



1/2" CONSTRUCTION JOIST W/ SURFACE SEALANT, DOWEL MONUMENT SIGN FOOTING TO GRADE BEAM WITH (4) #6X2'-0" (2 TOP AND BOTTOM)

48 S3.1 STRUCTURAL - FOUNDATION  
1/4" = 1'-0"

SHEARWALL HOLDDOWN AT FOUNDATION						
TYPE MARK	TYPE	HARDWARE	END POST	ATTACHMENT TO END POST	ANCHORAGE TO FOUNDATION	CAPACITY
HD2	POST-INSTALLED HOLDDOWN	SIMPSON HTS	(2)-2X	(24) 0.148 X 3 NAILS	5/8" DIA. GR.36 ALL-THREAD WITH 8" EMBEDMENT WITH NUT AND WASHER	SEE SHEET S4.3 FOR DETAILS 4670
HD2	POST-INSTALLED HOLDDOWN	SIMPSON STD14	(2)-2X	(30) 0.148 X 3 NAILS	ANCHOR CAST INTO FOUNDATION	SEE SHEET S4.3 FOR DETAILS 4210
HD3	POST-INSTALLED HOLDDOWN	SIMPSON HDU8-SDS2.5	(3)-2X	(20) 1/4" X 2 1/2" SDS SCREWS	7/8" DIA. GR.36 ALL-THREAD WITH 17 1/2" EMBEDMENT WITH NUT AND WASHER	SEE SHEET S4.3 FOR DETAILS 6200
HD4	POST-INSTALLED HOLDDOWN	SIMPSON HDU14-SDS2.5	6X6	(36) 1/4" X 2 1/2" SDS SCREWS	1" DIA. GR.36 ANCHOR ROD WITH 18" EMBEDMENT	SEE SHEET S4.3 FOR DETAILS 10000

- STRUCTURAL CONNECTION NOTES:**
- MINIMUM EDGE DISTANCE TO CENTERLINE OF BOLT IS 3". AT CORNERS, THE OPPOSING EDGE DISTANCE MUST BE ≥ 6".
  - MINIMUM #4X3" LONG REINFORCING BAR LOCATED 3"-5" BELOW THE TOP OF THE SLAB IS REQUIRED TO BE CENTERED ON THE HOLDDOWN. AT CORNER, BEND THE BAR 90° AT THE CENTER
  - REFERENCE MECHANICALLY LAMINATED BUILT-UP COLUMN FOR NAILING REQUIREMENTS FOR END POST.
  - SIMPSON ATR(REQUIRED Ø) WITH SIMPSON SET-3G IS AN ACCEPTABLE OPTION.

FOOTING SCHEDULE								
TYPE MARK	NAME	COUNT	DIMENSIONS			BOTTOM REINFORCING		TYPE COMMENTS
			WIDTH	LENGTH	DEPTH	LONG	SHORT	
FT1	CONCRETE STEEL COLUMN FOOTING - 4' X 4' X 2'-6"	12	4'-0"	4'-0"	2'-6"	SEE DETAIL 2B/S3.1	SEE DETAIL 2B/S3.1	
FT2	CONCRETE STEEL COLUMN FOOTING 5.5' X 5.5' X 2.5'	4	5'-6"	5'-6"	2'-6"	SEE DETAIL 2B/S3.1	SEE DETAIL 2B/S3.1	

PTI PARAMETERS	
E <sub>m</sub> - CENTER	4.8"
E <sub>m</sub> - EDGE	2.0"
Y <sub>m</sub> - CENTER	1.0"
Y <sub>m</sub> - EDGE	1.25"
EFFECTIVE PLASTICITY INDEX	35
ALLOW. BEARING (PSF)	1,800 PSF
MIN. BEAM EMBEDMENT BELOW FINAL GRADE	18"
MIN PERIMETER BEAM EMBEDMENT BELOW FINAL GRADE	52"

SLAB GEOMETRY	
AREA (SF)	5711 SF
PERIMETER (FT)	396 FT
SHAPE FACTOR (PERIMETER <sup>2</sup> /AREA)	27.5

FOUNDATION SCHEDULE									
BEAM ID	DESCRIPTION	WIDTH	DEPTH	TOP BARS	BOTTOM BARS	STIRRUPS	Type Comments	OD Structural	
GB1	GRADE BEAM - INTERIOR - 14"	14"	30"	(3) - #6	(3) - #6	#3 @24" OC			F
GB2	GRADE BEAM - PERIMETER - 14"	14"	30"	(3) - #6	(3) - #6	#3 @24" OC			F
GB2A	GRADE BEAM - PERIMETER - 14" - W/ 8" CONCRETE WALL	8"		(3) - #6	(3) - #6	#3 @24" OC	SEE 1D/S3.1 FOR MORE DETAIL		F
GB3	GRADE BEAM - INTERIOR - 28"	28"	30"	DOUBLE GB1	DOUBLE GB1	DOUBLE GB1	(2) GB1 STIRRUP CAGES SIDE/SIDE - SEE DETAIL 2A/S3.0		F
GB4	8" CONCRETE FOUNDATION	8"	36"				SEE 6A/S3.1		F
GB5	TURNDOWN THICKENED SLAB	12"	12"	N/R	(2) - #4	N/R			F

FOUNDATION NOTES	
FOUNDATION TYPE:	BRAB TYPE III - STIFFENED NON-STRUCTURAL SLAB-ON-GROUND
SLAB THICKNESS:	5"
SLAB REINFORCEMENT:	#4 @ 14" OC EACH WAY - REF DETAIL
DESIGN METHOD:	ACI 318
VAPOR RETARDER:	MINIMUM 10 MIL (LENGTH THICKER REQ'D BY ARCHITECT)

- NOTES:**
- BEAMS ARE TYPE B1 UNO.
  - LOCATE THE FIRST STIRRUP A MAXIMUM OF 3" FROM FACE OF SUPPORT.
  - BEAM DEPTH INDICATED IN THE SCHEDULE IS A STRUCTURAL MINIMUM THAT THE BEAM REINFORCEMENT CAGE MAY BE BASED UPON. REFERENCE GEOTECHNICAL REPORT FOR MINIMUM GRADE BEAM EMBEDMENT BELOW ADJACENT FINAL GRADE OR FLATWORK/PAVEMENT.
  - N/R = NOT REQUIRED

- PLAN NOTES**
- VERIFY ALL EDGE OF FOUNDATION DIMENSIONS WITH FINAL ARCHITECTURE FLOOR PLANS.
  - FORM DIMENSIONS: SLAB DROPS, SLOPES, ETC. SHOWN AS AN AID TO CONTRACTOR ONLY. VERIFY EXACT DIMENSIONS AND LOCATIONS WITH ARCHITECT.
  - DIMENSIONS ARE TO OF GRADE BEAMS OR EDGE OF SLAB UNLESS NOTED OTHERWISE.
  - CONTROL JOINTS (SAW-CUTS) ARE RECOMMENDED TO REDUCE CRACKS IN THE SLAB, BUT ARE NOT REQUIRED FOR STRUCTURAL REQUIREMENTS. FOR THE RECOMMENDED MAXIMUM JOINT SPACING REFERENCE DETAIL.
  - FOR FLATWORK OR PAVEMENT ABUTTING THE BUILDING FOUNDATION REFERENCE DETAIL.
  - CONCRETE IS ASSUMED TO RECEIVE A STEEL TROWEL FINISH UNLESS NOTED OTHERWISE. NOTIFY ENGINEER IF ARCHITECTURALLY EXPOSED CONCRETE (STAINED, POLISHED, ETC.) IS PLANNED FOR ADDITIONAL SHRINKAGE CRACKING MITIGATION METHODS.

This project, like most OpeningDesign's projects, is open source (Attribution-ShareAlike 4.0 International-CC BY-SA 4.0)-freely available to any party for future use, assuming the terms such as Attribution and ShareAlike are honored.

**RENOVATION**  
Architects

Owner: Renovation Wranglers  
102 E 26th St  
Bryan, TX 77803  
Kateracasonline.com | 979.450.9969

**ARCHITECTURE**  
Architect of Record: LKB Architecture  
2929 Allen Pkwy Suite 200  
Houston, TX 77019  
isa@lkbarchitecture.com | 713.425.3076

**DUDDLEY**  
Structural: Dudley  
6102 Imperial Loop Drive  
College Station, TX 77845  
(979) 777-0720

**amc**  
ENGINEERS  
MEP: AMC Engineers  
508 E Jackson St # 552  
Burnet, TX 78611  
info@amcengineers.com