STRUCTURAL DRAWING NOTES

MELALEUCA FIELD FENCE

I. GENERAL APPLICATION
A. Do not scale drawings.
B. In the opinion of the Contractor, any items that appear to be deficiencies, omissions, contradictions or ambiguities in the drawings, should be brought to the attention of the Architect and/or Structural Engineer.

II. CODES AND SPECIFICATIONS
A. International Building Code (IBC) - 2003 Edition

III. DESIGN CRITERIA
A. Wind — 3 Second Gust Wind Speed = 90 MPH; Exposure = C; Building Category II; Iw = 1.00

B. Design Assumptions
1. Soil bearing pressure assumed to be 1500 psf for columns and wall footings as per IBC Table 1804.2 based upon a clay, sandy clay, silty clay, clayey silt, and sandy silt (CL, ML, MH, and, CH) type soil. Any variations encountered, different from the soil type assumed, shall be brought to the attention of G&S Structural Engineers before proceeding.

C. Allowable Stresses (unless otherwise noted)
1. Concrete f'c (@ 28 days) — 4000 psi
2. Structural steel
a. Steel pipe — ASTM A53 Grade B
3. Headed Concrete Anchors (HCA) — ASTM A108

IV. SPECIAL INSPECTION
A. The Owner or the Owner's Agent shall employ independent Special Inspector(s) to perform the following duties. Each Special Inspector shall submit qualifications showing competency to the Building Official for approval prior to specified duties. All special inspection is to comply with IBC Chapter 17.
1. Duties and Responsibilities of the Special Inspector:
a. The Special Inspector shall observe the work assigned to be certain it conforms to the approved contract drawings.
b. The Special Inspector shall furnish inspection reports to the Building Official and to the Engineer of Record. All discrepancies shall be brought to the immediate attention of the Contractor for correction.
2. Concrete:
a. Special inspection per IBC Table 1704.4.
3. General Requirements:
a. Special inspection of concrete diameter versus depth.
b. Special inspection of steel pipe embedment into concrete..
4. Structural Steel:
a. Special inspection per IBC Table 1704.3.

V. CONCRETE
A. Concrete shall be of ready mix type conforming to ASTM C94.

B. When the average daily temperature is expected to drop below 40° F for 3 or more successive days, the concrete shall comply with the Cold Weather Concreting Standard (ACI 306). Place no concrete against frozen earth.

C. Reinforcement shall be continuous without splices.

VI. REINFORCING STEEL
A. Welding or tack welding of reinforcing bars to other bars, plates, angles, etc. is prohibited.

B. All detailing, fabrication and placing of reinforcing bars shall conform to the ACI Manual of Standard Practice for Detailing Reinforcing Concrete Structures (ACI 315).

C. Reinforcement shall be accurately placed and adequately supported before concrete is placed, and shall be secured against displacement. Location of reinforcement shall be as indicated on the drawings. The following protection for reinforcement shall be provided.
Minimum Cover:
Cast against and permanently exposed to earth.....3"
Exposed to earth or weather - #5 and smaller... 1-1/2"

VII. STRUCTURAL STEEL
A. All steel shall be shop fabricated to the greatest extent possible per AISC.

B. All welding must conform to the AISC and the AWS Structural Welding Code-Steel.

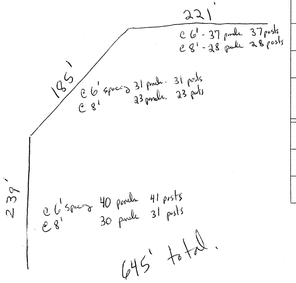
C. All structural steel shall be temporarily braced until all of the structural frame is complete.

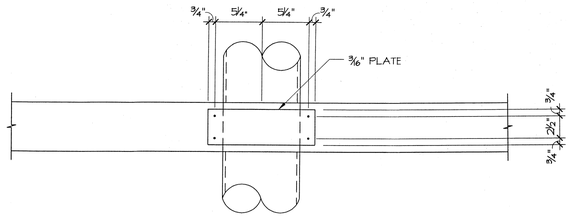
D. All welders shall have current certification by tests per American Welding Society (AWS) to perform the type of work required.

E. All welds shall be made using a minimum 70 ksi electrode meeting Charpy V-Notch toughness of 20 ft-lbs @ 20° F as determined by AWS for electrodes.

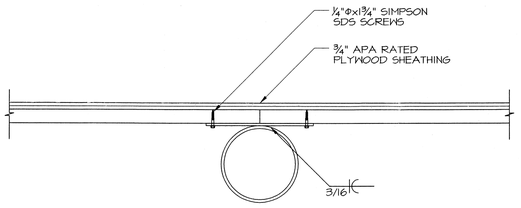
F. All steel members shall be given one shop coat of approved paint. Surfaces to be embedded in concrete shall not be painted.

PIPE SPACING @ 6'-0" O.C.					
GIRTS	FOOTING DIAMETER	FOOTING DEPTH	VERTICAL REBAR	HORIZONTAL REBAR	CY/LF
2x6 @ 24" O.C.	3'-0"	9'-0"	6- #5	#4 @ 12" O.C.	2.36
2x6 @ 24" O.C.	4'-0"	8'-0"	12- #5	#4 @ 12" O.C.	3.75
2x6 @ 24" O.C.	5'-0"	7'-0"	12- #6	#4 @ 12" O.C.	5.10
PIPE SPACING @ 8'-0" O.C.					
2x6 @ 16" O.C.	3'-0"	10'-0"	6- #5	#4 @ 12" O.C.	2.62
2x6 @ 16" O.C.	4'-0"	9'-0"	12- #5	#4 @ 12" O.C.	4.25
2x6 @ 16" O.C.	5'-0"	8'-0"	12- #6	#4 @ 12" O.C.	5.82

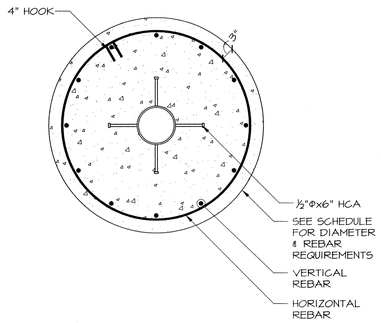




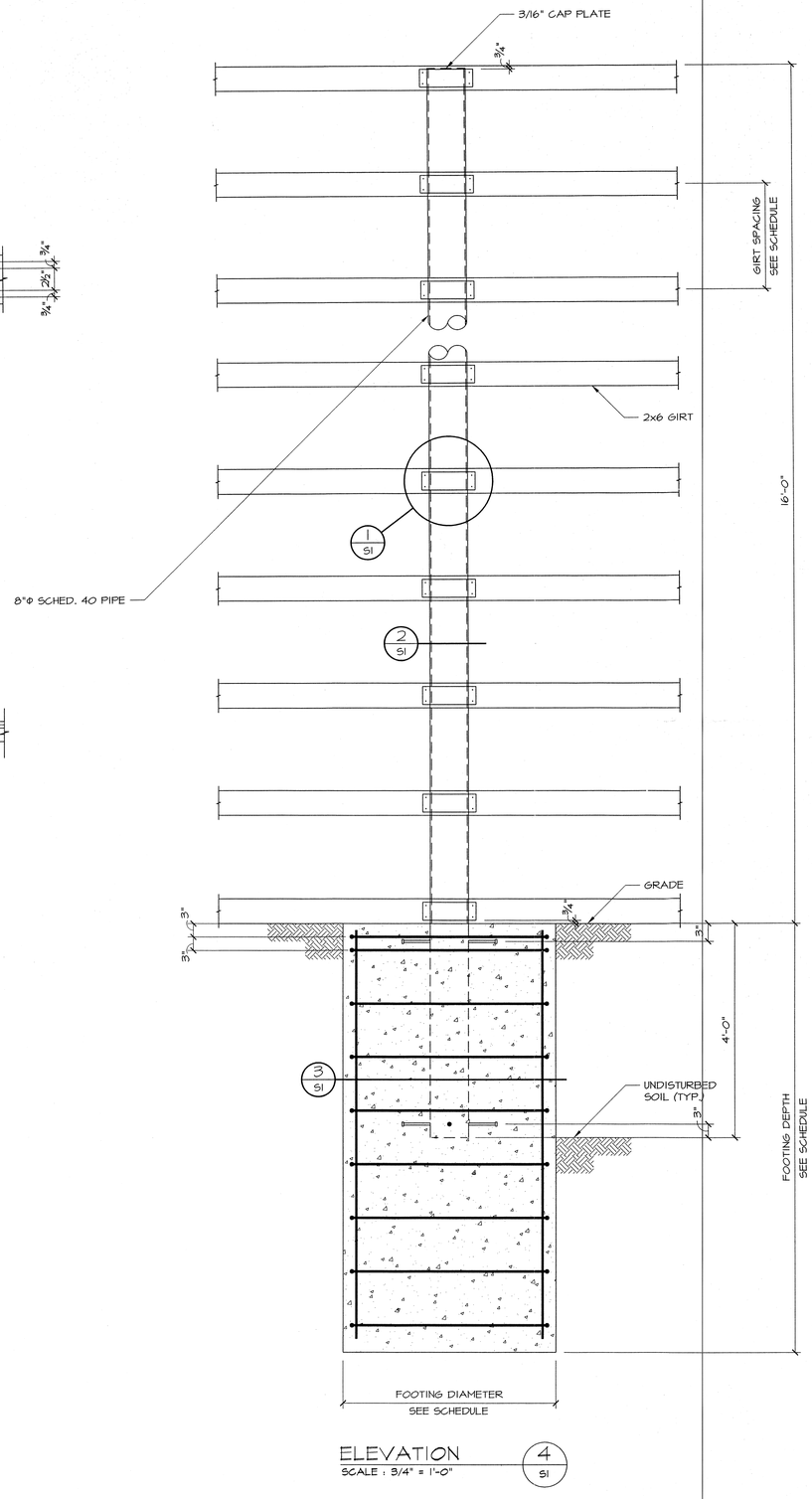
SECTION 1/S1
SCALE : 1 1/2" = 1'-0"



SECTION 2/S1
SCALE : 1 1/2" = 1'-0"



SECTION 3/S1
SCALE : 3/4" = 1'-0"



ELEVATION 4/S1
SCALE : 3/4" = 1'-0"

130 FT

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PROJECT & LOCATION
MELALEUCA FIELD FENCE
IDAHO FALLS, IDAHO

NO. REVISIONS: DATE:

PROFESSIONAL ENGINEER REGISTERED 8816 STATE OF IDAHO MARK D. ANDRUS

PROJECT NO. 07213
DRAFTER: CLH
DESIGNER: MA
CHECKER: DJT

SHEET NO.
S1