

DESIGN NOTES
CODES AND STANDARDS

- A. WORK IN ACCORDANCE WITH REQUIREMENTS OF THE LOCAL BUILDING DEPARTMENT, THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, AND THE INTERNATIONAL BUILDING CODE, 2018 .
- B. USE THE CURRENT VERSION OF ALL CODES, REFERENCES AND STANDARDS REFERRED UNLESS A DIFFERENT VERSION IS LISTED IN THE BUILDING CODE.
- C. CONSTRUCTION TYPE: V–B

DESIGN AND LOADING CRITERIA

- A. SNOW LOAD
1. GROUND SNOW LOAD: (PG) = 30.0 PSF
2. SNOW EXPOSURE FACTOR (CE): = 1.0
3. IMPORTANCE FACTOR (I): = 1.0
4. THERMAL FACTOR (CT): = 1.0
5. FLAT ROOF SNOW LOAD (PF): = 21.0 PSF
- B. SEISMIC LOAD
1. RISK CATEGORY: = II
2. SEISMIC IMPORTANCE FACTOR (I): = 1.0
3. MAPPED SPECTRAL RESPONSE: SS = 0.14, S/1= 0.044
4. SPECTRAL RESPONSE COEFF S/DS = 0.149, S/D1= 0.071
5. SITE CLASSIFICATION: = D
6. SEISMIC DESIGN CATEGORY = B
7. RESPONSE MODIFICATION FACTOR: R = 3.0
8. SEISMIC RESPONSE COEFF: CS = 0.043
9. SEISMIC RESISTANCE SYSTEM TYPE: = STEEL NOT SPECIFICALLY DESIGNED FOR LATERAL RESISTANCE
10. DESIGN BASE SHEAR: = 0.043W
11. ANALYSIS PROCEDURE USED: = EQUIVALENT LATERAL FORCE ANALYSIS
- C. WIND LOAD
1. ULTIMATE WIND SPEED: = 115 MPH
2. RISK CATEGORY: = II
3. EXPOSURE: = B

WOOD MATERIALS

- A. PROVIDE LUMBER AND TIMBER DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH:
1. "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION."
2. SPECIES FOR DECKING SHALL BE CUMARU
3. DECKING MINIMUM MEMBER PROPERTIES
- A) FLEXURE: FB = 1350 PSI
- B) SHEAR: FV = 175 PSI
- C) MODULUS OF ELASTICITY E = 2,500,000 PSI

CONCRETE AND REINFORCING

- A. PROVIDE CONCRETE WORK IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318. AS MODIFIED BY IBC CODE.
- B. CONCRETE DESIGN IS IN ACCORDANCE WITH "STRENGTH DESIGN METHOD."
- C. PROVIDE CONCRETE MIX WITH ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS (F'C) =5000 PSI
- D. CONCRETE MATERIALS:
1. CEMENT: ASTM C–150 TYPE I OR III
2. CEMENT SUBSTITUTES: ASTM C–595 TYPE '1P' (LIMIT TO 25% MAXIMUM CEMENTITIOUS CONTENT BY WEIGHT.)
3. AGGREGATES: ASTM C–33 (NORMAL WEIGHT)
4. AIR–ENTRAINING ADMIX: ASTM C–260
- E. CONCRETE EXPOSED TO WEATHER SHALL BE AIR–ENTRAINED 6%, +/- 1%.
- J. SUBMIT SHOP DRAWINGS FOR REINFORCEMENT TO THE ARCHITECT FOR APPROVAL. PREPARE DRAWINGS UNDER THE SUPERVISION OF A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE LOCAL JURISDICTION DETAILING FABRICATING, BENDING, AND PLACING CONCRETE REINFORCEMENT. COMPLY WITH ACI 315 AND ACI DETAILING MANUAL SP–66, SHOWING BAR SCHEDULES, STIRRUP SPACING, BENT BAR DIAGRAMs, AND ARRANGEMENT OF CONCRETE REINFORCEMENT.
- K. PROVIDE MINIMUM CONCRETE COVER BETWEEN FACE OF REINFORCING BAR AND FACE OF CONCRETE AS FOLLOWS:
1. CONCRETE CAST AGAINST EARTH = 3"

2. FORMED CONCRETE EXPOSED TO WEATHER OR EARTH = 2"

STRUCTURAL STEEL

- A. PROVIDE STRUCTURAL STEEL THAT IS DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AND THE "MANUAL OF STEEL CONSTRUCTION" FIFTEENTH EDITION.
- B. STRUCTURAL STEEL:
1. STRUCTURAL "W" & "I" SHAPES: ASTM A–992 FY = 50,000 PSI
2. BALANCE OF STEEL SHAPES & PLATES: ASTM A–36 FY = 36,000 PSI
3. HOLLOW SECTIONS (HSS) SQUARE & RECTANGULAR ASTM A–500B FY = 46,000 PSI
4. HIGH STRENGTH BOLTS: ASTM F3125, GR A–325 CONN TYPE–N
5. ANCHOR RODS: ASTM F–1554 GR36 OR GR 55 WITH WELDABILITY SUPPLEMENT S1.
6. GALVANIZING (HOT–DIP): ASTM A–123
- C. PROVIDE A–325 BOLTS TIGHTENED TO THE "SNUG TIGHT" CONDITION DEFINED AS THE TIGHTNESS ATTAINED BY A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH UNLESS OTHERWISE NOTED. ALL THE PLIES OF THE CONNECTED MATERIAL MUST BE INTO FIRM CONTACT TO CONFIRM THE SNUG TIGHT CONDITION.
- D. PROVIDE WELDING ACCORDING TO THE REQUIREMENTS OF THE "STRUCTURAL WELDING CODE" AWS D1.1–08. USE 70 KSI LOW–HYDROGEN ELECTRODES.
- E. PROVIDE NON–SHRINK NON–METALLIC GROUT UNDER BEAM BEARING PLATES AND COLUMN BASE PLATES WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH F'C = 7000 PSI.
- F. DO NOT FABRICATE STRUCTURAL STEEL PRIOR TO APROVAL OF SHOP DRAWINGS.
- G. ALL STEEL IS TO BE HOT DIPPED GALVANIZED TO ASTM A123 GRADE Z350.
- H. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS THAT HAVE BEEN PREPARED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER REGISTERED IN PROJECT JURISDICTION. INCLUDE DETAILS FOR APPLICATION AND ASSEMBLY OF ALL STRUCTURAL MEMBERS. INCLUDE DETAILS OF CUTS, CONNECTIONS, HOLES, AND OTHER PERTINENT DATA. INDICATE WELDS BY STANDARD AWS 2.1 SYMBOLS SHOWING SIZE, LENGTH AND TYPE OF EACH WELD. SUBMITTED STRUCTURAL STEEL SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL.
- I. WELD MISCELLANEOUS STEEL CONNECTIONS ALL AROUND WITH ONE–QUARTER–INCH FILLET WELD UNLESS OTHERWISE NOTED.
- J. PROVIDE HANDRAILS, GUARDRAILS THAT ARE DESIGNED BY THE MANUFACTURER'S ENGINEER FOR THE MOST RESTRICTIVE OF THE LOADS GIVEN AND APPLICABLE DESIGN CODE. DESIGN COMBINED POST/RAILING DEFLECTION NOT TO EXCEED 0.75", THE LIMITS IN ASTM E985 OR LIMITATION OF MATERIAL USED AS INFILL, WHICHEVER IS MORE RESTRICTIVE. SUBMIT SHOP DRAWINGS BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROJECT JURISDICTION TO THE ARCHITECT INDICATING ALL MEMBERS AND CONNECTIONS.
- K. THE CONTRACTOR SHALL NOT RELEASE BEAMS OR DIAGONAL BRACING FROM HOISTING CABLES UNTIL ALL MEMBERS ARE SECURE WITH AT LEAST (2) BOLTS. ALL FIELD WELDED CONNECTIONS SHALL BE COMPLETED BEFORE RELEASING CABLES.
- L. WHERE DOUBLE BEAM CONNECTIONS OCCUR ON EACH SIDE OF A WEB OF A BEAM OVER A COLUMN, THERE MUST BE AT LEAST ONE BOLT WITH A WRENCH–TIGHT NUT SECURING THE FIRST BEAM CONNECTED AT ALL TIMES.

POST– INSTALLED ANCHORS

- A. EXCEPT WHERE INDICATED ON THE DRAWINGS, PROVIDE POST–INSTALLED ANCHORS CONSISTING OF THE FOLLOWING ANCHOR TYPES OR AN EQUIVALENT MANUFACTURER APPROVED BY THE ARCHITECT.
1. ANCHORAGE TO CONCRETE
- A) ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE: HILTI HIT–HY 200 SAFE SET SYSTEM WITH HILTI HIT–Z ROD PER ICC ESR–3187.
- B. SUBSTITUTION REQUESTS FOR ALTERNATE POST INSTALLED ANCHOR PRODUCTS MUST BE APPROVED IN WRITING BY THE ARCHITECT PRIOR TO USE AND PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN–SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.
- C. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
- D. ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL

ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS

- E. INSTALL ACNHORS IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AND A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.
- F. INSTALL ANCHORS IN CONCRETE AT LEAST 50 DEGREES AT THE TIME OF INSTALLATION.
- G. LOCATE EXISTING REINFORCING BARS, EMBEDDED CONDUIT OR OTHER ITEMS IN THE CONCRETE STRUCTURE WHICH MAY CONFLICT WITH PROPOSED ANCHOR LOCATIONS BY HILTI FERROSCAN, GPR, X–RAY PACHOMETER, CHIPPING OR OTHER MEANS. REVIEW THE EXISTING STRUCTURAL DRAWINGS AND LOCATE THE POSITION OF THE REINFORCING BARS OR ANY OTHER EMBEDDED ITEMS AT THE LOCATIONS OF THE CONCRETE ANCHORS PRIOR TO SCANNING. MARK THE LOCATION OF EMBEDDED ITEMS AND THE PROPOSED ANCHOR LOCATIONS ON THE CONCRETE SURFACE AND NOTIFY THE ARCHITECT IF THERE APPEARS TO BE A CONFLICT. EXERCISE CARE IN CORING OR DRILLING TO AVOID DAMAGING EXISTING REINFORCING OR EMBEDDED ITEMS BY FIRST DRILLING A SMALL PILOT HOLE. NOTIFY THE ARCHITECT IF REINFORCING STEEL OR OTHER EMBEDDED ITEMS ARE ENCOUNTERED DURING DRILLING. TAKE PRECAUTIONS AS NECESSARY TO ALSO AVOID DAMAGING ANY ACTIVE ELECTRICAL AND TELECOMMUNICATIONS CONDUIT.
- H. PROVIDE ADHESIVE ANCHORS THAT HAVE BEEN TESTED AND QUALIFIED IN ACCORDANCE WITH ACI 355.4 AND ICC–ES AC308 FOR USE IN CRACKED, UNCRACKED AND SEISMIC CONCRETE APPLICATIONS.

GENERAL

- A. INFORMATION SHOWN REGARDING EXISTING CONDITIONS HAS BEEN OBTAINED BY LIMITED VISUAL OBSERVATIONS AND EXISTING DRAWINGS. AREAS NOT VISIBLE HAVE BEEN ASSUMED TYPICAL WITH OBSERVED EXISTING CONDITIONS.
- B. MEASURE AND PROVIDE ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE JOB SITE PRIOR TO CONSTRUCTION AND THE SUBMISSION OF SHOP DRAWINGS, AND NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES. PROVIDE VERIFICATION AND NOTIFICATION AT LEAST TWO WEEKS PRIOR TO THE START OF WORK SO THAT ANY NECESSARY CHANGES CAN BE MADE WITHOUT DELAYING THE PROJECT SCHEDULE.
- C. DETAILS, SECTIONS, AND NOTES SHOWN ON THESE DRAWINGS ARE INTENDED TO BE TYPICAL AND APPLY TO SIMILAR CONDITIONS ELSEWHERE UNLESS OTHERWISE SHOWN OR NOTED.
- D. PROVIDE SHOP DRAWINGS SUBMITTED TO THE ARCHITECT BEARING THE CONTRACTOR'S STAMP, DATE AND SIGNATURE THAT VERIFIES THAT THE DOCUMENTS HAVE BEEN REVIEWED AND CORRECTED FOR CONFORMANCE TO AND COORDINATION WITH CONTRACT DOCUMENTS.
- E. PROCEED WITH FABRICATION ONLY AFTER SHOP DRAWING APPROVAL BY THE ENGINEER.
- F. DO NOT REPRODUCE ANY PORTION OF CONTRACT DOCUMENTS IN THE SHOP DRAWINGS.
- G. SUBMIT INSPECTION REPORTS AND MATERIALS TESTING REPORTS TO THE ARCHITECT IN A TIMELY MANNER SUCH THAT CONSTRUCTION DELAY WILL BE AVOIDED.
- H. MEANS AND METHODS OF CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- I. WHERE THE CONTRACTOR IS REQUIRED TO ENGAGE A PROFESSIONAL ENGINEER TO DESIGN AND SUBMIT CALCULATIONS, AND WHERE THE PROFESSIONAL ENGINEER PREPARES THE CALCULATIONS USING A COMPUTER SOFTWARE SYSTEM, USE SOFTWARE THAT IS READILY AVAILABLE, INDUSTRY STANDARD FOR STRUCTURAL ENGINEERING IN COMMON USE.

TESTING AND INSPECTION

RETAIN THE SERVICES OF A TESTING AND INSPECTION AGENCY TO PERFORM THE SERVICES SPECIFIED.

- A. PROVIDE SERVICES ACCORDANCE WITH REQUIREMENTS OF THE LOCAL JURISDICTION AT A MINIMUM.
- B. FAILURE TO RETAIN A TESTING AGENCY TO PROVIDE REQUIRED SERVICES OR A FAILURE TO SUBMIT SIGNED AND SEALED REPORTS IS A NON–COMPLIANCE WITH CONTRACT DOCUMENTS.
- C. REMOVE AND REPLACE CONSTRUCTION CONSIDERED NON–COMPLIANT.
- D. ALL TESTING AND INSPECTION SHALL BE UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE LOCAL JURISDICTION.
- E. PROVIDE PRELIMINARY HANDWRITTEN SITE VISIT REPORTS CONFIRMING VERBAL DISCUSSIONS TO THE CONTRACTOR REGARDING THE RESULTS OF INSPECTIONS PRIOR TO LEAVING JOB SITE.

- F. SUBMIT FINAL REPORTS TO THE ARCHITECT IN A TIMELY MANNER, BUT NO LATER THAN TEN (10) DAYS FOLLOWING INSPECTION OR TESTING UNDER THE NAME AND SIGNATURE OF THE INSPECTOR AND LICENSURE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER RESPONSIBLE FOR TESTING AND INSPECTION.

- G. PROVIDE INSPECTION FOR THE FOLLOWING AT A MINIMUM:

1. FOUNDATIONS & EARTHWORK: DEEP FOUNDATIONS.
2. REINFORCING: LOCATION, ASTM DESIGNATION, BAR SIZES, TYPE, QUANTITY, PLACEMENT, SPACING, AND CLEARANCES.
3. CONCRETE: ALL STRUCTURAL CONCRETE; LOCATION, STRENGTH, TYPE, SLUMP, PLACEMENT, AIR TEMPERATURE, CURING AND WEATHER ACCOMMODATIONS AND CONCRETE ADDITIVES.
4. STRUCTURAL STEEL: LOCATION, ASTM DESIGNATION, MEMBER SIZES, TYPE (GALVANIZED), PLACEMENT AND CONNECTIONS INCLUDING WELDS AND BOLTS, STUDS IN COMPOSITE CONSTRUCTION, POST INSTALLED ANCHORS, ANCHOR BOLTS AND GROUTING.
5. PROVIDE SPECIAL INSPECTION FOR ADHESIVE ANCHORS PER THE APPLICABLE BUILDING CODE AND PER THE CURRENT ICC–ES REPORT (IBC TABLE 1705.3 NOTE B).

- H. PROVIDE MATERIAL TESTING THE FOLLOWING:

1. FOUNDATION & EARTHWORK: SOIL BEARING CAPACITIES.
2. REINFORCING: YIELD AND ULTIMATE STRENGTHS. (MILL REPORTS ARE ACCEPTABLE.)
3. CONCRETE: SLUMP TESTS; EVERY THIRD TRUCKLOAD OF CONCRETE AND IN ADDITION, ONE FOR EACH SET OF STRENGTH–TEST CYLINDERS AT PREPARATION. STRENGTH TESTS; ONE SET OF CYLINDERS FOR MAXIMUM OF EACH 50 CY OF CONCRETE PLACEMENT. ONE SET OF CYLINDERS FOR EACH 2500 SQUARE SLAB AREA.

4. STRUCTURAL STEEL: YIELD AND ULTIMATE STRENGTHS. (MILL REPORTS ARE ACCEPTABLE.)

- I. COMPLY WITH CODE REQUIREMENTS AND THE FOLLOWING:

1. CONCRETE CYLINDERS: THREE SETS OF THREE LABORATORY CURED 4X8 CYLINDERS SHALL BE TAKEN FOR EACH DAY'S POUR FOR EACH MIX: (3) 7–DAY, (3) 28–DAY, (3) HOLD;
2. TWO SETS OF THREE FIELD CURED 4X8 CYLINDERS SHALL BE TAKEN FOR EACH DAY'S POUR FOR EACH MIX (3) 7 –DAY, (3) 28–DAY.
- J. FIELD CURED CYLINDERS SHALL BE CURED IN ACCORDANCE WITH CODE REQUIREMENTS OR IF NOT APPLICABLE THEN CURED IN SAME CONDITIONS AS CONCRETE IN WORK.

DEEP FOUNDATIONS

- A. CAISSONS (DRILLED PIERS)

1. PROVIDE CAISSONS (DRILLED PIERS) FOUNDED IN MATERIAL CAPABLE OF SAFELY SUPPORTING BEARING PRESSURE OF 10,000 PSF AT STRATUM IV PER GEOTECHNICAL REPORT DATED 01/28/23 AND PREPARED BY PIEDMONT GEOTECHNICAL, INC.
2. SEE PLAN FOR MORE INFORMATION.
3. BOTTOMS OF CAISSON ELEVATIONS SHOWN ON PLAN HAVE BEEN DETERMINED FROM GEOTECHNICAL ENGINEERING REPORT DATA AND MAY VARY. USE ELEVATIONS SHOWN FOR BID BASIS. CAISSONS SHALL BE LOWERED OR RAISED TO ACHIEVE ADEQUATE BEARING.
4. ADJUSTMENT TO BEARING ELEVATIONS SHALL BE MADE ONLY UNDER THE DIRECTION OF THE PROJECT GEOTECHNICAL ENGINEER WHO SHALL ALSO DETERMINE THE ACCEPTABILITY OF BEARING MATERIAL AND/OR LENGTH OF CAISSON.
5. DRILLED CAISSONS WITHOUT DISTURBING SURROUNDING SOIL. KEEP EXCAVATION FREE FROM WATER. RESTRICTIONS ON SHAFT SIZES SHALL BE IN STRICT ACCORDANCE WITH THE GEOTECHNICAL REPORT AND PROJECT DOCUMENTS.
6. CONDUCT CAISSON INSPECTIONS UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER PRIOR TO REMOVING CASING. PLACE CONCRETE IN CAISSONS FULL HEIGHT IMMEDIATELY SUBSEQUENT TO INSPECTION AND APPROVAL. PROVIDE CAISSON CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT AND THE PROJECT SPECIFICATIONS.
7. CAISSON CONCRETE F'C = 5,000 PSI.MINIMUM.

- N. LOCATE ALL UNDERGROUND UTILITIES IN VICINITY OF FOUNDATIONS AND DETERMINE IF A CONFLICT EXISTS. PROVIDE INFORMATION ON LOCATION SIZE AND ELEVATION OF UTILITIES PRIOR TO START OF WORK SO THAT ANY NECESSARY CHANGES CAN BE MADE WITHOUT DELAYING THE PROJECT SCHEDULE.

NORTHERN VIRGINIA REGIONAL PARK AUTHORITY

OCCOQUAN REGIONAL PARK CAFÉ TERRACE EXPANSION

NAME:
LICENSE:
LIC. NO.:



RHODESIDE HARWELL
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REVISION:

ADDENDUM 1: JULY 23, 2025

SHEET NAME:

DESIGN NOTES

SHEET NUMBER:

S-001

DRAWN BY: AA/SO

CHECKED BY: CN

DATE: 12 MAY 2023

OCCOQUAN REGIONAL PARK CAFÉ TERRACE EXPANSION

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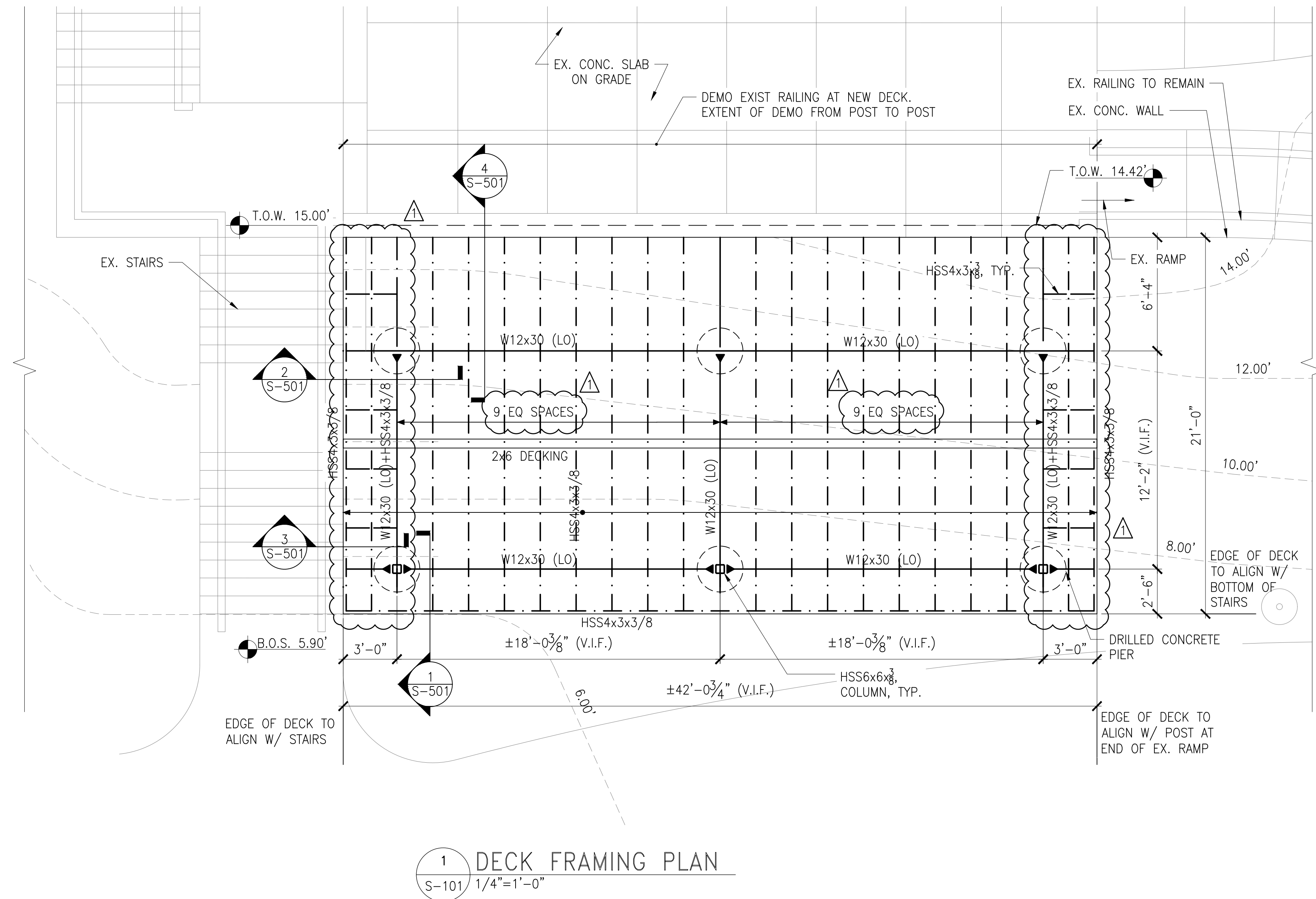
 ADDENDUM 1: JULY 23, 2025

FRAMING PLAN


S-101

DRAWN BY: **AA/SO** CHECKED BY: **CN**

DATE: 12 MAY 2023



NOTES:

1. DRILLED CONCRETE PIERS TO BE 30"Ø REINFORCED W/8#8 VERTICAL BARS W/ #4 TIES. BOTTOM OF DRILLED PIER TO BE AT STRATUM IV DECOMPOSED ROCK PER GEOTECH REPORT AND THAT IS ESTIMATED AT 18' BELOW LOWEST GRADE (APPROX ELEV -12') (ASSUME 30' DEEP CAISSONS FOR BID PURPOSES).
2. EXTEND DRILLED CONCRETE PIER 1'-0" MIN. ABOVE GRADE. MODIFY SOIL SLOPE AROUND PIER AS REQUIRED.
3. ELEVATIONS INDICATED ARE BASED ON EXISTING DRAWINGS AND ARE FOR INFORMATION ONLY. ALL ELEVATIONS AND EXISTING CONDITIONS ARE TO BE VERIFIED IN THE FIELD.
4.  INDICATES BEAM MOMENT CONNECTION.
5. SEE LANDSCAPE ARCH DWGS. FOR DECK FASTENING REQUIREMENTS.

NORTHERN VIRGINIA REGIONAL PARK AUTHORITY

OCCOQUAN REGIONAL PARK CAFÉ TERRACE EXPANSION

PERMIT SET - NOT FOR CONSTRUCTION

NAME:
LICENSE:
LIC. NO.:

RH

RHODESIDE HARWELL

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REVISION:

ADDENDUM 1: JULY 23, 2025

SHEET NAME:

SECTIONS AND DETAILS

SHEET NUMBER:

S-501

DRAWN BY: AA/SO CHECKED BY: CN

DATE: 12 MAY 2023

RAILING BY CONTRACTOR'S RAILING ENGINEER, SEE LAND. ARCH.

SEE PLAN

1/4

HSS BEAM, SEE PLAN

WOOD DECKING, SEE PLAN

1'-3"

STEEL BEAM, SEE PLAN

PLATE 3/4"x7"x1'-0" W/(4) 3/4" A325-SC BOLTS

1/4

HSS COLUMN, SEE PLAN

1/4

BASE PLATE 3/4"x14x1'-2" W/1/4" LEVELING PLATE W/+3/4" NS GROUT AND (4) 3/4" ANCHOR RODS W/ 12" EMBED. INSTALL 1/4" PL WASHERS FIELD WELDED TO BASE PL

#4 TIES

3"

2"

1'-0"

EMBEDMENT U.N.O.

DRILLED CONC. PIER, SEE PLAN

BALANCE @ 14" O.C.

1 SECTION AT DECK EDGE
S-501 1"=1'-0"

RAILING BY CONTRACTOR'S RAILING ENGINEER, SEE LAND. ARCH.

HSS4x3x3/8 AT EACH RAILING POST WELDED BETWEEN HSS BEAMS

WOOD DECKING, SEE PLAN

HSS BEAM, SEE PLAN

STEEL BEAM, SEE PLAN

TYP.

TYP.

3 SECTION AT DECK SIDE EDGE - RAILING POST
S-501 1"=1'-0"

RAILING BY CONTRACTOR'S RAILING ENGINEER, SEE LAND. ARCH.

SEE PLAN

WOOD DECKING, SEE PLAN

1/4

HSS BEAM, SEE PLAN

STEEL BEAM, SEE PLAN

1'-3"

BASE PLATE 3/4"x14x1'-2" W/1/4" LEVELING PLATE W/ 3/4" NS GROUT AND (4) 3/4" ANCHOR RODS W/ 12" EMBED. INSTALL 1/4" PLATE WASHERS FIELD WELDED TO BASE PL

DRILLED CONC. PIER, SEE PLAN

2 SECTION AT DECK SIDE EDGE
S-501 1"=1'-0"

WOOD DECKING, SEE PLAN

HSS BEAM, SEE PLAN

SEE PLAN

AISC DOUBLE ANGLE SHEAR CONN.

5/16 FULL HT STIFF

STEEL BEAM, SEE PLAN

1'-0" MIN.

ADJUST GRADE TO PROVIDE 1'-0" MIN CLEAR ON ALL SIDES

DRILLED CONC. PIER, SEE PLAN

BASE PLATE 3/4"x14x1'-2" W/1/4" LEVELING PLATE W/3/4" NS GROUT AND (4) 3/4" ANCHOR W/ 12" EMBED. INSTALL 1/4" PL WASHERS FIELD WELDED TO BASE PL

DEMOLISH EXIST. RAILING ALONG NEW DECK

PL 1/2"x4"x1'-0" W/(2) 1/2" HILTI HY-200 ADHESIVE BOLTS W/ 4" EMBED

EX. CONCRETE SLAB ON GRADE

EX. CONCRETE WALL

EX. CONCRETE FOOTING

4 SECTION AT EX. WALL
S-501 1"=1'-0"

ALL STEEL TO BE GALVANIZED

CJP, TYP.

STEEL BEAM, SEE PLAN

(2) AISC DOUBLE ANGLE SHEAR CONN.

5 TYP. BEAM TO BEAM MOMENT CONN.
S-501 1"=1'-0"

1/4"x3x3 PL WASHER

1/4

HEX NUT W/ WASHER

BASE PLATE

TOP OF FTG OR PIER

ANCHOR ROD ASTM F-1554, 3/4" U.N.O.

HEX NUT W/ CUT WASHER 4"x4"x1/4"

1'-0" EMBEDMENT U.N.O.

3" THREAD

TACK WELD NUT TO WASHER

ALT. PROVIDE HEADED ANCHOR

6 TYPICAL ANCHOR ROD DETAIL
S-501 1 1/2"=1'-0"