

CONTAINMENT ENCLOSURE:

THE ABRASIVE BLASTING CONTAINMENT SYSTEM SHALL CONFORM TO THE REQUIREMENTS OF OSHA 1926 SUBPART L, OSHA 29 CFR 1910.28, ANSI A10.8 AND SSPC GUIDE 6

ALL ABRASIVE BLAST CLEANING CONTAINMENTS, INCLUDING GROUND COVER, SIDEWALLS AND ENDWALLS, SHALL BE CONSTRUCTED OF 100% AIR IMPERMEABLE FIRE RESISTANT TARPULINS. ADJACENT TARPULIN PANELS SHALL BE FASTENED TOGETHER BY ROLLING AND CLAMPING OR BY CLAMPING TO LUMBER TO CREATE A CONTINUOUS IMPENETRABLE SEAL. THE CONTRACTOR MAY USE ANY APPROPRIATE METHOD AVAILABLE (TAPE, SPRAY FOAM, ETC) TO PROVIDE A CONTINUOUS SEAL TO CONTAIN DUST EMISSIONS (ABRASIVE BLASTING) AND/OR SOLVENT CLEANING/WATER WASHING OPERATIONS. SEE MISCELLANEOUS CONTAINMENT DETAILS SHEETS.

FOR BRIDGE TO GRADE CONTAINMENTS, THE TARPULIN BASE SHALL BE SEALED WITH SANDBAGS OR SIMILAR WEIGHTS. FOR SSPC CLASS 1A CONTAINMENTS, LUMBER PLANKS OR ALUMINUM SCAFFOLDS SHALL BE PLACED BELOW THE SANDBAGS TO PROVIDE A "CONTINUOUS" SEAL. FOR CLASS 2A CONTAINMENTS (OR LESSER), USE SANDBAGS OR SIMILAR WEIGHTED MATERIAL AT 5 FT (±) INTERVALS. FOR VERTICAL CONTAINMENTS, THE CONTRACTOR MAY UTILIZE CABLES ANCHORED WITH WEIGHTS OR ANCHORED TO THE GROUND TO SUPPORT THE VERTICAL TARPULIN WALLS.

FOR PLATFORM AND CABLE SUPPORTED CONTAINMENTS, TARPULIN WALLS SHALL BE SECURED TO APPROPRIATE BRIDGE ELEMENTS TO SEAL THE ENCLOSURE.

EXISTING BRIDGE DRAINS ENCLOSED WITHIN THE PAINT CONTAINMENT STRUCTURE SHALL BE TEMPORARILY PLUGGED OR WATER RUNOFF DIRECTED AWAY FROM THE CONTAINMENT ENCLOSURE AS SPECIFIED OR PERMITTED IN THE CONTRACT SPECIFICATIONS. AT THE CONCLUSION OF EACH WORKDAY, ALL PLUGGED DRAINS SHALL BE UNPLUGGED TO RESTORE DECK DRAINAGE. AT THE CONCLUSION OF THE BRIDGE CLEANING AND PAINTING OPERATIONS, RESTORE BRIDGE DRAINAGE TO THE SATISFACTION OF THE ENGINEER.

WHEN ABRASIVE BLASTING IS PERFORMED NEAR THE TARPULIN WALL, THE ABRASIVE BLAST SHALL BE DIRECTED AWAY FROM THE TARPULIN WALL. WHEN WORK IS PERFORMED NEAR AN INLET OPENING, THE OPENING SHALL BE TEMPORARILY SEALED TO MINIMIZE LOSS OF EMISSIONS.

TARPULINS SHALL BE 100% AIR/WATER IMPERMEABLE TO CONTAIN THE WASTE WATER AND BLASTING DEBRIS AND ALLOW FOR VACUUMING.

FOR SSPC TYPE 1A CONTAINMENTS, WORKERS SHALL ACCESS EACH CONTAINMENT THROUGH DOUBLE DOOR AIRLOCK ENTRANCE WHICH ALLOWS THE WORKERS TO SEAL ONE DOOR PRIOR TO ENTERING/EXITING THE CONTAINMENT THROUGH THE OTHER DOOR. TARPULIN DOORS SHALL BE CLOSED AND SEALED DURING BLASTING OPERATIONS TO PREVENT LOSS OF EMISSIONS. MINIMIZE PASSAGE IN AND OUT OF CONTAINMENT STRUCTURES DURING BLASTING OPERATIONS. DURING SANDBLASTING OPERATIONS, ALL WORKERS/PERSONNEL SHALL BE CLEANED WITH A HEPA VACUUM PRIOR TO LEAVING THE CONTAINMENT.

FOR SSPC TYPE 2A CONTAINMENTS (OR LESSER), WORKERS SHALL ACCESS EACH CONTAINMENT THROUGH OVERLAPPING TARPULIN DOORS. TARPULIN DOORS SHALL BE CLOSED AND SEALED DURING BLASTING OPERATIONS TO PREVENT LOSS OF EMISSIONS. MINIMIZE PASSAGE IN AND OUT OF CONTAINMENT STRUCTURES DURING BLASTING OPERATIONS. SEE MISCELLANEOUS CONTAINMENT DETAILS SHEETS.

AT THE CONCLUSION OF EACH WORK DAY, THE CONTRACTOR SHALL THOROUGHLY COLLECT AND REMOVE ALL SPENT ABRASIVE MATERIAL AND DEBRIS GENERATED FROM THE BLASTING AND PAINTING ACTIVITIES USING A VACUUM TRUCK AND/OR PUMP. DURING SANDBLASTING OPERATIONS, ALL WORKERS/PERSONNEL SHALL BE CLEANED WITH A HANDHELD HEPA VACUUM PRIOR TO LEAVING THE CONTAINMENT.

CONTAINMENT NOTES:

ALL WORK SHALL BE ASSEMBLED IN ACCORDANCE WITH THESE DRAWINGS, THE MANUFACTURER'S INSTRUCTIONS AND CRITERIA, INDUSTRY GUIDELINES AND THE MOST CURRENT EDITION OF ALL FEDERAL, STATE AND LOCAL REGULATIONS, STATUTES ORDINANCES, AND THE PROJECT SPECIFICATIONS. A2B ENGINEERING, LLC SHALL BE NOTIFIED WHERE DISCREPANCIES EXIST BETWEEN THESE DRAWINGS AND THE MANUFACTURER'S INSTRUCTIONS TO VERIFY THE APPROPRIATE CRITERIA.

THE CONTRACTOR IS SOLELY RESPONSIBLE TO ENSURE THAT ALL FALL PROTECTION IS INSTALLED PER OSHA AND PROJECT SPECIFICATIONS.

PRIOR TO CONSTRUCTION OF THE PAINT CONTAINMENT STRUCTURE ALL MATERIAL SHALL BE THOROUGHLY INSPECTED TO ENSURE THAT THEY CONTAIN NO DEFICIENCIES THAT WILL COMPROMISE THE STRUCTURAL INTEGRITY OF THE PAINT CONTAINMENT STRUCTURE. THE CONTRACTOR SHALL PERFORM PERIODIC INSPECTIONS OF THE PAINT CONTAINMENT STRUCTURE TO ENSURE THE STRUCTURAL INTEGRITY OF THE STRUCTURE REMAINS SECURE.

VENTILATION SYSTEM:

THE CONTRACTOR SHALL PROVIDE MECHANICAL EXHAUST VENTILATION FOR THE ABRASIVE BLASTING CONTAINMENT STRUCTURES USING ONE OR MORE MOBILE DUST COLLECTORS. THE CONTRACTOR PROPOSES TO USE ONE (1) 45,000 AT 13" W.G. CFM MOBILE DUST COLLECTOR MANUFACTURED BY ADVANCED RECYCLING SYSTEMS, INC. THE DUST COLLECTOR HAS AN ASSUMED DUST EXHAUST CAPACITY BASED ON THE NUMBER OF DUCTS PROVIDED AS:

- EXHAUST CAPACITY WITH 4 - 20 INCH DIAMETER DUCTS: 48,000 CFM
- EXHAUST CAPACITY WITH 3 - 20 INCH DIAMETER DUCTS: 45,000 CFM
- EXHAUST CAPACITY WITH 2 - 20 INCH DIAMETER DUCTS: 40,000 CFM
- EXHAUST CAPACITY WITH 1 - 20 INCH DIAMETER DUCT: 24,000 CFM

REFER TO PLAN SHEETS FOR NUMBER OF EXHAUST DUCTS AND INLET AREA REQUIREMENTS.

THE MAIN OBJECTIVE FOR USING THE NEGATIVE AIR EXHAUST VENTILATION SYSTEM IS TO CONTAIN AIRBORNE PARTICULATE WITHIN THE CONTAINMENT STRUCTURE AND PROVIDE AIR FLOW THROUGH THE CONTAINMENT STRUCTURE. CONTAINMENT SIDEWALLS, ENDWALLS AND GROUND COVERS SHALL BE CONSTRUCTED AND SEALED TO PREVENT EXCESSIVE LEAKS BETWEEN THE PANELS AND ALONG THE GROUND. A PRELIMINARY VENTILATION SYSTEM TEST OF EACH CONTAINMENT SHALL BE PERFORMED PRIOR TO STARTING ABRASIVE BLASTING OPERATIONS. AIR FLOW THROUGH THE CONTAINMENT SHALL BE VERIFIED AT MULTIPLE LOCATIONS THROUGHOUT THE CONTAINMENT USING A HAND-HELD MANOMETER. IF THE EXHAUST VENTILATION SYSTEM IS UNABLE TO ACHIEVE THE SPECIFIED AIR FLOW THROUGH THE CONTAINMENT STRUCTURE OR ADEQUATELY REMOVE AIRBORNE PARTICULATE MATTER, THE CONTRACTOR SHALL PROVIDE ADDITIONAL DUST COLLECTORS AND EXHAUST DUCTS, OR REDUCE THE SIZE OF THE ACTIVE PAINT CONTAINMENT ENCLOSURE BY INSTALLING INTERNAL TARPULIN WALLS. THE EXHAUST VENTILATION SYSTEMS SHALL REMAIN IN OPERATION DURING CLEANING AND VACUUMING OPERATIONS.

NO. OF 20" Ø DUCTS PROVIDED	4	3	2	1
VOLUME Q, CFM	48,000	45,000	40,000	24,000
MAX. CONTAINMENT AREA, SQ. FT. (V=100 FT/MIN.)	480.0	450.0	400.0	240.0
MIN. CONTAINMENT AREA, SQ. FT. (V=300 FT/MIN.)	160.0	150.0	133.3	80.0
MAX. INLET AREA, SQ. FT. (V=700 FT/MIN.)	68.6	64.3	57.1	34.3
MIN. INLET AREA, SQ. FT. (V=1000 FT/MIN.)	48.0	45.0	40.0	24.0

SUBMITTAL REVIEW

Review is only for general conformity to the contract drawings and specifications and shall not relieve the contractor of his entire responsibility under the contract, including among other things, dimensions to be confirmed and correlated at the job site, and information that pertains to the fabrication processes or to techniques of construction.

NO EXCEPTIONS TAKEN

MAKE CORRECTIONS NOTED

RESUBMITTAL NOT REQUIRED

AMEND AND RESUBMIT

REJECTED - SEE REMARKS

PB AMERICAS, INC.

BY: *Mark Sargent*

DATE: *5/17/16*

Vermont Agency of Transportation
RECEIVED
 ON: **May 10, 2016**
 and Checked for
CONFORMANCE
 BY: Mark Sargent DATE: 05/13/2016



REVISIONS		DESCRIPTION	DATE	BY	PROJECT NO.	SHEET NO.	PROJECT NAME	PROJECT FILE
02/21/16	LRS							
MONOKO, LLC. 1037 PENINSULA AVENUE TARPON SPRINGS, FL 34689 PHONE (727) 940-3244 FAX (727) 279-8795		PAUL STEULEN P.E. P.E. LICENSE NUMBER 107795 A2B ENGINEERING, LLC. 5406 N. HOOVER BLVD., SUITE 12 TAMPA, FL 33634	DRAWN BY: BDN 11/15 CHECKED BY: PDB 11/15 DESIGNED BY: MAT 11/15 CHECKED BY: PRS 11/15	COUNTY: BERNINGTON PROJECT ID: BF BPNT 1161	FIVE BRIDGES ON OR OVER US ROUTE 7		SHEET NO. C-3	