

DIRECTORY		
Approved TMRB Decision Proposal: INFORMATION FROM 800-IED-WISO-00401-000-00E		
INTERLOCKING DRIP SHIELD		
REQUESTER: SNL	SUPPLIER: BSC	
PARAMETER NAME OR DESCRIPTION OF REQUESTED INFORMATION	DATA	SOURCE
LA DRIP SHIELD GENERAL CONFIGURATION NOMINAL DIMENSIONS AND WEIGHTS * (ADDED PRIOR TO TMRB APPROVALS REQUIRED)	SEE TABLE 1	000-M00-SSE0-00101-000-00C 000-M00-SSE0-00102-000-00C 000-M00-SSE0-00103-000-00B
LA DRIP SHIELD ENVELOPE DIMENSIONS AND HANDLING WEIGHT (ADDED PRIOR TO TMRB APPROVALS REQUIRED)	SEE SOURCE, TABLE 1	000-M00-PECO-00101-000
LA DRIP SHIELD ASSEMBLY DRAWINGS (SEE SOURCE FOR DETAILS) (ADDED PRIOR TO TMRB APPROVALS REQUIRED)		
MOVED FROM 800-IED-MGR0-00401-000-00F		
REQUESTER: BSC	SUPPLIER: SNL	
DRIP SHIELD LOAD IN COLLAPSED LITHOPHYSAL ROCK (TMRB-2004-067) **	SEE SOURCE	DTN: M00407MWDLSLRCR.000
REQUESTER: SNL	SUPPLIER: BSC	
MATERIAL BASED MASS OF THE DRIP SHIELD COMPONENTS (TMRB-2004-096) **	SEE TABLE 2	000-00C-SSE0-00900-000-00A, Table 6.1-2
BASELINE AND BOUNDING MASS OF MATERIALS PER METER OF EMPLACEMENT DRIFT FOR THE DRIP SHIELD (TMRB-2004-096) **	SEE TABLE 3	000-00C-SSE0-00900-000-00A, Table 7.1-1
DIAGRAMS AND PLANS ON METHODS TO TRANSPORT AND EMPLACE DRIP SHIELDS (ADDED PRIOR TO TMRB APPROVALS REQUIRED)	SEE SOURCE	800-MH0-PECO-00101-000-00B 800-MH0-PECO-00201-000-00B
REQUESTER: BSC	SUPPLIER: SNL	
PHYSICAL AND CHEMICAL CHARACTERISTICS OF TI GRADES 7 AND 16 (ALLOY CHEMICAL COMPOSITIONS ELONGATION, EMISSIVITY, HEAT CAPACITY, METALS DENSITY, MODULUS OF DEFORMATION, POISSON'S RATIO, TENSILE STRENGTH, THERMAL CONDUCTIVITY, THERMAL EXPANSION COEFFICIENT, YIELD STRENGTH) (ADDED PRIOR TO TMRB APPROVALS REQUIRED)	SEE SOURCE	DTN: M00003RIB00073.000
REQUESTER: SNL	SUPPLIER: BSC	
DESIGN BASIS FOR SELECTION OF ALLOY 22 AS THE DRIP SHIELD BASE PLATE MATERIAL	THE DRIP SHIELD IS FABRICATED FROM ALLOY 22 (UNS N06022) FOR THE BASE PLATES TO PROVIDE LONG-TERM CORROSION RESISTANCE AND TO PREVENT DIRECT CONTACT BETWEEN THE TITANIUM DRIP SHIELD COMPONENTS AND THE STEEL MEMBERS IN THE INVERT	000-00C-SSE0-00100-000-00A, SECTION 5.1.2
OVERLAP DIMENSION BETWEEN ADJACENT INSTALLED DRIP SHIELDS *	320 mm	000-M00-SSE0-00102-000-00C
GENERAL CORROSION		
Approved TMRB Decision Proposal: TMRB-2007-013		
DTN PREVIOUSLY CITED BY BSC		
REQUESTER: BSC	SUPPLIER: SNL	
GENERAL CORROSION AND LOCALIZED CORROSION OF THE DRIP SHIELD FOR LA **	SEE SOURCE	DTN: M00408MWDGLDCDS.002
Approved TMRB Decision Proposal: TMRB-2007-016		
REQUESTER: SNL	SUPPLIER: BSC	
INTERLOCKING DRIP SHIELD SECTION D-D **	FIGURE 1	000-M00-SSE0-00102-000-00C, SECTION D-D
INTERLOCKING DRIP SHIELD DETAILS **	FIGURE 2	000-M00-SSE0-00102-000-00C
INTERLOCKING DRIP SHIELD SECTION N-N **	FIGURE 3	000-M00-SSE0-00102-000-00C, SECTION N-N
INTERLOCKING DRIP SHIELDS **	FIGURE 4	000-M00-SSE0-00103-000-00B
INTERLOCKING DRIP SHIELD SECTION DETAILS **	FIGURE 5	000-M00-SSE0-00102-000-00C, 000-M00-SSE0-00103-000-00B

LA DRIP SHIELD					
NOMINAL LENGTH	NOMINAL BASE WIDTH	NOMINAL SHOULDER WIDTH	NOMINAL HEIGHT	NOMINAL SHOULDER HEIGHT	HANDLING WEIGHT
228.5 in	99.8 in	89.8 in	113.6 in	87.0 in	11,600 lb

TABLE 1. LA DRIP SHIELD DIMENSIONS AND WEIGHT
Source: 000-M00-SSE0-00101-000-00C
000-M00-SSE0-00102-000-00C
000-M00-SSE0-00103-000-00B
000-M00-PECO-00101-000-00A

Material	Component	Mass, kg	Quantity
SB-575 N06022 (Alloy 22)	Base	54	2
	Stabilization Pin	0.07	10
	Stabilization Pin Washer	0.03	20
	DS Plate-1	831	1
	DS Plate-2	895	2
SB-265 R52400 (Titanium Grade 7 [Ti-7])	Internal Support Plate	16	10
	External Support Plate	44	10
	DS Connector Guide	31	2
	DSC Plate-1	97	1
	DSC Plate-2	102	2
SB-265 R56404 (Titanium Grade 29 [Ti-29])	DSC Connector Guide	31	2
	Bulkhead	47	4
	Peripheral Bulkhead	59	2
	Bulkhead Longitudinal Stiffener	12	15
	Bulkhead Flange	13	8
	Right Support Beam-Connector	30	2
	Left Support Beam-Connector	30	2
	Support Beam-Large	45	8
	DSC Left Support Beam	24	1
	DSC Right Support Beam	24	1
Lifting Feature Front Plate	1	4	
Lifting Feature Side Plate	1	4	
Lifting Feature Top Plate	2	8	

TABLE 2. MATERIAL BASED MASS OF THE DRIP SHIELD COMPONENTS
Source: 000-00C-SSE0-00900-000-00A, Table 6.1-2

Material	Location	Baseline Mass		(Excel Calculated) Upper Bound Mass	
		Kg / assembly	Kg / meter	Kg / assembly	Kg / meter
SB-575 N06022	Drip Shield	109	19.87	119.9	21.66
	Total Alloy 22				
SB-265 R52400	Drip Shield	3,646		4,010.6	
	Total Ti-7		664.722		731.194
SB-265 R56404	Drip Shield	1,142		1,256.2	
	Total Ti-29		208.204		229.025
Total		4,897		5,386.70	

TABLE 3. BASELINE AND BOUNDING MASS OF MATERIALS PER METER OF EMPLACEMENT DRIFT FOR THE DRIP SHIELD
Source: 000-00C-SSE0-00900-000-00A, Table 7.1-1

FOR PURPOSES OF THE INTERFACE BETWEEN BSC AND SNL, DRIP SHIELD COMPONENT BASELINE MASSES HAVE BEEN ESTABLISHED AS NOMINAL VALUES WITH A +10% / -0% TOLERANCE.

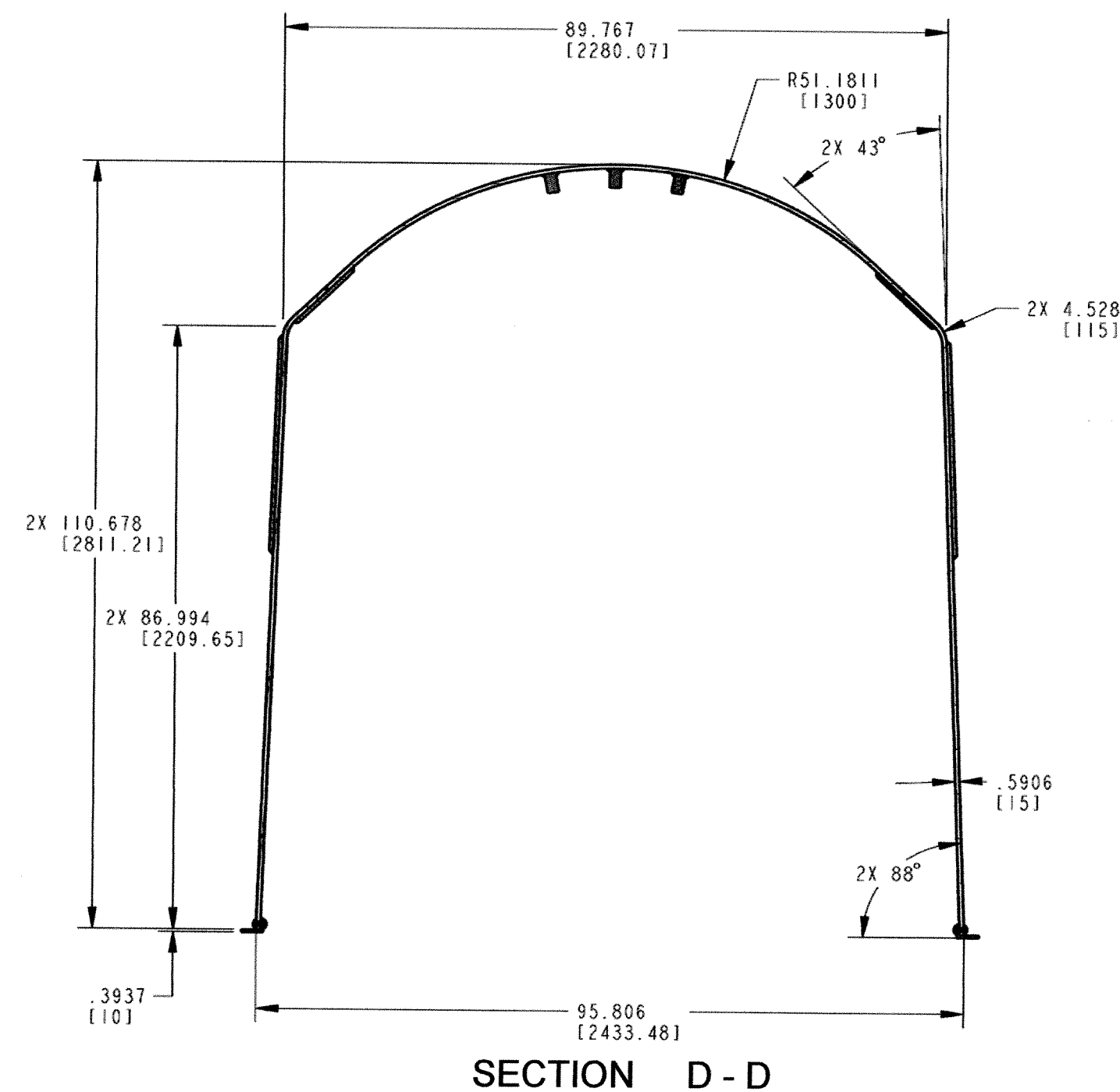


FIGURE 1. INTERLOCKING DRIP SHIELD SECTION D-D
Source: 000-M00-SSE0-00102-000-00C

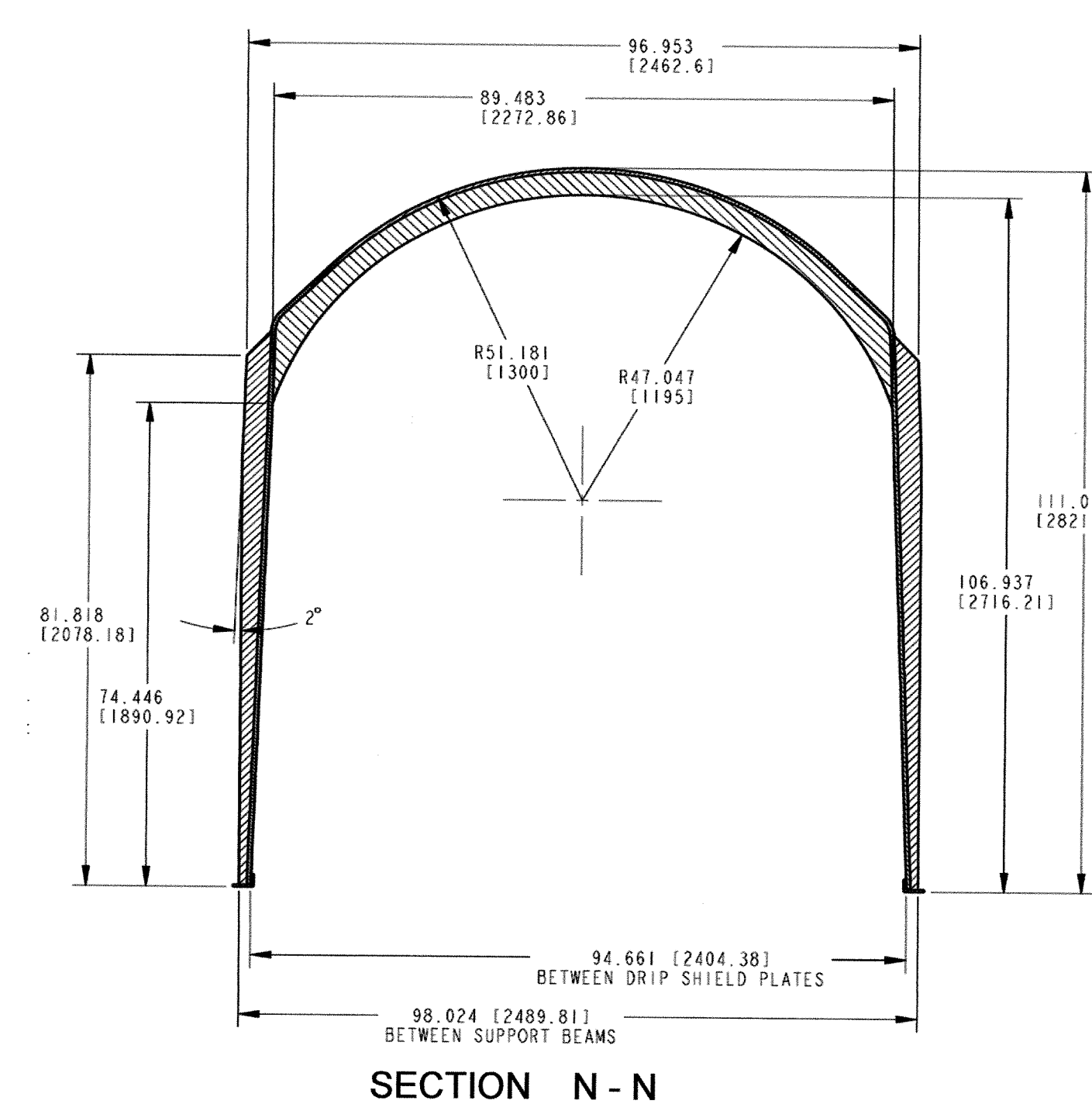


FIGURE 3. INTERLOCKING DRIP SHIELD SECTION N-N
Source: 000-M00-SSE0-00102-000-00C

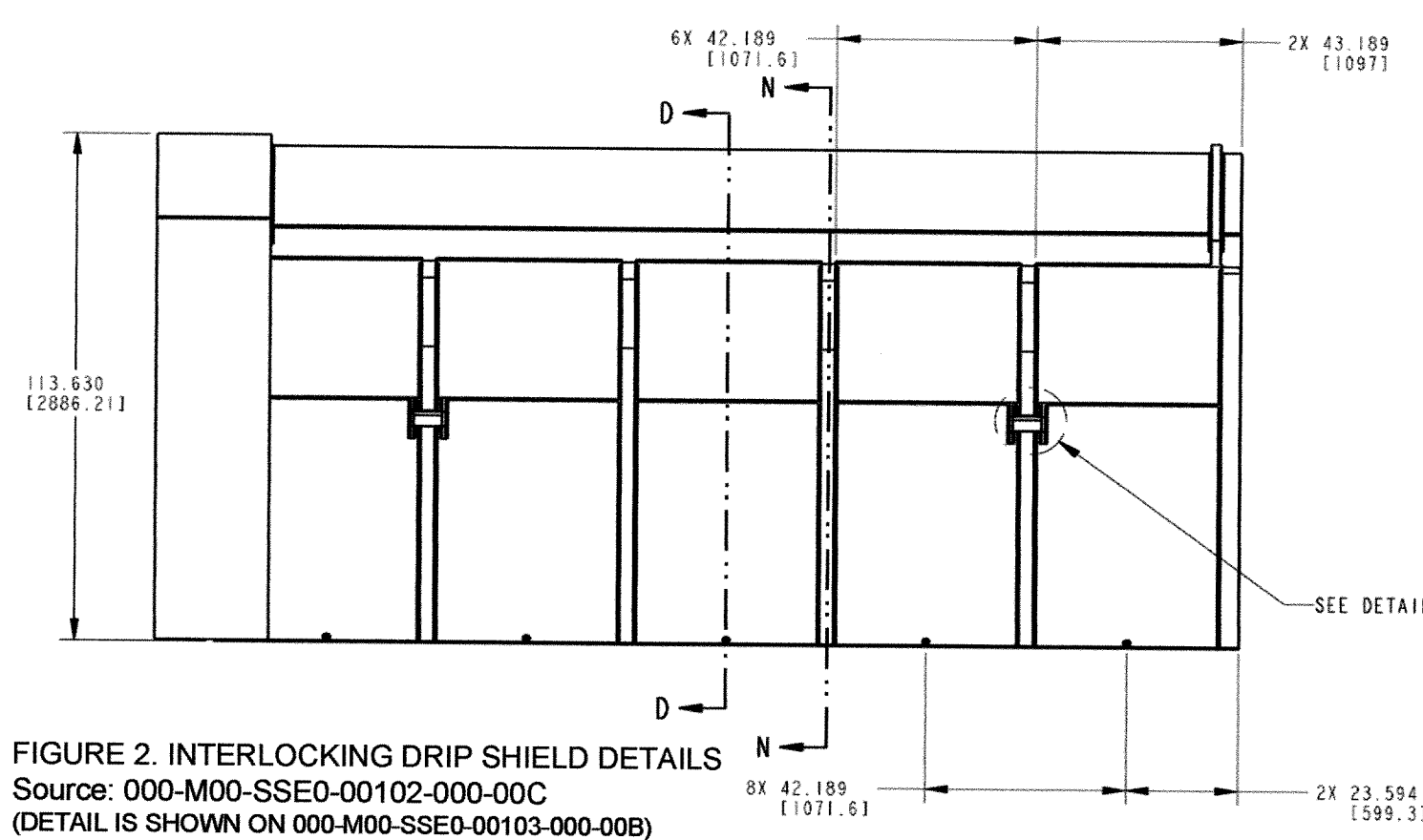


FIGURE 2. INTERLOCKING DRIP SHIELD DETAILS
Source: 000-M00-SSE0-00102-000-00C
(DETAIL IS SHOWN ON 000-M00-SSE0-00103-000-00B)

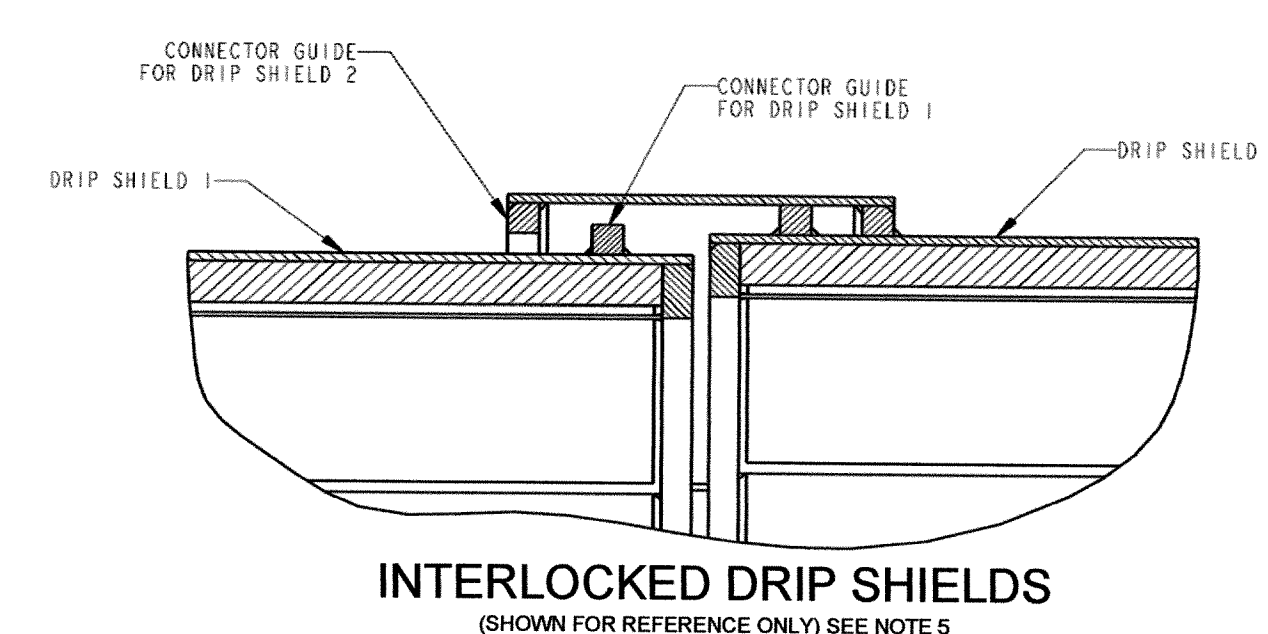


FIGURE 4. DETAIL - INTERLOCKED DRIP SHIELDS
Source: 000-M00-SSE0-00103-000-00B

DESIGN INPUTS
SEE DOCUMENT INPUT
REFERENCE SYSTEM (DIRS)
AND INFOWORKS

THIS DRAWING IS PRELIMINARY AND NOT INTENDED FOR CONSTRUCTION, PROCUREMENT OR FABRICATION.

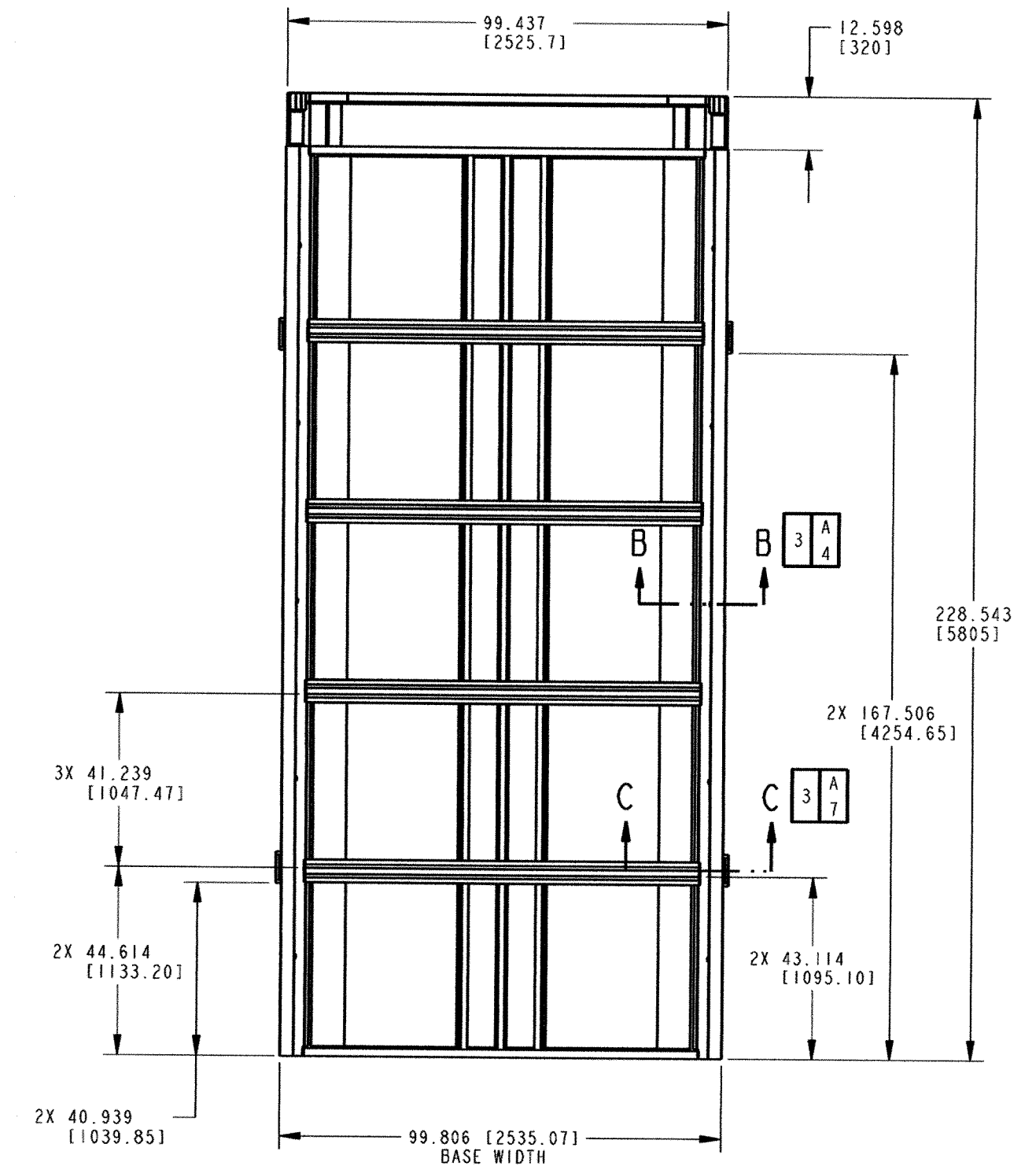


FIGURE 5. INTERLOCKING DRIP SHIELD SECTION DETAILS
Source: 000-M00-SSE0-00102-000-00C
(SECTION DETAILS ARE SHOWN ON 000-M00-SSE0-00103-000-00B)

- GENERAL NOTES:
- * DENOTES TECHNICAL INFORMATION THAT HAS CHANGED FROM SUPERSEDED DOCUMENT
 - ** DENOTES TECHNICAL INFORMATION NOT PROVIDED ON SUPERSEDED DOCUMENT
 - REVISION A NOTE:
THIS DRAWING SUPERSEDES 800-IED-WISO-00401-000-00E AND INCORPORATES FROM IT CALCULATION RESULTS I AND TABLES 1,2,3,4,5,9,10, AND 11 AS TABLES 1 THROUGH 8. THIS DRAWING ALSO IMPLEMENTS IN PART TMRB-2005-049 REV 01. DELETED EXTRANEOUS INFORMATION FROM CALCULATION RESULTS I.
 - REVISION B NOTE:
REDRAWN DUE TO EXTENSIVE CHANGES. REFORMATTED TITLE BLOCK, UPDATED SAFETY CLASSIFICATION. ADDED DRIP SHIELD INFORMATION FROM 800-IED-WISO-00401-000-00E AND 800-IED-MGR0-00401-000-00F. REMOVED REFERENCE TO ANL-DSD-MD-000001 FOR CORROSION RATE IN RESPONSE TO CR 10388.
INCORPORATED APPROVED TMRB DECISION PROPOSALS:
TMRB-2006-020 - WASTE EMPLACEMENT PALLET GENERAL CORROSION DATA MOVED TO 800-IED-SSE0-00201-000-00A AND ADDRESSED CONCERN IDENTIFIED IN CR 9462
TMRB-2007-016 - UPDATE INTERLOCKING DRIP SHIELD DIMENSIONS TO CURRENT APPROVED INFORMATION.
REVISED INFORMATION BASED ON ROCKFALL CALCULATION WORKSCOPE BEING TRANSFERRED TO SNL AND REMOVED OUT-DATED HEAT TREATMENT INFORMATION.
 - THE INTERLOCKED DRIP SHIELDS ARE SHOWN WITH SOME OFFSET FOR CLARITY. ALL MATING SURFACES ARE COMPLETELY FLUSH ON ASSEMBLY.

SAFETY CATEGORY CLASSIFICATION OF SYSTEMS AND SUBSYSTEMS.
[DRIP SHIELDS ARE CLASSIFIED AS 'IMPORTANT TO WASTE ISOLATION' (ITWI)].

SOURCE: 000-3DR-MGR0-00300-000-000, Section 8.1.2, page 94

REV	DESCRIPTION	DATE	ML	RHS	MJ	MM	CH	PRD	DT	BR	JK
00B	SEE REVISION B NOTE (ABOVE)	6/7/07									
00A	SEE REVISION A NOTE	10/17/06									
REV	DESCRIPTION	DATE	DRN	ORG	CHK	REQ	REQ	REQ	QER	DA	IED CM
APPROVALS	INITIAL/DATE										
DRAWN BY	M.L. Leitner	10/4/06									
ORIGINATOR	R.H. Spencer	10/4/06									
CHECKED BY (SUPPLIER)	SEE CHECKERS										
CHECKER'S MANAGER	M.J. Johnson	10/9/06									
REQUESTER	C. Howard	10/10/06									
REQUESTER'S MANAGER	P. Dixon	10/12/06									
QUALITY ENGINEERING REP	D.J. Tunney	10/16/06									
DESIGN AUTHORITY	B.E. Rusinko	10/16/06									
BSC IED COORDINATOR	J.K. Kliner	10/17/06									

U.S. DEPARTMENT OF ENERGY
Office of Civilian Radioactive Waste Management
BECHTEL Management and Operation of the Office of SAIC
SAIC COMPANY, LLC Civilian Radioactive Waste Management Program

IED INTERLOCKING DRIP SHIELD

SAFETY CATEGORY: ITWI
DOCUMENT IDENTIFIER: 800-IED-SSE0-00101-000
SCALE: NONE
FILENAME: 800-IED-SSE0-00101-000-00B.vsd
REV: 00B