### DIVISION 2 - SITE WORK

### **EXCAVATION - BACKFILL - GRADING**

- remove all vegetation, refuse or existing structures in confines of BUILDING CONSTRUCTION AND PAVING AREAS PRIOR TO COMMENCEMENT OF
- 2. EXCAVATE AS REQUIRED TO PROVIDE SUFFICIENT WORKING ROOM FOR THE LAYING OF FOUNDATION WALLS, EXCAVATION FOR ALL FOOTINGS TO BE DOWN TO UNDISTURBED EARTH WITH A MINIMUM DEPTH AS SHOWN ON DRAWINGS UNLESS OTHERWISE GOVERNED BY LOCAL CODES.
- 3. IN THE EVENT THAT ROCK IS ENCOUNTERED IN THE FOUNDATION EXCAVATION, AND IF THIS ROCK MUST BE REMOVED BY DYNAMITE OR COMPRESSOR, THE OWNER WILL REIMBURSE THE CONTRACTOR FOR THE PREDETERMINED COST OF THESE OPERATIONS.
- 4. BACKFILLING OF WALLS IN INTERIOR AREAS WHERE CONCRETE SLAB WILL BEAR ON GRADE SHALL BE GRITS OR BANK RUN GRAVEL, WELL COMPACTED, BROUGHT TO A SUBGRADE OF 8' BELOW FINISH FLOOR LINE.
- 5. BACKFILLING OF EXTERIOR FOUNDATION WALLS SHALL BE CLEAN GRAVEL WELL COMPACTED, BROUGHT TO A SUBGRADE OF 8" BELOW FINISH SIDEWALK
- **6.** BACKFILLING OVER UTILITIES RUNNING UNDER PAVED AREAS SHALL BE
- 7. REMAINDER OF SITE SHALL BE GRADED TO ASSURE DRAINAGE OF SURFACE WATER FROM BUILDING.
- 8. REMOVE EXCESS SOILS FROM THE SITE.
- 9. GRADES NOT OTHERWISE INDICATED ON THE PLANS SHALL BE UNIFORM LEVELS or slopes between points where elevations are given, Abrupt CHANGES IN SLOPES SHALL BE WELL-ROUNDED. THE CONTRACTOR IS RESPONSIBLE FOR POSITIVE SITE DRAINAGE.
- 10. SOILS TEST SHALL BE PERFORMED BY THE CONTRACTOR TO ENSURE SOIL MEET 3,000 PSF DESIGN STRENGTH, CONTRACTOR SHALL NOTIFY TIM HORTONS IMMEDIATELY IF EXCAVATION ON ANY PART OF THE SITE REVEALS FILL OR GROUND WATER.
- 11. SITE FILL SHOULD BE NON ORGANIC SOILS COMPACTED IN 6" LIFTS TO A MINIMUM 98% STANDARD PROCTOR DENSITY.

#### ASPHALT PAVING

ALL PAVING SHALL BE INSTALLED IN AREAS AS INDICATED ON SITE PLAN. PAVEMENT DESIGN SHALL MEET SOIL CONDITIONS, TIM HORTONS CONSTRUCTION ENGINEER REQUIREMENTS, AND DETAILS ON SITE PLAN.

#### SOIL CLASS

POOR - CBR = 3.5 - TYPE: PLASTIC WHEN WET SUCH AS CLAY, FINE SILT OR SANDY LOAM MEDIUM - CBR = 7.0 - TYPE: HARD SILTY-SANDS OR SAND GRAVELS CONTAINING CLAY OR FINE SILT

GOOD - CBR = 12 - TYPE: CLEAN SAND AND SAND GRAVEL FREE OF CLAY, silt or loam

#### MINIMUM PAVEMENT

POOR SOIL COARSE ASPHALT PLUS 1 1/2" AGGREGATE

MEDIUM SOIL 4" COARSE ASPHALT BASE BINDER (1 1/2' AGGREGATE) BASE (1 1/2' AGGREGATE) PLUS 1  $1/2^{\prime\prime}$  AGGREGATE) (MAXIMUM 1/2" AGGREGATE)(MAXIMUM 1/2" AGGREGATE) (MAXIMUM 1/2" AGGREGATE)

GOOD SOIL 3" COARSE ASPHALT BASE MATERIAL (1  $1/2^{\prime\prime}$  AGGREGATE) PLUS 1 1/2" ASPHALT TOPPING

CONCRETE PAVING

SPECIFICATIONS FOR ANY CONCRETE PAVING REQUIRED FOR THIS SITE IS TO BE VERIFIED BY TIM HORTONS CONSTRUCTION ENGINEER.

## STRIPING AND PARKING BLOCKS

STRIPING TO BE 'TUF-TRAC', OSHA SAFETY YELLOW, BY SONNEBORN (AVAILABLE BY sherwin Williams)

PARKING LOT MAKING REQUIREMENTS WILL VARY DEPENDING UPON LOCAL CITY CODES. YELLOW IS THE MOST COMMON COLOR FOR STRIPING AND ESPECIALLY IMPORTANT FOR NORTHERN CLIMATES WHERE SNOW IN PREVALENT, SINCE IT WILL PROVIDE CONTRAST FROM SNOW & SALT LADEN SURFACES. IF CODES ALLOW, WHITE PAINT IS PERMITTED FOR PARKING SPACE STRIPING ONLY. ALL HAZARDS SHOULD BE IDENTIFIED IN "SAFETY" YELLOW PAINT.

THE FOLLOWING AREAS SHOULD BE PROPERLY IDENTIFIED:

- 1. VEHICLE PARKING AREA IDENTIFIED WITH THE APPROPRIATE MARKING AS REQUIRED BY LOCAL MUNICIPAL CODES. COLOR: YELLOW OR WHITE
- 2. DIRECTION TRAFFIC FLOW ARROWS PAINTED ON THE LOT SHOULD IDENTIFY THE ROUTE OF TRAVEL INTO & OUT OF THE PARKING LOT FROM ALL PUBLIC OR PRIVATE ACCESS ROADS. COLOR: YELLOW
- 3. OUTLINE THE OUTSIDE OF THE PICK-UP WINDOW TRAFFIC LANE W/ A 4" SOLID STRIPE, COLOR; YELLOW
- 4. ALL CURBS THAT EXTEND FROM THE PARKING LOT ENTRANCE TO ANY PUBLIC OR PRIVATE ROADWAY SHOULD BE PAINTED. COLOR: YELLOW SPEED BUMPS SHOULD BE IDENTIFIED W/ STRIPING. IT IS NOT NECESSARY TO PAINT THE ENTIRE AREA. COLOR: YELLOW
- 5. PARKING SLOPE OR BLOCKS LOCATED NEXT TO THE BUILDING OR IN THE MIDDLE OF THE PARKING LOT SHOULD BE YELLOW RECYCLED PLASTIC. (SEE PARKING NOTE BELOW) COLOR: YELLOW
- 6. SIDEWALK CURBING DIRECTLY IN THE TRAVEL PATH OF THE BUILDING ENTRANCES OR EXITS SHOULD BE IDENTIFIED WITH A 2' STRIPS ON THE TOP EDGE OF THE CURVE FOR A LENGTH OF 3'-0' COLOR: YELLOW
- 7. IF SITE CONDITIONS WARRANT, ANY STEPS SHOULD BE IDENTIFIED WITH A 2' LINE PAINTED ON THE TOP & FRONT EDGE OF EACH STEP. COLOR: YELLOW
- 8. IF SITE CONDITIONS WARRANT, CROSSWALKS ACROSS THE DRIVE-THRU LANE FOR ENTRANCES/EXITS THAT ARE PERPENDICULAR TO THE DRIVE-THRU TRAFFIC PATTERN SHOULD BE IDENTIFIED W/ DIAGONAL STRIPES. COLOR: WHITE OR YELLOW
- 9. ALL POSTS, POLES, & THEIR SUPPORTS OR GUIDE WIRES THAT MAY BE EXPOSED TO VEHICLE TRAFFIC SHOULD BE PAINTED AT LEAST 60' IN HEIGHT FROM BASE. COLOR: YELLOW
- 10. STENCIL 'PICK-UP WINDOW' LANE BEHIND DIRECTIONAL ARROW. COLOR: WHITE OR YELLOW TO MATCH STRIPING
- 11. ANY CURB THAT REPRESENTS A POSSIBLE HAZARD TO VEHICLES SHOULD BE IDENTIFIED BY PAINTING A 2' LINE ON TOP & SIDE OF CURB. COLOR: YELLOW
- 12. HANDICAP RAMPS & HANDICAP PARKING SHOULD BE IDENTIFIED W/ ADA STRIPING & STENCILING PER LOCAL CODES. NOTE: PAINTING THE ENTIRE RAMP OR PARKING SPACE AS WELL AS PAINT BLOCKING BACKGROUND ON STENCILS IS NOT RECOMMENDED UNLESS SPECIFIED BY CODE.
- 13. HANDICAP SIDEWALK RAMPS SHOULD HAVE THE OUTSIDE CURBING THAT IS CHANGING IN ELEVATION IDENTIFIED W/ A 2' LINE PAINTED ON THE TOP & SIDE EDGE OF CURB FOR THE FIRST 3'-O' OF INCLINE STARTING FROM THE LOWER SURFACE LEVEL. COLOR: YELLOW

#### PARKING BLOCKS

100% recycled plastic parking blocks, yellow in color, parking blocks SHALL BE A MIN. OF 6'-O' IN LENGTH AND A MAX. OF 5' IN HEIGHT SPECIFIC FOR USE ON CONCRETE OR ASPHALT FOR CORRECT HARDWARE BLOCKS SHALL BE PLACED as shown on site plan.

#### **CURBS**

CONCRETE CURBS SHALL BE FULL 6' X 18' FORMED CURBS WITH EXPANSION JOINTS OR SAW CUTS NOT MORE THAN 20'-0" APART. ALL FREESTANDING OR INTEGRAL CURBS SHALL BE REINFORCED WITH AT LEAST ONE #4 REINFORCING ROD CONTINUOUS.

#### LANDSCAPING

LANDSCAPE BIDDER SHALL SUBMIT A WRITTEN PROPOSAL AND LANDSCAPE PLAN TO THE OWNER FOR APPROVAL PROPOSAL SHALL INDICATE SIZE AND NUMBER OF PLANTS AND EXACT AREA TO BE SODDED, PROPOSAL TO SHOW UNIT PRICES FOR EACH TREE AND SHRUB. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE SEEDING, SODDING, AND LANDSCAPE PLANTING, EARTHWORK AND EDGING AS SHOWN ON PROPOSAL.

### PLANT GUARANTEE AND REPLACEMENT

ALL PLANTS AND SOD AREAS SHALL BE GUARANTEED FOR ONE YEAR FROM DATE OF INSTALLATION. ANY PLANTS NOT IN SATISFACTORY VIGOR SHALL BE REPLACED AT NO ADDITIONAL EXPENSE TO OWNER.

- 1. THE GENERAL CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, TOOLS, TRANSPORTATION, INCIDENTALS AND APPURTENANCES TO COMPLETE IN EVERY DETAIL AND LEAVE IN WORKING ORDER ALL UTILITIES CALLED FOR HEREIN AND/OR SHOWN ON THE CONSTRUCTION DOCUMENTS, THIS INCLUDES BUT IS NOT LIMITED TO: STORM SEWER, SANITARY SEWER, WATER SERVICE, GAS SERVICE, ELECTRIC SERVICE, ROOF DRAINAGE, ETC.
- 2. ALL UTILITIES INCLUDING ELECTRIC SERVICE TO SIGNS WILL BE CONSIDERED SITE WORK AND BROUGHT TO WITHIN FIVE FEET OF THE BUILDING PERIMETER.
- 3. REQUIRED GREASE TRAP REGARDLESS OF LOCATION SHALL BE CONSIDERED AS PART OF THE BUILDING COST AND SO REFLECTED IN ALL BIDDING.
- 4. THE GENERAL CONTRACTOR SHALL VERIFY ALL TAPS AND FURNISH ANY CITY DRAWINGS REQUIRED PRIOR TO CONSTRUCTION.

## DIVISION 3 - CONCRETE

FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE ALL CONCRETE WORK INCLUDING EXCAVATION, TRENCHING, FORM WORK, REINFORCING, CEMENT FINISH AND PRECAST CONCRETE.

- 1. REFER TO DRAWINGS FOR SIZES, DEPTHS, AND REINFORCEMENT. EARTH TRENCH WILL BE PERMITTED FOR FOOTINGS IF CONDITIONS ARE FAVORABLE SIDES OF TRENCHES SHALL BE CLEAN EVEN, VERTICAL AND TRUE, AND BOTTOMS SHALL BE LEVEL, CLEAN AND WITH OUT FILL.
- 2. REINFORCING SHALL BE UNPAINTED AND UNCOATED, FREE FROM RUST OR SCALE, AND SHALL BE CLEANED AND STRAIGHTENED BEFORE BEING SHAPED AND PLACED IN POSITION, ACCURATELY POSITION REINFORCEMENT AND SECURED AGAINST DISPLACEMENT, WHERE THERE IS DELAY IN POURING, RE-INSPECT REINFORCEMENT AND CLEAN OFF ANY DRIED CEMENT, MORTAR
- 3. ALL REINFORCEMENT SHALL BE OF SIZE AND SPACING AS CALLED FOR ON THE DRAWINGS OR AS PER LOCAL CODES.

## SLABS AND FOOTINGS

- 1. 3,000 PSF CONCRETE SLABS ARE TO BE REINFORCED WITH 6X6 W/1.4/W 1.4 WELDED WIRE FABRIC INSTALLED IN A MANNER THAT PLACES IT IN CENTER OF THE SLAB. (LAP EDGES 6')
- 2. PROVIDE CONTINUOUS 10 MIL 'VISQUEEN' VAPOR BARRIER ON LEVEL 6' GRAVEL BASE UNDER ALL BUILDING SLABS. LAP EDGES 6" AND SEAL (TURN UP AT WALLS).
- 3. ALL CONCRETE FLOORS SHALL BE POURED LEVEL, EXCEPT WHERE FLOOR DRAINS OCCUR, IN WHICH CASE THEY SHALL HAVE A 36" TO 48" RADIUS SLOPED TO DRAIN, TOTAL SLOPE IS NOT TO EXCEED 3/4' BELOW FLOOR
- 4. THIS CONTRACTOR SHALL BUILD INTO CONCRETE WORK THE FOLLOWING MATERIALS WHICH ARE FURNISHED BY OTHER TRADES, AND SHALL BED AND SECURE SAME AS REQUIRED.
  - A. ALL PLUMBING AND SYRUP LINES, ELECTRIC CONDUIT, CONCRETE INSERTS HANGERS, ANCHORS, FLOOR CHIPS, SLEEVES FOR ALL PIPING, ETC., AND WHEN REQUIRED FOR ALL OTHER TRADES, ANCHOR BOLTS, PLATES, ETC. FOR ALL EQUIPMENT.

## SIDEWALKS AND RAMPS

3,500 PSI AIR ENTRAINED CONCRETE 5' THICK, BROOM FINISH SCORE WITH 3/4" DEEP CONTRACTION JOINTS INTO APPROXIMATELY 4'-O" SQUARES

## **PAVING**

SPECIFICATIONS FOR ANY CONCRETE PAVING REQUIRED FOR THIS SITE IS TO BE VERIFIED BY TIM HORTONS CONSTRUCTION ENGINEER.

## **CONCRETE PADS**

BLACK CONCRETE PADS AT PICK-UP WINDOW AND ORDER STATION (REFER TO site plan).

## DIVISION 4 - MASONRY

PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE ALL MASONRY WORK INCLUDING STRUCTURAL STEEL, WALL TIES, MASONRY

# **GENERAL**

- 1. ALL WORK TO BE LAID TRUE TO DIMENSIONS, PLUMB, SQUARE, AND IN BOND OR PROPERLY ANCHORED. ALL COURSES SHALL BE LEVEL WITH JOINTS OF UNIFORM WIDTH, NO JOINTS SHALL EXCEED SPECIFIED SIZE, AND IF NECESSARY, CLIPPED COURSES SHALL BE PROVIDED TO LEVEL OFF.
- 2. PERFORM ALL MASONRY WORK IN ACCORDANCE WITH BEST TRADE PRACTICES. BRACE 'GREEN' WALLS AND PROTECT MORTAR FROM 'WASHING-OUT' AT END OF DAYS WORK USING PLANKS, WEIGHTED CANVAS, OR SIMILAR MEANS TO COVER WALL. COOPERATE WITH OTHER TRADES IN JOINTLY EXECUTED WORK AND BUILT-IN ITEMS. PATCH OPENINGS AS REQUIRED FOR PASSAGE OF MECHANICAL AND ELECTRICAL TRADES. 'UNCORED' UNITS MUST BE USED AT ALL EXPOSED AND/OR SEMI-EXPOSED CONDITIONS OF BRICK ROWLOCK CAPS, SILLS, ETC. SIZE AND LOCATION SHOWN ON CONSTRUCTION DOCUMENTS.
- 3. ALL LINTELS SHALL BE OF SIZE AND SHAPE AS SHOWN OR NOTED ON THE DRAWINGS AND SHALL BE STRUCTURALLY SOUND FOR THE SPANS AND LOADS INVOLVED.
- 4. BUILD INTO MASONRY ALL MATERIALS FURNISHED BY OTHER TRADES, SUCH AS ANGLES, ANCHOR BOLTS, FLASHING, STEEL LINTELS AND FRAMING, VENTS, SLEEVES DOOR FRAMES, MISCELLANEOUS STEEL WORK WITH ANCHORS, ETC.

- 5. ALL BRICK TO BE LAID IN A RUNNING BOND WITH ALL FIELD BRICK TO MEET ASTM C-216, TYPE FBS, GRADE SW. ACCENT BRICK TO MEET EITHER ASTM C-216 OR ASTM C-652, TYPE HBS, GRADES SW.
- 6. ALL BRICK TO BE LAID WITH FULL MORTAR IN THE BED AND HEAD JOINTS.
- **7.** 1/4" RAKED JOINT.
- 8. WALL TIES SHOULD BE ADJUSTABLE WIRE ALLOWING VERTICAL MOVEMENT, NOT HORIZONTAL. TIES SHOULD BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS B-2.
- 9. WEEP HOLES SHOULD BE AT LEAST EVERY 24".
- 10. FLASHING TO BE PLASTIC COATED ALUMINUM BY DURO WALL OR THIN COATED COPPER BY YORK FLASHING. THE FLASHING SHOULD PENETRATE THE BRICKWORK AND BE TRIMMED AT THE COMPLETION OF THE MASONRY WORK.
- 11. CLEAN AND POINT ALL BRICK AND CONCRETE BLOCK WORK AT END OF EACH WORKING DAY. AT THE COMPLETION OF WORK AS AN ENTIRETY, WET WALLS thoroughly and clean all exposed brick work with cleaner and stiff BRISTLE BRUSHES. NO METAL SCRAPERS OR METAL BRUSHES SHALL BE USED ON ANY TYPE OF MASONRY, CLEANING AGENT SHOULD BE AS RECOMMENDED BY BY BRICK MANUFACTURER,

#### MORTAR FOR FACE BRICK

MORTAR SHALL BE ONE PART CEMENT (PORTLAND CEMENT, ASTM C-150, TYPE 1 OR 3). ONE PART LIME (HYDRATED LIME ASTM C-207, TYPE N) AND FIVE PARTS SAND (ASTM C-144 AND POTABLE WATER). DO NOT USE ADMIXTURES. IN COLD WEATHER, HEAT THE SAND AND WATER. IF TEMPERATURE DROPS TO 30 DEGREES F., STOP MASONRY WORK. COLOR TO MATCH BRICK.

### COLORED MORTAR (STANDARD BUILDING FINISH)

STANDARD: BRIXMENT #E-262 tan brown ACCENT: BRIXMENT #B-10 LIGHT BUFF

## FACE BRICK (STANDARD BUILDING FINISH)

4" BRICK VENEER BY BOWERSTON SHALE, STANDARD: OLD WINDSOR MODULAR 3 5/8"  $\times$  2 1/4"  $\times$  7 5/8" #340 WHITE VELVET MODULAR 3 5/8" X 2 1/4" X 7 5/8"

#### ARCHITECTURAL CONCRETE MASONRY UNITS

- ARCHITECTURAL CONCRETE MASONRY UNITS: DESIGNBLOK MOBERFIELD'S, INC. DELAWARE, OH,
- TEL: (800) 845-7644, FAX: (740) 363-7644, INTERNET: WWW.OBERFIELDS.COM. (OR AN APPROVED EQUAL)
- 1. TYPE: SPLIT FACE UNITS

PROVIDE SPECIAL SHAPES, INCLUDING SPLIT FACE ENDS, FACES AND CORNER UNITS, AS REQUIRED TO COMPLETE THE WORK.

- ALL UNITS SHALL COMPLY WITH ASTM C90 MATERIAL REQUIREMENTS
- SPLIT FACE UNITS:
- PROVIDE PLAIN FACE SINGLE-PLANE SPLIT FACE UNITS.
- A. SIZE: NOMINAL 8' HEIGHT X 4' DEPTH X 16' LENGTH AND HALF HIGH UNITS NOMINAL 4' HEIGHT X 4" DEPTH X 16" LENGTH.
- 2. COLOR: #264 INDIAN SUMMER

## DELIVERY, STORAGE AND HANDLING

- A. DELIVER, STORE AND HANDLE MASONRY MATERIALS TO PREVENT DAMAGE AND SOILING.
- B. DELIVER ARCHITECTURAL, SPECIAL AND "GREEN PRODUCT CERTIFIED" MASONRY UNITS TO THE JOBSITE ON BANDED WOOD PALLETS WITH MANUFACTURER'S RECOMMENDED UNIT PROTECTIVE COVERS.
- TARPAULIN COVERINGS TO PROTECT FROM INCLEMENT C. INSPECT MASONRY UNITS UPON DELIVERY TO ENSURE COLOR MATCH WITH REQUIRED MATERIALS AND ACCEPTED SAMPLE MOCK-UP PANEL.

1. STORE PALLETS IN SINGLE-STACKS ON LEVEL GROUND, COVER STACKS WITH WATERPROOF

- D. STACK ALL MASONRY UNITS IN A DRY PLACE OFF THE GROUND ON PALLETS OR A PREPARED PLANK P LATFORM, METHOD OF STACKING SHALL BE ACCEPTABLE TO ARCHITECT, PROTECT WITH NON-STAINING COVERING ARRANGED TO ALLOW AIR CIRCULATION AROUND AND ABOVE MASONRY
- E. EXERCISE PARTICULAR CARE IN THE STORAGE, HANDLING AND INSTALLATION OF MASONRY UNITS, EXPOSED CONCRETE MASONRY IS UTILIZED AS A "FINISH MATERIAL." DO NOT BUILD SOILED OR DAMAGED MASONRY UNITS I NTO THE WORK.

## PROJECT CONDITIONS

TEMPERATURES WHEN INSTALLED.

- A. DO NOT USE METAL REINFORCEMENTS OR TIES COATED WITH LOOSE RUST OR OTHER COATINGS, INCLUDING ICE, WHICH WILL REDUCE OR DESTROY BOND.
- B. PROTECT PARTIALLY COMPLETED MASONRY AGAINST WEATHER DAMAGE AND MOISTURE AT END OF EACH DAY OR SHUTDOWN AND WHEN WORK IS NOT IN PROGRESS.
- 1. COVER TOPS OF WALLS NOT ENCLOSED OR SHELTERED WITH STRONG, WATERPROOF, NON-STAINING MEMBRANE. EXTENDED MEMBRANE AT LEAST 2'-O' DOWN BOTH SIDES OF WALLS AND HOLD SECURELY IN PLACE.
- 2. ROTATE AND FLIP SCAFFOLDING BOARDS EACH DAY TO PREVENT MORTAR STAINING
- C. BRACE UNSUPPORTED AND NEWLY-LAID MASONRY WALLS, MAINTAIN BRACING IN PLACE UNTIL BUILDING STRUCTURE PROVIDES PERMANENT BRACING.
- D. COLD AND HOT WEATHER CONSTRUCTION: PROVIDE COLD AND HOT WEATHER MASONRY CONSTRUCTION AS REQUIRED BY ACI 530.1/ASCE6/TMS 602.
- E. COLD WEATHER CONSTRUCTION: COMPLY WITH IMIAWC RECOMMENDED PRACTICES AND GUIDE SPECIFICATIONS FOR COLD WEATHER MASONRY CONSTRUCTION.

1. PRECONDITION MASONRY MATERIALS TO MAINTAIN MINIMUM 50 DEGREES F.

- 2. PROTECT MASONRY FROM FREEZING WHEN THE OUTSIDE AIR TEMPERATURE IS 40 DEGREES F. AND FALLING. HEAT MATERIALS AND PROVIDE TEMPORARY PROTECTION OF COMPLETED PORTIONS OF MASONRY WORK, COMPLY WITH GOVERNING CODES AND NCMA "TEK BULLETIN 3-1C."
- 3. NO MASONRY WORK WILL BE PERMITTED WHEN OUTSIDE AIR TEMPERATURE IS BELOW 25 DEGREES F. EXCEPT WHEN ENCLOSURES, SUPPLEMENTAL HEAT AND INSULATING BLANKETS ARE PROVIDED AND WITH ARCHITECT'S APPROVAL OF COLD WEATHER PROCEDURES AND PROTECTION.
- 4. DO NOT USE FROZEN MATERIALS OR MATERIALS MIXED OR COATED WITH ICE OR FROST.

5. DO NOT BUILD ON FROZEN WORK, REMOVE AND REPLACE MASONRY WORK DAMAGED BY FROST OR FREEZING.

- 6. PROTECT COMPLETED MASONRY WORK AGAINST FREEZING FOR NOT LESS THAN FOUR DAYS AFTER LAYING, MAINTAIN MINIMUM 50 DEGREES F. TEMPERATURE ON BOTH SIDES OF MASONRY FOR NOT LESS THAN 72 HOURS.
- F. HOT WEATHER REQUIREMENTS; PROTECT UNIT MASONRY WORK WHEN TEMPERATURE AND HUMIDITY CONDITIONS PRODUCE EXCESSIVE EVAPORATION OF WATER FROM MORTAR AND GROUT, PROVIDE ARTIFICIAL SHADE AND WIND BREAKS AND USE COOLED MATERIALS AS REQUIRED, DO NOT APPLY MORTAR TO SUBSTRATES WITH TEMPERATURES OF 100 DEGREES F AND ABOVE.

G. MASONRY CONSTRUCTION TOLERANCES; COMPLY WITH MASONRY CONSTRUCTION TOLERANCES AS REQUIRED BY ACI 530.1.

H. CONSTRUCTION TOLERANCES:

1. VARIATION FROM PLUMB; FOR VERTICAL LINES AND SURFACES OF COLUMNS, WALLS AND ARISES DO NOT EXCEED 1/4" IN 10'-0", OR 3/8" IN A STORY HEIGHT NOT TO exceed 20'-0", Nor 1/2" in 40'-0" or more. For external corners, expansion Joints, Control Joints and other conspicuous lines, DO NOT — exceed 1/4" in any STORY OR 20'-0" MAXIMUM, NOR 1/2" IN 40'-0" OR MORE.

- 2. VARIATION FROM LEVEL: FOR LINES OF EXPOSED LINTELS, SILLS, PARAPETS AND OTHER CONSPICUOUS LINES, DO NOT EXCEED 1/4" IN ANY BAY OR 20'-0" MAXIMUM, NOR 3/4" IN 40'-0" OR MORE.
- 3. VARIATION OF LINEAR BUILDING LINE; FOR POSITION SHOWN IN PLAN AND related portion of columns, walls and partitions, do not exceed 1/2" in any BAY OR 20'-0" MAXIMUM, NOR 3/4" IN 40'-0" OR MORE.
- 4. VARIATION IN CROSS-SECTIONAL DIMENSIONS; FOR COLUMNS AND THICKNESS OF WALLS, FROM DIMENSION SHOWN, DO NOT EXCEED MINUS 1/4" NOR PLUS 1/2".

LOAD APPLICATION AFTER BUILDING MASONRY COLUMNS, PIERS OR WALLS:

2. DO NOT APPLY CONCENTRATED LOADS FOR AT LEAST THREE DAYS.

- DO NOT APPLY UNIFORM DESIGN FLOOR OR ROOF LOADING FOR AT LEAST 12
- J. STAIN PREVENTION: PREVENT GROUT, MORTAR, AND SOIL FROM STAINING THE FACE OF MASONRY TO BE LEFT EXPOSED OR PAINTED. REMOVE IMMEDIATELY ANY GROUT, MORTAR, AND SOIL THAT COMES IN CONTACT WITH SUCH

1. PROTECT BASE OF WALLS FROM RAIN-SPLASHED MUD AND MORTAR SPLATTER BY MEANS OF COVERINGS SPREAD ON GROUND AND OVER WALL SURFACE.

2. PROTECT SILLS, LEDGES, AND PROJECTION FROM MORTAR SPLATTER AND DROPPING. 3. PROTECT SURFACES OF WINDOWS AND DOOR FRAMES; AS WELL AS SIMILAR

PRODUCTS WITH PAINTED AND INTEGRAL FINISHES FROM MORTAR SPLATTER AND DROPPING. K. SPLIT MASONRY COURSING AT HEADS AND SILLS OF OPENINGS AND CUT

CONCRETE MASONRY COURSING LESS THAN 4" IN HEIGHT NOT PERMITTED.

## CONCRETE MASONRY MATERIALS

A. AGGREGATE: ASTM C33 NORMAL WEIGHT AGGREGATE, EXCEPT AS I NDICATED. CINDER AGGREGATE NOT PERMITTED.

1. Nonload-bearing exterior walls/interior partitions; astm c331 " solite" or "HAYDITE" EXPANDED SHALE LIGHTWEIGHT AGGREGATE.

2. EXPOSED EXTERIOR/INTERIOR UNITS: WASHED CRUSHED LIMESTONE COARSE AGGREGATE AND WASHED LIMESTONE SAND.

- B. CEMENT: ASTM C 150, TYPE REQUIRED
- C. WATER REPELLENT ADMIXTURE; KRETE INDUSTRIES "KRETE HQ PLUS" OR AN APPROVED EQUAL INTEGRAL WATER REPELLENT & ADMIXTURE FOR CONCRETE MASONRY UNITS AND ASSOCIATED MORTAR USED IN MASONRY EXPOSED TO EXTERIOR.
- 1. WATER RESISTANCE: ASTM E 514.
- 3. FULLY DISPERSIBLE IN WATER.

2. FLEXURAL BOND STRENGTH: PASS FOR FULL WALL; ASTM E 72 OR C 1072.

- D. COLOR PIGMENT: NATURAL OR SYNTHETIC IRON OXIDES MANUFACTURED SPECIFICALLY FOR USE IN CONCRETE MASONRY
- UNITS; PRODUCTS BY DAVIS COLORS, BAYER, DCS, OR AN APPROVED EQUAL. 1. COLOR: GREY
- CLEANING MATERIALS: NOT HARMFUL TO MASONRY WORK OR materials, products by prosoco, Inc. or an APPROVED EQUAL

# DIVISION 5 - METALS

PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO COMPLETE THE MISCELLANEOUS STRUCTURAL AND DECORATIVE METAL WORK INDICATED ON THE DRAWINGS, ALL MATERIALS TO MEET ASTM A-36.

PROVIDE ALL STRUCTURAL STEEL MEMBERS AS INDICATED ON THE DRAWINGS, ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD OF THE INDUSTRY AND ALL LOCAL GOVERNING CODES, FABRICATION SHALL BE FURNISHED TO THOSE TRADES PRIOR TO THE EXECUTION OF THEIR WORK BY THIS SUB-CONTRACTOR FOR PROPER INCORPORATION INTO THEIR WORK.

- 1. SHOP DRAWINGS: SUBMIT FOUR (4) SETS OF SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL AND CHECKING AS REQUIRED.
- 2. PROVIDE PROPER ANCHOR BOLTS AS INDICATED.
- 3. ALL STRUCTURAL METAL ITEMS TO RECEIVE ONE COAT OF RUST

## RAILING (OUTSIDE - REQUIRED)

INHIBITIVE SHOP PRIMER.

PROVIDE ALL RAILINGS AS INDICATED ON THE DRAWINGS, RAILINGS SHALL BE COMPLETE WITH ALL ANCHORS AND FITTINGS. REFER TO DRAWINGS FOR DESIGN.

# CAST STONE

PART 1 - GENERAL RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 1

## SUMMARY

A. THIS SECTION INCLUDES THE FOLLOWING:

SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

**DRAWING NUMBER:**