

STATE	PROJECT NO.	COUNTY	SHEET NO.
NEVADA	NH-095-2(051)	CLARK	L800

BASIS OF DESIGN

- A.

CODES

IBC-2006, ASCE 7-05, ACI 318-05, AISC 13TH EDITION & NDOT SPECIFICATIONS / SPECIAL PROVISIONS
- B.

SOILS

BASED ON ASSUMED VALUES IN ACCORDANCE WITH THE TABLE 1804.2 "ALLOWABLE FOUNDATION AND LATERAL PRESSURE" OF THE IBC 2006
- C.

SEISMIC DATA

EQ GROUND MOTION: SPECTRAL RESPONSE ACCELERATION, SHORT PERIOD SS=57%g
SPECTRAL RESPONSE ACCELERATION, 1 SEC. PERIOD S1=17%g
- D.

WIND

BASIC WIND SPEED 90MPH, V3 SECOND GUST WIND SPEED, EXPOSURE C
- E.

MATERIALS

1. CONCRETE:

F'c=3000 PSI MIN. @ 28 DAYS COMPRESSIVE STRENGTH

2. REINFORCING STEEL:

ASTM A706 GRADE 60 - *4 AND LARGER
GRADE 40 - *3

3. STEEL:

STEEL PLATES AND SHAPES ASTM A36 OR A588, TUBE ASTM A500-
GRADE B AND WELDS E-70 ELECTRODES

4. BOLTS:

ASTM A325 AND ANCHOR BOLTS OR THREADED ROD A307 OR A36

4. ANCHORS:

HILTI HDA-P TYPE UNDERCUT ANCHOR CONNECTION TO EXISTING
CONCRETE

STRUCTURAL NOTES

- A.

ALL WORK SHALL BE IN ACCORDANCE WITH NDOT STANDARD SPECIFICATIONS / SPECIAL PROVISIONS, THE INTERNATIONAL BUILDING CODE, IBC 2006, ASCE 7-05, AISC 13TH EDITION.
- B.

THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS SHOWN ON THE DRAWINGS PRIOR TO BEGINNING WORK. DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- C.

DETAILS NOTES AS "TYPICAL" SHALL BE USED WHENEVER APPLICABLE. SPECIFIC DETAILS OR NOTES TAKE PRECEDENCE OVER TYPICAL DETAILS AND NOTES. STRUCTURAL FEATURES, WHICH ARE NOT FULLY DESCRIBED ON THE DRAWINGS OR IN THE SPECIFICATIONS, SHALL BE CONSTRUCTED IN A SIMILAR MANNER AS THOSE SHOWN ON THE DRAWINGS OR DESCRIBED IN THESE SPECIFICATIONS.
- D.

THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE METHODS, PROCEDURES, OR SEQUENCE OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE DURING CONSTRUCTION.
- E.

STRUCTURAL DESIGN OR REVIEW OF TEMPORARY SHORING, ADDITIONAL BRACING, FORMWORK, SCAFFOLDING, ERECTION METHOD, ETC. REQUIRED FOR PROPER CONSTRUCTION OF ANY COMPONENTS OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE COORDINATED AND PREAPPROVED WITH NDOT RESIDENT ENGINEER REGARDING TRAFFIC SAFETY.

FOUNDATION

- A.

FOUNDATIONS CONSIST OF CONVENTIONAL SPREAD FOOTINGS AND HAVE BEEN DESIGNED TO IMPOSE LESS THAN 1,500 PSF FOR TOTAL LOADS. ONE-THIRD FOR LATERAL FORCES INCREASED ALLOWABLE BEARING PRESSURES. THIS IS IN ACCORDANCE WITH RECOMMENDATIONS CONTAINED IN TABLE 1804.2, "ALLOWABLE FOUNDATION AND LATERAL PRESSURE", OF THE INTERNATIONAL BUILDING CODE.
- B.

FOOTINGS SHALL EXTEND A MINIMUM OF 18-INCHES BELOW FINAL GRADE IN ORDER TO PROVIDE PROTECTION AGAINST FROST ACTION.
- C.

COMPACT SUBGRADE TO 90% OF MAXIMUM RELATIVE COMPACTION. COMPACT AGGREGATE BASE TO 95% OF LABORATORY MAXIMUM. ALL COMPACTION SHALL CONFORM TO THE REQUIREMENTS OF ASTM D 1557.

CONCRETE

- A.

ALL CONCRETE AND COMPONENT MATERIALS USED IN THIS PROJECT SHALL CONFORM TO THE FOLLOWING CRITERIA:

28 DAY COMPRESSIVE STRENGTH (MIN)

CEMENT

CONCRETE AGGREGATE

MAXIMUM AGGREGATE SIZE

3000 PSI UNLESS NOTED OTHERWISE
ASTM C 150, TYPE II
ASTM C 33 (HARDROCK)
3/4" DIAMETER
- B.

EXCEPT AS ABOVE ITEMIZED, ALL CONCRETE WORK SHALL BE PRODUCED, PLACED, CONSOLIDATED, CURED, AND FINISHED IN CONFORMANCE WITH NDOT STANDARD SPECIFICATION SECTION 501 "PORTLAND CEMENT CONCRETE" AND SECTION 701 "PORTLAND CEMENT" AS WELL AS AMERICAN CONCRETE INSTITUTE STANDARD 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", STANDARD 305 "HOT WEATHER CONCRETE", AND STANDARD 306 "COLD WEATHER CONCRETING". CALCIUM CHLORIDE, SALT OR OTHER MATERIALS CREATING A CORROSIVE ENVIRONMENT IN THE CONCRETE SHALL NOT BE USED FOR ANY REASON.

ANCHOR PLACEMENT ON WALLS

- A.

DUE TO EXISTING AND NEW FORMLINE PATTERNS IN TIEBACK, MSE AND SOUNDWALLS, IT IS RECOMMENDED A PAPER OR CARDBOARD TEMPLATE FOR EACH IMAGE PANEL BE MADE TO FIELD LOCATE AND ADJUST ANCHOR CENTER POINTS IN PATTERNED WALL AREAS AS NEEDED TO AVOID WALL PATTERN AND MSE WALL JOINT CONFLICTS.

- B.

ALL HILTI HDA-P ANCHORS (OR APPROVED EQUAL) SHALL BE INSTALLED IN ACCORDANCE WITH ESR-1546 AND BE TORQUED AND TIGHTENED TO 59 FT/LB AS PER TABLE 2 ESR-1546.

REINFORCING STEEL

- A.

REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, UNLESS NOTED OTHERWISE. LAP BARS AS SHOWN ON PLANS, 30 BAR DIAMETERS IN CONCRETE. ALL BARS SHALL BE LAPPED 2'-0" MINIMUM. REINFORCING STEEL SHALL BE FABRICATED IN CONFORMANCE WITH AMERICAN CONCRETE INSTITUTE STANDARD 318.
- B.

THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT (UNLESS NOTED OTHERWISE):

1. CONCRETE CAST AGAINST EARTH:

2. CONCRETE EXPOSED TO EARTH OR WEATHER:

2. CONCRETE NOT EXPOSED TO WEATHER OR
IN CONTACT WITH GROUND:

MIN. COVER
3 INCH
2 INCH
1 1/2 INCH

STRUCTURAL STEEL

- A.

ALL STEEL WORK SHALL BE IN ACCORDANCE WITH NDOT STANDARD SPECIFICATION SECTION 710 "STRUCTURAL STEEL" AND THE SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL' AS ADOPTED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
- B.

STEEL PLATES & SHAPES SHALL CONFORM TO ASTM A36 OR A588; STEEL TUBES SHALL CONFORM TO ASTM A500 GRADE B.
- C.

ALL WELDING MATERIALS AND PROCEDURES SHALL BE IN CONFORMANCE WITH THE AMERICAN WELDING SOCIETY'S STRUCTURAL WELDING CODE AND WELD SHALL BE MADE WITH E-70 ELECTRODES CONFORMING TO AWS A5.1 & A5.5
- D.

ALL IMAGE PANELS SHALL BE PAINTED PER SHEETS L700-L712 AND GALVANIZE ALL SIDES AND EDGES IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 715 (WHERE APPLICABLE)
- E.

ALL BOLTS SHALL BE A307. BOLTS SHALL BE TORQUED AND TIGHTENED IN ACCORDANCE WITH AISC 9TH ADDITION TABLES 4 AND 5.

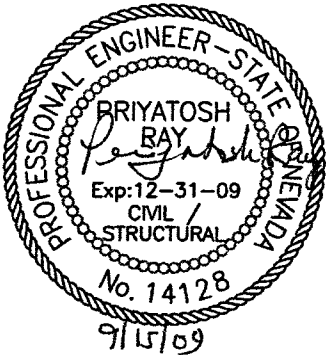
SPECIAL INSPECTION REQUIREMENTS

- THE FOLLOWING TEST AND INSPECTIONS WILL BE REQUIRED IN ACCORDANCE WITH THE 2006 INTERNATIONAL BUILDING CODE, SECTION 1701, AND PER NDOT STANDARD SPECIFICATION / SPECIAL PROVISIONS.
- A.

CONCRETE: DURING THE TAKING OF TEST SPECIMENS AND PLACEMENT OF REINFORCED CONCRETE:
- B.

WELDING: DURING ALL STRUCTURAL WELDING, INCLUDING SHOP & FIELD WELDS.
- C.

MECHANICAL ANCHORS: DURING THE INSTALLATION OF HILTI HDA-P ANCHORS (OR APPROVED EQUAL) AS PER ER REPORT 1546 INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH 1704-13 OF IBC 2006

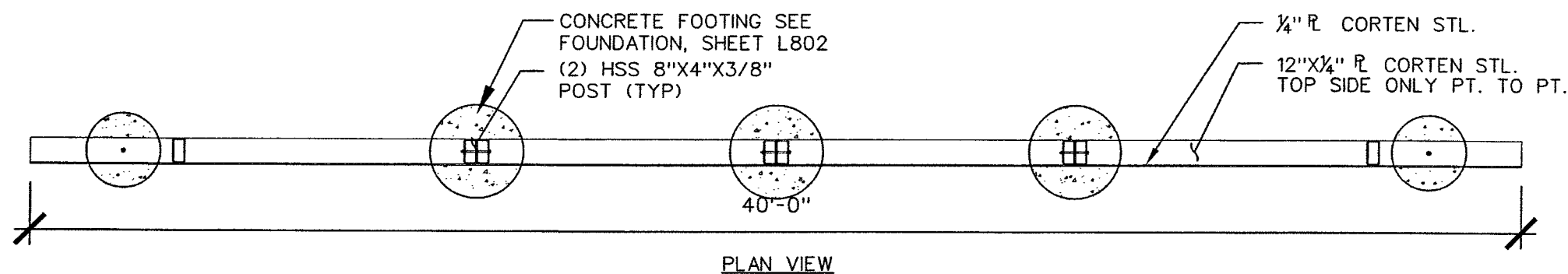
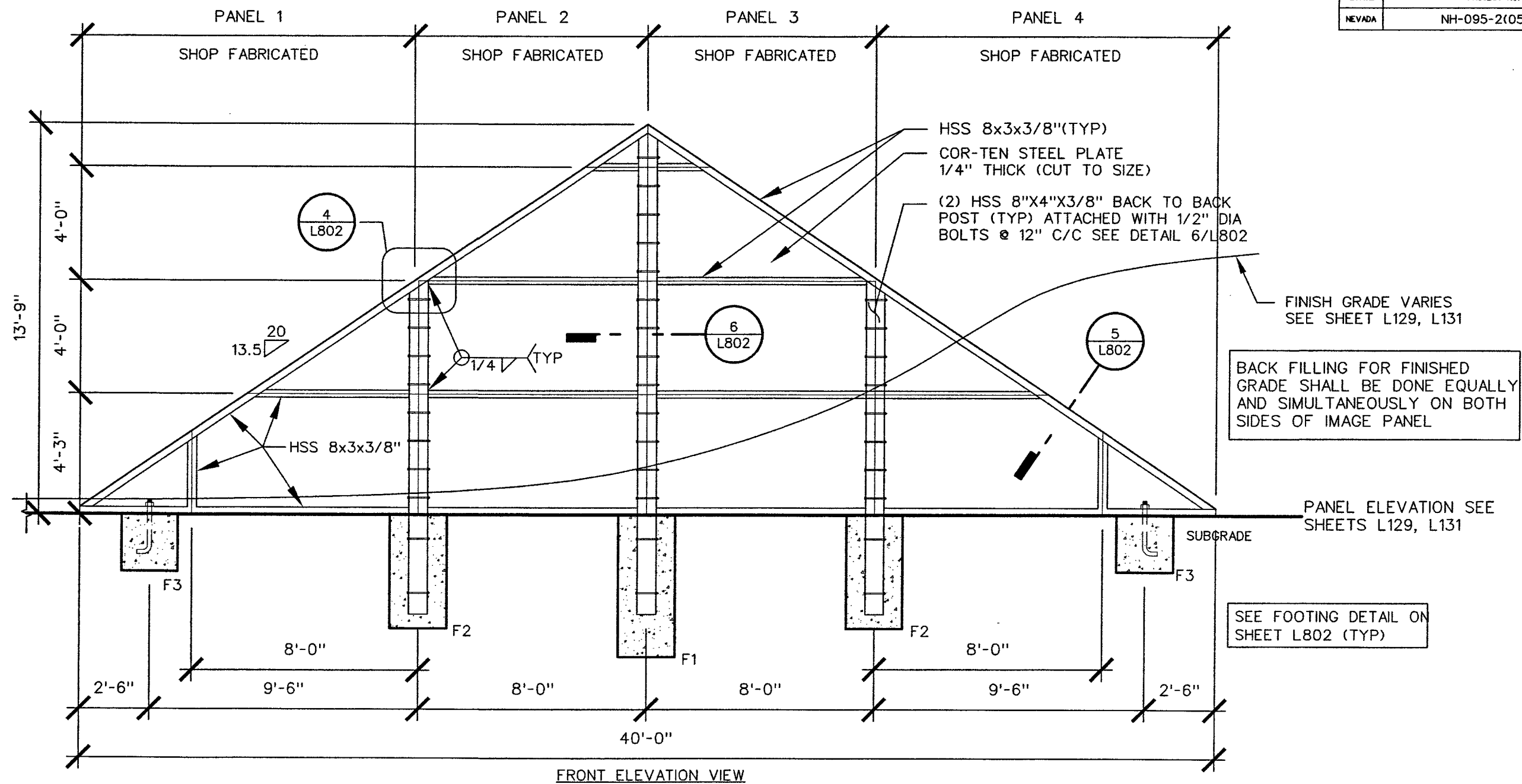


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PARWAY SUITE 100
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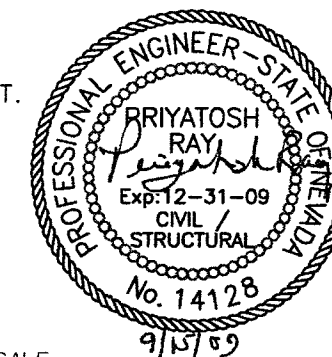
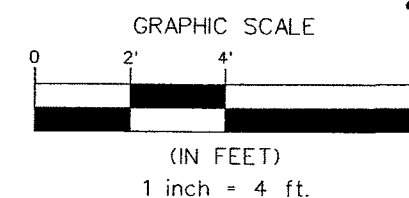
STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
US-95 NORTHWEST

LANDSCAPE IMPROVEMENTS
STRUCTURAL
GENERAL NOTES

STATE	PROJECT NO.	COUNTY	SHEET NO.
NEVADA	NH-095-2(051)	CLARK	L801



1 FREESTANDING IMAGE PANEL



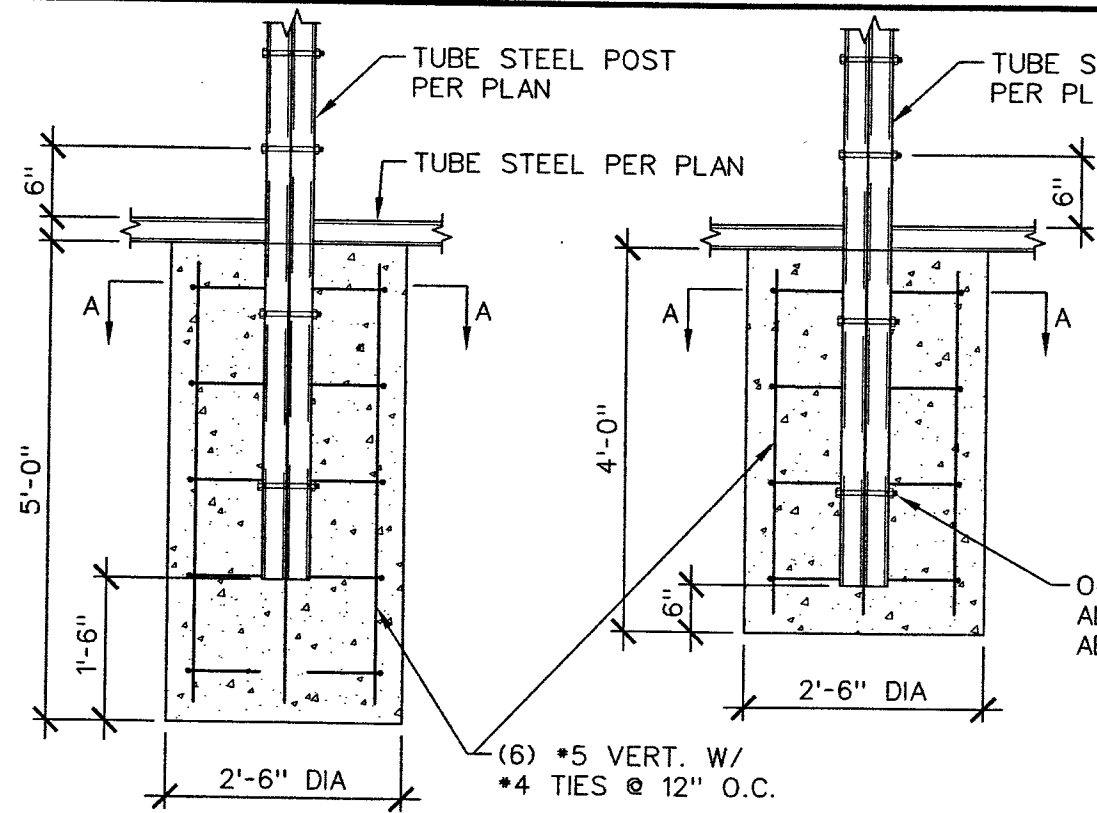
ALL STEEL USED FOR FREESTANDING IMAGE PANEL SHALL BE COR-TEN

STATE OF NEVADA
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LANDSCAPE IMPROVEMENTS
FREESTANDING IMAGE PANEL
STRUCTURAL DETAILS



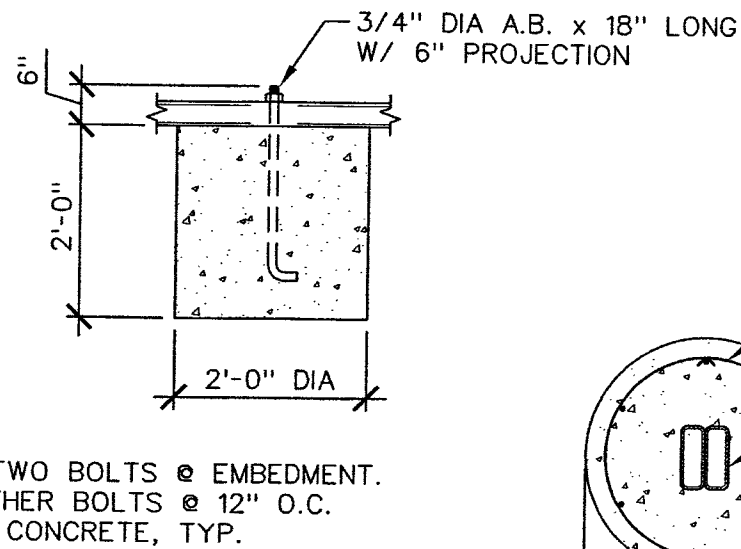
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NEVADA	NH-095-2(051)	CLARK	L802

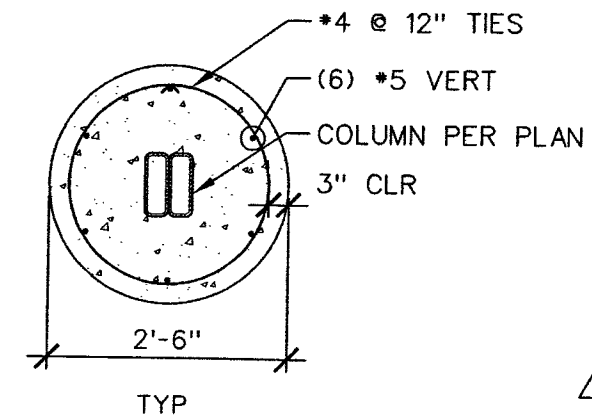


1 FOOTING F1
SCALE: 1/2" = 1'-0"

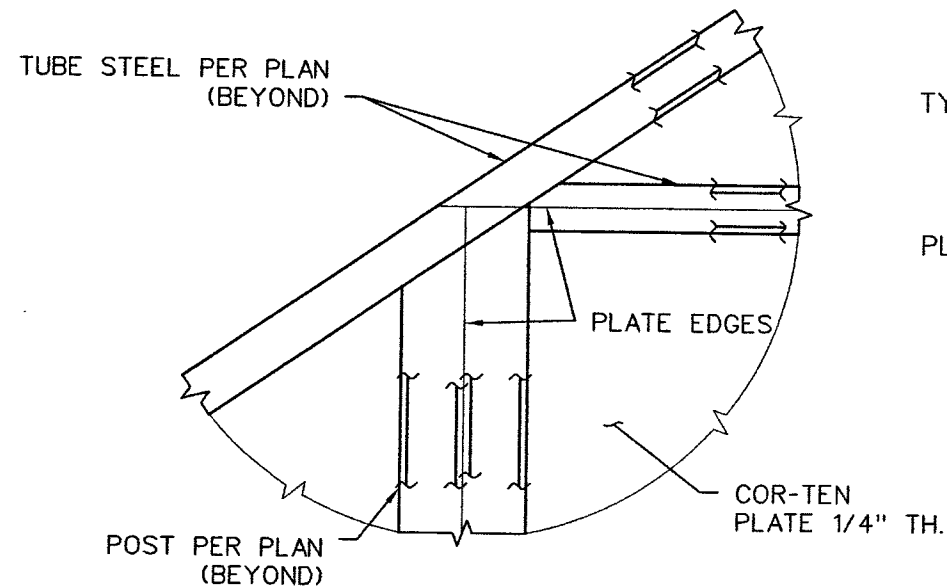
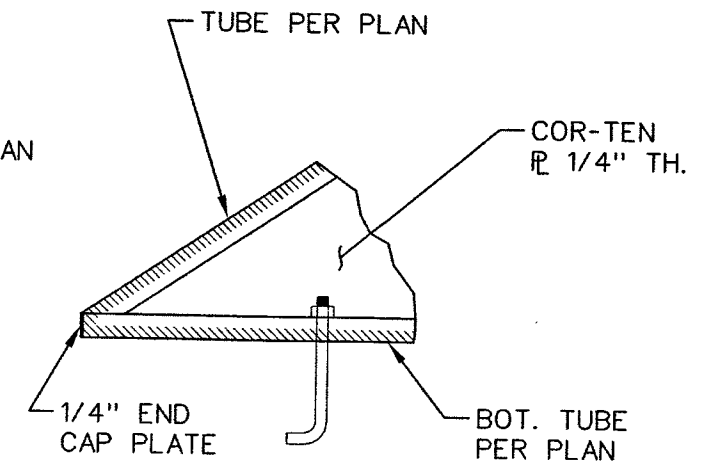
2 FOOTING F2
SCALE: 1/2" = 1'-0"



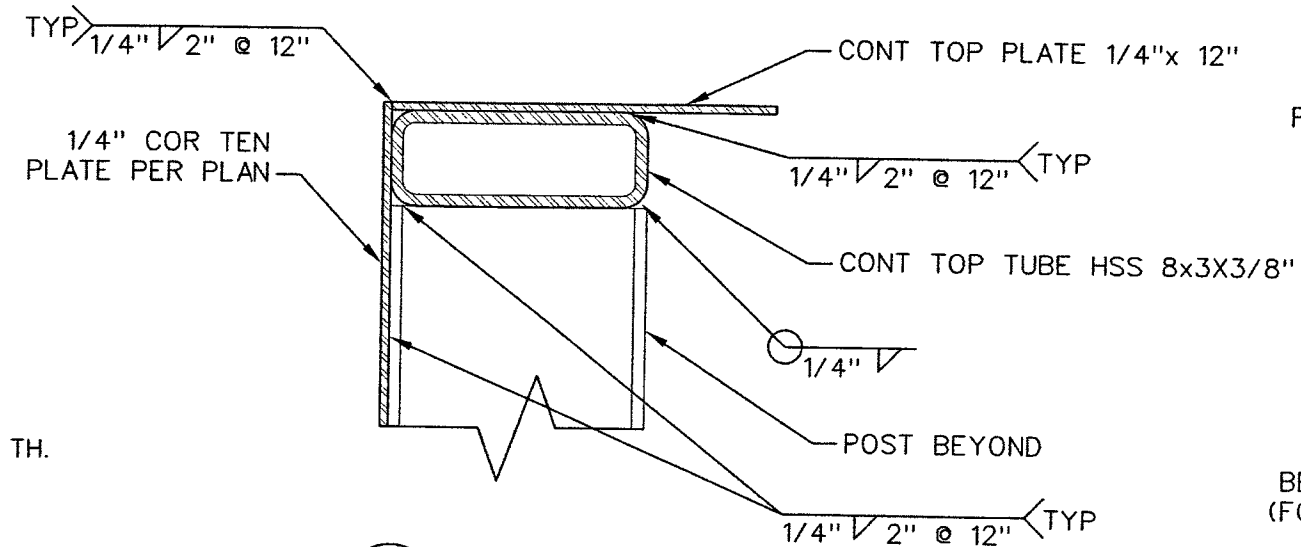
3 FOOTING F3
SCALE: 1/2" = 1'-0"



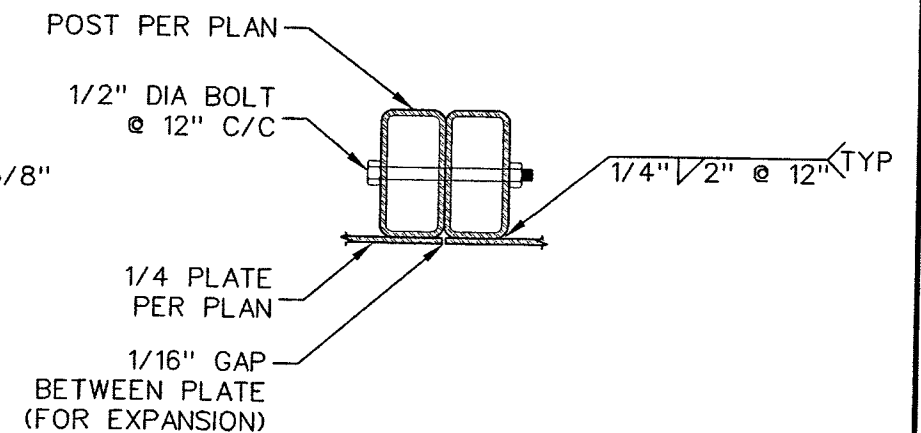
SECTION A-A
SCALE: 1/2" = 1'-0"



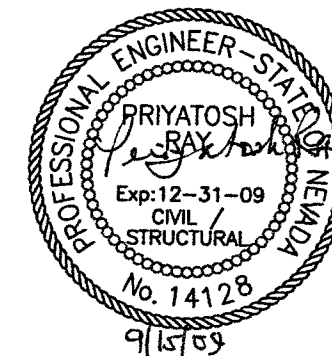
4 CORNER CONNECTION
SCALE: 1" = 1'-0"



5 TOP TUBE CONNECTION
SCALE: 2" = 1'-0"



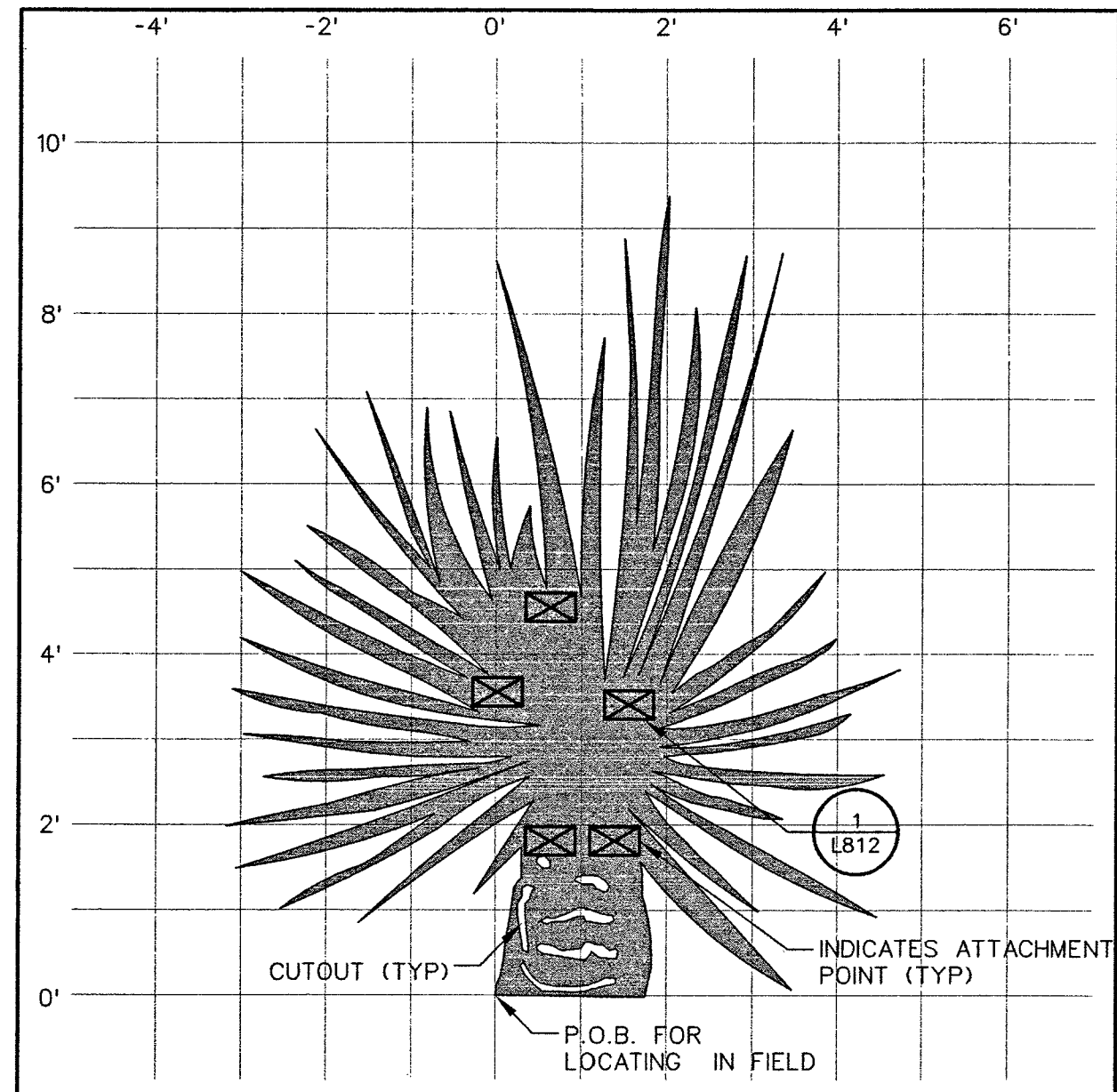
6 COLUMN CONNECTION
SCALE: 1" = 1'-0"



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US-95 NORTHWEST
LANDSCAPE IMPROVEMENTS
FREESTANDING IMAGE PANEL
STRUCTURAL DETAILS

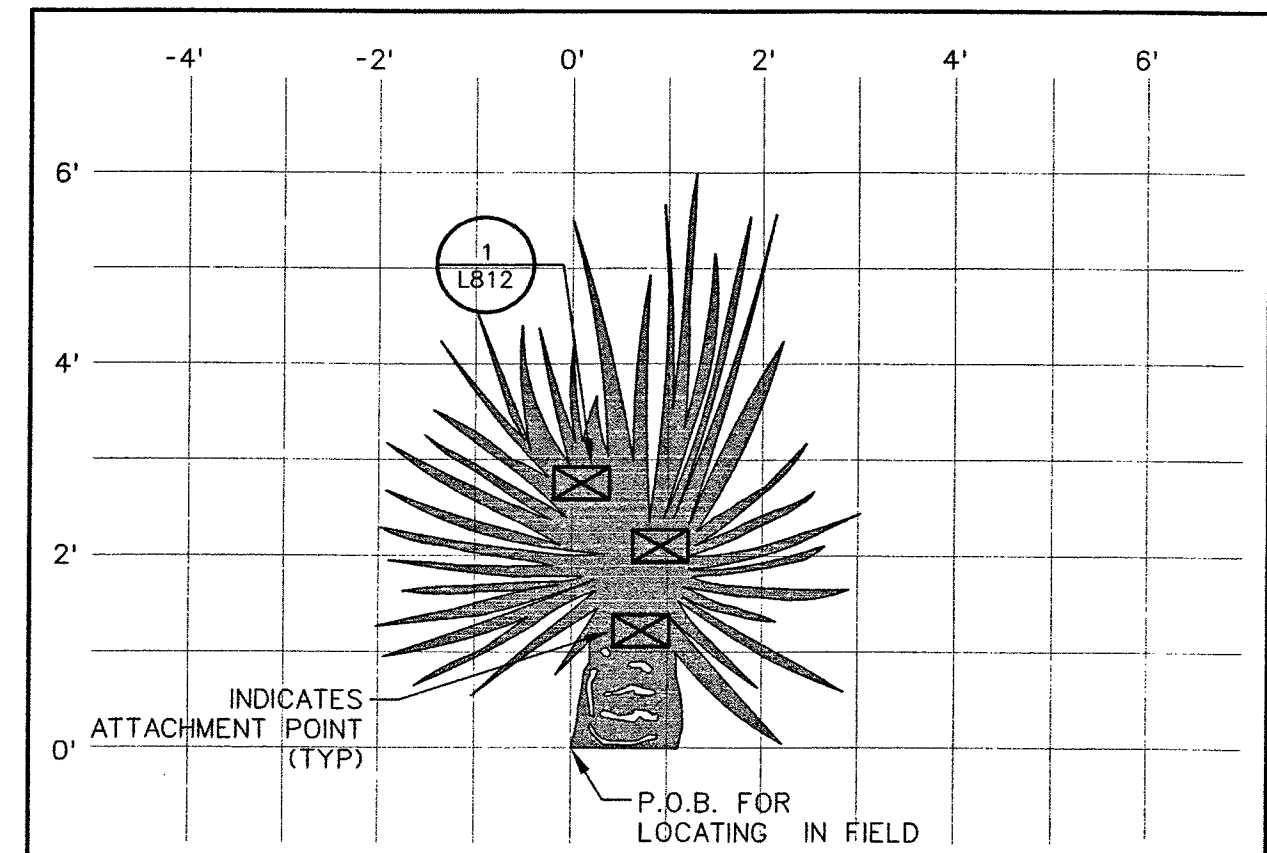
STATE	PROJECT NO.	COUNTY	SHEET NO.
NEVADA	NH-095-2(051)	CLARK	L803



"8FT YUCCA"

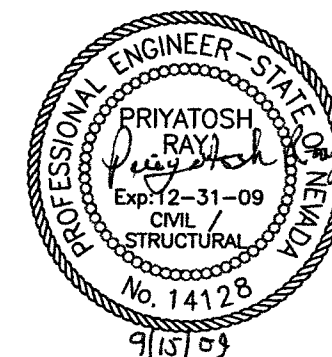
2 IMAGE PANEL "A-2"
SCALE: 1/2"=1'-0"

- NOTES:
- 1: 1/4" GALVANIZED PLATE (A-1,A-2)
 - 2: SEE SHEET L812 FOR ANCHORING CONNECTION DETAIL  DENOTES ANCHORS WHERE 1/2"Ø BOLT REQD.



"6FT YUCCA"

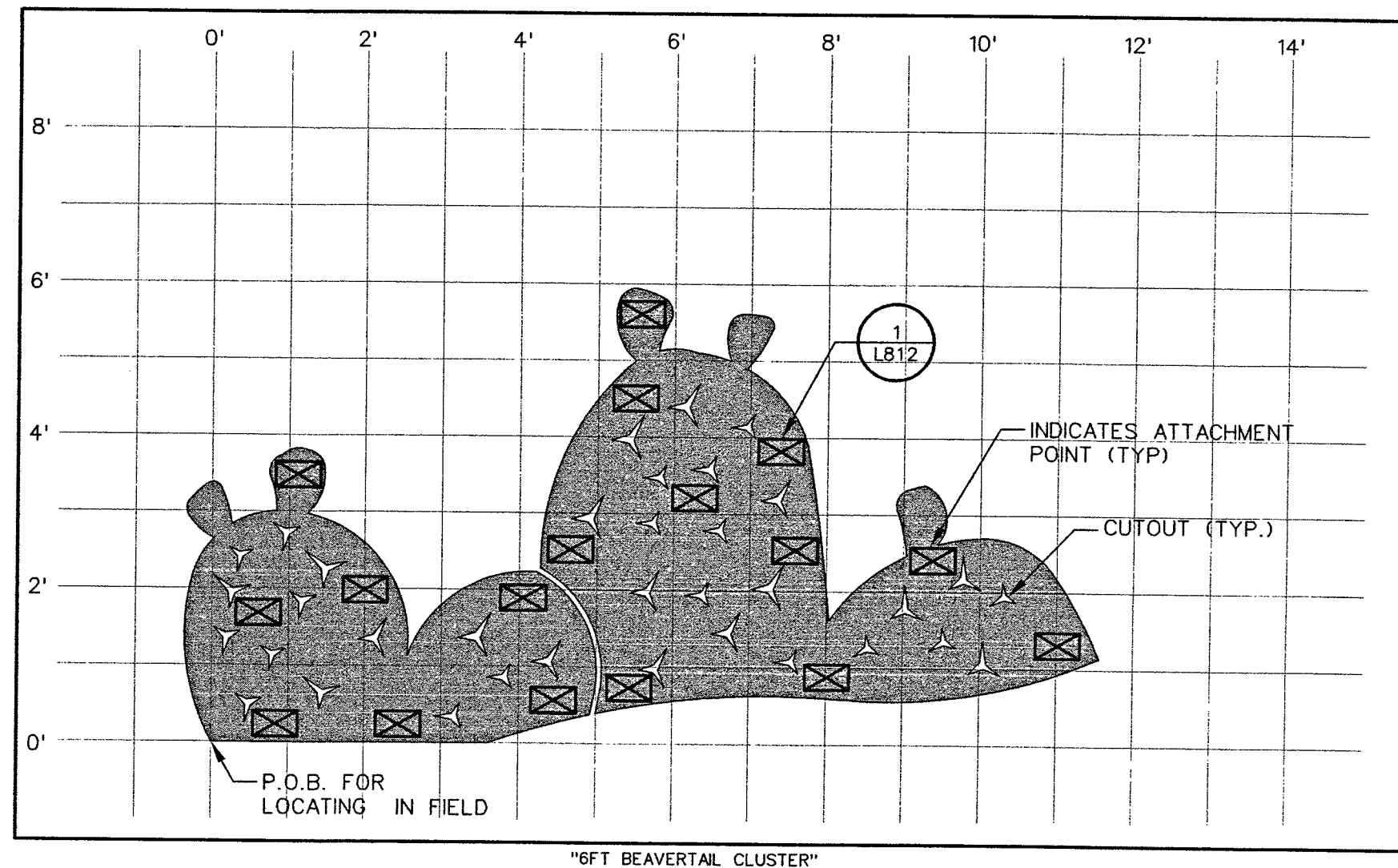
1 IMAGE PANEL "A-1"
SCALE: 1/2"=1'-0"



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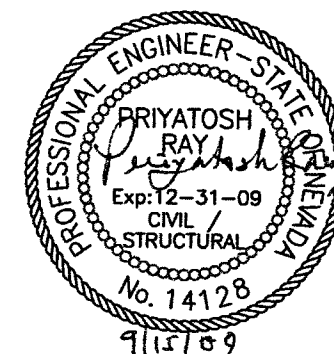
STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
US-95 NORTHWEST
LANDSCAPE IMPROVEMENTS
IMAGE PANEL ATTACHMENT
ON WALLS
STRUCTURAL DETAILS

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NEVADA	NH-095-2(051)	CLARK	L804



1 IMAGE PANEL "B-1"
SCALE: 1/2"=1'-0"

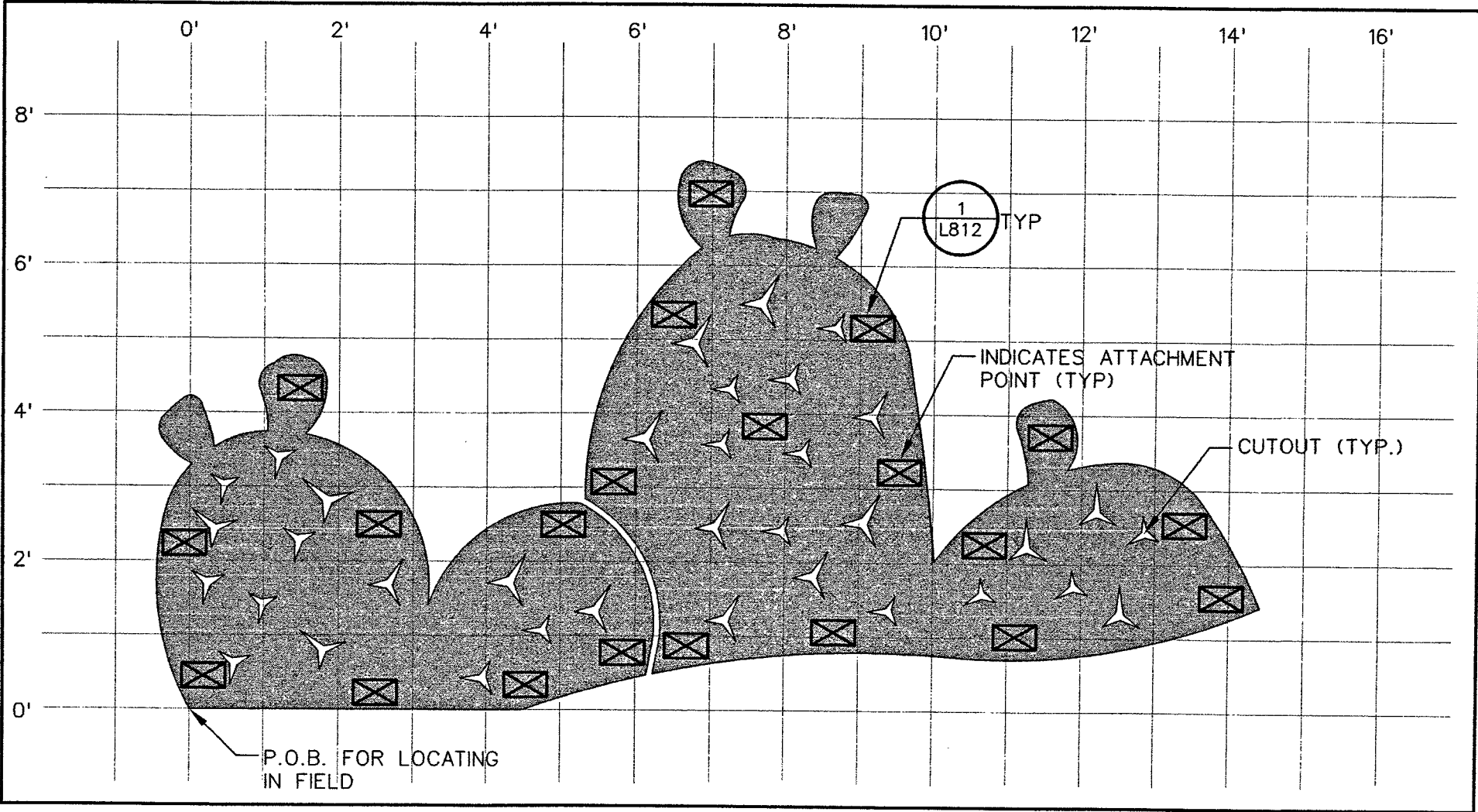
- NOTES:
- 1: 3/16" GALVANIZED PLATE (B-1)
 - 2: SEE SHEET L812 FOR ANCHORING CONNECTION DETAIL. X DENOTES ANCHORS WHERE 1/2"Ø BOLT REQD.



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LANDSCAPE IMPROVEMENTS
IMAGE PANEL ATTACHMENT
ON WALLS
STRUCTURAL DETAILS

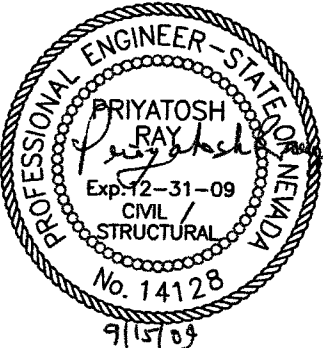
STATE	PROJECT NO.	COUNTY	SHEET NO.
NEVADA	NH-095-2(051)	CLARK	L805



"8FT BEAVERTAIL CLUSTER"

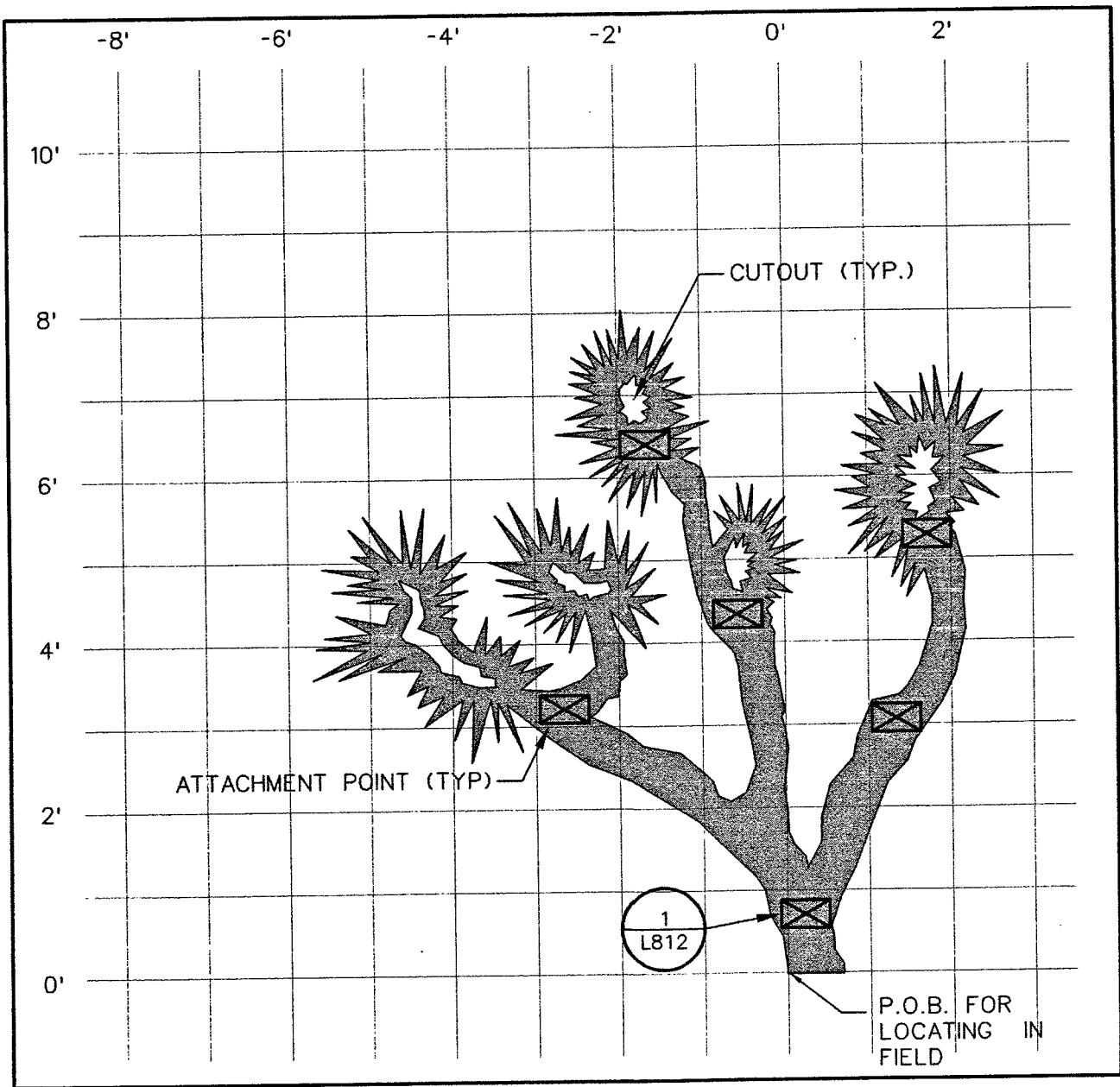
1 IMAGE PANEL "B-2"
SCALE: 1/2"=1'-0"

- NOTES:
- 1: 3/16" GALVANIZED PLATE (B-2)
 - 2: SEE SHEET L812 FOR ANCHORING CONNECTION DETAIL  DENOTES ANCHORS WHERE 1/2"Ø BOLT REQD.



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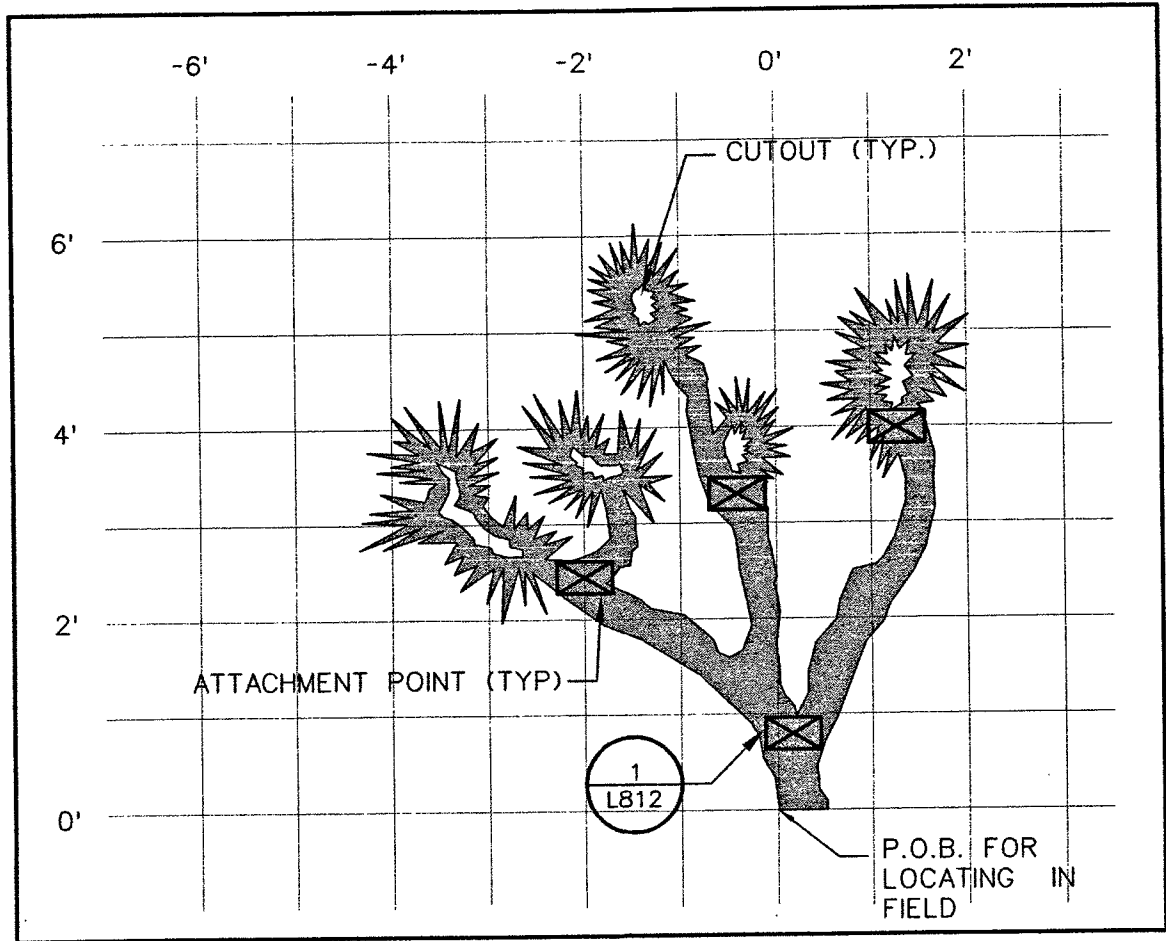


"8FT JOSHUA TREE"

2 IMAGE PANEL "C-2"
SCALE: 1/2"=1'-0"

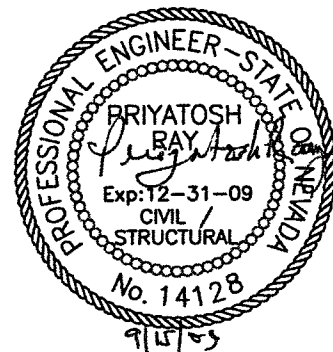
NOTES:

- 1: 1/4" GALVANIZED PLATE (C-1,C-2)
- 2: SEE SHEET L812 FOR ANCHORING CONNECTION DETAIL  DENOTES ANCHORS WHERE 1/2"Ø BOLT REQD.



"6FT JOSHUA TREE"

1 IMAGE PANEL "C-1"
SCALE: 1/2"=1'-0"



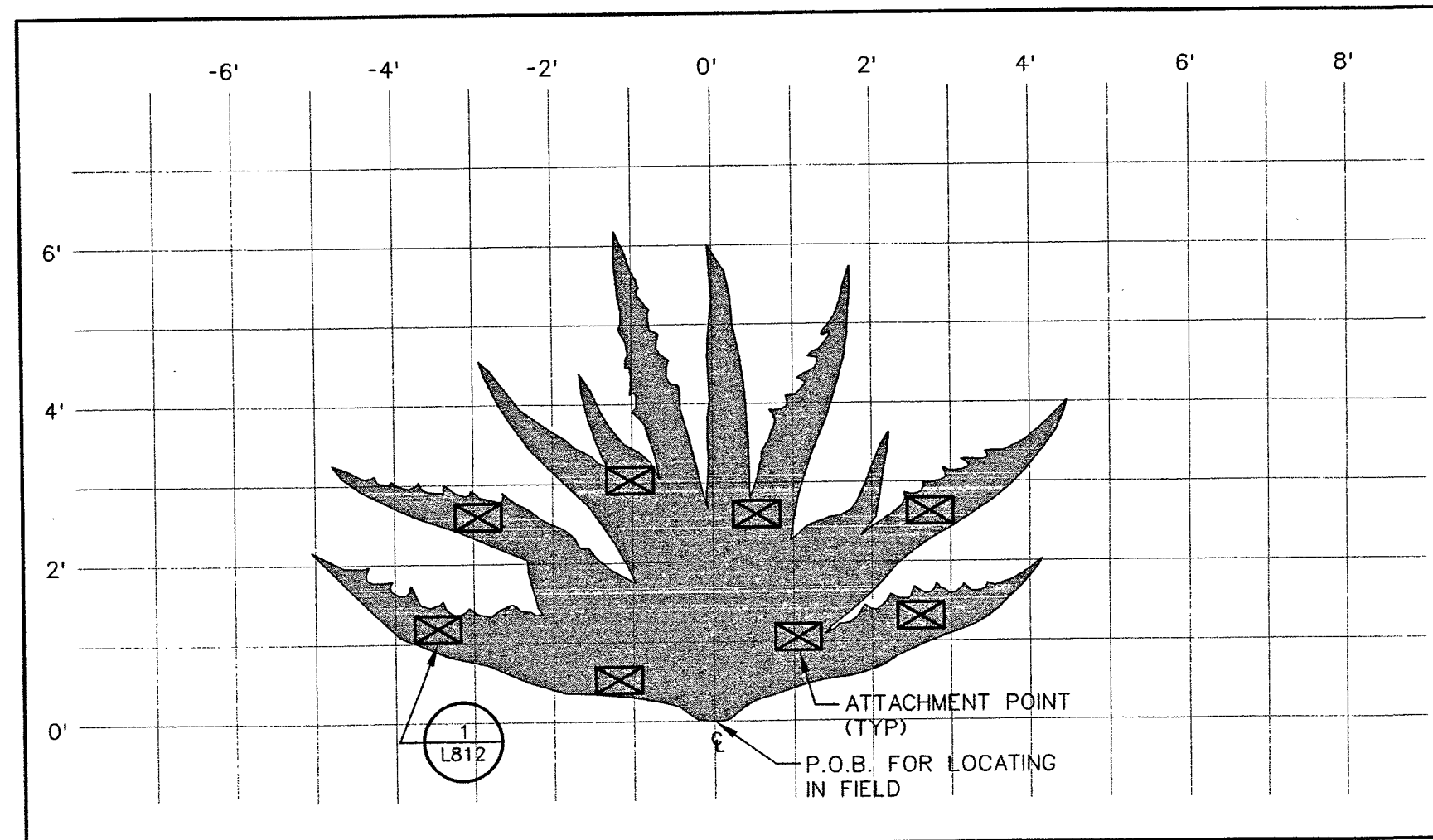
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STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

US-95 NORTHWEST

LANDSCAPE IMPROVEMENTS
IMAGE PANEL ATTACHMENT
ON WALLS
STRUCTURAL DETAILS

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NEVADA	NH-095-2(051)	CLARK	L807

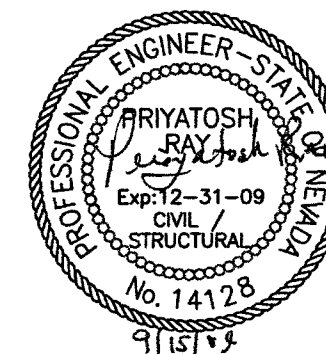


"6FT AGAVE"

1 IMAGE PANEL "D-1"
SCALE: 1/2"=1'-0"

NOTES:

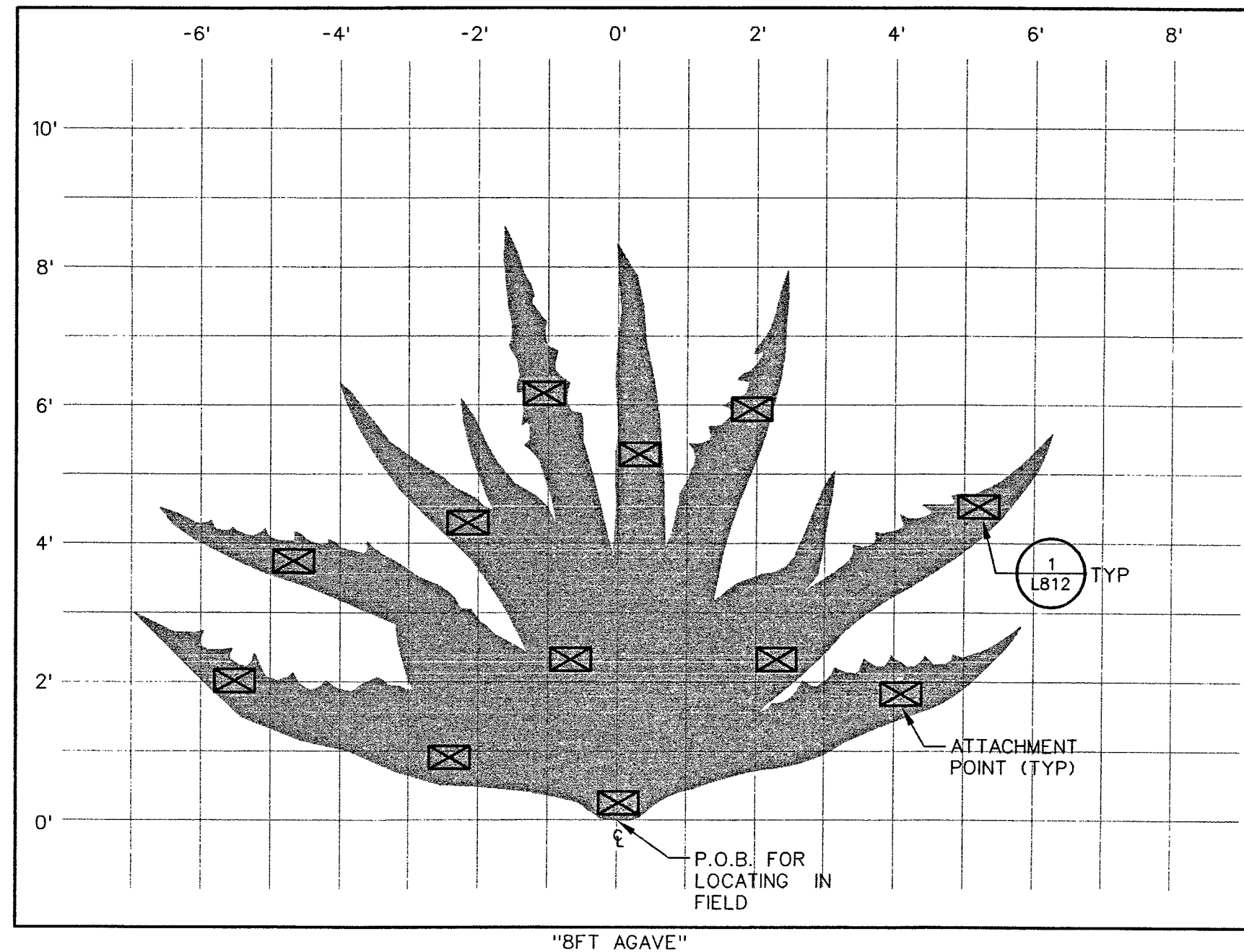
- 1: 3/16" GALVANIZED PLATE (D-1)
- 2: SEE SHEET L812 FOR ANCHORING CONNECTION DETAIL  DENOTES ANCHORS WHERE 1/2"Ø BOLT REQD.



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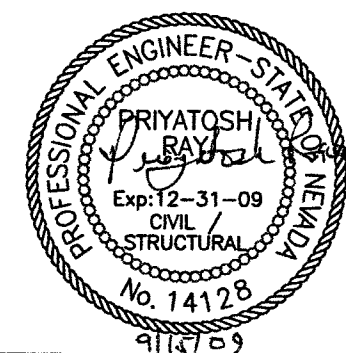
STATE	PROJECT NO.	COUNTY	SHEET NO.
NEVADA	NH-095-2(051)	CLARK	LB08



NOTES:

- 1: 3/16" GALVANIZED PLATE (D-2)
- 2: SEE SHEET L812 FOR ANCHORING CONNECTION DETAIL  DENOTES ANCHORS WHERE 1/2"Ø BOLT REQD.

1 IMAGE PANEL "D-2"
SCALE: 1/2"=1'-0"



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