

GENERAL CONDITIONS AND STATEMENTS

- EXISTING SLAB-ON-GRADE IS ASSUMED TO BE 4" AND MIN COMPRESSIVE STRENGTH OF 3000 PSI. PLEASE CONTACT ARCHITECT IF EXISTING CONDITIONS ARE LESS THAN THOSE ASSUMED.
- ALL DETAILS, SECTIONS, AND NOTES INDICATED ON THE DRAWINGS SHALL APPLY AT ALL LOCATIONS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY THE DETAIL, SECTION, OR NOTE.
- ANCHORAGE OF GONDOLAS SHOWN IS MINIMUM REQUIREMENTS TO MEET NOTED SEISMIC DESIGN. ADD ADDITIONAL ANCHORAGE PER MANUFACTURER REQUIREMENTS AS REQUIRED FOR SPECIAL OR OFFSET LOADING.
- OUR CALCULATIONS HAVE ASSUMED SHELVING SYSTEM CAN TRANSFER LOADS BETWEEN ANCHORAGE LOCATIONS SHOWN.

ABBREVIATIONS

ADH	ADHESIVE	DIM	DIMENSION	SOG	SLAB ON GRADE
AFF	ABOVE FINISHED FLOOR	EACH	EACH	TYP	TYPICAL
ALT	ALTERNATE	FFE	FINISH FLOOR ELEVATION	UNO	UNLESS NOTED OTHERWISE
ARCH	ARCHITECT	GC	GENERAL CONTRACTOR	VIF	VERIFY IN FIELD
B	BOTTOM OF	MAX	MAXIMUM	w/	WITH
CIP	CAST IN PLACE	OC	ON CENTER		
DIA:	DIAMETER	REQD	REQUIRED		

DESIGN CRITERIA

DESIGN CODES

- BUILDING CODE: 2018 SOUTH CAROLINA STATE BUILDING CODE BASED ON THE 2018 IBC WITH SOUTH CAROLINA AMENDMENTS
- DESIGN LOADS: ASCE 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES

DESIGN LOADS

- BUILDING RISK CATEGORY: II
- SHELVING LOADS: SEE DETAILS
- SEISMIC LOAD:

Site CLASSIFICATION	1.00
S _{DS}	D (DEFAULT)
R _p	≤1.000
o _p	2.5
I _s	1.0
I ₀	2.5
SEISMIC DESIGN CATEGORY	D

POST-INSTALLED ANCHORS

- EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI, INC. CONTACT HILTI AT (800) 879-8000 FOR PRODUCT RELATED QUESTIONS.
 - ANCHORAGE TO CONCRETE
 - MEDIUM DUTY MECHANICAL ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
 - HILTI KWIK-HUS-EZ AND KWIK-HUS-EZ-1 SCREW ANCHORS PER ICC ESR-3027
 - HILTI KWIK-BOLT-TZ EXPANSION ANCHORS PER ICC ESR-1917
 - HILTI KWIK-BOLT 3 EXPANSION ANCHORS (UNCRACKED CONCRETE ONLY) PER ICC ESR-2302
- ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL 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.
- INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
- ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON DRAWINGS.
- EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. EXISTING REBAR AND STANDS MUST NOT BE CUT OR DAMAGED, UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT. THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE CONCRETE ANCHORS, BY HILTI FERROSCAN, GPR, X-RAY, CHIPPING OR OTHER MEANS.

STATEMENT OF SPECIAL INSPECTIONS

THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE SPECIAL INSPECTION REQUIREMENTS (CHAPTER 17) OF THE INTERNATIONAL BUILDING CODE. THE STATEMENT INCLUDES A SCHEDULE OF SPECIAL INSPECTIONS APPLICABLE TO THIS PROJECT AS WELL AS THE REQUIRED QUALIFICATIONS FOR THE SPECIAL INSPECTOR AND AGENTS OF THE SPECIAL INSPECTOR TO PERFORM ON THIS PROJECT.

THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL INSPECTIONS, FURNISH INSPECTION REPORTS, AND IDENTIFY DISCREPANCIES AS DETAILED BY PROJECT SPECIFICATIONS AND RFP.

A FINAL REPORT OF SPECIAL INSPECTIONS, DOCUMENTING THE COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS AND CONFIRMING THE CORRECTION OF ANY DISCREPANCIES, WILL BE SUBMITTED PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY.

THE SPECIAL INSPECTIONS PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITIES. JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

SCHEDULE OF SPECIAL INSPECTION

THE FOLLOWING SHEETS COMPRISE THE REQUIRED SCHEDULE OF SPECIAL INSPECTIONS FOR THIS PROJECT. THE CONSTRUCTION DIVISIONS WHICH REQUIRE SPECIAL INSPECTIONS FOR THIS PROJECT ARE AS FOLLOWS.

<ul style="list-style-type: none"> ☒ SOILS ☒ SPECIAL FOUNDATIONS ☒ CAST-IN-PLACE CONCRETE ☒ STRUCTURAL LOAD BEARING PRECAST CONCRETE ☒ POST TENSIONED CONCRETE ☒ STRUCTURAL MASONRY - LEVEL 1 ☒ WOOD SHEAR WALLS ☒ STRUCTURAL STEEL 	<ul style="list-style-type: none"> ☒ SITE RETAINING WALLS ☒ COLD-FORMED STEEL FRAMED 'X' BRACING / SEISMIC RESISTING SYSTEMS ☒ WALL PANELS AND VENEERS ☒ SPRAYED FIRE RESISTANT MATERIALS ☒ EXTERIOR INSULATION & FINISH SYSTEM (EIFS) ☒ PROGRESSIVE COLLAPSE ☒ BLAST RESISTANCE ☒ QUALITY ASSURANCE FOR PROGRESSIVE COLLAPSE
---	---

QUALIFICATIONS OF INSPECTORS AND AGENTS OF SPECIAL INSPECTORS

The qualifications of all personnel performing Special Inspection activities are subject to the approval of the Building Official. The credentials of all inspectors shall be provided if requested. When the Structural Engineer of Record deems it appropriate that the individual performing a stipulated test or inspection have a specific certification or license as indicated below, such designation will appear on the Schedule of Special Inspections.

The Special Inspector (SI) shall be a licensed Professional Engineer with a minimum of 3 years of experience as a Special Inspector.

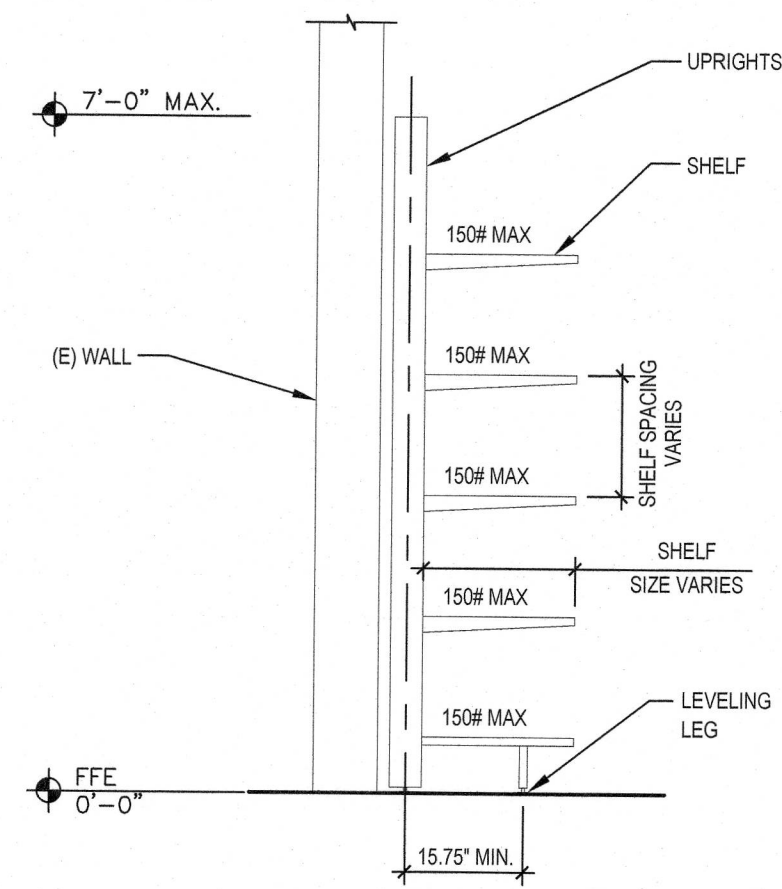
- SE: Structural Engineer: A licensed PE or SE specializing in the design of building structures.
- S-EIT: Structural Engineer-in-Training: A graduate engineer who has passed the Fundamentals of Engineering examination, with experience in the design of building structures and working under the supervision of a licensed structural PE or SE.
- C-TECH 1: Concrete Technician 1: An experienced technician with American Concrete Institute-Grade I Concrete Field Testing Technician or Grade I Concrete Laboratory Testing Technician certification.
- C-TECH 2: Concrete Technician 2: An experienced technician with American Concrete Institute-Grade II Concrete Laboratory Testing Technician or ICBO Reinforced Concrete Special Inspector certification.

CAST-IN-PLACE CONCRETE

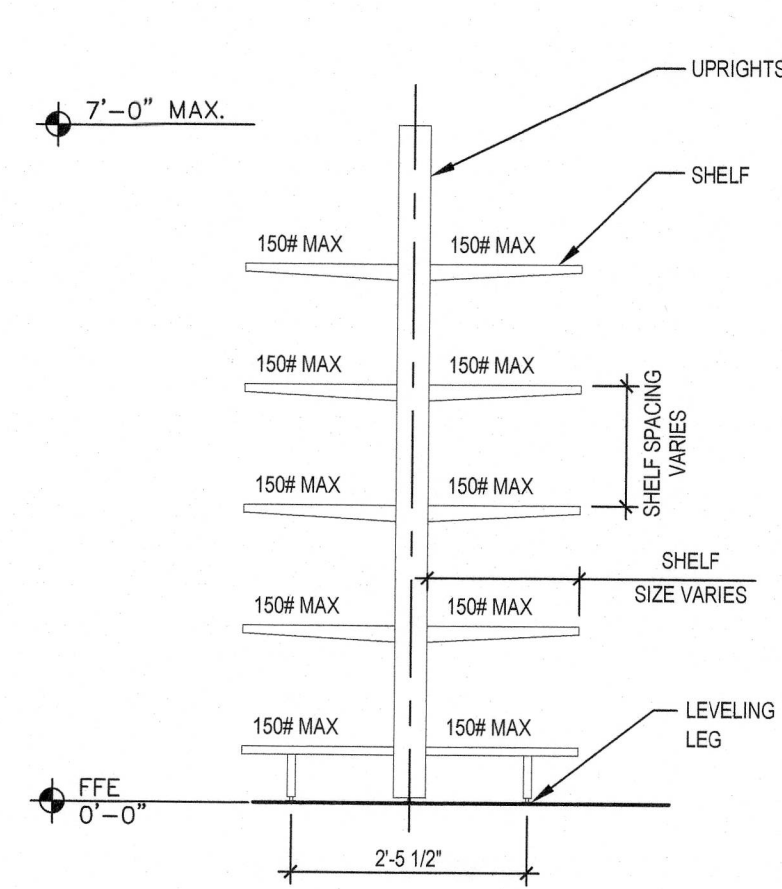
Item	Qualifications	Scope
1. Post Installed Anchor	SI, C-TECH 1, C-TECH 2, S-EIT, SE	Inspect anchors post-installed mechanical anchors in hardened concrete members per ACI 318: 17.8.2

NOTE: GONDOLA FRAME AND CONNECTIONS BETWEEN GONDOLA FRAMING MEMBERS SHALL BE DESIGNED BY THE GONDOLA MANUFACTURER. DETAILS DEPICTED ON THIS SHEET ARE OF ONLY THE CONNECTION OF THE GONDOLA STRUCTURE TO THE BUILDING CONCRETE SLAB ON GRADE

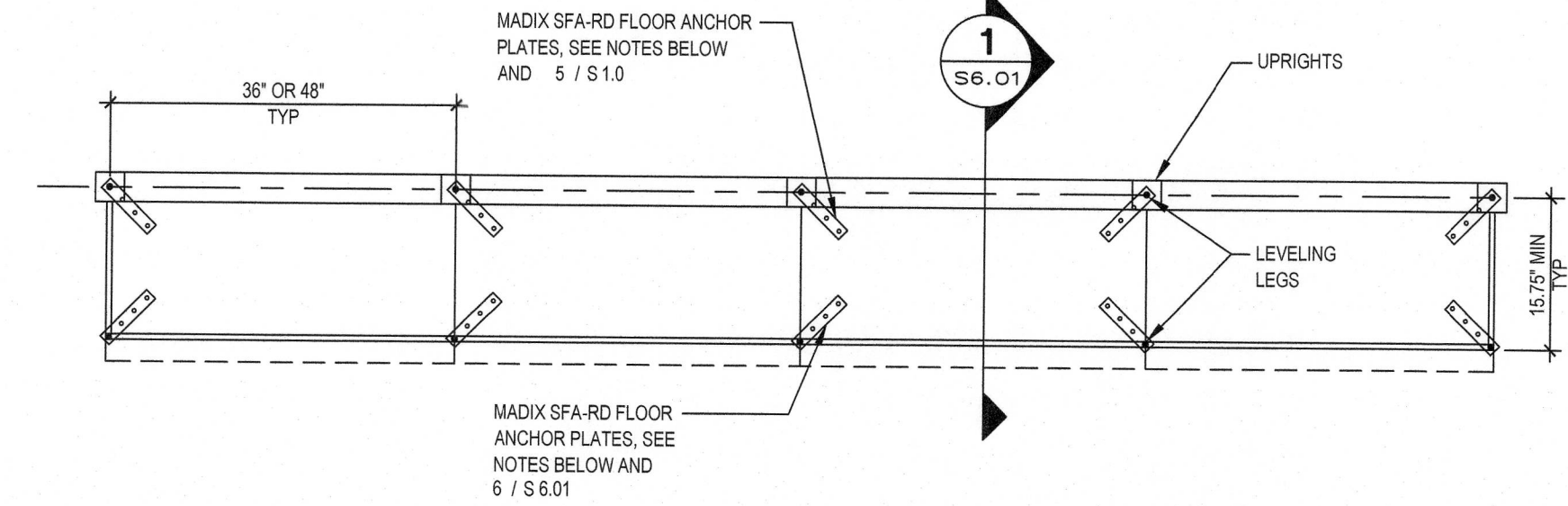
NOTE: CONCRETE ANCHORS SHALL BE INSTALLED AT A SPACING NO LESS THAN 2 1/2" CENTER TO CENTER OF ANCHOR



WALL GONDOLA SECTION 1
1/2" = 1'-0"

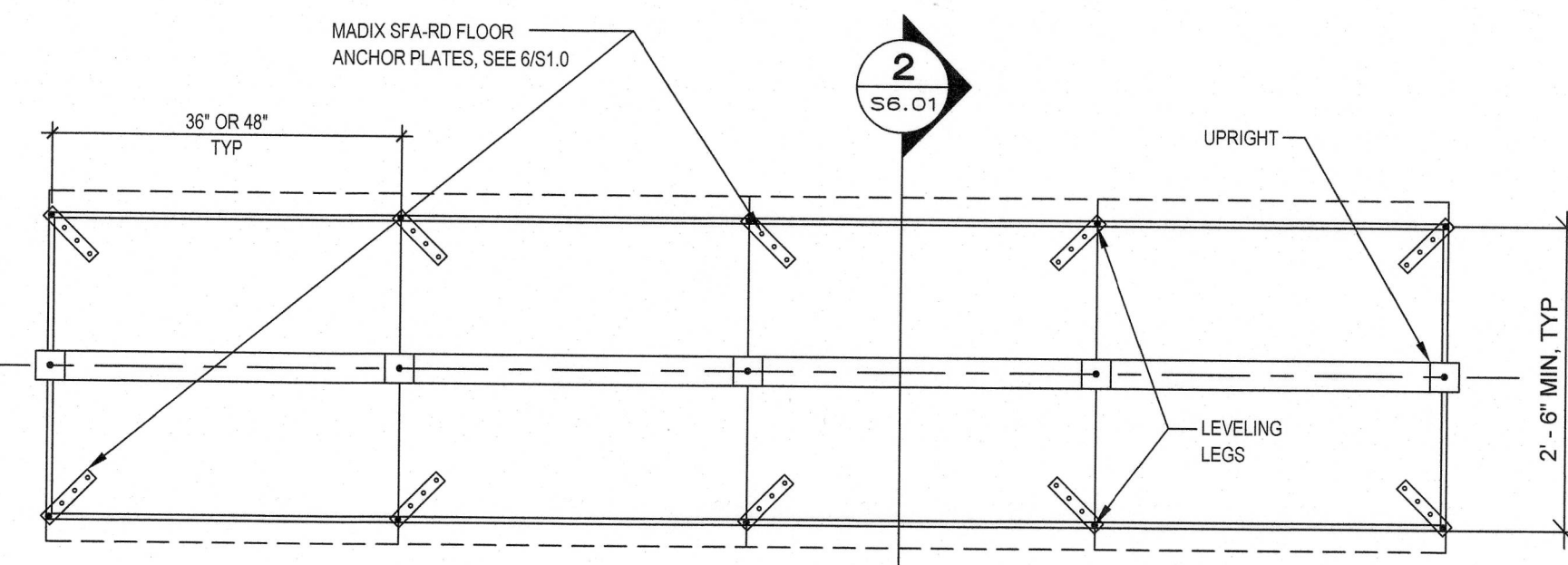
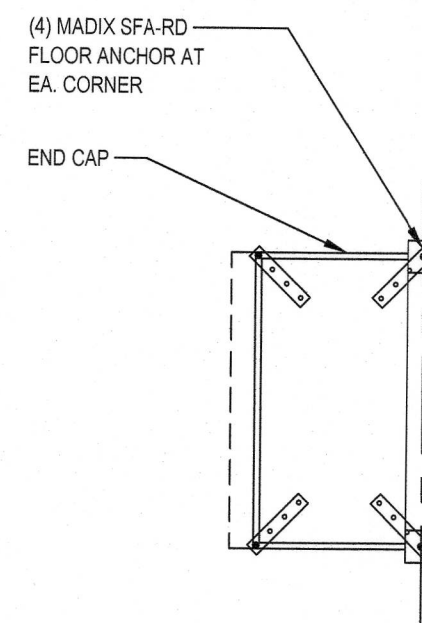


ISLAND GONDOLA SECTION 2
1/2" = 1'-0"



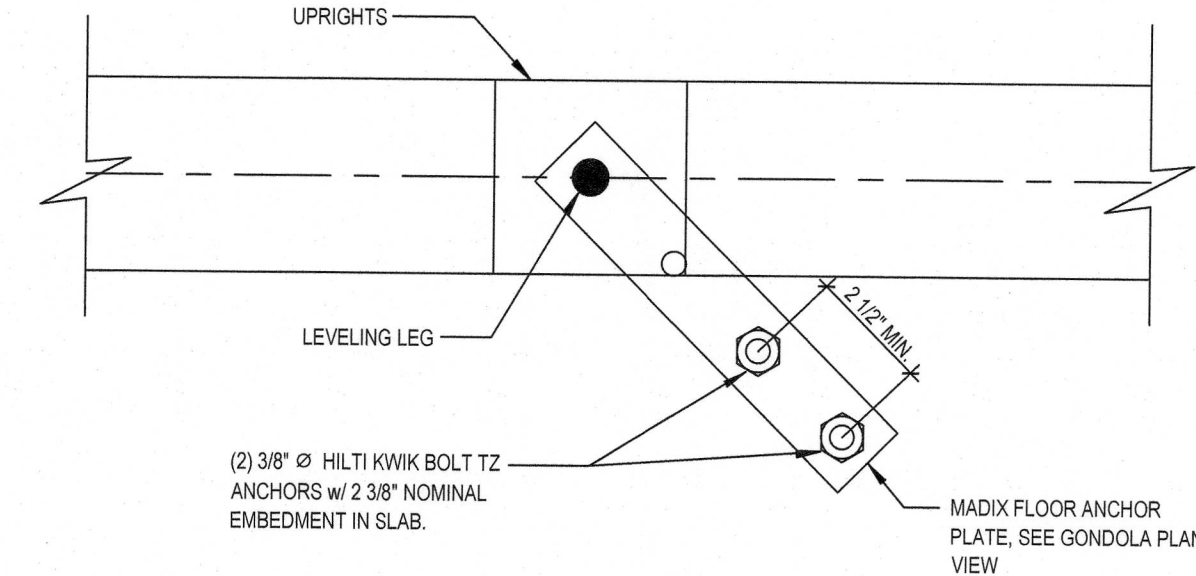
- NOTES:**
- SFA-RD ANCHOR PLATES SHALL BE PLACED AT EACH END AND AT 4'-0" OC MAXIMUM FOR 48" WIDE UPRIGHTS AND 3'-0" OC MAXIMUM FOR 36" WIDE UPRIGHTS AS SHOWN.
 - SFA-HD MAY BE USED IN LIEU OF SFA-RD ANCHORS.

MADIX WALL GONDOLA PLAN VIEW 3
1/2" = 1'-0"

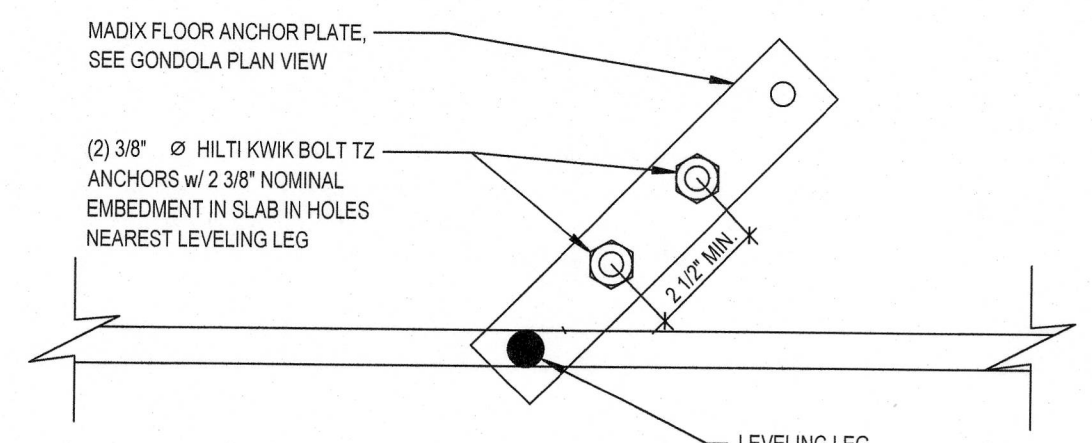


- NOTES:**
- SFA-RD ANCHOR PLATES SHALL BE PLACED AT EACH END AND AT 4'-0" OC MAXIMUM FOR 48" WIDE UPRIGHTS AND 3'-0" OC MAXIMUM FOR 36" WIDE UPRIGHTS.
 - SFA-HD MAY BE USED IN LIEU OF SFA-RD ANCHOR PLATES.

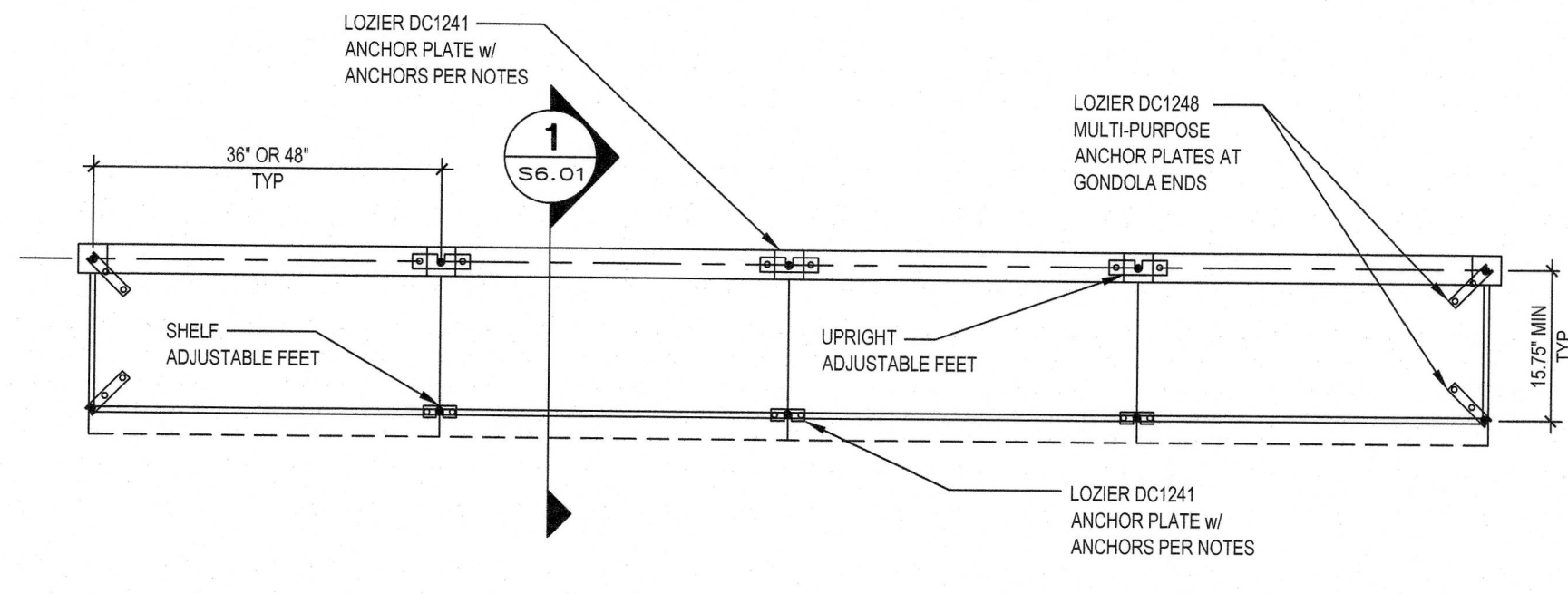
MADIX ISLAND GONDOLA PLAN VIEW 4
1/2" = 1'-0"



MADIX UPRIGHT ANCHOR DETAIL 5
3" = 1'-0"

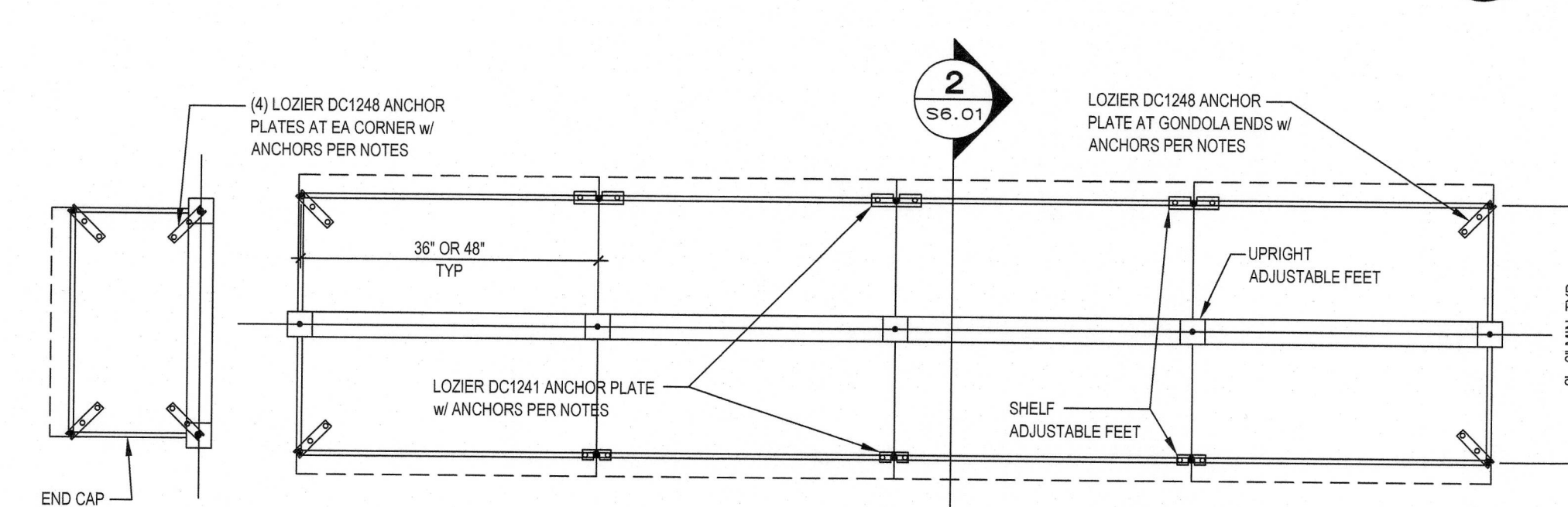


MADIX OUTER ANCHOR DETAIL 6
3" = 1'-0"



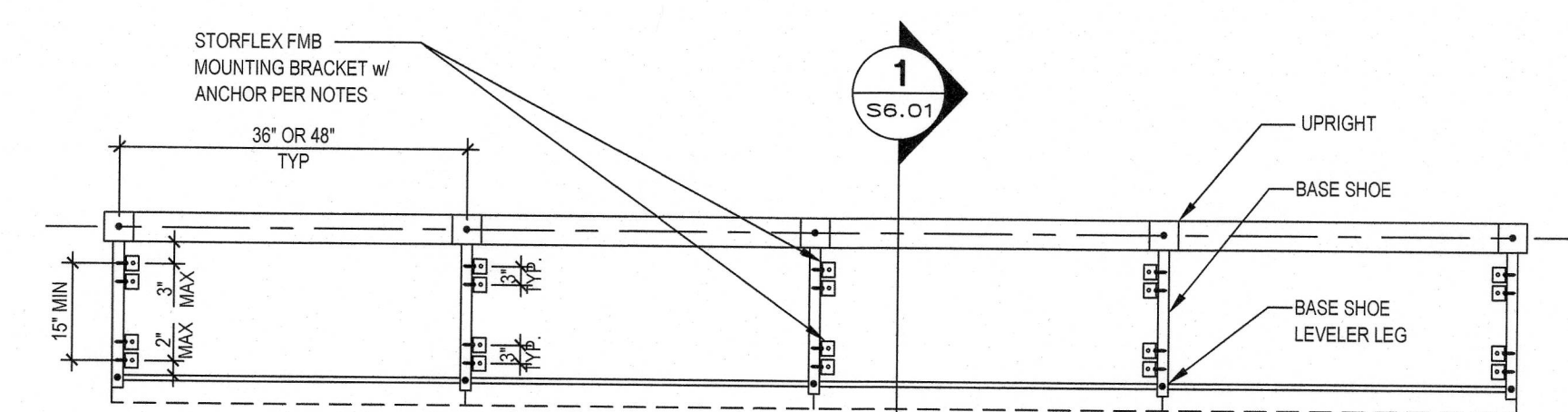
- NOTES:**
- ANCHOR PLATES ON UPRIGHT FEET MUST BE INSTALLED IN OPPOSING DIRECTION TO ANCHORS ON SHELF FEET AND AT 45° TO THE GONDOLA AS SHOWN. ANCHOR PLATES TO BE INSTALLED AT 36" OR 48" OC AS SHOWN.
 - ALL ANCHOR PLATES TO BE FASTENED TO THE EXISTING SLAB-ON-GRADE WITH (2) 3/8" Ø HILTI KWIK BOLT TZ ANCHORS WITH 2.38" NOMINAL EMBEDMENT IN SLAB.

LOZIER WALL GONDOLA PLAN VIEW 7
1/2" = 1'-0"



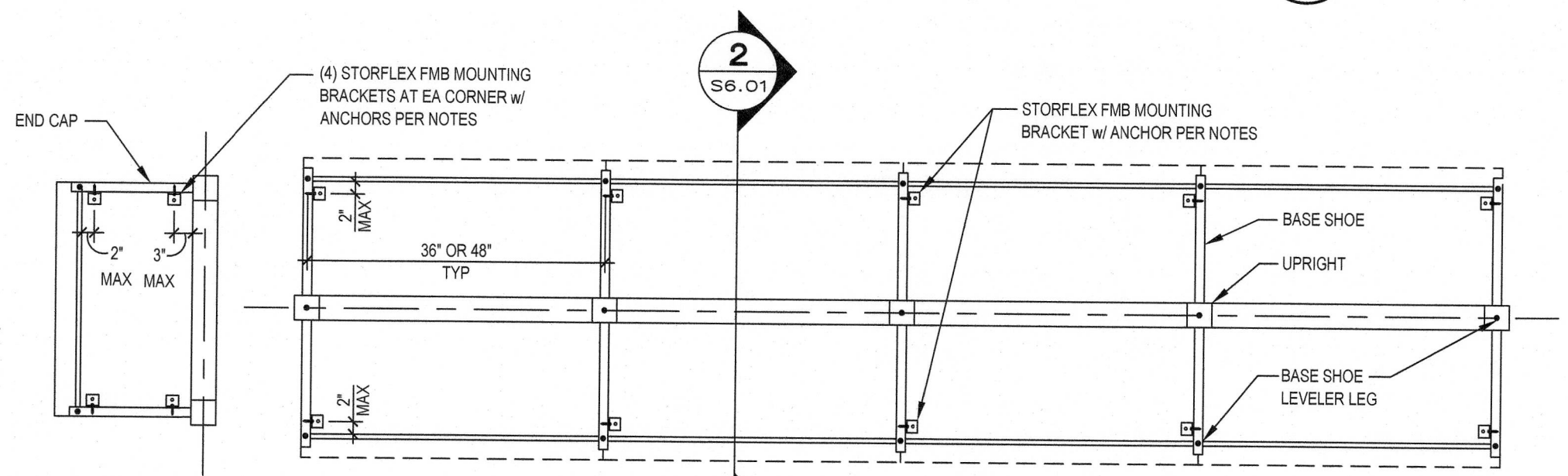
- NOTES:**
- DC1241 ANCHOR PLATES ON UPRIGHT FEET MUST BE INSTALLED IN OPPOSING DIRECTION TO DC1241 ANCHOR PLATES ON OPPOSING SHELF FEET. DC1248 END CAP AND GONDOLA END ANCHOR PLATES MUST BE INSTALLED IN OPPOSING DIRECTION AND AT 45° TO THE GONDOLA AS SHOWN. INSTALL LOZIER DC1248 ANCHOR PLATES AT GONDOLA ENDS AS SHOWN. INSTALL LOZIER DC1241 ANCHOR PLATES AT A MAXIMUM OF 48" OC.
 - ALL ANCHOR PLATES TO BE FASTENED TO THE EXISTING SLAB-ON-GRADE WITH (2) 3/8" Ø HILTI KWIK BOLT TZ ANCHORS WITH 2.38" NOMINAL EMBEDMENT IN SLAB.

LOZIER ISLAND GONDOLA PLAN VIEW 8
1/2" = 1'-0"



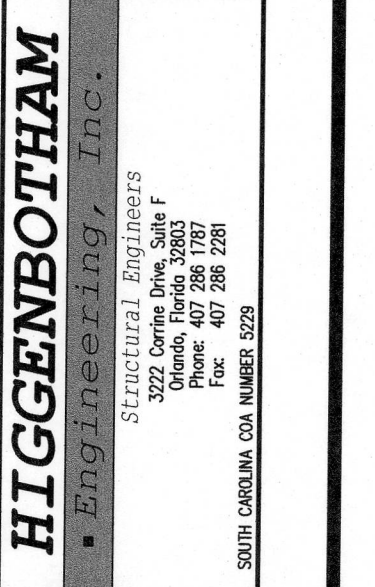
- NOTES:**
- STORFLEX FIXTURE MOUNTING BRACKET (FMB) CLIPS TO BE INSTALLED AT EACH END AS SHOWN AND AT 4'-0" ON CENTER MAXIMUM.
 - FASTEN EACH FMB MOUNTING BRACKET TO THE BASE SHOE PER GONDOLA MANUFACTURER'S RECOMMENDATIONS AND TO CONCRETE SLAB WITH (1) 3/8" Ø HILTI KWIK-BOLT TZ ANCHOR WITH 2.38" NOMINAL EMBEDMENT TO CONCRETE SLAB.

STORFLEX WALL HALF GONDOLA PLAN VIEW 9
1/2" = 1'-0"

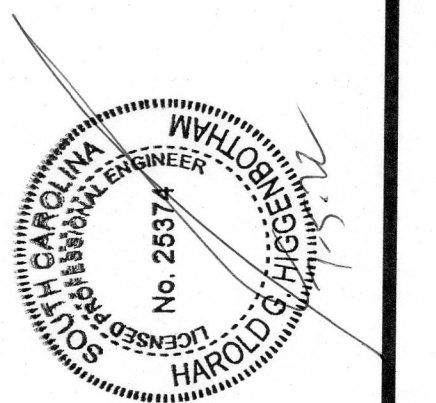


- NOTES:**
- STORFLEX FIXTURE MOUNTING BRACKET (FMB) CLIPS TO BE INSTALLED AT EACH END AS SHOWN AND AT 4'-0" ON CENTER MAXIMUM.
 - FASTEN EACH FMB MOUNTING BRACKET TO THE BASE SHOE PER GONDOLA MANUFACTURER'S RECOMMENDATIONS AND TO CONCRETE SLAB WITH (1) 3/8" Ø HILTI KWIK-BOLT TZ ANCHOR WITH 2.38" NOMINAL EMBEDMENT TO CONCRETE SLAB.

STORFLEX ISLAND GONDOLA PLAN VIEW 10
1/2" = 1'-0"



ENGINEER'S SEAL:



HAROLD G. HIGGENBOTHAM
PROFESSIONAL ENGINEER
SC REG. NO. 25374

REVISIONS
NO DATE REMARKS



FOOD LION
REMODEL
STORE #2839
860 PARRIS ISLAND GTWY
BEAUFORT, SC 29906

PROJECT NO: 2021.1218
DATE: 7/5/22

29 OF 54
S6.01
GONDOLA SEISMIC
ANCHORING PLANS
AND DETAILS - SDC 'D'

CHECKED: HIGH DRAWN: RED