APRIL 20, 2021

SUBJECT: **INITIAL COMMENTS LETTER**
PROJECT NAME: ON TOP OF THE WORLD ROAN HILLS AMENITY AREA
PROJECT #2021030089
APPLICATION: MAJOR SITE PLAN #26508

Met with staff 4/29/21. DRC 5/3/21.

1. DEPARTMENT: ENGDRN - STORMWATER REVIEW
   REVIEW ITEM: Copy of District Permit (County Interest)
   STATUS OF REVIEW: ENGINEER ACKNOWLEDGED INFO COMMENT
   REMARKS: Please provide a copy of the District permit modification prior to construction.

2. DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
   REVIEW ITEM: 2.12.4.K - List of approved waivers, their conditions, and the date of approval
   STATUS OF REVIEW: ENGINEER ACKNOWLEDGED INFO COMMENT
   REMARKS: 4/20/21 - Add waivers if requested in the future

3. DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
   REVIEW ITEM: Additional Development Review Comments
   STATUS OF REVIEW: ENGINEER ACKNOWLEDGED INFO COMMENT
   REMARKS: After approval, plans will be electronically stamped by the County. The applicant will receive an email indicating that approved plans are available for download and are located in the ePlans project Approved folder. For Development Review submittals, with the exception of Final Plats and Minor Site Plans, applicants are required to print, obtain required signatures, and sign and seal two 24”x 36” sets of the electronically stamped approved plan and deliver them to the Office of County Engineer, Development Review Section, located at 412 SE 25th Avenue Ocala, FL 34471. Upon receipt, a development order will be issued. Until such time as that development order is issued, the project does not have final approval and construction, if applicable, shall not commence. For plans requiring As-Builts, As-Builts and associated documentation shall be submitted on paper in accordance with current county requirements.

4. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
   REVIEW ITEM: Additional Landscape comments
   STATUS OF REVIEW: ENGINEER ACKNOWLEDGED INFO COMMENT
   REMARKS: Tree Mitigation, Landscape, Irrigation and Outdoor Lighting plans not included with this submittal

5. DEPARTMENT: ZONE - ZONING DEPARTMENT
   REVIEW ITEM: 2.12.24 - Landscape requirements/6.8.6 - Buffering
   STATUS OF REVIEW: ENGINEER ACKNOWLEDGED INFO COMMENT
   REMARKS: Current Landscape Plans for Calesa Township Roan Hills Phase 1, AR 26163, under review. Defer to LSCAPE for this specific project.

6. DEPARTMENT: ENGDRN - STORMWATER REVIEW
   REVIEW ITEM: 2.12.4.L(9)(b) - Data Block (Impervious Area)
   STATUS OF REVIEW: ENGINEER WILL COMPLY
   REMARKS: It appears the proposed impervious coverage is 0.75 acres based on the Amenity Center calculations.

7. DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.2.B(4) - Hydrologic Analysis
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: The stage-area of the ponds is different than the original permit. Is the as-built stage-area being used?

8. DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.2.B(5) - Hydraulic Analysis
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: 1) The HGL did not populate in the drainage calculations. Please update pipe calculations. 2) It appears YD-11 to YD-14 are tied into existing inlet 5-33 which drain to pond ET-4. Please demonstrate the proposed flow to 5-33 is consistent with the original plan.

9. DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.8.B(7) - Minimum Pipe Size
STATUS OF REVIEW: WAIVER REQUESTED. STAFF SUPPORTS SUBJECT TO PROVIDING SUPPORTING CALCULATIONS
REMARKS: Minimum pipe size 18". Support of the waiver is subject to the supporting hydraulic calculations.

LDC 6.13.8.B(7) - Minimum Stormwater Pipe Size
CODE states stormwater conveyance pipes and cross culverts shall be a minimum of 18 inches diameter or equivalent. Driveway culverts shall be a minimum of 15 inches diameter or equivalent for residential use and a minimum of 18 inches diameter or equivalent for commercial use. Roof drains, prior to connection to the overall stormwater system, are exempt from minimum diameter requirements.
APPLICANT requests waiver for use of 12 inch and 15 inch RCP pipe. Stormwater conveyance calculations will be provided with the next submittal.

10. DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.2.A(5) - Existing/Proposed Stormwater Structures
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: Please provide a detail or a reference to a detail for the proposed yard drains.

11. DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: Please provide a final signed and sealed hard copy signature page with references to the stormwater analysis or final hard copy of the full stormwater analysis.
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: Please provide a final signed and sealed hard copy signature page with references to the stormwater analysis or final hard copy of the full stormwater analysis.

12. DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
REVIEW ITEM: 2.21.2.B - Major Site Plan fee of $250.00 + ($5.00 x total site acreage) made payable to Marion County BCC
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: 4/20/21 - Due with resubmittal

13. DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
REVIEW ITEM: 2.12.3 - Title block on all sheets denoting type of application; project name, location, county, and state; and date of original and all revisions
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: 4/20/21 - Add type of application to title block on all sheets

14. DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
REVIEW ITEM: Legal Documents
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: 4/20/21 - Legal description on cover sheet:
1. Insert book & page of recorded plat
2. "Hills" is misspelled

15. DEPARTMENT: FRMSH - FIRE MARSHAL REVIEW
REVIEW ITEM: NFPA 1 Chapter 18.2.3 - Fire Dept Access Roads
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: Please ensure the site plan meets the minimum requirements per NFPA 1 Chapter 18 for fire department access. The fire department access road will need to be within 50 feet of the access door. Per Florida Fire Prevention Code Chapter 18.2.3.2.2 Fire department access roads shall be provided such that any portion of an exterior wall of the building is located not more than 150 feet from the fire department access road.

16. DEPARTMENT: LUCURR - LAND USE CURRENT REVIEW
REVIEW ITEM: 2.12.4.L(2,3, & 5)/6.3.1C(15)(g) - DRI/FQD Compliance Note?
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: Revise the plan to add the following advisory note to the cover page:
"DEVELOPMENT OF THE PROPERTY AS SHOWN ON THIS SITE PLAN IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CIRCLE SQUARE WOODS SUBDIVISION VESTED DRI PURSUANT TO CHAPTER 380.06, FS, AND ITS CORRESPONDING VESTED RIGHTS DETERMINATIONS, AS MAY BE AMENDED FROM TIME TO TIME, INCLUDING PROVISIONS REGARDING THE CONCURRENCY OF PUBLIC FACILITIES AND ELIGIBLE LAND USES."

17. DEPARTMENT: ENGSUR - SURVEY REVIEW
REVIEW ITEM: 6.4.7.A(1) - Show a minimum of two bench marks per site
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: No bench marks shown on site.

18. DEPARTMENT: ENGSUR - SURVEY REVIEW
REVIEW ITEM: 6.4.7.A(2 & 3) - One copy of the vertical control field notes shall be submitted to the Office of the County Engineer for review
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: Please provide.

19. DEPARTMENT: ENGSUR - SURVEY REVIEW
REVIEW ITEM: 6.4.7.B(1) - Show a minimum of two intervisible horizontal control points per site
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: No control points shown on site.

20. DEPARTMENT: ENGSUR - SURVEY REVIEW
REVIEW ITEM: 6.4.7.B(4) - One copy of the horizontal control notes along with reduction reports shall be submitted to the Office of the County Engineer for review
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: Please provide.

21. DEPARTMENT: ENGSUR - SURVEY REVIEW
REVIEW ITEM: 2.12.11 - Provide an aerial map of the site with a layout of the development
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: Please provide.

22. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 2.12.18 - All trees 10" DBH and larger
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

23. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.7.3 - Tree protection
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

24. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.7.4 - Shade tree requirements
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

25. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.7.6 - Tree removal submittal requirements
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

26. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.7.8 - Protected tree replacement requirements
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

27. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.7.9 - Replacement trees; general requirements
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

28. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.2 - Landscape plan requirements (details, schedule, calculations, notes)
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

29. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.3 - Landscape design standards
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

30. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.5 - Landscape area requirements for residential and mixed use developments
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

31. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.6 - Buffers
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

32. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.7 - Parking areas and vehicular use areas
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

33. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.8 - Building landscaping
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

34. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.9 - Service and equipment areas
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

35. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.13.3.D(4) - Landscaping of private stormwater management facilities
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

36. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.10 - General planting requirements (specifications)
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

37. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.11 - Landscape installation
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

38. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.8.12 - Landscape completion inspection requirements
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

39. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.9.2 - Irrigation plan requirements (details, legend, notes)
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

40. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.9.3 - Irrigation design standards
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

41. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.9.5 - Irrigation system installation
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

42. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.9.6 - Completion inspection requirements
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

43. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.19.3 - Outdoor lighting plan requirements
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

44. DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.19.4 - Exterior lighting design standards
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS:

45. DEPARTMENT: ZONE - ZONING DEPARTMENT
REVIEW ITEM: 2.12.32/6.5.4 - Modified environmental assessment or exemption if information is available to the county to indicate no habitat or existence of endangered species or vegetation
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: Assessment by BDA, March 23, 2018, shows location of gopher tortoise burrows in Exhibit 6. Some of these burrows correspond with project area and construction access route. What is the status for these burrows? Was an FWC permit obtained? If so, please provide a copy to Zoning.

46. DEPARTMENT: ZONE - ZONING DEPARTMENT
REVIEW ITEM: 4.4.4 -Sign (provisions for advertising signage), if it is a multi occupancy complex like shopping centers they must submit a master sign plan.
STATUS OF REVIEW: ENGINEER WILL COMPLY
REMARKS: Are any signs directing traffic to amenity center proposed? Is this center for residents of Roan Hills only or will general public be allowed?

Marion County
Board of County Commissioners
Office of the County Engineer
412 SE 25th Ave.
Ocala, FL 34471
Phone: 352-671-8686
Fax: 352-671-8687

DEVELOPMENT REVIEW COMMITTEE WAIVER REQUEST FORM

Date: 4/29/2021 (mm/dd/yyyy) Parcel Number(s): 35300-000-30 Permit Number: AR #26508

A. PROJECT INFORMATION: Fill in below as applicable:

Project Name: Roan Hills Amenity Area Commercial ☑ or Residential ☐
Subdivision Name (if applicable): _____
Unit_____ Block_____ Lot_____

B. PROPERTY OWNER'S AUTHORIZATION: Attach a letter from the owner(s) or the owner(s) may sign below authorizing the applicant to act on the owner's behalf for this waiver request:

Property Owner's Name (print): Colen Built Development LLC
Property Owner's Signature: _____
Property Owner's Mailing Address: 8445 SW 80th Street
City: Ocala State: FL Zip Code: 34481 Phone # 352-854-0805

C. APPLICANT INFORMATION: The applicant will be the point of contact during this waiver process and will receive correspondence.

Firm Name (if applicable): Tillman & Associates Engineering, LLC Contact Name: Jeffrey McPherson
Mailing Address: 1720 SE 16th Ave, Bldg 100 City: Ocala State: FL Zip Code: 34471
Phone # 352-387-4540 Alternate Phone # _____
Email address: permits@tillmaneng.com

D. WAIVER INFORMATION:
Section & Title of Code: 6.13.8.B(7) - Minimum Pipe Size
Reason/Justification for Waiver Request:
Requesting a waiver for the use of 12" & 15" RCP pipe. Stormwater conveyance calculations will be provided with the next submittal

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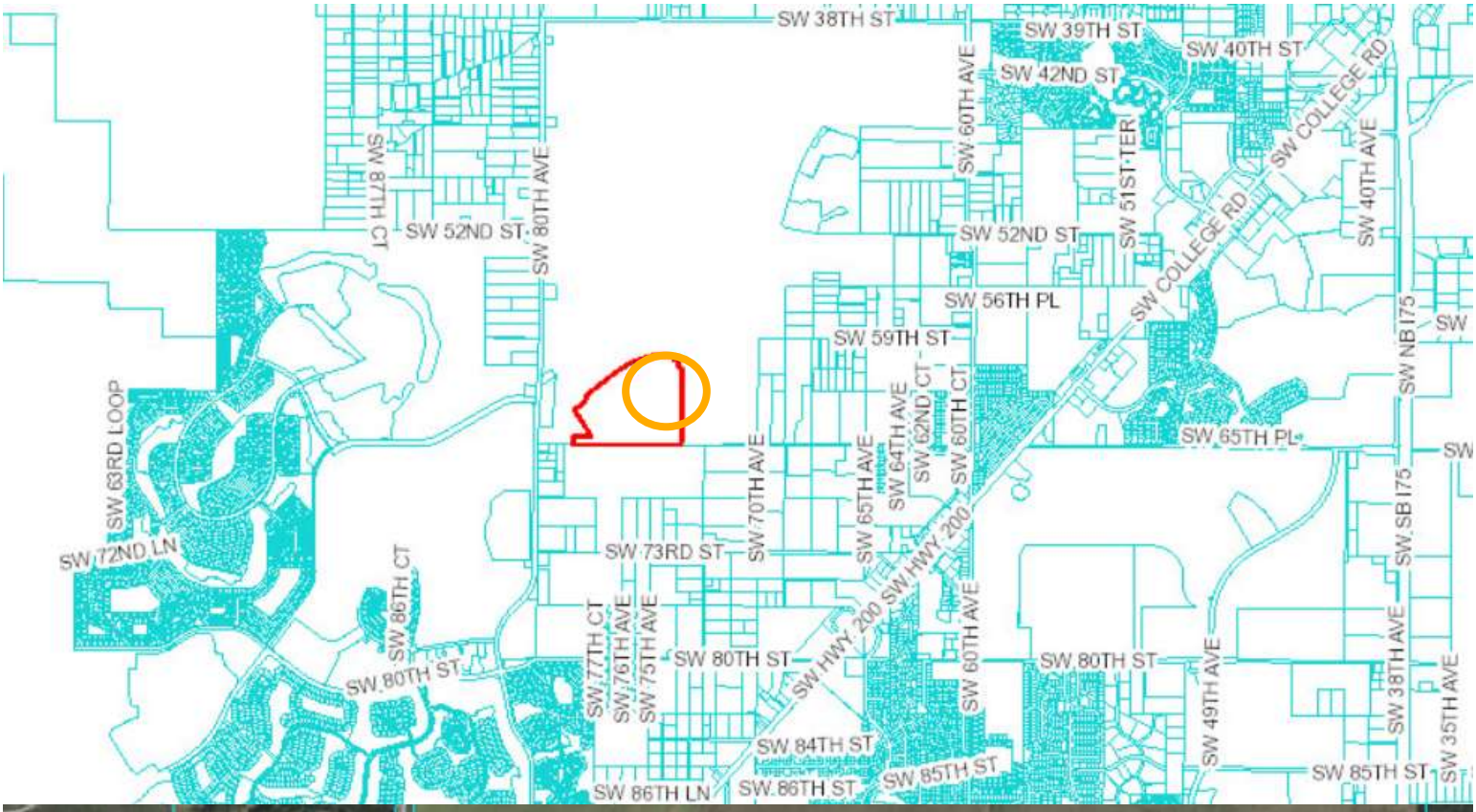
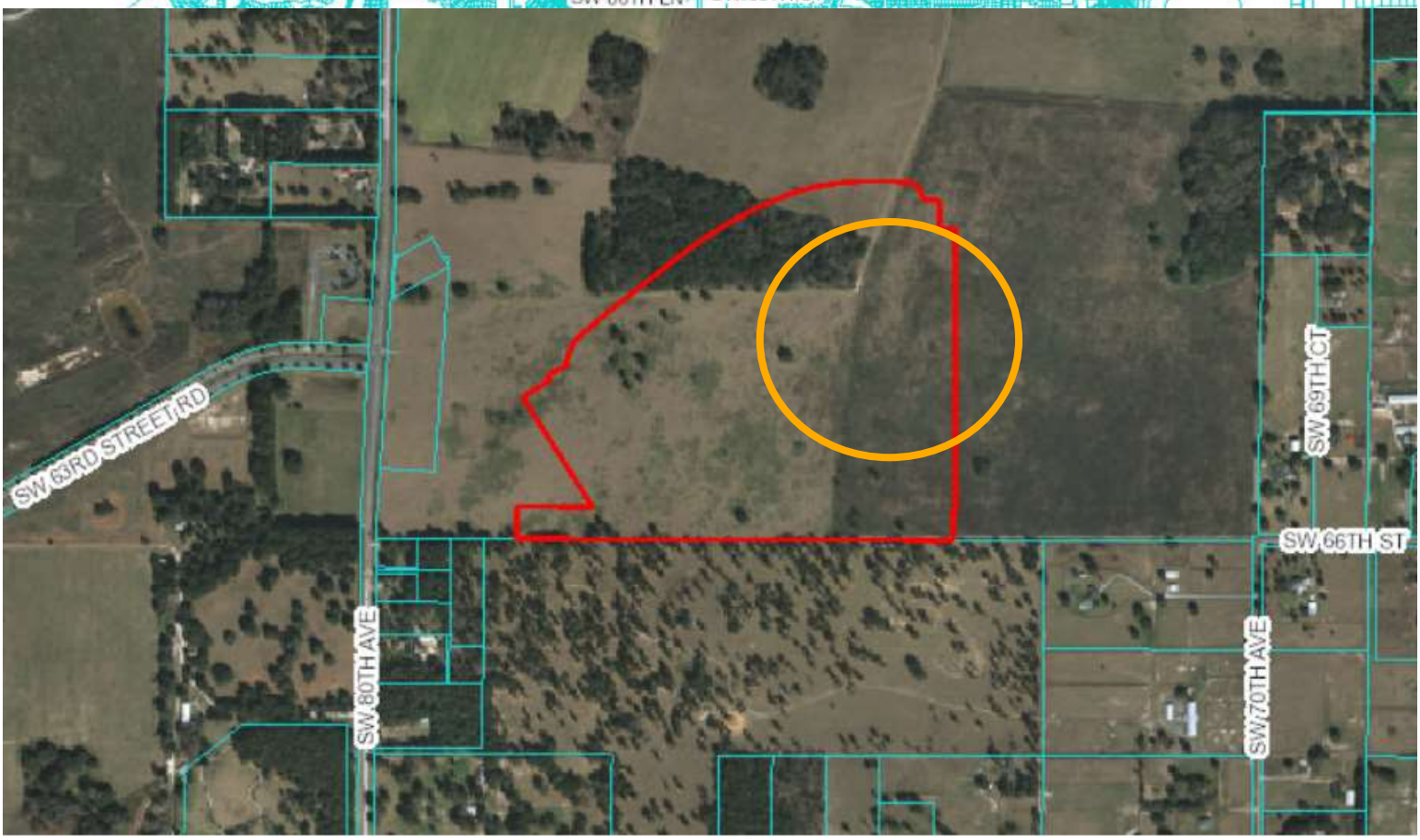
DEVELOPMENT REVIEW USE:
Received By:_____ Date Processed:_____ Project #_____ AR #_____

ZONING USE: Parcel of record: Yes ☐ No ☐ Eligible to apply for Family Division: Yes ☐ No ☐
Zoned:_____ ESOZ:_____ P.O.M._____ Must Vacate Plat: Yes ☐ No ☐
Land Use:_____ Date:_____ Verified by:_____

Revised 5/2017

ON TOP OF THE WORLD ROAN HILLS AMENITY AREA - MAJOR SITE PLAN
5211 SW 80TH AVE OCALA
Project #2021030089 #26508 Parcel #35300-000-30
TILLMAN & ASSOCIATES ENGINEERING





PERMITS:

1. MARION COUNTY - MAJOR SITE PLAN - #_____ (APPROVED _____)
2. S.W.F.W.M.D. - E.R.P. -_____/_____ (APPROVED _____)
3. FDEP - POTABLE WATER - #_____-DSGP (APPROVED _____)
4. FDEP - SANITARY SEWER - #_____-DWC/CG (APPROVED ____)
5. FDEP - NPDES (By Others)

Know what's below. Call before you dig.

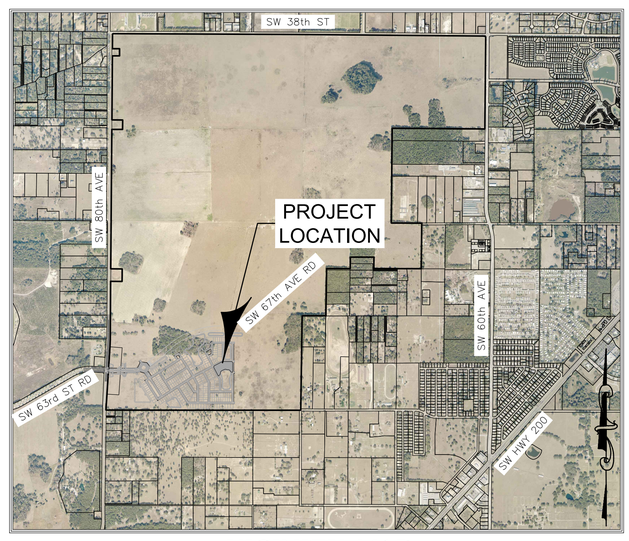
Call 48 Hours before you dig. It's the Law! 1-800-432-4770 Sunshine State One Call of Florida, Inc.

APPROVED WAIVERS

MAJOR SITE PLAN for COLEN BUILT DEVELOPMENT, L.L.C. ROAN HILLS AMENITY AREA

SECTION 6 , TOWNSHIP 16, SOUTH, RANGE 21 EAST
MARION COUNTY, FLORIDA

THIS SITE CONTAINS:
TOTAL PROJECT ACRES = 2.9
MILES OF ROADWAY = 0
PROPOSED IMPERVIOUS AREA = 1.0 AC. (43,391sf)
MARION COUNTY PARCEL # 35300-000-30
LANDUSE: CSW VDRI - HIGH RESIDENTIAL
ZONING: PUD



VICINITY MAP
SCALE: 1" =2000'

Marion County Approval Stamp

INDEX OF SHEETS

01.01	COVER
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03.01	AERIAL PHOTOGRAPH
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07.01	POTABLE WATER DISTRIBUTION DETAILS
08.01	SANITARY SEWER DETAILS
09.01	ROADWAY AND PAVEMENT DETAILS
10.01	DRAINAGE DETAILS
11.01	EROSION CONTROL PLAN & DETAILS
~~P1~~	~~PHOTOMETRIC PLAN~~
1 - 1	PLAT OF TOPOGRAPHIC SURVEY (PREPARED BY JCH CONSULTING GROUP, INC.)

NOTES:

1. ALL CONSTRUCTION COVERED BY THESE PLANS SHALL COMPLY WITH THE MATERIAL REQUIREMENTS AND QUALITY CONTROL STANDARDS CONTAINED IN THE MARION COUNTY LAND DEVELOPMENT CODE AND THE BLCCDD UTILITY MANUAL AS APPLICABLE.
2. ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP (FIRM), COMMUNITY MAP NO. 12083C0701E, MARION COUNTY, FLORIDA, DATE APRIL 19, 2017. THE PROPERTY DESCRIBED HEREON LIES IN FLOODS ZONE "X" AN AREA OF MINIMAL FLOOD HAZARD.
3. THIS PROJECT IS LOCATED IN THE SECONDARY SPRINGS PROTECTION ZONE.
4. VERTICAL DATUM IS BASED ON FOUND ⅝" IRON ROD WITH A PLASTIC CAP STAMPED "WOOLPERT TRAVERSE" APPROXIMATELY 0.35 MILES NORTH STATE ROAD 200 ON THE WEST SIDE OF S.W. 80TH AVENUE. BENCHMARK IS LOCATED IN THE NORTHWEST CORNER OF THE INTERSECTION OF S.W. 80TH AVENUE AND THE CONSTRUCTION ENTRANCE FOR "ON TOP OF THE WORLD, COMMUNITIES, INC.", ELEVATION = 69.272 (DATUM NGVD 1929). TO CONVERT TO NAVD 1988, SUBTRACT 0.96 FEET.
5. NO CHANGE TO THE WORK AS SHOWN ON THE APPROVED PLANS SHALL BE MADE WITHOUT NOTIFICATION TO AND APPROVAL BY THE OFFICE OF THE COUNTY ENGINEER.
6. SIGHT DISTANCE AT DRIVEWAYS COMPLIES WITH FDOT REQUIREMENTS.

HORIZONTAL CONTROL:

THE FLORIDA STATE PLANE COORDINATES SHOWN HEREON ARE NORTH AMERICAN DATUM OF 1983 (1990 ADJUSTMENT), FLORIDA WEST ZONE AS DERIVED FROM GPS STATIC SURVEY AND TRADITIONAL TRAVERSE METHODS AND ESTABLISHED FROM MARION COUNTY, FLORIDA CONTROL MONUMENTS "AR1852" AND "V086", PURSUANT TO SECTION 177.151, FLORIDA STATUTES.

THE NORTHWEST CORNER OF SECTION 12, TOWNSHIP 16 SOUTH, RANGE 20 EAST, MARION COUNTY, FLORIDA – FOUND 4" X 4" CONCRETE MONUMENT WITH NAIL & DISK STAMPED 1 2 11 12.
NORTHING: 1740427.4009 FEET
EASTING: 570381.5670 FEET
LATITUDE: 29°07'16.02210" N
LONGITUDE: 82°16'07.23060" W
CONVERGENCE: –00°07'50.7"
SCALE: 0.99994961

FOUND STAINLESS STEEL ROD STAMPED V086 1990
NORTHING: 1745775.8082 FEET
EASTING: 543817.8667 FEET
LATITUDE: 29°08'08.27974" N
LONGITUDE: 82°21'06.91361" W
CONVERGENCE: –00°10'16.8"
SCALE: 0.99995564

LEGAL DESCRIPTION:

TRACT "F", OF CALESA TOWNSHIP ROAN HILSS PHASE 1 AS RECORDED IN PLAT BOOK ____, PAGES___ OF THE PUBLIC RECORS OF MARIO COUNTY, FLORIDA.

Utility Companies

Water	BLCCDD	Bryan Schmalz, (352) 414-5454 EXT. 4105
Sewer	BLCCDD	Bryan Schmalz, (352) 414-5454 EXT. 4105
Electric	SECO	Jerry Bolduc, (352) 569-9633
Cable/Phone/Internet	Digital Communication Media	Jorge Santiago, (352) 873-4817
Natural Gas	TECO	Bruce Stout, (352) 401-3417

OWNER'S SIGNATURE

I CERTIFY THAT I, MY SUCCESSORS AND ASSIGNS SHALL PERPETUALLY MAINTAIN THE IMPROVEMENTS AS SHOWN WITHIN THESE PLANS.

KENNETH D. COLEN, PRESIDENT
COLEN BUILT DEVELOPMENT, L.L.C.

ENGINEER CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS AND CALCULATIONS WERE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE MARION COUNTY LAND DEVELOPMENT CODE (LDC), EXCEPT AS WAIVED.

JEFFREY McPHERSON, P.E.
Registered Engineer No. 69905
STATE OF FLORIDA

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE SURVEY REPRESENTED HEREON IS IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE LDC AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS.

CHRISTOPHER J. HOWSON, P.S.M.
JCH CONSULTING GROUP, INC.
Registered Land Surveyor No. 6553
STATE OF FLORIDA

OWNER/DEVELOPER:
COLEN BUILT DEVELOPMENT, L.L.C.
CONTACT: KENNETH D. COLEN, PRESIDENT
8445 SW 80th STREET
OCALA, FLORIDA 34481-9607
PHONE (352) 854-0805

CIVIL ENGINEER:
TILLMAN AND ASSOCIATES ENGINEERING, L.L.C.
JEFFREY McPHERSON, P.E.
1720 SE 16th AVE. BLDG. 100
OCALA, FLORIDA 34471
PHONE (352) 387-4540

SURVEYOR:
JCH CONSULTING GROUP, INC.
CHRISTOPHER J. HOWSON, P.S.M., CFM
426 SW 15TH STREET
OCALA, FLORIDA 34471
PHONE (352) 405-1482/FAX(888) 272-8335

GEOTECHNICAL CONSULTANT:
GEO-TECH, INC.
CONTACT: JONNY HEATH
1016 S.E. 3RD AVENUE
OCALA, FLORIDA 34471
PHONE (352) 694-7711

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

Tillman & Associates ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE	

ROAN HILLS AMENITY AREA
COLEN BUILT DEVELOPMENT, L.L.C.
MARION COUNTY FLORIDA

COVER

DATE 03-29-21
DRAWN BY HB
CHKD. BY JMM
JOB NO. 20-6103

SHT. 01.01

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF SIZE AND LOCATION OF ALL EXISTING UTILITIES AND RELATED CONSTRUCTION PRIOR TO COMMENCEMENT OR WORK.CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA, INC. AT 1-800-432-4770, IN ACCORDANCE WITH CHAPTER 556, FLORIDA STATUTES.
2. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST STANDARDS OF MARION COUNTY AND FDOT.
3. PAVEMENT STRIPING TO BE IN ACCORDANCE WITH MARION COUNTY SPECIFICATIONS AND WITH THE FLORIDA D.O.T. ROADWAY & TRAFFIC STANDARDS, INDEX 17346.
4. ALL TRAFFIC CONTROL SIGNS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
5. WHERE MUCK OR OTHER ORGANIC MATERIAL IS FOUND, IT SHALL BE REMOVED AND REPLACED BY GOOD QUALITY BACKFILL MATERIAL OBTAINED FROM THE GRADING OPERATIONS OR OTHER SOURCE APPROVED BY THE ENGINEER. THE ORGANIC MATERIAL SHALL BE THEN USED AS TOP DRESSING WHEN MIXED WITH CLEAN SANDY SOIL.
6. ALL FINISHED GRADES AND ELEVATIONS ARE AS DENOTED BY THE APPLICABLE LEGEND.
7. AS PART OF THE CLEARING AND GRUBBING OPERATION, THE CONTRACTOR IS TO REMOVE EXISTING FACILITIES AND / OR FENCING FROM THE SITE AS SHOWN ON PLANS.
8. THE CONTRACTOR SHALL NOTIFY BLCCDD ENGINEERING DIVISION AND TILLMAN AND ASSOCIATES ENGINEERING, LLC AT LEAST ONE WEEK BEFORE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR SHALL OBTAIN A MARION COUNTY R/W PERMIT PRIOR TO COMMENCING WORK WITHIN MARION COUNTY R/W's.
9. A MINIMUM SEPARATION OF 1.5 FEET BETWEEN THE LIMEROCK BASE AND THE HIGHEST GROUNDWATER ELEVATION SHALL BE MAINTAINED WITHIN THE RIGHT-OF-WAY. CONTRACTOR TO NOTIFY ENGINEER IF 1.5 FEET OF SEPARATION IS NOT ACHIEVED.
10. A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
11. PER SECTION 82-371, CODE OF ORDINANCES: FOR ANY WORK WITHIN PUBLIC RIGHT OF WAYS, A RIGHT OF WAY UTILIZATION PERMIT MUST BE OBTAINED FROM THE ENGINEERING DEPARTMENT A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
12. THE CONTRACTOR SHALL SUBMIT THREE (3) SETS OF STANDARD SHOP DRAWINGS AND MANUFACTURER'S CATALOGS WITH THE MODEL NUMBER OR TYPE OF THE ITEM ENCIRCLED OR OTHERWISE DESIGNATED. THE SUBMITTALS SHALL BEAR THE APPROVAL OF THE UNDERGROUND UTILITY CONTRACTOR. ALL UTILITY SHOP DRAWINGS AND MANUFACTURER'S CATALOGS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND BLCCDD PRIOR TO CONSTRUCTION.
13. THE CONTRACTOR SHALL SUBMIT THREE (3) SETS OF COMPLETE DETAILED SHOP DRAWINGS FOR ALL SANITARY MANHOLES, WET WELLS, OTHER CASTINGS, AND PUMPS. THE SUBMITTALS SHALL BEAR THE APPROVAL OF THE UNDERGROUND UTILITY CONTRACTOR ON EACH SHEET. A COMPLETE SET OF THE LIFT STATION ELECTRICAL SHOP DRAWINGS IS ALSO REQUIRED IF APPLICABLE. ALL UTILITY SHOP DRAWINGS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND BLCCDD PRIOR TO CONSTRUCTION.
14. CONTRACTOR TO DIG OUT ALL LIMEROCK IN ISLANDS.

PAVING AND DRAINAGE NOTES

1. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCE BETWEEN CENTERLINES OF DRAINAGE STRUCTURES.
2. ALL PAVEMENT RETURN RADII SHALL BE 28' AND MEASURED FROM THE INTERFACE OF THE CONCRETE CURB AND PAVEMENT SURFACE UNLESS OTHERWISE NOTED.
3. DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SECURED WITH CHAIN AND EYEBOLT.
4. FIVE (5) FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS AND MITERED END SECTIONS.
5. TOP ELEVATIONS OF MANHOLES IN GRASSED AREAS SHALL BE LOCATED AT FINISHED GRADE ELEVATION.
6. AS AN ALTERNATIVE, CONTRACTOR MAY USE ALTERNATIVE PIPE MATERIALS IN LIEU OF RCP. HOWEVER, CONTRACTOR MUST RECEIVE APPROVAL OF ALTERNATIVE PIPE MATERIALS IN WRITING BY MARION COUNTY AND TILLMAN & ASSOCIATES ENGINEERING, LLC PRIOR TO CONSTRUCTION.
7. TOP SOIL WHICH HAS BEEN STRIPPED AND STOCK PILED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED ON ALL REGRADED SURFACES SO AS TO PROVIDE AT LEAST FOUR INCHES OF EVEN COVER TO ALL DISTURBED AREAS OF THE DEVELOPMENT AND SHALL BE STABILIZED BY SEEDING OR PLANTING
8. ALL DISTURBED AREAS WITH SLOPES UP TO 6:1 SHALL BE SEEDED AND MULCHED. SLOPES STEEPER THAN 6:1 SHALL BE SODDED AND SLOPES 3:1 OR STEEPER SHALL HAVE THE SOD PEGGED.
9. SEE TABLE 2.0 FOR REQUIRED STORM PIPE COVER BENEATH AN UNPAVED SECTION.
10. SEE TABLE 3.0 FOR REQUIRED STORM PIPE COVER BENEATH RIGID PAVEMENT.
11. SEE TABLE 4.0 FOR REQUIRED STORM PIPE COVER BENEATH FLEXIBLE PAVEMENT
12. THE TABULATED VALUES ARE RECOMMENDED MINIMUM DIMENSIONS TO WITHSTAND ANTICIPATED HIGHWAY TRAFFIC LOADS. ADDITIONAL COVER MAY BE REQUIRED TO SUPPORT CONSTRUCTION EQUIPMENT LOADS OR HIGHWAY TRAFFIC LOADS BEFORE PAVEMENT IS COMPLETED. SOME SIZE THICKNESS COMBINATIONS MAY REQUIRE MINIMUM COVER GREATER THAN THOSE LISTED ABOVE. SEE FDOT INDEX 205, SHEETS 1-6.
13. ALL RCP STORM WATER PIPE SHALL MEET THE COVER & CLASS CRITERIA AS OUTLINED IN FDOT INDEX 205.
14. ALL STORM PIPE JOINTS SHALL BE WRAPPED AS SPECIFIED IN FDOT INDEX 280.
15. THE LAST FOOT OF STORM WATER POND SHALL NOT BE EXCAVATED UNTIL ALL DISTURBED AREAS ARE STABILIZED.
16. ANY FILL MATERIAL MUST BE APPROVED BY ENGINEER IN WRITING PRIOR TO PLACEMENT.
17. SIGNIFICANT CARE MUST BE TAKEN WHEN GRADING RETENTION PONDS TO ENSURE THAT POND BOTTOMS DO NOT BECOME COMPACTED DURING CONSTRUCTION OR SEALED BY CONSTRUCTION SEDIMENT. IF SEDIMENTATION OR COMPACTION OF A POND BOTTOM OCCURS, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE THE DESIGN HYDRAULIC CONDUCTIVITY.

SANITARY SEWER NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE ***MARION COUNTY*** MANUAL OF STANDARD SPECIFICATIONS FOR WASTEWATER CONSTRUCTION.
2. ALL SANITARY SEWER CONSTRUCTION AND MATERIALS TO BE OWNED AND MAINTAINED BY B.L.C.C.D.D.
3. ALL MANHOLES SHALL BE 4 FT. INSIDE DIAMETER.
4. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTERLINE.
5. ALL SANITARY SERVICE LATERALS SHALL BE 6 INCH DIAMETER, UNLESS SPECIFIED OTHERWISE ON PLANS.
6. INVERTS OF SANITARY SERVICE LATERALS AT THEIR CONNECTION TO SANITARY MANHOLES SHALL BE NO MORE THAN ONE (1) FOOT ABOVE THE MANHOLE INVERT.
7. MINIMUM AS BUILT 8" PVC SEWER LINE SLOPE WILL BE 0.40% MINIMUM SLOPE OR WILL BE RELAID BY CONTRACTOR TO MEET THE MINIMUM SLOPE REQUIREMENT AT NO ADDITIONAL COST.
8. MARK LATERALS WITH 4" X 4" X 8' PT POST PAINTED GREEN ON END.
9. PIPE MATERIAL IS ASTM D3034, SDR-26 UNLESS OTHERWISE NOTED.
10. A MINIMUM 1.04% SLOPE SHALL BE MAINTAINED ON THE SANITARY SEWER SERVICE LATERALS. AT NO TIME SHALL A SANITARY SEWER LATERAL HAVE A SLOPE OF 15% OR GREATER.
11. SANITARY SEWER GRAVITY MAINS ARE TO BE UPGRADED IN MATERIAL TO WATER MAIN STANDARDS AND HYDROSTATICALLY PRESSURE TESTED WITH WATER TO ENSURE JOINT TIGHTNESS IF EITHER OF THE HORIZONTAL OR VERTICAL MINIMUM REQUIRED CLEARANCE FROM A WATER MAIN CANNOT BE MAINTAINED OR IF THE SEWER MAIN IS ABOVE THE WATER MAIN. UPGRADE TO MATERIAL CANNOT BE MADE WITHOUT PRIOR APPROVAL FROM FDEP.
12. LEAKAGE TEST ARE SPECIFIED REQUIRING THAT
    A) THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.
    B) EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.
    C) AIR TESTS, AS MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES, AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.
13. DEFLECTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES, CHAPTER 33.85, FOR ALL GRAVITY SANITARY SEWER LINES. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM.TESTING REQUIREMENTS SPECIFY:
    1) NO PIPE SHALL EXCEED A DEFLECTION OF 5%.
    2) USING A RIGID BALL OR MANDREL FOR THE PIPE DEFLECTION TESTS WITH A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED.
    3) PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES.
14. TESTING OF THE SEWAGE COLLECTION SYSTEM IS AS FOLLOWS:
    A. ALL GRAVITY SEWER MAINS REQUIRE LOW PRESSURE AIR TESTING IN ACCORDANCE WITH THE LATEST UNI-BELL STANDARD FOR LOW PRESSURE AIR TESTS. AIR TEST, AS A MINIMUM, SHALL CONFORM TO THE TEST PROCEDURES DESCRIBED IN ASTM SPECIFICATIONS, ASTM F1417 FOR PLASTIC PIPE.
    B. ALL SEWER MAINS SHALL BE LAMPED BY IN THE PRESENCE OF A ***B.L.C.C.D.D.*** REPRESENTATIVE.
    C. ALL MANHOLES SHALL BE INSPECTED FOR INFILTRATION, ALIGNMENT, FLOW CHANNEL CONSTRUCTION AND COAL TAR EPOXY PAINT THROUGHOUT
    D. DEFLECTION TEST ARE REQUIRED FOR ALL FLEXIBLE PIPE EXCLUDING FORCE MAINS. TESTS SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
15. SANITARY SEWER SERVICES SHALL BE INSTALLED 10' FROM BACK OF CURB.
16. SANITARY SEWER GRAVITY MAINS ARE TO BE UPGRADED IN MATERIAL TO WATER MAIN STANDARDS AND HYDROSTATICALLY PRESSURE TESTED WITH WATER TO ENSURE JOINT TIGHTNESS IF EITHER OF THE HORIZONTAL OR VERTICAL MINIMUM REQUIRED CLEARANCE FROM A WATER MAIN CANNOT BE MAINTAINED OR IF THE SEWER MAIN IS ABOVE THE WATER MAIN.

WATER MAIN CONSTRUCTION NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH AWWA STANDARDS AS WELL AS THE MARION COUNTY MANUAL OF STANDARDS AND SPECIFICATIONS FOR WATER MAIN CONSTRUCTION.
2. ALL WATER MAIN CONSTRUCTION AND MATERIALS TO BE OWNED AND MAINTAINED BY B.L.C.C.D.D.
3. SEPARATION REQUIREMENTS (SEE TABLE 1.0-UTILITY SEPARATIONS)
   2.1. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS, SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, RECLAIMED WATER PIPELINES AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS:
   2.1.1. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 3' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
   2.1.2. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 3' AND PREFERABLY 10' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
   2.1.3. NEW OR RELOCATED UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 6' AND PREFERABLY 10' BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C.. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3' WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6" ABOVE THE TOP OF THE SEWER.
   2.2. VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS OR RECLAIMED WATER PIPELINES:
   2.2.1. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY GRAVITY OR VACUUM-TYPE SANITARY SEWER PIPE SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 6" AND PREFERABLY 12" ABOVE OR AT LEAST 12" BELOW THE OUTSIDE OF THE OTHER PIPE. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
   2.2.2. NEW OR RELOCATED UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12" ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
   2.2.3. AT THE UTILITY CROSSINGS DESCRIBED IN THE ABOVE PARAGRAPHS, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 3' FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST 6' FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C..
   2.3. NO WATER MAIN SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SANITARY SEWER MANHOLE OR A STORM SEWER MANHOLE.
   2.4. NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST 3' FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AT LEAST 3' BUT PREFERABLY 10' FROM ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST 10' FROM ANY EXISTING OR PROPOSED ON-SITE SEWAGE TREATMENT OR DISPOSAL SYSTEM AS DEFINED IN SECTION 381.0065(2), F.S. AND RULE 64E-6.002, F.A.C..
   2.5. EXCEPTIONS / MITIGATION:
        ADHERENCE TO THE ABOVE CONSTRAINTS AND SEPARATIONS IN THE ABOVE ITEMS SHALL BE COMPLIED WITHOUT EXCEPTION. IF FOR SOME REASON WHERE IT IS NOT TECHNICALLY FEASIBLE OR ECONOMICALLY SENSIBLE THAT THE ABOVE ITEMS CANNOT BE COMPLIED WITH, CONTRACTOR IS TO STOP WORK AND NOTIFY THE ENGINEER OF RECORD FOR THE APPROPRIATE SOLUTION. THE SOLUTION WILL BE SUBMITTED TO THE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR APPROVAL PRIOR TO WORK COMMENCEMENT.
4. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.
5. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.
6. ALL VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED EXTENSION WHERE NEEDED.
7. ALL PUBLIC WATER SYSTEMS COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT SHALL BE INSTALLED UNDER THIS PROJECT, AND THAT SHALL COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF INTERNATIONAL STANDARD 61 AND SHALL BE MARKED WITH NSF SEAL OF APPROVAL.
8. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(b)3, F.A.C., USING BLUE AS A PREDOMINANT COLOR. ALL DUCTILE IRON WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE BLUE IN COLOR IF PAINT IS USED INSTEAD OF TAPE. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION. FOR PIPE WITH AN INTERNAL DIAMETER OF 24" OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES A LONG EACH SIDE OF THE PIPE AS WELL AS A LONG THE TOP OF THE PIPE.
9. ALL NON-METALLIC WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 10 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC WATER MAINS SHALL BE A SOLID BLUE COLOR.
10. MARK DRINKING WATER SERVICES WITH 4" x 4" x 8' PT POST PAINTED BLUE ON END.
11. PIPE MATERIALS: ALL PIPES, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS.
    A. PVC WATER MAINS SHALL BE IN ACCORDANCE WITH AWWA C900-16, LATEST EDITION AND SHALL BE DR18. PVC PIPES LESS THAN 4 INCHES ARE NOT ALLOWED IN MARION COUNTY. IN OTHER JURISDICTIONS, THEY SHALL BE IN ACCORDANCE WITH ASTM D1785 (SCHEDULE 40, 80, 120) OR ASTM D2241 SDR 21. MINIMUM WORKING PRESSURE FOR ALL PVC SHALL BE 150 PSI. ALL PVC SHALL HAVE THE SAME O.D. AS DUCTILE IRON PIPE. PVC PIPE JOINTS SHALL BE IN ACCORDANCE WITH ASTM D3139 AND AWWA STANDARDS.
    B. DUCTILE IRON PIPE SHALL CONFORM TO ANSI A21.51/AWWA C151 AND SHALL BE A MINIMUM OF CLASS 50. DUCTILE IRON JOINTS SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.
    C. ALL SERVICES SHALL BE POLYETHYLENE TUBING, CLASS 160 AND SHALL BE IN ACCORDANCE WITH AWWA C901.
12. WATER MAIN CONNECTION SHALL BE MADE UNDER THE SUPERVISION OF THE BLCCDD. ALL VALVES SHALL BE OPERATED BY BLCCDD PERSONNEL ONLY. WATER MAINS ARE TO BE DISINFECTED PER ANSI/AWWA C651-92 AND MARION COUNTY LAND DEVELOPMENT CODE OF STANDARDS AND SPECIFICATIONS FOR WASTEWATER AND WATER MAIN CONSTRUCTION SECTION 51.6 WHICH INCLUDES A FULL FLUSH.
13. ALL VALVES SHALL BE LOCATED IN NON PAVED AREAS, UNLESS SPECIFIED ON PLANS.
14. FIRE HYDRANT LEADS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 6" AND SHALL INCLUDE AN AUXILIARY VALVE.
15. IF AGGRESSIVE SOIL CONDITIONS ARE FOUND DURING CONSTRUCTION, WATER MAINS SHALL BE PROTECTED THROUGH THE USE OF CORROSION RESISTANT MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC PROTECTION.
16. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE "LEAD FREE" AS DEFINED IN THE LATEST VERSION OF THE SAFE WATER DRINKING ACT.
17. WHERE NEW OR ALTERED DEAD-END WATER MAINS INCLUDED IN THIS PROJECT CANNOT BE AVOIDED, THEY SHALL BE PROVIDED WITH A FIRE FLUSHING HYDRANT OR BLOW-OFF FOR FLUSHING PURPOSES.
18. ALL FIRE HYDRANTS THAT WILL BE INSTALLED UNDER THIS PROJECT SHALL BE LOCATED AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN, PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., OR VACUUM - TYPE SANITARY SEWER; AT LEAST SIX FEET FROM ANY EXISTING OR PROPOSED GRAVITY - OR PRESSURE - TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
19. PROPOSED FIRE HYDRANTS CONNECTED TO THE POTABLE WATER MAIN, FOR THIS PROJECT, SHALL BE PAINTED PER NFPA AND AWWA STANDARDS. FIRE HYDRANTS CONNECTED TO THE DESIGNATED FIRE LINE SHALL BE PAINTED PER JURISDICTION.
20. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(b)3,F.A.C, USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPED APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.) [FAC 62-555.320(21)(b)3]
21. THE OPEN END OF THE AIR RELIEF PIPE FROM ALL AUTOMATIC AIR RELIEF VALVES WILL BE EXTENDED TO AT LEAST ONE FOOT ABOVE GRADE AND WILL BE PROVIDED WITH A SCREENED, DOWNWARD-FACING ELBOW. [FAC 62-555.320(21)(b)3, AND RSWW 8.4.2]
22. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE. BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE. [FAC 62-555.320(21)(b)3, AND RSWW 8.5.2]
23. ALL WATER MAIN TEES, BENDS, PLUGS, AND HYDRANTS WILL BE PROVIDED WITH THRUST BLOCKS OR RESTRAINED JOINTS TO PREVENT MOVEMENT. [FAC 62-555.320(21)(b)3, AND RSWW 8.5.4]
24. NEW OR ALTERED WATER MAIN INSTALLATION AND PRESSURE AND LEAKAGE TESTING, SHALL BE PROVIDED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS. PVC WATER MAIN INSTALLATION AND TESTING SHALL CONFORM TO AWWA C605. DUCTILE IRON WATER MAIN INSTALLATION AND TESTING SHALL CONFORM TO AWWA C600.
25. NEW OR ALTERED WATERMAINS, INCLUDING FIRE HYDRANT LEADS AND SERVICE LINES THAT WILL BE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER, SHALL BE DISINFECTED AND BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH AWWA C651.
26. THE MINIMUM COVER TO BE PROVIDED OVER POTABLE WATER LINES SHALL BE 3'. RSWW 8.7.3
27. WATER SERVICES SHALL BE INSTALLED 10' FROM BACK OF CURB.

FORCE MAIN NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH THE ***MARION COUNTY*** MANUAL OF STANDARDS AND SPECIFICATIONS FOR FORCE MAIN CONSTRUCTION.
2. ALL FORCE MAIN CONSTRUCTION AND MATERIALS TO BE OWNED AND MAINTAINED BY B.L.C.C.D.D.
3. PIPE LENGTHS SHOWN IN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.
4. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.
5. VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED EXTENSIONS WHERE NEEDED, UNLESS OTHERWISE NOTED.
6. ALL PVC FORCE MAIN SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS, MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION FOUNDATION (NSF).
7. ALL NON-METALLIC FORCE MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 10 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC FORCE MAINS SHALL BE EITHER A SOLID GREEN COLOR OR WHITE WITH GREEN LETTERING. ALL LETTERING SHALL APPEAR LEGIBLY ON PIPE AND SHALL RUN THE ENTIRE LENGTH OF THE PIPE. LETTERING SHALL READ AS IS ACCEPTABLE FOR THE INTENDED USE.
8. HYDROSTATIC & LEAKAGE TESTING OF THE FORCE MAIN SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600.
9. PIPE MATERIALS:
   PVC FORCE MAINS SHALL BE IN ACCORDANCE WITH AWWA C900-16, LATEST EDITION AND SHALL BE DR25. THE PVC SHALL HAVE A MINIMUM WORKING PRESSURE OF 100 PSI AND SHALL HAVE A DIMENSION RATIO (DR) OF 25 UNLESS OTHERWISE NOTED. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON PIPE. PVC JOINT SHALL BE IN ACCORDANCE WITH ASTM D3139. DUCTILE IRON JOINT - SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.
10. AIR RELEASE VALVES SHALL BE REQUIRED AT ALL HIGH POINTS IN THE PROPOSED FORCE MAIN, AS SHOWN ON PLANS. HIGH POINTS IN THE FORCE MAIN ARE DEFINED AS A CHANGE IN ELEVATION TWICE THE DIAMETER OF THE PIPE.
11. ALL FORCE MAINS TO BE CONSTRUCTED WITH A MINIMUM OF 3' FEET OF COVER.
12. TESTING OF THE SEWAGE COLLECTION SYSTEM IS AS FOLLOWS:
    A. HYDRO-STATIC TESTS CONSISTING OF A HYDROSTATIC PRESSURE TEST AND HYDROSTATIC LEAKAGE TEST SHALL BE CONDUCTED ON ALL NEWLY INSTALLED SEWER FORCE MAIN SYSTEM PRESSURE PIPES AND APPURTENANCES IN ACCORDANCE WITH AWWA C600 OR M23 AS APPLICABLE. THE PRESSURE SHALL BE 100 PSI FOR TWO (2) HOURS.

FIRE DEPARTMENT

1. THE STRUCTURES BEING CONSTRUCTED ON THE PROPERTY WILL BE CONSTRUCTED UNDER THE 6TH EDITION OF FLORIDA FIRE PREVENTION CODE.
2. PER ***MARION COUNTY*** CRITERIA:
   FIRE HYDRANTS MUST BE LOCATED SO AS NOT TO REQUIRE THE LAYING OF MORE THAN FOUR-HUNDRED (400) FEET OF HOSE CONNECTED TO SUCH HYDRANT, ALONG THE NEAREST PUBLIC RIGHT-OF-WAY, TO THE CENTER OF ANY BUILDABLE LOT OR PARCEL IN THE DEVELOPMENT.
3. ANY NEW HYDRANTS MUST BE ABLE TO SUPPLY 1000 G.P.M. OF WATER AT 20 P.S.I. AT ANY TIME OF THE DAY. ANY NEW HYDRANTS SHALL BE TESTED BY THE CONTRACTOR IN THE PRESENCE OF THE FIRE DEPARTMENT PRIOR TO APPROVAL OF THE FIRE HYDRANTS BY THE FIRE DEPARTMENT.(6TH EDITION OF FLORIDA

Marion County Approval Stamp

Tillman & Associates
ENGINEERING, LLC.
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CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE	

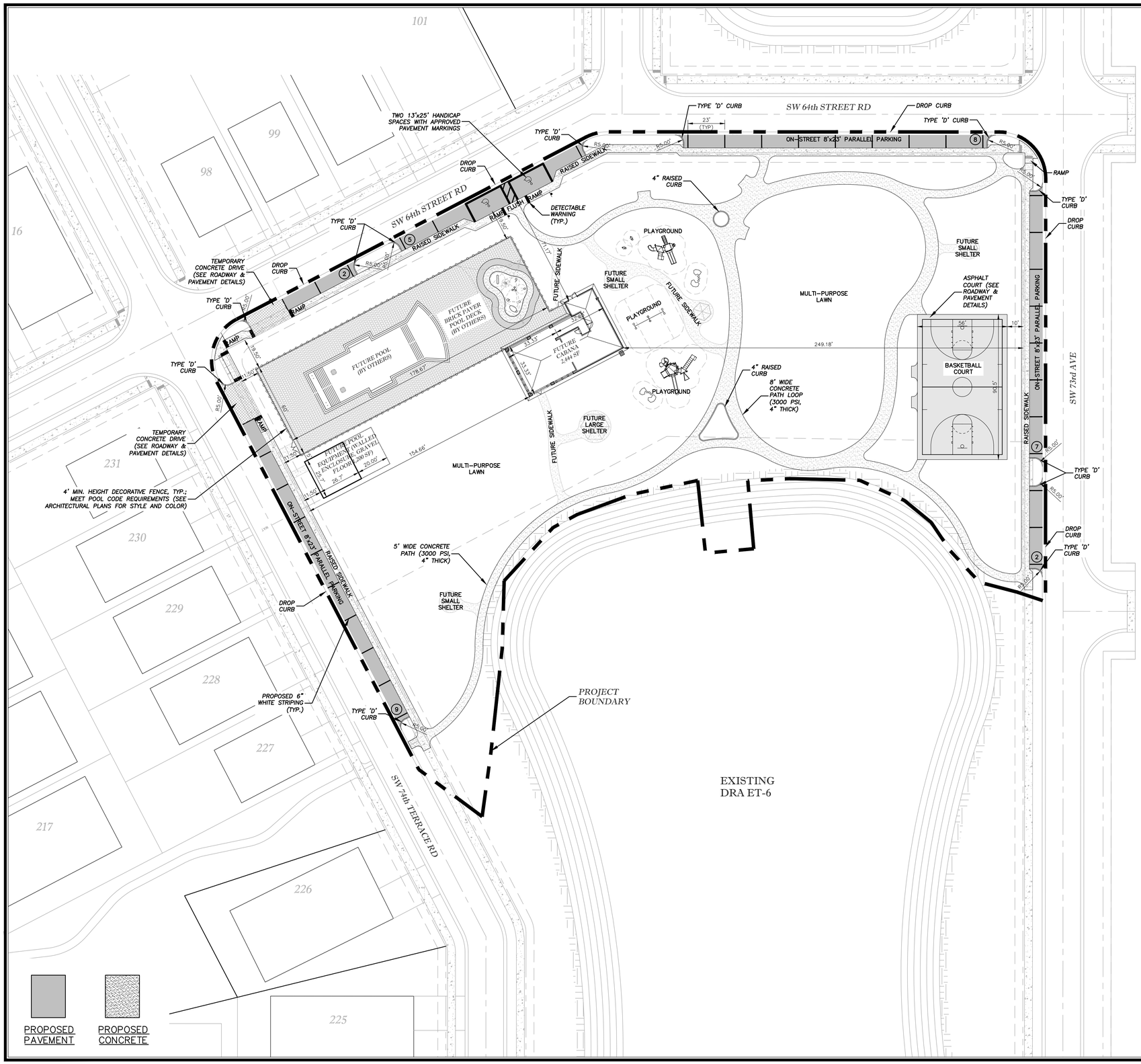
ROAN HILLS AMENITY AREA
COLEN BUILT DEVELOPMENT, L.L.C.
MARION COUNTY FLORIDA

AERIAL PHOTOGRAPH

DATE 03-29-21
DRAWN BY HB
CHKD. BY JMM
JOB NO. 20-6103

SHT. 03.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER



Marion County Approval Stamp

SITE DATA
PARCEL NUMBER: 35300-000-30
PROJECT AREA: 123,555 S.F. (2.84 AC.)
ZONING: PUD
EXISTING USE: AG
FUTURE LAND USE: OTOW DRI
PROPOSED USE: COMMUNITY CENTER
ELECTRIC BY: SECO
POTABLE WATER BY: BLCCDD
IRRIGATION BY: BLCCDD
FIRE BY: MARION COUNTY FIRE DEPARTMENT
SANITARY SEWER BY: BLCCDD
TELEPHONE BY: DIGITAL COMMUNICATION MEDIA
SOLID WASTE: TO BE DETERMINED

BUILDING HEIGHT:
MAXIMUM HEIGHT = 40'
PROPOSED HEIGHT = TBD

BUILDING FLOOR AREAS:
(1 STORY CABANA)
CABANA = 2,444 SF
POOL EQUIPMENT ROOM = 1,200 SF
(3,644 SF / 123,555 SF)
FLOOR AREA RATIO = 3.0%

PARKING REQUIRED:
BASED ON I.T.E. PARKING GENERATION MANUAL (4TH EDITION) FOR RECREATIONAL COMMUNITY CENTER (CODE #495)
3.2 SPACES/1000 S.F.
3.2 x 2.4 = 7.7
TOTAL PARKING SPACE REQUIRED = 8 SPACES

PARKING PROVIDED:
PROPOSED 8' x 23' SPACES = 31
PROPOSED 8' x 23' HANDICAP SPACES = 2
TOTAL PROVIDED PARKING = 35
FUTURE 8' x 23' SPACES = 2

MINIMUM BUILDING SETBACKS PER PUD TABLE 1:
20 FT FROM FRONT
10 FT FROM SIDE
10 FT FROM REAR

PROPOSED ON-SITE IMPERVIOUS AREA

PROPOSED BASKETBALL COURT	=	5,128	S.F.
PROPOSED PARKING	=	7,164	S.F.
PROPOSED SIDEWALKS	=	16,654	S.F.
FUTURE POOL DECK, CABANA, & POOL DECK	=	14,445	S.F.
TOTAL PROJECT IMPERVIOUS AREA	=	43,391	S.F. / 1.0 AC. (35.1%)
TOTAL ONSITE OPEN SPACE	=	80,164	S.F. (64.9%)
REQUIRED OPEN SPACE	=	20%	

30 15 0 30 60
SCALE IN FEET
1" = 30'

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE	

ROAN HILLS AMENITY AREA
COLEN BUILT DEVELOPMENT, L.L.C.
MARION COUNTY FLORIDA

GEOMETRY PLAN

DATE 03-29-21
DRAWN BY HB
CHKD. BY JMM
JOB NO. 20-6103

SHT. 04.01

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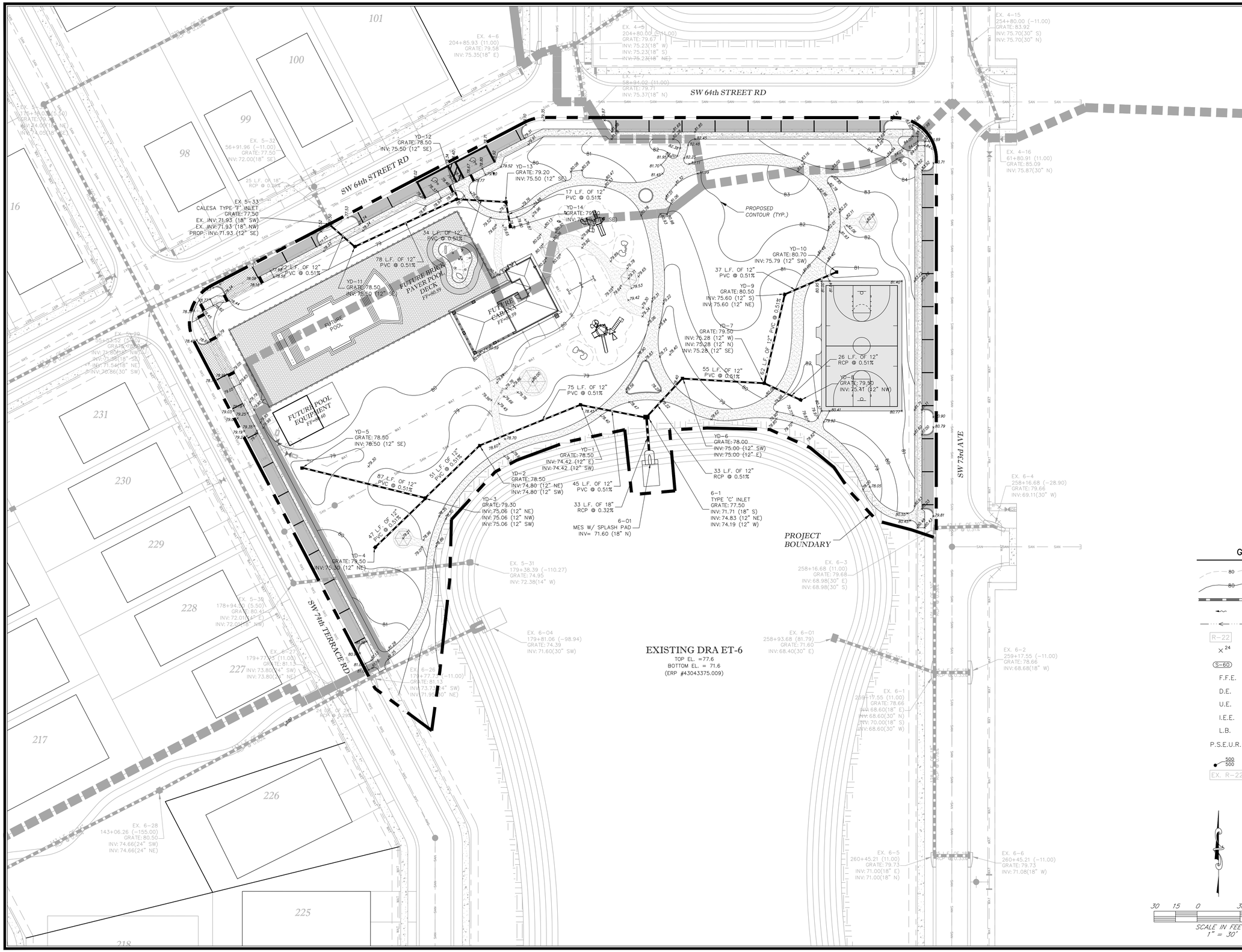

Marion County Approval Stamp

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING · PLANNING · LANDSCAPE ARCHITECTURE · ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE	

ROAN HILLS AMENITY AREA
COLEN BUILT DEVELOPMENT, L.L.C.
MARION COUNTY FLORIDA

GRADING PLAN

DATE 03-29-21
DRAWN BY HB
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JOB NO. 20-6103

SHT. 05.01

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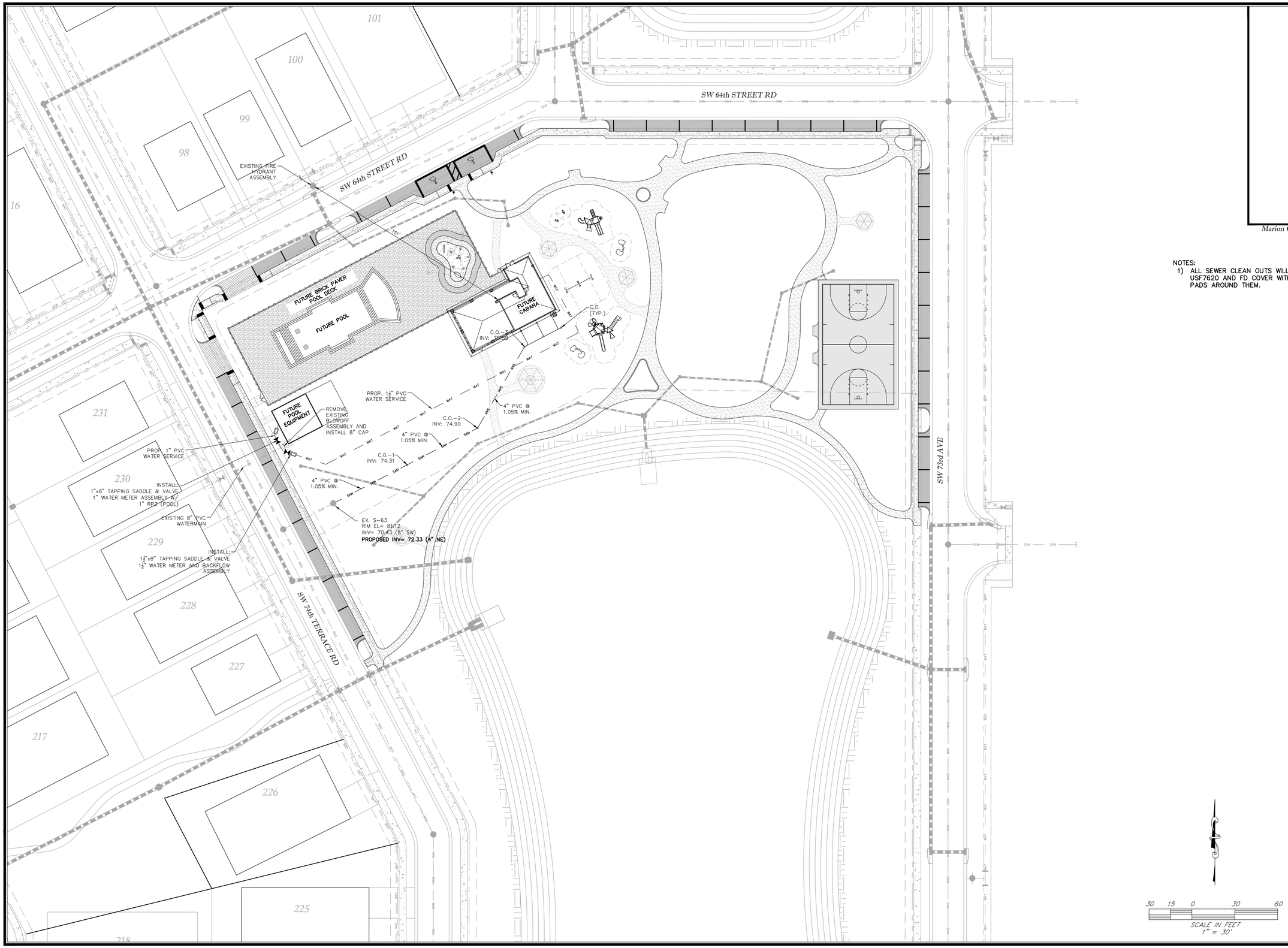

Marion County Approval Stamp

NOTES:
1) ALL SEWER CLEAN OUTS WILL BE USF7620 AND FD COVER WITH CONCRETE PADS AROUND THEM.

30 15 0 30 60
SCALE IN FEET
1" = 30'

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1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE	

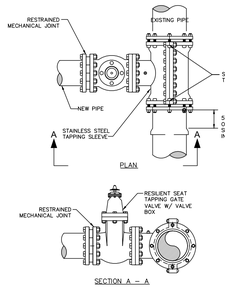
ROAN HILLS AMENITY AREA
COLEN BUILT DEVELOPMENT, L.L.C.
MARION COUNTY FLORIDA

UTILITY PLAN

DATE 03-29-21
DRAWN BY HB
CHKD. BY JMM
JOB NO. 20-6103

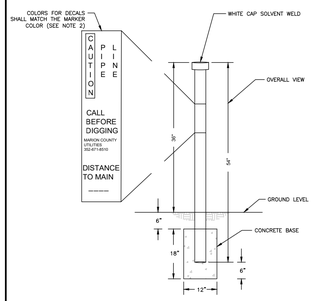
SHT. 06.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER



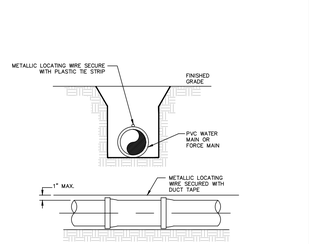
NOTES:
1. WASHERS ARE REQUIRED WHEN UTILITY MAIN IS LOCATED OVER 30 FEET FROM EDGE OF PAVEMENT
2. OR IN AN EASEMENT NOT ADJACENT TO THE RIGHT OF WAY.
3. MARKERS SHALL BE 4" DIAMETER SCH. 80 OR DR18 PVC. BLUE FOR WATER; GREEN FOR WASTEWATER; AND PANTONE PURPLE 522C FOR RECLAIMED WATER.
4. MARKERS SHALL BE PLACED AT ALL DIRECTIONAL CHANGES AND AT ALL VALVES EXCEPT WATER
5. VALVES NEAR FIRE HYDRANTS. ADDITIONAL MARKERS SHALL BE INSTALLED AS NEEDED SO THAT THE DISTANCE BETWEEN MARKERS DOES NOT EXCEED 1000 FEET.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	MJ TAPPING SLEEVE AND GATE VALVE ASSEMBLY FOR WATER AND RECLAIMED WATER	7.3.2 UT 108



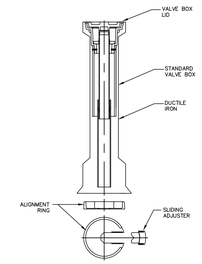
NOTES:
1. WASHERS ARE REQUIRED WHEN UTILITY MAIN IS LOCATED OVER 30 FEET FROM EDGE OF PAVEMENT
2. OR IN AN EASEMENT NOT ADJACENT TO THE RIGHT OF WAY.
3. MARKERS SHALL BE 4" DIAMETER SCH. 80 OR DR18 PVC. BLUE FOR WATER; GREEN FOR WASTEWATER; AND PANTONE PURPLE 522C FOR RECLAIMED WATER.
4. MARKERS SHALL BE PLACED AT ALL DIRECTIONAL CHANGES AND AT ALL VALVES EXCEPT WATER
5. VALVES NEAR FIRE HYDRANTS. ADDITIONAL MARKERS SHALL BE INSTALLED AS NEEDED SO THAT THE DISTANCE BETWEEN MARKERS DOES NOT EXCEED 1000 FEET.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	UTILITY MAIN MARKER	7.3.2 UT 109



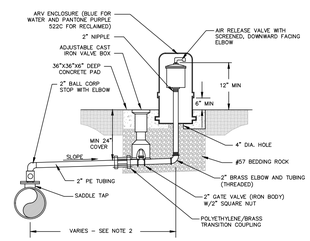
NOTES:
1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (14 GAUGE COPPER) CAPABLE OF
2. DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
3. LOCATING WIRE SHALL TERMINATE AT EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP
OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
4. ALL WIRE SPLICES SHALL BE MADE WITH 3M DBY SCOTCHLOK 3576 OR 3M DBR/Y-6 SPLICE.
5. ALL WIRE CONNECTIONS IN VALVE BOXES SHALL BE SPLICED TOGETHER AND TAPED.
6. FOR HORIZONTAL DIRECTIONAL DRILLING, UTILIZE 2 LOCATING WIRES WITH ALUMINUM TENSILE STRENGTH OF 1800 PSI.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	PIPE LOCATING WIRE	7.3.2 UT 104



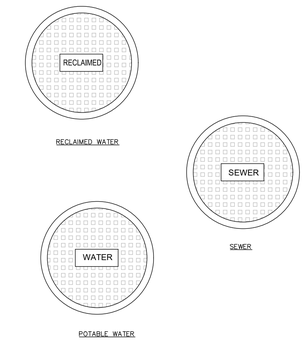
NOTES:
1. FOR ALL MAINS 6' DEEP OR GREATER.
2. PVC PIPE EXTENSIONS SHALL BE USED ON VALVE BOX INSTALLATION

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	SEALED VALVE BOX, ADJUSTABLE	7.3.2 UT 111

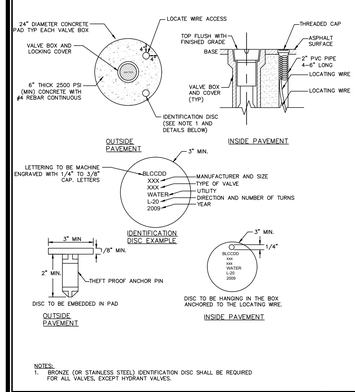


NOTES:
1. FOR WATER OR RECLAIMED USE ONLY.
2. OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE RIGHT OF WAY AS POSSIBLE.
3. ADJUST HORIZONTAL POSITION OF SIDEWALK, AS REQUIRED TO AVOID AR ENCLOSURE.
4. LOCATE ARV ENCLOSURE WITHIN 6" OF RIGHT OF WAY

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	AIR RELEASE VALVE	7.3.2 UT 206

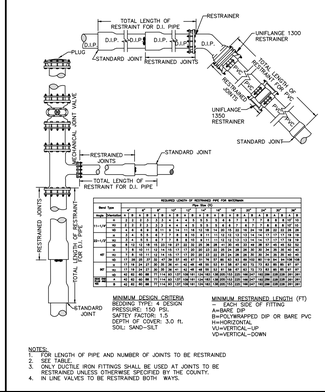


Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	TYPICAL VALVE BOX COVER	7.3.2 UT 110

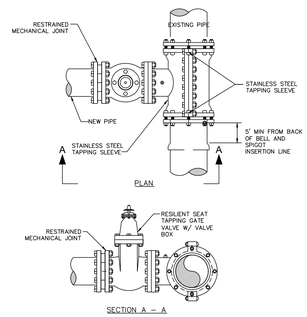


NOTES:
1. BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT HYDRANT VALVES.

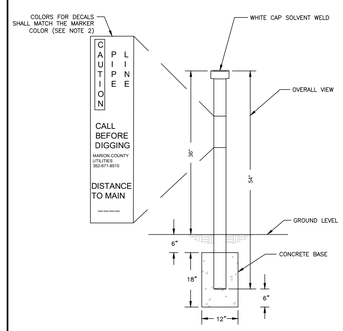
Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	VALVE BOX PAD	7.3.2 UT 112



| Nominal Size | Pipe Size | REQUIRED LENGTH OF RESTRAINED PIPE FOR MATERIAL | | |

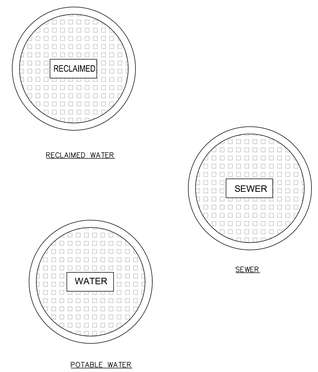


Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	MJ TAPPING SLEEVE AND GATE VALVE ASSEMBLY FOR WATER AND RECLAIMED WATER	7.3.2 UT 108
	REVISION # NA		

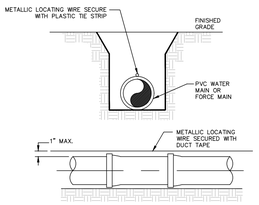


NOTES:
1. MARKERS ARE REQUIRED WHEN UTILITY MAIN IS LOCATED OVER 30 FEET FROM EDGE OF PAVEMENT
2. OR IN AN EASEMENT NOT ADJACENT TO THE RIGHT OF WAY.
3. MARKERS SHALL BE 4" DIAMETER SCH. 80 OR DR18 PVC: BLUE FOR WATER; GREEN FOR WASTEWATER, AND PANTONE PURPLE 522C FOR RECLAIMED WATER.
4. MARKERS SHALL BE PLACED AT ALL DIRECTIONAL CHANGES AND AT ALL VALVES EXCEPT WATER
5. VALVES NEAR FIRE HYDRANTS. ADDITIONAL MARKERS SHALL BE INSTALLED AS NEEDED SO THAT THE DISTANCE BETWEEN MARKERS DOES NOT EXCEED 1000 FEET.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	UTILITY MAIN MARKER	7.3.2 UT 109
	REVISION # NA		

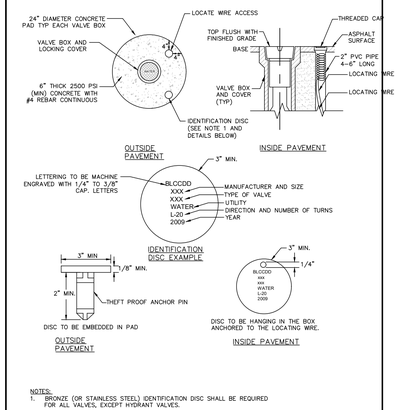


Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	TYPICAL VALVE BOX COVER	7.3.2 UT 110
	REVISION # NA		



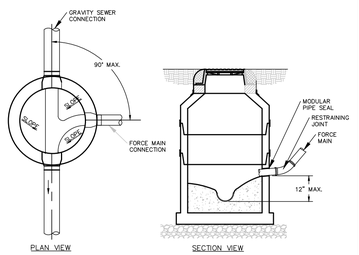
NOTES:
1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (14 GAUGE COPPER) CAPABLE OF
2. DETECTION BY A CABLE LOCATOR AND SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE.
3. LOCATING WIRE SHALL TERMINATE AT EACH VALVE BOX AND BE CAPABLE OF EXTENDING 12" ABOVE TOP
OF BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
4. USE DUCT TAPE AS NECESSARY TO HOLD WIRE DIRECTLY ON THE TOP OF THE PIPE.
5. ALL WIRE CONNECTIONS IN VALVE BOXES SHALL BE SPLICED TOGETHER AND TAPED.
6. FOR HORIZONTAL DIRECTIONAL DRILLING, UTILIZE 2 LOCATING WIRES WITH ALUMINUM TENSILE STRENGTH OF 1800 PSI.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	PIPE LOCATING WIRE	7.3.2 UT 104
	REVISION # NA		



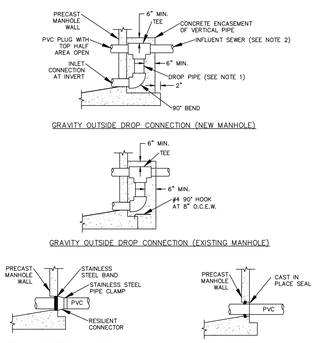
NOTES:
1. BRONZE (OR STAINLESS STEEL) IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, EXCEPT HYDRANT VALVES.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	VALVE BOX PAD	7.3.2 UT 112
	REVISION # NA		



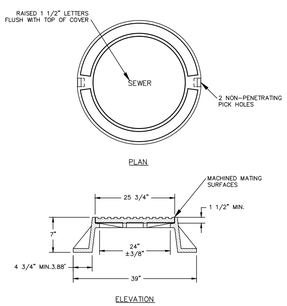
NOTES:
1. FORCE MAIN ORIENTED TO FACILITATE FLOW AND SHALL ENTER MANHOLE WITHIN 1' ABOVE INVERT OF
THE EFFLUENT PIPE.
2. BENCH AS REQUIRED FOR NEW FORCE MAIN.
3. MANHOLE RECEIVING FORCE MAIN AND NEXT MANHOLE SHALL BE LINED PER MARION COUNTY LAND DEVELOPMENT CODE. FOR CONNECTIONS TO EXISTING MANHOLES, MANHOLE RECEIVING FORCE MAIN AND NEXT MANHOLE SHALL BE COATED OR LINED PER MARION COUNTY LAND DEVELOPMENT CODE.
4. CONTRACTOR TO COORDINATE THE PRESENCE OF UTILITIES INSPECTOR DURING CORING AND CONNECTIONS TO EXISTING MANHOLES.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	FORCE MAIN TO GRAVITY SEWER CONNECTION	7.3.2 UT 302
	REVISION # NA		

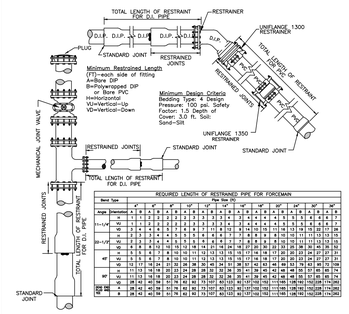


NOTES:
1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. AN OUTSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT LINES WHICH HAVE AN INVERT 2' OR MORE ABOVE THE MANHOLE INVERT.
3. CONTRACTOR TO COORDINATE THE PRESENCE OF UTILITIES INSPECTOR DURING CORING AND CONNECTIONS TO EXISTING MANHOLES.
4. POUR NEW BENCH FOR CONNECTION.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	GRAVITY MANHOLE CONNECTION	7.3.2 UT 303
	REVISION # NA		



Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	STANDARD SEWER MANHOLE FRAME AND COVER	7.3.2 UT 305
	REVISION # NA		

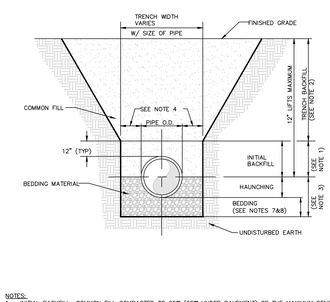


REQUIRED LENGTH OF RESTRAINED PIPE FOR FORCEMAIN

Bend Type		Pipe Size (%)																					
		4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"
Single Bend		4	6	8	10	12	14	16	18	20	24	30	36	4	6	8	10	12	14	16	18	20	24	30	36
11–1/4"	HU	1	1	2	2	2	2	3	3	3	4	5	6	3	4	4	4	5	6	5	6	6	8	9	11
	VU	2	3	4	5	6	7	8	9	10	12	15	18	8	10	12	14	16	18	20	22	24	28	35	42
	VD	2	3	4	5	6	7	8	9	10	12	15	18	8	10	12	14	16	18	20	22	24	28	35	42
22–1/2"	H	2	3	4	5	6	7	8	9	10	12	15	18	7	8	10	12	14	16	18	20	22	26	32	38
	HU	2	3	4	5	6	7	8	9	10	12	15	18	8	9	11	13	15	17	19	21	23	27	34	40
	VU	4	5	7	8	10	12	14	16	18	21	26	31	16	19	22	25	28	31	34	37	40	47	58	69
	VD	4	5	7	8	10	12	14	16	18	21	26	31	16	19	22	25	28	31	34	37	40	47	58	69
45°	H	3	4	5	6	7	8	10	11	12	14	17	20	13	15	17	19	21	23	25	27	29	34	41	48
	HU	5	6	8	9	11	13	15	17	19	22	27	32	17	20	23	26	29	32	35	38	41	48	59	70
	VU	8	10	12	15	17	20	23	26	29	34	41	48	26	31	36	41	46	51	56	61	66	78	96	114
	VD	8	10	12	15	17	20	23	26	29	34	41	48	26	31	36	41	46	51	56	61	66	78	96	114
90°	H	6	8	10	12	15	17	20	23	25	30	37	43	23	27	31	35	39	43	47	51	55	65	80	95
	HU	11	13	16	19	22	25	28	31	34	40	49	58	35	41	47	53	59	65	71	77	83	98	120	142
	VU	16	19	23	27	31	35	39	43	47	55	67	79	47	55	63	71	79	87	95	103	111	131	160	189
	VD	16	19	23	27	31	35	39	43	47	55	67	79	47	55	63	71	79	87	95	103	111	131	160	189
Dead End	H	12	15	19	22	26	30	34	38	42	50	62	74	46	54	62	70	78	86	94	102	110	130	159	188
	HU	22	27	32	37	42	47	52	57	62	72	87	102	67	77	87	97	107	117	127	137	147	172	209	246
	VU	32	38	45	52	59	66	73	80	87	101	122	143	94	108	122	136	150	164	178	192	206	241	292	343
	VD	32	38	45	52	59	66	73	80	87	101	122	143	94	108	122	136	150	164	178	192	206	241	292	343

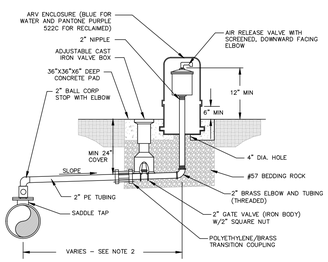
NOTES:
1. FITTINGS SHALL HAVE RESTRAINED JOINTS UNLESS OTHERWISE INDICATED.
2. INSTALL FULL LENGTH JOINTS WITH TOTAL LENGTH EQUAL TO OR GREATER THAN LENGTH SHOWN IN THE TABLE.
3. WHERE TWO OR MORE FITTINGS ARE IN SERIES, SELECT FITTING RESTRAINT LENGTH THAT YIELDS THE LONGEST RESTRAINT DISTANCE.
4. ALL INLINE VALVES SHALL BE RESTRAINED.
5. WHERE INTERNAL RESTRAINED JOINTS ARE USED, THE ENTIRE BELL SHALL BE PAINTED RED.
6. LENGTHS SHOWN IN THE TABLE WERE CALCULATED IN ACCORDANCE WITH PROCEDURES OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" GUIDELINES PUBLISHED BY DIPRA.
7. THE DESIGN ENGINEER SHALL INCREASE THE VALUES IN THE TABLE AS WARRANTED BY SITE–SPECIFIC DATA, OR USE OTHER METHODS TO DETERMINE RESTRAINT LENGTHS.
8. FOR LENGTH OF PIPE AND NUMBER OF JOINTS TO BE RESTRAINED SEE TABLE BELOW RIGHT.
9. ONLY DUCTILE IRON FITTINGS SHALL BE USED AT JOINTS TO BE RESTRAINED UNLESS OTHERWISE SPECIFIED BY THE COUNTY.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	RESTRAINED PIPE TABLE WASTEWATER FORCE MAINS	7.3.2 UT 300
	REVISION # NA		



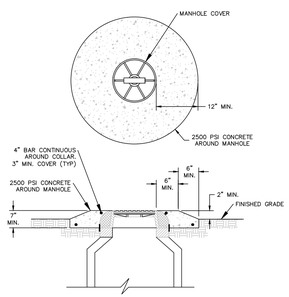
NOTES:
1. INITIAL BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY
2. AS PER AASHTO T–180.
3. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY
4. AS PER AASHTO T–180.
5. TYPE A BEDDING MATERIAL SHALL CONFORM TO FDOT NO. 57 AGGREGATE.
6. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
7. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
8. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
9. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER UP TO 12" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
10. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. UTILITIES SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.
11. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN MARION COUNTY RIGHT–OF–WAY SHALL COMPLY
WITH REQUIREMENTS OF R/W UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	TYPE "A" BEDDING AND TRENCHING	7.3.2 UT 102
	REVISION # NA		



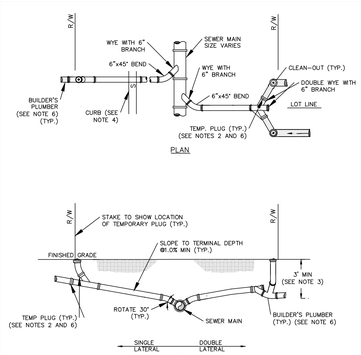
NOTES:
1. FOR WATER OR RECLAIMED USE ONLY.
2. OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE RIGHT OF WAY AS POSSIBLE.
3. ADJUST HORIZONTAL POSITION OF SIDEWALK, AS REQUIRED TO AVOID AR ENCLOSURE.
4. LOCATE ARV ENCLOSURE WITHIN 6" OF RIGHT OF WAY

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	AIR RELEASE VALVE	7.3.2 UT 206
	REVISION # NA		



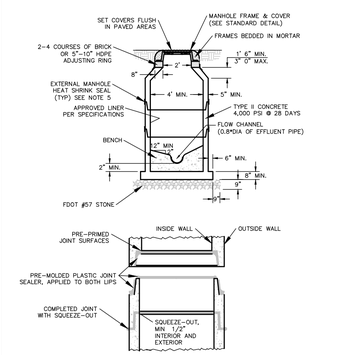
NOTES:
1. CLEARANCE OF 30" FREE FROM OBSTRUCTIONS IN ALL DIRECTIONS.
2. AREAS SUPPORTING CONCRETE COLLAR OR SLAB SHALL BE PROPERLY COMPACTED.
3. TOP OF MANHOLE SHALL BE 2" ABOVE FINISHED GRADE, CROWN OF ADJACENT ROADWAY, OR 100 YEAR FLOOD ELEVATION, WHICHEVER IS GREATER.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	MANHOLE IN NON–PAVED AREA	7.3.2 UT 309
	REVISION # NA		



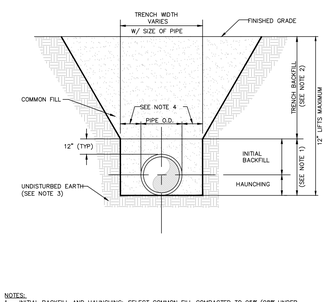
NOTES:
1. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
2. SERVICE LATERAL SHALL BE CAPPED BY DEVELOPER'S SITE–WORK CONTRACTOR.
3. WYE TO BE NO SHALLOWER THAN 3–FEET AND NO DEEPER THAN 5–FEET.
4. ALL FITTINGS SHOWN ARE TO BE INSTALLED.
5. SERVICE CONNECTIONS SHALL BE PERMANENTLY MARKED BY CUTTING AN "S" IN THE CURB DIRECTLY OVER THE LATERAL.
6. BUILDER'S PLUMBER WILL REMOVE PLUG, INSTALL CLEANOUT, AND CONNECT SERVICE LATERAL TO HOUSE.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	SEWER SERVICE LATERAL	7.3.2 UT 312
	REVISION # NA		



NOTES:
1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAIL.
2. ECCENTRIC CONE DESIGN MAY BE USED FOR CONFLICT RESOLUTION WITH MCU APPROVAL.
3. A FLOW CHANNEL SHALL BE CONSTRUCTED INSIDE MANHOLE TO DIRECT INFLUENT INTO FLOW STREAM.
4. LIFT HOLES THROUGH STRUCTURE ARE NOT PERMITTED.
5. WRAP TIGHTLY AROUND CASTING JOINTS AND APPLY HIGH INTENSITY PROPANE TORCH TO EFFECTIVELY SEAL THEM FROM GROUND WATER INFILTRATION.
6. RISER ADJUSTING RINGS MAY BE SUBSTITUTED FOR BRICK RISERS.
7. SECTION HEIGHTS VARY AS REQUIRED, AND AS AVAILABLE, FROM APPROVED MANUFACTURERS LISTED IN APPENDIX D.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	PRECAST CONCRETE MANHOLE	7.3.2 UT 306
	REVISION # NA		



NOTES:
1. INITIAL BACKFILL AND HAUNCHING: SELECT COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T–180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% (98% UNDER PAVEMENT) OF THE MAXIMUM DENSITY AS PER AASHTO T–180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY UTILITIES.
4. 15" MAX. (12" MIN.) FOR PIPE DIAMETER LESS THAN 24" AND 24" MAX (12" MIN) FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN MARION COUNTY RIGHT–OF–WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT–OF–WAY UTILIZATION REGULATIONS AND
ROAD CONSTRUCTION SPECIFICATIONS.

Marion County FLORIDA	MCBCC EFFECTIVE 10/12/2013	TYPE "B" BEDDING AND TRENCHING	7.3.2 UT 103
	REVISION # NA		

Marion County Approval Stamp

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING - PLANNING - LANDSCAPE ARCHITECTURE - ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

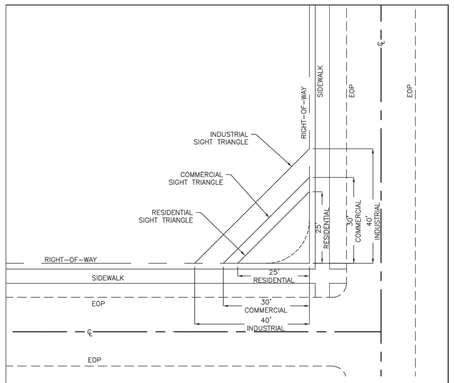
ROAN HILLS AMENITY AREA
COLEN BUILT DEVELOPMENT, L.L.C.
MARION COUNTY FLORIDA

SANITARY SEWER DETAILS

DATE 03-29-21
DRAWN BY HB
CHKD. BY JMM
JOB NO. 20-6103

SHT. 08.01

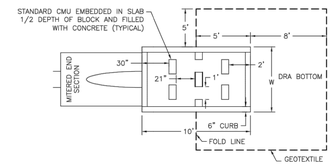
NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER



LEGEND
EOP EDGE OF PAVEMENT
℄ CENTERLINE OF ROADWAY

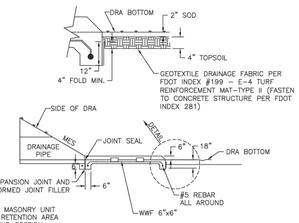
NOTE:
NO FENCE, WALL, HEDGE, SHRUB, STRUCTURE OR OTHER OBSTRUCTION TO VISION, BETWEEN A HEIGHT OF TWO AND ONE-HALF FEET AND EIGHT FEET ABOVE THE CENTER LINE GRADES OF INTERSECTING STREETS SHALL BE ERECTED, PLACED OR MAINTAINED WITHIN THE TRIANGLE SHOWN.

Marion County FLORIDA OFFICE OF THE COUNTY ENGINEER	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	SIGHT TRIANGLE	7.3.1 TS 038



PIPE SIZE	WIDTH	CMU 8 x 16	CMU 8 x 8
15"	6'	3	2
18"	7'	5	0
24"	7'	5	0
30"	8'	5	2
36"	9'	7	0
42"	9'	7	0

NOTES:
1. BLOCK CONFIGURATION VARIES ACCORDING TO PIPE SIZE.
2. GEOTEXTILE, WHEN REQUIRED, SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. FASTEN FABRIC TO CONCRETE STRUCTURE PER FDOT INDEX 281.
3. SPLASH PADS WITH ELLIPTICAL PIPE SHALL BE PAID UNDER THE CONTRACT UNIT PRICE FOR THE EQUIVALENT WIDTH OF CIRCULAR SIZE IN TABLE.



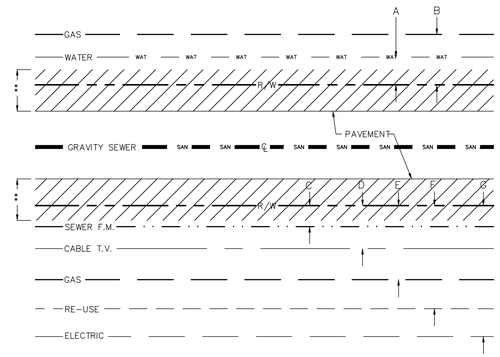
LEGEND
CMU CONCRETE MASONRY UNIT
DRA DRAINAGE RETENTION AREA
MES MITERED END SECTION
MIN MINIMUM

Marion County FLORIDA OFFICE OF THE COUNTY ENGINEER	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	TYPICAL SPLASH PAD WITH DISSIPATER	7.3.1 TS 035

UTILITY		LOCATION	
WATER	A	4.5'	36"
GAS	B	6.5'	36"
SEWER F.M.	C	3'	36"
CABLE T.V.	D	5'	24"
GAS	E	7'	30"
RE-USE	F	9'	36"
ELECTRIC	G	11'	36"

AERIAL CABLES SHALL BE 18' ABOVE ℄ GRADE. CABLE T.V. & COMMUNICATION CABLES MAY BE PERMITTED AT 16', IF VALID EXTENUATING CIRCUMSTANCES CAN BE SHOWN.

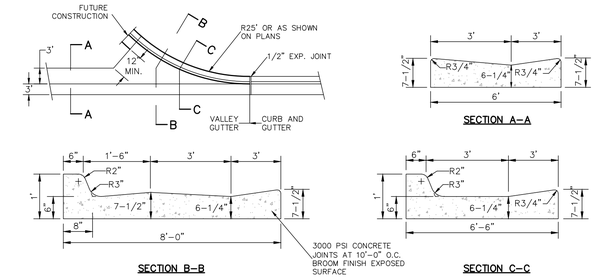
* AND ASSOCIATED ABOVE GROUND EQUIPMENT
** MAINTAIN CLEAR ZONE REQUIREMENTS AS DEFINED BY "THE FLORIDA GREENBOOK"



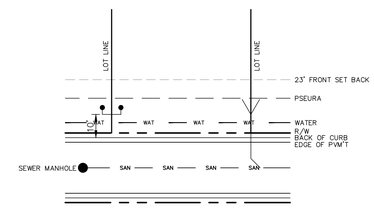
LEGEND
R/W RIGHT-OF-WAY
℄ CENTERLINE

UNLESS OTHERWISE APPROVED BY COUNTY ENGINEER

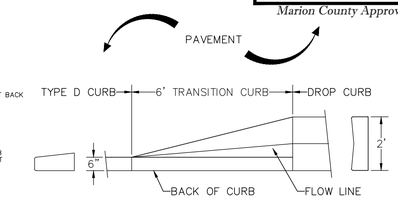
UTILITY POSITION IN RIGHT-OF-WAY
N.T.S



VALLEY GUTTER DETAIL
N.T.S

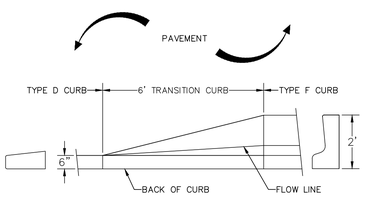


UTILITY PLACEMENT DETAIL
N.T.S



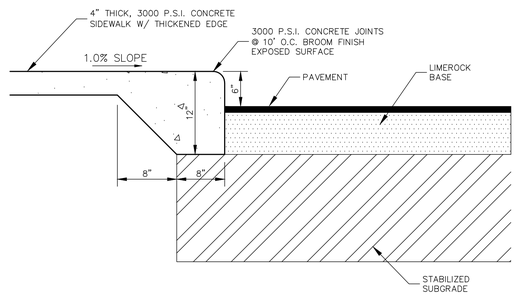
PLAN VIEW

TRANSITION CURB TYPE D CURB TO DROP CURB
NO SCALE

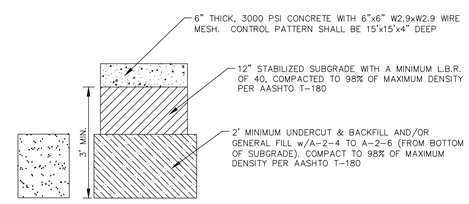


PLAN VIEW

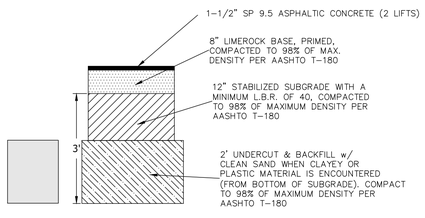
TRANSITION CURB TYPE D CURB TO TYPE F
N.T.S



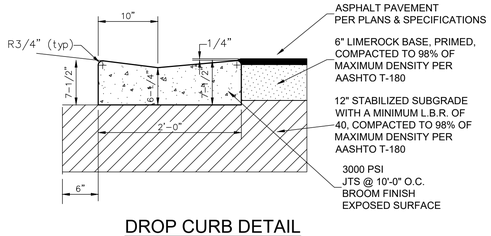
RAISED SIDEWALK DETAIL
N.T.S



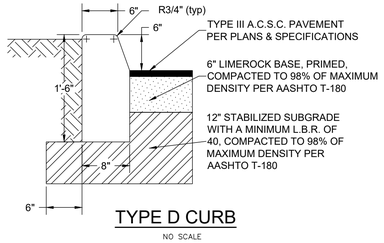
CONCRETE DRIVE SECTION
N.T.S



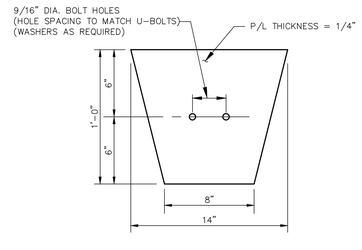
INTERNAL ROADS PAVEMENT SECTION
NO SCALE



DROP CURB DETAIL
NO SCALE



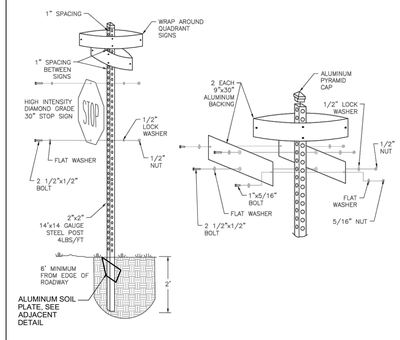
TYPE D CURB
NO SCALE



ALUMINUM SOIL PLATE DETAIL
NO SCALE

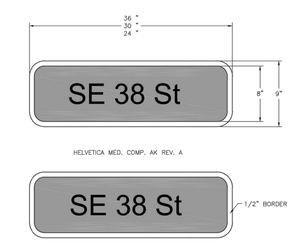
NOTES:
1. ALIGN SOIL PLATE BOTTOM AT 2/3 OF FOUNDATION DEPTH.
2. SLOT UP TO 1" LONG IS ALLOWED TO ACCOMMODATE VARIOUS POST SIZES.
3. RECTANGULAR SOIL PLATE OF SIZE 1'-2"x1'-0" MAY BE USED AS AN ALTERNATIVE.

"ALL CONSTRUCTION COVERED BY THESE PLANS SHALL COMPLY WITH THE MATERIAL REQUIREMENTS AND QUALITY CONTROL STANDARDS CONTAINED IN THE MARION COUNTY LAND DEVELOPMENT CODE."



Marion County FLORIDA OFFICE OF THE COUNTY ENGINEER	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	COMBINED STREET NAME & STOP SIGN INSTALLATION	7.3.1 TS 031

GREEN LETTERS ON A WHITE BACKGROUND – PRIVATE OR NON-COUNTY MAINTAINED
WHITE LETTERS ON A GREEN BACKGROUND – PUBLIC OR COUNTY MAINTAINED



HELVETICA MED. COMP. AK REV. A

HIGH-INTENSITY BACKGROUND WITH TRANSPARENT GREEN FILM OVERLAY. DIE-CUT LETTERS

Marion County FLORIDA OFFICE OF THE COUNTY ENGINEER	MCBCC EFFECTIVE 10/12/2013 REVISION # NA	STREET SIGN	7.3.1 TS 032

Marion County Approval Stamp

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING · PLANNING · LANDSCAPE ARCHITECTURE · ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

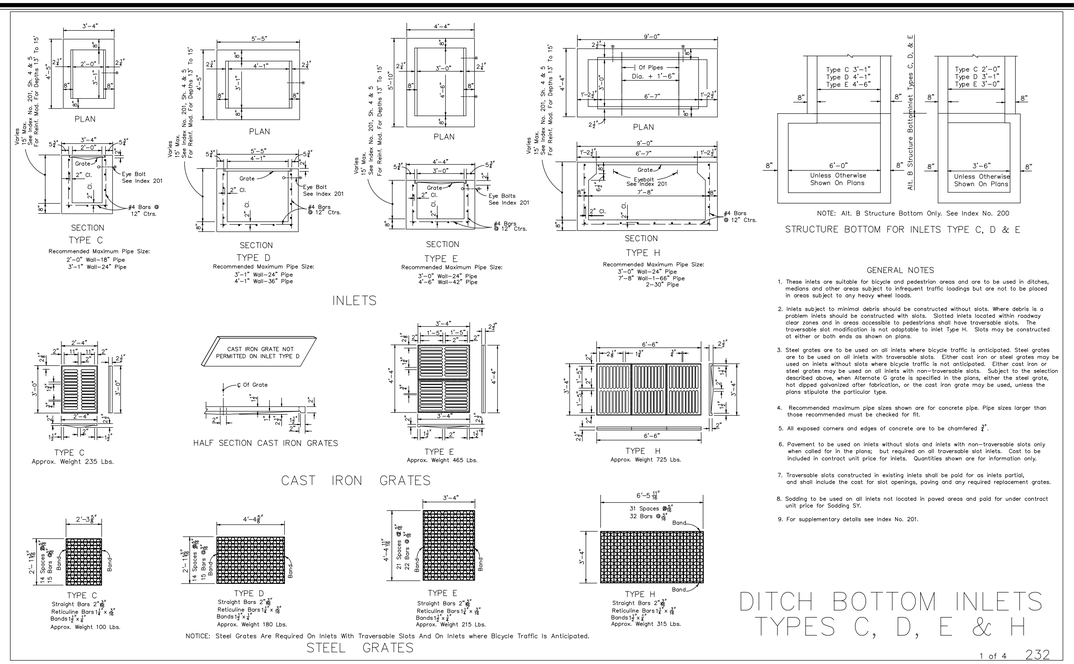
ROAN HILLS AMENITY AREA
COLEN BUILT DEVELOPMENT, L.L.C.
MARION COUNTY FLORIDA

ROADWAY AND PAVEMENT DETAILS

DATE 03-29-21
DRAWN BY HB
CHKD. BY JMM
JOB NO. 20-6103

SHT. 09.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER



NOTE: Alt. B Structure Bottom Only. See Index No. 200

STRUCTURE BOTTOM FOR INLETS TYPE C, D & E

GENERAL NOTES

1. These inlets are suitable for bicycle and pedestrian areas and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheel loads.
2. Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and in areas accessible to pedestrians shall have traversable slots. The traversable slot modification is not adaptable to inlet Type H. Slots may be constructed at either or both ends as shown on plans.
3. Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dipped galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
4. Recommended maximum pipe sizes shown are for concrete pipe. Pipe sizes larger than those recommended must be checked for fit.
5. All exposed corners and edges of concrete are to be chamfered 3/4".
6. Pavement to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
7. Traversable slots constructed in existing inlets shall be paid for as inlets partial, and shall include the cost for slot openings, paving and any required replacement grates.
8. Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Sodding SY.
9. For supplementary details see Index No. 201.

DITCH BOTTOM INLETS TYPES C, D, E & H

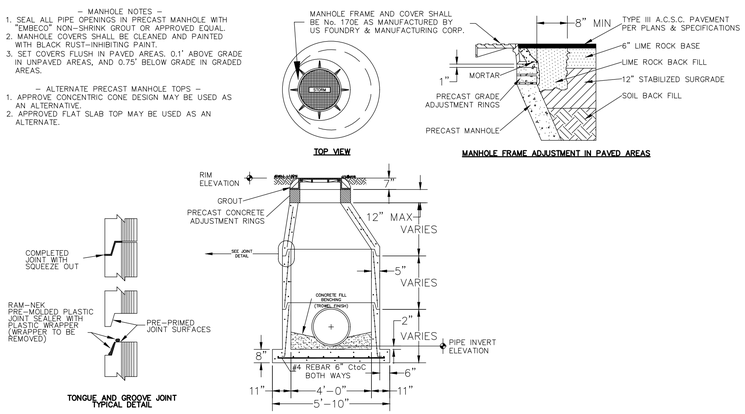
1 of 4 232

– MANHOLE NOTES –

1. SEAL ALL PIPE OPENINGS IN PRECAST MANHOLE WITH "EMBECO" NON-SHRINK GROUT OR APPROVED EQUAL.
2. MANHOLE COVERS SHALL BE CLEANED AND PAINTED WITH BLACK RUST-INHIBITING PAINT.
3. SET COVERS FLUSH IN PAVED AREAS, 0.1' ABOVE GRADE IN UNPAVED AREAS, AND 0.75' BELOW GRADE IN GRADED AREAS.

– ALTERNATE PRECAST MANHOLE TOPS –

1. APPROVE CONCENTRIC CONE DESIGN MAY BE USED AS AN ALTERNATIVE.
2. APPROVED FLAT SLAB TOP MAY BE USED AS AN ALTERNATE.



DRAINAGE PRECAST MANHOLE DETAIL

N.T.S

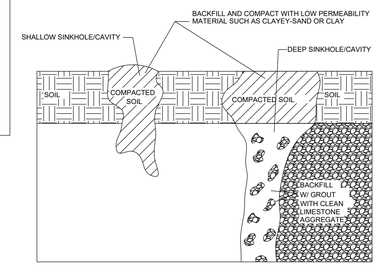
SINGLE AND MULTIPLE ROUND CONCRETE PIPE

DIMENSIONS & QUANTITIES																					
D	X	A	B	C	E	F	G	M				N	GRATE SIZES		CONCRETE (Cu. Yds.)				SODDING (Sq. Yds.)			
								Single Pipe	Double Pipe	Triple Pipe	Quad Pipe		Standard Weight Pipe	Extra Strong Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad Pipe
15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.63'	7.21'	9.79'	12.37'	1.19'			0.76	1.16	1.54	1.94	8	10	11	12
18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.92'	7.75'	10.58'	13.42'	1.21'			0.85	1.28	1.71	2.17	9	10	12	13
24"	3'-5"	2.53'	7.18△	9.71'	7.03'△	11'	1.73'	5.50'	8.92'	12.33'	15.75'	1.25'			1.02	1.58	2.15	2.75	10	12	13	15
30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	6.08'	10.33'	14.58'	18.83'	1.29'	2"	3"	1.23	1.98	2.74	3.50	12	14	15	17
36"	5'-1"	2.87'	11.30◇	14.18'	11.03◇	15'	2.24'	6.67'	11.75'	16.83'	21.92'	1.33'	2"	3"	1.40	2.38	3.33	4.24	13	15	17	20
42"	6'-0"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	7.25'	13.25'	19.25'	25.25'	1.38'	2"	3"	1.60	2.83	4.04	5.26	14	17	19	22
48"	6'-9"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	7.83'	14.58'	21.33'	28.08'	1.42'	2"	3"	1.81	3.26	4.70	6.14	15	18	21	24
54"	7'-8"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	8.42'	16.08'	23.75'	31.42'	1.46'	3"	4"	2.03	3.78	5.54	7.28	17	20	23	27
60"	8'-6"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	9.00'	17.50'	26.00'	34.50'	1.50'	3"	4"	2.28	4.36	6.43	8.50	18	22	25	29

△ 6.42' ◇ 10.40' — △ 6.25' ◇ 10.10' Dimensions permitted to allow use of 8' standard pipe lengths. Dimensions permitted to allow use of 12' standard pipe lengths.

△ ◇ Concrete slab shall be deepened to form bridge across crown of pipe. See section below.

DIMENSIONS & QUANTITIES																						
RISE R	SPAN S	X	A	B	C	E	F	G	M				N	GRATE SIZES		CONCRETE (CU.YDS)				SODDING (SQ.YDS.)			
									SINGLE PIPE	DOUBLE PIPE	TRIPLE PIPE	QUAD. PIPE		STANDARD WEIGHT PIPE	EXTRA STRONG PIPE	SINGLE PIPE	DOUBLE PIPE	TRIPLE PIPE	QUAD. PIPE	SINGLE PIPE	DOUBLE PIPE	TRIPLE PIPE	QUAD. PIPE
12"	18"	2'-10"	2.36'	3.06'	5.42'	3.03'	5'	1.50'	4.92'	7.75'	10.58'	13.42'	1.21'			0.30	0.45	0.61	0.76	9	11	12	14
14"	23"	3'-4"	2.44'	3.75'	6.19'	3.70'	6'	1.90'	5.38'	8.71'	12.04'	15.38'	1.23'			0.36	0.56	0.76	0.95	9	12	14	16
19"	30"	4'-0"	2.62'	5.47'	8.09'	5.36'	8'	2.37'	6.04'	10.04'	14.04'	18.04'	1.27'	2 1/2"	3"	0.51	0.79	1.08	1.36	11	13	16	19
24"	38"	5'-0"	2.79'	7.18'	9.97'	7.03'	10'	2.85'	6.79'	11.79'	16.79'	21.79'	1.31'	2 1/2"	3"	0.68	1.10	1.53	1.96	12	15	19	22
29"	45"	5'-11"	3.05'	8.90'	11.95'	8.70'	12'	3.19'	7.50'	13.42'	19.33'	25.25'	1.38'	2 1/2"	3 1/2"	0.96	1.45	2.04	2.63	13	17	21	25
34"	53"	7'-0"	3.22'	10.62'	13.84'	10.36'	13'	3.57'	8.25'	15.25'	22.25'	29.25'	1.42'	3"	3 1/2"	1.02	1.81	2.60	3.39	15	19	24	29
38"	60"	7'-10"	3.39'	11.99'	15.38'	11.70'	15'	3.95'	8.92'	16.75'	24.58'	32.42'	1.46'	3"	4"	1.18	2.14	3.10	4.05	16	21	26	31
43"	68"	8'-11"	3.56'	13.71'	17.27'	13.36'	17'	4.28'	9.57'	18.58'	27.50'	36.42'	1.50'	3"	4"	1.38	2.58	3.79	4.99	17	23	29	35
48"	76"	9'-11"	3.73'	15.43'	19.16'	15.03'	19'	4.59'	10.42'	20.33'	30.25'	40.17'	1.54'	SPECIAL	SPECIAL	1.59	3.05	4.51	5.97	18	25	32	38
53"	83"	10'-8"	3.91'	17.15'	21.06'	16.70'	20'	4.77'	11.08'	21.75'	32.42'	43.08'	1.58'	SPECIAL	SPECIAL	1.80	3.50	5.19	6.88	20	27	34	41
58"	91"	11'-8"	4.08'	18.87'	22.95'	18.36'	22'	5.01'	11.83'	23.50'	35.17'	46.83'	1.63'	SPECIAL	SPECIAL	2.04	4.04	6.05	8.05	21	29	37	44



SECTION VIEW

NOTES

IN THE EVENT THAT ANY KARST FEATURES SUCH AS SINKHOLES, SOLUTION CAVITIES, CHIMNEYS, ETC. ARE DISCOVERED DURING ROUTINE INSPECTIONS OF THE STORMWATER BASINS, THE FOLLOWING REMEDIATION PROCEDURE SHALL BE PROFORMED

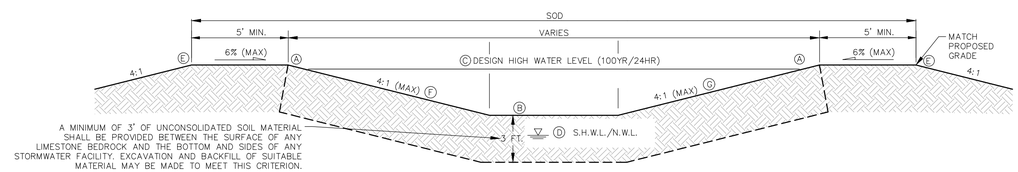
SHALLOW REPAIR (SEE DETAIL):
IF THE COLLAPSE IS SHALLOW (<5' DEEP) AND THE VOIDS IN THE LIMESTONE ARE SMALL, THEN THE SINKHOLE CAN BE REPAIRED BY BACKFILLING WITH A LOWER-PERMEABILITY MATERIAL, SUCH AS CLAYEY-SAND OR CLAY. THE MATERIAL SHOULD BE COMPACTED AND THE REPAIR SHALL BE SLIGHTLY ABOVE THE ORIGINAL BOTTOM IN ORDER TO CREATE A SMALL MOUND TO ACCOUNT FOR SETTLING

DEEP REPAIR (SEE DETAIL):
IF THE COLLAPSE IS DEEP, THEN THE REPAIR SHALL BE MORE PERMANENT. THE COLLAPSE SHALL BE EXCAVATED TO THE LIMESTONE BEDROCK THE VOID(S) IN THE BEDROCK SHALL BE PLUGGED WITH CLEAN GROUT. A LOW PERMEABILITY MATERIAL SHALL BE PLACED OVER THE CONCRETE PLUG. THE MATERIAL SHALL BE COMPACTED AND BROUGHT TO EXISTING BASIN BOTTOM.

NOTIFICATION:
THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (SJRWMD) SHALL BE NOTIFIED OF ANY SINKHOLE DEVELOPMENT WITHIN 48 HOURS OF DISCOVERY AND THE PROPOSED METHOD BY WHICH THE SINKHOLE WILL BE REPAIRED SHALL BE SUBMITTED TO THE SJRWMD FOR APPROVAL WITHIN 30 DAYS. THE SJRWMD WILL THEN NOTIFY THE RESPONSIBLE PARTY AS TO THE ACCEPTANCE, DENIAL OR NEED FOR MODIFICATION OF THE REPAIR METHOD.

SHALLOW AND DEEP SINKHOLE/CAVITY MAINTENANCE REPAIR DETAIL

N.T.S



POND	T.O.B.(FT) Ⓐ	BOTTOM(FT) Ⓑ	DHWL(FT) Ⓒ 100-YR 24-HR	SHWL*(FT) Ⓓ	Ⓔ	SIDE SLOPE Ⓕ	SIDE SLOPE Ⓖ
ET-4	79.0	75.0	77.56	67.1	MATCH PROPOSED GRADE	6:1 MAX	6:1 MAX
ET-5	75.6	69.6	72.68	61.2	MATCH PROPOSED GRADE	4:1 MAX	4:1 MAX
ET-6	77.6	71.6	73.94	66.2	MATCH PROPOSED GRADE	4:1 MAX	4:1 MAX

SOD ALL SLOPES AND BOTTOM WITH FLORIDA FRIENDLY NON-MUCK GROWN SOD

POND CROSS-SECTIONS

N.T.S

Marion County Approval Stamp

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING · PLANNING · LANDSCAPE ARCHITECTURE · ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE

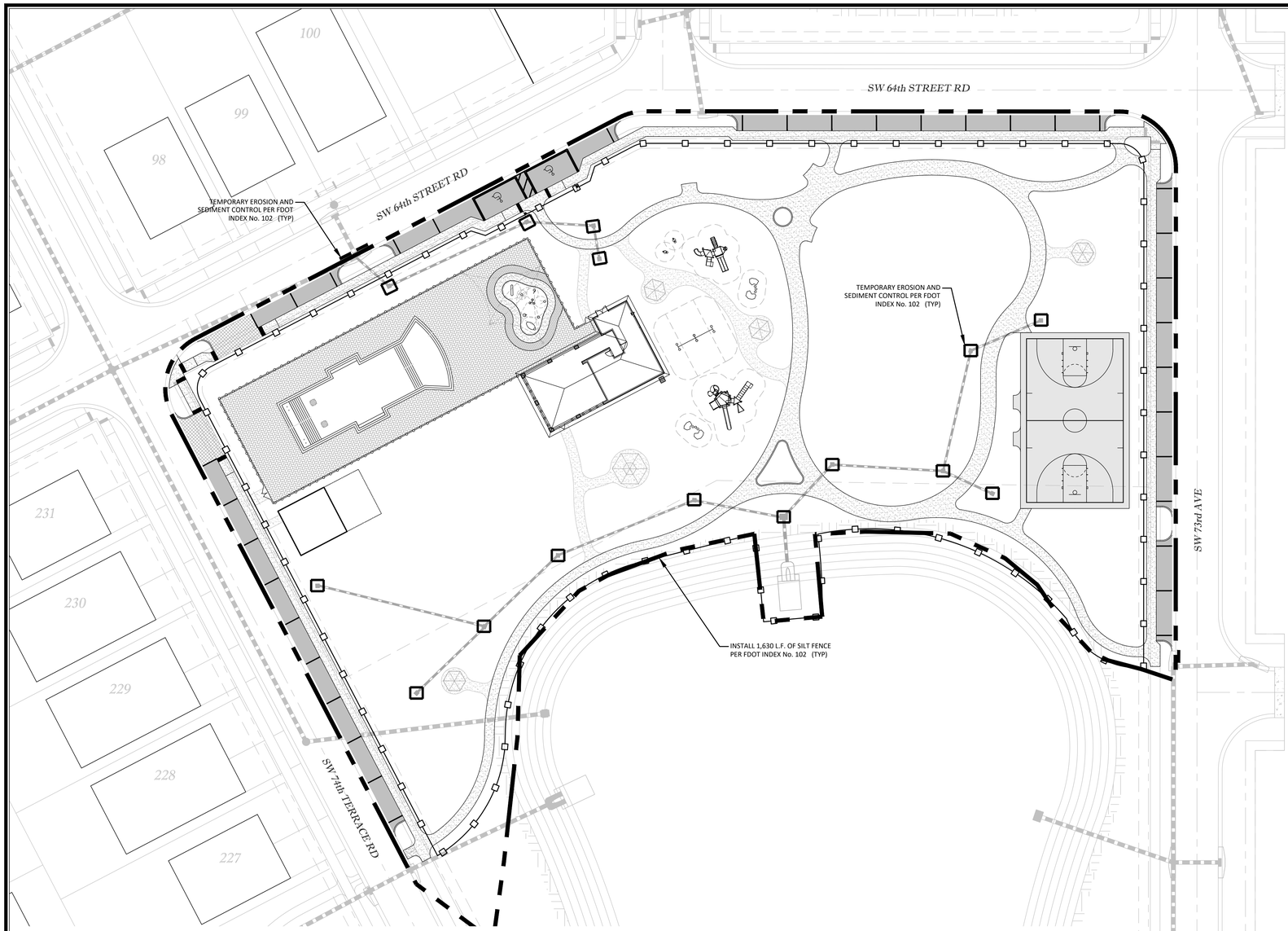
ROAN HILLS AMENITY AREA
COLEN BUILT DEVELOPMENT, L.L.C.
MARION COUNTY FLORIDA

DRAINAGE DETAILS

DATE 03-29-21
DRAWN BY HB
CHKD. BY JMM
JOB NO. 20-6103

SHT. 10.01

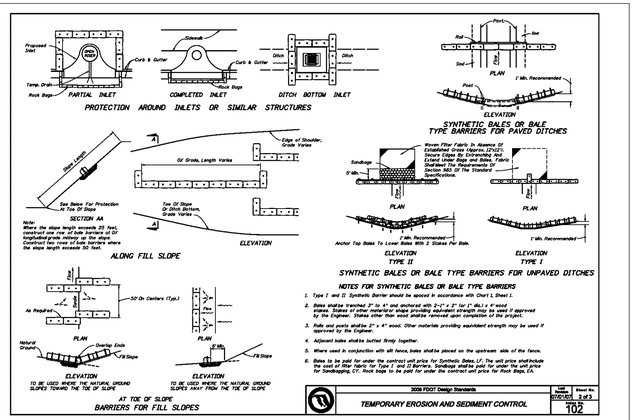
NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER



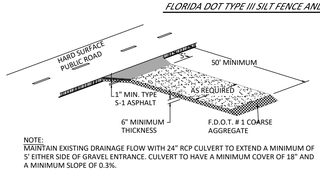
NOTES:

1. THE FOLLOWING LIST REPRESENTS A BASIC EROSION AND SEDIMENT CONTROL PROGRAM WHICH IS TO BE IMPLEMENTED TO HELP PREVENT OFF SITE SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROJECT.
2. TEMPORARY EROSION CONTROL TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY THE ENGINEER OR AREAS ON SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY THE OWNER.
3. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PRACTICAL TIME CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. ONE OF THE FIRST CONSTRUCTION ACTIVITIES SHOULD BE THE PLACEMENT OF PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AROUND THE PERIMETER OF THE PROJECT OR THE INITIAL WORK AREA TO PROTECT THE PROJECT, ADJACENT PROPERTIES AND WATER RESOURCES.
4. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL THROUGHOUT THE CONSTRUCTION PHASE. TEMPORARY MEASURES SHALL NOT BE CONSTRUCTED FOR EXPEDIENCY IN LIEU OF PERMANENT MEASURES.
5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT.
6. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.
7. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
8. MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCKPILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATERCOURSE BY RUNOFF OR HIGH WATER.
9. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
10. SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).
11. ALL INLETS TO BE PROTECTED BY DETAILS AS OUTLINED IN F.D.O.T. 2008 INDEX NO. 102

Marion County Approval Stamp

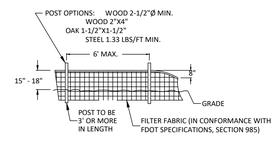


FLORIDA DOT TYPE III SILT FENCE AND EROSION CONTROL

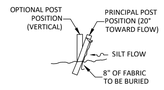


NOTE:
MAINTAIN EXISTING DRAINAGE FLOW WITH 24" RCP CULVERT TO EXTEND A MINIMUM OF 5' EITHER SIDE OF GRAVEL ENTRANCE. CULVERT TO HAVE A MINIMUM COVER OF 18" AND A MINIMUM SLOPE OF 0.3%.

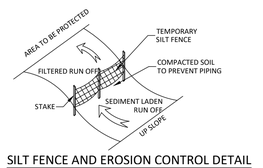
GRAVEL CONSTRUCTION ENTRANCE
N.T.S.



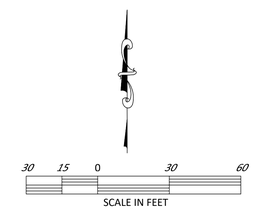
ELEVATION



SECTION
N.T.S.



SILT FENCE AND EROSION CONTROL DETAIL
N.T.S.



Tillman & Associates
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1720 SE 16th Ave. Bldg 100, Ocala, FL 34471
Office: (352) 387-4540 Fax: (352) 387-4545
CERTIFICATE OF AUTHORIZATION #26756

REVISIONS

DATE	

ROAN HILLS AMENITY AREA
COLEN BUILT DEVELOPMENT, L.L.C.
MARION COUNTY FLORIDA

EROSION CONTROL PLAN & DETAILS

DATE 03-29-21
DRAWN BY HB
CHKD. BY JMM
JOB NO. 20-6103

SHT. 11.01

NOT VALID UNLESS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER

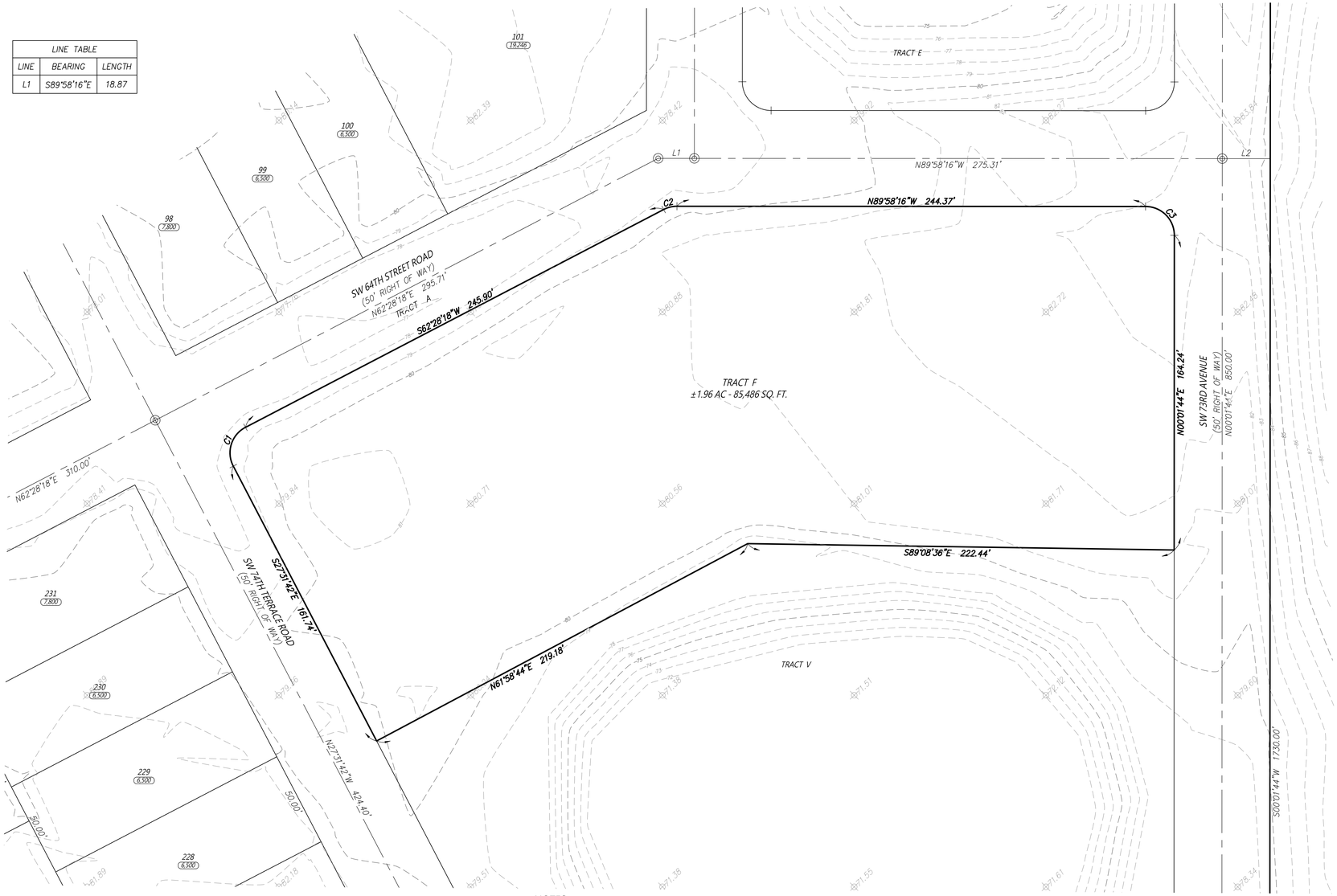
BOUNDARY AND TOPOGRAPHIC SURVEY FOR:
COLEN BUILT DEVELOPMENT, LLC
A PORTION OF SECTIONS 6 , TOWNSHIP 16 SOUTH, RANGE 20 EAST
MARION COUNTY, FLORIDA

CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C1	23.56	15.00	090°00'00"	21.21	S17°28'18"W
C2	7.21	15.00	027°33'26"	7.15	S76°15'01"W
C3	23.56	15.00	090°00'00"	21.21	N44°58'16"W

LINE TABLE		
LINE	BEARING	LENGTH
L1	S89°58'16"E	18.87

LEGEND AND ABBREVIATIONS:

- ± MORE OR LESS
- EL. ELEVATION
- LB LICENSED BUSINESS
- NO. NUMBER
- LS LAND SURVEYOR
- I.D. IDENTIFICATION
- ORB OFFICIAL RECORDS BOOK
- ℄ CENTERLINE
- R RADIUS
- L ARC LENGTH
- Δ DELTA (CENTRAL ANGLE)
- (P) PLAT MEASURE
- (D) DEED MEASURE
- (C) CALCULATED MEASURE
- C.D. CHORD LENGTH
- C.B. CHORD BEARING
- POC POINT ON CURVE
- POL POINT ON LINE
- PCC POINT OF COMPOUND CURVATURE
- PRC POINT OF REVERSE CURVATURE
- PC POINT OF CURVATURE
- PT POINT OF TANGENCY
- PI POINT OF INTERSECTION
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- FEMA FEDERAL EMERGENCY MANAGEMENT AGENCY
- DIP DUCTILE IRON PIPE
- PVC POLYVINYL CHLORIDE
- CMP CORRUGATED METAL PIPE
- RCP REINFORCED CONCRETE PIPE
- HDPE HIGH DENSITY POLYETHYLENE
- NAVD NORTH AMERICAN VERTICAL DATUM
- NGVD NATIONAL GEODETIC VERTICAL DATUM
- PB PLAT BOOK
- ORB OFFICIAL RECORDS BOOK
- PG(S) PAGE(S)
- R/W RIGHT OF WAY
- ESMT EASEMENT
- SEC SECTION
- FND FOUND
- REC RECOVERED
- CCR CERTIFIED CORNER RECORD
- RLS REGISTERED LAND SURVEYOR
- CM CONCRETE MONUMENT
- IRC IRON ROD AND CAP
- IR IRON ROD
- IP IRON PIPE
- CLF CHAIN LINK FENCE
- CURB INLET GRATE
- CATCH BASIN
- STORM MANHOLE
- MITERED END SECTION
- YARD DRAINAGE
- SANITARY MANHOLE
- SANITARY CLEANOUT
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC RISER BOX
- CABLE TELEVISION RISER BOX
- TELEPHONE RISER BOX
- UTILITY RISER
- WELL
- WATER SPIGOT
- IRRIGATION CONTROL VALVE
- WATER METER
- WATER VALVE
- FIRE HYDRANT
- BACK FLOW PREVENTER
- AIR CONDITIONER PAD
- GAS VALVE
- GAS METER
- GAS LINE MARKER
- CONCRETE UTILITY POLE
- METAL UTILITY POLE
- WOOD UTILITY POLE
- UTILITY POLE GUY ANCHOR
- LIGHT POLE
- SPOT/GROUND LIGHT
- ELECTRIC TRANSFORMER
- ELECTRIC VAULT
- WETLAND FLAG
- SIGN
- BOLLARD
- FLAG POLE
- MAILBOX
- HEDGE ROW
- LINE BREAK
- FENCE LINE AS NOTED
- T/B APPROXIMATE TOP OF BANK
- T/S APPROXIMATE TOE OF SLOPE
- 100 EXISTING CONTOUR
- BFOC UNDERGROUND FIBER OPTIC
- S UNDERGROUND SANITARY SEWER
- SAN FM UNDERGROUND FORCE MAIN
- W UNDERGROUND WATER LINE
- OHU OVERHEAD UTILITY LINE
- E UNDERGROUND ELECTRIC LINE
- CATV UNDERGROUND TV CABLE LINE
- STROM DRAINAGE LINE



HORIZONTAL CONTROL:

THE FLORIDA STATE PLANE COORDINATES SHOWN HEREON ARE NORTH AMERICAN DATUM OF 1983 (1990 ADJUSTMENT), FLORIDA WEST ZONE AS DERIVED FROM GPS STATIC SURVEY AND TRADITIONAL TRAVERSE METHODS AND ESTABLISHED FROM MARION COUNTY, FLORIDA CONTROL MONUMENTS "AR1852" AND "V086", PURSUANT TO SECTION 177.151, FLORIDA STATUTES.

THE NORTHWEST CORNER OF SECTION 12, TOWNSHIP 16 SOUTH, RANGE 20 EAST, MARION COUNTY, FLORIDA – FOUND 4" X 4" CONCRETE MONUMENT WITH NAIL & DISK STAMPED 1 2 11 12.
NORTHING: 1740427.4009 FEET
EASTING: 570381.5670 FEET
LATITUDE: 29°07'16.02210" N
LONGITUDE: 82°16'07.23060" W
CONVERGENCE: –00°07'50.7"
SCALE: 0.99994961

FOUND STAINLESS STEEL ROD STAMPED V086 1990
NORTHING: 1745775.8082 FEET
EASTING: 543817.8667 FEET
LATITUDE: 29°08'08.27974" N
LONGITUDE: 82°21'06.91361" W
CONVERGENCE: –00°10'16.8"
SCALE: 0.99995564

LEGAL DESCRIPTION:

TRACT "F", OF CALESA TOWNSHIP ROAN HILSS PHASE 1 AS RECORDED IN PLAT BOOK ____, PAGES___ OF THE PUBLIC RECORS OF MARIO COUNTY, FLORIDA.

NOTES:

1. DATE OF SURVEY DECEMBER 23, 2020
2. BEARINGS SHOWN HEREON ARE RELATIVE TO AN ASSUMED BEARING OF N89°58'16"W ALONG THE SOUTH LINE OF SECTION 6, TOWNSHIP 16 SOUTH, RANGE 21 EAST, MARION COUNTY, FLORIDA.
3. BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), COMMUNITY PANEL NO. 12083C0513E AND 12083C0701E, EFFECTIVE DATE OF APRIL 19, 2017, THE PROPERTY DESCRIBED HEREON LIES WITHIN FLOOD ZONES "X" AN AREA OF MINIMAL FLOOD HAZARD.
4. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR RIGHTS–OF–WAY, EASEMENTS, OWNERSHIP, ADJOINERS OR OTHER INSTRUMENTS OF RECORD.
5. IMPROVEMENTS NOT LOCATED AS PART OF THIS SURVEY.
6. DISTANCES SHOWN HEREON ARE BASED ON GRID DISTANCES.
7. INTERIOR IMPROVEMENTS NOT LOCATED AS PART OF THIS SURVEY PER CLIENTS REQUEST.
4. NORTH–SOUTH AND EAST–WEST TIES TO FOUND MONUMENTATION AND IMPROVEMENTS ARE BASED ON CARDINAL DIRECTION.
5. THE ACCURACY OF THE SURVEY MEASUREMENTS USED FOR THIS SURVEY MEETS OR EXCEEDS THE EXPECTED USE OF THE PROPERTY DESCRIBED HEREON. (RURAL) 1 FOOT IN 5,000 FEET.
6. ADDITIONS OR DELETIONS TO THE SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES ARE PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
7. THIS SURVEY HAS BEEN PREPARED FOR THE EXCLUSIVE BENEFIT OF THE PARTY(IES) NAMED HEREON, AND SHALL NOT BE DUPLICATED OR RELIED UPON BY ANY OTHER INDIVIDUAL OR ENTITY WITHOUT AUTHORIZATION FROM JCH CONSULTING GROUP, INC.
8. VERTICAL DATUM IS BASED ON FOUND 5/8" IRON ROD WITH A PLASTIC CAP STAMPED "WOOLPERT TRAVERSE" APPROXIMATELY 0.35 MILES NORTH STATE ROAD 200 ON THE WEST SIDE OF S.W. 80TH AVENUE. BENCHMARK IS LOCATED IN THE NORTHWEST CORNER OF THE INTERSECTION OF S.W. 80TH AVENUE AND THE CONSTRUCTION ENTRANCE FOR "ON TOP OF THE WORLD, COMMUNITIES, INC.", ELEVATION = 69.272 (DATUM NGVD 1929).
9. TOPOGRAPHIC SURVEY IS BASE ON AS BUILT DONE BY JCH CONSULTING GROUP DATED 05/23/2020 JOB NO.16451TOPASBMASS.

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THIS SURVEY MEETS THE APPLICABLE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J17.050–.052, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

_____ _____
CHRISTOPHER J. HOWSON DATE
FLORIDA LICENSED SURVEYOR & MAPPER NO. 6553

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

(CERTIFICATE OF AUTHORIZATION NO. LB 8071)

NO.	REVISIONS	BY	DATE

DRAWN: M.A.
REVISED:
REVISED:
CHECKED: C.J.H.
APPROVED: C.J.H.
SCALE: 1" = 30'

1 INCH = 30 FEET

JCH CONSULTING GROUP, INC.
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PLAT OF SURVEY AND TOPOGRAPHIC SURVEY -FOR- COLEN BUILT DEVELOPMENT, LLC.

FIELD BOOK/PAGE: 17–4/32, 20–3/4
FILE: OTOW CALESA

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