



- GENERAL NOTES:
- ALL WORK SHALL CONFORM TO THE 2003 MICHIGAN DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION.
 - ALL KNOWN UNDERGROUND VAULTS OR AREAWAYS ARE SHOWN ON THE PLANS IN THEIR APPROXIMATE LOCATIONS AS, "POSSIBLE AREAWAY".
 - SHOULD AN UNDERGROUND VAULT BE DISCOVERED DURING REMOVAL OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY CEASE REMOVAL OPERATIONS AND THEN INFORM THE ENGINEER.
 - IF THE UNDERGROUND VAULT DOES NOT CONFLICT VERTICALLY WITH THE NEW WORK AND GRADES, THE NEW WORK SHALL BE COMPLETED.
 - SHOULD IT BE FOUND THAT AN UNDERGROUND VAULT INTERFERES VERTICALLY WITH THE NEW WORK, THE ENGINEER SHALL THEN CONTACT THE OWNER AND SHALL MAKE A DECISION AS TO WHETHER THE CONFLICTED AREA SHALL BE FILLED IN OR A NEW STRUCTURAL ROOF, AT A LOWER TOP ELEVATION BE CONSTRUCTED.
 - SHOULD IT BE DECIDED TO RECONSTRUCT A PORTION OF THE EXISTING ROOF, OR TO BACKFILL A PORTION OF THE AREAWAY, THE ENGINEER SHALL THEN DIRECT THE CONTRACTOR AS TO WHICH DETAILS, AS SHOWN ON THIS SHEET, TO USE AND SHALL THOROUGHLY INSPECT THE WORK TO CONFIRM THAT IT WAS COMPLETED IN ACCORDANCE WITH THESE TYPICAL DETAILS AND THE MDT STANDARD SPECIFICATIONS.
 - THE CONTRACTOR SHALL INSTALL PROTECTIVE FENCING TO PROTECT AND BLOCK ACCESS TO THE SITE BY THE PUBLIC. LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
 - SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO ENTER THE AREAWAY, THE CONTRACTOR SHALL HAVE A WRITTEN CONFINED SPACE CONSTRUCTION SAFETY PROGRAM BASED ON MIOSHA PART 90 AND PART 490. THE CONTRACTOR SHALL COMPLY WITH MIOSHA REQUIREMENTS FOR ANY CONFINED SPACE ENTRY LOCATIONS.
 - IF IT IS SUSPECTED THAT THE UNDERGROUND VAULT CONTAINS ASBESTOS, LEAD PAINT OR OTHER HAZARDOUS MATERIALS THE ENGINEER SHALL HAVE A QUALIFIED TESTING AGENCY EXAMINE THE SITE TO MAKE AN ASSESSMENT AND TO MAKE RECOMMENDATIONS FOR ABATEMENT, IF NECESSARY. THIS WORK WILL BE PAID FOR ON A FORCE ACCOUNT BASIS.
 - REMOVALS OF THE EXISTING ROOF AS WELL AS PORTIONS OF ANY WALLS REMOVED SHALL BE PAID FOR AS "MASONRY AND CONC STRUCTURE, REM". ALL OTHER REMOVALS IN THE AREAWAY SHALL BE PAID FOR AS "BASEMENT CLEANOUT, MODIFIED".
 - NEW CONCRETE WALLS AND ROOFS SHALL BE CAST WITH "SUBSTRUCTURE CONCRETE" $f' = 3,500$ psi. Reinforcement Shall be Grade 60, ASTM A-615, 616, or 617.
 - SHOULD IT BE DECIDED TO KEEP THE AREAWAY, THE REMOVAL OF THE PORTION OF THE ROOF AND THE RECONSTRUCTION SHALL EXTEND ONLY AS FAR AS NECESSARY TO RESOLVE THE CONFLICT.
 - ROUTE THE UNDERDRAIN TO THE NEAREST DRAINAGE STRUCTURE AS DIRECTED BY THE ENGINEER. SEE STANDARD PLAN R-80-D.
 - STRUCTURAL STEEL SHALL BE AASHTO M 270 GRADE 36.

TYPICAL QUANTITIES FOR BACKFILLED VAULT (ASSUMED 8'X6' BACKFILL)		
ITEM DESCRIPTION	UNIT	QUANTITY
Basement Cleanout, Modified	Cyd	18
Substructure Concrete	Cyd	5
Reinforcement Steel	Lbs	836
Adhesive Anchoring of Vertical Bar, 3/4 inch	Ea	56
Granular Material, Cl II, Modified	Cyd	3
Masonry and Conc Structure, Rem	Cyd	2
Drainage Composite	Sft	10
Membrane, Preformed Waterproofing	Sft	286
Fence, Protective	Fl	30

TYPICAL QUANTITIES FOR RECONSTRUCTED ROOF (ASSUMED 8'X6' AREA)		
ITEM DESCRIPTION	UNIT	QUANTITY
Basement Cleanout, Modified	Cyd	1
Substructure Concrete	Cyd	2
Reinforcement Steel	Lbs	266
Adhesive Anchoring of Vertical Bar, 3/4 inch	Ea	14
Adhesive Anchoring of Horizontal Bar, 3/4 inch	Ea	16
Masonry and Conc Structure, Rem	Cyd	2
Membrane, Preformed Waterproofing	Sft	96
Structural Steel, Rolled Shape, Furn and Fab, Modified	Lbs	60
Structural Steel, Rolled Shape, Erect	Lbs	60
Bolt, Adhesive Anchored, 1/2 inch	Ea	7
Fence, Protective	Fl	30
Drainage Composite	Sft	48
Underdrain, Subgrade, Open Graded, 6 inch	Fl	10
Dr Structure, Top, 6 inch	Ea	1