

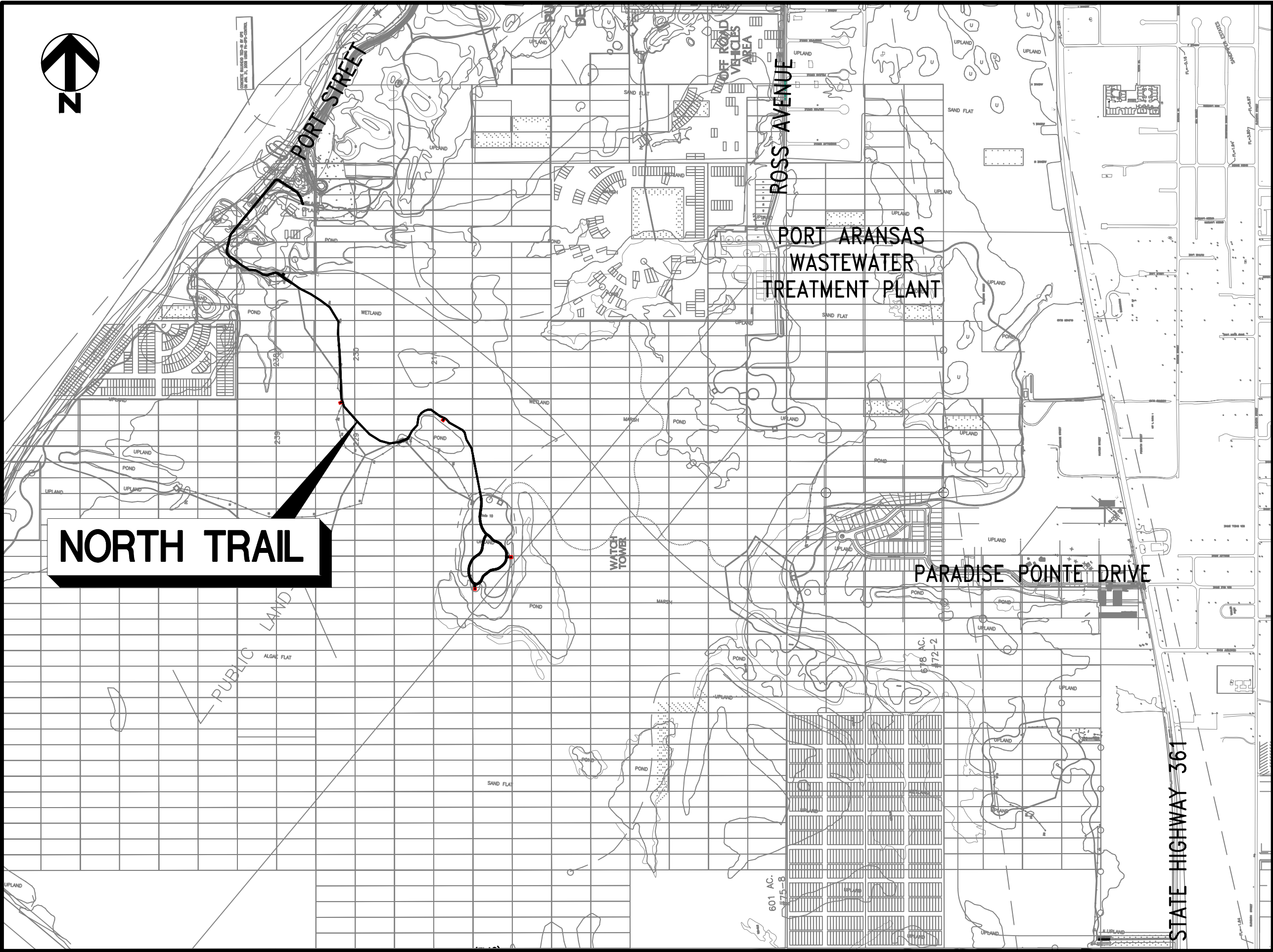
CONSTRUCTION PLANS
FOR
PHASE II
CHARLIE'S PASTURE NORTH TRAIL
FEMA PROJECT No. 36926
PORT ARANSAS, TX

OWNER:
CITY OF PORT ARANSAS
710 W. AVENUE A
PORT ARANSAS, TEXAS 78373
(361) 749-4111

ENGINEER:
URBAN ENGINEERING
2725 SWANTNER DRIVE
CORPUS CHRISTI, TEXAS 78404
(361) 854-3101

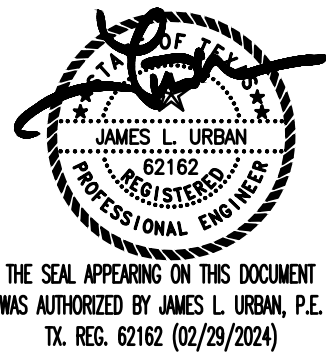
HURRICANE HARVEY PROGRAM MANAGERS:
BROADDUS AND ASSOCIATES
1301 S. CAPITAL OF TEXAS HWY
SUITE A-302
AUSTIN, TEXAS 78746

DEL-SOL CONSULTING
2 SANCTUARY BLVD.
SUITE 205
MANDEVILLE, LA 70471
(985) 778-7676



LOCATION MAP
N.T.S.

SHEET INDEX:	
1	TITLE SHEET
2	PROJECT SIGNAGE
3	NORTH TRAIL HORIZONTAL CONTROL & KEY MAP
4	NORTH TRAIL PLAN VIEW STA. 0+00 TO STA. 8+50
5	NORTH TRAIL PLAN VIEW STA. 8+50 TO STA. 17+50
6	NORTH TRAIL PLAN VIEW STA. 17+50 TO STA. 26+50
7	NORTH TRAIL PLAN VIEW STA. 26+50 TO STA. 40+50
8	NORTH TRAIL PLAN VIEW STA. 40+50 TO END
9	DEEP WATER CROSSING STATION STA. 11+97 TO STA. 15+70
10	NORTH TRAIL AND BOARDWALK DETAILS (1)
11	NORTH TRAIL AND BOARDWALK DETAILS (2)
12	NORTH TRAIL REST AREA DETAILS (1)
13	NORTH TRAIL REST AREA DETAILS (2)
14	TOWER MAINTENANCE PLAN (1)
15	TOWER MAINTENANCE PLAN (2)
16	TOWER MAINTENANCE PLAN (3)
17	TOWER MAINTENANCE PLAN (4)
18	LIMITS OF CONSTRUCTION - NORTH TRAIL AND BOARDWALK
19	POLLUTION PREVENTION DETAILS

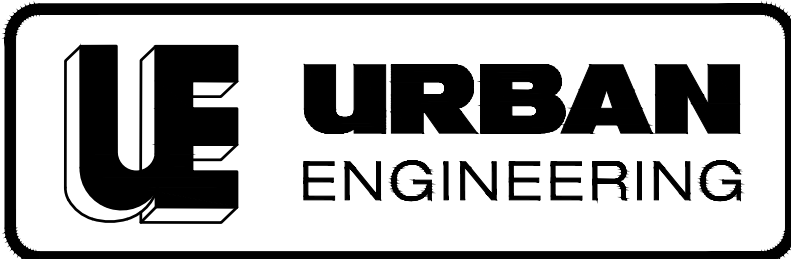


ENGINEER: _____
JAMES L. URBAN, P.E.

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PARTICIPANTS REQUEST
48 HOURS NOTICE BEFORE YOU DIG,
DRILL, OR BLAST - STOP AND CALL
811
1-800-344-8377



THE SEAL APPEARING ON THIS DOCUMENT
WAS AUTHORIZED BY JAMES L. URBAN, P.E.
TX. REG. 62162 (02/29/2024)

JOB NO. 06100.C1.07

DATE: February 2024

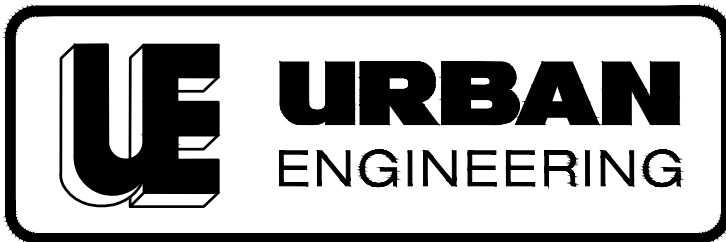
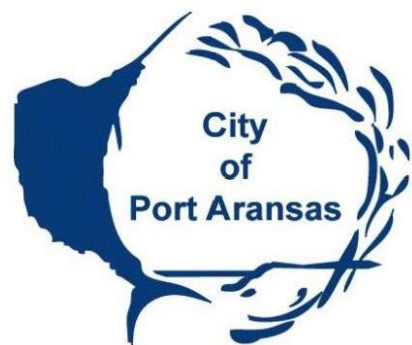
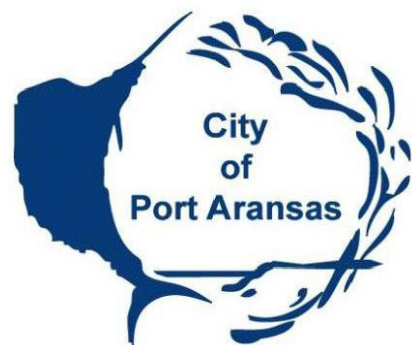
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PHASE II
CHARLIE'S PASTURE NORTH TRAIL & BOARDWALK
FEMA PROJECT No. 36926

Date: XXXXX, XXXX

City of Port Aransas
710 West Avenue A
Port Aransas, TX 78373
361.749.4111

Port Aransas
Nature Preserve
Port Aransas, TX 78373



TYPE FIRM NO. 145, TEMPL FIRM NO. 10032400
2725 SWANWINE DR. CORPUS CHRISTI, TX 78404
PHONE: 361.854.3101 WWW.URBANENG.COM

Contractor
LOGO



PROJECT MUST BE
SUBSTANTIALLY
COMPLETED BY
NOVEMBER 1st, 2024



THE SEAL APPEARING ON THIS DOCUMENT
INDICATES THAT THE ENGINEER IS
A LICENSED PROFESSIONAL ENGINEER
IN THE STATE OF TEXAS

PROJECT SIGNAGE

PHASE II CHARLIE'S PASTURE NORTH TRAIL
PORT ARANSAS, TX



TYPE FIRM NO. 145, TEMPL FIRM NO. 10032400
2725 SWANWINE DR. CORPUS CHRISTI, TX 78404
PHONE: 361.854.3101 WWW.URBANENG.COM

SHEET
2
OF 19

JOB NO.
06100.C1.07

SIGNAGE NOTES

- LOCATION OF SIGN SHALL BE DETERMINED BY THE OWNER.
- SIGN SHALL BE CONSTRUCTED OF 3/4" PRESSURE TREATED PLYWOOD, GRADE A-C OR BETTER AND EACH SHALL BE MOUNTED ON TWO 4"x4"x12' POSTS. ALL POSTS SHALL BE EMBEDDED A MINIMUM OF 3' BELOW THE GROUND.
- SIGN DIMENSIONS
SIGN A - 4' X 8'
- DATE SHALL BE DATE OF COUNCIL APPROVAL OF PROJECT.

DEMOLITION

- CONTRACTOR MUST DEMOLISH AND DISPOSE OF REMNANTS OF ORIGINAL BOARDWALK, OBSERVATION AREAS AND TOWER MAINTENANCE DEBRIS.

UTILITIES AND STORM SEWER

- THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT EXISTING UTILITIES. ALL PIPES AND UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED TO THE CITY'S SATISFACTION, WITH NO SEPARATE PAYMENT.
- ALL OPEN EXCAVATION SHALL BE ENCLOSED WITH ORANGE SAFETY FENCE AND BARRELS.

MISCELLANEOUS

- ALL HARDWARE FOR THIS PROJECT SHALL BE 316 STAINLESS STEEL.
- ALL WORK SHALL BE PERFORMED DURING DAYLIGHT HOURS.
- GRASS DRIVEWAYS SHALL BE RESODDED IN LIEU OF SEEDING.
- ALL AREAS DISTURBED BY THE CONSTRUCTION SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION THAN AT THE START OF CONSTRUCTION. ALL REMOVED OR DAMAGED FENCES, LANDSCAPING, ETC., SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, UNLESS OTHERWISE STIPULATED IN EASEMENTS.
- ALL TRASH SHALL BE PICKED-UP AND REMOVED AT THE END OF EACH DAY.
- CONTRACTOR SHALL VERIFY ALL SURFACE CONDITIONS ALONG THE PROPOSED ROUTE PRIOR TO PREPARING AND SUBMITTING ITS BID.
- CONTRACTOR SHALL COORDINATE SCHEDULE, PUBLIC NOTIFICATIONS, ETC., WITH CITY PUBLIC INFORMATION OFFICER.
- WHERE THE WORD "PROPOSED" OR "PROP." IS UTILIZED IN THIS SET OF DOCUMENTS, IT SHALL MEAN "NEW CONSTRUCTION TO BE PERFORMED AS PART OF THIS CONTRACT."
- EQUIPMENT AND MATERIALS SHALL NOT BE STORED ON RIGHT OF WAY AT ANY TIME DURING THE COURSE OF THE CONSTRUCTION PERIOD. ANY MATERIALS AND EQUIPMENT APPROVED BY THE CITY ENGINEER FOR TEMPORARY PLACEMENT ALONG THE PUBLIC RIGHT OF WAY SHALL BE ADEQUATELY BARRICADED WITH TYPE II BARRICADES FOR EACH DIRECTION OF TRAVEL AND SHALL IN NO CARE BE PLACED WITHIN 5 FEET FROM THE EDGE OF THE STREET PAVEMENT
- SHOULD ANY TRAFFIC SIGN, SIGN POST OR ITS FOUNDATION BE DAMAGED, CONTRACTOR SHALL REPORT SUCH IN FORMATION IMMEDIATELY TO THE ATTENTION OF THE CITY'S PUBLIC WORKS DEPARTMENT AT (361)749-5125
- EVERY REASONABLE EFFORT HAS BEEN MADE TO IDENTIFY EXISTING STRUCTURES OR INFRASTRUCTURES REQUIRING REMOVAL, RELOCATION AND/OR ADJUSTMENT. HOWEVER, THE CONTRACTOR IS NOT TO RELY ON THIS INFORMATION OR ASSUME NO ADDITIONAL DEMOLITION IS REQUIRED. CIRCUMSTANCES FOUND IN THE FIELD DURING CONSTRUCTION MAY DICTATE ADDITIONAL ITEMS NOT FOUND IN THE PLANS OR PROPOSAL REQUIRE REMOVAL, RELOCATIONS AND/OR ADJUSTMENT TO FACILITATE WORK. NO ADDITIONAL PAYMENT WILL BE GIVEN FOR RELOCATION, REMOVAL OR ADJUSTMENT OF EXISTING UTILITIES AND/OR FACILITIES WHICH CAN BE REASONABLY ANTICIPATED PRIOR TO SUBMISSION OF A PROPOSAL.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS AND/OR PAYING ANY NECESSARY FEES. NO SEPARATE PAYMENT WILL BE ALLOWED.

SURVEY

- SURVEY CONTROL IS BASED OFF OF NORTH AMERICAN VERTICAL DATUM 88 (NAVD 88) AND NORTH AMERICAN DATUM (NAD 83) FOR HORIZONTAL CONTROL.
- CONTROL POINTS HAVE BEEN PROVIDED AND REFERENCED IN THE PLANS TO AID IN THE CONSTRUCTION. CONTROL POINTS ARE BASED ON THE ABOVE STATED DATUM AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING CONSTRUCTION.

ENVIRONMENTAL

- CONSTRUCTION CREWS SHOULD BE EDUCATED ON THE APPEARANCE, STATUS AND PROTOCOLS OF PIPING PLOVER (CHARADRIUS MELODUS), WHOOPING CRANE (GRUS AMERICANA), NORTHERN APLOMADO FALCON (FALCO FEMORALIS), RED KNOT (CALIDRIS CANUTUS RUFUS), AND EASTERN BLACK RAIL (LATERALLUS JAMAICENSIS JAMAICENSIS), SO THAT THEY WILL BE ABLE TO RECOGNIZE THE SPECIES. PREFERABLY, THIS INFORMATION IS PROVIDED IN BOTH ENGLISH AND SPANISH. FEMA WILL RECOMMEND A QUALIFIED BIOLOGIST, WITH THE AUTHORITY TO TEMPORARILY HALT WORK, WHO WILL CONDUCT SURVEYS OF THE WORK AREA TO IDENTIFY RISKS TO ENDANGERED AND THREATENED SPECIES.
- THE BIOLOGICAL MONITOR WILL INSPECT THE ACTIVE WORK AREAS PRIOR TO THE START OF WORK AND CONTINUOUSLY THROUGHOUT THE WORKDAY. NO EQUIPMENT WILL BE POWERED ON AND/OR WORKING UNLESS THE BIO MONITOR S ASSIGNED TO THAT WORK AREA.
- BIOLOGICAL MONITORS SHOULD LOOK UNDER EQUIPMENT FOR PIPING PLOVERS, WHICH MAY BE IN THE AREA FROM JULY 15 TO APRIL 1. THE BIOLOGIST SHOULD NOTE THAT OBSERVATIONS AT SUNRISE AND SUNSET ARE THE MOST EFFECTIVE TIMES TO DISCOVER THE LOCATION OF ROOSTING BIRDS.
- DESIGNATED BIOLOGICAL MONITORS ARE THE SINGLE POINT OF CONTACT RESPONSIBLE FOR COMMUNICATING AND REPORTING ENDANGERED SPECIES AND MIGRATORY BIRD SIGHTING/ISSUES THROUGHOUT CONSTRUCTION AND POST-CONSTRUCTION PHASES OF THE PROJECT. ALL SIGHTINGS/ISSUES WILL BE RECORDED AND IMMEDIATELY REPORTED TO THE TEXAS COASTAL ECOLOGICAL SERVICES FIELD OFFICE, (361) 994-9005.
- WORK WILL BE CONCENTRATED OUTSIDE OF THE NOVEMBER 1 TO THROUGH APRIL 30 WHOOPING CRANE WINTERING SEASON TO AVOID IMPACTS TO THIS AND OTHER PROTECTED BIRD SPECIES.
- FROM NOVEMBER 1 THROUGH APRIL 30, EQUIPMENT THAT IS 15 FEET OR TALLER SHOULD BE LOWERED WHEN NOT IN USE. IF THE EQUIPMENT CANNOT BE LOWERED AT NIGHT, IT SHOULD BE MARKED OR FLAGGED TO AVOID COLLISIONS.
- FOR THE YEAR-ROUND RESIDENT NORTHERN APLOMADO FALCONS, IT IS RECOMMEND MAINTAINING A DISTANCE OF 300 TO 600 FEET IF BIRDS ARE OBSERVED IN THE AREA
- IF THE BIOLOGICAL MONITOR SIGHTS A NORTHERN APLOMADO FALCON NEST(S) ON SITE, THEY WILL CONTACT CORPUS CHRISTI ECOLOGICAL SERVICES OFFICE AT (361) 533-6765 AND THE PORT ARANSAS NATURE PRESERVE AT (361) 749-0081. THE NESTING VICINITY, ALONG WITH A 500 FOOT BUFFER, WILL BE MARKED OFF SO CONSTRUCTION ACTIVITIES WILL NOT DISTURB THE BIRD. HOWEVER, PORT ARANSAS NATURE PRESERVE SHOULD NOTIFY THE BIOLOGICAL MONITOR OF ANY CHANGES.
- EQUIPMENT WILL BE KEPT OVERNIGHT IN DESIGNATED STAGING AREAS. STAGING AREAS WILL BE DESIGNATED BEFORE WORK BEGINS.
- ALL WORK ACTIVITIES WILL OCCUR DURING DAYLIGHT HOURS ONLY.
- CONSTRUCTION WILL USE A SINGLE ACCESS ROUTE AND STAGING AREA TO MINIMIZE IMPACTS TO THESE AREAS TO AS MUCH AN EXTENT AS IS PRACTICABLE. THE NUMBER OF VEHICLES TRANSITIONING FROM THE UPLAND AREAS TO THE PROJECT SITE SHOULD BE KEPT TO A MINIMUM, AND ALL VEHICLES SHOULD USE THE SAME PATHWAY.
- PROVIDE ENCLOSED SOLID WASTE RECEPTACLES AT ALL PROJECT AREAS. NON-HAZARDOUS SOLID WASTE (TRASH) WOULD BE COLLECTED AND DEPOSITED IN THE ON-SITE RECEPTACLES. SOLID WASTE SHOULD BE COLLECTED AND DISPOSED OF BY A LOCAL WASTE DISPOSAL CONTRACTOR. FOR MORE INFORMATION ABOUT SOLID WASTE AND HOW TO PROPERLY DISPOSE OF IT, SEE THE EPA NON-HAZARDOUS WASTE WEBSITE.
- MINIMIZE PROJECT CREEP BY CLEARLY DELINEATING AND MAINTAINING PROJECT BOUNDARIES (INCLUDING STAGING AREAS).
- MAXIMIZE USE OF DISTURBED LAND FOR ALL PROJECT ACTIVITIES (I.E., SITING, LAY-DOWN AREAS, AND CONSTRUCTION).
- AVOID CONTAMINATING NATURAL AQUATIC AND WETLAND SYSTEMS WITH RUNOFF BY LIMITING ALL EQUIPMENT MAINTENANCE, STAGING LAYDOWN, AND DISPENSING OF FUEL, OIL, ETC., TO DESIGNATED UPLAND AREAS.
- AFTER THE PROJECT IS COMPLETED, THE MUD OR WIND TIDAL FLATS SHOULD BE RESTORED TO PRECONSTRUCTION SLOPE AND CONTOURS, AND ALL RUTS SHOULD BE LEVELED.

COORDINATION

- CONSTRUCTION SHALL BE COORDINATED WITH THE CITY OF PORT ARANSAS PUBLIC WORKS DEPARTMENT (361) 749-5125
- COORDINATE ALL SERVICE SHUT DOWNS WITH THE APPROPRIATE UTILITY DEPARTMENT CONSTRUCTION OBSERVER AT LEAST 48 HRS PRIOR TO THE ANTICIPATED UTILITY SERVICE SHUT DOWN.
- COORDINATE INSPECTIONS WITH THE CODE OFFICE INSPECTOR PRIOR TO ALL WORK BEING COVERED 24 HRS IN ADVANCE.

MATERIAL PROPERTIES FOR PROPOSED OBSERVATION
AREAS, TOWER AND BOARDWALK

- ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
- ALL LUMBER SHALL BE TREATED NO. 1 GRADE SOUTHERN YELLOW PINE.
- ALL POSTS/PILINGS THAT EXTEND INTO THE GROUND BEAMS AND JOISTS (UPLANDS AND WETLANDS) SHALL BE MARINE GRADE. TREATED TO 2.5 CCA.
- ALL OTHER LUMBER TREATED TO BE 0.31 CA.
- ALL BEAM AND JOIST CONNECTIONS REQUIRE 316 S.S. HURRICANE TIES H2.5T BY SIMPSON STRONGTIE OR APPROVED EQUAL
- CONTRACTOR SHALL PLACE AND COMPACT SUBGRADE TO 95% STD. PROCTOR WITHIN -1% TO +3% OPTIMUM MOISTURE CONTENT.
- ALL EXISTING STRUCTURES SHALL BE DEMOLISHED AND DISPOSED OF.

ADA

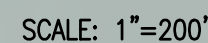
IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE ALL ELEMENTS OF THIS PROJECT COMPLY WITH THE LATEST REVISION OF THE TEXAS ACCESSIBILITY STANDARDS, INCLUDING BUT NOT LIMITED TO:
1. PATH RUNNING SLOPES MUST NOT EXCEED 5%.
2. PATH CROSS SLOPES MUST NOT EXCEED 2%.
3. FLOOR SURFACE CHANGES IN LEVEL MUST NOT EXCEED 1/4".
4. FLOOR SURFACE OPENINGS MUST NOT EXCEED 1/2".
5. THE PROJECT WILL BE INSPECTED BY THE CITIES REGISTERED ACCESSIBILITY SPECIALIST AT THE END OF CONSTRUCTION. ANY FEATURES THAT DO NOT PASS INSPECTION SHALL BE FIXED AND A NEW INSPECTION SHALL BE PERFORMED AT THE CONTRACTORS EXPENSE UNTIL PROJECT IS DETERMINED TO HAVE NO VIOLATIONS.

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PARTICIPANTS REQUEST
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DRILL, OR BLAST - STOP AND CALL

811
1-800-344-8377




SCALE: N.T.S.

- ① REPAIR RESTUCCO AND RESET 46 CONCRETE BOLLARDS
- ② RESET 60 CONCRETE BOLLARDS
- ③ REPLACE 2 CONCRETE BOLLARDS
- ④ EXISTING CABLE SHALL BE UNSTRUNG OR LOOSENED AS NECESSARY TO COMPLETE THE REPAIRS AND RESTRUNG
- ⑤ EXACT BOLLARDS WILL BE IDENTIFIED BY OWNER DURING CONSTRUCTION

PROPOSED BOLLARD PERIMETER

① RECABLE 4625 LF OF VEHICLE BARRIER FENCE IN KIND WITH NEW ½ GALVANIZED STEEL CABLE AND NEW HARDWARE

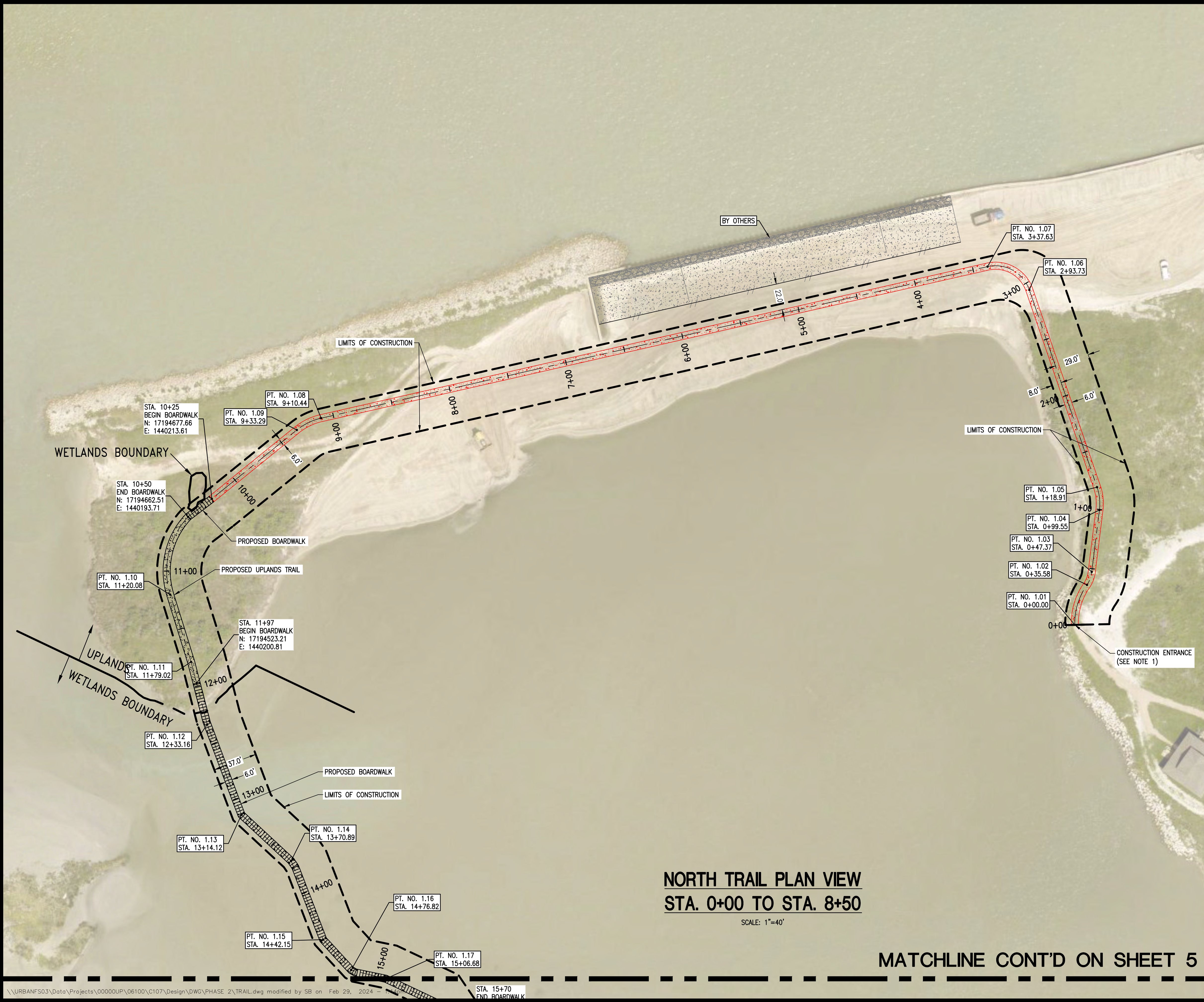
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3
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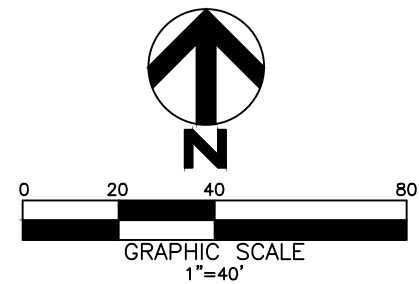
JOB NO.
06100.C1.07



NORTH TRAIL PLAN VIEW
STA. 0+00 TO STA. 8+50

SCALE: 1"=40'

MATCHLINE CONT'D ON SHEET 5



POINT NO.	STATION	NORTHING	EASTING
1.01	0+00.00	17194572.03	1440936.90
1.02	0+35.58	17194605.48	1440947.13
1.03	0+47.37	17194616.46	1440951.11
1.04	0+99.55	17194668.24	1440957.54
1.05	1+19.09	17194687.51	1440955.54
1.06	2+93.73	17194852.68	1440898.80
1.07	3+37.63	17194872.18	1440863.77
1.08	9+10.44	17194745.20	1440305.22
1.09	9+33.29	17194735.31	1440284.85
1.10	11+20.08	17194597.28	1440178.73
1.11	11+79.02	17194540.99	1440196.22
1.12	12+33.16	17194488.57	1440209.74
1.13	13+14.12	17194412.86	1440238.43
1.14	13+70.89	17194374.26	1440280.06
1.15	14+42.15	17194308.26	1440306.93
1.16	14+76.82	17194282.75	1440330.40
1.17	15+06.68	17194275.50	1440359.37

LEGEND:

- PROPOSED BOARDWALK
- PROPOSED UPLANDS TRAIL
- PROPOSED CONCRETE WALK
- LIMITS OF CONSTRUCTION

NOTES:

- CONTRACTOR TO INSTALL A STABILIZED CONSTRUCTION ENTRANCE AT THIS LOCATION.
- CONTRACTOR TO PERFORM CONSTRUCTION WITHIN THE LIMITS OF THE CONSTRUCTION ZONE AS IDENTIFIED IN THESE PLANS. CONTRACTOR TO LIMIT DISTURBANCES OF NATURAL LAND AS ABLE DURING CONSTRUCTION. CONTRACTOR TO MITIGATE/RESTORE IMPACTS TO NATURAL LAND DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO FILLING RUTS, RESTORING VEGETATION, AND CLEARING FOREIGN MATERIAL AND LITTER.
- URBAN ENGINEERING WILL PROVIDE CONSTRUCTION STAKING AND LAYOUT. COORDINATE WITH TIM JOHNSON AT 361-854-4187 EX. 224

APPROVED BY: [Signature]
DESCRIPTION: [Blank]
DATE: [Blank]

SCALE: 1"=40'
DRAWN: SC
CHECKED: BDW
DATE: Feb. 2024

THE SEAL APPEARING ON THIS DOCUMENT
INDICATES THAT THE ENGINEER IS
A LICENSED PROFESSIONAL ENGINEER
IN THE STATE OF TEXAS

NORTH TRAIL PLAN VIEW
STA. 0+00 TO STA. 8+50
PHASE II CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX

URBAN
ENGINEERING

SHEET
4
OF 10
JOB NO.
06100.C1.07

TX REG. NO. 145, TBS & FRY NO. 16992400
2725 SWANIER DR., CORPUS CHRISTI, TX 78404
PHONE: 361-854-1311 WWW.URBANENG.COM

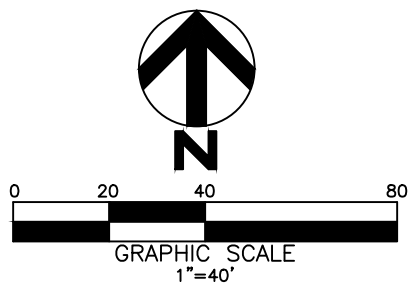


MATCHLINE CONT'D ON SHEET 4

NORTH TRAIL PLAN VIEW
STA. 8+50 TO STA. 17+50

SCALE: 1"=40'

MATCHLINE CONT'D ON SHEET 6



POINT NO.	STATION	NORTHING	EASTING
2.01	15+52.09	17194256.08	1440400.42
2.02	16+16.47	17194196.66	1440423.40
2.03	16+16.47	17194200.19	1440435.92
2.04	17+96.83	17194025.25	1440479.26
2.05	19+00.32	17193931.93	1440523.98
2.06	20+00.25	17193837.65	1440557.13
2.07	20+94.99	17193746.35	1440582.44
2.08	22+35.22	17193607.06	1440566.30
2.09	23+39.52	17193526.36	1440500.23

NOTE:

BASELINE A POINTS
2.02
2.03

LEGEND:

- PROPOSED BOARDWALK
- PROPOSED UPLANDS TRAIL
- LIMITS OF CONSTRUCTION
- FOOT TRAFFIC ONLY

REV. BY: DATE: DESCRIPTION:

SCALE: 1"=40' DRAWN: SC CHECKED: BDW DATE: Feb. 2024

THE SEAL APPEARING ON THIS DOCUMENT
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THE REG. NO. 07193 (02/25/2024)

NORTH TRAIL PLAN VIEW
STA. 8+50 TO STA. 17+50

PHASE II CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX

URBAN
ENGINEERING

TYPE: FERN, MS., L.S., P.E. & FERN, MS., L.S., P.E.
2725 SWANIER DR., CORPUS CHRISTI, TX 78404
PHONE: 361.684.1311 WWW.URBANENG.COM

SHEET
5
OF 10

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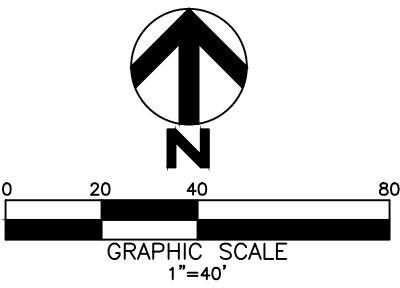
MATCHLINE CONT'D ON SHEET 5



NORTH TRAIL PLAN VIEW
STA. 17+50 TO STA. 26+50

SCALE: 1"=40'

MATCHLINE CONT'D ON SHEET 7



POINT NO.	STATION	NORTHING	EASTING
3.01	25+04.73	17193387.73	1440410.36
3.02	26+73.47	17193250.19	1440312.60
3.03	28+79.69	17193083.57	1440191.09
3.04	29+14.08	17193056.08	1440165.57
3.05	29+14.08	17193051.12	1440179.72
3.06	29+56.22	17193011.34	1440165.79
3.07	31+16.39	17192851.51	1440176.20
3.08	32+68.89	17192699.89	1440192.35

NOTE:

BASELINE B POINTS
3.04
3.05

LEGEND:

- PROPOSED BOARDWALK
- PROPOSED UPLANDS TRAIL
- LIMITS OF CONSTRUCTION
- FOOT TRAFFIC ONLY

REV. BY

DATE

DESCRIPTION

SCALE: 1"=40'

DRAWN: SC

CHECKED: BDW

DATE: Feb. 2024

THE SEAL APPEARING ON THIS DOCUMENT
INDICATES THAT THE ENGINEER IS A
LICENSED PROFESSIONAL ENGINEER
IN THE STATE OF TEXAS (02/25/2024)

NORTH TRAIL PLAN VIEW
STA. 17+50 TO STA. 26+50

PHASE II CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX

URBAN
ENGINEERING

TYPE: FERN, US, 145, TBS, FERN, US, 10992400
2725 SWANIER DR., CORPUS CHRISTI, TX 78404
PHONE: 361.684.3101 WWW.URBANENG.COM

SHEET
6
OF 10

JOB NO.
06100.C1.07

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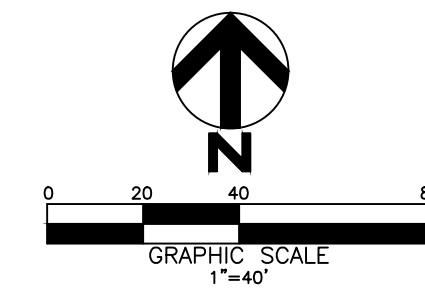
MATCHLINE CONT'D ON SHEET 6



NORTH TRAIL PLAN VIEW
STA. 26+50 TO STA. 40+50

SCALE: 1"=40'

MATCHLINE CONT'D ON SHEET 8







POINT NO.	STATION	NORTHING	EASTING
4.01	33+477.72	17192597.60	1440229.21
4.02	34+61.04	17192531.23	1440279.57
4.03	35+35.78	17192493.41	1440344.04
4.04	36+21.11	17192470.55	1440426.11
4.05	36+93.40	17192499.31	1440492.29
4.06	37+59.52	17192510.51	1440557.44
4.07	38+29.69	17192559.18	1440607.99
4.08	38+71.69	17192570.02	1440648.57
4.09	39+03.60	17192567.70	1440680.40
4.10	39+34.12	17192558.28	1440709.43
4.11	39+59.94	17192541.39	1440728.95
4.12	40+54.57	17192450.69	1440755.96
4.13	0+00.00	17192418.45	1440779.94
4.14	40+88.35	17192414.19	1440760.55
4.15	41+15.78	17192395.66	1440781.77
4.16	41+50.54	17192360.98	1440783.99
4.17	42+77.04	17192244.49	1440833.33
4.18	43+04.50	17192217.08	1440835.04
4.19	43+65.53	17192161.17	1440810.58
4.20	44+52.78	17192074.67	1440799.25

NOTE:

BASELINE C POINTS

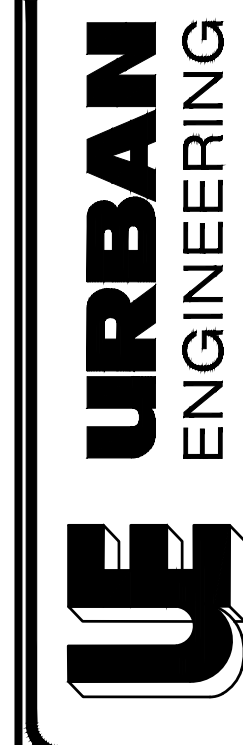
4.13
4.14

LEGEND:

-  PROPOSED BOARDWALK
 PROPOSED UPLANDS TRAIL
 LIMITS OF CONSTRUCTION
 FOOT TRAFFIC ONLY

NORTH TRAIL PLAN VIEW
STA. 26+50 TO STA. 40+50

PHASE II CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX



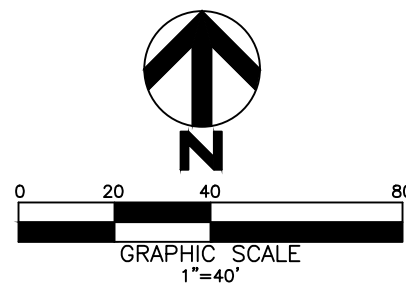
BBPE FIRM NO. 145, TBPLS FIRM NO. 10032400
7225 SWANTNER DR, CORPUS CHRISTI, TX 78404
PHONE: 361.854.3101 WWW.URBANENG.COM

SHEET
7
OF 19

JOB NO.
06100.C1.07

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MATCHLINE CONT'D ON SHEET 7



POINT NO.	STATION	NORTHING	EASTING
5.01	48+52.54	17191717.84	1440619.02
5.02	49+62.52	17191629.43	1440554.63
5.03	50+05.52	17191599.88	1440523.41
5.04	50+79.35	17191541.26	1440479.08
5.05	51+81.29	17191443.48	1440454.59
5.06	51+98.51	17191426.63	1440457.85
5.07	52+28.72	17191397.54	1440465.96
5.08	52+74.31	17191352.20	1440470.36
5.09	53+33.48	17191299.74	1440497.52
5.10	53+91.27	17191242.22	1440502.34
5.11	54+55.89	17191182.93	1440481.43
5.12	0+00.00	17191172.13	1440471.48
5.13	0+33.36	17191152.62	1440498.11
5.14	54+85.47	17191161.18	1440461.38
5.15	55+36.20	17191138.77	1440417.07
5.16	55+60.59	17191136.07	1440392.83
5.17	56+20.66	17191146.76	1440334.58
5.18	56+48.06	17191159.25	1440310.20
5.19	56+77.59	17191165.91	1440281.73
5.20	57+30.06	17191165.20	1440229.27
5.21	57+50.79	17191160.04	1440209.39
5.22	57+86.30	17191143.21	1440178.12
5.23	0+00.00	17191156.66	1440124.04
5.24	0+38.07	17191127.94	1440099.05
5.25	58+77.33	17191185.38	1440116.34
5.26	58+88.65	17191196.63	1440117.57
5.27	60+55.26	17191323.38	1440213.27
5.28	61+14.42	17191334.55	1440270.66
5.29	61+36.50	17191332.88	1440292.67
5.30	62+04.16	17191354.90	1440354.59
5.31	62+45.85	17191383.58	1440384.86
5.32	63+16.00	17191421.03	1440443.66

NOTE:

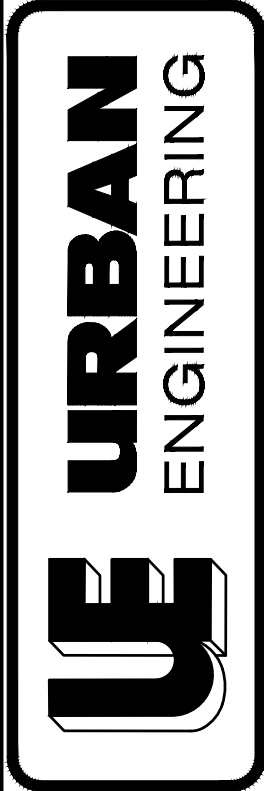
BASELINE D POINTS
5.12
5.13

BASELINE E POINTS
5.23
5.24

LEGEND:

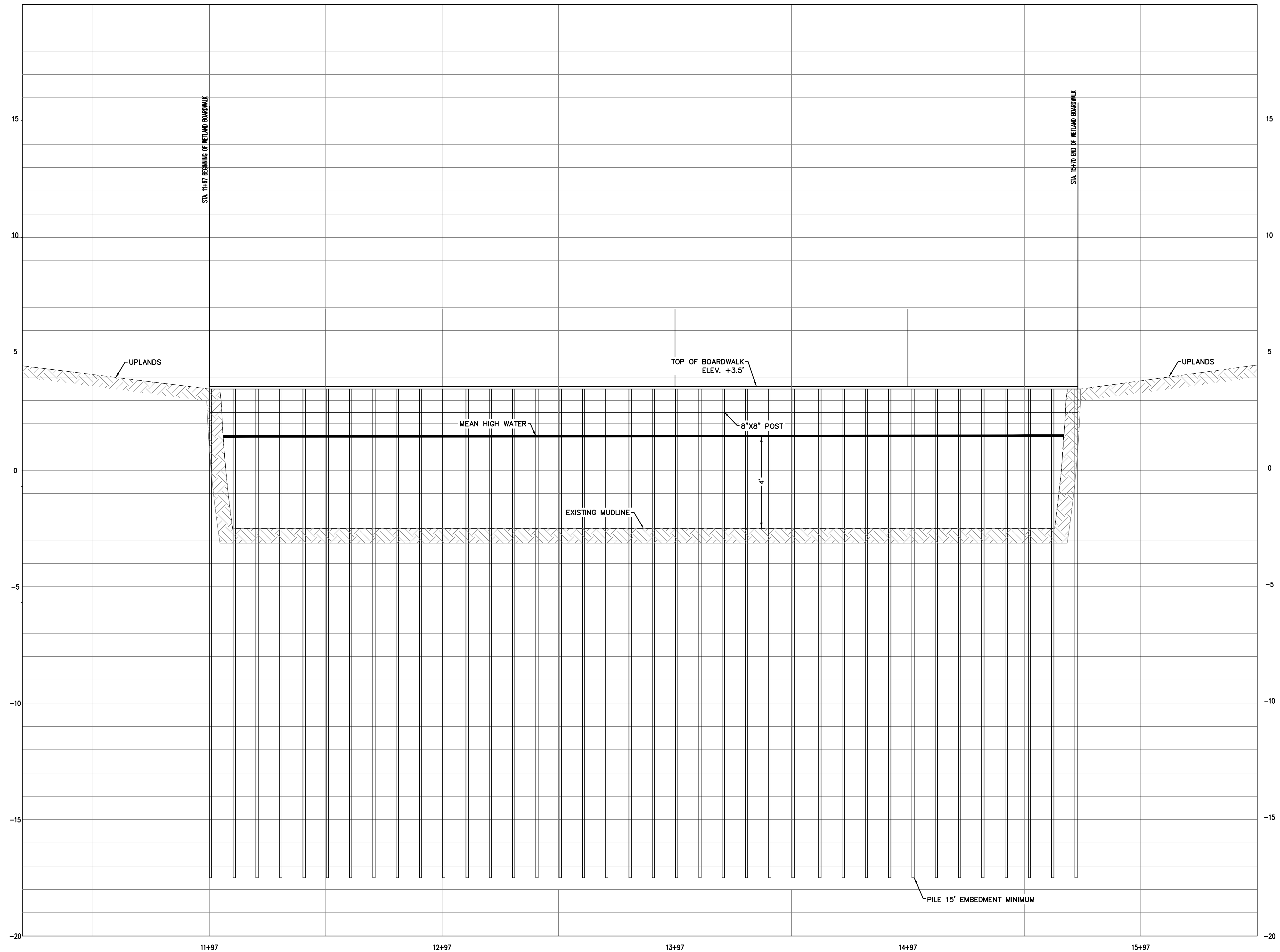
- PROPOSED BOARDWALK
- PROPOSED UPLANDS TRAIL
- LIMITS OF CONSTRUCTION
- FOOT TRAFFIC ONLY

NORTH TRAIL PLAN VIEW
STA. 40+50 TO END
PHASE II CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX



SHEET
8
OF 10

JOB NO.
06100.C1.07



STA. 11+97 BEGINNING OF WETLAND BOARDWALK

STA. 15+70 END OF WETLAND BOARDWALK

11+97

12+97

13+97

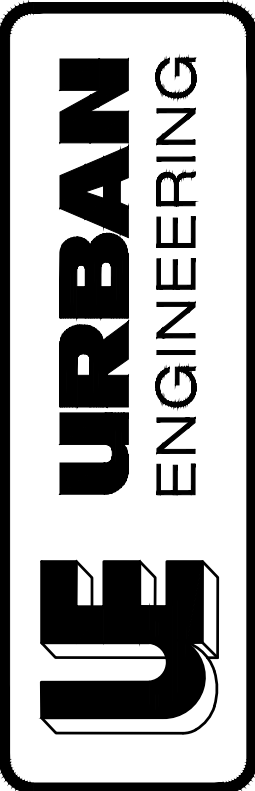
14+97

15+97

DEEP WATER CROSSING SECTION
STA. 11+97 TO STA. 15+70

STA. 11+97 TO STA. 15+70

PHASE I CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX



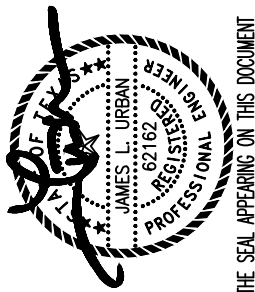
TBPE FIRM NO. 145, TBPLS FIRM NO. 10032400
 2725 SWANTNER DR, CORPUS CHRISTI, TX 78404
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SHEET
9

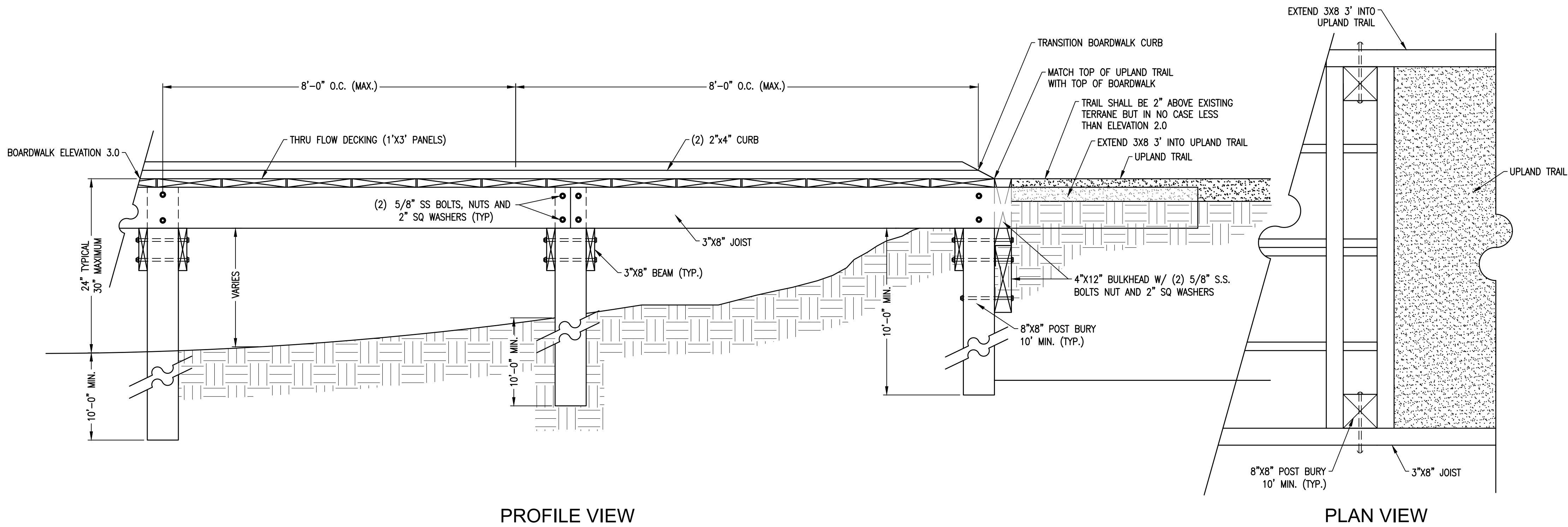
OF 19

JOB NO.
06100.C1.07

	REV.	BY	DATE	DESCRIPTION	APPROVED BY
SCALE: 1" = 20'					
DRAWN: DL					
CHECKED: BDW					
DATE: AUG, 2022					



TX. REG. 62162 (02/29/2024)

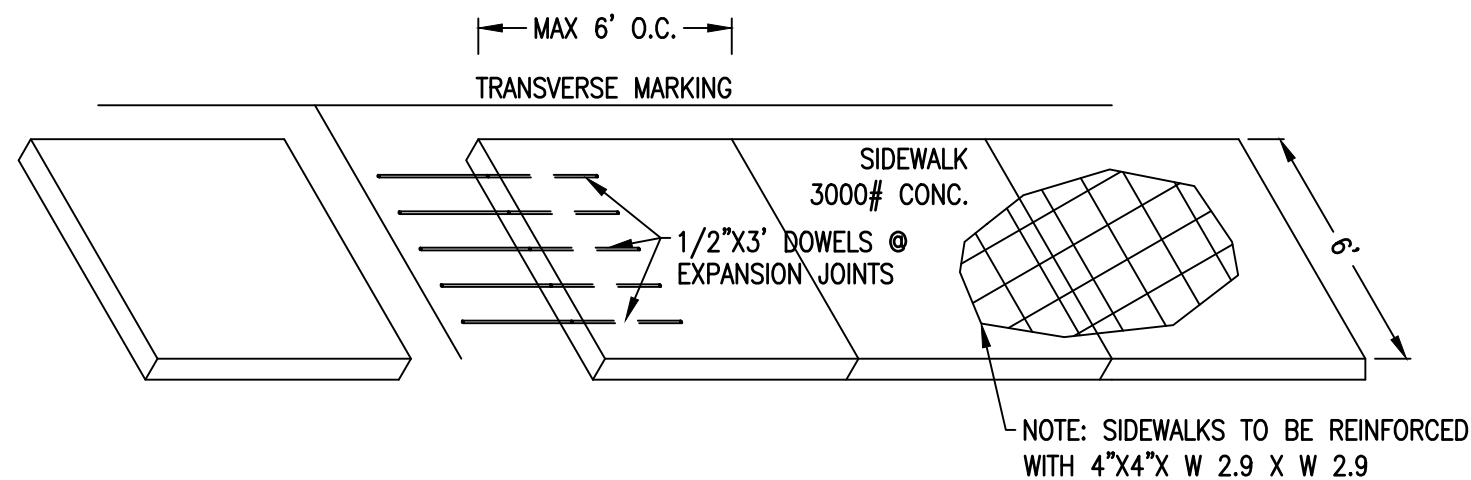


PROFILE VIEW

PLAN VIEW

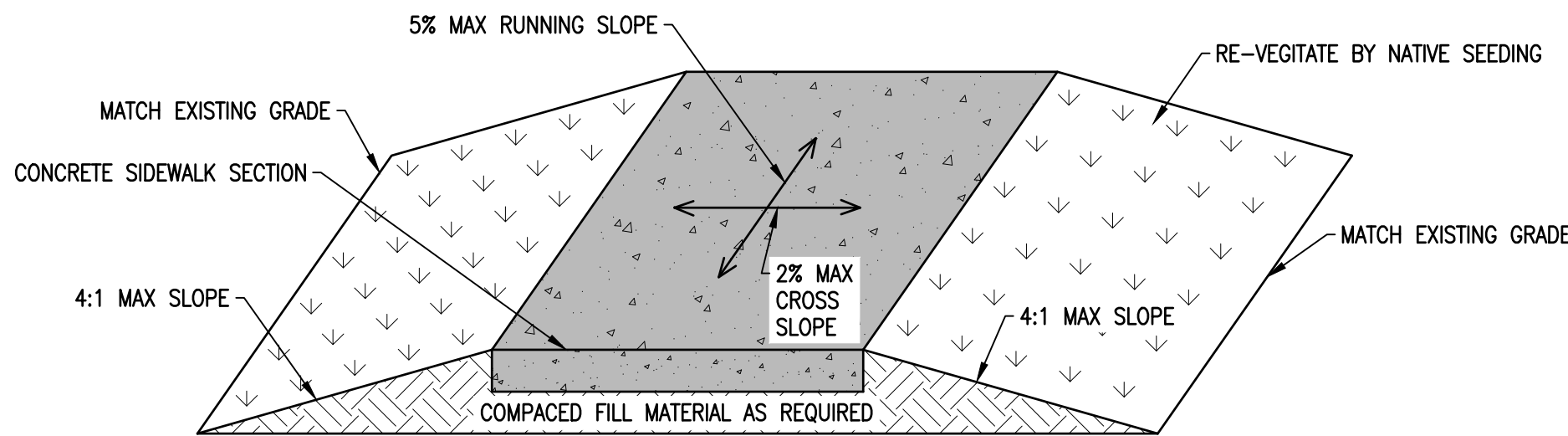
BOARDWALK TRANSITION TO UPLAND

SCALE: N.T.S.



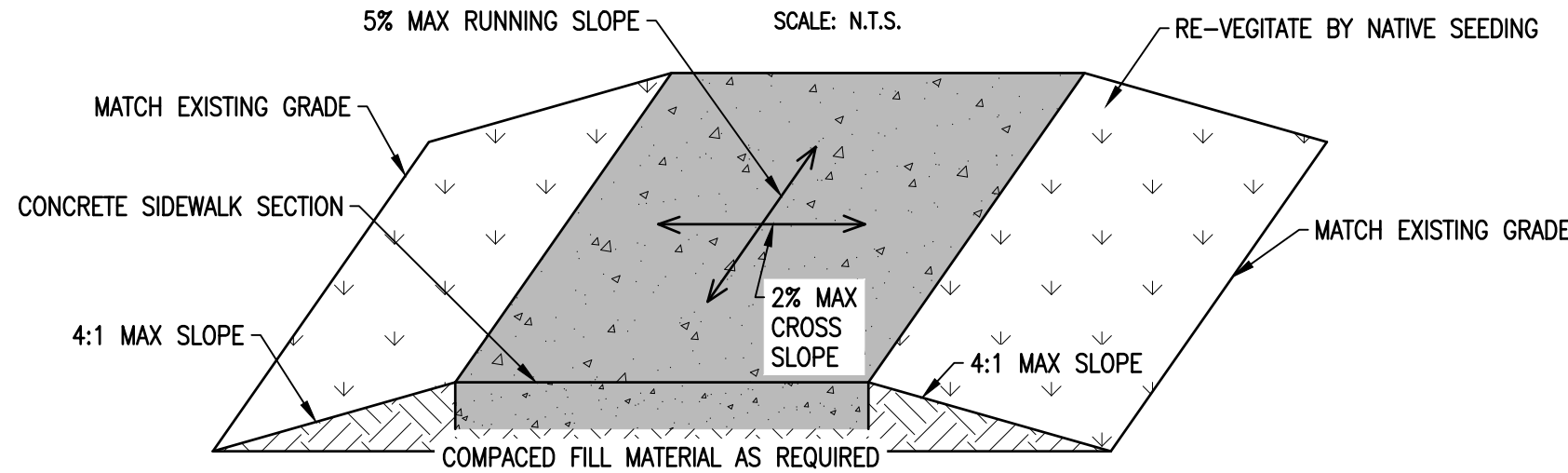
SIDEWALK DETAIL

SCALE: N.T.S.



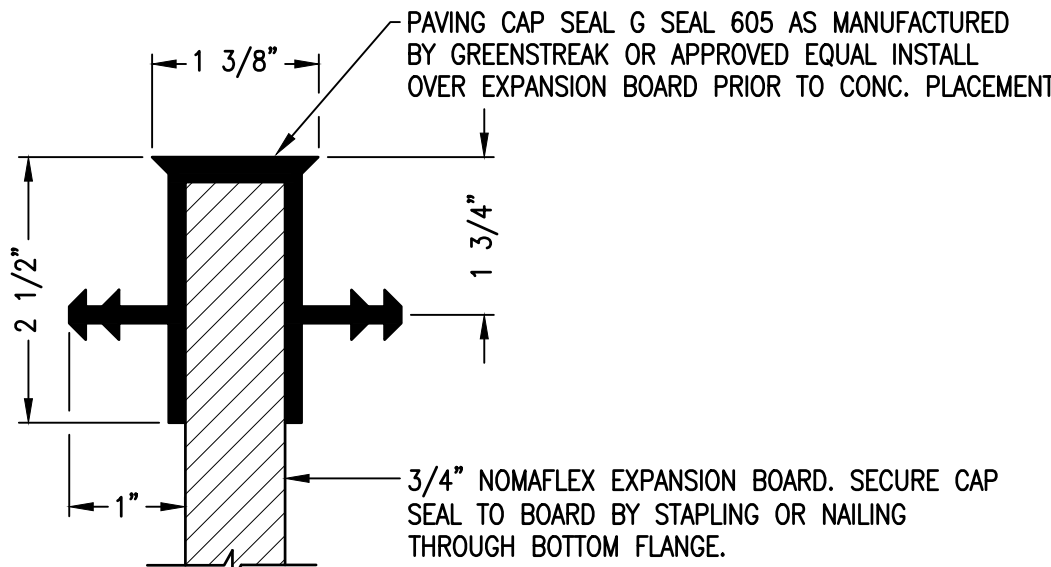
SIDEWALK ON FILL DETAIL TYPICAL SECTION A-A

SCALE: N.T.S.



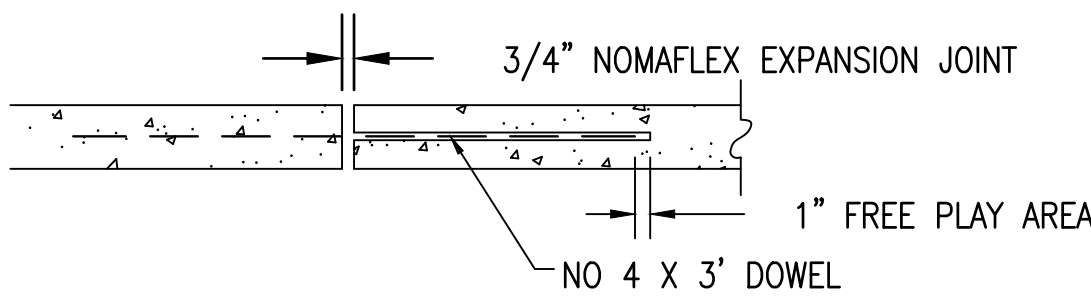
SIDEWALK ON GRADE DETAIL TYPICAL SECTION B-B

SCALE: N.T.S.



CAP SEAL DETAIL NEW CONC. TO NEW CONC.

SCALE: N.T.S.



DOWEL BAR DETAIL

SCALE: N.T.S.

SIDEWALK NOTES:

- EXPANSION JOINT SEALANT SHALL BE G SEAL 605 OR 628 AS MANUFACTURED BY GREENSTREAK OR APPROVED EQUAL. POLYURETHANE JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM C920-87, TYPE S OR M, GRADE F, CLASS 25 USES T.M.A AND D. SHALL BE USED IN ALL CONTRACTION JOINTS AND EXPANSION JOINTS WHERE CAP SEAL IS NOT FEASIBLE. WHERE GRADES CONTRACTION THAN 3% SLOPE USE BOSTIK 900 SEALANT. SEALANT NOT REQUIRED AT CAP SEAL JOINTS.
- ALL CONCRETE CLASS "A", 3,000 psi.
ALL STEEL, GRADE 60, fy = 60,000 psi
- MINIMUM SIDEWALK CONCRETE THICKNESS = 4"
- PROVIDE EXPANSION JOINT EVERY 36'
- PROVIDE CONTROL JOINT EVERY 6'

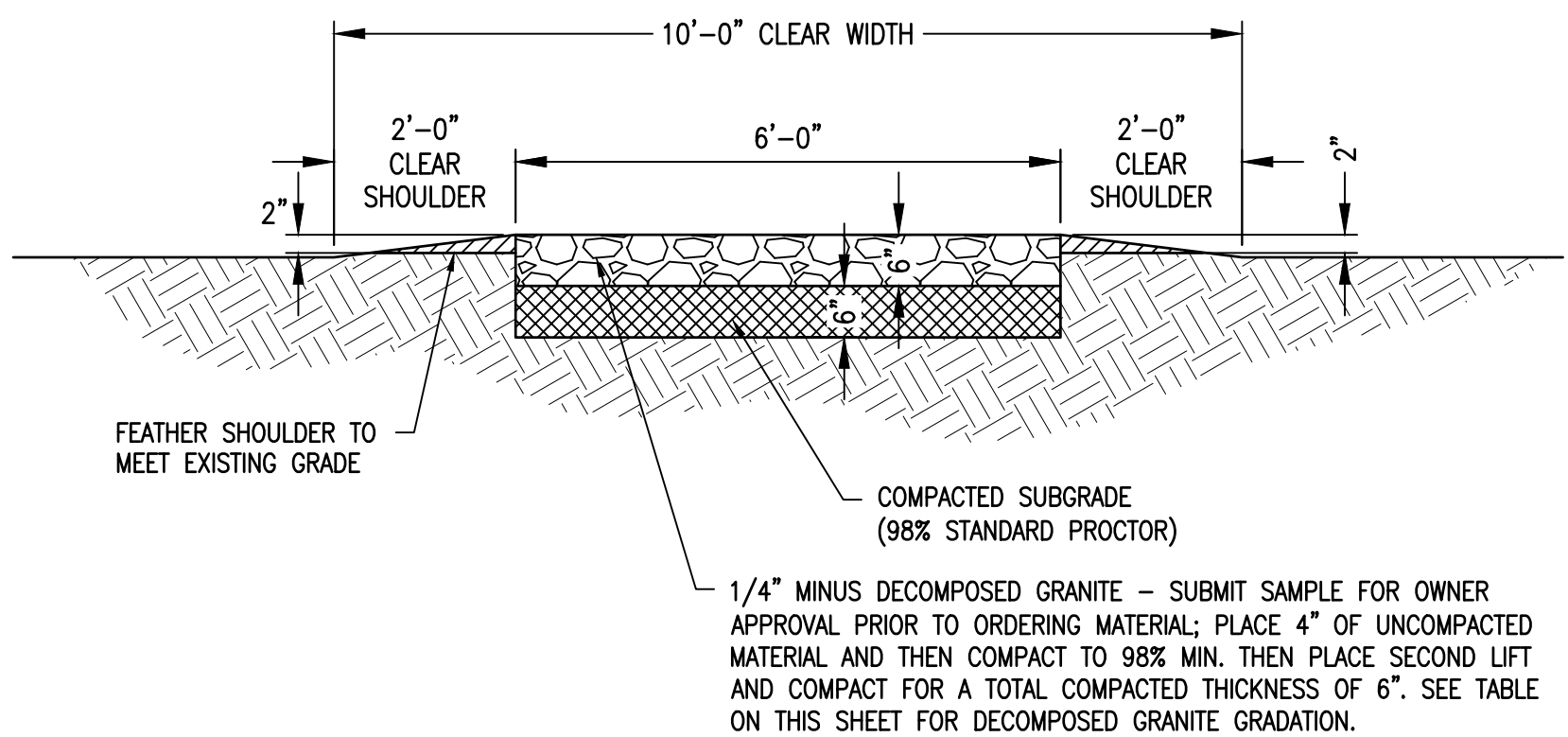
1/4" MINUS DECOMPOSED GRANITE GRADATION ASTM D6913

TEST METHOD:

U.S. STANDARD SIEVE SIZE		% PASSING
3/8 INCH	9.5-mm	100
NO. 4	4.75-mm	94
NO. 8	2.36-mm	71
NO. 16	1.18-mm	49
NO. 30	600-um	32
NO. 50	300-um	21
NO. 100	150-um	14
NO. 200	75-um	11

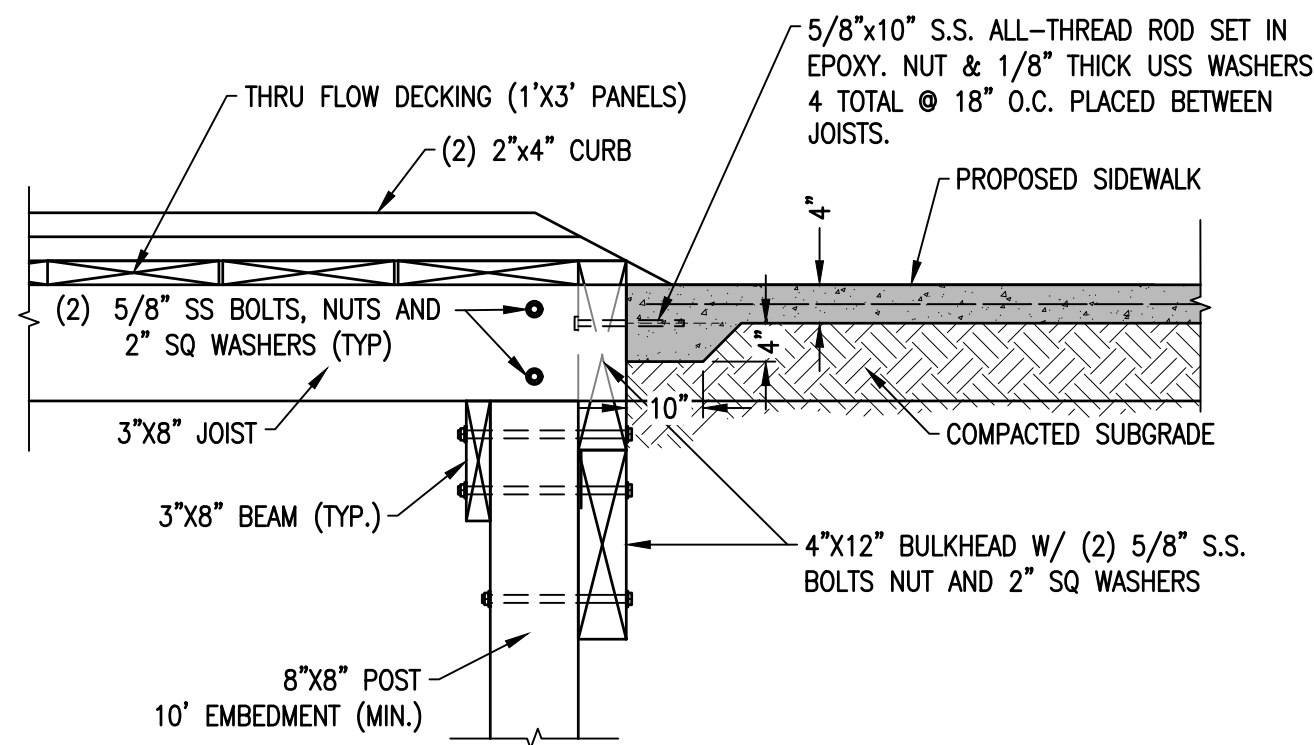
MATERIAL PROPERTIES FOR PROPOSED OBSERVATION AREAS, TOWER AND BOARDWALK

- ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
- ALL LUMBER SHALL BE TREATED NO. 1 GRADE SOUTHERN YELLOW PINE.
- ALL POSTS/PILINGS THAT EXTEND INTO THE GROUND BEAMS AND JOISTS (UPLANDS AND WETLANDS) SHALL BE MARINE GRADE, TREATED TO 2.5 CCA.
- ALL OTHER LUMBER TREATED TO BE 0.31 CA.
- ALL BEAM AND JOIST CONNECTIONS REQUIRE 316 S.S. HURRICANE TIES (H2.5T BY SIMPSON STRONGTIE OR APPROVED EQUAL)
- CONTRACTOR SHALL PLACE AND COMPACT SUBGRADE TO 95% STD. PROCTOR WITHIN -1% TO +3% OPTIMUM MOISTURE CONTENT.
- ALL EXISTING STRUCTURES SHALL BE DEMOLISHED AND DISPOSED OF.



UPLAND TRAIL SECTION

SCALE: N.T.S.



BOARDWALK TO SIDEWALK CONNECTION DETAIL

SCALE: N.T.S.

APPROVED BY: [Signature]

DESCRIPTION: [Blank]

REV. BY: [Blank]

DATE: [Blank]

SCALE: N.T.S.

DRAWN: SC

CHECKED: BDW

DATE: Feb. 2024

THE SEAL APPEARING ON THIS DOCUMENT
INDICATES THAT THE DESIGNER HAS
REGISTERED WITH THE STATE OF TEXAS
AS A PROFESSIONAL ENGINEER
IN THE FIELD OF CIVIL ENGINEERING
DATE: FEB. 2024

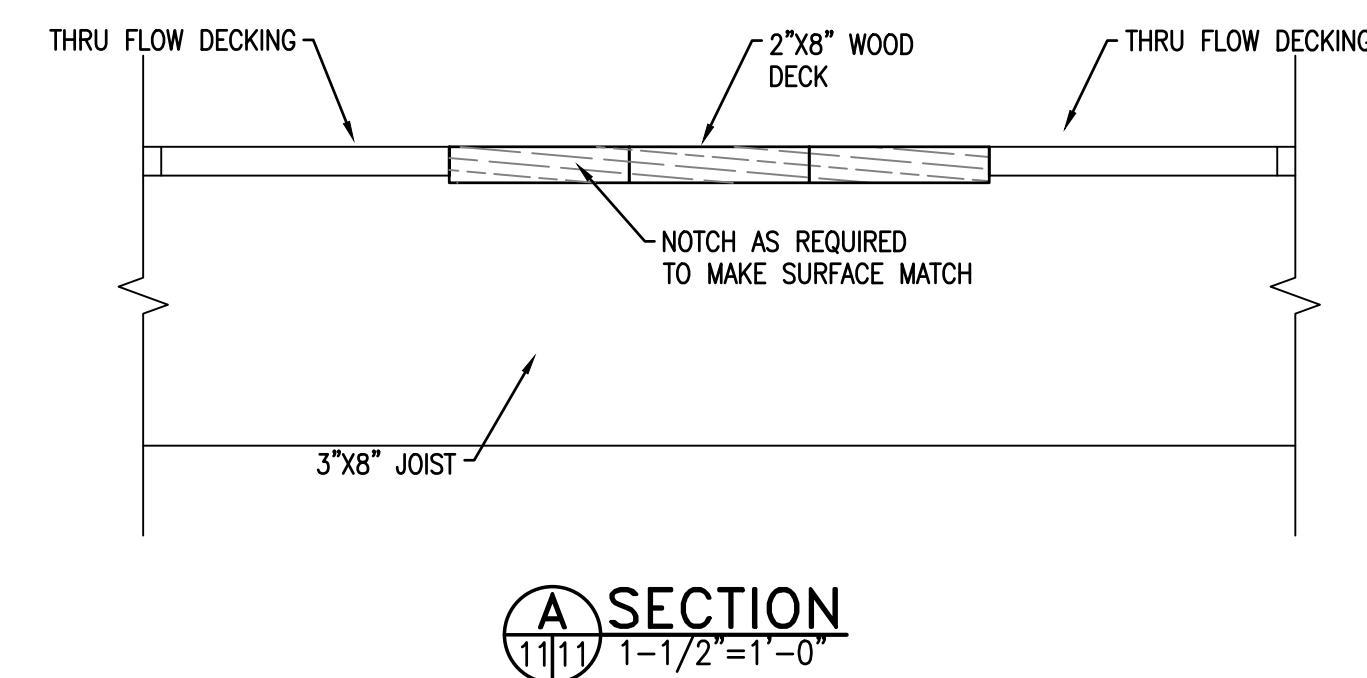
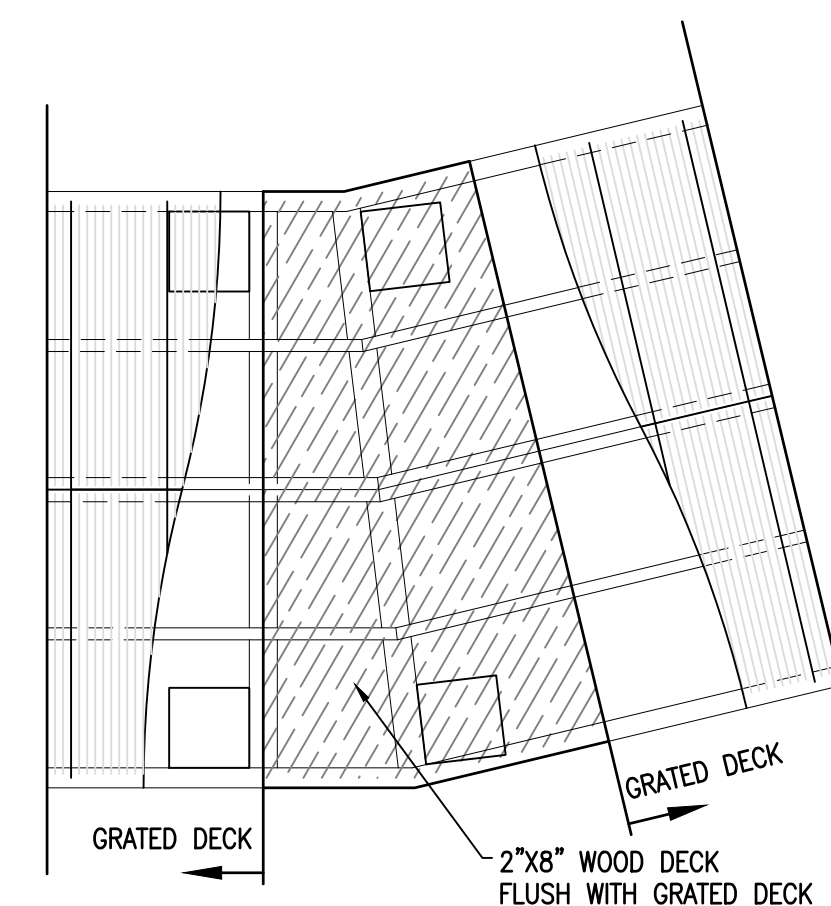
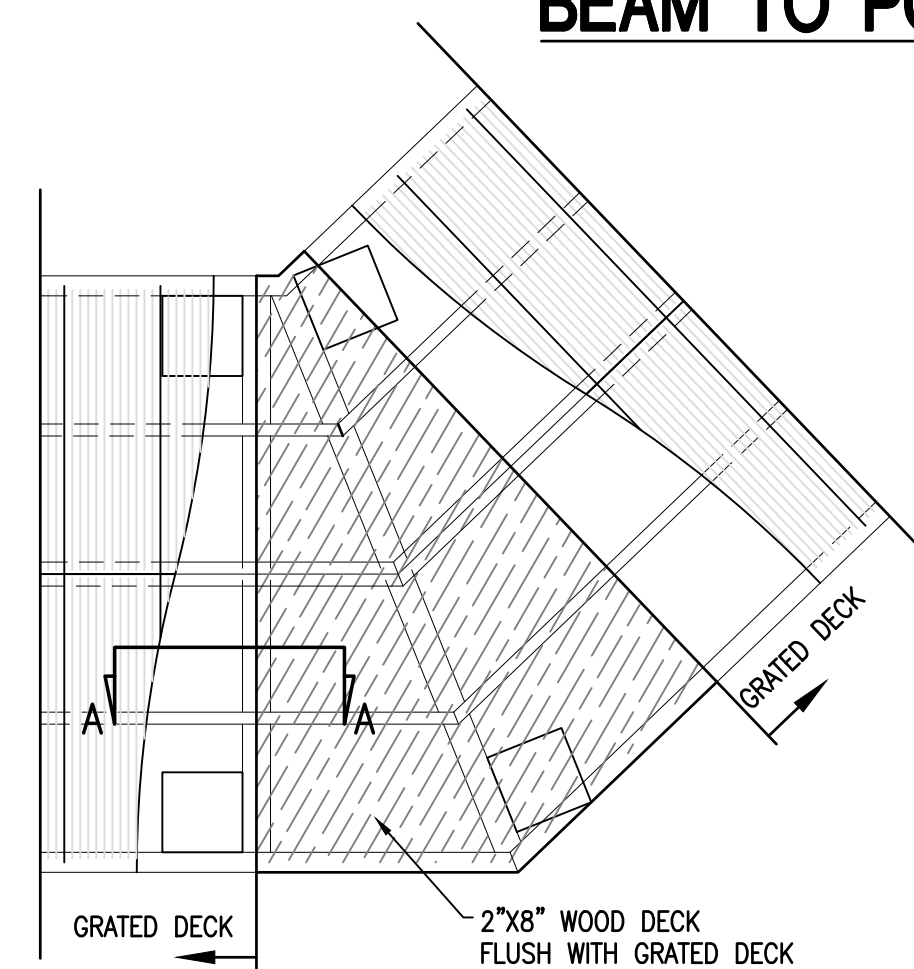
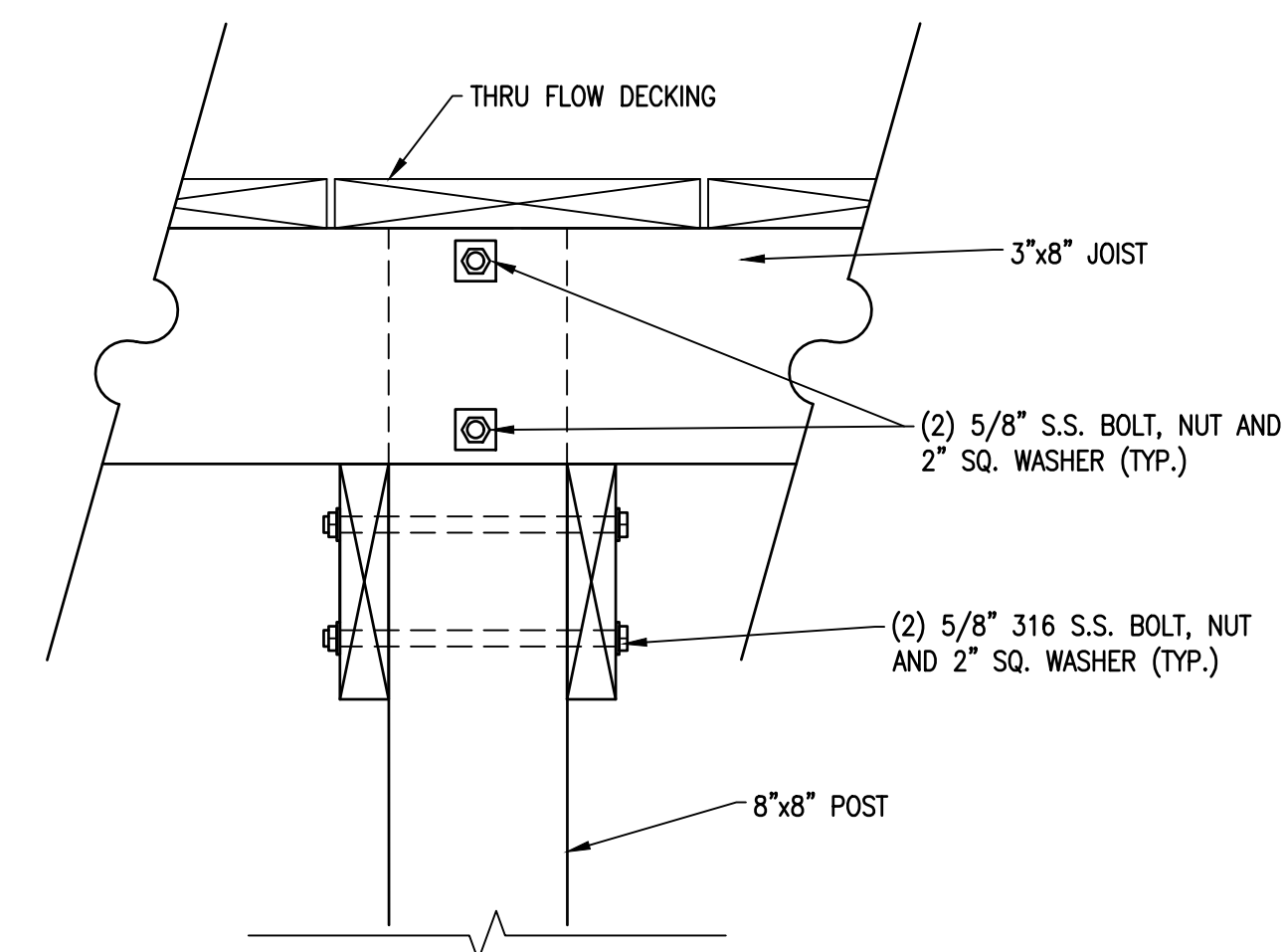
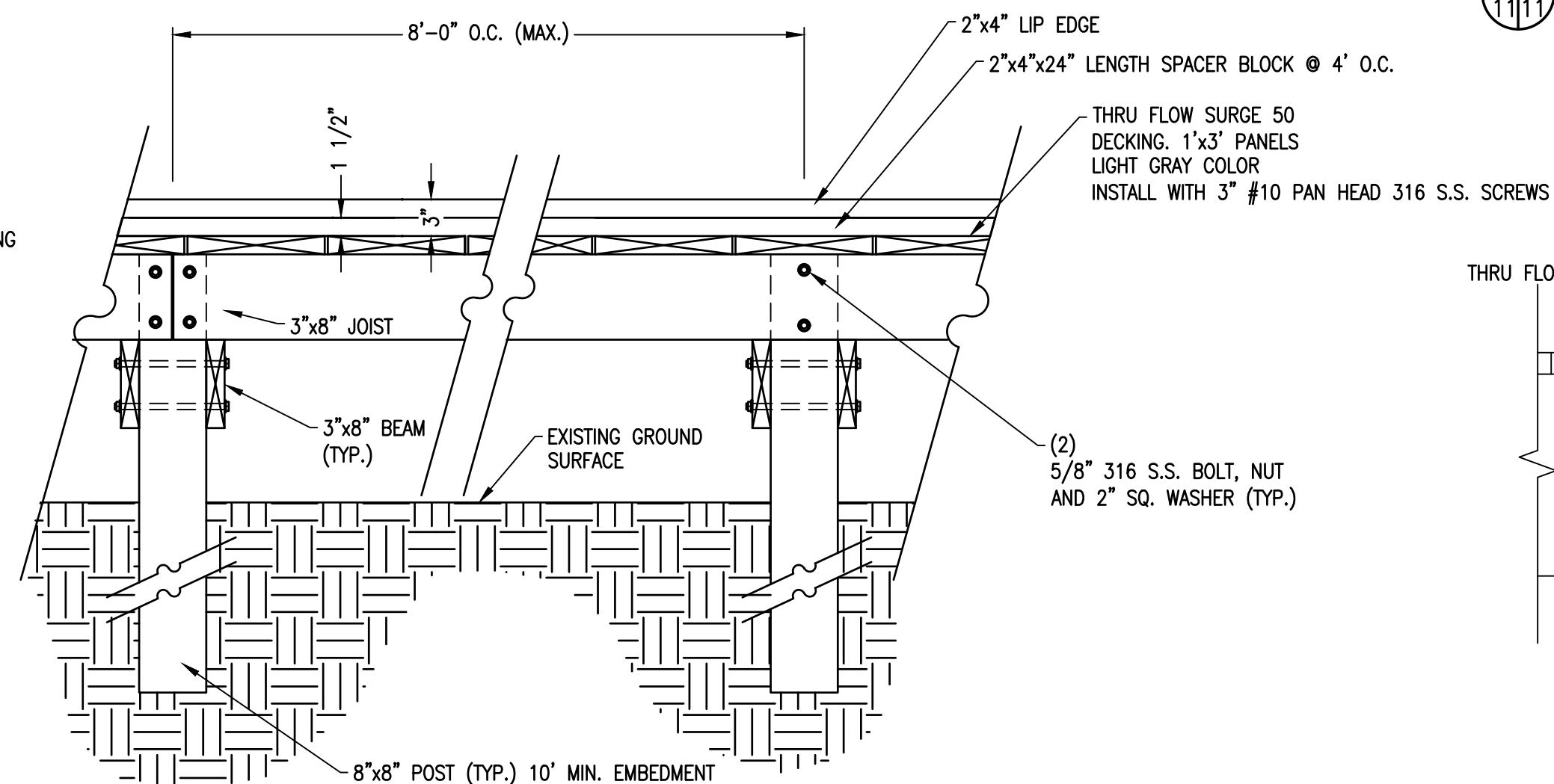
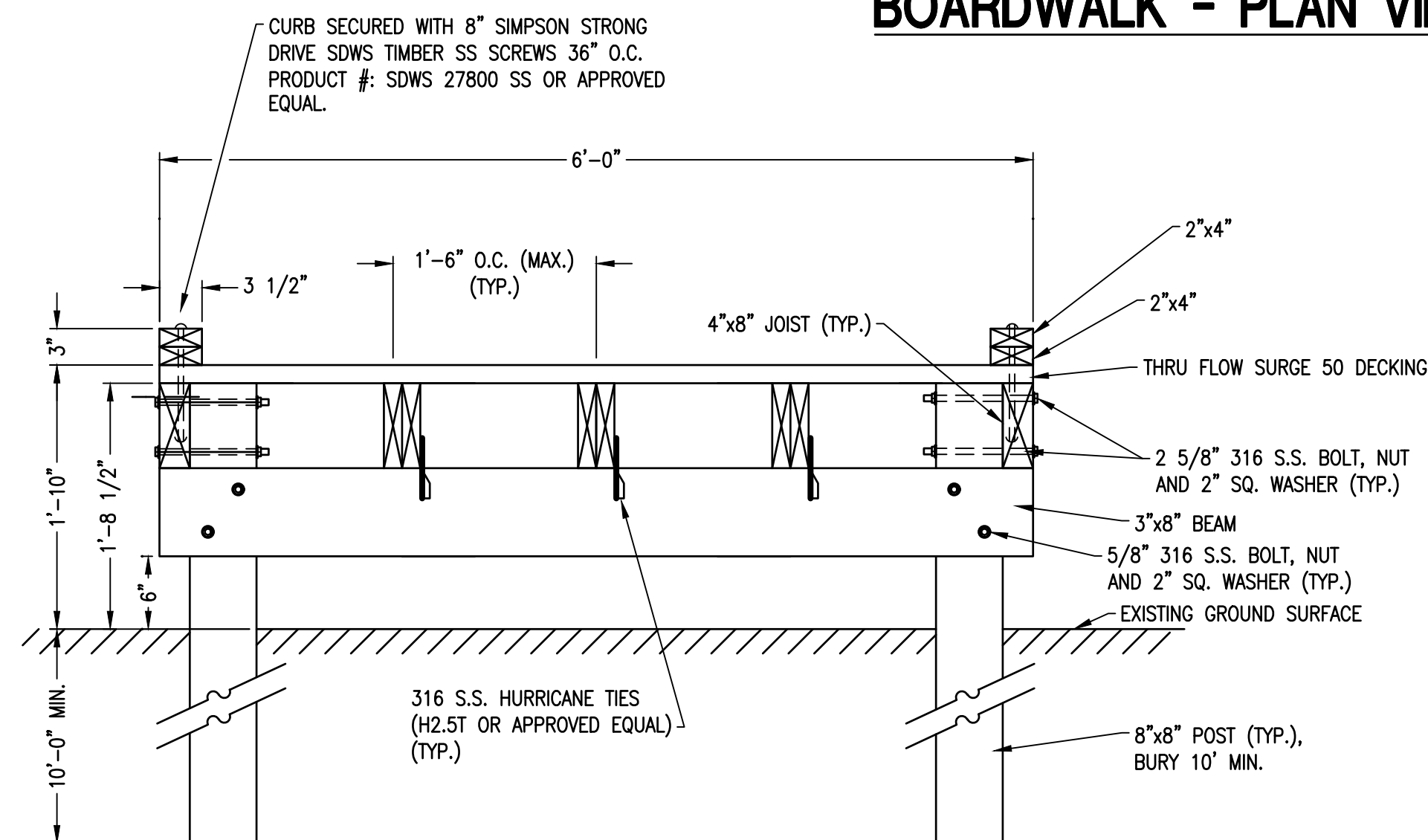
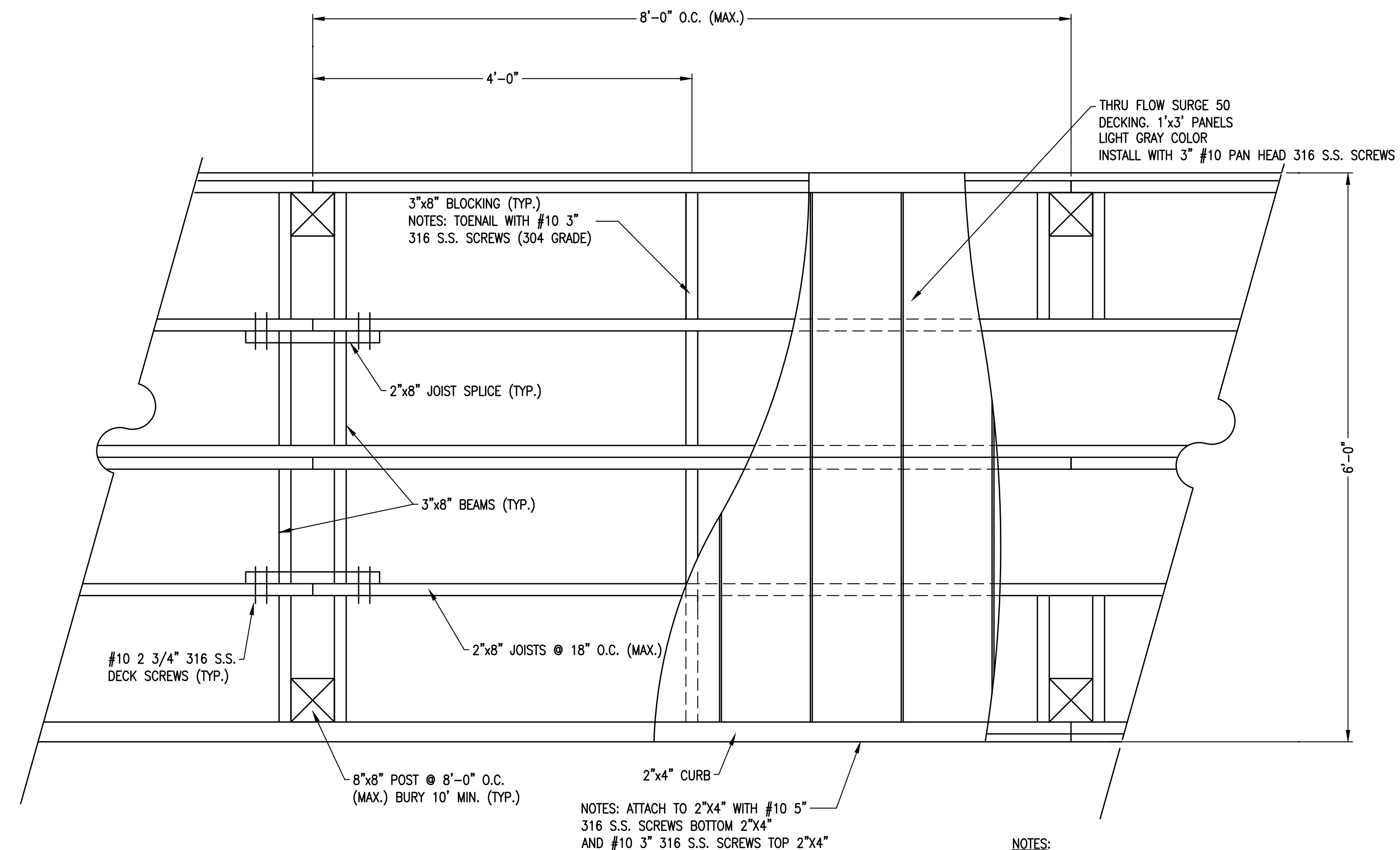
NORTH TRAIL AND BOARDWALK
DETAILS (1)

PHASE II CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX

THE SEAL APPEARING ON THIS DOCUMENT
INDICATES THAT THE DESIGNER HAS
REGISTERED WITH THE STATE OF TEXAS
AS A PROFESSIONAL ENGINEER
IN THE FIELD OF CIVIL ENGINEERING
DATE: FEB. 2024


SHEET
10
OF 10

JOB NO.
06100.C1.07



MATERIAL PROPERTIES FOR PROPOSED OBSERVATION AREAS, TOWER AND BOARDWALK

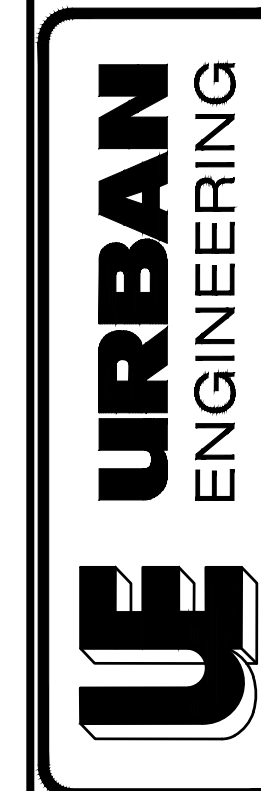
1. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
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5. ALL BEAM AND JOIST CONNECTIONS REQUIRE 316 S.S. HURRICANE TIES (H2.5T BY SIMPSON STRONGTIE OR APPROVED EQUAL).
6. CONTRACTOR SHALL PLACE AND COMPACT SUBGRADE TO 95% STD. PROCTOR WITHIN -1% TO +3% OPTIMUM MOISTURE CONTENT.
7. ALL EXISTING STRUCTURES SHALL BE DEMOLISHED AND DISPOSED OF.

	SCALE:	AS NOTED	REV.	BY	DATE	DESCRIPTION	APPROVED	DATE
	DRAWN:	SC						
	CHECKED:	BDW						
	DATE: Feb. 2024							



NORTH TRAIL AND BOARDWALK DETAILS (2)

PHASE II CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX

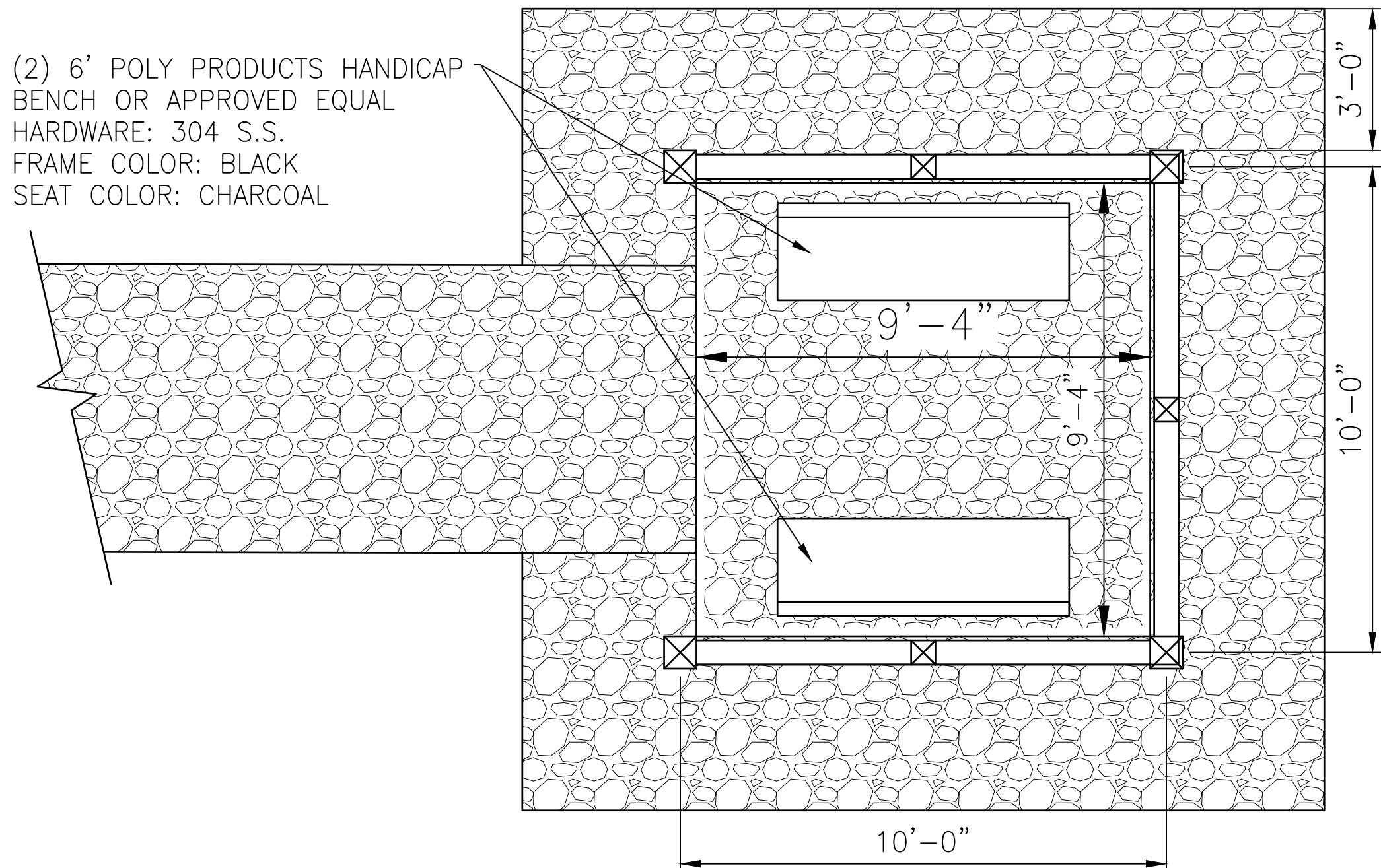


BBPE FIRM NO. 145, TBPLS FIRM NO. 10032400
1225 SWANTNER DR, CORPUS CHRISTI, TX 78404
PHONE: 361.854.3101 WWW.IIRANENG.COM

SHEET
11
OF 19

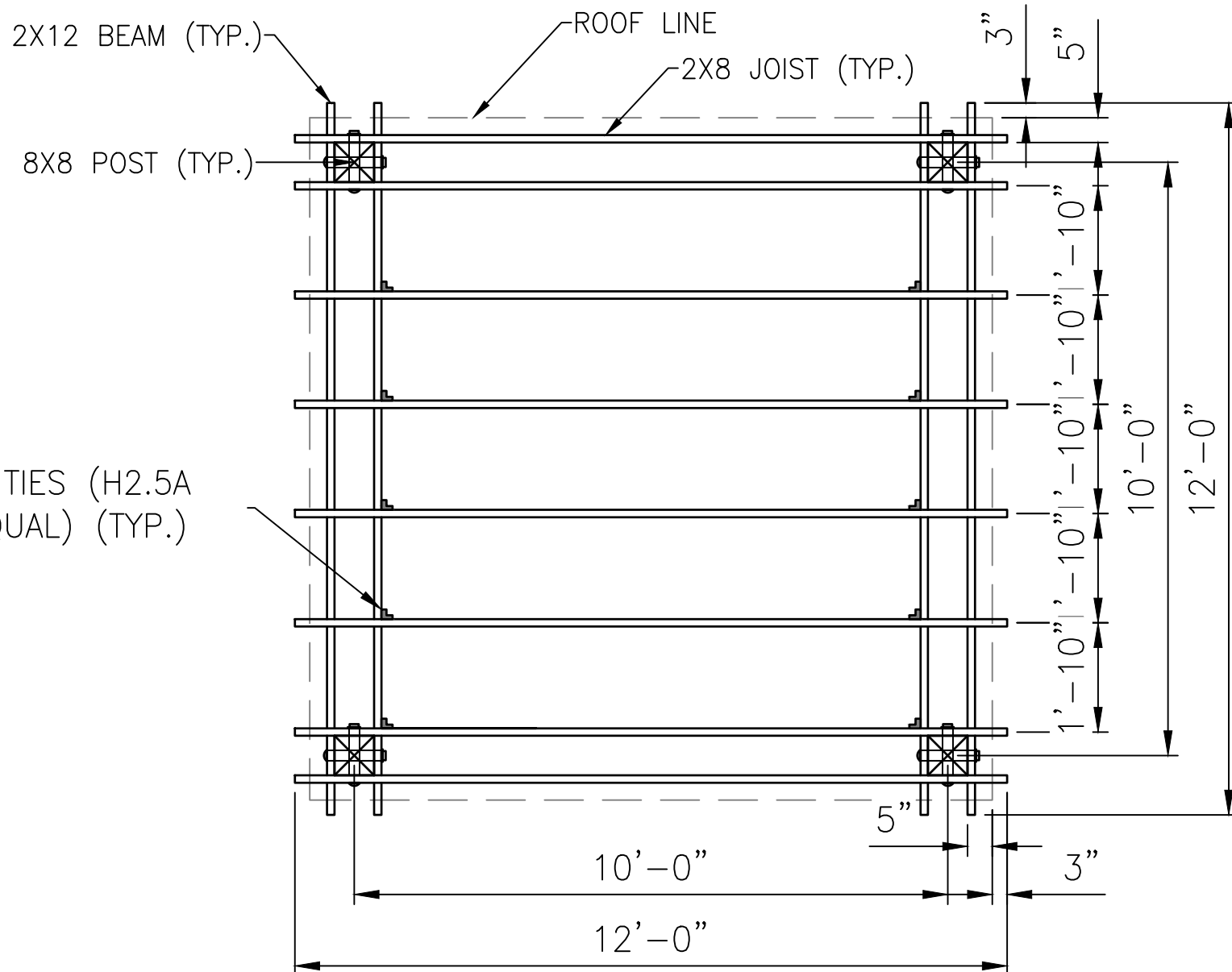
JOB NO.
06100.C1.07

(2) 6' POLY PRODUCTS HANDICAP BENCH OR APPROVED EQUAL
HARDWARE: 304 S.S.
FRAME COLOR: BLACK
SEAT COLOR: CHARCOAL

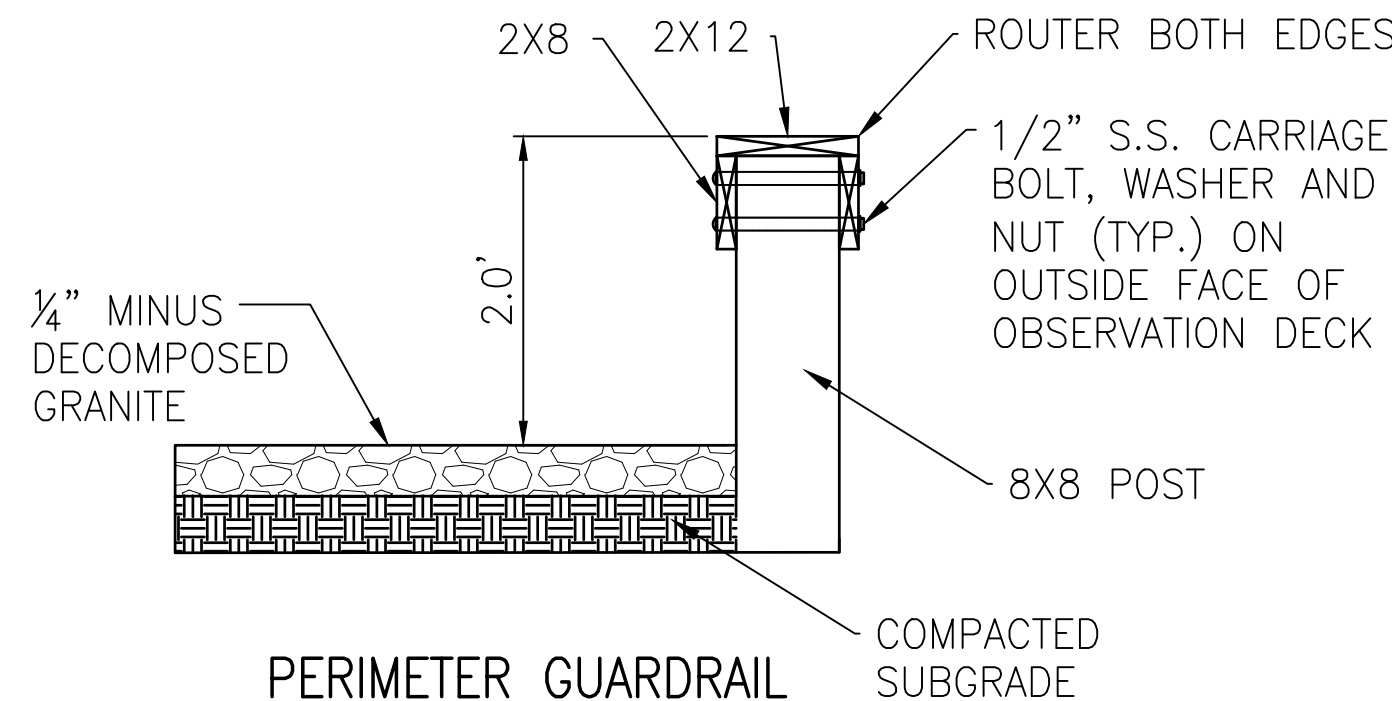


OBSERVATION AREA PLAN VIEW
N.T.S.

S.S. HURRICANE TIES (H2.5A
OR APPROVED EQUAL) (TYP.)

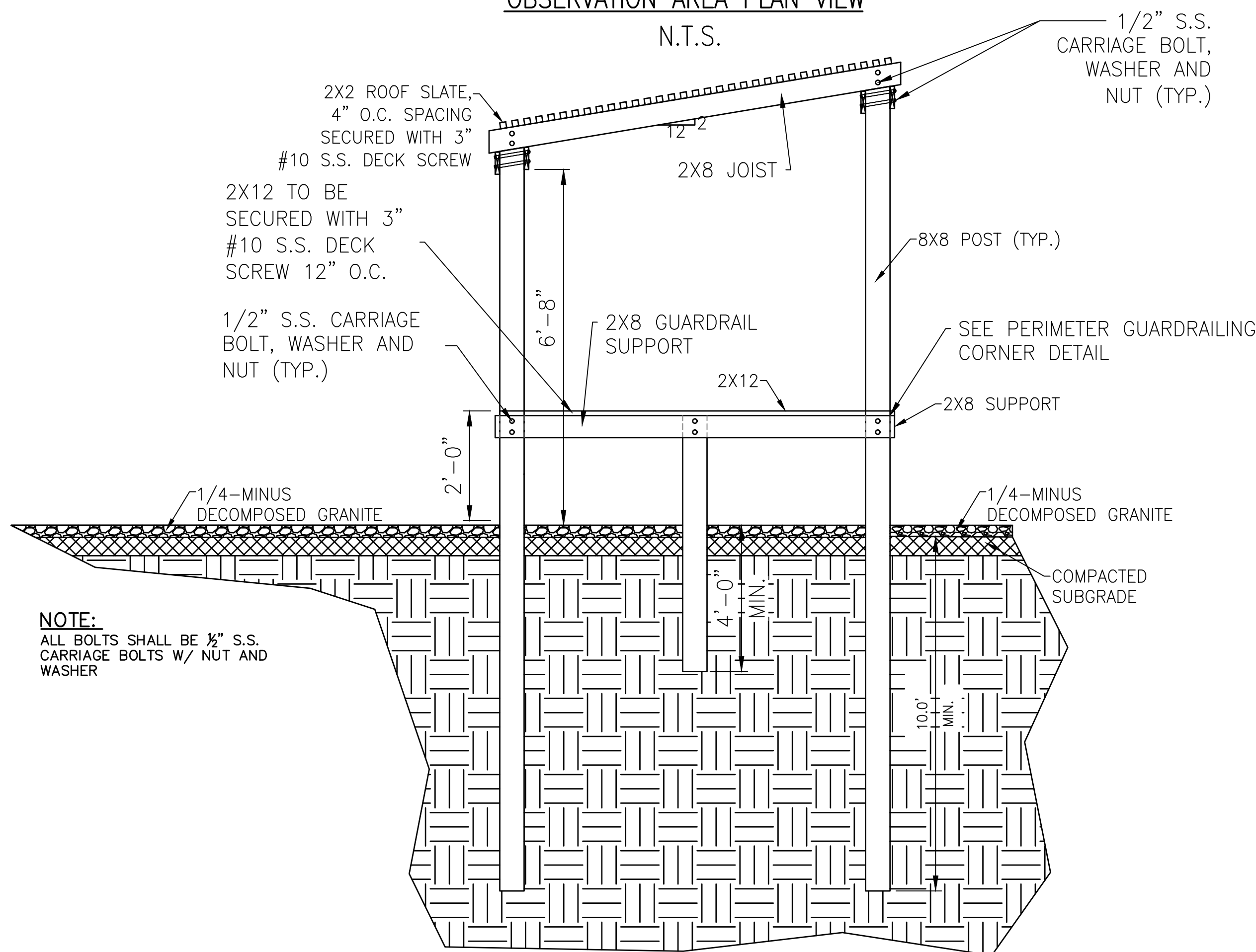


ROOF FRAMING PLAN
N.T.S.

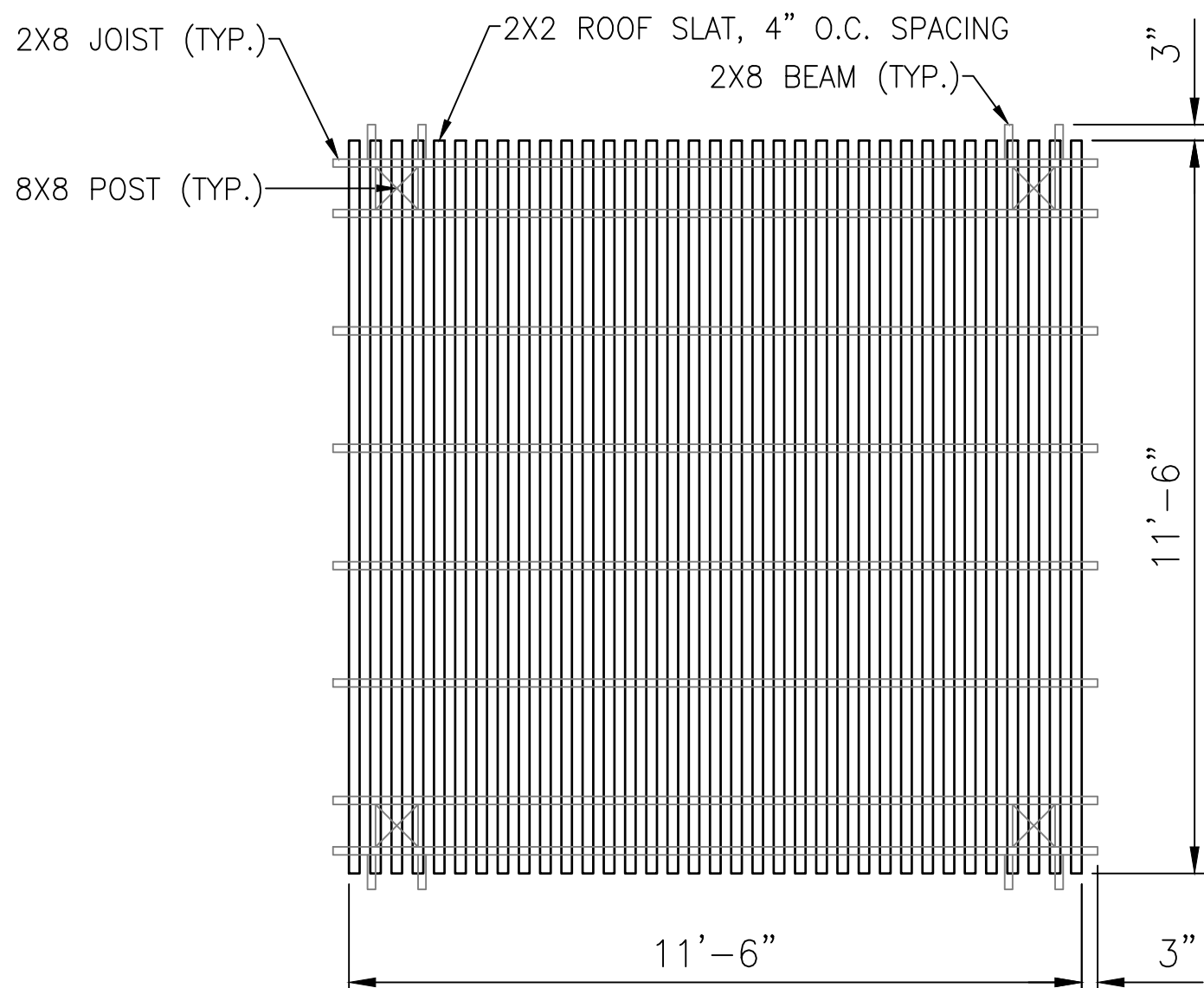


PERIMETER GUARDRAIL
N.T.S.

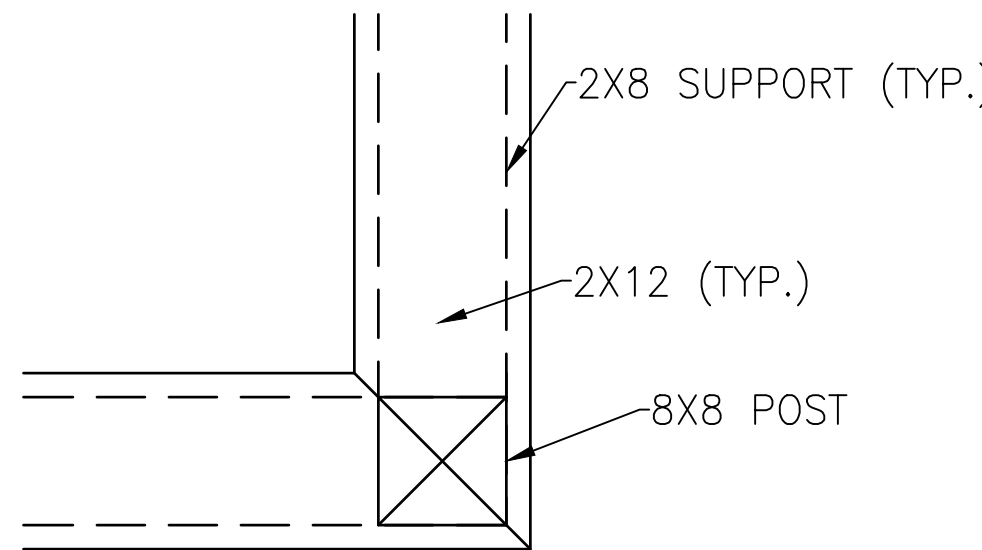
NOTE:
PERIMETER GUARDRAIL WRAPS AROUND
THREE SIDES
(DOES NOT OBSTRUCT WALKWAY).



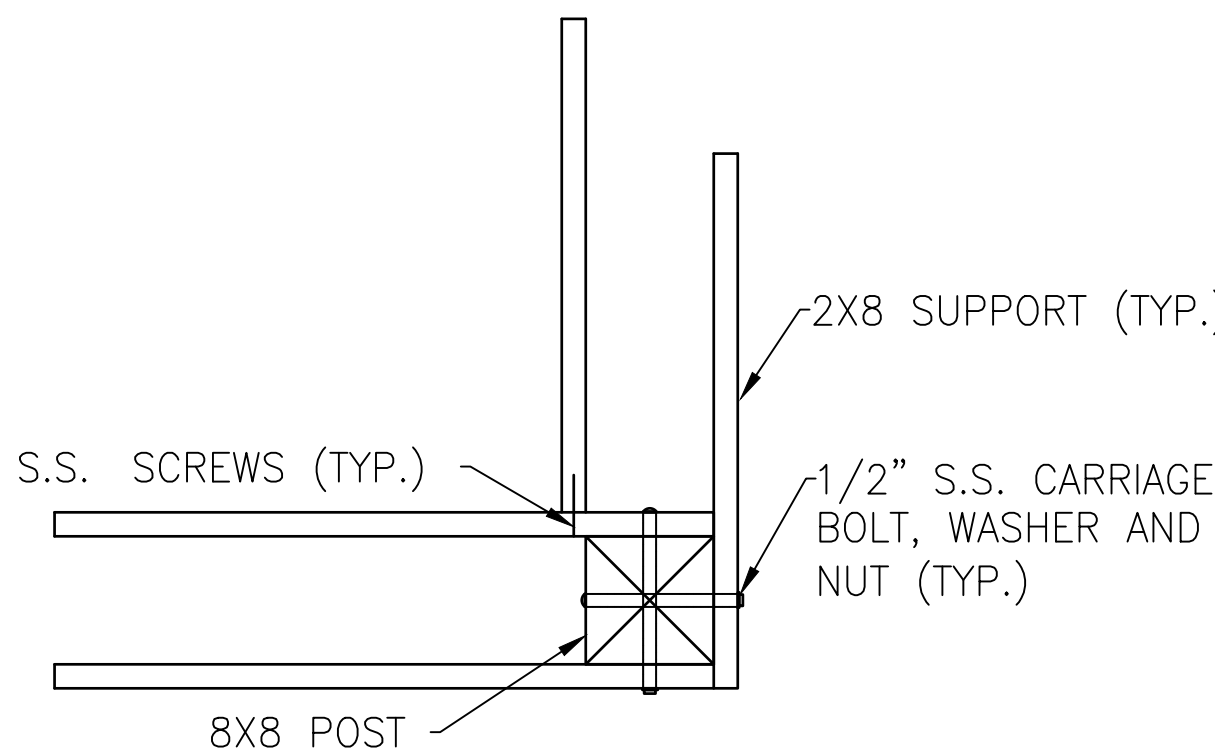
OBSERVATION AREA WITH SHADE DETAIL
N.T.S.



ROOFING PLAN
N.T.S.



PERIMETER GUARDRAIL
CORNER 2X12 CAP PLAN VIEW
N.T.S.



PERIMETER GUARDRAIL
CORNER FRAMING PLAN VIEW
N.T.S.

MATERIAL PROPERTIES FOR PROPOSED OBSERVATION AREAS, TOWER AND BOARDWALK

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7. ALL EXISTING STRUCTURES SHALL BE DEMOLISHED AND DISPOSED OF.

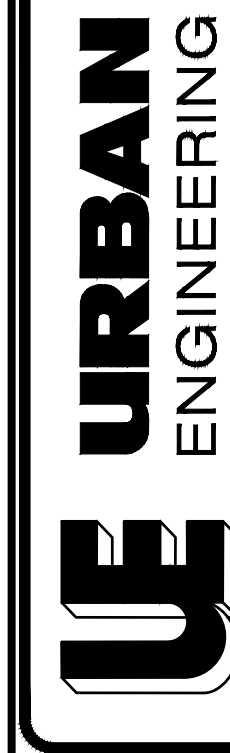
UPLAND REST AREA

SCALE: 3/8"=1'-0"

NORTH TRAIL REST AREA DETAILS

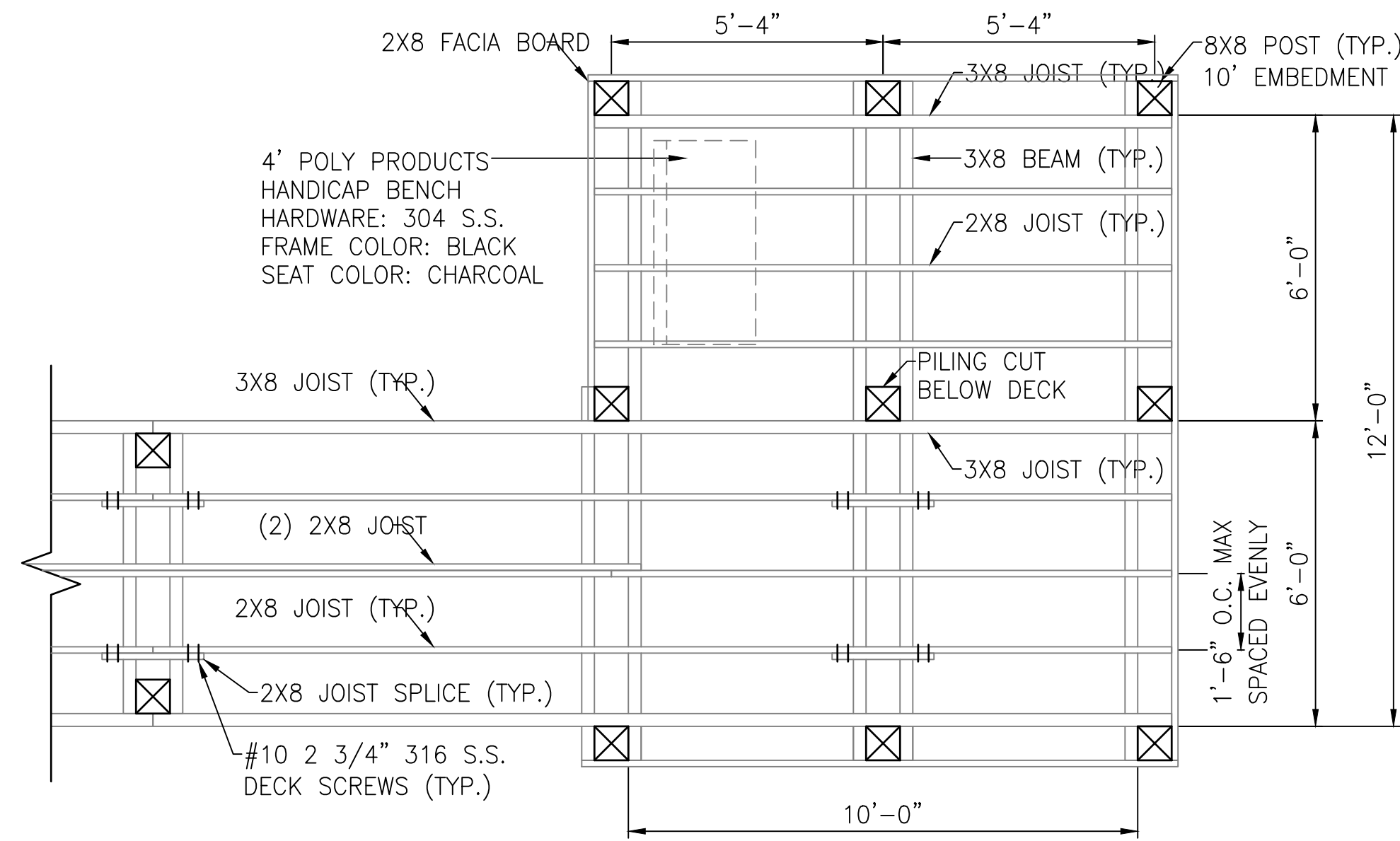
(1)

PHASE II CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX

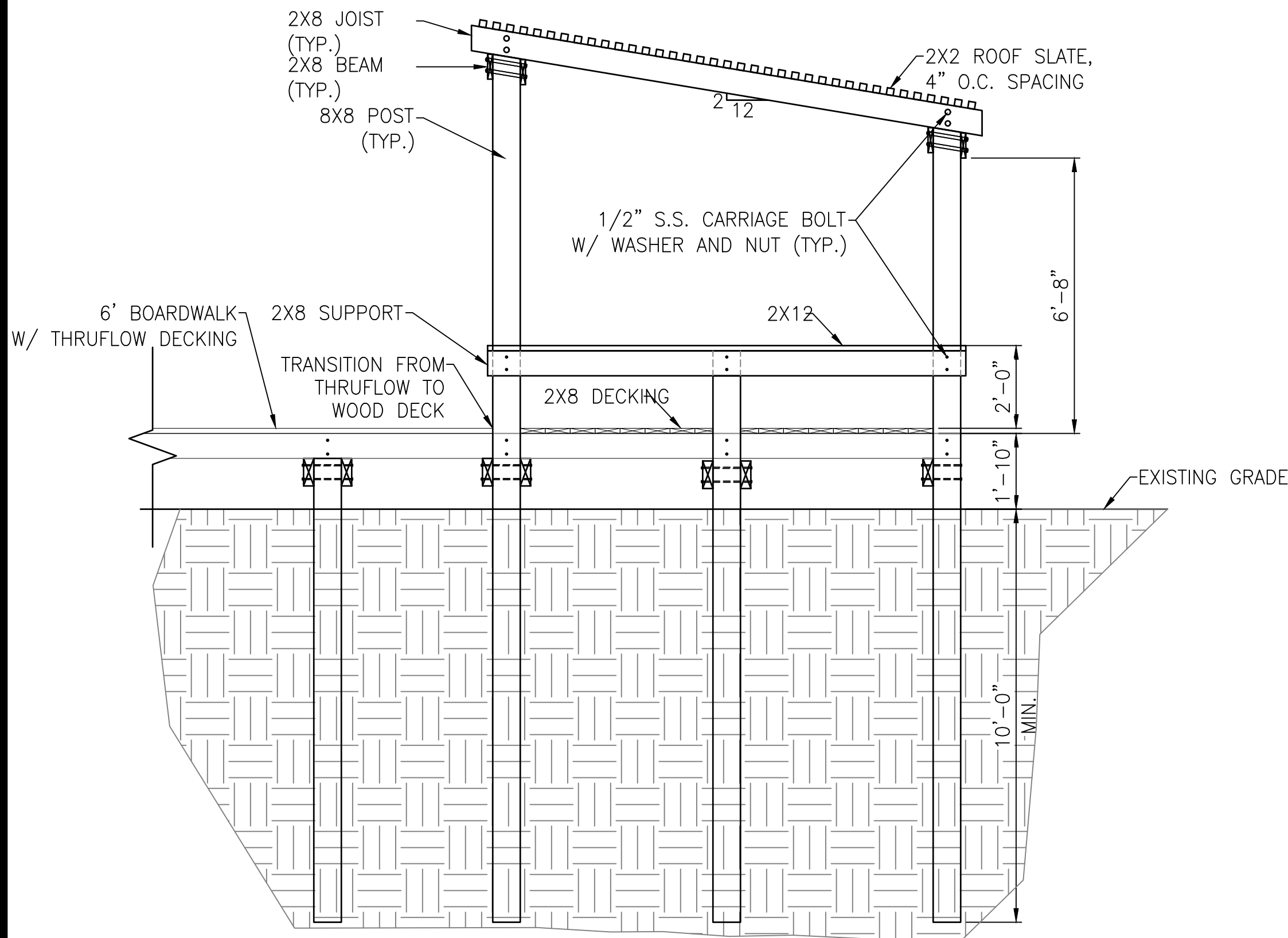


SHEET
12
OF 10

JOB NO.
06100.C1.07

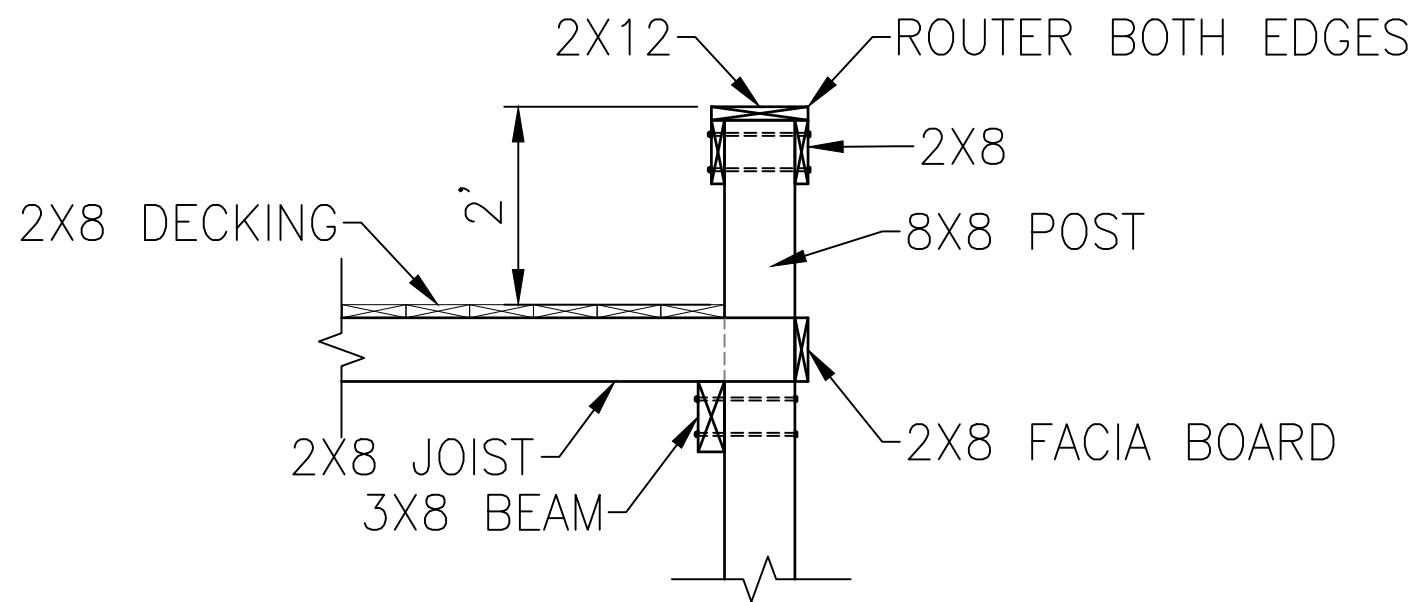


PLAN VIEW



SIDE VIEW

NOTES: ALL BOLTS ABOVE DECK SHALL BE 1/2 S.S. CARRIAGE BOLTS WITH NUT AND WASHER.

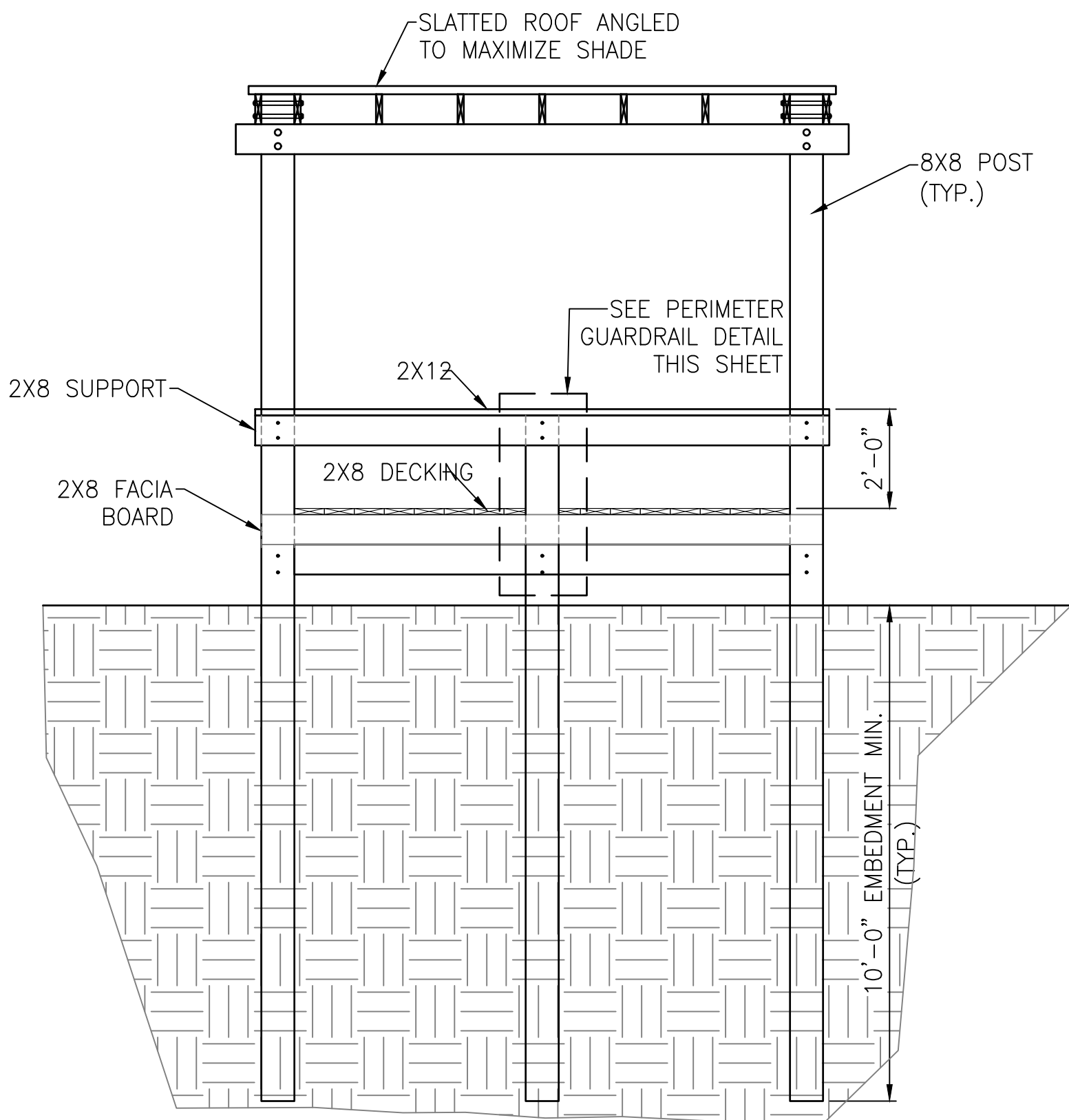


NOTE:

- PERIMETER GUARDRAIL WRAPS AROUND ALL FOUR SIDES BUT DOES NOT OBSTRUCT WALKWAY.
- USE PERIMETER GUARDRAIL DETAILS FROM SHEET 11 FOR ADDITIONAL INFORMATION.

PERIMETER GUARDRAIL DETAIL

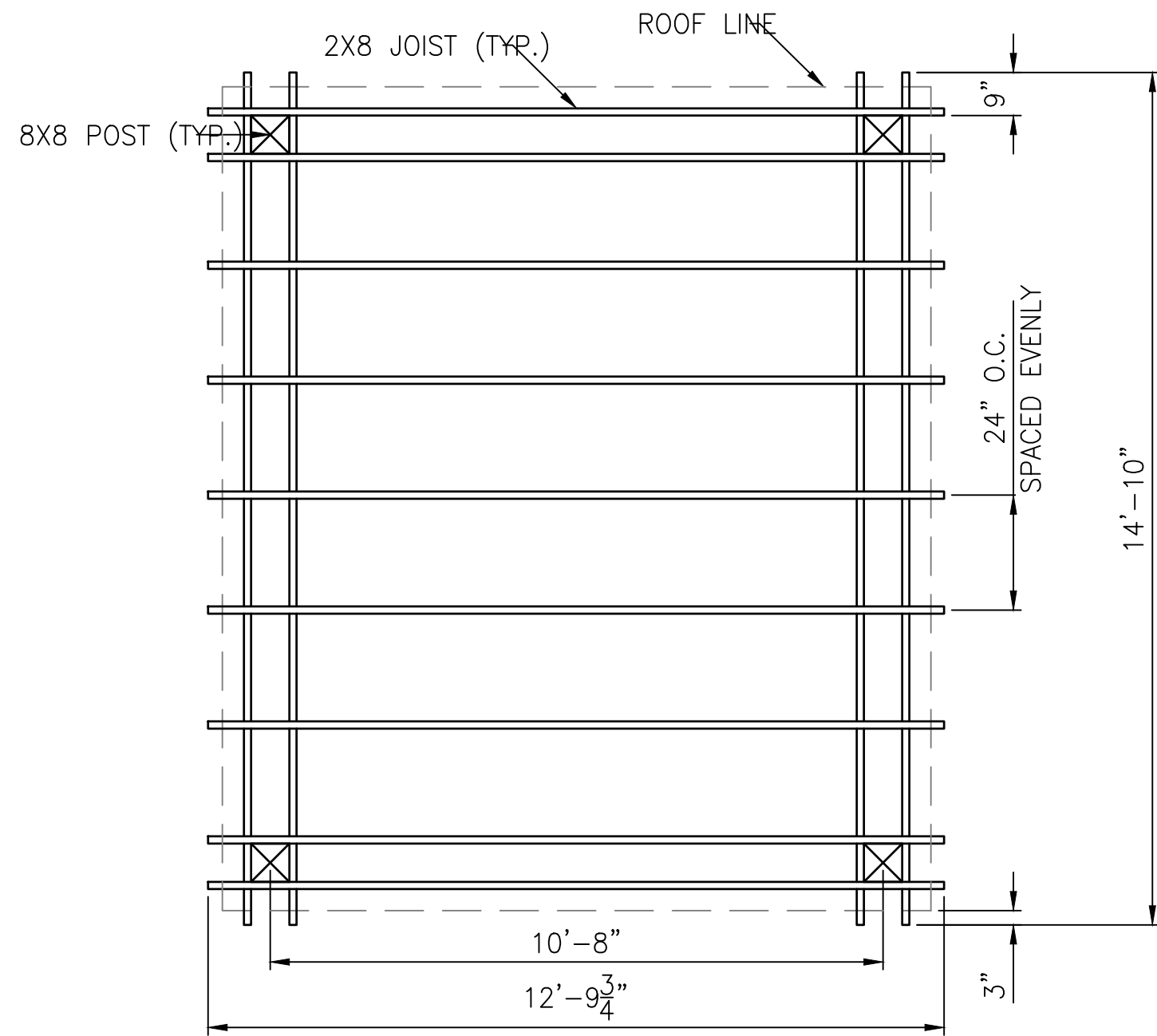
SCALE: NOT TO SCALE



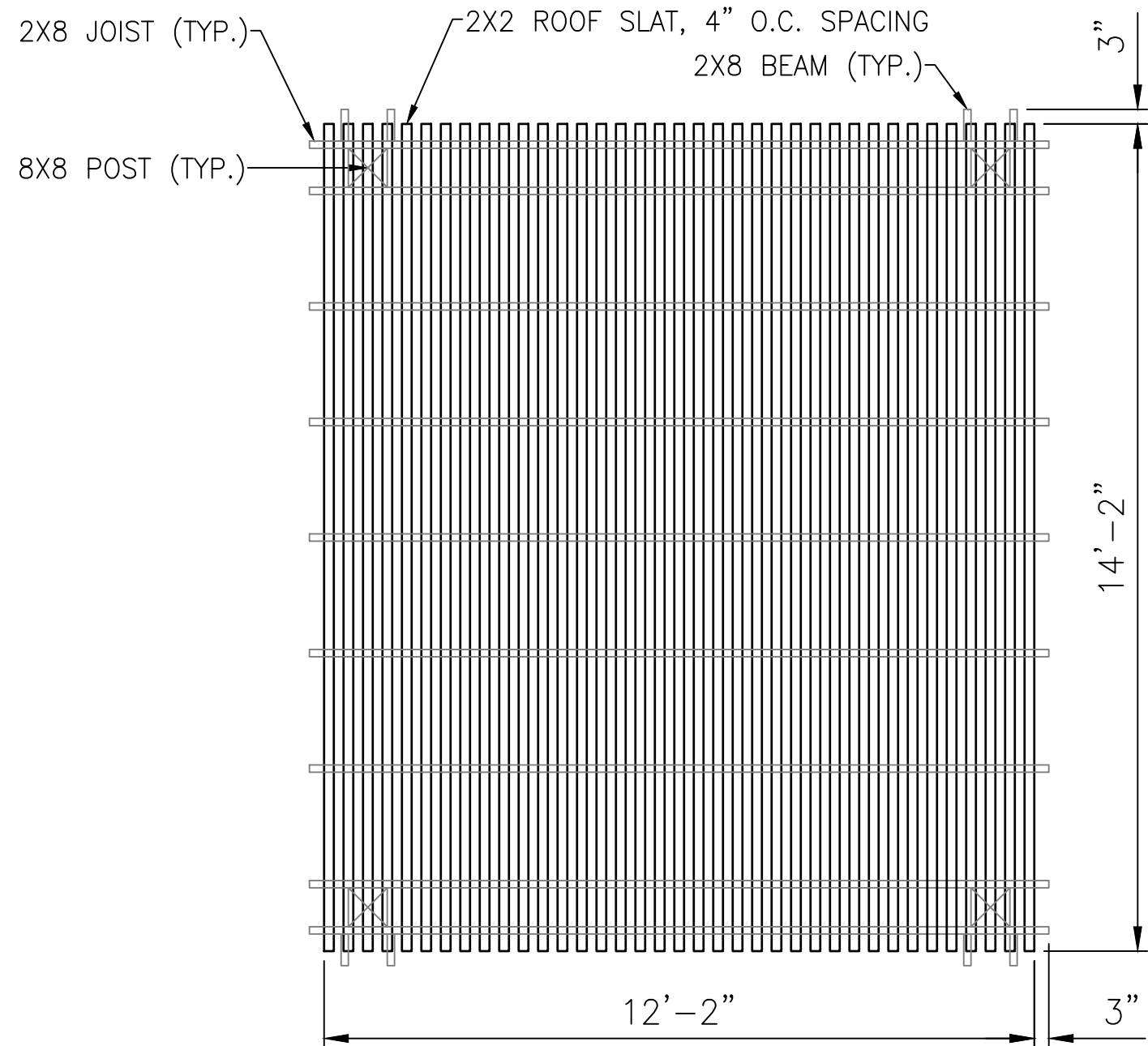
FRONT VIEW

WETLAND REST AREA

SCALE: 3/8"=1'-0"



ROOF FRAMING PLAN
SIDE VIEW



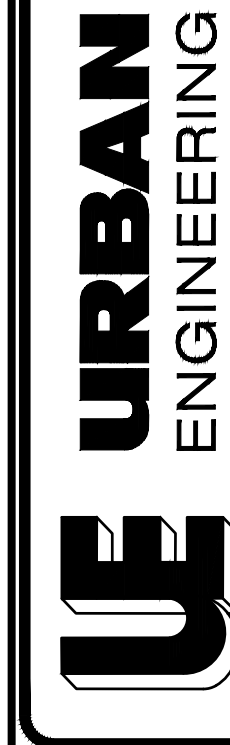
ROOF FRAMING PLAN
SIDE VIEW

MATERIAL PROPERTIES FOR PROPOSED OBSERVATION AREAS, TOWER AND BOARDWALK

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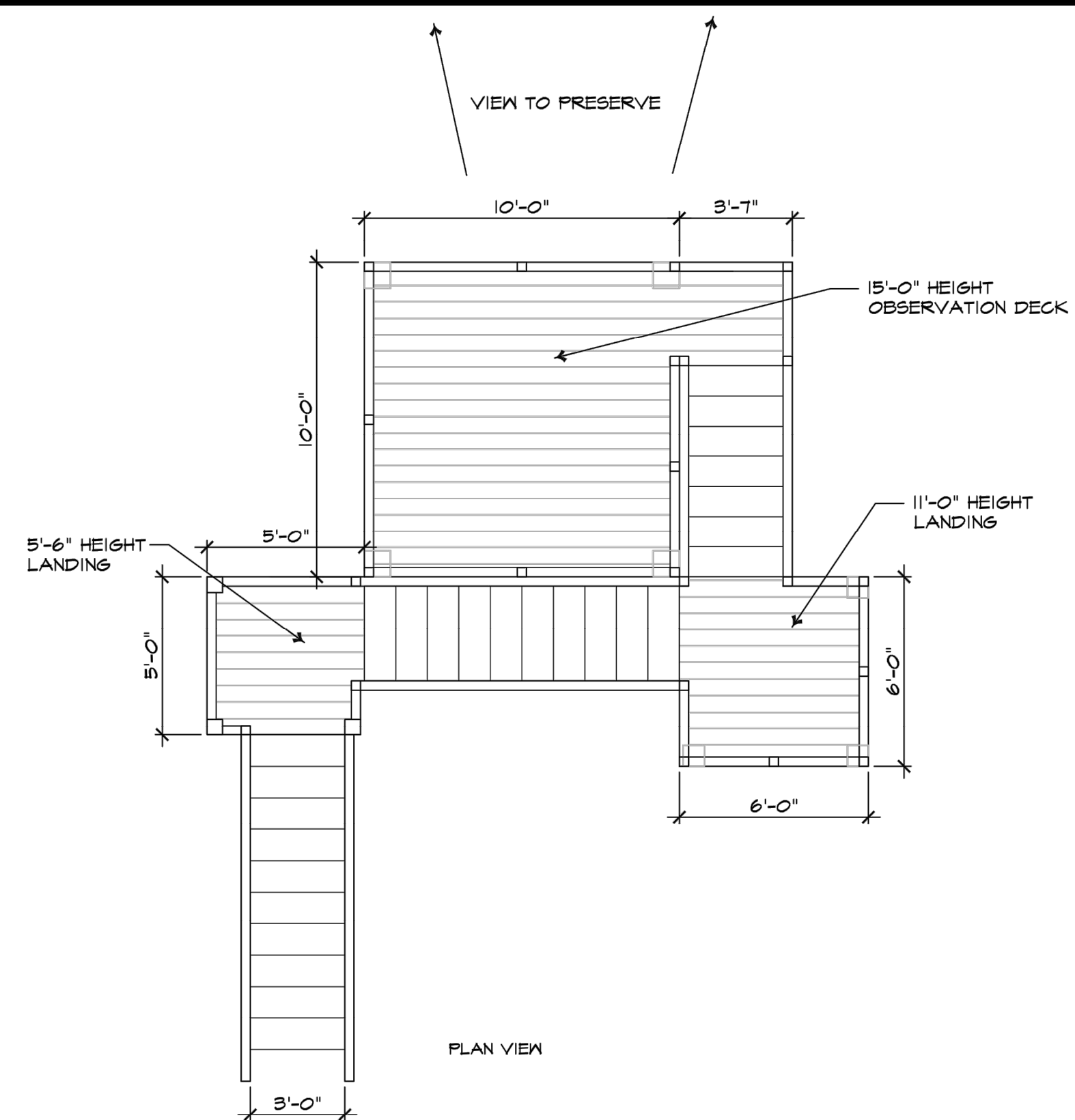
NORTH TRAIL REST AREA DETAILS
(2)

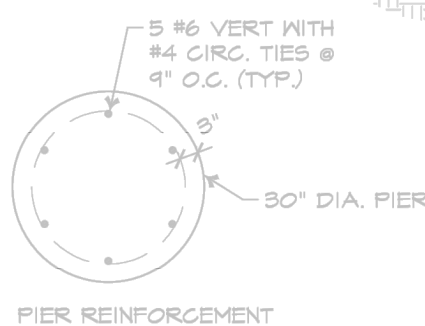
PHASE II CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX



SHEET
13
OF 10

JOB NO.
06100.C1.07





HELIX PIER NOTES:

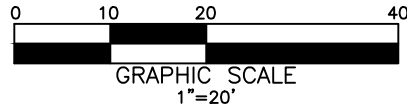
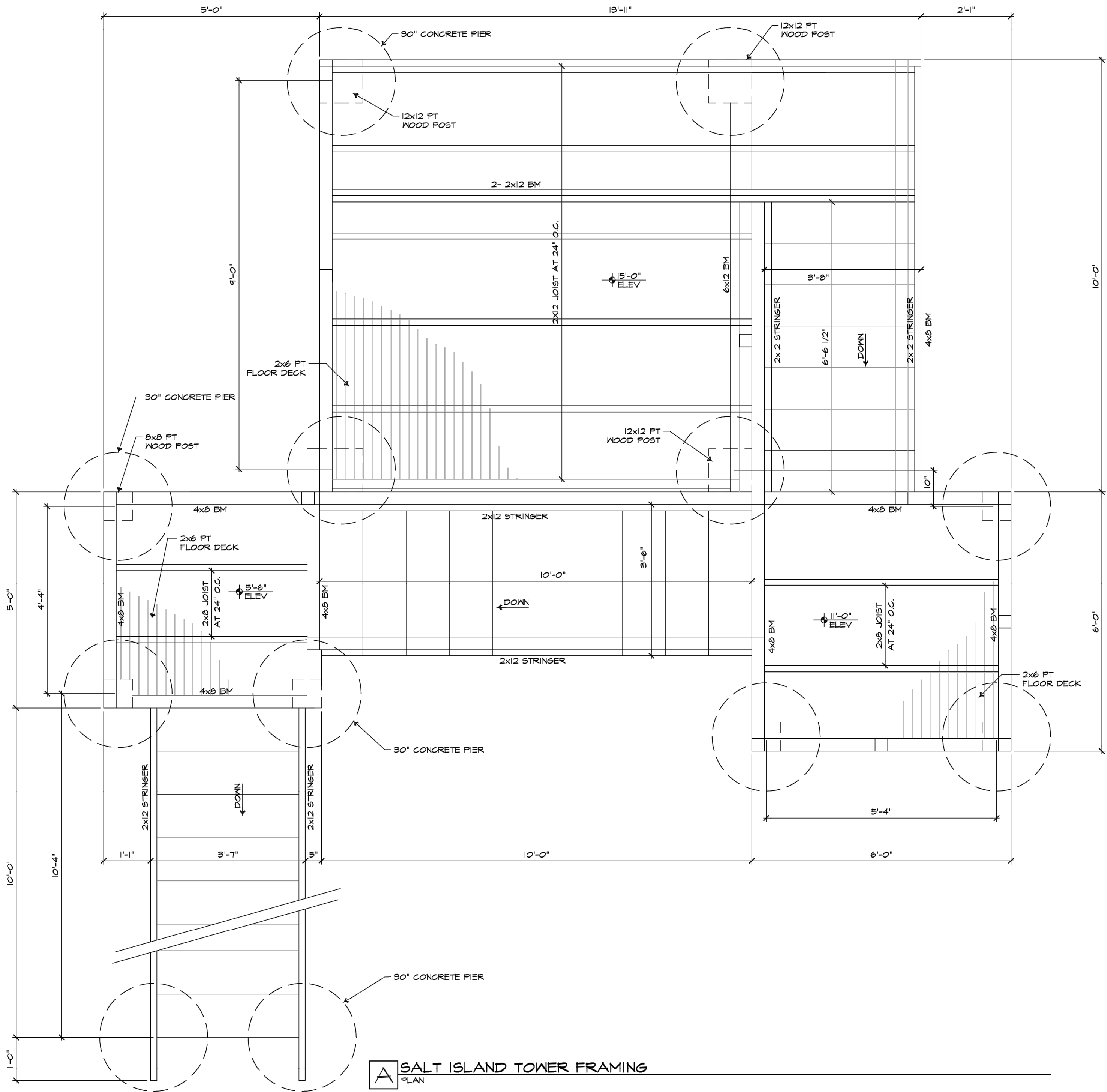
- 1) THE WORK CONSISTS OF DESIGNING, FURNISHING AND INSTALLING STEEL HELIX PIERS INCLUDING ALL ITS ACCESSORIES ACCORDING TO MANUFACTURER'S REQUIREMENTS AND STANDARD ENGINEERING CODES AND PRACTICE.
- 2) ALL STEEL HELIX PIERS AND ACCESSORIES SHALL BE CLASS B-1 HOT DIPPED GALVANIZED COMPLYING WITH ASTM A 153.
- 3) THE MANUFACTURER AND INSTALLER SHALL HAVE MINIMUM 5 YEARS EXPERIENCE IN DESIGNING, MANUFACTURING AND INSTALLING STEEL HELIX PIERS.
- 4) REFER TO SUBSURFACE INVESTIGATION DATED JUNE 28, 2010 BY ROCK ENGINEERING INCLUDED IN BID DOCUMENTS.
- 5) SUBMITTALS: SUBMIT SHOP DRAWINGS INDICATING SHAFT AND HELIX SIZES, MANUFACTURER'S CATALOG CUT OUT AND DATA SHEET PROVIDING TO BE SIGNED AND SEALED BY A STATE OF TEXAS LICENSED PROFESSIONAL ENGINEER.
- 6) INSTALLER SHALL KEEP A WRITING INSTALLATION RECORD FOR EACH HELIX PIER INCLUDING THE FOLLOWING:
 - A) PROJECT NAME AND LOCATION.
 - B) NAME OF AUTHORIZED EALER AND INSTALLER.
 - C) NAME OF INSTLERS FOREMAN OR REP. WITNESSING INSTALLATION.
 - D) DATE OF INSTALLATION.
 - E) LOCATION OF HELIX PIER.
 - F) DESCRIPTION OF LEAD SECTION INCLUDING NUMBER AND DIAMETER OF HELICES AND EXTENSIONS USED.
 - G) OVERALL DEPTH OF INSTALLATION FROM KNOWN REFERENCE POINT.
 - H) INSTALLATION TORQUE AT TERMINATION OF HELIX PIER.

1. ANY POSTS, CROSS BRACES, OR BEAMS DAMAGED DURING DEMOLITION WILL BE REPLACED WITH NEW MATERIALS AT NO ADDITIONAL COST TO THE OWNER.
2. ADJUST ALIGNMENTS AS NECESSARY TO ENSURE FLAT DECKING SURFACES.

PRESENTED ABOVE ARE THE
ORIGINAL CONSTRUCTION PLANS
BY LAND DESIGN PARTNERS.

URBAN
ENGINEERING

TEBE FIRM NO. 145, CORPORATION NO. 10032400
2700 WILSON AVENUE, SUITE 1100
CHICAGO, IL 60644-4100
TEL: 312.321.1100
FAX: 312.321.1101
WWW.URBANEENGINEERING.COM



TOWER MAINTENANCE SHALL INCLUDE THE FOLLOWING:

DEMO & REPLACE:

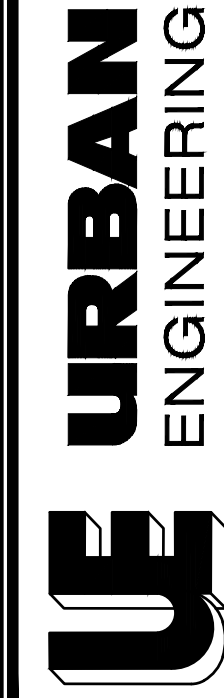
1. GUARD RAILING & HANDRAILS
2. DECKING
3. JOISTS
4. STAIRWAYS
5. ALL NON-STAINLESS HARDWARE WITH 316 STAINLESS

ITEMS TO REMAIN:

1. POSTS
2. CROSS BRACES
3. UPPER LEVEL BEAMS

NOTES:

1. ANY POSTS, CROSS BRACES, OR BEAMS DAMAGED DURING DEMOLITION WILL BE REPLACED WITH NEW MATERIALS AT NO ADDITIONAL COST TO THE OWNER.
2. ADJUST ALIGNMENTS AS NECESSARY TO ENSURE FLAT DECKING SURFACES.



TYPE: FRM NO. 145, TBS & FRM NO. 10992-00
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PHONE: 361-684-3101 WWW.URBANENG.COM

SHEET
16
OF 19

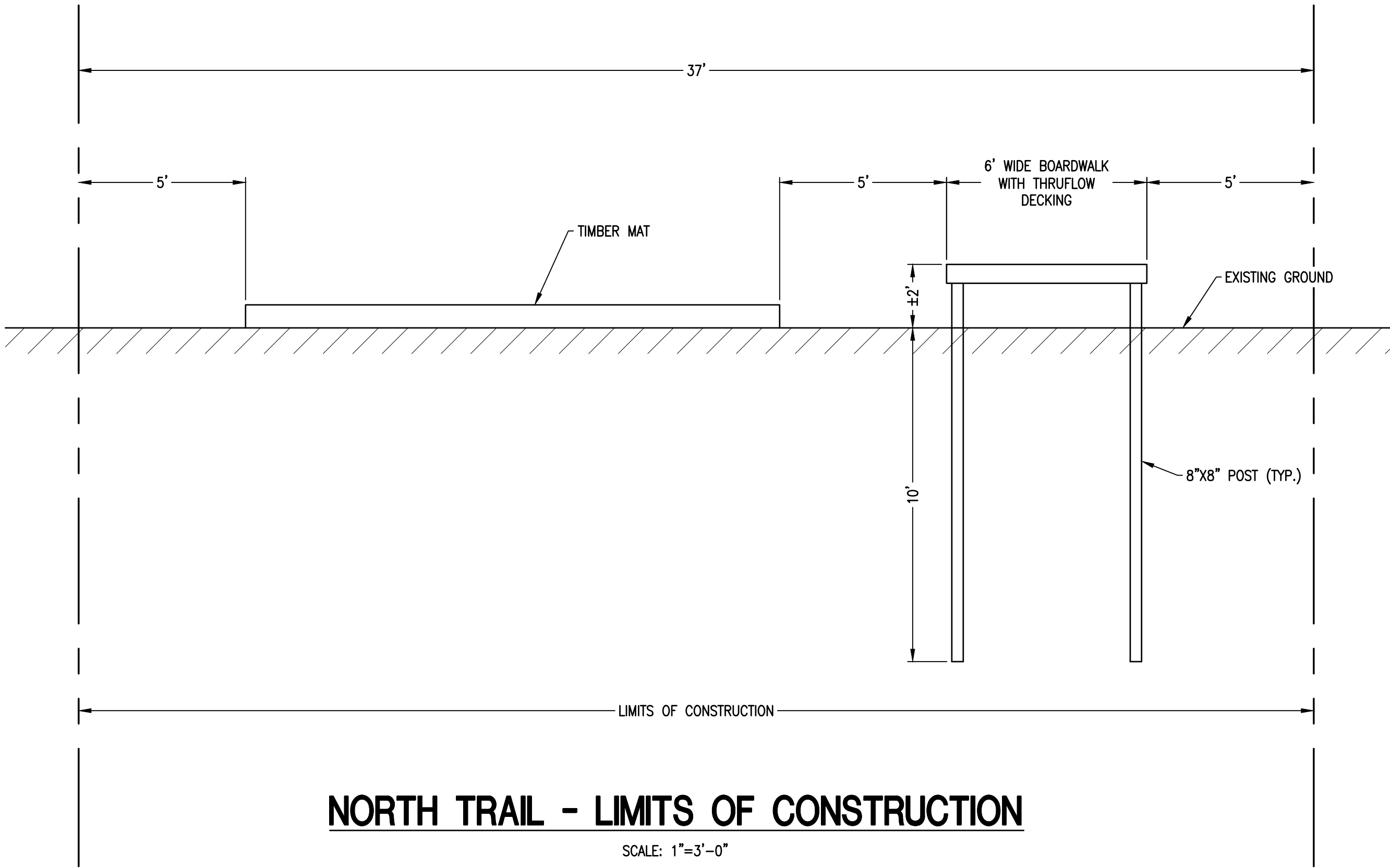
JOB NO.
06100.C1.07

TOWER MAINTENANCE PLAN (3)

PHASE II CHARLES PASTURE NORTH TRAIL
PORT ARANSAS, TX

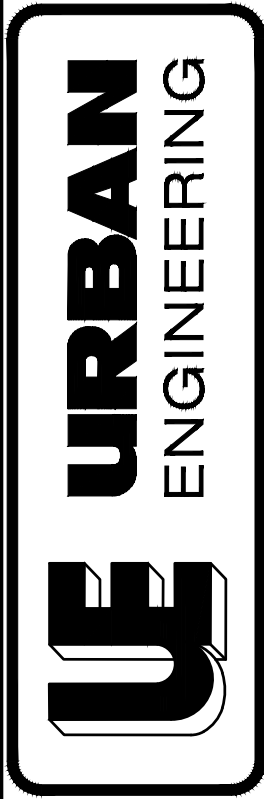


REV.	BY	DATE	DESCRIPTION
SCALE:	1"=20'		
DRAWN:	SC		
CHECKED:	BDW		
DATE:	Feb. 2024		



SHEET NOTES:

1. TIMBER MATS TO BE UTILIZED IN WETLAND AREAS FOR ACCESS AND STAGING EQUIPMENT AND MATERIALS.
2. CONTRACTOR TO USE TIMBER MATS WHERE PRACTICAL. IN DEEPER WATER CONTRACTOR WILL USE SPECIALIZED EQUIPMENT TO CARRY OUT CONSTRUCTION ACTIVITY.
3. ONCE CONSTRUCTION IS COMPLETE ALL TEMPORARY PLACED BOARD MATS USED FOR CONSTRUCTION ACCESS WILL BE REMOVED.
4. PRE-CONSTRUCTION ELEVATIONS SHALL BE RESTORED AND ALLOWED TO REVEGETATE NATURALLY.



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LIMITS OF CONSTRUCTION -
NORTH TRAIL AND BOARDWALK

PHASE II CHARLES PASTURE NORTH TRAIL

PORT ARANSAS, TX



THE SEAL APPEARING ON THIS DOCUMENT
INDICATES THAT THE ENGINEER IS A
LICENSED PROFESSIONAL ENGINEER
TX REG. 8/02 (02/02/2024)

SCALE:	AS NOTED	REV. BY	DATE	DESCRIPTION	APPROVED BY
DRAWN:	SC				
CHECKED:	BDW				
DATE:	Feb. 2024				

SHEET
10
OF 10

JOB NO.
06100.C1.07



NOTE 8: DUST CONTROL


WATER UNTIL THE SURFACE IS WET. PROVIDE DUST CONTROL UNTIL THE SEEDING OR SODDING HAS PROCEEDED ENOUGH TO PREVENT THE WIND EROSION.



CONSTRUCTION ENTRANCES ARE ALSO REQUIRED AT ANY OTHER LOCATION THE CONTRACTOR PROPOSES TO ACCESS THE PROJECT.

STABILIZED CONSTRUCTION ENTRANCE

REMOVAL: AFTER COMPLETION OF THE PROJECT REMOVE GRAVEL AND FABRIC AND COMPLETE THE FINAL GRADING AND SODDING REQUIREMENTS.

<div><div><div>URBAN ENGINEERING</div></div><div>TERRE FIRM NO. 145, TERRELS FIRM NO. 10032400 2700 W. 19TH STREET, SUITE 200, PORT ARANSAS, TX 78373 PHONE: 361.854.3101 WWW.URBANENG.COM</div></div>		<div><div><div>POLLUTION PREVENTION DETAILS</div><div>PHASE II CHARLES PASTURE NORTH TRAIL</div><div>PORT ARANSAS, TX</div></div></div>		<div><div><div></div><div>THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JAMES L. URBAN, P.E. TX REG. NO. 145 (02/28/2024)</div></div></div>		SCALE: N.T.S.	REV. BY	DATE	DESCRIPTION	APPROVED
						DRAWN: SC				
						CHECKED: BDW				
						DATE: Mar. 2023				
SHEET 19 OF 19		JOB NO. 06100.C1.07								