

SOLICITATION ADDENDUM NO. 2

Project Title	Date Prepared	Project No.
SJCCD Maritime Expansion Fire Training Center	December 4, 2019	CSP 20-12

Respondent for this solicitation shall acknowledge receipt of this addendum. This document shall be submitted with all other required documents.

QUESTIONS & ANSWERS:

• All submitted questions have been answered under the Questions tab in the e-bidding website (https://sanjac.ionwave.net).

UPDATES:

- 1. Changes have been made and are captured in the IBI Addendum No. 02 issued 2019-12-4 attached.
- 2. The addition of Section 01 89 13 Excavation Procedures is also attached.

ATTACHMENTS:

IBI Addendum No. 2 issued 2019-12-4 01 89 13 Excavation Procedures

Acknowledgement of Addendum No. 2 by the undersigned:					
Company Name (Bidder / Offeror):	Date:				
Signed by:					
Name (Type or Print):	Title:				



TEXAS-IBI GROUP

455 East Medical Center Blvd – Suite 500 P.O. Box 891209, Houston TX 77289 USA tel 281 286 6605 fax 281 286 9606 ibigrouptexas.com

ADDENDUM NO. 02

Date of Issuance: December 4, 2019

Project: Maritime Expansion Fire Training Center

San Jacinto Community College District

Issued by: Texas-IBI Group

P. O. Box 891209 Houston, TX 77289 281-286-6605

Texas-IBI Group

Project No.: 201936 / SJC #CSP 20-12

Prepared for: Prospective Proposers

PART A: NOTICE TO PROPOSERS:

- Receipt of this Addendum shall be acknowledged on the Proposal Form. Failure
 to do so may subject Proposers to disqualification. Each proposer shall make
 necessary adjustments and submit his proposal with full knowledge of all
 modifications, clarification, and supplemental data included therein.
- 2. This Addendum forms part of the Contract Documents and shall be incorporated integrally therewith. Where provisions of the following supplemental data differ from those of previously issued documents, this Addendum shall govern.
- 3. The following Contract Documents have been issued to date delineating the Work (Project).

Contract Documents November 12, 2019 Addendum No. 01 November 26, 2019

4. This Addendum consists of: four (4) 8-1/2x11 written pages, and nine (9) full-size sheets / drawings reissued as described in PARTS E and F below as prepared by CFS and IBI Group. Total pages: **13**

PART B: CHANGES TO PRIOR ADDENDUM

"Any changes to prior issued addendum materials are listed here."

5. None

PART C: CHANGES TO THE PROJECT MANUAL

- 1. Section 01 32 33 Photographic Documentation
 - a. Page 14, Delete item C. For new construction, arrange for aerial photographs of entire job site on not less than a monthly basis.



2. Section 03 15 19 Below Slab Vapor Membrane

Page 3, under Part 2 – Products, 2.1 MANUFACTURERS:
 Add the following, 07 Inteplast Group; "Barrier-Bac, VB-350" with their XF Seam Tape is approved.

3. Section 07 11 13 Bituminous Dampproofing

Page 1, under **Part – General, 1.1 A. Scope of Work**; revise sentence to read as "Dampproofing shall be applied on metal wall siding backup wherever a screw penetration occurs."

4. Section 11 96 01 Overhead Trolley Crane

a. Page 1, under **Part 1 – General**, **1.1 A. Scope of Work**: Add item no. 03, Any reference to "Bridge Crane" or "Bridge" shall be deleted. The scope of work has only a trolley and hoist system and no bridge crane system.

5. Section 13 34 19 Metal Building Systems

- a. Page 8, under E. Panels: Delete item 04.
- b. Page 10, under B., delete item 03
- c. Page 10, under C., delete item 03
- d. Page 10, under D., add item 05: Struts shall be bolted in place in lieu of welding.
- e. Page 10. under E., delete item 02
- f. Page 10, under F., item 06: change "Welded" to "Bolted if possible. If welding is required to meet all structural criteria, all welds must be painted with a heavy duty cold galvanizing solution."
- g. Page 10, under F., item 07: change "3½" to "4" minimum".
- h. Page 11, under B., item 01 change to read: Design is based on Whirlwind Type "Super Span", 22 gauge, exposed fastener wall panel."

PART D: CHANGES TO THE DRAWINGS

- 6. Sheet C1.00 General Notes
 - a. Remove Note 14 under GENERAL CONSTRUCTION NOTES FOR SITE WORK.
- 7. Sheet C1.02 Composite Site Plan
 - a. Portion of concrete walk is to be replaced and patched. This location can also be found on sheet C1.03.

8. Sheet C5.00 – Drainage, Drainage Area Map & utility Plan

 Keynote 1 revised to callout "RPZ Backflow preventor" (previously was Keynote 21). Keynote 21 was eliminated from the sheet.

9. Sheet C8.00 – Civil Details

Added model #TG-D-B-B-24-276 for detail no. 8 PREFABRICATED TRENCH SYSTEM MODEL TG". For the load rating, "H (HEAVY DUTY -H20) (END PIPE CONNECTION) OR EQUAL". Civil only specifies Loading, elevation, depth, width and pipe connection. Final model number to be determined by selection of options (Cover/Grate Style, Frame/Basin Style) see detail, by owner. Model # shown on detail is typical of an exterior/wet application. Final specification and requirements by vendor after exact model determined.

10. Sheet S1.00 – Fire Training Center Foundation Plan

 a. "48" Structural Fill" has replaced note "Compacted Subgrade or Structural fill per Geotech" on details A, B, and E.

11. Sheet A2.01 – 1st Floor, Mezzanine Floor Plans & Schedule

a. On detail 1, "CHAIN LINK FENCE AND GATE. RE: SPECS AND SCHEDULES" has been revised to (8'-0") CHAIN LINK FENCE AND GATE. RE: SPECS AND SCHEDULES.

12. Sheet A10.01 – Reflected Ceiling Plan

a. The model of the fan has changed from "POWERFOIL 8 SERIES" to "POWERFOIL x 3.0" and the weight has changed from WEIGHT: 135 LB" to "WEIGHT: 222 LBS" on the RCP legend.

PART E: RE-ISSUED SHEETS

13. Sheet C1.01 – Demolition Site Plan

- a. Portion of concrete to be removed next to the existing Maritime Center.
- b. Keynote 7 has been added to remove and relocate existing electrical box.

14. Sheet C1.03 – Renovation Site Plan

- a. Portion of concrete walk is to be replaced and patched.
- b. Construction fence to surround job site.
- c. Keynote 16 has been revised for the KFT to be provided and installed by owner.

15. Sheet C1.04 – Site Details

- a. Detail 4 has been revised
- b. Detail 12 has been revised to show the canopy over the bleachers.

16. <u>Sheet C2.04 – Existing Storm Sewer and SWQ Plan</u>

a. "FOR REFERENCE ONLY" placed over existing sheet to avoid any confusion as to scope of work with the Fire Trainer. This sheet from the Maritime Center project is showing the existing storm sewer infrastructure that the Fire Trainer scope of work will be tied into; and also shows the existing Storm Water Quality Interceptor for the site.

17. Sheet C6.00 - Grading & Paving Plan

a. Removed old Keynote 6 callout between the proposed metal building and the concrete pad as that ramp was removed in this area.

18. Sheet C9.00 – Existing Fire Apparatus Access Lane Plan

a. "FOR REFERENCE ONLY" placed over the existing sheet. Maritime Center project included the Fire Apparatus Access Lane Plan necessary for Harris County Fire Coder permitting reasons and to identify that there already is a Fire Access Lane previously installed and permitted by Harris County.

19. Sheet A6.00 – Wall Sections and Partitions

- a. The structure below the mezzanine has been revised to state "Hot Dipped Galvanized Steel".
- b. On detail 7, "SHEETING" has been removed from the detail.
- c. Detail 8, an enlarged wall section detail has been added to the sheet

TEXAS-IBI GROUP

ADDENDUM NO. 02 - December 04, 2019

20. Sheet A7.01 – Exterior Elevations

- a. On details, 2 and 4 the louvers heights were adjusted.
- b. On details, 2 and 4 the downspout is revised to match detail 7/6.00.
- c. An Additional louver has been added on detail 3.

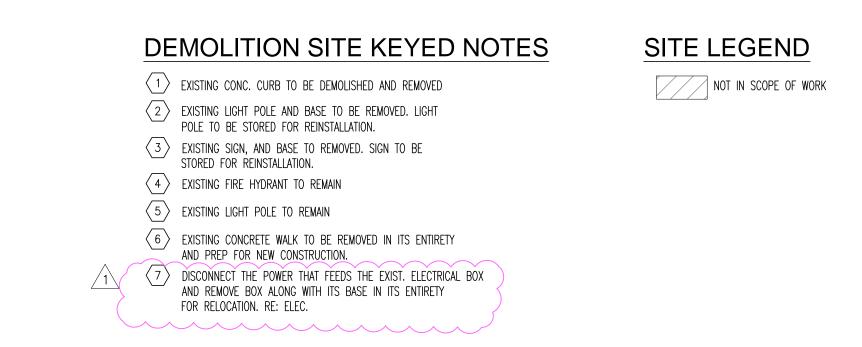
21. <u>Sheet A9.01 – Frame & Door Elevations, Frame Details</u>

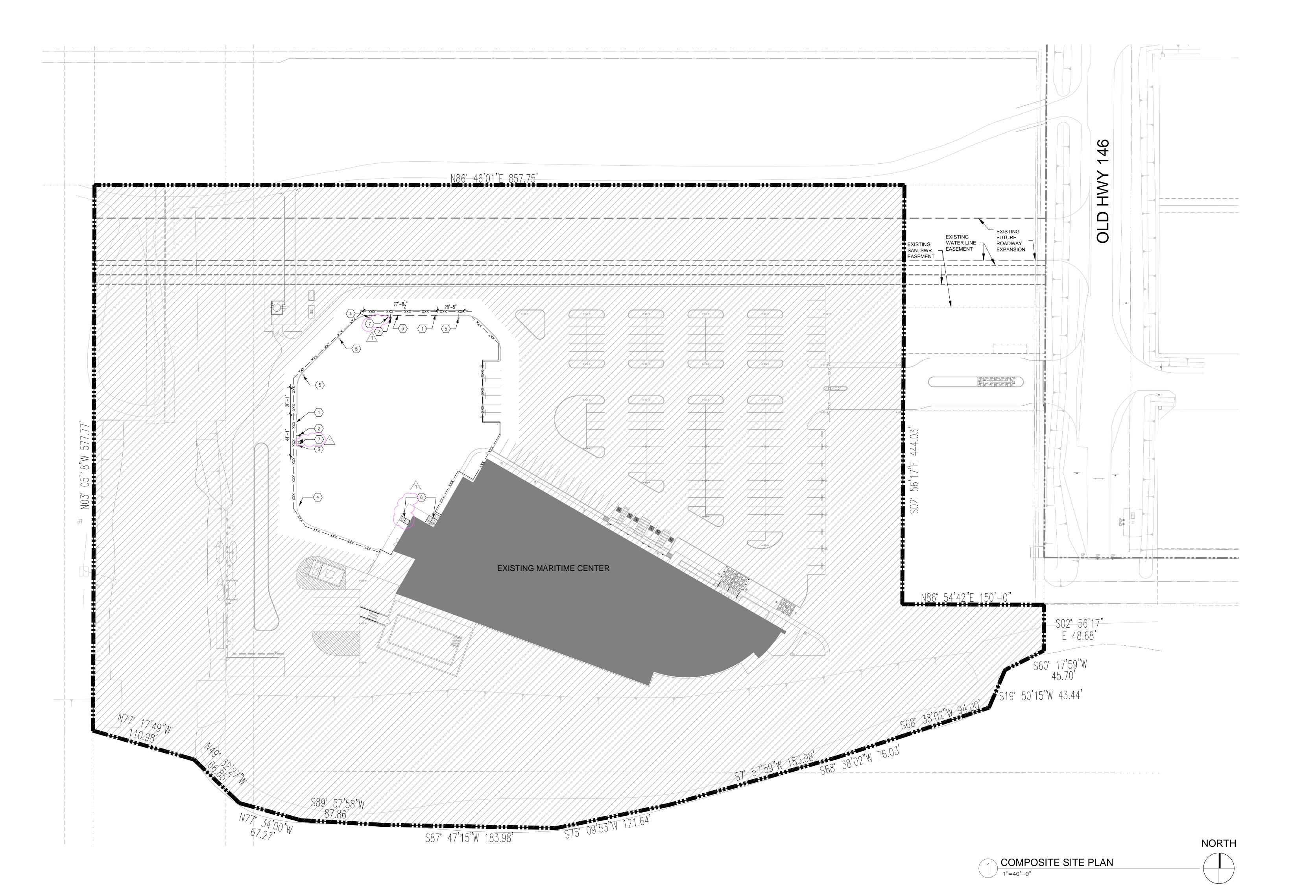
- a. The schedules for 1-E and V have been revised
- b. The note "Hollow Metal" or "H.M" have been removed from Details 1, and 2 and have been replaced with "Fiber Glass or "F.B". On detail 4 H.M

PART F: NEW ISSUED SHEETS

22. <u>None</u>

END OF ADDENDUM No. 02





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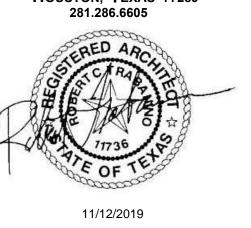
CONSULTANTS

TIME EXPANSION FIRE



TEXAS-IBI GROUP, INC.

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PROJECT NO. 201936
DATE: 11/12/2019
DRAWN CKA
CHECKED RCA

DATE ISSUE

11/12/2019 FOR CONSTRUCTION
12/4/2019 ADDENDUM #2

C1.01

DEMOLITION SITE PLAN

TYPICAL SITE PLAN NOTES:

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING SITE CONDITIONS, DIMENSION, UTILITIES, ETC. WHERE NEW CONSTRUCTION JOINS EXISTING CONDITIONS, THE EXISTING CONDITIONS SHALL CONTROL. ALL DISCREPANCIES SHALL BE SUBMITTED TO THE ARCHITECT FOR CONSIDERATION BEFORE PROCEEDING WITH THE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND MODIFYING EXISTING UTILITY LINES ABOVE AND BELOW GRADE DURING THE ENTIRE CONSTRUCTION PERIOD, INCLUDING ALL NECESSARY TIE-INS AND ELEVATION ADJUSTMENTS, RELOCATION OF ALL UTILITY POLES, LINES AND OTHER EXISTING SERVICES. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE WORK INCLUDING VERIFICATION AND COORDINATION WITH THE APPROPRIATE AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING UTILITIES IMMEDIATELY TO INSURE NO INTERRUPTION OF SERVICE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH APPROPRIATE AGENCIES ALL BURIED LINES THAT APPROACH THE CONSTRUCTION AREA.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, ACQUIREMENT OF ALL NECESSARY PERMITS, ETC. AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN WITH THE APPROPRIATE AGENCIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL VEGETATION, SHRUBS, TREES, ETC. INDICATED TO REMAIN FROM ALL CONSTRUCTION ACTIVITIES. DAMAGED LANDSCAPING SHALL BE REPLACED WITH LIKE MATERIALS AND SIZE(S) AT THE DIRECTION OF THE ARCHITECT.
- CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE CONSTRUCTION AREA. NO DISRUPTIVE WORK WILL BE PERMITTED INSIDE THE FACILITY DURING SCHOOL HOURS. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE CONSTRUCTION AREA CLEAN OF DEBRIS AND EXCESSIVE DUST. CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATELY CORRECTING ANY INTERRUPTED USE TO THE FACILITY AT NO COST TO THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY DAMAGE TO EXISTING FACILITY MATERIALS AT THE DIRECTION OF THE ARCHITECT AND AT NO COST TO THE OWNER.

- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL MEANS OF SECURITY INSIDE AND OUTSIDE REQUIRED AND APPROVED BY THE OWNER.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL MEANS OF ACCESSING THE CONSTRUCTION AREA REQUIRED AND APPROVED BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND RESTORATION OF THE EXISTING AREA(S) UPON COMPLETION OF THE CONSTRUCTION.
- 8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING UNDERGROUND STORM LINES DURING ALL CONSTRUCTION, INCLUDING NEW TIES-INS. CONTRACTOR SHALL REPAIR DAMAGE TO EXISTING SYSTEM (PIPE, GRATES, ETC.) IMMEDIATELY TO INSURE NO INTERRUPTION. CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT SEDIMENT INFILTRATION AND SHALL JET CLEAN ALL LINES AS NECESSARY UPON COMPLETION OF CONSTRUCTION.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFYING EXISTING SWALES AND/OR CREATING NEW TEMPORARY SWALES OR BERMS AS REQUIRED TO PROVIDE POSITIVE DRAINAGE AWAY FROM CONSTRUCTION AREA(S).
- 10. CONTRACTOR SHALL E RESPONSIBLE FOR PROVIDING THE FOLLOWING AMERICANS WITH DISABILITIES ACT (A.D.A.) AND TEXAS ACCESSIBILITIES STANDARDS (T.A.S.) ACCESSIBLE ROUTE REQUIREMENTS: *ACCESSIBLE ROUTE (PARKING LOT AND WALKS): SLOPE SHALL NOT EXCEED 5% (5/8"/1 FOOT) CROSS-SLOPE SHALL NOT EXCEED 2% (1/4"/1 FOOT) *ACCESSIBLE APPROACH TO EXTERIOR DOOR(S) IMMEDIATELY OUTSIDE OF DOOR AND FOR A DISTANCE OF 5'-0" MIN. SHALL NOT EXCEED A SLOPE OF 2% (1/4"/1 FOOT) MAXIMUM RISE AT THRESHOLD SHALL NOT EXCEED 1/2".
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING HYDROMULCH AT ALL LANDSCAPE AND PLANING AREA, ETC. DISTURBED DURING CONSTRUCTION AND AT ALL AREAS NOTED AS FILL AND GRADE, UNLESS NOTED OTHERWISE ON PLANS. PROVIDE TEMPORARY BARRICADE ALONG MAIN ACCESS PATHS TO BUILDING UNTIL SUCH TIME THE GRASS HAS STABILIZED THE FINISH GRADE.
- 13. CONTRACTOR SHALL PROVIDE EXPANSION JOINTS AT THE PROPERTY LINE AT
- 14. CONTRACTOR SHALL GRADE ALL LANDSCAPE ISLAND TO AVOID WATER PONDING INSIDE OF CURBS.
- 15. CONTRACTOR SHALL PROVIDE FILL AND SOLID SOD AT 5'-0" MIN. FROM ALL CONSTRUCTION AREAS UNLESS NOTED OTHERWISE.
- 16. CONTRACTOR SHALL REFER TO CIVIL DRAWINGS FOR ALL SITE GRADING AND SUB-SURFACE DRAINAGE SYSTEMS, MODIFICATIONS TO EXISTING SYSTEMS
- 17. CONTRACTOR SHALL REFER TO PAVING SCHEDULE FOR THICKNESS OF
- 18. ALL DIMENSIONS ARE TO EDGE OF WALK OR PAVING, INSIDE OF CURB, FACE OF BUILDING OF PROPERTY LINE, UNLESS NOTED OTHERWISE.
- 19. ALL SIDEWALKS TO HAVE 3" WIDE SMOOTH TROWELED PICTURE FRAME IN EACH SIDE OF EACH PANEL.

PAVING SCHEDULE					
NEW AREA	НАТСН	MATERIAL THICKNESS	SUBGRADE THICKNESS	REINFORCING	
HEAVY DUTY PARKING AREAS AND DRIVES		7" CONCRETE	8" SUBGRADE	#4 BARS @ 18" O.C. EACH WAY WITH DOWELS AT EJ 12" O.C. #6 BARS 18" LONG WITH 6" EMBEDMENT	
SIDEWALKS AND FLATWORK		4" CONCRETE		#3 BARS @ 15" O.C. — EACH WAY	

SITE KEYED NOTES

- 1) SIDEWALK EXPANSION JOINT, RE: 1/C1.04 (10) SIDEWALK AT DOOR, RE: 8/C1.04 (2) SIDEWALK CONTROL JOINT, RE: 2/C1.04
- EXISTING TO NEW WALK, RE: 3/C1.04
- DRIVE APPROACH, RE: 4/C1.04 CURB PAVING, RE: 5/C1.04
- FIXED BOLLARD, RE: 6/C1.04 LIGHT POLE, RE: 13/C1.04
- AREA DRAIN/INLET, RE: 7/C1.04 VERIFY LOCÁTIONS WITH CIVIL DWGS. (9) NEW PRE-ENGINEERED SHADE STRUCTURE
- OVER BLEACHERS
- 11) SIDEWALK AT BUILDING, RE: 9/C1.04 (12) BLEACHERS, RE: 12/C1.04 AND SPECS. (13) FIRE HYDRANT, RE: CIVIL
- (14) DOWNSPOUT BOOTS RE: 10/C1.04 15) REPLACED SIGNAGE RE: 13/C1.04
- (16) KFT TRAINER, TO BE PROVIDED AND INSTALLED BY OWNER. LOCATION ON PAD TO BE CONFIRMED BY OWNER. $\angle 1$ CONTRACTOR TO COORDINATE FINAL LOCATION WITH UTILITIES.

AT THE END OF THE JOB.

(17) CURB RAMP RE: 14/C1.04 (18) CONSTRUCTION FENCE, THAT WILL COME DOWN

SITE LEGEND NOT IN SCOPE OF WORK

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IRE ARITIME EXPANSI TRAINING CEN

TEXAS-IBIGROUP, INC.

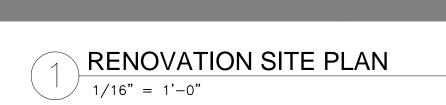
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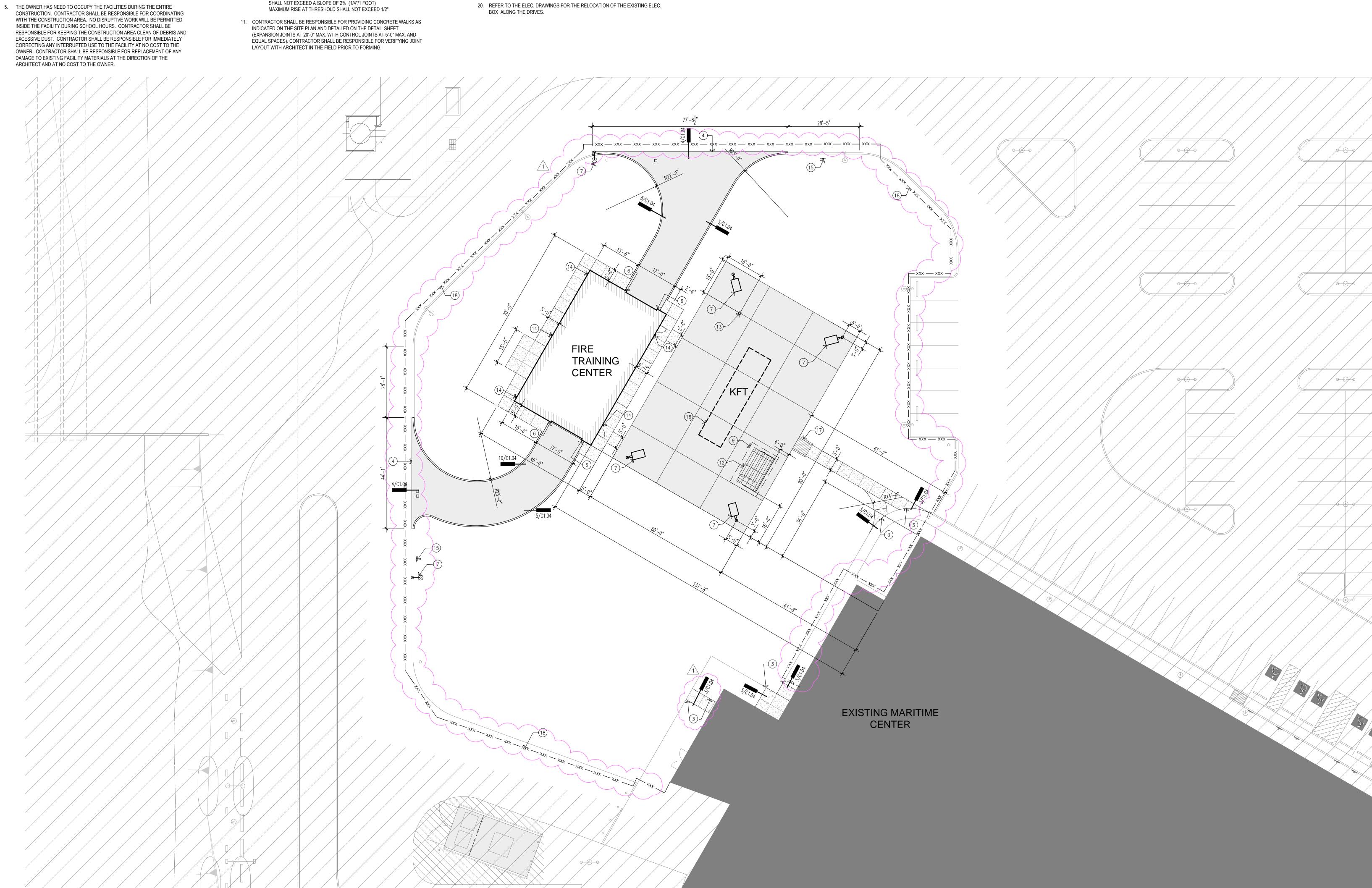


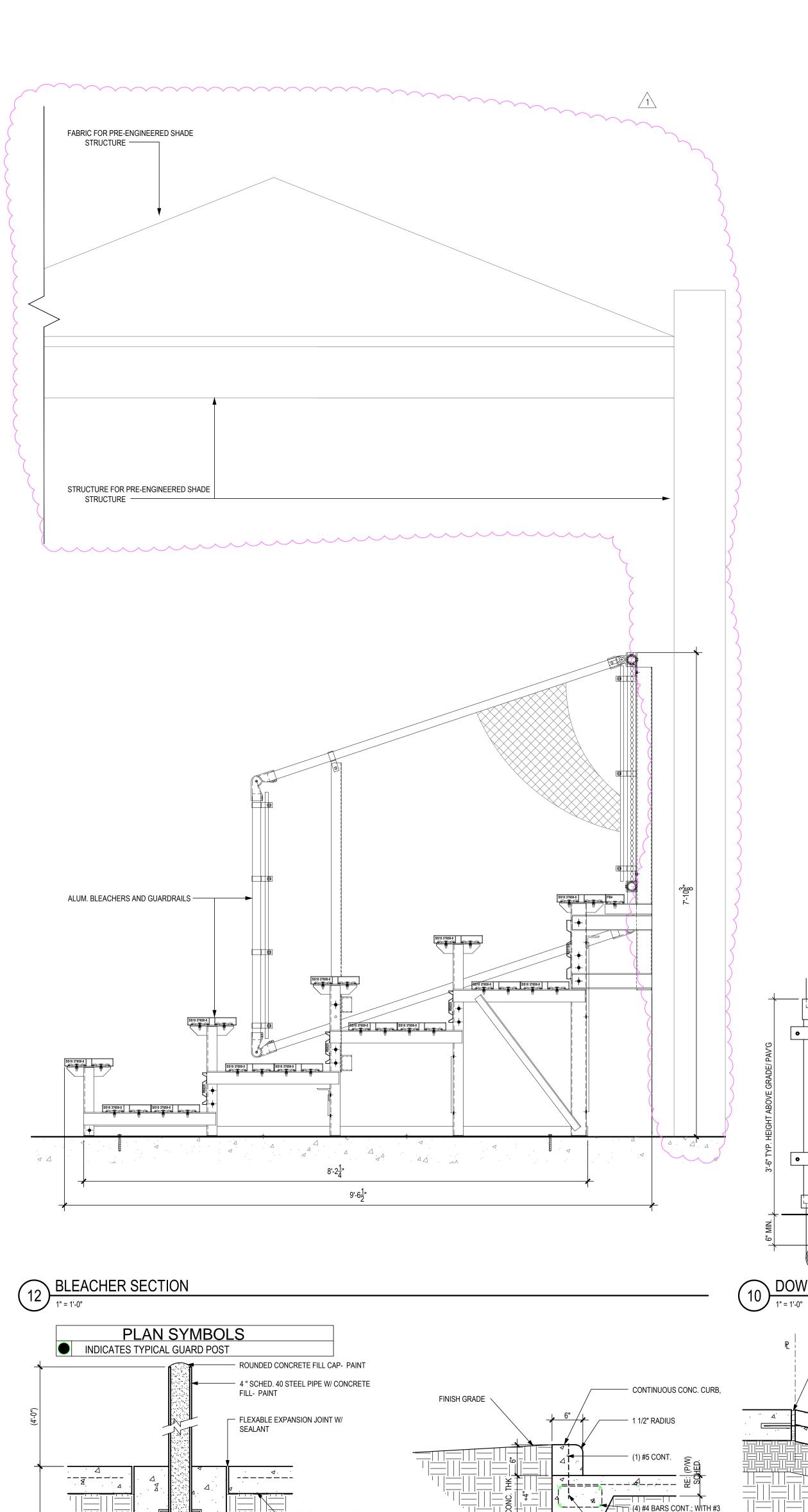
11/12/2019 CKA CHECKED

FOR CONSTRUCTION ADDENDUM #2

RENOVATION SITE PLAN







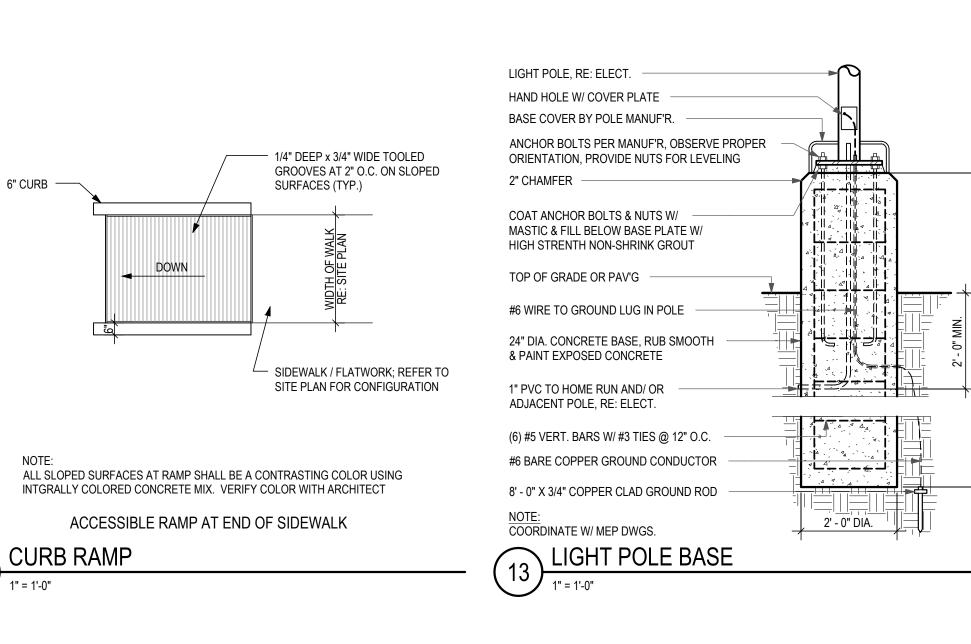
CONCRETE PAVING-

(6) 4"x1/2" Ø NELSON STUDS

NOTE: ALL COMPONENTS HOT

DIP GALVANIZED AFTER FABRICATION

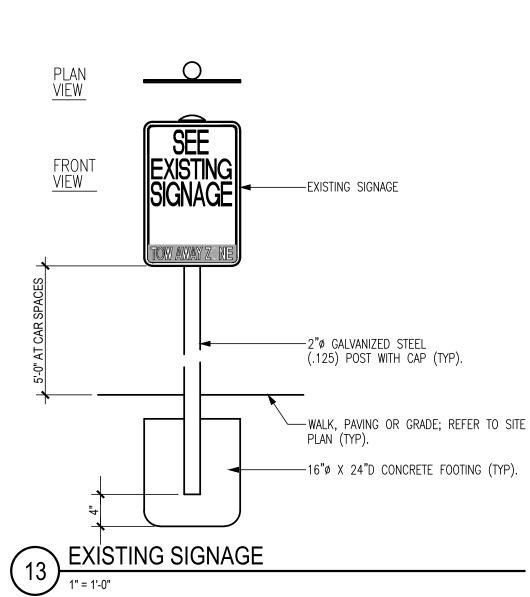
RE: PAVING SCHEDULE

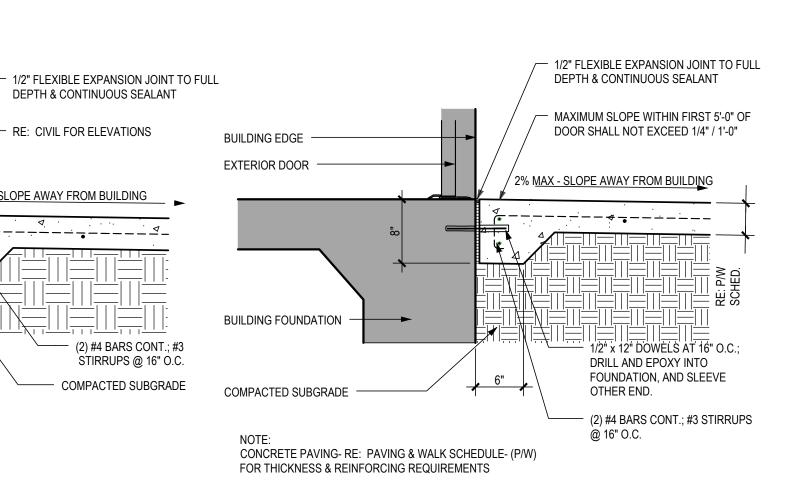


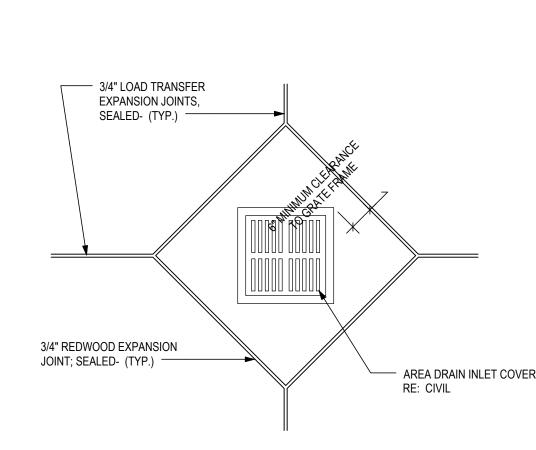
DEPTH & CONTINUOUS SEALANT

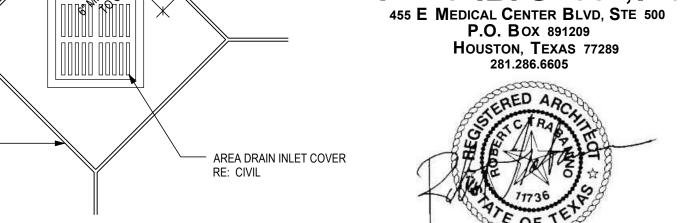
RE: CIVIL FOR ELEVATIONS

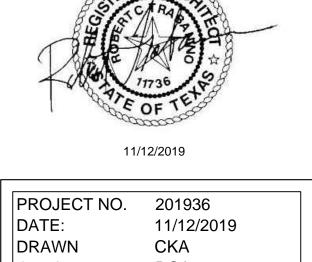
SLOPE AWAY FROM BUILDING











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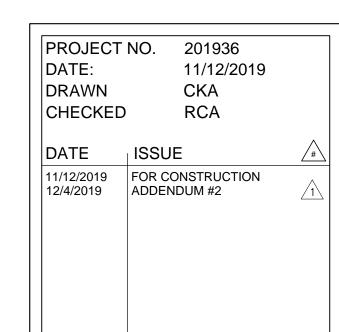
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CSF Consulting LP

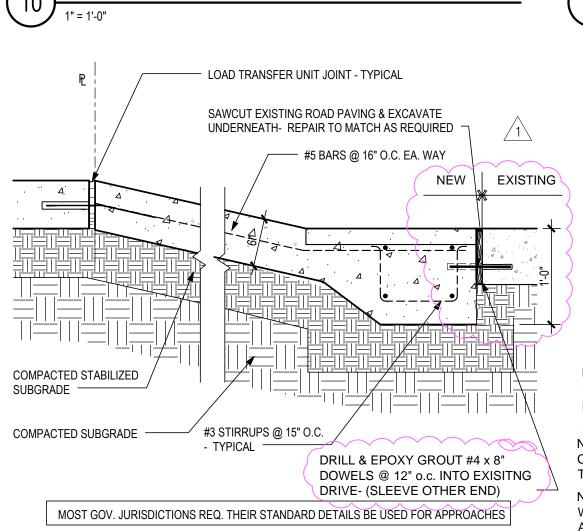
ANSI

RITIME EXP

738 Highway 6 South Suite 615



SITE DETAILS



APPROACH APRON

STIRRUPS AT 18" O.C.

- #3 DOWELS AT 24" O.C.

NOTE: CONCRETE PAVING, RE: PAVING AND WALK SCHEDULE (P/W) FOR THICKNESS AND

REINFORCING REQUIREMENTS.

CURB PAVING

PRE-FIN. MTL. DOWNSPOUT

GALV. STL. RECEPTOR, PAINT TO MATCH

BUILDING EDGE -

BUILDING FOUNDATION —

THIS CONDITION DOES NOT APPLY AT EXTERIOR DOORS

CONCRETE PAVING- RE: PAVING & WALK SCHEDULE- (P/W) FOR THICKNESS & REINFORCING REQUIREMENTS

DOWNSPOUT, VERIFY EXACT SIZE

ANCHOR TO FACADE AS NECESSARY

CLEAN-OUT W/ REMOVABLE COVER

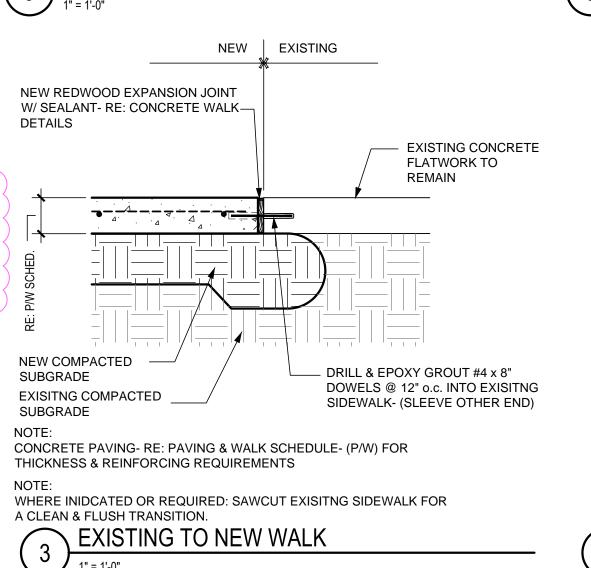
4"X6" GALV. STL. TUBE, PAINT TO MATCH DOWNSPOUT

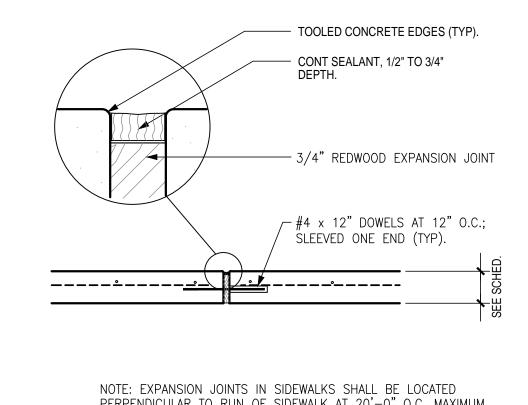
RE: EXTERIOR ELEVATIONS &

CIVIL DWG'S FOR LOCATIONS

FINISH GRADE/ FLATWORK, RE: CIVIL

STORM LINE CONNECTION, RE: CIVIL





PERPENDICULAR TO RUN OF SIDEWALK AT 20'-0" O.C. MAXIMUM. REFER TO SITE PLAN FOR OTHER LOCATIONS. COORDINATE WITH ARCHITECT PRIOR TO INSTALLATION.

2 CONCRETE WALK EXPANSION JT.

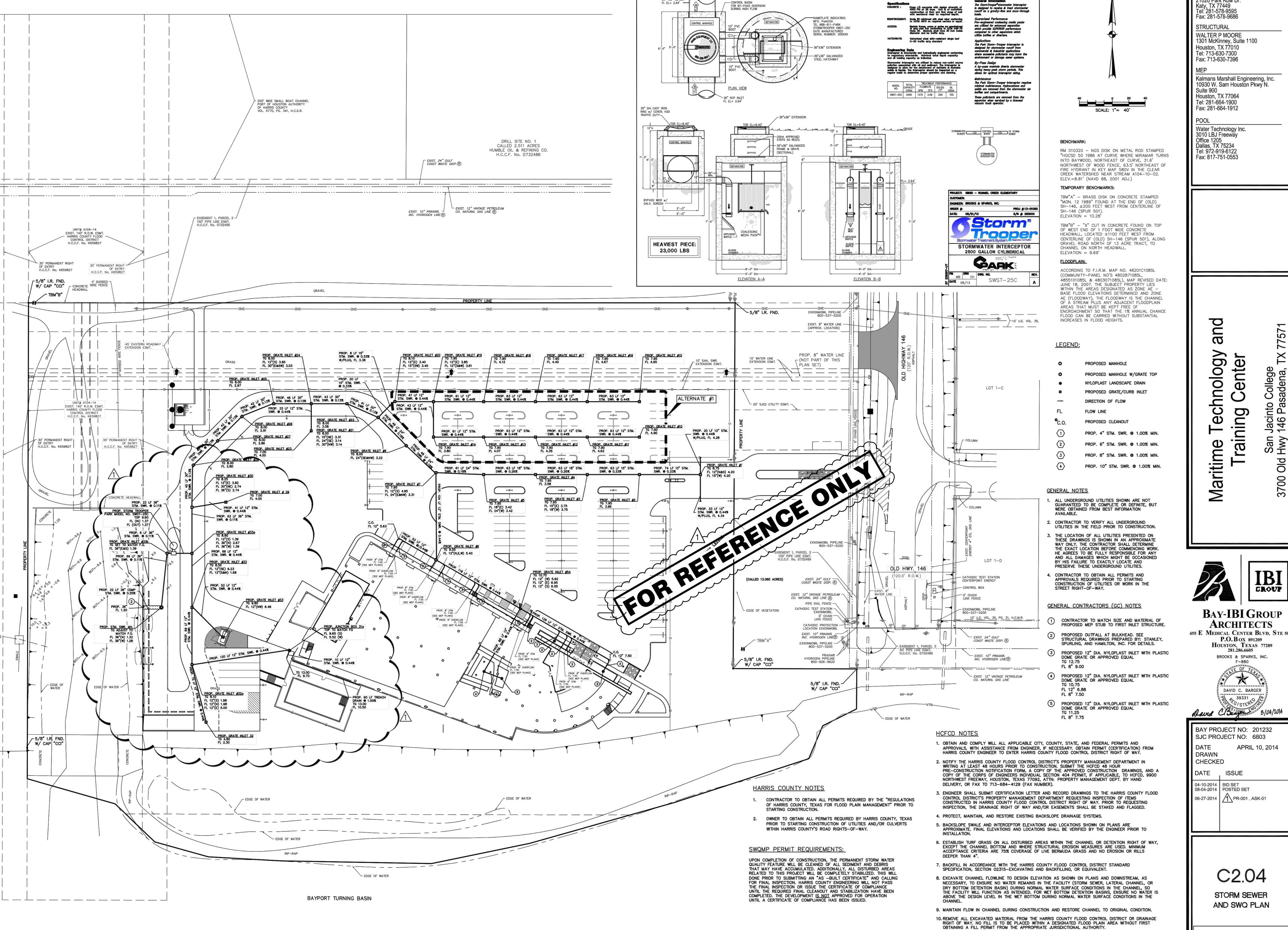
- PREPARED SUBGRADE NOTE: CONTROL JOINTS AT SIDEWALKS SHALL BE PERPENDICULAR TO THE RUN OF THE SIDEWALK AT 5'-0" O.C. MAXIMUM, EVENLY SPACED BETWEEN EXPANSION JOINTS. REFER TO SITE PLAN FOR OTHER LOCATIONS. COORDINATE WITH ARCHITECT PRIOR TO INSTALLATION.

CONCRETE WALK CONTROL JT.

/--- RE: PAVING & WALK SCHED. FOR

— TOOLED JOINT 1/4 THE DEPTH OF CONCRETE (1/2" MIN.)

REINFORCING.



CONSULTANTS Brooks and Sparks, Inc. 21020 Park Row Dr. Kalmans Marshall Engineering, Inc. 10930 W. Sam Houston Pkwy N

CONSULTANTS

CIVIL & STRUCTURAL

CIVIL • STRUCTURAL • FORENSIC

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TBPE FIRM NO. F-4395 CSF PROJ: 4007

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BAY-IBI GROUP **ARCHITECTS** 455 E MEDICAL CENTER BLVD, STE 500

BROOKS & SPARKS, INC. David CB 8/04/2014

BAY PROJECT NO: 201232 SJC PROJECT NO: 6803 APRIL 10, 2014

11/12/2019 FOR CONSTRUCTION

PROJECT NO.

DRAWN

CHECKED

TEXAS-IBI GROUP, INC.

455 E MEDICAL CENTER BLVD, STE 500

P.O. Box 891209

HOUSTON, TEXAS 77289

201936

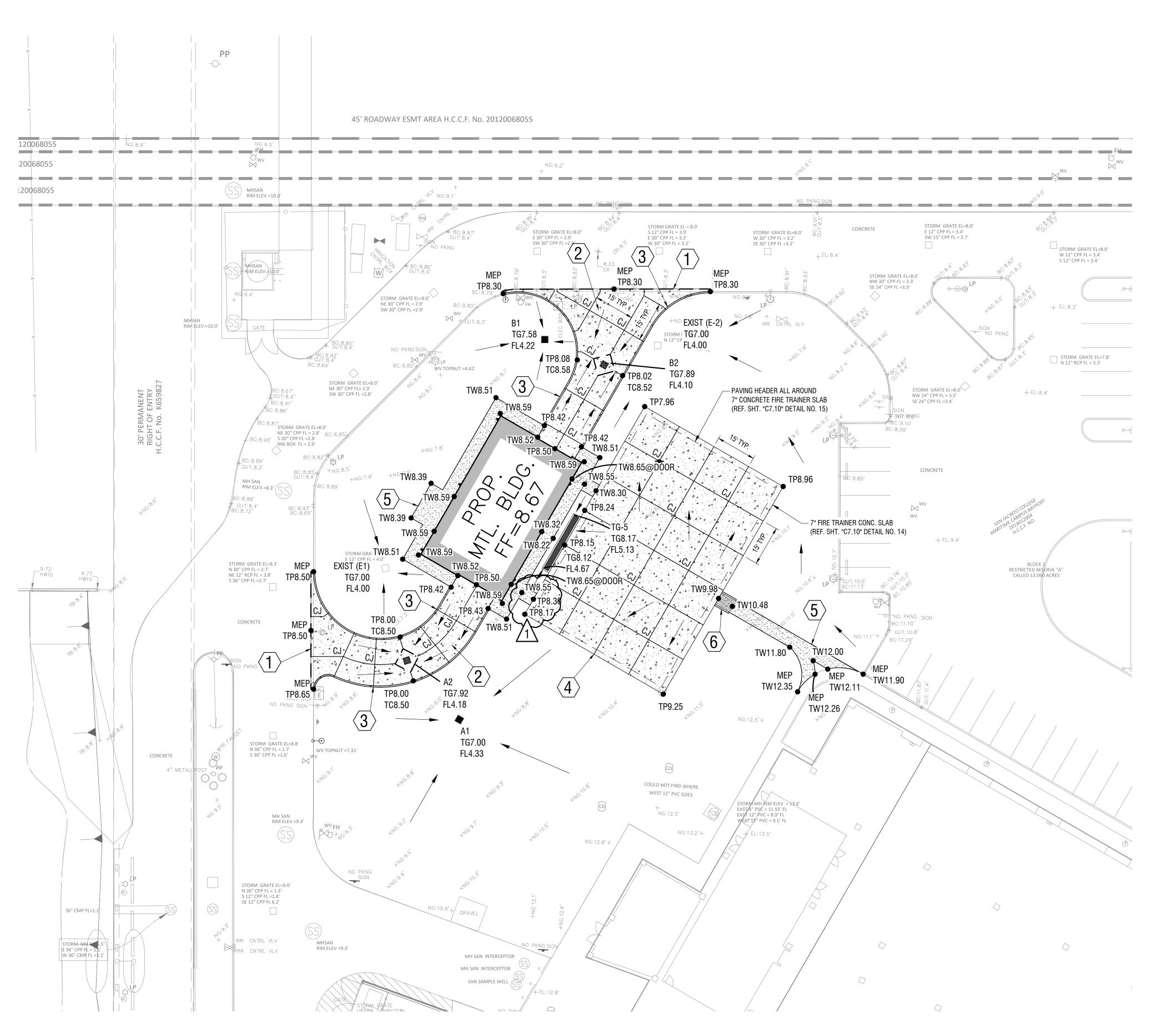
SJM

11/12/2019

281.286.6605

EXISTING STORM SEWER AND **SWQ PLAN**

SHEET 5 OF 12



PAVING CONSTRUCTION JOINTS

1. CONTRACTOR TO PLAN EXACT LOCATION INCLUDING TIMING OF CONSTRUCTION **JOINT(S) PRIOR TO START OF CONSTRUCTION.** 2. CONSTRUCTION JOINTS (NOT SHOWN IN PLAN) SHALL BE REQUIRED AND PLACED IN A STRATEGIC LOCATION AT THE END OF THE DAYS WORK AND WHERE CONCRETE PLACEMENT IS STOPPED OR INTERRUPTED FOR A PERIOD

SUCH THAT THE PREVIOUSLY PLACED CONCRETE HAS SET AND HARDENED.

- 3. PLACEMENT OF REINFORCEMENT THROUGH A CONSTRUCTION JOINT MAY BE NECESSARY TO ACHIEVE BOND AND PROPER LOAD TRANSFER AND RECOMMENDED WHERE PAVEMENT WILL CARRY HIGHER TRAFFIC LEVELS AND WHERE HEAVY TRUCK TRAFFIC IS EXPECTED. IF THE DESIGN THICKNESS IS LESS THAN 8-INCHES, DOWELS ARE NOT NEEDED. IF THE DESIGN THICKNESS IS 8-INCHES OR GREATER, LARGELY DICTATED BY TRUCK TRAFFIC, THEN DOWELS ARE OFTEN REQUIRED TO REDUCE SLAB PUMPING AND FAULTING. (ACI 325.12R-01, SEC. 4.1.1.2 DOWELED JOINTS). SIZE OF DOWELS SHOULD FOLLOW RECOMMENDATIONS ACCORDING TO PAVEMENT THICKNESS AS OUTLINED IN
- **SECTION. 4.1.1.2.** 4. CONSTRUCTION JOINTS SHALL BE KEYED ON THE TWO EDGES OF THE SLAB TO PROVIDE TRANSFER OF LOADS OR TO HELP PREVENT CURLING OR WARPING OF THE TWO ADJACENT EDGES. GALVANIZED METAL KEYS ARE SOMETIMES USED, HOWEVER, A BEVELED 1 INCH BY 2 INCH STRIP, NAILED TO BULKHEADS OR FORM BOARDS, CAN BE USED IN SLABS THAT ARE AT LEAST 5 INCHES THICK TO FORM A KEY WHICH WILL RESIST VERTICAL LOADS AND MOVEMENTS. METAL DOWELS SHOULD BE USED IN SLABS OR PAVEMENTS THAT WILL CARRY HEAVY LOADS AND/OR HIGH/HEAVY TRAFFIC. DOWELS MUST BE CAREFULLY LINED UP AND PARALLEL OR THEY MAY INDUCE RESTRAINT AND CAUSE RANDOM
- CRACKING AT THE END OF THE DOWEL. 5. REFERENCE ACI 325.12R-02 SEC. 4.2.2 TRANSVERSE CONSTRUCTION JOINTS (GUIDE FOR DESIGN OF JOINTED CONCRETE PAVEMENTS FOR STREETS AND
- LOCAL ROADS) 6. REFERENCE ACI 330R-7 SEC. 2.7.2 CONSTRUCTION JOINTS

ACI 325.12R-02.

- (GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS). 7. PROVIDE EXPANSION JOINTS / ISOLATION JOINTS WHERE APPLICABLE BETWEEN SLABS, COLUMNS, WALLS, FOOTINGS AND AROUND FIXED
- OBJECTS/STRUCTURES SUCH AS BUILDING(S), INLETS, LIGHT POLES AND AT JUNCTIONS OF DRIVEWAYS WITH WALKS, CURBS OR OTHER OBSTRUCTIONS. DETAILS AROUND INLET STRUCTURES WILL AS REMAIN AS SHOWN. (REFERENCE ACI 325.12R-02, APPENDIX C - JOINTING DETAILS FOR PAVEMENTS AND APPURTENANCES).
- 8. PROVIDE CONTRACTION JOINTS AND JOINT FILLING MATERIALS AS SHOWN ON PLANS AND/OR OUTLINED IN SPECIFICATIONS.
- 9. ALL JOINT RECOMMENDATIONS, SPECIFICATIONS AND METHODS FOR PROPER JOINTING SHALL COMPLY WITH LATEST REVISION OF "GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS" ACI 330R-01, AND "GUIDE FOR DESIGN OF JOINTED CONCRETE PAVEMENTS FOR STREETS AND LOCAL ROADS"



GRADING & PAVING PLAN

FLOODPLAIN INFORMATION

THIS TRACT LIES IN FLOOD ZONE(S); FLOODWAY ZONE AE, ZONE AE, ZONE VE, AS SHOWN ON FLOOD INSURANCE RATE MAP (FIRM) NO. 48201C1085M DATED JANUARY 06, 2017

FLOODPLAIN INFORMATION OBTAINED FROM TOPOGRAPHIC SURVEY PERFORMED BY OTHERS)

BENCHMARK INFORMATION

TBM "B" - "X" CUT IN CONCRETE FOUND ON TOP OF WEST END OF 1 FOOT WIDE CONCRETE HEADWALL 7 FEET EAST OF THE NORTHWEST PROPERTY CORNER. ELEVATION = 9.69 FEET.

CIVIL & STRUCTURAL CIVIL • STRUCTURAL • FORENSION

CONSULTANTS

ENGINEERING & SURVEYING 11301 FALLBROOK DR., SUITE 320 HOUSTON, TX. 77065 832/678-2110 FAX-832/678-2115 TBPE FIRM NO. F-4395 CSF PROJ: 4007

L.T.Y. Engineers, PLLC 738 Highway 6 South Suite 615 Houston, Texas 77079 Tel: 281.945.8888 Fax: 281.945.8889



SZ

A. PARKING AND LOADING AREAS - MAXIMUM SLOPE OF 1:50 IN ALL

B. ACCESSIBLE ROUTES - MAXIMUM SLOPE OF 1:20 IN THE DIRECTION OF

BUILDING ENTRANCES AND EXITS - AT ALL LOCATIONS 5'X5' (MINIMUM) ACCESSIBLE, CONCRETE WALK WITH THE MAXIMUM SLOPE OF 1:50 IN ALL DIRECTIONS.

3. CONTRACTOR SHALL GRADE THE SITE TO MATCH EXISTING GROUND AT THE LIMITS OF THE PROJECT SITE. ALL DRAINAGE ENTERING THE PROJECT AREA SHALL BE INTERCEPTED IN THE FINAL GRADE, TRANSITIONS TO EXISTING GROUND THAT ARE DIFFERENT FROM THE PLANS SHALL BE COORDINATED PRIOR TO FINAL GRADING

5. CONTRACTOR SHALL VERIFY ALL ELEVATIONS, DIMENSIONS AND CONDITIONS IN THE FIELD BEFORE COMMENCING ANY WORK. CONTRACTOR SHALL REPORT ANY CONFLICTS OR VARIATIONS AND RESOLVE ALL CHANGES WITH THE OWNER AND/OR ENGINEER PRIOR

7. TOP OF WALK ELEVATIONS AT ALL DOORS (REF. PLAN)

GEOTECHNICAL

RECOMMENDATIONS FOR:

A. CONSTRUCTION GUIDELINES B. PAVING & SUBGRADE MATERIALS C. PROCEDURES & SITE PREPARATION

TO BE IN CONFORMANCE WITH GEOTECHNICAL ENGINEERING STUDY PREPARED BY: HTS, INC. CONSULTANTS 416 PICKERING STREET HOUSTON, TEXAS 77091-3312

PREPARED FOR: SAN JACINTO COLLEGE DISTRICT 4624 FAIRMONT PARKWAY, SUITE 207

GRADING

1. CONTRACTOR SHALL CUT AND FILL SITE AS REQUIRED TO OBTAIN FINISHED ELEVATIONS SHOWN ON PLANS. COMPACT SELECTED BACKFILL TO 95% STANDARD PROCTOR DENSITY AS PER ASTM D-698

2. YARD AREAS, SIDEWALKS AND PAVEMENT SHALL BE GRADED TO DRAIN AWAY FROM THE BUILDING(S). FINISHED SURFACES IN ACCESSIBLE AREAS SHALL CONFORM TO THE REQUIREMENTS AMERICAN WITH DISABILITIES ACT AND TEXAS ACCESSIBILITY STANDARDS. ACCESSIBLE ROUTES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE ARCHITECTURAL DRAWINGS. ALL PAVING, SIDEWALKS AND RAMPS IN ACCESSIBLE AREAS SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, TEXAS ACCESSIBILITY STANDARDS AND THE THE FOLLOWING:

DIRECTIONS IN ACCESSIBLE PARKING SPACES AND AISLES

TRAVEL AND MAXIMUM CROSS SLOPE OF 1:50

4. ALL AREAS WITHIN THE PROJECT SITE SHALL BE GRADED TO DRAIN TO ON-SITE STORM

TO COMMENCING WORK.

6. EXCAVATIONS MATERIAL SHALL BE DISPOSED OF PROPERLY.

D: MAINTENANCE

HTS PROJECT NO.: 13-S-342 DATED: AUGUST 28, 2013

PASADENA, TEXAS 77504-3398

PROPOSED SAN JACINTO COLLEGE MARITIME FACILITY, PHASE II HARRIS COUNTY, TEXAS

B

TEXAS-IBI GROUP, INC. 455 E MEDICAL CENTER BLVD, STE 500 P.O. Box 891209 HOUSTON, TEXAS 77289

201936

SA| Old

KEYED SCHEDULE

PAVING

SPECIFICATIONS.

COUNTY, TEXAS.

AFTER CONCRETE IS PLACED.

STUDY.

SHT. "C7.10")

MAINTENANCE WILL BE REQUIRED.

1. PAVING AND SUBGRADE MATERIALS AND PROCEDURES TO BE IN CONFORMANCE WITH

PROJECT DRAWINGS, SOILS REPORT (GEOTECHNICAL), DETAILS ON PLANS AND PROJECT

2. CONTRACTOR SHALL CUT AND FILL SITE AS REQUIRED TO OBTAIN FINISHED ELEVATIONS

SHOWN ON PLANS. COMPACT SELECTED BACKFILL TO 95% STANDARD PROCTOR DENSITY AS

3. CONTRACTOR TO PROVIDE TEMPORARY MEASURES TO CONTROL STORM WATER RUN OFF

4. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS FROM CONTROLLING GOVERNMENTAL

5. SITE PREPARATION OF THE SUBGRADE FOR PAVEMENTS SHALL BE 6" BELOW PAVEMENT AS

A. ITEM 220/223 FROM THE CURRENT REVISION OF THE HARRIS COUNTY PUBLIC

ENTITLED "SPECIFICATIONS FOR THE CONSTRUCTION OF ROADS AND BRIDGES WITHIN HARRIS

THE MIXTURE SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY (AS PER ASTM

D-698) WITH MOISTURE CONTENT WITHIN $\pm 3\%$ OF OPTIMUM MOISTURE CONTENT. LIME

TREATMENT OF SUBGRADE SHALL BE APPLIED AS RECOMMENDED WITHIN GEO-TECHNICAL STUDY AS OUTLINED UNDER "LIME TREATMENT OF SUBGRADE". REFERENCE GEO-TECHNICAL

PAVEMENT STRENGTH @ AT 28 DAYS AND A MINIMUM FLEXURAL STRENGTH/MODULUS OF RUPTURE. COARSE AGGREGATE SHALL HAVE A MINIMUM DIAMETER OF ONE AND ONE-HALF

(1-1/2) INCHES. SAW CUT PAVEMENT JOINTS SHALL BE COMPLETED WITHIN 12 TO 24 HOURS

7. USE OF NEWLY CONSTRUCTED PAVEMENT FOR PURPOSES OF STAGING, STORAGE OF

MATERIALS OR OTHER MEANS SHALL BE PROHIBITED WITHOUT THE OWNERS APPROVAL

NEWLY PAVED AREAS (WHERE APPROVED BY OWNER) TO THE EXTENT THAT POST-USE

8. CONCRETE SHALL BE CURED BY PROTECTING IT AGAINST LOSS OF MOISTURE, RAPID

9. REINFORCING STEEL SHALL BE NEW BILLET STEEL AS FOLLOWS: REBAR SHALL CONFORM TO ASTM A615, GRADE 60 FOR ALL BARS, WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.

10. ALL PAVING SHALL BE CONSTRUCTED ON A STRAIGHT LINE GRADE BETWEEN ELEVATIONS

SHOWN ON THE PLANS. CONTRACTOR SHALL CONFIRM IN THE FIELD THAT ALL PAVED AREAS

& SIDEWALKS ABUT TO THE BUILDING AND OTHER SITE STRUCTURES. ISOLATION JOINTS SHALL

HAVE A REMOVABLE TOP STRIP AND SHALL BE SEALED WITH PAVING JOINT SEALANT. (REF.

PAVEMENT JOINT LOCATION SHOWN SHALL BY SUBMITTED TO ENGINEER & ARCHITECT FOR

JOINTED CONCRETE PAVEMENTS FOR STREETS AND LOCAL ROADS (LATEST REVISION), ACI

330R-01 "GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS". PERIODIC

13. CONTRACTOR SHALL CONFIRM EXISTING ELEVATIONS ADJOINING PROPOSED PAVING TO

14. ALL RECOMMENDATIONS AND PAVEMENT DESIGN CRITERIA SHALL MEET AT LEAST THE

SHALL BE REFERENCED AND VERIFIED WITH GEO-TECHNICAL REPORT.

ASSURE THAT COMPLETE PAVING WILL PROPERLY DRAIN AND WILL NOT OBSTRUCT EXISTING

MINIMUM COUNTY/GOVERNING AGENCY STANDARDS FOR PAVEMENT DESIGN AND SUBGRADE

STABILIZATION WHERE NOT SPECIFICALLY CITED IN GEO-TECHNICAL REPORT. DESIGN CRITERIA

12. PAVEMENT JOINT LOCATION SHALL BE SET AS SHOWN ON PLAN. ANY DEVIATION OF

REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. WHERE APPLICABLE, JOINTS FOR

CONCRETE PAVEMENTS MAY BE DESIGNED PER ACI 325.12R-02 "GUIDE FOR DESIGN OF

CLEANING RESTORES PAVEMENT TO THEIR INITIAL FRESH LOOK AND CONDITION.

TEMPERATURE CHANGE, FOR AT LEAST 7 DAYS AFTER CONCRETE PLACEMENT.

11. ISOLATION JOINTS SHALL BE PLACED AT ALL LOCATIONS THAT SITE PAVING

ARE CONSTRUCTED TO DRAIN WITHOUT HOLDING WATER

TRAFFIC SHALL BE PROHIBITED ON NEWLY CONSTRUCTED PAVEMENT DURING THE CURING

PROCESS AS LISTED IN NOTE NO. 8 BELOW OR WHERE GEO-TECHNICAL RECOMMENDATIONS ARE PROVIDED, THE MORE STRINGENT OF THE TWO. CONTRACTOR SHALL LIMIT THE USE OF

6. REFERENCE GEO-TECHNICAL REPORT FOR RECOMMENDED & MINIMUM CONCRETE

OUTLINED IN GEO-TECHNICAL STUDY, SECTION 1.4.1.2 AND 1.4.4, AND SHALL ALSO BE

INFRASTRUCTURE DEPARTMENT - ENGINEERING DIVISION (HCPID-ED) SPECIFICATIONS

SUB-GRADE SHALL BE STABILIZED WITH LIME USING METHOD (A):

STABILIZED AND COMPACTED IN ACCORDANCE WITH TXDOT SPECIFICATION ITEM 260/264.

DURING CONSTRUCTION AS REQUIRED TO MINIMIZE EROSION AND POLLUTION. (REF. SHT.

EXIST/NEW CONCRETE JOINT (REF. SHT. "C7.10" DETAIL NO. 1)

7" CONCRETE PAVING (REF. SHT. "C7.10" DETAIL NO. 14)

6" CONCRETE CURB (REF. SHT. "C7.10" DETAIL NO. 5)

7" CONCRETE FIRE TRAINER SLAB (REF. SHT. "C7.10" DETAIL NO. 14 & 15)

4" CONCRETE WALKWAY (REF. SHT. "C7.10" DETAIL NO. 9)

PROPOSED RAMP (REF. SHT. "C7.10" DETAIL NO. 16)

LEGEND

FL = FLOW LINETC = TOP OF CURB

TG = TOP OF GRATE

TJ = TOP OF JUNCTION BOXTP = TOP OF PAVEMENT

TW = TOP OF WALKMEP=MATCH EXIST

(VERIFY ELEV.) → DIRECTION OF FLOW (SLOPE)

4" CONC. WALK PAVEMENT (REF. SHT. "C7.10" DETAIL NO. 9, & JOINT DETAIL NO'S. 6, 7 & 8) (REF. ARCH. FOR JOINT LAYOUT)

7" CONC. PAVEMENT (REF. SHT. "C7.10" DETAIL NO. 14)

EXPANSION JOINT (EJ) (REF. SHT. "C7.10" DETAIL NO. 2) CONTROL JOINT (CJ)

Know what's below.

Call before you dig. (REF. SHT. "C7.10" DETAIL NO. 4)

11/12/2019 DRAWN SJM CHECKED DV ISSUE 11/12/2019 FOR CONSTRUCTION 12/3/2019 ADDENDUM #2

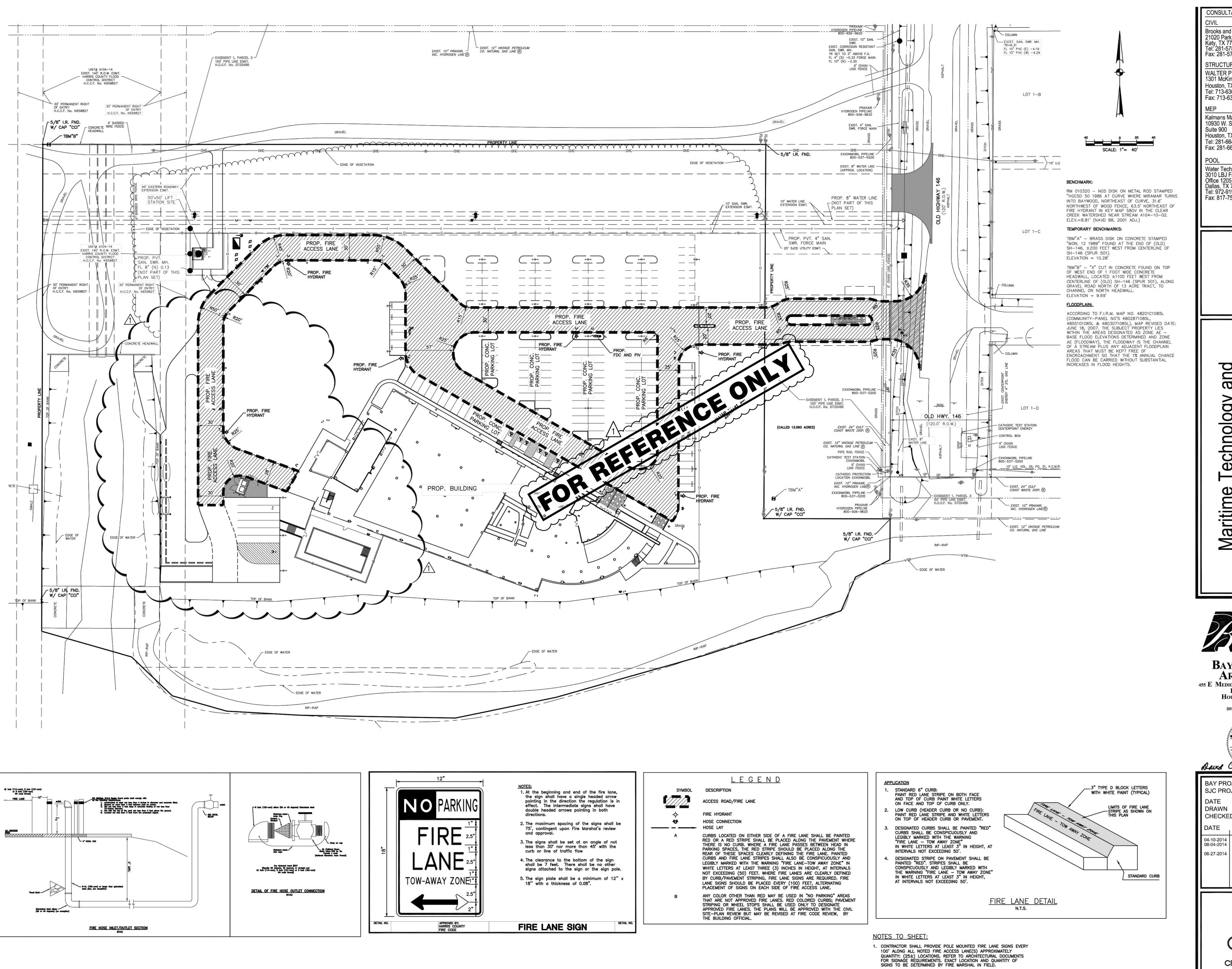
PROJECT NO.

C6.00

GRADING & PAVING

PLAN

SHEET 9 OF 12





CONSULTANTS

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A

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11/12/2019

SJM

DV

ADDENDUM #2

SAI

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hnolog ente **Training**

BAY-IBI GROUP ARCHITECTS 455 E MEDICAL CENTER BLVD, STE 500

P.O. B OX 891209 HOUSTON, TEXAS 77289 BROOKS & SPARKS, INC. DAVID C. BARGER David CB

BAY PROJECT NO: 201232 SJC PROJECT NO: 6803 APRIL 10, 2014 CHECKED 04-10-2014 BID SET 08-04-2014 POSTED SET 06-27-2014 PR-001 , ASK-01

C2.02

CIVIL SITE AND FIRE ACCESS PLAN

C9.00

PROJECT NO.

DRAWN

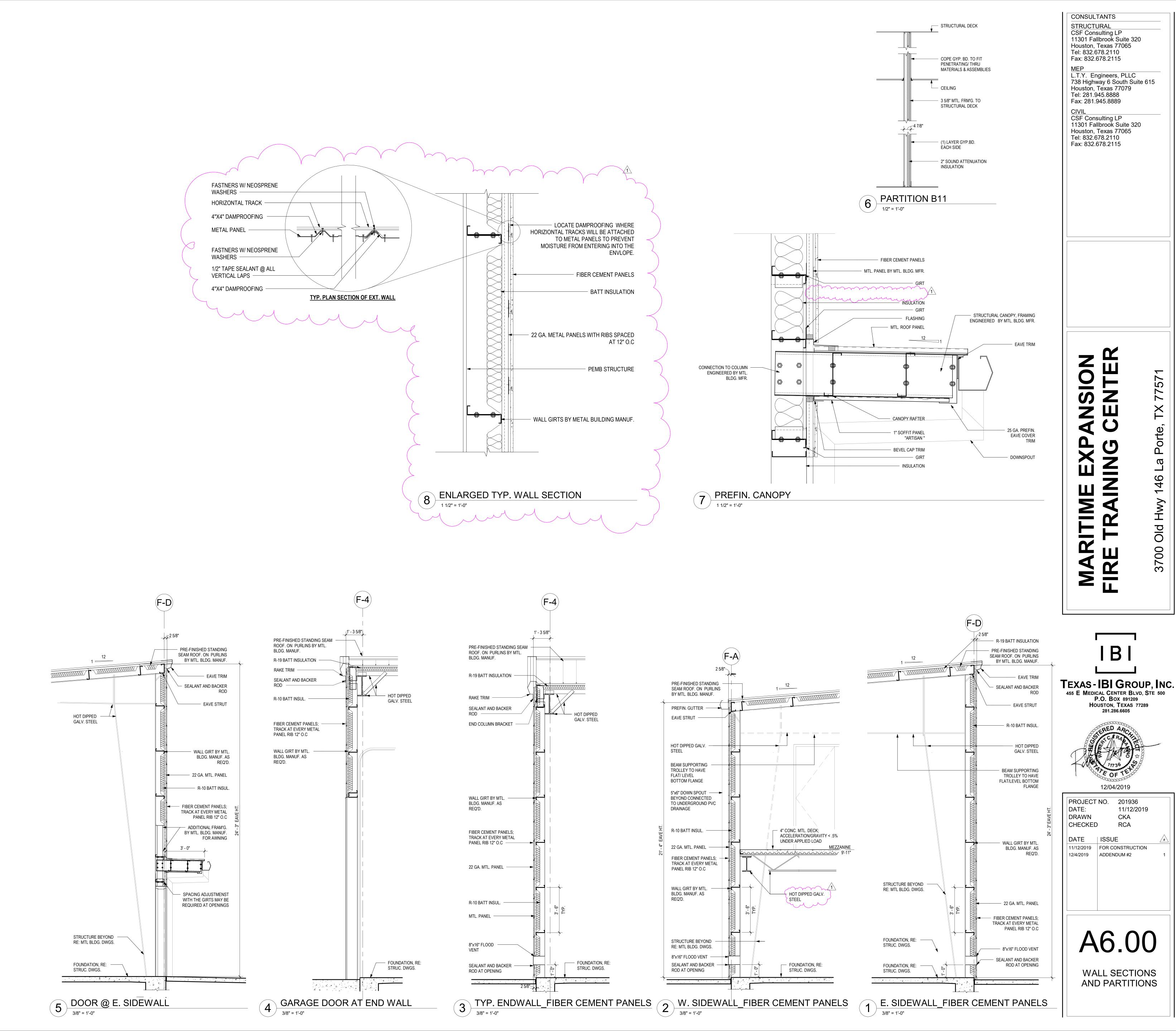
CHECKED

11/12/2019

12/3/2019

EXISTING FIRE APPARATUS ACCESS LANE PLAN

SHEET 12 OF 12



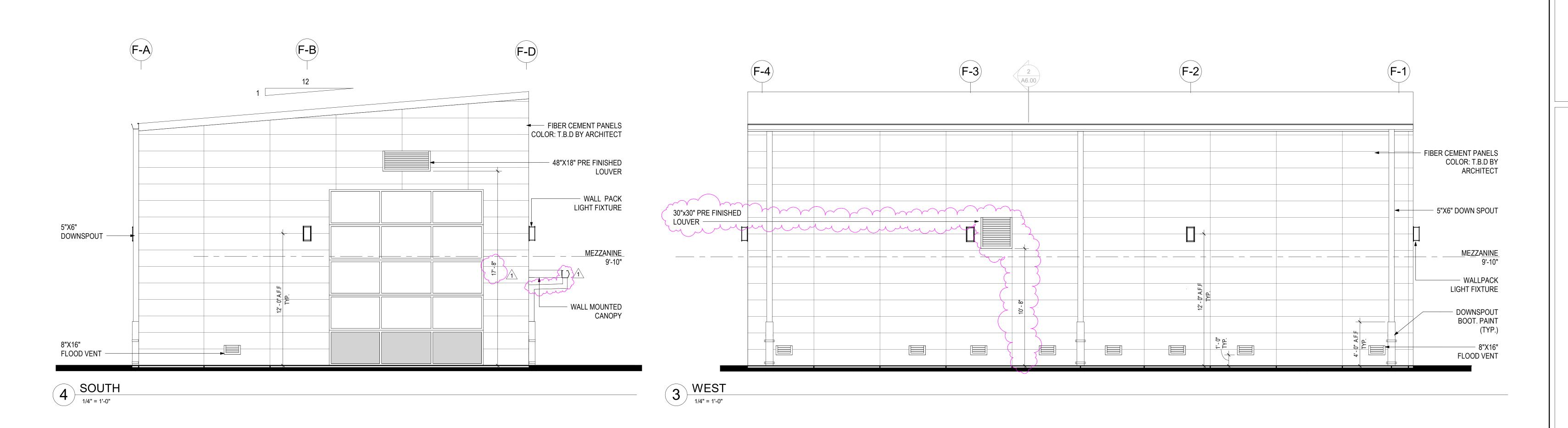
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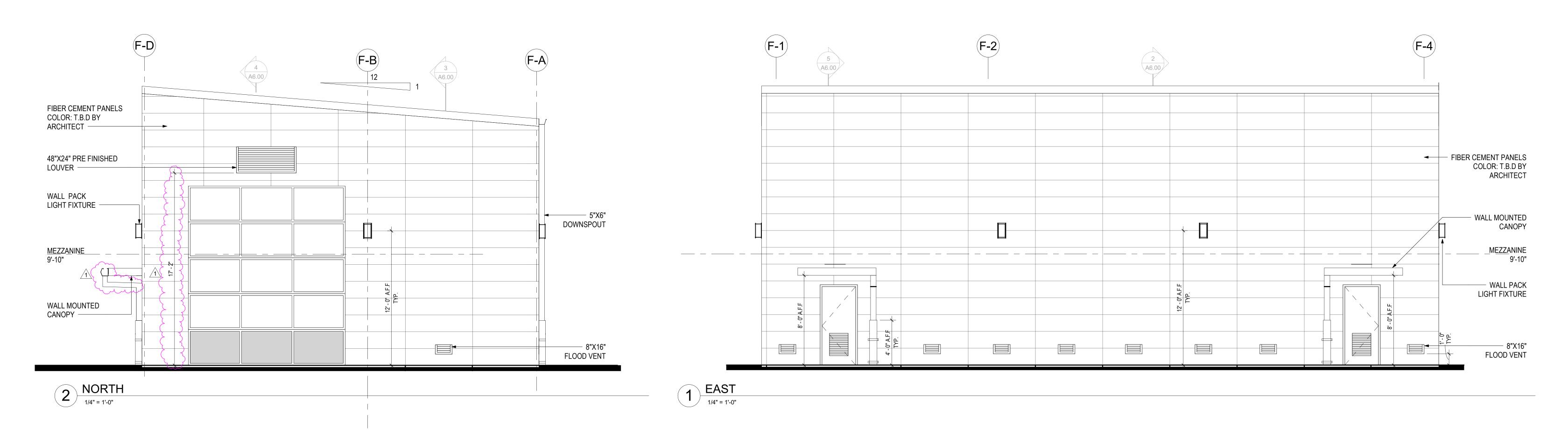
ADDENDUM #2

11/12/2019

CKA

RCA





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CONSULTANTS

MARITIME EXPANSION FIRE TRAINING CENTER

1757

Old Hwy

3700

IBI

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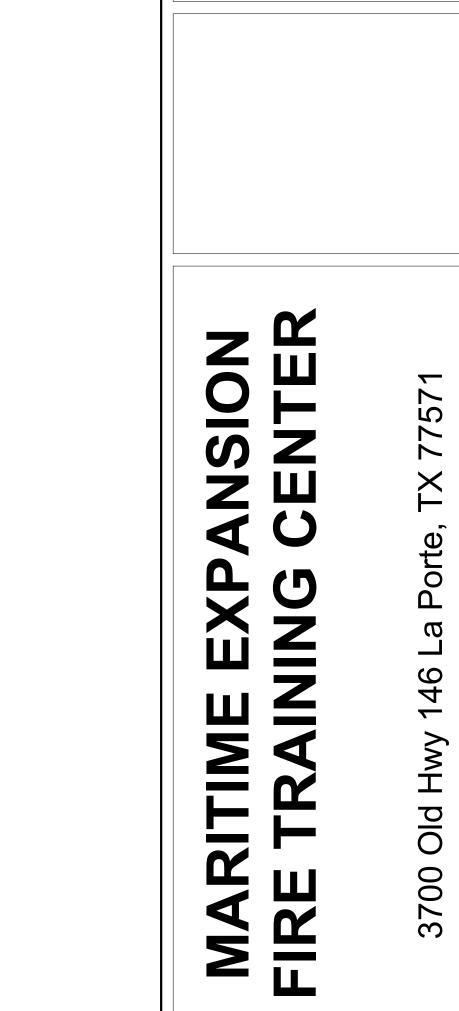
PROJECT NO. 201936
DATE: 11/12/2019
DRAWN CKA
CHECKED RCA

DATE ISSUE

11/12/2019 FOR CONSTRUCTION
12/4/2019 ADDENDUM #2 1

A7.01

EXTERIOR ELEVATIONS



— MTL. BLDG. TRIM

— CONT. SEALANT EA. SIDE

- MTL. BLDG. TRIM

- CONT. SEALANT EA. SIDE

MTL. BLDG. STRUCTURE

MTL. BLDG. TRIM —

CONT. SEALANT

F.G DOOR & FRAME

FIBER GLASS JAMB
BEYOND

PBR MTL. BLDG. PANEL

MTL. BLDG. STRUCTURE

PRE-FORMED NEOPRENE FILLER BY MTL. BLDG.

CONT. SEALANT EA. SIDE -

F.G DOOR & FRAME

THRESHOLD BELOW

2 H.M EXT. JAMB
3" = 1'-0"

THRESHOLD AND ASSEMBLY
SHALL COMPLY W/ADA AND
TEXAS ACCESSIBILITY
STANDARDS

CAST ABRASIVE THRESHOLD SET IN FULL -BED OF SEALANT MODEL: NATIONAL GUARD PRODUCTS CATALOG #882

SURFACE APPLIED NEOPRENE SWEEP

1/4" DIA. ANCHOR - 4 PER DOOR LEAF

1/2" FLEXIBLE EXPANSION JOINT, —— SEALED CONT. (TYP. @ FLATWORK)

3 EXT. DOOR THRESHOLD
3" = 1'-0"

ALUM.)

MAX 2% SLOPE -FROM DOOR (1" IN

DOOR AS SCHEDULED (MAY BE H.M. OR

MTL. BLDG. PBR PANEL →

1 H.M EXT. HEAD DETAIL
3" = 1'-0"

OVERHEAD DOOR

SECTIONALOVERHEADDOOR

CONSULTANTS STRUCTURAL CSF Consulting LP

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12/04/2019 11/12/2019 CKA RCA

PROJECT NO. 201936 DATE: 11/12/20 DRAWN CHECKED DATE 11/12/2019 FOR CONSTRUCTION 12/4/2019 ADDENDUM #2

A9.01

FRAME & DOOR ELEVATIONS, FRAME DETAILS

SLOPE CONCRETE BRICK LEDGE BEYOND

MTL. BLDG. STRUCTURE -

MTL. BLDG. PBR 1 1/4" -MTL. PANEL

MTL. BLDG. TRIM -

CONT. SEALANT

COLD FORM HEAD

JAMB BEYOND

4 EXT OVERHEAD DOOR HEAD

3" = 1'-0"

CAP TRIM _

PBR MTL. BLDG. PANEL

MTL. BLDG. STRUCTURE

PRE-FORMED NEOPRENE FILLER BY MTL. BLDG.

MFR. MTL. BLDG. TRIM -

COLD FORM CHANEL

5 EXT. OVERHEAD DOOR JAMB
3" = 1'-0"

SCHED. DOOR 2"X2"x1/4" GALV. STEEL ANGLE W/ WELDED STUDS, RE: STRUCT.

6 EXT. OVERHEAD DOOR SILL
3" = 1'-0"

1-E SILL JAMB HEAD CONDITION 1 3/A9.01 2/A9.01 1/A9.01

SCHED. DR.

DOOR FRAME ELEVATIONS [/] 1/4" = 1'-0"

SCHED. DOOR WIDTH SCHED. DOOR WIDTH SCHED. DOOR WIDTH SCHED. GATE WIDTH SOLID MTL. V OVERHEAD GARAGE DOOR W/ GLASS PANELS WIRE MESH GATE CHAIN LINK GATE SILL JAMB HEAD CONDITION FLUSH DOOR FLUSH DOOR 1 6/A9.01 5/A9.01 4/A9.01

DOOR ELEVATIONS

[/] 1/4" = 1'-0"

SCHED. DR. WIDTH

01 89 13 Site Preparation Performance Requirements

1. **GENERAL**

A. **DESIGN CRITERIA**

- Unless directed otherwise, the following shall be Standard Operating Procedure on all future 2015 Bond work:
 - ii Require the excavator to draft a Project Specific Excavation Plan.
 - iii Require the excavator to mark the locations of all suspected subterranean features based on the existing campus utility map and adjacent project as-built records.
 - iv Contact Dig Tess as required by law.
 - v Use GPR and Electro-Magnetic locating services for the entire length of the proposed excavation route.
 - a. For borings under roadways, clear readings for 10' on each side of the proposed routing, perpendicular to the routing on either side of the roadway, shall suffice.
 - a. For proposed trenching across roadways, the road surface shall be removed prior to GPR use.
 - vi All indeterminate obstacles identified by GPR/EM shall be exposed and verified by hydro or hand excavation.
 - vii The initial approach to all linear obstacles shall be made by hydro or hand excavation, or by probing in conjunction with mechanical equipment.
 - a. Probing shall be conducted at intervals no less than ½ the diameter of the suspected obstacle. When the diameter is unknown, probing shall be conducted at intervals of 2".
 - a. All probing shall be done to a depth of 12".
 - a. Probing shall be performed twice, diagonally across the width of the proposed cut in an "X" pattern, prior to making a bucket cut.
 - a. The bucket cut shall be made not more than one-half the depth of the probe.
 - viii "Scratching" in one-inch cuts shall be permitted under supervision of a Competent Person.
 - ix When mechanical equipment is used in excavation, a spotter will be used. The Spotter and the operator will agree on a set of visual or verbal signals to control the work. If the spotter or operator detects a conflict, mechanical excavation will cease until the conflict is resolved.
- 2. At a minimum, benching and shoring will be performed to OSHA standards.
- 3. The above will increase the cost of some smaller excavations. Contractors will be advised by Program Staff to plan for GPR use and to anticipate hand-excavating up to 5% of all utility lines until proven otherwise.