

**City of League City**  
**Community Green Space Irrigation Grant Program**  
**HOA Application Form**

(Resolution No. 2025-108. Approved May 27, 2025)

The Community Green Space Irrigation Grant Program, established under Chapter 380 of the Texas Local Government Code, provides financial assistance to eligible HOAs, nonprofits, and public entities for the installation of irrigation systems that serve non-commercial community green spaces. The purpose of the program is to enhance beautification, sustainability, stormwater management, and recreational access throughout League City. Approved grants cover Capital Recovery Fees (CRFs) for irrigation meters up to 2 inches in size. If you have questions regarding this application or program requirements, please contact the City Manager's Office at 281-554-1026.

**Section 1 – HOA Information**

HOA Name:	Hidden Lakes CAI
Subdivision/Community Name(s):	Hidden Lakes Community Association
Number of Homes/Units:	869
Primary Contact Person:	Tristan Herbert
Title/Role:	Senior Association Manager
Phone:	713-339-4522
Email:	tristan.herbert@riseagm.com

**Section 2 – Project Information**

Site Location & Description (attach separate sheet if needed):	Hidden Lakes CAI Landscape Improvements
Current Landscaping / Irrigation Contractor (if applicable):	Horticare Landscape Management
Company Name:	Horticare Landscape Management
Contact Person:	George Zagorianos
Phone:	281-554-5273
Email:	george@horticarelawn.com

Type of Green Space (check all that apply):

<input type="checkbox"/> Park / Playground	<input type="checkbox"/> Roadway Median
<input type="checkbox"/> Stormwater Detention Area	<input checked="" type="checkbox"/> HOA Common Area

Other: _____	_____
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Meter Size Requested (max 2"):

<input type="checkbox"/> 1.5" preferred	<input type="checkbox"/> 2"	<input checked="" type="checkbox"/> Other (specify) <u>3-1" meters &amp; 1-3/4" meter</u>
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Public Purpose (check all that apply):

<input checked="" type="checkbox"/> Beautification of publicly visible area	<input type="checkbox"/> Creation/expansion of community open space
<input type="checkbox"/> Environmental sustainability / stormwater benefit	<input checked="" type="checkbox"/> Enhancement of recreational/pedestrian corridor

### Section 3 – Required Documentation (attach to application)

<input type="checkbox"/> Site plan identifying irrigated area
<input type="checkbox"/> Proof of HOA ownership / deed restriction / plat note
<input type="checkbox"/> CRF invoice or fee assessment from City
<input type="checkbox"/> Documentation verifying subdivision is at least 90% built-out

### Section 4 – Certification

By signing below, the HOA affirms: - The project is for irrigation of non-commercial landscaped open space only. - The HOA will maintain the site for a minimum of five years. - The HOA is not acting in a developer capacity. - All information provided is true and accurate.

Authorized HOA Representative Name:	<u>Tristan Herbert</u>
Signature:	<u>Tristan M. Herbert</u>
Date:	<u>8/21/2025</u>

### Section 5 – For City Use Only

Date Received:	
Staff Reviewer:	
Council Approval Date:	
Notes:	
Grant Approved: Yes No	

## ENCROACHMENT AGREEMENT

STATE OF TEXAS

§

§

COUNTY OF GALVESTON

§

### RECITALS:

WHEREAS, Hidden Lakes C41, (hereinafter the "Grantee", whether one or more), is, or will be, the owner of multiple Restricted Reserves, in accordance with the MWD 4S, which is incorporated by reference, and duly recorded under Plat Record in Galveston County Map Records; and

WHEREAS, by virtue of recorded plats, that certain recorded roads right-of-way, and utility easements, and Restricted Reserves, have been dedicated to the public; and

WHEREAS, Grantee desires to construct private irrigation and landscaping improvements (hereinafter "Permitted Encroachments") within the dedicated roads right-of-way, utility easements, and Restricted Reserves; and

WHEREAS, the Permitted Encroachments shall be located upon Exhibit "A" attached hereto; and

WHEREAS, prior to the construction or installation of the Permitted Encroachments, Owner shall submit properly engineered plans to the City for review, approval, and permitting, and construction shall not occur until such plans have been approved.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS that the City of League City, Texas (the "City") hereby consents to Grantee's Permitted Encroachments within the dedicated roads right-of-way, utility easements, and Restricted Reserves, subject to the terms and conditions hereinafter set forth.

### TERMS AND CONDITIONS:

1. Grantee, Grantee's successors, heirs, or assigns hold the City harmless from all claims, lawsuits, costs, and damages for any person or property arising out of or in any way connected with the maintenance and use of said Permitted Encroachments, except where such injuries or damages are caused solely by the negligence of the City, its agents, or employees. The Grantee agrees to maintain and mow the property identified in Exhibit A.

2. If the City, its successors, assigns or grantees, shall at any time and in its sole discretion determine that it is necessary to do so for the purpose of maintaining City facilities, it shall be privileged to remove or alter the above-mentioned Permitted Encroachments and which the City agrees to restore as nearly as is practical to their former condition, all at Grantee's cost. Grantee, its successors, and assigns, hereby releases the City from any and all liability for damage caused to the Permitted Encroachments by any such removal, altering and restoring. Grantee, its successors and assigns further releases the City from any and all liability for loss of or damage.



3. The City may, at its sole discretion, terminate this consent to encroach by giving Grantee, its successors, assigns, agents or licensees written notice of such termination. Such written notice of termination shall be delivered by U. S. Postal Service certified mail delivery. Upon receipt of such notice, Owner, Owner's successors, assigns, agents or licensees shall have sixty (60) calendar days to cause the removal of said Permitted Encroachments. If the Permitted Encroachments have not been removed within said 60 days, the City may cause the removal the Permitted Encroachments, the cost of which removal by the City shall be solely borne by Grantee, Grantee's successors, assigns, agents, or licensees, and which cost may be attached as a lien against Grantee's property described above.

4. The exercise and enjoyment, by Grantee's successor, assigns, agents or licensees, of their rights and privileges to which the City has herein granted its consent to encroach shall constitute affirmative acceptance by such successors, assigns, agents or licensees of the terms herein contained; provided, however, that the City reserves the right to require that any such successor, assign, agent, or licensee further signify in a recordable instrument acceptance of such terms and conditions, and should any such successor, assign, agent or licensee refuse upon written request to execute such instrument, the rights and privileges herein consented to shall thereupon automatically terminate.

5. Grantee has or shall submit construction drawings associated with the proposed Permitted Encroachments to the City Building Department for review and permitting prior to constructing the Permitted Encroachments. In no case shall any construction associated with the Permitted Encroachments take place a building permit is obtained from the City Building Department. The proposed improvements shall conform to the minimum design criteria set forth in all applicable State, County, and City statutes, ordinances, codes, and policies. Grantee agrees that any tree installed within the dedicated roads right-of-way, utility easements, and Restricted Reserves shall have a root barrier.

6. As part of the documentation necessary to obtain the building permit for the Permitted Encroachments, Grantee shall be solely responsible for obtaining all consents to encroach or letters of no object from any of the City's franchised utilities which may be co-occupying the dedicated public right-of-way or dedicated 10-foot utility easements; and (ii) all costs associated with the relocation or abandonment of any City or franchised utilities infrastructure or service lines, if necessary.

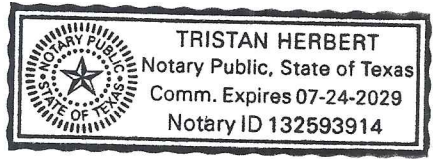
FOR GRANTEE: Hidden Lakes CAI

EXECUTED this the 21<sup>st</sup> day of August, ~~2020~~ 2025

By James L. Nuzzi - PRESIDENT  
(Name, Position)

ACKNOWLEDGMENT

STATE OF TEXAS }  
COUNTY OF GALVESTON }



Before me, a notary public, on this day personally appeared James L. Nuzzi, known to me or having proved to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Notary Public, State of Texas: Tristan M. Herbert

My Commission Expires: 07/24/2029

## Exhibit A

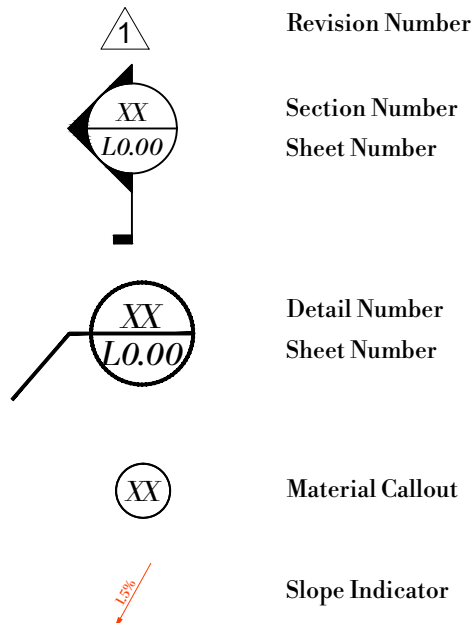


## ABBREVIATIONS

B&B	Balled and Burlap
BC	Bottom of Curb Elevation
BLDG	Building
BO	Bottom of
BS	Bottom of Step Elevation
BW	Bottom of Wall Elevation
CA	Caliper
CB	Catch Basin
CJ	Control Joint
COL	Column
CONC	Concrete
CONT	Continuous
DIA	Diameter
DIM	Dimension
DN	Down
DS	Downspout
EJ	Expansion Joint
ELEC	Electric
ELEV	Elevation
EQ	Equal
EXT	Existing
FFE	Finish Floor Elevation
FG	Finish Grade Elevation

GA	Gauge
GALV	Galvanized
GFI	Ground Fault Interrupter
HB	Hose Bib
HC	Handicapped
HP	High Point Elevation
HT	Height
ID	Interior Diameter
LP	Low Point Elevation
MIN	Minimum
MTL	Metal
NA	Not Applicable
NTS	Not to Scale
OC	On Center
OD	Outer Diameter
OCEW	On Center Each Way
OH	Overhead
PL	Property Line
REF	Reference
REQ	Required
SCH	Schedule
SF	Square Feet
SIM	Similar
SL	Slope
SS	Stainless Steel
STL	Steel
TBD	To Be Determined
TO	Top of
TOC	Top of Curb Elevation
TS	Top of Step Elevation
TYP	Typical
VIF	Verify In Field
WP	Waterproofing

## DRAWING SYMBOLS



## DRAWING INDEX

0.00	Cover	1 of 33
0.01	Reference Plan	2 of 33
L.1.00	Demo, Gibbons Hill at Bastrop Glen	3 of 33
L.1.01	Demo, Austin Breeze at Copper Cove	4 of 33
L.1.02	Demo, South Shore at Riley's Landing	5 of 33
L.1.03	Demo, South Shore at Marblewood	6 of 33
L.1.04	Demo, Holbrook Valley	7 of 33
L.1.05	Demo, Bonham Pines at Terrell Cove	8 of 33
L.1.06	Demo, Raven Springs	9 of 33
L.1.07	Demo, Silver Dawn	10 of 33
L.1.08	Demo, Nacogdoches	11 of 33
L.2.00	Landscape Construction, Gibbons Hill at Bastrop	12 of 33
L.2.01	Not Used	
L.2.02	Not Used	
L.2.03	Not Used	
L.2.04	Landscape Construction, Holbrook Valley	13 of 33
L.2.05	Landscape Construction, Bonham Pines at Terrell Cove	14 of 33
L.2.06	Landscape Construction, Raven Springs	15 of 33
L.2.07	Landscape Construction, Silver Dawn	16 of 33
L.2.08	Landscape Construction, Nacogdoches	17 of 33
L.2.09	Landscape Construction Notes	18 of 33
IL.00	Irrigation, Gibbons Hill at Bastrop Glen	19 of 33
IL.01	Not Used	
IL.02	Not Used	
IL.03	Not Used	
IL.04	Irrigation, Holbrook Valley	20 of 33
IL.05	Irrigation, Bonham Pines at Terrell Cove	21 of 33
IL.06	Irrigation, Raven Springs	22 of 33
IL.07	Irrigation, Notes	23 of 33
L3.00	Planting, Gibbons Hill at Bastrop Glen	24 of 33
L3.01	Planting, Austin Breeze at Copper Cove	25 of 33
L3.02	Planting, South Shore at Riley's Landing	26 of 33
L3.03	Planting, South Shore at Marblewood	27 of 33
L3.04	Planting, Holbrook Valley	28 of 33
L3.05	Planting, Bonham Pines at Terrell Cove	29 of 33
L3.06	Planting, Raven Springs	30 of 33
L3.07	Planting, Silver Dawn	31 of 33
L3.08	Planting, Nacogdoches	32 of 33
L3.09	Planting, Notes	33 of 33

## CODE SUMMARY

- 2021 International Residential Code (with Houston Amendments)
- 2021 International Building Code (with Houston Amendments)
- 2022 Minimum Design Loads & Associated Criteria for Buildings and Other Structures (ASCE-7)
- 2021 International Fire Code (with Houston Amendments)
- 2021 International Existing Building Code (with Houston Amendments)
- 2021 Uniform Mechanical Code (with Houston Amendments)
- 2021 Uniform Plumbing Code (with Houston Amendments)
- 2021 Swimming Pool and Spa Code (with Houston Amendments)
- 2023 National Electrical Code (State Mandated)
- Sign Code (Chapter 46 of the Houston Building Code)
- 2021 International Energy Conservation Code (with Houston Amendments)
- ASHRAE 90.1-2019 (with Houston Amendments)
- 2021 Code Words

## PROJECT TEAM

### OWNER

HIDDEN LAKES HOA  
Kaci Longoria  
Hidden Lakes Section 1.2, 4, 7  
League City, TX 77573

littlelongo@yahoo.com

### LANDSCAPE ARCHITECT

QJWLA  
Jonathan Williams, RLA 2947  
9212 Fry Rd, Ste 105-118  
Cypress, TX 77433  
713.521.5833  
hello@ojwla.com  
ojwla

### IRRIGATION

JAMES POLE IRRIGATION  
JAMES POLE  
100 N Locust St # 3, Denton, TX  
76201  
940.243.2364

### SITE CONTACT

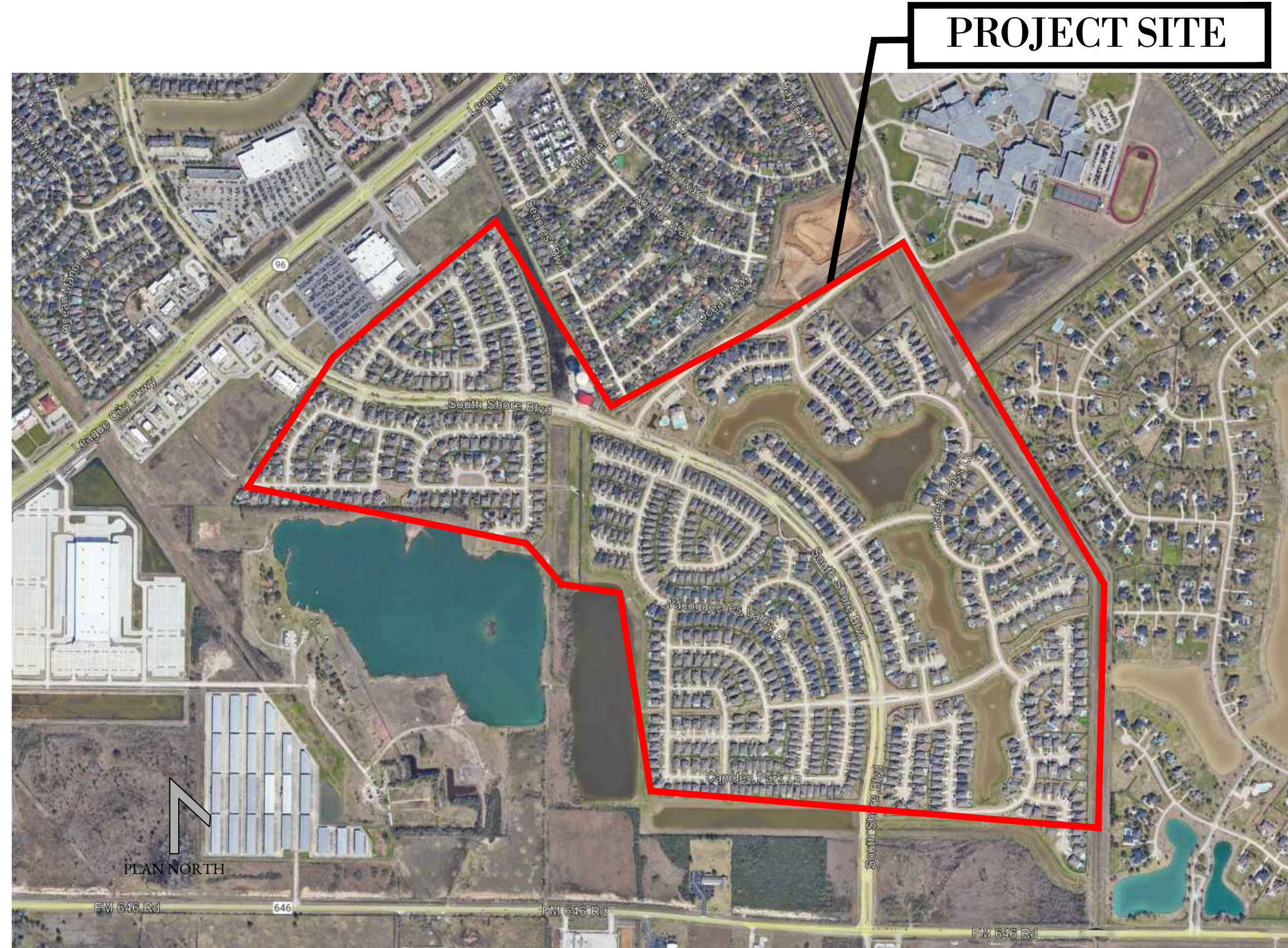
Estrella Ayala

Hidden Lakes Section 1.2, 4, 7  
League City, TX 77573  
713.332.4699  
Estrella.Ayala@fsresidential.com

## GENERAL NOTES

- All Utilities to be accessible during construction. Excavation in the vicinity of utilities shall be undertaken with care. The contractor bears full responsibility for this work. The contractor shall verify the location of all site utilities prior to beginning excavation. Damage to utilities that are to remain caused by any contractor, vehicle, equipment, or tool related to the execution of the contract shall be repaired immediately at no expense to the owner.
- Verify site information, including property lines, easements, buildings, roadway curb and gutters, utilities and other information affecting the scope of work included on these drawings.
- It is the contractor's responsibility to contact line location services before the start of any construction on site.
- Drawings were not based on as built drawing and could be different from existing conditions. The contractor shall be responsible for field verification of existing conditions, and shall perform field measurements prior to fabrication and/or purchase of any material and shall contact the landscape architect should existing conditions be different from the design drawings for the project. Conflicts arising due to lack of coordination shall be the responsibility and the expense of the contractor.
- Contract documents consist of drawings and notes, specifications, product manuals, bid forms, and other documentation furnished by the landscape architect.
- The contractor shall carefully study and compare the construction documents and shall at once report to the owner's representative any error, inconsistency, or omission they may discover.
- The contractor shall perform no portion of the work at any time without construction documents, or where required, approved shop drawings, product data, or samples for such part of the work.
- Base information including the location of property lines, easements, buildings, roads and curbs have been taken from the surveyor's drawings. For additional information Refer to the surveyor's drawings.
- Do not willfully proceed with construction as designed when unknown obstructions and/or grade differences exist that may have not been known during design. Such conditions shall be immediately brought to the attention of the landscape architect. The contractor shall assume full responsibility for all necessary revisions due to failure to give such notice.
- Substitution Procedures - a) Substitution requests shall be submitted during the bidding process, a minimum of one week prior to the bid due date; b) Changes proposed by the contractor that are required due to changed project conditions may be considered during the submittal phase; c) Substitution requests for convenience or for lack of planning will not be accepted.
- Any required changes to the drawings resulting from the acceptance of the contractor's alternatives and/or substitutions shall be submitted to the landscape architect for approval.
- Contractor shall be responsible for all coordination with his subcontractors to accomplish his scope of work. Contractors shall coordinate construction with other trades working on the site simultaneously.
- Contractor is responsible for notifying any easement properties to acquire approval for work within the easements and permission to excavate or install landscape or sidewalks within these easements.
- The contractor shall maintain at the site for the landscape architect, one record copy of all drawings, specifications, addenda, change orders, and other modifications in good order and marked currently to record all changes made during construction and approved shop drawings, product data, and samples.
- Each contractor/subcontractor shall be responsible for daily clean up and removal of all debris and hazardous conditions as related to their trade. The site shall be left clean and ready for the next trade. In the final phase, the contractor shall leave the area clean for the owner to move in.
- Contractor shall protect finished work until acceptance by the owner.
- Unless otherwise provided in contract documents contractor is to provide and pay for all permits, labor, construction, equipment, machinery, tools transportation, and other facilities and services necessary for proper execution and completion of work.
- Contractor shall be responsible to the owner for the acts and omissions of the contractor's employees, subcontractors and their agents and employees, and other persons performing any of the work under a contract with the contractor.
- Contractor shall supervise and direct the work, using the contractor's best skill and attention. The contractor shall be solely responsible for all construction means, methods, techniques, sequences, and procedures, and shall coordinate all portions of the work.
- Contractor is to obtain all permits required to construct the work and shall comply with federal, state, and local regulations, codes, and ordinances.
- Contractor to submit any substantial changes or additions to the approved plans to any agencies overseeing the work.
- Contractor warrants to the owner that all equipment and materials furnished under this contract will be new unless otherwise specified, and all work will be of good quality, free from faults and defects, and in conformance with contract documents. All work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective and will be removed and replaced at the contractor's expense.
- The contractor will be presumed to have inspected and to have read and be thoroughly familiar with the construction documents, failure or omission of any contractor or subcontractor to examine any form, instrument or document shall in no way relieve the contractor from any obligation in respect to their work.
- All finishes, specified or not, shall be approved by the owner/landscape architect for suitability prior to application.
- Where special items require extended lead time preventing installation by the projected completion date, the contractor is to propose an available alternative for approval by the owner/landscape architect.
- All construction is to be per applicable and governing codes and authorities. The contractor shall notify the landscape architect of any conflict between the drawings and governing codes prior to beginning construction.
- All plans are drawn to scale as much as possible but are not intended to be and should not be scaled.
- If the contractor claims that any revision to the drawings involves extra cost under this contract they shall give the owner written notice within a reasonable time after receipt of such instructions. In any event, before proceeding to execute the work, the additional cost shall be approved by the owner in writing.
- Contractor shall notify owner/landscape architect immediately if they cannot comply with all notes called for on documents and drawings prior to construction.
- Contractor shall furnish and install all items required to meet safety codes as required by all applicable federal, state, and local governing ordinances, codes, and regulations.
- Contractor shall furnish and install all items required to meet accessibility standards as required by all applicable federal, state, and local governing ordinances, codes, and regulations.
- The contractor shall protect existing improvements from damage. Any damage to existing improvements shall be repaired and/or reconstructed to a condition satisfactory to the owner at the contractor's expense.
- The contractor shall notify the landscape architect if any information or designs in the contract documents pose concerns with construction, permitting, maintenance, code, and long-term performance prior to commencing work.
- The contractor shall provide adequate drainage away from all structures.
- No staging or material storage on landscaped areas. The contractor shall coordinate with the owner/landscape architect to locate a suitable storage area if required.
- Contractor is responsible for Storm Water Pollution Prevention Plan and ensuring that any erosion is contained and not getting into the surface water. Contractor must take all precautions necessary to prevent erosion from occurring.
- Contractor is responsible for providing and servicing temporary toilet facilities. Location to be approved by the landscape architect.
- Contractor is responsible for maintenance of traffic along surrounding streets.
- Unless specified otherwise, the contractor is responsible for providing and paying all temporary utilities and services necessary to completely install all work as shown and noted in the contract documents.

## VICINITY MAP : NTS



## PROJECT DATA

PROJECT DESCRIPTION:	HIDDEN LAKES HOA SEC 1 & 2
JURISDICTION:	CITY OF LEAGUE CITY, COUNTY OF GALVESTON, STATE OF TEXAS
ZONING:	See Survey
FRONT SETBACK:	
SIDE YARD SETBACK:	
REAR YARD SETBACK:	
ACCESSORY SETBACK:	
SITE SQUARE FOOTAGE:	

For Pricing Only  
Not For Regulatory  
Approval Or Construction



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713.521.5833  
ojwla

stage: CD

client: Hidden Lakes HOA

project: Landscape Update  
Hidden Lakes Section 1 & 2  
League City, TX 77573

pages: 1 of 33

checked by: ---

revision: None

date: 20250205 IFP

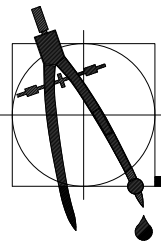
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sheet: Cover

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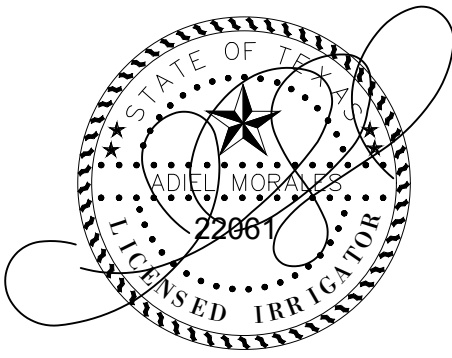
James Pole

IRRIGATION CONSULTANTS

IRRIGATION DESIGN, CONSULTING, AND  
LANDSCAPE WATER MANAGEMENT

TEXAS L.I.C. #658  
100 N. LOCUST ST., SUITE 3  
DENTON, TEXAS 76201

PHONE: 940.243.2364  
FAX: 940.382.2475  
james@jamespoleIRRIGATION.com

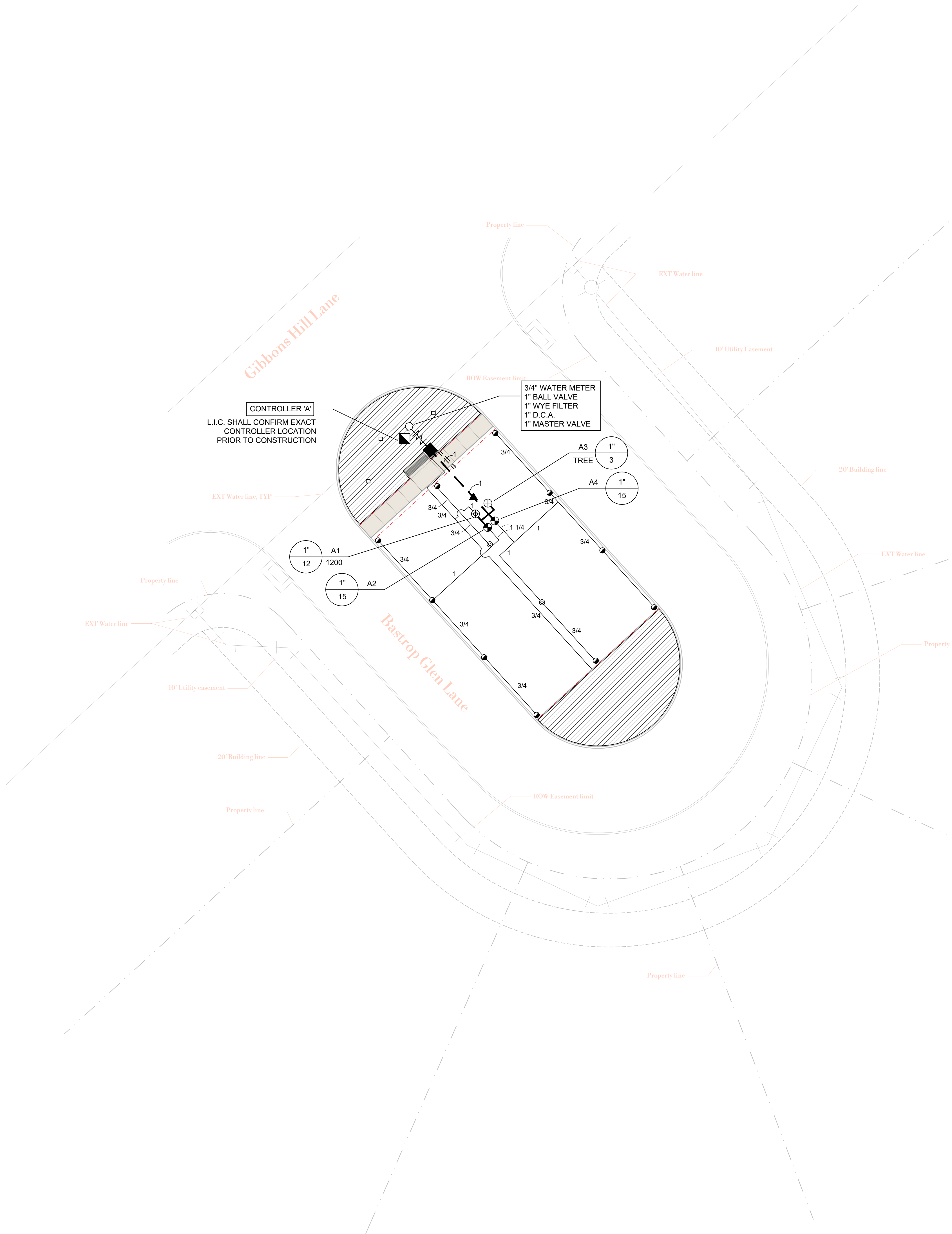


09/23/24

These drawings are property of the Office of  
Jonathan Williams Landscape Architects LLC & are  
not to be used by the owner, contractor,  
subcontractor, or supplier on other projects or  
for additions to this project. JWP LLC shall be  
deemed the author & retain all common law  
copyrights. The design shown & described in  
these drawings & specifications are proprietary &  
cannot be copied, duplicated, or commercially  
exploited, in whole or in part without the written  
authorization of JWP LLC.

Issue log:

20240725 Check  
20250205 IFP



JONATHAN WILLIAMS

hello@ojwla.com  
713.521.5833  
ojwla

Client: CD

Project: Hidden Lakes HOA

Project: Irrigation Plan  
Hidden Lakes Section 1 & 2  
League City, TX 77573

Page: 19 of 33

Checked by: ---

Revision: None

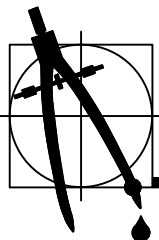
Date: 20250205 IFP

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Sheet: Planting  
11.00



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T.C.E.Q.'S WEB SITE IS: WWW.TCEQ.STATE.TX.US



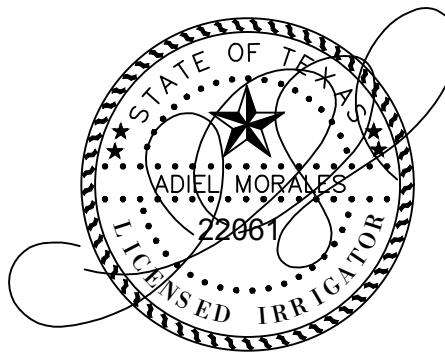
**James Pole**  
IRRIGATION CONSULTANTS

IRRIGATION DESIGN, CONSULTING, AND  
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TEXAS L.I.C. #658  
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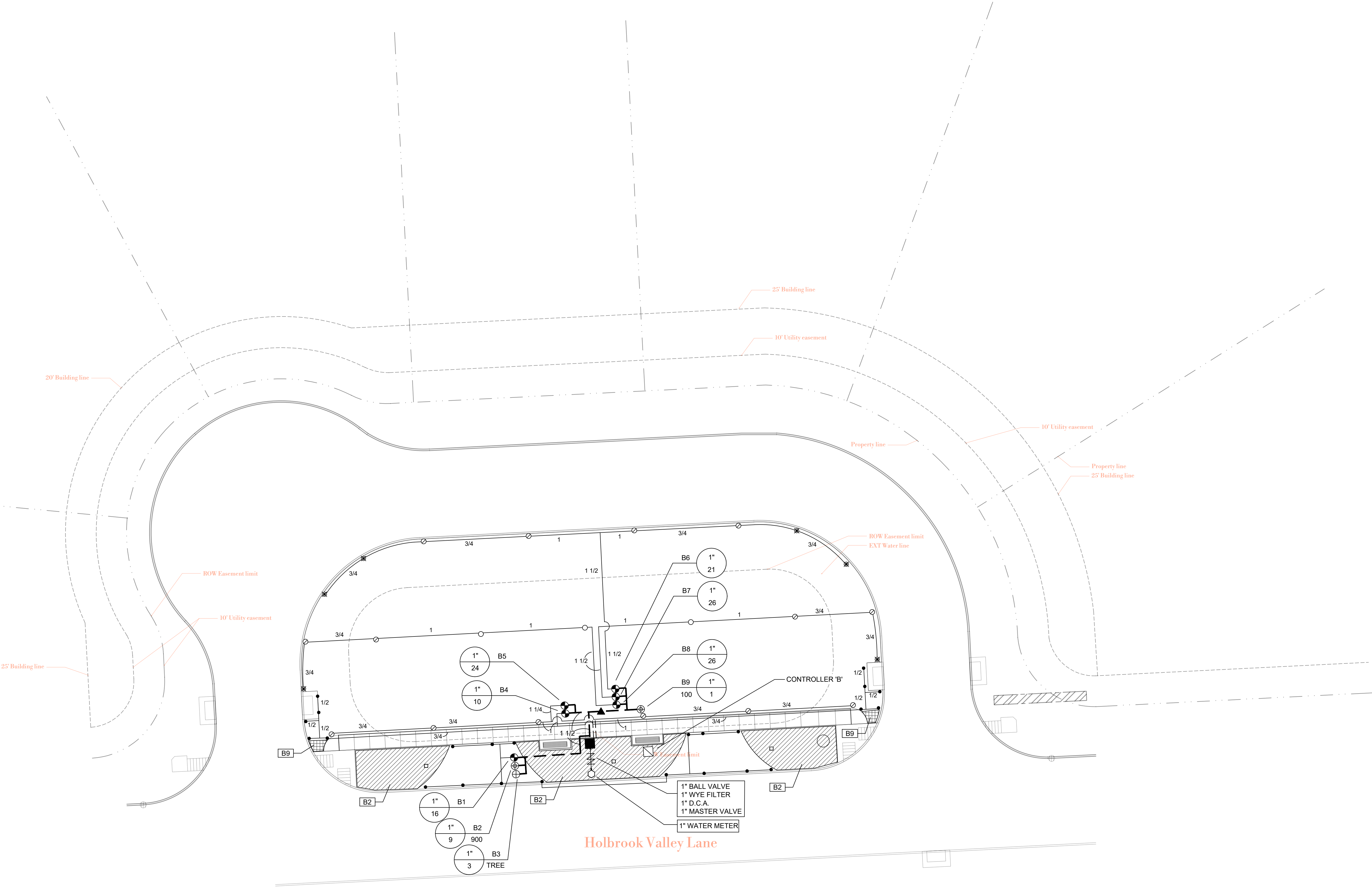
james@jamespoleirrigation.com



02/17/25

Issue log:

20240725 Check  
20250205 IFP



JONATHAN WILLIAMS

hello@ojula.com

713.521.5833

ojula

single:

CD

client:

Hidden Lakes HOA

project:

Irrigation Plan

Hidden Lakes Section 1 & 2

League City, TX 77573

page:

20 of 33

checked by:

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revision:

None

date:

20250205 IFP

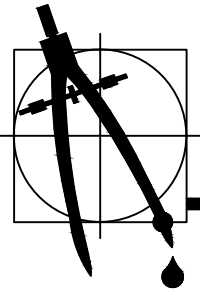
1/16" = 1'-0"

sheet:

Planting

11.04

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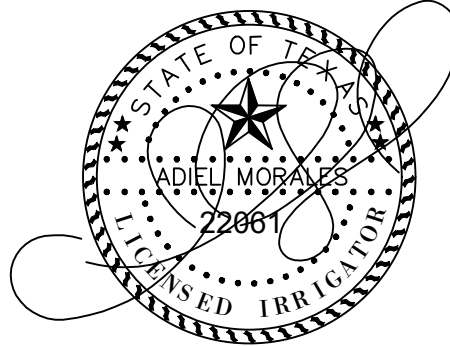


James Pole  
IRRIGATION CONSULTANTS

IRRIGATION DESIGN, CONSULTING, AND  
LANDSCAPE WATER MANAGEMENT

TEXAS L.I.C. #658  
P.O. BOX 1845  
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FAX: 940.382.2475  
james@jamespoleirrigation.com

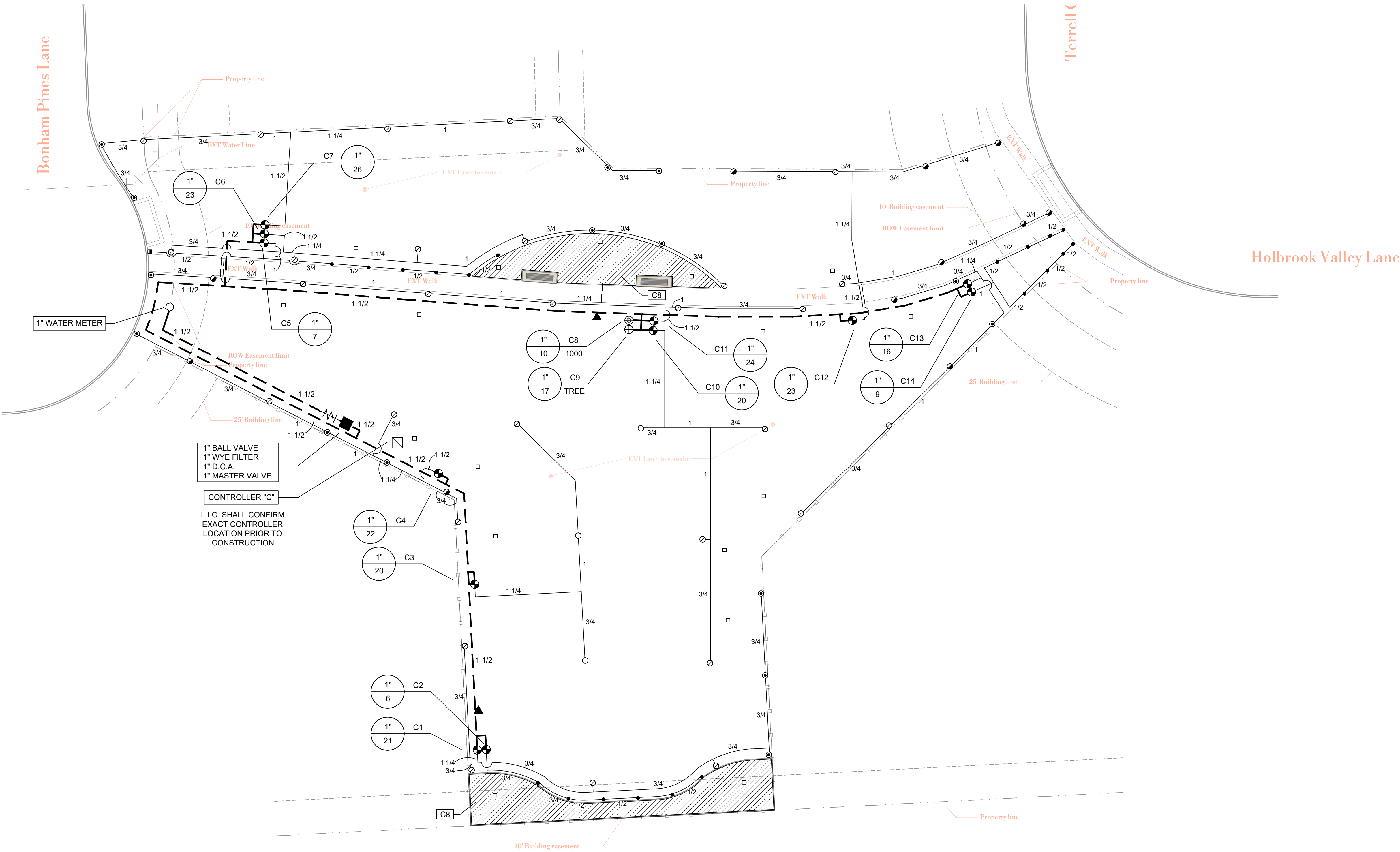


02/17/25

These drawings are property of the Office of Jonathan Williams Landscape Architect LLC & are not to be used by the owner, contractor, subcontractor, or supplier on other projects or for additions to this project. JWP LLC shall be deemed the author & retain all common law, statutory, & other reserved rights, in addition to the copyright. The design shown & described in these drawings & specifications are proprietary & cannot be copied, duplicated, or commercially exploited, in whole or in part without the written authorization of JWP LLC.

Issue log:

20240725 Check  
20250205 IFP



HELLO  
JONATHAN WILLIAMS  
LANDSCAPE ARCHITECT  
hello@ojwla.com  
713.521.5833  
ojwla

single: CD

client: Hidden Lakes HOA

project: Irrigation Plan  
Hidden Lakes Section 1 & 2  
League City, TX 77573

page: 21 of 33

checked by: AM

revision: None

date: 20250205 IFP

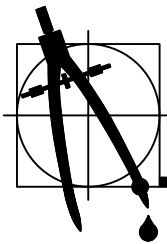
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sheet: Irrigation

11.05



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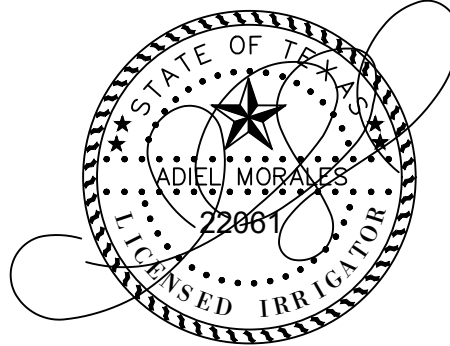
James Pole

IRRIGATION CONSULTANTS

IRRIGATION DESIGN, CONSULTING, AND  
LANDSCAPE WATER MANAGEMENT

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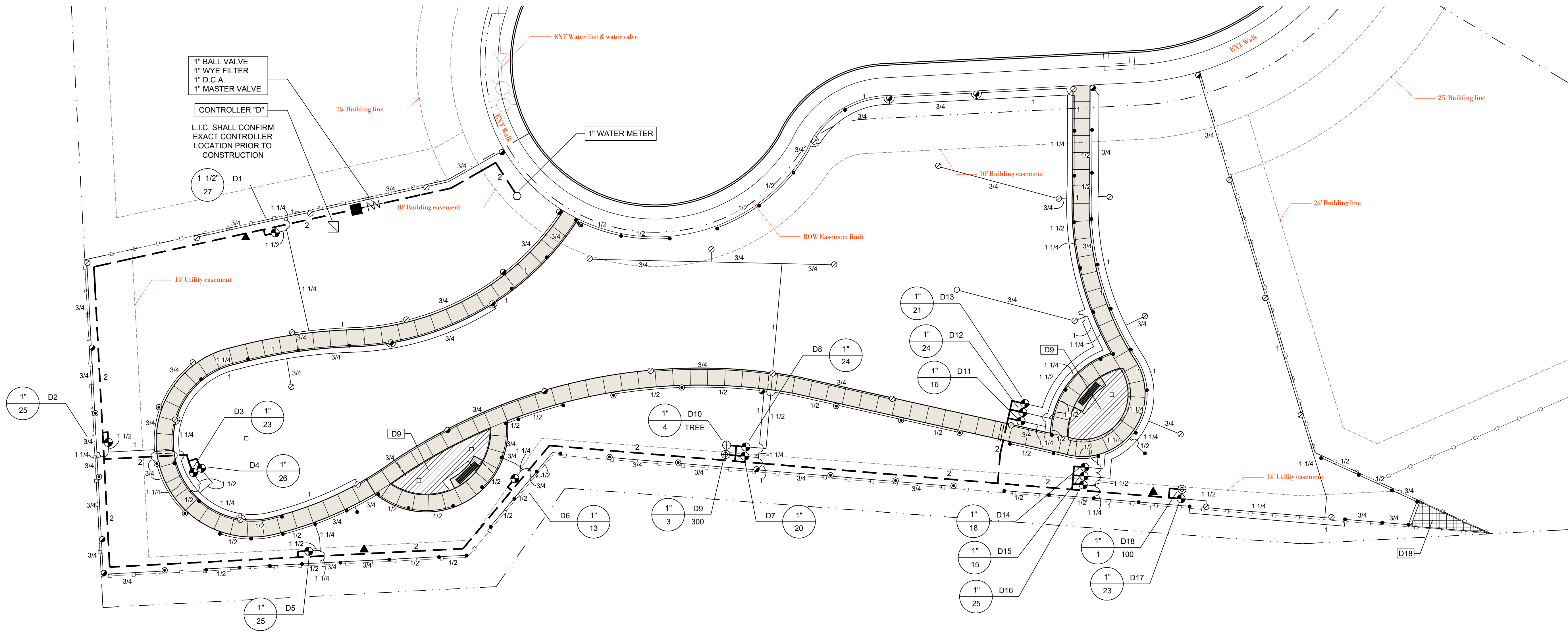


09/23/24

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Issue by:

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20250205 IFP



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single: CD

client: Hidden Lakes HOA

project: Landscape Update  
Hidden Lakes Section 1 & 2  
League City, TX 77573

page: 22 of 33

checked by: AM

revision: None

date: 20250205 IFP

1/4" = 1'-0"

sheet: Irrigation

11.06



## INSTALLATION NOTES

- COORDINATE IRRIGATION INSTALLATION WITH PLANTING PLAN AND SITE CONDITIONS TO PROVIDE COMPLETE COVERAGE WITH MINIMUM OVERSPRAY. THE IRRIGATION CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO ENSURE PROPER COVERAGE AT NO ADDITIONAL COST TO THE OWNER. THE IRRIGATION CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND STATE MANDATED IRRIGATION ORDINANCES AND CODES, AND WILL SECURE ALL REQUIRED PERMITS. L.I.C. SHALL PAY ANY ASSOCIATED FEES UNLESS OTHERWISE NOTED. ALL LOCAL CODES SHALL PREVAIL OVER ANY DISCREPANCIES HEREIN AND SHALL BE ADDRESSED BEFORE ANY CONSTRUCTION BEGINS.
- NO MACHINE TRENCHING SHALL BE PERMITTED WITHIN THE ROOT ZONE OF EXISTING TREES. HAND-DIG ONLY, WITHIN THE ROOT ZONES OF EXISTING TREES. NO ROOTS OVER 1" DIAMETER SHALL BE CUT. STAKE ALL PROPOSED TRENCH ROUTES NEAR EXISTING TREES FOR APPROVAL BY THE LANDSCAPE ARCHITECT BEFORE DIGGING BEGINS.
- CONFIRM MINIMUM STATIC WATER PRESSURE OF 65 PSI AT THE HIGHEST ELEVATION OF THE SYSTEM LIMITS, AND MAXIMUM STATIC WATER PRESSURE OF 90 P.S.I. AT THE LOWEST ELEVATION OF THE SYSTEM LIMITS AT LEAST 7 DAYS BEFORE BEGINNING WORK. IF STATIC WATER PRESSURE IS OUTSIDE THE RANGE STATED ABOVE, DO NOT PROCEED UNTIL DIRECTED BY THE LANDSCAPE ARCHITECT.
- LATERAL PIPE SHALL BE INSTALLED AT A MINIMUM DEPTH OF 12 INCHES. MAINLINE PIPE AND WIRES SHALL BE INSTALLED AT A MINIMUM DEPTH OF 18 INCHES. NO MACHINE TRENCHING SHALL BE PERMITTED WITHIN EXISTING TREE ROOT ZONES. WHEN HAND - TRENCHING WITHIN EXISTING TREE ROOT ZONES, NO ROOTS LARGER THAN 1" DIAMETER SHALL BE CUT.
- IRRIGATION PLANS ARE DIAGRAMS ONLY. IRRIGATION EQUIPMENT MAY BE SHOWN IN IMPERVIOUS SURFACES FOR GRAPHIC CLARITY PURPOSES. L.I.C. SHALL MAKE MINOR ADJUSTMENTS, AT NO ADDITIONAL COST TO THE OWNER, OF THE LOCATIONS OF THE IRRIGATION EQUIPMENT IN ORDER TO AVOID UTILITIES OR IMPERVIOUS SURFACES. R.F.I.S MAY BE SUBMITTED FOR APPROVAL OF CHANGES. UNSLEEVED PIPES MAY BE SHOWN UNDER PAVEMENT FOR GRAPHIC CLARITY ONLY. INSTALL THESE PIPES IN ADJACENT LANDSCAPED AREAS.
- ELECTRIC POWER SHALL BE PROVIDED WITHIN FIVE FEET OF CONTROLLER LOCATION BY GENERAL CONTRACTOR. L.I.C. TO PROVIDE FINAL HARD-WIRE TO CONTROLLER.
- 24 VOLT WIRE SHALL BE A MINIMUM OF #14 GAUGE, U.F. APPROVED FOR DIRECT BURIAL, SINGLE CONDUCTOR "IRRIGATION WIRE". WIRE SPLICES SHALL INCLUDE DBY CONNECTORS AS MANUFACTURED BY 3M COMPANY. ALL FIELD SPLICES SHALL BE LOCATED IN A ROUND VALVE BOX OF SUFFICIENT SIZE TO ALLOW INSPECTION.
- VALVE BOXES SHALL BE INSTALLED FLUSH WITH GRADE, SUPPORTED BY BRICKS IF NEEDED, WITH 3 INCHES OF CLEAN PEA GRAVEL LOCATED BELOW THE VALVE. USE 12" x 17" RECTANGULAR VALVE BOXES WITH PURPLE LID FOR QUICK COUPLING VALVES, AND 10" ROUND BOXES FOR ELCTRIC VALVES UNLESS NOTED OTHERWISE. D.C.A. WITH UPSTREAM BALL VALVE AND WYE FILTER SHALL BE BOXED AND LOCATED ACCORDING TO LOCAL CODE.
- USE RIGID SCH. 80 PVC SWING JOINT ASSEMBLIES TO CONNECT ALL ROTARY HEADS AND QUICK COUPLERS.
- ALL SPRAY HEADS SHALL BE CONNECTED WITH A 12" MINIMUM LENGTH OF 1/2" FLEX PVC. THE FLEX PVC SHALL BE SOLVENT WELDED TO SCHEDULE 40 PVC FITTINGS WITH WELD-ON #795 SOLVENT AND #P-70 PRIMER.
- PROVIDE ONE QUICK COUPLER KEY WITH SWIVEL HOSE ELL FOR EVERY SIX Q.C. VALVES. ( MINIMUM ONE SET ).
- CONTRACTOR IS TO CONTACT APPROPRIATE AUTHORITIES AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
- LATERAL PIPE TO TREE STREAM BUBBLER HEADS IS OMITTED FOR GRAPHIC CLARITY. CONNECT TREE BUBBLER HEADS TO VALVES AS SHOWN WITH CLASS 200 PVC PIPE SIZED TO ALLOW A MAXIMUM FLOW VELOCITY OF 5 FEET PER SECOND.
- THE PROPOSED LOCATIONS OF ALL ABOVE- GROUND EQUIPMENT INCLUDING BACKFLOW PREVENTORS, CONTROLLERS AND WEATHER SENSORS SHALL BE STAKED BY THE CONTRACTOR FOR APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE BEFORE THESE ITEMS ARE INSTALLED.
- ALL HEADS SHALL BE INSTALLED A MINIMUM OF 4" FROM PAVEMENT EDGES, ( 6" OR GREATER WHERE REQUIRED BY LOCAL CODE ) FINAL HEAD ADJUSTMENTS BY THE CONTRACTOR SHALL INCLUDE THE ADDITION OF CHECK VALVES WHERE NEEDED TO PREVENT EXCESSIVE LOW HEAD DRAINAGE. THE CONTRACTOR SHALL BUDGET FOR, AND INSTALL CHECK VALVES FOR UP TO 10 % OF THE TOTAL NUMBER OF HEADS WHEN NEEDED, WITH NO ADDITIONAL COST TO THE OWNER. WHERE SHOWN ON THE PLANS, MASS SHRUB / GROUND-COVER BEDS SHALL INCLUDE RAIN BIRD XFS-CV-06-12 SERIES DRIP TUBE WITH PRE-INSTALLED 6 GPH DRIP EMITTERS AT 12" INTERVALS ( XFS-CV-06-12 ). INSTALLED IN CENTER-FED GRIDS WITH ROWS SPACED 18" APART. INDIVIDUAL DRIP TUBE RUNS SHALL NOT EXCEED 150 L.F. PVC LATERAL "TRUNK" LINES SHALL BE INSTALLED 10" DEEP. DRIP TUBE SHALL BE SET 2" BELOW FINISHED SOIL GRADE ( NOT INCLUDING MULCH LAYER ), SECURELY STAKED EVERY 18". FLUSH VALVES SHALL BE INSTALLED AT THE FARTHEST POINTS FROM THE ZONE VALVE. USE 17 MM BARBED FITTINGS FOR DRIP LINE CONNECTIONS WITH 40 PSI MAX. PRESSURE REGULATOR. USE RAIN BIRD "QF" HEADER FOR HEADER / EXHAUST LINES, WITH TWIST-LOCK FITTINGS. RAIN BIRD DRIP TUBE SHALL BE INSTALLED PERPENDICULAR TO SLOPE FACE. INSTALL IN-LINE CHECK VALVES FOR EVERY 10 FEET OF DRIP LINE ELEVATION CHANGE WITHIN THE ZONE. USE STAPLES TO SECURE TUBING EVERY 18" EACH DRIP ZONE SHALL INCLUDE ONE RAIN BIRD MAINTENANCE "FLAG" MODEL #OPERIND WHICH SHALL CONSIST OF A 12" POP-UP SPRAY HEAD AND COMPLETELY CLOSED SPRAY NOZZLE. THE POP-UP HEAD SHALL BE CONNECTED TO THE DRIP ZONE PIPE, SET FLUSH WITH GRADE, AND LOCATED AT THE FARTHEST DISTANCE FROM THE DRIP VALVE ASSEMBLY. INSTALL THE "FLAG" HEAD ADJACENT TO EDGING OR IN LOW PLANTINGS FOR EASE OF VIEWING. LATERAL PIPE CONNECTING SEPARATE DRIP GRIDS ON THE SAME ZONE IS OMITTED FOR GRAPHIC CLARITY. SIZE LATERAL PIPE JOINING SEPARATE DRIP GRIDS ON THE SAME ZONE VALVE WITH 3/4" CLASS 200 PVC PIPE SPARSLEY SPACED, INDIVIDUAL SHRUB PLANTINGS MAY INCLUDE RAIN BIRD #XBT-10 SINGLE-OUTLET EMITTERS OR RAIN BIRD #XBT-10-6 MULTI-OUTLET EMITTERS INSTALLED AS DETAILED. PROVIDE MINIMUM TWO, 1 G.P.H. OUTLETS PER INDIVIDUAL SHRUB. SINGLE / MULTI-OUTLET EMITTERS MAY BE CONNECTED TO THE SAME DRIP ZONE VALVE WHICH SERVES ADJACENT DRIP TUBE GRIDS, UNLESS NOTED OTHERWISE.
- WHERE SHOWN ON THE PLANS, SPECIFIC TURF AREAS SHALL INCLUDE RAIN BIRD XFS-CV-06-12 SERIES DRIP TUBE WITH PRE- INSTALLED 6 GPH DRIP EMITTERS AT 12" INTERVALS ( XFS-CV-06-12 ). INSTALLED IN CENTER-FED GRIDS WITH ROWS SPACED 12" APART. INDIVIDUAL DRIP TUBE RUNS SHALL NOT EXCEED 150 L.F. PVC LATERAL "TRUNK" LINES SHALL BE INSTALLED 10" DEEP. DRIP TUBE SHALL BE SET 4" BELOW FINISHED SOIL GRADE. USE RAIN BIRD "QF" HEADER FOR HEADER / EXHAUST LINES, WITH TWIST-LOCK FITTINGS. FLUSH VALVES SHALL BE INSTALLED AT THE FARTHEST POINTS FROM THE ZONE VALVE. USE 17 MM BARBED FITTINGS FOR DRIP LINE CONNECTIONS, SET THE MAXIMUM OPERATING PRESSURE AT 40 PSI. RAIN BIRD DRIP TUBE SHALL BE INSTALLED PERPENDICULAR TO SLOPE FACE. INSTALL IN-LINE CHECK VALVES FOR EVERY 10 FEET OF DRIP LINE ELEVATION CHANGE WITHIN THE ZONE. EACH DRIP ZONE SHALL INCLUDE ONE RAIN BIRD MAINTENANCE "FLAG" MODEL #OPERIND WHICH SHALL CONSIST OF A 12" POP-UP SPRAY HEAD AND COMPLETELY CLOSED SPRAY NOZZLE. THE POP-UP HEAD SHALL BE CONNECTED TO THE DRIP ZONE PIPE, SET FLUSH WITH GRADE, AND LOCATED AT THE FARTHEST DISTANCE FROM THE DRIP VALVE ASSEMBLY. INSTALL THE "FLAG" HEAD ADJACENT TO EDGING OR IN LOW PLANTINGS FOR EASE OF VIEWING. TEMPORARY SUPPLEMENTAL OVERHEAD WATERING MAY BE REQUIRED FOR SOD ESTABLISHMENT.

## IRRIGATION LEGEND

- RAIN BIRD 1806-SAM-PRS SERIES POP UP SPRAY HEADS WITH RAIN BIRD SQ NOZZLES, MODEL #3QTR, SET TO 2.5' THROW ( TWO PER LARGE CANOPY TREE ) SEE INSTALLATION NOTE #13 REGARDING TREE BUBBLER LATERAL PIPE. REFERENCE LANDSCAPE PLAN FOR TREE SIZE.
- RAIN BIRD 1806-SAM-PRS SERIES POP UP SPRAY HEADS WITH RAIN BIRD SQ NOZZLES, MODEL #HALF, SET TO 2.5' THROW ( TWO PER SMALL CANOPY TREE ) SEE INSTALLATION NOTE #13 REGARDING TREE BUBBLER LATERAL PIPE. REFERENCE LANDSCAPE PLAN FOR TREE SIZE.
- RAIN BIRD 1804-SAM-PRS SERIES POP UP SPRAY HEAD WITH SST / EST SERIES NOZZLE AS NOTED BELOW
- RAIN BIRD 1804-SAM-PRS SERIES POP UP SPRAY HEAD WITH U-SERIES NOZZLE AS NOTED BELOW
- RAIN BIRD 5004PCSAMR, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, PART CIRCLE, #1.5 LA NOZZLE UNLESS NOTED OTHERWISE
- RAIN BIRD 5004PCSAMR, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, PART CIRCLE, #2.5 NOZZLE UNLESS NOTED OTHERWISE
- RAIN BIRD 5004PCSAMR, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, FULL CIRCLE, #5.0 NOZZLE UNLESS NOTED OTHERWISE
- RAIN BIRD 5004PCSAMR, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, PART CIRCLE, #4.0 NOZZLE UNLESS NOTED OTHERWISE
- RAIN BIRD 5004PCSAMR, ADJUSTABLE ARC 4" POP UP ROTARY HEAD, FULL CIRCLE, #8.0 NOZZLE UNLESS NOTED OTHERWISE
- RAIN BIRD XFS-CV-06-12 SERIES DRIP TUBE IN SHRUB BED INSTALLED AT 2" DEPTH
- SEE INSTALLATION NOTE #16 REGARDING DRIP TUBE LAYOUT IN SHRUB BEDS.
- RAIN BIRD XFS-CV-06-12 SERIES DRIP TUBE IN NARROW TURF AREAS INSTALLED AT 4" DEPTH
- SEE INSTALLATION NOTE #17 REGARDING DRIP TUBE LAYOUT IN TURF.

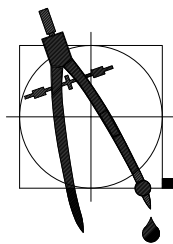
- RAIN BIRD PEB SERIES ELECTRIC REMOTE CONTROL VALVE
- RAIN BIRD PEB SERIES ELECTRIC REMOTE CONTROL, "TREE BUBBLER ZONE" VALVE
- SEE INSTALLATION NOTE #13 REGARDING TREE BUBBLER LATERAL PIPE
- RAIN BIRD XCZ-100-PRB-COM / XCZ-150-LCS SERIES AUTOMATIC DRIP VALVE ASSEMBLY WITH 40 PSI PRESSURE REGULATOR AND COMMERCIAL BASKET FILTER WITH STAINLESS STEEL SCREEN
- RAIN BIRD 33-DNP QUICK COUPLING VALVE WITH LOCKING PURPLE COVER AND 3/4" PVC BALL VALVE

- ZURN 350 SERIES D.C.A. INSTALLED PER CITY CODE, WITH SAME SIZE ZURN 850 SERIES BRONZE BALL VALVE AND ZURN SXL SERIES BRONZE WYE FILTER WITH 20 MESH STAINLESS STEEL SCREEN
- LASCO "V" SERIES SCH. 80 PVC TRUE UNION BALL VALVE, MAINLINE SIZE
- IRRIGATION WATER METER AND TAP, SIZE AS NOTED ON THE PLAN
- MASTER ELECTRIC VALVE
- CONTROLLER 'A' & 'B'
- RAINBIRD ESP12LXME SERIES AUTOMATIC CONTROLLER WITH LXXMSSPED PEDESTAL AND WR2-RFC RAIN / FREEZE SENSOR LOCATE SENSOR AS FIELD DIRECTED BY THE LANDSCAPE ARCHITECT
- CONTROLLER 'C' & 'D'
- RAINBIRD ESP12LXME SERIES AUTOMATIC CONTROLLER AND LXXMSSPED PEDESTAL WITH ONE ESPLXMSM12 STATION MODULE
- WR2-RFC RAIN / FREEZE SENSOR LOCATE SENSOR AS FIELD DIRECTED BY THE LANDSCAPE ARCHITECT

IRRIGATION CONTROLLER "A, B & C" TO INCLUDE LONGHORN PIPE AND SUPPLY SOLAR UNIT MODEL #IS-SOLAR-LG, CONTACT MATT SWOR WITH LONGHORN PIPE AND SUPPLY AT 214-882-8731.

- SCHEDULE 40 PVC MAINLINE PIPE
- CLASS 200 ( EXCEPT 1/2 INCH #315 ) PVC LATERAL PIPE
- ONE 4" CLASS 200 SLEEVE PIPE
- TWO 4" CLASS 200 SLEEVE PIPES

L.I.C. SHALL SELECT SPRAY NOZZLES FOR "HEAD-TO-HEAD" COVERAGE, ADJUSTED FOR NO OVERSPRAY ONTO WALLS AND WALKS. NO OVERSPRAY INTO STREETS IS PERMITTED.



James Pole

IRRIGATION CONSULTANTS

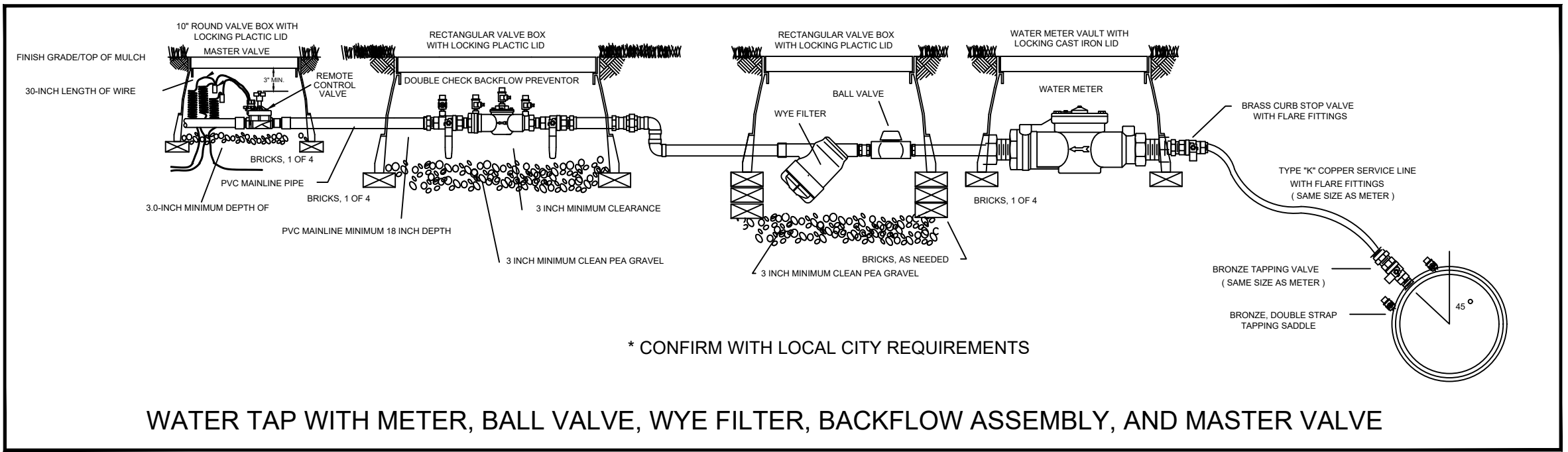
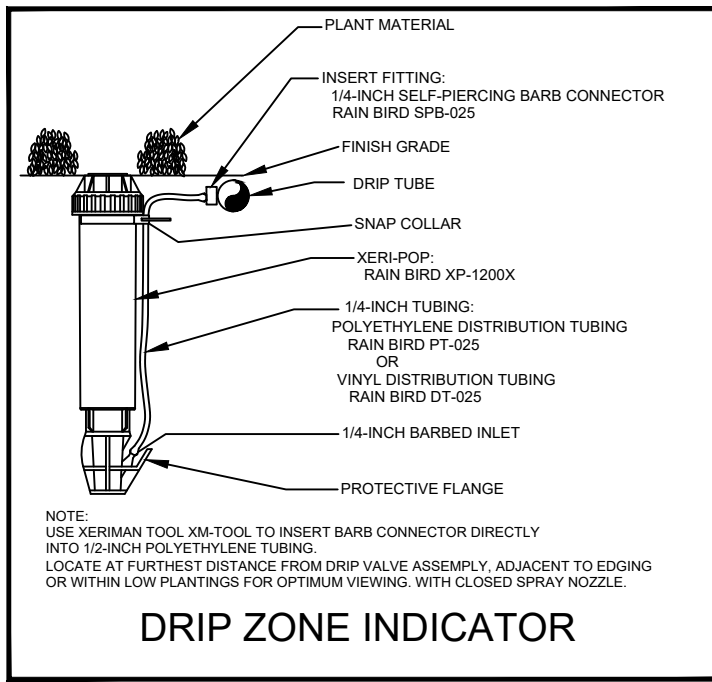
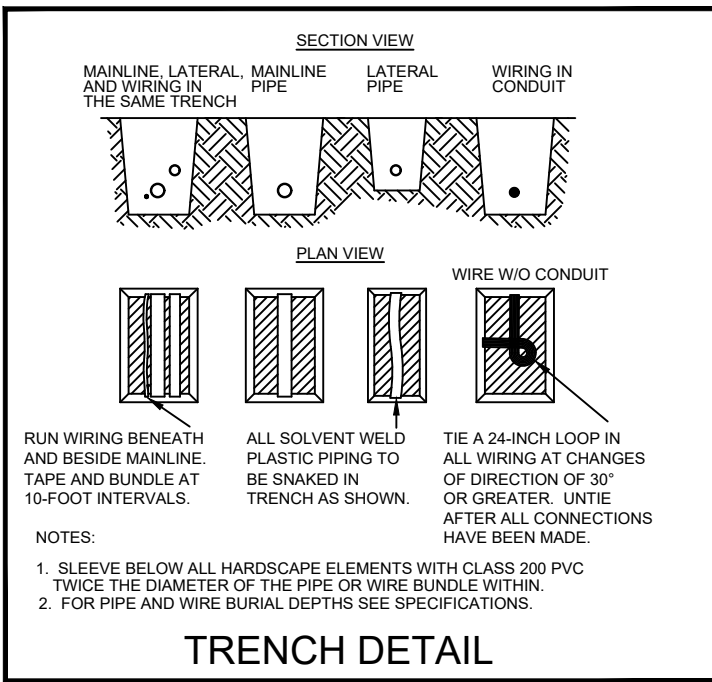
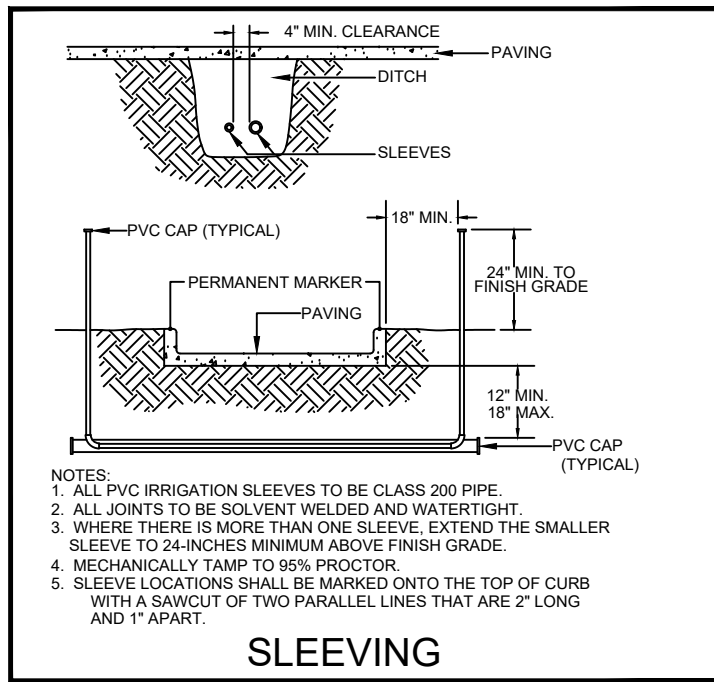
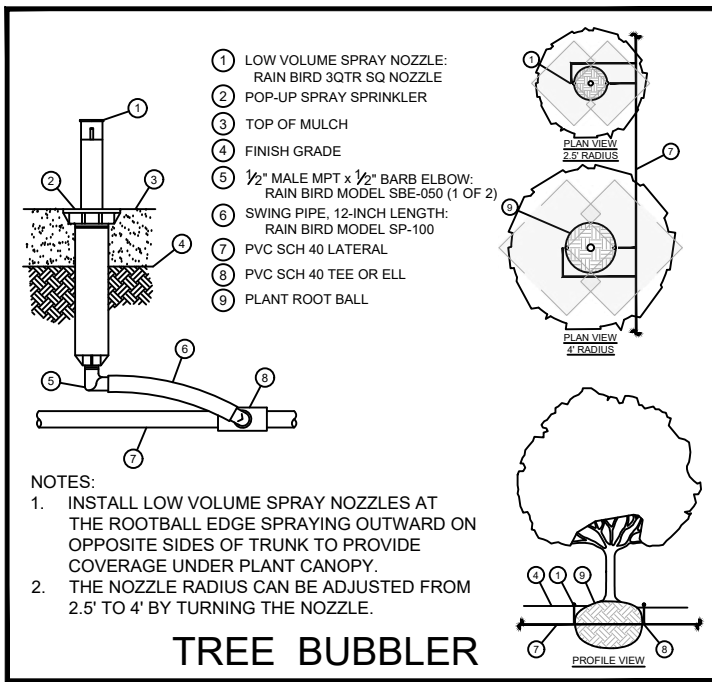
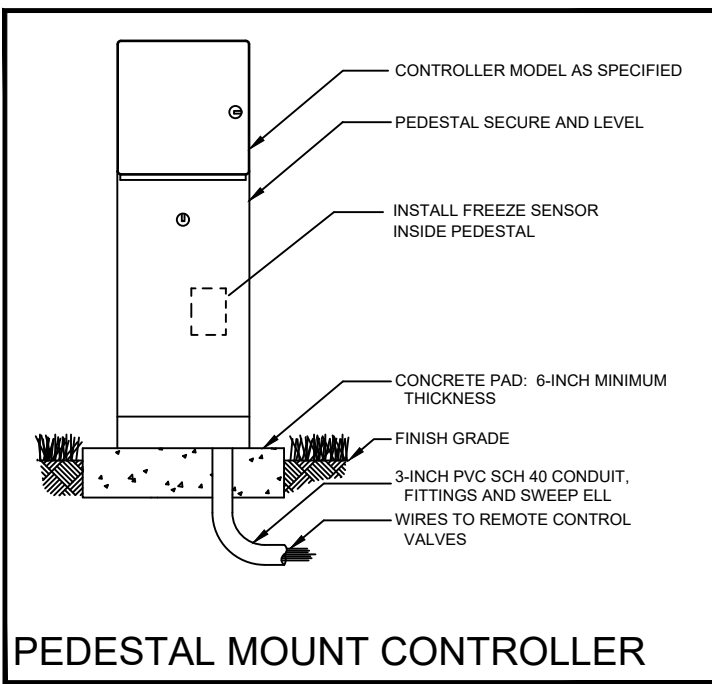
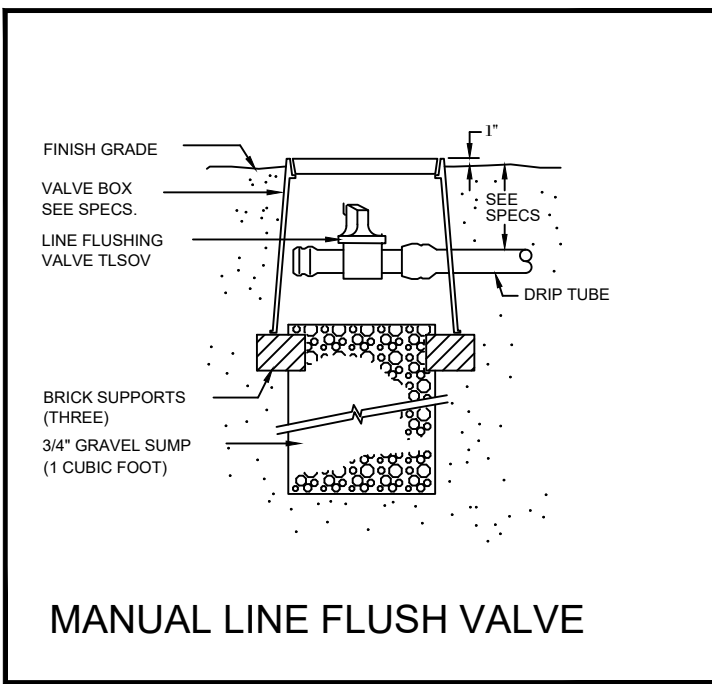
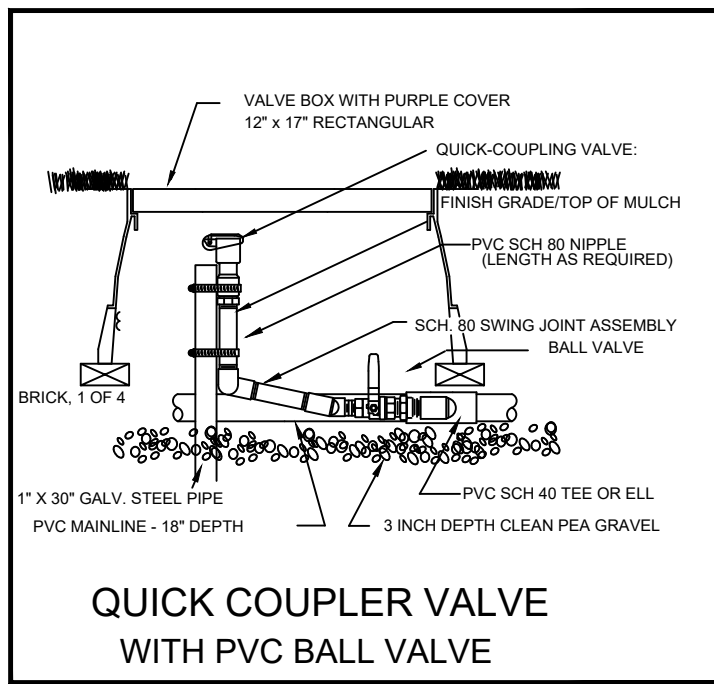
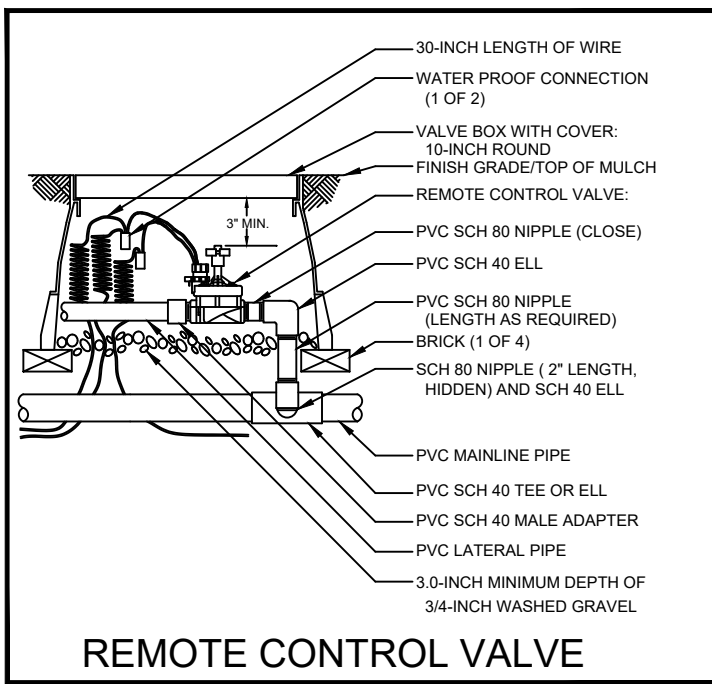
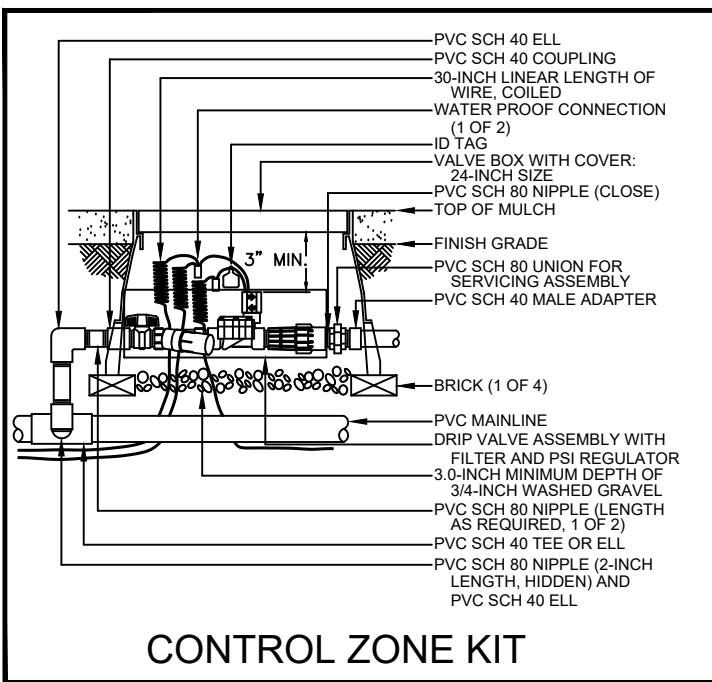
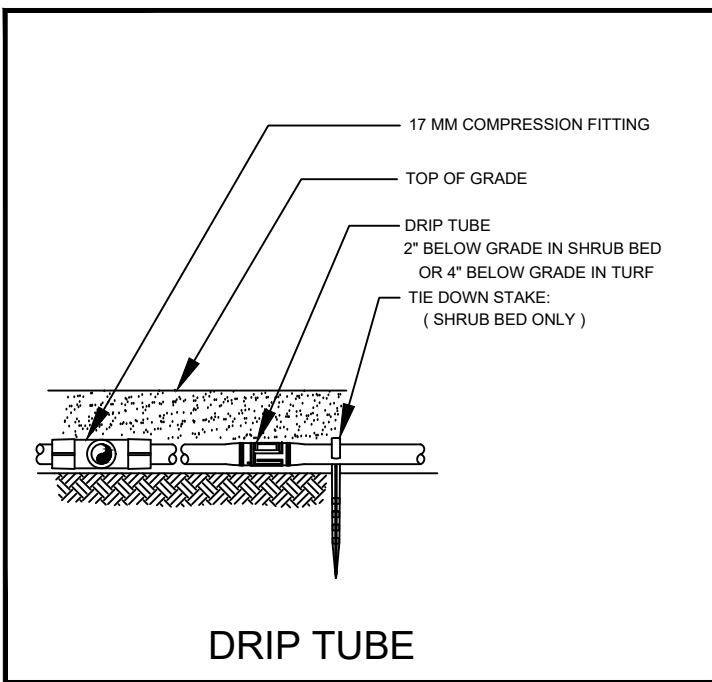
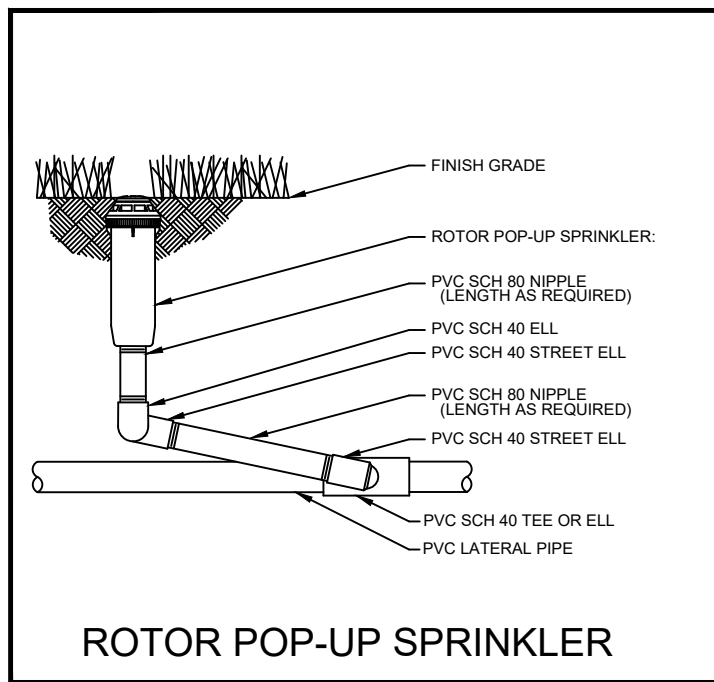
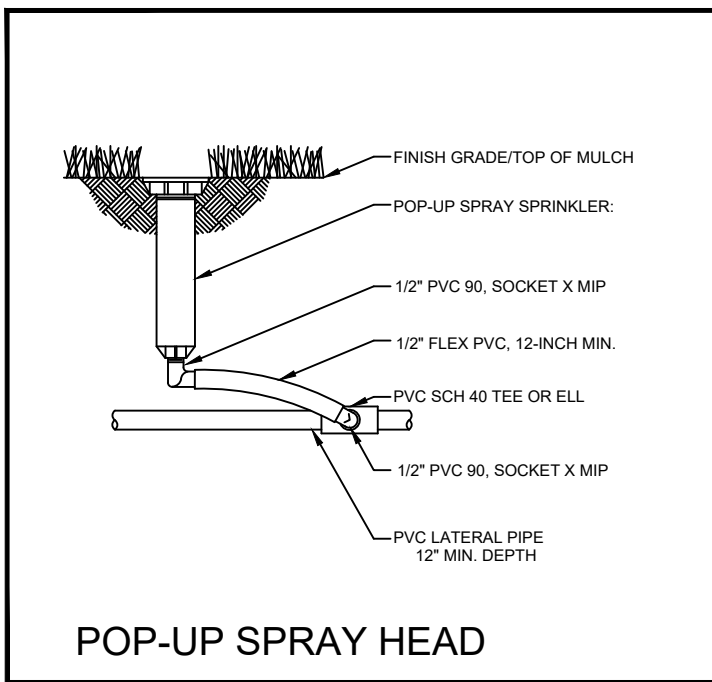
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IRRIGATION DESIGN, CONSULTING, AND LANDSCAPE WATER MANAGEMENT

TEXAS L.I.C. #658  
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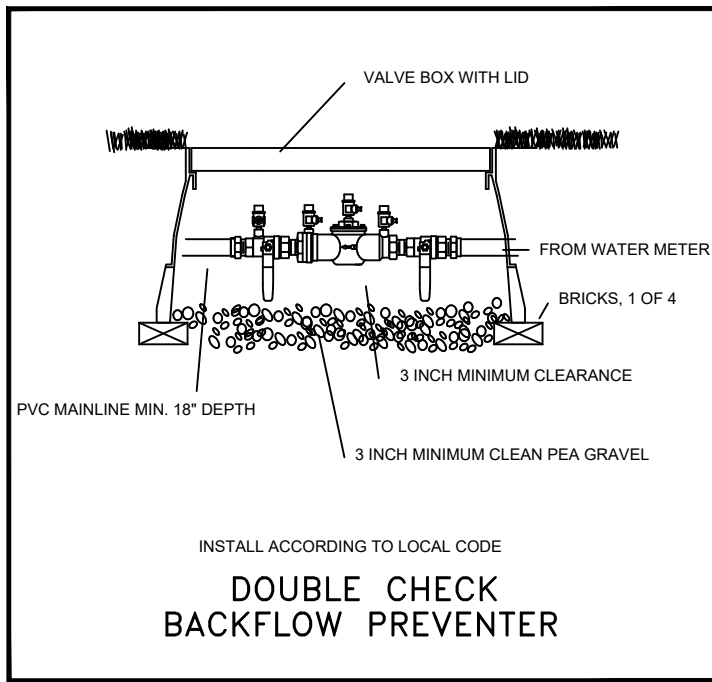
PHONE: 940.243.2364  
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james@jamespoleIRRIGATION.com

Planting  
11.07

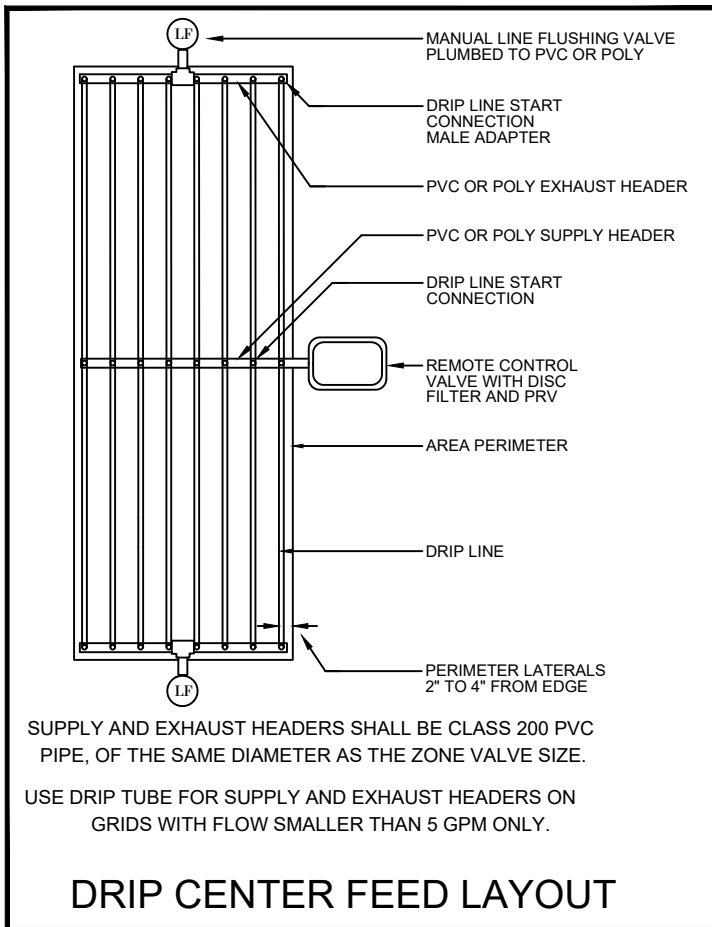


\* CONFIRM WITH LOCAL CITY REQUIREMENTS

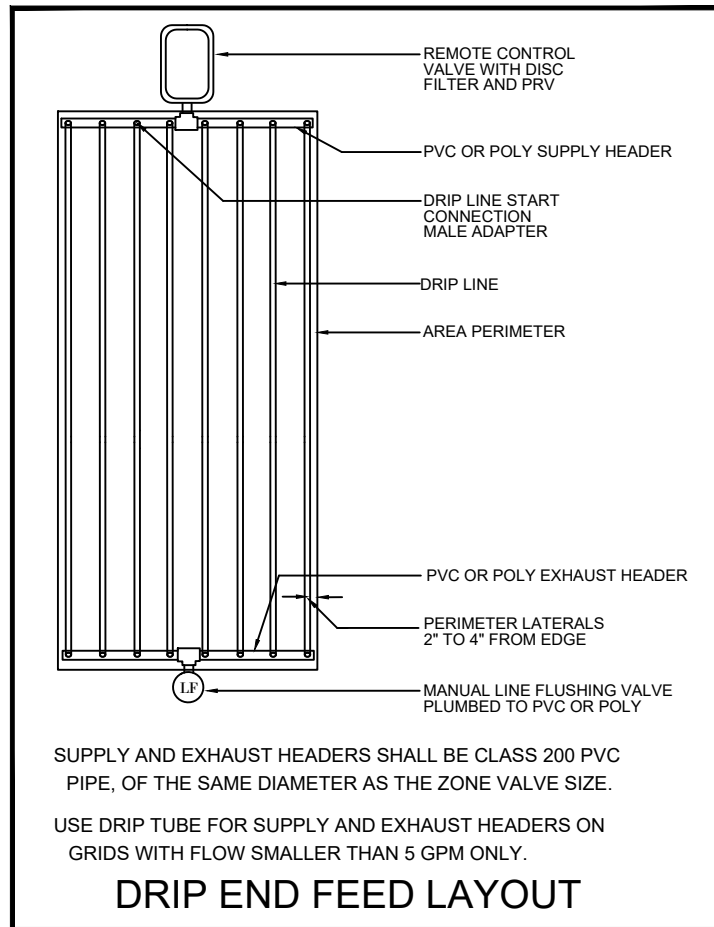
WATER TAP WITH METER, BALL VALVE, WYE FILTER, BACKFLOW ASSEMBLY, AND MASTER VALVE



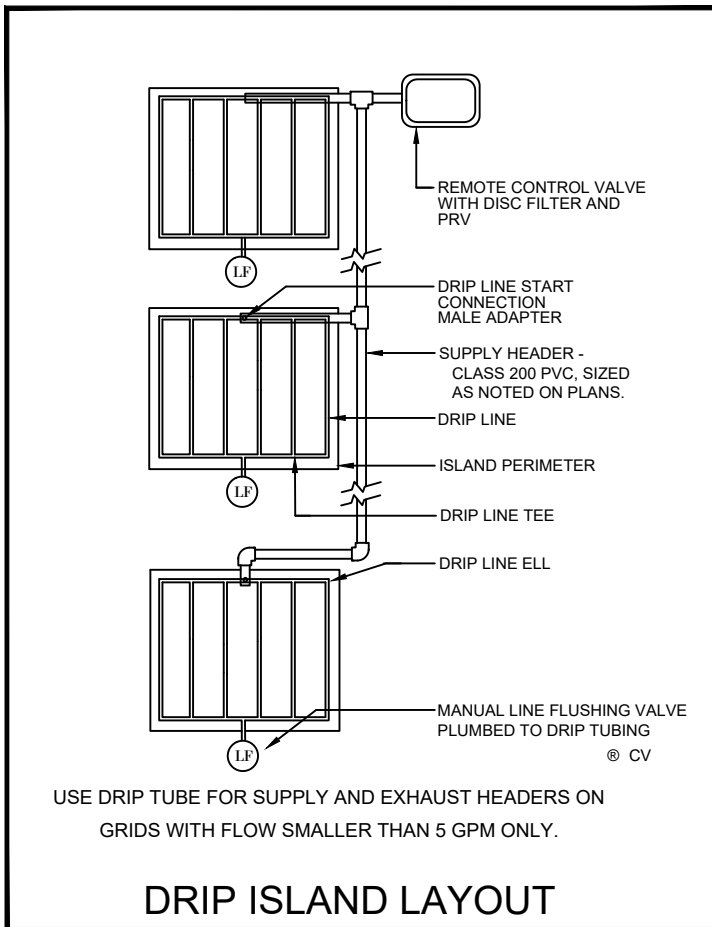
DOUBLE CHECK BACKFLOW PREVENTER



DRIP CENTER FEED LAYOUT



DRIP END FEED LAYOUT



DRIP ISLAND LAYOUT



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size: CD

client: Hidden Lakes HOA

project: Irrigation Details  
Hidden Lakes Section 1 & 2  
League City, TX 77573

page: 23 of 33

checked by: ---

revision: None

date: 20250205 IFP

scale: n.t.s.

sheet: Planting