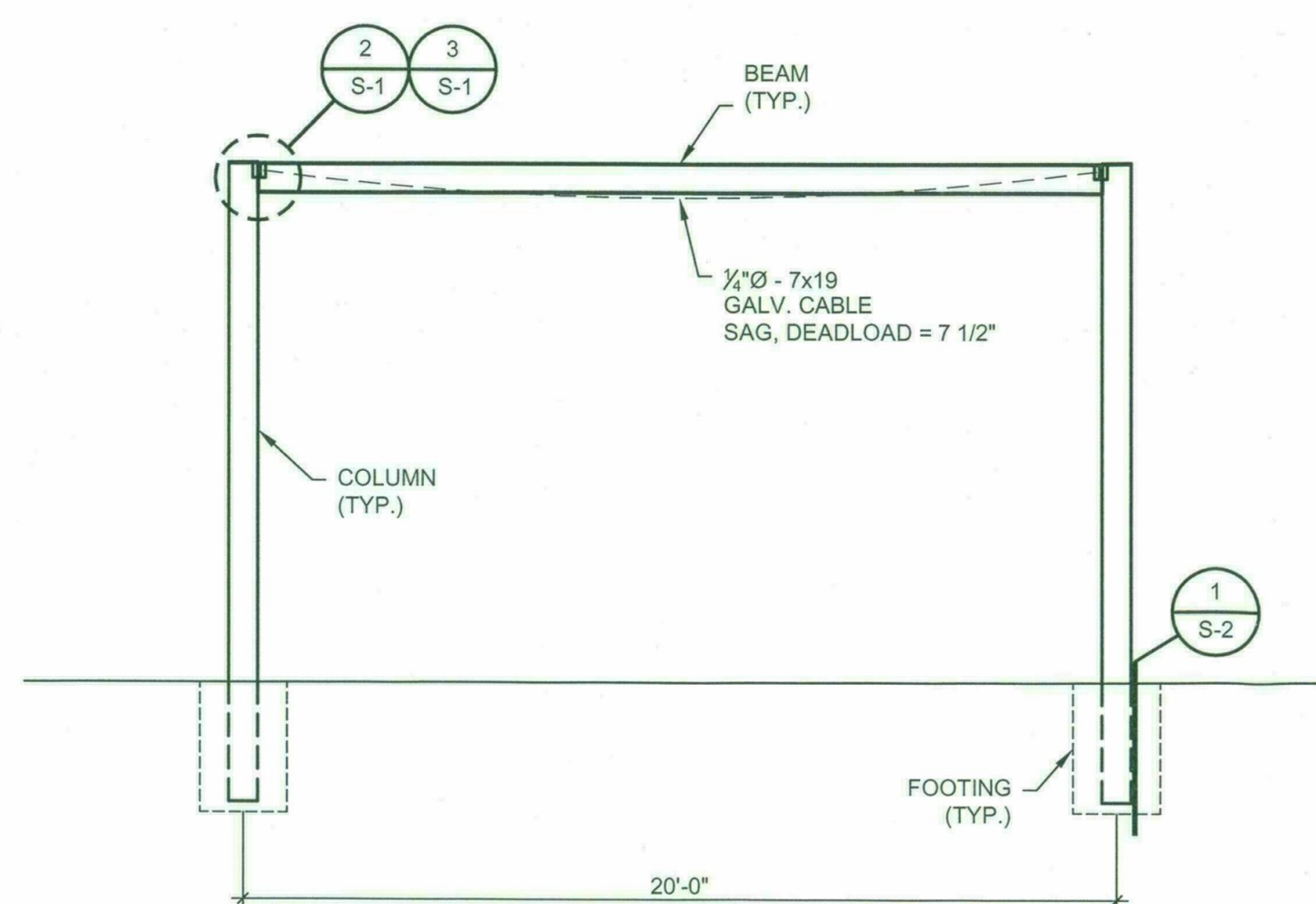


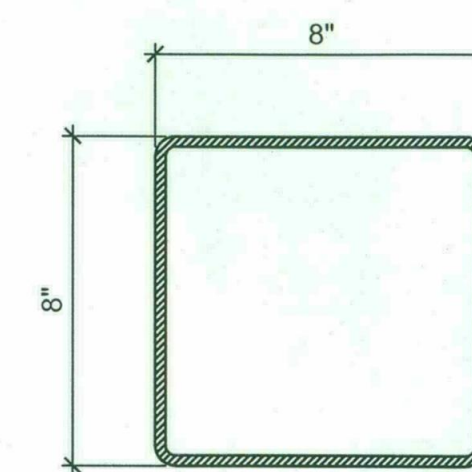
FOUNDATION & FRAMING PLAN

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



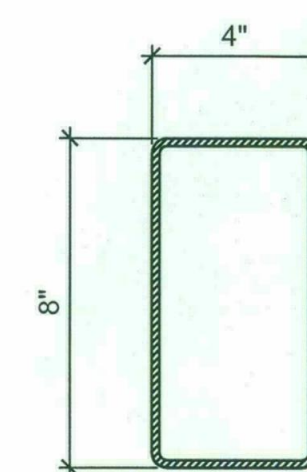
ELEVATION

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



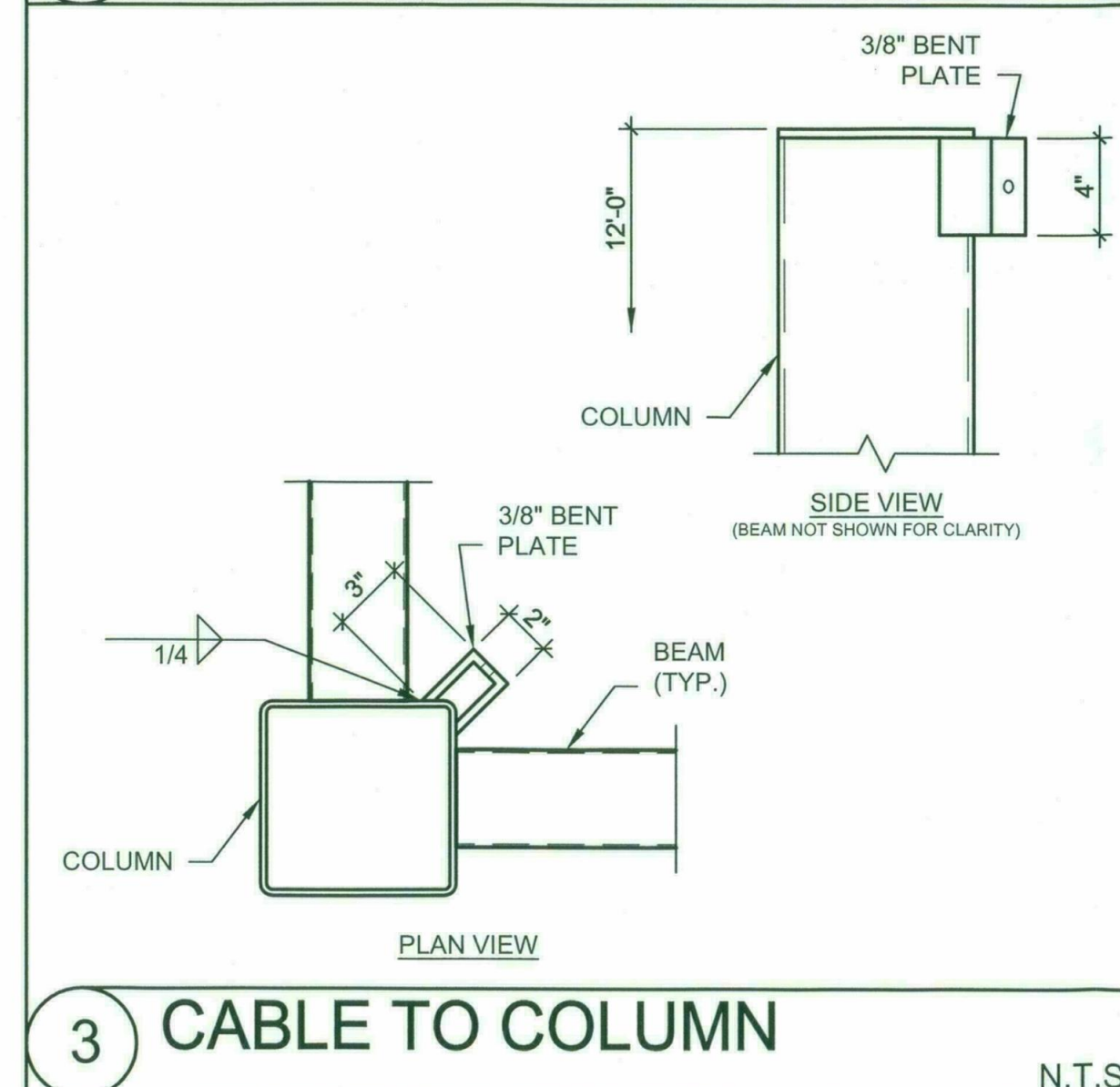
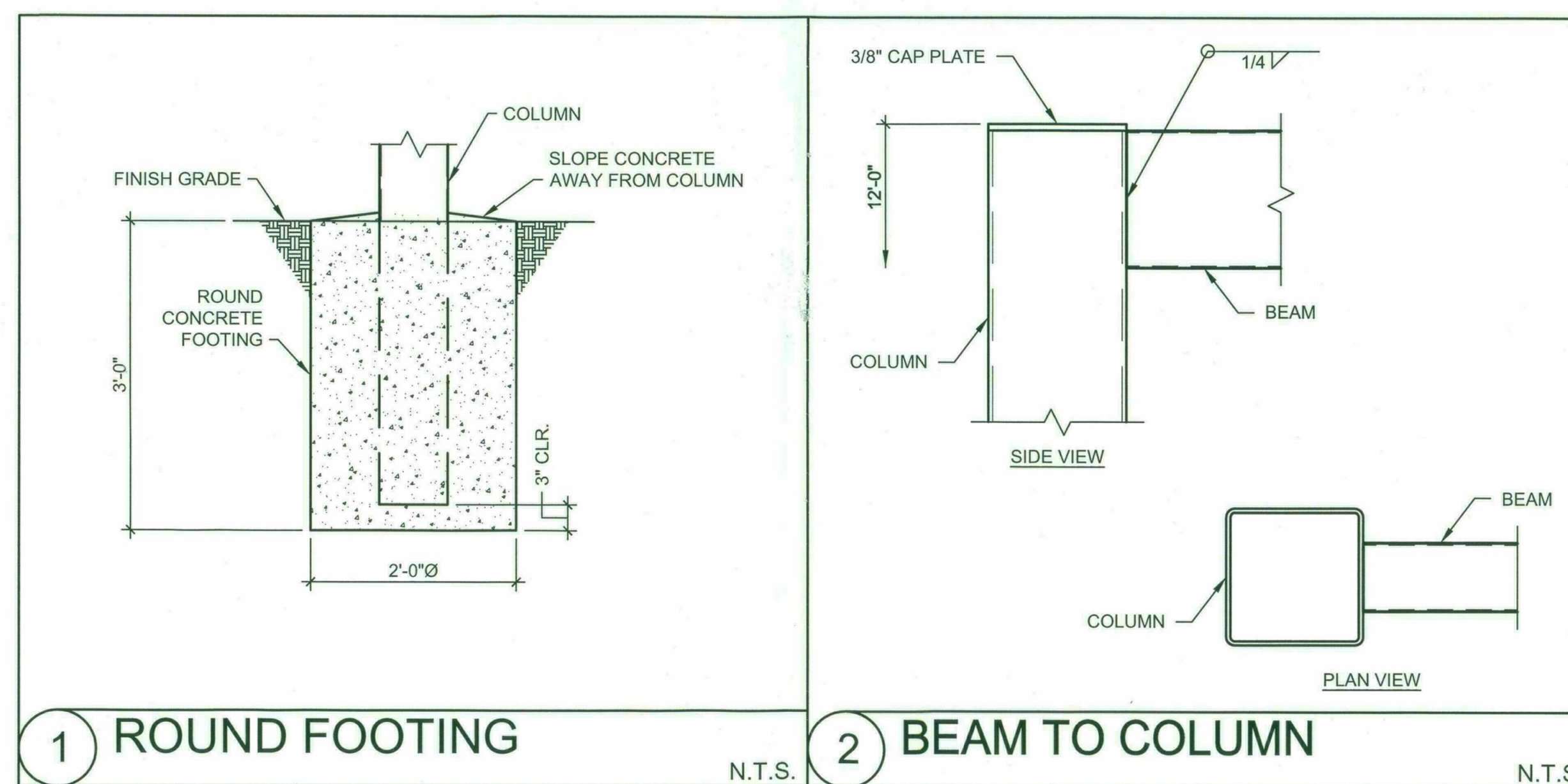
HSS 8" X 8" X 1/4"
I_x=70.70 in.⁴ S_x=17.70 in.³
F_y=36 ksi.

COLUMN



HSS 8" X 4" X 3/16"
I_x=33.10 in.⁴ S_x=8.27 in.³
F_y=36 ksi.

BEAM



GENERAL STRUCTURAL NOTES

- CODE:
2012 International Building Code
2007 American Iron and Steel Institute Handbook of Cold-Formed Steel Design
w/ 2010 Supplement.
- Loads:
Roof Live Load = 5 PSF
Ultimate Wind Speed = 115 mph, Exposure = C
Seismic Design Category = II, Seismic Design Category = B
Basic Seismic - force - resisting System:
Lateral : Ordinary Steel Moment Frames
Longitudinal: Ordinary Steel Moment Frames
Analysis Procedure: Equivalent Lateral Force Procedure
- Foundations:
Allowable soil bearing value is 1500 PSF at 18" below finish grade or existing natural grade, whichever is the lower elevation. Round caisson footing embedment depths for footings do not apply to locations where walls of the hole will not stand without supplemental support, or where UNCOMPACTED fill of organic fill material exists. Design lateral soil pressure per IBC section 1804.2 for Class 5 soils.
- Concrete:
All concrete herein required shall be done in accordance with ACI Standard 318-05, "Specifications for Structural Concrete for Buildings", which is hereby made a part of these documents, with the following modifications:

Para 2.1.2 Cement shall comply with ASTM C150, Type II, and shall contain no flyash.
Para 3.2 F_c shall be 2,500 PSI minimum for all concrete at 28 days for all concrete.
Para 4.1.3 The use of earth cuts for forms is permitted.
Para 5.2 Reinforcing shall be new billeted steel complying with ASTM A615, Grade 40.
Concrete shall be thoroughly consolidated by suitable means during placement and shall be thoroughly worked around reinforcement and embedded fixtures and into corners of the forms.
Curing of concrete shall be in accordance with sections 1905.11.1 through 1905.11.3.
- Structural Steel:
All structural steel shall be ASTM A36 (F_y=36,000 PSI) or ASTM A 572 GRADE 50 (F_y=50,000PSI);
All pipe shall be ASTM A 501 (F_y= 36,000 PSI) or ASTM A53, Type "E" or "S" grade "B"
(F_y= 36,000 PSI). All tubular steel shall be ASTM A500 (F_y=46,000 PSI). All bolts shall be ASTM A325.
Latest AISC and AWS codes apply. All construction per latest AISC handbook. All expansion bolts to have current I.C.B.O. approval. All welding by welders holding valid certificates and having current experience in type of weld shown on the drawings or notes. Certificates shall be those issued by and accepted testing agency. All welding by E70 series low hydrogen rods. (Use E90 for ASTM A706 - grade 40 reinforcing bars). All welding per American Welding Society Standards.
- Drawing sealing requirement

These drawings are to be wet sealed by the engineer. All copies shall bear wet seals.
If a copy of this drawing is disturbed without the proper wet seal the drawing is considered invalid. The duplication or copying of this drawing could mean the original drawing has been modified from its original content. All liability is removed from the below wet sealed. All wet sealed drawings are signed in blue ink and are accompanied with a red ink "VALID ONLY WHEN WET SEALED" stamp.
- Contractor:
The contractor must submit in writing any requests for modifications to the plans and specifications and no structural changes from the approved plans shall be made in the field, unless prior to making changes, written approval is obtained from the engineer. Shop drawings submitted the engineer for review do not constitute "in writing" unless it is noted that specific changes are being requested. If changes are made without written approval, such changes shall be the legal and financial responsibility of the contractor or sub-contractors involved and it shall be their responsibility to replace or repair the condition as directed by the engineer.

Contractor shall provide all temporary bracing, shoring, guying or other means to avoid excessive stresses and to hold structural elements in place during erection. The provisions shall remain in position until sufficient permanent members are erected to insure the safety of the partially erected structures. The contract structural drawings and specifications represent the finished structure. Observation visits to the site by the structural engineer shall not include inspection of the above items.

The above notes and specifications shall meet or exceed all state and local code requirements before erection.

The undersigned engineer will not supervise the fabrication or erection of this structure.
- Cable Wire:
Stranded Carbon Steel wire rope for general purpose shall meet all requirements of ASTM A1023/A1023M.

SHADE MASTERS		JOB # 1479-16	
COVERED STRUCTURE	COLUMN	HSS 8" x 8" x 1/4"	F _y = 36 KSI
	BEAM	HSS 8" x 4" x 3/16"	F _y = 36 KSI
FOUNDATION TYPE		DIMENSIONS	DEPTH
CONCRETE ROUND		2'-0"Ø	3'-0"

S. E. CONSULTANTS, Inc.
Structural Engineering Consultants

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Phone: (480) 946-2010
Fax: (480) 946-1909

SHADE MASTERS
FABRIC SHADE SAIL W/BEAMS

CORTESIAN APARTMENTS
7719 E. CAMELBACK RD.
SCOTTSDALE, AZ 85251



FRAMING & FOUNDATION PLAN,
ELEVATION, DETAILS & GSN

design GCS
drawn JMC
check SWS
DATE 01/03/2017

SHEET
S-1
of 1
Job 1479-16