PROPOSED WORK SEQUENCE

Demolition of RCC Roof Parapet Wall, CSX Building
(As per location shown on the plan by OBO 28 April 2021)

DESCRIPTION:

The parapet wall is located between grids 3-4 / L-H. This wall section is cladded with metal panels on the outer side and paint finished on the inner side. The thickness of the concrete section is 300mm. The width and height of each to-be demolished section is 7.5m x 2.6m.

This wall is to be cut in workable size panels and moved to the ground, from a height of about 20m. Behind the wall AC equipment is placed. On the floor roof waterproofing elements are present. So during the demolition operation, all the existing elements of the building plus the installed equipment and the roof waterproofing are to be protected and kept in functional condition.

PROTECTION:

It is recommended to place a double layer of plywood on the whole floor area between the parapet wall and the HVAC equipment and the parapet wall and outer low height parapet. This is to protect the waterproofing tiles and membrane from falling debris and wear and tear from the movement of equipment, personnel, and debris.

False plywood-covered scaffolding wall to be constructed to the full height of the parapet wall in front of the HVAC equipment to protect it during the demolition operation.
CONCRETE CUTTING:

Metal cladding on the wall is to be removed. The wall will be cut into hoist-able panels to be lifted off the roof using a suitable size crane and carted off-site using dump trucks. Panel size of 1.5m x 0.86m is about 0.93 tons in weight. Saw cut lines will be marked on the wall as shown in the sketch below. On each panel, two 50mm diameter holes are to be core drilled. Each core center is to be 400mm from the side and 400mm below the top. A sling arrangement shown below will hold the panel via a crane during saw cutting operation and its hoisting to the ground.
EQUIPMENT:

Main cutting of wall into panels may be done by electric Saw cutter equipment that is capable of safely cutting the concrete wall horizontally and vertically to its thickness of 300mm. Pneumatic breakers/tools will not be utilized to break the panels due to HSE constraints.

Core cutting will be used to create the holes in the panel to secure it while cutting as well as hoisting.

A Sufficient sized mobile crane will be employed to hold the panels during cutting and hoisting operations.

Hydraulic dump trucks will be used to carry the concrete wall panels off-site.
APPLICATION PROCEDURE FOR SIKADUR 30 LP ADHESIVE

The plates shall be cut and shaped using either a rotary disc cutter or a hack saw.
The plates shall be cleaned and designed with a clean, clean, clean or an alcohol-based cleaner.
The adhesive shall be applied to the plates in a way that it is approximately 1/4 inch thick on the sides and 2 1/2 inch thick in the middle of the plate.
A very thin layer of the adhesive shall be applied to the prepared substrate surface to fill any voids and voids.
The plate shall be placed on the prepared area and pressed onto the substrate using a dead flat, flat-topped roller. Any excess material is scraped off in both sides of the plate. The excess material shall be removed.
In case of plate perforation, the surface of the undersurface plate shall be cleaned from any dirt, dust, and any adhesive that shall be applied on both sides of the undersurface plate so the top plate is connected to the substrate on the entire area.
The finished adhesive system shall not be exposed to any weather conditions and any weathering shall be kept at a minimum during the curing period of the adhesive.
If necessary, the adhesive system shall be protected with a suitable coating (compatibility test between the coating and the laminate shall be available).

APPLICATION PROCEDURE FOR SIKADUR 339 ADHESIVE

The plates shall be cut to size with special fibre shears.
A primer layer of the interlayer resin shall be applied on the substrate surface using a sanded, sanded or a roller.
The primer shall be placed on the substrate, pressed on centre, and the primer shall be worked into the fabric with an interlayer roller until the primer is completely saturated.
Additional layers shall be installed as described above, preferably wet on wet.
In case of a conditions oversight, the resulting resin surface shall be broomed with glass beads.
Interlayer shall always be performed in fibre direction.
After application, the finished plate or laminate installation shall be protected from rain, snow, dust, and any other contaminants.
If necessary, the installed system shall be protected with a suitable coating (compatibility test between the coating and the laminate shall be available).