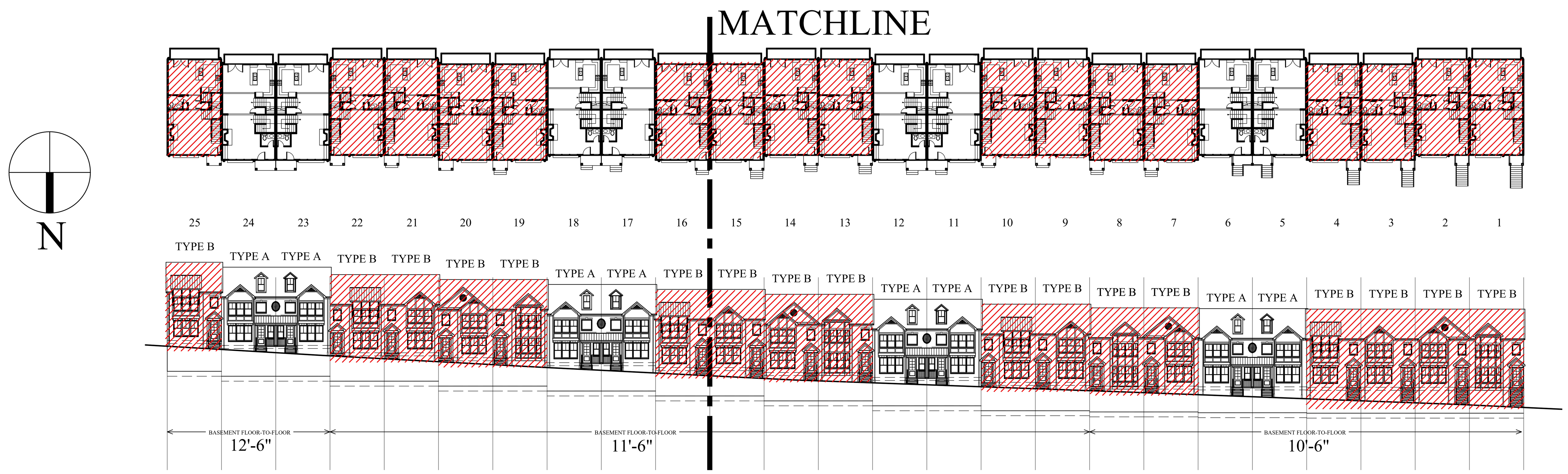
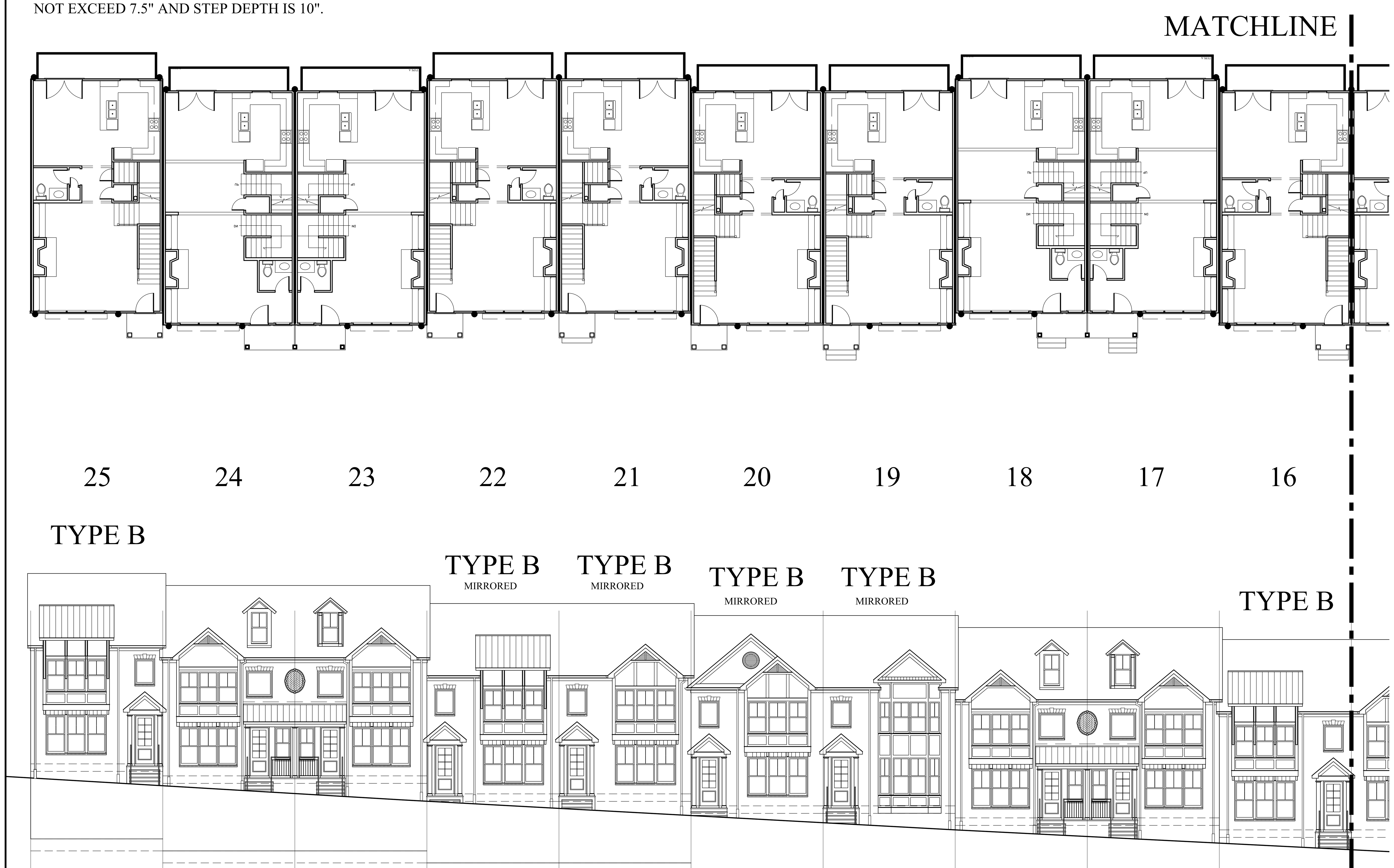


2 A-1.0 OVERALL PLAN & ELEVATION

SCALE: 1/32"=1'-0"

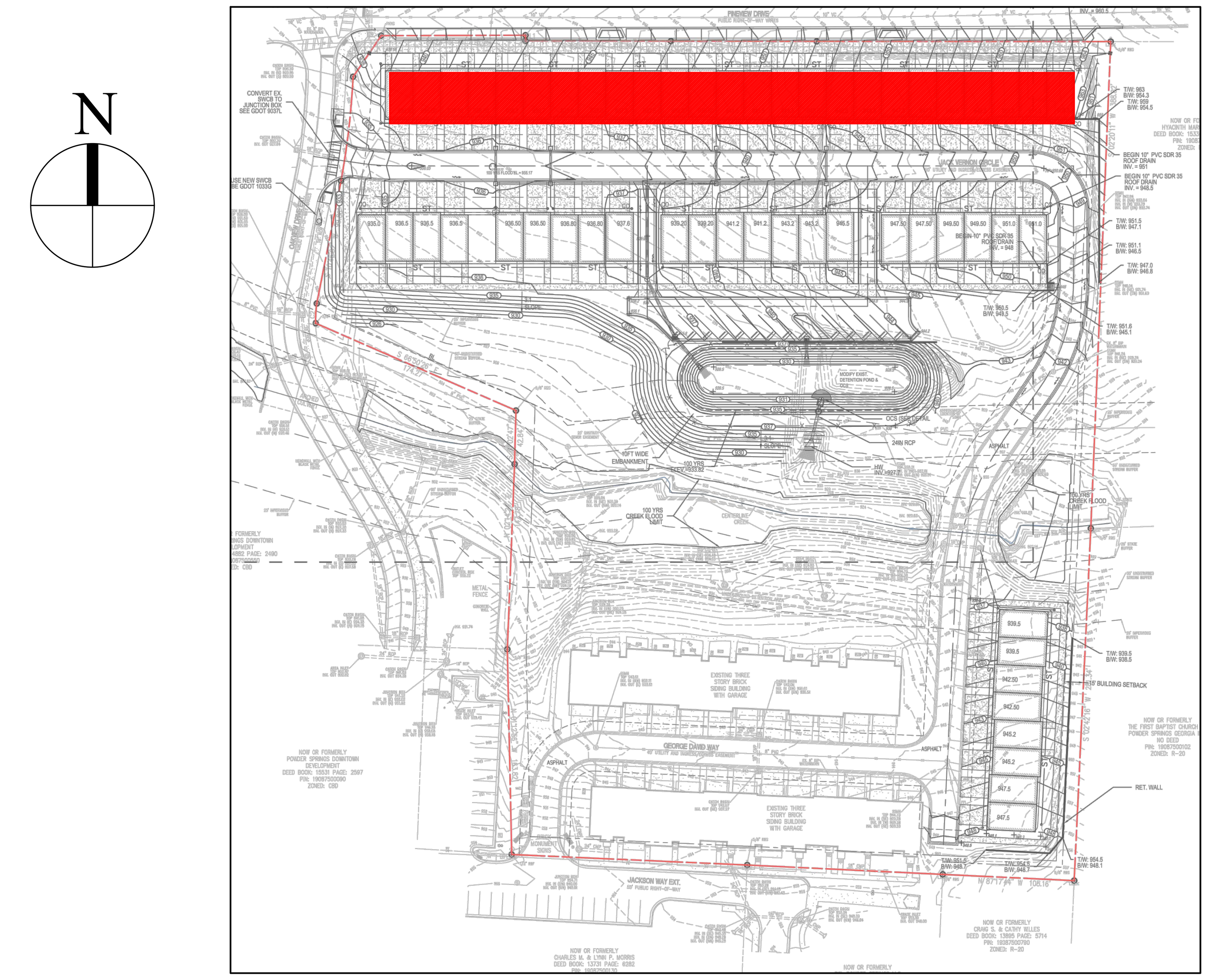
VERIFY BASEMENT FLOOR HEIGHT FOR EACH UNIT. ENSURE THE MAIN FLOOR SYSTEM JOIST IS ABOVE EXTERIOR GROUND FOR MIN. OF 4 INCH.

VERIFY EXACTEXTERIOR GROUND SPOT ELEVATION AT ENTRY, ADJUST NUMBER OF STEPS AS NEEDED. ENSURE STEP RISER DOES NOT EXCEED 7.5" AND STEP DEPTH IS 10".



3 A-1.0 ELEVATION ALONG PINE AVE.

SCALE:3/32"=1'-0"



1 A-1.0 KEY PLAN

N.T.S.

PROJECT DATA

SQUARE FOOTAGE

HEATED: BASEMENT: 403 SQFT
MAIN FLOOR: 858 SQFT
SECOND FLOOR: 868 SQFT
TOTA: 2129 SQFT

NONHEATED: GARAGE: 453 SQFT

TOTAL: 2582 SQFT

NUMBER OF STORIES IN BUILDING: 3

BUILDING HT: +/−39'4"

APPLICABLE CODES

- INTERNATIONAL BUILDING CODE (ICC) – 2012 EDITION WITH GEORGIA STATE AMENDMENTS (2014)(2015)(2017)(2018)
- INTERNATIONAL MECHANICAL CODE (ICC) – 2012 EDITION WITH GEORGIA STATE AMENDMENTS (2014)(2015)
- INTERNATIONAL FUEL GAS CODE (ICC) – 2012 EDITION WITH GEORGIA STATE AMENDMENTS (2014)(2015)
- INTERNATIONAL FIRE CODE (ICC) – 2012 EDITION WITH GEORGIA STATE AMENDMENTS (2014)
- INTERNATIONAL PLUMBING CODE (ICC) – 2012 EDITION WITH GEORGIA STATE AMENDMENTS (2014)(2015)
- NATIONAL ELECTRICAL CODE – 2017 EDITION WITH NO GEORGIA STATE AMENDMENTS
- INTERNATIONAL ENERGY CONSERVATION CODE – 2009 EDITION WITH 2011 & 2012 GEORGIA STATE SUPPLEMENTS & AMENDMENTS
- INTERNATIONAL RESIDENTIAL CODE FOR ONE– & TWO–FAMILY DWELLINGS– 2012 EDITION WITH GEORGIA STATE AMENDMENTS (2014)(2015)(2017)(2018)
- GEORGIA ACCESSIBILITY CODE/2010/120–3–20
- US DEPARTMENT OF JUSTICE. 2010 A.D.A. STANDARDS FOR ACCESSIBLE DESIGN (ADOPTED 03–15–2012)

DRAWING INDEX

FIRM NAME AND ADDRESS
NEW SPACE DESIGN, INC.
3331 NORTH BERKELEY LAKE ROAD
SUITE 200
DULUTH, GA 30096
Phone: (404) 217-3458
Fax: (770) 783-2978
Email: newspace@gmail.com

STATE OF GEORGIA
ZHI FENG
2019–04–08
CERTIFICATE NO. 010536
REGISTERED ARCHITECT

REVISIONS

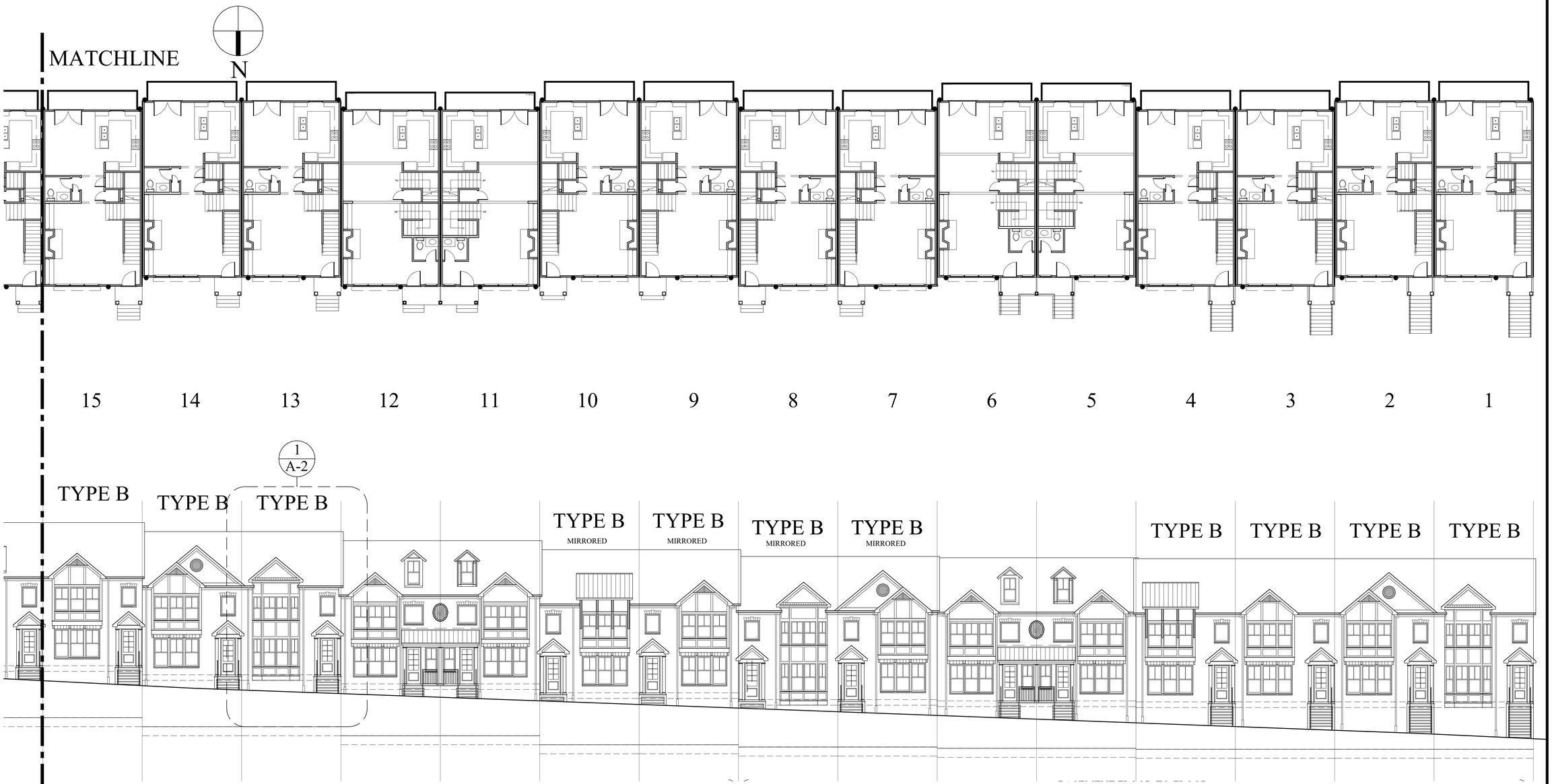
PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE
2019–04–08

SHEET TITLE
OVRERALL PLAN & ELEVATION

SHEET NUMBER
A-1.0

FOUNDATION NOTE: REFER TO CIVIL SET FOR EXACT SPOT ELEVATION OF BASEMENT SLAB , AND EXTERIOR TOPOGRAPHY. VERIFY IN FIELD BEFORE ROUGH IN.
WALL FOUNTAION DETAIL FOR CONCRETE SLAB EDGE ON GARAGE SIDE, REFER TO STRUCTURE DRAWINGS, 5/SB-3.0 & 3/SB-3.3, FOR DIFFERENT CONDITIONS.



1 A-1.1 ELEVATION ALONG PINE AVE.
SCALE:3/32"=1'-0"

FIRM NAME AND ADDRESS
NEW SPACE DESIGN, INC.
3331 NORTH BERKELEY LAKE ROAD
SUITE 200
DULUTH, GA 30096
Phone: (404) 217-3458
Fax: (770) 783-2978
Email: newspace@gmail.com

STATE OF GEORGIA
ZHI FENG
2019-04-08
CERTIFICATE NO. 026555
REGISTERED ARCHITECT

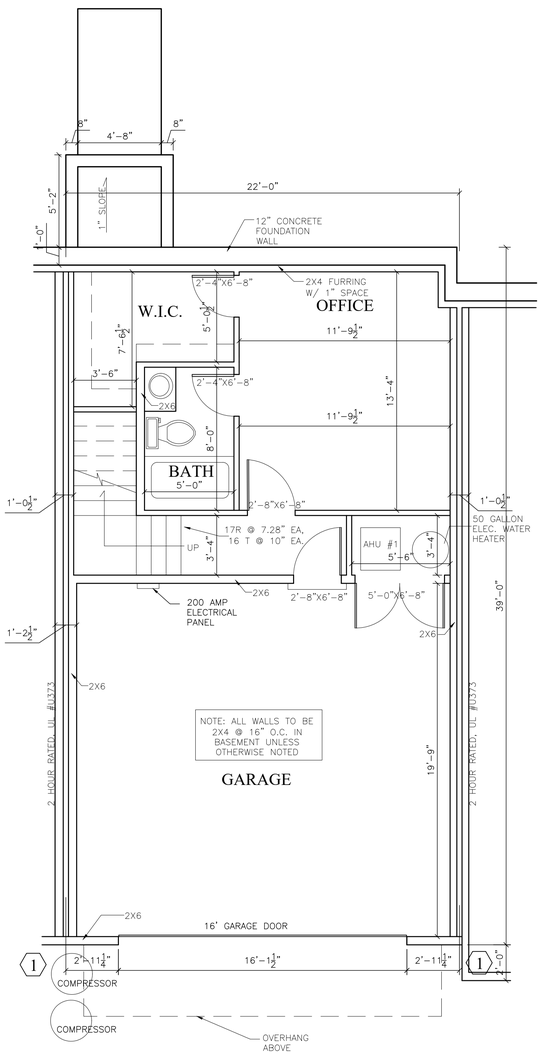
REVISIONS

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE
2019-04-08

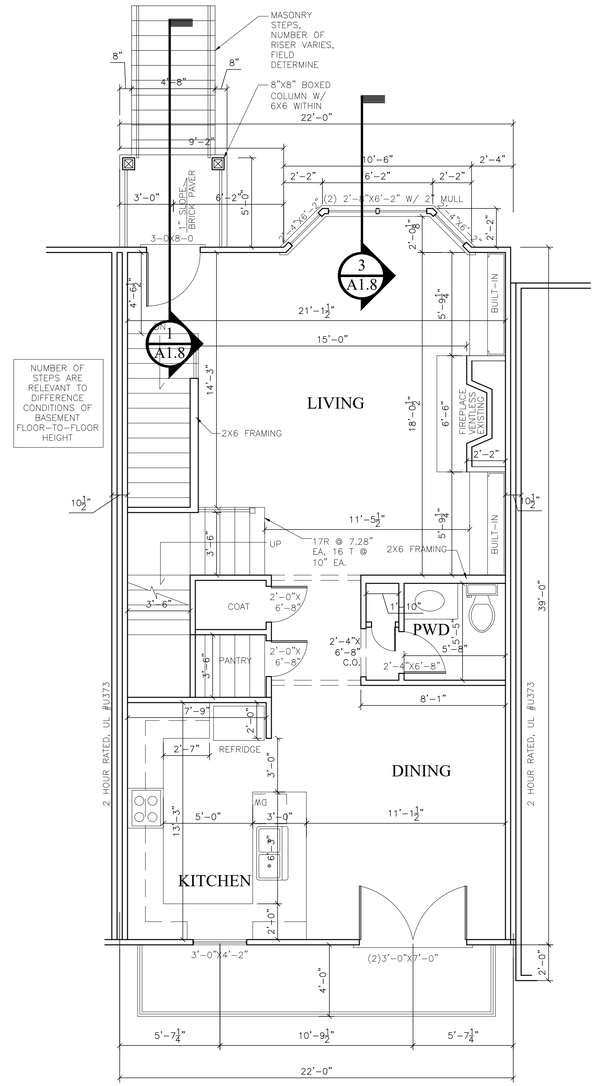
SHEET TITLE
OVRERALL PLAN
& ELEVATION

SHEET NUMBER
A-1.1



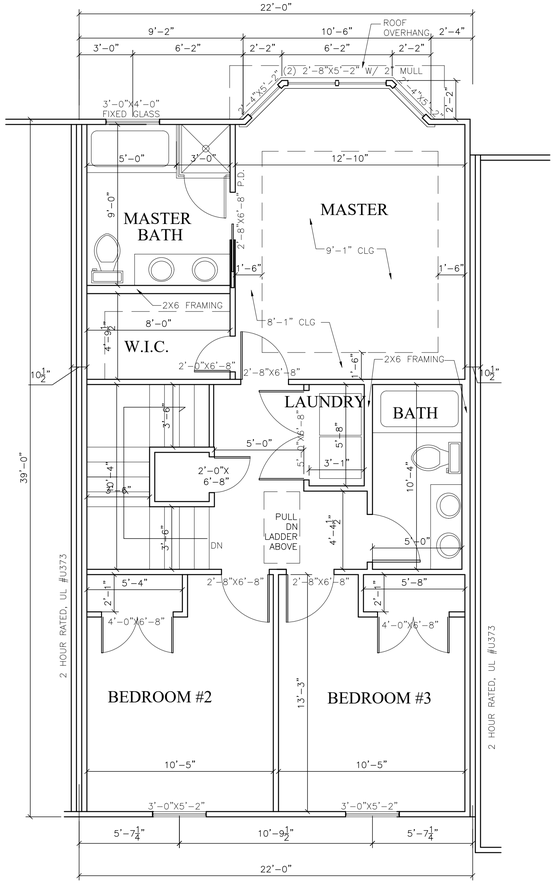
BASEMENT FLOOR PLAN

SCALE: 1/4"=1'-0"



MAIN FLOOR PLAN

SCALE: 1/4"=1'-0"



SECOND FLOOR PLAN

SCALE: 1/4"=1'-0"

(1) FOUNDATION NOTE: REFER TO CIVIL SET FOR EXACT SPOT ELEVATION OF BASEMENT SLAB , AND EXTERIOR TOPOGRAPHY. VERIFY IN FIELD BEFORE ROUGH IN. WALL FOUNTAION DETAIL FOR CONCRETE SLAB EDGE ON GARAGE SIDE, REFER TO STRUCTURE DRAWINGS, 5/SA-3.0 & 3/SA-3.3, FOR DIFFERENT CONDITIONS.

FIRM NAME AND ADDRESS
NEW SPACE DESIGN, INC.
3331 NORTH BERKELEY LAKE ROAD
SUITE 200
DULUTH, GA 30096
Phone: (404) 217-3458
Fax: (770) 783-2978
Email: newspace@gmail.com

STATE OF GEORGIA
ZHI FENG
CERTIFICATE NO. 026555
2019-04-08
REGISTERED ARCHITECT

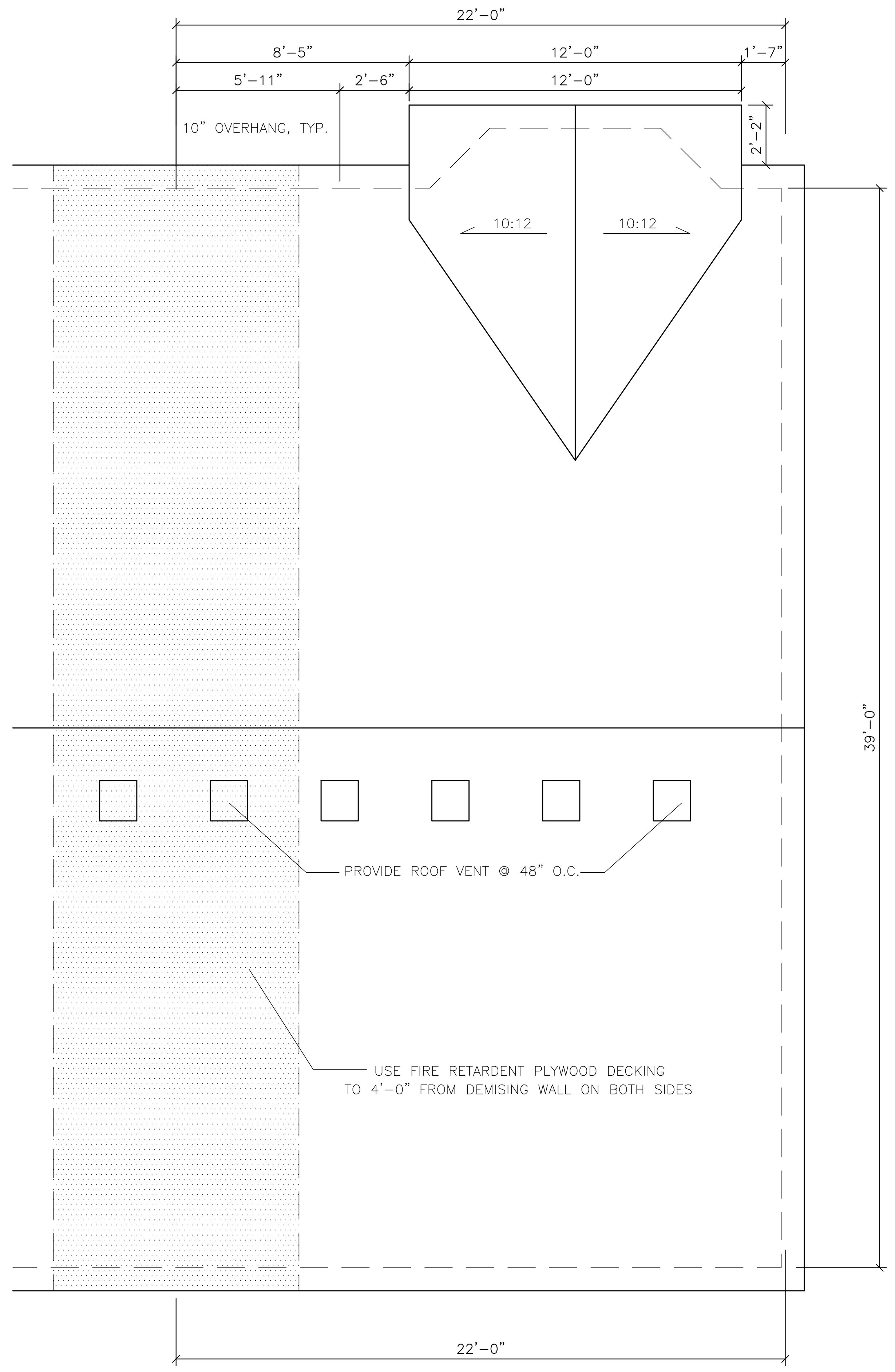
REVISIONS

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE
2019-04-08

SHEET TITLE
FLOOR PLANS

SHEET NUMBER
A-1.6



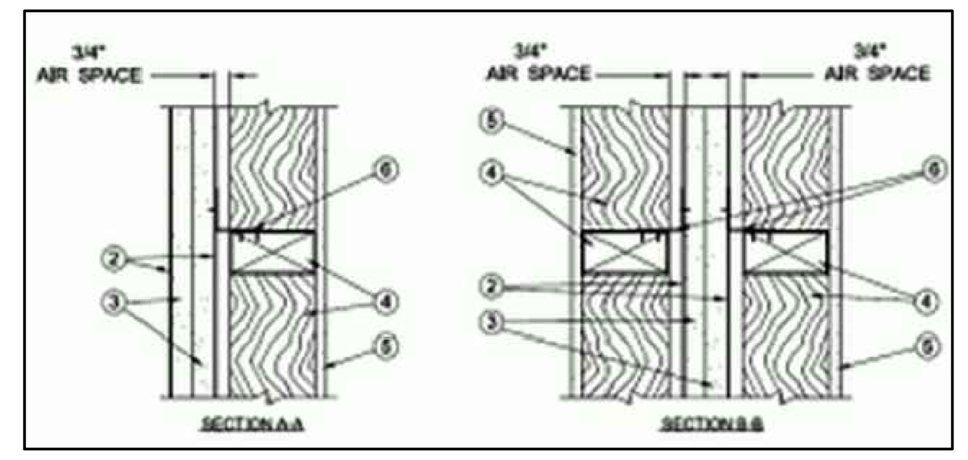
ROOF PLAN

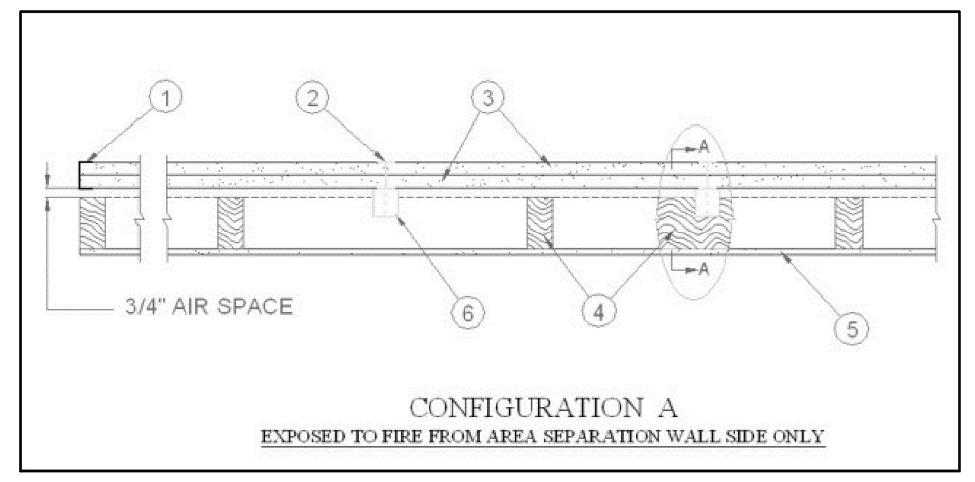
SCALE: 1/4"=1'-0"

ROOF CONSTRUCTION:

ARCHITECTURE SHINGLES
#30 FELT
5/8" PLYWOOD DECKING

UL REFERENCE
UL #U373



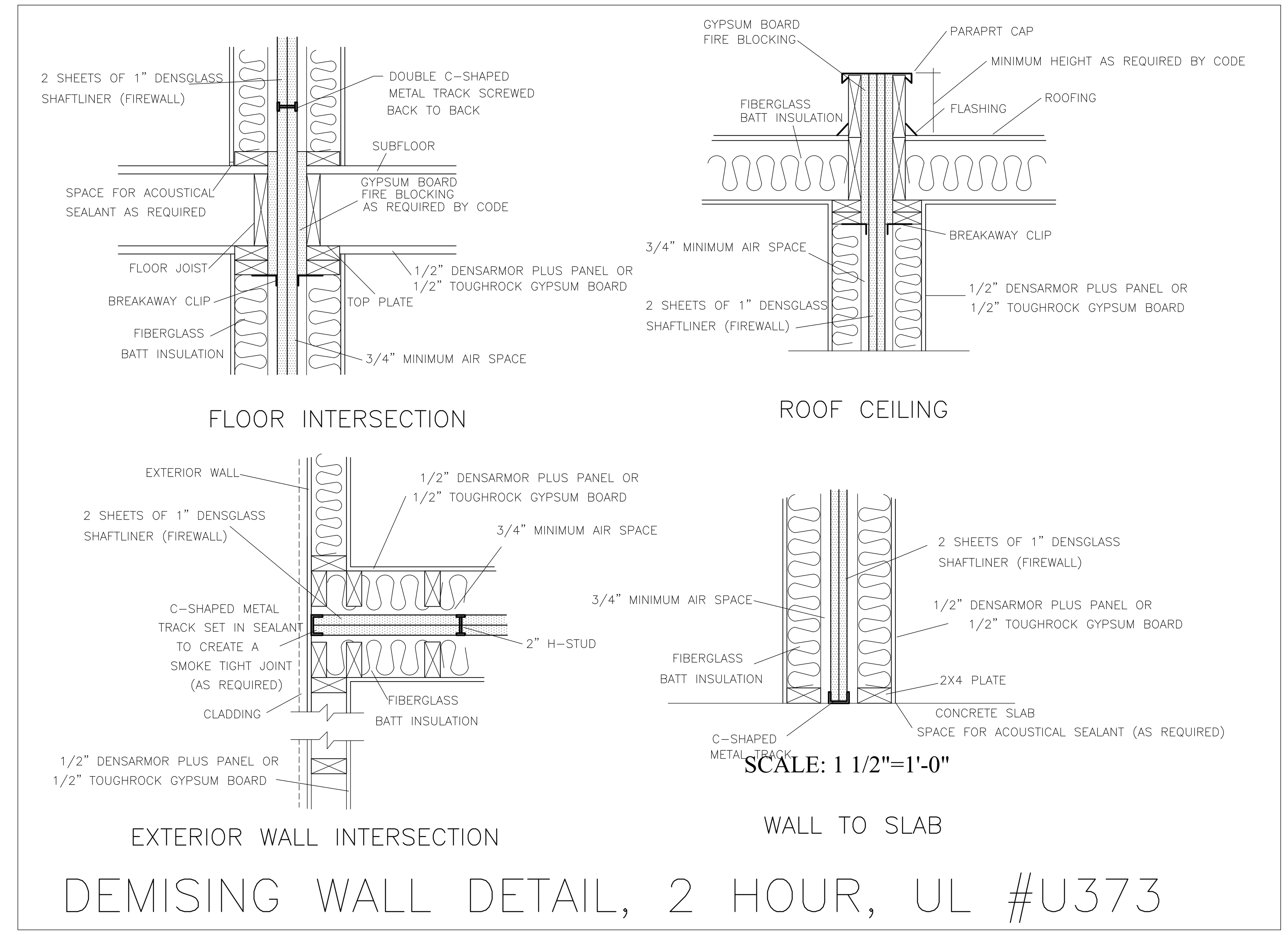


Design No. U373
March 05, 2018
Nonbearing Wall Rating – 2 Hr (Area Separation Wall, See items 1, 2 and 3)
Bearing Wall Rating 2 Hr (Protected Wall, See Items 4, 4A and 4B)
Nonbearing Wall Rating 2 Hr (Protected Wall, See Item 4B)
Finish Rating – 120 Min (See Item 4)
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

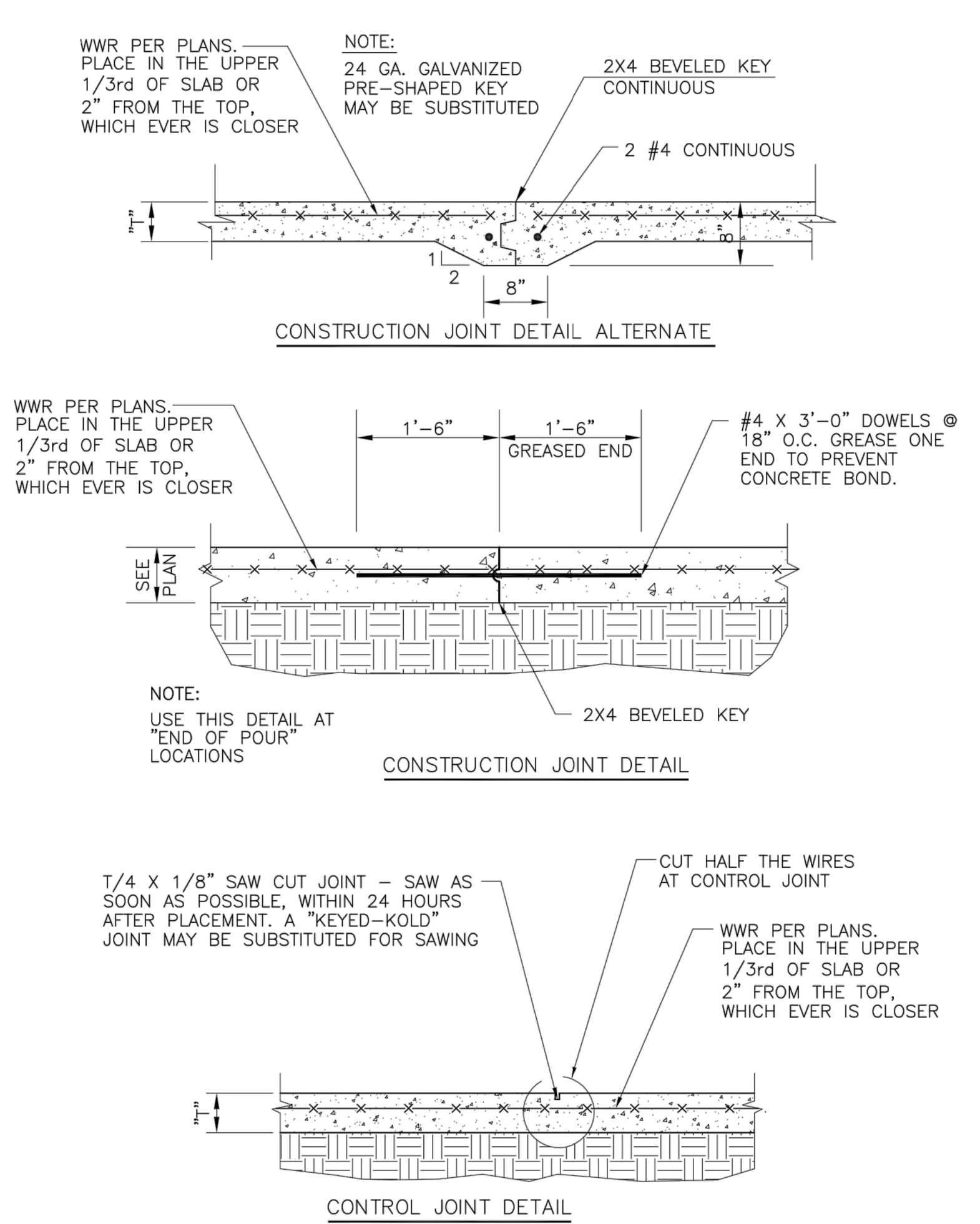
AREA SEPARATION WALL: —(Nonbearing, Max Height – 44 ft)
1. Floor, Intermediate or Top Wall —2-3/16 in. wide channel shaped with 1 in. long legs formed from No. 25 MSG galv steel, secured with suitable fasteners spaced 24 in. OC.
2. Steel Studs —Steel members formed from No. 25 MSG galv steel having "H" – shaped flanges spaced 24 in. OC; overall depth 2-1/8 in. and flange width 1-1/2 in.
3. Gypsum Board* —Two layers of 1 in. thick gypsum wallboard liner panels, supplied in nom 24 in. widths. Vertical edges of panels friction fitted into "H" – shaped studs.
GEORGIA-PACIFIC GYPSUM L L C —Types TRSL, DGUSL

PROTECTED WALL: (Bearing or Nonbearing Wall, as indicated in Items 4, 4A and 4B. When Bearing, Load Restricted for Canadian Applications —See Guide BXUV7.)

4. Wood Studs —For 2 Hr. Bearing or Nonbearing Wall Rating – Nom 2 by 4 in., max spacing 24 in. OC. Studs cross-braced at midheight where necessary for clip attachment. Min 3/4 in. separation between wood framing and area separation wall. Finish rating evaluated for wood studs only.
4A. Steel Studs —(As an alternate to Item 4, not shown) —For 2 Hr. Bearing Wall Rating – Corrosion protected steel studs, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min 3- 1/2 in. wide, min No. 20 GSG (0.036 in. thick) galv steel or No. 20 MSG (0.033 in. thick) primed steel, cold formed, shall be designed in accordance with the current edition of the Specification for the Design of Cold-Formed Steel Structural Members by the American Iron and Steel Institute. All design details enhancing the structural integrity of the wall assembly, including the axial design load of the studs, shall be as specified by the steel stud designer and/or producer, and shall meet the requirements of all applicable local code agencies. The max stud spacing of wall assemblies shall not exceed 24 in. OC. Studs attached to floor and ceiling tracks with 1/2 in. long Type S-12 steel screws on both sides of studs or by welded or bolted connections designed in accordance with the AISI specifications. Top and bottom tracks shall consist of steel members, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min No. 20 GSG (0.036 in. thick) galv steel or No. 20 MSG (0.033 in. thick) primed steel, that provide a sound structural connection between steel studs, and to adjacent assemblies such as a floor, ceiling, and/or other walls. Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 24 in. O.C. Studs cross-braced with stud framing at midheight where necessary for clip attachment. Min 3/4 in. separation between steel framing and area separation wall. Finish rating has not been evaluated for Steel Studs.
4B. Steel Studs —(As an alternate to Items 4 and 4A, for use in Configuration B only, not shown) —For 2 Hr. Nonbearing Wall Rating – Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min 3-1/2 in. wide, min 1-1/4 in. flanges and 1/4 in. return, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height. Top and bottom tracks shall be channel shaped, fabricated from min 25 MSG corrosion-protected steel, min width to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max. Studs cross-braced with stud framing at midheight where necessary for clip attachment. Min 3/4 in. separation between steel framing and area separation wall. Finish rating has not been evaluated for Steel Studs.
5. Gypsum Board —Classified or Unclassified – Min 1/2 in thick, 4 ft wide, applied either horizontally or vertically. Wallboard attached to wood studs (Item 4) with 1-1/4 in. long steel drywall nails spaced 12 in. OC. Wallboard attached to steel studs (Item 4A or 4B) with 1 in. long Type S steel screws spaced 12 in. OC. Vertical joints located over studs. (Optional) Joints covered with paper tape and joint compound. Nail or screw heads covered with joint compound.
5A. Plywood Sheathing or OSB —(Not shown) —As an alternate to Item 5, Nominal 1/2 in. thick or greater plywood or OSB applied horizontally or vertically to wood or steel studs. Vertical joints located over studs. Horizontal joints shall be butted tight to form a closed joint. Fastened to studs with nails or screws of sufficient length, spaced 12 in. OC. Joints and fastener heads are not required to be treated. Aluminum clips shall be spaced as described in Item 6.
6. Attachment Clips —Aluminum angle, 0.062 in. thick, min 2 in. wide with min 2 in. and 2-1/2 in. legs. Clips secured with minimum one Type S screw 3/8 in. long to "H" studs and with minimum one Type W screw 1-1/4 in. long to wood framing or steel framing through holes provided in clip. Clips spaced a max of 10 ft OC vertically between wood or steel framing and "H" studs for separation walls up to 23 ft high. For separation walls up to 44 ft high, clips spaced as described above for the upper 24 ft. and the remaining wall area below requires clips spaced a max 5 ft OC vertically between wood or steel framing and "H" studs.
7. Batts and Blankets* —(Optional, not shown) —Placed in stud cavities, any glass fiber or mineral wool insulation, max 3.0 pcf density, bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.
Last Updated on 2018-03-05



DEMISING WALL DETAIL, 2 HOUR, UL #U373



SLAB ON GRADE SPECIFICATION	
4", 3000 PSI CONCRETE SLAB ON GRADE WITH W.W.R. 6x6-W2.9xW2.9 ATOP 4-INCH COMPACTED LAYER OF FREE DRANING, GRANULAR SUBBASE MATERIAL. (SEE JOINT DETAILS FOR PLACEMENT) PREPARE SUB GRADE PER GEOTECHNICAL RECOMMENDATIONS PLACE A 10 MIL (MINIMUM) POLYETHYLENE MOISTURE BARRIER (WITH JOINTS LAPPED NOT LESS THAN 6 INCHES) DIRECTLY BENEATH ALL INTERIOR CONCRETE SLABS ON GRADE.	
FINISH FLOOR ELEVATION =	(SEE CIVIL)
REFERENCE F.F.E. =	(0'-0")

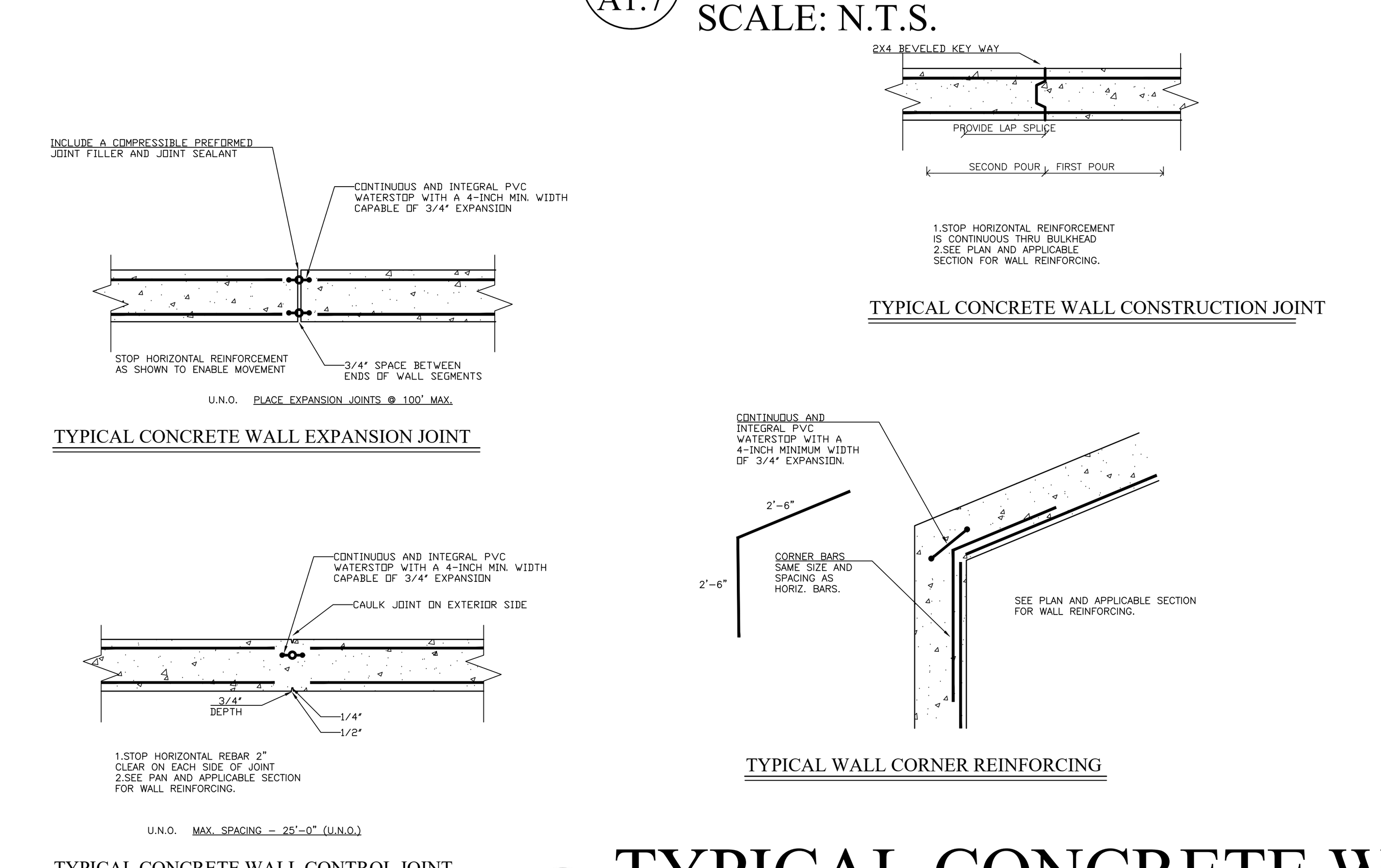
C.J. ON PLANS INDICATES CONSTRUCTION JOINTS OR CONTROL JOINTS. IF NOT SHOWN OTHERWISE; MAINTAIN A MAXIMUM AREA BOUNDED BY SLAB CONTROL JOINTS OF 400 SQUARE FEET (i.e. 20' x 20') THE MAXIMUM SIDE RATIO OF WHICH SHALL BE 1.5:1

PROVIDE JOINTS OR REINFORCEMENT AT ALL RE-ENTRANT SLAB CORNERS SUCH AS INSIDE CORNERS OF AN L-SHAPED SLAB. IF REINFORCEMENT IS UTILIZED, THESE RE-ENTRANT CORNERS SHALL HAVE TWO PIECES OF #4 REINFORCING BAR 48 INCHES LONG PLACED DIAGONALLY TO THE CORNER, 12 INCHES APART, WITH THE FIRST BAR PLACED 2 INCHES FROM THE CORNER. ALL REINFORCEMENT SHALL BE APPROPRIATELY POSITIONED IN THE UPPER THIRD OF THE SLAB.

1
A1.7

TYPICAL SLAB ON GRACE DETAIL

SCALE: N.T.S.



2
A1.7

TYPICAL CONCRETE WALL DETAIL

SCALE: N.T.S.

FIRM NAME AND ADDRESS
NEW SPACE DESIGN, INC.
3331 NORTH BERKELEY LAKE ROAD
SUITE 200
DULUTH, GA 30096
Phone: (404) 217-3458
Fax: (770) 783-2978
Email: newspace@gmail.com

STATE OF GEORGIA
ZHI FENG
2019-04-08
REGISTERED ARCHITECT

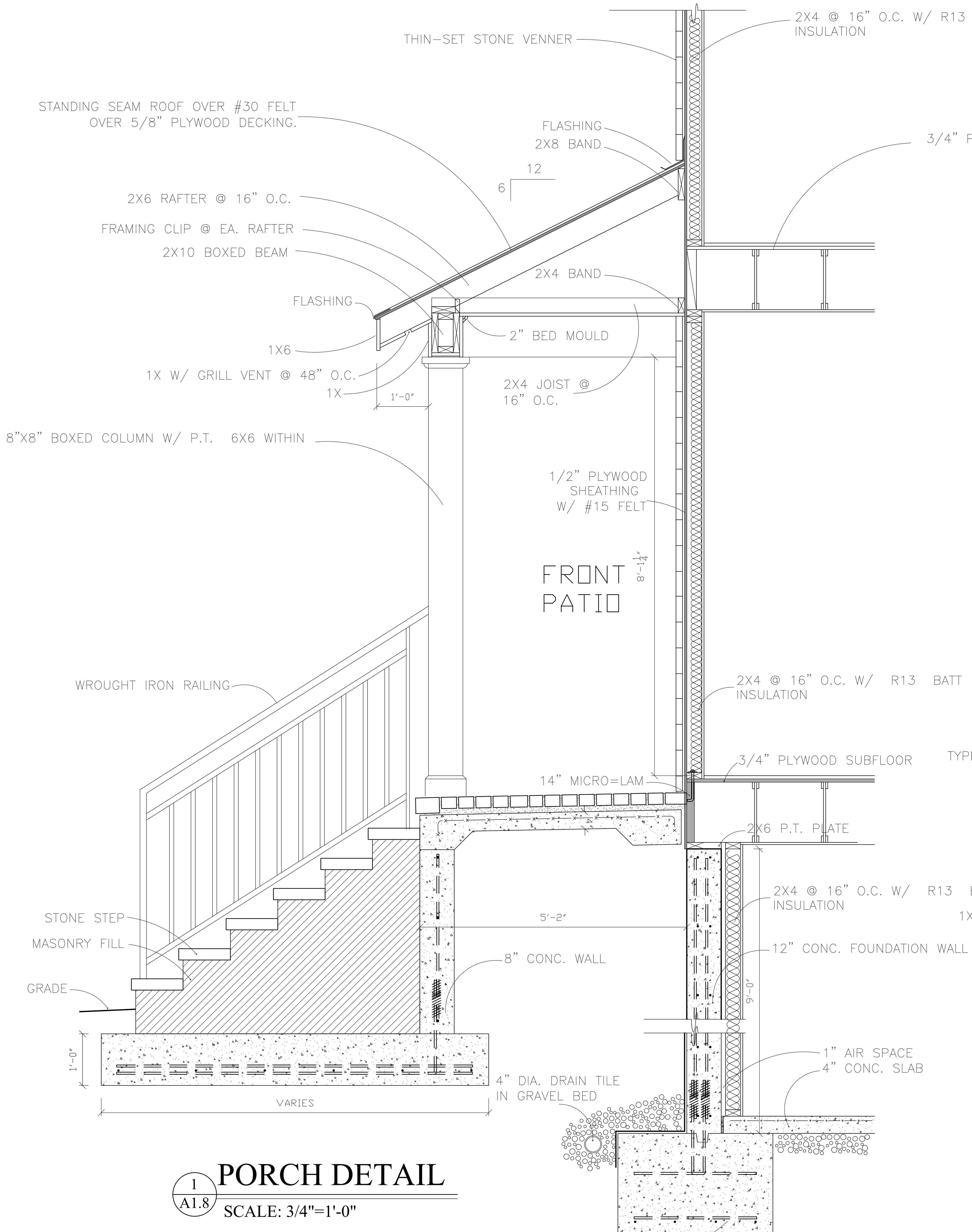
REVISIONS

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

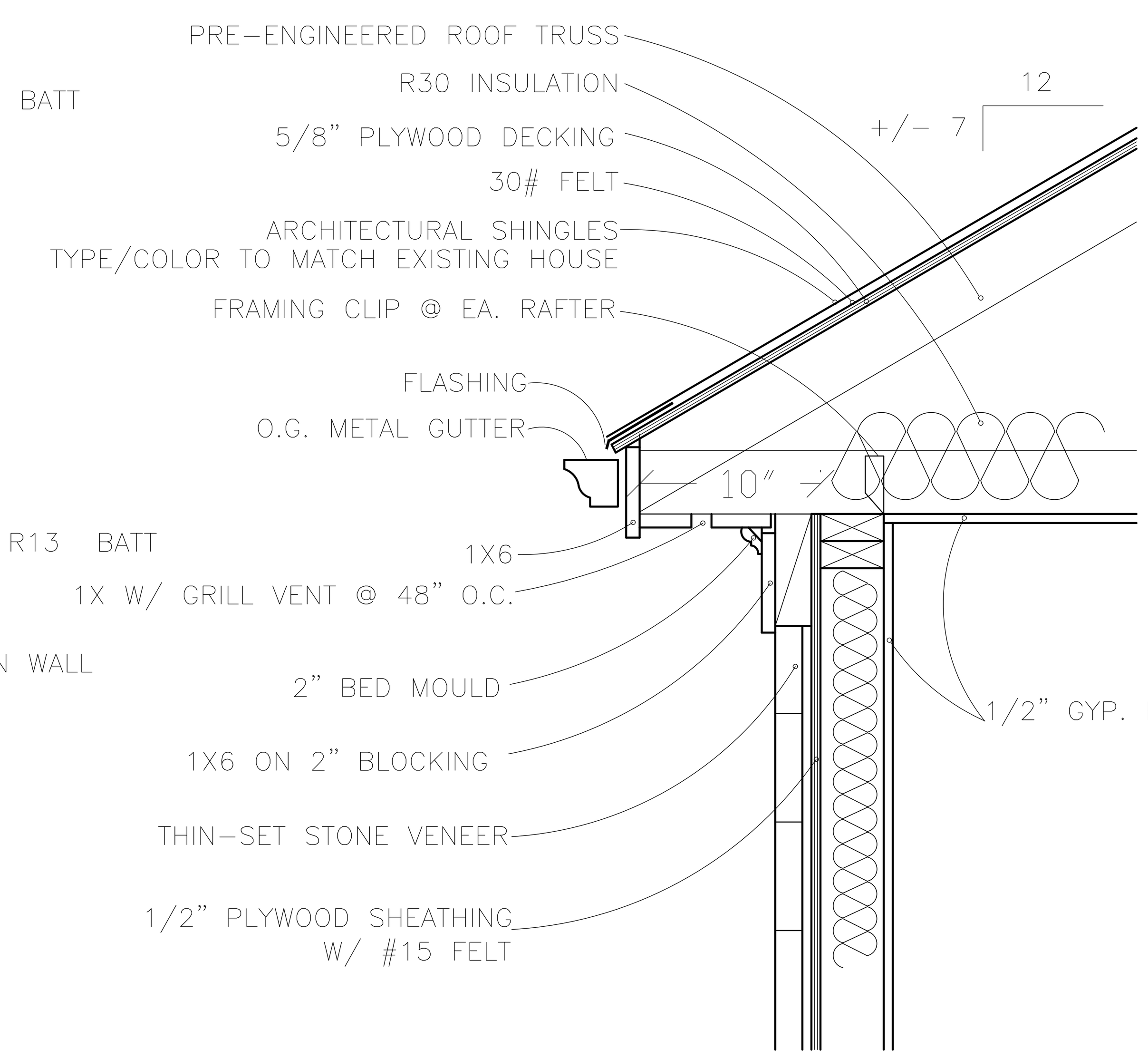
DATE
2019-04-08

SHEET TITLE
ROOF PLAN
& DEMISING WALL
DETAILS

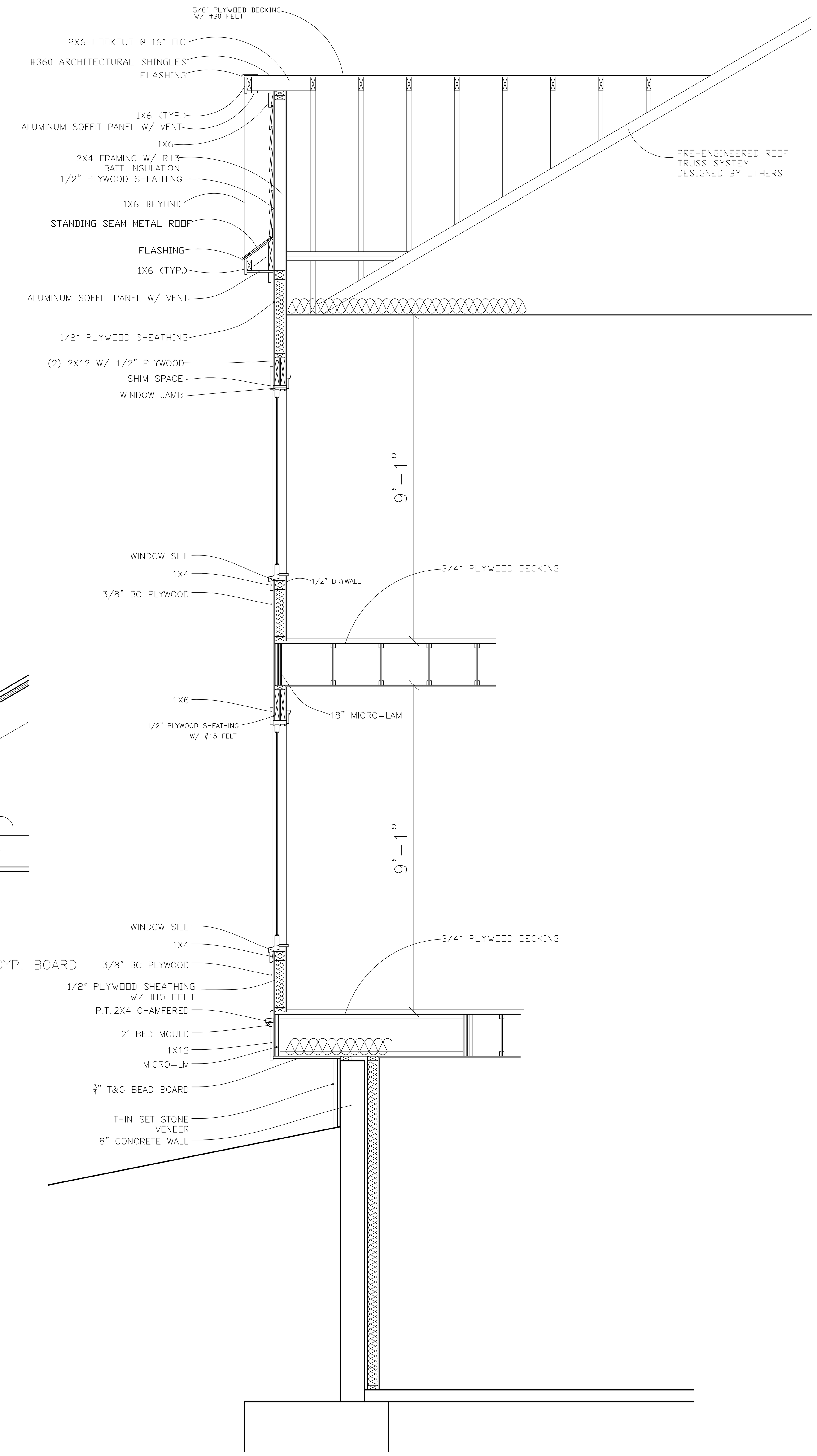
SHEET NUMBER
A-1.7



1 A1.8 **PORCH DETAIL**
SCALE: 3/4"=1'-0"



2 A1.8 **CORNICE DETAIL**
SCALE: 1 1/2"=1'-0"



3 A1.8 **BAY WINDOW SECTION**
SCALE: 1 1/2"=1'-0"

FIRM NAME AND ADDRESS
NEW SPACE DESIGN, INC.
3331 NORTH BERKELEY LAKE ROAD
SUITE 200
DULUTH, GA 30096
Phone: (404) 217-3458
Fax: (770) 783-2978
Email: newspace@gmail.com

STATE OF GEORGIA ZHI FENG 2019-04-08 REGISTERED ARCHITECT

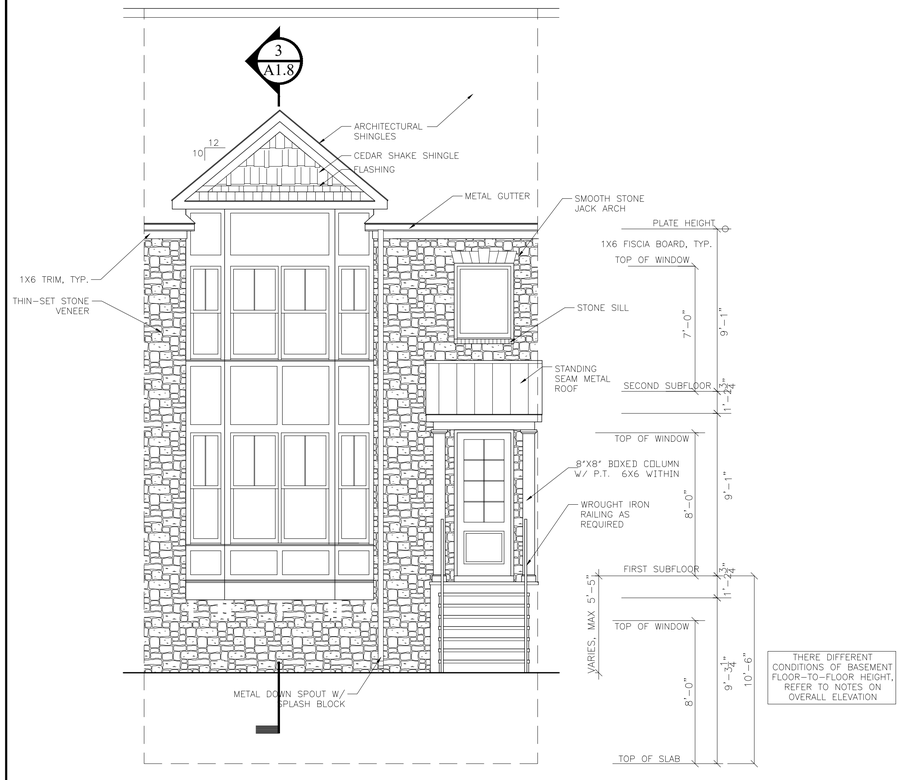
REVISIONS

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE
2019-04-08

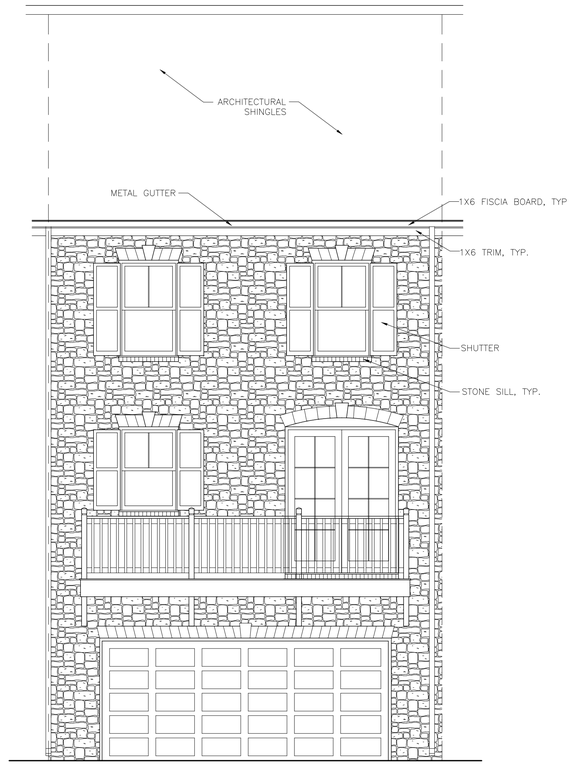
SHEET TITLE
DETAILS

SHEET NUMBER
A-1.8



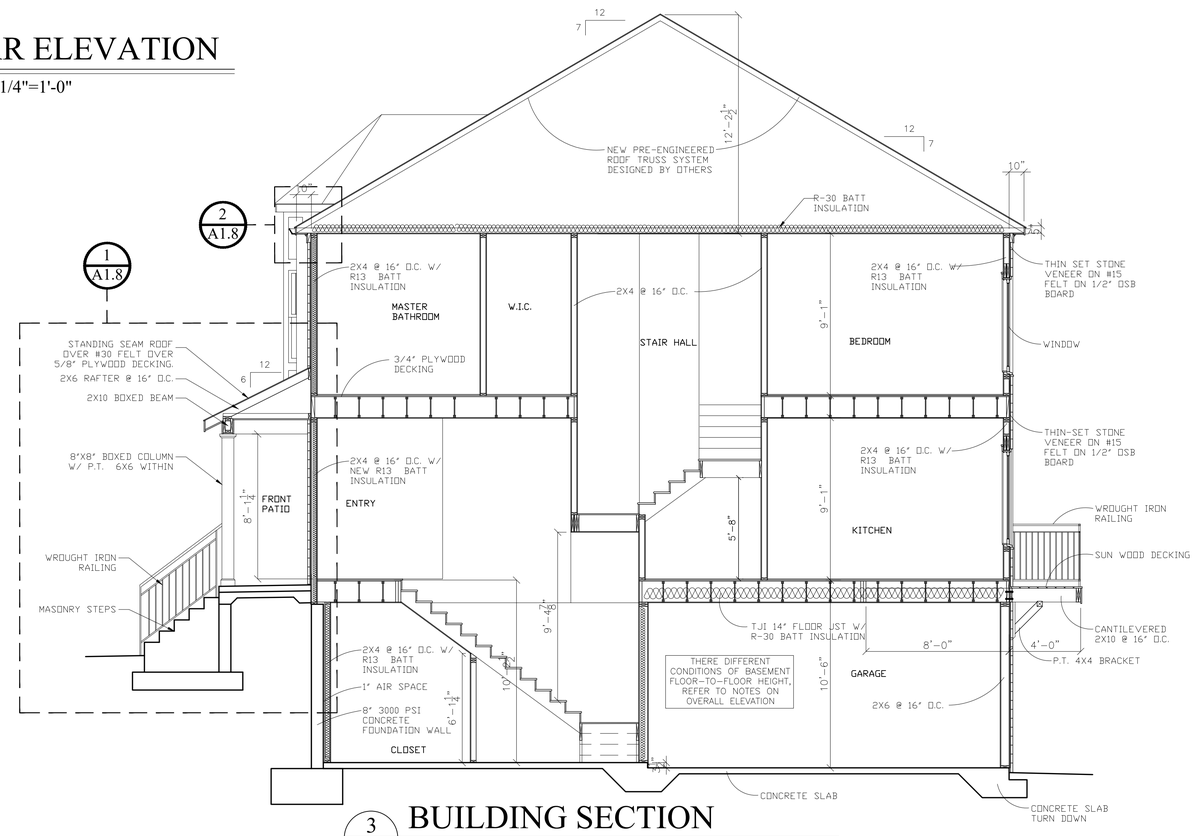
1 A-2 FRONT ELEVATION

SCALE: 1/4"=1'-0"



2 A-2 REAR ELEVATION

SCALE: 1/4"=1'-0"



3 A-2 BUILDING SECTION

SCALE: 1/4"=1'-0"

FIRM NAME AND ADDRESS
NEW SPACE DESIGN, INC.
3331 NORTH BERKELEY LAKE ROAD
SUITE 200
DULUTH, GA 30096
Phone: (404) 217-3458
Fax: (770) 783-2978
Email: newspace@gmail.com

STATE OF GEORGIA
ZHI FENG
2019-04-08
CERTIFICATE NO. 026055
REGISTERED ARCHITECT

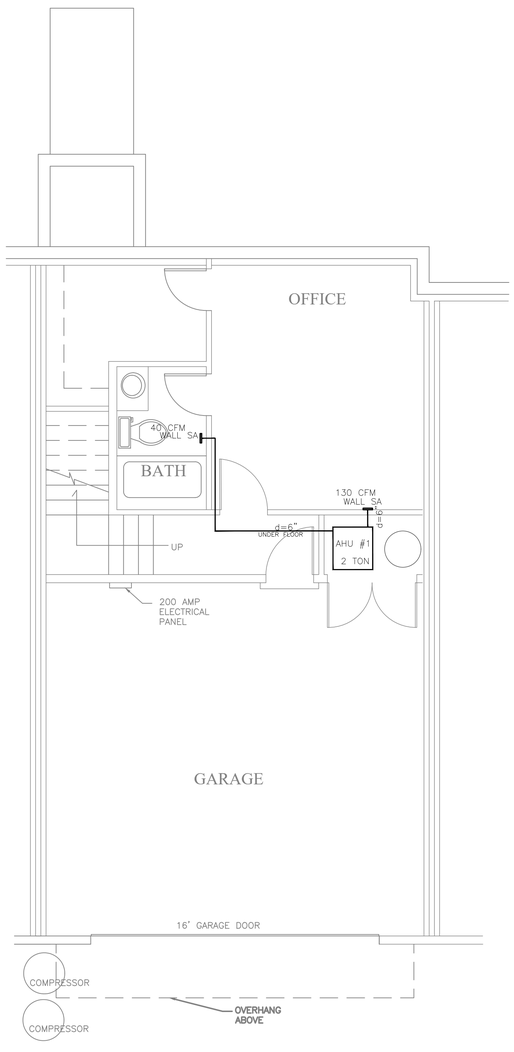
REVISIONS

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

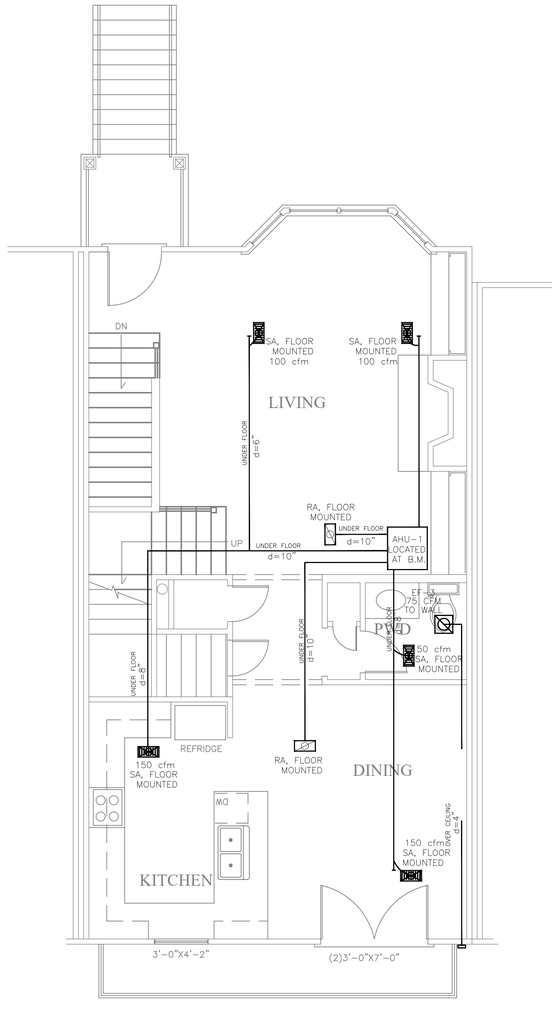
DATE
2019-04-08

SHEET TITLE
BUILDING ELEVATION & SECTION

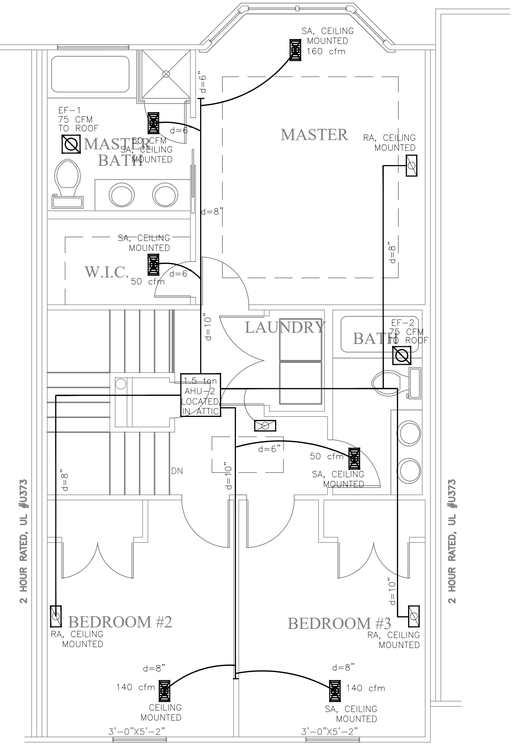
SHEET NUMBER
A-2



BASEMENT FLOOR



MAIN FLOOR



SECOND FLOOR

MECHANICAL PLAN

SCALE: 1/4"=1'-0"

FIRM NAME AND ADDRESS
NEW SPACE DESIGN, INC.
3331 NORTH BERKELEY LAKE ROAD
SUITE 200
DULUTH, GA 30096
Phone: (404) 217-3458
Fax: (770) 783-2978
Email: newspace@gmail.com

GEORGIA
REGISTERED
Guigen Wang
NO. 024269
PROFESSIONAL
4/8/19
ENGINEER
GUIGEN DAVID WANG

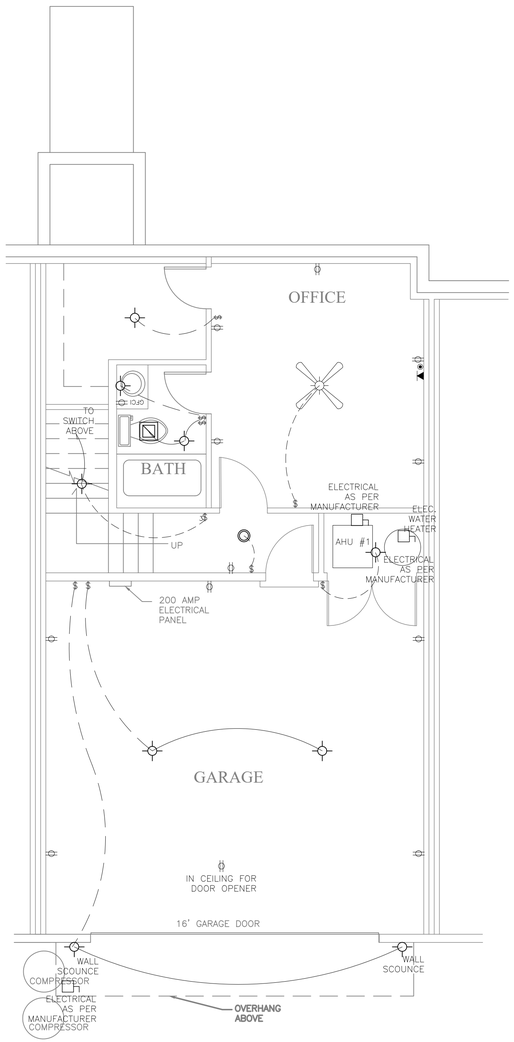
REVISIONS

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

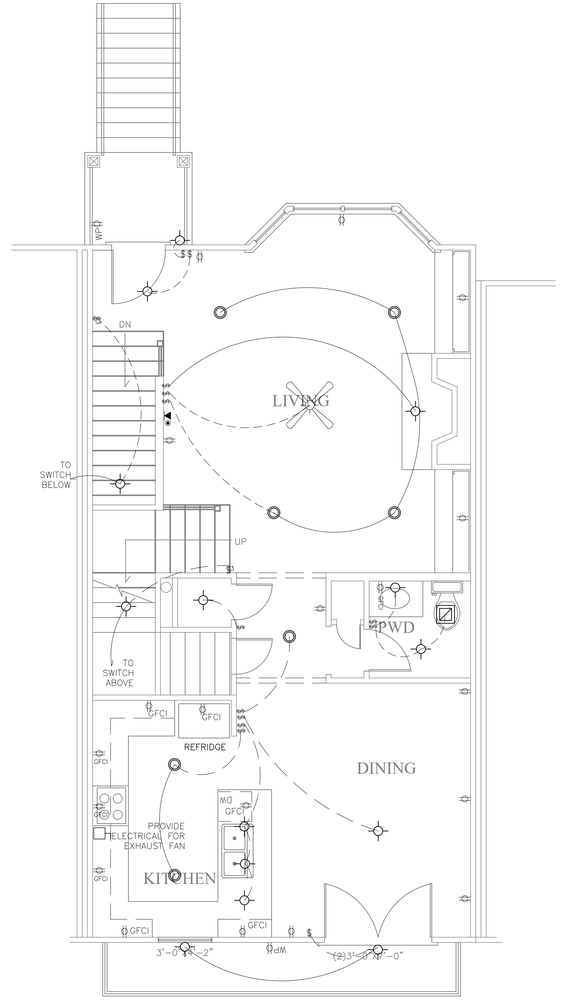
DATE
2019-04-08

SHEET TITLE
MECHANICAL PLAN

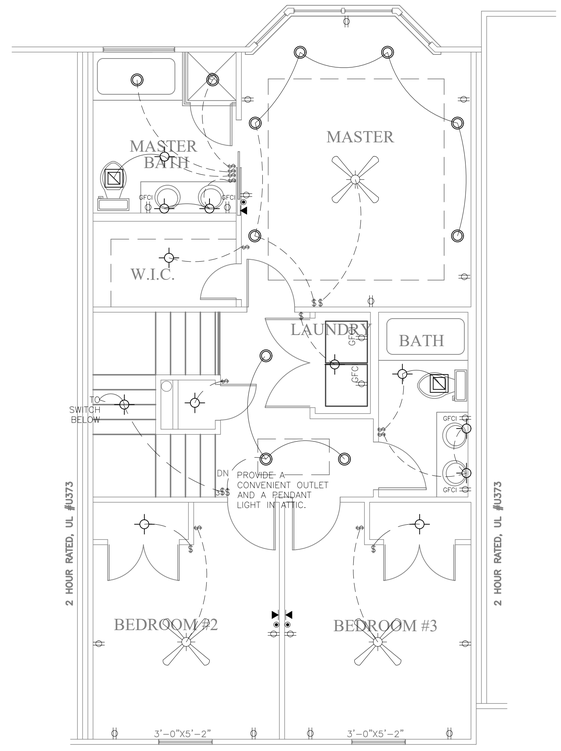
SHEET NUMBER
M-1



BASEMENT FLOOR



MAIN FLOOR



SECOND FLOOR

ELECTRICAL PLAN

SCALE: 1/4"=1'-0"

LEGEND

- PENDANT LIGHT
- WALL SCONCE
- LOW VAULTAGE CAN LIGHT
- EXHAUST FAN, SWITCH W/ LIGHT FIXTURE
- EXHAUST FAN AND LIGHT FIXTURE COMBO
- S_3 3-WAY SWITCH
- FAN LIGHT
- DUPLEX OUTLET
- ϕ_{WP} WATER PROOF ELECTRICAL OUTLET
- CABLE
- ϕ_{GFCI} GROUND FAULT CIRCUIT INTERUPTER
- EXHAUST FAN
- TELEPHONE JACK
- CEILING FAN LIGHT

FIRM NAME AND ADDRESS
NEW SPACE DESIGN, INC.
3331 NORTH BERKELEY LAKE ROAD
SUITE 200
DULUTH, GA 30096
Phone: (404) 217-3458
Fax: (770) 783-2978
Email: newspace@gmail.com

GEORGIA REGISTERED No. 024269 PROFESSIONAL ENGINEER GUIGEN DAVID WANG 4/8/19

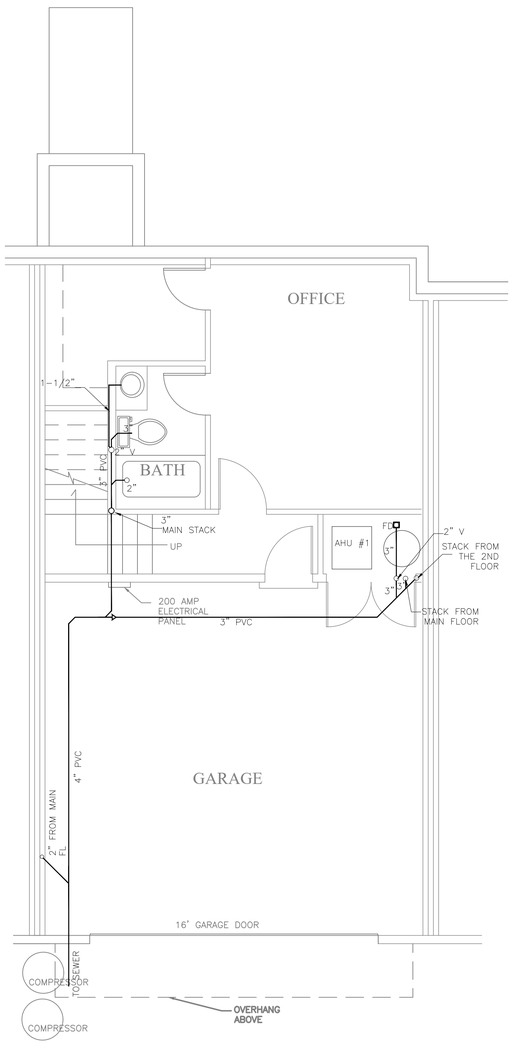
REVISIONS

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

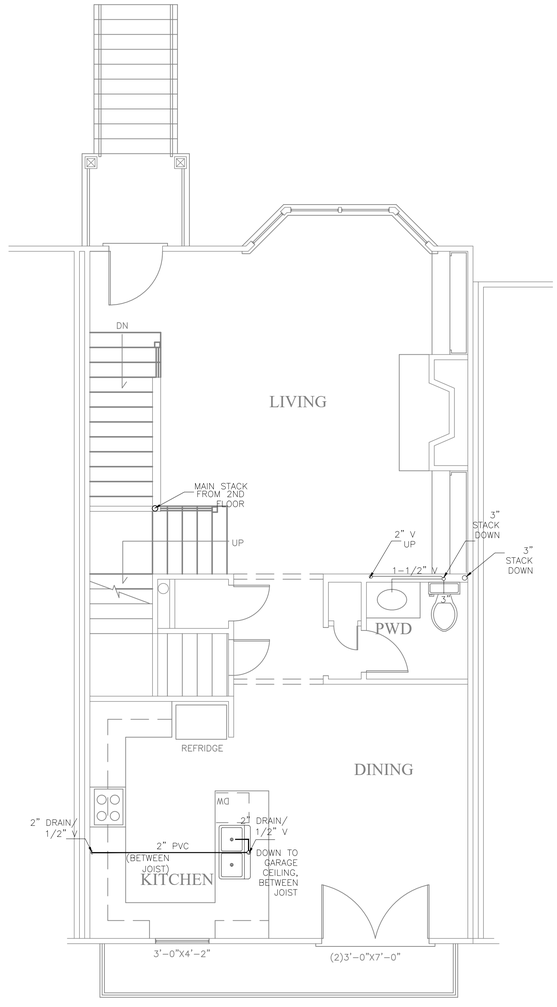
DATE
2019-04-08

SHEET TITLE
ELECTRICAL PLAN

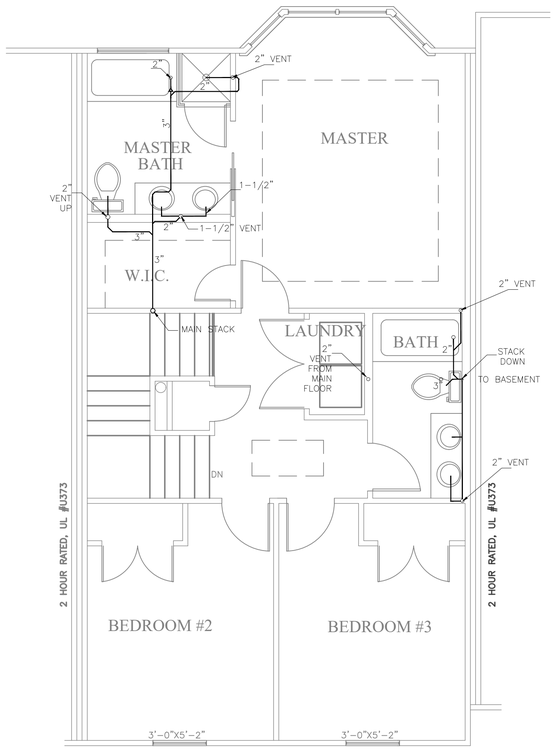
SHEET NUMBER
E-1



BASEMENT FLOOR



MAIN FLOOR



SECOND FLOOR

PLUMBING PLAN

SCALE: 1/4"=1'-0"

FIRM NAME AND ADDRESS
NEW SPACE DESIGN, INC.
3331 NORTH BERKELEY LAKE ROAD
SUITE 200
DULUTH, GA 30096
Phone: (404) 217-3458
Fax: (770) 783-2978
Email: newspace@gmail.com

GEORGIA REGISTERED No. 024269 PROFESSIONAL ENGINEER GUIGEN DAVID WANG 4/8/19

REVISIONS

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE
2019-04-08

SHEET TITLE
PLUMBING PLAN

SHEET NUMBER
P-1

GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BRACING DURING CONSTRUCTION. FOUNDATION WALLS WHICH ARE SHOWN TIED INTO SLAB–ON–GRADE OR FLOOR/ROOF FRAMING SHALL BE BRACED AGAINST BACK FILL MOVEMENT UNTIL SLAB/FRAMING (INCLUDING DECK) IS COMPLETED. THOUGH DETAILS DO MAY NOT INDICATE, ADEQUATE DRAINAGE MUST BE PROVIDED BEHIND WALLS TO ELIMINATE UNANTICIPATED HYDROSTATIC LOADING. PROVIDE ADEQUATE SHORING OR BRACING DURING CONSTRUCTION TO RESIST ALL REQUIRED FORCES SUCH AS (BUT NOT LIMITED TO) DEAD LOADS, LIVE LOADS, SOIL PRESSURES, CONSTRUCTION LOADS, WIND AND UNBALANCED LOADING. PROVIDE TEMPORARY SAFETY ENCLOSURES AS NECESSARY TO PROTECT ALL PERSONNEL INVOLVED WITH THIS PROJECT.

2. THE INTERNATIONAL BUILDING CODE, 2012 EDITION, PUBLISHED BY THE INTERNATIONAL CODE COUNCIL SHALL APPLY IN CONJUNCTION WITH THE 2014, 2015, & 2017 GA AMENDMENTS.

3. DETAILS NOT SHOWN SHALL BE IN ACCORDANCE WITH:
   - AMERICAN CONCRETE INSTITUTE (A.C.I.) SPECIFICATIONS FOR CONCRETE CONSTRUCTION
   - AMERICAN FOREST AND PAPER ASSOCIATION SPECIFICATIONS FOR WOOD CONSTRUCTION
   - SIMPSON STRONG–TIE SPECIFICATIONS
   - ANSI/ AF&PA SDPWS–2008 SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC

4. DESIGN LOADS:

ROOF LOADS (PREFABRICATED TRUSS GABLE ROOF FRAMING):

DEAD LOAD	
5/8" PLYWOOD DECKING	– 2 P.S.F.
STANDING SEAM	– 3 P.S.F.
FELT	– 1 P.S.F.
INSULATION	– 2 P.S.F.
COLLATERAL (M.E.P.)	– 5 P.S.F.
CEILING	– 2 P.S.F.
TRUSS SELF WEIGHT	– 5 P.S.F.
TOTAL	– 20 P.S.F.
LIVE LOAD	
ROOF LIVE LOAD (REDUCIBLE)	– 20 P.S.F.

FLOOR LOADS (RESIDENTIAL):

DEAD LOAD	
3/4" PLYWOOD SUB FLOORING	– 3 P.S.F.
COLLATERAL (M.E.P.)	– 5 P.S.F.
COLLATERAL (CEILING)	– 2 P.S.F.
JOISTS	– 4 P.S.F.
TOTAL	– 14 P.S.F.
LIVE LOAD	– 40 P.S.F.

INTERIOR WALLS AND PARTITIONS PER 1607.14

LIVE LOAD (MINIMUM)	– 5 P.S.F. (HORIZONTAL)

SNOW LOADS:

GROUND SNOW LOAD (Pg)	– 5 P.S.F.

WIND LOADS:

ULTIMATE DESIGN WIND SPEED, Vult (3–SECOND GUST)	– 115 MPH
NOMINAL DESIGN WIND SPEED, Vasd	– 90 MPH
RISK CATEGORY	– II
EXPOSURE	– B
INTERNAL PRESSURE COEFFICIENT (GCpi)	– ±0.18 (MAIN STRUCTURE)
ENCLOSURE CLASSIFICATION	– ENCLOSED BUILDING (MAIN STRUCTURE)
BUILDING CLASSIFICATION	– LOW RISE BUILDING

SEISMIC LOADING

– RISK CATEGORY	II
– SEISMIC IMPORTANCE FACTOR, Ie	1.0
– MAPPED SPECTRAL RESPONSE ACCELERATION (Ss)	0.205 g
– MAPPED SPECTRAL RESPONSE ACCELERATION (S1)	0.093 g
– SITE CLASSIFICATION	D (ASSUMED)
– SPECTRAL RESPONSE COEFFICIENT (SDS)	0.218 g
– SPECTRAL RESPONSE COEFFICIENT (SD1)	0.149 g
– SEISMIC DESIGN CATEGORY	C

BEARING WALL SYSTEM WITH LIGHT–FRAMED (WOOD) STUD WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE

RESPONSE MODIFICATION FACTOR, R – $6\frac{1}{2}$

ANALYSIS PROCEDURE – EQU. LAT. FORCE PROCEDURE

DESIGN BASE SHEARS

BASE SHEAR $W_{LONGITUDINAL}$	V = 10 KIPS
BASE SHEAR $W_{TRANSVERSE}$	V = 10 KIPS
SEISMIC RESPONSE COEFFICIENT	Cs = 0.034

GENERAL NOTES CONTINUED:

WOOD FRAMED STAIR LOADING:

DEAD LOAD	– 20 P.S.F.
LIVE LOAD	– 100 P.S.F.

HANDRAIL AND GUARD LOADING:

HANDRAILS AND GUARDS SHALL BE DESIGNED TO RESIST A LINEAR LOAD OF 50 POUNDS PER LINEAR FOOT AND A CONCENTRATED LOAD OF 200 POUNDS APPLIED AT THE TOP IN ANY DIRECTION AND TO TRANSFER THIS LOAD THROUGH THE SUPPORTS TO THE STRUCTURE.

INTERMEDIATE RAILS SHALL BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 50 POUNDS IN ANY DIRECTION AT ANY POINT.

5. THE DIMENSIONS, LOCATIONS, AND DETAILS SHOWN ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF PREPARATION OF THESE DRAWINGS. DEVIATIONS WHICH ARE NECESSARY OR WHICH CONFLICT SHALL BE REPORTED TO THE ENGINEER AND/OR OWNER. CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR DEVIATIONS NOT APPROVED BY THE ENGINEER OF RECORD.
6. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB SITE AND REPORT ANY ERRORS, OMISSIONS, OR POSSIBLE DISCREPANCIES TO THE DESIGN ENGINEER AND/OR THE OWNER PRIOR TO COMMENCING ANY WORK. SPECIAL CARE SHALL BE GIVEN TO SITE AND BUILDING LAYOUT THEREON.
7. UNLESS SHOWN ON THE DRAWINGS, SUBSTITUTION OF STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE DESIGN ENGINEER.
8. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF BOTH LOCAL ORDINANCES AND THE APPLICABLE BUILDING CODE(S).
9. THESE NOTES SHALL BE SUPPLEMENTARY TO ALL OTHER SPECIFICATIONS IF PROVIDED. SHOULD ANY CONFLICT EXIST BETWEEN THESE NOTES AND THE SPECIFICATIONS, THE MORE STRINGENT PROVISION SHALL GOVERN UNLESS APPROVED OTHERWISE BY THE DESIGN ENGINEER.
10. ALL STUD WALLS SHALL HAVE A DIRECT MECHANICAL ATTACHMENT TO THE FOUNDATION, ELEVATED FLOORS, AND ROOF FRAMING.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS, FABRICATION, AND CONSTRUCTION METHODS AND COORDINATING THIS WORK WITH ALL OTHER TRADES.
12. SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT, AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.
13. THE REVIEW OF SHOP DRAWINGS, WHERE REQUIRED BY THE ENGINEER OF RECORD, DOES NOT GUARANTEE IN ANY WAY THAT THE SHOP DRAWINGS ARE CORRECT NOR DOES IT INFER THAT THEY SUPERSEDE THE STRUCTURAL DRAWINGS NOTWITHSTANDING HAND WRITTEN COMMENTS MADE BY THE ENGINEER OF RECORD THAT MAY APPEAR ON THE SHOP DRAWINGS AFTER THE ENGINEER OF RECORD'S REVIEW.
14. REFER TO ARCHITECTURAL AND MECHANICAL/ELECTRICAL/PLUMBING PLANS FOR ALL ANCHORS, INSERTS, PLUGS AND SUCH EMBEDDED ITEMS NOT SHOWN ON STRUCTURAL PLANS.
15. NO SLEEVES OR OTHER PENETRATIONS SHALL BE ALLOWED THROUGH STRUCTURAL MEMBERS WITHOUT PRIOR APPROVAL OF THE DESIGN ENGINEER
16. OPTIONS, IF PROVIDED HEREIN, ARE FOR CONTRACTOR'S CONVENIENCE. HE SHALL BE RESPONSIBLE FOR ALL CHANGES NECESSARY, FOR COORDI–NATING ALL DETAILS, AND FOR OBTAINING ALL REQUIRED APPROVALS.
17. COSTS OF ADDITIONAL DESIGN WORK NECESSITATED BY SELECTION OF AN OPTION OR DUE TO ERRORS OR OMISSIONS IN CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR.
18. ALL PROPRIETARY MEMBERS ARE DEFERRED SUBMITTAL ITEMS
19. SHOP DRAWINGS FOR THE FOLLOWING BUILDING COMPONENTS NOT SPECIFIED ON THE PROJECT CONSTRUCTION DOCUMENTS APPROVED FOR BUILDING PERMIT SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF GEORGIA AND SUBMITTED TO GWINNETT COUNTY BUILDING PLAN REVIEW AFTER APPROVAL BY THE PROJECT ENGINEER–OF–RECORD: TRUSSES (ROOF)
    NOTE: THE DEPT. OF PLANNING & DEVELOPMENT WILL NOT PROVIDE ANY FRAMING INSPECTIONS FOR THE PROJECT UNTIL THE REQUIRED SHOP DRAWINGS HAVE BEEN SUBMITTED TO BUILDING PLAN REVIEW FOR REVIEW AND APPROVAL.
20. CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS AND VERIFY ALL DIMENSIONS PRIOR TO SUBMITTING SAME TO THE ARCHITECT AND/OR ENGINEER FOR REVIEW. ARCHITECT AND ENGINEERS REVIEW OF THESE SHOP DRAWINGS IS FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS.
21. ALL SHOP DRAWINGS SHALL BE PREPARED UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER LICENSED ON THE STATE OF GEORGIA. COMPLETE SHOP DRAWINGS FOR CONSTRUCTION OF ALL APPLICABLE SPECIALTY ITEMS INCLUDING BUT NOT LIMITED TO AWININGS, STOREFRONT, STAIR FRAMING, CONNECTIONS, AND LIGHT GAUGE STEEL FRAMING SHALL BE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER AND SHALL BE AVAILABLE AT THE JOB SITE DURING THE TIMES OF INSPECTION.
22. PROFESSIONAL ENGINEER QUALIFICATIONS: A PROFESSIONAL ENGINEER WHO IS LEGALLY AUTHORIZED TO PRACTICE IN JURISDICTION WHERE THE PROJECT IS LOCATED AND WHO IS EXPERIENCED IN PROVIDING ENGINEERING SERVICES OF THE KIND INDICATED.

PROPRIETARY ROOF TRUSSES

1. ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE ACCEPTED ENGINEERING PRACTICE. TRUSSES SHALL BE DESIGNED FOR ACTUAL LOADING CONDITIONS.
2. DESIGN OF ROOF TRUSSES SHALL INCLUDE ALL CONNECTIONS, BRACING, ETC. AS REQUIRED FOR A COMPLETED STRUCTURAL ASSEMBLY. DESIGN SHALL BE SEALED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
3. SEE "WOOD NOTES" FOR MINIMUM ROOF SHEATHING AND FLOOR DECKING REQUIREMENTS.
4. ROOF TRUSS TOP CHORD LOADING SHALL BE DESIGNED FOR ROOFING, INSULATION, SHINGLES, WIND, ETC., PLUS SELF WEIGHT.
5. ROOF TRUSS BOTTOM CHORD LOADING SHALL BE DESIGNED FOR CEILING, M.E.P., ETC., PLUS SELF WEIGHT.
6. MINIMUM WIDTH OF PREFAB ROOF TRUSSES = $1\frac{1}{2}$" FOR PROPER SHEATHING ATTACHMENT.
7. PREENGINEERED ROOF TRUSSES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF GEORGIA.
8. PREFAB ROOF TRUSS LOADING (SELF WEIGHT NOT INCLUDED) (SEE ALSO GENERAL NOTE #4 ON SHEET S1.0)
   TOP CHORD Lr: 20 PSF NOT REDUCIBILE PER THE ROOF PITCH.
   TOP CHORD DL: ROOFING, INSULATION, ETC. BUT NOT LESS THAN 10 P.S.F. MIN
   TOP CHORD WIND LOAD: SEE COMPONENT AND CLADDING PRESSURES.
   BOTTOM CHORD Lr: 10 P.S.F. (NOT TO ACT CONCURRENTLY)
   BOTTOM CHORD DL: CEILING, INSULATION, ETC. (DL) BUT NOT LESS THAN 5 P.S.F. MIN
   NOTE: FOR TRUSSES SUPPORTING HVAC UNIT, DESIGN BOTTOM CHORD FOR THE GREATER OF THE ACTUAL IMPOSED DEAD LOAD OR 10 P.S.F., UNIFORMLY DISTRIBUTED OVER THE ENTIRE SPAN.
9. ALL HARDWARE (BOLTS, HANGERS, STRAPS, HURRICANE TIES, ETC.) REQUIRED FOR CONNECTIONS BETWEEN PREENGINEERED TRUSSES SHALL BE DESIGNED AND SPECIFIED BY THE TRUSS DESIGN ENGINEER.
10. PREENGINEERED METAL PLATE CONNECTED WOOD TRUSSES SHALL BE BRACED IN ACCORDANCE WITH TRUSS PLATE INSTITUTE'S "BUILDING COMPONENT SAFETY INFORMATION BOOKLET, BCSI 1–03" AND RELATED SUMMARY SHEETS.
11. ALL PRE–ENGINEEERED TRUSS SHOP DRAWINGS SHALL BE AVAILABLE ON THE JOB SITE DURING TIMES OF INSPECTION AND SHALL BEAR CLEAR INDICATION THAT THEY HAVE BEEN REVIEWED AND APPROVED BY THE PROJECT STRUCTURAL ENGINEER–OF–RECORD (OR ARCHITECT–OF–RECORD FOR PROJECTS WITHOUT A STRUCTURAL ENGINEER–OF–RECORD).
12. PRE–ENGINEERED METAL PLATE CONNECTED WOOD TRUSSES SHALL BE BRACED IN ACCORDANCE WITH BCSI 1–08. "THE GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING, AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" AND RELATED SUMMARY SHEETS.

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

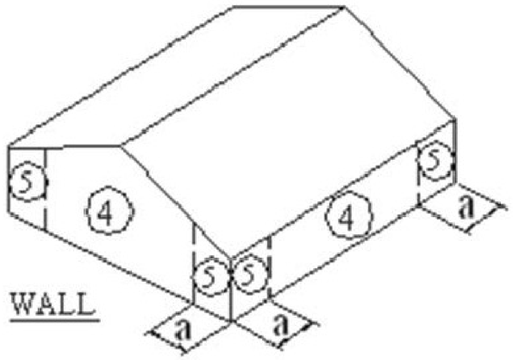
DATE 04/08/19

Sheet Title
TYPE "B" GENERAL NOTES

SB1.0

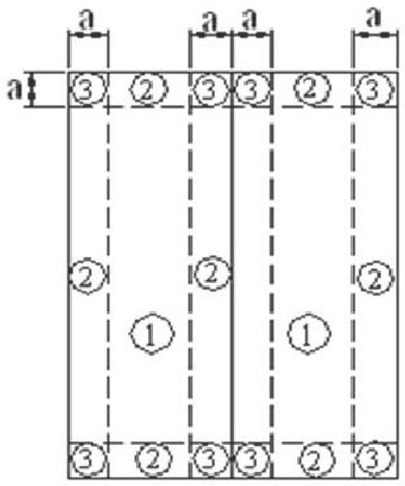
RELEASED FOR CONSTRUCTION

WIND (ULTIMATE COMPONENTS & CLADDING FORCES – ENCLOSED BUILDING)



FOR VALUES OF AREA OTHER THAN THOSE SHOWN, LINEAR INTEROPOLATION IS PERMITTED.
WALL PRESSURES NORMAL TO SURFACE
AREA – INDICATES EFFECTIVE WIND AREA
(+) DENOTES PRESSURE, (–) DENOTES SUCTION

TYPICAL WALL ELEVATION



FOR VALUES OF AREA OTHER THAN THOSE SHOWN, LINEAR INTEROPOLATION IS PERMITTED.
GROSS ROOF PRESSURES NORMAL TO SURFACE; NET IBC 2012 ASD ROOF PRESSURES PER 0.6D + 0.6W
AREA – INDICATES EFFECTIVE WIND AREA
(+) DENOTES PRESSURE, (–) DENOTES SUCTION

TYPICAL ROOF PLAN

Ultimate Wind Pressures

Wind Loads - Components & Cladding : h <= 60'

Kh (case 1) =	0.74	h =	37.0 ft
Base pressure (qh) =	**21.4 psf**	a =	3.0 ft
Minimum parapet ht =	0.0 ft	GCpi =	+/-0.18
Roof Angle (θ) =	30.3 deg		
Type of roof =	Gable		

Roof

	GCp +/- GCpi			Surface Pressure (psf)			User input	
Area	10 sf	50 sf	100 sf	10 sf	50 sf	100 sf	20 sf	80 sf
Negative Zone 1	-1.18	-1.04	-0.98	-25.3	-22.3	-21.0	-24.0	-21.4
Negative Zone 2	-1.38	-1.24	-1.18	-29.5	-26.5	-25.3	-28.3	-25.7
Negative Zone 3	-1.38	-1.24	-1.18	-29.5	-26.5	-25.3	-28.3	-25.7
Positive All Zones	1.08	1.01	0.98	23.1	21.6	21.0	22.5	21.2
Overhang Zone 3	-2.00	-1.86	-1.80	-42.8	-39.8	-38.5	-41.5	-38.9
Overhang Zone 3	-2.00	-1.86	-1.80	-42.8	-39.8	-38.5	-41.5	-38.9

Overhang pressures in the table above assume an internal pressure coefficient (Gcpi) of 0.0
Overhang soffit pressure equals adjacent wall pressure reduced by internal pressure of 3.9 psf

Parapet

qp = 0.0 psf

CASE A = pressure towards building (pos)
CASE B = pressure away from bldg (neg)

	Surface Pressure (psf)			User input
Solid Parapet Pressure	10 sf	100 sf	500 sf	50 sf
CASE A : Interior zone:	0.0	0.0	0.0	0.0
Corner zone:	0.0	0.0	0.0	0.0
CASE B : Interior zone:	0.0	0.0	0.0	0.0
Corner zone:	0.0	0.0	0.0	0.0

Walls

	GCp +/- GCpi			Surface Pressure (psf)			User input	
Area	10 sf	100 sf	500 sf	10 sf	100 sf	500 sf	20 sf	50 sf
Negative Zone 4	-1.28	-1.10	-0.98	-27.4	-23.6	-21.0	-26.3	-24.8
Negative Zone 5	-1.58	-1.23	-0.98	-33.8	-26.3	-21.0	-31.5	-28.5
Positive Zone 4 & 5	1.18	1.00	0.88	25.3	21.5	18.8	24.1	22.6

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "B"
C&C WIND
PRESSURES

SB1.1

RELEASED FOR CONSTRUCTION

CONCRETE NOTES:

1. ALL CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" AND A MINIMUM 28 DAY COMPRESSIVE STRENGTH AS FOLLOWS:

   FOOTINGS 3000 PSI (FO, SO, PO, CI)

   INTERIOR SLAB ON GRADE 3000 PSI (FO, SO, PO, CO)

   EXTERIOR SLAB ON GRADE 4500 PSI (FI, SO, PO, CI) MAXIMUM WATER/CEMENTIOUS CONTENT 0.45 SEE ACI 318 FOR EXPOSURE CLASSIFICATION AND CONCRETE MIX REQUIREMENTS.

   IF SULFATE CONTENT AT THE SITE IS AT A LEVEL REQUIRING A MORE STRINGENT EXPOSURE CLASS THAN THAT SPECIFIED ABOVE FOR ANY CONCRETE DESIGNATION, THE ENGINEER SHALL BE NOTIFIED, AND THE CONCRETE MIXES SHALL BE REVISED AS REQUIRED.

2. AIR ENTRAINING AGENTS SHALL BE USED TO PRODUCE 3% TO 6% AIR BY VOLUME IN ALL CONCRETE, BUT IT SHALL NOT BE LESS THAN THAT REQUIRED FOR THE EXPOSURE CLASS OF THE CONCRETE. AIR CONTENT ON INTERIOR SLABS SHALL NOT BE AIR ENTRAINED. THE SURROUNDING AIR THAT MAY ENTRAIN THE CONCRETE DURING THE MIXING PROCESS SUCH AS WHEN IN THE ROTATING DRUM SHALL NOT EXCEED 3%.

3. C.J. ON PLANS INDICATES CONSTRUCTION JOINTS OR CONTROL JOINTS. IF NOT SHOWN OTHERWISE; MAINTAIN A MAXIMUM AREA BOUNDED BY SLAB CONTROL JOINTS OF 900 SQUARE FEET (i.e. 30' x 30') THE MAXIMUM SIDE RATIO OF WHICH SHALL BE 1.5:1

   PROVIDE JOINTS OR REINFORCEMENT AT ALL RE-ENTRANT SLAB CORNERS SUCH AS INSIDE CORNERS OF AN L-SHAPED SLAB. IF REINFORCEMENT IS UTILIZED, THESE RE-ENTRANT CORNERS SHALL HAVE TWO PIECES OF #4 REINFORCING BAR 48 INCHES LONG PLACED DIAGONALLY TO THE CORNER, 12 INCHES APART, WITH THE FIRST BAR PLACED 2 INCHES FROM THE CORNER. ALL REINFORCEMENT SHALL BE APPROPRIATELY POSITIONED IN THE UPPER THIRD OF THE SLAB.

4. ALL STEEL BAR REINFORCEMENT SHALL BE A.S.T.M. A-615, GRADE 60.

5. MAINTAIN MINIMUM CONCRETE COVERAGE FOR REINFORCING STEEL AS INDICATED UNLESS OTHERWISE NOTED IN THE DRAWINGS.

   A. 3" CLEAR WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH.

   B. 2" CLEAR WHERE CONCRETE IS EXPOSED TO EARTH OR WEATHER BUT CAST AGAINST FORMS FOR BARS #6 OR LARGER.

   C. 1 1/2" CLEAR WHERE CONCRETE IS EXPOSED TO EARTH OR WEATHER BUT CAST AGAINST FORMS FOR BARS #5 OR SMALLER.

   D. 3/4" CLEAR FOR SLABS AND WALLS FORMED ABOVE GRADE AND NOT EXPOSED TO WEATHER.

   E. 1-1/2" CLEAR FOR BEAMS AND COLUMNS FORMED ABOVE GRADE AND NOT EXPOSED TO WEATHER.

6. UNLESS NOTED OTHERWISE IN THE DRAWINGS, CAST IN PLACE CONCRETE SHALL HAVE THE FOLLOWING TRIM STEEL ADDED AROUND ALL OPENINGS: TWO (2) - #5 BARS (LENGTH OF BARS = LENGTH OF OPENING + 4'-0") ALONG EACH SIDE OF OPENING AND TWO (2) - #5 x 5'-0" DIAGONALLY AT EACH CORNER.

7. FOOTINGS ARE DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 2000 P.S.F. ALL FOOTING EXCAVATIONS SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF CONCRETE. FOR DETAILS OF FILL AND COMPACTION REQUIREMENTS, REFER TO CIVIL DRAWINGS AND THE SPECIFICATIONS.

8. WELDED WIRE FABRIC (W.W.F.) SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR COLD-DRAWN STEEL WIRE FOR CONCRETE REINFORCEMENT A.S.T.M. A-185. ALL WELDED WIRE FABRIC SHALL BE CLEAN AND FREE OF EXCESSIVE RUST.

9. DESIGN OF CONCRETE STRUCTURAL ELEMENTS IS IN ACCORDANCE WITH ACI 318-11 (BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE)

10. RESULTS FOR ALL CONCRETE COMPRESSIVE STRENGTH TESTS SHALL BE AVAILABLE AT THE JOB SITE.

11. SEE ARCHITECTURAL DRAWINGS/SPECIFICATIONS FOR CONCRETE FLOOR FINISH REQUIREMENTS.

12. FLY ASH MAY BE USED AS A DIRECT SUBSTITUTE FOR PORTLAND CEMENT. FLY ASH MUST CONFORM TO ALL ASPECTS OF ASTM C618-84 STANDARD SPECIFICATION FOR FLY ASH. CLASS F OR CLASS C FLY ASH MAY BE USED, HOWEVER, TOTAL LOSS ON IGNITION OF FLY ASH MUST BE 3% OR LESS. FLY ASH MAY BE SUBSTITUTED ON A 1:1 RATIO BY WEIGHT AND ONLY UP TO A 20% REDUCTION IN THE ORIGINAL CEMENT CONTENT. CONCRETE PROPORTIONS SHALL BE SELECTED ON THE BASIS OF TRIAL MIXES CONFORMING TO A.C.I. 211.1.

13. ALL CONCRETE SHALL BE OF NORMAL WEIGHT (HARD ROCK, AGGREGATE). CONCRETE DESIGN MIX SHALL BE IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE REQUIREMENTS

14. ALL CONCRETE SHALL BE DESIGNED, MIXED, TRANSPORTED AND PLACED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF ACI.

15. ADEQUATE CURING OF CONCRETE, ESPECIALLY DURING HOT WEATHER, SHALL BE PROVIDED TO PREVENT FORMATION OF SHRINKAGE CRACKS.

16. CONCRETE SURFACES SHALL BE FINISHED AS CALLED FOR ON PLANS AND SPECIFICATIONS, OR AS DIRECTED BY THE OWNER.

17. ALL REINFORCEMENT SHALL BE DESIGNED AND DETAILED IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI "MANUAL OF STANDARD PRACTICES FOR DETAILING CONCRETE STRUCTURES,"

18. REINFORCEMENT SHALL BE SECURELY SUPPORTED TO PREVENT BOTH VERTICAL AND HORIZONTAL MOVEMENTS DURING PLACEMENT OF CONCRETE. REINFORCEMENT SHALL BE SUPPORTED WITH PLASTIC CHAIRS OR BOLSTERS AND SHALL BE TIED AT EVERY OTHER INTERSECTION. ALL REINFORCING STEEL SHALL BE SECURELY WIRED AND PROPERLY SUPPORTED ABOVE GROUND AND AWAY FROM FORMS

19. SPLICE BARS IN MEMBERS SUCH AS SPANDRELS, BEAMS, ETC AS FOLLOWS: TOP BARS AT CENTERLINE OF SPAN, BOTTOM BARS AT THE SUPPORT.

20. CONSTRUCTION JOINTS SHALL HAVE ENTIRE SURFACE REMOVED TO EXPOSE CLEAN, SOLIDLY EMBEDDED AGGREGATE. THE CONTRACTOR SHALL OBTAIN THE ENGINEER'S APPROVAL OF CONSTRUCTION JOINT LOCATION IN SLABS AND BEAMS.

21. TEMPERATURE AND SHRINKAGE REINFORCEMENT: LAP OF THIRTY (30) BAR DIAMETERS, BUT NOT LESS THAN 18 INCHES, AND THE SPLICES IN ADJACENT BARS SHALL BE A MINIMUM OF (5) FEET APART

22. CONCRETE TEST REPORTS SHALL BE AVAILABLE AT THE JOB SITE

CONCRETE LAP SPLICE NOTES:

SIZE	CLASS B
#4	29"
#5	36"
#6	43"

IBC GEOTECHNICAL DESIGN DATA:

* ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF PER IBC TABLE 1806.2

* ALLOWABLE PASSIVE = 300 PCF; FACTOR OF TWO INCREASE FOR FOUNDATIONS THAT ARE NOT ADVERSELY AFFECTED BY 1/2" MOTION AT THE GROUND SURFACE DUE TO SHORT-TERM LATERAL LOADS PER IBC SECTION 1806.3.4

* COEFFICIENT OF SLIDING FRICTION = 0.25 PER IBC TABLE 1806.2

DEFINITIONS:

B.O.S. - INDICATES BOTTOM OF STEEL ELEVATION ABOVE REFERENCED FINISHED FLOOR ELEVATION.

B/ STEEL - INDICATES BOTTOM OF STEEL ELEVATION ABOVE REFERENCED FINISHED FLOOR ELEVATION.

B.T.J. - INDICATES BOLTED TIE JOIST PER OSHA REQUIREMENTS.

C.J. - INDICATES SLAB ON GRADE CONTROL JOINT LOCATION.

COL - INDICATES COLUMN CENTERLINE.

D.B.E. - INDICATES DECK BEARING ELEVATION ABOVE REFERENCED FINISHED FLOOR ELEVATION.

EDGE/ - INDICATES EDGE OF

ELEV. - INDICATES ELEVATION.

E.O.R. - INDICATED ENGINEER OF RECORD.

E.Q. - INDICATES EQUAL.

F.D. - INDICATES FLOOR DRAIN.

F.F.E. - INDICATES FINISHED FLOOR ELEVATION.

O.F./ - INDICATES OUTSIDE FACE OF

Fy - INDICATES SPECIFIED MATERIAL YIELD STRENGTH.

Fu - INDICATES SPECIFIED MATERIAL ULTIMATE TENSILE STRENGTH.

J.B.E. - INDICATES JOIST BEARING ELEVATION ABOVE REFERENCED FINISHED FLOOR ELEVATION.

MIN. - INDICATES MINIMUM.

O.F./ - INDICATES OUTSIDE FACE OF

I.F./ - INDICATES INSIDE FACE OF

M.O. - INDICATES MASONRY OPENING.

℄ - INDICATES STEEL PLATE.

R.T.U. - INDICATES ROOF TOP UNIT.

T.B.E. - INDICATES TRUSS BEARING ELEVATION ABOVE REFERENCED FINISHED FLOOR ELEVATION.

T.O.F. - INDICATED TOP OF FOOTING ELEVATION BELOW REFERENCED FINISHED FLOOR ELEVATION.

T.O.S. - INDICATES TOP OF STEEL BEAM ELEVATION ABOVE REFERENCED FINISHED FLOOR ELEVATION.

T/STEEL - INDICATES TOP OF STEEL BEAM ELEVATION ABOVE REFERENCED FINISHED FLOOR ELEVATION.

TYP - INDICATES TYPICAL.

U.N.O - INDICATES UNLESS NOTED OTHERWISE.

SYMBOLS:

- INDICATES ELEVATION.
- 1 - INDICATES COLUMN LINE.
- B / B - INDICATES MASONRY FILLED CELL DESIGNATION. / INDICATES FOUNDATION DESIGNATION.
- 1 / S1 - INDICATES SECTION MARK.
- INDICATES REVISION MARK.

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "B" GENERAL NOTES

SB1.2

RELEASED FOR CONSTRUCTION

WOOD FRAMING NOTES:

1. WOOD AND TIMBER CONSTRUCTION SHALL COMPLY WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) STANDARD SPECIFICATIONS.

2. WOOD CONSTRUCTION SHALL CONFORM TO CHAPTER 23, OF THE IBC FOR MINIMUM REQUIREMENTS UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS. FOR MINIMUM FASTENING REFER TO TABLE IBC 2304.9.1. SEE SHEET S1.3

3. ALL FRAMING LUMBER SHALL BE INSTALLED WITH MOISTURE CONTENT OF 19% OR LESS INDICATING "S-DRY" ON THE GRADE STAMP.

4. ALL LUMBER IN CONTACT WITH CONCRETE, MASONRY OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED WITH WATERPROOFING TREATMENT (SEE TABLE BELOW), 28% MAX. MOISTURE CONTENT.

5. ALL SIMPSON STRONG-TIE CONNECTORS USED WITH PRESSURE TREATED LUMBER SHALL BE "Z-MAX" COATED AS A MINIMUM OR REQUIRED COATING TO PROTECT CONNECTORS FROM SURFACE CHEMICALS.

6. LUMBER SHALL COMPLY WITH NATIONAL DESIGN SPECIFICATION (NDS), LATEST EDITION SUPPLEMENT FOR MINIMUM ALLOWABLE DESIGN STRESS VALUES FOR LUMBER GRADES SHOWN BELOW. ALL LUMBER FRAMING SHALL BE MARKED WITH A GRADE STAMP.

MINIMUM LUMBER DESIGN VALUES ON PLAN OR DETAILS (PSI)
SOUTHERN PINE REFERENCE DESIGN VALUES TABLE 1
BASED ON SPIB GRADING RULES AND AWC NATIONAL DESIGN SPECIFICATIONS

SPECIES & GRADE	Fb	Ft	Fv	FcP	Fc	E
2x6 WALL STUDS, PRESSURE TREATED BOTTOM PLATE, TOP PLATE, AND RAFTERS						
SOUTHERN PINE No.1	1350	875	175	565	1550	1,600,000
2x4 WALL STUDS, PRESSURE TREATED BOTTOM PLATE, AND TOP PLATE						
SOUTHERN PINE No.1	1500	1000	175	565	1650	1,600,000
4x4 COLUMMNS						
SOUTHERN PINE No.1	1500	1000	175	565	1650	1,600,000
6x6 COLUMNS						
DOUGLAS FIR-LARCH No.1	1200	825	170	625	1000	1,600,000

IF ALTERNATIVE GRADE OR SPECIES OF LUMBER IS DESIRED THAT IS EQUAL OR GREATER THAN THE ABOVE REQUIREMENTS; CONTRACTOR TO SUBMIT REQUEST TO ENGINEER FOR APPROVAL PRIOR TO ORDERING OF MATERIAL. ALL PRE-CUT WALL STUD MATERIAL MUST BE STAMPED WITH THE PROPER GRADE STAMP MATCHING THE ABOVE REQUIREMENTS.

7. ANCHOR TREATED SILL PLATES TO CONCRETE WITH $\frac{1}{2}$"ø ANCHOR RODS @ 24" O.C. MINIMUM, U.N.O. ON PLAN. MINIMUM EMBED = 9" U.N.O. ANCHORS TO BE A36 THREADED ROD W/ HEAVY HEX NUTS U.N.O.; SEE STANDARD DETAILS. AT SILL PLATE SEGEMENTS PROVIDE A MINIMUM OF TWO (2) ANCHOR BOLTS PER SILL PLATE SEGMENT WITH ONE BOLT LOCATED FROM THE END OF EACH SEGMENT AT LEAST FOUR (4) INCHES BUT NOT MORE THAN TWELVE (12) INCHES.

8. DIMENSIONAL LUMBER USED FOR HEADERS SHALL HAVE NO SPLITS OR CHECKS.

9. PROVIDE WASHERS PER STRUCTURAL DETAILS FOR ALL BOLTS IN WOOD MEMBERS. RE-TORQUE NUTS 48 HOURS AFTER FIRST TIGHTENING.

10. NOTCHING OF WOOD MEMBERS IS PROHIBITED WITHOUT PRIOR APPROVAL FROM ENGINEER. HOLES BORED IN STUDS OR JOISTS SHALL BE IN THE CENTER HALF OF THE MEMBER AND SHALL NOT BE LARGER THAN ONE FOURTH OF THE DEPTH OF THE MEMBER.

11. EXTERIOR WALLS AND LOAD BEARING WALLS SHALL BE CAPPED WITH DOUBLE TOP PLATES. THE PLATES SHALL OVERLAP AT CORNERS AND AT INTERSECTIONS WITH OTHER LOAD BEARING WALLS. SEE STANDARD DETAILS.

12. POSTS AND BEARING STUDS (JACKS/KINGS) FOR BEAMS AND HEADERS SHALL BE CONTINUOUS TO THE FOUNDATION LEVEL. PROVIDE SQUASH BLOCKING BETWEEN FLOOR LEVELS TO MATCH THE WIDTH OF THE POST/STUD ASSEMBLY FROM ABOVE.

13. TOP FLANGE OF ALL RAFTERS, JOISTS AND BEAMS TO BE LATERALLY SUPPORTED @ 24" O.C. MIN. PROVIDE BRIDGING FOR TOP FLANGE AS REQUIRED TO NEAREST FRAMING MEMBER OR PROVIDE ADEQUATELY SUPPORTED PLYWOOD DECKING.

14. PROVIDE SOLID BLOCKING AT BEARING POINTS OF ALL 2x JOISTS.

15. ALL HARDWARE/CONNECTORS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS FOR THE LOAD RATING, U.N.O. IN DETAILS.

WOOD FRAMING NOTES CONTINUED:

16. METAL FRAMING ANCHORS AND HARDWARE SHOULD BE AS NOTED IN DETAILS. ALTERNATIVE HARDWARE THAT IS EQUAL OR GREATER IN CAPACITY MUST BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

17. STRUCTURAL LOAD BEARING OR LATERAL LOAD RESISTING WALLS ARE SHOWN ON THE PLAN. SEE ARCH DRAWINGS FOR PARTITION WALLS.

18. DRILL BOLT/ANCHOR HOLES IN WOOD 1/16" LARGER THAN THE NOMINAL DIAMETER OF THE BOLT. REPAIR OVERSIZED HOLES WITH BEARING PLATE WASHERS.

19. ALL JOISTS, TRUSSES, HEADERS, AND BEAMS SHALL HAVE FULL BEARING UNLESS NOTED OTHERWISE ON THE DETAILS.

20.

MINIMUM DESIGN VALUES FOR ENGINEERED WOOD MATERIALS. U.N.O. ON PLAN OR DETAILS (PSI)

MATERIAL & FUNCTION	Fb (MIN)	Fv	E
GLUED LAMINATED TIMBER BEAMS 2.0E PARALLAM PSL ROOF BEAM	2740	290	2,000,000

21.

MINIMUM DIMENSIONS OF FASTENERS, U.N.O. [NDS APPENDIX L] UNITS = INCHES

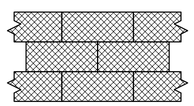
FASTENER TYPE	L	D	H	FASTENER TYPE	L	D	H
NAIL: 6d	2	0.113	0.266	NAIL: 16d	3 1/2	0.162	0.344
NAIL: 8d	2 1/2	0.131	0.281	NAIL: 30d	4 1/2	0.207	0.438
NAIL: 10d	3	0.148	0.312	#6 TYPE S OR W DRYWALL SCREW	1 1/4"	N/A	N/A

22. ALL WALL SHEATHING SHALL CONSIST OF $\frac{1}{2}$" APA PERFORMANCE-RATED OSB SHEATHING CONFORMING TO THE MINIMUM DOC PS2 PRODUCT STANDARD REQUIREMENTS WITH A MINIMUM SPAN RATING OF 32/16. SHEATHING SHALL BE NAILED TO SUPPORTS AND SHALL BE STANDARD 4'-0" x 8'-0" SHEETS. SEE SHEAR WALL ATTACHMENT DETAILS (in this set of drawings) FOR NAIL SIZE AND PATTERN REQUIREMENTS.

23. ALL WALL SHEATHING SHALL BE INSTALLED STAGGERED AS SHOWN WITH LONG DIRECTION EITHER PERPENDICULAR ARE PARALLEL TO SUPPORTS.

24. ALL ROOF AND FLOOR SHEATHING SHALL CONSIST OF $\frac{5}{8}$" AND $\frac{3}{4}$" APA PERFORMANCE-RATED OSB SHEATHING RESPECTIVELY CONFORMING TO THE MINIMUM DOC PS2 PRODUCT STANDARD REQUIREMENTS WITH A MINIMUM SPAN RATING OF 32/16 PER THE STRUCTURAL BOARD ASSOCATION OSB PRODUCT GUIDE. INSTALL WOOD STRUCTURAL PANEL EDGE CLIPS (H-CLIPS) 20 GAUGE BETWEEN ADJACENT OSB SHEATHING. SHEATHING SHALL BE NAILED TO SUPPORTS AND SHALL BE STANDARD 4'-0" x 8'-0" SHEETS. SEE ROOF NAILING PLAN (in this set of drawings) FOR NAIL SIZE AND PATTERN REQUIREMENTS. SEE ARCH FOR FIRE RATING REQUIREMENTS. SEE SECTION 1/S1.3 THIS SHEET FOR PANEL EDGE CLIPS IF BLOCKING IS NOT REQUIRED. OMIT PANEL EDGE CLIPS IF BLOCKING IS REQUIRED PER ATTACHMENT PATTERN.

25. ALL PLYWOOD DECKING SHALL BE INSTALLED STAGGERED AS SHOWN WITH THE STRENGTH AXIS PERPENDICULAR TO SUPPORTS, WHICH IS TYPICALLY THE (8'-0") LONG DIRECTION. THE PANEL SHALL BE CONTINUOUS OVER (3) SPANS MINIMUM.



26. LAG BOLTS (AND SCREWS) SHALL BE PRE-DRILLED TO SHANK DIAMETER AND FULL DEPTH AND SCREWED (NOT DRIVEN) INTO PLACE.

27. CUT WASHERS SHALL BE PLACED UNDER HEADS AND NUTS OF ALL BOLTS AND UNDER HEADS OF LAG BOLTS. ONE CUT WASHER SHALL BE USED FOR BOLTS CONNECTING WOOD LEDGERS TO CONCRETE OR MASONRY WALLS.

28. COMMON NAILS SHALL BE USED. BOX NAILS, IF INCREASED IN NUMBER BY 33%, MAY ALSO BE USED.

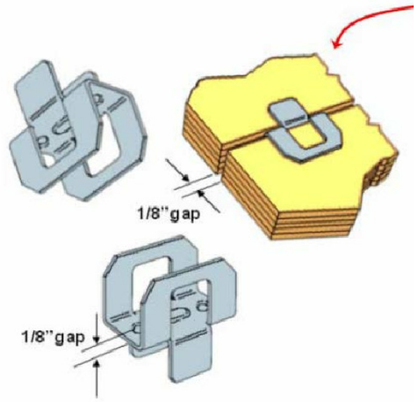
29. ALL BOLTS FOR WOOD CONNECTIONS SHALL CONFORM TO ANSI/ASME STANDARD, B18.2.1-1981 UNLESS NOTED OTHERWISE AND SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AS ESTABLISHED BY A.I.T.C.

30. ALL OTHER LAG BOLTS, SCREWS, AND MISCELLANEOUS CONNECTORS AND FASTENERS SHALL MEET THE SPECIFICATIONS FOR BOTH INSTALLATION AND PHYSICAL REQUIREMENTS, AS ESTABLISHED BY A.I.T.C.

31. WOOD GLUE SHALL BE 10-oz LIQUID NAILS HEAVY DUTY CONSTRUCTION ADHESIVE. 24 HOUR SHEAR STRENGTH = 200 PSI, 48 HOUR SHEAR STRENGTH = 300 PSI, AND 28 DAY SHEAR STRENGTH = 450 PSI.

METAL IN CONTACT WITH PRESSURE-TREATED WOOD:

Do not use standard carbon-steel or aluminum products in direct contact with pressure-treated wood. Metal products in contact with pressure-treated wood must be corrosion resistant. Examples include fasteners (e.g. nails, screws, and bolts), and all connecting hardware (e.g. joist hangers, straps, hinges, post anchors, and truss plates). The 2006 International Residential Code, Section R319.3 states, "Fasteners for pressure-preservative and fire-retardant-treated wood shall be of hot-dipped zinc-coated galvanized steel, stainless steel, silicon bronze or copper." Traditionally, the treated wood industry has recommended hot-dip galvanized or stainless steel fasteners and connectors for treated wood products. Hot-dip galvanized fasteners should meet ASTM A153. Hot-dip galvanized connectors should meet ASTM A653, Class G185 sheet with 1.85 ounces of zinc coating per square foot minimum. Fasteners and connectors used together must be of the same metallic composition to avoid galvanic corrosion (e.g. use hot-dip nails with hot-dip joist hangers)



1 SD1.3 WOOD STRUCTURAL PANEL EDGE CLIPS

SCALE: N.T.S.

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "B" WOOD NOTES

SB1.3

RELEASED FOR CONSTRUCTION

WOOD FASTENING SCHEDULE PER IBC TABLE 2304.9.1:

TABLE 2304.9.1
FASTENING SCHEDULE

CONNECTION	FASTENING[a, m]	LOCATION
1. Joist to sill or girder	3 - 8d common ($2^1/_2$" × 0.131") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples	toenail
2. Bridging to joist	2 - 8d common ($2^1/_2$" × 0.131") 2 - 3" × 0.131" nails 2 - 3" 14 gage staples	toenail each end
3. 1" × 6" subfloor or less to each joist	2 - 8d common ($2^1/_2$" × 0.131")	face nail
4. Wider than 1" × 6" subfloor to each joist	3 - 8d common ($2^1/_2$" × 0.131")	face nail
5. 2" subfloor to joist or girder	2 - 16d common ($3^1/_2$" × 0.162")	blind and face nail
6. Sole plate to joist or blocking	16d ($3^1/_2$" × 0.135") at 16" o.c. 3" × 0.131" nails at 8" o.c. 3" 14 gage staples at 12" o.c.	typical face nail
Sole plate to joist or blocking at braced wall panel	3 - 16d ($3^1/_2$" × 0.135") at 16" o.c. 4 - 3" × 0.131" nails at 16" o.c. 4 - 3" 14 gage staples at 16" o.c.	braced wall panels
7. Top plate to stud	2 - 16d common ($3^1/_2$" × 0.162") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples	end nail
8. Stud to sole plate	4 - 8d common ($2^1/_2$" × 0.131") 4 - 3" × 0.131" nails 3 - 3" 14 gage staples	toenail
	2 - 16d common ($3^1/_2$" × 0.162") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples	end nail
9. Double studs	16d ($3^1/_2$" × 0.135") at 24" o.c. 3" × 0.131" nail at 8" o.c. 3" 14 gage staple at 8" o.c.	face nail
10. Double top plates	16d ($3^1/_2$" × 0.135") at 16" o.c. 3" × 0.131" nail at 12" o.c. 3" 14 gage staple at 12" o.c.	typical face nail
Double top plates	8 - 16d common ($3^1/_2$" × 0.162") 12 - 3" × 0.131" nails 12 - 3" 14 gage staples	lap splice
11. Blocking between joists or rafters to top plate	3 - 8d common ($2^1/_2$" × 0.131") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples	toenail
12. Rim joist to top plate	8d ($2^1/_2$" × 0.131") at 6" o.c. 3" × 0.131" nail at 6" o.c. 3" 14 gage staple at 6" o.c.	toenail
13. Top plates, laps and intersections	2 - 16d common ($3^1/_2$" × 0.162") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples	face nail
14. Continuous header, two pieces	16d common ($3^1/_2$" × 0.162")	16" o.c. along edge
15. Ceiling joists to plate	3 - 8d common ($2^1/_2$" × 0.131") 5 - 3" × 0.131" nails 5 - 3" 14 gage staples	toenail
16. Continuous header to stud	4 - 8d common ($2^1/_2$" × 0.131")	toenail

(continued)

TABLE 2304.9.1—continued
FASTENING SCHEDULE

CONNECTION	FASTENING[a, m]	LOCATION
17. Ceiling joists, laps over partitions (see Section 2308.10.4.1, Table 2308.10.4.1)	3 - 16d common ($3^1/_2$" × 0.162") minimum, Table 2308.10.4.1 4 - 3" × 0.131" nails 4 - 3" 14 gage staples	face nail
18. Ceiling joists to parallel rafters (see Section 2308.10.4.1, Table 2308.10.4.1)	3 - 16d common ($3^1/_2$" × 0.162") minimum, Table 2308.10.4.1 4 - 3" × 0.131" nails 4 - 3" 14 gage staples	face nail
19. Rafter to plate (see Section 2308.10.1, Table 2308.10.1)	3 - 8d common ($2^1/_2$" × 0.131") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples	toenail
20. 1" diagonal brace to each stud and plate	2 - 8d common ($2^1/_2$" × 0.131") 2 - 3" × 0.131" nails 3 - 3" 14 gage staples	face nail
21. 1" × 8" sheathing to each bearing	3 - 8d common ($2^1/_2$" × 0.131")	face nail
22. Wider than 1" × 8" sheathing to each bearing	3 - 8d common ($2^1/_2$" × 0.131")	face nail
23. Built-up corner studs	16d common ($3^1/_2$" × 0.162") 3" × 0.131" nails 3" 14 gage staples	24" o.c. 16" o.c. 16" o.c.
24. Built-up girder and beams	20d common (4" × 0.192") 32" o.c. 3" × 0.131" nail at 24" o.c. 3" 14 gage staple at 24" o.c.	face nail at top and bottom staggered on opposite sides
	2 - 20d common (4" × 0.192") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples	face nail at ends and at each splice
25. 2" planks	16d common ($3^1/_2$" × 0.162")	at each bearing
26. Collar tie to rafter	3 - 10d common (3" × 0.148") 4 - 3" × 0.131" nails 4 - 3" 14 gage staples	face nail
27. Jack rafter to hip	3 - 10d common (3" × 0.148") 4 - 3" × 0.131" nails 4 - 3" 14 gage staples	toenail
	2 - 16d common ($3^1/_2$" × 0.162") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples	face nail
28. Roof rafter to 2-by ridge beam	2 - 16d common ($3^1/_2$" × 0.162") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples	toenail
	2 -16d common ($3^1/_2$" × 0.162") 3 - 3" × 0.131" nails 3 - 3" 14 gage staples	face nail
29. Joist to band joist	3 - 16d common ($3^1/_2$" × 0.162") 4 - 3" × 0.131" nails 4 - 3" 14 gage staples	face nail

(continued)

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

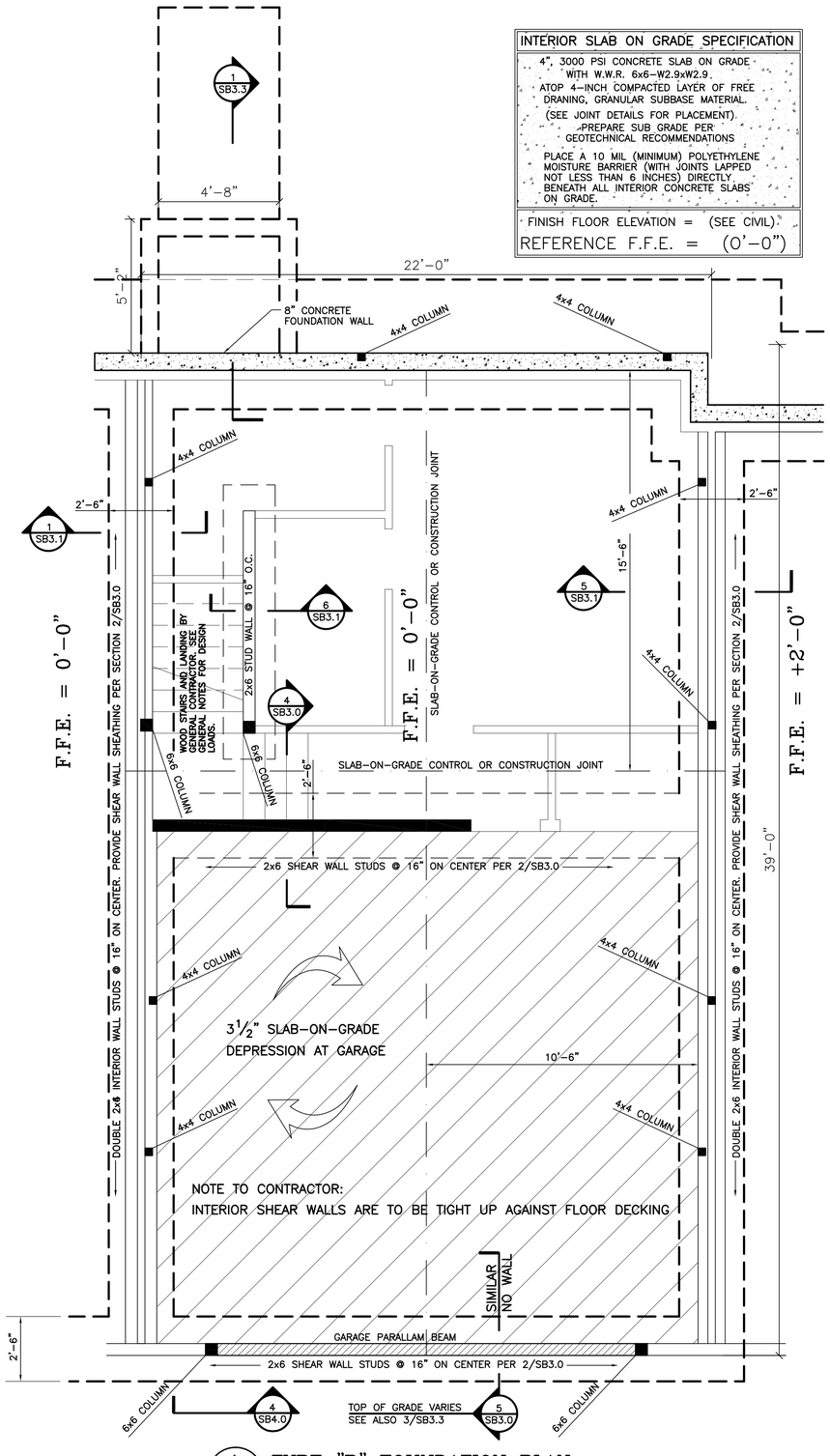
DATE 04/08/19

Sheet Title
TYPE "B" FASTENING SCHEDULE

SB1.4

RELEASED FOR CONSTRUCTION

INTERIOR SLAB ON GRADE SPECIFICATION
4", 3000 PSI CONCRETE SLAB ON GRADE WITH W.W.R. 6x6–W2.9xW2.9.
ATOP 4–INCH COMPACTED LAYER OF FREE DRANING, GRANULAR SUBBASE MATERIAL. (SEE JOINT DETAILS FOR PLACEMENT). PREPARE SUB GRADE PER GEOTECHNICAL RECOMMENDATIONS
PLACE A 10 MIL (MINIMUM) POLYETHYLENE MOISTURE BARRIER (WITH JOINTS LAPPED NOT LESS THAN 6 INCHES) DIRECTLY BENEATH ALL INTERIOR CONCRETE SLABS ON GRADE.
FINISH FLOOR ELEVATION = (SEE CIVIL).
REFERENCE F.F.E. = (0'–0")



1 SB2.0 TYPE "B" FOUNDATION PLAN
3/8" = 1'–0"

LEGEND:

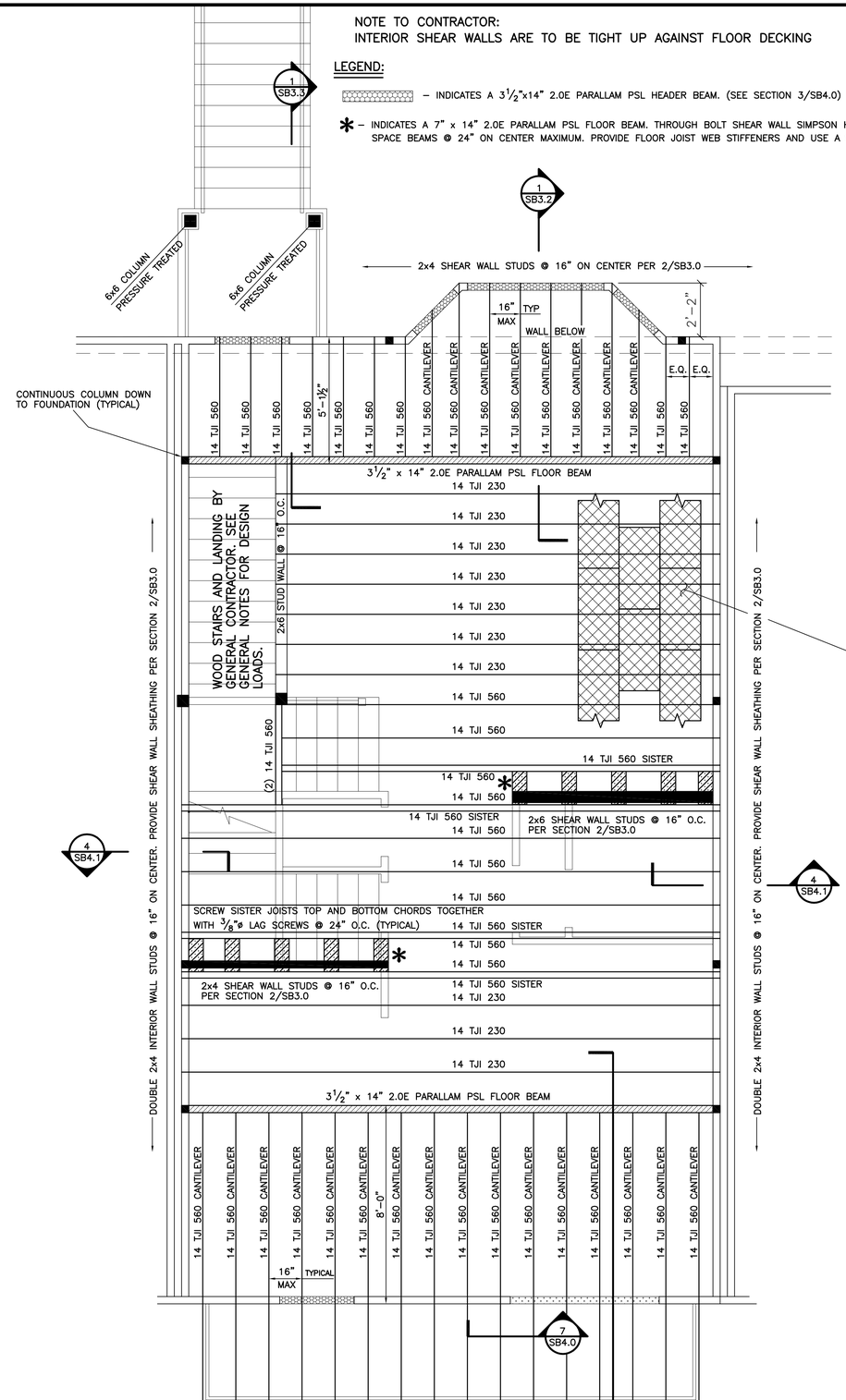
GARAGE PARALLAM BEAM – 5¼"x18" 2.0E PARALLAM PSL FLOOR BEAM BY TRUS JOIST WITH A ¼" PIECE OF PLYWOOD NAILED AND GLUED TO THE SIDE FOR A TOTAL THICKNESS OF 5½" TO MATCH SUPPORTING COLUMNS AND WALL STUDS.

NOTE TO CONTRACTOR:
INTERIOR SHEAR WALLS ARE TO BE TIGHT UP AGAINST FLOOR DECKING

LEGEND:

▨ – INDICATES A 3½"x14" 2.0E PARALLAM PSL HEADER BEAM. (SEE SECTION 3/SB4.0)

✱ – INDICATES A 7" x 14" 2.0E PARALLAM PSL FLOOR BEAM. THROUGH BOLT SHEAR WALL SIMPSON HOLD DOWN PER SECTION 3/SB3.0 TO BEAM. SPACE BEAMS @ 24" ON CENTER MAXIMUM. PROVIDE FLOOR JOIST WEB STIFFENERS AND USE A SIMPSON FACE MOUNT CONNECTION.



¾" TONGUE AND GROOVE PLYWOOD DECKING PER THE GENERAL NOTES GLUED, NAILED, AND SCREWED AT THE CORNERS. SEE SECTION 3/SD4.1 FOR DIAPHRAGM ATTACHMENT PATTERN. FINISH FLOOR ELEVATION = (10'–6")

2 SB2.0 TYPE "B" MAIN FLOOR FRAMING PLAN
3/8" = 1'–0"

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

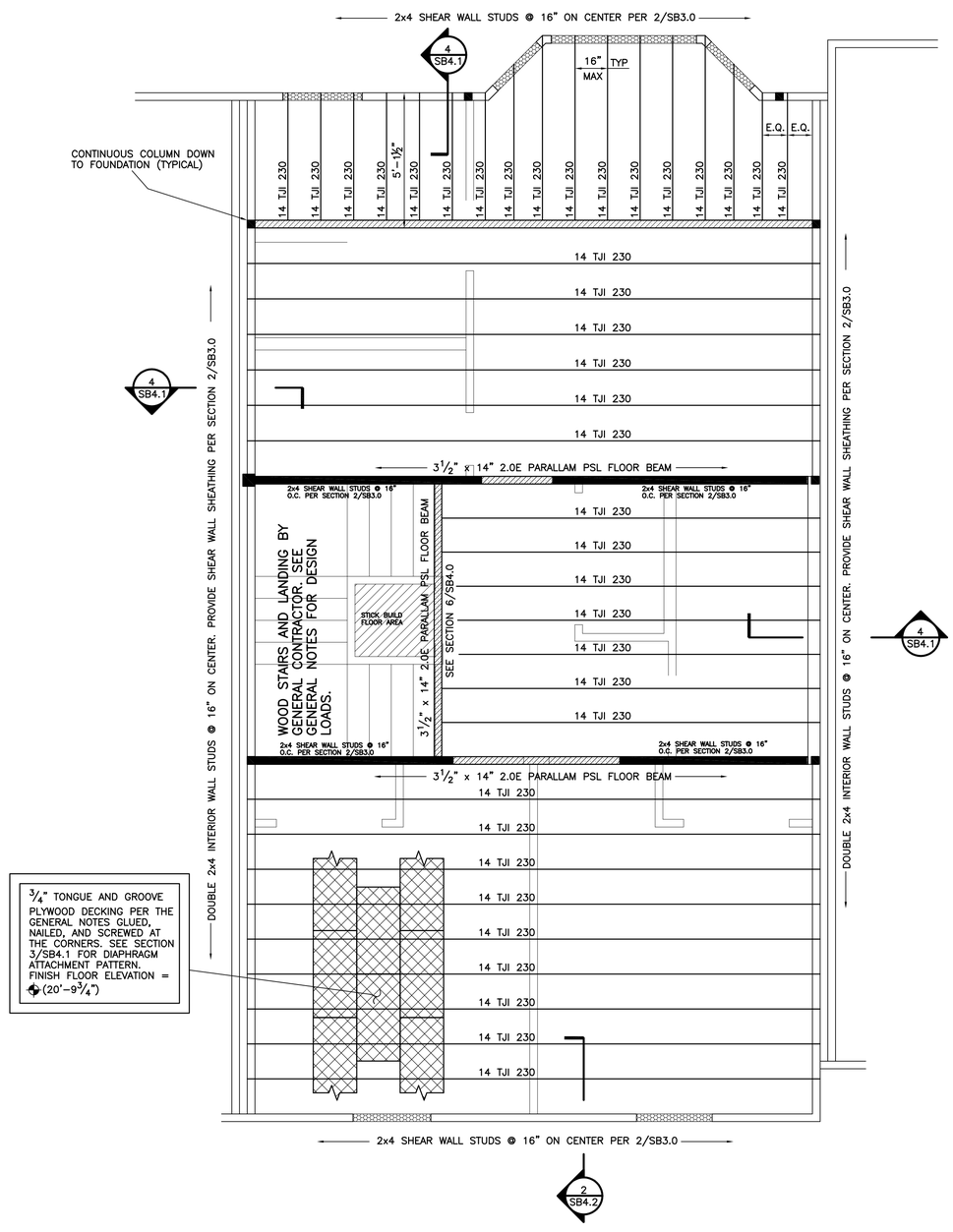
Sheet Title
TYPE "B" FOUNDATION & FLOOR

SB2.0

RELEASED FOR CONSTRUCTION

NOTE TO CONTRACTOR:

INTERIOR SHEAR WALLS ARE TO BE TIGHT UP AGAINST TRUSS BOTTOM CHORD SHEATHING

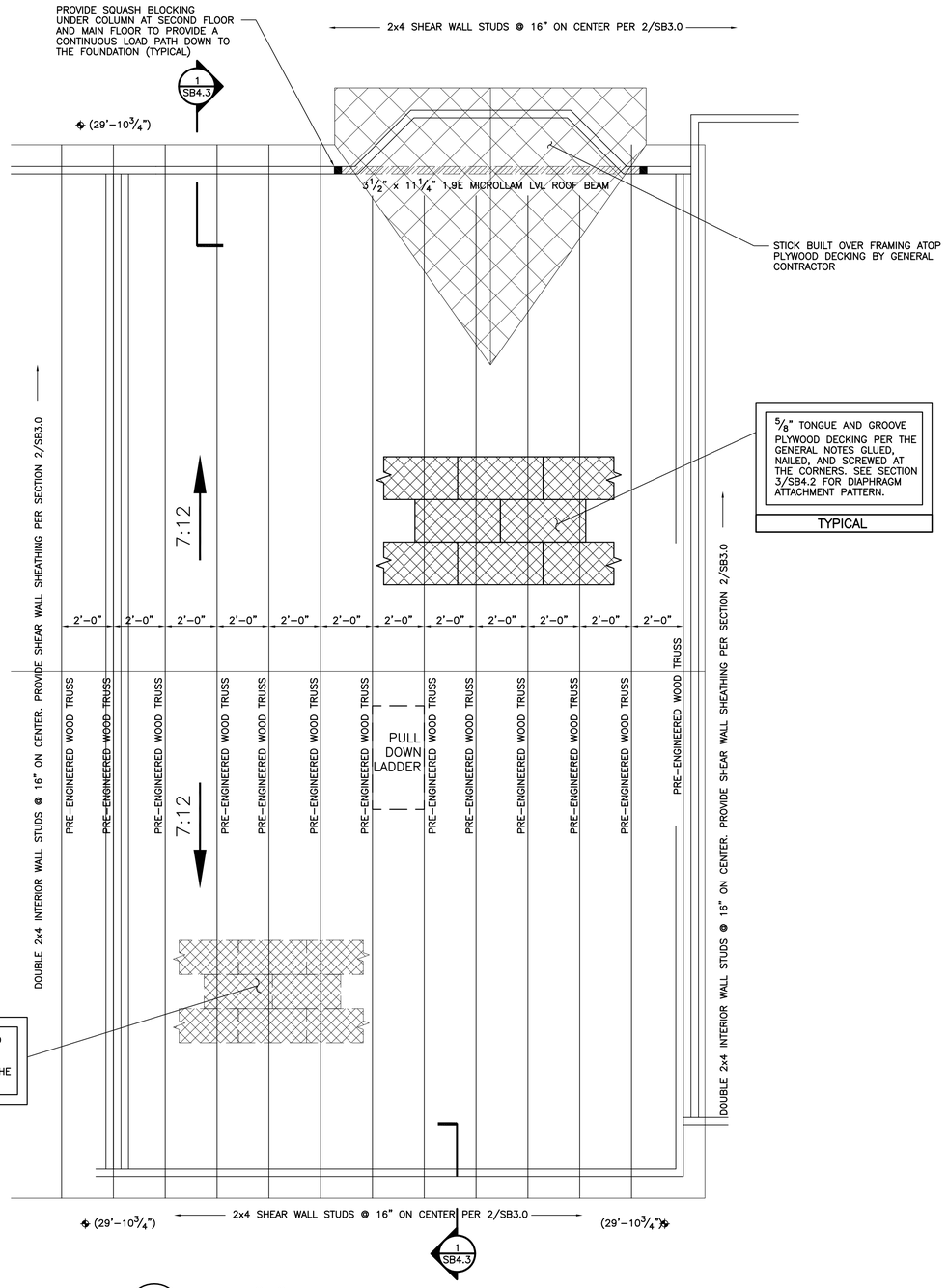


1 SB2.1 TYPE "B" SECOND FLOOR FRAMING PLAN

3/8" = 1'-0"

LEGEND:

▨ – INDICATES A 3½"x14" 2.0E PARALLAM PSL HEADER BEAM. (SEE SECTION 3/SB4.0)



2 SB2.1 TYPE "B" ROOF FRAMING PLAN

3/8" = 1'-0"

LEGEND:

✥ (X'-Y") – INDICATES TRUSS BEARING ELEVATION ABOVE REFERENCE FINISH FLOOR ELEVATION

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

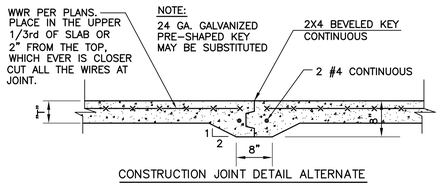
PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

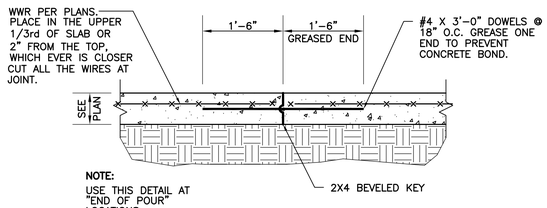
Sheet Title
TYPE "B" FLOOR&ROOF FRAMING

SB2.1

RELEASED FOR CONSTRUCTION

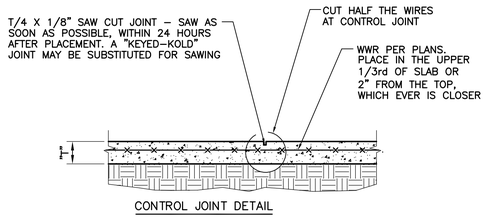


CONSTRUCTION JOINT DETAIL ALTERNATE



NOTE:
USE THIS DETAIL AT "END OF POUR" LOCATIONS

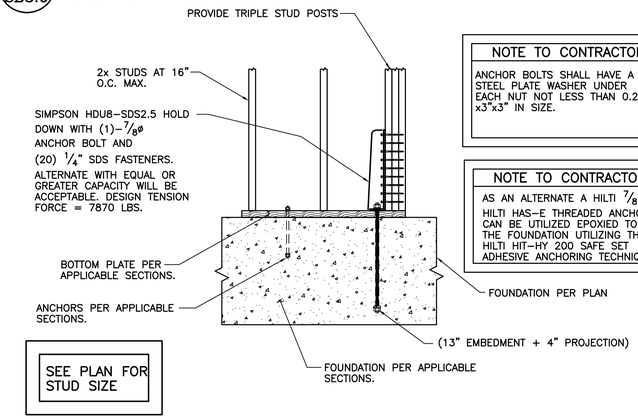
CONSTRUCTION JOINT DETAIL



CONTROL JOINT DETAIL

1 SB3.0 TYPICAL SLAB ON GRADE JOINT DETAILS

SCALE: N.T.S.

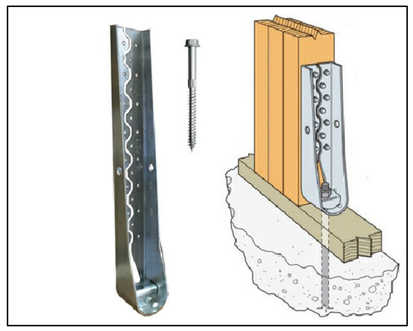


NOTE TO CONTRACTOR:
ANCHOR BOLTS SHALL HAVE A STEEL PLATE WASHER UNDER EACH NUT NOT LESS THAN 0.229" x3"x3" IN SIZE.

NOTE TO CONTRACTOR:
AS AN ALTERNATE A HILTI 7/8"ø HILTI HAS-E THREADED ANCHOR CAN BE UTILIZED EPOXIED TO THE FOUNDATION UTILIZING THE HILTI HIT-HY 200 SAFE SET ADHESIVE ANCHORING TECHNIQUE.

3 SB3.0 SIMPSON HDU8-SDS2.5 ANCHOR SECTION AT ENDS OF ALL SHEAR WALLS

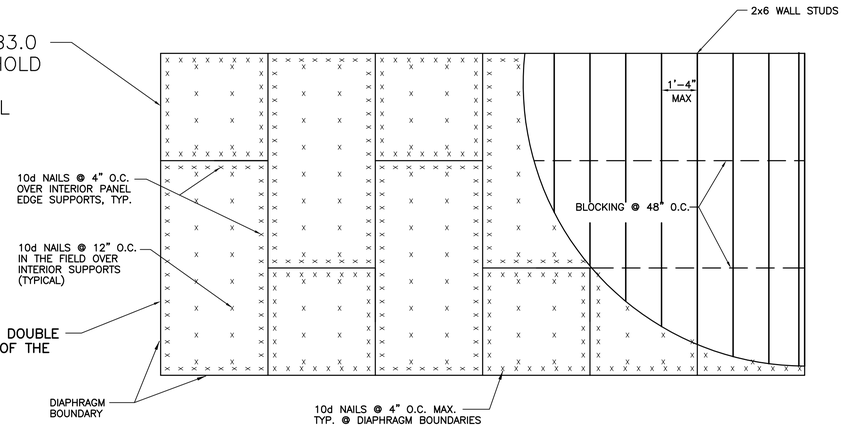
SCALE: N.T.S.



SEE SECTION 3/SB3.0 THIS SHEET FOR HOLD DOWN FRAMING AT ENDS OF THE WALL (TYPICAL)

NOTE TO CONTRACTOR:
SEE SECTIONS 2/SB4.3 OR 3/SB4.3 FOR ELEVATED SHEAR WALL END OF WALL ATTACHMENT.

AT A MINIMUM PROVIDE DOUBLE STUDS AT BOTH ENDS OF THE SHEAR WALL.



2 SB3.0 1/2" APA RATED SHEATHING STUD SHEAR WALL ATTACHMENT

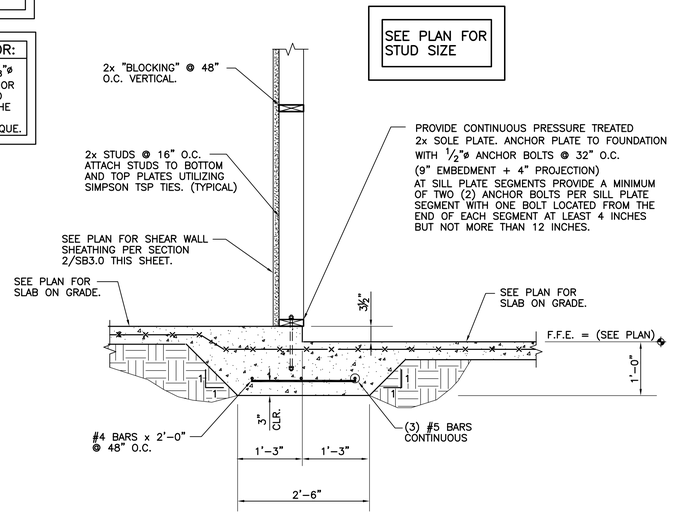
SCALE: N.T.S.

NOTES:

1. DIAPHRAGM VALUES PER ANSI/ AF&PA SDPWS-2008 (SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC); TABLE 4.3A.
2. 10d COMMON NAIL SIZE SHALL BE 3"x 0.148.
3. MINIMUM NAIL PENETRATION INTO FRAMING SHALL BE 1 1/2".
4. BLOCKING SHALL BE THE SAME DEPTH AND WIDTH AS STUD FRAMING.
5. PANELS SHALL BE APPLIED DIRECTLY TO FRAMING MEMBERS AND BLOCKING.
6. NAILS SHALL BE DRIVEN WITH THE HEAD OF THE NAIL FLUSH WITH THE SURFACE OF THE SHEATHING.
7. NAILS SHALL BE LOCATED AT LEAST 3/8" FROM THE PANEL EDGES.

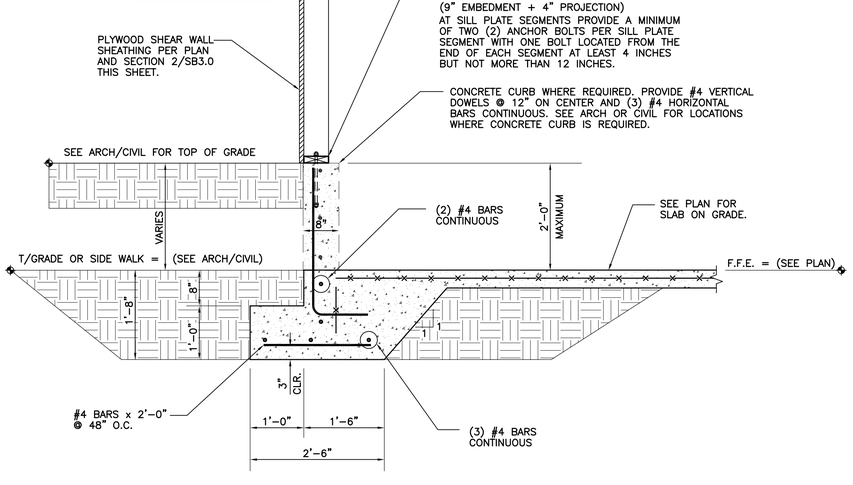
6 SB3.0 TYPICAL TSP SIMPSON STUD WALL TIES

SCALE: N.T.S.



4 SB3.0 TYPICAL THICKENED SLAB AT STUD WALL

SCALE: N.T.S.



5 SB3.0 TYPICAL PERIMETER FOUNDATION SECTION

SCALE: N.T.S.

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

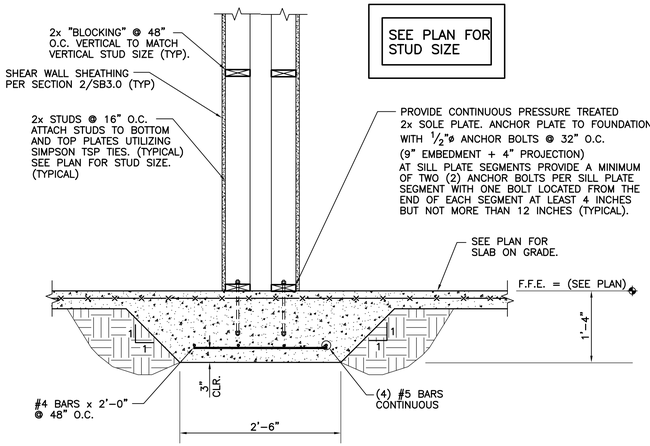
PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "B" FOUNDATION SECTIONS

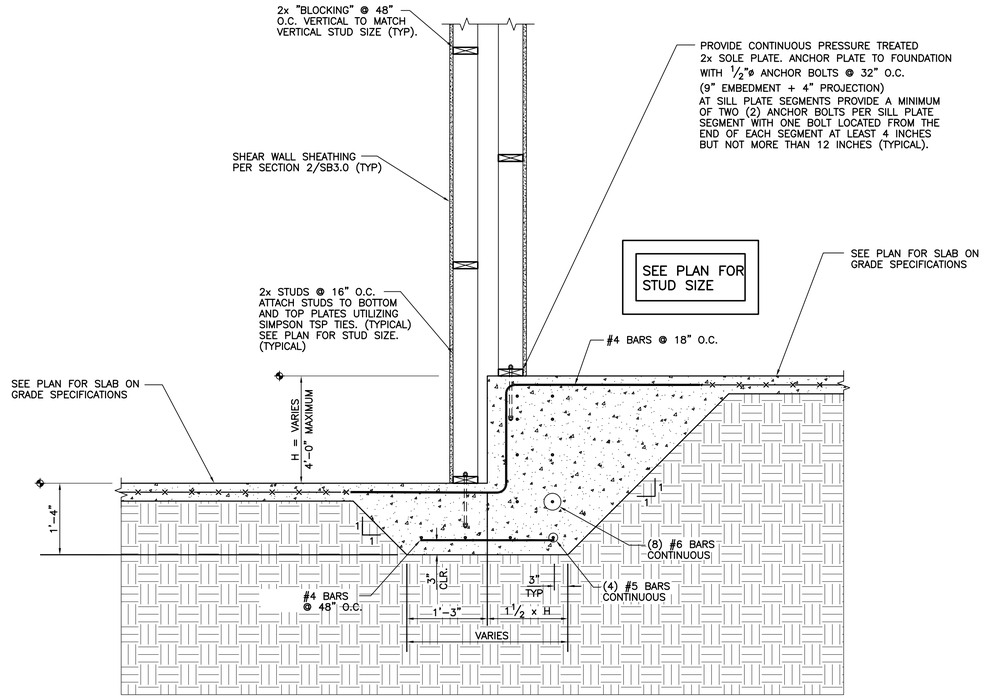
SB3.0

RELEASED FOR CONSTRUCTION



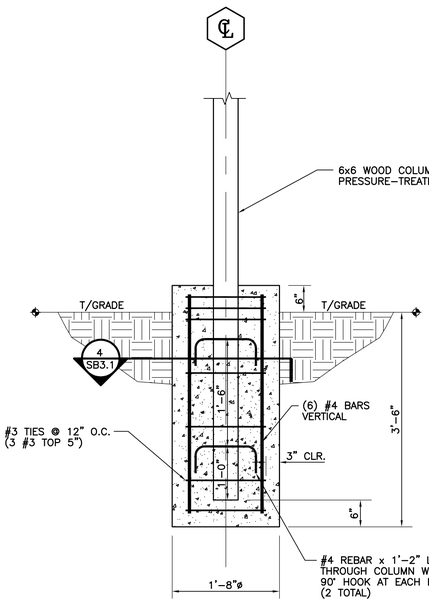
1 SB3.1 TYPICAL THICKENED SLAB AT DOUBLE WALL

SCALE: N.T.S.



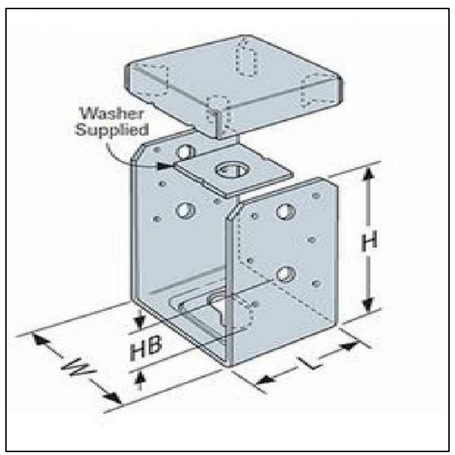
5 SB3.1 TYPICAL SLAB STEP FOUNDATION AT DOUBLE WALL

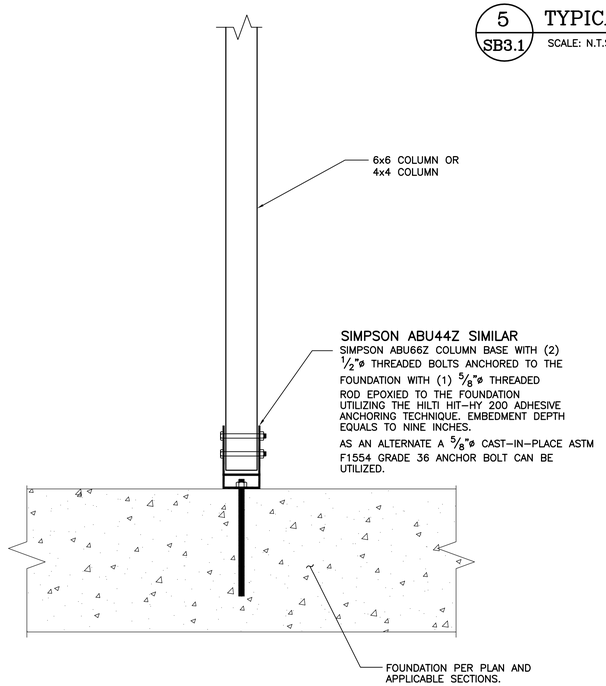
SCALE: N.T.S.



3 SB3.1 PORCH PIER SECTION

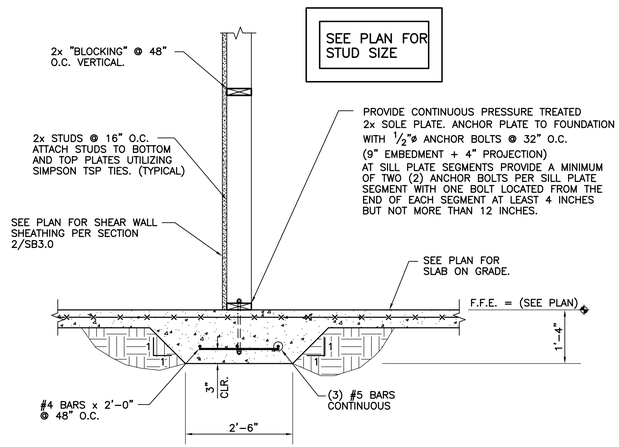
SCALE: N.T.S.





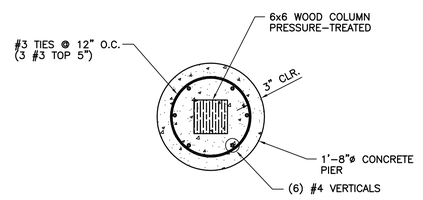
2 SB3.1 SIMPSON ABU66Z COLUMN BASE (ABU44Z SIMILAR)

SCALE: N.T.S.



6 SB3.1 TYPICAL THICKENED SLAB AT STUD WALL

SCALE: N.T.S.



4 SB3.1 TYPICAL SECTION THROUGH PIER

SCALE: N.T.S.

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

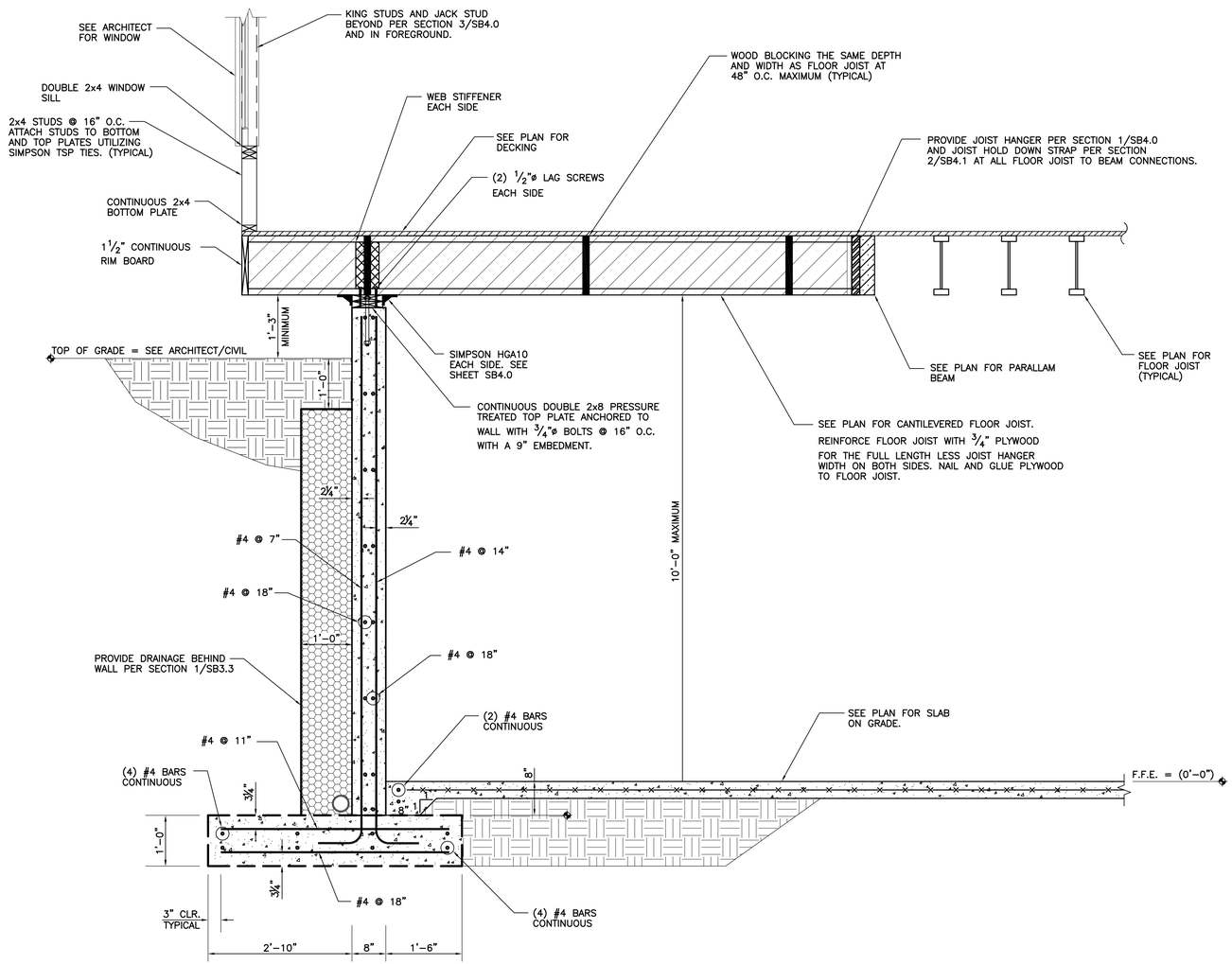
PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "B" FOUNDATION SECTIONS

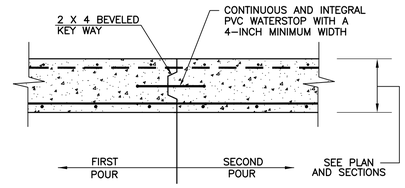
SB3.1

RELEASED FOR CONSTRUCTION



1 SB3.2 PERIMETER FOUNDATION WALL SECTION

SCALE: N.T.S.

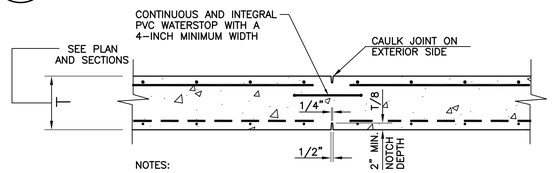


NOTES:

1. HORIZONTAL REINFORCEMENT IS CONTINUOUS THRU BULKHEAD
2. SEE PLAN AND APPLICABLE SECTIONS FOR WALL REINFORCING.

2 SB3.2 TYPICAL CONCRETE WALL CONSTRUCTION JOINT

SCALE: N.T.S.



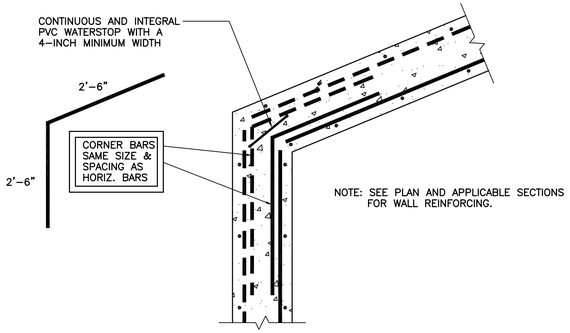
NOTES:

1. STOP HORIZONTAL REBAR 2" CLEAR ON EACH SIDE OF JOINT.
2. SEE PLAN AND APPLICABLE SECTIONS FOR WALL REINFORCING.

MAX SPACING = 25'-0'

3 SB3.2 TYPICAL CONCRETE WALL CONTRACTION JOINT

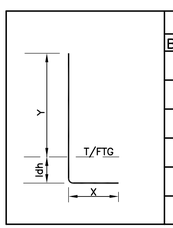
SCALE: N.T.S.



4 SB3.2 TYPICAL CONCRETE WALL CORNER REINFORCING

SCALE: N.T.S.

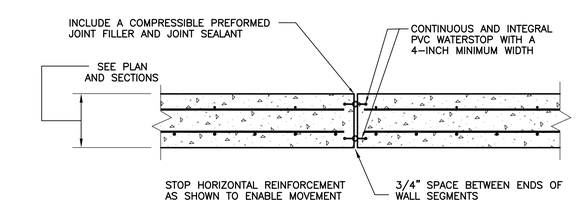
LAP SPLICE SCHEDULE	
BAR SIZE	LAP SPLICE DIMENSION (IN)
#3	1'-4"
#4	1'-5"
#5	1'-10"
#6	2'-2"
#7	3'-2"
#8	3'-7"



HOOKED BAR SCHEDULE			
BAR SIZE	X	Idh	Y
#3	0'-6"	0'-6"	1'-4"
#4	0'-8"	0'-8"	1'-5"
#5	0'-10"	0'-9"	1'-10"
#6	1'-0"	0'-11 1/2"	2'-2"
#7	1'-2"	1'-1 1/2"	3'-2"
#8	1'-4"	1'-3 1/2"	3'-7"

6 SB3.2 TYPICAL BAR DIMENSION SCHEDULE

SCALE: N.T.S.



U.N.O. PLACE EXPANSION JOINTS @ 100' MAX.

5 SB3.2 TYPICAL CONCRETE WALL EXPANSION JOINT

SCALE: N.T.S.

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

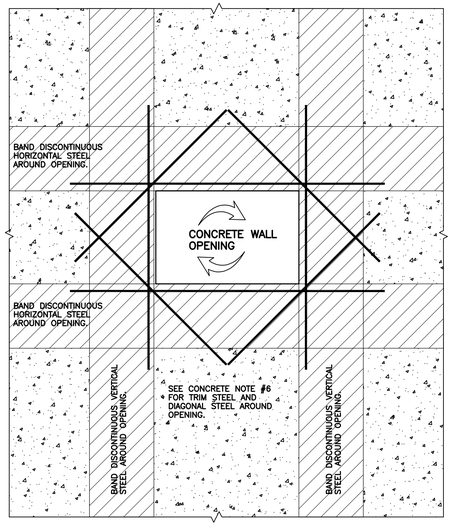
PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "B" FOUNDATION SECTIONS

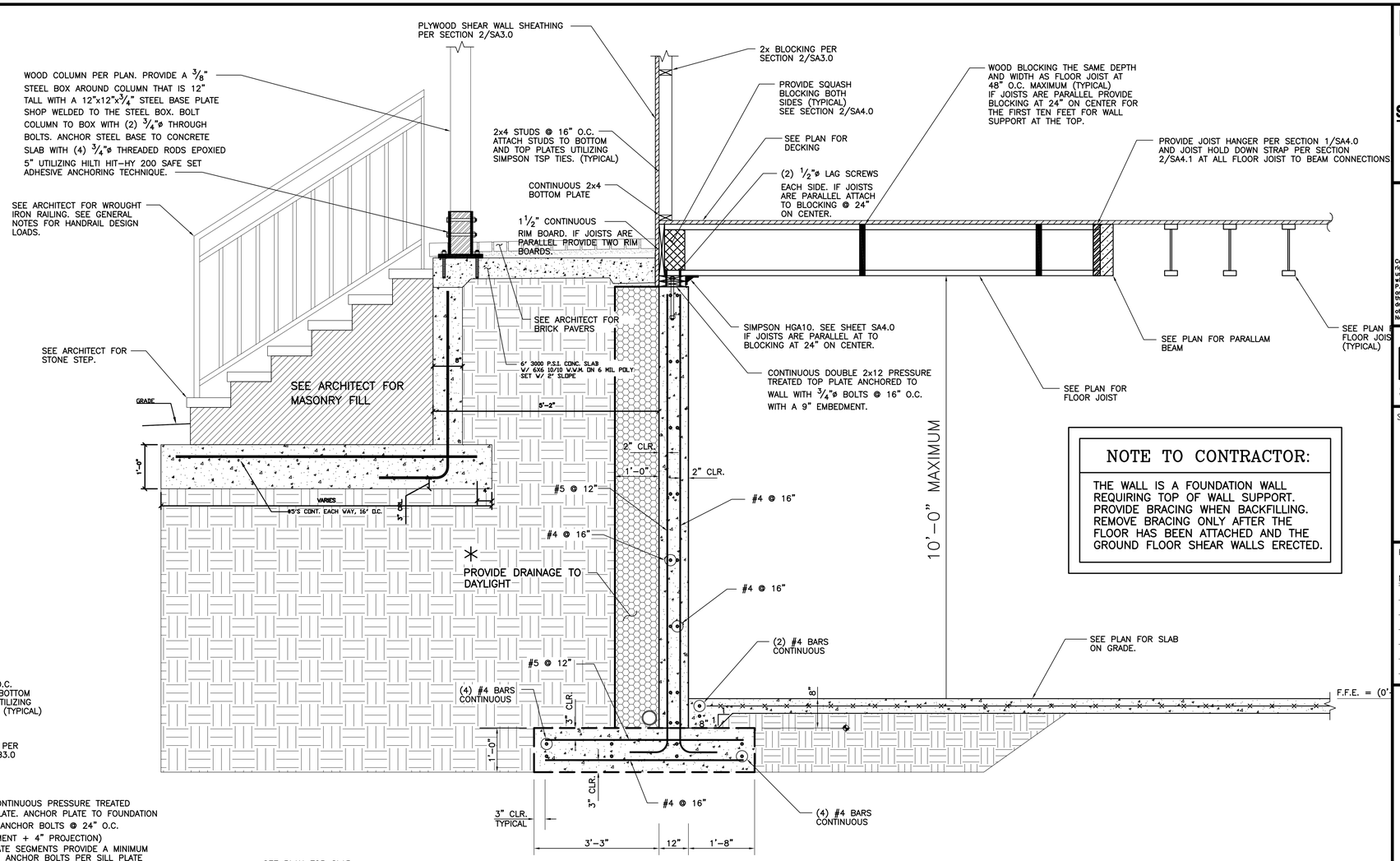
SB3.2

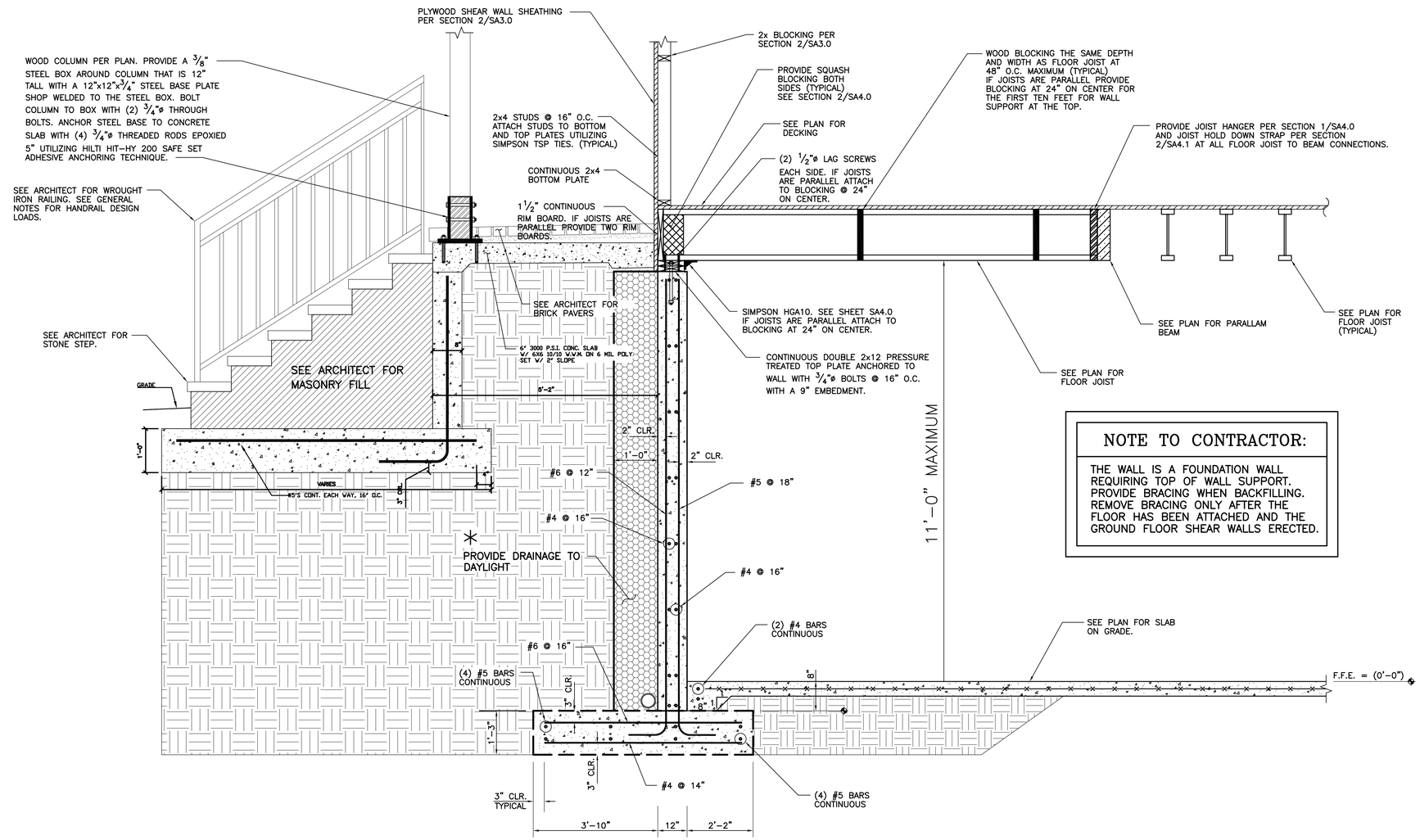
RELEASED FOR CONSTRUCTION



4 SA3.3 CONCRETE OPENING REINFORCING

SCALE: N.T.S.


PLYWOOD SHEAR WALL SHEATHING PER SECTION 2/SA3.0
2x BLOCKING PER SECTION 2/SA3.0
WOOD COLUMN PER PLAN. PROVIDE A 3/8" STEEL BOX AROUND COLUMN THAT IS 12" TALL WITH A 12"x12"x3/4" STEEL BASE PLATE SHOP WELDED TO THE STEEL BOX. BOLT COLUMN TO BOX WITH (2) 3/4"ø THROUGH BOLTS. ANCHOR STEEL BASE TO CONCRETE SLAB WITH (4) 3/4"ø THREADED RODS EPOXIED 5" UTILIZING HILTI HIT-HY 200 SAFE SET ADHESIVE ANCHORING TECHNIQUE.
PROVIDE SQUASH BLOCKING BOTH SIDES (TYPICAL) SEE SECTION 2/SA4.0
WOOD BLOCKING THE SAME DEPTH AND WIDTH AS FLOOR JOIST AT 48" O.C. MAXIMUM (TYPICAL) IF JOISTS ARE PARALLEL PROVIDE BLOCKING AT 24" ON CENTER FOR THE FIRST TEN FEET FOR WALL SUPPORT AT THE TOP.
2x4 STUDS @ 16" O.C. ATTACH STUDS TO BOTTOM AND TOP PLATES UTILIZING SIMPSON TSP TIES. (TYPICAL)
SEE PLAN FOR DECKING
PROVIDE JOIST HANGER PER SECTION 1/SA4.0 AND JOIST HOLD DOWN STRAP PER SECTION 2/SA4.1 AT ALL FLOOR JOIST TO BEAM CONNECTIONS
(2) 1/2"ø LAG SCREWS EACH SIDE. IF JOISTS ARE PARALLEL ATTACH TO BLOCKING @ 24" ON CENTER.
CONTINUOUS 2x4 BOTTOM PLATE
SEE ARCHITECT FOR WROUGHT IRON RAILING. SEE GENERAL NOTES FOR HANDRAIL DESIGN LOADS.
1 1/2" CONTINUOUS RIM BOARD. IF JOISTS ARE PARALLEL PROVIDE TWO RIM BOARDS.
SEE ARCHITECT FOR BRICK PAVERS
SIMPSON HGA10. SEE SHEET SA4.0 IF JOISTS ARE PARALLEL AT TO BLOCKING AT 24" ON CENTER.
SEE PLAN FOR PARALLAM BEAM
SEE PLAN FOR FLOOR JOIS (TYPICAL)
SEE ARCHITECT FOR STONE STEP.
6" 3000 P.S.I. CONC. SLAB W/ 6X6 10/10 W.W.M. ON 6 MIL POLY SET W/ 2" SLOPE
CONTINUOUS DOUBLE 2x12 PRESSURE TREATED TOP PLATE ANCHORED TO WALL WITH 3/4"ø BOLTS @ 16" O.C. WITH A 9" EMBEDMENT.
SEE ARCHITECT FOR MASONRY FILL
GRADE
5'-2"
2" CLR.
1'-0"
2" CLR.
#5 @ 12"
#4 @ 16"
#4 @ 16"
#4 @ 16"
10'-0" MAXIMUM
PROVIDE DRAINAGE TO DAYLIGHT
(2) #4 BARS CONTINUOUS
SEE PLAN FOR SLAB ON GRADE.
#5 @ 12"
(4) #4 BARS CONTINUOUS
3" CLR.
1'-0"
3" CLR.
#4 @ 16"
(4) #4 BARS CONTINUOUS
3" CLR. TYPICAL
3'-3"
12"
1'-8"
F.F.E. = (0'
8"
1'-8"
1'-0"
#4 @ 16"
#4 @ 16"
#4 @ 16



1 SA3.4 PERIMETER FOUNDATION WALL SECTION

SCALE: N.T.S.

NOTE TO CONTRACTOR:

THE WALL IS A FOUNDATION WALL REQUIRING TOP OF WALL SUPPORT. PROVIDE BRACING WHEN BACKFILLING. REMOVE BRACING ONLY AFTER THE FLOOR HAS BEEN ATTACHED AND THE GROUND FLOOR SHEAR WALLS ERECTED.

* – THIS DRAINAGE SYSTEM CAN BE CONSTRUCTED OF OPEN GRADED WASHED STONE ISOLATED FROM THE SOIL BACKFILL WITH A GEOSYNTHETIC FILTER FABRIC AND DRAINED BY PERFORATED PIPE PER GEOTECH APPROVAL.

NOTE: CONTRACTOR CAN SUBMIT ALTERNATE DRAINAGE SYSTEM FOR APPROVAL

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

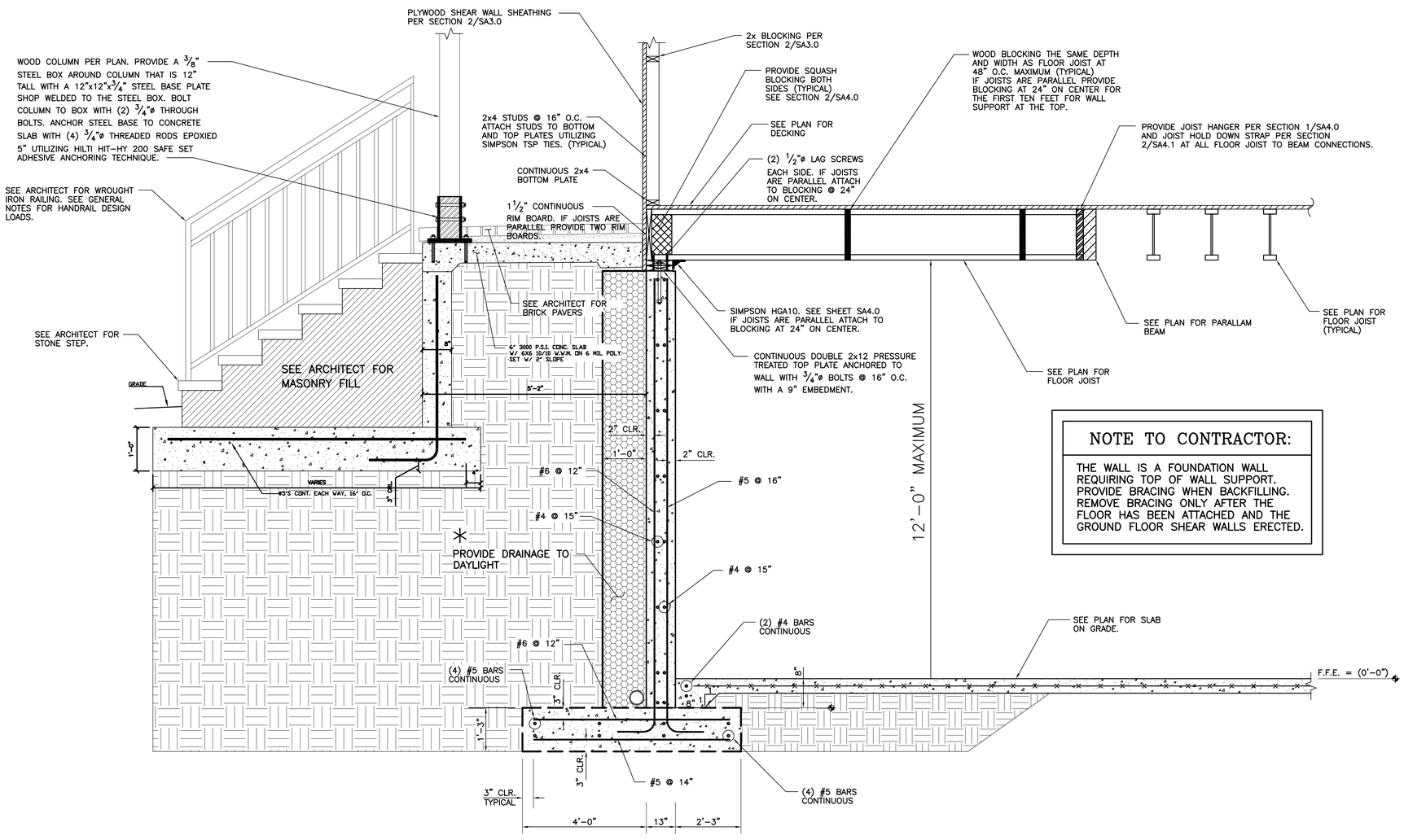
PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE A
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "A" FOUNDATION SECTIONS

SA3.4

RELEASED FOR CONSTRUCTION



NOTE TO CONTRACTOR:

THE WALL IS A FOUNDATION WALL REQUIRING TOP OF WALL SUPPORT. PROVIDE BRACING WHEN BACKFILLING. REMOVE BRACING ONLY AFTER THE FLOOR HAS BEEN ATTACHED AND THE GROUND FLOOR SHEAR WALLS ERECTED.

1 / SA3.5 PERIMETER FOUNDATION WALL SECTION

SCALE: N.T.S.

* – THIS DRAINAGE SYSTEM CAN BE CONSTRUCTED OF OPEN GRADED WASHED STONE ISOLATED FROM THE SOIL BACKFILL WITH A GEOSYNTHETIC FILTER FABRIC AND DRAINED BY PERFORATED PIPE PER GEOTECH APPROVAL.

NOTE: CONTRACTOR CAN SUBMIT ALTERNATE DRAINAGE SYSTEM FOR APPROVAL

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

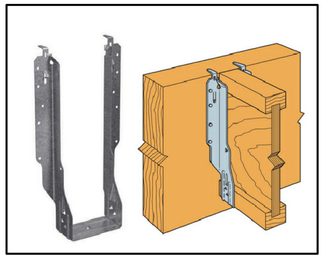
PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE A
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "A" FOUNDATION SECTIONS

SA3.5

RELEASED FOR CONSTRUCTION

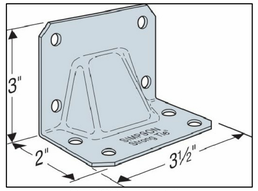


SIMPSON IUS/MUI FACE MOUNT TJI JOIST HANGER. SEE PLAN FOR TJI FLOOR JOIST SIZE, LENGTH AND WIDTH OF JOIST HANGER TO MATCH TJI FLOOR JOIST.

FACE MOUNTS SHALL BE ABLE TO SUPPORT 400 LBS VERTICAL GRAVITY LOAD.

1 SB4.0 TJI SIMPSON FACE MOUNT JOIST HANGERS

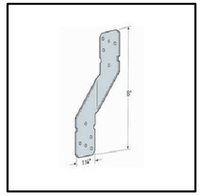
SCALE: N.T.S.



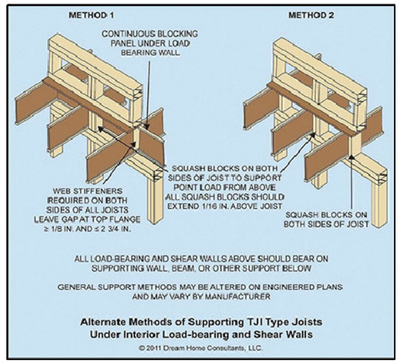
SIMPSON HGA10

0.148 x 1½ NAILS

ALLOWABLE LOAD = 710 LBS

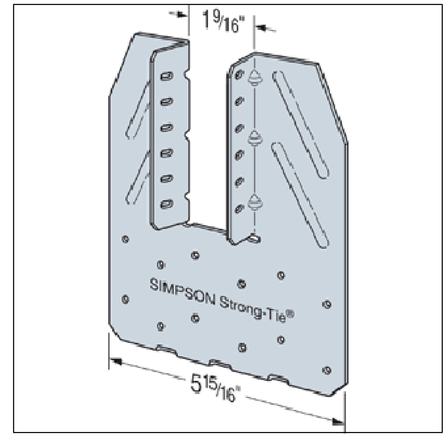


SIMPSON H8 TIES



2 SBC4.0 SQUASH BLOCKING

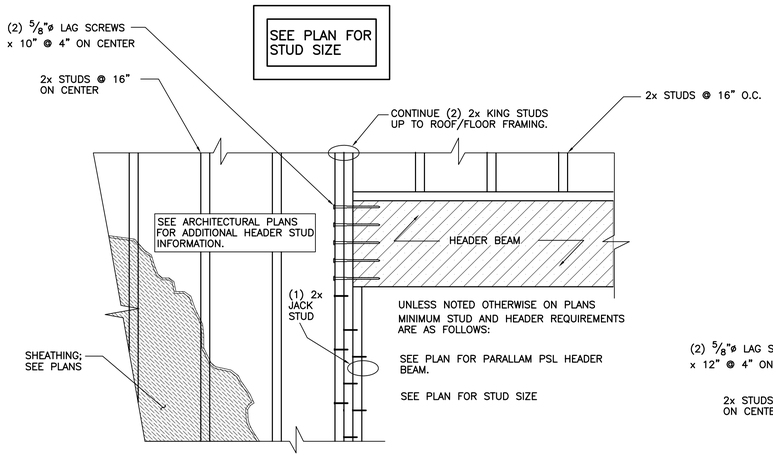
SCALE: N.T.S.



AT ALL TRUSS BEARING CONDITIONS

5 SB4.0 SIMPSON H14 HURRICANE TIE

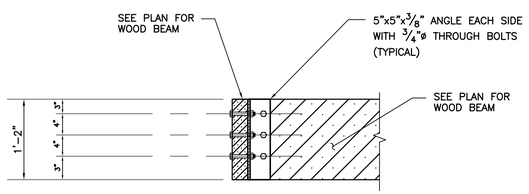
SCALE: N.T.S.



MAX OPENING WIDTH = 4'–6"

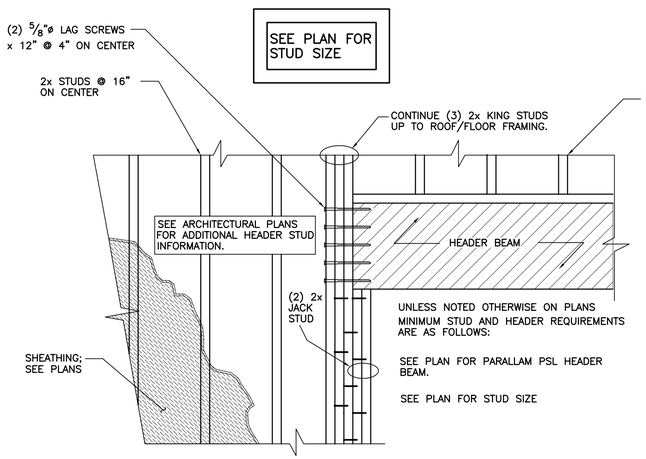
3 SB4.0 HEADER BEAM OVER SMALL OPENINGS

SCALE: N.T.S.



6 SB4.0 BEAM TO BEAM CONNECTION

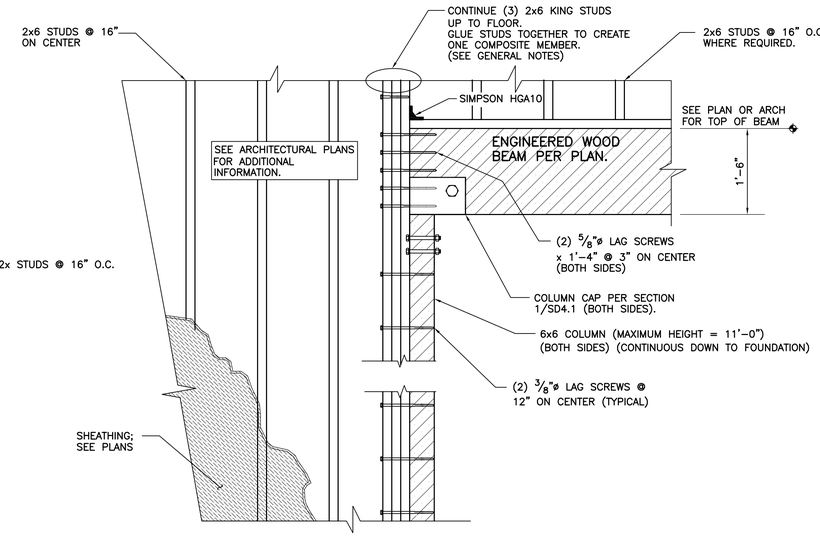
SCALE: N.T.S.



MAX OPENING WIDTH = 6'–0"

7 SB4.0 HEADER BEAM OVER SMALL OPENINGS

SCALE: N.T.S.



MAXIMUM SPAN = 16'–0"

4 SB4.0 ENGINEERED WOOD BEAM AT GARAGE

SCALE: N.T.S.

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

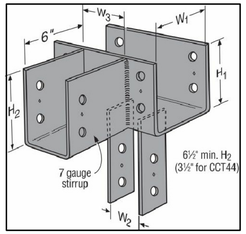
PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

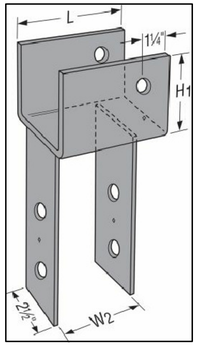
Sheet Title
TYPE "B" FRAMING SECTIONS

SB4.0

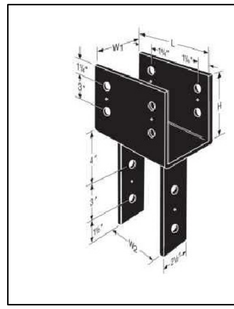
RELEASED FOR CONSTRUCTION



CORNER COLUMN CAP
4x4 COLUMN (ECCL444)
3½" WIDE BEAMS
6x6 COLUMN (ECCL666)
5½" WIDE BEAMS
UNLESS NOTED OTHERWISE



END COLUMN CAP
4x4 COLUMN (ECC44)
3½" WIDE BEAM
6x6 COLUMN (ECC66)
5½" WIDE BEAM
UNLESS NOTED OTHERWISE

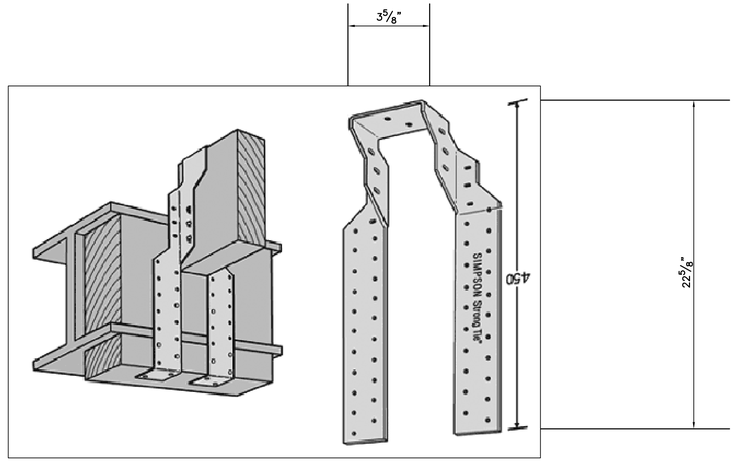


INTERIOR COLUMN CAP
4x4 COLUMN (CC44)
3½" WIDE BEAM
6x6 COLUMN (CC66)
5½" WIDE BEAM
UNLESS NOTED OTHERWISE

HUCQ BEAM TO BEAM CONNECTION

1 SB4.1 SIMPSON CC/ECC/ECCL COLUMN CAPS AND BEAM CONNECTIONS

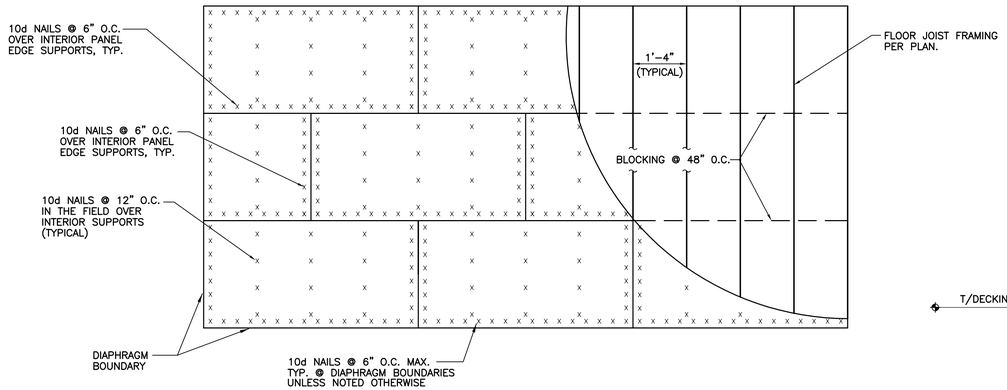
SCALE: N.T.S.



CARRYING MEMBER: (4) 10d TOP AND (8) 10d FACE

2 SB4.1 SIMPSON 16GA THAR/L422 MAX HOLD DOWN STRAP

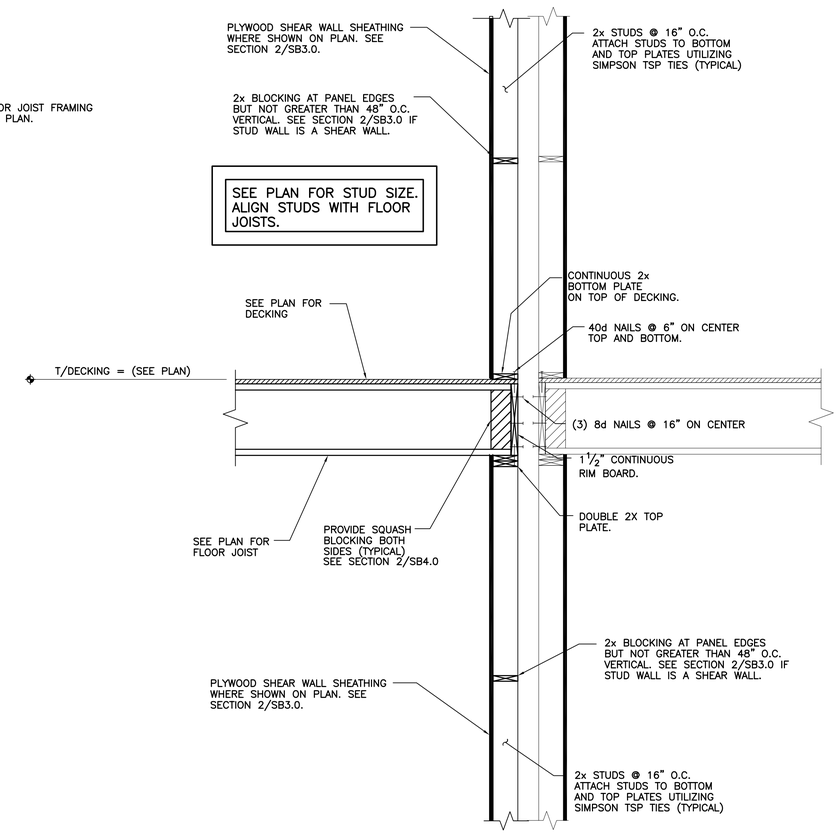
SCALE: N.T.S.



3 SB4.1 ¾" APA RATED SHEATHING FLOOR DIAPHRAGM ATTACHMENT

SCALE: N.T.S.

NOTES:
1. DIAPHRAGM VALUES PER ANSI/ AF&PA SDPWS-2008 (SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC); TABLE 4.2A.
2. 10d COMMON NAIL SIZE SHALL BE 3"x 0.148.
3. MINIMUM NAIL PENETRATION INTO FRAMING SHALL BE 1½".
4. PANELS SHALL BE APPLIED DIRECTLY TO FRAMING MEMBERS AND BLOCKING.
5. GLUE THE PLYWOOD DECKING TO THE FRAMING. (SEE GENERAL NOTES FOR GLUE)
6. SCREW THE CORNERS OF THE PLYWOOD DECKING TO THE SHEATHING.
7. BLOCKING SHALL BE THE SAME DEPTH AND WIDTH AS FLOOR JOIST FRAMING.
8. NAILS SHALL BE DRIVEN WITH THE HEAD OF THE NAIL FLUSH WITH THE SURFACE OF THE SHEATHING.
9. NAILS SHALL BE LOCATED AT LEAST ⅜" FROM THE PANEL EDGES.



4 SB4.1 TYPICAL PERIMETER WALL SECTION

SCALE: N.T.S.

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028734 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

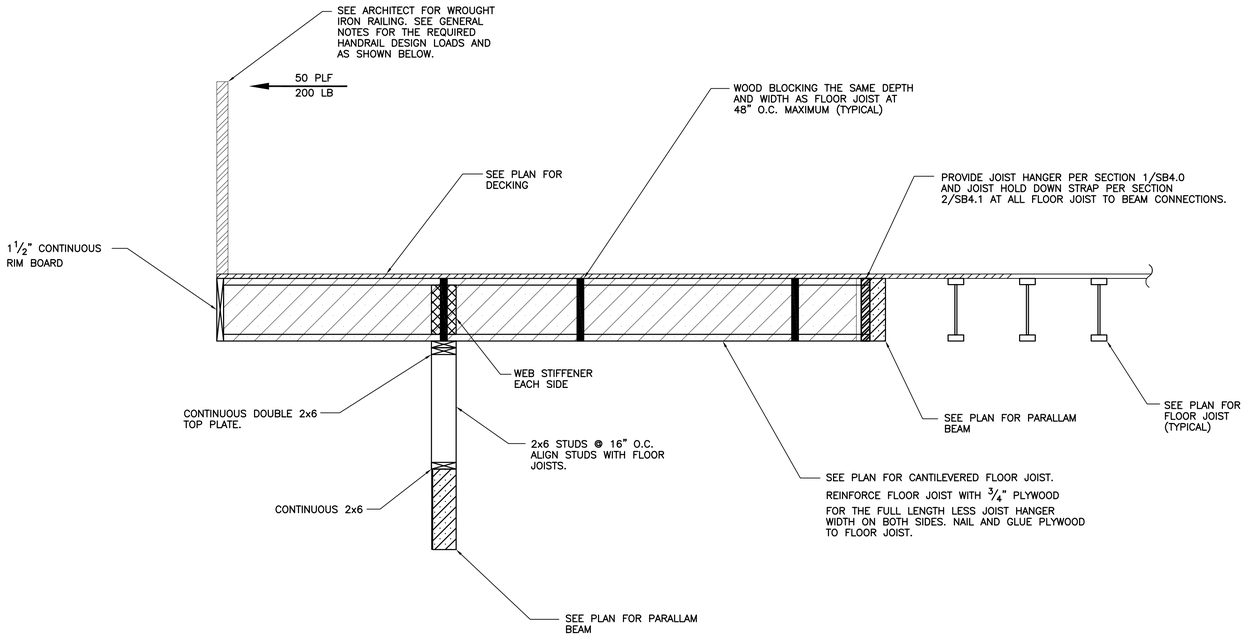
PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "B" FRAMING SECTIONS

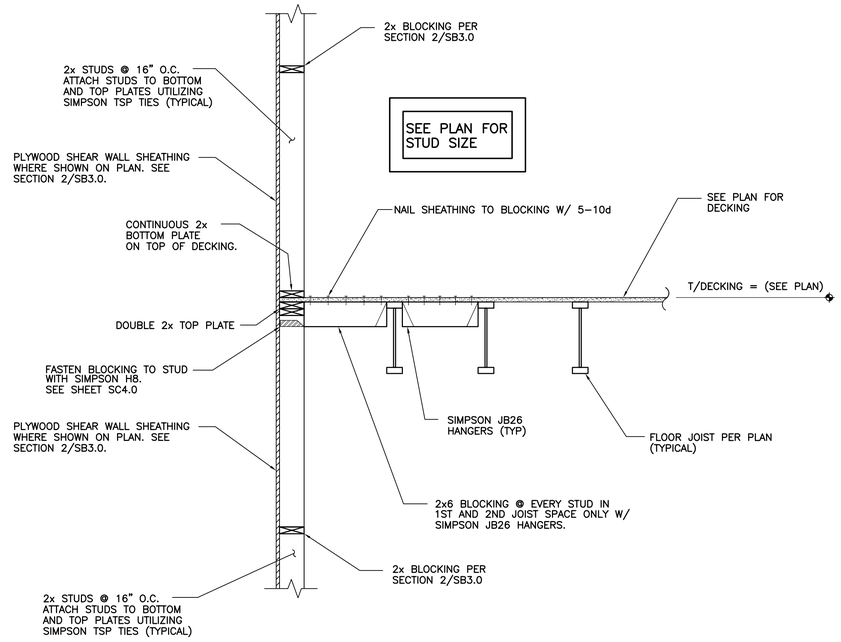
SB4.1

RELEASED FOR CONSTRUCTION



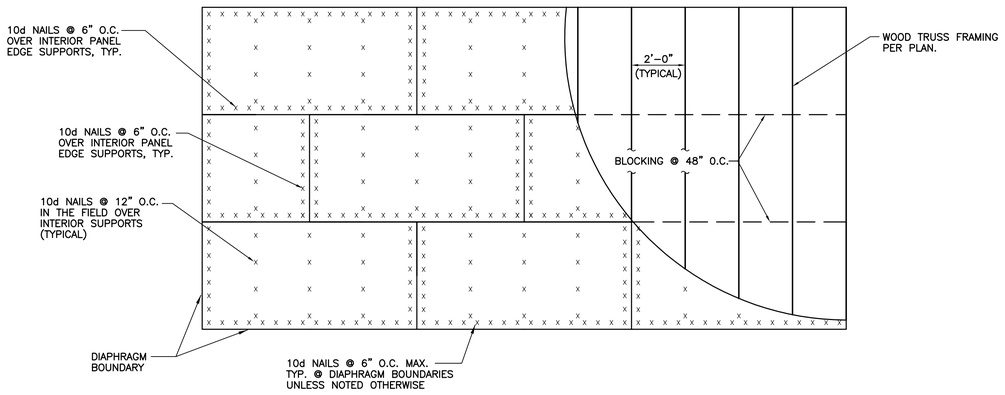
1 SB4.2 PERIMETER BALCONY SECTION

SCALE: N.T.S.



2 SB4.2 PERIMETER BUILDING SECTION

SCALE: N.T.S.

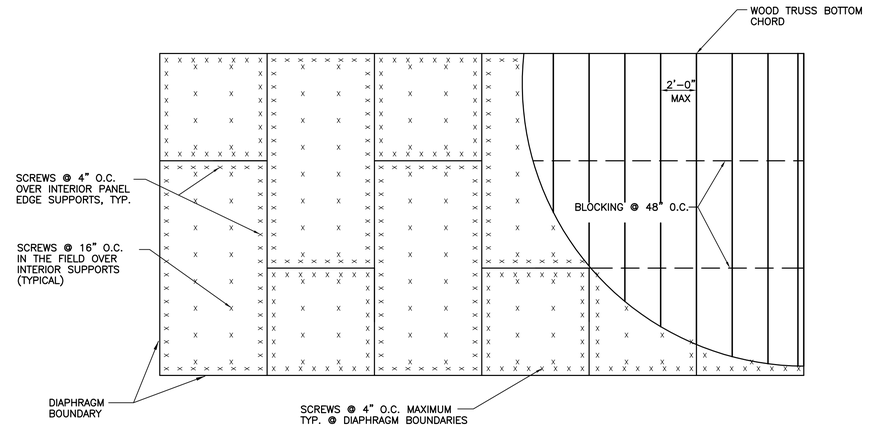


3 SB4.2 5/8" APA RATED SHEATHING ROOF DIAPHRAGM ATTACHMENT

SCALE: N.T.S.

NOTES:

1. DIAPHRAGM VALUES PER ANSI/ AF&PA SDPWS-2008 (SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC); TABLE 4.2C.
2. 10d COMMON NAIL SIZE SHALL BE 3"x 0.148.
3. MINIMUM NAIL PENETRATION INTO FRAMING SHALL BE 1 1/2".
4. FRAMING ALONG PERIMETER EDGE SHALL BE AT LEAST TWO (2) INCHES IN NOMINAL WIDTH TO ACCOMMODATE THE REQUIRED DIAPHRAGM BOUNDARY FASTENING.
5. PANELS SHALL BE APPLIED DIRECTLY TO FRAMING.
6. NAILS SHALL BE DRIVEN WITH THE HEAD OF THE NAIL FLUSH WITH THE SURFACE OF THE SHEATHING.
7. NAILS SHALL BE LOCATED AT LEAST 3/8" FROM THE PANEL EDGES.
8. BLOCKING SHALL BE THE SAME DEPTH AND WIDTH AS TRUSS TOP CHORD



4 SB4.2 1/2" GYPSUM WALLBOARD TRUSS BOTTOM CHORD ATTACHMENT

SCALE: N.T.S.

NOTES:

1. DIAPHRAGM VALUES PER ANSI/ AF&PA SDPWS-2008 (SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC); TABLE 4.3C.
2. SCREWS SHALL BE No. 6 TYPE S OR W DRYWALL SCREWS 1 1/4" LONG.
3. TYPE S OR W DRYWALL SCREWS SHALL CONFORN TO ASTM C1002.
4. BLOCKING SHALL BE THE SAME DEPTH AND WIDTH AS WOOD TRUSS BOTTOM CHORD.
5. PANELS SHALL BE APPLIED DIRECTLY TO FRAMING MEMBERS AND BLOCKING.
6. SCREWS SHALL BE DRIVEN WITH THE HEAD OF THE SCREW FLUSH WITH THE SURFACE OF THE GYPSUM WALLBOARD.
7. SCREWS SHALL BE LOCATED AT LEAST 3/8" FROM THE PANEL EDGES.

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

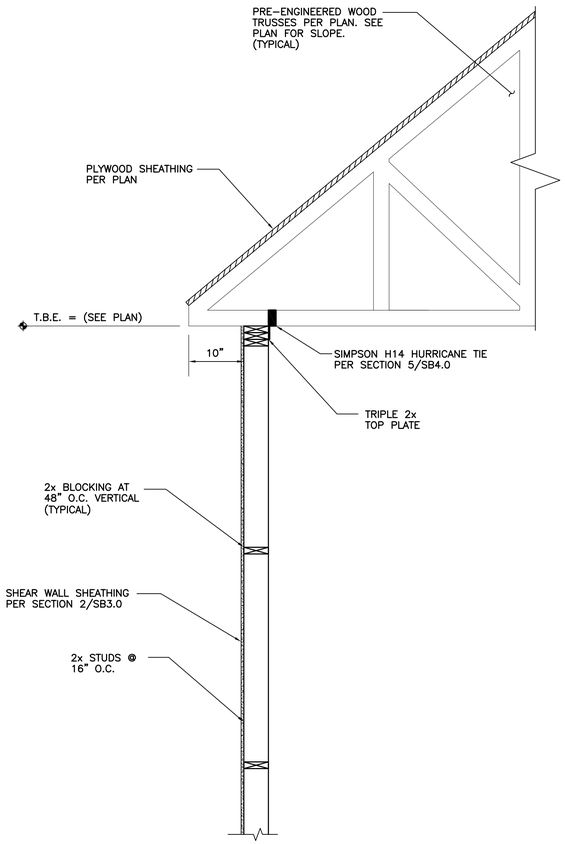
PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "B" FRAMING SECTIONS

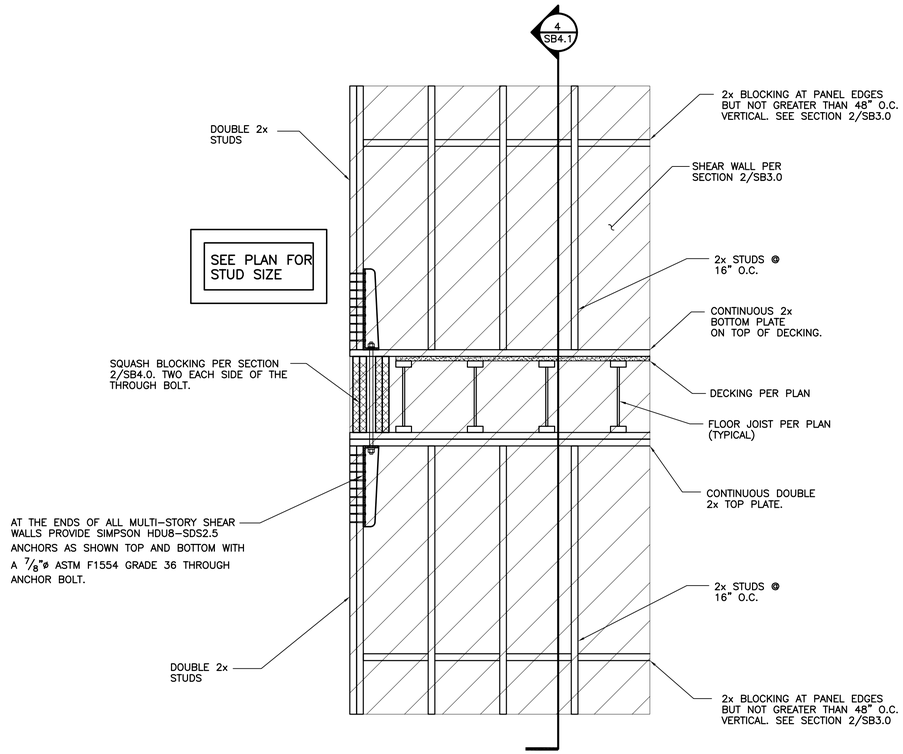
SB4.2

RELEASED FOR CONSTRUCTION



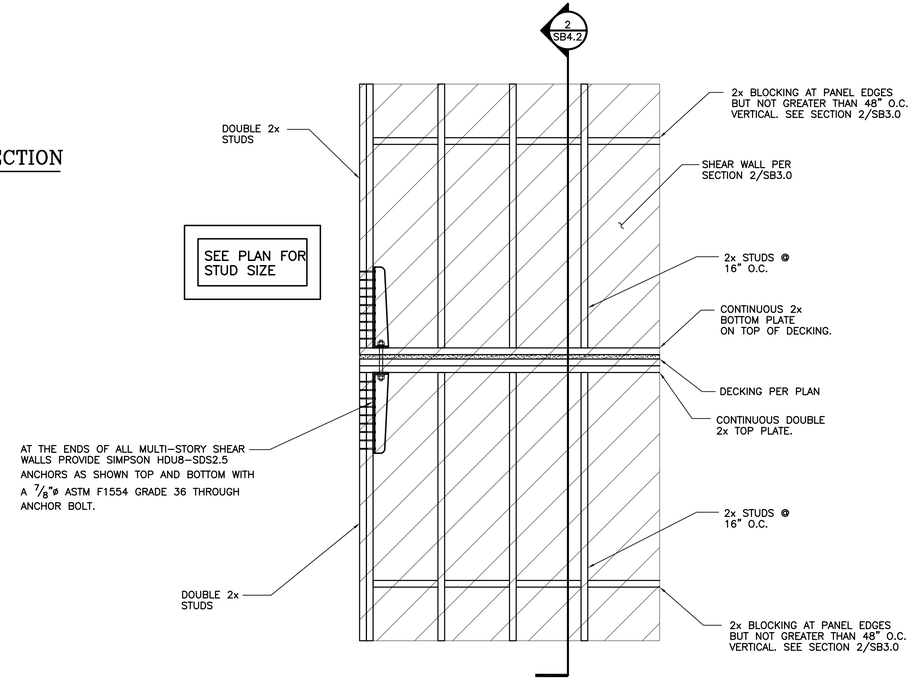
1 SB4.3 TYPICAL PERIMETER TRUSS BEARING SECTION

SCALE: N.T.S.



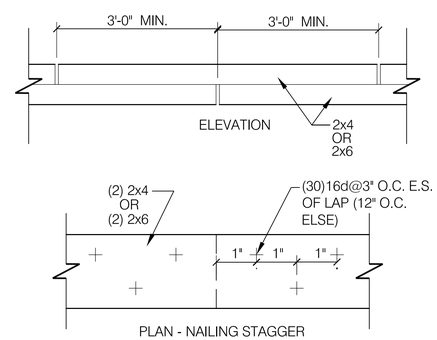
2 SB4.3 TYPICAL ELEVATED SHEAR WALL HOLD DOWN

SCALE: N.T.S.



3 SB4.3 TYPICAL ELEVATED SHEAR WALL HOLD DOWN

SCALE: N.T.S.



TYPICAL - ALL DOUBLE PLATE CONDITIONS - U.N.O.

4 SB4.3 DOUBLE 2x4 & 2x6 TOP PLATE LAP DETAIL

SCALE: N.T.S.

MICHAEL JON MCCAULEY, P.E.
STRUCTURAL ENGINEERING
114 OLD MILL ROAD
CARTERSVILLE, GA 30120
(678) 373-6691 OFFICE
(404) 592-6179 FAX
COA#: PEF007101

NOTE:
These drawings are NOT TO BE REPRODUCED for the purpose of generating shop drawings without the WRITTEN APPROVAL of the STRUCTURAL ENGINEER.

MJM STRUCTURAL ENGINEERING

Stamp

GEORGIA REGISTERED No. 028724 PROFESSIONAL ENGINEER MICHAEL J. MCCAULEY

Revisions

No.	Date	Description

PROJECT NAME AND ADDRESS
TOWNHOME PROTOTYPE B
CITY OF POWDER SPRINGS
COBB COUNTY, GA

DATE 04/08/19

Sheet Title
TYPE "B" FRAMING SECTIONS

SB4.3

RELEASED FOR CONSTRUCTION