SECTION 02 41 13

SELECTIVE SITE DEMOLITION

PART 1 GENERAL

1.1 SUMMARY

A. Comply with Division 1, General Requirements.

1.2 REFERENCES

A. Comply with the latest edition of the following statutes codes and standards and all amendments thereto.
   1. NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations.

1.3 SUBMITTALS

A. Submit cleaning operation schedule.

B. Submit shop drawings for bracing and shoring signed and sealed by an engineer licensed in the Province of Manitoba.

C. Submit for review proposed method of substrate preparation.

D. Job Hazard assessment.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 PREPARATION

A. Disconnect electrical and mechanical systems in areas of selective demolition to rules and regulations of authorities having jurisdiction.

B. Post warning signs on equipment, which will remain in operation in areas of selective demolition. Prepare and submit to Contract Administrator a Job Hazard assessment prior to demolition of existing electrical or mechanical works.

C. Disconnect and cap mechanical services in accordance with requirements of local authority having jurisdiction or pay for having this work done by local authority.

D. Do not disrupt active or energized utilities in area of selective demolition.

3.2 DEMOLITION

A. Do work in accordance with NFPA 241.

B. Work of this Section is of selective nature and may include any or all of the following:
1. Remove materials necessary for doorways at north wall of existing UV Facility.
2. Electrical removals generally as defined herein and on the associated drawings including:
a. Roadway light fixtures.
b. Transformer and associated distribution equipment at the south side of the plant, south of Secondary Clarifier No. 2.
c. West parking lot receptacles, associated pedestals and wiring including the supply transformer, distribution breaker panel and associated cabling.
d. Wiring and associated hardware for the electrical connections between the UV building and the Secondary Clarifier No. 3 lower level gallery.
3. Remove and store, existing facing Tyndall Stone veneer at following locations.
a. Where required to modify opening(s) for doors, louvers and/or window at an existing exterior wall.
b. Where shown on drawings.

C. Provide necessary support to keep un-demolished portion of existing exterior walls intact.Demolish in manner to minimize dusting. Keep dusty materials wetted.

3.3 EXISTING CONDITIONS

A. Review existing structure, with selective demolition work based on existing condition at time of examination prior to bidding. Carefully examine existing structure, equipment and conditions.

B. Protect existing, minimize damage to existing, make good damage.

C. Make good existing finishes disturbed or otherwise damaged during selective demolition, by qualified tradesmen. Match existing materials and finishes.

D. Make good existing materials and finishes disturbed or otherwise damaged by alterations to mechanical and electrical equipment and piping. Match existing materials and finishes.

3.4 PROTECTION

A. Prevent movement, settlement, or damage of existing structure and adjacent structures, walks, paving and parts of existing building to remain in service.

B. Contractor shall design bracing and shoring required. Submit drawings by a structural engineer licensed in the Province of Manitoba for demolition methods and procedures.

C. Prevent debris from collecting and blocking mechanical and electrical systems, which will remain in operation.

D. Prevent dust from entering mechanical and electrical system. Maintain water and electrical systems.

E. Where openings are scheduled in existing masonry, remove sufficient existing masonry units for toothing-in of new masonry units.

F. Protect interior of parts and items, which are not to be demolished, from exterior elements at all times.
   1. Maintain water and airtight enclosures.
   2. Provide thermal barrier to meet existing exterior thermal barrier.
   3. Protect building service lines from damage.

G. Turn over to the City, dismantled items, which are in good condition, and store at location and as directed by the Contract Administrator.

3.5 CLEANING

A. After selective demolition clean existing substrates to sound, clean surface free from extraneous matter. Use only non-ionic surfactants.

B. Where openings are scheduled in existing masonry, remove sufficient existing masonry units for footing in of new masonry units.

C. Test clean area designated by the Contract Administrator. Use accepted, cleaned area as the standard for the remainder of the cleaning work.

3.6 DISPOSAL OF WASTE

A. Dispose waste off site at location acceptable to authorities having jurisdiction.

B. Remove waste from site daily. Do not store on site.

C. Do not use waste as fill.

3.7 CLEANING - MASONRY

A. Preparation
   1. Clean existing masonry to extent shown.
      a. Seal, pack with removable masking, or repair defective jointing and other openings in the work area to minimize water, dust or solvent infiltration of the masonry wall.
   2. Dry brush and if necessary scrape large accumulations of foreign matter from walls, ledges, cornices and the like. Use moderate pressure 345 kPa dry air blasts to remove as much loosely attached soil and dust as possible before commencing main cleaning operations. Exercise care when blasting around decorative material or extremely friable masonry.
   3. Wet the masonry surface soiling by soaking with a low-pressure misting system to swell and loosen soiling.

4. Use as little water as possible; keep soiling moist. Avoid excessive wetting and soaking of the masonry. Ensure water used does not penetrate the building.
5. Use nozzles that give a nebulized droplet spray. Maintain a constant nozzle distance from wall face. Vary nozzle pressure to suit cleaning requirements without damaging the masonry surfaces.
6. Do not use strongly acidic water on carbonate material such as limestone or calcareous sandstones, or masonry bounded with lime mortar.
7. Establish details of the setup of equipment, incorporate of other related and accepted cleaning methods, and degree of cleaning achieved at the beginning of the job during the test patch operations.
8. Brush heavily soiled areas with natural bristle or nylon brushes and scrape with wood or plastic tools to loosen deposits and improve the action of the water misting.
9. Employ a final rinse-down with a pressurized water spray when the soiling reaches a state that allows easy removal without over-working of the masonry surface with the gun and without damaging the masonry.
10. Make the cleaned masonry surfaces free of foreign matter and uniform in appearance without streaks or variations caused in the cleaning process.
11. The finish of the masonry after cleaning generally to match the test-cleaned area. If excessive scaling or roughness occurs during cleaning operations, cease operations and notify the Contract Administrator promptly.
12. Ensure that manufacturer's proprietary materials for cleaning are free from materials detrimental to appearance or performance of the masonry facing.
13. At completion of the work, remove masking and protective covers and thoroughly clean the glass surfaces on the exterior of the building.

END OF SECTION