STRUCTURAL NOTES:

1. ALL FASTENERS INTO PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED.
2. ALL TRUSSES, RAFTERS AND JOISTS SHALL HAVE SOLID BLOCKING AT POINTS OF BEARING.
3. GAP ALL SHEATHING AS PER MANUF. SPECS. INSTALL H-CLIPS ON 7/16 OSB OR 1/2 PLY ROOF SHEATHING WHEN SPAN IS EXCESS OF 12" O/C SPACING.
4. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED UNLESS SPECIFICALLY NOTED OR APPROVED BY ENGINEER.
5. DOUBLE TOP PLATES ARE TO HAVE A MIN. 48" LAP SPLICE W/ (10) 16D NAILS STAGGERED EACH SIDE OF SPLICE. SPLICE SHALL OCCUR CENTERED OVER STUD.
6. WHERE TOP PLATE IS NOT CONTINUOUS OVER TOP OF BEAM INSTALL STRAP (IE. MSTC40) PER CODE FOR TRANSFER OF TENSILE FORCES.
7. STRUCTURAL LOOKOUTS SHALL BE SPACED NO MORE THAN 48" O/C AT GABLE ENDS.
8. USE 2X6 DF NO. 2 STUDS @ 16" O/C FOR FRAMING OF ALL EXT. WALLS U.N.O. MIDSPAN BLOCKING SHALL BE WITHIN 24" OF MID HEIGHT OF WALL
9. WHERE SHEARWALLS INTERSECT AT CORNERS ATTACH SHEARWALL CHORDS W/ 16D NAILS @ 6" O/C STAGGERED.
10. SHEARWALLS SHALL ONLY SHARE A COMMON HOLDOWN IF THE GROSS UPLIFT FORCE IS LESS THAN 2,500 LBS PER EACH SHEAR WALL
11. ALL INTERIOR WALLS AND CEILINGS SHEATHED WITH 7/16" OSB W/ 8D NAILS @ 6" O/C EDGES, 12" O/C FIELD.
12. GABLE END TRUSSES ABOVE SWL 1 & SWL 5 SHALL BE SHEATHED WITH 7/16" OSB W/ 8D NAILS @ 6" O/C EDGES, 12" O/C FIELD, BLOCK ALL PANEL EDGES. IF WEB SPACING OF TRUSS IS IN EXCESS OF 24" O/C PROVIDE ADDITIONAL BLOCKING AS NECESSARY.

CONCRETE NOTES:

1. CONCRETE MIX, MINIMUM COMPRESSIVE STRENGTH 3000 PSI.
2. REINFORCING STEEL (REBAR) ASTM A-615 GRADE 60.
3. ALL WOOD/LUMBER IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED OR REDWOOD.
4. EXTEND ALL FOOTINGS DOWN TO UNDISTURBED SOIL OF THE SPECIFIED STRENGTH WITH A MIN. DEPTH OF 12" BELOW GRADE OR AS REQUIRED BY LOCAL BUILDING CODE, BASED ON LOCAL FROST LINE DEPTH.
5. CONCRETE FOOTINGS SHALL BE CENTERED BELOW THE WALL ABOVE UNLESS NOTED OTHERWISE.
6. CONCRETE FOOTING ALONG PERIMETER OF FOUNDATION SHALL BE A MINIMUM 12" X 18" X CONT. TURNED DOWN THICKENED EDGE SLAB WITH (2) #4 BARS HORIZONTAL CONT.
6. CONCRETE FOOTING BENEATH INTERIOR BEARING PARTITION SHALL BE A MINIMUM 16" X 12" X CONT. THICKENED SLAB WITH (2) #4 BARS HORIZONTAL CONT.
7. ANCHOR BOLTS SHALL BE MIN. (2) PER SILL PLATE SEGMENT AND WITHIN 4"-12" OF WALL CORNERS AND SILL PLATE ENDS.
8. CONCRETE SLAB SHALL BE MIN. 4" THICK WITH MIN. 3000 PSI STRENGTH W/ 6X6-W2.9XW2.9 WWM REINF.
9. ALL CONCRETE SLABS SHALL BE UNDERLAIN BY 4 IN. OF COMPACTED, FREE DRAINING GRANULAR MATERIAL SUCH AS "PEA" GRAVEL OR 3/4-1 IN. MINUS CLEAN GRAVEL

HEADERS								
Header #	Ply	Span (ft)	Load (plf)	Size	Type	Species	Grade	Trimmers
HD1	3	8	628	2 x 10	Sawn Lumber	DF	No. 2	(1) 2x6
HD2	3	8	141	2 x 10	Sawn Lumber	DF	No. 2	(1) 2x6
HD3	2	3	141	2 x 10	Sawn Lumber	DF	No. 2	(1) 2x6

TIES, STRAPS & HANGERS		
Location	Part No.	Instructions
TRUSS/TOP PLATE	H1	Tie ends of rafters and trusses to ext. wall top plate.
TRUSS/TOP PLATE	H8 or H10A	Tie ends of rafters and trusses to ext. wall top plate for all truss bearing points with uplift greater than 600 lbs. See truss shop drawings.
LOOKOUT/TRUSS	H4	Tie all lookouts to top chord of gable end trusses or rafters.
WALL TOP PLATE	MSTC40	Tie top plate to beam where top plate is not continuous over beam.

BUILDING CODE COMPLIANCE

THIS STRUCTURAL DESIGN WAS PREPARED TO COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING INDUSTRY CODES. LOCAL BUILDING CODES MAY REQUIRE MODIFICATIONS TO BOTH MATERIALS AND DESIGN.

2012 IBC
ASCE 7-10
ANSI TPI 1-2007
GA-600-2012
AWC NDS 2012
ACI 318-11
WSEC 2012

BUILDING DATA

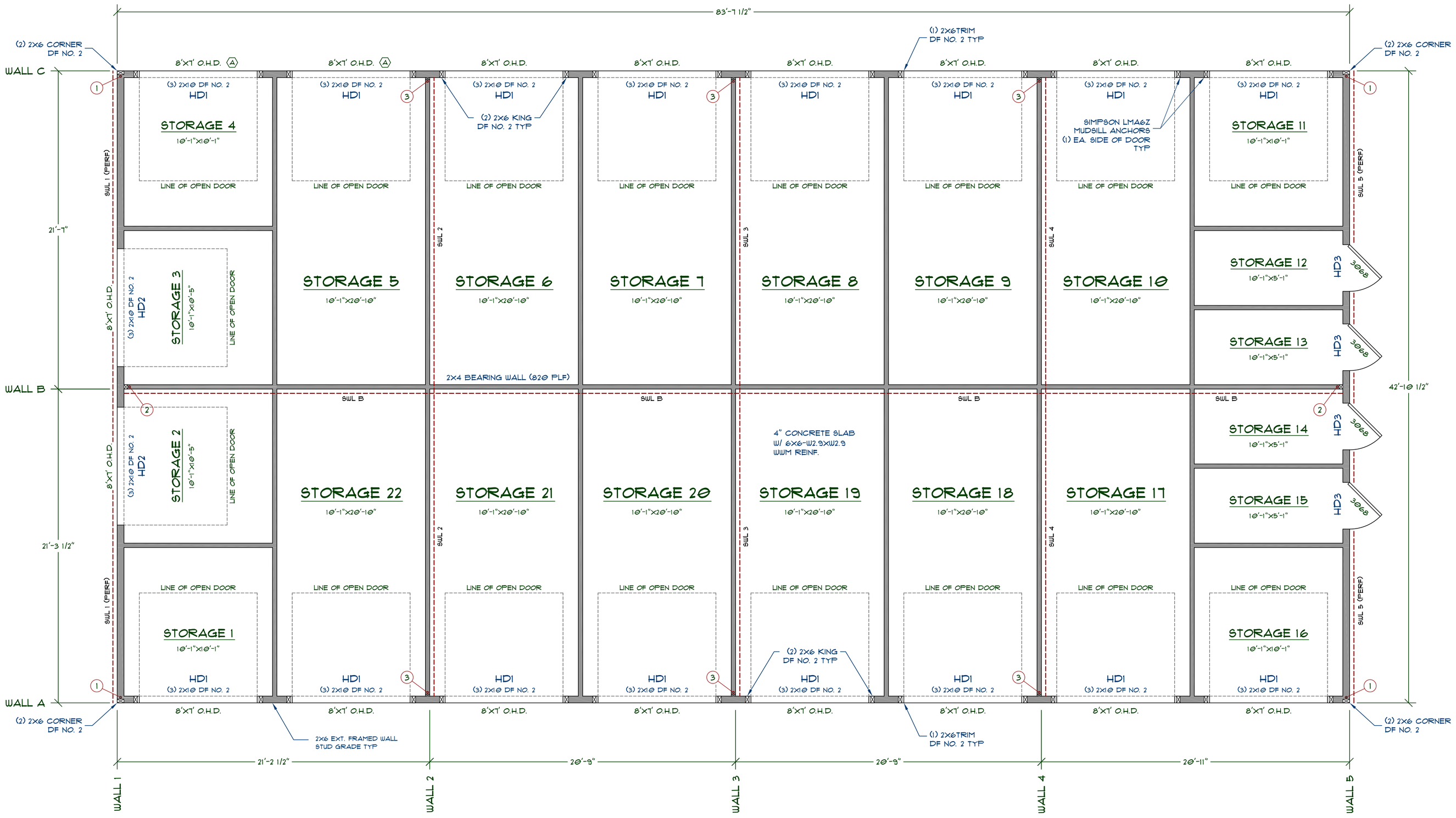
LENGTH: 83'-7 1/2"
WIDTH: 42'-10 1/2"
STUD WALL HEIGHT: 8'-1"
GRADE TO RIDGE HEIGHT: 16'-2"
EAVE HEIGHT: 8'-6"
TOTAL AREA: 3,585 SQFT

DESIGN CRITERIA

GROUND SNOW LOAD: 25 PSF
FROST LINE DEPTH: 12"
OCCUPANCY CLASSIFICATION: S-1
RISK CATEGORY: II
SNOW IMPORTANCE FACTOR: 1.0
WIND SPEED: 135 MPH (ULT)
TERRAIN EXPOSURE: C
WIND IMPORTANCE FACTOR: 1.0
WIND FACTOR ASD: 0.6
SITE CLASS: D (STIFF SOIL)
SEISMIC DESIGN CATEGORY: D
SEISMIC FACTOR ASD: 0.1
SEISMIC IMPORTANCE FACTOR: 1.0
FP CONSTRUCTION TYPE: V-B
SOIL BEARING CAPACITY: 1500 PSF

DESIGN LOADS

FLOOR DEAD LOAD: 10 PSF
FLOOR LIVE LOAD: 40 PSF
ROOF TC DEAD LOAD: 7 PSF
ROOF BC DEAD LOAD: 5 PSF
CEILING DEAD LOAD: 5 PSF
ROOF LIVE LOAD: 20 PSF
ROOF SNOW LOAD (P_s): 19.3 PSF
STAIR LIVE LOAD: 40 PSF
DECK LIVE LOAD: 60 PSF



SHEAR WALL PLAN

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

SHEATHING		
Location	Unit Shear (plf)	Specifications and Nailing Requirements
WALL SHEATHING	N/A	Building fully sheathed 7/16 OSB/PLY (APA Grade 24/16) with 8d nails @ 6" o/c edge, 12" o/c field. Nail all sheathing within 4 feet of wall corners w/ 8d nails @ 6" o/c edges, 12" o/c field.
ROOF SHEATHING	43/28	Roof fully sheathed 15/32 PLY (APA Grade 32/16) with 8d nails @ 6" o/c edge, 12" o/c field. Use 8d nails @ 4" o/c edge, 4" o/c field at overhangs and 6" o/c edge, 6" o/c field at perimeter and peak zones (4 ft.). Use "h" clips at all unsupported panel edges @ 24" o/c spacing.
SWL B SHEATHING	133	Shearwall sheathed 7/16 OSB/PLY (APA Grade 24/16) with 8d nails @ 6"o/c edge, 12" o/c field, Blocking required at panel edges.
SWL 1 SHEATHING	142	Shearwall sheathed 7/16 OSB/PLY (APA Grade 24/16) with 8d nails @ 6"o/c edge, 12" o/c field, Blocking required at panel edges.
SWL 2 SHEATHING	89	Shearwall sheathed 7/16 OSB/PLY (APA Grade 24/16) with 8d nails @ 6"o/c edge, 12" o/c field, Blocking required at panel edges.
SWL 3 SHEATHING	89	Shearwall sheathed 7/16 OSB/PLY (APA Grade 24/16) with 8d nails @ 6"o/c edge, 12" o/c field, Blocking required at panel edges.
SWL 4 SHEATHING	89	Shearwall sheathed 7/16 OSB/PLY (APA Grade 24/16) with 8d nails @ 6"o/c edge, 12" o/c field, Blocking required at panel edges.
SWL 5 SHEATHING	157	Shearwall sheathed 7/16 OSB/PLY (APA Grade 24/16) with 8d nails @ 6"o/c edge, 12" o/c field, Blocking required at panel edges.

SHEAR WALL LINES SHOWN IN RED								
SWL #	Shear (lbs)	Wall Length (ft)	Shear Length (ft)	Unit Shear (plf)	Wall Hgt. (ft)	Uplift (lbs)	Anchor	Chords
SWL B	10981	82.8	82.8	133	8.1	1075	DTT2Z & THD501200H	(2) 2X4 DF No. 2
SWL 1	2370	42.9	42.9 (PERF)	142	8.1	1152	DTT2Z & THD501200H	(2) 2X6 DF No. 2
SWL 2	3745	42	42	89	8.1	722	DTT2Z & THD501200H	(1) 2X4 DF No. 2
SWL 3	3745	42	42	89	8.1	722	DTT2Z & THD501200H	(1) 2X4 DF No. 2
SWL 4	3745	42	42	89	8.1	722	DTT2Z & THD501200H	(1) 2X4 DF No. 2
SWL 5	2248	42.9	42.9 (PERF)	157	8.1	1270	DTT2Z & THD501200H	(2) 2X6 DF No. 2

HOLDOWNS:

1. SHOWS LOCATION OF SST DTT2Z HOLDOWNS & THD5012008H (TITEN HD) SCREW ANCHOR (2) 2X6 CHORD, AB MIN. EMBEDMENT 5"
2. SHOWS LOCATION OF SST DTT2Z HOLDOWNS & THD5012008H (TITEN HD) SCREW ANCHOR (2) 2X4 CHORD, AB MIN. EMBEDMENT 5"
3. SHOWS LOCATION OF SST DTT2Z HOLDOWNS & THD5012008H (TITEN HD) SCREW ANCHOR (1) 2X4 CHORD, AB MIN. EMBEDMENT 5"

NOTE:

FLOOR PLANS DIMENSIONS ARE TO FACE OF FRAMING OR CENTERLINE OF OPENINGS TYP. AS SHOWN.

ATTENTION !

IT IS IMPORTANT FOR THE GENERAL CONTRACTOR TO UNDERSTAND THAT IT IS HIS/HER RESPONSIBILITY TO BE SURE THIS PROJECT IS CONSTRUCTED IN FULL COMPLIANCE WITH ALL STATE AND LOCAL CODES AND ORDINANCES. THE PLANS ARE NOT ALL INCLUSIVE OF ALL MINIMUM CODES AND ORDINANCES. THIS FACT DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH ALL MINIMUM STANDARDS. NO OMISSION FROM THESE PLANS GIVES PERMISSION FOR VIOLATION OF ANY CODE OR ORDINANCE. NO APPROVAL EVER GRANTS PERMISSION TO VIOLATE ANY CODE OR CITY ORDINANCE.

THE GREATEST EFFORT HAS BEEN MADE TO DRAW THESE PLANS WITHOUT ERROR. HOWEVER THERE IS NO GUARANTEE THAT THESE PLANS ARE WITHOUT ERROR. THE ARCHITECT, DRAFTSMAN & ENGINEER ARE TO BE HELD HARMLESS OF ANY FINANCIAL LIABILITY RESULTING FROM ERRORS IN THESE PLANS. ANY ONE USING THESE PLANS FOR CONSTRUCTION OF THIS BUILDING ACCEPT FULL RESPONSIBILITY. (CHECK PLANS CAREFULLY BEFORE AND DURING CONSTRUCTION)

COPYRIGHT © 2015 MEDEEK DESIGN INC.

MEDEEK ENGINEERING Inc.
3093 SR 109 COPALIS BEACH, WA 98535
(P) (425) 420-2715
DESIGN@MEDEEK.COM

REVISIONS
NO. DESCRIPTION

PLAN NO.
STORAGE8443
MINI-STORAGE BLDG.
SCALE: 1=8
REVISION: No. 1

DESIGNED BY: NPW
DATE: 8/4/2015

STRUCTURAL DETAILS

SHEET CONTENTS:
REVISION HISTORY:
CUSTOMER:
LOCATION:

SHEET
S1
OF 1