CITY OF HOLLY HILL, FLORIDA

BOARD OF PLANNING AND APPEALS

AGENDA ● JANUARY 9, 2023

City Commission Chamber	BOPA Regular Meeting	6:00 PM

CITY HALL
1065 RIDGEWOOD AVENUE
HOLLY HILL, FL 32117

City Clerk's office: (386) 248-9441 - Fax: (386) 248-9448

HOLLY HILL
FLORIDA

City Commission Chamber
City Hall
1065 Ridgewood Avenue
Holly Hill, FL 32117

PLANNING & APPEALS BOARD MEMBERS

Chairman
Mike Myer

Board Member
Robin D. Hanger

Board Member
Tony Cassata

Board Member
Dennis Smith

Board Member
Loretta Arthur

CITY PLANNER
Brian Walker

Building & Zoning
Eleni Deligianis

1. CALL TO ORDER

2. INVOCATION

3. PLEDGE OF ALLEGIANCE

4. MINUTES

1. BOPA Meeting December 5Th, 2022

   (Requested by Eleni Deligianis, Board of Planning and Appeals)

5. AGENDA ITEM(S)

1. Rick Maugeri, Applicant, Requests Preliminary Plat/Final Engineering Approval, for a 134-Lot Subdivision Called the Vineyards. the Vineyards Development is on a 14.24-Acre Parcel Located Approximately 900 Feet West of Center Avenue on the South Side of 6Th Street.

   (Requested by Brian Walker, Board of Planning and Appeals)

2. BOPA Interpretation of Sec. 114-742 LDR

   (Requested by Brian Walker, Board of Planning and Appeals)

6. ORDINANCES

1. Ordinance An Ordinance of the City of Holly Hill, Florida; Amending Chapter 3 (Enforcement) of the Holly Hill Code of Ordinance to Provide the City with a Process to Abate Nuisances Listed in Section 26-61 (Special Items Declared a Nuisance) of the Holly Hill Code of Ordinances; Providing for Notice to the Property Owner; Providing for Collection of Costs Incurred; Providing for Conflicting Ordinances; Providing for Severability; and Providing an Effective Date.

   (Requested by Brian Walker, Board of Planning and Appeals)

7. OLD BUSINESS

8. BOARD / STAFF COMMUNICATIONS

1. 2023 BOPA Meeting Schedule

   (Requested by Eleni Deligianis, Board of Planning and Appeals)

9. ADJOURNMENT

Website Address – www.hollyhillfl.org (City Clerk)

NOTICE – If any person decides to appeal any decision of the City Commission at this meeting, he/she will need a record of the proceedings and, for that purpose, he/she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. The City does not prepare or provide such a record.



For special accommodations, please notify the City Clerk's Office at least 72 hours in advance. (386) 248-9441



Help for the hearing impaired is available through the Assistive Listening System. Receivers can be obtained from the City Clerk's Office.

In accordance with the Americans with Disabilities Act (ADA), persons needing a special accommodation to participate in the Commission proceedings should contact the City Clerk's Office no later than three (3) days prior to the proceedings.

STAFF REPORT
CITY OF HOLLY HILL, FLORIDA

Board of Planning and Appeals
Agenda Item

MEETING DATE: **January 9, 2023**
FROM: **Eleni Deligianis**
SUBJECT: **BOPA Meeting December 5Th, 2022**
NUMBER: **(ID # 3993)**
APPLICANT:
PLANNER:

DISCUSSION:

Minutes from the December 5th, 2022 BOPA Meeting.

MOTION:

Approve the minutes as submitted by staff.

- BOPA MINUTES DECEMBER 2022 (PDF)

CITY OF HOLLY HILL, FLORIDA

BOARD OF PLANNING AND APPEALS

MINUTES ● DECEMBER 5, 2022

City Commission Chamber **BOPA Regular Meeting** **6:00 PM**

CITY HALL
1065 RIDGEWOOD AVENUE
HOLLY HILL, FL 32117

City Clerk's office: (386) 248-9441 - Fax: (386) 248-9448

1. CALL TO ORDER

Attendee Name	Title	Status	Arrived
Mike Myer	Chairman	Present	
Robin D. Hanger	Board Member	Present	
Dennis Smith	Board Member	Present	
Tony Cassata	Board Member	Present	
Loretta Arthur	Board Member	Absent	

2. INVOCATION

The invocation was led by Mike Myer.

3. PLEDGE OF ALLEGIANCE

The Pledge was led by Tony Cassata.

4. MINUTES

1. BOPA Meeting November 7, 2022

(Requested by Eleni Deligianis, Board of Planning and Appeals)

RESULT:	**APPROVED [UNANIMOUS]**
MOVER:	Tony Cassata, Board Member
SECONDER:	Robin D. Hanger, Board Member
AYES:	Myer, Hanger, Smith, Cassata

Enacted and approved this 5th day of December, 2022, in Holly Hill

5. AGENDA ITEM(S)

6. ORDINANCES

1. An Ordinance of the City of Holly Hill, Florida, Amending the Land Development Regulations, by Rezoning the Parcel Described in Exhibit a from Mpud (Mixed Use

Attachment: BOPA MINUTES DECEMBER 2022 (3993 : BOPA Meeting December 5Th, 2022)

Development District) to Rpud (Residential Planned Unit Development); Providing for Conflicting Ordinances; Providing for Severability; and Providing an Effective Date.

(Requested by Brian Walker, Board of Planning and Appeals)

Brian Walker, City Planner/Community Development Director summarized his staff report.

Zen Living Apartments PD Rezone - Consider a Rezone from MPUD (Mixed-Use Development District) to RPUD (Residential Planned Unit Development) with the associated Development Agreement and Preliminary Plan, including a density bonus, for approximately 5.4 acres, located on the northeast corner of Ridgewood Avenue and 3rd Street; (Kalpak Shah, Applicant) District 1 - Commissioner Penny (Brian Walker, Community Development Director).

The subject property is currently zoned MPUD(Mixed-Use PUD) and has a future land use of Mixed-Use 2. Current zoning allows (2) seven story buildings containing a total of 172 age-restricted affordable housing units with limited commercial activity. However, this development has not moved forward.

Elevations Correction:
Proposed PD Four (3) story buildings (120 units - total)

The elevations attached on this specific staff report, are to be voided. You may request a copy of the new elevations at the Building and Zoning Office.

CONCLUSION:
The rezoning request is consistent with the goals, objectives and policies of the City's Comprehensive Plan and Land Development Regulations, as well as the pattern of development in the area.

STAFF RECOMMENDATION:
Recommend the City Commission adopt the Ordinance enacting a Rezone from MPUD (Mixed- Use Development District) to RPUD (Residential Planned Unit Development) with the associated Development Agreement and Preliminary Plan, including a density bonus, for approximately 5.4 acres, located on the northeast corner of Ridgewood Avenue and 3rd Street.

Amir Malik, project engineer and consultant for the project. Spoke on the project and was available to answer questions.

Those to speak against - none.
Those to speak for -
(1) Heidi Heller - 460 Ridgewood Avenue -
1. Verification of apartment project - No hotels.
2. Verification of salt water pool - Yes, salt water pool
3. Bus stop concern on Ridgewood Avenue

Attachment: BOPA MINUTES DECEMBER 2022 (3993 : BOPA Meeting December 5Th, 2022)

(2) Donald Kane - 101 University Blvd. -
1. Wanted clarification on the buffers on 3rd Street and Daytona Ave

RESULT:	**RECOMMEND APPROVAL TO CITY COMMISSION [UNANIMOUS]**
MOVER:	Dennis Smith, Board Member
SECONDER:	Tony Cassata, Board Member
AYES:	Myer, Hanger, Smith, Cassata

7. OLD BUSINESS

None.

8. BOARD / STAFF COMMUNICATIONS

Mr. Brian Walker brought up the schedule for 2023, we will be presenting a schedule for the year to come at the January 9, 2022 Meeting.
BOPA Members committed to Monday, January 9, 2022 at 6:00PM.
Mike Myer
Dennis Smith
Robin Hanger
Tony Cassata

9. ADJOURNMENT

Meeting was adjourned at 6:25PM.

Attachment: BOPA MINUTES DECEMBER 2022 (3993 : BOPA Meeting December 5Th, 2022)

HOLLY HILL
FLORIDA

STAFF REPORT
CITY OF HOLLY HILL, FLORIDA

Board of Planning and Appeals
Agenda Item

MEETING DATE:	**January 9, 2023**
FROM:	**Brian Walker**
SUBJECT:	**Rick Maugeri, Applicant, Requests Preliminary Plat/Final Engineering Approval, for a 134-Lot Subdivision Called the Vineyards. the Vineyards Development is on a 14.24-Acre Parcel Located Approximately 900 Feet West of Center Avenue on the South Side of 6Th Street.**
NUMBER:	**(ID # 3984)**
APPLICANT:	**Rick Maugeri**
PLANNER:	**Brian Walker**

INTRODUCTION

Rick Maugeri, applicant, requests Preliminary Plat/Final Engineering approval, for a 134-lot subdivision called The Vineyards. The Vineyards development is on a 14.24-acre parcel located approximately 900 feet west of Center Avenue on the south side of 6th Street.

DISCUSSION:

On September 27th, 2022, the City Commission approved a Residential Planned Unit Development known as the Vineyards.

The site has a medium density land use and the Planned Development permits 13.21 dwelling units per net acre. The project proposes 2 story townhomes. The minimum lot size is 1,800 square feet, and the minimum townhome square footage is 1060 square feet. The maximum building height is 30 feet.

The City of Holly Hill is the provider of potable water and sanitary sewer.

Final engineering plans for the subdivision have been provided by a licensed engineer and reviewed by the City's relevant divisions. The applicant has provided an environmental report performed by Ecological Consulting Solutions, Inc., to assess the potential occurrence of flora and fauna listed as threatened or endangered by the United States Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FWC), and the Florida Department of Agriculture (FDA). In summary, no listed species were observed within the project site. There are no wetlands within the project site.

The applicant also provided a geotechnical engineering report performed by ECS Florida, LLC, wherein subsurface exploration, laboratory test, and geotechnical engineering analysis were performed for the site.

The development has also undergone review by the St. John's River Water Management District and the Florida Department of Environmental Protect, and has received permitting by those agencies.

Finally, the development has been reviewed by the School Board, and has received a Finding of Adequate Capacity in terms of the ability to serve school-aged children that will live within the subdivision.

A final plat for the proposed subdivision is under review for consistency with the approved final engineering plans, Florida Statute Chapter 177, and all other relevant state and local regulations. Once review of the plat has been completed, it will be brought before the City Commission for review.

The applicant has been notified that lots cannot be sold until such time that the subdivision improvements have been completed, inspected and approved (unless bonded), and the subdivision has received final plat approval.

The City has approved the final engineering plans and has no objections to the 134-lot development.

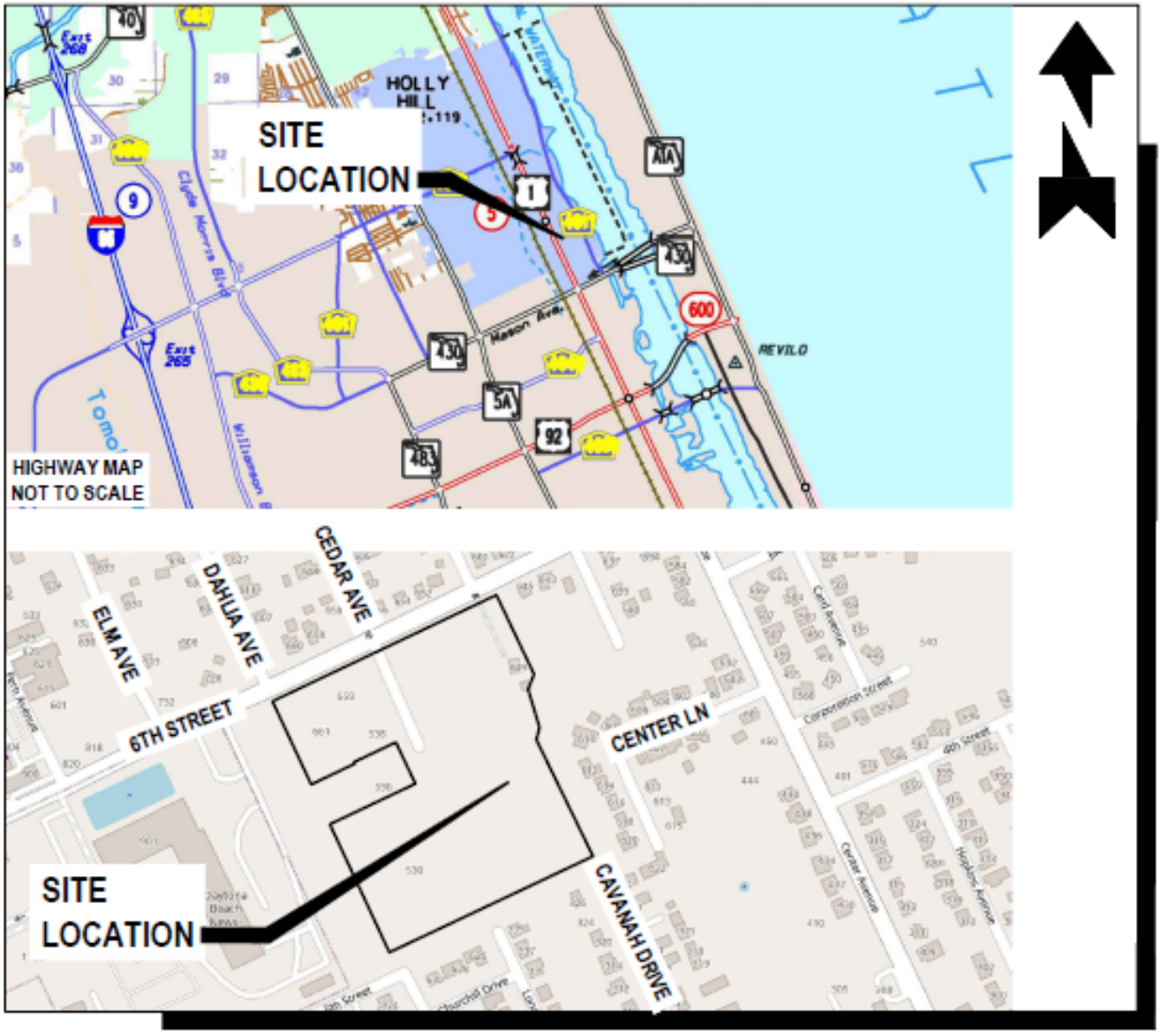
This item is being brought before the BOPA as required by Section 82-216 of the land development regulations for its recommendations regarding the 134-unit townhome development. Sec. 82-216. - Review of final development plan, states the following with regard to reviewing the subdivision plan:

The board of planning and appeals shall consider:
(1) Characteristics of the site and surrounding area, including important natural and manmade features, the size and accessibility of the site, and surrounding land uses.
(2) Whether the concurrency requirements of chapter 86 could be met if the development were built.
(3) The nature of the proposed development, including land use types and densities; the placement of proposed buildings and other improvements on the site; the location, type and method of maintenance of open space and public use areas; the preservation of natural features; proposed parking areas; internal traffic circulation system; the approximate total ground coverage of paved areas and structures; and types of water and sewage treatment systems.
(4) Consistency of the proposed development with the comprehensive plan.
(5) Conformity of the proposed development with this subpart and other applicable regulations.
(6) Applicable regulations, review procedures and submission requirements.
(7) Concerns and desires of surrounding landowners and other affected persons.
(8) Other applicable factors and criteria prescribed by the comprehensive plan, this subpart or other law.

RECOMMENDATION:

Staff recommends that the City Commission, APPROVE the Preliminary Plat/Final Engineering plan for the Vineyards Subdivision.

- Location Map (PDF)
- Aerial Map (PDF)
- The Vineyards Subdivision Plan (PDF)
- Environmental Report (PDF)
- Finding of Adequate Capacity (PDF)
- The Vineyards Overall Rendering (PDF)
- Vineyards Geo Report ECS 56 - 1590 (PDF)
- APPROVED - Ordinances 3055 and 3056 (PDF)



LOCATION MAP

SCALE: 1" = 500'

Location Map

Attachment: Location Map (3984 : The Vineyards Subdivision Review (PSP))



AERIAL MAP

SCALE: 1" = 300'

Aerial Map

Attachment: Aerial Map (3984 : The Vineyards Subdivision Review (PSP))

INDEX OF SHEETS	
DWG.NO.	DESCRIPTION
1	COVER
SU1-SU3	BOUNDARY, TOPOGRAPHIC & TREE SURVEY
5-8	CONSTRUCTION NOTES AND SPECIFICATIONS
9-10	DEMOLITION, TREE REMOVAL AND SWPPP PLAN
11	SWPPP DETAILS AND NOTES
12	OVERALL SITE PLAN
13-14	SITE LAYOUT PLAN
15-16	STRIPING AND SIGNAGE PLAN
17-18	DRAINAGE PLAN
19-20	GRADING PLAN
21-23	POND PLANS
24-25	CROSS SECTIONS
26	OVERALL UTILITY PLAN
27-35	PLAN AND PROFILE
36-38	CITY DETAILS AND NOTES
39	MISCELLANEOUS DETAILS AND NOTES
40-43	FDOT STANDARD DETAILS
44	MAINTENANCE OF TRAFFIC
45	EASEMENT PLAN
46	TREE PROTECTION PLAN
47	AUTOTURN TRUCK EXHIBIT PLAN
L1	LANDSCAPE PLAN
L2	LANDSCAPE PLAN
L3	BUILDING ENLARGEMENT PLAN
L4	LANDSCAPE DETAILS AND NOTES
L5	IRRIGATION PLAN
L6	IRRIGATION PLAN
L7	IRRIGATION DETAILS AND NOTES

LEGAL DESCRIPTION

LOTS 1, 2 AND 3, BLOCK 20, MASON AND CARSWELL SUBDIVISION, AS RECORDED IN MAP BOOK 2, PAGE 90, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, EXCEPTING THE SOUTHERLY 20 FEET USED FOR DRAINAGE, BEING ALSO DESCRIBED AS BLOCKS 13, 14, 15, 16 AND 17, HOME ACRES SUBDIVISION, AS RECORDED IN MAP BOOK 11, PAGE 64, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, EXCEPTING THEREFROM ALL OF SAID BLOCK 16 OF SAID HOME ACRES SUBDIVISON, AND EXCEPTING THEREFROM THAT PORTION OF SAID TRACT LYING EASTERLY OF A NORTH-SOUTH DRAINAGE DITCH WHICH LIES EASTERLY OF THE PRESENT HOUSE AS LOCATED AND KNOWN AS THE WILSON RESIDENCE. THE EXCEPTIONS MENTIONED AS LYING EASTERLY OF SAID DRAINAGE ARE THOSE FOUR (4) PARCELS DEEDED TO WOFF, HAYES, AND MOSTERT, AND RECORDED IN DEED BOOK 326, AT PAGES 381 AND 383, AND IN DEED BOOK 354 AT PAGE 426, AND IN DEED BOOK 360 AT PAGE 270, ALL IN THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA. THE DITCH AS DESCRIBED EXTENDS SOUTHERLY FROM 6TH STREET TO THE EAST-WEST DRAINAGE CANAL AT THE SOUTH END OF THIS ENTIRE TRACT AFOREMENTIONED. THIS DESCRIPTION AND TRANSFER IS ALSO SUBJECT TO A 40 FOOT RIGHT-OF- WAY FROM SIXTH STREET EXTENDING SOUTHERLY TO THE SOUTH LINE OF SAID BLOCK 16 OF SAID HOME ACRES SUBDIVISION, SHOWN AS "CEDAR STREET", SAID RIGHT-OF-WAY IS FOR INGRESS AND EGRESS, AND DESCRIBED IN DEED FROM WILSON TO WRENN, AS RECORDED IN OFFICIAL RECORDS BOOK 27, PAGE 537, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

SAID LAND LYING IN VOLUSIA COUNTY, FLORIDA AND CONTAINS 620,675 SQUARE FEET (14.249 ACRES), MORE OR LESS.

PROJECT STATEMENT

PROPOSE A 134-UNIT FEE SIMPLE TOWNHOME DEVELOPMENT ON 14.249 ACRES.

JURISDICTIONAL AGENCY — PERMIT No.

CITY OF HOLLY HILL (DEVELOPMENT ORDER)	SUB2022-02
SJRWMD (STORMWATER)	190826-1
FDEP WASTEWATER	0428669-001-DWC/CM
FDEP (NOI)	FLR20FR60
VOLUSIA COUNTY HEALTH DEPARTMENT (WATER)	.

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

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SUBDIVISION DRAWINGS FOR

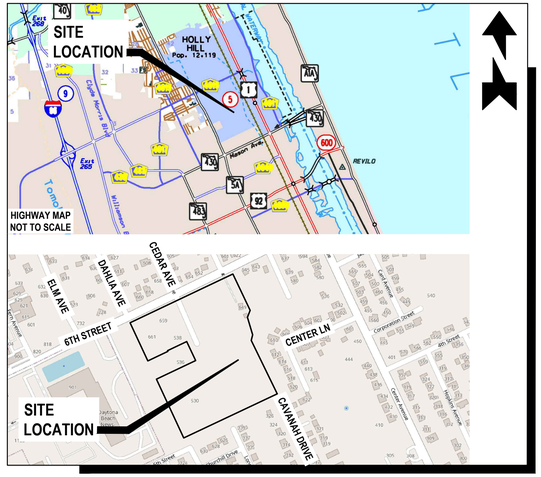
THE VINEYARDS

SECTION 44 TOWNSHIP 14 S, RANGE 32 E
TAX PARCEL ID# 424401200037, 424401200045, 424401200046 & 424401200048
649 6TH STREET
HOLLY HILL, FL 32117

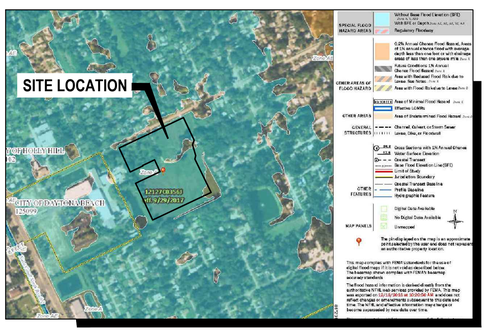
AUGUST 2022
REVISED NOVEMBER 2022



AERIAL MAP
SCALE: 1" = 300'

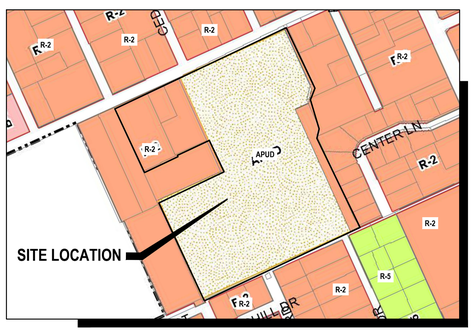


LOCATION MAP
SCALE: 1" = 500'



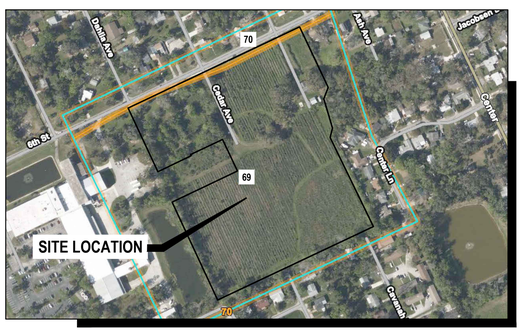
FLOOD ZONE MAP
SCALE: 1" = 800'

FLOOD ZONE "X" & "A" (EL 7.5 NAVD)
PANEL 12127C0356J, 9/29/2017



ZONING MAP
SCALE: 1" = 300'

PROJECT ZONING DISTRICT:
EXISTING: R2 (LOW-MEDIUM DENSITY SINGLE FAMILY RESIDENTIAL)
EXISTING: APUD (AGRICULTURAL PLANNED UNIT DEVELOPMENT)
PROPOSED: PUD (PLANNED UNIT DEVELOPMENT)



SOILS MAP
SCALE: 1" = 400'

SOIL TYPES: (69) TUSCAWILLA FINE SAND
(70) TUSCAWILLA - URBAN LAND COMPLEX

PROJECT TEAM

PROPERTY OWNER:	VINEYARD AND PRODUCE OF HOLLY HILL, LLC 175 S ORCHARD STREET ORMOND BEACH, FL 32174 PHONE: (386) 673-1263
APPLICANT:	THE VINEYARDS TOWNHOMES, LLC 123 MAGNOLIA AVENUE DAYTONA BEACH, FL 32114 PHONE: (386) 547-6176 EMAIL: RICKM@RIDGE-DEVELOPMENT.COM
ENGINEER/ PROJECT MANAGER/ LANDSCAPE ARCHITECT:	NEWKIRK ENGINEERING, INC. 1230 NORTH HIGHWAY 1, SUITE 3 ORMOND BEACH, FL 32174 PHONE: (386) 872-7794 EMAIL: HARRY@NEWKIRK-ENGINEERING.COM
SURVEYOR:	A1A SURVEYING, INC. 555 W GRANADA BOULEVARD ORMOND BEACH, FL 32174 PHONE: (386) 238-9231 EMAIL: SHAWN@A1ASURVEYING.COM
GEOTECHNICAL:	ECS FLORIDA, LLC 2330 SOUTH NOVA, SUITE A SOUTH DAYTONA, FL 32119 PHONE: (386) 944-9588 FAX: (386) 944-9589
ENVIRONMENTAL:	ECOLOGICAL CONSULTING SOLUTIONS, INC. 410 NORTH STREET, SUITE 130 LONGWOOD, FL 32750 PHONE: (407) 869-9434 FAX: (407) 869-9436 EMAIL: BGRIFFY@ECSFL.CC

CONTACT NUMBERS

PLANNING & BUILDING - CITY OF HOLLY HILL (386) 248-9442
WATER - CITY OF HOLLY HILL PUBLIC WORKS (386) 248-9463
WASTEWATER - CITY OF HOLLY HILL PUBLIC WORKS (386) 248-9463
GAS - TECO PEOPLES GAS - (386) 672-2232
ELECTRIC - FLORIDA POWER & LIGHT (386) 257-7502
TELEPHONE/CABLE - AT&T (386) 254-8550



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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY HARRY NEWKIRK, PE # 62971 ON

HARRY N. NEWKIRK — LICENSE — NO. 62971 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

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

DRAWING NUMBER
1

PROJECT No. 2022-86

Attachment: The Vineyards Subdivision Plan (3984 : The Vineyards Subdivision Review (PSP))

BOUNDARY, TOPOGRAPHIC & TREE SURVEY
649 6TH STREET, HOLLY HILL, FL

GENERAL NOTES:

1. BEARING STRUCTURE ASSUMED (N 64° 22" 31" E) ALONG THE NORTH LINE OF LOT 1, BLOCK 16, FOR ANGLE MEASUREMENT ONLY.

2. LAND DESCRIPTION WAS PROVIDED BY CLIENT. IT IS IN ACCORD WITH OFFICIAL RECORDS BOOK 6662, PAGE 4670, PUBLIC RECORDS OF VOLUSIA COUNTY RECORDS. NO TITLE WORK PROVIDED TO THIS SURVEYOR.

3. THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1" = 30" OR SMALLER. ANY USE OF THIS FILE AT A SCALE LARGER THAN STATED, SHALL BE AT THE USER'S OWN RISK.

4. RECORD DIMENSIONS ARE SHOWN IN PARENTHESIS ( ) , WHEN DIFFERS FROM MEASURED.

5. HISTORY REFERENCE TO PREVIOUS SURVEY OR HELPER SURVEYS, LINEAGE OF DATA HORIZONTAL DATA REFERENCES, DATE OF ORIGINAL PLAT.

A.) REPLAT OF UNIT NUMBER ONE HOME ACRES, M.B. 11, PG. 64, V.C.R.
B.) HALIFAX MEDIA, M.B. 58, PGS 154-159, V.C.R.
C.) MASON & CARSWELL'S HOLLY HILL, M.B. 2, PG. 90, V.C.R.
D.) WOLFF SUBDIVISION, M.B. 25, PG. 52, V.C.R.
E.) AA WILBERT BOUNDARY SURVEY.

6. DATA SOURCES:

ELEVATIONS REFER TO (NAVD) NORTH AMERICAN VERTICAL DATUM 1988 FEET AND DECIMAL PART THEREOF. BENCHMARK REFERENCE NAVD DATUM OF 1988. BENCHMARK IS A CITY OF DAYTONA BEACH DESIGNATION: DM 2604, ELEVATION 12.09 FEET (NAVD 1988).

7. THE BOUNDARY LINES SHOWN ARE COMPRISED FROM THE SAID INFORMATION ALONG WITH EXISTING MONUMENTATION FOUND IN THE FIELD. SURVEY DOES NOT DETERMINE OR REFLECT OWNERSHIP. THERE MAY BE OTHER INFORMATION NOT ON RECORD OR PROVIDED, SUCH AS: DEEDS OR SURVEY HELPERS FROM OTHER THAT ARE NOT ON RECORD TO A1A SURVEYING AT THE TIME OF SURVEY. A1A SURVEYING ATTEMPTS TO CONTACT LOCAL SURVEYORS FOR HELPER SURVEYS. SEE LIMITATIONS.

8. UNDERGROUND UTILITIES NOT LOCATED EXCEPT AS SHOWN, PER FIELD VISIBLE LOCATIONS OR MARKINGS.

9. LIMITATIONS:

A.) THE CLIENT AND/OR THEIR LEGAL REPRESENTATIVE(S) IS REQUIRED PER FLORIDA STATUTE RULE 5J-17.052(2)(D)(4) AND THE ALTA REQUIREMENTS THAT ALL RECORDED INSTRUMENTS (EASEMENTS, RIGHT-OF-WAY(S) & ETC.) THAT APPLIES TO THIS SURVEY MUST BE PROVIDED TO THIS SURVEYOR. SOME INSTRUMENTS OF RECORD REFLECTING EASEMENTS, RIGHT-OF-WAY(S) AND OR OWNERSHIP HAVE BEEN FURNISHED TO THE SURVEYOR, PER TITLE COMMITMENT. THERE MAY BE ADDITIONAL RECORDINGS NOT PROVIDED TO THIS SURVEYOR THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY OR A PREVIOUS SURVEY BY OTHERS NOT ON RECORD THAT WERE NOT PROVIDED AT THE TIME OF THIS SURVEY. THIS SURVEYOR RETAINS THE RIGHT TO REVISE HIS OR HER SURVEY WHEN SAID DOCUMENTATION IS PRESENTED.

B.) IT IS UNDERSTOOD TO BE THE PROFESSIONAL OPINION OF THIS SURVEYOR AND THE FIRM FROM WHICH IS FORMULATED ON HIS / HER BEST KNOWLEDGE, INFORMATION AND BELIEF, AND AS SUCH, DOES NOT CONSTITUTE A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED. FURTHERMORE, THIS SURVEYOR AND FIRM DOES NOT ASSUME RESPONSIBILITY AND SHALL NOT BE LIABLE FOR CLAIMS ARISING FROM ERRONEOUS OR INCORRECT INFORMATION FURNISHED BY THE OWNER, LENDER, OR OWNER'S CONTRACTORS OR OTHERS WHICH IS USED AS A BASIS TO FORMULATE THIS SURVEYORS OPINION.

C.) ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE PARTY PER FLORIDA STATUES CHAPTER RULE 5J-17.051(3)(5)(6).

D.) THE ACCEPTANCE OF THIS SURVEY AS CERTIFIED FOR THE EXCLUSIVE USE OF NAMES SHOWN HEREON SHALL CONSTITUTE FULFILLMENT OF MY CONTRACTUAL OBLIGATION. "ORIGINAL." AS DEFINED HEREON REFERS TO THE SIGNED AND SEALED GRAPHIC REPRESENTATION OF THE FIELD SURVEY. CAD FILES ARE NOT THE SURVEY AND THERE MAY BE A SURCHARGE FOR THEM.

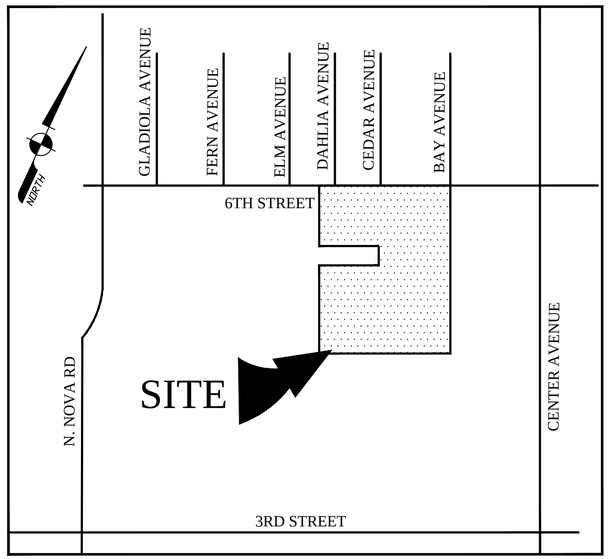
E.) TAX PARCEL IDENTIFICATION NUMBERS, ADJACENT OWNERS NAME AND ADDRESS WHEN SHOWN, IS TAKEN FROM SAID COUNTY PROPERTY WEB SITE.

F.) TREE INFORMATION:
TREES AS SHOWN ON THE SURVEY IS FOR THE LOCATION AND DIAMETER TAKEN APPROXIMATELY 4 TO 4-1/2 FEET ABOVE GROUND LEVEL (APPROXIMATELY CHEST HEIGHT). THE TREE IDENTIFICATION SHOWN IS USUALLY A COMMONLY KNOWN NAME. HOWEVER, THE ACCURACY OF THE SPECIES OF SAID IDENTIFICATION SHOULD BE IDENTIFIED AND CONSULTED BY AN ARBORIST OR ANY OTHER PROFESSIONAL LICENSED TO IDENTIFY TREES (LANDSCAPE ARCHITECT, ENVIRONMENTALIST, ETC.). IDENTIFICATION IS OUT OF THE EXPERTISE OF A FLORIDA SURVEYOR OR MAPPER, UNLESS THEY POSSESS SUCH CERTIFICATES.

G.) TOPOGRAPHIC SURVEY:
CONTOURS ARE ON ONE FOOT INTERVALS, INTERPOLATED BETWEEN GRIDS, VISIBLE GRADE BREAKS, ALONG WITH RANDOM GROUND ELEVATIONS.

10. FLOOD PLANE CERTIFICATION ACCORDING TO THE FEMA (FEDERAL EMERGENCY MANAGEMENT AGENCY) F.I.R.M (FEDERAL INSURANCE RATE MAP), COMMUNITY OF CITY OF HOLLY HILL, FLORIDA NUMBER 125136, PANEL NUMBER 12127 C 0356 J, DATED: SEPTEMBER 29, 2017. THE PROPERTY IS IN FLOOD ZONE "X" AND FLOOD ZONE A.

11. ABBREVIATIONS: BM = BENCHMARK; BTTM = BOTTOM; (C) = CALCULATED; C.L.F. = CHAIN LINK FENCE; CM = CONCRETE MONUMENT; CMP = CORRUGATED METAL PIPE; CONC = CONCRETE; (D) = DEED; FD = FOUND; ID = IDENTIFICATION; IR = IRON ROD; IR/C = IRON ROD & CAP; IP = IRON PIPE; INV = INVERT; LB = LICENSED BUSINESS; (M) = MEASURED; M.B. = MAP BOOK; O.R.B. = OFFICIAL RECORDS BOOK; (P) = PLAT; PG(S). = PAGE(S); PSM = PROFESSIONAL SURVEYOR & MAPPER; PVC = POLYVINYL CHLORIDE; RCP = REINFORCED CORRUGATED PIPE; R/W = RIGHT-OF-WAY; TOB = TOP OF BANK; TOS = TOE OF SLOPE; V.C.R. = VOLUSIA COUNTY RECORDS.



LOCATION SKETCH
NOT TO SCALE

LEGAL DESCRIPTION:

LOTS 1, 2 AND 3, BLOCK 20, MASON AND CARSWELL SUBDIVISION, AS RECORDED IN MAP BOOK 2, PAGE 90, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, EXCEPTING THE SOUTHERLY 20 FEET USED FOR DRAINAGE, BEING ALSO DESCRIBED AS BLOCKS 13, 14, 15, 16 AND 17, HOME ACRES SUBDIVISION, AS RECORDED IN MAP BOOK 11, PAGE 64, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, EXCEPTING THEREFROM ALL OF SAID BLOCK 16 OF SAID HOME ACRES SUBDIVISON, AND EXCEPTING THEREFROM THAT PORTION OF SAID TRACT LYING EASTERLY OF A NORTH-SOUTH DRAINAGE DITCH WHICH LIES EASTERLY OF THE PRESENT HOUSE AS LOCATED AND KNOWN AS THE WILSON RESIDENCE. THE EXCEPTIONS MENTIONED AS LYING EASTERLY OF SAID DRAINAGE ARE THOSE FOUR (4) PARCELS DEEDED TO WOFF, HAYES, AND MOSTERT, AND RECORDED IN DEED BOOK 326, AT PAGES 381 AND 383, AND IN DEED BOOK 354 AT PAGE 426, AND IN DEED BOOK 360 AT PAGE 270, ALL IN THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA. THE DITCH AS DESCRIBED EXTENDS SOUTHERLY FROM 6TH STREET TO THE EAST-WEST DRAINAGE CANAL AT THE SOUTH END OF THIS ENTIRE TRACT AFOREMENTIONED. THIS DESCRIPTION AND TRANSFER IS ALSO SUBJECT TO A 40 FOOT RIGHT-OF- WAY FROM SIXTH STREET EXTENDING SOUTHERLY TO THE SOUTH LINE OF SAID BLOCK 16 OF SAID **HOME** ACRES SUBDIVISION, SHOWN AS "CEDAR STREET", SAID RIGHT-OF-WAY IS FOR INGRESS AND EGRESS, AND DESCRIBED IN DEED FROM WILSON TO WRENN, AS RECORDED IN OFFICIAL RECORDS BOOK 27, PAGE 537, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

SAID LAND LYING IN VOLUSIA COUNTY, FLORIDA AND CONTAINS 575,541 SQUARE FEET (13.2126 ACRES), MORE OR LESS.

LEGEND

- BACK FLOW PREVENTOR VALVE
- BENCHMARK
- CABLE TELEVISION RISER
- CATCH BASIN
- CLEAN OUT
- CONCRETE UTILITY POLE
- CONCRETE UTILITY POLE WITH LIGHT
- CURB INLET
- ELECTRIC METER
- ELECTRIC RISER
- ELECTRIC SERVICE BOX
- 0.00 EXISTING ELEVATION
- FIRE HYDRANT
- GUY ANCHOR
- MAIL BOX
- OVERHEAD WIRES
- SANITARY MANHOLE
- SEWER VALVE
- SIGN (UNLESS NOTED)
- UNDERGROUND FIBER OPTIC MARKER
- UNKNOWN MANHOLE
- WATER METER
- WATER VALVE
- WELL
- WOOD UTILITY POLE
- WOOD UTILITY POLE WITH LIGHT

TREE LEGEND

- ASH
- CEDAR
- HACKBERRY
- OAK
- PALM
- 12" DENOTES 12" DIAMETER TRUNK (TYPICAL)

NOT VALID WITHOUT
SHEETS 1 THRU 3

SHEET SU-1

CERTIFIED TO:

TYPE OF SURVEY:
BOUNDARY, TOPOGRAPHIC & TREE

REVISIONS:

SITE ADDRESS: 649 6TH ST, HOLLY HILL, FL

PROJECT: 22-24

Field Work by: TE Date: 04/27/22 Office Work by: KB Date: 04/27/22
Field Book: 19 Page: 30 Scale: 1" = 30'

Professional Surveyor
A1A SURVEYING, INC.
Residential, Commercial, Construction
Phone: 386.238.9231
555 W Granada Blvd., Suite D7, Ormond Beach, Florida 32174 LB3805

THE FOREGOING BOUNDARY, TOPOGRAPHIC & TREE SURVEY IS CERTIFIED TO MEET THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYOR & MAPPERS, PER CHAPTER 5J-17, SECTION 472.027, FLORIDA STATUTES.

08-24-2022

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

PSM #6378

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

BOUNDARY, TOPOGRAPHIC & TREE SURVEY
649 6TH STREET, HOLLY HILL, FL

NORTH

0 30 60
GRAPHIC SCALE IN FEET
1"=30'

DAHLIA AVENUE (DAHLIA STREET (P)) 60' R/W (M.B. 11, PG. 64, V.C.R.)

6TH STREET MICHIGAN AVENUE (P) 40' R/W (M.B. 11, PG. 64, V.C.R.)

BAY AVENUE (BAY STREET (P)) 40' R/W (M.B. 11, PG. 64, V.C.R.)

CENTER AVENUE 60' R/W (M.B. 11, PG. 64, V.C.R.)

CEDAR STREET (M.B. 11, PG. 64, V.C.R.) UNCONSTRUCTED

BAY STREET 40' R/W (M.B. 11, PG. 64, V.C.R.) UNCONSTRUCTED

PARCEL 1

PARCEL 2

PARCEL 3

LOT 1 HALIFAX MEDIA (O.R.B. 6423, PG. 2234) PARCEL ID: 532742000010 ADDRESS: 901 HOTEL PLAZA HILL

15' UTILITY EASEMENT (M.B. 58, PGS. 154-159, V.C.R.)

NORTHWEST CORNER LOT 1 (M.B. 58, PGS. 154-159(V.C.R.)) FD 4"x4" C.M. LB#3612

831.1'(M)831.31'(P)

N64°22'31"E

FD 4"x4" C.M. LB#3612

FD 5/8" IR/C LB#3612

SOUTH R/W LINE

CONCRETE WALKWAY

150.11(M)150'(P)

75.3'(M)75'(D)

299.15'(M)300.00'(P)

150'(P)

150'(tf)

780.27'(D)(M)

274.11'(C) 273.62'(M)

S25°38'55"E

128.01'(C)(M)

S16°54'26"E

S14°11'40"W 40.68'(C)(M)

S06°16'46"W 41.33'(C)(M)

S5°16'W 7.96'(C)(M)

N25°45'18"W 4.97'(M) 5.00'(D)

N25°52'48"W 149.86'(M) 150.00'(P)

N25°21'23"W 592.26'(M)597.01'(P)

295.40'(D) 295.58'(M)

N64°22'31"E 151.89'(M) 150.00'(P)

N64°22'31"E 300'(P) 302.13'(M)

11.08'(M)

45.20'(P) 45.42'(M)

FD 5/8" IR/C LB#2620

FD 5/8" IR/C LB#7074

FD 1/2" IP. NO ID.

FD 1/2" IP/C LB#2048

FD 5/8" IR/C LB#8205

SET 5/8" IR/C LB#8205

3' VINYL FENCE

6' WOOD FENCE

4' FENCE

6' C.L.F.

0.2' N FENCE

(BEARING BASIS) NORTH LINE LOT 6, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

(BEARING BASIS) NORTH LINE LOT 1, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

EAST LINE LOT 1, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

WEST LINE LOT 1, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

EAST LINE LOT 6, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

WEST LINE LOT 6, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

EAST LINE LOT 5, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

WEST LINE LOT 5, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

EAST LINE LOT 2, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

WEST LINE LOT 2, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

EAST LINE LOT 2, BLOCK 20 (M.B. 2, PG. 90, V.C.R.)

WEST LINE LOT 2, BLOCK 20 (M.B. 2, PG. 90, V.C.R.)

EAST LINE BLOCK 20 (M.B. 2, PG 90, V.C.R.)

EAST LINE BLOCK 14 (M.B. 11, PG. 64, V.C.R.)

SOUTH LINE LOT 6, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

NORTH LINE LOT 5, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

SOUTH LINE LOT 5, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

NORTH LINE LOT 2, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

SOUTH LINE LOT 2, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

NORTH LINE BLOCK 16

SOUTH LINE BLOCK 16

NORTH LINE BLOCK 17

NORTH LINE LOT 6, BLOCK 17 (M.B. 11, PG. 64, V.C.R.)

WEST LINE LOT 6, BLOCK 20 (M.B. 2, PG. 90, V.C.R.)

WEST LINE LOT 2, BLOCK 20 (M.B. 2, PG. 90, V.C.R.)

WEST LINE LOT 5, BLOCK 16 (M.B. 11, PG. 64, V.C.R.)

WEST LINE HOMEACRES SUBDIVISION BLOCK 20 (M.B. 2, PG. 90, V.C.R.) PER A.A. WILBER JR. LAND SURVEYING, INC.

NORTH LINE OF LOT 4 BLOCK 16

REMAINDER OF LOT 4 BLOCK 16 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

BM#1 SET 5/8" IR/C LB#8205 BM EL=6.71

BM#2 SET 5/8" IR/C BM EL=7.91

LOT 6 BLOCK 16 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.) PARCEL ID: 424401200048 ADDRESS: 661 6TH ST, HOLLY HILL

WEST 75' OF LOT 1 BLOCK 16 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.) PARCEL ID: 424401200045 ADDRESS: 659 6TH ST, HOLLY HILL

EAST 75' OF LOT 1 BLOCK 16 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.) PARCEL ID: 424401200046 ADDRESS: 538 CEDAR ST, HOLLY HILL

LOT 5 BLOCK 16 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.) PARCEL ID: 424401200048 ADDRESS: 661 6TH ST, HOLLY HILL

LOT 2 BLOCK 16 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.) PARCEL ID: 424401200046 ADDRESS: 538 CEDAR ST, HOLLY HILL

LOT 3 BLOCK 16 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

LOT 7 BLOCK 15 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

LOT 8 BLOCK 15 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

LOT 9 BLOCK 15 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

LOT 10 BLOCK 15 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

LOT 1 BLOCK 15 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

LOT 2 BLOCK 15 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

LOT 3 BLOCK 15 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

LOT 4 BLOCK 15 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

PORTION OF LOT 7 BLOCK 14 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

PORTION OF LOT 8 BLOCK 14 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

PORTION OF LOT 9 BLOCK 14 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

PORTION OF LOT 1 BLOCK 20 MASON & CARSWELL (M.B. 2, PG 90, V.C.R.) (O.R.B. 7544, PG. 3307, V.C.R.) PARCEL ID: 424401200033

PORTION OF LOT 2 BLOCK 20 MASON & CARSWELL (M.B. 2, PG 90, V.C.R.) (O.R.B. 4511, PG. 402, V.C.R.) PARCEL ID: 424401200031

PORTION OF LOT 1 BLOCK 20 MASON & CARSWELL (M.B. 2, PG 90, V.C.R.) (O.R.B. 6423, PG. 2234, V.C.R.) PARCEL ID: 424401200016

PORTION OF LOT 1 BLOCK 20 MASON & CARSWELL (M.B. 2, PG 90, V.C.R.) (O.R.B. 4045, PG. 808, V.C.R.) PARCEL ID: 424401200016

REMAINDER OF LOT 6 BLOCK 17 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

LOT 1 BLOCK 17 REPLAT OF UNIT NUMBER ONE HOME ACRES (M.B. 11, PG 64, V.C.R.)

END OF CEDAR STREET EASEMENT R/W

BROKEN WATERFALL FEATURE

KOI POND

ABANDONED WELL ON CONCRETE

CONC PADS(6)

20.3' POLE BARN 17.6'

ASPHALT

CONCRETE HEADWALL TOP=7.60

WOOD HEADWALL TOP=9.20 N INV=6.19(18" CMP)

CONCRETE DRIVEWAY

GRAVEL DRIVEWAY

GRAVEL DRIVEWAY UNCONSTRUCTED

UNKNOWN 6" PCV PIPE

PVC (BURIED) W INV=7.16

W INV=6.48(6" CPVC)

W INV=5.98(10" PVC)

S INV=5.60(18" CMP)

E INV=5.98(10" PVC)

S INV=6.16(12" CPVC)

RIM=7.91
N INV=-0.75(10" PVC)
N INV=+1.64(10" PVC)
S INV=-0.51(10" PVC)
E INV=+)-1.81(10" CLAY)
W INV=(-)2.01(10" CLAY)
BOTTOM=(-)1.74

RIM=8.01
E INV=(-)3.07(10" CLAY)
W INV=(+)2.08(10" CLAY)
N INV=(-)3.04(10" PVC)
BTTM=(-)3.11

RIM=7.44

RIM=7.20

W INV=5.58(12" CMP) CRUSHED

S INV=6.23(12" CMP)

RIM=7.90
W INV=3.25(4" PVC)
N INV=5.75(15" CMP)
BOTTOM=4.07

RIM=8.13
E INV=(-)1.97(8" PVC)
W INV=(+)2.08(10" CLAY)
N INV=(-)1.92(10" CLAY)
N INV=(-)1.41(8" UNK)
S INV=(-)0.75(6" UNK)
BTTM=(-)2.00

E INV=5.77(12" CMP)

RIM=8.33
N INV=+2.80(10" PVC)
E INV=(-)1.09(8" PVC)
S INV=(-)1.17(10" CLAY)
W INV=(-)1.07(8" PVC)
BTTM=(-)1.04

S INV=5.81(15" CMP)
W INV=5.72(12" CMP)

RIM=8.14
W INV=7.54(4" PVC)
E INV=7.47(4" PVC)
N INV=5.38(15" CMP)
W INV=4.90(15" CMP)
E INV=4.83(15" CMP)
BOTTOM=4.79

TOP=6.93
N INV=5.85(12" CMP)

MATCHLINE (SEE SHEET 3 OF 3)

SHEET SU-2

CERTIFIED TO:	TYPE OF SURVEY: BOUNDARY, TOPOGRAPHIC & TREE REVISIONS:
Field Work by: TE Date: 04/27/22 Office Work by: KB Date: 04/27/22 Field Book: 19 Page: 30 Scale: 1" = 30'	SITE ADDRESS: 649 6TH STREET, HOLLY HILL, FL PROJECT: 22-24

A1A SURVEYING, INC.
Professional Surveyor
Residential Commercial Construction
Phone: 386.238.9231
555 W Granada Blvd., Suite D7, Ormond Beach, Florida 32174 LB 8205

NOT VALID WITHOUT SHEETS 1 THRU 3

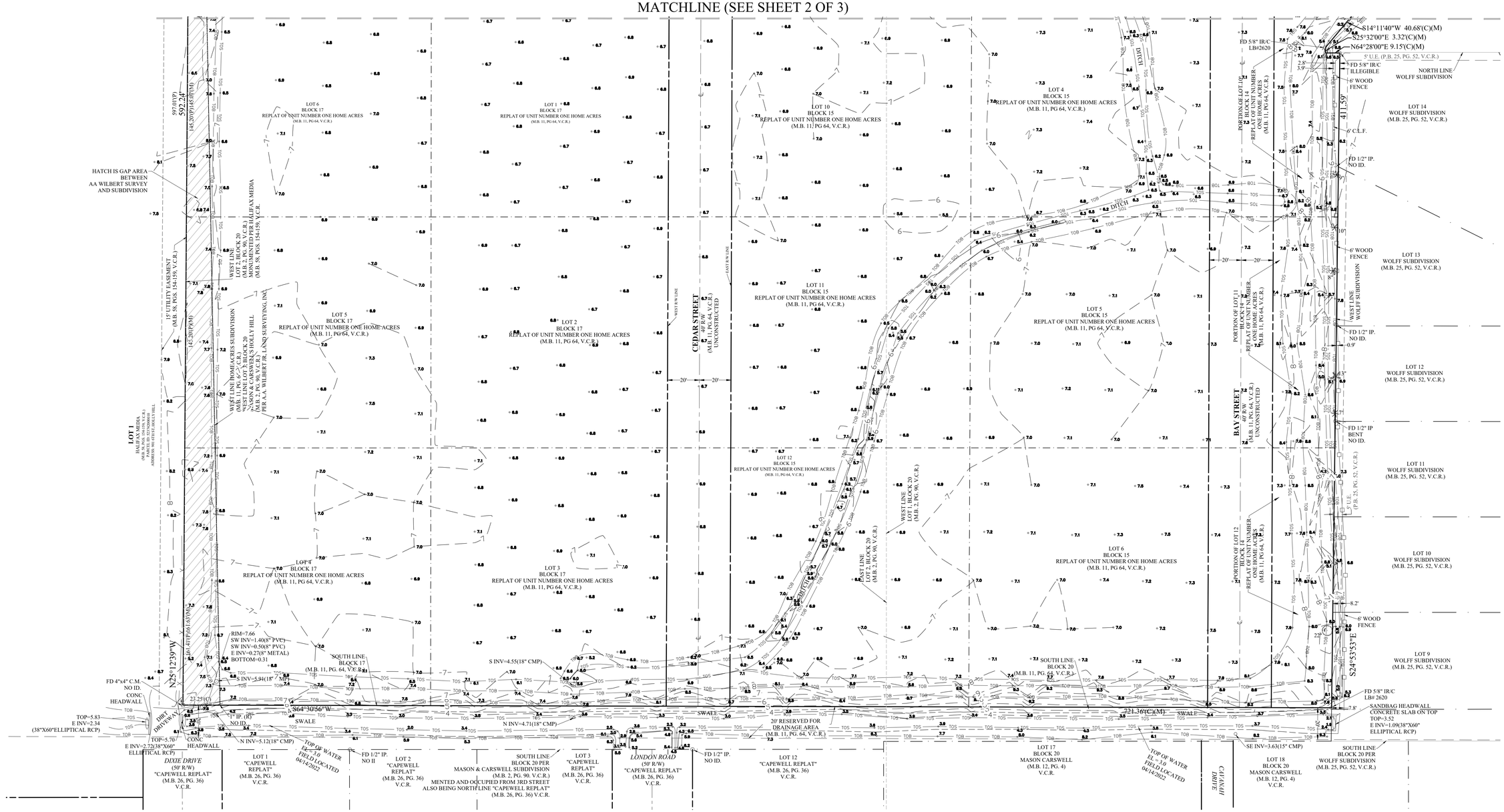
Attachment: The Vineyards Subdivision Plan (3984 : The Vineyards Subdivision Review (PSP))

BOUNDARY, TOPOGRAPHIC & TREE SURVEY
649 6TH STREET, HOLLY HILL, FL

NORTH

0 30 60
GRAPHIC SCALE IN FEET
1"=30'

MATCHLINE (SEE SHEET 2 OF 3)



SHEET SU-3

CERTIFIED TO:	TYPE OF SURVEY: BOUNDARY, TOPOGRAPHIC & TREE REVISIONS:
Field Work by: TE Date: 04/27/22 Office Work by: KB Date: 04/27/22 Field Book: 19 Page: 30 Scale: 1" = 30'	SITE ADDRESS: 649 6TH ST, HOLLY HILL, FL PROJECT: 22-24

A1A SURVEYING, INC.
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555 W Granada Blvd., Suite D7, Ormond Beach, Florida 32174 LB 8205

NOT VALID WITHOUT SHEETS 1 THRU 3

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

GENERAL CONSTRUCTION NOTES

1. GOVERNING SPECIFICATIONS: CITY OF HOLLY HILL LAND DEVELOPMENT CODE, CITY OF HOLLY HILL STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, CURRENT EDITION. CITY OF HOLLY HILL STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, CURRENT EDITION.
2. HOURS OF CONSTRUCTION WILL BE INSIDE THE HOURS OF 7:00 AM AND 7:00 PM MONDAY THROUGH SATURDAY ONLY. NO CONSTRUCTION ALLOWED ON SUNDAY.
3. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE 2022 / 2023 EDITION OF THE FDOT DESIGN STANDARD INDEXES, THE 2017 EDITION OF THE FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND THE 2010 EDITION OF THE FDOT UTILITY ACCOMMODATIONS MANUAL.
4. ALL UTILITY MATERIAL, CONSTRUCTION AND TESTING COVERED BY THESE DRAWINGS SHALL COMPLY WITH THE CITY OF HOLLY HILL STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, LATEST EDITION. ALL UTILITY WORK AND CONNECTIONS SHALL BE COORDINATED WITH THE CITY OF HOLLY HILL INSPECTORS.
5. CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL REQUIRED PERMITS. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL PERMITS AVAILABLE ON THE JOB SITE AT ALL TIMES.
6. THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE A RECORD COPY OF ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS ON WHICH ALL FIELD CHANGES ARE TO BE SHOWN. ALL CHANGES TO PLANS SHALL BE INCORPORATED IN THE "AS-BUILT" RECORD DRAWINGS SURVEY PROVIDED BY CONTRACTOR FOR REVIEW AND APPROVAL FROM ENGINEER OF RECORD.
7. THE CITY OF HOLLY HILL WILL OWN AND MAINTAIN ALL WATER, SEWER AND RECLAIM MAINS LOCATED WITHIN THE RIGHT-OF-WAY.
8. THE CONTRACTOR SHALL PAY FOR AND OBTAIN A SITE ENGINEERING BUILDING PERMIT. THE ENGINEER WILL SCHEDULE THE PRE-CONSTRUCTION CONFERENCE BEFORE THE CONTRACTOR'S START OF WORK. THE CONTRACTOR SHALL CONTACT THE BUILDING DEPARTMENT AT (386) 248-9442 FOR INFORMATION ON ISSUANCE OF CITY PERMITS AND / OR OTHER REQUIREMENTS.
9. SEPARATE BUILDING PERMIT APPLICATIONS ARE REQUIRED FOR: NEW BUILDINGS, CLUBHOUSE, TRASH COMPACTOR, RETAINING WALL, FENCE, SWIMMING POOL, GAZEBO, PLAYGROUND, LIGHT POLES AND SIGNS. CONTACT THE HOLLY HILL BUILDING DEPARTMENT AT (386) 248-9442.
10. ALL WATER SERVICE CONSTRUCTION SHALL BE IN ACCORDANCE WITH "CITY OF HOLLY HILL UTILITY SPECIFICATIONS AND STANDARD UTILITY DETAILS, CURRENT EDITION.
11. ALL SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH "DESIGN AND CONSTRUCTION STANDARDS", CITY OF HOLLY HILL UTILITIES DEPARTMENT, CURRENT EDITION.
12. ALL RECLAIMED WATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH "DESIGN AND CONSTRUCTION STANDARDS", CITY OF HOLLY HILL UTILITIES DEPARTMENT, CURRENT EDITION.
13. ALL ROADWAY SIGNAGE AND MARKINGS SHALL BE IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
14. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
15. LAND CLEARING OF THE PROJECT IS NOT ALLOWED UNTIL THE CITY ENGINEER AND/OR PLANNING DEPARTMENT ISSUES A LAND CLEARING PERMIT.
16. SHOP DRAWINGS AND CERTIFICATIONS FOR ALL MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL REVIEW AND SIGN ALL SHOP DRAWINGS. THE CONTRACTOR TO SUBMIT REVIEWED SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.
17. THE LOCATION OF EXISTING UTILITIES HAS BEEN OBTAINED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THIS INFORMATION IS NOT GUARANTEED AND IT SHALL BE EACH CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT NATURE OF ALL UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION AND TO NOTIFY NEWKIRK ENGINEERING, INC. AS TO DISCREPANCIES, IF ANY EXIST.
18. ALL SURVEY AND TOPOGRAPHICAL INFORMATION BASED ON SURVEY INFORMATION PROVIDED BY A1A SURVEYING INC.; CONTRACTOR TO COORDINATE WITH SURVEYOR FOR ALL CONSTRUCTION BENCHMARK INFORMATION.
19. ALL SURVEY AND TOPOGRAPHICAL INFORMATION IS BASED ON THE NAVD 1988 DATUM. ALL PROPOSED CONSTRUCTION ELEVATIONS ARE BASED ON THE NAVD 1988 DATUM. ALL PROPOSED ELEVATIONS REFER TO FINISH GRADES.
20. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR INSTRUCTING THE CONTRACTOR IN THE METHODS OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE METHOD TO CONSTRUCT THE IMPROVEMENTS AS SHOWN ON THE PLANS.
21. ANY CHANGES TO THE APPROVED PLANS REQUIRE COMPLETION OF THE CHANGE ORDER PROCESS.
22. LITTER CONTROL MEASURES TO PREVENT WIND-DRIVEN DEBRIS SHALL BE IMPLEMENTED THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEBRIS SHALL BE REMOVED AND THE PROJECT SITE CLEANED WITHIN 30 DAYS OF COMPLETION OF CONSTRUCTION.
23. AT NO TIME SHALL EXCAVATIONS BE LEFT UNCOVERED AFTER WORKING HOURS. CONTRACTOR SHALL SECURE THE WORK AREA AT THE END OF EACH DAY'S WORK.
24. AT ALL TIMES, THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT UNDERGROUND UTILITIES, STRUCTURES AND OTHER ASSOCIATED FACILITIES FROM DAMAGE DURING CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE MEASURES OF PROTECTION. ANY DAMAGED FACILITIES SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE CITY OR ENGINEER AT THE CONTRACTORS EXPENSE.
25. THERE SHALL BE NO DEVIATIONS FROM THESE PLANS UNLESS APPROVED IN WRITING BY THE ENGINEER AND THE OWNER.
26. ALL DISTURBED AREAS SHALL BE FULLY SODDED.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF THE RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND BASE DENSITIES AT UTILITY CROSSINGS, MANHOLES, INLETS, STRUCTURES. TEST SHALL INCLUDE ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, WATER MAIN TESTING, SANITARY SEWER TESTING, RECLAIM MAIN TESTING, ETC.
28. A MINIMUM OF 13'-6" OF VERTICAL CLEARANCE IS TO BE PROVIDED AND MAINTAINED FOR ALL ROADWAYS.
29. ALL ROADWAYS MUST HAVE A MINIMUM 25-FEET INSIDE AND 50-FEET OUTSIDE TURNING RADIUS.
30. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
31. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
32. IF ANY MUCK-LIKE MATERIAL IS DISCOVERED, IT WILL BE REQUIRED TO BE REMOVED, BACKFILLED WITH APPROPRIATE FILL, COMPACTED, AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
33. FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY (98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER AASHTO T-180).
34. ROAD CLOSURES ARE SEPARATE FROM THE PERMIT AND REQUIRE PLAN REVIEW AND APPROVAL WITH 7 DAY ADVANCE NOTICE FROM THE OWNER OF THE AFFECTED RIGHT-OF-WAY PRIOR TO ANY ROAD CLOSURES. A MAINTENANCE OF TRAFFIC PLAN IS REQUIRED FOR ALL SITE CONSTRUCTION JOBS.
35. DURING CONSTRUCTION, AN H-20 LOAD RATED ALL WEATHER ACCESSIBLE ROADWAY SHALL BE MAINTAINED AT ALL TIMES FOR FIRE ACCESS AND EMERGENCY SERVICES.
36. ALL REQUIRED FIRE MAINS AND HYDRANTS SHALL BE INSTALLED AND OPERATIONAL PRIOR TO THE START OF VERTICAL BUILDING CONSTRUCTION.
37. NO BURYING OF ANY ORGANIC MATERIALS ALLOWED.
38. THERE WILL BE NO PROPOSED OVERHEAD UTILITY AND SERVICE LINES ASSOCIATED WITH THIS PROJECT. ALL UTILITY LINES AND SERVICES WILL BE INSTALLED UNDERGROUND.

EROSION CONTROL AND DEMOLITION CONSTRUCTION NOTES:

1. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING AT THE CITY PRIOR TO COMMENCE OF CONSTRUCTION.
2. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE SWPPP DURING CONSTRUCTION OPERATIONS.
3. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL DEVICES HAVE BEEN INSTALLED.
4. ALL REASONABLE EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, SURFACE DRAINS, WETLAND AND LAKE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.
5. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.
6. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS TO PREVENT EROSION. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORMWATER RUNOFF FROM BEING DISCHARGED TO OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES, AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.
7. THE CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOIL STABILIZED. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND REPLACED IN UPLAND AREAS.
8. THE CONTRACTOR SHALL SWEEP ALL ADJACENT ROADWAYS AND PARKING AREAS THAT ARE AFFECTED BY THE CONSTRUCTION PROCESS ON A DAILY BASIS OR AS REQUIRED.
9. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES AND KEEP THEM IN GOOD CONDITION. ANY IMPACTS DUE TO EROSION OR FAILURE OF ANY EROSION CONTROL DEVICES SHALL BE REPORTED TO THE ENGINEER OF RECORD IMMEDIATELY. CORRECTIVE MEASURES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
11. ANY DISCHARGE OF STORMWATER RUNOFF FROM THIS SITE SHALL BE THROUGH A CONTROL DEVICE TO CONTROL TURBIDITY AND SEDIMENT TRANSPORT. THIS INCLUDES THE DISCHARGE FROM ANY DEWATERING OPERATIONS.
12. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL CRITERIA AS SET FORTH UNDER THE NPDES PERMITTING PROGRAM FOR CONSTRUCTION SITES OF THIS SIZE INCLUDING BUT NOT LIMITED TO THE ADHERENCE TO THE APPROVED POLLUTION PREVENTION CONTROL PLAN, TIMELY INSPECTIONS, PROJECT REPORTING AND DOCUMENTATION.
13. NO DEBRIS SHALL BE ALLOWED TO ENTER THE EXISTING STORM OR SANITARY SEWER SYSTEMS.
14. THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH ALL REQUIREMENTS OF THE STATE PERMITS FOR THIS PROJECT. THE CONTRACTOR SHALL COMPLY WITH THE STORMWATER POLLUTION PREVENTION PLAN OF BOTH ON-SITE AND OFF-SITE IMPROVEMENTS. A SIGNED COPY OF THE STORMWATER POLLUTION PREVENTION PLAN IS TO BE KEPT ON THE PROJECT PREMISES AT ALL TIMES.
15. NO WORK WITHIN THE CITY RIGHT-OF-WAY, VOLUSIA COUNTY OR FLORIDA DEPARTMENT OF TRANSPORTATION SHALL BE COMMENCED WITHOUT 48 HOURS ADVANCE NOTICE TO THE CITY, COUNTY OR FDOT.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE CITY OF HOLLY HILL PUBLIC WORKS / UTILITY DEPARTMENT, "811" AND EMERGENCY SERVICES FOR RESPECTIVE UTILITY LOCATIONS AND "NOTICE" OF CONSTRUCTION ACTIVITY.
17. THE CONTRACTOR SHALL POST "NO TRESPASSING" SIGNAGE AT ALL SITE ENTRANCES PRIOR TO CONSTRUCTION.
18. THE CONTRACTOR SHALL OBTAIN A TREE REMOVAL PERMIT FROM THE LOCAL JURISDICTION PRIOR TO REMOVING ANY TREES FROM THIS PROJECT.
19. ALL REMOVED MATERIAL SHALL BE HAULED OFF-SITE TO AN APPROVED LANDFILL. TREES MAY BE LOGGED OR MULCHED FOR OFF-SITE DISPOSAL AT THE CONTRACTOR'S DISCRETION.
20. THE CONTRACTOR SHALL NOT ALLOW DEBRIS AND RUBBISH TO ACCUMULATE ONT THE SITE.
21. THE CONTRACTOR SHALL CLEAN UP THE JOB SITE IN AREAS WHERE NO WORK IS TO BE PERFORMED UNDER THIS CONTRACT FOLLOWING DEMOLITION. THE CONTRACTOR SHALL REMOVE ALL DEBRIS, RUBBISH, TEMPORARY FACILITIES, AND EQUIPMENT. THE CONTRACTOR SHALL LEVEL SURFACE IRREGULARITIES AND LEAVE THE WORK IN A NEAT AND PRESENTABLE CONDITION.
22. CONTRACTOR SHALL ROUGH GRADE STORMWATER SWALES AND RETENTION PONDS PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS.
23. SITE PREPARATION AND FILL OPERATIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT AND RECOMMENDATIONS.
24. EXISTING STORM DRAINAGE TO REMAIN IN OPERATION AT ALL TIMES. CONTRACTOR TO MAINTAIN THE EXISTING, NEW OR TEMPORARY PIPING.
25. RELOCATION OF UTILITY POLES AND LINES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY AND SHALL BE INCLUDED AS PART OF THE PROJECT SCOPE AND COST.
26. ALL ASPHALT PAVEMENT REMOVALS SHALL BE VERTICAL SAWCUT. ALL CONCRETE PAVEMENT REMOVALS SHALL BE EITHER AT EXISTING JOINTS OR VERTICAL SAWCUT. ACTIVE SERVICES SHALL BE SEVERED WITH PROPER NOTICE GIVEN TO LOCAL UTILITY COMPANIES HAVING JURISDICTION.
27. THE CONTRACTOR SHALL PROVIDE THE ENGINEER, CITY A MOT PLAN AT PRECONSTRUCTION MEETING. TRAFFIC SHALL BE ALLOWED TO CONTINUE DURING WORK. PROVIDE MEASURES TO DETOUR TRAFFIC AROUND OPEN EXCAVATION WITH ADEQUATE BARRICADES, SIGNAGE AND FLAGPERSON TO DIRECT TRAFFIC. EMERGENCY SERVICES SHALL BE NOTIFIED 48 HOUR IN ADVANCE.
28. IF ANY DEWATERING IS TO OCCUR DURING ANY PHASE OF CONSTRUCTION THEN DEWATERING ACTIVITY SHALL ADHERE TO CHAPTER 40C-22 FAC MORE SPECIFICALLY AS FOLLOWS. PER 40C-22.030(3) A "NOTICED GENERAL SHORT-TERM DEWATERING PERMIT" IS REQUIRED "ONLY IF" DEWATERING EXCEEDS 4 MILLION GALLONS PER DAY, EXCEPT DURING THE FIRST 120 HOURS OF DEWATERING WHEN THE DAILY AND INSTANTANEOUS PUMPAGE RATES SHALL NOT EXCEED 6 MILLION GALLONS PER DAY. AVERAGE DAILY WITHDRAWAL SHALL NOT EXCEED 2 MILLION GALLONS PER DAY FOR THE FIRST 60 DAYS OF THE DEWATERING ACTIVITY AND SHALL NOT EXCEED ONE MILLION GALLONS PER DAY OF A 180 DAY DURATION. EACH SPECIFIC DEWATERING PROJECT SHALL NOT EXCEED 180 DAYS. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ANY DEWATERING ACTIVITY IS BELOW THE SPECIFIED THRESHOLD. OTHERWISE A PERMIT WILL BE REQUIRED AT THE EXPENSE OF THE CONTRACTOR. THE CONTRACTOR SHALL FAMILIARIZE ITSELF WITH CHAPTER 40C-22 FAC AND BE SOLELY RESPONSIBLE FOR OBTAINING AND SUBMITTING FORM RDS-50 TO SJRWMD A MINIMUM OF 10 DAYS PRIOR TO ANY DEWATERING ACTIVITY. SUBMITTAL OF FORM RDS-50 IS NOT REQUIRED IF DEWATERING IS 300,000 GALLONS PER DAY OR LESS AND WILL NOT EXCEED 30 DAYS IN DURATION.

SWPPP INSPECTIONS AND RECORD KEEPING:

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

SITE CLEARING AND GRADING CONSTRUCTION NOTES:

THE FOLLOWING MEASURES REPRESENT MINIMUM STANDARDS TO BE ADHERED TO BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF A PROJECT. THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO BE EMPLOYED WHEN WARRANTED BY EXTREME CONDITIONS AND/OR THE FAILURE OF THE CONTRACTOR TO EMPLOY THE APPROPRIATE EROSION CONTROL BEST MANAGEMENT PRACTICES. FAILURE TO COMPLY WITH THESE PROVISIONS SHALL RESULT IN THE ISSUANCE OF A "STOP WORK ORDER".

1. NO DISTURBANCE OF PROPOSED CONSERVATION EASEMENTS, NATURAL BUFFERS, OR WATER BODIES IS PERMITTED. THE CONTRACTOR SHALL LOCATE THESE AREAS ON SITE AND BARRICADE THEM TO AVOID ANY UNAUTHORIZED CLEARING. BARRICADES AND OTHER PROTECTIVE FENCING ARE TO BE LOCATED AT THE DRIP LINE OF EXISTING NATIVE TREES OR AT THE EDGE OF THE NATIVE UNDER- STORY HABITAT, WHICHEVER IS NEAREST TO THE CONSTRUCTION ACTIVITY.
2. SPECIMEN AND HISTORIC TREES, CONSERVATION EASEMENTS, NATURAL VEGETATION BUFFERS, AND SIMILAR AREAS MUST BE PROTECTED BY BARRICADES OR FENCING PRIOR TO CLEARING. BARRICADES ARE TO BE SET AT THE DRIP LINE OF THE TREES AND MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. BARBED WIRE IS NOT PERMITTED AS A PROTECTIVE BARRIER.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL PROTECTIVE VEGETATION BARRICADES AND EROSION CONTROL STRUCTURES AND MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORK, INCLUDING PRELIMINARY GRUBBING. THESE MEASURES INCLUDE, BUT ARE NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCES, SYNTHETIC JUTE BALES, SILT FENCES, FLOATING TURBIDITY BARRIERS AND OTHER APPROVED BEST MANAGEMENT PRACTICES (BMP's). FURTHER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THE ENTIRE PROJECT. MAINTENANCE SHALL INCLUDE PERIODIC INSPECTION AND REMOVAL OF DEBRIS ABUTTING EROSION CONTROL DEVICES.
4. PRIOR TO THE INSTALLATION OF ANY FILL MATERIALS ON SUBJECT SITE, SILT FENCES SHALL BE INSTALLED (1) ALONG SUBJECT SITE BOUNDARY AND PROPERTY LINES, (2) AT THE EDGE OF CONSERVATION EASEMENTS AND WETLANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED LOCATIONS.
5. WHERE FILL MATERIAL IS INTENDED TO BE INSTALLED ADJACENT TO EXISTING VEGETATION WHICH IS INTENDED TO REMAIN NATURAL, THE CONTRACTOR MAY INSTALL SILT FENCING AS A TREE PROTECTION MEASURE, IN LIEU OF INSTALLING EITHER WOOD BRACING OR ORANGE MESH FENCING. THIS PRACTICE IS ENCOURAGED BY THE CITY. IF THE SILT FENCE FAILS TO PROVIDE ADEQUATE PROTECTION FROM IMPACT DUE TO CONSTRUCTION, THEN ADDITIONAL CONSTRUCTION FENCING OR WOOD BRACING SHALL BE REQUIRED.
6. AT A MINIMUM, THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS. SUFFICIENT GRASS COVERAGE IS TO BE ESTABLISHED WITHIN TWO WEEKS.
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGH SCHEDULING, TO MINIMIZE THE DISTURBANCE OF SITE AREAS THAT HAVE BEEN BROUGHT TO THEIR PROPOSED FINAL GRADE. WITHIN SEVEN (7) DAYS OF BRINGING A SUBJECT AREA TO ITS FINAL GRADE OR INACTIVITY IN CONSTRUCTION, THE CONTRACTOR SHALL INSTALL SEED AND MULCH OR SOD, AS REQUIRED.
8. ONCE AN AREA IS SEEDED OR SODDED, IT MUST BE MAINTAINED BY THE CONTRACTOR TO ALLOW THE GRASS TO BECOME ESTABLISHED.IF THE GRASS IS NOT ESTABLISHED WITHIN TWO WEEKS THE CITY MAY REQUIRE THE CONTRACTOR TO RE-SEED OR A NON-VEGETATIVE OPTION MAY BE EMPLOYED.
9. ABSOLUTELY NO BURYING OF CLEARED MATERIALS IS PERMITTED.
10. THE REMOVAL OF ALL VEGETATION AND TOPSOIL ON THE FUTURE ROADWAY, PARKING AND BUILDING LOT AREAS IS REQUIRED TO BE COMPLETED PRIOR TO THE PLACEMENT OF FILL ON THOSE AREAS. THE TOPSOIL MAY BE TEMPORARILY STOCKPILED AND USED AS TOPSOIL OVER OVER PROPOSED GREEN AREAS SUCH AS PLANT BEDS, SODDED AREAS, AND WHERE TREES ARE TO BE INSTALLED OR RELOCATED.
11. A SIGNED, DATED, AND SEALED LETTER FROM A SOILS ENGINEER OR THE ENGINEER OF RECORD CERTIFYING THAT THE AREAS TO BE FILLED HAVE BEEN STRIPPED OF ORGANIC MATERIALS, MUST BE SUBMITTED TO THE CITY PRIOR TO FILLING.
12. FILL MATERIAL IS TO BE PLACED IN ONE FOOT LIFTS AND COMPACTED TO THE APPROPRIATE DENSITY 98% FOR PAVED AREAS AND 95% FOR BUILDING PADS AND ALL OTHER AREAS AS PER AASHTO T-180).
13. IF ANY MUCK MATERIAL IS DISCOVERED, IT SHALL BE REQUIRED TO BE REMOVED AND REPLACED WITH A SUITABLE MATERIAL THAT IS PROPERLY BACKFILLED, COMPACTED AND TESTED USING AASHTO T-180 MODIFIED PROCTOR METHOD.
14. STOCKPILING IS NOT GENERALLY PERMITTED BY THE CITY WHEN ALLOWED, STOCKPILES SHALL NOT EXCEED SIX FEET IN HEIGHT MEASURED FROM THE ORIGINAL GRADE. AT A MINIMUM, STOCK PILES SHALL BE LOCATED FURTHER FROM A SOILS ENGINEER OR THE ENGINEER OF RECORD CERTIFYING THAT THE AREAS TO BE FILLED HAVE BEEN STRIPPED OF ORGANIC MATERIALS, MUST BE SUBMITTED TO THE CITY PRIOR TO FILLING. IMMEDIATELY UPON PLACEMENT OF THE FINAL LIFT.
15. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION AND THE IMPACT TO NEIGHBORING COMMUNITIES. ADEQUATE WATERING METHODS SHOULD BE EMPLOYED TO ALLOW DAILY COVERAGE OF THE ENTIRE LIMITS OF ALL AREAS THAT DO NOT HAVE AN ESTABLISHED VEGETATIVE COVER. METHODS TO BE EMPLOYED INCLUDE, BUT ARE NOT LIMITED TO, WATER TRUCKS, PERMANENT IRRIGATION SYSTEMS, TEMPORARY SPRINKLER SYSTEMS OPERATED BY PUMPING UNITS CONNECTED TO WET RETENTION PONDS, WATER CANNONS, TEMPORARY IRRIGATION SYSTEMS MOUNTED ATOP STOCKPILE AREAS, AND OTHER METHODS AS DEEMED NECESSARY BY THE CITY.
16. ALL FILL MATERIALS LOCATED BENEATH STRUCTURES AND PAVEMENT SHALL CONSIST OF CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL 'THAT COULD DECOMPOSE.
17. FILL TO BE PLACED IN LANDSCAPED AREAS SHALL HAVE A Ph RANGE BETWEEN 5.5 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, OR MATCH NATIVE EXISTING SOILS.

TEMPORARY SEEDING SPECIFICATION:

GENERAL

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

SEEDING MIXTURES

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

ALL SLOPES AND FLAT GRADE

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

TEMPORARY SEEDING

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

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

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

FDEP WASTEWATER NOTES

1. APPROPRIATE DEFLECTION TEST ARE SPECIFIED FOR ALL FLEXIBLE PIPE. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM. TESTING REQUIREMENTS SPECIFY: 1) NO PIPE SHALL EXCEED A DEFLECTION OF 5%; 2) USING RIGID BALL OR MANDREL FOR THE DEFLECTION TEST WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATIONS, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURE; AND 3) PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.
2. LEAKAGE TEST ARE SPECIFIED REQUIRING THAT: 1) THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM; 2) EXFILTRATION OR INFILTRATION TEST BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET; AND 3) AIR TEST, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828 FOR CLAY PIPE, ASTM C 924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC P

REQUIREMENTS FOR AS-BUILT DRAWINGS (1 OF 2)

IN ORDER TO ENSURE THAT NEW SUBDIVISIONS AND SITE PLANS ARE CONSTRUCTED SUBSTANTIALLY IN ACCORDANCE WITH CITY REGULATIONS AND THE APPROVED DRAWINGS, THE FOLLOWING INFORMATION IS REQUIRED ON ALL SUBDIVISION AS-BUILT DRAWINGS.

1. INDIVIDUAL PLAN AND PROFILE SHEETS FOR ALL ROADS AND SANITARY SEWER LINES, SHOWING MANHOLES, INLETS, AND PIPE CROSSINGS. PLAN AND PROFILE SHEETS SHALL SHOW SANITARY LINES AND ALL OTHER BURIED UTILITIES THAT CROSS SEWER LINES, AND ANY THAT PARALLEL AND ARE WITHIN TEN FEET OF SANITARY SEWER LINES. PLAN VIEWS SHALL BE DRAWN AT A SCALE OF ONE (1) INCH EQUAL TO FORTY (40) FEET HORIZONTAL. PROFILES SHALL BE DRAWN AT ONE (1) INCH EQUAL TO FOUR (4) FEET VERTICAL.
2. PAVEMENT AND CURB WIDTHS SHALL BE VERIFIED AND DIMENSIONED FOR EACH STREET AT EACH BLOCK. (FOR SUBDIVISIONS) AND AS APPROPRIATE TO CONFIRM PAVING LIMITS (ON SITE PLANS).
3. ALL RADII AT INTERSECTIONS SHALL BE VERIFIED AND DIMENSIONED. THIS INFORMATION IS TO BE CLEARLY INDICATED ON THE AS-BUILT.
4. ROADWAY ELEVATIONS SHALL BE RECORDED AT ALL GRADE CHANGES, 100' INTERVALS LONG ROADWAY, AND OTHER INTERVALS AS NEEDED ALONG ALL STREETS. STREET CENTERLINE AND CURB INVERT ELEVATIONS SHALL BE RECORDED AS NOTED. THE AS-BUILT CENTERLINE PROFILE OF ALL STREETS SHALL ALSO BE SHOWN ON THE PLAN AND PROFILE SO IT MAY BE COMPARED TO THE DESIGN PROFILE GRADE LINES. IN THE EVENT THAT THE AS-BUILT CENTERLINE LONGITUDINAL GRADE DOES NOT MEET THE CITY MINIMUM STANDARDS, ADDITIONAL LONGITUDINAL GRADES OF THE ADJACENT CURBING AND SIMILAR ROADWAY CROSS-SECTION SURVEYS TO VERIFY THE CORRECT CROSS SLOPE, SHALL BE REQUIRED TO VERIFY THAT THE SYSTEM WILL FUNCTION AS ORIGINALLY DESIGNED.
5. STORM DRAINAGE STRUCTURES SHALL BE LOCATED AND / OR DIMENSIONED FROM CENTERLINES OR LOT LINES AS APPROPRIATE.
6. STORM DRAINAGE PIPE INVERT AND INLET ELEVATIONS SHALL BE RECORDED AND CLEARLY DENOTED AS AS-BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS-BUILT INFORMATION NEXT TO IT.
7. STORM DRAINAGE PIPE MATERIAL, LENGTH, AND SIZE SHALL BE MEASURED AND / OR VERIFIED. THIS INFORMATION IS TO BE CLEARLY INDICATED ON THE AS-BUILT INFORMATION.
8. ALL APPLICABLE TOPOGRAPHIC INFORMATION PERTINENT TO THE ON-SITE DRAINAGE SYSTEM, SUCH AS DITCHES, SWALES, LAKES, CANALS, ETC., THAT ARE DESIGNED AND CONSTRUCTED BY THE CITY TO VERIFY THE FUNCTIONAL PERFORMANCE OF THE STORMWATER SYSTEM, SHALL BE NOTED. NORMALLY, RECORDING ELEVATIONS EVERY 100 FEET AT THE TOP OF BANK AND TOE OF SLOPE WILL BE REQUIRED. MEASUREMENTS SHALL BE TAKEN AND RECORDED IN ORDER TO ACCURATELY TIE DOWN THESE FEATURES TO THE ROADWAY CENTERLINES AND TO PLAT LINES WHENEVER POSSIBLE. CONTOUR LINES SHALL BE UTILIZED TO GRAPHICALLY DESCRIBE THESE TOPOGRAPHIC FEATURES.
9. RETENTION AREAS SHALL HAVE THEIR TOP-OF-BANK AND BOTTOM ELEVATIONS RECORDED. ACTUAL MEASUREMENTS SHALL BE TAKEN AND DIMENSIONS RECORDED OF THE SIZE OF ALL RETENTION AREAS. MEASUREMENTS SHALL BE DONE FROM TOP-OF-BANK TO TOP-OF-BANK WITH SIDE SLOPES INDICATED. SIGNIFICANT DEVIATIONS SHALL BE NOTED AND THE NECESSARY CALCULATIONS AND PROVIDED RETENTION VOLUMES.
10. ACTUAL MATERIALS USED AND ELEVATIONS AND DIMENSIONS OF OVERFLOW WEIR STRUCTURES AND SKIMMERS SHALL BE NOTED ON THE AS-BUILT.
11. STORM DRAINAGE SWALE CENTERLINES SHALL BE LOCATED AND ELEVATIONS OF FLOW LINE AND TOP OF BANK SHALL BE RECORDED AT EVERY SIDE SLOPE BREAK. SIDE SLOPES SHALL ALSO BE INDICATED.
12. SANITARY SEWER MANHOLES SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. ALL RIM AND INVERT ELEVATIONS SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND AS-BUILT INFORMATION WRITTEN NEXT TO IT.

REQUIREMENTS FOR AS-BUILT DRAWINGS (2 OF 2)

13. FOR SUBDIVISIONS, PROPOSED DESIGN FINISHED FLOOR ELEVATIONS SHALL APPEAR ON ALL SUBDIVISION LOTS ON THE APPROPRIATE PLAN AND PROFILE SHEET AS WELL AS ON THE MASTER DRAINAGE PLAN. SANITARY SEWER LINE LENGTHS, SIZES, MATERIAL ETC., SHALL BE VERIFIED AND RECORDED. THIS INFORMATION IS TO BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION.
14. SEWER LATERALS SHALL BE VERIFIED AND RECORDED AT THEIR CLEAN-OUT LOCATIONS. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TOWARDS UPSTREAM MANHOLES.
15. LIFT STATIONS AND FORCE MAINS SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. FORCE MAIN DEPTH AND LOCATION INCLUDING VALVES WILL BE PROVIDED AND TIED TO PERMANENT ABOVE GRADE FEATURES. DIMENSIONAL AND ELEVATION INFORMATION INDICATED ON THE APPROVED PLAN SHALL BE VERIFIED AND RECORDED. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION. BURIED ELECTRICAL SERVICE LINE SHALL BE CLEARLY DIMENSIONED, LOCATED, AND LABELED.
16. CURB CUTS OR METAL TABS, USED TO MARK SEWER LATERALS, WATER SERVICES AND WATER VALVES, SHALL BE VERIFIED FOR PRESENCE AND ACCURACY OF LOCATION.
17. POTABLE AND RECLAIMED WATER MAIN LINES SHALL BE DIMENSIONED OFF THE BACK OF CURB, OR EDGE OF PAVEMENT IF NO CURB IS PRESENT. WATER MAIN LINE MATERIAL SIZE, LENGTH AND DEPTH PLACED SHALL ALSO BE NOTED. LOCATIONS OF VALVES, TEES AND CROSSES SHALL BE TIED TO (3) THREE PERMANENT ABOVE GRADE FEATURES. THIS INFORMATION SHALL BE CLEARLY INDICATED AS BEING AS-BUILT INFORMATION.
18. POTABLE AND RECLAIMED WATER VALVES, TEES, BENDS, ALL SERVICES, AND FIRE HYDRANTS SHALL BE LOCATED BY TYING TWO (2) SANITARY SEWER MANHOLES, SIMILAR, GATE MAIN VALVES, TEES, AND BENDS SHALL BE LOCATED IN THE SAME MANNER. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TO UPSTREAM MANHOLES.
19. FOR PERPENDICULAR CROSSINGS OF STORMWATER, SANITARY SEWER, POTABLE WATER, OR RECLAIMED WATER, THE AS-BUILT PLANS SHALL CLEARLY INDICATE WHICH UTILITIES ARE LOCATED OVER OR UNDER OTHER UTILITIES AS NECESSARY.
20. ANY SPECIAL FEATURES SUCH AS, CONCRETE FLUMES, LAKE BANKS, WALLS, FENCING, ETC., WHICH WERE A PART OF THE APPROVED CONSTRUCTION DRAWINGS SHOULD ALSO BE LOCATED AND DIMENSIONED.
21. IF AN APPROVED SUBDIVISION PLAT OR SITE PLAN SHOWS A CONSERVATION EASEMENT, THE PROJECT SURVEYOR SHALL PROVIDE THE EXACT LOCATION OF THE SPECIMEN TREE(S) FROM THE RIGHT-OF-WAY OR PROPERTY LINES AND PROPOSED EASEMENT BOUNDARIES ON THE AS-BUILT DRAWINGS. THE AS-BUILT SURVEY SHALL BE USED TO HELP VERIFY THE SUFFICIENCY OF THE CONSERVATION EASEMENT PRIOR TO PLAT RECORDING OR CERTIFICATE OF OCCUPANCY.
22. WHEN STORMWATER, POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER IMPROVEMENTS ARE LOCATED WITHIN AN EASEMENT, THE AS-BUILT DRAWING SHALL ACCURATELY DEPICT THE LOCATION OF THE EASEMENT ITSELF, AS WELL AS THE EXACT LOCATION OF THE IMPROVEMENTS WITHIN THE EASEMENT. THIS IS REQUIRED IN ORDER TO VERIFY THAT THE IMPROVEMENTS HAVE BEEN PROPERLY LOCATED AND TO ENSURE THAT FUTURE SUBSURFACE EXCAVATION TO PERFORM REMEDIAL REPAIR CAN BE ACCOMPLISHED WITHOUT DISTURBANCE BEYOND THE EASEMENT. SUCH DOCUMENTATION AND THE ASSOCIATED PROPOSED EASEMENT DOCUMENT WITH LEGAL DESCRIPTION SHALL BE SUBMITTED FOR CITY REVIEW AND APPROVAL PRIOR TO RECORDING OF SAID EASEMENT. UPON CITY APPROVAL, THE EASEMENT SHALL BE RECORDED VIA A SEPARATE LEGAL INSTRUMENT AND SHALL NOT BE INCLUDED AS PART OF HOMEOWNER COVENANTS & RESTRICTIONS.

NOTE: REFERENCES TO WATER SHALL MEAN BOTH POTABLE AND RECLAIMED WATER.

POTABLE WATER DESIGN NOTES (1 OF 2)

1. ALL SINGLE RESIDENTIAL WATER SERVICES SHALL BE 3/4" OR LARGER, DOUBLE RESIDENTIAL SERVICES SHALL BE 1", AND COMMERCIAL SERVICES SHALL BE 1" OR LARGER. NO 1 1/2" SERVICES ARE ALLOWED. POLYETHYLENE TUBING SHALL BE USED. IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS: POLYETHYLENE TUBING SHALL BE CTS 3406 HIGH DENSITY TUBING, BLUE IN COLOR, AND RATED FOR A MINIMUM OF P.S.I. WITH SDR OF (CTS). THE TUBING SHALL HAVE A VIRGIN HIGH DENSITY POLYETHYLENE CENTER FOR WHICH THE MANUFACTURER SHALL FURNISH A CERTIFICATE OF PURITY. THE TUBING SHALL HAVE UV PROTECTION AND SHALL NOT BE AFFECTED BY DIRECT SUNLIGHT. THE TUBING SHALL COMPLY WITH AND EXCEED THE APPLICABLE STANDARDS OF A.S.T.M. D1248, D3350, D2239, D2737, N.S.F. 14 AND A.W.W.A. C901 AND SHALL COME WITH A LIFETIME WARRANTY. ACCEPTABLE MANUFACTURERS ARE DRISCOPIPE OR EQUAL.
2. WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND AT MAXIMUM SPACINGS OF 1,000 FEET.
3. AT ALL WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE.
4. APPROVED WATER VALVE TYPES ARE THE FOLLOWING:
   A. RESILIENT SEATED GATE VALVES (GVS) TO BE LESS THAN 24" DIAMETER (AWWA C-515), AMERICAN FLOW CONTROL OR APPROVED EQUAL.
   B. BUTTERFLY VALVES GREATER THAN 24" (AWWA C-504)
   C. TAPPING VALVES WITH MECHANICAL TAPPING SLEEVE
5. TYPICALLY, A MINIMUM OF ONE FIRE HYDRANT SHALL BE LOCATED AT EVERY INTERSECTION. OTHER FIRE HYDRANTS SHALL BE LOCATED AT MAXIMUM SPACINGS OF 500 FEET AND/OR MEETING THE LATEST NFPA CODE HOSE LAY ALONG THE STREET FOR ALL RESIDENTIAL BUILDINGS. ALL BUILDINGS WITH FIRE PROTECTION SPRINKLER SYSTEM, THE FIRE DEPARTMENT CONNECTION (FDC) MUST BE WITHIN 50.0 FEET OF UNOBSTRUCTED DISTANCE TO AN APPROVED FIRE HYDRANT LOCATION BY THE FIRE MARSHALL AND OR PUBLIC UTILITIES ENGINEER.
6. AS STANDARD PRACTICE, WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF CURB OR AS APPROVED BY THE CITY, IN CITY RIGHT OF WAY.
7. ALL WATER MAIN PIPE MATERIALS APPROVED FOR POTABLE WATER USE, AND SHALL HAVE A MINIMUM COVER OF 36 INCHES (3.0 FEET) AND A MAXIMUM DEPTH OF 48 INCHES (4.0 FEET) FROM FINAL GRADE EXCEPT AT LOCATIONS OF UTILITY CROSSINGS OR WITH SPECIAL APPROVAL WHEN IT IS DETERMINED TO BE IN THE BEST INTEREST OF THE CITY. TRACER WIRE TO BE INCLUDED.
8. WATER MAINS SHALL BE C-900 PVC OR C-905 CL 150 (COLOR"BLUE") OR D.I.P. PRESSURE CLASS 350 STANDARD CEMENT LINED UNLESS OTHERWISE APPROVED BY THE CITY.
9. WATER DISTRIBUTION SYSTEM SHALL BE DESIGNED TO COMPLY WITH THE CITY'S LATEST FIRE FLOW CODE. ALL DESIGNED FIRE FLOWS SHALL BE VERIFIED FOR THE SUFFICIENCY OF THE DOMESTIC WATER SERVICES.
10. MECHANICAL BOLTSIDE RESTRAINED JOINTS OR GRIPPER GASKETS SHALL BE USED ON ALL RESTRAINED JOINT INSTALLATIONS. MINIMUM DEPTH OF BURY ON PIPES NOT MEETING REQUIRED COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DIPRA THRUST RESTRAINT DESIGN GUIDELINES USING TORQUE WRENCH LIST BY MANUFACTURERS RECOMMENDATION.
11. WATER SERVICES SHALL BE NORMALLY DOUBLE 3/4" OR LARGER SERVICES LOCATED AT SIDE LOT LINES. INSTANCES WHERE SERVICES NEEDED TO BE OFFSET, 1" SINGLE SERVICES SHALL BE SPECIFIED. THESE SERVICES MAY BE OFFSET A MAXIMUM OF 2.0' FROM SIDE LOT LINES.
12. THE CITY REQUIRES DOUBLE WATER SERVICE INSTALLATION WHEREVER FEASIBLE WHEN DESIGN CONFLICTS EXIST, SINGLE WATER SERVICES MAY BE ALLOWED. THIS MAY APPLY AT STORMWATER INLETS, FIRE HYDRANTS, FPL TRANSFORMERS, ETC. AND OTHER LOCATIONS DEEMED APPROPRIATE BY THE CITY.
13. ALL FITTINGS SHALL MEET REQUIREMENTS OF NSF61, LOW LEAD CONTENT.

POTABLE WATER DESIGN NOTES (2 OF 2)

13. ALL PROPOSED POTABLE WATER MAINS SHALL BE FLUSHED, DISINFECTED, PRESSURE TESTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE WHEN APPROPRIATE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE WITH CITY PERSONNEL AT THE WATER TREATMENT PLANT AT LEAST 2 BUSINESS DAYS PRIOR TO BEGINNING FLUSH OF THE MAINS AND PRIOR TO THE COMMENCEMENT OF PRESSURE TESTING.
14. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE PROPOSED LOCATIONS OF ALL WATER MAINS MEASURED FROM THE BACK OF CURB (OR EDGE OF PAVEMENT, IF NO CURB IS USED).
15. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE DESIGN LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF PUBLIC UTILITIES AND STORMWATER INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.
16. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX 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 NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
17. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-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.
18. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
19. 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 SIX INCHES ABOVE THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
20. ANY SPECIAL FEATURES SUCH AS, CONCRETE FLUMES, LAKE BANKS, WALLS, FENCING, ETC., WHICH WERE A PART OF THE APPROVED CONSTRUCTION DRAWINGS SHOULD ALSO BE LOCATED AND DIMENSIONED.
21. IF AN APPROVED SUBDIVISION PLAT OR SITE PLAN SHOWS A CONSERVATION EASEMENT, THE PROJECT SURVEYOR SHALL PROVIDE THE EXACT LOCATION OF THE SPECIMEN TREE(S) FROM THE RIGHT-OF-WAY OR PROPERTY LINES AND PROPOSED EASEMENT BOUNDARIES ON THE AS-BUILT DRAWINGS. THE AS-BUILT SURVEY SHALL BE USED TO HELP VERIFY THE SUFFICIENCY OF THE CONSERVATION EASEMENT PRIOR TO PLAT RECORDING OR CERTIFICATE OF OCCUPANCY.
22. WHEN STORMWATER, POTABLE WATER, RECLAIMED WATER, AND SANITARY SEWER IMPROVEMENTS ARE LOCATED WITHIN AN EASEMENT, THE AS-BUILT DRAWING SHALL ACCURATELY DEPICT THE LOCATION OF THE EASEMENT ITSELF, AS WELL AS THE EXACT LOCATION OF THE IMPROVEMENTS WITHIN THE EASEMENT. THIS IS REQUIRED IN ORDER TO VERIFY THAT THE IMPROVEMENTS HAVE BEEN PROPERLY LOCATED AND TO ENSURE THAT FUTURE SUBSURFACE EXCAVATION TO PERFORM REMEDIAL REPAIR CAN BE ACCOMPLISHED WITHOUT DISTURBANCE BEYOND THE EASEMENT. SUCH DOCUMENTATION AND THE ASSOCIATED PROPOSED EASEMENT DOCUMENT WITH LEGAL DESCRIPTION SHALL BE SUBMITTED FOR CITY REVIEW AND APPROVAL PRIOR TO RECORDING OF SAID EASEMENT. UPON CITY APPROVAL, THE EASEMENT SHALL BE RECORDED VIA A SEPARATE LEGAL INSTRUMENT AND SHALL NOT BE INCLUDED AS PART OF HOMEOWNER COVENANTS & RESTRICTIONS.

NOTE: REFERENCES TO WATER SHALL MEAN BOTH POTABLE AND RECLAIMED WATER.

POTABLE WATER CONSTRUCTION NOTES (1 OF 4)

1. THE CITY'S PUBLIC WORKS DEPARTMENT SHALL BE GIVEN A MINIMUM OF 5 BUSINESS DAYS ADVANCE NOTICE (NOT INCLUDING HOLIDAYS OR WEEKENDS) PRIOR TO BEGINNING ANY POTABLE WATER SYSTEM CONSTRUCTION.
2. DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW WATER MAIN BEING LAID.
3. ALL WATER MAINS SHALL BE LAID ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL. TRENCHES SHALL BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE CITY WITH A MINIMUM COMPACTION OF 98% IN PAVED AREAS AND 95% IN UNPAVED AREAS IN ACCORDANCE WITH AASHTO T-180.
4. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 1 FOOT VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM FREQUENCY OF EVERY 300 FEET.
5. 3" METALLIZED PIPE LOCATION TAPE SHALL BE LOCATED BETWEEN 15" AND 24" BELOW FINISHED GRADE OR AS SPECIFIED BY MANUFACTURER FOR ALL PVC LINES. MARKER TAPE SHALL BE USED ON ALL DUCTILE IRON PIPE, AND TRACER WIRE. AS WELL.
6. ALL WATER SERVICE ENDINGS SHALL BE MARKED WITH A 2"x4" LUMBER (PRESSURE TREATED) EXTENDED 4 FEET ABOVE GRADE, WITH WATER SERVICES SECURED 12" MAXIMUM ABOVE THE GROUND. ALL SERVICES SHALL BE LOCKED AT THE TIME OF FINAL INSPECTION BY THE CONTRACTOR IN THE PRESENCE OF THE CITY INSPECTOR OR CITY PERSONNEL. AFTER THEY HAVE BEEN INSPECTED AND VERIFIED TO OPERATE PROPERLY.
7. AT ALL WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE.
8. ALL WATER VALVES SHALL BE ADJUSTED TO FINISHED GRADE AND THE CAPS PAINTED BLUE TO MAKE THEM PLAINLY VISIBLE.
9. NON FLOW RETRIEVABLE WATER SYSTEMS, WATER VALVES SHALL BE COMPLETELY OPENED BY PUBLIC WORKS PERSONNEL. AT NO TIME SHALL CONTRACTOR OPERATE ANY EXISTING VALVES.
10. ALL FIRE HYDRANTS SHALL BE CONSTRUCTED TO MAKE THEM EASILY ACCESSIBLE TO FIRE PERSONNEL IN CASE OF A FIRE. THE PRIMARY HYDRANT PORT SHOULD ALWAYS FACE THE STREET.
11. AS STANDARD PRACTICE, WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF CURB OR AS APPROVED BY THE CITY, IN CITY RIGHT OF WAY.
12. ALL WATER MAINS SHALL BE NSF AND/OR AWWA APPROVED FOR POTABLE WATER USE, AND SHALL HAVE A MINIMUM COVER OF 36 INCHES (3.0 FEET) AND A MAXIMUM DEPTH OF 48 INCHES (4.0 FEET) FROM FINAL GRADE EXCEPT AT LOCATIONS OF UTILITY CROSSINGS OR WITH SPECIAL APPROVAL WHEN IT IS DETERMINED TO BE IN THE BEST INTEREST OF THE CITY. TRACER WIRE TO BE INCLUDED.
13. WATER MAINS SHALL BE C-900 PVC OR C-905 CL 150 (COLOR"BLUE") OR D.I.P. PRESSURE CLASS 350 STANDARD CEMENT LINED UNLESS OTHERWISE APPROVED BY THE CITY.
14. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE DEPARTMENT OF HEALTH AND AS-BUILTS ARE PROVIDED TO THE CITY PRIOR TO ANY PUBLIC USE OF THIS SYSTEM.

POTABLE WATER CONSTRUCTION NOTES (2 OF 4)

16. IN AREAS WHERE RECLAIMED WATER IS NOT AVAILABLE THE CONTRACTOR SHALL BE REQUIRED TO (UPON SATISFACTORY COMPLETION OF THE PRESSURE TEST) TRANSFER THE WATER FROM THE POTABLE WATER LINES TO THE RECLAIMED WATER LINES FOR UTILIZATION IN THEIR PRESSURE TEST. BACKFLOW PREVENTION SHALL BE REQUIRED.
17. DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA) GUIDELINES, IN THE EVENT THAT PVC PIPE IS SPECIFIED, THE RESTRAINT JOINT SHALL BE MODIFIED IN ACCORDANCE WITH THE RECOMMENDED ADDITIONAL RESTRAINT LENGTH REQUIRED FOR PIPE WRAPPED WITH POLYETHYLENE.
18. DEAD END MAINS SHALL HAVE A FLUSHING DEVICE (MINIMUM 2") LOCATED IN A METER VAULT AT END OF MAIN.
19. MEGALUGS, BOLTLESS RESTRAINED JOINTS OR GRIPPER GASKETS SHALL BE USED ON ALL RESTRAINED JOINT INSTALLATIONS. MINIMUM DEPTH OF BURY ON PIPES NOT MEETING REQUIRED COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DIPRA THRUST RESTRAINT DESIGN GUIDELINES USING TORQUE WRENCHES PER MANUFACTURERS RECOMMENDATION
20. WATER SYSTEMS SHALL BE PRESSURE TESTED AT 150 PSI STATIC PRESSURE FOR A PERIOD OF 2 HOURS PER AWWA STANDARDS.
21. ALL WATER SERVICES SHALL BE MARKED WITH AN "I" SAW CUT INTO THE CURB OR BY METAL TABS SET INTO THE PAVEMENT.
22. ALL WATER VALVES SHALL BE MARKED WITH AN "X" SAW CUT INTO THE CURB OR BY METAL TABS SET INTO THE PAVEMENT. BLOW-OFFS SHALL BE MARKED SIMILARLY, AS WELL. REVERSE TAPPING VALVE SHALL BE MARKED WITH AN "X :" SAW CUT INTO THE CURB OR PAVEMENT WITH THE ARROW POINTING TO THE DIRECTION OF THE PRESSURE MAIN RUN.
23. ALL TAPPING OF MAINS SHALL BE PERFORMED BY THE CONTRACTOR AND WITNESSED BY THE CITY AND BILLED IN ACCORDANCE WITH THE ADOPTED FEE RESOLUTION. SCHEDULING OF TAPS WITH PUBLIC WORKS DEPARTMENT SHALL REQUIRE 5 BUSINESS DAYS NOTICE. DIRECTED TO THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE THE WORK DIRECTLY WITH THE PUBLIC WORKS DEPARTMENT. SUBSEQUENTLY, THE CONNECTION SHALL BE SCHEDULED TO COMMENCE BETWEEN 8:00 A.M. AND NOON ON THE APPROPRIATE DAY.
24. LARGE COMMERCIAL WATER AND RECLAIMED WATER METERS GREATER THAN 3" TAKE A MINIMUM OF 6 WEEKS FOR DELIVERY AFTER ORDER IS PAID TO THE CITY. IN ADDITION ALL METERS AND VAULTS 3" AND GREATER SHALL BE INSTALLED BY THE OWNER/ DEVELOPER/ CONTRACTOR. THE FEE COLLECTED BY THE CITY IS FOR MATERIALS ONLY. ALL METERS, 2" AND LESS, SHALL BE INSTALLED BY THE CITY.
25. THE CITY REQUIRES DOUBLE WATER SERVICE INSTALLATIONS WHEREVER FEASIBLE. WHEN DESIGN CONFLICTS EXIST, SINGLE WATER SERVICES MAY BE ALLOWED. THIS MAY APPLY AT STORMWATER INLETS. FIRE HYDRANTS, FPL TRANSFORMERS, ETC. AND OTHER LOCATIONS DEEMED APPROPRIATE BY THE CITY.
26. ALL PROPOSED POTABLE WATER MAINS SHALL BE FLUSHED, DISINFECTED, PRESSURE TESTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE WHEN APPROPRIATE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE WITH CITY PERSONNEL AT THE WATER TREATMENT PLANT AT LEAST 2 BUSINESS DAYS PRIOR TO BEGINNING FLUSH OF THE MAINS AND PRIOR TO THE COMMENCEMENT OF PRESSURE TESTING.

POTABLE WATER CONSTRUCTION NOTES (3 OF 4)

27. THE CONTRACTOR SHALL BE REQUIRED TO PIG ALL POTABLE MAINS 6" AND LARGER IN DIAMETER AND PRIMARY DISTRIBUTION MAINS LOCATED ON COLLECTOR AND ARTERIAL ROADWAYS. ALL PIGS SHALL BE NEW. NO FOAM PIGS ARE ALLOWED. LAUNCHING AND EXTRACTION POINTS SHALL BE DETERMINED BY THE CONTRACTOR. ALL PRODUCING OPERATIONS SHALL BE WITNESSED BY A PUBLIC WORKS REPRESENTATIVE OR A CITY UTILITY INSPECTOR.
28. WITH RESPECT TO THE CONNECTIONS, ALL NEW MAINS SHALL BE LAID TO PERMIT CONNECTIONS TO BE PERFORMED DURING PERIODS OF LOW FLOW (MIDNIGHT TO 6:00 A.M.) IN ORDER TO MINIMIZE SERVICE DISRUPTION TO EXISTING CUSTOMERS. THE INSTALLATION OF LINE STOPPING DEVICES ON PRESSURE MAIN (POTABLE WATER AND FORCE MAIN) MAY BE REQUIRED ON ANY REQUESTED UTILITY OUTAGE AT THE DISCRETION OF PUBLIC WORKS DEPARTMENT TO MINIMIZE INTERRUPTION TO EXISTING UTILITY CUSTOMERS.
29. THE PHYSICAL TAKING OF EACH AND EVERY WATER SAMPLE FOR BACTERIOLOGICAL TESTING SHALL BE OBSERVED BY THE CITY'S DESIGNATED SITE INSPECTOR. THIS SHOULD NOT IMPACT THE PROJECT SINCE THE CONTRACTOR IS REQUIRED TO PERFORM THIS SAMPLING ACTIVITY WITH THE INSPECTOR. ALL SAMPLE FORMS SHALL BE COMPLETELY FILLED OUT BY THE SAMPLING COMPANY IN ORDER TO BE ACCEPTED. WHEN THE PUBLIC WORKS OFFICE RECEIVES POTABLE WATER CLEARANCE REQUEST REQUIRING SIGNATURE THE CITY'S DISTRIBUTION SUPERVISOR AND/OR DESIGNATED SITE INSPECTOR WILL BE CONTACTED TO CONFIRM THAT THE SYSTEM IS IN PROPER WORKING ORDER (I.E. ALL VALVES, HYDRANTS, AND WATER SERVICES ARE ACCESSIBLE AND OPERABLE). SIMULTANEOUSLY, THE CITY MAY ELECT TO TAKE A RANDOM BACTERIOLOGICAL SAMPLE WITHIN THE NEW SYSTEM TO VERIFY THAT WATER IS SAFE FOR CONSUMPTION. ONCE THE DISTRIBUTION SUPERVISOR AND/OR DESIGNATED SITE INSPECTOR HAVE VERIFIED THAT THE SYSTEM IS IN PROPER WORKING ORDER AND THAT ADEQUATE BACTERIOLOGICAL SAMPLE INDICATES THE WATER IS SAFE FOR CONSUMPTION, THE PUBLIC WORKS OFFICE WILL THEN SIGN OFF ON THE WATER CLEARANCE REQUEST.
30. ALL WORK PERFORMED ON THE POTABLE WATER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE CONSTRUCTED BY A STATE CERTIFIED UNDERGROUND UTILITY CONTRACTOR OR CONTRACTOR LICENSED IN THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
31. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE PROPOSED LOCATIONS OF ALL WATER MAINS MEASURED FROM THE BACK OF CURB (OR EDGE OF PAVEMENT, IF NO CURB IS USED).
32. NEWLY CONSTRUCTED POTABLE WATER SYSTEM EXTENSIONS MAY NOT BE USED PRIOR TO FINAL TESTING, CLEARANCE AND ACCEPTANCE BY THE CITY. THIS INCLUDES CONSTRUCTION WATER REQUIRED FOR SEWER LINE CLEANING OR RELATED USES. BACKFLOW PREVENTION SHALL BE REQUIRED.
33. FIRE HYDRANTS MAY NOT BE INSTALLED WITHIN 20' OF ANY ELECTRICAL TRANSFORMER
34. ALL D.I.P. PIPE (IS) (SEE) FOR WATER TORQUE MAIN AND/OR RECLAIMED WATER MAIN INSTALLATIONS SHALL BE S.D.R. 11 WITH #10 COPPERHEAD TRACER WIRE UNLESS SPECIFICALLY NOTED OTHERWISE. FITTINGS SHALL BE SIZED TO

SANITARY SEWER DESIGN NOTES (1 OF 3)

1. ALL GRAVITY SANITARY SEWER MAINS SHALL BE 8" DIAMETER MINIMUM. COMMERCIAL SERVICE LATERALS WITH MULTIPLE CONNECTIONS SHALL BE GREEN 6" DIR. OR LARGER. ALL SINGLE FAMILY RESIDENTIAL SERVICE LATERALS SHALL BE 4" - SINGLE SERVICES.
2. ALL GRAVITY SANITARY SEWER LINES SHALL BE GREEN PVC SDR 26, ASTM D-3034. IN PLACES WHERE A MINIMUM COVER OF 4.0' CANNOT BE MAINTAINED, AWWA C-900 OR C-905 GREEN PVC DR-25, CLASS 100 OR CONCRETE ENCASEMENT SHALL BE USED. WATER LINES, RECLAIMED LINES, AND STORM DRAINAGE CROSSINGS SHALL ALSO FOLLOW THE CONCRETE ENCASEMENT REQUIREMENT PER THESE STANDARDS AND AS PER REGULATORY REQUIREMENTS.
3. MINIMUM GRAVITY SANITARY SEWER SLOPES ARE AS FOLLOWS.

8" PIPE	0.40 %
10" PIPE	0.30 %
12" PIPE	0.22 %

4. MAXIMUM DEPTH OF SANITARY MANHOLES SHALL BE 15.0'. MAXIMUM DEPTH OF LIFT STATION WET WELLS SHALL BE 20.0'.
5. GRAVITY SANITARY SEWER LINES SHALL BE INSTALLED WHENEVER POSSIBLE UNDER PAVED AREAS WITHIN PUBLIC RIGHTS-OF-WAY. UTILITY EASEMENTS SHALL BE PROVIDED WHENEVER PUBLICLY-OWNED SEWER LINES ARE CONSTRUCTED OUTSIDE OF A PUBLIC RIGHT-OF-WAY.
6. ALL TESTING REQUIRED BY THE CITY SHALL BE PAID FOR BY THE CONTRACTOR / DEVELOPER.
7. ALL LOCAL COLLECTION SANITARY SEWER MANHOLES SHALL BE PRECAST WITH A MINIMUM INSIDE DIAMETER OF 4 FEET.
8. STANDARD MANHOLES SHALL BE LOCATED AT INTERVALS NOT EXCEEDING 350 FEET.
9. INDIVIDUAL SANITARY SERVICE LATERALS SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLES. AND MUST CONNECTED TO SEWER MAIN LINES BY USE OF WYE CONNECTIONS, UNLESS OTHERWISE APPROVED BY THE CITY.
10. FOR SINGLE FAMILY HOMES, SINGLE FOUR INCH SEWER SERVICES LATERALS SHALL BE CONSTRUCTED AT EACH LOT OR UNIT AND LOCATED ON THE DOWNSTREAM SIDE OF THE LOT CENTER LINE. THESE SERVICES SHALL BE EXTENDED 4 FEET ABOVE GROUND AT THE PROPERTY LINE WITH A PVC RISER AND PLUG BEING EASILY VISIBLE FROM THE ROAD. RUBBER SEAL FITTINGS SHALL BE USED ON ALL LINES. NO GLUED JOINTS ARE PERMITTED ON LATERALS.
11. FOR MULTI-FAMILY AND COMMERCIAL SITES, SIX INCH MINIMUM SEWER SERVICES AND CLEANOUTS SHALL BE PROVIDED AS APPROVED BY THE CITY.
12. SANITARY SEWER LIFT STATIONS AND FORCE MAINS, SIZE, MATERIAL, AND DESIGNS SHALL BE APPROVED BY THE CITY. LIFT STATIONS SHALL BE CONSTRUCTED WITH A MINIMUM WET WELL INTERIOR DIAMETER OF 6.0 FEET. FORCE MAINS SHALL BE A MINIMUM 6 INCH DIAMETER.
13. IT SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER TO PREPARE AND SUBMIT FLOTATION CALCULATIONS TO SIZE THE BASE OF THE WET WELL, AND ANY MANHOLES AS DEEMED NECESSARY BY THE CITY.
14. SANITARY SEWER DROP MANHOLES SHALL ONLY BE USED UNDER SPECIAL CONDITIONS AS APPROVED BY THE CITY. DROPS LESS THAN 2.0' SHALL NOT BE ALLOWED.
15. ALL SANITARY SEWER FORCE MAINS, INCLUDING FITTINGS, SHALL BE DIP WITH PROTECTO 401, PVC AWWA C-900, OR C-905 (COLOR "GREEN") (PRESSURE FITTINGS, PRESSURE CLASS 150 OR C-907).

CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
SANITARY SEWER DESIGN NOTES	DETAIL NUMBER SS-1.1

SANITARY SEWER DESIGN NOTES (2 OF 3)

16. SANITARY SEWER MANHOLES WHICH HAVE SEWER FORCE MAINS DISCHARGING DIRECTLY INTO THEM SHALL BE FIBERGLASS OR POLY-ETHYLENE LINED OR EPOXY LINED. RETRO-FITTING OF MANHOLES WITH LINERS SHALL BE REQUIRED WHEN NEW CONNECTIONS SUCH AS THIS ARE MADE. FIBERGLASS SHALL BE A MINIMUM 1/2" THICKNESS UNLESS APPROVED OTHERWISE BY THE CITY. OTHER TYPES OF LINING METHODS AND MATERIALS MAY BE CONSIDERED ON A CASE BY CASE BASIS. UNDER SPECIAL CIRCUMSTANCES WHERE HYDROGEN SULFIDE IS A MAJOR CONCERN MANHOLES UPSTREAM AND/OR DOWNSTREAM OF THE FORCE MAIN TIE-IN OR WET WELL MAY ALSO BE REQUIRED TO HAVE LININGS INSTALLED.
17. ALL SANITARY SEWER MANHOLES SHALL HAVE ALL INTERIOR SURFACES COATED WITH THREE (3) COATS OF WHITE/GRAY OVER RED OVER BLACK EW-1 EPOXY PAINT WITH A TOTAL OF 12 MILS DRY FILM THICKNESS OR BLACK COAL-TAR EPOXY WITH A TOTAL OF 16 MILS THICKNESS. OUTSIDE SURFACE TO BE COATED WITH TWO (2) COATS OF BLACK OVER BLACK EW-1 EPOXY PAINT WITH A TOTAL OF 8 MILS OR ONE (1) COAT OF BLACK COAL-TAR EPOXY WITH A TOTAL OF 8 MILS. ALL COATS SHALL BE APPLIED AT THE FACTORY EXCEPT MINOR FIELD TOUCH UP AT JOINTS AND AT MANHOLE NECK.
18. ALL MANHOLES CONSTRUCTED IN SIDE YARDS, BACKYARDS, AND EASEMENTS OUTSIDE OF THE RIGHT-OF-WAY SHALL BE OUTFITTED WITH FIBERGLASS OR EPOXY LINERS IN COMPLIANCE WITH ASTM-3753 OR OTHER TYPES OF LINERS APPROVED BY THE CITY. IN ADDITION THE CITY MAY REQUIRE LINERS TO BE INSTALLED IN OTHER AREAS WHERE THE PUBLIC WORKS DEPARTMENT BELIEVES THE NEED IS JUSTIFIED SUCH AS IMMEDIATELY UPSTREAM OF FORCE MAINS CONNECTING TO GRAVITY MAINS.
19. ALL SEWER LINES WHICH ARE CONSTRUCTED OUTSIDE OF PUBLIC RIGHTS-OF-WAY WITHIN SIDE YARDS, BACKYARDS, AND OTHER POORLY ACCESSIBLE AREAS SHALL BE CONSTRUCTED OF GREEN C-900 PVC. ABSOLUTELY NO USE OF PLASTIC STYRENE FITTINGS SHALL BE ALLOWED.
20. CONTACT A-2000 PVC PIPE SHALL NOT BE ALLOWED FOR USE.
21. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE LOCATION OF ALL FORCE MAINS, MEASURED FROM THE BACK OF CURB (OR EDGE OF PAVEMENT, IF NO CURBING EXISTS).
22. ALL HDPE PIPE INSTALLED FOR SEWAGE FORCE MAINS SHALL BE SDR 11 WITH #10 COPPER HEAD TRACER WIRE UNLESS SPECIFICALLY NOTED OTHERWISE. THE HDPE PIPE SHALL BE SIZED TO MATCH THE EXTERNAL DIAMETER OF THE PVC TO WHICH IT IS ATTACHED.
23. LANDSCAPE PLANS SHALL CLEARLY DEPICT THE DESIGN LOCATION OF PLANTINGS RELATIVE TO THE LOCATION OF PUBLIC WORKS AND STORMWATER INFRASTRUCTURE IN ORDER TO EVALUATE POTENTIAL CONFLICTS.
24. GREASE INTERCEPTORS ARE REQUIRED FOR ALL COMMERCIAL BUILDINGS HAVING KITCHEN, FOOD PREPARATION OR SERVING FACILITIES AND / OR MISCELLANEOUS USES. GREASE INTERCEPTORS CONSTRUCTED EXTERNAL TO BUILDINGS SHALL BE SIZED IN ACCORDANCE WITH FAC 64-E-6. CALCULATIONS TO DETERMINE SIZING REQUIREMENTS SHALL BE SUBMITTED AS PART OF BUILDING PERMITTING. AN INSPECTION MANHOLE MAY BE REQUIRED IMMEDIATELY DOWN STREAM OF THE GREASE INTERCEPTOR FOR INSPECTION PURPOSES, AS DEEMED APPROPRIATE BY THE CITY.

CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
SANITARY SEWER DESIGN NOTES	DETAIL NUMBER SS-1.2

SANITARY SEWER DESIGN NOTES (3 OF 3)

25. WHERE POTABLE WATER AND SANITARY SEWER MAINS CROSS WITH LESS THAN (18) INCHES OF VERTICAL CLEARANCE OR WHERE THE SEWER MAIN IS ABOVE THE WATER MAIN, THE SEWER MAIN SHALL BE ENCASED WITH CONCRETE OR ENCLOSED IN A WATER TIGHT CARRIER PIPE, OR PRESSURE RATED PVC PIPE (MEETING THE AWWA C-900 OR C-905 SPECIFICATION) FOR A MINIMUM LENGTH OF (20) FEET, CENTERED ON THE POINT OF CROSSING. A MINIMUM HORIZONTAL SEPARATION OF (10) FEET (EDGE TO EDGE) BETWEEN POTABLE WATER MAINS AND SEWER MAINS SHALL BE MAINTAINED WHEN AT ALL POSSIBLE. WHEN THE 10-FOOT HORIZONTAL SEPARATION CANNOT BE MAINTAINED THE WATER MAIN SHALL BE INSTALLED IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF AT LEAST 18" ABOVE THE SEWAGE MAIN. ALTERNATIVELY, THE SEWER MAIN SHALL BE ENCASED WITH CONCRETE OR ENCLOSED IN A WATER TIGHT CARRIER PIPE, OR UPGRADED TO PRESSURE RATED PVC PIPE (MEETING AWWA C-900 OR C-905 SPECIFICATION) AND PRESSURE TESTED AT 150 PSI TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING.
26. CEMENT USED IN CONCRETE MIX FOR PRECAST STRUCTURES SHALL BE TYPE II, ACID RESISTANT AND SULFIDE RESISTANT CONCRETE.
27. MORTAR TO CONTAIN "HYDRATITE" OR APPROVED EQUAL, TO PREVENT SHRINKAGE.
28. PROFILE VIEWS SHALL BE PROVIDED FOR ALL SEWER MAINS. PROFILE VIEWS SHALL BE ON THE SAME SHEET AS THE ASSOCIATED PLAN VIEW AND SHALL INCLUDE THE FOLLOWING INFORMATION.
    A. SIZE, SLOPE, LENGTH AND CLASS OF PIPE
    B. MANHOLE RIM AND INVERT ELEVATIONS
    C. UTILITY CROSSINGS WITH VERTICAL SEPARATION
    D. SHOW PROPOSED SEWER AND EXISTING UTILITY
    E. EXISTING GROUND PROFILE
    F. MATCH LINE
    G. VICINITY MAP
    H. PROFILE VIEW STATIONS TO COINCIDE WITH PLAN VIEW STATIONS

CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
SANITARY SEWER DESIGN NOTES	DETAIL NUMBER SS-1.3

SANITARY SEWER CONSTRUCTION NOTES (1 OF 4)

1. THE CITY'S PUBLIC WORKS DEPARTMENT SHALL BE GIVEN A MINIMUM OF 2 BUSINESS DAYS ADVANCE NOTICE (NOT INCLUDING HOLIDAYS OR WEEKENDS) PRIOR TO BEGINNING ANY SANITARY SEWER CONSTRUCTION.
2. ALL GRAVITY SANITARY SEWER LINES SHALL BE GREEN PVC SDR 26, ASTM D-3034. IN PLACES WHERE A MINIMUM COVER OF 4.0' CANNOT BE MAINTAINED, AWWA C-900 OR C-905 GREEN PVC DR-25, CLASS 100 OR CONCRETE ENCASEMENT SHALL BE USED. WATER LINES, RECLAIMED LINES, AND STORM DRAINAGE CROSSINGS SHALL ALSO FOLLOW THE CONCRETE ENCASEMENT REQUIREMENT PER THESE STANDARDS AND AS PER REGULATORY REQUIREMENTS.
3. GRAVITY SANITARY SEWER LINE CONSTRUCTION SHALL BE ACCOMPLISHED BY THE USE OF A LASER INSTRUMENT UNLESS ANOTHER METHOD IS PREVIOUSLY APPROVED BY THE CITY.
4. THE CONTRACTOR SHALL AT ALL TIMES, DURING PIPE LAYING OPERATIONS DEWATER THE GROUND SUFFICIENTLY TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6" BELOW THE PIPE BEING LAID WITHIN THE AREA OF THE TRENCH.
5. ALL PIPES SHALL BE LAID ON A FIRM FOUNDATION. SOFT OR SPONGY BEDDING FOR PIPES IS NOT ACCEPTABLE. ANY UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH A DRY, COMPACTED, GRANULAR MATERIAL SATISFACTORY TO THE CITY.
6. ON ALL EXCAVATION AND BACKFILLING THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING AND BRACING IN ACCORDANCE TO O.S.H.A. GUIDELINE IN ORDER TO PROVIDE FOR THE SAFETY OF WORKMEN, AS WELL AS REPRESENTATIVES OF THE CITY, THE DESIGN ENGINEER, AND THE DEVELOPER.
7. ALL TRENCHES SHALL BE BACKFILLED WITH ACCEPTABLE MATERIAL AND COMPACTED TO THE SPECIFIED MINIMUM COMPACTION (95% IN UNPAVED AREAS AND 98% IN PAVED AREAS) OF THE MAXIMUM DENSITY OF THAT MATERIAL BASED ON THE ASHTO T-180 MODIFIED PROCTOR TEST.
8. THE CONTRACTOR SHALL EMPLOY AN INDEPENDENT TESTING LABORATORY AT HIS OWN EXPENSE TO INSURE THAT COMPACTION OF ALL FILL MATERIAL IS COMPLETED PROPERLY. TESTS SHALL BE DONE ONE FOOT ABOVE THE PIPE AND THEN AT ONE FOOT VERTICAL INTERVALS TO THE TOP OF THE TRENCH. NO ADDITIONAL BACKFILL SHALL BE COMPLETED AND TEST DOCUMENTS SUBMITTED TO THE CITY AT A MINIMUM FREQUENCY OF ONE SET OF TESTS BETWEEN EACH MANHOLE AND ONE ADDITIONAL SET OF TESTS AT EVERY MANHOLE. IDENTIFICATION OF TEST LOCATIONS SHALL BE CLEARLY INDICATED ON TEST REPORTS. TEST RESULTS SHALL BE FORWARDED PROMPTLY TO THE CITY'S DESIGNATED SITE INSPECTOR.
9. THE CONTRACTOR SHALL INSTALL A MECHANICAL PULL THROUGH OR SIMILAR DEVICE AS MAY BE APPROVED BY THE CITY FOR THE FULL LENGTH OF ALL PVC SEWAGE FORCE MAINS. THIS PIPE LOCATOR AID SHALL BE INSTALLED BETWEEN 15" AND 24" BELOW FINISHED GRADE OR AS DIRECTED BY THE MANUFACTURER. THE PIPE LOCATOR AID SHALL BE USED FOR SANITARY SEWER AND FORCE MAIN. A CONTINUOUS NO. 10 COPPER HEAD WIRE SHALL BE INSTALLED WITH FINAL BREAKOUT AT ALL MANHOLES.
10. ALL TESTING REQUIRED BY THE CITY SHALL BE PAID FOR BY THE CONTRACTOR / DEVELOPER.
11. MANHOLE RIMS SHALL MATCH FLUSH WITH THE FINISH GRADE ELEVATION IN PAVED AREAS AND A MINIMUM OF 0.1 FEET AND MAXIMUM OF 0.2 FEET ABOVE FINISH GRADE ELEVATION IN UNPAVED AREAS.
12. THE CONTRACTOR SHALL CONSTRUCT SANITARY SEWER MANHOLES IN SUCH A WAY THAT SEWER LINES DO NOT INTERSECT SEALED JOINTS BETWEEN SECTIONS OF THE MANHOLE.
13. RUBBER BOOTS AND 316 STAINLESS STEEL BANDS SHALL BE UTILIZED IN THE CONNECTION OF THE SEWER MAIN TO THE MANHOLES (SEE STANDARD MANHOLE AND BOOT DETAILS).

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SANITARY SEWER DESIGN NOTES (2 OF 4)

14. INDIVIDUAL SANITARY SERVICE ON NEW CONSTRUCTION SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLES, AND MUST CONNECTED TO SEWER MAIN LINES BY USE OF WYE CONNECTIONS, UNLESS OTHERWISE APPROVED BY THE CITY.
15. FOR SINGLE FAMILY HOMES, SINGLE FOUR INCH SEWER SERVICES LATERALS SHALL BE CONSTRUCTED AT EACH LOT OR UNIT AND LOCATED ON THE DOWNSTREAM SIDE OF THE LOT CENTER LINE. THESE SERVICES SHALL BE EXTENDED 4 FEET ABOVE GROUND AT THE PROPERTY LINE WITH A PVC RISER AND PLUG BEING EASILY VISIBLE FROM THE ROAD. RUBBER SEAL FITTINGS SHALL BE USED ON ALL LINES. NO GLUED JOINTS ARE PERMITTED ON LATERALS.
16. ALL SANITARY SEWER MANHOLE COVERS SHALL HAVE THE WORDS "HOLLY HILL FLORIDA SANITARY SEWER" CAST INTO THEM.
17. FORCE MAIN SYSTEMS SHALL BE PRESSURE TESTED AT 100 PSI STATIC PRESSURE FOR A PERIOD OF 2 HOURS OR AS OTHERWISE DIRECTED BY THE CITY.
18. ALL SANITARY SEWER FORCE MAINS SHALL USE A THRUST RESTRAINT JOINT METHOD IN COMPLIANCE WITH THE DUCTILE IRON PIPE RESEARCH ASSOCIATION GUIDELINES MODIFIED TO ACCOMMODATE PVC PIPE BY FOLLOWING THE RECOMMENDED INCREASE IN RESTRAINT LENGTH CORRESPONDING TO THE INSTALLATION OF POLYETHYLENE WRAP. IN NO INSTANCE SHALL THRUST BLOCKS BE PERMITTED.
19. THE CITY MAY REQUIRE ALL NEW SANITARY SEWER GRAVITY SYSTEMS TO BE SMOKE TESTED PRIOR TO FINAL ACCEPTANCE. ALL TESTING MUST BE DONE IN THE PRESENCE OF THE CITY'S DESIGNATED SITE INSPECTOR.
20. THE CITY RESERVES THE RIGHT TO REQUIRE THE DEVELOPER TO PERFORM VACUUM TESTING OF ALL SANITARY MANHOLES, AIR TEST SEWER MAINS, AND REQUIRES THAT ALL SANITARY SEWER MAIN LINES BE TELEVISED PRIOR TO FINAL ACCEPTANCE. LATERALS SHALL BE TELEVISED UPON DEMAND BY THE CITY PRIOR TO FINAL ACCEPTANCE WHEN IT IS SUSPECTED THAT A PROBLEM EXISTS.
21. ALL SEWER MAINS, PRIOR TO FINAL ACCEPTANCE BY THE CITY AND PRIOR TO ANY FINAL PAVING OPERATIONS, SHALL BE CLEANED AND SUBMITTED TO THE CITY USING A "PAN AND TILT CAMERA" WITH DEPTH GAUGE IN FRONT OF THE CAMERA BY A CITY APPROVED CONTRACTOR. THE CAMERA SHALL RUN FROM DOWN STREAM MANHOLE TO UP STREAM MANHOLE. CITY INSPECTOR SHALL BE NOTIFIED IN ADVANCE AND BE PRESENT DURING THE TELEVISING OF THE SEWER SYSTEM. THE VIDEO SHALL BE NON-STOP WITH AUDIO DESCRIBING WHAT IS BEING REVIEWED. WRITTEN VIDEO LOGS DESCRIBING THE CONDITION OF THE LINES SHALL ACCOMPANY THE VIDEO SUBMISSION TO THE CITY PRIOR TO COMMENCING ANY INSTALLATION OF ASPHALT OR CONCRETE PAVEMENT. THE CITY MAY REQUIRE ADDITIONAL VIDEO TAPING, VIDEO TAPING OF LATERALS, AND/OR INFILTRATION / EXFILTRATION TESTS IF DEFECTS ARE APPARENT OR WORKMANSHIP IS QUESTIONABLE.
22. ALL SEWER LINES WHICH ARE CONSTRUCTED OUTSIDE OF PUBLIC RIGHTS-OF-WAY WITHIN SIDE YARDS, BACKYARDS, AND OTHER POORLY ACCESSIBLE AREAS SHALL BE CONSTRUCTED OF GREEN C-900 PVC. ABSOLUTELY NO USE OF PLASTIC STYRENE FITTINGS SHALL BE ALLOWED.
23. SEWER LATERAL LOCATIONS SHALL BE MARKED ALONG THE OUTSIDE OF THE CURB WITH A SAW CUT "V", OR BY A METAL TAB SET INTO THE PAVEMENT.
24. EZ-WRAP PLASTIC, AS MANUFACTURED BY PRESS SEAL GASKET CORPORATION, SHALL BE USED ON THE OUTSIDE OF ALL MANHOLE AND WETWELL JOINTS. APPLY ONE LAYER OF 9" WRAP CENTERED ON EACH JOINT. A CITY INSPECTOR SHALL PERSONALLY INSPECT ALL JOINT SEALS PRIOR TO BACKFILLING OPERATIONS.

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SANITARY SEWER DESIGN NOTES (3 OF 4)

25. ALL PROPOSED SEWER FORCE MAINS SHALL BE FLUSHED, PRESSURE TESTED, PIGGED AND CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE WITH CITY PERSONNEL AT THE WATER OR WASTEWATER TREATMENT PLANT (AS APPROPRIATE) AT LEAST 2 BUSINESS DAYS PRIOR TO BEGINNING A FULL-DIAMETER FLUSH OF THE MAINS AND PRIOR TO THE COMMENCEMENT OF PRESSURE TESTING (SUBJECT TO AVAILABILITY).
26. THE CONTRACTOR SHALL BE REQUIRED TO PIG ALL FORCE MAINS IN EXCESS OF 6" IN DIAMETER AND PRIMARY TRANSMISSION MAINS LOCATED ON COLLECTOR AND ARTERIAL ROADWAYS. LAUNCHING AND RETRACTION POINTS SHALL BE DETERMINED BY THE CONTRACTOR. ALL PIGGING OPERATIONS SHALL BE WITNESSED BY A CITY REPRESENTATIVE OR INSPECTOR.
27. AS A GENERAL RULE, THE NUMBER OF JOINTS SHALL BE LIMITED WHENEVER POSSIBLE. IN SPECIAL CASES WHERE A POINT REPAIR TO AN 8"TO 12" PVC SEWER MAIN IS REQUIRED, THE PROPER RIGID WRAP AROUND SLEEVE SUCH AS A JCM-210 OVERSIZED DUCTILE IRON COUPLING OR AN APPROVED EQUAL MAY BE ALLOWED BY SPECIAL APPROVAL BY THE CITY.
28. ALL IN-LINE SANITARY SEWER FORCE MAIN VALVES SHALL BE RESILIENT SEAT (AWWA C-509 OR C-515) VALVES FEATURING AN EPOXY LINED DUCTILE IRON BODY.
29. ALL TAPPING OF PRESSURE MAINS AND CORING OF MANHOLES SHALL BE PERFORMED BY THE CITY AND BILLED IN ACCORDANCE WITH THE ADOPTED FEE RESOLUTION. SCHEDULING OF THESE CONNECTIONS SHALL REQUIRE A MINIMUM 2 BUSINESS DAYS NOTIFICATION DIRECTED TO THE CITY'S DESIGNATED SITE INSPECTOR WHO SHALL COORDINATE THE WORK DIRECTLY WITH THE PUBLIC WORKS DEPARTMENT. SUBSEQUENTLY, THE CONNECTION SHALL BE SCHEDULED TO COMMENCE BETWEEN 8:00 A.M. AND NOON ON THE APPROPRIATE DAY ESTABLISHED BY CITY. WITH RESPECT TO TIE-IN CONNECTIONS AND CORING OPERATIONS, THE CITY REQUIRES THAT THE PROPER CONNECTIONS TO BE PERFORMED DURING PERIODS OF LOW FLOW (MIDNIGHT TO 6:00 A.M.) IN ORDER TO MINIMIZE SERVICE DISRUPTION TO EXISTING CUSTOMERS.
30. ALL WORK PERFORMED ON SANITARY SEWER FACILITIES OWNED OR PROPOSED TO BE OWNED BY THE CITY SHALL BE CONSTRUCTED BY AN UNDERGROUND UTILITY CONTRACTOR, OR LICENSED UTILITY CONTRACTOR, IS LICENSED BY THE STATE OF FLORIDA AND REGISTERED WITH THE CITY.
31. UPON CONSTRUCTION COMPLETION AND ACCEPTANCE OF THE SYSTEM, IT SHALL BE THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THAT THE SYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ASHLAND PROVIDED TO THE CITY PRIOR TO MAIN USE OF THE SYSTEM.
32. FOR CONSTRUCTION PURPOSES, THE PLANS SHALL DIMENSION THE LOCATION, OF ALL FORCE MAINS MEASURED FROM THE BACK OF CURB (OR EDGE OF PAVEMENT, IF NO CURBING EXISTS).
33. ALL HDPE PIPE INSTALLED FOR SEWAGE FORCE MAINS SHALL BE SDR 11 WITH #10 COPPER HEAD TRACER WIRE UNLESS SPECIFICALLY NOTED OTHERWISE.THE HDPE PIPE SHALL BE SIZED TO MATCH THE EXTERNAL DIAMETER OF THE PVC TO WHICH IT IS ATTACHED.
34. ALL P.V.C. PIPE SHALL BE STORED IN SUCH A WAY AS TO PREVENT WARPING, DEFLECTION, OR DEFORMATION. ANY PIPE DEEMED TO BE MISSHAPED IN ANY WAY FOR ANY REASON SHALL BE REJECTED.
35. NO USED, RE-USED, RUSTED, SECOND HAND, OR ANY MATERIAL THAT IS NOT NEW SHALL BE USED IN ANY UTILITY IMPROVEMENT PROJECTS WITHIN THE CITY'S SERVICE AREA.

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SANITARY SEWER DESIGN NOTES (4 OF 4)

36. WHERE POTABLE WATER AND SANITARY SEWER MAINS CROSS WITH LESS THAN (18) INCHES OF VERTICAL CLEARANCE OR WHERE THE SEWER MAIN IS ABOVE THE WATER MAIN, THE SEWER MAIN SHALL BE ENCASED WITH CONCRETE OR ENCLOSED IN A WATER TIGHT CARRIER PIPE, OR PRESSURE RATED PVC PIPE (MEETING THE AWWA C-900 OR C-905 SPECIFICATION) FOR A MINIMUM LENGTH OF (20) FEET, CENTERED ON THE POINT OF CROSSING. A MINIMUM HORIZONTAL SEPARATION OF (10) FEET (EDGE TO EDGE) BETWEEN POTABLE WATER MAINS AND SEWER MAINS SHALL BE MAINTAINED WHEN AT ALL POSSIBLE. WHEN THE 10-FOOT HORIZONTAL SEPARATION CANNOT BE MAINTAINED THE WATER MAIN SHALL BE INSTALLED IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF AT LEAST 18" ABOVE THE SEWAGE MAIN. ALTERNATIVELY, THE SEWER MAIN SHALL BE ENCASED WITH CONCRETE OR ENCLOSED IN A WATER TIGHT CARRIER PIPE, OR UPGRADED TO PRESSURE RATED PVC PIPE (MEETING AWWA C-900 OR C-905 SPECIFICATION) AND PRESSURE TESTED AT 150 PSI TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING.
37. CEMENT USED IN CONCRETE MIX FOR PRECAST STRUCTURES SHALL BE TYPE II, ACID RESISTANT AND SULFIDE RESISTANT CONCRETE.
38. MORTAR TO CONTAIN "HYDRATITE" OR APPROVED EQUAL, TO PREVENT SHRINKAGE
39. CONTRACTORS SHALL PROVIDE THICKER MANHOLE WALLS AND BASES AS REQUIRED TO PREVENT FLOTATION BASED ON HIGH GROUND WATER TABLE ELEVATIONS AS DETERMINED USING ACCEPTED ENGINEERING PRACTICES AND/OR APPROVED BY PUBLIC WORKS DEPT.
40. SHOP DRAWINGS FOR ALL STRUCTURES SHALL BE SUBMITTED TO AND APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION WITH TWO COPIES FORWARDED BY THE DESIGN ENGINEER TO THE CITY.
41. NO BUG HOLES OR HONEYCOMB WILL BE ACCEPTED.
42. ALL SANITARY SEWER MANHOLES SHALL HAVE ALL INTERIOR SURFACES COATED WITH THREE (3) COATS OF WHITE/GRAY OVER RED OVER BLACK EW-1 EPOXY PAINT WITH A TOTAL OF 12 MILS THICKNESS OR BLACK COAL-TAR EPOXY WITH A TOTAL OF 16 MILS THICKNESS. OUTSIDE SURFACE TO BE COATED WITH TWO (2) COATS OF BLACK OVER BLACK EW-1 EPOXY PAINT WITH A TOTAL OF 8 MILS AND ONE (1) COAT OF BLACK COAL-TAR EPOXY WITH A TOTAL OF 8 MILS. ALL COATS SHALL BE APPLIED AT THE FACTORY EXCEPT MINOR FIELD TOUCH UP AT JOINTS AND AT MANHOLE NECK.

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STORM DRAINAGE DESIGN AND CONSTRUCTION NOTES (1 OF 2)

ALL MATERIALS AND INSTALLATION METHODS USED FOR LAND DEVELOPMENT CODE REQUIRED IMPROVEMENTS FOR SUBDIVISIONS AND SITE PLANS SHALL BE IN CONFORMANCE WITH THE CITY, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), AND THE FDOT STANDARDS PLANS (LATEST EDITION).

1. ALL STORM SEWERS AND CULVERTS LOCATED IN ROADWAY RIGHTS-OF-WAY AND ROADWAY EASEMENTS SHALL BE REINFORCED CONCRETE PIPE. CORRUGATED METAL PIPE, POLYVINYL CHLORIDE PIPE, AND R.O.W., PIPE MAY BE MADE OF ALTERNATE MATERIALS INCLUDING:
   A. SMOOTH INNER WALL HIGH DENSITY POLYETHYLENE (HDPE) IN ACCORDANCE WITH AASHTO M-294, AASHTO M#P7, ASTM D3350 AND ASTM D2412 FOR SIZES UP TO 42" IN DIAMETER
   B. PVC IN ACCORDANCE WITH THE PROVISION NOTED IN THE "SEWER DETAILS" OF THESE SPECIFICATIONS.
2. ALL STORM SEWER PIPE JOINTS LOCATED IN ROADWAY RIGHTS-OF-WAY AND ROADWAY EASEMENTS SHALL BE ENTIRELY WRAPPED WITH FILTER FABRIC WITH A MINIMUM WIDTH OF 24" AND A MINIMUM OF 24" OVERLAP SECURED WITH PLASTIC OR STAINLESS BANDS. GASKETS ARE NOT PERMITTED AS AN EQUIVALENT SUBSTITUTE FOR MEETING. THIS REQUIREMENT. THIS PRACTICE IS ENCOUNTERED ON PRIVATE SITES ADDITIONALLY, ALL JOINTS SHALL BE RUBBER GASKETED FOR BOTH ROUND AND ELLIPTICAL PIPE.
3. DEPTH OF COVER MEASURED TO THE TOP OF PIPE (NOT INCLUDING THE BELL JOINT) SHALL BE A MINIMUM OF 2.0'. DEVIATION FROM THIS REQUIREMENT MAY BE ALLOWED BY REDUCING THE PIPE'S STRUCTURAL CAPACITY. THIS DEVIATION MUST BE SPECIFIED ON THE PLANS APPROVED FOR CONSTRUCTION AND SUBSEQUENTLY REFLECTED ON THE SHOP DRAWINGS AND AS-BUILT PLANS.
4. ALL STORM DRAINAGE PIPES LOCATED IN ROADWAY RIGHTS-OF-WAY AND ROADWAY EASEMENTS SHALL BE A MINIMUM OF FIFTEEN INCH (15") DIAMETER OR EQUIVALENT AND BE DESIGNED FOR A MINIMUM OF A TWENTY-FIVE (25) YEAR STORM OF TWENTY-FOUR (24) HOUR DURATION. STORM DRAINAGE PIPES SMALLER THAN 15" ARE PERMITTED ON PRIVATE SITE PLANS PROVIDING THAT MAINTENANCE SHALL BE PERFORMED BY THE OWNER.
5. STORM INLETS, MANHOLES, AND CATCH BASINS SHALL BE EITHER POURED IN PLACE OR PRECAST REINFORCED CONCRETE. STRUCTURES SHALL BE REQUIRED AT EACH CHANGE OF PIPE SIZE OR CHANGE IN PIPE DIRECTION. ALL STRUCTURES SHALL BE IN COMPLIANCE WITH ASTM C-478 AND SHALL HAVE 8" THICK WALLS. 6" THICK WALLS MAY BE PERMITTED PROVIDING THAT THE PLANS SPECIFY INCREASED REINFORCEMENT IN ACCORDANCE WITH FDOT STANDARD PLANS (LATEST EDITION). IN ADDITION, THIS REQUIREMENT MUST BE REFLECTED ON BOTH THE SHOP DRAWING AND AS-BUILT PLANS.
6. STORM INLETS SHALL BE SPACED IN SUCH A MANNER AS TO ACCEPT ONE HUNDRED 6. (100) PERCENT OF THE DESIGN STORM RUNOFF WITHOUT IMPEDING THE FLOW OF TRAFFIC. FOR ROADWAY SECTIONS WITH DESIGN SPEEDS OF 45 MPH AND LESS AND WITHOUT FULL WIDTH SHOULDERS, SPREAD RESULTING FROM A RAINFALL INTENSITY OF FOUR INCHES (4") PER HOUR SHALL NOT EXCEED ONE-HALF OF THE TRAVEL LANE ADJACENT TO THE GUTTER. FOR SITE PLANS, INLET SPACING SHALL BE DESIGNED TO ACCEPT ONE HUNDRED (100) PERCENT OF THE RUNOFF FROM A R

VOLUSIA COUNTY NOTES:

1. NOTIFY VOLUSIA COUNTY DEVELOPMENT ENGINEERING DIVISION AT (386) 736-5926 A MINIMUM OF 24 HOURS PRIOR TO THE START OF CONSTRUCTION. FAILURE OF THE PERMITTEE TO OBTAIN THE APPROPRIATE INSPECTIONS PRIOR TO PROCEEDING WITH WORK SHALL NOT RELIEVE THE PERMITTEE FROM REEXCAVATION OR OTHER MEASURES NECESSARY FOR THE INSPECTION OF WORK.
2. VOLUSIA COUNTY TRAFFIC ENGINEERING (386) 736-5968 IS NOT A MEMBER OF SUNSHINE ONE CALL. WHEN REQUESTING LOCATES, PLEASE PROVIDE A MINIMUM ADVANCED NOTIFICATION OF TWO (2) BUSINESS DAYS PRIOR TO PROPOSED WORK.
3. COORDINATION WITH VOLUSIA COUNTY TRAFFIC OPERATIONS (386) 239-6535 IS REQUIRED WITH A MINIMUM ADVANCED NOTICE OF SEVEN (7) DAYS PRIOR TO ANY SIDEWALK, LANE OR ROAD CLOSURE (INCLUDING FLAGGING OPERATIONS).
4. OPERATIONS WITHIN THE COUNTY RIGHT-OF-WAY SHALL NORMALLY BE CONDUCTED 7:00 AM TO 7:00 PM, MONDAY THROUGH FRIDAY. ANY DEVIATION FROM THESE HOURS REQUIRES PRIOR APPROVAL FROM THE COUNTY DEVELOPMENT ENGINEER. EMERGENCY REPAIRS ARE EXCLUDED FROM THIS TIME RESTRICTION.
5. ALL EXISTING SIDEWALKS WITHIN COUNTY RIGHT-OF-WAY SHALL EITHER REMAIN OPEN OR BE PROVIDED A TEMPORARY WALKWAY IN ACCORDANCE WITH THE CURRENT VERSION OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD INDEX NO. 660. ANY DAMAGE TO SIDEWALKS SHALL BE REPAIRED AND/OR REPLACED IN LIKE KIND BY THE CONTRACTOR. NEW SIDEWALKS AND SECTIONS THROUGH DRIVEWAYS MUST BE AT A 1.5% CROSS SLOPE AND 2% MAXIMUM CROSS SLOPE PER ADA STANDARDS.
6. DRIVING OR STAGING OF CONSTRUCTION VEHICLES OR MATERIALS IS NOT PERMITTED WITHIN THE COUNTY RIGHT-OF-WAY OR ON PEDESTRIAN WALKWAYS AND PATHS. THERE SHALL BE NO OVERNIGHT CONSTRUCTION VEHICLE RELATED PARKING, CONSTRUCTION MATERIAL PLACEMENT OR STORAGE OF ANY KIND PERMITTED WITHIN THE COUNTY RIGHT-OF-WAY.
7. NO TRENCH OR EXCAVATION SHALL BE LEFT OPEN OR UNATTENDED OVERNIGHT, UNLESS APPROVED BY THE COUNTY DEVELOPMENT ENGINEERING INSPECTOR. EXCAVATIONS SHALL MEET THE DROP OFF PROTECTION REQUIREMENTS OF THE LATEST FDOT DESIGN STANDARD INDEX NO. 600.
8. RESTORATION SHALL BE REQUIRED FOR ANY DAMAGE TO SIDEWALKS, CURBS, OR OTHER EXISTING STRUCTURES IN THE RIGHT-OF-WAY. ALL DISTURBED AREAS WITHIN THE COUNTY RIGHT OF WAY SHALL BE RE-GRADED AND SODDED. SEED AND MULCH IS NOT AN ACCEPTABLE ALTERNATIVE TO SODDING.

IRRIGATION NOTES:

1. IRRIGATION SHALL BE INSTALLED IN ACCORDANCE WITH VOLUSIA COUNTY WATERWISE ORDINANCE REQUIREMENTS.
2. IRRIGATION SYSTEM WILL BE PERMITTED THROUGH VOLUSIA COUNTY HEALTH DEPARTMENT.
3. AUTOMATIC IRRIGATION CONTROLLERS, WHEN UTILIZED, SHALL CONTAIN A FUNCTIONAL RAIN SENSOR DEVICE, CAPABLE OF BEING SET TO ONE MINUTE RUN TIMES, AND BATTERY BACKUP CAPABILITY TO RETAIN PROGRAMMING IN THE EVENT OF A POWER FAILURE.
4. A RAIN SENSOR PLACED ON A STATIONARY STRUCTURE, FREE AND CLEAR OF ANY OVERHEAD OBSTRUCTIONS AND ABOVE THE HEIGHT OF THE SPRINKLER COVERAGE.
5. EQUIPMENT WITH CHECK VALVES USED IN LOW-LYING AREAS TO PREVENT LOW HEAD DRAINAGE.
6. BACKFLOW PREVENTION METHODS AND OTHER PROVISIONS PRESCRIBED IN SECTION 74-42.
7. IRRIGATION DESIGN WITH THE APPROPRIATE UNIFORMITY FOR THE TYPE OF PLANT BEING GROWN AND FOR THE TYPE OF SOIL.
8. IRRIGATION SYSTEM EQUIPMENT INSTALLED AS DESIGNED.
9. IRRIGATION ZONES DIVIDED ACCORDING TO: AVAILABLE FLOW RATE, VEGETATED GROUPINGS (I.E., TURF, SHRUBS, NATIVE PLANTS, ETC.), SPRINKLER TYPES (I.E., SPRINKLERS WITH MATCHING PRECIPITATION RATES) AND SOIL CHARACTERISTICS.
10. SPRAY HEADS AND ROTORS NOT MIXED IN SAME ZONE.
11. DISTRIBUTION EQUIPMENT IN A GIVEN ZONE HAVING MATCHED PRECIPITATION RATES.
12. APPLICATION RATES THAT AVOID RUNOFF AND PERMIT UNIFORM WATER INFILTRATION INTO THE SOIL, CONSIDERING LAND SLOPE, SOIL HYDRAULIC PROPERTIES, VEGETATIVE GROUND COVER AND PREVAILING WINDS.
13. A MINIMUM SEPARATION OF FOUR INCHES BETWEEN DISTRIBUTION EQUIPMENT AND PAVEMENT.
14. A MINIMUM SEPARATION OF 12 INCHES BETWEEN DISTRIBUTION EQUIPMENT AND BUILDINGS AND OTHER VERTICAL STRUCTURES.
15. NO DIRECT SPRAY ONTO WALKWAYS, BUILDINGS, ROADWAYS AND DRIVES.
16. LAWN SPRAY PATTERNS PROVIDING HEAD TO HEAD COVERAGE.
17. WATER CONVEYANCE SYSTEMS WITH A FLOW VELOCITY OF FIVE FEET PER SECOND OR LESS.
18. PIPELINES DESIGNED TO PROVIDE THE SYSTEM WITH THE APPROPRIATE PRESSURE REQUIRED FOR MAXIMUM IRRIGATION UNIFORMITY.
19. PRESSURE REGULATING HEADS.
20. A MAINTENANCE CHECKLIST PROVIDED TO THE PROPERTY OWNER BY THE IRRIGATION CONTRACTOR ACCOMPANIED BY A RECOMMENDED MAINTENANCE SCHEDULE, PROPER IRRIGATION SYSTEM SETTINGS ACCORDING TO SEASON, RECOMMENDATIONS FOR CHECKING RAIN SENSOR DEVICE, FILTER CLEANING RECOMMENDATIONS AND INFORMATION ON THE CURRENT WATER RESTRICTIONS.
21. A HIGH VOLUME IRRIGATION AREA SHALL NOT EXCEED 50 PERCENT OF THE LANDSCAPED AREA. LOW OR MEDIUM VOLUME IRRIGATION AREAS MAY BE UTILIZED IN LIEU OF ANY HIGH VOLUME IRRIGATION AREA.
22. A MEDIUM VOLUME IRRIGATION AREA SHALL NOT EXCEED 25 PERCENT OF THE LANDSCAPED AREA. HOWEVER, THE LANDSCAPED AREA MAY CONTAIN UP TO 75 PERCENT MEDIUM VOLUME IRRIGATION AREA, IF NO HIGH VOLUME IRRIGATION AREA IS UTILIZED ON SITE.
23. A LOW VOLUME IRRIGATION AREA MAY BE UTILIZED FOR AN ENTIRE LANDSCAPED AREA WITH THE EXCEPTION OF NATIVE VEGETATION AREAS REGULATED BY SECTION 50-373(b)(4).
24. IN THE ALTERNATIVE TO (1), (2), AND (3) ABOVE, IF 25 PERCENT OF THE PRE-EXISTING NATIVE VEGETATION IS RETAINED ON SITE, THE REMAINING 75 PERCENT OF THE LANDSCAPED AREA MAY BE A HIGH VOLUME IRRIGATION AREA. FOR ALL PRE-EXISTING NATIVE VEGETATION RETAINED ON A PARCEL:
    - NO SUPPLEMENTAL WATER SHALL BE APPLIED TO THE NATIVE VEGETATION AREA.
    - ONLY HAND PRUNING OF NATIVE VEGETATION IS ALLOWED.
    - MECHANICAL MOWING OR CLEARING IS PROHIBITED.

VOLUSIA COUNTY CONTRACTOR LICENSE REQUIREMENTS:

NO PERSON MAY INSTALL OR REPAIR AN IRRIGATION SYSTEM IN VOLUSIA COUNTY UNLESS THEY POSSESS A VALID IRRIGATION CERTIFICATE OF COMPETENCY FROM THE DEPARTMENT. THE FOLLOWING PERSONS ARE EXEMPTED FROM HAVING TO POSSESS A CERTIFICATE OF COMPETENCY:

- LICENSED FLORIDA WATER WELL CONTRACTORS AND FLORIDA STATE CERTIFIED PLUMING CONTRACTORS.
- FLORIDA STATE REGISTERED PLUMBING CONTRACTORS.
- PROPERTY OWNERS WHO PERSONALLY PERFORM CONSTRUCTION, MAINTENANCE OR REPAIRS ON AN IRRIGATION SYSTEM THAT SERVES HIS OR HER OWNER-OCCUPIED SINGLE FAMILY RESIDENCE.

LEGEND

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

#3	BENCHMARK ID	■	FOUND 4" BY 4" CONCRETE MONUMENT L.B. #3724
B24	BORING ID		EXISTING EASEMENT
TV	EXISTING CABLE TV PEDESTAL	FOC	EXISTING UNDERGROUND FIBER OPTIC CABLE
	EXISTING CAP OR PLUG	#FM	EXISTING FORCE MAIN (# INDICATES SIZE)
	EXISTING CLEAN OUT	GAS	EXISTING GAS MAIN
	EXISTING CONDUIT RISER/ MARKER	OHE	EXISTING OVERHEAD ELECTRIC CABLES
E	EXISTING ELECTRIC METER	OHT	EXISTING OVERHEAD TRAFFIC SIGNAL CABLE
+11.7	EXISTING ELEVATION (SOFT)	#RAW	EXISTING RAW WATER MAIN (# INDICATES SIZE)
7.0±	PROPOSED ELEVATION (SOFT)	#REC	EXISTING RECLAIM WATER MAIN (# INDICATES SIZE)
+11.75	EXISTING ELEVATION (HARD)	#SAN	PROPOSED SANITARY SEWER (# INDICATES SIZE)
7.07	PROPOSED ELEVATION (HARD)	#WM	PROPOSED WATER MAIN (# INDICATES SIZE)
	EXISTING FIRE HYDRANT	12	EXISTING CONTOUR
	PROPOSED FIRE HYDRANT	10	PROPOSED CONTOUR (SOFT)
	EXISTING FLOW DIRECTION	10	PROPOSED CONTOUR (HARD)
	PROPOSED FLOW DIRECTION	UTEL	EXISTING UNDERGROUND TELEPHONE CABLE
	EXISTING GAS METER	UTV	EXISTING UNDERGROUND TELEVISION CABLE
	EXISTING GAS VALVE	UGE	EXISTING UNDERGROUND ELECTRICAL POWER CABLE
	EXISTING GUY WIRE & ANCHOR PIN		JURISDICTIONAL WETLAND LINE
	EXISTING MAIL BOX	#SAN	EXISTING SANITARY SEWER (# INDICATES SIZE)
	EXISTING MANHOLE (UNKNOWN)	#WM	EXISTING WATER MAIN (# INDICATES SIZE)
	PROPOSED MANHOLE		EXISTING PIPE OR CONDUIT (TYPE SPECIFIED)
	EXISTING SANITARY SEWER CLEANOUT		EXISTING SWALE OR CENTER OF DITCH
	EXISTING SANITARY SEWER MANHOLE		PROPOSED SWALE OR CENTER OF DITCH
	EXISTING ROAD SIGNS AND POSTS		EXISTING TOP OF DITCH BANK
	PROPOSED SIGN AND POST		EXISTING BOTTOM OF DITCH BANK
	EXISTING TEE	// // //	EXISTING WOOD FENCE
	EXISTING UTILITY POLE	x x	EXISTING WIRE OR CHAIN LINK FENCE
	EXISTING VALVE IRRIGATION	x x	PROPOSED WIRE OR CHAIN LINK FENCE
	EXISTING VALVE WATER		PROPOSED SILT/SEDIMENT FENCE
	PROPOSED WATER VALVE		PROPOSED COIR ROLL OR WATTLE
	EXISTING WATER METER		PROPOSED FLOATING TURBIDITY BARRIER
	EXISTING STORM SEWER WITH INLET	TP TP	PROPOSED TREE PROTECTION
	PROPOSED STORM SEWER WITH INLET		
●	FOUND 1/2" CAPPED IRON ROD L.B. #3724		
⊗	FOUND 1/2" IRON ROD (NO I.D.)		

ABBREVIATIONS

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

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS - 2022 / 2023 AND QUALIFIED PRODUCTS LIST

INDEX NO.	DESCRIPTION
102	TEMPORARY EROSION AND SEDIMENT CONTROL
425-010	STRUCTURE BOTTOMS - TYPES J AND P
205	PIPE BACKFILL
425-041	GUTTER INLET - TYPE V
425-052	DITCH BOTTOM INLETS - TYPES C, D, E AND H
430-022	SIDE DRAIN MITERED END SECTION
520-001	CURB & CURB AND GUTTER
522-002	PUBLIC SIDEWALK CURB RAMPS
350-001	CONCRETE PAVEMENT JOINTS
522-001	CONCRETE SIDEWALK
120-001	EMBANKMENT UTILIZATION
514	OPTIONAL BASE GROUP AND STRUCTURAL NUMBERS
330-001	TURNOUTS
546	SIGHT DISTANCE AT INTERSECTIONS
102-600	GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES
102-602	TWO-LANE AND MULTILANE, WORK ON SHOULDER
102-603	TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY
102-660	SIDEWALK CLOSURE
700-101	TYPICAL SECTIONS FOR PLACEMENT OF SINGLE & MULTIPLE-COLUMN SIGNS
711-001	SPECIAL MARKING AREAS

REVISIONS

DATE	DESCRIPTION

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Civil Engineering
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Landscape Architecture

NEWKIRK ENGINEERING INC.

CONSTRUCTION NOTES AND SPECIFICATIONS (SHT. 4 OF 4)

THE VINEYARDS

649 6TH STREET
HOLLY HILL, FL 32174

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HARRY NEWKIRK LICENSE NO. 62971 STATE OF FLORIDA PROFESSIONAL ENGINEER

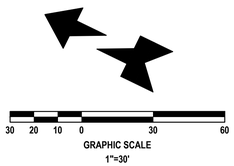
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DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	

DRAWING NUMBER

8

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



BENCHMARK INFORMATION:

VERTICAL DATA
ELEVATIONS REFER TO (NAVD) NORTH AMERICAN VERTICAL DATUM 1988 FEET AND DECIMAL PART THEREOF. BENCHMARK REFERENCE NAVD DATUM OF 1988. BENCHMARK IS A CITY OF DAYTONA BEACH DESIGNATION: DM 2604, ELEVATION = 12.09 FEET

EXISTING TREE LEGEND:

NAME	TOTAL	REMOVED
CEDAR TREE	12	10
OAK TREE	80	55
PALM TREE	5	4
HACKBERRY TREE	56	46
ASH TREE	6	4
	159 TOTAL	119 TOTAL

LEGEND:

PROPOSED SILT FENCE (SEE DETAIL, SHEET No. 11)

PROPOSED TREE PROTECTION (SEE DETAIL, SHEET No. 11)

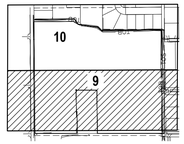
PROPOSED AGGREGATE

SIDEWALK REMOVAL

PAVEMENT PREPARATION AREA

EXISTING TREE (No. INDICATES SIZE)

TREE TO BE REMOVED



KEY MAP
NOT TO SCALE

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

WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS, UNDERGROUND ELECTRIC AND FIBER OPTIC LINES IN THE RIGHT-OF-WAY.

DEMOLITION AND SWPPP NOTES:

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

EROSION CONTROL NOTES:

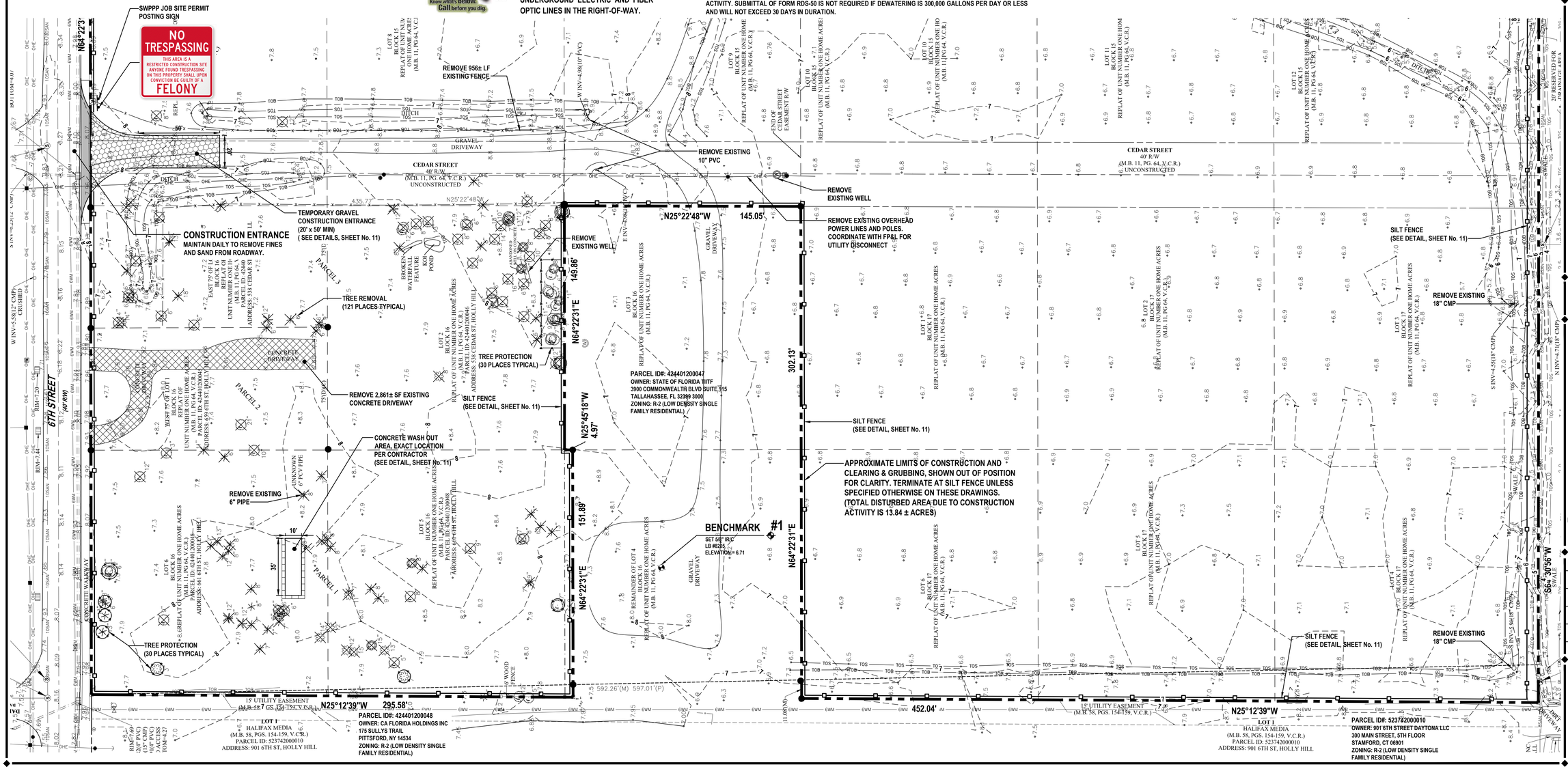
1. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE SWPPP DURING CONSTRUCTION OPERATIONS.
2. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL DEVICES HAVE BEEN INSTALLED.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

LAND ALTERATION / TREE PRESERVATION NOTES:

1. ALL TREES TO REMAIN MUST BE PROTECTED BY TREE PRESERVATION BARRICADES MEETING THE MINIMUM STANDARDS. PROTECTIVE BARRICADES SHALL REMAIN IN PLACE UNTIL LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED.
2. ALL TRIMMING SHALL BE UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING STANDARDS.
3. OAK TREES LARGER THAN 36-INCHES AND ABOVE (HISTORIC) PRUNING SHALL BE PERFORMED BY AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE OR A REGISTERED CONSULTING ARBORIST WITH THE AMERICAN SOCIETY OF CONSULTING ARBORISTS. THE ARBORIST SHALL UNDERSTAND THAT THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A300 PRUNING STANDARDS IS A STANDARD OF DIVISION 4.0.
4. ALL TREE ROOTS EXISTING WITHIN APPROVED IMPROVEMENT AREAS AND ORIGINATING FROM A PROTECTED TREE, SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA WHERE INDICATED ON THIS PLAN.

HOURS OF CONSTRUCTION:

1. HOURS OF CONSTRUCTION WILL BE INSIDE THE HOURS OF 7:00 AM AND 7:00 PM MONDAY THROUGH SATURDAY ONLY. NO CONSTRUCTION ALLOWED ON SUNDAY.



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www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
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Civil Engineering
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Landscape Architecture
NEWKIRK ENGINEERING INC.

REVISIONS

DATE	DESCRIPTION
10/13/22	CITY COMMENTS

DEMOLITION, TREE REMOVAL AND SWPPP PLAN
THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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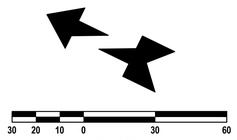
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CHECKED BY:	HHN
SCALE:	1" = 30'

DRAWING NUMBER

9

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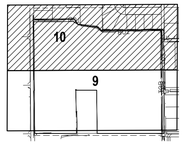
PROPOSED AGGREGATE

ASPHALT REMOVAL

BUILDING REMOVAL

EXISTING TREE (No. INDICATES SIZE)

TREE TO BE REMOVED



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NOT TO SCALE

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

EROSION CONTROL NOTES:

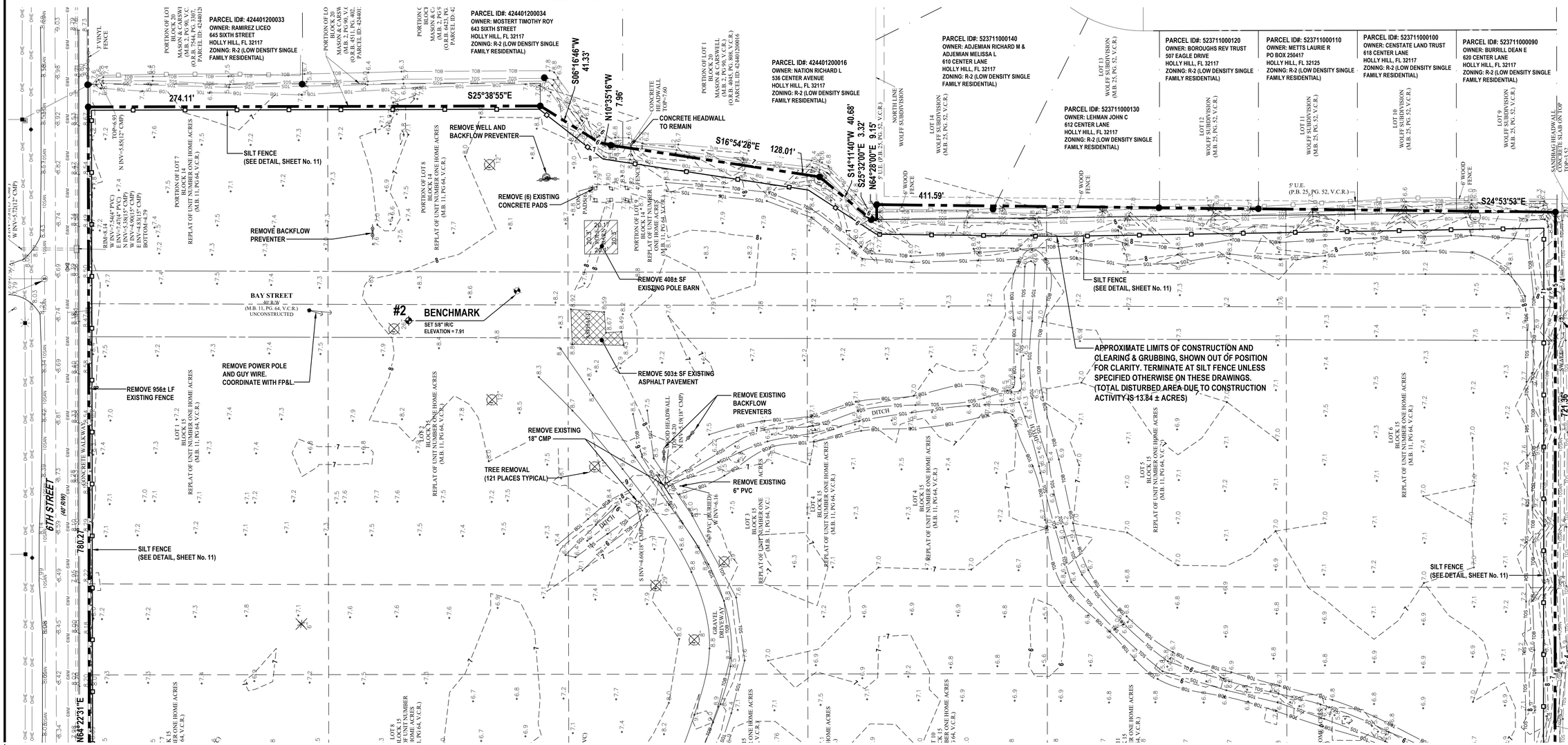
1. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE SWPPP DURING CONSTRUCTION OPERATIONS.
2. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL DEVICES HAVE BEEN INSTALLED.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

LAND ALTERATION / TREE PRESERVATION NOTES:

1. ALL TREES TO REMAIN MUST BE PROTECTED BY TREE PRESERVATION BARRICADES MEETING THE MINIMUM STANDARDS. PROTECTIVE BARRICADES SHALL REMAIN IN PLACE UNTIL LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED.
2. ALL TRIMMING SHALL BE UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING STANDARDS.
3. OAK TREES LARGER THAN 36-INCHES AND ABOVE (HISTORIC) PRUNING SHALL BE PERFORMED BY AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE OR A REGISTERED CONSULTING ARBORIST WITH THE AMERICAN SOCIETY OF CONSULTING ARBORISTS. THE ARBORIST SHALL UNDERSTAND THAT THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A300 PRUNING STANDARDS IS A STANDARD OF DIVISION 4.0.
4. ALL TREE ROOTS EXISTING WITHIN APPROVED IMPROVEMENT AREAS AND ORIGINATING FROM A PROTECTED TREE, SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA WHERE INDICATED ON THIS PLAN.

HOURS OF CONSTRUCTION:

1. HOURS OF CONSTRUCTION WILL BE INSIDE THE HOURS OF 7:00 AM AND 7:00 PM MONDAY THROUGH SATURDAY ONLY. NO CONSTRUCTION ALLOWED ON SUNDAY.



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NEWKIRK ENGINEERING INC.

REVISIONS

DATE	DESCRIPTION
10/13/22	CITY COMMENTS

DEMOLITION, TREE REMOVAL AND SWPPP PLAN
THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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HARRY NEWKIRK LICENSE NO. 62971 STATE OF FLORIDA PROFESSIONAL ENGINEER

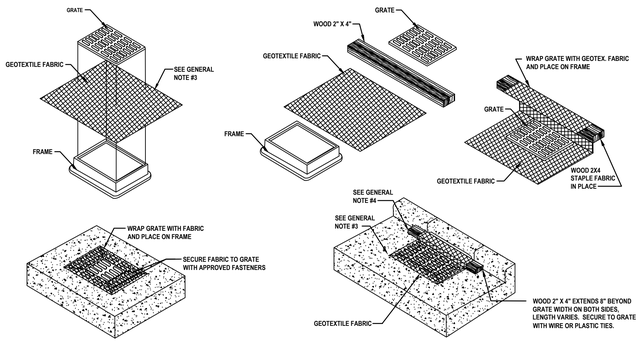
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PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 30'

DRAWING NUMBER

10

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



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

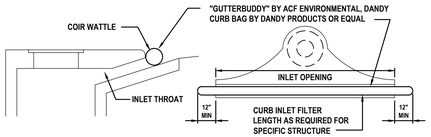
CURB INLET PROTECTION

GENERAL NOTES:

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

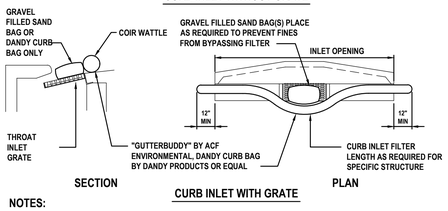
GEOTEXTILE FABRIC INLET PROTECTION

NOT TO SCALE



SECTION PLAN

CURB INLET WITHOUT GRATE



SECTION PLAN

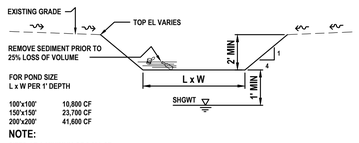
CURB INLET WITH GRATE

NOTES:

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

CURB INLET SEDIMENT PREVENTION DETAIL

NOT TO SCALE



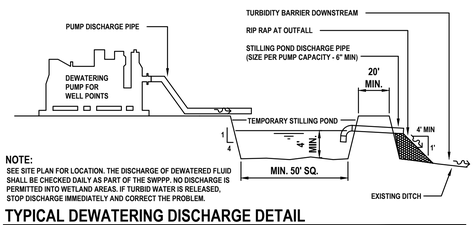
FOR POND SIZE
L x W PER 1' DEPTH

100'x100'	10,800 CF
150'x150'	23,700 CF
200'x200'	41,600 CF

NOTE:
SIZED AT A MINIMUM OF 3,600 CF PER ACRE OF DISTURBED AREA.

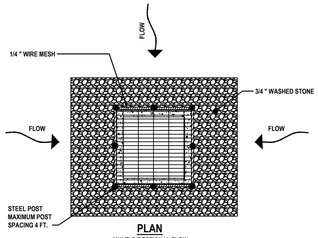
TEMPORARY SEDIMENT POND DETAIL

NOT TO SCALE

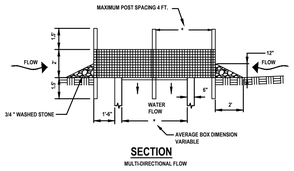


NOTE:
SEE SITE PLAN FOR LOCATION. THE DISCHARGE OF DEWATERED FLUID SHALL BE CHECKED DAILY AS PART OF THE SWPPP. NO DISCHARGE IS PERMITTED INTO WETLAND AREAS. IF TURBID WATER IS RELEASED, STOP DISCHARGE IMMEDIATELY AND CORRECT THE PROBLEM.

TYPICAL DEWATERING DISCHARGE DETAIL



PLAN
MULTI-DIRECTIONAL FLOW



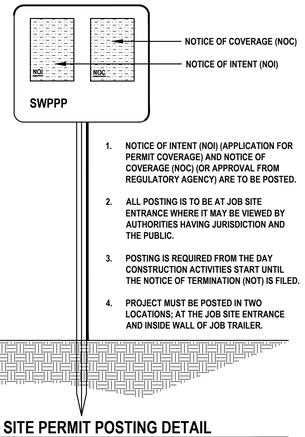
SECTION
MULTI-DIRECTIONAL FLOW

NOTE:

1. SEDIMENT CONTROL STONE SHALL BE 3/4" WASHED STONE.
2. WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4 INCH MESH
3. TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
4. STEEL POST SHALL BE 5 FT. IN LENGTH, BE INSTALLED 1.5 FT. DEEP MINIMUM, AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
5. WOOD POST SHALL BE 5 FT. IN HEIGHT, BE INSTALLED TO 1.5 FT. DEEP MINIMUM, AND BE 3 INCHES IN DIAMETER.
6. POST SPACING SHALL BE A MAXIMUM OF 4 FT.

HARDWARE CLOTH INLET PROTECTION

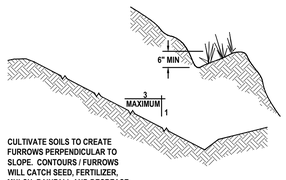
NOT TO SCALE



1. NOTICE OF INTENT (NOI) (APPLICATION FOR PERMIT COVERAGE) AND NOTICE OF COVERAGE (NOC) (OR APPROVAL FROM REGULATORY AGENCY) ARE TO BE POSTED.
2. ALL POSTING IS TO BE AT JOB SITE ENTRANCE WHERE IT MAY BE VIEWED BY AUTHORITIES HAVING JURISDICTION AND THE PUBLIC.
3. POSTING IS REQUIRED FROM THE DAY CONSTRUCTION ACTIVITIES START UNTIL THE NOTICE OF TERMINATION (NOT) IS FILED.
4. PROJECT MUST BE POSTED IN TWO LOCATIONS; AT THE JOB SITE ENTRANCE AND INSIDE WALL OF JOB TRAILER.

JOB SITE PERMIT POSTING DETAIL

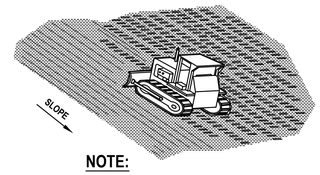
NOT TO SCALE



CULTIVATE SOILS TO CREATE FURROWS PERPENDICULAR TO SLOPE. CONTOURS / FURROWS WILL CATCH SEED, FERTILIZER, MULCH, RAINFALL AND DECREASE RUNOFF.

SURFACE ROUGHENING

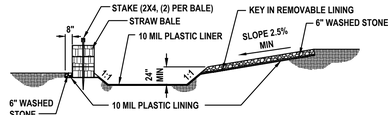
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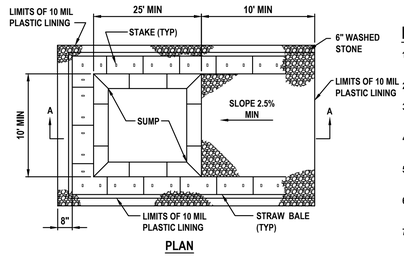
NOTE:
USE DOZER TRACKS TO CREATE GROOVES PERPENDICULAR TO THE SLOPE. GROOVES WILL CATCH SEED, FERTILIZER, MULCH, RAINFALL AND DECREASE SEDIMENT IN RUNOFF.

TRACKING DETAIL

NOT TO SCALE



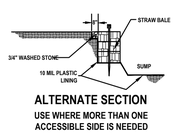
SECTION A-A



PLAN

CONCRETE WASHOUT AREA

NOT TO SCALE



ALTERNATE SECTION
USE WHERE MORE THAN ONE ACCESSIBLE SIDE IS NEEDED



WASHOUT SIGN

NOTES:

1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12."
4. FACILITY SHALL NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
5. SAW CUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT & GRINDING TO BE DISPOSED OF IN THE PIT.
6. CONCRETE WASHOUTS SHALL BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS, & SURFACE WATERS.
7. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 95% FULL CAPACITY.

TEMPORARY SEEDING SPECIFICATION:

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

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

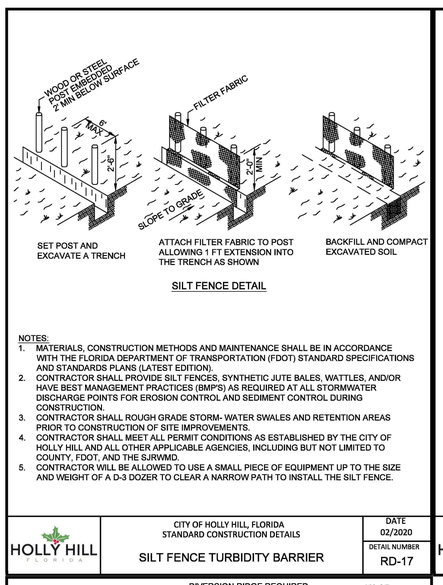
ALL SLOPES AND FLAT GRADE
APPLY 6:20:20 COMMERCIAL ORGANIC FERTILIZER AT A RATE OF 300 LB PER ACRE AND SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

TEMPORARY SEEDING

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

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

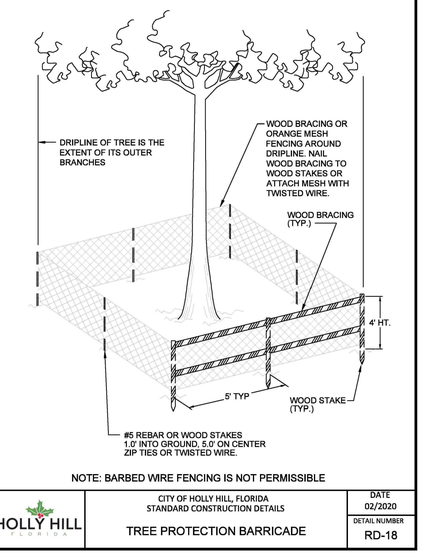
HYDRO FIBER MULCH MIXTURE SHALL BE PERFORMED IN A TANK WITH A CONTINUOUS AGITATION AND RECIRCULATION SYSTEM WITH SUFFICIENT OPERATING CAPACITY TO PRODUCE A HOMOGENOUS SLURRY AND DISCHARGE SYSTEM WHICH WILL APPLY THE SLURRY AT A CONTINUOUS AND UNIFORM RATE. MIXTURE SHALL CONTAIN A GREEN FUGITIVE DYE AS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



SILT FENCE DETAIL

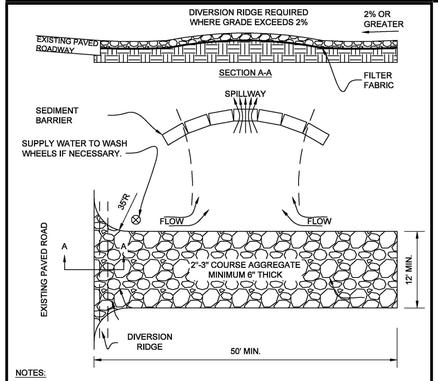
NOTES:
1. MATERIALS, CONSTRUCTION METHODS AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS AND STANDARDS PLANS (LATEST EDITION).
2. CONTRACTOR SHALL PROVIDE SILT FENCES, SYNTHETIC JUTE BALES, WATTLES, AND/OR HAVE BEST MANAGEMENT PRACTICES (BMP'S) AS REQUIRED AT ALL STORMWATER DISCHARGE POINTS FOR EROSION CONTROL AND SEDIMENT CONTROL DURING CONSTRUCTION.
3. CONTRACTOR SHALL ROUGH GRADE STORM- WATER SWALES AND RETENTION AREAS PRIOR TO CONSTRUCTION OF SITE IMPROVEMENTS.
4. CONTRACTOR SHALL MEET ALL PERMIT CONDITIONS AS ESTABLISHED BY THE CITY OF HOLLY HILL AND ALL OTHER APPLICABLE AGENCIES, INCLUDING BUT NOT LIMITED TO COUNTY, FDOT, AND THE SJRWMD.
5. CONTRACTOR WILL BE ALLOWED TO USE A SMALL PIECE OF EQUIPMENT UP TO THE SIZE AND WEIGHT OF A D-3 DOZER TO CLEAR A NARROW PATH TO INSTALL THE SILT FENCE.

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	SILT FENCE TURBIDITY BARRIER	DETAIL NUMBER RD-17



NOTE: BARBED WIRE FENCING IS NOT PERMISSIBLE

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	TREE PROTECTION BARRICADE	DETAIL NUMBER RD-18



NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OR-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO PUBLIC ROADS (INCLUDING T.G.C.E. AGGREGATE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED.
5. A SOIL TRACKING PREVENTION DEVICE (STPD) IS AN ACCEPTABLE ALTERNATIVE TO THIS DETAIL. REFERENCE FDOT STANDARD PLANS (LATEST EDITION).

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	TEMPORARY GRAVEL CONSTRUCTION ENTRANCE	DETAIL NUMBER RD-20

REVISIONS

DATE	DESCRIPTION

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Civil Engineering
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NEWKIRK ENGINEERING INC.

SWPPP DETAILS AND NOTES

THE VINEYARDS

649 6TH STREET
HOLLY HILL, FL 32174

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HARRY NEWKIRK LICENSE NO. 62971 STATE OF FLORIDA PROFESSIONAL ENGINEER

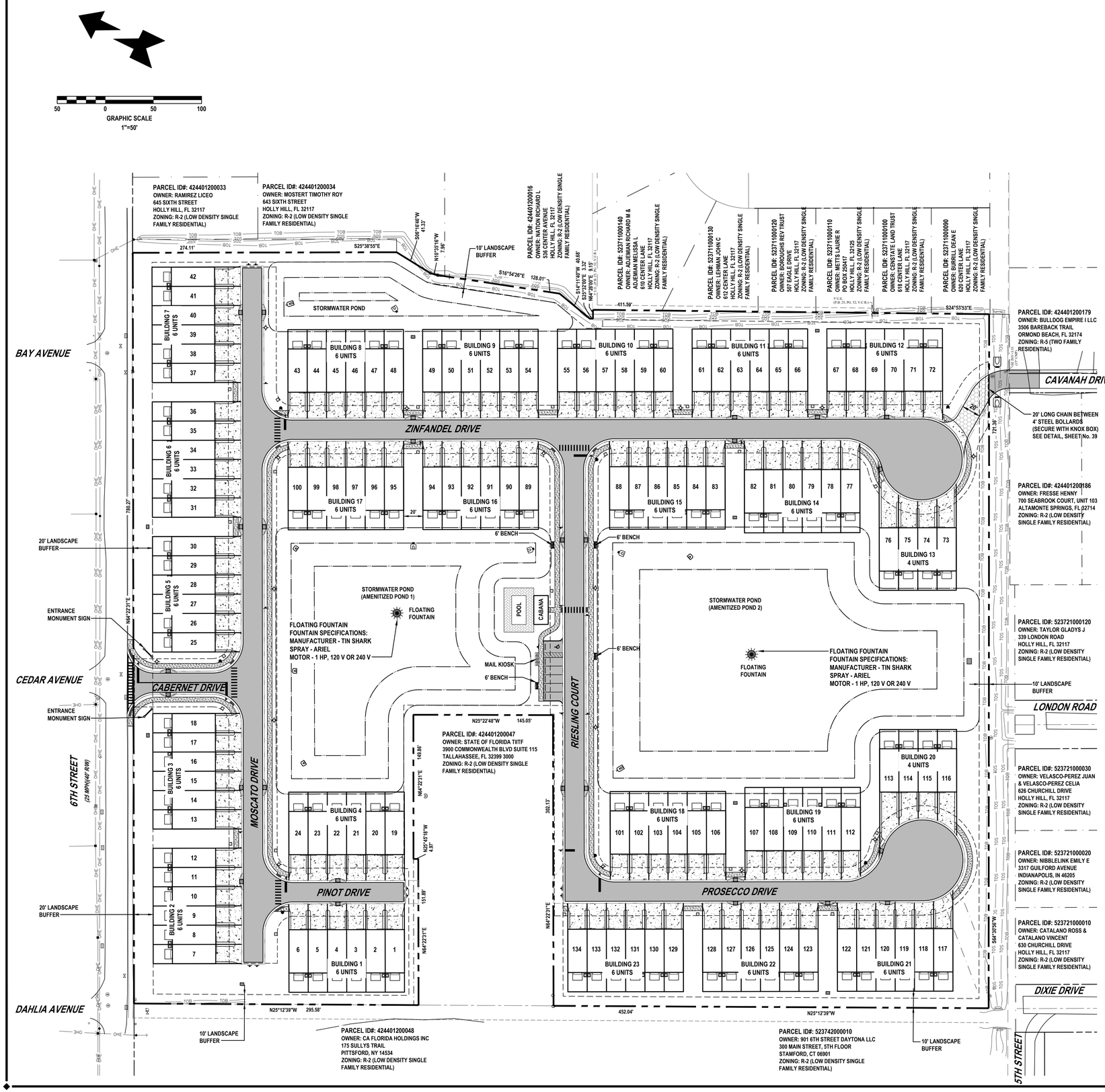
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DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	AS SHOWN

DRAWING NUMBER

11

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



SITE DEVELOPMENT USAGE

1. CURRENT ZONING: PRD
   FLU: MEDIUM DENSITY RESIDENTIAL

2. SETBACK:

	BUILDING	LANDSCAPE
FRONT (6TH ST)	25 FEET	20 FEET
REAR	10 FEET	10 FEET
SIDE	0 FEET	10 FEET
SIDE CORNER	10 FEET	10 FEET
MAXIMUM BUILDING HEIGHT		30 FEET
MAXIMUM BUILDING COVERAGE		30%
MAXIMUM IMPERVIOUS		50%
MINIMUM BUILDING SEPARATION		20 FEET
MINIMUM OPEN SPACE		30%
MINIMUM FLOOR AREA		1,060 SF (PROPOSED 2-STORY UNITS)

2. EXISTING SITE COVERAGE:

EXISTING SITE COVERAGE			
AREA TYPE	SF	ACRE	% OF SITE
BUILDINGS	407	0.009	0.1%
PAVEMENT	3362	0.077	0.5%
TOTAL SITE	620,676	14.249	100.0%
TOTAL PERVIOUS	616,907	14.162	99.4%
TOTAL IMPERVIOUS	3769	0.087	0.6%

3. PROPOSED SITE COVERAGE:

PROPOSED SITE COVERAGE			
AREA TYPE	SF	ACRE	% OF SITE
BUILDINGS	121,050	2.779	19.5%
PAVEMENT	64,069	1.471	10.3%
CONCRETE DRIVEWAYS	62,755	1.441	10.1%
SIDEWALK / PADS	22,549	0.518	3.6%
STORMWATER POND	124,653	2.862	20.1%
TOTAL SITE	620,676	14.249	100.0%
TOTAL IMPERVIOUS	270,423	6.208	43.6%
TOTAL PERVIOUS	350,253	8.041	56.4%
COMMON OPEN SPACE	156,481	3.592	25.2%

PROPOSED BUILDING COVERAGE: 19.5%

COMMON OPEN SPACE MEANS A COMMONLY OWNED AREA OF LAND RESERVED PRIMARILY FOR THE LEISURE OR RECREATIONAL USE OF THE OWNERS OF A RESIDENTIAL DEVELOPMENT.

COMMON OPEN SPACE CALCULATIONS = 620,676 x 0.15 = 93,101 SF (15%)
POOL AMENITY = 1,876 SF
AMENITIZED PONDS = 154,605 SF
COMMON OPEN SPACE = 1,876 + 154,605 = 156,481 SF (25.2%)

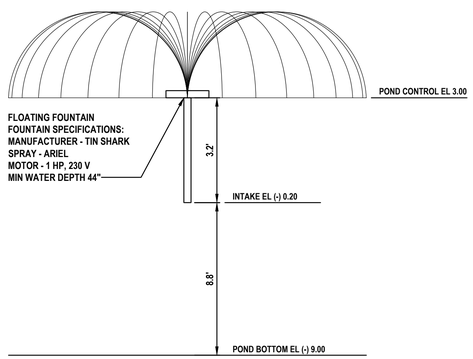
4. DENSITY
   GROSS DENSITY = TOTAL UNITS DIVIDED BY OVERALL SITE AREA
   GROSS DENSITY = 134 UNITS / 14.25 ACRES = 9.40 UNITS PER ACRE

   NET DENSITY = TOTAL UNITS DIVIDED BY (OVERALL SITE - STORMWATER PONDS - PAVEMENT)
   OVERALL SITE = 620,676 SF
   STORMWATER PONDS = 124,653 SF
   PAVEMENT = 64,069 SF
   NET DENSITY ACREAGE = (620,676 - 124,653 - 64,069) / 43,560 = 9.92 ACRES
   NET DENSITY = 134 UNITS / 9.92 ACRES = 13.5 UNITS PER ACRE

5. PARKING REQUIREMENTS
   2 SPACES PER UNIT x 134 UNITS = 268 SPACES
   TOTAL REQUIRED PARKING = 268 SPACES

6. PARKING PROVIDED

UNIT DRIVEWAY	268	65.7
UNIT GARAGE	134	32.8
POOL ACCESSIBLE	1	0.3
POOL STANDARD	5	1.2
TOTAL PARKING PROVIDED	408	100.0



FLOATING FOUNTAIN DETAIL

NOT TO SCALE

REVISIONS	
DATE	DESCRIPTION
10/13/22	CITY COMMENTS
11/22/22	CITY COMMENTS

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 672-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
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OVERALL SITE PLAN
THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 50'

DRAWING NUMBER

12

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

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

LEGEND

- MIAMI CURB
- TYPE 'D' CURB
- TRANSITION FROM TYPE 'D' CURB TO MIAMI CURB
- 24" DETECTABLE WARNING MAT DETAIL SHEET No. 36
- SITE LIGHT POLES (16 TOTAL)

PAVING LEGEND

ASPHALT PAVEMENT
1.5" SP-9.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS
6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS)
12" STABILIZED SUBBASE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (TYPE B STABILIZATION)

* ALTERNATE 12" STABILIZED SUBBASE: 6" CRUSHED CONCRETE (LBR=130) MIN OF 98% MODIFIED PROCTOR MAX DENSITY PER AASHTO T-180 (4" MAX. LIFTS) (TYPE B STABILIZATION)

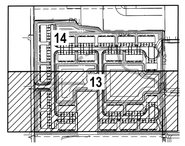
*ALTERNATE PAVEMENT TO ASPHALT IS CONCRETE PAVEMENT

CONCRETE DRIVEWAY
6" CONCRETE (3,000 P.S.I. @ 28 DAYS)
12" COMPACTED SUBGRADE (LBR 40) MIN OF 98% MODIFIED PROCTOR MAX DRY DENSITY PER ASTM D1557, AASHTO T-180 (6" LIFTS)
(TYPE B STABILIZATION)

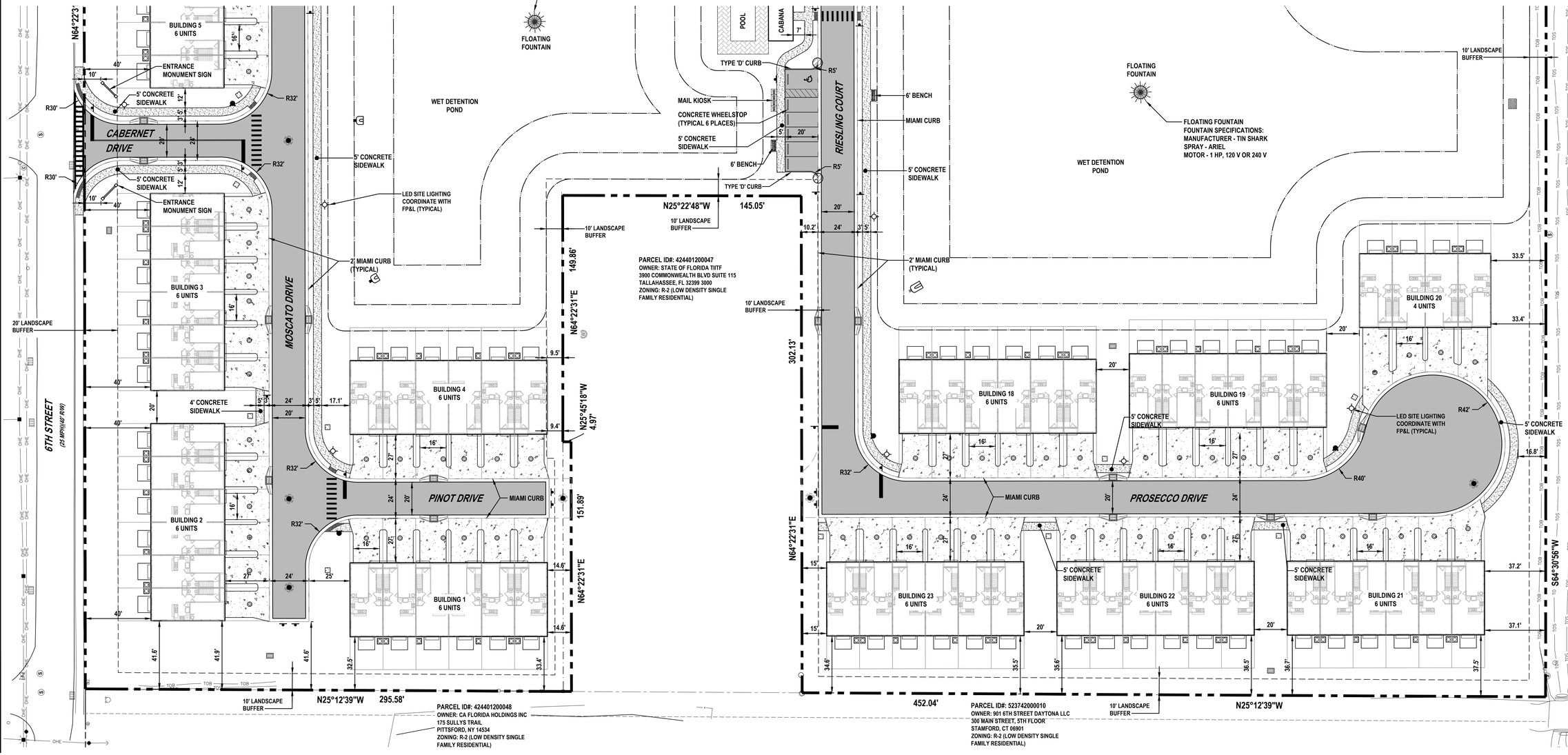
CONCRETE SIDEWALK
4" THICK CLASS I CONCRETE (3,000 P.S.I. @ 28 DAYS)
PER FDOT INDEX 522-001 (SEE DETAIL, SHEET No. 36)

GENERAL NOTES:

1. CITY OF HOLLY HILL BUILDING PERMITS ARE REQUIRED FOR BUILDING, DUMPSTER ENCLOSURE, LIGHT POLES, SCREEN WALLS AND MONUMENT SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, SHOP DRAWINGS, ETC.).
2. HOURS OF CONSTRUCTION WILL BE INSIDE THE HOURS OF 7:00 AM AND 7:00 PM MONDAY THROUGH SATURDAY ONLY. NO CONSTRUCTION ALLOWED ON SUNDAY.
3. ALL DIMENSIONS AND TIES ARE TO THE EDGE OF PAVEMENT AND OUTSIDE FACE OF BUILDING.
4. ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEYOR UTILIZING GEODETIC TOTAL STATION OR GPS. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR'S RISK.
5. THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING ADJACENT BUSINESSES TO ENSURE THERE IS NO DISRUPTION TO THEIR RESPECTIVE OPERATIONS.
6. THE CONTRACTOR AT ITS OWN DISCRETION SHALL MAINTAIN THE CONSTRUCTION SITE SECURE FROM TRESPASS.
7. SOD ALL DISTURBED AREAS IN RIGHT-OF-WAY WITH BAHIA SOD.
8. ALL SITE LIGHTING POLES ARE 20' TALL MAXIMUM. SEE SITE PHOTOMETRIC PLAN, SHEET No. 40.



KEY MAP
NOT TO SCALE



REVISIONS

DATE	DESCRIPTION
10/13/22	CITY COMMENTS

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SCALE:	1" = 30'

DRAWING NUMBER
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Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

GRAPHIC SCALE
1"=30'
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LEGEND

- MIAMI CURB
- TYPE 'D' CURB
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ASPHALT PAVEMENT

1.5" SP-9.5 (TL-C) WITH TACK COAT PER FDOT SPECIFICATIONS
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*ALTERNATE PAVEMENT TO ASPHALT IS CONCRETE PAVEMENT

CONCRETE DRIVEWAY

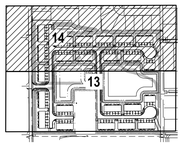
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(TYPE B STABILIZATION)

CONCRETE SIDEWALK

4" THICK CLASS I CONCRETE (3,000 P.S.I. @ 28 DAYS)
PER FDOT INDEX 522-001 (SEE DETAIL, SHEET No. 36)

GENERAL NOTES:

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8. ALL SITE LIGHTING POLES ARE 20' TALL MAXIMUM. SEE SITE PHOTOMETRIC PLAN, SHEET No. 40.



KEY MAP
NOT TO SCALE

PARCEL ID#: 424401200033
OWNER: RAMIREZ LICEO
645 SIXTH STREET
HOLLY HILL, FL 32117
ZONING: R-2 (LOW DENSITY SINGLE FAMILY RESIDENTIAL)

PARCEL ID#: 424401200034
OWNER: MOSTERT TIMOTHY ROY
643 SIXTH STREET
HOLLY HILL, FL 32117
ZONING: R-2 (LOW DENSITY SINGLE FAMILY RESIDENTIAL)

PARCEL ID#: 424401200016
OWNER: NATION RICHARD L
536 CENTER AVENUE
HOLLY HILL, FL 32117
ZONING: R-2 (LOW DENSITY SINGLE FAMILY RESIDENTIAL)

PARCEL ID#: 523711000140
OWNER: AIZEMAN RICHARD M &
ADELINE ROSE L
610 CENTER LANE
HOLLY HILL, FL 32117
ZONING: R-2 (LOW DENSITY SINGLE FAMILY RESIDENTIAL)

PARCEL ID#: 523711000130
OWNER: LEHMAN JOHN C
627 CENTER LANE
HOLLY HILL, FL 32117
ZONING: R-2 (LOW DENSITY SINGLE FAMILY RESIDENTIAL)

PARCEL ID#: 523711000120
OWNER: BOROUGHS REV TRUST
635 CENTER LANE
HOLLY HILL, FL 32117
ZONING: R-2 (LOW DENSITY SINGLE FAMILY RESIDENTIAL)

PARCEL ID#: 523711000110
OWNER: METTS LAURIE R
PO BOX 259417
HOLLY HILL, FL 32125
ZONING: R-2 (LOW DENSITY SINGLE FAMILY RESIDENTIAL)

PARCEL ID#: 523711000100
OWNER: SOUTH LAND TRUST
618 CENTER LANE
HOLLY HILL, FL 32117
ZONING: R-2 (LOW DENSITY SINGLE FAMILY RESIDENTIAL)

PARCEL ID#: 523711000090
OWNER: BURRILL DEAN E
620 CENTER LANE
HOLLY HILL, FL 32117
ZONING: R-2 (LOW DENSITY SINGLE FAMILY RESIDENTIAL)

10' LANDSCAPE BUFFER
S06°16'46"W 41.33'
N10°35'16"W 7.96'
S25°38'55"E
274.11'
S16°54'26"E 128.01'
S14°11'40"W 40.68'
S26°32'00"E 3.32'
N64°28'00"E 9.15'
(P.B. 25, PG. 52, V.C.R.)
411.59'
S24°53'53"E
721.36'
780.27'
N64°22'31"E
WET DETENTION POND
20' LONG CHAIN BETWEEN 4' STEEL BOLLARDS (SECURE WITH KNOX BOX) SEE DETAIL, SHEET No. 39
20' WIDE STABILIZED ACCESS FOR EMERGENCY ACCESS ONLY
20' LANDSCAPE BUFFER
5' CONCRETE SIDEWALK
MIAMI CURB
LED SITE LIGHTING COORDINATE WITH FP&L (TYPICAL)
6' BENCH
FLOATING FOUNDATION
POOL
CABANA
6TH STREET (25 MPH)(40 R/W)
MOSCATO DRIVE
RIESLING COURT
ZINFANDEL DRIVE
BUILDING 5 6 UNITS
BUILDING 6 6 UNITS
BUILDING 7 6 UNITS
BUILDING 8 6 UNITS
BUILDING 9 6 UNITS
BUILDING 10 6 UNITS
BUILDING 11 6 UNITS
BUILDING 12 6 UNITS
BUILDING 13 4 UNITS
BUILDING 14 6 UNITS
BUILDING 15 6 UNITS
BUILDING 16 6 UNITS
BUILDING 17 6 UNITS

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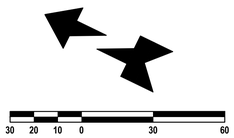
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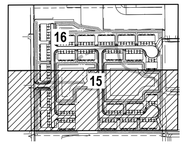
PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 30'

DRAWING NUMBER
14

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

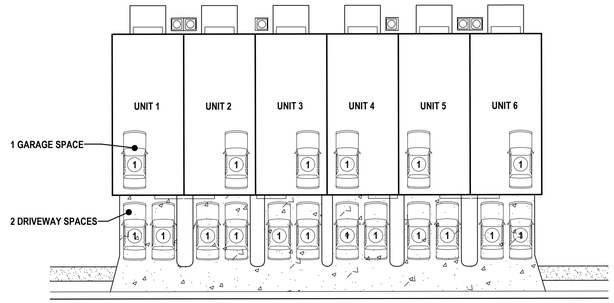


GRAPHIC SCALE
1"=30'



KEY MAP

NOT TO SCALE



3 PARKING SPACES PER UNIT

UNIT PARKING DETAIL

SCALE: 1" = 20'

PAVEMENT MARKING NOTES:

1. ALL STRIPING WITHIN PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC AND INSTALLED IN ACCORDANCE WITH THE LATEST FDOT PAVEMENT MARKINGS INDEX.
2. RPM'S SHALL BE PROVIDED FOR ALL CONSTRUCTION WITHIN PUBLIC RIGHTS-OF-WAY OF ALL THOROUGHFARES AND SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST FDOT STANDARD INDEX #706-001.
3. PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
4. APPLY PAINTED PAVEMENT MARKINGS AT LAST STAGE OF CONSTRUCTION AFTER LANDSCAPE PLANTINGS ARE INSTALLED.
5. PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS.
6. ALL REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17352.
7. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX NO. 17301 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
8. LOCATION OF SIGNS IS APPROXIMATE ONLY AND IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
9. FOR ADDITIONAL DETAILS SEE INDEX NO. 700-010, 700-101, 17344 AND 711-001.
10. ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM BLANKS. ALL 36"x48" SIGNS SHALL BE .100 GA MINIMUM AND SHALL BE INSTALLED USING 3"x12" ROUND ALUMINUM POST. ALL STOP SIGNS SHALL BE 36" OCTAGON INSTALLED ON 12.3 LBS/FT "U" CHANNEL POST RAIL STEEL ONLY OR 3"x12' ROUND ALUMINUM POSTS. "U" CHANNEL POSTS MAY BE USED FOR SIGNS SMALLER THAN 36"x36". ALL SPEED LIMIT SIGNS SHALL BE 24"x30".

STRIPING KEYNOTES: (PER FDOT INDEX No. 711-001, ONLY THERMOPLASTIC IN R/W)

1. 6" SOLID WHITE LINE
2. 6" SOLID YELLOW LINE
3. 6" SOLID DOUBLE YELLOW LINE
4. 24" WHITE STOP BAR
4. WHITE DIRECTIONAL ARROW
5. SPECIAL EMPHASIS CROSSWALK
6. STANDARD CROSSWALK
7. 24" DETECTABLE WARNING MAT

STRIPING LEGEND

■ PROPOSED BLUE REFLECTIVE PAVEMENT MARKER (MARKS FIRE HYDRANT)

PARKING CALCULATIONS

1. PARKING REQUIREMENTS

   MULTIFAMILY
   134 UNITS = 134 x 2 = 268 SPACES
   TOTAL REQUIRED PARKING = 268 SPACES

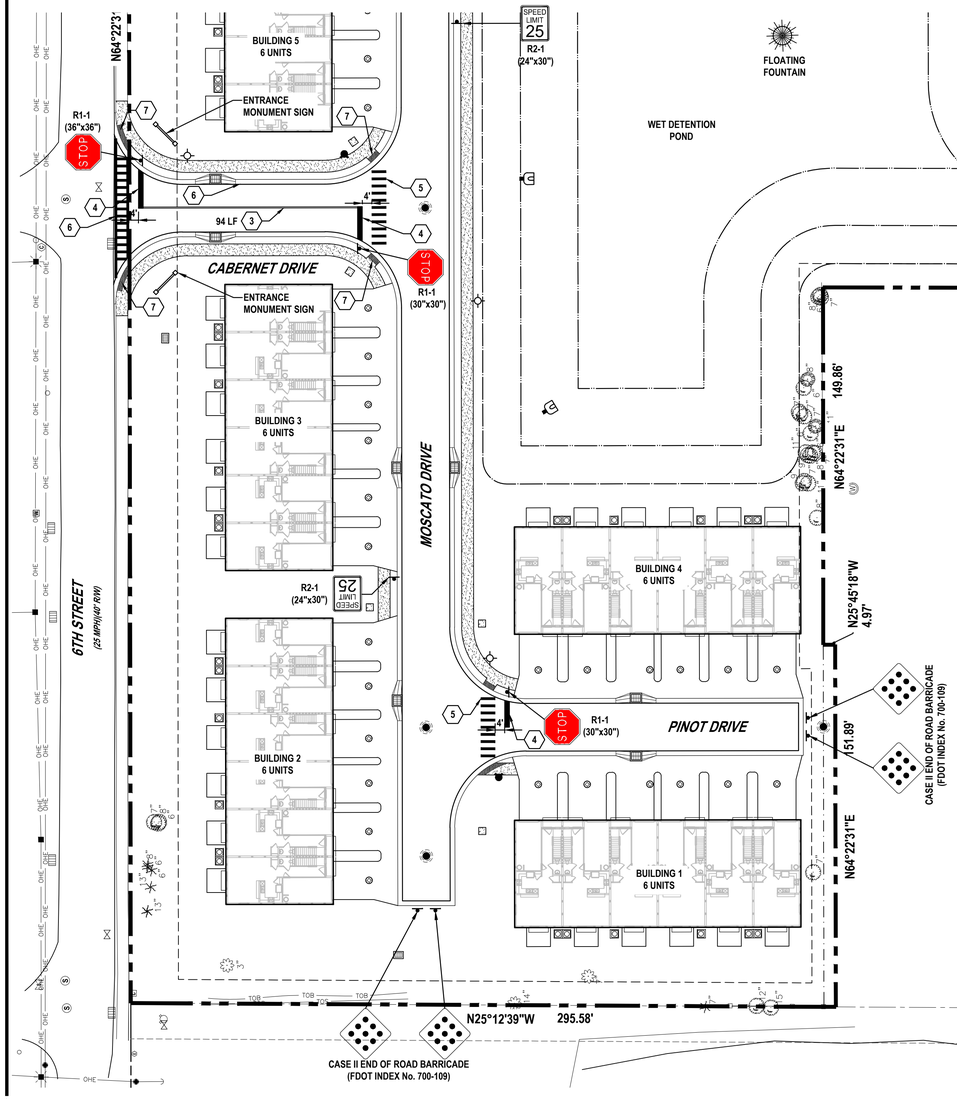
2. PARKING PROVIDED

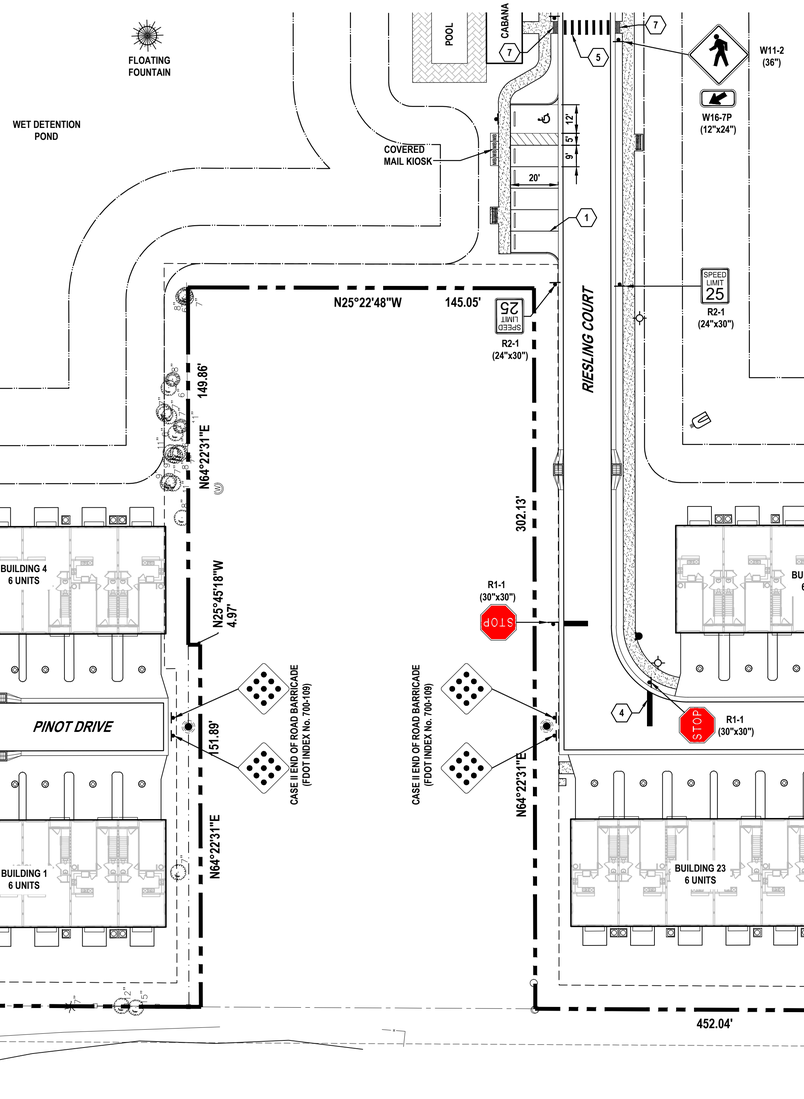
		%
HANDICAP	1	0.2
STANDARD	5	1.3
DRIVEWAY	268	65.7
GARAGE STANDARD	134	32.8
TOTAL PARKING PROVIDED	408	100.0

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

WARNING !!

CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS, UNDERGROUND ELECTRIC AND FIBER OPTIC LINES IN THE RIGHT-OF-WAY.





REVISIONS

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STRIPING AND SIGNAGE PLAN
THE VINEYARDS

649 6TH STREET
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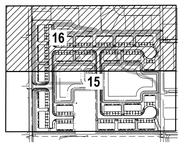
DRAWING NUMBER

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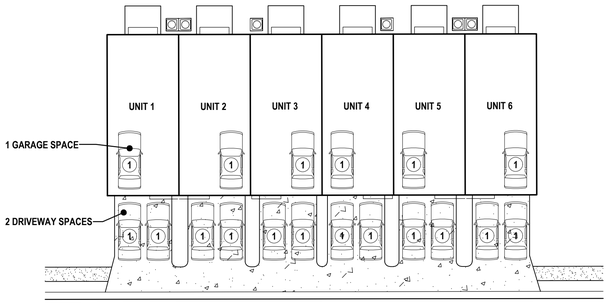
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30 20 10 0 30 60

GRAPHIC SCALE
1"=30'



KEY MAP
NOT TO SCALE



3 PARKING SPACES PER UNIT

UNIT PARKING DETAIL
SCALE: 1" = 20'

PAVEMENT MARKING NOTES:

1. ALL STRIPING WITHIN PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC AND INSTALLED IN ACCORDANCE WITH THE LATEST FDOT PAVEMENT MARKINGS INDEX.
2. RPM'S SHALL BE PROVIDED FOR ALL CONSTRUCTION WITHIN PUBLIC RIGHTS-OF-WAY OF ALL THOROUGHFARES AND SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST FDOT STANDARD INDEX #706-001.
3. PAINTED PAVEMENT MARKINGS SHALL BE APPLIED AFTER PAVEMENT SURFACE HAS CURED. SURFACE SHALL BE FREE OF FINE SAND AND DEBRIS PRIOR TO APPLICATIONS.
4. APPLY PAINTED PAVEMENT MARKINGS AT LAST STAGE OF CONSTRUCTION AFTER LANDSCAPE PLANTINGS ARE INSTALLED.
5. PAINT SHALL BE SHERWIN WILLIAMS LOW-VOC ACRYLIC PRO PARK PAINT, APPLY PER MANUFACTURER'S RECOMMENDATIONS. REFER TO DRAWINGS FOR LOCATIONS OF SPECIFIC COLORS.
6. ALL REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17352.
7. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH INDEX NO. 17301 AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
8. LOCATION OF SIGNS IS APPROXIMATE ONLY AND IS SUBJECT TO CHANGE AS DIRECTED BY THE ENGINEER.
9. FOR ADDITIONAL DETAILS SEE INDEX NO. 700-010, 700-101, 17344 AND 711-001.
10. ALL TRAFFIC CONTROL SIGNS SHALL BE FABRICATED USING 3M BRAND "SCOTCHLITE" SHEETING (ENGINEER GRADE) ON MINIMUM .08 GA ALUMINUM BLANKS. ALL 36"x48" SIGNS SHALL BE .100 GA MINIMUM AND SHALL BE INSTALLED USING 3"x12" ROUND ALUMINUM POST. ALL STOP SIGNS SHALL BE 36" OCTAGON INSTALLED ON 12.3 LBS/FT "U" CHANNEL POST RAIL STEEL ONLY OR 3"x12' ROUND ALUMINUM POSTS. "U" CHANNEL POSTS MAY BE USED FOR SIGNS SMALLER THAN 36"x36". ALL SPEED LIMIT SIGNS SHALL BE 24"x30".

STRIPING KEYNOTES: (PER FDOT INDEX No. 711-001, ONLY THERMOPLASTIC IN R/W)

1. 6" SOLID WHITE LINE
2. 6" SOLID YELLOW LINE
3. 6" SOLID DOUBLE YELLOW LINE
4. 24" WHITE STOP BAR
4. WHITE DIRECTIONAL ARROW
5. SPECIAL EMPHASIS CROSSWALK
6. STANDARD CROSSWALK
7. 24" DETECTABLE WARNING MAT

STRIPING LEGEND

■ PROPOSED BLUE REFLECTIVE PAVEMENT MARKER (MARKS FIRE HYDRANT)

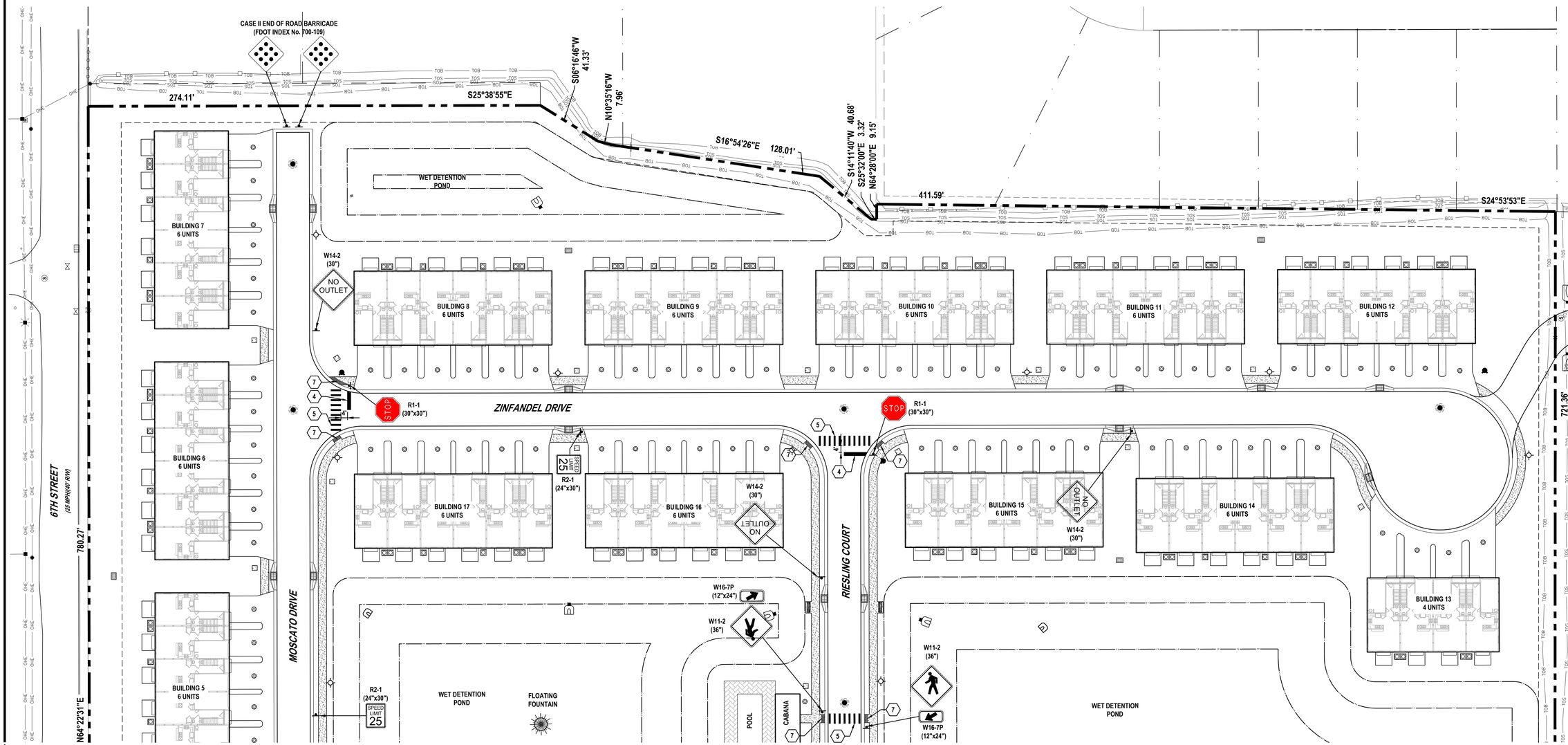
PARKING CALCULATIONS

1. PARKING REQUIREMENTS
   MULTIFAMILY
   134 UNITS = 134 x 2 = 268 SPACES
   TOTAL REQUIRED PARKING = 268 SPACES
2. PARKING PROVIDED

		%
HANDICAP	1	0.2
STANDARD	5	1.3
DRIVEWAY	268	65.7
GARAGE STANDARD	134	32.8
TOTAL PARKING PROVIDED	408	100.0

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

WARNING !!
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REVISIONS

DATE	DESCRIPTION
10/13/22	CITY COMMENTS

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C.A. # 30209
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NEWKIRK ENGINEERING INC.

STRIPING AND SIGNAGE PLAN
THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 30'

DRAWING NUMBER

16

Attachment: The Vineyards Subdivision Plan (3984 : The Vineyards Subdivision Review (PSP))

DRAINAGE PIPE MINIMUM SLOPE REQUIREMENTS

PIPE SIZE (IN)	SELF-CLEANSING VELOCITY (FPS)	MANNINGS (N)	RADIUS (FT)	CROSS-SECTIONAL AREA (FT)	WETTED PERIMETER	MINIMUM SLOPE (FT / 100 FT)
15	3.0	0.012	0.625	1.227	FULL & ½ FULL	0.0028
18	3.0	0.012	0.75	1.767	FULL & ½ FULL	0.0022
24	3.0	0.012	1.00	3.142	FULL & ½ FULL	0.0015
30	3.0	0.012	1.3	4.90859	7.8538	0.0011

EAST DITCH TO REMAIN
PROVIDES POSITIVE OUTFALL TO
SOUTH OFF-SITE DITCH TO NOVA
ROAD R-O-W DRAINAGE SYSTEM

EAST DITCH TO REMAIN
PROVIDES POSITIVE OUTFALL TO
SOUTH OFF-SITE DITCH TO NOVA
ROAD R-O-W DRAINAGE SYSTEM

OFFSITE DRAINAGE DITCH
POSITIVE OUTFALL TO NOVA
ROAD R-O-W DRAINAGE
SYSTEM. ULTIMATE
POSITIVE DISCHARGE TO
HALIFAX RIVER.

OFFSITE DRAINAGE DITCH
POSITIVE OUTFALL TO NOVA
ROAD R-O-W DRAINAGE
SYSTEM. ULTIMATE
POSITIVE DISCHARGE TO
HALIFAX RIVER.

ZINFANDEL DRIVE
MOSCATO DRIVE
CABERNET DRIVE
PINOT DRIVE
PROSECCO DRIVE
RIESLING COURT
6TH STREET (40' R/W)

BUILDING 1 6 UNITS
BUILDING 2 6 UNITS
BUILDING 3 6 UNITS
BUILDING 4 6 UNITS
BUILDING 5 6 UNITS
BUILDING 6 6 UNITS
BUILDING 7 6 UNITS
BUILDING 8 6 UNITS
BUILDING 9 6 UNITS
BUILDING 10 6 UNITS
BUILDING 11 6 UNITS
BUILDING 12 6 UNITS
BUILDING 13 4 UNITS
BUILDING 14 6 UNITS
BUILDING 15 6 UNITS
BUILDING 16 6 UNITS
BUILDING 17 6 UNITS
BUILDING 18 6 UNITS
BUILDING 19 6 UNITS
BUILDING 20 4 UNITS
BUILDING 21 6 UNITS
BUILDING 22 6 UNITS
BUILDING 23 6 UNITS

STORMWATER LEGEND

- PROPOSED TYPE "V" INLET
- PROPOSED U - TYPE CONCRETE ENDWALL
- PROPOSED STORM PIPE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED 8" PVC DR-18 WATER MAIN (30" MIN. COVER)
- PROPOSED 4" PVC DR-18 RECLAIMED WATER MAIN (30" MIN. COVER)
- PROPOSED 8" PVC SDR 26 (SLOPE PER PLAN WITH 36" MIN. COVER)

GENERAL DRAINAGE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO DRAINAGE SYSTEM AND SHALL RESTORE ANY DAMAGED STRUCTURES.
2. ALL PIPE FROM THE BUILDING DRAINS SHALL BE PVC SDR 35 OR SMOOTH INTERIOR HDPE.
3. ALL STORM PIPE SHALL BE CONSTRUCTED OF HDPE (SICE) PIPE WITH CERTIFIED WATERTIGHT JOINTS BY THE MANUFACTURER. ACCEPTABLE HDPE PIPE SHALL BE HANCOR SUR-LOK WT, ADS SERIES 35, ADS N-12 WITH WT JOINT OR EQUAL. ALTERNATE STORM PIPE MATERIAL IS RCP PER FDOT SPECIFICATIONS.
4. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL MATERIAL AND STRUCTURES TO THE ENGINEER (NEWKIRK ENGINEERING, INC.) FOR APPROVAL PRIOR TO THE PRECONSTRUCTION MEETING.
5. CONTRACTOR TO PLACE FILTER FABRIC BETWEEN DRAINAGE STRUCTURES AND TOPS TO PREVENT SOIL INTRUSION. THE FABRIC SHALL BE PERIODICALLY CLEANED OF SAND A DEBRIS FABRIC SHALL REMAIN IN PLACE UNTIL PAVING IS COMPLETE.
6. ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN. FENCING TREES, & ETC., WITHIN THE CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFFSITE.
7. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST PER FDOT SPECIFICATIONS.
8. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY PER FDOT STANDARD SPECIFICATIONS AND MANUFACTURES SPECIFICATIONS RESPECTIVELY.
9. ALL DRAINAGE STRUCTURES AND PIPES SHALL BE CLEANED OF SAND AT THE LAST STAGE OF CONSTRUCTION PRIOR TO THE FINAL INSPECTION.
10. ALL STORM INLET GRATES SHALL BE STEEL (TRAFFIC RATED).

PERMITTED RUNOFF		PRE		
Design Storm		Rainfall (inches)	Charge Rate (cfs)	Inflow Volume (ft^3)
Mean Annual, 24-Hour	PRE	5.30	19.00	191,002
25 Year, 24-Hour	PRE	9.50	38.68	397,431
100 Year, 24-Hour	PRE	12.40	52.15	542,846

PROPOSED - DISCHARGE		POST		STAGE		
Design Storm		Rainfall (inches)	Inflow Rate (cfs)	Inflow Volume (ft^3)	POND 1	POND 2	POND 3
Mean Annual, 24-Hour	POST	5.30	0.00	0.00	4.66	4.66	4.66
25 Year, 24-Hour	POST	9.50	1.20	16,118	5.94	5.94	5.94
100 Year, 24-Hour	POST	12.40	4.32	142,523	6.20	6.20	6.20
				TOB	7.00	7.00	7.00

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GRAPHIC SCALE
1"=40'

REVISIONS

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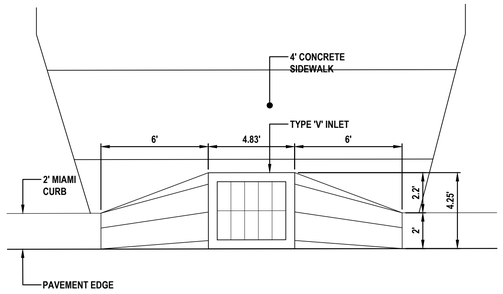
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DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 40'

DRAWING NUMBER
17

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



TYPE 'V' INLET DETAIL

NOT TO SCALE

DRAINAGE STRUCTURE SCHEDULE

I.D.	STRUCTURE TYPE	TOP EL	SUMP EL	CONNECTIONS
CS-01	Precast Ditch Bottom Inlet - Type E 10 ft. or Less	5.00	-4.24	18" PIPE - SE INV 3.00
I-01	Precast Ditch Bottom Inlet - Type C 10 ft. or Less	5.00	-2.09	15" PIPE - NE INV -1.09
I-02	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	2.50	15" PIPE - NE INV 3.52
I-03	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-4.05	15" PIPE - SW INV 3.44 15" PIPE - NW INV -3.05
I-04	Precast Gutter Inlet - Type V 10 ft. or Less	7.79	-4.39	15" PIPE - SW INV -1.61 15" PIPE - SE INV -3.39 18" PIPE - NE INV -3.39
I-05	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-4.72	18" PIPE - SW INV -3.72 18" PIPE - SE INV -3.72
I-06	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-4.78	18" PIPE - NW INV -3.80 18" PIPE - SE INV -3.80
I-07	Precast Ditch Bottom Inlet - Type C 10 ft. or Less	6.00	1.78	15" PIPE - E INV 2.78
I-08	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	1.59	15" PIPE - W INV 2.59 15" PIPE - NE INV 2.59
I-09	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	1.50	15" PIPE - SW INV 2.50 18" PIPE - SE INV 2.50
I-10	Precast Ditch Bottom Inlet - Type C 10 ft. or Less	6.00	1.50	15" PIPE - SE INV 2.50
I-11	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	0.41	15" PIPE - NW INV 1.41 18" PIPE - SE INV 1.41
I-12	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-0.41	18" PIPE - NW INV 1.34 18" PIPE - S INV 0.59
I-13	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	1.88	15" PIPE - SE INV 2.88
I-14	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-0.54	15" PIPE - NW INV 2.80 15" PIPE - SE INV 0.46
I-15	Precast Ditch Bottom Inlet - Type C 10 ft. or Less	7.25	-1.06	24" PIPE - SW INV -0.08 24" PIPE - NE INV -0.08
I-16	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-0.10	24" PIPE - SW INV 2.80 24" PIPE - NE INV 0.90
I-17	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-0.10	24" PIPE - NE INV 2.73 24" PIPE - SW INV 0.90
I-18	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-2.64	24" PIPE - SE INV -1.63 24" PIPE - NW INV -1.64
I-19	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-2.56	24" PIPE - NW INV -1.56 24" PIPE - S INV -1.56
I-20	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-1.94	15" PIPE - E INV -0.94
I-21	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-2.11	15" PIPE - W INV -1.11 15" PIPE - NW INV -1.11
I-22	Precast Ditch Bottom Inlet - Type C 10 ft. or Less	7.00	1.21	15" PIPE - SW INV 2.21
I-23	Precast Gutter Inlet - Type V 10 ft. or Less	7.43	-2.35	15" PIPE - SE INV -1.35 15" PIPE - NE INV 0.90 18" PIPE - NW INV -1.35
I-24	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-2.60	18" PIPE - SE INV -1.60 18" PIPE - SW INV -1.60
I-25	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-2.67	18" PIPE - NE INV -1.67 18" PIPE - SW INV -1.67
I-26	Precast Ditch Bottom Inlet - Type C 10 ft. or Less	7.40	1.40	18" PIPE - NE INV -2.60 18" PIPE - NW INV -2.56
I-27	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	2.00	15" PIPE - SE INV 3.00
I-28	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-0.15	15" PIPE - NW INV 2.79 15" PIPE - SE INV 0.85
I-29	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	3.00	15" PIPE - SW INV 4.00

DRAINAGE STRUCTURE SCHEDULE

I.D.	STRUCTURE TYPE	TOP EL	SUMP EL	CONNECTIONS
I-30	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-1.74	15" PIPE - NW INV -0.74 15" PIPE - NE INV 3.83
I-31	Precast Ditch Bottom Inlet - Type C 10 ft. or Less	7.00	1.29	15" PIPE - NE INV 2.29
I-32	Precast Gutter Inlet - Type V 10 ft. or Less	7.38	-1.95	15" PIPE - SE INV -0.95 15" PIPE - SW INV 0.90 18" PIPE - NW INV -0.95
I-33	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-2.30	18" PIPE - SE INV -1.23 18" PIPE - NE INV -1.30
I-34	Precast Gutter Inlet - Type V 10 ft. or Less	7.00	-2.30	18" PIPE - SW INV -1.23 18" PIPE - NE INV -1.30
I-35	Precast Ditch Bottom Inlet - Type C 10 ft. or Less	7.40	1.40	18" PIPE - N INV -2.19
MES-01	Cross Drain MES with 1:2 Slope - 18 in. Single Round Concrete Pipe	-	-	18" PIPE - NW INV -4.50
MES-02	Cross Drain MES with 1:2 Slope - 18 in. Single Round Concrete Pipe	-	-	18" PIPE - NW INV 0.00
MES-03	Cross Drain MES with 1:2 Slope - 18 in. Single Round Concrete Pipe	-	-	18" PIPE - N INV 0.00
MES-04	Cross Drain MES with 1:2 Slope - 24 in. Single Round Concrete Pipe	-	-	24" PIPE - NE INV 0.00
MES-05	Cross Drain MES with 1:2 Slope - 24 in. Single Round Concrete Pipe	-	-	24" PIPE - SE INV -2.18
MES-06	Cross Drain MES with 1:2 Slope - 15 in. Single Round Concrete Pipe	-	-	15" PIPE - NW INV 0.00
MES-07	Cross Drain MES with 1:2 Slope - 24 in. Single Round Concrete Pipe	-	-	24" PIPE - SW INV -0.50
MES-08	Cross Drain MES with 1:2 Slope - 24 in. Single Round Concrete Pipe	-	-	24" PIPE - N INV -2.17
MES-09	Cross Drain MES with 1:2 Slope - 18 in. Single Round Concrete Pipe	-	-	18" PIPE - SE INV -3.30
MES-10	Cross Drain MES with 1:2 Slope - 15 in. Single Round Concrete Pipe	-	-	15" PIPE - NW INV 0.00
MES-11	Cross Drain MES with 1:2 Slope - 18 in. Single Round Concrete Pipe	-	-	18" PIPE - S INV -3.00
MES-12	Cross Drain MES with 1:2 Slope - 38 in. x 60 in. Single Elliptical Concrete Pipe	-	-	60" PIPE - SW INV 2.50
MES-13	Cross Drain MES with 1:2 Slope - 38 in. x 60 in. Single Elliptical Concrete Pipe	-	-	60" PIPE - NE INV 2.39
UE-01	Cross Drain MES with 1:2 Slope - 18 in. Single Round Concrete Pipe	-	-	18" PIPE - NW INV 2.90

REVISIONS

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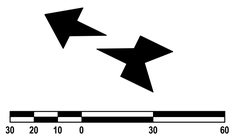
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PROJECT No:	2022-86
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DRAWN BY:	NWS
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SCALE:	AS SHOWN

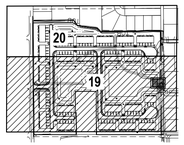
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18

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



GRAPHIC SCALE
1"=30'



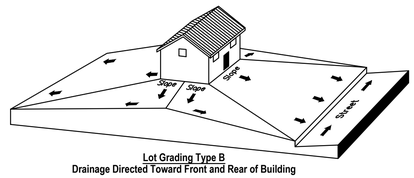
KEY MAP

NOT TO SCALE

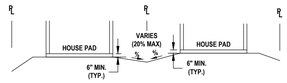


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Lot Grading Type B
Drainage Directed Toward Front and Rear of Building



NOTE:

1. ALL FINISHED FLOOR ELEVATIONS SHALL BE SET A MINIMUM OF 12 INCHES ABOVE THE CENTERLINE OF THE ADJACENT ROADWAY.
2. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 1 FOOT ABOVE THE LIMITS OF THE BASE FLOOD ELEVATION AND/OR 1 FOOT ABOVE THE 100-YEAR DESIGN HIGH WATER LEVEL OF THE ADJACENT DETENTION AREA.
3. SIDE YARD SWALE SHALL BE CENTERED ON THE COMMON PROPERTY LINE.

LOT GRADING TYPE B DETAIL

NOT TO SCALE

GRADING LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DRAINAGE FLOW ARROW
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- MATCH EXISTING GRADE

BENCHMARK INFORMATION:

#1 SET 5/8" IR/C
LB 8205
ELEVATION = 6.71

#2 SET 5/8" IR/C
ELEVATION = 7.91

VERTICAL DATA
ELEVATIONS REFER TO (NAVD) NORTH AMERICAN VERTICAL DATUM 1988 FEET AND DECIMAL PART THEREOF. BENCHMARK REFERENCE NAVD DATUM OF 1988. BENCHMARK IS A CITY OF DAYTONA BEACH DESIGNATION: DM 2604, ELEVATION = 12.09 FEET

GENERAL EARTHWORK NOTES:

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

GENERAL GRADING NOTES:

1. CROSS SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL NOT EXCEED 1:48 IN ACCORDANCE WITH SECTION 502.4 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
2. THE MAXIMUM ELEVATION CHANGE AT THE ENTRANCE DOOR MAY NOT EXCEED 1/2 INCH.
3. ALL SIDEWALK LANDINGS SHALL HAVE SLOPES NO GREATER THAN 1/4 INCH / 1 FOOT IN MANEUVERING SPACES AT ALL DOORWAYS.
4. ALL SIDEWALKS SHALL HAVE A 1.0% CROSS SLOPE (2.0% MAXIMUM) AND 5.0% MAXIMUM LONGITUDINAL SLOPE.
5. ALL CURB RAMPS SHALL COMPLY WITH SECTION 406 OF FACBC. LANDINGS OF 36 INCHES AT HEAD OF CURB RAMPS SHALL COMPLY WITH FACBC SECTION 406.4.
6. ALL IMPROVEMENTS SHALL BE STAKED FOR CONSTRUCTION BY MEANS OF DIGITAL COORDINATES BY SURVEY OR UTILIZING GEODETIC TOTAL STATION. SCALING OF DRAWINGS FOR PURPOSES OF STAKING ARE AT THE SURVEYOR.

GRADE SHALLOW SWALE WITH 3' BOTTOM @ 0.30% SLOPE TO INLET WITH 4:1 SIDE SLOPES

BUILDING 5
FFE 9.00
TYPE B

POND 2
MEAN ANNUAL-24 HR EL 4.66
25 YR-24 HR EL 5.94
100 YR-24 HR EL 6.20

POOL CABANA
FFE 8.50
TYPE B

POND 3
MEAN ANNUAL-24 HR EL 4.66
25 YR-24 HR EL 5.94
100 YR-24 HR EL 6.20

OFFSITE DRAINAGE DITCH POSITIVE OUTFALL TO NOVA ROAD R-O-W DRAINAGE SYSTEM. ULTIMATE POSITIVE DISCHARGE TO HALIFAX RIVER.

SAW CUT PAVEMENT FOR STRAIGHT EDGE AND MATCH WITH BUTT JOINT

GRADE SHALLOW SWALE WITH 3' BOTTOM @ 0.40% SLOPE TO INLET WITH 4:1 SIDE SLOPES

GRADE SHALLOW SWALE WITH 2' BOTTOM @ 1.00% SLOPE TO SWALE WITH 4:1 SIDE SLOPES

GRADE SHALLOW SWALE WITH 3' BOTTOM @ 0.40% SLOPE TO INLET WITH 4:1 SIDE SLOPES

GRADE SHALLOW SWALE WITH 4' BOTTOM @ 0.70% SLOPE TO POND WITH 6:1 SIDE SLOPES

GRADE SHALLOW SWALE WITH 4' BOTTOM @ 0.75% SLOPE TO POND WITH 6:1 SIDE SLOPES

GRADE SHALLOW SWALE WITH 2' BOTTOM @ 2.00% SLOPE TO SWALE WITH 4:1 SIDE SLOPES

GRADE SHALLOW SWALE WITH 2' BOTTOM @ 0.25% SLOPE TO INLET WITH 4:1 SIDE SLOPES

GRADE SHALLOW SWALE WITH 5' BOTTOM @ 0.60% SLOPE TO INLET WITH 4:1 SIDE SLOPES

GRADE SHALLOW SWALE WITH 2' BOTTOM @ 0.30% SLOPE TO INLET WITH 4:1 SIDE SLOPES

BUILDING 1 FFE 9.00 TYPE B
BUILDING 2 FFE 9.00 TYPE B
BUILDING 3 FFE 9.00 TYPE B
BUILDING 4 FFE 9.00 TYPE B
BUILDING 18 FFE 9.00 TYPE B
BUILDING 19 FFE 9.00 TYPE B
BUILDING 20 FFE 9.00 TYPE B
BUILDING 21 FFE 9.00 TYPE B
BUILDING 22 FFE 9.00 TYPE B
BUILDING 23 FFE 9.10 TYPE B

CABERNET DRIVE
PINOT DRIVE
PROSECCO DRIVE
MOSCATO DRIVE
RIESLING COURT
6TH STREET (40' R/W)

N64°22'31"E 302.13'
N64°22'31"E 149.86'
N25°45'18"W 4.97'
N64°22'31"E 151.89'
S64°30'56"W
N25°12'39"W 295.58'
N25°22'48"W 145.05'
N25°12'39"W 452.04'

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GRADING PLAN
THE VINEYARDS

649 6TH STREET
HOLLY HILL, FL 32174

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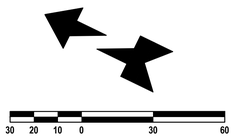
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CHECKED BY:	HHN
SCALE:	1" = 30'

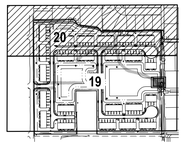
DRAWING NUMBER

19

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



GRAPHIC SCALE
1"=30'



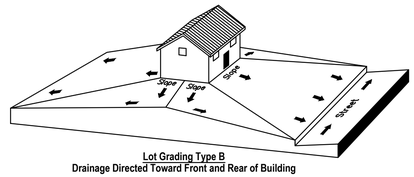
KEY MAP

NOT TO SCALE

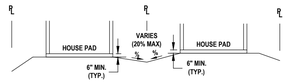


WARNING !!

CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS, UNDERGROUND ELECTRIC AND FIBER OPTIC LINES IN THE RIGHT-OF-WAY.



Lot Grading Type B
Drainage Directed Toward Front and Rear of Building



NOTE:

1. ALL FINISHED FLOOR ELEVATIONS SHALL BE SET A MINIMUM OF 12 INCHES ABOVE THE CENTERLINE OF THE ADJACENT ROADWAY.
2. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 1 FOOT ABOVE THE LIMITS OF THE BASE FLOOD ELEVATION AND/OR 1 FOOT ABOVE THE 100-YEAR DESIGN HIGH WATER LEVEL OF THE ADJACENT DETENTION AREA.
3. SIDE YARD SWALE SHALL BE CENTERED ON THE COMMON PROPERTY LINE.

LOT GRADING TYPE B DETAIL

NOT TO SCALE

GRADING LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DRAINAGE FLOW ARROW
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- MATCH EXISTING GRADE

BENCHMARK INFORMATION:

#1 SET 5/8" IR/C
LB 8205
ELEVATION = 6.71

#2 SET 5/8" IR/C
ELEVATION = 7.91

VERTICAL DATA

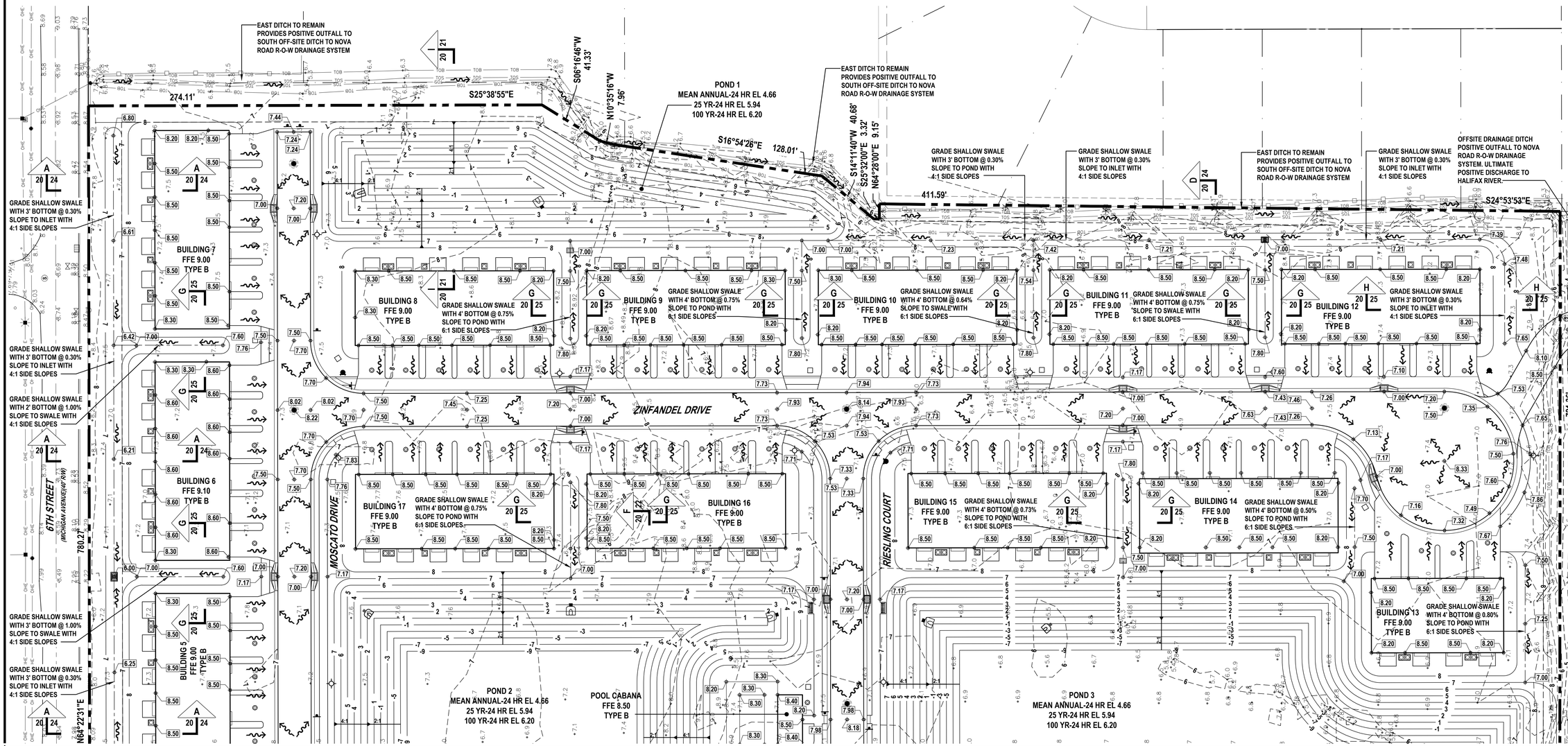
ELEVATIONS REFER TO (NAVD) NORTH AMERICAN VERTICAL DATUM 1988 FEET AND DECIMAL PART THEREOF. BENCHMARK REFERENCE NAVD DATUM OF 1988. BENCHMARK IS A CITY OF DAYTONA BEACH DESIGNATION: DM 2604, ELEVATION = 12.09 FEET

GENERAL EARTHWORK NOTES:

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

GENERAL GRADING NOTES:

1. CROSS SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL NOT EXCEED 1:48 IN ACCORDANCE WITH SECTION 502.4 OF FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (FACBC).
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GRADING PLAN
THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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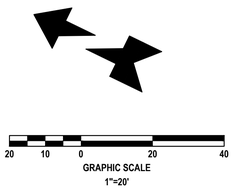
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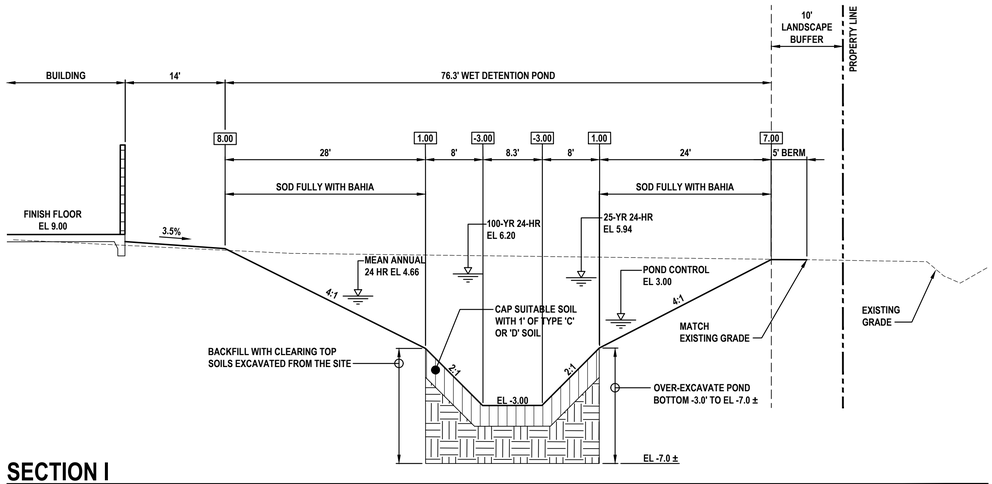
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Attachment: The Vineyards Subdivision Plan (3984 : The Vineyards SD)
Packet Pg. 32



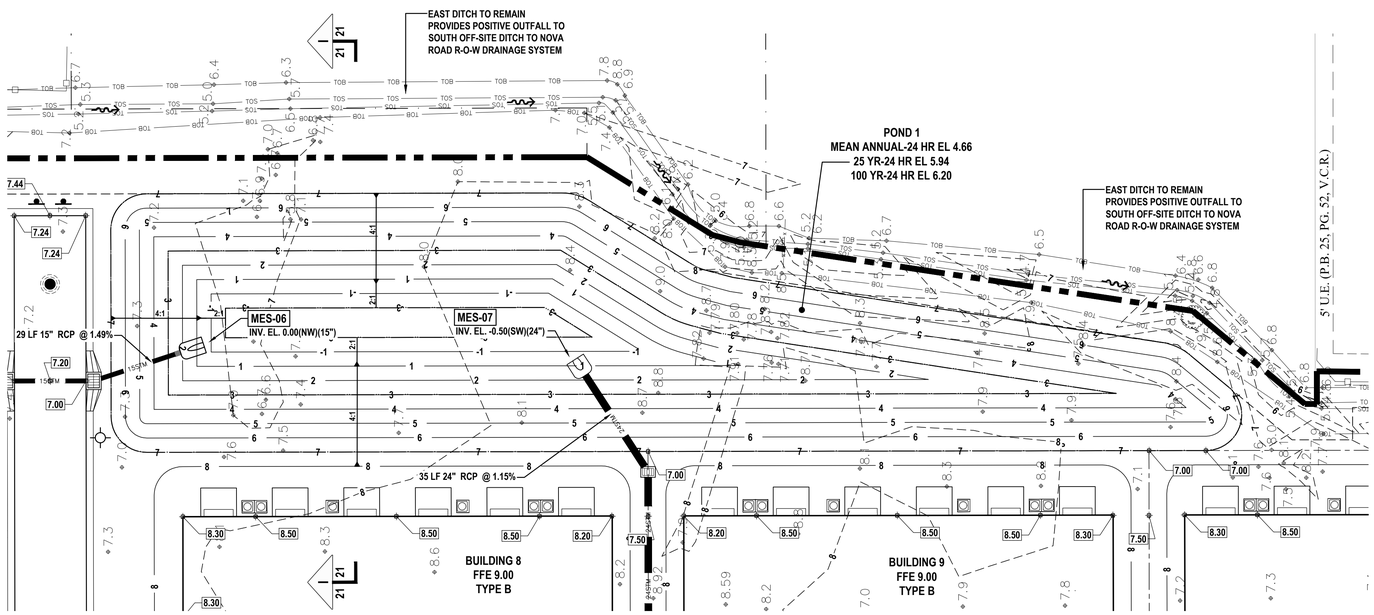
GRADING LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- DRAINAGE FLOW ARROW
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- MATCH EXISTING GRADE



SECTION I

NOT TO SCALE



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POND PLAN 1

THE VINEYARDS

649 6TH STREET
HOLLY HILL, FL 32174

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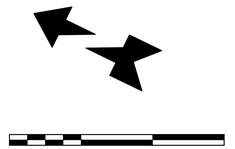
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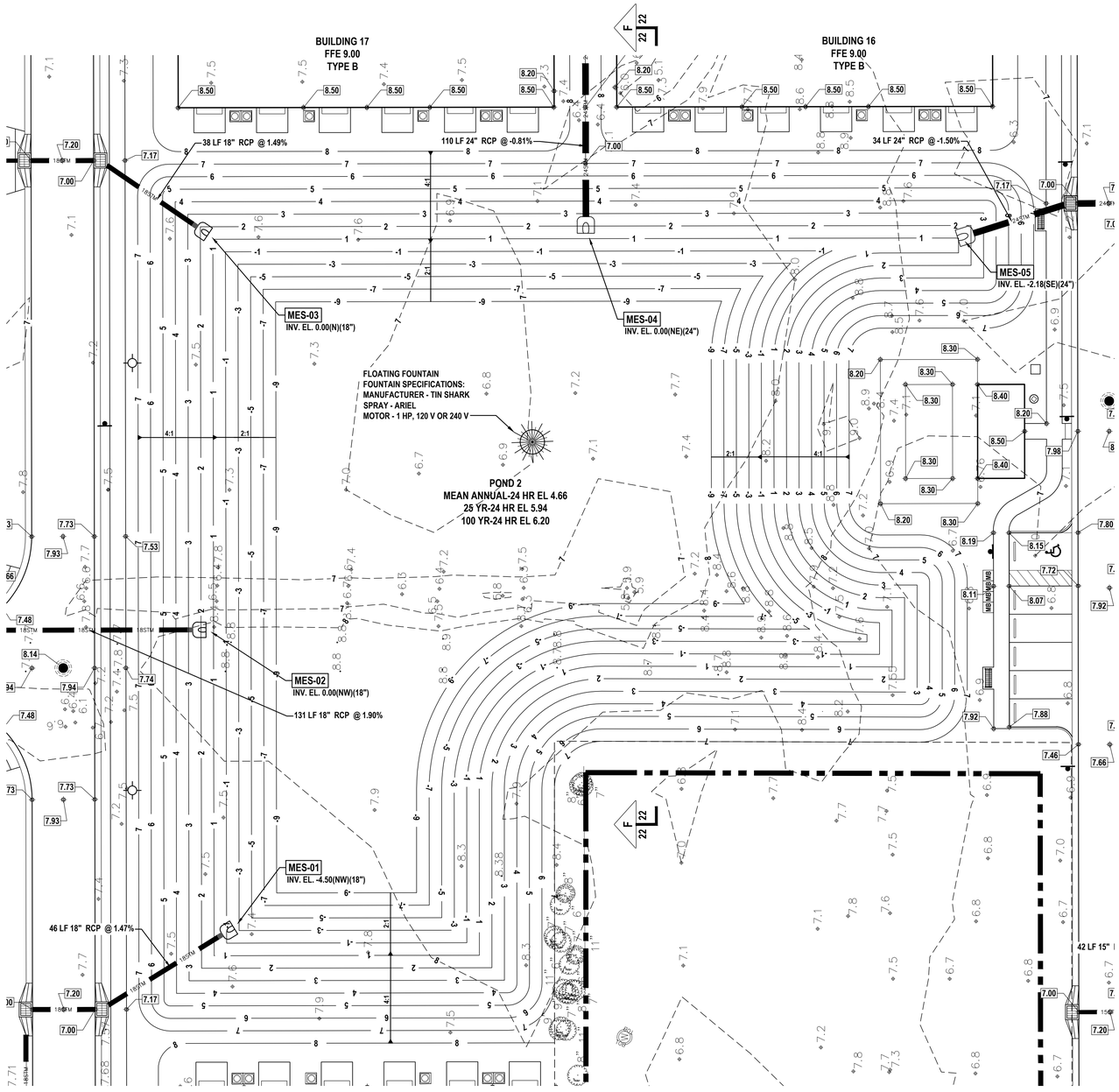
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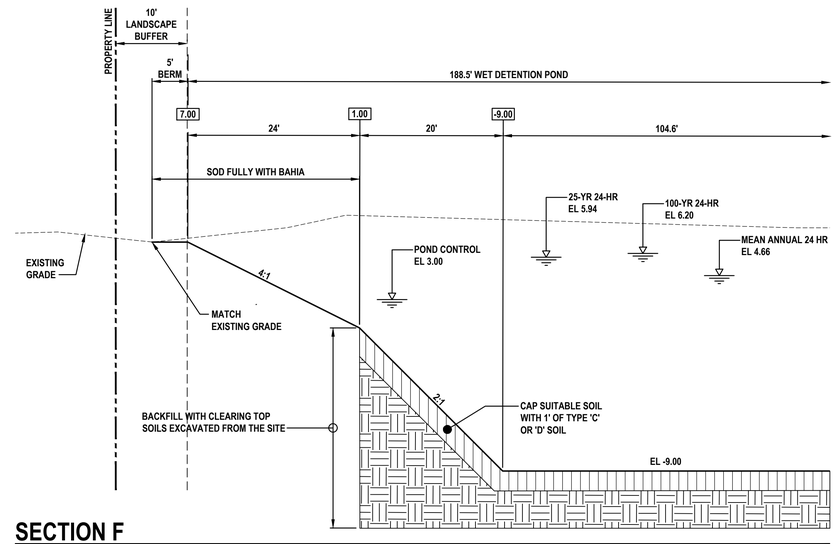
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



GRADING LEGEND:

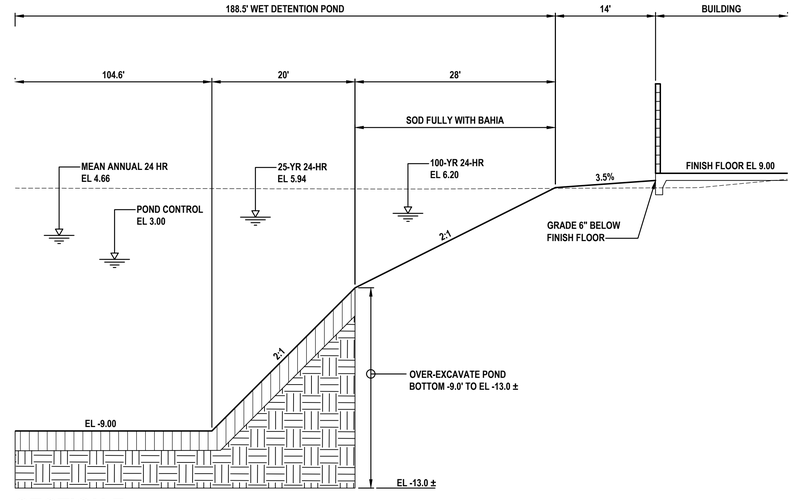
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DRAINAGE FLOW ARROW
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- MATCH EXISTING GRADE





SECTION F

NOT TO SCALE



SECTION F

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POND PLAN 2

THE VINEYARDS
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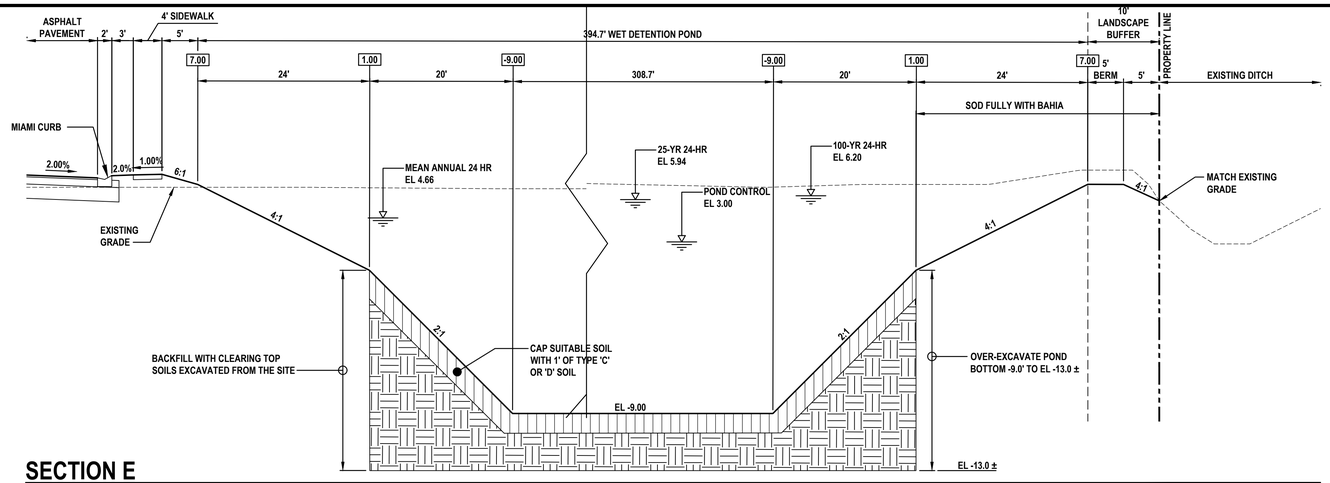
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SCALE:	1" = 20'

DRAWING NUMBER

22

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

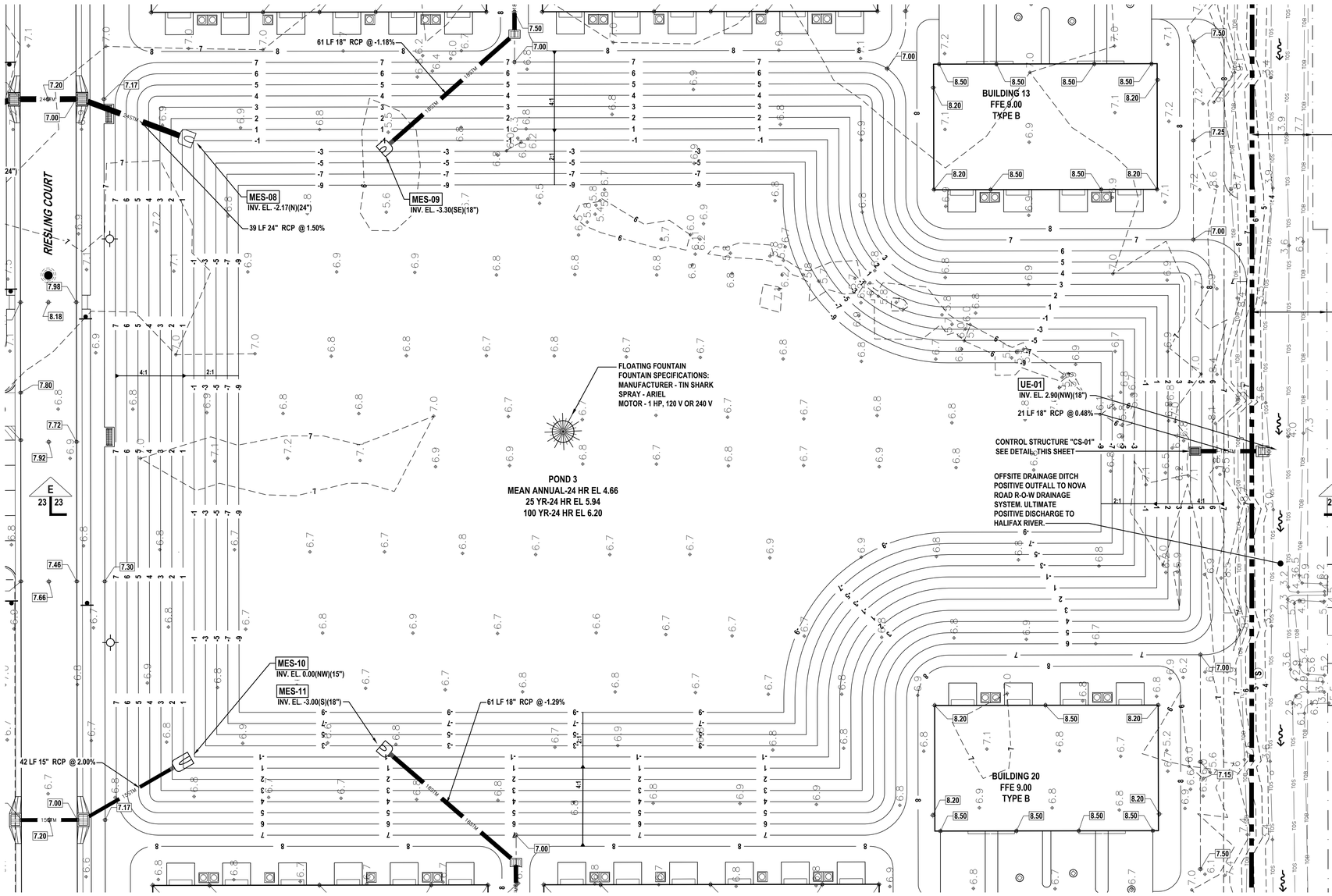
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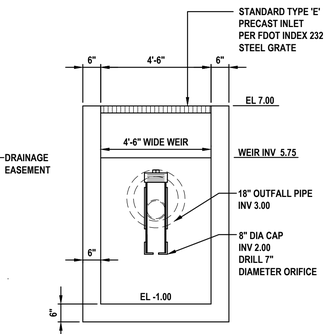


SECTION E
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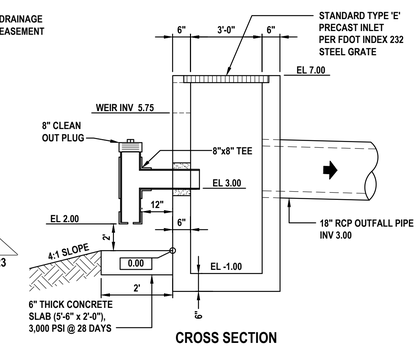
GRADING LEGEND:

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- DRAINAGE FLOW ARROW
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
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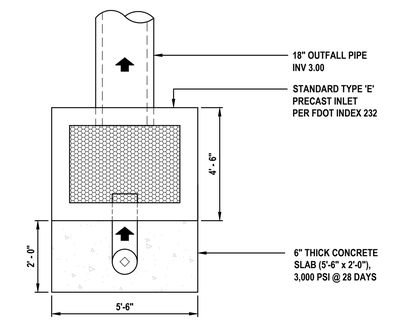




LONGITUDINAL SECTION



CROSS SECTION



PLAN VIEW

CONTROL STRUCTURE CS-01 DETAIL
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POND PLAN 3
THE VINEYARDS
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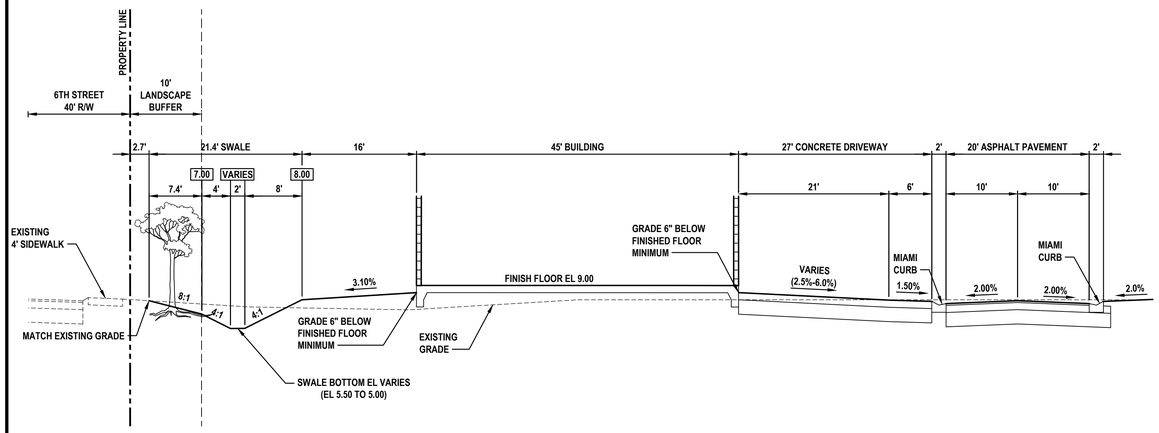
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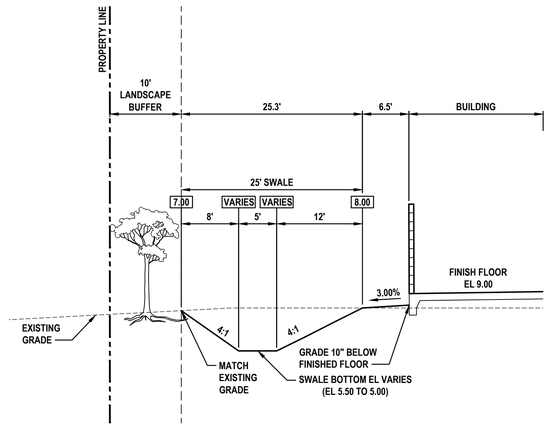
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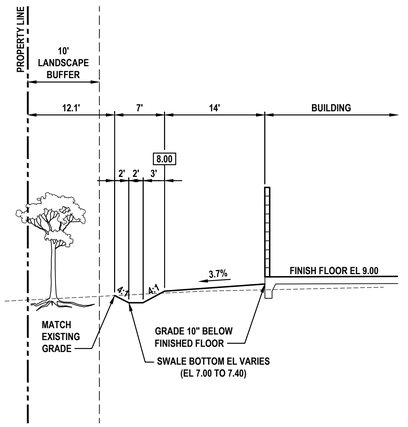
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



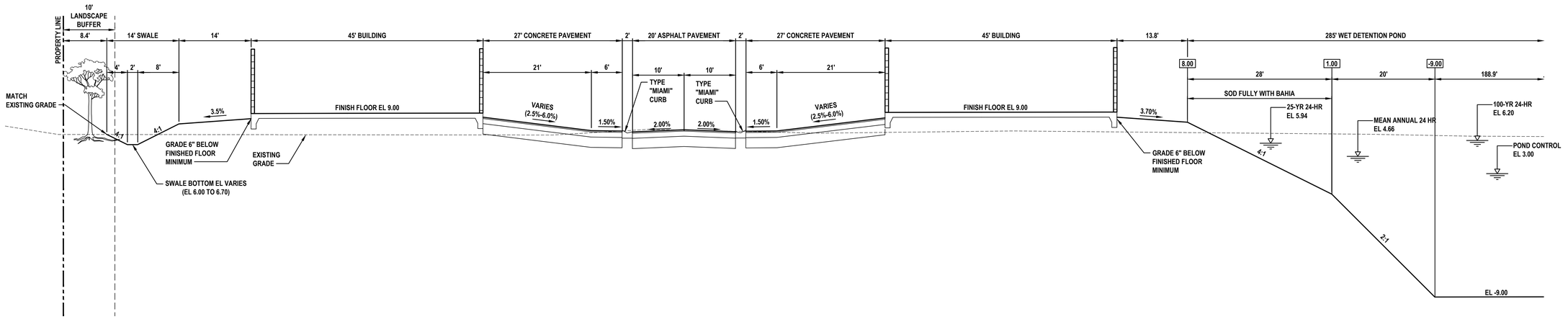
SECTION A
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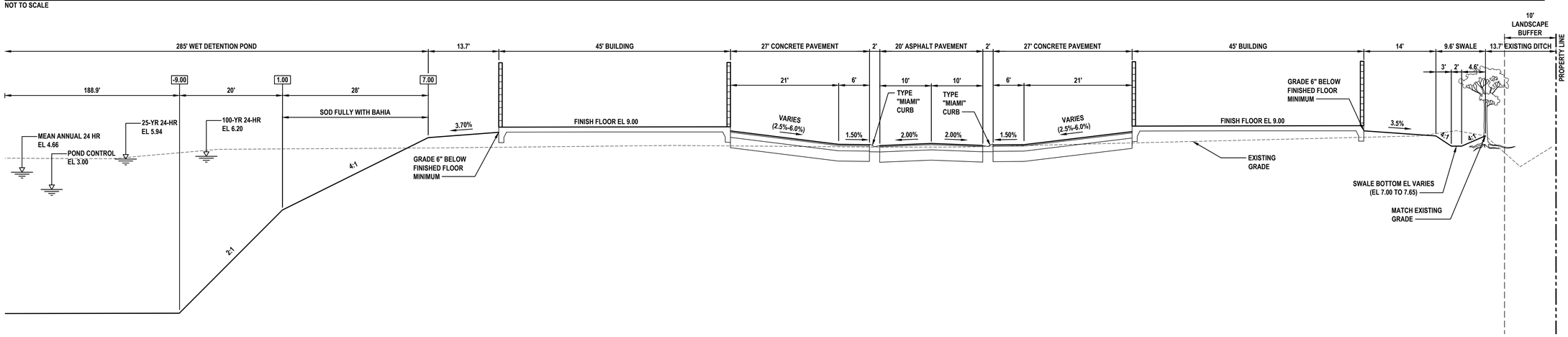
SECTION B
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SECTION C
NOT TO SCALE



SECTION D
NOT TO SCALE



SECTION D (CONT.)
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CROSS SECTIONS
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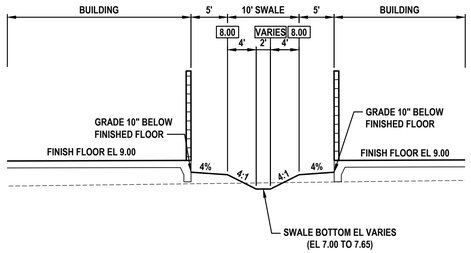
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SCALE:	AS SHOWN

DRAWING NUMBER

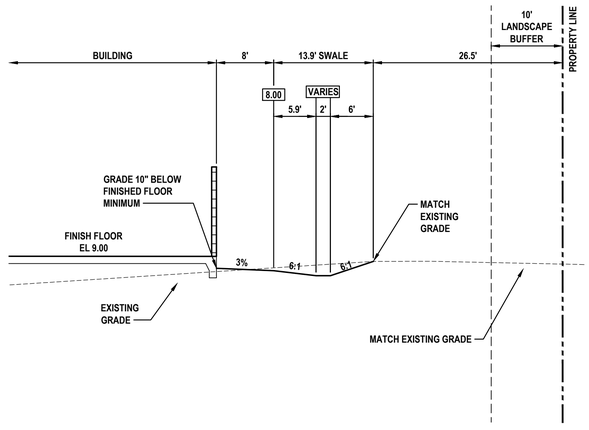
24

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



SECTION G

NOT TO SCALE



SECTION H

NOT TO SCALE

REVISIONS

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CROSS SECTIONS
THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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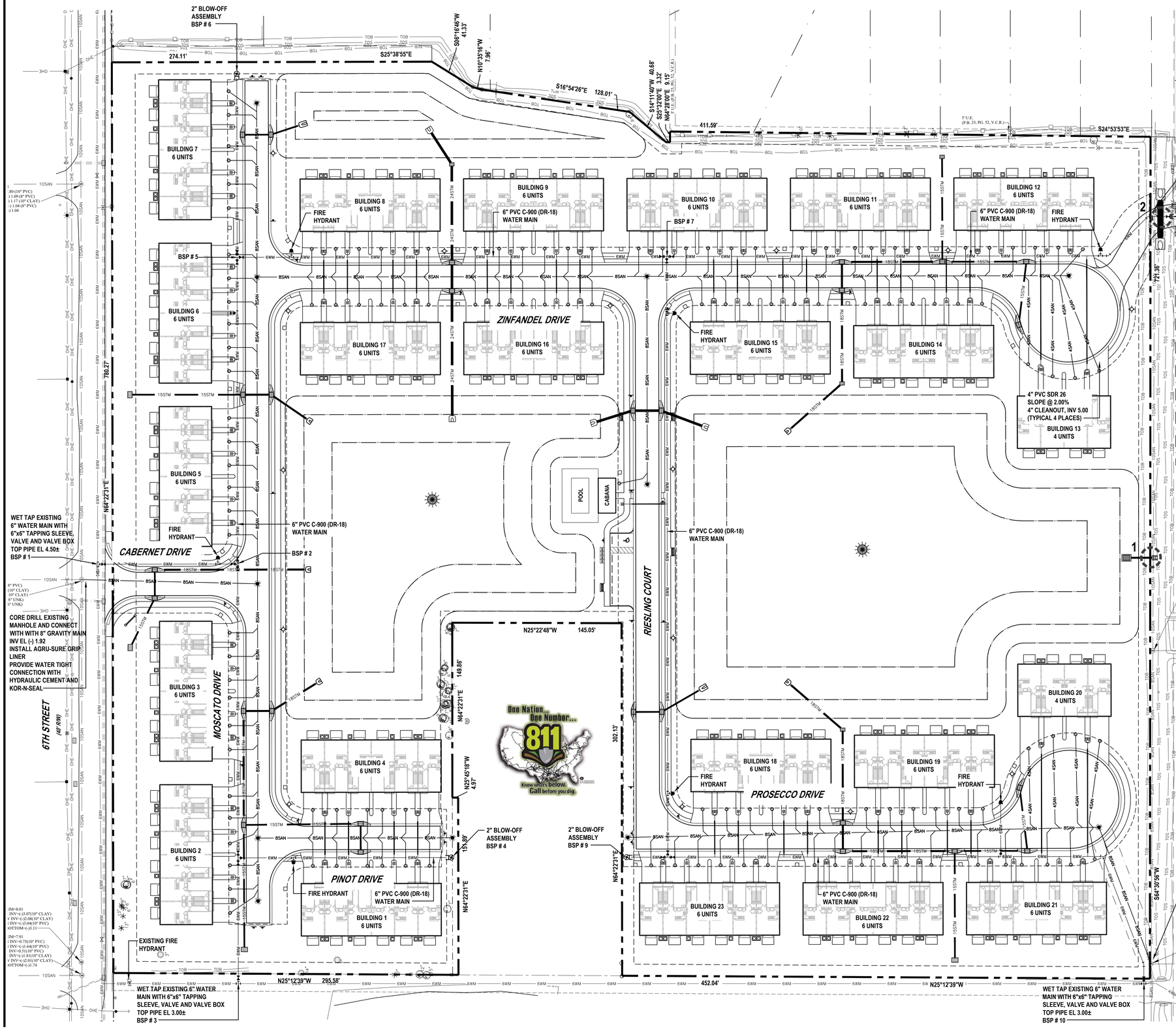
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PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	AS SHOWN

DRAWING NUMBER

25

Attachment: The Vineyards Subdivision Plan (3984 : The Vineyards Subdivision Review (PSP))



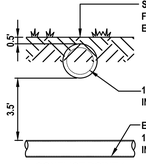
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GRAPHIC SCALE
1"=40'

UTILITY LEGEND

- PROPOSED 11.25° BEND
- PROPOSED 22.5° BEND
- PROPOSED 45° BEND
- PROPOSED 90° BEND
- PROPOSED TEE
- PROPOSED GATE VALVE
- PROPOSED CAP AND 2" BLOW OFF ASSEMBLY
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED SHORT SIDE SINGLE WATER SERVICE
- PROPOSED SHORT SIDE DOUBLE WATER SERVICE
- PROPOSED LONG SIDE SINGLE WATER SERVICE
- PROPOSED LONG SIDE DOUBLE WATER SERVICE
- 6WM — PROPOSED 6" PVC C-900 DR-18 WATER MAIN (36" MIN. COVER)
- 8SAN — PROPOSED 8" PVC SDR 26 (SLOPE PER PLAN)
- 4SAN — PROPOSED 4" PVC SDR-26 SANITARY SEWER LATERAL (SLOPE @ 2.0% MIN.)
- PROPOSED SANITARY SEWER MANHOLE
- BSP — BACTERIOLOGICAL SAMPLING POINT

UTLITY NOTES:

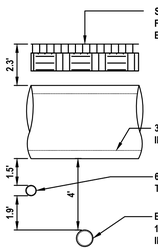
1. THE CITY OF HOLLY HILL PUBLIC WORKS / UTILITIES DEPARTMENT SHALL BE NOTIFIED PRIOR TO BEGINNING ANY WATER, SEWER AND REUSE SYSTEM CONSTRUCTION.
2. ALL WATER, SEWER AND REUSE CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDEP REGULATIONS AND CITY OF HOLLY HILL STANDARD UTILITY DETAILS AND SPECIFICATIONS (LATEST EDITION). CITY SPECIFICATIONS PROVIDED ON SHEET No. 4 AND 5. CITY DETAILS PROVIDED ON SHEET No. 36, 37 AND 38.
3. ALL WATER SERVICES SHALL BE CONSTRUCTED PER CITY DETAILS, SHEET No. 36 AND 37.
4. ALL SANITARY SERVICES SHALL BE CONSTRUCTED PER CITY DETAILS, SHEET 37.
5. ALL FIRE HYDRANT ASSEMBLIES SHALL BE CONSTRUCTED PER CITY DETAILS, SHEET 36.
6. THERE SHALL BE A MINIMUM DISTANCE OF TEN FEET BETWEEN ALL SANITARY, WATER AND RECLAIM SERVICES TO PROVIDE ADEQUATE ROOM FOR ELECTRIC AND OTHER UTILITIES TO AVOID CONFLICTS.



CONFLICT POINT 1

UTILITY CONFLICT DETAIL

NOT TO SCALE



CONFLICT POINT 2

UTILITY CONFLICT DETAIL

NOT TO SCALE

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REVISIONS

DATE	DESCRIPTION
10/13/22	CITY COMMENTS

OVERALL UTILITY PLAN
THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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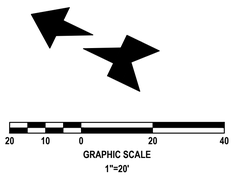
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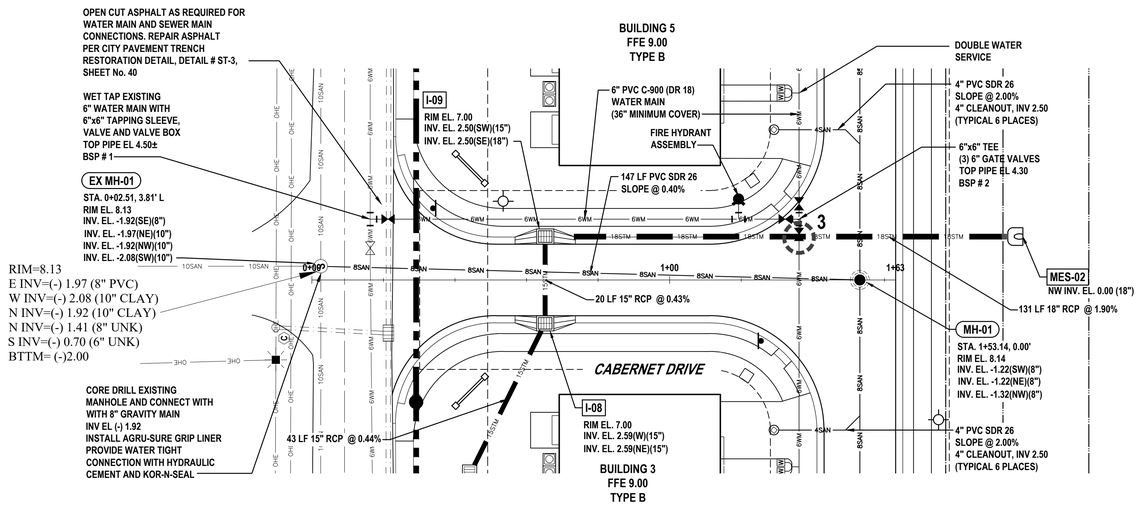
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DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 40'

DRAWING NUMBER

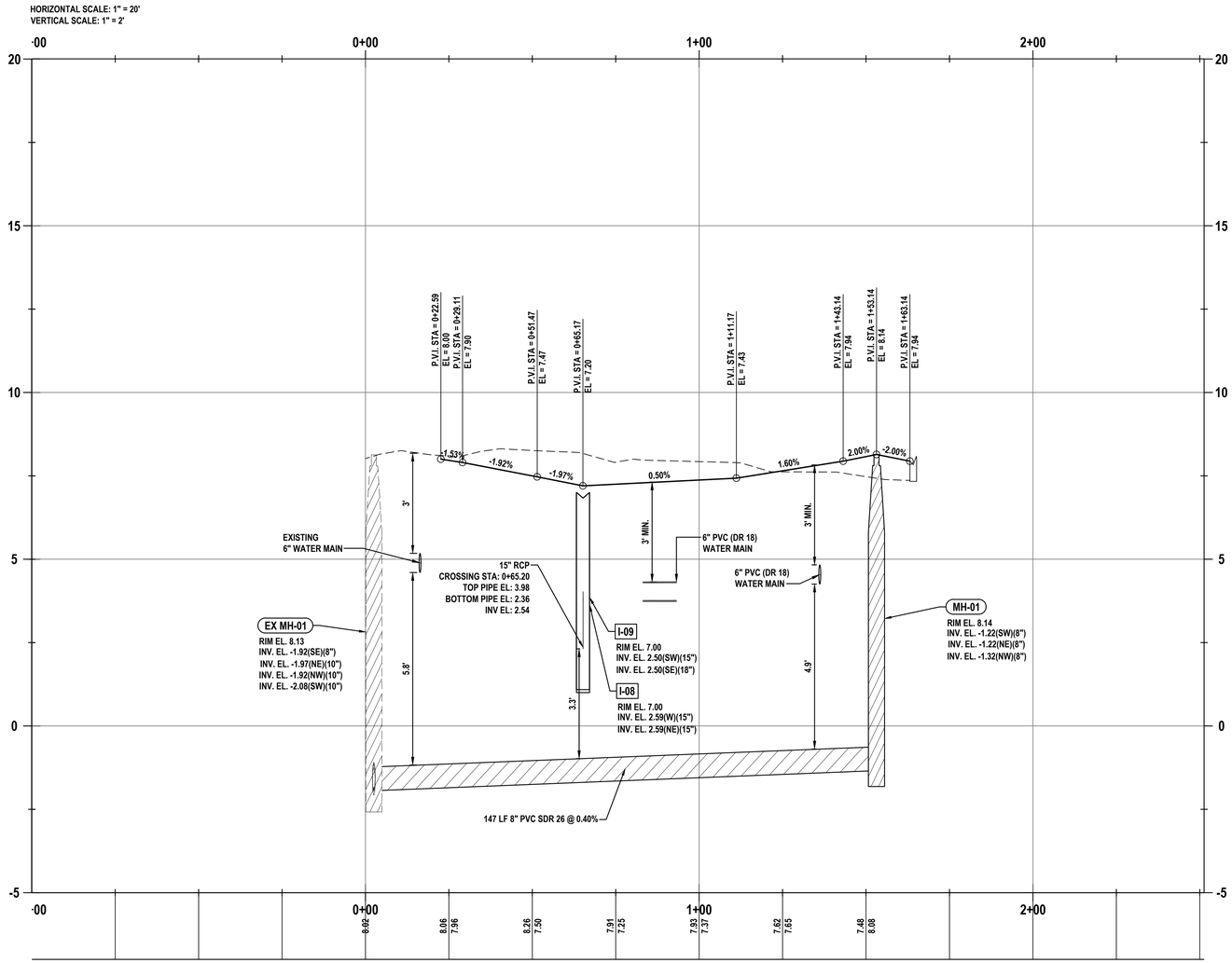
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Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



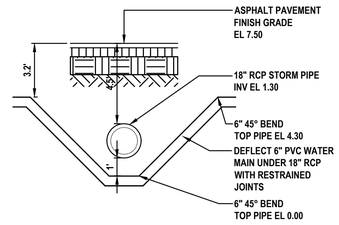


STATION 0+00 TO 1+63



UTILITY LEGEND

	PROPOSED 11.25° BEND
	PROPOSED 22.5° BEND
	PROPOSED 45° BEND
	PROPOSED 90° BEND
	PROPOSED TEE
	PROPOSED GATE VALVE
	PROPOSED CAP AND 2" BLOW OFF ASSEMBLY
	PROPOSED FIRE HYDRANT ASSEMBLY
3"	PROPOSED SHORT SIDE WATER SERVICE
3" 3"	PROPOSED LONG SIDE DOUBLE WATER SERVICE
6"W	PROPOSED 6" PVC C-900 DR-18 WATER MAIN (36" MIN. COVER)
8"SAN	PROPOSED 8" PVC SDR 26 (SLOPE PER PLAN)
4"SAN	PROPOSED 4" PVC SDR-26 SANITARY SEWER LATERAL (SLOPE @ 2.0% MIN.)
	PROPOSED SANITARY SEWER MANHOLE
BSP	BACTERIOLOGICAL SAMPLING POINT



CONFLICT POINT 3

UTILITY CONFLICT DETAIL

NOT TO SCALE

WARNING !!

CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS, UNDERGROUND ELECTRIC AND FIBER OPTIC LINES IN THE RIGHT-OF-WAY.

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PLAN AND PROFILE
STA. 0+00 - 1+63
THE VINEYARDS

649 6TH STREET
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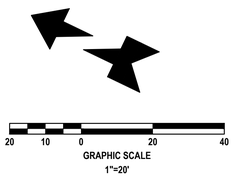
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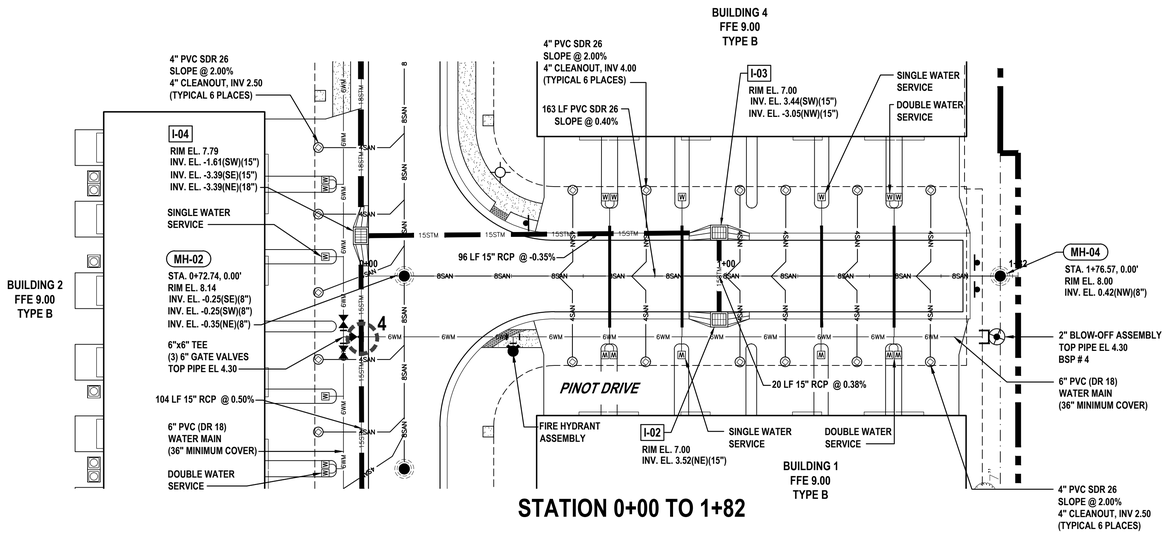
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DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 20'

DRAWING NUMBER

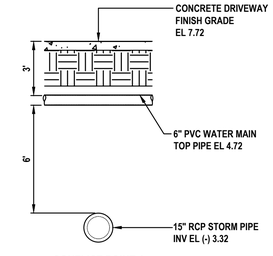
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Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))





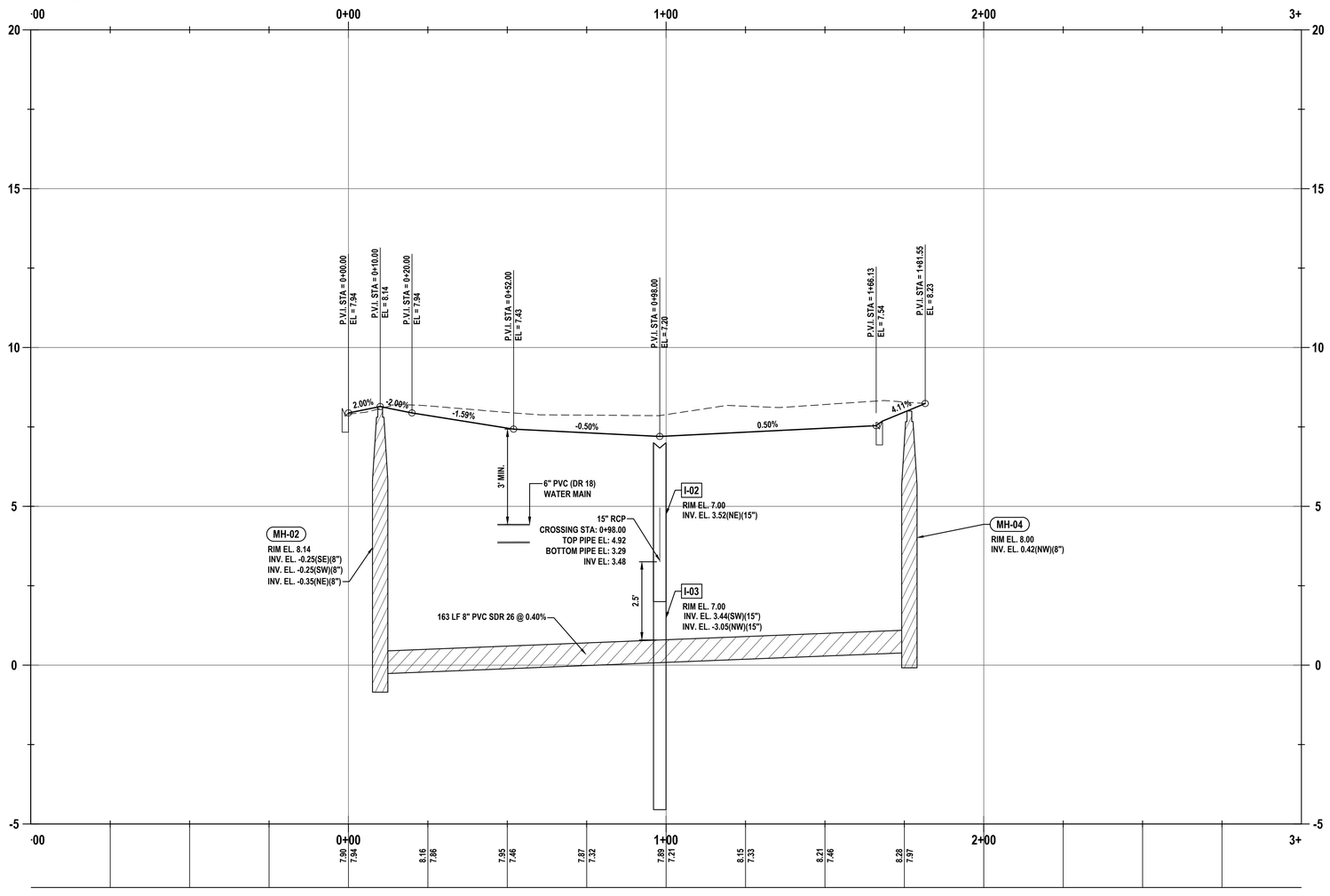
STATION 0+00 TO 1+82



UTILITY CONFLICT DETAIL

NOT TO SCALE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'





WARNING !!

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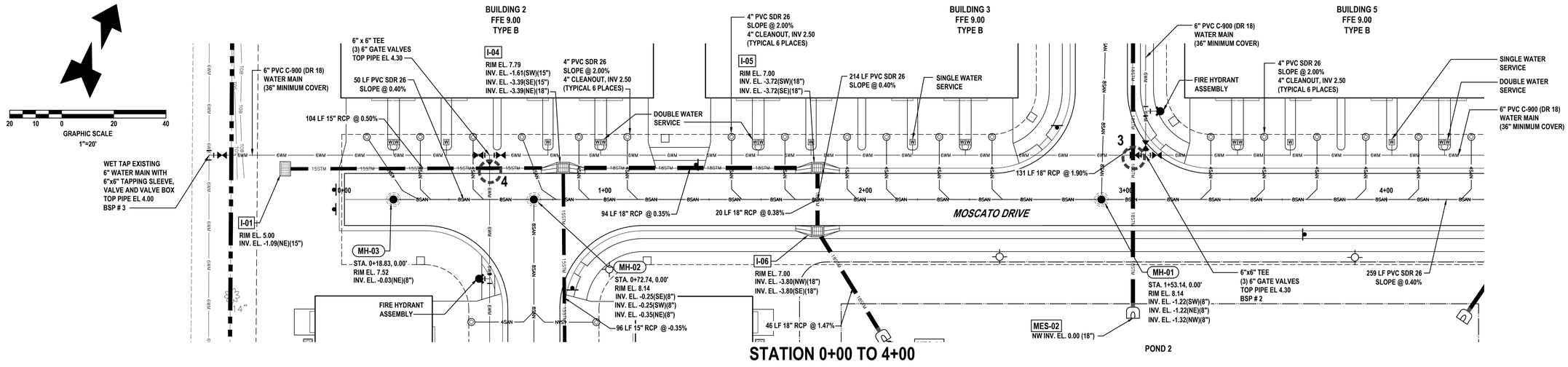
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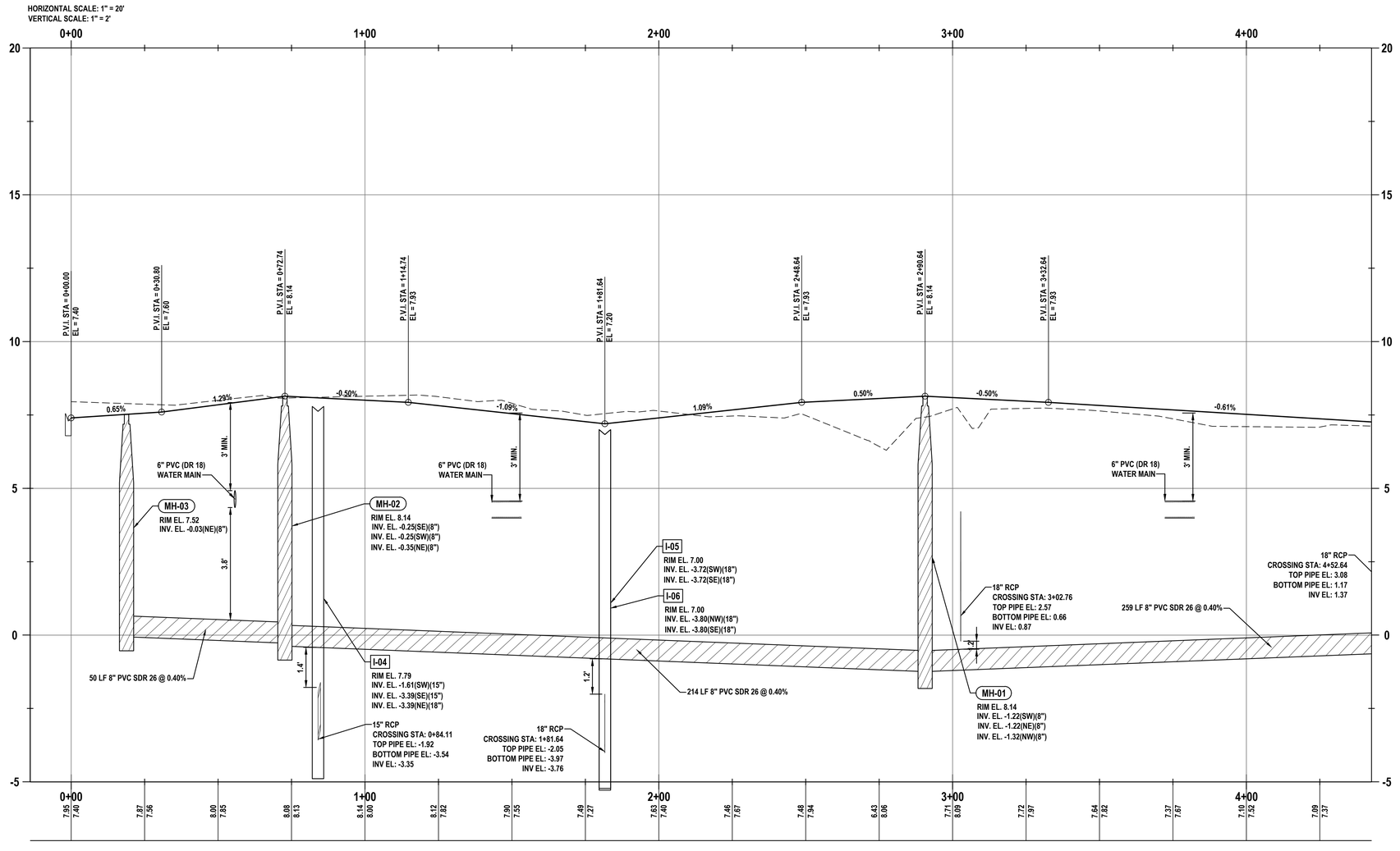
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DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 20'

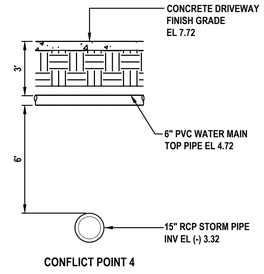
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Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



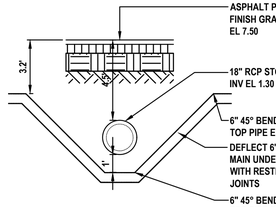




CONFLICT POINT 4

UTILITY CONFLICT DETAIL

NOT TO SCALE



CONFLICT POINT 3

UTILITY CONFLICT DETAIL

NOT TO SCALE

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

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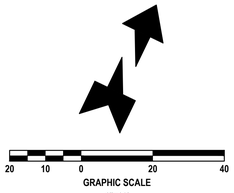
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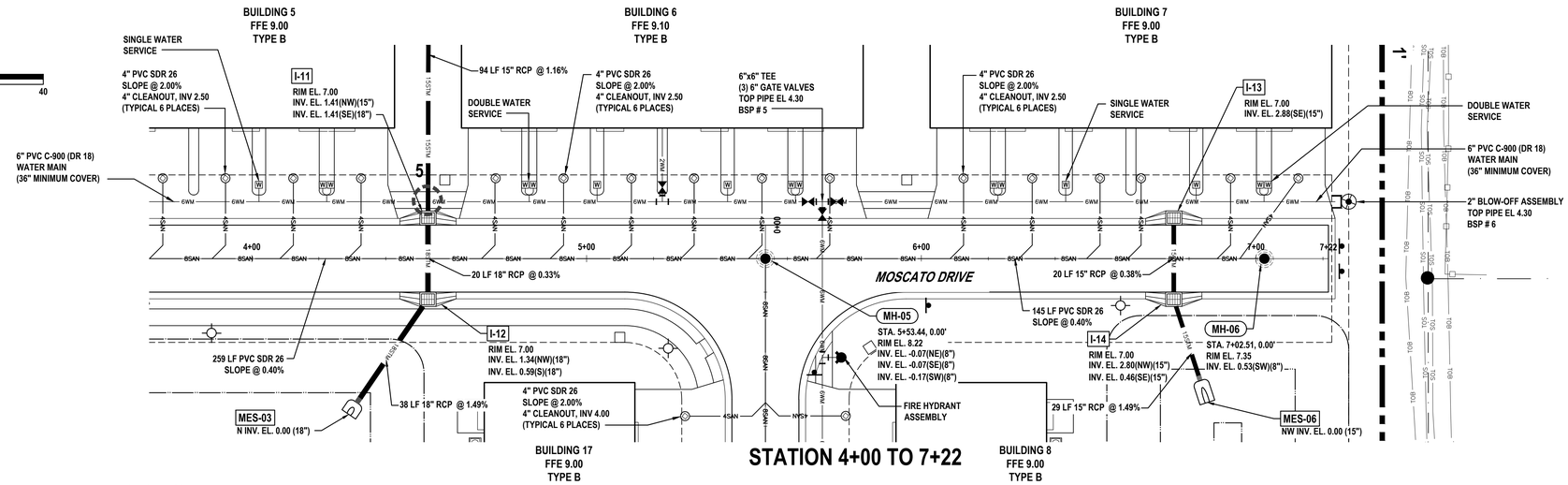
PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 20'

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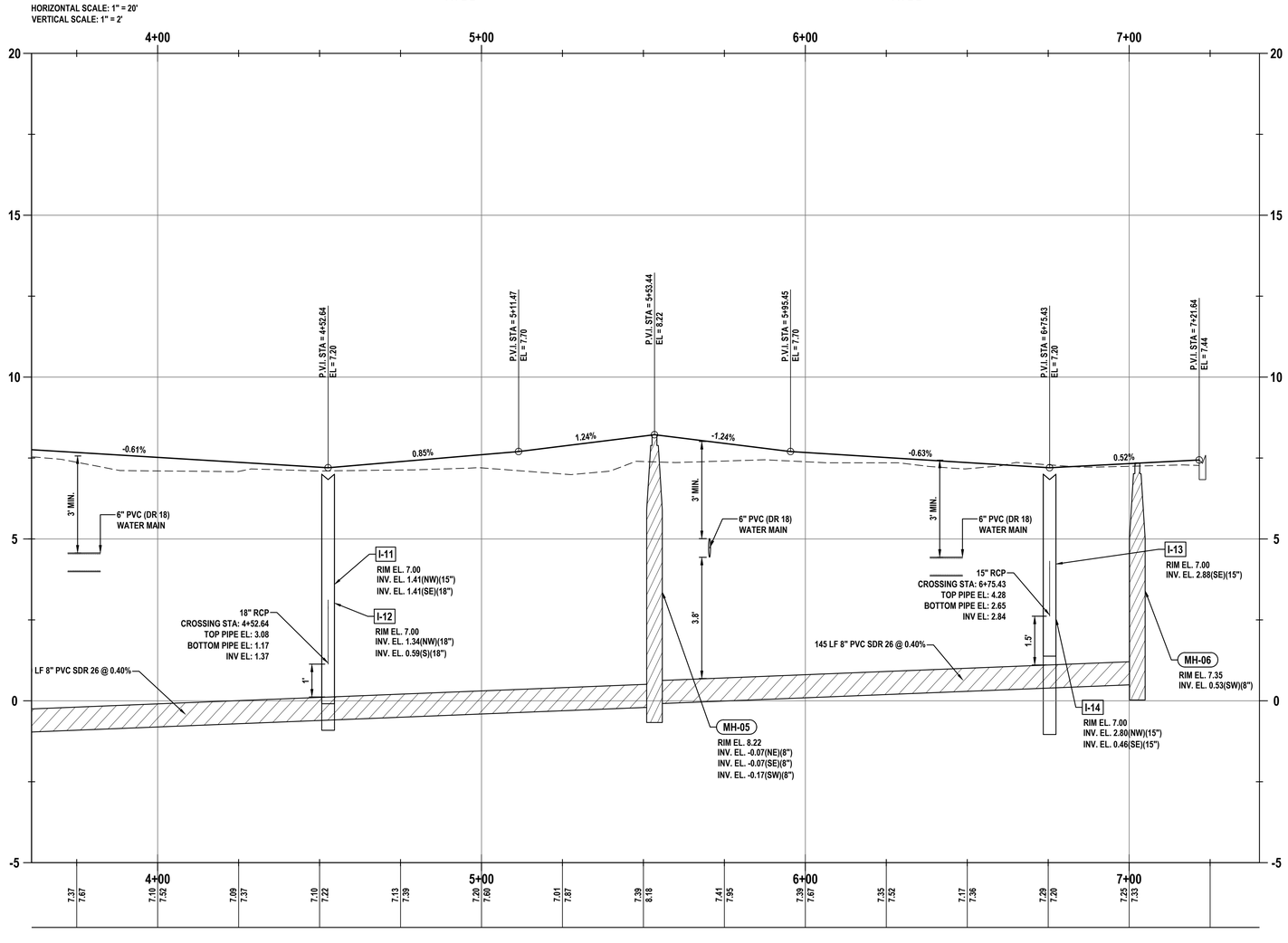
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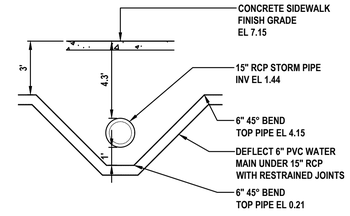
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))





STATION 4+00 TO 7+22





CONFLICT POINT 5

UTILITY CONFLICT DETAIL

NOT TO SCALE

WARNING !!

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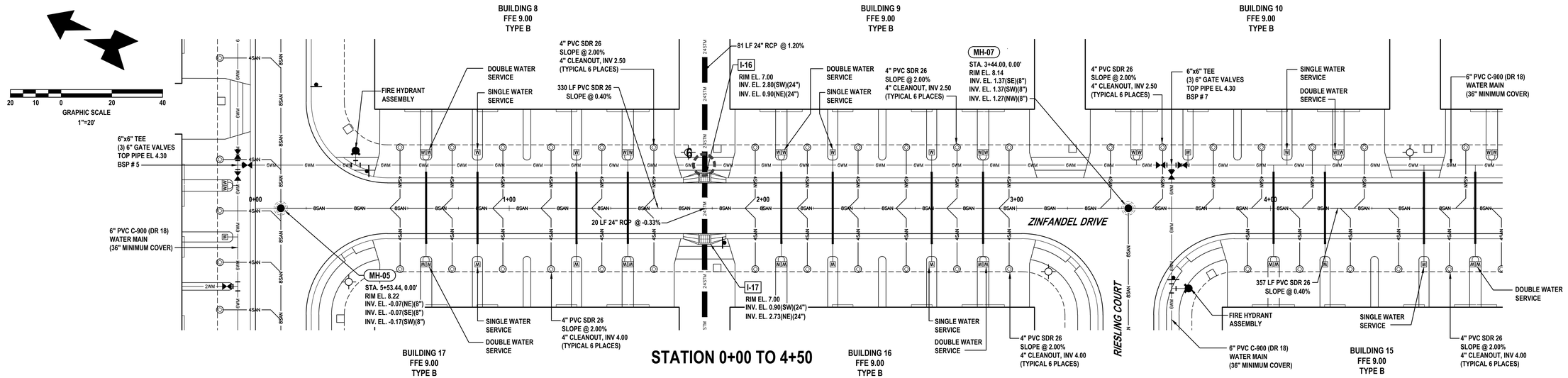
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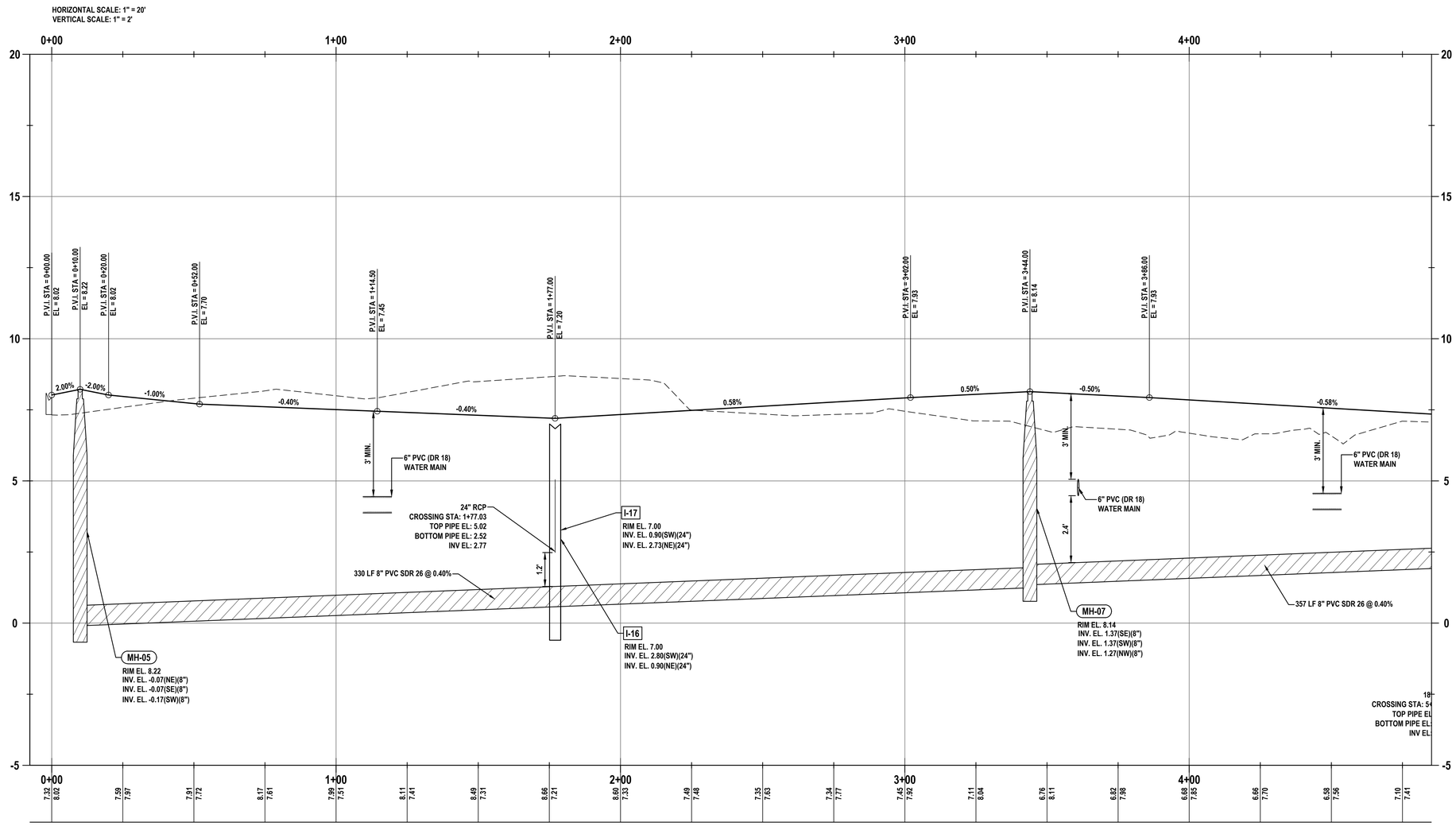
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DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 20'

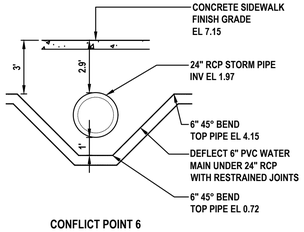
DRAWING NUMBER

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Attachment: The Vineyards Subdivision Plan (3984 : The Vineyards Subdivision Review (PSP))







CONFLICT POINT 6

UTILITY CONFLICT DETAIL

NOT TO SCALE

WARNING !!

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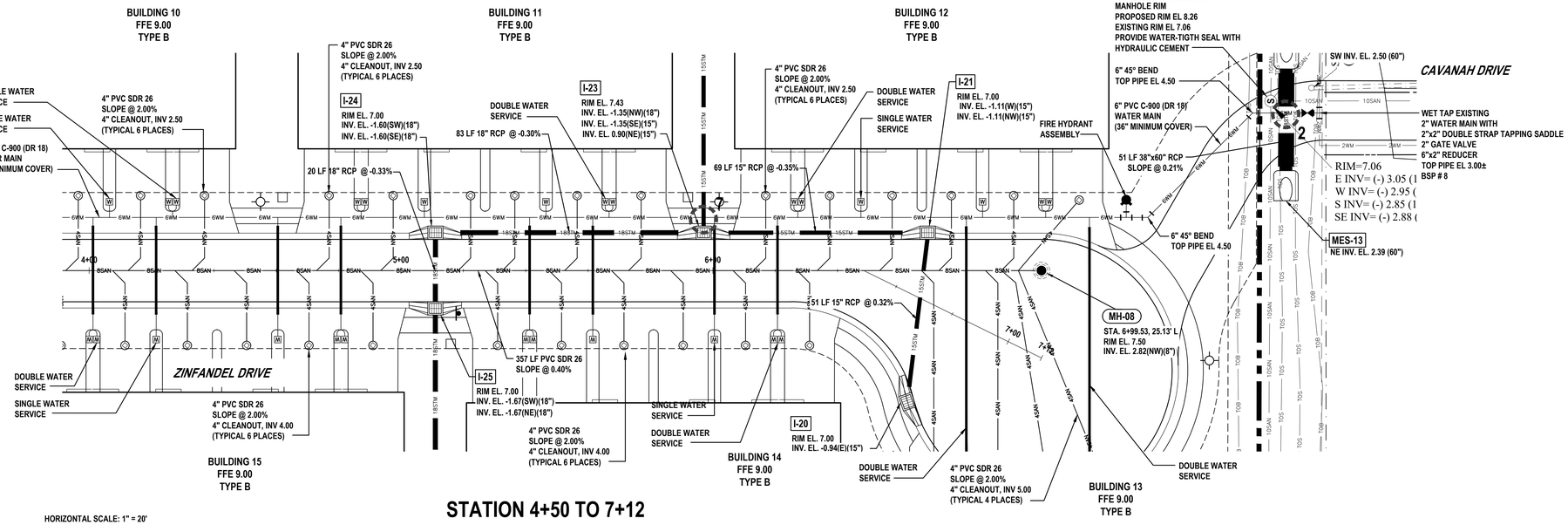
PROJECT No:	2022-86
DATE:	AUGUST 2022
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DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 20'

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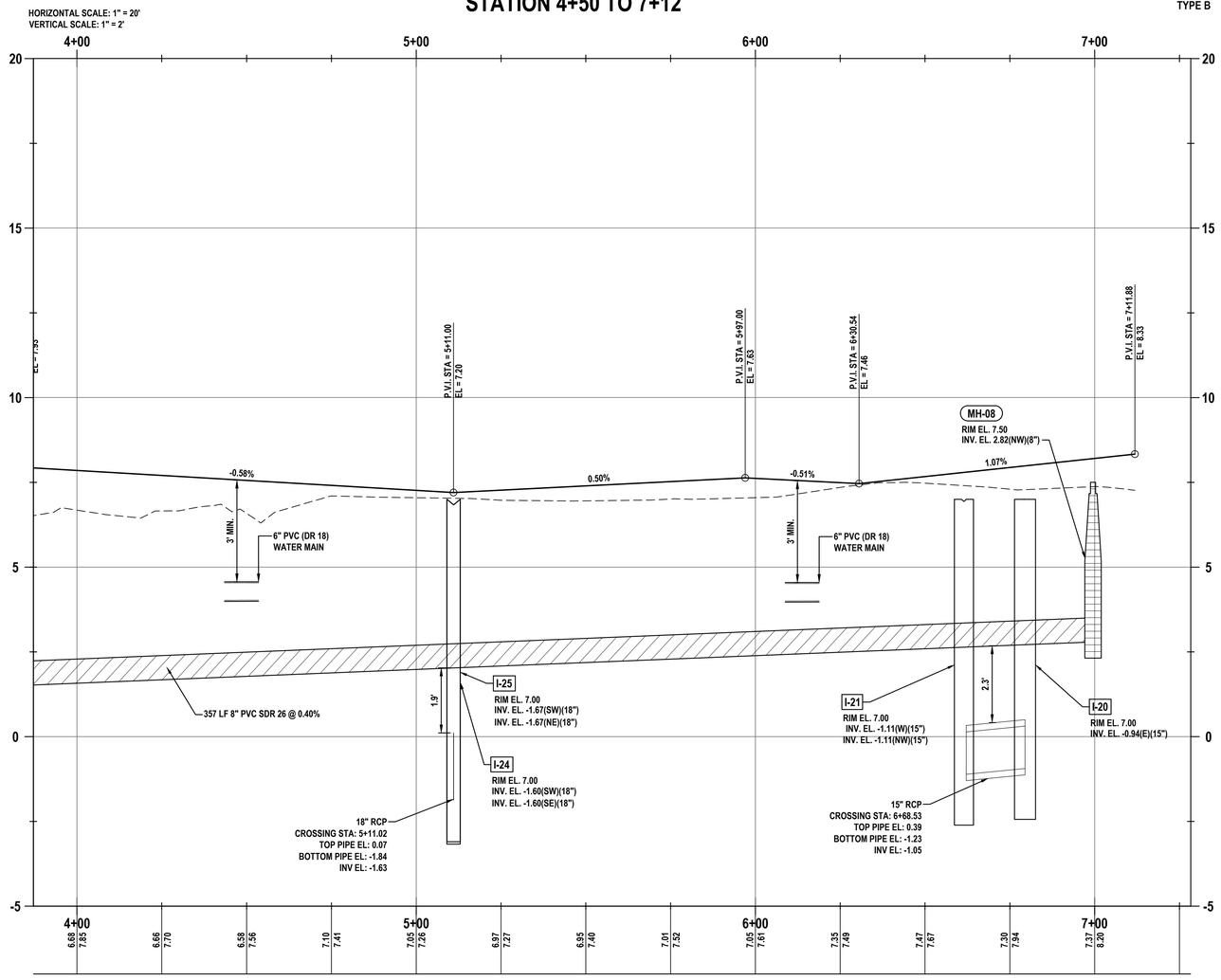
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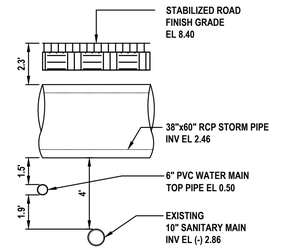
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

GRAPHIC SCALE
1"=20'
20 10 0 20 40



STATION 4+50 TO 7+12

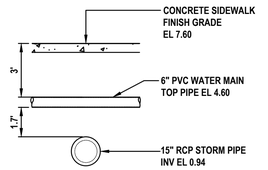




CONFLICT POINT 2

UTILITY CONFLICT DETAIL

NOT TO SCALE



CONFLICT POINT 7

UTILITY CONFLICT DETAIL

NOT TO SCALE

WARNING !!

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REVISIONS

DATE	DESCRIPTION
10/13/22	CITY COMMENTS

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Phone (386) 672-7784
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C.A. # 30209
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PLAN AND PROFILE
STA. 4+50 - 7+12
THE VINEYARDS

649 6TH STREET
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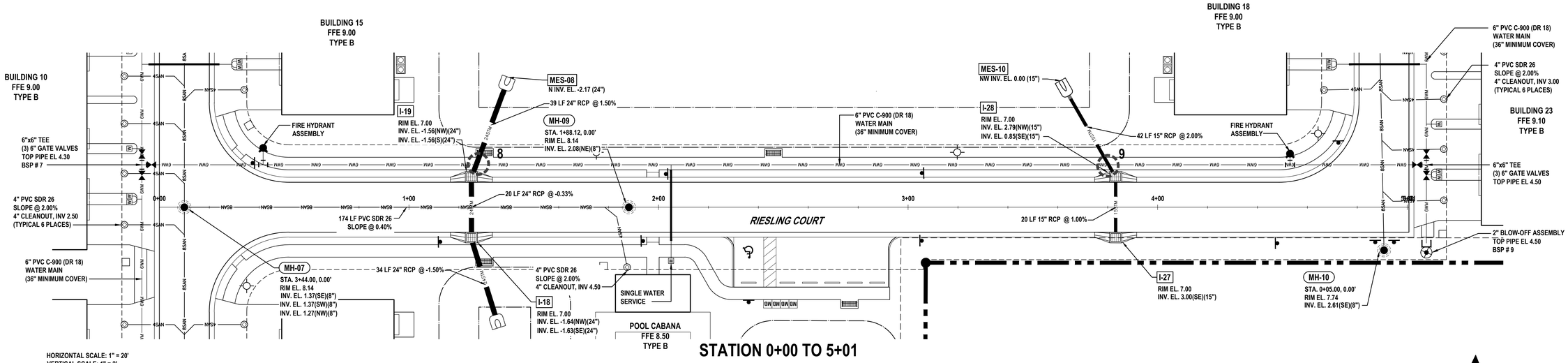
PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 20'

DRAWING NUMBER

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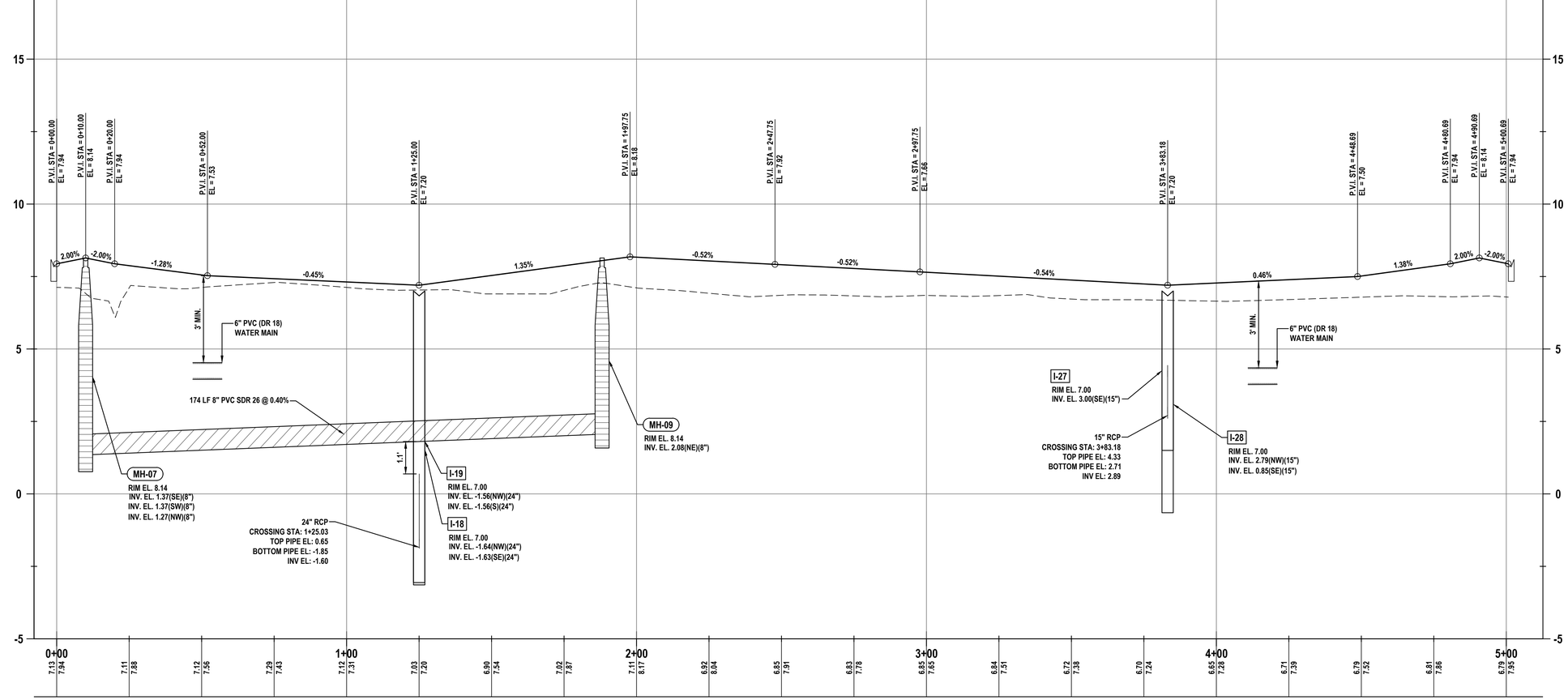
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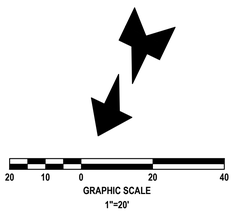
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

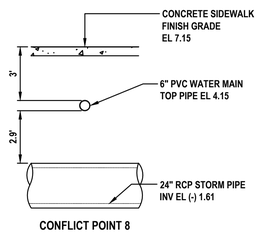


STATION 0+00 TO 5+01

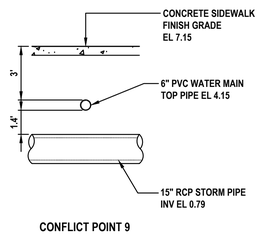
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VERTICAL SCALE: 1" = 2'







CONFLICT POINT 8



CONFLICT POINT 9

UTILITY CONFLICT DETAIL

NOT TO SCALE

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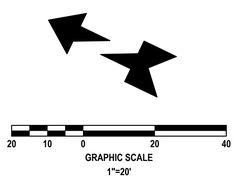
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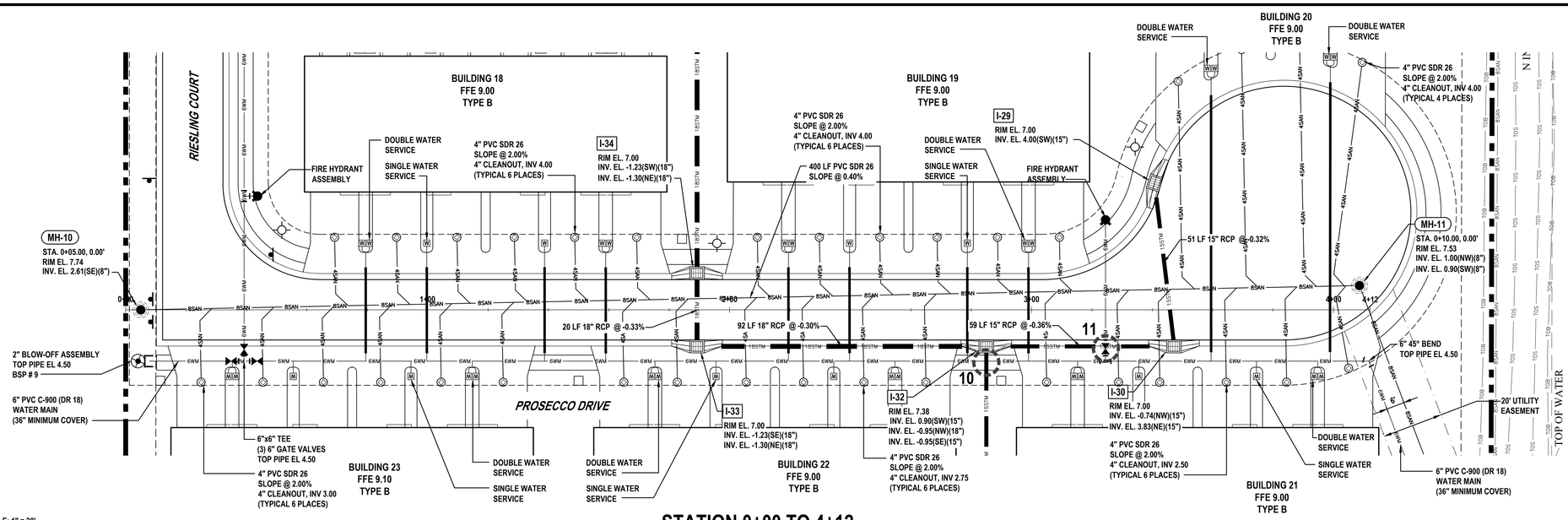
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DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	1" = 20'

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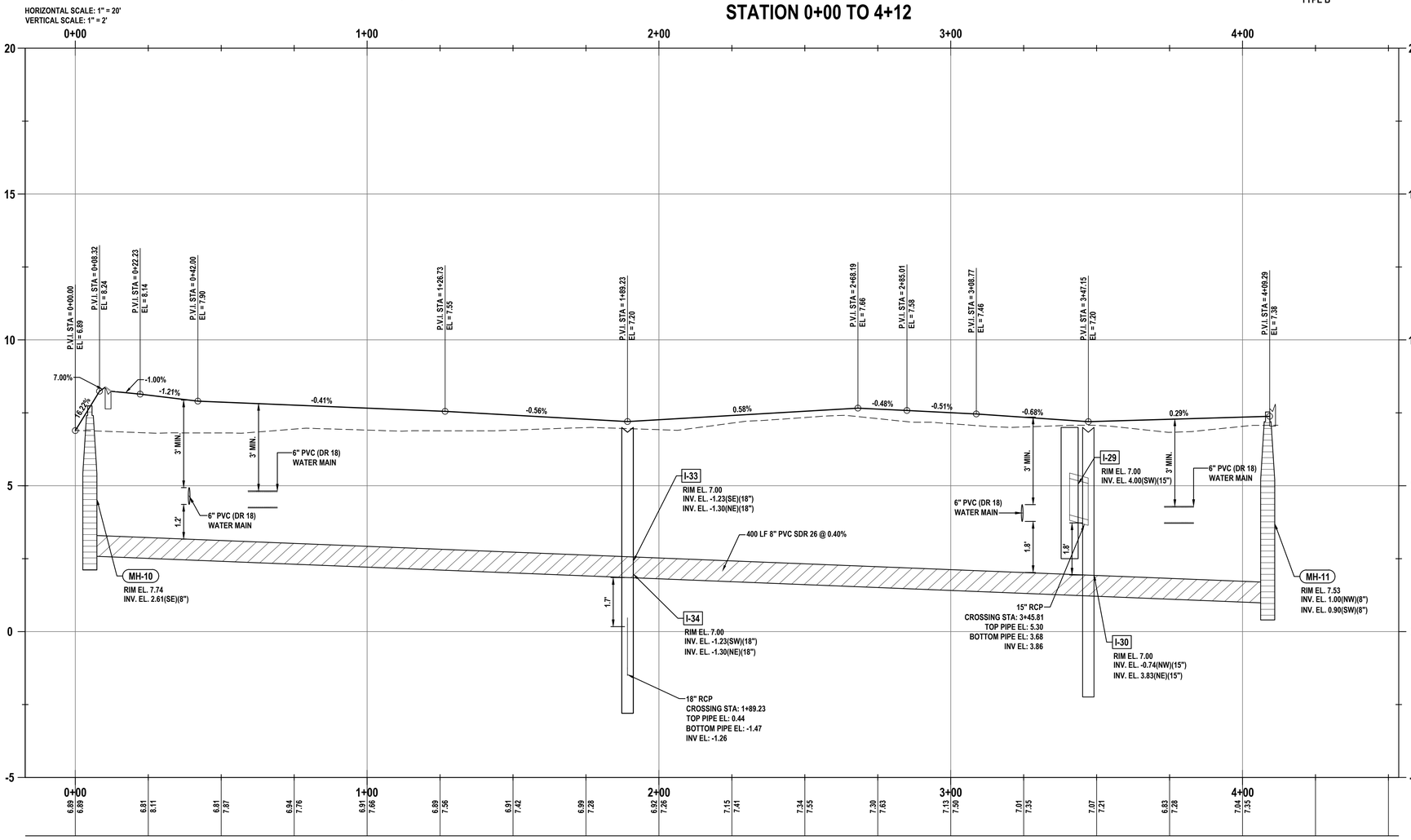
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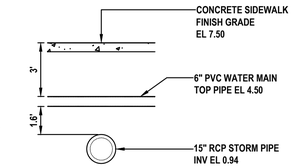
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))





STATION 0+00 TO 4+12

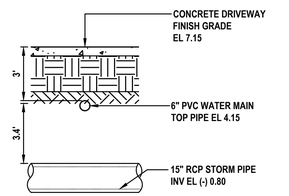




CONFLICT POINT 10

UTILITY CONFLICT DETAIL

NOT TO SCALE



CONFLICT POINT 11

UTILITY CONFLICT DETAIL

NOT TO SCALE

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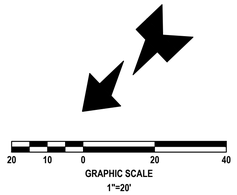
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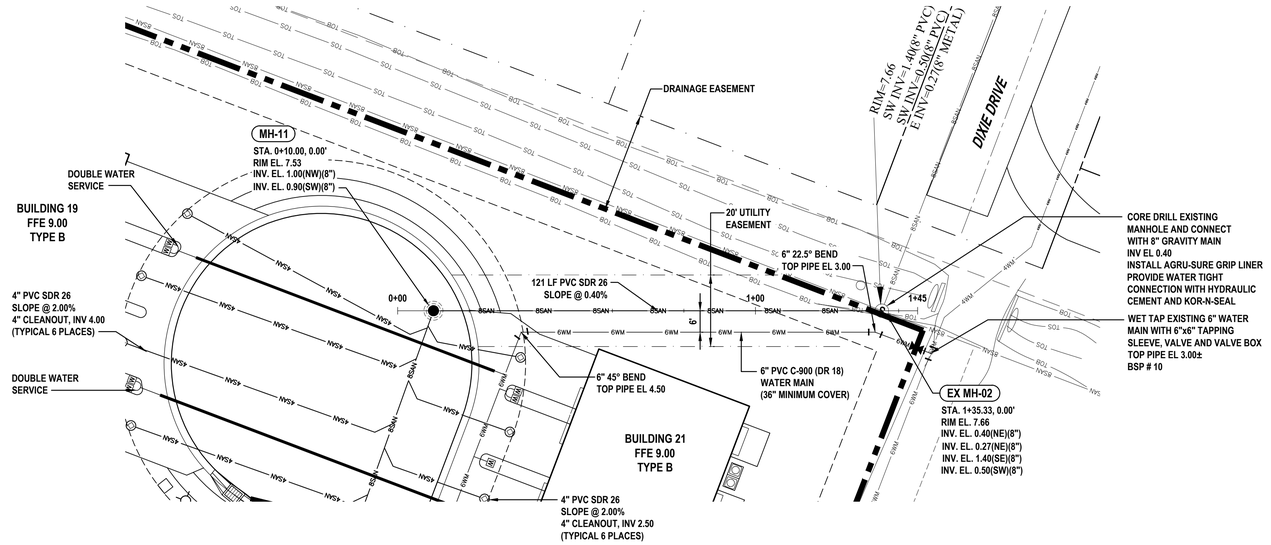
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DESIGN BY:	HHN
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CHECKED BY:	HHN
SCALE:	1" = 20'

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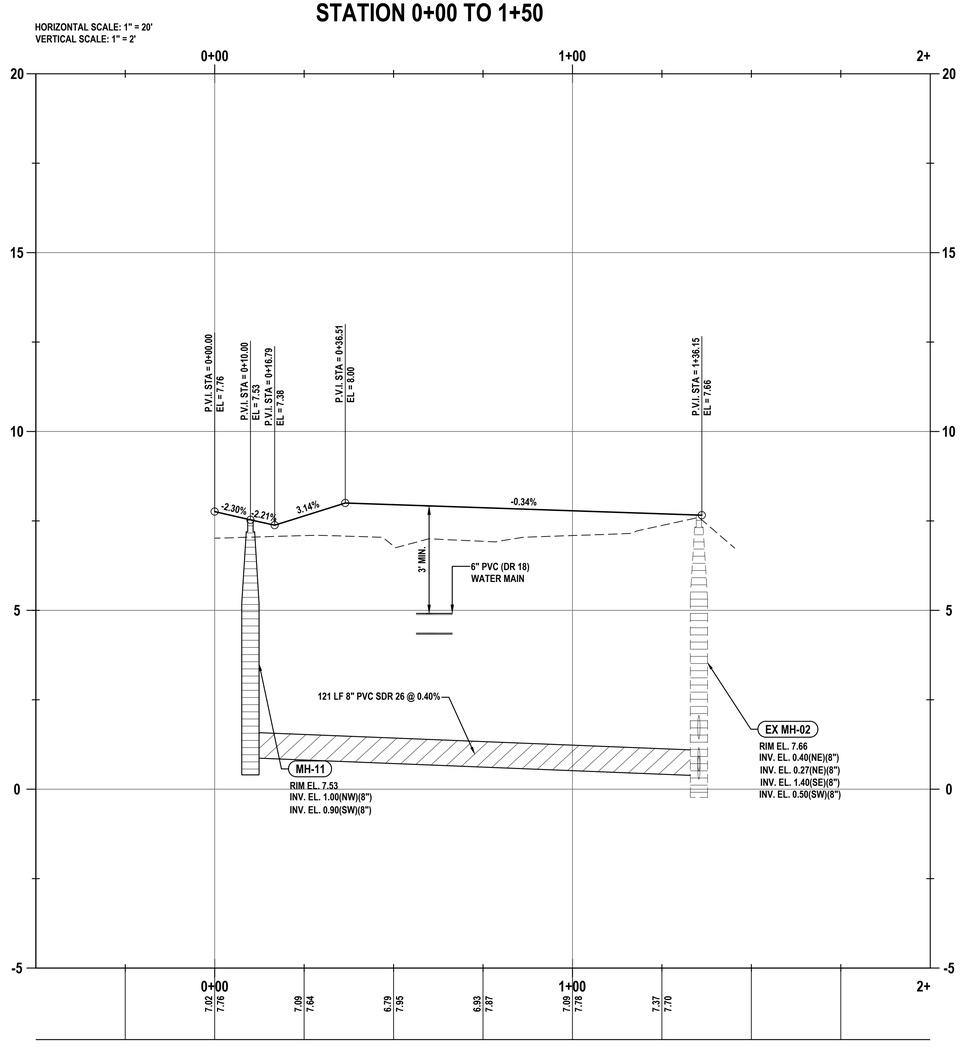
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Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))





STATION 0+00 TO 1+50



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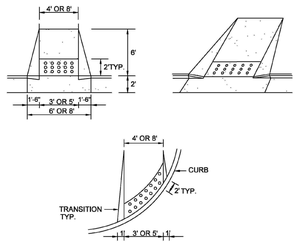
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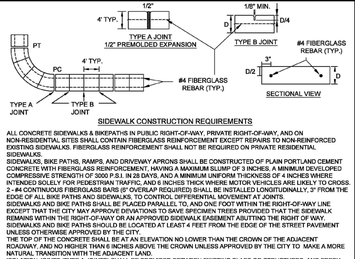
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



NOTES:

1. RAMP LOCATIONS ARE TO BE COORDINATED WITH AND IN CONFORMANCE WITH CROSSWALK MARKING DETAILS SHOWN IN THE PLANS.
2. CURBED RAMPS SHALL HAVE FLARED SIDES WITH A MAXIMUM SLOPE OF 12:1.
3. RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE AS SHOWN.
4. RAMPS ARE TO BE CONSTRUCTED AT ALL LOCATIONS SHOWN IN THE PLANS EVEN WHEN A SIDEWALK IS NOT CONSTRUCTED CONCURRENTLY.
5. NO CURB TRANSITION IS NEEDED FOR MIAMI CURBS.
6. ALL RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT STANDARD PLANS (LATEST EDITION) AND HANDICAPPED ACCESSIBILITY REQUIREMENTS IN ACCORDANCE WITH THE AMERICAN DISABILITIES ACT.

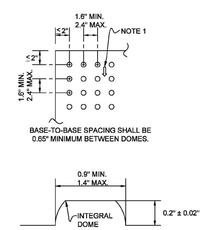
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | SIDEWALK AND BIKE PATH RAMP | DATE 02/2020 | DETAIL NUMBER GD-4



SIDEWALK CONSTRUCTION REQUIREMENTS

1. ALL CONCRETE SIDEWALKS & BIKEPATHS IN PUBLIC RIGHT-OF-WAY, PRIVATE RIGHT-OF-WAY, AND ON NON-RESIDENTIAL SITES SHALL CONTAIN FIBERGLASS REINFORCEMENT EXCEPT REPAIRS TO NON-REINFORCED EXISTING SIDEWALKS. FIBERGLASS REINFORCEMENT SHALL NOT BE REQUIRED ON PRIVATE RESIDENTIAL SIDEWALKS.
2. SIDEWALKS, BIKE PATHS, RAMPS, AND DRIVEWAY APRONS SHALL BE CONSTRUCTED OF PLAIN PORTLAND CEMENT CONCRETE WITH FIBERGLASS REINFORCEMENT, HAVING A MAXIMUM SLUMP OF 3 INCHES, A MINIMUM DEVELOPED COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS, AND A MINIMUM UNIFORM THICKNESS OF 4 INCHES WHERE INTENDED SOLELY FOR PEDESTRIAN TRAFFIC, AND 6 INCHES THICK WHERE MOTOR VEHICLES ARE LIKELY TO CROSS.
3. 2 - #4 CONTINUOUS FIBEROGLASS BARS (6" OVERLAP REQUIRED) SHALL BE INSTALLED LONGITUDINALLY, 3" FROM THE EDGE OF ALL BIKE PATHS AND SIDEWALKS, TO CONTROL DIFFERENTIAL MOVEMENT AT JOINTS.
4. SIDEWALKS AND BIKE PATHS SHALL BE PLACED PARALLEL TO, AND ONE FOOT WITHIN THE RIGHT-OF-WAY LINE EXCEPT THAT THE CITY MAY APPROVE DEVIATIONS TO SAVE SPECIMEN TREES PROVIDED THAT THE SIDEWALK REMAINS WITHIN THE RIGHT-OF-WAY OR AN APPROVED SIDEWALK EASEMENT ABUTTING THE RIGHT OF WAY. SIDEWALKS AND BIKE PATHS SHOULD BE LOCATED AT LEAST 4 FEET FROM THE EDGE OF THE STREET PAVEMENT UNLESS OTHERWISE APPROVED BY THE CITY.
5. THE TOP OF THE CONCRETE SHALL BE AT AN ELEVATION NO LOWER THAN THE CROWN OF THE ADJACENT ROADWAY, AND NO HIGHER THAN 6 INCHES ABOVE THE CROWN UNLESS APPROVED BY THE CITY TO MAKE A MORE NATURAL TRANSITION WITH THE ADJACENT LAND.
6. ISOLATION JOINTS (TYPE A JOINTS) SHALL BE PROVIDED BETWEEN EXISTING SLABS OR STRUCTURES AND FRESH CONCRETE, TO SEPARATE PEDESTRIAN SECTIONS FROM SECTIONS WHICH WILL ENCOUNTER VEHICLE TRAFFIC, TO SEPARATE FRESH PLACEMENT FROM CONCRETE WHICH HAS SET FOR MORE THAN 60 MINUTES, AND NO FARTHER APART THAN 100 FEET IN SIDEWALKS AND BIKE PATHS. JOINT MATERIAL SHALL BE PREFORMED JOINT FILLER MEETING FDOT SPECIFICATIONS (LATEST EDITION).
7. CONTROL JOINTS (TYPE B JOINTS) SHALL BE TOOLED INTO THE FRESH CONCRETE TO A DEPTH EQUAL TO 1/4 THE SLAB THICKNESS AND SPACED APART A DISTANCE EQUAL TO THE WIDTH OF THE SLAB OR 4 FEET WHICHEVER IS GREATEST.
8. THE SLAB SURFACE SHALL BE BROOM FINISHED TO BE SLIP RESISTANT, AND SHALL MATCH AS CLOSELY AS POSSIBLE THE FINISH OF EXISTING ADJACENT SLABS AND ALL EDGES SHALL BE TOOLED TO ELIMINATE SHARP CORNERS.
9. THE BEARING SUBSURFACE SHALL HAVE ALL ORGANIC, LOOSE, AND DELETERIOUS MATTER REMOVED, AND THE REMAINING CLEAN SOIL SHALL BE SMOOTH, SOUND, AND SOLID. ANY FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM PROCTOR FIELD DENSITY OF 95 PERCENT.
10. ALL CONCRETE WORK IN THE RIGHT-OF-WAY SHALL BE INSPECTED BY THE CITY AFTER THE SUBSOIL IS PREPARED AND THE FORMS ARE SET, BUT BEFORE THE CONCRETE PLACEMENT BEGINS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE FINISHED SLAB FROM ALL DAMAGE AND VANDALISM UNTIL THE CITY ACCEPTS OR APPROVES THE SLAB, AFTER WHICH TIME THE OWNER OF THE ABUTTING LAND SHALL BE RESPONSIBLE FOR THE SLAB IN ACCORDANCE WITH THE CITY CODE. ANY SLAB SECTION DAMAGED OR VANDALIZED PRIOR TO ACCEPTANCE OR APPROVAL SHALL BE CUT OUT BETWEEN JOINTS AND REPLACED. REPAIRS ARE NOT ACCEPTABLE.
12. SIDEWALKS LOCATED ON THE RIGHT-OF-WAY SHALL NOT BE TINTED, STAINED, COLORED, OR COATED.
13. ALL FORMS SHALL BE REMOVED PRIOR TO ACCEPTANCE OR APPROVAL AND THE DISTURBED GROUND SHALL BE BACKFILLED, REGRADED, AND SODDED SO THAT THE WEAR SURFACE OF THE CONCRETE IS REASONABLY FLUSH WITH THE ADJACENT GRADE.

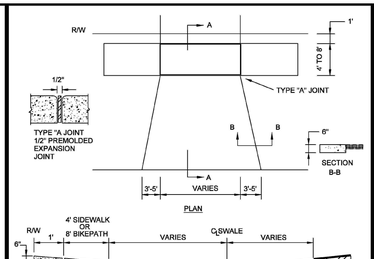
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | SIDEWALK CONSTRUCTION REQUIREMENTS | DATE 02/2020 | DETAIL NUMBER GD-3



NOTE:

1. ON RAMPS THAT ARE PERPENDICULAR WITH THE CURB LINE, THE DOME PATTERN SHALL BE IN-LINE WITH THE DIRECTION OF TRAVEL. ON RAMPS INTERSECTING CURBS ON A RADIUS, THE DOME PATTERN SHALL BE IN-LINE WITH THE DIRECTION OF TRAVEL TO THE EXTENT PRACTICAL.

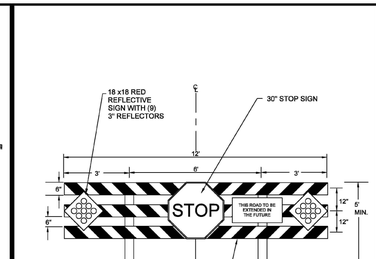
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | SIDEWALK AND BIKEPATH RAMP | DATE 02/2020 | DETAIL NUMBER GD-5



NOTES:

1. DRIVEWAY APRON BASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
2. CONCRETE DRIVEWAY APRON TO BE 28 DAY, 3000 P.S.I.

HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | DRIVEWAY APRON | DATE 02/2020 | DETAIL NUMBER GD-6



HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | ROAD BARRICADE | DATE 02/2020 | DETAIL NUMBER GD-9

HANDICAP ACCESSIBLE PARKING SPACES SHALL BE PROVIDED IN ACCORDANCE WITH CURRENT FLORIDA STATUTES, INCLUDING THE FOLLOWING DETAILS:

1. ANY COMMERCIAL REAL ESTATE PROPERTY OR RESIDENTIAL MODEL CENTERS OWNER OFFERING PARKING FOR THE GENERAL PUBLIC SHALL PROVIDE SPECIALLY DESIGNED AND MARKED MOTOR VEHICLE PARKING SPACES FOR THE EXCLUSIVE USE OF PHYSICALLY DISABLED PERSONS WHO HAVE BEEN ISSUED PARKING PERMITS PURSUANT TO STATE LAW.
2. DIAGONAL OR PERPENDICULAR PARKING SPACES SHALL BE A MINIMUM OF 12 FEET WIDE (SEE FIGURE 1).
3. PARALLEL PARKING SPACES SHALL BE LOCATED EITHER AT THE BEGINNING OR END OF A BLOCK OR ADJACENT TO ALLEY ENTRANCES (SEE FIGURE 2). CURBS ADJACENT TO SUCH SPACES SHALL BE OF A HEIGHT WHICH WILL NOT INTERFERE WITH THE OPENING AND CLOSING OF MOTOR VEHICLE DOORS.
4. EACH SUCH PARKING SPACE SHALL BE CONSPICUOUSLY OUTLINED IN BLUE PAINT AND SHALL BE POSTED AND MAINTAINED WITH A PERMANENT, ABOVE-GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND THE CAPTION PARKING BY DISABLED PERMIT ONLY, AND AN ADDITIONAL SIGN STATING THE PENALTY FOR ILLEGAL USE OF THE SPACE (SEE FIGURE 2). SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. ALL HANDICAP ACCESSIBLE PARKING MUST BE SIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION.
5. ALL SPACES SHALL HAVE A SIXTY INCH (60") WIDE ADJACENT ACCESS AISLE (SEE FIGURE 2). PARKING ACCESS AISLES SHALL BE PART OF THE ACCESSIBLE ROUTE TO THE BUILDING OR FACILITY ENTRANCE. TWO ACCESSIBLE PARKING SPACES MAY SHARE A COMMON ACCESS AISLE. PARKED VEHICLE OVERHANGS SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE CIRCULATION ROUTE.
6. ALL SPACES SHALL HAVE AN ACCESSIBLE CURB-RAMP OR CURB-CUT TO ALLOW ACCESS TO THE BUILDING SERVED. IT SHALL BE LOCATED SO THAT USERS WILL NOT BE COMPELLED TO WHEEL BEHIND PARKED VEHICLES.
7. THE MINIMUM NUMBER OF SUCH PARKING SPACES SHALL COMPLY WITH THE FOLLOWING TABLE:

TOTAL PARKING IN LOT	REQUIRED NUMBER OF ACCESSIBLE SPACES
UP TO 25	1
26 TO 50	2
51 TO 75	3
76 TO 100	4
101 TO 150	5
151 TO 200	6
201 TO 300	7
301 TO 400	8
401 TO 800	9
501 TO 1000	2% OF TOTAL OVER 20 PLUS 1 FOR EACH 100 OVER 1000
1000	

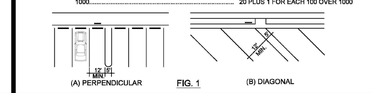
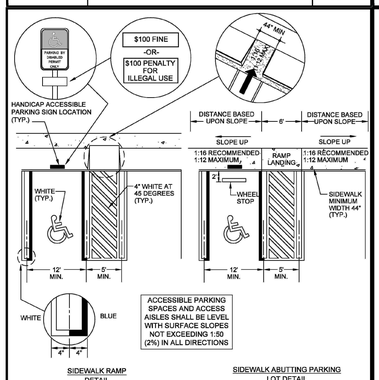


FIG. 1

HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | HANDICAP ACCESSIBLE PARKING SPACES | DATE 02/2020 | DETAIL NUMBER GD-10

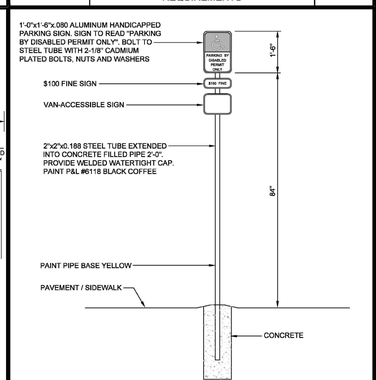


SIDEWALK RAMP DETAIL | SIDEWALK ABUTTING PARKING LOT DETAIL

NOTES:

1. WHEN HEADER CURB IS USED IN LIEU OF WHEEL STOPS, SIDEWALK ABUTTING CURB MUST BE WIDENED BY 18" SO THAT THE TOTAL SIDEWALK WIDTH IS 62", ALLOWING FOR 44" MINIMUM CLEAR ACCESSIBLE ROUTE.
2. FOR COMPLETE DETAIL OF HANDICAPPED SIGN, REFER TO DETAIL GD-12.

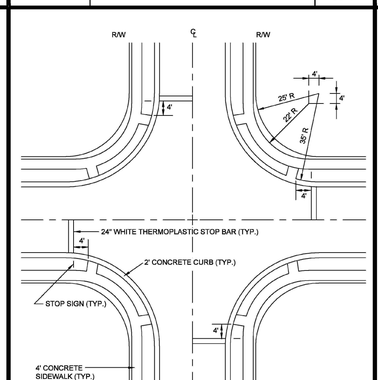
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | HANDICAP ACCESSIBLE PARKING SPACES | DATE 02/2020 | DETAIL NUMBER GD-11



NOTES:

1. HANDICAPPED PARKING SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL AND FEDERAL CODES AND REGULATIONS.
2. ALL SIGNS SHALL BE DESIGNED TO WITHSTAND 120 M.P.H. WIND SPEED.

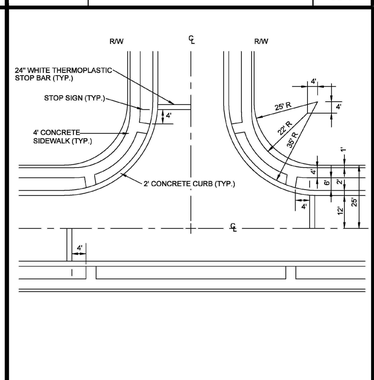
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | HANDICAP PARKING SIGN | DATE 02/2020 | DETAIL NUMBER GD-12



NOTES:

1. REFER TO DETAIL SHEET GD-3 FOR SIDEWALK CONSTRUCTION SPECIFICATIONS.
2. REFER TO DETAIL SHEET GD-4 & GD-5 FOR SIDEWALK & BIKE PATH RAMP SPECIFICATIONS.

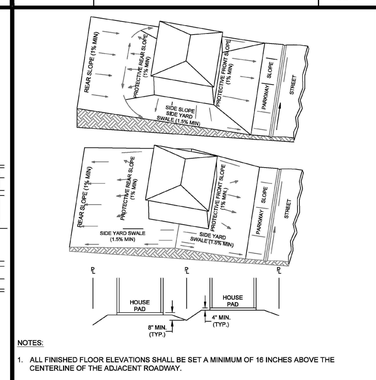
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | SIDEWALK CONSTRUCTION AT INTERSECTIONS | DATE 02/2020 | DETAIL NUMBER GD-14



NOTES:

1. REFER TO DETAIL SHEET GD-3 FOR SIDEWALK CONSTRUCTION SPECIFICATIONS.
2. REFER TO DETAIL SHEET GD-4 & GD-5 FOR SIDEWALK & BIKE PATH RAMP SPECIFICATIONS.

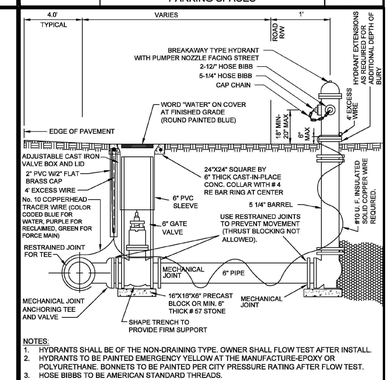
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | SIDEWALK CONSTRUCTION AT INTERSECTIONS | DATE 02/2020 | DETAIL NUMBER GD-15



NOTES:

1. ALL FINISHED FLOOR ELEVATIONS SHALL BE SET A MINIMUM OF 18 INCHES ABOVE THE CENTERLINE OF THE ADJACENT ROADWAY.
2. ALL FINISHED FLOOR ELEVATIONS ARE A MINIMUM OF 1 FOOT ABOVE THE LIMITS OF THE 100 YEAR FLOOD PLAIN AND/OR 1 FOOT ABOVE THE 100-YEAR DESIGN HIGH WATER LEVEL OF THE ADJACENT DETENTION/RETENTION AREA.
3. IN CASES WHERE THE ABOVE CONDITIONS CONFLICT, NOTE #2 SHALL TAKE PRECEDENCE.
4. SIDE YARD SWALE SHALL BE CENTERED ON THE COMMON PROPERTY LINE.

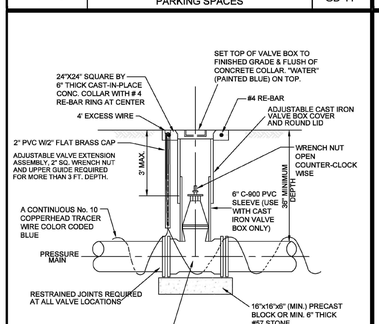
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | RESIDENTIAL GRADING | DATE 02/2020 | DETAIL NUMBER GD-18



NOTES:

1. HYDRANTS SHALL BE OF THE NON-DRAINING TYPE. OWNER SHALL FLOW TEST AFTER INSTALL.
2. HYDRANTS TO BE PAINTED EMERGENCY YELLOW AT THE MANUFACTURE-EPOXY OR POLYURETHANE. BONNETS TO BE PAINTED PER CITY PRESSURE RATING AFTER FLOW TEST.
3. HOSE BIBBS TO BE AMERICAN STANDARD THREADS.
4. RESTRAINED JOINTS REQUIRED. THRUST BLOCKS ARE NOT PERMITTED.
5. ADJUSTABLE TRENCH ADAPTOR ASSEMBLY REQUIRED FOR ALL VALVES GREATER THAN 3' DEEP.
6. INSTALL AT SIDE LOT LINES OR AT CORNERS OF ROADWAY INTERSECTIONS (TYPICAL).
7. CONTINUOUS TRACER WIRE TO BE COLOR CODED "BLUE" FOR WATER, LAID ON TOP IN TRENCH.
8. ALL OUTSIDE HEX NUTS, BOLTS AND HARDWARE (EXCEPT MECHANICAL BOLTS SUCH AS "T" BOLTS) SHALL BE MINIMUM 316 STAINLESS STEEL GRADE.
9. THE INTERNAL UPPER AND LOWER STEM SHALL BE MINIMUM OF 304 STAINLESS STEEL GRADE.

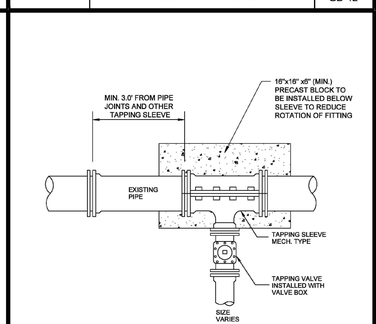
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | FIRE HYDRANT ASSEMBLY | DATE 02/2020 | DETAIL NUMBER PW-3



NOTES:

1. BOLT VALVES TO TEE OR CROSS WHEREVER AND WHENEVER APPLICABLE.
2. A CONTINUOUS TRACER WIRE TO BE COLOR CODED "BLUE" FOR WATER, LAYED ON TOP IN TRENCH
3. GATE VALVE WEDGE SHALL BE COMPLETELY ENCAPSULATED WITH EPDM RUBBER.
4. ALL OUTSIDE HEX NUTS, BOLTS AND HARDWARE (EXCEPT MECHANICAL BOLTS SUCH AS "T" BOLTS) SHALL BE MIN. 316 STAINLESS STEEL GRADE.

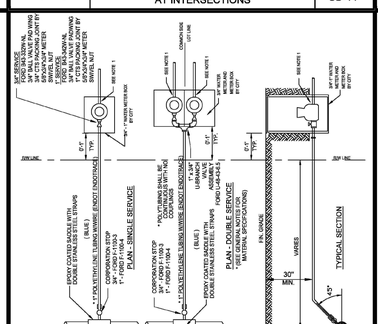
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | POTABLE WATER VALVE AND VALVE BOX (4" - 16" VALVE SIZES) | DATE 02/2020 | DETAIL NUMBER PW-4



NOTES:

1. EPOXY COATED STEEL, STAINLESS STEEL SLEEVES WITH 316 STAINLESS STEEL BOLTS ARE PERMITTED WITH ALL TYPES OF PIPE MATERIALS.
2. INSTALL REQUIRED RESTRAINED JOINTS. IN NO INSTANCE SHALL THRUST BLOCKS BE ALLOWED.
3. ALL TAPPING OF MAINS SHALL BE PERFORMED BY OWNER / DEVELOPER AND WITNESSED BY THE CITY AND BILLED IN ACCORDANCE WITH THE ADOPTED FEE RESOLUTION. ALL MATERIALS TO BE PROVIDED BY DEVELOPER / CONTRACTOR.
4. ALL VALVES 2" OR GREATER SHALL BE GATE VALVES. CORPORATION STOPS ARE NOT ALLOWED ON VALVES 2" OR GREATER EXCEPT ON BLOW-OFFS.

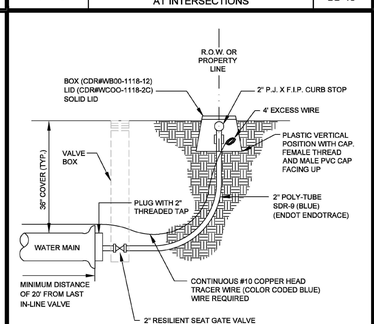
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | TAPPING SLEEVE AND VALVE | DATE 02/2020 | DETAIL NUMBER PW-5



NOTE:

1. WATER METERS INSTALLED ON RESIDENTIAL SERVICES WHERE RECLAIMED WATER IS AVAILABLE SHALL BE EQUIPPED WITH A DUAL CHECK BACKFLOW PREVENTER ON THE DISCHARGE SIDE OF THE METER. COMMERCIAL INSTALLATIONS SHALL BE INSTALLED WITH A REDUCED PRESSURE BACKFLOW DEVICE.

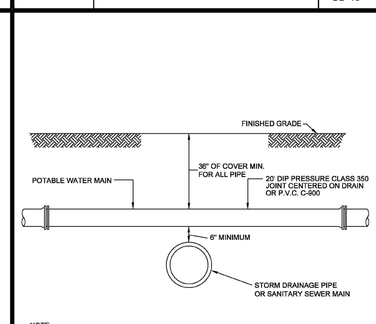
HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | WATER SERVICE (METER SIZES 3/4" - 1") | DATE 02/2020 | DETAIL NUMBER PW-7



NOTES:

1. BLOW-OFF BOXES FOR POTABLE AND RECLAIMED WATER WILL BE CDR#WBOO-1118-12 (11"X18"X12") THE LID FOR BOTH POTABLE AND RECLAIMED WATER BLOW-OFF BOXES WILL BE CDR #WCOO-1118-2C. THIS LID IS 11" X 18" AND HAS A CAST IRON READER LID. BOTH THE WATER AND THE RECLAIMED WATER BLOW-OFF BOX COMPONENTS SHALL BE NATURAL GRAY IN COLOR.
2. PROVIDE AT LEAST ONE RESTRAINED JOINT IMMEDIATELY UPSTREAM OF BLOW-OFF AS PER LATEST DIPRA RESTRAINED JOINT CALCULATIONS.

HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | POTABLE WATER BLOW-OFF ASSEMBLY | DATE 02/2020 | DETAIL NUMBER PW-12

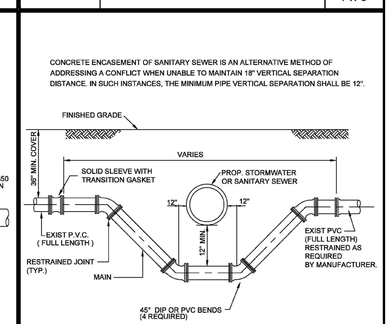


NOTE:

1. THIS DETAIL DOES NOT APPLY TO WATER OR SEWER SERVICES.

HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | STORM DRAINAGE PIPE OR SANITARY SEWER MAIN CONFLICT | DATE 02/2020 | DETAIL NUMBER PW-18

CONCRETE ENCASEMENT OF SANITARY SEWER IS AN ALTERNATIVE METHOD OF ADDRESSING A CONFLICT WHEN UNABLE TO MAINTAIN 18" VERTICAL SEPARATION DISTANCE. IN SUCH INSTANCES, THE MINIMUM PIPE VERTICAL SEPARATION SHALL BE 12".



NOTES:

1. LOWERING OF EXISTING WATER MAIN & FORCE MAIN BY DEFLECTION METHOD ACCEPTABLE IF EXISTING FIELD CONDITIONS PERMIT.
2. LENGTH OF SECTION BASED ON MINIMUM LENGTH AS DETERMINED BY DIPRA RESTRAINED JOINT MANUAL.
3. INSTALL RESTRAINED JOINTS, AS REQUIRED, FROM DEFLECTION POINT IN BOTH DIRECTIONS.

HOLLY HILL | CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS | STORM DRAINAGE PIPE OR SANITARY SEWER MAIN CONFLICT | DATE 02/2020 | DETAIL NUMBER PW-19

REVISIONS

DATE	DESCRIPTION

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Ormond Beach, Florida 32174
Phone (386) 672-7784
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C.A. # 30209
L.C. # 26000584
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Civil Engineering
Transportation, CEI &
Landscape Architecture

NEWKIRK ENGINEERING INC.

DETAILS AND SPECIFICATIONS
THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

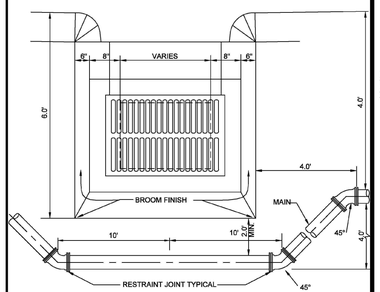
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HARRY NEWKIRK LICENSE NO. 62971 STATE OF FLORIDA PROFESSIONAL ENGINEER

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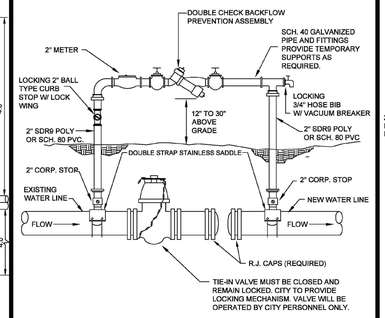
PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHEC



NOTES:

1. MAIN MAY PASS OVER STORM LINE IF 36" OF COVER IS PROVIDED OVER WATER MAIN OR RECLAIMED WATER LINE AND ADEQUATE CLEARANCE IS PROVIDED FROM THE STORM SEWER PIPE.
2. PIPE SHALL BE DEFLECTED AROUND DRAINAGE INLET IN ACCORDANCE WITH THE RESTRAINED JOINT GUIDELINES OF THE DIPRA AND ADAPTED TO PVC PIPE AS NECESSARY.

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	MAIN INSTALLATION BETWEEN DRAINAGE INLET AND SIDEWALK	DETAIL NUMBER PW-20

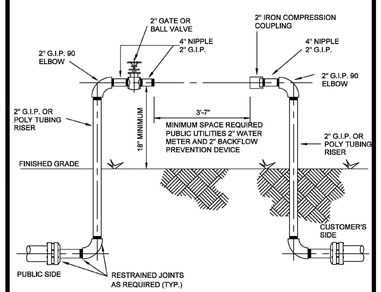


* DIRECT TIE-IN METHOD ALLOWED WHEN TIE-IN UNDER EXISTING PAVEMENT LIMITS.

NOTES:

1. THIS DETAIL SHALL BE UTILIZED ON ALL WATERLINE EXTENSIONS. THE CITY WILL ALLOW A DIRECT CONNECTION TO THE CITY'S DRINKING WATER SYSTEM AT ONLY ONE POINT OF CONNECTION. FINAL SECONDARY TIE-INS SHALL BE PERFORMED AFTER CLEARANCE FROM THE D.E.P.
2. PROVIDE SUPPORT AND/OR PROTECTIVE MEASURES TO PREVENT ABOVE GROUND PIPE BEING BROKEN.

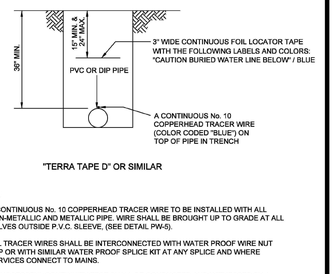
HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	TEMPORARY JUMPER CONNECTION	DETAIL NUMBER PW-26



NOTE:

1. PROVIDE SUPPORT OR PROTECTIVE POSTS.

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	CONTRACTORS' INSTALLATION REQUIREMENTS FOR 2" TEMPORARY METER	DETAIL NUMBER PW-27



"TERRA TAPE D" OR SIMILAR

NOTES:

1. A CONTINUOUS No. 10 COPPERHEAD TRACER WIRE TO BE INSTALLED WITH ALL NON-METALLIC AND METALLIC PIPE. WIRE SHALL BE BROUGHT UP TO GRADE AT ALL VALVES OUTSIDE P.V.C. SLEEVE, (SEE DETAIL PW-5).
2. ALL TRACER WIRES SHALL BE INTERCONNECTED WITH WATER PROOF WIRE NUT CAP OR WITH SIMILAR WATER PROOF SPLICE KIT AT ANY SPLICE AND WHERE SERVICES CONNECT TO MAINS.
3. A SUCCESSFUL CONTINUITY TEST SHALL BE CONDUCTED AND WITNESSED BY A CITY INSPECTOR AT THE COMPLETION OF TRACER WIRE INSTALLATION.

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	LOCATOR TAPE / TRACER WIRE INSTALLATION FOR WATER MAIN, PIPELINES	DETAIL NUMBER PW-28

TECHNICAL SPECIFICATIONS FOR MECHANICAL JOINT (M.J.) DUCTILE IRON PIPE FITTINGS

ALL MECHANICAL JOINT DUCTILE IRON PIPE FITTINGS SHALL BE IN ACCORDANCE WITH ACCEPTABLE STANDARDS AND COMPLY WITH THE THE FOLLOWING SPECIFICATIONS:

MATERIAL:
A.S.T.M. A536 MINIMUM GRADE 70-50-5 IN ACCORDANCE WITH A.W.W.A. C153 (A.N.S.I. A21.53)

PRESSURE:
CLASS 350 IN ACCORDANCE WITH A.W.W.A. C153 (A.N.S.I. A21.53) 350 PSI WATER WORKING PRESSURE.

TESTING:
IN ACCORDANCE WITH A.W.W.A. C153 (ANSI A21.53), THREE TIMES WATER WORKING PRESSURE (350 PSI). BODY CAPABLE OF WITHSTANDING HYDROSTATIC TEST OF 1050 PSI.

FLOW:
I.D. EQUAL TO I.D. OF CLASS 50/51 DUCTILE IRON PIPE, THUS ALLOWING THE FULL FLOW FEATURE.

LAYING LENGTH:
SHORT BODY (COMPACT)

CEMENT LINING:
IN ACCORDANCE WITH A.W.W.A. C104 (A.N.S.I. A21.4)

MECHANICAL JOINTS
IN ACCORDANCE WITH A.N.S.I./A.W.W.A. C111/A21.11

GASKETS:
SBR IN ACCORDANCE WITH A.W.W.A. C111 A.N.S.I. A21.11

TEE HEAD BOLTS:
COR-TEN IN ACCORDANCE WITH A.W.W.A. C111 (A.N.S.I. A21.11)

ACCEPTABLE MANUFACTURERS:
TYLER, CLOW, GRIFFIN, U.S. PIPE, UNION FOUNDRY, AMERICAN CAST IRON OR APPROVED EQUAL

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	TECHNICAL SPECIFICATIONS FOR M.J. DUCTILE IRON PIPE FITTINGS	DETAIL NUMBER PW-29

ROAD CLASSIFICATION	DESIGN SPEED (MPH)	LANE WIDTH (LW)	RIGHT OF WAY WIDTH	MIN. HORIZ RADIUS C.L.	MIN. VERT. CURVE	MIN. LONG. GRADE (%)	MIN. INT. SPACE
LOCAL / COLLECTOR UP TO 400 VPD	15	10	50	50'	75'	0.3	150'
	20	10	50	95'	125'	0.3	200'
UP TO 1000 VPD	25	11	50	180'	165'	0.3	250'
	20	11	50	95'	125'	0.3	200'
UP TO 5000 VPD	25	11	60	180'	165'	0.3	250'
	30	12	80	300'	200'	0.3	330'
	35	12	80	375'	225'	0.5	660'
	40	12	80	450'	275'	0.5	660'
ARTERIAL UP TO 7500 VPD	35	5 LANES (3)		375'	225'	0.5	660'
	40			450'	275'	0.5	660'
OVER 7500 VPD	40			450'	275'	0.5	660'

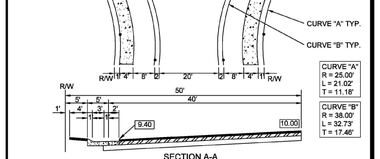
LEGEND
C.L. CENTER-LINE
INT. INTERSECTION
LONG. LONGITUDINAL

NOTES:

1. ALL ROADWAY DESIGN SHALL MEET THE MINIMUM REQUIREMENTS OF THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS (LATEST EDITION), AS PUBLISHED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION.
2. PAVEMENT WIDTHS FOR INDUSTRIAL AND COMMERCIAL ROADS SHALL BE INCREASED BY A MINIMUM OF ONE (1) FOOT.
3. AS A RULE, ALL INTERSECTIONS SHALL BE DESIGNED AT 90 DEGREE ANGLES. DEVIATION FROM THIS SHALL BE CONSIDERED STRICTLY ON A CASE BY CASE BASIS. IN THE EVENT THAT ANY DEVIATION IS PERMITTED, THEN IN NO CASE SHALL INTERSECTION ANGLES BE LESS THAN 75° FOR INTERSECTIONS WITH ARTERIAL ROADWAYS EXCEPT ON LOCAL AND COLLECTOR ROADWAYS WHICH SHALL NOT BE LESS THAN 60°. INTERSECTIONS WITH COUNTY AND STATE ROADS SHALL BE 90°.
4. ALL INTERSECTIONS AND ACCESS POINTS SHALL HAVE ADEQUATE LINE OF SIGHT BASED ON AN EYE LEVEL OF 3.5' ABOVE THE GROUND AND AN OBJECT 3.0' ABOVE THE LOWEST ROADWAY. FOR PURPOSES OF THIS STANDARD, THE EYE LEVEL SHALL BE MEASURED 8' IN BACK OF THE STOP BAR AT ENTRANCES. THE FOLLOWING SIGHT DISTANCES SHALL BE PROVIDED:

DESIGN SPEED (MPH)	20	25	30	35	40	45	50	55
SIGHT DISTANCE (FT) (MINIMUM)	200	250	300	350	400	450	500	550

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	ROADWAY GEOMETRY	DETAIL NUMBER RD-6



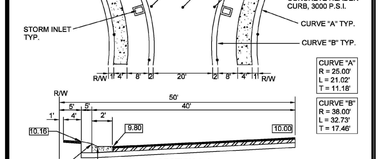
SECTION A-A

* THIS ALTERNATE IS SUBJECT TO SITE SPECIFIC APPROVAL

CURVE "A"
R = 25.00'
L = 21.02'
T = 11.18'

CURVE "B"
R = 38.00'
L = 32.73'
T = 17.46'

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	STANDARD CUL-DE-SAC WITH SINGLE STORM INLET	DETAIL NUMBER RD-7

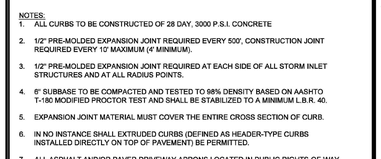


SECTION A-A

CURVE "A"
R = 25.00'
L = 21.02'
T = 11.18'

CURVE "B"
R = 38.00'
L = 32.73'
T = 17.46'

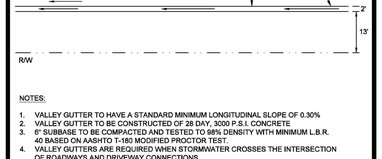
HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	STANDARD CUL-DE-SAC WITH DUAL STORM INLET	DETAIL NUMBER RD-8



NOTES:

1. ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE
2. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500', CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4' MINIMUM).
3. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIUS POINTS.
4. 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST AND SHALL BE STABILIZED TO A MINIMUM L.B.R. 40.
5. EXPANSION JOINT MATERIAL MUST COVER THE ENTIRE CROSS SECTION OF CURB.
6. IN NO INSTANCE SHALL EXTRUDED CURBS (DEFINED AS HEADER-TYPE CURBS INSTALLED DIRECTLY ON TOP OF PAVEMENT) BE PERMITTED.
7. ALL ASPHALT AND/OR PAVER DRIVEWAY APRONS LOCATED IN PUBLIC RIGHTS-OF-WAY, SHALL INCLUDE CURBING.

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	STANDARD CURB CONSTRUCTION	DETAIL NUMBER RD-9



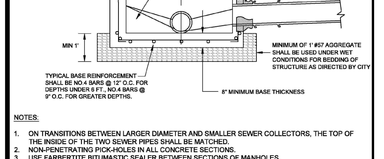
NOTES:

1. VALLEY GUTTER TO HAVE A STANDARD MINIMUM LONGITUDINAL SLOPE OF 0.30%
2. VALLEY GUTTER TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE
3. 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
4. VALLEY GUTTERS ARE REQUIRED WHEN STORMWATER CROSSES THE INTERSECTION OF ROADWAYS AND DRIVEWAY CONNECTIONS.
5. REFER TO FDOT STANDARD PLANS (LATEST EDITION).

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	ROADWAY INTERSECTION VALLEY GUTTER	DETAIL NUMBER RD-10



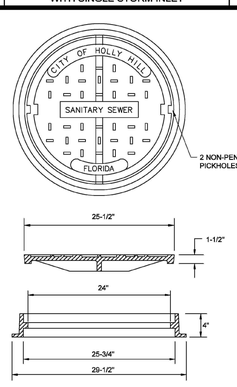
HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	PAVEMENT BUTT JOINT	DETAIL NUMBER RD-11



NOTES:

1. ON TRANSITIONS BETWEEN LARGER DIAMETER AND SMALLER SEWER COLLECTORS, THE TOP OF THE INSIDE OF THE TWO SEWER PIPES SHALL BE MATCHED.
2. NON-PENETRATING PICK-HOLES IN ALL CONCRETE SECTIONS.
3. USE FARBERTITE BITUMASTIC SEALER BETWEEN SECTIONS OF MANHOLES.
4. 0.1' - DROP ACROSS MANHOLE (TYPICAL).
5. MAXIMUM DEPTH NOT TO EXCEED 15.0 FEET MEASURED FROM MANHOLE TOP TO INSIDE BOTTOM.

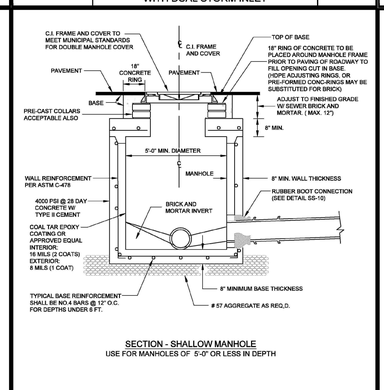
HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	SANITARY SEWER STANDARD MANHOLE	DETAIL NUMBER SS-3



NOTES:

1. MATERIAL: ASTM-A48 CLASS 35B GRAY IRON
2. RING WT.: 85 LBS. APP
3. COVER WT.: 120 LBS. APP

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	SANITARY SEWER MANHOLE COVER	DETAIL NUMBER SS-4

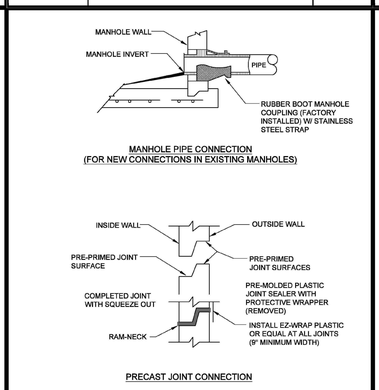


SECTION - SHALLOW MANHOLE
USE FOR MANHOLES OF 5'-0" OR LESS IN DEPTH

NOTES:

1. INSTALL EZ-WRAP PLASTIC OR EQUAL AT ALL JOINTS (MIN. 9" WIDTH).
2. NON-PENETRATING PICK-HOLES IN ALL CONCRETE SECTIONS.
3. USE FARBERTITE BITUMASTIC SEALER BETWEEN SECTIONS OF MANHOLE.

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	SANITARY SEWER SHALLOW MANHOLE	DETAIL NUMBER SS-5



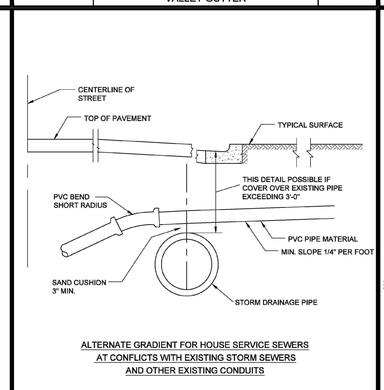
MANHOLE PIPE CONNECTION
(FOR NEW CONNECTIONS IN EXISTING MANHOLES)

PRECAST JOINT CONNECTION

NOTE:

1. ALL NEW CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES SHALL UTILIZE A CORING METHOD AND THE IN-FIELD INSTALLATION OF A RUBBER BOOT INTO THE MANHOLE.

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	RUBBER BOOT AND PRECAST JOINT CONNECTION	DETAIL NUMBER SS-10

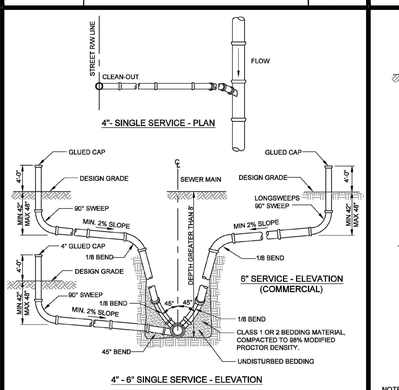


ALTERNATE GRADIENT FOR HOUSE SERVICE SEWERS
AT CONFLICTS WITH EXISTING STORM SEWERS
AND OTHER EXISTING CONDUITS

NOTE:

1. APPROVED PIPE MATERIALS: PVC (SDR 26)

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	STORM DRAINAGE CROSSING / SANITARY SEWER LATERAL PIPE CROSSING	DETAIL NUMBER SS-11



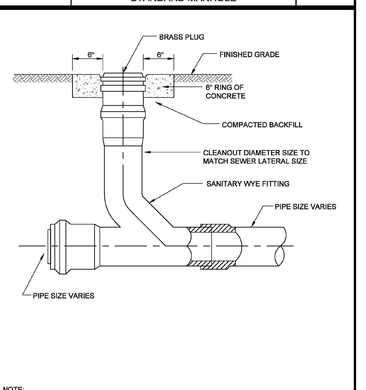
6" SERVICE - ELEVATION
(COMMERCIAL)

NOTES:

1. USE OF STYRENE MATERIAL WILL NOT BE PERMITTED.
2. ALL JOINTS TO BE RUBBER GASKET (NO GLUED FITTINGS) TYPICAL.
3. USE ALL HARCO SOR-26 FITTINGS OR CITY APPROVED EQUAL.
4. APPROVED EQUAL IS MULTI FITTINGS 8"x8" OR 8"x4" T-WYE AND 8"x6" OR 8"x4" WYE WITH A DATE STAMP.

4" - RESIDENTIAL
6" - COMMERCIAL

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	SANITARY SEWER SERVICE LATERAL	DETAIL NUMBER SS-12



NOTE:

1. CLEANOUT SIZE SHOULD ALWAYS MATCH MAIN LINE SIZE TO ALLOW FOR PROPER CLEANING

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	SANITARY SEWER CLEANOUT	DETAIL NUMBER SS-13

REVISIONS

DATE	DESCRIPTION

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Ormond Beach, Florida 32174
Phone (386) 672-7794
www.Newkirk-Engineering.com
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DETAILS AND SPECIFICATIONS

THE VINEYARDS

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HOLLY HILL, FL 32174

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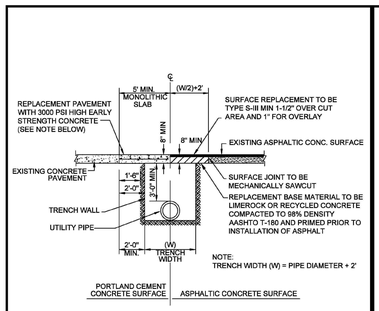
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PROJECT No:	2022-86
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DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	AS SHOWN

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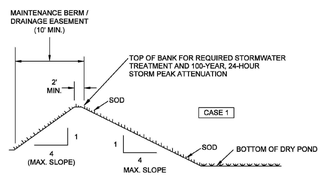
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



NOTES:

1. PAVING REPLACEMENT SHALL INCLUDE RAISING ALL MANHOLE FRAMES AND LIDS AND VALVE BOXES AND LIDS (AND SIMILAR APPURTENANCES) TO FINAL ELEVATION PRIOR TO RESURFACING.
2. SUBBASE TO BE COMPACTED TO 98% MAXIMUM DENSITY AASHTO T-180.
3. IN AREAS WHERE CONCRETE PAVEMENT IS TO BE UTILIZED, 3000 PSI - 28 DAY STRENGTH CONCRETE PAVEMENT MAY BE PERMITTED PROVIDED THAT THE SUBJECT AREA WILL REMAIN FREE OF VEHICULAR TRAFFIC FOR A MINIMUM OF 3 DAYS.

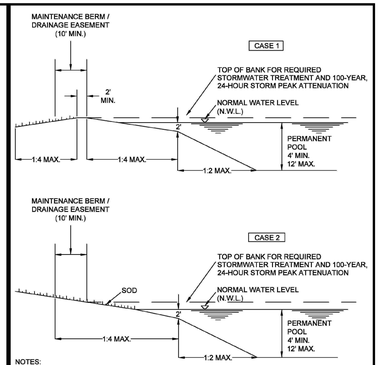
HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	PAVEMENT TRENCH RESTORATION	DETAIL NUMBER ST-3



NOTES:

1. SOD IS TO BE PLACED TO BOTTOM OF DRY POND.
2. BOTTOM OF DRY POND TO BE SEEDED AND MULCHED (EXCEPT WHERE "A"-TYPE SOILS ARE PRESENT WHICH REQUIRES SODDING OF ENTIRE BOTTOM OF POND).
3. CASE 1 BERM SHALL REQUIRE THE INSTALLATION OF IMPERVIOUS SOILS OR OTHER MATERIALS TO PREVENT TRANSMISSION OF WATER.

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	DRY RETENTION POND	DETAIL NUMBER ST-7



NOTES:

1. SOD IS TO BE PLACED TO N.W.L.
2. A PLANTED LITTORAL ZONE IS NOT PERMISSIBLE FOR SLOPES EXCEEDING 6:1.
3. AS AN OPTION TO A LITTORAL ZONE, THE DESIGNER CAN EITHER:
   A. PROVIDE AN ADDITIONAL 50% OF THE PERMANENT POOL VOLUME, AS REQUIRED, OR
   B. PROVIDE PRETREATMENT OF THE STORMWATER PRIOR TO ENTERING THE WET DETENTION POND.
4. CASE 1 BERM SHALL REQUIRE THE INSTALLATION OF IMPERVIOUS SOILS OR OTHER METHODS TO PREVENT TRANSMISSION OF WATER.

HOLLY HILL FLORIDA	CITY OF HOLLY HILL, FLORIDA STANDARD CONSTRUCTION DETAILS	DATE 02/2020
	WET DETENTION POND	DETAIL NUMBER ST-8

REVISIONS

DATE	DESCRIPTION

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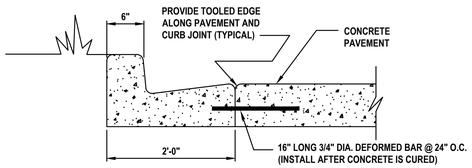
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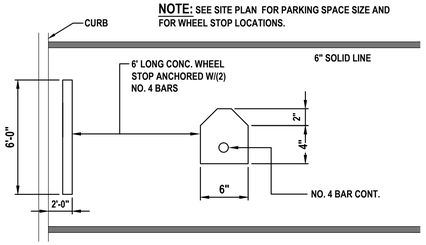
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



NOTE: DOWELS NOT REQUIRED IF MONOLITHIC POUR

CONCRETE CURB AND GUTTER DOWELED JOINT DETAIL

NOT TO SCALE

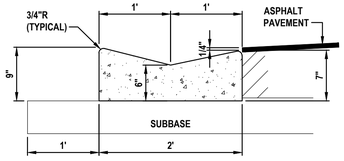


CONCRETE WHEEL STOP DETAIL

NOT TO SCALE

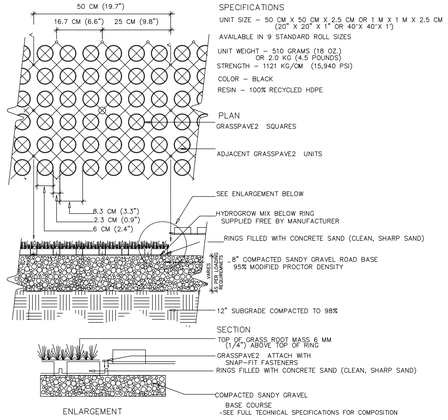
CURB CONSTRUCTION NOTES

1. ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3000 P.S.I. CONCRETE.
2. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 50', CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4' MINIMUM).
3. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIUS POINTS.
4. 6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST AND SHALL BE STABILIZED TO A MINIMUM L.B.R. 40.
5. EXPANSION JOINT MATERIAL MUST COVER ENTIRE CROSS SECTION OF CURB.
6. IN NO INSTANCE SHALL EXTRUDED CURBS (DEFINED AS HEADER-TYPE CURBS INSTALLED DIRECTLY ON TOP OF PAVEMENT) BE PERMITTED.



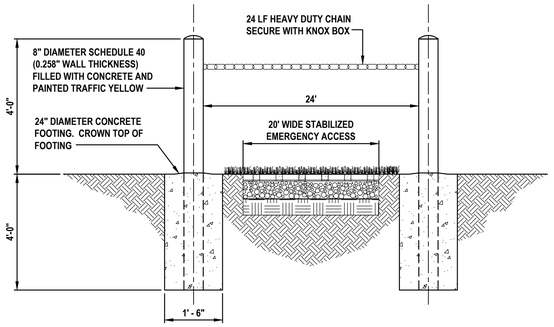
MIAMI CURB

NOT TO SCALE



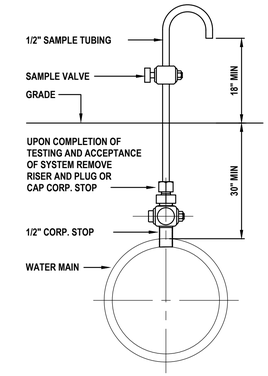
EMERGENCY SERVICE ACCESS DETAIL

NOT TO SCALE



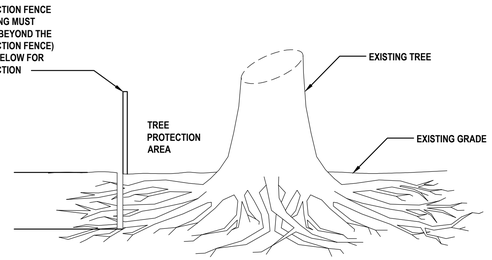
EMERGENCY ACCESS BOLLARD / CHAIN DETAIL

NOT TO SCALE



BACTERIOLOGICAL SAMPLE POINT DETAIL

NOT TO SCALE



ROOT PRUNING FOR UTILITIES, DRAINAGE AND PAVEMENT

1. INSTALL ALL TREE PROTECTION BARRIERS PRIOR TO CONSTRUCTION. LOCATION OF ALL TREE PROTECTION MUST BE APPROVED BY ISA CERTIFIED ARBORIST AND CITY OF NEW SMYRNA BEACH PRIOR TO CONSTRUCTION.
2. ROOT PRUNING METHODS AND MEANS MUST BE IN ACCORDANCE WITH ANSI A300.
3. ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF AN ISA CERTIFIED ARBORIST.
4. ALL ROOT PRUNING MUST BE MADE CLEANLY WITH A SHARP ROOT PRUNING TOOL (SUCH AS A DOSKO OR VERMEER ROOT MECHANICAL ROOT PRUNER EQUIPMENT.
4. ROOTS OVER 1.5" DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT; WHICH IS STILL ATTACHED TO THE TREE. DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND UTILITIES AND DRAINAGE AND ROOTS ARE BROKEN OR CHOPPED; THEN ALL ROOTS SHALL BE CLEANED SAW AT CHOPPED OR BROKEN POINT.

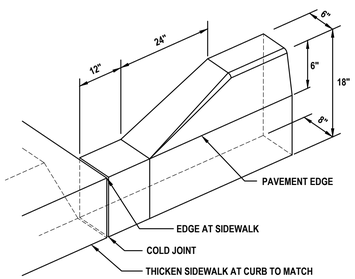
ROOT PRUNING DETAIL

NOT TO SCALE

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSINGS (1)	JOINT SPACING AT CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIMED WATER (2)	WATER MAIN / 3 FT MINIMUM	WATER MAIN / 12 INCHES IS THE MINIMUM EXCEPT FOR STORM SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 3 FT MINIMUM / WATER MAIN
VACUUM SANITARY SEWER	WATER MAIN / 10 FT PREFERRED 3 FT MINIMUM	WATER MAIN / 12 INCHES PREFERRED 6 INCHES MINIMUM	ALTERNATE 3 FT MINIMUM / WATER MAIN
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCE MAIN, RECLAIMED WATER (4)	WATER MAIN / 10 FT PREFERRED 6 FT MINIMUM (3)	WATER MAIN / 12 INCHES IS THE MINIMUM EXCEPT FOR STORM SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 6 FT MINIMUM / WATER MAIN
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM	10 FT MINIMUM (3)	———	———

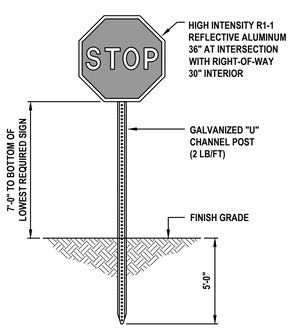
(1) WATER MAIN SHOULD CROSS ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
(2) RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
(3) 3 FT FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
(4) RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.



NOTES:
1. EXTRUDE CURB AND BROOM FINISH
2. PROVIDE 1/2" EXPANSION JOINTS AT ALL COLD JOINTS.
3. SAW CUT CONSTRUCTION JOINTS AT 10'-0" O.C.
4. ALL EXPOSED SURFACES SHALL BE STRIPED GREEN, TROWLED AND CURB EDGING RUBBED SMOOTH.
5. "GLUED-ON" EXTRUDED CURB NOT PERMITTED.

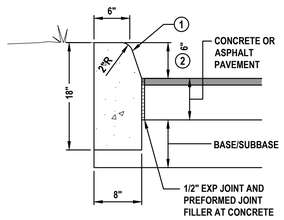
TYPE "D" CURB TERMINATION DETAIL

NOT TO SCALE



STOP SIGN DETAIL

NOT TO SCALE

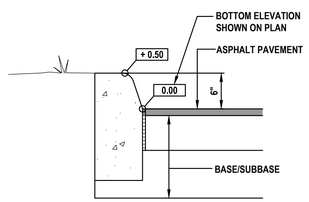


1 PROVIDE CONTRACTION JOINTS @ 10' O.C. AND EXPANSION JOINTS @ 50' O.C. ALL JOINTS SEALED PER SPECIFICATIONS

2 6" HEIGHT SHALL BE UNIFORM, IF HEIGHT VARIES ± 1/2" THEN CURB WILL BE REPLACED AT THE DISCRETION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

TYPE "D" CURB DETAIL

NOT TO SCALE



TYPE "D" CURB GRADING

NOT TO SCALE

TABLE 1: CLASSES OF EMBEDMENT AND BACKFILL MATERIALS

ASTM D 2321 MATERIAL CLASS	ASTM D 2487 USCS SOIL GROUP	MATERIAL TYPE	% PASSING			ATTERBERG LIMITS	
			1 1/2 IN.	NO. 4	NO. 200	LL	PI
IA	NONE	MANUFACTURED OPEN GRADED AGGREGATES	100%	≤10%	<5%	NON PLASTIC	
IB	NONE	MANUFACTURED DENSE GRADED AGGREGATES	100%	≤50%	<5%	NON PLASTIC	
II	GW	COARSE-GRAINED SOILS, CLEAN	100%	<50% OF "COARSE FRACTION"	<5%	NON PLASTIC	
	GP						
	SW			>50% OF "COARSE FRACTION"			
	SP						
III	GM	COARSE-GRAINED SOILS W/ FINES	100%	<50% OF "COARSE FRACTION"	12% TO 50%		<4 OR <"A" LINE
	GC						<7 OR >"A" LINE
	SM			>50% OF "COARSE FRACTION"			>4 OR <"A" LINE
	SC						>7 OR >"A" LINE
IV-A	ML	FINE-GRAINED SOILS	100%	100%	>50%	<50	<4 OR <"A" LINE
	CL						>7 OR >"A" LINE

REVISIONS

DATE	DESCRIPTION

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MISCELLANEOUS DETAILS AND NOTES

THE VINEYARDS

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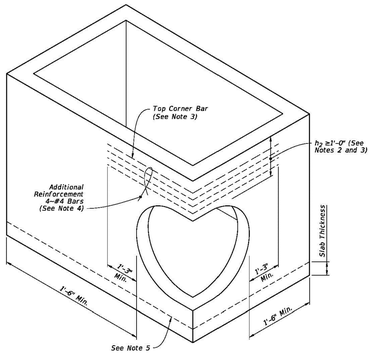
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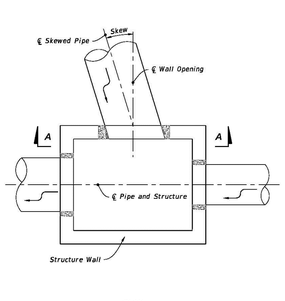
Attachment: The Vineyards Subdivision Plan (3984 : The Vineyards Subdivision Review (PSP))



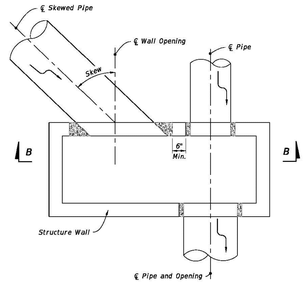
NOTES:

1. Submit Shop Drawings of corner openings for approval by the Engineer.
2. h_b may be less than 1'-0" when a minimum 1'-0" deep segment, 8" slab or curb inlet is provided above the corner opening.
3. For inlet segments at finish grade elevation, substitute a #8 Bar for the top corner bar when $1'-0" \leq h_b < 2'-0"$.
4. Install bars continuously around corner and evenly spaced. Tie additional reinforcement to the outside of vertical wall reinforcement.
5. Dowel construction joint or monolithically cast wall and slabs.

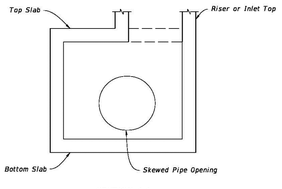
PIPE OPENING AT CORNER



PLAN

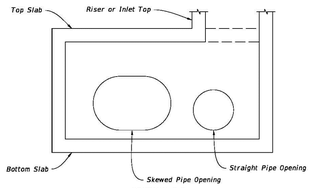


PLAN



SECTION A-A

SKEWS ≤ 45°
(Not Centered)



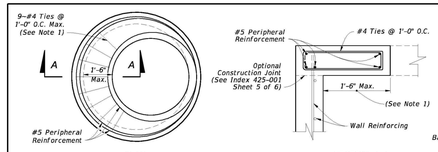
SECTION B-B

SKEWS > 45°
(Not Centered)

SKEWED PIPE IN RECTANGULAR STRUCTURES
(See Table 4 on Sheet 8)

SKEWED PIPE IN RECTANGULAR STRUCTURES

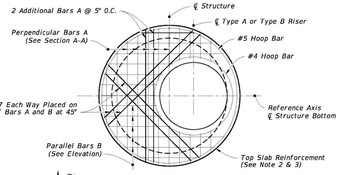
LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	INDEX	SHEET
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PLAN

SECTION A–A

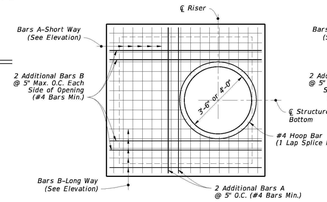
SPECIAL TOP SLAB



PLAN

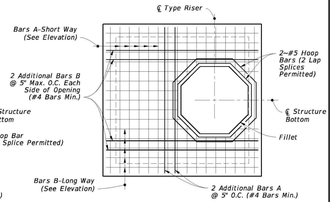
ALTERNATE A NOTES:

1. Rotate #4 Bars as required to maintain cover.
2. Construct the top or riser of the structure according the top slab to the "Special Top Slab" details, when the inside diameter of a round structure is not more than 1'-6" larger than the opening in the riser or top slab.
3. Alternate A slab reinforcing not applicable for Type A, B, C, D & E Ditch Bottom Inlets or Type S & V Gutter Inlets. See Indexes 425-040, 425-041, 425-050, 425-051, and 425-052.



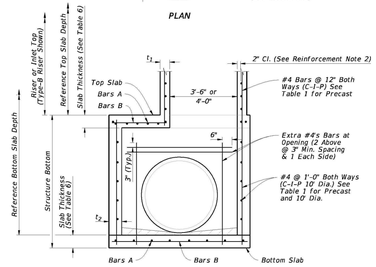
TYPE A - ROUND RISER OPENING

PLAN



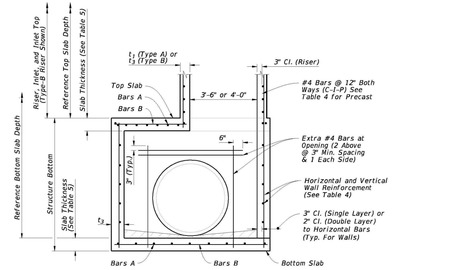
TYPE B - SQUARE RISER OPENING

PLAN



ELEVATION

TYPE J BOTTOM - ALTERNATE A

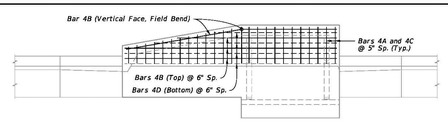


ELEVATION

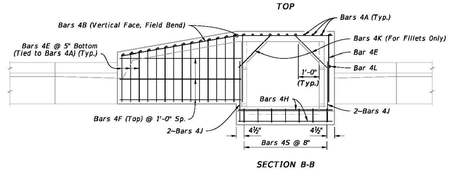
TYPE J BOTTOM - ALTERNATE B

DIMENSIONAL AND REINFORCING DETAILS

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX	SHEET
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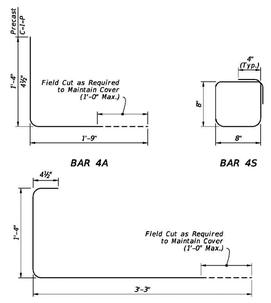


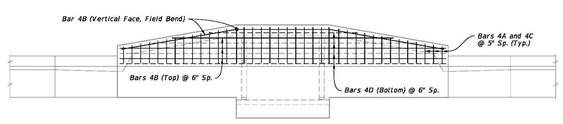
TOP



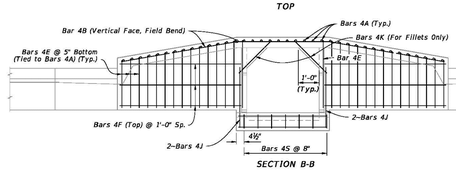
SECTION B-B

TYPE 5 REINFORCING DETAILS





TOP



SECTION B-B

TYPE 6 REINFORCING DETAILS

BILL OF REINFORCING STEEL

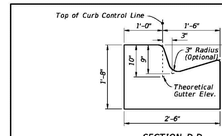
MARK	SIZE	TYPE 5 INLET NO.	TYPE 5 INLET LENGTH	TYPE 6 INLET NO.	TYPE 6 INLET LENGTH
A (Precast)	4	25	3'-1"	38	3'-1"
A (C-I-P)	4	25	2'-1½"	38	2'-1½"
B	4	6	10'-3"	6	15'-9"
C	4	25	11" to 1'-11"	38	11" to 1'-11"
D	4	4	10'-3"	4	15'-9"
E	4	16	4'-11½"	30	4'-11½"
F	4	3	6'-0"	6	6'-0"
H	4	4	4'-6"	4	4'-6"
J	4	4	3'-0"	4	3'-0"
K (Fillet)	4	2	2'-3"	2	2'-3"
L (Precast)	4	1	1'-4"	0	----
L (C-I-P)	4	10	1'-4"	9	1'-4"
S	4	7	3'-2"	7	3'-2"

NOTES:

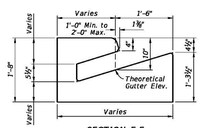
1. All bar dimensions in the bending diagrams are out to out.
2. Bars 4A and 4E may be combined into a single bar.
3. Welded Wire Reinforcement consists of smooth or deformed wire meeting the requirements of Specification 931.

TYPE 5 AND 6 REINFORCING AND BAR BENDING DETAILS

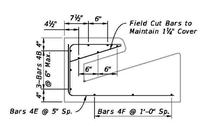
LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	CURB INLET TOP TYPES 5 AND 6	INDEX	SHEET
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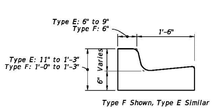
SECTION D-D



SECTION E-E

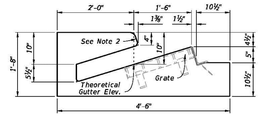


SECTION E-E

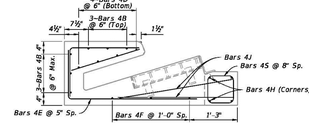


Type F Shown, Type E Similar

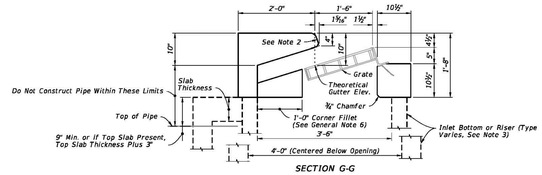
SECTION C-C



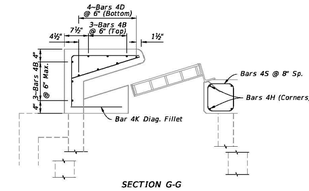
SECTION F-F



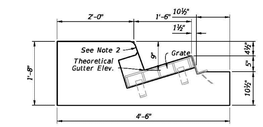
SECTION F-F



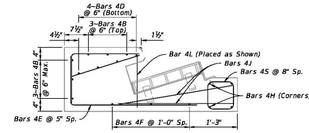
SECTION G-G



SECTION G-G



SECTION H-H



SECTION H-H

NOTES:

1. For location of Sections D-D thru H-H see Sheet 2.
2. Match slope of adjacent curb with 2" top radius and ¾" bottom chamfer of 1¼" radius.
3. See Plans for bottom and riser type.

DIMENSIONAL DETAILS

REINFORCING DETAILS

PRECAST DIMENSIONAL AND REINFORCING DETAILS

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	CURB INLET TOP TYPES 5 AND 6	INDEX	SHEET
11/01/20				425-021	4 of 7

REVISIONS

DATE	DESCRIPTION

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

NEWKIRK ENGINEERING INC.

FDOT STANDARD DETAILS

THE VINEYARDS

649 6TH STREET
HOLLY HILL, FL 32174

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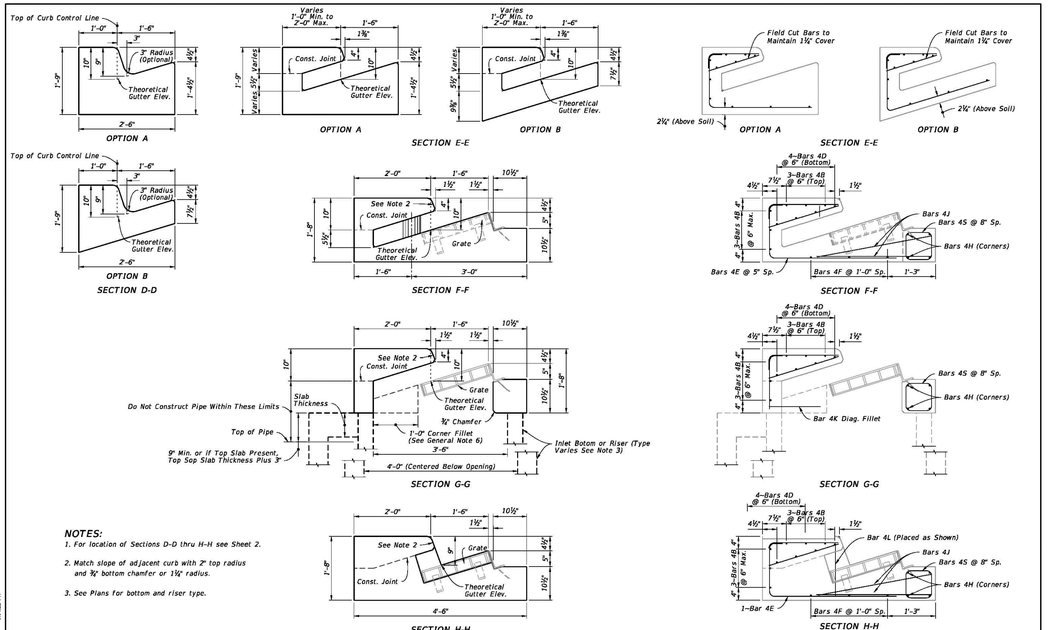
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PROJECT No:	2022-86
DATE:	AUGUST 2022
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DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	AS SHOWN

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Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



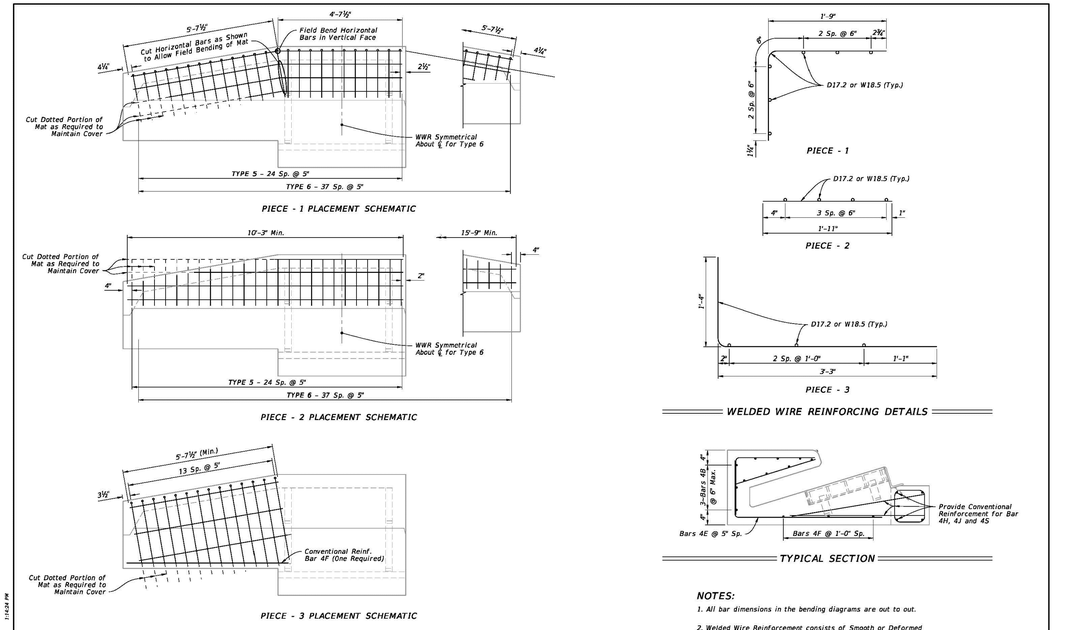
NOTES:

1. For location of Sections D-D thru H-H see Sheet 2.
2. Match slope of adjacent curb with 2" top radius and ⅝" bottom chamfer or 1½" radius.
3. See Plans for bottom and riser type.

DIMENSIONAL DETAILS — REINFORCING DETAILS

CAST-IN-PLACE DIMENSIONAL AND REINFORCING DETAILS

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	CURB INLET TOP TYPES 5 AND 6	INDEX	SHEET
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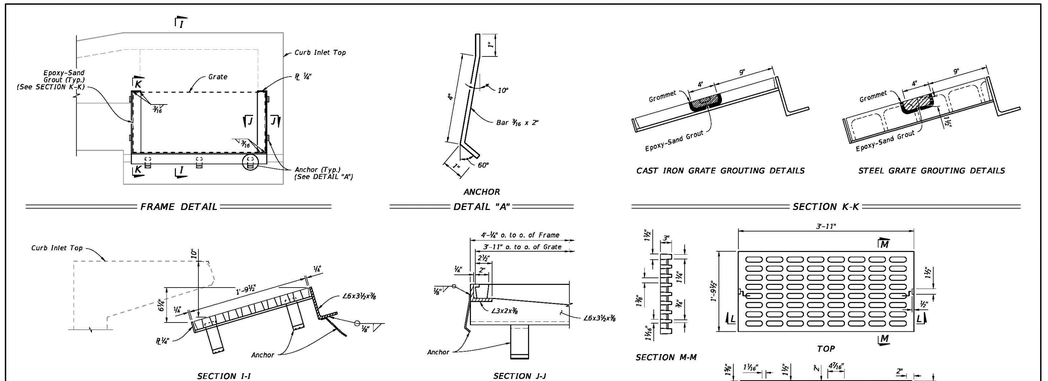


NOTES:

1. All bar dimensions in the bending diagrams are out to out.
2. Welded Wire Reinforcement consists of Smooth or Deformed wire meeting the requirements of Specification 931.

ALTERNATE WELDED WIRE REINFORCING (WWR) DETAILS

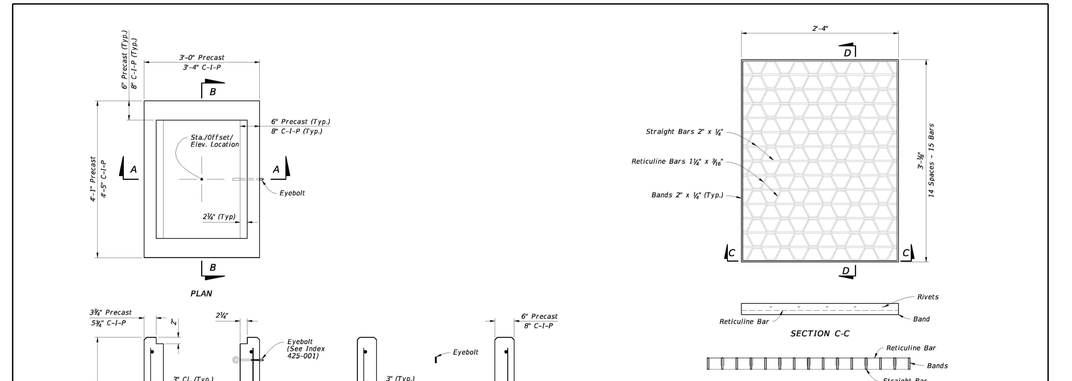
LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	CURB INLET TOP TYPES 5 AND 6	INDEX	SHEET
11/01/20				425-021	6 of 7



STEEL GRATE

GRATE, ANCHOR, AND GROUTING DETAILS

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	CURB INLET TOP TYPES 5 AND 6	INDEX	SHEET
11/01/20				425-021	7 of 7



DIMENSIONAL DETAILS — REINFORCING DETAILS

TYPE C - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX	SHEET
11/01/20				425-052	2 of 14

TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

WALL DEPTH	SCHEDULE	AREA (in²/ft.)	MAX. SPACING	
			BARS	WWF
0' - 15'	A12	0.20	12"	8"

NOTES:

1. Grate, Concrete Apron, and Sod not shown on structure detail.
2. See Sheet 8, 9, and 10 for Concrete Apron and Sodded Area details.

REVISIONS

DATE	DESCRIPTION

1230 North US1, Suite 3
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L.C. # 26000584
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FDOT STANDARD DETAILS

THE VINEYARDS

649 6TH STREET
HOLLY HILL, FL 32174

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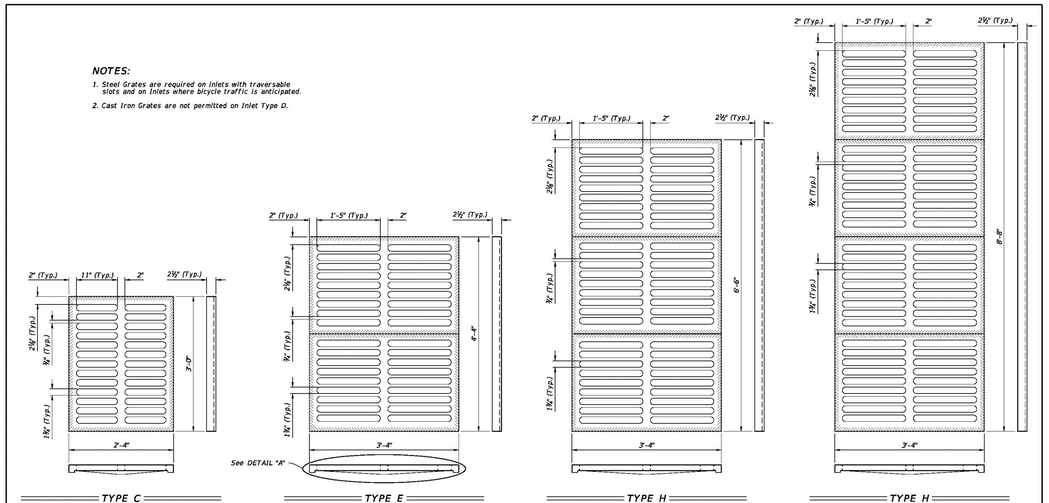
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Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



CAST IRON GRATE DETAILS

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX	SHEET
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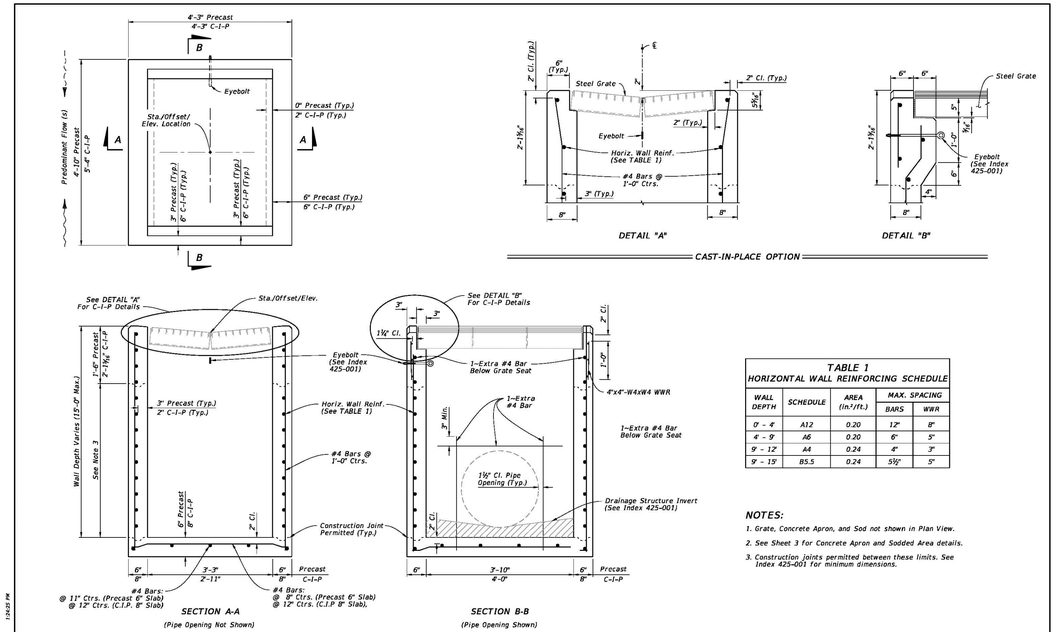


TABLE 1
HORIZONTAL WALL REINFORCING SCHEDULE

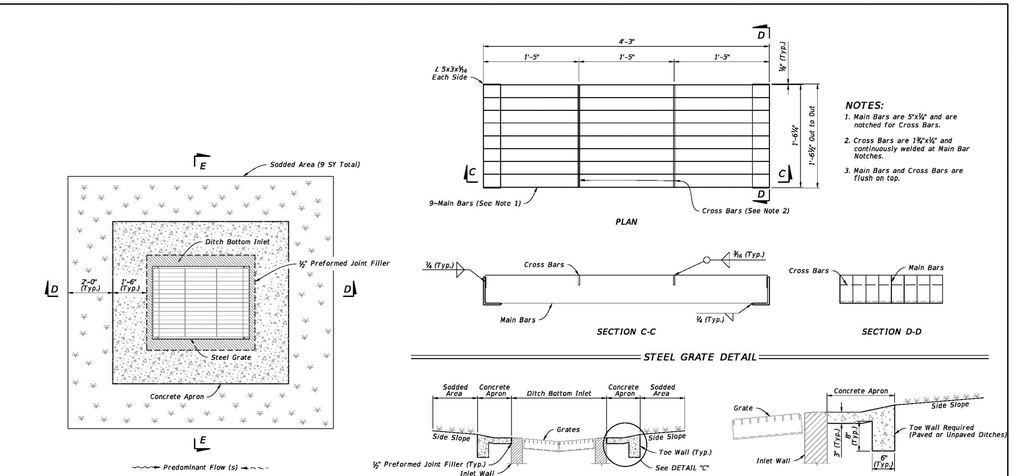
WALL DEPTH	SCHEDULE	AREA (in.²/ft.)	MAX. SPACING	
			BARS	WWR
0' - 4'	A12	0.20	12"	8"
4' - 9'	A6	0.20	6"	5"
9' - 12'	A4	0.24	4"	3"
9' - 15'	B5.5	0.24	5½"	5"

NOTES:
1. Grate, Concrete Apron, and Sod not shown in Plan View.
2. See Sheet 3 for Concrete Apron and Sodded Area details.
3. Construction joints permitted between these limits. See Index 425-001 for minimum dimensions.

DIMENSIONAL AND REINFORCING DETAILS

DIMENSIONAL AND REINFORCING DETAILS

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	DITCH BOTTOM INLET TYPE J	INDEX	SHEET
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GRATE, CONCRETE APRON, AND SODDED AREA DETAILS

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	DITCH BOTTOM INLET TYPE J	INDEX	SHEET
11/01/20				425-054	3 of 4

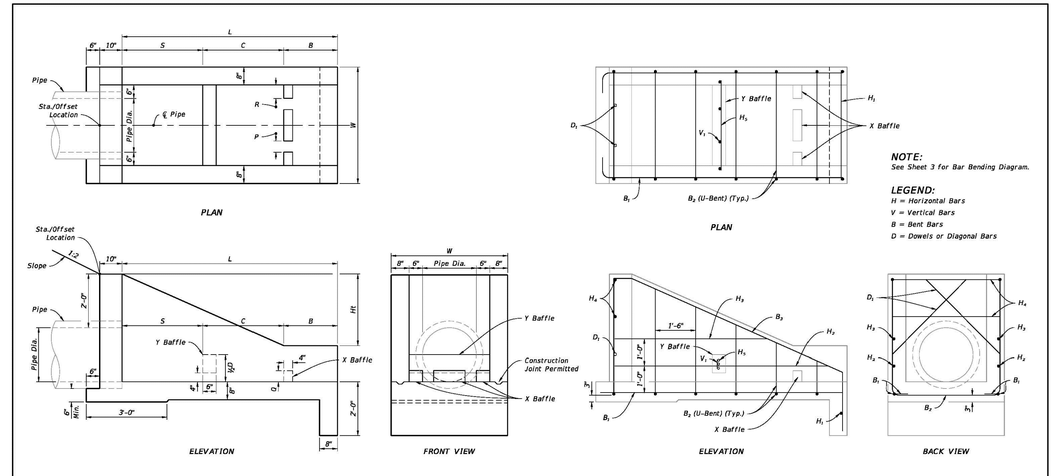


TABLE-1
DIMENSIONS AND QUANTITIES FOR ONE U-ENDWALL

Pipe Dia.	Pipe Area Sq. Ft.	L	Ht	W	S	B	C	X Baffle P	X Baffle Q	X Baffle R	Y Baffle Reinf. Steel Bars V_1	Y Baffle Reinf. Steel Bars H_2	Class II Conc. Cu. Yd.	Reinf. Steel lbs.
15"	1.23	5'-9"	2'-3½"	3'-7"	2'-3"	1'-3"	2'-3"	4"	4"	4"	2 #4	1 #4	1.61	72
18"	1.77	6'-6"	2'-5"	3'-10"	2'-6"	1'-6"	2'-6"	4"	4"	5"	3 #4	2 #4	1.89	86
24"	3.14	8'-0"	2'-8"	4'-4"	3'-0"	2'-0"	3'-0"	5"	5"	6"	4 #4	3 #4	2.52	108
30"	4.91	9'-6"	2'-11"	4'-10"	3'-6"	2'-6"	3'-6"	5"	5"	7"	4 #4	4 #4	3.34	131

ENDWALLS FOR 1:2 SLOPES WITH BAFFLES

LAST REVISION	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	U-TYPE CONCRETE ENDWALLS BAFFLES & GRATE OPTIONAL 15" TO 30" PIPE	INDEX	SHEET
11/01/21				430-011	2 of 5

REVISIONS

DATE	DESCRIPTION

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FDOT STANDARD DETAILS
THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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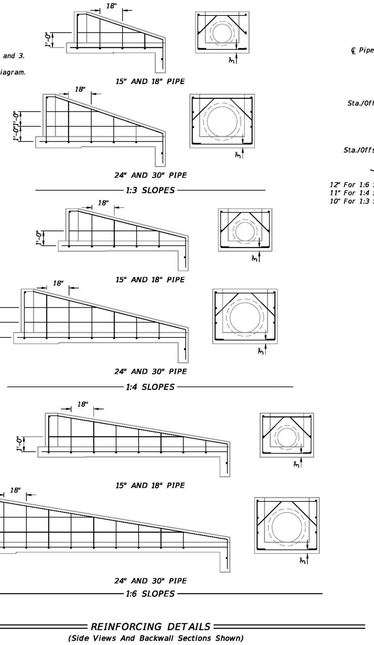
PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	AS SHOWN

DRAWING NUMBER

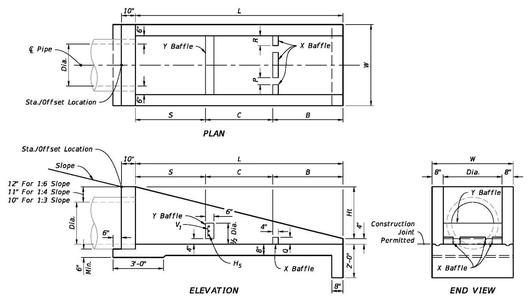
42

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

NOTE:
1. Reinforcing similar to Sheets 2 and 3.
2. See Sheet 3 for Bar Bending Diagram.



REINFORCING DETAILS
(Side Views And Backwall Sections Shown)



DIMENSIONAL DETAILS

TABLE-3
DIMENSIONS AND QUANTITIES FOR BAFFLES

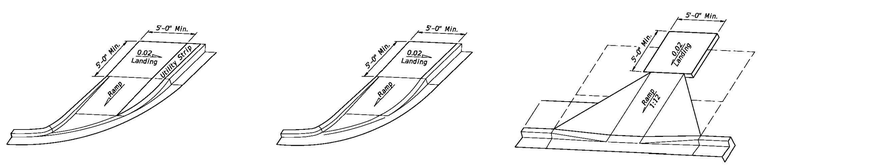
Pipe Dia.	X Baffle P Width	X Baffle Q Height	X Baffle R Length	Y Baffle Reinf. Steel Bar V_1	Y Baffle Reinf. Steel Bar H_5	Class II Concrete Cu. Yd.	Reinf. Steel lbs.
15"	4"	4"	6"	2- #4	1- #4	0.10	4
18"	4"	4"	5"	3- #4	2- #4		8
24"	5"	5"	6"	4- #4	3- #4		12
30"	5"	5"	7"	4- #4	4- #4		16

TABLE-4
DIMENSIONS AND QUANTITIES FOR ONE U-ENDWALL

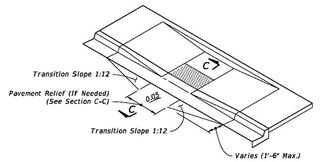
Rate Of Slope	Pipe Dia.	Pipe Area (Sq. Ft.)	L	Ht	W	Baffle Locations (When Required) S	B	C	Class II Concrete Cu. Yd.	Reinf. Steel lbs.
1 : 3	15"	1.23	5'-3"	1'-9"	3'-7"	1'-9"	1'-9"	1'-9"	1.19	51
	18"	1.77	6'-0"	2'-0"	3'-10"	2'-0"	2'-0"	2'-0"	1.42	56
	24"	3.14	7'-6"	2'-6"	4'-4"	2'-6"	2'-6"	2'-6"	1.94	77
	30"	4.91	9'-0"	3'-0"	4'-10"	3'-0"	3'-0"	3'-0"	2.54	96
1 : 4	15"	1.23	7'-4"	1'-10"	3'-7"	2'-6"	2'-6"	2'-4"	1.54	64
	18"	1.77	8'-4"	2'-1"	3'-10"	2'-10"	2'-10"	2'-8"	1.84	71
	24"	3.14	10'-4"	2'-7"	4'-4"	3'-6"	3'-6"	3'-4"	2.53	92
	30"	4.91	12'-4"	3'-1"	4'-10"	4'-2"	4'-2"	4'-0"	3.34	124
1 : 6	15"	1.23	11'-6"	1'-11"	3'-7"	3'-10"	3'-10"	3'-10"	2.19	89
	18"	1.77	13'-0"	2'-2"	3'-10"	4'-4"	4'-4"	4'-4"	2.63	103
	24"	3.14	16'-0"	2'-8"	4'-4"	5'-4"	5'-4"	5'-4"	3.59	143
	30"	4.91	19'-0"	3'-2"	4'-10"	6'-4"	6'-4"	6'-4"	4.81	180

ENDWALLS WITH AND WITHOUT BAFFLES FOR 1:3, 1:4, AND 1:6 SLOPES

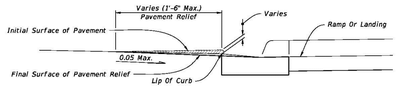
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11/01/21					430-011	4 of 5



LANDINGS FOR CURB RAMPS WITHOUT SIDEWALKS
(See CR-F, CR-G & CR-K Respectively For Detectable Warning Details/Options)



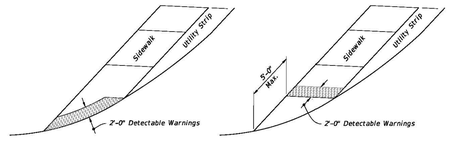
ISOMETRIC VIEW
(CR-C Shown, Other Similar)



NOTE: Remove Elevated Pavement By Spading And Rolling, Smooth Milling, or Grinding.

SECTION C-C

PAVEMENT RELIEF DETAILS

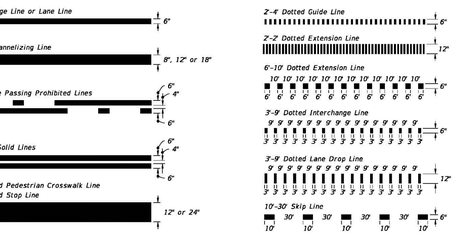


OPTION A OPTION B

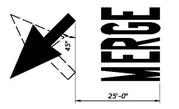
DETECTABLE WARNING ON FLUSH SHOULDER SIDEWALKS

CURB RAMPS WITHOUT SIDEWALKS AND FLUSH SHOULDER SIDEWALKS

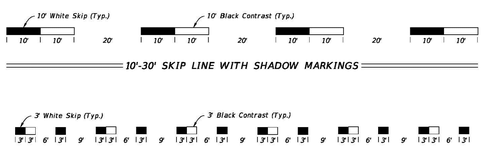
LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX	SHEET
11/01/20					522-002	6 of 7



PAVEMENT MARKING LINES

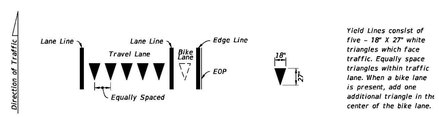


MARKINGS FOR MERGE



10'-30' SKIP LINE WITH SHADOW MARKINGS

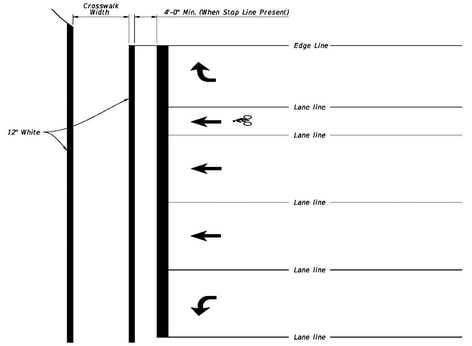
DOTTED LINE WITH ALTERNATING SHADOW MARKINGS
(3'-9' Dotted Line Shown, Other Dotted Lines Similar)



Yield Lines consist of five – 18" X 27" white triangles which face traffic. Equally space triangles within traffic lane. When a bike lane is present, add one additional triangle in the center of the bike lane.

YIELD LINES

LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	PAVEMENT MARKINGS	INDEX	SHEET
11/01/21					711-001	2 of 13



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 2022-23 STANDARD PLANS	PAVEMENT MARKINGS	INDEX	SHEET
11/01/21					711-001	9 of 13

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CHECKED BY:	HHN
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DRAWING NUMBER

43

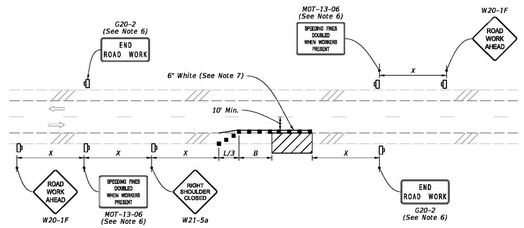
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

NOTE:

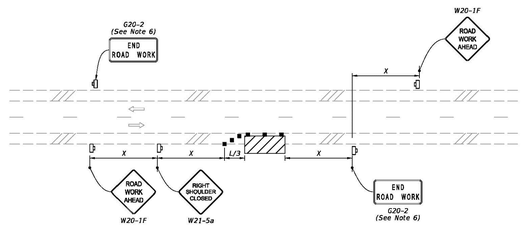
1. This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work on the shoulder.
2. L = Taper Length
   X = Work Zone Sign Spacing
   B = Buffer Length
   See Index 102-600 for "L", "X", "B", and channelizing device spacing values.
3. Where work activities are between 2' and 15' from the edge of traveled way, the Engineer may omit signs and channelizing devices for work operations 60 minutes or less.
4. When four or more work vehicles enter the through traffic lanes in a one hour period (excluding establishing and terminating the work area), use a flagger or lane closure to accommodate work vehicle ingress and egress.
5. For work less than 2' from the traveled way and work zone speed is greater than 45 MPH, use a lane closure.
6. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" Signs (G20-2) along with the associated work zone sign spacing distances may be omitted when the work operation is in place for 24 hours or less.
7. Temporary pavement markings may be omitted when the work operation is in place for 3 days or less.
8. Omit "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median.
9. When there is no paved shoulder, the "Worker" sign (W21-1) may be used instead of the "Shoulder Closed" sign (W21-5a).

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic

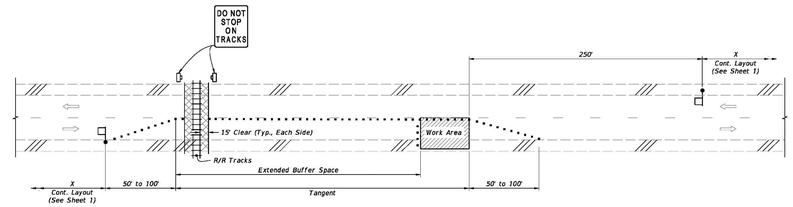


TWO-LANE ROADWAY
SHOULDER WORK LESS THAN 2' FROM THE TRAVELED WAY WITH WORK ZONE SPEED OF 45 MPH OR LESS

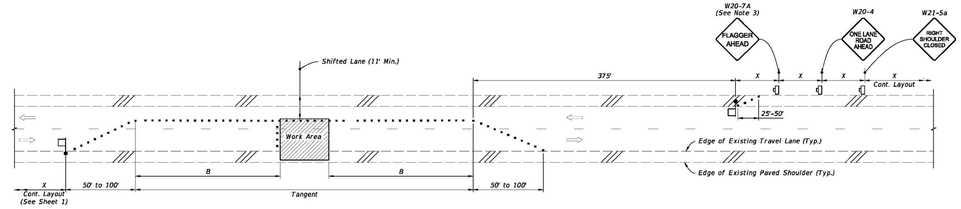


TWO-LANE ROADWAY
SHOULDER WORK BETWEEN 2' AND 15' FROM THE TRAVELED WAY

LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX 102-602	SHEET 1 of 2



TEMPORARY RAILROAD CROSSING BUFFER SPACE EXTENSION



TEMPORARY LANE SHIFT TO SHOULDER WHEN WORK AREA ENCROACHES ON THE CENTERLINE
(For Work Operations In place 24 Hours or Less)

SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Flagger
- Lane Identification and Direction of Traffic

SPECIAL CONDITIONS

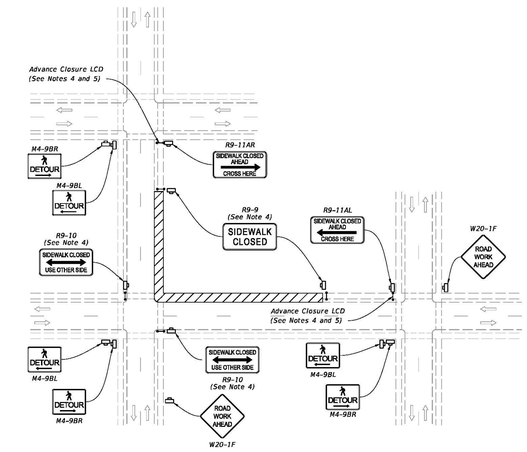
LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	TWO-LANE, TWO-WAY WORK WITHIN THE TRAVEL WAY	INDEX 102-603	SHEET 2 of 2

NOTES:

1. Cover or deactivate pedestrian traffic signal display(s) controlling closed crosswalks.
2. Place pedestrian LCDs across the full width of the closed sidewalk.
3. For post mounted signs located near or adjacent to a sidewalk, maintain a minimum 7' clearance from the bottom of the sign panel to the surface of the sidewalk.
4. "Sidewalk Closed" signs (R9-XX) may be mounted on pedestrian LCDs in accordance with the manufacturer's instructions.
5. Omit the Advance Closure LCD if it blocks access to other pedestrian facilities (e.g., transit stops, residences, or business entrances).

SYMBOLS:

- Work Area
- Work Zone Sign
- Pedestrian Longitudinal Channelizing Device (LCD)
- Lane Identification and Direction of Traffic



PEDESTRIAN DETOUR

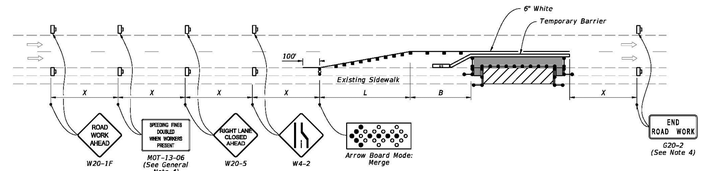
LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	SIDEWALK CLOSURE	INDEX 102-660	SHEET 1 of 2

NOTES:

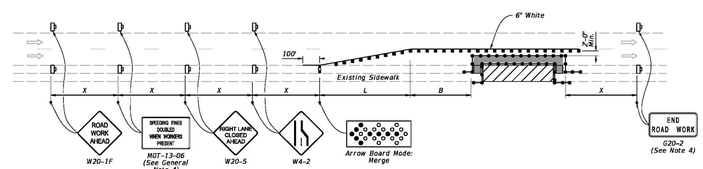
1. L = Taper Length
   B = Buffer Length
   X = Work Zone Sign Distance
   See Index 102-600 for "L", "B", "X", channelizing device spacing values.
2. Provide a 5' wide temporary pedestrian way with a maximum cross-slope of 0.02, except where space restrictions warrant a minimum width of 4'. Provide a 5' x 5' passing space for temporary pedestrian ways less than 5' in width at intervals not to exceed 200'.
3. When temporary pedestrian ways require curb ramps, meet the requirements of Index 522-002. Detectable warnings are not required for curb ramps diverting pedestrian traffic into a closed lane.
4. The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2), along with associated work zone sign distances, may be omitted when the work operation will be in place for 24 hours or less.
5. Pedestrian Diversion Option 2 may only be used when called for in the Plans or as approved by an Engineer.

SYMBOLS:

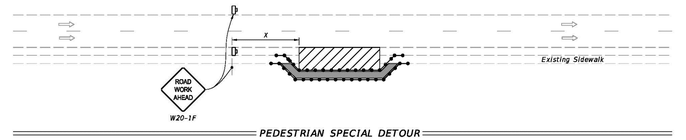
- Work Area
- Temporary Pedestrian Way
- Channelizing Device (See Index 102-600)
- Pedestrian Longitudinal Channelizing Device (LCD)
- Work Zone Sign
- Arrow Board
- Crash Cushion
- Lane Identification and Direction of Traffic



PEDESTRIAN DIVERSION - OPTION 1
(Temporary Barrier Shown, Low Profile Barrier Similar)



PEDESTRIAN DIVERSION - OPTION 2
(Work Zone Speed 35 mph or Less)



PEDESTRIAN SPECIAL DETOUR

LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2022-23 STANDARD PLANS	SIDEWALK CLOSURE	INDEX 102-660	SHEET 2 of 2

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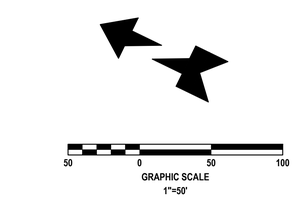
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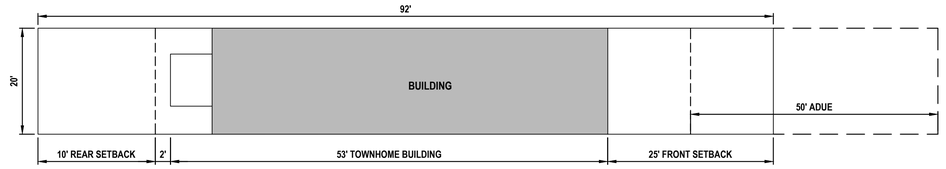
PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	HHN
DRAWN BY:	NWS
CHECKED BY:	HHN
SCALE:	AS SHOWN

DRAWING NUMBER

44

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))





TYPICAL LOT DIMENSIONS

CITY EASEMENT LEGEND:

- PROPOSED 24' PRIVATE RIGHT-OF-WAY
- PROPOSED DRAINAGE EASEMENT
- PROPOSED ACCESS, DRAINAGE AND UTILITY EASEMENT
- PROPOSED UTILITY EASEMENT

EASEMENT LEGEND :

ADUE	ACCESS, DRAINAGE AND UTILITY EASEMENT
DE	DRAINAGE EASEMENT
DUE	DRAINAGE AND UTILITY EASEMENT
UE	UTILITY EASEMENT



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DATE	DESCRIPTION
10/13/22	CITY COMMENTS

EASEMENT PLAN
THE VINEYARDS
649 6TH STREET
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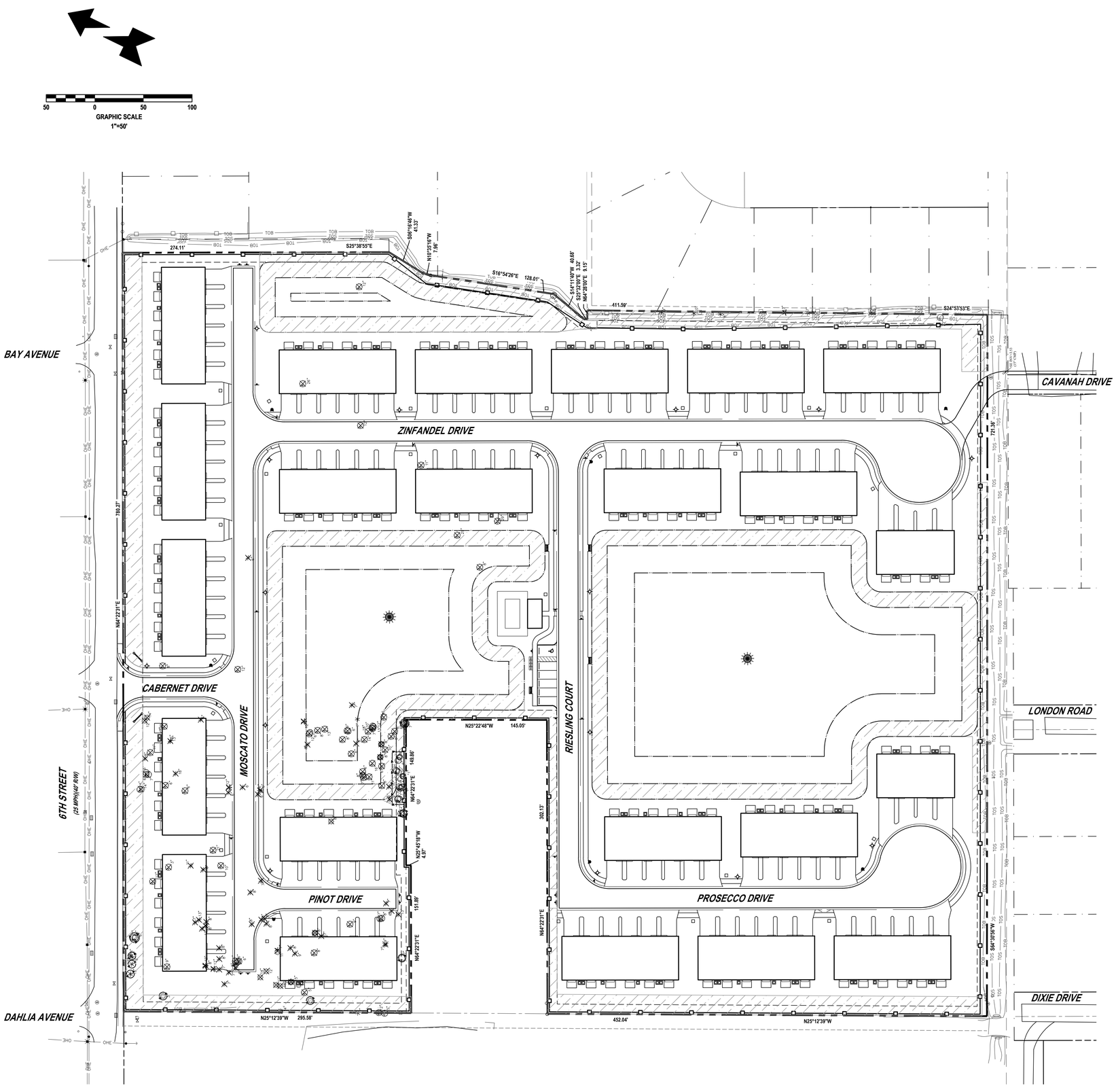
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DESIGN BY:	HHN
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CHECKED BY:	HHN
SCALE:	1" = 50'

DRAWING NUMBER

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Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



TREE PRESERVATION SUMMARY CHART

TREE PRESERVATION AREA REQUIRED = 620,676 SF / 14.249 ACRES
= 620,676 SF x 0.15 = 93,101 SF (15.0%)
TREE PRESERVATION AREA PROVIDED = 96,686 SF / 2.220 ACRES = 15.6%

LEGEND

TREE PRESERVATION AREA

EXISTING TREE LEGEND:

NAME	TOTAL	REMOVED
CEDAR TREE	12	10
OAK TREE	80	55
PALM TREE	5	4
HACKBERRY TREE	56	46
ASH TREE	6	4
	159 TOTAL	119 TOTAL

TREES REMOVED			
DBH	QUANTITY	CSSI	TOTAL
6"	23	28.27	650.21
7"	17	38.48	654.16
8"	30	50.26	1507.8
9"	6	63.62	381.72
10"	3	78.54	235.62
11"	5	95.03	475.15
12"	15	113.1	1696.5
13"	6	132.73	796.38
14"	5	153.94	769.7
15"	2	176.71	353.42
16"	1	201.06	201.06
18"	2	254.47	508.94
21"	1	346.36	346.36
26"	1	530.93	530.93
29"	2	660.52	1321.04
TOTAL	**119**		**10428.99**

TREES REMAIN			
DBH	QUANTITY	CSSI	TOTAL
6"	7	28.27	197.89
7"	11	38.48	423.28
8"	7	50.26	351.82
9"	4	63.62	254.48
10"	1	78.54	78.54
11"	3	95.03	285.09
12"	1	113.1	113.1
13"	3	132.73	398.19
14"	1	153.94	153.94
15"	1	176.71	176.71
22"	1	380.13	380.13
TOTAL	**40**		**2813.17**

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TREE PROTECTION PLAN

THE VINEYARDS

649 6TH STREET
HOLLY HILL, FL 32174

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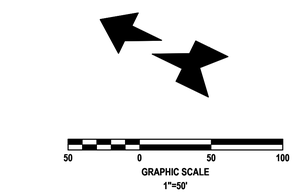
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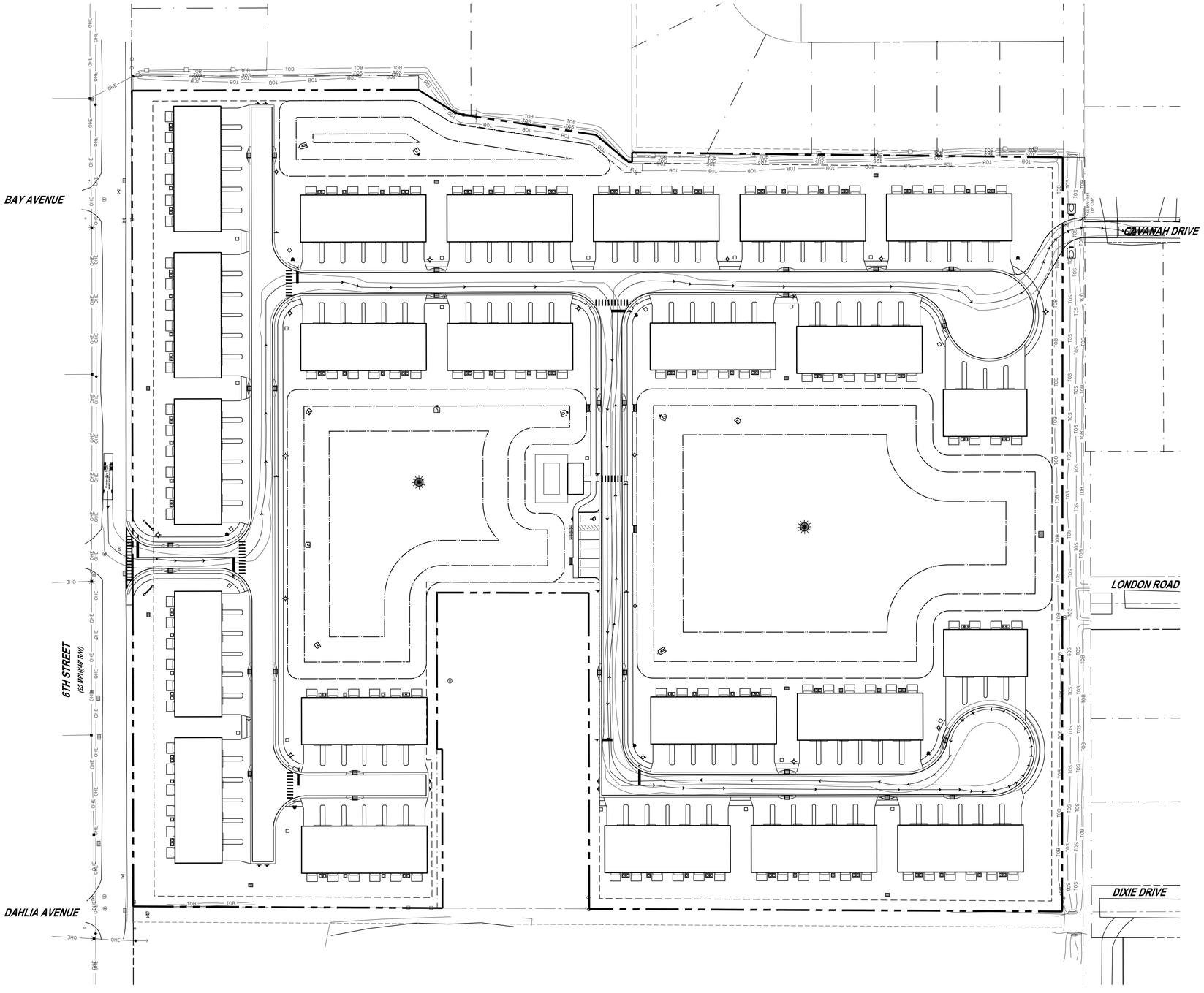
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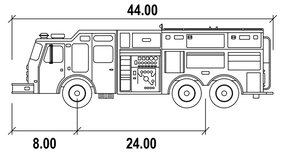
DRAWING NUMBER

46

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))







Pumper Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8

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AUTOTURN TRUCK EXHIBIT PLAN

THE VINEYARDS

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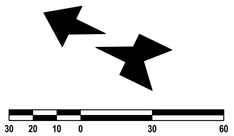
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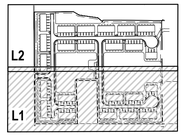
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SCALE:	1" = 50'

DRAWING NUMBER

47

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))





KEY MAP

NOT TO SCALE

LEGEND

- ST. AUGUSTINE SOD
- BAHIA SOD
- AREA TO REMAIN NATURAL

MINIMUM REQUIRED TREES	
SITE AREA	620676
TREES REQUIRED (1/2,500 S.F.)	248
EXISTING TREES TO REMAIN	40
TREES PROPOSED WITH BUILDINGS	92
TREES PROPOSED WITH POOL/CABANA	24
TREES PROPOSED IN COMMON AREA	108
TOTAL TREES ON SITE	264

OVERALL PLANT SCHEDULE

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
SP	6	SABAL PALMETTO	CABBAGE PALMETTO	10`, 14`, 18` HT.	STAGGERED HEIGHTS
SHADE TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
AR	13	ACER RUBRUM	RED MAPLE	2.5" CAL., 10` HT.	
BN	3	BETULA NIGRA	RIVER BIRCH	10` HT, 30 GAL.	6" CAL. COMBINED, 3 STEM MIN MULTI TRUNK
QV	29	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	2.5" CAL., 10` HT.	
TD	33	TAXODIUM DISTICHUM	BALD CYPRESS	2.5" CAL., 10` HT.	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
IAE	1	ILEX X ATTENUATA `EAGLESTON`	EAGLESTON HOLLY	2.5" CAL., 10` HT.	
LIM	8	LAGERSTROEMIA INDICA X FAURIEI `MUSKOGEE`	MUSKOGEE CRAPE MYRTLE	30 GAL., 1.5" CAL., 10` HT	M.T. LILAC
MGL	8	MAGNOLIA GRANDIFLORA `LITTLE GEM`	DWARF SOUTHERN MAGNOLIA	2.5" CAL., 10` HT.	
PC	11	PRUNUS CAROLINIANA	CAROLINA LAUREL CHERRY	2" CAL., 8` HT	
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
AZR	84	AZALEA X `RED RUFFLES`	RED RUFFLES AZALEA	3 GAL., 24" HT, X 18" SPRD.	36" O.C.
PMP	10	PODOCARPUS MACROPHYLLUS `PRINGLES`	DWARF PODOCARPUS	3 GAL.	30" O.C.
SRC	15	SERENOA REPENS `CINEREA`	SILVER SAW PALMETTO	7 GAL.	48" O.C.
VOW	222	VIBURNUM OBOVATUM `WHORLED CLASS`	WHORLED CLASS DWARF WALTER'S VIBURNUM	3 GAL., 18" HT. X 9" SPRD.	36" O.C.
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
JC	232	JUNIPERUS CONFERTA	SHORE JUNIPER	1 GAL.	30" O.C.
MUH	315	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	1 GAL.	36" O.C.
TRP	58	TRADESCANTIA PALLIDA `PURPLE HEART`	PURPLE QUEEN SPIDERWORT	1 GAL.	18" O.C.
TF	354	TRIPSACUM FLORIDANUM	FLORIDA GAMAGRASS	1 GAL.	

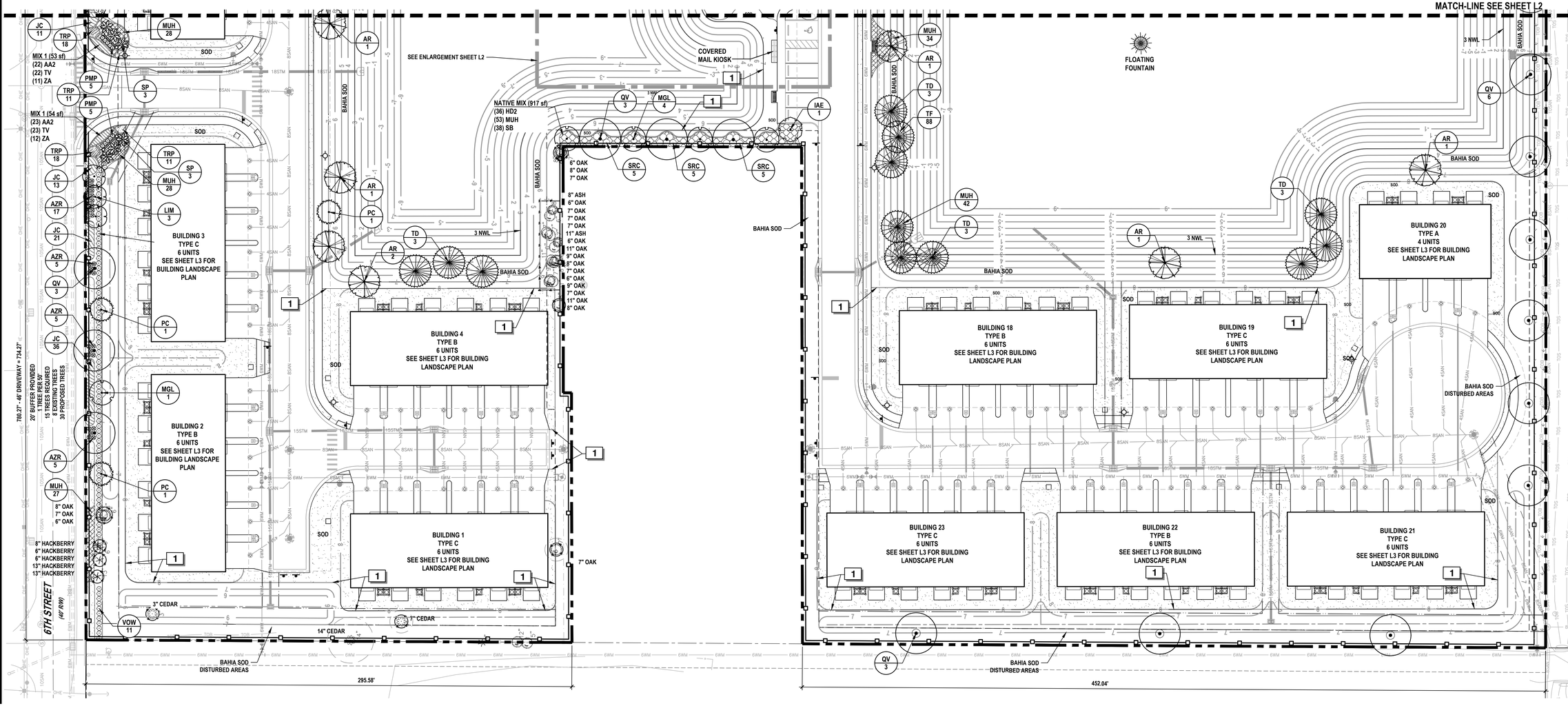
OVERALL PLANT MIX SCHEDULE

MIX 1		107 SF	
FLOWER MIX			
AGAPANTHUS AFRICANUS / AFRICAN LILY		45	1 GAL.
TULBAGHIA VIOLACEA / SOCIETY GARLIC		45	1 GAL.
ZEPHYRANTHES ATAMASCO / ATAMASCO LILY		23	3" HT, X 3" SPRD
NATIVE MIX		917 SF	
HELIANTHUS DEBILIS / DUNE SUNFLOWER		239	1 GAL.
MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS		53	1 GAL.
SPARTINA BAKERI / SAND CORDGRASS		38	1 GAL.

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	CHANGE IN SOD TYPE

MATCH-LINE SEE SHEET L2



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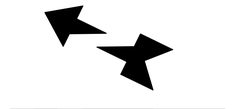
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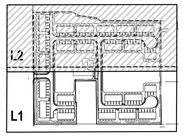
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DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 30'

DRAWING NUMBER

L1

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))





KEY MAP

NOT TO SCALE

LEGEND

- ST. AUGUSTINE SOD
- BAHIA SOD
- AREA TO REMAIN NATURAL

PLANT SCHEDULE POOL AREA

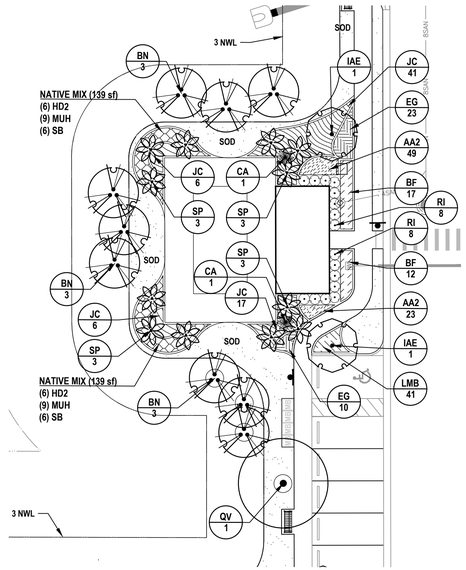
PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
SP	12	SABAL PALMETTO	CABBAGE PALMETTO	10`, 14`, 18` HT.	STAGGERED HEIGHTS
SHADE TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
BN	9	BETULA NIGRA	RIVER BIRCH	10` HT, 30 GAL.	6" CAL. COMBINED, 3 STEM MIN MULTI TRUNK
QV	1	QUERCUS VIRGINIANA	SOUTHERN LIVE OAK	2.5" CAL., 10` HT.	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
IAE	2	ILEX X ATTENUATA `EAGLESTON`	EAGLESTON HOLLY	2.5" CAL., 10` HT.	
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
CA	2	CRINUM AUGUSTUM `QUEEN EMMA`	QUEEN EMMA CRINUM LILY	15 GAL., 48" HT, X 18" SPRD.	FLORIDA FANCY
RI	16	RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	3 GAL., 15" HT. X 15" SPRD.	36" O.C.
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
AA2	72	AGAPANTHUS AFRICANUS	AFRICAN LILY	1 GAL.	12" O.C.
BF	29	BULBINE FRUTESCENS `HALLMARK`	HALLMARK STALKED BULBINE	1 GAL.	24" O.C.
EG	33	EVOLVULUS GLOMERATUS `BLUE DAZE`	BRAZILIAN DWARF MORNING GLORY	1 GAL.	18" - 24" O.C.
JC	70	JUNIPERUS CONFERTA	SHORE JUNIPER	1 GAL.	30" O.C.
LMB	41	LIRIOPE MUSCARI `BIG BLUE`	BIG BLUE LILYTURF	1 GAL.	12" O.C.

PLANT MIX SCHEDULE POOL AREA

NATIVE MIX	278 SF		
HELIANTHUS DEBILIS / DUNE SUNFLOWER	73	1 GAL.	24" oc
MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS	17	1 GAL.	50% @ 36" oc
SPARTINA BAKERI / SAND CORDGRASS	12	1 GAL.	35% @ 36" oc

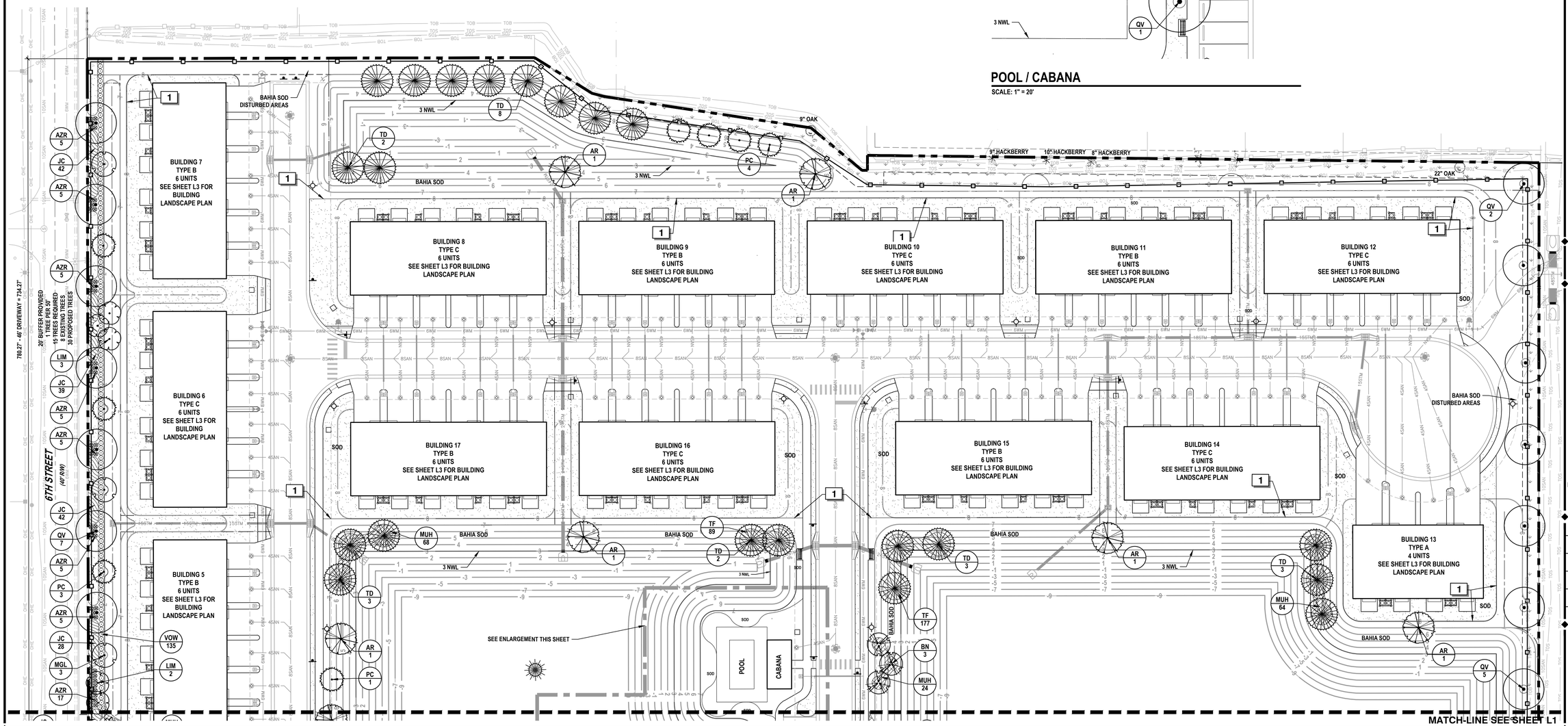
REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	CHANGE IN SOD TYPE



POOL / CABANA

SCALE: 1" = 20'



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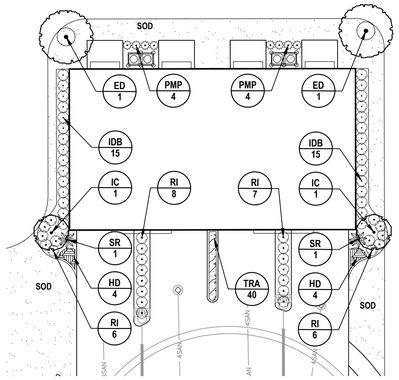
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L2

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



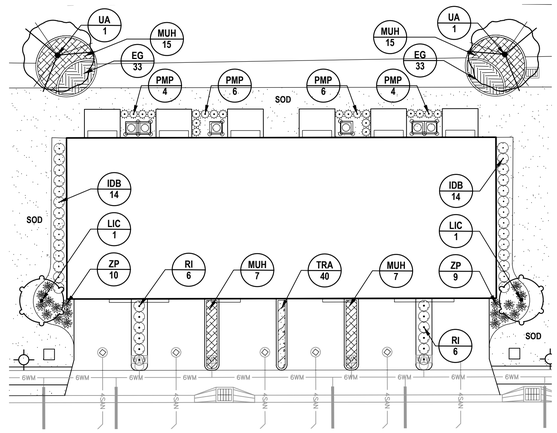
BUILDING TYPE A (2 BUILDINGS)

SCALE: 1" = 20'

PLANT SCHEDULE TYPE A BLDG

SHADE TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
ED	2	ELAEOCARPUS DECIPIENS	JAPANESE BLUEBERRY TREE	3.5" CAL., 10` HT	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
IC	2	ILEX CASSINE	DAHOON HOLLY	2" CAL., 6` HT.	2` C.T. OR F.T.G.
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
IDB	30	ILEX CORNUTA 'BURFORDII NANA'	DWARF BURFORD HOLLY	3 GAL., 24" HT, X 18" SPRD.	
PMP	8	PODOCARPUS MACROPHYLLUS `PRINGLES`	DWARF PODOCARPUS	3 GAL.	30" O.C.
RI	27	RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	3 GAL., 15" HT. X 15" SPRD.	36" O.C.
SR	2	STRELITZIA REGINAE	BIRD OF PARADISE	7 GAL.	48" HT.
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
HD	8	HELIANTHUS DEBILIS	DUNE SUNFLOWER	1 GAL.	24" O.C.
TRA	40	TRACHELOSPERMUM ASIATICUM	ASIAN JASMINE	1 GAL.	12" O.C.

BUILDING TYPE A TOTAL TREES			
TREE CODE	QTY	BUILDINGS	TOTAL
ED	2	2	4
IC	2	2	4
TOTAL BUILDING A TREES			8



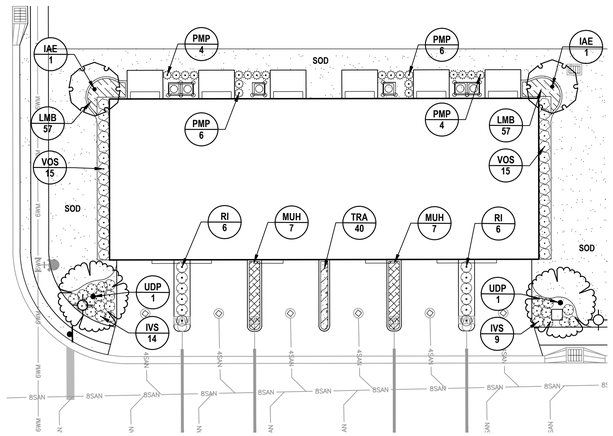
BUILDING TYPE B

SCALE: 1" = 20'

PLANT SCHEDULE TYPE B BLDG

SHADE TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
UA	2	ULMUS AMERICANA	AMERICAN ELM	2.5" CAL., 10` HT.	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
LIC	2	LAGERSTROEMIA INDICA `CATAWBA`	CATAWBA CRAPE MYRTLE MULTI-TRUNK	15 GAL., 3` CT	
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
IDB	28	ILEX CORNUTA 'BURFORDII NANA'	DWARF BURFORD HOLLY	3 GAL., 24" HT, X 18" SPRD.	
PMP	20	PODOCARPUS MACROPHYLLUS `PRINGLES`	DWARF PODOCARPUS	3 GAL.	30" O.C.
RI	12	RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	3 GAL., 15" HT. X 15" SPRD.	36" O.C.
ZP	19	ZAMIA PUMILA	COONTIE CYCAD	3 GAL.	60" O.C.
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
EG	66	EVOLVULUS GLOMERATUS `BLUE DAZE`	BRAZILIAN DWARF MORNING GLORY	1 GAL.	18" - 24" O.C.
MUH	44	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	1 GAL.	36" O.C.
TRA	40	TRACHELOSPERMUM ASIATICUM	ASIAN JASMINE	1 GAL.	12" O.C.

BUILDING TYPE B TOTAL TREES			
TREE CODE	QTY	BUILDINGS	TOTAL
UA	2	10	20
LIC	2	10	20
TOTAL BUILDING B TREES			40



BUILDING TYPE C

SCALE: 1" = 20'

PLANT SCHEDULE TYPE C BLDG

SHADE TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
UDP	2	ULMUS PARVIFOLIA `DRAKE`	DRAKE CHINESE ELM	2" CAL., 8` HT	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
IAE	2	ILEX X ATTENUATA `EAGLESTON`	EAGLESTON HOLLY	2.5" CAL., 10` HT.	
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
IVS	23	ILEX VOMITORIA `STOKES DWARF`	STOKES DWARF YAUPON HOLLY	3 GAL., 12" HT. X 18" SPRD.	36" O.C.
PMP	20	PODOCARPUS MACROPHYLLUS `PRINGLES`	DWARF PODOCARPUS	3 GAL.	30" O.C.
RI	12	RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	3 GAL., 15" HT. X 15" SPRD.	36" O.C.
VOS	30	VIBURNUM OBOVATUM 'SELECT'	WALTER'S VIBURNUM	---	36" O.C.
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**	**REMARKS**
LMB	114	LIRIOPE MUSCARI `BIG BLUE`	BIG BLUE LILYTURF	1 GAL.	12" O.C.
MUH	14	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	1 GAL.	36" O.C.
TRA	40	TRACHELOSPERMUM ASIATICUM	ASIAN JASMINE	1 GAL.	12" O.C.

BUILDING TYPE C TOTAL TREES			
TREE CODE	QTY	BUILDINGS	TOTAL
UDP	2	11	22
IAE	2	11	22
TOTAL BUILDING C TREES			44

REVISIONS

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BUILDING LANDSCAPE PLANS

THE VINEYARDS

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LAUREN ADAMS LICENSE NO. 6667278 STATE OF FLORIDA LANDSCAPE ARCHITECT

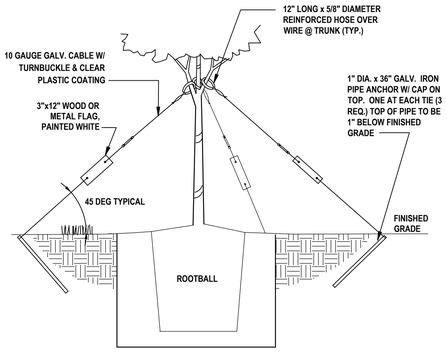
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PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	AS SHOWN

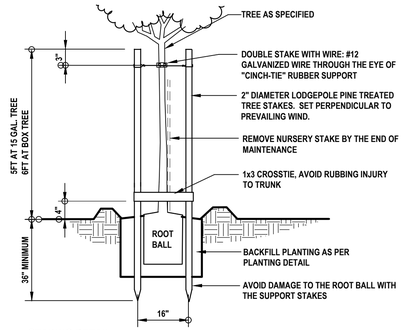
DRAWING NUMBER

L3

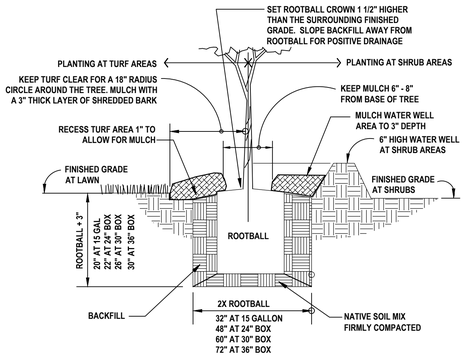
Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



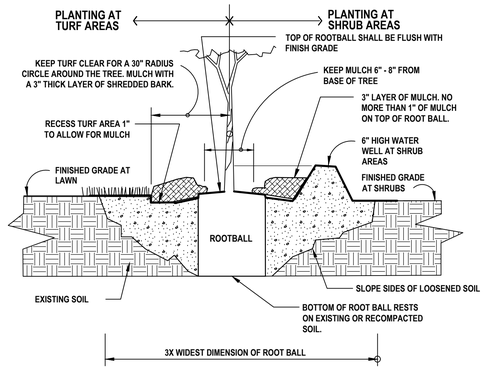
STAKING DETAIL



STAKING DETAIL



PLANT PIT DETAIL



PLANT PIT DETAIL

LANDSCAPE NOTES

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

LANDSCAPE SOIL SPECIFICATIONS

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

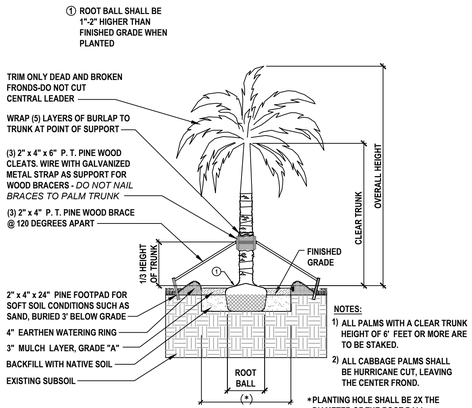
REFER TO LANDSCAPE DETAILS FOR MINIMUM PLANTING PIT DIMENSIONS.

PLANT SPECIFICATION NOTES

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

1 TREE PLANTING DETAIL

1" = 1'-0" P-CO-2022-86-01

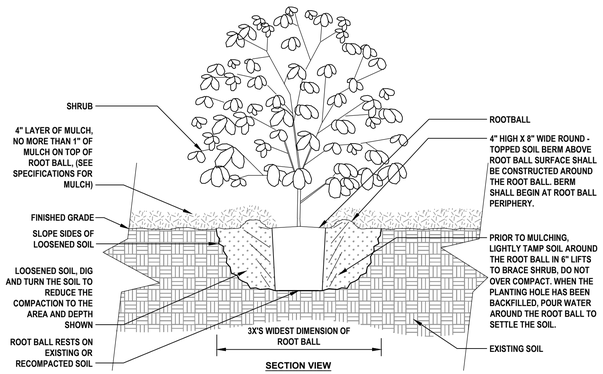


3 STRAIGHT TRUNK PALM PLANTING DETAIL

NTS P-CO-2022-86-12

2 SMALL TREE PLANTING DETAIL

1" = 1'-0" P-CO-2022-86-03

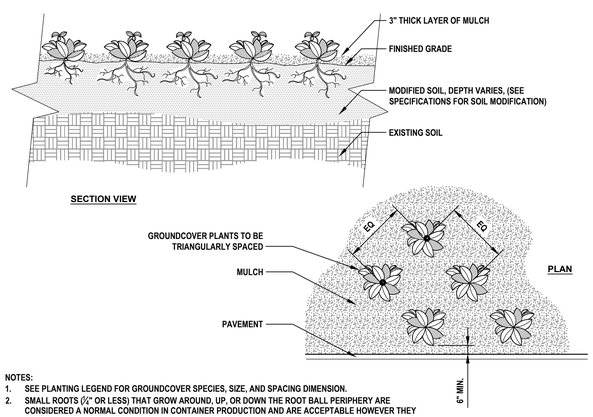


NOTES:
1. SHRUBS SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

4 SHRUB PLANTING DETAIL

NTS P-CO-2022-86-04

URBAN TREE FOUNDATION © 2014
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NOTES:
1. SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
2. SMALL ROOTS (½" OR LESS) THAT GROW AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPERHY CAN BE REMOVED AT THE TIME OF PLANTING. (SEE ROOT BALL SHAVING CONTAINER DETAIL).
3. SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.

5 GROUNDCOVER LAYOUT

1/16" = 1'-0" P-CO-2022-86-02

REVISIONS	
DATE	DESCRIPTION
10/13/22	CITY COMMENTS

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

LANDSCAPE DETAILS AND NOTES

THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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LAUREN ADAMS LICENSE NO. 6667278 STATE OF FLORIDA LANDSCAPE ARCHITECT

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DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	AS SHOWN

DRAWING NUMBER

L4

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))

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

MATCH-LINE SEE SHEET L6

SEE ENLARGEMENTS SHEET L6

6TH STREET (40' R/W)

1	1½"	31.0
2	1½"	30
3	1½"	31.4
4	1½"	23.8
5	1½"	23.6
6	1½"	30.6
7	1½"	30.6
8	1½"	28.7
9	1½"	24.0
10	1½"	30.4
11	1½"	26.6
12	1½"	27.4
13	1½"	26.8

I-101

55GPM 40PSI

REVISIONS

DATE	DESCRIPTION
10/13/22	CITY COMMENTS

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (386) 672-7794
www.Newkirk-Engineering.com
C.A. # 30209
L.C. # 26000584
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IRRIGATION PLAN
THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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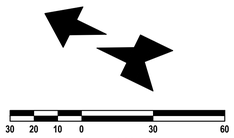
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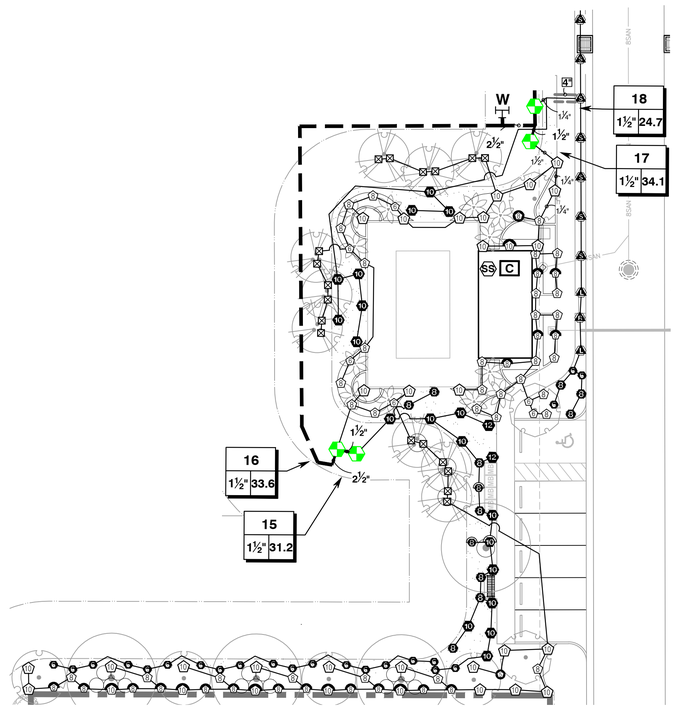
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DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	1" = 30'

DRAWING NUMBER

L5

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))





POOL / CABANA

SCALE: 1" = 20'

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY
ES LCS RCS CS SS	HUNTER PROS-06-PRS30-CV-F 5` STRIP SPRAY	196
Q T H F	HUNTER PROS-06-PRS30-CV-F 8` RADIUS	35
Q T H F	HUNTER PROS-06-PRS30-CV-F 10` RADIUS	1
4 6 8 10 12 15 17	HUNTER PROS-06-PRS30-CV-F ADJUSTABLE ARC	66
EST LCS RCS CST SST	HUNTER PROS-12-PRS30-CV-F 5` STRIP SPRAY	74
Q H F	HUNTER PROS-12-PRS30-CV-F 5` RADIUS	1
Q T H F	HUNTER PROS-12-PRS30-CV-F 8` RADIUS	18
Q T H F	HUNTER PROS-12-PRS30-CV-F 10` RADIUS	6
4 6 8 10 12 15 17	HUNTER PROS-12-PRS30-CV-F ADJUSTABLE ARC	93
25 50 10 20	HUNTER PCB 10	210

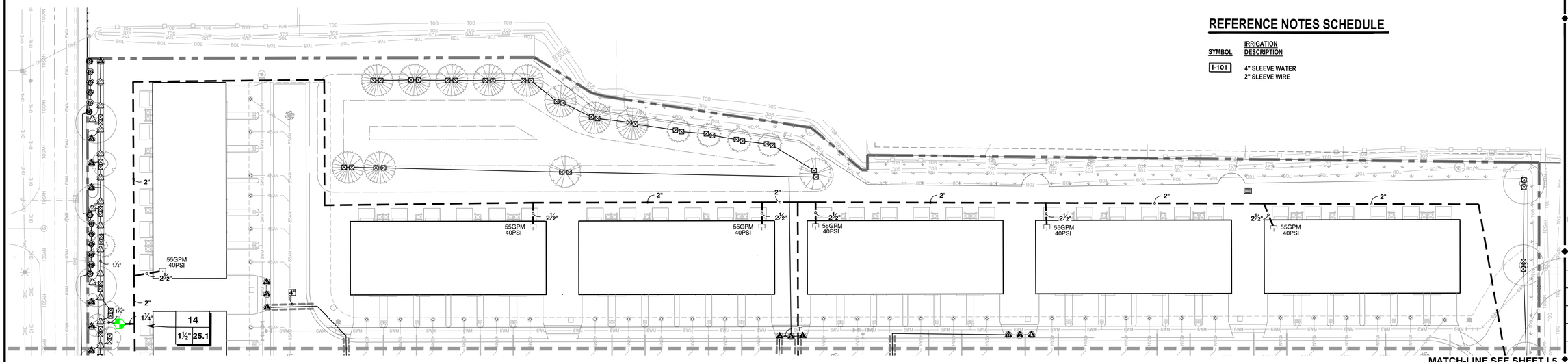
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	HUNTER ICV-G-FS 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE. WITH FILTER SENTRY.	18
C	HUNTER I2C-2400-M/ICC-PED-SS 24 STATION OUTDOOR MODULAR CONTROLLER. WITH TWO ICM-800 MODULE. COMMERCIAL USE. STAINLESS STEEL PEDESTAL.	1
SS	HUNTER SOLAR-SYNC SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE, CONNECTS TO HUNTER PCC, PRO-C, AND I-CORE CONTROLLERS, INSTALL AS NOTED. INCLUDES 10 YEAR LITHIUM BATTERY AND RUBBER MODULE COVER, AND GUTTER MOUNT BRACKET. WIRED.	1
XX	CAP FOR FUTURE USE CAP AT THE MAINLINE OR LATERAL LINE FOR FUTURE USE. THE PRESSURE AND FLOW PROVIDED TO THAT LOCATION ARE INDICATED NEXT TO THE CAP SYMBOL.	23
W	POINT OF CONNECTION 4" WELL WITH SUBMERSIBLE PUMP, SEE	1
	IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26	9,363 L.F.
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21	5,564 L.F.
	PIPE SLEEVE: PVC SCHEDULE 40	5.8 L.F.

Valve Callout



REFERENCE NOTES SCHEDULE

SYMBOL	IRRIGATION DESCRIPTION
I-101	4" SLEEVE WATER 2" SLEEVE WIRE



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10/13/22	CITY COMMENTS

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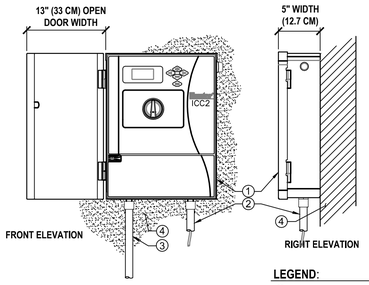
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DRAWING NUMBER

L6

Attachment: The Vineyards Subdivision Plan (3884 : The Vineyards Subdivision Review (PSP))



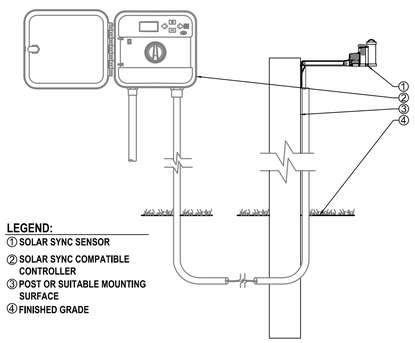
NOTE:
MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL, CONTROLLER SHALL BE HARD-WIRED TO GROUNDED 110 VAC POWER SOURCE

LEGEND:

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

1 HUNTER ICC2 CONTROLLER

1/8" = 1'-0" P-CO-2022-86-21

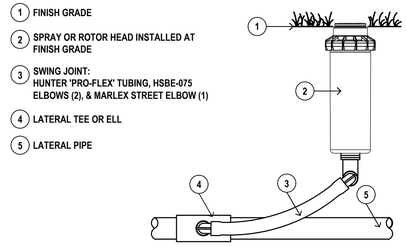


LEGEND:

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

2 HUNTER SOLAR SYNC SENSOR

1/8" = 1'-0" P-CO-2022-86-22



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

3 SPRAY HEAD AND ROTOR DETAIL

1/4" = 1'-0" P-CO-2022-86-13

IRRIGATION NOTES

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

WELL & PUMP NOTE

1. PUMP SPECIFICATIONS:

   PUMP MUST PROVIDE A MINIMUM OF 70 GALLONS PER MINUTE @ 80 PSI AT HEAD.

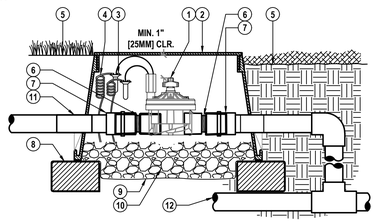
2. THE WELL SHALL BE CAPABLE OF PROVIDING REQUIRED WATER QUANTITY WITH FOLLOWING WATER QUALITY:
   - A. AT THE REQUIRED FLOW WATER SHALL BE CLEAR AND FREE OF SAND AND OTHER DEBRIS LARGER THAN .030" IN DIAMETER.
   - B. WATER SHALL BE CONSIDERED SAND FREE WHEN NO SAMPLE, TAKEN DURING TEST PUMPING, CONTAINS MORE THAN 2 PARTS PER MILLION OF SUSPENDED SOLID WEIGHT.
   - C. MAXIMUM IRON ALLOWED IN THE WELL WATER SHALL BE LESS THAN 0.3 PARTS PER MILLION.
   - D. MAXIMUM SALT CONTENT SHALL BE LESS THAN 300 PARTS PER MILLION.

PLANT ESTABLISHMENT

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

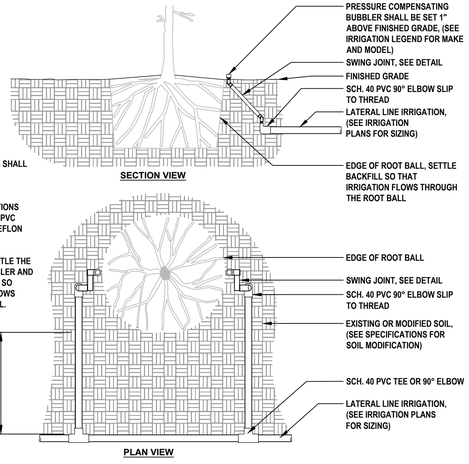
LEGEND

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



4 HUNTER REMOTE CONTROL VALVE (ICV)

1 1/2" = 1'-0" P-CO-2022-86-20

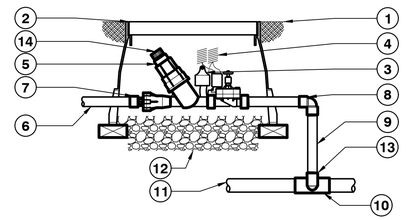


NOTES:
1. ALL IRRIGATION FITTINGS SHALL BE SCH. 40 PVC UNLESS SPECIFIED OTHERWISE.
2. ALL THREADED CONNECTIONS FROM SCH. 40 TO SCH. 80 PVC SHALL BE MADE USING TEFLON TAPE.
3. CONTRACTOR SHALL SETTLE THE AREA AROUND THE BUBBLER AND EDGE OF THE ROOT BALL SO THAT ALL IRRIGATION FLOWS THROUGH THE ROOT BALL.

5 IRRIGATION BUBBLER (2) W/ LAYOUT

URBAN TREE FOUNDATION © 2014 OPEN SOURCE FREE TO USE

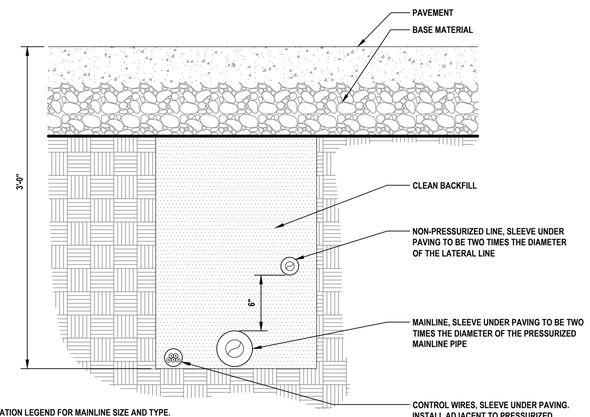
3/4" = 1'-0" P-CO-2022-86-08



1. FINISH GRADE
2. LANDSCAPE PRODUCTS JUMBO VALVE BOX WITH COVER
3. VALVE ID TAG
4. 30-INCH LENGTH OF COILED WIRE
5. LANDSCAPE PRODUCTS DRIP KIT (INCLUDES VALVE, FILTER & PRESSURE REGULATOR)
6. PVC SUPPLY HEADER TO DRIPLINE
7. PVC SCH 80 FEMALE ADAPTER OR REDUCER
8. PVC SCH 80 ELL
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. PVC SCH 80 TEE OR ELL
11. PVC MAINLINE
12. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL
13. PVC SCH 80 STREET ELL
14. MANUAL FLUSH POINT

6 DRIP ZONE KIT IN VALVE BOX

NOT TO SCALE P-CO-2022-86-14

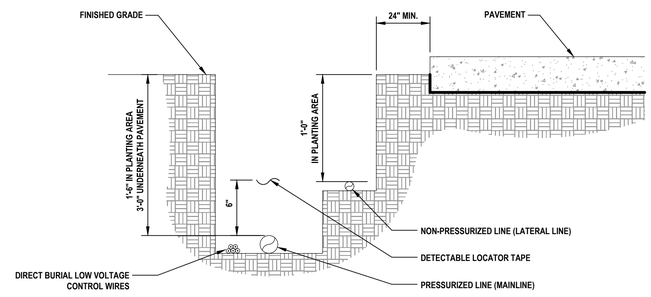


NOTES:
1. SEE IRRIGATION LEGEND FOR MAINLINE SIZE AND TYPE.
2. ALL SLEEVES SHALL BE SCH. 40 PVC PIPE.
3. ALL SLEEVES SHALL EXTEND 12" BEYOND THE EDGE OF PAVEMENT.
4. END OF SLEEVES SHALL BE LOCATED WITH A WOODEN STAKE OR PVC PIPE. LOCATORS SHALL RUN CONTINUOUSLY FROM THE END OF THE SLEEVE TO FINISHED GRADE.
5. REPAIR PAVEMENT PER INDEX 125-001

7 PIPE BENEATH PAVEMENT

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1 1/2" = 1'-0" P-CO-2022-86-10



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

8 IRRIGATION TRENCHING

URBAN TREE FOUNDATION © 2014 OPEN SOURCE FREE TO USE

1 1/2" = 1'-0" P-CO-2022-86-15

REVISIONS

DATE	DESCRIPTION
10/13/22	CITY COMMENTS

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

IRRIGATION PLAN AND DETAILS

THE VINEYARDS
649 6TH STREET
HOLLY HILL, FL 32174

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

LAUREN ADAMS LICENSE NO. 6667278 STATE OF FLORIDA LANDSCAPE ARCHITECT

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

PROJECT No:	2022-86
DATE:	AUGUST 2022
DESIGN BY:	LAA
DRAWN BY:	BWV
CHECKED BY:	LAA
SCALE:	AS SHOWN

DRAWING NUMBER

L7

Attachment: The Vineyards Subdivision Plan (3984 : The Vineyards Subdivision Review (PSP))

March 24, 2022

Dave Janse
VP of Operations
Wexford Reserve, LLC
123 Magnolia Avenue
Daytona Beach, FL 32114

Re: 649 6th Street – Holly Hill
Volusia County, Florida
Listed Species Report
ECS Project No. 770.11.22

Dear Dave:

On March 10th, 2022, a listed species survey was conducted on the above-referenced property. The subject property is located at 649 6th Street in the City of Holly Hill. More specifically, the subject property is located in Section 44 Township 14 South and Range 32 East of Volusia County, Florida.

The subject property is vacant land that was a former vineyard. The property has been abandoned and was extremely overgrown at the time of the site visit. There were no wetlands within the property boundaries.

A survey of the project boundaries was conducted to assess the potential occurrence of flora and fauna listed as threatened or endangered by the United States Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FWC), and the Florida Department of Agriculture (FDA). Tables 1 and 2 provide a listing of the species known to occur within Volusia County and their expected occurrence of the project site. The findings and conclusions of the survey are reported in this letter.

The survey was conducted by Ecological Consulting Solutions Inc (ECS) for the purpose of evaluating the site for the presence or absence of wetland habitat and protected flora and fauna or their habitat. The survey was conducted by means of pedestrian transects in the early morning to assure the potential of observing listed fauna as recommended by the FWC and the USFWS.

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

Longwood Office
410 North Street, #130
Longwood, FL 32750
Phone: (407) 869-9434
Fax: (407) 869-9436

Tampa Office
419 W. Platt St., Suite 103
Tampa, FL 33606
Phone: (813) 254-5959

The following resources were used for supporting information during the site assessment and letter preparation:

- Color aerial photographs (1" = 300), 2021, Google Earth, Volusia County, Florida.
- United States Geological Survey (USGS) 7.5-minute quadrangle map, Volusia County, Florida, (ArcGIS).
- National Wetlands Inventory Mapping, U.S. Fish and Wildlife Service.
- Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida (USFWS and FWC).

Pedestrian and vehicular surveys of the proposed project site were conducted in order to qualitatively document the existing vegetation and to assess the present land use patterns according to *the Florida Land Use, Cover and Forms Classification System, Department of Transportation* (FLUCFCS; DOT 1999). One (01) land-use type was determined for the project site (Figure 2). A brief description of the FLUCFCS community is provided below.

240 – Nurseries and Vineyards

This is the single habitat within the property boundaries. It consists of rows of former vineyards. The trellis structures were present during the site visit. The vineyard has been abandoned and the property was extremely overgrown. Vegetation consists of bahia grass (*Paspalum notatum*), common beggars ticks (*Bidens alba*), dog fennel (*Eupatorium capilifolium*), Caesar weed (*Urena lobata*), blackberry (*Rubus fruticosa*), lantana (*Lantana camara*), broom sedge (*Andropogon virginicus*), grapevine (*Vitis rotundifolia*), torpedo grass (*Panicum repens),* cabbage palm (*Sabal palmetto*), laurel oaks (*Quercus laurifolia*), and some live oaks (*Quercus virginiana*). A small storage shed is present on the northeast side of the property.

Listed Species Survey

A survey was conducted using pedestrian transects throughout the site to assess the occurrence, or potential for occurrence, of flora and fauna listed as threatened, endangered, or as species of special concern (SSC) by the Florida Fish and Wildlife Conservation Commission (FWC), United States Fish and Wildlife Service (USFWS), and Florida Department of Agriculture (FDA).

ECS biologists searched the USFWS database at http://endangered.fws.gov for the presence of critical habitats within the proposed project site. There are no critical habitats within the project boundaries.

On January 11, 2017, the FWC State listing status changes, originally proposed back in 2010, became official after the approval of Florida's Imperiled Species Management Plan by FWC Commissioners.

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

• 15 species were removed from Florida's Endangered and Threatened Species List: Eastern chipmunk, Florida mouse, brown pelican, limpkin, snowy egret, white ibis, peninsula ribbon snake (Lower Keys population), red rat snake Lower Keys population), striped mud turtle (Lower Keys population), Suwannee cooter, gopher frog, Pine Barrens tree frog, Lake Eustis pupfish, mangrove rivulus, and Florida tree snail.

• 23 species changed from State-designated Species of Special Concern to State-designated Threatened species: Sherman's short-tailed shrew, Sanibel rice rat, little blue heron, tricolored heron, reddish egret, roseate spoonbill, American oystercatcher, black skimmer, Florida burrowing owl, Marian's marsh wren, Worthington's Marsh wren, Scott's seaside sparrow, Wakulla seaside sparrow, Barbour's map turtle, Florida Keys mole skink, Florida pine snake, Georgia blind salamander, Florida bog frog, bluenose shiner, saltmarsh top minnow, Southern tessellated darter, Santa Fe crayfish, and Black Creek crayfish.

• 14 species keep their State-designated Threatened status: Everglade's mink, Big Cypress fox squirrel, Florida sandhill crane, snowy plover, least tern, white-crowned pigeon, Southeastern American kestrel, Florida brown snake (Lower Keys population), Key ringneck snake, short-tailed snake, rim rock crowned snake, Key silverside, blackmouth shiner, and crystal darter.

• Five species listed as State-designated Species of Special Concern: (list species): Homosassa shrew, Sherman's fox squirrel, osprey (Monroe County population), alligator snapping turtle, and harlequin darter.

On December 23, 2018, the State listing status changes that were proposed in 2011 as part of the newly implemented imperiled species management system became official after the approval of Florida's Imperiled Species Management Plan by FWC Commissioners.

• Four species were removed from Florida's Endangered and Threatened Species List as State Species of Special Concern: Harlequin darter, Osprey (Monroe County population), Homosassa shrew, and Sherman's fox squirrel.

• The Alligator snapping turtle was taxonomically reclassified into three subspecies. The Suwannee alligator snapping turtle was listed as a State-designated Threatened species.

• Two species were listed as Federally designated Threatened species: Giant manta ray and Nassau grouper.

• Four species had changes in their scientific names: Short tailed snake, Bluetail mole skink, Florida Keys mole skink, and sand skink.

Birds

Approximately 35 species (and sub-species) of birds found in Florida are protected by the FWC and/or the USFWS. Overall, about fifteen (15) are expected to occur in central Florida.

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

Approximately 35 species (and sub-species) of birds found in Florida are protected by the FWC and/or the USFWS. For Volusia County, the USFWS federally lists five (5) bird species. Only about fifteen (15) are expected to occur in central Florida. No listed birds were observed at this site (Table 1).

Florida scrub jays (*Aphelocoma c. coerulescens)* were not observed on the project site. This species is listed as threatened at the state and federal levels. The property does not contain scrub habitat. There were no open sandy patches of groundcover. The guidelines outlined in the *Ecology & Development-Related Habitat Requirements of the Florida Scrub Jay (April 1991)* were reviewed prior to the site visit to aid with the habitat assessment. No scrub jays were observed, or vocalizations heard.

ECS reviewed the mapped locations of Florida scrub jays and the mapped habitat areas per Volusia County. The project is not within the mapped scrub jay habitat range or adjacent to known occupied habitat. Therefore, Volusia County will not require a 5-day scrub jay survey.

Red-cockaded woodpeckers (*Picoides borealis*) are listed as endangered (USFWS) and endangered (FWC). No red-cockaded woodpeckers were observed, and the upland habitat type is not suitable. There was no open pine flatwood habitat with old-growth pines that characterize RCW nesting and foraging habitat.

Listed wading birds such as limpkin (*Aramus guarauna)*, little blue heron (*Egretta caerulea),* tricolored heron (*Egretta tricolor),* white ibis (*Eudocimus albus)* and wood stork *(Mycteria americana)* were not observed. There are no wetlands present onsite.

Bald eagles (*Haliaeetus leucocephalus*) or their nests were not observed on the site. Bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The USFWS has established a 660-foot protection zone around a bald eagle nest.

ECS searched the FWC website and the Audubon's Eagle Watch website to determine if any documented bald eagle nests are within 660 feet of the project site. There are no reported bald eagle nest in close proximity to the project site. ECS did not observe any bald eagle nests anywhere within the property boundaries. Therefore, the project site is outside of the 660-foot eagle nest protection zone and the development will not affect any bald eagle nests.

No other listed raptors such as Southeastern American kestrels (*Falco sparverius paulus*) or Arctic peregrine falcons (*Falco peregrinus tundrius*) were observed on or around the site. There is foraging habitat for kestrels, site visit was conducted out of the migratory season. No birds were observed on or offsite at the time of the survey.

Florida sandhill cranes (*Grus canadensis pratensis*), a Threatened Species, were not observed within the project boundaries.

Amphibians and Reptiles

About thirty (30) species of Florida's amphibians and reptiles are protected. For Volusia County, the USFWS federally lists four (4) reptile species. Only a few could occur on this site. Only a few could occur on this site. No listed reptile or amphibian species were observed within the project boundaries.

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

A cursory survey was conducted throughout the property for gopher tortoises (*Gopherus polyphemus)*, a species listed by the FWC as a Threatened. No gopher tortoise burrows were observed onsite. The historic use of the property combined with the surrounding residential development and overgrown condition of the property reduces the probability of gopher tortoises occurring onsite.

Several commensal species associated with gopher tortoise burrows, including the gopher frog (*Rana areolata aesopus)* and eastern indigo snake (*Drymarchon corais couperi)* also receive protection, but were not observed.

Concerning the eastern indigo snake, ECS conducted survey transects to identify potential aboveground and underground refugia, which eastern indigo snakes may inhabit. Underground refugia includes active or inactive gopher tortoise burrows, mammal burrows, hollows at the base of trees and other similar formations. Above ground refugia includes thick shrub formations, stumps, the base of thick palmetto, ground litter, brush piles, trash piles, and abandoned structures, and crevices of rock-lined ditch walls and other similar refugia.

Surveys for eastern indigo snakes are recommended by the USFWS during the time of October 01st through April 30th. There were little suitable refugia for the eastern indigo snake onsite. No eastern indigo snakes were observed.

The USFWS has established new programmatic effect determination key (Key) as part of the eastern indigo snake management. The Key allows the USFWS to require mitigation for eastern indigo snake habitat if 25 or more acres of suitable habitat will be impacted for development.

To determine if the site has eastern indigo snake habitat will be up to the USFWS reviewer assigned to the project.

The Key only applies if a project has Army Corps of Engineers jurisdictional wetlands. It was designed to speed up the permitting process for indigo snakes when there are Army Corps of Engineers jurisdictional wetlands onsite. The idea is a developer pays into the fund and gets a permit quickly.

If a project site does not have Army Corps of Engineers jurisdictional wetlands, then the programmatic key cannot be used. Under this circumstance, formal consultation with the USFWS would have to be conducted which can take up to 6 months to obtain a permit to impact eastern indigo snake habitat.

The USFWS requires the developer to notify the local field office via email at least **30 days prior** to any clearing/land alteration activities.

The notification has to include an eastern indigo snake protection/education plan. This notification can occur via email with the protection/education plan attached.

As long as the signatory of the e-mail certifies compliance with the protection/education plan (including use of the USFWS informational poster and brochure), no further written confirmation or “approval” from the USFWS is needed and the applicant may move forward with the project.

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

Mammals

Thirty-three (33) mammals are currently protected in Florida. For Volusia County, the USFWS federally lists no mammal species.

ECS searched for the presence of the Southern fox squirrels (*Sciurus niger niger*) and the Florida mouse (*Podomys floridanus)* and their possible den or nest sites. The absence of gopher tortoise burrows decreases the likelihood for the Florida mouse.

No mammal species were observed.

Listed Plants

There were no protected plant species found on the project site (Table 2).

Currently, there are no technical reports available by the state or federal agencies mentioned in this letter report for the survey of the nearly 400 protected plant species. None of the agencies require relocation or mitigation for protected plant species.

The Department of Agriculture and Consumer Services (DACS) designates and regulates plants listed as "endangered", "commercially exploited" and "threatened".

There is no statutory prohibition against a landowner from harvesting an endangered or threatened plant from his property. However, it is unlawful for an individual to harvest an endangered or threatened species from the private land of another or any public land without first obtaining written permission of that landowner and a permit from DACS. Additionally, harvesting three or more commercially exploited plants from the private land of another or any public land will also require a DACS permit.

Summary

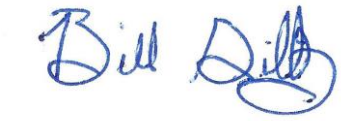
In summary, no listed species were observed within the project site. There are no wetlands within the project site.

Prior to any land clearing or construction activities, the USFWS must be provided with an eastern indigo snake protection/education plan. The USFWS must approve the protection/education plan prior to construction. There were no other environmental concerns observed for this project.

Ecological Consulting Solutions Inc. appreciates the opportunity to provide you with our services. Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

ECOLOGICAL CONSULTING SOLUTIONS INC



Bill Griffy

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

PICTURES



Upland habitat located on site.



Former vineyard habitat on site.

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

FIGURES

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))



LEGEND

Project Boundary (15.24 Acres)

www.ecologicalcs.com
Ecological Consulting Solutions, Inc.

649 6TH STREET/HOLLY HILL
VOLUSIA COUNTY, FLORIDA
PROJECT SITE LOCATION MAP

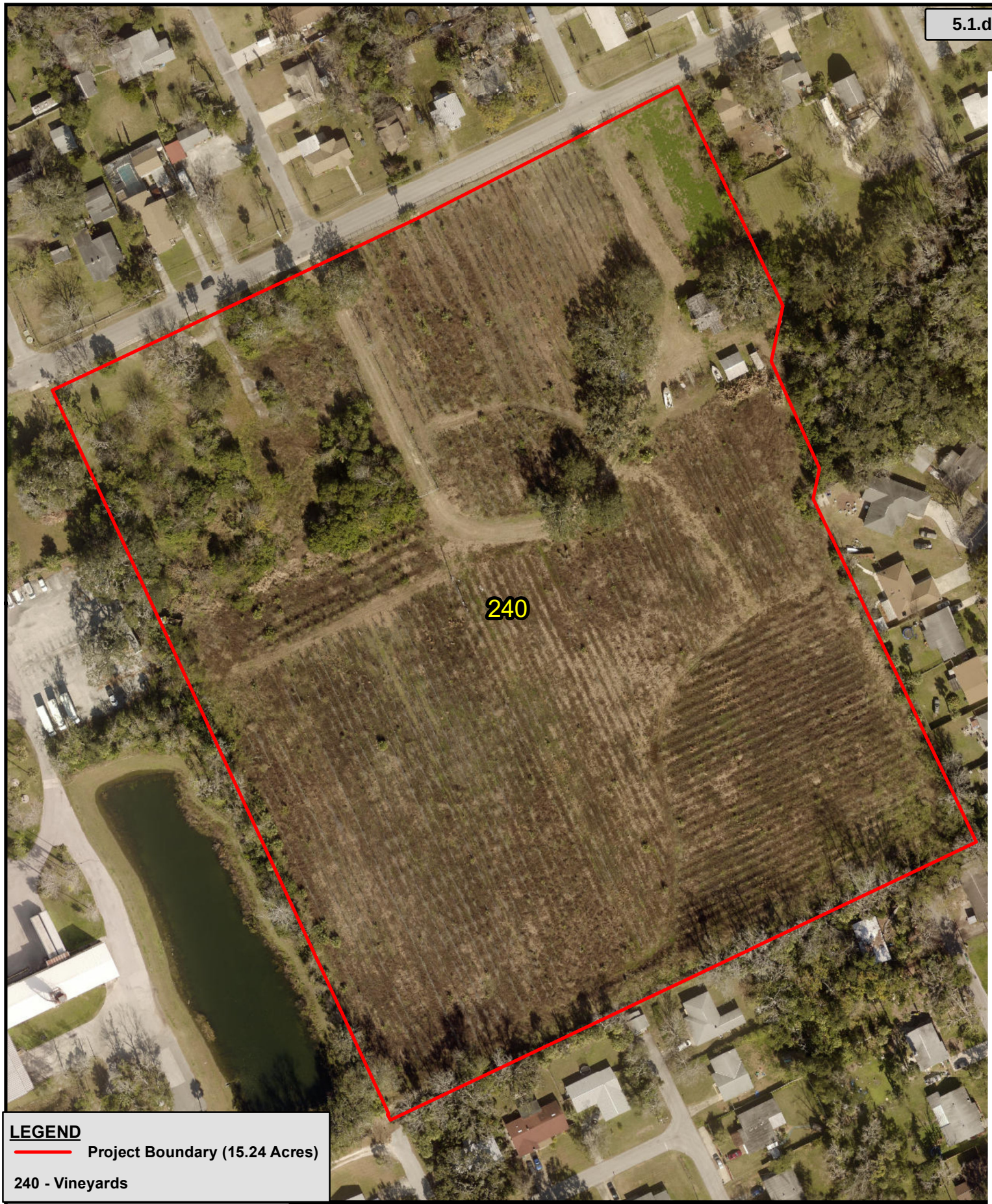
PROJECT #: 770.11.22 DATE: 03/24/22 FIGURE

0 6,000 12,000 Fe

N

410 North Street #130
Longwood, Florida 32750
Office: (407) 869-9434 Fax: (407) 869-9436
JDunfee@ecsfl.cc

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))



LEGEND

Project Boundary (15.24 Acres)

240 - Vineyards

www.ecologicalcs.com

Ecological Consulting Solutions, Inc.

649 6TH STREET/HOLLY HILL VOLUSIA COUNTY, FLORIDA FLUCFCS MAP

PROJECT #: 770.11.22 DATE: 03/24/22 FIGURE

0 50 100 200 300 Feet

N

410 North Street #130
Longwood, Florida 32750
Office: (407) 869-9434 Fax: (407) 869-9436
JDunfee@ecsfl.cc

TABLES

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

TABLE 1: PROTECTED FAUNA FOUND IN VOLUSIA COUNTY, FLORIDA AND THEIR EXPECTED OCCURRENCE ON THE 649 6TH STREET PROPERTY.

SPECIES	FWC STATUS (1)	USFWS STATUS (2)	PREFERRED HABITAT (3)	PROBABILITY OF OCCURRENCE (4)
REPTILES				
Drymarchon corais couperi Eastern indigo snake	T	T	Dry habitats bordered by water; often occupy *G. polyphemus* burrows	Low: habitat poor, gopher tortoise burrows not observed
Gopherus polyphemus Gopher tortoise	SSC	_	Well drained soil; xeric pine-oak hammocks and scrub; pine flatwoods	Low: habitat poor, burrows not observed
Neoseps reynoldsii Sand Skink	T	T	Well drained sandy soil, open areas, sand pine-rosemary scrub	Low: habitat not available, none sighted, outside of known range
Pituophis melanoleucus mugitus Florida pine snake	SSC	_	Dry, sandy barrens in xeric oak and pine-wooded sandhills	Low: habitat not present, snakes not observed
Stilosoma extenuatum Short-tailed snake	T	_	Sandy upland ridges; xeric oak pine woods; xeric oak hammocks	Low: habitat not present, none sighted
AMPHIBIANS				
Rana areolata aesopus Florida gopher frog	SSC	-	Dry, xeric habitats with wetlands such as isolated permanent ponds and cypress domes	Low: habitat not available, gopher tortoise burrows not observed
BIRDS				
Aphelocoma coerulescens Florida scrub jay	T	T	Level, sterile, white sand with low, xeric oak scrub	Low: scrub habitat not available on site, none sighted
Aramus guarauna Limpkin	SSC	_	Densely vegetated swamps, lakeshores and slow streams	Low: no open water habitat available on site, none sighted
Egretta caerulea Little blue heron	SSC	_	Lake littorus; shallow ponds and marshes	Low: foraging habitat not available, no birds sighted
Egretta thula Snowy egret	SSC	_	Lake littorus; shallow ponds and marshes	Low: foraging habitat not available, no birds sighted

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

TABLE 1: PROTECTED FAUNA FOUND IN VOLUSIA COUNTY, FLORIDA AND THEIR EXPECTED OCCURRENCE ON THE 649 6TH STREET PROPERTY.

SPECIES	FWC STATUS (1)	USFWS STATUS (2)	PREFERRED HABITAT (3)	PROBABILITY OF OCCURRENCE (4)
BIRDS (cont..)				
Egretta tricolor Tricolored heron	SSC	_	Lake littorus; shallow ponds and marshes	Low: foraging habitat not available, none sighted
Eudocimus albus White ibis	SSC	-	Beaches, mudflats, wet fields and prairies, forested wetlands and marshes	Low: foraging habitat not available, none sighted
Falco peregrinus tundrius Peregrine falcon	E	_	Coastal beaches, prairies, and marshes	Low: habitat not available, none sighted.
Falco sparverius paulus Southeastern American kestrel	T	_	Forest edges, and clearings; nests in mature pines	Low: habitat poor, none sighted
Grus canadensis pratensis Florida sandhill crane	T	_	Marshes, wet prairies, pastures, and open herbaceous rangeland	Low: habitat not available, no birds sighted
Haliaeetus leucocephalus Bald eagle	T	T	Open (<60% canopy cover), mature pine forests < 2 km from expansive open waters	Low: habitat unavailable, nest search was negative
Mycteria americana Wood stork	E	E	Nests is cypress swamps; forage sites range from shallow marshes to roadway borrow pits	Low: habitat not available, none sighted
Picoides borealis Red-cockaded Woodpecker	E	E	Old-growth pine flatwoods with regular fire occurrence are required for nesting	Low: habitat not available, none sighted
MAMMALS				
Podomys floridanus Florida mouse	SSC	_	Sand pine scrub; xeric oak-pine flatwoods; often associated with *G. polyphemus* burrows	Low: habitat not present, none sighted
Sciurus niger niger Southern fox squirrel	-	_	Mature flatwoods of sandhills; occasional in tall cypress-bay forests	Low: no habitat available, none sighted
Ursus americanus floridanus Florida black bear	T	_	Nearly-impenetrable wooded thickets and swamps	Low: habitat not available, none sighted

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

Footnotes to Table 1

1 FWC - Florida Fish and Wildlife Conservation Commission, formerly the Florida Game and Fresh Water Fish Commission; Official Lists of Florida's Endangered Species, Threatened Species and Species of Special Concern, published August 1997.

2 USFWS – United States Fish and Wildlife Service; List obtained from FWC's Florida's Endangered Species, Threatened Species and Species of Special Concern, published August 1997.

(E-endangered, T-threatened, SSC-species of special concern, CE-commercially exploited). C1 (candidate for federal listing, with enough substantial information on biological vulnerability and threats to support proposals for listing) and C2 (candidate for listing, with some evidence of vulnerability, but for which not enough data exists to support listing) are no longer official categories.

3 Habitats described by:

Ashton, R.E. and P.S. Ashton. 1985 Handbook of Reptiles and Amphibians of Florida (3 vols.). Windward Publ. Inc. Miami.
Conant, R. 1975 A Field Guide to Reptiles and Amphibians of Eastern/Central North America (2nd ed.). Houghton Mifflin Co. Boston 430 pp.
Kale, H.W. 1978. Volume Two; Birds. In P.C.H. Pritchard (ed.), Rare and Endangered Biota of Florida. University Presses of Florida. Gainesville. 121 pp.
Kale, H.W. and D.S. Maehr. 1990. Florida's Birds: A Handbook and Reference. Pineapple Press. Sarasota. 288 pp.
Layne, L.N. 1978 Volume One: Mammals. In P.C.H. Pritchard (ed.), Rare and Endangered Biota of Florida. University Presses of Florida. Gainesville, 52 pp.
McLane, W.M. 1985. The Fishes of the St. Johns River, Florida. Ph.D. diss. University of Florida, Gainesville. 361 pp.
Peterson, R.T. 1980. A Field Guide to the Birds of East of the Rockies (4th ed.). Houghton Mifflin Co. Boston. 384 pp.

4 Likelihood of occurrence: Low, Moderate or High, based on the best available data and selective field observations.

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

TABLE 2: PROTECTED FLORA FOUND IN VOLUSIA COUNTY, FLORIDA AND THEIR EXPECTED OCCURRENCE ON THE 649 6TH STREET PROPERTY.

SPECIES	FDA STATUS (1)	USFWS STATUS (2)	PREFERRED HABITAT (3)	PROBABILITY OF OCCURRENCE (4)
Calopogon barbatus Bearded grass pink	T	_	Damp pinelands	Low: habitat not available, none found
Calopogon multiflorus Many-flowed grass pink	E	_	Open, damp, occasionally recently burned pinelands and meadows	Low: habitat not available, none found
Deerinfothamnus rugelii Rugel's pawpaw	E	E	Mesic flatwoods	Low: habitat not available, none found
Encyclia tampensis Butterfly orchid	CE	_	Cypress swamps, hardwood swamps and hammocks	Low: habitat not available, none found
Epidendrum conopseum Greenfly orchid	CE	_	Cypress swamps, hardwood swamps and hammocks	Low: habitat not available, none found
Hartwrightia floridiana Florida Hartwrightia	T	_	Wet, open areas, moist grasslands, and sphagnum bogs	Low: no habitat available, none found
Lilium catesbaei Southern red lily	T	_	Mesic flatwoods, wet prairies, usually in graminoid systems	Low: habitat not available, none found
Listera australis Southern tway blade	T	_	Hammocks, low moist woods in deep humus, ravines, shady stream banks, sphagnum	Low: habitat not available, none found
Nemastylis floridana Fall-flowering ixia	E	_	Marshes; grassy openings of wet hammocks moist flatwoods	Low: habitat not available, none found
Platanthera blephariglottis Large white fringed orchid	T	_	Inhabits sphagnum bogs, meadows, damp fields and woods	Low: no habitat available, none found
Platanthera cristata Golden fringed orchid	T	_	Low moist meadows and damp pine woods	Low: habitat not available, none found
Platanthera flava Southern tubercled orchid	T	_	Very wet habitats such as swamps, bogs and wet forests with thick, black mud	Low: no habitat available, none found

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

TABLE 2: **PROTECTED FLORA FOUND IN VOLUSIA COUNTY, FLORIDA AND THEIR EXPECTED OCCURRENCE ON THE 649 6TH STREET PROPERTY.**

SPECIES	FDA STATUS (1)	USFWS STATUS (2)	PREFERRED HABITAT (3)	PROBABILITY OF OCCURRENCE (4)
Platanthera integra Southern yellow fringeless orchid	E		Marshes and wet pine flatwoods	Low: habitat not available, none found
Platanthera nivea Snowy orchid	T	_	Open bogs and sunny, wet meadows	Low: habitat not available, none found
Pogonia ophioglossoides Rose pogonia	T	_	Open, wet meadows and sphagnum bogs, poorly drained roadside ditches	Low: habitat not available, none found
Polygala lewtonii Scrub (Lewton's) milkwort	E	E	Dry oak woodlands and scrub	Low: habitat not available, none found.
Rhapidophyluum hystrix Needle palm	CE	_	Wet to mesic woods and hammocks; spring fed stream bottoms	Low: habitat not available, none found
Spiranthes brevilabris floridana Florida Ladies' tresses	E	_	Open meadows and damp pinelands, road shoulders, ditches	Low: habitat not available, none found
Spiranthes laciniata Lace-tip ladies' tresses	T	_	Marshes and cypress swamps; road banks and ditches	Low: habitat not available, none found
Spiranthes longilabris Long-tip ladies' tresses	T	_	Marshes and wet prairies	Low: habitat not available, none found
Stenorrhynchos lanceolatus var. lanceolatus Leafless beaked orchid	T	_	Vacant lots, open pastures, pine flatwoods and mowed roadsides	Low: habitat not available, none found
Tillandsia fasciculata Common wild pine	E	_	Cypress swamps and hammocks	Low: habitat not available, none found
Tillandsia utriculata Giant wild pine	E	_	Hammocks and cypress swamps	Low: habitat not available, none found
Zephyranthes simpsonii Simpson zephyr lily	T	_	Dome swamps, wet flatwoods, ditches, wet pastures, often burned-over areas	Low: habitat not available, none found

Attachment: Environmental Report (3984 : The Vineyards Subdivision Review (PSP))

Table 2 Footnotes

1 FDA – Florida Department of Agriculture and Consumer Services; List obtained from FWC's Florida's Endangered Species, Threatened Species and Species of Special Concern, published August 1997. Supporting information from FNAI - Florida Natural Inventory; Matrix of habitats and distribution by county of rare/endangered fauna and flora in Florida, published April 1990.

2 USFWS – United States Fish and Wildlife Service; List obtained from FWC's Florida's Endangered Species, Threatened Species and Species of Special Concern, published August 1997.

[E-endangered, T-threatened, SSC- species of special concern, CE-commercially exploited.] C1 (candidate for federal listing, with enough substantial information on biological vulnerability and threats to support for listing) and C2 (candidate for listing with some evidence of vulnerability, but for which not enough data exist to support listing) are no longer official categories.

3 Habitats described by:

Bell, C.R. and B.J. Taylor. 1982. Florida Wild Flowers and Roadside Plants. Laurel Hill Press, Chapel Hill, NC 308pp.
FNAI - Florida Natural Inventory; Matrix of Habitats and Distribution by County of Rare/Endangered Species in Florida, published April 1990.
Godfrey, R.K. 1988. Trees, Shrubs, and Woody Vines of Northern Florida, and Adjacent Georgia and Alabama. University Georgia Press. Athens, GA 734 pp.
Ward, D.B. (publ. date not listed). Volume Five,. Plants, in P.C.H. Pritchard (ed.), Rare and Endangered Biota of Florida. University Presses of Florida, Gainesville. 175 pp.
Wunderlin, R.P. 1982. Guide to Vascular Plants of Florida. University Presses of Florida, Gainesville, FL. 472 pp.

4 Likelihood of occurrence: Low, Moderate, or High, based on the best available data and selective field observations.

VOLUSIA COUNTY SCHOOLS

Carmen J. Balgobin, Ed.D
Superintendent of Schools

School Board of Volusia County

Mr. Ruben Colón, Chairman
Ms. Jamie M. Haynes, Vice Chairman
Mrs. Anita Burnette
Mrs. Linda Cuthbert
Mr. Carl Persis

School Adequate Capacity Determination
Finding of Adequate Capacity Letter

July 19, 2022

Mr. Rick Maugeri
Manager
The Vineyards Townhomes, LLC
123 Magnolia Ave
Daytona Beach, FL 32114

RE : The Vineyards – City of Holly Hill
School Capacity Review #22-07-08-002-A

Dear Mr. Maugeri:

The County Charter requires any Comprehensive Plan Amendment or Rezoning that allows increased residential density to be effective only when adequate public schools can be timely planned and constructed to serve the projected increase in student population. The district uses this requirement as the guiding principle behind the school adequate capacity review.

District staff reviewed the updated information for the proposed The Vineyards associated with 14 +/- acres of property located at or near the intersection of N Nova Rd and 6th St within Holly Hill city limits. Proposed project would provide for one hundred and thirty-four (134) multi-family townhome units.

The district uses a county wide Student Generation Rate (SGR) of (0.127) per multi-family dwelling unit to calculate projected students. By applying the SGR to the use types in Table 1 below, the project could generate eighteen (18) full time students.

Table 1

UNIT TYPE	SGR	UNIT COUNT	STUDENTS GENERATED
Single Family Dwelling Unit	0.273	0	0
Multifamily Dwelling Unit	0.127	134	18
Manufactured Home Dwelling Unit	0.047	0	0
	Total	**134**	**18**

When performing adequate capacity review district staff evaluates the effects of the proposed change compared to any remaining permanent capacity within the impacted schools, up to 100%, Table 2 (next page). The projected increase in student population may be over 100% if there are plans to serve increased student population in that planning area within the long-term planning horizon. A finding of adequate capacity may be issued in either case.

Attachment: Finding of Adequate Capacity (3984 : The Vineyards Subdivision Review (PSP))

Table 2

Schools	SY 2021/22 Enrollment	% of Permanent Capacity	Plans for Capacity Increase Long-Term	Traditional K-12 students projected
Holly Hill School	1,024	98%	No	11
Mainland High (Halifax CSA)	1,780	91%	No	5
Other				2

The student projections generated by this project **will not** increase the existing percentage above 100% permanent capacity at any school level. Based on this, the school district has no objections to the proposed development plan. Minimum planning considerations should include pedestrian and vehicular access, safety, connectivity, and buffering.

All future development orders, such as site plans and subdivisions, are subject to school concurrency review. School concurrency will be evaluated at the time when the impact of development is specifically quantified and known. Only funded school improvements and then current capacity will be considered at that time.

No student reservations have been made at this time.

Please note the School Board has the right to adjust the attendance boundaries to balance the student enrollment populations at these area schools. Consequently, students generated from this project may not attend the current assigned schools.

Should you need additional information, please contact me at (386) 947-8786, extension 50709.
Sincerely,

Stephanie B. Doster,
Coordinator, Planning

CC: Carmen J. Balgobin, Ed.D, Superintendent of Schools
Steven Grube, Director, Planning and Construction
Brian Walker, Community Development Director, City of Holly Hill
Lisa V. Divina, Volusia County School Board Project File

Attachment: Finding of Adequate Capacity (3984 : The Vineyards Subdivision Review (PSP))

VOLUSIA COUNTY SCHOOLS

Finding of Adequate School Capacity

VOLUSIA COUNTY SCHOOL BOARD

Project Information	
Project Name	The Vineyards
VCSB Project #	**22-07-08-002-A**
Jurisdiction Project #	
Parcel ID Numbers	4244-01-20-0037; 4244-01-20-0045; 4244-01-20-0046; 4244-01-20-0048
Project Location	N Nova Rd and 6th St
Potential Residential Units	137 Multi-Family Townhomes
Property Owner/Applicant	The Vineyards Townhomes, LLC
Notes: Additional review will be required at the time of subdivision/site plan submittal(s). No Student Reservations have been made.	

Based upon the Findings of Fact, pursuant to School Board Policy 612 and Section 206 of the County Charter, the school district has determined at this time that school capacity is adequate to serve the proposed increase in residential density. This Finding shall constitute competent substantial evidence that adequate public school capacity is likely to be available at the time it is required to serve the planned new development.

Capacity is not being reserved with this Finding unless otherwise noted on this document. This Finding of Adequate School Capacity allows this subject project to continue through the Comprehensive Plan Amendment and/or rezoning process; however, it may be subject to additional school capacity review in the future.

Stephanie B. Doster
Coordinator, Planning

July 19, 2022
Issue Date

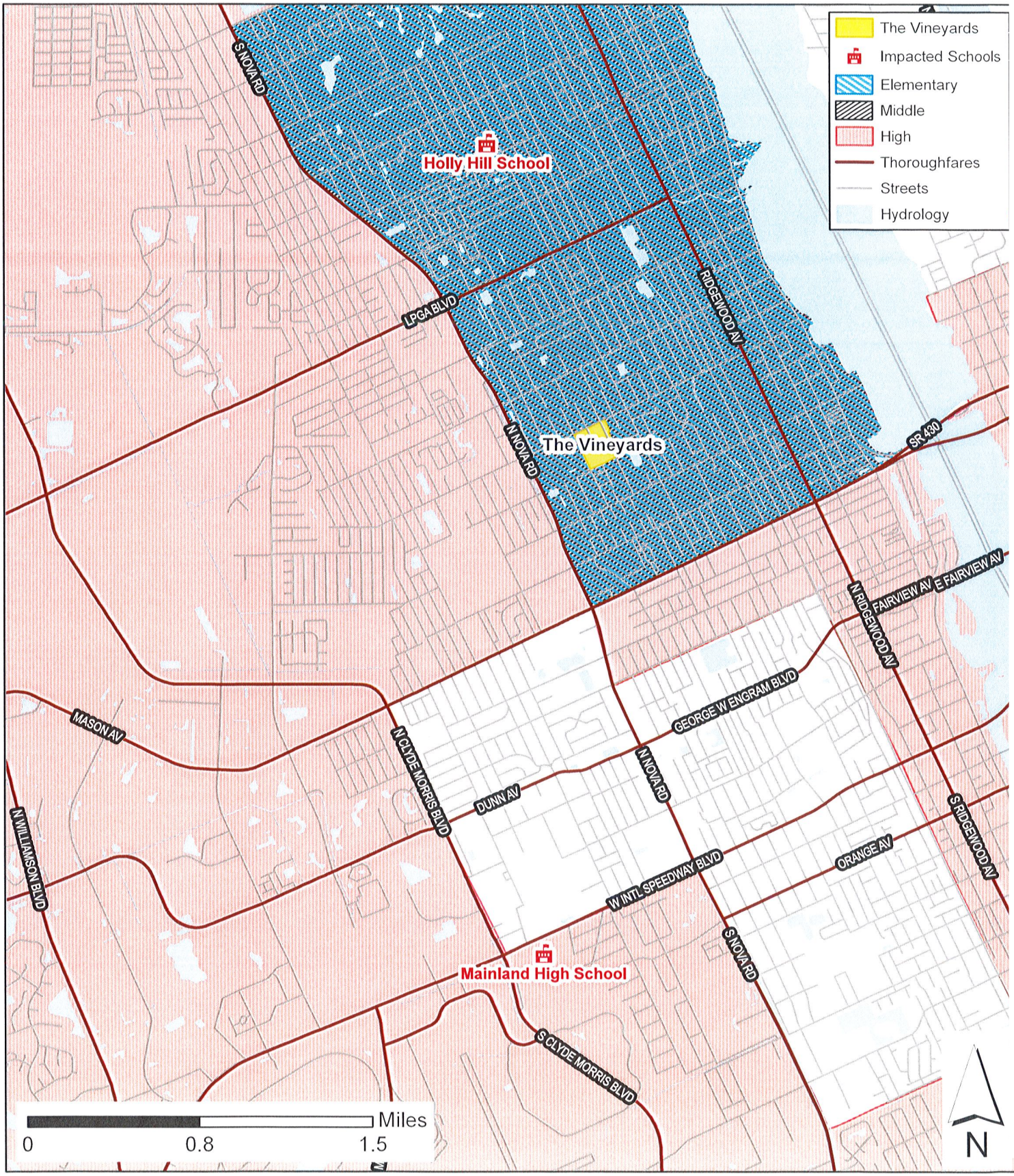
Attachment: Finding of Adequate Capacity (3984 : The Vineyards Subdivision Review (PSP))

VCSB Schools Impacted by Development

School Concurrency Review - The Vineyards

VOLUSIA COUNTY SCHOOLS

Created by Facilities Service
July 202



Attachment: Finding of Adequate Capacity (3984 : The Vineyards Subdivision Review (PSP))



The Vineyards

Attachment: The Vineyards Overall Rendering (3984 : The Vineyards Subdivision Review (PSP))





ECS Florida, LLC

Geotechnical Engineering Report

The Vineyards

649 6th Street
Holly Hill, Florida 32174

ECS Project Number 56:1590

July 14, 2022

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

ECS FLORIDA, LLC
"Setting the Standard for Service"
Geotechnical • Construction Materials • Environmental • Facilities

July 14, 2022

Mr. Dave Janse, Project Manager
The Vineyards Townhomes, LLC
123 Magnolia Avenue
Daytona Beach, Florida 32114

ECS Project No. 56:1590

Reference: Geotechnical Engineering Report
The Vineyards
649 6th Street
Holly Hill, Florida 32174

Dear Mr. Janse:

ECS Florida, LLC. (ECS) has completed the subsurface exploration, laboratory testing, and geotechnical engineering analyses for the above-referenced project. Our services were performed in general accordance with our agreed-to scope of work. This report presents our understanding of the geotechnical aspects of the project along with the results of the field exploration and laboratory testing conducted, and our foundation design and earthwork construction recommendations.

It has been our pleasure to be of service to **The Vineyards Townhomes, LLC** during the design phase of this project. We would appreciate the opportunity to remain involved during the continuation of the design phase, and we would like to provide our services during construction phase operations as well to verify the assumptions of subsurface conditions made for this report. Should you have any questions concerning the information contained in this report, or if we can be of further assistance to you, please contact us.

Respectfully submitted,

ECS Florida, LLC.

Idi Kola
Geotechnical Staff Project Manager

Reviewed by: David W. Spangler, P.E.
Chief Engineer
Registered, Florida No 58770

MAXIMILIAN KEMNITZ
LICENSE
No. 93191
7-14-22
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Maximilian Kemnitz, P.E.
Senior Geotechnical Project Manager
Registered Florida No 93191

cc: Mr. Preston Doub - The Vineyards Townhomes, LLC

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

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Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

APPENDICES

Appendix A – Drawings & Reports

- Figure 1 – Site Location Diagram
- Figure 2 – Boring Location Diagram

Appendix B – Field Operations

- Reference Notes for Boring Logs
- Subsurface Exploration Procedure: Standard Penetration Testing (SPT)
- Geotechnical SPT Boring Logs
- Auger Boring Logs

Appendix C – Laboratory Test Results

- Laboratory Test Results Summary

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

EXECUTIVE SUMMARY

This Executive Summary is intended as a very brief overview of the primary geotechnical conditions that are expected to affect design and construction of The Vineyards townhomes development. Information gleaned from the Executive Summary should not be utilized in lieu of reading the entire geotechnical report.

- Approximately 1 to 4 feet of probable fill soil was encountered in most of the borings at the site. We recommend complete removal and recompaction of these soils within structure (building and pavement) areas. Where fill soils contain significant organic materials (greater than 8 percent), the organic materials should be screened from the soils prior to reuse, or the soils should be used in non-structural areas.

- The borings encountered groundwater at depths varying from 3.5 to 6 feet below the existing ground surface at the time of our exploration. Temporary groundwater control will be necessary to compact soils at subgrade levels that are within 2 feet of the groundwater level at the time of construction, and for areas requiring deeper excavation, such as pond construction and utility installation.

- Based on the results of our exploration, we consider the subsurface conditions at the site adaptable for support of the proposed structures on a properly designed conventional shallow foundation system with a maximum allowable bearing pressure of 2,500 psf. Provided the site preparation and earthwork construction recommendations outlined in Section 5.0 of this report are performed, the parameters presented in Section 4.1 of this report may be used for foundation design.

- We consider the subsurface conditions at the site adaptable for support of flexible and rigid pavement sections when constructed on properly prepared subgrade soils as outlined in Section 5.0 of this report. Where underlying clayey sands and sandy clays with greater than 20 percent fines are within 2 feet of the bottom of the pavement base, they should be over-excavated from within the pavement areas. Groundwater was encountered at depths of 3.5 to 6 feet below existing grade. Adequate separation between the pavement base course and the estimated normal seasonal high groundwater level should be maintained to preclude premature distress of pavements. This can be achieved by raising site grades or the use of underdrains.

- The fine sand (SP), and fine sand with clay (SP-SC) encountered in the upper 20 feet at the boring locations are considered most suitable for use as structural fill soil, particularly within 2 feet of the final building pad grades. Where clayey fine sands (SC) are encountered in the near surface materials, clayey fine sands with 20 percent or less fines may also be used as structural fill if properly moisture conditioned and compacted as recommended herein. Soils with greater than 20 percent fines are not recommended for use as structural fill but may be used as fill in non-structural areas.

- Dense to very dense coquina gravel and/or cemented shells were encountered throughout many of the borings at this site. Excavations through this material may be difficult and require special equipment or procedures, particularly where the near-surface materials are cemented.

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

- We recommend that ECS be provided the opportunity to review the foundation plans and earthwork specifications to verify that our recommendations have been properly interpreted and implemented. ECS should also be retained to perform the construction material testing and observations required for this project, to verify that our recommendations have been satisfied.

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

1.0 INTRODUCTION

The purpose of this study was to provide geotechnical information for the design of foundations, pavements and ponds for The Vineyards townhome development. Based on an email dated June 3, 2022 from The Vineyards Townhomes, LLC and the provided Overall Site Plan, we understand that the project will consist of 23 townhome buildings each with four to six units each, along with proposed residential roadways and three stormwater management facilities (wet and dry ponds).

Our services were provided in general accordance with our Proposal No. 56-1451, dated June 7, 2022, and as authorized by you on June 8, 2022, which includes our Terms and Conditions of Consultant Services Agreement.

This report contains the procedures and results of our subsurface exploration and laboratory testing programs, review of existing site conditions, engineering analyses, and recommendations for the foundation design and earthwork construction of the project. This report includes the following items:

- A brief discussion of our understanding of the planned construction and imposed loading conditions;
- A brief review and description of our field and laboratory test procedures and the results of testing conducted;
- A review of surface topographical features and site conditions;
- A review of area and site geologic conditions;
- A review of subsurface soil stratigraphy with pertinent available physical properties;
- Final copies of our soil boring logs;
- Measured groundwater levels and our estimate of the normal seasonal high groundwater level at the boring locations;
- Recommendations for foundation design parameters, including our estimate of the performance of the foundation system;
- General recommendations for pavement design;
- Recommendations for pond borrow material fill suitability and permeability (hydraulic conductivity) of the soils at requested locations; and
- Recommendations for site preparation and construction of compacted fills, including an evaluation of on-site soils for use in structural fills.

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

2.0 PROJECT INFORMATION

2.1 PROJECT LOCATION/CURRENT SITE USE

The project site is located at 649 6th Street in Holly Hill, Florida. The general conditions surrounding the site included the following:

- to the north is 6th Street followed by residential development;
- to the east and south there are residential developments; and
- to the west is an approximate one-acre pond and commercial development.

The general site location is shown below.



Site Location

At the time of our exploration, the site was predominantly undeveloped and contained vacant former agricultural fields, with the exception of a single-family residence and sheds in the northeast portion of the site. There were some bushes and trees around the residence and in the northwest portion of the site. In addition, a network of drainage ditches was present on the site, with ditches located in the central and southeast portions of the site, and along the east and south edges of the agricultural fields.

Based on a site survey prepared by A1A Surveying, Inc. and provided by the client, the site elevation varies from an elevation of approximately 5.5 to 8 feet.

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

2.2 PAST SITE HISTORY/USES

ECS has reviewed aerial photographs of the subject site on Google Earth. The aerial photographs reviewed were dated 1995, 1999, 2004 to 2005, 2006, 2008, 2010, 2016 to 2019 and 2021. The 1995 to 1999 aerial photograph show the site as woodland with dense trees, with 6th Street present along the north side of the site. From 2004 onward, the arial photographs show the site to consist of furrowed agricultural fields, along with the residence in the northeast portion of the site. Conditions did not appear to change significantly since 2004.

2.3 SOIL SURVEY MAPPING

Based on the Web Soil Survey for Volusia County, Florida, as prepared by the U.S. Department of Agriculture Natural Resource Conservation Service (USDA-NRCS), the predominant soil types existing within the site area boundaries are described in the following table. The site area is illustrated superimposed on the USDA-NRCS Soil Survey Map in the following figure.

Web Soil Survey Data

Soil Type	Constituents	Drainage Class	Water Table
69 – Tuscawilla fine sand	Fine sand and fine sandy loam	Poorly drained	0 to 12 inches
70 – Tuscawilla-Urban land complex	Fine sand and fine sandy loam	Poorly drained	0 to 12 inches

Soil mapping of the site vicinity included soil types and numbers are presented in figure below, obtained from the USDA Web Soil site.



Site Soil Survey, Volusia County, Florida

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

2.4 PROPOSED CONSTRUCTION

Based on information provided by The Vineyards Townhomes, LLC, which included the Overall Site Plan and requested boring locations, we understand that the project will consist of 23 townhome buildings with four to six units each, along with proposed residential roadways and three stormwater management facilities (wet and dry ponds). The following tabulated information explains our understanding of the planned development, including proposed buildings and related infrastructure.

Subject	DESIGN INFORMATION / EXPECTATIONS
# of Stories	2 stories above grade
Usage	Townhomes
Column Loads (1)	30 kips (Full Dead and Factored Live)
Wall Loads (1)	3 kips per linear foot (klf) maximum
Floor Loads (1)	150 pounds per square foot (psf) maximum
Fill and Cut Heights	Assumed a maximum of 3 feet of fill and only minor cuts, from existing site grades.

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

3.0 FIELD EXPLORATION AND LABORATORY TESTING

Our scope of exploration work included drilling 23 Standard Penetration Test (SPT) borings for the proposed buildings, 7 SPT borings for the wet and dry retention ponds, and 11 auger borings for the roadways. Our borings were located with a handheld GPS unit and their approximate locations are shown on the Boring Location Diagram (Figure 2) in Appendix A. Our exploration procedures are explained in greater detail in Appendix B including the inserts titled Reference Notes for Boring Logs and Subsurface Exploration Procedure: Standard Penetration Testing (SPT).

3.1 SUBSURFACE CHARACTERIZATION

The subsurface conditions encountered were generally consistent with published geological mapping. The following sections provide generalized characterizations of the soil strata. Please refer to the boring logs in Appendix B for detailed subsurface conditions.

Subsurface Stratigraphy of SPT Building Borings

Approximate Depth Range (ft)	Stratum	Description	Ranges of SPT[(1)] N-values (bpf)
0 - 4	N/A	Loose to Medium Dense Probable Fill comprising Fine Sand (SP), Fine Sand with Clay (SP-SC) and Clayey Fine Sand (SC); some samples contained Cemented Shell and Coquina Gravels	4-61
4 to 20	I	Very Loose to Dense Fine Sand (SP), Fine Sand with Clay (SP-SC), Clayey Fine Sand (SC) and Clayey Fine Sand/Sandy Lean Clay (SC/CL); often containing significant shells/shell fragments and typically Cemented approximately within the upper 2 to 4 feet below the existing ground surface	2 to 44

Notes: (1) Standard Penetration Test.

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Subsurface Stratigraphy of SPT Pond Borings

Approximate Depth Range (ft)	Stratum	Description	Ranges of SPT[(1)] N-values (bpf)
0 - 2	N/A	Loose to Dense Probable Fill comprising Clayey Fine Sand (SC)	8-36
2-20	I	Very Loose to Dense Fine Sand (SP), Fine Sand with Clay (SP-SC) and Clayey Fine Sand (SC); often containing significant shells/shell fragments and typically Cemented approximately within the upper 2 to 4 feet below the existing ground surface	2 to 95

Notes: (1) Standard Penetration Test.

Subsurface Stratigraphy of Pavement (Auger) Borings

Approximate Depth Range (ft)	Stratum	Description
0 –3.5	N/A	Probable Fill comprising Fine Sand (SP) with Coquina Gravels, Fine Sand with Clay (SP-SC), Fine Sand with Silt (SP-SM) and Clayey Fine Sand (SC); Auger refusal was typically encountered below the fill on Cemented soils
3.5 to 6[(1)]	I	Fine Sand (SP) with Coquina Gravels and Shells, and Fine Sand with Clay (SP-SC)

Notes: (1) Only auger A-05 to A-07 were extended to 6 feet; refusal conditions were encountered at 6 feet in Borings A-05 and A-06.

3.2 GROUNDWATER OBSERVATIONS

3.2.1 Encountered Groundwater

Groundwater levels were measured during our field exploration and are presented on our boring logs in Appendix B. Groundwater depths measured at the time of drilling ranged from 3.5 to 6 feet below the ground surface. Variations in the long-term water table may occur as a result of changes in precipitation, evaporation, surface water runoff, construction activities, and other factors.

3.2.2 Estimated Seasonal High Groundwater

The normal seasonal high groundwater level is affected by a number of factors. The drainage characteristics of the soils, land surface elevation, relief points such as drainage ditches, lakes, rivers, swamp areas, etc., and distance to relief points are some of the more important factors influencing the seasonal high groundwater level.

Based on our interpretation of the site conditions, including the boring logs and Web Soil Survey, we estimate the normal seasonal high groundwater level to be at approximately 2 feet higher than the levels measured at the time of drilling; as shown on the boring logs. **However, we note that groundwater can perch on top of the clayey sands at or near the ground surface during periods**

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of heavy or prolonged rain during the wet season. It is possible that groundwater levels may exceed the estimated normal seasonal high groundwater level as a result of significant or prolonged rains and may rise above the existing ground surface. The level to which the groundwater may rise above existing grades should be determined by the drainage engineer.

3.3 LABORATORY TESTING

Each sample was visually classified on the basis of texture and plasticity in accordance with ASTM D2487 Standard Practice for Classification for Engineering Purposes (Unified Soil Classification System (USCS)) and ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedures) and including USCS classification symbols. After classification, the samples were grouped in the major zones noted on the boring logs in Appendix B. The group symbols for each soil type are indicated in parentheses along with the soil descriptions. The stratification lines between strata on the logs are approximate; in situ, the transitions may be gradual.

The laboratory testing consisted of selected tests performed on samples obtained during our field exploration operations. Classification and index property tests were performed on representative soil samples. Laboratory tests performed on the selected samples included percent fines (ASTM D1140), moisture content (ASTM D2216), and organic material content (ASTM D2974-07A Method C) tests. We also performed 6 soil permeability tests in accordance with ASTM D5084 for the proposed dry ponds at this development. The results of the permeability tests are presented in Section 4.4.1 of this report.

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4.0 DESIGN RECOMMENDATIONS

4.1 FOUNDATIONS

Provided subgrades and structural fills are prepared as recommended in this report, the proposed structures can be supported by shallow foundations including column footings and continuous wall footings. We recommend the foundation design use the following parameters:

Buildings Foundation Parameters

Design Parameter	Column Footing	Wall Footing
Minimum Width	24 inches	18 inches
Minimum Footing Embedment Depth (below slab or finished grade)	24 inches	18 inches
Estimated Maximum Total Settlement[1]	1 inch	1 inch
Estimated Maximum Differential Settlement[2]	½ inch between columns	Less than ½ inch over 50 feet
Net Allowable Bearing Pressure[3]	2,500 psf	
Acceptable Bearing Soil Material	Compacted Subgrade/Engineered Fill	

1. Based on estimated structural loads. If final loads are different, ECS must be contacted to update foundation recommendations and settlement calculations.
2. Based on maximum column/wall loads and variability in borings. Differential settlement can be re-evaluated once the foundation plans are more complete.
3. Net allowable bearing pressure is the applied pressure in excess of the surrounding overburden soils above the base of the foundation.

Depending on the final floor elevations of the buildings, we anticipate that the soils at the foundation bearing elevation are anticipated to be adaptable for support of the proposed structures, after subgrade preparation in accordance with Section 5.0 of this report. The bearing level soils, after compaction, should exhibit densities equivalent to 95 percent of the modified Proctor maximum dry density (ASTM D1557) to a depth of at least one foot below foundation bearing levels.

For turn down slabs and interior wall footings the minimum width should also be 18 inches, however the sloped transition portion of the turn-down may be included when determining the footing width. Even though the maximum allowable soil bearing pressure may not be achieved, these width recommendations should control the size of the foundations.

4.2 SLABS ON GRADE

The floor slabs can be constructed as a slab-on-ground, provided the site is prepared as outlined in Section 5.0. A minimum clearance of 2 feet is recommended between the estimated normal seasonal high groundwater table and the bottom of the floor slabs. It is recommended the floor slab bearing soils be covered with an impervious membrane to reduce moisture entry and floor dampness. A 6-mil thick plastic membrane is commonly used for this purpose. Care should be exercised not to tear large sections of the membrane during placement of reinforcing steel and concrete. Due to the potential for a damp slab condition to develop as a result of the shallow groundwater, we recommend a 4-inch thick drainage layer beneath the floor slabs, as shown in Figure 4.2.1. Consideration should also be given to not use moisture sensitive floor coverings.

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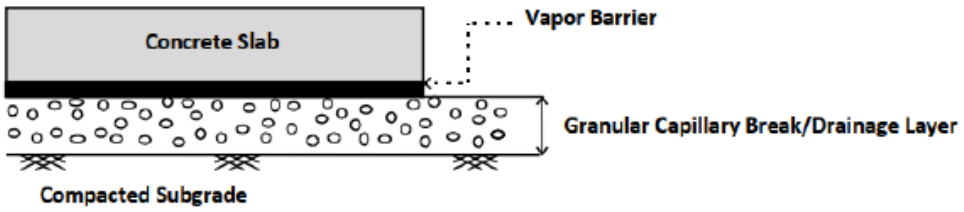


Figure 4.3.1

1. Drainage Layer Thickness: 4 inches
2. Drainage Layer Material: GRAVEL (GP, GW), SAND (SP, SW)

Figure 4.2.1. Granular Capillary Break/Drainage Layer

4.3 PAVEMENTS

Based on the results of our exploration, we consider the subsurface conditions at the site adaptable for support of a flexible or rigid pavement section when constructed on properly prepared subgrade soils as outlined in Section 5.0 of this report. However, where underlying clayey sands (SC) are within 2 feet of the bottom of the pavement base or concrete, they should be over-excavated from within the pavement areas and replaced with structural fill. However, where underlying clayey sands (SC) are within 2 feet of the bottom of the pavement base, they should be over-excavated from within the pavement areas and replaced with structural fill. Typical pavement sections used in northeast Florida are presented in the following sections. If requested, we can prepare a project-specific pavement design if specific traffic data is provided.

4.3.1 Flexible Pavement Recommendations

TYPICAL PAVEMENT SECTIONS		
MATERIAL	**LIGHT DUTY**	**HEAVY DUTY**
Asphaltic Concrete Surface Course (SP-9.5 or Type S)	1.5 inches	2 inches
Limerock Base	6 inches	8 inches
Stabilized Subgrade	12 inches	12 inches

Base and Subgrade: The limerock base course should have a minimum Limerock Bearing Ratio (LBR) of 100 and should be compacted to 98 percent of the modified Proctor maximum dry density (ASTM D1557) value. The subgrade material should have a minimum LBR of 40 and be compacted to 98 percent of the modified Proctor maximum dry density (ASTM D1557) value.

Underdrains: Satisfactory pavement life is dependent on dry/strong pavement support provided by the base and subgrade courses. Accordingly, a minimum clearance of 2 feet must be maintained between the normal seasonal high groundwater table and the bottom of the limerock base layer. Depending on final pavement grades, FDOT Type I or II underdrains may be required to maintain dry base and subgrade materials.

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4.3.2 Rigid Pavement Recommendations

Our recommendations for slab thickness for standard duty and heavy-duty concrete pavements are based on the following:

a) subgrade soils densified to 98 percent of the modified Proctor maximum dry density (ASTM D1557),

b) modulus of subgrade reaction (k) equal to 200 pounds per cubic inch, and

c) a 20-year design life.

TYPICAL PAVEMENT SECTIONS		
	LIGHT DUTY	**HEAVY DUTY**
Minimum Concrete Thickness	5 inches	6 inches
Maximum Control Joint Spacing	10 feet x 10 feet	12 feet x 12 feet
Recommended Sawcut Depth	1¼ inches	1½ inches

We recommend using concrete with a minimum 28-day compressive strength of 4,000 psi and a minimum 28-day flexural strength (modulus of rupture) of at least 600 pounds per square inch, based on 3rd point loading of concrete beam test samples. Layout of the sawcut control joints should form square panels. The joints should be sawed within six hours of concrete placement or as soon as the concrete has developed sufficient strength to support workers and equipment. We recommend allowing ECS to review and comment on the final concrete pavement design, including section and joint details (type of joints, joint spacing, etc.), prior to the start of construction.

For further details on concrete pavement construction, please reference the "Guide to Jointing on Non-Reinforced Concrete Pavements" published by the Florida Concrete and Products Associates, Inc., and "Building Quality Concrete Parking Areas", published by the Portland Cement Association.

4.4 STORMWATER MANAGEMENT PONDS

4.4.1 Soil Permeability

Laboratory permeability testing was completed for the project on soils obtained from within a depth range of approximately 2 to 8 feet below the ground surface at the proposed dry stormwater management ponds from Borings P-01 to P-04. The purpose of the testing was to determine the hydraulic conductivity of the site soils. To determine the hydraulic conductivity, ECS conducted laboratory falling head permeability tests in accordance with ASTM D5084-16a. The soil hydraulic conductivity (permeability) is presented in the following table (note the permeability tests were performed with remolded samples from our soil borings).

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Laboratory Permeability Results

Test Location	Soil Type	Test Depth (feet)	Measured Mean Permeability (ft/day) K_m	Estimated Horizontal Permeability (ft/day) K_h	Estimated Vertical Permeability (ft/day) K_v
P-01	SC	4 to 6	2.4	2.9	2.0
P-02	SC	6 to 8	13.4	16.4	10.9
P-03	SP-SC	2 to 4	6.6	8.1	5.4
P-03	SP-SC	6 to 8	4.9	6.0	4.0
P-04	SC	2 to 4	0.5	0.6	0.4
P-04	SP-SC	6 to 8	19.0	23.3	15.5

The measured permeability rates should not be construed to represent the actual pond exfiltration rates. For pond design calculations, we recommend an appropriate factor of safety be applied to the above permeability/infiltration rate values.

4.4.2 Borrow Suitability

Based on the boring results and classification of the soil samples, the Stratum I soil comprising fine sands (SP) and fine sand with clay (SP-SC) encountered to depths of 20 feet at the pond boring locations are considered suitable for use as structural fill soil. Clayey fine sand (SC) soils may also be used as structural fill provided the materials have 20 percent or less fines. Where clayey fine sands (SC) or sandy lean clay soils (CL) are encountered during excavation and these materials appear to contain more than 20 percent fines, they should be separated and assessed for the percentage of fines. Soils with more than 20 percent fines should not be used in structural areas but may be used as fill in non-structural areas. These soils may be used in landscape berms.

If soils to be excavated from within the proposed pond areas are in close proximity to or below the groundwater level, they may have moisture contents in excess of the modified Proctor optimum moisture content. In this case, these soils will require stockpiling or spreading to drain the excess moisture. Wet soils should be dried to bring the soil moisture content within ±2 percent of the soil's optimum moisture content to facilitate placement and compaction.

We note that the near surface soils were often cemented and dense to very dense approximately within the upper 2 to 4 feet below the existing ground surface, and in some instances to greater depths. Excavation of the cemented and dense to very dense soils may be difficult and require heavy duty excavation equipment and methods, such as ripping, to facilitate removal. **Exploratory test pits or excavations should be considered prior to construction to evaluate the effort required to excavate these materials as borrow material and as part of general earthwork considerations**.

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5.0 SITE CONSTRUCTION RECOMMENDATIONS

5.1 SUBGRADE PREPARATION

5.1.1 Stripping and Grubbing

The "footprint" of the proposed buildings, plus a minimum additional margin of 5 feet, and of the hardscape areas (parking/driveway) plus a minimum additional margin of 3 feet, should be stripped of all existing fill soil, surface vegetation, stumps, demolition debris, organic topsoil, or other deleterious materials. During grubbing operations, roots with a diameter greater than 0.5-inch, stumps, small roots in a concentrated state or other organic soils with higher than 8 percent organic materials content, should be grubbed and completely removed; organic soils may be used in non-structural areas. Fill soils should be treated as recommended in Section 5.1.2.

5.1.2 Assessment of Existing Probable Fill Soils

Based on the results of our field exploration, it should be anticipated that up to 2 feet of fill soils and in some instances up to 4 feet of fill soils may be encountered across the site. These soils often contained roots and/or other organic materials. These soils should be completely removed from within building and pavement areas but may be reused provided they meet the requirements for fill soils, and soils with significant organic materials are either screened or separated for use in non-structural areas. The actual depths of fill soils should be determined by ECS using visual observation and judgment during earthwork operations. Where encountered, any topsoil removed during stripping/grubbing should be stockpiled and may be used subsequently in non-structural areas.

5.1.3 Proof Rolling

Following removal of any unsuitable materials (such as fill soils or soils with many organic materials) and prior to fill placement or other construction on subgrades, e subgrades should be evaluated by an ECS field technician. The exposed subgrade should be thoroughly proof rolled with construction equipment having a minimum axle load of 20 tons [e.g., fully loaded tandem-axle dump truck]. Proof rolling should be traversed in two perpendicular directions with overlapping passes of the vehicle under the observation of an ECS technician. This procedure is intended to assist in identifying any localized yielding materials.

Where proof rolling identifies areas that are unstable or “pumping” subgrade those areas should be repaired prior to the placement of any subsequent Structural Fill or other construction materials. Methods of stabilization include undercutting or moisture conditioning. The situation should be discussed with ECS to determine the appropriate procedure. Test pits may be excavated to explore the shallow subsurface materials to help in determining the cause of the observed unstable materials, and to assist in the evaluation of appropriate remedial actions to stabilize the subgrade.

5.1.4 Temporary Groundwater Control

We recommend that temporary groundwater control measures be implemented where the groundwater table is within a depth of 2 feet below the excavated subgrade bottom at the time of compaction operations. Dewatering methods should be determined by the contractor. We recommend the groundwater control measures remain in place until compaction of the existing soils is completed. The dewatering method should be maintained until backfilling has reached a height of 2 feet above the subgrade level at the time of construction. The site should be graded to direct surface water runoff from the construction area.

Note that discharge of produced groundwater to surface waters of the state from dewatering operations or other site activities is regulated and requires a permit from the State of Florida Department of Environmental Protection (FDEP). This permit is termed a Generic Permit for the

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Discharge of Produced Groundwater From Any Non-Contaminated Site Activity. If discharge of produced groundwater is anticipated, we recommend sampling and testing of the groundwater early in the site design phase to prevent project delays during construction. ECS can provide the sampling, testing, and professional consulting required to evaluate compliance with the regulations.

5.1.5 Subgrade Compaction

After completing the clearing and stripping, fill soil and organic soils removals (where required) and proof rolling operations and installing the temporary groundwater control measures, the exposed surface should be compacted with a heavy vibratory roller having a minimum static, at-drum weight on the order of 10 tons. Typically, the material should exhibit moisture contents within ±2 percentage points of the modified Proctor optimum moisture content (ASTM D1557) during the compaction operations. Compaction should continue until densities of at least 95 percent of the modified Proctor maximum dry density (ASTM D1557) have been achieved within the upper 2 feet of the compacted natural soils at the site.

Should the bearing level soils experience pumping and soil strength loss during the compaction operations, compaction work should be immediately terminated, and (1) the disturbed soils should be removed and backfilled with compacted structural fill, or (2) the excess moisture content within the disturbed soils should be allowed to dissipate before recompacting.

Care should be exercised to avoid damaging any nearby structures while the compaction operation is underway. Prior to commencing compaction, occupants of adjacent structures should be notified, and the existing conditions of the structures should be documented with photographs and survey (if deemed necessary). Compaction should cease if deemed detrimental to adjacent structures, and ECS should be contacted immediately. We recommend the vibratory roller remain a minimum of 50 feet from existing structures. Within this zone, use of a track-mounted bulldozer, or a vibratory roller operating in the static mode, is recommended.

5.2 EARTHWORK OPERATIONS

5.2.1 Structural Backfill and Fill Soils

Structural fill is defined as a non-plastic, inorganic, granular soil having less than 10 percent material passing the No. 200 mesh sieve and containing less than 4 percent organic material. The predominant fine sand (SP) and fine sand with silt or fine sand with clay (SP-SM or SP-SC), without roots, as encountered in the borings, are suitable as fill materials and, with proper moisture control, should densify using conventional compaction methods. Soils with more than 10 to 12 percent passing the No. 200 sieve will be more difficult to compact, due to their nature to retain soil moisture, and may require drying. The clayey fine sand (SC) may be used at the site where these soils contain 20 percent or less fines; however, the potential difficulty working with these soils and achieving optimum moisture content for earthwork should be taken into consideration.

Structural Fill Compaction Requirements: Materials satisfactory for use as structural fill should consist of soils with the following compaction requirements.

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STRUCTURAL FILL COMPACTION REQUIREMENTS	
Subject	**Requirement**
Compaction Standard	Modified Proctor, ASTM D1557
Required Compaction	95% of Max. Dry Density (general structural fill) 98% of Max. Dry Density (upper one foot below the proposed pavement base course)
Loose Thickness prior to compaction	12 inches if vibratory drum roller compaction equipment is used 8 inches if vibratory drum roller is used in static mode 8 inches if track-mounted compaction equipment is used 6 inches if hand-held compaction equipment is used

Fill materials should not be placed on excessively wet soils. Excessively wet soils should be scarified, aerated, and moisture conditioned. Proper drainage should be maintained during the earthwork phases of construction to prevent ponding of water which has a tendency to degrade subgrade soils. The contractor should minimize dusting or implement dust control measures, as required.

We recommend that the grading contractor have equipment on site during earthwork for both drying and wetting fill soils. Moisture control may be difficult during extended periods of rain. The control of moisture content of soils containing more than 10% fines may be difficult when these soils become wet. Further, such soils are easily degraded by construction traffic when the moisture content is elevated.

5.2.2 Foundation Areas

After satisfactory placement and compaction of the required structural fill, the foundation areas may be excavated to the planned bearing levels. The foundation bearing level soils, after compaction, should exhibit densities equivalent to 95 percent of the modified Proctor maximum dry density (ASTM D1557) to a depth of at least one foot below the bearing level. For confined areas, such as the footing excavations, any compactive effort should be provided by a lightweight vibratory sled or roller having a total weight on the order of 500 to 2,000 pounds.

5.2.3 Flexible Pavement Areas

After completing the clearing/stripping operations in the pavement areas, where any underlying clayey sands and sandy clays are within 2 feet of the bottom of the pavement base, they should be over-excavated from within the pavement areas. Structural backfill and fill required to achieve the finish pavement grades then can be placed and compacted as described in Sections 5.2.1.

5.2.4 Rigid Pavement Areas

For a concrete pavement subgrade, we recommend using clean fine sand (SP), compacted to at least 98 percent of modified Proctor test maximum dry density (ASTM D 1557) without additional stabilization.

5.3 UTILITY INSTALLATIONS

Utility Subgrades: The soil borings along the proposed roadways encountered fine sands and fine sands with clay or clayey fine sand (SP, SP-SC, SC). It is our opinion that these soils are suitable bedding soils for pipelines and utility structures where it is determined that these soils contain 20 percent or less fines. Where soils contain more than 20 percent fines, they should be overexcavated to a depth of 12 inches below the pipe invert and should be replaced with soils having less than 20 percent fines.

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Utility Backfilling: Backfill placed around the pipe, and to a height of 2 feet above the top of pipe, should be placed in 6-inch lifts. Each lift should be compacted with hand-held equipment to 98 percent of the soil's Modified Proctor (ASTM D1557) maximum dry density. Backfill placed above the 2-foot zone above the top of pipe elevation may be placed in 12-inch lifts and compacted with heavier equipment. Typically, the backfill soil should exhibit moisture contents within ±2 percent of the soil's optimum moisture content as determined from the Proctor test. Care should be taken to avoid damaging the pipe during compaction operations.

Utility Excavation Dewatering: Based on the groundwater depths encountered at our boring locations, groundwater may be encountered in utility excavations which extend below existing grades. Removal of groundwater may be required, especially for deeper utility excavations. The contractor should submit a dewatering plan prior to installing the site utilities.

Excavation Safety: All excavations and slopes should be made and maintained in accordance with OSHA excavation safety standards. The contractor is solely responsible for designing and constructing stable, temporary excavations and slopes and should shore, slope, or bench the sides of the excavations and slopes as required to maintain stability of both the excavation sides and bottom. The contractor's responsible person, as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. ECS is providing this information solely as a service to our client. ECS is not assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred.

Erosion Control: The surface soils may be erodible. Therefore, the Contractor should provide and maintain good site drainage during earthwork operations to maintain the integrity of the surface soils. All erosion and sedimentation controls should be in accordance with sound engineering practices and local requirements.

Other Excavation Considerations: Dense to very dense coquina gravel and/or cemented shells were encountered throughout many of the borings at this site. Excavations through this material may be difficult and require special equipment or procedures, particularly where the near-surface materials are cemented.

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6.0 CLOSING

Our geotechnical exploration has been performed, our findings obtained, and our recommendations prepared, in accordance with generally accepted geotechnical engineering principles and practices. ECS is not responsible for any independent conclusions, interpretation, opinions, or recommendations made by others based on the data contained in this report.

Our scope of services was intended to evaluate the soil conditions within the zone of soil influenced by the foundation system. Our scope of services does not address geologic conditions, such as sinkholes or soil conditions existing below the depth of the soil borings.

If any of the project description information discussed in this report is inaccurate, either due to our interpretation of the documents provided or site or design changes that may occur later, ECS should be contacted immediately in order that we can review the report in light of the changes and provide additional or alternate recommendations as may be required to reflect the proposed construction.

We recommend that ECS be allowed to review the project's plans and specifications pertaining to our work so that we may ascertain consistency of those plans/specifications with the intent of the geotechnical report.

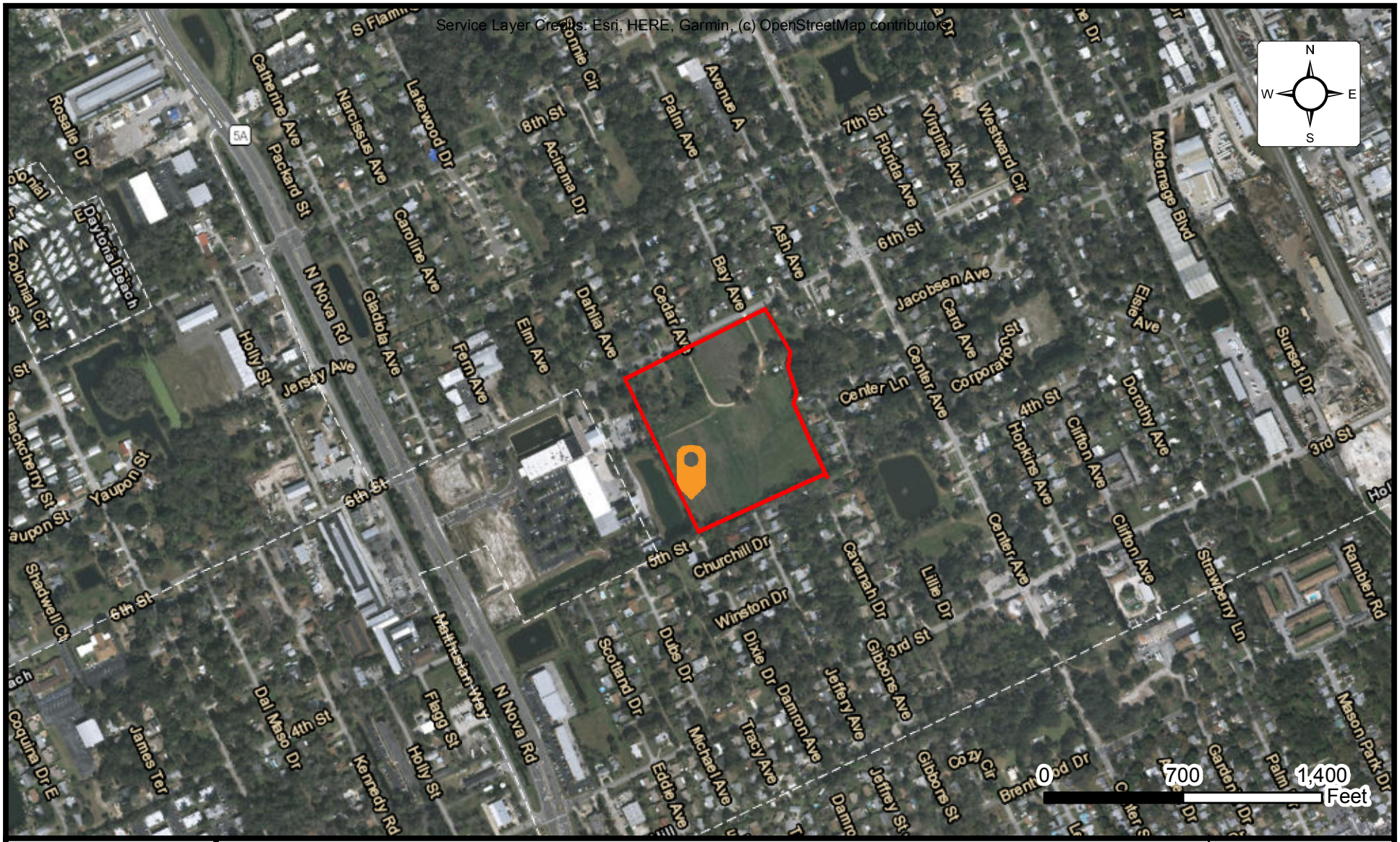
Field observations, monitoring, and quality assurance testing during earthwork and foundation installation are an extension of and integral to the geotechnical design recommendation. We recommend that the owner retain these quality assurance services and that ECS be allowed to continue our involvement throughout these critical phases of construction to provide general consultation as issues arise.

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APPENDIX A – Diagrams & Reports

Figure 1 - Site Location Diagram
Figure 2 – Boring Location Diagram

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))



SITE LOCATION DIAGRAM
VINEYARDS OF HOLLY HILL

649 6TH STREET, HOLLY HILL, FLORIDA
THE VINEYARDS TOWNHOMES, LLC

ENGINEER	DS05
SCALE	AS NOTED
PROJECT NO.	56:1590
FIGURE	1 OF 1
DATE	7/14/2022

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))



BORING LOCATION DIAGRAM
VINEYARDS OF HOLLY HILL

649 6TH STREET, HOLLY HILL, FLORIDA
THE VINEYARDS TOWNHOMES, LLC

ENGINEER	DS05
SCALE	AS NOTED
PROJECT NO.	56:1590
FIGURE	1 OF 1
DATE	7/14/2022

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

APPENDIX B – Field Operations

Reference Notes for Boring Logs
Geotechnical SPT Borehole Logs
Hand Auger Logs

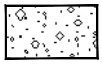
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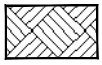
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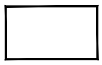
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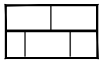

ASPHALT


CONCRETE


GRAVEL


TOPSOIL

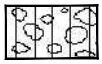

VOID


BRICK

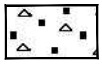

AGGREGATE BASE COURSE

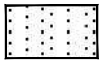

GW **WELL-GRADED GRAVEL**
gravel-sand mixtures, little or no fines

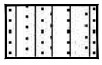

GP **POORLY-GRADED GRAVEL**
gravel-sand mixtures, little or no fines


GM **SILTY GRAVEL**
gravel-sand-silt mixtures

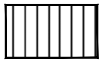

GC **CLAYEY GRAVEL**
gravel-sand-clay mixtures


SW **WELL-GRADED SAND**
gravelly sand, little or no fines


SP **POORLY-GRADED SAND**
gravelly sand, little or no fines


SM **SILTY SAND**
sand-silt mixtures

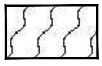

SC **CLAYEY SAND**
sand-clay mixtures

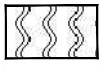

ML **SILT**
non-plastic to medium plasticity

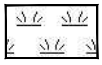

MH **ELASTIC SILT**
high plasticity


CL **LEAN CLAY**
low to medium plasticity


CH **FAT CLAY**
high plasticity


OL **ORGANIC SILT or CLAY**
non-plastic to low plasticity


OH **ORGANIC SILT or CLAY**
high plasticity


PT **PEAT**
highly organic soils

DRILLING SAMPLING SYMBOLS & ABBREVIATIONS

SS	Split Spoon Sampler	PM	Pressuremeter Test
ST	Shelby Tube Sampler	RD	Rock Bit Drilling
WS	Wash Sample	RC	Rock Core, NX, BX, AX
BS	Bulk Sample of Cuttings	REC	Rock Sample Recovery %
PA	Power Auger (no sample)	RQD	Rock Quality Designation %
HSA	Hollow Stem Auger		

PARTICLE SIZE IDENTIFICATION

DESIGNATION		PARTICLE SIZES
Boulders		12 inches (300 mm) or larger
Cobbles		3 inches to 12 inches (75 mm to 300 mm)
Gravel:	Coarse	¾ inch to 3 inches (19 mm to 75 mm)
	Fine	4.75 mm to 19 mm (No. 4 sieve to ¾ inch)
Sand:	Coarse	2.00 mm to 4.75 mm (No. 10 to No. 4 sieve)
	Medium	0.425 mm to 2.00 mm (No. 40 to No. 10 sieve)
	Fine	0.074 mm to 0.425 mm (No. 200 to No. 40 sieve)
Silt & Clay ("Fines")		<0.074 mm (smaller than a No. 200 sieve)

COHESIVE SILTS & CLAYS

UNCONFINED COMPRESSIVE STRENGTH, Q_P[4]	SPT[5] (BPF)	CONSISTENCY[7] (COHESIVE)
<0.25	<2	Very Soft
0.25 - <0.50	2 - 4	Soft
0.50 - <1.00	5 - 8	Firm
1.00 - <2.00	9 - 15	Stiff
2.00 - <4.00	16 - 30	Very Stiff
4.00 - 8.00	31 - 50	Hard
>8.00	>50	Very Hard

GRAVELS, SANDS & NON-COHESIVE SILTS

SPT[5]	DENSITY
<5	Very Loose
5 - 10	Loose
11 - 30	Medium Dense
31 - 50	Dense
>50	Very Dense

RELATIVE AMOUNT[7]	COARSE GRAINED (%)[8]	FINE GRAINED (%)[8]
Trace	≤5	≤5
With	10 - 20	10 - 25
Adjective *(ex: "Silty")*	25 - 45	30 - 45

WATER LEVELS[6]

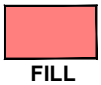

WL (First Encountered)


WL (Completion)


WL (Seasonal High Water)


WL (Stabilized)

FILL AND ROCK


FILL


POSSIBLE FILL


PROBABLE FILL


ROCK

[1]Classifications and symbols per ASTM D 2488-17 (Visual-Manual Procedure) unless noted otherwise.

[2]To be consistent with general practice, "POORLY GRADED" has been removed from GP, GP-GM, GP-GC, SP, SP-SM, SP-SC soil types on the boring logs.

[3]Non-ASTM designations are included in soil descriptions and symbols along with ASTM symbol [Ex: (SM-FILL)].

[4]Typically estimated via pocket penetrometer or Torvane shear test and expressed in tons per square foot (tsf).

[5]Standard Penetration Test (SPT) refers to the number of hammer blows (blow count) of a 140 lb. hammer falling 30 inches on a 2 inch OD split spoon sampler required to drive the sampler 12 inches (ASTM D 1586). "N-value" is another term for "blow count" and is expressed in blows per foot (bpf). SPT correlations per 7.4.2 Method B and need to be corrected if using an auto hammer.

[6]The water levels are those levels actually measured in the borehole at the times indicated by the symbol. The measurements are relatively reliable when augering, without adding fluids, in granular soils. In clay and cohesive silts, the determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally employed.

[7]Minor deviation from ASTM D 2488-17 Note 14.

[8]Percentages are estimated to the nearest 5% per ASTM D 2488-17.

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

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SUBSURFACE EXPLORATION PROCEDURE: STANDARD PENETRATION TESTING (SPT) ASTM D 1586 Split-Barrel Sampling

Standard Penetration Testing, or **SPT**, is the most frequently used subsurface exploration test performed worldwide. This test provides samples for identification purposes, as well as a measure of penetration resistance, or N-value. The N-Value, or blow counts, when corrected and correlated, can approximate engineering properties of soils used for geotechnical design and engineering purposes.

SPT Procedure:

- Involves driving a hollow tube (split-spoon) into the ground by dropping a 140-lb hammer a height of 30-inches at desired depth
- Recording the number of hammer blows required to drive split-spoon a distance of 12 inches (in 3 or 4 Increments of 6 inches each)



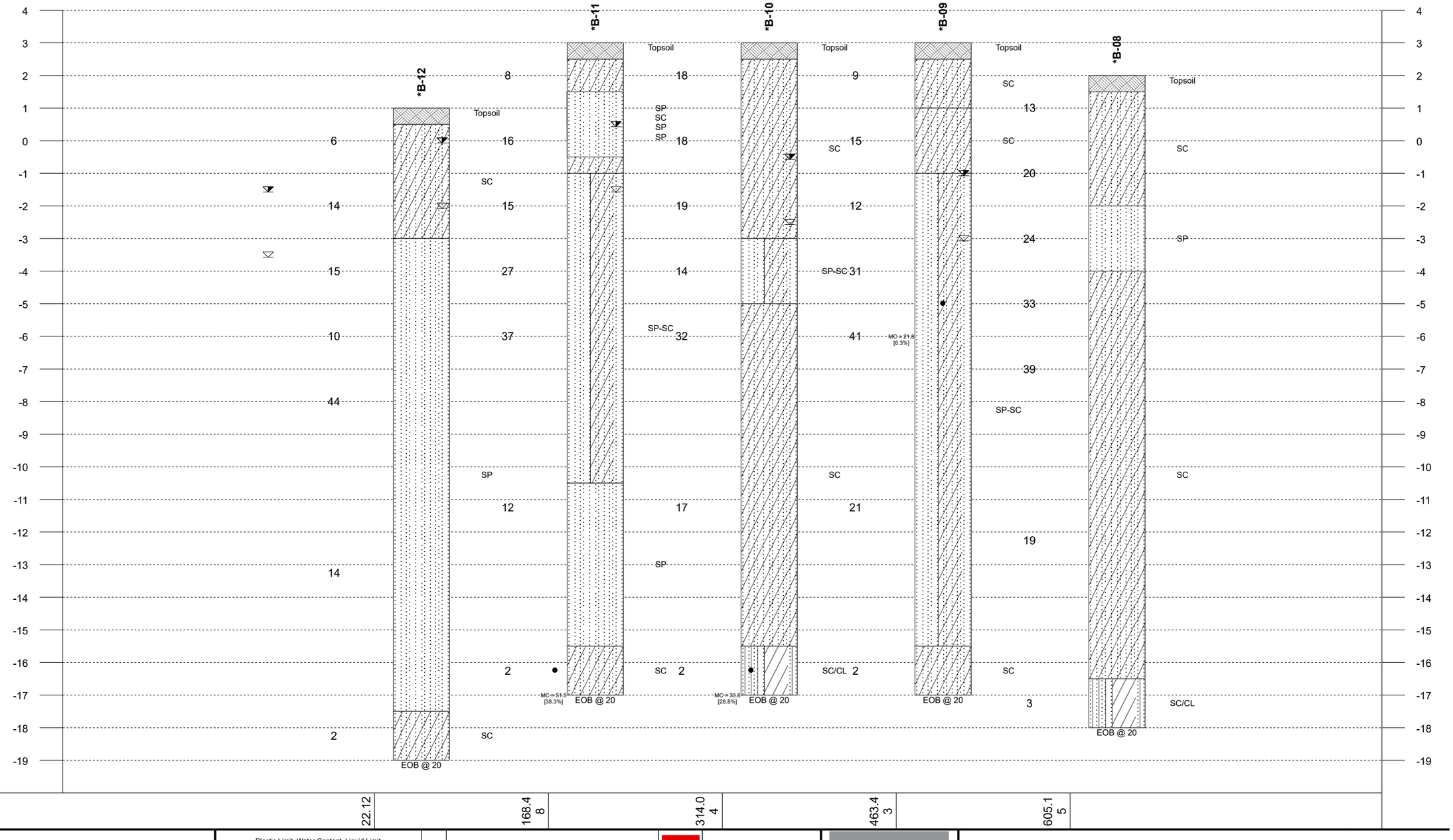
- Auger is advanced* and an additional SPT is performed
- One SPT test is typically performed for every two to five feet



- Obtain 1.5-inch diameter soil sample

**Drilling Methods May Vary—* The predominant drilling methods used for SPT are open hole fluid rotary drilling and hollow-stem auger drilling.

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))



Legend Key

- Topsoil
- CLAYEY SAND
- Poorly Graded SAND
- Poorly Graded SAND w… Clayey sand/Low plasticity…

-20.00

Notes:

1- EOB: END OF BORING AR: AUGER REFUSAL SR: SAMPLER REFUSAL.
2- THE NUMBER BELOW THE STRIPS IS THE DISTANCE ALONG THE BASELINE.
3- SEE INDIVIDUAL BORING LOG AND GEOTECHNICAL INFORMATION.
4- STANDARD PENETRATION TEST RESISTANCE (LEFT OF BORING) IN BLOWS PER FOOT (ASTM D1586).

Plastic Limit Water Content Liquid Limit X—●—△	WL (First Encountered)		Fill
[FINES CONTENT %]	WL (Completion)		Possible Fill
BOTTOM OF CASING	WL (Estimated Seasonal High Water)		Probable Fill
LOSS OF CIRCULATION	WL (Stabilized)		Rock

GENERALIZED SUBSURFACE SOIL PROFILE Section A-A'

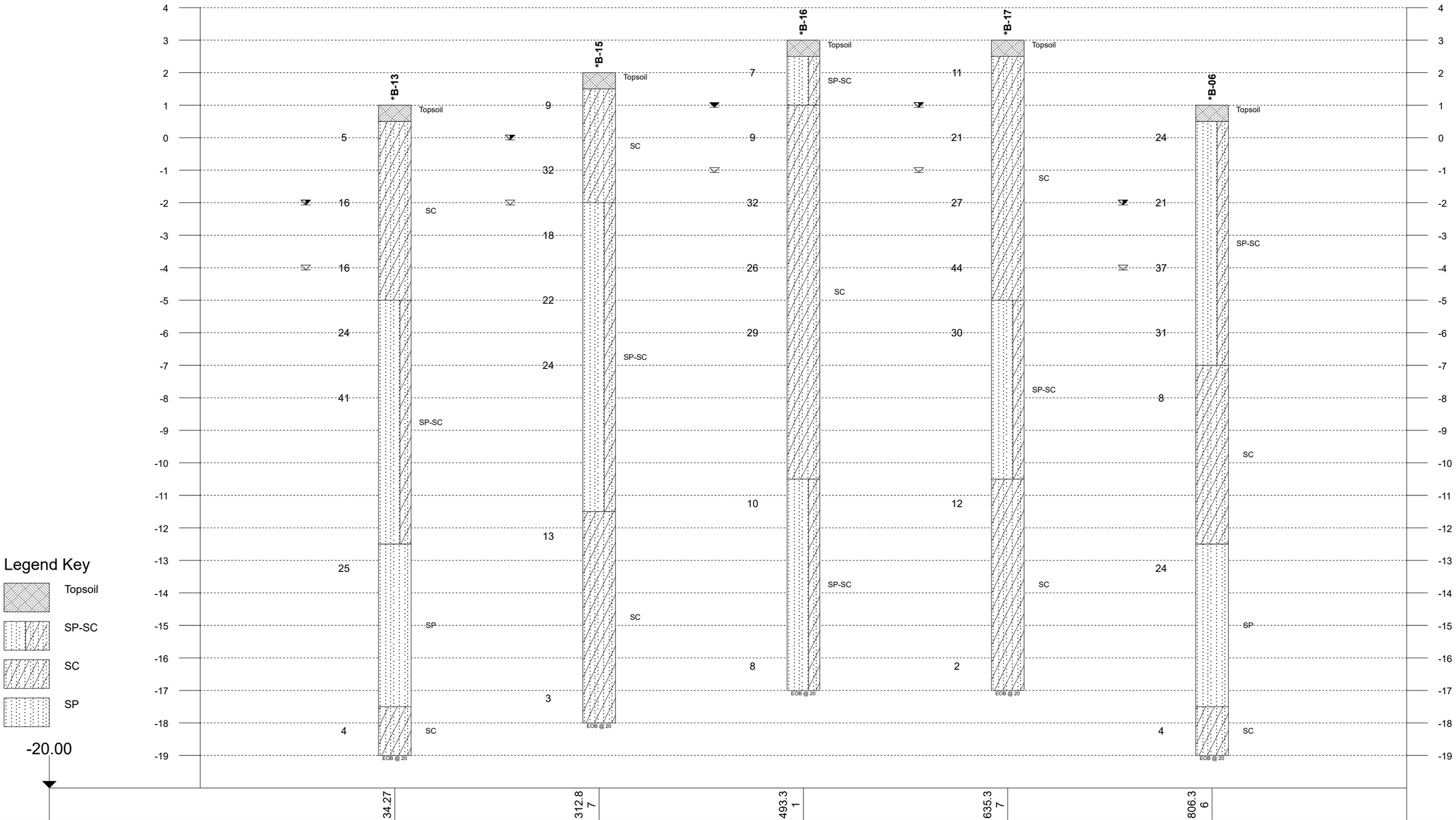
Vineyards of Holly Hill

The Vineyards Townhomes, LLC

649 6th Street, Holly Hill, Florida 32174

Project No: 56:1590 Date:

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))



Legend Key

- Topsoil
- SP-SC
- SC
- SP

-20.00

Notes:

1- EOB: END OF BORING AR: AUGER REFUSAL SR: SAMPLER REFUSAL.
2- THE NUMBER BELOW THE STRIPS IS THE DISTANCE ALONG THE BASELINE.
3- SEE INDIVIDUAL BORING LOG AND GEOTECHNICAL INFORMATION.
4- STANDARD PENETRATION TEST RESISTANCE (LEFT OF BORING) IN BLOWS PER FOOT (ASTM D1586).

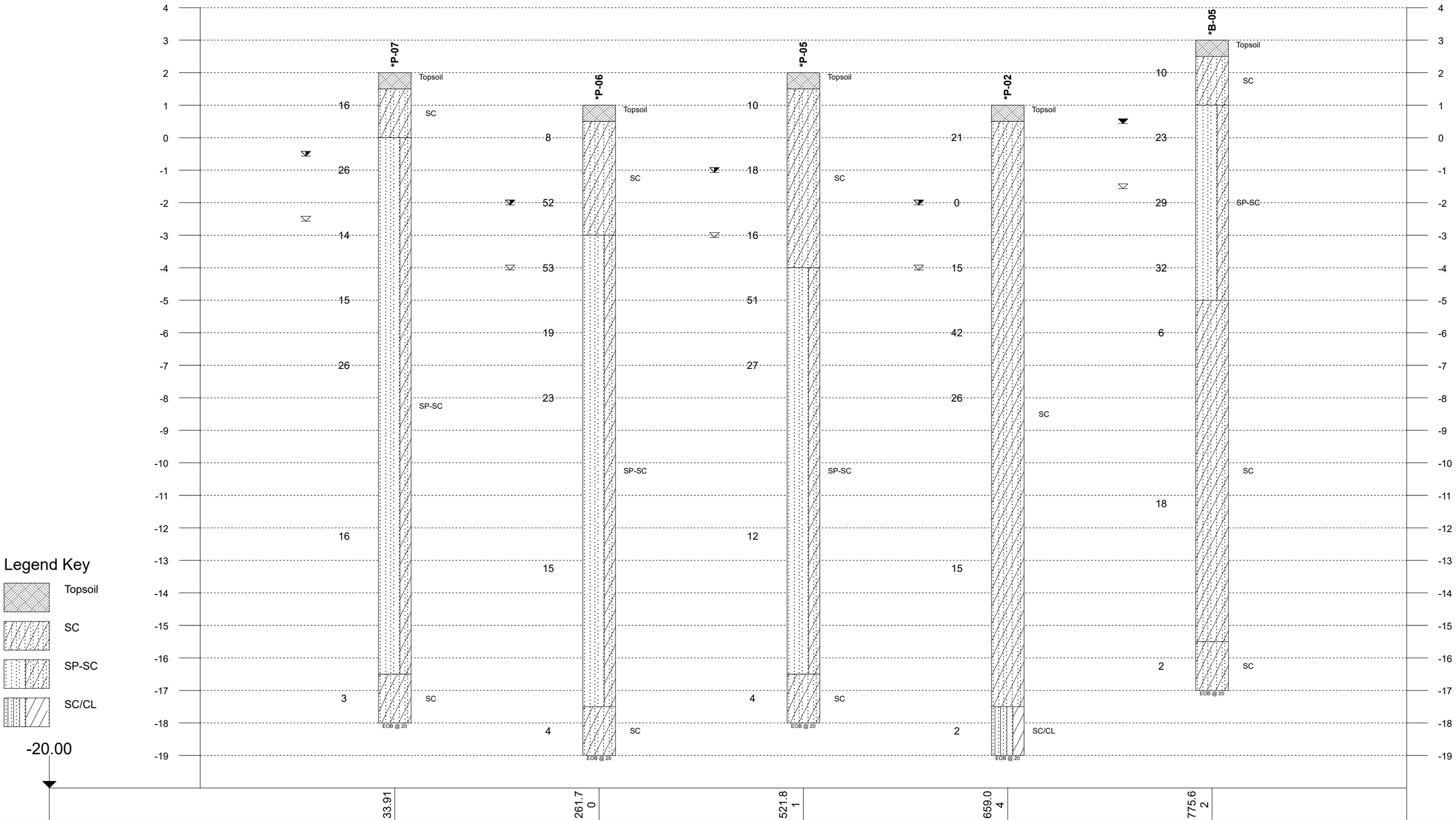
Plastic Limit Water Content Liquid Limit X—●—△	WL (First Encountered)	Fill	
[FINES CONTENT %]	WL (Completion)	Possible Fill	
BOTTOM OF CASING	WL (Seasonal High Water)	Probable Fill	
LOSS OF CIRCULATION	WL (Stabilized)	Rock	

GENERALIZED SUBSURFACE SOIL PROFILE Section B-B'

Vineyards of Holly Hill
The Vineyards Townhomes, LLC
649 6th Street, Holly Hill, Florida 32174

Project No: 56:1590 Date:

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))



Legend Key

- Topsoil
- SC
- SP-SC
- SC/CL

-20.00

Notes:

1- EOB: END OF BORING AR: AUGER REFUSAL SR: SAMPLER REFUSAL.
2- THE NUMBER BELOW THE STRIPS IS THE DISTANCE ALONG THE BASELINE.
3- SEE INDIVIDUAL BORING LOG AND GEOTECHNICAL INFORMATION.
4- STANDARD PENETRATION TEST RESISTANCE (LEFT OF BORING) IN BLOWS PER FOOT (ASTM D1586).

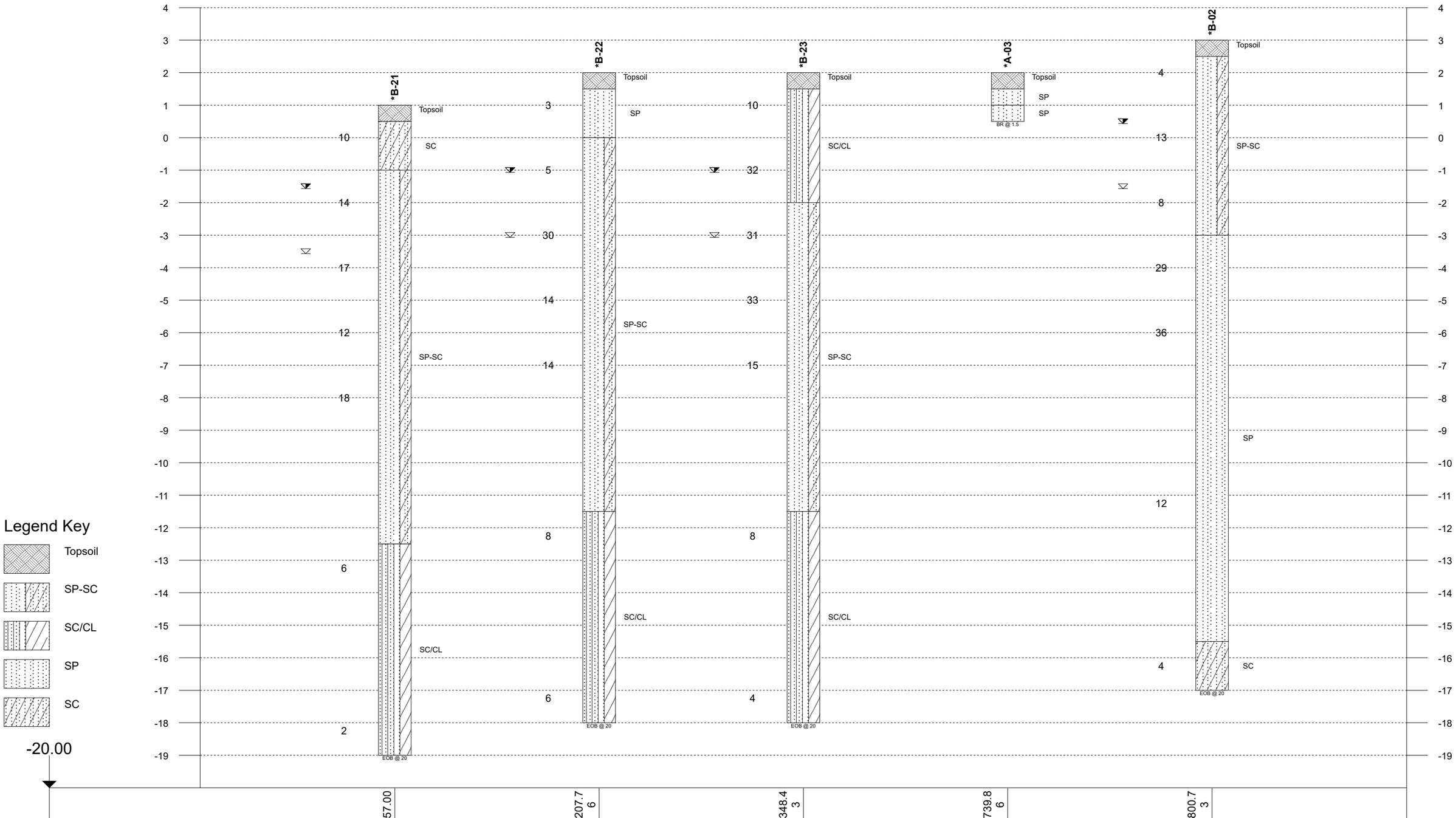
Plastic Limit Water Content Liquid Limit X—●—△	WL (First Encountered)	Fill	
[FINES CONTENT %]	WL (Completion)	Possible Fill	
BOTTOM OF CASING	WL (Seasonal High Water)	Probable Fill	
LOSS OF CIRCULATION	WL (Stabilized)	Rock	

GENERALIZED SUBSURFACE SOIL PROFILE Section C-C'

Vineyards of Holly Hill
The Vineyards Townhomes, LLC
649 6th Street, Holly Hill, Florida 32174

Project No: 56:1590 Date:

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))



Legend Key

- Topsoil
- SP-SC
- SC/CL
- SP
- SC

-20.00

Notes:

1- EOB: END OF BORING AR: AUGER REFUSAL SR: SAMPLER REFUSAL.
2- THE NUMBER BELOW THE STRIPS IS THE DISTANCE ALONG THE BASELINE.
3- SEE INDIVIDUAL BORING LOG AND GEOTECHNICAL INFORMATION.
4- STANDARD PENETRATION TEST RESISTANCE (LEFT OF BORING) IN BLOWS PER FOOT (ASTM D1586).

Plastic Limit Water Content Liquid Limit X—●—△	WL (First Encountered)	Fill	
[FINES CONTENT %]	WL (Completion)	Possible Fill	
BOTTOM OF CASING	WL (Seasonal High Water)	Probable Fill	
LOSS OF CIRCULATION	WL (Stabilized)	Rock	

GENERALIZED SUBSURFACE SOIL PROFILE Section D-D'

Vineyards of Holly Hill
The Vineyards Townhomes, LLC
649 6th Street, Holly Hill, Florida 32174

Project No: 56:1590 Date:

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-01**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION:			LOSS OF CIRCULATION
649 6th Street, Holly Hill, Florida 32174			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION:
100403.2	**3069447.2**		BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SP PROBABLE FILL) FINE SAND, light gray-brown, dry to moist	0	1-5-9-8 (14)
	S-2	SS	24	24	(SP) CEMENTED FINE SAND AND SHELLS, light brown, moist, medium dense		15-17-9-10 (26)
5	S-3	SS	24	24	(SC) CLAYEY FINE SAND, brown and gray, moist to saturated, medium dense	-5	7-7-9-11 (16)
	S-4	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains slight shell fragments, gray, saturated, medium dense to dense		11-15-21-25 (36)
	S-5	SS	24	24			13-15-17-16 (32)
10						-10	
	S-6	SS	18	18			6-5-8 (13)
15						-15	
	S-7	SS	18	18	(SC) CLAYEY FINE SAND, contains shell fragments, gray, saturated, very loose		2-2-2 (4)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

WATER LEVELS

STANDARD PENETRATION BLOWS/FT
20 40 60 80 100
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS
1 2 3 4 5
WATER CONTENT %
[FINES CONTENT] %
10 20 30 40 50
[17.3 %]
25.0

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	**4.70**	BORING STARTED: **Jun 28 2022**		CAVE IN DEPTH:
WL (Completion)		BORING COMPLETED: **Jun 28 2022**		HAMMER TYPE: **Manual - Safety**
WL (Seasonal High Water)	**2.70**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)				

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-02**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100569.3**	EASTING: **3069421.6**	STATION:	SURFACE ELEVATION: BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SP PROBABLE FILL) FINE SAND, brown, moist, loose	0	1-1-3-14 (4)
	S-2	SS	24	24	(SC) CLAYEY FINE SAND , gray, moist to saturated, loose to medium dense		18-6-7-10 (13)
5	S-3	SS	24	24		-5	6-5-3-4 (8)
	S-4	SS	24	24	(SP) FINE SAND, contains significant shell fragments, gray, saturated, medium dense to dense		6-12-17-21 (29)
	S-5	SS	24	24			14-16-20-23 (36)
10						-10	
	S-6	SS	18	18			7-7-5 (12)
15						-15	
	S-7	SS	18	18	(SC) CLAYEY FINE SAND, contains shell fragments, gray, saturated, loose		2-2-2 (4)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT %
[FINES CONTENT] % (10 20 30 40 50)

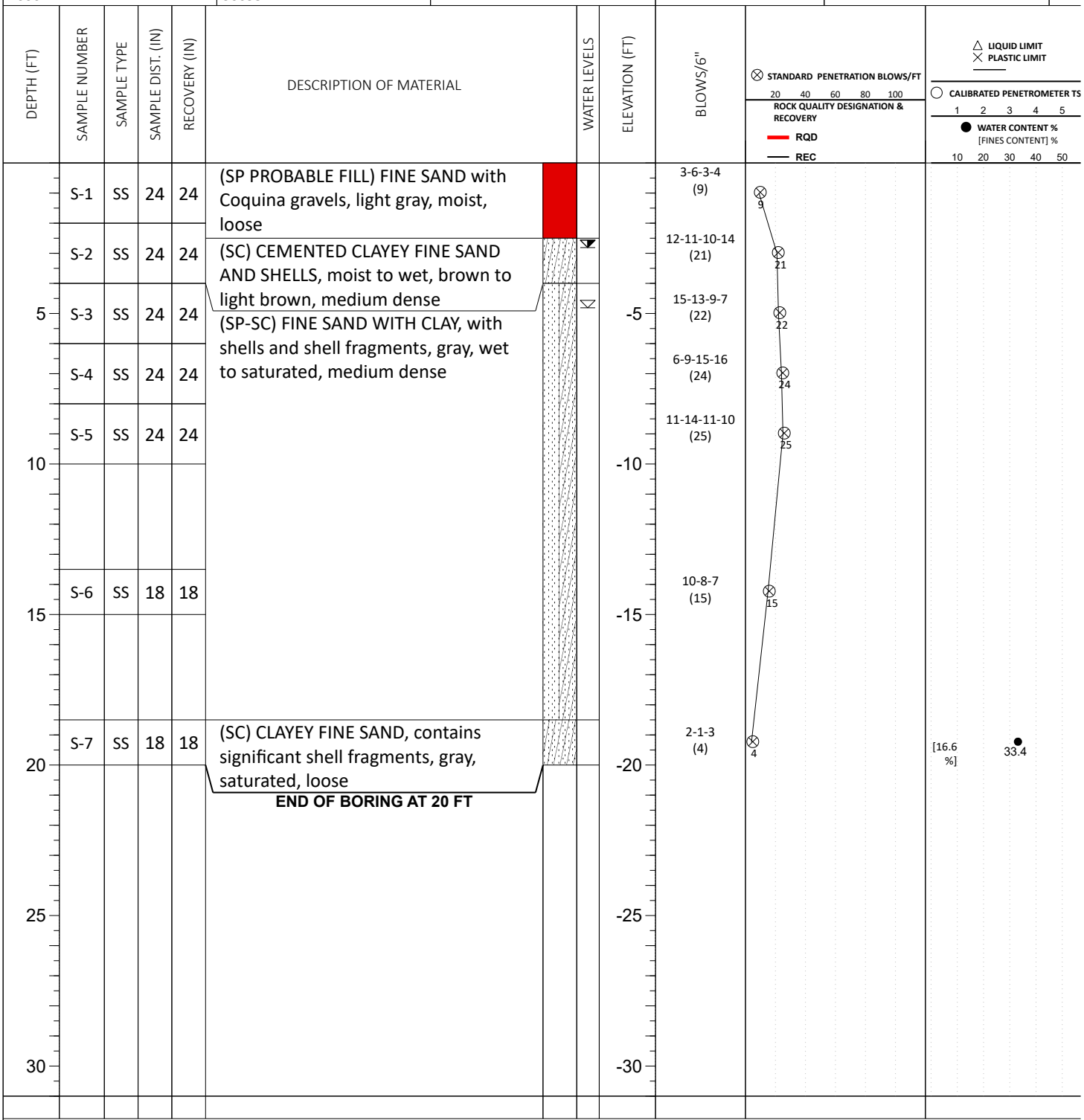
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered) **4.50**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:	
WL (Completion)	BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water) **2.50**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-03**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100641.2**	EASTING: **3069544.4**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING



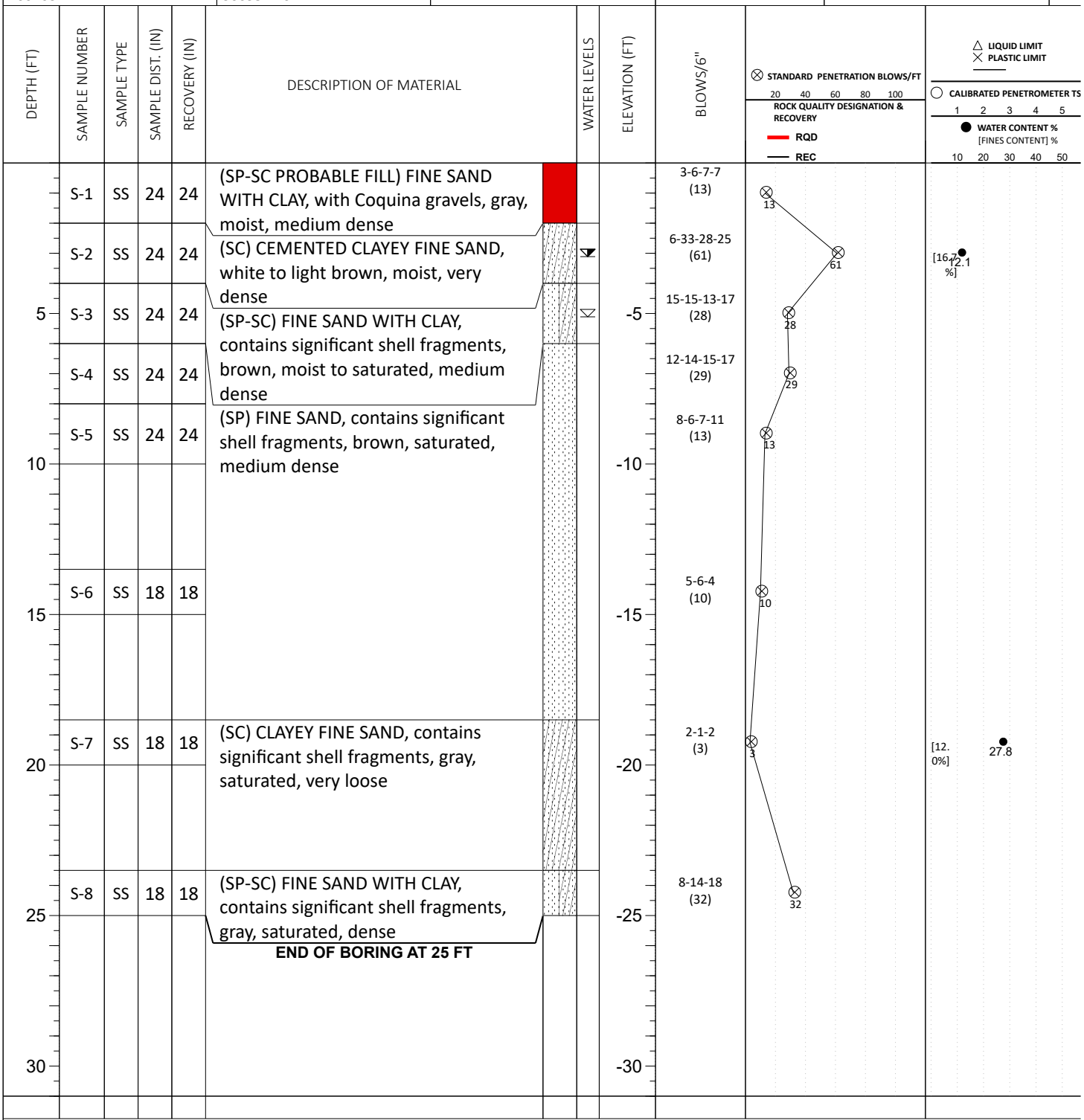
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**4.70**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**
▼ WL (Seasonal High Water)	**2.70**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
▽ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-04**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100463.2**	EASTING: **3069572.0**	STATION:	SURFACE ELEVATION: BOTTOM OF CASING



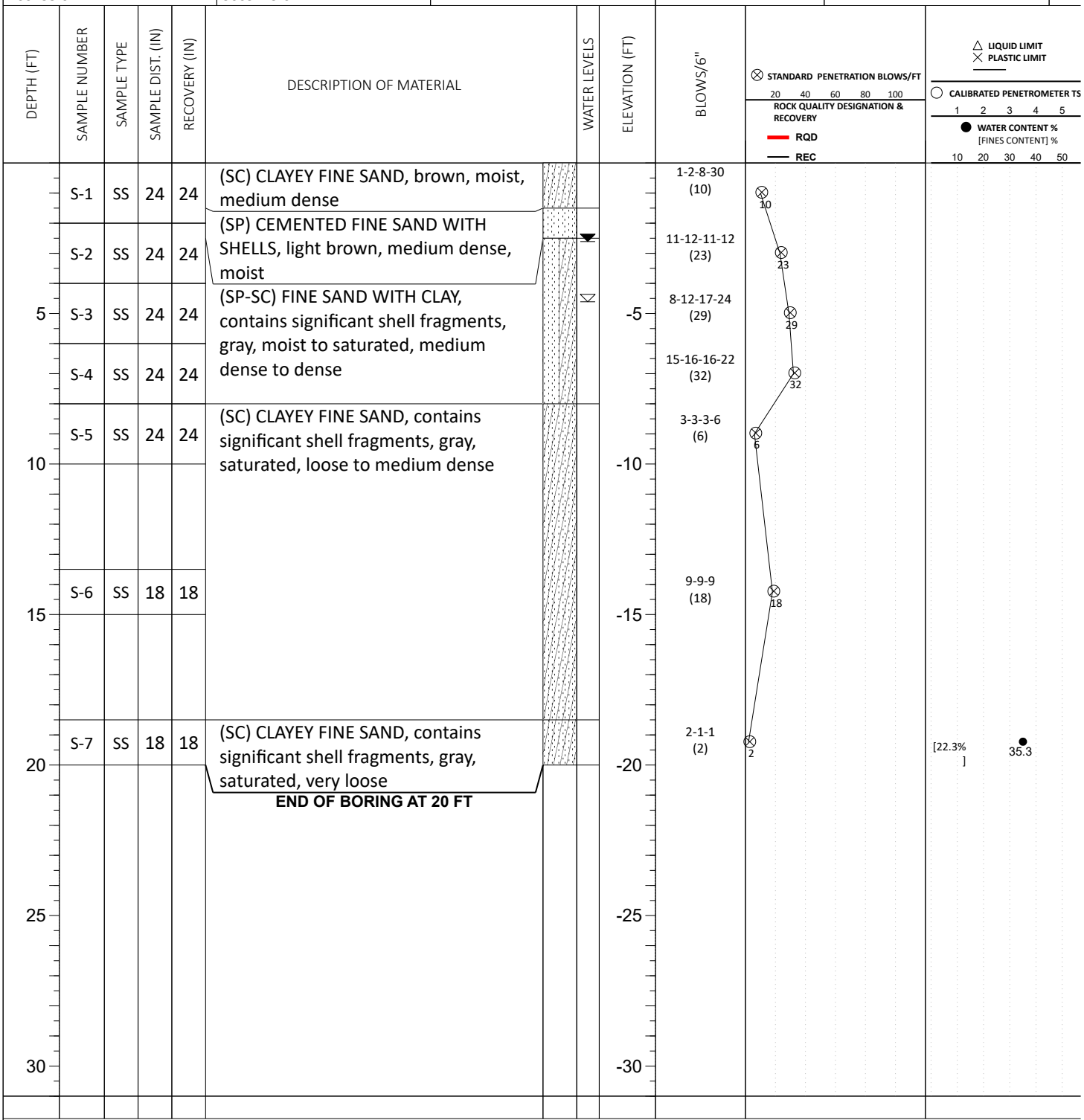
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered) **5.00**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:	
WL (Completion)	BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water) **3.00**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-05**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100735.0**	EASTING: **3069719.6**	STATION:	SURFACE ELEVATION:
			BOTTOM OF CASING



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered) **4.50**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:	
▼ WL (Completion) **2.50**	BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**	
▽ WL (Seasonal High Water)	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
▽ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-06**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION:			LOSS OF CIRCULATION
649 6th Street, Holly Hill, Florida 32174			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION:
100801.7	**3069840.8**		BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SP-SC) CEMENTED FINE SAND WITH CLAY AND SHELLS, light brown, moist, medium dense	0	2-6-18-22 (24)
	S-2	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains significant shell fragments, gray, moist to saturated, loose to dense		11-10-11-13 (21)
5	S-3	SS	24	24		-5	16-19-18-21 (37)
	S-4	SS	24	24			18-17-14-12 (31)
	S-5	SS	24	24			5-2-6-16 (8)
10						-10	
15	S-6	SS	18	18	(SP) FINE SAND, contains significant shell fragments, gray, saturated, medium dense	-15	8-11-13 (24)
20	S-7	SS	18	18	(SC) CLAYEY FINE SAND, contains significant shell fragments, gray, saturated, loose	-20	2-3-1 (4)
					END OF BORING AT 20 FT		
25						-25	
30						-30	

WATER LEVELS

STANDARD PENETRATION BLOWS/FT
20 40 60 80 100
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS
1 2 3 4 5
WATER CONTENT %
[FINES CONTENT] %
10 20 30 40 50

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

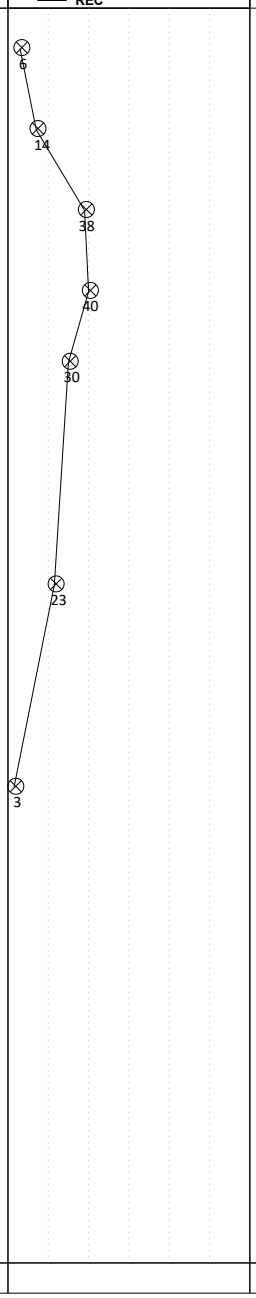
WL (First Encountered)	**5.00**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:	
WL (Completion)		BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)				

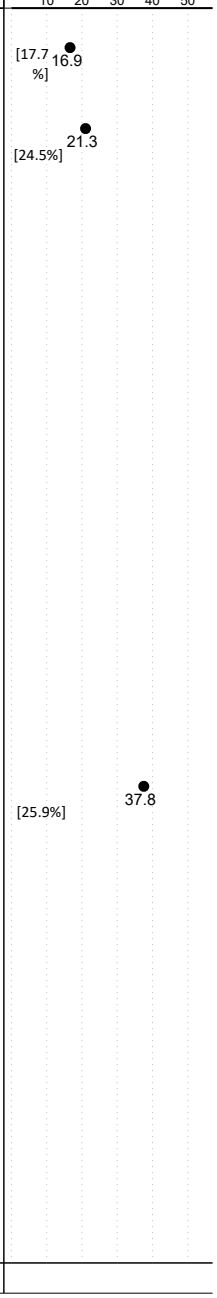
GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-07**	**1 of 1**
PROJECT NAME: **Vineyards of Holly Hill**	DRILLER/CONTRACTOR: **ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100870.7**	EASTING: **3069979.1**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC) CLAYEY FINE SAND, gray, moist to saturated, loose			3-4-2-3 (6)
	S-2	SS	24	24	(SC) CEMENTED CLAYEY FINE SAND AND SHELLS, light brown, medium dense, moist	▼		3-8-6-7 (14)
5	S-3	SS	24	24	(SC) CLAYEY FINE SAND, contains significant shell fragments, gray, moist to saturated, very loose to dense	▽	-5	13-19-19-18 (38)
	S-4	SS	24	24				15-18-22-21 (40)
	S-5	SS	18	18				10-13-17 (30)
10							-10	
	S-6	SS	18	18				11-11-12 (23)
15							-15	
	S-7	SS	18	18				2-2-1 (3)
20					**END OF BORING AT 20 FT**		-20	
25							-25	
30							-30	





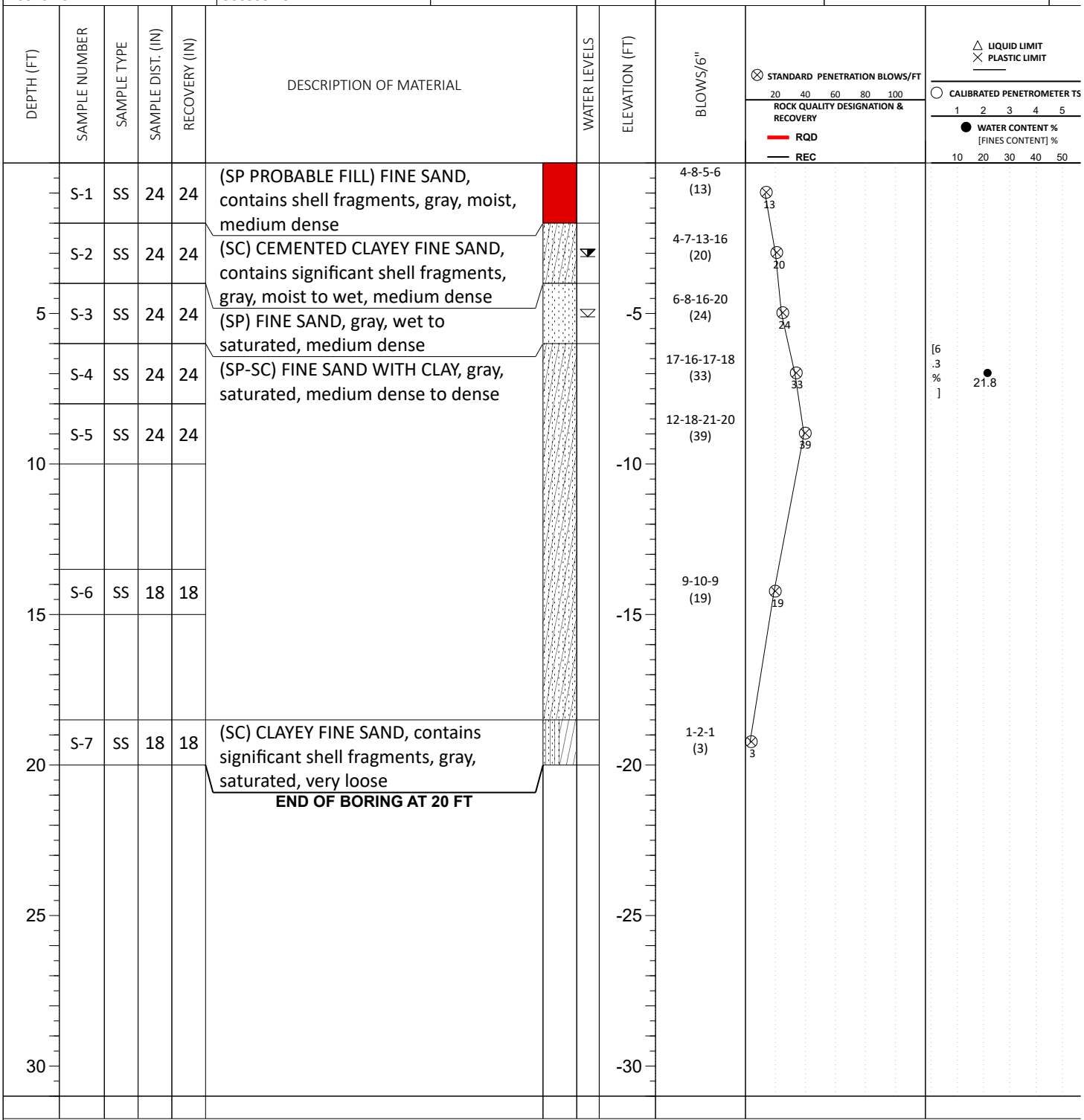
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**5.00**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**
▼▽ WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
▽▽ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-08**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100702.6**	EASTING: **3069997.9**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING



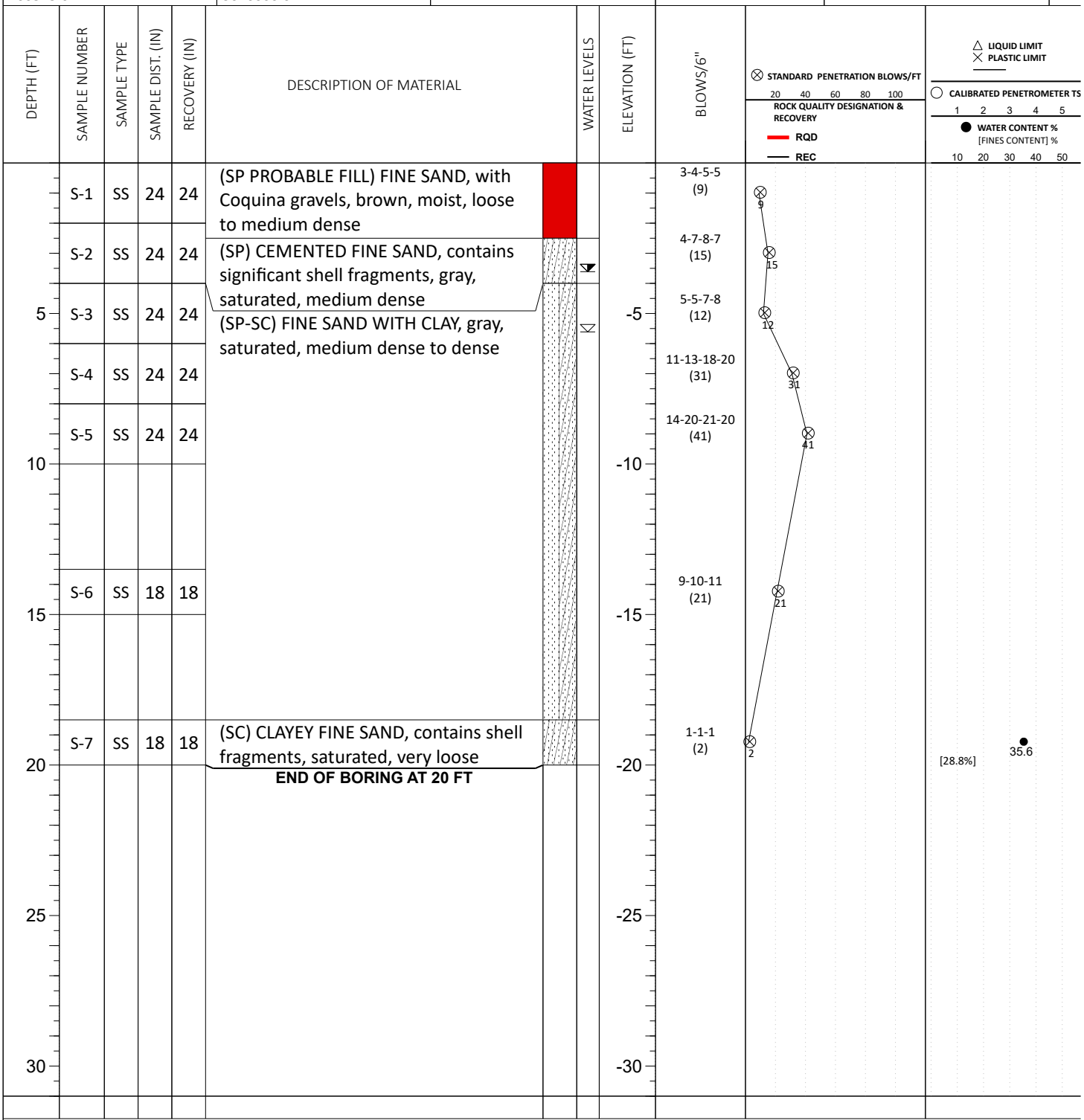
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**5.00**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**
▼ WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
▽ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-09**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100575.0**	EASTING: **3070060.0**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING



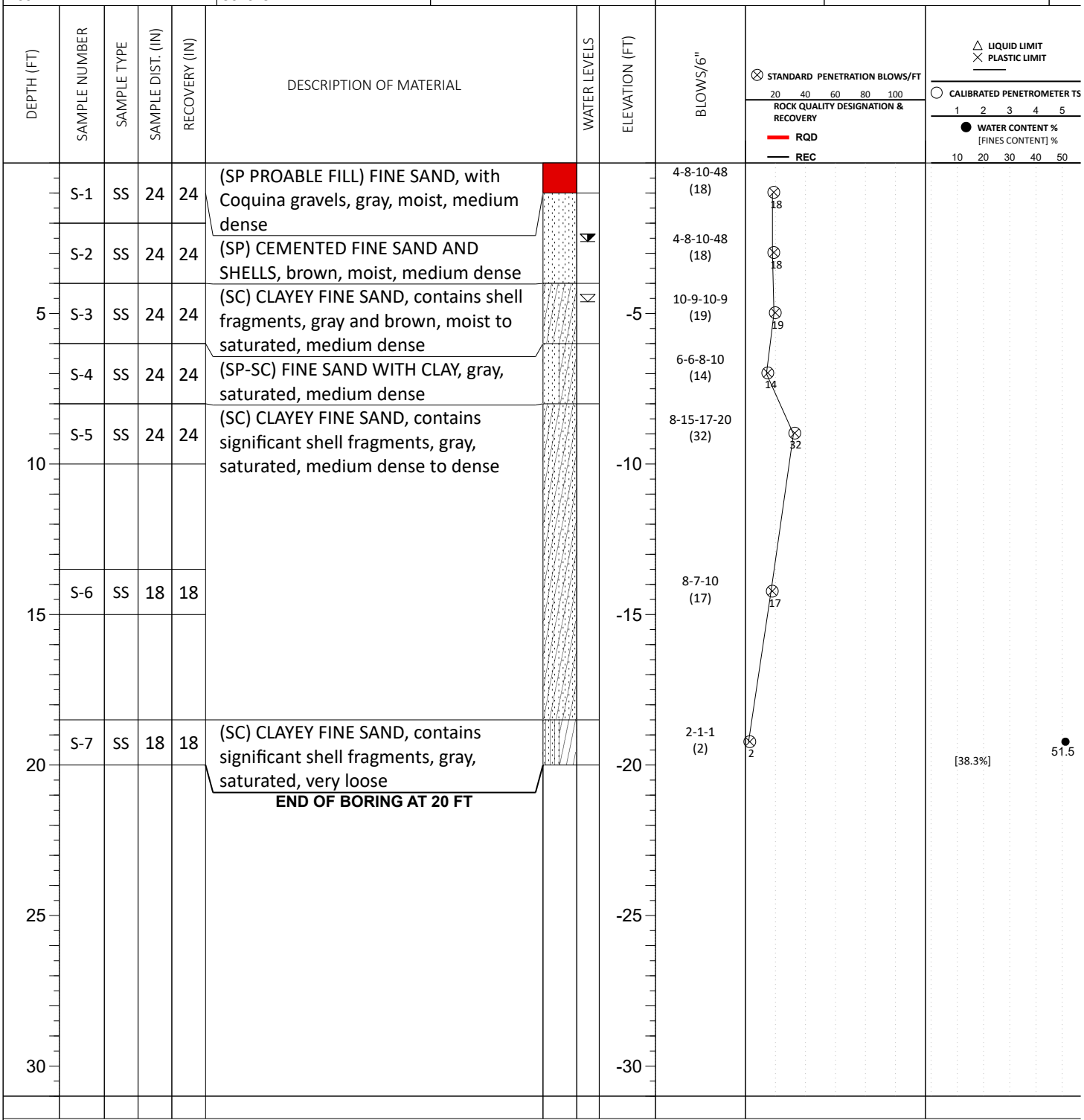
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered) **5.50**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:	
WL (Completion)	BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water) **3.50**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-10**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100444.4**	EASTING: **3070132.4**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered) **4.50**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:	
WL (Completion)	BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water) **2.50**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-11**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100315.3**	EASTING: **3070199.7**	STATION:	SURFACE ELEVATION:
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SP-SC PROBABLE FILL) FINE SAND WITH CLAY, with Coquina gravels, brown, moist, loose		0	2-4-4-4 (8)
	S-2	SS	24	24	(SC) CEMENTED CLAYEY FINE SAND AND SHELLS, gray, moist to wet, medium dense	▼		5-8-8-7 (16)
5	S-3	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains shell fragments, gray, saturated, medium dense to dense	▽	-5	6-7-8-8 (15)
	S-4	SS	24	24				7-9-18-20 (27)
	S-5	SS	24	24				12-17-20-25 (37)
10							-10	
15	S-6	SS	18	18	(SP) FINE SAND, gray, saturated, medium dense		-15	6-5-7 (12)
20	S-7	SS	18	18	(SC) CLAYEY FINE SAND, contains shell fragments, gray, saturated, very loose		-20	2-1-1 (2)
					END OF BORING AT 20 FT			
25							-25	
30							-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC
LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT % [FINES CONTENT] % (10 20 30 40 50)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**5.00**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**
▼▽ WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
▽▽ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-12**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100188.0**	EASTING: **3070272.0**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC PROBABLE FILL) CLAYEY FINE SAND, with Coquina gravels, brown and gray, moist, loose	0	1-3-3-3 (6)
	S-2	SS	24	24	(SC) CEMENTED CLAYEY FINE SAND AND SHELLS, light brown and gray, moist to wet, medium dense		5-6-8-9 (14)
5	S-3	SS	24	24	(SP) FINE SAND, gray, saturated, medium dense to dense	-5	10-8-7-7 (15)
	S-4	SS	24	24			4-3-7-9 (10)
	S-5	SS	24	24			16-21-23-25 (44)
10						-10	
15	S-6	SS	18	18		-15	7-5-9 (14)
20	S-7	SS	18	18	(SC) CLAYEY FINE SAND, gray, saturated, very loose	-20	2-1-1 (2)
					END OF BORING AT 20 FT		
25						-25	
30						-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC
LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT % [FINES CONTENT] % (10 20 30 40 50)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered) **4.50**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:	
WL (Completion)	BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water) **2.50**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-13**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100083.0**	EASTING: **3070122.8**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC PROBABLE FILL) CLAYEY FINE SAND, gray, moist, loose		0	2-3-2-3 (5)
	S-2	SS	24	24	(SC) CLAYEY FINE SAND, contains shell fragments, gray, moist to saturated, medium dense	▼		14-10-6-7 (16)
5	S-3	SS	24	24		▽	-5	7-7-9-10 (16)
	S-4	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains shell fragments, gray, saturated, medium dense to dense			10-10-14-20 (24)
	S-5	SS	24	24				18-20-21-22 (41)
10							-10	
	S-6	SS	18	18	(SP) FINE SAND, gray, saturated, medium dense			9-13-12 (25)
15							-15	
	S-7	SS	18	18	(SC) CLAYEY FINE SAND, gray, saturated, loose			3-2-2 (4)
20					**END OF BORING AT 20 FT**		-20	
25							-25	
30							-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC
LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT % [FINES CONTENT] % (10 20 30 40 50)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**5.00**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**
▼▽ WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
⊻ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-14**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION:			LOSS OF CIRCULATION
649 6th Street, Holly Hill, Florida 32174			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION:
100215.5	**3070110.3**		BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC) CLAYEY FINE SAND, gray, moist to wet, loose	0	4-5-3-3 (8)
	S-2	SS	24	24			3-3-3-4 (6)
5	S-3	SS	24	24	(SP) FINE SAND, contains significant shell fragments, gray, wet to saturated, loose to medium dense	-5	3-3-6-7 (9)
	S-4	SS	24	24			7-11-16-20 (27)
	S-5	SS	24	24			14-13-13-13 (26)
10						-10	
	S-6	SS	18	18			9-8-9 (17)
15						-15	
	S-7	SS	18	18	(SC) CLAYEY FINE SAND, gray, saturated, very loose		1-1-3 (4)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

WATER LEVELS

STANDARD PENETRATION BLOWS/FT
20 40 60 80 100
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS
1 2 3 4 5
WATER CONTENT %
[FINES CONTENT] %
10 20 30 40 50

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**5.00**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**
▼ WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
▽ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-15**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100351.4**	EASTING: **3070044.5**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC PROBABLE FILL) CLAYEY FINE SAND, gray, moist, loose	0	3-3-6-11 (9)
	S-2	SS	24	24	(SC) CEMENTED CLAYEY FINE SAND, gray, moist to wet, dense		38-24-8-9 (32)
5	S-3	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains significant shell fragments, gray, saturated, medium dense	-5	6-7-11-13 (18)
	S-4	SS	24	24			6-10-12-15 (22)
	S-5	SS	24	24			14-16-8-23 (24)
10						-10	
15	S-6	SS	18	18	(SC) CLAYEY FINE SAND, contains significant shell fragments, gray, saturated, very loose to medium dense	-15	8-7-6 (13)
	S-7	SS	18	18			1-1-2 (3)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

WATER LEVELS

STANDARD PENETRATION BLOWS/FT
20 40 60 80 100
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS
1 2 3 4 5
WATER CONTENT %
[FINES CONTENT] %
10 20 30 40 50

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	**4.00**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:	
WL (Completion)		BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water)	**2.00**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)				

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-16**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100510.6**	EASTING: **3069955.8**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SP-SC) FINE SAND WITH CLAY, brown, moist, loose	0	1-3-4-5 (7)
	S-2	SS	24	24	(SC) CLAYEY FINE SAND, contains shell fragments, gray, moist to saturated, loose to dense		4-4-5-10 (9)
5	S-3	SS	24	24		-5	8-12-20-30 (32)
	S-4	SS	24	24			8-13-13-15 (26)
	S-5	SS	24	24			9-13-16-20 (29)
10						-10	
15	S-6	SS	18	18	(SP-SC) FINE SAND WITH CLAY, gray, saturated, loose to medium dense	-15	6-4-6 (10)
	S-7	SS	18	18			2-2-6 (8)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

WATER LEVELS

STANDARD PENETRATION BLOWS/FT
20 40 60 80 100
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS
1 2 3 4 5
WATER CONTENT %
[FINES CONTENT] %
10 20 30 40 50

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered) **4.00**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:	
WL (Completion)	BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water) **2.00**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-17**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100636.2**	EASTING: **3069886.9**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SP PROBABLE FILL) FINE SAND, with Coquina gravels, gray, moist, medium dense	0	2-4-7-11 (11)
	S-2	SS	24	24	(SC) CEMENTED CLAYEY FINE SAND AND SHELLS, light brown and gray, moist to saturated, medium dense		14-10-11-15 (21)
5	S-3	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains significant shell fragments, gray, saturated, medium dense to dense	-5	8-12-15-27 (27)
	S-4	SS	24	24			17-21-23-27 (44)
	S-5	SS	24	24			11-15-15-17 (30)
10						-10	
15	S-6	SS	18	18	(SC) CLAYEY FINE SAND, contains significant shell fragments, gray, saturated, medium dense to very loose	-15	7-6-6 (12)
	S-7	SS	18	18			2-1-1 (2)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC
LIQUID LIMIT / PLASTIC LIMIT
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT % [FINES CONTENT] % (10 20 30 40 50)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered) **4.00**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:	
WL (Completion)	BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water) **2.00**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-18**	**1 of 1**

PROJECT NAME:	DRILLER/CONTRACTOR:
Vineyards of Holly Hill	**ECS**

SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**

LOSS OF CIRCULATION

NORTHING:	EASTING:	STATION:	SURFACE ELEVATION:
100167.8	**3069717.9**		

BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SP PROBABLE FILL) FINE SAND, gray, moist, loose	0	2-3-6-8 (9)
	S-2	SS	24	24	(SP-SC) CEMENTED FINE SAND WITH CLAY AND SHELLS, gray, moist to wet, medium dense to dense		9-22-14-10 (36)
5	S-3	SS	24	24		-5	11-9-10-12 (19)
	S-4	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains shell fragments, gray, saturated, very loose to dense		16-17-18-17 (35)
	S-5	SS	24	24			14-14-17-18 (31)
10						-10	
15	S-6	SS	18	18		-15	7-7-7 (14)
	S-7	SS	18	18			2-1-1 (2)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

WATER LEVELS

STANDARD PENETRATION BLOWS/FT
20 40 60 80 100
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS
1 2 3 4 5
WATER CONTENT %
[FINES CONTENT] %
10 20 30 40 50

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	**6.00**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:	
WL (Completion)		BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water)	**4.00**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)				

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-19**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100040.3**	EASTING: **3069781.7**	STATION:	SURFACE ELEVATION:
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SP-SC) FINE SAND WITH CLAY, gray, moist to saturated, medium dense	0	3-5-6-8 (11)
	S-2	SS	24	24			14-12-9-9 (21)
5	S-3	SS	24	24		-5	6-8-6-12 (14)
	S-4	SS	24	24			10-9-7-6 (16)
	S-5	SS	24	24	(SP) FINE SAND, gray, saturated, medium dense		11-15-13-13 (28)
10					(SC) CLAYEY FINE SAND, contains significant shell fragments, gray, saturated, very loose to medium dense	-10	
	S-6	SS	18	18			6-6-5 (11)
15						-15	
	S-7	SS	18	18			1-1-3 (4)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT %
[FINES CONTENT] % (10 20 30 40 50)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**4.00**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**
▼ WL (Seasonal High Water)	**2.00**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
▽ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-20**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **99950.1**	EASTING: **3069895.7**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC) CLAYEY FINE SAND, gray, moist to saturated, loose to medium dense	▽	0	1-2-3-4 (5)
	S-2	SS	24	24		▽		4-4-5-10 (9)
5	S-3	SS	24	24			-5	15-16-12-10 (28)
	S-4	SS	24	24	(SP-SC) FINE SAND WITH CLAY, gray, saturated, medium dense			11-9-9-10 (18)
	S-5	SS	24	24				8-7-9-6 (16)
10							-10	
	S-6	SS	18	18	(SC) CLAYEY FINE SAND, contains shell fragments, gray, saturated, loose			4-4-5 (9)
15							-15	
	S-7	SS	18	18				1-2-3 (5)
20					**END OF BORING AT 20 FT**		-20	
25							-25	
30							-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC
LIQUID LIMIT △ PLASTIC LIMIT ×
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT % ● [FINES CONTENT] % (10 20 30 40 50)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered) **3.50**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:	
▼ WL (Completion)	BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**	
▼ WL (Seasonal High Water) **1.50**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
▽ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-21**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **99888.6**	EASTING: **3069721.3**	STATION:	SURFACE ELEVATION:
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SP-SC PROBABLE FILL) FINE SAND WITH CLAY, with Coquina gravels, gray, moist, medium dense	0	1-3-7-18 (10)
	S-2	SS	24	24	(SC) CEMENTED CLAYEY FINE SAND, gray, moist, medium dense		29-10-4-10 (14)
5	S-3	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains shell fragments, gray, saturated, medium dense	-5	8-8-9-10 (17)
	S-4	SS	24	24			5-4-8-9 (12)
	S-5	SS	24	24			9-9-9-10 (18)
10						-10	
15	S-6	SS	18	18	(SC) CLAYEY FINE SAND, gray, saturated, very loose to loose	-15	5-3-3 (6)
	S-7	SS	18	18			1-1-1 (2)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC
10 14 17 12 18 6 2

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT %
[FINES CONTENT] % (10 20 30 40 50)
[14. 0%] 34.5

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered) **4.50**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:	
WL (Completion)	BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water) **2.50**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-22**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100022.7**	EASTING: **3069652.1**	STATION:	SURFACE ELEVATION: / BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SP) FINE SAND, with cemented sand gravels, gray, moist, very loose	0	1-1-2-3 (3)
	S-2	SS	24	24	(SP-SC) FINE SAND WITH CLAY, gray, moist to saturated, loose to medium dense		3-3-2-3 (5)
5	S-3	SS	24	24		-5	7-12-18-15 (30)
	S-4	SS	24	24			4-5-9-10 (14)
	S-5	SS	24	24			8-8-6-6 (14)
10						-10	
15	S-6	SS	18	18	(SC) CLAYEY FINE SAND, contains significant shell fragments, saturated, loose	-15	4-3-5 (8)
	S-7	SS	18	18			1-3-3 (6)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC
LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT % [FINES CONTENT] % (10 20 30 40 50)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

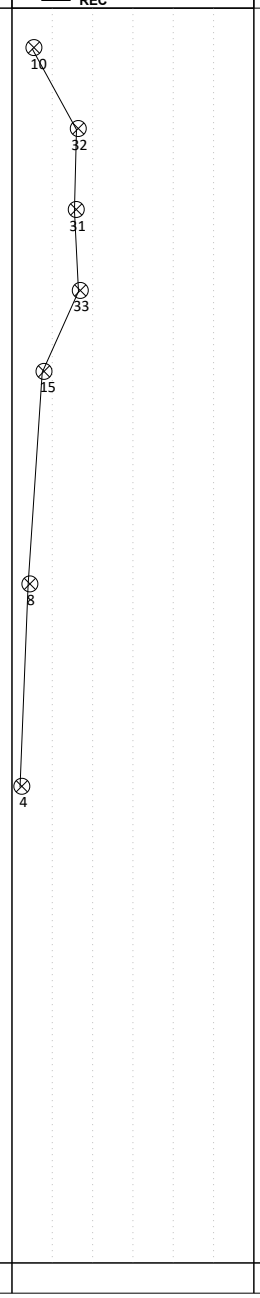
WL (First Encountered) **5.00**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:	
WL (Completion)	BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water) **3.00**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)			

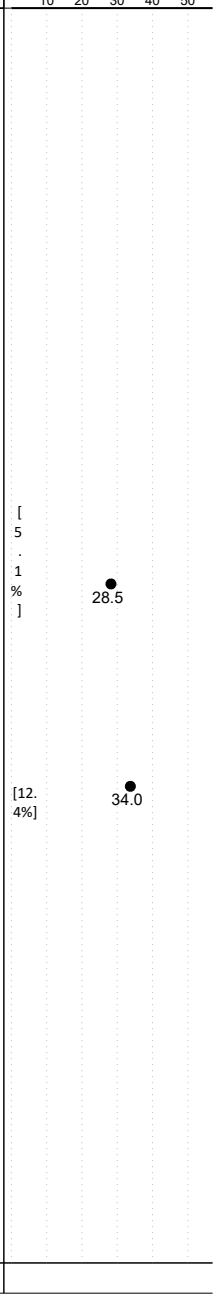
GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**B-23**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100146.8**	EASTING: **3069585.0**	STATION:	SURFACE ELEVATION:
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC) CLAYEY FINE SAND, gray, moist, medium dense	0	1-3-7-7 (10)
	S-2	SS	24	24	(SP-SC) CEMENTED FINE SAND WITH CLAY AND SHELLS, gray, moist to saturated, dense		7-5-27-30 (32)
5	S-3	SS	24	24		-5	15-15-16-21 (31)
	S-4	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains shell fragments, gray, saturated, loose to dense		15-17-16-16 (33)
	S-5	SS	24	24			8-7-8-8 (15)
10						-10	
	S-6	SS	18	18			4-4-4 (8)
15						-15	
	S-7	SS	18	18			1-1-3 (4)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	





THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**5.00**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**
▼ WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
▽ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**P-01**	**1 of 1**

PROJECT NAME:	DRILLER/CONTRACTOR:
Vineyards of Holly Hill	**ECS**

SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**

LOSS OF CIRCULATION

NORTHING:	EASTING:	STATION:	SURFACE ELEVATION:
100557.2	**3069639.4**		

BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC PROBABLE FILL) CLAYEY FINE SAND, contains roots, moist, medium dense		0	1-5-7-8 (12)
	S-2	SS	24	24	(SC) CEMENTED CLAYEY FINE SAND, gray and brown, moist to wet, medium dense to dense	▼		9-13-18-19 (31)
5	S-3	SS	24	24	(SC) CLAYEY FINE SAND, with shells, gray and brown, wet to saturated, very loose to medium dense	▽	-5	7-6-4-2 (10)
	S-4	SS	24	24				1-1-1-2 (2)
	S-5	SS	24	24				7-11-9-9 (20)
10							-10	
	S-6	SS	18	18				4-4-6 (10)
15							-15	
	S-7	SS	18	18				2-3-4 (7)
20					**END OF BORING AT 20 FT**		-20	
25							-25	
30							-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)

ROCK QUALITY DESIGNATION & RECOVERY — RQD — REC

LIQUID LIMIT △ PLASTIC LIMIT ×

CALIBRATED PENETROMETER TS (1 2 3 4 5)

WATER CONTENT % ● [FINES CONTENT] % (10 20 30 40 50)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**5.00**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**
▼▽ WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
⊻ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**P-02**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100638.4**	EASTING: **3069791.0**	STATION:	SURFACE ELEVATION:
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC) CLAYEY FINE SAND, contains shell fragments, gray, moist, medium dense		0	4-10-11-11 (21)
	S-2	SS	18	18	(SP) CEMENTED FINE SAND AND SHELLS, brown, moist, very dense	▼		30-45-50 (95)
5	S-3	SS	24	24	(SC) CLAYEY FINE SAND, gray, wet to saturated, very loose to dense	▽	-5	8-8-7-10 (15)
	S-4	SS	24	24				11-17-25-27 (42)
	S-5	SS	24	24				13-13-13-12 (26)
10							-10	
	S-6	SS	18	18				6-8-7 (15)
15							-15	
	S-7	SS	18	18				2-1-1 (2)
20					**END OF BORING AT 20 FT**		-20	
25							-25	
30							-30	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC
21, 95, 15, 42, 26, 15, 2

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT %
[FINES CONTENT] % (10 20 30 40 50)
[41.6%]
41.5

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**5.00**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:	
▼ WL (Completion)		BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**	
▼▽ WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
▽▽ WL (Stabilized)				

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**P-03**	**1 of 1**

PROJECT NAME:	DRILLER/CONTRACTOR:
Vineyards of Holly Hill	**ECS**

SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**

LOSS OF CIRCULATION

NORTHING:	EASTING:	STATION:	SURFACE ELEVATION:
100778.1	**3070071.0**		

BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC PROBABLE FILL) CLAYEY FINE SAND, with Coquina gravels and Coquina cobbles/boulder, gray, moist, dense	0	5-6-30-11 (36)
	S-2	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains shell fragments, gray, moist to saturated, medium dense		5-7-8-10 (15)
5	S-3	SS	24	24		-5	10-12-15-17 (27)
	S-4	SS	24	24			10-8-4-3 (12)
	S-5	SS	24	24			11-14-15-15 (29)
10						-10	
15	S-6	SS	18	18		-15	6-10-9 (19)
	S-7	SS	18	18	(SC) CLAYEY FINE SAND, gray, saturated, loose		2-2-2 (4)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

WATER LEVELS

STANDARD PENETRATION BLOWS/FT
20 40 60 80 100
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS
1 2 3 4 5
WATER CONTENT %
[FINES CONTENT] %
10 20 30 40 50

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	**6.00**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:	
WL (Completion)		BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water)	**4.00**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)				

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**P-04**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION:			LOSS OF CIRCULATION
649 6th Street, Holly Hill, Florida 32174			
NORTHING:	EASTING:	STATION:	SURFACE ELEVATION:
100636.3	**3070112.9**		BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC) CLAYEY FINE SAND, gray, moist, medium dense	0	3-6-6-4 (12)
	S-2	SS	24	24	(SC) CEMENTED CLAYEY FINE SAND, gray, moist, dense		15-29-14-11 (43)
5	S-3	SS	24	24	(SP-SC) FINE SAND WITH CLAY, with significant shells, gray, moist to saturated, medium dense to dense	-5	6-8-9-11 (17)
	S-4	SS	24	24			6-6-7-12 (13)
	S-5	SS	24	24			12-15-20-21 (35)
10						-10	
	S-6	SS	18	18			7-9-9 (18)
15						-15	
	S-7	SS	18	18	(SC) CLAYEY FINE SAND, gray, saturated, very loose		1-1-2 (3)
20					**END OF BORING AT 20 FT**	-20	
25						-25	
30						-30	

WATER LEVELS

STANDARD PENETRATION BLOWS/FT
20 40 60 80 100
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS
1 2 3 4 5
WATER CONTENT %
[FINES CONTENT] %
10 20 30 40 50
[27.5%]
35.7

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

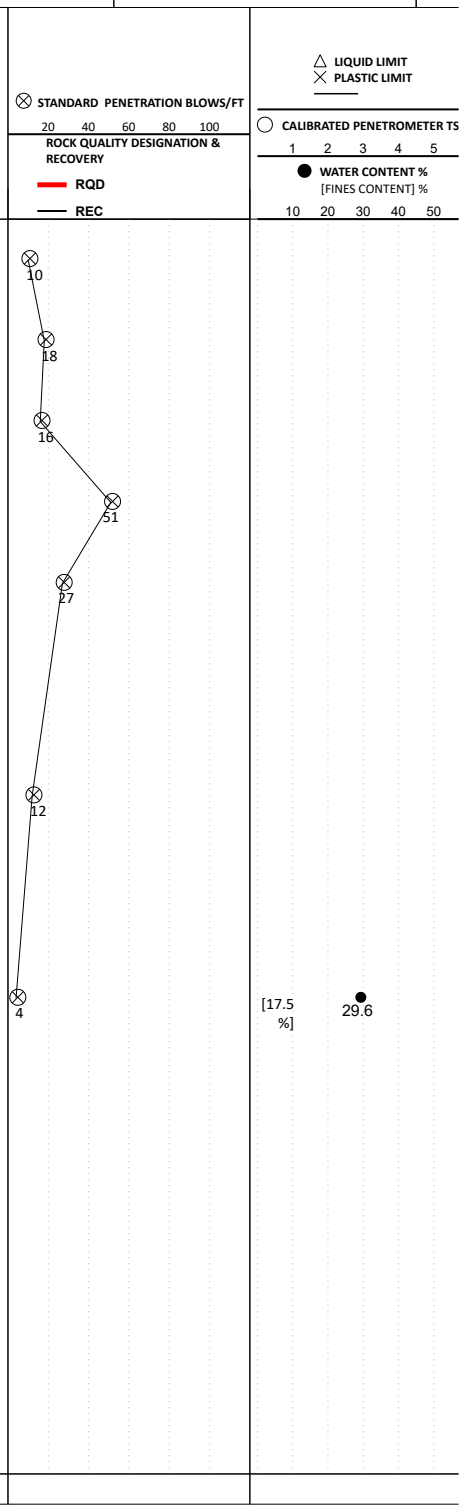
WL (First Encountered) **5.50**	BORING STARTED: **Jun 29 2022**	CAVE IN DEPTH:	
WL (Completion)	BORING COMPLETED: **Jun 29 2022**	HAMMER TYPE: **Manual - Safety**	
WL (Seasonal High Water) **3.50**	EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:
WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**P-05**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100499.4**	EASTING: **3069814.0**	STATION:	SURFACE ELEVATION:
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC PROBABLE FILL) CLAYEY FINE SAND, gray, moist, loose		0	3-4-6-6 (10)
	S-2	SS	24	24	(SC) CLAYEY FINE SAND, gray, moist to saturated, medium dense	▼		12-11-7-6 (18)
5	S-3	SS	24	24		▽	-5	5-5-11-15 (16)
	S-4	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains significant shell fragments, gray, saturated, medium dense to very dense			17-25-26-25 (51)
	S-5	SS	24	24				12-15-12-11 (27)
10							-10	
	S-6	SS	18	18				6-5-7 (12)
15							-15	
	S-7	SS	18	18	(SC) CLAYEY FINE SAND, gray, saturated, loose			3-2-2 (4)
20					**END OF BORING AT 20 FT**		-20	
25							-25	
30							-30	



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

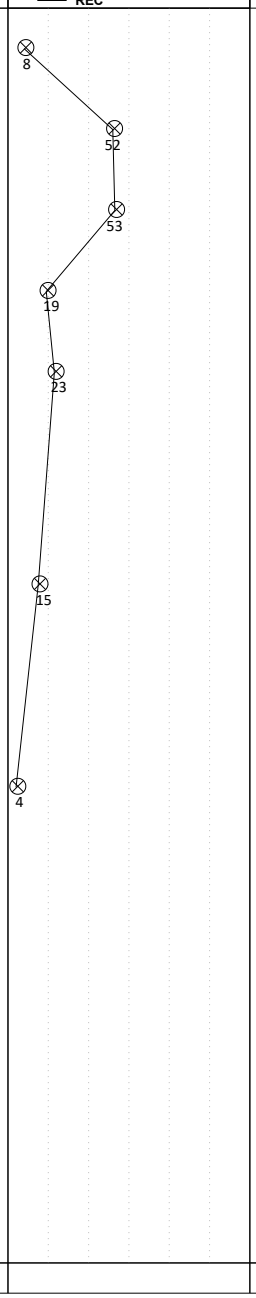
▽ WL (First Encountered)	**5.00**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**
▼▽ WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
⊻ WL (Stabilized)			

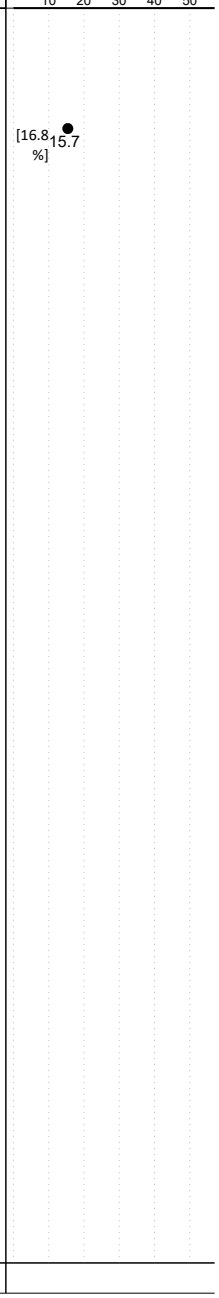
GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**P-06**	**1 of 1**
PROJECT NAME:	DRILLER/CONTRACTOR:		
Vineyards of Holly Hill	**ECS**		
SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**			LOSS OF CIRCULATION
NORTHING: **100251.5**	EASTING: **3069895.2**	STATION:	SURFACE ELEVATION:
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC PROBABLE FILL) CLAYEY FINE SAND, gray, dry to moist, loose		0	3-4-4-6 (8)
	S-2	SS	24	24	(SC) CEMENTED CLAYEY FINE SAND, gray, moist to saturated, very dense	▼		16-25-27-30 (52)
5	S-3	SS	24	24		▽	-5	24-26-27-30 (53)
	S-4	SS	24	24	(SP-SC) FINE SAND WITH CLAY, contains shell fragments, gray, saturated, medium dense			15-9-10-10 (19)
	S-5	SS	24	24				9-10-13-15 (23)
10							-10	
	S-6	SS	18	18				8-8-7 (15)
15							-15	
	S-7	SS	18	18	(SC) CLAYEY FINE SAND, contains shell fragments, gray, saturated, very loose			1-1-3 (4)
20					**END OF BORING AT 20 FT**		-20	
25							-25	
30							-30	





THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**5.00**	BORING STARTED: **Jun 28 2022**	CAVE IN DEPTH:
▼ WL (Completion)		BORING COMPLETED: **Jun 28 2022**	HAMMER TYPE: **Manual - Safety**
▼▽ WL (Seasonal High Water)	**3.00**	EQUIPMENT: **Track** / LOGGED BY:	DRILLING METHOD:
⧩ WL (Stabilized)			

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	BORING NO.:	SHEET:
Ridge Development Group	**56:1590**	**P-07**	**1 of 1**

PROJECT NAME:	DRILLER/CONTRACTOR:
Vineyards of Holly Hill	**ECS**

SITE LOCATION: **649 6th Street, Holly Hill, Florida 32174**

LOSS OF CIRCULATION

NORTHING:	EASTING:	STATION:	SURFACE ELEVATION:
100048.6	**3070000.6**		**2.00**

BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6"
0	S-1	SS	24	24	(SC) CLAYEY FINE SAND, gray, moist, medium dense		2	5-10-6-12 (16)
	S-2	SS	24	24	(SP-SC) CEMENTED FINE SAND WITH CLAY, contains shell fragments, gray, moist to saturated, medium dense	▼		15-15-11-13 (26)
5	S-3	SS	24	24	(SP-SC) FINE SAND WITH CLAY, with shells, gray, wet to saturated, medium dense	▽	-3	9-10-4-7 (14)
	S-4	SS	24	24				7-7-8-9 (15)
	S-5	SS	24	24				9-15-11-10 (26)
10							-8	
	S-6	SS	18	18				7-8-8 (16)
15							-13	
	S-7	SS	18	18	(SC) CLAYEY FINE SAND, contains significant shell fragments, gray, saturated, loose			3-1-2 (3)
20					**END OF BORING AT 20 FT**		-18	
25							-23	
30							-28	

STANDARD PENETRATION BLOWS/FT (20 40 60 80 100)
ROCK QUALITY DESIGNATION & RECOVERY
RQD
REC

LIQUID LIMIT
PLASTIC LIMIT
CALIBRATED PENETROMETER TS (1 2 3 4 5)
WATER CONTENT %
[FINES CONTENT] % (10 20 30 40 50)

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL (First Encountered)	**4.50**
▼ WL (Completion)	
▽ WL (Seasonal High Water)	**2.50**
▽ WL (Stabilized)	

BORING STARTED: **Jun 28 2022**		CAVE IN DEPTH:
BORING COMPLETED: **Jun 28 2022**		HAMMER TYPE: **Manual - Safety**
EQUIPMENT: **Track**	LOGGED BY:	DRILLING METHOD:

GEOTECHNICAL BOREHOLE LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-01**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **100725.0**	EASTING: **3069612.0**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SP PROBABLE FILL) FINE SAND with Coquina gravels, trace shells, some to many roots, brown, moist			S-1		
						S-2		
			AUGER REFUSAL AT 3.5 FT					
5		-5						
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered)	▼ WL (Seasonal High)	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jun 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-02**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **100632.9**	EASTING: **3069664.5**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SP PROBABLE FILL) FINE SAND, with roots, trace Coquina gravels, brown, dry to moist			S-1		
						S-2		
			AUGER REFUSAL AT 2.5 FT					
5		-5						
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered)	▼ WL (Seasonal High)	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jun 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-03**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **100495.6**	EASTING: **3069406.7**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SP-SM PROBABLE FILL) FINE SAND WITH SILT, with wood fragments, Coquina gravels, few organics, dark brown, moist			S-1		
						S-2		
			AUGER REFUSAL AT 1.5 FT					
5		-5						
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered)	▼ WL (Seasonal High)	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jun 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-04**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **100397.0**	EASTING: **3069524.4**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SP-SM PROBABLE FILL) FINE SAND WITH SILT, few roots, with PVC pipe fragment, brown, moist			S-1		
						S-2		
			AUGER REFUSAL AT 2.5 FT					
5		-5						
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered)	▼ WL (Seasonal High)	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jun 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-05**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **100752.6**	EASTING: **3069905.7**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SP PROBABLE FILL) FINE SAND, dark gray-brown, some roots, dry to moist			S-1		
						S-2		
			(SP-SC) FINE SAND WITH CLAY, with Coquina gravels, dark gray-brown, dry to moist					
5	▽	-5						
			AUGER REFUSAL AT 6 FT					
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered) **5.00**	▼ WL (Seasonal High) **3.00**	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jun 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-06**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **100828.1**	EASTING: **3070036.9**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SC PROBABLE FILL) CLAYEY FINE SAND, few organics, dark gray-brown, dry to moist			S-1		
						S-2	22	12.3
	▼		(SC) CLAYEY FINE SAND, contains Coquina gravels, gray, moist to saturated			S-3	33	13.5
5	▽	-5						
			AUGER REFUSAL AT 6 FT					
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered) **5.00**	▼ WL (Seasonal High) **3.00**	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jun 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-07**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **100450.2**	EASTING: **3070043.2**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SC PROBABLE FILL) CLAYEY FINE SAND, contains roots, with Coquina gravels, dry to moist, dark gray-brown			S-1	26	10.5
	▼		(SP-SC) SAND WITH CLAY, with Coquina gravels, gray, moist to saturated,			S-2		
5	▽	-5						
			END OF HAND AUGER AT 6 FT					
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered) **4.00**	▼ WL (Seasonal High) **2.00**	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jul 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-08**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **100123.4**	EASTING: **3070220.9**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SP PROBABLE FILL) FINE SAND, with roots and Coquina gravels, some to many organics, dark brown, dry to moist			S-1		
			AUGER REFUSAL AT 2 FT					
5		-5						
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered)	▼ WL (Seasonal High)	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jun 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-09**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **100334.8**	EASTING: **3069832.7**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SC PROBABLE FILL) CLAYEY FINE SAND, with significant roots, dark brown, moist			S-1	15	17.4
						S-2	33	8.3
			(SC) CLAYEY FINE SAND, contains Coquina gravels and shell fragments, dary gray-brown, moist			S-3	32	11.8
			AUGER REFUSAL AT 2.5 FT					
5		-5						
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered)	▼ WL (Seasonal High)	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jun 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-10**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **100219.5**	EASTING: **3069625.6**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SC PROBABLE FILL) CLAYEY FINE SAND, with Coquina gravels, grey, moist			S-1	28	23.8
						S-2		
			AUGER REFUSAL AT 2.5 FT					
5		-5						
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered)	▼ WL (Seasonal High)	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jun 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

CLIENT:	PROJECT NO.:	SHEET:
Ridge Development Group	**56:1590**	**1 of 1**
PROJECT NAME:	HAND AUGER NO.:	SURFACE ELEVATION:
Vineyards of Holly Hill	**A-11**	
SITE LOCATION:		STATION:
649 6th Street, Holly Hill, Florida 32174		
NORTHING: **99915.2**	EASTING: **3069814.6**	

DEPTH (FT)	WATER LEVELS	ELEVATION (FT)	DESCRIPTION OF MATERIAL	EXCAVATION EFFORT	DCP	SAMPLE NUMBER	FINES CONTENT (%)	MOISTURE CONTENT (%)
			(SP-SM PROBABLE FILL) FINE SAND WITH SILT, few organics, dark gray-brown, moist			S-1		
			AUGER REFUSAL AT 3.5 FT					
5		-5						
10		-10						
15								

REMARKS:

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDRY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

EXCAVATION EFFORT: E - EASY M - MEDIUM D - DIFFICULT VD - VERY DIFFICULT

▽ WL (First Encountered)	▼ WL (Seasonal High)	ECS REP:	DATE COMPLETED:	UNITS:	CAVE-IN-DEPTH
▼ WL (Completion)			**Jun 28 2022**	**English**	

HAND AUGER LOG

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

APPENDIX C – Laboratory Testing

Laboratory Testing Summary

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

Laboratory Testing Summary

Sample Source	Sample Number	Start Depth (feet)	End Depth (feet)	Sample Distance (feet)	MC[1] (%)	Soil Type[2]	Atterberg Limits[3]			Percent Passing No. 200 Sieve[4]	Moisture - Density (Corr.)[5]		CBR Value[6]	Organic Content
							LL	PL	PI		Maximum Density (pcf)	Optimum Moisture (%)		
A-06	S-2	1.2	1.5	0.3	12.3	SC				21.8				
A-06	S-3	1.5	3.0	1.5	13.5	SC				33.0				
A-07	S-1	0.0	1.0	1.0	10.5	SC				26.1				
A-09	S-1	0.0	0.5	0.5	17.4	SC				14.7				
A-09	S-3	2.0	2.5	0.5	8.3	SC				32.6				
A-09	S-2	0.5	2.0	2.0	11.8	SC				31.5				
A-10	S-2	0.3	2.5	2.2	23.8	SC				27.8				
B-01	S-3	4.0	6.0	2.0	25.0	SC				17.3				
B-02	S-1	0.0	2.0	2.0	13.2	SC				21.9				
B-03	S-7	18.5	20.0	1.5	33.4	SC				16.6				
B-04	S-2	2.0	4.0	2.0	12.1	SC				16.7				
B-04	S-7	18.5	20.0	1.5	27.8	SC				12.0				
B-05	S-7	18.5	20.0	1.5	35.3	SC				22.3				
B-07	S-1	0.0	2.0	2.0	16.9	SC				17.7				
B-07	S-2	2.0	4.0	2.0	21.3	SC				24.5				
B-07	S-7	18.5	20.0	1.5	37.8	SC				25.9				
B-08	S-4	6.0	8.0	2.0	21.8	SP-SC				6.3				
B-09	S-7	18.5	20.0	1.5	35.6	SC				28.8				

Notes: 1. ASTM D 2216, 2. ASTM D 2487, 3. ASTM D 4318, 4. ASTM D 1140, 5. See test reports for test method, 6. See test reports for test method

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ration, OC: Organic Content (ASTM D 2974)

Project No. 56:1590
Project Name: Vineyards of Holly Hill
PM: Maximilian Kemnitz
PE: David Spangler
Printed On: July 12, 2022

ECS Florida, LLC - Daytona Beach
2330 South Nova Road, Suite A
South Daytona, FL 32119
Phone: 386-944-9588
Fax: 386-944-9589 fax

Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

Laboratory Testing Summary

Sample Source	Sample Number	Start Depth (feet)	End Depth (feet)	Sample Distance (feet)	MC[1] (%)	Soil Type[2]	Atterberg Limits[3]			Percent Passing No. 200 Sieve[4]	Moisture - Density (Corr.)[5]		CBR Value[6]	Organic Content
							LL	PL	PI		Maximum Density (pcf)	Optimum Moisture (%)		
B-10	S-7	18.5	20.0	1.5	51.5	SC				38.3				
B-21	S-7	18.5	20.0	1.5	34.5	SC				14.0				
B-23	S-6	13.5	15.0	1.5	28.5	SP-SC				5.1				
B-23	S-7	18.5	20.0	1.5	34.0	SC				12.4				
P-02	S-7	18.5	20.0	1.5	41.5	SC				41.6				
P-04	S-7	18.5	20.0	1.5	35.7	SC				27.5				
P-05	S-7	18.5	20.0	1.5	29.6	SC				17.5				
P-06	S-2	2.0	4.0	2.0	15.7	SC				16.8				

Notes: 1. ASTM D 2216, 2. ASTM D 2487, 3. ASTM D 4318, 4. ASTM D 1140, 5. See test reports for test method, 6. See test reports for test method

Definitions: MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ration, OC: Organic Content (ASTM D 2974)

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Attachment: Vineyards Geo Report ECS 56 - 1590 (3984 : The Vineyards Subdivision Review (PSP))

ORDINANCE 3055

AN ORDINANCE OF THE CITY OF HOLLY HILL FLORIDA, AMENDING THE COMPREHENSIVE PLAN BY AMENDING THE FUTURE LAND USE MAP DESIGNATION OF CERTAIN PROPERTY IDENTIFIED AS 649 6th STREET HAVING PARCEL NUMBER 4244-01-20-0037 AND 661 6th STREET HAVING PARCEL NUMBER 4244-01-20-0048 AND 659 6th STREET HAVING PARCEL NUMBER 4244-01-20-0045 AND 538 CEDAR AVENUE HAVING PARCEL NUMBER 4244-01-20-0046, BY VIRTUE OF A SMALL SCALE FUTURE LAND USE MAP AMENDMENT; CHANGING THE FUTURE LAND USE MAP DESIGNATION FROM LOW DENSITY SINGLE-FAMILY RESIDENTIAL TO MEDIUM DENSITY RESIDENTIAL; PROVIDING FOR CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Commission of the City of Holly Hill, Volusia County, Florida, has adopted a comprehensive plan pursuant to, and in compliance with 163.3161 et. Seq., Florida Statutes; and

WHEREAS, the City Commission has reviewed the future land use designation for the parcel described in Attachment A and determined that it is necessary to amend its Future Land Use Map as herein provided in order to more effectively implement its adopted comprehensive plan.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF HOLLY HILL, FLORIDA:

SECTION 1. The Future Land Use Map for the City of Holly Hill, is hereby amended to designate the parcels identified as 649 6th Street having parcel number 4244-01-20-0037 and 661 6th Street having parcel number 4244-01-20-0048 and 659 6th Street

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

having parcel number 4244-01-20-0045 and 538 Cedar Avenue having parcel number 4244-01-20-0046 as described in Attachment A, as Medium Density Residential.

SECTION 2. The City Manager is authorized and directed to submit the proposed amendment to the Florida Department of Economic Opportunity and Volusia Growth Management Commission, as required by law.

SECTION 3. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance, or application hereof, is for any reason held invalid or unconstitutional by any Court, such portion or application shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions or application hereof.

SECTION 4. That all ordinances made in conflict with this Ordinance are hereby repealed.

SECTION 5. That this Ordinance shall be posted at City Hall as required by law.

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

SECTION 6. The proposed amendment will not become final until thirty-one (31) days following adoption by the City Commission unless a challenge is filed per 163.3187(5) Fla. Stat. If a timely challenge is filed, the amendment will not become effective until the State Land Planning Agency issues a final order determining that the amendment is in compliance. In any event, the amendment shall not become effective until certification of consistency is provided by the Volusia Growth Management Commission and approval is noticed by the Florida Department of Economic Opportunity.

APPROVED AND AUTHENTICATED on this 27th day of SEPTEMBER, 2022 for second and final reading.

Chris Via, Mayor 9/27/2022

Valerie Manning, City Clerk,CMC 9/27/2022

RESULT:	**ADOPTED AT 2ND READING [4 TO 1]**
MOVER:	John Penny, District 1 - Commissioner
SECONDER:	Penny Currie, District 2 - Commissioner
AYES:	Penny, Currie, Danio, Johnson
NAYS:	Via

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

ATTACHMENT "A"

LEGAL DESCRIPTION:

LOTS 1, 2 AND 3, BLOCK 20, MASON AND CARSWELL SUBDIVISION, AS RECORDED IN MAP BOOK 2, PAGE 90, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, EXCEPTING THE SOUTHERLY 20 FEET USED FOR DRAINAGE, BEING ALSO DESCRIBED AS BLOCKS 13, 14, 15, 16 AND 17, HOME ACRES SUBDIVISION, AS RECORDED IN MAP BOOK 11, PAGE 64, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, EXCEPTING THEREFROM ALL OF SAID BLOCK 16 OF SAID HOME ACRES SUBDIVISON, AND EXCEPTING THEREFROM THAT PORTION OF SAID TRACT LYING EASTERLY OF A NORTH-SOUTH DRAINAGE DITCH WHICH LIES EASTERLY OF THE PRESENT HOUSE AS LOCATED AND KNOWN AS THE WILSON RESIDENCE. THE EXCEPTIONS MENTIONED AS LYING EASTERLY OF SAID DRAINAGE ARE THOSE FOUR (4) PARCELS DEEDED TO WOFF, HAYES, AND MOSTERT, AND RECORDED IN DEED BOOK 326, AT PAGES 381 AND 383, AND IN DEED BOOK 354 AT PAGE 426, AND IN DEED BOOK 360 AT PAGE 270, ALL IN THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA. THE DITCH AS DESCRIBED EXTENDS SOUTHERLY FROM 6TH STREET TO THE EAST-WEST DRAINAGE CANAL AT THE SOUTH END OF THIS ENTIRE TRACT AFOREMENTIONED. THIS DESCRIPTION AND TRANSFER IS ALSO SUBJECT TO A 40 FOOT RIGHT-OF- WAY FROM SIXTH STREET EXTENDING SOUTHERLY TO THE SOUTH LINE OF SAID BLOCK 16 OF SAID HOME ACRES SUBDIVISION, SHOWN AS "CEDAR STREET", SAID RIGHT-OF-WAY IS FOR INGRESS AND EGRESS, AND DESCRIBED IN DEED FROM WILSON TO WRENN, AS RECORDED IN OFFICIAL RECORDS BOOK 27, PAGE 537, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

SAID LAND LYING IN VOLUSIA COUNTY, FLORIDA AND CONTAINS 620,675 SQUARE FEET (14.249 ACRES), MORE OR LESS.

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

ORDINANCE 3056

ORDINANCE OF THE CITY OF HOLLY HILL, FLORIDA, AMENDING THE LAND DEVELOPMENT REGULATIONS, BY AMENDING THE OFFICIAL ZONING MAP TO DESIGNATE THE PROPERTY DESCRIBED IN EXHIBIT A FROM APUD (AGRICULTURE PLANNED UNIT DEVELOPMENT) AND R-2 (LOW-MEDIUM DENSITY SINGLE-FAMILY RESIDENTIAL) TO RPUD (RESIDENTIAL PLANNED UNIT DEVELOPMENT); PROVIDING FOR CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Commission of the City of Holly Hill, Volusia County, Florida, has adopted a comprehensive plan pursuant to, and in compliance with 163.3161 et. Seq., Florida Statutes; and

WHEREAS, the City Commission, as authorized by 163.3202, Florida Statutes, has enacted and does enforce the Land Development Regulations, based on, related to, and as a means to implement its adopted comprehensive plan; and

WHEREAS, the City Commission has determined that it is necessary to amend its Land Development Regulations as herein provided in order to more effectively implement its adopted comprehensive plan, and

WHEREAS, the City Commission has determined that the proposed amendment to the Land Development Regulations is consistent with its adopted comprehensive plan.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF HOLLY HILL, FLORIDA:

SECTION 1. The Official Zoning Map of the City of Holly Hill is hereby amended to designate the property described in Attachment A as RPUD (Residential Planned Unit Development) pursuant to the provisions contained in the attached Development

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

Agreement, attached to this Ordinance as Attachment B and incorporated in this Ordinance by reference.

SECTION 2. Development of the property described in Attachment A shall conform to the Land Development Regulations of Holly Hill.

SECTION 3. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance, or application hereof, is for any reason held invalid or unconstitutional by any Court, such portion or application shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions or application hereof.

SECTION 4. That all ordinances made in conflict with this Ordinance are hereby repealed.

SECTION 5. That this Ordinance shall be posted at City Hall as required by law.

SECTION 6. This ordinance shall become effective following approval of the future land use map amendment by the Florida Department of Economic Opportunity and certification of the same amendment by the Volusia Growth Management Commission.

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

APPROVED AND AUTHENTICATED on this 27th day of SEPTEMBER, 2022 for second and final reading.

Chris Via, Mayor 9/27/2022

Valerie Manning, City Clerk,CMC 9/27/2022

RESULT:	**ADOPTED AT 2ND READING [4 TO 1]**
MOVER:	Roy Johnson, District 4 - Commissioner
SECONDER:	John Danio, District 3 - Commissioner
AYES:	Johnson, Danio, Penny, Currie, Via

ATTACHMENT "A"

LEGAL DESCRIPTION:

LOTS 1, 2 AND 3, BLOCK 20, MASON AND CARSWELL SUBDIVISION, AS RECORDED IN MAP BOOK 2, PAGE 90, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, EXCEPTING THE SOUTHERLY 20 FEET USED FOR DRAINAGE, BEING ALSO DESCRIBED AS BLOCKS 13, 14, 15, 16 AND 17, HOME ACRES SUBDIVISION, AS RECORDED IN MAP BOOK 11, PAGE 64, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA, EXCEPTING THEREFROM ALL OF SAID BLOCK 16 OF SAID HOME ACRES SUBDIVISON, AND EXCEPTING THEREFROM THAT PORTION OF SAID TRACT LYING EASTERLY OF A NORTH-SOUTH DRAINAGE DITCH WHICH LIES EASTERLY OF THE PRESENT HOUSE AS LOCATED AND KNOWN AS THE WILSON RESIDENCE. THE EXCEPTIONS MENTIONED AS LYING EASTERLY OF SAID DRAINAGE ARE THOSE FOUR (4) PARCELS DEEDED TO WOFF, HAYES, AND MOSTERT, AND RECORDED IN DEED BOOK 326, AT PAGES 381 AND 383, AND IN DEED BOOK 354 AT PAGE 426, AND IN DEED BOOK 360 AT PAGE 270, ALL IN THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA. THE DITCH AS DESCRIBED EXTENDS SOUTHERLY FROM 6TH STREET TO THE EAST-WEST DRAINAGE CANAL AT THE SOUTH END OF

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

THIS ENTIRE TRACT AFOREMENTIONED. THIS DESCRIPTION AND TRANSFER IS ALSO SUBJECT TO A 40 FOOT RIGHT-OF- WAY FROM SIXTH STREET EXTENDING SOUTHERLY TO THE SOUTH LINE OF SAID BLOCK 16 OF SAID HOME ACRES SUBDIVISION, SHOWN AS "CEDAR STREET", SAID RIGHT-OF-WAY IS FOR INGRESS AND EGRESS, AND DESCRIBED IN DEED FROM WILSON TO WRENN, AS RECORDED IN OFFICIAL RECORDS BOOK 27, PAGE 537, PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.

SAID LAND LYING IN VOLUSIA COUNTY, FLORIDA AND CONTAINS 620,675 SQUARE FEET (14.249 ACRES), MORE OR LESS.

ATTACHMENT "B"

DEVELOPMENT AGREEMENT

Exhibit to Ordinance No. _____

DEVELOPMENT AGREEMENT for the project known as The Vineyards Residential Planned Unit Development (RPUD) located at 649 6th Street, Holly Hill, Florida 32117 (hereinafter referred to as the "Subject Property").

THIS DEVELOPMENT AGREEMENT (hereinafter referred to as the "Agreement") is entered into and made as of the ___ day of _____, 2022, by and between the CITY OF HOLLY HILL, a Florida municipal corporation, with a mailing address of 1065 Ridgewood Ave. Holly Hill, FL 32117 (hereinafter referred to as the "City"), and The Vineyards Townhomes, LLC, a Florida limited liability company, (hereinafter referred to as the "Owner/Developer").

W I T N E S S E T H

WHEREAS, the Owner/Developer warrants that it holds legal title to the lands located in Volusia County, Florida, and within the corporate limits of the City of Holly Hill, said lands being more particularly described in **Exhibit "A"**, Legal Description for the Subject Property, attached hereto and by this reference made a part hereof; and that the holders of any and all liens and encumbrances affecting such property will subordinate their interests to this Agreement; and

WHEREAS, the Owner/Developer has clear title to, or contract to purchase, the Subject Property, and intends to develop such property as The Vineyards Townhomes; and

WHEREAS the Owner/Developer desires to facilitate the orderly development of the Subject Property in compliance with the laws and regulations of the City and of other governmental authorities, and the Owner/Developer desires to ensure that its development is compatible with other properties in the area and planned traffic patterns; and

WHEREAS the development permitted or proposed under this Development Agreement is consistent with the City's Comprehensive Plan, concurrency management system, and all land

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

development regulations; and

WHEREAS it is the purpose of this Agreement to clearly set forth the understanding and agreement of the parties concerning the matters contained herein; and

WHEREAS the Owner/Developer has sought the City's approval to develop the Subject Property, and the City approved **Ordinance No**._____, through rezoning the Subject Property to a form of Planned Unit Development (PUD), as defined under the City's Land Development Code. The PUD shall consist of this Agreement as the Written Agreement of the RPUD and an **Exhibit "B"**, attached hereto as the Preliminary Plan, subject to the covenants, restrictions, and easements offered by the Owner/Developer and contained herein, (hereinafter the "Master Development Plan"). Where more detailed criteria for City required submittals exceed the criteria required for a Master Development Plan, the more detailed criteria apply.

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. Recitals and Definitions. The recitals herein contained are true and correct and are incorporated herein by reference. All capitalized terms not otherwise defined herein shall be as defined or described in the City's Land Development Code as it may be amended from time to time, unless otherwise indicated.

2. Ownership. The legal and equitable owners of the Subject Property are: The Vineyards Townhomes, LLC, a Florida limited liability company.

3. **Title Opinion/Certification.** The Owner/Developer will provide to the City, in advance of the City's execution and recordation of this Agreement, a title opinion from a licensed attorney in the state of Florida, or a certification by an abstractor or title company authorized to do business in the state of Florida, verifying marketable title to the Subject Property to be in the name of the Owner/Developer and any and all liens, mortgages, and other encumbrances that are either satisfied or not satisfied or released of record.

4. **Subordination/Joinder.** Unless otherwise agreed to by the City and if applicable, all liens, mortgages, and other encumbrances that are not satisfied or released of record, must be subordinated to the terms of this Agreement or the Lienholder join in this Agreement. It shall be the responsibility of the Owner/Developer to promptly obtain the said subordination or joinder, in form and substance that is acceptable to the City Attorney, prior to the execution and recordation of this Agreement.

5. **Duration.** The duration of this Agreement is binding and runs with the land in perpetuity, unless amended.

6. **Development of the Subject Property**. Development of the Subject Property shall be subject to performance standards listed in this Agreement. Where a land use listed below differs from a defined use in the City of Holly Hill's Code of Ordinances, the use listed in this

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

Agreement shall prevail.

A. Permitted principal uses allowable on the Subject Property:
1. Residential Townhomes

B. Proposed maximum density (in number of dwelling units per net acre): 14 dwelling units per net acre.

C. Required Open Space is 35 percent.

D. Required Common Open Space is 25 percent.

E. Open Space Provided: 57.2% and includes all green space and ponds

F. Common Open Space Provided: 31.7%.

G. Minimum landscaping and buffer-yard requirements are as shown and stated on the Preliminary Plan.

H. Minimum lot size area (in square feet): 1,800 square feet

I. Minimum townhome floor area: 1060 square feet

J. Minimum lot width (in feet): 20 feet

K. Minimum Building Separation: 20 feet

L. Minimum yard setbacks:
1. Front yard: 25 feet
2. Side yard: 0 feet
3. Street side yard: 10 feet
4. Rear yard: 10 feet

M. Maximum building height (in feet): 30 feet

N. Minimum parking standards are as shown and stated on the Preliminary Plan.

O. Lighting shall not exceed .5-foot candles at the property line.

P. Emergency Access: Emergency access to be provided on Cavanah Drive.

Q. Architectural controls and development on the Subject Property shall follow a common architectural theme as listed in this Agreement by harmoniously coordinating the general appearance of all buildings and accessory structures. All controls and variations shall be defined by a Homeowners Association, as defined within this Agreement.

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

R. Utility provision and dedication: The Owner/Developer shall connect to the City of Holly Hill's central utility systems, when available, or to Volusia County's central utility systems, where applicable, at their sole cost and expense. Utility fees shall be paid to City of Holly Hill Water or Volusia County, respectively, before any building permit is issued.

S. Stormwater and environmental: Per parcel stormwater systems or master stormwater systems shall be owned and maintained by an established Homeowners Association and shall not be dedicated to or become the responsibility of the City of Holly Hill. All environmental permitting, mitigation, and/or soil and erosion control for the property shall conform to all federal, state, and local permits/requirements, shall be the sole responsibility of the Homeowners Association, and shall be maintained in good condition/standing with the applicable permitting authorities. Best Management Practices and conformance to National Pollutant Discharge Elimination System (NPDES) criteria are required.

T. Transportation, site access, and traffic devices: The Owner/Developer is responsible for all transportation improvements within the Subject Property and any off-site transportation requirements, because of the proposed development, for site function, which maintains or improves the level of service for area roadways, and ensures the public health, safety, and welfare for the community. All permits shall be obtained from appropriate permitting agencies prior to development and the City shall determine the appropriate level of service per the City Comprehensive Plan and current traffic counts.

7. **Public Facilities/Land Dedication.** Facilities or tracts that either are or shall become public facilities/tracts that will serve the development and/or are on the Subject Property are, as follows**:** None.

8. **Development Permits/Fees.** The Owner/Developer is responsible for obtaining, permitting, and the payment of all fees for facilities and services for the Subject Property. Any site permits shall be kept current with the respective permitting agency and shall ensure the protection of the public health, safety, and welfare of the community and the development. All impact fees are applicable, and no impact fee credits shall be awarded through this Agreement; unless a cessation exists through a City moratorium that is Citywide. Proportionate fair share site improvements shall not be used in lieu of impact fees.

9. **Obligations.** Should the Owner/Developer fail to undertake and complete its obligations as described in this Agreement to the City's specifications, then the City shall give the Owner/Developer thirty (30) days written notice to commence and ninety (90) days to complete said required obligation. If the Owner/Developer fails to complete the obligations within the ninety (90) day period, then the City, without further notice to the Owner/Developer, or its successors in interest, may, without prejudice to any other rights or remedies it may have, place liens and take enforcement action on the Subject Property. A lien of such assessments shall be superior to all others, and all existing lienholders and mortgagees, by their execution of

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

the subordination or joinder documents, agree to subordinate their liens or mortgages to the City's said liens or assessments. Notice to the Owner/Developer and its successors in interest shall be deemed to have been given upon the mailing of notice to the address or addresses set forth in Paragraph (19) hereof.

10. **Site Plan/Plat Approval.** The Master Development Plan, is the Preliminary Plan of the PUD and this Written Development Agreement. The Master Development Plan shall not replace, supersede, or absolve the Owner/Developer from approvals for any site plan, preliminary plat, and/or final plat and their respective regulations. Where more detailed criteria for City required submittals exceed the criteria required for a Master Development Plan, the more detailed criteria apply.

11. **Indemnification.** The Owner/Developer shall indemnify and hold the City harmless from any and against all claims, demands, disputes, damages, costs, expenses, (to include attorneys' fees whether or not litigation is necessary and if necessary, both at trial and on appeal), incurred by the City as a result, directly or indirectly, of the use or development of the Subject Property, except those claims or liabilities caused by or arising from the negligence or intentional acts of the City, or its employees or agents. It is specifically understood that the City is not guaranteeing the appropriateness, efficiency, quality or legality of the use or development of the Subject Property, including but not limited to, drainage or water/sewer plans, fire safety, or quality of construction, whether inspected, approved, or permitted by the City.

12. **Compliance.** The Owner/Developer agrees that it, and their successors and assigns, will abide by the provisions of this Agreement, the City's Comprehensive Plan and the City's Code of Ordinances, including but not limited to, the site plan regulations of the City as amended from time to time, which are incorporated herein by reference and such subsequent amendments hereto as may be applicable. Further, all required improvements, including landscaping, shall be continuously maintained by the Owner/Developer, or their successors and assigns, in accordance with the City's Code of Ordinances. The City may, without prejudice to any other legal or equitable right or remedy it may have, withhold permits, Certificates of Occupancy, or plan/plat approvals to the Subject Property, should the Owner/Developer fail to comply with the terms of this Agreement. In the event of a conflict between this Development Agreement and the City's Land Development Code, the more restrictive regulations shall govern the development of the Subject Property.

13. **Obligations for Improvements.** Any surface improvement as described and required hereunder included, but not limited to such as signalization, walls, stormwater management facilities, medians, and utilities, or any other surface improvement shall be performed, prior to the issuance of the first Certificate of Occupancy on that portion of the Subject Property that the surface improvement(s) relates or is otherwise scheduled in this Agreement. Should the Owner/Developer fail to undertake and complete its obligations as described in this Agreement and to the City's specifications, then the City shall give the Owner/Developer thirty (30) days written notice to commence and ninety (90) days to complete said required obligation at the sole expense of the Owner/Developer. If the Owner/Developer fails to complete the obligations within the ninety (90) day period, then the City, without further notice to the Owner/Developer and their successors and assigns in interest, may but shall not be

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

required to, perform such obligations at the expense of the Owner/Developer or their successors and assigns in interest, without prejudice to any other rights or remedies the City may have under this Agreement. Further, the City is hereby authorized to immediately recover the actual and verified cost of completing the obligations required under this Agreement and any legal fees from the Owner/Developer in an action at law for damages, as well as record a lien against the Subject Property in that amount. The lien of such assessments shall be superior to all others, and all existing lienholders and mortgagees, by their execution of the subordination or joinder documents, agree to subordinate their liens or mortgages to the City's said liens or assessments. Notice to the Owner/Developer and their successors and assigns in interest shall be deemed to have been given upon the mailing of notice as provided **in paragraph (19)** of this Agreement.

14. **Environmental and Tree Preservation.** The Owner/Developer is responsible to obtain all site related permits and approval prior to any development activity on or for the Subject Property. This may involve mitigation for habitat of threatened or endangered flora and fauna or for species identified for proportion (i.e., tree preservation). This Agreement does not vest or exempt the Owner/Developer from any permitting and mitigation obligations needed to develop the Subject Property.

15. **Homeowners Association or Property Owners Association.** The Declaration of Covenants and Restrictions, Articles of Incorporation and by-laws of any Homeowners Association ("HOA") for the Subject Property and any deed restrictions related thereto shall be furnished to the City for approval by the City Attorney prior to the recording thereof in the Public Records of Volusia County, Florida. Such recording shall take place before a Certificate of Occupancy is issued for the first development project on land covered by this Agreement. The HOA shall at a minimum be responsible for maintaining the common open space, any common utility systems, such as for irrigation and site lighting, and project signage. The Owner/Developer shall be responsible for establishing the HOA and recording said information in the Public Records of Volusia County, Florida. The City is not responsible for the enforcement of any agreements or deed restrictions entered into between property owners or occupiers of the Subject Property. If maintenance for the Subject Property is not maintained following issuance of a Certificate of Occupancy, the property / property owner shall be subject to code enforcement.

16. **Enforcement.** Both parties may seek specific performance of this Agreement and/or bring an action for damages in a court within Volusia County, Florida, if either party breaches this Agreement. If enforcement of this Agreement by the City becomes necessary, and the City is successful in such enforcement, the Owner/Developer shall be responsible for the payment of all the City's costs and expenses, including attorney fees, whether or not litigation is necessary and, if necessary, both at trial and on appeal. Such costs, expenses and fees shall also be a lien upon the Subject Property superior to all others. Should this Agreement require the payment of any monies to the City, the recording of this Agreement shall constitute a lien upon the Subject Property for said monies, until said are paid, in addition to such other obligations as this Agreement may impose upon the Subject Property and the Owner/Developer. Interest on unpaid overdue sums shall accrue at the rate of the lesser of eighteen percent (18%) compounded annually or at the maximum rate allowed by law.

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

17. **Utility Easements.** For any easement not established on a plat for the Subject Property, the Owner/Developer shall provide to the City such easements and other legal documentation, in form mutually acceptable to the City Attorney and the Owner/Developer, as the City may deem reasonably necessary or appropriate for the installation and maintenance of the utility and other services, including but not limited to, sanitary sewer, potable water, and reclaimed water services, electric, cable, gas, fire protection and telecommunications.

18. **Periodic Review.** The City reserves the right to review the Subject Property in relation to this Agreement periodically to determine if there has been demonstrated good faith compliance with the terms of this Agreement. If the City finds that based on substantial competent evidence that there has been a failure to comply with the terms of this Agreement, the City may not issue development orders or permits until compliance with this Agreement has been established.

19. **Notices.** Where notice is herein required to be given, it shall be by certified mail return receipt requested, hand delivery or nationally recognized courier, such as Federal Express or UPS. E-mail delivery of documents shall not replace or be in lieu of the aforementioned process. Said notice shall be sent to the following, as applicable:

OWNER/DEVELOPER'S REPRESENTATIVES:

The Vineyards Townhomes, LLC
123 Magnolia Avenue
Daytona Beach, Florida 32114

With copy to:

Storch Law Firm
420 South Nova Road
Daytona Beach, FL 32114

CITY'S REPRESENTATIVES:

City Manager
City of Holly Hill
1065 Ridgewood Avenue
Holly Hill, Florida 32117

With copy to:

Director
Community Development
City of Holly Hill
1065 Ridgewood Avenue
Holly Hill, Florida 32117

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

Should any party identified above change, it shall be said party's obligation to notify the remaining parties of the change in a fashion as is required for notices herein. It shall be the Owner/Developer's obligation to identify its lender(s) to all parties in a fashion as is required for notices herein.

20. **Compliance with the Law.** The failure of this Agreement to address a particular permit, condition, term, or restriction shall not relieve the Owner/Developer of the Subject Property from the necessity of complying with the law governing said permitting requirements, conditions, terms, or restrictions.

21. **Captions.** The captions used herein are for convenience only and shall not be relied upon in construing this Agreement.

22. **Binding Effect.** This Agreement shall run with the land, shall be binding upon and inure to the benefit of the Owner/Developer and their successors and assigns in interest, and the City and their successor and assigns in interest. This Agreement shall become effective upon its execution and recordation with the Public Records of Volusia County, Florida. This Agreement does not, and is not intended to, prevent, or impede the City from exercising its legislative authority as the same may affect the Subject Property.

23. **Subsequently Enacted State or Federal Law.** If either state of federal law is enacted after the effective date of this Agreement that is applicable to and precludes the parties' compliance with the terms of this Agreement, this Agreement and correlating zoning amendment shall be modified or revoked, as is necessary, to comply with the relevant state or federal law.

24. **Severability.** If any part of this Development Agreement is found invalid or unenforceable in any court, such invalidity or unenforceability shall not affect the other parts of this Development Agreement if the rights and obligations of the parties contained herein are not materially prejudiced and if the intentions of the parties can be affected. To that end, this Development Agreement is declared severable.

25. **Covenant Running with the Land.** This Agreement shall run with the Subject Property and inure to and be for the benefit of the parties hereto and their respective successors and assigns and any person, firm, corporation, or entity who may become the successor in interest to the Subject Property or any portion thereof.

26. **Recordation of Agreement.** The parties hereto agree that an executed original of this Agreement shall be recorded by the City, at the Developer's expense, in the Public Records of Volusia County, Florida.

27. **Applicable Law/Venue.** This Agreement and the provisions contained herein shall be construed, controlled, and interpreted according to the laws of the State of Florida. Venue of any litigation relating to this Agreement shall be in the courts of Volusia County, Florida.

28. **Time of the Essence.** Time is hereby declared of the essence to the lawful

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

performance of the duties and obligations contained in this Agreement. The Owner/Developer shall execute this Agreement within ten (10) business days of City Commission adoption and agrees to pay the cost of recording this document in the Public Records of Volusia County, Florida. Failure to execute this Agreement within ten (10) business days of this ordinance adoption may result in the City not issuing development orders or permits until execution and recordation of this Agreement has occurred.

29. **Agreement; Amendment.** This Agreement constitutes the entire agreement between the parties, and supersedes all previous discussions, understandings, and agreements, with respect to the subject matter hereof; provided, however, that it is agreed that this Agreement is supplemental to the City's Comprehensive Plan and does not in any way rescind or modify any provisions of the City's Comprehensive Plan. Amendments to and waivers of the provisions of this Agreement shall be made by the parties only in writing by formal amendment.

30**. Amendments.** Amendments to the MDP shall be subject to the requirements of Section 114-771(g)(4) of the City of Holly Hill Land Development Regulations, which states that minor amendments to the preliminary plan not violating any terms of the written development agreement and not altering the intent and purpose of the MDP may be approved by the Development Code Administrator after such departmental comment as he/she deems appropriate. Minor changes shall be limited to items such as small adjustments to building footprints, allocation of uses within a defined parcel such as retention areas, parking etc. Minor amendments to the preliminary plan not violating any terms of the MDP and not altering the intent and purpose of the MDP may be approved by the Development Code Administrator. Major amendments will require full review and shall include relocation of uses on the site, except as permitted by the MDP, changes to building styles, changes to landscaping requirements, etc. Decisions as to whether modifications are Major or Minor shall be at the sole discretion of the Development Code Administrator.

31. **Effective Date.** The Effective Date of this Agreement shall be the day this Agreement is recorded in the Public Records of Volusia County, Florida.

Attachment: APPROVED - Ordinances 3055 and 3056 (3984 : The Vineyards Subdivision Review (PSP))

HOLLY HILL
FLORIDA

STAFF REPORT
CITY OF HOLLY HILL, FLORIDA

Board of Planning and Appeals
Agenda Item

MEETING DATE:	**January 9, 2023**
FROM:	**Brian Walker**
SUBJECT:	**BOPA Interpretation of Sec. 114-742 LDR**
NUMBER:	**(ID # 3995)**
APPLICANT:	**Edward Quillen**
PLANNER:	**Brian Walker**

Introduction

On January 11th of 2022, MGN Contracting applied on behalf of Carol Woodriff, property owner, to build a 1,872 square foot detached garage with an apartment, at 1235 Powers Ave. The City reviewed the application and denied approval.

Reason for Denial

A garage is an accessory structure on the property and has a size limitation. **Per Sec. 114-742 (2) C. 1 of the Land Development Regulations**, a detached garage may not exceed 50 percent of the total square footage of the principal structure. Per her survey, Ms. Woodriff's home is 2,023 square feet, therefore a detached garage structure can't be more than 1011.5 square feet.

Sometimes, an applicant desires to build a detached garage with an apartment in it. This is the case with Ms. Woodriff. In such a case, the structure is called a garage apartment and is defined in **Sec. 114-746** as: An accessory building containing a storage area for one or more motor vehicles and one dwelling unit. Said dwelling unit shall not have more than 800 square feet of living space……

Sec. 114-742 (2) B. further states that garage apartments are in association with a garage and that the apartment must be on the second floor of the garage. So, a garage apartment is basically a detached garage with an apartment upstairs. The detached garage structure, based on code, cannot exceed 50 percent of **the total square footage of the principal structure,** and if you put an apartment inside of it, the apartment portion can't be more than 800 square feet of living space. However, the total structure still can't exceed 50% of the total square footage of the principal structure.

How the overall square footage is divided up between the garage and the apartment within the 1011.5 square foot garage structure, is up to the applicant. However, in no case can apartment within the garage structure exceed 800 square feet.

Conclusion:

Based on the foregoing, it is staff's conclusion that Ms. Woodriff's detached garage with an apartment, cannot exceed an overall square footage of 1011.5 square feet. Ms. Woodriff is proposing a 1,872 square foot detached garage which is more than 50% the size of the principal

structure. Therefore, staff has not approved Ms. Woodriff's permit request.

Appeal:

Mr. Edward Quillen, who is Ms. Woodriff's husband, has filed an appeal of staff's decision to deny the permit request. The appeal is to the Board of Planning and Appeals, in accordance with **Sec. 82-291** which states: The board of planning and appeals shall hear and decide any appeal, except as to variances and special exceptions and as otherwise provided, where it is alleged there is an error in any order, requirement, decision or determination made by the development code administrator.

After hearing the arguments in this case, the BOPA is requested to make one of the following motions:

Agree with Staff: Motion to agree with staff's interpretation of code Sec. 114-742 (2) C. 1 and Sec. 114-746 and Sec. 114-742 (2) B., as presented, such interpretation as applied to this case being that the overall square footage of the detached garage structure, including an apartment, cannot exceed 1011.5 square feet, which is 50% of the overall square footage of the principal structure on the lot, and that the apartment within said structure cannot exceed 800 square feet, and support staff's decision to deny approval of the applicant's permit request as submitted.

Agree with Applicant:
Motion to agree with the applicant's interpretation of the City's Land Development Regulations, as presented, with regard to the size permitted for a garage apartment, and how such size is calculated, and recommend that the City approve the applicant's permit request for a detached garage containing an apartment, such overall structure being 1,872 square feet.

Staff has no further comments and request that the floor be turned over to Mr. Quillen.

- Request for BOPA Interpretation (PDF)
- Site Plan and Survey(PDF)
- Code Citations (PDF)
- Sec. 114-742. Principal buildings and accessory structures.docx (PDF)
- Applicant's Presentation (PDF)
- Aerial and Information (PDF)

The City of Holly Hill

Brian Walker <bwalker@hollyhillfl.org>

BOPA Agenda

Ed Quillen <Ed.Quillen@kbr.com> Mon, Nov 28, 2022 at 2:05 PM
To: Brian Walker <bwalker@hollyhillfl.org>
Cc: Joe Forte <jforte@hollyhillfl.org>

Brian,

Please arrange for my request for Appeal of the approval of plans for the Garage Apartment at 1235 Powers to be on the agenda for the next available meeting of the Board of Planning and Appeals.

Please advise when that will be.

As instructed, I will deliver a check for **$300** made out to **City of Holly Hill** to the clerk in your office.

I may send an update of my presentation file prior to the meeting. Please consider the version I previously sent as a DRAFT.

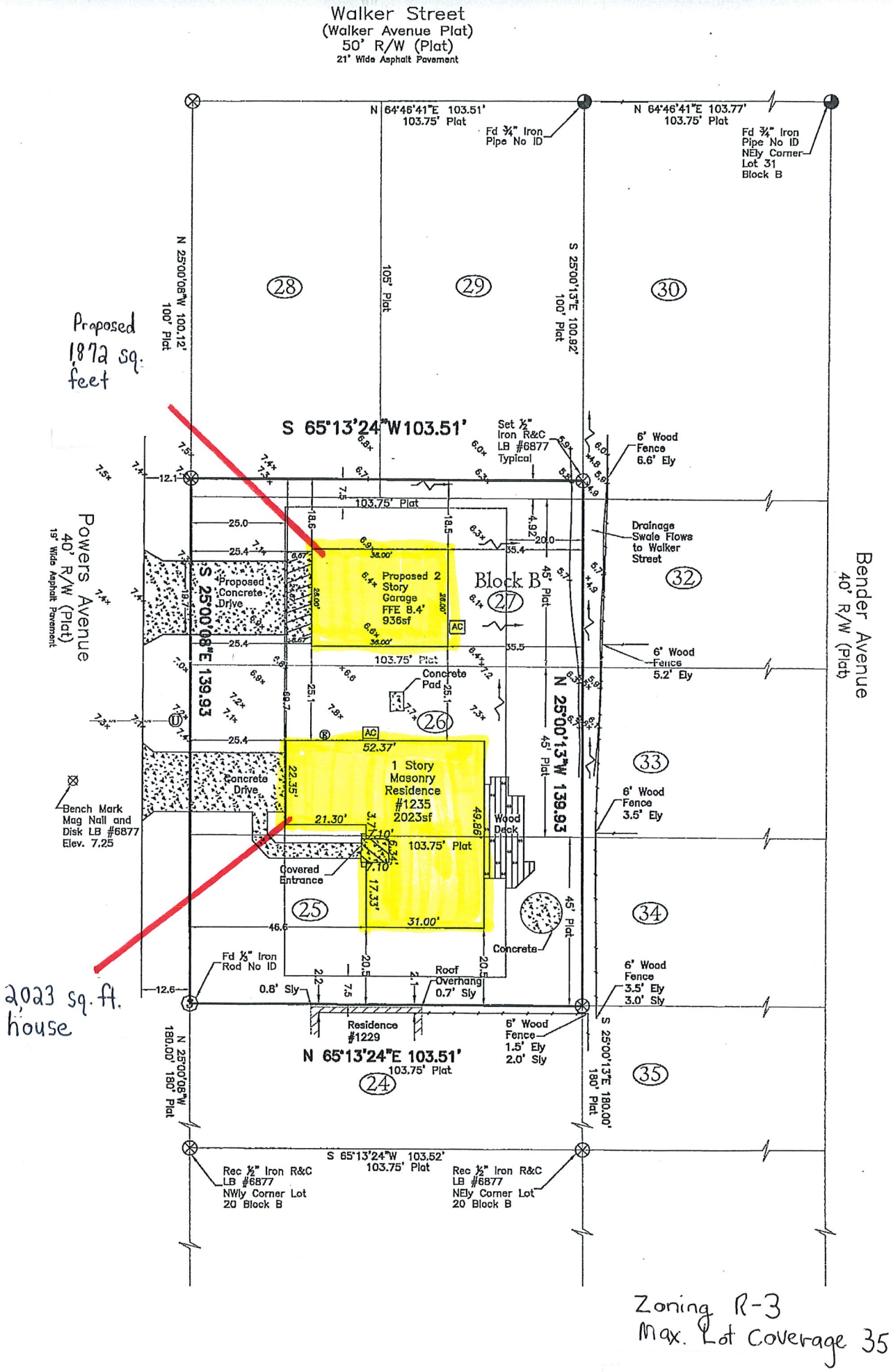
Regards,

Edward Quillen

713.385.5180

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Attachment: Request for BOPA Interpretation (3995 : BOPA Interpretation of Sec. 114-742 LDR)



Attachment: Site Plan and Survey (3995 : BOPA Interpretation of Sec. 114-742 LDR)

Sec. 114-742. - Principal buildings and accessory structures.

B. Accessory apartments/garage apartments. One accessory apartment or garage apartment is permitted for properties within residential zoning districts. Accessory apartments are to be located on the ground floor. Garage apartments are in association with a garage, with the apartment located above the garage. Accessory apartments/garage apartments are required to comply with the following regulations:

1.All utilities must be metered through the same meter serving the single-family dwelling unit.

2.The setbacks of the accessory apartment structure shall be the same as the principal building setbacks of the respective zoning district.

3.The building materials and color of the accessory apartment structure shall be similar to the principal residential structure.

4.Secondary kitchens are permitted.

5.The maximum total square footage permitted for the accessory apartment is 800 square feet or no greater than 50 percent of the total square footage of the principal structure, whichever is less.

6.All accessory apartments shall be annually registered with the city's building and zoning department.

7.The accessory apartment may only be occupied by members of the family of the owner of the single-family dwelling unit.

C. Detached garages are permitted in residential zoning districts under the following conditions:

1.The detached garage may not exceed 50 percent of the total square footage of the principal structure and shall be required to comply with the following conditions:

a. The detached garage shall not cause the building coverage on the lot to exceed the maximum building coverage established for the zoning district;

b. In the event that this code does not establish a maximum building coverage for a zoning district, the maximum building coverage shall be based on the most similar zoning district, as determined by the administrative official;

c. No detached garage shall be used in any manner for a home occupation, except for the storage of customary homeowner vehicles, tools and equipment, unless otherwise permitted by this code.

2.The building setbacks of the detached garage shall conform to the principal building setbacks of the zoning district.

3.Detached garage structures shall be similar in design, materials and colors to the principal structure occupying the site.

4.Detached garages that provide an accessory apartment shall be required to meet all the requirements for accessory apartments.

Sec. 114-746. - Specific terms defined.

Garage apartment, An accessory building containing a storage area for one or more motor vehicles and one dwelling unit. Said dwelling unit shall not have more than 800 square feet of living space and shall not be marketed as a rental unit.

Accessory apartment, Accessory apartments are located on the ground floor and shall not have more than 800 square feet of living space and shall not be marketed as a rental unit.

Attachment: Code Citations (3995 : BOPA Interpretation of Sec. 114-742 LDR)

Sec. 114-742. Principal buildings and accessory structures.

In any residential district, a dwelling shall be deemed to be the principal building on the lot on which it is situated. The construction of accessory structures shall not grant any use in property that is not otherwise permitted.

(1) Only one principal building shall be located on any single-family or duplex lot.

(2) On any single-family or duplex lot, accessory structures shall comply with the following requirements:

a. Accessory structures 300 square feet or less in floor area may be located in the rear and shall be set back at least five feet from the rear lot line yard provided a minimum five-foot separation is maintained from other building.

b. The maximum height of accessory structures 300 square feet or less shall not exceed 12 feet.

c. Accessory structures greater than 300 square feet in floor area shall be located within the building area.

d. Accessory structures greater than 300 square feet in floor area shall be similar in design, materials and colors to the principal structure occupying the site.

e. The maximum height of a detached accessory over 300 square feet of area shall not exceed the maximum height in that zoning district.

f. A minimum five-foot separation between accessory structures and the principal building on the site shall be maintained.

g. Accessory structures shall not cause the building coverage on the lot to exceed the maximum building coverage established for the zoning district.

h. Any specific accessory use or structures which are not addressed within this chapter shall not be located on any lot.

A. *General.* Accessory structures and uses are permitted in conjunction with any principal use, provided that they are recognized as clearly incidental and subordinate to the principal use and do not alter the characteristics of the lot(s). The following regulations shall apply to all accessory uses:

1. No accessory structure or use shall be permitted on any lot(s) which does not have an existing or permitted principal use or structure.

2. Unless otherwise specified within this section:

a. Accessory structures and uses in all zoning districts shall be prohibited in the required front yard or side setback and are to be located behind the principal structure on the lot.

3. All accessory uses are required to be located on the same lot as the principal structure or on a contiguous lot under the same ownership.

4. Except as otherwise specifically permitted within this article, accessory structures shall be similar in design, materials and colors to the principal structure occupying the site.

5. For double frontage lots and corner lots, accessory structures or uses shall not be located within the required yard setback unless screened by a hedge or wall at least six feet in height.

6. No accessory structure or use shall be permitted in any platted easement, unless otherwise specifically permitted by the easement dedication. Fences may be located within certain easements with the condition that if the fence is required to be removed, the property owner is solely responsible for replacement of the fence.

Attachment: Sec. 114-742. Principal buildings and accessory structures.docx (3995 : BOPA Interpretation of Sec. 114-742 LDR)

7. All accessory structures require the issuance of building permits by the city building department.
8. Does not involve the conduct of business on the premises of residentially zoned property.
9. Are not of a nature likely to attract visitors in larger numbers than would normally be expected in a residential neighborhood if located in a residentially zoned area.
10. No accessory structure shall be used in any manner for a home occupation, except for the storage of customary homeowner tools and equipment, unless otherwise permitted by this code.

B. *Accessory apartments/garage apartments.* One accessory apartment or garage apartment is permitted for properties within residential zoning districts. Accessory apartments are to be located on the ground floor. Garage apartments are in association with a garage, with the apartment located above the garage. Accessory apartments/garage apartments are required to comply with the following regulations:

1. All utilities must be metered through the same meter serving the single-family dwelling unit.
2. The setbacks of the accessory apartment structure shall be the same as the principal building setbacks of the respective zoning district.
3. The building materials and color of the accessory apartment structure shall be similar to the principal residential structure.
4. Secondary kitchens are permitted.
5. The maximum total square footage permitted for the accessory apartment is 800 square feet or no greater than 50 percent of the total square footage of the principal structure, whichever is less.
6. All accessory apartments shall be annually registered with the city's building and zoning department.
7. The accessory apartment may only be occupied by members of the family of the owner of the single-family dwelling unit.

C. Detached garages are permitted in residential zoning districts under the following conditions:

1. The detached garage may not exceed 50 percent of the total square footage of the principal structure and shall be required to comply with the following conditions:
    a. The detached garage shall not cause the building coverage on the lot to exceed the maximum building coverage established for the zoning district;
    b. In the event that this code does not establish a maximum building coverage for a zoning district, the maximum building coverage shall be based on the most similar zoning district, as determined by the administrative official;
    c. No detached garage shall be used in any manner for a home occupation, except for the storage of customary homeowner vehicles, tools and equipment, unless otherwise permitted by this code.
2. The building setbacks of the detached garage shall conform to the principal building setbacks of the zoning district.
3. Detached garage structures shall be similar in design, materials and colors to the principal structure occupying the site.
4. Detached garages that provide an accessory apartment shall be required to meet all the requirements for accessory apartments.

Attachment: Sec. 114-742. Principal buildings and accessory structures.docx (3995 : BOPA Interpretation of Sec. 114-742 LDR)

Sec. 114-746. Specific terms defined.

Accessory use or structure: A use or structure of a nature customarily incidental and subordinate to the principal use or structure and, unless otherwise provided, on the same premises. On the same premises with respect to accessory uses shall be construed as meaning on the same lot or on a contiguous lot having the same zoning district and in the same ownership. Where a building is attached to the principal building, it shall be considered a part thereof and not an accessory building. Outdoor storage of materials and equipment used in an enterprise and outdoor display of merchandise for sale shall be considered accessory uses where the principal business activity or enterprise is conducted in a building.

Garage apartment, An accessory building containing a storage area for one or more motor vehicles and one dwelling unit. Said dwelling unit shall not have more than 800 square feet of living space and shall not be marketed as a rental unit.

Accessory apartment, Accessory apartments are located on the ground floor and shall not have more than 800 square feet of living space and shall not be marketed as a rental unit.

Building area: the area established by setback requirements.

(Ord. No. 2804, § 1, 6-26-07)

Attachment: Sec. 114-742. Principal buildings and accessory structures.docx (3995 : BOPA Interpretation of Sec. 114-742 LDR)

HOLLY HILL
FLORIDA

1235 Powers Avenue
Garage Apartment Plan Approval

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

INTRODUCTIONS

- My name is Edward Quillen and Carol Woodriff is my wife.
- We own 1235 Powers Avenue in Holly Hill and plan to retire there.
- I am a registered Professional Engineer in Florida and four other states and also a Licensed Electrical Contractor in Florida.
- In 2023, I will attain 50 years of engineering experience in various industries including electricity generating stations, petroleum refineries, petrochemical facilities and offshore hydrocarbon production facilities.
- I am experienced in interpreting technical documents including specifications, contracts, domestic and international codes and standards.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

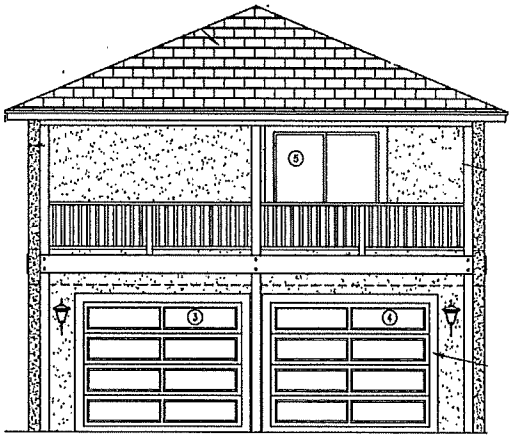
BACKGROUND

- Our desire is to build a garage apartment that would provide space for my two antique cars along with workshop space and living quarters for our daughter.
- A local architectural firm has prepared these plans and a contractor has been engaged.
- We applied for a building permit early this year, but it has yet to be approved.
- Mr. Rickie Lee has been the primary point of contact for the construction permit.

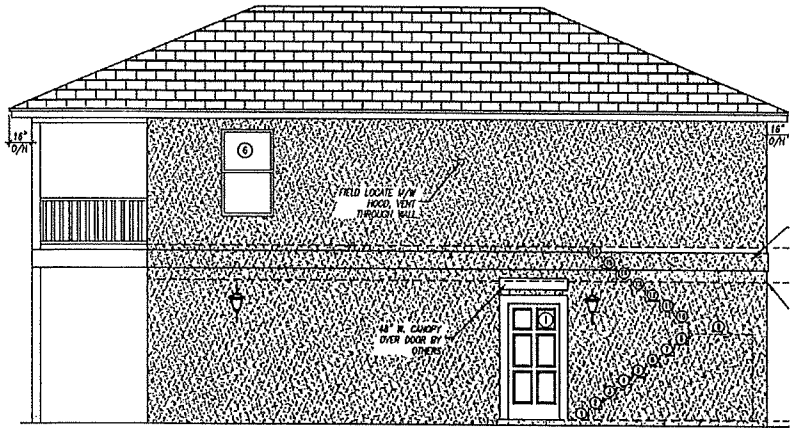
Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

GARAGE APARTMENT

1235 POWERS AVENUE



FRONT ELEVATION



RIGHT SIDE ELEVATION

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

CITY RESPONSE

Mr. Lee communicated the following requirements of the Code which are **not** at issue:

- All utilities must be metered through the same meter serving the single-family dwelling unit.
- The setbacks of the accessory apartment structure shall be the same as the principal building setbacks of the respective zoning district.
- The building materials and color of the accessory apartment structure shall be similar to the principal residential structure.
- Secondary kitchens are permitted.
- The accessory apartment may only be occupied by members of the family of the owner of the single-family dwelling unit.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

CITY RESPONSE

The following responses from Mr. Lee were adverse and have stymied the approval process:

- Proposed structure is over the maximum allowed for an accessory structure. Total accessory structure is 2037 sq. ft., principal structure is 2,023 sq. ft. according to survey.
- Maximum square footage for an apartment is 800 square footage. Apartment proposed is 936 square feet, plans exceed the maximum permitted amount.

I promptly requested the Code citations and calculations to support these statements but did not receive any formal responses. There was some verbal discussion afterward which was not recorded.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

THE ISSUE

The City's adverse responses are not supported by the actual text of the City Code.

The Code issues standing in the way of plan approval seem only to be size-related as follows:

1. Maximum Lot Coverage
2. Detached Garage Size
3. Garage Apartment Size

For clarity and accuracy, it is necessary to address each of the above points separately and with specific reference to the pertinent Code text. The following slides will demonstrate that.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

1. MAXIMUM LOT COVERAGE

Holly Hill Code - Article 2

Division 4 - Buildings and Structures

Sec. 114-742. - Principal buildings and accessory structures.

B. *Accessory apartments/garage apartments.* One accessory apartment or garage apartment is permitted for properties within residential zoning districts. Accessory apartments are to be located on the ground floor. Garage apartments are in association with a garage, with the apartment located above the garage.

C. Detached garages are permitted in residential zoning districts under the following conditions:

1. The detached garage may not exceed 50 percent of the total square footage of the principal structure and shall be required to comply with the following conditions:

    a. The detached garage shall not cause the building coverage on the lot to exceed the maximum building coverage established for the zoning district;

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

1. MAXIMUM LOT COVERAGE

- The survey shows the principal structure size as 2023 SF.
- Reference Code Sec. 114-765 - Schedule of dimensional requirements. For this zone R3 project the maximum lot coverage is **35%**.
- The lot is 104' x 149.9' = 15,589.6 SF. The footprint of the proposed garage apartment (including the balcony/porch) is 26'-0" x 42'-8" = 1110 SF. Adding the 2023 SF primary structure results in 3133 SF of coverage which represents **20%** of the lot size.

Conclusion: The project meets this Code requirement.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

2. GARAGE SIZE (1st LEVEL)

Holly Hill Code - Article 2

Division 4 - Buildings and Structures

Sec. 114-742. - Principal buildings and accessory structures.

B. *Accessory apartments/garage apartments.* One accessory apartment or garage apartment is permitted for properties within residential zoning districts. Accessory apartments are to be located on the ground floor. Garage apartments are in association with a garage, with the apartment located above the garage.

C. Detached garages are permitted in residential zoning districts under the following conditions:

1. The detached garage may not exceed 50 percent of the total square footage of the principal structure and shall be required to comply with the following conditions:

    a. The detached garage shall not cause the building coverage on the lot to exceed the maximum building coverage established for the zoning district;

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

2. GARAGE SIZE (1st LEVEL)

- The detached garage may not exceed **50 percent** of the total square footage of the principal structure …
- The survey shows the principal structure size as 2023 SF.
- The garage structure is 26'-0" x 36'-0" = 936 SF.
- The garage represents **46.3%** of the principal structure size.

Conclusion: The detached garage size meets the Code requirement.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

3. APARTMENT SIZE (2nd LEVEL)

Holly Hill Code - Article 2
Division 4 - Buildings and Structures

Sec. 114-746. - Specific terms defined.

Garage apartment, An accessory building containing a storage area for one or more motor vehicles and one dwelling unit. Said dwelling unit shall not have more than 800 square feet of living space and shall not be marketed as a rental unit.

Accessory apartment, Accessory apartments are located on the ground floor and shall not have more than 800 square feet of living space and shall not be marketed as a rental unit.

State of Florida Administrative Code

76-57.005 Definitions:

"Living Space" means areas in a dwelling unit that are livable space. This does not include closets, crawl spaces, and other storage areas.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

3. APARTMENT SIZE (2nd LEVEL)

Why are definitions important in law?

Definitions are powerful provisions because they control the meaning of terms used throughout a legislative text and, in the absence of a contrary intention, the meaning of terms in all other enactments relating to the same subject-matter. They have a very strong influence on the interpretation of legislative texts. Aug 29, 2022
Legistics - Definitions - Department of Justice

Definitions clauses, also known as contract definitions, are the defined terms in a legal document. Drafting definitions clauses mitigates the chance of misunderstanding interpretations among the parties.
https://www.contractscounsel.com › definitions-clause

Conclusion: Division 4, Sec. 114-746 *Specific terms defined* applies to all uses of those terms in Division 4, unless otherwise stated.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

3. APARTMENT SIZE (2nd LEVEL)

The City response has been that clauses B.5 and C.4 (highlighted below) impose a **size limit** on an *accessory apartment* of **800 square feet based upon outside wall dimensions** and that this limit also applies to a *garage apartment*. However, these statements are **subordinate** to Sec. 114-476 ***Specific terms defined*** in which the size of both structures are limited to **800 square feet of *living space***.

Sec. 114-472. – Principal buildings and accessory structures

B. *Accessory apartments/garage apartments.*

> 5. The maximum total square footage permitted for the accessory apartment is 800 square feet or no greater than 50 percent of the total square footage of the principal structure, whichever is less.

C. Detached garages are permitted in residential zoning districts under the following conditions:

> 4. Detached garages that provide an accessory apartment shall be required to meet all the requirements for accessory apartments.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

3. APARTMENT SIZE (2nd LEVEL)

Said dwelling unit shall not have more than 800 square feet of living space ...

Living Space Calculation (Sum of Living Spaces)	
Bedroom 1	151.9 SF
Bedroom 2	106.2 SF
Living Room / Bar	339.1 SF
Interior Stairway	66.5 SF
Bathroom	+74.0 SF
Total Living Space	**737.7 SF**

Living Space Calculation (Gross Size minus Wall Spaces and Closets)	
Gross Size (26'x36')	936.0 SF
Exterior Walls (6.5")	-65.9 SF
Wet Walls (7.5")	-14.9 SF
Interior Walls (4.5")	-30.4 SF
Closets	-73.3 SF
Total Living Space	**751.6 SF**

Conclusion: The apartment size complies with the Code.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

SUMMARY

The Code requirements related to the following categories have been reviewed and demonstrated to satisfy the Holly Hill Code of Ordinances:

- Maximum Lot Coverage
- Detached Garage Size
- Garage Apartment Size

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

CONCLUSION

The City of Holly Hill is requested to approve the plans for the Garage Apartment at 1235 Powers Avenue without further delay.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

APPENDIX

TERMINOLOGY: *Area* vs *Space*

CITY and COUNTY CODES COMPARED

CITY OF HOLLY HILL: *Floor Area, Gross Floor Area*

MORE DEFINITIONS: *Habitable Space*

AN ALTERNATIVE DESIGN

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

TERMINOLOGY: *Area* vs *Space*

- The term *living space* is distinct from such terms as *building area*, *living area*, *floor area, conditioned space* or *habitable space*.
- "Area" calculation methods are generally based on the exterior dimensions of a structure.
- "Space" calculation methods are based on the interior dimensions of certain qualifying rooms which can then be summed. This method is sometimes called "paint-to-paint".
- The Holly Hill Code does not define the term *living space*. Instead, it defines the terms *floor area* and *gross floor area.* But *living space* is the sizing basis prescribed in Division 4.
- *Living space* is defined in the Florida Administrative Code. State Code shall prevail in the absence of definitions by other governmental subdivisions.
- *Habitable space* is defined in the IBC and IRC and is similar to *living space,* but it excludes all of the following: bathrooms, toilet rooms, closets, halls, storage or utility spaces.
- *Conditioned space* is defined by ASHRAE 62.2 and 90.2, IBC, IRC, IECC, RESNET, UMC, CA, VT…
- *Living area* is defined in the Volusia County Code Sec. 72-277.
- *Finished area, unfinished area,* are defined in ANSI Z765 SQUARE FOOTAGE–METHOD FOR CALCULATING which applies to detached and attached single-family houses. It also prescribes the calculation method(s) for *square footage.*
- *Gross Living Area* (GLA) is defined in the Appraisal Institute's Dictionary of Real Estate.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

CITY and COUNTY CODES COMPARED

Holly Hill Sec. 114-746 allows accessory apartments sized up to 800 SF of *living space*.
Volusia County Sec. 72-277 allows accessory apartments sized up to 1200 SF of *living area*.
What is the difference? The measurement methods are quite different!

State of Florida Administrative Code
76-57.005 Definitions:
"Living Space" means areas in a dwelling unit that are livable space. This does not include closets, crawl spaces, and other storage areas.

Volusia County Code of Ordinances
Sec. 72-277 Accessory structures ...
"Living area" shall be defined as conditioned space enclosed within the building thermal envelope that is utilized for living, sleeping, eating, cooking, bathing, washing and sanitation purposes, including hallways; utility rooms; and closets. Unconditioned spaces such as garages or porches (open or screened) are not included in the definition of "living area."

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

CITY OF HOLLY HILL CODE OF ORDINANCES
Subpart B – LAND DEVELOPMENT REGULATIONS
Chapter 78 - GENERAL PROVISIONS

Sec. 78-14. – Definitions

Floor area means the sum of the gross horizontal areas of the several floors of a dwelling, measured from the exterior faces of the exterior walls or from the centerline of walls separating two buildings, but excluding:

(1) Attic areas with a headroom of less than seven feet.
(2) Unenclosed stairs or fire escape.
(3) Elevator structures.
(4) Cooling towers.
(5) Vehicle parking structures.
(6) Basement space not devoted to residential use.
(7) Porches, patios, breezeways, sun porches or other similar structural additions that are unenclosed or are enclosed with screening.

Gross floor area means the sum of the gross horizontal areas of the several floors of a building measured from the exterior face of exterior walls, or from the centerline of a wall separating two buildings, but not including interior parking spaces, loading space for motor vehicles, or any space where the floor-to-ceiling height is less than six feet.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

MORE DEFINITIONS

International Building Code (2012)

HABITABLE SPACE. A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

International Residential Code (2015)

[RB] HABITABLE SPACE. A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered *habitable spaces*.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

AN ALTERNATIVE DESIGN

Suggested by Rickie Lee

Based upon the below highlighted Code citation, a revision was suggested by Mr. Lee as a (helpful) way to obtain plan approval:

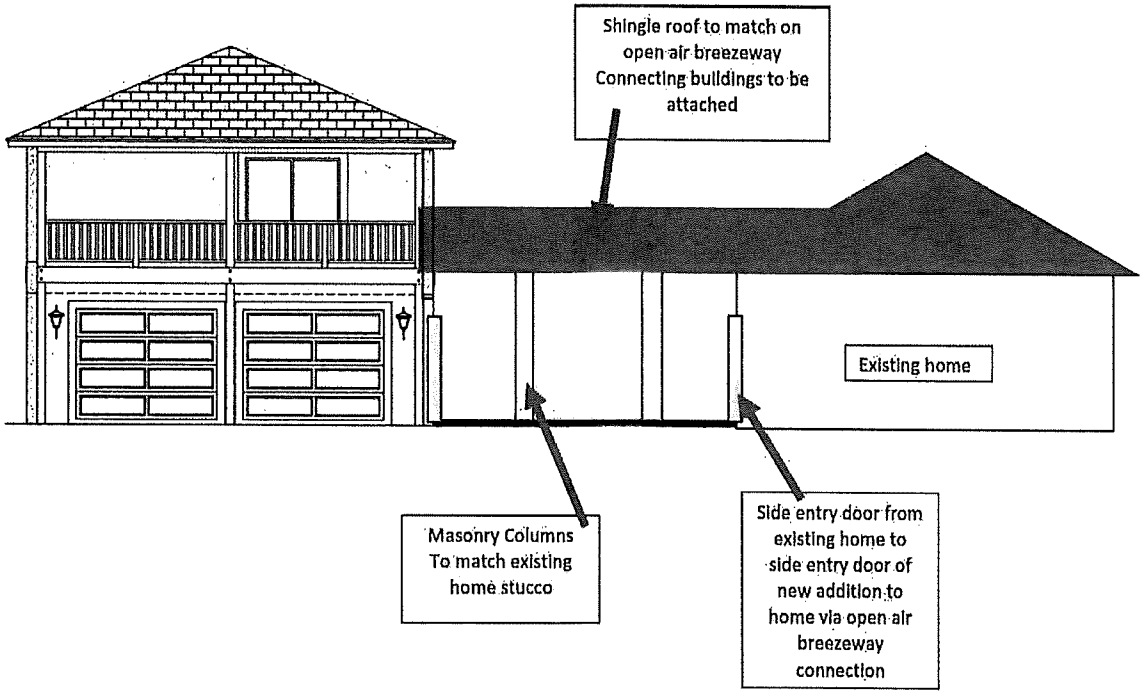
Sec. 114-746. – Specific terms defined
Accessory use or structure: A use or structure of a nature customarily incidental and subordinate to the principal use or structure and, unless otherwise provided, on the same premises. On the same premises with respect to accessory uses shall be construed as meaning on the same lot or on a contiguous lot having the same zoning district and in the same ownership. Where a building is attached to the principal building, it shall be considered a part thereof and not an accessory building. Outdoor storage of materials and equipment used in an enterprise and outdoor display of merchandise for sale shall be considered accessory uses where the principal business activity or enterprise is conducted in a building.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

AN ALTERNATIVE DESIGN

Suggested by Rickie Lee

This sketch was prepared by my Contractor based on his understanding of Mr. Lee's suggestion.



Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

AN ALTERNATIVE DESIGN

Suggested by Rickie Lee

Reasons to reject this alternative design:

- It is unnecessary as the original plans already meet the City Code! And what real difference would this change make to the City except to satisfy some bureaucratic notion.
- Under the City Code, a secondary kitchen is not allowed in a unified structure.
- It represents an additional expense with several components: Architect fee, Surveyor fee, Construction cost, Maintenance costs.
- It ties together two significant structures that will be subjected to differential settlement which could, over time, require expensive repairs.
- It creates the possibility of communicating a fire between two otherwise isolated structures.
- It could become a liability in case of hurricane winds.
- My wife and I envision the space between the two structures to be completely landscaped. We would prefer one or more pathways between the structures that could be modified at any time in the future to suit changing landscaping ideas.
- It requires the removal of an olive tree.

Attachment: Applicant's Presentation (3995 : BOPA Interpretation of Sec. 114-742 LDR)

1235 Powers Avenue

Description	Area
MAIN BUILDING	1483
Wood Deck	253
Finished Garage	462
Porch, Open Finished	42
Total Building Area	2,240

House size per survey = 2,023

2,240 less 253 (wood deck) = 1,987 square feet

Lot Size – 14,484 **Zoned R-3** **Max Permitted Lot Coverage – 35% (5,069 square feet)**



Attachment: Aerial and Information (3995 : BOPA Interpretation of Sec. 114-742 LDR)

STAFF REPORT
CITY OF HOLLY HILL, FLORIDA

Board of Planning and Appeals
Ordinance

MEETING DATE: **January 9, 2023**
FROM: **Brian Walker**
SUBJECT: **An Ordinance of the City of Holly Hill, Florida; Amending Chapter 3 (Enforcement) of the Holly Hill Code of Ordinance to Provide the City with a Process to Abate Nuisances Listed in Section 26-61 (Special Items Declared a Nuisance) of the Holly Hill Code of Ordinances; Providing for Notice to the Property Owner; Providing for Collection of Costs Incurred; Providing for Conflicting Ordinances; Providing for Severability; and Providing an Effective Date.**
NUMBER: **(ID # 3983)**
APPLICANT: **Brian Walker**
PLANNER:

TITLE
Consider adoption of an Ordinance of the City of Holly Hill, Florida, amending the Holly Hill Code of Ordinances by amending Chapter 3 (Enforcement) of the Holly Hill Code of Ordinances, to provide the City with a process to abate nuisances listed in Section 26-61 (special items declared a nuisance.)

BACKGROUND
Code Enforcement is an important focus of the City of Holly Hill. Holly Hill Code Enforcement officers enforce a broad range of land use-related ordinances to ensure that a healthy and safe environment is maintained for the residents, businesses, and visitors of Holly Hill.

The process through which Code Officers do their job is outlined in the City's Code of Ordinances - particularly Chapter 2, Division 3, titled Code Enforcement, and Chapter 3, titled Enforcement. These chapters discuss definitions, the enforcement procedure, issuance of citations, and abatement, along with other topics related to the code enforcement process.

Chapter 26, Section 26-61 of the Code, titled Special items declared a nuisance, provides a list of items that are declared to be and constitute a nuisance. These include items such as the accumulation of trash and debris, storage of junk, improperly maintained septic tanks, as well as other types of nuisances.

In general, unresolved violations of code, such as the accumulation of trash and debris on private property, can lead to the issuance of daily fines and ultimately the placing of liens on the property. However, with few exceptions, the City does not specifically have the authority to abate (which is to "put an end to") a nuisance, by entering onto private property and removing (for example), trash and debris, or abate other types of nuisances. In general, once a lien is placed on a property for an unresolved violation of code, the City must wait for the property owner to abate (put an end to) the nuisance. This can become a severe problem in the case for

instance, of a hoarder who refuses to remove large amounts of trash and debris from their property, and who in fact continues to accumulate such trash and debris.

The purpose of the proposed Ordinance is to expand the ability of the City to abate nuisances listed in Chapter 26, Section 26-61, including by entering onto private property, only after following the process outlined in the Ordinance, and receiving authorization from the City Commission. The proposed Ordinance also provides a process for notice, and authorizes the City to file a lien for costs incurred and pursue collection of costs as an assessment.

STAFF RECOMMENDATION

Adopt an Ordinance of the City of Holly Hill, Florida, amending Chapter 3 (Enforcement) of the Holly Hill Code of Ordinances to provide the City with a process to abate nuisances listed in Section 26-61 (special items declared a nuisance) of the Holly Hill Code of Ordinances; providing for notice to the property owner; providing for collection of costs incurred; providing for conflicting ordinances; providing for severability; and providing an effective date.

ATTACHMENTS:

- Chapter 3. ENFORCEMENT (PDF)
- Division 3. CODE ENFORCEMENT (PDF)
- Sec. 26-61. Special Items Declared a Nuisance (PDF)

Ordinance No. (ID # 3983)

AN ORDINANCE OF THE CITY OF HOLLY HILL, FLORIDA; AMENDING CHAPTER 3 (ENFORCEMENT) OF THE HOLLY HILL CODE OF ORDINANCE TO PROVIDE THE CITY WITH A PROCESS TO ABATE NUISANCES LISTED IN SECTION 26-61 (SPECIAL ITEMS DECLARED A NUISANCE) OF THE HOLLY HILL CODE OF ORDINANCES; PROVIDING FOR NOTICE TO THE PROPERTY OWNER; PROVIDING FOR COLLECTION OF COSTS INCURRED; PROVIDING FOR CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

ORDINANCE NO.

AN ORDINANCE OF THE CITY OF HOLLY HILL, FLORIDA; AMENDING CHAPTER 3 (ENFORCEMENT) OF THE HOLLY HILL CODE OF ORDINANCE TO PROVIDE THE CITY WITH A PROCESS TO ABATE NUISANCES LISTED IN SECTION 26-61 (SPECIAL ITEMS DECLARED A NUISANCE) OF THE HOLLY HILL CODE OF ORDINANCES; PROVIDING FOR NOTICE TO THE PROPERTY OWNER; PROVIDING FOR COLLECTION OF COSTS INCURRED; PROVIDING FOR CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Section 26-21 (Special Items Declared a Nuisance) of the Holly Hill Code of Ordinances declares certain conditions and activities to be nuisances.

WHEREAS, Chapter 3 (Enforcement) of the Holly Hill Code of Ordinances provides a process for the city to abate certain nuisances but not all nuisances identified in Section 26-61 of the Holly Hill Code of Ordinances.

WHEREAS, the City Commission believes that expanding the process under Section 3 (Enforcement) to include all the conditions and activities listed in Section 26-61 (Special Items Declared a Nuisance) will be a useful tool for the City in remedying properties with nuisance conditions.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF HOLLY HILL, FLORIDA:

Section 1.

Sec. 3-1. General provision.

(a) Except when specifically provided otherwise in this Code, violations of this Code shall be enforced as provided pursuant to this ~~c~~ Chapter and Chapter 2 (Administration), Article III (Board, Committee, Commissions), Division 3 (Code Enforcement).

(b) The city shall have the authority to remove from private property vehicles and other equipment parked or stored in violation of the city regulations, including but not limited to Chapter 114, divisions 6 and 7, and shall have the authority, in addition to any procedure established under state law, to abate nuisances described in section 26-61 pursuant to the following procedure:

(1) Whenever a code enforcement officer, building official, police chief or any member of their respective departments (hereinafter referred to collectively as city official) determines that there is a violation of a regulation of the city, such city official shall pursue code enforcement pursuant to Chapter 2 (Administration), Article III (Board, Committee, Commissions), Division 3 (Code Enforcement), unless an emergency condition justifies other lawful response. The city official can request the special magistrate authorize the City to enter the property for purposes of yard maintenance such as mowing, trimming, debris removal, etc. All other nuisance conditions shall be abated as set forth below. ~~shall issue a notice of violation setting forth the provision(s) of the Code that is/are violated, the corrective action that is required, the time allowed for corrective action which shall be reasonable and that the party has the right to a hearing regarding the violation as long as a request is submitted in writing to the city within the time allowed for corrective action. The notice shall also provide that failure to correct the violation(s) could result in the city taking the necessary action to correct the violation(s) and charging the property owner for such action plus the levying of fines.~~

(2) If the property owner fails to correct the violation(s) pursuant to the Order issued pursuant to Chapter 2

(Administration), Article III (Board, Committee, Commissions), Division 3 (Code Enforcement) and the nuisance condition still exists, the city official may pursue abatement pursuant to Section 3-2 below.

~~If after the reasonable time for corrective action has elapsed and the violation is still in existence and the property owner has not requested a hearing, the city official is hereby authorized to take the necessary actions, within the legal constraints of the law, to correct the violation.~~

~~(3) After the corrective action has been performed by the city or its authorized agent(s), the city official shall immediately notify the property owner of the action that was taken and if property was removed from the premises, that the property owner has the right to reclaim the property by paying all fees and costs incurred by the city and the wrecker company in the removal and impoundment of the property and all fines that have been assessed. The notice shall include the name and address of the wrecker company where the property is being stored. If the city has corrected the Code violation(s), such as mowing the property, the property shall be liened for the services rendered, plus all costs incurred in liening the property.~~

~~(4) Once property is towed at the direction of the city, the property shall become the responsibility of the wrecker~~

~~company. If the property is not reclaimed by the property owner, such property shall be disposed of by the wrecker company as provided by law and the city shall not be responsible for such property nor the ultimate disposition of such property.~~

~~(5) If a hearing is requested under this section, the hearing shall be held before the city commission, and the matter shall be placed on the commission's agenda at the next regularly held commission meeting following receipt of the written request for the hearing. The property owner shall be provided written notice of the date, time and place of the hearing. If the city commission determines that a violation exists, the commission has the discretion to allow the property owner additional time for corrective action and shall authorize necessary corrective action.~~

(~~6~~3) The term "property owner" as used in this section for purpose of issuance of a notice of violation as provided in subsection (1) shall mean the owner for owner-occupied structures and vacant land and tenant for rental properties. The intent is to provide the notice to the individual in possession and control of the subject premises. If property is removed from the subject premises, i.e., the towing of a vehicle, the notice required in subsection (3), above, shall be given to the same party receiving the notice of violation in subsection (1), above, and to the owner of the property removed.

Sec. 3-2. Abatement of nuisance by demolition.

The city shall have the right to abate a nuisance by removing or correcting the condition(s) constituting a nuisance, such as demolishing the structure or other property constituting such nuisance, removing junk, garbage and debris, and any other condition constituting a nuisance under Section 26-61 pursuant to the following procedure:

(a) The city official shall provide a written notice to the property owner and tenant setting forth the following:

(1) The violation(s) that exist on the premises and a cite to the Code section(s) that are in violation;

(2) The corrective action to be taken;

(3) A reasonable time for the corrective action to be performed; and

(4) That if the corrective action is not taken within the time allowed, the city commission will hold a public hearing to determine whether a public nuisance exists and if so, the appropriate remedy to abate the nuisance, including the demolition of the structure or property and correcting any other conditions constituting a nuisance.

(b) The city shall also perform a title search on the subject property to determine all lien holder(s) and shall

provide the notice in subsection (1), above, to such lien holder(s).

(c) If the corrective action is not performed within the time allowed, and any extensions thereto, the city official is authorized to request a public hearing before the city commission for a determination as to whether or not a public nuisance exists on the subject property and if so, the remedy that the city official deems appropriate, including the demolition of the structure or the removal of any conditions that constitutes a nuisance under Section 26-61. If the city commission determines a nuisance exists, the city commission shall determine a reasonable time for the property owner to eliminate the nuisance(s) and if not eliminated without the allowed time, authorize the city to enter the subject property and abate the nuisance(s). The property owner(s), tenant(s) and all lien holders shall receive a copy of the notice of public hearing. At such public hearing, the city commission shall hear testimony and receive other forms of evidence from all interested parties and shall make its determination based on the evidence presented.

(d) Once property is towed at the direction of the city, the property shall become the responsibility of the wrecker company. If the property is not reclaimed by the property owner, such property shall be disposed of by the wrecker company as

provided by law and the city shall not be responsible for such property nor the ultimate disposition of such property.

Sec. 3-3. Notice requirements.

All notices required by this chapter shall be provided to the required party in one of the following methods:

(a) By certified mail, return receipt requested, to the last known address of the alleged violator pursuant to the tax rolls;

(b) By hand delivery by the code inspector, by a city police officer or other person designated by the city;

(c) By publishing the notice once a week for four consecutive weeks in a paper of general circulation in the county, with the proof of publication made in compliance with F.S. §§ 50.041 and 50.051, as amended;

(d) By posting for at least ten days in two locations, one of which shall be the property upon which the violation is alleged to exist and the other of which shall be at City Hall, along with a proof of posting by affidavit which shall include a copy of the notice posted and the date and place of posting;

(e) Evidence that an attempt has been made to hand deliver or mail the notice as provided in subsections (1) and (2), above, together with proof of publication or posting as provided in

subsections (3) and (4), above, shall be sufficient to establish that the notice requirements have been met, without regard to whether or not the party actually received such notice.

Sec. 3-4. Lien for Cost and Collection.

All costs incurred by the city in abating the nuisance (including cost of remedying the code violation(s) or public nuisance(s), all administrative, legal, posts and publication expenses, as well as other direct or indirect costs associated therewith) may be recorded as a lien on the subject property and to the extent permitted, may be collected as an assessment pursuant to Chapter 30 (Finance), Article IV (Special Assessment). In addition to the above, the city may collect the costs incurred by any other legal means.

Section 2. If any section, subsection, sentence, clause, phrase, or portion of this Ordinance, or application hereof, is for any reason held invalid or unconstitutional by any Court, such portion or application shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions or application hereof.

Section 3. That all ordinances made in conflict with this Ordinance are hereby repealed.

Section 4. That this Ordinance shall become effective immediately upon its adoption.

Section 5. That this Ordinance shall be posted at City Hall as required by law.

Chapter 3 ENFORCEMENT

Sec. 3-1. General provision.

(a) Except when specifically provided otherwise in this Code, violations of this Code shall be enforced as provided pursuant to this chapter.

(b) The city shall have the authority to remove from private property vehicles and other equipment parked or stored in violation of the city regulations, including but not limited to chapter 114, divisions 6 and 7, and shall have the authority, in addition to any procedure established under state law, to abate nuisances described in section 26-61 pursuant to the following procedure:

(1) Whenever a code enforcement officer, building official, police chief or any member of their respective departments (hereinafter referred to collectively as city official) determines that there is a violation of a regulation of the city, such city official shall issue a notice of violation setting forth the provision(s) of the Code that is/are violated, the corrective action that is required, the time allowed for corrective action which shall be reasonable and that the party has the right to a hearing regarding the violation as long as a request is submitted in writing to the city within the time allowed for corrective action. The notice shall also provide that failure to correct the violation(s) could result in the city taking the necessary action to correct the violation(s) and charging the property owner for such action plus the levying of fines.

(2) If after the reasonable time for corrective action has elapsed and the violation is still in existence and the property owner has not requested a hearing, the city official is hereby authorized to take the necessary actions, within the legal constraints of the law, to correct the violation.

(3) After the corrective action has been performed by the city or its authorized agent(s), the city official shall immediately notify the property owner of the action that was taken and if property was removed from the premises, that the property owner has the right to reclaim the property by paying all fees and costs incurred by the city and the wrecker company in the removal and impoundment of the property and all fines that have been assessed. The notice shall include the name and address of the wrecker company where the property is being stored. If the city has corrected the Code violation(s), such as mowing the property, the property shall be liened for the services rendered, plus all costs incurred in liening the property.

(4) Once property is towed at the direction of the city, the property shall become the responsibility of the wrecker company. If the property is not reclaimed by the property owner, such property shall be disposed of by the wrecker company as provided by law and the city shall not be responsible for such property nor the ultimate disposition of such property.

(5) If a hearing is requested under this section, the hearing shall be held before the city commission, and the matter shall be placed on the commission's agenda at the next regularly held commission meeting following receipt of the written request for the hearing. The property owner shall be provided written notice of the date, time and place of the hearing. If the city commission determines that a violation exists, the commission has the discretion to allow the property owner additional time for corrective action and shall authorize necessary corrective action.

(6) The term "property owner" as used in this section for purpose of issuance of a notice of violation as provided in subsection (1) shall mean the owner for owner-occupied structures and vacant land and tenant for rental properties. The intent is to provide the notice to the individual in possession and

Attachment: Chapter 3. ENFORCEMENT (3983 : Code Enforcement - Amendment of Chapter 3 Enforcement)

control of the subject premises. If property is removed from the subject premises, i.e., the towing of a vehicle, the notice required in subsection (3), above, shall be given to the same party receiving the notice of violation in subsection (1), above, and to the owner of the property removed.

(Ord. No. 2452, § 1, 2-25-97)

Sec. 3-2. Abatement of nuisance by demolition.

The city shall have the right to abate a nuisance by demolishing the structure or other property constituting such nuisance pursuant to the following procedure:

(1) The city official shall provide a written notice to the property owner and tenant setting forth the following:

a. The violation(s) that exist on the premises and a cite to the Code section(s) that are in violation;

b. The corrective action to be taken;

c. A reasonable time for the corrective action to be performed; and

d. That if the corrective action is not taken within the time allowed, the city commission will hold a public hearing to determine whether a public nuisance exists and if so, the appropriate remedy to abate the nuisance, including the demolition of the structure or property.

(2) The city shall also perform a title search on the subject property to determine all lien holder(s) and shall provide the notice in subsection (1), above, to such lien holder(s).

(3) If the corrective action is not performed within the time allowed, and any extensions thereto, the city official is authorized to request a public hearing before the city commission for a determination as to whether or not a public nuisance exists on the subject property and if so, the remedy that the city official deems appropriate, including the demolition of the structure. The property owner(s), tenant(s) and all lien holders shall receive a copy of the notice of public hearing. At such public hearing, the city commission shall hear testimony and receive other forms of evidence from all interested parties and shall make its determination based on the evidence presented.

(Ord. No. 2452, § 1, 2-25-97)

Sec. 3-3. Notice requirements.

All notices required by this chapter shall be provided to the required party in one of the following methods:

(1) By certified mail, return receipt requested, to the last known address of the alleged violator pursuant to the tax rolls;

(2) By hand delivery by the code inspector, by a city police officer or other person designated by the city;

(3) By publishing the notice once a week for four consecutive weeks in a paper of general circulation in the county, with the proof of publication made in compliance with F.S. §§ 50.041 and 50.051, as amended;

(4) By posting for at least ten days in two locations, one of which shall be the property upon which the violation is alleged to exist and the other of which shall be at City Hall, along with a proof of posting by affidavit which shall include a copy of the notice posted and the date and place of posting;

(5) Evidence that an attempt has been made to hand deliver or mail the notice as provided in subsections (1) and (2), above, together with proof of publication or posting as provided in subsections (3) and (4),

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above, shall be sufficient to establish that the notice requirements have been met, without regard to whether or not the party actually received such notice.

(Ord. No. 2452, § 1, 2-25-97)

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DIVISION 3. CODE ENFORCEMENT[1]

Sec. 2-116. Definitions.

The following words, terms and phrases, as used in this article, shall have the meanings respectively ascribed to them in this section, unless the context clearly indicates otherwise:

City means City of Holly Hill, Florida.

City attorney means the city attorney or any assistant city attorney of the city.

Code means the Code of Ordinances, the Land Development Code, and all other ordinances of the City of Holly Hill.

Code enforcement officer shall mean the city manager, assistant city manager, chief building official, code enforcement supervisor, code enforcement officer, fire safety inspector, director of public works, and any other person designated in writing by the city manager.

Law enforcement officer shall mean any person who is elected, appointed, or employed full-time by a municipality or the state or any political subdivision thereof; who is vested with authority to bear arms and make arrests; and whose primary responsibility is the prevention and detection of crime or the enforcement of penal, criminal, traffic, or highway laws of the state.

Person means any natural person, corporation, partnership, or other entity.

Repeat violation means a violation of a provision of a code or ordinance by a person who has previously been found to have violated the same provision within five years prior to the violation.

(Ord. No. 2626, § 2, 2-12-02)

[1]Editor's note(s)—Ord. No. 2626, § 1, adopted Feb. 12, 2002, repealed the former div. 3, §§ 2-116—2-124, which pertained to the code enforcement board and derived from Code 1984, §§ 2-421—2-429. Section 2 of said ordinance enacted a new div. 3 as set out herein.

Cross reference(s)—Alcoholic beverages, ch. 6; animals, ch. 10; buildings and building regulations, ch. 14; alarm systems, § 22-26 et seq.; noise regulations, § 26-26 et seq.; sanitary nuisances, § 26-61 et seq.; fire prevention and protection, ch. 34; solid waste, ch. 54; street regulations, § 58-31 et seq.; sidewalk regulations, § 58-61 et seq.; parking and obstructions in and maintenance of rights-of-way, § 58-96 et seq.; local business tax receipts, § 62-26 et seq.; enforcement of payment for local business tax receipt taxes, § 62-40; utilities, ch. 70; taxicab regulations, § 74-26 et seq.; wrecker regulations, § 74-106 et seq.; development standards, ch. 90; flood regulations, ch. 94; landscaping and buffering requirements, ch. 98; resource protection, ch. 106; sign regulations, ch. 110; zoning regulations, ch. 114.

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Sec. 2-117. Declaration of legislative intent.

(a) It is the intent of this article to promote, protect, and improve the health, safety and welfare of the citizens of the city by providing an equitable, expeditious, effective and inexpensive method of enforcing the various codes of the city.

(b) Further, the provisions of this article are intended to provide an additional and supplemental means of enforcing the various codes of the city, and nothing contained herein shall prohibit the city from enforcing its codes or ordinances by any other means, specifically including F.S. ch. 162, pts. I and II.

(Ord. No. 2626, § 2, 2-12-02)

Sec. 2-118. Special masters.

(a) The city hereby establishes a special master/citation code enforcement system for the enforcement of its various codes. In order to avoid any potential conflict of it is preferably for a special master not be a resident of the city, own real property in the city or own a business with a location in the city. this requirement can be waived by the city commission. Special masters shall be an active or retired lawyer. One or more special masters shall be appointed by the city commission based upon the joint recommendation of the city attorney and city manager. Special masters shall serve at the pleasure of the city commission and may be removed at anytime with or without cause by the city commission. Special masters shall serve on a volunteer basis and shall not be compensated for their services, but may be reimbursed for such travel, mileage, and per diem expenses as may be authorized by the city commission or as otherwise provided by law.

(b) A special master shall have the power to:

(1) Adopt rules for the conduct of hearings.

(2) Special masters shall have the authority to hold hearings and assess fines against violators of the various codes of the city.

(3) Subpoena alleged violators and witnesses to the hearings. Subpoenas may be served by any law enforcement officer of the city or as otherwise permitted by law.

(4) Subpoena evidence to the hearings.

(5) Take testimony under oath.

(6) Issue orders having the force of law to command whatever steps are necessary to bring a violation into compliance with city codes or ordinances. However, any orders that require that city to expend money or directs city employees to perform work, i.e. demolition or repair of a structure, must be approved by the city manager or city commission.

(Ord. No. 2626, § 2, 2-12-02)

Sec. 2-119. Enforcement procedure.

(a) It shall be the duty of police and code enforcement officers to investigate complaints of violations of city codes and ordinances and to initiate enforcement proceedings relative hereto. Special masters shall not have any independent authority to conduct their own investigation of such complaints or to initiate enforcement proceedings.

(b) A police officer or a code enforcement officer is authorized to issue a civil citation to a person when, based upon personal investigation, the police officer or code enforcement officer has reasonable cause to believe

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that the person has committed a civil infraction, or allowed a civil infraction to be committed or occurring on property owned by them, in violation of a duly enacted code or ordinance of the City of Holly Hill, Florida.

(c) Prior to issuing a citation a police officer or code enforcement officer shall (i) provide notice to the persons or property owner that a violation of a code or ordinance has been committed or is occurring, and (ii) establish a reasonable time period within which the person or property owner must correct the violation. If, upon personal investigation, a police officer or code enforcement officer finds that the person or property owner has not corrected the violation within the given time period, a police officer or code enforcement officer may issue a civil citation to the person or property owner who has committed the violation or is allowing the violation to occur.

If a repeat violation is found or if a police officer or code enforcement officer has reason to believe that the violation presents a serious threat to the public health, safety, or welfare, or if the violation is irreparable or irreversible, or that the violator is engaged in a violation of an itinerant or transient nature within the jurisdiction while moving from place to place, or occurs under a special event permit, a police officer or code enforcement officer does not have to provide the person or property owner with a reasonable time period to correct the violation or abate the nuisance and may immediately issue a civil citation.

However, a "fire safety inspector" as that term is defined in F.S. § 633.052, shall provide a violator a minimum time of 45 days to correct the violation, except for major structural changes, which may be corrected within an extended adequate period of time. A life safety code violation as per National Fire Prevention Codes may be ordered to comply in less than 45 days. In the event the violation continues to exist beyond the time specified for correction, a police officer or code enforcement officer shall issue a citation to the violator in accordance with the requirements of section 2-120.

(d) A civil citation issued by a police officer or code enforcement officer will either be personally served to the individual or mailed by first class. The refusal of a person to sign the citation shall not affect the validity of the citation. However, any person who willfully refuses to sign and accept a civil citation issued by any police officer or code enforcement officer shall be guilty of a misdemeanor of the second degree, punishable as provided in F.S. §§ 775.082 or 775.083. The civil citation shall contain all elements listed in section 2-120.

(e) Upon receipt the citation, the person must either correct the violation(s) and pay the fine established in subsection (g) within 15 days from the issue date, or, within the specified time period, contest the violation or fine by filing a request for special master hearing. Any person that receives a citation may contest the citation by filing a written request for hearing and providing the written request to the City of Holly Hill Code Compliance Division within 15 calendar days from the citation issue date. Upon the filing of a request for a hearing, the City of Holly Hill will proceed with scheduling and holding a hearing before the city's designated special master. A failure to file a timely request for hearing will waive the right to a hearing before the special master.

(f) A violation of a code or ordinance enforced pursuant to this section is a civil infraction. The maximum civil penalty shall not exceed $500.00. If the person who has committed the civil infraction, or permitted one to exist on property owned by them, does not contest the citation, the civil penalty shall be less than the maximum ($500.00). This maximum civil penalty shall not be applicable to the fine established by the special magistrate.

(g) The city manager shall classify codes and ordinances and establish and periodically revise a schedule of fines to be assessed for violations and repeat violations of codes and ordinances. In setting and revising the schedule, the city manager shall classify violations by seriousness and magnitude and take into consideration the extent and nature of the violation, whether the violation is isolated and temporary or repetitive and continuous, the city's cost of investigating and correcting the violation, and other relevant factors.

(h) The provisions of this section are an additional and supplemental means of enforcing a code or ordinance. Nothing contained in this section shall prohibit the city or special master from enforcing a code or ordinance by any other means authorized by ordinance or statute.

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(i) Cases in which a violator has been issued a citation, but who has failed to pay the fine and correct the code or ordinance violation for which the citation was originally issued, may be brought before the special master. The special master shall have the right to levy additional fines for each day the violation was in existence beginning with the date of the citation through the date the police officer or code enforcement officer confirms compliance. It is the responsibility of the violator to notify the city that the violation has been corrected. The violation will be deemed to have continued until the code enforcement officer has determined that the violation has been corrected.

(j) If repeat violation(s) are found, the police officer or code enforcement officer shall notify the violator and advise him or her of the nature of the repeat violation, but is not required to provide that person a reasonable period of time to correct the repeat violation. The police officer or code enforcement officer may, upon notifying the violator of a repeat violation, issue a civil citation to the violator in accordance with the provisions of section 2-120. The case may be presented to the special master even if the fine for the repeat violation has been paid and the repeat violation corrected prior to the hearing. The special master shall have the authority to levy a per day fine beginning the date that the violation was first observed by the police officer or code enforcement officer.

(k) If a police officer or code enforcement officer has reason to believe a violation presents a serious threat to the public health, safety and welfare or if the violation is irreparable or irreversible in nature, or if the violation is transient or itinerant in nature or exists during any special event period or under a special event permit issued by the city, a police officer or code enforcement officer shall make a reasonable effort to notify the violator of the same and may immediately issue a civil citation and/or schedule the matter before the special master.

(l) Each day that a violation exists shall constitute a separate violation for the purpose of assessing a fine by the special master.

(m) All fines imposed by civil citation or special master pursuant to this article shall be paid through the city's finance department and shall be paid by cash, check or other manner acceptable to the city, with coins only being accepted for any amounts which may require change to pay the exact amount.

(Ord. No. 2626, § 2, 2-12-02; Ord. No. 2930, § 1, 3-12-13)

Sec. 2-120. Content of citations.

(a) A citation issued by a code enforcement officer shall be in the form prescribed by the city and shall contain:

(1) The date and time of issuance.

(2) The name and address of the person to whom the citation is issued.

(3) The date and time the violation was first observed.

(4) The facts constituting reasonable cause.

(5) The section of the code that has been violated and a description of the nature of the violation.

(6) The necessary corrective action and the date the corrective action shall be completed.

(7) The fine amount and the date to be paid.

(8) The procedure for the person to follow in order to pay the civil penalty or to contest the citation.

(9) In the event the issue is referred to the special master, the maximum per day fine for each violation or repeat violation that may be levied by the special master if found in violation. That the special master has the authority to levy the per day fine starting on the date the citation was issued through the date

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the violation is corrected or from the day the violation was first observed by the code enforcement officer for repeat violations.

(10) The name, work phone number and work address of the police officer or code enforcement officer. That it is the responsibility of the person to contact the city for an inspection when the violation is corrected. The violation will be deemed to be [in] existence until the code enforcement officer determines that the violation has been corrected.

(11) The date, time and place the special master hearing will be conducted, if necessary.

(12) A conspicuous statement that if the person fails to pay the civil penalty or to appear at the special master hearing to contest the violation, the person shall be deemed an admission that the violation exists.

(b) After issuing a citation to an alleged violator, the code enforcement officer shall deposit the original citation in a file for the special master, and shall deposit one copy thereof with the city's finance director.

(c) Any person who willfully refuses to sign and accept a citation issued by a code enforcement officer shall be guilty of a misdemeanor of the second degree, punishable as provided in F.S. §§ 775.082 or 775.083.

(Ord. No. 2626, § 2, 2-12-02; Ord. No. 2930, § 2, 3-12-13)

Sec. 2-121. Conduct of hearing.

(a) Special master hearings should be held once a month, but may be held more or less often as the demand necessitates. Minutes shall be kept of all special master hearings and all such hearings shall be open to the public. The city manager or his designee shall provide clerical and administrative personnel as may be reasonably required for the proper performance of his or her duties. At any hearing, a special master may continue any matter to a future hearing date.

(b) Each case before a special master shall be presented by a code enforcement officer, a member of the city's administrative staff, or the city attorney, any assistant city attorney, or any special counsel. The city attorney may present the case before the special master or serve as council to the special master, but cannot perform both functions on a single case. If the city prevails in prosecuting a case before a special master, it shall be entitled to recover all costs incurred in prosecuting the said case and such costs may be added to the fine and become part of any lien authorized under section 2-122.

(c) A special master shall proceed to hear the cases on the agenda for the respective hearing. All testimony shall be under oath and shall be recorded. Formal rules of evidence shall not apply, however, fundamental due process shall be observed and shall govern all proceedings. Both the city and the alleged violator shall have the right to subpoena witnesses to testify at the hearing.

(d) A special master shall advise the alleged violator of the section of the code of which he or she is accused of violating and the nature of the violation. A special master shall first seek to determine whether or not the alleged violator admits the violation. If the alleged violator admits the violation, the special master shall hear such testimony and evidence as he or she deems necessary to determine the extent of the violation and appropriate fine amount. If the alleged violator denies the violation, the special master shall hear first from the city and any city witnesses and evidence, and the alleged violator shall have the right to cross-examine city witnesses. At the close of the presentation of the city's case against the alleged violator, the violator shall be permitted to present his evidence, testimony of other witnesses and his own testimony in his defense. The city shall have the right to cross-examine the alleged violator and his or her witnesses. The city shall have the burden of proving the violation by a preponderance of the evidence.

(e) At the conclusion of the hearing, the special master shall issue findings of fact, conclusions of law and order imposing fine based on the evidence of record, and shall issue an order affording the proper relief consistent

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with the powers granted herein. If the special master finds the person in violation, the special master shall establish a per day fine amount that may begin accruing on the date the citation was issued and shall continue accruing until the violation is corrected. A certified copy of such order may be recorded in the public records of the county and shall constitute notice to any subsequent purchasers, successors in interest or assigns if the violation concerns real property, and the findings therein shall be binding upon the violator and, if the violation concerns real property, any subsequent purchasers, successors in interest or assigns. Upon compliance and payment of the fine, the city shall record an order acknowledging compliance of the code violation and satisfaction of the fine. A hearing is not required for the issuance of such an order acknowledging compliance.

(Ord. No. 2626, § 2, 2-12-02)

Sec. 2-122. Administrative fines and liens.

(a) *Amount of fine.* A special master may impose a fine up to the maximum amount described in this subparagraph as provided below:

(1) A fine imposed pursuant to this section shall not exceed $250.00 per day for the first violation and shall not exceed $500.00 per day for a repeat violation; and, in addition thereto, may include all costs of repairs pursuant to subsection (a) of this section. However, if a special master finds the violation to be irreparable or irreversible in nature, he or she may impose a fine not to exceed $5,000.00 per violation.

(2) In determining the amount of the fine, if any, a special master shall consider the following factors:

a. The gravity of the violation;

b. Any actions taken by the violator to correct the violation; and

c. Any previous violations committed by the violator.

(3) Each day a violation exists shall constitute a separate violation for the purpose of assessing such fine.

(b) *Reduction of fine.* If the violation has been brought into compliance, a special master may reduce any fine imposed pursuant to this article.

(c) *Lien for unpaid fine.* A certified copy of the findings of fact, conclusions of law and order imposing fine may be recorded in the public records of the county and shall thereafter constitute a lien against the land on which the violation exists and upon any other real or personal property owned by the violator. Upon petition to the circuit court, such order may be enforced in the same manner as a court judgment by the sheriffs of this state, including levy against the personal property, but such order shall not be deemed to be a court judgment except for enforcement purposes. A lien arising from a fine imposed pursuant to this section runs in favor of the city and the city manager may authorize the execution of a satisfaction and release of lien entered pursuant to this article. No lien created pursuant to the provisions of this section may be foreclosed on real property that is a homestead under Section 4, Article X of the Florida Constitution.

(Ord. No. 2626, § 2, 2-12-02)

Sec. 2-123. Notices.

(a) All notices required by this article shall be provided to the alleged violator by certified mail, return receipt requested to the address listed in the tax assessors office for tax notices, or by hand delivery by the sheriff or other law enforcement officer, or code enforcement officer, or by leaving the notice at the violator's usual place of residence with any person residing therein who is above 15 years of age and informing such person of the contents of the notice. In the case of commercial property, the notice may be provided to the

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manager or other person in charge. Further, in the event notice is provided by certified mail, return receipt requested, and acceptance of such notice is refused or is returned to the city, and additional notice is provided using the same address by regular U.S. mail delivery and said additional notice is not returned to the city, a rebuttable presumption shall arise that the violator has received notice of the violation.

(b) In addition to providing notice as set forth in subsection (a) notice may also be served by publication or posting, as follows:

(1) Such notice shall be published once during each week for four consecutive weeks (four publications being sufficient) in a newspaper of general circulation in the county. The newspaper shall meet such requirements as are prescribed under F.S. ch. 50, for legal and official advertisements. Proof of publication shall be made as provided in F.S. §§ 50.041 and 50.051.

(2) In lieu of publication as described in subsection (b)(1), such notice may be posted for at least ten days in at least two locations, one of which shall be the property upon which the violation is alleged to exist and the other of which shall be at city hall. Proof of posting shall be by affidavit of the person posting the notice, which affidavit shall include a copy of the notice posted and the date and places of its posting.

(3) Notice by publication or posting may run concurrently with, or may follow, an attempt or attempts to provide notice by hand delivery or by mail as required under subsection (a). Evidence that an attempt has been made to hand deliver or mail notice as provided in subsection (a), together with proof of publication or posting as provided in subsection (b), shall be sufficient to show that the notice requirements of this article have been met, without regard to whether or not the alleged violator actually received such notice.

(c) The provisions of this section shall not apply to the enforcement, pursuant to F.S. §§ 553.79 and 553.80, as amended from time to time, of the building codes adopted pursuant to F.S. § 553.73, as they apply to construction, provided that a building permit is either not required or has been issued. For purposes of this section, "building codes" means only those codes adopted pursuant to F.S. § 553.73.

(Ord. No. 2626, § 2, 2-12-02)

Sec. 2-124. Appeals.

Except as otherwise provided herein, an aggrieved party, including the city, may appeal a final administrative order of a special master by certiorari to the circuit court of the county. Such an appeal shall not be a hearing de novo but shall be limited to appellate review of the record created before the special master. An appeal shall be filed within 30 days of the execution of the order to be appealed. The foregoing notwithstanding, appeals from dangerous dog determinations by the special master shall be governed by section 5-80 of this Code.

(Ord. No. 2626, § 2, 2-12-02)

Sec. 2-125. Duration of lien.

No lien provided by this article shall continue for a period longer than 20 years after the certified copy of an order imposing a fine has been recorded, unless within that time an action to foreclose on the lien is commenced in a court of competent jurisdiction. In an action to foreclose on a lien, the city is entitled to recover all costs, including a reasonable attorney's fee, that it incurs in the foreclosure. The city shall be entitled to collect all costs incurred in recording and satisfying a valid lien.

(Ord. No. 2626, § 2, 2-12-02)

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Sec. 2-126. Nuisance abatement.

The city hereby authorizes and delegates to the special master the right to enforce all of the city's rights, duties and obligations as set forth in F.S. § 893.138, as amended. The city hereby adopts and incorporates all of F.S. § 893.138, as amended, as if specifically set forth herein.

(Ord. No. 2724, § 1, 5-10-05)

Sec. 2-127. Fines.

The special master shall have the authority to levy fines in the same manner as set forth in section 2-122 above. In addition to the fines set forth above, the special master shall award to the city the reasonable fees and costs associated with the investigation of and hearing on the public nuisance, including all attorney fees incurred.

(Ord. No. 2724, § 1, 5-10-05)

Sec. 2-128. Continuing jurisdiction.

The special master shall retain continuing jurisdiction for a period of one year over any place or premises that has been or is declared to be a public nuisance.

(Ord. No. 2724, § 1, 5-10-05)

Sec. 2-129. Recording of orders; foreclosure.

Orders of the special master on public nuisances shall be recorded in the public records to provide notice to subsequent purchases, successors in interest, or assigns of the real property that is subject to the order. Recorded orders shall become a lien against the real property that is the subject of the order and may be foreclosed as provided by law. The city shall be entitled to reimbursement of all costs, including reasonable attorney fees, associated with the recording of the order and foreclosures.

(Ord. No. 2724, § 1, 5-10-05)

Secs. 2-130—2-145. Reserved.

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Sec. 26-61. Special items declared a nuisance.

The maintaining, using, placing, depositing, leaving or permitting to be or remain on any public or private property of any of the following items, conditions or actions are hereby declared to be and constitute a nuisance:

(1) Any weeds such as broom grass, jimson, burdock, ragweed, sandspur or other similar weeds; or any other vegetation, other than trees, ornamental bushes, flowers or other ornamental plants with a height exceeding 12 inches;

(2) Accumulation of trash, litter, debris, garbage, bottles, paper, cans, rags, dead or decayed fish, fowl, meat or other animal matter; fruit, vegetables, offal, bricks, concrete, scrap lumber or other building debris or other refuse of any nature;

(3) Any condition which provides harborage for rats, mice, snakes and other vermin;

(4) Any building or other structure which is in such a dilapidated condition that it is unfit for human habitation, or kept in such an insanitary condition that it is a menace to the health of people residing in the vicinity thereof, or presents a more than ordinarily dangerous fire hazard in the vicinity where it is located;

(5) All unnecessary or unauthorized noises and annoying vibrations, including animal noises;

(6) All disagreeable or obnoxious odors and stenches, as well as the conditions, substances or other causes which give rise to the emission or generation of such odors and stenches;

(7) The carcasses of animals or fowl not disposed of within a reasonable time after death;

(8) The pollution of any public well or cistern, stream, lake, canal or body of water by sewage, dead animals, creamery wastes, industrial wastes or other substances;

(9) Any building, structure or other place or location where any activity which is in violation of local, state or federal law is conducted, performed or maintained;

(10) Any accumulation of stagnant water permitted or maintained on any lot or piece of ground;

(11) The storage or accumulation of junk in any area zoned for residential use;

(12) Any act resulting in the discharge, dumping, or disposal of any contents of any septic tank, dry well, raw sewage, grease or similar material, regardless of its source, into or upon any land or body of water within the city, except as may be allowed through the city's sewer system or as otherwise authorized by section 70-173;

(13) Improperly built or maintained septic tanks, water closets, or privies;

(14) Any act by which the health or life of any individual may be threatened or impaired, or by which or through which, directly or indirectly, disease may be caused;

(15) Any method for disposing of the contents of any septic tank, dry well, raw sewage, grease or similar material which has not been approved by the county health department or state department of health and rehabilitative services;

(16) Improper maintenance or operation of any vehicle designed or used for the transportation or disposal of the contents of any septic tank, dry well, raw sewage, grease, or similar material, which may threaten or impair the health or lives of any individual, or by which or through which, directly or indirectly, disease may be caused.

(Code 1984, § 18-1)

Created: 2022-03-24 09:25:17 [EST]

(Errata)

Attachment: Sec. 26-61. Special Items Declared a Nuisance (3983 : Code Enforcement - Amendment of Chapter 3 Enforcement)

STAFF REPORT
CITY OF HOLLY HILL, FLORIDA

Board of Planning and Appeals
Agenda Item

MEETING DATE: **January 9, 2023**
FROM: **Eleni Deligianis**
SUBJECT: **2023 BOPA Meeting Schedule**
NUMBER: **(ID # 3994)**
APPLICANT:
PLANNER:

Monday, February 6th, 2023

Monday, March 6th, 2023

Monday, April 3rd, 2023

Monday, May 1st, 2023

Monday, June 5th, 2023

Monday, July 10th, 2023

Monday, August 7th, 2023

Tuesday, September 5th, 2023

Monday, October 2nd, 2023

Monday, November 6th, 2023

Monday, December 4th, 2023