## SITE DATA: PROPERTY OWNER JAMES P. GILLS C/O JIREH INC.

P.O. BOX 1608 TARPON SPRINGS, FL 34688-1608 (727) 942-2591

11-26-16-0020-03300-0000

LEW@LEWFL.COM

#### LEGAL DESCRIPTION

(CLOSES 0.014'J.M.M.)

FRONT: 25' SIDE: 0'

**EXISTING PROPERTY USE** 

PROPERTY USE: PROPOSED

MAX. BUILDING HEIGHT

LANDSCAPE BUFFER:

NORTH = TYPE B (15')

SOUTH = TYPE B (15') WEST = TYPE B (15')

EAST = NONE

ALLOWED: 60'

PROPOSED: 22'

MULTI-FAMILY ATTACHED (SINGLE STORY)

REAR:

PLAT OF SURVEY A PORTION OF TRACTS 33, 34 AND 36 OF THE TAMPA AND TARPON SPRINGS LAND COMPANY'S SUBDIVISION OF SECTION 11, TOWNSHIP 26 SOUTH RANGE 16 EAST, AND A PORTION OF 26 SOUTH, RANGE 16 EAST, ALL AS SHOWN ON THE PLAT RECORDED IN PLAT BOOK 1, PAGES 68, 69 AND 70 OF THE PUBLIC RECORDS OF PASCO COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE SOUTHWEST CORNER OF TRACT "B-1", HUNTER'S RIDGE UNIT SIX -A, AS SHOWN ON THE PLAT RECORDED IN PLAT BOOK 29, PAGES 10 AND 11 OF SAID PUBLIC RECORDS; THENCE ALONG THE SOUTHERLY BOUNDARY LINE OF SAID TRACT "B-1", NORTH 89'23'28" EAST, A DISTANCE OF 45.21 FEET FOR A POINT OF BEGINNING; THENCE CONTINUE ALONG THE SOUTHERLY BOUNDARY LINE OF SAID TRACT "B-1", AND THE WESTERLY BOUNDARY LINE OF HUNTER'S RIDGE UNIT SIX-B, AS SHOWN ON THE PLAT RECORDED IN PLAT BOOK 30, PAGES 15 THROUGH 19 OF SAID PUBLIC RECORDS THE FOLLOWING TEN (10) COURSES AND DISTANCES: (1) NORTH 89°23'28" EAST, A DISTANCE OF 236.07 FEET; (2) SOUTH 50°05'39" EAST, A DISTANCE OF 252.50 FEET; (3) SOUTH 25°22'08" EAST, A DISTANCE OF 156.46 FEET; (4) SOUTH 41'42'02" WEST. A DISTANCE OF 69.56 FEET: (5) SOUTH 16'25'16" EAST. A DISTANCE OF 72.8' FEET; (6) SOUTH 31°37'10" EAST, A DISTANCE OF 82.31 FEET; (7) SOUTH 43°05'35" EAST, A DISTANCE OF 146.63 FEET; (8) SOUTH 15°56'17" EAST, A DISTANCE OF 49.13 FEET; (9) SOUTH 36°22'58" WEST, A DISTANCE OF 49.97 FEET; (10) SOUTH 64°47'16" EAST, A DISTANCE OF 115.35 FEET TO A POINT ON TH WESTERLY BOUNDARY LINE OF THE PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 1998, PAGE 1653 OF LINE OF HUNTER'S RIDGE UNIT ONE AS SHOWN ON THE PLAT RECORDED IN PLAT BOOK 25, PAGES 118 THROUGH 120 OF SAID PUBLIC RECORDS THE FOLLOWING TWO (2) COURSES AND DISTANCES: (1) SOUTH 51"15'05" WEST, A DISTANCE OF 66.82 FEET; (2) 163.49 FEET ALONG THE ARC OF A CURVE TO THE LEF SAID CURVE HAVING A RADIUS OF 700.00 FEET, A CENTRAL ANGLE OF 13°22'55" AND A CHORD OF 163.12 FEET, WHICH BEARS SOUTH 68°27'22" WEST TO THE NORTHEAST CORNER OF THE PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 4390, PAGE 1855 OF SAID PUBLIC RECORDS; THENCE ALONG THE NORTHERLY BOUNDARY LINE OF SAID PARCEL AND THE PARCELS DESCRIBED IN OFFICIAL RECORDS BOOK 8935, PAGE 1000, OFFICIAL RECORDS BOOK 9072, PAGE 2845, AND OFFICIAL RECORDS BOOK 3933, PAGE 0639 OF SAID PUBLIC RECORDS THE FOLLOWING SEVEN (7) COURSES AND DISTANCES: (1) 57.79 FEET ALONG THE ARC OF A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 60.79 FEET, A CENTRAL ANGLE OF 54°28'12" AND A CHORD OF 55.64 FEET WHICH BEARS NORTH 00°07'19" EAST; (2) NORTH 34°48'13" WEST A DISTANCE OF 130.79 FEET; (3) NORTH 38°32'11" WEST, A DISTANCE OF 143.03 FEET; (4) NORTH 42°38'08" WEST, A DISTANCE OF 90.65 FEET; (5) NORTH 50°40'42" WEST, A DISTANCE OF 279.55 FEET (6) NORTH 62°02'45" WEST, A DISTANCE OF 70.90; (7) 37.70 FEET ALONG THE ARC OF A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 24.00 FEET, A CENTRAL ANGLE OF 89°59'46" AND A CHORD OF 33.94 FEET, WHICH BEARS SOUTH 72°57'15" WEST FEET TO THE WESTERLY BOUNDARY LINE OF SAID PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 3933, PAGE 0639; THENCE ALONG SAID WESTERLY BOUNDARY LINE THE FOLLOWING TWO (2) COURSES AND DISTANCES: (1) SOUTH 27°57'15" WEST, A DISTANCE OF 176.60 FEET; (2) SOUTH 39"19'22" WEST, A DISTANCE OF 58.53 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF LITTLE ROAD AS RECORDED IN OFFICIAL RECORDS BOOK 888, PAGE 1739 OF SAID PUBLIC RECORDS; THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE 15.01 FEET ALONG THE ARC OF CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 107.89 FEET, A CENTRAL ANGLE OF 07.58'14" AND A CHORD OF 15.00 FEET WHICH BEARS NORTH 50°06'30" WEST TO THE SOUTHEAST CORNER OF THE PARCEL DESCRIBED IN OFFICIAL RECORDS BOOK 5348, PAGE 1882 OF SAID PUBLIC RECORDS; THENCE ALONG THE EASTERLY BOUNDARY LINE OF SAID PARCEL THE FOLLOWING THREE (3) COURSES AND DISTANCES TO THE POINT OF BEGINNING: (1) NORTH 39"19"52" EAST, A DISTANCE OF 56.92 FEET; (2) NORTH 27°57'15" EAST, A DISTANCE OF 408.47 FEET; (3) NORTH 35°14'45" WEST, A DISTANCE OF 101.53 FEET TO THE POINT OF BEGINNING. THE ABOVE DESCRIBED PARCEL CONTAINS 5.71 ACRES MORE OR LESS.

# PRELIMINARY SITE PLAN ? RESIDENTIAL FINAL CONSTRUCTION PLANS HUNTERS RIDGE MULTIFAMILY NEW PORT RICHEY, PASCO COUNTY, FLORIDA

PROJECT NUMBER: 11-2015 PREPARED FOR

TRI COUNTY DEVELOPMENT 9400 RIVER CROSSING BLVD. SUITE 102 NEW PORT RICHEY, FLORIDA 34655 (727) 376-6831 ALEX@DEEBCOMPANIES.NET



9400 RIVER CROSSING BOULEVARD, SUITE 104 NEW PORT RICHEY, FLORIDA 34655 727-375-1155 EXT. 4 - FAX 727-375-1156 CERTIFICATE OF AUTHORIZATION NO. 28366

# HURRICANE EVACUATION ZONE: ZONE E

NEAR THE NORTHEAST CORNER OF THE INTERSECTION OF LITTLE ROAD AND RANCHO DEL RIO DRIVE IN PASCO COUNTY, FLORIDA.  $\overline{\hspace{-1em}\hspace{-1e$ PROPERTY ZONING: PROPERTY LIES WITHIN PASCO ZONE X-500 (0.2% ANNUAL CHANCE OF FLOOD <del>-C2</del> (GENERAL COMMEBETAL) HAZARD), AS SHOWN ON FLOOD INSURANCE BASE MAP (FIRM) PANEL NO. FUTURE LAND USE: PD - PLANNED DEVELOPMENT

> FIRE PROTECTION TO BE PROVIDED BY PASCO COUNTY FIRE DEPARTMENT VIA PROPOSED HYDRANTS & BUILDING SPRINKLERS.

**BUILDING TYPE:** 

TYPE SPRKIKLED // TOTAL LOT COVERAGE- 50% ALLOWED

1X (140X40) = 5,600 S.F. 1X (82X52) = 4,264 S.F 3X (190X76) = 43,320 S.F 1X (140X76) = 10,640 S.F 1X(66X50) = 3,300 S.F1X(50X55) = 2,750 S.FCABANA = 615 S.F.

= 70,489 S.F.

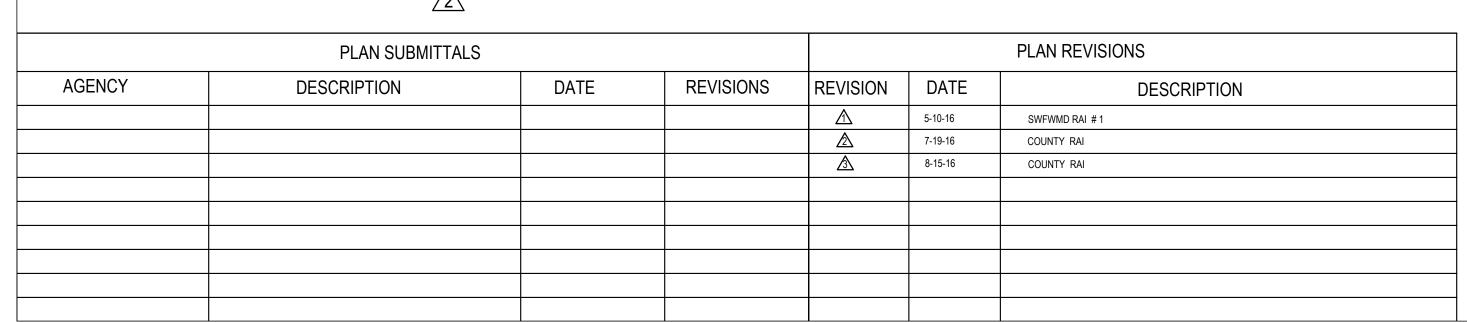
TOTAL LOT COVERAGE = 70,489 / 248,728 = 28.3% GROSS RESIDENTIAL DENSITY: 41 UNITS/5.71 AC= 7.2 UNITS PER ACRE

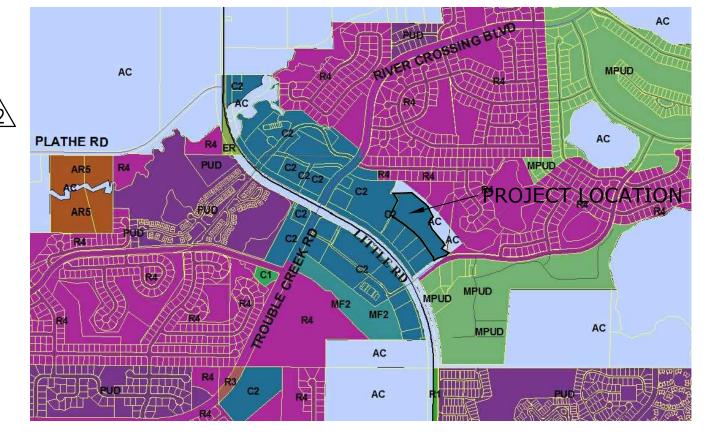
## PARKING REQUIREMENTS

REQUIRED: 41 UNITS X 2, PLUS VISITOR PARKING OF 41 X 0.25 = 93 SPACES PREVIOUS APPROVALS: PROVIDED: 26 GARAGES, 26 DRIVEWAYS X 2 = 52 SPACES AND 25 SPACES

( 23 STANDARD AND 2 HANDICAP) TOTAL: 103 SPACES (101 STANDARD AND 2 HANDICAP) 

RZ 4510 - REZONED AC TO C2 - APPROVED WITH CONDTIONS 02-25-92 -GU 15-018-CONDITONAL-USEIN C-2 - APRBOVED WITH CONDITIONS -9-22-15 CPAS 16(01) - SMALL SCALE LAND USE AMENDMENT ROR & RES -3 TO PD-APPROVED 4-26-16





**ZONING MAP** 

NOTES:

1. IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF THE PRESENCE OF STATE AND FEDERALLY PROTECTED PLANT AND/OR ANIMAL SPECIES IS DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND PASCO COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE PLANT AND/OR ANIMAL SPECIES FOUND ON THE SITE.

FLU MAP

LATHE RD

2. IF DURING CONSTRUCTION ACTIVITIES ANY EVIDENCE OF HISTORIC RESOURCES, INCLUDING BUT NOT LIMITED TO ABORIGINAL OR HISTORIC POTTERY, PREHISTORIC STONE TOOLS, BONE OR SHELL TOOLS, HISTORIC TRASH PITS, OR HISTORIC BUILDING FOUNDATION, ARE DISCOVERED, WORK SHALL COME TO AN IMMEDIATE STOP AND THE FLORIDA DEPARTMENT OF HISTORIC RESOURCES (STATE HISTORIC PRESERVATION OFFICER) AND PASCO COUNTY SHALL BE NOTIFIED WITHIN TWO WORKING DAYS OF THE RESOURCES FOUND ON THE SITE.

## 3. ON-SITE BURNING SHALL NOT BE PERMITTED.

4. IN THE EVENT OF PRODUCTION FAILURE OR SHORTFALL BY TAMPA BAY WATER, AS SET FORTH IN SECTION 3.19 OF THE INTERLOCAL AGREEMENT CREATING TAMPA BAY WATER, THE DEVELOPER/OWNER SHALL TRANSFER TO PASCO COUNTY ANY AND ALL WATER USE PERMITS OR WATER USE RIGHTS IF THE DEVELOPER/OWNER MAY HAVE TO USE OR CONSUME SURFACE OR GROUND WATER WITHIN PASCO COUNTY.

5. PRIOR TO THE DEVELOPER/OWNER SELLING WATER OR WATER USE PERMITS OR WATER USE RIGHTS, THE DEVELOPER/OWNER SHALL NOTIFY PASCO COUNTY, AND PASCO COUNTY SHALL HAVE A RIGHT OF FIRST REFUSAL TO PURCHASE SUCH WATER USE PERMITS OR WATER USE RIGHTS.

6. LIGHTING USED TO ILLUMINATE ANY PARKING AREA SHALL BE ARRANGED AS TO DIRECT AND/OR SHIELD LIGHT AWAY FROM ADJOINING RESIDENTIAL PROPERTIES AND RIGHT-OF-WAY.

## **CIVIL ENGINEER**

REGENCY DESIGN & ENGINEERING, INC. 9400 RIVER CROSSING BOULEVARD, SUITE 104 NEW PORT RICHEY, FLORIDA 34655 PH: 727-375-1155 EXT 4

UTILITY COMPANIES

CLEARWATER GAS

400 N. MYRTLE AVE.

(727) 638-0763

**TELEPHONE:** 

MC FLCW-5033

(727) 562-1101

DUKE ENERGY

PH. (727) 372-5148

SEWER / WATER

PH: 813-235-6189

CLEARWATER, FL 33755

FRONTIER COMMUNICATIONS

1280 EAST CLEVELAND STREET

CLEARWATER, FLORIDA 33755

BRIGHTHOUSE NETWORKS

NEW PORT RICHEY, FLORIDA 34654

10555 MOON LAKE ROAD

PH: 727-856-3278 EXT 3014

4121 ST. LAWRENCE DRIVE

NEW PORT RICHEY, FL 34655

PASCO COUNTY PUBLIC UTILITIES

19420 CENTRAL BOULEVARD

LAND O', LAKES, FLORIDA 34637

#### SURVEYORS:

PRECISION SURVEYING & MAPPING 7710 MASSACHUSETTS AVE. NEW PORT RICHEY, FL 34653 (727) 841-8414

#### **GEOTECHNICAL**

BTL ENGINEERING SERVICES, INC. 5802 N. OCCIDENT STREET TAMPA, FL 33684 (727) 846-1703

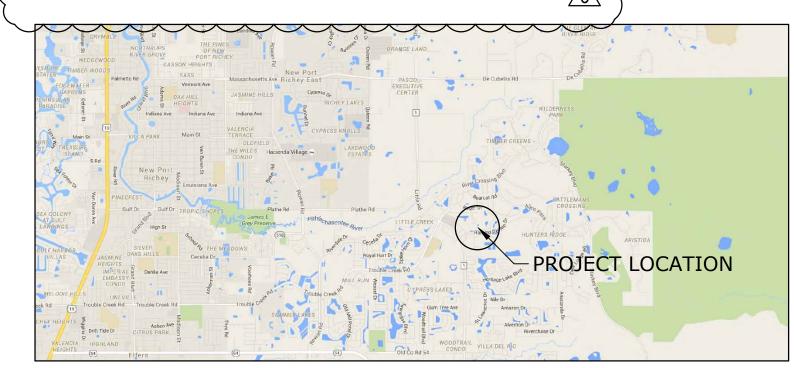
## **INDEX OF SHEETS**

- **COVER SHEET**
- **AERIAL PHOTO**
- **EXISTING CONDITIONS SURVEY**
- EXISTING TREE REMOVAL/INVENTORY
- **GENERAL NOTES**
- PRELIMINARY SITE PLAN
- PAVING, GRADING & DRAINAGE PLAN
- PAVING, GRADING & DRAINAGE SECTIONS
- UTILITY PLAN
- SITE DETAILS
- WATER UTILITY DETAILS
- SANITARY SEWER DETAILS
- STRIPING & SIGNAGE PLAN
- 12. STRIPING & SIGNAGE DETAILS
- 13. SWPP PLAN
- ĽA1. LÁNĎSČAPĚ PĽAŇ
- LA2. LANDSCAPE NOTES & DETAILS
- IR1. IRRIGATION PLAN

PROJECT LOCATION

JR2. JRRIGATION NOTES & DETAILS

HUNTERS RIDGE UNIT SIX - SWALE DETAILS



 PRIOR TO THE START OF CLEARING AND GRUBBING OR ANY SOIL DISTURBANCE, CONTRACTOR SHALL CONTACT PASCO COUNTY STORMWATER MANAGEMENT AT (727) 834-3611 FOR A SOIL EROSION AND SEDIMENT CONTROL PRE-INSPECTION MEETING.

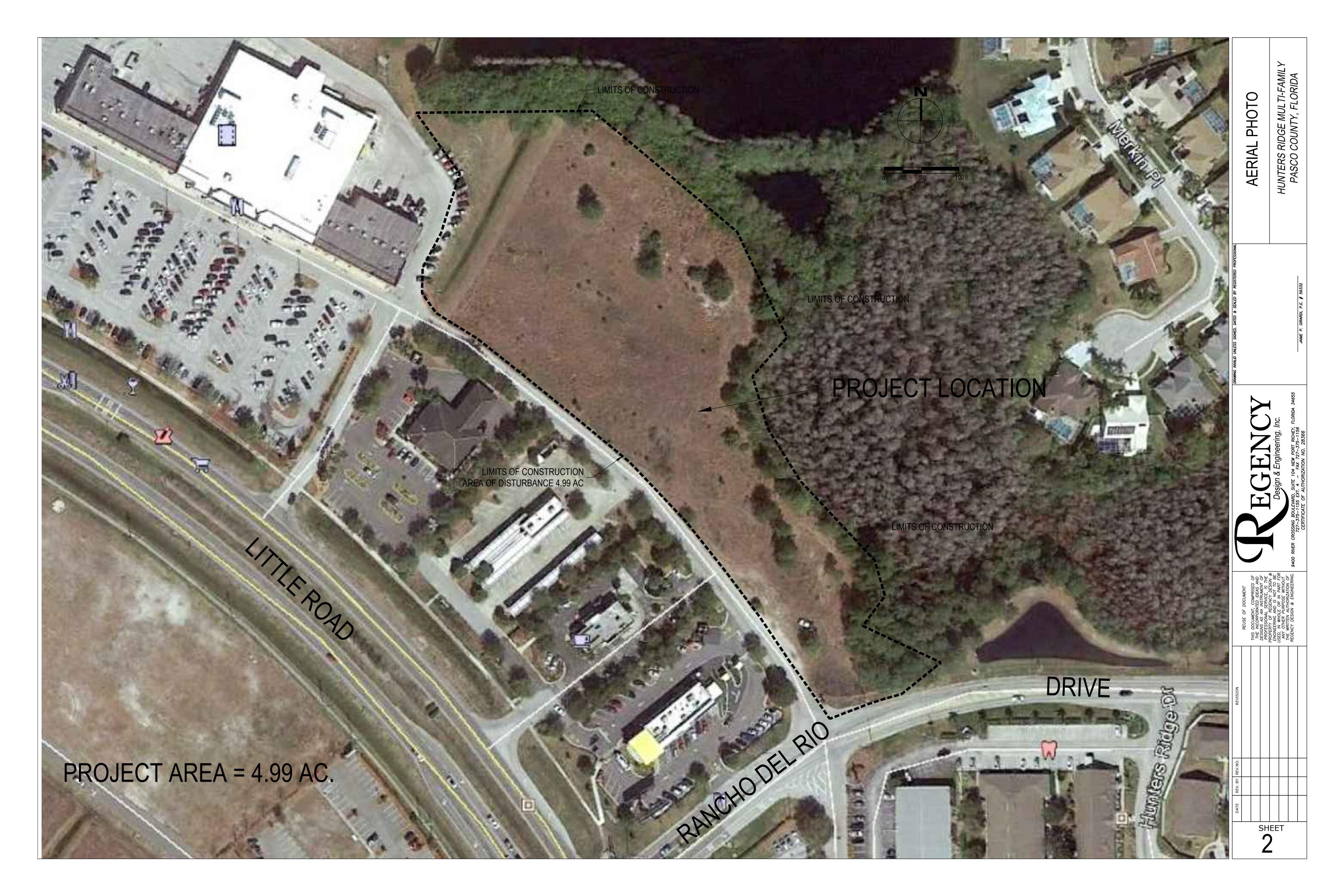
VICINITY MAP

2. THE CONTRACTOR MUST PROVIDE A DE-WATERING PLAN, IF APPLICABLE, TO PASCO COUNTY ENGINEERING INSPECTIONS AT (727) 834-3670 FOR REVIEW PRIOR TO THE EROSION CONTROL MEASURES PRE-INSPECTION

ELEVATIONS SHOWN IN THESE DOCUMENTS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.

DESIGN ENGINEER: JAIME P. GIRARDI. P.E.

PROFESSIONAL ENGINEER FLORIDA REGISTRATION NO. 59332





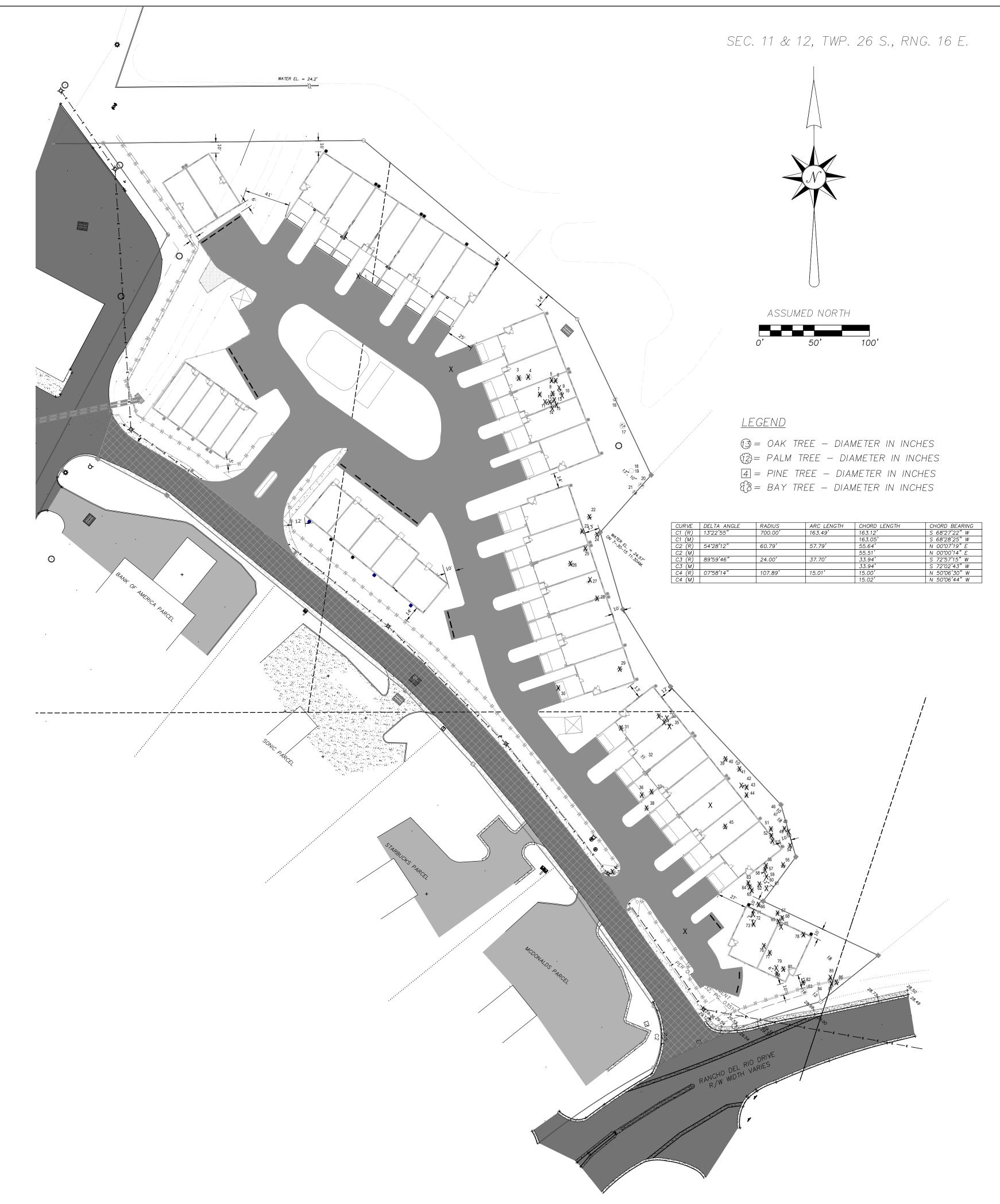
DATE OF SURVEY: AUGUST 18, 2015 TYPE OF SURVEY: BOUNDARY & TOPOGRAPHIC

|      |        | TREES ON SITE - TOTAL # OF INCHES |           |      |      |      |                  |           |      |      |      |                  |           |      |
|------|--------|-----------------------------------|-----------|------|------|------|------------------|-----------|------|------|------|------------------|-----------|------|
| TREE | TYPE   | SIZE<br>(INCHES)                  | PROTECTED | SAVE | TREE | TYPE | SIZE<br>(INCHES) | PROTECTED | SAVE | TREE | TYPE | SIZE<br>(INCHES) | PROTECTED | SAVE |
|      |        |                                   |           |      |      |      |                  |           |      |      |      |                  |           |      |
| 1    | . PINE | 16                                | N         | N    | 34   | OAK  | 10               | Υ         | N    | 67   | PINE | 8                | N         | N    |
| 2    | OAK    | 13                                | Υ         | N    | 35   | OAK  | 9                | Υ         | N    | 68   | PINE | 11               | N         | N    |
| 3    | PALM   | 15                                | N         | N    | 36   | PINE | 7                | N         | N    | 69   | PINE | 13               | N         | N    |
| 4    | PALM   | 7                                 | N         | N    | 37   | PINE | 12               | N         | N    | 70   | PINE | 7                | N         | N    |
| 5    | OAK    | 4                                 | Υ         | N    | 38   | PINE | 11               | N         | N    | 71   | OAK  | 7                | Υ         | N    |
| 6    | OAK    | 6                                 | Υ         | N    | 39   | OAK  | 13               | Υ         | N    | 72   | OAK  | 4                | Υ         | N    |
| 7    | OAK    | 6                                 | Υ         | N    | 40   | OAK  | 10               | Υ         | Υ    | 73   | PINE | 6                | N         | N    |
| 8    | OAK    | 16                                | Υ         | N    | 41   | PINE | 11               | N         | N    | 74   | PINE | 11               | N         | N    |
| 9    | OAK    | 5                                 | Υ         | N    | 42   | OAK  | 4                | Υ         | N    | 75   | PALM | 12               | N         | N    |
| 10   | OAK    | 5                                 | Υ         | N    | 43   | OAK  | 6                | Υ         | N    | 76   | OAK  | 7                | Y         | N    |
| 11   | OAK    | 4                                 | Υ         | N    | 44   | PINE | 9                | N         | N    | 77   | OAK  | 6                | Υ         | N    |
| 12   | OAK    | 4                                 | Υ         | N    | 45   | PINE | 10               | N         | N    | 78   | PINE | 14               | N         | N    |
| 13   | OAK    | 5                                 | Υ         | N    | 46   | PINE | 10               | N         | Υ    | 79   | OAK  | 6                | Υ         | N    |
| 14   | OAK    | 5                                 | Y         | N    | 47   | PINE | 18               | N         | Υ    | 80   | PINE | 14               | N         | N    |
| 15   | OAK    | 5                                 | Υ         | N    | 48   | PINE | 18               | N         | N    | 81   | OAK  | 6                | Υ         | N    |
| 16   | OAK    | 5                                 | Υ         | Υ    | 49   | PINE | 4                | N         | N    | 82   | PINE | 15               | N         | N    |
| 17   | BAY    | 17                                | Υ         | Υ    | 50   | PINE | 4                | N         | N    | 83   | PALM | 18               | N         | Υ    |
| 18   | OAK    | 13                                | Υ         | Υ    | 51   | OAK  | 8                | Υ         | N    | 84   | PINE | 12               | N         | N    |
| 19   | OAK    | 10                                | Υ         | Υ    | 52   | OAK  | 8                | Υ         | N    | 85   | PINE | 9                | N         | N    |
| 20   | PALM   | 17                                | N         | Υ    | 53   | PINE | 7                | N         | N    | 86   | PINE | 13               | N         | N    |
| 21   | OAK    | 14                                | Υ         | Υ    | 54   | PINE | 11               | N         | N    | 87   | PINE | 9                | N         | N    |
| 22   | PALM   | 14                                | N         | N    | 55   | PINE | 15               | N         | N    |      |      |                  |           |      |
| 23   | OAK    | 6                                 | Υ         | N    | 56   | OAK  | 8                | Υ         | N    |      |      |                  |           |      |
|      | OAK    | 17                                | Υ         | N    | 57   | OAK  | 8                | Υ         | N    |      |      |                  |           |      |
|      | PINE   | 11                                | N         | N    | 58   | OAK  | 4                | Υ         | N    |      |      |                  |           |      |
|      | PINE   | 14                                | N         | N    | 59   | OAK  | 4                | Υ         | N    |      |      |                  |           |      |
|      | PINE   | 4                                 | N         | N    | 60   | PINE | 12               | N         | N    |      |      |                  |           |      |
|      | PINE   | 11                                | N         | N    | 61   | PINE | 7                | N         | N    |      |      |                  |           |      |
|      | PINE   | 17                                | N         | N    | 62   | PINE | 7                | N         | N    |      |      |                  |           |      |
|      | PINE   | 4                                 | N         | N    | 63   | OAK  | 6                | Y         | N    |      |      |                  |           |      |
|      | PINE   | 17                                | N         | N    | 64   | PINE | 10               | N N       | N    |      |      |                  |           |      |
|      | PINE   | 11                                | N         | N    | 65   | PINE | 6                | N         | N    |      |      |                  |           |      |
|      | OAK    | 10                                | Y         | N    | 66   | PINE | 16               | N         | N    |      |      |                  |           |      |

|           |      | SIZE |              |                |      | SIZE | TOTAL  |
|-----------|------|------|--------------|----------------|------|------|--------|
| TAG       | TYPE |      | TOTAL INCHES | TAG            | TYPE |      | INCHES |
|           |      |      |              | PINE           |      |      |        |
| 2         | OAK  | 13   |              | 1              | PINE | 16   |        |
| 8         | OAK  | 16   |              | 25             | PINE | 11   |        |
| 24        | OAK  | 17   |              | 26             | PINE | 14   |        |
| 33        | OAK  | 10   |              | 28             | PINE | 11   |        |
| 34        | OAK  | 10   |              | 29             | PINE | 17   |        |
| 39        | OAK  | 13   |              | 31             | PINE | 17   |        |
|           |      |      |              | 32             | PINE | 11   |        |
|           |      |      |              | 37             | PINE | 12   |        |
|           |      |      |              | 38             | PINE | 11   |        |
|           |      |      |              | 41             | PINE | 11   |        |
|           |      |      |              | 45             | PINE | 10   |        |
|           |      |      |              | 48             | PINE | 18   |        |
|           |      |      |              | 54             | PINE | 11   |        |
| TOTAL OAK |      |      | 79           | 55             | PINE | 15   |        |
|           |      |      |              | 60             | PINE | 12   |        |
| 3         | PALM | 15   |              | 64             | PINE | 10   |        |
| 22        | PALM | 14   |              | 66             | PINE | 16   |        |
| 75        | PALM | 12   |              | 68             | PINE | 11   |        |
|           |      |      |              | 69             | PINE | 13   |        |
|           |      |      |              | 74             | PINE | 11   |        |
| OTAL PALM |      |      | 41           | 78             | PINE | 14   |        |
|           |      |      |              | 80             | PINE | 14   |        |
|           |      |      |              | 82             | PINE | 15   |        |
|           |      |      |              | 84             | PINE | 12   |        |
|           |      |      |              | 86             | PINE | 13   |        |
|           |      |      |              |                |      |      |        |
|           |      |      |              |                |      |      |        |
|           |      |      |              |                |      |      |        |
|           |      |      |              |                |      |      |        |
|           |      |      |              | <br>TOTAL PINE |      |      |        |

|                |              | TOTAL 1       | REE INCHES TO             | BE REPLACED     | (FUTURE)         |   |        |  |
|----------------|--------------|---------------|---------------------------|-----------------|------------------|---|--------|--|
|                |              | Liv           | e Oaks to be re           | placed inch for | inch.            |   |        |  |
| Replaceme      | ent not requ | uired for Cam | phor, Pine or Pa          | lm. Others t    |                  |   |        |  |
|                | Live Oaks    |               | Other Trees Aso Note Type |                 |                  |   |        |  |
| (INCHES)       | NO.          | INCHES        | TYPE                      |                 | SIZE (INCHES) NO |   | INCHES |  |
|                |              | 79            |                           |                 |                  |   | C      |  |
| Inch for In 79 |              |               | 1"/3"                     |                 |                  | 0 |        |  |

|      |      | TOTAL TR         | REE INCHES TO | BE SAVED |       |
|------|------|------------------|---------------|----------|-------|
| TREE | ТҮРЕ | SIZE<br>(INCHES) | PROTECTED     | SAVED    | TOTAL |
| 16   | OAK  | 5                | Y             | Υ        |       |
| 17   | BAY  | 17               | Y             | Υ        |       |
| 18   | OAK  | 13               | Y             | Y        |       |
| 19   | OAK  | 10               | Y             | Υ        |       |
| 20   | PALM | 17               | N             | Υ        |       |
| 21   | OAK  | 14               | Y             | Υ        |       |
| 40   | OAK  | 10               | Y             | Υ        |       |
| 41   | PINE | 11               | N             | N        |       |
| 42   | OAK  | 4                | Υ             | N        |       |
| 43   | OAK  | 6                | Y             | N        |       |
| 44   | PINE | 9                | N             | N        |       |
| 45   | PINE | 10               | N             | N        |       |
| 46   | PINE | 10               | N             | Y        |       |
| 47   | PINE | 18               | N             | Υ        |       |
| 48   | PINE | 18               | N             | N        |       |
| 83   | PALM | 18               | N             | Y        |       |
|      |      |                  |               |          | 1     |



TREE

ENGINE Inc.

#### GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION IN ACCORDANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS AND TO TOLERANCES STATED HEREIN OR IN THE SPECIFICATIONS. REFER TO THE BOUNDARY AND TOPOGRAPHIC SURVEY FOR ADDITIONAL INFORMATION ON HORIZONTAL AND VERTICAL

2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROL MARKERS AND PROPERTY CORNERS (MONUMENTS, PIPES, ETC.) FOR THE DURATION OF CONSTRUCTION. MARKERS SHALL BE CONTINUOUSLY FLAGGED AND SHALL BE RESET IMMEDIATELY BY A FLORIDA LICENSED LAND SURVEYOR IF ANY SHOULD BECOME DISTURBED.

LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE DRAWINGS AND DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, ETC. AFFECTING HIS WORK

4. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO POSSIBLE INCIDENTAL CONFLICTS WITH EXISTING STRUCTURES SUCH AS MAIL BOXES, SIGNS, FENCES, BILLBOARDS, ETC. AND SHALL INCLUDE IN HIS OVERALL COSTS THE REMOVAL AND OR REPLACEMENT AND PROTECTION OF SUCH INCIDENTAL ITEMS.

THE CONTRACTOR, PRIOR TO BIDDING THIS WORK, SHALL APPRAISE HIMSELF AS TO ALL ABOVE GROUND FEATURES, AND TO THE EXTENT POSSIBLE WITHOUT EXCAVATING, BELOW GROUND FEATURES, THAT HE MAY ENCOUNTER DURING CONSTRUCTION AND INCLUDE INTO HIS OVERALL BID ALL COSTS FOR SPECIFIC CONSTRUCTION METHODS AND PROCEDURES THAT NEED TO BE TAKEN TO WORK AROUND SUCH

6. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZED EARTH, DRIVEWAYS, SIDEWALKS, RETAINING WALLS, MAIL BOXES, SOD, LANDSCAPING, ETC. REMOVED OR DAMAGED DURING CONSTRUCTION WITH THE SAME MATERIAL REMOVED OR DAMAGED OR AS DIRECTED BY THE ENGINEER.

7. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PROCEEDING WITH ANY SITE WORK WITH WHICH A CONFLICT HAS ARISEN DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS.

8. CONSTRUCTION SHALL BE CARRIED OUT "IN THE DRY". THE CONTRACTOR SHALL REVIEW SITE CONDITIONS AND DETERMINE METHODS AND EXTENT OF DEWATERING NECESSARY AND SHALL INCLUDE COSTS OF DEWATERING IN THE BID. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR CONTROL OF GROUND OR SURFACE WATER OR FOR ADDITIONAL MATERIALS OR REWORK REQUIRED AS A RESULT OF INADEQUATE OR

9. ALL WORK TO BE PERFORMED FOR THE COMPLETION OF THIS PROJECT SHALL BE CONSTRUCTED ACCORDING TO THE BEST PRACTICES OF THE INDUSTRY AND IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, COUNTY AND/OR COUNTY CODES, ORDINANCES, STANDARDS AND PERMIT CONDITIONS.

10. ALL AREAS DISTURBED BY THIS CONSTRUCTION SHALL BE SEEDED AND MULCHED EXCEPT AS NOTED BELOW: ALL AREAS WITH SLOPES GREATER THAN 4:1 OR WITHIN 2' OF ANY PAVEMENT OR CURB SHALL BE SODDED. ALL AREAS WITHIN 5' OF ANY DRAINAGE STRUCTURE OR WITHIN FDOT OR COUNTY R/W SHALL BE

11. ALL AREAS DISTURBED WITHIN EXISTING COUNTY AND FDOT RIGHTS-OF-WAY SHALL BE SODDED UNLESS OTHERWISE NOTED, ALL LANDSCAPING WITHIN RIGHT-OF-WAY SHALL CONFORM TO PASCO COUNTY AND

12. THE CONTRACTOR SHALL PROVIDE FOR SAFE AND EFFICIENT MAINTENANCE OF TRAFFIC, INCLUDING PEDESTRIANS, VIA ADHERENCE TO THE F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARD INCLUDES 600-680 (2004 EDT.), THE U.S.D.O.T. MANUAL OR UNIFORM TRAFFIC DEVICES (MUTCO), AND THE REQUIREMENTS OF

13. ALL DIMENSIONS SHOWN, WHERE CURB IS APPLICABLE, ARE TO THE BACK OR CURB. PIPE LENGTHS SHOWN, WHERE MITERED ENDS ARE CALLED FOR, INCLUDE IN THE PIPE LENGTH PLUS THE "F" DIMENSION FOR THE MITERED END SECTION PIPE.

ROAD, DRAINAGE AND GRADING CONSTRUCTION NOTES

ALL PAVEMENT AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
IMPROVEMENTS WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE OR PASCO COUNTY DEPARTMENT HAVING JURISDICTION OVER THE ROAD 2. PAVEMENT AND GRADING SHALL BE SLOPED TO THE PROPOSED ELEVATIONS AND CONTOURS SHOWN ON THE DRAWINGS. SMOOTH, CONSTANT SLOPES SHALL BE MAINTAINED BETWEEN PROPOSED ELEVATIONS AND CONTOURS. PROPOSED CONTOUR ELEVATIONS, SPOT ELEVATIONS AND FINISHED GRADE ELEVATIONS IN NON-PAVED AREAS REFER TO FINISHED SURFACE ELEVATION ONCE SODDING OR SEEDING IS COMPLETE.

3. FINISHED GRADE ADJACENT TO BUILDING WALLS SHALL BE 4-INCHES BELOW FINISHED FLOOR WITH A MINIMUM OF 2 PERCENT DOWNWARD SLOPE AWAY FROM BUILDING. FINISHED GRADES ADJACENT TO WALLS, CURBS OR SLABS SHALL BE 2-INCHES BELOW ADJACENT SURFACE FOR DRAINAGE AWAY OR FLUSH WITH SURFACE FOR DRAINAGE TOWARD PAVEMENT OR CURB.

4. ALL STORM SEWER PIPES SHALL BE CLASS III REINFORCED CONCRETE PIPE (RCP) (ASTM C-76) UNLESS OTHERWISE NOTED AND INSTALLED AT THE LOCATIONS AND GRADES SHOWN ON THE DRAWINGS. PRECAST INLETS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS. ALL CROSS DRAINS SHALL BE STEEL REINFORCED CONCRETE PIPE (SRCP) NO

SIGNS. POSTS AND HARDWARE SHALL BE CERTIFIED BY FDOT AND INSTALLED IN ACCORDANCE WITH FDOT SPECIFICATIONS AND MUTCD OR GOVERNING AUTHORITY HAVING JURISDICTION OVER ROADS.

6. THE SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO CONSTRUCTION, MAINTAINED THROUGHOUT CONSTRUCTION AND UNTIL THE SITE IS PERMANENTLY STABILIZED.

7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT AND MAINTAIN THE WATER RETENTION SYSTEM ON A REGULAR BASIS.

8. ALL SODDED SLOPES OVER 4:1 SHALL IN INSTALLED WITH SOD PEGS.

9. ALL FINISHED FLOOR ELEVATIONS SHALL BE A MINIMUM OF 1-FOOT ABOVE THE BASE FLOOD ELEVATION, OR AS REQUIRED BY THE LAND DEVELOPMENT CODE SECTION 902.

10. ANY OFF SITE DISTURBANCE SHALL BE RESTORED TO THE PRE-DEVELOPMENT CONDITION OR BETTER. 11. ALL DRAINAGE AND MAINTENANCE EASEMENTS MUST CONTAIN CLEAR OPERABLE ACCESSIBILITY.

**GEOTECHNICAL NOTES:** GEOTECHNICAL RECOMMENDATIONS FOR THE PROJECT ARE INCLUDED IN THE REPORT PREPARED BY BTL ENGINEERING SERVICES, INC. DATED NOVEMBER 11, 2015. THESE RECOMMENDATIONS INCLUDE, BUT ARE NOT LIMITED TO, THE

#### FOLLOWING: SITE PREPARATION

1.INITIAL SITE PREPARATION SHOULD CONSIST OF PERFORMING CLEARING, GRUBBING AND REMOVAL OF TOPSOIL, VEGETATION, AND ASSOCIATED ROOT SYSTEMS TO A DEPTH OF THEIR VERTICAL REACH. THIS SHOULD BE DONE WITHIN AND TO A MINIMUM DISTANCE OF 5 FEET BEYOND THE PERIMETER OF THE PROPOSED TOWNHOME BUILDING FOOTPRINTS. THE STRIPPED TOPSOIL SHOULD BE STOCKPILED ON-SITE FOR LATER USAGE IN LANDSCAPE (NON-STRUCTURAL) AREAS ONLY.

2.UPON COMPLETION OF THE CLEARING, GRUBBING AND REMOVAL OF TOPSOIL AS NOTED ABOVE, PERFORM PROOFROLLING WITH A VIBRATORY ROLLER. WE RECOMMEND A HEAVY WEIGHT VIBRATORY DRUM ROLLER HAVING A TOTAL OPERATING STATIC WEIGHT (INCLUDING FUEL AND WATER) OF AT LEAST 5 TONS AND A DRUM DIAMETER OF 2.5 TO 3 FEET. REGARDLESS OF THE DEGREE OF COMPACTION ACHIEVED, A MINIMUM OF 6 PERPENDICULAR OVERLAPPING PASSES SHOULD BE MADE IN THE BUILDING FOOTPRINTS WITH THE COMPACTION EQUIPMENT IN ORDER TO INCREASE THE DENSITY AND IMPROVE THE UNIFORMITY OF THE UNDERLYING LOOSE SANDY SOILS. UPON COMPLETION OF THE PROOFROLLING, DENSITY TESTS SHALL BE PERFORMED TO CONFIRM A MINIMUM COMPACTION COMPLIANCE OF 95 PERCENT OF MODIFIED PROCTOR MAXIMUM DENSITY (ASTM D-1557). THE ROLLER COVERAGES SHOULD BE DIVIDED EVENLY INTO TWO PERPENDICULAR DIRECTIONS, WHERE POSSIBLE. ADDITIONAL PASSES MAY BE NECESSARY IF COMPLIANCE COMPACTION IS NOT ACHIEVED.

3.PLACE FILL MATERIAL IN UNIFORM LIFTS OF 12 INCHES, TO REACH FINISHED GRADE. THE FILL MATERIAL SHOULD BE INORGANIC (CLASSIFIED AS SP, SW, GP, GW, SP-SM, SW-SM, GP-GM, GW-GM) CONTAINING NOT MORE THAN 5 PERCENT (BY WEIGHT) ORGANIC MATERIALS. FILL MATERIALS WITH SILT-SIZE SOIL FINES IN EXCESS OF 12% SHOULD NOT BE USED. PLACE FILL IN MAXIMUM 12-INCH LIFTS AND COMPACT EACH LIFT TO A MINIMUM DENSITY OF 95 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557) STRUCTURES. IF ONLY ONE DIMENSION CAN BE TAKEN OFF THE CENTERLINE OF ROAD, THE SECOND SHALL WITH A VIBRATORY ROLLER AS MENTIONED IN ITEM #2.

4.PERFORM COMPLIANCE TESTS WITHIN THE FILL AT A FREQUENCY OF NOT LESS THAN ONE TEST PER 2,500 SQUARE FEET PER LIFT, OR AT A MINIMUM OF 3 TESTS PER LIFT, WHICHEVER IS GREATER.

5.UPON COMPLETION OF THE BUILDING FOOTING EXCAVATION AND PRIOR TO PLACEMENT OF REINFORCING STEEL AND CONCRETE, WE RECOMMEND COMPACTION OF THE BOTTOM OF THE FOOTINGS WITH THE VIBRATORY COMPACTOR OVER EACH FOOTING. THE BOTTOM OF FOOTINGS SHALL BE EXAMINED BY THE ENGINEER OR HIS REPRESENTATIVE TO DETERMINE IF THE SOIL IS VERTICALLY FREE OF ALL ORGANIC AND/OR DELETERIOUS MATERIAL, AND IF THE COMPACTION AND SOIL PRESSURES ARE ACHIEVED OR IF ADDITIONAL COMPACTION IS REQUIRED.

6. THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE FINAL CONTOURS AND GRADES AS ESTABLISHED BY THE PLAN WHEN EXECUTING HIS BACKFILLING AND COMPACTION OPERATIONS.

7. USING VIBRATORY COMPACTION EQUIPMENT AT THIS SITE MAY DISTURB ADJACENT STRUCTURES. CARE SHALL BE TAKEN DURING THE EXCAVATION, PROOFROLLING AND COMPACTION OPERATIONS TO INSURE ANY ADJACENT STRUCTURES AND UTILITIES ARE NOT ADVERSELY AFFECTED. WE RECOMMEND THAT YOU MONITOR NEARBY STRUCTURES BEFORE AND DURING PROOFROLLING COMPACTION OPERATIONS.

#### PAVEMENT SITE PREPARATION

1.THE PROPOSED CONSTRUCTION LIMITS SHOULD BE CLEARED, STRIPPED AND GRUBBED OF ALL CONSTRUCTION DEBRIS, VEGETATION AND ASSOCIATED ROOT SYSTEMS TO A DEPTH OF THEIR VERTICAL REACH. THIS SHOULD BE DONE WITHIN AND TO A DISTANCE OF 5 FEET BEYOND THE ROAD PERIMETER AND PARKING LOT.

2.PLACE FILL MATERIAL, AS REQUIRED. THE SUBGRADE SHOULD HAVE AT LEAST 12 INCHES OF STABILIZED SUBGRADE MATERIAL WITH A MINIMUM LIMEROCK BEARING RATIO (LBR) OF 40. WE RECOMMEND A MEDIUM WEIGHT ROLLER BE USED TO PREPARE THE SITE FOR THE PROPOSED PAVEMENT SECTION. UPON COMPLETION OF THE PROOF-ROLLING, DENSITY TESTS SHOULD BE PERFORMED AT A FREQUENCY OF ONE TEST PER 300 LINEAR FEET TO CONFIRM A MINIMUM COMPACTION COMPLIANCE OF 98 PERCENT OF MODIFIED PROCTOR MAXIMUM DENSITY (AASHTO T-180).

3.THE FILL MATERIAL SHOULD BE INORGANIC (CLASSIFIED AS SP/GW) CONTAINING NOT MORE THAN 5 PERCENT (BY WEIGHT) ORGANIC MATERIALS. FILL MATERIALS WITH SILT-SIZE SOIL FINES IN EXCESS OF 12% SHOULD NOT BE USED. PLACE FILL IN MAXIMUM 12-INCH LIFTS AND COMPACT EACH LIFT TO A MINIMUM DENSITY OF 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180) WITH A ROLLER AS MENTIONED PREVIOUSLY.

4.PERFORM COMPLIANCE TESTS WITHIN THE FILL AT A FREQUENCY OF ONE TEST PER 300 LINEAR FEET PER LIFT IN THE PAVEMENT AREAS, OR AT A MINIMUM OF TWO TEST LOCATIONS, WHICHEVER IS GREATER. 5.THE CONTRACTOR SHALL TAKE INTO ACCOUNT THE FINAL CONTOURS AND GRADES AS ESTABLISHED BY THE PAVING

#### ENVIRONMENTAL PROTECTION NOTES

CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED IN WETLAND AREAS UNLESS SUCH CONSTRUCTION PRACTICES ARE APPROVED IN A PLAN OF OPERATION SUBMITTED TO THE ENGINEER & THE APPROPRIATE REGULATORY AUTHORITIES. WHERE CONSTRUCTION IS NECESSARY ACROSS OR ADJACENT TO WETLAND JURISDICTIONAL AREAS, SILT BARRIERS SHALL BE INSTALLED AS SHOWN ON THE PLANS. SILT BARRIERS SHALL BE CONSIDERED LIMITS OF CONSTRUCTION WITHIN OR ADJACENT TO JURISDICTIONAL AREAS.

AND DRAINAGE PLAN WHEN EXECUTING ANY BACKFILLING AND / OR COMPACTION OPERATIONS.

2. CONSTRUCTION SHALL PROCEED SUCH THAT ALL STORM WATER FACILITIES WITHIN A WATERSHED AREA ARE IN PLACE AND OPERATIONAL PRIOR TO CONSTRUCTION OF IMPERVIOUS SURFACES WITHIN

3. STAKED OR FLOATING SILT SCREENS OR HAY BALES, AS APPROPRIATE, SHALL BE UTILIZED AS SILT BARRIERS AND PLACED IN LOCATIONS SHOWN ON THE PLANS AND AT OTHER LOCATIONS AS REQUIRED TO KEEP SEDIMENT FROM REACHING WATER BODIES OR WETLAND AREAS. THESE BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING WITH ANY CONSTRUCTION WITHIN OR ADJACENT TO JURISDICTIONAL AREAS. THE CONTRACTOR SHALL MONITOR AND MAINTAIN ALL SILT BARRIERS INCLUDING DAILY INSPECTIONS TO CHECK THEIR INTEGRITY. ANY LOOSE OR DAMAGED SILT BARRIERS SHALL BE IMMEDIATELY REPAIRED OR REPLACED, AS NECESSARY. ONCE CONSTRUCTION IS COMPLETE AND FINISH GRADING / STABILIZATION HAS BEEN ACHIEVED, SILT BARRIERS SHALL BE COMPLETELY REMOVED TO THE SATISFACTION OF THE OWNER AND PRIOR TO FINAL ACCEPTANCE.

4. ALL FUGITIVE DUST SHALL BE CONTROLLED ON SITE. ONLY AREAS SCHEDULED FOR IMMEDIATE CONSTRUCTION SHALL BE CLEARED OR STRIPPED OF VEGETATION. WATERING, APPLICATION OF <u>APS 605 SILT STOP</u> OR OTHER PRIOR APPROVED MEANS OF DUST CONTROL SHALL BE EMPLOYED TO PREVENT THE EMANATION OF DUST FROM THE SITE. PERMANENT GRASSING, LANDSCAPING AND OTHER SITE WORK

ALL WATER COLLECTED AND PUMPED DURING TRENCH DEWATERING ACTIVITIES SHALL BE DISPOSED OF IN ON-SITE UPLAND AREAS INTO DOUBLE STAKED HAY BALES. DISCHARGE LOCATIONS SHALL BE A MINIMUM OF 75 FEET FROM THE NEAREST SURFACE WATER BODY OR WETLAND AREA, TO ALLOW FOR MAXIMUM OVERLAND FILTRATION OF SOIL PARTICLES. CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT FOR APPROVAL PRIOR TO DEWATERING.

6 TEMPORARY STOCKPILES SHALL NOT BE LOCATED ADJACENT TO LINDISTURBED WETLANDS ADDITIONALLY, STOCKPILES TO REMAIN FOR LONGER THAN 24 HOURS SHALL BE CONFINED BY SILT BARRIERS WHICH PREVENT RUNOFF SEDIMENTATION FROM ENCROACHING UPON WETLAND AREAS OR SURFACE WATER BODIES.

7. ALL TRASH AND CONSTRUCTION DEBRIS PRODUCED FROM THIS PROJECT SHALL BE COLLECTED BY THE CONTRACTOR DAILY. THESE MATERIALS SHALL BE STAGED OR CONTAINERIZED AS NECESSARY TO PREVENT ACCIDENTAL RELEASE. DISPOSAL OF SOLID WASTE MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE MUNICIPAL, COUNTY AND STATE REGULATIONS.

8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING PORTABLE SANITARY WASTE UNITS ON-SITE FOR USE BY HIS EMPLOYEES DURING CONSTRUCTION.

9. THE CONTRACTOR SHALL MAINTAIN CONTROL OF ANY HAZARDOUS MATERIALS UTILIZED ON-SITE FOR CONSTRUCTION. STORAGE CONTAINERS, VEHICLES, ETC. WILL BE INSPECTED REGULARLY FOR LEAKAGE. A SPILL PREVENTION PLAN SHALL BE ESTABLISHED WHICH COVERS CLEANUP AND NOTIFICATION OF APPROPRIATE GOVERNMENT AGENCIES.

10. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING SITE EROSION AND SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION OR ALTER EXISTING TOPOGRAPHY. THE CONTRACTOR SHALL PROVIDE ADDITIONAL SOD, HAY BALES, SAND BAGS OR SEED & MULCH, AS NECESSARY, TO ACHIEVE AN EROSION-FREE SITE (FREE FROM RUTTING, ETC.) TO THE LINES AND GRADES SHOWN IN THE PLANS UNTIL FINAL ACCEPTANCE. ALL SWALES AND SURFACES 4:1 OR STEEPER SHALL BE SODDED. ALL OTHER UNPAVED SURFACES WHICH EXPERIENCE UNDUE EROSION THAT CANNOT BE CONTROLLED BY OTHER MEASURES SHALL BE SODDED. ALL SOD SHALL BE ARGENTINE BAHIA UNLESS SPECIFICALLY SHOWN OTHERWISE IN THE CONTRACT DOCUMENTS.

11. PRIOR TO THE START OF THE CLEARING OR GRUBBING, OR ANY SOIL DISTURBANCE, CONTACT PASCO COUNTY STORMWATER MANAGEMENT AT (727) 834-3611 FOR A SOIL EROSION AND SEDIMENT CONTROL PRE-INSPECTION MEETING.

12. THE CROSS-SLOPE OF THE SHOULDERS SHALL NOT BE STEEPER THAT 0.06 FEET PER FOOT. 13. THE SLOPE OF THE AREA WITHIN THE ROADSIDE CLEAR ZONE SHALL NOT BE STEEPER THAN SIX FEET HORIZONTAL TO ONE FOOT VERTICAL (6:1)

14. ALL SLOPES WITHIN THE COUNT RIGHT-OF-WAY (OUTSIDE THE CLEAR ZONE) SHALL BE A MINIMUM

## MINIMUM REQUIRED UTILITY AS-BUILTS

## PASCO COUNTY REQUIREMENTS

UPON THE COMPLETION OF THIS PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE COUNTY WITH A COMPLETE SET OF "RECORD DRAWINGS" OF STORM DRAINAGE, UTILITIES, AND OTHER SITE IMPROVEMENTS AS FURTHER HEREIN NOTED. THE CONTRACTOR SHALL MAINTAIN A LEGIBLY MARKED SET OF PLANS, DURING CONSTRUCTION, SHOWING THE ACTUAL CONSTRUCTION, LOCATION, AND LAYOUT OF THE PIPELINES AND APPURTENANCES AS THEY WERE INSTALLED. THE MARKED UP PLAN SHALL SHOW ALL VALVES, TAPS AND FITTINGS USED, PIPE CUTS, DIMENSIONS, MATERIAL TYPES, CLASS, COLOR, PIPE BEDDING MATERIAL AND INDICATE THE PROXIMITY OF THE INSTALLED PIPELINE TO ANY CROSSING OR OTHER PIPELINE, CONDUIT OR CABLE EXCAVATED DURING INSTALLATION. THE CONTRACTOR SHALL ALSO PROVIDE A SURVEY OF THE PIPELINE SHOWING THE LOCATION AND ELEVATION OF THE TOP OF PIPE AT EACH END AND AT 100 FT. STATIONING IN REFERENCE TO BOTH MEAN SEA LEVEL AND FINISH GRADE. THE SURVEY SHALL BE SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED WITH THE STATE OF FLORIDA. SIX COPIES OF THE AS-BUILTS ARE REQUIRED. FINAL PAYMENT TO THE CONTRACTOR SHALL NOT BE MADE WITHOUT THESE SUBMITTED AND APPROVED BY THE DESIGN ENGINEER.

## ADDITIONAL REQUIREMENTS

1. ALL DIMENSIONS SHALL BE IN FEET DIMENSIONED OFF CENTERLINE OF ROADS OR OTHER PERMANENT BE OFF A PERMANENT MARKER OR REFERENCE POINT.

AS-BUILTS SHALL BE SUBMITTED TO THE ENGINEER, SIGNED & SEALED BY A PROFESSIONAL SURVEYOR REGISTERED IN THE STATE OF FLORIDA.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A RECORD SURVEY(S) PREPARED AND SUBMITTED BY A LICENSED PROFESSIONAL SURVEYOR AND MAPPER INCLUDING, BUT NOT LIMITED TO, LOCATION AND FINISHED GRADE ELEVATIONS IN PAVED AND NON-PAVED AREAS SUFFICIENT TO DETERMINE DIRECTION OF SITE DRAINAGE AND ELEVATIONS OF RETENTION/DETENTION AREAS, MITIGATION AREAS AND DITCH/CHANNEL CONVEYANCES INCLUDING TOPS OF BANKS. TOES OF SLOPES. POND BOTTOMS AND WATER LEVELS; ELEVATIONS AND DIMENSIONS OF POND CONTROL STRUCTURES, SPILLWAYS AND UNDERDRAINS; DRAINAGE STRUCTURE GRATE/INLET/RIM ELEVATIONS, STORM PIPE SIZES, PIPE MATERIALS, AND PIPE INVERTS, PLUS LOCATIONS, DIMENSIONS AND ELEVATIONS OF ALL OTHER CONSTRUCTION COMPONENTS WHICH VARY FROM THE DESIGN UTILITY INFORMATION SHALL INCLUDE LOCATION OF WATER LINE CONNECTIONS, VALVES, BENDS, METERS AND ELEVATIONS OF PIPES WHERE DEPTH OF COVER VARIES FROM DESIGN; TIES TO SANITARY SEWER LINES, MANHOLE RIM AND INVERT ELEVATIONS, CLEANOUTS AND SERVICE CONNECTIONS; FOUR COPIES OF THE SIGNED AND SEALED RECORD SURVEY AND ONE COPY OF THE SURVEY IN AUTOCAD DIGITAL FORMAT.

. SHOW ACTUAL ELEVATIONS (TOP AND ALL INVERTS) FOR ALL NEW AND EXISTING MANHOLES. SHOW ACTUAL GRAVITY SEWER SLOPE PERCENTAGES.

INDICATE ALL LOCATIONS WHERE SEWER LINE WAS ENCASED OR WHERE DUCTILE IRON WAS UTILIZED.

SHOW SIZE, SDR, CLASS OR TYPE OF MATERIAL IF DIFFERENT THAN PLANS. SHOW LOCATIONS OF ALL SERVICE WYES BY DIMENSION FROM MANHOLES.

DIMENSION SERVICE LATERAL TERMINATION POINTS AND DEPTH FROM FINISH GRADE. FITTINGS, VALVES, TAPS, ETC. SHALL BE DIMENSIONED (SEE NOTE NO. 1 UNDER "GENERAL") USING DESCRIPTIVE NOTES INDICATING THEIR EXACT LOCATION.

SHOW BOTTOM, INFLUENT INVERT AND TOP ELEVATIONS OF WETWELL. ACTUAL ELEVATIONS OF BOTTOM OF CONTROL PANEL.

. ELEVATIONS OF LIQUID LEVEL SENSORS FOR PUMP OFF, FIRST AND SECOND PUMPS ON (THIRD IF PROVIDED), AND ALARM ON. 4. SHOW ALL WETWELL AND VALVE VAULT PIPING AND VALVE CHANGES.

#### ENVIRONMENTAL PROTECTION NOTES

CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED IN WETLAND AREAS UNLESS SUCH CONSTRUCTION PRACTICES ARE APPROVED IN A PLAN OF OPERATION SUBMITTED TO THE ENGINEER & THE APPROPRIATE REGULATORY AUTHORITIES. WHERE CONSTRUCTION IS NECESSARY ACROSS OR ADJACENT TO WETLAND JURISDICTIONAL AREAS, SILT BARRIERS SHALL BE INSTALLED AS SHOWN ON THE PLANS. SILT BARRIERS SHALL BE CONSIDERED LIMITS OF CONSTRUCTION WITHIN OR ADJACENT TO JURISDICTIONAL AREAS.

. CONSTRUCTION SHALL PROCEED SUCH THAT ALL STORM WATER FACILITIES WITHIN A WATERSHEE AREA ARE IN PLACE AND OPERATIONAL PRIOR TO CONSTRUCTION OF IMPERVIOUS SURFACES WITHIN THAT

#### GENERAL UTILITY NOTES

1. ALL UTILITY CONSTRUCTION SHALL MEET OR EXCEED PASCO COUNTY STANDARDS AND CONFORM WITH PASCO COUNTY UTILITY DEPARTMENT (PCUD) WATER, RECLAIMED WATER AND WASTEWATER CONSTRUCTION SPECIFICATIONS

MANUAL, JULY 2006 EDITION. 2. CONTRACTOR SHALL CONTACT THE PASCO COUNTY UTILITY DEPARTMENT 24 HOURS PRIOR TO EXCAVATION OR OF CONNECTION TO COUNTY UTILITIES.

3. ALL UNPAVED AREAS DISTURBED BY THIS CONSTRUCTION SHALL BE SODDED UNLESS DIRECTED OTHERWISE BY THE

4. ALL UTILITY LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE PIPE ALIGNMENT. IN THE CASE OF GRAVITY SEWERS, THE TAPE SHALL BE SECURED TO EACH MANHOLE. THE PROTECTION TAPE SHALL BE INSTALLED DURING BACK FILING 18" DIRECTLY OVER THE PIPE. THE TAPE SHALL HAVE A METAL DETECTABLE STRIP SANDWICHED BETWEEN 2 LAYERS OF POLYETHYLENE, 2" WIDE STRIPING WITH A THICKNESS OF 5.5 MILS. FOR WATER LINES, THE TAPE SHALL BE CONTINUOUSLY MARKED "CAUTION, WATER LINES BELOW". FOR FORCE MAINS, THE TAPE SHALL BE CONTINUOUSLY MARKED "CAUTION, SEWAGE FORCE MAIN BELOW". FOR SANITARY SEWER, THE TAPE SHALL BE CONTINUOUSLY MARKED "CAUTION, SEWER MAIN BELOW". BOTH WATER MAINS AND SANITARY SEWER FORCE MAINS SHALL ALSO HAVE A "LOCATOR DETECTOR WIRE" - UL TYPE AWG #10 SOLID STRAND COPPER WIRE W/60MM PVC WALL INSTALLED ALONG THE ENTIRE LENGTH OF PIPE.

5. THE CONTRACTOR IS CAUTIONED THAT THE LOCATION OF EXISTING UTILITIES, WHETHER OR NOT SHOWN, ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ACTUAL FIELD LOCATIONS FROM THE RESPECTIVE UTILITY COMPANY AND TO COORDINATE WITH AFFECTED UTILITY COMPANY 48 HOURS BEFORE BEGINNING ANY

SUNSHINE STATE ONE CALL 1-800-432-4770 DUKE ENERGY 1-866-372-4663 BRIGHTHOUSE NETWORKS 1-877-897-7333 (727) 562 - 1178CLEARWATER GAS (727) 638-0763 PASCO COUNTY UTILITIES (813) 235-6189

6. ALL PVC FORCE MAINS, UNLESS SPECIFIED OTHERWISE, SHALL BE AWWA C-909, CLASS 200, AWWA C900, CLASS 150, DR18 PVC WITH AWWA APPROVED DUCTILE IRON MECHANICAL JOINT FITTINGS AND SHALL BE BROWN PIPE (WHITE OR BLACK LETTERING).

7. ALL PVC WATER MAINS, UNLESS SPECIFIED OTHERWISE, SHALL BE AWWA C-900, DR 18 PVC WITH AWWA APPROVED DUCTILE IRON MECHANICAL JOINT FITTINGS AND SHALL BE BLUE (WHITE OR BLACK LETTERING). 8. SANITARY SEWER (GRAVITY) PIPE SHALL CONFORM TO ASTMD 3034 SDR35 PVC BELL AND SPIGOT GASKETED JOINTS FOR DEPTHS LESS THAN 12'. FOR DEPTHS GREATER THAN 12', ASTMD 3034, SDR 26.

9. ADDITIONAL REQUIREMENTS FOR PVC, DUCTILE IRON AND HDPE PIPING ARE CONTAINED IN THE CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS FOR THIS PROJECT.

10. ALL PVC PIPE SHALL HAVE LETTERING APPEARING ON THREE SIDES OF THE PIPE, SHALL RUN THE ENTIRE LENGTH OF THE PIPE AND SHALL BE 3/4" IN HEIGHT WITH THE APPROXIMATE WORDING APPEARING ONE OR MORE TIMES EVERY I INCHES ALONG THE LENGTH OF THE PIPE. THE LETTERING MUST BE PERMANENTLY STENCILED TO THE PIPE SURFACE. LETTERING SHALL READ AS IS ACCEPTABLE FOR THE INTENDED USE. ALL LETTERING SHALL BE APPLIED BY

11. THE CONTRACTOR SHALL PERFORM LEAK TESTING LAMPING AND VIDEO TAPING ON ALL GRAVITY SEWERS AND A PRESSURE TEST ON ALL WATER, REUSE AND FORCE MAINS (AS APPLICABLE) IN ACCORDANCE WITH THE UTILITY HAVING JURISDICTION AND/OR AS STATED IN THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER. TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD. THE SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

12. WATER AND WASTEWATER SYSTEMS SHALL NOT BE PLACED IN SERVICE (FOR TEMPORARY OR PERMANENT USE) UNTIL ALL TESTING AND INSPECTIONS HAVE BEEN COMPLETED, TEST REPORTS AND "AS-BUILTS" FOR THOSE SYSTEMS SUBMITTED, AND CLEARANCE HAS BEEN OBTAINED FROM THE APPLICABLE UTILITIES AND PERMITTING AGENCIES. NO WATER SYSTEM SHALL BE PLACED IN SERVICE BEFORE SEWER SYSTEM HAS BEEN CLEARED FOR USE.

13. DISINFECTION AND BACTERIOLOGICAL TESTING OF ALL WATER LINES SHALL BE PERFORMED IN ACCORDANCE WITH FDEP REGULATION 62-555.340.

14. DEFLECTION TESTING FOR GRAVITY SEWER LINES SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 33.85 OF "RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (10 STATE STANDARDS)". 1997 EDITION. 15. TESTING OF SUB AQUEOUS LINES SHALL COMPLY WITH FAC 62-604.400(2).

16. THE CONTRACTOR SHALL COMPLY WITH LOCAL CROSS-CONNECTION CONTROL POLICY FOR CONSTRUCTION OF ALL POTABLE, SANITARY AND RECLAIMED UTILITIES.

17. ALL WATER MAINS SHALL HAVE A MINIMUM OF 36" COVER. FORCE MAINS SHALL HAVE A MINIMUM OF 48" COVER. INCREASED DEPTH MAY BE REQUIRED TO AVOID STORM DRAINAGE OR OTHER UTILITY SYSTEMS.

18. CONTRACTOR TO PROVIDE THRUST BLOCKING AND/OR JOINT RESTRAINTS TO FULLY RESTRAIN PRESSURE PIPES AGAINST FAILURE UP TO A TEST PRESSURE OF 150 psi. CONTRACTOR SHALL PROVIDE A RESTRAINING PLAN FOR THE ENGINEER'S REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

19. WARNING SIGNS SHALL BE INSTALLED AT ANY SURFACE WATER CROSSING IN ACCORDANCE WITH FAC 62-604.400(2).

20. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE DOCUMENTS REFERENCED HEREIN. ANY METHODS, PROCEDURES, STANDARDS, EQUIPMENT, OR MATERIALS WHICH ARE NOT COVERED OR SPECIFIED BY THE APPLICABLE PROVISIONS OF PASCO COUNTY UTILITIES DEPARTMENT WATER AND WASTEWATER CONSTRUCTION SPECIFICATIONS MANUAL SHALL BE CONSTRUCTED TO BE IN ACCORDANCE WITH THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND F.D.O.T. UTILITIES ACCOMMODATION GUIDE UNLESS SPECIFICALLY APPROVED BY THE ENGINEER OF RECORD. IN THE CASE OF CONFLICTING SPECIFICATIONS, THE MOST STRINGENT SHALL APPLY.

21. ALL UTILITIES SHALL BE KEPT IN OPERATION EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF THE UTILITY OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE EXISTING UTILITIES. ANY AND ALL DAMAGE TO EXISTING UTILITIES AS A RESULT OF THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

WHERE WATER AND SEWER LINE INSTALLATION ARE IN CONFLICT WITH EXISTING UTILITY POLES, GUY WIRES OR SIMILAR STRUCTURES, THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY TO DETERMINE WHETHER THE STRUCTURES WILL REQUIRE RESTRAINT. THE FINAL DECISION AS TO WHETHER RESTRAINT IS REQUIRED WHILE EXCAVATION OCCURS SHALL BE THAT OF THE UTILITY OWNER. THE COST FOR THIS COORDINATION AND RESTRAINT SHALL BE INCLUDED IN THE CONTRACTOR'S OVERALL COSTS.

PRESSURE TESTING. 24. CONTRACTOR SHALL CONTACT THE PASCO COUNTY DEPARTMENT OF PUBLIC WORKS 24 HOURS PRIOR TO THE START OF ANY CONSTRUCTION WITHIN THE COUNTY RIGHT-OF-WAY.

23. CONTRACTOR SHALL PROVIDE TEMPORARY CONNECTIONS AS NECESSARY FOR FLUSHING, DECONTAMINATION AND

## UTILITY SEPARATION NOTES

1. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER, STORM SEWER, STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER (OR A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER IF THE BOTTOM OF THE WATER MAIN WILL BE LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER): A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM." [FAC 62-555.314(1); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)]

2. NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE LAID SO THI OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE; AND NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE. [FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC

3. AT THE UTILITY CROSSINGS DESCRIBED ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE WILL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE OR THE PIPES WILL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. [FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)]

NOTE: WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATIONS AS STIPULATED ABOVE, DEP MAY ALLOW DEVIATION ON A CASE-BY-CASE BASIS IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. APPROVAL FOR THE DEVIATION MUST BE OBTAINED PRIOR TO CONSTRUCTION.

INSPECTIONS AND MAINTENANCE OF STORMWATER FACILITIES 1. EROSION AND SETTLEMENT CONTROLS SHALL BE INSPECTED ON A DAILY BASIS. WHEN NECESSARY REPAIRS SHALL BE INITIATED WITHIN 24 HOURS OF NOTED DEFICIENCY.

2. THE ENTIRE STORM WATER SYSTEM SHOULD BE INSPECTED ON AT LEAST A SEMI—ANNUAL BASIS. THIS SHOULD INCLUDE A VISUAL INSPECTION OF THE POND, POND BANKS, BLEED-DOWN ORIFICES, OTHER CONTROL STRUCTURES, AND DISCHARGE PIPES. THESE SHOULD BE KEPT FREE OF DEBRIS AND CLEANED ON A FREQUENCY AS REQUIRED TO KEEP THEM FUNCTIONAL, AS DESIGNED. MOWING/CLEANING AROUND THE STRUCTURES MAY BE REQUIRED TO PREVENT CLOGGING BY VEGETATION.

3. SEDIMENT SUMPS, IF DESIGNED AND INSTALLED, SHOULD HAVE SEDIMENT REMOVED AS NECESSARY TO ALLOW FOR EFFICIENT REMOVAL OF SUSPENDED PARTICLES. THEY SHOULD BE RE-EXCAVATED TO THE DESIGN FINISH GRADE ELEVATION, IF SILTED IN. 4. SPECIFIC CONDITIONS OF ALL PERMITS MAY REQUIRE ADDITIONAL MAINTENANCE ACTIVITIES ABOVE AND BEYOND THOSE OUTLINED ABOVE. CHECK ALL PERMIT CONDITIONS AS ISSUED BY REGULATORY AGENCIES TO ENSURE COMPLIANCE.

5. THE REMOVAL OF LITTORAL SHELF VEGETATION (INCLUDING CATTAILS) FROM WET DETENTION PONDS IS PROHIBITED UNLESS OTHERWISE APPROVED BY THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD). REMOVAL INCLUDES DREDGING, THE APPLICATION OF HERBICIDES, CUTTING AND THE INTRODUCTION OF GRASS CARP. ANY QUESTIONS REGARDING AUTHORIZED ACTIVITIES WITH THE WET DETENTION PONDS SHALL BE ADDRESSED TO THE REGULATION MANAGER OF SWFWMD'S LOCAL OFFICE. 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF TEMPORARY SEDIMENT / EROSION CONTROL DEVICES WHEN NO LONGER NEEDED.

## SPECIAL NOTES TO CONTRACTORS

1. WHERE TREE REMOVAL IS REQUIRED DUE TO CONSTRUCTION, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND DISPOSE OF THOSE TREES. THE COST FOR THIS REMOVAL AND DISPOSAL SHALL BE INCLUDED IN THE CONTRACTOR'S OVERALL COSTS. TREE REMOVAL AND PROTECTION SHALL COMPLY WITH APPLICABLE CITY AND / OR COUNTY

2. WHERE WATER AND SEWER LINE INSTALLATION ARE IN CONFLICT WITH EXISTING UTILITY POLES, GUY POLES OR OTHER SUCH POLES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY TO DETERMINE WHETHER THE RESPECTIVE POLE REQUIRES RESTRAINT. THE FINAL DECISION AS TO WHETHER A POLE IS TO BE RESTRAINED WHILE EXCAVATION OCCURS AROUND THE POLE SHALL BE THAT OF THE UTILITY OWNER. THE COST FOR THIS COORDINATION AND RESTRAINT SHALL BE INCLUDED IN THE CONTRACTORS OVERALL COSTS.

3. THE CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLANS TO APPROPRIATE REGULATORY AGENCIES HAVING JURISDICTION OVER IMPACTED ROADWAYS. CONSTRUCTION SHALL NOT COMMENCE WITHIN ROW UNTIL MOT APPROVALS FOR IMPACTED ROAD(S) ARE RECEIVED. CONTRACTOR SHALL ALSO NOTIFY LOCAL EMERGENCY SERVICES DEPARTMENTS WHENEVER CONSTRUCTION ACTIVITIES WILL IMPEDE NORMAL TRAFFIC FLOW.

4. ALL DEFLECTION BENDS ARE 45° UNLESS SPECIFIED OTHERWISE. EXACT LOCATION OF BENDS TO BE DETERMINED IN FIELD AND APPROVED BY FIELD INSPECTOR. LOCATION DATA SHALL BE PROVIDED IN AS-BUILTS ACCORDING TO PASCO COUNTY AND/OR FDOT REQUIREMENTS.

UNLESS SPECIFIED OTHERWISE, CONTRACTOR SHALL FURNISH AND INSTALL ALL PROPOSED ITEMS SHOWN WITHIN THE

6. LENGTHS FOR DIRECTIONAL DRILLING SHOWN ARE MINIMUM TO CLEAR SPECIFIC OBSTRUCTIONS. ADDITIONAL LENGTH MAY BE REQUIRED DEPENDING UPON ALLOWABLE BEND RADIUS, DEPTH AND PIPE DIAMETER. CONTRACTOR SHALL NOTIFY ENGINEER WHENEVER ADDITIONAL DRILL LENGTHS ARE NECESSARY. PIPE DIMENSION RATIO SPECIFIED IS MINIMUM FOR PRESSURE REQUIREMENTS AND MAY NOT BE SUITABLE FOR ALL DEPTH, PULL FORCE, OR LOADING CONDITIONS. DRILLING CONTRACTOR SHALL NOTIFY ENGINEER WHENEVER SPECIFIED MINIMUMS MAY BE UNSUITABLE FOR THE INTENDED APPLICATION.

7. CONSTRUCTION EQUIPMENT AND MATERIAL TRANSPORT / STAGING IS THE RESPONSIBILITY OF THE CONTRACTOR. UPON REQUEST, THE OWNER WILL PROVIDE ACCESS TO THE CLOSEST OPEN SPACE OWNED AND AVAILABLE FOR THE CONTRACTOR'S USE; HOWEVER, THE SITE MAY NOT BE CONTIGUOUS TO THE PROJECT AREA OR OF SUFFICIENT SIZE TO ACCOMMODATE THE ENTIRE PROJECT INVENTORY OF MATERIALS / EQUIPMENT.

## FIRE PROTECTION NOTES:

1. PROJECT MUST COMPLY WITH PASCO COUNTY FIRE HYDRANT ORDINANCE NO. 46-51.

2. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.

3. PER THE NATIONAL FIRE PROTECTION ASSOCIATION. NFPA-1, 16.4.3.1.3: WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO CONSTRUCTION WORK.

4. PER NFPA-1, 18.3.4.1: CLEARANCES OF 7.5 FEET IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH A FOUR FOOT CLEARANCE TO THE REAR MUST BE MAINTAINED AT ALL TIMES.

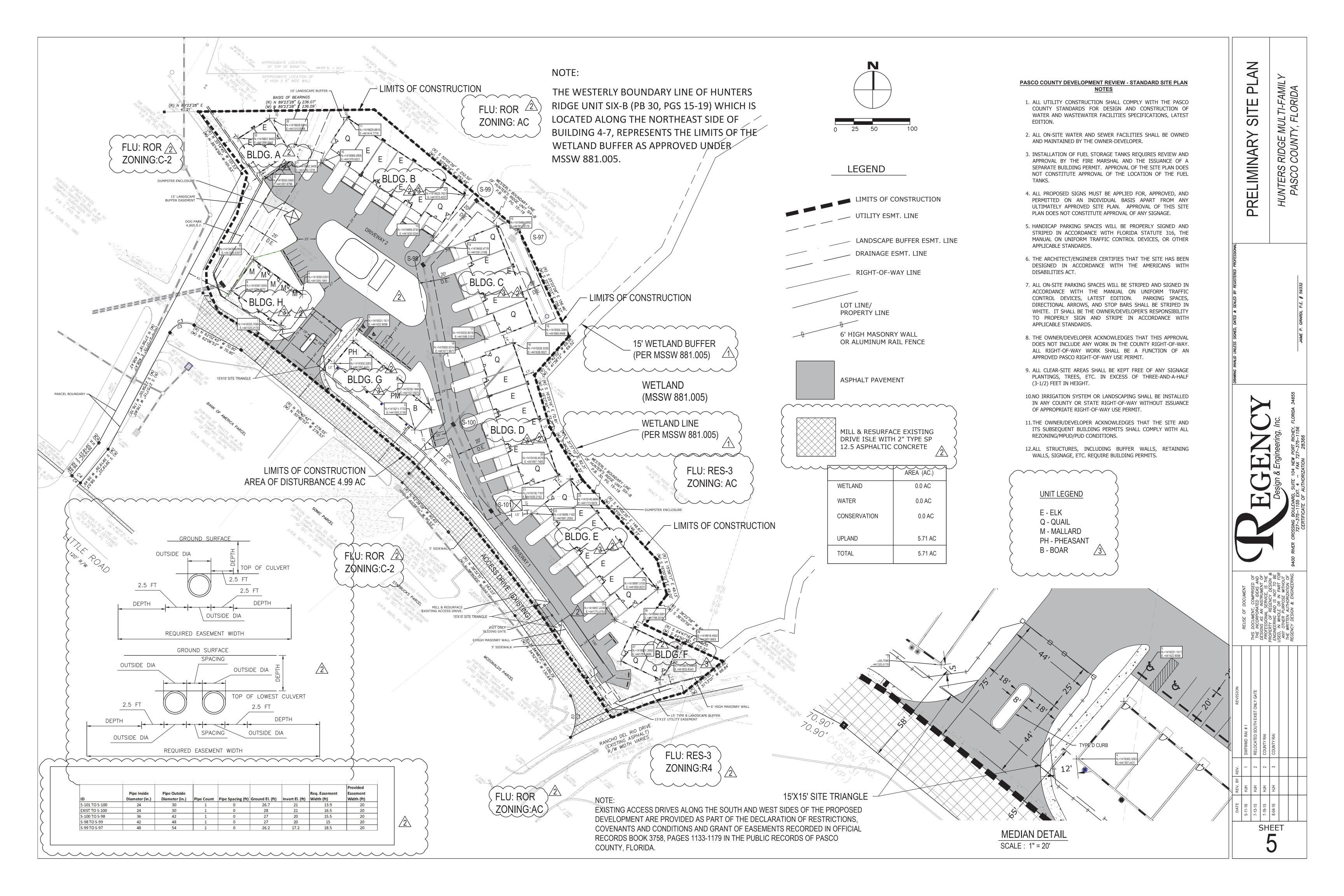
5. GATED ENTRIES REQUIRE A SIREN CREATING SYSTEM OR A 3M OPTICOM SYSTEM FOR EMERGENCY ACCESS

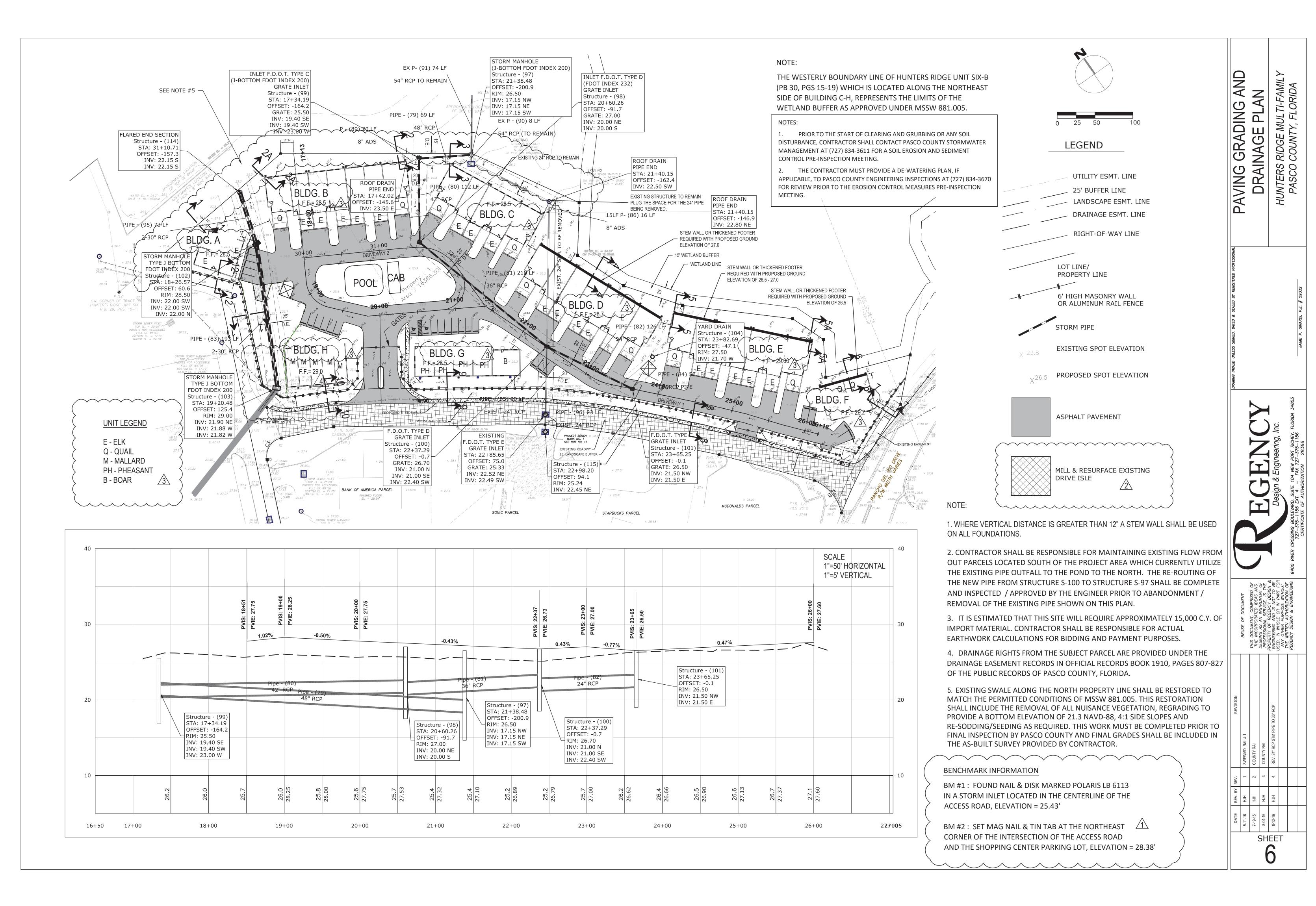
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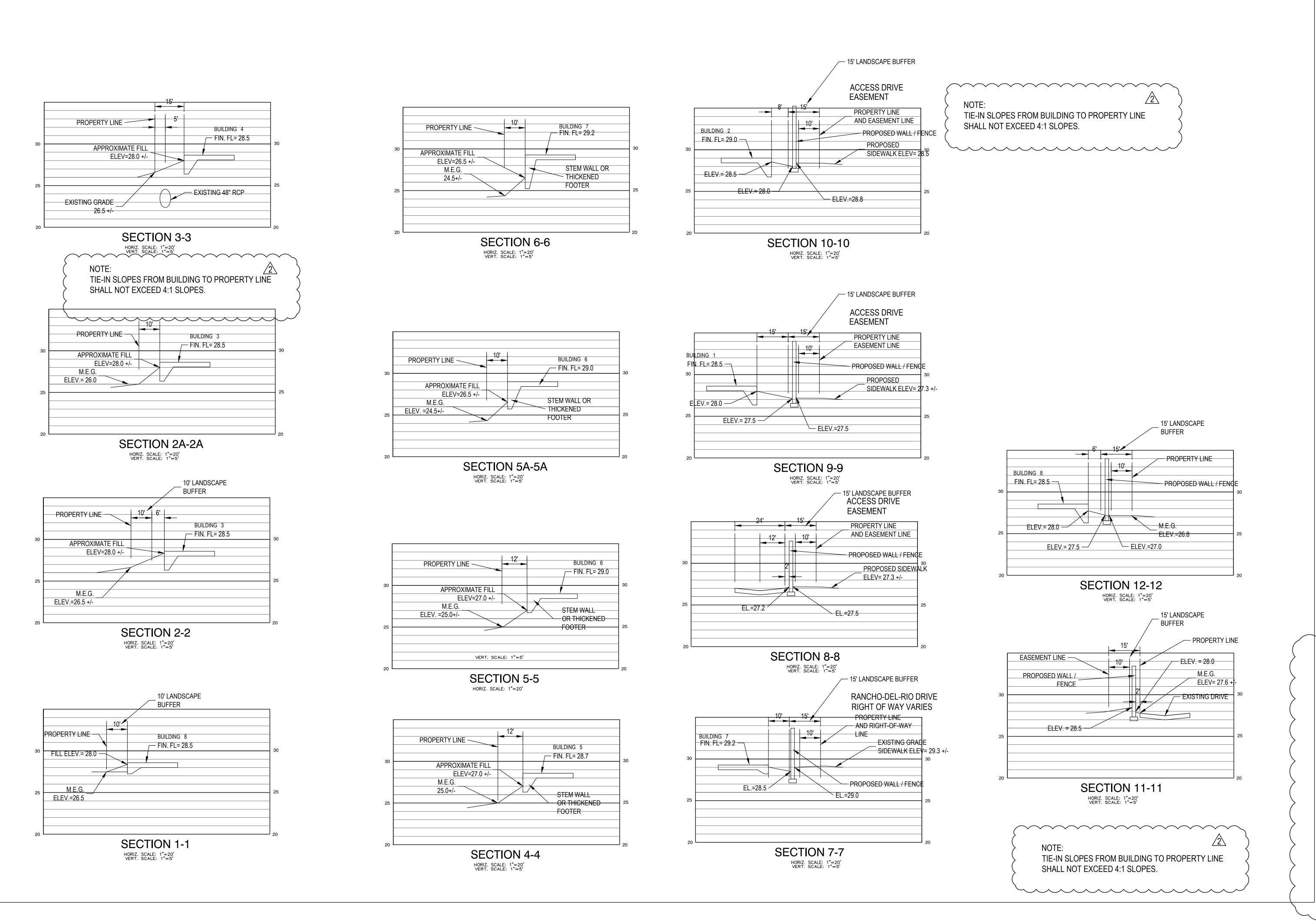
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PAVING GRADING AND DRAINAGE SECTIONS

DRAINAGE SECTIONS
HUNTERS RIDGE MULTI-FAMILY
PASCO COUNTY, FLORIDA

JAIME P. GIRARDI, P.E. # 59332

Besign & Engineering, Inc.

Design & Engineering, Inc.

2400 RIVER CROSSING BOULEVARD, SUITE 104 NEW PORT RICHEY, FLORIDA 34655

277-375-1155 EXT. 4 - FAX 727-375-1156

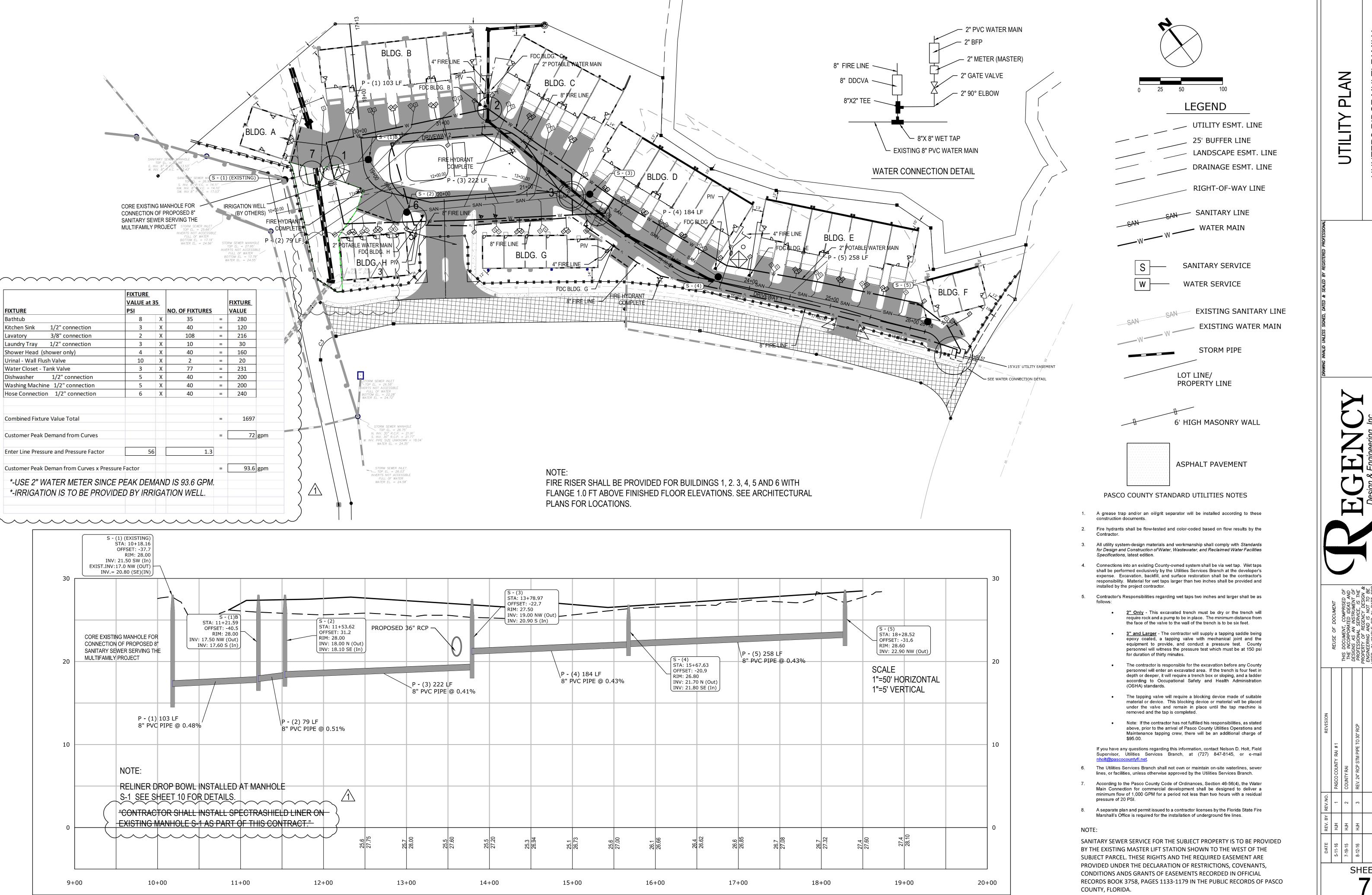
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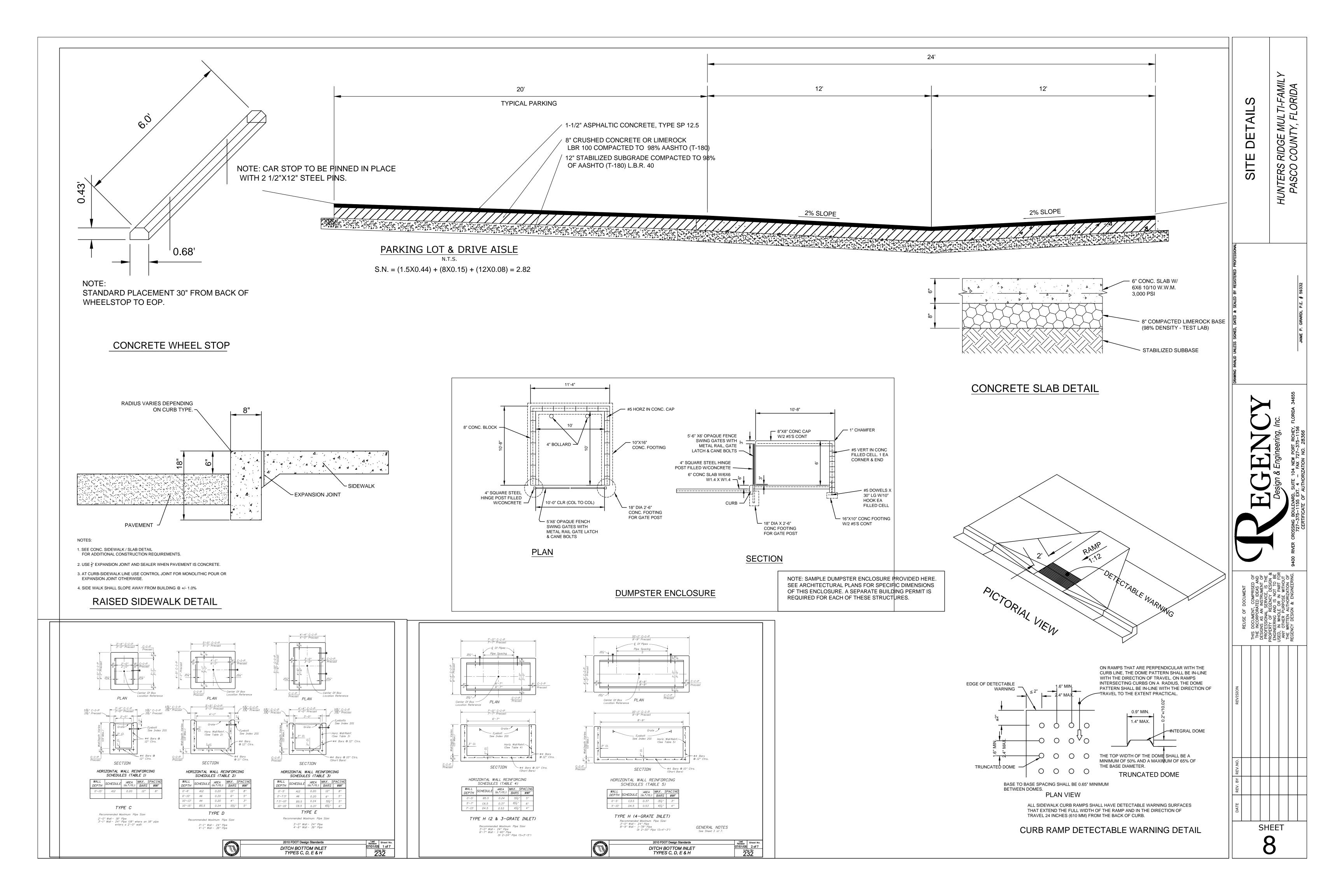
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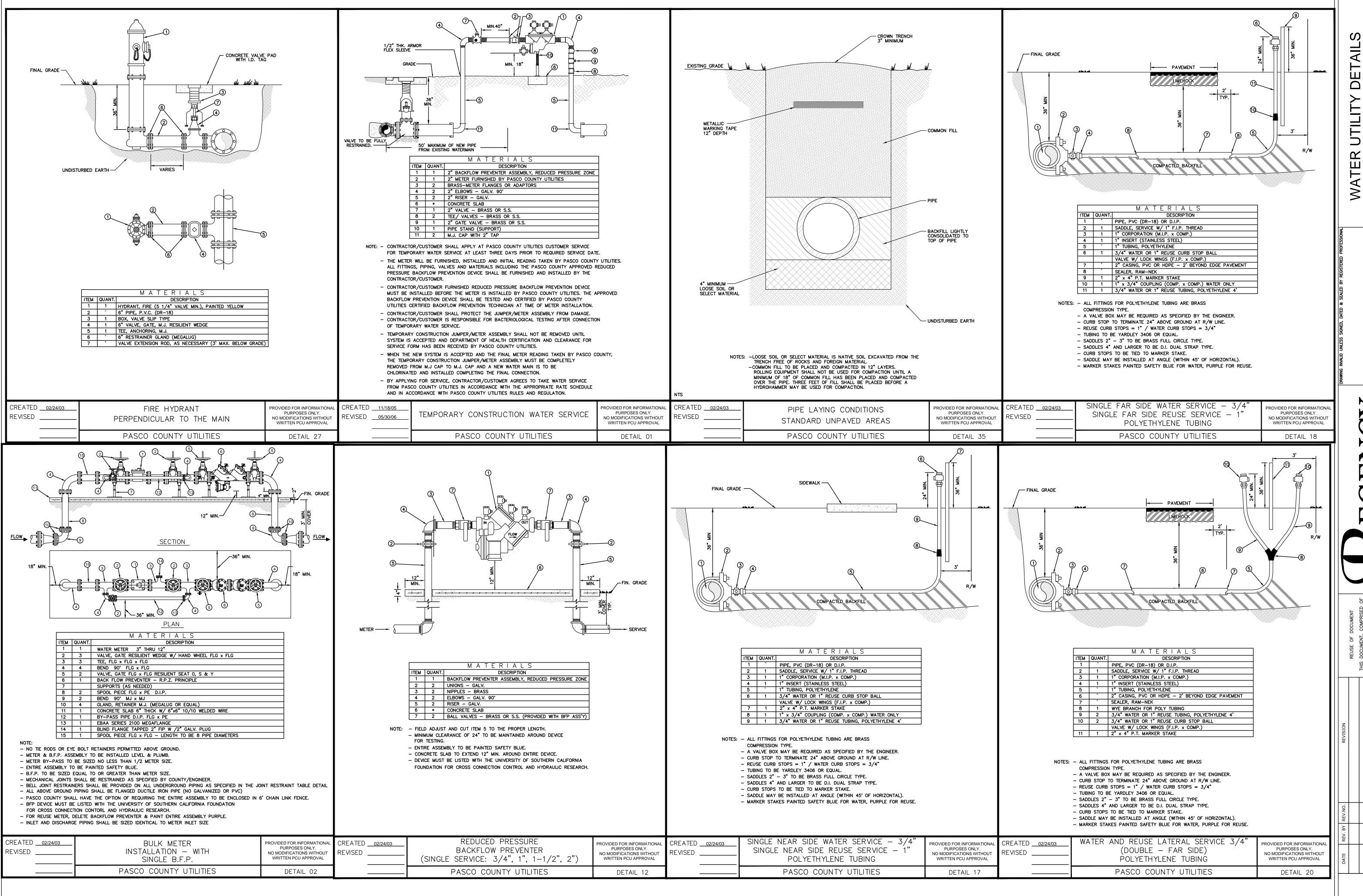
HJH 2 ADDED 4:1 SLOPE NOTE

SHEET 6A



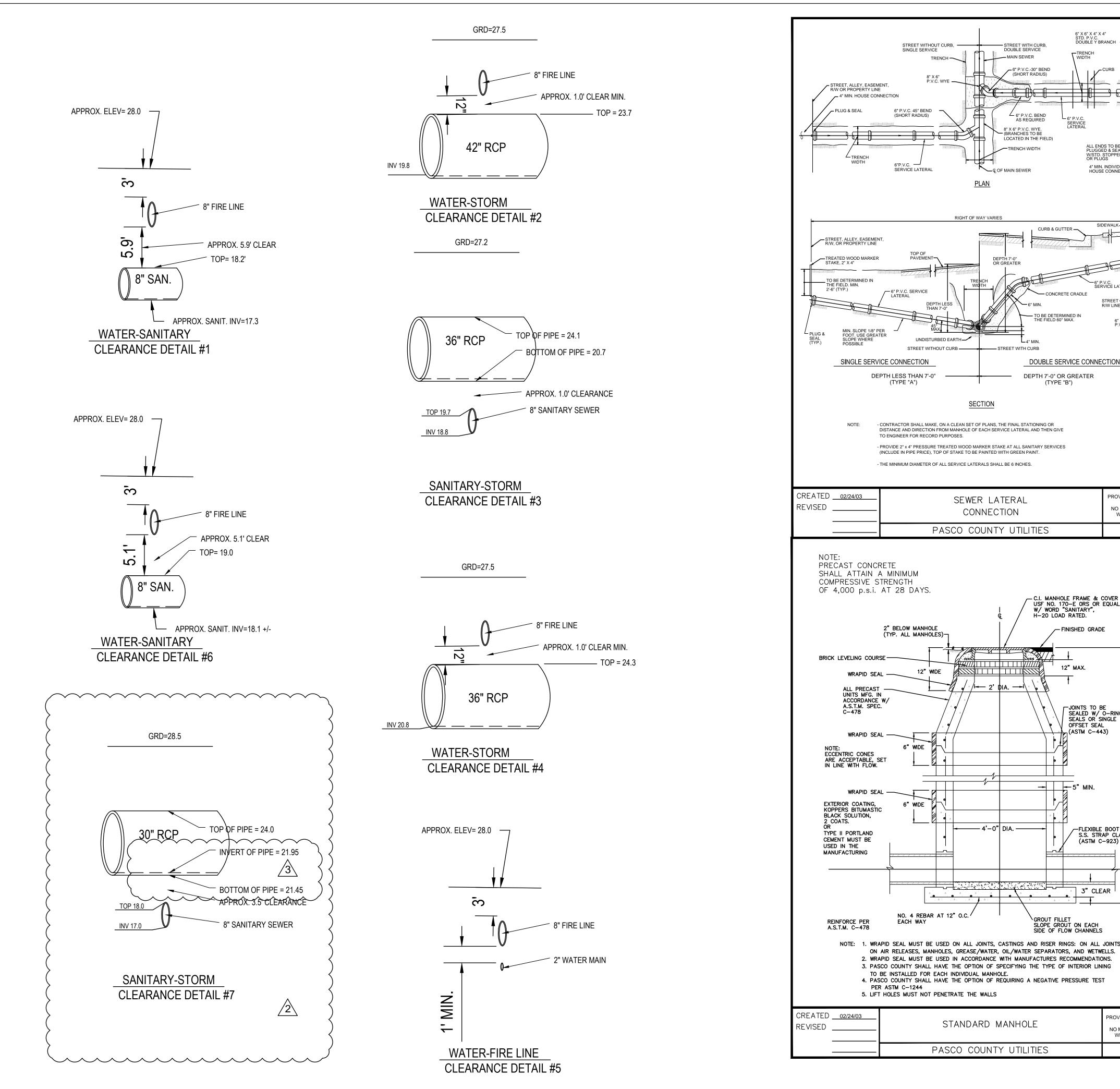
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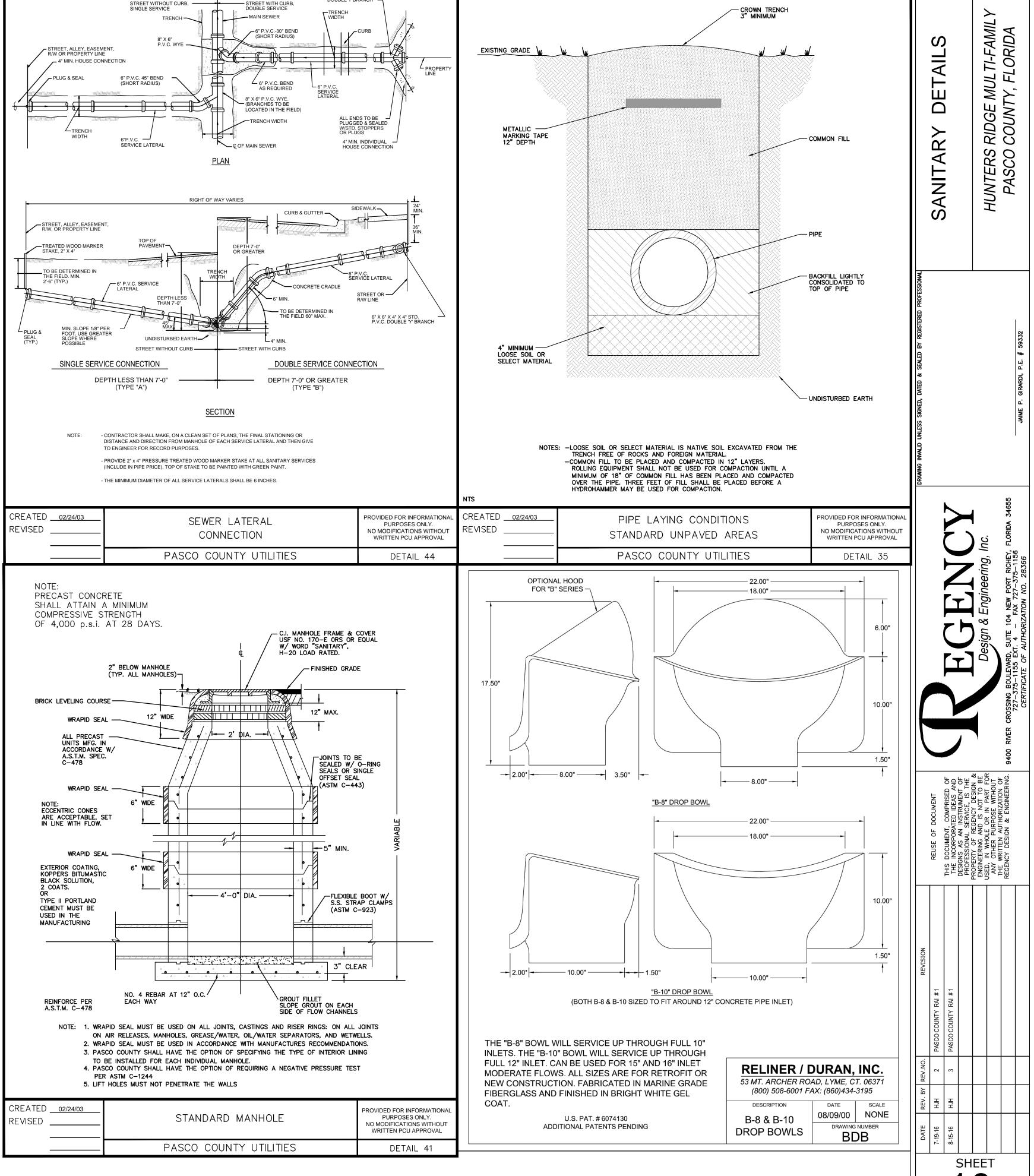




SHEET

HUNTERS I







PLAN SIGNAGE STRIPPING

RECOMMENDED ACCESSIBLE PARKING SPACE(S) DESIGN FOR SINGLE LINE REQUIREMENTS

1. TOP PORTION OF FTP 25 & 26 SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER.

2. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.

3. FTP 25 & 26 MAY BE FABRICATED ON ONE PANEL OR TWO.

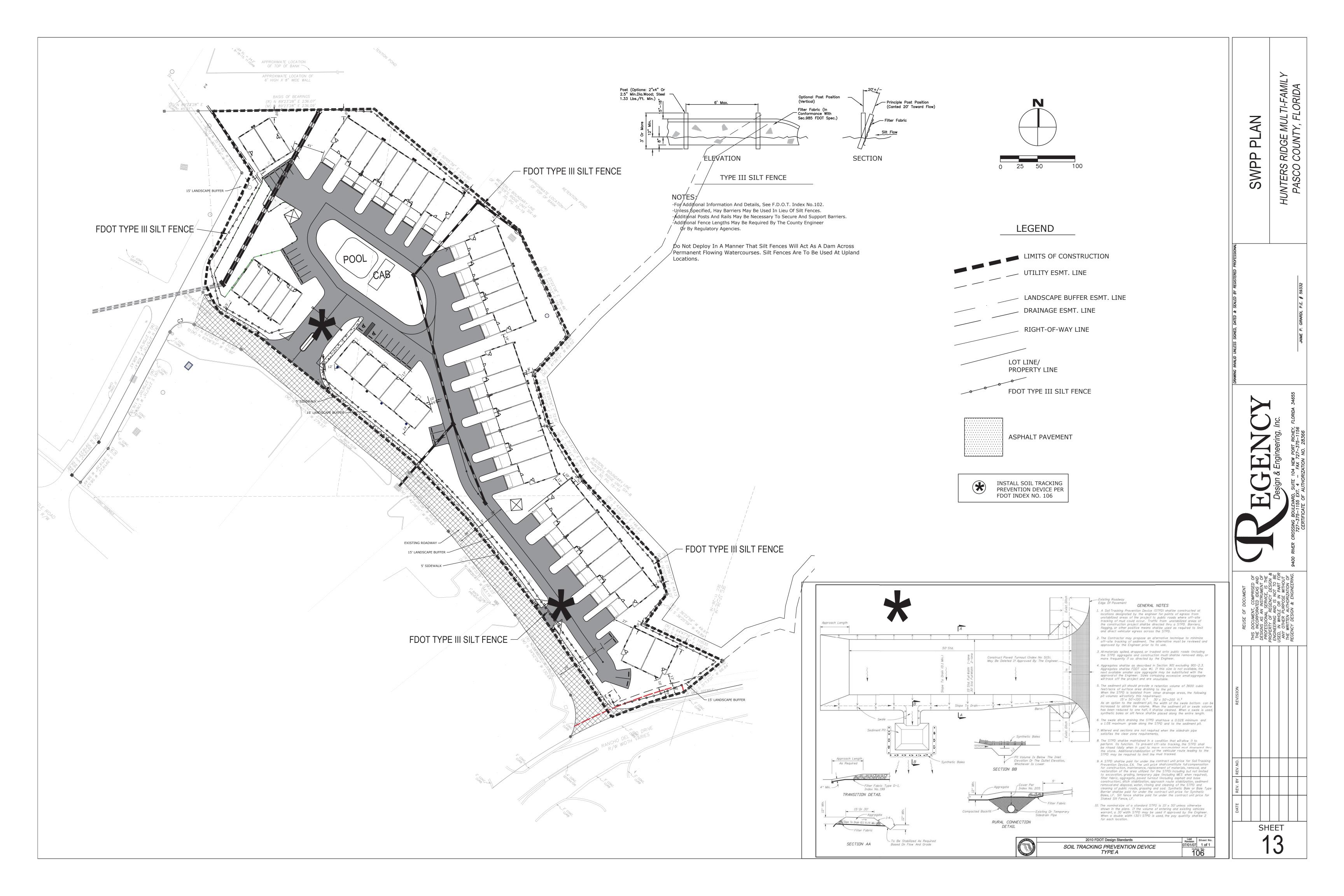
4. FTP 25 MAY BE SUBSTITUTED FOR THE FTP 26 IN AREAS WHERE SPACE IS LIMITED.

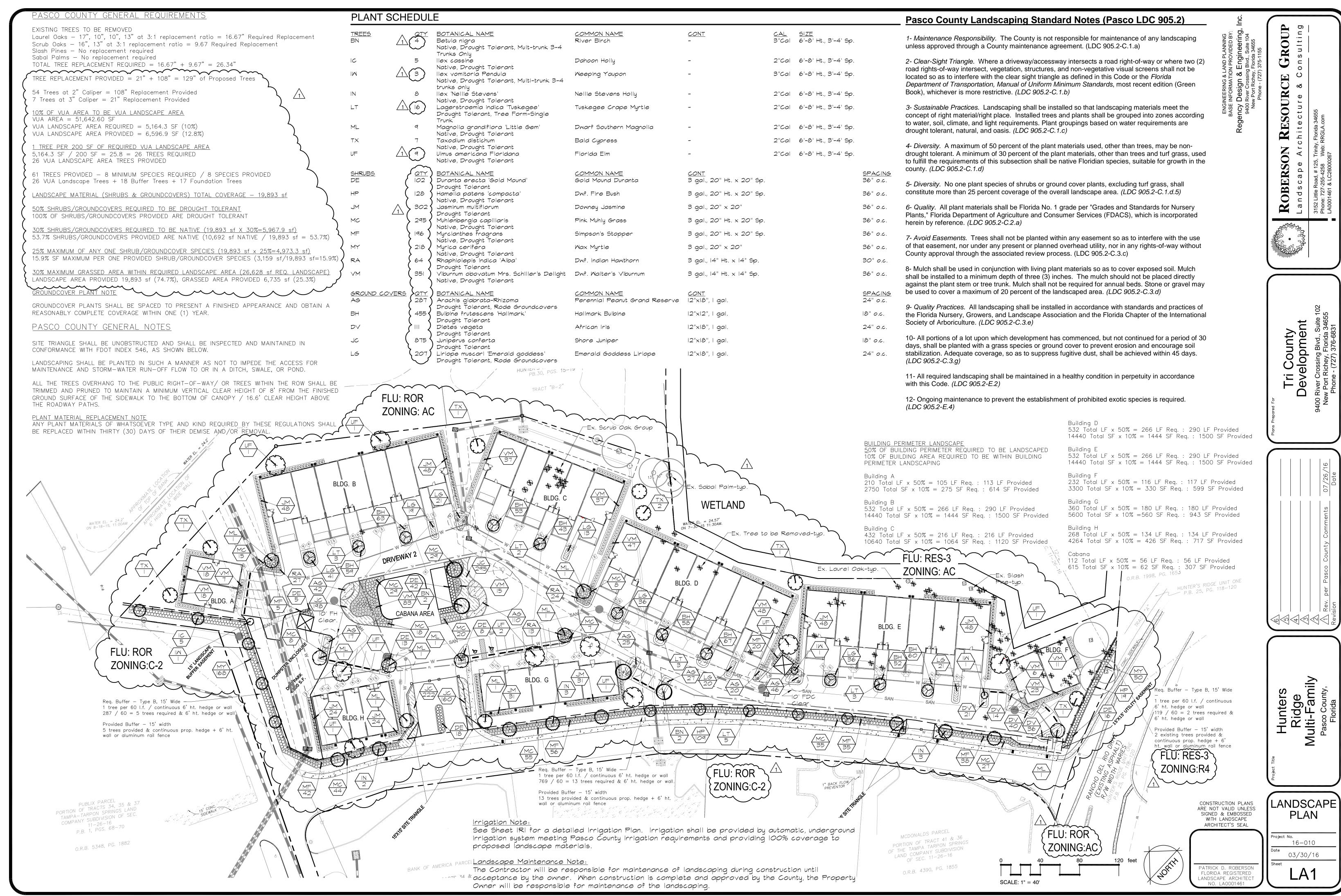
5. SIGNS ARE TO BE MOUNTED AT STANDARD HEIGHT. (7. FROM PAVEMENT TO BOTTOM OF SIGN).



PARKING BY DISABLED PERMIT ONLY

STRIPING & SIGNAG DETAILS





ANDSCAPE GENERAL NOTES

1. Permits required by any authority or governing jurisdiction, for any installation or construction work described in the contract documents, shall be obtained by the Contractor. Any applicable fees or financial requirements are to be paid by the Contractor for such permits, unless stipulated specifically in writing by the Owner.

2. The Contractor shall comply with all codes, safety requirements, and environmental regulations of federal, state, local and other regulatory agencies that have jurisdiction over the project, without additional cost to the owner. This includes any safety standards of the Occupational Safety and Health Act and amendments. The Owner and Owner's Representative shall be held harmless from any accident, injury or any other incident resulting from compliance or non-compliance with these standards.

3. The work included in this Section include the furnishing of all materials, equipment and labor necessary and incidental to the installation and preparation of planting areas, soil treatment, plants, grassing, protection of existing and proposed plants, hauling and spreading of topsoil, finish grading, removal and / or transplanting of existing plants as indicated, warranty, replacement of plants and / or materials, and related items as required to complete the work as indicated on the plans and fulfilling all warranty provisions, as specified herein.

4. The work shall also include the maintenance of all landscape plants and materials, planting areas, and sod / seeded areas until the Final Acceptance by the Owner's Representative. This time period of required maintenance may be extended through the full warranty period, as specified in the contract agreement, until Final Project Acceptance.

5. During construction, protect all existing trees, shrubs, and other specified vegetation, site features and improvements, structures, installed elements and utilities specified herein and / or on submitted plans. Removal or destruction of items described above is prohibited unless specifically authorized by the

6. The plant list as shown on the plans is for the Contractor's information only and no guarantee is expressed or implied that quantities shown therein are correct or that the list is complete. The Contractor shall verify that all plant material shown on the drawings are included in the Contractor's bid.

7. Substitutions of plant materials will not be permitted unless authorized in writing by the Owner's Representative. Proof is to be submitted in writing from 5 different regional sources that a plant specified is not obtainable. Consideration will be given to the nearest available size or similar variety with a corresponding adjustment of the contract price.

8. The Contractor shall review and verify the proposed and existing site elements, including but not limited to, storm drainage, water, sewer, phone, cable and electrical utilities, paving, site grading, buildings, walks, hardscape, and vegetation to preclude any misunderstanding and ensure a trouble free

9. Stated dimensions shall govern over scaled dimensions on the plans.

10. Plants shall be subject to inspection for conformity to specification requirements and approval by the Owner's Representative at their place of growth, or upon delivery to the site, as determined by the Owner's Representative. Such approval shall not preclude the right of inspection and rejection during any phase of the work. Rejected plant materials shall be immediately removed from the project site and replaced with approved plant materials within seven (7) days or as approved by the Owner's Representative.

11. All plants may be selected and tagged by the Owner's Representative at their place of growth. For distance material, photographs may be submitted for pre—inspection review and approval by the Owner's Representative. Pictures shall be clear and contain the full image of the plant material to be reviewed and have a clear indication of size in foot increments for trees and palms and inches for shrubs and groundcovers. The photograph will become the representative sample for that plant type (species and size).

12. Submit certificates of inspection, as required by governmental authorities, and manufacturers or vendors certified analysis for soil amendments, herbicides, insecticides and fertilizer materials and any additional data that indicates that the materials comply with specified requirements.

13. The Contractor shall conduct a minimum of three (3) soil tests at locations as shown on the plans or determined by the Owner's Representative. The Contractor shall test each location for soil composition (type, strata, pH, soluble salts, and organic content) and sub-surface drainage conditions (percolation rate), as a minimum. Soil testing shall be conducted by an approved soil—testing laboratory. The Contractor shall provide the Owner's Representative with the results of the soil analyses prior to any installations throughout the project. If soil conditions are insufficient for proper plant growth, the Contractor is required to supply recommendations for improving the condition of the soil of each area, to the Owner's Representative for approval. The Contractor shall, at the discretion of the Owner's Representative, proceed with the recommendations for improving the soil conditions.

14. Trees designated as Ball and Burlap (B&B) shall be properly dug with firm natural balls of soil retaining as many fibrous roots as possible is sizes and shapes as specified in the most recent edition of the American Standard for Nursery Stock. Balls shall be firmly wrapped with nonsynthetic, rottable burlap and secured with heavy nonsynthetic, rottable twine. Root collar shall be apparent at the surface of the rootball. No trees with loose, broken, or manufactured rootballs will be planted, except with written approval of the Owner's Representative, prior to planting.

15. Sabal Palms shall have all frond removed prior to planting, leaving a minimum of twelve (12) inches of new frond growth above the bud. Boots shall be removed from the trunk of sabal palms unless otherwise specified by the Owner's Representative. Remove only a minimum number of fronds on other palm species to facilitate the handling of the palm material. Do not damage the buds of any palms and take necessary care to protect the bud during digging, handling, transportation and installation.

16. During transportation of plant material, the Contractor shall exercise care to prevent injury and drying out of the trees. Should the roots be dried out, large branches broken, rootball damage, or areas of torn bark, the Owner's Representative may reject the injured plant material and require replacement of the rejected material at no additional cost to the Owner.

17. Plant material that is stored improperly shall receive a special review of acceptance or rejection, established on a case by case basis.

18. The Contractor shall protect existing pavement, buildings, walks, curbing, walls, hardscape elements, utilities and planting materials (trees, shrubs, ground covers, etc.) which are not designated for removal on the plans from damage.

19. The Contractor shall request the proper utility company to stake the exact location of all underground lines including but not limited to electric, gas, cable and/or telephone service prior to layout and excavating of any planting area. The Contractor shall contact Sunshine State One—Call of Florida, Inc. (SSOCOF) at 1—800—432—4770. Per SSOCOF, the calls shall be made a minimum of two days and a maximum of five days before beginning construction

20. Not all utilities are members of the Sunshine State One—Call system and direct contact shall be taken as necessary.

21. The Contractor shall be responsible for the preservation and protection of all site conditions to remain from damage due to this work. In the event damage does occur, all damage shall be completely repaired to its original condition. All the costs of such work shall be charged to and paid by the Contractor.

22. The Contractor shall thoroughly examine the project site, including sub—surface soil conditions, existing and proposed elevations and general conditions under which the work is to be preformed. The Contractor shall notify in writing of any conflicts or unsatisfactory conditions discovered, prior to beginning work. If the Contractor begins work before the unsatisfactory condition have been resolved, this will indicate that the Contractor has accepted the

existing conditions and is responsible to complete the work at no additional cost to the Owner. 23. The Contractor shall be responsible for all unauthorized cutting or damage to existing trees not marked for removal on the plans. Such damage may be caused by operation of equipment, stockpiling of materials, careless labor, etc. This shall include compaction by driving or parking inside the drip—line

of trees or the spillage of oil, gasoline, or other deleterious materials within the drip—line of trees. 24. The Contractor shall have a clear understanding and identify each existing tree, shrub and / or palm that is designated to remain or to be removed.

25. The Contractor shall maintain tree barricades at all times during the construction activities on the project for all existing trees, palms and other plant material within and adjacent to the limits of construction that are specified to remain. The Contractor shall refer to the tree protection detail and notes provided within the Landscape Plans.

26. The Contractor shall provide an International Society of Arboriculture (I.S.A.) Certified Arborist with a minimum of five (5) years experience with similar projects, to direct appropriate pruning (roots, branches) and/or other treatment necessary to ensure the health, viability and attractiveness of trees and palms to remain. The Contractor shall be responsible for implementation of the Certified Arborist's instructions.

27. Uncover specified work when directed by the Owner's Representative without compensation. Should the material, workmanship, or method of installation not meet the standards specified herein, the Contractor shall replace the work at his own expense.

28. Rejected work shall be removed and corrected within seventy—two (72) hours upon notification of rejection by the Owner's Representative.

29. Plants shall be true to species, variety and size as specified on the plans and nursery grown in accordance with good horticultural practices under climatic conditions similar to those in the locality of the project.

30. All plant material shall comply with all required inspections, grading standards and plant regulations, as set forth by the Florida Department of Agriculture and Consumer Services Division of Plant Industry, Grades and Standards for Nursery Plants, latest edition. All plant material shall also conform to ANSI Standards for Nursery Stock (ANSI Z60.1-1990).

31. Plant materials not specifically covered in "Florida's Grade and Standards for Nursery Plants" shall conform to a minimum grade of Florida No. 1 as to: health and vitality, condition of foliage, root system, freedom from pests or mechanical damage; heavily branched and densely foliated according to the accepted normal shape; freedom from low and/or "V" shaped crotches.

32. The minimum grade for all plant material shall be Florida No. 1 or better.

other damage to the trunk.

project site.

33. Trees with a damaged or crooked leader, bark abrasions, sunscald, disfiguring knots, insect damage, or cuts of limbs over 3/4 inch in diameter that are not completely closed will be rejected.

34. Palms shall have straight trunks (within 3 degrees of vertical) unless other wise stated on the plans. Palms shall be free from burn marks and / or

35. Balled and burlapped (B&B) plants (field grown trees and palms) shall be dug with firm, natural balls of soil of sufficient size to encompass the fibrous and feeding roots of the plants. No plants moved with a ball shall be planted if the ball is cracked or broken. B&B root balls shall exhibit small white fibrous roots coming through the burlap. Field grown trees and palms shall be nursery grown material. Root pruning and hardening off of plant material shall be done a minimum of six (6) weeks or for a period as determined by the Owner's Representative, prior to planting at the project. The supplier of the tree material shall supply certification of the date of root pruning and harvest date of the tree material, prior to the installation of the trees at the

36. Protect roots or balls of plants at all times from sun and drying winds, excess water and freezing, as necessary until planting.

37. Prepared planting soil shall be fertile, friable natural topsoil of loamy character, without admixture of subsoil material, obtained from a well—drained arable site, reasonably free from clay, lumps, coarse sands, stones, plants, roots, sticks and other foreign materials. The acidity range shall be between pH 5.5 and 6.5. Prepared planting soil mixture shall consist of three (3) parts native topsoil meeting the above requirements and one (1) part peat. The peat shall be brown to black in color, sterile, weed and seed free, granulated raw peat, containing not more than 9% mineral content on a dry basis.

38. Planting shall be coordinated with the underground automatic irrigation system(s) installation. The irrigation system is to supply 100 percent coverage of water to all required landscape plant material and turf at time of landscape installation.

39. The Contractor shall supply supplemental water; over the amount of water supplied by the irrigation system, for establishment to all newly installed trees and palms for ninety (90) days, commencing immediately after installation. Supplemental water can be supplied by water truck or direct water source on site (hose bib, reclaimed water, pump/well source), and shall be applied in such a manner to avoid disturbance to mulch and soil, and to avoid damage to plant materials.

40. It is the Contractor's responsibility to adjust watering amounts and frequency to ensure proper establishment of all plant material.

41. Fertilizer shall be complete, uniform in composition, dry and free flowing. Fertilizer shall be delivered to the site in the original unopened containers, each bearing the manufacturer's statement of analysis. Store in a manner to prevent wetting and deterioration.

42. Mulch is to be 100% organic shredded Melaleuca, Pine Bark Nuggets (2" max.) or Eucalyptus mulch, type as approved by the Owner, shall be utilized

and installed to a wetted depth of three (3) inches. Mulch shall be free of extraneous sticks and other tree residue. 43. A pre—emergent herbicide (Rout, Ronstar or approved equal) shall be applied to all planting areas as specified by manufacturer's recommendations. 44. Sod shall be as specified on the plans, in areas designated on the plans, and for disturbed areas within the construction limits, grass sod type shall be well matted with grass roots. The sod shall be taken up in rectangles, preferably 12" x 24", shall be a minimum of 2" in thickness, and shall be live, fresh, and uninjured at the time of planting. Sod shall be a minimum of 95% free from all noxious weeds, other grasses, and extraneous materials. The sod shall have a soil mat of sufficient thickness adhering to the roots to withstand all necessary

45. The sod shall be planted as soon as possible after being dug, and kept moist and shaded until it is planted. Dumping from vehicles will not be permitted and damaged sod will be rejected. Replanting shall be performed within 24 hours after time of harvesting or sod shall be stacked in an approved manner and properly moistened until planted. Sod which has been cut for more than 72 hours shall not be used unless specifically authorized by the Owner's Representative, after inspection of the sod.

The sod shall be kept in a moist condition to the full depth of the rooting zone for at least three (3) weeks after placement. It is the responsibility of the Contractor to apply water as necessary until the sod roots begin to grow. This period shall be extended for a period of 45 days during low rainfall period for any non—irrigated Bahia sod and/or seeded areas. St. Augustine species sod shall have a permanent underground irrigation system providing 100%, head to head coverage at time of installation.

46. The work area may have existing utilities, such as, but not limited to, irrigation, phone, cable, electrical, water, sanitary sewer, and storm sewer. The locations of some of these existing utilities may have been indicated on the Plans. However, no guarantee is implied that the Plans are accurate or complete in reference to existing utility information. It shall be the responsibility of the Contractor to verify the location of all such utilities, structures, etc., by hand excavation or other appropriate measures before performing any work that could result in damage or injury to persons, utilities, structures or property. The Contractor shall make a thorough search of the site for utilities, structures, etc., before work is commenced in any particular location.

47. The Contractor shall take immediate steps to repair, replace, or restore all services to any utilities or other facilities which are disrupted due the Contractor's operations. The Contractor shall also engage any additional outside repairs on a continuous basis until services are restored. Contractor shall provide and operate any supplemental temporary services to maintain uninterrupted use of the facilities. All responsibility for damage due to negligence on the part of the Contractor shall be borne by the Contractor and the Contractor shall also be fully responsible for any and all claims resulting from the damage.

48. The Contractor shall notify the Owner's Representative, in writing, of soil conditions that the Contractor considers detrimental to the growth of plant material. These conditions are to be described, as well as suggestions for correcting them. Proper soil percolation must be assured at a minimum rate of 1/2" percolation per hour to a depth of a typical tree planting pit.

49. Planting areas are to be finished graded to conform to grades on engineering drawings or as noted on the landscape drawings, after full settlement and installation has occurred. The Contractor shall correct or repair the grades as necessary to conform to the finished grades specified. All planting areas shall be free from concrete debris, lumps, depressions, rocks, sticks or other debris and shall be raked and graded smooth to conform to the finish grades after the installation of landscape materials. The planting areas shall provide positive surface drainage without puddling of water. This requirement is applicable to sodded areas also. Sodded areas shall present a smooth and finished appearance, meeting finished grades as specified after installation.

50. All materials and equipment shall be installed in a neat and workmanlike manner. The Owner's Representative reserves the right to direct the removal and replacement of any items, which, in his opinion, do not present an orderly and workmanlike appearance. Plant locations may also be adjusted by the Owner's Representative due to unforeseen on—site conditions.

51. Clean—up work and planting areas of rubbish or objectionable matter. Mortar, concrete and toxic material shall be removed from the surface of all plant beds. These materials shall not be mixed with the soil. Should the Contractor find conditions beneath the soil, which will in any way adversely affect the plant growth, he shall immediately call it to the attention of the Owner's Representative. Failure to do so before planting shall make the corrective measures the responsibility of the Contractor.

52. If underground construction, utilities or obstructions are encountered during the excavation of planting areas or pits, alternative locations for the plant material shall be selected by the Owner's Representative. Such changes in location shall be made by the Contractor without

53. All required trees and palms shall be placed a minimum of four (4) feet from impervious surfaces; shrubs shall be placed a minimum of 18 inches as measured from the edge of the plant.

54. All shrub beds shall be considered as a single mulched area. There shall be no sod incorporated within such planted areas. All shrub and groundcovers shall be mulched curb—to—curb or edge of planting bed, unless otherwise indicated. Top of mulch shall be level with the top of curb or surrounding grade.

55. Sides of pits and trenches shall be vertical. When conditions detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, and/or obstructions, the Owner's Representative shall be notified before planting. Sites with poor drainage may require the use of sloped sides, for pits or trenches.

56. In planting areas where soils have been compacted to a density, which is detrimental to plant growth, loosen soils to allow root penetration

beyond the planting pit. 57. Width of planting pit shall be 3 times the diameter of the rootball in highly compacted or poorly draining soils, with the sides of the pit

58. Shrubs fertilizer shall be Osmocote Time Released Fertilizer and composed of a fertilizer ratio of 3:1:1 or 3:1:2, (nitrogen: phosphorus: potassium) and contain all primary and secondary trace elements, or approved equal.

59. Sod fertilizer shall be composed of sixteen percent (16%) nitrate nitrogen, four percent (4%) phosphorus, eight percent (8%) potassium and contain all primary and secondary trace elements for sodded areas, or approved equal.

60. Palms: Fertilizer shall be composed of twelve percent (12%) nitrogen, four percent (4%) phosphorus, twelve percent (12%) potassium and contain all primary and secondary trace elements for Florida palm trees.

61. Fertilizer shall be applied at the rates recommended by the manufacture and soil testing laboratory. Fertilizer shall be applied as a top dressing only and shall not be mixed in with the backfill material at time of installation. The Contractor shall apply fertilizers at the time of installation. Fertilizer shall be applied per ANSI 300, Part 2 — 1998 and Best Management Practices, Tree and Shrub Fertilization, ISA.

62. Trees, shrubs and ground cover shall be set straight and at such a level, that after settlement, the plant ball will stand flush, to 1" -1/2" above grade. Each plant shall be set in the center of the planting pit (see planting details). Planting goal shall be thoroughly "watered—in" to remove all air pockets around the root ball. Do not rely on the irrigation system to achieve this task. All burlap, rope wires, etc. shall be loosened from the top and sides of the ball, but no burlap shall be pulled from underneath. No more than two (2) inches of soil shall remain over the first major root closest to the soil surface. Remove non—biodegradable nursery wrappings and unwrap burlap from the top 1/3 of the rootball.

63. Plant materials such as trees, shrubs and groundcovers shall be planted prior to the planting of the grassed / sodded areas. The grassed / sodded areas shall be protected during and repaired if damaged during the planting installation activities.

64. All new furnished trees and palms shall be set plumb at the time they are installed to within a tolerance of three (3) degrees from vertical. Trees and palms found not to be vertically aligned will not be accepted.

65. A basin shall be built around all plants or trees that stand—alone and are not located in larger mulched beds. A water—holding soil—dam shall be built on the outside edge of the planting pit to form a basin of sufficient volume to hold water, as per the

66. Each tree shall be pruned to preserve the natural character of the plant as shown on the Plans. All softwood (sucker growth) and all broken or badly damaged branches shall be removed with a clean cut. Pruning procedures shall conform to ANSI A300 Part 1 — 2001 and Pruning and Best Management Practices, Tree Pruning, by the International Society of Arboriculture. All pruning shall be previously approved by the Owner's Representative.

67. Within one week after the planting, mulch material, as specified, shall be uniformly applied to a minimum wetted thickness of three (3) inches or as indicated on the Plans, over the entire area of the backfilled hole or bed. The mulch shall be maintained continuously in place until the time of final inspection.

68. All trees not within planting beds shall be mulched within a three (3) foot diameter of the tree.

69. Do not place mulch immediately against trunks of trees and palms.

EXISTING TREE PROTECTION GENERAL NOTES

additional compensation.

70. Soft spots and inequalities in grade shall be corrected before starting sod work. Soil shall be watered before sod planting. Tamp or roll all newly installed sod. Sod shall be thoroughly watered in.

71. The setting of the sod pieces shall be staggered so as to avoid a continuous seam. The offsets of individual strips shall not exceed 6". In order to prevent erosion caused by vertical edges at the outer limits, the outer pieces of sod shall be tamped so as to produce a feathered edge effect. On steep slopes, the Contractor shall, if so directed, prevent the sod from sliding by means of wooden pegs driven through the sod blocks into firm earth, at directed intervals. Sod shall be placed in rows perpendicular to the

72. The project site shall be kept in a relative neat and clean appearance throughout the course of the landscape installation. Perform cleaning during installation of the work and upon completion of the work. Remove from the site all excess materials, soil, debris, and equipment. Repair damage resulting from planting and other landscape installation operations.

73. Provide one (1) year warranty covering the life and satisfactory condition of all planted materials. All sod shall be warranted for 90 days after Final Acceptance. The one (1) year warranty does not begin until the entire landscape installation has been accepted by the Owner's Representative at the time of Final Acceptance for Landscape work. After the one (1) year warranty period, the Owner's Representative shall conduct the Project's Final Inspection.

74. All plant material and turf not found in a healthy growing condition, questionable survivability or dead at the end or at any time during the warranty period shall be removed from the site and replaced within ten (10) calendar days after written notice. 75. All plant material replacements shall be of the same kind and size as specified in the Plant List. They shall be furnished,

planted, mulched and watered—in as specified at no additional cost to the Owner. These replacement materials shall be bound to the same warranty conditions as the original materials. 76. Damage to plant material from obvious vandalism, theft, Owner's neglect, or acts of providence (i.e., prolonged flooding, gale

force winds, etc.), or incidents beyond the Contractor's control will not be covered under this warranty. 77. The Contractor shall notify the Owner's Representative in writing, a minimum of ten (10) days in advance, when all work is

substantially complete to schedule a substantial completion. Based on this inspection, the Owner's Representative will develop a punch list of items to be addressed by the Contractor. Upon completion of Punch List items, the Contractor shall coordinate with the Owner's Representative to schedule a Final Acceptance Inspection. At the time of Final Acceptance, the warranty period shall

78. Upon Final Acceptance of the plant material, the Contractor shall submit two (2) written maintenance instructions recommending procedures for the maintenance of plant materials and sod, for a one year period.

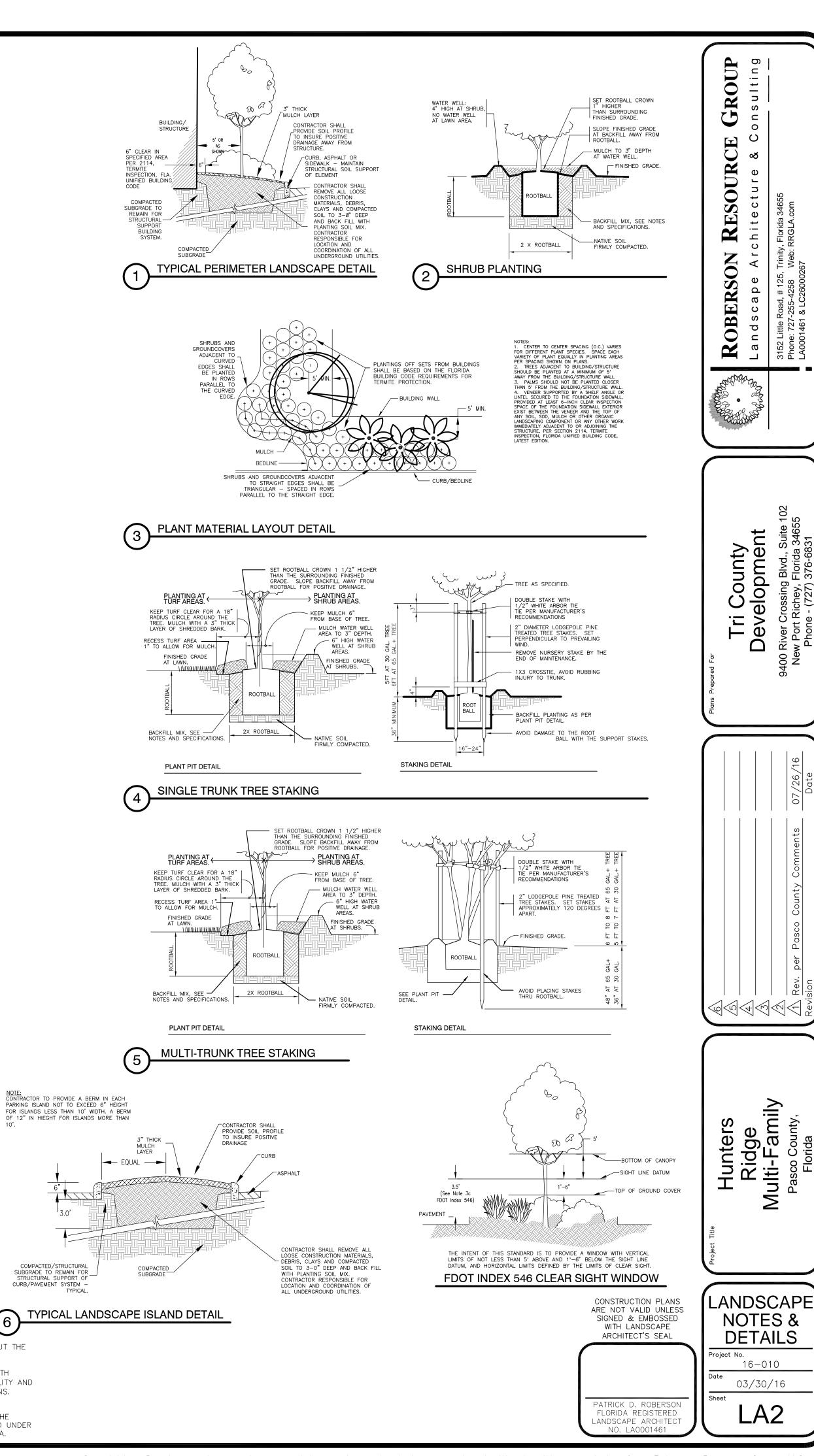
EXISTING TREES AND PALMS WITHIN AND ADJACENT TO THE LIMITS OF CONSTRUCTION AND SPECIFIED TO REMAIN ARE TO BE PROTECTED THROUGHOUT THE CONSTRUCTION PROCESS WITH TREE BARRICADES PER PASCO COUNTY REQUIREMENTS.

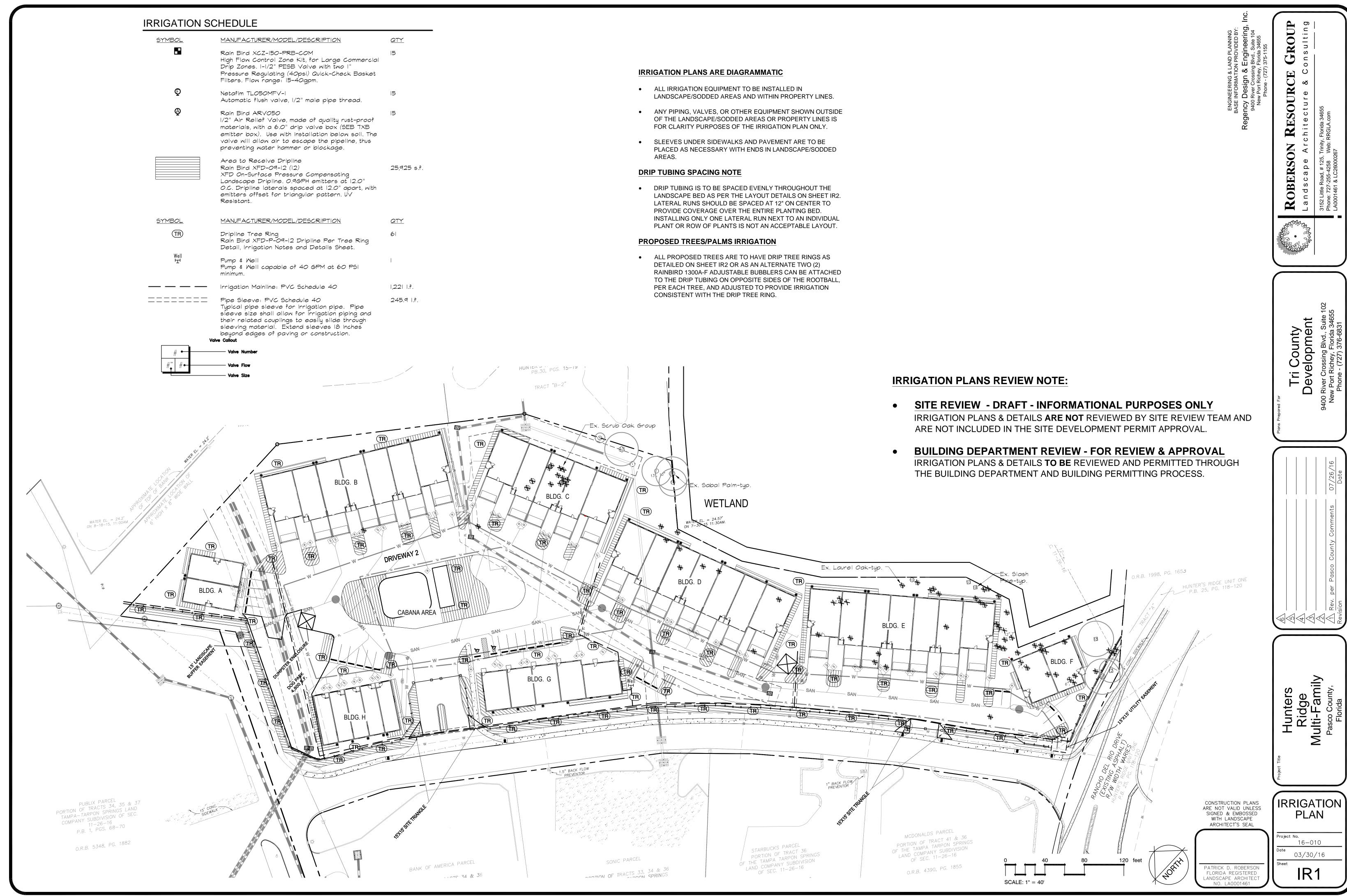
SUBGRADE TO REMAIN FOR STRUCTURAL SUPPORT OF

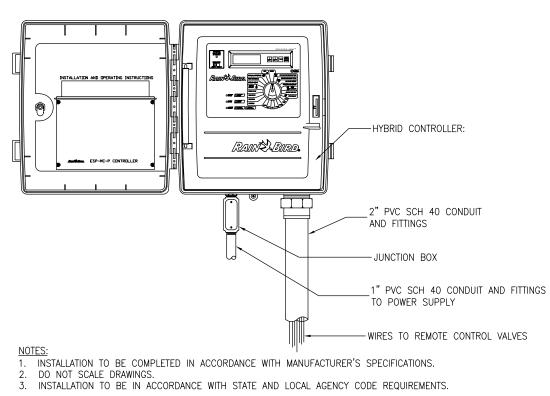
CURB/PAVEMENT SYSTEM -

THE CONTRACTOR SHALL PROVIDE AN INTERNATIONAL SOCIETY OF ARBORIST (ISA) CERTIFIED ARBORIST WITH A MINIMUM OF 5 YEARS EXPERIENCE WITH SIMILAR PROJECTS, TO DIRECT APPROPRIATE PRUNING (ROOTS, BRANCHES) AND/OR OTHER TREATMENT NECESSARY TO ENSURE THE HEALTH, VIABILITY AND ATTRACTIVENESS OF TREES TO REMAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE CERTIFIED ARBORIST'S INSTRUCTIONS. PRUNING SHALL CONFORM TO ANSI A-300 PRUNING STANDARDS.

ALL TREE ROOTS EXISTING WITHIN IMPROVEMENT AREAS AND ORIGINATING FROM A PROTECTED TREE, SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA WHERE INDICATED ON THE PLANS. ROOT PRUNING SHALL BE ACCOMPLISHED BY MECHANICAL TRENCHER WITH SHARP BLADES AND UNDER THE DIRECT SUPERVISION OF THE CERTIFIED ARBORIST. ROOT PRUNING SHALL MEET THE STANDARDS AND REQUIREMENTS OF PASCO COUNTY AND ISA.

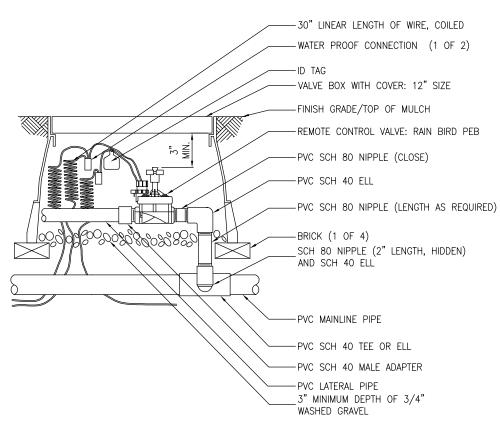






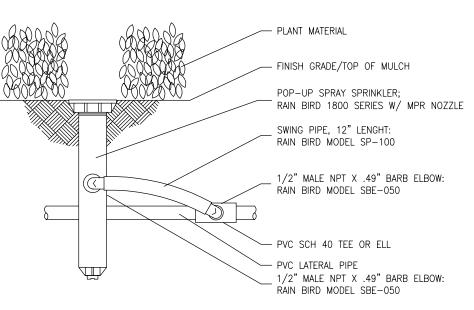
HYBRID CONTROLLER

RAINBIRD ESP-MC SERIES, OUTDOOR WALL MOUNT



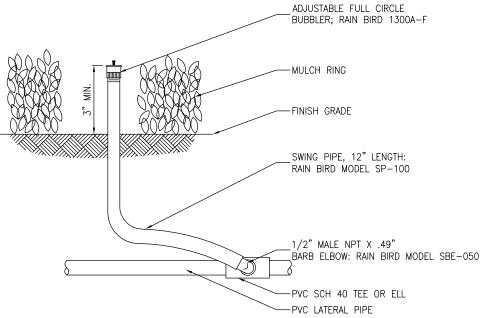
. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

REMOTE CONTROL VALVE RAINBIRD PEB VALVE



1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. 3. POP-UP HEIGHT ADJUSTED FOR CLEARANCE OF PLANT MATERIAL, 12" MIN. HEIGHT

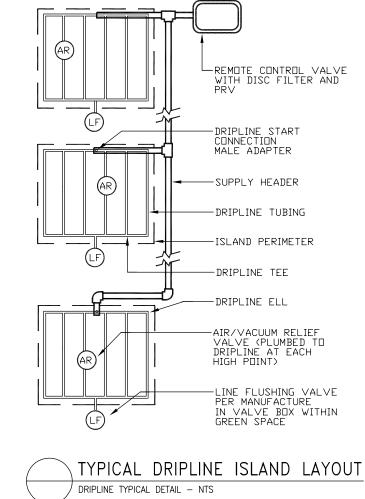
POP-UP SPRAY SPRINKLER RAINBIRD 1800 SERIES POP-UP SPRAY

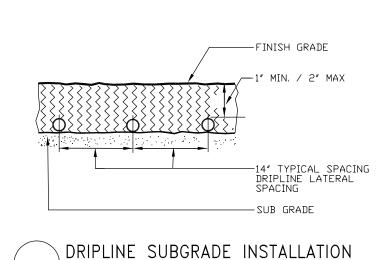


. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

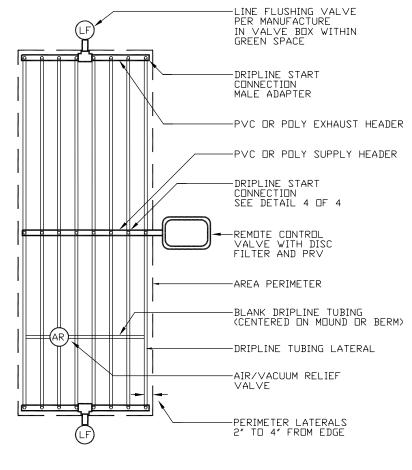
1300A-F BUBBLER RAINBIRD ADJUSTABLE FLOOD BUBBLER

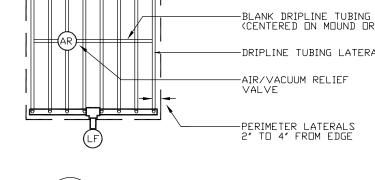
DO NOT SCALE DRAWINGS.





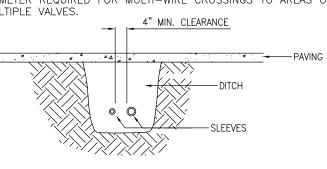
DRIPLINE TYPICAL DETAIL - NTS

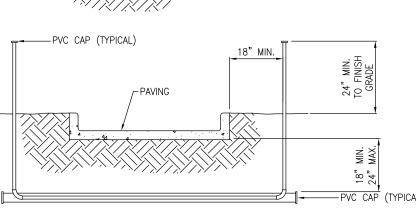




DRIPLINE CENTER FEED LAYOUT DRIPLINE TYPICAL DETAIL - NTS

FOR OPEN TRENCH INSTALLATION OF SLEEVES. SLEEVES ARE TO BE PRE-LOADED WITH THE LATERAL PIPE TO BE CARRIED, SIZED PER IRRIGATION PLANS. THE PRE-LOADED LATERAL PIPE WITHIN THE SLEEVE SHALL BE CAPPED TO PREVENT DEBRIS AND SOIL FROM ENTERING LATERAL PIPE DURING INSTALLATION OF SLEEVE. MAINLINE PIPE SLEEVES TO ALSO INCLUDE SEPERATE SLEEVE FOR CONTROL WIRES. WIRE SLEEVE TO BE 1", SCHEDULE 40 MIN. FOR INDIVIDUAL WIRES TO ONE VALVE OR 1" LARGER THAN DIAMETER REQUIRED FOR MULTI-WIRE CROSSINGS TO AREAS OF





SET BOX 2" ABOVE GRADE AT SHRUBS.——

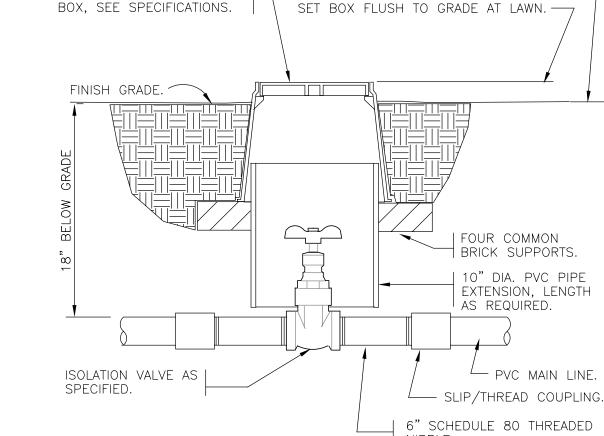
- PVC MAIN LINE.

MAIN LINE AS OCCURS.

. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. DO NOT SCALE DRAWINGS. ALL PVC IRRIGATION SLEEVES TO BE SCH. 40 PIPE. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT. 5. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24" MINIMUM ABOVE FINISH GRADE. MECHANICALLY TAMP TO 95% PROCTOR.

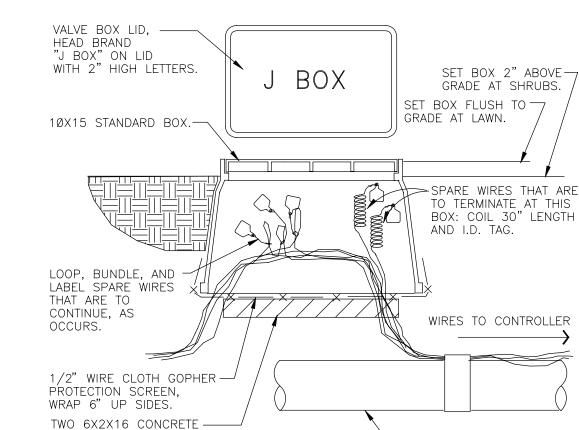
SLEEVE TO BE 2 SIZES LARGER THAN MAIN LINE/LATERAL PIPE BEING CARRIED. 8. SLEEVES TO BE LOADED WITH LATERAL PIPE SIZÉD PER PLAN

SLEEVING LOADED W/LATERAL PIPE SLEEVES UNDER HARDSCAPES



10" DIAMETER ROUND VALVE

BRASS ISOLATION VALVE



WIRE BUNDLE JUNCTION BOX

BLOCK CPAS, ONE ON

EACH SIDE OF BOX.

IRRIGATION GENERAL NOTES

1. NO PLANTING SHALL OCCUR UNTIL THE UNDERGROUND AUTOMATIC IRRIGATION SYSTEM IS INSTALLED AND FULLY FUNCTIONAL. THE IRRIGATION SYSTEM IS TO SUPPLY 100% COVERAGE TO ALL REQUIRED LANDSCAPE PLANT MATERIAL AND ST. AUGUSTINE TURF.

2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADJUST WATERING AMOUNTS AND FREQUENCY TO ENSURE PROPER ESTABLISHMENT OF ALL PLANT MATERIAL.

3. THE CONTRACTOR SHALL BE FAMILIAR WITH BOTH PROPOSED AND EXISTING SITE CONDITIONS SUCH AS, UTILITIES, PLANT MATERIALS AND ARCHITECTURAL ELEMENTS IN ORDER TO AVOID CONFLICTS DURING INSTALLATION.

4. THE CONTRACTOR SHALL AVOID DAMAGE TO EXISTING TREES AND SHRUBS ON SITE THAT MAY OR MAY NOT BE INDICATED ON THE PLANS.

5. THE CONTRACTOR SHALL INSTALL THE IRRIGATION SYSTEM IN CONFORMANCE TO ALL APPLICABLE STATE AND REGIONAL REGULATIONS AND CODES.

6. A MAXIMUM OF 65% OF THE ON-SITE GREEN SPACE MAY BE ALLOWED TO BE PLANTED WITH ST. AUGUSTINE GRASS SPECIES, CONFIGURED WITH A PERMANENT IRRIGATION SYSTEM IF A SOIL MOISTURE SENSOR IS UTILIZED WITHIN THE CONTROL SYSTEM. TURF/SODDED AREAS SHALL BE ON SEPARATE IRRIGATION ZONES, THAN OTHER LANDSCAPE PLANT MATERIAL.

7. DRIP LINE, BUBBLERS, SPRAY HEADS AND ROTORS SHALL NOT BE COMBINED ON THE SAME CONTROL VALVE CIRCUIT. SPRAY AND ROTOR COMPONENTS SHALL HAVE MATCHING APPLICATION RATES WITHIN EACH IRRIGATION ZONE.

8. THE IRRIGATION SYSTEM SHALL BE DESIGNED AND ADJUSTED TO AVOID OVERSPRAY AND RUNOFF ONTO SIGNS, BUILDINGS, WALLS, WALKWAYS, ROADWAY PAVEMENT OR OTHER IMPERVIOUS SURFACES.

9. THE IRRIGATION SYSTEM CONTROLLER SHALL HAVE PROGRAM FLEXIBILITY SUCH AS REPEAT CYCLES AND MULTIPLE PROGRAM CAPABILITIES AND HAVE A BATTERY BACK-UP SYSTEM TO RETAIN IRRIGATION PROGRAMS. THE IRRIGATION CONTROL SYSTEM SHALL BE EQUIPPED WITH AN OPERABLE SOIL MOISTURE SENSOR SHUTOFF DEVICE EXPOSED PER THE MANUFACTURERS SPECIFICATIONS. THE CONTROLLER SHALL ALSO BE EQUIPPED WITH A PUMP START RELAY SYSTEM.

10. THE IRRIGATION SYSTEM SHALL BE INSTALLED TO "STANDARDS AND SPECIFICATIONS FOR TURF AND LANDSCAPE IRRIGATION SYSTEMS", LATEST EDITION, (FIFTH EDITION MINIMUM) AND ANY AMENDMENTS, BY THE FLORIDA IRRIGATION SOCIETY, INC.

11. RAIN BIRD DRIP TUBING SYSTEM COMPONENTS SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.

12. SPRAY HEAD AND ROTOR LAYOUT SHALL PROVIDE FOR PROPER HEAD TO HEAD COVERAGE. SPRINKLER SPACING SHALL NOT TO EXCEED 55% OF THE SPRINKLERS DIAMETER OF COVERAGE.

13. LANDSCAPE OR SODDED AREAS 4' WIDE OR LESS ARE TO BE IRRIGATED WITH DRIP LINE (MICRO IRRIGATION) ONLY, THESE AREAS ARE INDICATED ON THE PLANS.

14. THE IRRIGATION CONTRACTOR SHALL ASCERTAIN THE IRRIGATION SYSTEM REQUIREMENTS FOR GPM AND PSI DEMAND AND DETERMINE IF THE PUMP & WELL ASSEMBLY IS CAPABLE OF MEETING THE DEMAND WITHIN THE ALLOWABLE WATERING TIMES. PUMP & WELL ASSEMBLY TO BE PER LOCAL JURISDICTIONAL REQUIREMENTS AND APPLICABLE STATE OF FLORIDA BUILDING CODES.

15. THE IRRIGATION CONTRACTOR SHALL COORDINATE WITH THE SITE/BUILDING CONTRACTOR TO VERIFY ANY REQUIRED ELECTRICALLY POWER FOR THE IRRIGATION SYSTEM IS AVAILABLE.

16. WIRE CONNECTIONS FOR ELECTRIC CONTROL VALVES ARE TO BE MADE WITH NORTHSTAR WATERPROOF SPLICE KITS (3M DBT).

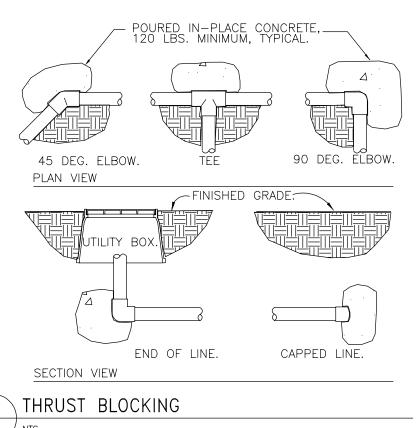
17. MAINLINE PIPE IS TO BE INSTALLED A MINIMUM OF 18" BELOW FINISH GRADE. LATERAL LINE PIPE IS TO BE INSTALLED A MINIMUM OF 12" BELOW FINISH GRADE.

18. THE IRRIGATION CONTROLLER SHALL HAVE PROPER LIGHTNING PROTECTION INSTALLED PER MANUFACTURE AND APPLICABLE CODES

19. CONTROL VALVE WIRES SHALL RUN UNDER THE MAINLINE PIPE.

20. THE MAINLINE PIPE AND SLEEVES ARE TO BE SCHEDULE 40 PVC. LATERAL LINE PIPE IS TO BE CLASS 200 PVC. IRRIGATION PIPE SHALL BE PROPERLY SIZED TO A MAXIMUM OF 5 FEET PER SECOND OF WATER VELOCITY FLOW THROUGH THE IRRIGATION SYSTEM.

21. NO IRRIGATION COMPONENTS, MAINLINE PIPING, LATERAL PIPING OR TRENCHING SHALL OCCUR WITHIN THE PROTECTED ZONE OF EXISTING TREES ON SITE AS INDICATED ON THE PLANS.



THRUST BLOCKS ARE REQUIRED ON ALL UNRESTRAINED, PUSH-ON GASKETED PIPE JOINTS AND FITTINGS AT DEAD ENDS, AND WHENEVER THE LINE CHANGES DIRECTION OF 30 DEGREES OR MORE. CONCRETE HAVING A COMPRESSIVE STRENGTH OF 2000 PSI OR HIGHER WILL BE SPECIFIED. THRUST BLOCKS WILL BE FORMED AGAINST SOLID, UNEXCAVATED EARTH THAT HAS BEEN UNDAMAGED BY MECHANICAL EQUIPMENT. THE SPACE BETWEEN THE PIPE AND TRENCH WALL WILL BE FILLED TO THE HEIGHT OF THE OUTSIDE DIAMETER OF THE PIPE. SIZE THRUST BLOCKS IN ACCORDANCE WITH ASAE (AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS) STANDARD S-376.2.

CONSTRUCTION PLANS ARE NOT VALID UNLESS SIGNED & EMBOSSED WITH LANDSCAPE ARCHITECT'S SEAL

PATRICK D. ROBERSON IR2 FLORIDA REGISTERED LANDSCAPE ARCHITECT

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ESOUR

**OBERSO** 

Hunters Ridge 1ulti-Family

RRIGATION NOTES & **DETAILS** 

16-010 03/30/16

BUBBLERS (ex. RAINBIRD 1300A-F) AT THIS LOCATION AND OMIT THE DRIPLINE AT THE ROOTBALL LOCATION(7).

AND TREE CANOPY. SEE RAIN BIRD XF-SDI DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS. 2. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET

(2) PVC SCH 40 TEE OR EL 3) %" POLYETHYLENE TUBING 4 ) BARB CROSS INSERT FITTING: RAIN BIRD XFD-CROSS

1) PVC DRIP MANIFOLD PIPE

M  $\times$  F I.P.S COUPLING 12"  $\times$  18"

REMOTE CONTROL VALVE W/ PRV & FILTER

RAIN BIRD XF SERIES BLANK TUBING ) BARB TEE INSERT FITTING: RAIN BIRD XFD-TEE (6) PROJECTED CANOPY LINE OF TREE

- 3/4" DISC FILTER

3/4" PRV 3/4" SCH 80

7) SUB-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFS DRIPLINE NON-POTABLE: XFSP DRIPLINE PLACE AS SHOWN (LENGTH AS REQUIRED)

(8) **ROOT BALL** (9) TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND (QUANTITY AS REQUIRED, SEE NOTES 2-3 BELOW)

10) ALTERNATE: USE TWO ADJUSTABLE 1. DISTANCE BETWEEN LATERAL RINGS AND EMITTER SPACING TO BE BASED ON SOIL TYPE,

3. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

RAINBIRD PEB
PVC MAINLINE REMOTE CONTROL 3/4" SCH 80 /

DRIPLINE TYPICAL DETAIL - NTS

SUB-SURFACE DRIPLINE AROUND TREE

