



Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

DLR 2016 JUN 16 PM 1:36

Date Received: _____

Permit No.: B16002754

Building Address: 16451 FREDERICK ROAD
 City: WOODBINE State: MD Zip Code: 21777
 Suite/Apt. # _____ SDP/WP/BA #: _____
 Census Tract: _____ Subdivision: _____
 Section: _____ Area: _____ Lot: _____
 Tax Map: _____ Parcel: _____ Grid: _____
 Zoning: _____ Map Coordinates: _____ Lot Size: _____
 Existing Use: SINGLE FAMILY
SINGLE FAMILY
 Proposed Use: _____
 Estimated Construction Cost: \$ 125,000
 Description of Work: 2 STORY ADDITION W/
INTERIOR MODIFICATIONS
 Occupant or Tenant: _____
 Was tenant space previously occupied? Yes No
 Contact Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Property Owner's Name: TOM & ELIZABETH LOVELESS
 Address: 16451 FREDERICK RD
 City: WOODBINE State: MD Zip Code: 21777
 Phone: 301 259 6996 Fax: _____
 Email: emloveless@msn.com
 Applicant's Name & Mailing Address, (if other than stated herein)
 Applicant's Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____
 Contractor Company: KNJ CONSTRUCTION, LLC
 Contact Person: MIKE SHARP
 Address: 1705 HARTY ROAD
 City: MT. AIRY State: MD Zip Code: 21771
 License No.: 90623
 Phone: 413 478 2773 Fax: _____
 Email: MSHARP@KNJCONST.COM
 Engineer/Architect Company: _____
 Responsible Design Prof.: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Commercial Building Characteristics	Residential Building Characteristics	
Height:	<input checked="" type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse	
No. of stories:	Depth	Width
Gross area, sq. ft./floor:	1 st floor: <u>24'</u>	<u>26'</u>
Area of construction (sq. ft.):	2 nd floor: <u>26'</u>	<u>26'</u>
Use group:	Basement: <u>29'</u>	<u>26'</u>
Construction type:	<input type="checkbox"/> Finished Basement	
<input type="checkbox"/> Reinforced Concrete	<input checked="" type="checkbox"/> Unfinished Basement	
<input type="checkbox"/> Structural Steel	<input type="checkbox"/> Crawl Space	
<input type="checkbox"/> Masonry	<input type="checkbox"/> Slab on Grade	
<input type="checkbox"/> Wood Frame	No. of Bedrooms:	
<input type="checkbox"/> State Certified Modular	Multi-family Dwelling	
<input checked="" type="checkbox"/> Roadside Tree Project Permit	No. of efficiency units:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No. of 1 BR units:	
Roadside Tree Project Permit #	No. of 2 BR units:	
	No. of 3 BR units:	
	Other Structure:	
	Dimensions:	
	Footings:	
	Roof:	
	<input type="checkbox"/> State Certified Modular	
	<input type="checkbox"/> Manufactured Home	

Utilities
Water Supply
<input type="checkbox"/> Public
<input checked="" type="checkbox"/> Private
Sewage Disposal
<input type="checkbox"/> Public
<input checked="" type="checkbox"/> Private
Electric: <input type="checkbox"/> Yes <input type="checkbox"/> No
Gas: <input type="checkbox"/> Yes <input type="checkbox"/> No
Heating System
<input type="checkbox"/> Electric <input checked="" type="checkbox"/> Oil
<input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas
Other: _____
Sprinkler System:
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Grading Permit Number: _____
Building Shell Permit Number: _____

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Applicant's Signature: Michael D. Sharp
 Email Address: MSHARP@KNJCONST.COM
 Title/Company: _____

Print Name: MICHAEL D. SHARP
 Date: JUNE 16, 2016

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 PLEASE WRITE NEATLY & LEGIBLY
 -FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
Building Officials		
PSZA (Zoning)		
PSZA (Engineering)		
Health	<u>8/24/16</u>	<u>H. Oswald</u>

Is Sediment Control approval required for issuance? Yes No
 CONTINGENCY CONSTRUCTION START

DPZ SETBACK INFORMATION
Front:
Rear:
Side:
Side St.:
All minimum setbacks met? <input type="checkbox"/> Yes <input type="checkbox"/> No
Is Entrance Permit Required? <input type="checkbox"/> Yes <input type="checkbox"/> No
Historic District? <input type="checkbox"/> Yes <input type="checkbox"/> No
Lot Coverage for New Town Zone:
SDP/Red-line approval date:

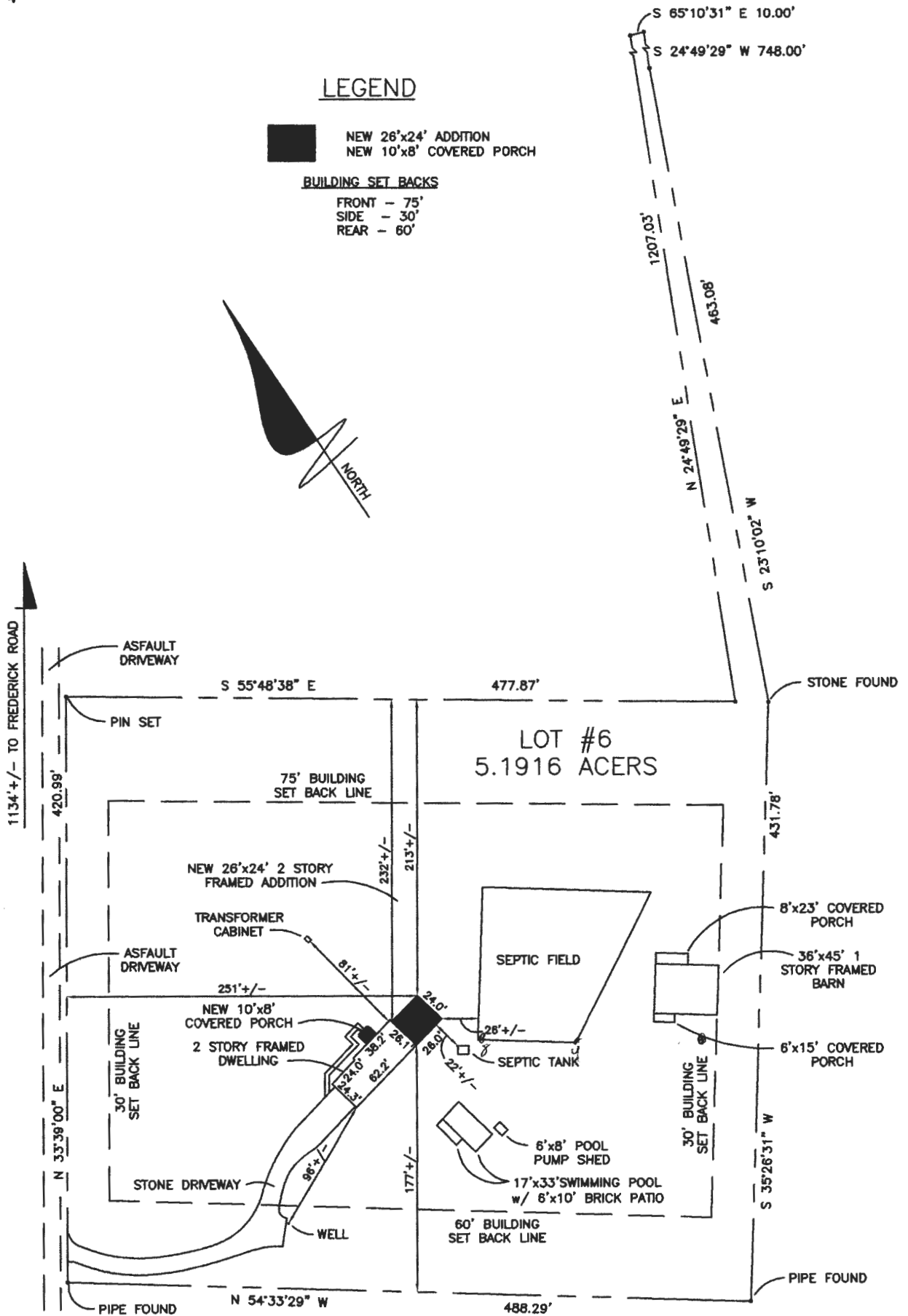
Filing Fee	\$ <u>2500</u>
Permit Fee	\$
Tech Fee	\$
Excise Tax	\$
PSFS	\$
Guaranty Fund	\$
Add'l per Fee	\$
Total Fees	\$
Sub-Total Paid	\$
Balance Due	\$
Check	# <u>1545</u>

LEGEND

NEW 26'x24' ADDITION
 NEW 10'x8' COVERED PORCH

BUILDING SET BACKS

FRONT - 75'
 SIDE - 30'
 REAR - 60'



LOCATION SURVEY

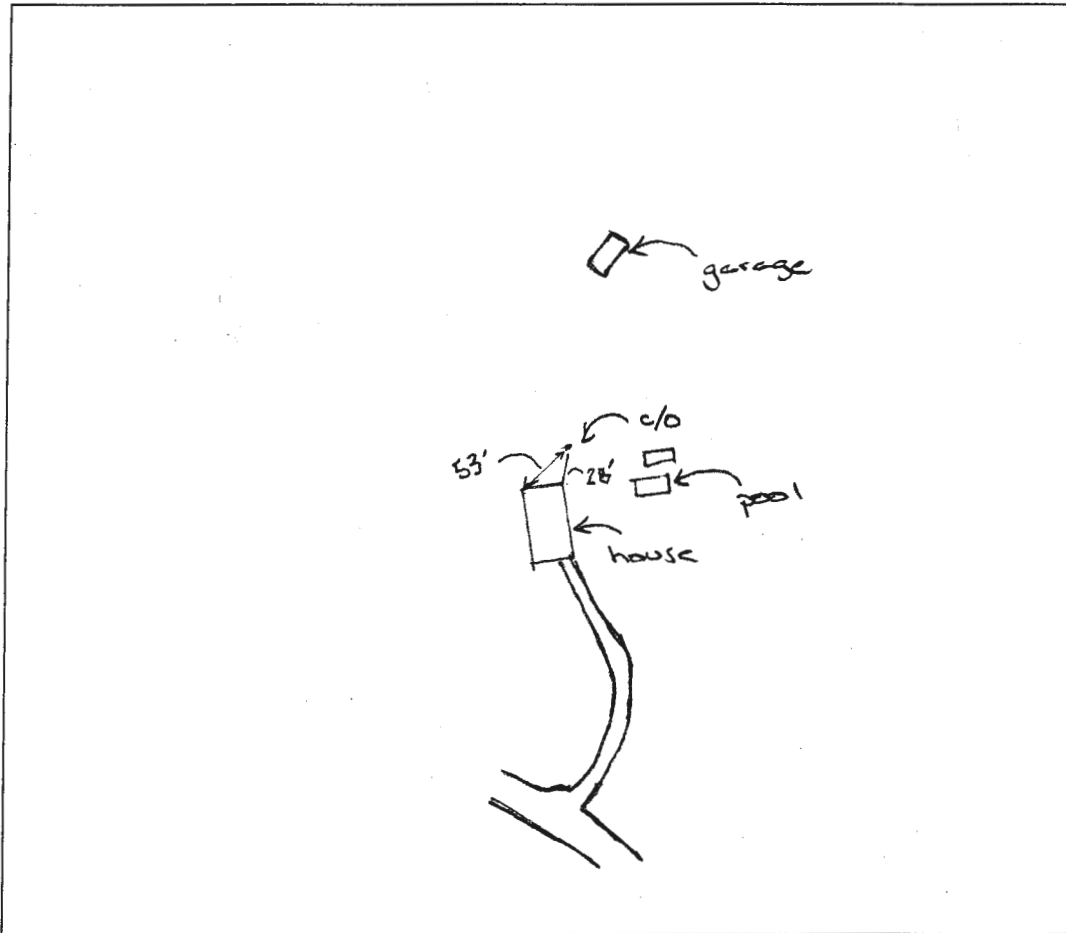
Thomas E. & Elizabeth M.
 Loveless
 16451 Frederick Road
 Woodbine, Maryland 21797
 SCALE 1"=100'-0"

LOT NO. 6
 (5.1916 ACERS, 228,950 SQ. FT.)
 LIBER 1016, FOLIO 735
 PLAT BOOK #27, PAGE #22
 HOWARD COUNTY, MARYLAND

SITE INSPECTION SHEET

OWNER: Thomas Lovelass PHONE #: 301.602.0994
ADDRESS: 16451 Frederick Road CONTRACTOR: KNT Construction
Woodbine, MD 21797 WELL TAG #: Michael Sharp
SUBDIVISION: _____ LOT: _____ COUNTY #: 443.472.2775
PROPOSAL: 2 story addition w/ interior modifications

LOCATION DIAGRAM



COMMENTS: Several attempts were made to locate the
drain field w/ a flex probe but were unsuccessful.
The area was dry w/ no signs of surfacing, green grass
or odors relating to a failing system.

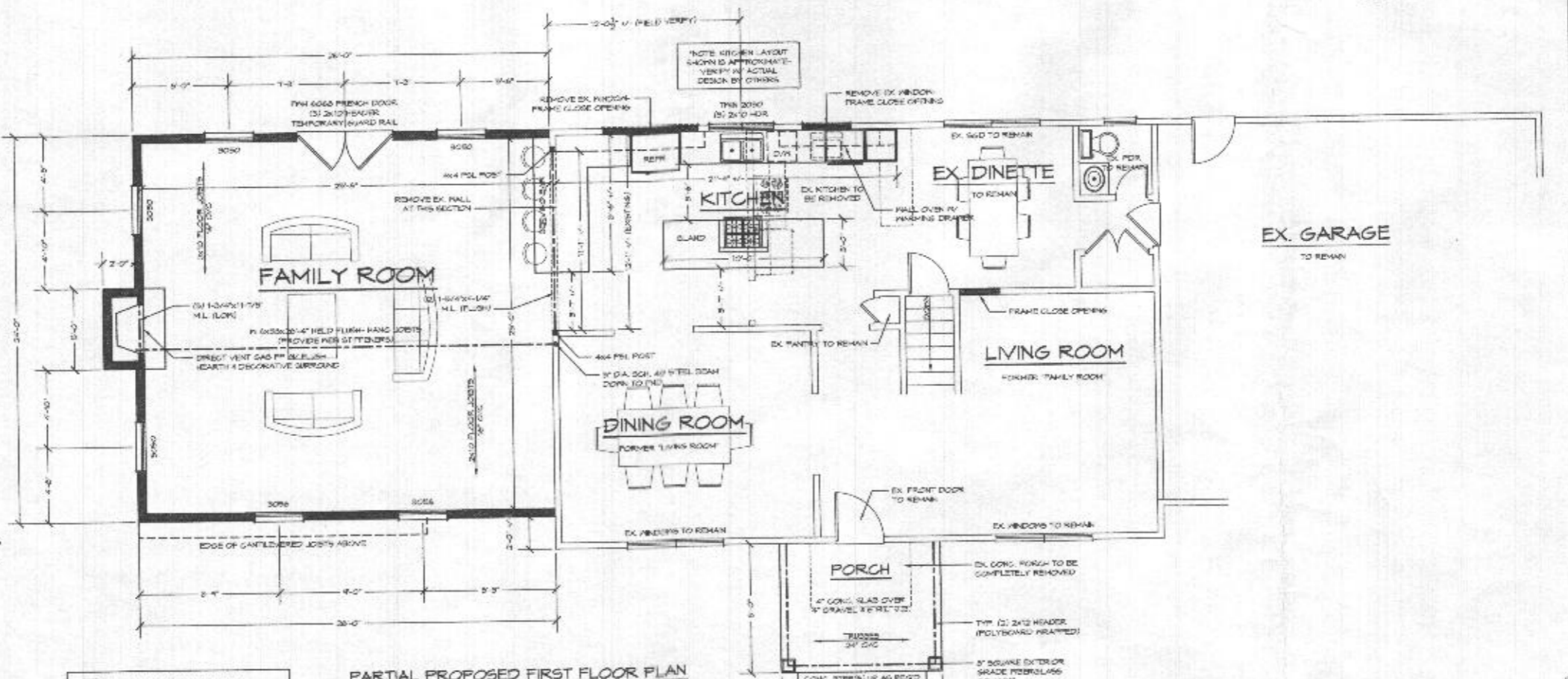
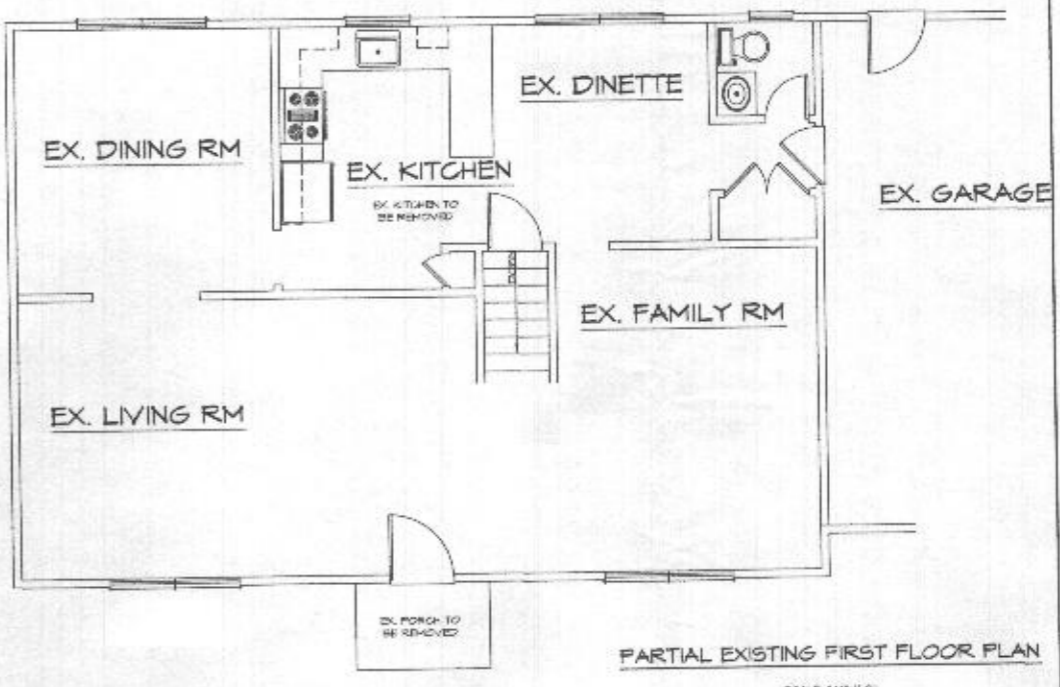
DATE: 7/12/16 INSPECTOR: Hank Oswald
Spencer Freeman

GENERAL STRUCTURAL NOTES

- 1. GENERAL**
- A. ALL CONSTRUCTION SHALL CONFORM WITH THE PROVISIONS OF THE 2015 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS.
- B. DESIGN LIVE LOADS:
 ROOFS 20 PSF
 FLOORS 40 PSF
 SLEEPING AREAS 30 PSF
- 2. FOUNDATIONS**
- A. FOOTINGS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF. FOOTINGS SHALL BEAR ON NATURAL UNDISTURBED SOIL. 1'-0" BELOW ORIGINAL GRADE. THE BOTTOM OF EXISTING FOOTINGS SHALL BE A MINIMUM OF 3'-6" BELOW FINISHED GRADE. CONTRACTOR TO VERIFY THE ALLOWABLE SOIL BEARING IN THE FIELD. IF FOUND TO BE LESS THAN 2000 PSF, THE FOOTINGS WILL HAVE TO BE REDESIGNED.
- 3. GRAFT IN PLACE CONCRETE**
- A. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST APPROVED (BY LOCAL GOVERNMENT) EDITIONS OF THE FOLLOWING A.C.I. AND A.S.T.M. DOCUMENTS:
 ACI 308 - SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
 ACI 309 - SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR REINFORCED CONCRETE
- B. ALL CONCRETE, UNLESS AS NOTED, SHALL BE (PS-5000 PSI) STONE AGGREGATE CONCRETE AT 28 DAYS. ALL CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR ENTRAINED.
- C. SLABS OR BEAMS SHALL BE 4" THICK CONCRETE REINFORCED WITH 5/8" @ 18" O.C. REINFORCING BARS WITH 1/2" MINIMUM CLEARANCE AND 4" RADIUS CHAIRS, UNLESS OTHERWISE NOTED.
- 4. MASONRY**
- A. ALL MASONRY CONSTRUCTION AND MATERIALS USED THEREIN (CONCRETE MASONRY, CLAY MASONRY, MORTAR, REGRUT AND STEEL REINFORCEMENT) SHALL CONFORM TO THE LATEST CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5-13/INTL 530) AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-13/ASCE 5-13/INTL 530.1) IN ALL RESPECTS.
- B. MASONRY BEARING WALLS SHALL CONSIST OF STANDARD HOLLOW UNITS CONFORMING TO ASTM C 90 UNLESS OTHERWISE NOTED. WHERE SOLID UNITS ARE REQUIRED, PROVIDE UNITS CONFORMING TO ASTM C 140.
- C. ALL MORTAR SHALL CONFORM TO THE REQUIREMENTS FOR PROPORTIONS, TESTING, STRENGTH AND APPLICATION FOR PORTLAND CEMENT-LIME TYPE II MORTAR AS DESCRIBED IN ACI 530.2.
- D. ALL GROUT FILL IN MASONRY WALLS SHALL CONFORM TO ASTM C 110. SLUMP RANGE 5 TO 7". PLACE GROUT IN 2" OF MAXIMUM POUR HEIGHTS AND CONSOLIDATE BY MECHANICAL VIBRATION.
- E. PROVIDE 6" DEPTH OF 100% SOLID MASONRY BELOW ALL JOIST OR BEAM BEARING LINES. PROVIDE 16" HIGH X 8" LONG 100% SOLID MASONRY BELOW ALL LIFELINES AND BEAMS UNLESS NOTED OTHERWISE.
- F. ALL MASONRY WALLS SHALL BE REINFORCED WITH NO. 4 GAGE TRUSS TYPE GALVANIZED STEEL CHAIRS SPACED VERTICALLY AT 48" O.C. UNLESS LARGER CHAIRS ARE MINIMUM. PROVIDE CORNER AND END REINFORCEMENT AT ALL INTERSECTIONS.
- G. GROUT LEVELS FOR MASONRY WALLS SHALL BE FOR EACH 4' WIDTH OF MASONRY ONE STEEL ANGLE AS FOLLOWS:
 0'-0" TO 3'-0" 3/4" X 3/4" X 3/4"
 3'-0" TO 5'-0" 1" X 1" X 1/2"
 5'-0" TO 6'-0" 1 1/2" X 1 1/2" X 1/2"
 6'-0" TO 8'-0" 2" X 2" X 1/2"
 8'-0" TO 10'-0" 2 1/2" X 2 1/2" X 1/2"
- ALL ANGLES SHALL HAVE THEIR SHORT LEGS OUTSTANDING AND 3" MINIMUM BEARING.
- 5. STRUCTURAL STEEL**
- A. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM SPECIFICATION A-36 (LATEST LOCAL APPROVED). ALL STEEL SHALL BE DETAIL FABRICATED AND ERODED IN ACCORDANCE WITH THE AISC MANUAL AND SPECIFICATION AND AISC CODE OF STANDARD PRACTICE.
- B. ALL WELDED CONNECTIONS SHALL BE DONE WITH EPOXY ELECTRODES. SHOP AND FIELD WELDS SHALL BE MADE BY APPROVED CERTIFIED WELDERS AND SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE FOR BUILDING AND D1.1. WELDS SHALL DEVELOP THE FULL STRENGTH OF MATERIALS BEING WELDED UNLESS OTHERWISE NOTED.
- 6. FLOOR**
- A. STRUCTURAL SOLID FLOOR PARTS, JOISTS, BEAMS AND FLOOR SHALL BE 15% PER 10' OR SPILLAGE PER 10' TO SURFACE DRY AT A MAXIMUM OF 1% MOISTURE CONTENT. ALL LUMBER EXPOSED TO WEATHER SHALL BE PRESERVATION TREATED. DO NOT USE FRESHLY CUT LUMBER. OTHER PROVISIONS AND REQUIREMENTS SHALL CONFORM TO THE LATEST NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.
- B. FLOOR TRUSSES SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION (ANSI/TPI-1) AND COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLATION AND BRACING METAL PLATE CONNECTED WOOD TRUSSES (TBC 11) AS PUBLISHED BY THE TRUSS PLATE INSTITUTE AND IN ACCORDANCE WITH THE 1995 EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.
- C. WOOD TRUSSES AND DIMENSIONED FLOOR JOISTS ARE TO BE DESIGNED BY THE SUPPLIER. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER/ARCHITECT FOR REVIEW. ALL TRUSSES AND JOISTS SHALL BE DESIGNED TO LIMIT THE BEARING STRESS TO 400 PSI WHEN MEMBERS BEAR ON STUD WALLS. PROVIDE MEMBERS OF ADEQUATE WIDTH OR METAL CONNECTIONS TO LIMIT STRESS TO THE SPECIFIED VALUE.
- D. ALL LAMINATED WOOD LUMBER (LVL) OR PARALLEL STRAND LUMBER (PSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: SPECIES, GRADE, MOISTURE, D-500 DOUBLE, FORTIFICATION, K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, K15, K16, K17, K18, K19, K20, K21, K22, K23, K24, K25, K26, K27, K28, K29, K30, K31, K32, K33, K34, K35, K36, K37, K38, K39, K40, K41, K42, K43, K44, K45, K46, K47, K48, K49, K50, K51, K52, K53, K54, K55, K56, K57, K58, K59, K60, K61, K62, K63, K64, K65, K66, K67, K68, K69, K70, K71, K72, K73, K74, K75, K76, K77, K78, K79, K80, K81, K82, K83, K84, K85, K86, K87, K88, K89, K90, K91, K92, K93, K94, K95, K96, K97, K98, K99, K100.
- E. ALL DOUBLE MEMBERS SHALL BE NAILED TOGETHER WITH 2 ROWS OF 16 D nails spaced at 18" O.C. ALL TRIPLE MEMBERS SHALL BE NAILED TOGETHER WITH 3 ROWS OF 16 D nails spaced at 12" O.C. NAILED FROM EACH SIDE.
- F. PROVIDE DOUBLE JOISTS AT PARALLEL PARTITIONS PER PARTITION LENGTH - ENGINEER TO BE DETERMINED.
- G. ALL WALLS ARE TO BE COMMON FIRST NAILS. BULKING OF ALL FRAMES SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS BUT IN NO CASE SHALL BE LESS THAN THE RECOMMENDED NAILING SCHEDULE CONTAINED IN THE 2005 INTERNATIONAL RESIDENTIAL CODE. ALL MULTIPLE STUD POSTS ARE TO BE NAILED TOGETHER WITH 10 D NAILS @ 48" O.C. STAGGERED.
- H. PROVIDE BRIDGING SPACED AT 48" O.C. IN FIRST TWO JOIST RAFTER OR TRUSS SPACES FROM FRAMING TO PARALLEL TO EXTERIOR WALL. NAIL BRIDGING TO STUD WALLS OR TO BRACKETS AND NAIL BRACKETS TO EXTERIOR WALL PLATE. PROVIDE ONE ROW OF BRIDGING BETWEEN ALL FLOOR AND ROOF JOISTS FOR EACH 3'-0" OF SPAN. PROVIDE SOLID BLOCKS OR A CONTINUOUS NAIL JOIST AT THE BEARING OF JOISTS, RAFTERS OR TRUSSES ON FLOOR PLATE.
- I. PROVIDE THE FOLLOWING JAMB STUDS AT ALL SLIDING WALL OPENINGS UNLESS NOTED OTHERWISE:
 0" OPENING 1 JACK STUD, 1 KING STUD
 3'-0" - 5'-0" OPENING 2 JACK STUDS, 1 KING STUD
 6'-0" - 10'-0" OPENING 3 JACK STUDS, 2 KING STUDS
- J. PROVIDE DOUBLE STUDS AT ALL CORNERS AND BENEATH ALL UNDER TRUSSES AND WOOD BEAMS UNLESS NOTED OTHERWISE ON PLANS. WOOD BEAMS, UNDER TRUSSES AND HEADERS SHALL BEAR THE FULL LENGTH OF POSTS AND JACK STUDS.
- K. ALL POSTS SHALL HAVE STUDS OR SOLID POSTS SUPPORTING BEAMS. WALL HEADERS OR BRACKETS TRUSSES SHALL BE TIED TO SOLID STUDS FOR THE FULL LENGTH AND WIDTH OF POSTS AT ALL INTERSECTIONS WITH FLOORS AS REQUIRED TO PROVIDE COR. BRACKETS SUPPORT TO TOP OF FOUNDATION WALLS OR BEAMS. POSTS SHOWN ON UPPER LEVELS FLOORS SHALL ALSO BE INSTALLED ON THE LOWER LEVELS IN LINE WITH THE POST ABOVE DOWN TO FOUNDATION WALLS OR BEAMS.
- L. ALL FLUSH JOIST TO BEAM OR BEAM TO BEAM CONNECTIONS SHALL BE MADE WITH JOIST OR BEAM HANGERS TO SUPPORT THE LONGER CAPACITY INDICATED ON THE PLANS OR THE FULL CAPACITY OF THE JOIST OR BEAM. HANGERS SHALL BE PROVIDED BY SUPPLIER. STRENGTH OF JOIST OR BEAM HANGERS SHALL BE PROVIDED BY SUPPLIER. HANGERS FOR THE CAPACITY STATED. INSTALL ALL HANGERS IN STRICT CONFORMANCE TO THE MANUFACTURER'S INSTRUCTIONS. FULL ALL NAIL OR BOLT HOLES WITH THE SPECIFIED NAILS AND BOLTS ONLY.

- 2015 2009 CODE REQUIREMENTS**
- R402.1 CLIMATE ZONE 4
- R402.2 COMPLIANCE METHOD
 MANDATORY AND PREScriptive PROVISIONS
- R402.1.1 WINDOW RETARDERS
 WALL ASSEMBLIES IN THE THERMAL ENVELOPE SHALL COMPLY WITH THE WINDOW RETARDER REQUIREMENTS OF SECTION R402.1.1 OF THE 2015 IBC.
- R402.1.2 ATTIC INSULATION - RATED MIN. THICKNESS 16 R
- R402.1.3 ROOF INSULATION - RATED MIN. THICKNESS 15 R
- R402.1.4 EXTERIOR WALL INSULATION - RATED MIN. THICKNESS 15 R
- R402.1.5 FLOOR INSULATION OVER UNFINISHED SPACE - RATED MIN. THICKNESS 15 R
- R402.1.6 WINDOW/DOOR INSULATION - RATED MIN. THICKNESS 15 R
- R402.1.7 SLAB ON GRADE FLOOR - RATED MIN. THICKNESS 15 R
- R402.1.8 ATTIC ACCESS
 ATTIC ACCESS SCUTTLES SHALL BE REINFORCED AND SEALED TO R-4.
- R402.1.9 THERMAL ENVELOPE AIR LEAKAGE
 EXTERIOR WALLS AND PENETRATIONS SHALL BE SEALED WITH THE BOTTOM OF THE JOIST END WITH GASKETS, WATERSTOPPING OR AN AIR BARRIER OF SUITABLE MATERIAL.
- R402.1.10 THERMAL ENVELOPE AIR LEAKAGE TEST
 BUILDING ENVELOPE SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 3 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM E 2178 OR ASTM E 1827 FROM EITHER SIDE OF A PRESSURE OF 0.2 INCHES WATER GAUGE. TESTING SHALL BE DONE BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE BUILDING DEPARTMENT.
- R402.2.2 THE FOLLOWING ADDITIONAL MANDATORY PROVISIONS SHALL APPLY TO THIS PROJECT:
 1. ALL FLOOR JOISTS SHALL BE 2X12 OR LARGER UNLESS OTHERWISE NOTED.
 2. ALL FLOOR TRUSSES SHALL BE 12X12 OR LARGER UNLESS OTHERWISE NOTED.
 3. ALL FLOOR TRUSSES SHALL BE 12X12 OR LARGER UNLESS OTHERWISE NOTED.

- R402.4 ROOMS CONTAINING FULL-BURNING APPLIANCES (RANGES, STOVE, OVEN, WATER HEATER, BOILER, FURNACE, HEAT PUMP, AIR CONDITIONER, etc.) SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.
- R402.4.1 ROOMS CONTAINING FULL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.
- R402.4.2 ROOMS CONTAINING FULL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.
- R402.4.3 ROOMS CONTAINING FULL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.
- R402.4.4 ROOMS CONTAINING FULL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.
- R402.4.5 ROOMS CONTAINING FULL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.
- R402.4.6 ROOMS CONTAINING FULL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.
- R402.4.7 ROOMS CONTAINING FULL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.
- R402.4.8 ROOMS CONTAINING FULL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.
- R402.4.9 ROOMS CONTAINING FULL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.
- R402.4.10 ROOMS CONTAINING FULL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE THERMAL ENVELOPE OR IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE. EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C. AND EXISTING EXTERIOR WALLS SHALL BE REINFORCED WITH 5/8" @ 18" O.C.



- EXISTING FRAME WALL TO REMAIN
- EXISTING FRAME WALL TO BE REMOVED
- PROPOSED FRAME WALL

REMODELING & ADDITIONS TO THE LOVELL RESIDENCE

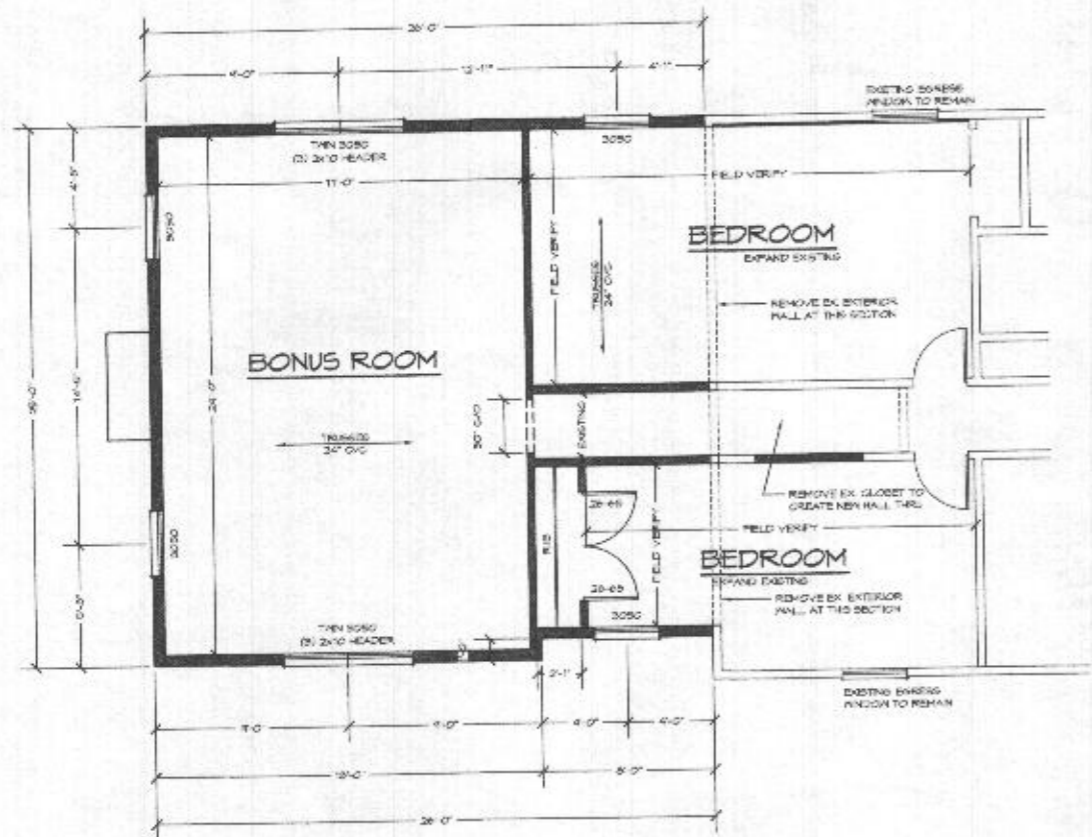
PROJECT ADDRESS:
 1401 FREEDOM ROAD
 ROCKEY, MD 21785
 CARROLL COUNTY, MD

REVISED 5/18/2015
 REVISED 6/26/2015
 REVISED 3/25/2015
 REVISED 3/14/2015

G.B.L. CUSTOM HOME DESIGN INC.
 PO BOX 237 FRINGSBURG, MD 21048
 PHONE: 410-533-8310

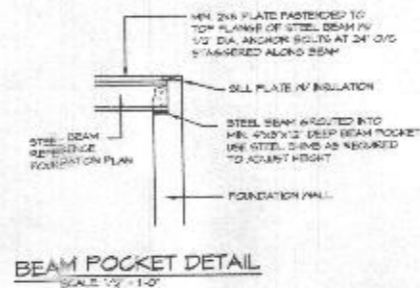
SCALE: 1/4" = 1'-0"
 DATE: 2/20/15
 SHEET NO.: 1 OF 4

FILE: LOVELL RESIDENCE

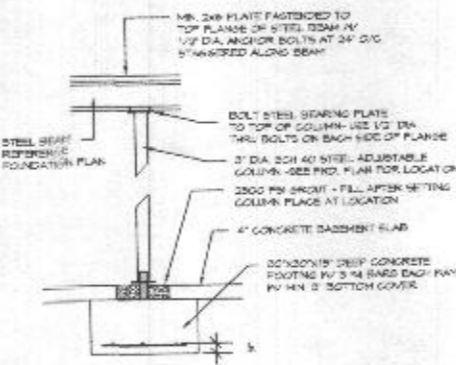


PARTIAL PROPOSED SECOND FLOOR PLAN

SCALE 1/4" = 1'-0"
 NOTE: NEAR FINISHED FLOOR ELEVATION TO MATCH EX. HOUSE (VERIFY)



BEAM POCKET DETAIL
 SCALE 1/2" = 1'-0"

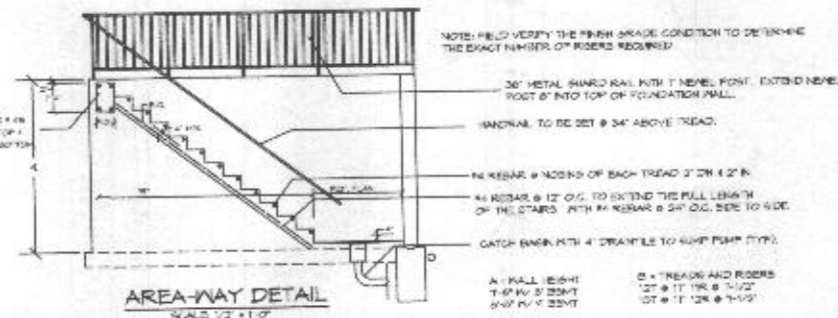


LALLY COLUMN DETAIL
 SCALE 1/2" = 1'-0"

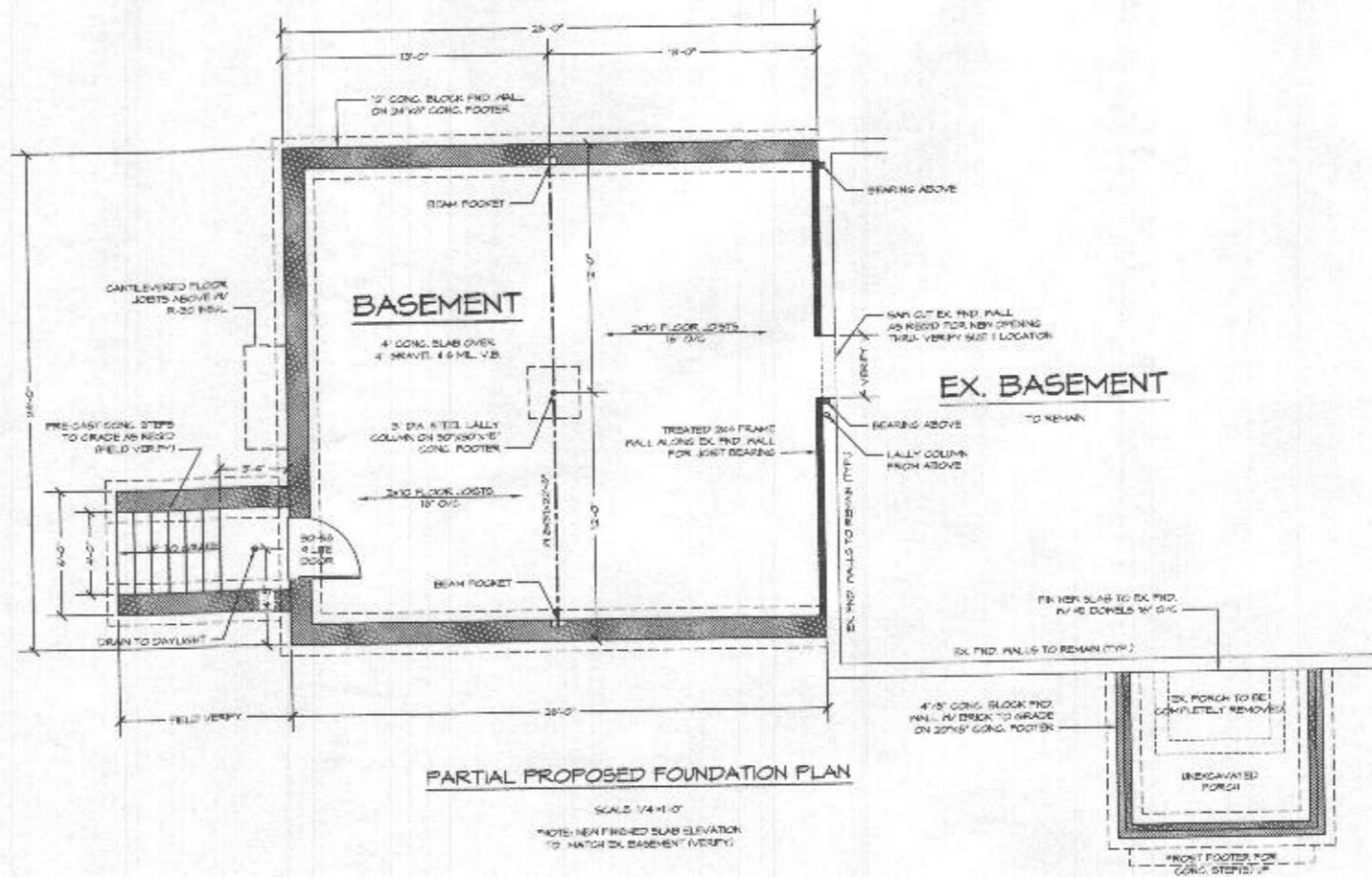
WALL REINFORCEMENT SCHEDULE

WALL HEIGHT	MAX. BAY/FEET	WALL THICKNESS	VERTICAL REINF. PER FOOT TYPE			
			CONC. OR BR. 5/8" O.C. 4 ML	CONC. OR BR. 5/8" O.C. 4 ML	NO. 4 @ 16" O.C.	NO. 4 @ 16" O.C.
2'-0"	8'-0"	12" C.M.U.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.
3'-0"	8'-0"	12" C.M.U.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.
4'-0"	8'-0"	12" C.M.U.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.
5'-0"	8'-0"	12" C.M.U.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.
6'-0"	8'-0"	12" C.M.U.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.
7'-0"	8'-0"	12" C.M.U.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.
8'-0"	8'-0"	12" C.M.U.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.
9'-0"	8'-0"	12" C.M.U.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.
10'-0"	8'-0"	12" C.M.U.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.	14 @ 12" O.C.

ALL INFORMATION LISTED ABOVE WAS DERIVED FROM THE N.C. 2018 BUILDING CODE



AREA-WAY DETAIL
 SCALE 1/2" = 1'-0"



PARTIAL PROPOSED FOUNDATION PLAN

SCALE 1/4" = 1'-0"
 NOTE: NEAR FINISHED SUB ELEVATION TO MATCH EX. BASEMENT (VERIFY)

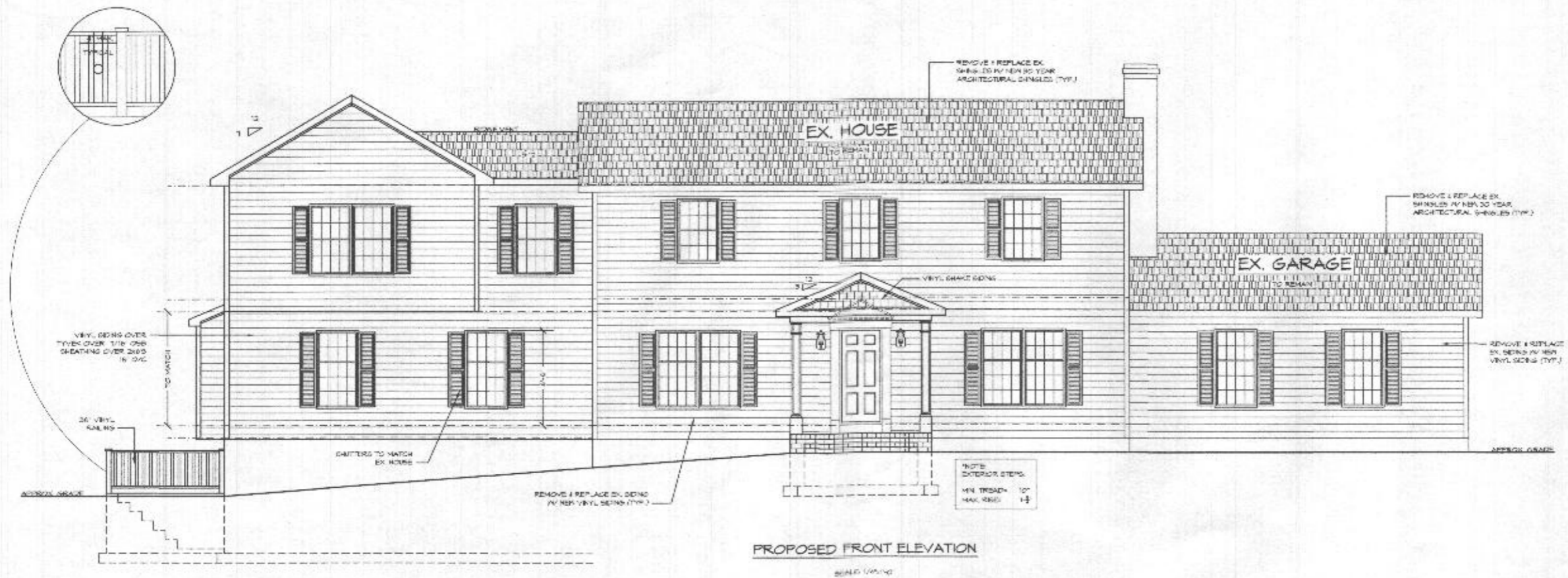
REMODELING & ADDITIONS TO
 THE LOVELESS RESIDENCE

PROJECT ADDRESS:
 14411 FREDERICK ROAD
 HODDERSHE, MD 21746
 CARROLL COUNTY, MD

REVISED 3/16/2019
 REVISED 4/26/2019
 REVISED 5/29/2019
 REVISED 3/15/2019

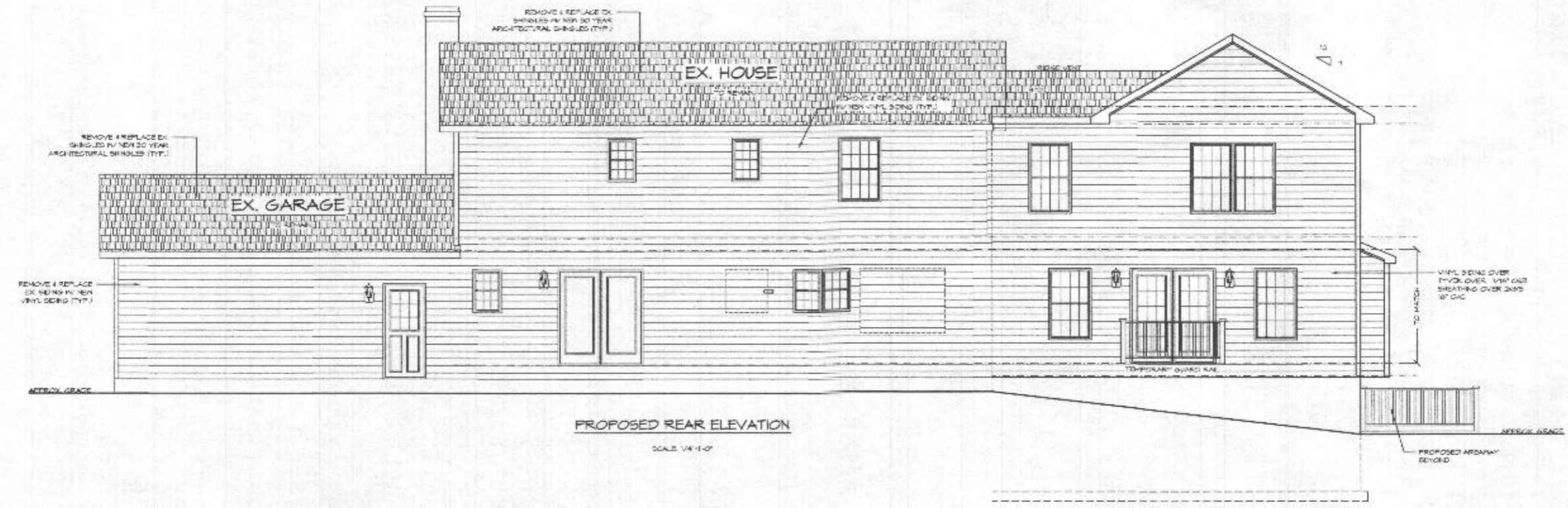
FILE: LOVELESS-ADDIT-019
 SCALE: 1/4" = 1'-0"
 DATE: 2/2/2019
 SHEET NO.: 3 OF 6

GBL CUSTOM HOME
 DESIGN INC.
 PO BOX 237 THIRSBORO, MD 21748
 PHONE 410-333-8320



PROPOSED FRONT ELEVATION

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



PROPOSED REAR ELEVATION

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

REMODELING & ADDITIONS TO
THE LOVELESS RESIDENCE

PROJECT ADDRESS:
16451 FREDERICK ROAD
ROCKHURST, MD 21113
CARROLL COUNTY, MD

REVISED 5/16/2015
REVISED 4/28/2015
REVISED 5/28/2015
REVISED 2/19/2015

FILE: LOVELESS ADDITIONS

SCALE: 1/4" = 1'-0"
DATE: 2/2/2015
SHEET NO.: 5 OF 8

GBL CUSTOM HOME
DESIGN INC.
PO BOX 237 FINEBURG, MD 21048
PHONE 410-933-8300

REMODELING & ADDITIONS TO THE LOVELESS RESIDENCE

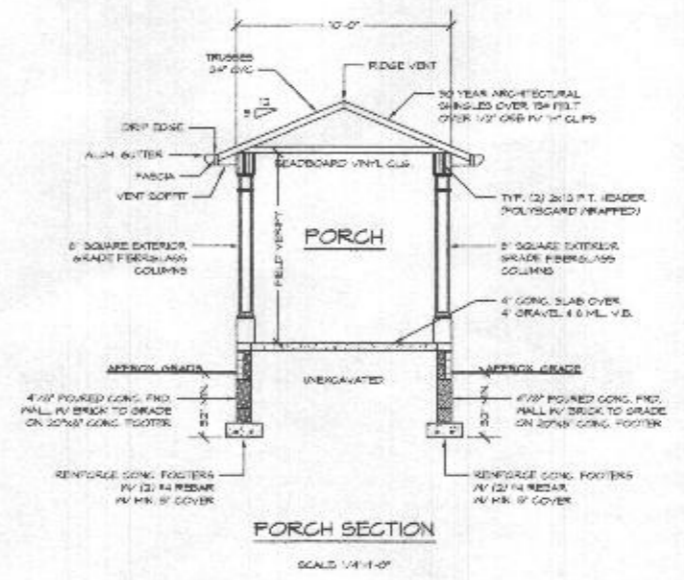
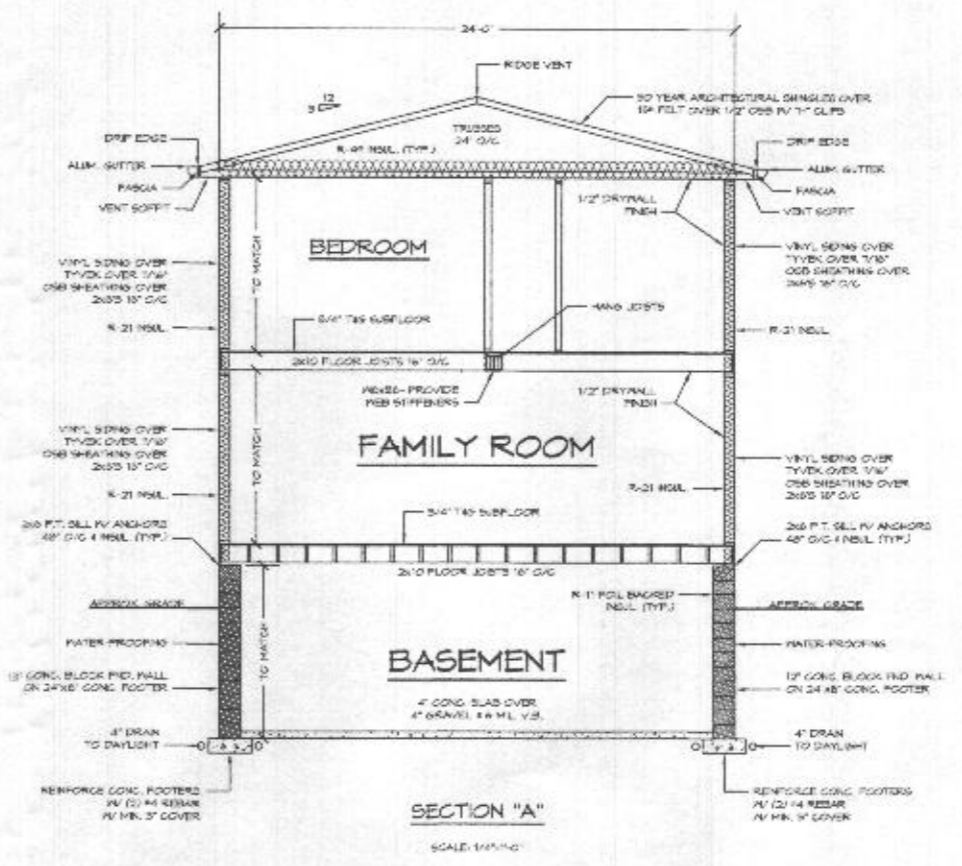
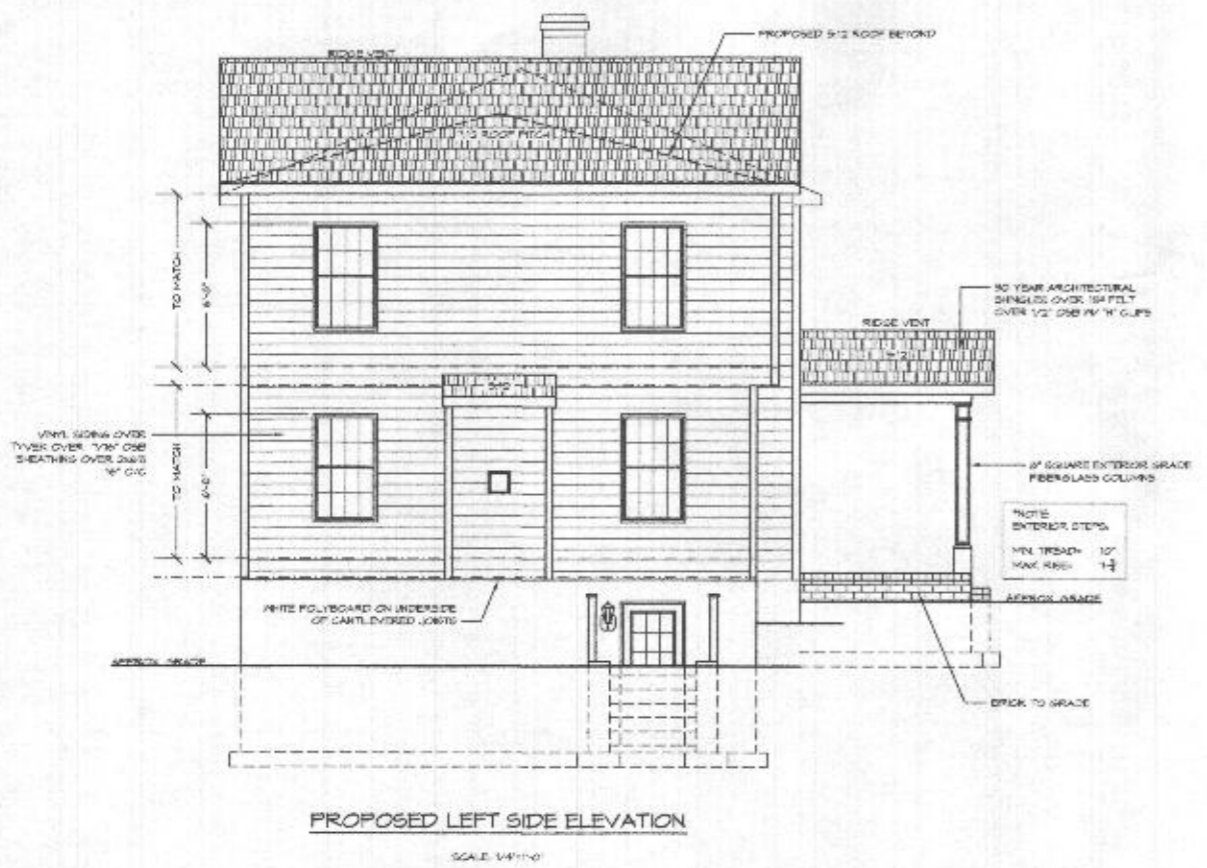
PROJECT ADDRESS:
1401 FREDERICK ROAD
ROCKERS, MD 21111
CARROLL COUNTY, MD

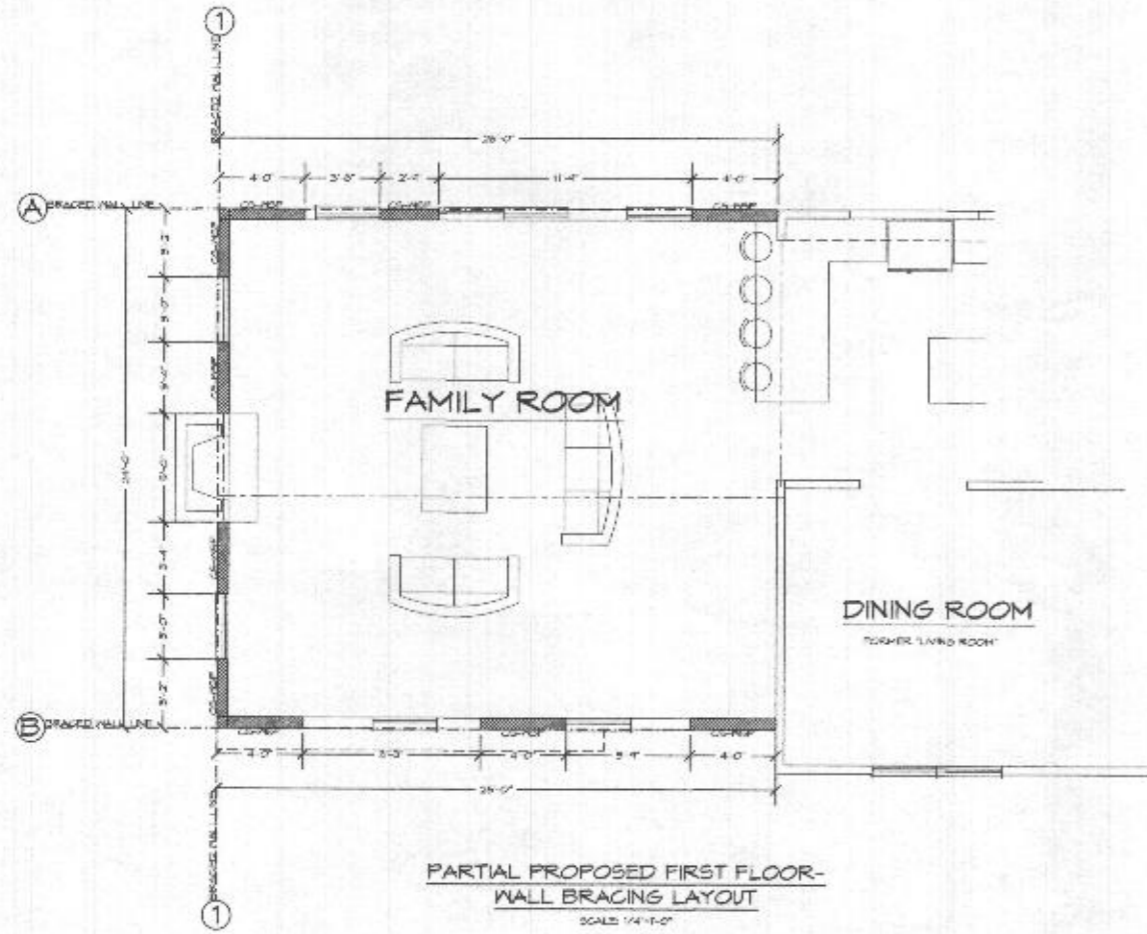
REVISED 04/20/16
REVISED 4/28/2015
REVISED 03/20/15
REVISED 3/12/15

FILE LOVELESS ADDITIONS

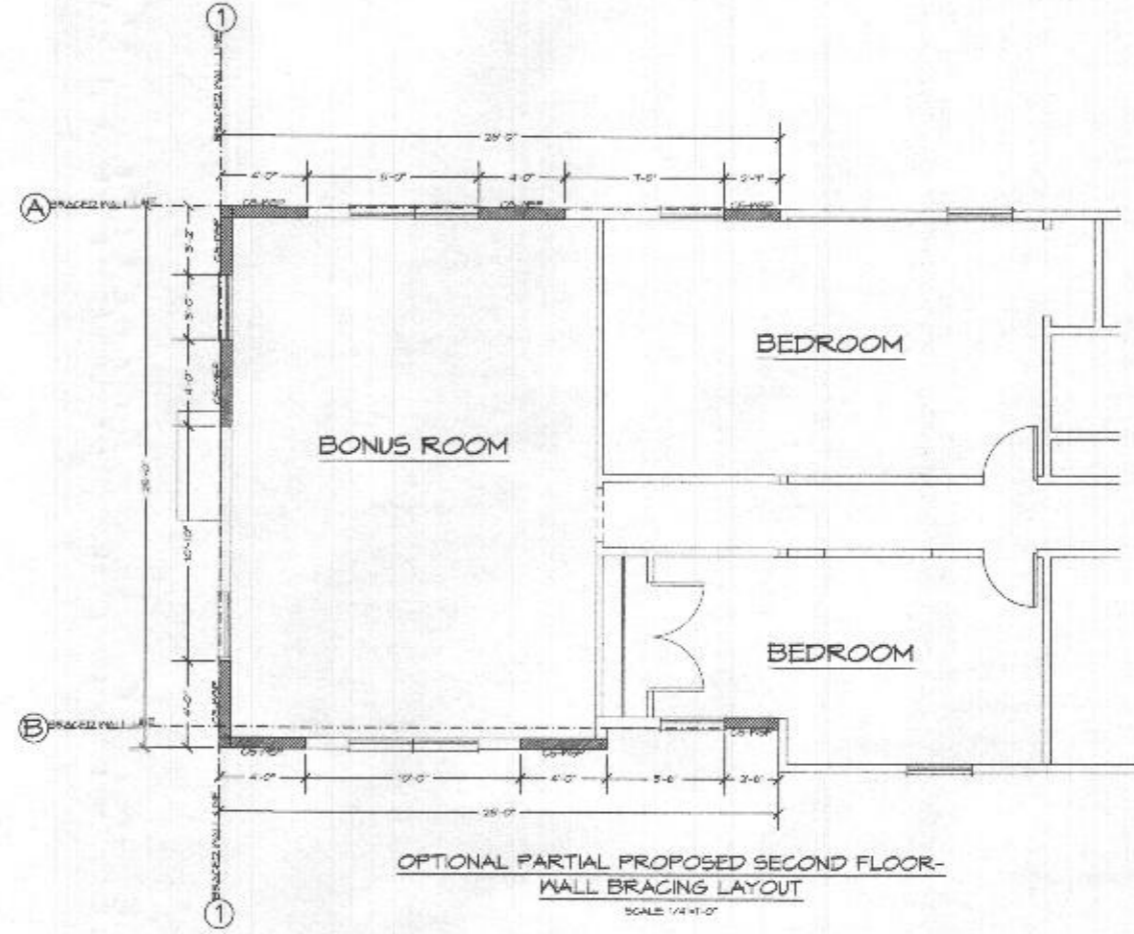
SCALE: 1/4" = 1'-0"
DATE: 2/20/15
SHEET NO.: 4 OF 6

**GBL CUSTOM HOME
DESIGN INC.**
PO BOX 237 FINNERSBURG, MD 21048
PHONE 410-333-8330





PARTIAL PROPOSED FIRST FLOOR-
WALL BRACING LAYOUT
SCALE 1/4"=1'-0"



OPTIONAL PARTIAL PROPOSED SECOND FLOOR-
WALL BRACING LAYOUT
SCALE 1/4"=1'-0"

REMODELING & ADDITIONS TO THE LOYELESS RESIDENCE

PROJECT ADDRESS:
16451 FREDERICK ROAD
ROCKERS, MD 21111
CARROLL COUNTY, MD

REVISED 3/16/2015
REVISED 4/24/2015
REVISED 3/23/2015
REVISED 3/4/2016

FILE LOCATION: A037016

SCALE: 1/4" = 1'-0"
DATE: 2/20/15
SHEET NO.: 5 OF 6

**GBL CUSTOM HOME
DESIGN INC.**
PO BOX 237 PINEBURG, MD 21148
PHONE 410-833-8370

LEGEND:

- CS-PF CONTINUOUS SHEATHING - KOOD STRUCTURAL PANEL (CLASHTC)
- CS-PP CONTINUOUS SHEATHED PORTAL FRAME
- CS-W CONTINUOUS SHEATHING - WARRAGE DOOR OPENING
- CS GYPSUM BOARD
- TE DOWN DEVICE (LBS)

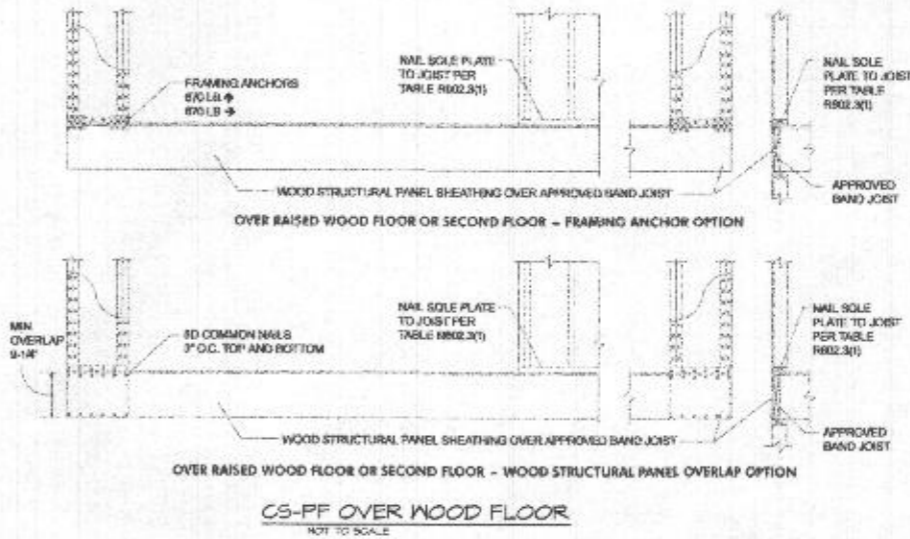
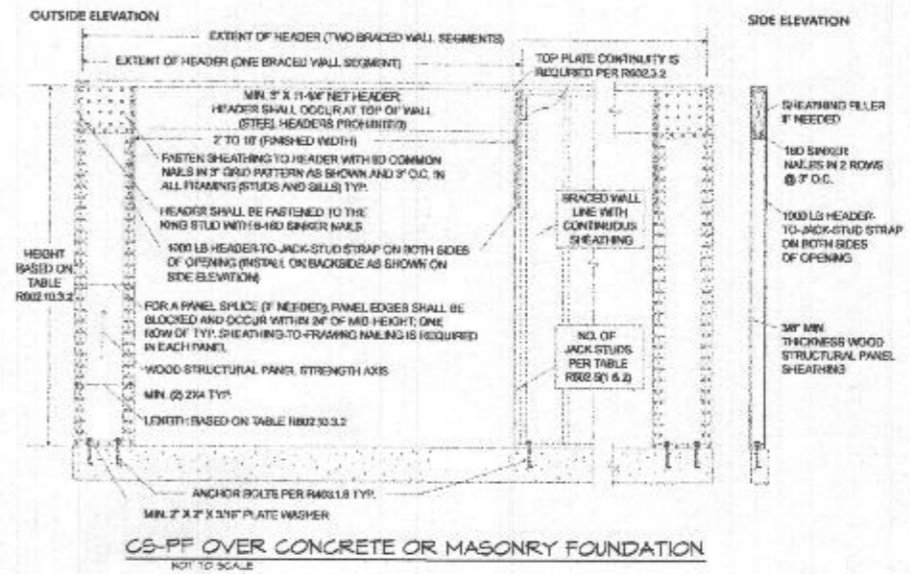
WALL BRACING DESIGN INFO:

LOCATION: GARROLL COUNTY, MARYLAND
 SEISMIC CATEGORY: B
 WIND SPEED: 10 MPH

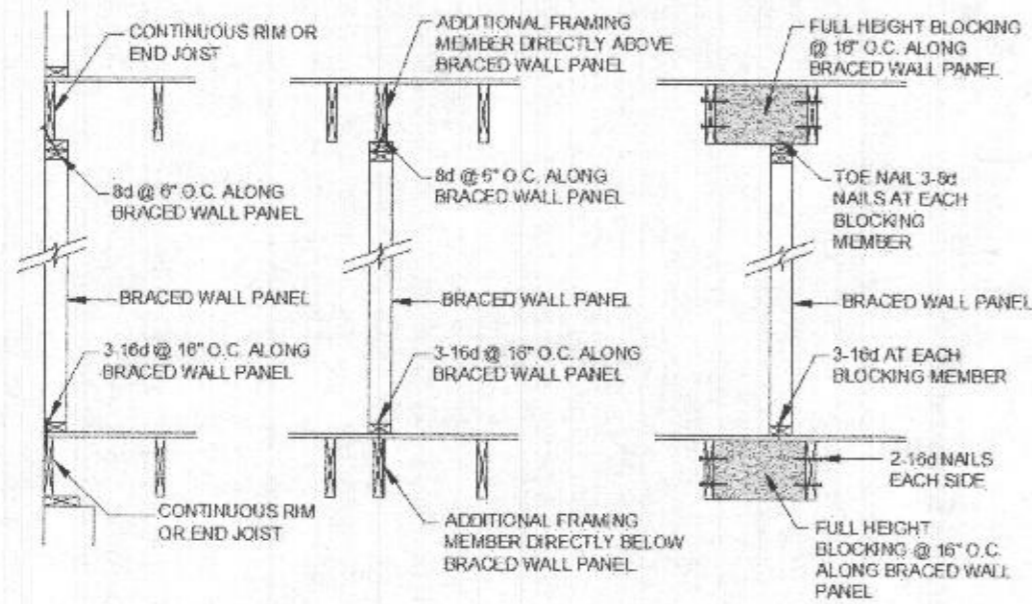
METHOD: 3 (SHED SHEATHING) / CONTINUOUS SHEATHING
 METHOD: 5 (GYPSUM BOARD)

*THESE DRAWINGS ARE LIMITED TO WALL BRACING REQUIREMENTS ONLY.

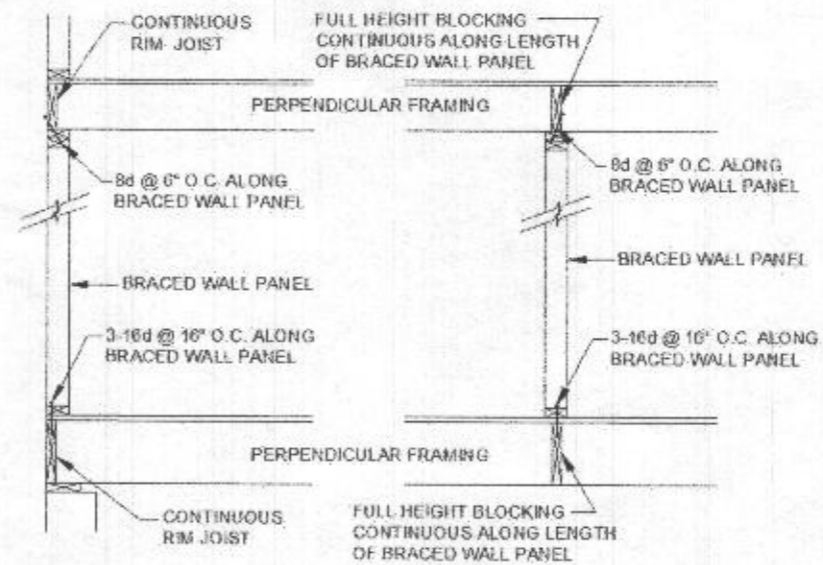
REG. 10.4 CONTINUOUS SHEATHING - BRACED WALL LINES WITH CONTINUOUS SHEATHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS SECTION. ALL BRACED WALL LINES ALONG EXTERIOR WALLS ON THE SAME STORY SHALL BE CONTINUOUSLY SHEATHED.



CORNER CONDITIONS
NOT TO SCALE



PARALLEL CONNECTIONS
NOT TO SCALE



PERPENDICULAR CONNECTIONS
NOT TO SCALE

REMODELING & ADDITIONS TO THE LOVELESS RESIDENCE

PROJECT ADDRESS:
 1414 FREDERICK ROAD
 MOORENS, MD 21771
 GARROLL COUNTY, MD

REVISED 5/15/2015
 REVISED 4/26/2015
 REVISED 3/25/2015
 REVISED 3/16/2015

SCALE: 1/4" = 1'-0"
 DATE: 2/20/15
 SHEET NO.: 6 OF 6

GBL CUSTOM HOME DESIGN INC.
 PO BOX 337 FINEBURG, MD 21048
 PHONE 410-833-8300

FILE LOVELESS ADDITION