

# JUNO LANDING EXTENSION

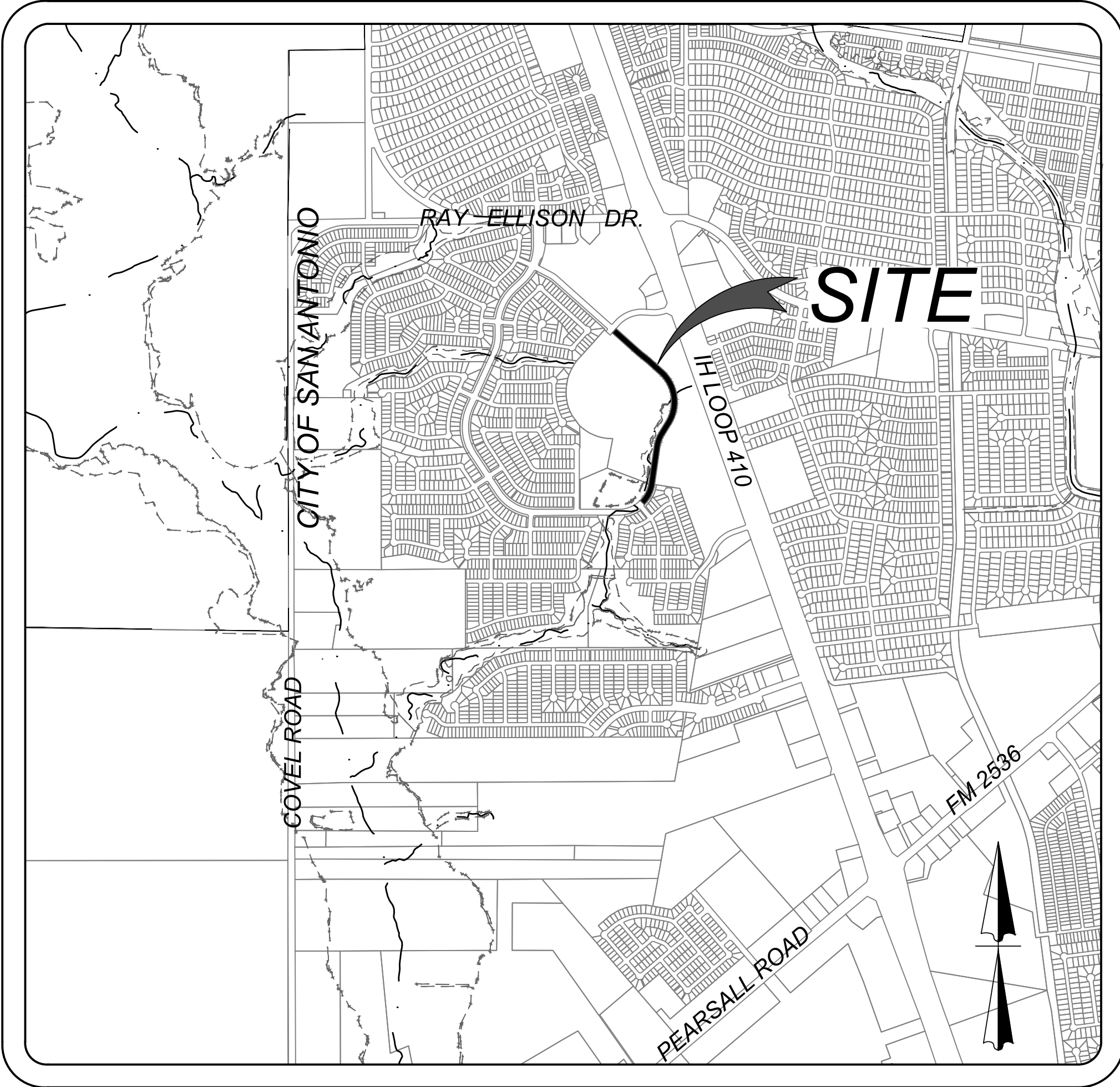
## SAN ANTONIO, TEXAS 78252

### WATER IMPROVEMENTS

- General Section
1. All materials and construction procedures within the scope of this contract shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable:
- A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1 Chapter 290.
  - B. Current "TXDOT" "Standard Specifications for Construction of Highways, Streets and Drainage".
  - C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction".
  - D. Current City of San Antonio "Standard Specifications for Public Works Construction".
  - E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).
2. The contractor shall not proceed with any pipe installation work until they obtain a copy of the approved Counter Permit or General Construction Permit (GCP) from the consultant and has been notified by SAWS Construction Inspection Division to proceed with the work and has arranged a meeting with the inspector and consultant for the work requirements. Work completed by the contractor without an approved Counter Permit and/or a GCP will be subject to removal and replacement at the expense of the contractors and/or the developer.
3. The Contractor shall obtain the SAWS Standard Details from the SAWS website, [http://www.saws.org/business\\_center/specs](http://www.saws.org/business_center/specs). Unless otherwise noted within the design plans.
4. The Contractor is to make arrangements with the SAWS Construction Inspection Division at (210) 233-2973, on notification procedures that will be used to notify affected home residents and/or property owners 48 hours prior to beginning any work.
5. Location and depth of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the Contractor at least 1 week prior to construction. It shall be the Contractor's responsibility to locate utility service lines as required for construction and to protect them during construction at no cost to SAWS.
6. The Contractor shall verify the exact location of underground utilities and drainage structures at least 1-2 weeks prior to construction whether shown on plans or not. Please allow up to 7 business days for locates requesting pipe location markers on SAWS facilities. The following contact information are supplied for verification purposes:
- SAWS Utility Locates: <http://www.saws.org/Service/Locates>
  - COSA Drainage (210) 207-0724 or (210) 207-6026
  - COSA Traffic Signal Operations (210) 206-6490
  - COSA Traffic Signal Damages (210) 207-3951
  - Texas State Wide One Call Locator 1-800-545-6005 or 811
7. The Contractor shall be responsible for restoring existing construction including curbs, sidewalks, landscaping and structures to its original or better condition if damages are made as a result of the project's construction.
8. All work in Texas Department of Transportation (TxDOT) and/or Bexar County right-of-way shall be done in accordance with respective construction specifications and permit requirements.
9. The Contractor shall comply with City of San Antonio or other governing municipality's tree ordinances when excavating near trees.
10. The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit.
11. Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Request should be sent to [constworkreq@saws.org](mailto:constworkreq@saws.org). Weekend Work: Contractors are required to notify the SAWS Inspection Construction Department 48 hours in advance to request weekend work. Request should be sent to [constworkreq@saws.org](mailto:constworkreq@saws.org). Any and all SAWS utility work installed without holiday/weekend approval will be subject to be uncovered for proper inspection.
12. Compaction note (Item 804): The contractor shall be responsible for meeting the compaction requirements on all trench backfill and for paying for the tests performed by a third party. Compaction tests will be done at one location point randomly selected, or as indicated by the SAWS Inspector and/or the test administrator, per each 12-inch loose lift per 400 linear feet at a minimum. This project will not be accepted and finalized by SAWS without this requirement being met and verified by providing all necessary documented test results.
13. A copy of all testing reports shall be forwarded to SAWS Construction Inspection Division.

- Water Section
1. Prior to tie-ins, any shutdowns of existing mains of any size must be coordinated with the SAWS Construction Inspection Division at least one week in advance of the shutdown. The Contractor must also provide a sequence of tie-in work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the Contractor to sequence the work accordingly.
- For water mains 12" or higher: SAWS Emergency Operations Center (210) 233-2014
2. Asbestos Cement (AC) pipe, also known as transite pipe which is known to contain asbestos containing material (ACM), may be located within the project limits. Special waste management procedures and health and safety requirements will be applicable when removal and/or disturbance of this pipe occurs. Such work is to be made under Special Specification Item No. 3000, "Special Specification for Handling Asbestos Cement Pipe".
3. Valve removal: Where the contractor is to abandon a water main, the control valve located on the abandoning branch will be removed and replaced with a capplug. (NSPI)
4. Suitable anchorage/thrust blocking or joint restraint shall be provided at all of the following main locations: dead ends, plugs, caps, tees, crosses, valves, and bends, in accordance with the Standard Drawings DD-839 Series and Item No. 839, in the SAWS Standard Specifications for Construction.
5. All valves shall read "open right".
6. PRVs Required: Contractor to verify that no portion of the tract is below ground elevation of .745 feet where the static pressure will normally exceed 80 PSI. At all such locations where the ground level is below .745 feet, the Developer or Builder shall install at each lot, on the customer's side of the meter, an approved type pressure regulator in conformance with the Plumbing Code of the City of San Antonio. No dual services allowed for any lot(s) if "PRV is/are required for such lot(s), only single service connections shall be allowed. \*Note: A pressure regulator is also known as a pressure reducing valve (PRV).
7. Pipe Disinfection with Dry HTH for Projects less than 800 linear feet. (Item No. 847.3): Mains shall be disinfected with dry HTH where shown in the contract documents or as directed by the Inspector, and shall not exceed a total length of 800 feet. This method of disinfection will also be followed for main repairs. The Contractor shall utilize all appropriate safety measure to protect his personnel during disinfection operations.
8. Backflow Prevention Devices:
- All irrigation services within residential areas are required to have backflow prevention devices.
  - All commercial backflow prevention devices must be approved by SAWS prior to installation.
9. Final connection to the existing water main shall not be made until the water main has been pressure tested, chlorinated, and SAWS has released the main for tie-in and use.
10. Division Valves: Division Valves shown on plans or not shown on plans but found in the field shall only be operated by SAWS Distribution and Collection staff and only with prior written approval of the SAWS Director of Production and Operations and proper coordination with all SAWS departments. Contractor shall provide written notification to the inspector a minimum of two weeks in advance to start the coordination process and will be informed by the Inspector when the division valve will be operated by the SAWS Distribution and Collection staff. The Division Valve can only be operated by SAWS Distribution and Collection staff member not the inspector or the contractor. Operation of a Division Valve without the express prior written approval of the SAWS Distribution and Collection staff will constitute a material breach of any written SAWS contract or permit in addition to subjecting the Contractor to liability for any and all fines, fees, or other damages, direct or consequential, that may arise from or be caused by the operation of the valve without prior written permission. Please be informed that the approval of the operation or opening or closing of a division valve can take several weeks for approval. Division Valves will also have a valve lid labeled Division Valve and a locking mechanism installed with a key. The lock and key mechanism will be paid for by the contractor but will be installed by SAWS Distribution and Collection staff.

- Sewer Notes
1. The Contractor is responsible for ensuring that no Sanitary Sewer Overflow (SSO) occurs as a result of their work. All contractor personnel responsible for SSO prevention and control shall be trained on proper response. Should an SSO occur, the contractor shall:
- A. Identify the source of the SSO and notify SAWS Emergency Operations Center (EOC) immediately at (210) 233-2014. Provide the address of the spill and an estimated volume or flow.
  - B. Attempt to eliminate the source of the SSO.
  - C. Contain sewage from the SSO to the extent of preventing a possible contamination of waterways.
  - D. Clean up spill site (return contained sewage to the collection system if possible) and properly dispose of contaminated soil/materials.
  - E. Clean the affected sewer mains and remove any debris.
  - F. Meet all post-SSO requirements as per the EPA Consent Decree, including line cleaning and televising the affected sewer mains (at SAWS direction) within 24 hours. Should the Contractor fail to address an SSO immediately and to SAWS satisfaction, they will be responsible for all costs incurred by SAWS, including any fines from EPA, TCEQ and/or any other Federal, State or Local Agencies. No separate measurement or payment shall be made for this work. All work shall be done according to guidelines set by the TCEQ and SAWS.
1. If bypass pumping is required, the Contractor shall perform such work in accordance with SAWS Standard Specification for Water and Sanitary Sewer Construction, Item No. 864, "Bypass Pumping".
3. Prior to tie-ins, any shutdowns of existing force mains of any size must be coordinated with the SAWS Construction Inspection Division at (210) 233-2973 at least one week in advance of the shutdown. The Contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the Contractor to sequence the work accordingly.
4. Sewer pipe where water line crosses shall be 160 psi and meet the requirements of ASTM D2241, TAC 217.53 and TCEQ 290.44(e)(4)(B). Contractor shall center a 20' joint of 160 psi pressure rated PVC at the proposed water crossing.
5. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY: It shall be the responsibility of the Contractor to make allowances and adjustments for top of manholes to match the finished grade of the project's improvements. (NSPI)
6. Spills, Overflows, or Discharges of Wastewater: All spills, overflows, or discharges of wastewater, recycled water, petroleum products, or chemicals must be reported immediately to the SAWS Inspector assigned to the Counter Permit or General Construction Permit (GCP). This requirement applies to every spill, overflow, or discharge regardless of size.
7. Manhole and all pipe testing (including the TV inspection) must be performed and passed prior to Final Field Acceptance by SAWS Construction Inspection Division, as per the SAWS Specifications For Water and Sanitary Sewer Construction.
8. All PVC pipe over 14 feet of cover shall be extra strength with minimum pipe stiffness of 115 psi.



## LOCATION MAP

### N.T.S.

OWNER/DEVELOPER:  
DHI COMMUNITIES  
1341 HORTON CIRCLE  
ARLINGTON, TEXAS 76011

**KFW**  
ENGINEERS + SURVEYING  
3421 Paesanos Pkwy, Suite 200, San Antonio, TX 78231  
Phone #: (210) 979-8444 • Fax #: (210) 979-8441  
TBPE Firm #: 9513 • TBPLS Firm #: 10122300



DSP PRESSURE ZONE: 930

DEVELOPER'S NAME: <u>DHI COMMUNITIES</u>			
DEVELOPER'S ADDRESS: <u>1341 HORTON CIRCLE</u>			
CITY: <u>ARLINGTON</u>	STATE: <u>TEXAS</u>	ZIP: <u>76011</u>	
PHONE#: <u>210-496-2668</u>	FAX#: <u>N/A</u>	TOTAL ACREAGE: <u>4.07 Ac.</u>	
SAWS BLOCK MAP#: <u>116550_116552</u>		TOTAL EDU'S: <u>138</u>	
TOTAL LINEAR FOOTAGE OF PIPE: <u>1,343.26 L.F. ~ 12" PVC PIPE, 80.34 L.F. ~ 8" DI PIPE</u>			
TOTAL LINEAR FOOTAGE OF PIPE: <u>80.34 L.F. ~ 2" IRB PIPE</u>			
NUMBER OF LOTS: <u>1</u>	SAWS JOB#: <u>23-1064</u>	PLAT NO.: <u>23-11800061</u>	

GENERAL CONSTRUCTION  
PERMIT S.A.W.S. JOB# 23-1064

PLAT NO. 23-11800061 SHEET 3.0



TRENCH EXCAVATION SAFETY PROTECTION

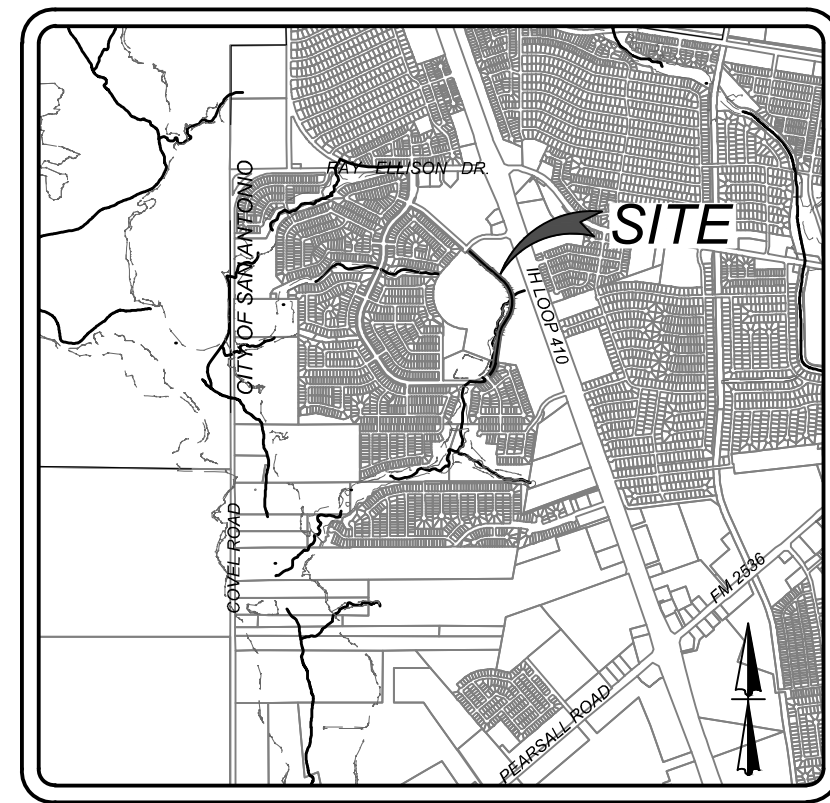
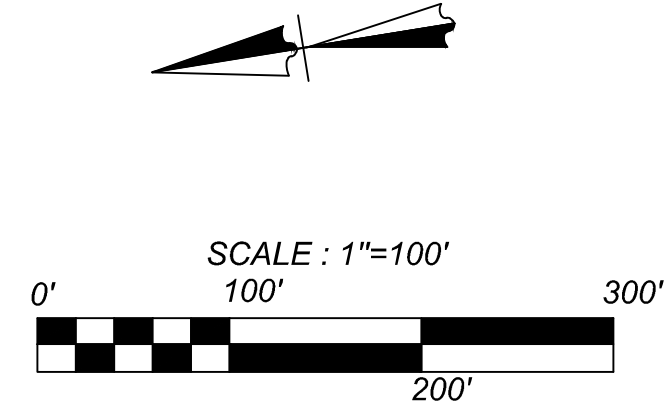
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

CAUTION:

THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

LEGEND

PROPOSED WATER MAIN	= 8" W
PROPOSED WATER SERVICE & METER BOX	= S
PROPOSED WATER SERVICE & METER BOX WITH PRESSURE REDUCING VALVE	= S *
PROPOSED WATER 3/4" IRRIGATION SERVICE & 5/8" METER BOX	= 3/4" IRR
PROPOSED FIRE HYDRANT	= 8" SS
PROPOSED SANITARY SEWER MAIN	= 8" SS
PROPOSED SANITARY SEWER MANHOLE	= 8" SS
PROPOSED SANITARY SEWER LATERAL	= 8" SS
PROPOSED WATER VALVE	= 8" W
PROPOSED SANITARY SEWER LATERAL WITH VERTICAL STACK	= 8" SS
ELECTRIC, GAS, TELE. & CABLE TV EASEMENT	= E.G.T.V.E.
VEHICULAR NON-ACCESS EASEMENT	= V.N.A.E.
EXISTING WATER MAIN	= -E 8" W-
EXISTING FIRE HYDRANT	= 8" SS
EXISTING WATER VALVE	= 8" W
EXISTING SANITARY SEWER MAIN	= -E 8" SS-
EXISTING SANITARY SEWER MANHOLE	= 8" SS
EXISTING STREETLIGHT (UG, 250 WATT)	= 250 W



LOCATION MAP  
N.T.S.

DSP PRESSURE ZONE: 930

DEVELOPER'S NAME: DHI COMMUNITIES	
DEVELOPER'S ADDRESS: 1341 HORTON CIRCLE	
CITY: ARLINGTON	STATE: TEXAS ZIP: 76011
PHONE#: 210-496-2688	FAX#: N/A TOTAL ACREAGE: 4.07 Ac.
SAWS BLOCK MAP#: 116550, 116552	TOTAL EDU'S: 138
1,348.89 L.F. ~ 12" PVC PIPE, 79.25 L.F. ~ 8" DI PIPE	
TOTAL LINEAR FOOTAGE OF PIPE: 78.70 L.F. ~ 2" IRR PIPE	
NUMBER OF LOTS: 1	SAWS JOB#: 23-1064 PLAT NO.: 23-11800061

GENERAL CONSTRUCTION  
PERMIT S.A.W.S. JOB# 23-1064



PROPOSED JUNO LANDING EXTENSION  
SAN ANTONIO, TEXAS 78252  
OVERALL WATER IMPROVEMENT PLAN

PLAT NO.  
23-11800061  
JOB NO.: 779-02-01  
DATE: July 2023  
DRAWN: AB CHECKED: RJ  
SHEET NUMBER:

3.1
















1/29/24 ISSUE FOR CONSTRUCTION

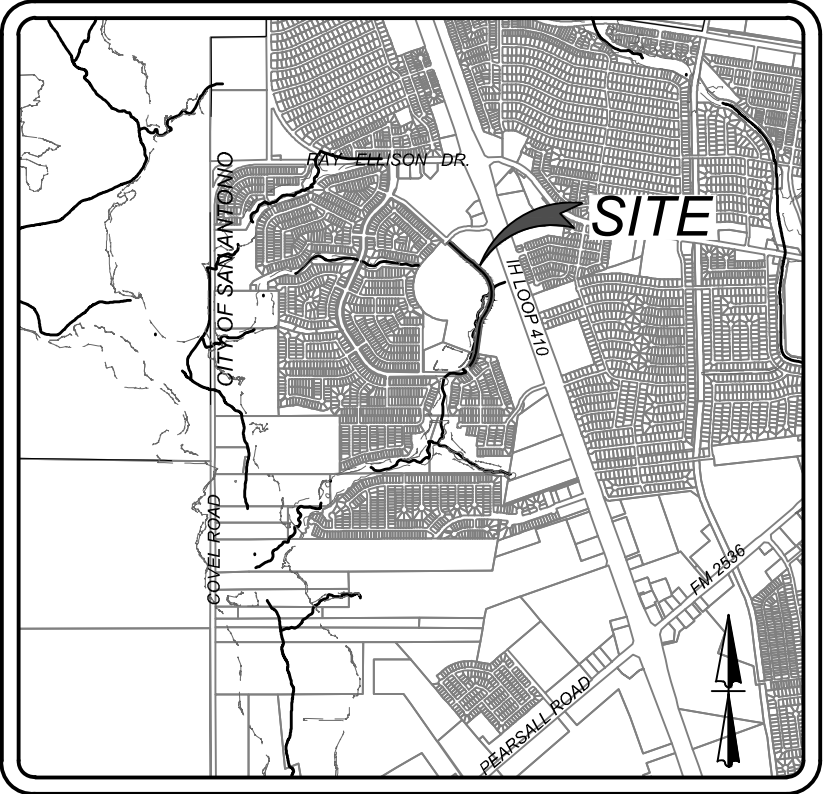
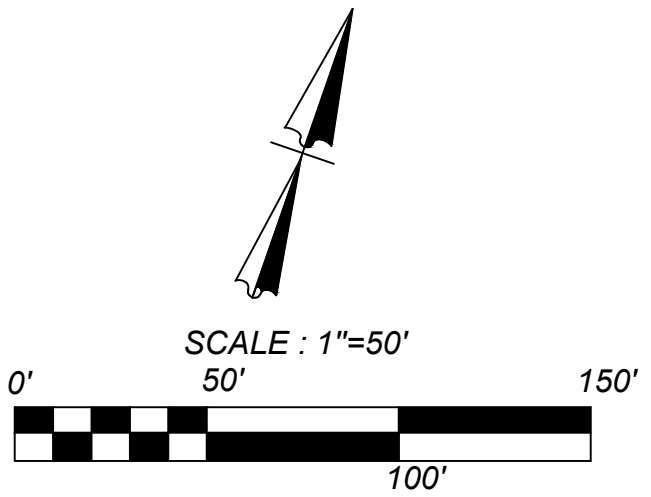






### LEGEND

- |   |   |   |
|---|---|---|
| PROPOSED WATER MAIN   | = | — 5"W —   |
| PROPOSED WATER SERVICE & METER BOX                              | = |  —   |
| PROPOSED WATER SERVICE & METER BOX WITH PRESSURE REDUCING VALVE | = |  — *   |
| PROPOSED WATER 3/4" IRRIGATION SERVICE & 5/8" METER BOX         | = |  —  |
| PROPOSED FIRE HYDRANT   | = |    |
| PROPOSED SANITARY SEWER MAIN                                    | = | — 8"SS —   |
| PROPOSED SANITARY SEWER MANHOLE                                 | = | —  —   |
| PROPOSED SANITARY SEWER LATERAL                                 | = |    |
| PROPOSED WATER VALVE  | = |    |
| PROPOSED SANITARY SEWER LATERAL WITH VERTICAL STACK             | = |    |
| ELECTRIC, GAS, TELE., & CABLE TV EASEMENT                       | = | E.G.T.V.E.  |
| VEHICULAR NON-ACCESS EASEMENT                                   | = | V.N.A.E.  |
| EXISTING WATER MAIN   | = | — — — 8"W — — —   |
| EXISTING FIRE HYDRANT   | = |    |
| EXISTING WATER VALVE  | = |    |
| EXISTING SANITARY SEWER MAIN                                    | = | — 8"SS —   |
| EXISTING SANITARY SEWER MANHOLE                                 | = | —  —   |
| EXISTING STREETLIGHT (UG, 250 WATT)                             | = |    |



LOCATION MAP  
N.T.S.

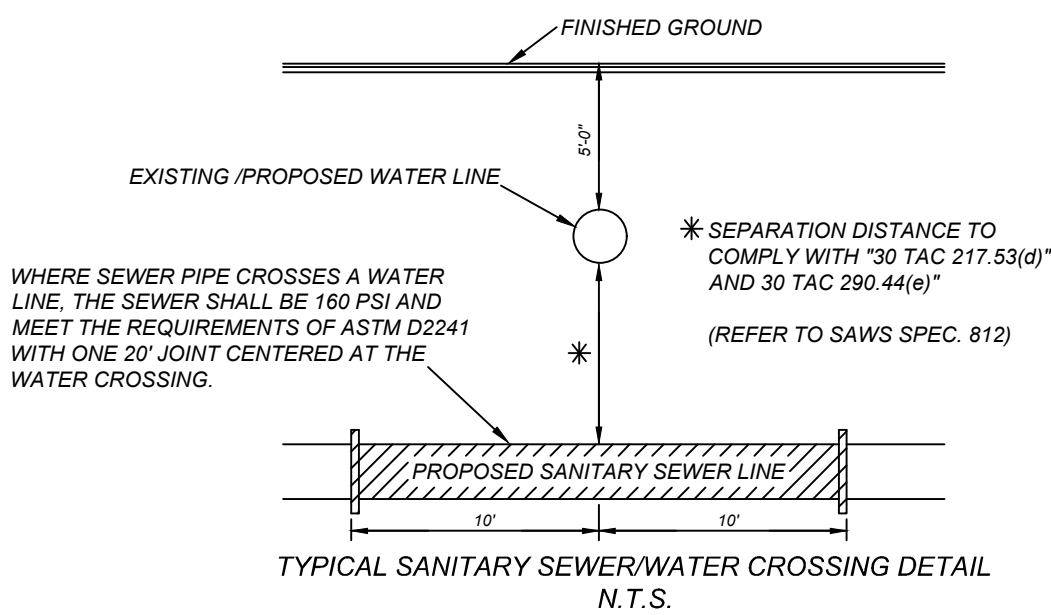
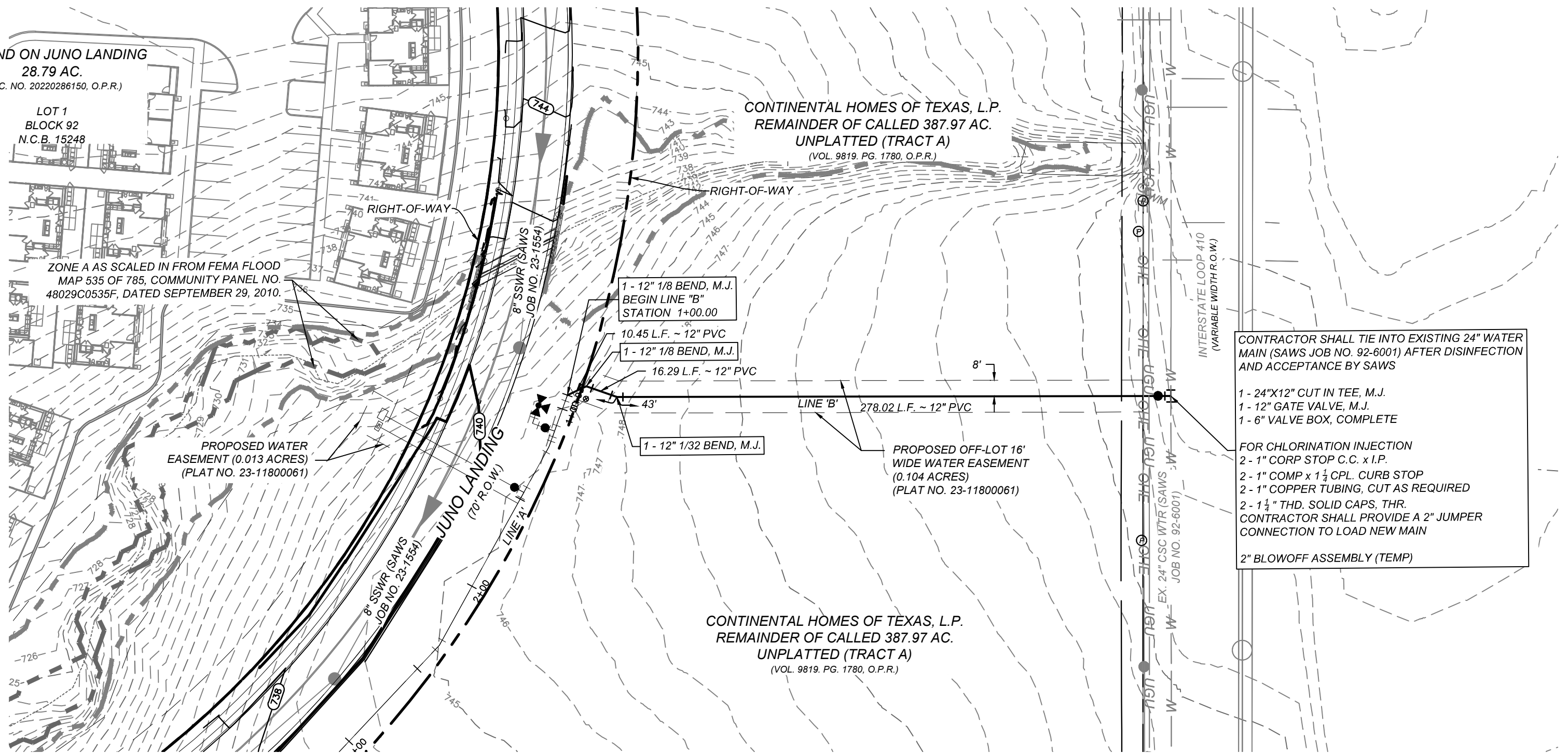
**CAUTION!!:** THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DISTRIBUTION, GAS, IRRIGATION, AND ALL OTHER UTILITIES. ANY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

### TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION STEPS WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL BE IN ACCORDANCE WITH THE OSHA STANDARDS GOVERNING TRENCH EXCAVATION, WITH A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION,

**COMPACTION NOTE:**

COMPACTION NOTE (ITEM 804): THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE COMPACTION REQUIREMENTS ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.



DSP PRESSURE ZONE: 930

DEVELOPER'S NAME: DHI COMMUNITIES

DEVELOPER'S ADDRESS: 1341 HORTON CIRCLE

CITY: ARLINGTON STATE: TEXAS ZIP: 76011

PHONE#: 210-496-2668 FAX#: N/A TOTAL ACREAGE: 4.07 Ac.

SAWS BLOCK MAP#: 116550 116552 TOTAL EDUS: 138

TOTAL LINEAR FOOTAGE OF PIPE: 1,348.89 LF - 12" PVC PIPE, 79.25 LF - 8" DI PIPE  
78.70 LF - 2" IRR PIPE

NUMBER OF LOTS: 1 SAWS JOB#: 23-1064 PLAT NO.: 23-118000601

GENERAL CONSTRUCTION  
PERMIT S.A.W.S. JOB# 23-1064

PROPOSED JUNO LANDING EXTENSION  
SAN ANTONIO, TEXAS 78252  
WATER MAIN LINE B STA 1+00 - END

PLAT NO.  
23-11800061

JOB NO.: 779-02-01

DATE: July 2023  
DRAWN: AB CHECKED: B.

**SHEET NUMBER:**

### 3.3