### **INDEX OF SHEETS** DWG.NO. DESCRIPTION SU-1 & SU-2 BOUNDARY AND TOPOGRAPHIC SURVEY DEVELOPMENT INFORMATION DEMOLITION, TREE REMOVAL AND SWPPP PLAN SWPPP DETAILS AND NOTES SWPPP DETAILS AND NOTES SITE LAYOUT PLAN DRAINAGE PLAN DRAINAGE DETAILS DRAINAGE DETAILS **CULTEC OPERATION AND MAINTENANCE GRADING PLAN CROSS SECTIONS CROSS SECTIONS UTILITY PLAN** PLAN AND PROFILE PLAN AND PROFILE PLAN AND PROFILE UTILITY DETAILS AND NOTES CITY OF FLAGLER BEACH UTILITY DETAILS **MISCELLANEOUS DETAILS AND NOTES** FDOT DETAILS MAINTENANCE OF TRAFFIC **AUTOTURN TRUCK PLAN** EASEMENT PLAN PHOTOMETRIC PLAN **PHOTOMETRIC DETAILS** TREE PROTECTION DETAILS TREE REPLACEMENT PLAN SURFACE WATER / WETLAND IMPACT PLAN **LANDSCAPE DESIGN** IRRIGATION PLAN **IRRIGATION DETAILS** INSTALLATION DETAILS **BUILDING ELEVATION TYPES BUILDING ELEVATION "A" BUILDING ELEVATION "B"** A-03 **BUILDING ELEVATION "C" BUILDING ELEVATION "D"** DUMPSTER ENCLOSURE

### **LEGAL DESCRIPTION**

#### **DESCRIPTION: PARCEL 1**

A PARCEL OF LAND LYING SOUTH OF STATE ROAD 100 WITHIN GOVERNMENT SECTION 11, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A POINT OF BEGINNING BEING THE NORTHWEST COMER OF THE SOUTH HALF (1/2) OF TRACT 4, BLOCK D, ACCORDING TO THE PLAT BUNNELL DEVELOPMENT COMPANY, RECORDED IN MAP BOOK 1, PAGE 1, OF THE PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA, SAID NORTHWEST COMER BEING THE NORTHWEST COMER OF HILLCREST UNRECORDED SUBDIVISION, THENCE SOUTH 01° 20' 27" EAST ALONG THE WEST LINE OF TRACT 4, BLOCK D, A DISTANCE OF 320,00 FEET, THENCE DEPARTING TRACT 4, BLOCK D, SOUTH 88° 39' 33" WEST A DISTANCE OF 331,10 FEET, THENCE NORTH 01° 20' 27" WEST A DISTANCE OF 64.70 FEET TO A POINT ON THE BOUNDARY OF LANDS RECORDED IN OFFICIAL RECORDS BOOK 244, PAGE 576 THROUGH 578, THENCE NORTH 05° 21' 24" WEST A DISTANCE OF 267.29 FEET, THENCE SOUTH 89° 29' 02" EAST ALONG THE SOUTH LINE OF SAID LANDS RECORDED IN OFFICIAL RECORDS BOOK 244, PAGES 576 THROUGH 578, A DISTANCE OF 350.00 FEET TO THE POINT OF BEGINNING, PARCEL CONTAINING 2.5303 ACRES MORE OR LESS.

#### TOGETHER WITH.

#### PARCEL 2:

A PARCEL OF LAND LYING SOUTH OF STATE ROAD 100 WITHIN GOVERNMENT SECTION 11, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: A POINT OF REFERENCE BEING THE NORTHWEST CORNER OF THE SOUTH HALF (1/2) OF TRACT 4, BLOCK D,

ACCORDING TO THE PLAT BUNNELL DEVELOPMENT COMPANY, RECORDED IN MAP BOOK 1, PAGE 1, OF THE PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA, SAID NORTHWEST COMER BEING THE NORTHWEST COMER OF HILLCREST UNRECORDED SUBDIVISION, THENCE SOUTH 01° 20' 27" EAST ALONG THE WEST LINE OF TRACT 4, BLOCK D, A DISTANCE OF 320.00 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION, THENCE CONTINUE SOUTH 01° 20' 27" EAST A DISTANCE OF 60.00 FEET, THENCE DEPARTING TRACT 4, BLOCK D, SOUTH 88° 39' 33" WEST A DISTANCE OF 391.10 FEET, THENCE NORTH 01° 20' 27" WEST A DISTANCE OF 126.65 FEET TO A POINT ON THE BOUNDARY OF LANDS **RECORDED IN OFFICIAL** 

RECORDS BOOK 244, PAGE 576 THROUGH 578, THENCE SOUTH 89° 29' 02" EAST ALONG THE SOUTH BOUNDARY LINE OF SAID LANDS RECORDED IN OFFICIAL RECORDS BOOK 244, PAGES 576 THROUGH 578, A DISTANCE OF 60.03 FEET, THENCE DEPARTING SAID BOUNDARY SOUTH 01° 20' 27" EAST A DISTANCE OF 64.70 FEET, THENCE NORTH 88° 39' 33" EAST A DISTANCE OF 331.10 FEET TO THE POINT OF BEGINNING, PARCEL CONTAINING 0.6292 ACRES MORE OR

PARCEL 2, SUBJECT TO AN EXISTING EASEMENT FOR ACCESS AND UTILITIES.

#### **JURISDICTIONAL AGENCY** PERMIT No.

PARCELS 1 AND 2 CONTAINING 3.1595 ACRES MORE OR LESS.

**CITY OF FLAGLER BEACH (DEVELOPMENT ORDER)** SP#23-04-01 **SJRWMD (STORMWATER)** 199375-1

FDEP (WATER) FDEP (WASTEWATER)

FDEP (NPDES NOI)

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

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

## SITE PLAN DRAWINGS FOR

# LEGACY POINTE COTTAGES

**SECTION 11, TOWNSHIP 12 S, RANGE 31 E** 11-12-31-0650-000D0-0050 LESLIE STREET FLAGLER BEACH, FL 32136

**OCTOBER 2024** 

## **PROJECT TEAM**

**ALT HOMES LLC** OWNER / **39 AUDUBON LANE** FLAGLER BEACH, FL 32136 PHONE: (386) 931-6018

ALTHOMESLLC@GMAIL.COM

**NEWKIRK ENGINEERING, INC. LANDSCAPE** 1230 NORTH US1, SUITE 3 ARCHITECT/ **ORMOND BEACH, FL 32174** AGENT

HARRY@NEWKIRK-ENGINEERING.COM

ROBERT HALL ARCHITECTS, INC.

217 ROBERTS ROAD **NEW SMYRNA BEACH, FL 32169** PHONE: (386) 214-4529

HALLARCHITECTS@RHALLARCH.COM

CPH, INC.

FLAGLER BEAC

520 PALM COAST PARKWAY SW PALM COAST, FL 32137 PHONE: (386) 445-6569

UNIVERSAL ENGINEERING SCIENCES

911 BEVILLE ROAD, SUITE 3 **SOUTH DAYTONA BEACH, FL 32119** 

BPOHL@UNIVERSALENGINEERING.COM

**ENVIRONMENTAL: ECOLOGICAL CONSULTING SOLUTIONS, INC.** 

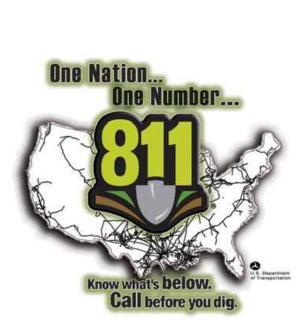
235 HUNT CLUB BOULEVARD, SUITE 202 LONGWOOD, FL 32779

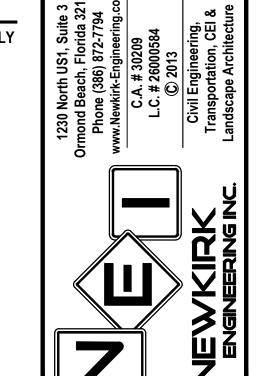
## **CONTACT NUMBERS**

PLANNING DIVISION - CITY OF FLAGLER BEACH (386) 517-2016 **BUILDING SERVICES - CITY OF FLAGLER BEACH (386) 517-2016** WATER - CITY OF FLAGLER BEACH UTILITY DEPARTMENT (386) 517-2000 WASTEWATER - FLAGLER BEACH UTILITY DEPARTMENT (386) 517-2000 GAS - TECO PEOPLES GAS - (386) 672-2232 ELECTRIC - FLORIDA POWER & LIGHT (386) 257-7502 TELEPHONE/CABLE - AT&T (386) 254-8550

## **PROJECT STATEMENT**

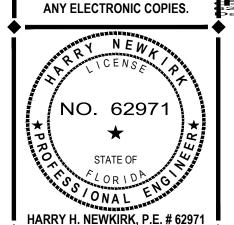
PROPOSE A 22 UNIT. 1-STORY COTTAGE STYLE MULTIFAMILY **DEVELOPMENT. THE SITE CONSISTS OF 3.159 ACRES WITH** 1.096 ACRES IMPERVIOUS SURFACE.





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

DOCUMENT ARE NOT CONSIDERE SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON



DRAWING NUMBER

**LOCATION MAP** 

SCALE: 1" = 700'

LOCATION

MOODY BLVD

**LESLIE ST** 

**HIGHWAY MAP** 

**NOT TO SCALE** 

# National Flood Hazard Layer FIRMette Area of Uniterestrict Root Nazero Es - Coessel Trensco. --- Base Road Beravial Gate (BFE) LOCATION

MOODY BLVD

LESLIE ST

**FLOOD ZONE MAP** 

**SCALE: 1" = 600'** 

**AERIAL MAP** 

SCALE: 1" = 600'

PANEL NO. 12035C0232 E FLOOD ZONE "X"

SCALE: 1" = 700'

HW-C R-R STATE ROAD NO.100 HW-C PUD

PROJECT ZONING DISTRICT: **ZONING MAP** GC (GENERAL COMMERCIAL)

**SOILS MAP** 

SCALE: 1" = 500'

(11) MYAKKA-MYAKKA, WET, FINE SANDS. 0 TO 2 PERCENT SLOPES

PROJECT No. 2023-17



- MANHOLE

METAL LIGHT POLE

- METAL POWER POLE

TRAFFIC SIGNAL SUPPORT POLE

- UNDERGROUND TELEPHONE LINES

UNDERGROUND WATER LINE

TYPICAL

UNKNOWN

- UTILITY EASEMENT

WOOD LIGHT POLE

WOOD POST FENCE

WOOD POWER POLE

WATER METER

WATER VALVE

WORK PROGRAM

UNDERGROUND CABLE TV LINES

- MILES PER HOUR

#### Abbreviation Legend:

ACTUAL

ACSM

AIR CONDITIONER

- AMERICAN CONGRESS ON SURVEYING & MAPPING

- AMERICANS WITH DISABILITIES ACT

ADA ALTA - AMERICAN LAND TITLE ASSOCIATION - NOT APPLICABLE **APPROX**  APPROXIMATE NORTH AMERICAN VERTICAL DATUM ARV AIR RELEASE VALVE - NORTH AMERICAN DATUM AVE AVENUE - NATURAL GROUND AVG AVERAGE NATIONAL GEODETIC SURVEY BEARING BASIS - NATIONAL GEODETIC VERTICAL DATUM BACK FLOW PREVENTER NAIL AND DISK BLK BLOCK NUMBER BLDG BUILDING NON-RADIAL BOULEVARD - NATIONAL SOCIETY OF - BENCH MARK PROFESSIONAL SURVEYORS - BACK OF CURB NON—TANGENT BOW BACK OF WALK NOT TO SCALE BUILDING SETBACK LINE OUTSIDE DIAMETER - BARBED WIRE FENCE - OFFICIAL RECORDS BOOK - DENOTES SHEET NUMBERING FOR ENGINEERING PLANS OR C-X OFFICIAL RECORDS OVERHEAD LITHITY OVERHEAD TRAFFIC LINES CATV - CABLE TELEVISION RISER - PLAT CHORD BEARING - PLAT BOOK CONCRETE BLOCK STRUCTURE POINT OF CURVATURE - CERTIFIED CORNER RECORD - POINT OF COMPOUND CURVATURE - PERMANENT CONTROL POINT C&G CURB & GUTTER - CATCH INLET - PROPOSED FINISHED FLOOR CENTERLINE PGS PAGES CHAIN LINK FENCE - POINT OF INTERSECTION CONCRETE MONUMENT - CORRUGATED METAL PIPE - POST INDICATOR VALVE - PARKER KAYLON CLEANOUT CONC - POINT OF BEGINNING CONCRETE COR POINT OF COMMENCEMENT - POINT ON LINE - CORRUGATED PLASTIC PIPE - POWER POLE - COUNTY UTILITY EASEMENT **CWS** - POINT OF REVERSE CURVATURE CROSSWALK SIGNAL PERMANENT REFERENCE MONUMENT - DESCRIPTION PROFESSIONAL SURVEYOR & MAPPER POINT OF TANGENCY DEED BOOK - POLYVINYL CHLORIDE PIPE - DIAMETER AT BREAST HEIGHT IN INCHES - PAVEMENT DRAINAGE EASEMENT **R31E** RANGE 31 EAST - DEPARTMENT RADIUS - DUCTILE IRON PIPE RADIAL - REINFORCED CONCRETE PIPE D/U - DRAINAGE AND UTILITY EASEMENT REC RECOVERED ENGINEERING PLAN REV REVISION - ELECTRIC JUNCTION BOX RADIUS POINT - UNDERGROUND ELECTRICAL LINES RIGHT-OF-WAY **ELEC**  ELECTRIC - REGISTERED LAND SURVEYOR ELEV - ELEVATION RADIUS POINT **ELLIP**  ELLIPTICAL UNDERGROUND RECLAIM WATER LINE - END OF INFORMATION RECLAIMED WATER METER - EDGE OF PAVEMENT SPECIAL EASEMENT - FIELD BOOK SECTION 11 **FDOT** - FLORIDA DEPARTMENT OF TRANSPORTATION SANITARY SEWER MANHOLE - FINISH FLOOR - STATE PLANE (SP) - FLAT GRATE INLET **FGLP** - FIBERGLASS LIGHT POLE SQUARE SQUARE FEET FHYD - FIRE HYDRANT FORCE MAIN STORM DRAINAGE MANHOLE - FOUND FP&L - FLORIDA POWER AND LIGHT SIDEWALK TANGENT BEARING FLORIDA STATUTES TOWNSHIP 12 SOUTH GRID (STATE PLANE) - TELEPHONE - UNDERGROUND GAS LINES OVERHEAD TRAFFIC SIGNAL LINES GOV'T GOVERNMENT TOP OF BANK GROUND PENETRATING RADAR TOE TOE OF SLOPE GREASE TRAP MANHOLE TELEPHONE RISER - HIGH DENSITY POLYETHYLENE PIPE **HDPE** TRANS TRANSFORMER HOG WIRE FENCE **TSB** TRAFFIC SIGNAL BOX

TVL

#### Line Legend: NOT TO SCALE

| 1      | = 1 FOOT CONTOURS                         |
|--------|---|
|        | = 5 FOOT CONTOURS                         |
|        | = ADJOINER PROPERTY LINES                 |
|        | = BARBED WIRE FENCE                       |
|        | = BROKEN LINE                             |
| •      | = BURIED CABLE                            |
|        | = BURIED CABLE TELEVISION                 |
|        | = BURIED ELECTRIC                         |
|        | = BURIED FIBER OPTICS                     |
| UG     |   |
|        | = BURIED RECLAIMED WATER LINE             |
|        | = BURIED SANITARY LINES                   |
|        | = BURIED SANITARY SEWER FORCE MAIN LINE   |
|        | = BURIED TRAFFIC CONTROL                  |
|        | = BURIED TELEPHONE LINE                   |
|        | = BURIED WATER LINES                      |
|        | = CENTER LINE R/W                         |
|        | = CHAIN LINK FENCE                        |
|        |   |
|        | = EASEMENT LINES (EXISTING)               |
|        | = EASEMENT LINES (PROPOSED)               |
|        | = EDGE OF WATER LINES                     |
|        | = EXISTING DRAINAGE PIPES                 |
| 5      | = EXISTING DRAINAGE PIPES                 |
|        | (TERMINUS & ANGLE UNKNOWN)                |
|        | = FIRE WATER MAIN LINES                   |
| — нw — | = HOT WATER SUPPLY LINES                  |
| IRR    | = IRRIGATION LINES                        |
|        | = OVERHEAD TRAFFIC LINES                  |
|        | = OVERHEAD UTILITY LINES                  |
|        | = RAILROAD TRACKS                         |
|        | = RIGHT-OF-WAY LINES                      |
|        | = SECTION LINES                           |
|        | = STONE WALL LINES                        |
|        | = TOP OF BANK LINES                       |
|        | = TOE OF SLOPE LINES                      |
|        |   |
|        | = TRAVERSE LINES                          |
|        | = UNKNOWN BURIED LINES                    |
|        |   |
|        | = WETLAND LINE                            |
|        |   |
|        | = ORANGE PAINT LINE<br>= GREEN PAINT LINE |
|        | = RED PAINT LINE                          |
|        | = WHITE PAINT LINE                        |
|        | = PURPLE PAINT LINE                       |
|        | = BLUE PAINT LINE                         |
|        | = YELLOW PAINT LINE                       |
| TP     | - ILLLOW FAINT LINE                       |
|        |   |

## **BOUNDARY & TOPOGRAPHIC SURVEY**

## ALT HOMES LLC

FLAGLER BEACH

## SECTION 11-TOWNSHIP 12 SOUTH-RANGE 31 EAST FLAGLER COUNTY, FLORIDA

Legal Description: (PER ORB 2634, PG 1299, AS PROVIDED BY CLIENT)

DESCRIPTION: PARCEL 1:

A PARCEL OF LAND LYING SOUTH OF STATE ROAD 100 WITHIN GOVERNMENT SECTION 11, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A POINT OF BEGINNING BEING THE NORTHWEST COMER OF THE SOUTH HALF (1/2) OF TRACT 4, BLOCK D, ACCORDING TO THE PLAT BUNNELL DEVELOPMENT COMPANY, RECORDED IN MAP BOOK 1, PAGE 1, OF THE PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA, SAID NORTHWEST COMER BEING THE NORTHWEST COMER OF HILLCREST UNRECORDED SUBDIVISION, THENCE SOUTH 01° 20' 27" EAST ALONG THE WEST LINE OF TRACT 4, BLOCK D, A DISTANCE OF 320.00 FEET, THENCE DEPARTING TRACT 4, BLOCK D, SOUTH 88' 39' 33" WEST A DISTANCE OF 331.10 FEET, THENCE NORTH 01° 20' 27" WEST A DISTANCE OF 64.70 FEET TO A POINT ON THE BOUNDARY OF LANDS RECORDED IN OFFICIAL RECORDS BOOK 244, PAGE 576 THROUGH 578, THENCE NORTH 05° 21' 24" WEST A DISTANCE OF 267.29 FEET, THENCE SOUTH 89° 29' 02" EAST ALONG THE SOUTH LINE OF SAID LANDS RECORDED IN OFFICIAL RECORDS BOOK 244, PAGES 576 THROUGH 578, A DISTANCE OF 350.00 FEET TO THE POINT OF BEGINNING, PARCEL CONTAINING 2.5303 ACRES MORE OR LESS.

TOGETHER WITH,

PARCEL 2:

A PARCEL OF LAND LYING SOUTH OF STATE ROAD 100 WITHIN GOVERNMENT SECTION 11, TOWNSHIP 12 SOUTH, RANGE 31 EAST, FLAGLER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A POINT OF REFERENCE BEING THE NORTHWEST CORNER OF THE SOUTH HALF (1/2) OF TRACT 4, BLOCK D, ACCORDING TO THE PLAT BUNNELL DEVELOPMENT COMPANY, RECORDED IN MAP BOOK 1, PAGE 1, OF THE PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA, SAID NORTHWEST COMER BEING THE NORTHWEST COMER OF HILLCREST UNRECORDED SUBDIVISION, THENCE SOUTH 01° 20' 27" EAST ALONG THE WEST LINE OF TRACT 4, BLOCK D, A DISTANCE OF 320.00 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION, THENCE CONTINUE SOUTH 01 20' 27" EAST A DISTANCE OF 60.00 FEET, THENCE DEPARTING TRACT 4, BLOCK D, SOUTH 88' 39' 33" WEST A DISTANCE OF 391.10 FEET, THENCE NORTH 01° 20' 27" WEST A DISTANCE OF 126.65 FEET TO A POINT ON THE BOUNDARY OF LANDS

RECORDS BOOK 244. PAGE 576 THROUGH 578. THENCE SOUTH 89° 29' 02" EAST ALONG THE SOUTH BOUNDARY LINE OF SAID LANDS RECORDED IN OFFICIAL RECORDS BOOK 244, PAGES 576 THROUGH 578, A DISTANCE OF 60.03 FEET, THENCE DEPARTING SAID BOUNDARY SOUTH 01° 20' 27" EAST A DISTANCE OF 64.70 FEET, THENCE NORTH 88° 39' 33" EAST A DISTANCE OF 331.10 FEET TO THE POINT OF BEGINNING, PARCEL CONTAINING 0.6292 ACRES

□ - LIGHT POLE (TRIPLE)

MONITOR WELLS

2 - PARKING SPACES (2)

— PULL BOX (AS NOTED)

A REVISION NUMBER (3)

□ ROOF DRAIN

- RECLAIMED WATER METER

→ RECLAIMED WATER VALVE

S – SANITARY SEWER MANHOLE

- SCHEDULE B ITEM NUMBER (8)

- SANITARY SEWER VALVE

- SECTION CORNER

- - SIGN

─ - 4" X 4" CM LB #7143

- 5/8" IR&C LB #7143

STORM SEWER MANHOLE

STRIPING (DIRECTIONAL)

— TELEPHONE CABLE RISER

TELEPHONE LINE MARKER

TRAFFIC SIGNAL BOX

- UNKNOWN UTILITY MARKER

UTILITY FLAG (AS NOTED)

U - UNKNOWN MANHOLE

UNKNOWN RISER

- UNKNOWN VALVE

→ VENT (AS NOTED)

- WATER METER

- WATER RISER

- WATER SPIGOT

- WETLAND FLAG

[120] - WATER LINE MARKER

WOOD UTILITY POLE

— WIRE HEIGHTS (SEE CHART)

WATER SPRINKLER

MS - WATER SERVICE

₩ − WATER VALVE

WELL

- TELEPHONE JUNCTION BOX

TRAFFIC SIGNAL SUPPORT POLE

TELEPHONE MANHOLE

- TEST HOLE

- SITE BENCH MARK

→ MAILBOX

- LIGHT POLE (QUAD)

NAIL & DISC (AS NOTED)

PARCEL 2, SUBJECT TO AN EXISTING EASEMENT FOR ACCESS AND UTILITIES.

Symbol Legend:

PARCELS 1 AND 2 CONTAINING 3.1595 ACRES MORE OR LESS.

- AIR RELEASE VALVE

→ BORING HOLE LOCATION

- CABLE TV RISER

CENTRAL ANGLE

CONCRETE PAVERS

- CONCRETE RIP RAP

CONCRETE UTILITY POLE

- CROSSWALK SIGNAL POLE

--- - DUAL SUPPORT SIGN

(E) – ELECTRICAL MANHOLE

- ELECTRIC METER

- ELECTRIC OUTLET

[FO] - FIBER OPTIC MARKER

- ELECTRIC RISER

- FIRE HYDRANT

- FLOOD LIGHT

GAS — GAS MARKER

A GAS VALVE

— GRATE INLET

- GRAVEL/DIRT

← GROUND LIGHT

← − GUY ANCHOR

- COUNTY ROAD SYMBOL

- DETECTABLE WARNING AREA

- ELECTRICAL JUNCTION BOX

FOUND IRON PIPE (AS NOTED)

FOUND/SET NAIL (AS NOTED)

◆ GOPHER TORTOISE HOLE

GREASE TRAP MANHOLE

95) - INTERSTATE SYMBOL

□⊕□ - LIGHT POLE (DUAL)

6 - HANDICAP PARKING SPACE

- IRRIGATION CONTROL VALVE

FOUND IRON REBAR (AS NOTED)

─ FOUND CONCRETE MONUMENT (AS NOTED) ▼

□●□ - CONCRETE LIGHT POLE (DUAL)

- CONCRETE LIGHT POLE (TRIPLE)

□ - CONCRETE LIGHT POLE (QUAD)

— CONCRETE MITERED END SECTION

- CLEAN OUT

- CONCRETE

册 - BRICK PAVERS

## Reference Material

1) MAP OF THE BUNNELL DEVELOPMENT COMPANY'S LAND, AS RECORDED IN MAP BOOK 1, PAGE 1 OF THE PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA.

2) OFFICIAL RECORDS BOOK 1814, PAGE 1479 OF THE PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA.

#### Sign Legend: NOT TO SCALE

|        | NOT I | O SCALE                    |
|--------|-------|----------------------------|
| (R1)   |       | ROW NUMBER SIGN            |
| (B)    | 0     | BUS STOP SIGN              |
| (DE)   | 0     | DEAD END SIGN              |
| (DNE)  | -0    | DO NOT ENTER SIGN (R5-1)   |
| (HC)   | 0     | HANDICAP SIGN              |
| (HC)   | _0_   | DUAL HANDICAP SIGN         |
| (FDC)  | -0    | FIRE DEPARTMENT CONNECTION |
| (INFO) | -0-   | INFORMATION SIGN           |
| (KR)   |       | KEEP RIGHT SIGN            |
| (LTO)  | _0    | LEFT TURN ONLY             |
| (ME)   | 0     | MEDIAN SIGN                |
| (ND)   | 0     | NO DUMPING SIGN            |
| (NL)   |       | NO LEFT TURN SIGN (R3-2)   |
| (NLI)  |       | NO LITTERING SIGN          |
| (NO)   | _0_   | NO OUTLET SIGN             |
| (FL)   | 0     | NO PARKING FIRE LANE SIGN  |
| (NOR)  | -0-   | NO RIGHT TURN SIGN (R3-1)  |
| (NTT)  | 0     | NO THRU TRAFFIC SIGN       |
| (NOT)  | 0     | NO TRUCKS (R5-2)           |
| (NP)   | -0    | NO PARKING SIGN            |
| (1W)   |       | ONE WAY SIGN (R6-2)        |
|        |       |                            |

(PE) — PEDESTRIAN CROSSING SIGN

TOW AWAY ZONE SIGN

TRUCK ENTRANCE SIGN

- SPEED LIMIT SIGN

(RTO) - RIGHT TURN ONLY

(ST)  $\longrightarrow$  STOP SIGN (R1-1)

STREET SIGN

UNKNOWN SIGN

WEIGHT LIMIT SIGN

WRONG WAY SIGN

(Y) TIELD SIGN

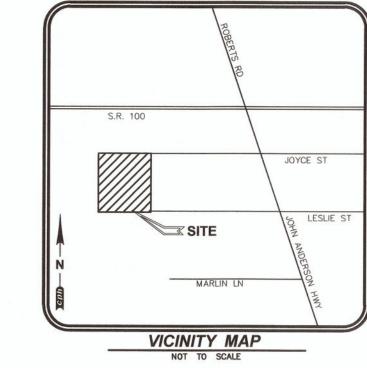
Index of Sheets BOUNDARY & TOPOGRAPHIC SURVEY

### Surveyor's Certification: Certified to: ALT Homes LLC

hereby certify that the attached "Boundary & Topographic Survey" of the nereon—described property is true and correct to the best of my knowledge, information and belief as surveyed in the field on February 2, 2022. Whither Certify that this "Boundary & Topographic Survey" meets the standards of practice set forth in Rule Chapter 5J-17 of the Florida Administrative Code, pursuant to PS/17/2027

LS6384 STATEOF FLORIDA CA For the Firm By: Jeffrey UW enatterson Professional "Surveyor" and Mappe

Florida Registration No. 6384



#### Survey Notes:

- COPIES OF THIS SURVEY ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
- ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
- 3. THIS SURVEY IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88)

THE SITE BENCHMARKS FOR THIS TOPOGRAPHIC SURVEY ARE DISPLAYED ON THE RESPECTIVE SURVEY FILE. THESE BENCHMARKS ARE BASED ON A CLOSED VERTICAL CONTROL LOOP HAVING AN ACTUAL ERROR OF CLOSURE OF 0.014' WHICH MEETS THE ALLOWABLE CLOSURE OF 0.054. THIS FIELDWORK WAS PERFORMED USING A NIKON LEVEL MODEL #AS-2 AND REFERENCES THE FOLLOWING PUBLISHED BENCHMARKS AS ESTABLISHED BY THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88) AND ALL VERTICAL INFORMATION INCLUDING SPOT ELEVATIONS, NOTATIONS AND THE CONTOUR LINES DERIVED THEREFROM ARE BASED ON AND MATCHED TO VERTICAL CONTROL BENCHMARKS SUPPLIED BY NGS DATA SHEETS PUBLISHED AT WWW.LABINS.ORG AS FOLLOWS:

- a) DESIGNATION #T 491, PID #DE8123, SURVEY DISK IN 4"X4" CONCRETE MONUMENT STAMPED "T 491 2000" (NAVD '88) ELEVATION = 12.01'
- b) DESIGNATION #S 491, PID #DE8122, SURVEY DISK IN 4"X4" CONCRETE MONUMENT STAMPED "S 491 2000" (NAVD '88) ELEVATION = 21.28'
- SITE BENCHMARKS ARE AS SHOWN ON SHEET 2 OF 2.
- 4. THIS SURVEY IS NOT VALID WITHOUT SHEETS 1 THROUGH 2 OF 2.
- 5. THE LAST DAY FIELD WORK WAS PERFORMED WAS 2/2/2; ALL BOUNDARY CORNERS WERE RECOVERED OR
- 6. THE "LEGAL DESCRIPTION" HEREON IS IN ACCORD WITH THE INSTRUMENT OF RECORD, AND WAS PROVIDED BY
- 7. BEARINGS SHOWN HEREON ARE RELATIVE TO THE WEST LINE OF TRACT 4, BLOCK D, AS DESCRIBED IN OFFICIAL RECORDS BOOK 1814, PAGE 1479 OF THE PUBLIC RECORDS OF FLAGLER COUNTY, FLORIDA, SAID
- 8. HAVING CONSULTED THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 12035C0232E, CITY OF FLAGLER BEACH, REVISED DATE JUNE 6, 2018, THE SUBJECT PROPERTY APPEARS TO LIE IN ZONE X, WHICH ARE AREAS OF MINIMAL FLOOD HAZARD (NAVD '88). THIS DETERMINATION WAS BASED ON GEOSPATIAL DATA DOWNLOADED FROM WWW.FEMA.GOV AND THE SHAPE FILE DISPLAYED HEREON WAS REFERENCED TO ABOVE GROUND IMPROVEMENTS. THIS DETERMINATION WAS BASED ON A GRAPHIC INTERPOLATION OF SAID MAP AND NOT ON ACTUAL FIELD MEASUREMENTS.
- HORIZONTAL WELL-IDENTIFIED FEATURES IN THIS SURVEY AND MAP HAVE BEEN MEASURED TO AN ESTIMATED HORIZONTAL POSITIONAL ACCURACY OF 0.05 (FT). THE EQUIPMENT USED TO VERIFY THE HORIZONTAL CONTROL ON THE SUBJECT SURVEY WAS A TOPCON GPS HIPER V). THE EQUIPMENT USED TO LOCATE THE FEATURES WAS A TOPCON GPS HIPER V.
- 10. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OR OPINION OF TITLE, NO INSTRUMENTS OF RECORD REFLECTING EASEMENTS, RIGHTS-OF-WAY, AND/OR OWNERSHIP WERE FURNISHED TO THIS SURVEYOR EXCEPT AS NOTED BELOW: FLAGLER COUNTY PROPERTY APPRAISER INFORMATION DISPLAYED HEREON AS PARCEL# IS PER THE COUNTY PROPERTY APPRAISER'S WEBSITE FLAGLERPA.COM AS OF FEBRUARY 2, 2022.
- 11. NO UNDERGROUND UTILITIES, FOUNDATIONS OR IMPROVEMENTS, IF ANY, HAVE BEEN LOCATED EXCEPT AS
- 12. THIS SURVEY DOES NOT IDENTIFY THE LIMITS OR EXTENT OF POTENTIAL JURISDICTIONAL WETLAND
- 13. FENCES AND WALLS EXISTING ON, OVER OR ADJACENT TO SUBJECT PROPERTY, ARE DISPLAYED HEREON: OWNERSHIP WHETHER SINGULAR OR JOINT WAS NOT DETERMINED BY THIS SURVEY.
- 14. VERTICAL FEATURE ACCURACY: "ELEVATIONS OF WELL-IDENTIFIED FEATURES CONTAINED IN THIS SURVEY AND MAP HAVE BEEN MEASURED TO AN ESTIMATED VERTICAL POSITIONAL ACCURACY OF 0.05 (FT)."
- 15. DIMENSIONS ARE SHOWN RELATIVE TO UNITED STATES STANDARD FEET AND DECIMALS THEREOF, UNLESS THE OBJECT SHOWN IS COMMONLY IDENTIFIED IN INCHES, I.E. TREE DIAMETER, PIPE DIAMETER, ETC. TREES DEPICTED ARE COMMON NAMES AND MEASURED AND LABELED AS DIAMETER AT BREAST HEIGHT IN INCHES.
- 16. THE UNDERGROUND UTILITIES DEPICTED BY PIPE LINETYPES ARE APPROXIMATE IN NATURE BASED UPON AN INSPECTION OF THE MANHOLE, GRATE, ETC. OF EACH FACILITY. EXISTING PIPES WERE NOT LAMPED OR REMOTELY VIEWED FOR DIRECTION, OBSTRUCTIONS OR CONNECTIVITY.

A & E Firm Architects Engineers Landscape Architects M/E/P **Planners** Structural Surveyors Traffic / Transportation Development Coordination Offices in: Florida Puerto Rico Connecticut Maryland Texas Survey Prepared By: CPH. Inc.

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Eng. C.O.A. No. 3215 Survey L.B. No. 7143 Arch. Lic. No. AA2600926 Lndscp. Lic. No. LC0000298

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Sheet No.

**SU-1** 

THIS SURVEY IS NOT VALID WITHOUT SHEETS 1 THROUGH 2 OF

C.O.A. = CERTIFICATE OF AUTHORIZATION Arch.= ARCHITECTURAL

Landscp. = LANDSCAPE N/A = NOT APPLICABLE Lic. = LICENSED No. = NUMBER P.O. = POST OFFICE © = COPYRIGHT

L.B. = LICENSED BUSINESS

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IDENTIFICATION

IRON PIPE & CAP

- IRON REBAR & CAP

- MITERED END SECTION

INFORMATION

IRON PIPI

IRON ROD

IRRIGATION

ARC LENGTH

LIGHT POLE

MEASURED

- MAP BOOK

MAILBOX

INVERT

INFO

INV

IP&C

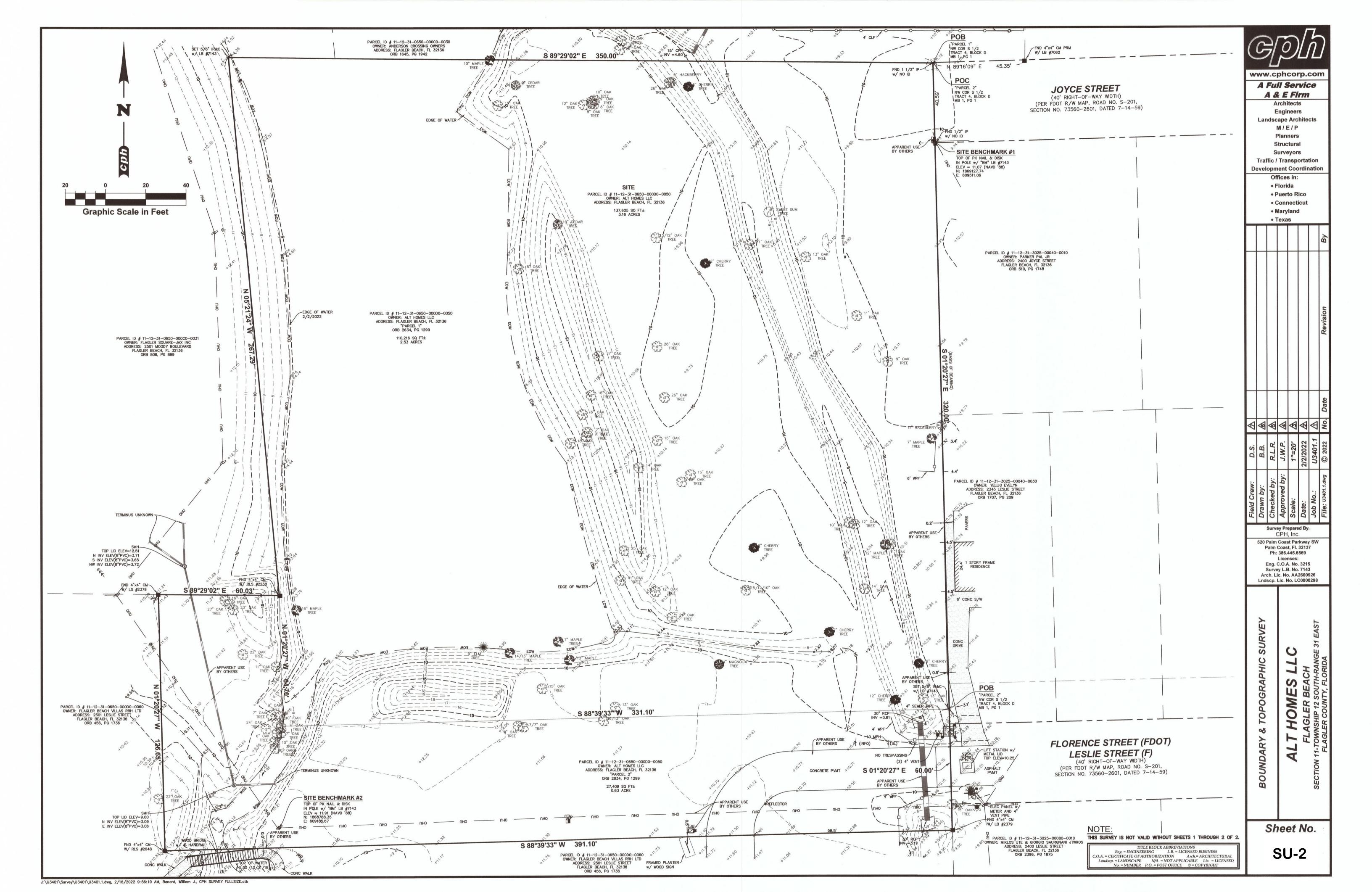
IR&C

MBX

MES

IRRIGATION CONTROL VALVE

- LICENSED BUSINESS NUMBER



#### **GENERAL CONSTRUCTION NOTES**

- 1. GOVERNING SPECIFICATIONS: CITY OF FLAGLER BEACH LAND DEVELOPMENT CODE, CITY OF FLAGLER BEACH STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, CURRENT EDITION.
- 2. ALL CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL CONFORM TO THE CURRENT EDITION OF THE FDOT DESIGN STANDARD INDEXES, THE FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND THE FDOT UTILITY ACCOMMODATIONS MANUAL.
- 3. ALL UTILITY MATERIAL, CONSTRUCTION AND TESTING COVERED BY THESE DRAWINGS SHALL COMPLY WITH THE CITY OF FLAGLER BEACH STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS, LATEST EDITION. ALL UTILITY WORK AND CONNECTIONS SHALL BE COORDINATED WITH THE CITY OF FLAGLER BEACH INSPECTOR.
- 4. THE CONTRACTOR SHALL PAY FOR AND OBTAIN A BUILDING PERMIT. THE ENGINEER WILL SCHEDULE THE PRECONSTRUCTION CONFERENCE BEFORE THE CONTRACTOR'S START OF WORK. THE CONTRACTOR SHALL CONTACT THE BUILDING DEPARTMENT AT (386) 517-2016 FOR INFORMATION ON ISSUANCE OF CITY PERMITS AND / OR OTHER REQUIREMENTS.
- 5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER OF ANY DEFICIENCIES OR DISCREPANCIES AMONG THE DIVISIONS OF THE DRAWING AND SPECIFICATIONS PRIOR TO THE BID DATE. NEITHER THE OWNER OR ENGINEER WILL BE RESPONSIBLE FOR ANY DEFICIENCIES OR DISCREPANCIES RAISED AFTER THE BID OPENING. ACCORDINGLY, IN LIGHT OF THESE OBLIGATIONS, THE ENGINEER IS OBLIGATED TO INTERPRET THE DRAWINGS AND SPECIFICATIONS IN A MANNER THAT WILL PROVIDE THE OWNER WITH A COMPLETE, FUNCTIONING FACILITY FOR THE BID PRICE.
- 6. THESE DRAWINGS AND THE PROJECT MANUAL ARE COMPLEMENTARY, AND ANY REQUIREMENT OF ONE SHALL BE A REQUIREMENT OF THE OTHER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS AND TO COMPARE THE REQUIREMENTS OF EACH DIVISION AND ENSURE THAT EACH TRADE OR SUBCONTRACTOR IS MAKING THE ALLOWANCES NECESSARY TO PROVIDE THE OWNER A COMPLETE FACILITY, OPERATIONAL IN ALL RESPECTS, UNLESS OTHERWISE SPECIFICALLY STATED IN THE DRAWINGS.
- 7. 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.
- 3. ONLY ONE TEMPORARY CONSTRUCTION SIGN IS PERMITTED, NOT TO EXCEED 32 SQUARE FEET IN SIGN AREA, MAXIMUM HEIGHT OF 8 FEET AND NO CLOSER THAN 10 FT FROM PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL APPLY FOR A TEMPORARY SIGN PERMIT AT THE CITY OF FLAGLER BEACH BUILDING DEPARTMENT. THE SIGN MUST BE REMOVED UPON RECEIPT OF THE CERTIFICATE OF OCCUPANCY.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. THERE SHALL BE NO DEVIATIONS FROM THESE PLANS UNLESS APPROVED IN WRITING BY THE ENGINEER AND THE OWNER.
- 13. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- 14. CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COST.
- 15. 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, ETC.
- 16. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
- 17. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.
- 18. ALL PROPOSED ELEVATIONS REFER TO FINISHED GRADES.
- 19. CONCRETE WALKS SHALL BE 4 INCHES THICK HAVING A 3,500 PSI STRENGTH, POURED OVER PROPERLY PREPARED SUBGRADE. ALL CONCRETE SIDEWALKS SHALL BE 8 INCHES THICK ACROSS DRIVEWAYS. 1/2 INCH EXPANSION JOINTS SHALL BE PLACED AT A MAXIMUM OF 50'. CRACK CONTROL JOINTS SHALL BE 5' ON CENTERS.
- 20. CORE TESTS SHALL BE TAKEN TO VERIFY THICKNESS AND SUBSURFACE COMPACTION. PROVIDE FOR THREE SAMPLES, RANDOMLY LOCATED. TEST FOR EXTRACTION, GRADATION, LABORATORY DENSITY, AND MARSHALL'S STABILITY. PROVIDE A CERTIFICATE FROM THE TESTING AGENCY THAT MATERIALS AND INSTALLATION COMPLY WITH SPECIFICATIONS, SIGNED BY THE ASPHALTIC CONCRETE PRODUCER AND CONTRACTOR. ALL COSTS OF TESTS SHALL BE PAID BY THE CONTRACTOR. IF TESTS SHOW THE INSTALLATION DOES NOT MEET SPECIFICATIONS, THE PAVING SHALL BE REMOVED, REPLACED, AND RETESTED.
- 21. 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.
- 22. 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).
- 23. NO BURYING OF ANY ORGANIC MATERIALS ALLOWED.
- 24. THERE WILL BE NO PROPOSED OVERHEAD UTILITY AND SERVICE LINES ASSOCIATED WITH THIS PROJECT. ALL UTILITY LINES AND SERVICES WILL BE INSTALLED UNDERGROUND AT THE OWNER'S, DEVELOPER'S OR BUILDER'S EXPENSE.

#### SITE AND GENERAL INFORMATION

- 1. THE PROPERTY AREA BOUNDARY CONSISTS OF 137,625 SF OR 3.159 ACRES. FOR BOUNDARY AND TOPOGRAPHIC SURVEY REFER TO THE SURVEY PERFORMED BY SLIGER & ASSOCIATES, INC. (SEE SHEET No. 2 OF THESE PLANS).
- 2. THE EXISTING AND PROPOSED ZONING IS GC (GENERAL COMMERCIAL).
- 3. THE TAX PARCEL NUMBER IS 11-12-31-0650-000D0-0050.
- 4. FLORIDA BUILDING CODE-ACCESSIBILITY (FBCA) AS THE CONTROLLING REGULATION FOR ACCESSIBLE PARKING REQUIREMENTS.
- 5. THE EXISTING SITE CONDITION IS UNDEVELOPED AND PARTIALLY CLEARED AND GRADED. THE FLUCFCS LAND USE IS (191) UNDEVELOPED LAND WITHIN URBAN AREAS.
- 6. PER THE USDA NATURAL RESOURCES CONSERVATION SERVICE FOR FLAGLER COUNTY, THE SCS SOILS MAP INDICATES THE SITE CONSISTS OF (11) MYAKKA-MYAKKA, WET, FINE SANDS, 0 TO 2 PERCENT SLOPES.
- 7. THE SITE IS LOCATED WITHIN ZONE "X" PER FEMA MAP PANEL No. 12035C0232 E, DATED JUNE 6, 2018.
- 8. ELECTRICAL UTILITY SERVICE WILL BE PROVIDED BY FLORIDA POWER & LIGHT. NATURAL GAS WILL BE PROVIDED BY TECO PEOPLES GAS COMPANY. TELEPHONE, CABLE AND INTERNET SERVICE WILL BE PROVIDED BY AT&T. CABLE TV AND INTERNET CAN ALSO BE PROVIDED BY SPECTRUM.
- 9. SOLID WASTE WILL BE COLLECTED AND DISPOSED OF BY WASTE PRO, INC.
- 10. THE SITE IS NOT LOCATED WITHIN THE LIMITS OF A WELLHEAD PROTECTION ZONE AND THERE IS NO ORDINARY HIGH WATER (OHW) LINE WITHIN THE SITE.
- 11. STORMWATER WILL BE PROVIDED BY INTERCONNECTED DRY RETENTION TO EXFILTRATION TRENCH SYSTEM.
- 12. POTABLE WATER AND WASTEWATER UTILITIES PROVIDED BY CITY OF FLAGLER BEACH.
- 13. IRRIGATION SERVICE WILL BE PROVIDED BY A PRIVATE WELL.

## 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.

| "_ <del>\</del>    | BENCHMARK ID                     | _            | 4" BY 4" CONCRETE MONUMENT                     |
|--------------------|----------------------------------|--------------|--|
| #3 <sup>©</sup>    | BORING ID                        | <b>-</b>     | EXISTING EASEMENT                              |
| <b>B24</b>         | EXISTING CABLE TV PEDESTAL       | FOC          | EXISTING UNDERGROUND FIBER OPTIC CABLE         |
|                    | EXISTING CAP OR PLUG             | #FM          | EXISTING FORCE MAIN (# INDICATES SIZE)         |
| <u> </u>           | EXISTING CLEAN OUT               | GAS          | EXISTING GAS MAIN                              |
| ×                  | EXISTING CONDUIT RISER/ MARKER   | OHE          | EXISTING OVERHEAD ELECTRIC CABLES              |
| E                  | EXISTING ELECTRIC METER          | ——— онт ———  | EXISTING OVERHEAD TRAFFIC SIGNAL CABLE         |
| +                  | EXISTING ELEVATION (SOFT)        | #RAW         | EXISTING RAW WATER MAIN (# INDICATES SIZE)     |
| + `<br><b>5.0±</b> | PROPOSED ELEVATION (SOFT)        | #REC         | EXISTING RECLAIM WATER MAIN (# INDICATES SIZE) |
| +1,1,0             | EXISTING ELEVATION (HARD)        | #SAN =       | PROPOSED SANITARY SEWER (# INDICATES SIZE)     |
| 5.00               | PROPOSED ELEVATION (HARD)        | #WM          | PROPOSED WATER MAIN (# INDICATES SIZE)         |
| <u> </u>           | EXISTING FIRE HYDRANT            | 12           | EXISTING CONTOUR                               |
| *                  | PROPOSED FIRE HYDRANT            | 10           | PROPOSED CONTOUR (SOFT)                        |
| <b>←</b> ~         | EXISTING FLOW DIRECTION          | 10           | PROPOSED CONTOUR (HARD)                        |
| <del>\</del>       | PROPOSED FLOW DIRECTION          | UTEL         | EXISTING UNDERGROUND TELEPHONE CABLE           |
| $\otimes$          | EXISTING GAS METER               | UTV          | EXISTING UNDERGROUND TELEVISION CABLE          |
| ፟፟፟፟               | EXISTING GAS VALVE               | UGE          | EXISTING UNDERGROUND ELECTRICAL POWER CABLE    |
| <del>(</del>       | EXISTING GUY WIRE & ANCHOR PIN   |              | JURISDICTIONAL WETLAND LINE                    |
| $\boxplus$         | EXISTING MAIL BOX                | 8SAN         | EXISTING SANITARY SEWER (# INDICATES SIZE)     |
| $\bigcirc$         | EXISTING MANHOLE (UNKNOWN)       | 8WM          | EXISTING WATER MAIN (# INDICATES SIZE)         |
|                    | PROPOSED MANHOLE                 | : :          | EXISTING PIPE OR CONDUIT (TYPE SPECIFIED)      |
|                    | EXISTING SANITARY SEWER CLEANOUT |              | EXISTING SWALE OR CENTER OF DITCH              |
| <u>(SS)</u>        | EXISTING SANITARY SEWER MANHOLE  | ···          | PROPOSED SWALE OR CENTER OF DITCH              |
| <del>-0 -0 0</del> | EXISTING ROAD SIGNS AND POSTS    | ·            | EXISTING TOP OF DITCH BANK                     |
| •                  | PROPOSED SIGN AND POST           |              | EXISTING BOTTOM OF DITCH BANK                  |
| iTi                | EXISTING TEE                     |              | EXISTING WOOD FENCE                            |
| -0-                | EXISTING UTILITY POLE            | xx           | EXISTING WIRE OR CHAIN LINK FENCE              |
| ×                  | EXISTING VALVE IRRIGATION        | x            | PROPOSED WIRE OR CHAIN LINK FENCE              |
| $\bowtie$          | EXISTING VALVE WATER             |              | PROPOSED SILT/SEDIMENT FENCE                   |
| H                  | PROPOSED WATER VALVE             | <b>~~~~~</b> | PROPOSED COIR ROLL OR WATTLE                   |
|                    | EXISTING WATER METER             | <del></del>  | PROPOSED FLOATING TURBIDITY BARRIER            |
|                    | EXISTING STORM SEWER WITH INLET  | ТРТР         | PROPOSED TREE PROTECTION                       |
|                    |                                  |              |  |

## SITE DEVELOPMENT USAGE

TOTAL UNITS

1/2" IRON ROD (NO I.D.)

PROPOSED STORM SEWER WITH INLET

| 1. | SETBACK:                                    | BUILDING SETBACK REQUIRED  | 7. REQUIRED RECREATIONAL AREA  |          |
|----|---|--|--|----------|
|    | FRONT (EAST)                                | 25 FEET  | 200 SF PER UNIT = 200 SF x 22 UNITS =                                      | 4,400 S  |
|    | REAR (WEST)<br>SIDE (NORTH)<br>SIDE (SOUTH) | 25 FEET<br>15 FEET<br>15 FEET                                    | PROVIDED ACTIVE AREA = PLAY AREA AND GRILL AREA =                          | 9,164 S  |
|    | MAXIMUM BUILDING HEI                        |  | PROVIDED PASSIVE AREA = BENCHES, FLOATING FOUNTAIN AND CONVERSATION AREA = | 571 \$   |
|    | ZONING                                      | GC (GENERAL COMMERCIAL)  | TOTAL RECREATION AREA =  | 9,735 S  |
|    | FLUM  | MEDIUM DENSITY RESIDENTIAL                                       | 8. COMMON OPEN SPACE   |          |
|    | BUILDING HEIGHT DENSITY                     | BUILDING 1 = 34'-1/2"<br>BUILDING 2 = 35'-0"<br>12.35 UNITS/ACRE | REQUIRED COMMON OPEN SPACE 250 SF PER UNIT = 250 SF x 22 UNITS =           | 5,500 SF |
|    | MULTI-FAMILY UNITS                          |  | PROVIDED COMMON OPEN SPACE = 15  | 5,313 SF |
|    | 2 BEDROOM                                   | 22   | (ACTIVE AND PASSIVE RECREATION AND SIDE                                    | WALKS)   |

22 UNITS

6.9 100.0

## 2. PROPOSED SITE COVERAGE SITE COVERAGE - PROPOSED AREA TYPE SF ACR

| STIL COVERAGE - PROPOSED |  |   |  |  |  |
|--------------------------|--|---|--|--|--|
| SF                       | ACRE   | % OF SITE   |  |  |  |
| 17,248                   | 0.396  | 12.5%   |  |  |  |
| 24,905                   | 0.572  | 18.1%   |  |  |  |
| 5,578                    | 0.128  | 4.1%  |  |  |  |
| 89,894                   | 2.064  | 65.3%   |  |  |  |
| 137,625                  | 3.159  | 100.0%  |  |  |  |
|                          |  |   |  |  |  |
| 47,731                   | 1.096  | 34.7%   |  |  |  |
| 89,894                   | 2.064  | 65.3%   |  |  |  |
|                          | SF<br>17,248<br>24,905<br>5,578<br>89,894<br>137,625 | SF         ACRE           17,248         0.396           24,905         0.572           5,578         0.128           89,894         2.064           137,625         3.159           47,731         1.096 |  |  |  |

FLOOR AREA RATIO (FAR) 0.125

## 3. PARKING REQUIREMENTS MULTI-FAMILY: 2 SPACES PER DWELLING UNIT

| TOTAL REQUIRED:     | 44 SPAC | ES   |
|---------------------|---------|------|
| 4. PARKING PROVIDED | SPACES  | %    |
| HANDICAP            | 2       | 4.5  |
| STANDARD            | 39      | 88.6 |

2 **SPACES** x 22 **UNITS** = 44

## 5. BICYCLE PARKING REQUIRED 10% OF REQUIRED VEHICULAR PARK

10% OF REQUIRED VEHICULAR PARKING 0.1 x 44 SPACES = 4.4 5 BICYCLE SPACES REQUIRED

#### 6. BICYCLE PARKING PROVIDED

TOTAL PARKING PROVIDED

PARALLEL

6 BICYCLE SPACES PROVIDED

## STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS - 2024 / 2025 AND QUALIFIED PRODUCTS LIST

| 02     | TEMPORARY EROSION AND SEDIMENT CONTROL    | 514     | OPTIONAL BASE GROUP AND STRUCTURAL NUMBERS    |
|--------|---|---------|---|
| 25-010 | STRUCTURE BOTTOMS - TYPES J AND P         | 330-001 | TURNOUTS                                      |
| 05     | PIPE BACKFILL                             | 546     | SIGHT DISTANCE AT INTERSECTIONS               |
| 25-024 | CURB INLET TOP - TYPE 9                   | 102-600 | GENERAL INFORMATION FOR TRAFFIC CONTROL       |
| 25-052 | DITCH BOTTOM INLETS - TYPES C, D, E AND H |         | THROUGH WORK ZONES                            |
| 30-022 | SIDE DRAIN MITERED END SECTION            | 102-602 | TWO-LANE AND MULTILANE, WORK ON SHOULDER      |
| 20-001 | CURB & CURB AND GUTTER                    | 102-603 | TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY |
| 22-002 | PUBLIC SIDEWALK CURB RAMPS                | 700-101 | TYPICAL SECTIONS FOR PLACEMENT OF SINGLE &    |
| 50-001 | CONCRETE PAVEMENT JOINTS                  |         | MULTIPLE-COLUMN SIGNS                         |
| 22-001 | CONCRETE SIDEWALK                         | 711-001 | SPECIAL MARKING AREAS                         |
| 20-001 | EMBANKMENT UTILIZATION                    |         |   |
|        |   |         |   |

INDEX NO.

DESCRIPTION

#### **ABBREVIATIONS**

INDEX NO.

DESCRIPTION

| AWWA         | AMERICAN WATER            | HDPE       | HIGH DENSITY          | RCP     | REINFORCED CONCRETE   |
|--------------|---------------------------|------------|-----------------------|---------|-----------------------|
| WORKS        | ASSOCIATION               | HUFE       | POLYETHYLENE          | NOF     | PIPE                  |
| CMP          | CORRUGATED METAL          | INV        | INVERT                | REQ'D   | REQUIRED              |
| PIPE         | OOKKOOATED MILIAL         | Kн         | HORIZONTAL            | RPM     | REFLECTIVE PAVEMENT   |
| CPP          | CORRUGATED PLASTIC        | IM         | PERMEABILITY          | IXI IVI | MARKER                |
| <b>U</b> . 1 | PIPE                      | <b>K</b> ν | VERTICAL PERMEABILITY | R/W     | RIGHT-OF-WAY          |
| CTV          | CABLE TELEVISION          | КО         | KNOCK OUT             | SAN     | SANITARY              |
| DIP          | DUCTILE IRON PIPE         | LF         | LINEAL FEET           | SH      | SEASONAL HIGH         |
| ESMT         | EASEMENT                  | MB         | MAP BOOK              | SMH     | SANITARY MANHOLE      |
| EXIST        | EXISTING                  | MES        | MITERED END SECTION   | SJRWMD  | ST. JOHNS RIVER WATER |
| FAC          | FLORIDA ADMINISTRATIVE    | MJ         | MECHANICAL JOINT      |         | MANAGEMENT DISTRICT   |
|              | CODE                      | MPD        | MULTI-PRODUCT         | SS      | SANITARY SEWER        |
| FDEP         | FLORIDA DEPARTMENT OF     |            | DISPENSER (FUEL PUMP) | SWPPP   | STORMWATER POLLUTION  |
|              | ENVIRONMENTAL             | N/A        | NOT APPLICABLE        |         | PREVENTION PLAN       |
|              | PROTECTION                | NIC        | NOT IN CONTRACT       | TSB     | TEMPORARY SEDIMENT    |
| FEMA         | FEDERAL EMERGENCY         | NGVD       | NATIONAL GEODETIC     |         | BASIN                 |
|              | MANAGEMENT AGENCY         |            | VERTICAL DATUM        | TYP     | TYPICAL               |
| FH           | FIRE HYDRANT              | OHE        | OVERHEAD ELECTRIC     | UGE     | UNDERGROUND ELECTRIC  |
| FOC          | FIBER OPTIC CABLE         | OR         | OFFICIAL RECORD       | UGT     | UNDERGROUND           |
| FF EL        | FINISH FLOOR ELEVATION    | PG         | PAGE                  |         | TELEPHONE             |
| FM           | FORCE MAIN                | PSI        | POUNDS PER SQUARE     | USACOE  | UNITED STATES ARMY    |
| FPD          | FEET PER DAY              |            | INCH                  |         | CORP OF ENGINEERS     |
| G            | GAS                       | PVC        | POLYVINYL CHLORIDE    | W       | WATER (POTABLE)       |
| GPC          | <b>GULF POWER COMPANY</b> | PVMT       | PAVEMENT              |         | -                     |
| GW           | GROUND WATER              | PROP       | PROPOSED              |         |                       |
| H/C          | ΗΔΝΠΙCΔΡ                  | R          | RADIUS                |         |                       |

#### SITE GEOTECHNICAL CONSIDERATIONS

SEE GEOTECHNICAL REPORT UNIVERSAL ENGINEERING SCIENCES. (REPORT No. 134233, DATED JANUARY 14, 2019) FOR ALL SUBSURFACE CONDITIONS, GROUNDWATER, SITE PREPARATION FOR PAVEMENT AND ALL EARTHWORK REQUIREMENTS.

REVISIONS

DATE DESCRIPTION

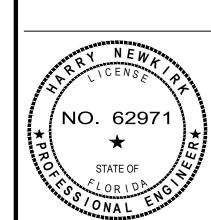




ELOPMENT INFORMATION ACY POINTE COTTAGES

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PROJECT No: 2023-17

DATE: OCTOBER 2024

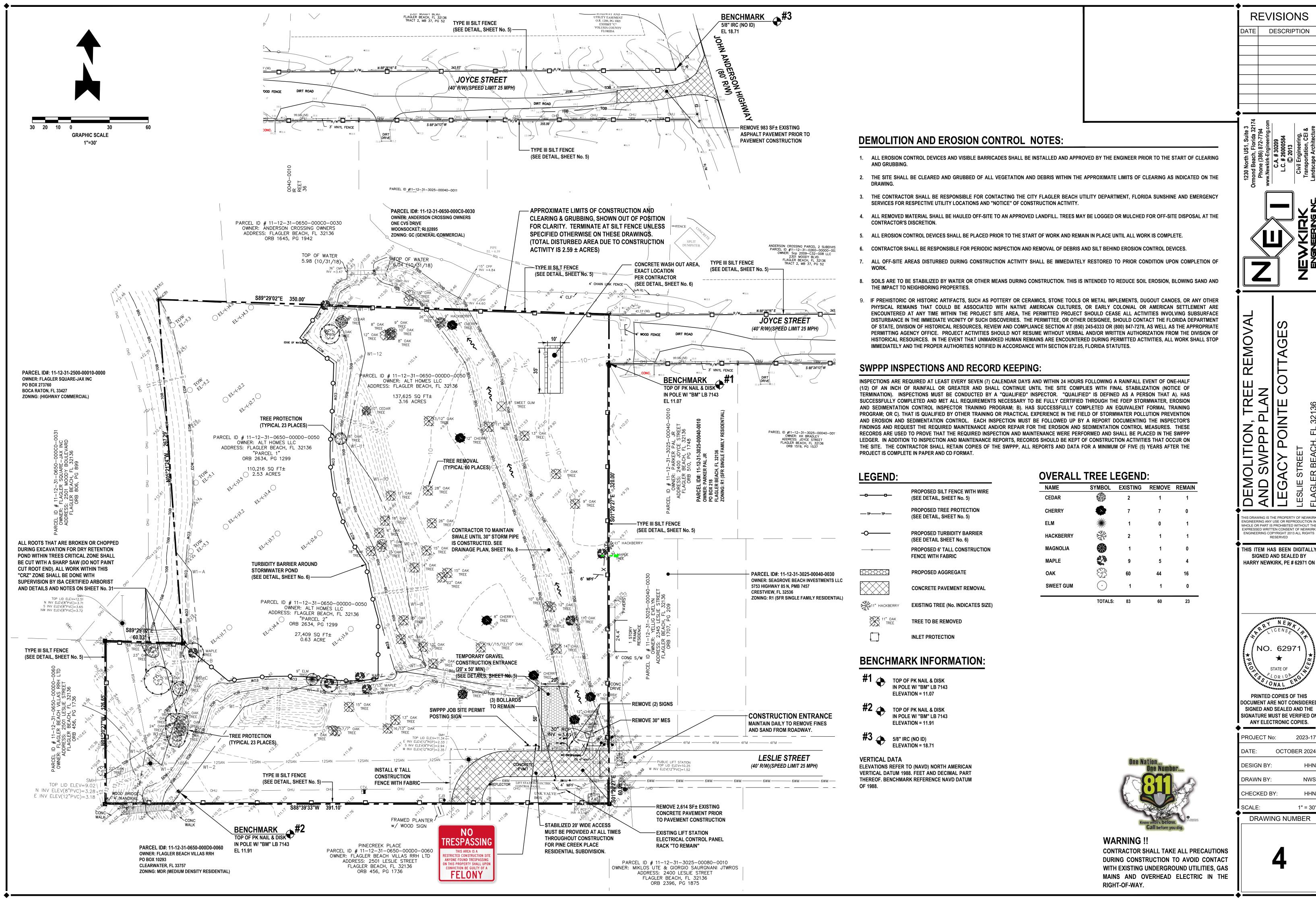
DESIGN BY: HHN

DRAWN BY: NWS

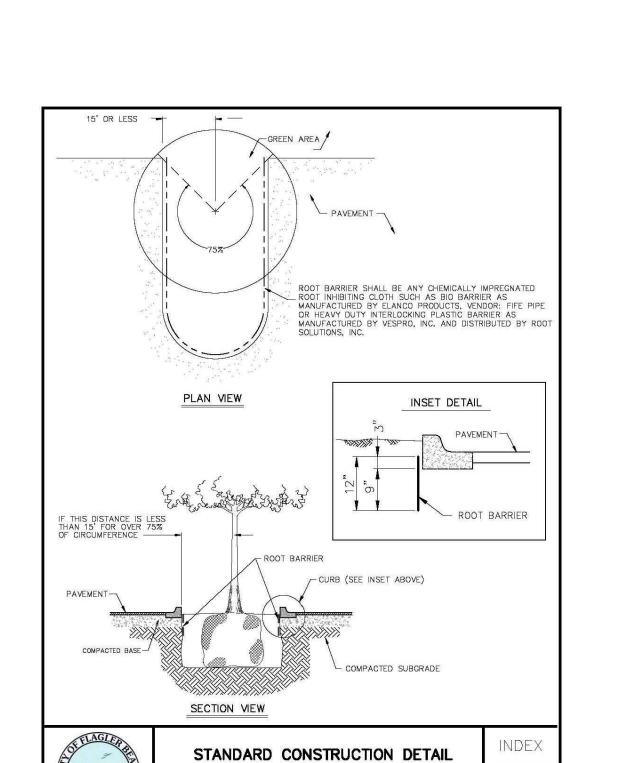
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SCALE:



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ROOT BARRIER

NTS

EXISTING TREE-

-6' O.C. @ CURB--

PLAN VIEW

LIMIT OF FILL 7

PARKING LOT-

EXISTING TREE

PREVIOUSLY EXISTING GRADE

FEB 2018

2" PVC STANDPIPE (TYP.) (4 REQUIRED)

2" PVC STANDPIPE FACING

- PAVEMENT

WAYNE TREE

DR FOUAL (TYP.) (INSTALL PER

> ∠ 6" CRUSHED GRANITE DOWN TO EXIST. GRADE

FEEDER SYSTEM

SPECIFICATIONS)

INDEX

FEB 2018

PREVAILING WIND

- CURB

(NOT LIME ROCK) / 6" NON-CALCIFEROUS BASE

- FILTER CLOTH

CONCRETE CURB /

- ADDITIONAL FILL (OVER FILTER CLOTH)

2" PERF. PVC

B" DRAINAGE ROCK

NOTE: NON-CALCIFEROUS BASE SHALL BE CRUSHED CONCRETE, RECYCLED ASPHALT PAVEMENT (RAP), ASPHALT, OR GRADED AGGREGATE, IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS.

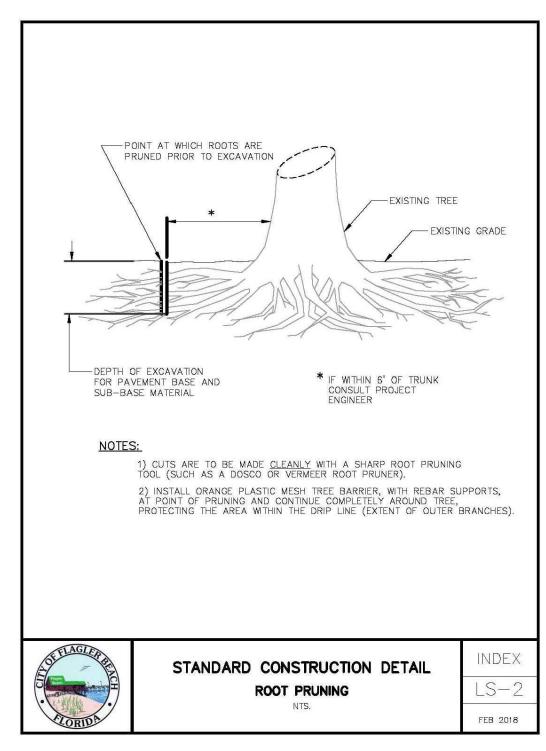
STANDARD CONSTRUCTION DETAIL

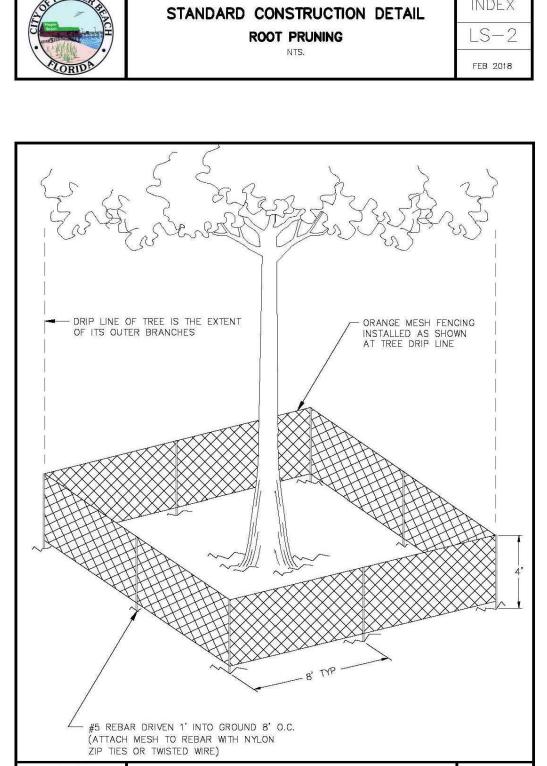
TREE PRESERVATION ON FILLED

SITE WITHOUT RETAINING WALL

SECTION VIEW

DETAILS SAME FOR BOTH SIDES OF TREE





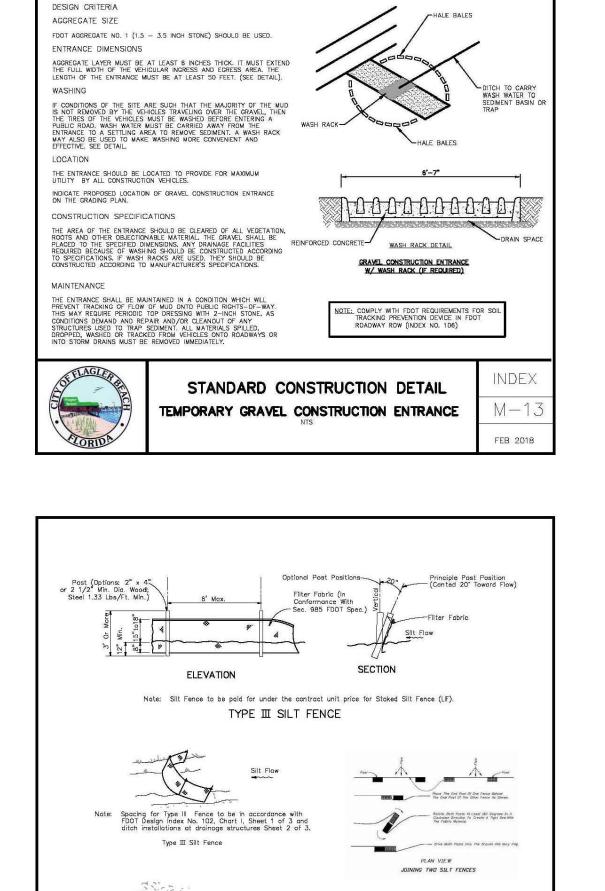
STANDARD CONSTRUCTION DETAIL

TREE BARRICADE

NTS.

NDEX

FEB 2018



Type III Silt Fence Protection Around Ditch Bottom Inlets.

NDEX

M - 15

FEB 2018

Type III Silt Fence

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

STANDARD CONSTRUCTION DETAIL

EROSION CONTROL - SILT FENCE

SILT FENCE APPLICATIONS

GRAVEL CONSTRUCTION ENTRANCE N.T.S.

ES BMP 1.01

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

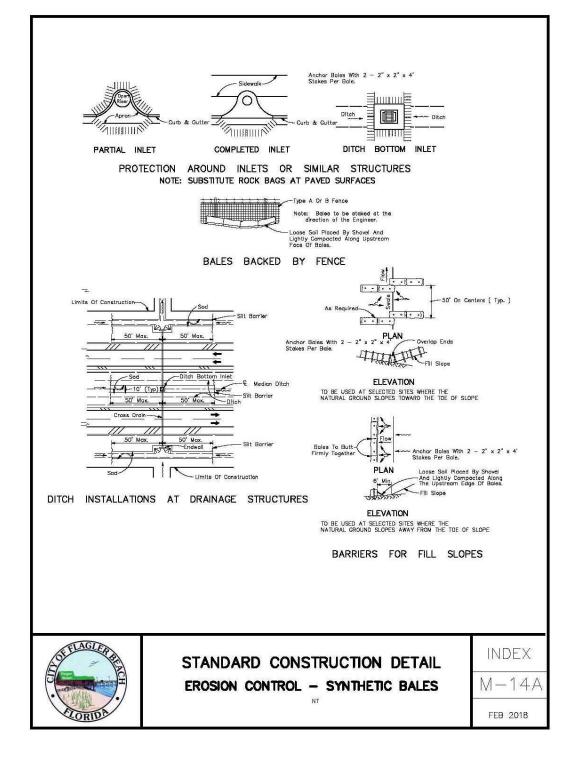
A STONE STABILIZED PAD LOCATED AT POINTS OF VEHICULAR INGRESS AND EGRESS ON A CONSTRUCTION SITE.

TO REDUCE THE AMOUNT OF SEDIMENT TRANSPORTED ONTO PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.

WHEREVER TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVES DIRECTLY ONTO A PUBLIC ROAD OR OTHER PAVED AREA.

CONDITIONS WHERE PRACTICE APPLIES

PLANNING CONSIDERATIONS



### CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND 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". 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 WHICHEVER IS NEAREST TO THE CONSTRUCTION ACTIVITY.
- 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. . WHERE A CHANGE OF GRADE OCCURS AT THE DRIP LINE OF A SPECIMEN TREE, SILT FENCES WILL BE REQUIRED DURING CONSTRUCTION AND RETAINING WALLS MUST BE INSTALLED PRIOR TO FINAL
- 4. 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, WATTLES, &/OR HAVE BEST MANAGEMENT PRACTICES (BMP'S) AS REQUIRED, SILT FENCES, AND FLOATING TURBIDITY BARRIERS. 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. 5. 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) CONSERVATION EASEMENTS AND WEILANDS, (3) ADJACENT TO NATURAL LANDSCAPE BUFFERS, (4) AROUND THE PERIMETER OF EXISTING STORM WATER TREATMENT FACILITIES, AND (5) AT ANY ADDITIONAL AREAS THAT THE CITY DEEMS NECESSARY TO BE PROTECTED FROM POTENTIAL EROSION IMPACTS DURING CONSTRUCTION. THESE CONDITIONS SHALL APPLY IN ALL INSTANCES WHERE FILL MATERIAL IS BEING INSTALLED WITHIN 25 FEET OF ANY OF THE AFOREMENTIONED LOCATIONS. WHILE THESE ITEMS REPRESENT THE MINIMUM REQUIREMENTS, THE CITY RESERVES THE RIGHT TO IMPOSE ADDITIONAL PROTECTIVE MEASURES, AS DETERMINED DURING ACTUAL SITE VISITS CONDUCTED AS PART OF THE STANDARD REVIEW OF THE SITE THROUGHOUT PROJECT CONSTRUCTION.
- 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. ANY PROJECT THAT IS INACTIVE FOR A PERIOD OF 30 DAYS OR MORE SHALL BE STABILIZED TO THE SATISFACTION OF THE
- 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.

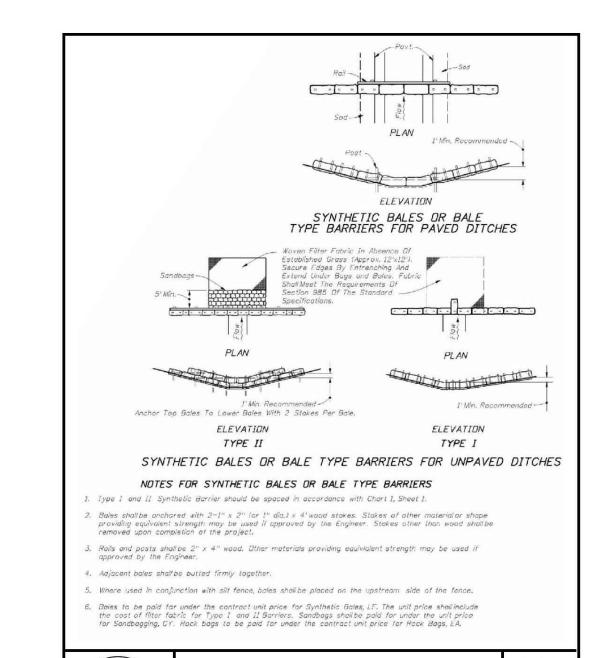
9. ABSOLUTELY NO BURYING OF CLEARED MATERIALS IS PERMITTED.



ACCEPTANCE BY THE CITY.

STANDARD CONSTRUCTION DETAIL CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES

NDEX FEB 2018



#### CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES

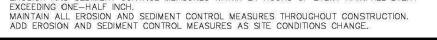
- 10. THE REMOVAL OF ALL VEGETATION AND TOPSOIL ON THE FUTURE ROADWAY, PARKING AND BUILDING LOT AREAS IS REQUIRED TO BE COMPLETED PRIOR TO THE PLACEMENT OF FILL ON THOSE AREAS. THE TOPSOIL MAY BE TEMPORARILY STOCKPILED AND USED AS TOPSOIL OVER OVER PROPOSED GREEN AREAS SUCH AS PLANT BEDS, SODDED AREAS, AND WHERE TREES ARE TO BE INSTALLED OR
- 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.
- 10. 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).

STANDARD CONSTRUCTION DETAIL

EROSION CONTROL - SYNTHETIC BALES

- 11. DURING SUBDIVISION DEVELOPMENT WHEN FUTURE BUILDING LOTS ARE FILLED AS PART OF THE OVERALL SUBDIVISION IMPROVEMENTS, COMPACTION TEST REPORTS MUST BE PERFORMED ON THE BUILDING LOTS AT 300 FOOT INTERVALS. THESE TESTS ARE TO BE PERFORMED IN ONE-FOOT VERTICAL INCREMENTS. THE RESULTS OF THESE TESTS ARE TO BE SUBMITTED TO THE CITY UPON COMPLETION OF THE TESTS.
- 12. 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.
- 13. 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 THAT WILL REMAIN IN PLACE IN EXCESS OF TWENTY DAYS SHOULD BE SEEDED AND MULCHED IMMEDIATELY UPON PLACEMENT OF THE FINAL LIFT.
- 14. 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 VECETATIVE 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.
- 15. ALL FILL MATERIALS LOCATED BENEATH STRUCTURES AND PAVEMENT SHALL CONSIST OF CLEAN GRANULAR SAND FREE FROM ORGANICS AND SIMILAR MATERIAL THAT COULD DECOMPOSE.
- 16. ALL 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.
- 7. OWNER SHALL FILE A "NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORM WATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS REQUIRED BY DEP. CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH ALL PROVISIONS OF THE GENERIC PERMIT INCLUDING BUT NOT LIMITED TO:

  A. PROVIDE SUCH EROSION AND SEDIMENT CONTROL MEASURES AS MAY BE NECESSARY TO PREVENT DISCHARGE OF POLLUTANTS FROM THE SITE FROM THE START OF CONSTRUCTION UNTIL THE FINAL GROUND COVER HAS BEEN ESTABLISHED.
- B. EMPLOY A DEP CERTIFIED INSPECTOR TO MAKE WEEKLY INSPECTIONS / REPORTS OF THE CONDITION OF EROSION AND SEDIMENT CONTROL MEASURES.
- C. EMPLOY A DEP CERTIFIED INSPECTOR TO MAKE INSPECTIONS / REPORTS OF THE CONDITION OF EROSION AND SEDIMENT CONTROL MEASURES WITHIN 24 HOURS OF EVERY RAINFALL EVENT





STANDARD CONSTRUCTION DETAIL CONTRACTOR REQUIREMENTS FOR SITE CLEARING, GRADING, AND EROSION CONTROL DESIGN AND CONSTRUCTION NOTES

INDEX FEB 2018

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FEB 2018

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2023-17

OCTOBER 2024

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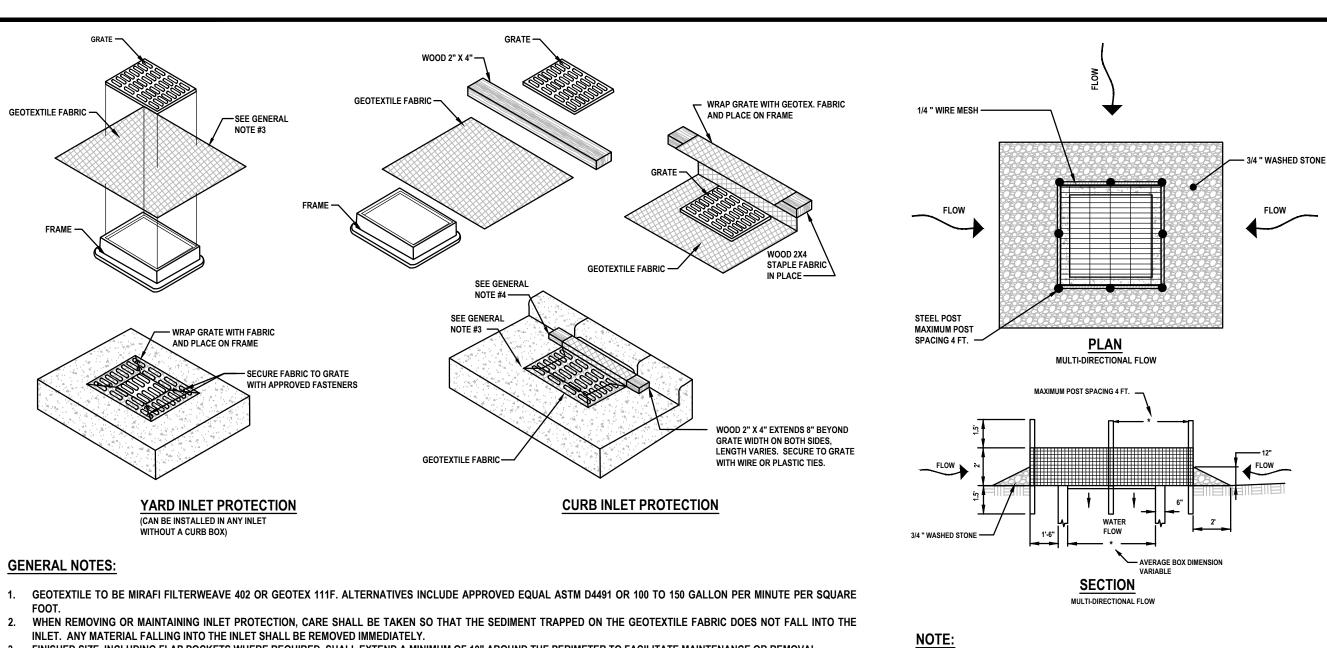
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- FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL. 4. FOR CURB INLET PROTECTION AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE
- TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS, OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM

"GUTTERBUDDY" BY ACF ENVIRONMENTAL, DANDY

INLET OPENING

INLET OPENING

**CURB INLET FILTER** 

LENGTH AS REQUIRED FOR

SPECIFIC STRUCTURE

CURB BAG BY DANDY PRODUCTS OR EQUAL

CURB INLET FILTER LENGTH AS REQUIRED FOR SPECIFIC STRUCTURE -

**CURB INLET WITHOUT GRATE** 

FROM BYPASSING FILTER ——

**CURB INLET WITH GRATE** 

- NOTICE OF COVERAGE (NOC)

NOTICE OF INTENT (NOI)

NOTICE OF INTENT (NOI) (APPLICATION FOR

**REGULATORY AGENCY) ARE TO BE POSTED** 

ENTRANCE WHERE IT MAY BE VIEWED BY

**AUTHORITIES HAVING JURISDICTION AND** 

**CONSTRUCTION ACTIVITIES START UNTIL** 

LOCATIONS; AT THE JOB SITE ENTRANCE

AND INSIDE WALL OF JOB TRAILER.

THE NOTICE OF TERMINATION (NOT) IS FILED.

PERMIT COVERAGE) AND NOTICE OF COVERAGE (NOC) (OR APPROVAL FROM

ALL POSTING IS TO BE AT JOB SITE

POSTING IS REQUIRED FROM THE DAY

PROJECT MUST BE POSTED IN TWO

THE PUBLIC.

JOB SITE PERMIT POSTING DETAIL

NOT TO SCALE

- COIR WATTLE AS REQUIRED TO PREVENT FINES

"GUTTERBUDDY" BY ACF

2. INSPECT ONCE EACH WEEK AND AFTER ANY RAIN EVENT. REMOVE ANY FINES AND

**CURB INLET SEDIMENT PREVENTION DETAIL** 

DEBRIS THAT MAY HAVE ACCUMULATED AND DISPOSE OF PROPERLY.

1. INSTALL FILTER PRIOR TO BEGINNING CONSTRUCTION.

**SWPPP** 

ENVIRONMENTAL, DANDY CURB BAG

BY DANDY PRODUCTS OR EQUAL —

**GRAVEL FILLED SAND BAG(S) PLACE** 

#### GEOTEXTILE FABRIC INLET PROTECTION

HEIGHT OF THE CURB BOX OPENING.

COIR WATTLE -

NOT TO SCALE

FILLED SAND

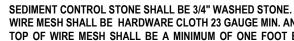
DANDY CURB-

**BAG ONLY** 

THROAT

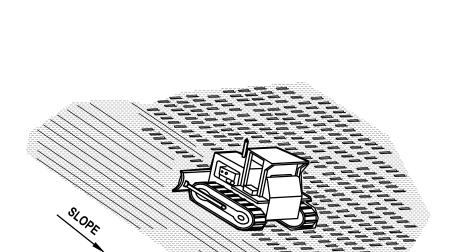
INLET

GRATE



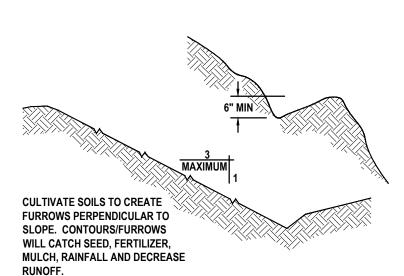
- WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4 INCH MESH 3. TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY
- 4. STEEL POST SHALL BE 5 FT. IN LENGTH, BE INSTALLED 1.5 FT. DEEP MINIMUM, AND BE OF
- THE SELF-FASTENER ANGLE STEEL TYPE.
- 5. WOOD POST SHALL 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



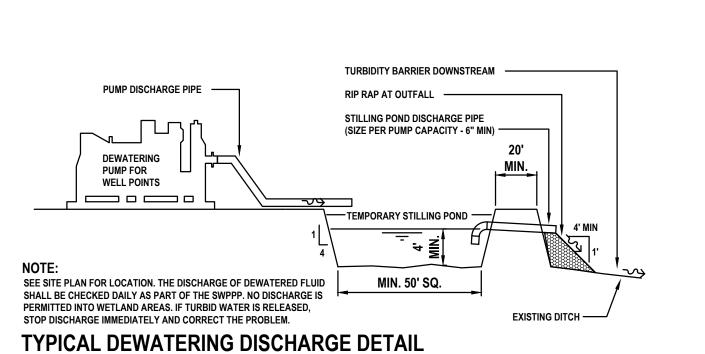
**USE DOZER TRACKS TO CREATE GROOVES** PERPENDICULAR TO THE SLOPE. GROOVES WILL CATCH SEED, FERTILIZER, MULCH, RAINFALL AND **DECREASE SEDIMENT IN RUNOFF.** 

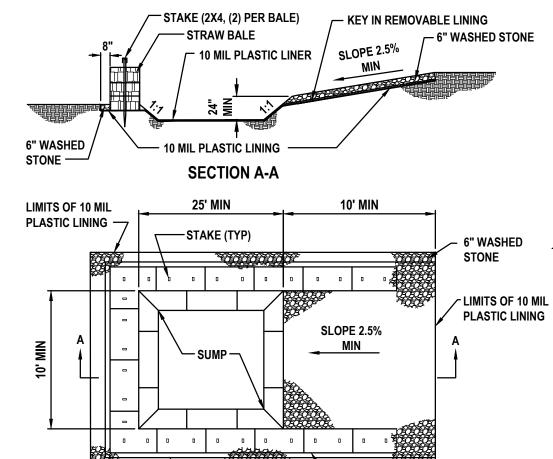
## TRACKING DETAIL



#### SURFACE ROUGHENING

(NOT TO SCALE)





LIMITS OF 10 MIL

PLASTIC LINING

**CONCRETE WASHOUT AREA** 

- STRAW BALE

(TYP)

TRUCKS SHALL WASHOUT HERE **ALTERNATE SECTION USE WHERE MORE THAN ONE** ACCESSIBLE SIDE IS NEEDED **WASHOUT SIGN** 

ALL CONCRETE

A MINIMUM FREEBOARD OF 12."

- 1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
- LIMITS OF 10 MIL 2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER. PLASTIC LINING 3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH
  - 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:**

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.

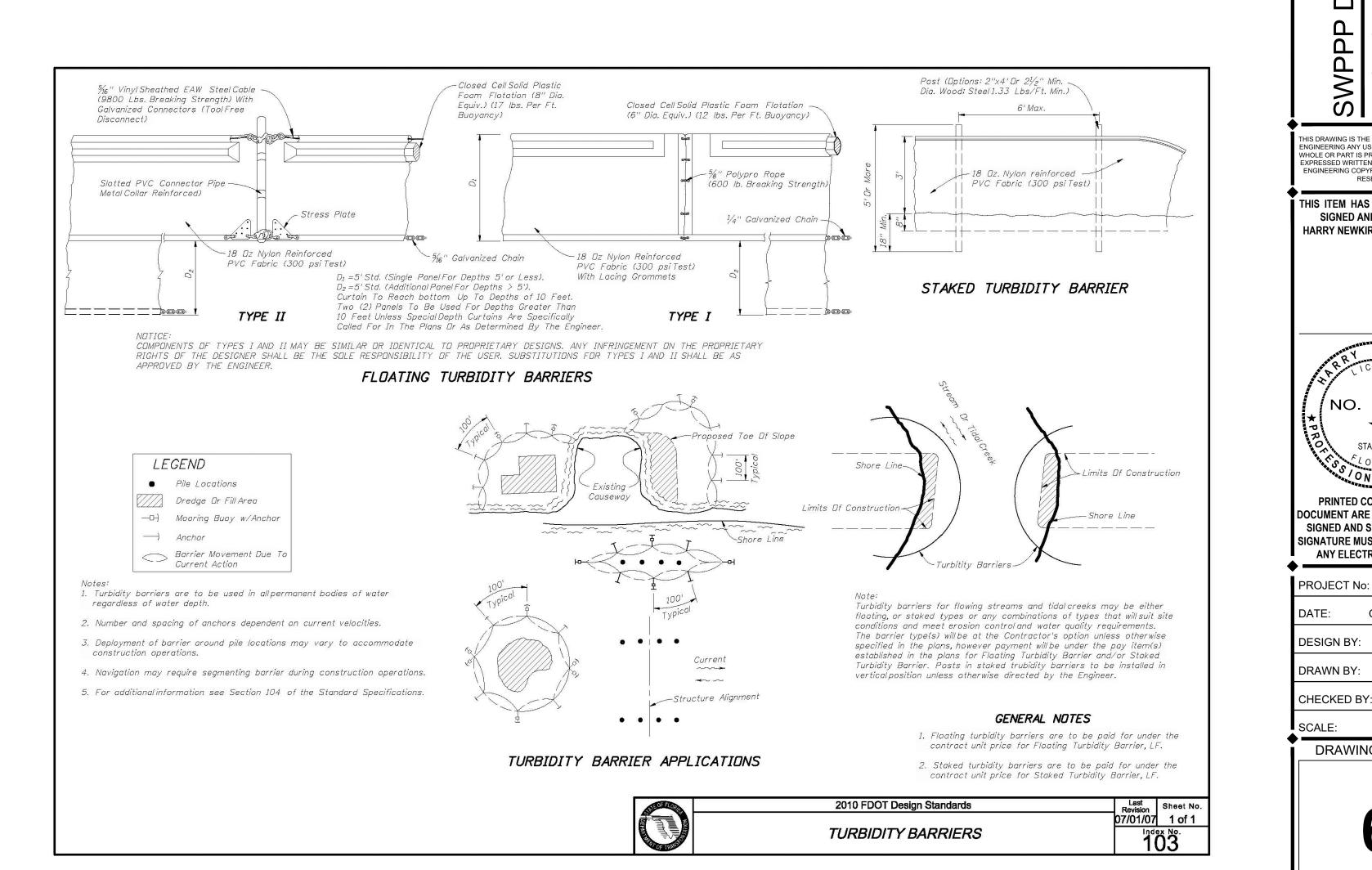
#### **ALL SLOPES AND FLAT GRADE**

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 -<br>OCTOBER 15         | PENSACOLA BAHIA (SCARIFIED)<br>BERMUDA COMMON (50% HULLED)                                  | 90<br>25              |
| 0CTOBER 16 -<br>MARCH 14         | PENSACOLA BAHIA (SCARIFIED)<br>BERMUDA COMMON (50% HULLED)<br>ANNUAL RYE GRASS<br>RYE GRAIN | 100<br>35<br>10<br>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.



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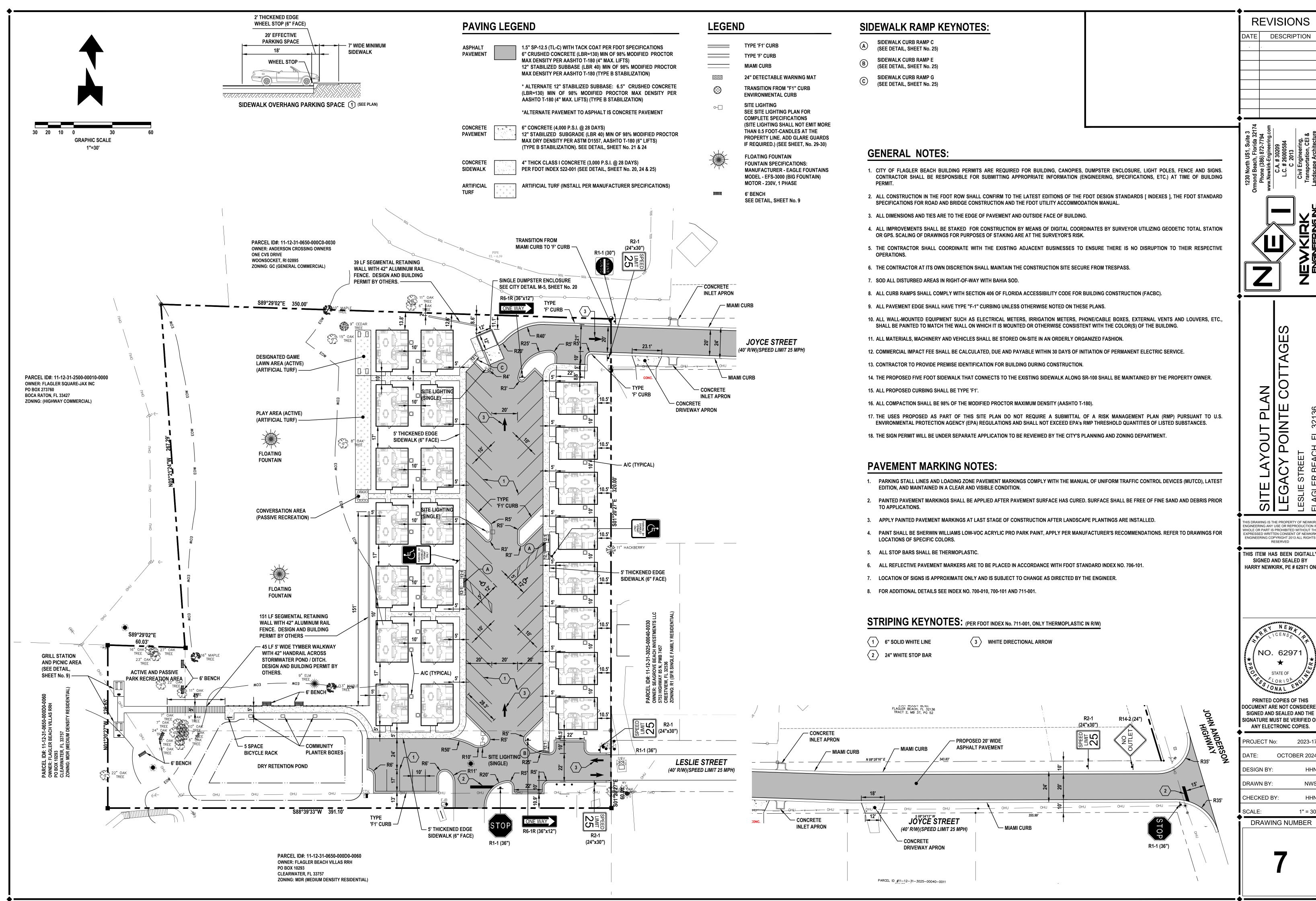


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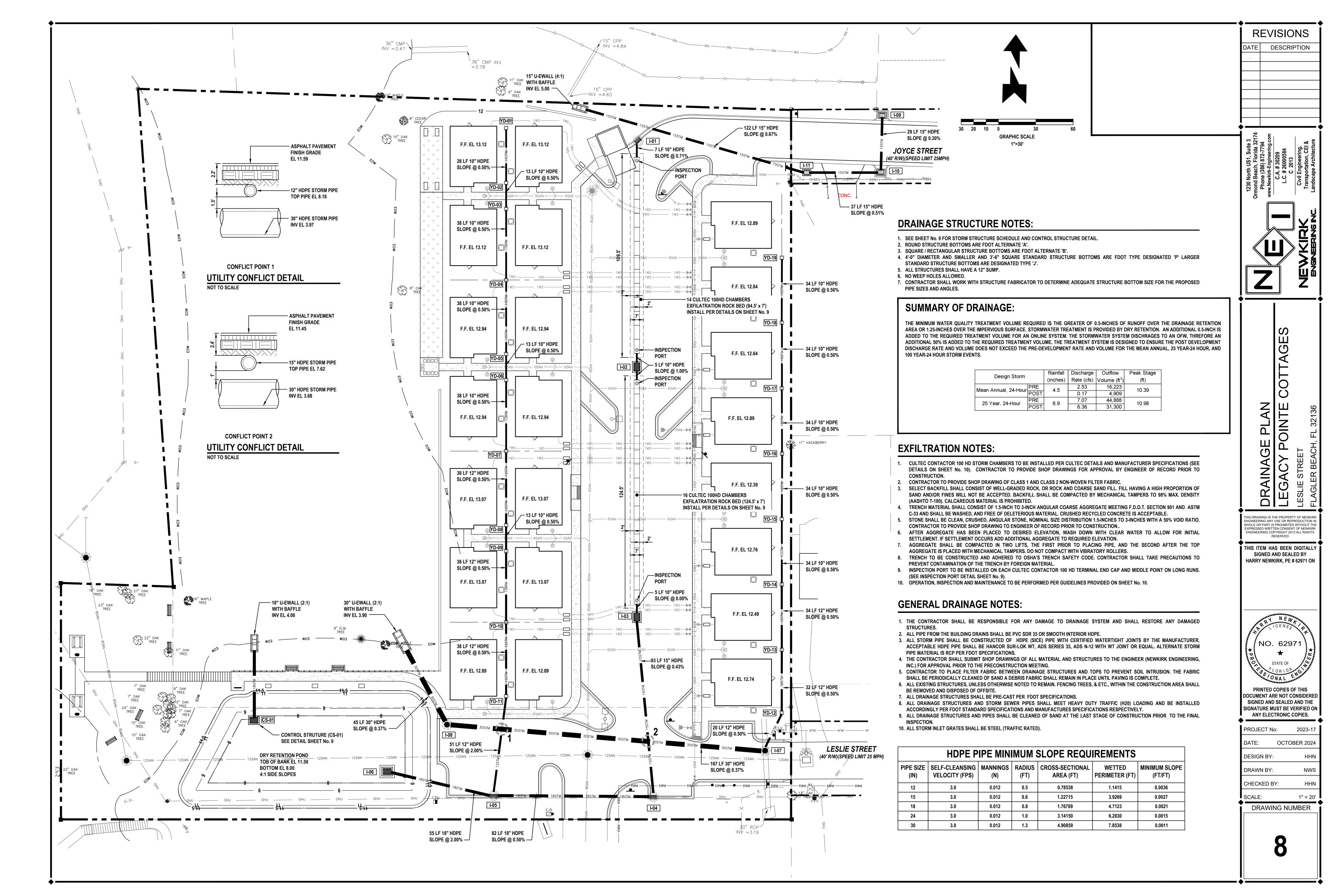
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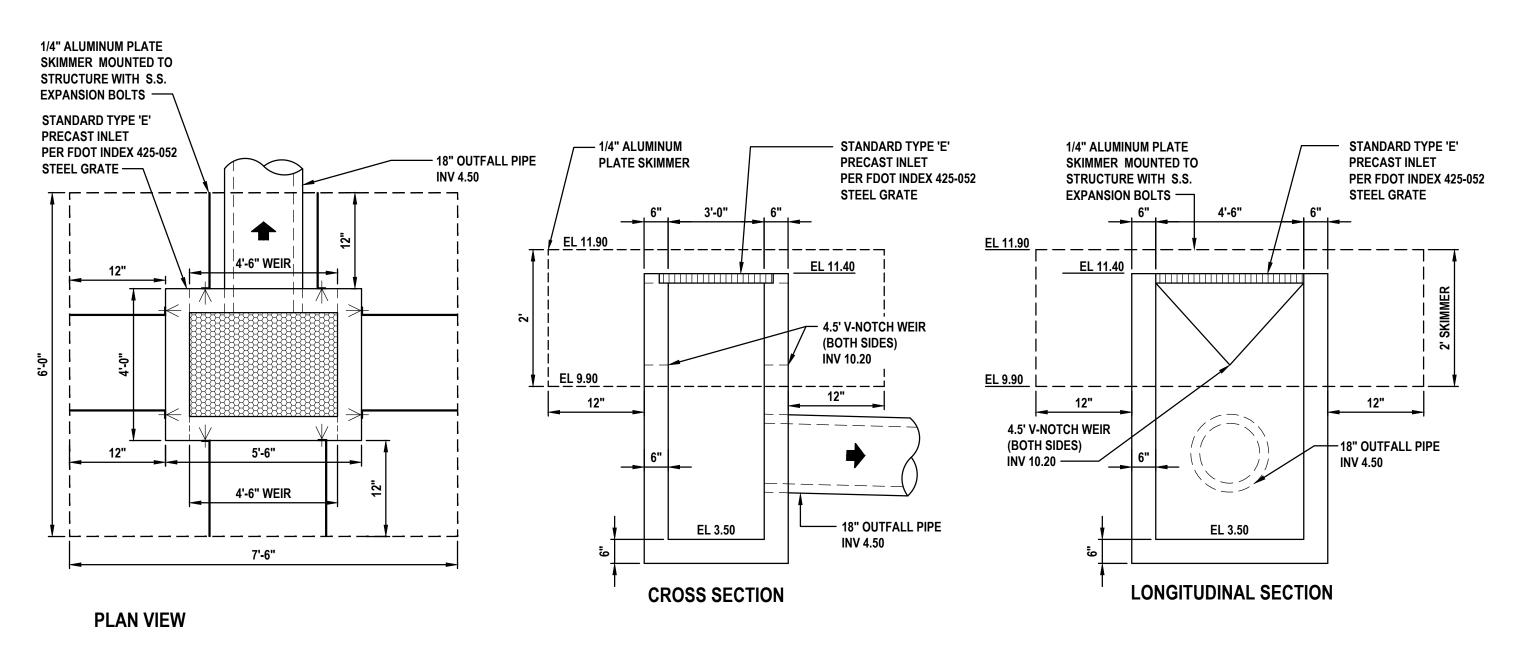


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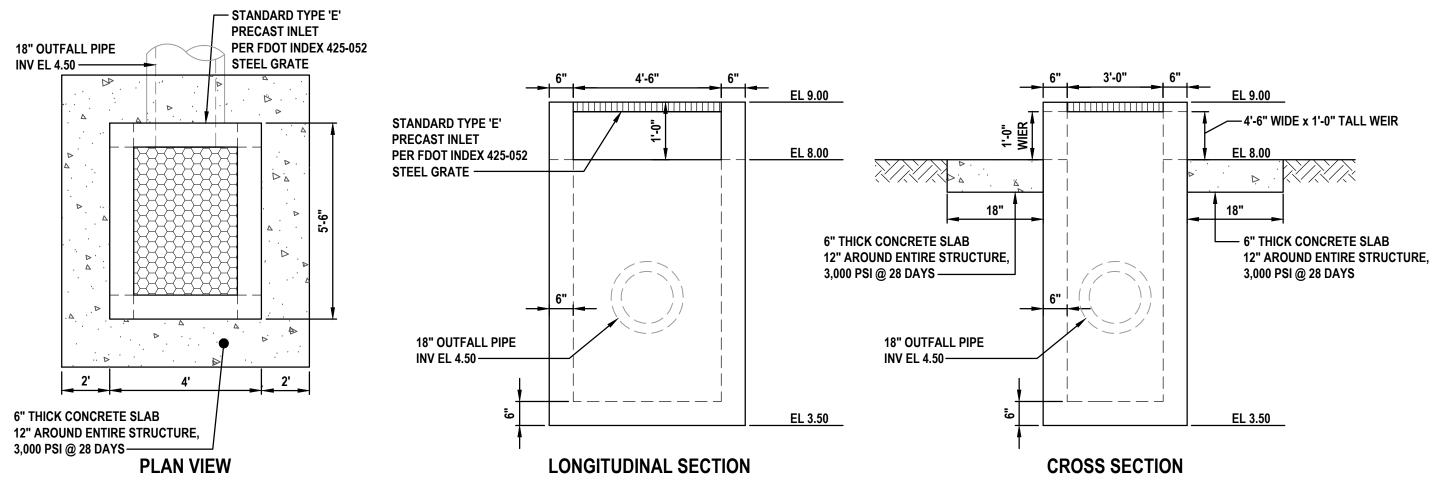
OCTOBER 2024





### **CONTROL STRUCTURE CS-01 DETAIL**

NOT TO SCALE



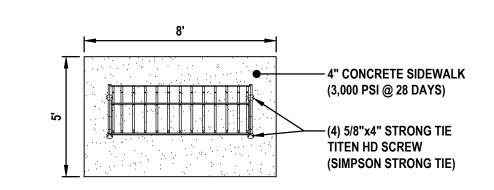
### TYPE 'E' BUBBLE-UP STRUCTURE DETAIL: INLET 06







BELSON OUTDOORS (MODEL G620-3) ADJUSTABLE ROTATING METAL PEDESTAL GRILL (14"x20") POST: 3.5" DIAMETER x 40" HEIGHT MOUNT PER MANUFACTURER SPECIFICATIONS



### BENCH MOUNTING WITH CONCRETE PAD DETAIL

**NOT TO SCALE** 

## STORM STRUCTURE SCHEDULE

| I.D.  | SIZE    | TYPE<br>BOT | TYPE<br>TOP | TOP<br>ELEV  | BOT<br>ELEV | N INV       | SINV        | EINV        | W INV       |
|-------|---------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|
| I-01  |         | ALT-B       | E           | 10.90        | 7.55        |             | 10"<br>8.55 |             |             |
| 1-02  |         | ALT-B       | E           | 10.90        | 7.55        | 10"<br>8.55 | 10"<br>8.55 |             |             |
| 1-03  |         | ALT-B       | E           | 10.90        | 6.90        | 10"<br>8.55 | 15"<br>7.90 |             |             |
| 1-04  |         | ALT-A       | 9           | EOP<br>10.90 | 6.50        | 15"<br>7.50 |             |             | 18"<br>7.5  |
| 1-05  |         | ALT-A       | 9           | EOP<br>10.90 | 4.60        | 12"<br>7.50 |             | 18"<br>7.09 | 18"<br>5.60 |
| 1-06  |         | ALT-B       | E           | 9.00         | 3.50        |             |             | 18"<br>4.50 |             |
| 1-07  | 5' DIA. | ALT-B       | M.H.        | 10.50        | 2.45        | 12"<br>6.47 | 30"<br>3.45 |             | 30"<br>3.45 |
| 1-08  | 5' DIA. | ALT-B       | M.H.        | 11.65        | 3.07        | 30"<br>4.07 |             | 30"<br>4.07 |             |
| 1-09  |         | ALT-B       | С           | 9.60         | 5.10        |             | 15"<br>6.10 |             |             |
| I-10  |         | ALT-B       | С           | 9.60         | 5.01        | 15"<br>6.01 |             |             | 15"<br>6.01 |
| I-11  |         | ALT-B       | С           | 9.60         | 4.82        |             |             | 15"<br>5.82 | 15"<br>5.82 |
| CS-01 |         | ALT-B       | E           |              |             | SEE DETAIL, | THIS SHEE   | Γ           | 1           |

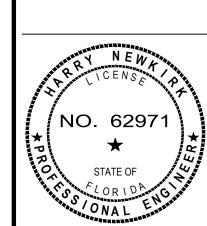
|            |      | 1           | ı    |       | I    | <b>.</b> |
|------------|------|-------------|------|-------|------|----------|
| I.D.       | SIZE | TOP<br>ELEV | NINV | SINV  | EINV | W INV    |
| YD-01      | 12"  | 12.00       |      | 10"   |      |          |
| 15 01      | '-   | 12.00       |      | 10.00 |      |          |
| YD-02      | 12"  | 12.00       | 10"  | 10"   |      | <b></b>  |
| 15-02      | 12   | 12.00       | 9.86 | 9.86  |      |          |
| YD-03      | 12"  | 12.00       | 10"  | 10"   |      |          |
| 15-00      | 12   | 12.00       | 9.80 | 9.80  |      |          |
| YD-04      | 12"  | 12.00       | 10"  | 10"   |      |          |
| 10-04      | 12   | 12.00       | 9.61 | 9.61  |      |          |
| YD-05      | 12"  | 12.00       | 10"  | 10"   |      |          |
| 10-03      | 12   | 12.00       | 9.42 | 9.42  |      |          |
| YD-06      | 12"  | 12.00       | 10"  | 10"   |      |          |
| 10-00      | 12   | 12.00       | 9.35 | 9.35  |      |          |
| YD-07      | 12"  | 12.00       | 10"  | 12"   |      |          |
| 10-07      | 12   | 12.00       | 9.16 | 9.16  |      |          |
| YD-08      | 12"  | 12.00       | 12"  | 12"   |      |          |
| 15-00      | 12   | 12.00       | 8.97 | 8.97  |      |          |
| YD-09      | 12"  | 12" 12.00   | 12"  | 12"   |      |          |
| 10-09      | 12   | 12.00       | 8.90 | 8.90  |      |          |
| YD-10      | 12"  | 12" 12.00   | 12"  | 12"   |      |          |
| 10-10      | 12   | 12.00       | 8.71 | 8.71  |      |          |
| YD-11      | 12"  | 12.00       | 12"  | 12"   |      |          |
| 10-11      | 12   | 12.00       | 8.52 | 8.52  |      |          |
| YD-12      | 12"  | 10.00       | 12"  | 12"   |      |          |
| 10-12      | 12   | 10.00       | 6.57 | 6.57  |      |          |
| YD-13      | 12"  | 10.00       | 12"  | 12"   |      |          |
| 10-13      | 12   | 10.00       | 6.73 | 6.73  |      |          |
| YD-14      | 12"  | 10.50       | 10"  | 12"   |      |          |
| 10-14      | 12   | 10.50       | 6.90 | 6.90  |      |          |
| YD-15      | 12"  | 10.50       | 10"  | 10"   |      |          |
| 10-13      | 12   | 10.50       | 7.07 | 7.07  |      |          |
| YD-16      | 12"  | 10.00       | 10"  | 10"   |      |          |
| 10-10      | 12   | 10.00       | 7.24 | 7.24  |      |          |
| YD-17      | 12"  | 10.00       | 10"  | 10"   |      |          |
| - 11 - U i | 12   | 10.00       | 7.41 | 7.41  |      |          |
| YD-18      | 12"  | 10.00       | 10"  | 10"   |      |          |
| 10-10      | 12   | 10.00       | 7.58 | 7.58  |      |          |
| YD-19      | 12"  | 10.00       |      | 10"   |      |          |
| פו-טו      | 14   | 10.00       |      | 7.75  |      |          |
|            |      |             |      |       |      |          |

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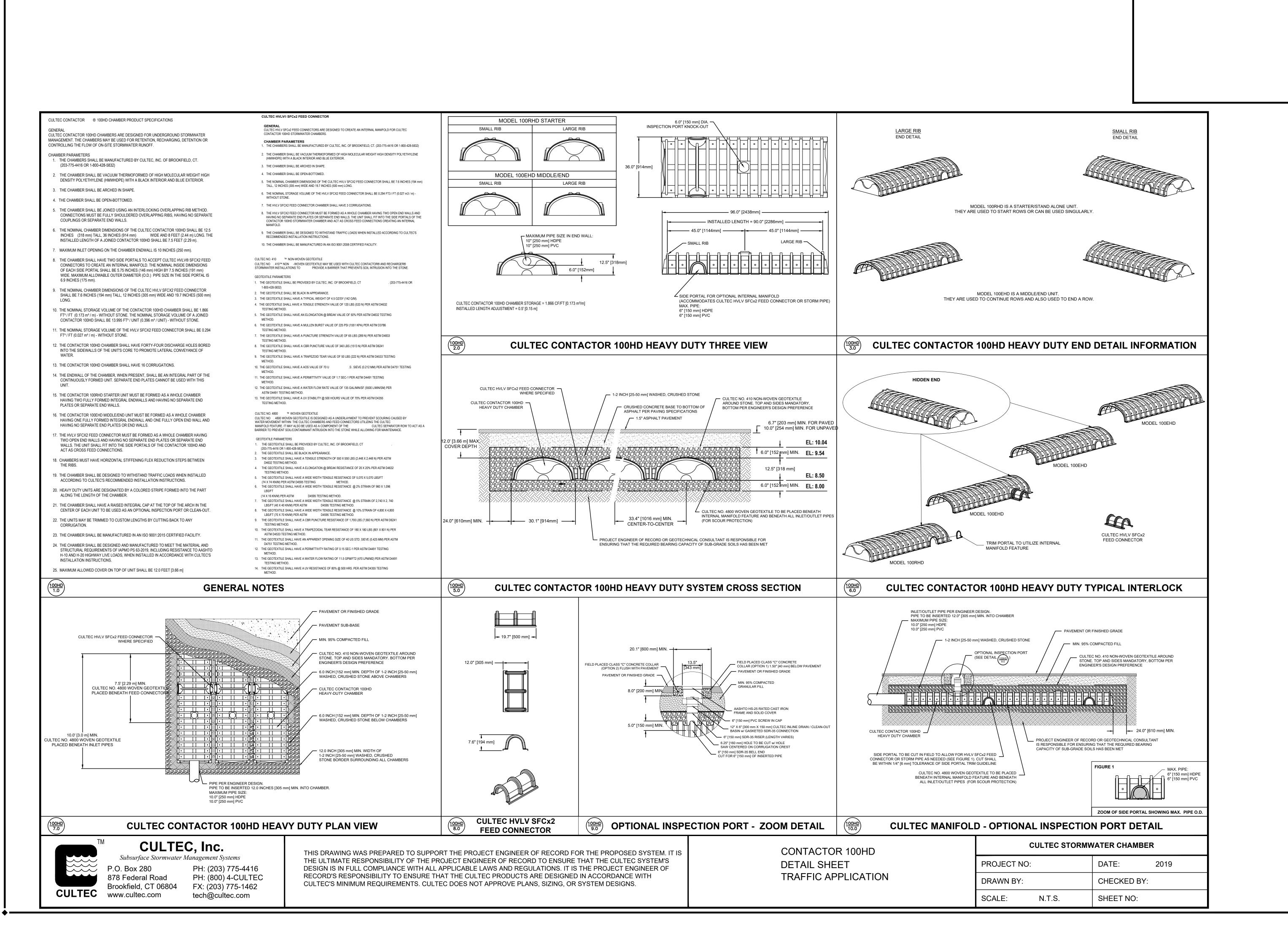


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Civil Engineering, Suite 5

Ormond Beach, Florida 32174

Phone (386) 872-7794

www.Newkirk-Engineering.com

C.A. # 30209

L.C. # 26000584

C 2013

Civil Engineering,

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**CULTEC STORMWATER CHAMBERS** 

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**CULTEC STORMWATER CHAMBERS** 



### **OPERATIONS AND MAINTENANCE GUIDELINES**

This manual contains guidelines recommended by CULTEC, Inc. and may be used in conjunction with, but not to supersede, local regulations or regulatory authorities. OSHA Guidelines must be followed when inspecting or cleaning any structure.

#### Introduction

The CULTEC Subsurface Stormwater Management System is a high-density polyethylene (HDPE) chamber system arranged in parallel rows surrounded by washed stone. The CULTEC chambers create arch-shaped voids within the washed stone to provide stormwater detention, retention, infiltration, and reclamation. Filter fabric is placed between the native soil and stone interface to prevent the intrusion of fines into the system. In order to minimize the amount of sediment which may enter the CULTEC system, a sediment collection device (stormwater pretreatment device) is recommended upstream from the CULTEC chamber system. Examples of pretreatment devices include, but are not limited to, an appropriately sized catch basin with sump, pretreatment catchment device, oil grit separator, or baffled distribution box. Manufactured pretreatment devices may also be used in accordance with CULTEC chambers. Installation, operation, and maintenance of these devices shall be in accordance with manufacturer's recommendations. Almost all of the sediment entering the stormwater management system will be collected within the pretreatment device.

Best Management Practices allow for the maintenance of the preliminary collection systems prior to feeding the CULTEC chambers. The pretreatment structures shall be inspected for any debris that will restrict inlet flow rates. Outfall structures, if any, such as outlet control must also be inspected for any obstructions that would restrict outlet flow rates. OSHA Guidelines must be followed when inspecting or cleaning any structure.

### **Operation and Maintenance Requirements**

#### I. Operation

CULTEC stormwater management systems shall be operated to receive only stormwater run-off in accordance with applicable local regulations. CULTEC subsurface stormwater management chambers operate at peak performance when installed in series with pretreatment. Pretreatment of suspended solids is superior to treatment of solids once they have been introduced into the system. The use of pretreatment is adequate as long as the structure is maintained and the site remains stable with finished impervious surfaces such as parking lots, walkways, and pervious areas are properly maintained. If there is to be an unstable condition, such as improvements to buildings or parking areas, all proper silt control measures shall be implemented according to local regulations.

#### II. Inspection and Maintenance Options

- **A.** The CULTEC system may be equipped with an inspection port located on the inlet row. The inspection port is a circular cast box placed in a rectangular concrete collar. When the lid is removed, a 6-inch (150 mm) pipe with a screw-in plug will be exposed. Remove the plug. This will provide access to the CULTEC Chamber row below. From the surface, through this access, the sediment may be measured at this location. A stadia rod may be used to measure the depth of sediment if any in this row. If the depth of sediment is in excess of 3 inches (76 mm), then this row should be cleaned with high pressure water through a culvert cleaning nozzle. This would be carried out through an upstream manhole or through the CULTEC StormFilter Unit (or other pretreatment device). CCTV inspection of this row can be deployed through this access port to deter mine if any sediment has accumulated in the inlet row.
- If the CULTEC bed is not equipped with an inspection port, then access to the inlet row will be through an upstream manhole or the CULTEC StormFilter.

#### 1. Manhole Access

This inspection should only be carried out by persons trained in confined space entry and sewer inspection services. After the manhole cover has been removed a gas detector must be lowered into the manhole to ensure that there are not high concentrations of toxic gases present. The inspector should be lowered into the manhole with the proper safety equipment as per OSHA requirements. The inspector may be able to observe sediment from this location. If this is not possible, the inspector will need to deploy a CCTV robot to permit viewing of the sediment.

2. StormFilter Access

Remove the manhole cover to allow access to the unit. Typically a 30-inch (750 mm) pipe is used as a riser from the StormFilter to the surface. As in the case with manhole access, this access point requires a technician trained in confined space entry with proper gas detection equipment. This individual must be equipped with the proper safety equipment for entry into the StormFilter. The technician will be lowered onto the StormFilter unit. The hatch on the unit must be removed. Inside the unit are two filters which may be removed according to StormFilter maintenance guidelines. Once these filters are removed the inspector can enter the StormFilter unit to launch the CCTV camera robot.

The inlet row of the CULTEC system is placed on a polyethylene liner to prevent scouring of the washed stone beneath this row. This also facilitates the flushing of this row with high pressure water through a culvert cleaning nozzle. The nozzle is deployed through a manhole or the StormFilter and extended to the end of the row. The water is turned on and the inlet row is back-flushed into the manhole or StormFilter. This water is to be removed from the manhole or StormFilter using a vacuum truck.

#### III. Maintenance Guidelines

The following guidelines shall be adhered to for the operation and maintenance of the CULTEC stormwater management system:

- The owner shall keep a maintenance log which shall include details of any events which would have an effect on the system's operational capacity.
- The operation and maintenance procedure shall be reviewed periodically and changed to meet site
- Maintenance of the stormwater management system shall be performed by qualified workers and shall follow applicable occupational health and safety requirements.
- Debris removed from the stormwater management system shall be disposed of in accordance with applicable laws and regulations.

#### IV. Suggested Maintenance Schedules

#### Minor Maintenance

The following suggested schedule shall be followed for routine maintenance during the regular operation of the stormwater system:

| Frequency   | Action  |
|---|---|
| Monthly in first year                                       | Check inlets and outlets for clogging and remove any debris, as required. |
| Spring and Fall   | Check inlets and outlets for clogging and remove any debris, as required. |
| One year after commissioning and every third year following | Check inlets and outlets for clogging and remove any debris, as required. |

#### Major Maintenance

The following suggested maintenance schedule shall be followed to maintain the performance of the CULTEC stormwater management chambers. Additional work may be necessary due to insufficient performance and other issues that might be found during the inspection of the stormwater management chambers. (See table on next page)

|                               | Frequency   | Action   |
|-------------------------------|---|--|
| Inlets and Outlets            | Every 3 years                                       | Obtain documentation that the inlets, outlets and vents have been cleaned and will function as intended.   |
|                               | Spring and Fall                                     | Check inlet and outlets for clogging and remove any debris as required.  |
| CULTEC Stormwater<br>Chambers | 2 years after commissioning                         | <ul> <li>Inspect the interior of the stormwater management chambers<br/>through inspection port for deficiencies using CCTV or comparable<br/>technique.</li> </ul>              |
|                               |   | Obtain documentation that the stormwater management chambers and feed connectors will function as anticipated.   |
|                               | 9 years after commissioning every 9 years following | Clean stormwater management chambers and feed connectors of any debris.  |
|                               | Tollowing   | Inspect the interior of the stormwater management structures for deficiencies using CCTV or comparable technique.  |
|                               |   | Obtain documentation that the stormwater management chamber<br>and feed connectors have been cleaned and will function as intended.  |
|                               | 45 years after com-<br>missioning                   | Clean stormwater management chambers and feed connectors of any debris.  |
|                               |   | Determine the remaining life expectancy of the stormwater management chambers and recommended schedule and actions to rebilitate the stormwater management chambers as required. |
|                               |   | Inspect the interior of the stormwater management chambers for deficiencies using CCTV or comparable technique.  |
|                               |   | Replace or restore the stormwater management chambers in acco<br>dance with the schedule determined at the 45-year inspection.   |
|                               |   | Attain the appropriate approvals as required.  |
|                               |   | Establish a new operation and maintenance schedule.  |
| Surrounding Site              | Monthly in 1 <sup>st</sup> year                     | <ul> <li>Check for depressions in areas over and surrounding the stormwal management system.</li> </ul>  |
|                               | Spring and Fall                                     | Check for depressions in areas over and surrounding the stormwarmanagement system.   |
|                               | Yearly  | Confirm that no unauthorized modifications have been performed the site.   |

For additional information concerning the maintenance of CULTEC Subsurface Stormwater Management Chambers, please con-

For more information, contact CULTEC at (203) 775-4416 or visit www.cultec.com.

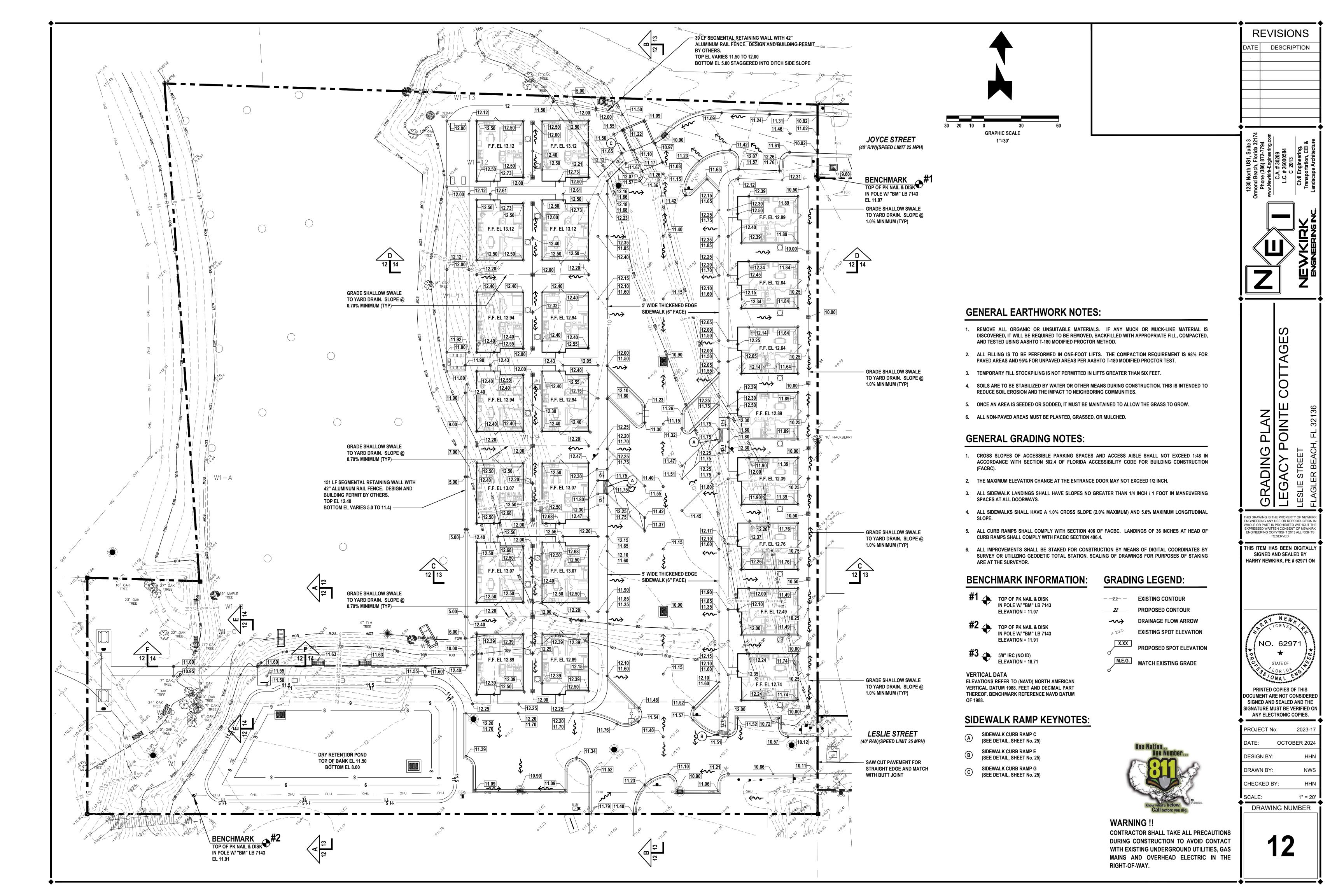
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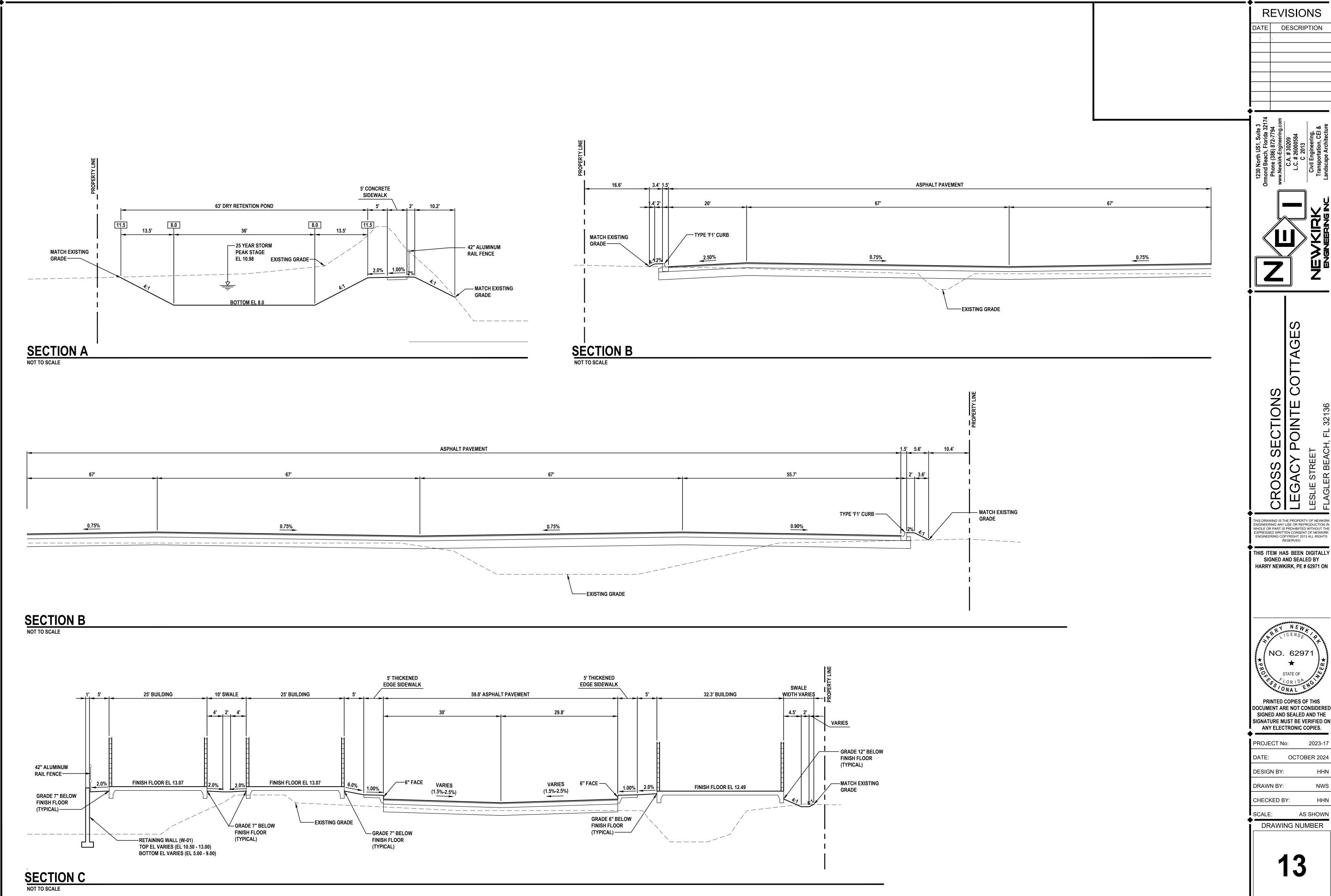
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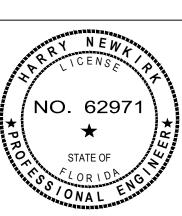
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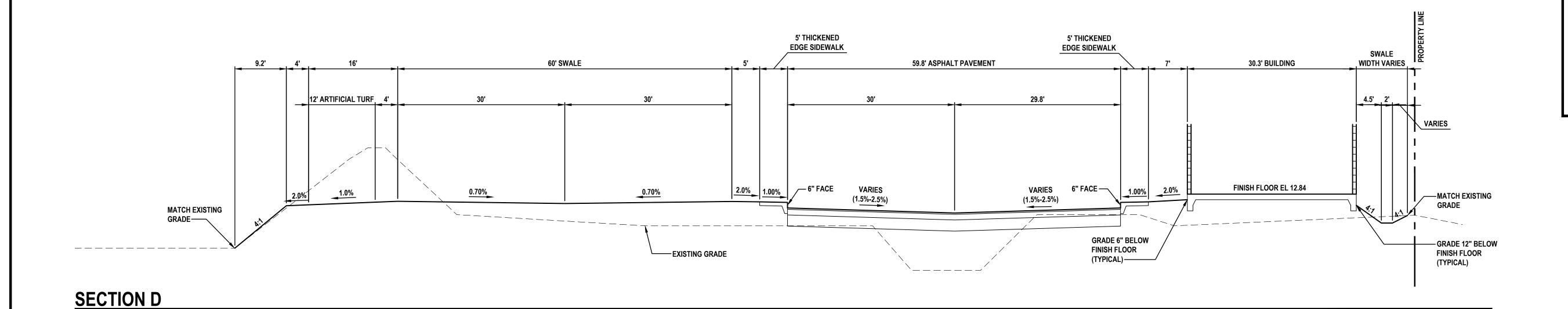


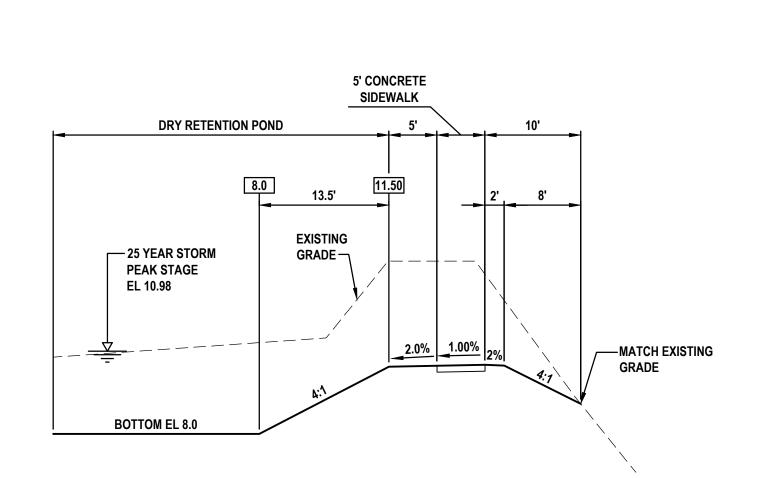




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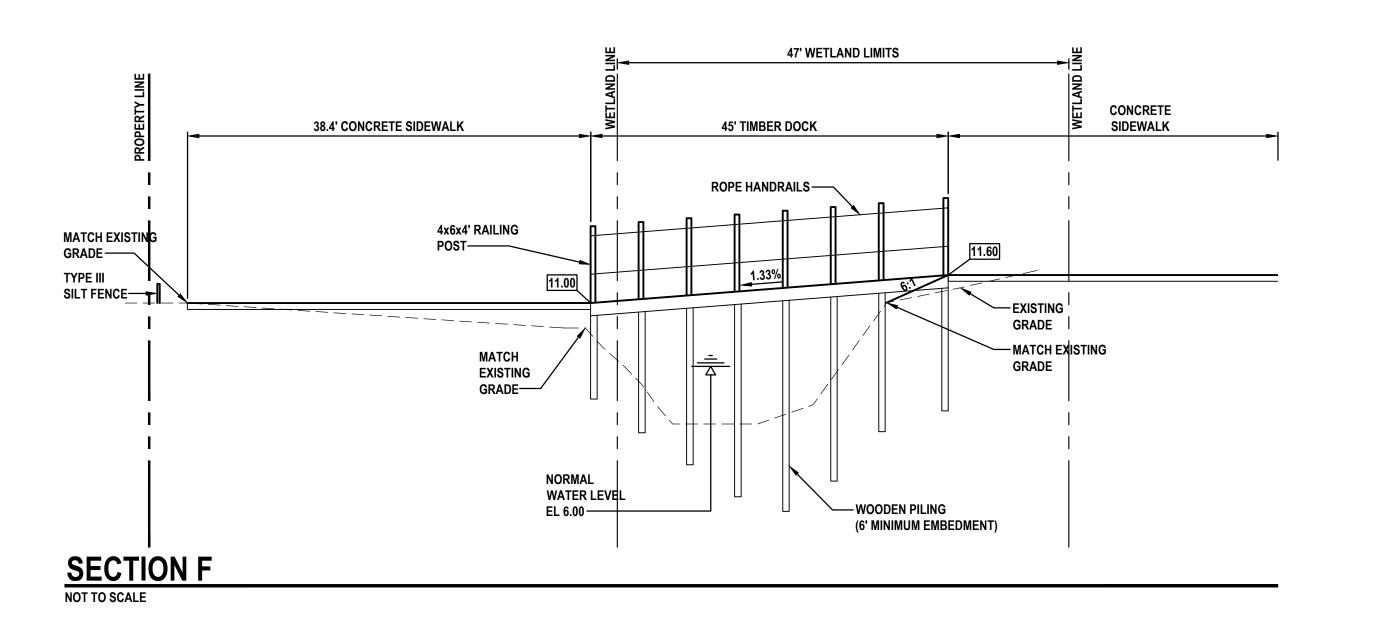
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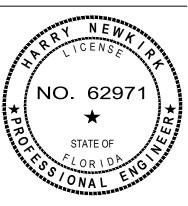
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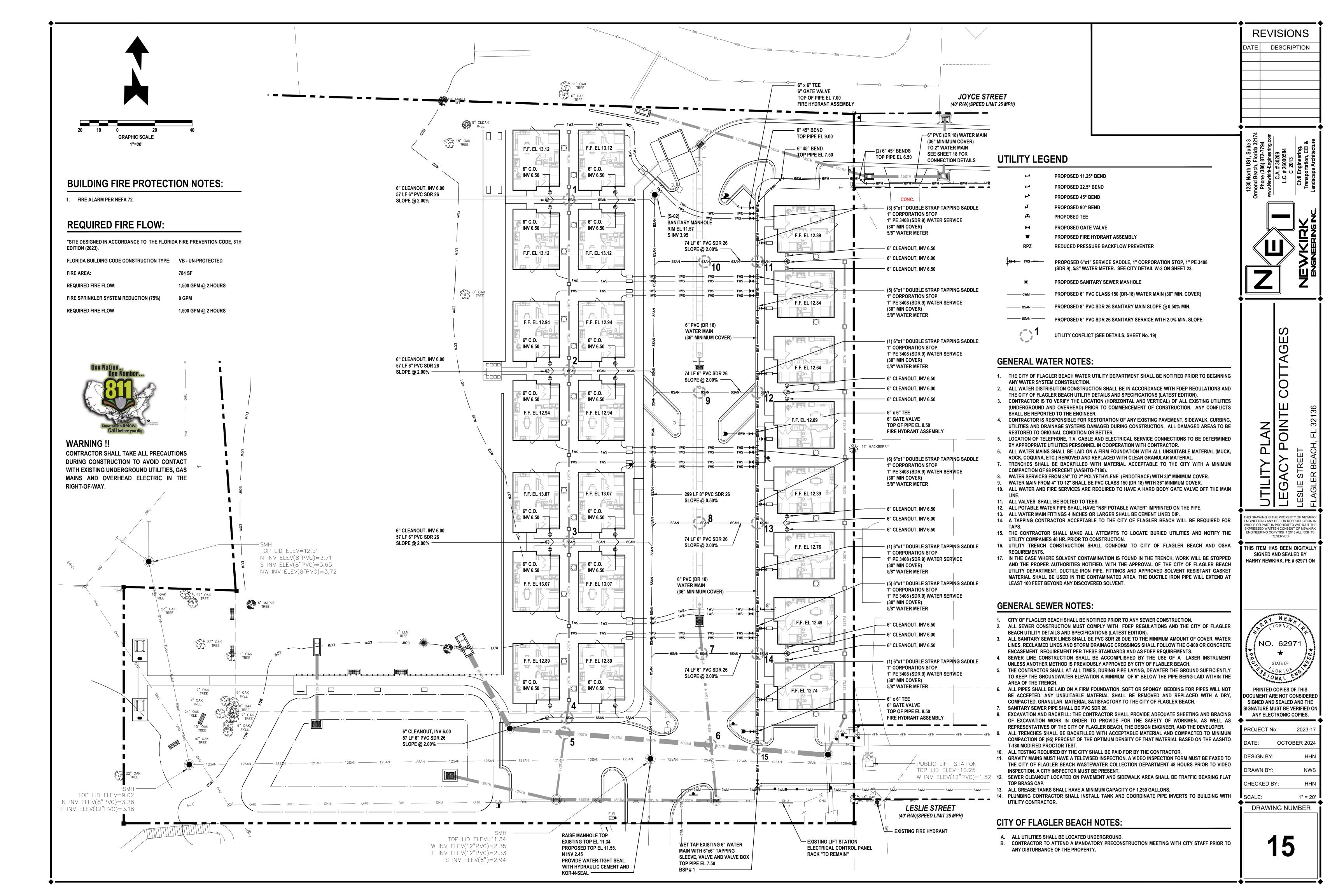
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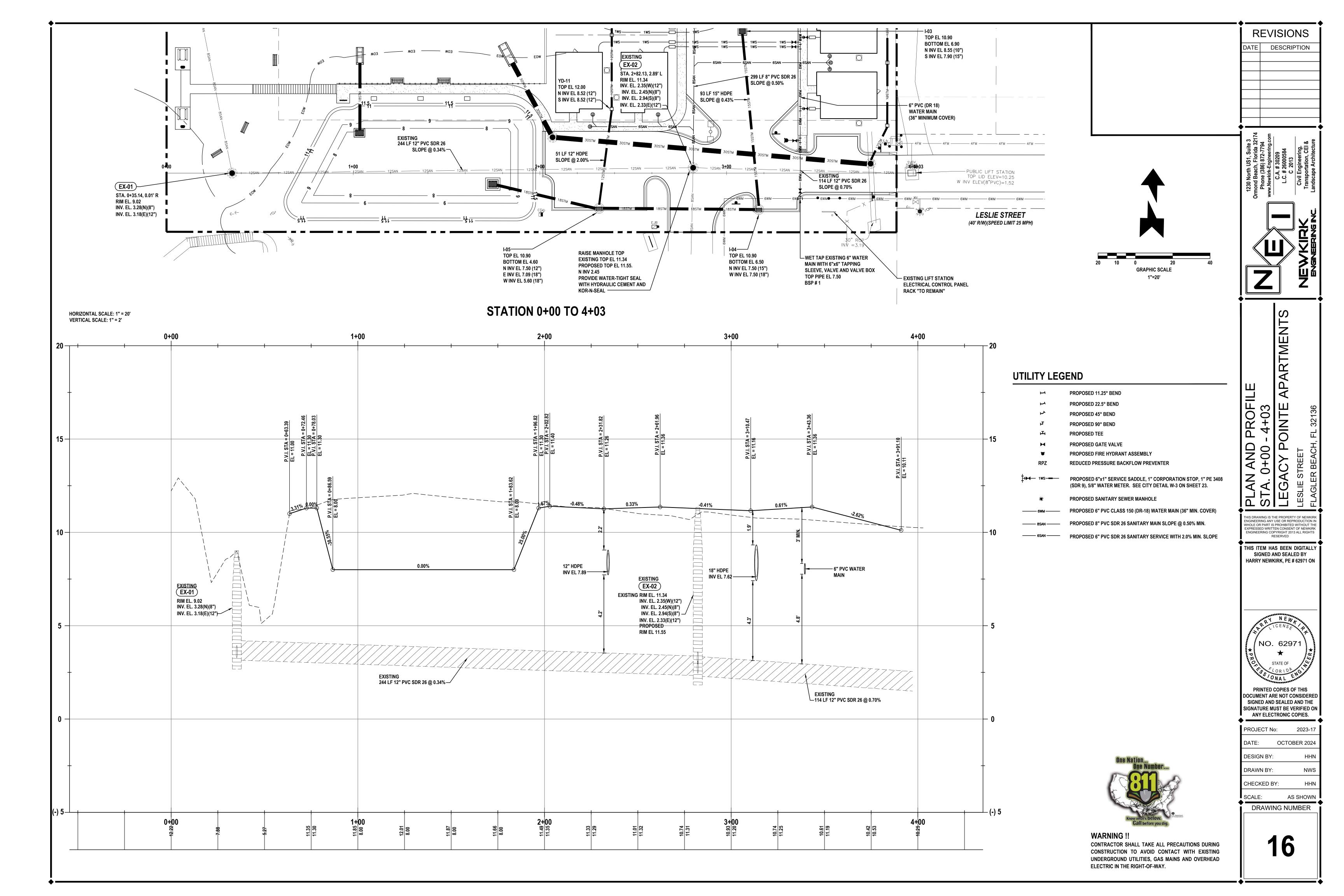
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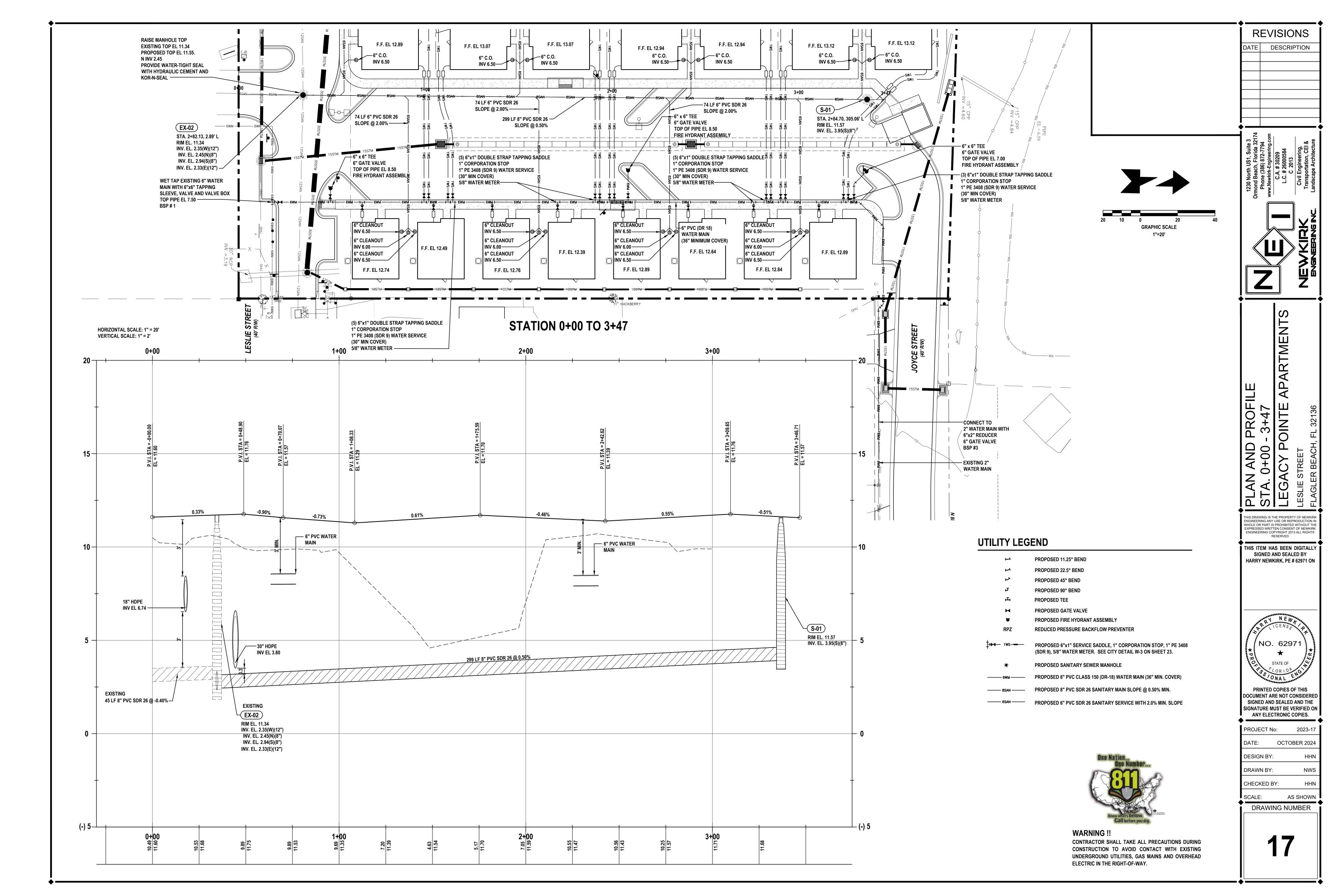
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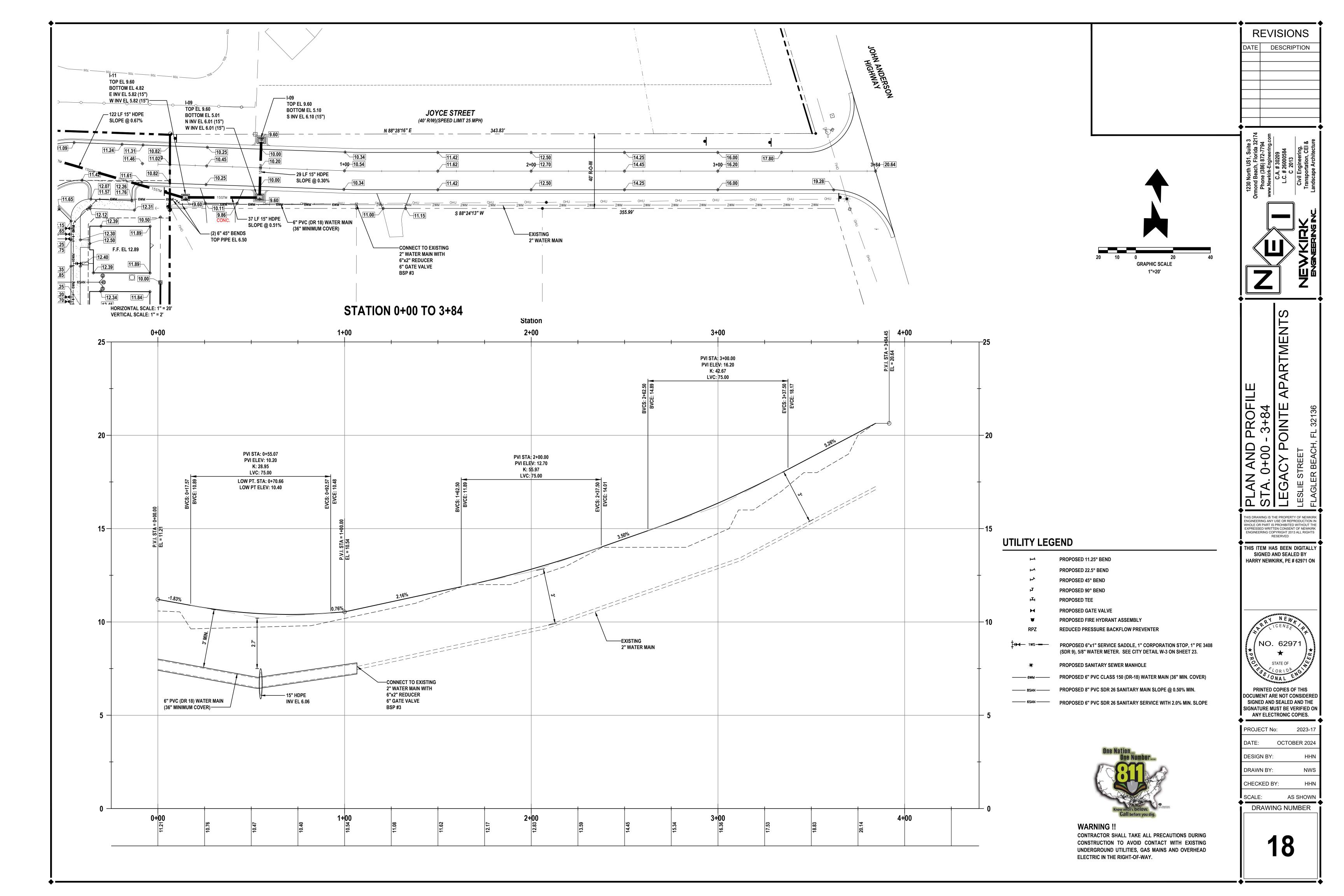
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### TABLE 1: CLASSES OF EMBEDMENT AND BACKFILL MATERIALS

| ASTM D 2321<br>MATERIAL | ASTM D 2487              | MATEDIAL TYPE                        |                      | % PASSING          |                      | ATTE            | ERBERG LIMITS   |  |
|-------------------------|--------------------------|--------------------------------------|----------------------|--------------------|----------------------|-----------------|-----------------|--|
| CLASS                   | SOIL GROUP MATERIAL TYPE |                                      | 1 1/2 IN.            | NO. 4              | NO. 200              | LL              | PI              |  |
| IA                      | NONE                     | MANUFACTURED OPEN GRADED AGGREGATES  | 100%                 | ≤10%               | <5%                  | NC              | ON PLASTIC      |  |
| IB                      | NONE                     | MANUFACTURED DENSE GRADED AGGREGATES | 100%                 | _<50%              | <5%                  | NON PLASTIC     |                 |  |
|                         | GW                       |                                      |                      | <50% OF<br>"COARSE |                      |                 |                 |  |
|                         | GP                       |                                      | 100%                 | FRACTION"          | - <5%                | NON PLASTIC     |                 |  |
| II                      | sw                       | COARSE-GRAINED SOILS, CLEAN          | 100 %                | >50% OF            |                      |                 |                 |  |
|                         | SP                       |                                      |                      | FRACTION"          | "COARSE<br>FRACTION" |                 |                 |  |
|                         | GM                       |                                      |                      | <50% OF<br>"COARSE |                      |                 | <4 OR <"A" LINE |  |
| 111                     | GC                       |                                      | 100%                 | FRACTION"          | 12% TO               |                 | <7 OR >"A" LINE |  |
| III                     | SM                       | COARSE-GRAINED SOILS W/ FINES        | 100 /6               | >50% OF            | 50%                  | >4 OR <"A" L    |                 |  |
|                         | sc                       |                                      | "COARSE<br>FRACTION" |                    |                      | >7 OR >"A" LINE |                 |  |
| IV. A                   | ML                       | FINE ORANIES CON C                   | 4000/                | 4000/              | > F00/               | 450             | <4 OR <"A" LINE |  |
| IV-A                    | CL                       | FINE-GRAINED SOILS                   | 100%                 | 100%               | >50%                 | <50             | >7 OR >"A" LINE |  |

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

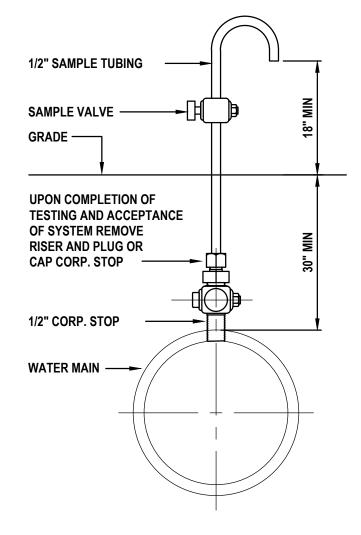
| OTHER PIPE  | HORIZONTAL SEPARATION                        | CROSSINGS (1)  | JOINT SPACING<br>AT CROSSINGS<br>(FULL JOINT CENTERED) |
|---|--|--|--|
| STORM SEWER,<br>STORMWATER FORCE<br>MAIN, RECLAIMED WATER<br>(2)                            | WATER MAIN  3 FT MINIMUM                     | WATER 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<br>SANITARY SEWER, SANITARY<br>SEWER FORCE MAIN,<br>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<br>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

(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.



BACTERIOLOGICAL SAMPLE **POINT DETAIL** 

**←** FIRE HYDRANT

**TOP OF FLANGE REFERENCE** 

**POINT DETAIL** 

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TOP OF FLANGE (TOF)

— TOP OF SHEAR PAD

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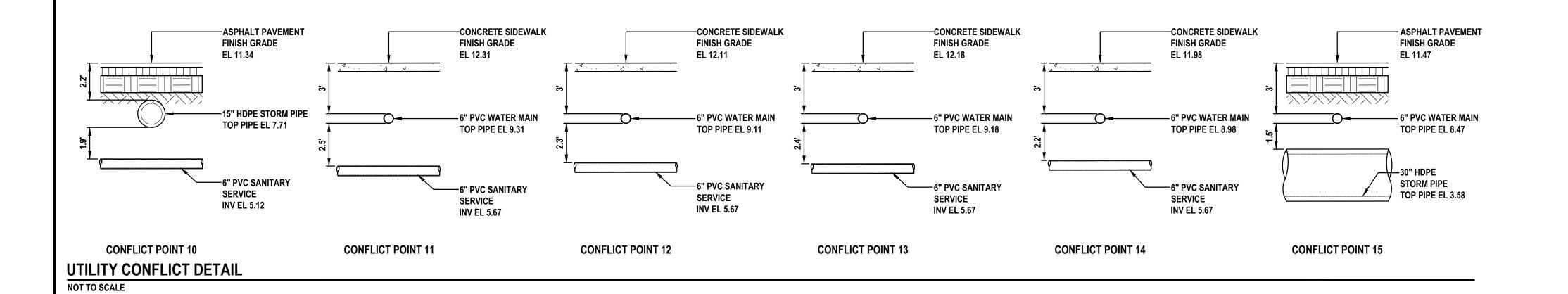
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| CONCRETE SIDEWALK<br>FINISH GRADE<br>EL 12.61 | CONCRETE SIDEWALK FINISH GRADE EL 12.43  | CONCRETE SIDEWALK FINISH GRADE EL 12.56  | CONCRETE SIDEWALK FINISH GRADE EL 12.23  | ASPHALT PAVEMENT FINISH GRADE EL 11.59 | ASPHALT PAVEMENT FINISH GRADE EL 11.45  | ASPHALT PAVEMENT FINISH GRADE EL 11.03  | ASPHALT PAVEMENT FINISH GRADE EL 11.27  | ASPHALT PAVEM FINISH GRADE EL 10.99 |
|---|--|--|--|--|---|---|---|-------------------------------------|
| 10" HDPE STORM PIPE \$\frac{5}{2}             | 10" HDPE STORM PIPE 5% INV EL 9.39       | 12" HDPE STORM PIPE NV EL 8.94           | 12" HDPE STORM PIPE INV EL 8.34          | 12" HDPE STORM PIPE TOP PIPE EL 8.18   | 15" HDPE STORM PIPE<br>TOP PIPE EL 7.62 | 18" HDPE STORM PIPE<br>TOP PIPE EL 7.10 | 15" HDPE STORM PIPE<br>TOP PIPE EL 7.30 | 15" HDPE STORM<br>TOP PIPE EL 7.51  |
| 6" PVC SANITARY SERVICE TOP PIPE EL 5.77      | 6" PVC SANITARY SERVICE TOP PIPE EL 5.77 | 6" PVC SANITARY SERVICE TOP PIPE EL 5.77 | 6" PVC SANITARY SERVICE TOP PIPE EL 5.79 | 30" HDPE STORM PIPE<br>INV EL 3.97     | 30" HDPE STORM PIPE INV EL 3.68         | 6" PVC SANITARY SERVICE INV EL 5.07     | 6" PVC SANITARY SERVICE INV EL 5.05     | 6" PVC SANITARY SERVICE INV EL 5.05 |
| CONFLICT POINT 1                              | CONFLICT POINT 2                         | CONFLICT POINT 3                         | CONFLICT POINT 4                         | CONFLICT POINT 5                       | CONFLICT POINT 6                        | CONFLICT POINT 7                        | CONFLICT POINT 8                        | CONFLICT POINT 9                    |



**HYDRANT MUST** MIN 4'-0" CLEAR IN REAR **FACE TRAVEL LANE** MIN 7'-6" CLEAR ON SIDE MIN 7'-6" CLEAR ON SIDE BONNET SHALL BE PAINTED PER NFPA **COLOR CODE FOR** FLOW (TYPICAL) CONTRACTOR SHALL PAINT YELLOW (TYPICAL) SIDE VIEW FRONT VIEW

MIN 7'-6" CLEAR IN FRONT

TYPICAL FIRE HYDRANT CLEARANCE REQUIREMENT NOT TO SCALE

IN ORDER TO ENSURE THAT NEW DEVELOPMENTS WITHIN THE CITY ARE CONSTRUCTED SUBSTANTIALLY IN ACCORDANCE WITH CITY REGULATIONS AND THE APPROVED DRAWINGS "AS-BUILT" DRAWINGS ARE REQUIRED:

- THE FOLLOWING INFORMATION IS REQUIRED ON ALL PAVING AND DRAINAGE "AS-BUILT" DRAWINGS: PAVEMENT AND CURB WIDTHS SHALL BE VERIFIED AND DIMENSIONED FOR EACH STREET AT EACH BLOCK, ALL RADII AT INTERSECTIONS SHALL BE VERIFIED AND DIMENSIONED, THIS INFORMATION TO CLEARLY INDICATE IT AS AS BEING "AS—BUILT" INFORMATION.
- ROADWAY ELEVATIONS SHALL BE RECORDED AT ALL GRADE CHANGES OR DITHER 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 EXISTING AND DESIGNED PROFILE GRADE LINES. ALL STREET CENTERLINES ON "AS-BUILTS" SHALL BE LABELED WITH STREET NAME AND RIGHT-OF-WAY WIDTH ON EVERY PAGE.
- STORM DRAINAGE STRUCTURES SHALL BE LOCATED AND/OR DIMENSIONED FROM CENTERLINES OR LOT LINES AS APPROPRIATE.
- 4. STORM DRAINAGE PIPE INVERT AND STRUCTURE TOP AND BOTTOM ELEVATIONS SHALL BE RECORDED AND CLEARLY DENOTED AS "AS-BUILT" INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND "AS-BUILT" INFORMATION WRITTEN NEXT TO IT.
- ALL APPLICABLE TOPOGRAPHIC INFORMATION, PERTINENT TO THE ON SITE DRAINAGE SYSTEM SUCH AS DITCHES, LAKES, CANALS, ETC. THAT ARE DEEMED APPROPRIATE BY THE CITY 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.
- 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. SEPARATE CALCULATIONS SHALL BE SUBMITTED TO INDICATE REQUIRED
  AND PROVIDED RETENTION VOLUMES.
- STORM DRAINAGE SWALE CENTERLINES SHALL BE LOCATED AND ELEVATIONS OF FLOW LINE SHALL BE RECORDED EVERY 100 FEET.
- ACTUAL MATERIALS USED AND ELEVATIONS AND DIMENSIONS OF OVERFLOW WEIR STRUCTURES AND SKIMMERS SHALL BE NOTED ON THE "AS-BUILT".
- THE FOLLOWING INFORMATION IS REQUIRED ON ALL WATER AND SEWER "AS-BUILT" DRAWINGS: 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 TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION.



STANDARD CONSTRUCTION DETAIL REQUIREMENTS FOR "AS-BUILT" DRAWINGS FEB 2018

STANDARD CONSTRUCTION DETAIL REQUIREMENTS FOR AS BUILT DRAWINGS

TRENCH WIDTH

PIPE INSTALLATION DETAIL

5. INSTALL UTILITY COLOR CODED METALLIC TAPE OVER FULL LENGTH OF PIPE.

STANDARD CONSTRUCTION DETAIL

PIPE INSTALLATION

1. WHERE SOIL CONDITIONS CAN NOT BE MAINTAINED AS SHOWN

2. SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
3. COMPACTION PERCENTAGES SHOWN REFER TO A.A.S.H.T.O. T-180. PROVIDE COPIES OF CERTIFIED TEST REPORTS TO THE CITY.
4. MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL.

FEB 2018

CONSTRUCTION

-UNDISTURBED S

GROUND LEVEL-

APPROVED EQUAL.

POTABLE WATER SYSTEM:

SANITARY SEWER FORCE MAIN SYSTEM:

COLOR CODING:

1/2" PVC PIPE-

ALL PVC PIPE, OR OTHER CITY APPROVED NONMETALLIC PIPE INSTALLED WITHIN THE CITY'S WATER, SANITARY SEWER, OR RECLAIMED WATER SYSTEMS, SHALL BE INSTALLED WITH 10 THEN SOLID COPPER TRACING WIRE. IF PIPE IS INSTALLED BY DIRECTIONAL BORE, USE (2) 10 THHN SOLID COPPER TRACING WIRE.

THE TRACING WIRE MUST BE INSTALLED DIRECTLY BELOW THE PIPE AND BROUGHT TO THE SURFACE AT 500' MINIMUM INTERVALS. WIRE SHALL EXTEND A MINIMUM OF 12" ABOVE GRADE AT EACH INTERVAL AND BE COILED AND PLACED IN A VALVE BOX, METER BOX, MANHOLE, CLEANOUT OR OTHER APPLICABLE STRUCTURE.

TRACING WIRE BETWEEN INTERVALS SHALL BE INSTALLED SO AS TO PROVIDE CONTINUOUS CURRENT WHEN LINE LOCATION EQUIPMENT IS CONNECTED TO THE TRACING WIRE. WIRE BRANCHING FROM MAIN LINES SHALL BE LINKED BY A CITY APPROVED CONNECTOR SUCH AS KING # 2011 SAFETY SEALED CONNECTORS OR

POTABLE WATER AND RECLAIMED WATER SYSTEMS: WIRE SHALL BE INSTALLED BELOW ALL MAINS AND SERVICE LINES AND ATTACHED TO VALVES, HYDRANTS AND FITTINGS. WIRE INSTALLED WITH SERVICE LINES SHALL CONNECT TO THE WIRE INSTALLED BELOW THE MAIN AND EXTEND TO THE CURB STOP.

SANITARY SEWER FORCE MAINS: WIRE SHALL BE INSTALLED BELOW THE FORCE MAIN AND ATTACHED TO ALL VALVES AND FITTINGS AND BROUGHT TO THE SURFACE AND PLACED IN A METAL, CITY APPROVED, VALVE BOX.

STANDARD CONSTRUCTION DETAIL

UTILITY PIPE LOCATION MATERIALS

25. THREE (3) CONCRETE CYLINDERS SHALL BE TAKEN AND TESTED FOR EVERY THREE HUNDRED (300) FEET OF ROADWAY CONSTRUCTED. TEST RESULTS SHALL THEN BE PROVIDED TO THE CITY AS THEY BECOME AVAILABLE.

26. THE DEVELOPER SHALL PROVIDE ALL REQUIRED PAVEMENT MARKINGS ON ALL ROADWAYS PER CITY, COUNTY AND STATE REQUIREMENTS. CENTERLINE STRIPES SHALL BE PROVIDED ON EXTENSIONS OF CITY COLLECTOR OR ARTERIAL ROADS, COUNTY ROADS AND STATE HIGHWAYS ONLY.

27. STOP BARS SHALL BE PLACED AT ALL SUBDIVISION ENTRANCES AND INTERSECTIONS CONTAINING CITY COLLECTOR AND ARTERIAL ROADS, COUNTY ROADS AND STATE HIGHWAYS.

28. ALL TRAFFIC CONTROL DEVICES PLACED AT INTERSECTIONS, PRIVATE STREETS, PUBLIC STREETS, COUNTY ROADS AND STATE HIGHWAYS WITHIN THE CITY LIMITS SHALL BE INSTALLED ACCORDING TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

29. THE DEVELOPER IS RESPONSIBLE FOR PAYING FEES FOR ALL STREET LIGHTS PRIOR TO ACCEPTANCE OF THE PROJECT BY THE CITY.

31. THE CITY SHALL BE PRESENT DURING PAVING OF ALL PUBLIC AND PRIVATE ROADS. PAVING SHALL BE PERFORMED DURING NORMAL BUSINESS HOURS, MONDAY THROUGH FRIDAY. PAVING DURING WEEKENDS IS NOT

CONSTRUCTION METHODS AND DESIGN FOR CONCRETE PAVEMENT SHALL CONFORM TO FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

33. ALL CONTRACTORS THAT ARE PERFORMING THE CONSTRUCTION OF PUBLIC

IMPROVEMENTS (WATER MAIN, SANITARY SEWER MAIN, RECLAIMED WATER MAIN, STORM WATER PIPES AND INLETS AND ALSO CONSTRUCTION OF ROADWAYS) SHALL BE CERTIFIED WITH THE FLORIDA STATE DEPARTMENT OF PROFESSIONAL

REGULATIONS (DPR) FOR THE TYPE OF WORK THAT THEY PERFORM. A COPY OF THE VALID LICENSE IS REQUIRED AT PRE CONSTRUCTION MEETING.

- HIGH VOLTAGE UTILITIES SUCH AS POWER (FEEDER, SERVICE AND DROPS)
SHALL BE BURIED A MINIMUM OF 30 INCHES IN DEPTH.

LOW VOLTAGE UTILITIES SUCH AS PHONE AND CABLE TV SHALL BE BURIED A MINIMUM OF 12 INCHES IN DEPTH FOR FEEDER AND SERVICES. SERVICE DROPS SHALL BE BURIED A MINIMUM OF 6 INCHES IN DEPTH.

- HIGH VOLTAGE UTILITIES INSTALLED PARALLEL TO PRESSURE MAINS SHALL MAINTAIN A MINIMUM FIVE FOOT SEPARATION.

30. STANDARD TURNING RADII FOR INTERSECTIONS:

LOCAL OR COLLECTOR TO ARTERIAL 40

2-LANE ACCESS OR FEEDER

ARTERIAL TO ARTERIAL

2. FIRE SPRINKLER LINES: WIRE SHALL CONNECT TO THE WIRE INSTALLED BELOW THE MAIN AND EXTEND TO THE RISER CONNECTION.

DEAD END MAINS: WIRE SHALL BE PLACED IN A PROPERLY IDENTIFIED METAL VALVE BOX AT THE END OF THE RUN.

5. WIRE SHALL NOT BE FASTENED OR COILED TO VALVE OPERATING NUT.

CONTRACT WITH THE CITY.

GENERAL NOTES:

PERMIT(S) AS REQUIRED BY THE CITY.

STANDARD CONSTRUCTION DETAIL GENERAL CONSTRUCTION NOTES

1/2" PVC PIPE

- METALLIC OR VINYL CONTINUOUS IDENTIFICATION/WARNING TAPE

SIDEWALK, RAMP, AND DRIVEWAY APRON CONSTRUCTION REQUIREMENTS

FEB 2018

1.6" MIN. 2.4" MAX. 0.9" MIN. 1.4" MAX. ₹<del>1</del> 00°0 0.2" ± 0.02" 0000 0.65" MINIMUM BETWEEN DOMES. STANDARD CONSTRUCTION DETAIL SIDEWALK AND BIKE PATH RAMP M – 4

-|1|- 3' OR 5'-|1|-

RAMP LOCATIONS ARE TO BE COORDINATED WITH AND IN CONFORMANCE WITH CROSSWALK MARKING DETAILS SHOWN IN THE PLANS.

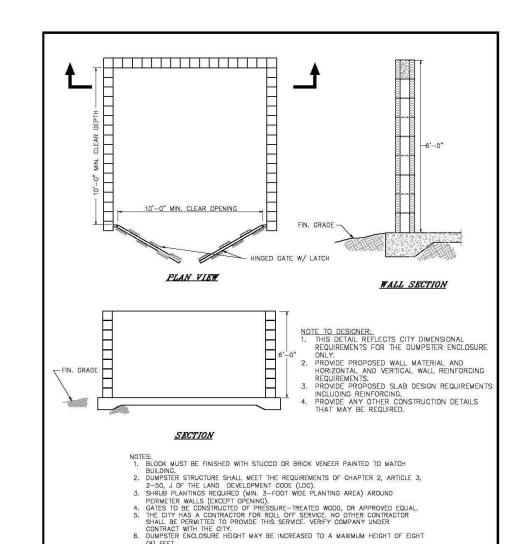
RAMPS ARE TO BE CONSTRUCTED AT ALL LOCATIONS SHOWN IN THE PLANS EVEN WHEN A SIDEWALK IS NOT CONSTRUCTED CONCURRENTLY.

ALL RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX NO. 304 AND HANDICAPPED ACCESSIBILITY REQUIREMENTS IN ACCORDANCE WITH THE AMERICAN DISABILITIES ACT.

2. CURBED RAMPS SHALL HAVE FLARED SIDES WITH A MAXIMUM SLOPE OF 12:1.

3. RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE AS SHOWN.

5 NO CURB TRANSITION IS NEEDED FOR MIAMI CURBS.





ROADWAY CONSTRUCTION NOTES

ALL RICHT OF WAY OTHER THAN ROADWAY AREAS SHALL BE SEEDED AND MULCHED OR SODDED. ALL SLOPES GREATER THAN 6% SHALL BE SODDED. THE CITY RESERVES THE RIGHT TO REQUIRE SODDING IN SPECIAL AREAS WHERE EROSION IS A CONCERN.

2. THE FOLLOWING WILL BE THE STANDARD PROTECTION FOR DITCHES UNLESS DRAINAGE CALCULATIONS INDICATE OTHERWISE:

3. ALL FRANCHISE UTILITY CROSSINGS, INCLUDING BUT NOT LIMITED TO FPL, BELLSOUTH AND CABLE SHALL BE INSTALLED PRIOR TO INSTALLATION AND COMPACTION OF THE ROAD SUB BASE. ANY CROSSINGS AFTER INSTALLATION OF THE SUB BASE SHALL BE BY DIRECTIONAL BORE.

INCHES (6") BELOW THE BOTTOM OF THE BASE AND OUTWARD TO TWELVE

4. THE LIMITS OF STABILIZED SUB BASE SHALL EXTEND TO A DEPTH OF SIX

PROTECTION REQUIRED

SEEDING AND MULCHING

SODDING DITCH PAVING

SWALE PROFILE GRADES

4.0% AND GREATER

0.2% - 1.0%1.0% - 4.0%

IF BOLLARDS ARE INSTALLED CLEAR DEPTH MUST BE MEASURED FROM BOLLARDS TO GATES.

STANDARD CONSTRUCTION DETAIL

SEE NOTE 4 ---

1/4" DIA BEDDING ROCK WHERE-

XCAVATION CONDITIONS REQUIRE

OR IN EXCAVATIONS 12 FEET DEEP

13. ASPHALT SPECIFICATIONS SHALL BE SUBMITTED BY THE DESIGN ENGINEER WITH FINAL PLANS TO THE CITY. FLORIDA STATE CERTIFIED BATCH PLANTS MUST THEN CERTIFY THAT THESE APPROVED SPECIFICATIONS HAVE BEEN MET.

14. EXTRACTION AND GRADATION TESTS ON ASPHALT MIXES SHALL BE PROVIDED TO THE CITY TO INSURE THAT DESIGN MIXES MEET THE CITY STANDARD SPECIFICATIONS.

16. ALL ROADWAYS WITH CURB AND GUTTER SECTIONS SHALL HAVE AS A STANDARD A MINIMUM LONGITUDINAL SLOPE OF 0.30%.

OF THE ADJACENT CONCRETE CURB.

19. CONCRETE CURBS SHALL BE SAW CUT TO A DEPTH EQUAL TO 1/4 OF CURB THICKNESS AT INTERVALS OF TEN FEET (10') WITH EXPANSION JOINTS AT STREET INTERSECTIONS, STRUCTURES AND ALONG CURVES AT SIXTY

21. AN "X" SHALL BE CUT INTO THE CURB TO MARK THE LOCATION OF ALL VALVES OTHER THAN WATER DISTRIBUTION VALVES.

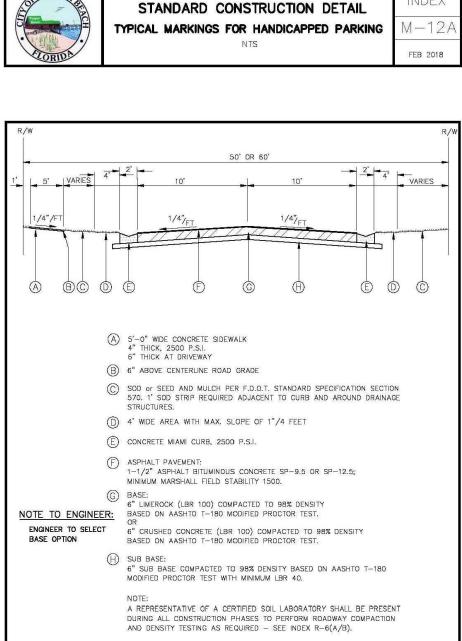
23. A " $oldsymbol{\perp}$ " shall be cut in the curb to mark the location of all RECLAIMED WATER SERVICES.

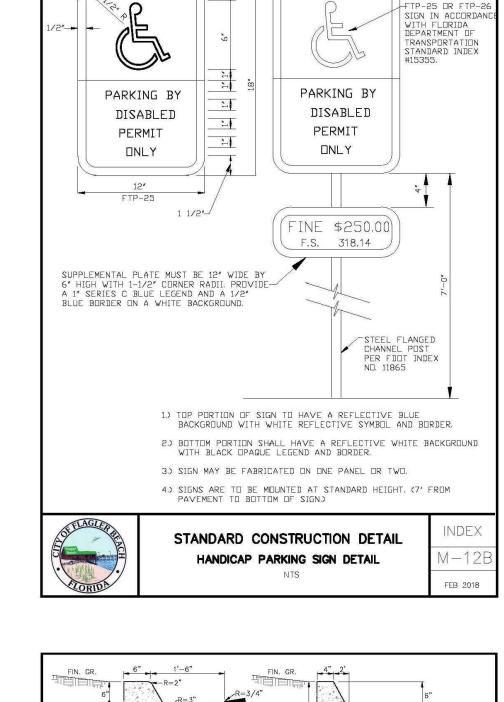
24. A "A" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL WATER SERVICES.



FEB 2018

STANDARD CONSTRUCTION DETAIL ROADWAY CONSTRUCTION NOTES





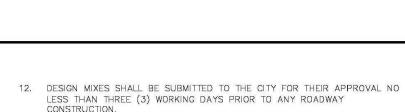
SUBBASE

HEADER CURB

SUBBASE

2'

ENVIRONMENTAL CURB



LESS THAN THREE (3) WORKING DAYS PRIOR TO ANY ROADWAY CONSTRUCTION.

15. THE ROADWAY CROWN SHALL HAVE A STANDARD ONE QUARTER INCH (1/4") PER FOOT SLOPE.

17. THE FINISHED PAVEMENT EDGE SHALL BE WITHIN ONE QUARTER INCH (1/4")

18. CONCRETE CURBS SHALL BE PROVIDED ON BOTH SIDES OF ALL STREETS AND CONSTRUCTED WITH 2500 PSI CONCRETE AT 28 DAYS.

FEET (60') INTERVALS. ALL EXPANSION JOINT MATERIAL IS REQUIRED TO BE INSTALLED THROUGH THE ENTIRE DEPTH OF THE CONCRETE CURB.

20. AN "X" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF WATER DISTRIBUTION SYSTEM VALVE.

22. A "V" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL

STANDARD CONSTRUCTION DETAIL ROADWAY CONSTRUCTION NOTES



STANDARD CONSTRUCTION DETAIL 50' OR 60' R/W/ ROAD SECTION

INDF>

STANDARD CONSTRUCTION DETAIL STANDARD CURB CONSTRUCTION

SUBBASE

SUBBASE

NOTES:

F.D.O.T. TYPE "F" CURB

MIAMI CURB

|<del>- 9" -|- 1'-6" -|</del>

F.D.O.T. TYPE "E" CURB

CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4' MINIMUM).

1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIUS POINTS.

6" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.

EXPANSION JOINT MATERIAL MUST COVER THE ENTIRE CROSS SECTION OF CURB.

ALL CURB ENDS THAT DO NOT TIE INTO OTHER FACILITIES SHALL TRANSITION DOWN TO PAVEMENT GRADE IN 24 INCHES.

6. ALL EXPOSED CORNERS TO BE ROUNDED AT 3/4" MIN. RADIUS.

1. ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 2500 P.S.I. CONCRETE

SUBBASE

1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500'.

12" 8"

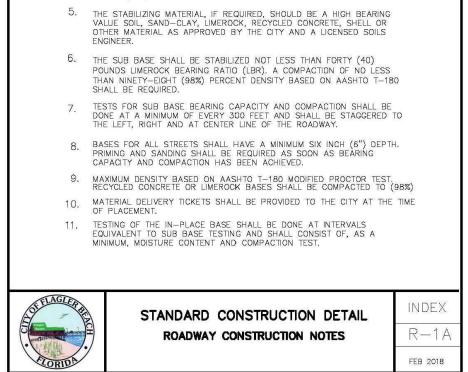
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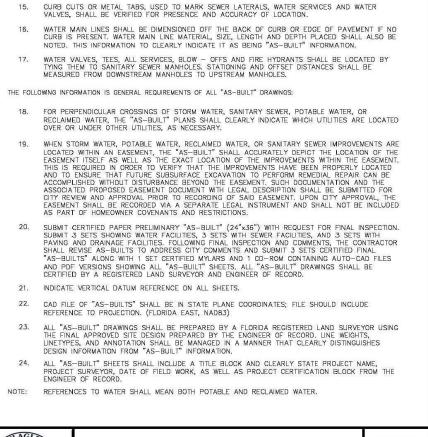
PROJECT No: 2023-17 OCTOBER 2024 DATE: DESIGN BY: DRAWN BY:

SCALE:

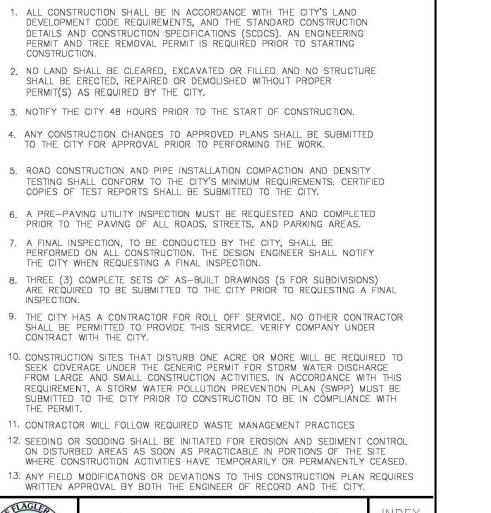
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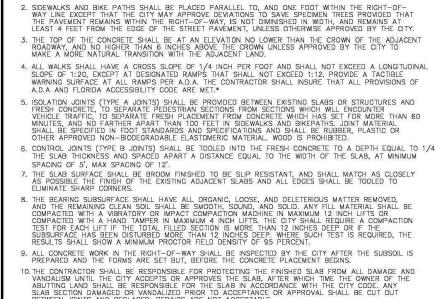
DRAWING NUMBER





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 EVERY 500 FEET. DIMENSIONAL AND ELEVATION INFORMATION INDICATED ON THE APPROVED PLAN SHALL BE VERIFIED AND RECORDED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION. BURIED ELECTRICAL SERVICE LINE SHALL BE CLEARLY DIMENSIONED, LOCATED AND LABELED.





HANDICAPPED PAVEMENT SYMBOL

USE OF PAVEMENT SYMBOL IN HANDICAPPED PARKING SPACES IS REQUIRED. WHEN USED THE SYMBOL SHALL BE 5 FT. HIGH AND WHITE IN COLOR. TO BE INSTALLED IN ACCORDANCE

WITH FDOT STANDARD INDEX #17346

TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595

4" BLUE STRIP -

4" WHITE STRIP

TYPE A JOINT TYPE B JOINT

I. 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. 10.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.

SIDEWALKS, BIKEPATHS, RAMPS, AND DRIVEWAY APRONS SHALL BE CONSTRUCTED OF PLAIN PORTLAND CEMENT CONCRETE WITH A MAXIMUM SLUMP OF 3 INCHES, A MINIMUM DEVELOPED COMPRESSIVE STRENCTH OF 2500 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. SIDEWALKS SHALL BE 5 FOOT WIDE UNLESS OTHERWISE SHOWN ON PLANS.

1. SIDEWALKS LOCATED WITHIN THE RIGHT-OF-WAY SHALL NOT BE TINTED, STAINED, COLORED, OR COATED. 2. 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.



STANDARD CONSTRUCTION DETAIL

ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 2.0% IN ALL DIRECTIONS.

2. IF ACCESSIBLE AISLE CROSSES THE TOP OF THE HANDICAP SPACE, WHEEL STOP

SHALL BE USED TO MAINTAIN MINIMUM 44 INCH CLEAR ACCESSIBLE ROUTE. 3. IF WHEEL STOP IS USED, PARKING

SHALL HAVE 18' CLEAR SPACE. ACCESSIBLE PARKING SIGN SHALL BE PLACED AS TO NOT ENCROACH INTO

THE ACCESSIBLE AISLE MINIMUM 44 INCH

CLEAR ACCESSIBLE AISLE MINIMUM 44 INC CLEAR ACCESSIBLE ROUTE. NUMBER OF ACCESSIBLE PARKING SPACES SHALL MEET REQUIREMENT OF THE LATEST ISSUE OF THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION

FT WIDE ACCESS

STRIPED AT 45 DEGREES WITH 4" WIDE SOLID WHIT

STRIPING AT 4 FT. ON CENTERS AND OUTLINED THREE SIDES WITH 4"

WIDE SOLID WHITE STRIPI

NDEX

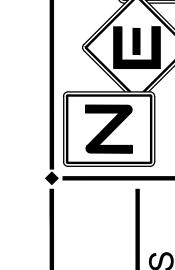




1'-6" 3' OR 5' 1'-6"

6' OR 8'

FEB 2018



AC B

**REVISIONS** 

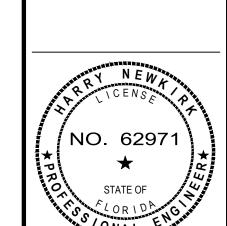
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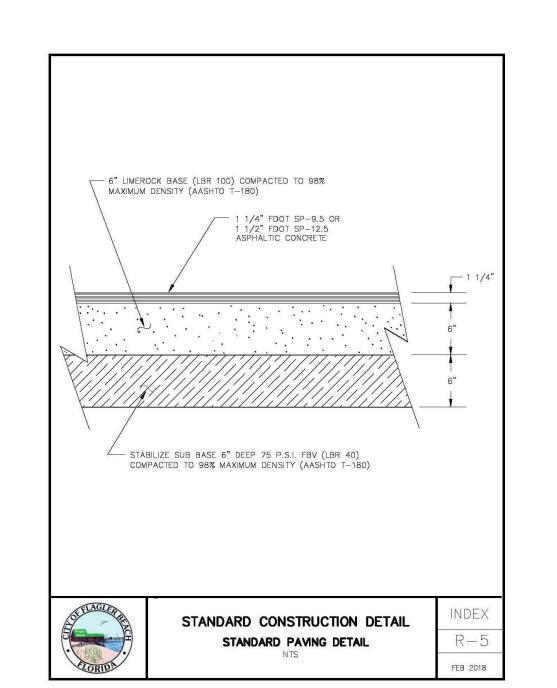
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Newkirk-E
C.A. #
L.C. # 2

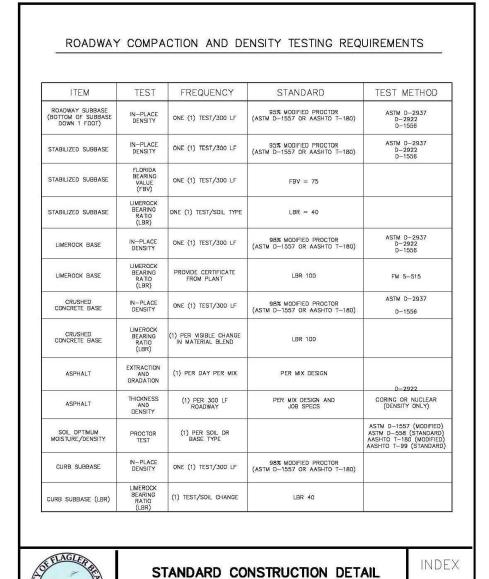
CITY OF UTILITY CEGAC LESLIE STR

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TECHNICAL SPECIFICATIONS FOR

-#10 W.W.M OR FIBERCRETE

12" SUBBASE COMPACTED
TO 98% MAX. DENSITY

ROADWAY

EXPANSION JOINT

CONTRACTION JTS. MAY BE HAND FORMED, SAWED OR CONSTRUCTED W/ A 1/4" PREMOLDED FILLER JT. JOINTS MUST BE

CONCRETE HAS BEEN PLACED.

SAWED BETWEEN 4 AND 18 HOURS AFTER

3. USE OF WOOD IS NOT AN ACCEPTABLE ALTERNATIVE TO FLEXIBLE JOINT SEALANTS.

5. CONSTRUCTION JOINTS WITHIN THE SLAB AREA

SHOULD NOT CONTAIN PREMOLDED EXPANSION JOINT FILLER.

CONCRETE PAYEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH A.C.I. PUBLICATION ACI 330R-87.

EXPANSION JOINTS TO BE PLACED BETWEEN ROADWAY AND CURB. ALSO AT ANY PERMANENT STRUCTURE ABUTTING OR WITHIN THE PAVED AREA INCLUDING SIDEWALKS.

FINAL DETERMINATION OF CONSTRUCTION JOINT SELECTION AND APPLICATION SHALL BE MADE BY THE ENGINEER OF RECORD BASED ON PROJECT REQUIREMENTS AND LOCATION.

\_ 1/2" EXPANSION MAT. W/ FLEXIBLE JT. SEALANT

STRUCT.

NDEX

INDEX

FEB 2018

**TESTING REQUIREMENTS** 

TYPICAL PAVEMENT SECTION

NOTES:

STANDARD CONSTRUCTION DETAIL

CONCRETE PAVEMENT DETAILS

STANDARD CONSTRUCTION DETAIL

TYPE "A" PRECAST MANHOLE

SEE NOTE

NOTE: FOR ROADWAYS, THE CROSS SLOPE SHALL BE 1/4" PER FOOT. FOR PRIVATE PARKING AREAS THE MINIMUM ALLOWABLE PAVEMENT SLOPE SHALL BE NO LESS THAN 0.50% MEASURED FROM THE

MIN. ½ \* "D"

MAX. SPACING AROUND LONGEST PERIMETER OF RADIUS CURVES = 12 FT

- 1/4" MAX. RAD

1/4" MAX. RAD.

| | | 1/4" MAX.

CONTRACTION JOINT

--

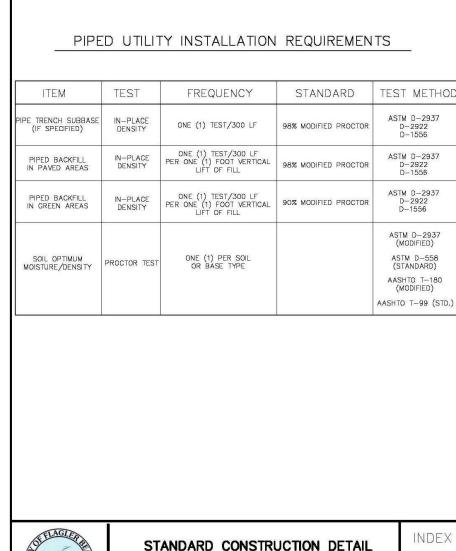
CONSTRUCTION JOINT

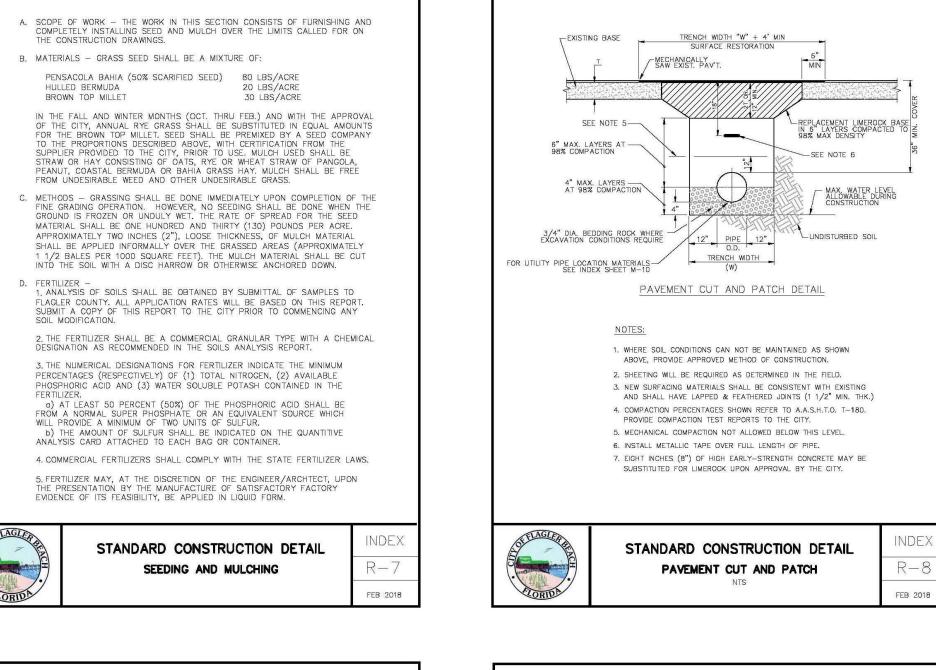
2" MAX 7

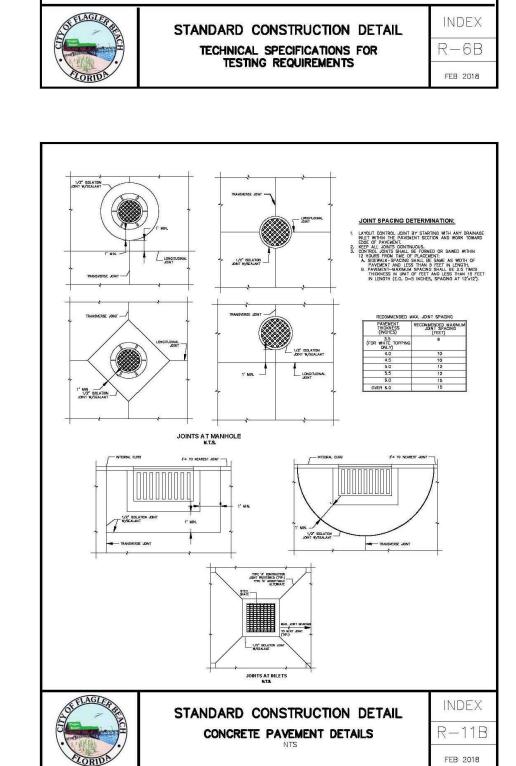
12' MAXIMUM

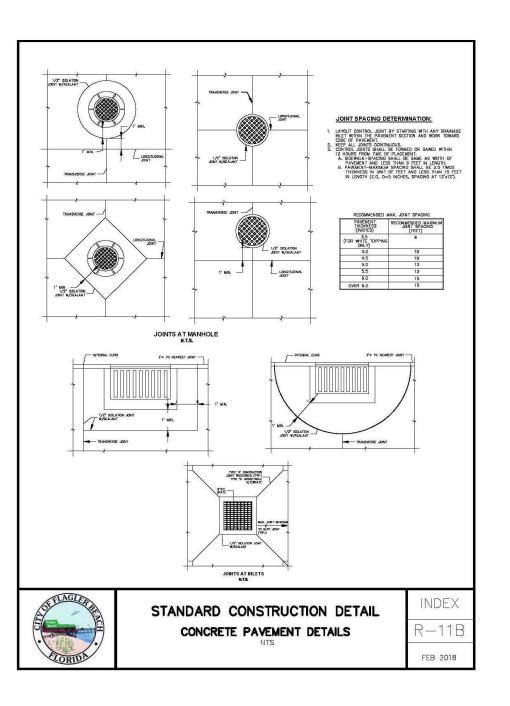
R - 6A

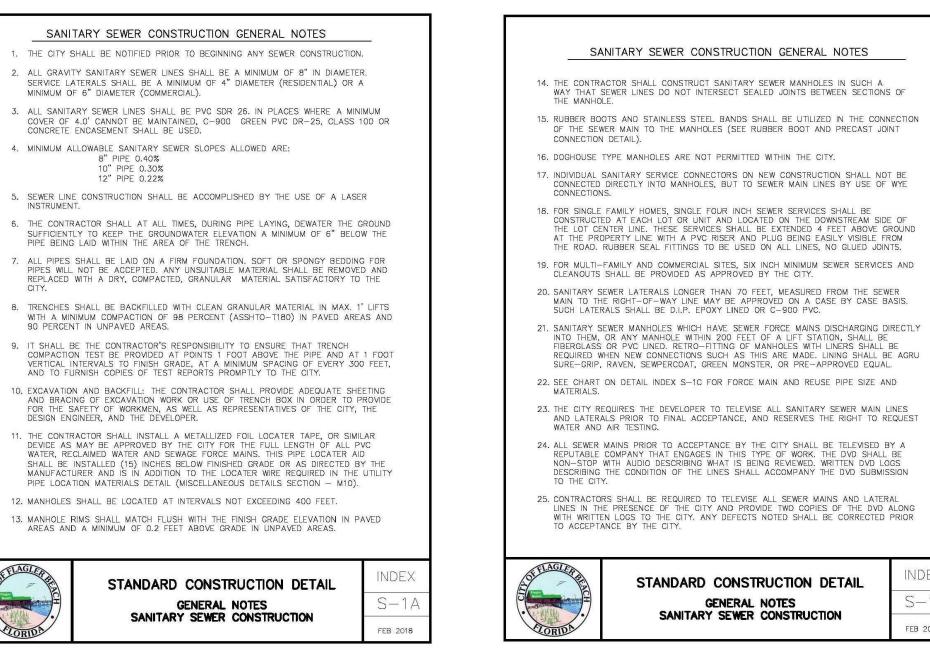
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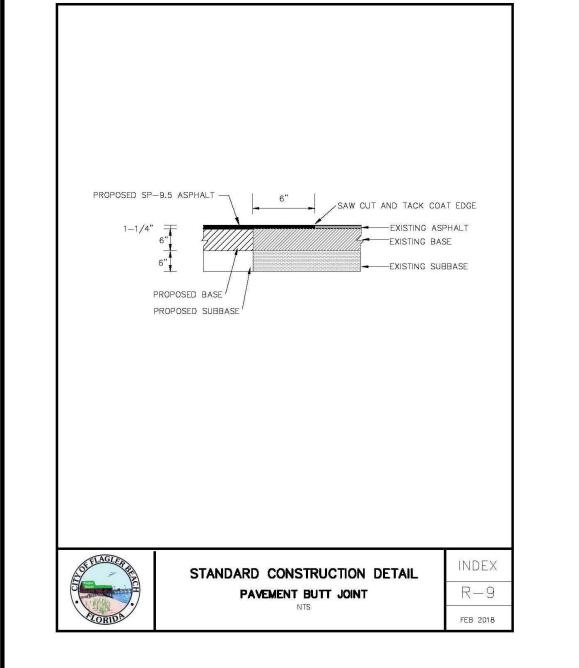












DIAMETER

2" - 4"

ALL SIZES

PVC 1120 / SDR 21

PVC 1120 / CLASS 10

HDPE (DIPS) DR 13.5

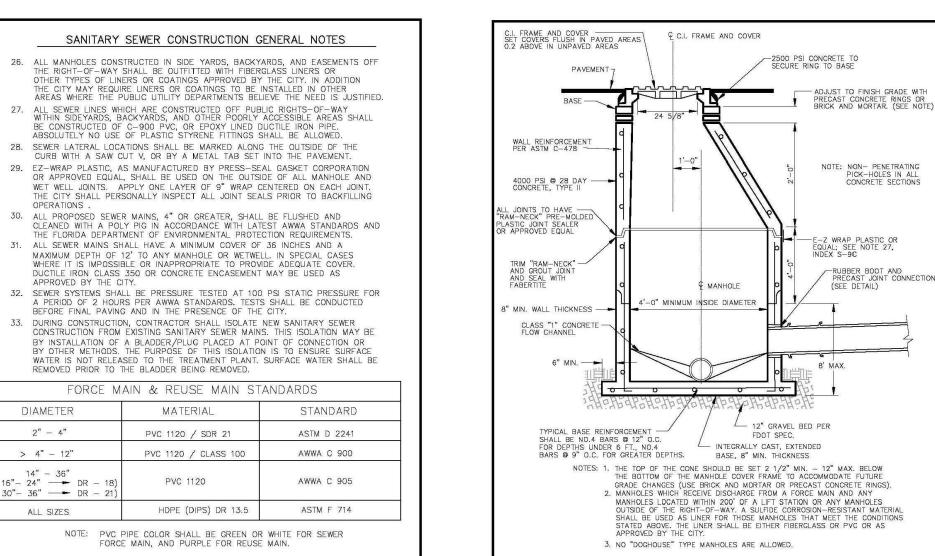
STANDARD CONSTRUCTION DETAIL

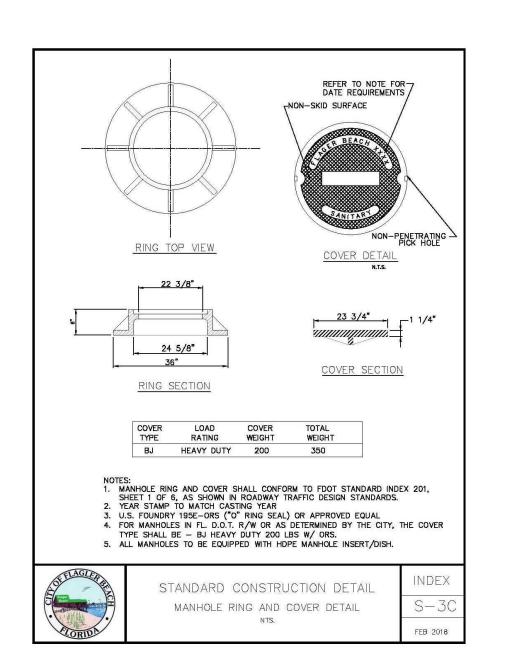
GENERAL NOTES

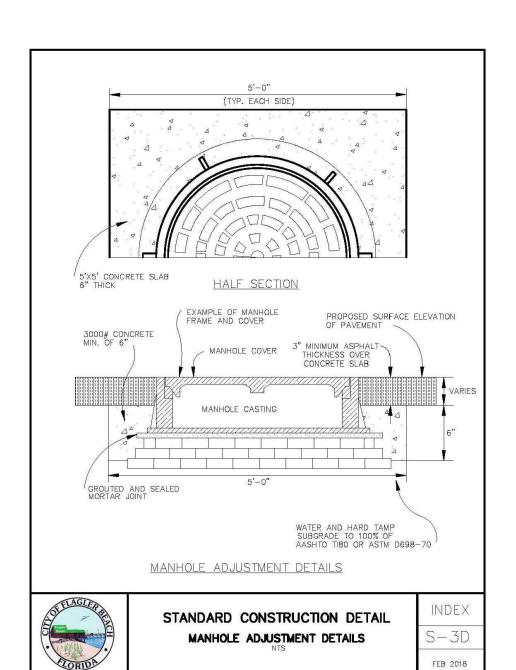
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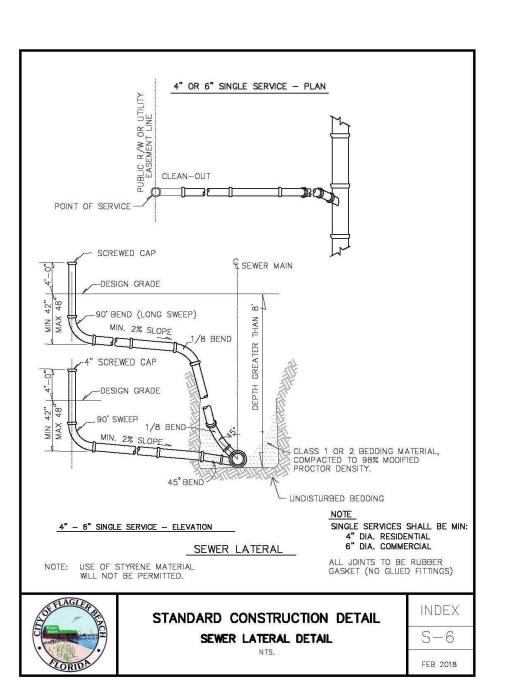
SANITARY SEWER CONSTRUCTION

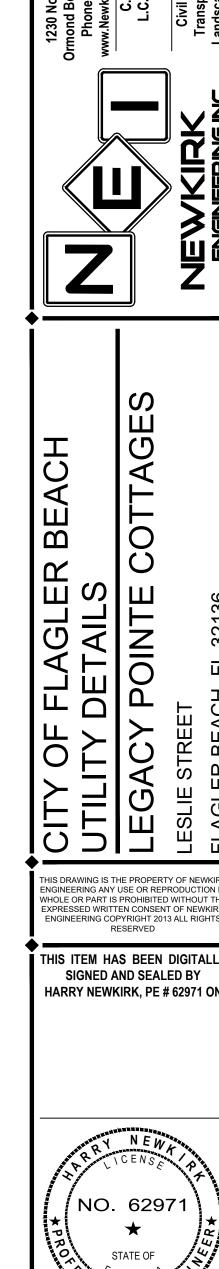
PVC 1120









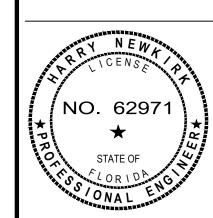


DATE DESCRIPTION

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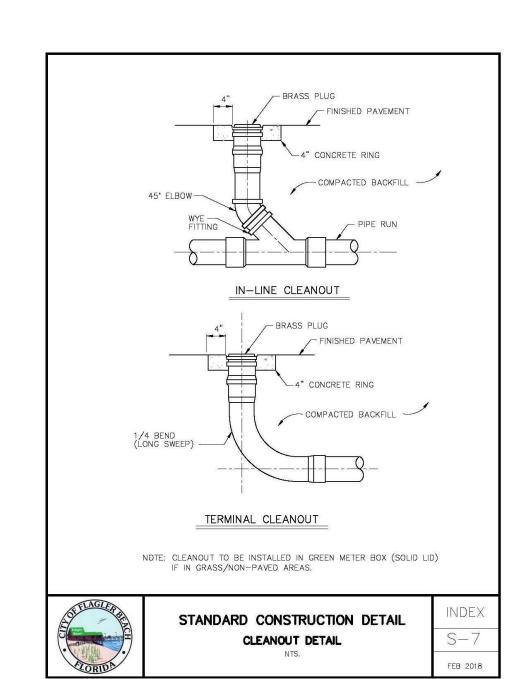
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| DRAWN BY:  | NW          |
| CHECKED BY | Y: HHI      |

SCALE: DRAWING NUMBER



MIAMI CURB -

1/2" EXPANSION JOINT (TYP.) -

\*\* TOP OF INLET TO BE 3" MIN TO 6" MAX BELOW EDGE OF PAVEMENT

LOCATION MATERIALS DETAIL.

CITY BEFORE FINAL INSPECTION.

- C OF ROAD

PLAN VIEW

STANDARD CONSTRUCTION DETAIL

STORM INLET APRON

GENERAL NOTES

WATER SYSTEM CONSTRUCTION

PRESSURE FOR A PERIOD OF 2 HOURS PER AWWA STANDARDS. TESTS

SHALL BE CONDUCTED BEFORE FINAL PAVING AND IN THE PRESENCE

23. ALL WATER SERVICES SHALL BE MARKED WITH A "A" SAW CUT INTO THE CURB OR BY METAL TABS SET INTO THE PAVEMENT.

24. ALL WATER VALVES AND BLOW—OFFS SHALL BE MARKED WITH AN "X" SAW CUT INTO THE CURB OR BY METAL TABS SET INTO THE PAVEMENT.

26. TRACING WIRE SHALL BE INSTALLED IN ACCORDANCE WITH UTILITY PIPE

27. NO GALVANIZED PIPE, FITTINGS, ETC. ARE ACCEPTED.

THE RIGHT OF WAY LINE ONLY REGARDLESS OF SIZE.

1. SEE CHART BELOW FOR WATER MAIN SIZE AND MATERIALS.

EQUAL DISTANCE IN FEET FROM EDGE OF PAVEMENT TO VALVE.

LOCATION OF METAL TABS IN INCHES FROM EDGE OF PAVEMENT SHALL

UNIFLANGE 1300 SERIES PIPE RESTRAINTS AS MANUFACTURED BY FORD OR APPROVED EQUAL MAY BE USED AS APPROPRIATE FOR RESTRAINING IN—LINE

28. UNLESS APPROVED BY THE CITY, ALL WATER METERS SHALL BE INSTALLED AT

29. SUBMIT ASSEMBLY CERTIFICATION FOR ALL BACKFLOW PREVENTERS TO THE

. PIPING FOR RAW WATER SHALL BE OLIVE GREEN FOR ABOVE GROUND PIPINI BURIED PVC PIPING SHALL BE BLUE WITH WHITE COLOR BACKGROUND LOCATOR

TAPE PLACED DIRECTLY ON TOP OF THE PIPE AND AT 12" TO 18" ABOVE THE

BURIED BELOW" OR WHITE WITH LOCATOR TAPE PLACED 12" TO 18" ABOVE TH

PIPE. THE TAPE SHALL CONTINUOUSLY READ "CAUTION - RAW WATER MAIN

< 12" DIP CLASS 350 AWWA C 150 > 12" DIP CLASS 250 AWWA C 150

4" PVC 1120 / SDR 21 (1) ASTM D 2241

> 4" - 12" PVC DR-18 (1) AWWA C 900
" - 12" DEDICATED FIRE LINE PVC DR-14 (1) AWWA C 900

ALL SIZES HDPE DIPS DR 11 (2) ASTM F 714

NOTE: (1) PVG PIPE COLOR SHALL BE BLUE FOR POTABLE WATER MAINS, BLUE WITH WHITE LOCATOR TAPE OR WHITE WHITE LOCATOR TAPE FOR RAW WATER MAIN. (2) HOPE TO BE PROVIDED IN WEST LARGER DIAMETER IN ORDER TO HAVE REQUIRED INSIDE DIAMETER.

STANDARD CONSTRUCTION DETAIL

GENERAL NOTES

WATER SYSTEM CONSTRUCTION

FEB 2018

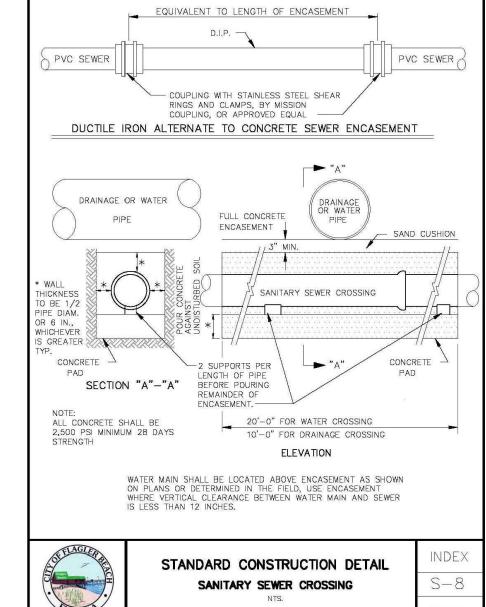
PRESSURE PIPE EACH SIDE OF PIPE JOINT. AS REQUIRED BY RESTRAINT TABLE

WATER SYSTEMS SHALL BE PRESSURE TESTED AT 150 PSI STATIC

SECTION A-A

2'-0" 1'-0" ON CUL-DE-SAC

1' STRIP OF SOD (T



P OF POND ELEVATION=

BOTTOM OF DRY POND

NOTES:

1. PROVIDE DESIGN DATA WHERE INDICATED (=)
2. WATER LEVEL MUST RECOVER TO BOTTOM OF POND
AT OR BEFORE 72 HOURS AFTER STORM
3. PROVIDE SPILLWAY DETAILS
4. MUCK GROWN SOD IS NOT ACCEPTABLE FOR POND
BOTTOM. SOD TO BE PLACED ON BOTTOM MUST BE
GROWN IN SAND. PLEASE COORDINATE WITH ENGINEER
OR LANDSCAPE ARCHITECT PRIOR TO PLACEMENT

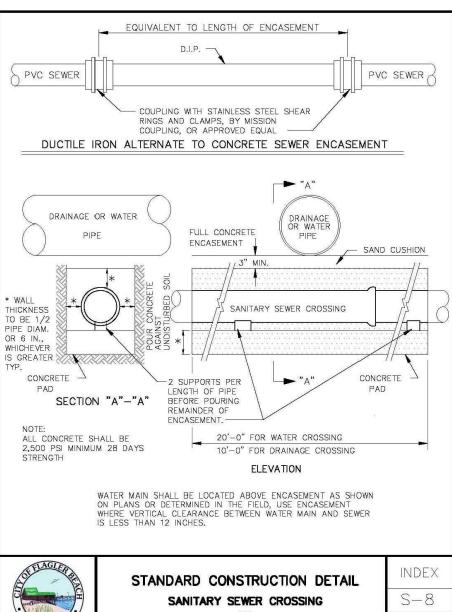
STANDARD CONSTRUCTION DETAIL

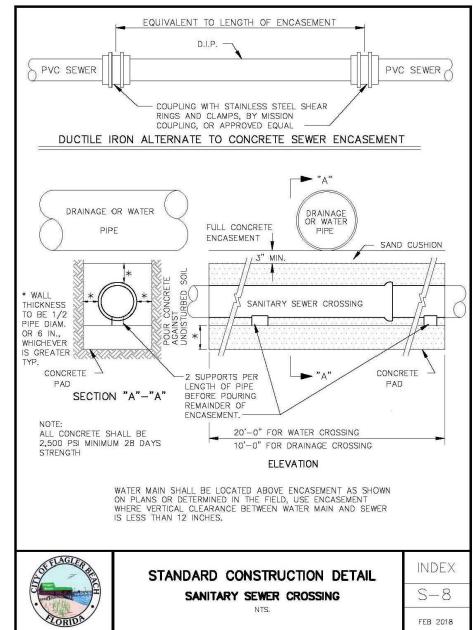
DRY RETENTION POND

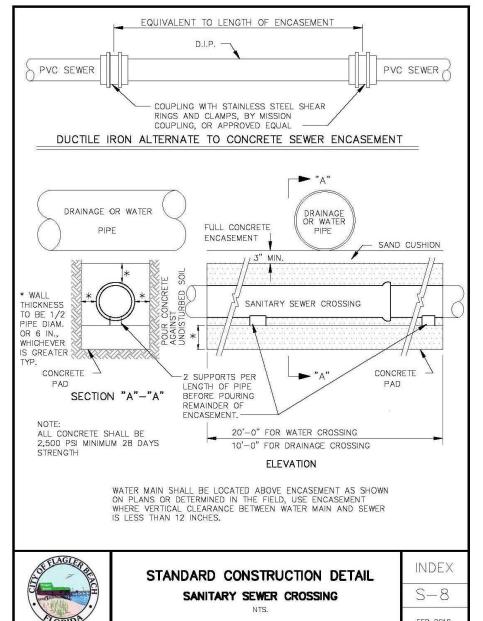
ESTIMATED WET SEASON GROUND WATER ELEVATION=

MAX. SLOPE

BANK EXCEEDS .







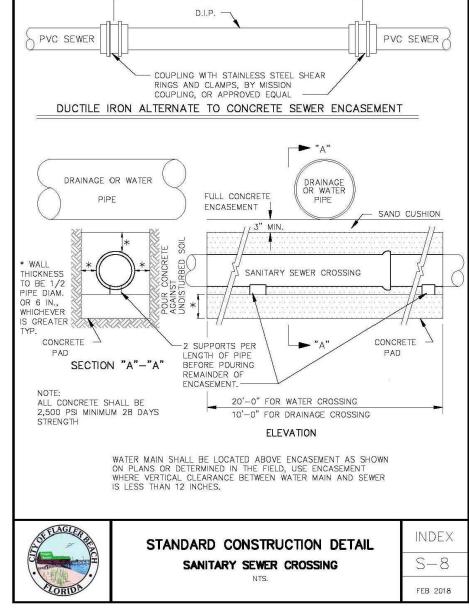
6" MIN FREEBOARD

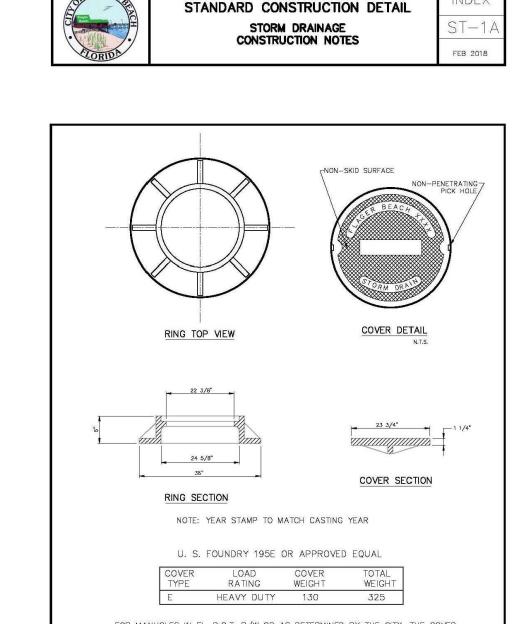
HIGH WATER ELEVATION=

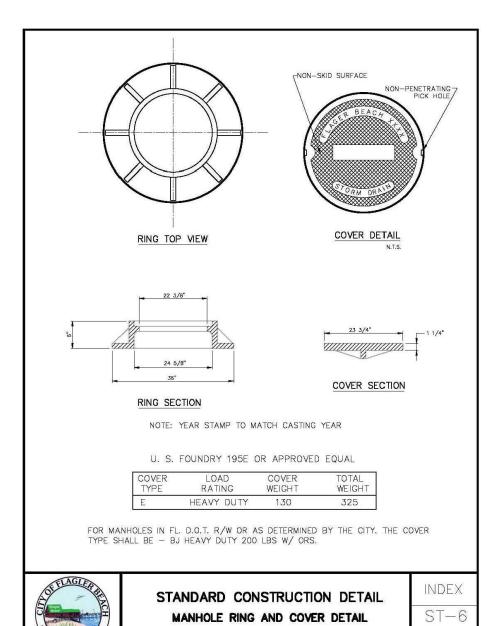
INDEX

FEB 2018

W-2







. CONSTRUCTION STANDARDS FOR ALL DRAINAGE SYSTEM COMPONENTS SHALL CONFORM TO THE LATEST EDITION OF THE "FDOT STANDARD

SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND AS

2. ALL STORM WATER PIPES AND STRUCTURES SHALL BE INSTALLED ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK,

COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR

3. DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW THE COMPONENT BEING INSTALLED.

4. ALL PIPES AND STRUCTURES SHALL BE PLACED TRUE TO LINES AND GRADES AS DEPICTED ON THE APPROVED PLANS.

5. ALL PIPE JOINTS SHALL BE PROPERLY HONED AND FILTER FABRIC LINED USING A METHOD TO HOLD THE FABRIC IN PLACE DURING

6. BACKFILL AND COMPACT TO THE SPRING-LINE (CENTER OF PIPE)
ELEVATION AND REQUEST CITY INSPECTION AND APPROVAL BEFORE

7. ALL WORK COVERED WITHOUT CITY INSPECTION WILL BE REQUIRED TO

BE EXCAVATED AND INSPECTED AT THE CONTRACTOR'S EXPENSE.

GRANULAR MATERIAL IN MAX 6" LIFTS WITH A MINIMUM COMPACTION OF 98 PERCENT (AASHTO-T180) IN PAVED AREAS AND 95 PERCENT

8. TRENCHES SHALL BE BACKFILLED AND COMPACTED WITH CLEAN

9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS AT POINTS 1' ABOVE THE PIPE AND AT

10. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE (RCP), HIGH DENSITY POLYETHYLENE (HDPE), AS SHOWN ON THE PLANS.

A MAX. 1' VERTICAL INTERVALS TO FINISH GRADE, AT A MAXIMUM SPACING OF 100 FEET, AND TO FURNISH COPIES OF TEST REPORTS PROMPTLY TO THE CITY.

11. STORM DRAINAGE PIPES WITHIN PUBLIC RIGHT-OF-WAY SHALL BE A

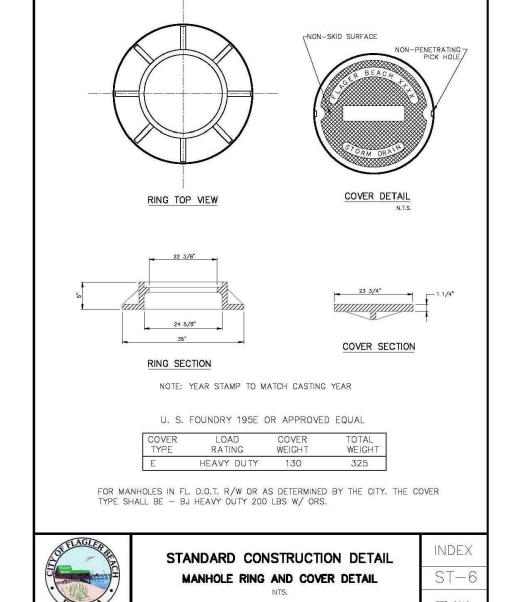
POURED IN PLACE OR PRECAST REINFORCED CONCRETE. STRUCTURES

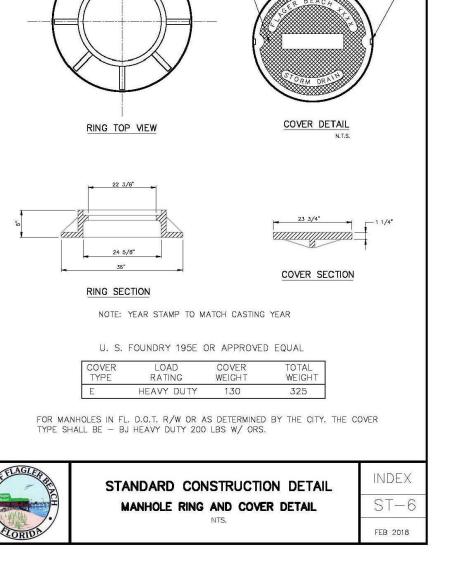
SHALL BE REQUIRED AT EACH CHANGE OF PIPE SIZE OR CHANGE IN

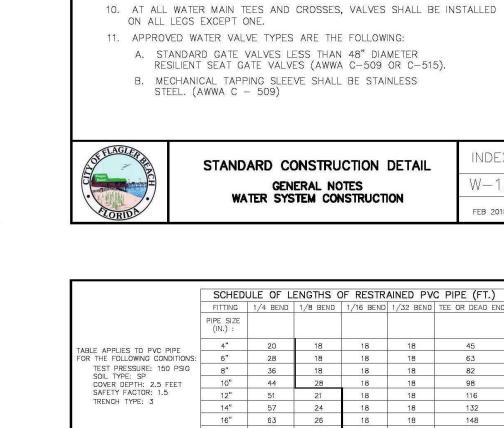
MINIMUM OF FIFTEEN (15) INCH RCP DIAMETER OR EQUIVALENT.

12. STORM INLETS, MANHOLES, AND CATCH BASINS SHALL BE EITHER

(AASHTO-T180) IN UNPAVED AREAS.







13. STORM INLETS SHALL BE SPACED IN SUCH A MANNER AS TO ACCEPT

ONE HUNDRED (100) PERCENT OF THE DESIGN STORM RUNOFF.

TWELVE (12) FEET MAXIMUM DEPTH BELOW THE DESIGN LOW OR NORMAL WATER STAGE.

LENGTH OF RUN (FEET)

14. WET DETENTION PONDS SHALL BE EIGHT (8) FEET MINIMUM TO

15. MAXIMUM DISTANCES BETWEEN INLETS AND/OR JUNCTION BOXES:

16. ALL SWALES, DITCHES, AND DRY RETENTION POND SIDE SLOPES

SHALL BE NO STEEPER THAT 4:1 (H:V) AND SHALL BE SODDED.

17. ALL RETENTION POND BACKSLOPES SHALL BE NO STEEPER THAN 3:1

18. NORMAL ROADSIDE SWALES SHALL BE CONSTRUCTED TO A MAXIMUM

19. CONCRETE EROSION CONTROL MUST BE PROVIDED WHERE SWALES OR CULVERTS INTERCEPT DRAINAGE DITCHES.

21. A MINIMUM SIX INCH (6") FREEBOARD ABOVE THE DESIGN HIGH WATER ELEVATION IS REQUIRED AT ALL POINTS AROUND DRY RETENTION

22, POND INFLOW SHALL GENERALLY BE CONSTRUCTED WITH REINFORCED CONCRETE AND SHALL BE SUBJECT TO THE APPROVAL OF THE CITY.

DEPTH OF 18" BELOW THE OUTSIDE EDGE OF PAVEMENT OR

20. A MINIMUM ONE FOOT (1') FREEBOARD ABOVE THE DESIGN HIGH

WATER ELEVATION IS REQUIRED AT ALL POINTS AROUND WET

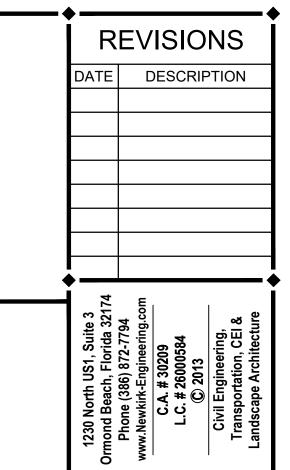
PIPES SIZE (INCHES)

24 OR GREATER

(H: V) AND SHALL BE SODDED.

CONCRETE CURB.



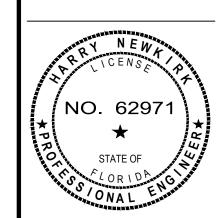


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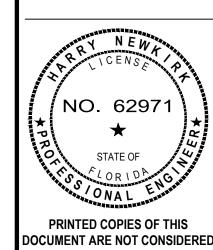
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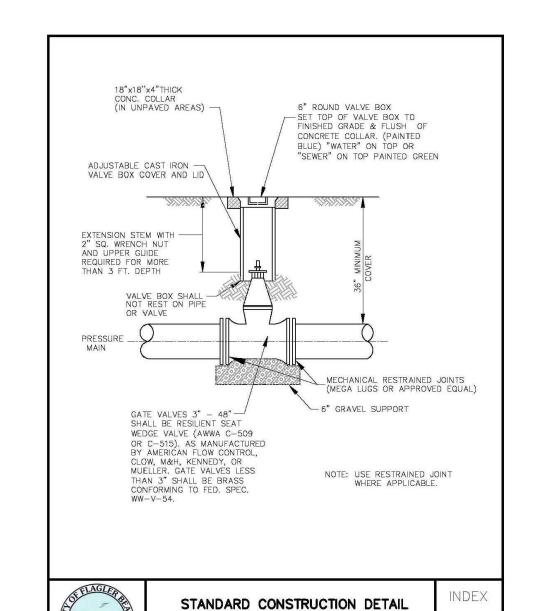
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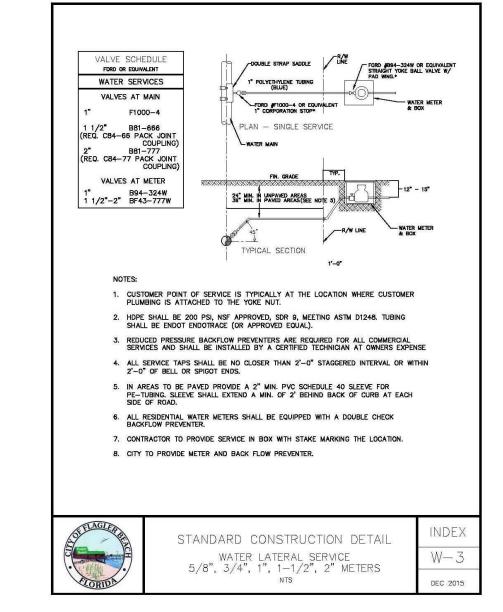
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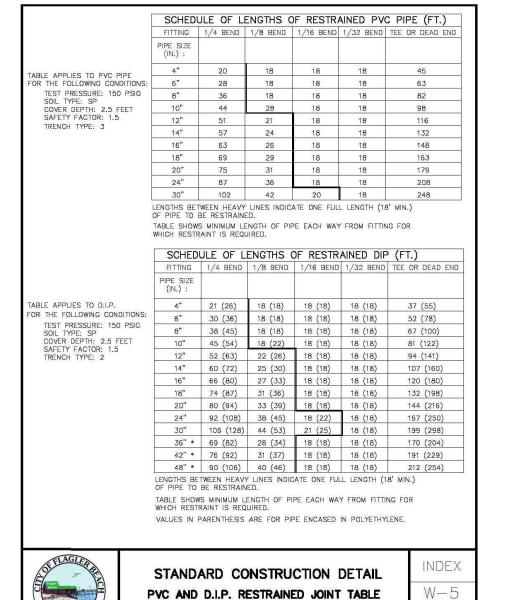
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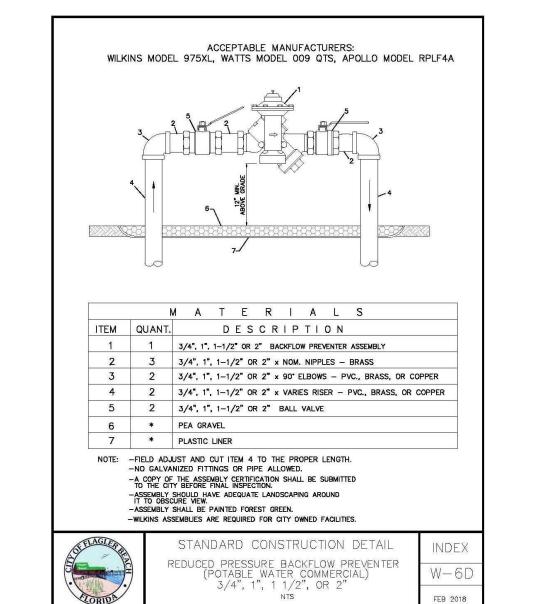
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GATE VALVE AND VALVE BOX







26. ADEQUATE MAINTENANCE ACCESS AS APPROVED BY THE CITY SHALL BE PROVIDED AROUND THE ENTIRE PERIMETER OF ALL PONDS AND

ASSOCIATED OUTFALLS DISCHARGING INTO AND OUT OF PONDS.

RIGHT-OF-WAY LINE TO RIGHT-OF-WAY LINE UNDER THE ROADWAY.

ARE REQUIRED TO BE CHANNELED INTO DEFINED DRAINAGE PATHS TO

STORM SEWER PIPE SYSTEMS IN THE PRESENCE OF THE CITY BY A REPUTABLE COMPANY THAT ENGAGES IN THIS TYPE OF WORK. THE DVD SHALL BE IN HIGH QUALITY STANDARD RESOLUTION USING A

BE NON-STOP WITH AUDIO DESCRIBING WHAT IS BEING VIEWED.

BY WRITTEN LOGS DESCRIBING THE CONDITION OF THE LINES AT

ACCEPTANCE BY THE CITY OR ISSUANCE OF CERTIFICATE OF

CAMERA WITH SUITABLE LICHTING TO ALLOW A CLEAR FOCUSED PICTURE OF THE ENTIRE INSIDE PIPE CIRCUMFERENCE. THE DVD SHALL

COPIES OF DVD SHALL BE SUBMITTED IN DVD FORMAT ACCOMPANIED

LEAST FORTY—EIGHT (48) HOURS PRIOR TO REQUESTING FINAL INSPECTIONS. ANY DEFECTS NOTED SHALL BE CORRECTED PRIOR TO

30. ALL STORM WATER DISCHARGE FROM RETENTION/DETENTION PONDS

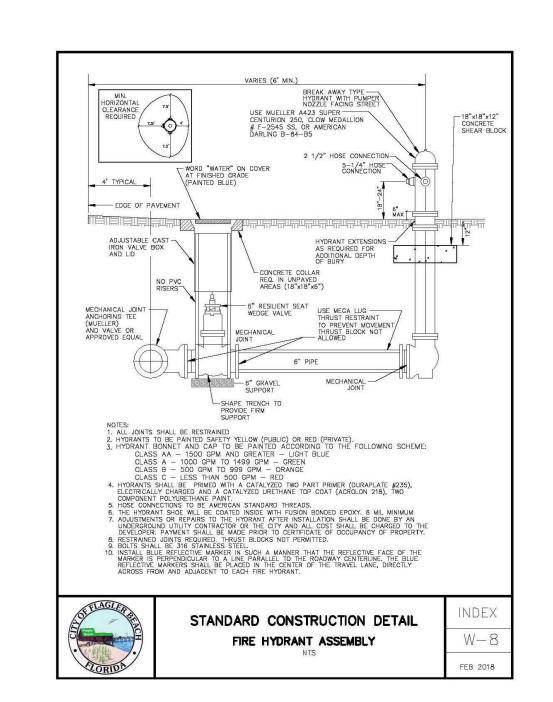
31. THE CITY REQUIRES THE DEVELOPER TO TELEVISE ANY AND ALL

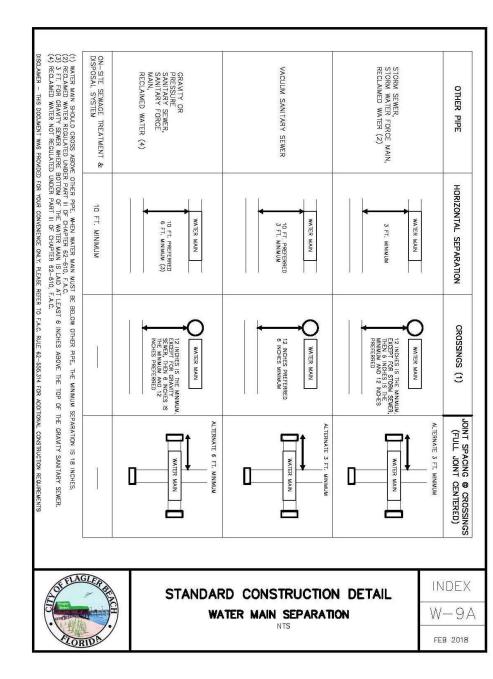
27. IN GENERAL, ALL RETENTION/DETENTION PONDS MUST BE CONSTRUCTED PRIOR TO ANY ROAD, PARKING LOT, OR BUILDING CONSTRUCTION COMMENCING OR AS CURRENT PERMIT CONDITIONS

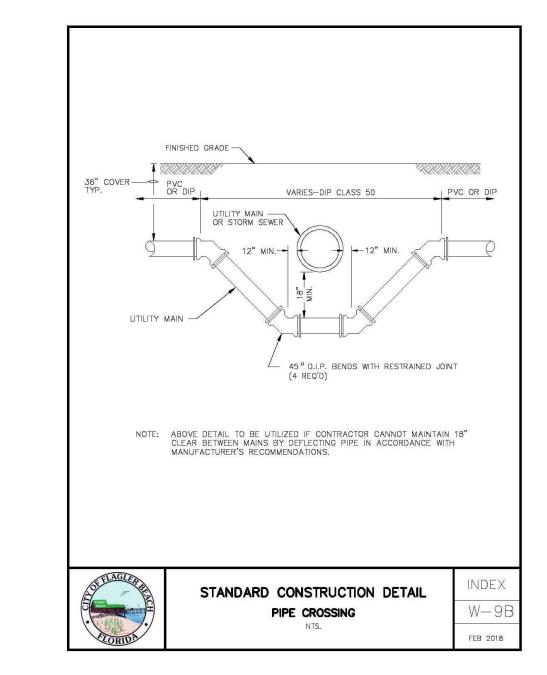
28. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY DEWATERING PERMITS THAT MAY BE REQUIRED.

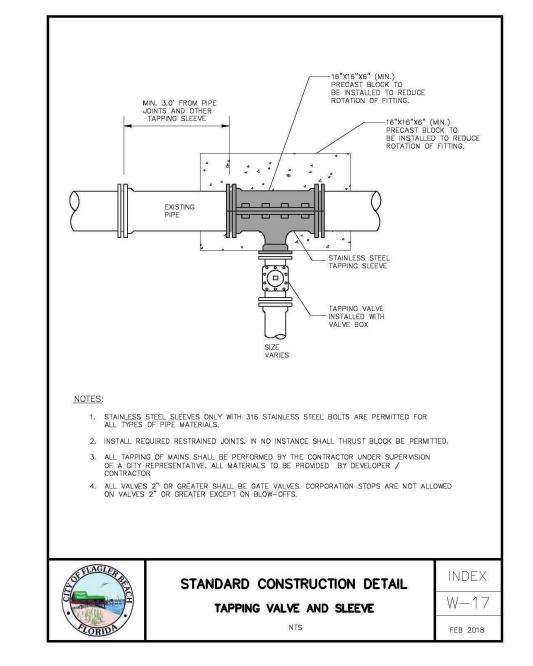
29. CULVERTS CROSSING RIGHT-OF-WAYS SHALL EXTEND FROM

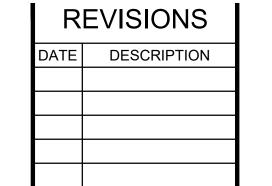
EXISTING WATER BODIES, WETLANDS, DITCHES, ETC.











Crmond Beach, Florida 32174
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www.Newkirk-Engineering.com
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L.C. # 26000584
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Civil Engineering,

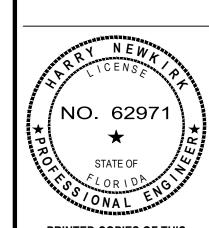


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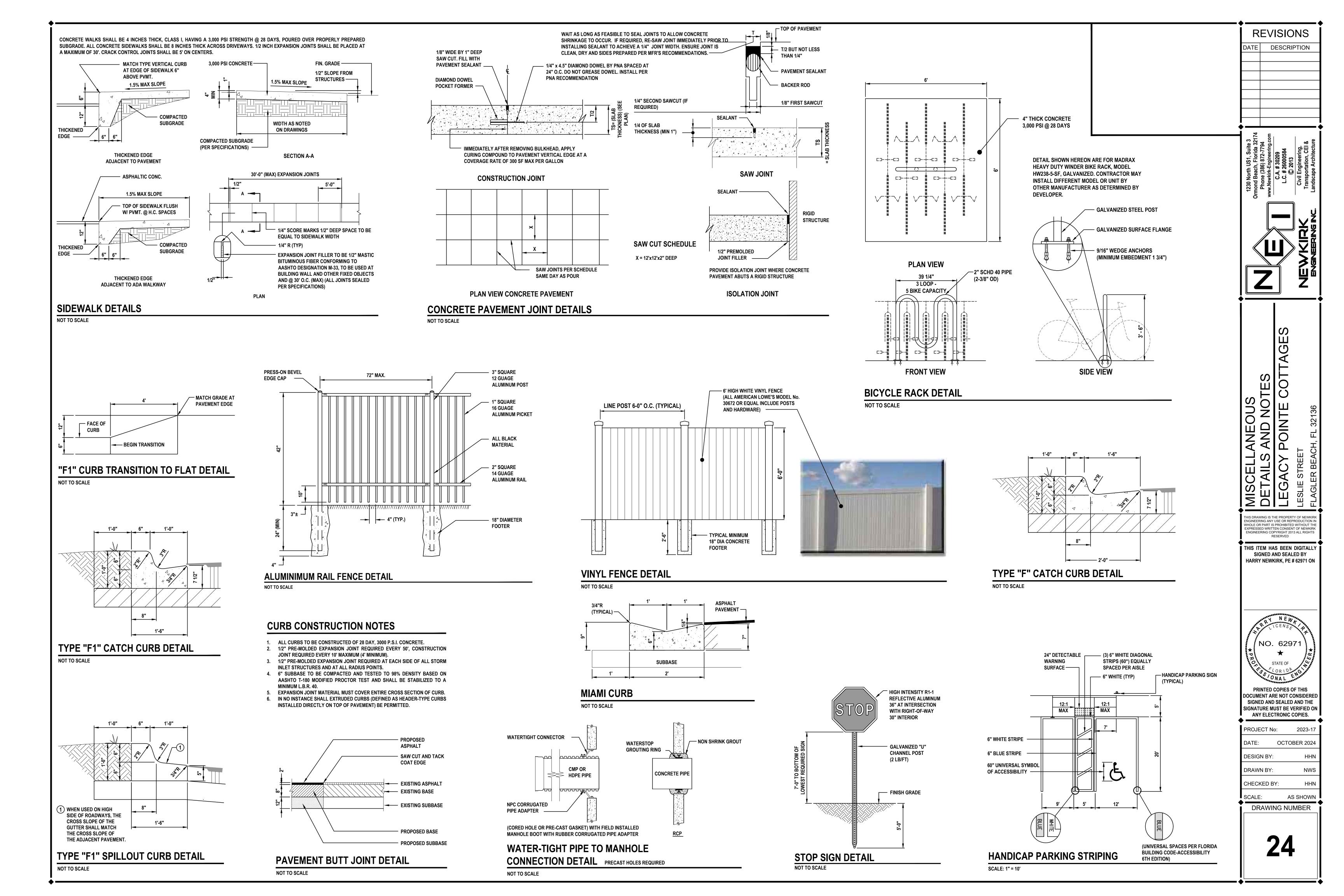


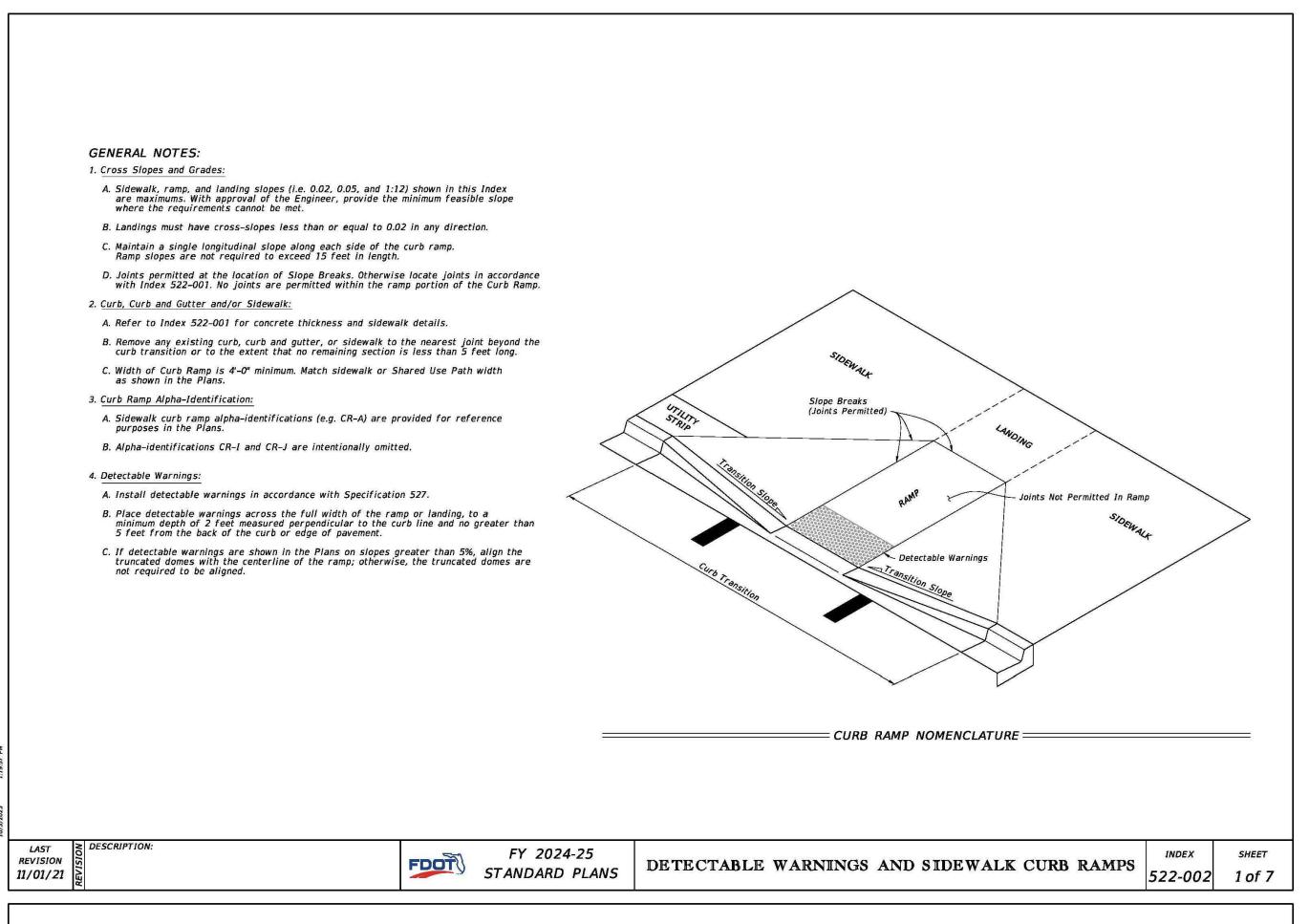
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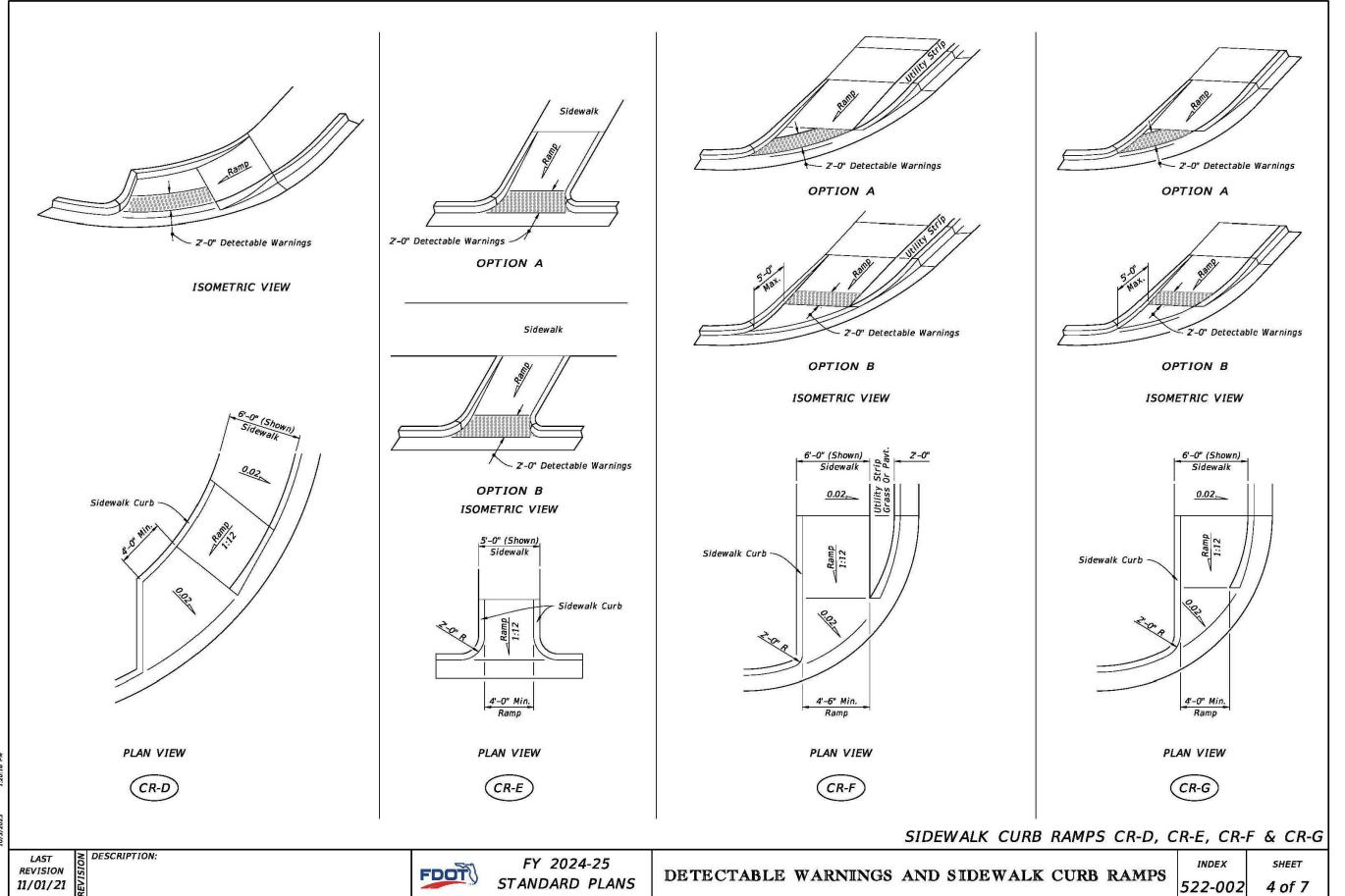
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|   | DRAWN BY:  | NWS          |
|   | CHECKED B  | Y: HHN       |

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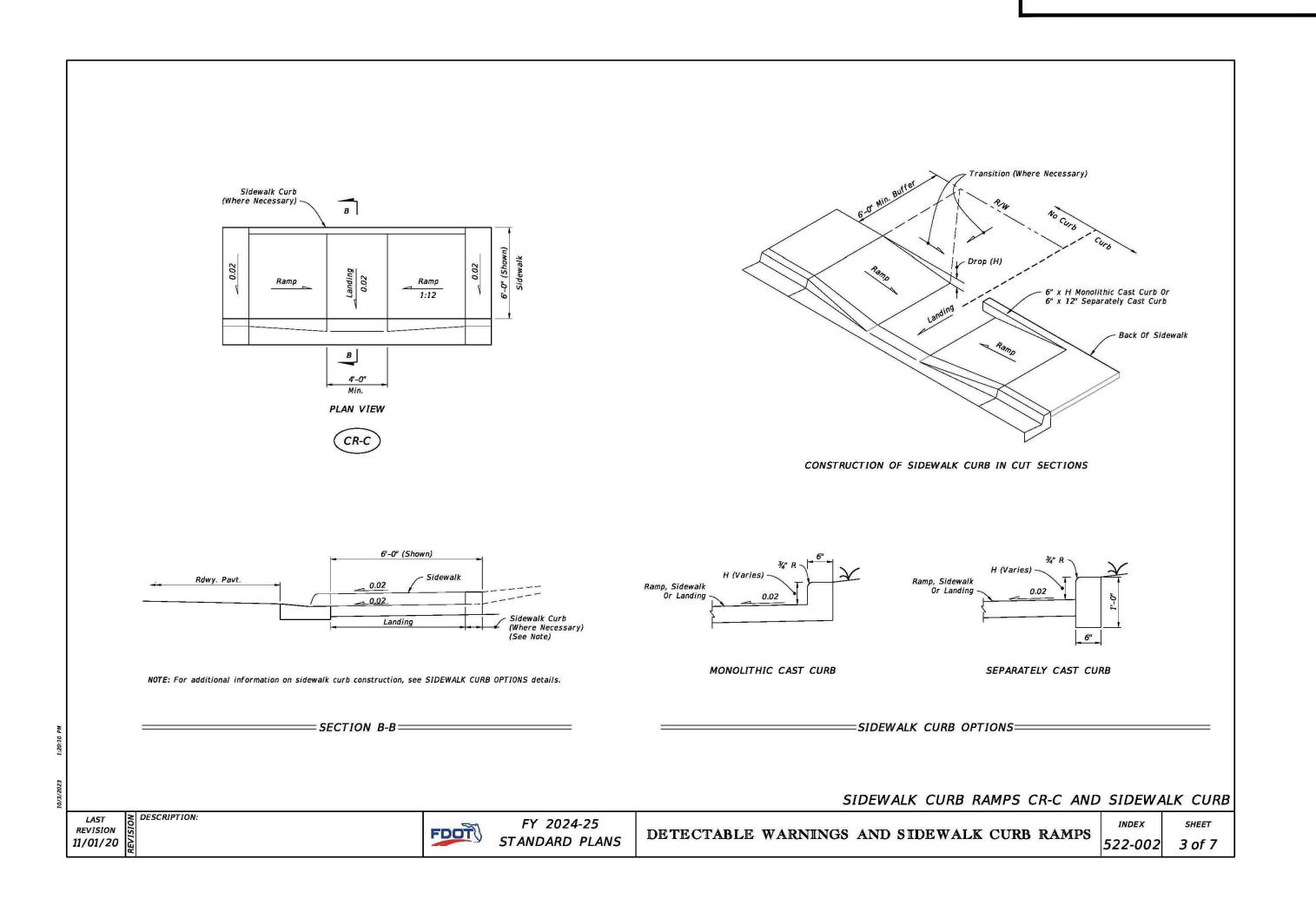
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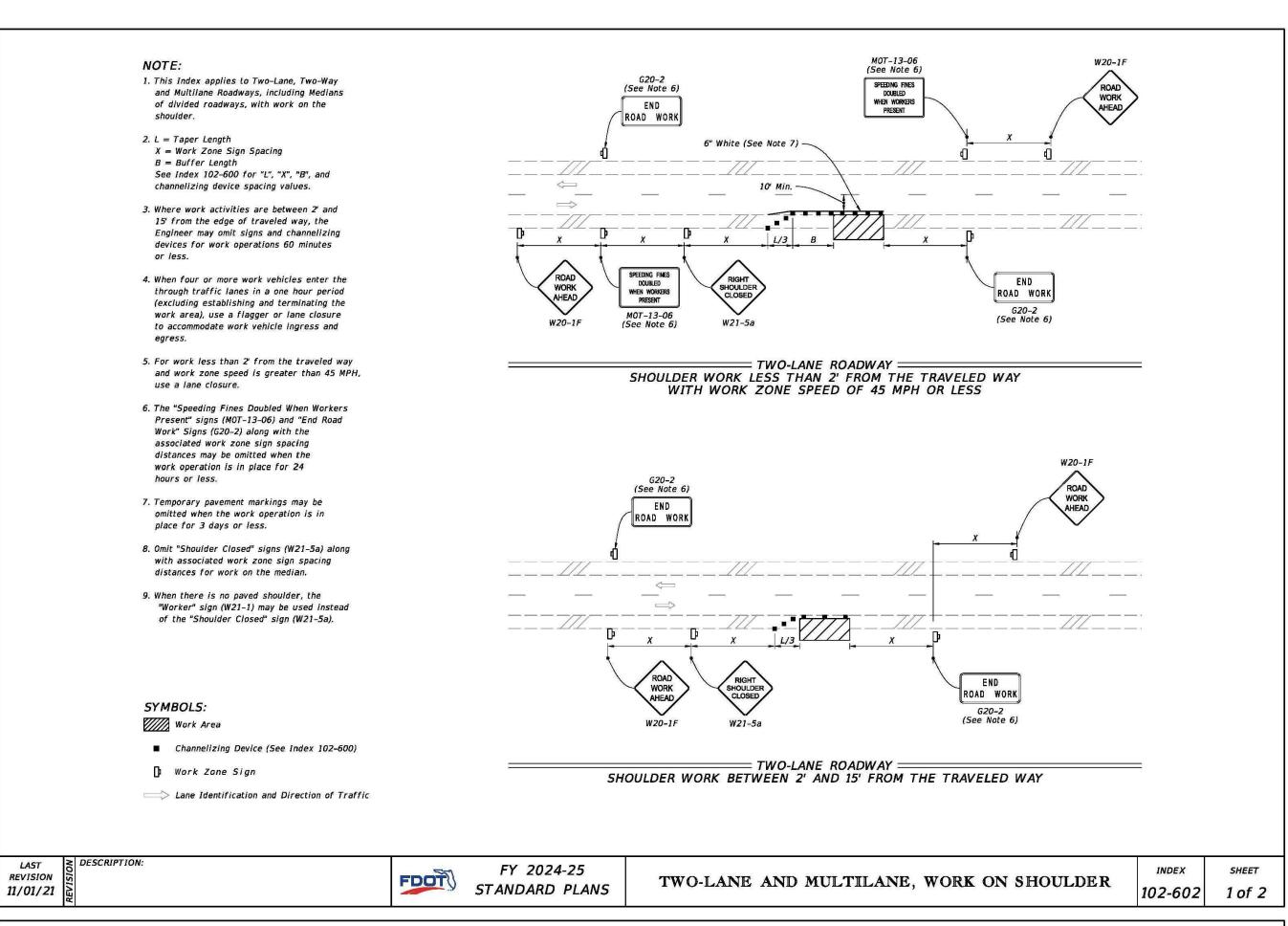


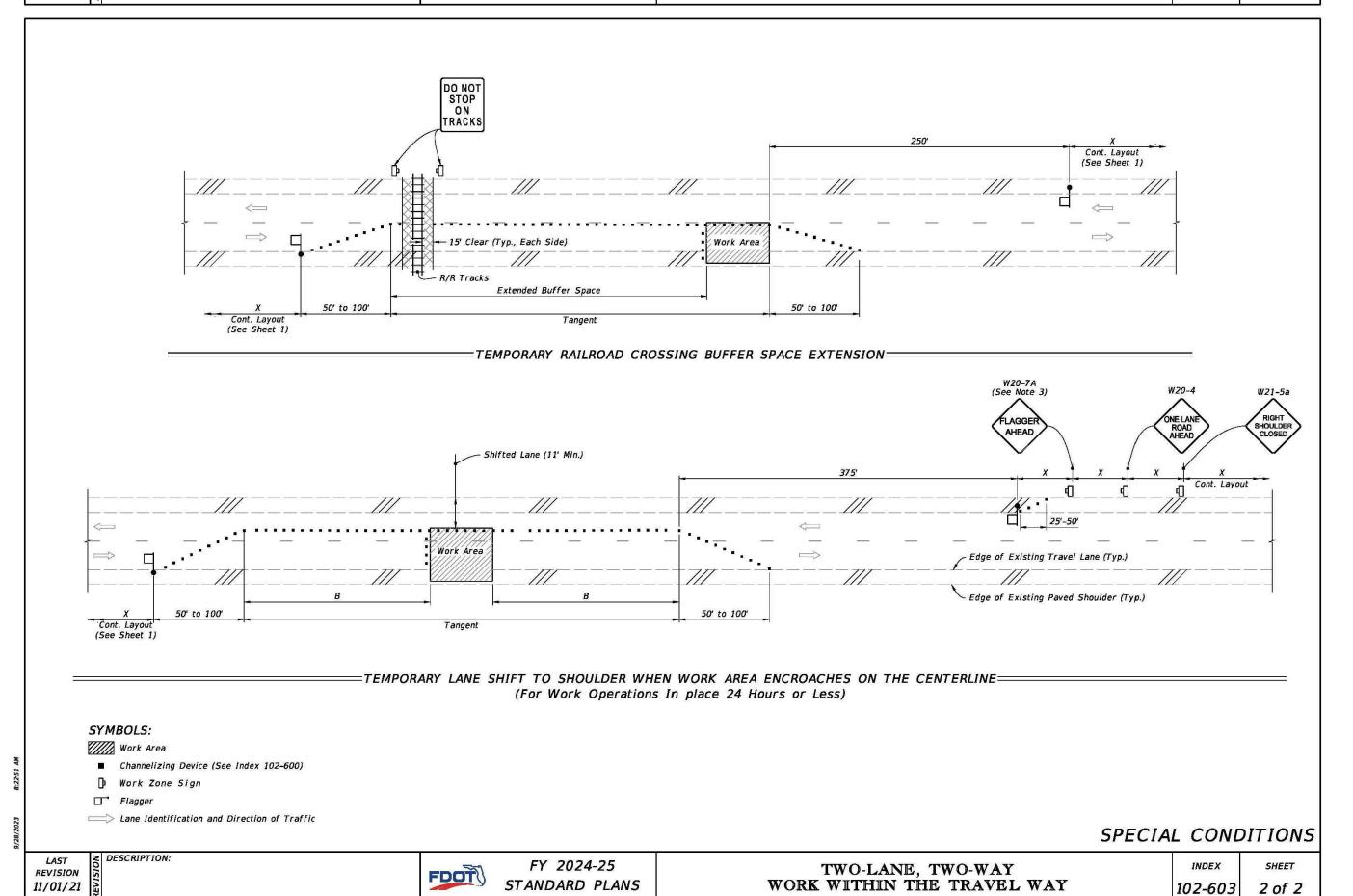
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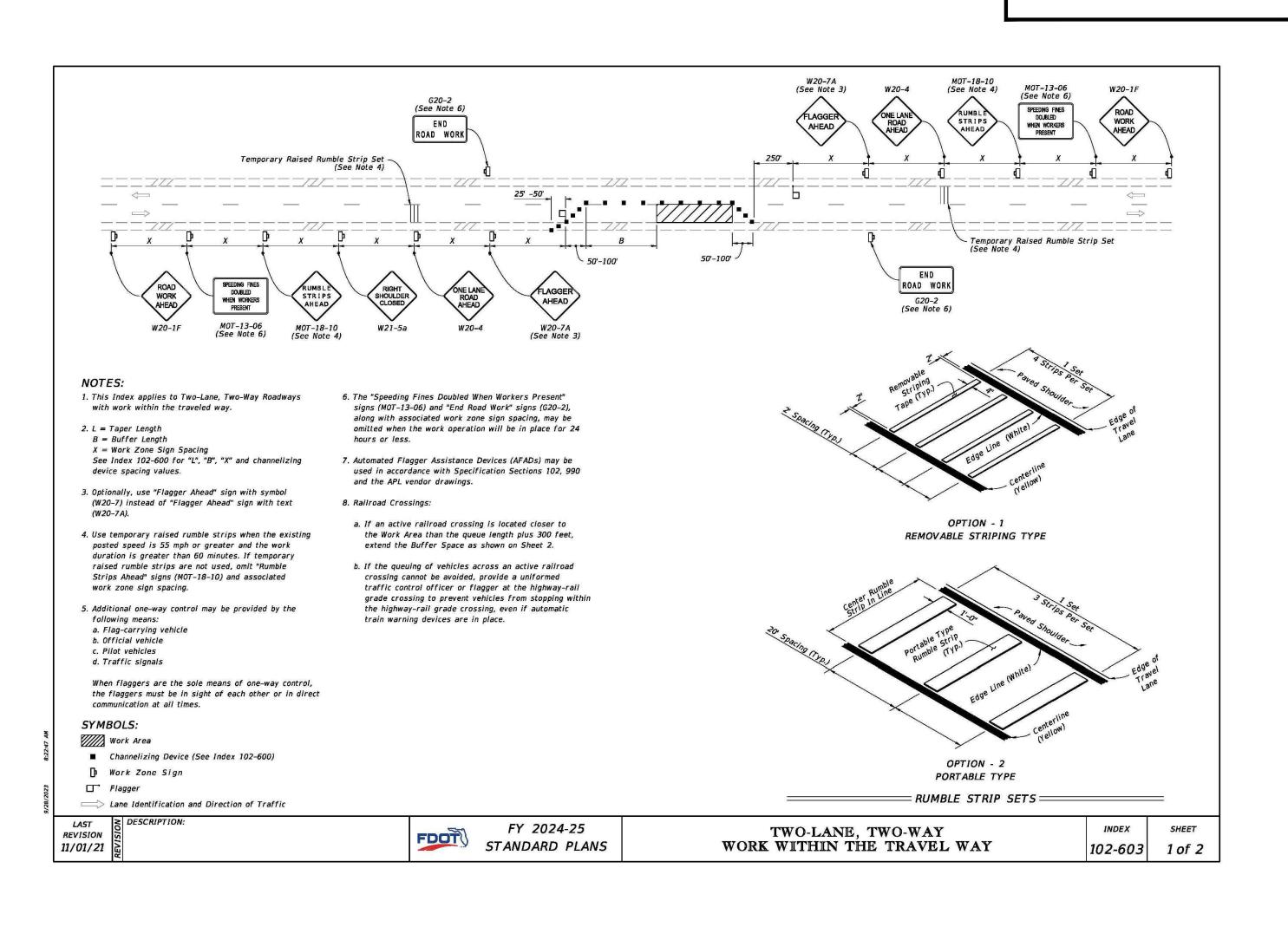
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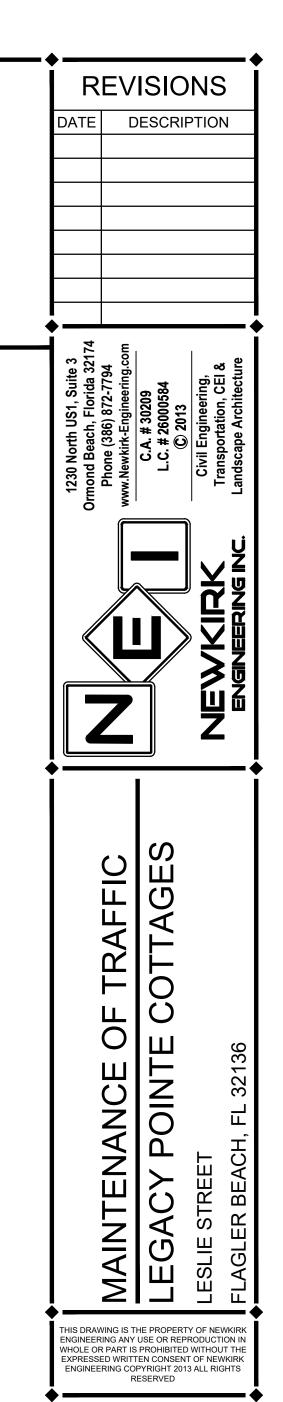
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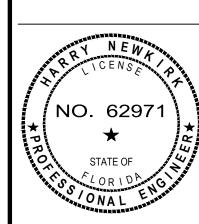








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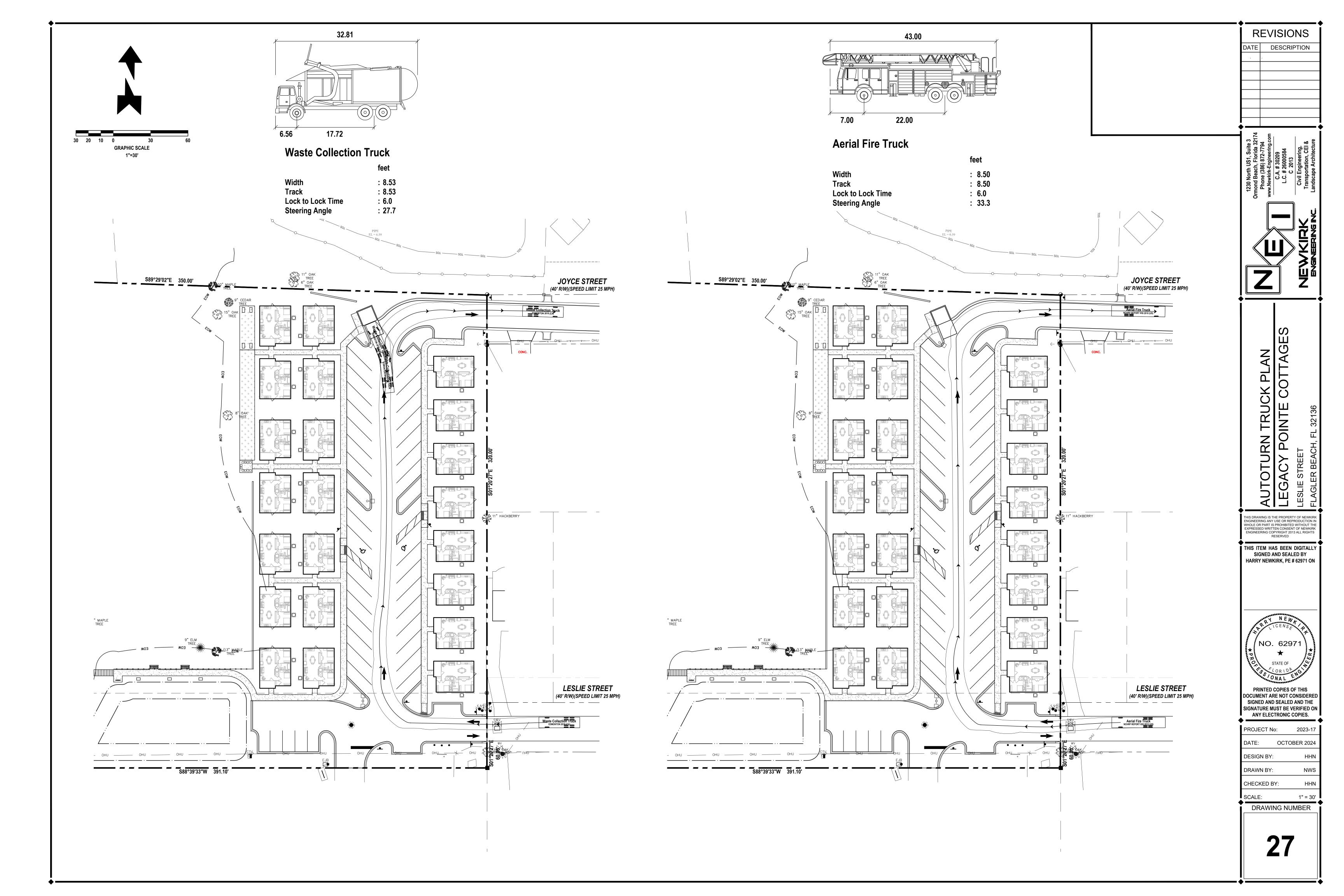
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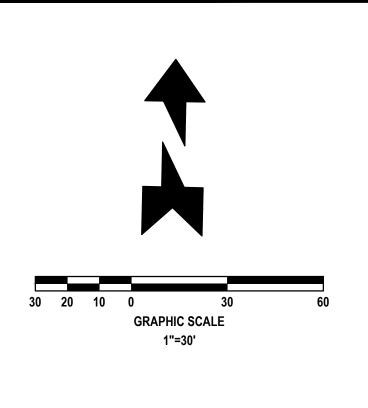
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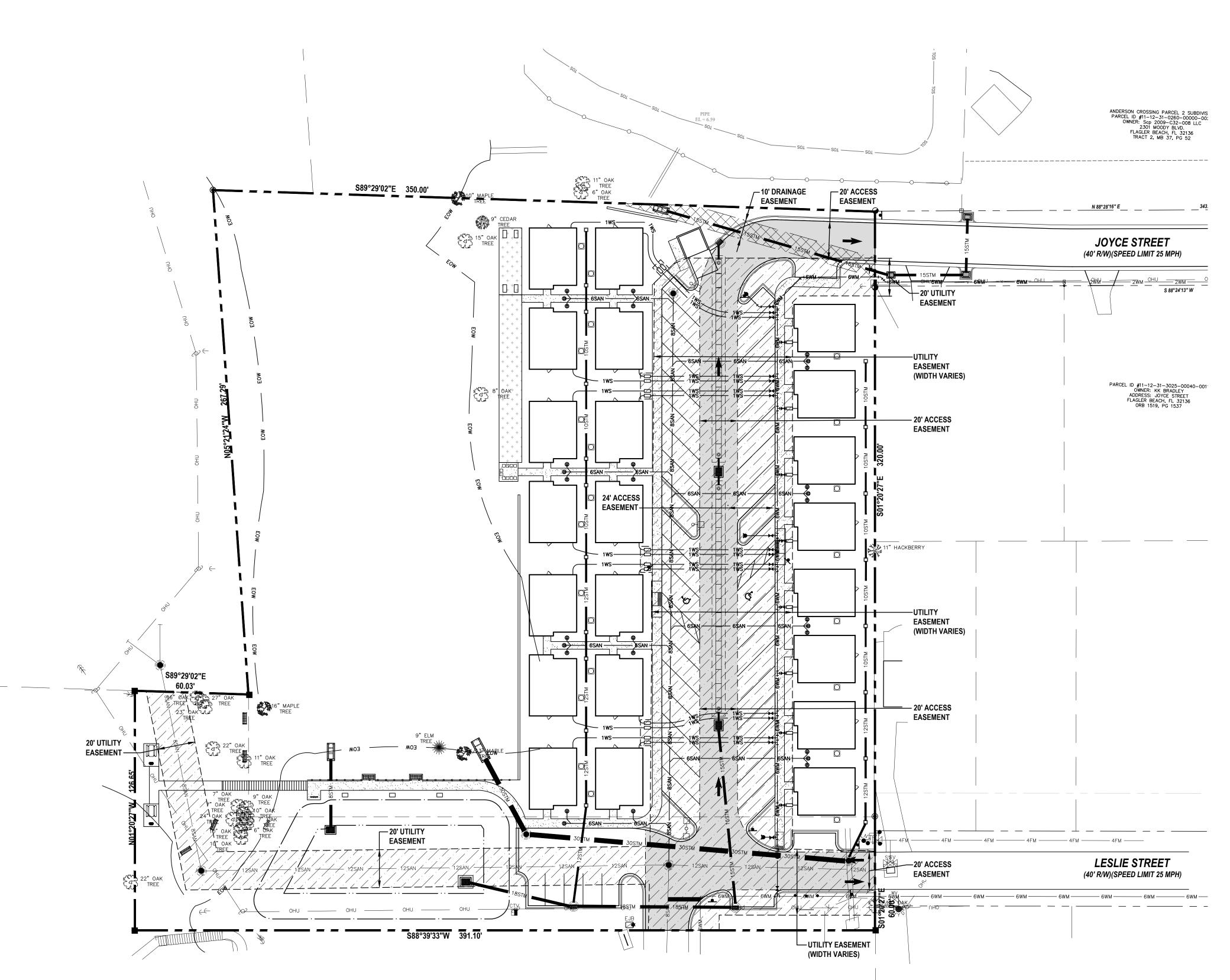
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## **EASEMENT LEGEND:**

- · — · — · — PROPOSED ACCESS EASEMENT

---- PROPOSED UTILITY EASEMENT

PROPOSED DRAINAGE EASEMENT

REVISIONS

DATE DESCRIPTION

. . .

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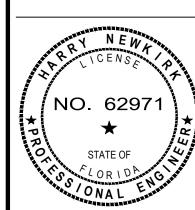
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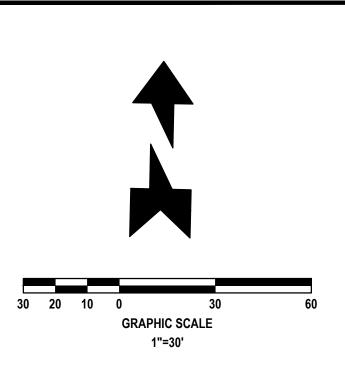
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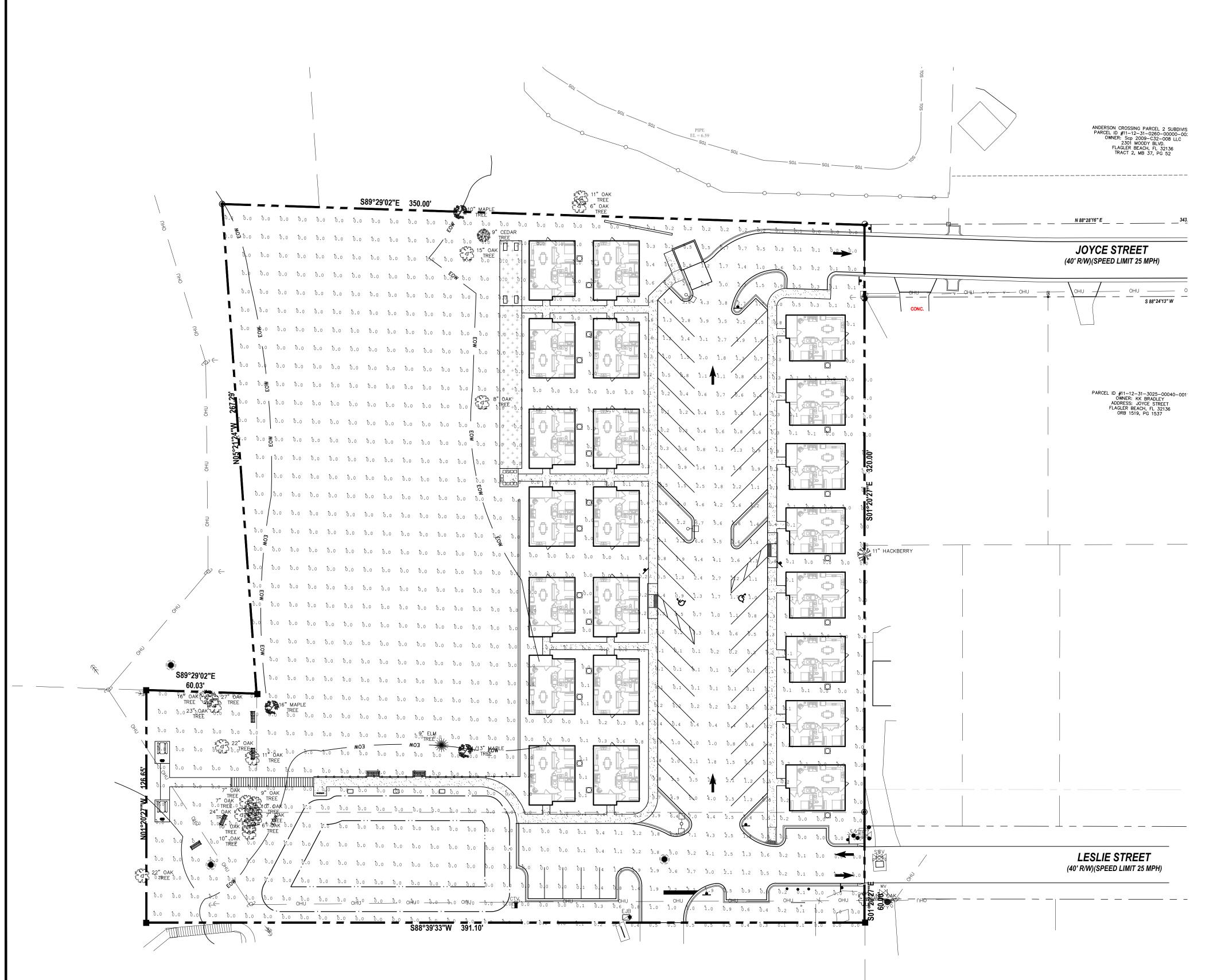
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SCALE: 1" = 30

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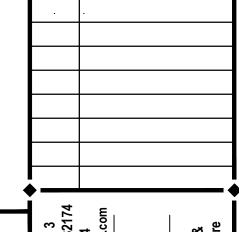
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| Label            | Units | Avg  | Max | Min |
| BOUNDARY         | Fc    | 029  | 0.5 | 0.0 |
| SITE             | Fc    | 0.32 | 7.1 | 0.0 |

### **LIGHTING NOTES:**

- A. NO LIGHTS ALLOWED 90 DEGREES ABOVE HORIZONTAL PLANE, EXCEPT ACCENT LIGHTING.
- B. LIGHT SHIELDING REQUIREMENTS SHALL PROTECT FROM GLARE, LIGHT SPILLAGE TO
- PEDESTRIANS, AIRCRAFT AND CARS. C. MERCURY VAPOR SHALL NOT BE ALLOWED.
- D. LIGHTING PLAN MEET THE REQUIREMENTS OF SECTION 14 OF IESNA RP-20-98 LIGHTING

1998 OR CURRENT EDITION.



**REVISIONS** 

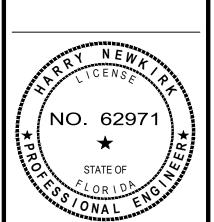
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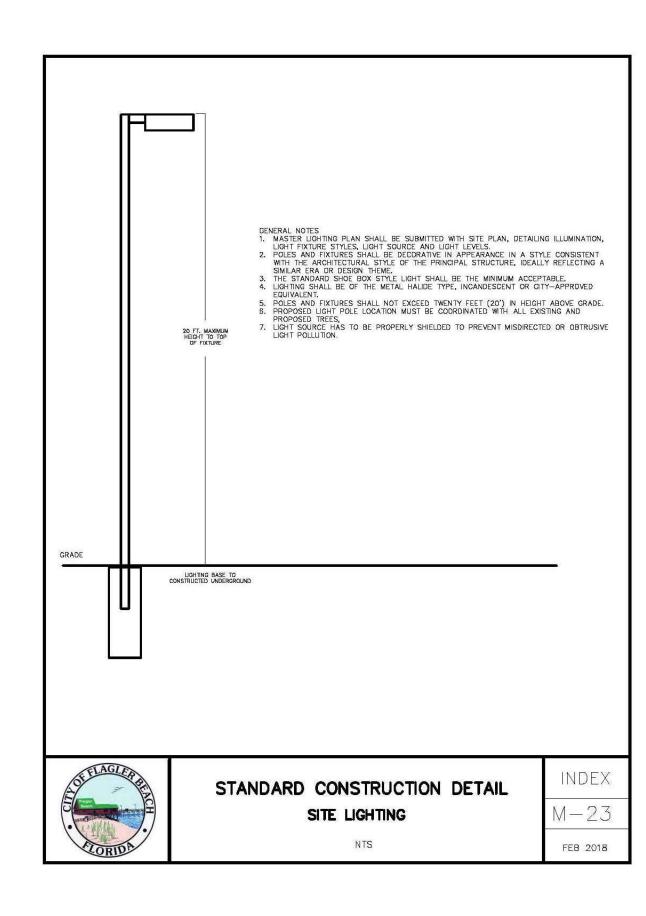
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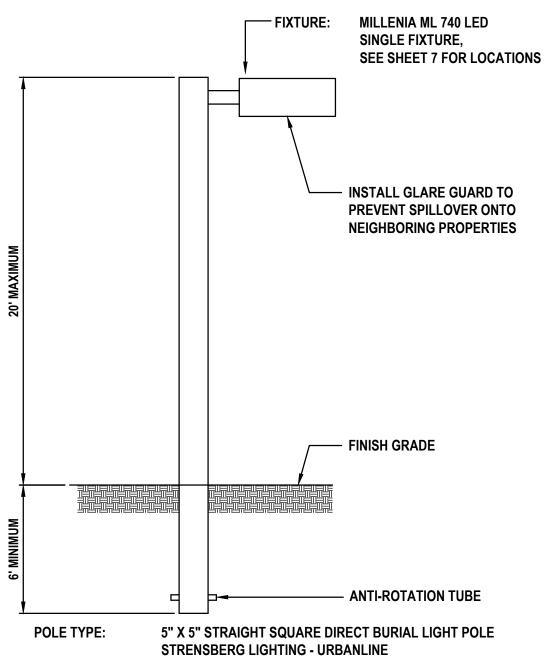


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|   | SCALE:      | 1" = 30'     |

DRAWING NUMBER





POLE HEIGHT: 25' MAXIMUM HEIGHT WITH 5' MINIMUM BURIAL SMOOTH BLACK OR SATIN ALUMINUM FINISH: MATERIAL: ALUMINUM

- CONTRACTOR MUST OBTAIN CITY OF FLAGLER BEACH BUILDING PERMIT FOR LIGHT POLES. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING APPROPRIATE INFORMATION (ENGINEERING, SPECIFICATIONS, ETC...) FOR LIGHT FIXTURES AT TIME OF PERMIT REVIEW.
- DESIGNED TO HANDLE A MINIMUM 140 MPH WIND SPEED, EXPOSURE B OR C. MAKE THE HOLE, GENERALLY HOLES SHALL BE ROUND WITH SMOOTH VERTICAL SIDES CONSISTING OF UNDISTURBED SOIL FOR BEST COMPACTION AND STABILITY OF POLES. DIAMETER OF POLE SHALL BE ABOUT TWICE THE DIAMETER OF THE POLE AT ITS BASE. HOLES SHALL BE AUGURED.
- WIRE THE POLE UTILIZING APPROVED METHODS. INSTALL THE POLE, IN MANY CASES COMPOSITE POLES CAN BE MANUALLY LIFTED
- INTO PLACE AND INSERTED INTO THE HOLE. ALIGN AND LEVEL THE POLE. BACKFILL THE HOLE, FILL AND TAMP EVERY 6 TO 8 INCHES OF BACKFILL,
- FREQUENT TAMPING IS IMPORTANT FOR INSTALLATION. SITE LIGHTING MUST NOT SHINE DIRECTLY UPON ANY ADJACENT RESIDENCE AND MUST NOT PRODUCE EXCESSIVE GLARE. GLARE GUARDS WILL BE INSTALLED IF NEEDED.

## SITE LIGHTING DETAIL

**NOT TO SCALE** 



## **ML740 MILLENIA SERIES**



See Pole specification sheets.

UGMT Gun Metal Textured

• UBT Urban Bronze Textured

USLT Urban Silver Textured

· UWHT Urban White Textured

<sup>5</sup>Smooth finishes are available upon request.

mount luminaire is a breakthrough in modern

design transcends traditional lighting conven-

area lighting technology. Its new world urban

tion by seamlessly interweaving form and

AAD™ "Advanced Air-flow Dynamics" maxi-

passed thermal management for long-life LED

with a myriad of options, the Millenia is perfect

markets. The cast aluminum slipfitter slips a 3"

performance and energy efficiency. Available

for commercial, institutional and municipal

OD x 3" tall tenon. The luminaire shall be UL

circuit boards shall be 100% recyclable; they

listed in US and Canada.

mizes heat sink expulsion to deliver unsur-

• UWH Urban White Matte

USL Urban Silver Matte

 BKT Black Textured Custom Urban Finishes<sup>5</sup>

CM Custom Match

Specifications

UGM Gun Metal Matte

UB Urban Bronze Matte

| FIXTURE TYPE     |  |
|------------------|--|
| мемо             |  |
|                  |  |
|                  |  |
| /5SQ-14-188/UGMT |  |

|                     | BUILD A PART NUMBER  |     |     |                      |                 |          |                        |                                   |                |             |                             |                              |        |
|---------------------|--|-----|-----|----------------------|-----------------|----------|------------------------|-----------------------------------|----------------|-------------|-----------------------------|------------------------------|--------|
|                     | ORDERING EXAMPLE: PT-ML740-32L40T3-MDL014-CA-FHD/5SQ-14-188/UGMT   |     |     |                      |                 |          |                        |                                   |                |             |                             |                              |        |
| Mounting<br>Config. | Fixture  | LED | сст | Distribution<br>Type | Driver          | Lens     | Option Pole<br>Adapter | Optional<br>Control<br>Receptacle | Option Control | Option Fuse | Option House<br>Side Shield | Pole<br>See Pole Spec Sheets | Finish |
|                     |  |     |     |                      |                 |          |                        |                                   |                |             |                             |                              |        |
| Mounting            | ounting Configuration Pole (Click here to link to pole specification page) shall also be protected from moisture |     |     |                      | d from moisture | and cor- |                        |                                   |                |             |                             |                              |        |

PT = Post Top **Fixture** • ML740

LED •40L •32L CCT - Color Temperature (K) ·27(00) ·30(00) ·40(00) ·50(00)

**Distribution Type** •T2 •T3 • T4 • T5 • MDL0181 (120V-277V, 180mA) · MDH0181 (347V-480V, 180mA)

· MDL0162 (120V-277V, 160mA) • MDH016<sup>2</sup> (347V-480V, 160mA) · MDL0141 (120V-277V, 140mA) • MDH0141 (347V-480V, 140mA) <sup>1</sup>32L or 24L system only. <sup>2</sup> 40L system only.

 CA (Clear Acrylic) • **SVI** (Flat Soft Vue Light Diffused Acrylic) • SV2 (Flat Soft Vue Moderate Diffused Acrylic) | function to yet another level. Our convective

Options (Click here to view accessories sheet) •**SQ4** Square pole adapter for 4" square pole shafts •R 3-Pin control receptacle only • R5 5-Pin control receptacle only • R7 7-Pin control receptacle only • PE3 Twist-Lock Photocontrol (120V-277V) • PE3<sup>3</sup> Twist-Lock Photocontrol (347V) • PE43 Twist-Lock Photocontrol (480V) SC³ Shorting Cap

•FHD4 Double Fuse and Holder The luminaire shall use high output, high HSS 120° House Side Shield brightness LED's. They shall be mounted in BLOC Back Light Optical Control arrays, on printed circuit boards designed 3 Requires control receptacle to maximize heat transfer to the heat sink <sup>4</sup> Ships loose for installation in base surface. The arrays shall be roof mounted to minimize up-light. The LED's and printed

#### Pole (Click here to link to pole specification page) shall also be protected from moisture and corrosion by a conformal coating. They shall not contain lead, mercury or any other hazardous substances and shall be RoHS compliant. The LED life rating data shall be determined in ac-Standard Urban Finishes (Click here to view paint fini cordance with IESNA LM-80. The High Performance white LED's will have a life expectancy of approximately 100,000 hours with not less than 70% of original brightness (lumen maintenance), rated at 25°C. The High Brightness, High Output LED's shall be 4000K (2700K, ULBT Urban Light Bronze Textured 3000K or 5000K option) color temperature ULB Urban Light Bronze Matte with a minimum CRI of 70. Consult factory for custom color CCT. The luminaire shall have a minimum \_\_\_\_\_ (see table) delivered initial lumen rating when operated at steady state with an average ambient temperature of 25°C • UCHS Urban Champagne Satin Smooth

The luminaire shall be provided with refractor type optics applied to each LED array. The luminaire shall provide Type \_\_\_ (2, 3, 4 or 5) light distribution per the IESNA classifications. Testing shall be done in accordance with

IESNA LM-79. The large scale ML740 Millenia® vertical tenon | BLOC Optic: An optional "Back Light Optical Control" shield can be provided at the factory. This is an internal optic level "House Side Shield" offering significantly reduced backlight and glare while maintaining the original design aesthetics of the luminaire.

**Electronic Drivers** 

The LED driver shall be U.L. Recognized. It shall be securely mounted inside the fixture, for optimized performance and longevity. It shall be supplied with a quick-disconnect electrical connector on the power supply, providing easy power connections and fixture installation. It shall have overload, overheat and short circuit protection, and have a DC voltage output, constant current design, 50/60HZ. It shall be supplied with line-ground, line-neutral and neutral-ground electrical surge protection in accordance with IEEE/ANSI C62.41.2 guidelines. It shall be a high efficiency driver with a THD less than 20% and a high power factor greater than .9. It shall be dimming capable



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## Independence Series



 Reduced Glare & Offensive Light Less Wasted Light

the Ground

 More Footcandles on Creates a Smooth & Uniform Light Pattern

Pending 8.75"Wx8.5"Hx9.05"D 6.6 LBS

3,913 **LUMENS** 🎎 31 WATTS 4 125 **LPW** 🕏 80 CRI 🕒 4500K **cct** 🐐 0-10V **DIMMING** REC MNT HT

ADD SUFFIX# DESCRIPTION

HID

72

129

SOURCE WATTAGE

WATTAGE USED

PM 208-277V Photocontrol

ANNUAL

COST

\$52

\$59

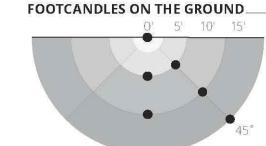
\$77

REPLACES UP TO 100W MH

ORDERING INFORMATION CATALOG # DESCRIPTION CCT REPLACES UP TO VOLTS 120-277 WSG4L45K Small LED Wall Light 4500K 100W MH Specs shown are for 4500K CCT. Also available in 3000K, 4000K and 5000K. See Cut Sheet for more information.

OPTIONS.

SUFFIX# DESCRIPTION



|                | PC 120      | OV Photocont | rol |
|----------------|-------------|--------------|-----|
| 45°            | ENERGY S    |              |     |
| 5              | <u>. La</u> | ED           | No. |
| 12' Mtg Height | WATTACE     | ANNUAL       | SO  |

|      | 90°   |       |      | 0       |          |
|------|-------|-------|------|---------|----------|
| ight | 12' M | tg He | ight | WATTAGE | ANI<br>C |
| 45°  |       | 90°   | 45°  | 31      | \$       |
| 11.2 | 0'    | 7.6   | 7.6  | 31      | \$       |
| 8.7  | 5'    | 7.5   | 6.4  | 31      | \$       |
| 3.9  | 10'   | 3.9   | 3.6  |         |          |
| 1.8  | 15'   | 2.2   | 1.8  |         |          |
|      |       | M.    | 58   |         |          |

Average **6.0** Average **4.7** 





\*The majority of Atlas Lighting Products are assembled in USA facilities by an American Workforce utilizing both Domestic and Foreign components \*Qualifies for Buy American under ARRA



\$38

\$45

OMETRIC D CY POINTE

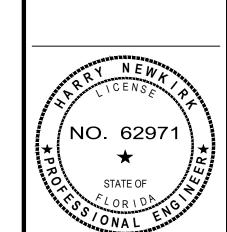
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SCALE: DRAWING NUMBER

#### TREE PROTECTION AND ROOT PRUNING SPECIFICATIONS

#### PART 1 GENERAL

#### 1.1 SUMMARY

- A. This item shall consist of furnishing all labor, materials, tools and equipment required to protect those trees designated to remain on the site. Protection of designated trees shall include directing heavy construction work activity away from the protected trees Section Includes the protection, trimming, and pruning of trees that interfere with, or are affected by, execution of the Work, whether temporary or new construction.
- 1.2 SUBMITTALS
- A. Product Data: For each type of product indicated.
- B. Tree Pruning Schedule: Written schedule from certified arborist detailing scope and extent of pruning of trees to remain that interfere with or are affected by construction.
- C. Qualification Data: For tree service firm and arborist, ISA certification required.
- D. Certification: From arborist, certifying that trees indicated to remain have been protected during construction according to recognized standards and that trees were promptly and properly pruned and repaired when damaged
- E. Maintenance Recommendations: From certified arborist, for care and protection of trees affected by construction during and after completion of the Work.
- F. Provide final log of work performed including any damage that occurred during construction and subsequent repairs.

#### 1.3 QUALITY ASSURANCE

- A. Tree Service Qualifications: An experienced tree service firm that has successfully completed tree protection and trimming work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site on a full-time basis during execution of the Work.
- B. Arborist qualifications: An arborist certified by the International Society of Arboriculture.
- C. Tree Pruning Standards: Comply with ANSI A300 (Part 1), Trees, Shrubs, and other Woody Plant Maintenance--Standard Practices (Pruning) and Part 8 Root Management Standard.
- D. Pre-installation Conference: Before starting tree protection and trimming, meet with representatives of authorities having jurisdiction, Owner, Architect, consultants, and other concerned entities to review tree protection and trimming procedures and responsibilities.

#### PART 2 PRODUCTS

#### 2.1 MATERIALS

- A. Materials for tree/vegetation protection barriers shall conform to the following requirements:
- 1. Mesh Construction Fencing by Conwed or Approved Equal (orange or green color)
- 2. Wood Posts (minimum length 6.0 feet)
- 3. #14 gauge steel wire

#### PART 3 EXECUTION

#### 3.1 PREPARATION

- A. Temporary Fencing: Install temporary fencing around the tree protection zones designated on the plans or where directed by the engineer to protect remaining vegetation from construction damage. Maintain temporary fence and remove when construction is complete. See detail this sheet.
- B. Root Zone Protection: During the entire construction period all reasonable efforts shall be made to protect from damage those trees and their root system designated to remain. Around the trees to be protected, the Contractor shall avoid excessive excavation or compaction and damage during the removal of trees and shrubs designated to be removed. All plant material designated to be saved, or outside of the limits of construction, shall be protected during subsequent construction work. Work under these items will include construction and maintenance of temporary fencing to protect the root zones of existing trees and other plantings, construction and maintenance of tree trunk protection.
- A protection barrier or temporary fence of at least 4 feet in height shall be installed around each tree to be protected and preserved. The tree protection shall be installed prior to the actual construction start and maintained for the duration of the project.
- Within this protection zone, construction materials shall not be stored, equipment operated and/or temporary storage buildings or work trailers placed.
- The protection barrier shall be constructed of orange snow fencing securely fastened to fence posts spaced a maximum of 6 feet on center. Posts are 6 feet in length with 2 feet set into the ground and 4 feet extending above ground. The fencing shall be attached to the post with a minimum of four (4) nylon-locking ties evenly placed at each

#### 3.2 EXCAVATION

- A. Install shoring or other protective support systems to minimize shoring or benching of excavations.
- B. Do not excavate within tree protection zones, unless otherwise indicated on plans.
- C. Where excavation for new construction is required within drip line of trees, clear and excavate to minimize damage to root systems. Use narrow-tine spading forks and comb soil to expose roots.
- 1. Relocate roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and relocate them without breaking. If encountered immediately adjacent to location of new construction and relocation is not practical; cut roots approximately 3 inches back from new
- 2. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect
- D. Root Pruning: Cut roots with sharp pruning instruments. All roots that are broken or chopped by excavators during excavation will be required to be saw cut cleanly with a sharp saw and do not paint cut root end.
- E. When excavating, place excavated soil on opposite side of trench from tree.

#### 3.3 ROOT PRUNING

- A. Root pruning shall take place only where the roots of existing trees have been damaged by the Contractor during construction of the Project, as directed by the Certified
- B. If construction is to occur within the root zone of existing plant material, root pruning and special plant care including fertilizing and watering will be required, as directed by the Certified Arborist and hereinafter specified. Prior to root pruning, remove all weeds growing in existing tree mulch rings. Root pruning using an approved mechanical root pruning saw shall be performed prior to digging where noted on the plans, or directed by the Certified Arborist. Air Spading excavation consisting of hand and/or pneumatic excavation may be required if indicated on plans or as directed by Certified Arborist. Whenever roots of plant material to remain are exposed during construction, the damaged root ends are to be removed by cutting them off cleanly.
- C. Initial watering shall be performed on all trees, which are designated for root pruning. Water trees immediately by thoroughly saturating root balls and provide a horticultural watering bag, such as a Gator Bag or equivalent, filled with water to keep root balls thoroughly saturated during first three weeks following root pruning. Thereafter refill bags as required, according to weather conditions, to keep root balls in a moist condition during growing seasons, through the duration of the Project. Test root balls for optimal moisture once a week using a soil auger.
- D. All pruning shall be overseen by a professional arborist (someone whose principal occupation is the care and maintenance of trees). All pruning shall be done according to the National Arborist Association's Pruning Standards for Shade Trees Class 11 - Standard Pruning Specifications.
- E. Any damage to the root zone, as determined by the Certified Arborist, will be compensated by pruning an equivalent amount of the top vegetative growth of the material
- within 1 week following root damage, fertilization and supplemental watering. F. Fertilize damaged trees with fertilizer that promotes root growth. Fertilizer nutrients shall be applied within 48 hours after root damage occurs. Fertilizer nutrients shall be
- applied within 48 hours after root damage occurs. A fertilizer with a 1: 1: 1 ratio shall be applied at the rate of .5 pounds of nutrients per 1000 square feet (2 kg per 90 G. Application shall be accomplished by placing dry fertilizer in holes in the soil. The holes shall be 8 inches (200 mm) to 12 inches (300 mm) deep and spaced 24 inches (600
- mm) apart in an area beginning 30 inches (1 meter) from the base of the plant. Holes can be punched with a punch bar, dug with a spade, drilled with an auger or any other method approved by the Certified Arborist H. Approximately 0.02 pounds (10 grams) of fertilizer nutrients shall be placed in each hole 250 holes per 1000 square feet (90 square meters). Fertilizer Nutrients shall not be
- measured for payment but considered incidental to root pruning. If the Certified Arborist determines that the whole method of fertilizer placement is not practical or desirable, an approved method of uniform surface application will be allowed. Neither separate measurement nor payment will be made for fertilization, but will be considered incidental to the cost of TREE PROTECTION. I. Supplemental water shall be applied within 48 hours of any root damage. The water shall be applied at the rate of 7 quarts per square yard of surface area within the root

zone of plant material having sustained damage to the root zone. Root zone shall be calculated as the areas, which extend three meters beyond the limits of the crown's

branches. Subsequent weekly watering shall be applied if deemed necessary by the Certified Arborist. Neither separate measurement nor payment will be made for

- supplemental watering but will be considered incidental to the cost of TREE PROTECTION. J. The Contractor shall repair or replace any and all damage determined by the Certified Arborist and City of Flagler Beach to any existing or newly installed plant material at its own expense. Unnecessary damage to ground cover or turf shall be repaired or replaced as specified for restoration of similar areas within the plans, or as directed by the Certified Arborist and City of Flagler Beach, and shall be at the Contractor's expense.
- K. Materials shall be disposed of in accordance with specifications.

#### 3.4 REGRADING

- A. Do not fill within tree protection zones, unless otherwise indicated.
- B. Where filling for new construction is required within drip line of trees, perform work by hand to minimize damage to root systems.
- 1. Where existing grade is below elevation of finish grade, fill with topsoil. Place topsoil by hand in a single uncompacted layer and hand grade to required finish elevations.

#### 3.5 TREE PRUNING

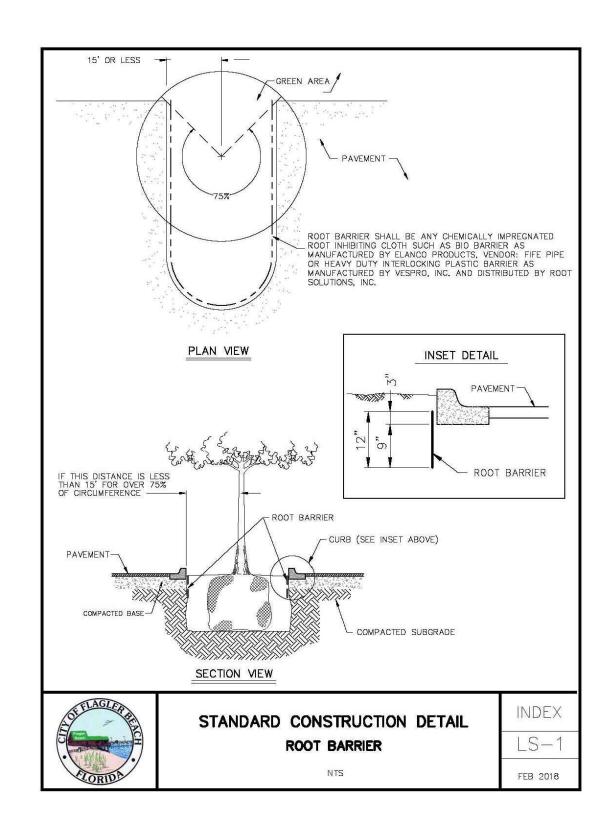
- A. Prune trees to remain that are affected by temporary and permanent construction.
- B. Pruning Standards: Prune trees according to ANSI A300 (Part 1).
- C. Cut branches with sharp pruning instruments; do not break or chop.
- 1. Clean all pruning instruments with antimicrobial solution between performing work on separate trees to avoid the potential spread of pathogens.
- D. Chip removed tree branches and uses as organic mulch or dispose of off-site.

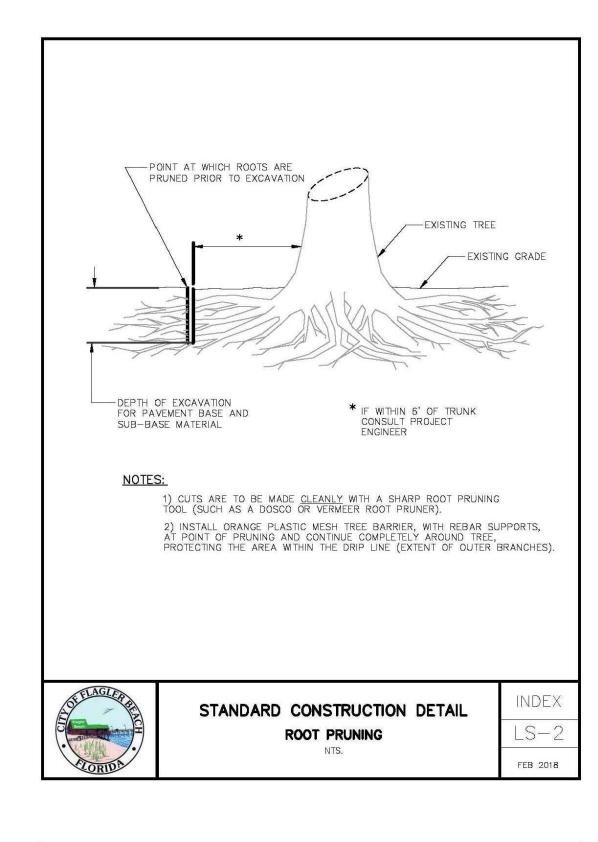
#### 3.6 TREE REPAIR AND REPLACEMENT

- A. Promptly repair trees damaged by construction operations within 24 hours. Treat damaged trunks, limbs, and roots according to arborist's written instructions.
- B. Aerate surface soil, compacted during construction, 10 feet (3 m) beyond drip line. Drill 2-inch (50-mm) diameter holes a minimum of 12 inches (300 mm) deep at 24 inches (600 mm) o.c. Backfill holes with an equal mix of augered soil and sand.

#### 3.7 DISPOSAL OF WASTE MATERIALS

- A. Burning is not permitted.
- B. Disposal: Remove excess excavated material, displaced trees, and excess chips from Owner's property. Disposal shall be local landfill.





DRIP LINE OF TREE IS THE EXTENT OF ITS OUTER BRANCHES

#5 REBAR DRIVEN 1' INTO GROUND 8' O.C.

STANDARD CONSTRUCTION DETAIL

TREE BARRICADE

(ATTACH MESH TO REBAR WITH NYLON

ZIP TIES OR TWISTED WIRE)



CONTRACTOR TO USE DOSKO OR VERMEER MECHANICAL ROOT PRUNER EQUIPMENT WHEN WITHIN CRITICAL ROOT ZONE OR TREE PROTECTION AREA FOR INSTALLATION OF 4" CONDUITS FOR ELECTRICAL. CABLE, TELECOMMUNICATIONS AND IRRIGATION SERVICES

MECHANICAL ROOT PRUNER EQUIPMENT DETAIL

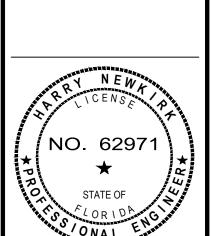
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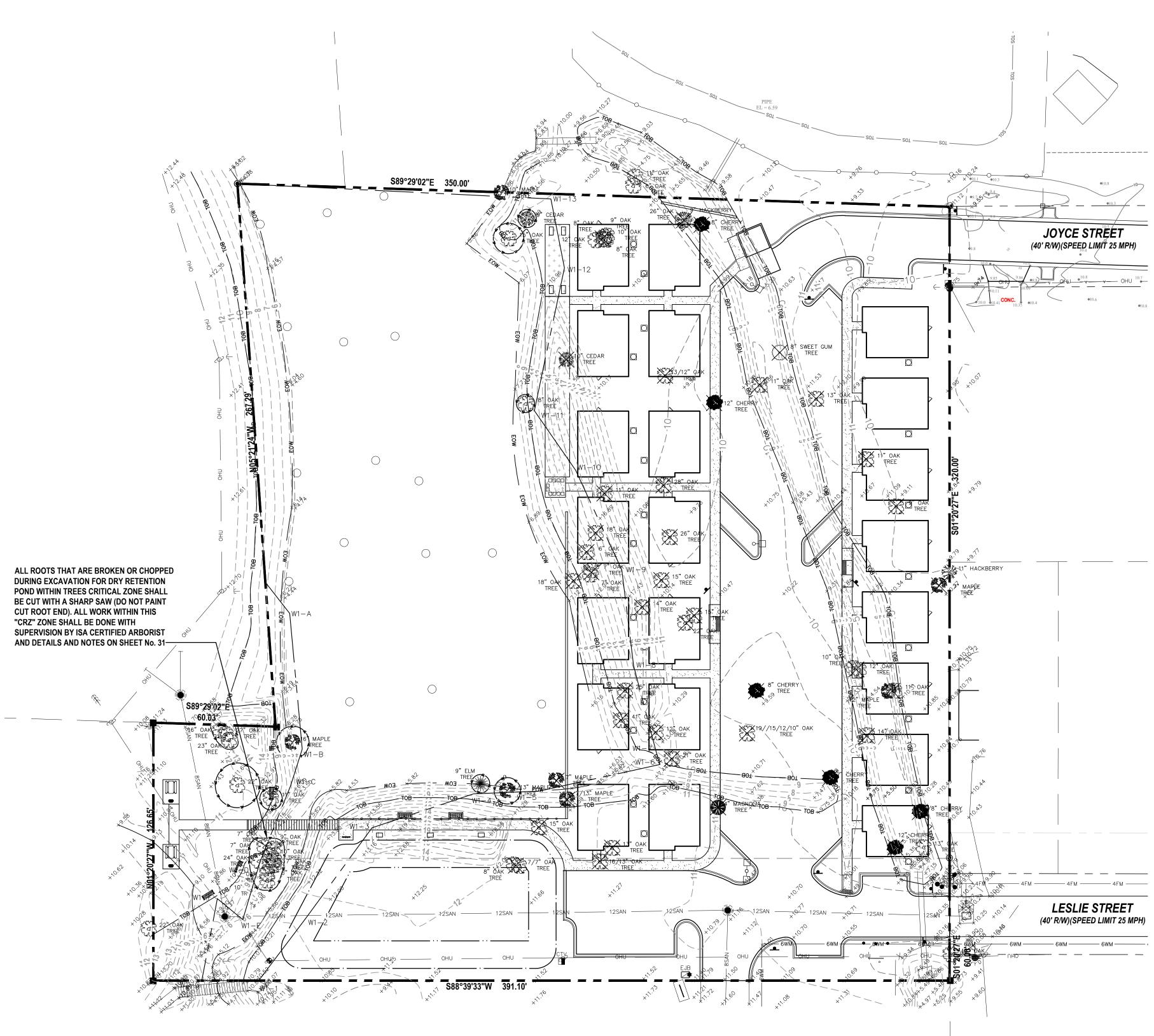
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AS SHOWN

DRAWING NUMBER

NDEX





| MAPLE         | TREES REMOVED | TREES REMAIN   |
|---------------|---------------|----------------|
| 7"            | 3             |                |
| 10"           |               | 1              |
| 12"           | 1             |                |
| 13"           | 1             | 1              |
| 14"           |               | 1              |
| 16"           |               | 1              |
| TOTAL         | 5             | 4              |
|               |               |                |
| CEDAR         | TREES REMOVED | TREES REMAIN   |
| 9"            |               | 1              |
| 10"           | 1             |                |
| TOTAL         | 1             | 1              |
| OAK           | TREES REMOVED | TREES REMAIN   |
| 6"            | 1             | 1              |
|               | 4             | 3              |
| 8"            | 3             | 1              |
| <br>9"        | 2             | 1              |
|               | 3             | 3              |
| 10<br>11"     | 4             | <u>5</u><br>1  |
| 12"           |               | 1              |
|               | 5             |                |
| 13"           | 5             |                |
| 14"           | 2             | A              |
| 15"           | 4             | 1              |
| 16"           | 1             | 1              |
| 18"           | 2             |                |
| 19"           | 1             |                |
| 21"           | 1             |                |
| 22"           | 1             | 1              |
| 23"           |               | 1              |
| 24"           |               | 1              |
| 25"           | 1             |                |
| 26"           | 2             |                |
| 27"           |               | 1              |
| 28"           | 1             |                |
| 41"           | 1             |                |
| TOTAL         | 44            | 16             |
|               | T T           |                |
| 9"            | TREES REMOVED | TREES REMAIN   |
| TOTAL         | 0             | 1<br>1         |
| 101712        |               |                |
| CHERRY        | TREES REMOVED | TREES REMAIN   |
| 7"            | 1             |                |
| 8"            | 3             |                |
| 11"           | 1             |                |
| 12"           | 2             |                |
| TOTAL         | 7             | 0              |
|               |               |                |
| WEET GUM      | TREES REMOVED | TREES REMAIN   |
| 8"            | 1             |                |
| TOTAL         | 1             | 0              |
| MAGNOLIA      | TREES REMOVED | TREES REMAIN   |
| 14"           | 1             | INLLY REIVIAIN |
| TOTAL         | 1             | 0              |
|               | <u> </u>      |                |
| TOTALS        | 59            | 22             |
|               |               |                |
|               |               |                |
| TAL TREES REI | MOVED         | 59             |

REQUIRED TREE REPLACEMENT: 59 CANOPY TREES (6' MINIMUM HEIGHT)

| DATE DESCRIPTION |
|------------------|
|                  |
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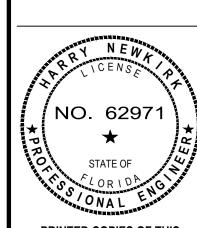
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TREE PRESERVATION PLAN
LEGACY POINTE COTTAGES
ESLIE STREET

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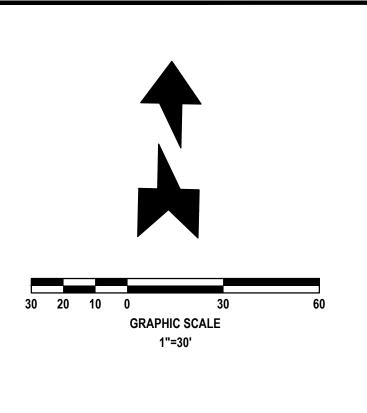


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| DRAWN BY:  | NWS          |
| CHECKED B  | Y: HHN       |

DRAWING NUMBER

SCALE:





## **WETLAND AREAS SUMMARY CHART**

| 1. WETLAND / UPLAND AREAS:          | SQ. FT. | ACRE  | %     |
|-------------------------------------|---------|-------|-------|
| WETLAND/SURFACE WATER IMPACT AREA 1 | 468     | 0.011 | 0.9   |
| WETLAND/SURFACE WATER IMPACT AREA 2 | 4,839   | 0.111 | 9.5   |
| WETLAND/SURFACE WATER IMPACT AREA 3 | 773     | 0.018 | 1.5   |
| TOTAL WETLAND/SURFACE WATER IMPACTS | 6,080   | 0.140 | 100.0 |

## **LEGEND**

TOTAL WETLAND / SURFACE WATER (51,108 SF / 1.173 AC) TOTAL

WETLAND / SURFACE WATER IMPACT AREA (6,080 SF / 0.140 AC) TOTAL

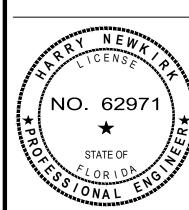
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| PROJECT No | o: 2023-17   |
|------------|--------------|
| DATE:      | OCTOBER 2024 |
| DESIGN BY: | ННИ          |
| DRAWN BY:  | NWS          |
| CHECKED B  | Y: HHN       |
| SCALE:     | 1" = 30'     |

DRAWING NUMBER



JOB NUMBER: 23FIS-01256
DRAWN BY: ZM
CHECKD BY: LG



NORTH SCALE: 1" = 20'-0"0 10' 20'



HCSG DESIGN DISCLAIMER

A - The irrigation design services provided by HCSG are crafted to assist our customers during the project bidding process. These services are intended to facilitate preliminary planning and are not to be used for and utilized by professionals who have the requisite experience and educational background in the field.

It is important to note that Heritage Commercial Services Group (HCSG), along with our brands, affiliates, vendors, and construction purposes. We strongly recommend that all designs, estimates, and related documents be reviewed or revenue) arising from the use of our products and services. Our goal is to support your project planning efforts with quality designs and estimates, while emphasizing the need for further professional review and validation.

contractors, assumes no liability for inaccuracies, omissions, errors, or any potential financial losses (including lost income projects. For clients requiring detailed construction-ready drawings, our affiliate, WC3, a specialized irrigation design firm within Record for any irrigation design projects. Our role is to provide initial design the Heritage Landscape Supply Group, offers professional services. WC3 is equipped to create comprehensive construction assistance, with the understanding that final design responsibility and verification lie drawings, which can be formally stamped and/or submitted for necessary approvals and reviews.

CONTRACTOR SHALL COORDINATE LOCATION AND CONNECTION OF CONTROLLER AND RAIN SENSOR WITH OWNERS REP.

## VALVE\_SCHEDULE

| NUMBER | MODEL                          | SIZE | TYPE        | <u>GPM</u> | WIRE  | PSI  | PSI @ POC | PRECIP    |
|--------|--------------------------------|------|-------------|------------|-------|------|-----------|-----------|
| 1      | Hunter PGV-101G                | 1"   | Turf Spray  | 24.4       | 339.2 | 37.5 | 37.8      | 0.69 in/h |
| 2      | Hunter PGV-101G                | 1"   | Turf Spray  | 18.87      | 190.4 | 35.4 | 36.5      | 0.82 in/h |
| 3      | Hunter PGV-101G                | 1"   | Turf Spray  | 20.54      | 186.1 | 36.4 | 37.7      | 1.28 in/h |
| 4      | Hunter PGV-101G                | 1"   | Shrub Spray | 19.5       | 146.9 | 36.7 | 38.1      | 1.24 in/h |
| 5      | Hunter PGV-101G                | 1"   | Bubbler     | 15         | 65.7  | 35.3 | 36.4      | 1.7 in/h  |
| 6      | Hunter PGV-101G                | 1"   | Turf Spray  | 20.87      | 65.7  | 37.6 | 40.1      | 0.89 in/h |
| 7      | Hunter PGV-101G                | 1"   | Turf Spray  | 24.69      | 72.7  | 36.2 | 39.6      | 1.01 in/h |
| 8      | Hunter PGV-101G                | 1"   | Shrub Spray | 22.75      | 77.3  | 38.1 | 41.1      | 1.3 in/h  |
| 9      | Hunter PGV-101G                | 1"   | Turf Rotor  | 18         | 240.0 | 49.5 | 51.2      | 0.65 in/h |
| 10     | Hunter PGV-101G                | 1"   | Shrub Spray | 24.7       | 247.0 | 39.6 | 42.5      | 1.41 in/h |
| 11     | Hunter PGV-101G                | 1"   | Turf Spray  | 20.87      | 252.5 | 36.6 | 38.7      | 1.14 in/h |
| 12     | Hunter PGV-101G                | 1"   | Shrub Spray | 22.1       | 414.2 | 36.7 | 39.2      | 1.48 in/h |
| 13     | Hunter PGV-101G                | 1"   | Turf Spray  | 22.17      | 438.5 | 35.1 | 37.5      | 1.31 in/h |
| 14     | Hunter PGV-101G                | 1"   | Turf Spray  | 21.59      | 650.4 | 37.7 | 40.0      | 0.74 in/h |
| 15     | Hunter PGV-101G                | 1"   | Shrub Spray | 23.4       | 654.8 | 37.7 | 40.4      | 1.53 in/h |
| 16     | Hunter PGV-101G                | 1"   | Turf Spray  | 23.3       | 682.6 | 38.1 | 40.8      | 0.76 in/h |
| 17     | Hunter PGV-101G                | 1"   | Shrub Spray | 7.8        | 653.2 | 32.3 | 32.6      | 1.54 in/h |
| 18     | Hunter PGV-101G                | 1"   | Turf Spray  | 21.97      | 648.1 | 34.6 | 36.7      | 1.3 in/h  |
| 19     | Hunter PGV-101G                | 1"   | Bubbler     | 21.5       | 638.9 | 39.7 | 41.7      | 1.7 in/h  |
| 20     | Hunter PGV-101G                | 1"   | Turf Spray  | 24.93      | 469.4 | 37.8 | 39.2      | 0.99 in/h |
| 21     | Hunter PGV-101G<br>Common Wire | 1"   | Shrub Spray | 18.2       | 461.4 | 34.7 | 35.4      | 1.53 in/h |

## WATERING\_SCHEDULE

IRRIGATION DETAILS LAYOUT

OUTDOOR

FIRST IN SERVICE

| NUMBER | MODEL           | TYPE        | PRECIP    | IN./WEEK | MIN./WEEK | GAL./WEEK | GAL./DAY |
|--------|-----------------|-------------|-----------|----------|-----------|-----------|----------|
| 1      | Hunter PGV-101G | Turf Spray  | 0.69 in/h | 1.01     | 88        | 2,147     | 716      |
| 2      | Hunter PGV-101G | Turf Spray  | 0.82 in/h | 1.01     | 75        | 1,415     | 472      |
| 3      | Hunter PGV-101G | Turf Spray  | 1.28 in/h | 1.01     | 48        | 986       | 329      |
| 4      | Hunter PGV-101G | Shrub Spray | 1.24 in/h | 1.01     | 50        | 975       | 325      |
| 5      | Hunter PGV-101G | Bubbler     | 1.7 in/h  | 0.75     | 27        | 405       | 135      |
| 6      | Hunter PGV-101G | Turf Spray  | 0.89 in/h | 1.01     | 69        | 1,440     | 480      |
| 7      | Hunter PGV-101G | Turf Spray  | 1.01 in/h | 1.01     | 61        | 1,506     | 502      |
| 8      | Hunter PGV-101G | Shrub Spray | 1.3 in/h  | 1.01     | 47        | 1,069     | 356      |
| 9      | Hunter PGV-101G | Turf Rotor  | 0.65 in/h | 1.01     | 94        | 1,692     | 564      |
| 10     | Hunter PGV-101G | Shrub Spray | 1.41 in/h | 1.01     | 43        | 1,062     | 354      |
| 11     | Hunter PGV-101G | Turf Spray  | 1.14 in/h | 1.01     | 54        | 1,127     | 376      |
| 12     | Hunter PGV-101G | Shrub Spray | 1.48 in/h | 1.01     | 41        | 906       | 302      |
| 13     | Hunter PGV-101G | Turf Spray  | 1.31 in/h | 1.01     | 47        | 1,042     | 347      |
| 14     | Hunter PGV-101G | Turf Spray  | 0.74 in/h | 1.01     | 83        | 1,792     | 597      |
| 15     | Hunter PGV-101G | Shrub Spray | 1.53 in/h | 1.01     | 40        | 936       | 312      |
| 16     | Hunter PGV-101G | Turf Spray  | 0.76 in/h | 1.01     | 80        | 1,864     | 621      |
| 17     | Hunter PGV-101G | Shrub Spray | 1.54 in/h | 1.01     | 40        | 312       | 104      |
| 18     | Hunter PGV-101G | Turf Spray  | 1.3 in/h  | 1.01     | 47        | 1,033     | 344      |
| 19     | Hunter PGV-101G | Bubbler     | 1.7 in/h  | 0.75     | 27        | 581       | 194      |
| 20     | Hunter PGV-101G | Turf Spray  | 0.99 in/h | 1.01     | 62        | 1,546     | 515      |
| 21     | Hunter PGV-101G | Shrub Spray | 1.53 in/h | 1.01     | 40        | 728       | 243      |
|        |                 | TOTALS:     |           |          | 1,163     | 24,564    | 8,188    |

## CRITICAL ANALYSIS

| Generated: P.O.C. NUMBER: 01 Water Source Information:  |   |
|---|---|
| FLOW AVAILABLE<br>Custom Max Flow:<br>Flow Available  | 25 GPM<br>25 GPM  |
| PRESSURE AVAILABLE Static Pressure at POC: Pressure Available:  | 65 PSI<br>65 PSI  |
| DESIGN ANALYSIS Maximum Station Flow: Flow Available at POC: Residual Flow Available:   | 24.93 GPM<br>25 GPM<br>0.07 GPM   |
| Critical Station: Design Pressure: Friction Loss: Fittings Loss: Elevation Loss: Loss through Valve: Pressure Req. at Critical Station: Loss for Fittings: Loss for Main Line: Loss for POC to Valve Elevation: | 9<br>45 PSI<br>1.73 PSI<br>0.17 PSI<br>0 PSI<br>2.62 PSI<br>49.5 PSI<br>0.15 PSI<br>1.48 PSI<br>0 PSI |
| Loss for Backflow: Critical Station Pressure at POC: Pressure Available: Residual Pressure Available:   | 0 PSI<br>51.2 PSI<br><u>65 PSI</u><br>13.8 PSI  |

## IRRIGATION\_SCHEDULE

| SYMBOL  | MANUFACTURER/MODEL                                   | <u>QTY</u> |
|---|--|------------|
| ES LCS RCS CS SS  | Hunter PROS-06-NSI Strip Series                      | 19         |
| 8) 8) 8) 8)<br>Q T H F  | Hunter PROS-06-NSI 8 Series                          | 171        |
|   | Hunter PROS-06-NSI 10 Series                         | 36         |
|   | Hunter PROS-06-NSI 12 Series                         | 18         |
|   | Hunter PROS-06-NSI 15 Series                         | 55         |
|   | Hunter PROS-06-NSI Adj Series                        | 15         |
| ES LCS RCS CS SS  | Hunter PROS-12-NSI Strip Series on riser             | 147        |
| →       →       ◆       ◆         25       50       10       20 | Hunter PCB-50 (One per Tree)                         | 73         |
| SYMBOL  | MANUFACTURER/MODEL                                   | <u>QTY</u> |
| 1.5   | Hunter PGP-04 1.5                                    | 4          |
| 3.0   | Hunter PGP-04 3.0                                    | 4          |
| SYMBOL  | MANUFACTURER/MODEL                                   | QTY        |
| $oldsymbol{\Theta}$   | Hunter PGV-101 Globe 1"                              | 21         |
| $\bowtie$   | Gate Valve 1-1/2"                                    | 1          |
| C   | Hunter I-Core Controller-Wall Mount                  | 1          |
| R   | Hunter WR-CLIK                                       | 1          |
| Well  | Irrigation Well With a 2HP Pump                      | 1          |
|   | Irrigation Lateral Line: PVC Class 160 SDR 26 3/4"   | 6,920 l.:  |
|   | Irrigation Lateral Line: PVC Class 160 SDR 26 1"     | 860 l.f.   |
|   | Irrigation Lateral Line: PVC Class 160 SDR 26 1 1/4" | 480 l.f.   |
|   | Irrigation Lateral Line: PVC Class 160 SDR 26 1 1/2" | 10 l.f.    |
|   | Irrigation Mainline: PVC Class 200 SDR 21 1 1/2"     | 1,520 1.1  |
| =======   | Pipe Sleeve: Conduit 1-1/4" (Control Wire)           | 100 l.f.   |
| =======   | Pipe Sleeve: PVC Schedule 40 2"                      | 110 l.f.   |
|   | Pipe Sleeve: PVC Schedule 40 4"                      | 160 l.f.   |
|   | Valve Callout  |            |
| # •   | ——— Valve Number                                     |            |

Valve Flow

Valve Size

## SLEEVING SIZE SCHEDULE

| PIPE SIZE | SLEEVE SIZE |  |
|-----------|-------------|--|
| 3/4"      | 2" SLV      |  |
| 1"        | 2" SLV      |  |
| 1 1/4"    | 2" SLV      |  |
| 1 1/2"    | 4" SLV      |  |
| 2"        | 4" SLV      |  |
| 2 1/2"    | 4" SLV      |  |
| 3"        | 6" SLV      |  |

#### **VALVE SIZING REQUIREMENTS**

| VALVE SIZE |
|------------|
| 1"         |
| 1-1/2"     |
| 2"         |
|            |
|            |

PVC CLASS 200

10 GPM 3/4"

26 GPM | 1 1/4"

35 GPM | 1 1/2"

80 GPM | 2 1/2"

16 GPM | 1"

55 GPM 2"

|120 GPM | 3"

PVC SCH 40

8 GPM

**22 GPM** 

**50 GPM** 

**70 GPM** 



## GENERAL IRRIGATION NOTES

- 1. IRRIGATION SYSTEM DESIGN IS BASED ON 25 GPM AND 65 PSI.
  EACH IRRIGATION ZONE SHALL BE PROGRAMMED ON THE BASIS OF
  WATER REQUIREMENT 0.75 (LOW VOLUME IRRIGATION) 1 (HIGH
  VOLUME IRRIGATION) INCH WATER PER WEEK TO THE LANDSCAPE
  IRRIGATION SYSTEM.
- 2. IRRIGATION DESIGN IS FROM THE POINT OF CONNECTION (POC) ONLY. THE DESIGN IS BASED ON GALLONS PER MINUTE (GPM) AND POUNDS PER SQUARE INCH (PSI) FURNISHED BY OTHERS.
- 3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION OF ALL SITE UTILITIES AND MAKING THE NECESSARY ADJUSTMENTS TO THE IRRIGATION SYSTEM TO ACCOMMODATE THE INFRASTRUCTURE.
- LATERAL PIPE SIZING REQUIREMENTS 4. THE PRESSURE REQUIREMENT AT THE POINT OF CONNECTION IS BASED ON NO MORE THAN 5 FEET OF ELEVATION CHANGE IN THE AREAS OF
  - IRRIGATION.

    5. PIPE LOCATIONS ARE DIAGRAMATIC. MAINLINE, LATERAL & VALVES
  - SHOWN IN OUTSIDE OF CURBS FOR GRAPHIC CLARITY ONLY.

    6. CONTRACTOR TO VERIFY WATER PRESSURE AND AVAILABILITY PRIOR TO INSTALLATION.
  - 7. ALL CONTROL WIRING DOWNSTREAM OF THE CONTROLLER IS TO BE 14-AWG, UL APPROVED DIRECT BURY.
  - 8. LOCATION OF IRRIGATION COMPONENTS SHOWN ON DRAWING IS APPROXIMATE. ACTUAL PLACEMENT MAY VARY SLIGHTLY AS REQUIRED TO ACHIEVE FULL, EVEN COVERAGE.
  - 9. CONTRACTOR SHALL INSTALL ADDITIONAL CHECK VALVES TO HEADS AND LATERALS AS REQUIRED TO PREVENT LOW HEAD DRAINAGE.

- 10. ACTUAL LOCATION FOR THE INSTALLATION OF THE BACKFLOW AND THE CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
- 11. ALL HEADS ARE TO BE INSTALLED WITH THE NOZZLE, SCREEN AND ARCS SHOWN ON THE PLANS. ALL HEADS ARE TO BE ADJUSTED TO PREVENT OVERSPRAY ONTO BUILDINGS, WALLS, FENCE AND ANY HARD STRUCTURE.
- 12. FINAL LOCATION OF THE AUTOMATIC CONTROLLER (S) SHALL BE APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION (INDOOR VS OUTDOOR).
- 13. SLEEVE SHALL BE PLACED UNDER PAVEMENT AS SHOWN ON PLANS AND SHALL BE A MINIMUM OF 2X THE SIZE OF THE IRRIGATION PIPE. SEE SLEEVE SIZE CHART.
- 14. ALL MAINLINE PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 18" OF COVER AND ALL LATERAL PIPING SHALL BE BURIED TO A MINIMUM DEPTH OF 12" OF COVER.
- 15. ALL REMOTE CONTROL VALVES, GATE VALVES AND QUICK COUPLER VALVE SHALL BE INSTALLED IN VALVE BOXES.
- 16. ANY PIPING OR VALVES SHOWN OUTSIDE OF THE PROPERTY LINE OR OUTSIDE OF LANDSCAPE AREA IS SHOWN THERE FOR DESIGN CLARITY ONLY. ALL PIPING AND VALVES SHALL BE INSTALLED ON THE PROPERTY AND WITHIN LANDSCAPE AREAS.

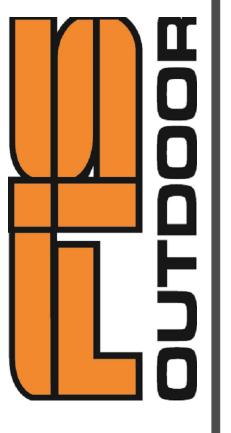
PREPARED FOR:
LEGACY POINTE

APARTMENTS
FLAGLER BEACH, FL

PREPARED BY:

FIS OUTDOOR 1112 Samples Industrial Dr. Cumming, GA 30041

770-844-7899 www.fisoutdoor.com



IRRIGATION DETAILS

DRAWING SCALE: NTS

PROJECT NUMBER: F56801

DRAWING TITLE:

IRRIGATION DETAILS

......

CHECKED BY: JF

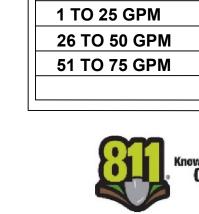
DRAWN BY: ZN

AUTHORIZED: JF

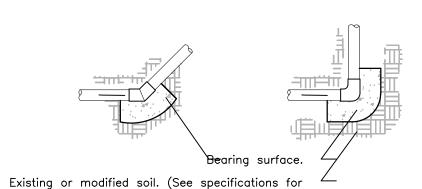
ISSUE DATE: 02-14-2023

SHEET NUMBER:

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| MINIMUM BEARING SURFACE AREA |                         |                        |                                     |  |  |
|------------------------------|-------------------------|------------------------|-------------------------------------|--|--|
| PIPE SIZE                    | TEE AND PLUG            | 90° BEND               | 45° BEND                            |  |  |
| 1-1/2"                       | Ø.45 FEET <sup>2</sup>  | Ø.63 FEET <sup>2</sup> | Ø.34 FEET <sup>2</sup>              |  |  |
| 2"                           | Ø.69 FEET <sup>2</sup>  | Ø.97 FEET <sup>2</sup> | Ø.53 FEET <sup>2</sup>              |  |  |
| 2-1/2"                       | 1.Ø FEET <sup>2</sup>   | 1.41 FEET <sup>2</sup> | Ø.77 FEET <sup>2</sup>              |  |  |
| 3"                           | 1.48 FEET <sup>2</sup>  | 2.10 FEET <sup>2</sup> | 1.14 FEET <sup>2</sup>              |  |  |
| 4"                           | 2.43 FEET <sup>2</sup>  | 3.45 FEET <sup>2</sup> | 1.87 FEET <sup>2</sup>              |  |  |
| 6"                           | 5.25 FEET <sup>2</sup>  | 7.41 FEET <sup>2</sup> | 4.Ø2 FEET <sup>2</sup>              |  |  |
| 8"                           | 9.08 FEET <sup>2</sup>  | 12.83 FEET             | <sup>2</sup> 6.96 FEET <sup>2</sup> |  |  |
| 1Ø"                          | 14.93 FEET <sup>2</sup> | 21.Ø7 FEET             | 11.44 FEET                          |  |  |



1— Size thrust blocks shall be specified as show in the table above.

2— Control wires shall not be encased in concrete.

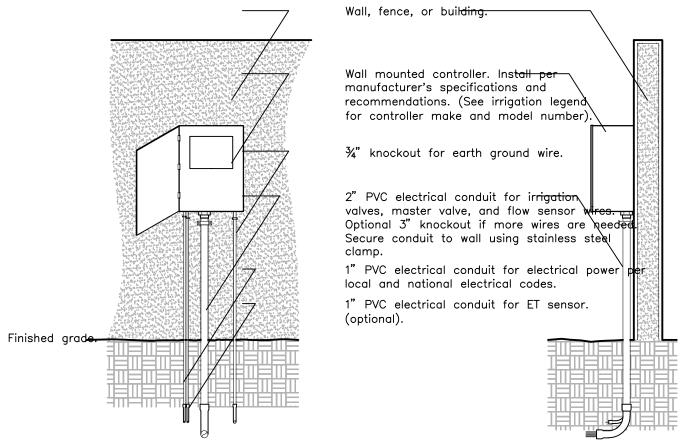
3— All fittings shall be wrapped with polyethylene to prevent concrete from adhering to pipe, fittings or bolts.

4- Joints and bolts shall be accessible for repairs.

5- Thrust blocks shall be a minimum of 6" thick.

6- One 80 lbs. sack of concrete shall cover .6 ft.3

THRUST BLOCK

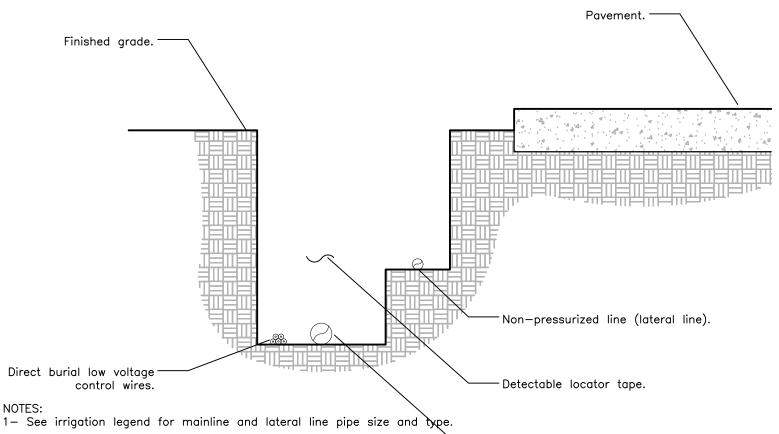


Notes: <u>SECTION VIEW</u>

1— Common and controller wire to be bundled using electrical tape at 10'-0" on center.

2— Grounding rods shall be located between 8"— Ø" to 12'— Ø" away from the controller. Grounding rods shall be ¾" in diameter x 8' in length. Connect the grounding rod to the controller using 6 gauge bare copper wire or per the manufacturer's specifications.See grounding rod detail.

3— ET Station shall be installed no further than 90' away from the controller and a minimum of 15' off of the ground, out from under any overhead obstructions such as, but not limited to, building overhangs, trees, or utilities. URBAN TREE FOUNDATION ? 2014 OPEN SOURCE FREE TO USE WALL MOUNTED CONTROLLER



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.

Pressurized line (mainline).

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.

IRRIGATION TRENCHING

 Pressure compensating bubbler shall be one inch (1") above finished grade. (See irrigation legend for make and model number). — Finished grade. - Swing joint. See detail.

1- All irrigation fittings shall be Sch. 40 PVC unless specified otherwise. 2— All threaded connection from Sch. 40 to Sch. 80 PVC shall be made using teflon tape. class and size).

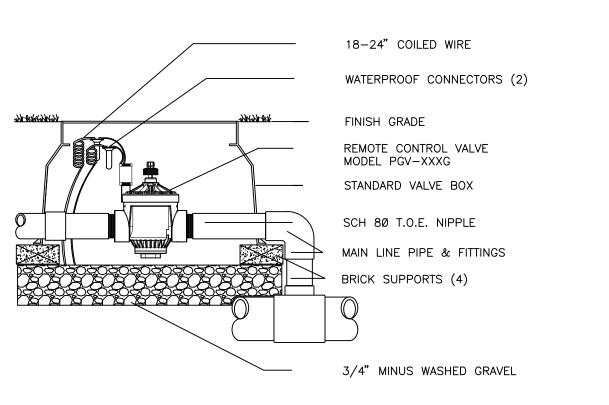
3— Contractor shall settle soil around the bubbler and swing joint prior after installation.

**BUBBLER ON SWING JOINT** 

URBAN TREE FOUNDATION ? 2014 OPEN SOURCE FREE TO USE

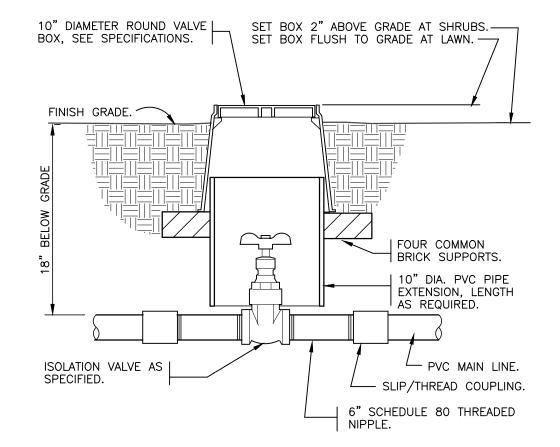
— Sch. 40 PVC tee or elbow.



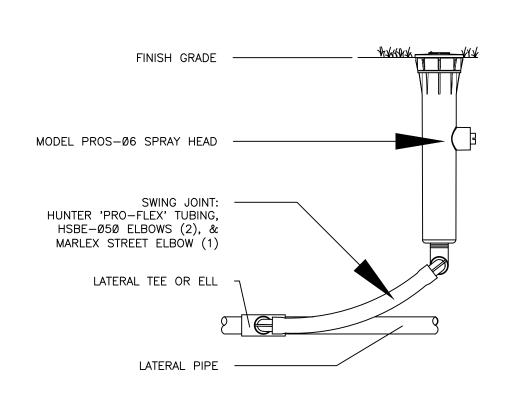


PGV GLOBE VALVE

SIDE VIEW

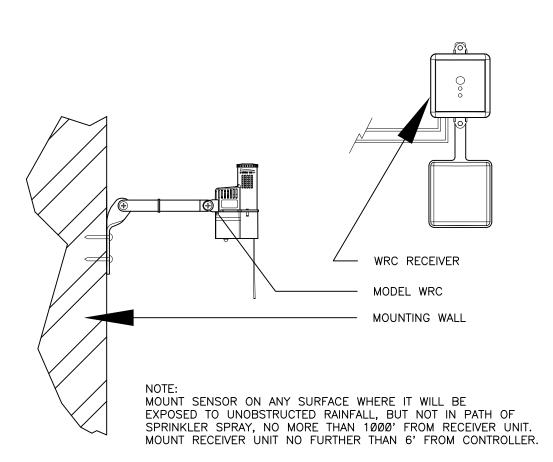


**BRASS ISOLATION VALVE** 



PROS-06 SPRAY HEAD WITH PRO-FLEX TUBING

## Hunter

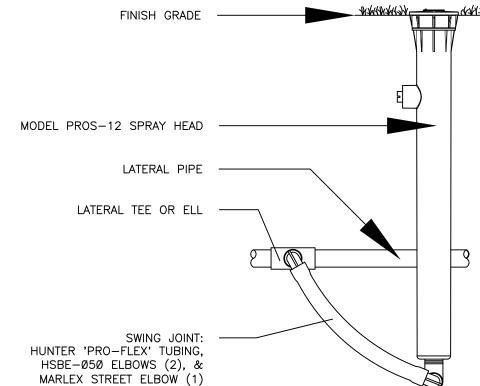


MODEL PROS-12 SPRAY HEAD LATERAL PIPE LATERAL TEE OR ELL SWING JOINT: HUNTER 'PRO-FLEX' TUBING, HSBE-Ø5Ø ELBOWS (2), &

**WIRELESS RAIN-CLIK** 

PROS-12 SPRAY HEAD WITH PRO-FLEX TUBING

## Hunter®



IRRIGATION INSTALLATION DETAILS LAYOUT



PREPARED FOR:

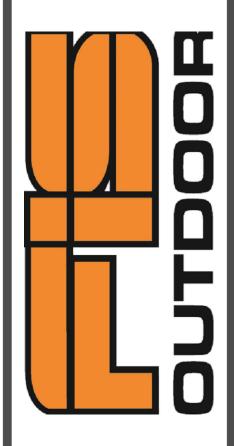
LEGACY POINTE **APARTMENTS** 

FLAGLER BEACH, FL

PREPARED BY:

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770-844-7899 www.fisoutdoor.com



TION

| REVISION | REVISION |           |  |  |
|----------|----------|-----------|--|--|
|          | COMMENTS | DATE      |  |  |
|          |          | 02-28-202 |  |  |
| (2)      |          | 05-03-202 |  |  |
| 3        |          | 08-25-202 |  |  |
| 4        |          | xx-xx-xxx |  |  |
| 5        |          | xx-xx-xxx |  |  |
|          |          |           |  |  |
|          |          |           |  |  |

DRAWING SCALE: NTS

PROJECT NUMBER:

DRAWING TITLE:

IRRIGATION DETAILS

CHECKED BY: JF

DRAWN BY: ZN

ISSUE:

AUTHORIZED: JF

ISSUE DATE: 02-14-2023

SHEET NUMBER: **IRR-03** 

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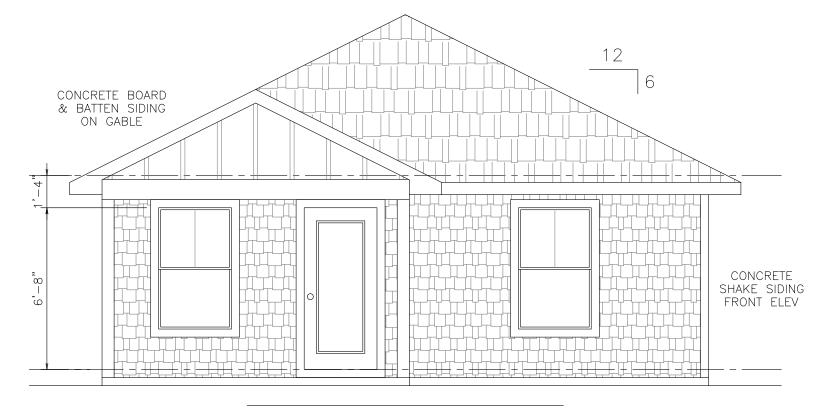
## **ELEVATION "A"**

## UNIT 1



## UNIT 5

SCALE: 1/4" = 1'-0"



## FRONT ELEVATION SCALE: 1/4" = 1'-0"

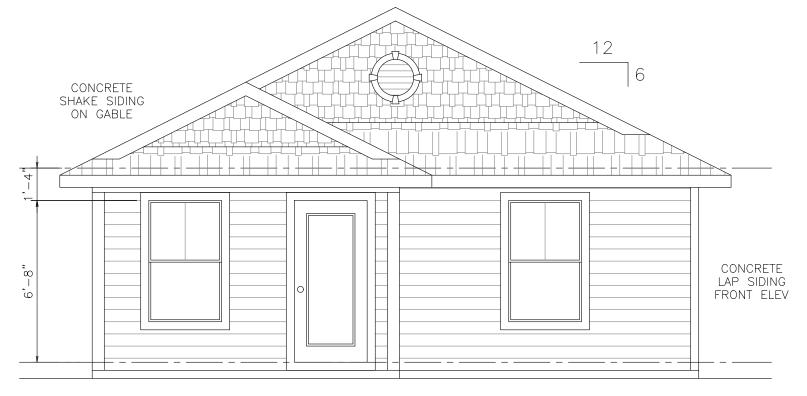
## UNIT 9



## FRONT ELEVATION SCALE: 1/4" = 1'-0"

## **ELEVATION "B"**

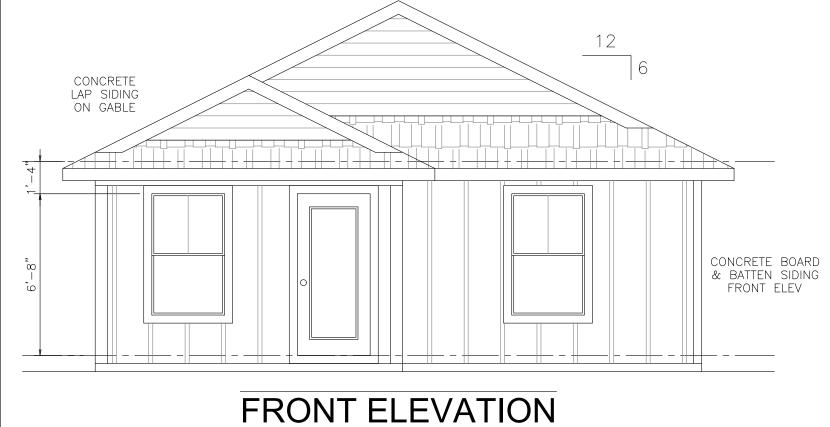
## UNIT 2



## FRONT ELEVATION

SCALE: 1/4" = 1'-0"

## UNIT 6



## UNIT 10

SCALE: 1/4" = 1'-0"



## FRONT ELEVATION

SCALE: 1/4" = 1'-0"

## **ELEVATION "C"**

## UNIT 3



## FRONT ELEVATION

SCALE: 1/4" = 1'-0"

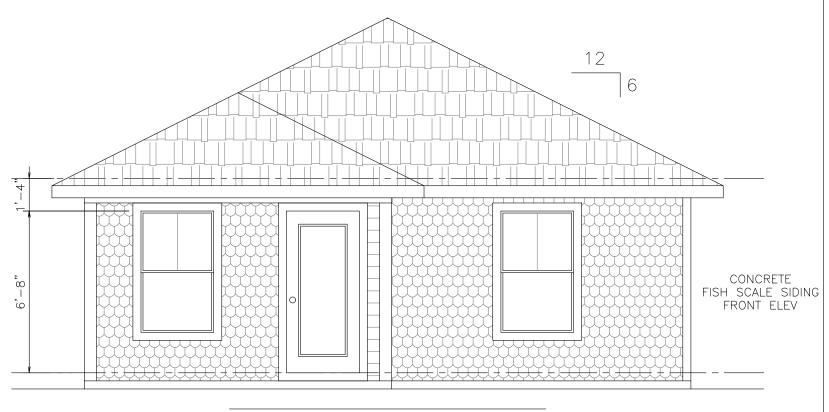
## UNIT 7



## FRONT ELEVATION

SCALE: 1/4" = 1'-0"

## UNIT 11



## FRONT ELEVATION

SCALE: 1/4" = 1'-0"

## ELEVATION "D"

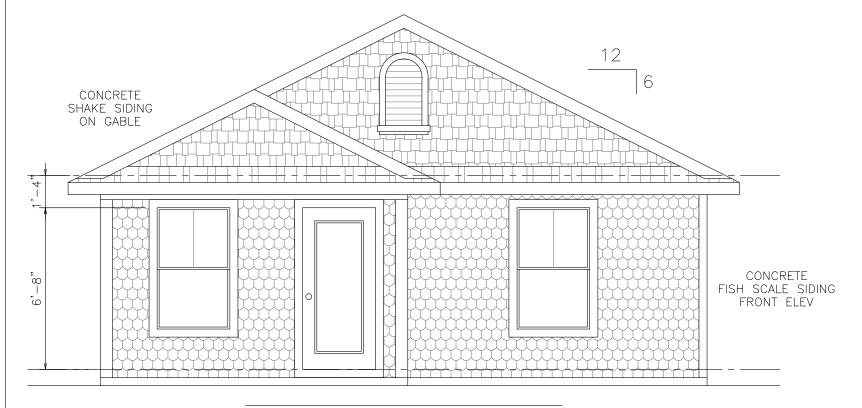
## UNIT 4



## FRONT ELEVATION

SCALE: 1/4" = 1'-0"

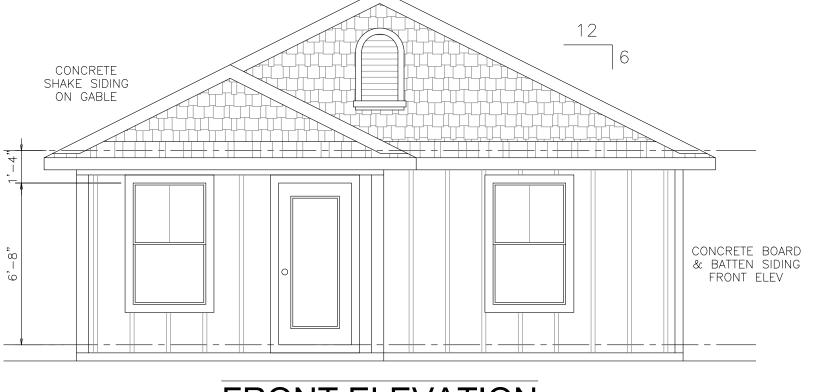
## UNIT 8



## FRONT ELEVATION

SCALE: 1/4" = 1'-0"

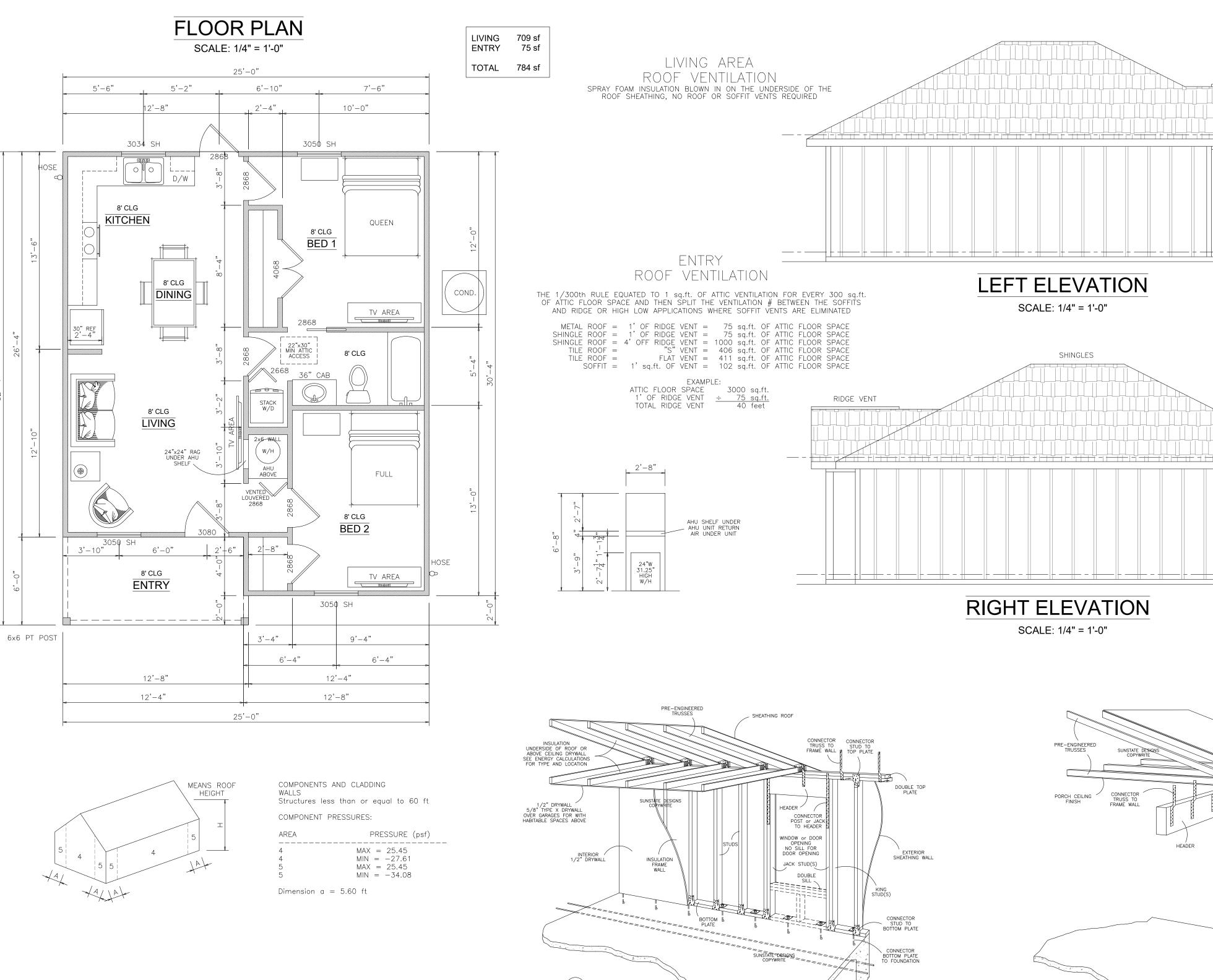
## UNIT 12

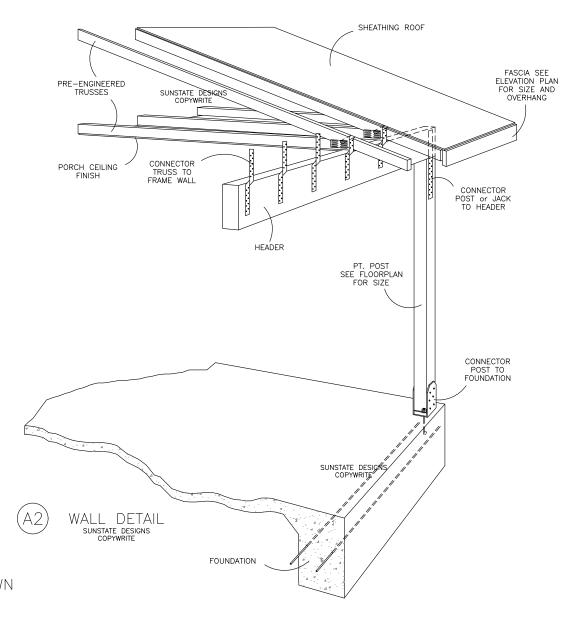


## FRONT ELEVATION

SCALE: 1/4" = 1'-0"

A-01

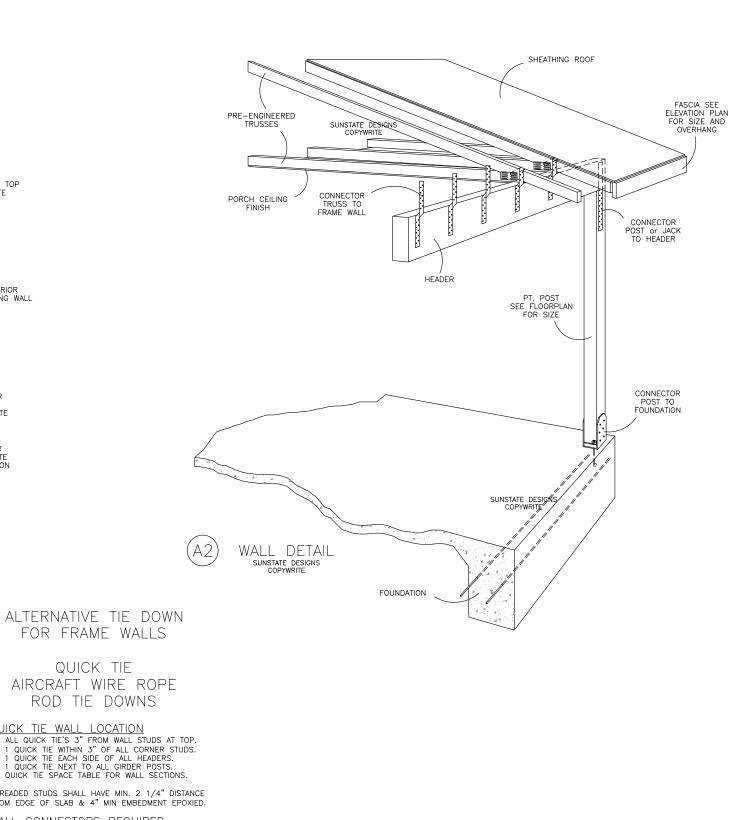




2x6 FASCIA

CONCRETE

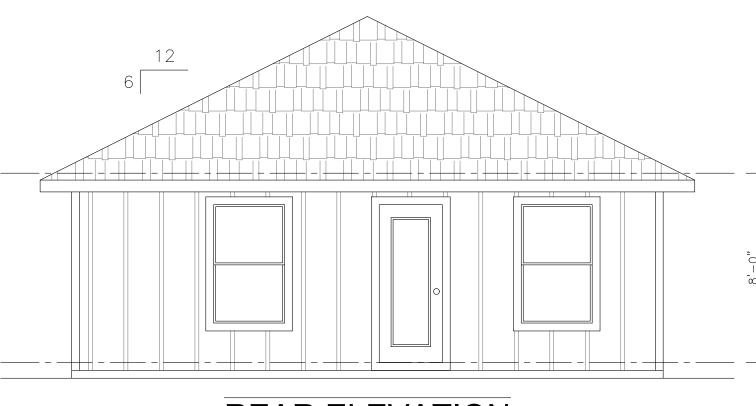
BOARD & BATTEN SIDING





## FRONT ELEVATION

SCALE: 1/4" = 1'-0"



## **REAR ELEVATION**

SCALE: 1/4" = 1'-0"

WALL SECTION NOTES:

ROOF/WALL SHEATHING 15/32" OR LESS (2 3/8"x.113") RING SHANK NAILS 6" O.C. EDGE & FIELD ROOF/WALL SHEATHING GREATER THAN 15/32" (2.5"x.131") RING SHANK NAILS 6" O.C. EDGE & FIELD ROOF SHINGLE AND TILE ROOF 20 PSF LIVE LOAD & 15 PSF DEAD LOAD

SEE FOUNDATION PLAN AND FOOTER DETAILS FOR INFORMATION. BOTH MONOLITHIC AND OR STEMWALL FOUNDATIONS CAN BE USED FOR ALL WALL DETAILS. ALL FOUNDATION AND WALL REBAR IS TO BE MINIMUM GRADE SCHEDULE 40 KSI.

CEILING FINISH CAN BE MOISTURE RESISTANT DRYWALL, DENZBOARD STUCCO, CONCRETE PANELS, VINYL BEADBOARD, 1x6 T&G OR ANYOTHER STATE APPROVED EXTERIOR CEILING PRODUCTS <u>FLOORS AND SEALED DECKS</u>

3/4" SHEATHING = T&G GLUED AND NAILED 10d SCREW OR RING SHANK 6" O.C. EDGES 6" O.C. FIELD

SEE ELEVATIONS FOR EXTERIOR FINISH (EXAMPLES: LAP SIDING OR TEXTURED FINISH).

MASONRY WALLS = ADD 1x2 PT FURRING HORIZ. OR VERT. 24" MAX. O.C. FOR LAP OR PANEL SIDING.

FRAME WALLS AND GABLES = 1 LAYER HOUSE WRAP, TEXTURED FINISH ADD PAPER BACK WIRE LATH. TEXTURED FINISH = STUCCO OR EXTERIOR PORLAND CEMENT PLASTER. 3-COAT WORK OVER METAL PLASTER BASE THICKNESS 0.875 MINIMUM. 2-COAT WORK OVER MASONRY UNIT THICKNESS 0,5 MINIMUM. 2-COAT WORK OVER CAST-IN-PLACE OR PRECAST CONCRETE THICKNESS 0.375 MINIMUM. ROOFING & SOFFIT STANDARD SHEATHING

ROOF SHEATHING, EXPOSURE B MIN 7/16", EXPOSURE C MIN 15/32", EXPOSURE D MIN 19/32" ROOF SHEATHING, MIN 19/32 FOR ALL FLAT OR BARREL TILE ROOF ROOF SHEATHING (SP) SPECIFIC GRAVITY, PLYWOOD 0.57, OSB 0.62 UNDERLAYMENT TYPE WOOD or CONCRETE SOLID SOFFITS 3/8" THICK, 6d NAILS (2 x 0.099 x HEAD DIAMETER) GALVANIZED

NAILS 6" O.C. of STAINLESS STEEL NAILS 4" O.C. ZIP SYSTEM ROOF AND WALL SHEATHING

ZIP SYSTEM STRUCTURAL SHEATHING WITH WATER-RESISTIVE BARRIER DOES NOT REQUIRE HOUSE WRAP OR FELT DRY IN UNLESS MENTIONED IN THE NOTES BELOW. ZIP SYSTEM TAPE ALL SEAMS. ZIP WALL SHEATHING = 7/16" THICK PANELS WITH GREEN SURFACE EXTERIOR OUTSIDE. ZIP ROOF SHEATHING = 1/2" THICK PANELS WITH RED SURFACE UP. USE STANDARD FLASHING FOR ROOF VALLEYS AND WHERE ROOF SURFACES MEET GABLE & WALL SURFACES.

SEE ELEVATIONS FOR ROOFING TYPE, EXAMPLES: SHINGLE, METAL OR TILE ROOFING.

SHINGLE ROOF = APPLY DIRECTLY TO ROOF SHEATHING ADD ONE LAYER 1516 FELT FOR ROOF PITCH

FROM 2/12 TO LESS GHAN 4/12

METAL ROOF = APPLY DIRECTLY TO ROOF SHEATHING

TILE ROOF = USE 5/8" THICK PANELS ADD ONE LAYER OF MIN 30Ib FELT

1 LAYER OF SELF ADHERING SYNTHETIC UNDERLAYMENT CAN REPLACE ALL FELT REQUIREMENTS AND CAN BE ADDED TO ALL ROOFS EVEN WHERE FELT IS NOT REQUIRED

FRAME WALLS

SHEATHING WALL - 7/16" SHEATHING ON EXTERIOR SIDE OF WALL USE PRESSURE TREATED LUMBER or VAPOR BARRIOR WHERE FRAMING IS IN CONTACT WITH CONCRETE STUDS - 2x4 MIN STUDS UNLESS OTHERWISE SPECIFIED ON PLAN = SPF#2 or SYP#2, 16" O.C. TOP PLATE - (2) 2x4 OVERLAP ENDS 2' LOAD BEARING WALLS (2) 10d NAILS EA END 6" BETWEEN BOTTOM PLATE - SAME SIZE AS STUDS = SYP#2 PT TO CONCRETE FLOOR & SPF#2 TO WOOD FLOOR 2×12 HEADERS SYP#2

3016 LIVE LOAD, 1016 DEAD LOAD, DEFLECTION L/240, ALL FRAME HEADERS MIN (2) 2x12 UNLESS OTHERWISE SPECIFIED HEADER TABLE (PLF) DOWNLOAD POUNDS PER LINEAR FOOT (TOTAL) TOTAL MAX DOWNLOAD POUNDS NUMBER OF 2x12's PLF TOTAL PLF TOTAL

HEADERS MAX DOWNLOAD NUMBER JACKS & KINGS 350 LBS DOWNLOAD PER STUD / HDR = HEADER, J = JACK K, = KING / KING & JACK STUD POSTS = SPF#2 or SYP# NUMBER KINGS & JACKS EA SIDE OF HDR (1)J (1)K (1)J (2)K (2)J (2)K (2)J (3)K (3)J (3)K (3)J (4)K (4)J (4)K TOTAL STUDS UNDER BOTH SIDE OF HDR (4) STUDS (6) STUDS (8) STUDS (10) STUDS (12) STUDS (14) STUDS (16) STUDS HEADER MAX LBS, POUNDS DOWNLOAD 5,400 8,100 10,800 13,500 16,200 18,900 21,600

SIMPSON HURRICANE TIE DOWN CONNECTOR TRUSS TO CONCRETE WALL - HETA16 or LONGER
TRUSS TO FRAME WALL - MTS12 or LONGER
STUD TO TOP PLATE - SP2 or SP4,6,8
STUD TO BOTTOM PLATE - SP1 or SP4,6,8
JACK/POST to HEADER SPAN 0" to 48" - (1) LSTA24 ea SIDE
JACK/POST to HEADER SPAN 49" to 73" - (2) LSTA24 ea SIDE
JACK/POST to HEADER SPAN 73" to 97" - (2) LSTA30 ea SIDE BOTTOM PLATE TO SLAB - 1/2" BOLT & 2"
WASHER 21" O.C. 6" EMBEDMENT EPOXIED OR
J-BOLT 2" MIN DIST FROM EDGE OF SLAB
4x4 POST TO SLAB - ABU44 5/8"x7" BOLT
6x6 POST TO SLAB - ABU66 5/8"x7" BOLT JACK/POST to HEADER SPAN 97" & UP - (1) MST27 ea SIDE

(1) HEADER JACK TO BOTTOM PLATE - SP1

(2) HEADER JACKS TO SLAB - LTT20B 1/2"x6" BOLT

(3) HEADER JACKS TO SLAB - HTT4 5/8"x7" BOLT

(4) HEADER JACKS TO SLAB - HTT5 5/8"x7" BOLT

OTHER CONNECTORS MAY BE CALLED OUT ON FLOOR, STRUCTURAL OR TRUSS SHEETS OTHER SAME/SIMILAR USE TYPE CONNECTORS OF EQUAL OR GREATER STRENGTHS ARE ACCEPTABLE SUBSTITUTES CORY A BROCKETT, PE LICENSE #74677 2939 NW 39th PLACE GAINESVILLE, FL 32605 352-359-1982

GROU [LEGAC

JOB NUMBER 3731 PLAN DATE

4/19/24 "PLANS CONFORM TO" 2023 FLORIDA BUILDING CODE 2020 NATIONAL ELEC CODE 2018 WFCM DESIGN CRITERIA 2014 ASCE24 FLOOD DESIGN STRUCTURALLY ADEQUATE FOR ALTERATION LEVEL: N/A

RISK CATEGORY: 2 WIND VELOCITY (MPH): 140 EXPOSURE CATEGORY: C INTERNAL PRESSURE: .18 CONSTRUCTION TYPE: VB

2401 LESLIE ST FLAGLER BEACH

FLORIDA FLOOR ELEV

**A-02** 



LEDGER BOARDS: ARE NEVER TO BE USED ON ANY 10 STORY HOUSES MASONRY OR

BLOW, MIN  $\frac{1}{4}$ " IN 12" DOWN SLOPE TO ALL OUTER EDGES OF THE BALCONY

## TRUSS COMPANY NOTES:

DO NOT START TRUSS DESIGN UNLESS TRUSS COMPANY ACCEPTS ALL TRUSS NOTES LOAD BEARING WALLS AND HEIGHTS ARE PROVIDED ON THE PLAN: PLEASE DO NOT ADD OR CHANGE LOAD BEARING WALLS WITHOUT CALLING THE DESIGNER OF RECORD THE

REQUESTED CHANGE, NEVER EXPECT CHANGES TO BE FOUND ON THE TRUSS LAYOUT

ALL AREAS OF FLOOR AND ROOF TRUSS SYSTEM ARE TO BE PROVIDED BY TRUSS COMPANY, NO AREAS ARE TO BE PROVIDED BY OTHERS BALCONY FLOOR TRUSSES: 6" STEP DOWN TO BALCONY. BALCONY IS ROOF OVER AREA

LAMINATE BEAMS: CALLED OUT ON PLANS ARE TO BE PROVIDED BY TRUSS CO, THANKS

WALL DETAIL

4" MIN EMBEDMENT EPOXIED 2 1/4" MIN FROM SLAB EDGE

AIRCRAFT WIRE ROPE ROD TIE DOWNS QUICK TIE WALL LOCATION

ALL QUICK TIE'S 3" FROM WALL STUDS AT TOP.

1 QUICK TIE WITHIN 3" OF ALL CORNER STUDS.

1 QUICK TIE EACH SIDE OF ALL HEADERS.

1 QUICK TIE NEXT TO ALL GIRDER POSTS.

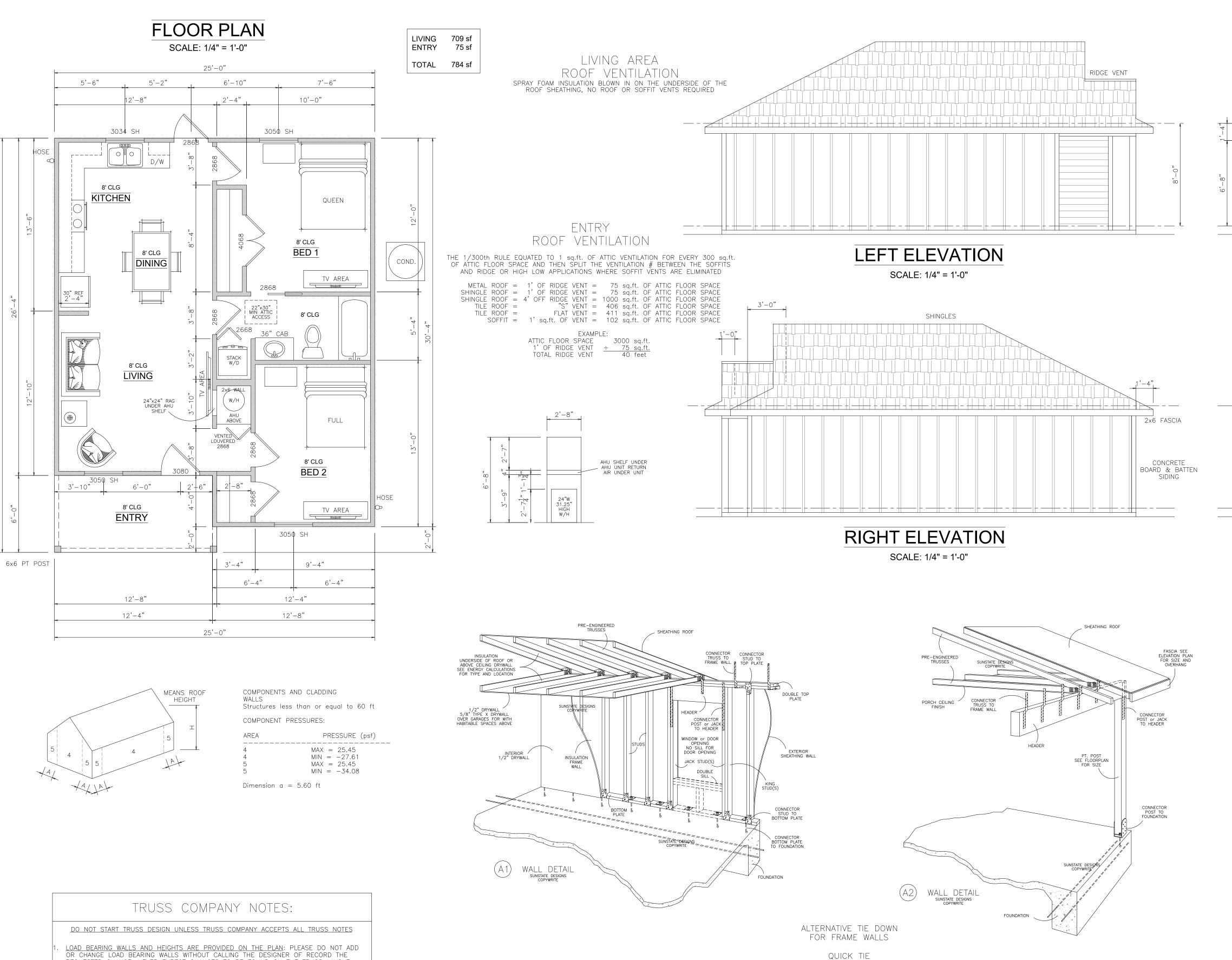
QUICK TIE SPACE TABLE FOR WALL SECTIONS. THREADED STUDS SHALL HAVE MIN. 2 1/4" DISTANCE FROM EDGE OF SLAB & 4" MIN EMBEDMENT EPOXIED. WALL CONNECTORS REQUIRED

ROOF TRUSS TO WALL CONNECTORS.

ROOF TRUSS CONNECTORS CONNECTS TO HEADERS
SIMPSON CS16-32" HEADERS TO JACKS WHERE HEADER IS WIDER THAN QUICK TIE SPACING INTERIOR WALLS: (1) SIMPSON SPH TOP PLATE TO STUD WITH QUICK TIE SPACING 3' TO 5'. (2) SIMPSON SPH TOP PLATE TO STUD WITH QUICK TIE SPACING 5' TO 8'.

BOTTOM PLATE TO SLAB OR MASONRY WALL 1/2' BOLTS 24" O.C. MAX SPACE BETWEEN QUICK TE
FLOOR TRUSSES TO MASONRY WALLS STILL REQUIRE
HETA20 EACH QUICK TIE SPACING TABLE TRUSS UPLIFT QUICK TIE PER TRUSS SPACING 24" O.C. FT. & IN. 0-400 8'-0" 1161 4'-0" 522 7'-0" 1547 3'-0"

QUICK TIE



REQUESTED CHANGE, NEVER EXPECT CHANGES TO BE FOUND ON THE TRUSS LAYOUT

LEDGER BOARDS: ARE NEVER TO BE USED ON ANY 10 STORY HOUSES MASONRY OR

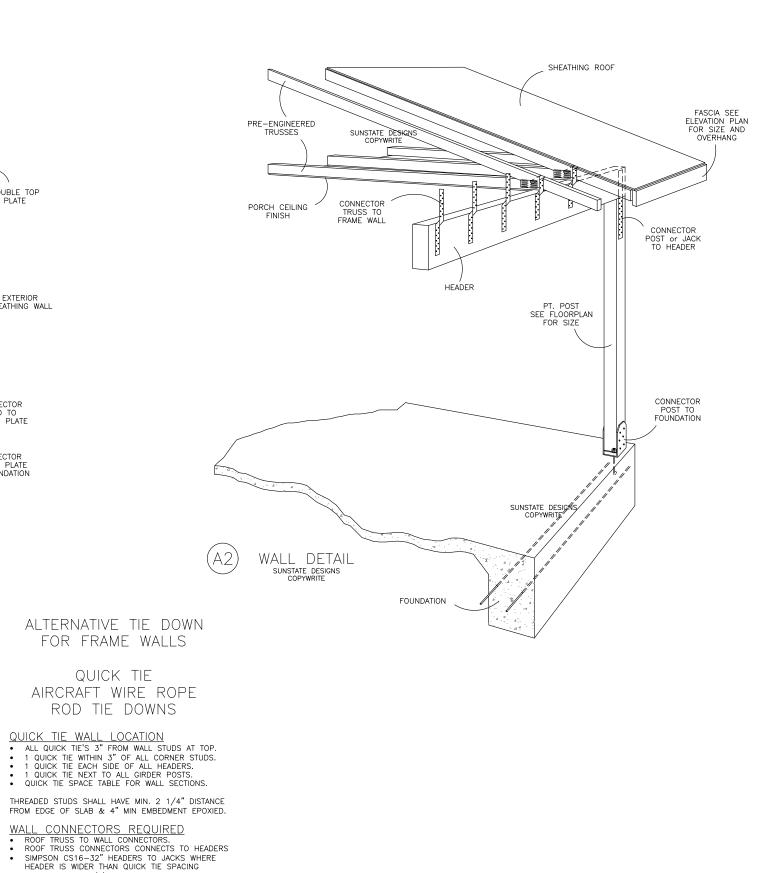
ALL AREAS OF FLOOR AND ROOF TRUSS SYSTEM ARE TO BE PROVIDED BY TRUSS

BLOW, MIN  $\frac{1}{4}$ " IN 12" DOWN SLOPE TO ALL OUTER EDGES OF THE BALCONY

BALCONY FLOOR TRUSSES: 6" STEP DOWN TO BALCONY. BALCONY IS ROOF OVER AREA

LAMINATE BEAMS: CALLED OUT ON PLANS ARE TO BE PROVIDED BY TRUSS CO, THANKS

COMPANY, NO AREAS ARE TO BE PROVIDED BY OTHERS



QUICK TIE

INTERIOR WALLS: (1) SIMPSON SPH TOP PLATE TO STUD WITH QUICK TIE SPACING 3' TO 5'. (2) SIMPSON SPH TOP PLATE TO STUD WITH QUICK TIE

QUICK TIE SPACING TABLE

TRUSS UPLIFT QUICK TIE PER TRUSS SPACING 24" O.C. FT. & IN. 0-400 8'-0" 1161 4'-0" 522 7'-0" 1547 3'-0"

4" MIN EMBEDMENT EPOXIED 2 1/4" MIN FROM SLAB EDGE

SPACING 5' TO 8'.

BOTTOM PLATE TO SLAB OR MASONRY WALL 1/2' BOLTS 24" O.C. MAX SPACE BETWEEN QUICK TE
FLOOR TRUSSES TO MASONRY WALLS STILL REQUIRE
HETA20 EACH



SCALE: 1/4" = 1'-0"

CONCRETE

SHAKE SIDING ON GABLE

## **REAR ELEVATION**

SCALE: 1/4" = 1'-0"

WALL SECTION NOTES:

ROOF/WALL SHEATHING 15/32" OR LESS (2 3/8"x.113") RING SHANK NAILS 6" O.C. EDGE & FIELD ROOF/WALL SHEATHING GREATER THAN 15/32" (2.5"x.131") RING SHANK NAILS 6" O.C. EDGE & FIELD ROOF SHINGLE AND TILE ROOF 20 PSF LIVE LOAD & 15 PSF DEAD LOAD

SEE FOUNDATION PLAN AND FOOTER DETAILS FOR INFORMATION. BOTH MONOLITHIC AND OR STEMWALL FOUNDATIONS CAN BE USED FOR ALL WALL DETAILS. ALL FOUNDATION AND WALL REBAR IS TO BE MINIMUM GRADE SCHEDULE 40 KSI.

CEILING FINISH CAN BE MOISTURE RESISTANT DRYWALL, DENZBOARD STUCCO, CONCRETE PANELS, VINYL BEADBOARD, 1x6 T&G OR ANYOTHER STATE APPROVED EXTERIOR CEILING PRODUCTS <u>FLOORS AND SEALED DECKS</u>

3/4" SHEATHING = T&G GLUED AND NAILED 10d SCREW OR RING SHANK 6" O.C. EDGES 6" O.C. FIELD

SEE ELEVATIONS FOR EXTERIOR FINISH (EXAMPLES: LAP SIDING OR TEXTURED FINISH).

MASONRY WALLS = ADD 1x2 PT FURRING HORIZ. OR VERT. 24" MAX. O.C. FOR LAP OR PANEL SIDING.

FRAME WALLS AND GABLES = 1 LAYER HOUSE WRAP, TEXTURED FINISH ADD PAPER BACK WIRE LATH. TEXTURED FINISH = STUCCO OR EXTERIOR PORLAND CEMENT PLASTER. 3-COAT WORK OVER METAL PLASTER BASE THICKNESS 0.875 MINIMUM. 2-COAT WORK OVER MASONRY UNIT THICKNESS 0,5 MINIMUM. 2-COAT WORK OVER CAST-IN-PLACE OR PRECAST CONCRETE THICKNESS 0.375 MINIMUM. ROOFING & SOFFIT STANDARD SHEATHING

ROOF SHEATHING, EXPOSURE B MIN 7/16", EXPOSURE C MIN 15/32", EXPOSURE D MIN 19/32" ROOF SHEATHING, MIN 19/32 FOR ALL FLAT OR BARREL TILE ROOF ROOF SHEATHING (SP) SPECIFIC GRAVITY, PLYWOOD 0.57, OSB 0.62 UNDERLAYMENT TYPE WOOD or CONCRETE SOLID SOFFITS 3/8" THICK, 6d NAILS (2 x 0.099 x HEAD DIAMETER) GALVANIZED NAILS 6" O.C. of STAINLESS STEEL NAILS 4" O.C.

ZIP SYSTEM ROOF AND WALL SHEATHING ZIP SYSTEM STRUCTURAL SHEATHING WITH WATER-RESISTIVE BARRIER DOES NOT REQUIRE HOUSE WRAP OR FELT DRY IN UNLESS MENTIONED IN THE NOTES BELOW. ZIP SYSTEM TAPE ALL SEAMS. ZIP WALL SHEATHING = 7/16" THICK PANELS WITH GREEN SURFACE EXTERIOR OUTSIDE. ZIP ROOF SHEATHING = 1/2" THICK PANELS WITH RED SURFACE UP. USE STANDARD

FLASHING FOR ROOF VALLEYS AND WHERE ROOF SURFACES MEET GABLE & WALL SURFACES.

SEE ELEVATIONS FOR ROOFING TYPE, EXAMPLES: SHINGLE, METAL OR TILE ROOFING.

SHINGLE ROOF = APPLY DIRECTLY TO ROOF SHEATHING ADD ONE LAYER 1516 FELT FOR ROOF PITCH FROM 2/12 TO LESS GHAN 4/12

METAL ROOF = APPLY DIRECTLY TO ROOF SHEATHING

TILE ROOF = USE 5/8" THICK PANELS ADD ONE LAYER OF MIN 30Ib FELT

1 LAYER OF SELF ADHERING SYNTHETIC UNDERLAYMENT CAN REPLACE ALL FELT REQUIREMENTS AND

CAN BE ADDED TO ALL ROOFS EVEN WHERE FELT IS NOT REQUIRED

FRAME WALLS SHEATHING WALL - 7/16" SHEATHING ON EXTERIOR SIDE OF WALL

USE PRESSURE TREATED LUMBER or VAPOR BARRIOR WHERE FRAMING IS IN CONTACT WITH CONCRETE STUDS - 2x4 MIN STUDS UNLESS OTHERWISE SPECIFIED ON PLAN = SPF#2 or SYP#2, 16" O.C. TOP PLATE - (2) 2x4 OVERLAP ENDS 2' LOAD BEARING WALLS (2) 10d NAILS EA END 6" BETWEEN BOTTOM PLATE - SAME SIZE AS STUDS = SYP#2 PT TO CONCRETE FLOOR & SPF#2 TO WOOD FLOOR 2×12 HEADERS SYP#2

3016 LIVE LOAD, 1016 DEAD LOAD, DEFLECTION L/240, ALL FRAME HEADERS MIN (2) 2x12 UNLESS OTHERWISE SPECIFIED HEADER TABLE (PLF) DOWNLOAD POUNDS PER LINEAR FOOT (TOTAL) TOTAL MAX DOWNLOAD POUNDS NUMBER OF 2x12's PLF TOTAL PLF TOTAL

HEADERS MAX DOWNLOAD NUMBER JACKS & KINGS 350 LBS DOWNLOAD PER STUD / HDR = HEADER, J = JACK K, = KING / KING & JACK STUD POSTS = SPF#2 or SYP# NUMBER KINGS & JACKS EA SIDE OF HDR (1)J (1)K (1)J (2)K (2)J (2)K (2)J (3)K (3)J (3)K (3)J (4)K (4)J (4)K TOTAL STUDS UNDER BOTH SIDE OF HDR (4) STUDS (6) STUDS (8) STUDS (10) STUDS (12) STUDS (14) STUDS (16) STUDS HEADER MAX LBS, POUNDS DOWNLOAD 5,400 8,100 10,800 13,500 16,200 18,900 21,600

SIMPSON HURRICANE TIE DOWN CONNECTOR TRUSS TO CONCRETE WALL - HETA16 or LONGER
TRUSS TO FRAME WALL - MTS12 or LONGER
STUD TO TOP PLATE - SP2 or SP4,6,8
STUD TO BOTTOM PLATE - SP1 or SP4,6,8
JACK/POST to HEADER SPAN 0" to 48" - (1) LSTA24 ea SIDE
JACK/POST to HEADER SPAN 49" to 73" - (2) LSTA24 ea SIDE
JACK/POST to HEADER SPAN 73" to 97" - (2) LSTA30 ea SIDE

BOTTOM PLATE TO SLAB - 1/2" BOLT & 2"
WASHER 21" O.C. 6" EMBEDMENT EPOXIED OR
J-BOLT 2" MIN DIST FROM EDGE OF SLAB
4x4 POST TO SLAB - ABU44 5/8"x7" BOLT
6x6 POST TO SLAB - ABU66 5/8"x7" BOLT JACK/POST to HEADER SPAN 97" & UP - (1) MST27 ea SIDE

(1) HEADER JACK TO BOTTOM PLATE - SP1

(2) HEADER JACKS TO SLAB - LTT20B 1/2"x6" BOLT

(3) HEADER JACKS TO SLAB - HTT4 5/8"x7" BOLT

(4) HEADER JACKS TO SLAB - HTT5 5/8"x7" BOLT OTHER CONNECTORS MAY BE CALLED OUT ON FLOOR, STRUCTURAL OR TRUSS SHEETS OTHER SAME/SIMILAR USE TYPE CONNECTORS OF EQUAL OR GREATER STRENGTHS ARE ACCEPTABLE SUBSTITUTES

CORY A BROCKETT, PE LICENSE #74677 2939 NW 39th PLACE GAINESVILLE, FL 32605 352-359-1982

CONCRETE LAP SIDING FRONT ELEV

GROUP [LEGAC]

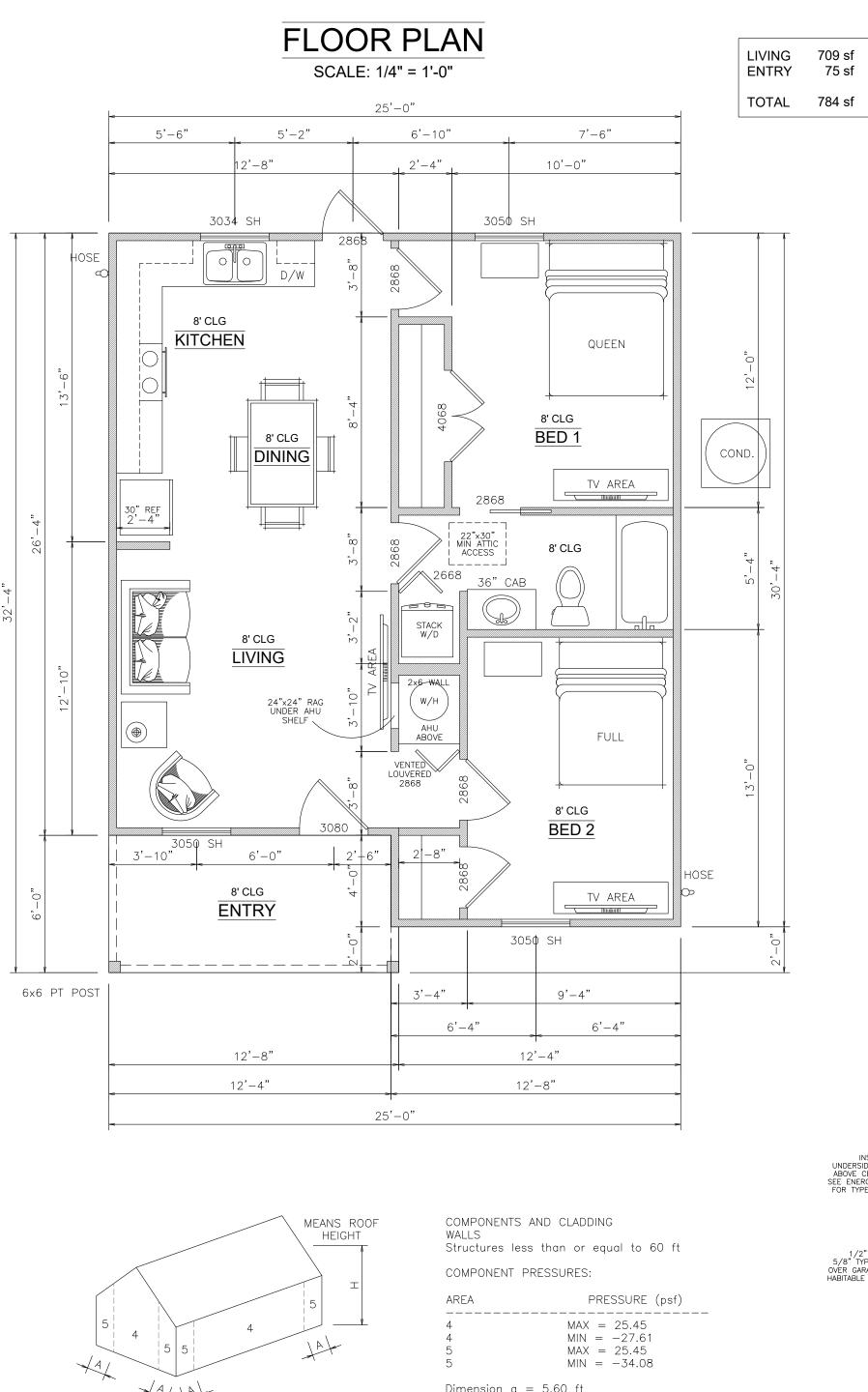
JOB NUMBER 3748 PLAN DATE

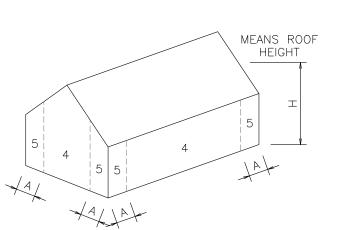
4/21/24 "PLANS CONFORM TO" 2023 FLORIDA BUILDING CODE 2020 NATIONAL ELEC CODE 2018 WFCM DESIGN CRITERIA 2014 ASCE24 FLOOD DESIGN STRUCTURALLY ADEQUATE FOR ALTERATION LEVEL: N/A RISK CATEGORY: 2

WIND VELOCITY (MPH): 140 EXPOSURE CATEGORY: C INTERNAL PRESSURE: .18 CONSTRUCTION TYPE: VB

2401 LESLIE ST FLAGLER BEACH FLORIDA

FLOOR ELEV





Dimension a = 5.60 ft

## TRUSS COMPANY NOTES:

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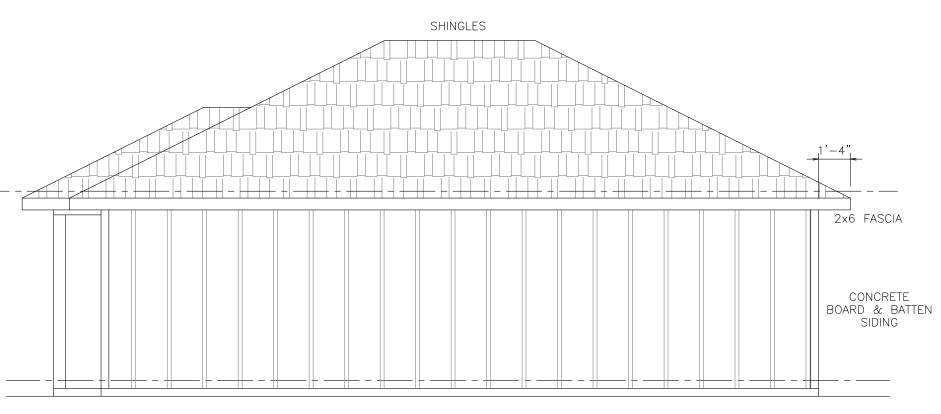
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BLOW, MIN  $\frac{1}{4}$ " IN 12" DOWN SLOPE TO ALL OUTER EDGES OF THE BALCONY LAMINATE BEAMS: CALLED OUT ON PLANS ARE TO BE PROVIDED BY TRUSS CO, THANKS



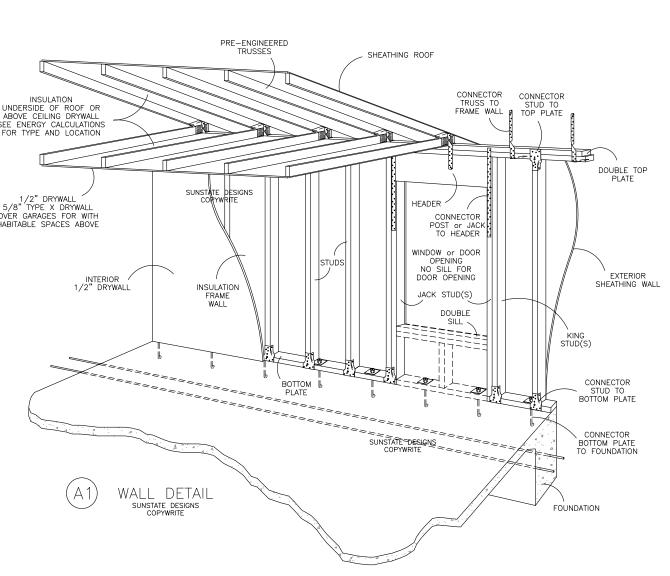
LIVING AREA ROOF VENTILATION SPRAY FOAM INSULATION BLOWN IN ON THE UNDERSIDE OF THE ROOF SHEATHING, NO ROOF OR SOFFIT VENTS REQUIRED

LEFT ELEVATION ENTRY SOFFIT VENTS ONLY SCALE: 1/4" = 1'-0" R806.2 MINIMUM VENT AREA
THE MINIMUM NET FREE VENTILATING AREA SHALL BE
1/150 OF THE AREA OF THE VENTED SPACE.



**RIGHT ELEVATION** 

SCALE: 1/4" = 1'-0"



AIRCRAFT WIRE ROPE 4" MIN EMBEDMENT EPOXIED 2 1/4" MIN FROM SLAB EDGE

SHEATHING ROOF PORCH CEILING FINISH PT. POST SEE FLOORPLAN FOR SIZE WALL DETAIL SUNSTATE DESIGNS COPYWRITE ALTERNATIVE TIE DOWN FOR FRAME WALLS

ROD TIE DOWNS QUICK TIE WALL LOCATION

ALL QUICK TIE'S 3" FROM WALL STUDS AT TOP.

1 QUICK TIE WITHIN 3" OF ALL CORNER STUDS.

1 QUICK TIE EACH SIDE OF ALL HEADERS.

1 QUICK TIE NEXT TO ALL GIRDER POSTS.

QUICK TIE SPACE TABLE FOR WALL SECTIONS. THREADED STUDS SHALL HAVE MIN. 2 1/4" DISTANCE FROM EDGE OF SLAB & 4" MIN EMBEDMENT EPOXIED. WALL CONNECTORS REQUIRED

ROOF TRUSS TO WALL CONNECTORS.

ROOF TRUSS CONNECTORS CONNECTS TO HEADERS
SIMPSON CS16-32" HEADERS TO JACKS WHERE HEADER IS WIDER THAN QUICK TIE SPACING INTERIOR WALLS: (1) SIMPSON SPH TOP PLATE TO STUD WITH QUICK TIE SPACING 3' TO 5'. (2) SIMPSON SPH TOP PLATE TO STUD WITH QUICK TIE SPACING 5' TO 8'.

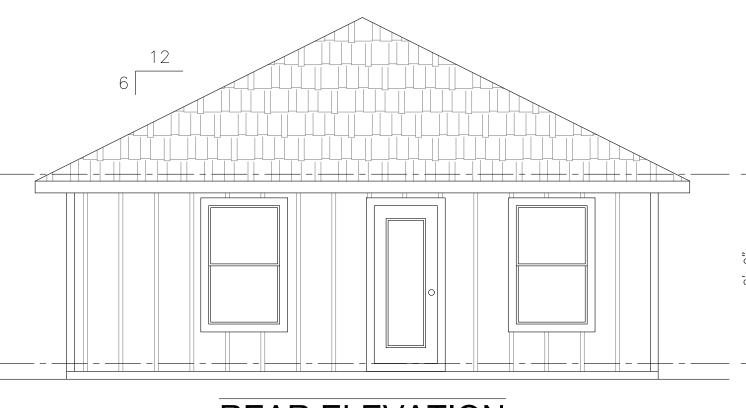
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FLOOR TRUSSES TO MASONRY WALLS STILL REQUIRE
HETA20 EACH QUICK TIE SPACING TABLE TRUSS UPLIFT QUICK TIE PER TRUSS SPACING 24" O.C. FT. & IN. 0-400 8'-0" 1161 4'-0" 522 7'-0" 1547 3'-0"

QUICK TIE

CONCRETE SHAKE SIDING FRONT ELEV

## FRONT ELEVATION

SCALE: 1/4" = 1'-0"



## **REAR ELEVATION**

SCALE: 1/4" = 1'-0"

WALL SECTION NOTES:

ROOF/WALL SHEATHING 15/32" OR LESS (2 3/8"x.113") RING SHANK NAILS 6" O.C. EDGE & FIELD ROOF/WALL SHEATHING GREATER THAN 15/32" (2.5"x.131") RING SHANK NAILS 6" O.C. EDGE & FIELD ROOF SHINGLE AND TILE ROOF 20 PSF LIVE LOAD & 15 PSF DEAD LOAD

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FRAME WALLS AND GABLES = 1 LAYER HOUSE WRAP, TEXTURED FINISH ADD PAPER BACK WIRE LATH. TEXTURED FINISH = STUCCO OR EXTERIOR PORLAND CEMENT PLASTER. 3-COAT WORK OVER METAL PLASTER BASE THICKNESS 0.875 MINIMUM. 2-COAT WORK OVER MASONRY UNIT THICKNESS 0,5 MINIMUM. 2-COAT WORK OVER CAST-IN-PLACE OR PRECAST CONCRETE THICKNESS 0.375 MINIMUM. ROOFING & SOFFIT STANDARD SHEATHING

ROOF SHEATHING, EXPOSURE B MIN 7/16", EXPOSURE C MIN 15/32", EXPOSURE D MIN 19/32" ROOF SHEATHING, MIN 19/32 FOR ALL FLAT OR BARREL TILE ROOF ROOF SHEATHING (SP) SPECIFIC GRAVITY, PLYWOOD 0.57, OSB 0.62 UNDERLAYMENT TYPE WOOD or CONCRETE SOLID SOFFITS 3/8" THICK, 6d NAILS (2 x 0.099 x HEAD DIAMETER) GALVANIZED

NAILS 6" O.C. of STAINLESS STEEL NAILS 4" O.C. ZIP SYSTEM ROOF AND WALL SHEATHING

ZIP SYSTEM STRUCTURAL SHEATHING WITH WATER-RESISTIVE BARRIER DOES NOT REQUIRE HOUSE WRAP OR FELT DRY IN UNLESS MENTIONED IN THE NOTES BELOW. ZIP SYSTEM TAPE ALL SEAMS. ZIP WALL SHEATHING = 7/16" THICK PANELS WITH GREEN SURFACE EXTERIOR OUTSIDE. ZIP ROOF SHEATHING = 1/2" THICK PANELS WITH RED SURFACE UP. USE STANDARD FLASHING FOR ROOF VALLEYS AND WHERE ROOF SURFACES MEET GABLE & WALL SURFACES.

SEE ELEVATIONS FOR ROOFING TYPE, EXAMPLES: SHINGLE, METAL OR TILE ROOFING.

SHINGLE ROOF = APPLY DIRECTLY TO ROOF SHEATHING ADD ONE LAYER 1516 FELT FOR ROOF PITCH

FROM 2/12 TO LESS GHAN 4/12

METAL ROOF = APPLY DIRECTLY TO ROOF SHEATHING

TILE ROOF = USE 5/8" THICK PANELS ADD ONE LAYER OF MIN 30Ib FELT

1 LAYER OF SELF ADHERING SYNTHETIC UNDERLAYMENT CAN REPLACE ALL FELT REQUIREMENTS AND CAN BE ADDED TO ALL ROOFS EVEN WHERE FELT IS NOT REQUIRED

FRAME WALLS

SHEATHING WALL - 7/16" SHEATHING ON EXTERIOR SIDE OF WALL USE PRESSURE TREATED LUMBER or VAPOR BARRIOR WHERE FRAMING IS IN CONTACT WITH CONCRETE STUDS - 2x4 MIN STUDS UNLESS OTHERWISE SPECIFIED ON PLAN = SPF#2 or SYP#2, 16" O.C. TOP PLATE - (2) 2x4 OVERLAP ENDS 2' LOAD BEARING WALLS (2) 10d NAILS EA END 6" BETWEEN BOTTOM PLATE - SAME SIZE AS STUDS = SYP#2 PT TO CONCRETE FLOOR & SPF#2 TO WOOD FLOOR 2×12 HEADERS SYP#2

3016 LIVE LOAD, 1016 DEAD LOAD, DEFLECTION L/240, ALL FRAME HEADERS MIN (2) 2x12 UNLESS OTHERWISE SPECIFIED HEADER TABLE (PLF) DOWNLOAD POUNDS PER LINEAR FOOT (TOTAL) TOTAL MAX DOWNLOAD POUNDS NUMBER OF 2x12's PLF TOTAL PLF TOTAL

HEADERS MAX DOWNLOAD NUMBER JACKS & KINGS 350 LBS DOWNLOAD PER STUD / HDR = HEADER, J = JACK K, = KING / KING & JACK STUD POSTS = SPF#2 or SYP#: NUMBER KINGS & JACKS EA SIDE OF HDR (1)J (1)K (1)J (2)K (2)J (2)K (2)J (3)K (3)J (3)K (3)J (4)K (4)J (4)K TOTAL STUDS UNDER BOTH SIDE OF HDR (4) STUDS (6) STUDS (8) STUDS (10) STUDS (12) STUDS (14) STUDS (16) STUDS HEADER MAX LBS, POUNDS DOWNLOAD 5,400 8,100 10,800 13,500 16,200 18,900 21,600

SIMPSON HURRICANE TIE DOWN CONNECTOR TRUSS TO CONCRETE WALL - HETA16 or LONGER
TRUSS TO FRAME WALL - MTS12 or LONGER
STUD TO TOP PLATE - SP2 or SP4,6,8
STUD TO BOTTOM PLATE - SP1 or SP4,6,8
JACK/POST to HEADER SPAN 0" to 48" - (1) LSTA24 ea SIDE
JACK/POST to HEADER SPAN 49" to 73" - (2) LSTA24 ea SIDE
JACK/POST to HEADER SPAN 73" to 97" - (2) LSTA30 ea SIDE BOTTOM PLATE TO SLAB - 1/2" BOLT & 2"
WASHER 21" O.C. 6" EMBEDMENT EPOXIED OR
J-BOLT 2" MIN DIST FROM EDGE OF SLAB
4x4 POST TO SLAB - ABU44 5/8"x7" BOLT
6x6 POST TO SLAB - ABU66 5/8"x7" BOLT JACK/POST to HEADER SPAN 97" & UP - (1) MST27 ea SIDE

(1) HEADER JACK TO BOTTOM PLATE - SP1

(2) HEADER JACKS TO SLAB - LTT20B 1/2"x6" BOLT

(3) HEADER JACKS TO SLAB - HTT4 5/8"x7" BOLT

(4) HEADER JACKS TO SLAB - HTT5 5/8"x7" BOLT

OTHER CONNECTORS MAY BE CALLED OUT ON FLOOR, STRUCTURAL OR TRUSS SHEETS OTHER SAME/SIMILAR USE TYPE CONNECTORS OF EQUAL OR GREATER STRENGTHS ARE ACCEPTABLE SUBSTITUTES CORY A BROCKETT, PE LICENSE #74677 2939 NW 39th PLACE GAINESVILLE, FL 32605 352-359-1982

GROUP LEGACY



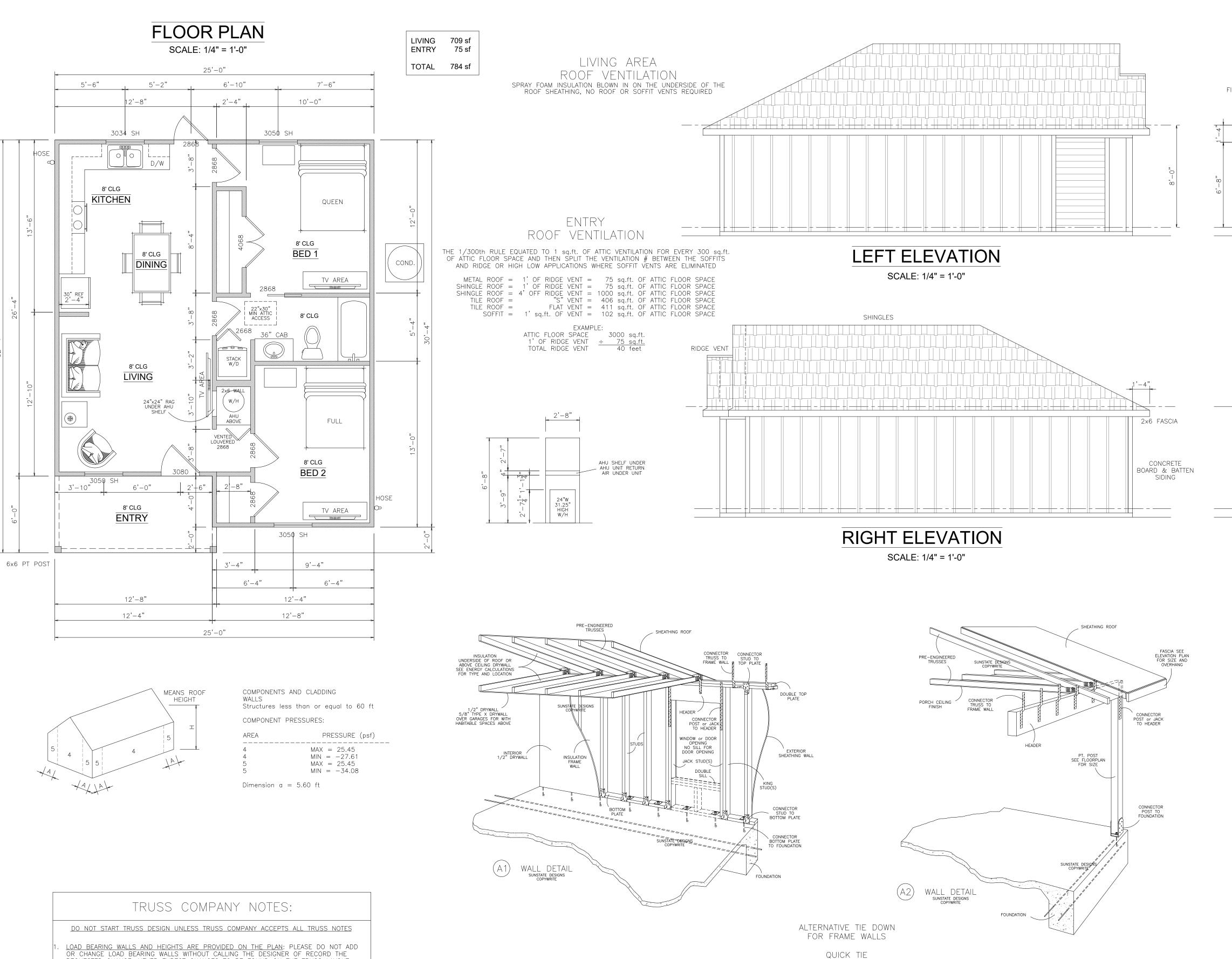
JOB NUMBER 3749 PLAN DATE 4/21/24

"PLANS CONFORM TO" 2023 FLORIDA BUILDING CODE 2020 NATIONAL ELEC CODE 2018 WFCM DESIGN CRITERIA 2014 ASCE24 FLOOD DESIGN STRUCTURALLY ADEQUATE FOR ALTERATION LEVEL: N/A

RISK CATEGORY: 2 WIND VELOCITY (MPH): 140 EXPOSURE CATEGORY: C INTERNAL PRESSURE: .18 CONSTRUCTION TYPE: VB

> 2401 LESLIE ST FLAGLER BEACH

FLORIDA FLOOR ELEV



AIRCRAFT WIRE ROPE

ROD TIE DOWNS

QUICK TIE WALL LOCATION

ALL QUICK TIE'S 3" FROM WALL STUDS AT TOP.

1 QUICK TIE WITHIN 3" OF ALL CORNER STUDS.

1 QUICK TIE EACH SIDE OF ALL HEADERS.

1 QUICK TIE NEXT TO ALL GIRDER POSTS.

QUICK TIE SPACE TABLE FOR WALL SECTIONS.

THREADED STUDS SHALL HAVE MIN. 2 1/4" DISTANCE

FROM EDGE OF SLAB & 4" MIN EMBEDMENT EPOXIED.

WALL CONNECTORS REQUIRED

ROOF TRUSS TO WALL CONNECTORS.

ROOF TRUSS CONNECTORS CONNECTS TO HEADERS
SIMPSON CS16-32" HEADERS TO JACKS WHERE HEADER IS WIDER THAN QUICK TIE SPACING

INTERIOR WALLS: (1) SIMPSON SPH TOP PLATE TO STUD WITH QUICK TIE SPACING 3' TO 5'. (2) SIMPSON SPH TOP PLATE TO STUD WITH QUICK TIE

QUICK TIE SPACING TABLE

TRUSS UPLIFT QUICK TIE PER TRUSS SPACING 24" O.C. FT. & IN. 0-400 8'-0" 1161 4'-0" 522 7'-0" 1547 3'-0"

4" MIN EMBEDMENT EPOXIED 2 1/4" MIN FROM SLAB EDGE

SPACING 5' TO 8'.

BOTTOM PLATE TO SLAB OR MASONRY WALL 1/2' BOLTS 24" O.C. MAX SPACE BETWEEN QUICK TE
FLOOR TRUSSES TO MASONRY WALLS STILL REQUIRE
HETA20 EACH

REQUESTED CHANGE, NEVER EXPECT CHANGES TO BE FOUND ON THE TRUSS LAYOUT

LEDGER BOARDS: ARE NEVER TO BE USED ON ANY 10 STORY HOUSES MASONRY OR

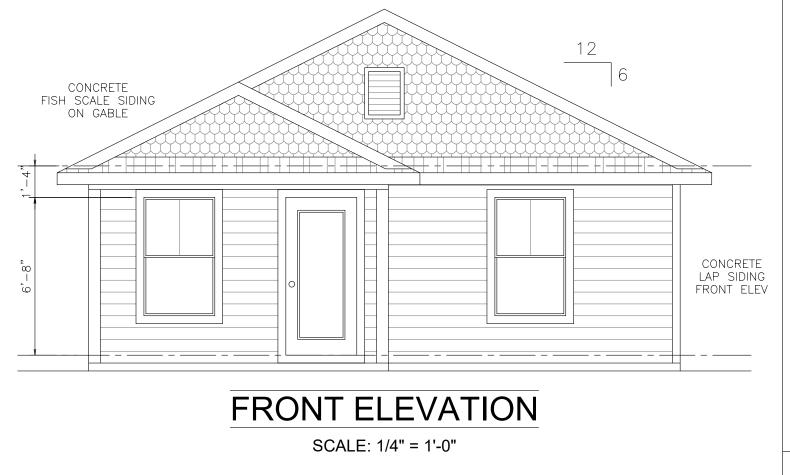
ALL AREAS OF FLOOR AND ROOF TRUSS SYSTEM ARE TO BE PROVIDED BY TRUSS

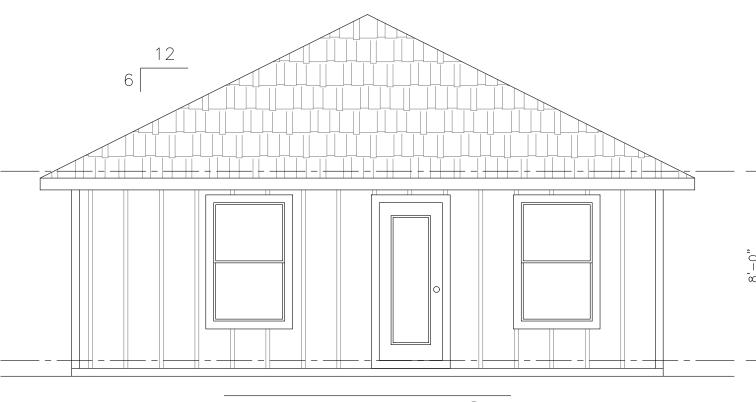
BLOW, MIN  $\frac{1}{4}$ " IN 12" DOWN SLOPE TO ALL OUTER EDGES OF THE BALCONY

BALCONY FLOOR TRUSSES: 6" STEP DOWN TO BALCONY. BALCONY IS ROOF OVER AREA

LAMINATE BEAMS: CALLED OUT ON PLANS ARE TO BE PROVIDED BY TRUSS CO, THANKS

COMPANY, NO AREAS ARE TO BE PROVIDED BY OTHERS





## **REAR ELEVATION**

SCALE: 1/4" = 1'-0"

WALL SECTION NOTES: ROOF/WALL SHEATHING 15/32" OR LESS (2 3/8"x.113") RING SHANK NAILS 6" O.C. EDGE & FIELD ROOF/WALL SHEATHING GREATER THAN 15/32" (2.5"x.131") RING SHANK NAILS 6" O.C. EDGE & FIELD ROOF SHINGLE AND TILE ROOF 20 PSF LIVE LOAD & 15 PSF DEAD LOAD

SEE FOUNDATION PLAN AND FOOTER DETAILS FOR INFORMATION. BOTH MONOLITHIC AND OR STEMWALL FOUNDATIONS CAN BE USED FOR ALL WALL DETAILS. ALL FOUNDATION AND WALL REBAR IS TO BE MINIMUM GRADE SCHEDULE 40 KSI.

CEILING FINISH CAN BE MOISTURE RESISTANT DRYWALL, DENZBOARD STUCCO, CONCRETE PANELS, VINYL BEADBOARD, 1x6 T&G OR ANYOTHER STATE APPROVED EXTERIOR CEILING PRODUCTS <u>FLOORS AND SEALED DECKS</u>

3/4" SHEATHING = T&G GLUED AND NAILED 10d SCREW OR RING SHANK 6" O.C. EDGES 6" O.C. FIELD

SEE ELEVATIONS FOR EXTERIOR FINISH (EXAMPLES: LAP SIDING OR TEXTURED FINISH).

MASONRY WALLS = ADD 1x2 PT FURRING HORIZ. OR VERT. 24" MAX. O.C. FOR LAP OR PANEL SIDING.

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GROUP LEGACY 

JOB NUMBER 3750 PLAN DATE

4/21/24 "PLANS CONFORM TO" 2023 FLORIDA BUILDING CODE 2020 NATIONAL ELEC CODE 2018 WFCM DESIGN CRITERIA 2014 ASCE24 FLOOD DESIGN STRUCTURALLY ADEQUATE FOR ALTERATION LEVEL: N/A

RISK CATEGORY: 2 WIND VELOCITY (MPH): 140 EXPOSURE CATEGORY: C INTERNAL PRESSURE: .18 CONSTRUCTION TYPE: VB

2401 LESLIE ST

FLAGLER BEACH FLORIDA

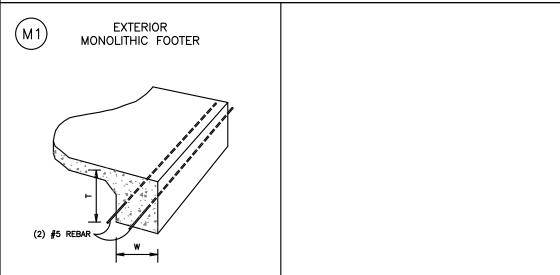
FLOOR ELEV

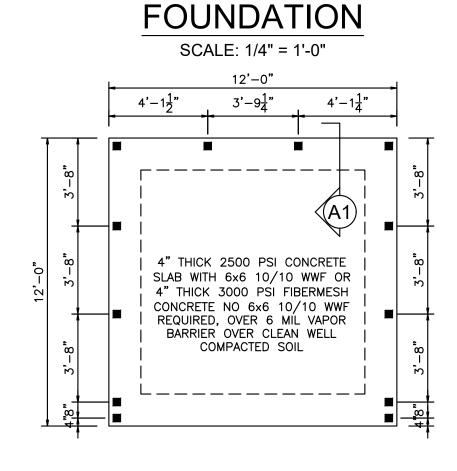
A-05

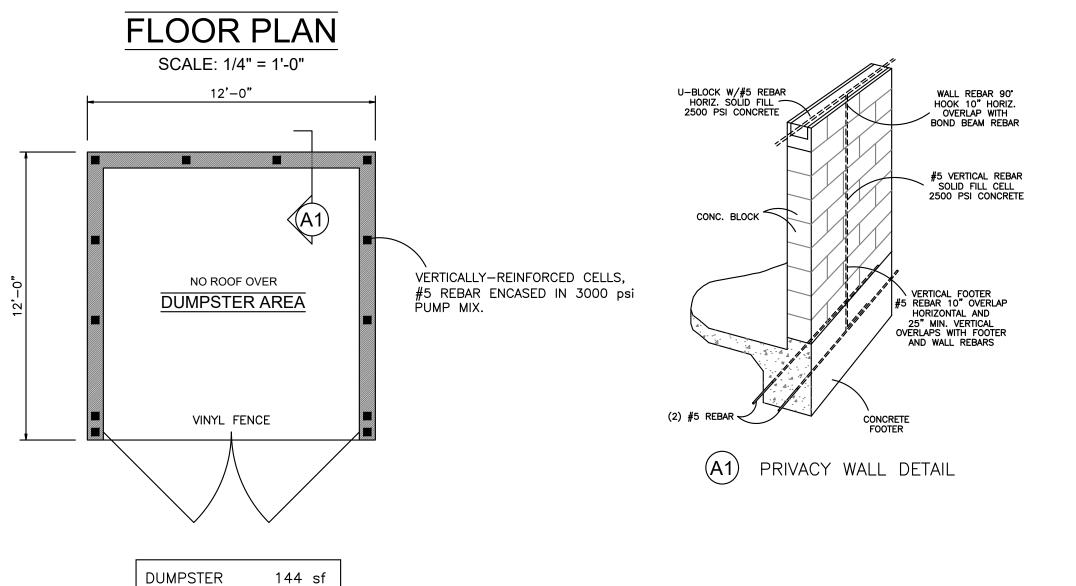
BOTTOM OF ALL FOOTERS MIN 12" BELOW GRADE BELOW THE FROST LINE MONOLITHIC FOOTERS MIN 20" HIGH BOTTOM MIN 12" BELOW GRADE THE FROST LINE, TOP OF ALL SLABS 8" ABOVE GRADE, MONOLITHIC FOOTERS MAX 32" HIGH WITH (2) #5 REBAR MONOLITHIC FOOTERS 33" TO 48" HIGH USE FOOTER DETAIL H1 TO REPLACE

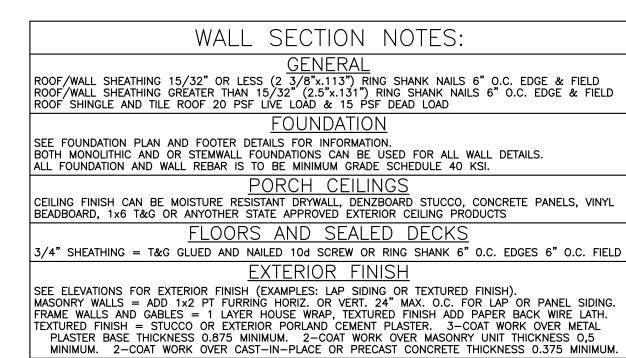
M1, USE FOOTER DETAIL H2 TO REPLACE M2

PORCH AND GARAGE SLAB SLOPE MIN 4" IN 12"









MASONRY BLOCK WALLS CONCRETE = SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. BLOCK WALL = STANDARD 8" WIDE WALL. HEIGHT AND LENGTH OF EACH BLOCK CAN VARY BLOCK COLUMN = SIZE, SHAPE AND HEIGHT MAY PER PLAN CAN VARY, W/(1) #5 REBAR MIN. VERTICAL SOLID FILLED CONCRETE. SEE FLOOR PLAN or STRUCTURAL PLAN FOR NUMBER OF REBAR BOND BEAM = HORIZ COURSE U-BLOCK WITH (1)#5 REBAR HORIZONTAL SOLID CONCRETE FILLED REBAR CONTINUOUS OVERLAP = #5 REBAR OVERLAP MIN 25" CONTINUOUS HORIZ OR VERT REBAR 90° HOOK = (1)#5 REBAR 10" OVERLAP REBAR HORIZ. AND 25" OVERLAP REBAR VERTICAL. VERTICAL REINFORCED CELL = (1)#5 REBAR VERTICAL SOLID FILLED CONCRETE

LEFT ELEVATION

SCALE: 1/4" = 1'-0"

SMOOTH STUCCO FINISH

REAR ELEVATION SCALE: 1/4" = 1'-0"



RIGHT ELEVATION SCALE: 1/4" = 1'-0"

FRONT ELEVATION

SCALE: 1/4" = 1'-0"

GROUP TF



JOB NUMBER 38.14 PLAN DATE 10/19/24

"PLANS CONFORM TO"
2023 FLORIDA BUILDING CODE
2020 NATIONAL ELEC CODE 2018 WFCM DESIGN CRITERIA 2014 ASCE24 FLOOD DESIGN STRUCTURALLY ADEQUATE FOR

ALTERATION LEVEL: N/A RISK CATEGORY: 2 WIND VELOCITY (MPH): 140 EXPOSURE CATEGORY: C INTERNAL PRESSURE: .18 CONSTRUCTION TYPE: VB

> LOT: 2401 LESLIE ST FLAGLER BEACH

**FLORIDA** 

**A-06** 

SHEET