GENERAL NOTES

1. TYPICAL STRUCTURAL DETAILS AND NOTES SHALL APPLY UNLESS NOTED OTHERWISE ON THE DRAWINGS.
2. EXAMINE SITE AND DRAWINGS TO DETERMINE LOCATIONS AND DIMENSIONS OF UTILITIES, AND SITE IMPROVEMENTS.
3. THE STRUCTURAL DESIGN IS BASED ONLY ON THE STRUCTURE IN ITS COMPLETED STATE. CONTRACTORS AND THEIR SUBCONTRACTORS SHALL TAKE WHATEVER PRECAUTIONS ARE NECESSARY TO WITHSTAND ALL HORIZONTAL AND VERTICAL LOADING THAT MAY BE ENCOUNTERED DURING THE CONSTRUCTION PROCESS PRIOR TO THE COMPLETION OF THE STRUCTURE.
4. WRITTEN DISTANCES & ELEVATIONS SHALL GOVERN OVER SCALED DISTANCES & ELEVATIONS.
5. SCALES SHOWN ARE BASED ON FULL SIZE (22X34) DRAWINGS. REDUCE SCALES BY 2 FOR 11X17 DRAWINGS.

MATERIAL NOTES:

REINFORCED CONCRETE:

CONCRETE:	4000 PSI @ 28 DAYS
REINFORCEMENT BARS:	
DEFORMED BARS	ASTM A615, GRADE 60

DESIGN CRITERIA & LOADING

1. CODE: 2015 INTERNATIONAL BUILDING CODE (IBC) and 2015 IOWA BUILDING CODE AMENDMENTS.
2. DESIGN LOADING

DEAD LOADS (D)		
MATERIALS		CALCULATED
LIVE LOADS (L)		
FLOOR		
ROOF LIVE LOADS (L/r)		
UNIFORM		20 PSF
SNOW LOADS (S)		
P_g	GROUND SNOW LOAD	39 PSF
P_f	FLAT-ROOF SNOW LOAD	33.1 PSF
C_e	SNOW EXPOSURE FACTOR	1.0
I_s	SNOW LOAD IMPORTANCE FACTOR	1.1
C_t	THERMAL FACTOR	1.1
C_s	SLOPE FACTOR	1.0
WIND LOAD (W)		
V	BASIC WIND SPEED	101 MPH (3 SECOND GUST)
V_{asd}	ASD WIND SPEED (V*√(0.6))	84 MPH
RISK (OCCUPANCY) CATEGORY		II
EXPOSURE CATEGORY		C
GC_{pi}	INTERNAL PRESSURE COEFFICIENT	+/- 0.18

FOUNDATION AND SOIL NOTES:

1. PROVIDE A MINIMUM OF 5'-0" OF SOIL COVER AT ALL UNHEATED STRUCTURE FOOTINGS.
2. PROTECT FOUNDATION SOILS FROM FREEZING DURING CONSTRUCTION.
3. PLACE FILL AND BACKFILL AND COMPACT TO FOLLOWING MAXIMUM STANDARD PROCTOR DENSITIES UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS:

LOCATION	DENSITY
FILL BELOW FOOTINGS	100%
FILL BELOW SLABS ON GRADE	98%
PIPE AND STRUCTURE EXCAVATIONS	95%
GREEN SPACES	90%

4. ASSUMED SOIL BEARING PRESSURES:
   ASSUMED ALLOWABLE SOIL BEARING PRESSURE: 1,500 PSF

Preliminary
Not for Const.

EXCAVATION NOTES:

1. TEMPORARY GROUND CONTROL IS BY CONTRACTOR DESIGN.
2. CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TEMPORARY SHEETING AND BRACING NECESSARY TO PROTECT PERSONNEL AND ADJACENT PROPERTY FROM INJURY OR DAMAGE DURING CONSTRUCTION OPERATION.
3. EXCAVATIONS OR TRENCHING WITHIN CLOSE PROXIMITY TO UNDERGROUND STRUCTURES, UTILITIES, OR UTILITY POLES WILL REQUIRE PROTECTION AND SUPPORT TO PREVENT DAMAGE OR INTERRUPTION TO SERVICE. THE COST TO PROVIDE THIS PROTECTION SHALL BE INCLUDED IN THE CONTRACTOR'S TOTAL BASE BID PRICE.

CONCRETE NOTES:

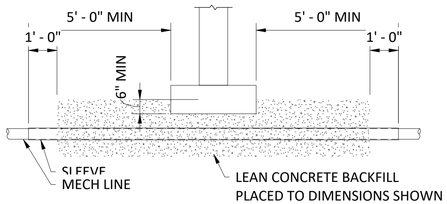
1. LAP SPLICES AND 90 DEGREE END HOOKS SHALL BE AS SHOWN BELOW UNLESS NOTED. WHEN BARS OF TWO DIFFERENT SIZES ARE SPLICED, THE LONGER LAP LENGTH SHALL APPLY.

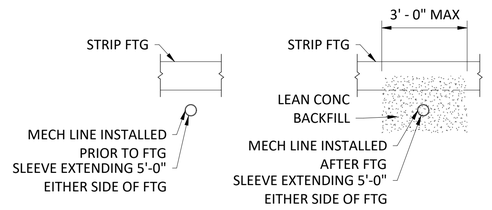
F'C=4000 PSI	SLAB, WALL		90 DEGREE HOOK
BAR SIZE	BAR LAP	TOP BAR	
#4	25 IN.	32 IN.	8 IN.
#5	31 IN.	40 IN.	10 IN.

   *TOP BAR LAP SPLICES ARE HORIZONTAL REINFORCEMENT PLACED SUCH THAT MORE THAN 12 IN. OF CONCRETE IS CAST IN THE MEMBER BELOW THE SPLICE.
2. REINFORCING BARS SHALL HAVE THE FOLLOWING CONC. COVER UNLESS NOTED OTHERWISE.
   - FOOTINGS AND OTHER UNFORMED SURFACES — 3"
   - CONCRETE EXPOSED TO EARTH, WEATHER OR FLUIDS
     - #5 BARS OR SMALLER — 1-1/2"
   - CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND
     - SLABS, WALLS & JOISTS — 3/4"
3. CONCRETE SHALL BE PLACED WITHOUT CONSTRUCTION JOINTS EXCEPT WHERE SPECIFICALLY SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER.
4. CAST-IN-PLACE CONCRETE SHALL NOT BE PLACED IN STANDING WATER, ON FROZEN SOIL OR ON FROZEN CONCRETE.
5. FOR LOCATIONS AND DIMENSIONS OF SLEEVES, AND OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS, SEE CIVIL/MECHANICAL, PLUMBING, HVAC AND ELECTRICAL DRAWINGS. CONTRACTOR SHALL VERIFY AND COORDINATE REQUIREMENTS FOR AND LOCATION OF ABOVE ITEMS WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT.
6. BEVEL ALL EXPOSED CORNERS OF CONCRETE 3/4" x 3/4".

FOUNDATION PLAN NOTES:

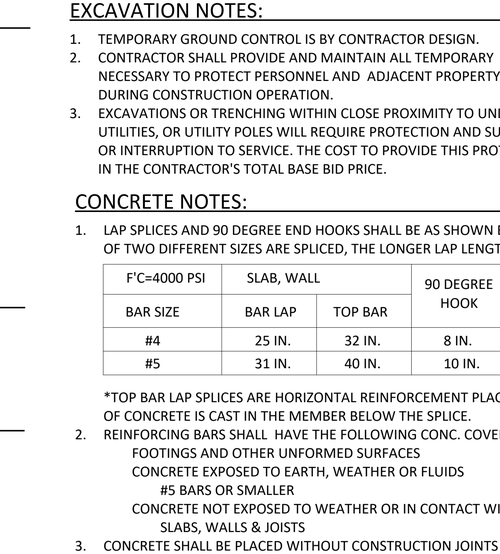
1. REFERENCE ELEVATION 100'-0" = EXISTING GRADE
2. FOOTINGS ARE CENTERED ON WALLS, U.N.O.
3. FOR PIPE BELOW FOOTING, SEE DTL 2/S1.01.
4. FOR CONTRACTORS OPTION OF MECH LINES BENEATH FOOTING, SEE DTL 5/S1.02.
5. CONNECTION OF BUILDING TO FOUNDATION BY BLDG SUPPLIER



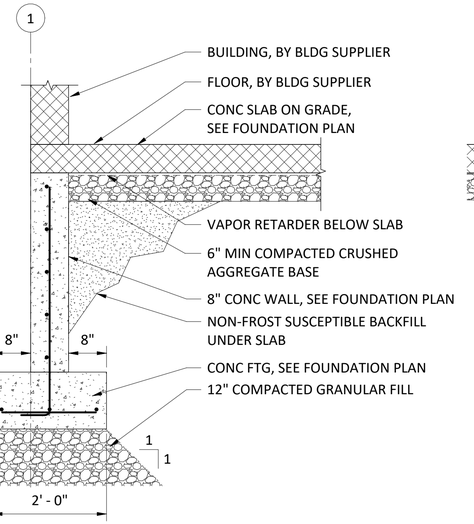


OPTION "A": INSTALLED PRIOR TO FOOTING OPTION "B": INSTALLED AFTER FOOTING

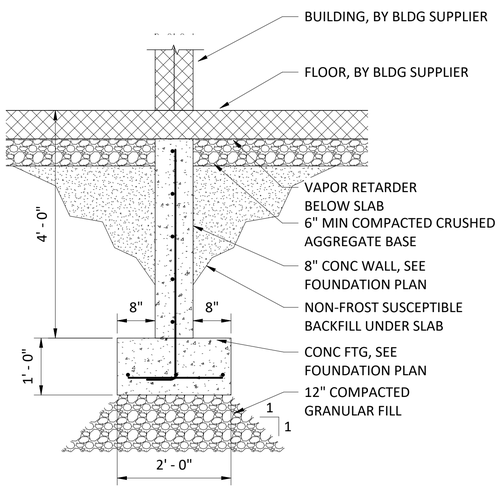
2 / S1.01 DETAIL - CONTRACTORS OPTIONS AT MECH LINES BENEATH FTG
3/8" = 1'-0"



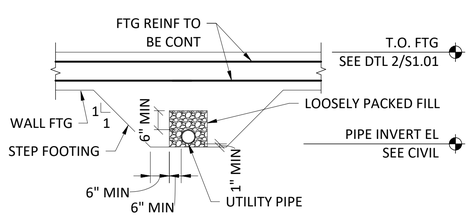
1 / S1.01 PLAN - FOUNDATION
1/4" = 1'-0"



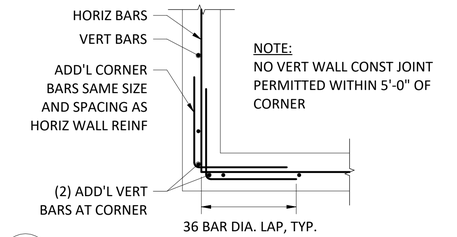
3 / S1.01 DETAIL - TYPICAL EXTERIOR FOUNDATION
3/4" = 1'-0"



4 / S1.01 DETAIL - TYPICAL INTERIOR FOUNDATION
3/4" = 1'-0"



5 / S1.01 DETAIL - STEPPED FOOTING FOR PIPE BELOW
1/2" = 1'-0"



6 / S1.01 DETAIL - TYPICAL FOUNDATION WALL CORNER
3/4" = 1'-0"

BOLTON & MENK
3168 41st Street South, Suite 2
Fargo, ND 58104
Phone: (701) 566-5339
Email: Fargo@bolton-menk.com
www.bolton-menk.com

DESIGNED	JWE
DRAWN	JWE
CHECKED	JCG
CLIENT PROJ. NO	

NO.	ISSUED FOR	DATE

CLAYTON COUNTY CONSERVATION
OSBORNE PARK IMPROVEMENTS
STRUCTURAL NOTES AND FOUNDATION PLAN

SHEET
S1.01

BOLTON & MENK
3168 41st Street South, Suite 2
Fargo, ND 58104
Phone: (701) 566-5339
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NO.	ISSUED FOR	DATE

CLAYTON COUNTY CONSERVATION
OSBOURN PARK IMPROVEMENTS
STRUCTURAL STRUCTURAL DETAILS

SHEET
S1.02