PART 1 - GENERAL

1.1 REFERENCES

.1 Canadian Standards Association (CSA):
- .1 CAN/CSA A165 Series-14, CSA Standards on Concrete Masonry Units (Consists of A165.1, A165.2 and A165.3)
- .2 CAN/CSA A371-14 Masonry Construction for Buildings.

1.2 SUBMITTALS

.1 Product Data:
- .1 Submit manufacturer's printed product literature, specifications and installation, and data sheet in accordance with Section 01 33 00 – Submittal Procedures.

.2 Samples:
- .1 Submit samples in each type of masonry reinforcement and accessory specified.
- .2 Two samples of each type of specified stone products.

1.3 ENVIRONMENTAL REQUIREMENTS

.1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage and disposal of materials.

.2 Cold Weather:
- .1 Maintain temperature of mortar between 5°C and 50°C until used.
- .2 Prepare mortar by heating sand slowly and evenly. Do not use scorched sand in mortar.
- .3 Prepare mortar with heated water and or sand to produce mortar between 5°C and 49°C.
- .4 Do not wet masonry.
- .5 Provide heated temporary enclosure to be supplied during the installation and for a minimum 24 hour period after the Work is completed.
- .6 When air temperature is below -4°C maintain air temperature above 0°C on both sides of walls during operation and for a period of 24 hours after. Erect wind-breaks to prevent differential freezing of walls.
- .7 Do not lay masonry units having either a temperature below -7 °C or containing frozen, moisture, visible ice, or snow on their surface. Maintain mortar temperature above freezing until used in masonry.
- .8 Remove visible ice and snow from the top surface of existing foundations and masonry to receive new construction. Heat these surfaces above freezing, using methods that do not result in damage.

.3 Hot Weather: above 46°C
- .1 Shade materials and mixing equipment from direct sunlight

.2 Provide necessary conditions and equipment to produce mortar having a temperature below 49 ºC
.3 Protect freshly laid masonry from drying too rapidly, by means of waterproof, non-staining coverings.
.4 Maintain sand piles in damp loose condition.

.4 Follow Indoor Air Quality (IAQ) Plan requirements in accordance with Division 01 Indoor Environmental Protection and Sustainability Requirements.
.1 Work scheduling requirements must be followed for compliance.

1.4 WASTE MANAGEMENT

.1 Separate and recycle waste materials in accordance with Division 01 and project Construction Waste Management Plan.
.1 A Waste Trip Log Form must be completed and submitted for all waste material removed from site.
.2 Weigh bills from receiving facilities, which support the Waste Trip Log Form, must also be submitted.

.2 Contractor to ensure all pallets are returned to the point of supply manufacturer.

.3 Contractor to ensure all recyclable materials, i.e. clean wood, cardboard and paper packaging materials are placed in containers labeled same.

.4 Contractor to ensure full size units are utilized as much as possible.

1.5 DELIVERY, STORAGE AND PROTECTION OF PRODUCT

.1 Deliver and store materials in compliance with Division 01.

.2 Comply with manufacturer’s recommendations for handling, storage and protection during installation.

.3 Protect and store materials off the ground, away from physical damage and from becoming wet, soiled or covered with ice or snow before, during and after installation.

.4 Label packages to include material name, production date and/or product code.

.5 Maintain temperature of sand and water for use in mortar between 5°C and 50°C until used.

.6 Keep masonry dry, using waterproof, non-staining coverings that extend over walls and down sides sufficient to protect walls from wind driven rain, until masonry Work is completed and protected by flashings or other permanent construction.

PART 2 - PRODUCTS

2.1 MATERIALS

.1 Masonry materials, mortar, grout, reinforcing and accessories are specified in related Sections.

PART 3 - EXECUTION

3.1 EXAMINATION

.1 Prior to proceeding with installation of concrete masonry, Contractor to review the concrete floor slab and steel structure. Report any irregularities to the Consultant, do not commence Work until remedial Work is completed.

3.2 PREPARATION OF SITE

.1 Provide temporary bracing of masonry work during and after erection until permanent lateral support is in place.

3.3 INSTALLATION

.1 Do masonry work in accordance with CSA A371 except where specified otherwise.

.2 Site tolerances as noted in CSA A371.

.3 Build masonry plumb, level, and true to line, with vertical joints in alignment.

.4 Layout coursing and bond to achieve correct coursing heights, and continuity of bond above and below openings, with minimum of cutting.

3.4 CONSTRUCTION

.1 Exposed masonry:
- .1 Remove chipped, cracked, and otherwise damaged units, in accordance with CSA A165, in exposed masonry and replace with undamaged units.

.2 Jointing:
- .1 Allow joints to set just enough to remove excess water, then tool with round jointer to provide smooth, joints true to line, compressed use, uniformly concave joints unless otherwise noted.
- .2 Provide flush joints at block wall to be tiled, painted, applied sheet goods.
- .3 Provide flush joint at floor to accommodate baseboard installation.
- .4 Concave joint at exterior brick.

.3 Cutting:
- .1 Cut out for electrical switches, outlet boxes, and other recessed or built-in objects.
- .2 Make cuts straight, clean, and free from uneven edges.

.4 Building-In:
- .1 Build in items including pressed steel frames required to be built in to masonry.
- .2 Prevent displacement of built-in items during construction. Check plumb, location and alignment frequently, as work progresses.
- .3 Brace door jambs to maintain plumb.

.5 Provision for movement:
- .1 Leave 3 mm space below shelf areas.
- .2 Leave 6 mm space between top of non-load bearing walls and partitions and structural elements. Do not use wedges.
- .3 Built masonry to tie in with stabilizers, with provision for vertical movement.

.6 Lintels:
- .1 Refer to Lintel Schedule Drawing A-110..
- .2 For any Lintels over 3000m refer to structural drawings.

.7 Control joints:
- .1 Provide continuous control joints as indicated.
- .2 Incorporate vertical shrinkage control joints in walls of which concrete and brick masonry units are a part.
- .3 Install control joints on line of door opening jambs from head to top of wall. Cut false joints in concrete and block lintels exposed to view, to line up with control joints.
- .4 Install control joints at junctions of walls and columns and wherever indicated on drawings, and otherwise in walls with no openings, at a maximum spacing of 9144 mm o.c. Carry joints full of height of walls.
- .5 Ensure complete vertical separation through walls incorporating control joints. Make control joint 12 mm wide, rake back 19 mm at junctures with concrete, and leave joints free and wide clear for caulking, as specified in Section 07 92 00 Joint Sealants.
- .6 Construct control joints of standard block and fill void between block with 20 Mpa concrete grout to form a continuous key full height of joint. Maintain separation between walls on either side of joint by installation of continuous building paper between concrete key and block on one side of joint.

.8 Masonry Flashing:
- .1 Apply through wall flashing and SBS membrane in accordance with CSA A371.
- .2 Install flashing under exterior masonry bearing on foundation walls, slabs, shelf angles, and steel angles over openings. Install flashing under weep hole courses. Secure to air vapour barrier at walls.
- .3 Cavity wall applications to form a continuous flashing membrane. Carry flashing from front edge of masonry, under outer wythe, then up backing, not less than 200 mm
- .4 At the end of each day’s Work, seal the top edge of the membrane where it meets the substrate using liquid air seal mastic. Trowel apply a feathered edge to seal termination and shed water.

.5 Through wall flashing membrane to extend fully to the exterior face of the interior wythe or substrate face. At locations where flashing terminates or intersects wall openings including door frames, “end dam” flashing to protect openings and redirect water out. Trim off excess as directed by the Consultant.

.9 Concrete Block Lintels:

.1 Refer to the drawings for concrete install construction and details.

3.5 COMPRESSIBLE JOINT FILLER

.1 Follow manufacturer’s written instructions for installation.

3.6 MORTAR CONTROL

.1 Install mortar dropping collection mesh to manufacturer’s written instructions.

3.7 PROTECTION

.1 Keep masonry dry using waterproof, non-staining coverings that extend over walls and down sides sufficient to protect walls from wind driven rain, until masonry work is completed and protected by flashings or other permanent construction.

.2 Protect masonry and other work from marking and other damage. Protect completed work from mortar droppings. Use non-staining coverings.

.3 Provide temporary bracing of masonry work during and after erection until permanent lateral support is in place.

3.8 CLEANING

.1 Perform cleaning after installation to remove construction and accumulated environmental dirt.

.2 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

.3 For masonry cleaning, refer to respective Sections of concrete unit masonry and clay brick masonry.

END

PART 1 - GENERAL

1.1 SUMMARY OF SECTION

.1 As summarized and described, but not restricted to the following:
- .1 Provide mortar and grout for masonry.
- .2 This section to be read in conjunction with Section 04 05 00 Common Work Results for Masonry.

1.2 REFERENCES

.1 Canadian Standards Association (CSA)
- .1 CAN/CSA A179-14, Mortar and Grout for Unit Masonry.
- .2 CAN/CSA A371-14, Masonry Construction for Buildings
- .3 CSA A23.1-14/A23.2-14, Concrete Materials and Methods of Concrete Construction/Test Methods and Standard Practices for Concrete.
- .4 CAN/CSA A3000-13, Cementitious materials compendium.

1.3 SUBMITTALS

.1 Product Data:
- .1 Submit manufacturer's printed product literature, MSDS sheets, specifications and data sheets in accordance with Division 01 Submittal Procedures.
- .2 Include design mix, indicate whether the Proportion or Property Specification of CAN/CSA A179 is to be used, required environmental conditions, and admixture limitations.

.2 Reports:
- .1 If requested submit reports on mortar indicating conformance of mortar to property requirements of CAN/CSA-A179, component mortar materials to requirements of CAN/CSA-A179 and test and evaluation reports to CAN/CSA-A179.
- .2 If requested submit reports on grout indicating conformance of component grout materials to requirements of CAN/CSA-A179 and test and evaluation reports to CAN/CSA-A179.

1.4 ENVIRONMENTAL REQUIREMENTS

.1 Cold and Hot Weather Requirements: Refer to CAN/CSA-A371, and Section 04 05 00 Common Work Results for Masonry.

1.5 QUALITY ASSURANCE/QUALITY CONTROL

.1 Applicator must be a company specializing in performance of work of this section with three (3) years experience at installation of mortar and grout.

1.6 TESTING OF PRODUCT

.1 Refer to Division 01.

.2 If requested, test mortar and grout mix to CAN/CSA-A179.

PART 2 - PRODUCTS

2.1 MATERIALS

.1 General:
- .1 Cementitious Material: CAN/CSA-A179.
- .2 Portland Cement: CAN/CSA-A3000.
- .3 Water: Clean and potable.
- .4 Mortar and Grout Aggregate: to CAN/CSA-A179, fine aggregate.
- .5 Use same brands of materials and source of aggregate for entire project.

.2 Mortar Mix:
- .1 Mix mortar ingredients to CAN/CSA-A179 in quantities needed for immediate use, using only dry ingredients.
- .2 Do not use antifreeze liquids, calcium chloride, frost inhibitors based on calcium chloride, salts or other substances used for lowering the freezing point or accelerating setting time.
- .3 If moisture is lost by evaporation, re-temper with water in quantities and at intervals sufficient to restore workability as directed by the manufacturer.
- .4 Use mortar within 1-1/2 hours after mixing at temperatures of 25°C or higher, or 2-1/2 hours at temperatures less than 25°C within period specified by mortar manufacturer.

.3 Mortar Types: to CAN/CSA A179.
- .1 Type N:
  - .1 Interior and exterior non loadbearing walls and exterior veneers
  - .2 Strength 5.2 Mpa750 PSI
  - .3 Colour: Natural Grey at concealed locations; at exposed locations chosen by Consultant from full colour range.
  - .4 Type “S”: Exterior loadbearing walls, strength 20 MPa

.4 Grout: For Core Fills of Masonry Units
- .1 Grout Aggregate: CAN/CSA-A179, fine aggregate.
- .2 Grout Mixes: Proportion normal density concrete in accordance with CSA-A23.1, to give the following properties for concrete grout in core fills of masonry units.

.3 Cement: Type 10
.4 Minimum Compressive Strength at 28 days: 20 MPa
.5 Class of Exposure: N
.6 Nominal Size of Coarse Aggregate: 10 mm
.7 Slump at Time and Point of Discharge: Maximum 250 mm
.8 Air Content: 3% Maximum
.9 Use aggregate passing 1.18 mm sieve where 6 mm thick joints are indicated.
.10 Approved Products:
  .1 Master Builders Embeco pre-mixed grout
  .2 Sika M-Bed Standard
  .3 Mapei Planigrout 750

PART 3 - EXECUTION

3.1 EXAMINATION AND INSTALLATION

.1 Refer to Section 04 05 00 Common Work Results for Masonry.

END

PART 1 - GENERAL

1.1 REFERENCES

.1 American Society for Testing and Materials International (ASTM):
- .1 ASTM A153/A153M-16a, Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.

.2 Canadian Standards Associations (CSA)
- .1 CSA A23.1-14/A23, 2-14, Concrete Materials and Methods of Concrete Construction/Test Methods and Standard Practices for Concrete
- .2 CSA A370-14, Connectors for Masonry
- .3 CSA A371-14, Masonry Construction for Buildings
- .4 CSA S301.1-04 (R2010), Design of Masonry Structures.

1.2 SHOP DRAWINGS

.1 Submit shop drawings in accordance with Section 01 33 00.

1.3 SAMPLES

.1 Submit samples noted in Section 04 05 00.

PART 2 - PRODUCTS

2.1 MATERIALS

.1 Masonry Wall Reinforcing:
- .1 Prefabricated truss reinforcement, c/w prefabricated corners and ties.
  - .1 Weight of truss connector: to CSA A370, Connectors for Masonry. This Standard should be read in conjunction with CSA S304, Design of masonry structures, and CSA A371, Masonry construction for buildings.
  - .2 Fabricated to ASTM A951 Standard Spec for Masonry Joint Reinforcement.
  - .3 Finish: stainless steel.
  - .4 Approved Manufacturer:
    - .1 Hohmann and Barnard’s #120 Truss-Mesh, Blok-Lok BL-30, or approved alternate.

PART 3 - EXECUTION

3.1 EXAMINATION

.1 Prior to placing mortar, obtain Consultant's approval of placement of reinforcement and connectors.

3.2 GENERAL INSTALLATION

.1 Install masonry connectors and reinforcement in accordance with CSA A370, CSA A371 and CSA S304.

.2 Prior to placing mortar, obtain Consultant's approval of placement of reinforcement and connectors.

.3 Field welding to be performed by licensed welders having current welders' certificates to CSA W47.1 (steel).

3.3 INSTALLATION

.1 Reinforcement:
- .1 Place joint reinforcement spaced at 406 mm vertically in accordance with CSA A371 unless otherwise indicated.
- .2 Lap joint reinforcement ends minimum 305 mm
- .3 Reinforce and grout masonry units and bond beams in accordance with CSA A371 unless otherwise indicated.
- .4 Install vertical reinforcing steel with a minimum clearance of 12.7 mm from the masonry and not less than one bar diameter between bars.
- .5 Secure reinforcing steel in place. Inspect steel connections before grouting.
- .6 Provide cleanout openings at bottom of cores containing reinforcement.
- .7 Fill cells containing reinforcement and anchor bolts solidly with grout.

.2 Bonding and Tying:
- .1 Bond walls using metal connectors in accordance with NBC, CSA S304, CSA A371 and as indicated.
- .2 Provide masonry anchorage ties to laterally load bearing stud walls in strict accordance with manufacturer’s recommendations.
- .3 Coordinate erection of masonry assemblies with installation of lateral support and anchorage.

3.4 FIELD BENDING

.1 Do not field bend reinforcement and connectors except where indicated or authorized by Consultant.

.2 When field bending is authorized, bend without heat, applying a slow and steady pressure.

.3 Replace bars and connectors which develop cracks or splits.

END

PART 1 - GENERAL

1.1 REFERENCES

.1 American Society for Testing and Materials (ASTM)
- .1 ASTM D2240-15, Test Method for Rubber Property-Durometer Hardness.

.2 Canadian Standards Association (CSA)
- .1 CAN/CSA A371-14, Masonry Construction for Buildings.

PART 2 - PRODUCTS

2.1 MATERIALS

.1 Control joint filler: purpose-made elastomer; durometer hardness to ASTM D2240 of size and shape indicated.
- .1 Acceptable Manufacturers:
  - .1 Hohmann & Barnard
  - .2 Block Lok

.2 Mechanical fasteners: hot-dipped galvanized.

.3 Masonry Flashings:
- .1 Self-adhering cold applied composite sheet membrane, 0.8mm rubberized asphalt integrally bonded to 0.2mm high density cross laminated polyethylene for minimum thickness of 1.0mm c/w primer as per manufacturer's recommendations.
  - .1 Acceptable Manufacturers:
    - .1 W.R. Grace
    - .2 Henry-Bakor
    - .3 IKO
  - .2 Lap Adhesive: as recommended by masonry flashing manufacturer.

PART 3 - EXECUTION

3.1 CONTROL JOINTS

.1 Refer to Section 04 05 00.

3.2 MASONRY FLASHING

.1 Build in flashings in masonry in accordance with CSA A371 as follows:
- .1 Install flashings under exterior masonry bearing on foundation walls, and shelf angles over openings. Install flashings under weep hole courses and as indicated.

.2 In masonry veneer walls run flashing up wall approximately 600mm and bond to the substrate. Coordinate with application of air barrier, ensure 'shingle method' of installation of flashing / air barrier application and overlaps at all flashing joints.

.3 Lap joints 150mm and seal in accordance with manufacturer’s instructions.

3.3 INSTALLATION

.1 Install continuous control joint fillers in control joints at locations indicated.

.2 Install weep hole vents in vertical joints immediately over flashings, in exterior wythes at maximum horizontal spacing of 600 mm o.c.

.3 Install air vents to align with weep hole vents, locate below cap flashing.

END

PART 1 - GENERAL

1.1 REFERENCES

.1 Canadian Standards Association (CSA):
- .1 CAN/CSA A165 Series-14, CSA Standards on Concrete Masonry Units (Consists of A165.1, A165.2 and A165.3).

PART 2 - PRODUCTS

2.1 MATERIALS

.1 Standard concrete block units, hollow, to A165.
- .1 Classification: H/10/A/M
- .2 Size: modular
- .3 Special shapes: provide solid bull-nosed units for exposed corners. Provide purpose-made shapes for lintels and bond beams. Provide additional special shapes as indicated.
- .4 Acceptable Manufacturer: Shaw

.2 Standard concrete block units, semi-solid, to A165.
- .1 Classification: S/15/A/M
- .2 Size: modular
- .3 Special shapes: provide bull-nosed units for exposed corners. Provide purpose-made shapes for lintels and bond beams. Provide additional special shapes as indicated.
- .4 Acceptable Manufacturer: Shaw

PART 3 - EXECUTION

3.1 INSTALLATION

.1 Concrete block units.
- .1 Bond: running.
- .2 Coursing height: 200 mm for one block and one joint.
- .3 Jointing: concave unless noted otherwise.

.2 Concrete block lintels.
- .1 Install reinforced concrete block lintels over openings in masonry.
- .2 End bearing: not less than 200 mm as indicated on drawings.

.3 Refer to Lintel Schedule A-110.

3.2 CLEANING

.1 Standard block: Allow mortar droppings on masonry to partially dry then remove by means of trowel, followed by rubbing lightly with small piece of block and finally by brushing.

END

PART 1 - GENERAL

1.1 SUMMARY OF THIS SECTION

.1 As summarized and described herein, but not restricted to the following:
.1 To provide interior tile stone veneer.

1.2 REFERENCES

.1 American National Standards Institute (ANSI)
.1 ANSI A108/A118/A136.1 - 2011, Installation of Ceramic Tile (Includes A108.01 up to .17)

.2 American Society for Testing and Materials (ASTM)
.1 ASTM C144-11 Specification for Aggregate for Masonry Mortar
.2 ASTM C207-06 (2011), Specification for Hydrated Lime for Masonry Purposes

.3 Canadian Standards Association (CSA)
.1 CSA A3000-08, Cementitious Materials Compodium (Consists of A3001, A3002, A3003, A3004, and A3005)

.4 Terrazzo Tile and Marble Association of Canada (TTMAC) Installation Manual latest edition.

1.3 SUBMITTALS

.1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures. Selection from tiles listed in Part 2 Products must be submitted to the Departmental Representative for review to ensure colour and surface texture quality.

1.4 MOCK-UP

.1 Refer to Section 01 45 00 Testing and Quality Control for requirements of mock-up.

.2 Locate where directed by Departmental Representative.

.3 Allow 48 hours for field review of mock-up for Departmental Representative.

.4 Contractor to proceed once the testing is complete and written approval has been received by the Departmental Representative.

.5 When accepted, mock-up will demonstrate minimum standard for this work. Approved mock-up may remain as part of the Work.

.6 Provide one mock-up interior thin stone veneer wall assembly.
.1 Size of both mock up to be 1200 x 1200mm minimum.

1.5 MAINTENANCE DATA

.1 Include recommended cleaning methods, cleaning materials, stain removal methods and polishes.

1.6 ENVIRONMENTAL REQUIREMENTS

.1 Follow Indoor Air Quality (IAQ) Plan requirements in accordance with Section 01 35 44, Indoor Environmental Protection.

.1 Work scheduling requirements must be followed for compliance.

.2 Maintain air temperature and structural base temperature at quarry tile installation area above 12˚C for 48 h before, during, and 48 h after, installation.

.3 Ensure substrate is clean and dry and moisture content reading is acceptable to the manufacturer and installer.

1.7 QUALITY ASSURANCE

.1 Ensure tile setters are experienced in this trade with minimum five (5) year's experience.

.2 Ensure manufacturer, supplier and contractor are members of Tiles & Terrazzo Institute Manufacturer Association of Canada.

.3 Subcontractor to submit a list of 5 previous jobs where he has preformed similar work in scale and scope for review by the Consultant and Departmental Representative, representative of his workmanship.

.4 Subcontractor to provide documentation that he has required man power for the scale of this job, to meet the construction schedule.

1.8 WASTE MANAGEMENT & DISPOSAL

.1 Contractor to separate and recycle waste materials in accordance with Waste Management and Disposal and project Construction Waste Management Plan.
.1 A Waste Trip Log Form must be completed and submitted for all waste material removed from site.

PART 2 - PRODUCTS

2.1 TILE MATERIALS

.1 Split face stone, front, back and end, split with cleft or bedding plane or stone natural straight and flat surface.
.1 Thin Stone Veneer – Brunswick Limestone (thickness varies)
.2 Size: 2" and 4" height X 4"-12" Length
.3 Thickness :1 3/8" +/–
.4 Supplied : Shaw Brick

.5 Submit sample for approval prior to ordering material.
.6 Colour Antique Grey.
.7 Refer to Section 09 21 16 section 2.1.5 for Tile backer Board

2.2 MORTAR AND ADHESIVE MATERIALS

.1 Water: potable and free of minerals which are detrimental to mortar and grout mixes.

.2 Thin set bond coat: ANSI-A108.
.1 Acceptable Manufacturer:
.1 Mapei
.2 Wall Mortar Kiesel Servolight
.3 Dry Set Mortar: mix to manufacturer's instructions

.4 Organic adhesive: pre-mixed.

2.3 CEMENTITIOUS AND EPOXY GROUT

.1 Cementitious Grout: Provide at all wall applications typical
.1 Thin set system grout: to ANSI-A108.
.2 Grout preparation: to manufacturer's instructions.
.3 Colour to be selected by Consultant.
.4 Cementitious Mortar and Grout Materials:
.1 Cement – to CAN/CSA-A3000 Series, colour to Consultant's selection.
.2 Sand – to ASTM C144.
.3 Lime – to ASTM C207, type S
.4 Latex – formulated for use in cement mortar.
.5 Water – potable and free of minerals which may discolour mortar.

PART 3 - EXECUTION

3.1 EXAMINATION

.1 Examine Exterior grade plywood sheathing surfaces prepared to receive installation of stone. If discrepancies exist, report to Departmental Representative. Installation of any part of the Work will be construed as acceptance of such surfaces as being satisfactory.
.2 Examine all substrate and ensure thoroughly cleaned prior to installation of tile.

3.2 WORKMANSHIP

.1 Do tile work in accordance with Installation Manual 200, "Ceramic Tile", produced by Terrazzo Tile and Marble Association of Canada (TTMAC), except where specified otherwise and stone veneers manufacturer recommendations.

.2 Apply bond coat to clean and sound surfaces.

.3 Fit tile units around corners, and other built-in objects. Maintain uniform joint appearance. Make cut edges smooth and even.

.4 Stone Coursing:
.1 Install coursing in random lengths as indicated.
.2 Lay stone in a semi-coursed pattern.

.5 Maximum surface tolerance: 1:800.

.6 Make joints between stone uniform and approximately 1/4" wide, plumb, straight, true, even and with adjacent units flush. Align patterns.

3.3 INSTALLATION

.1 Installation as specified and illustrated in Veneer stone manufacturers recommendations.

.2 Use setting method specified. Allow minimum twenty-four (24) hours after installation of stone before grouting. Clean installed stone surfaces after installation and grouting cured.

.3 Obtain Departmental Representative approval of surfaces over which veneer is to be installed before commencing. The substrate board is to be per the recommendations of the veneer stone manufacturer.

.4 Place stone snugly around piping, fixtures and other items built in or passing through tile work. Form external angles with stone extending over edge of adjacent stone. Internal angles shall be formed square, carrying 1 stone past edge of other.

.5 Finish surfaces flat and level.

.6 Point joints with specified mortar or grout. Remove strings and wedges used for jointing and bracing prior to mortar or grouting.

.7 Re-point joints after cleaning to eliminate imperfections. Avoid scratching tile surfaces.

.8 Finished stone to be clean and free of tiles which are pitted, chipped, cracked or scratched.

.9 Control Joints @ 20’-0” O.C.

3.4 CLEANING

.1 Clean stone work progressively as work proceeds. Do not allow mortar to stain absorbent tile.
.2 Remove and replace defective, damaged, loose and unbonded stone, and point defective joints.

3.5 SEALING

.1 Seal stones where recommended by manufacturers using procedures and products certified with the T.T.M.A.C. “Maintenance Guide”.

3.6 SEALANTS

.1 Conform to Section 07 92 00 for Sealants

END