A. GENERAL:

1. THE STRUCTURAL DRAWINGS FOR THIS PROJECT ARE NOT ISSUED FOR BID UNLESS THE INDIVIDUAL SHEETS ARE IDENTIFIED AS "ISSUED FOR BID".
2. THE STRUCTURAL DRAWINGS FOR THIS PROJECT ARE NOT ISSUED FOR CONSTRUCTION UNLESS THE INDIVIDUAL SHEETS ARE IDENTIFIED AS "ISSUED FOR CONSTRUCTION".

B. CODES AND STANDARDS:

1. THE FOLLOWING CODES AND STANDARDS, INCLUDING ALL SPECIFICATIONS REFERENCED WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION, QUALITY CONTROL AND SAFETY OF ALL WORK PERFORMED ON THE PROJECT. USE THE VERSION REFERENCED IN THE BUILDING CODE UNLESS NOTED OTHERWISE.

   a. BUILDING CODE: 2022 NEW YORK CITY BUILDING CODE
   b. "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES", ASCE 7-22, AMERICAN SOCIETY OF CIVIL ENGINEERS.
   c. "NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION w/ 2005 SUPPLEMENT",NDS,AMERICAN FOREST & PAPER ASSOC.

C. DESIGN LOADS:

1. GRAVITY LOADS: NEW WOOD FRAMING HAS BEEN DESIGNED FOR THE SELF WEIGHT OF THE FRAMING AND 100 PSF LIVE LOAD.

D. MATERIALS:

1. THE FOLLOWING ASTM STANDARDS AND DESIGN STRESSES SHALL BE USED FOR THE APPROPRIATE MATERIALS USED IN THE CONSTRUCTION OF THIS PROJECT.

2. POST-INSTALLED ANCHORS

EXPANSION BOLTS INTO CONCRETE	HILTI KWIK BOLT TZ
SCREW ANCHORS INTO CONCRETE	HILTI KWIK HUS EZ
ADHESIVE ANCHORS INTO CONCRETE	HILTI HIT HY 200 SAFE SET WITH HILTI HIT Z-ROD or HILTI HIT HY 200 SAFESET W/ HOLLOW DRILL BIT W/ HILTI HAS- E THREADED ROD or HILTI HIT RE 500 SD W/ HILTI HAS –E THREADED ROD FOR ALL ADHESIVE ANCHORS, HOLES SHALL BE HAMMER DRILLED AND HOLES MAY BE DRY OR WATER SATURATED
EXPANSION ANCHORS INTO GROUT FILLED CONCRETE BLOCK	HILTI KWIK BOLT 3
SCREW ANCHORS LARGER > 1/4" DIA. INTO CONCRETE OR GROUT FILLED CONCRETE BLOCK	HILTI KWIK HUS EZ

   a. ALTERNATIVE ANCHORS MAY BE USED IF APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. THE CONTRACTOR SHALL SUBMIT CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROJECT'S JURISDICTION VERFIYING THAT PROPOSED ALTERNATIVE ANCHORS WILL PROVIDE THE SAME OR GREATER LOAD CARRYING CAPACITY AS THE SPECIFIED ANCHORS. THE CONTRACTOR SHALL SUBMIT ICC ESR REPORTS. EACH ANCHOR CONFIGURATION SHALL BE EVALUATED AND COMPARED TO THE SPECIFIED ANCHOR.

   b. ALL ANCHORS SHALL ASSUME THE CRACKED CONCRETE DESIGN CONDITION, U.N.O.

   c. POST-INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII).

   d. THE CONTRACTOR SHALL ARRANGE FOR AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ON SITE INSTALLATION TRAINING FOR EACH SPECIFIED ANCHOR TYPE. THE STRUCTURAL ENGINEER OF RECORD SHALL RECEIVE DOCUMENTATION VERIFYING THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS HAVE BEEN TRAINED PRIOR TO COMMENCEMENT OF INSTALLING ANCHORS.

   e. INSTALLATION OF ADHESIVE ANCHORS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM. CERTIFICATION SHALL INCLUDE WRITTEN AND PERFORMANCE TESTS IN ACCORDANCE WITH THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM OR EQUIVALENT. THE ACCEPTABILITY OF CERTIFICATIONS OTHER THAN THE ACI/CRSI ADDHESIVE INSTALLER CERTIFIFICATION WILL BE DETERMINED BY THE STRUCTURAL ENGINEER OF RECORD.

   f. CONCRETE SHALL HAVE ACHIEVED DESIGN STRENGTH PRIOR TO INSTALLING POST-INSTALLED ANCHORS. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE THAT HAS CURED FOR A MINIMUM OF 21 DAYS.

   g. ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ANCHORS AND PROXIMITY OF ANCHORS TO EDGES OF CONCRETE OR MASONRY. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.

   h. POST-INSTALLED ANCHORS SHALL BE INSTALLED IN A MANNER THAT DOES NOT DAMAGE REINFORCING STEEL. REINFORCING STEEL SHALL BE LOCATED BY NON-DESTRUCTIVE MEANS PRIOR TO DRILLING HOLES. PLATES AND BRACKETS THROUGH WHICH ANCHORS WILL BE INSTALLED SHALL NOT BE FABRICATED UNTIL AFTER REINFORCING STEEL IS LOCATED AND ANCHOR LOCATIONS ARE ADJUSTED. CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER TO OBTAIN ALTERNATIVE ANCHOR LAYOUT WHERE ANCHORS MUST BE RELOCATED TO AVOID INTERFERENCE WITH REINFORCING STEEL.

   i. ADHESIVE ANCHORS SHALL BE INSTALLED WITH A 6" EMBEDMENT DEPTH UNLESS NOTED OTHERWISE. ANCHORS OTHER THAN ADHESIVE ANCHORS SHALL BE INSTALLED WITH AN EMBEMENT DEPTH EQUAL TO THE MAXIMUM EMBEDMENT DEPTH NOTED IN THE MANUFACTURER'S PRODUCT TECHNICAL GUIDE UNLESS NOTED OTHERWISE. WHERE EMBEDMENT DEPTH IS SPECIFIED, THAT DEPTH IS THE REQUIRED FINAL EFFECTIVE MINIMUM EMBEDMENT DEPTH.

   j. POST INSTALLED ANCHORS SHALL BE INSPECTED PERIODICALLY DURING INSTALLATION PER CHAPTER 17 OF IBC2021, UNLESS NOTED OTHERWISE.

   k. ADHESIVE ANCHORS INSTALLED IN VERTICAL SURFACES OR IN OVERHEAD OR UPWARDLY INCLINED ORIENTATIONS SHALL BE CONTINUOUSLY INSPECTED DURING INSTALLATION PER ACI 318.

   l. INSPECTIONS SHALL BE PERFORMED BY A SPECIAL INSPECTOR WHO HAS BEEN APPROVED BY THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL VERIFY THAT ALL ANCHORS WERE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, THE APPLICABLE ICC ESR REPORTS AND THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS. THE INSPECTION SHALL INCLUDE VERIFICATION OF ANCHOR SPACING, EMBEDMENT AND EDGE DISTANCE REQUIREMENTS.

3. WOOD FRAMING:

   a. TIMBER (SAWN LUMBER):
      ALL SAWN LUMBER SHALL HAVE 19% MAX. MOISTURE CONTENT AND SHALL BE SURFACE DRY IN THE FOLLOWING SPECIES AND GRADES:

FRAMING	SPECIES	GRADE
STUDS	SPRUCE-PINE-FIR	NO. 2
BEAMS, HEADERS & ALL OTHER FRAMING	HEM-FIR	NO. 2

   b. NAILS: ALL NAILS SHALL BE COMMON NAILS, STAINLESS STEEL U.N.O.

   c. STRUCTURAL CONNECTORS:
      STRUCTURAL CONNECTORS FOR WOOD CONSTRUCTION MANUFACTURED BY SIMPSON STRONG-TIE COMPANY. GRADE 316 OR 316L STAINLESS STEEL.

E. CONSTRUCTION:

1. GENERAL:

   a. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL REVIEW THE STRUCTURAL CONTRACT DOCUMENTS AND SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY CONFLICTS BETWEEN THOSE DOCUMENTS AND ANY SAFETY REGULATIONS. SUCH REVIEW AND NOTIFICATION SHALL OCCUR PRIOR TO PRODUCTION OF SHOP DRAWINGS.

   b. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALLOWABLE CONSTRUCTION LOADS, FOR PROTECTING THE COMPLETED STRUCTURAL FRAMING FROM DAMAGE DUE TO TEMPORARY CONSTRUCTION LOADINGS, FOR DETERMINING SEQUENCES OF CONSTRUCTION, AND FOR DETERMINATION, DESIGN AND INSTALLATION OF ALL FALSEWORK, FORMWORK, STAGING, TEMPORARY BRACING, SHEETING AND SHORING NECESSARY FOR CONSTRUCTION.

   c. ALL SUBMITTALS, INCLUDING SHOP DRAWINGS SHALL BE SUBMITTED ELECTRONICALLY IN PDF FORMAT.

   d. COSTS OF INVESTIGATION AND/OR REDESIGN DUE TO CONTRACTOR ERRORS WILL BE AT THE CONTRACTOR'S EXPENSE.

   e. IF DIFFERENCES OCCUR WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS REGARDING MATERIALS, SIZES, STRENGTHS OR QUANTITIES, THEN THE BETTER MATERIAL, HIGHER STRENGTH, LARGER SIZE AND GREATER QUANTITY INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.

   f. REINFORCING STEEL IN EXISTING CONCRETE SHALL BE LOCATED PRIOR TO INSTALLATION OF NEW OPENINGS OR CORING OF HOLES IN THE CONCRETE. REINFORCING STEEL MAY NOT BE CUT WITHOUT APPROVAL FROM THE ENGINEER.

   g. DIMENSIONS MAY NOT BE SCALED FROM THE DRAWINGS.

   h. ALL CONSTRUCTION IS NEW UNLESS IDENTIFIED AS EXISTING "(E)". THE CONTRACTOR SHALL VERIFY ALL EXISTING BUILDING INFORMATION AND SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO FABRICATION OF ANY STRUCTURAL COMPONENT. UNLESS INDICATED OTHERWISE, NEW SLABS ARE TO BE AT THE SAME ELEVATIONS AS ADJACENT EXISTING SLABS. FOUNDATION ELEVATIONS OR COLUMN LENGTHS SHALL BE ADJUSTED WITH THE APPROVAL OF THE STRUCTURAL ENGINEER TO ACHIEVE MATCHING SLAB ELEVATIONS.

   i. INFORMATION SHOWN ON THE SECTIONS AND DETAILS IS THAT WHICH IS REQUIRED TO CONVEY THE PURPOSE FOR WHICH THE SECTIONS AND DETAILS WERE PROVIDED. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING ELSEWHERE ON THE CONTRACT DOCUMENTS FOR ALL OTHER INFORMATION WHICH MAY BE OCCURRING IN THE SECTIONS OR DETAILS, BUT WHICH IS NOT SHOWN.

F. WOOD:

1. WOOD CONNECTORS AND FASTENERS:

   a. SEE IBC TABLE 2304.9.1 FOR MINIMUM FASTENING REQUIREMENTS.

   b. WOOD CONNECTORS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY. PROVIDE FULL FASTENING USING THE LARGEST FASTENER SIZE, TYPE AND QUANTITY AS SPECIFIED IN THE SIMPSON STRONG-TIE CATALOG TO DEVELOP THE PUBLISHED CAPACITY OF THE CONNECTOR.

   c. WOOD CONNECTOR AND FASTENER FINISH / MATERIAL REQUIREMENTS: CONNECTORS AND FASTENERS SHALL BE GRADE 316 OR 316L STAINLESS STEEL

   d. USE 1/2" DIA. LAG BOLTS OR THRU BOLTS AT 24" O.C. TO JOIN MULTIPLE 2x BEAMS OR GIRDERS SO THAT LOAD DISTRIBUTES EQUALLY.

   e. PROVIDE STANDARD WASHERS ON ALL BOLTED CONNECTIONS.

2. PRESERVATIVE-TREATED WOOD:

   a. ABOVE GROUND PRESERVATIVE TREATED WOOD:
      WOOD REQUIRED TO BE PRESERVATIVE-TREATED SHALL BE TREATED WITH WATER-BORNE PRESERVATIVES IN ACCORDANCE WITH AWPA U1 (COMMODITY SPECIFICATIONS "A" OR "F") FOR ABOVE-GROUND USE.

3. MEMBERS SHALL BE SET WITH CROWN UP AND HAVE MINIMUM OF 3" BEARING.

2025.08.04 - ISSUED FOR BID

RIOC
ROOSEVELT ISLAND OPERATING CORPORATION

STRUCTURAL ENGINEER

IMEG
The FUTURE. Built Smarter www.imegcorp.com
1411 BROADWAY
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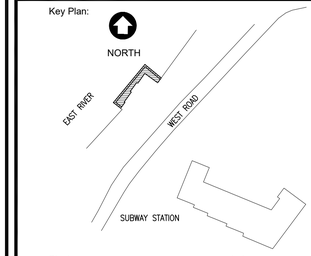
NEW YORK, NEW YORK 10018

NO.	DESCRIPTION	DATE	CHECKED	DRAWN

Key Plan:



Block # Lot #

PROJECT TITLE:

ELEANOR'S PIER REHABILITATION
W ROAD, NEW YORK, NY

DRAWING TITLE:

GENERAL STRUCTURAL NOTES (WOOD FRAMING)

DATE	08/04/2025
SCALE	AS NOTED
JOB NO.	25003964.00
DOB #	

DRAWING NUMBER
S-000.00

SHEET NO.