

City of Bunnell, Florida

Agenda Item No. 4.

Document Date: 2/22/2025

Department: Community Development

Subject: SE 2023-08 Requesting a modification to an approved special

exception for the Phoenix Crossings development.

Property Address: N Bay Street Zoning Designation: L-1 / R-3B

Future Land Use Designation: Industrial / Multifamily

Agenda Section: New Business

ATTACHMENTS:

DescriptionTypeZoning MapExhibitModified Development Plan LayoutPlansApproval Letter for Previous Special Exception.Exhibit

Summary/Highlights:

This is a request to modify an approved special exception for the Phoenix Crossings development. The special exception was previously granted by the PZA Board on April 21, 2020.

In accordance with local notification procedures, notice detailing the date, time, and location were mailed to adjacent property owners within 300 feet of the subject property, within the City limits, on March 10, 2025. Notice was published in the Observer Local News on March 20, 2025.

Background:

The applicant, Sandra Shank, applied for a modification to her approved special exception (Case No. PZA 2020-07) in conjunction with major site plan approval. The reason for this modification is to modify the development plan that was approved as part of the special exception. The approved special exception permits a mixed-use development on Parcel ID's: 10-12-30-0850-02130-0030, 10-12-30-0850-02680-0000, and 10-12-30-0850-02490-0020 within the R3-B and L-1 zoning districts. The following uses are authorized under the special exception:

- 1. Multi-family
- 2. Administrative Offices
- 3. Chapel
- 4. Gym/Fitness Center
- 5. Medical and Therapeutic Services
- 6. Library with computer lab

- 7. Park
- 8. Fair Market Rate Rent Housing
- 9. 120% of Median Income Rent Housing
- 10. 80% of Median Income Rent Housing
- 11. 50% of Median Income Rent Housing
- 12. 30% of Median Income Rent Housing
- 13. Elderly Housing
- 14. Homelessness Housing
- 15. Veterans Housing

The updated development plan layout is derived from the major site plan submitted and reviewed by the Technical Review Committee for consistency with the City's Land Development Regulations. The approved uses are consistent with the R-3B zoning district for which the uses are to reside in (See attached zoning map).

Staff Recommendation:

Approve the Phoenix Crossings special exception modification to the approved development plan for Parcels 10-12-30-0850-02130-0030, 10-12-30-0850-02680-0000, and 10-12-30-0850-02490-0020 with the following condition to ensure consistency with Land Development Code:

1. This special exception use shall run with the land and may be transferrable should the ownership of the property ever change only if the new owner continues the use of the property as allowed under this special exception. If under any circumstance the use of the property changes beyond what is allowed within this special exception, this special exception shall become null and void.

If motioned for approval, please state along the lines of <u>"I make a motion to approve the special exception modification with staff's conditions."</u>

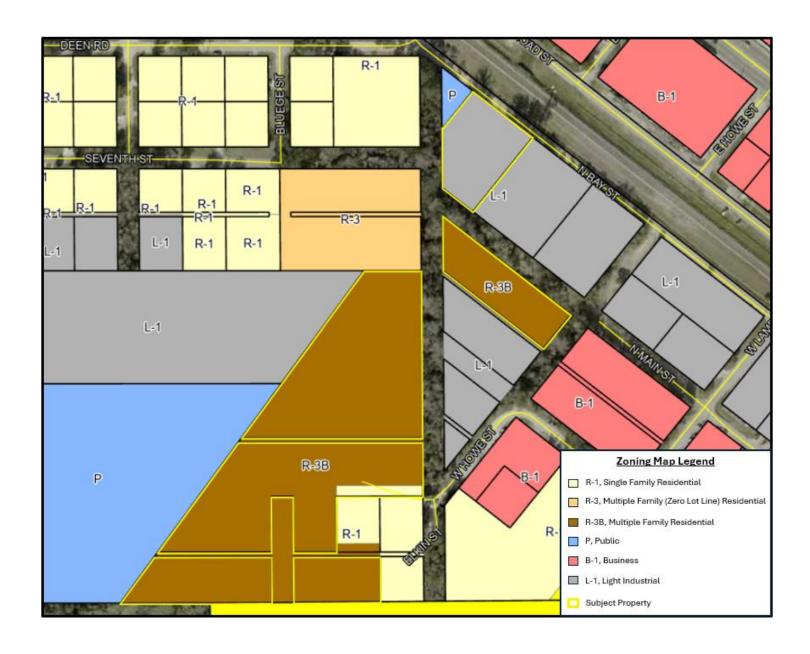
If motioned for denial, please state along the lines of "I make a motion to deny the special exception modification for the subject property" and state the reason for denial.

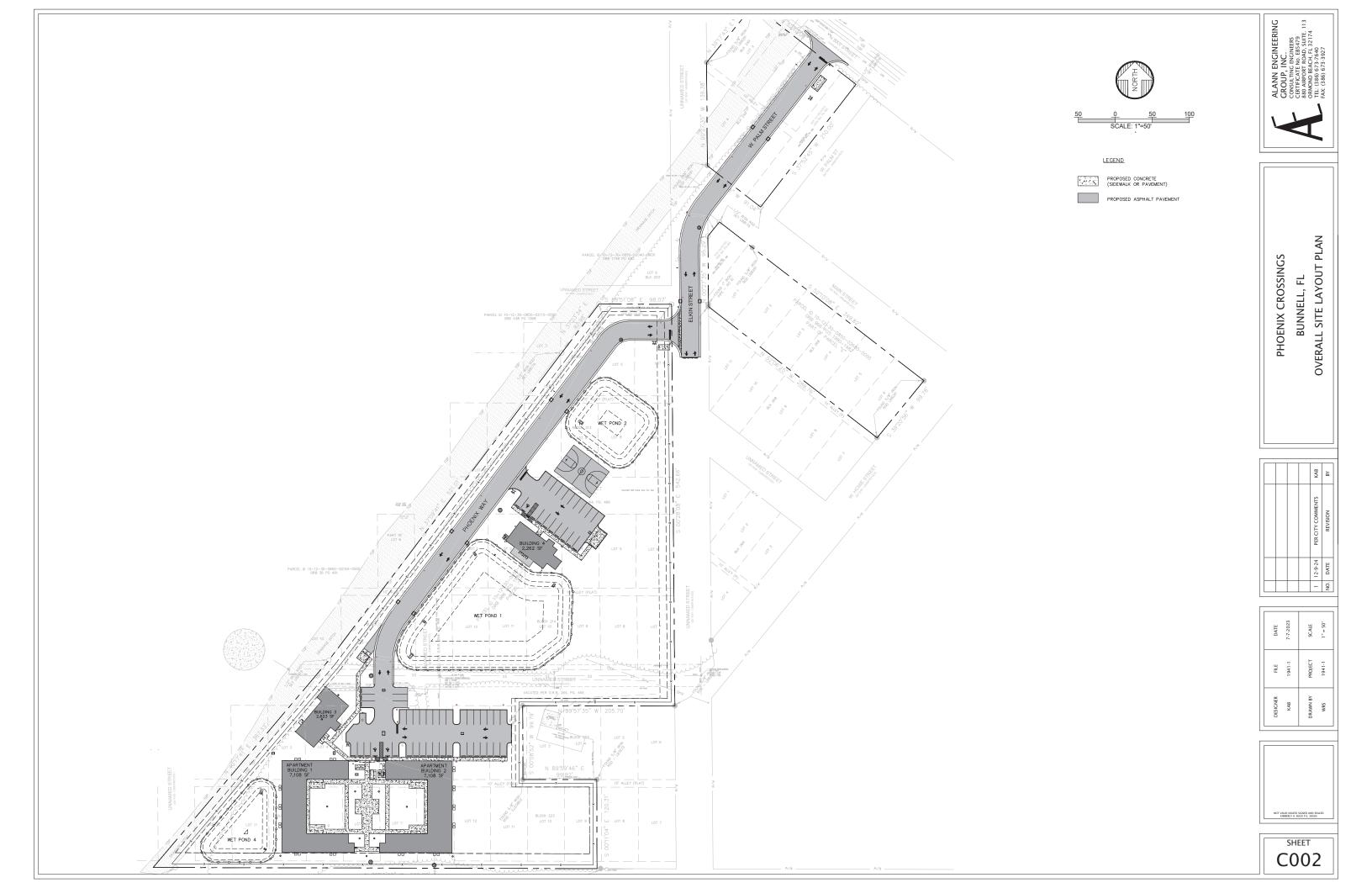
The Planning, Zoning and Appeals Board has the ability and authority to amend the conditions or apply more than what staff has recommended

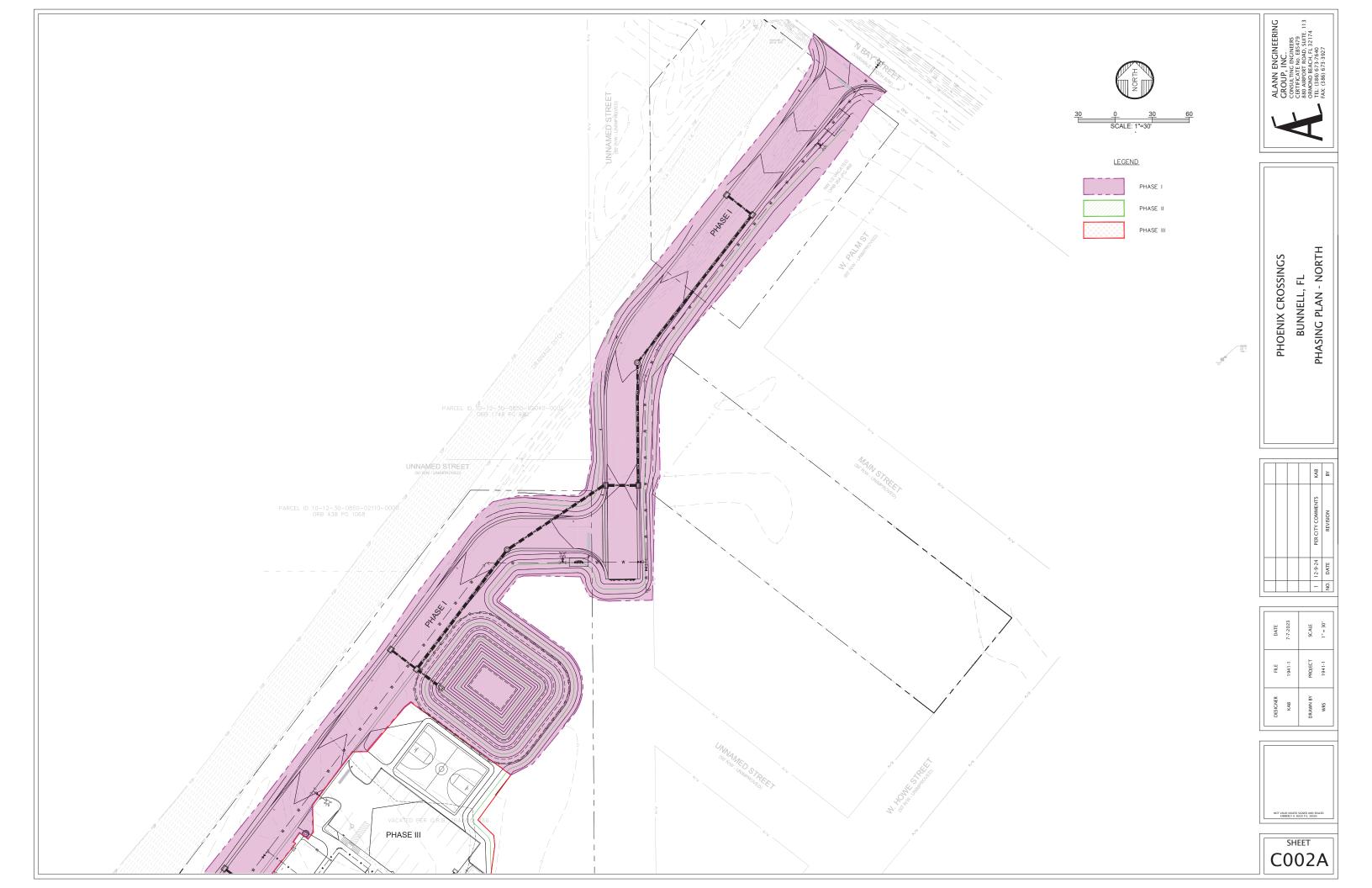
City Attorney Review:

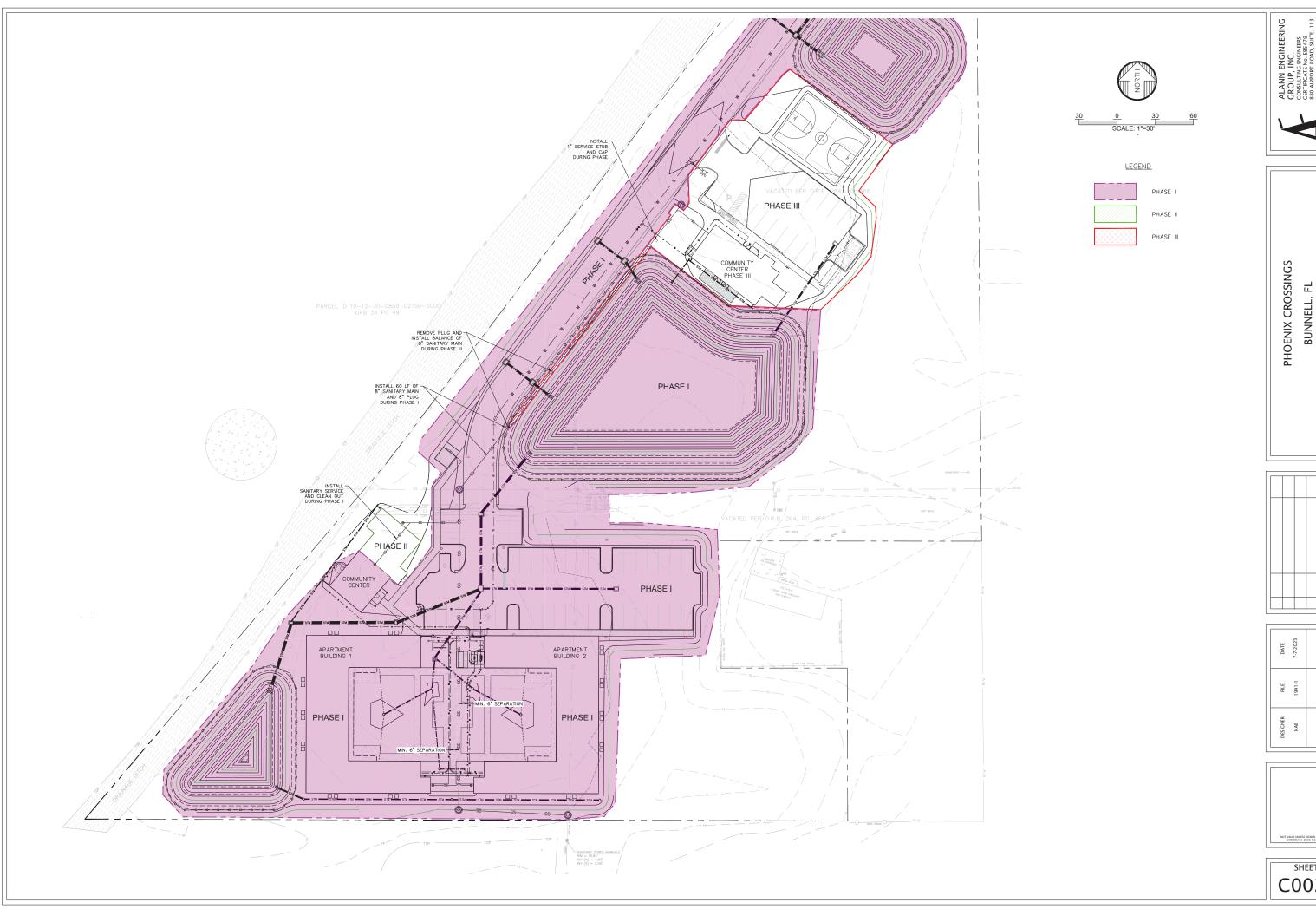
Approved for agenda

Zoning Map









PHOENIX CROSSINGS BUNNELL, FL PHASING PLAN - SOUTH

SHEET C002B

CATHERINE D. ROBINSON MAYOR

JOHN ROGERS VICE-MAYOR

DR. ALVIN B. JACKSON, JR. CITY MANAGER



COMMISSIONERS:

BILL BAXLEY

DONNIE NOBLES

TONYA GORDON

June 23, 2021

Phoenix Crossing ATTN: Sandra Shank PO Box 354925 Bunnell, FL 32110

Dear Ms. Shank:

At its April 21, 2020 meeting, the Planning, Zoning, and Appeals Board approved a request for a Special Exception to permit a mixed use development on parcel ID's: 10-12-30-0850-02130-0030, 10-12-30-0850-02680-0000 and 10-12-30-0850-02490-0020 in the R3-B and L-1 zoning districts. The following uses are authorized with this approval:

- 1) Multi-Family
- 2) Administrative Offices
- 3) Chapel
- 4) Gym/Fitness Center
- 5) Medical and Therapeutic Services
- 6) Library with Computer Lab
- 7) Park
- 8) Fair Market Rate Rent Housing
- 9) 120% of Median Income Rent Housing
- 10) 80% of Median Income Rent Housing
- 11) 50% of Median Income Rent Housing
- 12) 30% of Median Income Rent Housing
- 13) Elderly Housing
- 14) Homelessness Housing
- 15) Veterans Housing

Please note that the Special Exception only permits the uses on the site and is not a Development Order. Site plan approval will be needed to authorize development of the permitted uses. If you need additional information, please let me know. Thank you.

Sincerely,

Mark P. Karet, AICP Director of Planning



City of Bunnell, Florida

Agenda Item No. 5.

Document Date: 2/22/2025

Department: Community Development

Subject: MJSP 2023-15 Requesting approval of the major site plan for

the Phoenix Crossings project, located off of North Bay Street.

Property Address: N Bay Street Zoning Designation: L-1 / R-3B

Future Land Use Designation: Industrial / Multifamily

Agenda Section: New Business

ATTACHMENTS:

Description	Type
Phoenix Crossings Major Site Plan Sheets C001 - C002A	Plans
Phoenix Crossings Major Site Plan Sheets C002B - C004	Plans
Phoenix Crossings Major Site Plan Sheets C005 - C007	Plans
Phoenix Crossings Major Site Plan Sheets C008 - C009A	Plans
Phoenix Crossings Major Site Plan Sheets C009B - C011	Plans
Phoenix Crossings Major Site Plan Sheets C012 - C014	Plans
Phoenix Crossings Major Site Plan Sheets C015 - C017	Plans
Phoenix Crossings Major Site Plan Sheets C018 - C020	Plans
Phoenix Crossings Major Site Plan Sheets C021 - C023	Plans
Phoenix Crossings Major Site Plan Sheets C024 - C025	Plans
Phoenix Crossings Landscaping Plan Sheets LA-1 through LA-3	Plans
Phoenix Crossings Landscaping Plan Sheets LA-4 through LA-5	Plans

Summary/Highlights:

This is a request for major site plan approval for the Phoenix Crossings development on 8.03+/-acres of land. The request for approval includes the following:

- Phoenix Crossings Major site plan civil set Sheets C001 C025
- Phoenix Crossings Landscaping Plan Sheets LA-1 LA-5

Background:

The applicant, Abundant Life Ministries-Hope House, Inc., has requested major site plan approval for a development that spans 8.03+/- acres of land located within three Parcel ID's: 10-12-30-0850-02130-0030, 10-12-30-0850-02680-0000, and 10-12-30-0850-02490-0020. The development consists affordable multifamily housing with amenities to support and service the

community within. The development is permitted by a special exception granted in April 21, 2020 and will contain the following uses:

- 1. Multi-family
- 2. Administrative Offices
- 3. Chapel
- 4. Gym/Fitness Center
- 5. Medical and Therapeutic Services
- 6. Library with computer lab
- 7. Park
- 8. Fair Market Rate Rent Housing
- 9. 120% of Median Income Rent Housing
- 10. 80% of Median Income Rent Housing
- 11. 50% of Median Income Rent Housing
- 12. 30% of Median Income Rent Housing
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- 15. Veterans Housing

Staff and the Technical Review Committee have reviewed the submitted plans and material in accordance with the City's Land Development Code, Comprehensive Plan, and other applicable federal, state, and local regulations. The plans have received all applicable staff and TRC member sign-offs and is deemed to meet the requirements listed within the City's land development regulations and is consistent with the City's 2035 Comprehensive Plan. There are some outstanding comments that are not major and have been placed as conditions of approval. The applicant will be required to satisfy these conditions prior to a building permit being issued.

In accordance with Section 22-3(e) in the Land Development Code, the Planning, Zoning and Appeals Board shall consider each major site plan application and shall base its decision on the use, size and dimension regulations for the respective zoning district, the site review standards established herein and all other applicable land development regulations, and comprehensive plan policies. The planning, zoning, and appeals board may impose conditions on-site plan approvals which ensure compliance with all applicable land development regulations and comprehensive plan policies.

Staff Recommendation:

Approve the major site plan for the Phoenix Crossings development with the following conditions to ensure consistency with the City's land development regulations:

- The development agreement addressing concerns regarding ingress/egress, rights-of-way, stormwater management, potable water and sewer must be approved and executed by the City Commission prior to any building permits being issued.
- 2. Please obtain and provide to the City a St. Johns River Water Management District (SJRWMD) Environmental Resource Permit as necessary for the proposed construction with regards to stormwater management. The SJRWMD permit shall be provided to the City prior to the issuance of any building permits.
- 3. On sheet C014, revise "Palm Harbor Parkway" to "North Bay Street" under sequence of major activities.

- 4. On sheet C006, the dead-end sign at the entrance point from Elkin Street into Phoenix Way was provided but was incorrectly placed on Elkin Street at the end of Elkin Street. Please place the dead-end sign within Phoenix Way and the entry point to Phoenix Way.
- 5. On Sheets C012 and C013, Provide the City with a 30' wide Sanitary Sewer Easement with labeled metes and bounds describing the easement and tying to a property corner for the existing 15" gravity sanitary sewer which crosses parcel 10-12-30-0850-02130-0030 in a west to east direction. Please call out the proposed 30' wide Easement, with metes and bounds description, within the Civil Plan set on plan sheets C007 and C0012. The applicant shall also provide the metes and bounds easement in a recordable format, as approved by the City, and recorded in the Clerk of Court of Flagler County, Florida, after which a copy is to be provided to the City.
- 6. The alley ways and right-of-way located within the subject parcels must be vacated prior to the issuance of any building permits.
- 7. All land and/or easements must be donated or executed with the proper instruments, as described herein and in the development agreement, prior to the release of the site plan pursuant to Section 22-7 in the Land Development Code.

If motioned for approval, please state along the lines of "I make a motion to approve the major site plan application MJSP 2023-15 for the Phoenix Crossings development with staff's conditions."

If motioned for denial, please state along the lines of <u>"I make a motion to deny the major site plan application MJSP 2023-15 for the Phoenix Crossings development"</u> and state the reason for denial.

The Planning, Zoning and Appeals Board has the ability and authority to amend the conditions or apply more than what staff has recommended

City Attorney Review:

Approved for agenda

PHOENIX CROSSINGS

SECTION 15, TOWNSHIP 12 SOUTH, RANGE 30 EAST

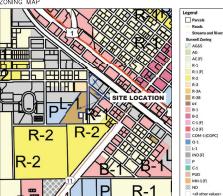
ENVIRONMENTALIST: CARTER ENVIRONMENTAL SERVICES, INC. DAVE JEFF ST. AUGUSTINE ,FL 32084 904-540-1786 RYAN@CARTERENV COM

LANDSCAPE ARCHITECT: STERN DESIGN GROUP JAN B. STERN, A.S.L.A., #1160 224 SOUTH BEACH STREET, SUITE 201 DAYTONA BEACH, FL 32114 JSTERN@STERNDESIGNGROUP.COM

SHEET NUMBER SHEET TITLE OVERALL SITE LAYOUT OVERALL SILE LATIOUT PLAIN PHASING PLAN — NORTH PHASING PLAN — SOUTH MITTON & EROSION CONTROL PLAN TREE REMOVAL PLAN — NORTH TREE REMOVAL PLAN — SOUTH SITE DIMENSION PLAN - NORTH SITE DIMENSION PLAN - SOUTH C008 GRADING PLAN - NORTH C009 GRADING PLAN - SOUTH C009A GRADING SECTIONS C010 C011 DRAINAGE PLAN - NORT DRAINAGE PLAN - SOUTH C012 C013 C014 C015 UTILITY PLAN - NORTH UTILITY PLAN - SOUTH SITE DETAILS ROADWAY DETAILS STORM DRAINAGE & WATER DETAILS WATER DETAILS WATER & SANITARY DETAILS SANITARY DETAILS GENERAL DETAILS GENERAL DETAILS

SHEET INDEX

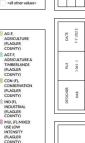
STORM DRAINAGE DETAILS C023 STORM DRAINAGE DETAILS C024 TRAFFIC CONTROL DETAILS C025





PHOENIX CROSSINGS

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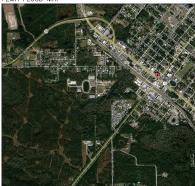


C001

VICINITY MAP



FEMA FLOOD MAP



MAP: 12035C0209E, REVISED JUNE 6, 2018

BUNNELL, FL

OWNER: ARLINDANT LIFE MINISTRIES-HOPE 386-597-2861

STATEMENT OF INTENT

SITE DATA

EXISTING ZONING: R-38 & L-1

EXISTING USE:

UTURE LAND USE: WULTI-FAMILY & INDUSTRIA

ANDSCAPE BUFFERS: IORTHERN PERIMETER

ASTERN PERIMETER -OUTHERN PERIMETER -ESTERN PERIMETER

ROPOSED USES:

ROPOSED BUILDING HEIGHTS: UILDING 1: 24'-9"
UILDING 2: 24'-9"
UILDING 3: 12'-6" (ESTIMATED)
UILDING 4: 12'-6"

OPOSED BUILDING GFA:

BUILDING 1 - REQUIRED: 20 FT PROPOSED: 21 FT BUILDING 2 - REQUIRED: 20 FT PROPOSED: 21 FT BUILDING 3 - REQUIRED: 10 FT PROPOSED: 22 FT PROPOSED: 22 FT PROPOSED: 22 FT PROPOSED: 22 FT

SETBACKS.

ENGINEER: THE ALANN ENGINEERING GROUP, INC. KAR@AF-GROUP COM

ONSTRUCT A COMMUNITY CENTER, RESIDENTIAL HOUSING, LIBRARY AND ADMINISTRATIVE AND MEDICAL OFFICES. THE ROJECT WILL INCLUDE ASSOCIATED ROADWAYS, UTILITIES, AND OTHER ASSOCIATED FEATURES.

7.260 SF LOT REQUIRED FOR MULTI-UNIT DWELLING STRUCTURE ADDITIONAL 2,000 SF REQUIRED FOR EACH UNIT OF ADDITIONAL MULTI-UNIT DWELLING STRUCTURES

SING:
MULTI-FAMILY:
1.5 SPACES PER UNIT FOR FIRST 20 UNITS PLUS 1 SPACE PER UNIT THEREAFTER
28 UNITS = 38 SPACES

COMMUNITY SPACES:
COMMUNITY SPACES:

ARCHITECT: JPA JOSEPH POZZUOLI, P.A., AR #13178 314 MOODY BOULEVARD FLAGLER BEACH, FL 32136 JPA@JPAFLORIDA.COM

SURVEYOR: ATLANTIC DRAFTING & SURVEYING, INC. JOSEPH JAY WOOLDRIDGE, P.S.M. L.S., #6994 1362 N. US HWY J. SUITE 304 ORMOND BEACH, FLORIDA 32174 ADS.INC.FL1@GMAIL.COM

GENERAL NOTES

CONTRACTOR SHALL VERIFY ALL PERTINENT FEATURES WHICH MAY AFFECT HIS BID PRIOR TO BIDDING THE PROJECT. DISCREPANCES NOTED DURING CONSTRUCTION WILL NOT BE CONSIDERED CAUSE FOR EXTRA PAYMENT ON ANY OF THE PAY ITEMS IN THE CONTRACT.

UTILITIES MAY EXIST WHICH ARE NOT SHOWN ACCURATELY ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION.

CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER AND THE BUNNELL DEVELOPMENT ENGINEER OF ANY DISCREPANCIES FOUND ON THE PLANS.

A MINIMUM OF ONE (1) COMPACTION TEST PER 5,000 SF OF PARKING AREA IS REQUIRED. A COPY OF THE TEST REPORTS SHALL BE GIVEN TO CITY OF BUNNELL DESIGNATED INSPECTORS.

. ALL STORM SEWER LINES AND INLETS SHALL BE CLEANED OF DEBRIS AND ERODED MATERIALS AT LAST STAGES OF CONSTRUCTION.

ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION.

CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT EXISTING TREES THAT ARE TO REMAIN AS CALLED OUT ON THE PLANS

IF TREES MARKED TO BE REMOVED CAN BE SAVED, THE CONTRACTOR SHALL SAVE SAID TREES, SHOULD ADDITIONAL TREES NEED TO BE REMOVED, THE CONTRACTOR SHALL NOTIFY THE CITY FOR APPROVAL.

CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY PERFORMED BY A REGISTERED SURVEYOR. SURVEY SHALL INDICATE AS-BUILT OF ALL IMPROVEMENTS.

A FINAL INSPECTION, TO BE CONDUCTED BY THE CITY OF BUNNELL, SHALL BE PERFORMED ON ALL CONSTRUCTION. THE DESIGN ENGINEER SHALL NOTIFY THE CITY OF BUNNELL ONCE AS-BUILT DRAWINGS AND CLEARANCES HAVE BEEN SUBJECT OF THE CONTROLLED ON THE CONTROLLED O

. A COMPLETE SET OF AS-BUILT DRAWINGS ARE REQUIRED TO BE SUBMITTED TO THE CITY OF BUNNELL PRIOR TO REQUIRESTING A FINAL INSPECTION. COMPACTION REQUIREMENTS SHALL BE 96% OF MAX. DRY DENSITY FOR PAVED AREAS AND 95% FOR PIPE BEDS AND UNPAVED AREAS

GENERAL UTILITY NOTES

LOCATION OF UTILITIES ARE APPROXIMATE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERHY, EXISTING UTILITIES SHOWN ARE ESTIMATES BASED ON BEST AVAILABLE

THERE SHALL BE A MINIMUM HORZONTAL CLEARANCE OF TEN FEET (10') BETWEEN POTABLE WATER LINES AND SANTARY HAZARDS SUCH AS SANTARY SEWEL LINES AND STORM SEWER FUNES IN PARALLEL INSTALLATION (OR AT CLOSES) FOR POINTS) AND A VERTICAL CLEARANCE OF 18 INCHES AT CROSSINGS. WHEN SUCH CLEARANCE ARE NOT POSSIBLE CONCRETE ENCASSEMENT WILL BE REQUIRED.

FORCE MAIN PIPE STANDARDS: PVC 1120/AWWA C-900

POTABLE WATER SPECIFICATION: PVC 1120 AWWA C-900 CLASS 150

POTABLE WATER SERVICES SHALL BE 2" POLETHYLENE TUBING, 200 PSI, NSF APPROVED, SDR 9 AND MEET ASTM D124B, PIPE SHALL BE ENCASED IN A PVC SCHEDULE 40 SLEEVE EXTENDING 2" BEYOND THE BACK OF CURB.

ALL BURIED GATE VALVES <45" SHALL CONFORM TO AWWA C-509 OR C-515 SPECIFICATIONS.

WATER MAIN PRESSURE TESTING: 150 PSI STATIC PRESSURE FOR 2 HOURS

UNLESS OTHERWISE NOTED, FOLLOW FDOT STANDARD SPECIFICATIONS, LATEST EDITION.

THE CONTRACTOR SHALL CALL FOR LOCATES 2 BUSINESS DAYS PRIOR TO STARTING CONSTRUCTION.

LEGAL DESCRIPTION





AGT-F, AGRICULTURE & TIMBERLANDS (FLAGLER COUNTY) FLUM (BUNNELL) AG, AGRICULTURE AG&S, AGRICULTURE & SILVICULTURE COUNTY)
CON-(F),
CONSERVATION
(FLAGLER
COUNTY) COMM-LOW, COMMERCIAL LOW IND (F), INDUSTRIAL (FLAGLER COUNTY) COMM-MED. COMMERCIAL MEDIUM CON-1, CONSERVATION-1 MUL (F), MIXED USE LOW INTENSITY (FLAGLER COUNTY) CON-2, CONSERVATION-2 IND. INDUSTRIAL MUH-F, MIXED USE HIGH INTENSITY (FLAGLER COUNTY) MF, MULTI-FAMILY PUB. PUBLIC REC, RECREATION

RE, RURAL

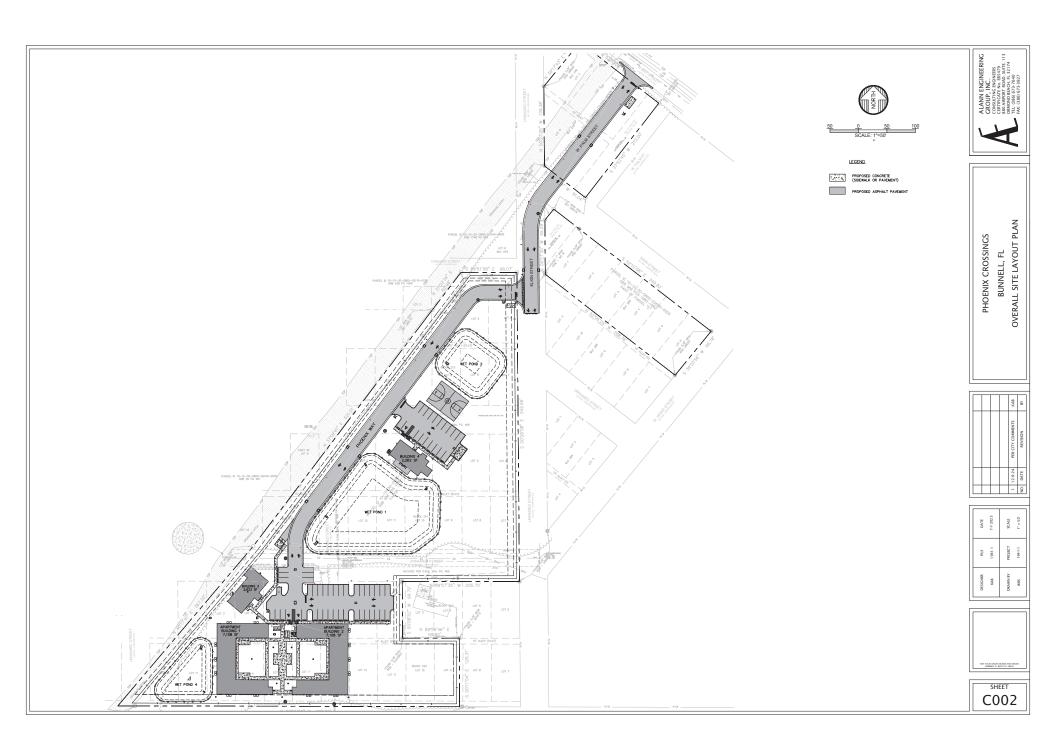
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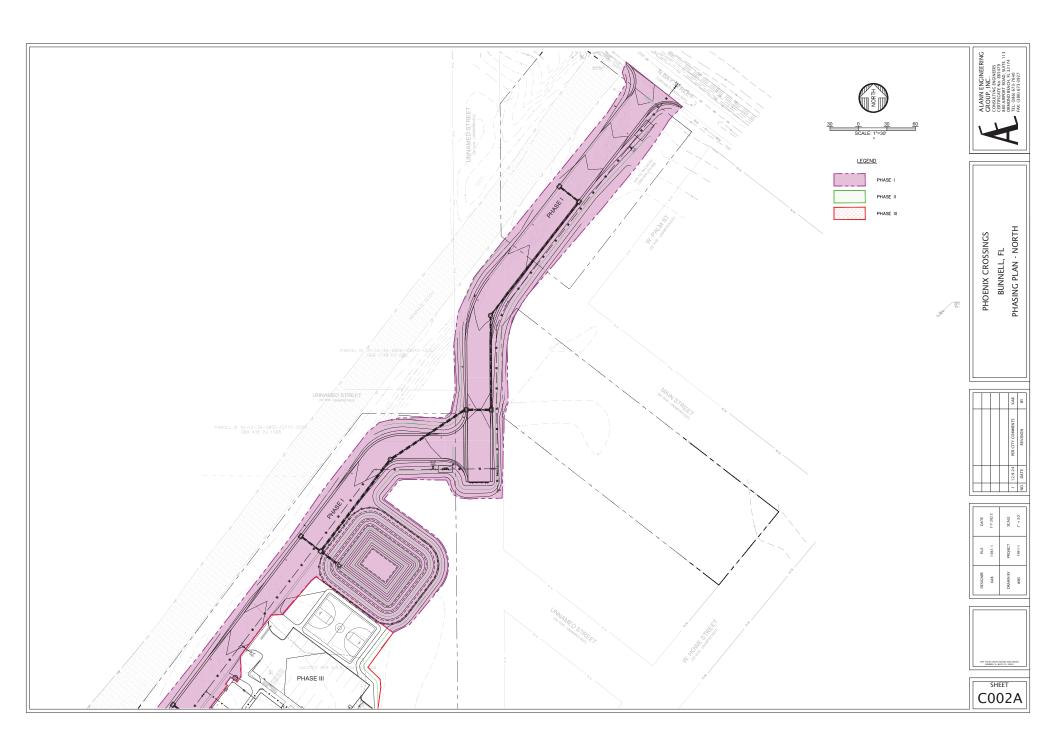
MU-COPC, MIXED USE (COPC) RESIDENTIAL (FLAGLER COUNTY)

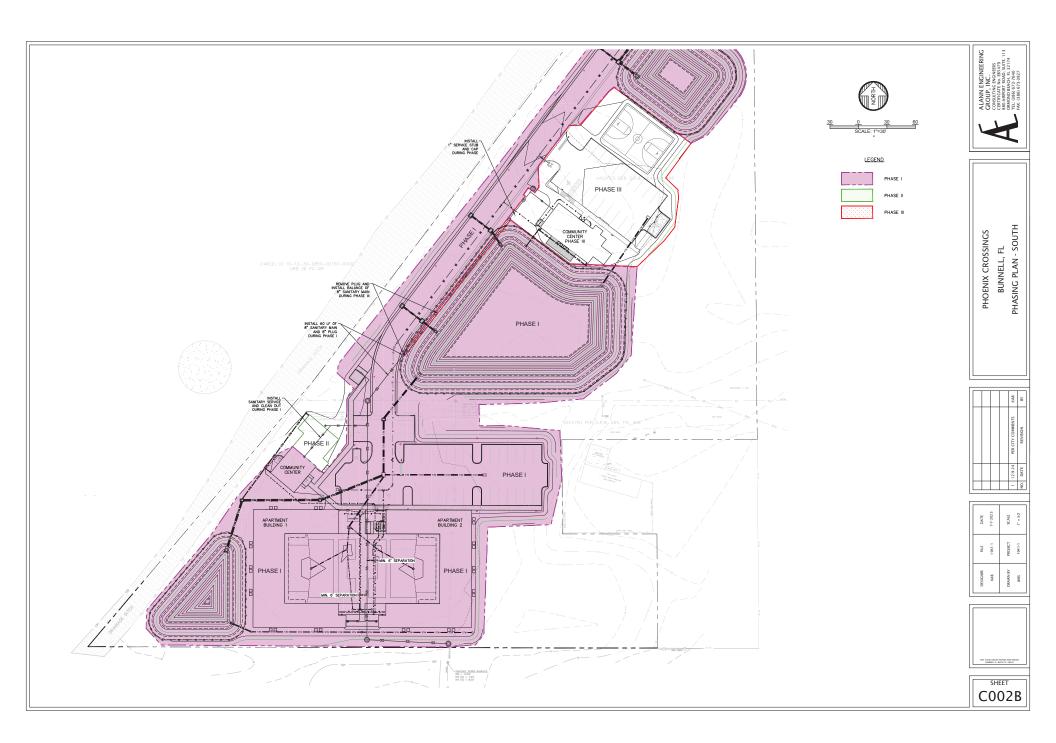
SHEET

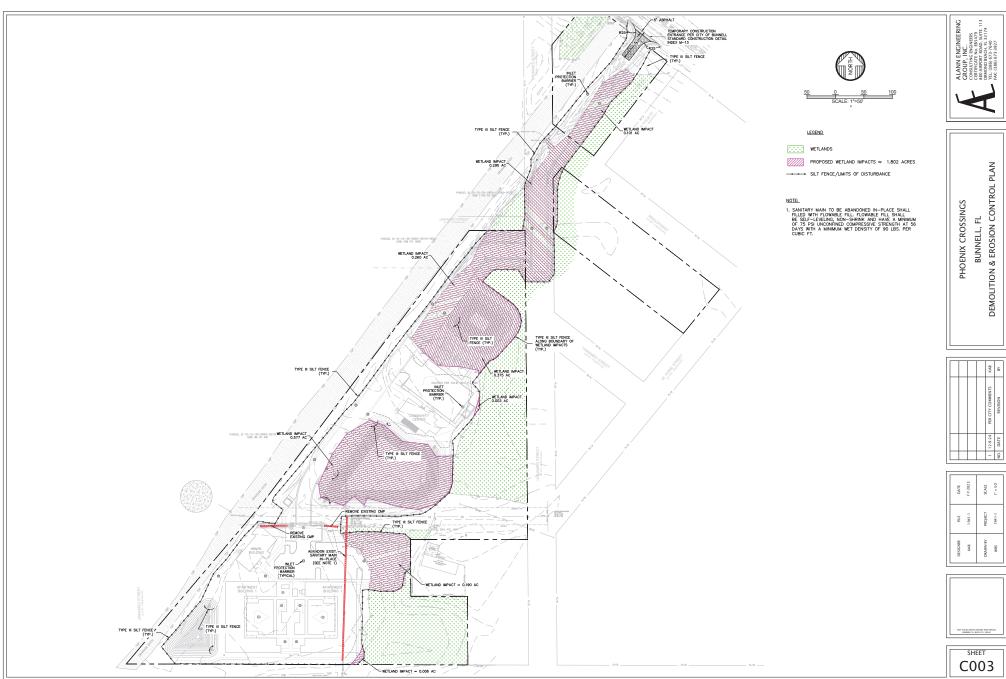


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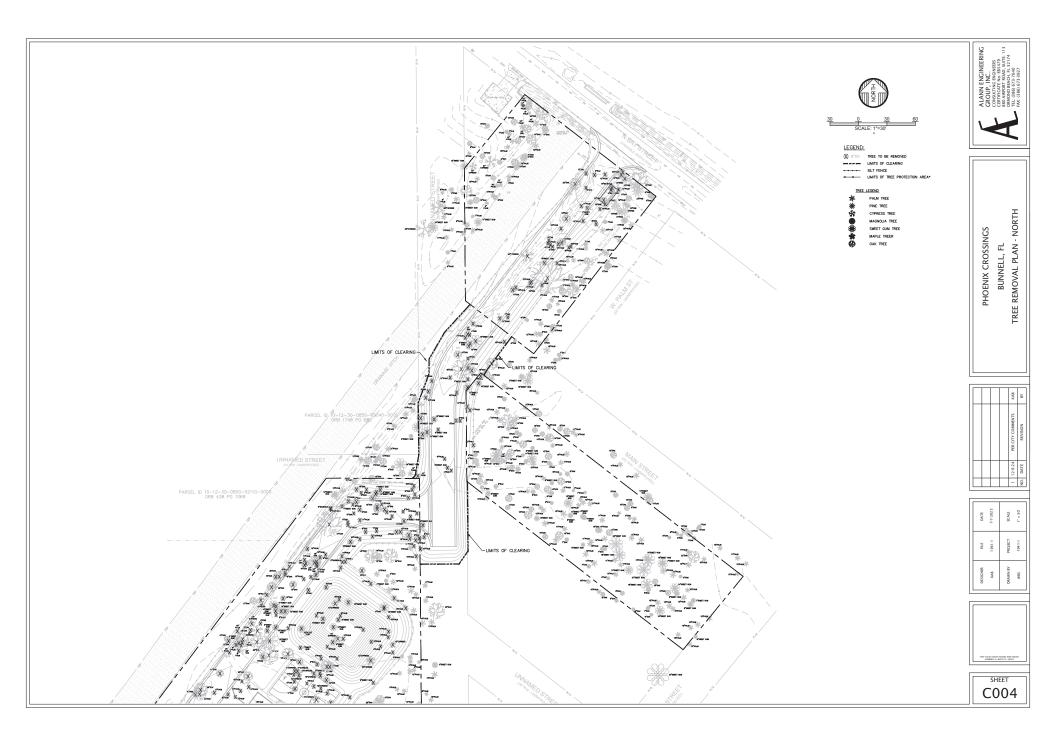




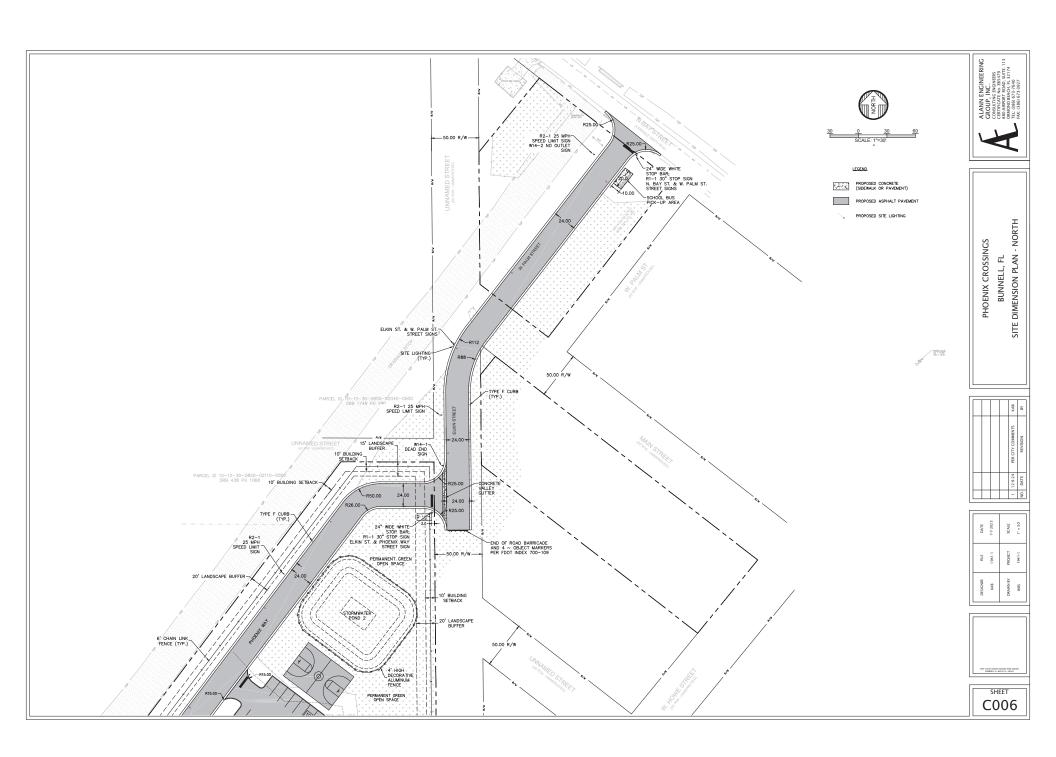


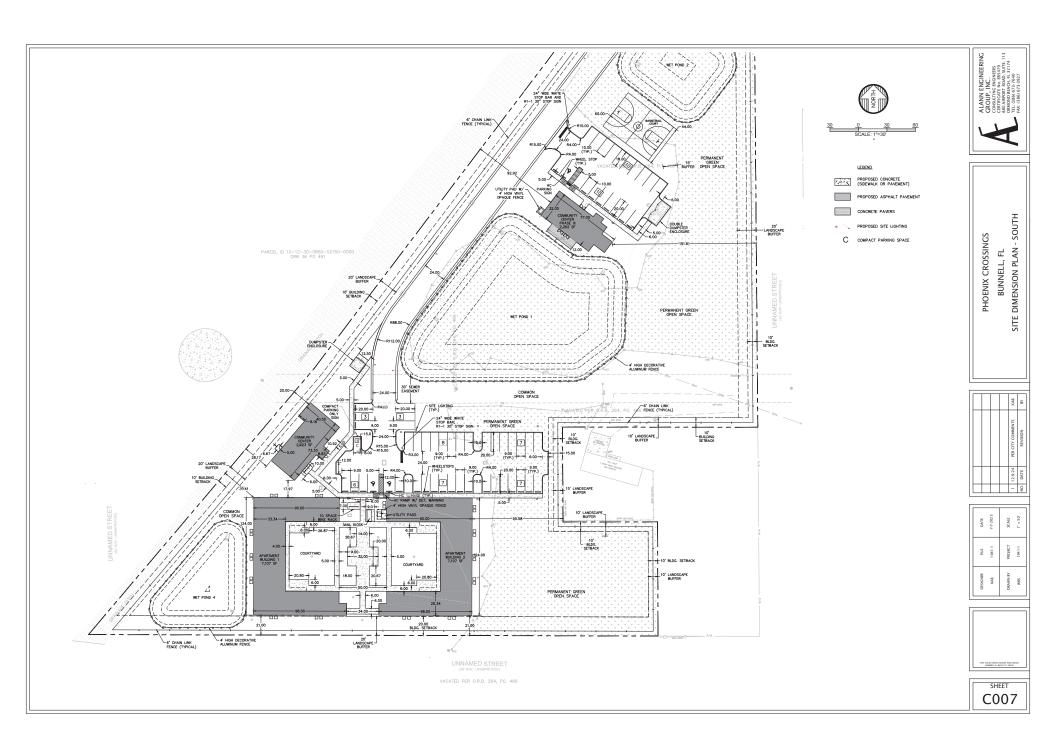
DATE 7-7-2023	SCALE 1" = 50'
FILE 1941-1	PROJECT 1941-1
DESIGNER	DRAWN BY WRS

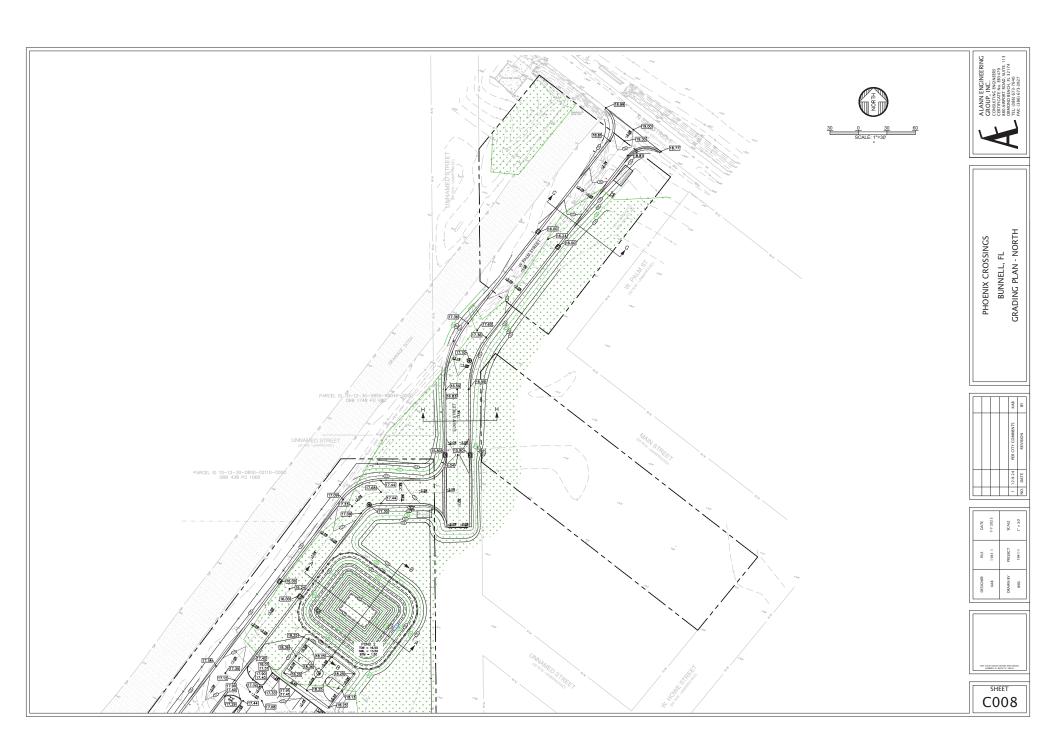


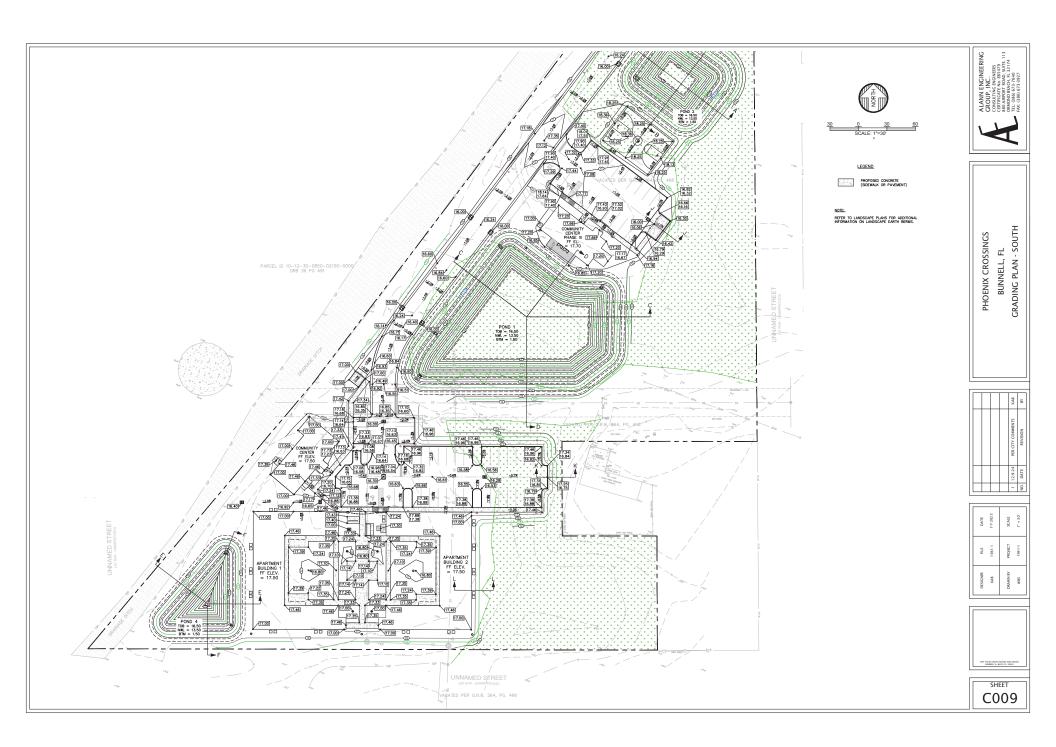


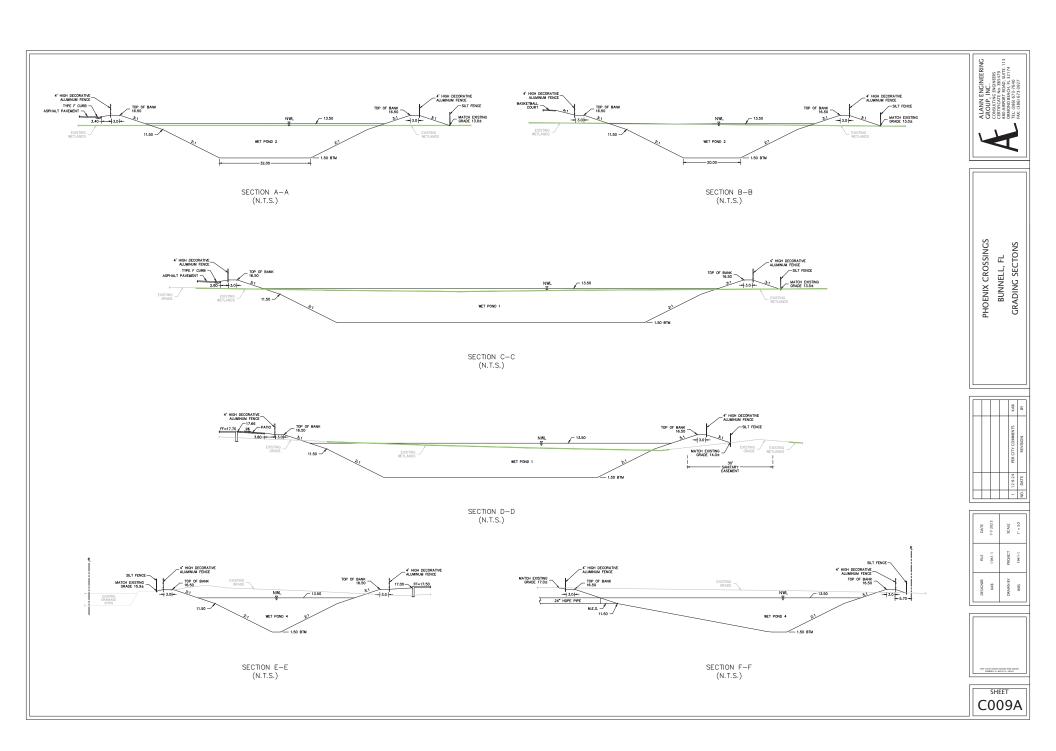












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	PER CITY COMMENTS	REVISION	
	12-9-24	DATE	
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DATE	SCALE
7-7-2023	1" = 3 0"
FILE	PROJECT
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DESIGNER	DRAWN BY WRS



SECTION H-H (N.T.S.)		
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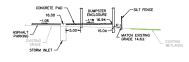
MATCH EXISTING GRADE 17.3±



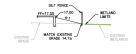
SECTION K-K (N.T.S.)



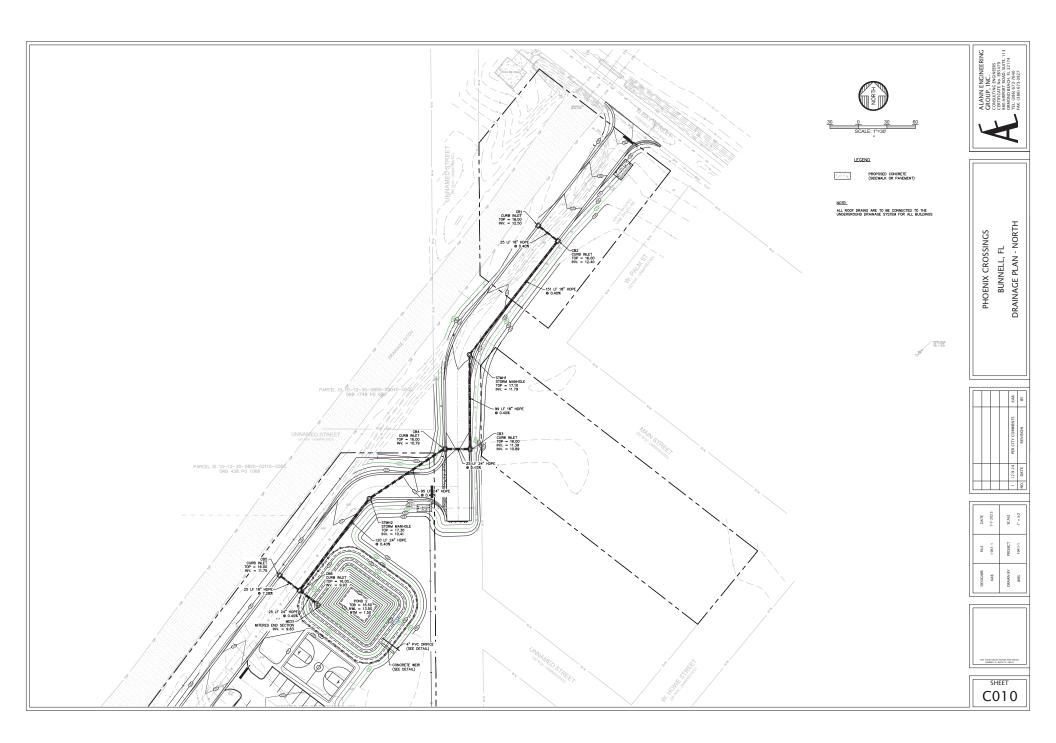
SECTION G-G (N.T.S.)

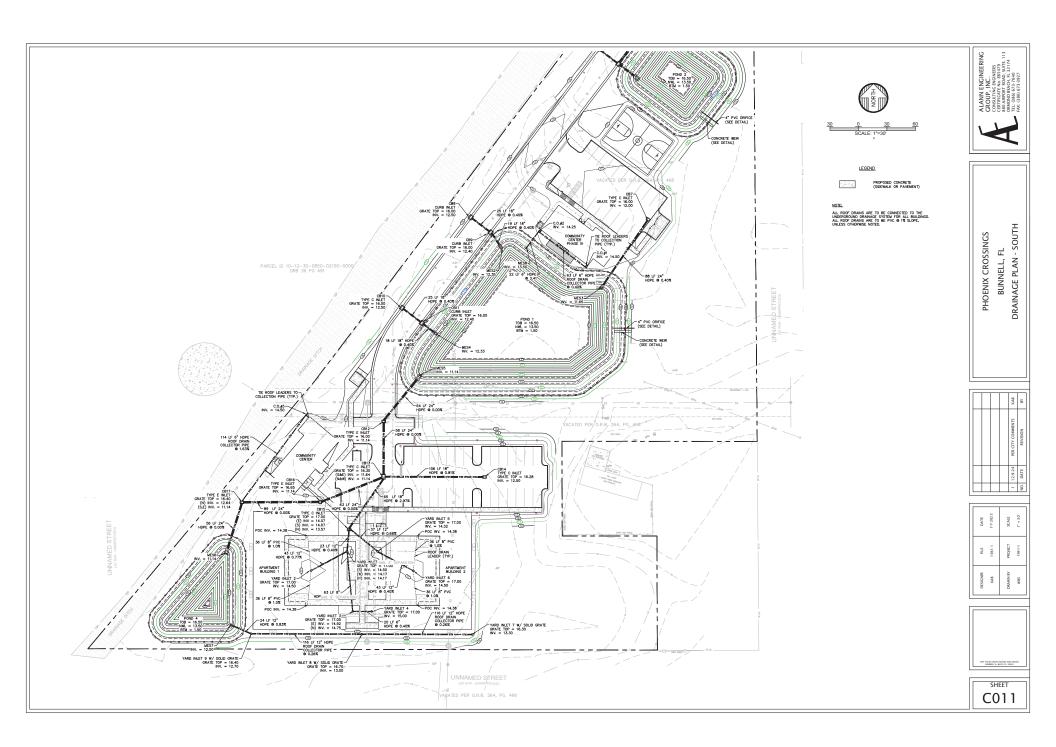


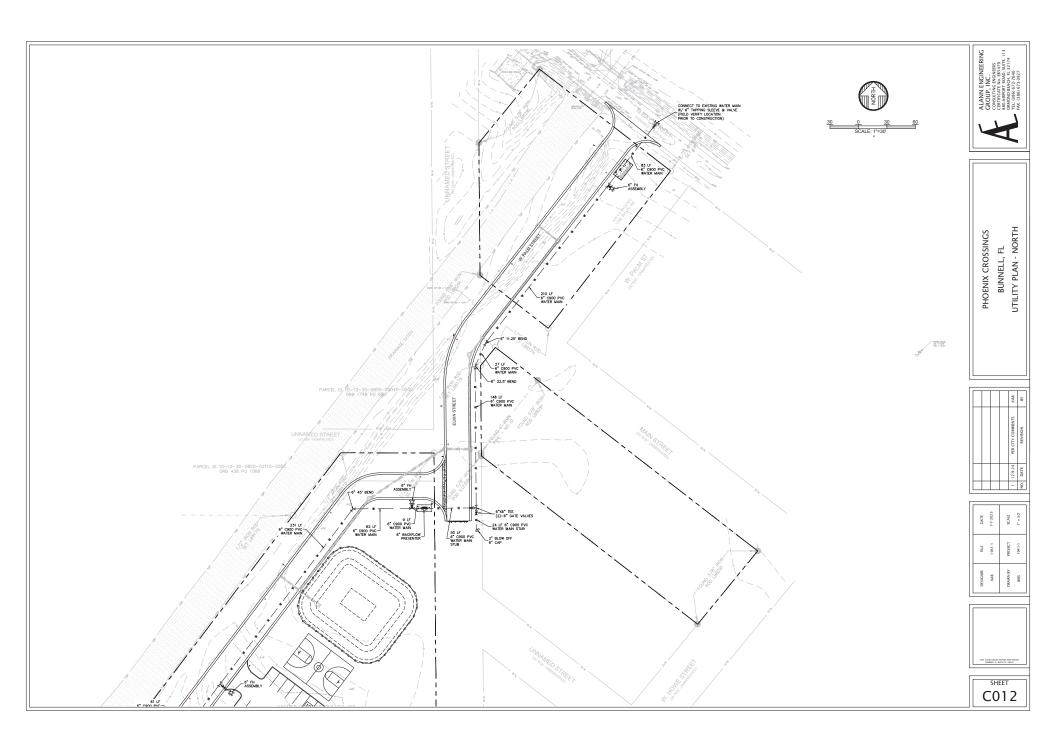
SECTION J-J (N.T.S.)

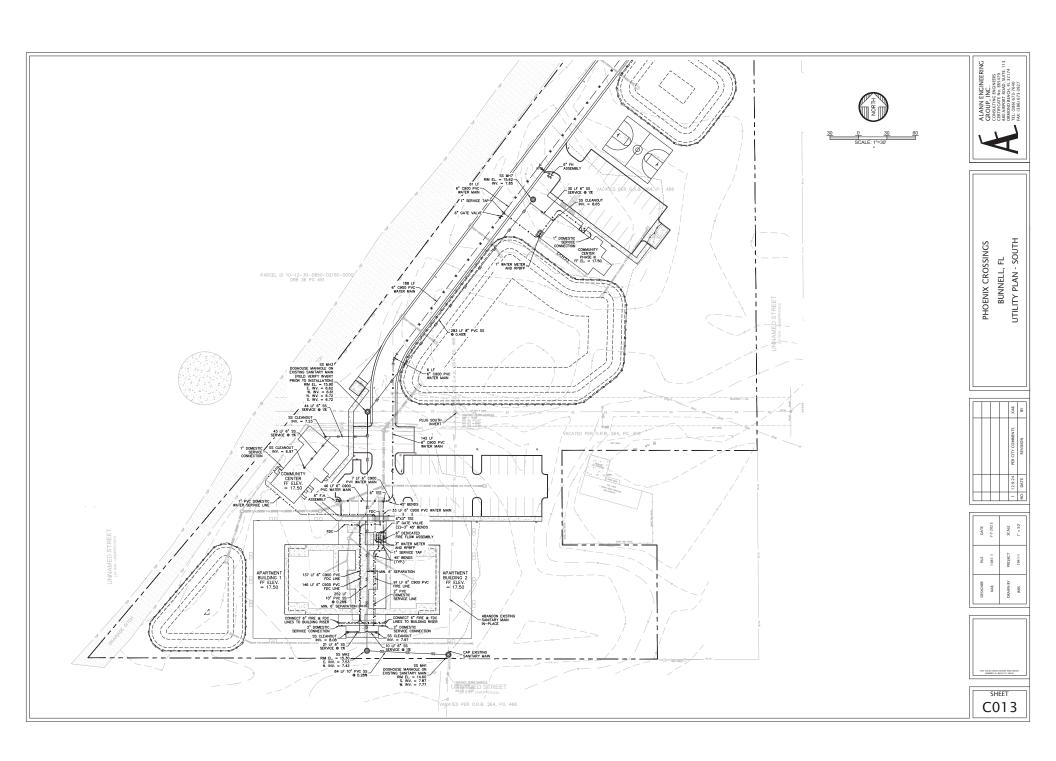


SECTION K-K (N.T.S.)









PHOENIX CROSSINGS DETAILS 딮 BUNNELL,

FILE 941 ICNER KAB

SHEET C014

SITE DESCRIPTION
7.64 ACRES
4.62 ACRES DEVELOPED AREA
3.02 ACRES UNDEVELOPED PROPERTY PROJECT NAME AND LOCATION PHOENIX CROSSINGS OWNER NAME AND ADDRESS:

DESCRIPTION:
MULTI-USE RESIDENTIAL/COMMUNITY SERVICES FACILITY SOIL DISTURBING ACTIVITIES WILL INCLUDE:
- CLEARING AND GRUBBING:
- EARTHWOOD AND CRADING

EARTHWORK, AND GRADING; STORM SEMER, WATER MAIN, SANITARY SEWER, REUSE MAIN, IRRIGATION AND PREPARATION FOR FINAL PLANTING AND SEEDING.

DIEXE
CONCRETE JOINTS SHALL BE IN ACCORDANCE WITH FDOT DESIGN INDEX #310.
CONCRETE STRENGTH SHALL BE 3000 PS MN.
SUBGRADE SHALL BE A MINMUM 12" THICK AND COMPACTED TO 960%
AGSHIOT 1-180 MINMUM LBR = 40

THICKENED EDGE SIDEWALK DETAIL N.T.S.

INLET PROTECTION DETAIL

CONCRETE SERTILIZERS WOOD (ASPHALT [] PETROLEUM BASED (MASONRY PRODUCTS BLOCKS M TAR M CLEANING SOLVENTS M ROOFING MATERIALS (A DETERGENTS (A PLANTS (A METAL STUDS

SCUDICE OF MAJOR ACTIVITIES THE ORDER OF ACTIVITIES SHALL BE AS FOLLOWS

1. RICKALL STRAUGUZO CONSTRUCTION DITENDED SHALL BE AS FOLLOWS

1. RICKALL STRAUGUZO CONSTRUCTION DITENDED SHALL BE AS FOLLOWS

1. CLAPA MO ORDER STOCK PLE TO SOL OF SIZE.

1. PROFINE SHALL STOCK PLE TO SOL OF SIZE.

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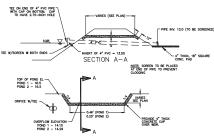
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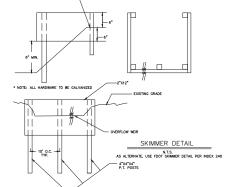
1. PROFINE SHALL STOCK PLE TO SOL OF SIZE.

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1. PROFINE SHALL SHA

WHEEL STOP DETAIL





SITE AREA:

1. TOTAL AREA OF SITE - 7.64 ACRES

2. TOTAL AREA TO BE DISTURBED - 4.62 ACRES

* ***LINE OF DECENING WATERS: UN-NAMED WETLANDS

CONTROLS. THIS PROTECTION IS AN ADMINISTRATION OF A VERBOLITY CAUSED BY STORM MATER RAIN OFF. AN ERGISON AND TURBULITY FLAN HAS BEEN PREPARED TO INSTRUCT THE STORM MATER RAIN OFF. AN ERGISON AND TURBULITY FLAN HAS BEEN PREPARED TO INSTRUCT THE CONTRACTION OF REACOUNT SERVICE SERVICES, THE CONTRACTION OF SERVICES SERVICES, TO THE CONTRACTION SERVICES SERVICES, TO THE PROPER PROTECTIONS AS REQUIRED BY FEDERAL, STATE AND LOCAL LAWS. REFER TO "CONTRACTIONS REPORTED TO THE CONTRACTIONS SERVICES AND ADMINISTRATION OF THE CONTRACTION OF THE CONTR

THIS SITE IS IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH BY THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT FOR THE TYPE OF DEVELOPMENT AT THE TIME OF PERMITTING.

ROSION AND TURBIDITY CONTROLS, THE FOLLOWING PERM FDEP PERMIT NO.

SJR.W.M.D. ENVIRONMENTAL RESOURCE PERMIT NO.

CONCRETE TRUCKS CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

(E)

(A) ASPHALT PAVEMENT: 1-1/2" ASPHALT BITUMINOUS CONCRETE TYPE S-III; MINIMUM MARSHALL FIELD STABILITY 1500, COMPACTED TO 98% DENSITY PER FM 1-T238 (METHOD B), NUCLEAR DENSITY TEST, "BACK SCATTER METHOD".

(B) BASE:
6" LIMEROCK BASE (LBR 100) OR RECYCLED/CRUSHED CONCRETE BASE (LBR 130)
COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.

© SUB-BASE: 12" SUB-BASE COMPACTED TO 98% DENSITY BASED ON AASHTO T-180

E SIDEWALK WITH THICKENED EDGE: 4" THICK; 3000 PSI; 28 DAY CONCRETE

PRIVATE PARKING LOT PAVEMENT DETAIL

OVERFLOW WEIR & BLEEDER DETAIL

SIZE L " X W " X D "

ROADWAY CONSTRUCTION NOTES

- ALL RIGHT OF WAY OTHER THAN ROADWAY AREAS SHALL BE SEEDED AND MULCHED OR SOODED. THE CITY RESERVES THE RIGHT TO REQUIRE SODDING AT ITS DISCRETION.
- THE FOLLOWING WILL BE THE STANDARD PROTECTION FOR DITCHES UNLESS DRAINAGE CALCULATIONS INDICATE OTHERWISE:

SWALE PROFILE GRADES PROTECTION REQUIRED

0.2% - 1.0% 1.0% - 4.0% 4.0% AND GREATER SEEDING AND MULCHING

- ALL FRANCHISE UILLITY CROSSINGS, INCLUDING BUT NOT LIMITED TO FPT, BELLSOUTH AND CABLE SHALL BE INSTALLED PRIOR TO INSTALLATION AND COMPACTION OF THE ROAD SUB BASE. ANY CROSSINGS AFTER INSTALLATION OF THE SUB BASE SHALL BE BY DIRECTIONAL BORE.
- 3A. IF OPEN CUTTING A ROADWAY IS APPROVED BY THE CITY, THE ROAD SHALL BE MILLED AND RESURFACED 25' ON EACH SIDE OF THE REPAIR.
- THE LIMITS OF STABILIZED SUB BASE SHALL EXTEND TO A DEPTH OF TWELVE INCHES (12") BELOW THE BOTTOM OF THE BASE AND OUTWARD TO TWELVE INCHES (12") BEYOND THE CURB.
- THE STABILIZING MATERIAL, IF REQUIRED, SHOULD BE A HIGH BEARING VALUE SOLL, SAND-CLAY, LIMEROCK, RECYCLED CONGRETE, SHELL OR OTHER MATERIAL AS APPROVED BY THE CITY AND A LICENSED SOILS BNANEER.
- THE SUB BASE SHALL BE STABILIZED NOT LESS THAN FORTY (40)
 LIMEROCK BEARING RATIO (LBR). A COMPACTION OF NO LESS
 THAN INNET-ROHT (88%) PERCENT DENSITY BASED ON AASHTO T-180
 SHALL BE REQUIRED.
- BASES FOR ALL STREETS SHALL HAVE A MINIMUM SIX INCH (6") DEPTH. PRIMING AND SANDING SHALL BE REQUIRED AS SOON AS BEARING CAPACITY AND COMPACTION HAS BEEN ACHIEVED.
- RECYCLED CONCRETE OR LIMEROCK BASES SHALL BE COMPACTED TO (98%) MAXIMUM DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
- 10. MATERIAL DELIVERY TICKETS SHALL BE PROVIDED TO THE CITY AT THE TIME OF PLACEMENT.
- TESTING OF THE IN-PLACE BASE SHALL BE DONE AT INTERVALS EQUIVALENT TO SUB BASE TESTING AND SHALL CONSIST OF, AS A MINIMUM, MOISTURE CONTENT AND COMPACTION TEST.



STANDARD CONSTRUCTION DETAIL ROADWAY CONSTRUCTION NOTES

INDEX R-1A 12. DESIGN MIXES SHALL BE SUBMITTED TO THE CITY FOR THEIR APPROVAL NO LESS THAN THREE (3) WORKING DAYS PRIOR TO ANY ROADWAY CONSTRUCTION.

- EXTRACTION AND GRADATION TESTS ON ASPHALT MIXES SHALL BE PROVIDED TO THE CITY TO INSURE THAT DESIGN MIXES MEET THE CITY STANDARD SPECIFICATIONS.
- THE RUADWA' CROWN SHALL HAVE A STANDARD ONE QUARTER INCH (1/4'') PER FOOT (2%) SLOPE.
- ALL ROADWAYS WITH CURB AND GUTTER SECTIONS SHALL HAVE AS A STANDARD A MINIMUM LONGITUDINAL SLOPE (F 0.30%.
- 17. THE FINISHED PAVEMENT EDGE SHALL BE WITHIN ONE QUARTER INCH $(1/4^{\circ})$ OF THE ADJACENT CONCRETE CURB.
- IF PROVIDED, CONCRETE CURBS IN NEW SUBDIVISIONS (ON BOTH SIDES OF ALL STREETS) TO BE CONSTRUCTED WITH 3000 PSI CONCRETE AT 28 DAYS. 19. CONCRETE CLRBS SHALL BE SAW CUT TO A DEPTH EQUAL TO 1/4 OF
- CONCRETE COMES SHALL BE SAW OUT TO A JETT BLOOKE IN 174 OF CURB THICKNESS AT INTERVALS OF TEN FEET (10") WITH EXPANSION JOINTS AT STREET INTERSECTIONS, STRUCTURES AND ALONG CURVES AT SIXTY FEET (40") INTERVALS. ALL EXPANSION JOINT MATERIAL IS REQUIRED TO BE INSTALLED THROUGH THE ENTIRE DEPTH OF THE CONCRETE CURB.
- 20. A "V" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF WATER DISTRIBUTION SYSTEM VALVE.
- AN " † " SHALL BE CUT INTO THE CURB TO MARK THE LOCATION OF ALL VALVES OTHER THAN WATER DISTRIBUTION VALVES.
- 22. AN "5" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL SEWER SERVICES.
- A "1" SHALL BE CUT IN THE CURB TO MARK THE LOCATION OF ALL RECLAIMED WATER SERVICES.
- 24. A "W" SHALL BE OUT IN THE CURB TO MARK THE LOCATION OF ALL WATER SERWICES.

BUNNELL

STANDARD CONSTRUCTION DETAIL ROADWAY CONSTRUCTION NOTES

INCEX R-1B

- 25. WARCE (S) CONCRETE CILINDERS SHALL BE TWAEN AND TESTED FOR EVER THREE HUNDRED (SOO) FEET OF ROOWAY CONSTRUCTED. TEST RESULTS SHALL THEN BE PROVIDED TO THE CITY AS THEY BECOME AVAILABLE.
- 26. THE DEVELOPER SHALL PROVIDE ALL REQUIRED PAVEMENT MARKINGS ON ALL ROADWAYS PER CITY, COUNTY AND STATE REQUIREMENTS. CENTERLINE STREES SHALL BE PROVIDED ON EXTENSIONS OF CITY COLLECTOR OR ARTERIAL ROADS, COUNTY ROADS AND STATE HIGHWAYS ONLY.
- 27. STOP BARS WITHIN STATE, COUNTY, OR CITY RIGHT-OF-WAY SHALL BE THERMOPLISTIC AND MEET REQUIREMENTS SET FORTH IN THE FOOT STANDARD SPECIFICATIONS FOR ROAD AND BROBE CONSTRUCTION CURRENT EDITION, WITH EXCEPTION THAT TRAFFIC PAINT MAY BE UTILIZED ON CITY RIGHT-OF-WAY.
- 28. ALL TRAFFC CONTROL DEWCES PLACED AT INTERSECTIONS, PRIVATE STREETS, PUBLIC STREETS, COUNTY ROADS AND STATE RICHWAYS WITHIN THE CITY LIMITS SHALL BE ENTAILED ACCORDING TO THE MANUAL ON UNFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- 29. THE DEVELOPER IS RESPONSIBLE FOR PAYING FEES FOR ALL STREET LIGHTS PRIOR TO ACCEPTANCE OF THE PROJECT BY THE CITY.

2-LANE ACCESS OR FEEDER 35'
LOCAL TO COLLECTOR 35'
LOCAL OR COLLECTOR TO ARTERIAL 40'
ARTERIAL TO ARTERIAL 50'

- 31. CITY INSPECTOR SHALL BE PRESENT DURING PAVING OF ALL PUBLIC AND PRIVATE ROADS.
- CONSTRUCTION METHODS AND DESIGN FOR CONCRETE PAVEMENT SHALL CONFORM TO FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- 34. UTILITY DE'TH (REFERENCED TO FINISHED GRADE):

 HIGH YOUTAGE UTILITIES SUCH AS POWER (REEDER, SERVICE AND DROPS)
 SHALL BE BURIED A MINIMUM OF 30 INCHES IN DEPTH. LOW YOUTAGE UTILITIES SUCH AS PHONE AND CABLE TV SHALL BE BURIED A
 MINIMUM OF 18 INCHES IN DEPTH FOR FEEDER AND SERVICES. SERVICE DROPS
 SHALL BE BURIED A MINIMUM OF 18 INCHES IN DEPTH. HIGH VOLTAGE UTILITIES INSTALLED PARALLEL TO PRESSURE MAINS SHALL MAINTAIN A MINIMUM FIVE FOOT SEPARATION.
- 35. GEOTECHNICAL TESTING REPORTS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER SHALL BE SUBMITTED TO THE CITY FRIOR TO FINAL SIGN OFF. REPORTS SHALL CLEARLY LABEL PROJECT NAME AND PHASE



STANDARD CONSTRUCTION DETAIL ROADWAY CONSTRUCTION NOTES

INDEX R-1C 5' VARIES 1. YARIES Z VARIES

5'-0" WDE CONCRETE SIDEWALK
4" THICK, 3000 P.S.I.
6" THICK AT DRIVEWAY

- B MAX 6" ABOVE CENTERLINE ROAD GRADE (PER INDEX M-3(3)) © SOO or SEED AND MULCH PER F.D.O.T. STANDARD SPECIFICATION SECTION 570. 1' SOO STRIP REQUIRED ADJACENT TO CURB AND AROUND DRAINAGE
- O CONCRETE MIAMI CURB, 3000 P.S.I. OR 6-INCH RIBBON CURB OR 6-INCH EXTENDED STABILIZED BASE.
- (E) ASPHALT PAVEMENT: 1-1/2" ASPHALT BITUMINOUS CONCRETE TIPE SP-R.5 OR SP-12.5; MINIMUM MARSHALL FIELD STABLITY 1500.

MARCHANT TABLE TO ENGINEER TO SELECT BASE CHARGE TO RESERVE AND AND CHARGE TO SELECT BASE CHARGE TO AND CHARGE TO SELECT BASE CHARGE TO AND CHARGE TO SELECT BASE CHARGE TO SELECT BASE CHARGE TO SELECT BASE CHARGE TO SEND CHARGE PROCTOR TEST.

(i) SUB BASE:

12" SUB BASE COMPACTED TO 98% DENSITY BASED ON AASHTO T-180 MODIFIED PROCTOR TEST WITH MINIMUM LER 40.

NOTE: A REPRESENTATIVE OF A CERTIFIED SOIL LABORATORY SHALL BE PRESENT DUBING ALL CONSTRUCTION PHASES TO PERFORM ROADWAY COMPACTION AND DENSITY TESTING AS REQUIRED — SEE INDEX $R=\theta(A/B)$.



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

INDEX

R-2

FIN. CR. 6" 1'-6" R=3* SUBBASE 12" | 8" | F.D.O.T. TYPE "F" CURB HEADER CURB FIN. GR. 9 e MIAMI CURB ENVIRONMENTAL CURB 9* 1'-6" R=1 3/4" R=3/4" SUBBASE 12* ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 2500 P.S.I. CONCRETE

- 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500', CONSTRUCTION JOINT REQUIRED EVERY 10" MAXIMUM (4" MINIMUM).
- $1/2^{\circ}$ PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIUS POINTS.
- 12" SUBBASE TO BE COMPACTED AND TESTED TO 98% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
 EDPAINSON JOINT MATERIAL MUST COVER THE ENTIRE CROSS SECTION OF CURB.
- 6. ALL EXPOSED CORNERS TO BE ROUNDED AT 3/4" MIN. RADIUS.



STANDARD CONSTRUCTION DETAIL STANDARD CURB CONSTRUCTION NTS

R-4 March 2022

INDEX

1 1./2" FIRST TYPE \$\Pi_0 \text{ is OF \$\Pi_12 \text{ is ASPHALTIC CONCRETE. } 3/4" TO BE PLACED DURING INITIAL CONSTRUCTION, THEN 3/4" TO BE INSTALLED AFTER THE COMPLETION OF THE BUILD-OUT PHASE. INDEX THE REAL PROPERTY. STANDARD CONSTRUCTION DETAIL STANDARD PAVING DETAIL NTS R-5 BUNNELL March 2022 ROADWAY COMPACTION AND DENSITY TESTING REQUIREMENTS

STANDARD

ITEM TEST FREQUENCY

ROADWAY SUBBASE (BOTTOM OF SUBBASE DOWN 1 FOOT)	N-PLACE CONSITY	ONE (1) TEST/300 UF	95% MODIFIED PROCTOR (ASTM 0-155" OR AASHTO T-180)	ASTM D-2937 D-2922 D-1556
STABILIZED SUBBASE	IN-PLACE CONSITY	ONE (1) TEST/300 LF	95% MOSFED PROCTOR (ASTM 0-155" OR AASHTO T-180)	ASTM D-2937 D-2932 D-1556
STADILIZED SUBBASE	EARING /ALUE (FBN)	ONE (1) TEST/300 UF	75V = 75	
STABILIZED SUBBASE	LIKEROOK ECARING SATIO (LBR)	ONE (1) TEST/SOIL TIPE	UR = 40	
LIMEROOK BASE	IN-PLACE CONSITY	ONE (1) TEST/300 LF	98% MODIFED PROCTOR (ASTM D-155" OR AASHTO T-180)	ASTM D-2937 D-2922 D-1556
LIMEROOK BASE	LIKEROOK BEARING BATIO (LBR)	PROVIDE CERTIFICATE FROM PLANT	JBR 100	PM 5-515
CRUSHED CONCRETE BASE	IN-PLACE CONSITY	ONE (1) TEST/300 UF	SET MODIFIED PROCTOR (ASTM D-155" OR AKSHTO T-180)	ASTM 0-2937 D-1556
CONCRETE BASE	LMENDOK SLATIO RATIO (LBR)	IN MATERIAL BLEND	.BR 100	
ASPHALT	EXTRACTION AND GRADATION	(1) PER DAY PER MIX	PER MIX DESIGN	0.2922
ASPHALT	THEXINESS AND DINSITY	(1) PER 300 LF ROADNAY	PER MK DESIGN AND JMB SPECS	CORING OR NUCLEAR (DENSITY ONLY)
SOIL OPTIMUM MOISTURE/DENSITY	PLOCATOR	(1) PER SOIL OR BASE TYPE		ASTM D-1557 (WODIFIED) ASTM D-558 (STANDARD) AASHTO T-189 (MODIFIED) AASHTO T-99 (STANDARD)
CURB SUBBASE	IN-PLACE CONSITY	ONE (1) TEST/300 UF	SEX MODIFED PROCTOR (ASTM D-155" OR AKSHTO T-180)	
euno sueense (uen)	UMEROCK SCARING KATIO (LBR)	(s) TEST/SIN PARAME	199 40	



STANDARD CONSTRUCTION DETAIL TECHNICAL SPECIFICATIONS FOR TESTING REQUIREMENTS

INDEX R-6A March 2022

PIPED UTILITY INSTALLATION REQUIREMENTS

ITEM	TEST	FREQUENCY	STANDARD	TEST METHOD
PIPE TRENCH SUBBASE (IF SPECIFIED)	IN-PLACE DENSITY	ONE (1) TEST/300 LF	18% MODIFIED PROCTOR	ASTM D-2937 D-2922 D-1556
PIPED BACKFILL IN PAVED AREAS & ANY OTHER CONDITION NOT SPECIFICALLY MENTIONED	IN-PLACE DONSITY	ONE (1) TEST/300 LF PER ONE (1) FOOT VERTICAL LIFT OF FILL	18% MODIFIED PROCTOR	ASTM D-2937 D-2922 D-1556
PIPED BACKFILL IN GREEN AREAS	IN-PLACE DONSITY	ONE (1) TEST/300 UF PER ONE (1) FOOT VERTICAL LIFT OF FILL	10% MODIFIED PROCTOR	ASTM D-2937 D-2922 D-1556
SOIL OPTIMUM MOISTURE/DENSITY	PROCTOR TEST	ONE (1) PER SOIL OR BASE TYPE		ASTM D-2937 (MODIFIED) ASTM D-558 (STANDARD) AASHTO T-180 (MODIFIED) AASHTO T-99 (STI ³)



STANDARD CONSTRUCTION DETAIL TECHNICAL SPECIFICATIONS FOR TESTING REQUIREMENTS

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SHEET C015

ENGINEERI INC. G ENGINEERS F No. EB 5479 F ROAD, SUTE. 1 ACH, FL 32174 3-7640 3-3927

CROSSINGS 卍 BUNNELL, **PHOENIX**

DETAILS



	2
DATE 7-7-2023	SCALE N.T.S.
FILE 1941-1	PROJECT 1941-1
DESIGNER	DRAWN BY WRS

B. MATERIALS - GRASS SEED SHALL BE A MIXTURE OF: THE CONSTRUCTION DRAWINGS. PENSAGNA BAHIA (50% SCARIFIED SEED) 80 LBS/ACRE
HULLED BERMUDA 20 LBS/ACRE
BROWN TOP MILLET 30 LBS/ACRE

IN THE FALL AND WINTER MONTHS (OCT. THRU FEB.) AND WITH THE APPROVAL OF THE CYY, ANNUAL PTC GRASS SHALL BE SIBSTITUTED IN COULA MADURIS FOR THE GROWN FOR MILLET. SEED SHALL BE PREVIOUS OF A SEED COMPANY SHAPPLEF PROVIDED TO THE CITY, PROOF TO USE. MULCH USED SHALL BE STRAW OR HAY OR OSSISTING OF CARE, FOR ON HAIT STRAW OF PANOLA, PRANTI, CANSTAL BERSHUED AR BANG ARGASS 4AY. MULCH SHALL BE FREE FROW LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING PAROLA, PRANTI, CHISTAL BERSHUED AR BANG FORSS 4AY. MULCH SHALL BE FREE FROW LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROW LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROW LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROM LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROM LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROM LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROM LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROM LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROM LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROM LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROM LIGHTSPRING LEED AND OTHER WORKSHIPS, LIGHTSPRING AND THE CONTROL SHALL BE FREE FROM LIGHTSPRING AND THE CONTROL

METHORS - GRISSING SHALL BE DODE BANDDITTS' UPON COMPLETON OF THE PIEC GROWD OPERATION. HOWEVER, HO SEZEMO SHALL BE DODE WHO THE GROWN IS PROCESS OF UPON THE SEZEMON OF TH

D. FERTILIZER -1. RESERVED

2. THE PERTILIZER SHALL BE A COMMERCIAL GROULAR TIPE WITH A CHEMICAL DESIGNATION AS RECOMMENDED IN THE SOILS ANALYSIS REPORT.

3. THE NUMERICAL DESIGNATIONS FOR FERTILIZER INDICATE THE MINIMUM PERCENTIAES (RESPECTIVELY) OF (1) TOTAL NITROGEN, (2) AVAILABLE PHOSPHORC ACID AND (3) WATER SOLUBLE POTASH CONTAINED IN THE FERTILIZER

FERTILIZER

9) AT LLAST 50 PERCENT (50%) OF THE PHOSPHORIC ACID SHALL BE FROM A NORMAL SUPER PHOSPHATE OR AN EQUIVALENT SOURCE WHICH WILL PROVIDE A MINIMUM OF TWO UNTS OF SUFFER.

9) THE MADONT OF SULFUR SHALL BE NOICHED ON THE QUANTITIVE ANALYSIS JAND ATTACHED TO EACH BAG OR CONTAINER.

4. COMMERCIAL FERTILIZERS SHALL COMPLY WITH THE STATE FERTILIZER LAWS 5, FERTILIZER MAY, AT THE DISCRETION OF THE ENGINEER/ARCHITECT, UPON THE PRESENTATION BY THE MANUFACTURE OF SATISFACTORY FACTORY EVIDENCE OF ITS FEASIBILITY, BE APPLIED IN LUDID FORM.



STANDARD CONSTRUCTION DETAIL SEEDING AND MULCHING

INDEX R-7 March 2022

S. B. Bra Al B BUNNELL

6" MAX. LAYER AT 98% COMPACTION

4" MAX. LATERS TO AT 98% COMPACTION

3/4" DIA. BEDDING ROCK WHERE -

NOTES:

FOR UTILITY PIPE LOCATION MATERIALS -

PAVEMENT CUT AND PATCH NTS

25' EACH SIDE OF REPAIR SURFACE RESTORATION

12" PIPE 12"

TRENCH MOTH

PAVEMENT CUT AND PATCH DETAIL

WHERE SOIL CONDITIONS CAN NOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE APPROVED METHOD OF CONSTRUCTION.

SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
 NEW SURFACING MATERIALS SHALL BE CONSISTENT WITH EXISTING AND SHALL HAVE LAPPED & FEATHERSO JOINTS (1 1/2" MIN. THK.)

AND SMILL HAVE LOWED & PEATHERED SMITS (1 1/2" MIN. THE.

C. COMPACTION PERCENTAGES SHOWN REPER TO A.SATIO. T—100.

PROVIDE COMPACTION ITST REPORTS TO CITY MSPECTOR.

S. INCHARACUL COMPACTION NOT ALLOWED BLOW THIS LEVEL.

6. INSTALL METALLIC TAPE OVER FULL LEVETH OF PPE.

7. EIGHT NICHES (8") OF HIGH EARLY—STRENMENT CONCRETE MAY SE
SUBSTITUTED FOR UMBRICKUL UNDWARFOUNLE BY CITY.

18

REPLACEMENT LIMEROCK BASE .

N 6" LAYERS COMPACTED TO E

MAX. WATER LEVEL ALLOWABLE DURING CONSTRUCTION

SEE NOTE 6

MECHANISA LA

R-8 Morch 2022

INDEX

1. CONSTRUCTION STANDARDS FOR ALL DRAINAGE SYSTEM COMPONENTS SHALL CONFORM TO THE LATEST EDITION OF THE "FOOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND AS SPECIFIED HEREIN. 2. ALL STORMWATER PIPES AND STRUCTURES SHALL BE INSTALLED ON A

FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, E°C.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.

MATERIAL

3. DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION

A MINIMUM OF 6 INCHES BELOW THE COMPONENT BEING INSTALLED.

4. ALL PIPES AND STRUCTURES SHALL BE PLACED TRUE TO LINES AND

GRADES AS DEPICTED ON THE APPROVED PLANS.

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

BACKFILL AND COMPACT TO THE SPRING-UNE (CENTER OF PIPE)
ELEVATION AND REQUEST CITY INSPECTION AND APPROVAL BEFORE
CONTINUING.
7. ALL WORK (OVERED WITHOUT CITY INSPECTION WILL BE REQUIRED TO

BE EXCAVATED AND INSPECTED AT THE CONTRACTOR'S EXPENSE

TRENCHES SHALL BE BACKFILLED AND COMPACTED WITH CLEAN GRANULAR MATERIAL IN MAX 6" LIFTS WITH A MINIMUM COMPACTION OF 98 PERCENT (AASHTO—TIBO) IN PAVED AREAS AND 98 PERCENT (AASHTO—TIBO) IN UNPAVED AREAS.

(AASH10-TIBO) IN UMPAYED AREAS.
IT SHALL BE THE CONTRACTOR'S RESPONSBILITY TO ENSURE THAT TRENCH COMPACTION TESTS AT POINTS 1' ABOVE THE PIPE AND AT A MAX. 1' VERTICAL INTERVALS TO PINISH GRADE, AT A MAXIMUM SPACING OF 100 FEET, AND TO FURNISH COPIES OF TEST REPORTS PROMPTLY 10 THE CITY'S INSPECTOR.

PROMPTLY OF THE CITY'S INSPECTOR.

10. ALL STORM SEMER PIPE SHALL BE REINFORCED CONCRETE (RCP), HP PIPE, OR HISH DENSITY POLYETHYLENE (HDPE) MAY BE USED AS APPROVED BY THE CITY.

11. STORM DRANACE PIPES WITHIN PUBLIC RICHT-OF-WAY SHALL BE A MINIMUM OF THEIR WE GOVERNMENT OF THE THE CONCRETE OF THE PIPES OF THE PIPES

MINIMUM OF TWELVE (12) INCH RCP DIAMETER OR EQUIVALENT

12. STORM INLE'S, MANIOLES, AND CATCH BASINS SHALL BE EITHER POURED IN PLACE OR PRECAST REINFORCED CONCRETE. STRUCTURES SHALL BE REQUIRED AT EACH CHANGE OF PIPE SIZE OR CHANGE IN PIPE DIRECTON.

THE MITELLINE.

3. ALL SIDE DAM AND CROSS DRAIN MITERED ENDS PLACED WITHIN 1900 HORH-UN-WAY SHALL BE CASH-M-VACE UNIX. ALL MILITED ENDS SHALL MEET REQUIREMENTS OF THE WOST CURRENT FOR DESIGN STANDARDS AND FROD STANDARD SPECIFICATIONS FOR ROAD AND BRODE CONSTRUCTION.



STANDARD CONSTRUCTION DETAIL STORM DRAINAGE CONSTRUCTION NOTES

INDEX ST-14 March 2022

13A. STORM INLE'S SHALL BE SPACED IN SUCH A MANNER AS TO ACCEPT ONE HUNDRED (100) PERCENT OF THE DESIGN STORM RUNOFF.

WET DETENTON PONDS SHALL BE EIGHT (8) FEET MINIMUM TO TWELVE (12) FEET MAXIMUM DEPTH BELOW THE DESIGN LOW OR NORMAL WATER STAGE.

15. MAXIMUM DISTANCES BETWEEN INLETS AND/OR JUNCTION BOXES: PIPES SIZE (INCHES) LENGTH OF RUN (FEET) 15 OR LESS

24 OR GREATER

ALL SWALES DITCHES, AND DRY RETENTION POND SIDE SLOPES SHALL BE NO STEEPER THAT 4:1 (H:V) AND SHALL BE SODDED.

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

NORMAL ROADSIDE SWALES SHALL BE CONSTRUCTED TO A MAXIMUM DEPTH OF 13" BELOW THE OUTSIDE EDGE OF PAVEMENT OR CONCRETE CURB.

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

A MINIMUM ONE FOOT (1') FREEBOARD ABOVE THE DESIGN HIGH WATER ELEWATION IS REQUIRED AT ALL PONTS AROUND WET DETENTION PONDS.

21. A MINIMUM OF TWELVE INCHES (12") FREEEOARD ABOVE THE DESIGN HIGH WATER ELEVATION IS REQUIRED AT ALL POINTS AROUND DRY RETENTION PONDS.

RETENTION PONDS.

22. PROIN INFO SHALL GENERALLY BE CONSTRUCTED WITH REINFORCED CONCRETE AND SHALL BE SUBJECT TO THE APPROVAL OF THE CITY.

23. OUTLET SHOUTURES AND REQUIRED ON ALL PONDS. ALL OUTLET CONCRETE CONTROL SHOUTURES NO SODIED WERS OR OTHER NON-PERMANENT OWERLOW STRUCTURES SHALL BE ALLOWED.

24. SOIL EROSION CONTROL MEASURES SATISFACTORY TO THE CITY, SHALL BE EMPLOYED DURING CONSTRUCTION AND UPON COMPLETION OF THE POND.

US THE POND.

25. THE CITY MAY REQUEST THAT THE DEVELOPER SUBMIT A REPORT BY A QUALIFIED HTD/RUGUSIST OF THE IMPACT THE PUND WILL HAVE ON NEIGHBORNO WATER TABLE ELEVATIONS BOTH DURING CONSTRUCTION AND AFTER POND COMPLETION. THE CITY MAY REQUIRE GROUNDWATER MONITORING DURING THE POND EXCAVATION.



STANDARD CONSTRUCTION DETAIL

INDEX ST-1B March 2022

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

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

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

CULVERTS CROSSING RIGHT-OF-WAYS SHALL EXTEND FROM RIGHT-OF-WAY LINE TO RIGHT-OF-WAY LINE UNDER THE ROADWAY.

ALL STORMWATER DISCHARGE FROM RETENTION/DETENTION PONDS ARE REQUIRED TO BE CHANNELED INTO DETINED DRAINAGE PATHS TO EXISTING WHER BODIES, WETLANDS, DITCHES, ETC.

31. THE CITY REQUIRES THE DEVELOPER TO TELEVISE ANY AND ALL STORM SEWER PIPE SYSTEMS PRIOR TO ANY FINAL ACCEPTANCE BY THE CITY.

32. ALL STORM SEMER PIPE SYSTEMS SHALL BE TELEVISED IN THE PRESENCE OF THE CITY INSPECTION AND OPPIES OF THE VIDEO AND NESPECTOR AT LEAST FORTY EIGHT (48) HOURS PROR TO REQUESTING FRALL INSPECTIONS. ANY DEFECTS NOTES SHALL BE CORRECTED PROR TO ACCEPTANCE BY THE CITY.

CAMELLIAD HIGH TO ACCEPTANCE BY THE CITY.

SALL STORM SWERP FIPES, PROFIT OF ACCEPTANCE BY THE CITY,

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HIGH COLLIN'S TANDARD RESIDENCING USING A CAMPEN WITH

SUITABLE LIGHTING TO ALLOW A CLEAR AND FOCUSED PICTURE OF

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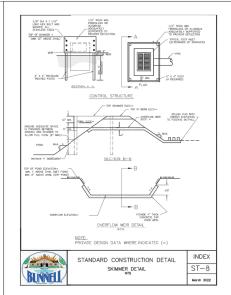
LOGS DESCRIBING THE CONDITION OF THE USES SHALL ACCOMPANY

THE DIGITAL SUBMISSION TO THE CITY.



STANDARD CONSTRUCTION DETAIL STORM DRAINAGE CONSTRUCTION NOTES

INDEX March 2022



GENERAL NOTES WATER SYSTEM CONSTRUCTION

THE CITY'S PUBLIC UTILITIES DEPARTMENT SHALL BE NOTIFIED PRIOR TO BEGINNING ANY WATER SYSTEM CONSTRUCTION.

 DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW WATER MAIN BEING LAID. ALL WATER MAINS SHALL BE LAID ON A RRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL.

TRENCHES SHALL BE BACKFILLED WITH CLEAN GRANULAR MATERIAL IN MAX. 1' LIETS WITH A MINIMUM COMPACTION OF 08 PERCENT (AASHTO-TIBO) IN PAYED AREAS OR IN LIMPAYED AREAS.

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRENCH IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT TRENG COMPACTION TESTS BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 1 FOOT VERTICAL INTERVALS TO INNISH GRADE, AT A MINIMUM SPACING OF EVERTY 300 FEET, AND TO FURNISH COPIES OF TEST REPORTS PROMPTLY TO THE CITY UTILITIES DEPARTMENT.

METALLIZED PIPE LOCATION TAPE SHALL EE LOCATED 15 INCHES BELOW FINISHED GRADE OR AS SPECIFIED BY MANUFACTURER FOR ALL PVC LINK MARKER TAPE SHALL BE USED ON ALL DUCTULE IRON PIPE.

7. WATER SERVICES (SINICLE 1" OR DOUBLE 2") SHALL BE POLYETHYLENS TUBING (BUE IN CLOUR): POLYBUTYLENS ENALL NOT BE ALLOWED.

ALL WATER SERVICE ENDINGS SHALL BE MARKED WITH 4" X 4" LUMBER (PRESSURE TREATED) EXTENDING 4 FEET ABOVE GRADE, WITH WATER SERVICES SCURED 2" ABOVE THE GROUND. WHE TIES SHALL BE USED TO SCURE THE CURB STOPS TO SLPPORT POSTS.

9. WATER VALVES SHALL BE PLACED AT ALL STREET INTERSECTIONS AND

AT ALL WATER MAIN TEES AND CROSSES, VALVES SHALL BE INSTALLED ON ALL LEGS EXCEPT ONE.

11. APPROVED WATER VALVE TYPES ARE THE FOLLOWING: A. STANDARD GATE VALVES LESS THAN 48" DIAMETER RESILIENT SEAT GATE VALVES (AWWA C-509 OR C-515).

B. TAPPING VALVES AND MECHANICAL TAPPING SLEEVE SHALL DE STAINLESS STEEL (AWWA 0 - 508)



STANDARD CONSTRUCTION DETAIL GENERAL NOTES
WATER SYSTEM CONSTRUCTION

INDEX W-1A Morch 2022

GENERAL NOTES WATER SYSTEM CONSTRUCTION

ALL WATER VALVE BOXES SHALL BE ADJUSTED TO FINISH GRADE AND THE LIDS PAINTED BLUE TO MAKE THEM PLAINLY VISIBLE.

WATER VALVES SHALL BE COMPLETELY OPENED BY THE CONTRACTOR UPON FINAL ACCEPTANCE OF NEW WATER SYSTEMS IN THE PRESENCE OF UTILITY DEPARTMENT PERSONNEL.

14. HYDRANTS SHALL BE PLACED AT MAXIMUM SPACINGS IN ACCORDANCE WITH NFPA (LATEST EDITION). SPECIAL EXCEPTIONS MAY BE ALLOWED BY FIRE AUTHORITY HAVING JURISDICTION, ALL WATER MAIN TO WHICH HYDRANTS ARE CONNECTED SHALL BE 6 INCHES MINIMUM.

ALL FIRE HYDRANTS SHALL BE CONSTRUCTED TO MAKE THEM EASILY ACCESSELE TO FIRE PERSONNEL IN CASE OF FIRE. THE MAIN NOZELE CONNECTION SHOULD ALWAYS FACE THE STREET AND BE 18-24" ABOVE GRADE.

AS STANDARD PRACTICE, WATER MAINS SHALL BE INSTALLED 4 FEET OFF THE BACK OF CURB OR AS APPROVED BY THE CITY.

17. ALL WATER MANS AND APPURTENANCES SHALL BE NSF-APPROVED FOR POTABLE WATER USE, AND SHALL HAVE A WINMUM COVER OF 36 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR INAPPROPR TO PROVIDE ACCUATE COVER, DUCTILE IRON LOLSS 350 OR CONCRETE ENCASSMENT MAY BE USED AS APPROVED BY THE CITY.

18. ALL PROPOSED WATER MAINS SHALL BE FLUSHED WITH A FULL PIPE DIAMETER, DISPIPECITED AND DACTEMICLOGICALLY CLEARED FOR SCRUCE IN ACCORDANCE WITH LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.

WATER MAINS SHALL BE AWWA C-900/C-905 C. 150, OR D.I.P. CLASS 350 STANDARD CEMENT LINED.

BOOK CONSTRUCTION CONNECTION AND ACCEPTURE OF THE SYSTIM, IT SHALL SE THE DESCRIPTION CONNECTION CONTROLLED AND ACCEPTED BY THE RESEARCH THE GYSTEM IS PROPERLY CERTIFIED AND ACCEPTED BY THE RESEARCH ACROSSES, AND THAT CRETTED AS ASSESSED, AS OF THE SYSTEM IS PROVIDED TO THE CONTROL PRICE TO PANNO AND AFTER BASE, EXPOSE AND THAT CONTROL PROVIDED AND ACCEPTED ASSESSED, AS OF THE SYSTEM, PROVIDED THESE CYCLOPY CANNO AND AFTER BASE, EXPOSE THE CYCLOPY CANNO AND ACTION CONTROL PROPERCY CONTROL OF AUTOLOGAL SEE CHACH RANDOWN.

MEGALUG OR EQUIVALENT, RESTRAINED JOINT SYSTEM MAY BE USED ON ALL RESTRAINED FITTINGS, VALVES, ETC. MINIMUM DEPTH OF E ON PIPES NOT MEETING REQUIRED COVER REQUIREMENTS SHALL FOLLOW THE MOST RECENT DIPRA THRUST RESTRAINT DESIGN GUIDELINES. 21.



STANDARD CONSTRUCTION DETAIL GENERAL NOTES
WATER SYSTEM CONSTRUCTION

W-1B March 2022

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DETAILS

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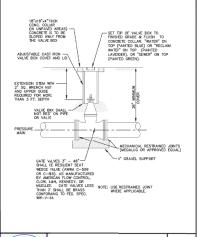


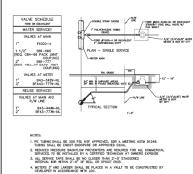
- 22. WATER SYSTEMS SHALL BE PRESSURE TESTED AT 150 PS STATIC PRESSURE FOR A PERIOD OF 2 HOURS PER AWAY STANDARDS. TESTS SHALL BE CONDUCTED BEFORE FINAL PAWAY AND ATER LIME ROCK BASE, AND IN THE PRESSURE OF THE CITYS INSPECTOR. MAXIMUM PRESSURE LOSS SHALL BE 5 PS NO THE CAUGE.
- 23. ALL WATER SERVICES SHALL BE MARKED WITH A " \mathbf{W} " SAWCUT INTO THE CURB AND BY METAL TABS SET INTO THE PAVEMENT.
- ALL WATER VALVES AND BLOW-OFFS SHALL BE MARKED WITH A "V" SAWUJT INTO THE CURB AND BY METAL. TABS SET INTO THE PAVEMENT, LOCATION OF METAL TABS IN INCHES FROM EDGE OF PAVEMENT SHALL EQUAL DISTANCE IN FEET FROM EDGE OF PAVEMENT TO VALVE.
- 25. UNIFLANGE 1300 SERIES PIPE RESTRAINTS AS MANUFACTURED BY FORD OR APPROVED EQUAL MAY BE USED AS APPROPRIATE FOR RESTRAINING IN-LINE PRESSURE PIPE EACH SIDE OF PIPE JOINT. AS REQUIRED BY RESTRAINT TABLE.
- TRACING WIRE SHALL BE INSTALLED IN ACCORDANCE WITH UTILITY PIPE LOCATION MATERIALS DETAIL.
- 27. NO GALVANIZED PIPE, FITTINGS, ETC. ARE ACCEPTED.
- ALL WATER METER BOXES SHALL BE INSTALLED AT THE RIGHT OF WAY LINE ONLY REGARDLESS OF SIZE.
- SUBMIT ASSEMBLY CERTIFICATION FOR ALL BACKFLOW PREVENTERS TO THE CITY'S UTILITIES DEPARTMENT BEFORE FINAL INSPECTION.
- CIT'S UILLIES DEPAIRMENT BEFORE THAL INSPECTION. PIPHO, BURIED PLY PPING SHALL BE BLUE FOR ABOVE GROUND PIPHO, BURIED PLY PPING SHALL BE BLUE WITH WHITE COLOR BACKGROUND LOCATOR TAPE THE CASE SHALL BEAUTH WHITE COLOR BACKGROUND LOCATOR TAPE TAPE SHALL CONTINUOUSLY FROM "CASTION" RAW WATER WHITE WITH LOCATOR TAPE PLACED 12" TO 18" ABOVE THE TOP OF THE PIPE.
- 31. SEE CHART BELOW FOR WATERMAIN SIZE AND MATERIALS

M A	TERIA	L S
DIAMETER	MATERIAL	STANDARD
2" - 4"	PVC 1120 / 50R 21	ASTM D 2241
> 4" - 12"	PVC 1120 / 08+18	AWWA C 900
$L^{*} = 12^{\circ}$ DEDICATED FIRE LINE	PVC 1120 / 08-16	AWWA C 900
6" - 28" - 30" - 100 30" - 30" - 30 - 100	PM 150	APRA U 900
AL 9205	HOPE DIPS OR 11	ASTM F 714



STANDARD CONSTRUCTION DETAIL





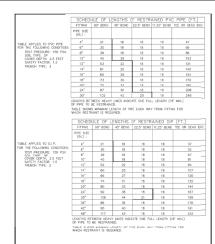
- 5. IN AREAS TO BE PAVED PROVIDE A 2" MIN. PVC SCHEDULE 40 SLEEVE FOR PE-TUBING. SLEEVE SHALL EXTEND A MIN. OF 2" BEHIND BACK OF CURB AT EACH SDE OF ROAD.
- ALL RISIDATION SERVICES (MATER) MUST HAVE AN APPROXID BACKFLOW PREVENTION DEVICE INTRALLED ON CUSTOMERS SIDE OF WATER MITER. THE CUSTOMER IS RESPONSIBLE FOR INSTALLATION AND CERTIFICATION GOST. A COPY OF THE CERTIFICATION MUST BE SOFT TO THE CITY UTILITIES DEPARTMENT, PRIOR TO FINAL
- 7. WATER METERS INSTALLED IN AREAS SERVED BY RECLAIMED WATER OR AN ALTERNATE MANDATION SUPPLY SHALL BE EXCUPTED WITH GUAL CHECK DAIGNTON PREVENTERS.





STANDARD CONSTRUCTION DETAIL WATER LATERAL SERVICE

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BUNNELL

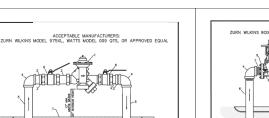
STANDARD CONSTRUCTION DETAIL PVC AND DUP, RESTRAINED JOINT TABLE

INDEX W-5 March 2022

GENERAL NOTES
WATER SYSTEM CONSTRUCTION

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1	1	3/4", 1",	1-1/3	2" OR	2" BA	CKFLO	W PRE	ENTER	ASSEM	BLY	
2	3	3/4", 1"	1-1,	/2° 0	R 2" x	NOM.	NIPPI	ES -	BRASS		
3	2	3/4", 1"	. 1-1,	/2° 0	R 2" T	HREA	DED U	IION -	BRAS	S	
4	2	3/4", 1"	1-1,	/2° 0	R 2" x	90"	ELBOW	S - B	RASS		
5	2	3/4", 1"	1-1,	/2" 0	R 2" ×	VARI	ES RIS	ER -	BRASS		
6	2	3/4", 1"	1-1	/2" 0	R 2"	BALL	VALVE				
7	*	3000 P.S	J. CON	CRETE	SLAB	(MIN.	4" THIC	(X)			
8	*	PLASTIC	LINER								

NOTE: -FIELD ADJUST AND CUT ITEM 4 TO THE PROPER LENGTH. -NO GALVANIZED FITTINGS OR PIPE ALLOWED. "-NU GRAVANICED FITTINGS OR PIPE ALLOWED.

"A COPY OF THE ASSEMBLY DEFIDICATION SHALL EL SUBMITTED

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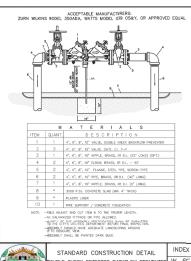


STANDARD CONSTRUCTION DETAIL

REDUCED PRESSURE BACKFLOW PREVENTER (POTABLE WATER & IRRIGATION) 3/4", 1", 1 1/2", OR 2"

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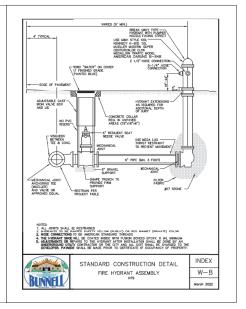
BUNNELL



DOUBLE CHECK DETECTOR BACKFLOW PREVENTER (DEDICATED FIRE LINE) 4", 6', 8', 10"

W-6E

March 2022





PHOENIX CROSSINGS

BUNNELL,

DETAILS

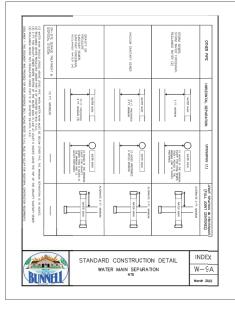
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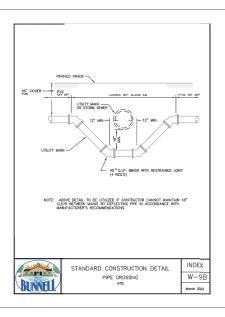
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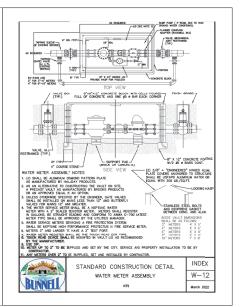
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SANITARY SEWER CONSTRUCTION GENERAL NOTES

- THE CITY'S PUBLIC UTILITY DEPARTMENT SHALL BE NOTIFIED PRIOR TO BEGINNING ANY SEWER CONSTRUCTION.
- ALL GRAVITY SANITARY SEWER MAIN LINES SHALL BE A MINIMUM OF 8" IN DIAMETER. SERVICE LATERALS SHALL BE A MINIMUM OF 4" DIAMETER (RESIDENTIAL) OR A MINIMUM OF 6" DIAMETER (COMMERCIAL)
- 3. ALL GRAVITY SANITARY SEWER LINES SHALL BE PVC SDR 26. 4. MINIMUM ALLOWABLE SANITARY SEWER SLOPES ALLOWED ARE:

8" PIPE 0.40% 10" PIPE 0.28% 12" PIPE 0.22%

- SEWER LINE CONSTRUCTION SHALL BE ACCOMPLISHED BY THE USE OF A LASER INSTRUMENT UNLESS ANOTHER METHOD IS PREVIOUSLY APPROVED BY THE CITY.
- GROUND SUFFICIENTLY TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6" BELOW THE PIPE BEING LAID WITHIN THE AREA OF THE TRENCH.
- 7. ALL PIPES SHALL BE LAID ON A FIRM FOUNDATION. SOFT OR SPONGY BEDDING FOR PIPES WILL NOT BE ACCEPTED. ANY UNSUITABLE MATERIAL SHALL DE REMOVED AND INCLUSED WITH A DRY, COMPACTED, CRANULAN MATERIAL SATISFACTORY TO THE CITY.
- 8. EXCAVATION AND BACKFILL: THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING AND BRACING OF EXCAVATION WORK OR USE OF TRENCH BOX IN ORDER TO PROVIDE FOR THE SAFETY OF WORKMEN, AS WELL AS REPRESENTATIVES OF THE CITY, THE DESIGN ENGINEER, AND THE DEVELOPER.
- 9. THE CONTINUEDRO SHALL INSTALL AN EXTELLIZED FOR LOCATER TAPE, OR SHALLAR DEVICES AN MAY SE APPONDED BY THE GITY FOR THE FILE, LENGTHE OF ALL PO'C WATER, RECLAMED WATER AND SHALLE FORCE MAINS. THIS PROPERTY OF THE ANALY ACTURED AND IS IN ACTION TO THE LOCATER WATE REQUIRED IN THE UTILITY PIPE LOCATION MATERIALS DETAIL (MISCELLANEOUS DETAILS SECTION MID).
- 10. MANHOLES SHALL BE LOCATED AT INTERVALS NOT EXCEEDING 400 FEET. 11. MANHOLE RIMS SHALL MATCH FLUSH WITH THE FINISH GRADE BLEVATION IN PAVED AREAS AND FLUSH WITH FINISH GRADE AND HAVE 4" THICK 3000 PSI CONCRETE POURED A MINIMUM OF 1.0" OUTSIDE OF THE COVER. CONCRETE IS TO BE POURED SOU



STANDARD CONSTRUCTION DETAIL GENERAL NOTES SANITARY SEWER CONSTRUCTION

SANITARY SEWER CONSTRUCTION GENERAL NOTES

- THE CONTRACTOR SHALL CONSTRUCT SANITARY SEVER MANHOLES IN SUCH A WAY THAT SEVER LINES DO NOT INTERSECT SEALED JOINTS BETWEEN SECTIONS OF THE MANHOLE.
- RUBBER BOOTS AND STAINLESS STEEL BANDS SHALL BE UTILIZED IN THE CONNECTION OF THE SEWER MAIN TO THE MANHOLES (SEE RUBBER BOOT AND PRECAST JOINT CONNECTION DETAIL).
- . INDIVIDUAL SANITARY SERVICE CONNECTORS ON NEV CONSTRUCTION SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLES, BUT TO SEWER MAIN LINES BY HER OF WE CONNECTIONS.
- HY 15°C FE WE FORBETTINKS.

 F FOR SINGE FRAILY HOUSE, SINGLE FOUR INCH MINIMAL SEWER SERVICES SHALL BE CONSTRUCTED AT EACH LOT OR UNIT AND LOCATED ON THE DOWNSTREAM SIDE OF THE LOCATED AT EACH SERVICES SHALL BE REPORTED.

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 EASILY MISBLE FROM THE ROAD. RUBBER SEAL FITTINGS TO BE USED ON ALL USES. NO QUEED JOINTS.
- FOR MULTI-FAMILY AND COMMERCIAL SITES, SIX INCH MINIMUM SEWER SERVICES AND CLEANOUTS SHALL BE PROVIDED AS APPROVEE BY THE CITY.
- AND CLANGUIS SMALL BE PROVIDED AS APPROVED BY THE CITY.

 SANITARY SERVER LATERALS, LONGE HAN TO PEET MAKERIED FROM THE SEMEN MAN TO THE MARKET AND LINE AND LINE AS A SERVER LATERAL SERVICE AND LINE AS A SERVER LATERAL SERVER LATERAL SERVER LANGE SERVER LATERAL SERVER LANGE SERVER LATERAL SERVER LANGE SERVER LATERAL SERVER LATERAL SERVER LANGE SERVER LATERAL SERVER LANGE SERVER LATERAL SERVER LATERA SERVER LATERAL SERVER LATERAL SERVER LA
- SEE CHART ON DETAIL INDEX S-1C FOR FORCEMAIN AND REUSE PIPE SIZE AND MATERIALS
- THE CITY REQUIRES THE DEVELOPER TO TELEVISE ANY AND ALL GRAVITY SANTARY SEWER MAIN LINES AND LATERALS PRIOR TO ANY FINAL ACCEPTANCE, AND RESERVES THE RIGHT TO REQUEST WATER AND AIR TESTING, THERE SHALL BE NO DIPS GREATER THAN 1° AS SEEN WITH A MANDREL TEST.
- SECR. HIT A NATUREL ID.1.

 ALL GRANTY SEEP MANN. PROR TO ACCEPTANCE BY THE CITY SHALL BE TELEVISED BY A REPUTABLE COMPANY THAT ENGAGES IN THIS TYPE OF WORK, TELEVISING IN ROAD SHALL BE ATTER ASSEX AND BEFORE PAYING. THE WOOD SHALL BE NOW-STOP WITH AUDIO DESCRIBING WHAT IS BEING REVERSED, WHITEN WIDE LOSS DESCRIBING THE CONDITION OF THE CITY.
- 22. CONTRACTORS SHALL BE REQUIRED TO TELEVISE ALL GRAVITY SANITARY SEWER LINES IN THE PRESENCE OF CITY PERSONAL HAVE PROVIDE COPIES OF THE VIDEO TAPE TO THE PUBLIC UTLITY DEPT. ANY DEFECTS NOTED SHALL BE CORRECTED PRIOR TO ACCEPTANCE BY THE CITY.



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STANDARD CONSTRUCTION DETAIL GENERAL NOTES
SANITARY SEWER CONSTRUCTION

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SANITARY SEWER CONSTRUCTION GENERAL NOTES

- 23. ALL GRAVITY SANITARY SEWER LINES WHICH ARE CONSTRUCTED OFF PUBLIC RIGHTS-GF-WAY WITHIN SIDETYARDS, BACKYARDS, AND OTHER POORLY ACCESSIBLE AREAS SHALL BE CONSTRUCTED OF C-G900 PVC, OR EPOXY LINED DUCTILE IRON PIPE. ABSOLUTELY NO USE OF PLASTIC STYRENE FITTINGS SHALL BE ALLOWED.
- SEWER LATERAL LOCATIONS SHALL BE MARKED ALONG THE OUTSIDE OF THE CURB WITH A SAWCUT S, AND BY A METAL TAE SET INTO THE PAYEMENT.
- 25. EZ-WARP FLASTIC, AS MANUFACTURED BY PRESS-SEL GASKET CORPORATION OR APPROVED EQUAL, SHALL BE USED ON THE DUTSIDE OF ALL MANHOLE AND WETWELL GANTS. APPLY ONE LAYER OF 9" WARP CENTERED ON EACH JOINT. A PLASTIC CITY INSPECTIOR SHALL PERSONALLY INSPECT ALL JOINT SEALS PRIOR TO BACKFILLAM OPERATIONS.
- ALL PROPOSED GRAVITY SANITARY SEWER MAINS 8° OR GREATER, SHALL BE
- FLUSHED HID CLEMED.

 ALL GRANTY SANITARY SWER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR INAPPROPRIATE TO PROVIDE ACQUIATE COVER DUCTILE IRON CLASS 350 OR CONCRETE ENCASEMENT MAY BE USED AS APPROVED BY THE CITY.
- DIAGNOSHOM MAY SE LUED AS APPROVED BY THE CITY.

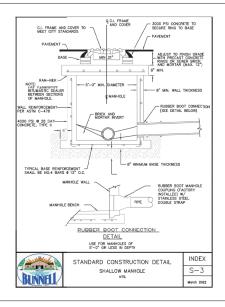
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 AND IN THE PRESSURE OF THE CITY'S INSPECTION MANUAM PRESSURE CONSMALL BE IT FOR ON THE CONTENTION OF THE CITY OF THE VOICE OF THE CITY PROTECTION AND CHESS OF THE CITY PROTECTION AND CHESS OF THE CITY OF THE CIT
- CORRECTED PRIOR TO ACCEPTANCE BY THE CALL GRAVITY SALLINARY SWEER PRISE, PRIOR TO ACCEPTANCE BY THE ENGAGES IN THIS TYPE OF WORK. THE WEED SHALL BE IN DIO FORMAT WITH HIGH COLJULITY STANDARY RESCULDION LIVES A CAMERA WITH SUITABLE LIGHTING TO ALLOW A CLEAR MAY POOLISED PROTING WITH SHALLINARY CALLOW AND POOLISED PROTING HOW AND THE CONTROL OF THE LIWES SHALL ACCOMPANY THE VOS SERVISION THE CONTROL OF THE LIWES SHALL ACCOMPANY THE VOS SERVISION TO THE CLITY.

FORCE M.	AIN & REUSE MAIN ST	ANDARDS
DIAMETER	MATERIAL	STANDARD
2" - 4"	PVC 1120 / SDR 21	ASTM D 2241
> 4" - 12"	PVC 1120 / DR18	AWWA C 900
(14" - 36" (R - 18) (30" - 36" — DR - 18)	PVC 1120	AWWA C 905
ALL SIZES	HDPE (DIPS) DR 11	ASTM F 714
NOTE: PVC F	PIPE COLOR SHALL BE GREEN FO PURPLE FOR REUSE MAIN.	R SEWER FORCE MAIN,



STANDARD CONSTRUCTION DETAIL GENERAL NOTES
SANITARY SEWER CONSTRUCTION

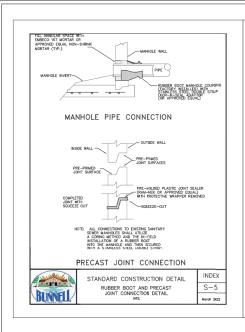
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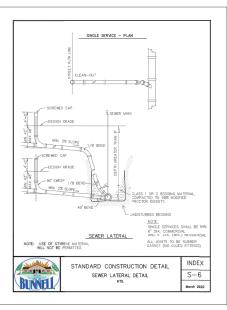


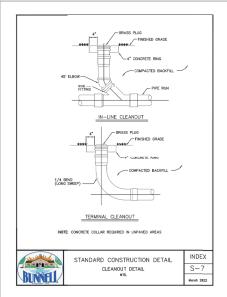
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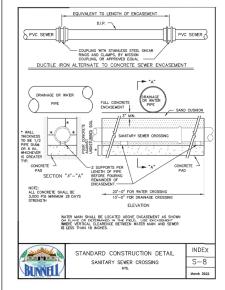


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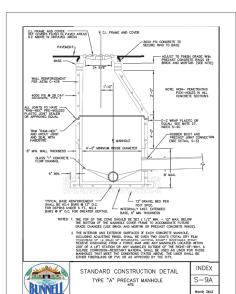


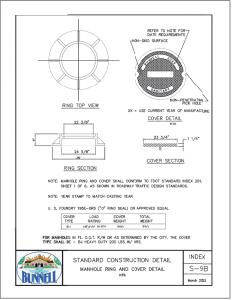


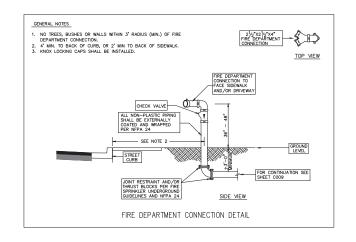


DETAILS

SANITARY











- PAYEMENT AND CURB WIDTHS SHALL BE YERRED AND DIMENSIONED FOR EACH STREET AT EACH BLOCK, ALL RADII AT INTERSECTIONS SHALL BE VERFED AND DIMENSIONED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION.
- AS BEIND ASSEDED BY COMMENT.

 ROMANY ELECTROPS SMALL BE ECCORDED AT ALL GRACE CHANGES OF OTHER INTERVALS AS MICHOLO ALLOS ALL STREETS. STREET CENTRALINE AND CAMB INTERVALS AS MICHOLO ALLOS ALL STREETS. STREET CENTRALINE AND CAMB INTERVAL AND PROFILE OF ALL STREETS SHALL AND DE SHAPE ON THE FARM AND PROFILE SO IT MAY BE COMPARED TO THE DESTRIC AND DECRETO PROFILE GRACE LINES. ALL STREETS SHALL ASSED AND STREETS AND DECRETO PROFILE ORDER LINES. ALL STREETS AND DECRETO PROFILE ORDER LINES. AND STREETS AND STREETS AND DECRETO PROFILE ORDER LINES. AND STREETS AND STREETS AND STREETS AND DECRETO PROFILE ORDER LINES. AND STREETS AND STREETS AND STREETS AND STREETS AND STREETS AND STREETS AND STREETS.
- STORM DRAINAGE STRUCTURES SHALL BE LOCATED AND/OR DIMENSIONED FROM CENTERLINES OR LOT LINES AS APPROPRIATE.

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- DWATFICALLY DESCRIBE, INSEE INFOURMENT LEADING.

 BELINITURE MALES SPAILL HAVE BERN INFO-US—BINK AND BUTTOW LLEVATURES

 BECOMED ACTUAL MEASUREMENTS SHALL BE TAKEN AND DWATSOMS BECOMES

 BECOMED ACTUAL MEASUREMENTS SHALL BE TAKEN AND DWATSOMS BECOMES

 TO THE TAKEN AND TH
- STORN DRAINAGE SWALE CENTERLINES SHALL BE "OCATED AND ELEVATIONS OF FLOW LINE SHALL BE RECORDED EVERY 100 FRET.
- ANY SPECIAL FEATURES SUCH AS CONCRETE FLURES, LAKE BANKS, WALLS, FENDING, ETC., WHICH WERE A PART OF THE APPROVED CONSTRUCTION DRAWINGS SHOULD ALSO BE LOCATED AND DIMENSIONED.
- CONTRICTION GOWINGS SHOULD ALSO BE LOCATE AND REMISSIONED.

 SIGHER CENTED AND PRELIMINATE ANALYS. WHE ROCASEST FOR REMISSION CONTRICTION AND RESIST FOR REMISSION CONTRICTION AND COMMUNICATION.

 FINAL PROPERTY OF THE REMISSION AND COMMUNICATION CONTRICTION CONTRICTION AND CONTRICTION CAN NOT 1888.



BUNNELL

STANDARD CONSTRUCTION DETAIL REQUIREMENTS FOR "AS-BUILT" DRAWINGS (PAVING & DRANAGE) March 2022

M-4

INDEX M-1A

STANDARD CONSTRUCTION DETAIL REQUIREMENTS FOR AS BUILT DRAWINGS BUNNELL (WATER & SEWER)

SANITARY SEWER MANHOLES SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. ALL RIM AND INVERT ELEVATIONS SHALL BE VERIFIED AND RECORDED, THIS INFORMATION TO CLEARLY INDICATE IT AS BEING AS-BUILT INFORMATION.

SANITARY SEWER LINE LENGTHS, SIZES, MATERIAL, SLOPE, ETC., SHALL BE VERIFIED AND RECORDED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING AS-BUILT INFORMATION.

SEWER LATERALS SHALL DE YERVIELD AND RECORDED AT THEIR CLEAN-OUT LOCATIONS. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TOWARDS UPSTREAM MANHOLES.

HAGID DUMSTHEAM MORNICLES TORMOUS OFSTREAM MANHALES.

ITER STATIONS AND FORCE MAINS STALL BE VERRIED AND DIMENSIONED FROM STREET CONTRIBUTES OR LOT LINES AS APPROPRIATE. FORCE MAIN STREET CONTRIBUTES OR LOT LINES AS APPROPRIATE. FORCE MAIN STREET AND STREET CONTRIBUTES OF LONG-CONTRIBUTES OF LONG-CONTRIBU

WATER MAIN LINES SHALL BE DIMENSIONED OFF THE BACK OF CURB OR EDGE OF PAVEMENT IF NO CURB IS PRESENT. WATER MAIN LINE MATERIAL, SIZE, LENGTH AND DEPTH PLACED SHALL ALSO BE NOTED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING AS-BUILT INFORMATION.

COMMINGEN MANIGLES TO UPSTREAM MANIFOLES.

BUBLIT COSTERED PAPER PRELIMINATION "AG-PULLES" WITH REQUEST FOR FINAL INSPECTION SUBMIT 3 STES SHOWNS MATER FACILITIES AND 3 WITH SOME A FACILITIES. FALOUR FINAL INSPECTION AND COMMINTS AND 3 WITH SOME A FACILITIES TO THE ADDRESS OTY COMMINTS AND SUBMIT 3 STES CONTRACTOR SHALL REVISE AS-BULLTS TO ADDRESS OTY COMMINTS AND SUBMIT 3 STES CONTRACTOR SHALL REVISE AS-BULLTS (SEE FOR SUBMISSIONS) ALL X-S-BULLTS (SEE FOR SUBMISSIONS) ALL X-S-BULLTS (SEE FOR SUBMISSIONS) ALL X-S-BULLTS (SEE FOR SUBMISSIONS) AND SUBMISSIONS AND POPERLES OF ECOROR, PROVIDE A CO OF AUTOCAD DRAWNOS AND POPERLES OF EACH PROVIDED A SECTION OF AUTOCAD DRAWNOS AND POPERLES OF ECONOMICS AND POPERLES OF

CURB CUTS OR METAL TABS, USED TO MARK SEWER LATERALS, WATER SERVICES AND WATER VALVES, SHALL BE VERIFIED FOR PRESENCE AND ACCURACY OF LOCATION.

WATER VALVES, TESS, ALL SERVICES, BLOW-OFFS AND FIRE HYDRANTS SHALL BE LOCATED BY THING THEM TO SANITARY SENER MANHOLES. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOINISTIEM MANHOLES.

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

INDEX M-1B

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY LAND DEVELOPMENT CODE REQUIREMENTS, AND THE MINIMUM STANDARD CONSTRUCTION DETAILS AND CONSTRUCTION SPECIFICATIONS, AN ENGINEERING PIEMET AND TREE REMOVAL PERMIT IS REQUIRED PRIOR TO STARTING CONSTRUCTION.
- NO LAND SHALL BE CLEARED, EXCAVATED OR FILLED AND NO STRUCTURE SHALL BE ERECTED, REPAIRED OR DEMOLISHED MITHOUT PROPER PERMIT(S) AS FEQUIPED BY THE CITY.
- NOTIFY THE CITY UTILITY DIVISION AT (386)437-7515 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- 4, ANY CONSTRUCTION CHANGES TO APPROVED PLANS SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO PERFORMING THE WORK.
- ROAD CONSTRUCTION AND PIPE INSTALLATION COMPACTION AND DENSITY TESTING SHALL COMPORM TO THE CITY MINIMUM REQUIREMENTS. CERTIFIED COPIES OF TEST REPORTS SHALL BE SUBMITTED TO THE CITY INSPECTOR AND THE CITY'S ENGINEERING DIVISION.
- A PRE-PAVING UTILITY INSPECTION MUST BE REQUESTED AND COMPLETED PRIOR TO THE PAVING OF ALL ROADS, STREETS, AND PARKING AREAS.
- A FINAL INSPECTION, TO BE CONDUCTED BY THE CITY, SHALL BE PERFORMED ON ALL CONSTRUCTION. THE DESIGN ENGINEER SHALL NOTIFY THE CITY UTILITY DIVISION AT (388)437-7515 WHEN REQUESTING A FINAL INSPECTION.
- 8. THREE COMPLETE SETS OF AS-BUILT DRAWINGS (5 FOR SUBDIVISIONS) ARE REQUIRED TO BE SUBMITTED TO THE CITY PRIOR TO REQUESTING A THALL INSPECTION.
- CONSTRUCTION SIES THAT DISTURB ONE ACRE OR MORE WILL BE REQUIRED TO SEEK COVERAGE UNDER THE GENERIC PERMIT FOR STORMMATER DISCHARGE FROM LARGE AND SHALL CONSTRUCTION ACTIVITIES. AN ACCORDANCE WITH HIS REQUIREMENT, A TYS STORMMATER POLLUTION PERVENTION PLAN (SMPP) MUST BE SUBMITED TO THE OTHER CONTINUES OF THE OWNER OFFICE OF THE SEE ACCOUNTS OF THE REPORT OF THE OWNER OTHER O 10. CONTRACTOR WILL FOLLOW REQUIRED WASTE MANAGEMENT PRACTICES
- 11. SEEDING OR SODNING SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORABILY OR PERMANENTLY CEASED.
- ANY FIELD MODIFICATIONS OR DEVIATIONS TO THE CONSTRUCTION PLANS REQUIRE WRITTEN APPROVAL BY BOTH THE ENGINEER OF RECORD AND THE CITY UTILITY DIVISION.
- 13. ANY DIRECTIONAL BORES WILL BE PER SECTION 555 OF FDOT STANDARD SPECIFICATIONS (ATEST FORTON)



STANDARD CONSTRUCTION DETAIL GENERAL CONSTRUCTION NOTES

INDEX M-2 Morch 2022 1/2"

1/2"

1/2"

1/4" role

1/2" PECHALISE DOWNSON

THE 8 JOHN

CORNELS OF THE REPORT OF THE PROPERTY OF THE P

- THE TOP OF THE CONCRETE SHALL BE AT AN ELEVATION NO LOVER THAN THE CROWN OF THE ADJACEN ROADWAY, AND NO HIGHER THAN IS INCHES ABOVE THE CROWN UNLESS APPROVED BY THE CITY TO MAKE A MORE NATURAL TRANSTON WITH THE ADJACENT LAND.
- MACE, A MORE MATINE. TRANSPORT WITH THE ADMINISTRATION OF THE ALL MOST THESE A LIGHT THRAN A MACE AND A MACE A
- ONTROL JOINTS (TYPE 3 JOINTS) SHALL BE TOOLED INTO THE FRESH CONCRETE TO A DEPTH EQUAL TO 1/4 THE SLAB THICKNESS AND SPACED APART A DISTANCE EQUAL TO THE WOTH OF THE SLAB OR 5 FEET WHICHEVER IS GREATES!
- THE GLAD GUITAGE GIVEL DE DROOM FINIGIED TO BE GUIT DESCRAMT, AND GLALL MATCH AS GLOCELY AS POSSBLE THE THISP OF THE EUSTING ADJACENT SLABS AND ALL EDGES SHALL BE TOOLED TO ELIMINATE SHAPP CORREST.
- CLANACE SHAPE COMES.

 NEW SEARCH SECRECATE SHALL HAVE ALL COMESS, LOCKE, AND SELECTIONS AND THE SECRECAL SHAPE COMES AND THE SECRECA
- PREPARED MAD THE FORMS ARE SET, BUT BEFORE THE CONCRETE PLACEMENT TERMS. "

 THE COMMANDED SHALL BE RESPONSED FOR PROTECTION FOR PROPER THE PROPER THE PROPER AND THE PROPERTY OF THE PLACE OF THE PLACE
- 12 ALL FORMS SHALL BE REMOVED PRIOR TO ACCEPTANCE OR APPROVAL AND THE DISTURBED GROUND SHALL BE BENCHALD, REGRESOL, AND GODDED 30 THAT THE WEAR JURIAGO OF THE CONCRETE IS REASONABLY FLUSH WITH THE ADJACHT GRADE.



STANDARD CONSTRUCTION DETAIL SIDEWALK, RAMP, AND DRIVEWAY APRON CONSTRUCTION REQUIREMENTS

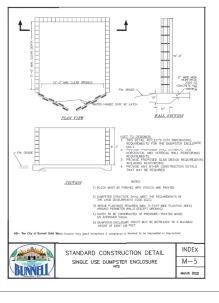
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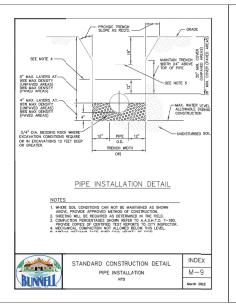
March 2022

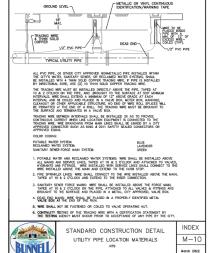
4" OR 6" 4' OR 8' f-4, 3' OR 5' f-4' h) 2. 08 2. h) RAMP LOCATIONS ARE TO BE COORDINATED WITH AND IN COMFORMANCE WITH CROSSWALK
MARKING DETAILS SHOWN IN THE PLANS. 2. CURBED RAMPS SHALL HAVE FLARED SIDES WITH A MAXIMUM SLOPE OF 12:1. 3. RAMPS SHALL HAVE A DETECTABLE WARNING SURFACE AS SHOWN. RAMPS ARE TO BE CONSTRUCTED AT ALL LOCATIONS SHIMN IN THE PLANS EVEN WHEN A SIDEMALK IS NOT CONSTRUCTED CONCURRENTLY. NO CURB TRANSITION IS NEEDED FOR MIAM CURBS. ALL RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX NO. 304 AND HAMDICAPPED ACCESSIBILITY REQUIREMENTS IN ACCORDANCE WITH THE AMERICAN DISABILITIES ACT. 22 DAY O O O 0.9" MIN. 1.4" MAX. 0.2" ± 0.02' BASE-TO-BASE SPACING SHALL BE NOTES: ON DAMPS THAT ARE DEDOCATED HAVE ON PRAMES INTERESTING COMES ON A REALISING THE DOME PATTERN SHALL BE IN-LIKE WITH THE DEPOCHON OF TRAVEL TO THE EXTENT PRACTICAL. INDEX STANDARD CONSTRUCTION DETAIL

SIDEWALK AND BIKE PATH RAMP

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CROSSINGS

PHOENIX

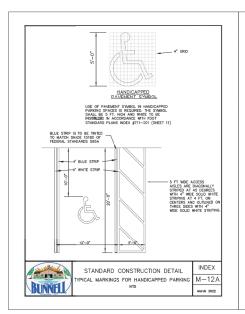
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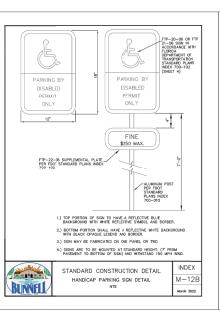
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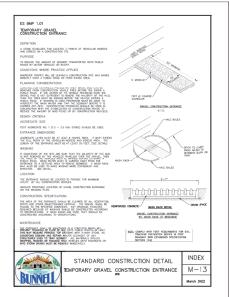
BUNNELL, GENERAL

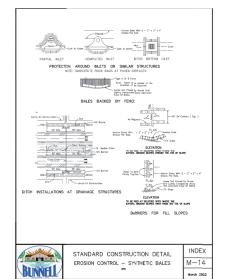
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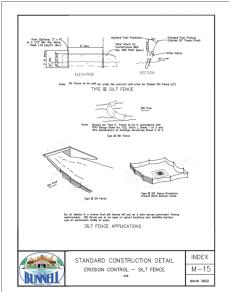




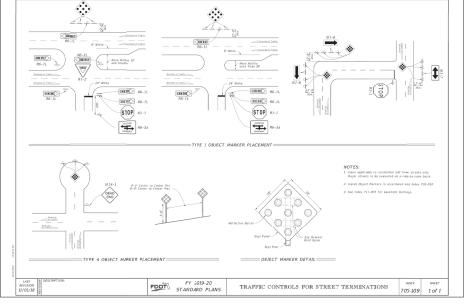






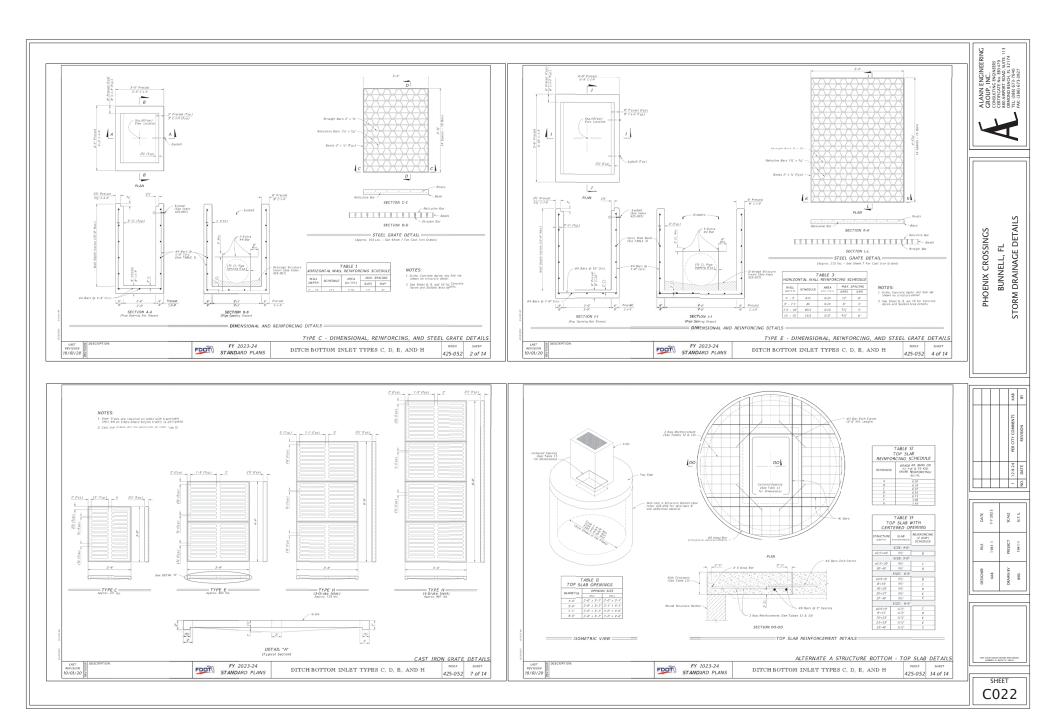


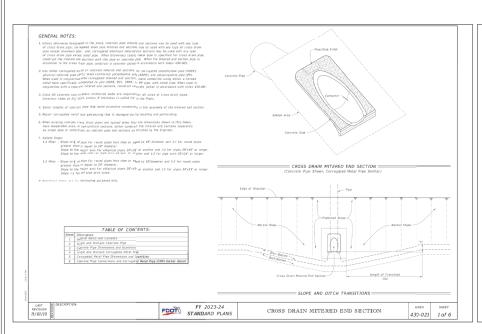


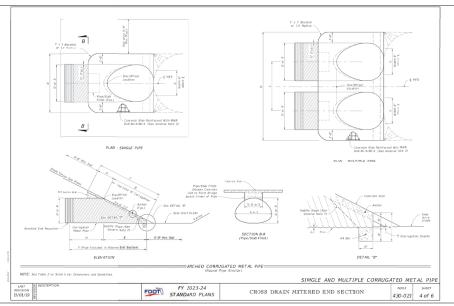


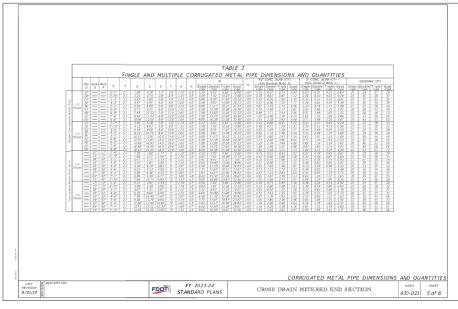












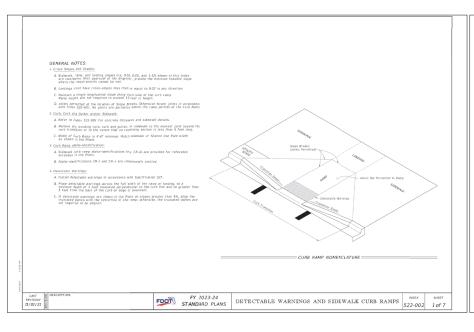


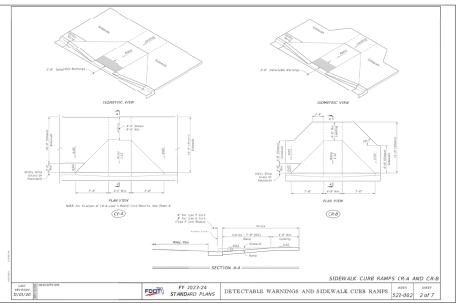
STORM DRAINAGE DETAILS

BUNNELL, FL

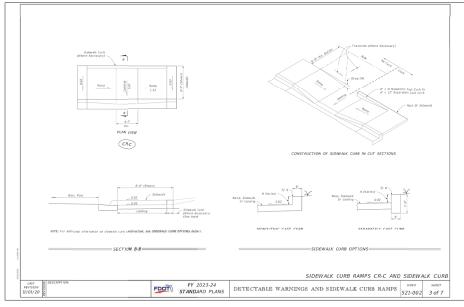
PHOENIX CROSSINGS

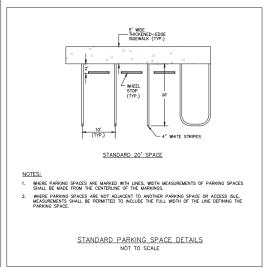


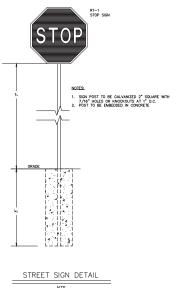




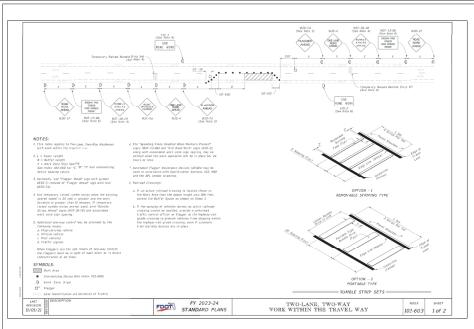


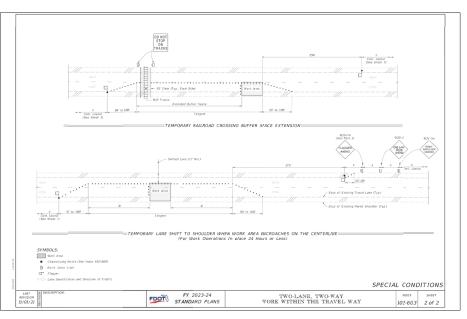


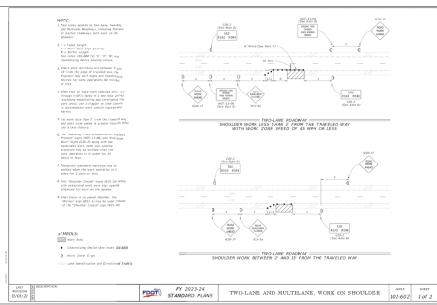


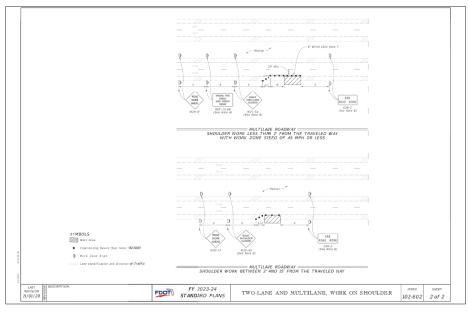












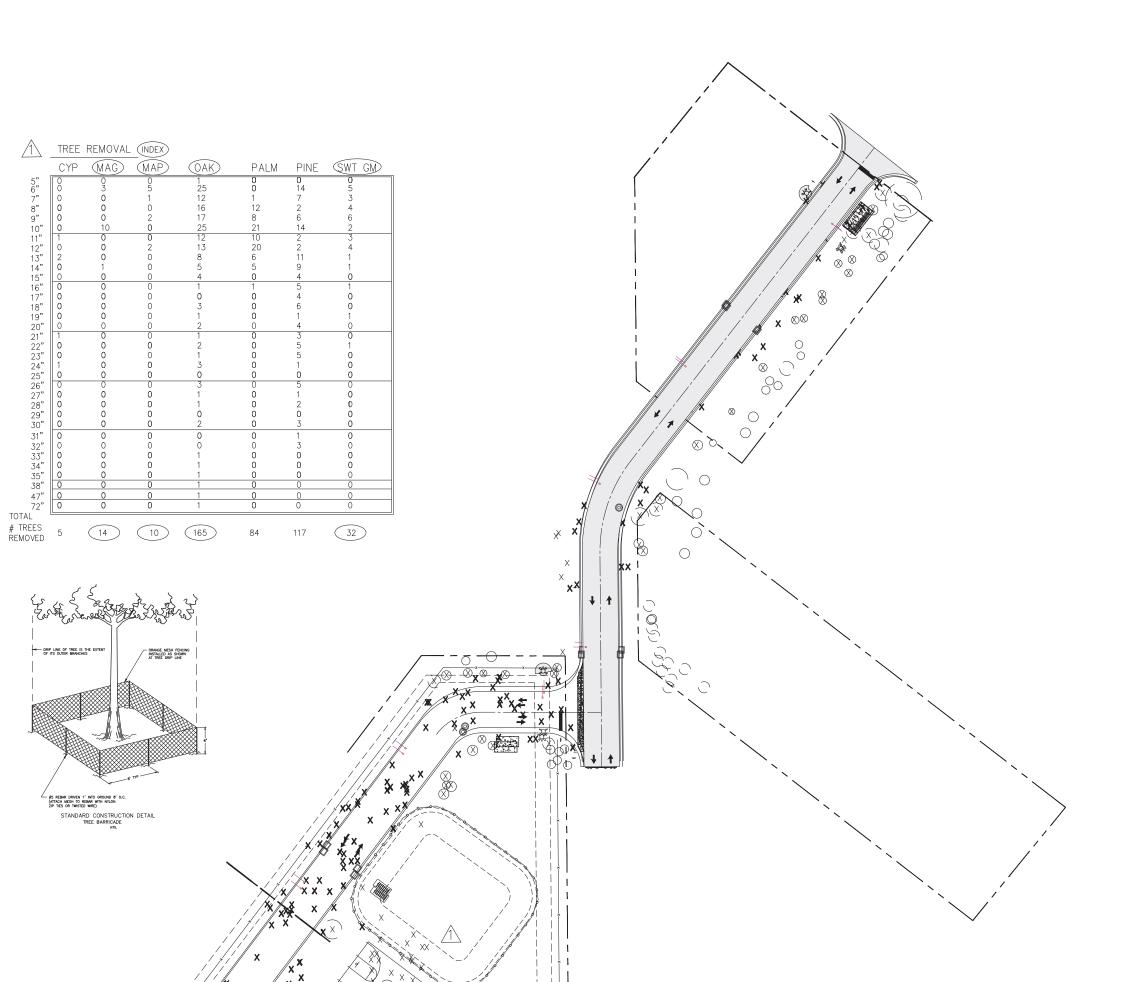


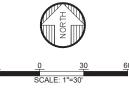
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KAB	WIS



SHEET C025





LEGEND: 8"CH TREE TO BE REMOVED LIMITS OF CLEARING

SILT FENCE

MAGNOLIA TREE SWEET GUM TREE MAPLE TREER

TREE REMOVAL PLAN - NORTH PHOENIX CROSSINGS BUNNELL, FL

JBS	JBS	JBS	ВУ
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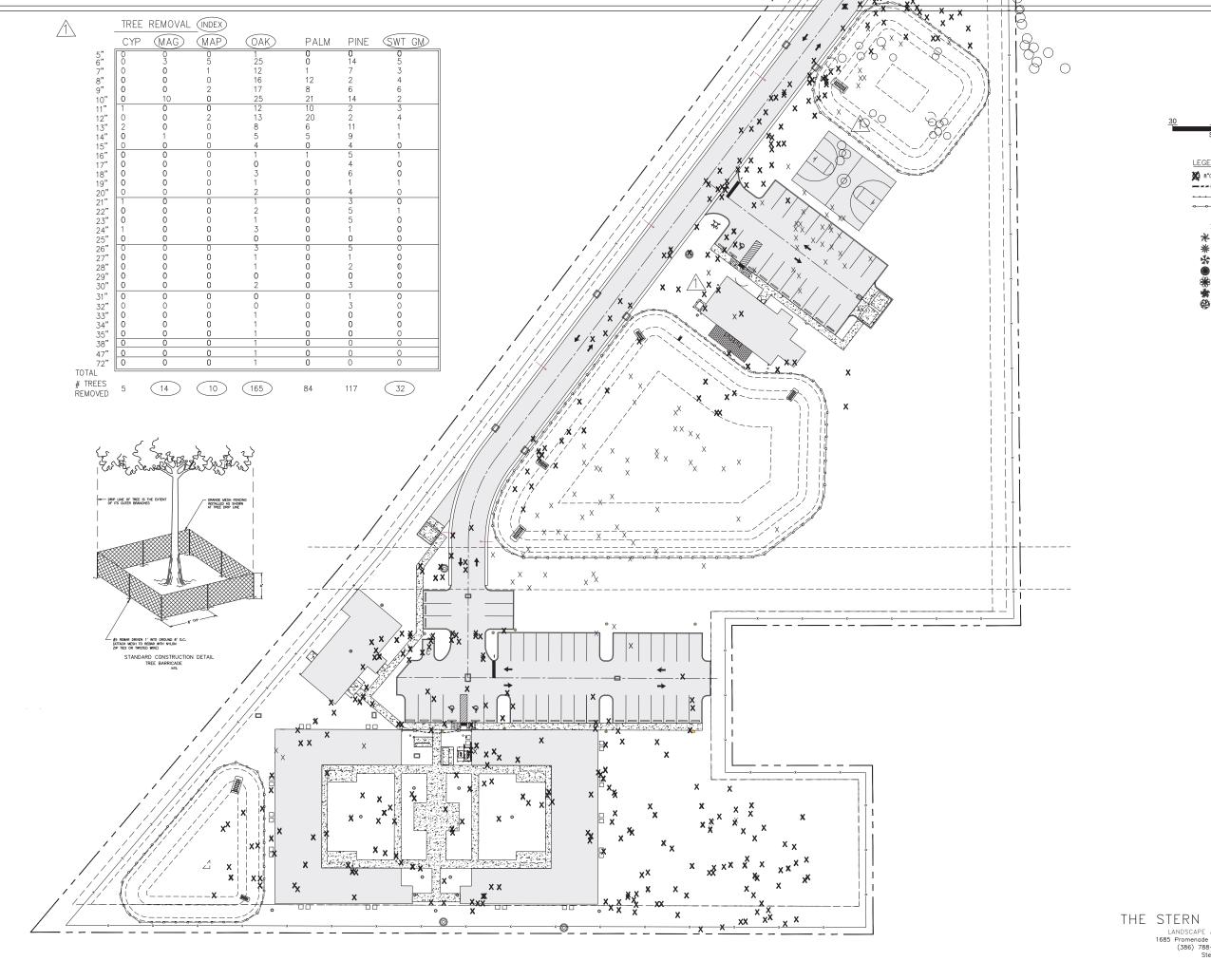
DATE	7-7-2023	SCALE	1" = 30"
FILE	1941-1	PROJECT	1941-1
DESIGNER	KAB	DRAWN BY	WRS



THE STERN DESIGN GROUP, P.A.

LANDSCAPE ARCHITECTS LAND PLANNERS
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(386) 788-3788 CELL (386) 290-6411
SternDesignGroup@att.net

SHEET LA-1





8"CH TREE TO BE REMOVED LIMITS OF CLEARING

SILT FENCE

MAGNOLIA TREE SWEET GUM TREE

PHOENIX CROSSINGS

TREE REMOVAL PLAN - SOUTH

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DESIGNER	FILE	DATE
KAB	1941-1	7-7-2023
DRAWN BY	PROJECT	SCALE
WRS	1941-1	1" = 30'



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SHEET LA-2





GENERAL NOTES

ANY VARIATIONS FROM THE APPROVED LANDSCAPE PLAN MUST BE INITIALLY REVIEWED BY THIS LANDSCAPE ARCHITECT. UPON REVIEW BY THIS OFFICE, THE CITY OF BUNNELL MUST APPROVE THE PROPOSED REVISIONS TO THE LANDSCAPE PLAN. THE CITY MUST THE SECURED PRICE TO TO INSTALLATION. FAILURE TO COMPLY WITH THIS PROCEDURE MAY RESULT IN REQUIRED MITIGATION AND/OR DELAY OF THIS PROJECT.

SEE ENGINEER'S PLAN FOR ALL EXISTING AND PROPOSED EASEMENTS, COVENANTS, RO.W., BUFFER DIMENSIONS, AND ALL SITE LAYOUT DIMENSIONING.

ALL UNDERBRUSH, STUMPS, AND DEAD BRANCHES ARE TO BE REMOVED ON ALL EXISTING REMAINING TREES AND PALMS.

ALL IRRIGATION BACK-FLOW DEVICES WILL BE VISUALLY SCREENED WITH LANDSCAPING AND PAINTED BLACK AND/OR NILE GREEN.

PLANTING AREAS AS SHOWN OF IT IE AND SCAPE. IRRIVATION IN WAS.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ANY PROPOSED TREES TO BE PRESERVED. FENCE THE TREE GROUP(S) WITH A WOOD BARRIER AS SHOWN BY THE DETAIL TO BE LOCATED 11/2 THUSE THE TREES' DRIP—LINE RADIUS(ES). NO VEHICLES OR MATERIALS SHALL BE PLACED UNDER OR ROUND THESE TREES TO REMAIN.

ALL TREES NOT LOCATED WITHIN A MULCHED PLANTING BED SHALL HAVE A MINIMUM FIVE-FOOT (5') MULCH RING INSTALLED AROUND THE TRUNK AREA.

A MINIMUM FIVE-FOOT (5') GRASS RING SHALL BE INSTALLED AROUND EACH CATCH BASIN LOCATED WITHIN ANY LANDSCAPE AREA. THE CONTRACTOR IS TO BE SURE THAT NO MULCH CAN FLOW INTO THESE BASINS.



LANDSCAPING, EXCEPT GRASS AND GROUND COVER, SHALL NOT BE PLACED CLOSER THAN THREE—FEET (3) FROM THE EDGE OF ANY ACCESSAMY PAYMENT. ALL LANDSCAPING WITHIN THE TRANSOLAR TEN-FOOT (0) AREA SHALL ROVIDE A MAINTAIND UNOBSTRUCTED (ROSS—VSIBILITY AT A LEVEL BETWEEN TWO—FEET (2) AND TEN-FEET (10') AND/OR LIMBED UP SO THAT THE CROSS—

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NO LANDSCAPING SHALL BE IN: SEVEN AND ONE-HALF TEET (7 THE FRONT AND SIDES OF HE AND FOUR-FEET (4') TO THE

ELKIN STREET

SETBACK

20' LANDSCAPE

122

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EXISTING TREES (TYP) SEE SHEET LA-1 FOR TREE SPECIE AND SIZE

MINIMUM FIFTEEN-FOOT (15') WIDTH BUFFER ONE (1) TREE / FIFTY (50) LF (2) REQUIRED FORTY-EIGHT-INCH (48") HIGH DENSE PLANTINGS PINE BARK NUGGETS (TYP)

ALL PLANT MATERIAL THAT IS INSTALLED MUST BE FLORIDA NO.1 GRADE OR BETTER ACCORDING TO THE CURRENT GRADES AND STANDARDS FOR NURSERY PLANTS, STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.

ALL FILL DIRT TO BE PLACED IN THE PROPOSED LANDSCAPE AREAS AND BERMS, MUST HAVE A PH RANGE BETWEEN 5.5 AND 7.5, BE ORGANIC IN NATURE, FREE OF ROCKS AND DEBRIS, AND MATCH NATIVE EXISTING SOILS.

TREES SHALL BE PLANTED A MINIMUM OF FOUR-FEET (4') FROM BACK OF CURB OR SIDEWALK (TYP). AND SHALL BE INSTALLED ON THE PEAK OF THE BERM ALONG WITH THE DENSE HEDGE PLANTINGS.

ALL EXISTING SHRUBS, GROUND COVERS AND TREES NOT SHOWN TO REMAIN ARE TO BE REMOVED ALONG WITH THEIR ROOT SYSTEM.

ON ALE ANSING REMAINING INCES AND PAUMS.

ST. AUGUSTINE SOLID SOOI IS TO BE USED IN ALL OPEN SODDED IRRIGATED AREAS AS SHOWN ON THIS PLAN AND THE LANDSCAPE IRRIGATION PLAN. ALL OTHER OPEN SPACE AREAS, INCLUDING BUT NOT LIMITED TO ALL DISTURBED AREAS, RETENTION AREAS, AREAS SUBJECT TO POSSIBLE EROSION, RIGHT-OF WAYS (R.O.W.). ETC, SHALL ALSO BE SODDED WITH BAHLA' ARRENTINE' SOLID SOD OR SOLID BERMUDA SOD. ALSO, REFERENCE AND SEE CIVIL ENGINEERING DWGS FOR SODDING MUNTATIONS OF SOD AT WET AMO/OR DRY RETENTION AREAS, AND THE EDGE OF PAVEMENTS AND R.O.W.

AN AUTOMATIC IRRIGATION SYSTEM, WITH A RAIN SENSOR, WILL BE INSTALLED TO IRRIGATE 100% OF THE TREE AND LANDSCAPE PLANTING AREAS AS SHOWN BY THE LANDSCAPE IRRIGATION DWGS.

ALL EXPOSED MECHANICAL AND UTILITY EQUIPMENT, SUCH AS A/C UNITS, BACKFLOW PREVENTERS, UTILITY PADS, ETC SHALL BE SCREENED USING A FOUR-FOOT (4') HIGH, SEVEN (7) GALLON VIBURNUM HEDGE





NORTH , FL PLAN BUNNELL, F PLANTING P LANDSCAPE

PHOENIX CROSSINGS

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	DATE 7-7-2023	SCALE
	FILE 1941-1	PROJECT 1941-1
	DESIGNER	DRAWN BY
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THE STERN DESIGN GROUP, P.A.

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PROPOSED TREES KEY QTY BOTANICAL/COMMON NAMES

lex vomittoria pendula Weeping Holly agerstroemia indica

QV 36 Quercus virginiana Live Oak TD 14 Taxodium distichum Southern Bald Cypress

KEY QTY BOTANICAL/COMMON NAMES

3 Lagerstroemia indica 8' 3' Min 2 1/2" DBH
Tuscorora Crepe Myrtle One (1) Main—Trunk with Min Five (5) Branches

PROPOSED SHRUBS AND GROUND COVERS

8'-10' 3'-4'

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4 **₩**

REMARKS Min 2 1/2" DBH Full to Ground

8'-10' 3'-4' Min 2 1/2" DBH Shape/Full 8'-10' 3'-4' Min 2 1/2" DBH Shape/Full

18" 12" 3 Gal Cont 30" 0.C. 18" 12" 3 Gal Cont 30" 0.C. 3' 18" 7 Gal Cont FULL 24" 12" 3 Gal Cont 30" 0.C.

48"MINIMUM 24" 7 Gal Cont 36" 0.C.

Min 2 1/2" DBH Full







GENERAL NOTES

ALL PLANT MATERIAL THAT IS INSTALLED MUST BE FLORIDA NO.1 GRADE OR BETTER ACCORDING TO THE CURRENT GRADES AND STANDARDS FOR NURSERY PLANTS, STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.

CURVLINEAR LANDSCAPE BEDS ARE TO BE EDGED WITH SMOOTH FLOWING CURVES. STRAIGHT-LINE LANDSCAPE BEDS ARE TO BEDED IN A STRAIGHT LINE AND MUST BE PARRALLEL TO PARKIN LOTS, WALKWAYS, AND/OR STRUCTURES UNLESS INTENTIONALLY DESIGNED TO MEANDER.

TREES SHALL BE PLANTED A MINIMUM OF FOUR-FEET (4') FROM BACK OF CURB OR SIDEWALK (TYP). AND SHALL BE INSTALLED ON THE PEAK OF THE BERM ALONG WITH THE DENSE HEDGE PLANTINGS.

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ALL UNDERBRUSH, STUMPS, AND DEAD BRANCHES ARE TO BE REMOVED ON ALL EXISTING REMAINING TREES AND PALMS.

ALL IRRIGATION BACK-FLOW DEVICES WILL BE VISUALLY SCREENED WITH LANDSCAPING AND PAINTED BLACK AND/OR NILE GREEN.

AN AUTOMATIC IRRIGATION SYSTEM, WITH A RAIN SENSOR, WILL BE INSTALLED TO IRRIGATE 100% OF THE TREE AND LANDSCAPE PLANTING AREAS AS SHOWN BY THE LANDSCAPE IRRIGATION DWGS.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ANY PROPOSED TREES TO BE PRESERVED. FENCE THE TREE GROUP(S) WITH A WOOD BARRIER AS SHOWN BY THE DETAIL TO BE LOCATED 11/2 THISE THE TREES' DRIP—INE RADIUS(ES). NO VEHICLES OR MATERIALS SHALL BE PLACED UNDER OR AROUND THESE TREES TO REMAIN.

A MINIMUM FIVE-FOOT (5') GRASS RING SHALL BE INSTALLED AROUND EACH CATCH BASIN LOCATED WITHIN ANY LANDSCAPE AREA. THE CONTRACTOR IS TO BE SURE THAT NO MULCH CAN FLOW INTO THESE BASINS.

ALL EXPOSED MECHANICAL AND UTILITY EQUIPMENT, SUCH AS A/C UNITS, BACKFLOW PREVENTERS, UTILITY PADS, ETC SHALL BE SCREENED USING A FOUR-FOOT (4') HIGH, SEVEN (7) GALLON VIBURNUM HEDGE



LANDSCAPE PLANTING PLAN - SOUTH

JBS	rs JBS	JBS	JBS	JBS	ВУ	
12162024 REMOVE BUFFER PLANTINGS	10172024 REV PER TRC JULY 17 COMMENTS	REV SITE BASE PLAN + KEY	REV SITE BASE PLAN	REV SITE BASE PLAN	REVISION	
12162024	10172024	02242024	11152028	07132023	DATE	
2	4	е	2	-	NO.	

DATE	SCALE 1" = 30'
FILE	PROJECT JBS
DESIGNER	DRAWN BY JBS



THE STERN DESIGN GROUP, P.A.

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SHEET LA-4

MINIMUM TWENTY-FOOT (20') WIDTH BUFFER 395.5 LF ONE (1) TREE / FIFTY (50) LF (8) REQUIRED AND PROVIDED FORTY-EIGHT-INCH (48") HIGH DENSE PLANTINGS PINE BARK NUGGETS (TYP)

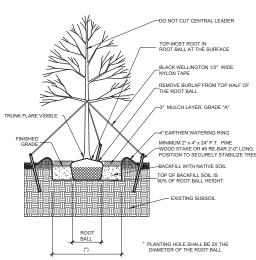
DRAINAGE TESTING/DRAINAGE CHANNEL REQUIREMENTS

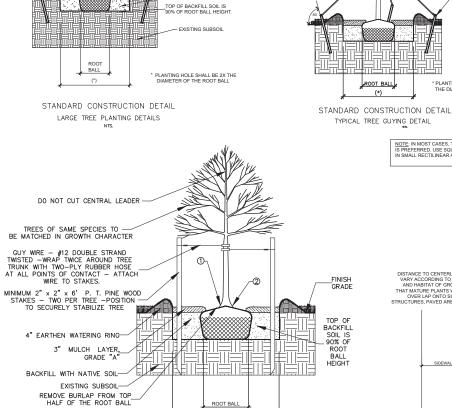
PRIOR TO PLANTING PITS SELECTED FOR TESTING SHALL BE TESTED IN THE FOLLOWING MANNER:

- A. DIG EACH PLANTING PIT TO THE MINIMUM SPECIFIED SIZE.
- B. FILL PLANTING PIT TWELVE INCHES (12") OF WATER. IF THE WATER LEVEL DROPS FOUR NICHES (4") OF WATER WITHIN FOUR (4) HOURS, THE DRAWAGE IS SUFFICIENT AND DRAWAGE CHANNEL IS NOT REQUIRED. IF HOWEVER, THE WATER LEVEL DROPS LESS THAN FOUR INCHES (4") WITHIN THE FOUR (4) HOUR PERIOD, A DRAINAGE CHANNEL IS REQUIRED.
- C. WHERE REQUIRED, THE DRAINAGE CHANNEL MUST EXTEND DOWN THROUGH THE NON-POROUS SOIL AND INTO POROUS SOIL. (SEE DETAIL)
- D. ALL MATERIAL REMOVED FROM THE DRAINAGE CHANNEL SHALL BE SIGNAFOED.

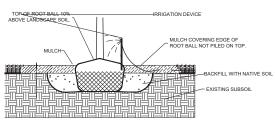
 E. WHEN BACKFILLING PLANTING PITS WITH PLANTING MIXTURE, CARE MUST BE TAKEN TO KEEP THE CONSISTENCY OF THE SOIL MIX THE SAME THROUGHOUT THE PLANTING PIT AND DRAINAGE CHANNOT.

DRAINAGE CHANNEL DETAIL





TRUNK FLARE VISIBLE * PLANTING HOLE SHALL BE 2X THE DIAMETER OF THE ROOT BALL. © TOP-MOST ROOT IN ROOT BALL AT THE SURFACE STANDARD CONSTRUCTION DETAIL SMALL TREE PLANTING DETAIL NTS.



NEVER PLACE ANY SOIL OVER THE ROOT BALL. THE ROOT BALL SHOULD BE POSITIONED IN THE HOLE SHALLOW ENOUGH SO THE FINISHED GRADE OF THE BACKFILL SOIL DOES NOT REACH THE TOP. IN OTHER WORDS, LEAVE THE TOP FEW INCHES OF THE ROOT BALL SIDES EXPOSED TO THE AIR. MULCH WILL COVER THE REMAINING COUPLE INCHES. THE TOP OF THE ROOT BALL SHOULD BE SEVERAL INCHES HIGHER THAN THE SURROUNDING LANDSCAPE SOIL BE SURE THAT WHEN YOU ARE FINISHED PLANTING, THERE IS NO SOIL OVER THE ROOT BALL. SOIL (AS WELL AS THICK MULCH LAYERS MORE THAN 3 INCHES DEEP) OVER THE ROOT BALL CAN PREVENT WATER AND AIR FROM ENTERING THE ROOT BALL. YOU SHOULD BE ABLE TO SEE THE TOP-MOST ROOT ORIGINATING FROM THE TRUNK AT THE SOIL SURFACE OR WITHIN THE TOP INCH OF SOIL IN THE ROOT BALL. THE TRUNK FLARE SHOULD BE VISIBLE.

MULCH SHOULD COVER ONLY THE EDGE OF THE ROOT BALL, SINCE THICK LAYERS OVER THE ROOT BALL CAN KEEP THE TRUNK TOO MOIST OR TOO DRY AND CAN CAUSE OTHER PROBLEMS. LOCATE THE IRRIGATION DEVICE SO IT DELIVERS WATER DIRECTLY TO THE ROOT BALL. HOW AMENDMENTS ANY KIND ARE NECESSARY IN THE BACKFILL SOIL, BECAUSE EXTENSIVE RESEARCH CLEARLY SHOWS THAT THEY TYPICALLY DO NOT NOT INCREASE THE SURVIVAL, NOR GROWTH AFTER PLANTING, NO SOIL BERM IS NEEDED IF TREES WILL BE IRRIGATED WITH A LOW-VOIME DEVICE PLACE THE BERM AT THE EDGE OF THE ROOT BALL IF THE ROOT BALL IS FINER TEXTURE THAN THE BACKFILL SOIL. THIS WILL HELP INSURE THAT WATER

MINIMUM 2" x 4" x 2' x 0" P.T. PINE -WOOD STAKE OR #5 RE-BAR 2'-0' LONG. POSITION TO SECURELY STABILIZE TREE

TRIANGULAR

SPACING

ACING OF PLANTS

STANDARD CONSTRUCTION DETAIL TYPICAL CONTAINER SPACING NTS.

SQUARE SPACING

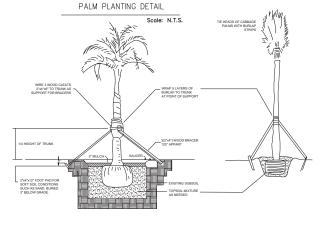
TYPICAL CURB AND GUTTER

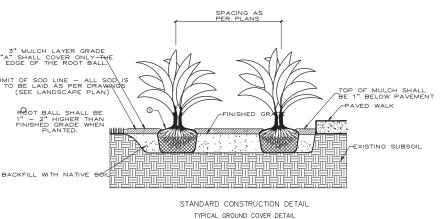
STANDARD CONSTRUCTION DETAIL PLANT LIKE THIS DETAIL NTS.

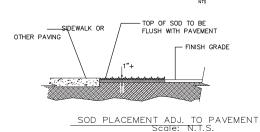
2"x 4"x 2'-0" P.T. PINI

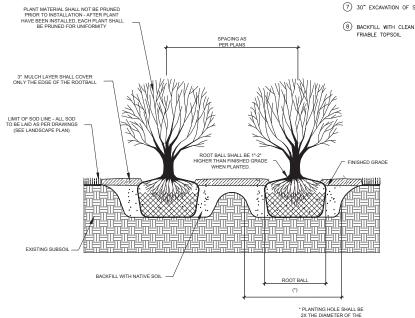
PLAN

DETAIL









STANDARD CONSTRUCTION DETAIL TYPICAL SHRUB PLANTING DETAIL

NTS

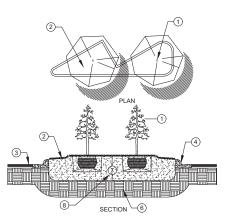
PLANTING NOTES

- ALL MATERIALS ARE TO BE FLORIDA #1 OR BETTER, INSTALLED ACCORDING TO THE HIGHEST NURSERY STANDARDS.

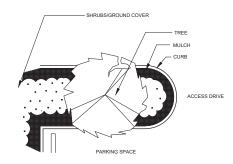
 - BAHIA SOLID SOD SHALL BE USED ON ALL AREAS SO MARKED AS IN SWALES, RIGHT-OF-WAYS, DISTURBED AREAS, OR OTHER AREAS SUBJECT TO EROSION.
- GRASS SEEDED AREAS SHALL MEET FLORIDA STATE DEPARTMENT OF TRANSPORTATION STANDARDS.

- 11. OWNER TO BE RESPONSIBLE FOR IRRIGATION OF ALL PLANT MATERIALS
- ALL BUILDING MATERIALS AND LABOR ARE TO CONFORM TO THE SOUTHERN BUILDING CODE AND ALSO TO ALL LOCAL CODES THAT HAVE JURISDICTION.
- ALL PERMIT AND VARIANCE APPLICATION ARE TO BE MADE BY THE CONTRACTOR.

- 17. REMOVE ALL TAGS FROM INSTALLED PLANT MATERIALS
- 18. PLACE TERRA SORB UNDER THE ROOT BALL OF ALL PLANT MATERIALS.
- ALL TREES ARE TO BE GUYED WITHING "DUCKBILL" ANCHORING SYSTEMS OR AN APPROVED EQUAL.
- ALL TREE CALIPERS ARE TO BE MEASURED ACCORDING TO LOCAL CODES AND ORDINANCES.
- TREE SEE TREE
 PLANTING DETAIL
- 2 SOD SEE PLANT LIST FOR TYPE AND VARIETY
- 3 ASPHALT PAVING
- 4 CONCRETE CURB
- 5 BERM ISLAND 6" ABOVE TOP OF CURB
- 6 COMPACTED SUBGRADE
- 7 30" EXCAVATION OF SUBGRADE



TYPICAL PLANTER ISLAND NOT TO SCALE



TYPICAL ISLAND LANDSCAPING NOT TO SCALE

DETAILS/NOTES PHOENIX CROSSINGS BUNNELL, FL PLANTING

LANDSCAPE

ENGINEERIN INC.



SHEET LA-5