

STRUCTURAL SYSTEM DESCRIPTION

NO ORIGINAL STRUCTURAL DRAWINGS HAVE BEEN FOUND. BASED ON 1973 HABS DRAWINGS, 1984 INVESTIGATIVE STUDY BY PITTS & ASSOCIATES ENGINEERS, 2002 STABILIZATION DRAWINGS, 2006 REHABILITATION DRAWINGS, 2022 SD REHAB DRAWINGS BY SEA, AND SITE OBSERVATIONS PERFORMED BY SILMAN IN FEBRUARY & JULY 2023, THE STRUCTURAL DESCRIPTION IS AS FOLLOWS:

THE GRAVITY SYSTEM OF THE BUILDING IS GENERALLY COMPRISED OF REINFORCED CONCRETE SLABS AND BEAMS SUPPORTED BY INTERIOR AND EXTERIOR MASONRY BEARING WALLS. SUBGRADE STRUCTURE, INCLUDING WALLS AND SLAB ON GRADE, CONSISTS OF CONCRETE WITH UNKNOWN REINFORCEMENT. BASEMENT SLAB ON GRADE. STRUCTURAL WALLS ARE ASSUMED TO BEAR ON CONCRETE WALL FOOTINGS.

MAURICE BATHHOUSE WAS CONSTRUCTED IN 1911. MOST BUILDINGS CONSTRUCTED IN THIS REGION AND ERA WERE NOT DESIGNED WITH AN EXPLICITLY DEFINED LATERAL FORCE RESISTING SYSTEM. AN ACCEPTABLE STRUCTURAL SYSTEM TO RESIST LATERAL FORCES WAS A CONCRETE FRAMED BUILDINGS DESIGNED TO SUPPORT GRAVITY LOADS SURROUNDED BY WELL-PROPORTIONED MASONRY OR CONCRETE WALLS.

THE SCOPE OF WORK WITHIN THESE DOCUMENTS DOES NOT ALTER THE EXISTING STRUCTURAL BEHAVIORS OR LOAD PATHS. THEREFORE, PER 2021 INTERNATIONAL EXISTING BUILDING CODE SECTION 805 AND 1205, REPAIRS CAN BE INSTALLED TO BRING THE BUILDING BACK TO THE ORIGINAL CAPACITY AT THE TIME OF CONSTRUCTION. REFERENCE SILMAN MEMO DATED JULY 5, 2023 FOR SEISMIC SAFETY CONSIDERATIONS PER STANDARDS OF SEISMIC SAFETY FOR EXISTING FEDERALLY OWNED AND LEASED BUILDINGS; ICSSC RECOMMENDED PRACTICE 10 (RP 10-22). NO STRUCTURAL LATERAL ASSESSMENT OR RETROFIT IS REQUIRED PER IEBC OR ICSSC-RP10.

TEMPORARY SHORING

1. ANY TEMPORARY SHORING SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS IS PROVIDED TO SHOW GENERAL INTENT IN A QUALITATIVE, SCHEMATIC, AND NON-COMPREHENSIVE MANNER. FOR THE PURPOSES OF ASSISTING IN COORDINATION AND GENERAL SCOPE/PRICING.
2. DETERMINATION OF THE FULL SCOPE AND EXTENT OF ALL TEMPORARY SHORING WORK AND SEQUENCING REQUIRED TO SAFELY EXECUTE THE STRUCTURAL WORK SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
3. THE DESIGN OF TEMPORARY SHORING BY THE CONTRACTOR'S ENGINEER SHALL ABIDE BY THE REQUIREMENTS IN THE GENERAL NOTES.
4. THE DESIGN OF TEMPORARY SHORING, AND DETERMINATION OF THE EXTENT OF TEMPORARY SHORING, ARE NOT THE RESPONSIBILITY OF SILMAN.
5. SEE STRUCTURAL DRAWINGS FOR SPECIAL AREAS OF THE PROJECT THAT REQUIRE TEMPORARY SHORING FOR STABILITY DURING CONSTRUCTION OR ERECTION. IN ACCORDANCE WITH SHORING GENERAL NOTES 1-4 IN THIS SECTION, TEMPORARY SHORING OF SUCH AREAS IS ONLY NOTED SCHEMATICALLY AND SUBCONTRACTORS ARE RESPONSIBLE FOR DETERMINING ALL FINAL MEANS AND METHODS FOR SAFE ERECTION OF THE STRUCTURE. ALL TEMPORARY SHORING WORK AND SEQUENCING ARE THE COMPLETE RESPONSIBILITY OF THE CONTRACTOR, AND IS NOT DESIGNED OR COMPREHENSIVELY IDENTIFIED BY SILMAN. CONTRACTOR SHALL ALLOW FOR ANY SUCH REQUIRED SHORING IN BIDS.

ROCK ANCHORS

1. ROCK ANCHORS ARE NOT EXPECTED AS PREVIOUS GEOTECHNICAL REPORTS STATE PRESENCE OF HIGHLY WEATHERED SHALE AND TUFFA ROCK WITHIN THE BOUNDS OF ANTICIPATED NEW CONSTRUCTION. HOWEVER, THIS SECTION IS INCLUDED IN CASE A FIELD CONDITION SHOULD OCCUR WHEREBY NEW CONCRETE FOUNDATIONS CONFLICT WITH EXISTING ROCK THAT CANNOT BE EXCAVATED.
2. ALL ROCK ANCHORS SHALL BE INSTALLED BY A CONTRACTOR HAVING A MINIMUM OF FIVE (5) YEARS OF INSTALLATION AND TESTING EXPERIENCE. CONTRACTOR SHALL PROVIDE THE OWNER AND CONTRACTING OFFICER WITH DOCUMENTATION OF PROJECT PARTICIPATION.
3. CONTRACTOR SHALL SUBMIT THE PROPOSED MATERIAL, INSTALLATION AND TESTING PROCEDURE. ALL ANCHORS ARE TO BE TESTED TO TWO (2) TIMES THE INDICATED SERVICE LOAD PLUS FIFTY PERCENT (50%) OF SAID SERVICE LOAD.
4. ANCHORS MAY BE "PRESTRESSED BONDED ANCHORS" OR "PRE-STRESS MECHANICAL ANCHORS". HOWEVER, ALL ANCHORS SHALL BE INSTALLED HAVING MULTIPLE CORROSION PROTECTION.
5. CORROSION PROTECTION SYSTEM, FAST RESIN BOND MATERIAL AND REQUIRED BOND LENGTH, AND SLOW SET RESIN UTILIZED FOR RESIN ANCHORING SHALL BE BY THE SAME MANUFACTURER AND SHALL BE SUBMITTED TO THE OWNER AND CONTRACTING OFFICER PRIOR TO USE. DRILL HOLE DIAMETER AS RECOMMENDED BY THE MANUFACTURER.
6. MECHANICAL ROCK ANCHOR HEAD ASSEMBLIES SHALL BE MANUFACTURED AND SUPPLIED BY THE SAME COMPANY.
7. STRESS ANCHORS SHALL BE PLACED WITHIN THE DRILL HOLE USING A PVC CENTRALIZER. CENTRALIZERS SHALL BE AS RECOMMENDED BY THE ANCHOR MANUFACTURER.
8. TIE DOWN STRESS ANCHORS SHALL HAVE A MINIMUM DIAMETER PROVIDING A MAXIMUM STRESS OF NOT GREATER THAN SIXTY PERCENT (60%) OF THE ANCHORS ULTIMATE STRENGTH. BAR MATERIAL SHALL HAVE A MINIMUM STRENGTH OF 75 KSI.
9. MINIMUM FREE STRESSING LENGTH SHALL BE 8 FEET.

STANDARD ABBREVIATIONS

ADD'L	ADDITIONAL
ADJ.	ADJACENT
A/E	DESIGN TEAM OF RECORD
ALT.	ALTERNATE
APPROX.	APPROXIMATE/APPROXIMATELY
ARCH.	ARCHITECT/ARCHITECTURAL
BLDG.	BUILDING
B.O.	BOTTOM OF
BOT.	BOTTOM
BRG.	BEARING
BSMT.	BASEMENT
CANT.	CANTILEVER
C.I.P.	CAST IN PLACE
C.J.	CONTRACTION JOINT
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
COORD.	COORDINATE/COORDINATION
COTR	CONTRACT OFFICER'S TECHNICAL REPRESENTATIVE

CTR.	CENTER
DBL.	DOUBLE
DEMO	DEMOLITION/DEMOLISH
DIA.	DIAMETER
DIM.	DIMENSION
DWG(S)	DRAWING(S)
DWL.	DOWEL
EA.	EACH
E.F.	EACH FACE
E.J.	EXPANSION JOINT
EL.	ELEVATION
ELEV.	ELEVATOR
EMBED.	EMBEDMENT
E.O.R.	ENGINEER OF RECORD
EQ.	EQUAL
E.S.	EACH SIDE
E.W.	EACH WAY
EXP.	EXPANSION
EXT.	EXTERIOR
FDN.	FOUNDATION
FIN.	FINISH
FLR.	FLOOR
F.S.	FAR SIDE
FT.	FEET
FTG.	FOOTING
GA.	GAGE
GALV.	GALVANIZED
G.B.	GRADE BEAM
HORIZ.	HORIZONTAL
HVAC	HEATING, VENTILATION, & AIR CONDITIONING

I.F.	INSIDE FACE
I.J.	ISOLATION JOINT
INFO	INFORMATION
INT.	INTERIOR
JT.	JOINT
K	KIP
LB.	POUND
L.L.	LIVE LOAD
LLBB	LONG LEGS BACK-TO-BACK
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
L.W.	LIGHTWEIGHT
L.W.	LONG WAY
MAX.	MAXIMUM
MECH.	MECHANICAL
MEP	MECH., ELECT., PLUMBING, & FIRE PROTECTION
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MPII	MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS
N.F.	NEAR FACE
N.I.C.	NOT IN CONTRACT

NO.	NUMBER
N.S.	NEAR SIDE
N.T.S.	NOT TO SCALE
N.W.	NORMAL WEIGHT
O.C.	ON CENTER
O.F.	OUTSIDE FACE
OPNG.	OPENING
OPP.	OPPOSITE
PC.	PIECE
PL.	PLATE
PLF	POUNDS PER LINEAR FOOT
PREFAB.	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
REINF.	REINFORCE(D)/REINFORCEMENT
REQ'D	REQUIRED
REV.	REVISION
SCHED.	SCHEDULE
SECT.	SECTION
SLBB	SHORT LEGS BACK-TO-BACK
SIM.	SIMILAR
S.O.G.	SLAB ON GRADE
SPEC.	SPECIFICATION
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STIFF.	STIFFENER
STL.	STEEL
S.W.	SHORT WAY
T & B	TOP & BOTTOM
TEMP.	TEMPORARY/TEMPERATURE
THK.	THICK(NESS)
T.O.	TOP OF
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W/	WITH
W.W.R.	WELDED WIRE REINFORCEMENT
#	NUMBER/SIZE
Ø	DIAMETER

STANDARD ABBREVIATIONS FOR EXISTING STRUCTURES

(E)	EXISTING MEMBER OR DIMENSION
EXIST.	EXISTING
T.C.	TERRA COTTA
U-P	UNDERPINNING
V.I.F.	VERIFY IN FIELD

LEGEND

	EXISTING CONCRETE FOOTING, GRADE BEAM, OR PILE CAP
	CONCRETE FOOTING, GRADE BEAM, OR PILE CAP
	UNDERPINNING
	WALL OR CONCRETE BEAM BELOW
	CONCRETE WALL
	EXISTING WALL, BEAM FLOOR, OR FOUNDATION (SEE NOTES FOR MATERIAL)
	EXISTING CONCRETE COLUMN
	STEEL COLUMN
	EXISTING WOOD BEAM
	WOOD BEAM
	EXISTING STEEL BEAM
	STEEL BEAM
	LEDGER ANGLE (SEE DETAIL)
	SHEAR CONNECTION
	BEAM BEARING PLATE IN CONCRETE OR MASONRY (SEE DETAIL)
	3" THICK LIGHTWEIGHT CONCRETE TOPPING SLAB, REFER TO DETAIL 1/S5.8
	OPEN ARROW INDICATES SPAN DIRECTION
	SLAB ON GRADE (SEE SCHEDULE)
	RAMP/SLOPED FLOOR (TAIL INDICATES HIGH END)
	STEP IN SLAB
	SLAB SLOPE TRANSITION
	TOP OF SLAB ELEVATION
#' - #' symbol"/>	SPOT ELEVATION
	OPENING IN SLAB; REFER TO TYPICAL DETAILS FOR SUPPORT OF EXIST. CUT SLAB
	EXISTING OPENING IN EXISTING SLAB
	COLUMN LINE
	EXISTING COLUMN LINE. (DIMENSIONS BETWEEN EXISTING COLUMN LINES ARE FOR REFERENCE ONLY.)
	KEYNOTE
	REVISION
	TOP/BOTTOM OF FOOTING ELEVATION RELATIVE TO DATUM
<### - ##> symbol"/>	TOP OF FRAMING ELEVATION RELATIVE TO DATUM
	RETAINING WALL, SEE SCHEDULE & DETAILS
	CONCRETE SLAB OR CONCRETE SLAB ON METAL DECK, SEE SCHEDULE & DETAILS
	CONCRETE WALL, SEE SCHEDULE & DETAILS
	WALL FOOTING, SEE SCHEDULE & DETAILS
	CONFINED, LIMITED ACCESS, OR INACCESSIBLE AREA
	EXISTING ONE WAY FLOOR SLAB
	OPEN ARROW INDICATES SPAN DIRECTION
	STEEL LINTEL; REFER TO GENERAL NOTES - STRUCTURAL STEEL AND TYPICAL DETAILS



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	CADD: CM			PMIS/PKG NO. 318915
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