CHARLOTTE COUNTY
FLORIDA

MEMORANDUM

Date: 06-23-2025

To: Honorable Board of County Commissioners

From: Jenny Shao, Process Improvement Manager
(Exhibit 1 - Professional Qualifications)

Subject: FP-22-05-14 Babcock Ranch Community Crescent Lakes Phase 1 Bond Release

Request:

On behalf of Meritage Homes of Florida, Inc., Barraco and Associates, Inc. is requesting a Bond Release of the approved surety provided under Bond No. SUR0075808, in the amount of $386,012.28, issued by Argonaut Insurance Company for the completion of the remaining infrastructure for Babcock Ranch Community Crescent Lakes Phase 1.

Analysis and Background:

The subdivision, consisting of 193 single-family lots and 16 tracts with supporting utility, roadway, and stormwater infrastructure, was granted Final Plat approval by the Board of County Commissioners on March 28, 2023.

The site contains 111.47± acres and is generally located south of Panther Drive, north of Cypress Parkway, west of the County line with Glades County and east of Babcock Trail. The site is within the boundary of the Babcock Ranch Community Development of Regional Impact (DRI) Increment 2, the East County area, and in Commission District I.

At the time of Final Plat application, the applicant was granted approval of a Development Agreement (See Attachment 1) and surety in the amount of $6,796,298.80, to ensure the completion of the plat infrastructure. The subdivision was granted approval of a bond reduction and First Amendment to Development Agreement for the plat infrastructure on November 28, 2023 (See Attachment 2).

The Babcock Ranch Community Independent Special District (BRCISD) District Engineer completed a limited review and visual observation of the site conditions, requiring that the remaining approvals for release are required from the County (See Attachment 3). The Project Engineer has submitted this request for a bond release (See Attachment 4), along with the

SFWMD Construction Completion Certification (CCC) (See Attachment 5) and record drawings (See Attachment 6).

The Public Works Department has inspected the site, finding that the construction has been completed and is in substantial compliance with previously approved plans. The County Engineer agrees with the Bond Release (See Attachment 7).

If approved, Bond No. SUR0075808, in the amount of $386,012.28, issued by Argonaut Insurance Company, will be released to the applicant.

Recommendation:

Community Development recommends approval of the requested Bond Release under Petition **FP-22-05-14**.

Exhibit 1

Professional Qualifications

CHARLOTTE COUNTY
Community Development

Qualifications of Jenny Shao

***Position*:** Process Improvement Manager

***Time with Charlotte County*:** 4 years

***Position Summary & Experience*:** I have worked as an Administrative Assistant II, Zoning Tech, Project Coordinator, Zoning Coordinator, and Planner for Charlotte County Human Services and Community Development Departments for 4 years. My duties include administrative tasks, customer service, data entry, reviewing and processing permits, Plats, Vacations and Land Splits for compliance with Charlotte County Land Development regulations. Furthermore, I coordinate and compile the comments and conditions of the reviewing departments and agencies into the final recommendation to the Planning and Zoning Board and the Board of County Commissioners for the above applications. My education consists of a Bachelor of Arts in International Studies and East Asian Studies, graduating Cum Laude from University of Miami in Spring 2020.

Exhibit 1

Attachment 1

Recorded Development Agreement

ROGER D. EATON, CHARLOTTE COUNTY CLERK OF CIRCUIT COURT
PAGE: 7
INSTR #: 3249227 Doc Type: AGR
Recorded: 04/12/2023 at 02:24 PM
Rec. Fee: RECORDING $61.00

This instrument prepared by:
BARRACO & ASSOCIATES, INC.
2271 MCGREGOR BLVD., SUITE 100
FORT MYERS, FL. 33901

DEVELOPER'S AGREEMENT

THIS DEVELOPER'S AGREEMENT ("Agreement") is made this 28 day of March, 2023, by and between CHARLOTTE COUNTY, a political subdivision of the State of Florida, herein called "County", and Meritage Homes of Florida, Inc. with an address of 1400 Centrepark Boulevard, Suite 1000 West Palm Beach, FL. 33401 herein called "Developer".

W I T N E S S E T H

WHEREAS, Developer is the fee simple owner of the lands described in Exhibit "A," attached hereto and incorporated herein by reference (hereinafter, "Property"); and

WHEREAS, Developer intends to subdivide the Property and develop a project under the name of Babcock Ranch Community Crescent Lakes Phase 1 and cause a plat of the same name to be recorded in the Public Records of Charlotte County, Florida (the "Plat"); and

WHEREAS, the Plat is identified in Charlotte County Community Development Department Files as #FP 22-05-14; and

WHEREAS, Developer is required to construct certain improvements within the Property in accordance with County Standards, and construction plans and specifications approved by the County; and

WHEREAS, Developer submitted plans prepared by Barraco and Associates, Inc., dated April 6, 2022 for final construction plan approval (hereinafter, "Plans"). The Plans were approved by County on December 12, 2022 under DRC-22-00192. The Plans depict certain subdivision improvements which must be required to be constructed prior to receiving certificates of occupancy for structures to be constructed on the Property; and

WHEREAS, Developer and County desire to enter into this Agreement to set forth certain obligations by the Developer and County in connection with the construction of the improvements; and

WHEREAS, the intent of this Agreement is to provide the required financial assurances for the construction of the improvements pursuant to the provisions of Section 3-7-122 of the

Charlotte County Code of Laws and Ordinances and is not intended to be construed as a development agreement under Chapter 163.3221, Florida Statutes.

NOW THEREFORE, in consideration of their respective undertakings hereunder, County and Developer agree as follows:

1. The foregoing recitals are true and correct and incorporated herein by this reference.

2. Developer agrees to complete the subdivision improvements shown on the Plans. Developer is required to construct the improvements as set forth in the Engineer's Probable Cost Estimate dated October 25, 2022 , according to the sound engineering standards and County Subdivision Regulations, and according to the engineering plans and specifications submitted by the Developer to the County, as approved by the County.

3. In order to guarantee Developer's adherence to the obligations under this Agreement, Developer has provided a bond in an amount of $6,796,298.80 (hereinafter, the "Security") to ensure completion of those subdivision improvements depicted on the approved Plans which have not, to date, been certified as complete.

4. Said Security shall remain in effect until final approval of the improvements by the County. Any reduction of the Security shall follow Charlotte County policy and Developer will be required to provide the applicable fee along with the record drawings and recommendation signed and sealed by the engineer of record. The reduction of the Security must be approved by the County prior to Developer reducing the Security amount.

5. All improvements as shown on the Plans must be completed per the approved Plans to the satisfaction of the County Engineer no later than two (2) years after the date that the Plat is recorded in the Public Records of Charlotte County, Florida. If the work is not completed within two (2) years, the County Engineer shall have right to review the surety amount, and if deemed insufficient, Developer may be required to provide additional surety and execute an amendment to this Agreement to reflect the increased surety. Said amendment shall be recorded in the same manner as this Agreement.

6. If the subdivision improvements depicted in the Plans are not completed as provided herein, or if the County receives notification from the institution issuing the Security that the Security will expire prior to the specified time period stated herein, it is expressly understood and acknowledged by the Parties that:

(a) Notwithstanding any notice and cure requirements in this Agreement, the County may, at its sole and absolute discretion, request and/or utilize the outstanding amount of the Security.

(b) In the event of litigation, no party, including but not limited to the Owner, Developer, future lot owners, successors and assigns, is entitled to an offset of damages in an amount equal to the Security;

7. There are no intended third party beneficiaries to this Agreement, therefore, no third parties may rely upon on this Agreement and/or the Security, including but not limited to future lot owners or their successors and assigns.

8. Nothing herein shall be construed to create an obligation upon the County, under Section 177.081, Florida Statutes, to voluntarily assume an obligation to perform any act of construction or maintenance under this Agreement and/or the Security.

9. County's consent, approval and acknowledgement herein granted shall not limit the County's right to approve or deny other development on the Property as provided by all laws, rules and regulations applicable to the Property.

10. Upon certification by a licensed engineer that the subdivision improvements have been completed in substantial compliance with the Plans and the terms of this Agreement have been met, or upon replacement of the Security and execution of a new development agreement by a subsequent developer, County shall release the Security and this Agreement shall terminate.

11. This Agreement shall inure to the benefit of and be obligatory upon the Parties and their respective successors, assigns, heirs and personal representatives.

12. The terms of this Agreement have been jointly drafted by the Parties; therefore, in construing this Agreement no legal presumptions shall arise against either Party as the drafter of the Agreement.

13. The invalidity or unenforceability of any one or more provisions of this Agreement shall not affect the validity or enforceability of the remaining portions of this Development Agreement, or any part of this Agreement not held to be invalid or unenforceable.

14. This Agreement may be executed in counterparts, each of which shall constitute an original, but all taken together shall constitute one and the same Development Agreement.

15. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. Venue for any proceeding brought hereunder shall be Charlotte County, Florida.

IN WITNESS WHEREOF, County and Developer have executed this Development Agreement on the date first above written.

CHARLOTTE COUNTY, a political subdivision of the State of Florida

By: William G. Truex
William G. Truex, Chairman
MARCH 28, 2023

Attest:

Roger D. Eaton, Clerk of the Circuit Court and Ex-officio Clerk of the Board Of County Commissioners

By: Dawn Johnston
Deputy Clerk
AGR 2023-051

Approved as to form and legal sufficiency:

By: Janette S. Knowlton
Janette S. Knowlton
County Attorney
LR-2022-1007

Marie M. Vacula
1st Witness Signature

Marie M. Vacula
1st Witness Printed Name

2nd Witness Signature

2nd Witness Printed Name

Meritage Homes of Florida, Inc.
1400 Centrepark Boulevard
Suite 1000
West Palm Beach, FL. 33401

By: _____
[Authorized Signature]

Division President South Florida
[Title]

Justin Cook
[Printed Name]

ACKNOWLEDGMENT

STATE OF Florida
COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me, by means of [X] physical presence or [ ] online notarization this 22 day of February, 2022, by Justin Cook, Division President, [X] who is personally known to me or [ ] who has produced _____ as identification.

_____
Notary Public
Printed Name: Ligia Elena Bido
My Commission Expires: Aug 6 2024

(Notary Seal)

LIGIA ELENA BIDO
Notary Public - State of Florida
Commission # HH 29586
My Comm. Expires Aug 6, 2024
Bonded through National Notary Assn.

EXHIBIT "A"

COMMENCING AT THE SOUTHEASTERLY MOST CORNER OF TRACT MA-11, BABCOCK RANCH COMMUNITY BLUEBIRD TRAIL, AS RECORDED IN PLAT BOOK 23, PAGE 16A OF SAID PUBLIC RECORDS, THENCE N.73°12'45"E., A DISTANCE OF 629.78 FEET TO THE POINT OF BEGINNING.

FROM SAID POINT OF BEGINNING, THENCE N.03°55'35"W., A DISTANCE OF 526.37 FEET; THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 1,110.00 FEET,(CHORD BEARING N.01°16'08"W.)(CHORD 102.93 FEET)(DELTA 05°18'53") FOR A DISTANCE OF 102.96 FEET; THENCE S.85°24'51"E., A DISTANCE OF 571.86 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 115.51 FEET, (CHORD BEARING N.34°35'12"E.)(CHORD LENGTH 202.44 FEET)(DELTA 122°23'35") FOR A DISTANCE OF 246.75 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 118.56 FEET, (CHORD BEARING N.01°49'03"E.)(CHORD LENGTH 111.08 FEET)(DELTA 55°52'04") FOR A DISTANCE OF 115.61 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 92.71 FEET, (CHORD BEARING N.23°10'20"W.)(CHORD LENGTH 155.08 FEET)(DELTA 113°31'32") FOR A DISTANCE OF 183.69 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 898.77 FEET, (CHORD BEARING N.63°23'06"W.)(CHORD LENGTH 489.80 FEET)(DELTA 31°37'27") FOR A DISTANCE OF 496.07 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 1,110.00 FEET, (CHORD BEARING N.42°47'36"E.)(CHORD LENGTH 339.00 FEET)(DELTA 17°34'02") FOR A DISTANCE OF 340.33 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 790.00 FEET, (CHORD BEARING N.48°37'41"E.)(CHORD LENGTH 81.28 FEET)(DELTA 05°53'51") FOR A DISTANCE OF 81.32 FEET; THENCE S.84°41'29"E., A DISTANCE OF 2,894.94 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 290.00 FEET, (CHORD BEARING S.32°32'02"W.)(CHORD LENGTH 225.66 FEET)(DELTA 45°47'39") FOR A DISTANCE OF 231.79 FEET; THENCE S.09°38'13"W., A DISTANCE OF 81.70 FEET; THENCE S.20°33'43"W., A DISTANCE OF 402.65 FEET; THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 210.00 FEET,(CHORD BEARING S.34°19'19"W.)(CHORD 99.90 FEET)(DELTA 27°31'12") FOR A DISTANCE OF 100.87 FEET; THENCE S.48°04'55"W., A DISTANCE OF 228.85 FEET; THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 290.00 FEET,(CHORD BEARING S.21°49'09"W.)(CHORD 256.64 FEET)(DELTA 52°31'31") FOR A DISTANCE OF 265.85 FEET; THENCE S.04°26'36"E., A DISTANCE OF 686.22 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 2,910.00 FEET, (CHORD BEARING N.85°19'10"W.)(CHORD LENGTH 883.35 FEET)(DELTA 17°27'36") FOR A DISTANCE OF 886.78 FEET; THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 3,578.46 FEET, (CHORD BEARING N.75°49'15"W.)(CHORD LENGTH 96.01 FEET)(DELTA 01°32'14") FOR A DISTANCE OF 96.02 FEET; THENCE

ALONG A REVERSE CURVE TO THE LEFT HAVING A RADIUS OF 18,478.35 FEET, (CHORD BEARING N.75°59'17"W.)(CHORD LENGTH 603.67 FEET)(DELTA 01°52'19") FOR A DISTANCE OF 603.70 FEET; THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 5,169.97 FEET, (CHORD BEARING N.81°45'48"W.)(CHORD LENGTH 872.29 FEET)(DELTA 09°40'43") FOR A DISTANCE OF 873.33 FEET; THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 5,170.00 FEET, (CHORD BEARING N.87°49'45"W.)(CHORD LENGTH 221.33 FEET)(DELTA 02°27'11") FOR A DISTANCE OF 221.35 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 110.66 FEET, (CHORD BEARING N.67°56'26"W.)(CHORD LENGTH 72.21 FEET)(DELTA 38°05'14") FOR A DISTANCE OF 73.56 FEET; THENCE N.49°47'32"W., A DISTANCE OF 13.92 FEET; THENCE ALONG A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 125.08 FEET, (CHORD BEARING N.28°04'28"W.)(CHORD LENGTH 92.51 FEET)(DELTA 43°24'20") FOR A DISTANCE OF 94.76 FEET; THENCE ALONG A REVERSE CURVE TO THE LEFT HAVING A RADIUS OF 60.00 FEET, (CHORD BEARING N.13°20'32"W.)(CHORD LENGTH 14.56 FEET)(DELTA 13°56'28") FOR A DISTANCE OF 14.60 FEET; THENCE N.20°18'46"W., A DISTANCE OF 17.99 FEET; THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 90.00 FEET,(CHORD BEARING N.12°07'10"W.)(CHORD 25.65 FEET)(DELTA 16°23'12") FOR A DISTANCE OF 25.74 FEET TO THE POINT OF BEGINNING.

BEARINGS SHOWN HEREON ARE BASED ON THE EASTERLY LINE OF TRACT MA-11, BABCOCK RANCH COMMUNITY BLUEBIRD TRAIL, AS RECORDED IN PLAT BOOK 23, PAGE 16A, OF THE PUBLIC RECORDS OF CHARLOTTE COUNTY, FLORIDA WHEREIN SAID LINE BEARS N.01°52'45"W.

Attachment 2

Recorded First Amendment to Development Agreement

This instrument prepared by:
Williams Parker Harrison Dietz & Getzen
50 Central Avenue, Eighth Floor
Sarasota, Florida 34236
(941) 366-4800
Attn: Kyle D. Elliott, Esq.

ROGER D. EATON, CHARLOTTE COUNTY CLERK OF CIRCUIT COURT
PAGE: 5
INSTR #: 3343287 Doc Type: AGR
Recorded: 11/29/2023 at 03:05 PM
Rec. Fee: RECORDING $44.00

FIRST AMENDMENT TO DEVELOPMENT AGREEMENT

THIS FIRST AMENDMENT TO DEVELOPMENT AGREEMENT (this "**Amendment**") is made this 28 day of November, 2023, by and between CHARLOTTE COUNTY, a political subdivision of the State of Florida, herein called "**County**", and MERITAGE HOMES OF FLORIDA, INC, a limited liability company registered to conduct business in the State of Florida, with an address of 1395 University Blvd., Suite 300, Jupiter, FL 33458, herein called "**Developer**".

WITNESSETH

WHEREAS, Developer is the fee simple owner of the lands described in Exhibit "A" (hereinafter, the "**Property**"); and

WHEREAS, Developer subdivided the Property and caused a plat named Babcock Ranch Community Crescent Lakes Phase 1 to be recorded at Plat Book 26, Pages 14A – 14O, in the Official Records of Charlotte County, Florida (the "**Plat**"); and

WHEREAS, to ensure the completion of certain improvements depicted on plans approved by the County, and required for the Plat, County and Developer entered into that certain Developer's Agreement dated March 28, 2023 and recorded on April 12, 2023 at Instrument Number 3249227 in the Public Records of Charlotte County (the "**Developer's Agreement**"); and

WHEREAS, pursuant to the terms of the Development Agreement, Developer provided a Performance Assurance Bond No. SUR0075808 in the amount of Six Million Seven Hundred Ninety-Six Thousand Two Hundred Ninety-Eight Dollars and 80/100ths ($6,796,298.80) (hereinafter, the "**First Security**"); and

WHEREAS, a portion of the subdivision improvements shown on the approved plans have been certified as completed in substantial compliance with the Plans by a licensed engineer; and

WHEREAS, County and Developer have agreed to amend the Development Agreement to facilitate the reduction of the amount of securing necessary to ensure completion of remaining improvements for the Plat; and

WHEREAS, the intent of the Development Agreement and this Amendment thereto is to provide the required financial assurances pursuant to the provisions of Section 3-7-65 of the Charlotte County Code of Laws and Ordinances, which is not intended to be construed as a development agreement under Chapter 163.3221, Florida Statutes.

NOW THEREFORE, in consideration of their respective undertakings hereunder, County and Developer agree as follows:

1. Developer agrees to complete the subdivision improvements shown on the Plans, which have not yet been certified as complete.

2. County hereby reduces the amount of the First Security from $6,796,298.80 down to $386,012.28 (the "Second Security") and Developer shall provide a rider to the bond in such amount.

3. All improvements as shown on the Plans must be completed per the approved Plans to the satisfaction of the County Engineer no later than April 12, 2025.

4. The parties agree that the Developer's Agreement remains in full force and effect, except as modified herein.

5. This Amendment may be executed in counterparts, each of which shall constitute an original, but all taken together shall constitute one and the same Developer's Agreement.

[Signature Pages to Follow]

IN WITNESS WHEREOF, the County and the Developer have executed this First Amendment on the date first above written.

Attest:

Roger D. Eaton, Clerk of the Circuit Court and Ex-officio Clerk of the Board of County Commissioners

By: _____
Deputy Clerk

A.AGR 2023-051

CHARLOTTE COUNTY, a political Subdivision of the State of Florida

By: _____
WILLIAM G. TRACEY, Chairman

Approved as to Form and Legal Sufficiency:

By: _____
Janette S. Knowlton
County Attorney
LR 23-0836

1st Witness Signature

Michael D'Amelio
1st Witness Printed Name

Lindsey Cendejas
2nd Witness Signature

Lindsey Cendejas
2nd Witness Printed Name

Meritage Homes of Florida, Inc.,
1395 University Boulevard
Suite 300
Jupiter, FL 33458

By: _____
Name: Lexie McIntyre
Title: Division President

STATE OF FLORIDA
COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization, this 16th day of October, 2023, by Lexie McIntyre, as Div President of Meritage Homes of Florida, Inc., on behalf of the same. He ☒ is personally known to me, or ☐ produced _____ as identification and did not take an oath.

VINDRA A. KHAN
MY COMMISSION # HH 273837
EXPIRES: January 23, 2026

Notary Stamp

_____
Signature of Notary

Vindra A. Khan
Print Name of Notary

My Commission Expires: 1/23/2026

EXHIBIT "A"
Property Legal Description

All of "BABCOCK RANCH COMMUNITY CRESCENT LAKES PHASE 1" recorded in Plat Book 26, Page 14A through 14O, of the Public Records of Charlotte County, Florida. A subdivision lying in Section 28, Township 42 South, Range 26 East, Charlotte County, Florida.

Attachment 3

BRC ISD Bond Release Approval Letter

BABCOCK RANCH
COMMUNITY INDEPENDENT
SPECIAL DISTRICT

42911 Lake Babcock Dr, Babcock Ranch, FL 33982
Phone: (941) 676-7191 | Email | ISD Website | ACA Portal

April 21, 2025

Carl Barraco, P.E.
Barraco and Associates, Inc.
2271 McGregor Blvd, Suite 100
Fort Myers, FL 33901

RE: BRC ISD BOND APPROVAL LETTER

Record ID #:	**D02-0002**
Record ID Name:	**Village II Parcel 3 (Crescent Lakes)**
County:	Charlotte
Phase, Sub-Phase:	Phase
Owner:	Meritage Homes of Florida, Inc

Dear Mr. Barraco:

The BRCISD District Engineer has completed a limited review of the remaining improvements associated with the above referenced project and phase. In the provided Engineer's Opinion of Probable Costs for remaining improvements within this phase, it is the opinion of the District Engineer that those improvements noted are consistent with the construction completed and the remaining outstanding items.

The remaining improvements noted have been field verified and are consistent with the quantities represented within the reduction estimate. The cost of remaining improvements is consistent with the unit prices that were approved in the original bond issuance.

This letter only constitutes the District Engineer's limited review and visual observation of the site conditions and remaining improvements. Remaining approvals for release of funds are required from Charlotte County and are not the responsibility of authority of the BRCISD.

Sincerely,

Sina Ebrahimi, PE
ISD District Engineer: Kimley-Horn and Associates, Inc.

cc: brcisdengineer@babcockranchcommunityisd.com

Attachment 4

Applicant's Request for a Bond Release

Barraco and Associates, Inc.
www.barraco.net
Civil Engineers, Land Surveyors and Planners

March 28, 2025

Ms. Jenny Shao
Charlotte County Land Development
18400 Murdock Circle
Port Charlotte, FL. 33948

Re: Babcock Ranch Community Crescent Lakes Phase 1 (DRC-22-00192; FP-22-05-14)
Bond Release Request

Dear Ms. Shao:

Please accept this letter that in our professional judgement, to the best of our knowledge and belief, and based on information provided by the project surveyor and our designated representatives observation the roadway, storm drainage and potable water main system for the above referenced project have been completed in accordance with the plans and specifications as approved by Charlotte County. My authorized representative conducted an on-site inspection of the infrastructure on February 3, 2025.

At this time, the applicant requests a full release of Performance Bond No. SUR0075808 in the currently reduced amount of $386,012.28 held by Charlotte County.

Thank you for your consideration and if you should have any questions or require additional information, please advise.

Very truly yours,
BARRACO AND ASSOCIATES, INC.

CARL A. BARRACO JR. LICENSED No 81259 STATE OF FLORIDA REGISTERED PROFESSIONAL ENGINEER

3-28-25

Carl A. Barraco, Jr., P.E.
Florida Registration No. 81259
Project Engineer (Seal)
Florida Certificate of Authorization #7995

Cc: Mike Hueniken
Stephen Coleman

Attachment 5

SFWMD Construction Completion Certification (CCC)

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

February 04, 2025

Jeff Alexander
Meritage Homes of Florida, Inc.
1395 University Blvd., Ste 300
Jupiter, FL 33458

Delivered via email

Subject: Crescent Lakes at Babcock Ranch (Village II Parcel 3)
Construction Completion Certification (CCC) Acceptance
Environmental Resource Permit (ERP) No. 08-106739-P
Charlotte County

Dear Mr. Alexander:

The South Florida Water Management District (District) is in receipt of your October 30, 2024 CCC for the above referenced ERP. Your CCC is accepted and the above referenced ERP is hereby converted from the construction phase to the operation and maintenance phase.

This acceptance is based on the District's review of the "As-built Certification and Request for Conversion to Operation Phase", Form 62-330.310(1), and a determination that construction is in substantial conformance with the plans and specifications approved by the District, in accordance with Section 62-330.310, Florida Administrative Code (FAC).

The following comments are also included based on recent observations by District Staff:

1. Best Management Practices (BMPs) shall be utilized in accordance with the Stormwater Pollution Prevention Plan throughout completion of individual lot construction to ensure erosion is not causing sediment to be deposited into the stormwater management system. Upon completion of construction please remove all BMPs from the conveyance system to ensure that runoff can freely enter the stormwater system for conveyance and treatment.

2. Throughout completion of individual lot construction side and rear lot drainage swales shall be graded such that conveyance is in accordance with permitted plans.

By accepting the Florida registered professional's certification, District staff considers the stormwater management (SWM) system authorized under the above referenced permit/application number(s) to be in compliance with ERP conditions pertaining to the CCC.

As stated in the ERP's conditions, a permit transfer from the Permittee to the operating entity is required in accordance with Section 62-330.310, FAC. The permittee is liable to comply with the plans, terms and conditions of the ERP for the life of the project or activity until issuance of the permit transfer to the Operating Entity. This transfer should be pursued via Form 62-330.310(2), Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity, with supporting documentation. The form and filing instructions are enclosed.

If you have any questions or require additional assistance, please contact Gary Koltz, P.E. at 239-338-2929 x7765 or via email at gkoltz@sfwmd.gov.

Sincerely,



Gary Koltz, P.E.
District Staff Engineer, Environmental Resource Compliance

eEnclosures: Location Map (220225-33354_Exhibit1.0_LocMap.pdf)
Form 62-330.310(2)_Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity (Form 62-330.310(2))
Notice of Rights (Notice of Rights)

c: Bill Vander May, Babcock Ranch Community Independent Special District (E-Mail)
Steve Coleman, PE, Barraco and Associates, Inc. (E-Mail)
Carl Barraco, PE, Barraco and Associates, Inc. (E-Mail)

This document is filed in the RegPermitting system under Permit Number 08-106739-P via the Application/Permit Section on the Search Records home page

Attachment 6

Utility Record Drawings

PROJECT RECORD

UTILITY RECORD DRAWINGS

FOR

CRESCENT LAKES

AT BABCOCK RANCH

PART OF SECTION 28, TOWNSHIP 42 SOUTH, RANGE 26 EAST
PUNTA GORDA, FLORIDA

PROJECT DATA

SITE ADDRESS
PUNTA GORDA, FL 33982

PROJECT DATUM
STATE PLANE FLORIDA WEST ZONE NAD 1983 (NSRS2011)
NORTH AMERICAN VERTICAL DATUM (NAVD) 1988

ZONING
BOZD

RECORD PLAT
PENDING

FLOOD ZONE
ACCORDING TO F.I.R.M. (FLOOD INSURANCE RATE MAP) NO. 12015C0500G, MAP REVISED: DECEMBER 15, 2022), THE PROPERTY IS IN FLOOD ZONE AE (27.5 NAVD88) AND FLOOD ZONE X

STRAP NUMBERS
422628100001

PERMIT REQUIREMENTS

AGENCY	STATUS	NOTES
S. FLORIDA WATER MANAGEMENT DISTRICT	PENDING	-
CHARLOTTE COUNTY DRC	PENDING	-
B.R.C.I.S.D. SITE PLAN	PENDING	-
FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION	PENDING	-
FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION	PENDING	-
F.D.O.T. CONNECTION PERMIT	N/A	-
F.D.O.T. DRAINAGE CONNECTION PERMIT	N/A	-
F.D.O.T. UTILITY PERMIT	N/A	-
ARMY CORPS OF ENGINEERS	N/A	-
F.D.E.P. NOTICE OF INTENT	PENDING	-

NOTE: CONTRACTOR MUST OBTAIN AND KEEP ON FILE A COPY OF ALL PERMITS REQUIRED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY

DESIGN TEAM

PROJECT ENGINEER
CARL A. BARRACO, JR., P.E.

PROJECT MANAGEMENT
STEVE COLEMAN

DESIGN ENGINEER
VINNIE O. BARRACO, JR., E.I.

PROJECT SURVEYOR
SCOTT A. WHEELER, PSM

LEAD DESIGN TECHNICIAN
JOHN W. HAHN, JR.

SITE PLANNING
JENNIFER SAPEN, AICP

DESIGN STAFF
-

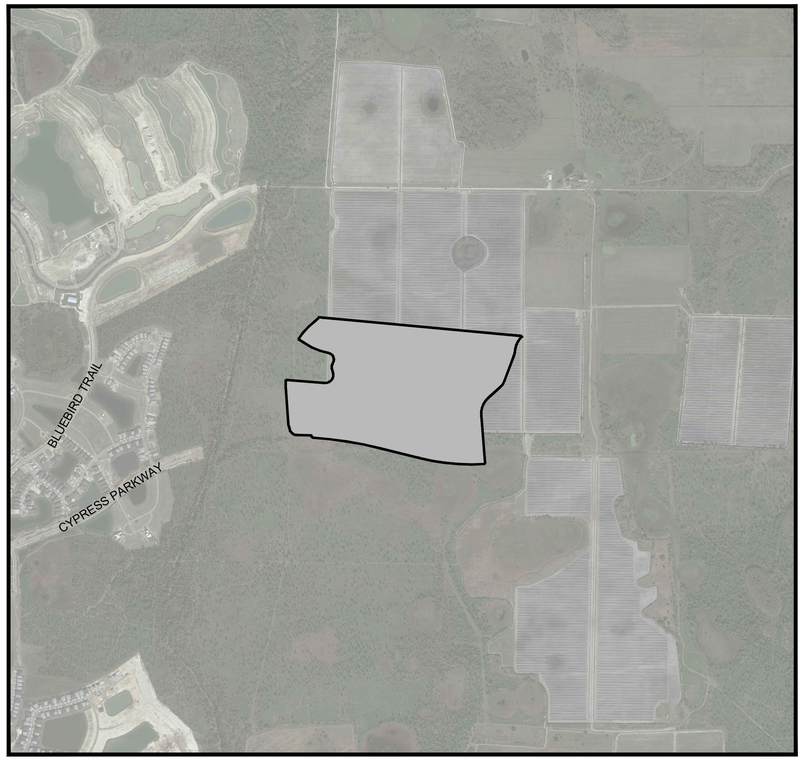
LAND PLANNING
-

QUALITY CONTROL
DOUG TARN

RECORD DRAWINGS
W. PEYTON GAUSE, III

THESE PLANS MAY HAVE BEEN MODIFIED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

ALL DIMENSIONS ARE IN FEET.



PROJECT LOCATION

N
W E
S

LOCATION MAP
0 500 1000 2000
SCALE IN FEET

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INDEX OF DRAWINGS

ENGINEER OF RECORDS SIGNATURE AND SEAL APPLY TO THE FOLLOWING PLAN SHEETS, EXCLUDING ANY SUPPLEMENTS:

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~~2.1~~	~~ZONING AND DEVELOPMENT STANDARDS PLAN~~	-	~~24012A06.DWG~~
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A	BASE LINEWORK PLAN & PROFILE	24012A00.DWG
B	SURVEY LINEWORK	23758S00.DWG
C	PLAT LINEWORK	24012P00.DWG
D	AERIAL PHOTOGRAPH	24012_IMAGE.JPEG

RECORD DRAWINGS CERTIFICATION BY ENGINEER

THESE RECORD DRAWINGS (FOR UTILITIES ONLY) ARE BASED UPON SURVEY DATA COLLECTED BY BARRACO & ASSOCIATES, INC. BETWEEN NOVEMBER 2, 2022 & NOVEMBER 29, 2023.

BARRACO AND ASSOCIATES, INC.

CARL A. BARRACO, P.E. — DATE

REGISTERED PROFESSIONAL ENGINEER
FLORIDA CERTIFICATE NO. 38536
FOR THE FIRM

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PREPARED FOR

Meritage Homes

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FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

This item has been digitally signed and sealed by Carl A. Barraco, Jr. on the date adjacent to the seal.

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FILE NAME	24012R01.DWG
LOCATION	J:\24012\DWG\RECORD\PH1\
PLOT DATE	MON. 12-4-2023 - 8:49 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

MASTER = BAI-COVER-1.DWG

PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

COVER SHEET AND LOCATION MAP

PROJECT / FILE NO.	SHEET NUMBER
24012	1.0

STANDARD ABBREVIATIONS

NOTE: SEE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS ABBREVIATIONS FOR ADDITIONAL ABBREVIATIONS NOT LISTED BELOW.

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	CTR.	CENTER	FHWA.	FEDERAL HIGHWAY ADMINISTRATION	M.H.	MANHOLE	REINF.	REINFORCED OR REINFORCING
ABD.	ABANDONED	C.U.E.	COUNTY UTILITY EASEMENT	FIN.	FINISH	M.H.W.	MEAN HIGH WATER	REL.	RELOCATED
AC.	ACRE	CULV.	CULVERT	FL.	FLORIDA	MI.	MILE	REM.	REMOVED
A.D.A.	AMERICANS WITH DISABILITIES ACT	C.Y.	CUBIC YARD	FLEX.	FLEXIBLE	MIN.	MINIMUM	REQ.	REQUIRED
ADJ.	ADJUST	CYL.	CYLINDRICAL	F.M.	FORCEMAIN	MISC.	MISCELLANEOUS	RES.	RESIDENCE
A.D.T.	AVERAGE DAILY TRAFFIC	D.	DEGREE OF CURVATURE	F.O.C.	FACE OF CURB	M.L.W.	MEAN LOW WATER	R.M.	REFERENCE MONUMENT
A.E.	ACCESS EASEMENT	DA.	DAY(S)	F.P.S.	FEET PER SECOND	MM.	MILLIMETER	R.P.M.	RAISED REFLECTIVE PAVEMENT MARKERS OR REVOLUTIONS PER MINUTE
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC	(D)	DEED	FRAC.	FRACTION	MOD.	MODIFY OR MODIFIED		
		D.A.	DRAINAGE AREA	FREQ.	FREQUENCY	MON.	MONUMENT		
		D.B.	DEED BOOK	F.	FOOT OR FEET	M.O.T.	MAINTENANCE OF TRAFFIC	R.P.P.A.	REDUCED PRESSURE PRINCIPLE ASSEMBLY
AGG.	AGGREGATE	D.B.I.	DITCH BOTTOM INLET	FURN.	FURNISH	M.P.H.	MILES PER HOUR		
A.I.C.P.	AMERICAN INSTITUTE OF CERTIFIED PLANNERS	DBL.	DOUBLE	G.	GRAM	M.S.L.	MEAN SEA LEVEL	R.P.Z.D.	REDUCED PRESSURE BACKFLOW PREVENTION DEVICE
		D.C.S.	DEGREE OF CURVATURE (SPIRAL)	GAL.	GALLON	M.U.T.C.D.	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES		
		D.D.C.V.	DOUBLE DETECTOR CHECK VALVE	GALV.	GALVANIZED			R.R.	RAILROAD
ALT.	ALTERNATE	D.E.	DRAINAGE EASEMENT	GA.	GAUGE OR GAGE	N.	NORTH	RT.	RIGHT
ALUM.	ALUMINUM	DECEL.	DECELERATION	GAR.	GARAGE	N/A	NOT APPLICABLE	R/W	RIGHT OF WAY
A.M.	12:00 MIDNIGHT UNTIL 11:59 NOON	DEMOBL.	DEMOBILIZATION	GOV'T.	GOVERNMENT	NE.	NORTHEAST	S.	SOUTH
A.N.S.I.	AMERICAN NATIONAL STANDARDS INSTITUTE	DEN.	DENSITY	GM.	GROSS MILE	NGVD	NATIONAL GEODETIC VERTICAL DATUM OF 1929	SAN.	SANITARY
		DEPT.	DEPARTMENT	GR.	GUARDRAIL			SCH.	SCHEDULE
APPL.	APPLICATION	DET.	DETOUR	GRND.	GROUND	NAVD	NORTH AMERICAN VERTICAL DATUM OF 1988	SE.	SOUTHEAST
APPROX.	APPROXIMATELY	D.H.W.	DESIGN HIGH WATER	GV.	GATE VALVE			SEC.	SECTION
ASPH.	ASPHALT	DIA.	DIAMETER	H.	HEIGHT	N.G.S.	NATIONAL GEODETIC SURVEY	SED.	SEDIMENT
ASSY.	ASSEMBLY	D.I.P.	DUCTILE IRON PIPE	H.D.	HIGH DENSITY			SG.	SPECIFIC GRAVITY
A.S.T.M.	AMERICAN SOCIETY FOR TESTING MATERIALS	DIR.	DIRECTION	HDWL.	HEADWALL	N.H.W.	NORMAL HIGH WATER	SH.	SHEET
		DIST.	DISTANCE	HNDRL.	HANDRAIL	NM.	NET MILE	SHLDR.	SHOULDER
AUX.	AUXILIARY	D.O.T.	DEPARTMENT OF TRANSPORTATION	HORIZ.	HORIZONTAL	N.S.R.S.	NATIONAL SPATIAL REFERENCE SYSTEM	S.H.W.T.	SEASONAL HIGH WATER TABLE
AVE.	AVENUE	DR.	DRIVE	H.P.	HIGH PRESSURE OR HORSE POWER			SPEC.	SPECIFICATION
AVG.	AVERAGE	DRWY.	DRIVEWAY	H.W.	HIGH WATER	N.T.S.	NOT TO SCALE	S.F.	SQUARE FOOT
B.E.	BURIED ELECTRIC	D.S.	DESIGN SPEED	HWY.	HIGHWAY	NW.	NORTHWEST	S.P.I.	STANDARD PLAN INDEX
B/L	BASE LINE	D.S.W.T	DRY SEASON WATER TABLE	HYD.	HYDRANT	O.D.	OUTSIDE DIAMETER	S.R.	STATE ROAD
BLVD.	BOULEVARD	DWG.	DRAWING	I.	EXTERNAL ANGLE (DELTA)	O.E.	OVERHEAD ELECTRIC	ST.	STREET
B.M.	BENCHMARK	E.	EAST	I.D.	INSIDE DIAMETER	OPT.	OPTIONAL	STA.	STATION
B.O.C.	BACK OF CURB	EA.	EACH	I.E.	INVERT ELEVATION	O.R.	OFFICIAL RECORD BOOK	STAB.	STABILITY OR STABILIZATION
BOT.	BOTTOM	e.	RATE OF SUPER ELEVATION	IN.	INCH	OZ.	OUNCE	STD.	STANDARD
B.P.	BORROW PIT	E.I.	ENGINEERING INTERN	INC.	INCORPORATED	(P)	PLAT	STR.	STRUCTURE
BR.	BRIDGE	EL.orELEV.	ELEVATION	INCL.	INCLUDED	PAVT.	PAVEMENT	S.Y.	SQUARE YARD
BRG.	BEARING	ELEC.	ELECTRIC	I.P.	IRON PIPE	P.C.	POINT OF CURVATURE	SW.	SOUTHWEST
B.T.	BURIED TELEPHONE	ELLIP.	ELLIPTICAL	I.R.	IRON ROD	P.E.	PROFESSIONAL ENGINEER	S/W	SIDEWALK
BTWN.	BETWEEN	EMBK.	EMBANKMENT	IRR.	IRRIGATION	PED.	PEDESTRIAN OR PEDESTAL	T.	TANGENT
B/W	BARBED WIRE	ENCL.	ENCLOSURE	INSTL.	INSTALL OR INSTALLATION	PG.	PAGE	TAN.	TANGENT
CALC.	CALCULATED	E.O.P.	EDGE OF PAVEMENT	INST. NO.	INSTRUMENT NUMBER	P.G.L.	PROFILE GRADE LINE	TWP.	TOWNSHIP
(C)	CALCULATED OR CUT	E.O.W.	EDGE OF WATER	INT.	INTERSECTION	P.I.E.	PRIVATE IRRIGATION EASEMENT	T.B.M.	TEMPORARY BENCH MARK
CAP.	CAPACITY	EQ.	EQUATION OR EQUAL	INV.	INVERT	P.I.V.	POST INDICATOR VALVE	T.B.D.	TO BE DETERMINED
CATV.	CABLE TELEVISION	EQUIP.	EQUIPMENT	J.B.	JUNCTION BOX	PH	MEASURE OF ACIDITY OR ALKALINITY	T.B.R.	TO BE REMOVED
C.B.	CATCH BASIN	E.R.C.P.	ELLIPTICAL REINFORCED CONCRETE PIPE	JCT.	JUNCTION			TEL.	TELEPHONE
CBC.	CONCRETE BOX CULVERT			JT.	JOINT	P.I.	POINT OF INTERSECTION	TEMP.	TEMPORARY
CBS.	CONCRETE BOX STRUCTURE	ESMT.	EASEMENT	K.	RATE OF VERTICAL CURVATURE	PK.	PARKER-KALON	TN.	TON
C/C	CENTER TO CENTER	ETC.	ET CETERA (AND SO FORTH)	KM.	KILOMETER	PL.	PROPERTY LINE	T.U.E.	TECHNOLOGY UTILITY ESMT.
CCMB.	COUNTY COMMISSIONERS MINUTES BOOK	E.W.	ENDWALL	KV.	KILOVOLT	P.M.	12:00 NOON UNTIL 11:59 MIDNIGHT	TYP.	TYPICAL
		EXCAV.	EXCAVATION	KVA.	KILOVOLT AMPERES	P.O.C.	POINT ON CURVE	UG.	UNDERGROUND
C.E.	CONTROL ELEVATION	EX.	EXISTING	L.	LENGTH, LENGTH OF CURVE	P.P.	POWER POLE	U.E.	UTILITY EASEMENT
CEM.	CEMENT	EXP.	EXPANSION	L.A.	LIMITED ACCESS	P.R.C.	POINT OF REVERSE CURVATURE	USC&GS	UNITED STATES COAST AND GEODETIC SURVEY
C.F.	CUBIC FOOT	EXT.	EXTENSION	LAT.	LATERAL OR LATITUDE				
C.I.	CAST IRON	(F)	FILL	LB.	POUND OR LICENSED BUSINESS	P.R.M.	PERMANENT REFERENCE MONUMENT	USGS	UNITED STATES GEOLOGICAL SURVEY
C.I.P.	CAST IRON PIPE	F. TO F.	FACE TO FACE	L.C.R.	LEE COUNTY RECORDS				
C/L	CENTER LINE	F.A.C.	FLORIDA ADMINISTRATIVE CODE	L.C.U.	LEE COUNTY UTILITIES	PROP.	PROPERTY	UTIL.	UTILITIES
CONC.	CONCRETE	F.A.C.B.C.	FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION	L.C.U.E.	LEE COUNTY UTILITIES EASEMENT	P.U.E.	PUBLIC UTILITY EASEMENT	VAR.	VARIABLE
C.M.	CONCRETE MONUMENT			L=	ARC LENGTH	P.S.I.	POUNDS PER SQUARE INCH	V.C.	VERTICAL CURVE
C.M.P.	CORRUGATED METAL PIPE	F.B.C.	FLORIDA BUILDING CODE	LF.	LINEAR FOOT	P.S.M.	PROFESSIONAL SURVEYOR AND MAPPER	VEH.	VEHICLE
CO.	COUNTY OR COMPANY	FD.	FOUND	L.M.E.	LAKE MAINTENANCE EASEMENT			V.F.	VERTICAL FOOT
C/O	CLEANOUT	F.D.C.	FIRE DEPARTMENT CONNECTION	L.M.T.	LAKE MAINTENANCE TRACT	P.V.C.	POLYVINYL CHLORIDE PIPE	VERT.	VERTICAL
COL.	COLUMN			LOC.	LOCATION	P.V.I.	POINT OF VERTICAL INTERSECTION	VOL.	VOLUME
COM.	COMMERCIAL	FDN.	FOUNDATION	L.S.	LUMP SUM OR LIFT STATION	Q.	PEAK DISCHARGE OR FLOW VOLUME (CFS)	W.	WEST
CONST.	CONSTRUCTION	F.D.O.T.	FLORIDA DEPARTMENT OF TRANSPORTATION	LT.	LEFT			WIT.	WITNESS
CONT.	CONTRACTOR			M.	MASS	QTY.	QUANTITY	W.M.	WATERMAIN
COORD.	COORDINATE	FED.	FEDERAL	(M)	MEASURED	R. or RAD.	RADIUS	X.	COORDINATE DISTANCE(EAST-WEST)
COR.	CORNER	FERT.	FERTILIZER	MAINT.	MAINTENANCE	RNG.	RANGE	XING.	CROSSING
C.P.	CONTROL POINT	F.E.S.	FLARED END SECTION	MAX.	MAXIMUM	REC.	RECORD	Y.	COORDINATE DISTANCE (NORTH-SOUTH)
C.R.	CONTROL RADIUS	F.F.E.	FINISHED FLOOR ELEVATION	MED.	MEDIAN	RECT.	RECTANGULAR		
C.S.	CONTROL STRUCTURE	F.H.	FIRE HYDRANT	M.E.S.	MITERED END SECTION	R.C.P.	REINFORCED CONCRETE PIPE	YR.	YEAR
				MG	MILLION GALLONS				

GENERAL NOTES

NOTE: SEE ADDITIONAL NOTES ON SITE DEVELOPMENT PLANS AND DETAIL SHEETS WHICH ARE SPECIFIC TO THIS PROJECT. IN THE EVENT OF A CONFLICT, UTILIZE NOTES ON SITE DEVELOPMENT PLANS.

1. THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE LATEST EDITIONS OF THE F.D.O.T. STANDARD PLANS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ALL LOCAL CODES. F.D.O.T. DESIGN STANDARD PLANS AND APPLICABLE DESIGN STANDARDS MODIFICATIONS ARE FOUND AT: https://www.fdot.gov/design/standardplans/default.shtm.
2. ALL APPROVALS REQUIRED IN CONJUNCTION WITH THESE NOTES MUST BE OBTAINED IN WRITING BY THE CONTRACTOR. ANY DEVIATIONS FROM THE PLANS AND / OR SPECIFICATIONS MUST BE APPROVED IN ADVANCE BY THE OWNER, ENGINEER, AND APPROPRIATE REGULATORY AGENCY.
3. CONTRACTOR SHALL ENSURE THAT ALL PERMITS ARE IN PLACE PRIOR TO CONSTRUCTION, THAT COPIES OF ALL PERMITS ARE RETAINED ON SITE AT ALL TIMES, AND SHALL ADHERE TO ALL PERMIT CONDITIONS. AT LEAST 72 HOURS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY THE LOCAL MAINTENANCE ENGINEERS OFFICE TO SECURE GENERAL USE PERMITS AND / OR OTHER PERMITS REQUIRED FOR WORK WITHIN F.D.O.T. RIGHT-OF-WAY.
4. ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST VERSIONS OF THE AMERICANS WITH DISABILITIES ACT (A.D.A.) AND THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION (F.A.C.B.C.). MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND CROSSWALKS. ALL PEDESTRIAN SURFACES SHALL BE ADA COMPLIANT.
5. SIDEWALKS ARE DESIGNED AND INTENDED FOR PEDESTRIAN TRAFFIC ONLY. ALL SIDEWALKS AND CURB CUTS SHALL BE IN ACCORDANCE WITH F.D.O.T. S.P.I. 522-002 AND SHALL INCLUDE DETECTABLE WARNING SURFACES. VALLEY GUTTER ADJACENT TO CURB CUTS SHALL DEVIATE FROM STANDARD DETAIL BY NOT EXCEEDING 12:1 SLOPES.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, OWNER'S REPRESENTATIVE AND APPROPRIATE AGENCY A MINIMUM OF 72 HOURS PRIOR TO ALL INSPECTIONS REQUIRED BY THE RESPECTIVE PERMIT.
7. THE CONTRACTOR SHALL NOTIFY THE OWNER AND CONTACT ALL UTILITY COMPANIES FOR LOCATIONS OF EXISTING UTILITIES A MINIMUM OF 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL DETERMINE IF UTILITIES OTHER THAN THOSE SHOWN ON THESE PLANS EXIST. THE LOCATION OF EXISTING UTILITIES, PAVEMENT, VEGETATION, AND OTHER IMPROVEMENTS ARE APPROXIMATE ONLY. THE EXACT SIZES, ELEVATIONS, AND LOCATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO COMMENCING CONSTRUCTION OR ORDERING MATERIALS. CONTRACTOR SHALL NOTIFY ENGINEER / OWNER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
8. ANY PUBLIC LAND CORNER OR BENCHMARK WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED AND, IF IN DANGER OF BEING DESTROYED, MUST BE PROPERLY REFERENCED BY THE CONTRACTOR.
9. EXISTING IMPROVEMENTS SHALL REMAIN UNLESS NOTED OTHERWISE AND SHALL BE RESTORED TO A CONDITION EQUIVALENT TO THAT WHICH EXISTED PRIOR TO COMMENCING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER. EXISTING OFF-SITE DRAINAGE PATTERNS SHALL BE MAINTAINED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL OBTAIN ANY CLEARING, VEGETATION REMOVAL, OR RIGHT-OF-WAY PERMITS REQUIRED FOR THIS PROJECT. ALL DEBRIS SHALL BE REMOVED FROM SITE AND PROPERLY DISPOSED OF.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS ADJACENT TO THE PROJECT. ALL TRAFFIC MAINTENANCE CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA MANUAL OF TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET CONSTRUCTION, MAINTENANCE, AND UTILITY OPERATIONS. CONTRACTOR SHALL ASSURE THAT ALL TRAFFIC CONTROL DEVICES MEET ACCEPTABLE STANDARDS AS OUTLINED IN THE LATEST EDITION OF THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA's) "QUALITY STANDARDS FOR WORK ZONE TRAFFIC CONTROL DEVICES", AND SHALL IMMEDIATELY REPAIR, REPLACE, OR CLEAN DAMAGED, DEFACED, OR DIRTY DEVICES. TRAFFIC CONTROL OPERATION PROCEDURES SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION. ANY IMPACTS TO TRAFFIC FLOW SHALL BE COORDINATED WITH AND APPROVED BY THE APPROPRIATE LOCAL AGENCY.
12. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER AND OWNER'S REPRESENTATIVE.
13. THE LOCATIONS OF PROPOSED DRAINAGE STRUCTURES AND UTILITY LINES MAY BE FIELD ADJUSTED TO PRESERVE EXISTING VEGETATION AS APPROVED IN ADVANCE BY THE ENGINEER. UNDERGROUND CONTRACTOR SHALL MINIMIZE THE WORK AREA AND WIDTH OF TRENCHES TO AVOID DISTURBANCES OF NATURAL VEGETATION. EXERCISE CARE TO PROTECT THE ROOTS OF TREES TO REMAIN. WITHIN THE BRANCH SPREAD OF SUCH TREES, PERFORM ALL TRENCHING BY HAND. OPEN THE TRENCH ONLY WHEN UTILITIES CAN BE INSTALLED IMMEDIATELY. PRUNE INJURED ROOTS CLEANLY AND BACKFILL AS SOON AS POSSIBLE. SPOIL FROM TRENCHES SHALL BE PLACED ONLY ON PREVIOUSLY CLEARED AREAS OR AS DIRECTED BY THE OWNER. CONTRACTOR SHALL NOT REMOVE OR DISTURB ANY TREES AND/OR SHRUBS WITHOUT PRIOR APPROVAL BY OWNER.
14. INSTALLATION OF SUBSURFACE CONSTRUCTION, INCLUDING BUT NOT LIMITED TO WATER, SEWER AND IRRIGATION LINES, PUBLIC UTILITIES, AND STORM DRAINAGE IS REQUIRED PRIOR TO COMPACTION OF THE ROADWAY SUBGRADE.
15. SUBGRADE AND LIMEROCK BASE COURSES TO BE COMPACTED TO 98% MINIMUM OF THE MAXIMUM DRY DENSITY AS SPECIFIED BY AASHTO T-180 TESTING. CONTRACTOR SHALL PROVIDE THE ENGINEER SATISFACTORY DENSITY TESTS FOR SUBGRADE AND LIMEROCK PRIOR TO PAYMENT OR FINAL ACCEPTANCE. EXCESS ROAD BASE AND COMPACTED SOIL SHALL BE REMOVED FROM ALL LANDSCAPE AREAS PRIOR TO FINAL GRADING.
16. SWALE ELEVATIONS SHOWN ARE TO TOP OF SOD. CONTRACTOR TO ADJUST SWALE GRADING ACCORDINGLY. ALL UNPAVED AREAS SHALL BE GRADED TO DRAIN TO THE DRAINAGE SYSTEM TO PREVENT STANDING WATER. YARD DRAINS MAY BE ADDED IN GREEN AREAS AS NECESSARY AT THE DIRECTION OF THE LANDSCAPE ARCHITECT OR ENGINEER, AND SHALL HAVE PEDESTRIAN-SAFE GRATES MEETING THE REQUIREMENTS OF H-20 LOADING.
17. BERM ELEVATIONS SHOWN ARE THE MINIMUM REQUIRED. CONTRACTOR MAY EXCEED THE MINIMUM BERM ELEVATION BY UP TO 0.5 FEET PROVIDED ALL SLOPE CRITERIA IS MET. ANY CONSTRUCTION OF BERMS IN EXCESS OF THAT LIMIT MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
18. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WITHIN ONE WEEK OF COMPLETION OF DRAINAGE CONTROL STRUCTURES SO THAT ELEVATIONS MAY BE VERIFIED PRIOR TO COMPLETION OF CONSTRUCTION.
19. THE CONTRACTOR IS REQUIRED TO ADJUST ALL EXISTING AND PROPOSED VALVE BOXES, MANHOLE RIMS, GRATES AND OTHER IMPROVEMENTS AS REQUIRED TO MATCH THE FINAL GRADE.
20. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE IN REGARDS TO THE LOCATION, SIZE AND QUANTITY OF ALL CONDUITS FOR UTILITIES, IRRIGATION, LIGHTING, AND OTHER IMPROVEMENTS PRIOR TO CONSTRUCTION OF THE ROADWAY SUBGRADE. CASING AND/OR CONDUIT SHALL HAVE A MINIMUM OF 30" COVER, EXTEND 5' BEYOND THE EDGE OF PAVEMENT, BACK OF CURB AND/OR SIDEWALK AT EACH END, AND ENDS SHALL BE SEALED AND DENOTED WITH MARKING TAPE
21. CONTRACTOR SHALL NOTIFY THE ENGINEER 24 HOURS PRIOR TO PLACING SOD ON AREAS THAT REQUIRE CRITICAL MINIMUM OR MAXIMUM ELEVATIONS IN ORDER FOR ENGINEER TO VERIFY SUCH ELEVATIONS. THE OBLIGATION TO ACHIEVE MINIMUM OR MAXIMUM ELEVATIONS REMAINS WITH THE CONTRACTOR.
22. AT MINIMUM, SOD A 12" STRIP ADJACENT TO ALL PAVEMENT PER F.D.O.T. REQUIREMENTS. SOD ALL UNPAVED DISTURBED AREAS WITHIN F.D.O.T. RIGHT OF WAY. ALL OTHER UNPAVED AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED, FERTILIZED AND MULCHED UNLESS NOTED OTHERWISE.
23. THE CONTRACTOR SHALL REMOVE ALL UNSUITABLE MATERIAL ENCOUNTERED FROM FILL AREAS PRIOR TO PLACEMENT OF FILL AND SUCH MATERIAL SHALL BE STOCKPILED OR REMOVED AS DIRECTED BY OWNER.
24. THE PROPERTY OWNER OR DESIGNATED AUTHORITY IS RESPONSIBLE FOR THE PERPETUAL MAINTENANCE OF ALL FEATURES OF THE SURFACE WATER MANAGEMENT SYSTEM AS SHOWN IN THESE DRAWINGS AND AS REQUIRED BY LOCAL, STATE, AND FEDERAL PERMITS. IT IS FURTHER RECOMMENDED THAT THE SURFACE WATER MANAGEMENT SYSTEM BE INSPECTED SEMI-ANNUALLY.
25. CONTRACTOR SHALL VERIFY DESIGN DETAILS WITH ENGINEER PRIOR TO ORDERING STRUCTURES. STRUCTURE TYPES LABELED ON THE PLANS FOR ITEMS SUCH AS JUNCTION BOXES AND INLETS MAY ONLY BE A REFERENCE TO THE TOP OF THE STRUCTURE. CERTAIN STRUCTURE TYPES REQUIRE A LARGER BOTTOM TO ACCOMMODATE LARGER PIPE SIZES AND/OR PIPE ANGLES. THE APPROPRIATE SIZE AND SHAPE OF THE BOTTOM OF THE STRUCTURE SHALL BE DETERMINED BY THE CONTRACTOR WITH CONSIDERATION GIVEN TO ADJACENT EXISTING OR PROPOSED UTILITIES. THE COST FOR THE ENTIRE STRUCTURE IS INCLUDED IN THE UNIT PRICE FOR THE PRIMARY STRUCTURE.
26. STORM DRAIN PIPE LENGTHS ARE APPROXIMATE AND HAVE BEEN MEASURED FROM INSIDE FACE OF STRUCTURE. SANITARY SEWER PIPE LENGTHS ARE APPROXIMATE AND ARE MEASURED FROM THE CENTER OF STRUCTURE.
27. CONTRACTOR SHALL MAINTAIN MINIMUM SEPARATION BETWEEN UTILITIES AS SHOWN ON "UTILITY LOCATION DETAIL" AND IN ACCORDANCE WITH APPLICABLE LOCAL UTILITY SERVICE PROVIDER REQUIREMENTS.
28. ALL COMPONENTS OF THE POTABLE WATER SYSTEM SHALL BE IN CONFORMANCE WITH AMERICAN NATIONAL STANDARDS INSTITUTE / NSF INTERNATIONAL STANDARD 61. ALL COMPONENTS, INSTALLATION AND TESTING OF THE POTABLE WATER SYSTEM SHALL BE IN ACCORDANCE WITH ALL A.W.W.A. APPLICABLE STANDARDS.
29. CONTRACTOR TO COORDINATE WITH ALL OTHER CONTRACTORS WORKING ON THE PROJECT SITE, THE OWNERS' REPRESENTATIVE, AND WITH ELECTRIC, TELEPHONE, AND CABLE COMPANIES TO ASSURE THAT NO SANITARY SEWER, WATERLINE, OR IRRIGATION SERVICES ARE INSTALLED UNDER PROPOSED TRANSFORMERS.
30. DEFLECTION TESTING IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS FOR GRAVITY SEWER MAY NOT BE UNDERTAKEN UNTIL 30 DAYS AFTER FINAL BACKFILLING OF THE TRENCH IS COMPLETE. SEWER DEFLECTION MAY NOT EXCEED THE MAXIMUM PROVIDED IN THE TECHNICAL SPECIFICATIONS OR 5%, WHICHEVER IS LESS.
31. ALL GRAVITY SEWER MAINS SHALL BE TESTED WITH A MANDREL WITH A DIAMETER OF NOT LESS THAN 95% OF THE INSIDE PIPE DIAMETER. MANDREL TESTS MUST BE PERFORMED WITHOUT USE OF MECHANICAL PULLING DEVICES.
32. NO VEGETATION OR OTHER OBSTRUCTIONS SHALL BE PLACED SO AS TO BLOCK ACCESS OR LINE OF SIGHT TO FIRE HYDRANTS, F.D.C, P.I.V, ETC. IN ACCORDANCE WITH LOCAL FIRE JURISDICTION AND / OR AS SHOWN IN DETAILS.
33. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA FIRE CODE. SEPARATE PERMITS MAY BE REQUIRED FOR ANY DEDICATED FIRE LINE. UNDERGROUND FIRE LINES MUST MEET REQUIREMENT OF NFPA 24. CONTRACTOR TO VERIFY FIRE LINE SIZE WITH BUILDING PLANS PRIOR TO CONST.

SYMBOL LEGEND

NOTE: THE SYMBOLS REPRESENTED BELOW ARE STANDARDS UTILIZED BY THIS FIRM AND NOT ALL ARE REQUIRED FOR THE SUBJECT PROJECT.

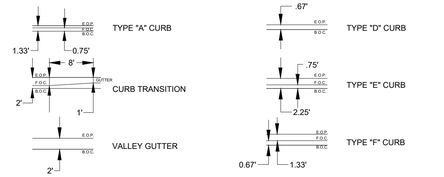
DRAINAGE

- VALLEY GUTTER INLET
- DITCH BOTTOM INLET
- DRAINAGE JUNCTION BOX
- MITERED END SECTION
- CONTROL STRUCTURE
- HEADWALL
- FLARED END SECTION
- TYPE 5 INLET (LEFT)
- TYPE 5 INLET (RIGHT)
- TYPE 6 INLET
- TYPE 9 INLET
- TYPE 10 INLET
- YARD DRAIN
- FLOW ARROW

UTILITIES

- 11.25° BEND
- 22.5° BEND
- 45° BEND
- 90° BEND
- TEE
- REDUCER
- AIR RELEASE VALVE
- WYE
- CROSS
- CAP OR PLUG
- BACTERIOLOGICAL SAMPLE POINT
- PERMANENT BLOW OFF ASSEMBLY
- TEMPORARY BLOW OFF ASSEMBLY
- 45° VERTICAL DEFLECTION
- GATE VALVE
- PLUG VALVE
- SANITARY SEWER MANHOLE
- SINGLE SANITARY SEWER SERVICE
- DOUBLE SANITARY SEWER SERVICE
- CLEANOUT
- PUMP STATION
- SINGLE IRRIGATION SERVICE
- DOUBLE IRRIGATION SERVICE
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE
- FIRE HYDRANT ASSEMBLY (PLAN VIEW)
- FIRE HYDRANT ASSEMBLY (PROFILE VIEW)
- GATE VALVE (PROFILE VIEW)

STANDARD CURB TYPES SEE F.D.O.T. STANDARD PLAN INDEX 520-001 FOR ADDITIONAL DETAILS



SIGNAGE AND MARKINGS

- SIGN (PLAN VIEW)
- CONSERVATION SIGN LOCATION
- HANDICAP SYMBOL
- M MODEL HOMES, MODEL UNITS, MODEL DISPLAY CENTERS.
- LEFT ONLY
- RIGHT ONLY
- LEFT OR RIGHT
- STRAIGHT OR RIGHT
- STRAIGHT OR LEFT
- STRAIGHT, LEFT OR RIGHT
- STRAIGHT

IDENTIFICATION

- LOT NUMBER
- BUILDING ID NUMBER
- STORM STRUCTURE I.D.
- XXX SANITARY STRUCTURE I.D.
- FH FIRE HYDRANT LABEL
- SOIL BORING LOCATION
- SECTION LABEL
- NORTH ARROW
- BAR SCALE (0, 30, 60; N.T.S.)

EROSION CONTROL

NOTE: SEE EROSION CONTROL DETAILS FOR ADDITIONAL INFORMATION.

- INLET PROTECTION
- DOUBLE ROW SILT FENCE
- SINGLE ROW SILT FENCE
- FLOATING TURBIDITY BARRIER

SURVEYING

- FOUND NAIL AS NOTED
- SET 1/2" IRON ROD WITH CAP STAMPED LB6940
- SET 4"x4" CONC. MONUMENT STAMPED LB6940
- SET P.K. NAIL WITH DISC STAMPED LB6940
- FOUND CONC. MONUMENT AS NOTED
- FOUND IRON PIPE OR IRON ROD AS NOTED
- DRAINAGE INLET
- DRAINAGE MANHOLE
- MITERED END SECTION
- LIGHT POLE
- CONCRETE POWER POLE
- WOOD POWER POLE
- GUY ANCHOR
- GAS LINE MARKER
- TELEPHONE RISER
- WATER BOX
- ELECTRIC BOX
- SIGN
- FIRE HYDRANT
- W WATER VALVE
- S SANITARY MANHOLE
- SANITARY CLEAN OUT
- SANITARY SEWER VALVE
- BENCH MARK

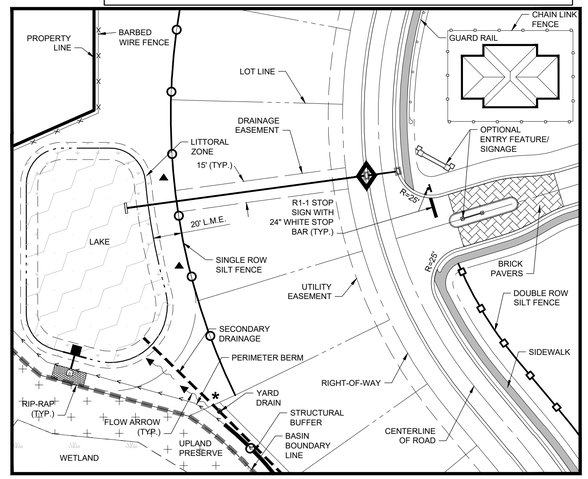
QUANTITIES AND PAYMENT

CONTRACTOR SHALL REFER TO THE BID TABULATION AND PROJECT TECHNICAL SPECIFICATIONS FOR NOTES REGARDING THE METHOD OF PAYMENT FOR SPECIFIC PAY ITEMS. ITEMS NOT SPECIFICALLY REFERENCED IN THE SPECIFICATIONS OR BID TABULATION SHALL BE PAID FOR PER THE LATEST VERSION OF THE APPROPRIATE F.D.O.T. DESIGN STANDARD PLANS AND STANDARD SPECIFICATIONS.

LINETYPE AND HATCHING LEGEND

NOTE: THE DRAWI
UTILIZED BY THIS F

PROJECT RECORD

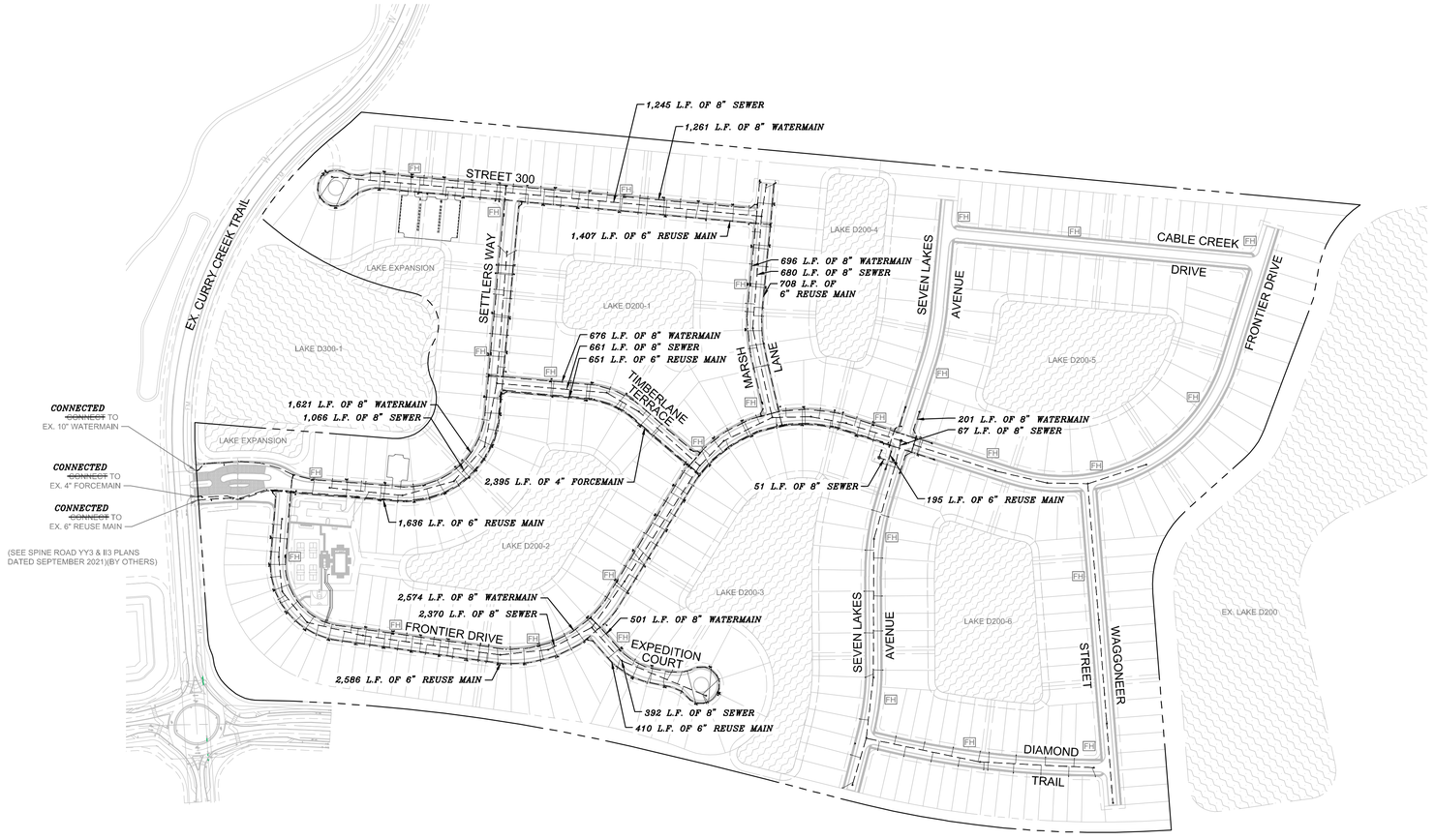


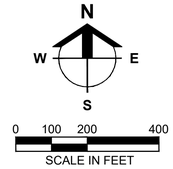
STANDARD STREET SIGNS

THE SIGN LEGEND BELOW IS PROVIDED AS A GRAPHICAL REFERENCE TO ONE OR MORE OF THE SIGNS REQUIRED FOR THIS PROJECT. THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) SHOULD BE REFERENCED FOR SPECIFIC DETAILS AND LOCATION REQUIREMENTS.

- STOP (R1-1): STOP SIGN - ALL STOP SIGNS SHALL INCLUDE A 24" WIDE PAINTED STOP BAR OR CONTRASTING COLOR OF BRICK PAVERS
- YIELD (R1-2): YIELD SIGN
- DO NOT ENTER (R5-1): DO NOT ENTER SIGN
- HANDICAP PARKING (FTP-20-04, FTP-22-04): HANDICAP PARKING SIGN
- SPEED LIMIT XX (R2-1): SPEED LIMIT SIGN
- KEEP RIGHT (R4-7): KEEP RIGHT SIGN
- AHEAD (W16-9P): AHEAD PLAQUE
- W1-6L: LARGE LEFT ARROW (ONE DIRECTION) SIGN
- W1-6R: LARGE RIGHT ARROW (ONE DIRECTION) SIGN
- W1-7: TWO-DIRECTION LARGE ARROW SIGN
- W11-2: PEDESTRIAN CROSSING SIGN
- W16-7pL / W16-7pR: DIAGONAL ARROW PLAQUE
- NO OUTLET (W14-2): NO OUTLET SIGN
- DIVIDED HIGHWAY

PROJECT RECORD





DESCRIPTION	QUANTITIES	UNITS
8" WATERMAIN	7,530	L.F.
6" REUSE MAIN	7,593	L.F.
8" SEWER	6,532	L.F.
4" FORCEMAIN	2,395	L.F.

GENERAL NOTES

1. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING WATER MAINS, FORCE MAINS, AND OTHER UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION.
2. UTILITY CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE TCU SPECIFICATIONS AND DETAILS AND WITH TOWN AND COUNTY UTILITY REQUIREMENTS.
3. ALL POTABLE WATER MAINS SHALL HAVE A MINIMUM OF 36" OF COVER, UNLESS OTHERWISE NOTED.
4. ALL FORCE MAINS AND REUSE WATER MAINS SHALL HAVE A MINIMUM OF 36" COVER; UNLESS OTHERWISE NOTED.
5. FIELD DEFLECT WATER MAIN TO CLEAR BEHIND INLETS WHERE REQUIRED.
6. FIELD DEFLECT ALL REUSE AND FORCEMAINS AT WATERMAIN CROSSINGS TO PROVIDE A MINIMUM OF 12" OF VERTICAL SEPARATION.
7. ALL FIRE HYDRANTS SHALL BE LOCATED NO MORE THAN 1' OUTSIDE OF RIGHT OF WAY LINE AND AT LEAST 8' FROM CLOSEST ROAD IMPROVEMENT PER CHARLOTTE COUNTY REQUIREMENTS.
8. ALL WATER AND REUSE MAINS SHALL BE PVC, C900, DR-18, FOR PIPES 12" AND SMALLER OR PVC C-905, DR-18, FOR PIPES GREATER THAN 12", UNLESS OTHERWISE NOTED.
9. ALL FORCE MAINS SHALL BE PVC, C900, DR-18 FOR PIPES 12" AND SMALLER, AND PVC C-905, DR-18 FOR PIPES GREATER THAN 12, UNLESS OTHERWISE NOTED.
10. ALL SANITARY SEWER MAINS SHALL BE PVC, SDR-26, UNLESS OTHERWISE NOTED.
11. ALL VALVES TO BE INSTALLED OUTSIDE OF ALL RAMPS AND CURBED AREAS.
12. SEE UTILITY DETAIL DRAWINGS FOR WATER, REUSE AND SEWER SERVICE TERMINATIONS.
13. GRAVITY SANITARY SEWER PIPE LENGTHS ARE MEASURED FROM CENTER TO CENTER OF MANHOLES.
14. THE MAXIMUM ALLOWABLE PRESSURE PIPE DEFECTION IS 50% OF THE MANUFACTURER'S RECOMMENDED MAXIMUM DEFLECTION.
15. ALL WATER SERVICES TO BE POLYETHYLENE (PE) TUBING, SIZING TO BE 1" FOR SINGLE SERVICES AND 1.5" FOR DOUBLE SERVICE. COMMERCIAL WATER SERVICES TO BE 2" POLYETHYLENE (PE) TUBING.
16. PE TUBING (2" OR LESS) SHALL CONFORM TO AWWA STANDARD C901, PE 3408 AND BE COPPER TUBING SIZE (CTS, SDR-9) WITH A WORKING PRESSURE OF 200 PSIG .
17. ALL WATER SERVICES UNDER ROADWAYS ARE TO BE SLEEVED PER TCU REQUIREMENTS. SINGLE SERVICES TO USE 1.5" AND DOUBLE SERVICES TO USE 4" SCH 40 PVC SLEEVES.
18. RESTRAINED JOINT PIPE SHALL BE USED FOR THE WATER, REUSE, AND FORCE MAINS AS PER DETAILS AND NOTES. RESTRAINTS TO UTILIZE MEGALUG MECHANICAL JOINTS AND RETAINER GLANDS. RESTRAINED JOINTS TO ALSO BE USED AT ALL VERTICAL BENDS AT PIPE CROSSINGS. SEE DETAILS GD-1 FOR RESTRICTED LENGTHS.
19. ALL METERS ARE TO HAVE RPZ BACK FLOW PREVENTIONS.
20. ALL LIFT STATIONS TO HAVE WATER SERVICES INSTALLED FOR WASH DOWN. BACK FLOW PREVENTORS AT LIFT STATION HOSE BIBS SHALL BE RPZ MODELS.
21. ALL VALVE COVERS AND/OR PADS THAT ARE WITHIN, ADJACENT TO, OR IN CLOSE PROXIMITY TO SIDEWALK SHALL BE ADJUSTED TO MATCH SIDEWALK GRADES.
22. UTILITY SYMBOLS ON THE PLAN MAY APPEAR LARGER THAN ACTUAL SIZE OR MOVED FROM INTENDED LOCATION FOR CLARITY. UTILITY APPURTENANCES ARE TO BE INSTALLED PER DETAILS IN PLAN SET OR REFERENCED STANDARD DETAILS.
23. 10' WIDE PUBLIC UTILITY EASEMENTS (P.U.E.) ADJACENT TO ROAD RIGHT- OF-WAYS (BOTH SIDES) AND A 4' WIDE P.U.E. ADJACENT TO ALLEY RIGHT-OF-WAYS (BOTH SIDES) ARE TO BE PROVIDED.
24. ALL METER BOXES AND CLEANOUTS TO BE PLACED NEXT TO SIDEWALK IN P.U.E.
25. GATE VALVES SHALL BE USED ON ALL POTABLE AND RECLAIMED WATER MAINS FOR ALL SIZES. GATE VALVES FOURTEEN (14) INCHES AND LARGER SHALL BE SIDE ACTUATED.
26. PLUG VALVES SHALL BE USED ON 3" DIAMETER TO 12" DIAMETER FORCE MAINS. SIDE ACTUATED GATE VALVES SHALL BE USED ON 14" DIAMETER OR LARGER FORCE MAINS.
27. PER THE DSM, ALL WATER METERS ARE TO BE SUPPLIED BY TCU.
28. ALL LATERAL SEWER SERVICES TO BE 6" DIAMETER WITH A SLOPE NOT LESS THAN 0.63% AND NO MORE THEN 14%.

UTILITIES PROVIDING SERVICE:

POTABLE WATER
TOWN AND COUNTRY UTILITIES (TCU)
12150 SR 31
BABCOCK RANCH, FLORIDA 33982
PHONE (941) 235-6900

FIRE CONTROL DISTRICT
BAYSHORE FIRE DEPT. STATION 131
17350 NALLE RD.
FORT MYERS, FLORIDA 33917
PHONE (239) 543-3443

TELEPHONE
CENTURYLINK, INC.
1020 EL JOBEAN RD.
PORT CHARLOTTE, FLORIDA 33948
PHONE (941) 629-9311

GARBAGE COLLECTION
WASTE MANAGEMENT
25550 HARBOR VIEW RD. SUITE 2
PORT CHARLOTTE, FLORIDA 33980
PHONE (941) 764-4360

GAS
TECO GAS
702 NORTH FRANKLIN ST.
P.O. BOX 2562
TAMPA, FLORIDA 33601
PHONE (813) 275-3700

SANITARY SEWER
TOWN AND COUNTRY UTILITIES (TCU)
12150 SR 31
BABCOCK RANCH, FLORIDA 33982
PHONE (941) 235-6900

CABLE TELEVISION
COMCAST
22266 EDGEWATER DR.
PORT CHARLOTTE, FLORIDA 33980
PHONE (941) 625-6000

ELECTRIC
FLORIDA POWER AND LIGHT
10650 PALM BEACH BLVD.
FORT MYERS, FLORIDA 33905
PHONE (239) 334-7754

IRRIGATION
BABCOCK RANCH IRRIGATION, LLC
4500 PGA BLVD.
PALM BEACH GARDENS, FLORIDA 33418
PHONE (941) 235-6900

Barraco and Associates, Inc.
CIVIL ENGINEERING - LAND SURVEYING
LAND PLANNING
www.barraco.net
2271 McGREGOR BLVD., SUITE 100
POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes
12220 TOWNE LAKE DRIVE, SUITE 75
FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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FILE NAME	24012R12.DWG
LOCATION	J:\24012\DWG\RECORD\PH1\
PLOT DATE	MON. 12-4-2023 - 8:50 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

BASEPLAN = 24012A00.DWG
PLAT = 24012P00.DWG
SURVEY = 23758S00.DWG

PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

MASTER UTILITY PLAN

PROJECT / FILE NO.	SHEET NUMBER
24012	6.0

PROJECT RECORD



Barraco and Associates, Inc.
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FLORIDA CERTIFICATES OF AUTHORIZATION
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PREPARED FOR

Meritage Homes
12220 TOWNE LAKE DRIVE, SUITE 75
FORT MYERS, FLORIDA 33913
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PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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PLOT BY	PEYTON GAUSE

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PLAT = 24012P00.DWG
SURVEY = 23758S00.DWG

PLAN REVISIONS

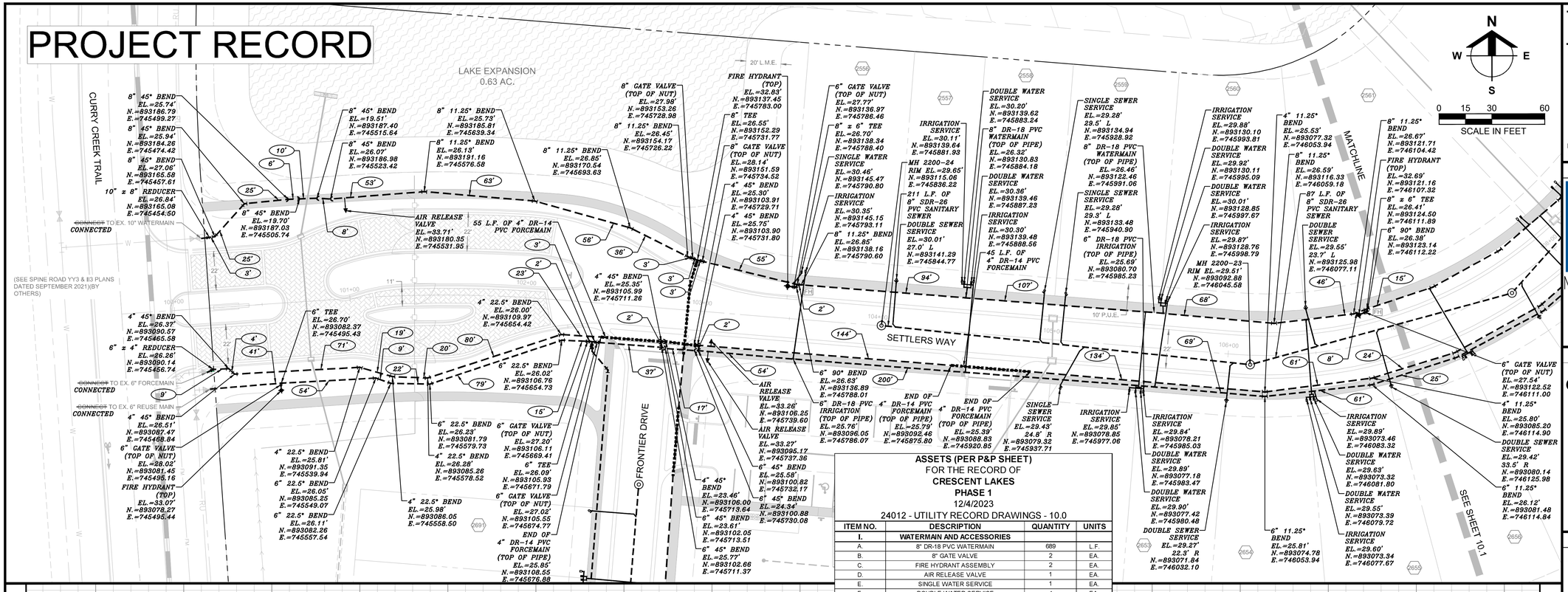
PLAN STATUS

RECORD DRAWINGS

PLAN AND PROFILE KEY SHEET

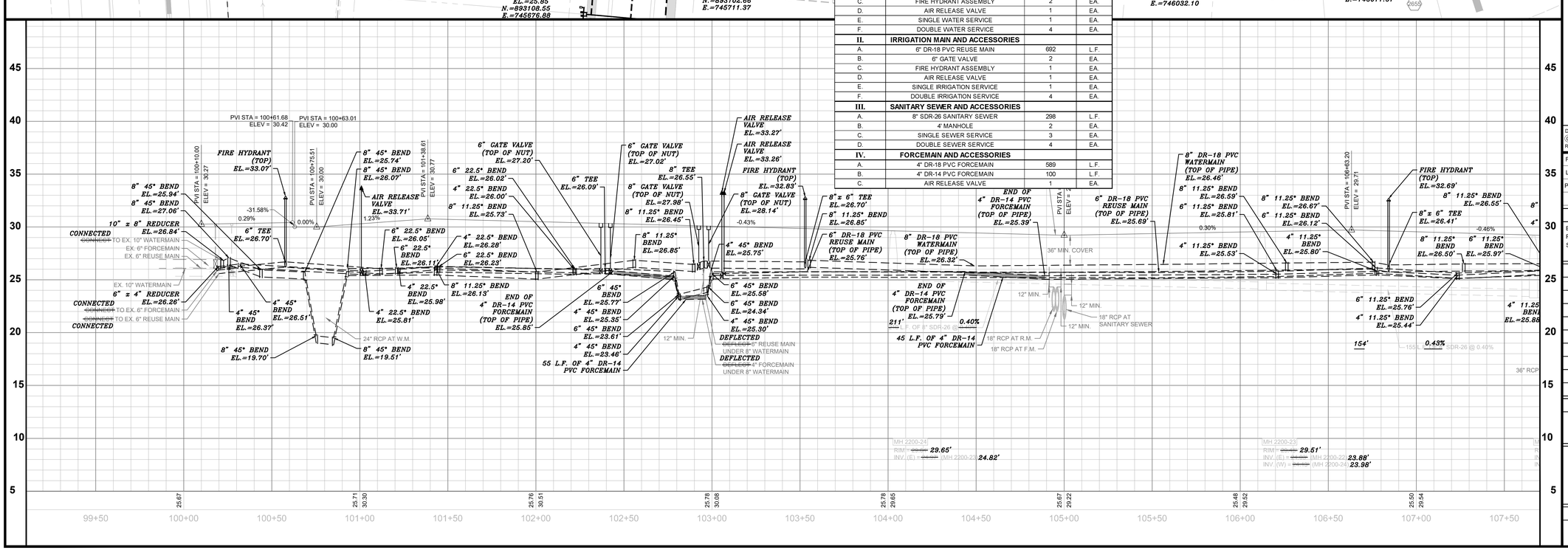
PROJECT / FILE NO.	SHEET NUMBER
24012	**9.0**

PROJECT RECORD



ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 10.0

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	689	L.F.
B.	8" GATE VALVE	2	EA.
C.	FIRE HYDRANT ASSEMBLY	2	EA.
D.	AIR RELEASE VALVE	1	EA.
E.	SINGLE WATER SERVICE	1	EA.
F.	DOUBLE WATER SERVICE	4	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	692	L.F.
B.	6" GATE VALVE	2	EA.
C.	FIRE HYDRANT ASSEMBLY	1	EA.
D.	AIR RELEASE VALVE	1	EA.
E.	SINGLE IRRIGATION SERVICE	1	EA.
F.	DOUBLE IRRIGATION SERVICE	4	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	298	L.F.
B.	4' MANHOLE	2	EA.
C.	SINGLE SEWER SERVICE	3	EA.
D.	DOUBLE SEWER SERVICE	4	EA.
IV.	**FORCEMAIN AND ACCESSORIES**		
A.	4" DR-18 PVC FORCEMAIN	589	L.F.
B.	4" DR-14 PVC FORCEMAIN	100	L.F.
C.	AIR RELEASE VALVE	1	EA.



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FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

12220 TOWNE LAKE DRIVE, SUITE 75
FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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PLOT DATE	MON. 12-4-2023 - 8:51 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

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PLAT = 24012P00.DWG
SURVEY = 23758S00.DWG

PLAN REVISIONS

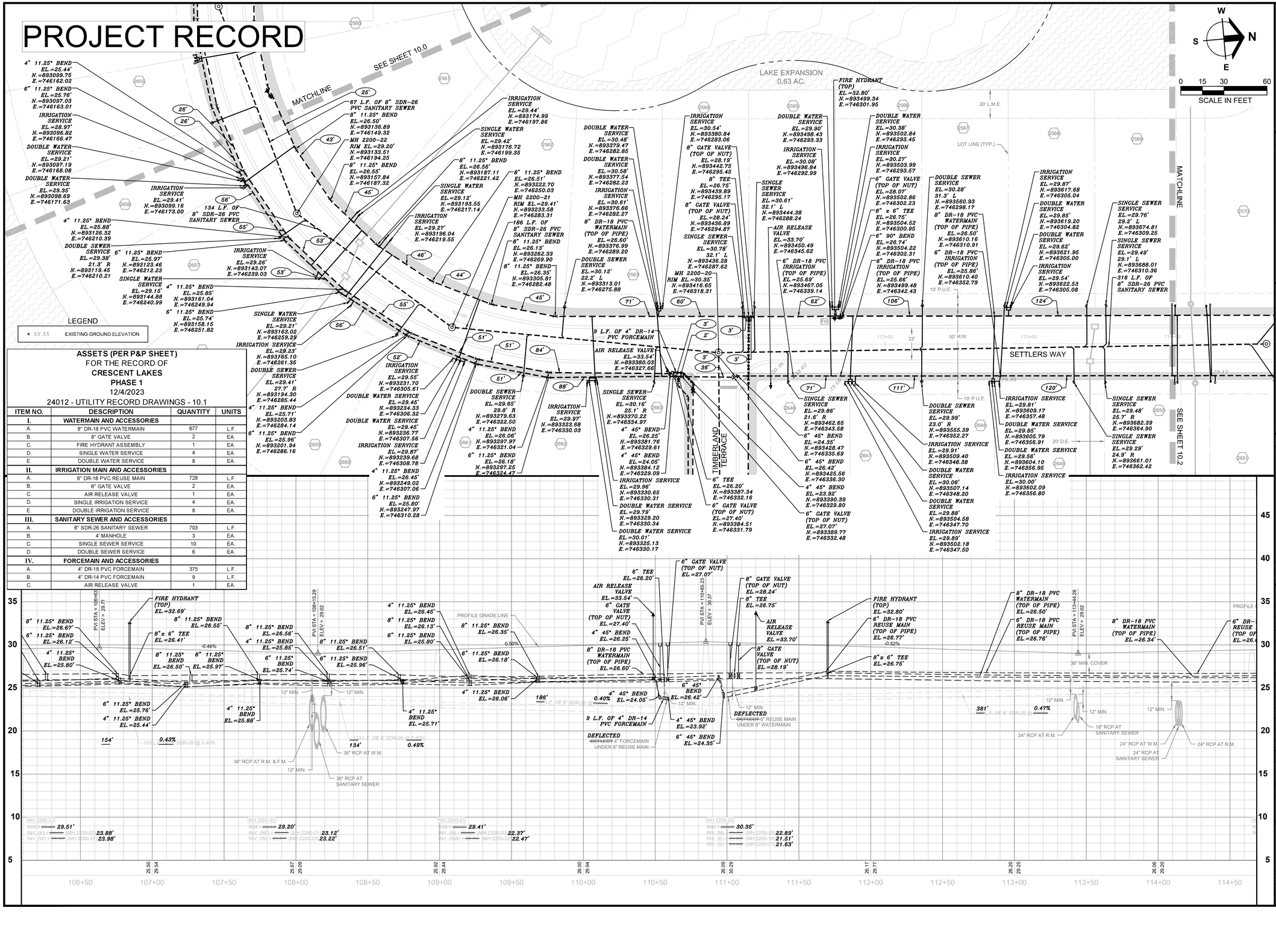
PLAN STATUS

RECORD DRAWINGS

PLAN AND PROFILE SETTLERS WAY STA: 100+00 TO 107+00

PROJECT / FILE NO.	SHEET NUMBER
24012	10.0

PROJECT RECORD



ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 10.1

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	677	L.F.
B.	8" GATE VALVE	2	EA.
C.	FIRE HYDRANT ASSEMBLY	1	EA.
D.	SINGLE WATER SERVICE	4	EA.
E.	DOUBLE WATER SERVICE	8	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	728	L.F.
B.	6" GATE VALVE	2	EA.
C.	AIR RELEASE VALVE	1	EA.
D.	SINGLE IRRIGATION SERVICE	4	EA.
E.	DOUBLE IRRIGATION SERVICE	8	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	703	L.F.
B.	4' MANHOLE	3	EA.
C.	SINGLE SEWER SERVICE	10	EA.
D.	DOUBLE SEWER SERVICE	6	EA.
IV.	**FORCEMAIN AND ACCESSORIES**		
A.	4" DR-18 PVC FORCEMAIN	375	L.F.
B.	4" DR-14 PVC FORCEMAIN	9	L.F.
C.	AIR RELEASE VALVE	1	EA.

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FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

Meritage Homes
12220 TOWNE LAKE DRIVE, SUITE 75
FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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PLOT DATE	MON. 12-4-2023 - 8:51 AM
PLOT BY	PEYTON GAUSE

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PLAT = 24012P00.DWG
SURVEY = 23758S00.DWG

PLAN REVISIONS

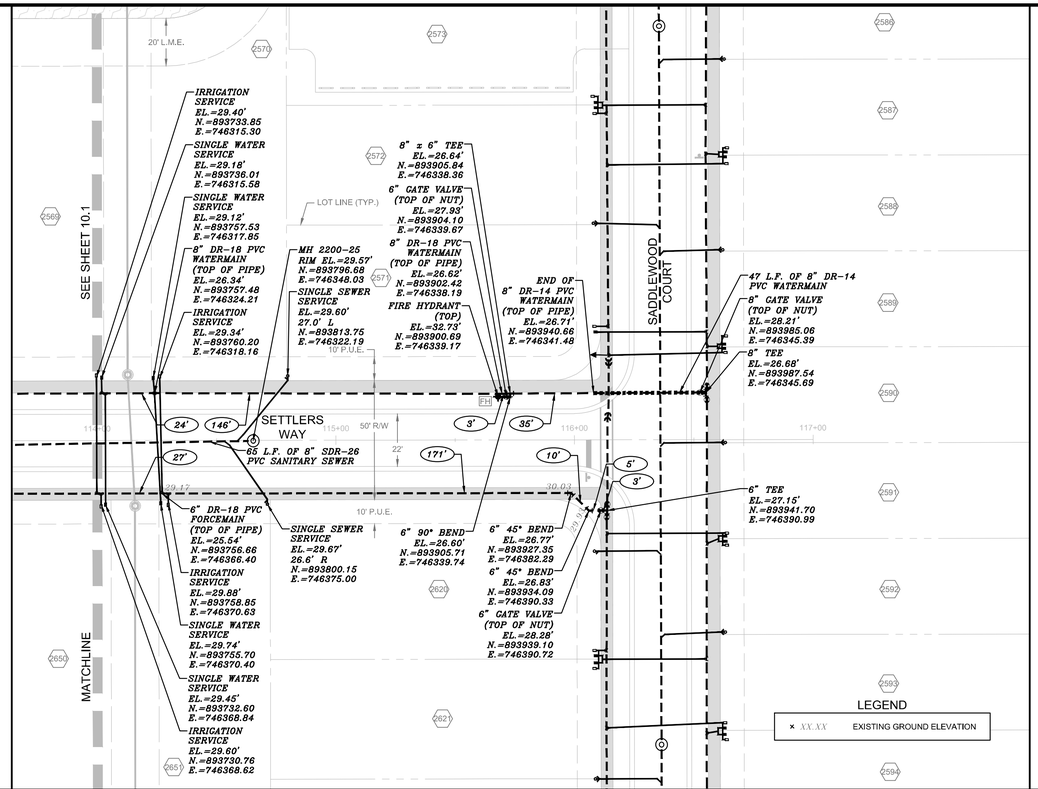
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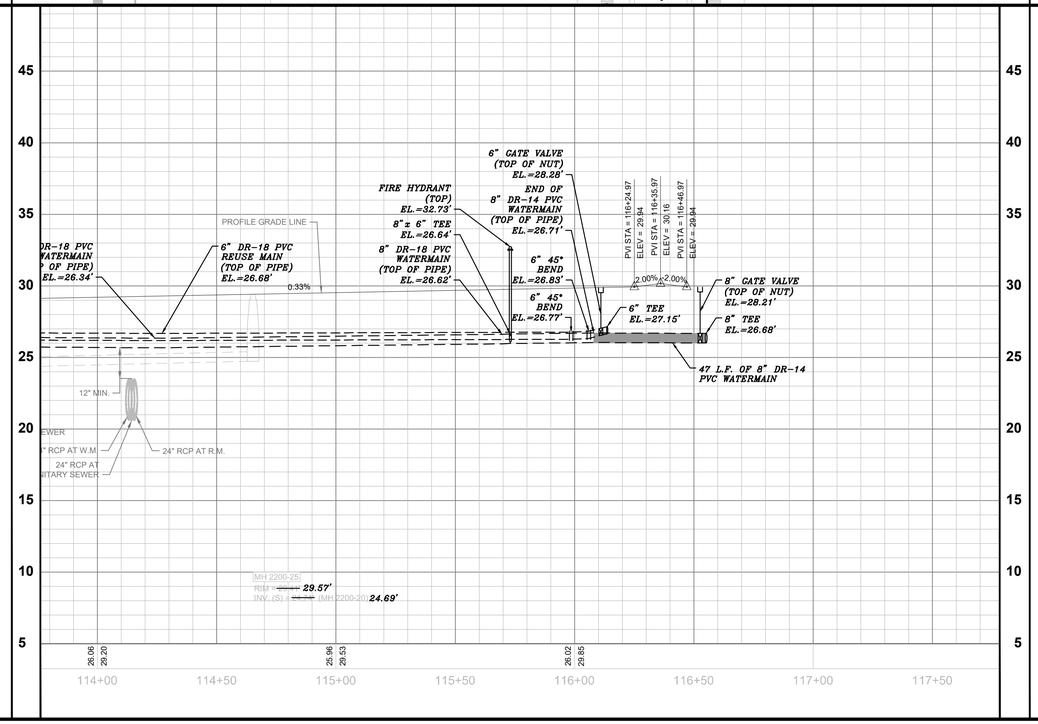
RECORD DRAWINGS

PLAN AND PROFILE SETTLERS WAY STA: 107+00 TO 114-00

PROJECT / FILE NO.	SHEET NUMBER
24012	10.1

PROJECT RECORD





W S N E

0 15 30 60

SCALE IN FEET

ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 10.2

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	208	L.F.
B.	8" DR-14 PVC WATERMAIN	47	L.F.
C.	8" GATE VALVE	1	EA.
D.	FIRE HYDRANT ASSEMBLY	1	EA.
E.	SINGLE WATER SERVICE	4	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	216	L.F.
B.	6" GATE VALVE	1	EA.
C.	SINGLE IRRIGATION SERVICE	4	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	65	L.F.
B.	4' MANHOLE	1	EA.
C.	SINGLE SEWER SERVICE	2	EA.

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FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

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PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
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PLOT BY	PEYTON GAUSE

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SURVEY = 23758S00.DWG

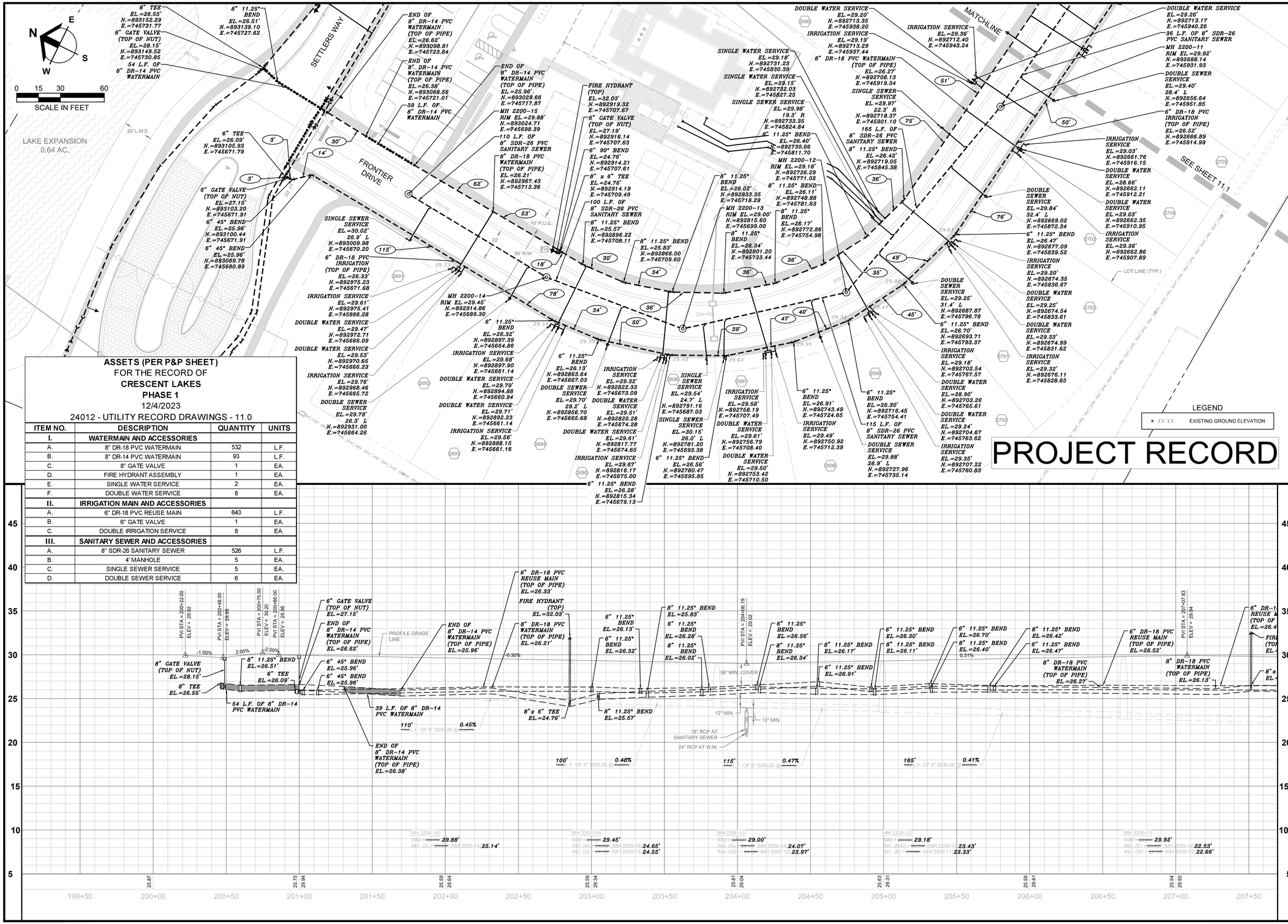
PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

PLAN AND PROFILE
SETTLERS WAY
STA: 114+00 TO END

PROJECT / FILE NO.	SHEET NUMBER
24012	10.2



ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 11.0

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	532	L.F.
B.	8" DR-14 PVC WATERMAIN	93	L.F.
C.	8" GATE VALVE	1	EA.
D.	FIRE HYDRANT ASSEMBLY	1	EA.
E.	SINGLE WATER SERVICE	2	EA.
F.	DOUBLE WATER SERVICE	8	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	643	L.F.
B.	6" GATE VALVE	1	EA.
C.	DOUBLE IRRIGATION SERVICE	8	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	526	L.F.
B.	4' MANHOLE	5	EA.
C.	SINGLE SEWER SERVICE	5	EA.
D.	DOUBLE SEWER SERVICE	6	EA.

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FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

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https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
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PLOT BY	PEYTON GAUSE

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SURVEY = 23758500.DWG

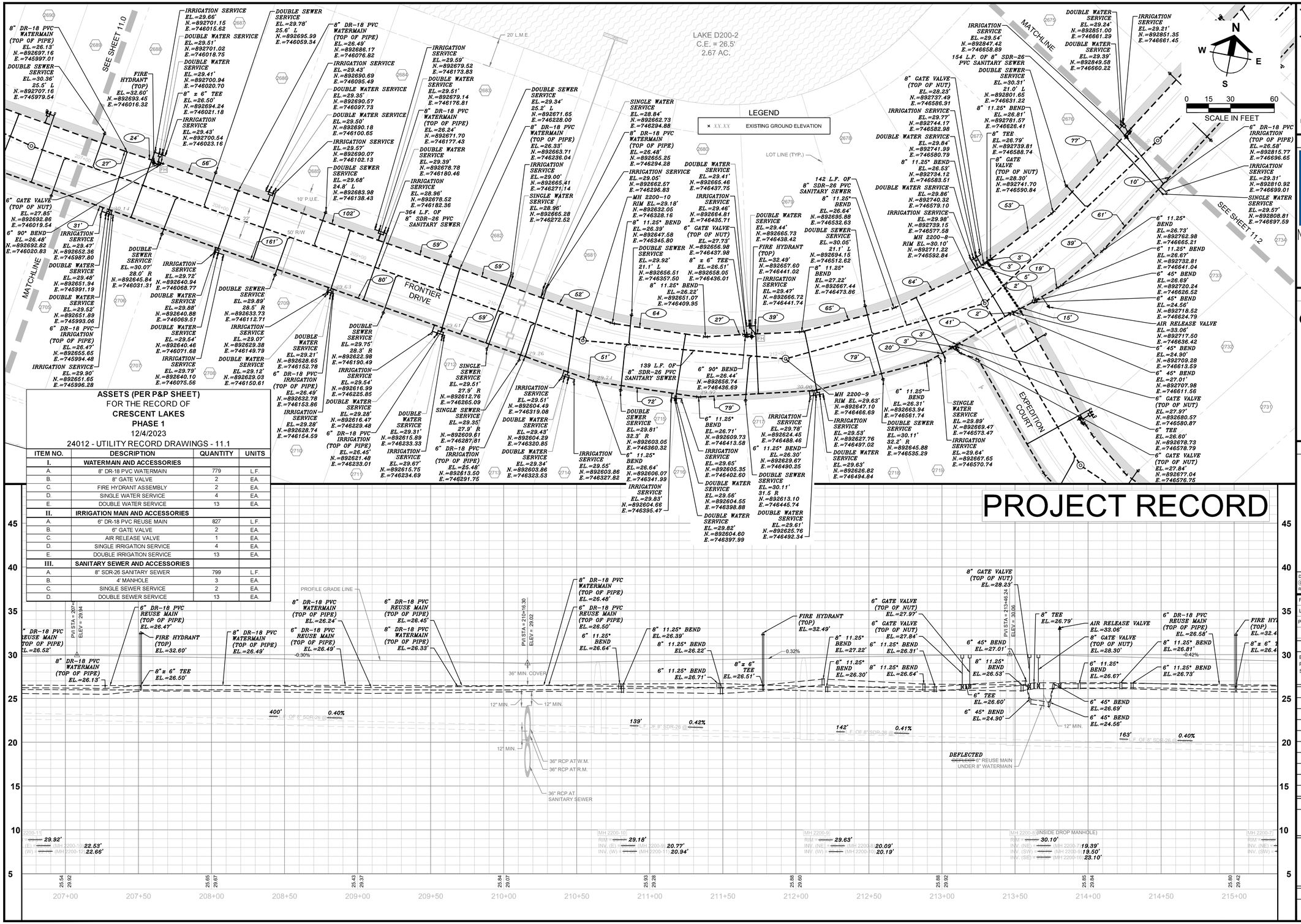
PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

PLAN AND PROFILE FRONTIER DRIVE STA: 200+00 TO 207+00

PROJECT / FILE NO.	SHEET NUMBER
24012	**11.0**



ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 11.1

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	779	L.F.
B.	8" GATE VALVE	2	EA.
C.	FIRE HYDRANT ASSEMBLY	2	EA.
D.	SINGLE WATER SERVICE	4	EA.
E.	DOUBLE WATER SERVICE	13	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	827	L.F.
B.	6" GATE VALVE	2	EA.
C.	AIR RELEASE VALVE	1	EA.
D.	SINGLE IRRIGATION SERVICE	4	EA.
E.	DOUBLE IRRIGATION SERVICE	13	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	799	L.F.
B.	4' MANHOLE	3	EA.
C.	SINGLE SEWER SERVICE	2	EA.
D.	DOUBLE SEWER SERVICE	13	EA.

PROJECT RECORD

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PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

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PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
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PLOT BY	PEYTON GAUSE

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PLAT = 24012P00.DWG
SURVEY = 23758S00.DWG

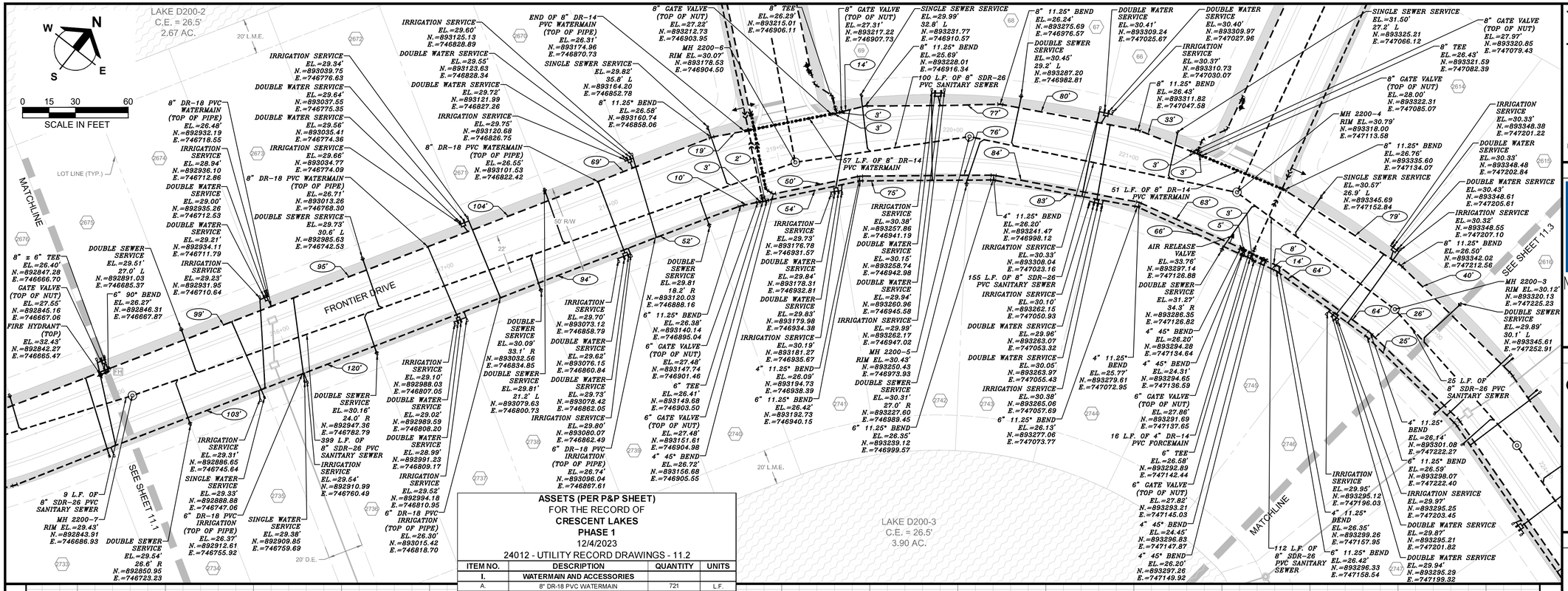
PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

PLAN AND PROFILE FRONTIER DRIVE STA: 207+00 TO 215+00

PROJECT / FILE NO.	SHEET NUMBER
24012	**11.1**



PROJECT RECORD

ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 11.2

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	721	L.F.
B.	8" DR-14 PVC WATERMAIN	108	L.F.
C.	8" GATE VALVE	4	EA.
D.	FIRE HYDRANT ASSEMBLY	1	EA.
E.	SINGLE WATER SERVICE	2	EA.
F.	DOUBLE WATER SERVICE	11	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	773	L.F.
B.	6" GATE VALVE	4	EA.
C.	SINGLE IRRIGATION SERVICE	2	EA.
D.	DOUBLE IRRIGATION SERVICE	11	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	800	L.F.
B.	4' MANHOLE	5	EA.
C.	SINGLE SEWER SERVICE	4	EA.
D.	DOUBLE SEWER SERVICE	11	EA.
IV.	**FORCEMAIN AND ACCESSORIES**		
A.	4" DR-18 PVC FORCEMAIN	371	L.F.
B.	4" DR-14 PVC FORCEMAIN	16	L.F.
C.	AIR RELEASE VALVE	1	EA.

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FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes
Meritage Homes
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PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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PLOT BY	PEYTON GAUSE

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SURVEY = 23758S00.DWG

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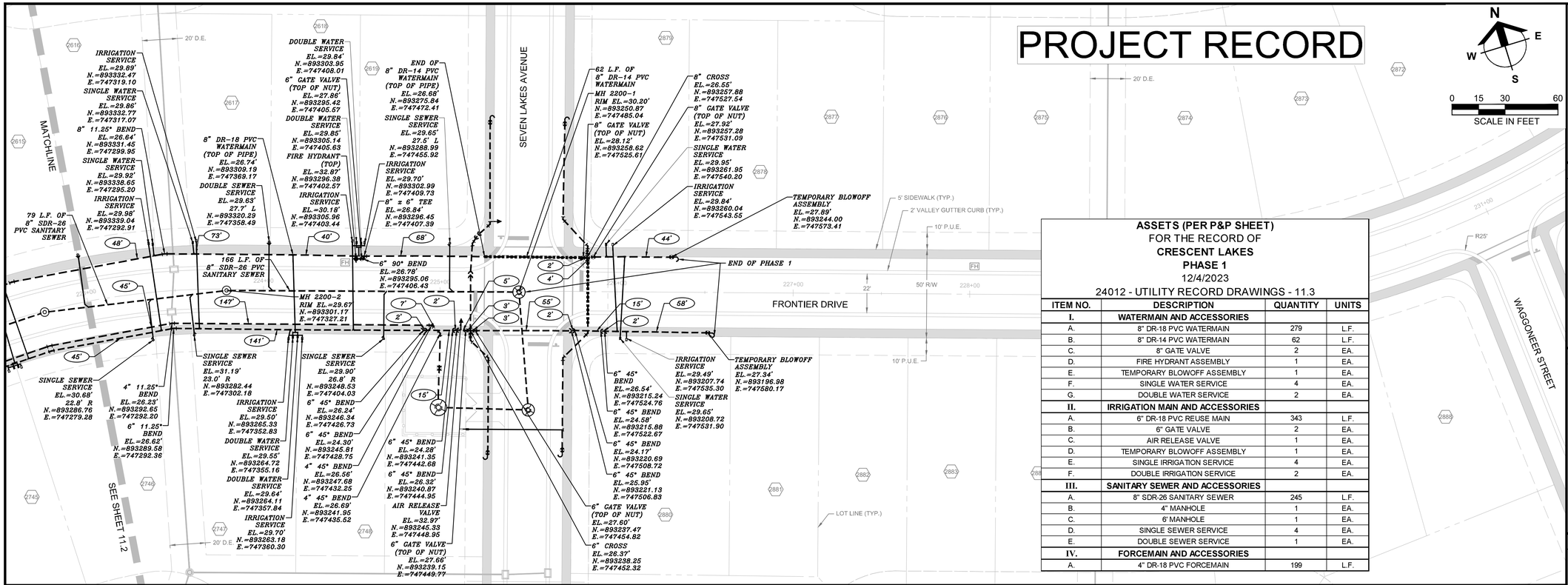
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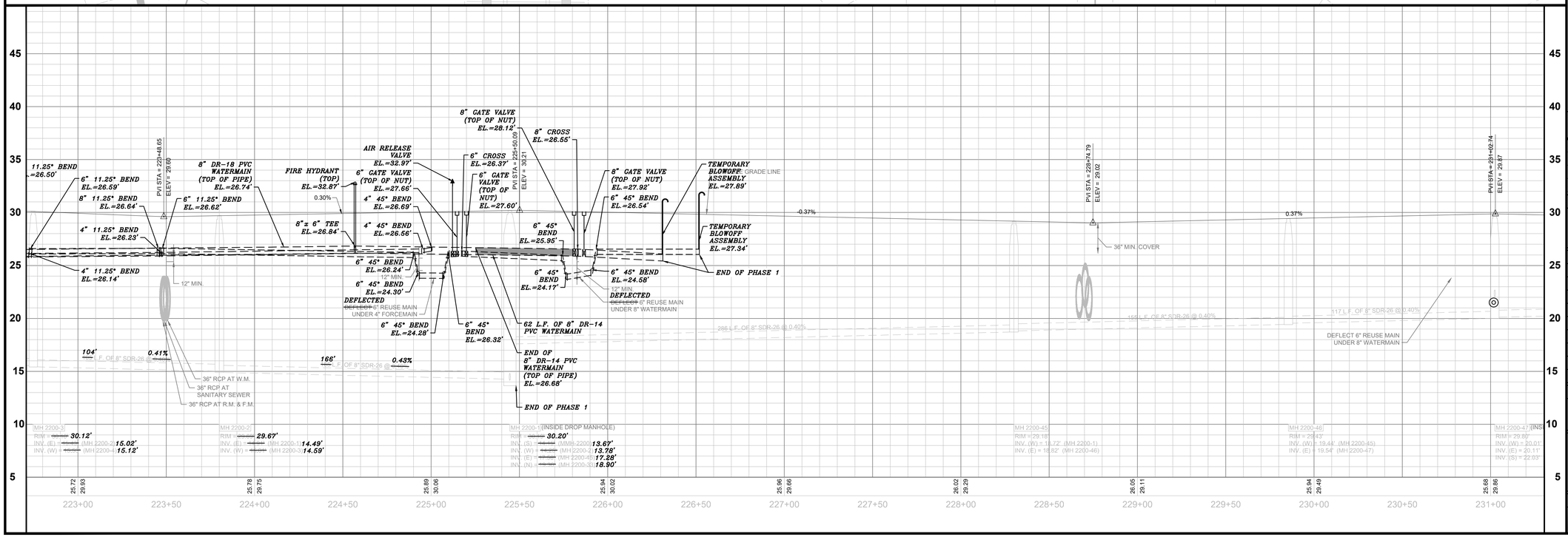
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PLAN AND PROFILE FRONTIER DRIVE STA: 215+00 TO 223+00

PROJECT / FILE NO.	SHEET NUMBER
24012	11.2

PROJECT RECORD





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FLORIDA CERTIFICATES OF AUTHORIZATION
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PREPARED FOR

Meritage Homes

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FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
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PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
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SURVEY = 23758S00.DWG

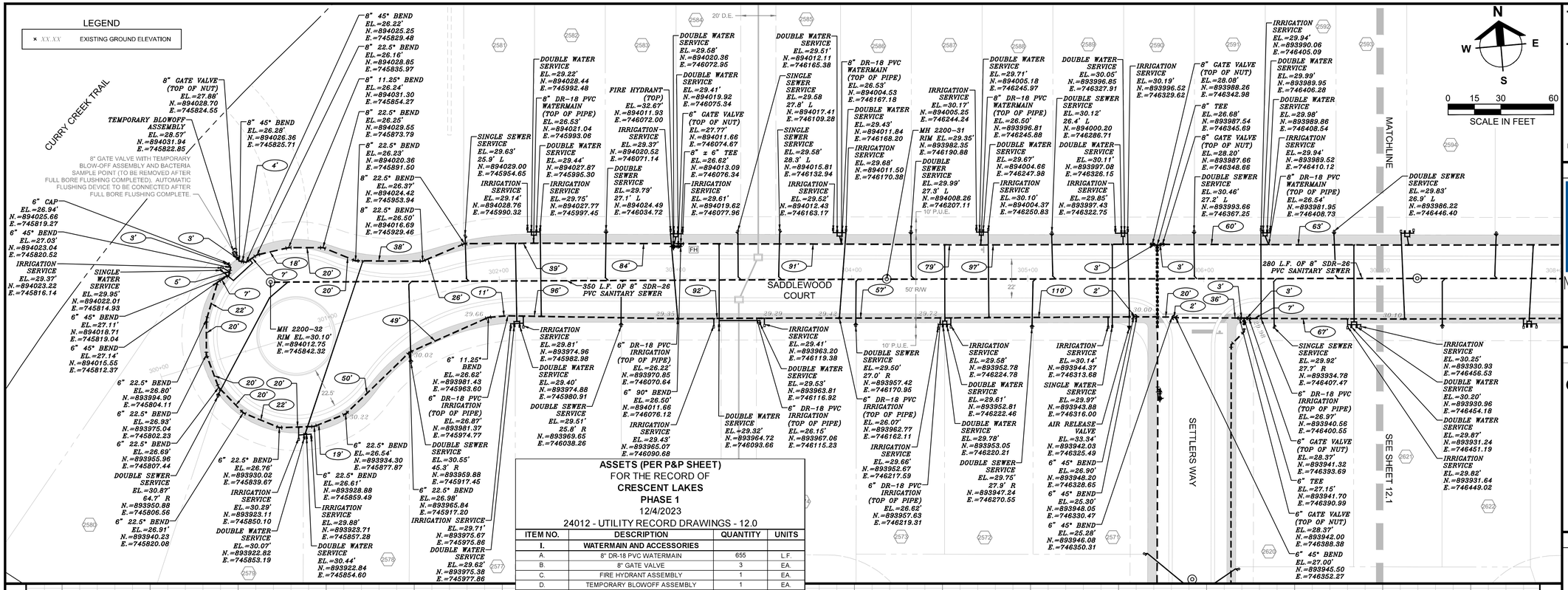
PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

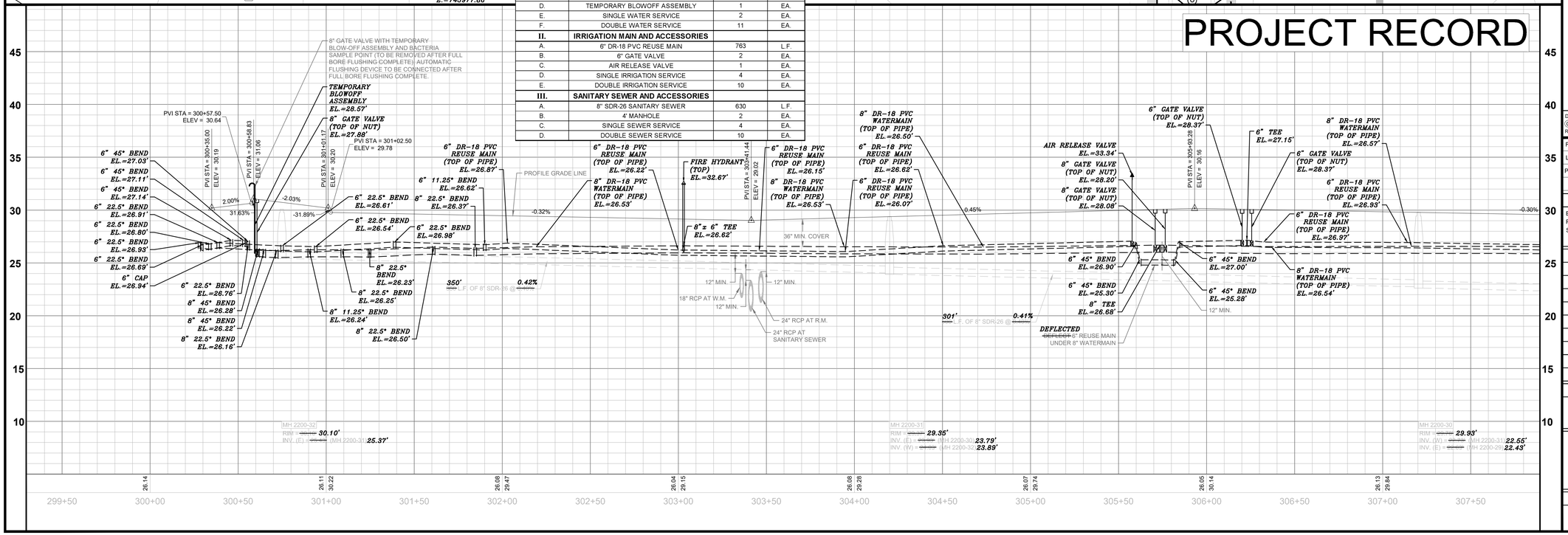
PLAN AND PROFILE FRONTIER DRIVE STA: 223+00 TO 231+00

PROJECT / FILE NO.	SHEET NUMBER
24012	11.3



ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 12.0

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	655	L.F.
B.	8" GATE VALVE	3	EA.
C.	FIRE HYDRANT ASSEMBLY	1	EA.
D.	TEMPORARY BLOWOFF ASSEMBLY	1	EA.
E.	SINGLE WATER SERVICE	2	EA.
F.	DOUBLE WATER SERVICE	11	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	763	L.F.
B.	6" GATE VALVE	2	EA.
C.	AIR RELEASE VALVE	1	EA.
D.	SINGLE IRRIGATION SERVICE	4	EA.
E.	DOUBLE IRRIGATION SERVICE	10	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	630	L.F.
B.	4' MANHOLE	2	EA.
C.	SINGLE SEWER SERVICE	4	EA.
D.	DOUBLE SEWER SERVICE	10	EA.



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ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

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PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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PLOT BY	PEYTON GAUSE

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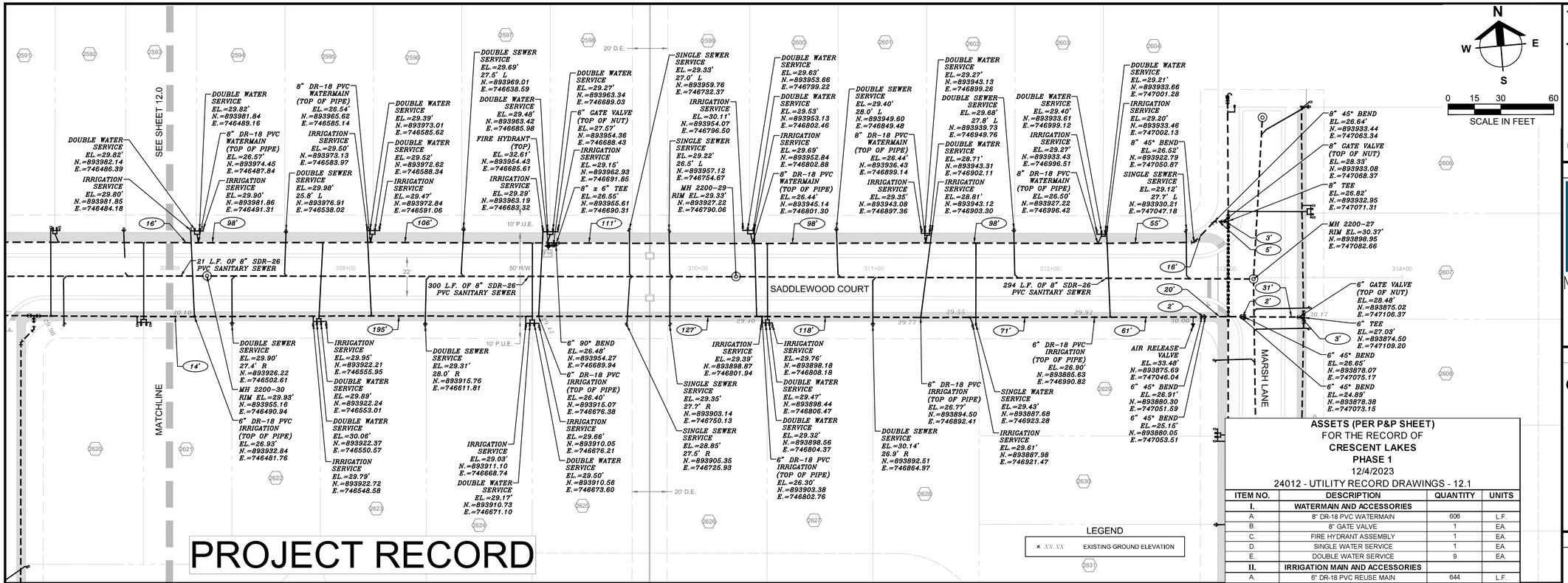
PLAN REVISIONS

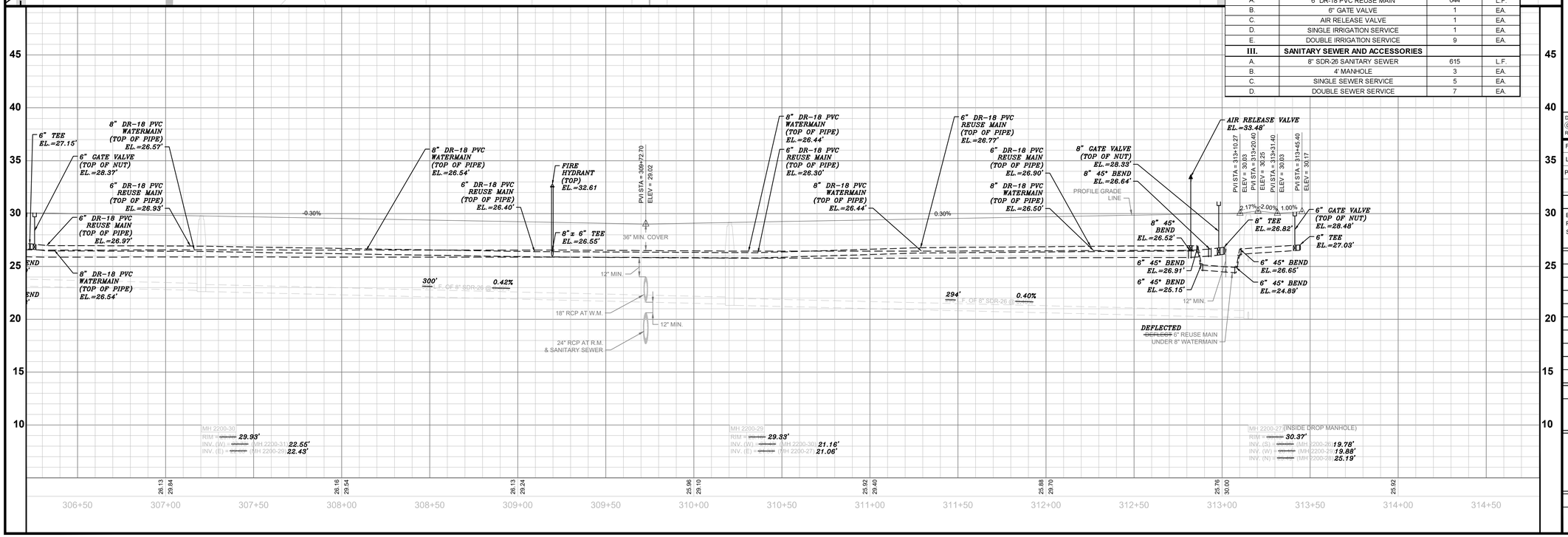
PLAN STATUS

RECORD DRAWINGS

PLAN AND PROFILE SADDLEWOOD COURT STA: 300+00 TO 307+00

PROJECT / FILE NO.	SHEET NUMBER
24012	12.0





ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 12.1

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	606	L.F.
B.	8" GATE VALVE	1	EA.
C.	FIRE HYDRANT ASSEMBLY	1	EA.
D.	SINGLE WATER SERVICE	1	EA.
E.	DOUBLE WATER SERVICE	9	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	644	L.F.
B.	6" GATE VALVE	1	EA.
C.	AIR RELEASE VALVE	1	EA.
D.	SINGLE IRRIGATION SERVICE	1	EA.
E.	DOUBLE IRRIGATION SERVICE	9	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	615	L.F.
B.	4' MANHOLE	3	EA.
C.	SINGLE SEWER SERVICE	5	EA.
D.	DOUBLE SEWER SERVICE	7	EA.

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FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes
12220 TOWNE LAKE DRIVE, SUITE 75
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PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS
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SURVEY = 23758S00.DWG

PLAN REVISIONS

PLAN STATUS

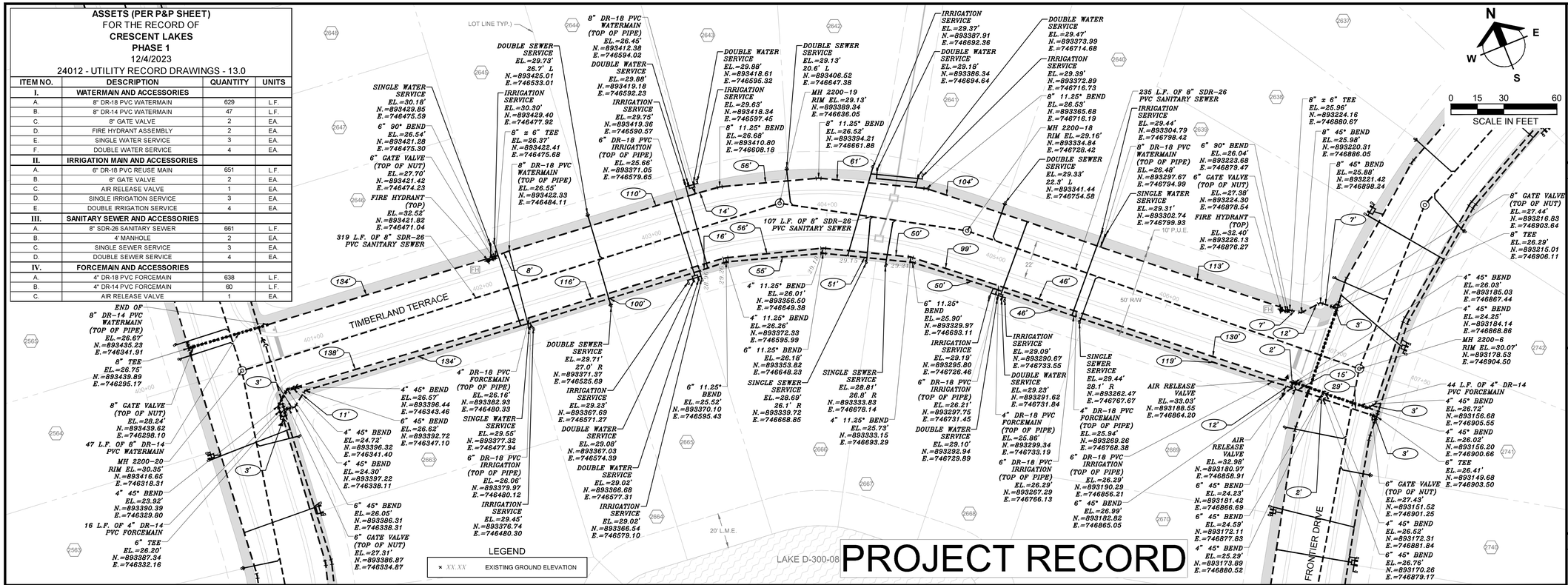
RECORD DRAWINGS

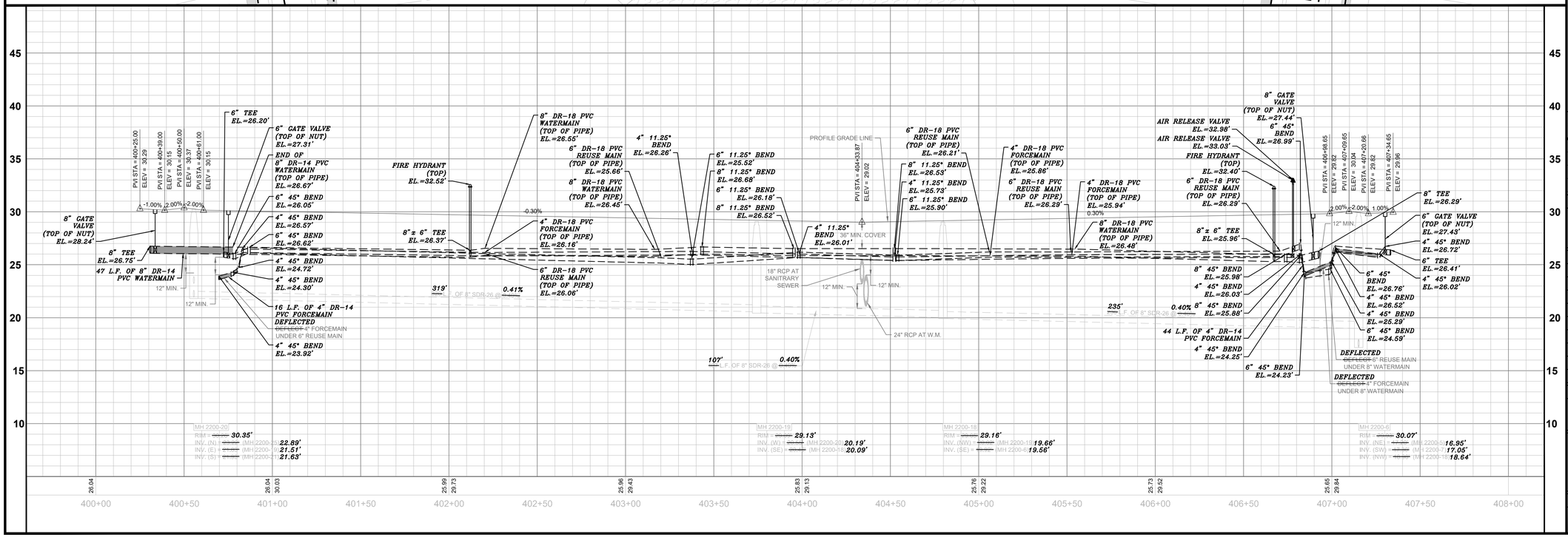
PLAN AND PROFILE SADDLEWOOD COURT STA: 307+00 TO END

PROJECT / FILE NO.	SHEET NUMBER
24012	**12.1**

ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 13.0

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	629	L.F.
B.	8" DR-14 PVC WATERMAIN	47	L.F.
C.	8" GATE VALVE	2	EA.
D.	FIRE HYDRANT ASSEMBLY	2	EA.
E.	SINGLE WATER SERVICE	3	EA.
F.	DOUBLE WATER SERVICE	4	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	651	L.F.
B.	6" GATE VALVE	2	EA.
C.	AIR RELEASE VALVE	1	EA.
D.	SINGLE IRRIGATION SERVICE	3	EA.
E.	DOUBLE IRRIGATION SERVICE	4	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	661	L.F.
B.	4' MANHOLE	2	EA.
C.	SINGLE SEWER SERVICE	3	EA.
D.	DOUBLE SEWER SERVICE	4	EA.
IV.	**FORCEMAIN AND ACCESSORIES**		
A.	4" DR-18 PVC FORCEMAIN	638	L.F.
B.	4" DR-14 PVC FORCEMAIN	60	L.F.
C.	AIR RELEASE VALVE	1	EA.





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FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes
Meritage Homes
12220 TOWNE LAKE DRIVE, SUITE 75
FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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FILE NAME	24012R30D.DWG
LOCATION	J:\24012\DWG\RECORD\PH1\
PLOT DATE	MON. 12-4-2023 - 8:55 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

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PLAT = 24012P00.DWG

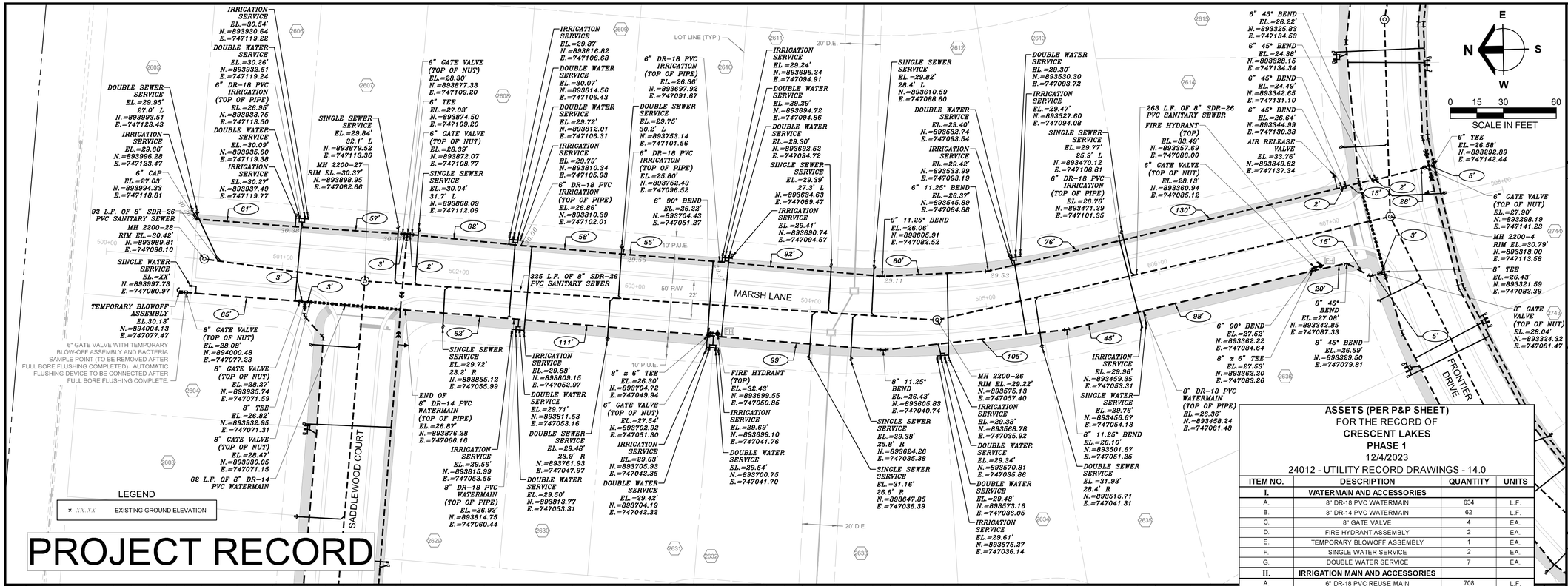
PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

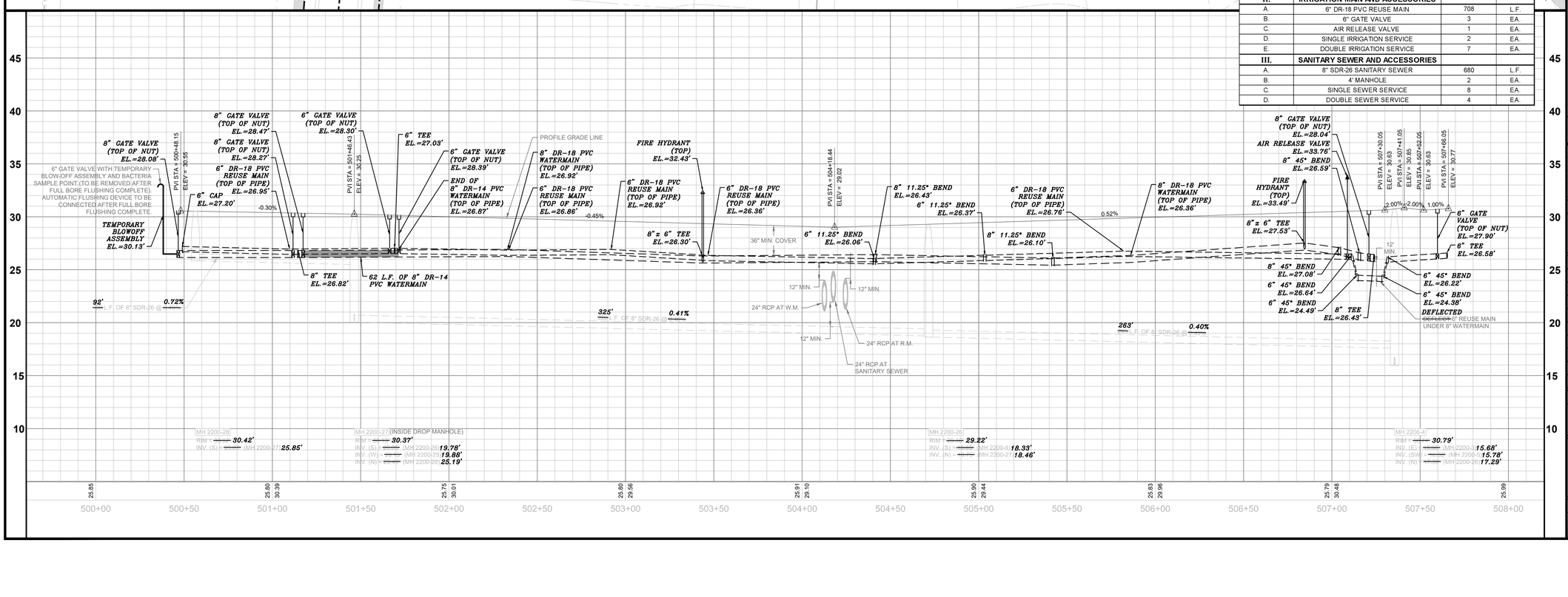
PLAN AND PROFILE TIMBERLAND TERRACE STA: 400+00 TO END

PROJECT / FILE NO.	SHEET NUMBER
24012	13.0



ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 14.0

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	634	L.F.
B.	8" DR-14 PVC WATERMAIN	62	L.F.
C.	8" GATE VALVE	4	EA.
D.	FIRE HYDRANT ASSEMBLY	2	EA.
E.	TEMPORARY BLOWOFF ASSEMBLY	1	EA.
F.	SINGLE WATER SERVICE	2	EA.
G.	DOUBLE WATER SERVICE	7	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	708	L.F.
B.	6" GATE VALVE	3	EA.
C.	AIR RELEASE VALVE	1	EA.
D.	SINGLE IRRIGATION SERVICE	2	EA.
E.	DOUBLE IRRIGATION SERVICE	7	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	680	L.F.
B.	4' MANHOLE	2	EA.
C.	SINGLE SEWER SERVICE	8	EA.
D.	DOUBLE SEWER SERVICE	4	EA.



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ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

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https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
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LOCATION	J:\24012\DWG\RECORD\PH1\
PLOT DATE	MON. 12-4-2023 - 8:55 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

BASEPLAN = 24012A00.DWG
PLAT = 24012P00.DWG

PLAN REVISIONS

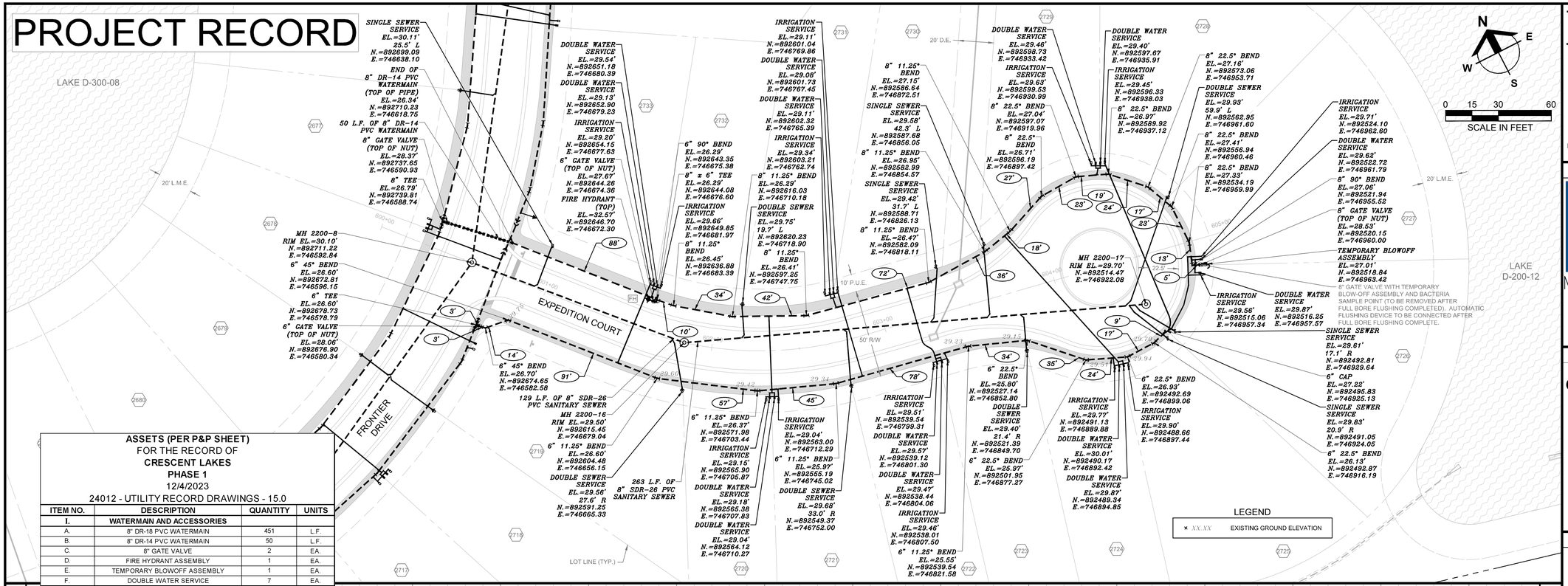
PLAN STATUS

APPROVAL SUBMITTAL PLANS
NOT FOR CONSTRUCTION

PLAN AND PROFILE MARSH LANE STA: 500+00 TO END

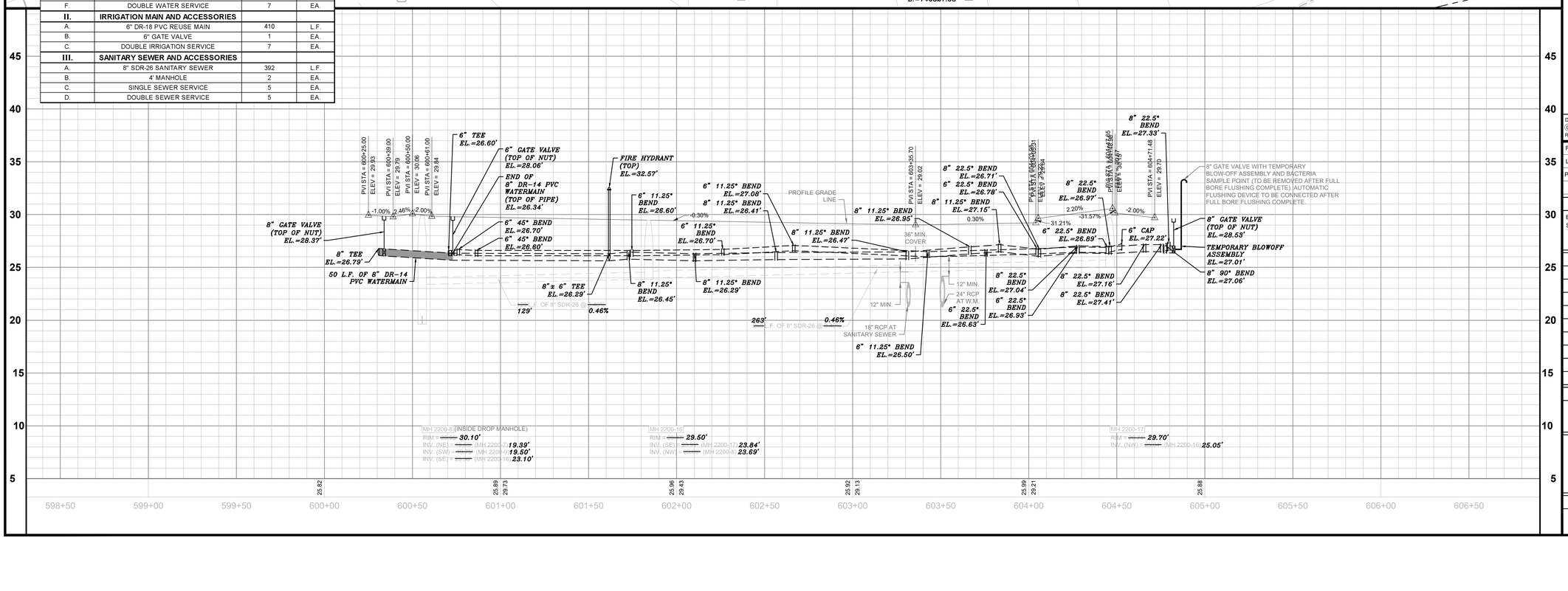
PROJECT / FILE NO.	SHEET NUMBER
24012	**14.0**

PROJECT RECORD



ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 15.0

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	451	L.F.
B.	8" DR-14 PVC WATERMAIN	50	L.F.
C.	8" GATE VALVE	2	EA.
D.	FIRE HYDRANT ASSEMBLY	1	EA.
E.	TEMPORARY BLOWOFF ASSEMBLY	1	EA.
F.	DOUBLE WATER SERVICE	7	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	410	L.F.
B.	6" GATE VALVE	1	EA.
C.	DOUBLE IRRIGATION SERVICE	7	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	392	L.F.
B.	4' MANHOLE	2	EA.
C.	SINGLE SEWER SERVICE	5	EA.
D.	DOUBLE SEWER SERVICE	5	EA.



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PREPARED FOR

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https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

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LOCATION	J:\24012\DWG\RECORD\PH1\
PLOT DATE	MON. 12-4-2023 - 8:56 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

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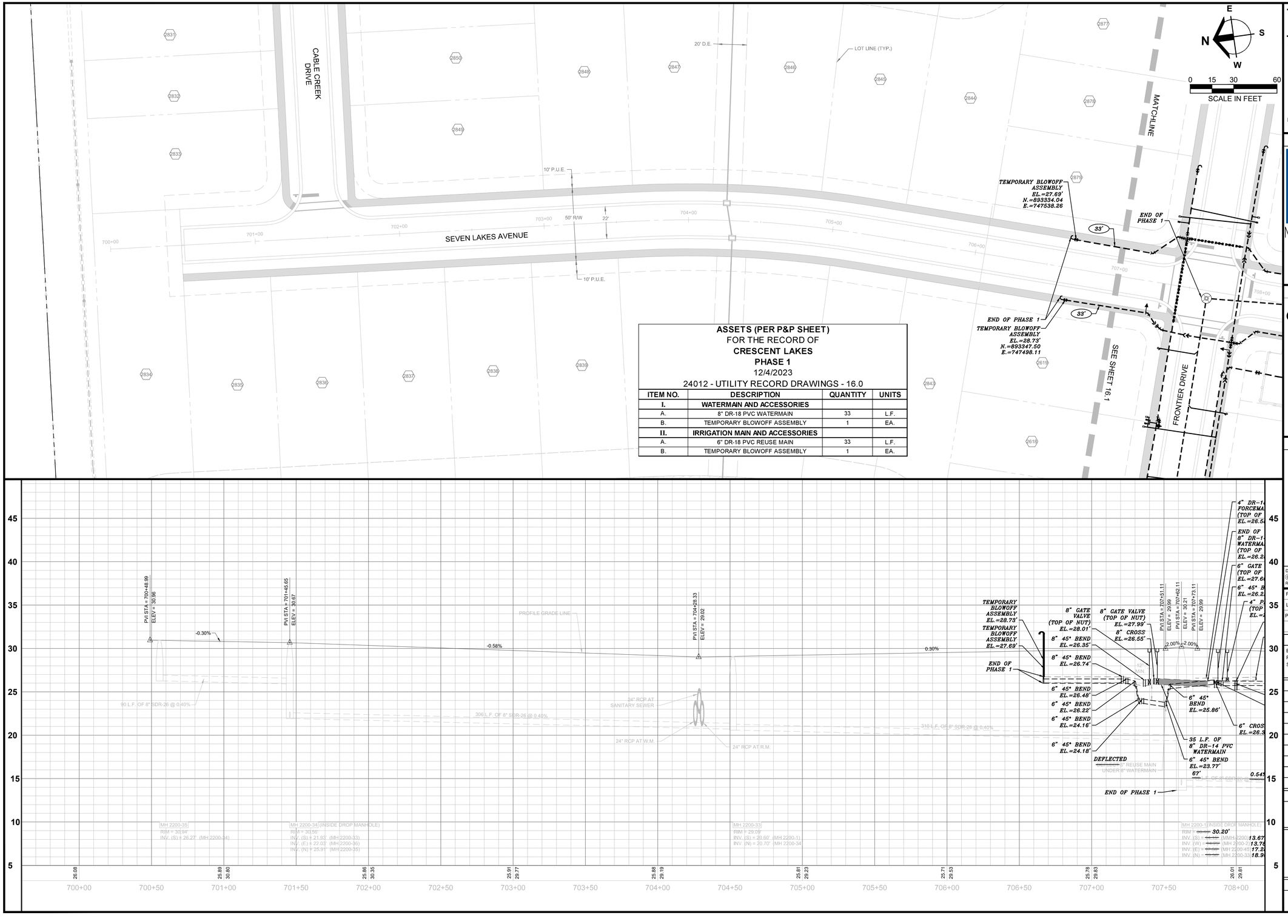
PLAN REVISIONS

PLAN STATUS

APPROVAL SUBMITTAL PLANS
NOT FOR CONSTRUCTION

PLAN AND PROFILE EXPEDITION COURT STA: 600+00 TO END

PROJECT / FILE NO.	SHEET NUMBER
24012	15.0



ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 16.0

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	33	L.F.
B.	TEMPORARY BLOWOFF ASSEMBLY	1	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	33	L.F.
B.	TEMPORARY BLOWOFF ASSEMBLY	1	EA.

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ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

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PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

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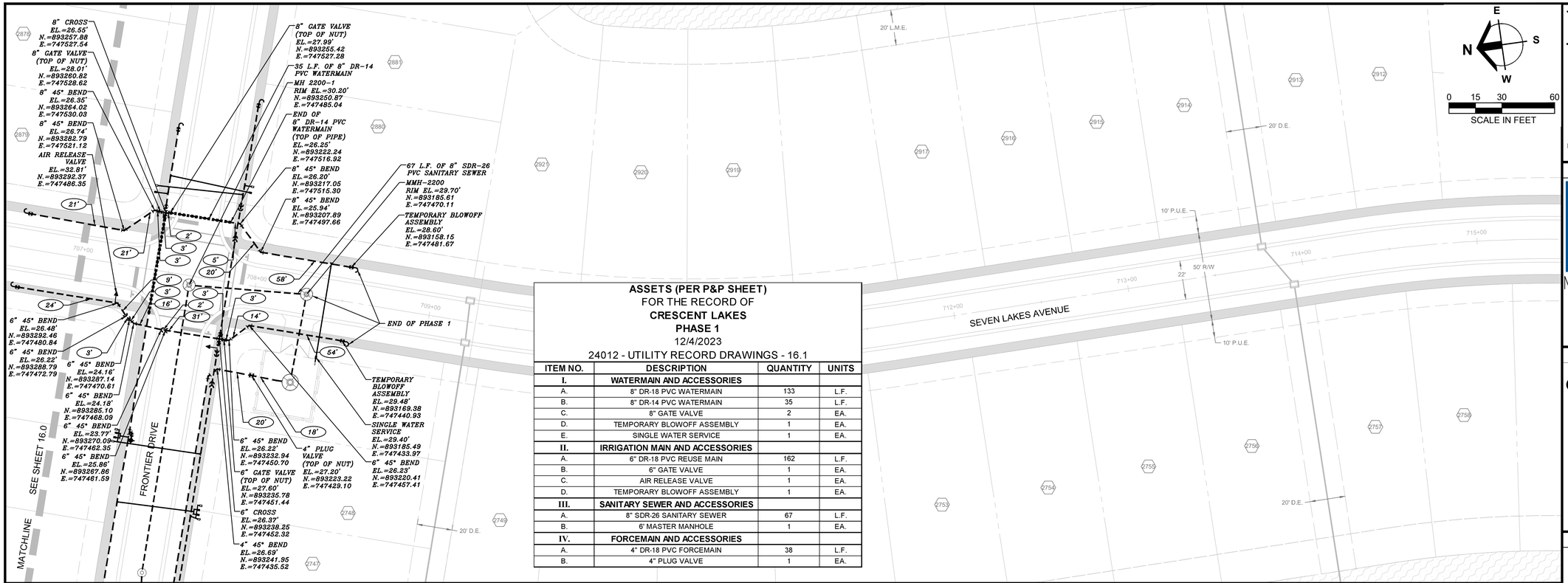
PLAN REVISIONS

PLAN STATUS

APPROVAL SUBMITTAL PLANS
NOT FOR CONSTRUCTION

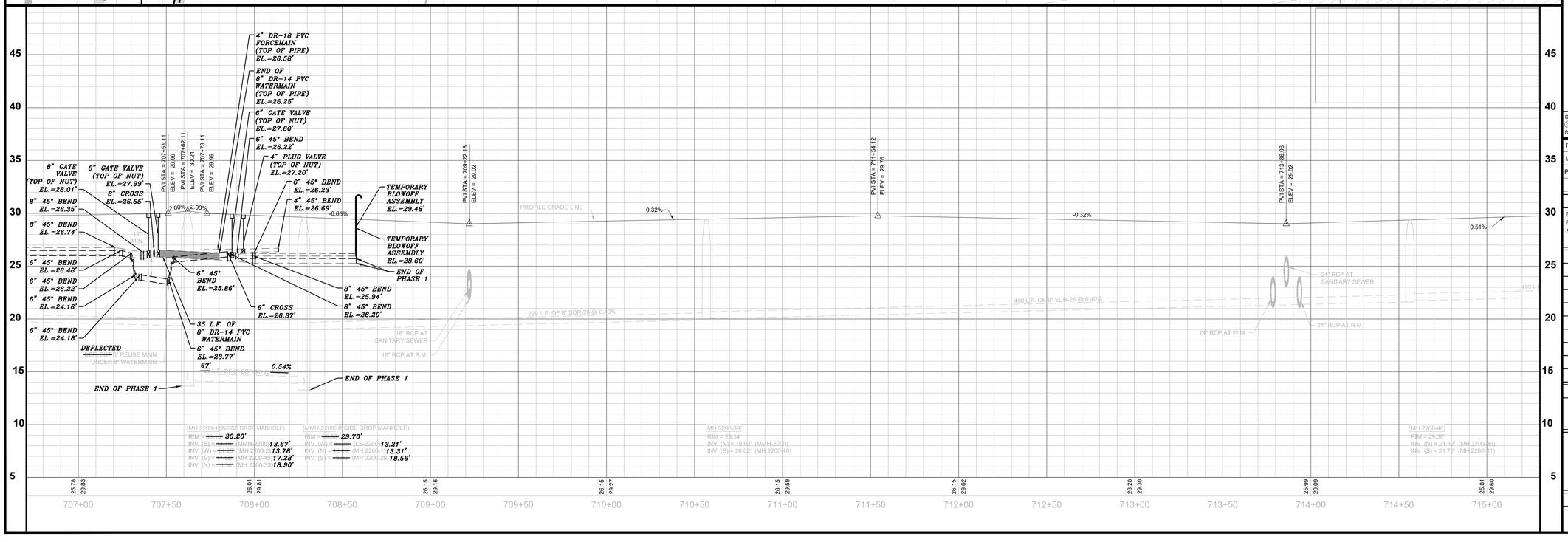
PLAN AND PROFILE SEVEN LAKES AVENUE STA: 700+00 TO 707+00

PROJECT / FILE NO.	SHEET NUMBER
24012	**16.0**



ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 16.1

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	**WATERMAIN AND ACCESSORIES**		
A.	8" DR-18 PVC WATERMAIN	133	L.F.
B.	8" DR-14 PVC WATERMAIN	35	L.F.
C.	8" GATE VALVE	2	EA.
D.	TEMPORARY BLOWOFF ASSEMBLY	1	EA.
E.	SINGLE WATER SERVICE	1	EA.
II.	**IRRIGATION MAIN AND ACCESSORIES**		
A.	6" DR-18 PVC REUSE MAIN	162	L.F.
B.	6" GATE VALVE	1	EA.
C.	AIR RELEASE VALVE	1	EA.
D.	TEMPORARY BLOWOFF ASSEMBLY	1	EA.
III.	**SANITARY SEWER AND ACCESSORIES**		
A.	8" SDR-26 SANITARY SEWER	67	L.F.
B.	6' MASTER MANHOLE	1	EA.
IV.	**FORCEMAIN AND ACCESSORIES**		
A.	4" DR-18 PVC FORCEMAIN	38	L.F.
B.	4" PLUG VALVE	1	EA.



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PREPARED FOR

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PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
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PLOT BY	PEYTON GAUSE

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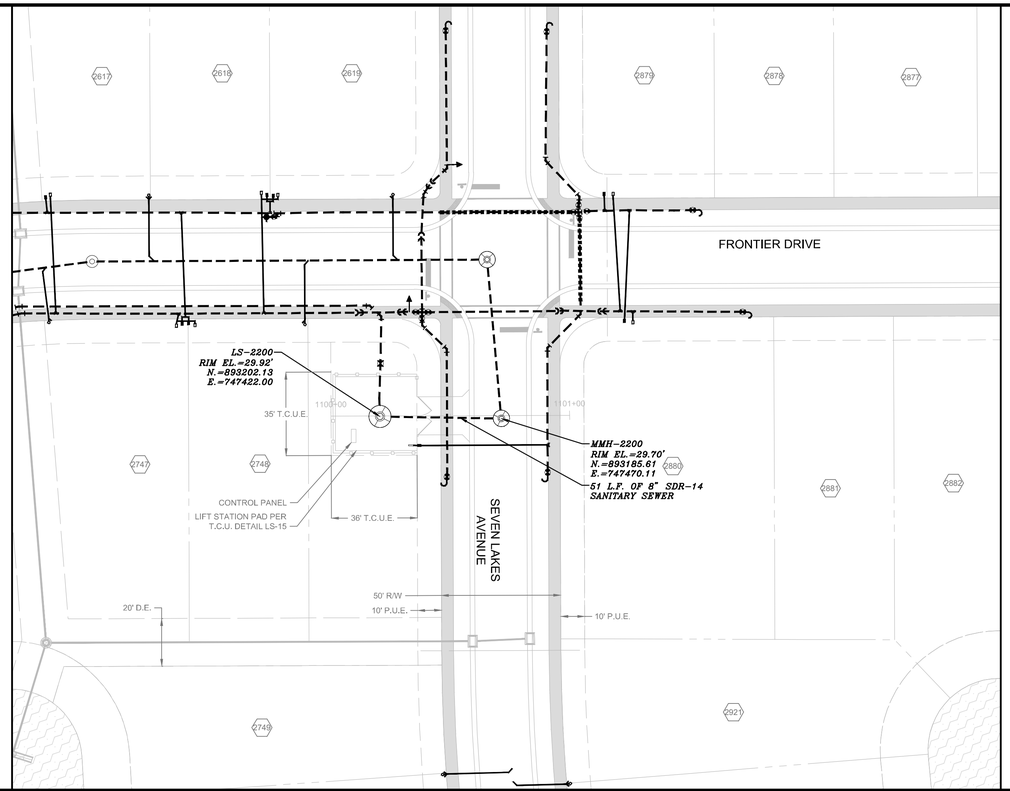
PLAN REVISIONS

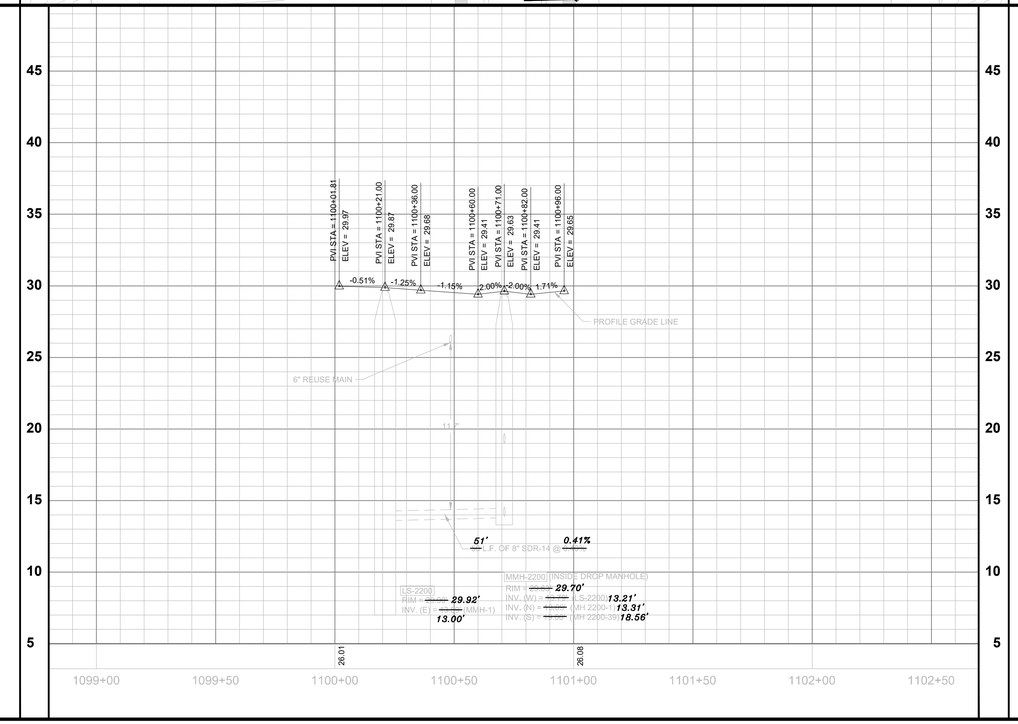
PLAN STATUS

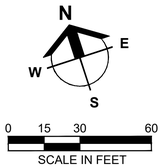
APPROVAL SUBMITTAL PLANS
NOT FOR CONSTRUCTION

PLAN AND PROFILE SEVEN LAKES AVENUE STA: 707+00 TO 715+00

PROJECT / FILE NO.	SHEET NUMBER
24012	**16.1**







ASSETS (PER P&P SHEET)
FOR THE RECORD OF
CRESCENT LAKES
PHASE 1
12/4/2023
24012 - UTILITY RECORD DRAWINGS - 20.0

ITEM NO.	DESCRIPTION	QUANTITY	UNITS
I.	SANITARY SEWER AND ACCESSORIES		
A.	8" SDR-14 SANITARY SEWER	51	L.F.
B.	LIFT STATION	1	EA.

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PREPARED FOR

Meritage Homes
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PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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FILE NAME	24012R30K.DWG
LOCATION	J:\24012\DWG\RECORD\PH1\
PLOT DATE	MON. 12-4-2023 - 8:57 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

BASEPLAN = 24012A00.DWG
PLAT = 24012P00.DWG

PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

PLAN AND PROFILE LIFT STATION #2200 STA: 1100+00 TO END

PROJECT / FILE NO.	SHEET NUMBER
24012	**20.0**

PROJECT RECORD

GENERAL NOTES:

1. BABCOCK RANCH COMMUNITY DESIGN & SPECIFICATION MANUAL (DSM) AND TCU STANDARD DETAILS SHALL GOVERN ALL UTILITY WORK. UNDER CERTAIN CIRCUMSTANCES THE STANDARD SPECIFICATIONS AND/OR STANDARD DETAILS MAY BE MODIFIED BY THE SPECIAL PROVISION SECTION OF THE CONTRACT DOCUMENTS IN WHICH CASE THE SPECIAL PROVISIONS SHALL PREVAIL. WHEN A CONFLICT EXISTS AMONG THE REQUIREMENTS OF A REFERENCED MATERIAL OR INSTALLATION STANDARD, THE REQUIREMENTS OF TCU SHALL PREVAIL. WHERE THE REQUIREMENTS OF A STATE OR LOCAL AGENCY HAVING JURISDICTION ARE MORE STRINGENT, THOSE REQUIREMENTS SHALL PREVAIL.
2. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED LOCAL, COUNTY, AND STATE PERMITS PRIOR TO COMMENCING WORK AND SHALL KEEP ONE COPY OF ALL ISSUED PERMITS AT THE SITE AT ALL TIMES DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL ASSURE COMPLIANCE WITH ANY OSHA, EPA, AND/OR OTHER FEDERAL OR STATE OF FLORIDA RULES, REGULATIONS OR OTHER REQUIREMENTS, AS EACH MAY APPLY.
4. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE ONE CURRENT COPY OF TCU SPECIFICATIONS AND DESIGN DETAILS AND ONE COPY OF THE CONTRACT DOCUMENTS INCLUDING ENGINEERING DRAWINGS, SPECIFICATIONS, SPECIAL PROVISIONS, ETC. NO FIELD CHANGES OR DEVIATION FROM THE CONTRACT DOCUMENTS SHALL BE MADE BY THE CONTRACTOR WITHOUT PRIOR TCU WRITTEN APPROVAL
5. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL NOTIFY "SUNSHINE STATE ONE CALL" PRIOR TO START OF CONSTRUCTION. THE EXISTING UTILITIES SHOWN ON THE ENGINEERING DRAWINGS ARE FOR DESIGN PURPOSES ONLY. THE CONTRACTOR SHALL MARK LOCATIONS OF UTILITIES BY PAINTING AND/OR FLAGGING THE UTILITY ALIGNMENT. THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION(S) TO FIELD VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COMPLY WITH ALL LAWS AND ORDINANCES COVERING THE PROTECTION OF SUCH WORK AND THE SAFETY MEASURES TO BE EMPLOYED THEREIN.
6. THE CONTRACTOR SHALL REVIEW THE SITE CONDITIONS PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BRING ENGINEERING DRAWING DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO COMMENCING WORK.
7. THE CONTRACTOR SHALL CONTACT THE ISD, APPLICABLE COUNTY DEPARTMENTS AND ALL OTHER UTILITY COMPANIES A MINIMUM OF 48-HOURS PRIOR TO START OF CONSTRUCTION.
8. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY CUSTOMERS 48 HOURS IN ADVANCE IF WATER AND/OR SEWER SERVICE WILL BE INTERRUPTED DURING CONSTRUCTION.

SCALE: N.T.S. | DATE: 11/07/2018 | DRAWN BY: | APPROVED BY: | BABCOCK RANCH WATER UTILITIES | GENERAL NOTES | PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL. | DN-01 | D: DN-01.dwg

9. IF EXISTING VALVES OR FITTINGS ARE NOT RESTRAINED PROPERLY, THE CONTRACTOR SHALL RESTRAIN EXISTING UTILITIES IN ACCORDANCE WITH TCU REQUIREMENTS AS APPROVED BY TCU.
10. THE CONTRACTOR SHALL INSTALL INCIDENTAL FITTINGS REQUIRED TO RESOLVE. CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES AS DETERMINED IN THE FIELD UNLESS OTHERWISE SHOWN ON THE PLANS. ALL MATERIALS, EQUIPMENT, AND LABOR TO RESOLVE INCIDENTAL CONFLICTS SHALL BE PAID FOR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS.
11. ALL VALVES AND VALVE BOXES SHALL BE INSTALLED OUTSIDE OF PAVEMENTS, CURB, AND GUTTERS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE PLANS OR APPROVED BY TCU.
12. THE CONTRACTOR SHALL INSTALL ALL OPEN TRENCH BURY PIPE IN AN UPRIGHT VERTICAL POSITION SO ALL LETTERING AND/OR STRIPING CAN BE READ FROM ABOVE. DIRECTIONAL BORE HDPE PIPE SHALL MEET THIS REQUIREMENT TO THE EXTENT POSSIBLE.
13. THE CONTRACTOR SHALL PUSH HOME ALL SPIGOT ENDS OF PVC AND/OR DI PIPE INTO BELL ENDS WITHIN 1/2" OF THE MANUFACTURER'S INSERTION MARK. IF PIPE IS CUT, THE CONTRACTOR SHALL REPLACE AN INSERTION MARK FROM NEW END OF PIPE AS SHOWN ON THE ORIGINAL PIPE.
14. ALL STAINLESS STEEL SHALL BE 316 AUSTENITIC, NON-MAGNETIC UNLESS OTHERWISE APPROVED BY TCU.
15. MARKER BALLS AND METALLIC LOCATION TAPE MUST BE INSTALLED IN ACCORDANCE WITH THE TCU STANDARD DETAILS AND TCU STANDARD SPECIFICATIONS.

DUCTILE IRON EXTERNAL PROTECTIVE COATING

ALL EXPOSED DUCTILE IRON UTILITIES SHALL BE PAINTED AS FOLLOWS IN ACCORDANCE WITH TCU FIELD PAINTING SPECIFICATIONS:

TYPE	COLOR DESIGNATION*
POTABLE WATER LINES	BLUE (PANTONE 287)
POTABLE WATER VALVE CAPS	BLUE (PANTONE 287)
FIRE LINES	ANSI SAFETY RED (PANTONE 485)
FIRE LINE VALVE CAPS	ANSI SAFETY RED (PANTONE 485)
WASTE WATER LINES	ANSI SAFETY GREEN (PANTONE 3415)
WASTE WATER VALVE CAPS	ANSI SAFETY GREEN (PANTONE 3415)
RECLAIMED WATER LINES	PURPLE (PANTONE 522C)
RECLAIMED WATER VALVE CAPS	PURPLE (PANTONE 522C)
FIRE HYDRANTS	ANSI SAFETY YELLOW (PANTONE 109)
FIRE HYDRANT VALVE CAPS	ANSI SAFETY YELLOW (PANTONE 109)
FIRE HYDRANTS (RECLAIMED WATER)	PURPLE (PANTONE 522C)
FIRE HYDRANT VALVE CAPS (RECLAIMED WATER)	PURPLE (PANTONE 522C)

**Equivalent colors matching these colors are acceptable. Provide with Shop Drawing submittal direct color comparisons of color numbers available from manufacturer submitted.*

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CONSTRUCTION IN STREETS AND ROAD RIGHT-OF-WAYS:

1. OPEN ROAD CUTS REQUIRE PRIOR APPROVAL/PERMIT OF THE ISD, COUNTY, STATE, OR OTHER AGENCY HAVING JURISDICTION. CONSTRUCTION WITHIN THE FLORIDA DEPARTMENT OF TRANSPORTATION (DOT) RIGHT-OF-WAY SHALL CONFORM TO FLORIDA DOT CONSTRUCTION STANDARDS. THE AGENCY HAVING JURISDICTION SHALL BE NOTIFIED 48-HOURS IN ADVANCE OF ALL APPROVED OPEN ROAD CUTS WITHIN ROADWAYS/RIGHT-OF-WAYS.
2. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN TRAFFIC AT THE JOB SITE DURING CONSTRUCTION IN ACCORDANCE WITH THE PERMIT AND SAFETY REQUIREMENTS FOR THE PROJECT. PROPER DETOUR SHALL BE PROVIDED AS NECESSARY.
3. EXCAVATION SHALL BE CONDUCTED IN A MANNER TO CAUSE THE LEAST POSSIBLE INTERRUPTION TO TRAFFIC. WHERE TRAFFIC MUST CROSS EXCAVATIONS, THE CONTRACTOR SHALL PROVIDE SUITABLE BRIDGES AT STREET INTERSECTIONS AND DRIVEWAYS.
4. NOT MORE THAN ONE BLOCK OF EXCAVATION SHALL BE OPEN PER CREW AT ANY ONE TIME, AND THIS DISTANCE SHALL BE REDUCED IF CONSTRUCTION CAUSES EXCESSIVE INTERFERENCE WITH TRAFFIC. EXCAVATED OR OTHER MATERIAL STORED ADJACENT TO OR PARTIALLY UPON A ROADWAY PAVEMENT SHALL BE ADEQUATELY MARKED FOR TRAFFIC AND PEDESTRIAN SAFETY AT ALL TIMES. ALL EXCAVATED AND/OR STORED MATERIAL SHALL BE REMOVED FROM THE PAVEMENTS AT THE END OF THE WORK DAY UNLESS OTHERWISE PROVIDED FOR IN THE CONTRACT DOCUMENTS.
5. THE CONTRACTOR SHALL CARRY OUT THE WORK SO AS NOT TO DENY UNREASONABLE ACCESS TO PRIVATE PROPERTY. ALL ACCESS SHALL BE RESTORED AT THE END OF THE WORK DAY.
6. ALL UTILITY ACCESS MANHOLES, VALVES, AND FIRE HYDRANTS AND MAIL BOXES SHALL BE ACCESSIBLE AT ALL TIMES DURING CONSTRUCTION.
7. ROAD SURFACE RESTORATION SHALL BE PERFORMED IN ACCORDANCE WITH THE BABCOCK RANCH COMMUNITY DESIGN & SPECIFICATION MANUAL (DSM), FLORIDA DEPARTMENT OF TRANSPORTATION, OR OTHER GOVERNING AGENCY REQUIREMENTS.
8. THE CONTRACTOR SHALL REPLACE ALL PAVEMENT MARKINGS DAMAGED DURING THE PROJECT.

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CONSTRUCTION IN STREETS AND ROAD RIGHT-OF-WAYS:

1. TRAFFIC CONTROL ON ALL ISD, COUNTY, AND STATE HIGHWAY RIGHT-OF-WAYS SHALL COMPLY WITH THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND REQUIREMENTS OF THE STATE AND/OR ANY OTHER LOCAL AGENCY HAVING JURISDICTION.
2. WORK AFFECTING TRAFFIC ON ANY, ISD OR COUNTY, STREET, ROADWAY, RIGHT-OF-WAY, BIKE PATH, OR SIDEWALK REQUIRES THE PREPARATION AND SUBMITTAL OF MAINTENANCE OF TRAFFIC (MOT) PLAN BY THE CONTRACTOR TO THE ISD OR COUNTY ENGINEER. THE MOT PLAN SHALL BE APPROVED BY THE APPROPRIATE ISD OR COUNTY ENGINEER OR HIS/HER DESIGNEE PRIOR TO THE START OF CONSTRUCTION.
3. WORK AFFECTING TRAFFIC ON ANY STATE ROAD OR HIGHWAY REQUIRES THE PREPARATION AND SUBMITTAL OF A MOT PLAN BY THE CONTRACTOR TO THE FDOT. THE MOT PLAN SHALL BE APPROVED BY THE FDOT PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR SHALL BE IN FULL COMPLIANCE WITH THE APPROVED MOT PLAN AT ALL TIMES.
5. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL TRAFFIC CONTROL SIGNS AND DEVICES, BARRICADES, FLASHERS, ETC. IN WORKING CONDITION AT ALL TIMES.
6. ROAD CLOSURE WHETHER TEMPORARY ON A DAILY BASIS OR PERMANENTLY DURING CONSTRUCTION REQUIRES THE APPROVAL OF A DETOUR PLAN BY THE AGENCY OR AGENCIES HAVING JURISDICTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL TEMPORARY SIGNAGE WHEN THE ROADWAY IS TO BE CLOSED OR TRAFFIC WHEN ROAD CLOSURES ARE TEMPORARY ALL STREETS SHALL BE RE-OPENED DETOURED TO TRAFFIC BY THE END OF THE WORK DAY AND ALL DETOUR SIGNS COVERED OR REMOVED. WHEN ROADS ARE PERMANENTLY CLOSED DURING CONSTRUCTION ACCESS MUST BE PROVIDED TO PROPERTIES LOCATED ON THE CLOSED ROAD AT THE END OF EACH WORK DAY AND ON WEEKENDS.
7. DURING NON-DAY LIGHT HOURS OR RESTRICTED VISIBILITY, THE CONTRACTOR SHALL PROPERLY ILLUMINATE THE WORK BY THE INSTALLATION AND MAINTENANCE OF SUITABLE LIGHTS OR FLARES ESPECIALLY ALONG OR ACROSS THOROUGHFARES.

ENVIRONMENTAL REQUIREMENTS:

1. THE CONTRACTOR SHALL REFER TO TCU STANDARDS SPECIFICATIONS FOR "EROSION AND SEDIMENT CONTROL".
2. PRIOR TO THE START AND DURING CONSTRUCTION ACTIVITIES, FOR AREAS WITHIN AND ADJOINING THE LIMITS OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE PROTECTION BARRICADES/SILT FENCES/ADEQUATE MEASURES IN ACCORDANCE WITH ISD, COUNTY, AND STATE REQUIREMENTS FOR ALL DESIGNATED TREES/PLANTS TO BE PROTECTED, WETLANDS, THREATENED AND/OR ENDANGERED SPECIES ETC.

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BEDDING, BACKFILL, AND COMPACTION:

1. ALL PIPES BEDDING MATERIAL SHALL BE NEW MATERIAL UNLESS OTHERWISE APPROVED BY TCU.
2. FOUNDATION MATERIAL OR BEDDING STONE SHALL BE USED FOR BEDDING OF PIPE AND/OR MANHOLES AS INDICATED ON THE ENGINEERING DRAWINGS. CRUSHED STONE SHALL CONSIST OF HARD, DURABLE, AND SUB-ANGULAR PARTICLES OF PROPER SIZE AND GRADATION, AND SHALL BE FREE FROM ORGANIC MATERIAL, WOOD, TRASH, SAND, LOAM, CLAY, EXCESS FINES AND OTHER DELETERIOUS MATERIALS. THE STONE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C33, SIZE NO. 57 (3/4 INCH STONE) AND BE GRADED WITHIN THE FOLLOWING LIMITS:

U.S. SIEVE SIZE	PERCENT FINER BY WEIGHT
1 1/2 INCH	100
1 INCH	95-100
1/2 INCH	25-100
NO. 4	0-10
NO. 8	0-5

3. SAND FOR BEDDING OF THE POLYVINYL CHLORIDE (PVC) GRAVITY SEWER PIPE SHALL BE A DRY SCREENED AND GRADED MATERIAL WITH 95 PERCENT PASSING 1 INCH SIEVE AND NOT MORE THAN FIVE PERCENT PASSING A NO. 200 SIEVE. ALL PVC GRAVITY SEWER PIPE SHALL BE INSTALLED AND BEDDED IN ACCORDANCE WITH ASTM SPECIFICATION D-2321, "RECOMMENDED PRACTICE FOR UNDERGROUND INSTALLATION OF FLEXIBLE THERMOPLASTIC SEWER PIPE".
4. FOUNDATION STABILIZATION MATERIAL SHALL MEET TCU STANDARD SPECIFICATIONS OR DESIGN DETAILS. IF DETERMINED BY TCU THE MATERIAL IN THE BOTTOM OF THE TRENCH IS UNSUITABLE FOR SUPPORTING THE PIPE, THE CONTRACTOR SHALL EXCAVATE BELOW THE FLOW LINE OF THE PIPE. THE TRENCH SHALL BE BACKFILLED TO SPECIFIED GRADE WITH FOUNDATION STABILIZATION MATERIAL. IF THE TRENCH IS PROPERLY DEWATERED, TCU APPROVED BACKFILL MATERIAL MAY BE USED FOR STABILIZATION. CRUSHED ROCK (NO. 57 STONE) SHALL BE USED WHEN A DRY TRENCH CANNOT BE OBTAINED. THE FOUNDATION STABILIZATION MATERIAL SHALL BE PLACED OVER THE FULL WIDTH OF THE TRENCH AND COMPACTED IN LAYERS NOT EXCEEDING SIX INCHES DEEP TO THE REQUIRED GRADE.
5. BACKFILLING OF TRENCHES SHALL NOT BE ALLOWED UNTIL THE WORK HAS BEEN APPROVED BY TCU. WORK BACKFILLED OR CONCEALED WITHOUT THE KNOWLEDGE OF TCU SHALL BE UNCOVERED OR EXPOSED FOR INSPECTION AT NO COST TO THE OWNER.

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6. BACKFILL MATERIAL PLACED WITHIN ONE FOOT OF PIPING AND APPURTENANCES OR IN THE UPPER SIX INCHES OF ALL BACKFILL AND FILLS SHALL NOT CONTAIN ANY STONES OR ROCKS LARGER THAN ONE INCH IN DIAMETER. EXISTING BACKFILL MATERIAL SHALL MEET THE ABOVE REQUIREMENTS AS APPROVED BY TCU. BROKEN CONCRETE SHALL NOT BE USED. OUTSIDE THE PIPE ZONE, FILL MATERIAL CONTAINING LIME ROCK SHALL HAVE SUFFICIENT SAND TO FILL THE VOIDS IN THE LIME ROCK. NO STONES OR ROCKS LARGER THAN THREE INCHES IN DIAMETER SHALL BE USED IN ANY BACKFILL.
7. MATERIAL SUITABLE FOR BACKFILL IN A PROPERLY DEWATERED TRENCH SHALL NOT BE EXPANSIVE NOR HAVE HIGH ORGANIC CONTENT, SHALL BE FREE OF DEBRIS, LUMPS AND CLODS, AND SHALL MEET THE FOLLOWING REQUIREMENTS:
   a. MAXIMUM LIQUID LIMIT SHALL NOT EXCEED 12 AS DETERMINED BY ASTM D423.
   b. MAXIMUM PLASTICITY INDEX SHALL NOT EXCEED 35 AS DETERMINED BY ASTM D424.
   c. NOT MORE THAN 10% OF WEIGHT SHALL BE FINER THAN 74 MICRON (NO. 200) U.S. STANDARD SIEVE.
8. READY-MIX FLOWABLE FILL OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED AS AN ALTERNATIVE TO COMPACTED SOIL WITH THE APPROVAL OF TCU OR WHERE SHOWN ON THE ENGINEERING DRAWINGS. APPLICATIONS FOR THE MATERIAL INCLUDE BEDDINGS, ENCASEMENTS, CLOSURES FOR TANKS AND PIPES, AND GENERAL BACKFILL APPLICATIONS FOR TRENCHES AND ABUTMENTS. FLOWABLE FILL SHALL BE DESIGNED TO BE EXCAVATED AND PUMPED FOR APPLICATIONS WHERE STRENGTH IS MORE IMPORTANT THAN EXCAVATABILITY. IF FLOWABLE FILL IS SPECIFIED, ULTIMATE COMPRESSIVE STRENGTH SHALL BE LESS THAN 200 PSI AT 28 DAYS. FLOWABLE FILL IS NOT ACCEPTABLE FOR USE AS BACKFILL UNDER PAVEMENT, SIDEWALKS OR OTHER HARD SURFACES UNLESS OTHERWISE APPROVED IN WRITING BY AUTHORITY WITH JURISDICTION.
9. THE CONTRACTOR SHALL COMPACT ALL PORTIONS OF A TRENCH WITHIN 7.5' OF EXISTING EDGE OF PAVEMENT TO 98% DENSITY, AASHTO T-180, AND 95% FOR OTHER AREAS WITHIN THE RIGHT OF WAY. IF MORE STRINGENT COMPACTION REQUIREMENTS ARE SHOWN ON THE PLANS OR IN THE CONTRACT DOCUMENTS THEY SHALL PREVAIL.
10. COMPACTION OF BACKFILL MATERIAL UNDER PAVEMENT, SIDEWALKS, OR OTHER HARD SURFACES SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
11. DENSITY TESTS SHALL BE PERFORMED FOR EACH 6" LIFT AT A MINIMUM OF ONE TEST PER 200 FEET OF TRENCH.
12. ALL WELL POINT HOLES UNDER PARKING, DRIVING, OR ROADWAY SURFACES SHALL BE BACKFILLED WITH CONCRETE IMMEDIATELY AFTER PULLING THE WELL POINTS. ALL OTHER WELL POINT HOLES SHALL BE BACKFILLED WITH FDOT NO. 89 STONE IMMEDIATELY AFTER REMOVING THE WELL POINTS UNLESS SPECIFIED OR DIRECTED TO DO OTHERWISE BY TCU.

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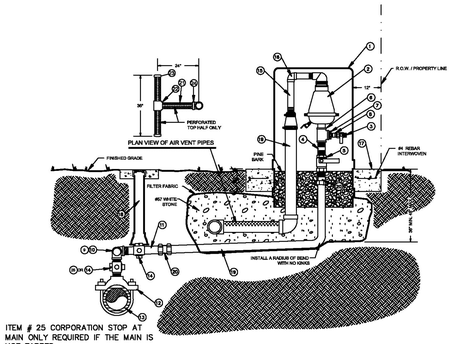
MATERIALS AND METHODS OF CONSTRUCTION:

ALL MATERIALS AND CONSTRUCTION METHODS USED IN THE CONSTRUCTION OF TCU'S UTILITIES INCLUDING BUT NOT LIMITED TO PIPING, VALVES, FITTINGS, RESTRAINTS, FIRE HYDRANTS, BLOW-OFFS, GRAVITY SEWER MAINS, MANHOLES, LIFT STATIONS, WATER AND SEWER SERVICES AND ALL ASSOCIATED APPURTENANCES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE BABCOCK RANCH COMMUNITY DESIGN & SPECIFICATION MANUAL (DSM) UNLESS OTHERWISE NOTED IN THE CONTRACT DOCUMENTS.

RESTORATION:

1. THE CONTRACTOR SHALL RESTORE ALL DISTURBED OR DAMAGED AREAS TO THE SAME OR BETTER CONDITION THAN THAT PRIOR TO THE START OF CONSTRUCTION.
2. ALL AREAS IN EXISTING RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO EQUAL OR BETTER THAN THE ORIGINAL CONDITION AND GROUND COVER TO THE SATISFACTION OF THE LOCAL OR STATE AGENCY HAVING JURISDICTION.
3. ALL DISTURBED SWALE OR CANAL GRADES SHALL BE RESTORED TO THE GRADES AND ELEVATIONS THAT EXISTED PRIOR TO DISTURBANCE UNLESS OTHERWISE SPECIFIED ON THE ENGINEERING DRAWINGS OR IN THE CONTRACT DOCUMENTS.

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ITEM # 25 CORPORATION STOP AT MAIN ONLY REQUIRED IF THE MAIN IS HOT TAPPED

MATERIALS		
ITEM	QUANTITY	DESCRIPTION
1	1	ENCLOSURE (GREEN IN COLOR)
2	1	AIR RELEASE VALVE
3	1	1" CURB STOP - BRASS
4	1	1" x 4" NIPPLE - BRASS
5	1	2" BALL VALVE - BRASS
6	1	2" TEE - BRASS
7	1	2" X 1" REDUCER - BRASS
8	1	1" SHORT NIPPLE - BRASS
9	4	2" X 90° ELBOW - BRASS
10	2	2" SHORT NIPPLE - BRASS
11	2	2" PIPE - PVC SCH 80, LENGTH AS REQUIRED
12	1	DOUBLE STRAP TAPPING SADDLE EPOXY OR NYLON COATED WITH S.S. STRAPS
13	1	4" X LARGER PIPE, D.I., PVC (DR-18), HDPE
14	1	2" GATE VALVE
15	2	1-1/2" PIPE - PVC SCH 80, LENGTH AS REQUIRED
16	1	1-1/2" x 90° ELBOW - PVC SCH 80
17	1	REINFORCED CONCRETE MONOLITHIC COLLAR AROUND ENCLOSURE
18	1	VALVE BOX
19	1	2" POLY TUBING
20	2	2" COMPRESSION FITTING
21	1	3" FIPE, PVC, LENGTH AS SHOWN, PERFORATED TOP HALF ONLY
22	1	3" TEE, PVC
23	1	3" CAP PVC
24	1	3" X 90° ELBOW, PVC
25	1	2" CORP STOP-BRASS

SCALE: N.T.S. | DATE: 11/07/2018 | DRAWN BY: | APPROVED BY: | BABCOCK RANCH WATER UTILITIES | LOW PRESSURE & FORCE MAIN SEWER AUTO-AIR RELEASE VALVE ASSEMBLY W/ ODOR CONTROL SYSTEM | PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL. | LPS-08 | D: LPS-08-ARV.dwg

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PREPARED FOR

Meritage Homes

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FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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LOCATION	J:\24012\DWG\RECORD\PH1\
PLOT DATE	MON. 12-4-2023 - 8:58 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

UTILITY DETAILS

PROJECT / FILE NO.	SHEET NUMBER
24012	24.0

PROJECT RECORD

TABLE 1
HORIZONTAL BENDS AND ELBOWS
LENGTH OF RESTRAINED JOINT PIPE (FEET)

NOMINAL PIPE DIAMETER	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS
4	14	6	3	2
6	20	9	4	2
8	26	11	6	3
10	30	13	7	4
12	36	15	8	4
16	47	20	10	5
20	57	24	12	6
24	66	28	13	7
30	79	33	16	8
36	91	38	19	9

TABLE 2
TEES AND WYES

NOMINAL PIPE DIAMETER OF BRANCH PIPE (IN INCHES)	RESTRAINED LENGTH ALONG BRANCH PIPE (IN FEET)
4	11
6	21
8	32
10	48
12	65
16	97
20	128
24	156
30	196
36	233

TABLE 3
REDUCERS

NOMINAL PIPE DIAMETER		RESTRAINED LENGTH ALONG PIPE (IN FEET)
LARGE END	SMALL END	
6	4	33
8	6	35
10	4	81
10	6	61
10	8	34
12	4	103
12	6	86
12	8	63
12	10	35
16	12	65
20	16	66
24	20	66
30	24	94
36	30	95

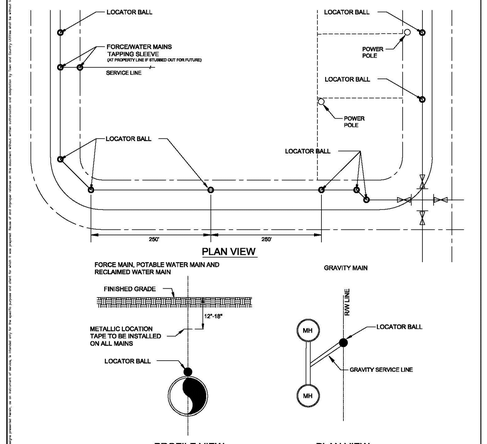
TABLE 4
DEAD ENDS

NOMINAL PIPE DIAMETER	RESTRAINED LENGTH ALONG PIPE (IN FEET)
4	45
6	63
8	83
10	100
12	118
16	153
20	187
24	220
30	267
36	313

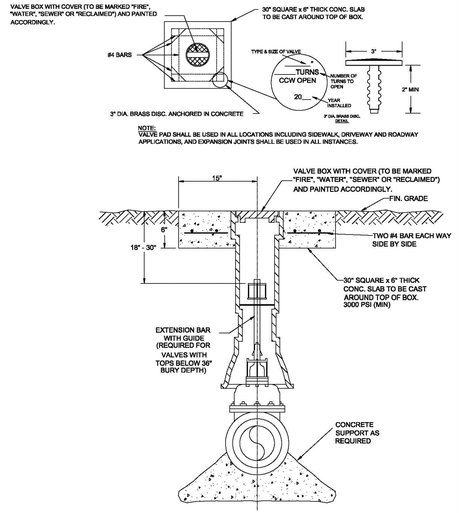
NOTES: (ALL TABLES)

1. FITTINGS SHALL BE RESTRAINED JOINT UNLESS OTHERWISE NOTED.
2. ALL PIPE SHALL BE RESTRAINED IN ACCORDANCE WITH THESE TABLES OR AS PER DESIGN CRITERIA, WHICHEVER IS GREATER.
3. WHERE TWO (2) OR MORE FITTINGS ARE TOGETHER, RESTRAIN JOINTS IN ACCORDANCE WITH FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
4. RESTRAINT TABLES APPLY TO TEST PRESSURES OF 150 PSI OR LESS.
5. FOR PIPE ENCASED IN POLYETHYLENE, INCREASE THE GIVEN VALUES BY A FACTOR OF 1.5.
6. LENGTH OF RESTRAINED PIPE INDICATED IN TABLES 1 & 4 SHALL BE THE LENGTH OF PIPE ON EACH SIDE OF FITTING OR AS PER DESIGN CRITERIA, WHICHEVER IS GREATER.
7. LENGTH OF RETRAINED PIPE INDICATED IN TABLE 2 SHALL BE THE LENGTH OF PIPE ALONG BRANCH OF PIPE ONLY OR AS PER DESIGN CRITERIA, WHICHEVER IS GREATER. PIPE ON BOTH SIDES OF BRANCH SHALL HAVE A MINIMUM LAYING LENGTH OF 10 FEET.
8. LENGTH OF RESTRAINED PIPE INDICATED IN TABLE 3 SHALL BE THE LENGTH OF PIPE ON LARGE END ONLY OF AS PER DESIGN CRITERIA, WHICHEVER IS GREATER.

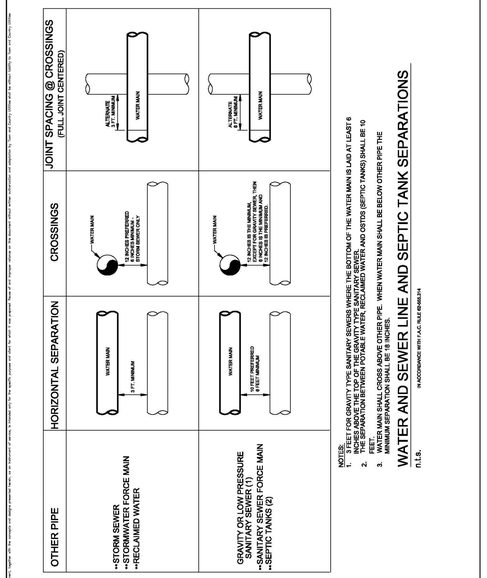
SCALE: N.T.S. | DATE: 11/01/2018 | DRAWN BY: | APPROVED BY:
BABCOCK RANCH WATER UTILITIES | RESTRAINT TABLE
PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
03-01
ID: 03-01-RT.dwg



SCALE: N.T.S. | DATE: 11/01/2018 | DRAWN BY: | APPROVED BY:
BABCOCK RANCH WATER UTILITIES | MARKER BALL AND METALLIC LOCATION TAPE INSTALLATION
PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
03-02
ID: 03-02-MTL.dwg



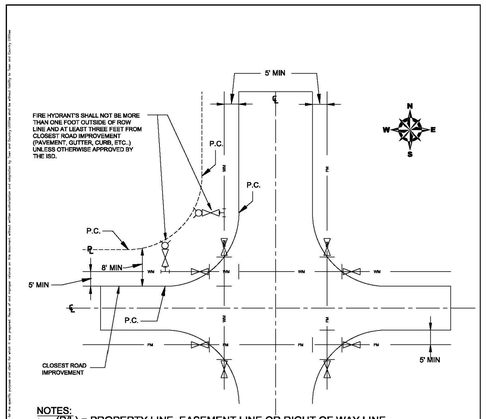
SCALE: N.T.S. | DATE: 11/01/2018 | DRAWN BY: | APPROVED BY:
BABCOCK RANCH WATER UTILITIES | TYPICAL VALVE INSTALLATION
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03-03
ID: 03-03-TVI.dwg



NOTES:
1. 3 FEET FOR GRAVITY TYPE SANITARY SEWERS WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SEWER. FOR ALL OTHER WATER AND SEWER MAINS AND COSTTS (SEPTIC TANKS) SHALL BE 10 FEET.
2. WATER MAIN SHALL CROSS ABOVE OTHER PIPE. WHEN WATER MAIN SHALL BE BELOW OTHER PIPE THE MINIMUM SEPARATION SHALL BE 18 INCHES.
3. IN ACCORDANCE WITH F.A.C. RULE 62-604.21

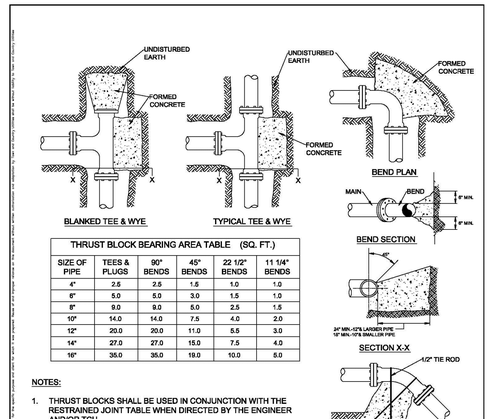
WATER AND SEWER LINE AND SEPTIC TANK SEPARATIONS
n.t.s.

SCALE: N.T.S. | DATE: 11/01/2018 | DRAWN BY: | APPROVED BY:
BABCOCK RANCH WATER UTILITIES | MAIN SEPARATION
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03-05
ID: 03-05-MS.dwg



NOTES:
1. (P/L) = PROPERTY LINE, EASEMENT LINE OR RIGHT OF WAY LINE
2. ALL VALVES SHALL BE PLACED AT THE FITTING UNLESS APPROVED BY TCU.
3. ALL MAINS SHALL BE LOCATED A MINIMUM OF 5'-0" FROM EDGE OF ROADWAY IMPROVEMENTS (PAVEMENT, GUTTERS, CURBS, ETC..) UNLESS APPROVED BY ISD.
4. ALL WATER LINES SHALL BE LOCATED ON THE NORTH SIDE OF EAST-WEST STREETS AND ON THE WEST SIDE OF NORTH-SOUTH STREETS UNLESS APPROVED BY ISD.
5. ALL RECLAIMED WATER AND SEWER FORCE MAINS SHALL BE LOCATED ON THE SOUTH SIDE OF EAST-WEST STREETS AND ON THE EAST SIDE OF NORTH-SOUTH STREETS UNLESS APPROVED BY ISD.

SCALE: N.T.S. | DATE: 11/01/2018 | DRAWN BY: DR, MN, BT | APPROVED BY:
BABCOCK RANCH WATER UTILITIES | ALIGNMENT OF MAINS, VALVES, AND HYDRANTS
PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
03-06
ID: 03-06-AV.dwg

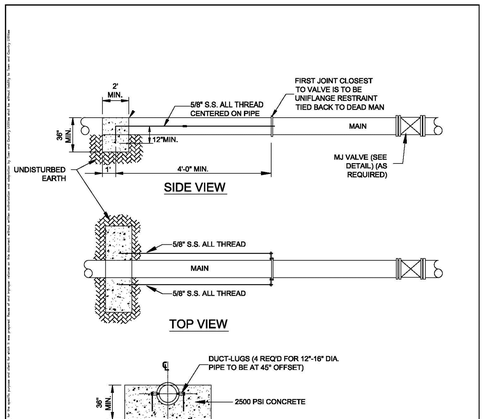


THRUST BLOCK BEARING AREA TABLE (SQ. FT.)

SIZE OF PIPE	TEES & PLUGS	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS
4"	2.5	2.5	1.5	1.0	1.0
6"	5.0	5.0	3.0	1.5	1.0
8"	9.0	9.0	5.0	2.5	1.5
10"	14.0	14.0	7.5	4.0	2.0
12"	20.0	20.0	11.0	5.5	3.0
14"	27.0	27.0	15.0	7.5	4.0
16"	35.0	35.0	19.0	10.0	5.0

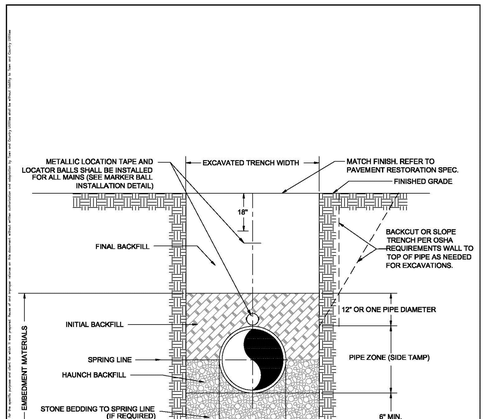
NOTES:
1. THRUST BLOCKS SHALL BE USED IN CONJUNCTION WITH THE RESTRAINED JOINT TABLE WHEN DIRECTED BY THE ENGINEER AND/OR TCU.
2. WRAP ALL FITTINGS WITH VISQUEEN BEFORE POURING THRUST BLOCKS. ALL THRUST BLOCKS SHALL BE LEFT OPEN FOR INSPECTION BY TCU.
3. ALL BEARING SURFACE SHALL BE CARRIED TO UNDISTURBED SOIL.
4. THESE TABLES SHOW MINIMUM SIZE THRUST BLOCKS FOR SOIL WITH A 2,000 P.S.F. SOIL BEARING (A-1 THRU A-3 CLEAN SAND AND GRAVELS).
5. POOR SOIL (A-1 THRU A-8, SILTY SOILS, CLAYS, MUCK & PEAT) SHALL REQUIRE LARGER THRUST BLOCKS.
6. THRUST BLOCK SIZES SHALL BE BASED ON 150 P.S.I. HYDROSTATIC TEST PRESSURE.
7. ALL THRUST BLOCKING SHALL BE 2500 PSI-28 DAY CONCRETE.
8. VERTICAL BENDS ONLY - 1/2" US TYPE 316 STAINLESS STEEL TIE RODS SHALL BE ANCHORED TO REACTION BLOCK
9. VERTICAL BENDS ONLY - THRUST BLOCKS SHALL BE SIZED BY ENGINEER, AND APPROVED BY TCU PRIOR TO CONSTRUCTION.

SCALE: N.T.S. | DATE: 11/01/2018 | DRAWN BY: | APPROVED BY:
BABCOCK RANCH WATER UTILITIES | TYPICAL THRUST BLOCK DETAILS
PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
03-08
ID: 03-08-THB.dwg



NOTE:
1. DEAD MEN SHALL BE SET PRIOR TO THE FIRST JOINT FROM A VALVE UNLESS IT'S END-OF-LINE, THERE SHALL BE A TIE-BACK ASSEMBLY ON EACH SIDE OF VALVE.
2. ALL JOINTS BETWEEN CONCRETE AND VALVE SHALL BE RESTRAINED.

SCALE: N.T.S. | DATE: 11/01/2018 | DR, MN, BT: | APPROVED BY:
BABCOCK RANCH WATER UTILITIES | TIE-BACK ASSEMBLY
PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
03-12
ID: 03-12-TB.dwg



SCALE: N.T.S. | DATE: 11/01/2018 | DRAWN BY: | APPROVED BY:
BABCOCK RANCH WATER UTILITIES | STANDARD PRESSURE PIPE TRENCH
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03-13
ID: 03-13-SPPT.dwg

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PREPARED FOR

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PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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FILE NAME	24012R70.DWG
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PLOT DATE	MON. 12-4-2023 - 8:58 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

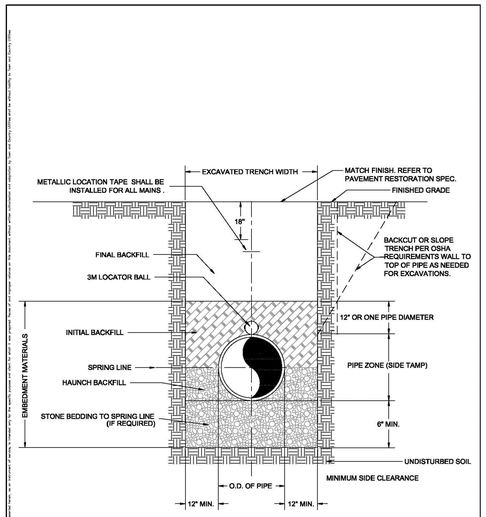
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RECORD DRAWINGS

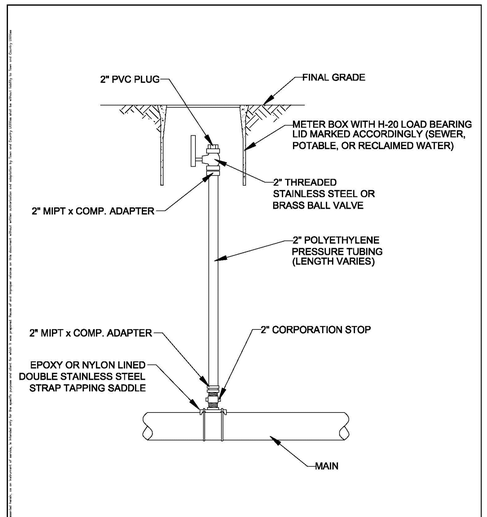
UTILITY DETAILS

PROJECT / FILE NO.	SHEET NUMBER
24012	24.1

PROJECT RECORD

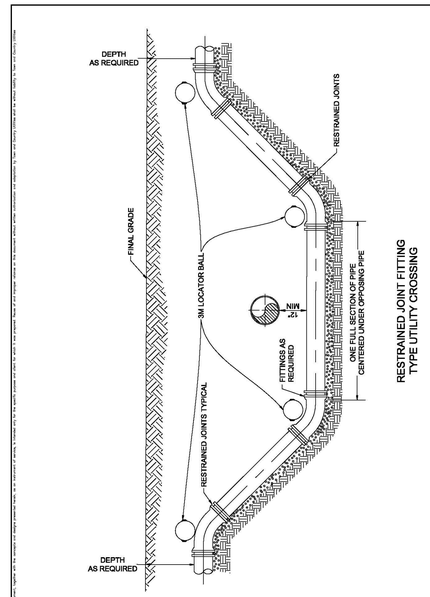


SCALE: N.T.S. DATE: 11/01/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	STANDARD GRAVITY SEWER PIPE TRENCH	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL. SD-14 S: SD-14-SGPT.dwg



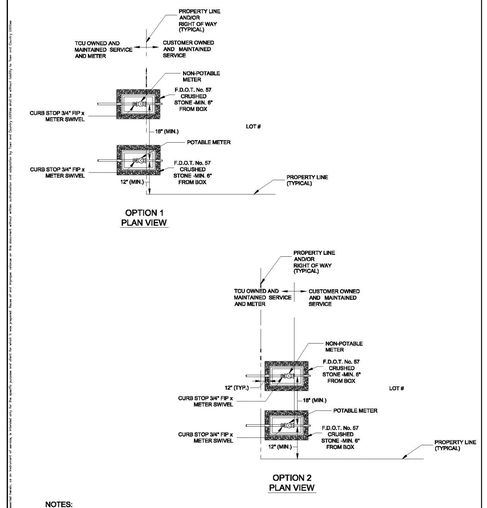
NOTE: MANUAL AIR RELEASE MAY BE USED FOR A BACTERIOLOGICAL SAMPLING POINT WITH A TEMPORARY EXTENSION TO 3' ABOVE GROUND. THIS MUST HAVE TCU APPROVAL OR BE SHOWN ON THE ENGINEERING PLANS. SEE TYPICAL BACTERIOLOGICAL SAMPLE POINT DETAIL.

SC-LC: N.T.S. D-TE: 11/01/2018 DR: MH BY: PPROVED: BY:	BABCOCK RANCH WATER UTILITIES	MANUAL AIR RELEASE	PROVIDED FOR INFORM-TION-L PURPOSES ONLY. NO MODIFIC-TIONS WITHOUT WRITTEN -PPROV-L. SD-15 S: SD-15-M-R.dwg



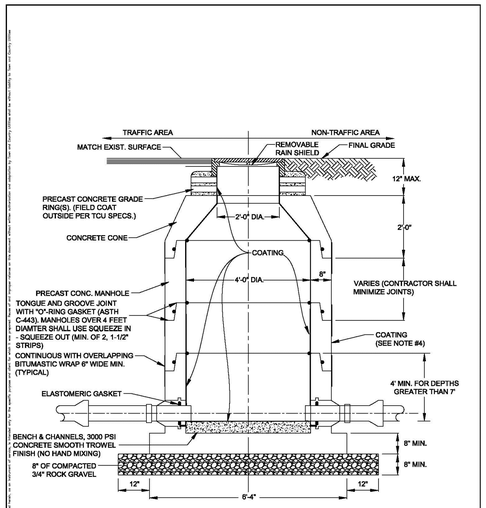
RESTRAINED JOINT FITTING TYPE UTILITY CROSSING

SC-LC: N.T.S. D-TE: 11/01/2018 PPROVED: BY:	BABCOCK RANCH WATER UTILITIES	TYPICAL UTILITY CROSSING	PROVIDED FOR INFORM-TION-L PURPOSES ONLY. NO MODIFIC-TIONS WITHOUT WRITTEN -PPROV-L. SD-23 S: SD-23-TUXING.dwg



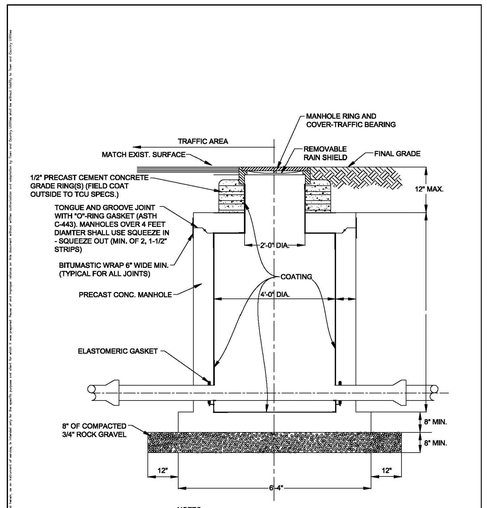
NOTES:
1. REFER TO TCU STANDARD DETAILS FOR SERVICE INSTALLATION.
2. IF TWO METER BOXES ARE ADJACENT TO EACH OTHER, THE SERVICE LINES SHALL HAVE A MINIMUM SEPARATION OF 18 INCHES AND SHALL HAVE SEPARATE METER BOXES.
3. SERVICE AND METER SHALL BE PLACED/LOCATED AS SHOWN IN OPTION 1 UNLESS OTHER FACTORS LIMIT THE METER BOXES TO BE PLACED AS SHOWN IN OPTION 2. METER BOX LOCATION SHALL BE APPROVED AT TCU DISCRETION PRIOR TO CONSTRUCTION.
4. IF THERE ARE EXISTING OR PROPOSED STRUCTURES ON THE PROPERTY LINE, METER BOXES SHALL BE PLACED WITH A MINIMUM SEPARATION OF SIX INCHES FROM THE STRUCTURE.

SCALE: N.T.S. DATE: 11/01/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	TYPICAL RESIDENTIAL SERVICES PLACEMENT	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL. SD-24 S: SD-24-TRSP.dwg



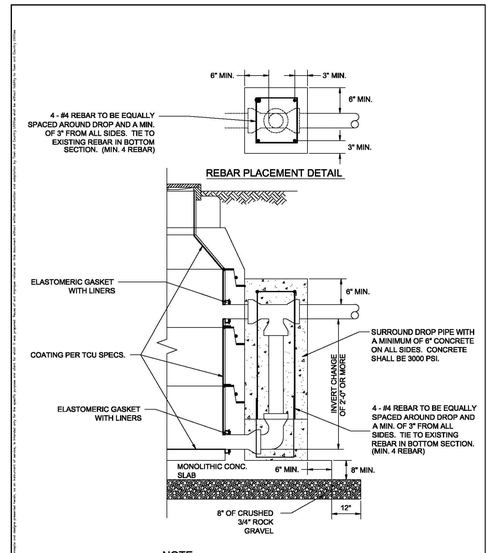
NOTES:
1. PROVIDE 0.1' DROP THROUGH MANHOLE.

SCALE: N.T.S. DATE: 11/01/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	STANDARD PRECAST MANHOLE	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL. SD-01 S: SD-01-ITCM1.dwg



NOTES:
1. PROVIDE 0.1' DROP THROUGH MANHOLE.

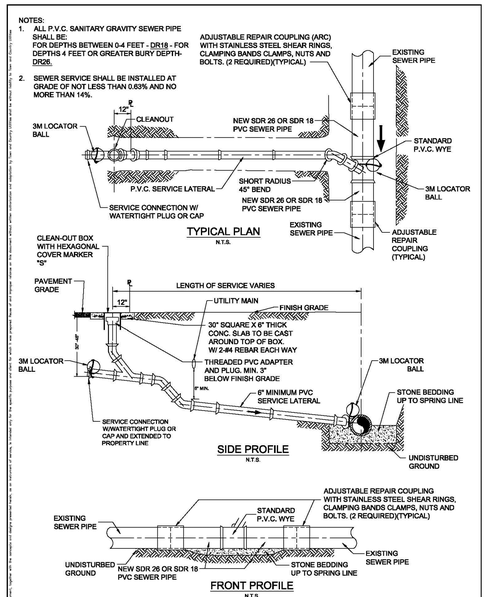
SC-LC: N.T.S. D-TE: 11/01/2018 DR: MH BY: PPROVED: BY:	BABCOCK RANCH WATER UTILITIES	SHALLOW PRECAST MANHOLE	PROVIDED FOR INFORM-TION-L PURPOSES ONLY. NO MODIFIC-TIONS WITHOUT WRITTEN -PPROV-L. SD-02 S: SD-02-SPCM1.dwg



NOTE:
1. PROVIDE 1% SLOPE THROUGH MANHOLE.

SCALE: N.T.S. DATE: 11/01/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	OUTSIDE DROP MANHOLE	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL. SD-03 S: SD-03-OSDM1.dwg

NOTES:
1. ALL P.V.C. SANITARY GRAVITY SEWER PIPE SHALL BE: FOR DEPTHS BETWEEN 0-4 FEET - DR18 - FOR DEPTHS 4 FEET OR GREATER BURY DEPTH- DR26.
2. SEWER SERVICE SHALL BE INSTALLED AT GRADE OF NOT LESS THAN 0.63% AND NO MORE THAN 14%.



SCALE: N.T.S. DATE: 11/01/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	GRAVITY SEWER CUT-IN WYE & SERVICE	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL. SD-05 S: SD-05-CIW.dwg

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PREPARED FOR

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https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
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PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

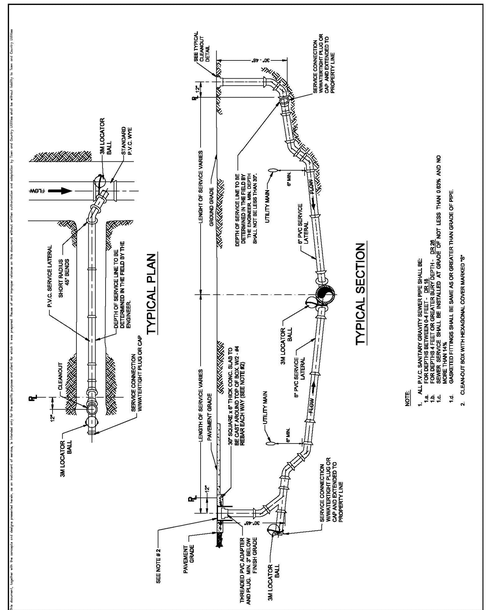
PLAN STATUS

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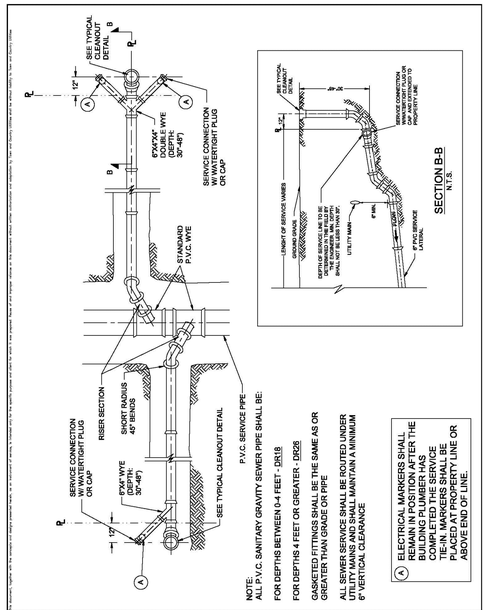
UTILITY DETAILS

PROJECT / FILE NO.	SHEET NUMBER
24012	24.2

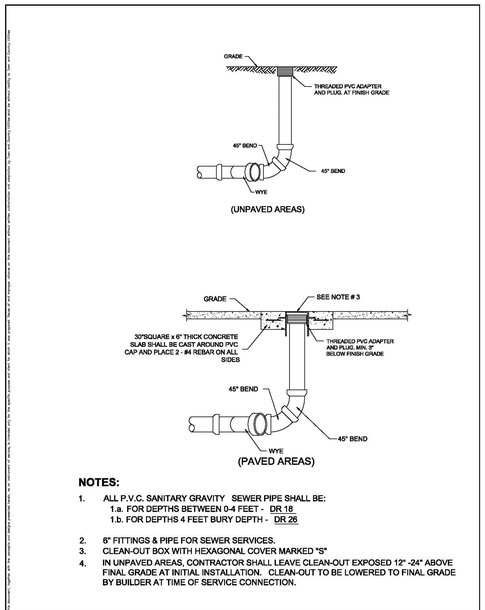
PROJECT RECORD



SCALE: N.T.S.	BABCOCK RANCH WATER UTILITIES	TYPICAL SEWER SERVICE	PROVIDED FOR INFORM.-NON-CONSTRUCTION PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
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DRAWN BY:			ID: DS-08-TSS.dwg
APPROVED BY:			



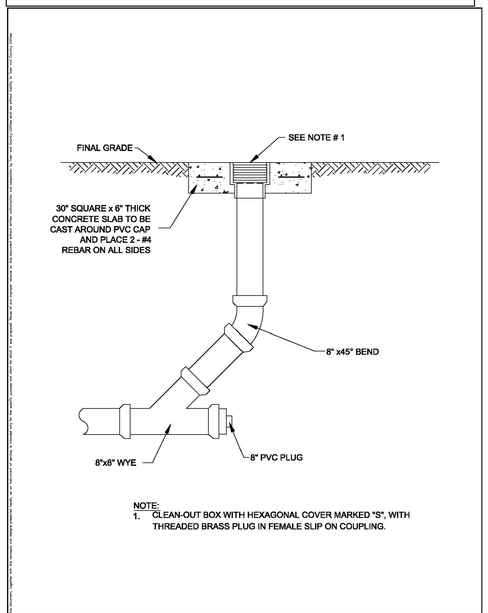
SCALE: N.T.S.	BABCOCK RANCH WATER UTILITIES	TYPICAL RESIDENTIAL SEWER SERVICE WITH RISER	PROVIDED FOR INFORM.-NON-CONSTRUCTION PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
DATE: 11/07/2018			DS-09
DRAWN BY:			ID: DS-09-RSR.dwg
APPROVED BY:			



NOTES:

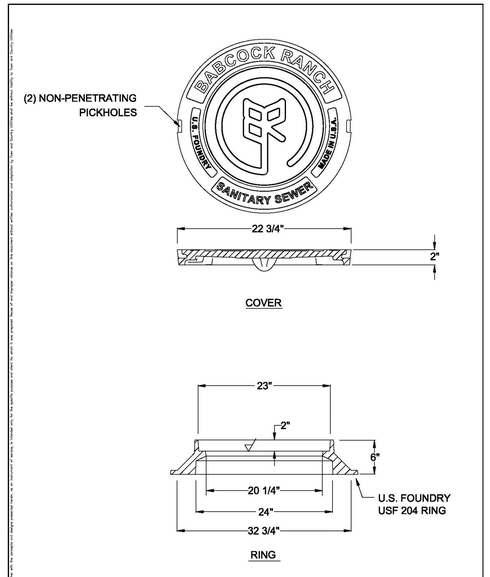
1. ALL P.V.C. SANITARY GRAVITY SEWER PIPE SHALL BE:
   1.a. FOR DEPTHS BETWEEN 0-4 FEET - DR 18
   1.b. FOR DEPTHS 4 FEET BURY DEPTH - DR 26
2. 6" FITTINGS & PIPE FOR SEWER SERVICES.
3. CLEAN-OUT BOX WITH HEXAGONAL COVER MARKED "S"
4. IN UNPAVED AREAS, CONTRACTOR SHALL LEAVE CLEAN-OUT EXPOSED 12" -24" ABOVE FINAL GRADE AT INITIAL INSTALLATION. CLEAN-OUT TO BE LOWERED TO FINAL GRADE BY BUILDER AT TIME OF SERVICE CONNECTION.

SCALE: N.T.S.	BABCOCK RANCH WATER UTILITIES	TYPICAL CLEANOUT DETAIL	PROVIDED FOR INFORM.-NON-CONSTRUCTION PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
DATE: 11/07/2018			DS-10
DRAWN BY:			ID: DS-10-303.dwg
APPROVED BY:			

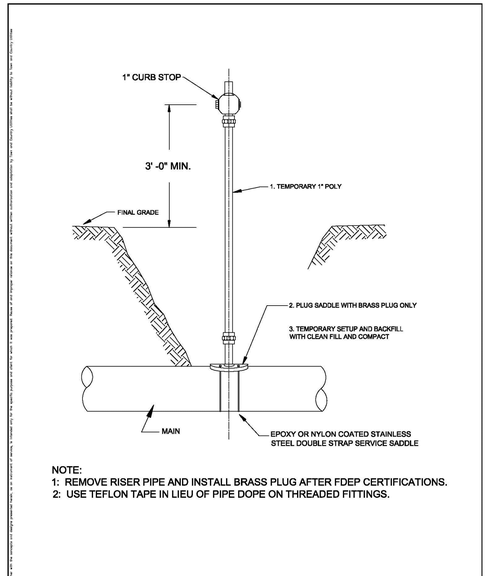


NOTE:
1. CLEAN-OUT BOX WITH HEXAGONAL COVER MARKED "S", WITH THREADED BRASS PLUG IN FEMALE SLIP ON COUPLING.

SCALE: N.T.S.	BABCOCK RANCH WATER UTILITIES	TEMPORARY TERMINAL CLEANOUT	PROVIDED FOR INFORM.-NON-CONSTRUCTION PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
DATE: 11/07/2018			DS-11
DRAWN BY:			ID: DS-11-TCO.dwg
APPROVED BY:			

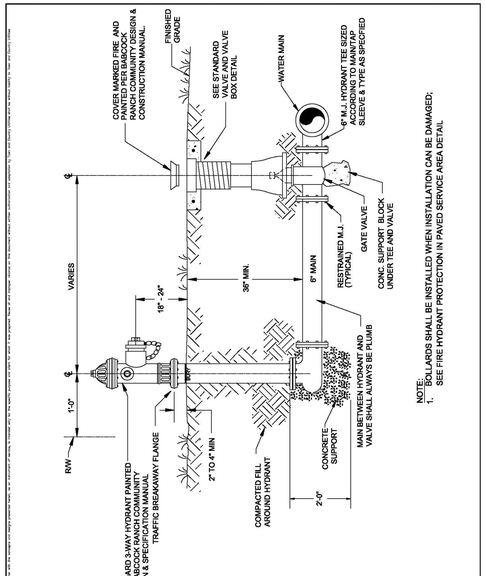


SCALE: N.T.S.	BABCOCK RANCH WATER UTILITIES	MANHOLE RING & COVER	PROVIDED FOR INFORM.-NON-CONSTRUCTION PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
DATE: 11/07/2018			DS-12
DRAWN BY:			ID: DS-12-MRC.dwg
APPROVED BY:			



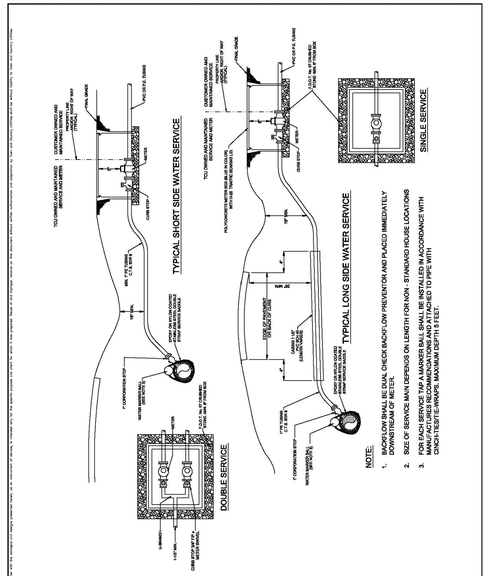
NOTE:
1: REMOVE RISER PIPE AND INSTALL BRASS PLUG AFTER FDEP CERTIFICATIONS.
2: USE TEFLON TAPE IN LIEU OF PIPE DOPE ON THREADED FITTINGS.

SCALE: N.T.S.	BABCOCK RANCH WATER UTILITIES	SAMPLE POINT	PROVIDED FOR INFORM.-NON-CONSTRUCTION PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
DATE: 11/07/2018			FM-02
DRAWN BY:			ID: FM-02-SP-C.dwg
APPROVED BY:			



NOTE:
1. BOLLARDS SHALL BE INSTALLED WHEN INSTALLATION CAN BE DAMAGED; SEE FIRE HYDRANT PROTECTION IN PAVED SERVICE AREA DETAIL

SCALE: N.T.S.	BABCOCK RANCH WATER UTILITIES	FIRE HYDRANT WITH TYPICAL GATE VALVE	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
DATE: 11/29/2018			FM-02
DRAWN BY:			ID: FM-02-ITG.dwg
APPROVED BY:			



NOTE:
1. CONTRACTOR SHALL INSTALL CHECK VALVE IMMEDIATELY DOWNSTREAM OF METER.
2. SIZE OF SERVICE MAIN DEPENDS ON LENGTH FOR NON - STANDARD HOUSE LOCATIONS
3. FOR EACH SERVICE TAP A MARKER BALL SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS AND ATTACHED TO PIPE WITH CINCH-TIGHT STRAPS, MAXIMUM EIGHTY (80) FEET.

SCALE: N.T.S.	BABCOCK RANCH WATER UTILITIES	TYPICAL 5/8" - 1" WATER SERVICE	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.
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DRAWN BY:			ID: FM-11-TWS.dwg
APPROVED BY:			

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PLOT BY	PEYTON GAUSE

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PLAN REVISIONS

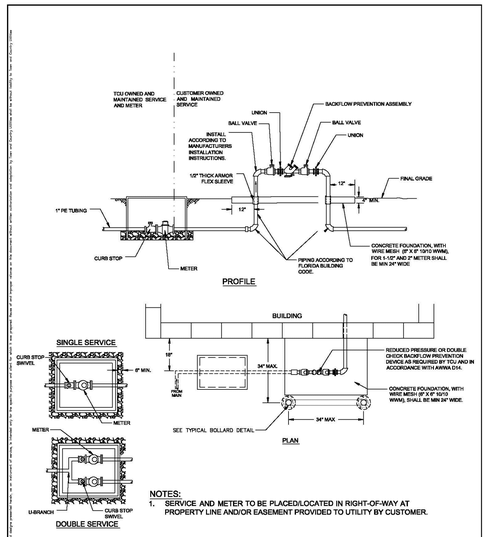
PLAN STATUS

RECORD DRAWINGS

UTILITY DETAILS

PROJECT / FILE NO.	SHEET NUMBER
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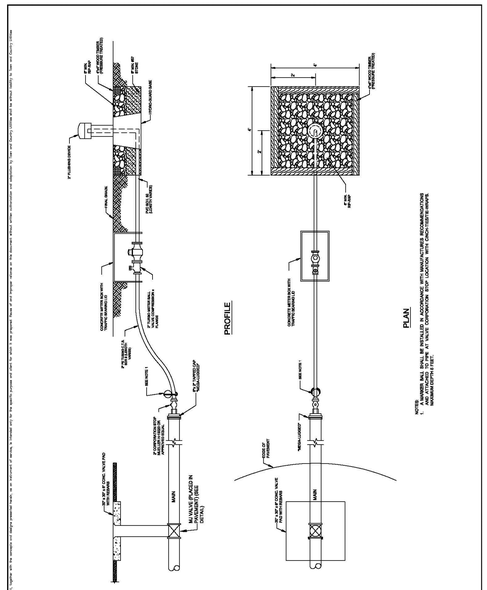
PROJECT RECORD



NOTES:
1. SERVICE AND METER TO BE PLACED/LOCATED IN RIGHT-OF-WAY AT PROPERTY LINE AND/OR EASEMENT PROVIDED TO UTILITY BY CUSTOMER.

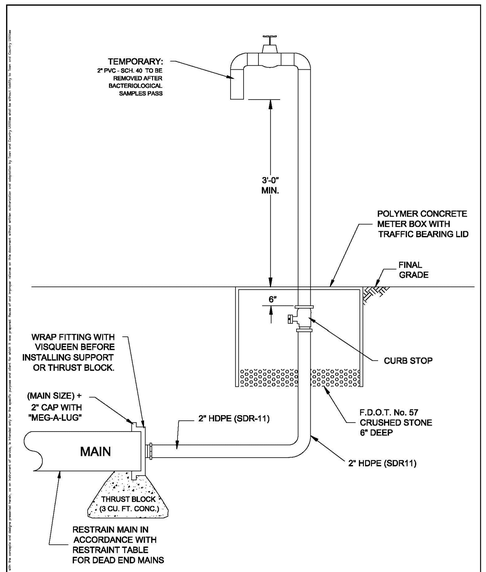
SCALE: N.T.S. DATE: 11/20/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	BUILDING AREA BELOW GROUND WATER METER INSTALLATION

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FW-12
D: FW-12-3DMtr.dwg



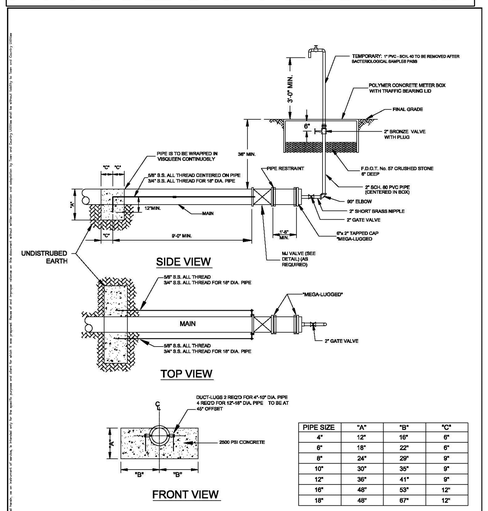
SCALE: N.T.S. DATE: 11/20/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	AUTOMATIC FLUSHING ASSEMBLY

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FW-14
D: FW-14-AFA.dwg



SCALE: N.T.S. DATE: 11/20/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	TEMPORARY MAIN END BLOW OFF ASSEMBLY

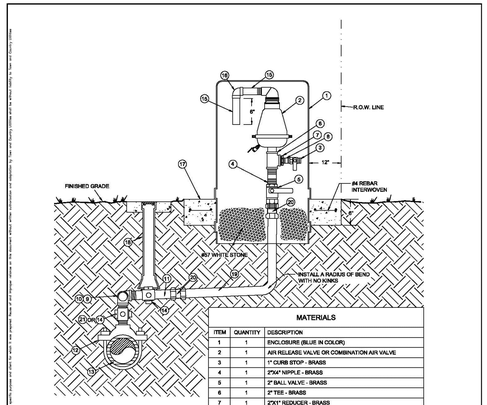
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FW-15
D: FW-15-TBO.dwg



PIPE SIZE	"A"	"B"	"C"
4"	12"	16"	6"
6"	18"	22"	6"
8"	24"	29"	9"
10"	30"	35"	9"
12"	36"	41"	9"
16"	48"	53"	12"
18"	48"	67"	12"

SCALE: N.T.S. DATE: 11/20/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	PERMANENT END OF MAIN BLOW-OFF ASSEMBLY (WATER)

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FW-16
D: FW-16-1562.dwg

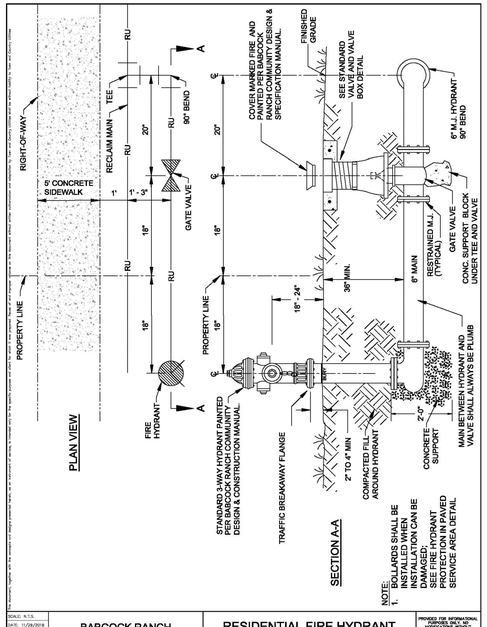


NOTE:
ITEM # 21 CORPORATION STOP AT MAIN ONLY REQUIRED IF THE MAIN IS HOT TAPPED

ITEM	QUANTITY	MATERIALS DESCRIPTION
1	1	ENCLOSURE (BLUE IN COLOR)
2	1	AIR RELEASE VALVE OR COMBINATION AIR VALVE
3	1	1" CURB STOP - BRASS
4	1	2"x4" NIPPLE - BRASS
5	1	2" BALL VALVE - BRASS
6	1	2" TEE - BRASS
7	1	2"X1" REDUCER - BRASS
8	1	1" SHORT NIPPLE - BRASS
9	4	2"X90° ELBOW - BRASS
10	2	2" SHORT NIPPLE - BRASS
11	2	2" PIPE - PVC SCH 80, LENGTH AS REQUIRED
12	1	DOUBLE STRAP TAPPING SADDLE EPOXY OR NYLON COATED WITH S.S. STRAPS
13	1	4" & LARGER PIPE, D.I. PVC (DR-18), HDPE
14	1	2" GATE VALVE
15	2	1-1/2" PIPE - PVC SCH 80, LENGTH AS REQUIRED
16	1	1-1/2"X90° ELBOW - PVC SCH 80
17	1	REINFORCED CONCRETE MONOLITHIC COLLAR AROUND ENCLOSURE
18	1	VALVE BOX
19	1	2" POLY TUBING
20	2	2" COMPRESSION FITTING
21	1	2" CORP STOP - BRASS

SCALE: N.T.S. DATE: 11/20/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	POTABLE WATER AUTOMATIC AIR RELEASE VALVE

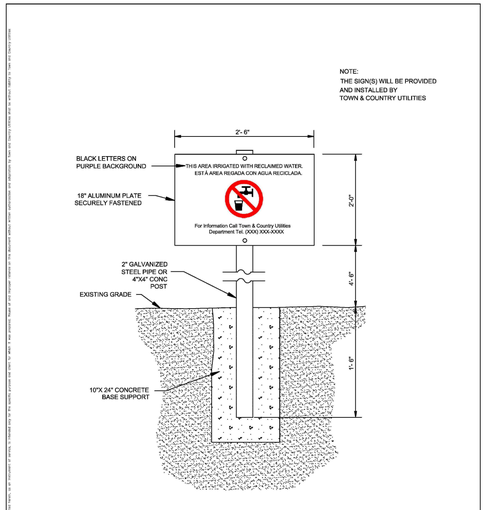
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FW-17
D: FW-17-ARV.dwg



NOTE:
1. BOLLARDS SHALL BE INSTALLED WHEN INSTALLATION CAN BE DAMAGED; SEE FIRE HYDRANT AND GATE VALVE TYPICAL SERVICE AREA DETAIL

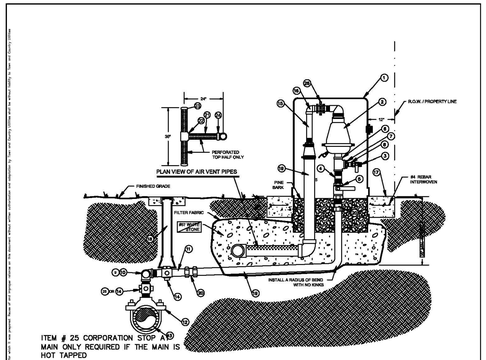
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FW-18
D: FW-18-FH.dwg



SCALE: N.T.S. DATE: 11/20/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	RECLAIMED WATER SIGN

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FW-03
D: FW-03-SWL.dwg



ITEM # 25 CORPORATION STOP AT MAIN ONLY REQUIRED IF THE MAIN IS HOT TAPPED

ITEM	QUANTITY	MATERIALS DESCRIPTION
1	1	ENCLOSURE (PURPLE IN COLOR)
2	1	AUTOMATIC COMBINATION AIR RELEASE/VACUUM RELEASE VALVE
3	1	1" CURB STOP - BRASS
4	1	2"x4" NIPPLE - BRASS
5	1	2" BALL VALVE - BRASS
6	1	2" TEE - BRASS
7	1	2" X 1" REDUCER - BRASS
8	1	1" SHORT NIPPLE - BRASS
9	4	2" X 90° ELBOW - BRASS
10	2	2" SHORT NIPPLE - BRASS
11	2	2" PIPE - PVC SCH 80, LENGTH AS REQUIRED
12	1	DOUBLE STRAP TAPPING SADDLE EPOXY OR NYLON COATED WITH S.S. STRAPS
13	1	4" & LARGER PIPE, D.I., PVC (DR-18), HDPE
14	1	2" GATE VALVE
15	2	1-1/2" PIPE - PVC SCH 80, LENGTH AS REQUIRED
16	1	REINFORCED CONCRETE MONOLITHIC COLLAR AROUND ENCLOSURE
17	1	VALVE BOX
18	1	2" POLY TUBING
19	1	2" COMPRESSION FITTING
20	2	2" CORP STOP - BRASS
21	1	2" PIPE, PVC, LENGTH AS SHOWN, PERFORATED TOP HALF ONLY
22	1	2" TEE, PVC
23	1	2" GAP PVC
24	1	2"X 90° ELBOW, PVC
25	1	2" CORP STOP - BRASS
26	1	1-1/2" UNION

SCALE: N.T.S. DATE: 11/20/2018 DRAWN: BY: APPROVED: BY:	BABCOCK RANCH WATER UTILITIES	RECLAIMED WATER AUTOMATIC COMBINATION AIR RELEASE/ VACUUM RELEASE VALVE

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FW-08
D: FW-08-ARV-DS.dwg

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ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

Meritage Homes
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PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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PLOT DATE	MON. 12-4-2023 - 8:59 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

UTILITY DETAILS

PROJECT / FILE NO.	SHEET NUMBER
24012	24.4

DRAWING LEGEND

1. CENTRIFUGAL NON-CLOG SUBMERSIBLE PUMP - TYPE NP, MODEL NO. 3127 HT, IMPELLER NO. 487 , 460 VOLTS, 10.0 H.P., 162 GPM @ 89.4 TDH, (2 REQUIRED).
2. TCU APPROVED MANUFACTURER COMPATIBLE 4 " STANDARD DISCHARGE CONNECTION (2 REQ'D). ADJUST FOR PUMP TO WETWELL BOTTOM CLEARANCE AS REQUIRED BY PUMP MANUFACTURER WITH 4000 PSI TYPE II CONCRETE.
3. 2 " DIAMETER SCH 40 WELDED STAINLESS STEEL PIPE TYPE 316, MUST BE WITHIN 1/4" TOLERANCE OF FITTING INTO GUIDE RAIL BRACKETS AS PER MFG. (4 REQUIRED)
4. 4 " HDPE SDR 11 PIPE. (AS NEEDED)
5. PUMP POWER CABLE (2 REQUIRED).
6. PUMP LIFTING CHAIN (2 REQUIRED).
7. LIQUID LEVEL SENSOR, EACH SENSOR CABLE SHALL BE CONTINUOUS (NO SPLICES) AND A MINIMUM OF 40 FEET IN LENGTH (5 REQUIRED).
8. LIQUID LEVEL SENSOR CABLE HOLDER TYPE 316SS WITH PUMP LIFTING CABLE RING. FURNISH WITH NOT LESS THAN 6 PRONGS.
9. 4 " SDR 11 HDPE 90 DEGREE ELBOW.
10. 2" CONDUIT FOR CABLES (3 REQUIRED). FROM TOP OF SWEEP TO MCC TO BE 316 STAINLESS STEEL & FROM TOP OF SWEEP TO INSIDE OF WET WELL TO BE PVC SCH. 80. END AT WET WELL TO BE SEALED WITH DUXSEAL. CLAMP CONDUIT TO BOTTOM STRUT OF MCC. (SEE SECTION A-A OF WET WELL DETAIL)
11. 2" FLANGED AUTOMATIC AIR-RELEASE VALVE D-020, MANUFACTURED BY A.R.I. ON LINE OR APPROVED EQUAL. WITH 4 " EPOXY COATED STAINLESS STEEL STRAP SADDLE.
12. 4 " x 24" LONG HDPE SDR 11 PIPE.
13. 4 " HDPE FUSION COUPLER (IF NEEDED)
14. NA " x NA " MJ REDUCER (IF NEEDED)
15. 4 " MUELLER-A-2602-6-01-E193 OR M&H "QUIET CLOSING SWING CHECK" WITH WEIGHT AND LEVER.
16. 4 " PLUG VALVE (3 REQ'D).
17. 4 " HDPE TEE.
18. 4 " x 4 " D.I. COMPANION FLANGE.
19. 6" COUPLER.
20. ACCESS COVER. INSTALLED PER MFG. ACTUAL HATCH SIZE TO ACCOMMODATE PUMPS (MIN. 36x48)
21. STATION VENT - (SEE DETAIL "B" SHEET LS-18).
22. 8 " PVC 90° ELBOW RESTRAINED.
23. #5 REBAR AT 12" ON CENTER EACH WAY.
24. WRAP
25. UPPER GUIDE RAIL BRACKETS (2 REQUIRED)
26. FOR GUIDE RAILS OVER 15 FT INSTALL INTERMEDIATE GUIDE RAIL BRACKETS (2 REQUIRED) (SEE DETAIL "A" SHEET LS-18)
27. 1" CONDUIT FOR CABLE FROM TOP OF SWEEP TO MCC, TO BE 316 SS; FROM TOP OF SWEEP TO BOTTOM OF SLAB TO BE SCH. 80 TO YARD LIGHT

SCALE: N.T.S. DATE: 11/20/2018 DRAWN BY: APPROVED BY:	BABCOCK RANCH WATER UTILITIES	LEGEND ONE ABOVE GROUND VALVES STANDARD LIFT STATION	PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL LS-21 ID: LS-21-ADV-LGND.dwg

DRAWING LEGEND CONTINUED

28. J-BOLTS 4 PER PUMP
29. NA " CLASS 53 DI EPOXY LINED SOLID SLEEVE - RESTRAINED JOINT.
30. TONGUE AND GROOVE JOINT WITH SEAL.
31. PROVIDE 12 INCHES OF COMPACTED CRUSHED STONE OR PEA GRAVEL LEVELING COURSE. COMPACT TO STABILIZE. WET WELL SHALL BE PLACED ON UNDISTURBED SUB-BASE OR 100% COMPACTED CLEAN FILL.
32. ELASTOMERIC GASKET BOOT.
33. NA " 316 STAINLESS STEEL INSERT
34. NA " HDPE DIPS SDR-11 FUSED 90° ELBOW
35. "LINK SEAL" MODEL S-316 FOR D.I.P.S. / CAST OR CORE BIT DRILLED HOLE, TYPE WALL SLEEVE PIPE SUPPORTS W/ S.S. BOLTS (2).
36. ALL GASKETS SHALL BE 1/8" THICK SBR AS MANUFACTURED BY: U.S. PIPE "FLANGE - TYPE" OR AMERICAN CAST IRON PIPE "TORUSEAL".
37. 4 " MJ GATE VALVE .
38. 1-5/8"x 1-5/8" SLOTTED 12 GAUGE CHANNEL STRUT , TO BE PLACED AT 6' INTERVALS ON PIPE LONGER THAN 10 FEET (SEE DETAIL "A" SHEET LS-13). IF LESS THAN 10 FEET, PLACE AT MIDPOINT OF PIPE.
39. 3.129" x 4 " D.I. FLANGED REDUCER (IF REQUIRED)
40. 4 " D.I.P.S. SDR 11 HDPE WITH FUSED FLANGE W/ STAINLESS STEEL BACK UP RING, (USE BENDS AS NECESSARY)
41. 5/8" x 6" 316 S.S. RED HEAD WITH WASHER AND NUT. (2 REQUIRED) (SEE DETAIL "A" SHEET LS-18)
42. PRECAST CONCRETE WET WELL TOP,WITH BROOM FINISH.
43. PRECAST CONCRETE WET WELL AND BASE.
44. WET WELL LINING
45. 6" MINIMUM POURED IN PLACE CONCRETE SLAB EVEN WITH WET WELL TOP AND TO HAVE A BROOM FINISH.
46. 1" OR 2" (MATCH A.R.V. DISCHARGE) PVC SCH. 80. DISCHARGE LINE FROM A.R.V's, WITH FITTINGS. (FROM A.R.V.'S TO TOP OF WET WELL SLAB)
47. TAP PVC SCH 80 A.R.V. PIPE INTO VENT PIPE (SEE DETAIL SHEET LS-18)
48. STAINLESS STEEL SUPPORT CRADLE (SEE DETAIL SHEET LS-20) (4 REQUIRED)
49. 4 " x 90° EPOXY LINED MJ BEND. (RESTRAINED JOINT AND THRUST BLOCK AS REQUIRED) (2 REQUIRED)
50. 4 " x SDR 11 HDPE 90° BEND
51. EMERGENCY PUMP OUT PIPE (SEE DETAIL SHEET LS-18)

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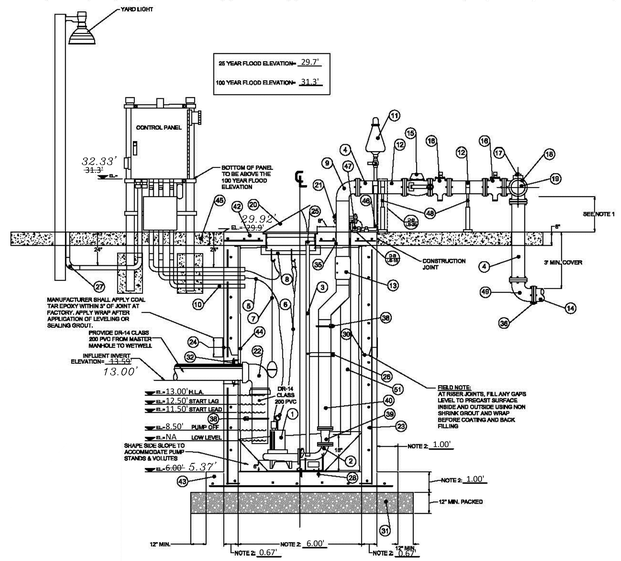
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BABCOCK RANCH
WATER UTILITIES

SECTION A-A/ ABOVE GROUND
VALVE-STANDARD LIFT STATION

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LS-17
ID: LS-17-ADV-SS.dwg



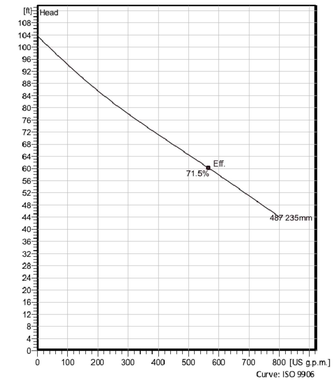
SECTION A-A, THROUGH WETWELL

NOTES:

1. MAXIMUM HEIGHT FROM BOTTOM OF PIPE TO TOP OF SLAB 24".
2. FINAL WETWELL DIMENSIONS TO BE BASED ON WETWELL ANTI-FLOATATION CALCULATIONS.
3. YARD LIGHT AND CONDUIT TO BE INSTALLED AS SHOWN ON ENGINEERING DRAWINGS.
4. ALL PIPING ABOVE GRADE SHALL BE HDPE. ALL HDPE FITTINGS SHALL BE MOLDED. CONNECTIONS TO FLANGED PIPING VALVES, AND FITTINGS SHALL BE MADE WITH HDPE FLANGE ADAPTERS WITH STAINLESS STEEL BOLTING RINGS AND BOLTS.

PUMP CURVE

Curves according to: Water, pure Water, pure [100%], 39.2 °F, 62.428 lb/ft³, 1.6889E-5 ft²/s



PROJECT RECORD

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ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes
12220 TOWNE LAKE DRIVE, SUITE 75
FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES
AT
BABCOCK
RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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PLOT BY	PEYTON GAUSE

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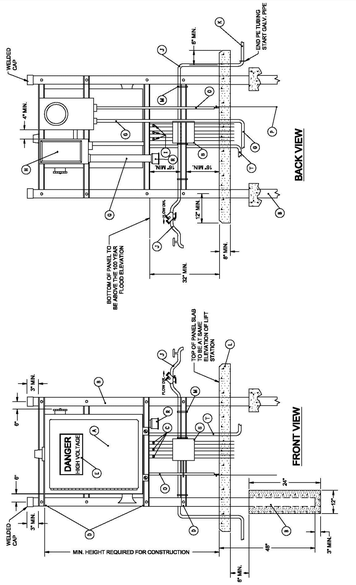
PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

LIFT STATION
#2200
DETAILS

PROJECT / FILE NO.	SHEET NUMBER
24012	25.0



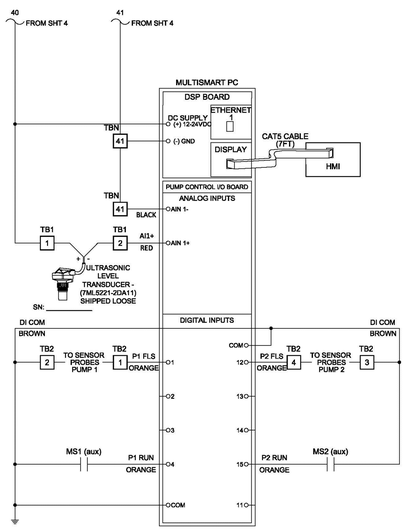
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BABCOCK RANCH
WATER UTILITIES

240V-3PH MOTOR CONTROL
CENTER PANEL MOUNTING

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LS-01
ID: LS-01-CPM.dwg



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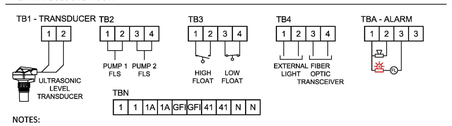
BABCOCK RANCH
WATER UTILITIES

240V-3PH MOTOR CONTROL
CENTER MULTISTART PUMP
CONTROLLER

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LS-09
ID: LS-09-MPC.dwg

TERMINAL BLOCK LAYOUT:



NOTES:

1. CONTROL TERMINAL
2. NEUTRAL AND GROUND LUGS
3. FIELD WIRING (EXTERNAL TO CONTROL ENCLOSURE)
4. PANEL WIRING
5. SEAL ALL CONDUITS ENTERING CONTROL PANEL
6. CONTROL PANEL IS UL508A LABELED
7. INSTALL IN ACCORDANCE WITH ARTICLE 504 OF THE N.E.C.
8. MINIMUM #14 AWG CONTROL WIRE AT 600V

CONTROL WIRE COLOR CODE:

120VAC HOT	RED	24VDC POSITIVE (+)	ORANGE
120VAC NEUTRAL	WHITE	24VDC NEGATIVE (-)	BROWN
12 or 24VAC HOT	BLUE	12VDC POSITIVE (+)	RED
12 or 24VAC NEUTRAL	YELLOW	12VDC NEGATIVE (-)	BLACK

TORQUE TABLES:

CONTROL TERMINALS

MFG	PART#	RATING (L, E)	WIRE SIZE	WIRE STRIP LENGTH	TORQUE
RECOMMENDED TIGHTENING TORQUE					
SQUARE D	9080GR6	60A, 600V	22-8AWG	7-8 lb.in.	

POWER DISTRIBUTION BLOCK

MFG	PART#	WIRE SIZE MAIN	TORQUE	WIRE SIZE BRANCH	TORQUE
RECOMMENDED TIGHTENING TORQUE					
SQUARE D	9080LBA_42104	(1) #6-2/0AWG	120 lb.in.	(4-6) #14-4#6	35 lb.in.
		(1) #8AWG	40 lb.in.		
		(1) #14-#10AWG	35 lb.in.		

GROUND TERMINALS

MFG	PART#	WIRE SIZE	TORQUE - SCREWDRIVER
RECOMMENDED TIGHTENING TORQUE			
THOMAS & BETTS	ADR11-21	12AWG	20 lb.in.
		10AWG	20 lb.in.
		8AWG	20 lb.in.
		6AWG	35 lb.in.
		4AWG	35 lb.in.
		2AWG	50 lb.in.
		1AWG	50 lb.in.
		1/0AWG	50 lb.in.
		2/0AWG	50 lb.in.
SQUARE D	PK__GTA	14-10AWG	20 lb.in.
		8AWG	25 lb.in.
		8AWG	25 lb.in.
		6-4AWG	35 lb.in.

SC-LD: N.T.S.
D-TE: 11/01/2018
DR: MK BY:
APPROVED BY:

BABCOCK RANCH
WATER UTILITIES

240V-3PH MOTOR CONTROL
CENTER TERMINALS AND NOTES

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LS-13
ID: LS-13-TN.dwg

PROJECT RECORD

MOTOR CONTROL CENTER (MCC) MOUNTING NOTES

A. SEE ENCLOSURE LAYOUT DETAIL LS-02 FOR ENCLOSURE REQUIREMENTS.

B. TWO (2) 4 INCH DIAMETER SCHEDULE 80 ALUMINUM PIPES 10 FEET LONG WITH 4 INCH WELDED ALUMINUM CAPS SHALL BE ANCHORED IN CONCRETE FROM 3 INCHES BELOW THE BOTTOM OF THE PIPE TO 12 INCHES BELOW THE FINISHED GRADE.

C. THREE (3) "EYE" EXPLOSION PROOF CLASS 1 SEAL-OFF 2 INCH DIAMETER SEAL WITH NON-HARDENING CONDUIT SEALANT AS APPROVED BY THE MANUFACTURER FOR A TEMPORARY SEAL.

D. THE ALUMINUM PIPES SHALL INCLUDE TYPE 316 STAINLESS STEEL I-1 7/8 INCH CHANNEL STRUT C/W TYPE 316 STAINLESS STEEL. DISSIMILAR METALS SHALL BE ISOLATED WITH RUBBER GASKETS.

E. PLASTIC WARNING LABEL STATING "DANGER HIGH VOLTAGE" SHALL BE INSTALLED ON THE OUTSIDE OF THE ENCLOSURE DOOR AND BE SECURED TO THE DOOR WITH ADHESIVE OR CEMENT.

F. TWO (2) INCH CONDUIT AND WIRING BETWEEN THE FPL METER CAN AND THE SAFETY DISCONNECT PANEL AND THE SAFETY DISCONNECT PANEL AND THE MCC.

G. UNDERGROUND CONDUIT AND WIRING BETWEEN THE FPL METER CAN AND THE FPL HAND HOLE.

H. FUSED SAFETY DISCONNECT IN A NEMA 4X ENCLOSURE WITH A LOCKING PLATE. INSTALL AN EXTERNAL LIGHTNING ARRESTOR. POWER FROM THE MCC SHALL EXIT THE ENCLOSURE FROM THE UNDERSIDE.

I. THREE (3) 2" CONDUIT AND WIRING BETWEEN THE MCC AND THE WETWELL. FROM THE TOP OF THE SWEEP TO THE MCC SHALL BE TYPE 316 STAINLESS STEEL AND FROM THE TOP OF THE SWEEP TO THE INSIDE OF THE WETWELL SHALL BE SCHEDULE 80 PVC.

J. ¾" GALVANIZED STEEL PIPE WITH TWO (2) 90 DEGREE BENDS TO THE BACKFLOW PREVENTION DEVICE AND THE HOSE BIB.

K. ¾" POLYETHYLENE PIPING FROM THE WATER METER AND THE WATER SERVICE GALVANIZED PIPE.

L. CONCRETE SLAB.

M. WORM DRIVE CLAMPS. (3 MINIMUM)

N. ONE (1) NUMBER 6 WIRE GROUND IN ¾" SCHEDULE 80 PVC.

O. THREADED RIGID TYPE 316 STAINLESS STEEL CONDUIT SIZED AS REQUIRED BY FULL LOAD AMPERAGE.

P. GROUND ROD.

Q. CAST ALUMINUM TYPE LB FITTING WITH ALUMINUM CAP.

R. HEAVY DUTY MECHANICAL INTERLOCK FOR EMERGENCY POWER TRANSFER.

S. STAINLESS STEEL, NEMA 3R JUNCTION BOX WITH TERMINAL STRIP MOUNTED WITH ALUMINUM BACKING PLATE. TERMINAL STRIPS TO HAVE STAINLESS STEEL SCREWS, 10"X12"X6" MINIMUM, HINGED ON BOTTOM.

T. 1.5" CONDUIT BETWEEN THE MCC AND THE CONNECTION TO CENTURYLINK, INC. FIBER. FROM THE TOP OF THE SWEEP TO THE MCC SHALL BE TYPE 316 STAINLESS STEEL AND FROM THE TOP OF THE SWEEP TO THE CENTURY LINK FIBER CONNECTION SHALL BE SCHEDULE 80 PVC.

NOTES:

1. PANDUIT TO BE FILLED TO ONLY 50% CAPACITY.
2. IF REQUIRED, ONE (1) INCH PVC AND TYPE 316 STAINLESS STEEL CONDUIT BETWEEN THE MCC AND THE TCU CONTROL PANEL ENCLOSURE, THE AREA LIGHT, THE STAND-BY GENERATOR, AND/OR THE DOOR CONTROL IN ACCORDANCE WITH THE ENGINEERING DRAWINGS.
3. ALL INTERNAL MCC WIRING SHALL BE STRANDED WIRE AND PERMANENTLY NUMBERED.

SCALE: N.T.S.
DATE: 11/01/2018
DRAWN BY:
APPROVED BY:

BABCOCK RANCH
WATER UTILITIES

240V-3PH MOTOR CONTROL
CENTER MOUNTING NOTES

PROVIDED FOR INFORMATIONAL PURPOSES ONLY. NO MODIFICATIONS WITHOUT WRITTEN APPROVAL.

LS-13
ID: LS-13-MTNOTES.dwg

TELEMETRY CONTROL UNIT FUNCTIONS		
MOD R - RIM006		
BATTERY TEST	BIAS VOLTAGE	TCU POWER
RADIO KEY CURRENT	RADIO SIGNAL STRENGTH	INTERNAL TEMPERATURE
MOD A - DMM002		
PUMP 1 STATUS	PUMP 2 STATUS	PHASE MONITOR BYPASS
OFF FLOAT INPUT	LEAD FLOAT INPUT	LAG FLOAT INPUT
HIGH FLOAT INPUT	ANY PUMP	WORKING AT L/S
MOD B - DCM001		
STARTER 1 OUT	STARTER 2	AUXILLARY OUT
ALARM LIGHT STATUS	ALARM HORN STATUS	ALARM SILENCE INPUT
STATION DISABLE	AC POWER	DC BIAS
PHASE SEQUENCE	PROCESS	
MOD C - DCM001		
ANALOG INPUT 1	ANALOG INPUT 2	FLOAT SEQUENCE
PHASE VOLTAGE	CONFIGURATION	
MOD D - DCM001		
PUMP 1 DISABLE	PUMP 2 DISABLE	PUMP 1 OVERRIDE
PUMP 2 OVERRIDE	PIMP 1 STARTER	PUMP2 STARTER
PUMP 1 STOP	PUMP 2 STOP	
MOD E - ACM001		
FLOW EQUALIZATION	LOW WELL LEVEL	HIGH WELL LEVEL
HOA 1	HOA 1	HOA 1
HOA 2	HOA 2	HOA 2
MOD G - DCM001		
AUX OUT OVERRIDE	ALARM LIGHT OVERRIDE	ALARM HORN OVERRIDE
AUX OUT DISABLE	ALARM LIGHT DISABLE	ALARM HORN DISABLE
PUMP OVERRIDE REST	ANALOG UPDATING	

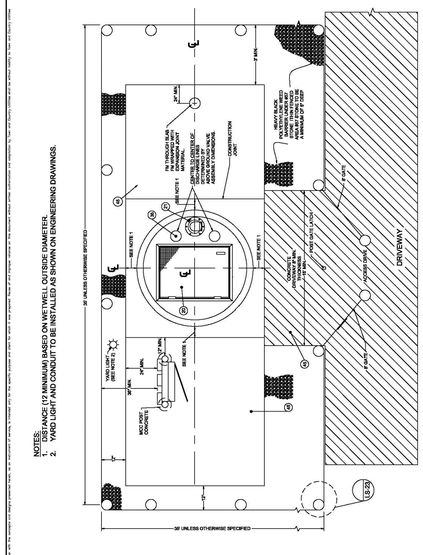
SC-LD: N.T.S.
D-TE: 11/01/2018
DR: MK BY:
APPROVED BY:

BABCOCK RANCH
WATER UTILITIES

240V-3PH TELEMETRY CONTROL
UNIT FUNCTIONS

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LS-14
ID: LS-14-TCUTNC.dwg



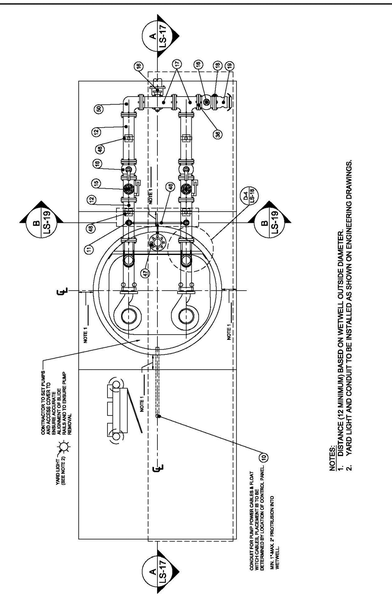
SCALE: N.T.S.
DATE: 11/01/2018
DRAWN BY:
APPROVED BY:

BABCOCK RANCH
WATER UTILITIES

SITE PLAN-ABOVE GROUND
VALVE-LIFT STATION

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LS-15
ID: LS-15-AGV-SP.dwg



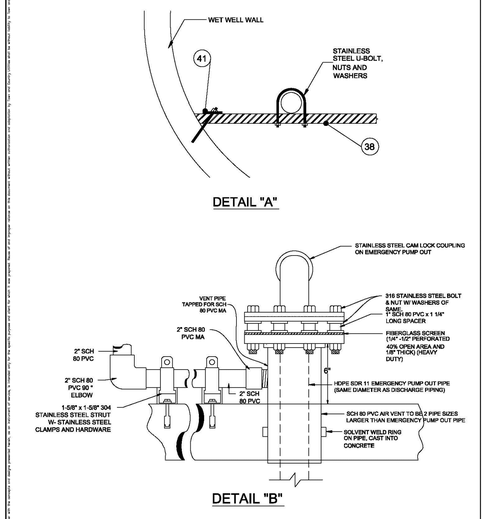
SCALE: N.T.S.
DATE: 11/01/2018
DRAWN BY:
APPROVED BY:

BABCOCK RANCH
WATER UTILITIES

PIPING PLAN-ABOVE GROUND
VALVE-STANDARD LIFT STATION

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LS-18
ID: LS-18-AGV-PP.dwg



SCALE: N.T.S.
DATE: 11/01/2018
DRAWN BY:
APPROVED BY:

BABCOCK RANCH
WATER UTILITIES

DETAILS A & B-ABOVE GROUND
VALVE-STANDARD LIFT STATION

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LS-19
ID: LS-19-AGV-DET.dwg

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CIVIL ENGINEERING - LAND SURVEYING
LAND PLANNING
www.barraco.net
2271 McGREGOR BLVD., SUITE 100
POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

12220 TOWNE LAKE DRIVE, SUITE 75
FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES
AT
BABCOCK
RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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FILE NAME	24012R72.DWG
LOCATION	J:\24012\DWG\RECORD\PH1\
PLOT DATE	MON. 12-4-2023 - 8:59 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

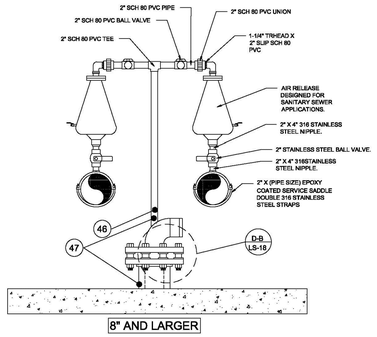
PLAN STATUS

RECORD DRAWINGS

LIFT STATION
#2200
DETAILS

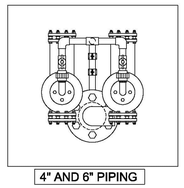
PROJECT / FILE NO.	SHEET NUMBER
24012	25.1

PROJECT RECORD



8" AND LARGER

SECTION B-B



4" AND 6" PIPING

SCALE: N.T.S. | DATE: 11/07/2014 | DRAWN BY: | APPROVED BY:

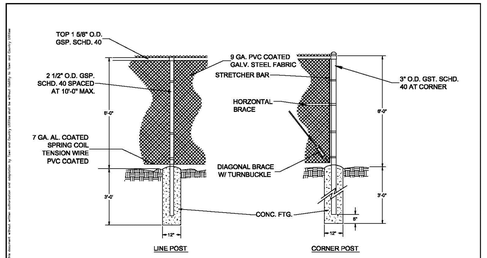
BABCOCK RANCH WATER UTILITIES

SECTION B-B/ ABOVE GROUND VALVE-STANDARD LIFT STATION

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LS-19

ID: LS-19-ADV-A5.dwg



NOTES:
1. DOUBLE GATE TO BE 16'-0" CLEAR OPENING OR AS SPECIFIED.
2. PVC COATED GALVANIZED STEEL WOVEN WIRE FABRIC TO BE STRETCHED TAUT W/STRETCHER BARS AND STRAPS AND FASTENED TOP & BOTTOM AND AT POSTS WITH GALV. PVC COATED PIG RING TIES. AS TO COMPLY WITH ASTM-392, CLASS II.
3. EACH GATE TO BE SECURED OPEN WITH A GATE STOP SET IN CONCRETE.
4. ALL HARDWARE, PIPE AND ACCESSORIES TO COMPLY TO ASTM 1-120,123,153 AND TO BE PVC COATED AND MATCH IN COLOR.
5. COLOR OF FENCING, POSTS, HARDWARE AND BARBED WIRE SHALL BE PVC COATED BLACK. UNLESS APPROVED BY TCU.

SCALE: N.T.S. | DATE: 11/07/2014 | DRAWN BY: | APPROVED BY:

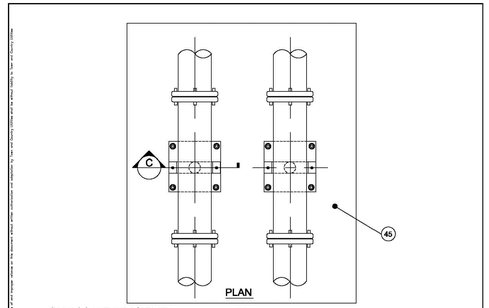
BABCOCK RANCH WATER UTILITIES

SECURITY FENCE - ABOVE GROUND VALVES - STANDARD LIFT STATION

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LS-23

ID: LS-23-ADV-FNC.dwg



NOTE:
MAXIMUM HEIGHT FROM BOTTOM OF PIPE TO TOP OF SLAB 24"

NO SCALE: N.T.S. | DATE: 11/07/2014 | DRAWN BY: | APPROVED BY:

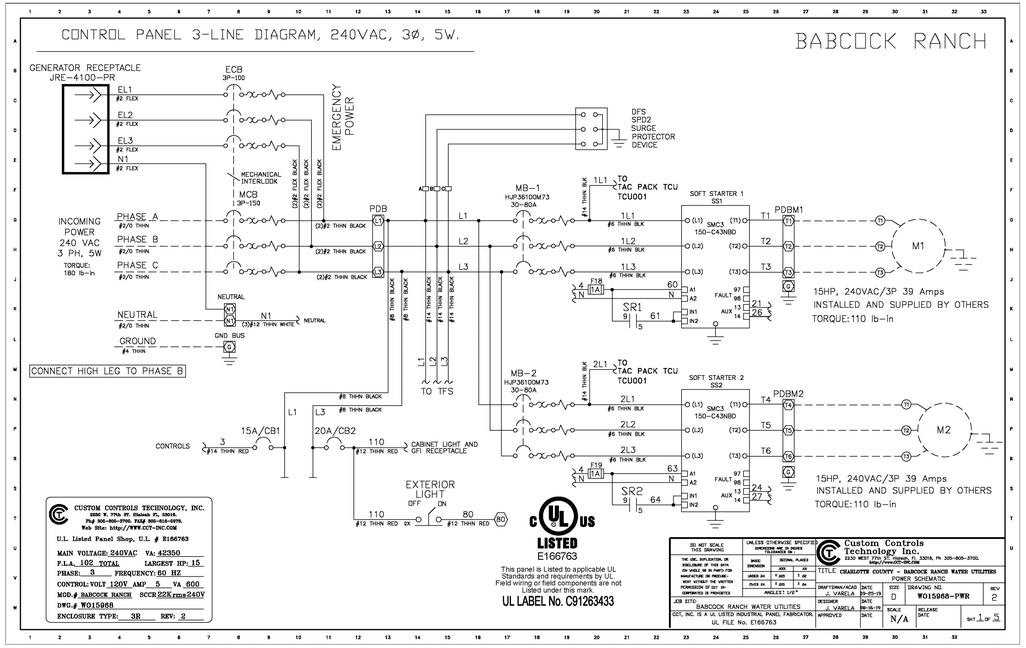
BABCOCK RANCH WATER UTILITIES

DISCHARGE PIPE SUPPORT DETAIL ABOVE GROUND VALVES STANDARD LIFT STATION

PROVIDED FOR INFORM-TION-L PURPOSES ONLY. NO MODIFIC-TIONS WITHOUT WRITTEN APPROVAL.

LS-20

ID: LS-20-ADV-SD.dwg



CUSTOM CONTROLS TECHNOLOGY, INC.
8200 W. 99th ST. Hialeah FL. 33016.
Tel 305-805-3700. FAX 305-418-0398.
Web Site: http://WWW.CCT-INC.COM

U.L. Listed Panel Shop, U.L. # E166763

MAIN VOLTAGE: 240VAC VA: 42350
P.L.A.: 102 TOTAL LARGEST HP: 15
PHASE: 3 FREQUENCY: 60 HZ
CONTROL VOLT 120V AMP 5 VA 600
MOD.# BABCOCK RANCH SCCR 22Krms 240V
DWG.# W015068
ENCLOSURE TYPE: 3R REV: 2

cULus LISTED E166763

This panel is Listed to applicable UL Standards and requirements by UL. Field wiring or field components are not Listed under this mark.

UL LABEL No. C91263433

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JOB SITE: BABCOCK RANCH WATER UTILITIES

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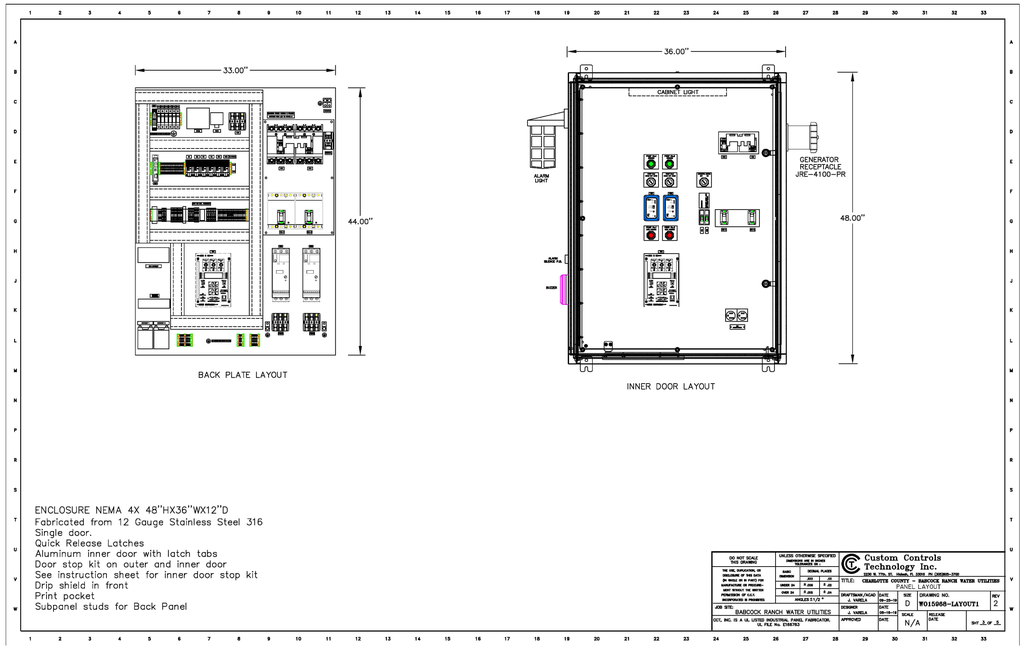
BASIC DIMENSION	REGIONAL PLACES	
	.XXX	.XX
OVER 24	± .005	± .02

ANGLES 1/2°

Custom Controls Technology Inc.
8200 WEST 99th STREET HIALEAH, FL 33016, PH. 305-805-3700.
http://www.cct-inc.com

TITLE: CHARLOTTE COUNTY – BABCOCK RANCH WATER UTILITIES
POWER SCHEMATIC

DRAFTSMAN/ACAD: J. VARELA | DATE: 10-03-13 | SIZE: D | DRAWING NO.: W015068-PWR | REV: 2
DESIGNER: J. VARELA | DATE: 08-18-15 | SCALE: N/A | RELEASE DATE:
APPROVED: | DATE: | SHT 1 OF 5



ENCLOSURE NEMA 4X 48"HX36"WX12"D
Fabricated from 12 Gauge Stainless Steel 316
Single door.
Quick Release Latches
Aluminum inner door with latch tabs
Door stop kit on outer and inner door
See instruction sheet for inner door stop kit
Drip shield in front
Print pocket
Subpanel studs for Back Panel

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JOB SITE: BABCOCK RANCH WATER UTILITIES

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCE ON "X"

BASIC DIMENSION	REGIONAL PLACES	
	.XXX	.XX
OVER 24	± .005	± .02

ANGLES 1/2°

Custom Controls Technology Inc.
8200 W. 99th PL. Hialeah, FL. 33016. PH. (305)805-3700

TITLE: CHARLOTTE COUNTY – BABCOCK RANCH WATER UTILITIES
PANEL LAYOUT

DRAFTSMAN/ACAD: J. VARELA | DATE: 10-03-13 | SIZE: D | DRAWING NO.: W015068-LAYOUT1 | REV: 2
DESIGNER: J. VARELA | DATE: 08-18-15 | SCALE: N/A | RELEASE DATE:
APPROVED: | DATE: | SHT 2 OF 5

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POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

Meritage Homes
12220 TOWNE LAKE DRIVE, SUITE 75
FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
https://www.meritagehomes.com/

PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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LOCATION	J:\24012\DWG\RECORD\PH1\
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PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

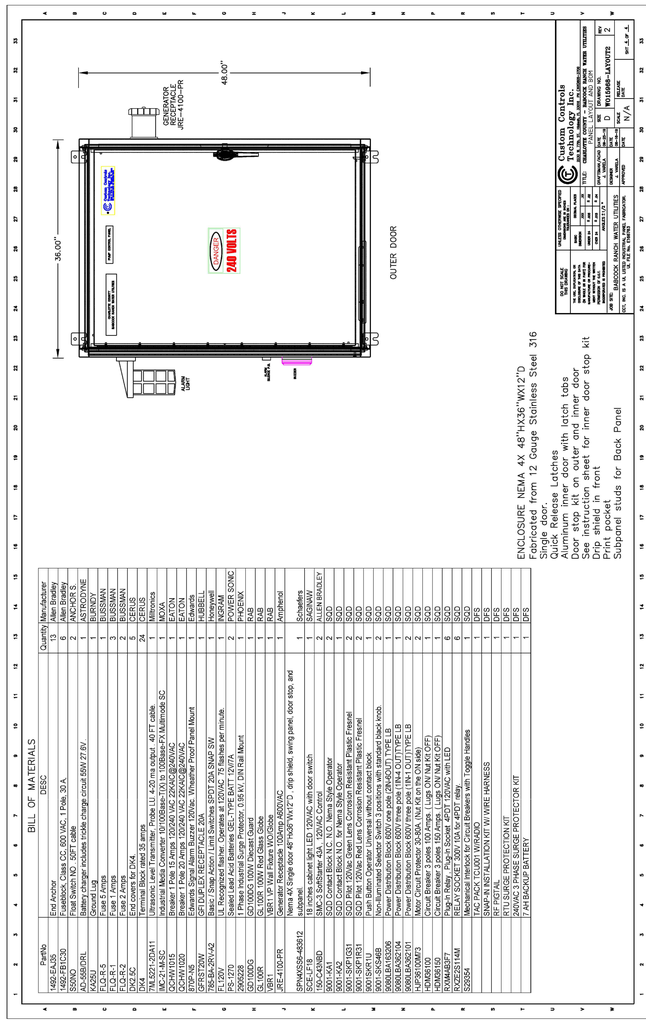
PLAN STATUS

RECORD DRAWINGS

LIFT STATION #2200 DETAILS

PROJECT / FILE NO.	SHEET NUMBER
24012	25.2

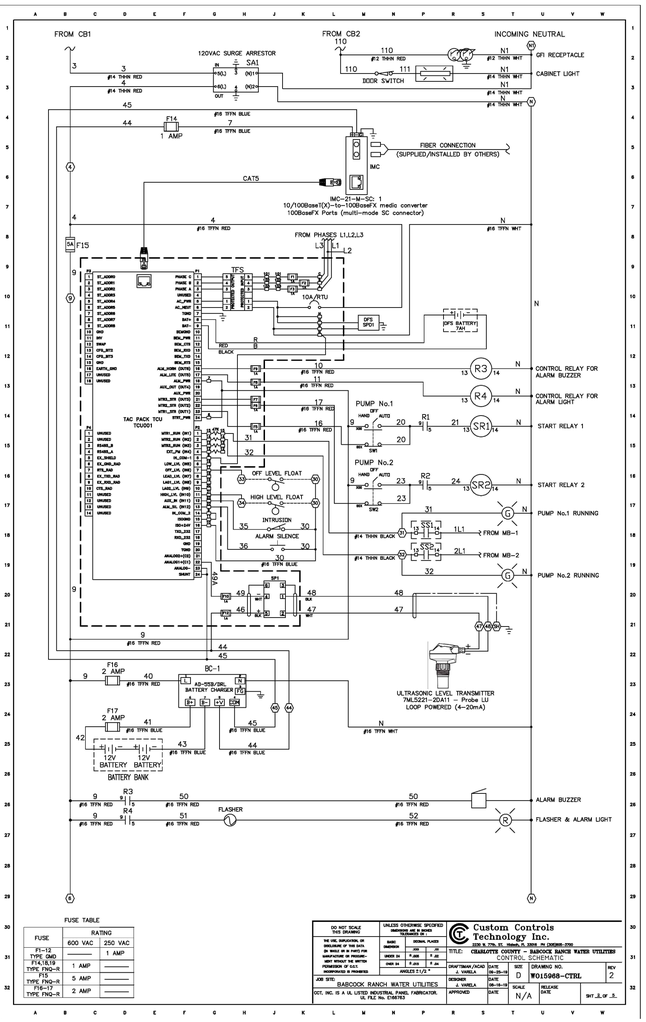
PROJECT RECORD



ENCLOSURE NEMA 4X 48"HX36"WX12"D
Fabricated from 12 Gauge Stainless Steel 316
Single door.
Quick Release Latches
Automatic door closers with latch tabs
Door stop kit on outer and inner door
See instruction sheet for inner door stop kit
Drip shield in front
Pad locking provisions
Subpanel studs for Back Panel

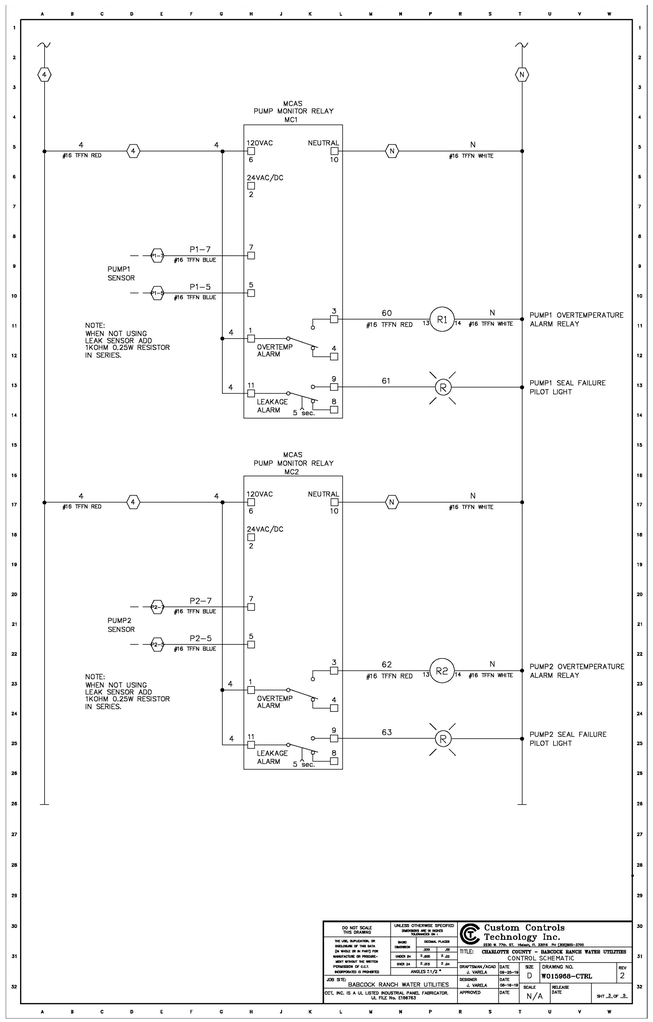
BILL OF MATERIALS

PartNo	DESC	Quantity	Manufacturer
1492-EAJ35	End Anchor	13	Allen Bradley
1492-EAJ70C60	Wire Duct Cover CO, 60D VdC, 1 Pole, 30 A	1	Allen Bradley
SSXNO	Float Switch NO, 50FT cable.	2	ANCHOR SC
AD-568/DRL	Battery charger, includes trickle charge circuit 56W 27.6V	1	ASTRODYNE
KA25U	Ground Lug	1	BURNDY
FLQ-R-5	Fuse 5 Amps	1	BUSSMAN
FLQ-R-1	Fuse 1 Amps	3	BUSSMAN
FLQ-R-2	Fuse 2 Amps	2	BUSSMAN
2081-SC	Control Relay DP4	4	CRYDOM
DX4	Terminal Block rated 35 amps	24	CERUS
TWL5271-20A11	Ultrasonic Level Transmitter, Probe LU 4-20 ma output. 40 FT cable.	1	Milltronics
HOA1100	Hand-Off-Auto Control Switch 10 Amp 120VAC 2NO/2NC	1	EATON
OCHW1015	Breaker 1 Pole 15 Amps 10/240 VAC 25KAIC@240VAC	1	EATON
BTRP-NB	Breaker 1 Pole 20 Amps 120/240 VAC 22KAIC@240VAC	1	EATON
SSP-24B	Edwards Signal Alarm Buzzer 120VAC Wheather Proof Panel Mount	1	Edwards
1492-SP1C030	Circuit Breaker 3 Poles 30 Amps 277/480 VAC	1	Allen Bradley
1760-BA-2RV/A2	Basic / Snap Action / Limit Switches SPDT 20A SNAP SW	1	Honeywell
FL120V	UL Recognized flasher Operates at 120VAC - 75 flashes per minute.	1	INGRAM
2062228	Surge Arrester 3 Phase Industrial Surge Protector, 0.5KA IN, DIN Rail Mount	2	PHOENIX CONTACT
2906228	1 Phase Industrial Surge Protector, 0.5KA IN, DIN Rail Mount	2	PHOENIX CONTACT
GD1000G	GD1000G3 1000V Discard Guard	1	RAB
GLS10R	GLS10R 10 Amp Rod Gap Style	1	RAB
VELWP	VELWP 1000V Rod Gap Base	1	RAB
JRE-4100-PR	Generator Receptacle 100Amp AB200VAC	1	Amphenol
SPWMSS6-483612	Nema 4X Single door 48"Hx36"Wx12"D drip shield, swing panel, door stop, and latches	1	Schaefers
SCE-LF18	18 inches cabinet light LED 120VAC with door switch	2	SAGINAW
100-CA09BD	SMC-3 Self-Starter 43A, 120VAC Control	2	ALLEN BRADLEY
9001-K4W	Socket Relay 4 Pole 14 Pin Square Base Octal Ice Cube Operator	2	SQD
9001-K42	SQD Contact Block N.O. for Nema Style Operator	2	SQD
9001-SKPT631	SQD Pilot 120Vac Red Lens Corrosion Resistant Plastic Fresnel	2	SQD
9001-SKPT731	SQD Pilot 120Vac Red Lens Corrosion Resistant Plastic Fresnel	2	SQD
9001-SKS46B	Non-Illuminated Selector Switch 3 positions with standard black knob.	2	SQD
9080LBA1S2006	Power Distribution Block 6000 one pole (2#-6OUT) TYPE LB	1	SQD
9080LBA2S2006	Power Distribution Block 6000 two pole (4#-6OUT) TYPE LB	1	SQD
9080LBA3S2101	Power Distribution Block 6000 three pole (1#-1 OUT) TYPE LB	2	SQD
HJP3810MP3	Motor Circuit Protector 30-80A, (1kit Kit on the ON side)	2	SQD
HJP3810MP3	Motor Circuit Protector 30-80A, (1kit Kit on the OFF side)	1	SQD
HDM36150	Circuit Breaker 3 poles 150 Amps, Lugs (ON Nut KD CUFF)	1	SQD
RXM4AB2P7	Plug-in Relay, Plug-in Socket 4PDT 120VAC with LED	6	SQD
RXZE2S114M	RELAY SOCKET 300V 10A for 4PDT relay	6	SQD
52564	Toggle Switch 2 position 20A 125VAC Black toggle Handles	1	SQD
	TAC PACK TCU001 W/RADIO	1	DFS
	SNAP-IN INSTALLATION KIT W/ WIRE HARNESS	1	DFS
	ANTENNA	1	DFS
	RTU SURGE PROTECTION KIT	1	DFS
	240VAC 3 PHASE SURGE PROTECTOR KIT	1	DFS
	7 AH BACKUP BATTERY	1	DFS



FUSE TABLE

FUSE	RATING	
F1-12 TYPE GMD	600 VAC	250 VAC
F14,15,19 TYPE FNQ-R	1 AMP	
F16 TYPE FNQ-R	5 AMP	
F17 TYPE FNQ-R	2 AMP	



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ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

Meritage Homes

12220 TOWNE LAKE DRIVE, SUITE 75
FORT MYERS, FLORIDA 33913
PHONE (239)768-3826
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PROJECT DESCRIPTION

CRESCENT LAKES AT BABCOCK RANCH

CHARLOTTE COUNTY, FLORIDA

ENGINEER OF RECORD

CARL A. BARRACO, JR., P.E., FOR THE FIRM
FLORIDA P.E. NO. 81259 - CARLJR@BARRACO.NET

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PLOT DATE	MON. 12-4-2023 - 9:00 AM
PLOT BY	PEYTON GAUSE

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS

RECORD DRAWINGS

LIFT STATION #2200 DETAILS

PROJECT / FILE NO.	SHEET NUMBER
24012	25.3

Attachment 7

Public Works Department Approval

Outlook

RE: FP-22-05-14 BRC Crescent Lakes P1 Bond Release

From Benjamin, Roy <Roy.Benjamin@charlottecountyfl.gov>
Date Wed 5/14/2025 8:44 AM
To Shao, Jenny <Jenny.Shao@charlottecountyfl.gov>
Cc Benjamin, Roy <Roy.Benjamin@charlottecountyfl.gov>

Bond release approved. No comment or concerns BRR-25-09 approved in Accela.

If you have further concerns please contact me at the information below.

Best Regards,

Roy Benjamin
Construction Services Manager
Charlotte County Public Works
410 Taylor Road, Unit 104
Punta Gorda, Florida 33950
Roy.benjamin@charlottecountyfl.gov

Office (941) 575-3628
Cell (941) 628-8065
Fax (941) 575-3664
To Exceed Expectations in the Delivery of Public Services"

ACCREDITED AGENCY APWA

From: Shao, Jenny <Jenny.Shao@charlottecountyfl.gov>
Sent: Tuesday, May 13, 2025 10:51 AM
To: Benjamin, Roy <Roy.Benjamin@charlottecountyfl.gov>
Subject: FP-22-05-14 BRC Crescent Lakes P1 Bond Release

Good morning,

On behalf of Meritage Homes of Florida, Inc., Barraco and Associates, Inc. is requesting a bond release for FP-22-05-14 BRC Crescent Lakes P1. The Accela reference # is BRR-25-09 and I have assigned the review to you.

Please let me know if the standards of approval have been met for the release of the bond or if more information is required.