS (08/18/22)
- 2 08/23/22 - CITY COMMENTS (08/18/22)

Project

DELAND COMMONS

DELAND, FL

CODE LANDSCAPE PLANT LIST & NOTES

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Scale: N/A

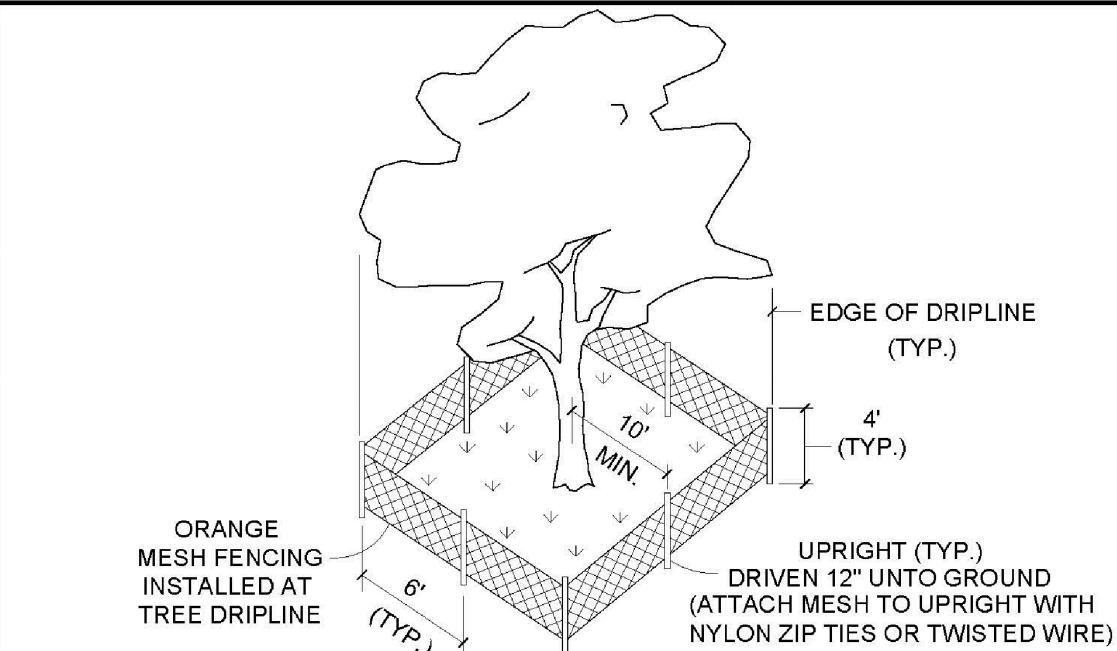
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File Name: DECOPL303.DWG

North

Sheet

PL-303



TYP. CITY TREE BARRICADE DETAIL

N.T.S.

TREE BARRICADES ARE REQUIRED AROUND ALL TREES WHICH HAVE BEEN DESIGNATED ON THE SITE PLAN TO BE RETAINED AND PROTECTED PRIOR TO ANY CLEARING OR CONSTRUCTION ACTIVITY OCCURRING ON THE SITE. TREE BARRICADES SHALL BE CONSTRUCTED BY THE CONTRACTOR AND APPROVED BY THE CITY. TREE BARRICADES SHALL BE PLACED AT THE EDGE OF THE DRIPLINE OR A MINIMUM OF 10' FROM THE TRUNK OF THE TREE, WHICHEVER IS GREATER.

FOR THE BARRIER THE CITY RECOMMENDS SAFETY BARRICADE FENCING.

NOTE: EXISTING TREES IN LANDSCAPE BUFFER SHALL ALSO BE PROTECTED.

DATE: May 22, 2019

TREE BARRICADE DETAIL

M112

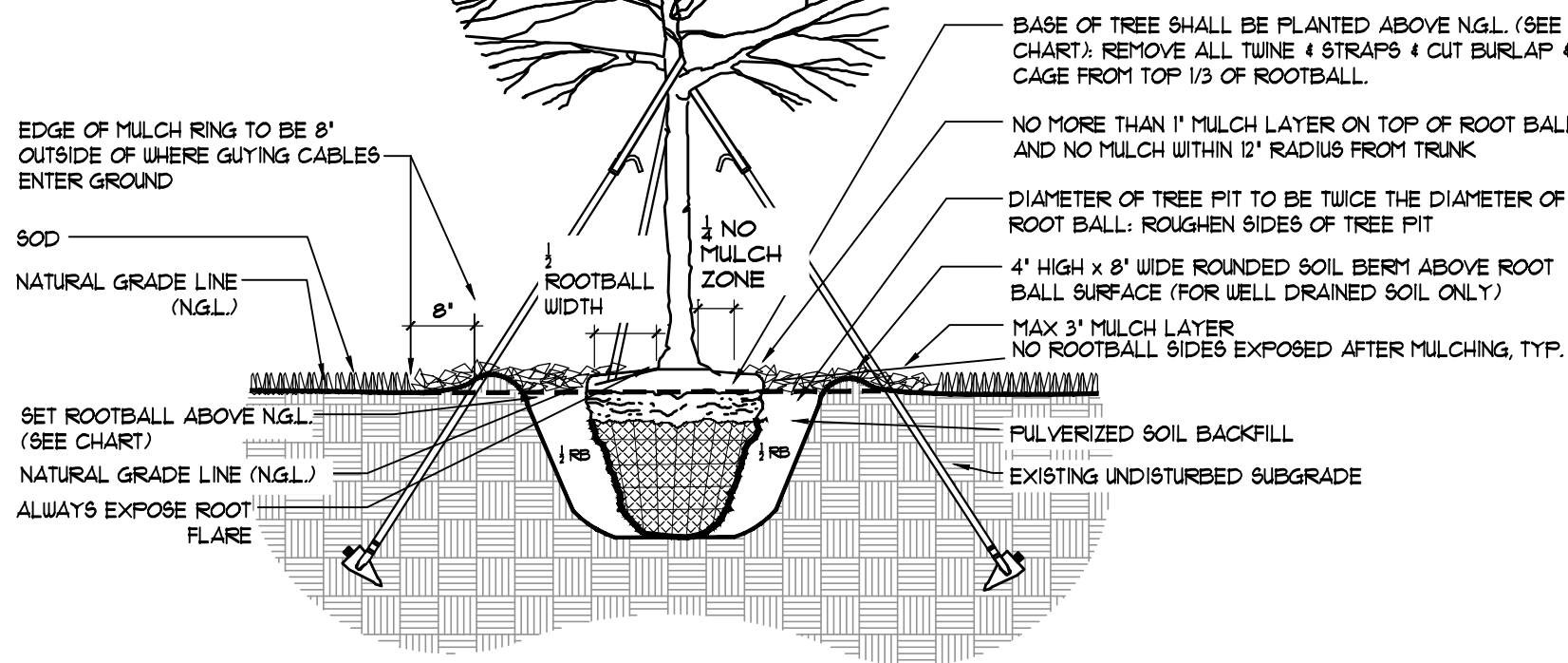
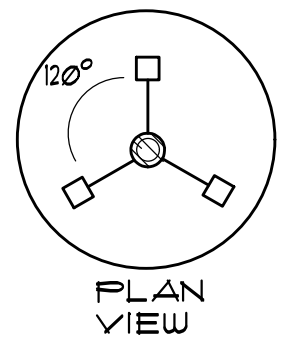
City of DeLand - Standard Details



BIKE RACK

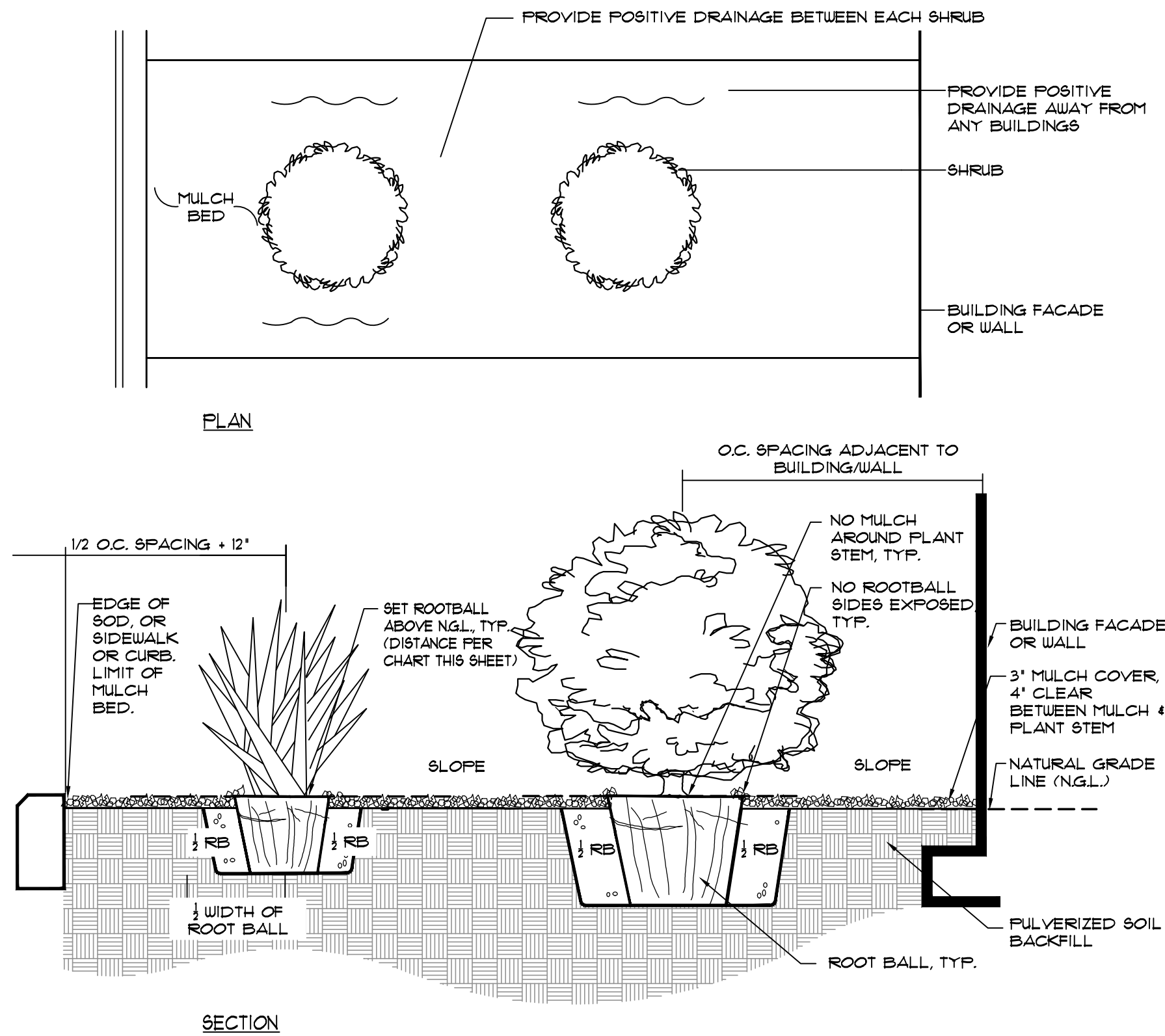


Know what's below.
Call before you dig.



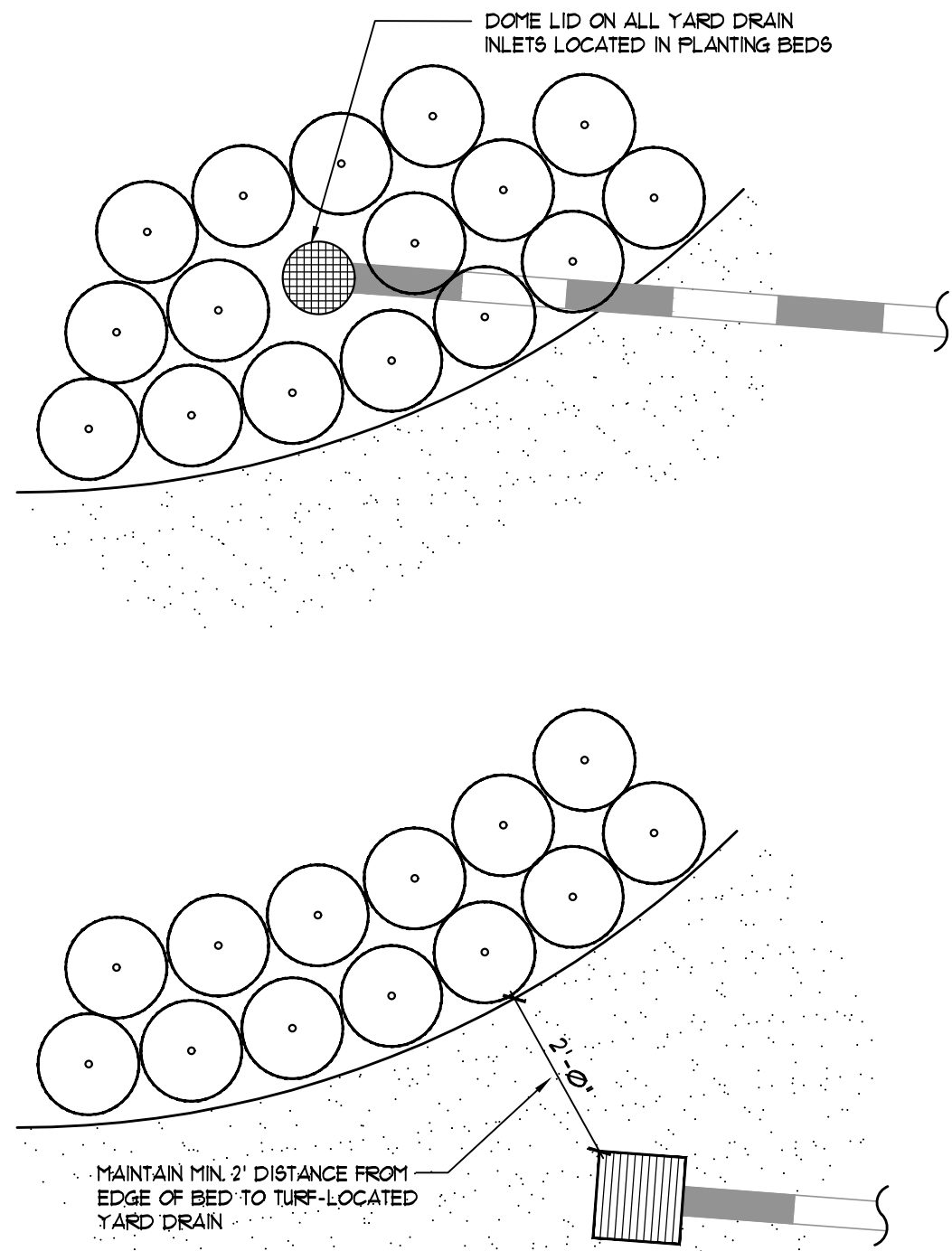
LARGE TREE PLANTING DETAIL BALL AND BURLAP

SCALE : N.T.S.



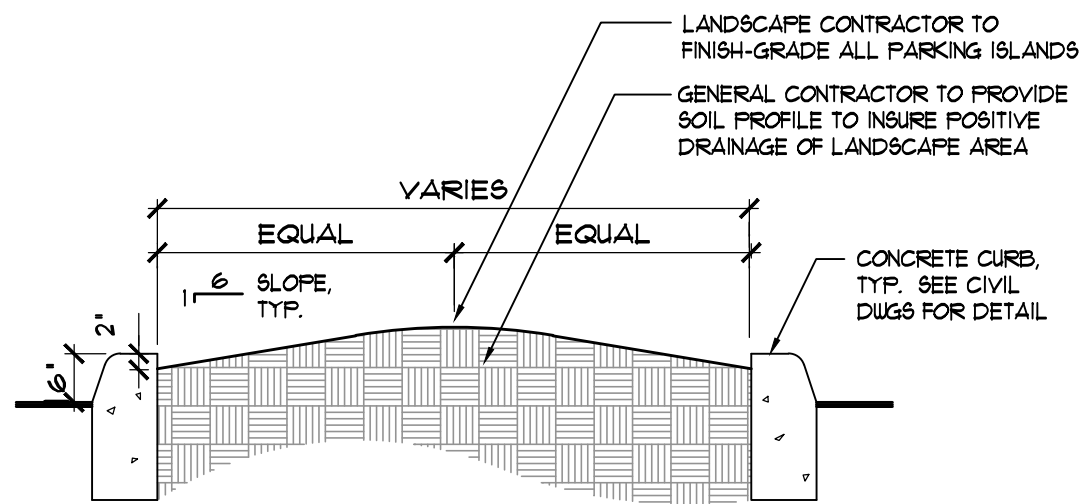
SHRUB PLANTING DETAIL

SCALE : N.T.S.



YARD DRAIN DETAILS

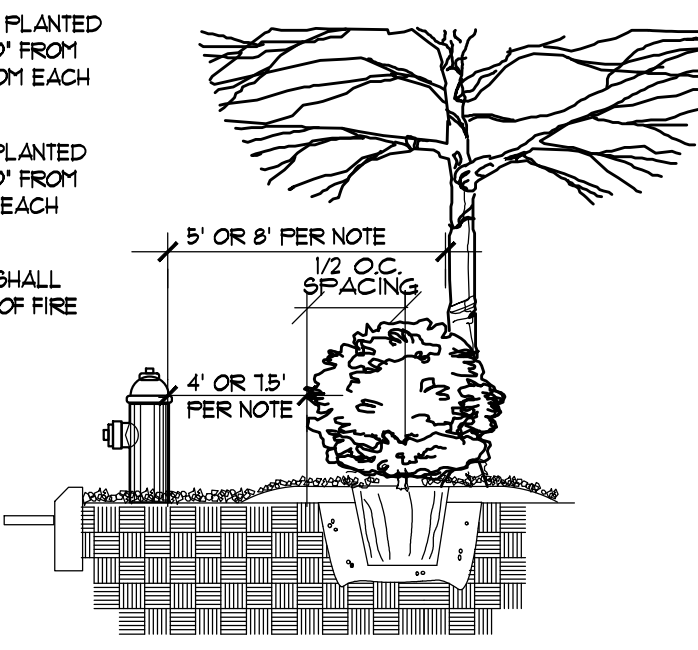
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TYPICAL LANDSCAPE ISLAND DETAIL

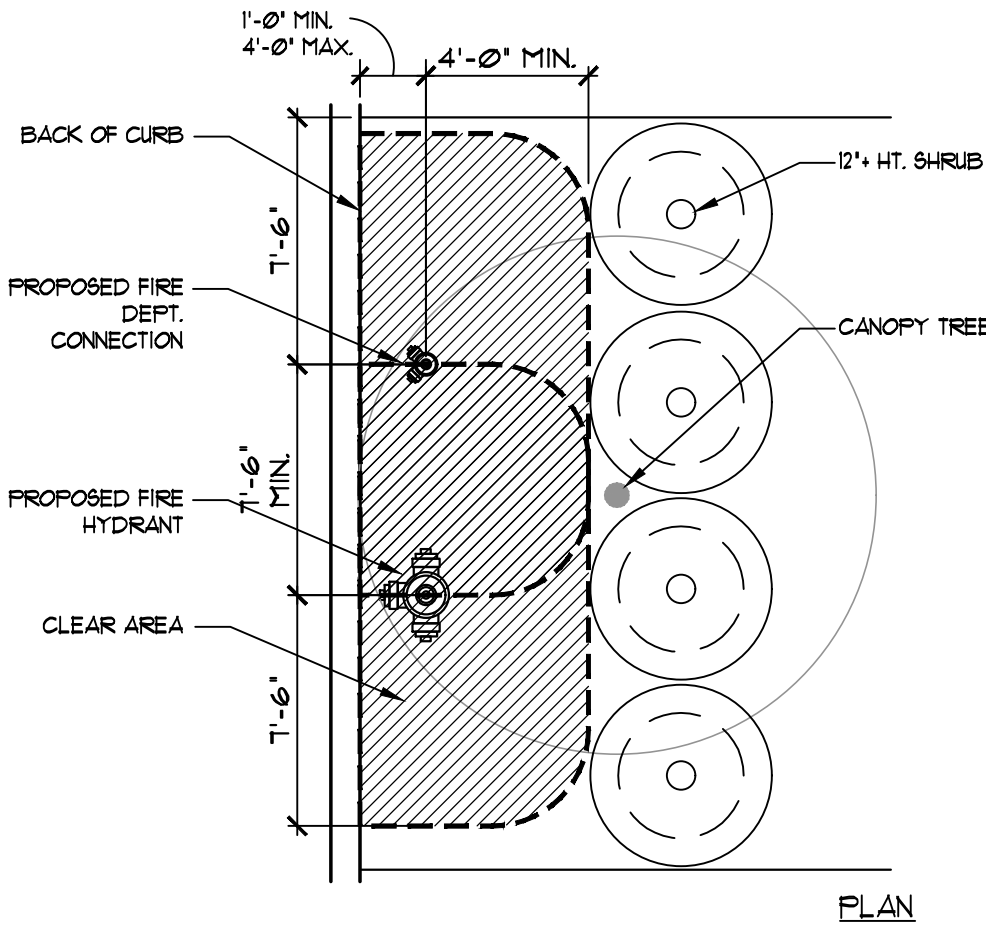
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- SHRUBS SHALL NOT BE PLANTED ANY CLOSER THAN 4'-0" FROM THE BACK OR 1'-6" FROM EACH SIDE OF FIRE HYDRANT
- TREES SHALL NOT BE PLANTED ANY CLOSER THAN 5'-0" FROM THE BACK OR 8' FROM EACH SIDE OF FIRE HYDRANT
- NO TREES OR SHRUBS SHALL BE PLANTED IN FRONT OF FIRE HYDRANT



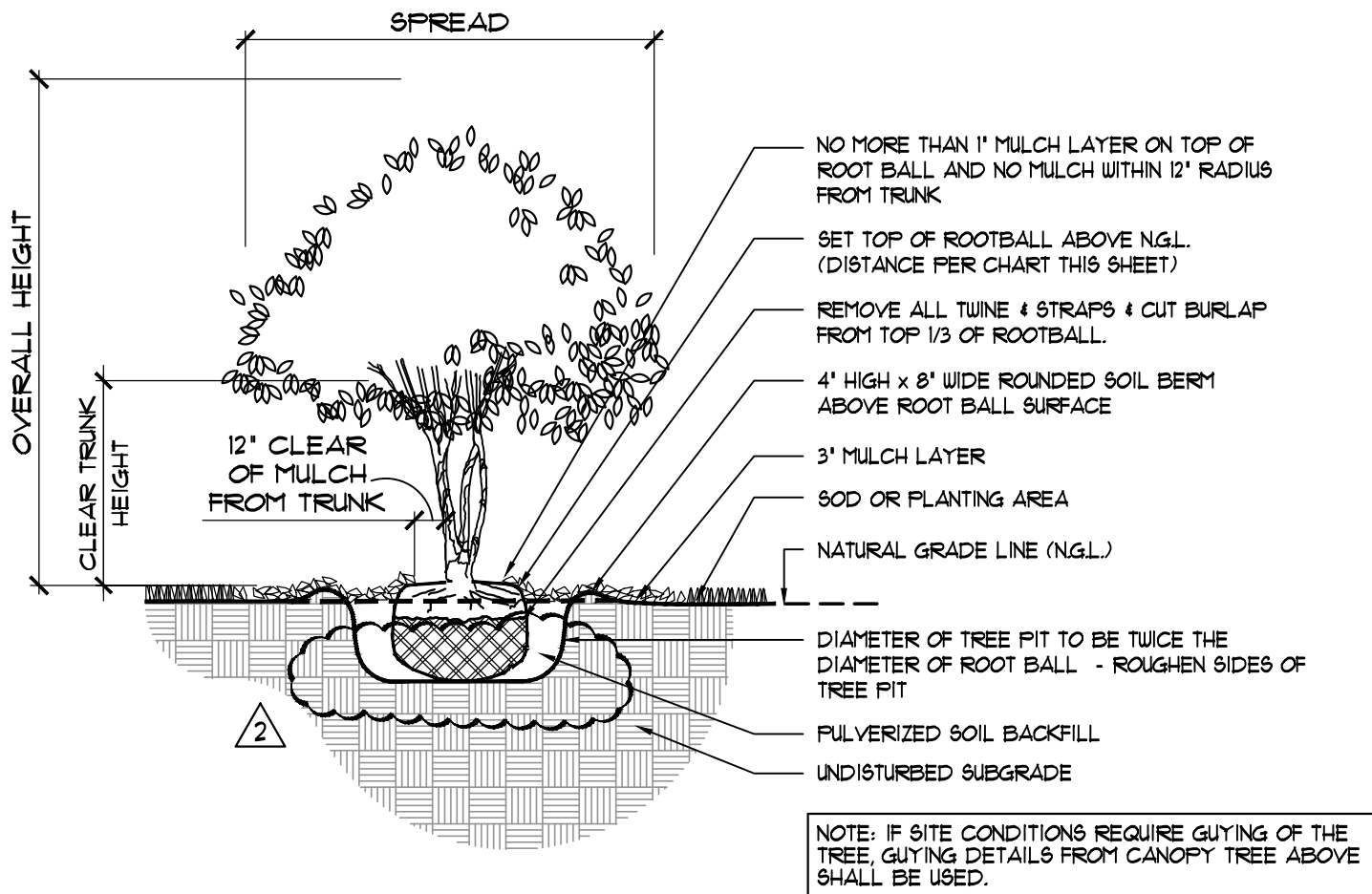
PLANTING SHRUBS AND TREES ADJACENT TO HYDRANT

SCALE : N.T.S.



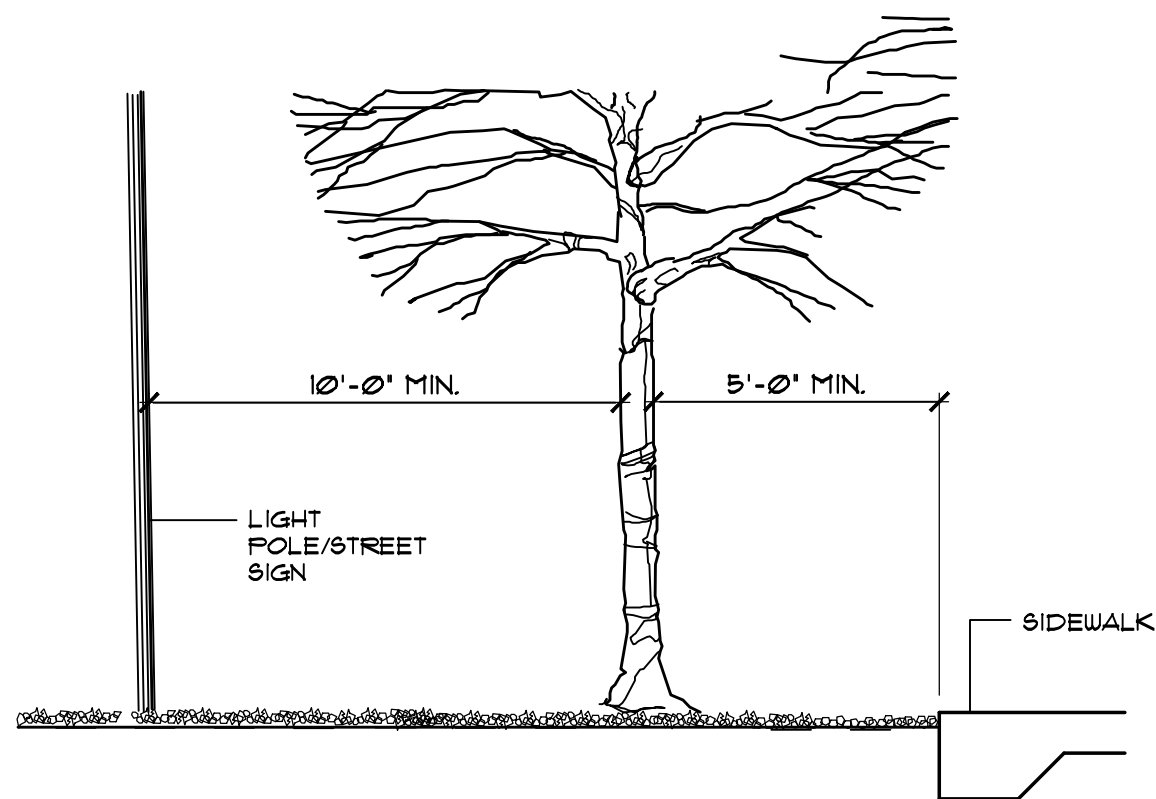
SHRUB PLANTING ADJACENT TO CURBS DETAIL

SCALE : N.T.S.



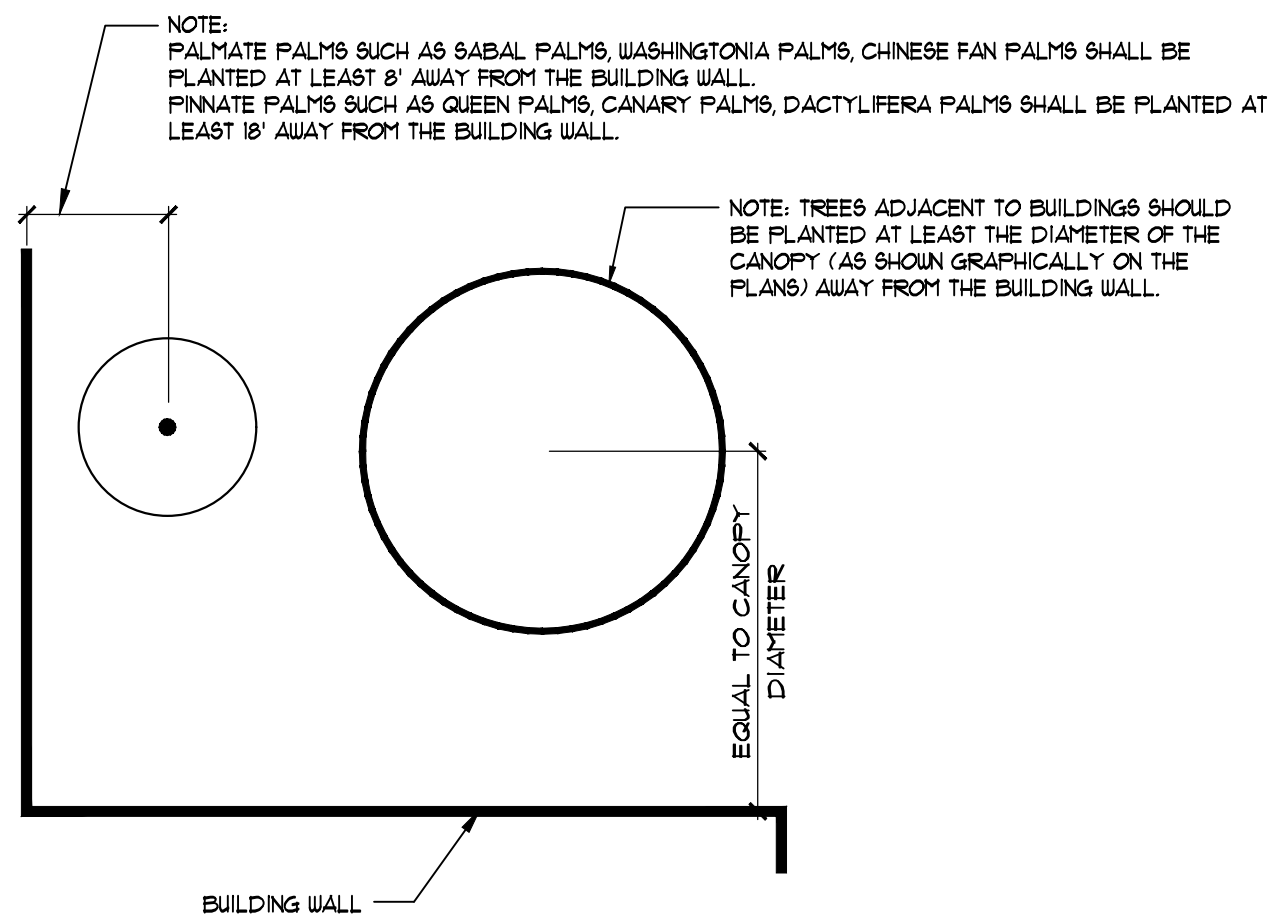
MULTI-TRUNK PLANTING DETAIL

SCALE : N.T.S.



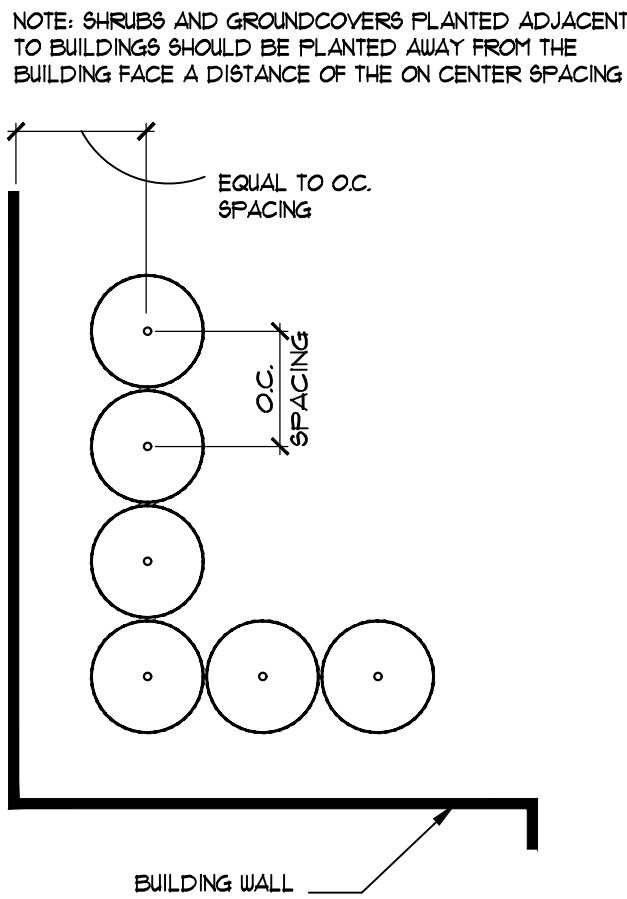
TREE PLACEMENT DETAIL

SCALE : N.T.S.



TREE AND SHRUB PLACEMENT ADJACENT TO BUILDINGS

SCALE : N.T.S.



Sheet

Revisions

- 08/02/22 - CITY COMMENTS (07/18/22)
- 08/23/22 - CITY COMMENTS (08/18/22)

Project

DELAND
COMMONS

DELAND, FL

LANDSCAPE
DETAILS

Date: 06.17.22
Scale: AS NOTED
Drawn: CB Checked: RRC
File Name: DECOPL305.DWG
North

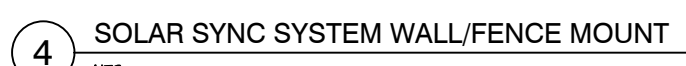
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PL-305



CODE IRRIGATION PLAN & DETAILS

Page 91 of 158



- IR-HU2-0

<u>SYMBOL</u>	<u>MANUFACTURER/MODEL/DESCRIPTION</u>
	Hunter A2C-75D-P 75-Station decoder controller in an outdoor plastic wall mount enclosure.
	Hunter WSS-SEN Wireless Solar, rain freeze sensor with outdoor interface, connects to Hunter X-Core and ACC Controllers, install as noted Includes gutter mount bracket. Module not included. For distances over 200', use the wireless Solar Sync (WSS-SEN) for a range up to 800' line of sight from sensor to receiver. The sensor must be placed in an area where it can receive full sun and rain exposure.
	4" Deep Well - Connect to 2.5" Irrigation Mainline
	2.5" Irrigation Mainline: PVC Class 200 SDR 21 - Size as Shown All mainline 1"-2.5" shall be solvent weld. All mainline 3" and larger shall be PVC gasketed type. All mainline fittings up to 2.5" shall be Sch-80 fittings. 3" and above shall be LEEMCO ductile iron fittings with fitting restraints. Min
	Pipe Sleeve: PVC Schedule 40 - Size as Shown Irrigation sleeves shall be Schedule 40 PVC pipe up to 4" pipe and CL200 for 6" and above. The depth of the sleeves shall be a minimum of 30" cover from finished grade (top of asphalt) under roadway crossings and 24" under all sidewalks and hardscapes.

PART 1-UELL

1) The contractor shall drive or drill a 4" deep well for the operation of the irrigation system. The well shall produce 65 gallons per minute and a minimum of 65 psi with not more than a 5 foot pumping drawdown.

2) The well shall be installed as per State and Local code regulations. The contractor shall be responsible for all fees and permits required to drill the well.

PART 2-PUMP

2) The contractor shall furnish and install one submersible pump in the well. The pump shall be capable of producing 75 gallons per minute at 140 T.D.H. (total dynamic head) The T.D.H. is at ground level. The pump or pumps shall be installed using the following equipment and materials. All equipment may not be listed. The contractor shall be responsible to furnish and install all necessary equipment for the operation of the well pump and its connection to the irrigation system.

- A) 4x2 Inch sanitary well seal
- B) Galvanized drop pipe, size as required
- C) Submersible pump cable, size as required
- D) All necessary galvanized fittings that are required for the connection of the system. All above ground piping shall be galvanized steel
- E) All necessary electrical wires, switches and conduit
- F) Isolation valve
- G) Silent check valve
- H) Magnetic starter for three phase systems, size as required
- I) Above ground check valve, where required by code.

22) The contractor shall furnish and install one "Pumpco-Plus" protection system by Franklin Electric for each pump installed.

PART 3-NOTES

3) The contractor shall be responsible for the installation and connection of all the above equipment and the connection to the irrigation system.

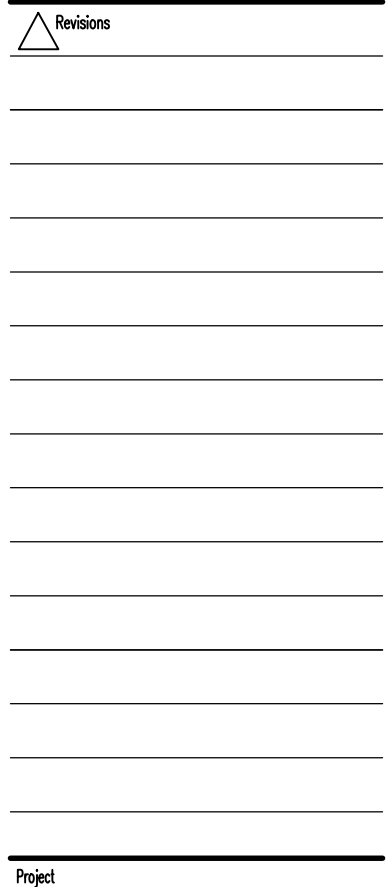
32) Power for the operation of the pumps shall be supplied to a junction box at the pump location by the electrical contractor. Coordinate all power requirements with the owner or general contractor.

PART 4-SITE CONDITIONS

4) The well driller shall be responsible to visit the site and become familiar with the on site location of the well. It shall be his responsibility to notify the owner if he feels the location should be moved. The owner shall not be responsible for any well or part of a well that does not meet the full intent of these specifications.



- REFER TO THE LANDSCAPE PLANS WHEN NECESSARY TO AVOID TREE AND SHRUB LOCATIONS.
- 2) ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 24" OF COVER AND ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER.
- 3) ALL POP-UP ROTOR AND SPRAY HEADS SHALL BE INSTALLED USING AN 18" PVC FLEX PIPE CONNECTION. CONTRACTOR SHALL NOT USE FUNNY PIPE.
- 4) PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. THE SMALLEST LATERAL PIPE SIZE TO A SINGLE SPRAY OR ROTOR HEAD SHALL BE 3/4".
- 5) ALL REMOTE CONTROL VALVES, GATE VALVES AND QUICK COUPLERS SHALL BE INSTALLED IN VALVE BOXES.
- 6) THE EXACT HEIGHT OF ANY 12" POP-UP THAT IS SHOWN IN A SHRUB BED SHALL BE DETERMINED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
- 7) CONTROL WIRE SHALL BE 2-WIRE JACKET DECODER CABLE WITH RED AND BLUE WIRES. PAIGE ELECTRIC MODEL NO. P17354D. NO CROSS CONNECTION BETWEEN CONTROLLERS SHALL BE ALLOWED. WIRE SPLICES SHALL BE MADE ONLY IN VALVE BOXES USING 3M DBRY -6 WATERPROOF CONNECTORS.
- 8) ANY PIPING OR VALVES SHOWN OUTSIDE THE PROPERTY LINE OR OUTSIDE OF A LANDSCAPE AREA IS SHOWN THERE FOR DESIGN CLARITY ONLY. ALL PIPING AND VALVES SHALL BE INSTALLED ON THE PROPERTY AND WITHIN LANDSCAPE AREAS.
- 9) IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE HIMSELF WITH, AND EXERCISE CARE SO AS TO NOT DAMAGE ANY EXISTING BERM, WALLS, STRUCTURES, PLANT MATERIALS AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIR OR REPLACEMENT OF ALL ITEMS DAMAGED BY HIS WORK. HE SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS FOR THE LOCATION AND INSTALLATION OF SLEEVES AND PIPING THROUGH WALLS, UNDER ROADWAYS AND PAVING, ETC.
- 10) DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS.
- 11) FINAL LOCATION OF THE AUTOMATIC CONTROLLER(S) SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.
- 12) ELECTRICAL SERVICE TO ALL EQUIPMENT SHALL BE PROVIDED TO A JUNCTION BOX AT THE EQUIPMENT LOCATION. (BY OTHERS, NOT A PART OF THIS CONTRACT) THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL CONNECTION FROM THE JUNCTION BOX TO ALL EQUIPMENT.
- 13) THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS AND VALVES TO PROVIDE OPTIMUM COVERAGE WITH MINIMAL OVERSPRAY ONTO WALKS, STREETS, WALLS, ETC. IN ORDER TO ACCOMPLISH THIS, THE CONTRACTOR MAY SUBSTITUTE VARIABLE ARC NOZZLES IN PLACE OF THE SPECIFIED FIXED ARC NOZZLES WHERE NECESSARY. PRESSURE COMPENSATING SCREENS MAY ALSO BE USED TO REDUCE SPRAY DISTANCE.
- 14) THE CONTRACTOR SHALL COMPLETE ALL WORK IN ACCORDANCE WITH ALL PREVAILING LAWS, CODES AND REGULATIONS.
- 15) ALL SPRINKLER EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- 16) THE CONTRACTOR SHALL PREPARE AN AS-BUILT DRAWING ON A REPRODUCIBLE MYLAR, SHOWING ALL IRRIGATION INSTALLATION. A MYLAR OF THE ORIGINAL PLAN MAY BE OBTAINED FROM THE LANDSCAPE ARCHITECT FOR A FEE. THE AS-BUILT DRAWING SHALL LOCATE ALL MAINLINE AND VALVES BY SHOWING EXACT MEASUREMENTS FROM HARD SURFACES.
- 17) ALL WORK SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST ALL DEFECTS IN EQUIPMENT AND WORKMANSHIP.
- 18) SLEEVES SHALL BE PLACED UNDER PAVEMENT AS SHOWN ON PLANS AND SHALL BE A MINIMUM OF 2X THE SIZE OF THE IRRIGATION PIPE.
- 19) ALL SPRAY HEADS IN THE ROW SHALL BE EITHER 6' OR 12" POP-UP AS INDICATED ON THE PLANS. NO RISERS SHALL BE USED ON SITE.
- 19) CONTRACTOR SHALL PERFORM PRESSURE AND VOLUME TEST ON IRRIGATION WATER SOURCE OVER A CONTINUOUS 24 HOUR PERIOD PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORK. SHOULD THE AVAILABLE SUPPLY NOT BE ADEQUATE TO MEET THE DEMANDS OF THE IRRIGATION SYSTEM AS DESIGNED THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION FOR DESIGN MODIFICATIONS.



DELAND, FL

CODE IRRIGATION PLAN, SCHEDULE & NOTES

Sheet

PL-401

Pre

DELAND, FL

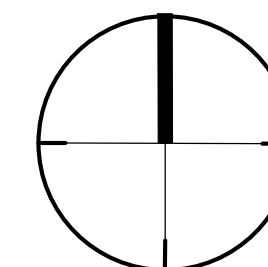
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North



Sho

SEE SHEET PL-502 FOR LIGHTING SCHEDULE & CUT SHEETS

MATCHLINE, SEE SHEET PL-501

WOODLAND BLVD.

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KEY WORDS

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KREFS:
TIME: 22 AUG 2022 - 4:09PM

Seal

Revisions

Project

**DELAND
COMMONS**

DELAND, FL

**PHOTOMETRIC
PLAN**

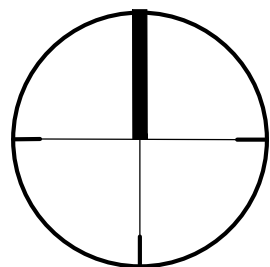
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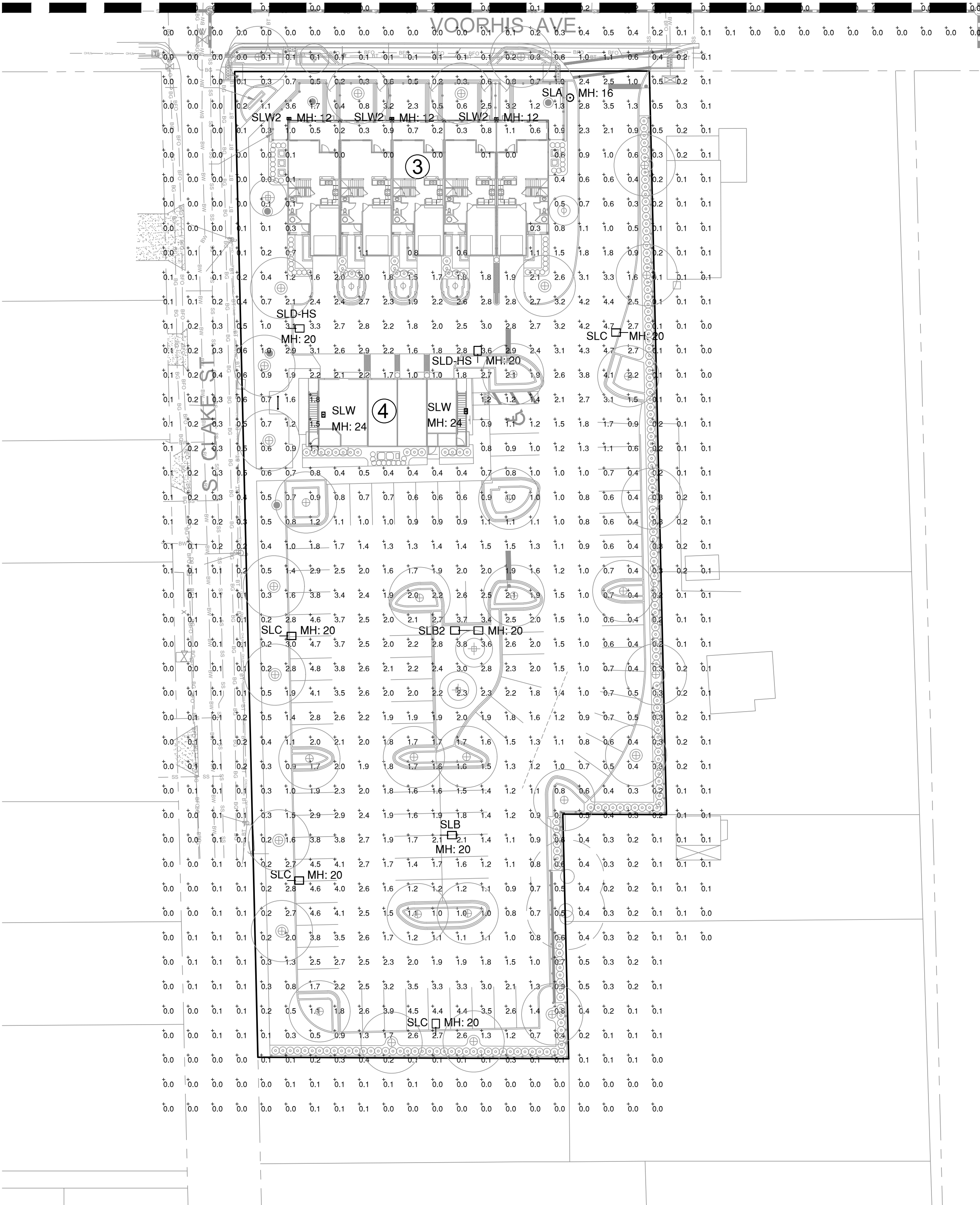
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Sheet

PL-501

MATCHLINE, SEE SHEET PL-500



SEE SHEET PL-502 FOR LIGHTING SCHEDULE & CUT SHEETS

Landreth Lighting Luminaire Schedule

[illegible]

S | A

SLB SLB2 SLC SLD HS

16' POLE

20' DOLE

SI W/2

SLW



DL 500

**PLANNING DEPARTMENT STAFF REPORT
TO
THE CITY OF DELAND PLANNING BOARD**

September 21, 2022

A. APPLICATION NO.: SSB22-132, Summit Place Sketch Plan

Applicant: Nicole Martin, Madden Moorhead & Stokes, LLC

Request: Subdivision Sketch Plan Review for 304 Townhome Units

Applicable Ordinance: Article 13, Sec. 33-146.02 Subdivision Sketch Plan

B. SITE FACTORS

Location: NW corner of I-4 and N. Summit Ave (County Road 4139)

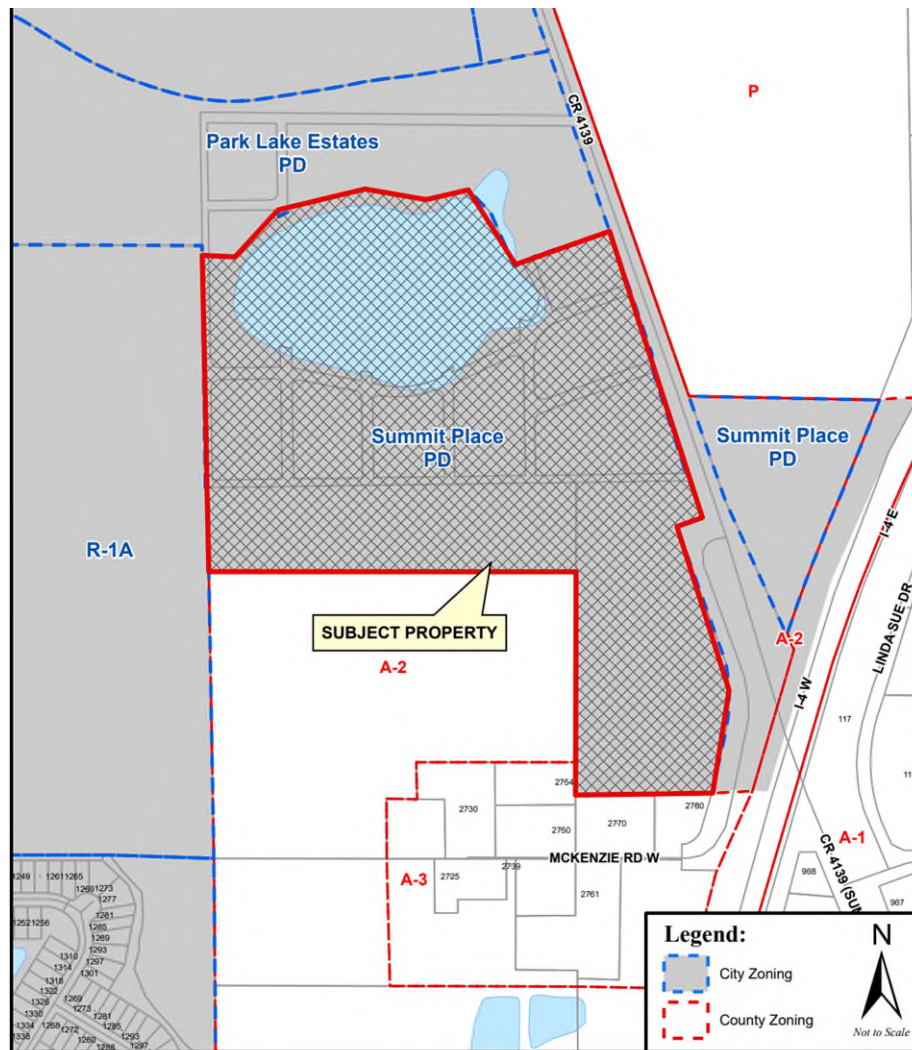
Parcel Size: 59.88 acres

Existing Zoning: Planned Development (PD) – Summit Place – Office, Retail, Multi-Family Residential and Support Commercial

Existing Land Use: Vacant, undeveloped land

	SURROUNDING USE:	SURROUNDING ZONING:
North:	Vacant, undeveloped Single-Family Residential	PD – Park Lake Estates PD
South:	Future School Site and Single-Family Residential	A-2 and A-3 Unincorporated Volusia County; PD - Victoria Park
East:	Daytona State College West Campus in Unincorporated Volusia County; a portion of the Summit Place PD; Single-Family Residential	P (Public) in Volusia County; PD-Summit Place (6.36-acre site within the (not a part of this application)); A-1 Unincorporated Volusia County
West:	Undeveloped Single-Family Residential	R-1A

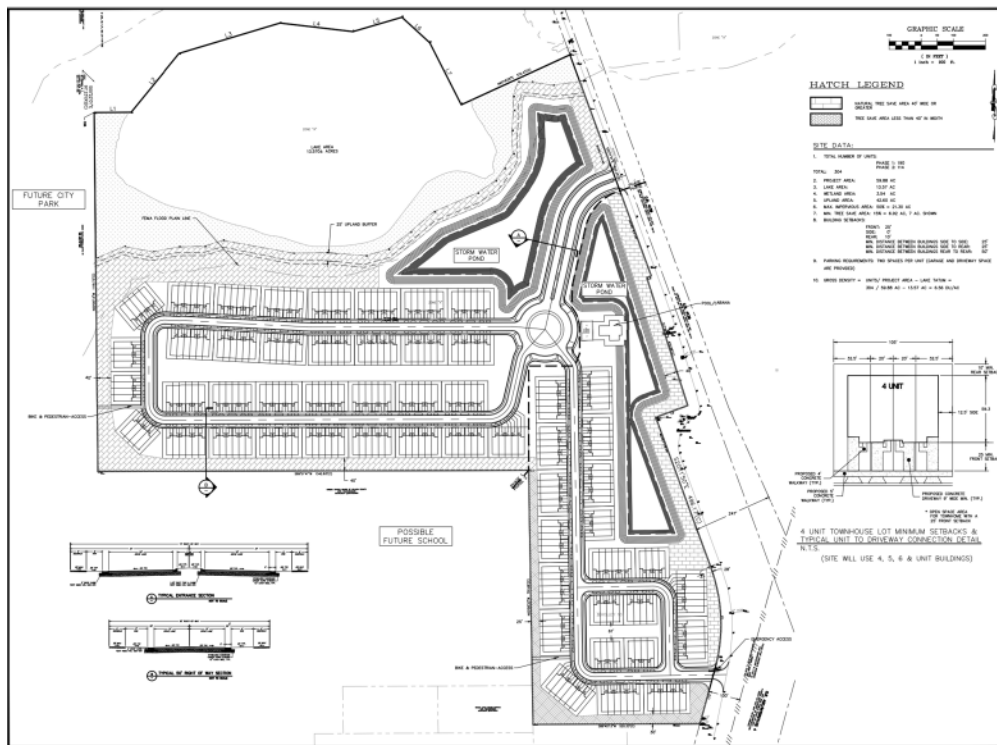
C. LAND USE PLAN: Lake Winnemissett Gateway Corridor



D. ANALYSIS: The proposed Summit Place Sketch Plan shows a preliminary layout for townhomes on a vacant, wooded, undeveloped 59.88-acre site. The Summit Place PD was approved on October 20, 2014 (Ordinance No. 2014-20) and allows for a mix of high-quality office, retail, residential, and ancillary support commercial uses consistent with the R-16 and C-2 zoning classifications.

The applicant is proposing 304 townhomes at a gross density of 6.56 du/acre. Lake Tatum has been excluded from the gross density calculations. The proposed tree protection area and stormwater facilities have been shown on the sketch plan along with a preliminary roadway network and lot layout. City staff reviewed the application for consistency with the approved Summit Place PD, the Land Development Regulations, and the Comprehensive Plan.

The Sketch Plan shows a preliminary public street layout with primary access off of County Road 4139. An emergency access is proposed at the southern end of the site, at W. McKenzie Road. The lots will range from 20 to 32 feet in width and will be developed in accordance with the City's recently-adopted townhouse regulations. The sketch plan is the first phase in the subdivision process. Following the sketch plan, the applicant will need to submit a Preliminary Plat, followed by a Final Plat. A separate site plan application is required for the clubhouse and pool.



The purpose of the sketch plan is to allow the Planning Board to provide the applicant with comments prior to the submittal of preliminary and final plat application. As part of the preliminary and final plats, engineering construction plans are required. No official action is needed by the Planning Board for a sketch plan. The Technical Review Committee reviewed the sketch plan on August 18, 2022. In response to the TRC review comments, the Applicant revised the plans and submitted the attached plan on August 24, 2022. While most of the Technical Review Committee (TRC) comments have been addressed with the resubmittal, there are a few outstanding comments which are outlined below. The applicant will need to address these comments, along with comments from the Planning Board, as part of the preliminary plat application. The sketch plan will remain valid for one (1) year.

Planning Comments

1. Label wetland areas on the sketch plan
2. Illustrative building elevations should be provided. Townhouses should be rear-loaded to avoid a garage-dominated front façade.

Engineering Comments

1. Initial comments regarding additional details for wetland buffer area and a typical roadway section as well as stormwater and wetland buffer information have been addressed.

Utility Department Comments

1. A Utility Service Agreement will be required for this project.
2. A 12" water line will need to be extended from the NE corner of the project to the SE corner and stubbed out to the south parcel.
3. Sewer and reclaim will need to be extended down from the Gas Easement on Summit on the NE section of the proposed project.

4. The sewer and reclaim lines will need to be extended from the Gas Easement on Summit.
5. 12" water line will need to be extended to the south end of the project by over pass and stubbed out toward School Board Property.

Forestry Comments

1. Change "Tree Save Area" to "Tree Protection Area." Clearly show the limits of this area on your site plan. Fifteen percent of 59.88 acres should be 8.98 acres. Tree protection area is listed as 6.39. It appears that your project may not have sufficient Tree Protection Area.

Fire Comments

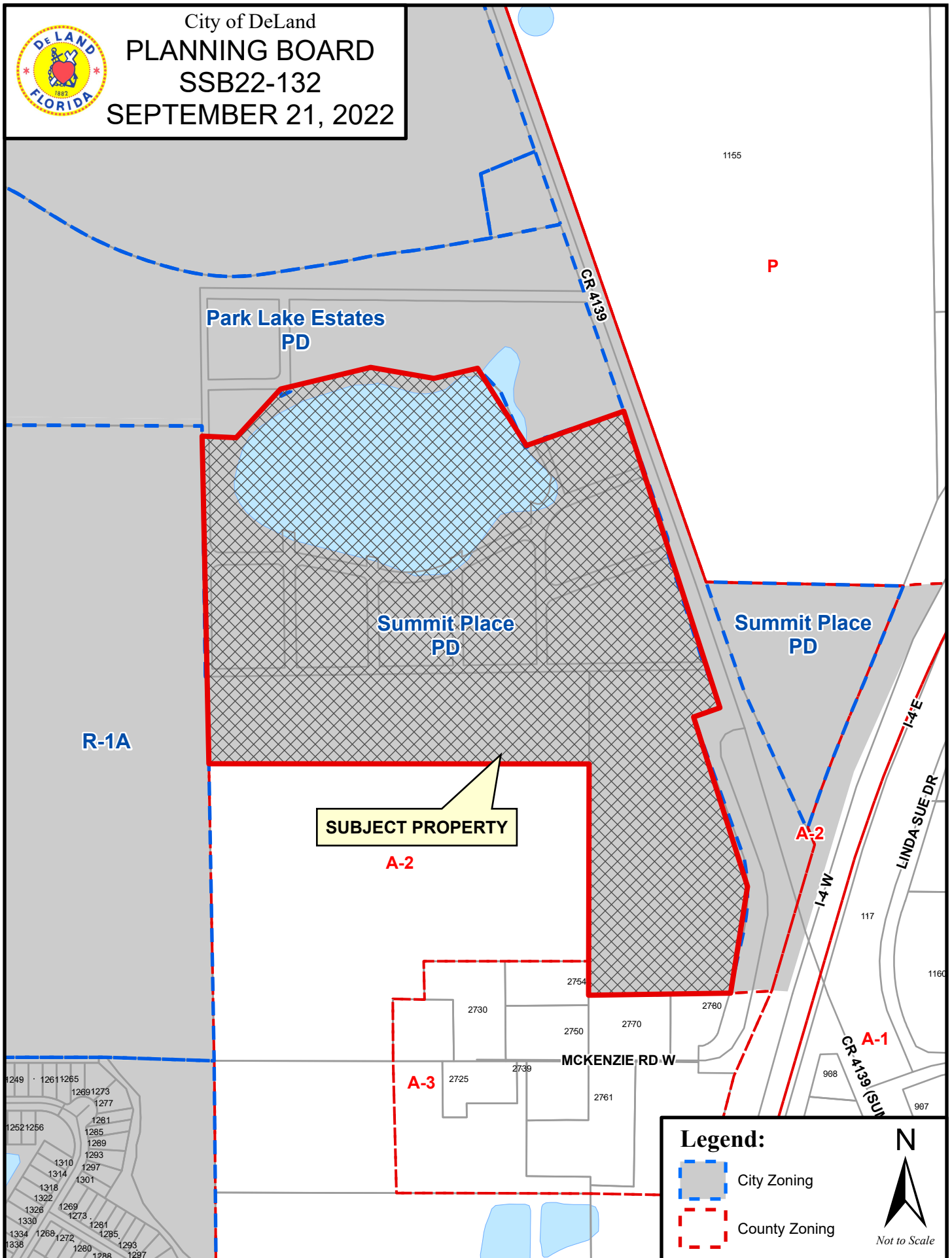
1. All review comments have been addressed or will be addressed with the preliminary plat.

E. PLANNING BOARD ACTION:

1. Review the submitted sketch plan and provide comments for applicant to address.



City of DeLand
PLANNING BOARD
SSB22-132
SEPTEMBER 21, 2022





City of DeLand
PLANNING BOARD
SSB22-132
SEPTEMBER 21, 2022



PLANNING DEPARTMENT STAFF REPORT TO THE CITY OF DELAND PLANNING BOARD

September 21, 2022

- A. APPLICATION NO.:** Z22-139 Aquarius Landing PD
APPLICANT: Carolyn Haslam, Applicant
 DeLand Church of God Inc., Owner
REQUEST: The applicant is proposing to rezone the property in order to construct a 3-story 71 unit multi-family development.
 From: R-1B (Single Family)
 To: Aquarius Landing PD

APPLICABLE ORDINANCES:

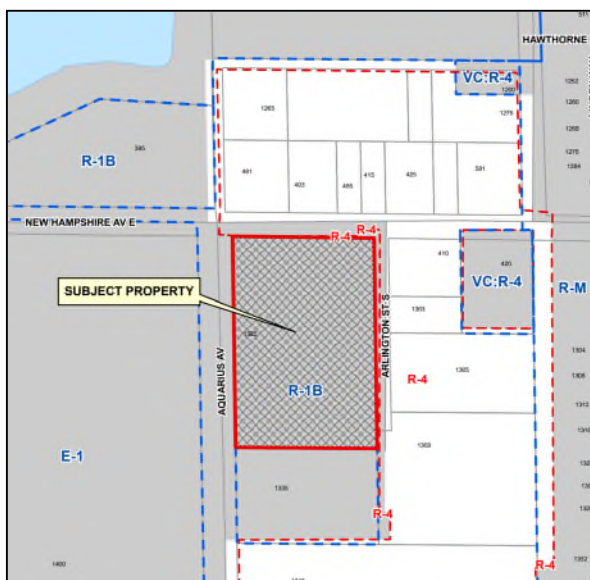
Article XII ADMINISTRATION AND ENFORCEMENT
 Sec. 33-135 – Procedure for text amendments and rezoning

Location: 1325 Aquarius Ave. (parcel id. 702100000281)
Parcel Size: 2.95 ± acres
Existing Use: Vacant, undeveloped

B. ANALYSIS:

The applicant is requesting to rezone this parcel from R1-B (Single family) to Aquarius Landing PD in order to develop an affordable housing project with a 3-story apartment building and the associated parking and stormwater retention with 71 residential units (18 two-bedroom + 53 one-bedroom).

At the August 17, 2022 Planning Board meeting the applicant requested a land use amendment to change the land use designation for the site from Low Density Residential to High Density Residential. Planning staff supported the request; however, the board denied the request because they considered the proposed density to be too high for the area. The land use amendment request is scheduled to be heard by the City Commission on October 17, 2022. Additionally, because the applicant's intent is to develop affordable housing, a land development text amendment was submitted with the intent to update language regarding the provision of affordable housing that would allow a 50% increase in density for a total of 24 d.u.a. (2.95 acres x 16 dua + 50% = 70.8 units. *The Planning Board and City Commission may round the number up to 71 units as their interpretation of the PD agreement.*)

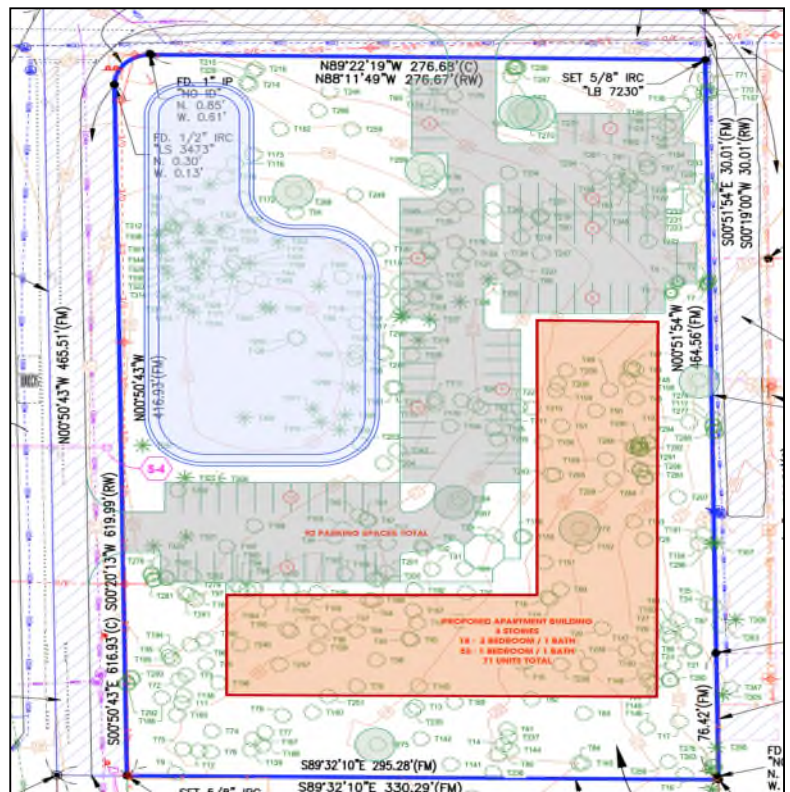


Z22-139 (BC)

1 of 5

The area surrounding the site is characterized by single-family use on the north, east and south sides of the property and DeLand Middle School to the west. The City's Public Works Facility is also located northwest of this site.

S. Arlington Avenue separates a number of single-family residences on the east side of the site. The stormwater retention area is located on the northwest corner of the property and a total of 92 parking spaces are arranged in the center of the site on the front side of the building.



Site Layout



Section 33-135 provides the following criteria, which the City Commission shall utilize in reviewing a rezoning request:

1. **Is the proposed rezoning consistent with the Comprehensive Land Use Plan, the land use, zoning pattern and character of the surrounding area?**

The surrounding area has a mixture of uses that exist in a typical residential area including single-family homes, a church and a school. The proposed use is residential at a denser scale.

The increased density of an apartment complex is compatible with the school and serves as a transition to the single family uses in the surrounding area.

A change in the land use designation has been proposed by the applicant and this rezoning request is consistent with that request. As shown in the following table, the development parameters of the new PD can be compared to the existing ones:

	R-1B	Aquarius Landing PD
Min. lot area	7,500 sf	
Min. width	75 ft.	
Setbacks:		
Front	30 ft.	30 ft.
Rear	25 ft.	20 ft
Side- Int.	10 ft.	10 ft.
Side-St.	20 ft.	20 ft.
Max. impervious	40%	n/a
Max. lot coverage	n/a	75%
Max. bldg. height	35 ft.	65 ft.

Parking req'mt.	2/unit	1/unit + 1/5 units visitor pkg.
Density	5.8	24

The development agreement should state either the density or the total number of units.

2. **Will the proposed rezoning have an impact upon the environment or natural resources?**
Rezoning of the property will amend the permitted uses of the property by permitting multi-family use, however it will not impact the environment or natural resources. No wetlands have been identified on this site.
3. **Will the proposed rezoning have an impact upon the economy of the affected area?**
The addition of the multi-family building that eventually results from the rezoning will not impact the economy of the area, however, the approval of the related amendment will permit residents who may have been unable to move into the area to do so.
4. **Will the proposed rezoning have an impact upon governmental services?**
No additional new services are anticipated to be required because of this rezoning action. The impact of the housing on School concurrency will be considered as the site development process takes place.
5. **Are there changes in the circumstances or conditions affecting the area since the original assignment of zoning that will support the proposed zoning?**
There is an expressed need for additional residential units throughout the area. This rezoning will support the provision of additional residential units.
6. **Was there a mistake in the original classification?**
There is no mistake that has been identified in the classification of this property.
7. **Will the proposed rezoning have any effect upon the use or value of the affected area?**
The proposal will impact the value of the site but should not adversely affect the value of the area.
8. **Will the proposed rezoning have an impact upon public health, safety and welfare?**
The ultimate result of the rezoning request, which is the provision of needed housing, will positively impact health, safety and welfare. Because the development is intended to serve the needs of those who need affordable housing, the provision of services to meet their requirements will have to be considered.

The applicant submitted this updated site plan to accompany the development agreement. The TRC has not yet completed it's review on this layout.

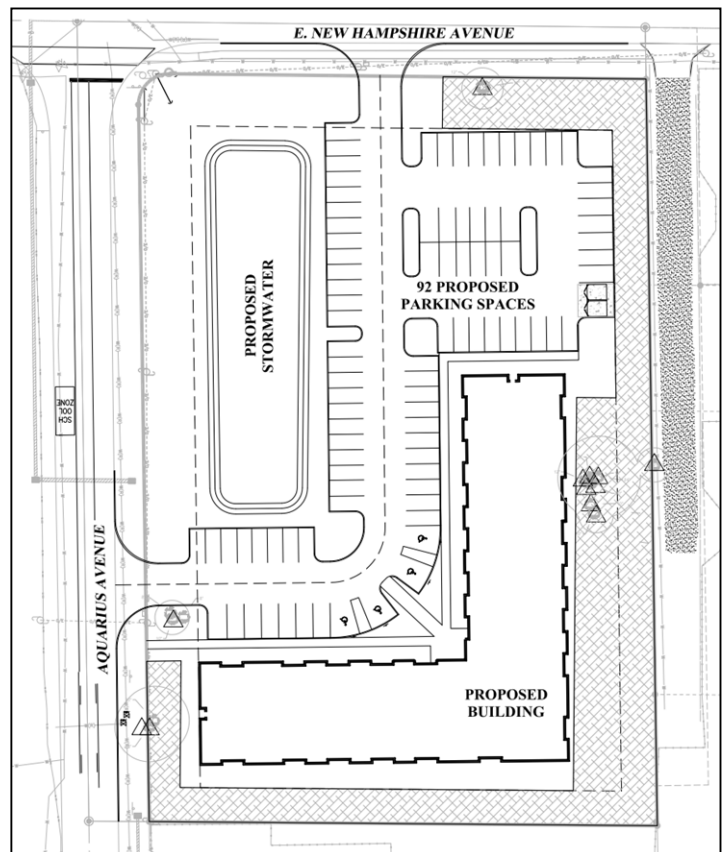
Typically, the requirement for parking is 2 spaces per unit which would require 142 parking spaces based on 71 units to be provided.

The layout includes a total of 92 parking spaces. Based on the requested reduction of required parking spaces as outlined in the development agreement, the updated layout is required to provide a total of 85 spaces.

The development agreement off-street parking requirement (*see attachment*) requested is as follows:

<u>1 space per unit</u>	71
<u>1 space per 5 units for visitor parking</u>	14.2
TOTAL	85

Staff is not in favor of this much of a reduction, but a less severe reduction may be acceptable.



Updated conceptual site layout

The TRC reviewed the plans at the August 18, 2022 meeting and the following comments for the concept plan remain to be addressed:

		Trees
Forestry	Open	Your plan indicates that you have nine 20"+ "historic and specimen trees." If the trees are actually Laurel Oaks and not Live Oaks, they would not be specimen or historic. Please make sure that your tree identification is correct prior to your site plan stage.
Forestry	Open	Pine You will need to identify Pine trees by species during future submissions to determine whether they are specimen trees.
Forestry	Open	T294 If the table on page 8 is correct, Tree T294, within your building footprint, may be historic. Historic Tree removal requires a review by the Tree Advisory Committee and approval by the City Commission. The applicant would need to demonstrate that the tree is in potentially hazardous conditions or that the project cannot be completed without removing the tree. Please schedule a site visit with Chris Jackson (jacksonc@deland.org) if you have any question regarding the status of this tree.
Forestry	Open	Proposed Apartment Building Location If your species ID is correct, we recommend adjusting your proposed apartment building to avoid the clusters of Specimen Live Oaks on the property. This would provide more of a long term benefit than building around a 48" DBH Laurel Oak, which is most likely at the end of its lifespan.

Engineering	Open	Handicap Space 1. Please show parking space dimensions on site plan. Per City LDC, regular spaces are min. 9' x 19' and handicap are 9' x 20' Last comment from reviewer: 1. Parking lot dimensions are not shown on revised Concept Plan submitted.
Engineering	Open	Dumpster Location 1. Dumpster location comments may be forthcoming from GFL staff. Concept Plan was sent to GFL for review. Last comment from reviewer: 1. Dumpster location may be an issue for turning radius and safety back-in and out maneuvers through parking lot. This will need to be addressed at engineering site plan submittal
Engineering	Open	Stormwater Retention Pond 1. Retention pond outfall pipe and mitered end section should not be point discharge onto Aquarius Ave. right-of-way and near public sidewalks. This can cause slippage and erosion issues within the right-of-way. Please re-locate outfall pipe to discharge into existing storm catch basin on east side of Aquarius Ave. 2. Please show retention pond side slopes and top of pond area in acre. Slope must not exceed 1:4 (V:H). Last comment from reviewer: 1. Pond discharge location concerns comment was not addressed on the revised Concept Plan. 2. Pond area and side slopes are not shown on revised Concept Plan.
Fire	Open	Final Site Plan Approval Section shall include no burning. Last comment from reviewer: Did not locate (no Burning) clause in revised edition.
Forestry	Open	Typo Change "papel" to "parcel"
Forestry	Open	Camphor Camphor trees do not count towards minimum coverage requirements or require replacement as they are considered a nuisance species by our code.
Forestry	Open	Specimen Trees Live Oak trees 10" DBH and larger are considered Specimen. Depending on the age and accuracy of your survey, your 24" DBH Live Oak may be historic.

C. CONCLUSION:

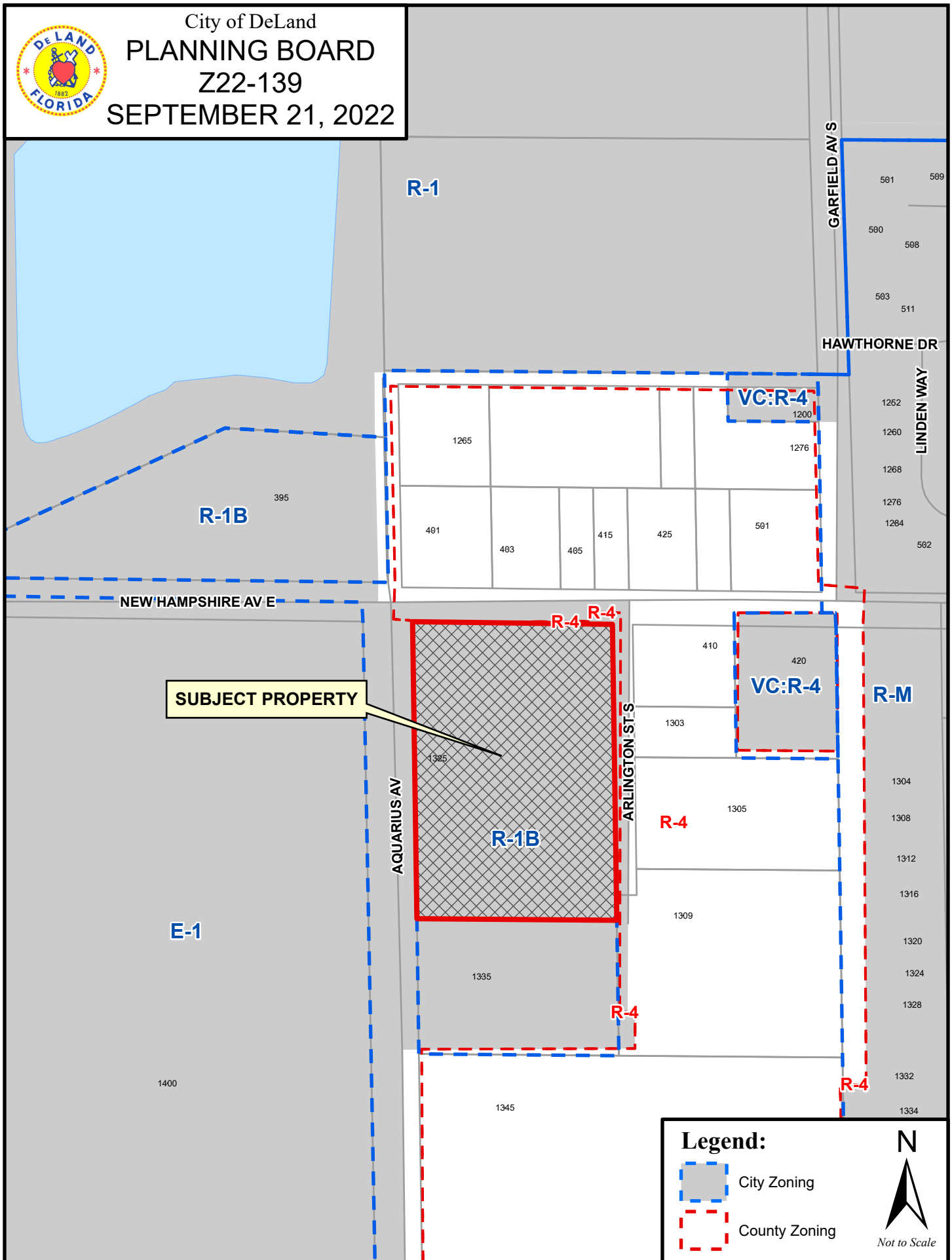
The applicant has proposed a change to the future land use designation of the property to amend it from Low Density Residential to High Density Residential and also submitted a zoning text amendment to allow provision of affordable housing that would allow a 50% increase in the permitted density. This rezoning request is in compliance with the land use amendment that staff approved and the City Commission is scheduled to review.

D. STAFF RECOMMENDATION:

Staff recommends that the Planning Board forward to the City Commission a recommendation of approval of the rezoning request. *(The City Commission will address the proposed rezoning for first reading October 17, 2022.)*



City of DeLand
PLANNING BOARD
Z22-139
SEPTEMBER 21, 2022





City of DeLand
PLANNING BOARD
Z22-139
SEPTEMBER 21, 2022



1 PD PLANNED DEVELOPMENT AGREEMENT

2 IN THE CITY COMMISSION OF THE

3 CITY OF DELAND, FLORIDA

4 IN RE: (Case #), Application of

5 Volusia Initiative for Church and Community, Inc.

6 ORDINANCE #

7 ORDER AND RESOLUTION

8 GRANTING A REQUEST FOR CHANGE OF ZONING FROM R-1B TO

9 AQUARIUS LANDING PLANNED DEVELOPMENT

10
11 The application of Volusia Initiative for Church and Community, Inc., hereinafter,
12 "Applicant", for rezoning was heard by and before the City Commission, DeLand Florida, on
13 . Based upon the verified Application and other supporting documents,
14 maps, charts, overlays, other evidence and instruments; the advice, report, and
15 recommendations of the Community Development, and other Departments and agencies of
16 DeLand, Florida; and the testimony adduced and evidence received at the Public Hearing
17 on this Application by the Planning Board on , and otherwise being
18 fully advised, the City Commission does hereby find and determine as follows:

19 GENERAL FINDINGS

20 A. That the application of Volusia Initiative for Church and Community, Inc. was
21 duly and properly filed herein on July 11, 2022 as required by law.

22 B. That all fees and costs which are by law, regulation, or Ordinance required to
23 be borne and paid by the applicant have been paid.

24 C. That the applicant is the developer of a 2.95 acre parcel of land which is

1 situated in DeLand, Florida. This parcel of land is described more particularly in the survey
2 and legal description, a true copy of which is attached hereto as Exhibit "A".

3 D. That the Applicant has complied with the concept plan provision as required
4 by Land Development Regulations Ordinance # 2013-11, as amended.

5 E. That the Applicant has complied with the "Due Public Notice" requirements of
6 the City Commission, Land Development Regulations Ordinance # 2013-11, as amended.

7 F. That the owner of the property, DeLand Church of God, Inc., agrees with the
8 provisions of the Development Agreement.

9 FINDINGS REGARDING REZONING

10 A. That the Applicant has applied for a change of zoning from the present zoning
11 classification(s) of the parcel described in Exhibit "A" from R-1B to (PD) (Planned
12 Development).

13 B. That the said rezoning to a(n) PD is consistent with both the City of DeLand
14 Comprehensive Plan Ordinance # 1990-04, as amended, and the intent and purpose of the
15 City of DeLand Land Development Regulations Ordinance # 2013-11, as amended, and
16 does promote the public health, safety, morals, general welfare and orderly growth of the
17 area affected by the rezoning request.

18 NOW, THEREFORE, BE IT RESOLVED AND ORDERED BY THE CITY OF
19 DELAND, FLORIDA, IN OPEN MEETING DULY ASSEMBLED IN THE CITY
20 COMMISSION CHAMBERS, 120 SOUTH FLORIDA AVENUE, DELAND, FLORIDA, THIS
21 DAY OF [REDACTED], A.D., 2022, AS FOLLOWS:

22 A. That the Application of Volusia Initiative for Church and Community, Inc. for
23 the rezoning of the subject parcel is hereby granted.

24 B. That the zoning classification of the subject parcel described in Exhibit "A"

1 attached hereto is hereby amended from R-1B to PD as described in Article VII of the City
2 of DeLand, Land Development Regulations Ordinance # 2013-11, as amended.

3 C. That the Official Zoning Map of the City of DeLand, is hereby amended to
4 show the rezoning of said parcel to Aquarius Landing PD.

5 D. That the City of DeLand Land Development Regulations Ordinance # 2013-
6 11, as amended, is consistent with the provisions of the "Development Agreement" as
7 hereinafter set forth in this Ordinance and with respect to any conflict between Land
8 Development Regulations Ordinance # 2013-11, as amended, and the "Development
9 Agreement", the provisions of the "Development Agreement" shall govern. Ordinance No.
10 02-09, as amended, shall govern with respect to any matter not covered by the
11 "Development Agreement." The City of DeLand, will ensure overall compliance with this
12 Ordinance.

13 E. Unless otherwise provided for herein the City of DeLand, Land Development
14 Regulations Ordinance # 2013-11, as amended, shall apply to the PD in the same manner
15 as the R-16 zoning classification.

16 F. Nothing in this Ordinance shall abridge the requirements of any City of
17 DeLand Ordinance other than Ordinance 2013-11, as amended. Timing and review
18 procedures contained in this Order and Resolution may be modified to comply with the City
19 of DeLand Land Development Regulations, Ordinance No. 2013-11, as amended. Further,
20 nothing in the Development Agreement is intended to abridge the requirements of
21 Ordinance No. 2013-11, as amended, and any other City Ordinances.

22 DEVELOPMENT AGREEMENT

23 A. Development Concept The property shall be developed as a PD
24 substantially in accordance with the Planned Development Plan. The Planned

1 Development Plan shall govern the development of the property as a PD and shall regulate
2 the future land use of this parcel.

3 1. Planned Development Plan The Planned Development Plan shall
4 consist of the Development Plan Map prepared by H&T Consultants, Inc. and dated March
5 2021 and this development agreement. The Planned Development Plan is hereby
6 approved and incorporated in this Ordinance by reference as Exhibit "B". The Planned
7 Development Plan shall be filed and retained for public inspection in the Planning
8 Department and it shall constitute a supplement to the Official Zoning Map of the City of
9 DeLand.

10 2. Amendments. All amendments of the Planned Development Plan,
11 other than those deemed by the Planning Department to be minor amendments as set out
12 in Ordinance No. 2013-11, as amended, shall require the review and recommendation of
13 the Planning Board and action by the City Commission in the same manner as a rezoning
14 of the parcel. All amendments of the Planned Development Plan shall require review by the
15 Fire Department.

16 3. Final Site Plan Approval. After the Planned Development Plan is
17 recorded, and prior to issuance of any permits for construction, including clearing and
18 landfill, a Final Site Plan shall be prepared and submitted for review and approval in the
19 manner required by Article 12 of the City of DeLand, Land Development Regulations
20 Ordinance # 2013-11, as amended.

21 B. Unified Ownership. The Applicant or his successors shall maintain unified
22 ownership of the subject parcel until after issuance of the Final Site Plan Development
23 Order.

24 C. Land Uses Within the PD. The development of the parcel shall be consistent

with the uses prescribed for each area within the proposed Aquarius Landing PD. The location and size of said land use areas are shown on the Development Plan Map, Exhibit "B". The following land uses shall be allowed as permitted principal uses and structures along with their customary accessory uses and structures: multi-family residential development.

E. Development Standards.

1. Maximum building length 225'
2. Minimum setbacks
 - a. Front yard: 30'
 - b. Rear yard: 20'
 - c. Side yard: 20'
 - d. Interior: All buildings shall be set back at least 5' from all interior private roads and parking areas. An additional set back from private roads of one foot shall be required for every two feet of height for structures exceeding 40'
 - e. Spacing between buildings:

Between sides of buildings	15'
Between sides and rear of adjacent buildings	15'
Between any combination of fronts or rears of adjacent buildings	20'
3. Minimum floor area:

425 SF (Efficiency)
575 SF (1 Bedroom)
725 SF (2 Bedroom)
4. Maximum lot coverage 75%
5. Maximum building height 65'
6. Off-street parking requirements
 - 1 space per unit
 - 1 space per 5 units for visitor parking
7. Open Space and/or Common Area requirements meeting the Land Development Regulations Ordinance # 2013-11.

F. Environmental Considerations. The development shall comply with the requirements for preservation of environmental resources as set forth in the Land

1 Development Regulations Ordinance No. 2013-11, as amended unless otherwise noted in
2 this section. Removal of any historic trees shall occur through separate approval by the
3 City Commission. All landscaping, including buffers, shall utilize Florida-Friendly
4 Landscaping, as defined by the University of Florida/Institute of Food and Agricultural
5 Sciences ("UF/IFAS") Center for Landscape Conservation and Ecology, native, or low-
6 water plant material. The PD Plan encourages environmental preservation and sustainable
7 development through the provision of substantial perimeter buffers, natural areas, open
8 space, the incorporation of Low Impact Development ("LID") stormwater strategies, as
9 developed by the UF/IFAS, Center for Landscape Conservation and Ecology, and use of
10 Florida-Friendly Landscaping. The development shall include landscape designs such that
11 plants will serve environmentally friendly functions including, but not limited to, cooling,
12 privacy screening, shade, aesthetics, wildlife habitat, runoff pollution prevention, and
13 directing traffic flow onto and within the community.

14 No open burning shall be permitted on the property.

15 G. Sewage Disposal, Potable Water and Reclaimed Water. Provision for
16 sewage disposal, potable water and reclaimed water needs of the PD will be provided in
17 accordance with the Comprehensive Plan, Ordinance No.1990-04, as amended, the Land
18 Development Regulations Ordinance No. 2009-09, as amended, and State of Florida
19 Administrative Code 64E-6.

20 H. Stormwater Drainage. Provision for stormwater retention shall be in
21 accordance with the Land Development Regulations Ordinance # 2013-11, as amended.

22 I. Access and Transportation System Improvements. All access and
23 transportation system improvements shall be provided in accordance with the Land
24 Development Regulations, Ord. 02-09, as amended. The parcel shall be developed with a

1 full ingress and egress access will be provided to the site on Aquarius Avenue and E. New
2 Hampshire Avenue.

3 J. Internal Roadways. Internal roadways shall be privately maintained.

4 K. Reverter Provision: The City Commission may rezone any portion of the
5 project which has not secured a final site plan on or before 5 years from the effective date
6 of this ordinance as may be necessary or appropriate to protect adjoining properties or the
7 public health, safety and welfare, unless the City Commission, for good cause shown, shall
8 extend the time period indicated in this paragraph.

9 L. Binding Effect of Plans; Recording; and Effective Date. The Planned
10 Development Plan, including any and all amendments shall bind and inure to the benefit of
11 the Applicant and his successor in title or interest. The Aquarius Landing PD zoning,
12 provisions of the "Development Agreement," and all approved plans shall run with the land
13 and shall be administered in a manner consistent with Article 12 of the City of DeLand Land
14 Development Regulations Ordinance # 2013-11, as amended.

15 This Ordinance and all subsequent amendments shall be filed with the Clerk of the
16 Court and recorded within forty-five (45) days following execution of the document by the
17 City Commission, in the Official Records of Volusia County, Florida. One copy of the
18 document, bearing the book and page number of the Official Record in which the document
19 was recorded, shall be submitted to the Planning Department for placement in the public
20 file. The date of recording of this document shall constitute the effective date of the _PD or
21 its subsequent amendments. The applicant shall pay all filing costs for recording
22 documents.

23
24 DONE and ORDERED by the City Commission, City of DeLand, Florida, this
25 ____ day of _____ (mo/yr).

1
2
3 ATTEST:

City Commission of DeLand Florida

4
5
6
7 _____
8 Michael Plues
9 City Manager

Robert Apgar
Mayor

10
11 STATE OF FLORIDA

12 CITY OF DELAND

13
14 The foregoing instrument was acknowledged before me this _____ day of
15 _____ (mo/yr), by Michael Plues and Robert Apgar, as City
16 Manager and Mayor, City of DeLand, respectively, on behalf of the City of
17 DeLand, and who are personally known to me.

18
19
20 NOTARY PUBLIC, STATE OF FLORIDA

21 Type or Print Name:

22 _____
23 Commission No.: _____

24 My Commission Expires: _____

1
2 WITNESSES:
3
4

5 _____
6 Mark Schrade, Volusia Initiative for Church and
7 Community, Inc. (Applicant)
8

9 _____
10 Mark Schrade, DeLand Church of God, Inc. (Owner)
11
12
13
14
15
16

17 The foregoing instrument was acknowledged before me this _____ day of
18 _____ (mo/yr), by (N A M E), who is personally
19 known to me or who has produced _____ as
20 identification.
21
22
23

24 NOTARY PUBLIC, STATE OF FLORIDA

25 Type or Print Name:

26 _____
27 Commission No.: _____

28 My Commission Expires: _____
29

Exhibit "A"

Legal Description

THE WEST 1/2 OF THE NE 1/4 OF THE NW 1/4 OF THE SE 1/4, SECTION 21, TOWNSHIP 17 SOUTH,
RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA, LESS AND EXCEPT THE SOUTH 200 FEET THEREOF.

SUBJECT TO WARRANTY DEED TO COUNTY OF VOLUSIA RECORDED IN OFFICIAL RECORDS BOOK
2764, PAGE 1715, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA

2.95 Acres

1
2
3

Exhibit "B"

[DEVELOPMENT PLAN TO BE INSERTED]

**PLANNING DEPARTMENT STAFF REPORT
TO
PLANNING BOARD**

September 21, 2022

APPLICATION: AN22-100

1. **Requested Action:** Annexation of property located in unincorporated Volusia County into the City limits of DeLand
2. **Location:** Located on the north side of E. Wisconsin Ave., west of N Blue Lake Ave.
3. **Petitioner:** Viatcheslav Yedlin
4. **Owner:** Stetson University
5. **Size of parcel(s):** ± 4.8 acres
6. **Parcel ID:** 7010-00-00-0300
7. **Land Use Designation & Zoning of Subject Property:**

Future Land Use: Volusia County: Urban Low Intensity

Existing Zoning: Volusia County: R-3A Urban Single Family Residential

Existing Use: Undeveloped

8. **Surrounding Land Use & Zoning:**

	LAND USE	ZONING
North:	LDR	R-1A
South:	Educational	E-1
East:	VC: ULI	VC: R-3A
West:	MDR	R-12

9. **Physical Characteristics:** The proposed annexation consists of ± 4.8 acres, and will also include the northern half of the E Wisconsin Ave. right-of-way. The subject property does not appear to contain wetlands and does not lie within the 100-year flood zone. The parcel is undeveloped and heavily wooded.

10. Public Services & Utilities: The City's Utilities Department will determine the closest City water and sewer mains. The Police Department will determine the appropriate Patrol Zone, and the Fire Department will confirm that there is adequate fire protection. Furthermore, the County of Volusia will confirm that there are no code enforcement actions or liens associated with this property.

11. Growth Management Plan Consistency: An application for a change in land use will be required to amend the future land use from Volusia County Urban Low Intensity (ULI) to the appropriate City land use designation. Additionally, an application for a zoning change from Volusia County R-3A (Urban Single Family Residential) to the appropriate City zoning designation will also be required. To the north of the subject property is the Victoria Place residential which consists of 75-100-ft. wide parcels. To the south of the subject property is Blue Lake Elementary School. To the east are residential properties approximately .5 to 1.5 acres in size. To the west are the Ashton Place apartments.



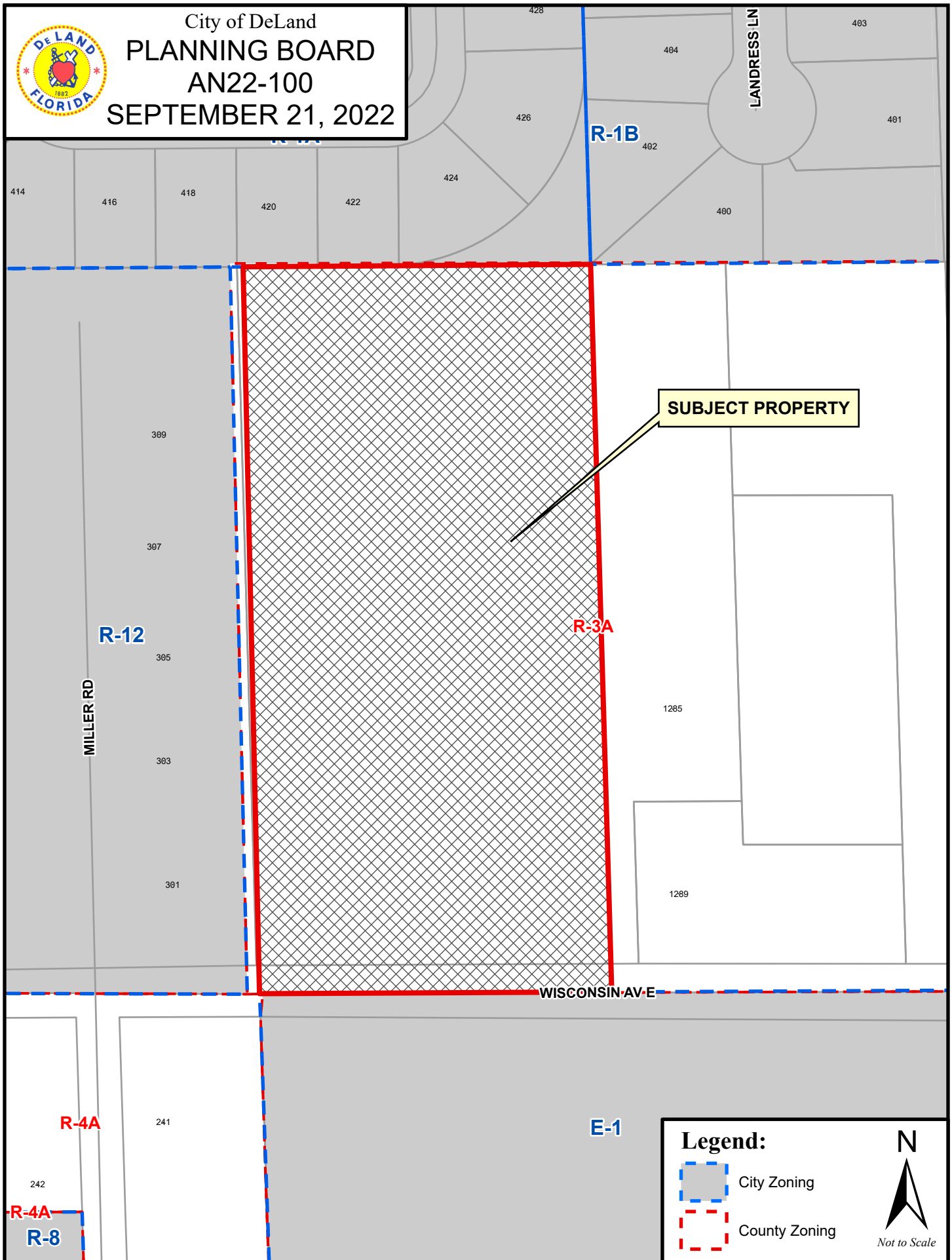
12. Analysis: The City's guidelines for annexation require a property be sufficiently contiguous to property already within the city limits and to be accessible to public services provided. In addition, the State requires the property be reasonably compact, not circuitous, and does not create an enclave. The subject property does not create an enclave, is contiguous to the City of DeLand, is reasonably compact and is not circuitous. The parcel is contiguous to the north by $\pm$ 327 ft., and to the west by $\pm$ 646 ft.

Recommendation: Staff recommends that the Planning Board forward this annexation petition to the City Commission, with a recommendation for approval.

Based upon the concurrency requirements of the State of Florida and the City's concurrency management plan, as adopted in Article 5, Sec. 33-41 of the Land Development Regulations, approval of the proposed annexation does not automatically provide vested development rights. At the time the developer applies for a development permit, adequate infrastructure must exist to support the proposed development. If such infrastructure does not exist, the developer may be required to incur additional expense to ensure that the necessary infrastructure is provided.

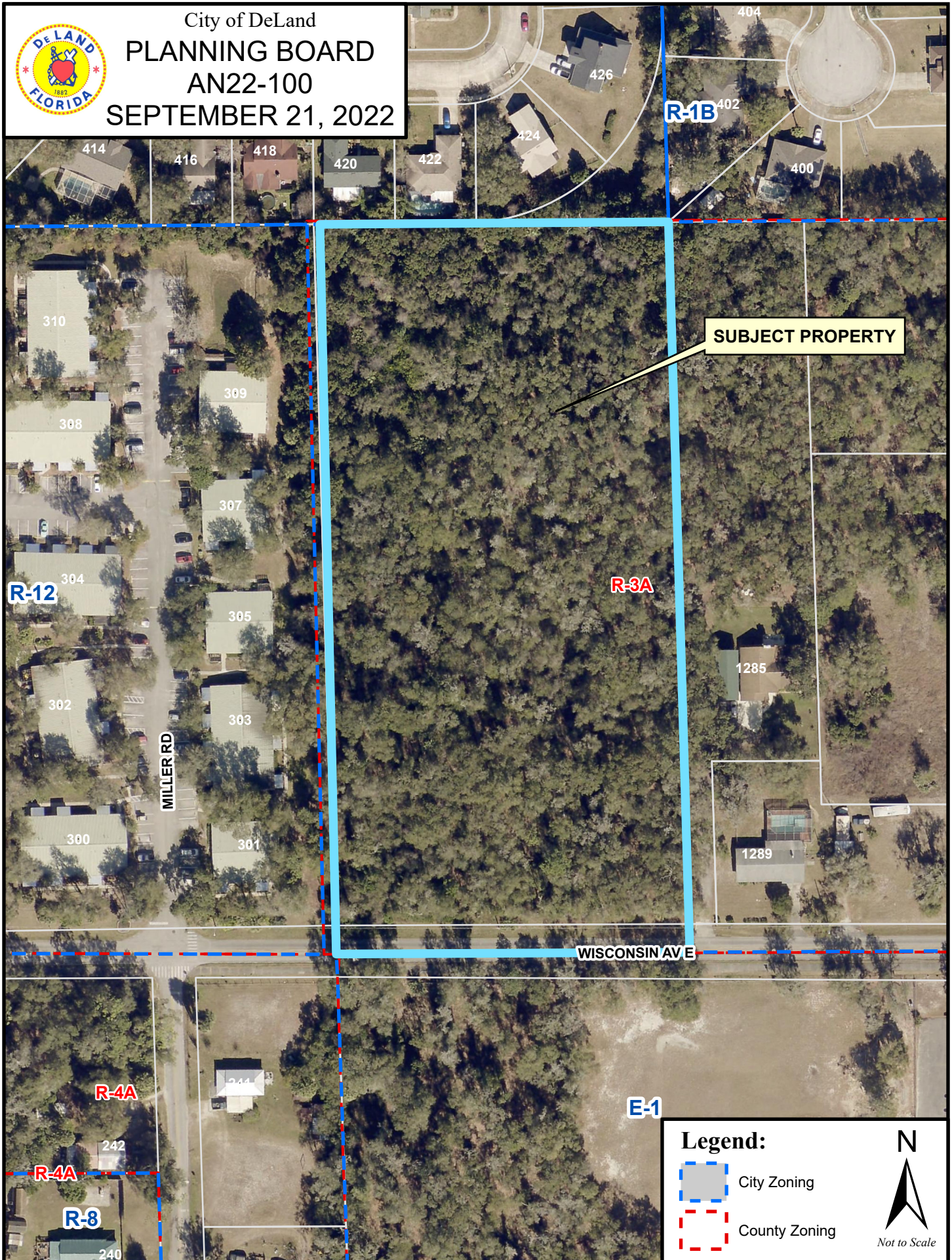


City of DeLand
PLANNING BOARD
AN22-100
SEPTEMBER 21, 2022





City of DeLand
PLANNING BOARD
AN22-100
SEPTEMBER 21, 2022



BEGINNING AT THE INTERSECTION OF THE EAST LINE OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, TOWNSHIP 17 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA AND THE NORTH LINE OF THE SOUTHEAST ONE-QUARTER (SE ¼) OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, TOWNSHIP 17 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA, SAID POINT BEING A 4-INCH BY 4-INCH CONCRETE MONUMENT STAMPED PRM 3282.

THENCE BEARING SOUTH 1 DEGREE 47 MINUTES 32 SECONDS EAST ALONG THE EAST LINE OF SAID NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, A DISTANCE OF 647.78 FEET TO THE INTERSECTION OF THE NORTH BOUNDARY OF THE EAST WISCONSIN AVE. R/W, SAID POINT BEING A 5/8" IRC (NO ID);

THENCE BEARING SOUTH 89 DEGREES 39 MINUTES 36 SECONDS WEST A DISTANCE OF 328.89 FEET TO THE WEST LINE OF THE SOUTHEAST ONE-QUARTER (SE ¼) OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, SAID POINT BEING A ½" IRC (ILLEGIBLE);

THENCE BEARING NORTH 1 DEGREE 39 MINUTES 6 SECOND WEST ALONG THE WEST LINE OF THE SOUTHEAST ONE-QUARTER (SE ¼) OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, A DISTANCE OF 646.97 FEET TO THE INTERSECTION OF THE NORTH LINE OF THE SOUTHEAST ONE-QUARTER (SE ¼) OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, SAID POINT BEING A ½" IR (NO ID)

THENCE BEARING NORTH 89 DEGREES 31 MINUTES 34 SECONDS EAST ALONG THE NORTH LINE OF THE SOUTHEAST ONE-QUARTER (SE ¼) OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, A DISTANCE OF 327.28 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 4.875 ACRES MORE OR LESS.

**PLANNING DEPARTMENT STAFF REPORT
TO
THE CITY OF DELAND PLANNING BOARD**

September 21, 2022

A. APPLICATION NO.: SMLU22-142

APPLICANT: Viatcheslav Yedlin, Yedlin & Co. LLC

REQUEST: To amend the future land use designation of a parcel, approximately 4.87 acres in size, located on the north side of E. Wisconsin Ave., west of N. Blue Lake Ave. and east of N. Hill Ave., from Volusia County Urban Low Intensity (VC ULI) to City of DeLand Urban Low Intensity (ULI).

B. SITE FACTORS:

Location: On the north side of E. Wisconsin Ave., west of N. Blue Lake Ave.
Parcel ID #: 7010-00-00-0300
Parcel Size: ± 4.87 acres
Land Use: VC ULI – Residential
Existing Use: vacant land

	SURROUNDING LAND USE:
North:	Low Density Residential
South:	Educational
East:	VC Urban Low Intensity
West:	Medium Density Residential

C. REQUESTED ACTION & HISTORY:

1. REQUEST: The applicant is requesting the future land use designation be amended from Volusia County Urban Low Intensity (VC ULI), to City of DeLand Urban Low Intensity (ULI), for a parcel located on the north side of E. Wisconsin Ave., west of N. Blue Lake Ave., and east of N. Hill Ave. The subject property is currently vacant and heavily wooded. The applicant is proposing a 12-lot single-family residential subdivision and desires to connect to city utilities, which are available.

Volusia County's Urban Low Intensity designation allows for residential density ranging from 0.2 to 4 dwelling units per acre. The uses are primarily residential but may also include neighborhood convenience uses, or mixed uses, if criteria from the County's Comprehensive Plan are satisfied and use is determined to be compatible based on location, size and traffic. As part of the County, the commercial intensity is limited to .50 FAR.

If annexed into the City, and the requested land use change is approved, the maximum residential density would not change, as the City's Urban Low Intensity land use category maintains the same range of 0.2 to 4 dwelling units per acre.

However, under the City's ULI designation, the intensity of non-residential uses would be more restrictive, limiting the FAR to only .18, for applicable properties.

Whether the property remains in the County or is annexed into the City, with a maximum density of 4 units per acre, the 4.87-acre property could yield up to 19 residential lots, the same as if it were to remain in unincorporated Volusia County. However, the applicant is proposing 12 single-family lots and a residential density of 2.46 dwelling units per acre, well within the parameters of the ULI land use designation.



Per the City's Comprehensive Plan, the Urban Low Intensity land use is intended for suburban residential density. It also acts as a buffer between lower density uses and nonresidential uses. Developments with higher densities should be located in proximity to major transportation facilities and utility lines.

The adjacent land uses surrounding the subject property include County Urban Low Intensity, Medium Density Residential (max. density of 12 du/acre), Low Density Residential (max. density of 5.8 du/acre) and Educational (max. 4.3 du/acre for single-family development)

2. CHRONOLOGY OF PAST EVENTS: The applicant has submitted concurrent applications to annex the property into the City of DeLand (AN22-100), and rezone the property to Planned Development (Z22-143). The rezoning application for The Canopy at Blue Lake Planned Development was reviewed by the Technical Review Committee (TRC) at the August 18th, 2022 meeting, where it was recommended that the application be forwarded onto the Planning Board, pending revisions.

D. ALTERNATIVES & ANALYSIS:

The purpose of this section is to analyze the reasonableness of the applicant's request for an amendment of the land use designation for the subject property. This analysis will include a description of the current and future land uses of the site and the surrounding area, potential impacts on the transportation system, and any significant adverse environmental impacts.

1. Availability of Public Facilities (water, sewer, solid waste, drainage, traffic, recreation, and schools if residential):

The City's Utilities Department states that there is an 8" water main located 150 LF to the west of the property; an 18" sewer main is located approximately 300 LF to the west of the property. Water and sewer adequacy will depend on future use/demand.

A Projected Trip Generation Report submitted by the applicant shows an average daily trip count of **115** trips; because the trips do not exceed the 1,000-trip threshold, the applicant will not be required to submit a full Traffic Impact Analysis.

The change in designation will not generate a new demand for recreation.

Volusia County provides a sanitary landfill for the disposal of solid waste. The landfill has adequate capacity at this time.

The City can provide an adequate LOS of Fire/Rescue service.

The City can provide an adequate LOS of Police service.

Prior to construction, the applicant must receive their Reservation Certificate from the VCSB.

- 2. Compatibility with Land Use and Other Elements:** The Future Land Use element requires that the subject property be consistent with surrounding development. The general area consists of mostly single-family residential neighborhoods as well as areas that are more rural. A project of this type would be compatible with other developments in the surrounding area as it maintains its residential character and establishes development standards that exceed general code requirements, such as wider lots and larger parcel sizes. Additionally, the impacts on public services, such as City utilities and roads, will be low because of the development's size and density.
- 3. Future Land Use Map:** The change in land use designation to City Urban Low Intensity (ULI) will be shown on the revised Future Land Use Map, if approved.
- 4. Location of Lakes, Floodplains, and Wetlands:** The property is generally flat with a slight slope towards the northeast corner. The highest area is in the southwest corner, closest to the roadway. According to Volusia County's interactive map, the property is located outside of the 100-year floodplain and does not contain any wetlands.
- 5. Analysis of Natural Resources:**
 - a. Soil types:*
 - Astatula-Fine Sand, 0-8% slope
 - Orsino Fine Sand, 0-5% slope
 - b. Presence of Endangered Species:*
 - None known of at this time; the applicant will not be required to submit an environmental report prior to construction because it is less than 5 acres in size.
- 6. Existing and Future Impact upon Infrastructure Capacity:**
 - a. Water* – The City's Utility Department indicates sufficient water supply is available for the proposed use.
 - b. Sewer* – The City's Utility Department has indicated sufficient existing capacity.

- c. *Drainage* – The City adheres to the County’s 100-year frequency, 24-hour storm event standard for landlocked basins. Stormwater capture will be addressed on-site.
- d. *Solid Waste* – Solid waste services are available for the property.
- e. *Transportation* – In order to estimate traffic generation by development on the subject property, Staff must make theoretical projections based on the **most intense** uses that are allowed under the existing future land use designation versus the proposed future land use designation.

Staff estimates that development of the 4.87 acres of property under the existing land use designation (VC ULI), at its **maximum residential density** of 4 dwelling units per acre, would generate **132** calculated trips per day at build-out.

Alternatively, at its **maximum non-residential intensity** under the existing land use (VC ULI), which has a FAR limit of .50 (50%), could yield up to 106,000 sq. ft. of Neighborhood Commercial space, and would generate **1,167** calculated trips per day at build-out, according to Trip Generation by the Institute of Transportation Engineers.

However, the proposed land use designation (City ULI) mirrors the County’s **maximum residential density** of 4 dwelling units per acre, and therefore no additional trips would be generated if developed for residential uses.

Alternatively, the proposed land use designation (City ULI) allows a **maximum commercial intensity** and limits the FAR to .18 (18%); in this case, the property could yield up to 38,184 sq. ft. of **neighborhood commercial space**. The commercial space could potentially generate **418** calculated trips per day at build-out.

Therefore, if developed for non-residential uses, the requested land use amendment could result in *less* trips, generating a net loss of **-749** trips per day. If developed for residential use, as proposed, the daily trips per day remain the same.

- f. *Fire/Rescue Service* - The Fire Department states that adequate fire protection can be provided and response time is under 7 minutes (non-emergency).
- g. *Police Service* - The Police Department states that the property is located within what is known as Zone 3. Adequate police protection can be provided with a response time of approximately 5 minutes.

7. **Impact upon Recreation and Open Space:** Per the City’s Capital Improvement Element, park facilities shall be provided at a rate of 7 acres per 1,000 residents. If approved for a land use amendment to Urban Low Intensity, with a **maximum** of 19 new dwelling units (with the most intense scenario), anticipated population would be no more than **46** additional citizens; therefore, a need for new recreation areas is not expected.

8. **New Public Facilities Needed to Serve Land Use:** No need for new public facilities is anticipated.

9. **Impact Upon Existing Deficiencies:** As identified in the City's Comprehensive Plan, drainage is the only existing deficiency within the City. Any development on this site will be required to manage its own stormwater.
 10. **Impact upon Ability of the City to Fund Capital Improvements:** The development should not create an additional impact upon the City's ability to fund the projects listed in the adopted Five-Year Capital Improvement Program.
 11. **Impact upon Adopted Five-Year Schedule in Capital Improvements Element:** The proposed land use amendment will not require revision to the City's adopted Five-Year Capital Improvement Program.
 12. **Compatibility with Existing Zoning Classification:** The existing zoning classification will be amended upon approval of the land use amendment to a classification permitted by the new land use designation.
 13. **Will the proposed land use change impact schools?** The Volusia County School Board must review the applicant's concurrency application and issue a finding of adequate school capacity for this project.
 14. **How does this proposal fit with the guidelines developed for DeLand 2050 and the City's Strategic Plan?**
 - a. Located in Urban Core (Category 2) – i.e. “where the majority of the new, higher intensity growth will take place.” – *Consistent*
 - b. DeLand 2050 Land Use Guidelines – “Concentrate development at the core of the city or at transit-oriented sites and corridors. The urban core is the key area to focus development, maintaining a strong job base and taking advantage of existing infrastructure. Locating higher intensity along select corridors or major centers will encourage transit and lessen traffic congestion.” – *Somewhat Consistent*
- E. **CONCLUSION:** The Applicant is proposing an amendment to the future land use designation, with the intention of developing the subject property as a single-family residential subdivision. The proposed designation is acceptable as presented and is consistent with the development pattern of the surrounding area.
- F. **STAFF RECOMMENDATION:** Staff recommends approval to amending the subject property's future land use designation to City of DeLand Urban Low Intensity (ULI).
- G. **VGMC INFRASTRUCTURE IMPACT ASSESSMENT**
In accordance with standard practice from the Florida Department of Economic Opportunity (DEO) and other review agencies, an impact comparison analysis of the proposed amendment has been completed based upon the theoretical maximum development potential under the currently adopted future land use designation versus the proposed designation.

The following seven public facilities and services were examined: (Table 4)

1. Transportation
2. Sanitary Sewer
3. Potable Water
4. Solid Waste
5. Stormwater Drainage
6. Recreation
7. Schools

Table 4. Impact Analysis (Theoretical Max.)

Development Variable	Future Land Use	Proposed Future Land Use	Net Change
	(Theoretical Maximum)		
	VC ULI (Existing)	City ULI (Proposed)	
Residential Density	0.2-4 du/ac	0.2-4 du/ac	N/A
Dwelling Units	19	19	0
Non-residential (commercial)	106,068 SF (FAR .5)	38,184 SF (FAR .18)	-67,883 SF
1. Population	46	46	0
2. P.M. Peak Hour Trips/Daily Trips (residential peak/average) (commercial peak/average)	(18/132) res. (156/1,167) com.	(18/132) res. (57/418) com.	(0/0) res. (-99/-749) com.
3. Sanitary Sewer (gallons per day)	3,800/10,606	3,800 /3,818	0/-6,788
4. Potable Water (gallons per day)	5,700 /10,606	5,700/3,818	0/-6,778
5. Solid Waste (pounds per person)	148/1,060	148/380	0/-680
6. Stormwater Drainage	TBD	TBD	TBD
7. Rec. & Open Space (per person)	.32	.32	0

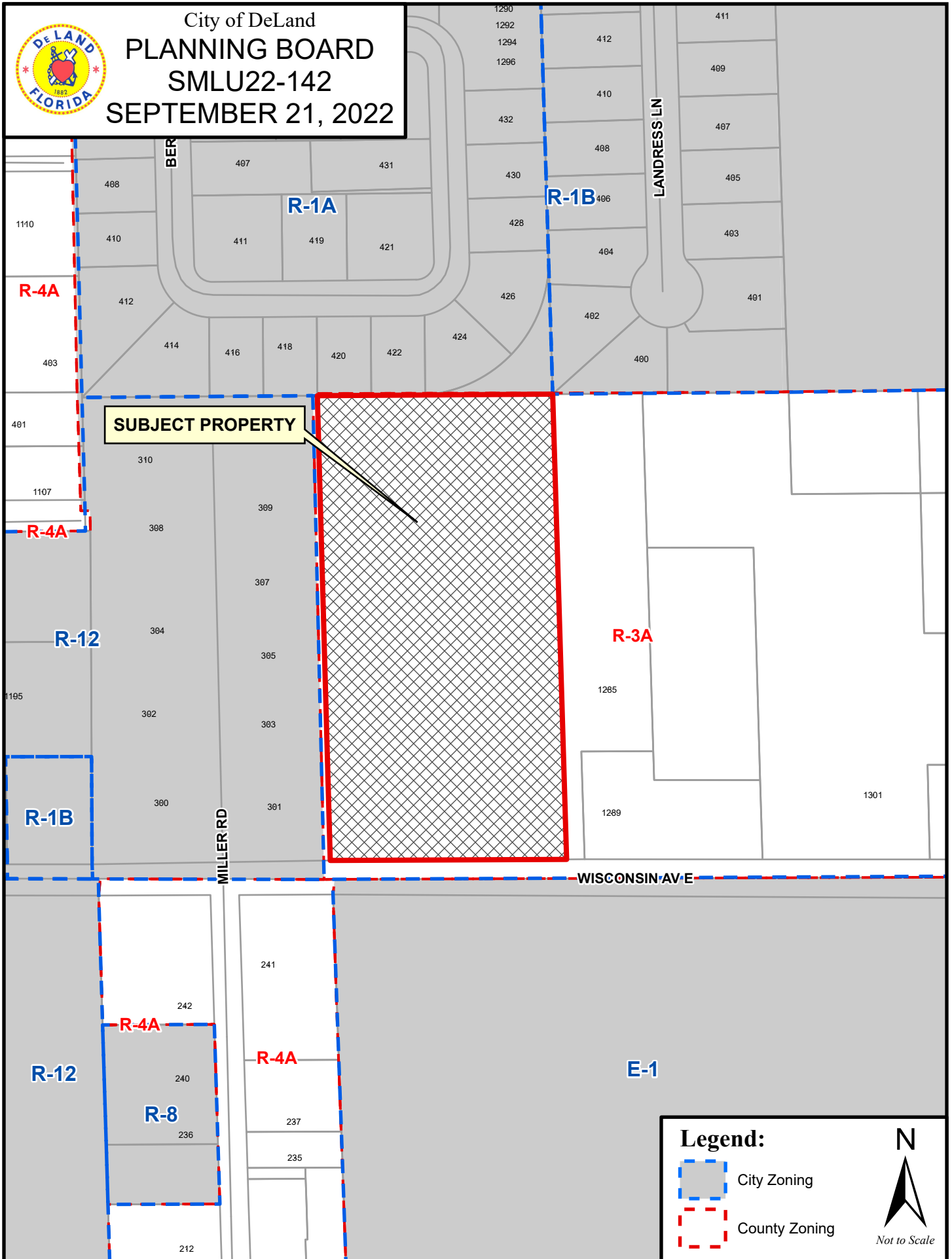
Notes:

1. Population: 2.44 persons per household (per 2020 Census)
2. Transportation: ITE Trip Generation Manual, 8th Edition:
0.97 PM peak hour trips/DU; and 6.97 daily trips/DU;
1.49 PM peak hour trips/1,000 SF office space; and 11.01 daily trips/1,000 SF office.
3. Sanitary Sewer: 200 GPD per Equivalent Residential Unit; 0.10 GPD per sq. ft. commercial use
4. Potable Water: 300 GPD per Equivalent Residential Unit; 0.10 GPD per sq. ft. commercial use
5. Solid Waste: 3.21 pounds per person per day; 10 lbs. per 1,000 sq. ft. non-residential development per day
6. Stormwater Drainage: LOS standard = 25-year, 24-hour event. Drainage system is required to be designed to meet the requirements of the Land Development Code during subdivision or site plan review.
7. Rec. & Open Space: 7 acres per 1,000 persons (0.007 acres/person)

The proposed amendment results in decreased impacts to all public infrastructure and services based on the theoretical maximum impact analysis.



City of DeLand
PLANNING BOARD
SMLU22-142
SEPTEMBER 21, 2022



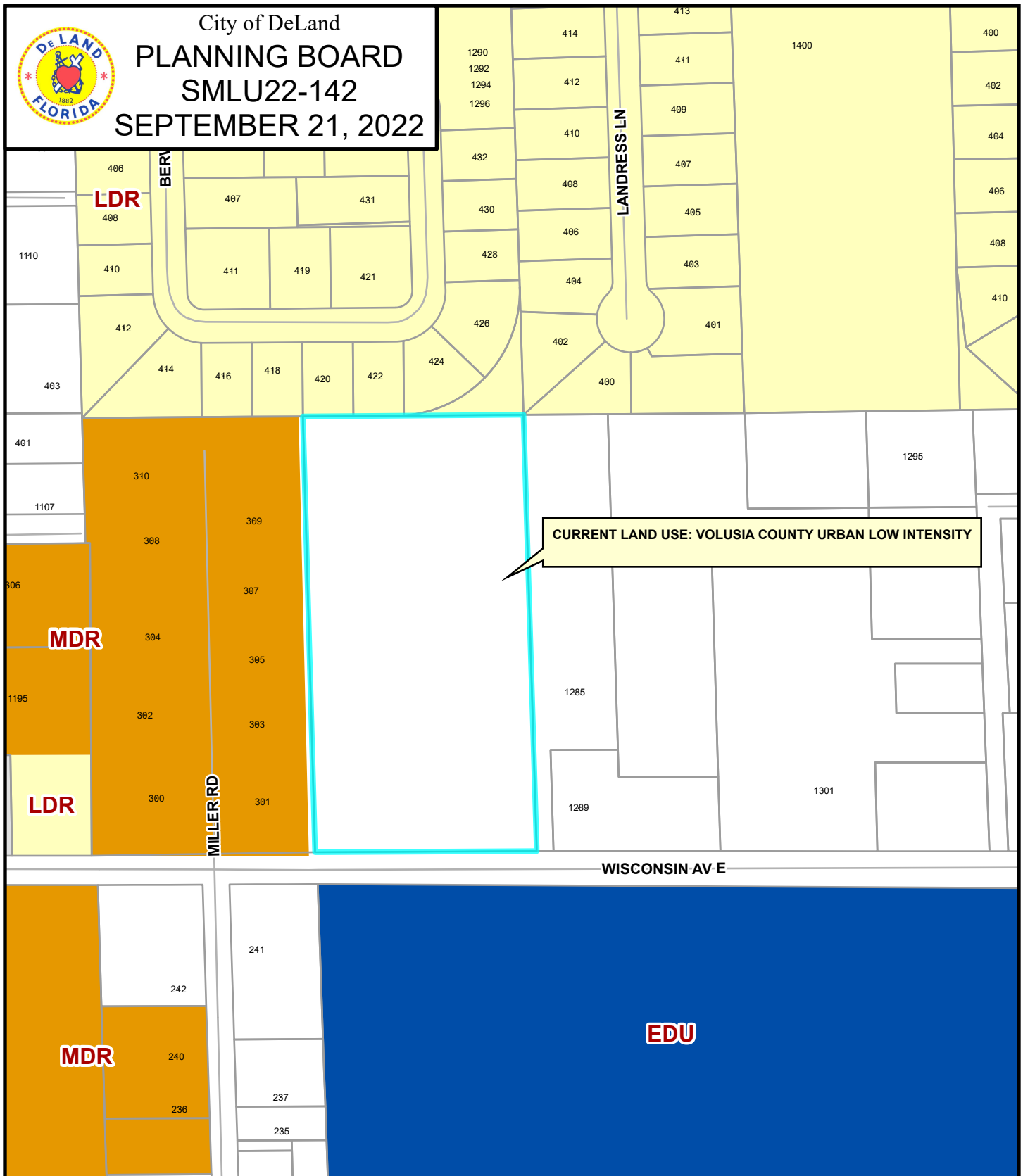


City of DeLand
PLANNING BOARD
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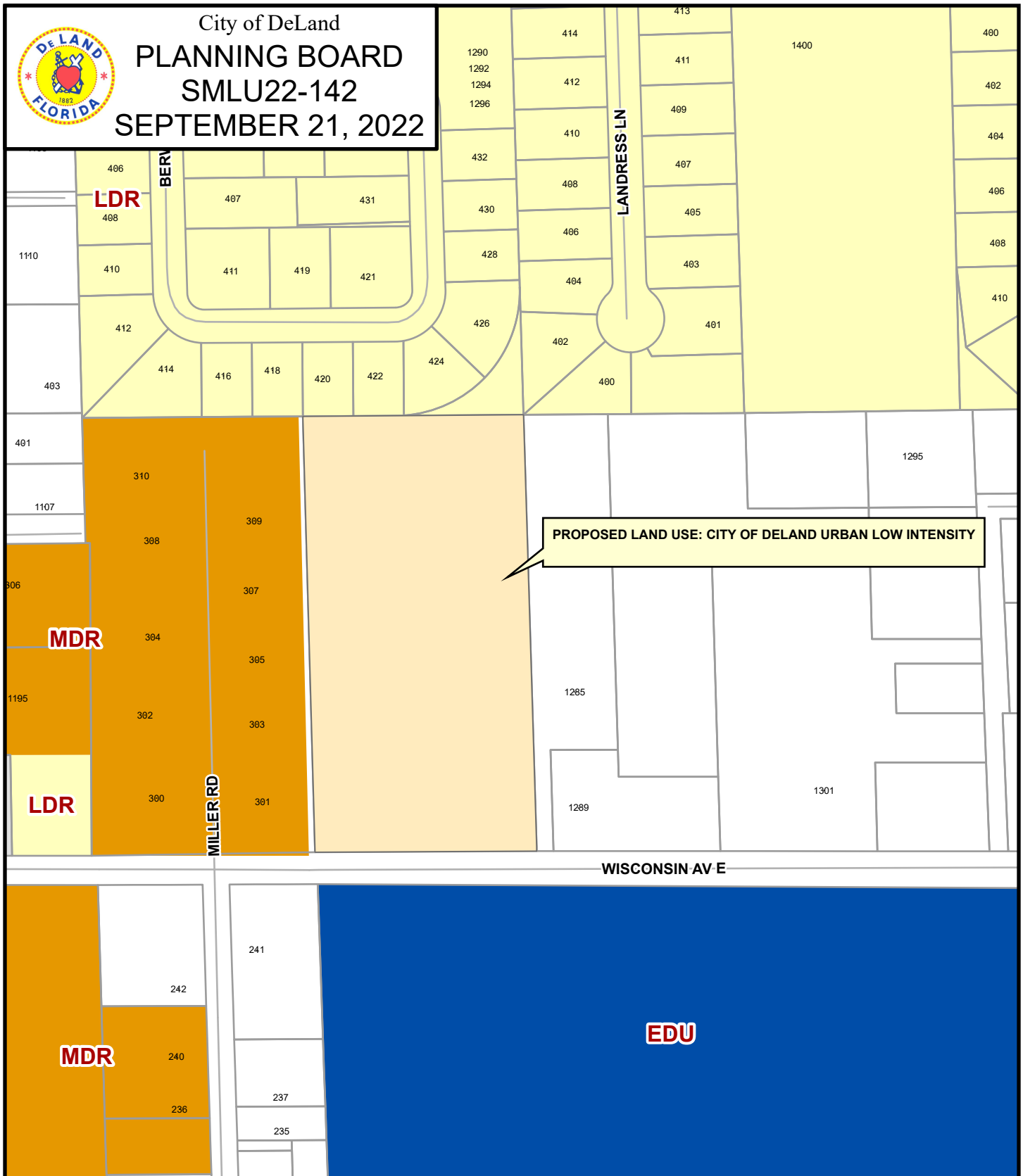
DeLand Future Land Use:

Agricultural Conservation	Educational	Downtown Commercial	New Community Development
Urban Low Intensity	Mixed Office - Residential	Redevelopment	Community
Low Density Residential	Mixed Commercial	Gateway	Commerce
Medium Density Residential	Business Retail	Rail Spur	West Central District
High Density Residential	Highway Commercial	Industrial	County





City of DeLand
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**PLANNING DEPARTMENT STAFF REPORT
TO
PLANNING BOARD**

September 21, 2022

APPLICATION NO.: Z22-143

APPLICANT: Slava Yedlin, Yedlin & Co. LLC

REQUEST: Amend the existing zoning designation from VC R-3A to The Canopy at Blue Lake PD

APPLICABLE REGULATIONS:

Article IV	OVERLAY AND FLOATING ZONES
	Sec. 33-32 – Planned Development District.
Article XII	ADMINISTRATION AND ENFORCEMENT
	Sec. 33-135 – Procedure for text amendments & rezoning.

A. SITE FACTORS:

Location:	On the north side of E. Wisconsin Ave. and west of N. Blue Lake Ave.
Parcel Size:	±4.8 ac.
Land Use:	Urban Low Intensity
Existing Zoning:	Volusia County R-3 (Urban Single-Family)
Existing Use:	Vacant, heavily wooded

	SURROUNDING USE:	SURROUNDING ZONING:
North:	Low Density Residential	R-1A
South:	Education	E-1
East:	VC Urban Low Intensity	VC: R-3A
West:	Medium Density Residential	R-12

B. ANALYSIS:

The applicant is requesting the zoning be amended for a parcel that is approximately 4.8 acres in size, located on the north side of E. Wisconsin Ave. and west of N. Blue Lake Ave. The subject property is currently unincorporated; however, the applicant has submitted an application to annex into the city (AN22-100) and an application to amend the future land use (SMLU22-142).

As part of the PD rezoning request, the applicant has provided a Development Agreement and Concept Plan outlining the zoning standards proposed. The proposed minimum lot size for each home in The Canopy at Blue Lake PD is 9,500 sq. ft. This is slightly smaller than the existing Volusia County R-3A zoning district, which requires a minimum of 10,000 sq. ft. per lot. The subdivision will be divided into 12 single-family residential parcels, each parcel being at least 85' in width.

The setbacks mirror the R-1A zoning district and requires a 30' front yard setback, a 25' rear yard setback and a 12.5' side yard setback. Each home must contain a minimum of 1,200 sq. ft. of livable space, a 2-car garage, as well as a driveway large enough to accommodate 2 full-size vehicles.

The perimeter landscape buffers adhere to Sec. 33-92 of the code, providing a 25' wide buffer to the north, a 20' wide buffer to the south along E. Wisconsin Ave., a 15' wide buffer to the east and a 20' wide buffer to the west.

C. TECHNICAL REVIEW COMMITTEE:

The Technical Review Committee, at their August 18, 2022 meeting, recommended that the proposed Planned Development rezone application be forwarded on to the Planning Board subject to addressing remaining Staff comments.

The following TRC comments remain:

Fire:

1. All amendments shall require review of Fire for changes.

Forestry:

1. The City no longer allows tree protection area in the back yards of single family residences. These areas must be platted separately and maintained by a homeowners' association. Please remove the lot lines if the area designated as Tree Protection Area is one separate parcel.

Utilities:

1. Subdivision needs to be connected by a gravity sewer system extension and not a private lift station.
-

5. Are there changes in the circumstances or conditions affecting the area since the original assignment of zoning that will support the proposed zoning?

New residential growth, as well as existing residential development patterns, make the proposed residential PD zoning standards compatible with the surrounding area, as noted above, and support the proposed zoning.

6. Was there a mistake in the original classification?

There was no mistake in the original zoning classification.

7. Will the proposed rezoning have any effect upon the use or value of the affected area?

The proposed development, at a maximum of 12 units, has a proposed density of approximately 2.5 du/ac., below the 4 du/ac. maximum allowed under both the existing Volusia County Urban Low Intensity land use category, as well as the proposed City Urban Low Intensity category, which could yield a maximum of 19 units.

8. Will the proposed rezoning have an impact upon public health, safety and welfare?

The proposed rezoning is not anticipated to negatively impact public health, safety, and welfare.

D. CONCLUSION:

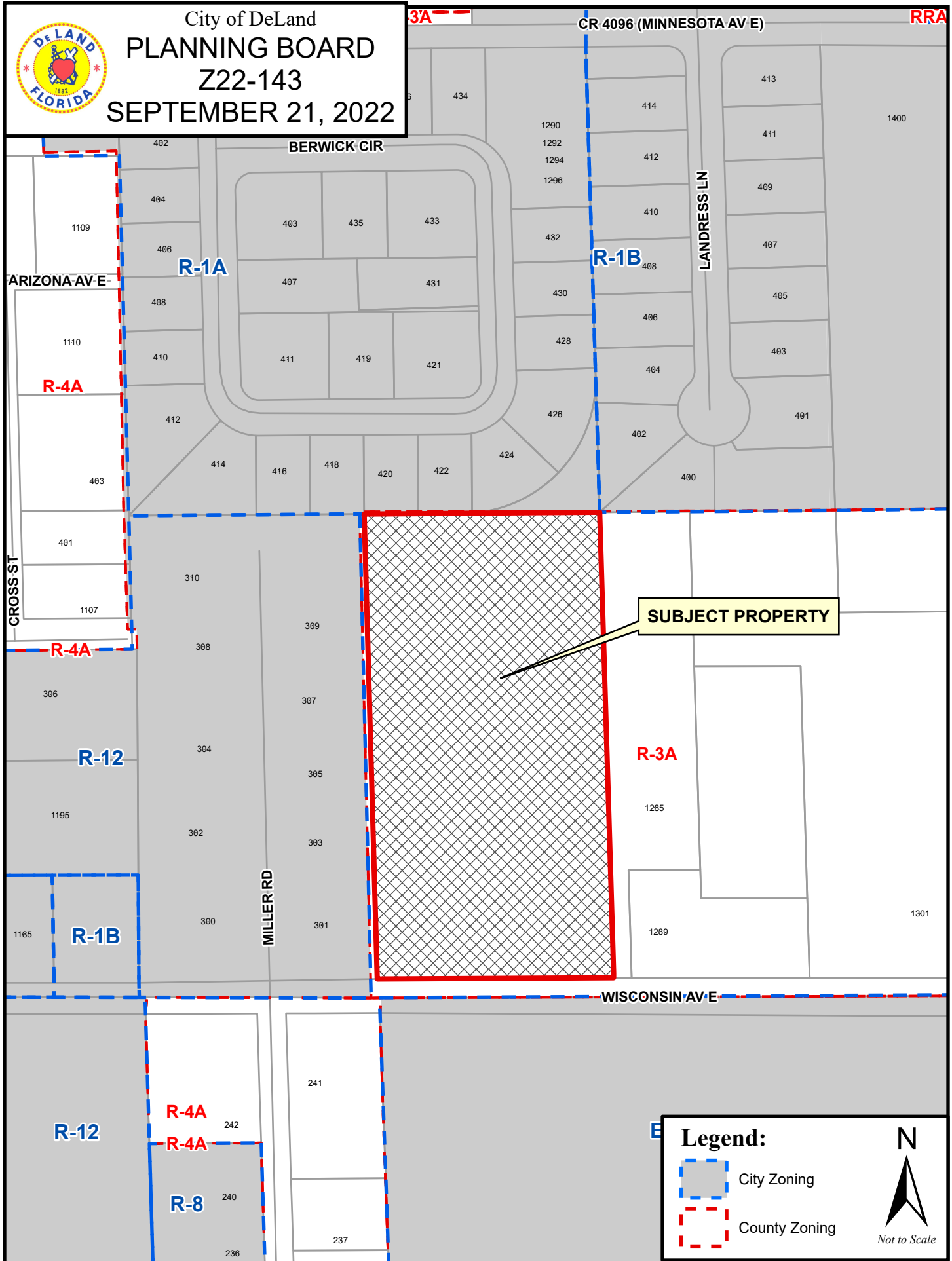
The Applicant is proposing a rezoning from VC R-3A to (PD) Planned Development in order to develop the subject property for into a 12-lot, single-family residential subdivision. Submittal of a plat will be required to ensure the provisions of the Planned Development Agreement are satisfied, as determined by TRC Staff.

E. STAFF RECOMMENDATION:

Staff recommends that the Planning Board forward the application to the City Commission with a recommendation of approval of The Canopy at Blue Lake PD (Planned Development) zoning, subject to the applicant addressing the outstanding Technical Review Committee comments.



City of DeLand
PLANNING BOARD
Z22-143
SEPTEMBER 21, 2022





City of DeLand
PLANNING BOARD
Z22-143
SEPTEMBER 21, 2022



1
2 PLANNED DEVELOPMENT AGREEMENT

3 IN THE CITY COMMISSION OF THE

4 CITY OF DELAND, FLORIDA

5 IN RE: (**Case #**), Application of

6 ***Yedlin & Co, LLC***

7 ORDINANCE # _____
8 ***(# to be Provided After Commission Approval)***

9 ORDER AND RESOLUTION

10 GRANTING A REQUEST FOR CHANGE OF ZONING FROM (**VCR-3A**) TO
11 ***(The Canopy at Blue Lake PD)*** PD (PLANNED DEVELOPMENT) (*see below*)

12
13 The application of (***Yedlin & Co, LLC***), hereinafter, "Applicant", for rezoning was
14 heard by and before the City Commission, DeLand Florida, on (***public hearing date***).
15 Based upon the verified Application and other supporting documents, maps, charts,
16 overlays, other evidence and instruments; the advice, report, and recommendations of the
17 Community Development, and other Departments and agencies of DeLand, Florida; and
18 the testimony adduced and evidence received at the Public Hearing on this Application by
19 the Planning Board on (***public hearing date***), and otherwise being fully advised, the City
20 Commission does hereby find and determine as follows:
21

GENERAL FINDINGS

A. That the application of (**Yedlin & Co, LLC**) was duly and properly filed herein on (**application filing date**) as required by law.

B. That all fees and costs which are by law, regulation, or Ordinance required to be borne and paid by the applicant have been paid.

C. That the applicant is the (**owner**) of a (**4.874**) acre parcel of land which is situated in DeLand, Florida. This parcel of land is described more particularly in the survey and legal description, a true copy of which is attached hereto as Exhibit "A".

D. That the Applicant has complied with the concept plan provision as required by Land Development Regulations Ordinance #2013-11, as amended.

E. That the Applicant has complied with the "Due Public Notice" requirements of the City Commission, Land Development Regulations Ordinance #2013-11, as amended.

FINDINGS REGARDING REZONING

A. That the Applicant has applied for a change of zoning from the present zoning classification(s) of the parcel described in Exhibit "A" from (**VCR-3A**) to (**The Canopy at Blue Lake PD**) (Planned Development).

B. That the said rezoning to a PD is consistent with both the City of DeLand Comprehensive Plan Ordinance # 1990-04, as amended, and the intent and purpose of the City of DeLand Land Development Regulations Ordinance #2013-11, as amended, and does promote the public health, safety, morals, general welfare and orderly growth of the area affected by the rezoning request.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED BY THE CITY OF DELAND, FLORIDA, IN OPEN MEETING DULY ASSEMBLED IN THE CITY COMMISSION CHAMBERS, 120 SOUTH FLORIDA AVENUE, DELAND, FLORIDA, THIS (**public hearing date**) DAY OF _____, A.D., _____, AS FOLLOWS:

A. That the Application of (**Yedlin & Co, LLC**) for the rezoning of the subject parcel is hereby granted.

B. That the zoning classification of the subject parcel described in Exhibit "A" attached hereto is hereby amended from (**VCR-3A**) to (**The Canopy at Blue Lake PD**) PD as described in Article VII of the City of DeLand, Land Development Regulations Ordinance #2013-11, as amended.

1
2 C. That the Official Zoning Map of the City of DeLand, is hereby amended to
3 show the rezoning of said parcel to (***The Canopy at Blue Lake PD***) PD.
4

5 D. That the City of DeLand Land Development Regulations Ordinance #2013-
6 11, as amended, is consistent with the provisions of the "Development Agreement" as
7 hereinafter set forth in this Ordinance and with respect to any conflict between Land
8 Development Regulations Ordinance #2013-11, as amended, and the "Development
9 Agreement", the provisions of the "Development Agreement" shall govern. Ordinance
10 #2013-11, as amended, shall govern with respect to any matter not covered by the
11 "Development Agreement." The City of DeLand, will ensure overall compliance with this
12 Ordinance.
13

14 E. Unless otherwise provided for herein the City of DeLand, Land Development
15 Regulations Ordinance #2013-11, as amended, shall apply to the PD in the same manner
16 as the (***R-1A***) zoning classification.
17

18 F. Nothing in this Ordinance shall abridge the requirements of any City of
19 DeLand Ordinance other than Ordinance #2013-11, as amended. Timing and review
20 procedures contained in this Order and Resolution may be modified to comply with the City
21 of DeLand Land Development Regulations, Ordinance #2013-11, as amended. Further,
22 nothing in the Development Agreement is intended to abridge the requirements of
23 Ordinance #2013-11, as amended, and any other City Ordinances.
24

1
2
3 DEVELOPMENT AGREEMENT
4

5 A. Development Concept The property shall be developed as a PD
6 substantially in accordance with the Planned Development Plan. The Planned
7 Development Plan shall govern the development of the property as a PD and shall regulate
8 the future land use of this parcel. The subdivision improvements shall all be constructed in
9 a single phase.

10 1. Planned Development Plan The Planned Development Plan shall
11 consist of the Development Plan Map prepared by (***Newkirk Engineering, Inc.***) and dated
12 (***7-18-2022***) and this Development Agreement. The Planned Development Plan is hereby
13 approved and incorporated in this Ordinance by reference as Exhibit "B". The Planned
14 Development Plan shall be filed and retained for public inspection in the Planning
15 Department and it shall constitute a supplement to the Official Zoning Map of the City of
16 DeLand.

17 2. Amendments. All amendments of the Planned Development Plan,
18 other than those deemed by the Planning Department to be minor amendments as set out
19 in Ordinance #2013-11, as amended, shall require the review and recommendation of the
20 Planning Board and action by the City Commission in the same manner as a rezoning of
21 the parcel. The plan shall also require review of Fire for changes.

22 3. Subdivision Approval. After the Planned Development Plan is
23 recorded, and prior to any construction, including clearing and landfill, ***a preliminary plat***
24 of the area to be subdivided shall be submitted for review and approval in the manner

required by Article XIII of the City of DeLand Land Development Regulations, Ordinance #2013-11, as amended.

B. Unified Ownership. The Applicant or his successors shall maintain unified ownership of the subject parcel until after issuance of the Final Site Plan Development Order.

C. Phases of Development. *The development will be constructed in a single phase.*

D. Land Uses Within the PD. The development of the parcel shall be consistent with the uses prescribed for each area within the proposed (***The Canopy at Blue Lake PD***) PD. The location and size of said land use areas are shown on the Development Plan Map, Exhibit "B". The following land uses shall be allowed as permitted principal uses and structures along with their customary accessory uses and structures: ***Single Family Residential and accessory uses and structures, utility lift station, stormwater management area, common open space and mail kiosk.***

E. Development Standards.

Maximum Density	4 DU / Acre
-----------------	-------------

Maximum Number of Lots	12 Lots
------------------------	---------

Minimum Lot Requirements

- | | |
|-----------------------------------|--|
| 1. Minimum lot area | 9,500 SF |
| 2. Minimum lot width and/or depth | 85-ft Minimum Width
90-ft Minimum Depth |

1 *natural vegetation retention with plantings along the pond site perimeter to enhance*
2 *the existing vegetations diversity and screening ability. The site will be graded to*
3 *minimum cut and fill requirements allowing for retention of as much of the existing*
4 *soil bacteria and mycelium as possible, as well as minimizing impacts of dust and*
5 *other construction nuisance activities to neighboring properties. No on-site burning*
6 *of cleared vegetation will be allowed during construction.*

7
8 G. Sewage Disposal and Potable Water. Provision for sewage disposal and
9 potable water needs of the PD will be provided in accordance with the Comprehensive
10 Plan, Ordinance No.1990-04, as amended, the Land Development Regulations Ordinance
11 #2013-11, as amended, and State of Florida Administrative Code 64E-6. Sewer is
12 anticipated to be provided extension of existing City of Deland gravity sewer, and city water
13 for potable and fire protection.

14
15 H. Stormwater Drainage. Provision for stormwater retention shall be in
16 accordance with the Land Development Regulations Ordinance #2013-11, as amended.

17
18 I. Access and Transportation System Improvements. All access and
19 transportation system improvements shall be provided in accordance with the Land
20 Development Regulations, Ordinance #2013-11, as amended. The parcel shall be
21 developed in substantial accordance with the following access and transportation system
22 improvements:

23 1. Access. *The proposed site access consists of a single cul-de-sac*
24 *roadway connecting to East Wisconsin Ave.*

2. Transportation System Improvements. **5-ft concrete sidewalks may**

be included on both sides of the proposed cul-de-sac roadway, as well as along the frontage of Wisconsin Ave. Also, a marked crosswalk will be provided at the site's Eastern property line to provide a safe route to Blue Lake Ave. Elementary School.

J. Internal Roadways. **The proposed roadway consists of a 50-ft R/W width and includes 5-ft concrete sidewalks on both sides, as well as 12-ft travel lanes and 2-ft Miami curb. The roadway will be dedicated to the City of Deland.**

K. Building or Property Owners Association. The subdivision will be developed with a home-owners association responsible for the maintenance of the proposed stormwater facilities and sanitary sewer lift station. The charter and by-laws of said association and any other agreements, covenants, easements or restrictions shall be furnished to the City of DeLand at the time of creation. The applicant shall be responsible for recording said information in the Public Records of Volusia County, Florida. Also, the applicant shall bear and pay all costs for recording all of the aforementioned documents.

With respect to the enforcement of said agreements, covenants, easements or restrictions entered into between the applicant and the owners or occupiers of property within the **(The Canopy at Blue Lake PD)** PD, the City of DeLand shall only enforce the provisions of the "Development Agreement" and City of DeLand Land Development Regulations Ordinance #2013-11, as amended, whichever is applicable, and not the private agreements entered into between the aforementioned parties.

L. **Electrical Service and franchise utilities shall be installed underground**

1 ***in 10-ft easements dedicated along the home site frontage of all lots. Municipal***
2 ***utilities (water and sewer) shall be installed within the roadway R/W.***

3 Model Homes and Temporary Sales Offices. Construction of a Model Home and/or
4 Temporary Sales Office for a particular phase may commence after final site plan
5 development order, **and** all the infrastructure improvements for said phase have been
6 approved and accepted by the City of DeLand. The City Engineer shall make the final
7 determination on the acceptance and approval.

8
9 M. Reverter Provision: The City Commission may rezone any portion of the
10 project which has not secured a **(final development order)** on or before 5 years from the
11 effective date of this ordinance as may be necessary or appropriate to protect adjoining
12 properties or the public health, safety and welfare, unless the City Commission, for good
13 cause shown, shall extend the time period indicated in this paragraph.

14
15 N. Binding Effect of Plans; Recording; and Effective Date. The Planned
16 Development Plan, including any and all amendments shall bind and inure to the benefit of
17 the Applicant and his successor in title or interest. The **(The Canopy at Blue Lake PD)**
18 PD zoning, provisions of the "Development Agreement," and all approved plans shall run
19 with the land and shall be administered in a manner consistent with Article XII of the City of
20 DeLand Land Development Regulations Ordinance #2013-11, as amended.

21
22 This Ordinance and all subsequent amendments shall be filed with the Clerk of the
23 Court and recorded within forty-five (45) days following execution of the document by the
24 City Commission, in the Official Records of Volusia County, Florida. One copy of the

1 document, bearing the book and page number of the Official Record in which the
2 document was recorded, shall be submitted to the Planning Department for placement in
3 the public file. The date of recording of this document shall constitute the effective date of
4 the **(The Canopy at Blue Lake PD)** PD or its subsequent amendments. The applicant
5 shall pay all filing costs for recording documents.

6

DONE and ORDERED by the City Commission, City of DeLand, Florida, this
____ day of _____ (mo/yr).

ATTEST:

City Commission of DeLand Florida

Michael Pleus
City Manager

Robert Apgar
Mayor

STATE OF FLORIDA

CITY OF DELAND

The foregoing instrument was acknowledged before me this _____ day of
_____ (mo/yr), by Michael Pleus and Robert Apgar, as City
Manager and Mayor, City of DeLand, respectively, on behalf of the City of
DeLand, and who are personally known to me.

NOTARY PUBLIC, STATE OF FLORIDA

Type or Print Name:

Commission No.: _____

My Commission Expires: _____

1
2 WITNESSES:
3
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Applicant's Name, Title & Corporation

Applicant's Name, Title & Corporation

Owner of Property (if other than applicant)

19 The foregoing instrument was acknowledged before me this _____ day of
20 _____ (mo/yr), by (N A M E), who is personally
21 known to me or who has produced _____ as
22 identification.
23
24
25

26 NOTARY PUBLIC, STATE OF FLORIDA

27 Type or Print Name:

28 _____
29 Commission No.: _____

30 My Commission Expires: _____
31
32

BEGINNING AT THE INTERSECTION OF THE EAST LINE OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, TOWNSHIP 17 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA AND THE NORTH LINE OF THE SOUTHEAST ONE-QUARTER (SE ¼) OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, TOWNSHIP 17 SOUTH, RANGE 30 EAST, VOLUSIA COUNTY, FLORIDA, SAID POINT BEING A 4-INCH BY 4-INCH CONCRETE MONUMENT STAMPED PRM 3282.

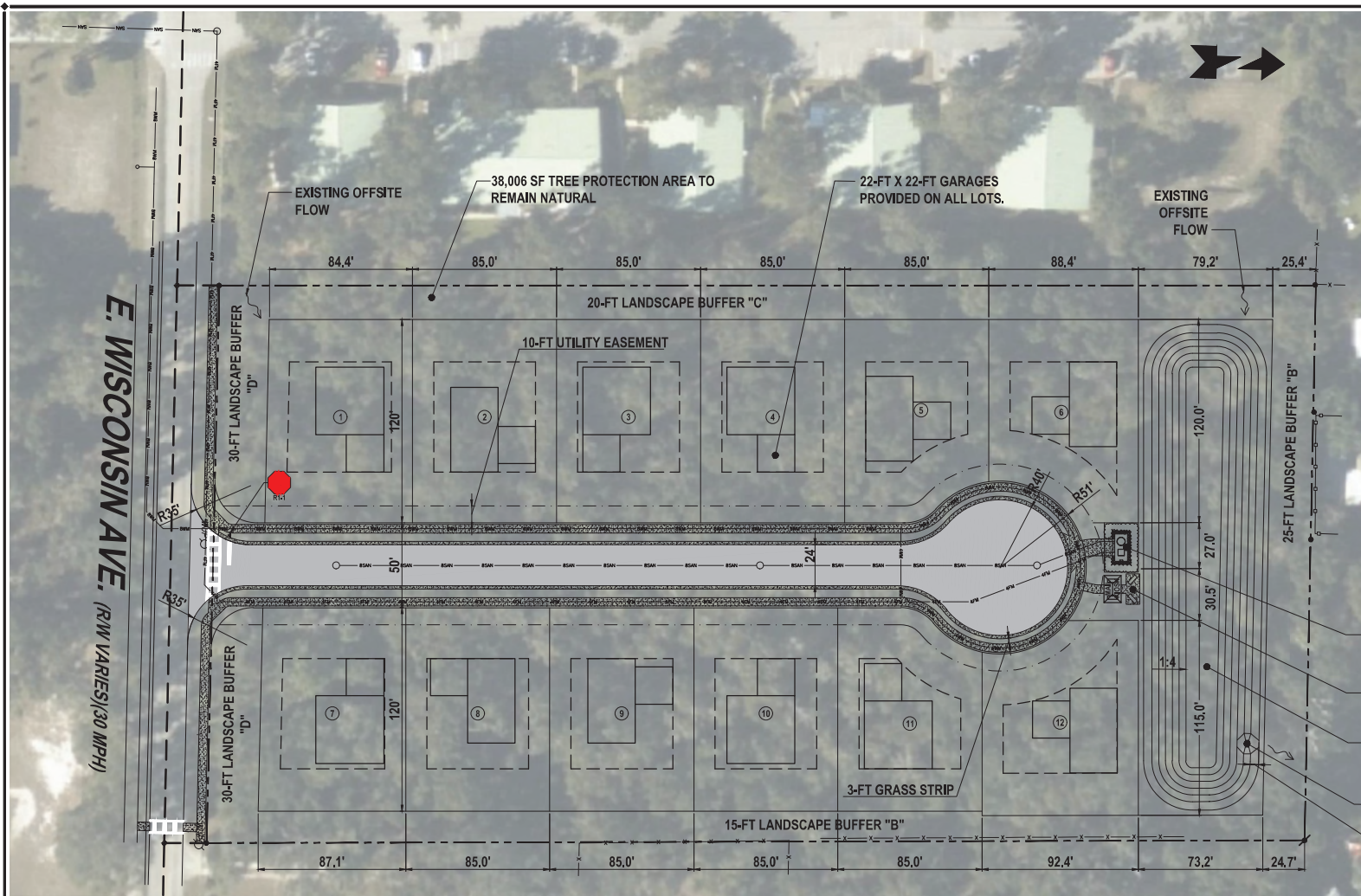
THENCE BEARING SOUTH 1 DEGREE 47 MINUTES 32 SECONDS EAST ALONG THE EAST LINE OF SAID NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, A DISTANCE OF 647.78 FEET TO THE INTERSECTION OF THE NORTH BOUNDARY OF THE EAST WISCONSIN AVE. R/W, SAID POINT BEING A 5/8" IRC (NO ID);

THENCE BEARING SOUTH 89 DEGREES 39 MINUTES 36 SECONDS WEST A DISTANCE OF 328.89 FEET TO THE WEST LINE OF THE SOUTHEAST ONE-QUARTER (SE ¼) OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, SAID POINT BEING A ½" IRC (ILLEGIBLE);

THENCE BEARING NORTH 1 DEGREE 39 MINUTES 6 SECOND WEST ALONG THE WEST LINE OF THE SOUTHEAST ONE-QUARTER (SE ¼) OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, A DISTANCE OF 646.97 FEET TO THE INTERSECTION OF THE NORTH LINE OF THE SOUTHEAST ONE-QUARTER (SE ¼) OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, SAID POINT BEING A ½" IR (NO ID)

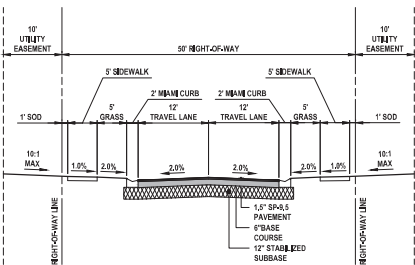
THENCE BEARING NORTH 89 DEGREES 31 MINUTES 34 SECONDS EAST ALONG THE NORTH LINE OF THE SOUTHEAST ONE-QUARTER (SE ¼) OF THE NORTHWEST ONE-QUARTER (NW ¼) OF THE SOUTHEAST ONE-QUARTER (SE ¼) SECTION 10, A DISTANCE OF 327.28 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 4.875 ACRES MORE OR LESS.



LOT TABLE		
LOT #	SF	ACRE
1	10,296	0.2364
2	10,200	0.2342
3	10,200	0.2342
4	10,200	0.2342
5	9,579	0.2199
6	9,681	0.2222
7	10,282	0.2360
8	10,200	0.2342
9	10,200	0.2342
10	10,200	0.2342
11	9,581	0.2199
12	9,866	0.2265

- 19-FT X 10.5-FT PRIVATE LIFT STATION WITH 5-FT LANDSCAPE BUFFER
- MAIL KIOSK AND COMMON AREA
- DRY RETENTION AREA
POND AREA AT TOP OF POND = 0.371 AC
- EMERGENCY OVERFLOW WEIR
- 5-FT MAINTENANCE BERM



ROADWAY TYPICAL SECTION 50' RIGHT-OF-WAY
YIELD PLACE

SINGLE-FAMILY DIMENSIONAL REQUIREMENTS:

BUILDING SETBACKS:	
A. FRONT	30-FT
B. REAR	25-FT
C. SIDE	12.5-FT
D. POOL AND ACCESSORY STRUCTURES	5-FT
E. MINIMUM LOT WIDTH	85-FT (AT SETBACK LINES)
F. MINIMUM LOT DEPTH	90-FT (AT SETBACK LINES)
G. MINIMUM LOT SIZE	9,500 SF
H. MAXIMUM BUILDING HEIGHT	35-FT
I. MAXIMUM IMPERVIOUS COVERAGE	40%
J. MINIMUM FLOOR AREA	1,200 SF

COMMON AREAS

THE COMMON AREAS TRACTS WILL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

EASEMENT NOTE

ALL UTILITY AND DRAINAGE EASEMENTS SHALL BE MAINTAINED BY THE HOME OWNER'S ASSOCIATION.

LANDSCAPE NOTE

ALL TREE PROTECTION, BUFFERS, TREE REMOVAL AND PLANTING SHALL COMPLY WITH THE REQUIREMENTS OF CITY OF DELAND LAND DEVELOPMENT CODE AS AMENDED.

UTILITY NOTE

ALL POTABLE WATER, WASTEWATER AND RECLAIM SHALL COMPLY WITH THE CITY OF DELAND LAND DEVELOPMENT CODE AS AMENDED AND FLORIDA ADMINISTRATIVE CODE 64E6.

STORMWATER SYSTEM NOTE

- THE PROPOSED STORMWATER SYSTEM SHALL COMPLY WITH THE CITY OF DELAND LAND DEVELOPMENT CODE AS AMENDED AND ST. JOHNS RIVER WATER MANAGEMENT DISTRICT REQUIREMENTS.
- ALL ROADWAY RUNOFF MUST BE COLLECTED BY A CLOSED STORM SYSTEM WITH CURB AND GUTTER FOR DISCHARGE TO THE RETENTION POND.

REVISIONS

DATE	DESCRIPTION

125 East Indiana Ave., Suite A
Deland, Florida 32726
www.newkirk-engineering.com
C.E. # 30099
L.C. # 2013
Civil Engineering
Transportation, Civil &
Landscape Architecture



PLANNED DEVELOPMENT PLAN
THE CANOPY AT BLUE LAKE
E. WISCONSIN AVE.
DELAND, FL 32724

PROJECT No.: TBD
DATE: JUNE 2022
DESIGN BY: TJM
DRAWN BY: TJM
CHECKED BY: TJM
SCALE: 1" = 30'
DRAWING NUMBER



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