PROPOSED RENOVATION FOR:

KURNIT RESIDENCE

5330 42ND STREET NW
WASHINGTON D.C. 20024

PERMIT SET - 10/28/14

DRAWING INDEX

301.956.9800
HOME IMPROVEMENT CONSULTANTS

PROPOSED DECK RENOVATION FOR:

KURNIT RESIDENCE

5330 42ND STREET NW
WASHINGTON D.C.

PROJ. NO.:

DATE:

CV

GENERAL NOTES

BUILDING CODES:

A. ALL CONSTRUCTION SHALL CONFORM WITH THE 2012 INTERNATIONAL RESIDENTIAL CODE (IRC).

B. ALL CONSTRUCTION SHALL CONFORM WITH ALL APPLICABLE LOCAL CODES AS AMENDED BY MONTGOMERY COUNTY MARYLAND.

DESIGN LOADS: (PER SECTION R301 OF IRC 2012)

A. THE DESIGN DEAD LOADS FOR ALL FRAMING IS BASED ON THE CONSTRUCTION MATERIALS SHOWN ON THE DRAWINGS AND INDICATED IN THE GENERAL NOTES

B. THE MINIMUM DESIGN UNIFORMLY DISTRIBUTED LIVE LOADS FOR ALL NEW FRAMING SHALL BE AS FOLLOWS:

FLOOR LOAD (U.O.N.)	LL=40 PSF / DL=10 PSF
SLEEPING RMS. / ATTIC WITH FIXED STAIR	LL=30 PSF / DL=10 PSF
GARAGE FLOOR	LL=50 PSF / 2000# POINT
ROOF LIVE LOAD	MIN. 30 PSF
ATTIC AND TRUSS BOTTOM CHORD	LL=20 PSF (LIMITED STORAGE) LL=10 PSF (NO STORAGE)

C. ROOF SNOW LOAD DESIGN CRITERIA:

GROUND SNOW LOAD (Pg)=	30 PSF
FLAT ROOF SNOW LOAD (Pf)=	21 PSF
EXPOSURE FACTOR (Ce)=	1
IMPORTANCE FACTOR (I)=	1

D. WIND LOAD DESIGN CRITERIA:

BASIC WIND SPEED=	90 MPH
WIND EXPOSURE=	B
IMPORTANCE FACTOR (I)=	1

E. EARTHQUAKE LOAD DESIGN CRITERIA:

SEISMIC DESIGN CATEGORY=	B
SPECTRAL RESPONSE COEFFICIENT (SDS)=	0.199
(SD1)=	0.101
SITE CLASS=	D

F. SUBJECT TO DAMAGE FROM:

WEATHERING	SEVERE
FROST LINE DEPTH	24"
TERMITE	MODERATE TO HEAVY
DECAY	SLIGHT TO MODERATE

G. TEMPERATURE AND FLOODING:

WINTER DESIGN TEMPERATURE	19° F
ICE SHIELD UNDERLAYMENT REQUIRED	YES (24|2
FLOOD HAZARDS	1978
AIR FREEZING INDEX	300
MEAN ANNUAL TEMPERATURE	55 °F

H. THE STABILITY OF THE STRUCTURE IS DEPENDENT UPON THE DIAPHRAGM ACTION OF THE FLOORS AND ROOF. THE CONTRACTOR IS RESPONSIBLE FOR THE METHOD OF CONSTRUCTION AND SHALL PROVIDE ALL TEMPORARY BRACING AND SHORING REQUIRED TO MAINTAIN THE STABILITY OF THE STRUCTURE AND TO SUPPORT CONSTRUCTION LOADS DURING CONSTRUCTION, INCLUDING SOILS ON WALLS FROM BACK FILLING PRIOR TO PLACING SLABS ON GRADE. DESIGN OF ALL BRACING IS THE CONTRACTOR'S RESPONSIBILITY.

SPREAD FOOTING FOUNDATIONS:

A. THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 30" BELOW FINISH GRADE FOR FROST PROTECTION.

B. ALL FOOTINGS HAVE BEEN DESIGNED FOR AN ASSUMED NET ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.

C. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL FOUNDATION AND SOIL CONDITIONS WHICH DIFFER FROM THOSE ANTICIPATED OR INDICATED IN THE CONTRACT DOCUMENTS.

CONCRETE SLAB-ON-GRADE:

A. ALL SLABS ON GRADE, UNLESS OTHERWISE NOTED, SHALL CONSIST OF A 4 INCH THICK CONCRETE SLAB REINFORCED WITH ONE LAYER OF 6"x6"-W4.4xW4.4 WELDED WIRE FABRIC, AND PLACED OVER A 6 MIL POLYETHYLENE VAPOR RETARDER AND 4 INCHES OF COMPACTED GRANULAR BASE. ALL EDGES OF VAPOR RETARDER SHALL BE LAPPED A MINIMUM OF 6 INCHES AND TAPED. MAXIMUM AGGREGATE SIZE OF GRANULAR BASE SHALL BE 1/2 INCH.

B. FILL DEPTHS UNDER SLAB SHALL NOT EXCEED 24 INCHES FOR CLEAN SAND OR GRAVEL, AND 8 INCHES FOR COMPACTED SOIL. SLABS ON GREATER FILL SHALL BE ENGINEERED SUPPORTED SLABS. COORDINATE WITH ENGINEER WHERE REQUIRED.

C. PLACE CONCRETE PER ACI 302. CONTRACTOR SHALL READ, UNDERSTAND & FOLLOW GUIDELINES SET FORTH FOR PREPARING SUBGRADE, PLACING, CONSOLIDATING, FINISHING AND CURING CONCRETE SLABS.

CAST IN PLACE CONCRETE:

A. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301)" AND TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318)".

B. IN ADDITION TO THE ABOVE, ALL CONCRETE WORK SHALL CONFORM TO THE FOLLOWING:
1. RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING (ACI 305).
2. RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING (ACI 306).
3. RECOMMENDED PRACTICE FOR CONCRETE FORM WORK (ACI 347).

C. ALL CONCRETE, UNLESS OTHERWISE NOTED, SHALL BE STONE AGGREGATE CONCRETE HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI. ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE AN AIR ENTRAINMENT OF 5%-7%. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED. MAXIMUM AGGREGATE SIZE SHALL BE 1" AND MAXIMUM SLUMP SHALL BE 4" (3" FOR SLABS ON GRADE). ALL CONCRETE, EXCEPT FOOTINGS, SHALL CONTAIN A WATER REDUCING ADMIXTURE. PORTLAND CEMENT SHALL CONFORM TO ASTM C150 AND NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C33.

D. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615 GRADE 60. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. LAP ALL REINFORCING BARS A MINIMUM OF 45xBAR DIA. (EX.- LAP 1/2" BAR 24") AND ALL WWF. A MINIMUM OF TWO FULL GRIDS, UNLESS OTHERWISE INDICATED.

STRUCTURAL AND MISCELLANEOUS STEEL:

A. ALL STEEL CONSTRUCTION SHALL CONFORM TO THE THIRTEENTH EDITION OF THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN" AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".

B. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 GRADE 50 OR ASTM A36 AT THE CONTRACTORS OPTION.

C. ALL MISCELLANEOUS STEEL (ANGLES, PLATES, ETC.) SHALL CONFORM TO ASTM A36 HAVING A MINIMUM YIELD STRENGTH OF Fy=36,000 PSI.

D. ALL STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A501 HAVING A MINIMUM YIELD STRENGTH OF Fy=36,000 PSI OR TO ASTM A53, TYPE "E" OR "S" GRADE "B", HAVING A MINIMUM YIELD STRENGTH OF Fy=35,000 PSI.

E. ALL STRUCTURAL STEEL TUBES SHALL CONFORM TO ASTM A500, GRADE "B", HAVING A MINIMUM YIELD STRENGTH OF Fy=46,000 PSI.

F. ALL CONNECTIONS, UNLESS OTHERWISE NOTED, SHALL BE DOUBLE ANGLE OR SINGLE PLATE SHEAR CONNECTIONS DESIGNED AND DETAILED IN ACCORDANCE WITH THE AISC "STEEL CONSTRUCTION MANUAL" WITH A MINIMUM EDGE DISTANCE OF 1-1/2 INCHES AND BOLT SPACING OF 3 INCHES.

G. THE CONTRACTOR SHALL NOT SPLICE OR CUT OPENINGS IN STEEL MEMBERS NOT SHOWN ON CONTRACT DRAWINGS WITHOUT THE PERMISSION OF THE STRUCTURAL ENGINEER.

WINDOWS AND DOORS:

A. ALL WINDOW NUMBERS INDICATE MODEL NUMBERS FOR "ANDERSEN" WINDOW UNITS

B. WINDOWS INDICATED ON DRAWINGS AS "EGRESS" SHOULD MEET BUILDING CODE REQUIREMENTS PER SECTION R310 OF THE IRC.

C. WINDOWS IN DOORS, SIDE LIGHTS AND WINDOWS WITHIN 24" OF DOORS SHALL BE PROVIDED WITH SAFETY GLASS TO COMPLY WITH SECTION R308 OF THE IRC.

D. GLASS AT TUBS AND SHOWER ENCLOSURES SHALL BE PROVIDED WITH SAFETY GLASS TO COMPLY WITH SECTION R308 OF THE IRC

WOOD FRAMING:

A. ALL WOOD FRAMING SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.

B. ALL NEW LUMBER SHALL BE SPRUCE-PINE-FIR NO. 2 OR BETTER. ALL NEW PRESSURE TREATED LUMBER SHALL BE SOUTHERN PINE NO. 2 OR BETTER.

C. NAILING OF ALL WOOD FRAMING SHALL MEET THE MINIMUM RECOMMENDED REQUIREMENTS PROVIDED IN THE NAILING SCHEDULE OF THE IRC BUILDING CODE.

D. PROVIDE DOUBLE JOISTS OR HEADERS ALONG EACH SIDE OF FLOOR OR ROOF OPENINGS, UNDER THE CENTERLINE OF PARTITION WALLS PARALLEL TO JOIST SPANS, AND ABOVE ALL WALL OPENINGS UNLESS OTHERWISE INDICATED.

E. THE CONTRACTOR SHALL CUT OR NOTCH THE WOOD FRAMING ONLY AS REQUIRED AND IN ACCORDANCE WITH THE IRC BUILDING CODE, THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", OR AS SHOWN ON THE CONTRACT DRAWINGS

F. PROVIDE DOUBLE OR TRIPLE STUDS AT ALL CORNERS, SIDES OF OPENINGS, AND BENEATH ALL WOOD BEAMS AND LINTELS, UNLESS OTHERWISE INDICATED.

G. WOOD TRUSSES SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE TRUSS PLATE INSTITUTE'S "NATIONAL DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION" FOR THE DESIGN LOADS INDICATED ON THE CONTRACT DOCUMENTS.

H. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS FOR ALL WOOD TRUSSES INCLUDING MEMBER LAYOUT, WOOD SPECIES AND GRADE, MEMBER SIZES, TRUSS BEARING CONNECTION DETAILS, CAPACITY OF CONNECTOR PLATES AND THE SIZE AND LOCATION OF ALL REQUIRED BRIDGING. THE CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WHERE WORK IS BEING DONE.

I. THE CONTRACTOR SHALL PROVIDE TRUSS TIES EQUIVALENT TO OR BETTER THAN THE UPLIFT LOADS INDICATED ON THE TRUSS SHOP DRAWINGS.

INSULATION & MOISTURE PROTECTION:

A. PROVIDE 30 lb. BUILDING FELT OR PAPER AT BRICK VENEER WITH FLASHING AT OPENING TO PREVENT MOISTURE PENETRATION BEHIND THE VENEER.

B. PROVIDE MINIMUM ONE LAYER OF 15 lb ROOFING FELT AT THE ROOF TO PROVIDE A WATER-RESISTANT BASE FOR FIBERGLASS COMPOSITION ROOF SHINGLES.

C. PROVIDE INSULATION AS FOLLOWS:

ROOF/ATTIC AREAS:	R-49, FIBERGLASS BATT OR BLOWN
EXTERIOR WALLS:	R-22, KRAFT-FACED, FIBERGLASS BATTS
BASEMENT EXTERIOR WALLS:	R-13, FOIL-FACED, FIBERGLASS BATTS
	R-10 CONTINUOUS INSULATION
WINDOWS / GLASS DOORS:	U-FACTOR ≤ 0.40
SKYLIGHTS:	U-FACTOR ≤ 0.60

D. THE CONTRACTOR SHALL PROVIDE CORROSION-RESISTANT METAL FLASHING ABOVE ALL WINDOW AND DOOR OPENINGS TO PREVENT MOISTURE PENETRATION. SIMILAR FLASHING SHALL BE PROVIDED AT ROOF VALLEYS AND ROOF OPENINGS, HOOD OR METAL COPINGS AND SILLS.

E. THE CONTRACTOR SHALL PROVIDE PERFORATED SOFFITS AT THE ROOF EAVES AND A CONTINUOUS RIDGE VENT AT THE ROOF TO PROVIDE REQUIRED ATTIC VENTILATION

SPECIAL TIES:

A. SMOKE ALARMS SHALL COMPLY WITH SECTION R313 OF THE IRC. SMOKE ALARMS SHALL BE INSTALLED IN EACH SLEEPING ROOM AND OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EACH ADDITIONAL STORY OF THE HOUSE INCLUDING THE BASEMENT

B. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE HOUSE WIRING. WHEN PRIMARY POWER IS INTERRUPTED, SMOKE ALARMS SHALL RECEIVE POWER FROM A BATTERY.

STAIRS, HANDRAILS AND GUARDS:

A. STAIRS SHALL COMPLY WITH SECTION R311.7 OF THE IRC. STAIRWAYS SHALL NOT BE LESS THAN 36 INCHES IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQD HEADROOM HEIGHT. 31.5 INCHES WHERE A HANDRAIL IS INSTALLED ON ONE SIDE; 27 INCHES WHERE HANDRAILS ARE INSTALLED ON BOTH SIDES

B. MINIMUM HEADROOM IN ALL PARTS OF THE STAIRWAY SHALL NOT BE LESS THAN 6 FEET 8 INCHES.

C. MAXIMUM STAIR RISER HEIGHT SHALL BE 7-3/4 INCHES AND MINIMUM TREAD DEPTH SHALL BE 10 INCHES. (UNLESS NOTED OTHERWISE IN CONTRACT DRAWINGS)

D. HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH STAIRWAY WITH FOUR OR MORE RISERS. HANDRAILS SHALL BE A MINIMUM OF 34 INCHES AND A MAXIMUM OF 38 INCHES ABOVE TREAD NOSING.

E. PORCHES, BALCONIES, RAMPS OR RAISED FLOOR SURFACES LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS NOT LESS THAN 36 INCHES IN HEIGHT.

F. REQUIRED GUARDS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES WHICH DO NOT ALLOW PASSAGE OF A SPHERE 4 INCHES OR MORE IN DIAMETER.

MECHANICAL, ELECTRICAL & PLUMBING:

A. H.V.A.C. DESIGN AND INSTALLATION TO BE PERFORMED BY LICENSED MECHANICAL CONTRACTOR IN COMPLIANCE WITH ALL APPLICABLE CODES.

B. ELECTRICAL DESIGN AND INSTALLATION TO BE PERFORMED BY LICENSED ELECTRICAL CONTRACTOR IN COMPLIANCE WITH ALL APPLICABLE CODES.

C. PLUMBING DESIGN AND INSTALLATION TO BE PERFORMED BY LICENSED PLUMBING CONTRACTOR IN COMPLIANCE WITH ALL APPLICABLE CODES

D. IF REQUIRED, FIRE SPRINKLER SYSTEM TO BE DESIGNED AND INSTALLED BY LICENSED SUBCONTRACTOR IN COMPLIANCE WITH ALL APPLICABLE CODES.

HEADER SPAN CHART NOTES:

A. SPANS ARE GIVEN IN FEET AND INCHES.

B. TABULATED VALUES ASSUME #2 GRADE DOUGLAS FIR-LARCH, HEM-FIR, SOUTHERN PINE, OR SPRUCE-PINE-FIR LUMBER.

C. BUILDING WIDTH IS MEASURED PERPENDICULAR TO THE RIDGE. FOR WIDTHS BETWEEN THOSE SHOWN, SPANS ARE PERMITTED TO BE INTERPOLATED.

D. WHERE THE NUMBER OF REQUIRED JACK STUDS EQUALS ONE, THE HEADER IS PERMITTED TO BE SUPPORTED BY AN APPROVED FRAMING ANCHOR ATTACHED TO THE FULL-HEIGHT WALL STUD AND TO THE HEADER.

PROJECT GENERAL NOTES:

A. WALL DIMENSIONS ARE FROM OUTSIDE FACE OF FRAMING AND ARE AS FOLLOWS (U.O.N.):

INTERIOR PARTITIONS = 3-1/2" (2x4 WOOD STUDS @ 16" O.C.)
EXTERIOR WALLS = 6" (2x6 STUDS @ 16" O.C. PLUS 1/2" SHEATHING)

B. THE CONTRACTOR AND HIS ASSOCIATED SUBCONTRACTORS ARE RESPONSIBLE TO THOROUGHLY REVIEW ALL DRAWINGS. ANY INCONSISTENCIES OR ERRORS ARE TO BE REPORTED TO THE DESIGNER FOR CLARIFICATION OR CORRECTION PRIOR TO THE START OF CONSTRUCTION OR MANUFACTURING OF PRE-FABRICATED COMPONENTS

C. SIZING/SPACING OF ALL PRE-ENGINEERED WOOD FRAMING PRODUCTS (MICRO-LAMS, PARALLAMS, & I FLOOR/ROOF TRUSSES) TO BE ENGINEERED/VERIFIED BY MANUFACTURER.

D. IF FLOOR FRAMING TO BE ACCOMPLISHED WITH PRE-ENGINEERED WOOD "I" JOISTS; MANUFACTURER'S AGENT TO DESIGN JOIST LAYOUT AND PROVIDE ENGINEERED SHOP DRAWINGS. FLOOR SYSTEM TO BE DESIGNED WITH L/480 LIVE LOAD DEFLECTION MIN. (L/600 IN AREAS TO BE FINISHED WITH TILE).

E. IF ROOF FRAMING TO BE ACCOMPLISHED WITH PRE-ENGINEERED WOOD TRUSSES; MANUFACTURER'S AGENT TO DESIGN TRUSS LAYOUT AND PROVIDE ENGINEERED SHOP DRAWINGS

F. THESE DOCUMENTS ARE NOT TO BE SCALED. DIMENSIONS SHALL GOVERN ON ALL DRAWINGS. ANY OMISSIONS OR AREAS OF DISCREPANCY SHALL BE REFERRED TO LEVEILLE HIG, INC. PRIOR TO CONSTRUCTION

MASONRY - BRICK VENEER

A. ALL BRICK VENEER CONSTRUCTION TO BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR ENGINEERED BRICK MASONRY" BY THE BRICK INSTITUTE OF AMERICA AND IRC 2009 REQUIREMENTS

VENEER BRICK _____ ASTM C216, GRADE SW
MORTAR _____ ASTM C270, TYPE S

B. BRICK VENEER SHALL BE ATTACHED TO WOOD FRAMING WITH 1/8" x 7/8" LONG 22 GAUGE STANDARD CORRUGATED WALL TIES. THE TIES SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION CONFORMING TO ASTM A-153 CLASS B2. SPACING OF ANCHORS AND TIES SHALL BE 16" O.C. MAX. VERTICAL AND 33" O.C. MAX. HORIZONTAL. FOR BRICK VENEER WALLS TALLER THAN 25'-0" BUT NOT EXCEEDING 40'-0" IN HEIGHT, PROVIDE DW-10 SERIES VENEER ANCHORS BY HOHMANN AND BARNHARD OR APPROVED EQUIVALENT AT 16" O.C. VERTICAL AND 24" O.C. HORIZONTAL. ATTACH ALL TIES WITH (2)#8 x 1-1/4" SCREWS PER STUD. PROVIDE WEEP HOLES HORIZONTALLY AT 2'-0" O.C.

C. COORDINATE OPENINGS WITH LINTEL SCHEDULE

D. ALL MASONRY CONSTRUCTION TO BE IN ACCORDANCE WITH THE NATIONAL CONCRETE MASONRY ASSOCIATIONS STANDARD PRACTICES AND "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD-BEARING CONCRETE MASONRY" OR ACI 530 "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES". ALL MASONRY TO CONFORM TO THE FOLLOWING SPECIFICATIONS:

- HOLLOW LOAD-BEARING C.M.U. ____ ASTM C90
- SOLID LOAD-BEARING C.M.U. ____ ASTM C145
- MORTAR _____ ASTM C270, TYPE M OR S

E. C.M.U. UNITS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF f'm = 1500 PSI. CONTRACTOR SHALL PROVIDE SPECIAL TEST AND INSPECTION FOR THE LOCATION OF THE REINFORCEMENT AND DURING CONSTRUCTION OF C.M.U. WALL.

F. JOINT REINFORCING: PROVIDE TRUSS TYPE ZINC COATED, COLD DRAWN STEEL WIRE CONFORMING TO ASTM A82 DURAWALL OR EQUIVALENT AT EVERY OTHER BLOCK COURSE ABOVE GRADE. REINFORCEMENT SHOULD CONSIST OF TWO OR MORE LONGITUDINAL WIRES NO. 9 GAUGE OR LARGER, HELD CONNECTED WITH NO. 12 GAUGE OR LARGER CROSS WIRES. ZINC COATING

G. GROUT OR PEA GRAVEL CONCRETE USED FOR FILLING UNIT CELLS OF MASONRY SHALL CONFORM TO ASTM C476 AND SHALL HAVE A COMPRESSIVE STRENGTH OF 2500 PSI ON THE NET AREA AT 28 DAYS

HEADER SPAN CHART

BASED ON 30 PSF GROUND SNOW LOAD PER SECTION R502 OF IRC 2012

EXTERIOR BEARING WALLS

HEADERS SUPPORTING	SIZE	BUILDING WIDTH[c] (feet) 20 SPAN	20 # OF JACKS[d]	28 SPAN	28 # OF JACKS[d]	36 SPAN	36 # OF JACKS[d]
ROOF AND CEILING	(2) 2x8	6'-10"	1	5'-11"	2	5'-4"	2
	(2) 2x10	8'-5"	2	7'-3"	2	6'-6"	2
	(2) 2x12	9'-7"	2	8'-5"	2	7'-6"	2
	(3) 2x8	8'-4"	1	7'-5"	1	6'-8"	1
	(3) 2x10	10'-4"	1	8'-11"	2	8'-2"	2
	(3) 2x12	12'-2"	2	10'-7"	2	9'-5"	2
ROOF, CEILING AND ONE CENTER-BEARING FLOOR	(2) 2x8	5'-4"	2	5'-0"	2	4'-6"	2
	(2) 2x10	7'-0"	2	6'-2"	2	5'-6"	2
	(2) 2x12	8'-4"	2	7'-3"	2	6'-5"	2
	(3) 2x8	7'-2"	1	6'-3"	2	5'-8"	2
	(3) 2x10	8'-9"	2	7'-8"	2	6'-11"	2
	(3) 2x12	10'-2"	2	8'-11"	2	8'-0"	2
ROOF, CEILING AND ONE CLEAR SPAN FLOOR	(2) 2x8	5'-0"	2	4'-4"	2	3'-10"	2
	(2) 2x10	6'-6"	2	5'-8"	2	4'-11"	2
	(2) 2x12	7'-8"	2	6'-8"	2	5'-9"	2
	(3) 2x8	6'-3"	2	5'-5"	2	4'-10"	2
	(3) 2x10	7'-7"	2	6'-7"	2	5'-11"	2
	(3) 2x12	8'-10"	2	7'-8"	2	6'-10"	2
ROOF, CEILING AND TWO CENTER-BEARING FLOORS	(2) 2x8	4'-4"	2	3'-10"	2	3'-4"	2
	(2) 2x10	5'-6"	2	4'-10"	2	4'-3"	2
	(2) 2x12	6'-6"	2	5'-10"	2	5'-0"	2
	(3) 2x8	5'-4"	2	4'-8"	2	4'-1"	2
	(3) 2x10	6'-5"	2	5'-7"	2	4'-11"	2
	(3) 2x12	7'-6"	2	6'-6"	2	5'-8"	2
ROOF, CEILING AND TWO CLEAR SPAN FLOOR	(2) 2x8	3'-10"	2	3'-4"	2	2'-11"	2
	(2) 2x10	4'-11"	2	4'-3"	3	3'-9"	3
	(2) 2x12	5'-8"	3	4'-11"	3	4'-3"	3
	(3) 2x8	4'-10"	2	4'-2"	2	3'-8"	2
	(3) 2x10	5'-11"	2	5'-1"	2	4'-7"	2
	(3) 2x12	6'-10"	2	5'-11"	3	5'-1"	3

INTERIOR BEARING WALLS

HEADERS SUPPORTING	SIZE	BUILDING WIDTH[c] (feet) 20 SPAN	20 # OF JACKS[d]	28 SPAN	28 # OF JACKS[d]	36 SPAN	36 # OF JACKS[d]
ONE FLOOR ONLY	(2) 2x6	4'-0"	1	3'-6"	1	3'-0"	1
	(2) 2x8	5'-4"	1	5'-0"	2	4'-5"	2
	(2) 2x10	7'-0"	2	6'-4"	2	5'-6"	2
	(2) 2x12	8'-4"	2	7'-0"	2	6'-3"	2
TWO FLOOR	(2) 2x6	3'-2"	2	2'-9"	2	2'-5"	2
	(2) 2x8	4'-4"	2	3'-10"	2	3'-2"	2
	(2) 2x10	5'-6"	2	4'-8"	2	3'-10"	3
	(2) 2x12	6'-6"	3	5'-6"	3	4'-5"	3

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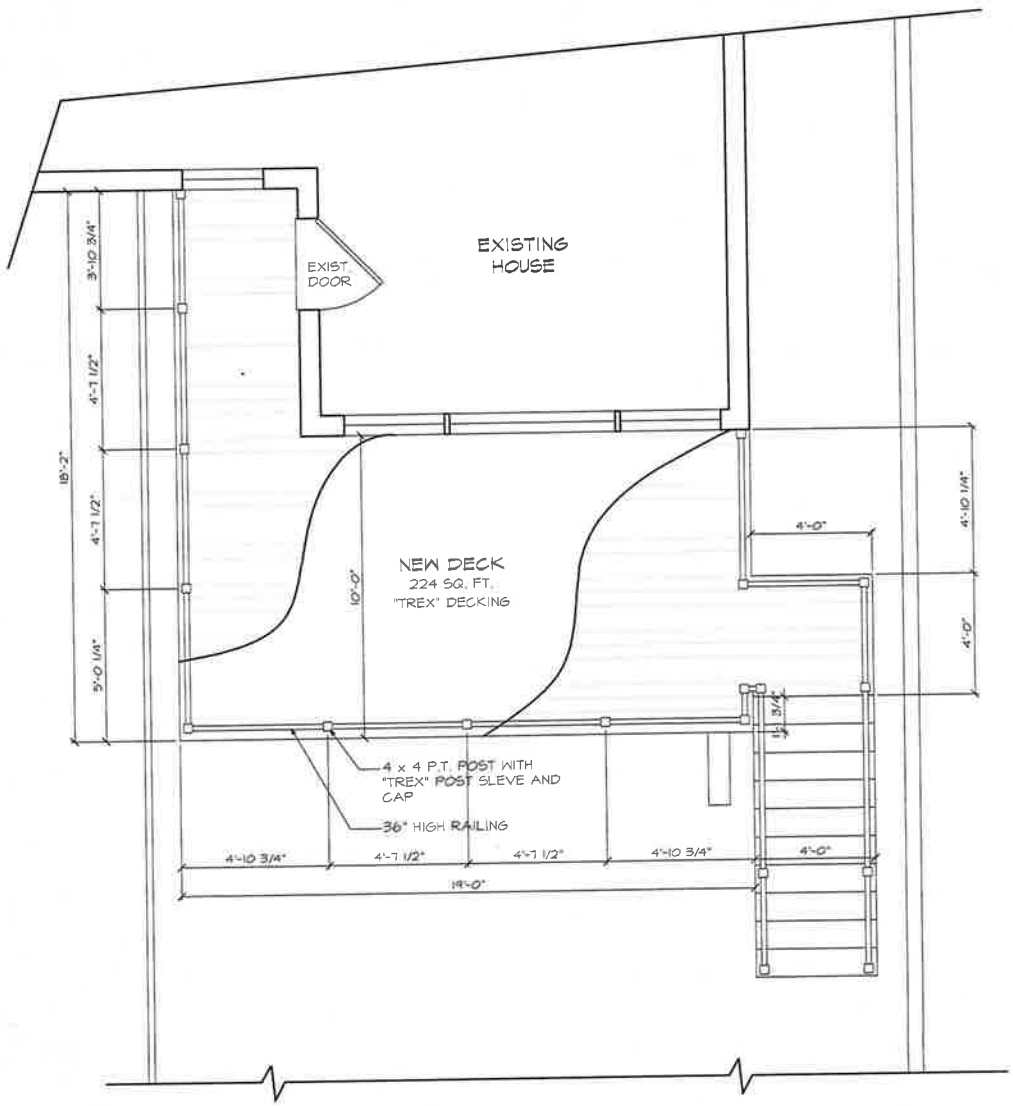
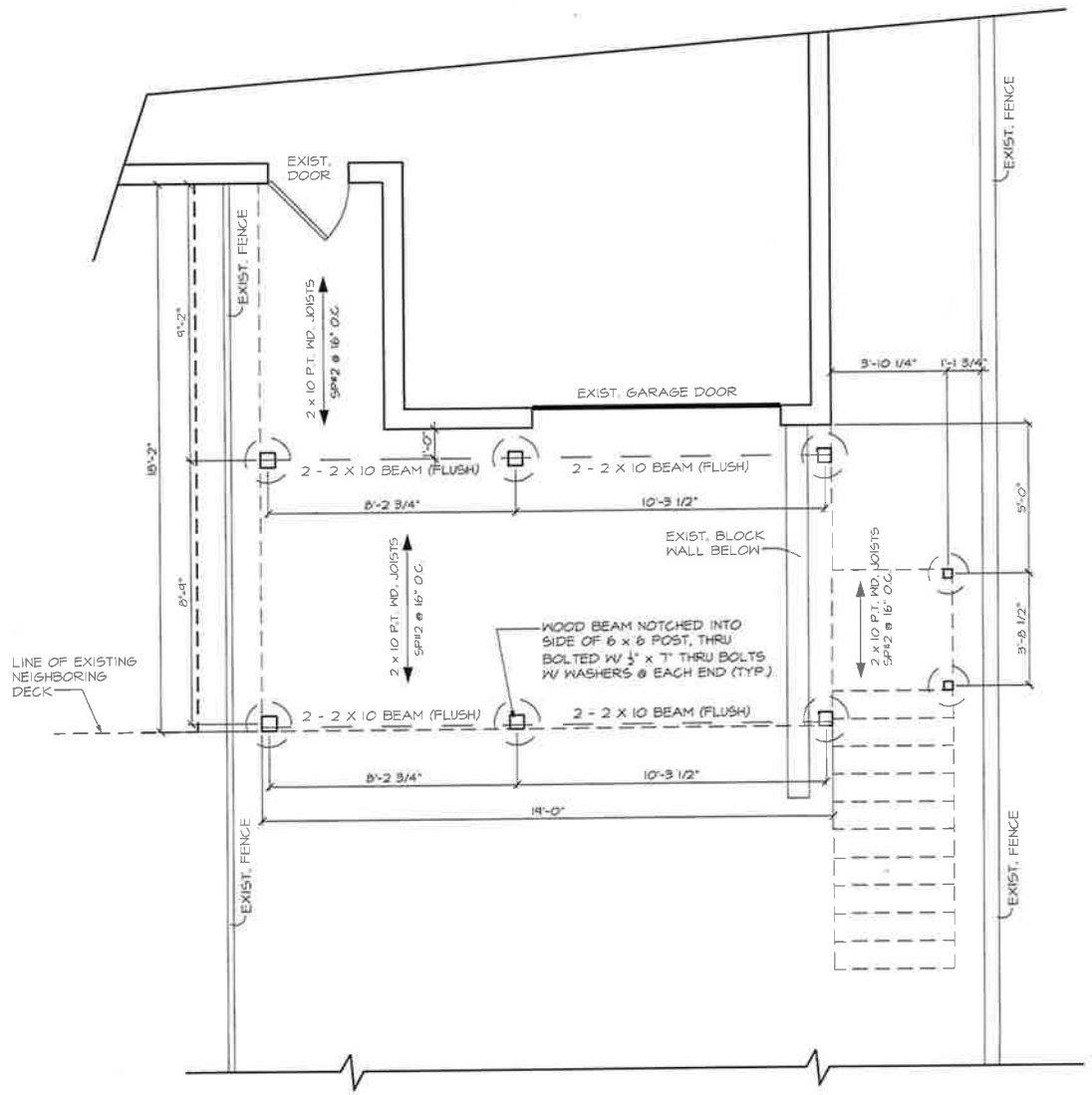


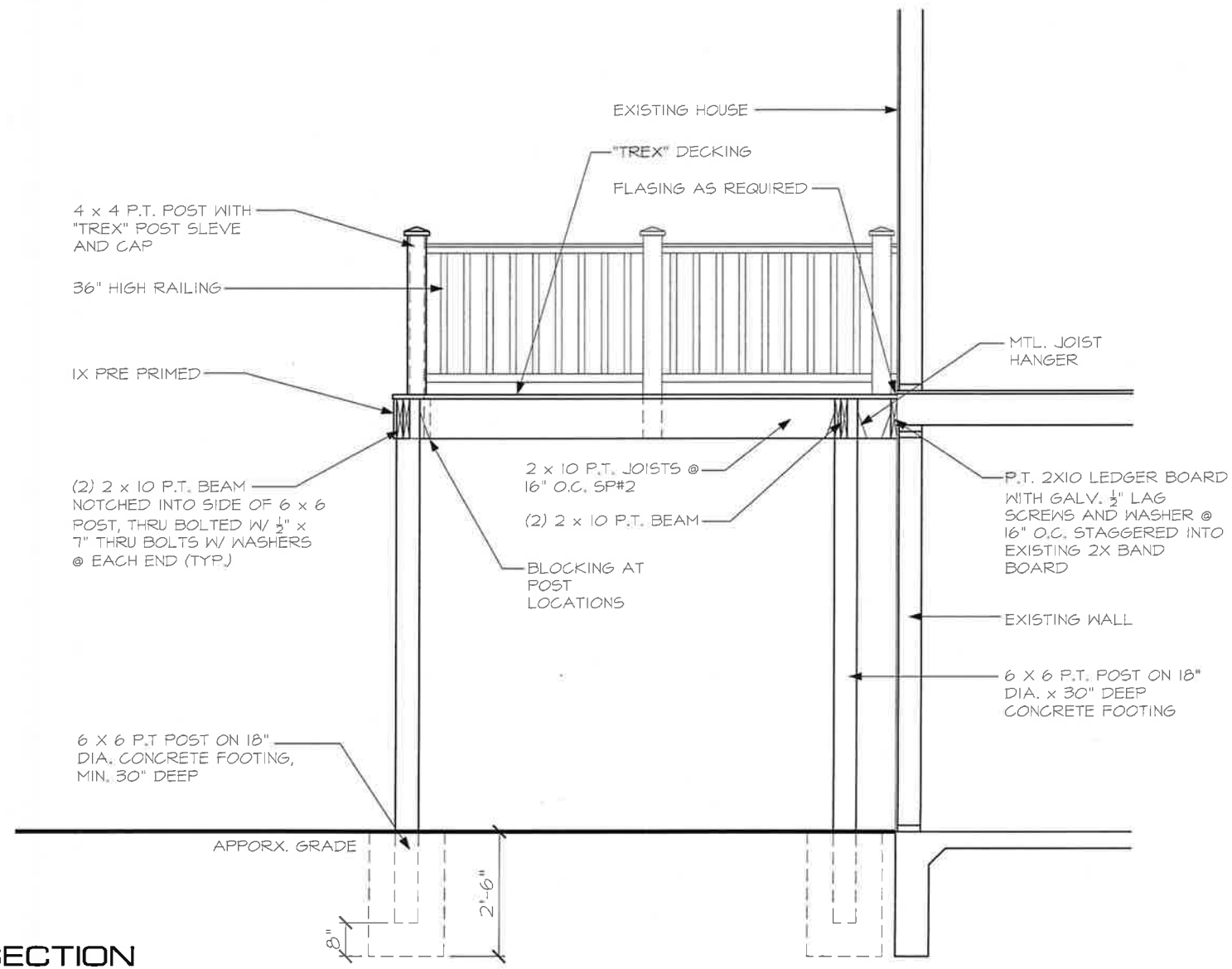
FLOOR PLAN

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



FOUNDATION PLAN

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

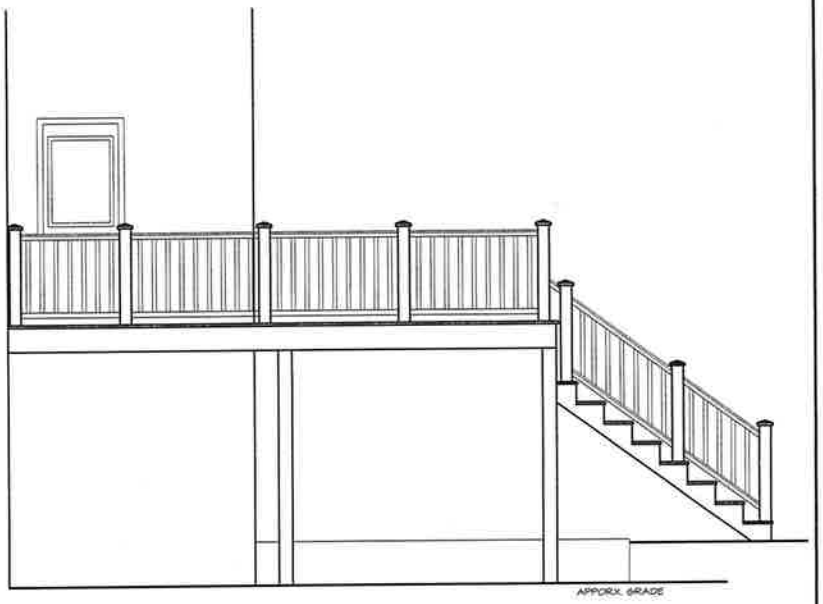


CROSS SECTION

SCALE: 1/2" = 1'-0"

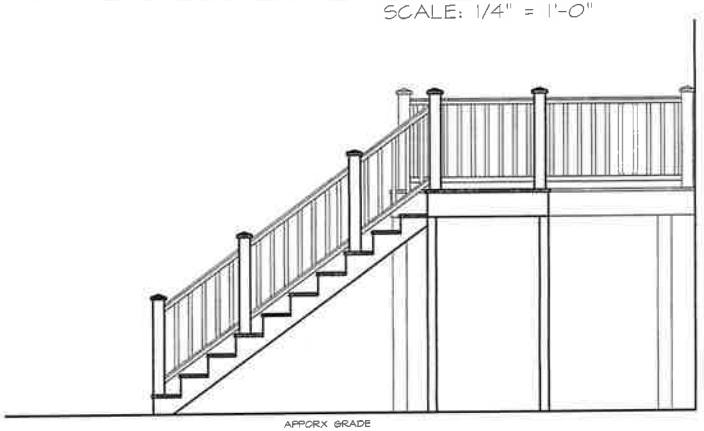
REAR ELEVATION

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



LEFT SIDE ELEVATION

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



RIGHT SIDE ELEVATION

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