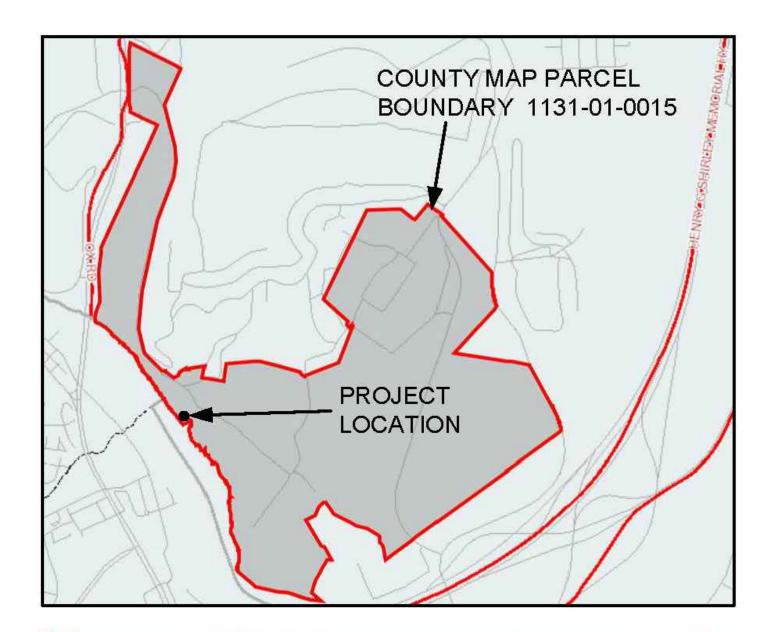
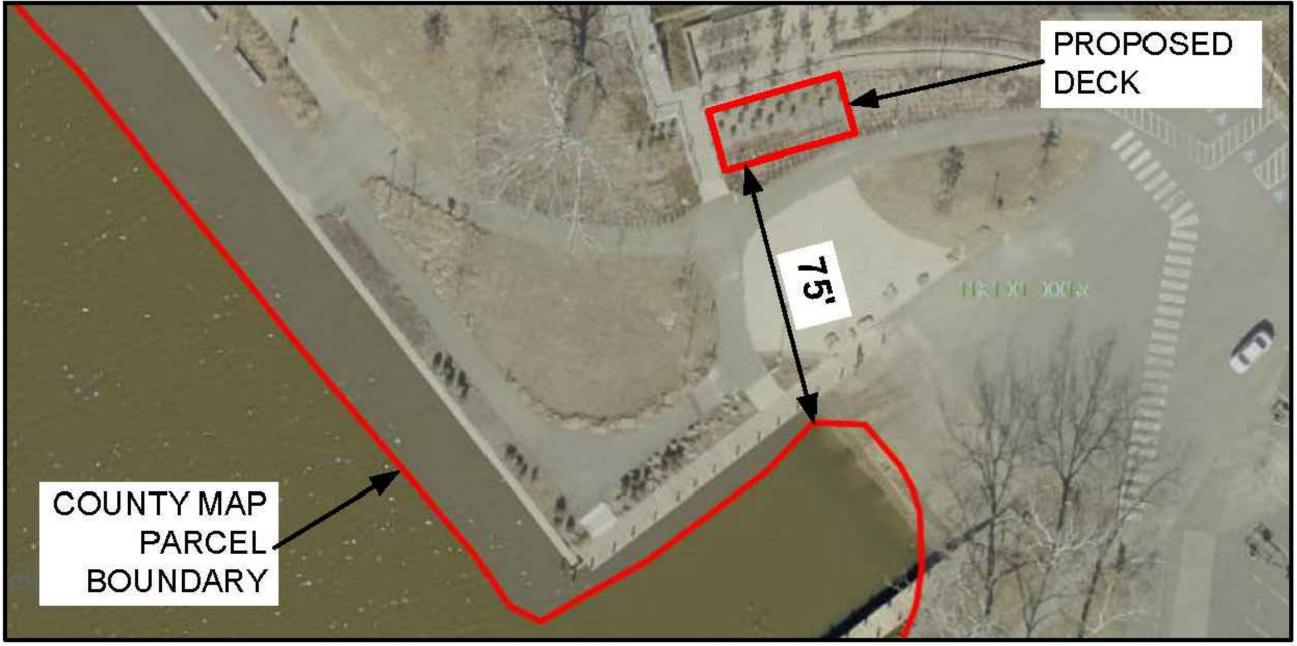
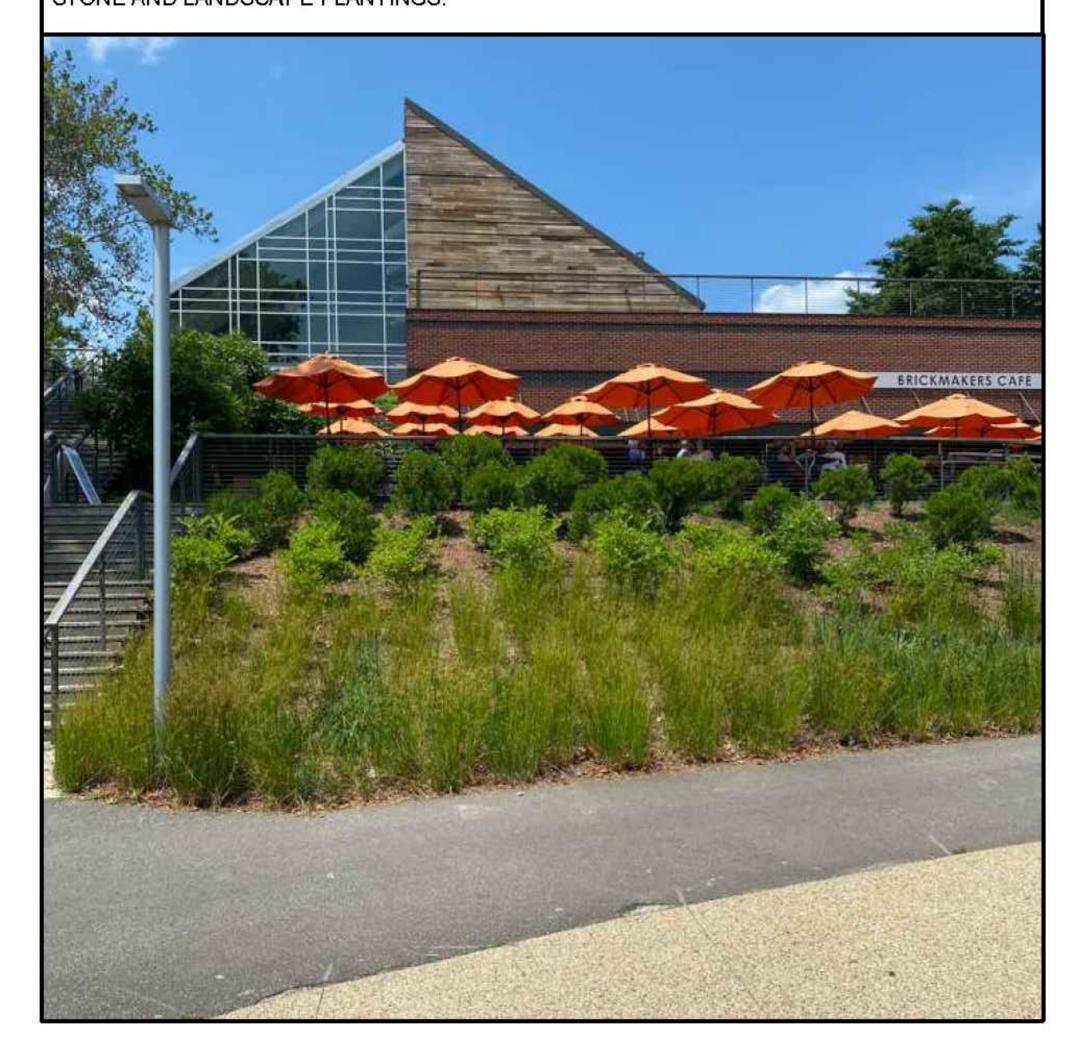
PROJECT ADDRESS: 9751 OX ROAD, LORTON, VA 22079

FAIRFAX COUNTY MAP PARCEL #: 1131-01-0015 OWNER: NOVA PARKS, 5400 OX ROAD, FAIRFAX STATION, VA 22039





PROPOSED ELEVATED DECK OF APPROX. 883 S.F. TO BE CONSTRUCTED OVERTOP OF EXISTING VEGETATED SLOPE SHOWN IN PHOTO BELOW. DECK SURFACE CONSTRUCTED OF WOOD DECKING WITH SPACES BETWEEN BOARDS TO ALLOW FOR WATER PENETRATION. EXISTING SLOPE TO BE PROTECTED WITH COMBINATION OF GABION STONE AND LANDSCAPE PLANTINGS.



NORTHERN VIRGINIA REGIONAL PARK AUTHORITY

OCCOQUAN REGIONAL PARK CAFÉ TERRACE EXPANSION



NAME LICENS LIC. NO



RHODESIDE HARWELL
LANDSCAPE ARCHITECTURE
PLANNING/URBAN DESIGN

510 KING ST, SUITE 300
ALEXANDRIA, VA 22314

347 W 36TH ST, SUITE 1201

703.683.7447



MCMULLAN CONSULTING ENGINEERS

11800 SUNRISE VALLEY DR., STE 430

REVISION:

SCALE: AS SHOWN

SHEET NAME:

COVER SHEET AND PROJECT LOCATION PLAN

SHEET NUMBER:

_-001

DRAWN BY: **JR**

CHECKED BY: **DW**

LIST OF LANDSCAPE ARCHITECTURAL ABBREVIATIONS

LIST OF LA	ANDSCAPE ARCHITECTURAL ABBREVIAT	IONS	
APPROX ARCH ASSOC	APPROXIMATE ARCHITECT/ARCHITECTURAL ASSOCIATED	MAX MFR MIN	MAXIMUM MANUFACTURER MINIMUM
		MISC	MISCELLANEOUS
B&B BOC	BALLED AND BURLAPPED BOTTOM OF CURB	NOM	NOMINAL/NOMINAL DIMENSION
BOS	BOTTOM OF CORD BOTTOM OF STAIR	NTS	NOT TO SCALE
BW/BOW	BOTTOM OF WALL	OC	ON CENTER
		PA	PLANTING AREA
CAL	CALIPER	PH	PHASE
CL COL	CENTERLINE CLEAN OUT	POB	POINT OF BEGINNING
CONC	CONCRETE	POC PROP	POINT OF CURVE PROPOSED
CONT	CONTINUOUS	PVC	POLYVINYL CHLORIDE
DET	DETAIL	R	RADIUS
DEMO	DEMOLISH/DEMOLITION	REINF	REINFORCED
DIA	DIAMETER	ROW	RIGHT-OF-WAY
DIM DWG	DIMENSION DRAWING		
20	2.4	SAN	SANITARY/SANITARY SEWER
EJ	EXPANSION JOINT	SD SF	STORM DRAIN SQUARE FEET
EL/ELEV	ELEVATION	SH/SHT	SHEET
ENGR	ENGINEER EDGE OF DAVE	SIM	SIMILAR
EOP EQ	EDGE OF PAVE EQUAL	SPEC SQ	SPECIFICATIONS/SPECIFIED SQUARE
EX	EXISTING	SS	STAINLESS STEEL
EXIST	EXISTING	ST	STORM
EC/EQQ	EACE OF CLIDD	STRUC	STRUCTURE/STRUCTURAL
FC/FOC FF/FFE	FACE OF CURB FINISHED FLOOR ELEVATION	T00	TOD OF OUR
FG	FINISHED GRADE (PAVED AREA)	TOC TEMP	TOP OF CURB TEMPORARY
FH	FIREHYDRANT	TOS	TOP OF STAIR
FOB FOW	FACE OF BUILDING FACE OF WALL	TO. SLAB	TOP OF SLAB
FT	FOOT/FEET	TW/TOW TYP	TOP OF WALL TYPICAL
			TTTOKE
GALV	GALVANIZED	UTIL	UTILITY
НС	HANDICAP	OTIL	OTILITI
HT	HEIGHT	VAR	VARIES/VARIABLE
		VIF	VERIFY IN FIELD
IN INV	INSIDE DIAMETER	W/	WITH
IINV	INVERT	W/O WWF	WITHOUT WELDED WIRE FABRIC
LA	LANDSCAPE ARCHITECT	WWM	WOVEN WIRE MESH
LF	LINEAR FEET		
LOD	LIMIT OF DISTURBANCE	MISCELLANEOUS:	
LOW LP	LIMIT OF WORK LOW POINT	@	AT
	2011 01111	m mm	METERS MILLIMETERS
		1	FEET
		"	INCHES
SYMBOLS		#	NUMBER
	EXISTING CONTOUR		
0	_		DIRECTION SECTION FACES
0	PROPOSED CONTOUR		DETAIL NUMBER (OR LETTER)
0.00		1 L-501	SECTION LINE
0.00	PROPOSED SPOT ELEVATION (THIS CONTRACT)	L-301	
(0.00)	,		SHEET NUMBER
(0.00)	EXISTING SPOT ELEVATION (TO REMAIN)		
0.0%	PROPOSED SLOPE		NUMBEDED NOTE DEFENTS
	I NOI OOLD OLOI L		NUMBERED NOTE. REFER TO NOTES ON THIS SHEET.
• •	ALIGN	[]	LEGENDS MAY BE GIVEN ON
			INDIVIDUAL SHEETS FOR EASE OF REFERENCE.
1			FUN EASE OF REFERENCE.
L-501	DETAIL NUMBER (OR LETTER)	10	PLANT QUANTITY
	OLUCET NUMBER	RG -	PLANT SYMBOL, REFER
	SHEET NUMBER		TO PLANT LIST
	OUEET VIII MEET		
L5.1 —	SHEET NUMBER		

GENERAL NOTES:

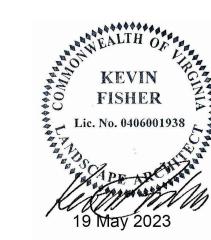
- 1. THE DRAWINGS AND SPECIFICATIONS, TAKEN TOGETHER, DESCRIBE THE DESIGN FOR THIS PROJECT. THE DRAWINGS AND SPECIFICATIONS ARE MEANT TO BE COMPLIMENTARY TO EACH OTHER.
- 2. THAT WHICH IS SHOWN ON THE DRAWINGS BUT NOT IN THE SPECIFICATIONS, OR SHOWN IN THE SPECIFICATIONS BUT NOT ON THE DRAWINGS, SHALL BE PROVIDED AS IF SHOWN IN BOTH PLACES AND TO THE SAME STANDARD OF QUALITY FOR SIMILAR ITEMS.
- 3. DRAWINGS SHOW EXTENT, LOCATION, DIMENSIONS, RELATIONSHIPS AMONG VARIOUS PART, AND QUANTITY OF ITEMS. IN CASE OF CONFLICT WITH THE SPECIFICATIONS IN THESE MATTERS, THE DRAWINGS SHALL GOVERN.
- SPECIFICATIONS SHOW QUALITY, TRADE NAME, GENERIC NAMES, AND WORKMANSHIP. IN CASE OF CONFLICT WITH THE DRAWINGS IN THESE MATTERS, THE SPECIFICATIONS SHALL GOVERN.
- 5. THE LARGER THE SCALE OF THE DRAWINGS, THE MORE PRECEDENCE: i.e. A 1 INCH PER FOOT SCALE DRAWING GOVERNS OVER A 10 FEET PER INCH DRAWING.
- CONTRACTOR SHALL PROTECT FROM ALL DAMAGE EXISTING TREES TO REMAIN AND THEIR ROOT STRUCTURES.
- 7. THE CONTRACTOR SHALL TAKE PROPER PRECAUTIONS NOT TO DAMAGE EXISTING ADJACENT FACILITIES AND STRUCTURES THAT ARE TO REMAIN. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS TO THEIR ORIGINAL CONDITION (UNLESS OTHERWISE INDICATED) TO THE SATISFACTION OF THE CONTRACTING REPRESENTATIVE AND OWNER. ADJACENT STREETS AND SIDEWALKS SHALL BE MAINTAINED IN A CLEAN CONDITION, MUD AND DUST FREE. ADEQUATE MEANS AND FACILITIES SHALL BE PROVIDED BY THE CONTRACTOR TO CLEAN TRUCKS AND OTHER EQUIPMENT LEAVING THE SITE.
- 8. THE EXISTING SURROUNDING FACILITIES ARE TO REMAIN IN OPERATION WHILE CONSTRUCTION WORK IS BEING DONE. ALL UTILITY WORK SHALL BE COORDINATED WITH THE OWNER AND LOCAL UTILITY COMPANIES AND SHALL BE PERFORMED IN AN EXPEDITIOUS MANNER.
- 9. UTILITIES SHOWN ON DRAWINGS ARE BASED ON PUBLISHED DATA AND ARE FOR CONTRACTOR'S CONVENIENCE ONLY. THE CONTRACTOR MUST LOCATE AND VERIFY ALL SUCH INFORMATION, INCLUDING INFORMATION NOT SHOWN ON PLANS, BY CONTACTING THE INDIVIDUAL UTILITY COMPANY AND INVESTIGATING THE SITE TO DETERMINE THE EXACT LOCATION OF RESPECTIVE UTILITY LINES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT THEIR OWN EXPENSE, AND TO THE SATISFACTION OF THE PROJECT OWNER & THE UTILITY OWNER, DAMAGE TO ANY UTILITY CAUSED BY THEIR WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE UTILITY OWNER OF ANY DAMAGE TO ANY UTILITY BY REASON OF THEIR OPERATION.
- 10. BEFORE BEGINNING ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT MISS UTILITY AT LEAST 3 WORKING DAYS PRIOR TO STARTING WORK SO THAT THEY CAN ARRANGE TO MARK THE HORIZONTAL LOCATION OF UNDERGROUND FACILITIES.
- 11. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE PRIOR TO VERTICAL AND HORIZONTAL START OF CONSTRUCTION. IF DISCREPANCIES ARE FOUND, NOTIFY THE PROJECT REPRESENTATIVE IMMEDIATELY FOR CLARIFICATION.
- 12. FOR ALL PAVEMENT REMOVAL AREAS, NEATLY SAWCUT ALL EDGES. TIES TO EXISTING PAVEMENT AREAS SHALL BE SMOOTH CONSISTENT TRANSITIONS. NO ABRUPT CHANGE IN LINE AND/OR GRADE WILL BE PERMITTED.
- 13. IN AREAS OF FORMER PAVED SURFACES (ROADBEDS, WALKWAYS, ETC.), REMOVE ALL EXISTING PAVING MATERIAL, INCLUDING BASE MATERIALS. EXCAVATE EXISTING SUBGRADE TO A TOTAL DEPTH OF 18" BELOW FINISHED GRADE. SCARIFY BOTTOM OF EXCAVATION TO A DEPTH OF 4". IF FINISHED GRADE IS GREATER THAN 14" ABOVE EXISTING SUBGRADE, SCARIFY EXISTING SUBGRADE TO MINIMUM DEPTH OF 4". FILL AREA WITH APPROVED EARTH FILL TO A TOTAL DEPTH OF 4" BELOW FINISHED GRADE. PLACE SOIL IN MAXIMUM 8" LIFTS, AND COMPACT EACH LIFT TO MINIMUM 50%, MAXIMUM 75% DENSITY. SPREAD TOPSOIL OVER ENTIRE DISTURBED AREA TO DEPTH OF 4". LIGHTLY COMPACT TOPSOIL. BLEND EDGES OF TOPSOIL TO MATCH GRADES OF ADJACENT [EXISTING OR PROPOSED] CONDITIONS.
- 14. POSITIVE DRAINAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PONDING OR STANDING WATER WILL NOT BE PERMITTED.
- 15. CONTRACTOR SHALL NOTIFY THE PROJECT REPRESENTATIVE OF ANY DEVIATION FROM THIS PLAN PRIOR TO ANY CHANGE BEING MADE. ANY DEVIATION FROM THIS PLAN WITHOUT WRITTEN AUTHORIZATION FROM THE PROJECT REPRESENTATIVE WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND CORRECTIONS SHALL BE MADE BY THE CONTRACTOR AT NO COST TO THE OWNER

SHEET INDEX:

- L-001 COVER SHEET AND PROJECT LOCATION PLAN
- L-002 NOTES, SYMBOLS AND DRAWING LIST
- L-003 EXISTING SITE PLAN
- L-101 MATERIALS AND LAYOUT PLAN
- L-102 RAILING AND FRAMING PLAN
- L-201 PLANTING PLAN AND SCHEDULE
- L-301 SECTION AND ELEVATION
- L-501 DECK AND RAILING DETAILS
- L-502 PLANTING DETAILS
- S-001 DESIGN NOTES
- S-101 FRAMING PLAN
- S-501 SECTION DETAILS

NORTHERN VIRGINIA REGIONAL PARK AUTHORITY

OCCOQUAN REGIONAL PARK CAFÉ TERRACE EXPANSION



NAME: LICENSE: LIC. NO.:



RHODESIDE HARWELL
LANDSCAPE ARCHITECTURE
PLANNING/URBAN DESIGN

510 KING ST, SUITE 300
ALEXANDRIA, VA 22314

347 W 36TH ST, SUITE 1201

703.683.7447



MCMULLAN CONSULTING

ENGINEERS

11800 SUNRISE VALLEY DR., STE 430
RESTON, VA. 20191
T 703,556.0651

CHECKED BY: **DW**

REVISION:

SCALE: AS SHOWN

SHEET NAME:

NOTES, SYMBOLS AND DRAWING LIST

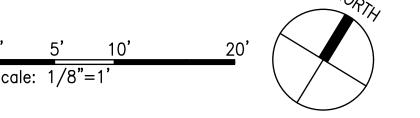
SHEET NUMBER:

L-002

DRAWN BY: **JR**

V 2023





OCCOQUAN **REGIONAL PARK** CAFÉ TERRACE EXPANSION





RHODESIDE HARWELL LANDSCAPE ARCHITECTURE PLANNING/URBAN DESIGN



MCMULLAN CONSULTING ENGINEERS 11800 SUNRISE VALLEY DR., STE 430 RESTON, VA. 20191

T 703.556.0651

REVISION:

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

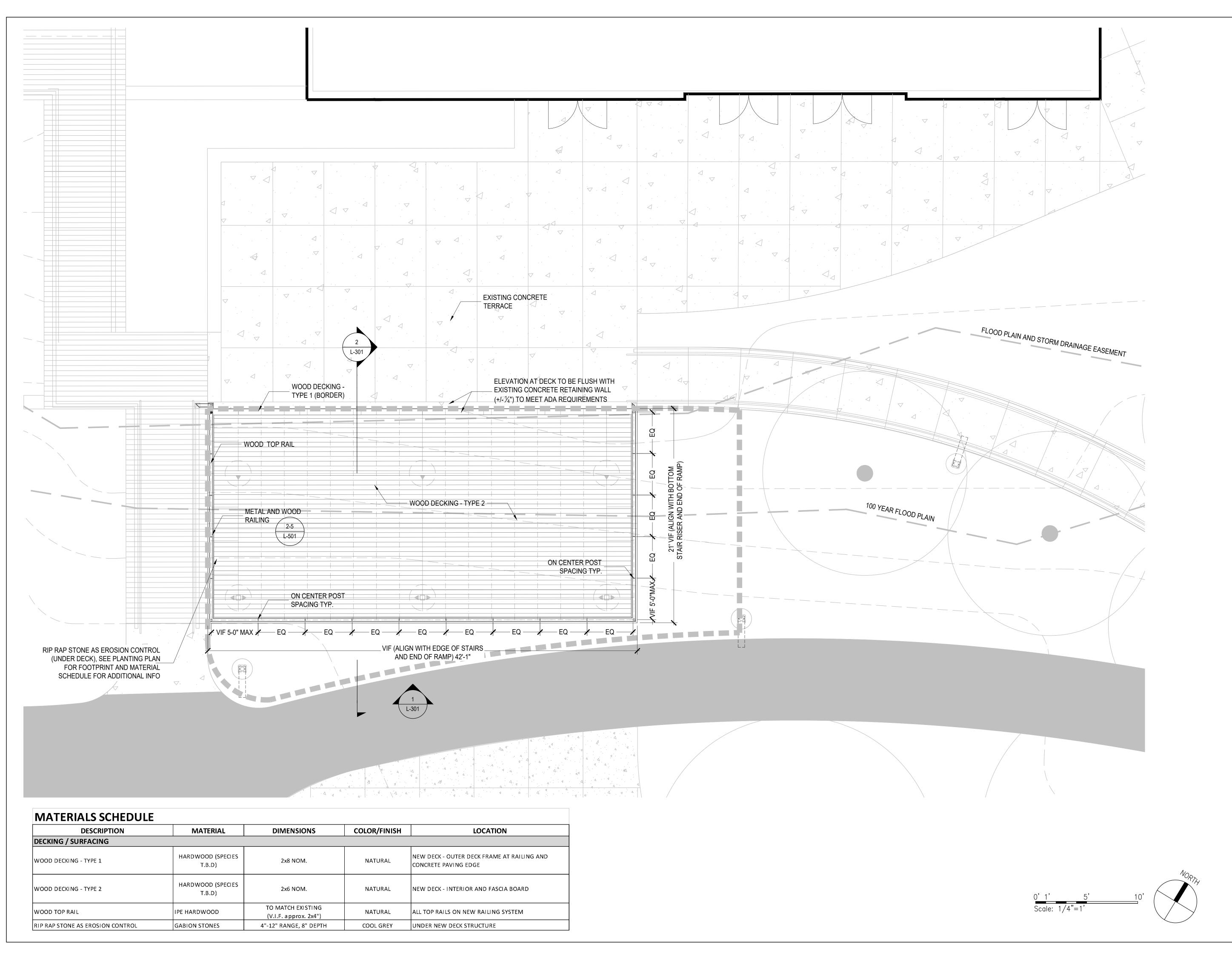
SHEET NAME:

EXISTING SITE PLAN

SHEET NUMBER:

DRAWN BY: **JR**

CHECKED BY: **DW**



OCCOQUAN **REGIONAL PARK CAFÉ TERRACE EXPANSION**





RHODESIDE HARWELL LANDSCAPE ARCHITECTURE PLANNING/URBAN DESIGN



MCMULLAN CONSULTING ENGINEERS

11800 SUNRISE VALLEY DR., STE 430

REVISION:

SCALE: ½" = 1'-0"

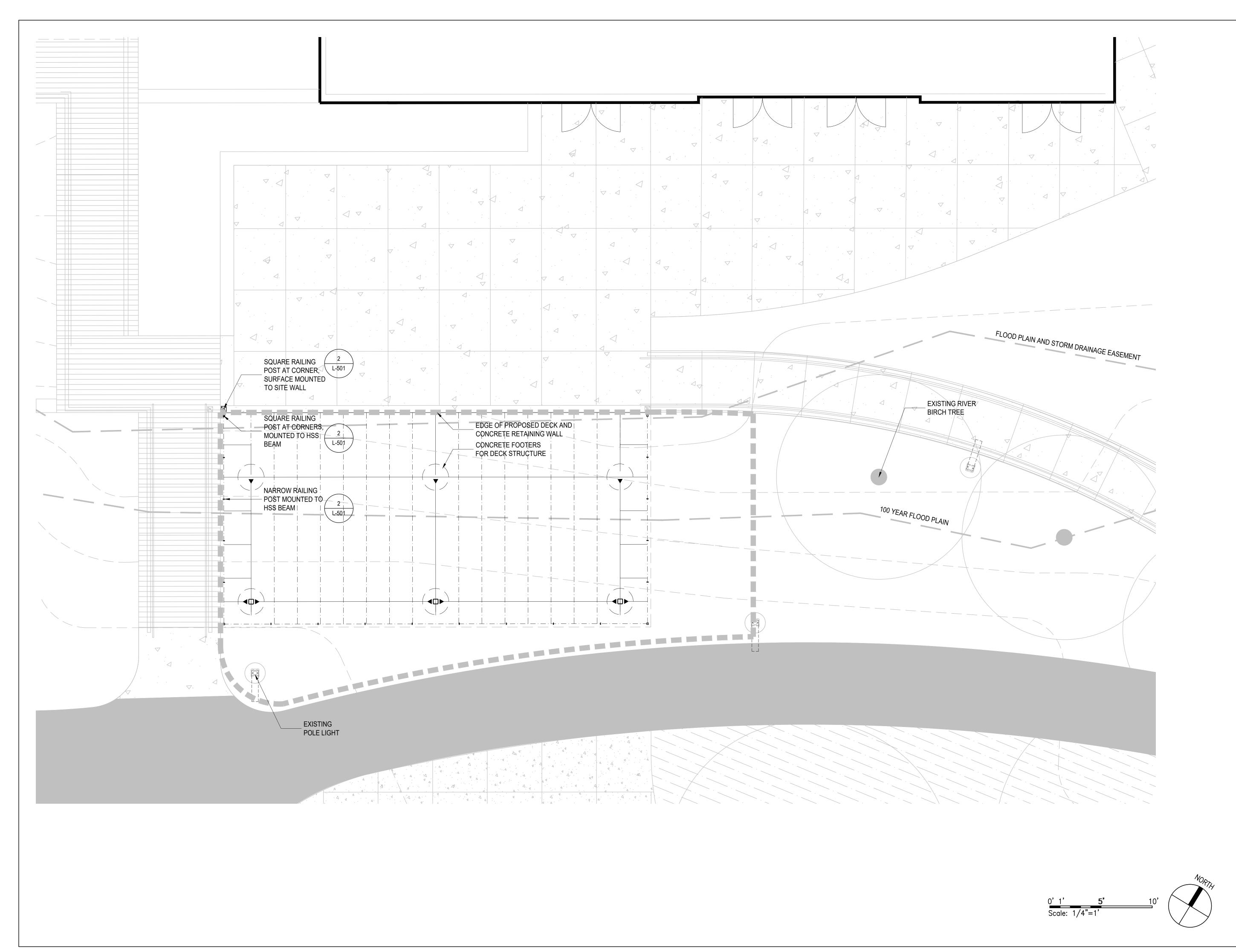
SHEET NAME:

MATERIALS AND LAYOUT PLAN

SHEET NUMBER:

DRAWN BY: **JR**

CHECKED BY: **DW**



OCCOQUAN **REGIONAL PARK** CAFÉ TERRACE **EXPANSION**





RHODESIDE HARWELL LANDSCAPE ARCHITECTURE PLANNING/URBAN DESIGN



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11800 SUNRISE VALLEY DR., STE 430 RESTON, VA. 20191

REVISION:

SCALE: 1/4" = 1'-0"

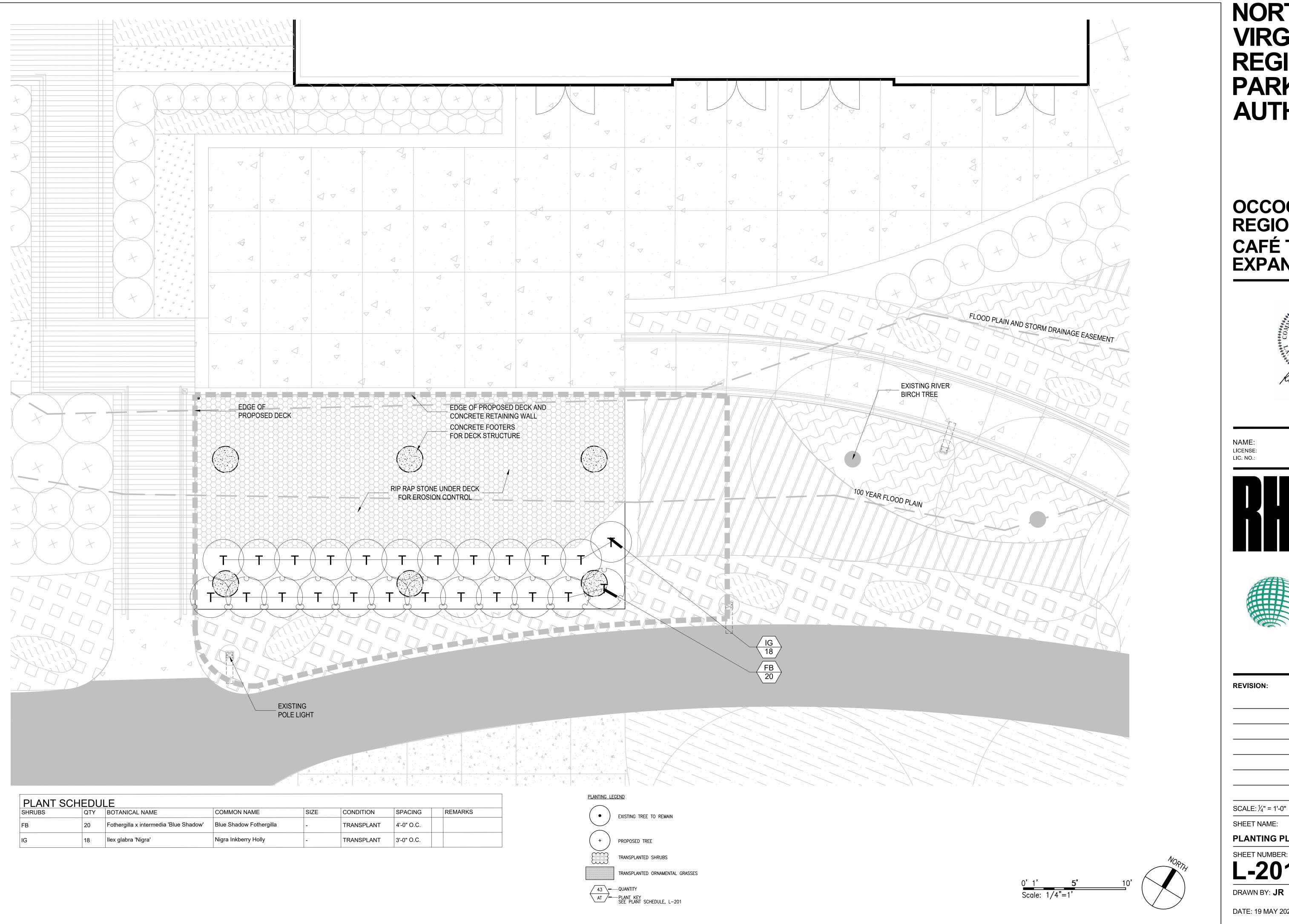
SHEET NAME:

RAILING AND FRAMING PLAN

SHEET NUMBER:

DRAWN BY: **JR**

CHECKED BY: **DW**



OCCOQUAN **REGIONAL PARK CAFÉ TERRACE EXPANSION**





RHODESIDE HARWELL LANDSCAPE ARCHITECTURE PLANNING/URBAN DESIGN



MCMULLAN CONSULTING ENGINEERS

11800 SUNRISE VALLEY DR., STE 430 T 703.556.0651

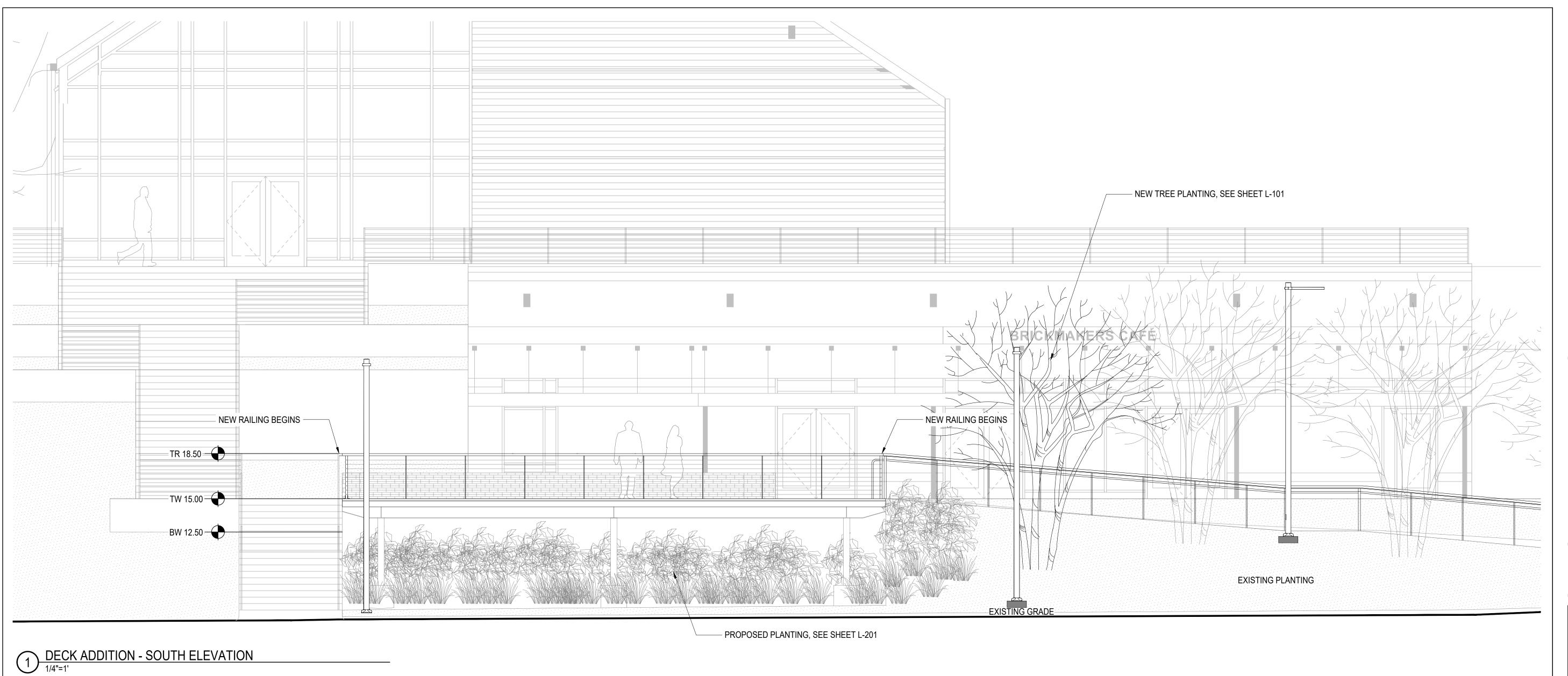
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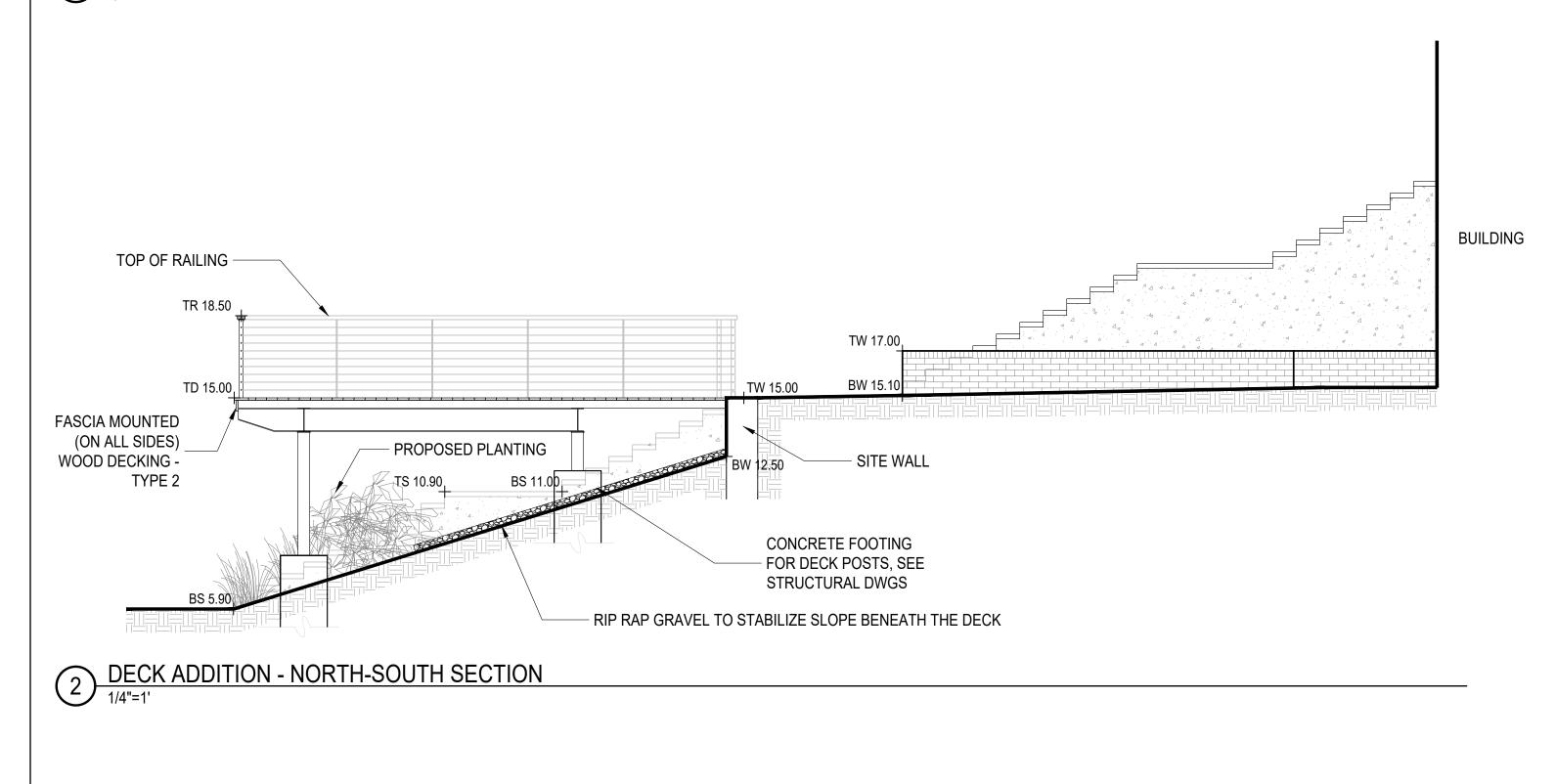
SHEET NAME:

PLANTING PLAN AND SCHEDULE

SHEET NUMBER:

DRAWN BY: **JR** CHECKED BY: **DW**





OCCOQUAN **REGIONAL PARK CAFÉ TERRACE EXPANSION**







MCMULLAN CONSULTING ENGINEERS

11800 SUNRISE VALLEY DR., STE 430 T 703.556.0651

REVISION:

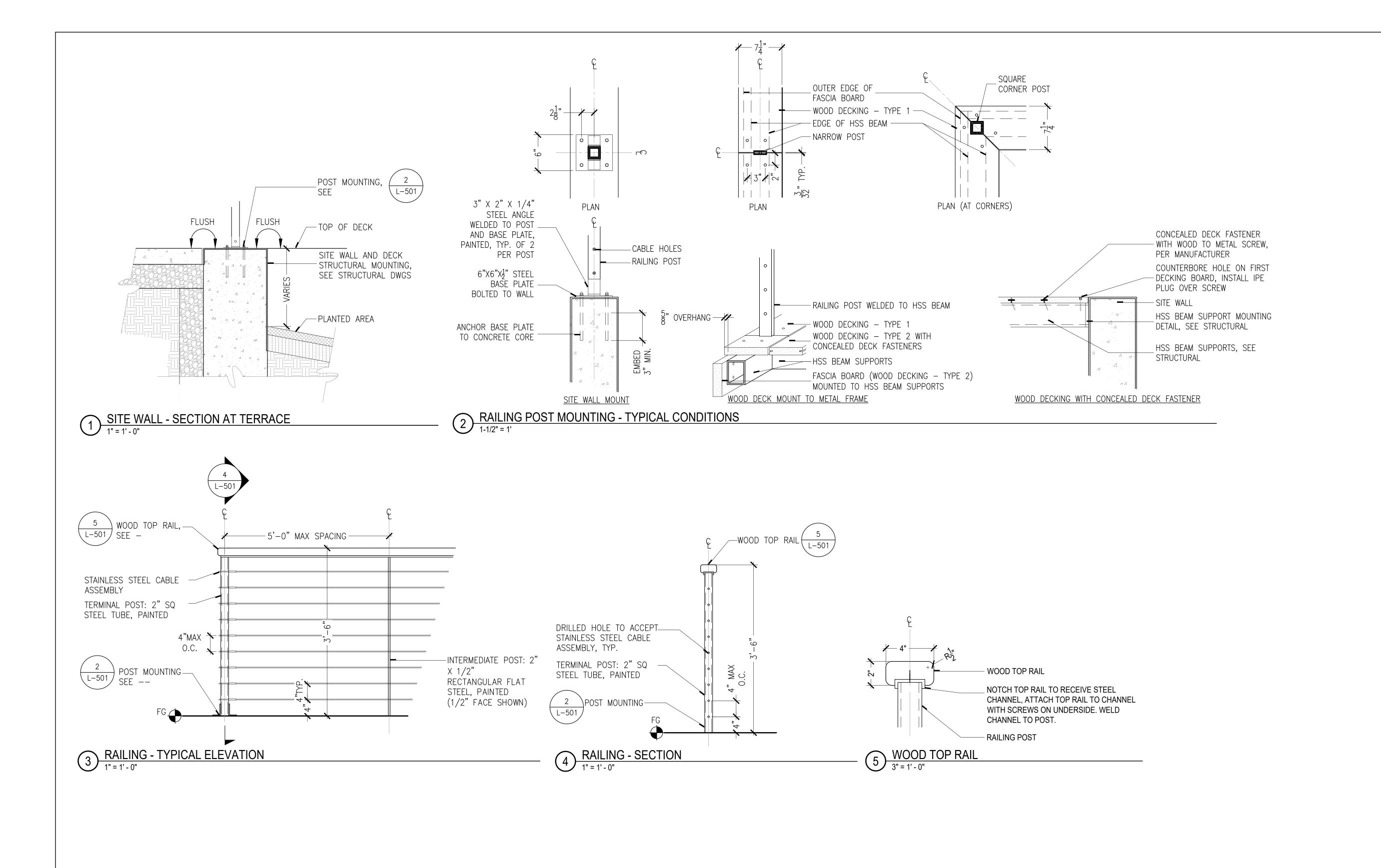
SCALE: 1/4" = 1'-0" SHEET NAME:

SECTION AND ELEVATION

SHEET NUMBER:

DRAWN BY: **JR**

CHECKED BY: **DW**



OCCOQUAN REGIONAL PARK CAFÉ TERRACE **EXPANSION**



NAME: LICENSE: LIC. NO.:



RHODESIDE HARWELL LANDSCAPE ARCHITECTURE PLANNING/URBAN DESIGN



MCMULLAN CONSULTING ENGINEERS

T 703.556.0651

11800 SUNRISE VALLEY DR., STE 430

REVISION:

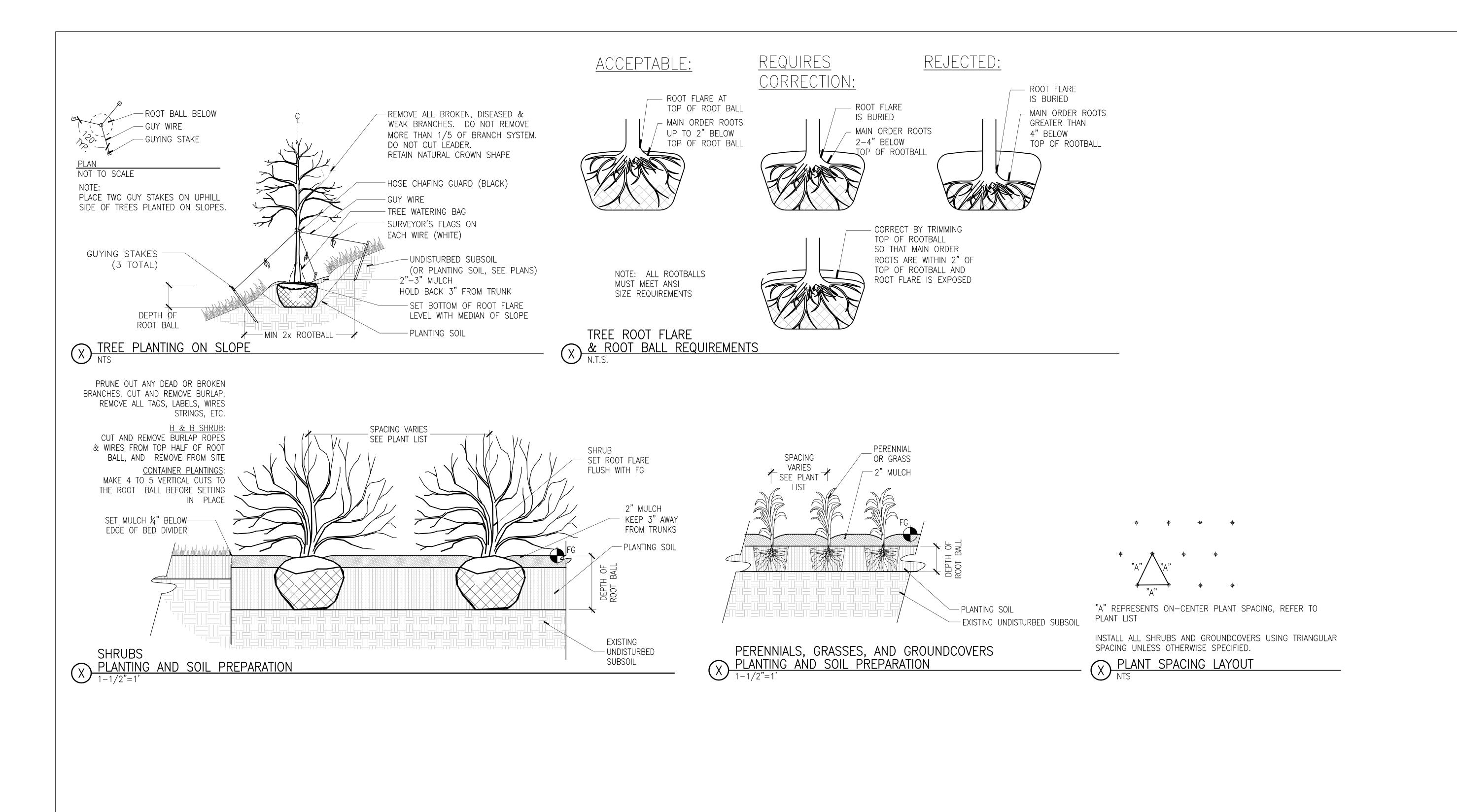
SCALE: AS SHOWN

SHEET NAME:

DECK AND RAILING DETAILS

SHEET NUMBER:

CHECKED BY: **DW** DRAWN BY: **JR**



OCCOQUAN REGIONAL PARK CAFÉ TERRACE EXPANSION



NAME: LICENSE:



PLANNING/URBAN DESIGN 510 KING ST, SUITE 300 ALEXANDRIA, VA 22314 347 W 36TH ST, SUITE 1201



MCMULLAN CONSULTING ENGINEERS

11800 SUNRISE VALLEY DR., STE 430 T 703.556.0651

REVISION:				

SCALE: AS SHOWN

SHEET NAME:

PLANTING DETAILS

SHEET NUMBER:

L-502

CHECKED BY: **DW** DRAWN BY: **JR**

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.

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:
- = || 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:
- 6. SEISMIC DESIGN CATEGORY
- RESPONSE MODIFICATION FACTOR: R = 3.0
- SEISMIC RESPONSE COEFF: CS = 0.043
- SEISMIC RESISTANCE SYSTEM TYPE: = STEEL NOT SPECIFICALLY
- DESIGNED FOR LATERAL RESISTANCE 10. DESIGN BASE SHEAR:
- = 0.043W11. ANALYSIS PROCEDURE USED: = EQUIVALENT LATERAL FORCE
- ANALYSIS
- C. WIND LOAD 1. ULTIMATE WIND SPEED: = 115 MPH
- RISK CATEGORY: = ||
- 3. EXPOSURE:

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: IPE
 - 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
- 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.)
- 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.
- STRUCTURAL STEEL:

TYPE-N

- 1. STRUCTURAL "W" & "T" 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

ASTM A-123

- 5. ANCHOR RODS: ASTM F-1554 GR36 OR GR 55 WITH WELDABILITY SUPPLEMENT S1.
- 6. GALVANIZING (HOT-DIP):
- 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.
- 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.
- 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.
- 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.

- 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
- H. MEANS AND METHODS OF CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 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.
- PROVIDE PRELIMINARY HANDWRITTEN SITE VISIT REPORTS CONFIRMING VERBAL DISCUSSIONS TO THE CONTRACTOR REGARDING THE RESULTS OF INSPECTIONS PRIOR TO LEAVING JOB SITE.

- 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.
- 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.)
- 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.
- FIELD CURED CYLINDERS SHALL BE CURED IN ACCORDANCE WITH CODE REQUIREMENTS OR IF NOT APPLICABLE THEN CURED IN SAME CONDITIONS AS

DEEP FOUNDATIONS

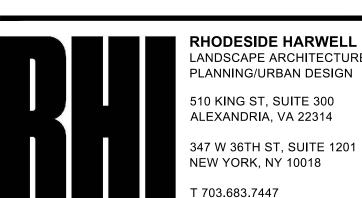
- A. CAISSONS (DRILLED PIERS)
- 1. PROVIDE CAISSONS (DRILLED PIERS) FOUNDED IN MATERIAL CAPABLE OF SAFELY SUPPORTING BEARING PRESSURE OF 10,000 PSF AT STRATUM IV PER GEOTECHNICAL REPORT DATED 01/28/23 AND PREPARED BY PIEDMONT GEOTECHNICAL, INC.
- 2. SEE PLAN FOR MORE INFORMATION.
- 3. BOTTOMS OF CAISSON 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.:





REVISION:					

CHECKED BY: **CN**

SHEET NAME: **DESIGN NOTES**

SCALE: N.T.S.

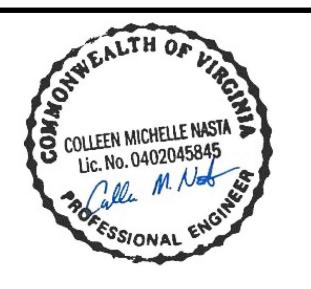
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EX. CONC. SLAB ON GRADE EX. RAILING TO REMAIN -DEMO EXIST RAILING AT NEW DECK. EXTENT OF DEMO FROM POST TO POST EX. CONC. WALL — T<u>.O.W. 14.42</u> T.O.W. 15.00' EX. STAIRS -12.00' 10.00 EDGE OF DECK TO ALIGN W/ BOTTOM OF STAIRS HSS4x3x3/8 B.0.S. 5.90' $\pm 18' - 0\frac{3}{8}$ " (V.I.F.) $\pm 18' - 0\frac{3}{8}$ " (V.I.F.) - DRILLED CONCRETE $= HSS6x6x_8^3$, $\pm 42' - 0\frac{3}{4}"$ (V.I.F.) COLUMN, TYP. EDGE OF DECK TO EDGE OF DECK TO ALIGN W/ POST AT ALIGN W/ STAIRS END OF EX. RAMP DECK FRAMING PLAN S-101/1/4"=1'-0" 1. DRILLED CONCRETE PIERS TO BE 30" 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





RHODESIDE HARWELL LANDSCAPE ARCHITECTURE PLANNING/URBAN DESIGN 510 KING ST, SUITE 300 ALEXANDRIA, VA 22314 347 W 36TH ST, SUITE 1201

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MCMULLAN CONSULTING ENGINEERS

11800 SUNRISE VALLEY DR., STE 430 T 703.556.0651

REVISION:

SCALE: AS SHOWN

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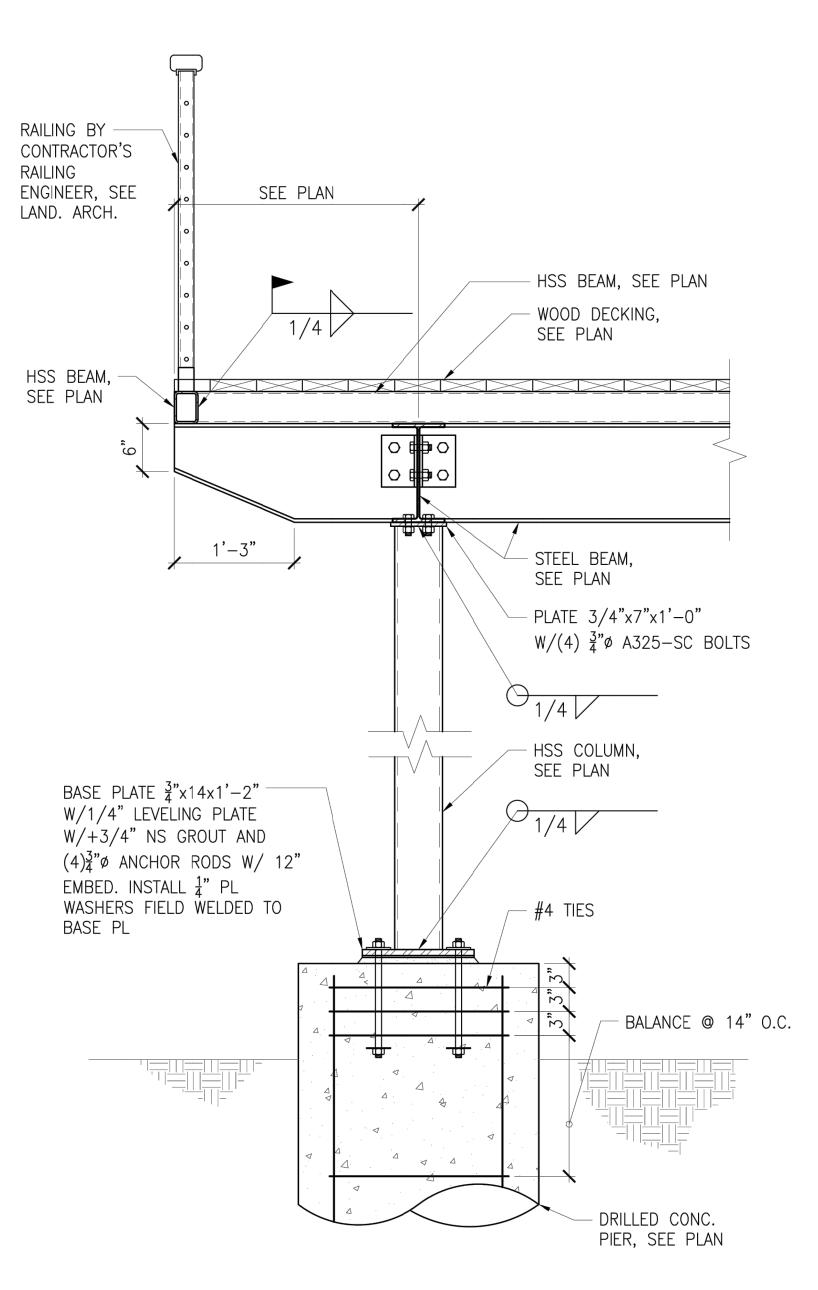
FRAMING PLAN

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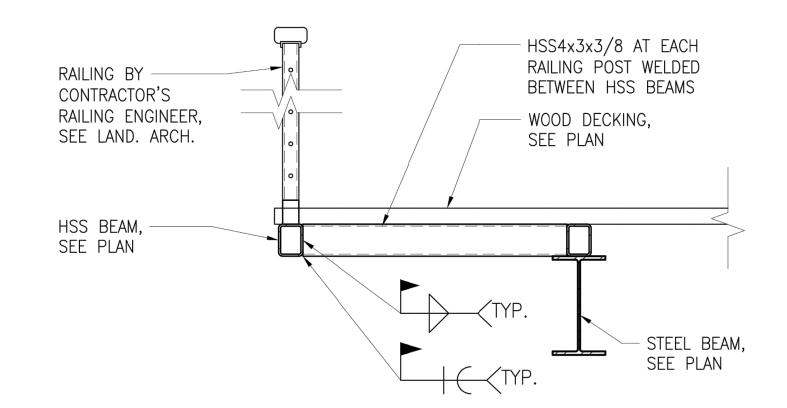
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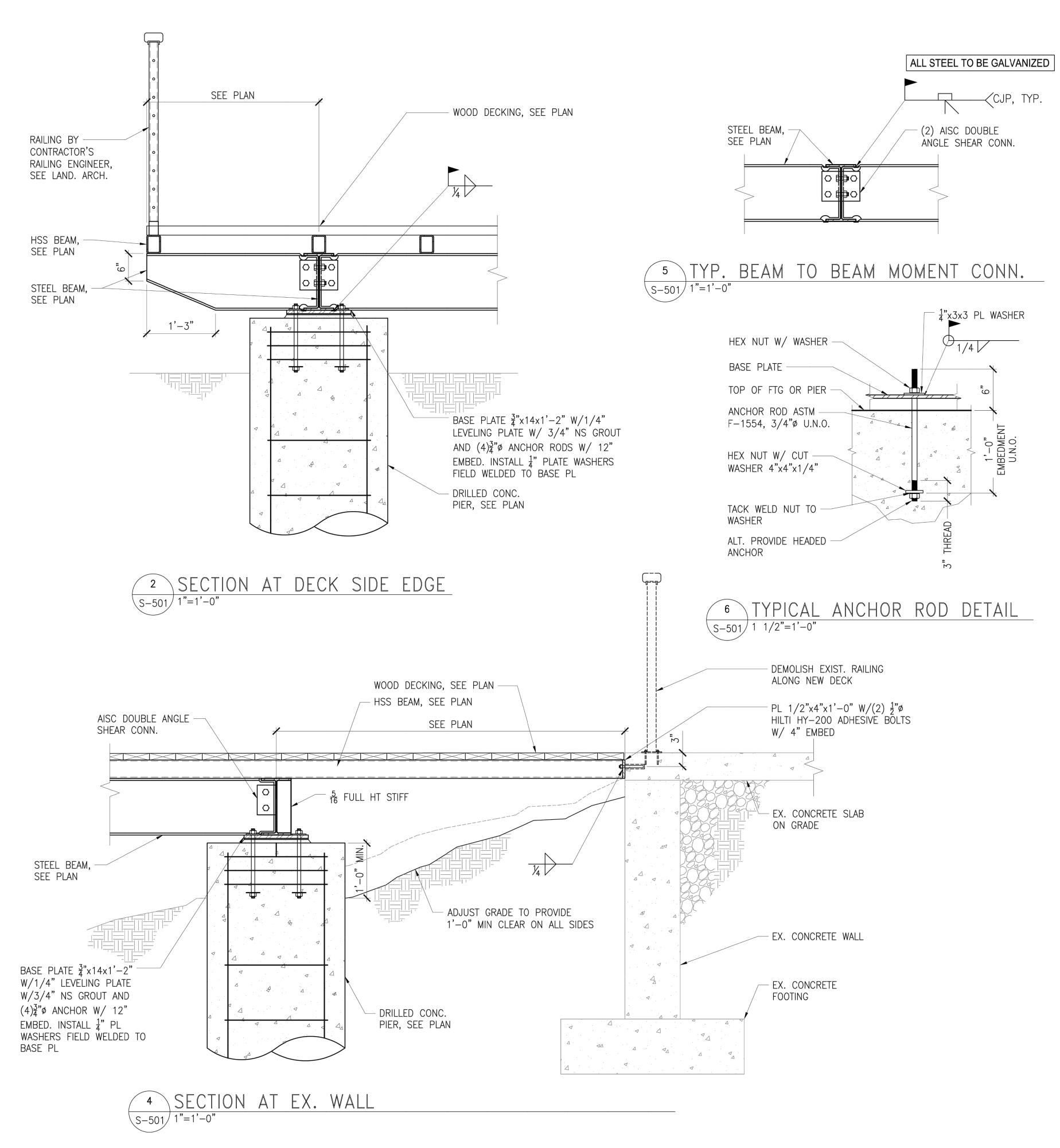
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SECTION AT DECK EDGE S-501/1"=1'-0"

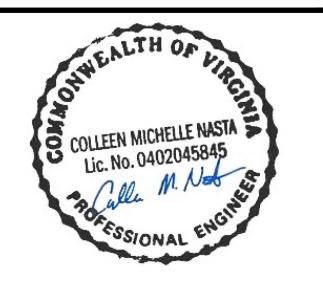


³ SECTION AT DECK SIDE EDGE - RAILING POST S-501/1"=1'-0"



NORTHERN VIRGINIA REGIONAL PARK AUTHORITY

OCCOQUAN REGIONAL PARK CAFÉ TERRACE **EXPANSION**



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REVISION:

SCALE: AS SHOWN

SHEET NAME:

SECTION DETAILS

SHEET NUMBER:

S-501

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