

STRUCTURAL NOTES

STEEL JOISTS

- Manufacture and erect steel joists and bridging in accordance with Specifications of the Steel Joist Institute, and all OSHA requirements. Manufacture joists with SJI recommended approximate camber.
- Submit complete fabrication and erection drawings including layout, mark, number, type, location, and spacing of joists. Include joist length, camber, joining and anchorage details, bracing, bridging, accessories, splice and connection locations and details; and attachments to other construction. Indicate loads on all special joists, including loading diagrams and wind net uplift pressures. Include a letter signed and sealed by the Fabricator's Engineer accepting responsibility for designing all of the joists on the project.
- Design joists for wind net uplift as shown on the Drawings.
- Provide min. bearing per SJI requirements and connect each side of joist to support steel with 3/16" x 1" fillet welds for K Series and. Comply with all OSHA requirements. For joists 40 ft. or longer supported by steel framing, fasten joists with two 1/2" A307 bolts for K series. Field bolt joists at column lines if structural steel is not framed in two (2) directions. If slotted holes are used, slot joist seat, not supporting steel.
- Brace all joists with steel angle cross-bridging spaced per SJI and as shown on the drawings. Provide the following sizes:

Bracing Size	Max. Joist Spacing
L1 x 1 x 7/64	60"
L1-1/4 x 1-1/4 x 7/64	75"

Weld bridging to the top and bottom of joists and beams, at intersections, and to all structural members parallel to joists. For joists spanning 40 ft. or more, the center row of bridging shall be bolted. Horizontal bridging will not be accepted in lieu of diagonal bridging. For joists subject to wind uplift, provide horizontal bottom chord bridging at the first interior panel point in addition to all other bridging.

- Suspended ceiling grid may be hung anywhere along joist bottom chord. Design superimposed dead load which is hung as a concentrated load is limited to panel point locations and maximum 100 pounds.
- Provide additional joists for moveable partitions, masonry walls, air-conditioning units, or other superimposed loads not shown on structural drawings.

STEEL JOIST GIRDERS

- Manufacture and erect steel joist girders in accordance with Specifications of the Steel Joist Institute and all OSHA requirements. Manufacture joist girders with SJI recommended approximate camber.
- Submit complete fabrication and erection drawings including layout, mark, number, type, location of joist girders. Include length, camber, joining and anchorage details, bracing, accessories, splice and connection locations and details; and attachments to other construction. Indicate loads on all joist girders, including loading diagrams and wind net uplift pressures. Include a letter signed and sealed by the Fabricator's Engineer accepting responsibility for designing all of the joist girders on the project.
- Design joist girders for a net uplift as shown on the Drawings. An allowable stress increase for load combinations including wind is prohibited.
- Joist girders shall bear 4" minimum over steel columns or beams and 6" over bearing plates set in concrete.
- Connect joist girder to supports with 2 - 1/4" x 2" fillet welds or 2 - 3/4" A-325N bolts, u.o.n. for joist girders 40 ft. or longer, provide bolts only. Bolt joist girders to columns to provide lateral stability during erection.

STEEL ROOF DECK - RIGID INSULATION

- Manufacture and install steel roof deck in accordance with Specifications of the Steel Deck Institute.
 - Manufacture steel sheets conforming to ASTM A-653, with a minimum yield point of 33 ksi and a G-90 protective zinc coating. Minimum deck properties are as follows:
- | Depth Gage | Sp (m ³) | Sn (m ³) |
|------------|----------------------|----------------------|
| 1 1/2" Z0 | 0.234 | 0.247 |
- Fasten deck to all supports with Hilli ENP2 pins or 5/8" diameter puddle welds. Fastener pattern shall be 36/7 for 1 1/2" deck. Fasten deck to end support at each rib and to edge support at 6" o.c. fasten sidelaps with 9#10 TEK screws at 6" o.c.
 - The deck shall be capable of supporting a uniform construction load of 20 p.s.f., u.o.n.
 - Erect steel deck closures and other light gage material required to produce a completed installation.
 - Manufacture and install steel deck for a minimum two span condition. One span conditions are prohibited except where specifically shown on the Drawings.
 - Do not hang ceiling, ducts, light fixtures, equipment or other items from roof deck.

LIGHT GAGE STEEL FRAMING (LTGFRM) EXTERIOR WALLS

- Design, detail, fabricate and erect exterior stud construction in accordance with the General Notes and AISI "Specification for the Design of Cold-Formed Steel Structural Members". An allowable stress increase for load combinations including wind is permitted.
 - Light gage steel framing details shown on contract documents represent a minimum design intent to be followed. Connections not detailed in contract documents shall be designed and detailed by fabricator according to specifications and requirements herein. Minimum gage of members is 18 gage, but not less than that shown on the plans and details.
 - Submit complete shop drawings and calculations showing method of fabrication, erection procedures, attachment of the system to the building, joints, connections and framing. Calculations and shop drawings shall be prepared, signed and sealed by a Delegated Engineer. See Notes "Shop Drawings And Other Submittals". Calculations are submitted for record only.
 - Use galvanized steel "C" studs, tracks, angles and straps as shown on drawings and details providing the following minimum section properties:
- | C-studs: | | | | | |
|----------|---------|---------|---------|----------------|--|
| 3-5/8" | 18 gage | I=0.694 | S=0.365 | MR= 8045 in-lb | |
| 3-5/8" | 16 gage | I=0.855 | S=0.439 | MR=14680 in-lb | |
| 6" | 18 gage | I=2.268 | S=0.733 | MR=16142 in-lb | |
| 6" | 16 gage | I=2.803 | S=0.887 | MR=29630 in-lb | |
- All tracks to be same gage as studs with minimum of 1-1/4" leg.
- Max. spacing of lateral bracing for LTGFRM studs shall be 5'-0" for spans greater than ten (10) feet and midspan for shorter spans. Lateral bracing shall also be provided at free ends of cantilevered parapets and near the supports of continuous spans.
 - LTGFRM connections to structural framing shall be capable of withstanding a min. 250 pounds force in any direction, but not less than that required by calculations. Connect LTGFRM to structural frame so as to minimize introduction of flexural and torsional forces in structural members. Provide struts, knee bracing, etc., to stabilize LTGFRM framing as required.
 - Door and window sills, headers, and jambs shall be designed to resist wind forces on tributary windows and doors and to transmit these forces to the primary structural frame. As a minimum, openings provided for sills, headers and jambs.
 - Screws, where required, shall meet the minimum requirements of SAE J-429 Grade 5 and FF-105. Screws shall have a protective coating equivalent to cadmium or zinc plating, ASTM B766.
 - The following are minimum fastener requirements:
- | LTGFRM to LTGFRM: | Fastener |
|---|----------------------------|
| LTGFRM to concrete and structural steel - | |
| 3-5/8" track - | at least 16" o.c. - 16" |
| 6" track - | 2 pins @ 16" o.c. at studs |
- Field cutting of LTGFRM framing members shall be by saw or shear. Torch cutting is not permitted.
 - Splicing of framing components, other than the continuous track at the top and bottom of walls, is not permitted, u.o.n. Splicing of track used in the construction of the jamb, head or sill assemblies of framed wall openings is not permitted. Where splicing of track is necessary between stud spacings, a section of stud shall be placed in the adjoining tracks across the joint and fastened to the flanges at both sides of the wall.

13. Limit deflections of studs between supports to L/360 (L/180).

PRE-ENGINEERED COLD FORMED STEEL (CFS) ROOF TRUSSES

- Design of CFS roof trusses shall conform to the latest edition of "Specifications for the Design of Cold-formed Structural Steel Members" (AIS), all applicable building codes and standards specified in the Structural Notes and Specification 054000.
- Shop fabricated CFS roof trusses and their connections to each other shall be designed by a delegated engineer for the loads indicated below.
- Signed and Sealed calculations and shop drawings showing truss configuration with member sizes and connections, truss layout with piece marks, required truss to truss connections, design loads and erection details must be submitted for review prior to fabrication. Connections may use welds or screws.
- Materials: 18 gage (43-mil) minimum or as required by design, and shall meet the requirements of ASTM A653/A653M and ASTM A924 with minimum yield strength of 33 ksi.
- See Structural and Architectural Drawings for outline shape and any special conditions/locations of panel points.
- Temporary and permanent truss bridging required for truss stability during installation and for maintaining limits of un-braced length required by the truss design are considered part of the cold-formed truss system and shall be designed and detailed by the cold-formed delegated engineer.

Roof sheathing is adequate to provide lateral support to the top chord.

7. Truss design loads as follows:

Top Chord	Dead Load	25 psf
	Live Load	20 psf

Bottom Chord	Dead Load	10 psf
	Live Load	20 psf

Maximum Deflection span/360

Wind pressures are shown on the drawings.

- Handling, erection and bracing of trusses shall not cause twist, distortion or reduction of strength in truss units.
- All CFS members shall be zinc coated G90. All welds shall be touched up with a zinc rich protective paint for corrosion resistance.
- No field splicing permitted unless specifically detailed by the delegated engineer and approved by engineer of record.

SBLM

SCORE PROPERTIES

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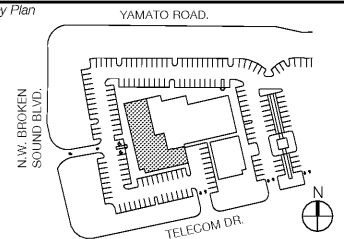
Bliss & Nyitray, Inc.

Electrical/Mechanical/Plumbing

Revisions/Issues

06/21/18 PERMIT SET

Key Plan



Seal

Lazaro Alfonso, P.E. FL Reg. No.: 69782

Project Title

SOUTHERN PALM CROSSING
BUILDING SHELL
11001-11161 Southern Blvd.
Royal Palm Beach, FL 33411

Job Number 017512.00 - 17M32

Drawing

STRUCTURAL NOTES

Scale NA

Drawing Date 06/21/18

Drawing No.

S-102

Sheet

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