

SITE INFORMATION

ADDRESS	710 A STREET NE
	WASHINGTON, DC 20002
LOT:	41
SQUARE:	896
ZONING:	R-4
LOT AREA:	2000 SF
EXISTING LOT COVERAGE	1001 SF OR 50%
PROPOSED ADDITION	0
PROPOSED LOT COVERAGE:	1001 OR 50%
DISTURBED AREA	0
VOLUME OF EXCAVATION	0

DRAWING LIST

A0	TITLE SHEET
A1	SITE PLANS
A2.1	1ST FLOOR PLANS
A2.2	2ND FLOOR PLANS
A2.3	ROOF PLANS
A3	EXISTING ELEVATIONS
A4	PROPOSED ELEVATIONS
A5	PROPOSED BUILDING SECTION
A6	INTERIOR
S1	FOUNDATIONS & 1ST FLOOR FRAMING
S2	2ND FLOOR FRAMING
S3	ROOF FRAMING
S4	STRUCTURAL NOTES
S5	STRUCTURAL CALCULATIONS
E1	2ND FLOOR ELECTRICAL PLAN
P1	PLUMBING RISER DIAGRAM

DESIGN NOTES:

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT CITY, COUNTY, AND STATE BUILDING CODES AND ALL OTHER APPLICABLE CODES TO EACH TRADE.
2. ALL DIMENSIONS TO BE VERIFIED IN FIELD.
3. ALL DIMENSIONS ARE TO FACE OF MATERIAL, TYP.
4. ANY NECESSARY SUPPLEMENTAL PERMITS TO BE OBTAINED BY TRADE PROFESSIONALS UNDER CONTRACTOR COORDINATION.
5. SEPARATE ALL DEMOLITION WASTE AND RECYCLE AS FEASIBLE. DIVERT GOAL OF 50% WASTE FROM LANDFILL BY RECYCLING CONSTRUCTION MATERIAL AND PACKAGING, DRYWALL REPROCESSING, DONATIONS TO COMMUNITY FORKLIFT, AND ANY OTHER MEANS FEASIBLE.
6. VIF ALL STRUCTURAL LOAD BEARING WALLS BEFORE DEMOLITION AND CONTACT ARCHITECT AND STRUCTURAL ENGINEER IF EXISTING CONDITIONS DIFFER FROM DRAWINGS.
7. CEMENT BOARD TO BE USED BEHIND ALL TILES.
8. ALL PAINT AND PRIMER TO BE LOW VOC.
9. APPLIANCES TO BE ENERGY STAR RATED.
10. FIXTURES TO HAVE WATER SENSE CERTIFICATION.



VAN DYCK
RESIDENCE

710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

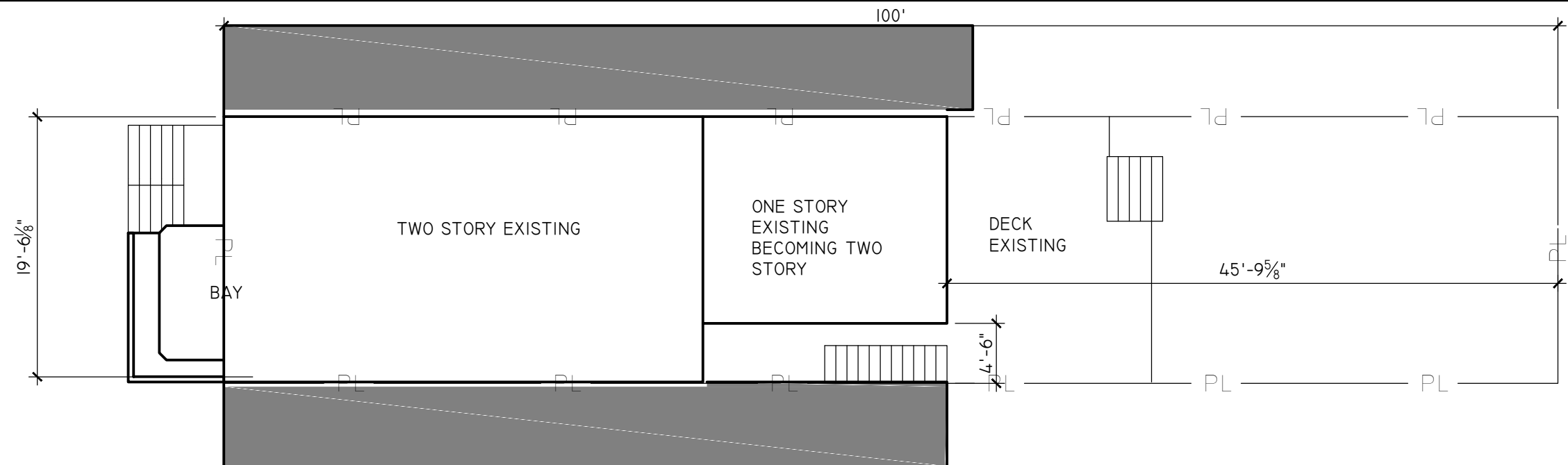
LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

HPRB/BZA 12-19-14

TITLE
A0

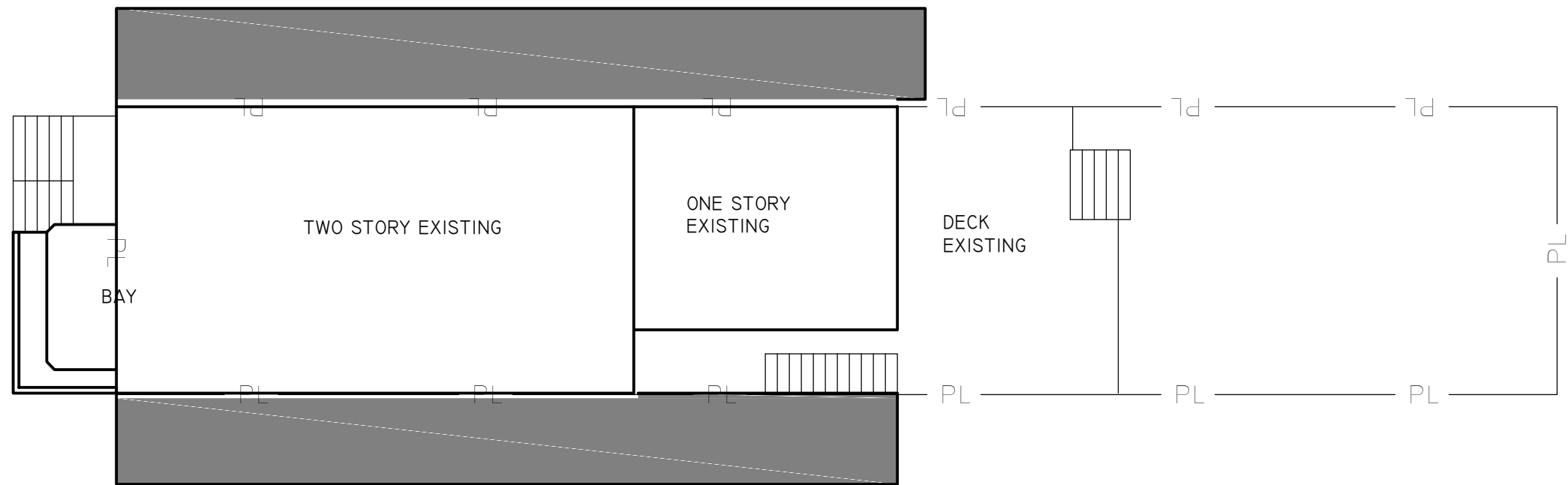
**Board of Zoning Adjustment
District of Columbia
CASE NO.18947
EXHIBIT NO.9**



1

EXISTING AND PROPOSED SITE PLAN

SCALE: 1" = 10'



2

DDOE SITE PLAN

SCALE: 1" = 10'

VAN DYCK RESIDENCE

710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

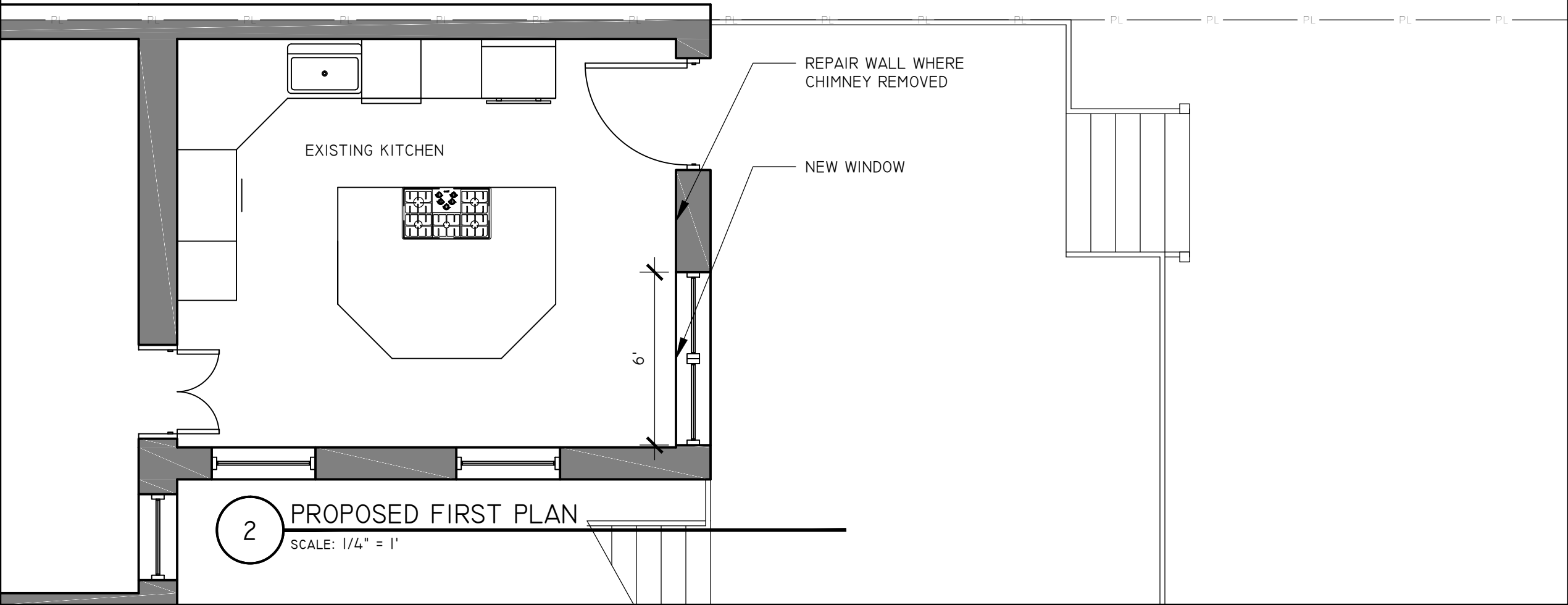
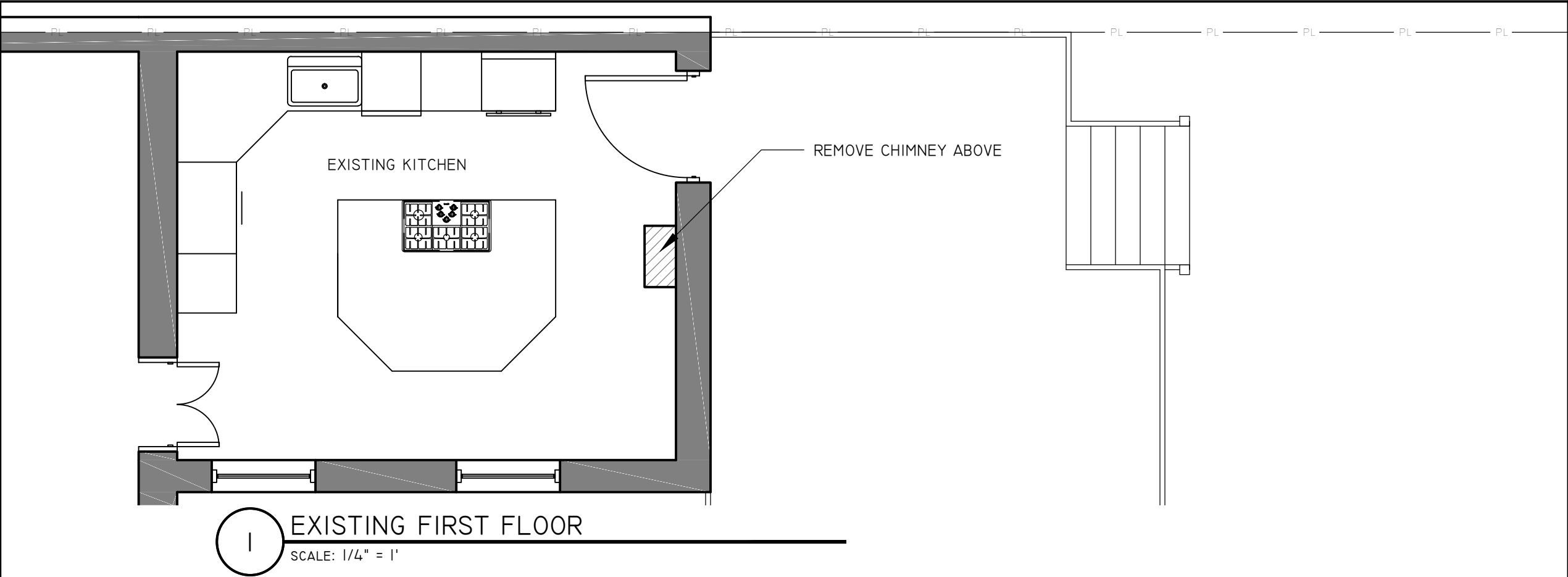
LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

HPRB/BZA 12-19-14

SITE PLANS

AI



VAN DYCK
RESIDENCE

710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

HPRB/BZA 12-19-14

1ST FLOOR PLANS

A2.1

A2.2

?

A3

1

A3

1

A6

2

 ΔL

1

A4

– EGRESS WINDOW MIN OPENING: 20" WIDE, 24" HIGH, 5.7 SF CLEAR, AND 44" FROM FF

VAN DYCK
RESIDENCE

710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

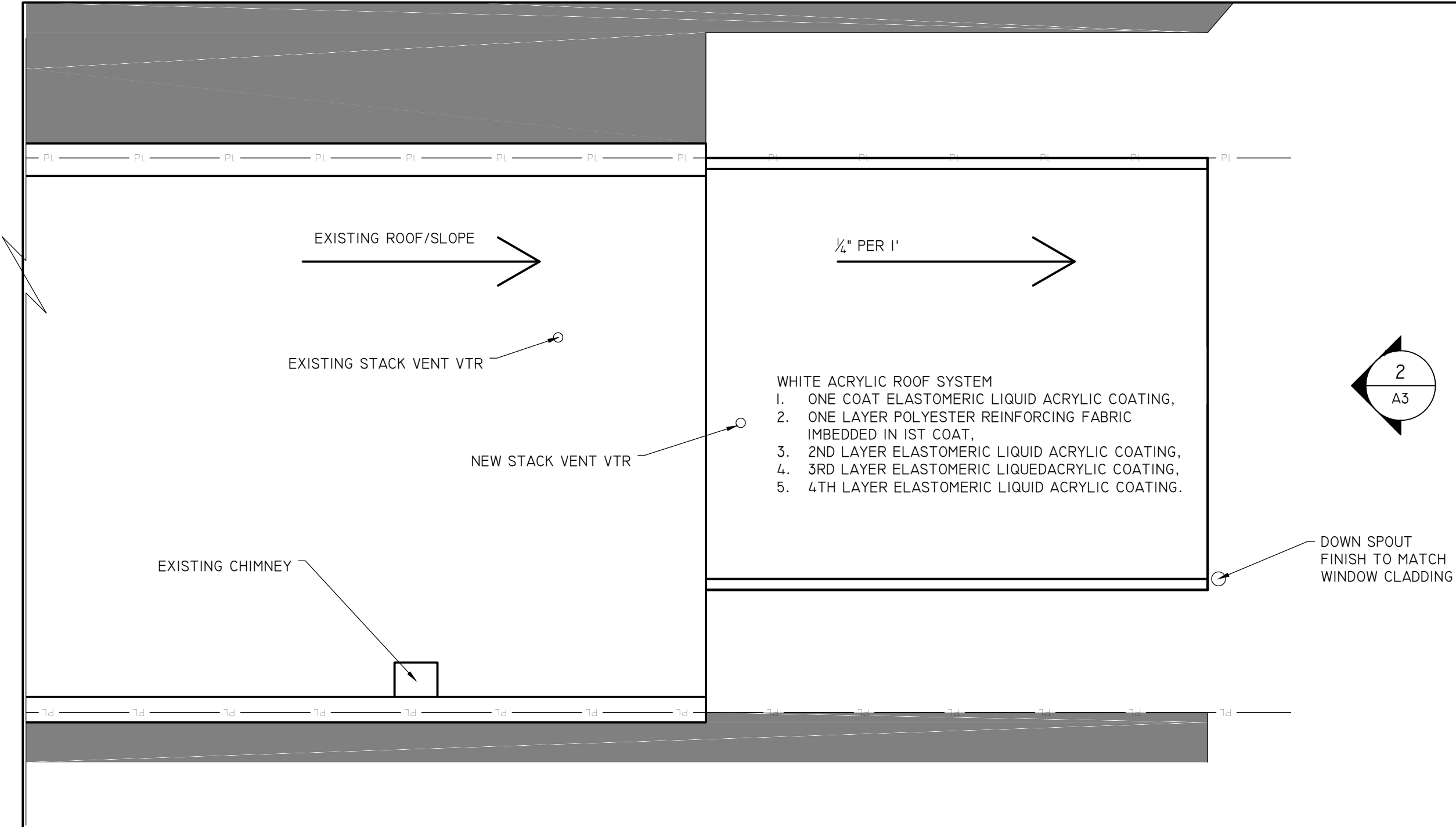
LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

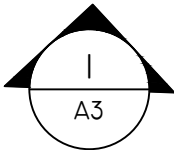
HPRB/BZA 12-19-14

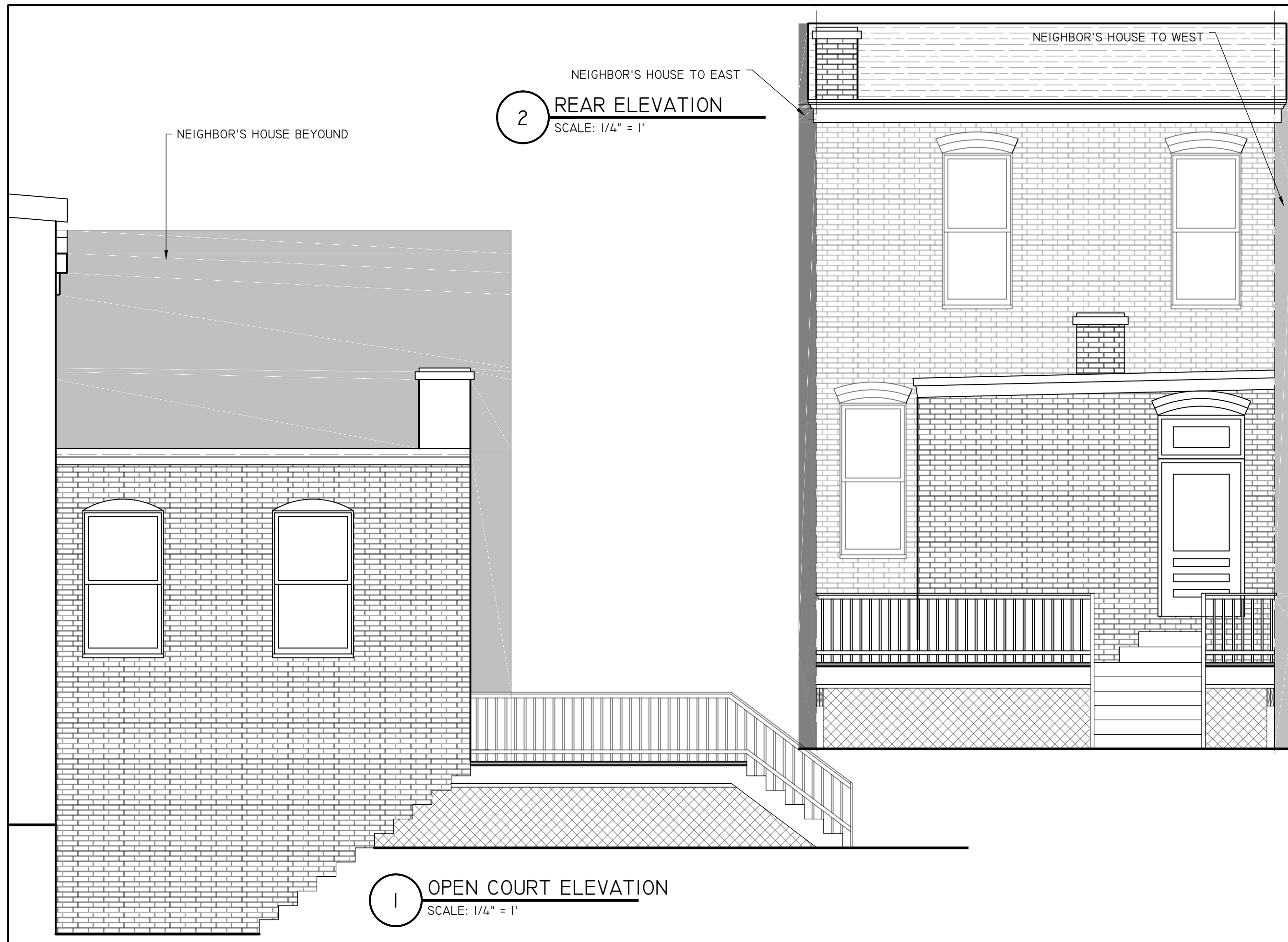
ROOF PLAN

A2.3



1 ROOF PLAN
SCALE: 1/4" = 1'





REAR ELEVATION

2

NEIGHBOR'S HOUSE TO EAST

NEIGHBOR'S HOUSE BEYOND

NEIGHBOR'S HOUSE TO WEST

OPEN COURT ELEVATION

VAN DYCK
RESIDENCE

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

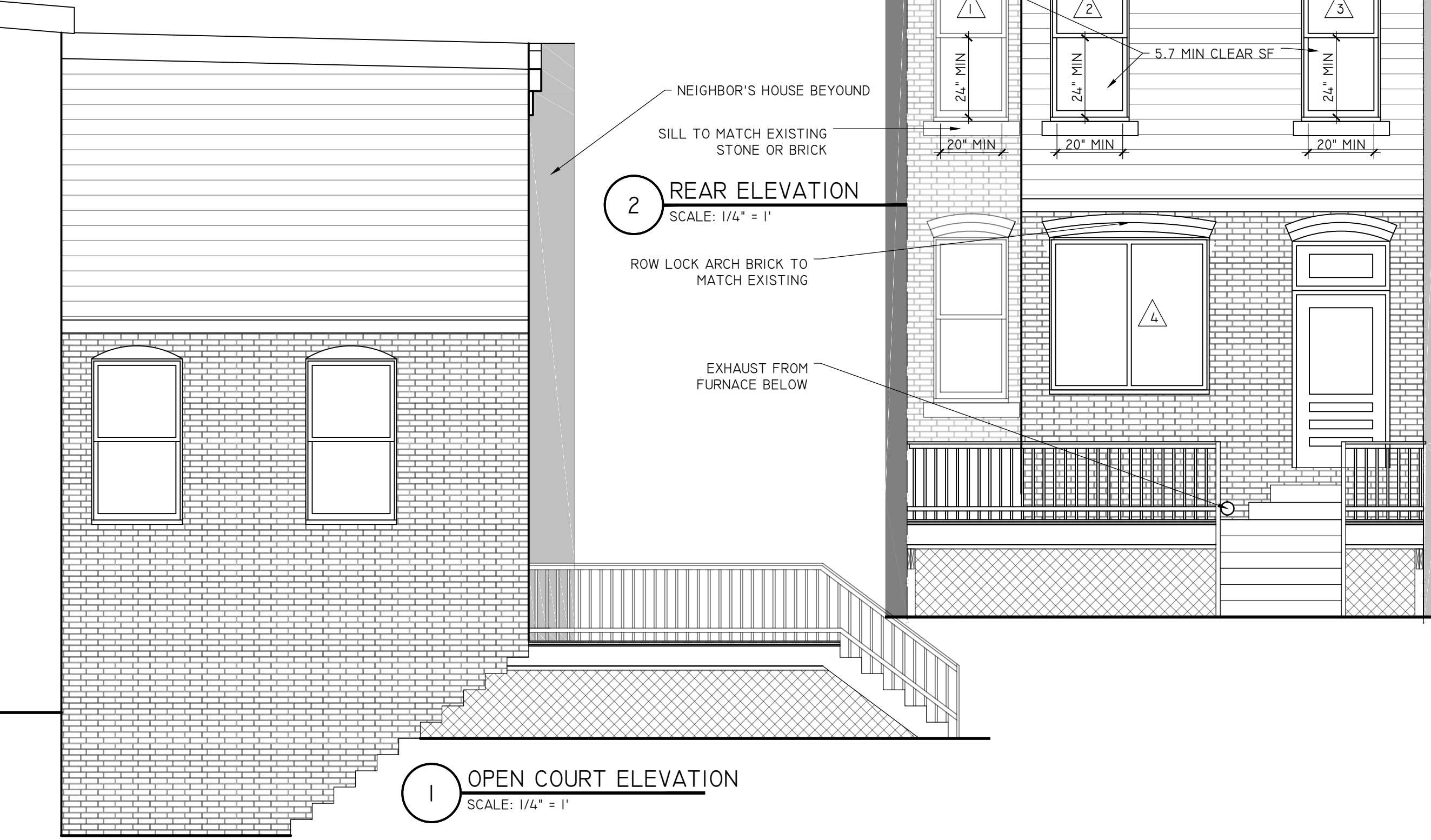
HPRB/BZA 12-19-14

EXISTING EXTERIOR ELEVATIONS

A3

WINDOW SCHEDULE:

1. WOOD INTERIOR, CLAD EXTERIOR, U VALUE .3 OR BETTER, LOW E GLAZING, ARGON FILLED, DOUBLE HUNG, 1 OVER 1 LITES. DIMENSIONS TO MATCH EXISTING WINDOW BELOW IN DINING ROOM. COMPLY WITH EGRESS REQUIREMENTS
2. WOOD INTERIOR, CLAD EXTERIOR, U VALUE .3 OR BETTER, LOW E GLAZING, ARGON FILLED, DOUBLE HUNG, 1 OVER 1 LITES. DIMENSIONS TO MATCH EXISTING WINDOW BELOW IN DINING ROOM. COMPLY WITH EGRESS REQUIREMENTS
3. WOOD INTERIOR, CLAD EXTERIOR, U VALUE .3 OR BETTER, LOW E GLAZING, ARGON FILLED, DOUBLE HUNG, 1 OVER 1 LITES. DIMENSIONS TO MATCH EXISTING WINDOW BELOW IN DINING ROOM. COMPLY WITH EGRESS REQUIREMENTS
4. WOOD INTERIOR, CLAD EXTERIOR, U VALUE .3 OR BETTER, LOW E GLAZING, ARGON FILLED, FOLDING STYLE, ONE LITE. BASIS OF DESIGN: NANAWALL, LACANTINA, JELD-WEN, OR KOLBE.



VAN DYCK
RESIDENCE

710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

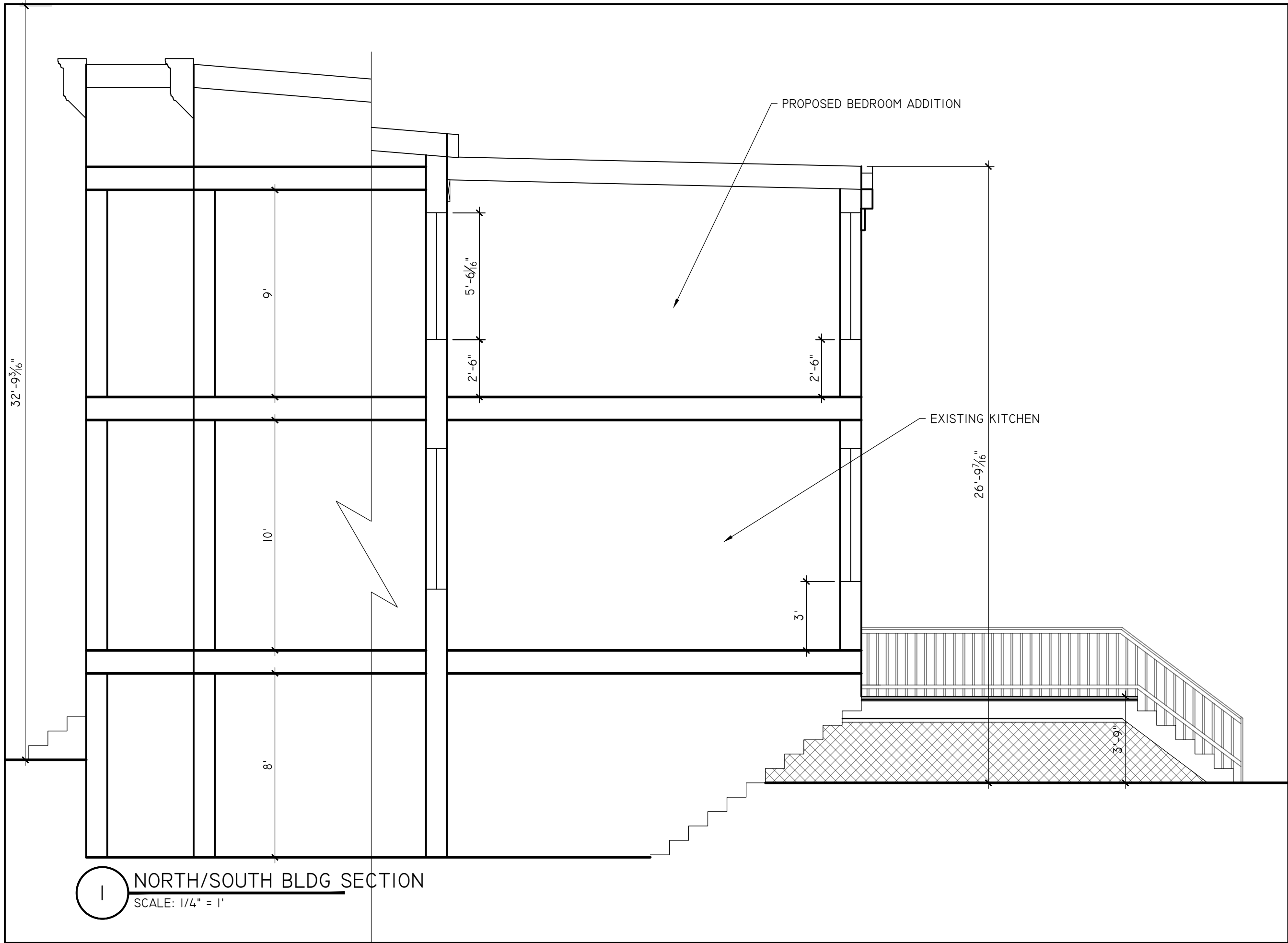
NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

HPRB/BZA 12-19-14

PROPOSED
EXTERIOR
ELEVATIONS
A4



VAN DYCK
RESIDENCE
710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

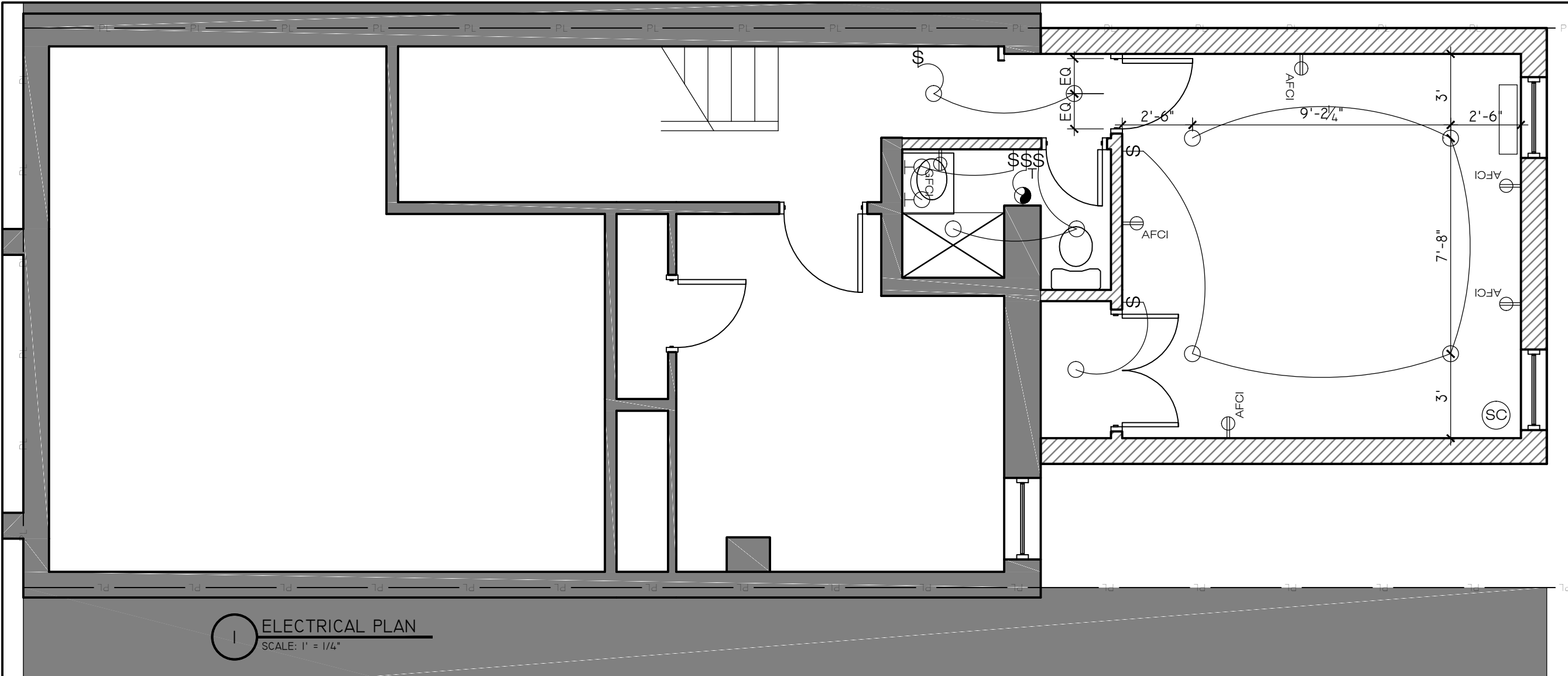
NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

HPRB/BZA 12-19-14

PROPOSED
BUILDING SECTION



ELECTRICAL PLAN
SCALE: 1" = 1/4"

GENERAL ELECTRICAL NOTES

1. VIF ALL ELECTRICAL NON COMPLIANCE AND REPAIR AS NEEDED.
2. PROVIDE ADDITIONAL WALL OUTLETS AS REQUIRED BY CODE FOR EXISTING HOUSE
3. DIMMERS ON THE FOLLOWING NEW LIGHTS: KITCHEN PENDANTS AND RECESSED LIGHTS, AND MASTER-BATH RECESSED LIGHTS.
4. FIXTURES AND FANS IN BATHS TO BE ON SEPARATE GFCI CIRCUIT
5. CONFIRM ALL POWER REQUIREMENTS W/ APPLIANCE MANUFACTURER SPECIFICATIONS
6. APPLIANCE CIRCUIT DEDICATION IN ACCORDANCE W/ LOCAL BUILDING CODE
7. HIDE ALL CABLES AND WIRING IN WALLS
8. ELECTRICAL DRAWINGS REPRESENT NEW ELECTRICAL WORK ONLY. VIF EXISTING ELECTRICAL AND COORDINATE WITH OWNER.

ELECTRICAL KEY

- DUPLEX OUTLET, 2-POLE, 3-WIRE, GROUNDED, 20A, 125V, FOR INDOOR USE WALL MTD, VERTICAL, 12" AFF TO $\mathbb{I}$, TYP
- DUPLEX OUTLET, 2-POLE, 3-WIRE, WITH GROUND FAULT CIRCUIT INTERRUPTER, 20A, 125V, FOR INDOOR USE WALL MTD, VERTICAL, 12" AFF TO $\mathbb{I}$, TYP
- DUPLEX OUTLET, 2-POLE, 3-WIRE, WITH ARC FAULT CIRCUIT INTERRUPTER, 20A, 125V, FOR INDOOR USE WALL MTD, VERTICAL, 12" AFF TO $\mathbb{I}$, TYP
- CAT 6 MULTI JACK (PHONE/DATA/CABLE)
- SWITCH, SINGLE POLE, 15A, 125V, 50" AFF ("D" REFERS TO DIMMER)
- EXHAUST FAN TIMER SWITCH
- EXHAUST FAN, ENERGY STAR LABELED
- WALL SCONCE
- RECESSED 4" LIGHT OLIER LIGHT
- CEILING MOUNTED FAN AND LIGHT, ENERGY STAR
- UNDERCABINET LIGHT
- PENDANT/ CHANDELIER LIGHT
- SMOKE AND CARBON MONOXIDE DETECTOR, HARD WIRED, INTERCONNECTED WITH BATTERY BACKUP

**VAN DYCK
RESIDENCE**

710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

**HARDWICK
STUDIO, PLLC**

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

HPRB/BZA 12-19-14

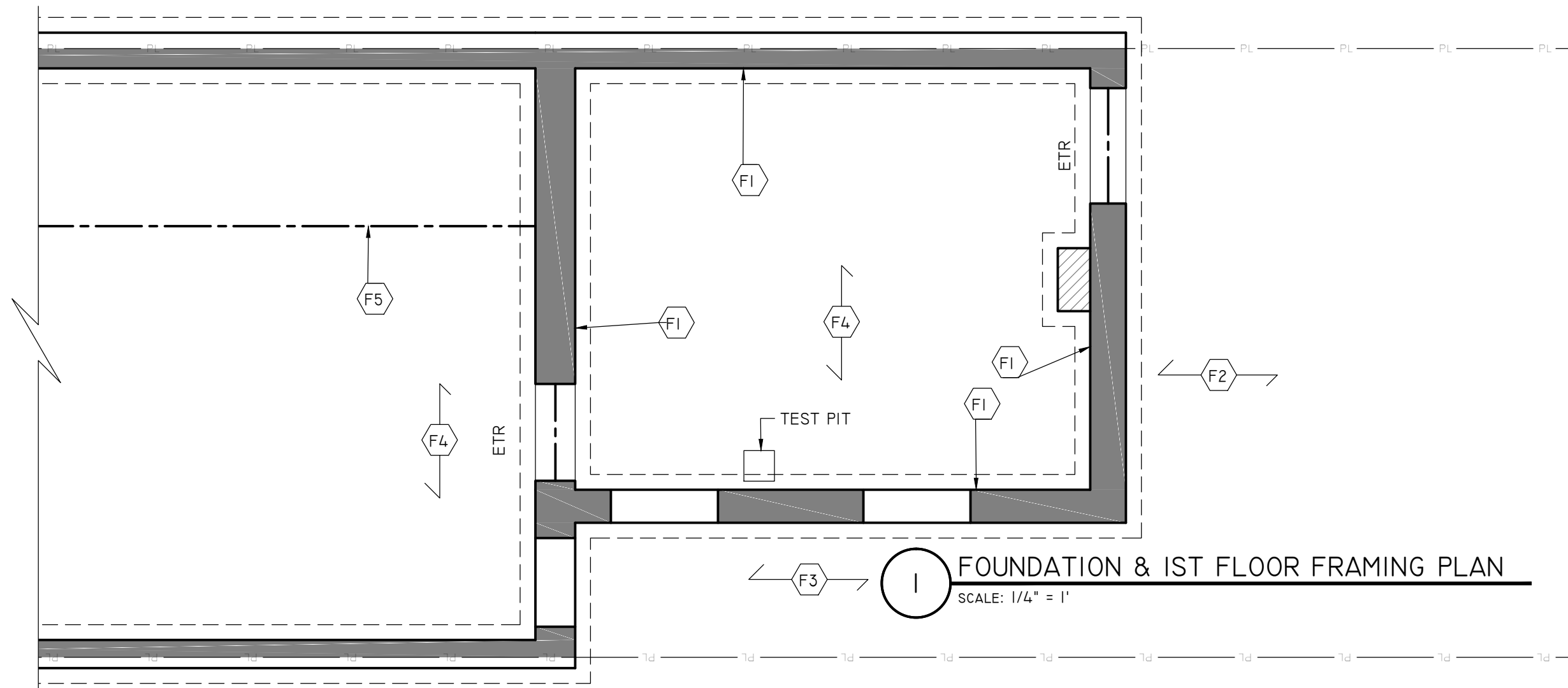
**2ND FLOOR
ELECTRICAL PLAN
EI**

FRAMING NOTES:

1. BOTTOM OF ALL FOOTINGS SHALL BE 30" MINIMUM BELOW GRADE.
2. ALL SLAB ON GRADE CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI WITH 6%±1% AIR ENTRAINMENT.
3. SEE ARCHITECTURAL DRAWINGS FOR FIRE RATED ASSEMBLIES
4. PROVIDE SQUASH BLOCKING AS NEEDED BELOW ALL POSTS, COLUMNS, AND MULTIPLE STUDS.
5. PLACE A DOUBLE JOIST BELOW ALL PARTITION WALLS THAT ARE PARALLEL TO THE FLOOR JOISTS. ALTERNATELY PLACE SOLID BLOCKING AT 16" O.C. BELOW THE PARTITION WALLS BETWEEN THE TWO ADJACENT JOISTS.
6. EPOXY BOLTS SHALL BE SIMPSON "SET". FOLLOW MANUFACTURERS INSTRUCTIONS FOR INSTALLATION AND THE INSTRUCTIONS OF ESR 1772. UNO ALL BOLTS SHALL HAVE 6" EMBEDMENT.
7. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING DURING CONSTRUCTION AS NEEDED FOR THE EXISTING STRUCTURAL ELEMENTS THAT WILL REMAIN.
8. USE TYPE N LIME BASED MORTAR FOR EXTERIOR BRICK WALL APPLICATIONS. MATCH THE COLOR AND JOINT SIZE IN THE NEW WALL TO THE EXISTING WALL. IF NEW BRICKS ARE USED, THEY SHALL BE MATCHED TO THE EXISTING BRICKS FOR COLOR, SIZE, POROSITY AND STRENGTH.
9. ALL STEEL ANGLE LINTELS SHALL BE LONG LEG VERTICAL (LLV). PROVIDE 4" BEARING FOR STEEL ANGLES ON SOLID MASONRY.
10. WHEN CONNECTING NEW MASONRY TO THE EXISTING MASONRY TOOTH THE NEW WALL INTO THE EXISTING WALL.

- (R1) PT2X12 LEDGER WITH ½"Ø EPOXY BOLTS AT 12" O.C. TOP AND BOTTOM STAGGERED. ATTACH EACH RAFTER TO THE LEDGER WITH A SIMPSON LUS HANGER. NOTCH THE BOTTOM OF THE RAFTER AS NEEDED TO FIT IN THE CONNECTOR.
- (R2) ATTACH THE FIRST STUD OF THE WALL ABOVE TO THE EXISTING MASONRY WALL WITH ½"Ø EPOXY BOLTS AT 24" O.C. TOOTH THE NEW BRICK INTO THE EXISTING WALL.
- (R3) EXISTING ROOF FRAMING.
- (R4) EXISTING CEILING JOISTS.
- (R5) TWO L4X3½X¼" STEEL ANGLE LINTEL.
- (R6) MASONRY ARCH TO MATCH THE EXISTING HOME.
- (R7) MASONRY ARCH AND (2)2X8 HEADER.
- (R8) NEW EXTERIOR WALL. USE 2X6 STUDS AT 24" O.C. WITH A SINGLE TOP AND BOTTOM PLATE. EACH RAFTER SHALL ALIGN WITH A STUD. ATTACH EACH RAFTER TO THE WALL WITH A SIMPSON H2.5A.
- (R9) FLANK THE CHIMNEY WITH A RAFTER.
- (R10) OVERBUILT CRICKET

- (S1) PT2X10 CLEAT WITH ½"Ø EPOXY BOLTS AT 32" O.C. TOP AND BOTTOM STAGGERED.
- (S2) PLACE BLOCKING OR BRIDGING BETWEEN THE FLOOR JOISTS WITHIN 12" OF THE EXISTING WALL.
- (S3) PLACE THE NEW FLOOR JOISTS ON THE EXISTING SILL PLATE. EACH FLOOR JOIST SHALL ALIGN WITH THE NEW STUDS IN THE WALL ABOVE.
- (S4) PLACE A FLOOR JOIST NEXT TO THE CHIMNEY WITH 2" OF CLEARANCE.
- (S5) EXISTING 2ND FLOOR FRAMING.
- (S6) EXISTING LOAD BEARING WALL
- (S7) PLACE SOLID BLOCKING AT 24" O.C. IN THE FIRST BAY ON THE EXISTING SILL PLATE. EACH BLOCKING SHALL ALIGN WITH THE NEW STUDS IN THE WALL ABOVE.
- (F1) EXISTING FOUNDATION WALL AND CONCRETE FOOTING. THE EXISTING WALL AND FOOTING CAN SAFELY SUPPORT THE WEIGHT OF THE EXISTING HOME AND THE PROPOSED RENOVATION.
- (F2) EXISTING DECK UNCHANGED.
- (F3) EXISTING STAIRS UNCHANGED.
- (F4) EXISTING 1ST FLOOR FRAMING.
- (F5) EXISTING STEEL BEAM



FOUNDATION & 1ST FLOOR FRAMING PLAN

SCALE: 1/4" = 1'

VAN DYCK
RESIDENCE

710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

HPRB/BZA 12-19-14

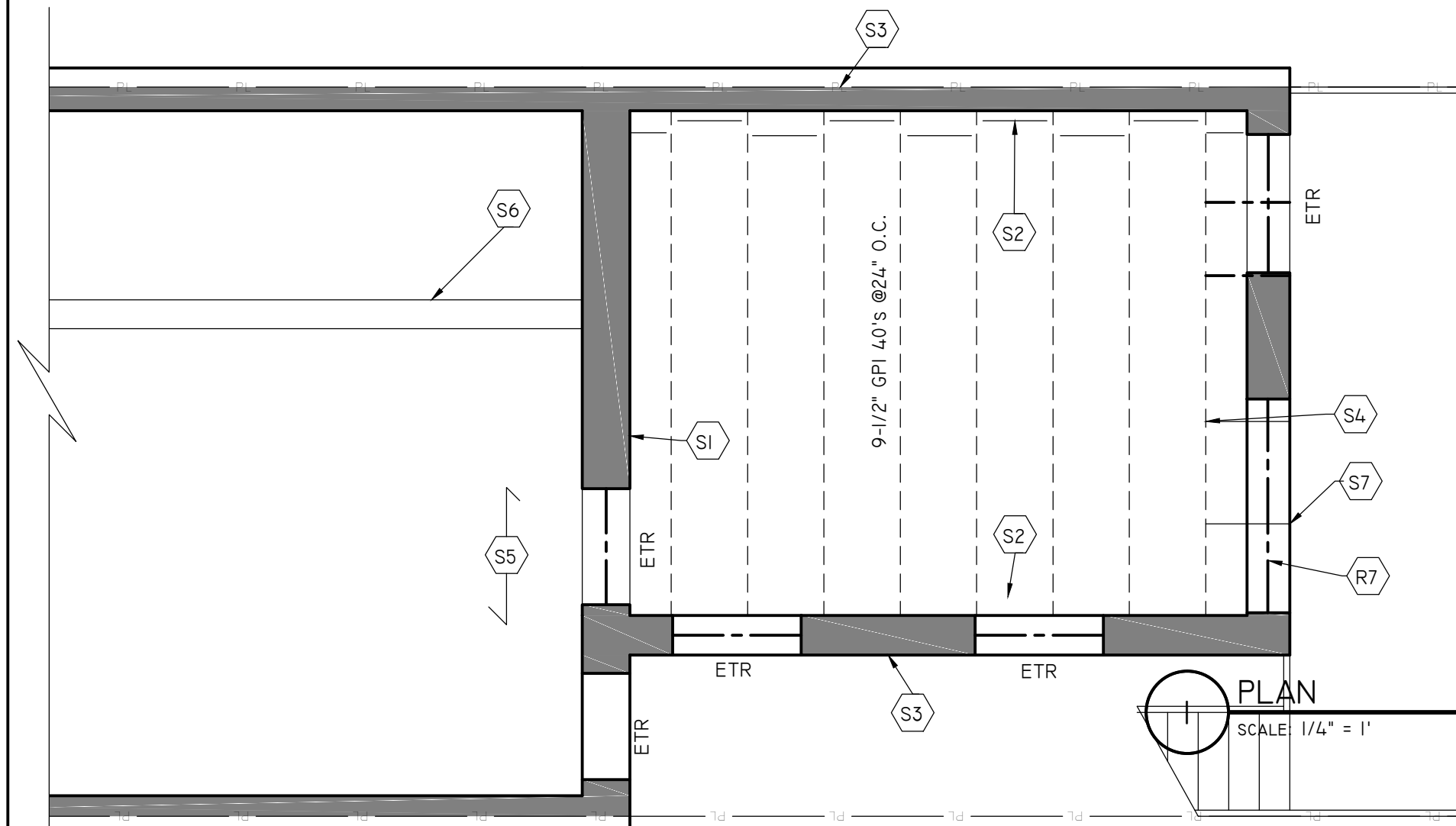
FOUNDATION & 1ST
FLOOR FRAMING
PLAN

FRAMING NOTES:

1. BOTTOM OF ALL FOOTINGS SHALL BE 30" MINIMUM BELOW GRADE.
2. ALL SLAB ON GRADE CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI WITH 6%±1% AIR ENTRAINMENT.
3. SEE ARCHITECTURAL DRAWINGS FOR FIRE RATED ASSEMBLIES
4. PROVIDE SQUASH BLOCKING AS NEEDED BELOW ALL POSTS, COLUMNS, AND MULTIPLE STUDS.
5. PLACE A DOUBLE JOIST BELOW ALL PARTITION WALLS THAT ARE PARALLEL TO THE FLOOR JOISTS. ALTERNATELY PLACE SOLID BLOCKING AT 16" O.C. BELOW THE PARTITION WALLS BETWEEN THE TWO ADJACENT JOISTS.
6. EPOXY BOLTS SHALL BE SIMPSON "SET". FOLLOW MANUFACTURES INSTRUCTIONS FOR INSTALLATION AND THE INSTRUCTIONS OF ESR 1772. UNO ALL BOLTS SHALL HAVE 6" EMBEDMENT.
7. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING DURING CONSTRUCTION AS NEEDED FOR THE EXISTING STRUCTURAL ELEMENTS THAT WILL REMAIN.
8. USE TYPE N LIME BASED MORTAR FOR EXTERIOR BRICK WALL APPLICATIONS. MATCH THE COLOR AND JOINT SIZE IN THE NEW WALL TO THE EXISTING WALL. IF NEW BRICKS ARE USED, THEY SHALL BE MATCHED TO THE EXISTING BRICKS FOR COLOR, SIZE, POROSITY AND STRENGTH.
9. ALL STEEL ANGLE LINTELS SHALL BE LONG LEG VERTICAL (LLV). PROVIDE 4" BEARING FOR STEEL ANGLES ON SOLID MASONRY.
10. WHEN CONNECTING NEW MASONRY TO THE EXISTING MASONRY TOOTH THE NEW WALL INTO THE EXISTING WALL.

- R1 PT2X12 LEDGER WITH ½"Ø EPOXY BOLTS AT 12" O.C. TOP AND BOTTOM STAGGERED. ATTACH EACH RAFTER TO THE LEDGER WITH A SIMPSON LUS HANGER. NOTCH THE BOTTOM OF THE RAFTER AS NEEDED TO FIT IN THE CONNECTOR.
- R2 ATTACH THE FIRST STUD OF THE WALL ABOVE TO THE EXISTING MASONRY WALL WITH ½"Ø EPOXY BOLTS AT 24" O.C. TOOTH THE NEW BRICK INTO THE EXISTING WALL.
- R3 EXISTING ROOF FRAMING.
- R4 EXISTING CEILING JOISTS.
- R5 TWO L4X3½X¼" STEEL ANGLE LINTEL.
- R6 MASONRY ARCH TO MATCH THE EXISTING HOME.
- R7 MASONRY ARCH AND (2)2X8 HEADER.
- R8 NEW EXTERIOR WALL. USE 2X6 STUDS AT 24" O.C. WITH A SINGLE TOP AND BOTTOM PLATE. EACH RAFTER SHALL ALIGN WITH A STUD. ATTACH EACH RAFTER TO THE WALL WITH A SIMPSON H2.5A.
- R9 FLANK THE CHIMNEY WITH A RAFTER.
- R10 OVERBUILT CRICKET

- S1 PT2X10 CLEAT WITH ½"Ø EPOXY BOLTS AT 32" O.C. TOP AND BOTTOM STAGGERED.
- S2 PLACE BLOCKING OR BRIDGING BETWEEN THE FLOOR JOISTS WITHIN 12" OF THE EXISTING WALL.
- S3 PLACE THE NEW FLOOR JOISTS ON THE EXISTING SILL PLATE. EACH FLOOR JOIST SHALL ALIGN WITH THE NEW STUDS IN THE WALL ABOVE.
- S4 PLACE A FLOOR JOIST NEXT TO THE CHIMNEY WITH 2" OF CLEARANCE.
- S5 EXISTING 2ND FLOOR FRAMING.
- S6 EXISTING LOAD BEARING WALL
- S7 PLACE SOLID BLOCKING AT 24" O.C. IN THE FIRST BAY ON THE EXISTING SILL PLATE. EACH BLOCKING SHALL ALIGN WITH THE NEW STUDS IN THE WALL ABOVE.
- F1 EXISTING FOUNDATION WALL AND CONCRETE FOOTING. THE EXISTING WALL AND FOOTING CAN SAFELY SUPPORT THE WEIGHT OF THE EXISTING HOME AND THE PROPOSED RENOVATION.
- F2 EXISTING DECK UNCHANGED.
- F3 EXISTING STAIRS UNCHANGED.
- F4 EXISTING 1ST FLOOR FRAMING.
- F5 EXISTING STEEL BEAM



WIND BRACING NOTES:

NO SPECIAL DETAILS ARE REQUIRED LATERAL BRACING SINCE THE HOME IS BRACED BY THE EXISTING MASONRY SHEAR WALLS THAT WILL NOT BE MODIFIED. THE HOMES ON THE BLOCK FORM AN E SHAPED SYSTEM OF WIND RESISTANCE WITH AN OPEN END ON THE SOUTH SIDE SIMILAR TO LOW RISE SHOPPING CENTERS. THE PARTY WALLS RESIST WIND IN THE NORTH/SOUTH DIRECTION AND FRONT WALL OF THE HOME ACTS AS A PERFORATED SHEAR WALL IN CONJUNCTION WITH THE REST OF THE HOMES ON THE BLOCK TO RESIST EAST/WEST WIND. TO ACCOMPLISH THIS ALL OF THE PARTY WALLS ON THE BLOCK RESIST THE ECCENTRICITY IN THE SYSTEM. THE FLOOR AND ROOF DIAPHRAGMS TRANSFER THE WIND SHEAR TO THE SHEAR WALLS. SEE THE ATTACHED CALCULATION FOR VERIFICATION.

VAN DYCK
RESIDENCE
710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

LICENCES:

DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

HPRB/BZA 12-19-14

2ND FLOOR FRAMING
PLAN

S2

FRAMING NOTES:

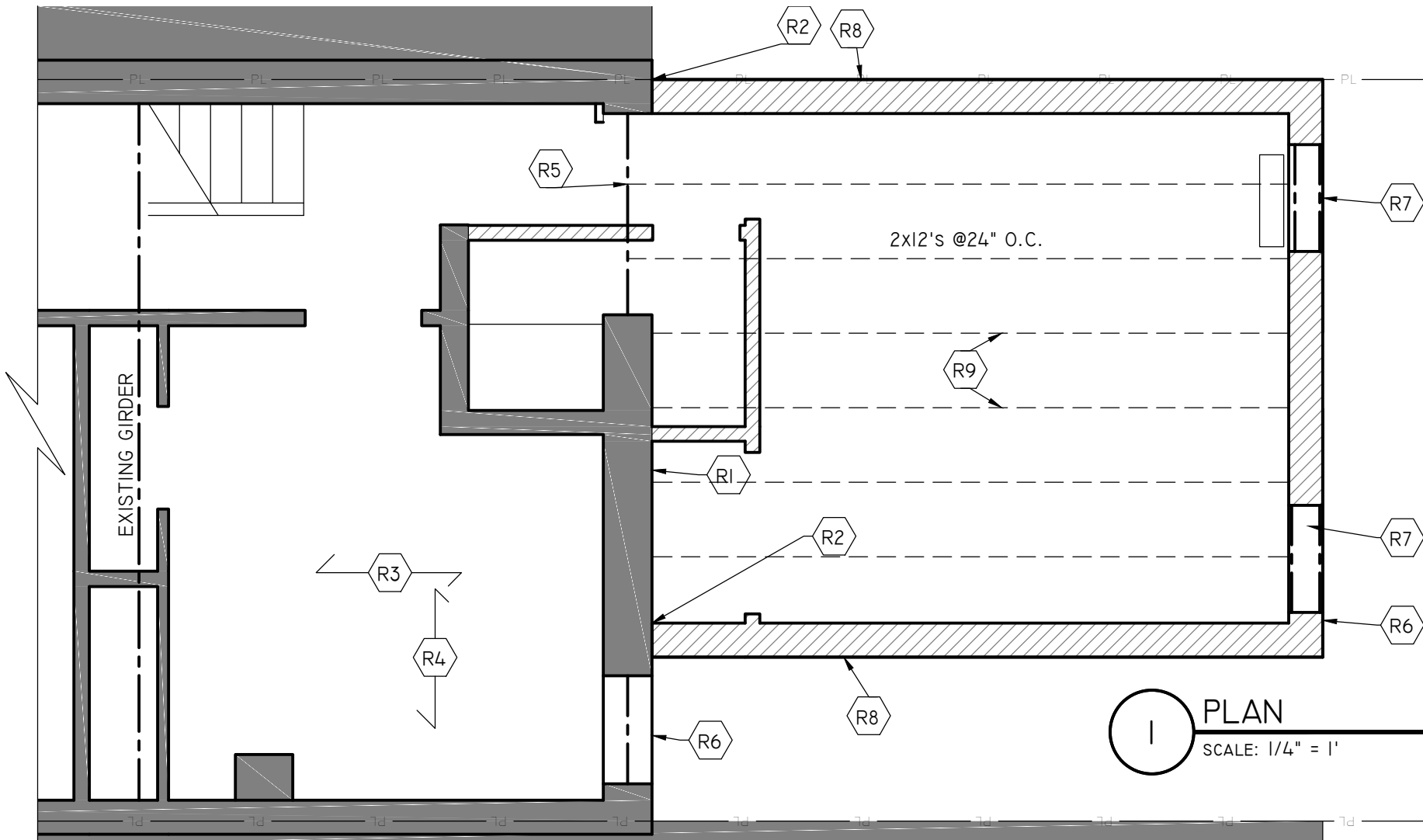
1. BOTTOM OF ALL FOOTINGS SHALL BE 30" MINIMUM BELOW GRADE.
2. ALL SLAB ON GRADE CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI WITH 6%±1% AIR ENTRAINMENT.
3. SEE ARCHITECTURAL DRAWINGS FOR FIRE RATED ASSEMBLIES
4. PROVIDE SQUASH BLOCKING AS NEEDED BELOW ALL POSTS, COLUMNS, AND MULTIPLE STUDS.
5. PLACE A DOUBLE JOIST BELOW ALL PARTITION WALLS THAT ARE PARALLEL TO THE FLOOR JOISTS. ALTERNATELY PLACE SOLID BLOCKING AT 16" O.C. BELOW THE PARTITION WALLS BETWEEN THE TWO ADJACENT JOISTS.
6. EPOXY BOLTS SHALL BE SIMPSON "SET". FOLLOW MANUFACTURES INSTRUCTIONS FOR INSTALLATION AND THE INSTRUCTIONS OF ESR 1772. UNO ALL BOLTS SHALL HAVE 6" EMBEDMENT.
7. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING DURING CONSTRUCTION AS NEEDED FOR THE EXISTING STRUCTURAL ELEMENTS THAT WILL REMAIN.
8. USE TYPE N LIME BASED MORTAR FOR EXTERIOR BRICK WALL APPLICATIONS. MATCH THE COLOR AND JOINT SIZE IN THE NEW WALL TO THE EXISTING WALL. IF NEW BRICKS ARE USED, THEY SHALL BE MATCHED TO THE EXISTING BRICKS FOR COLOR, SIZE, POROSITY AND STRENGTH.
9. ALL STEEL ANGLE LINTELS SHALL BE LONG LEG VERTICAL (LLV). PROVIDE 4" BEARING FOR STEEL ANGLES ON SOLID MASONRY.
10. WHEN CONNECTING NEW MASONRY TO THE EXISTING MASONRY TOOTH THE NEW WALL INTO THE EXISTING WALL.

- R1 PT2X12 LEDGER WITH $\frac{1}{2}$ "Ø EPOXY BOLTS AT 12" O.C. TOP AND BOTTOM STAGGERED. ATTACH EACH RAFTER TO THE LEDGER WITH A SIMPSON LUS HANGER. NOTCH THE BOTTOM OF THE RAFTER AS NEEDED TO FIT IN THE CONNECTOR.
- R2 ATTACH THE FIRST STUD OF THE WALL ABOVE TO THE EXISTING MASONRY WALL WITH $\frac{1}{2}$ "Ø EPOXY BOLTS AT 24" O.C. TOOTH THE NEW BRICK INTO THE EXISTING WALL.
- R3 EXISTING ROOF FRAMING.
- R4 EXISTING CEILING JOISTS.
- R5 TWO L4X3 $\frac{1}{2}$ X $\frac{1}{4}$ " STEEL ANGLE LINTEL.
- R6 MASONRY ARCH TO MATCH THE EXISTING HOME.
- R7 MASONRY ARCH AND (2)2X8 HEADER.
- R8 NEW EXTERIOR WALL. USE 2X6 STUDS AT 24" O.C. WITH A SINGLE TOP AND BOTTOM PLATE. EACH RAFTER SHALL ALIGN WITH A STUD. ATTACH EACH RAFTER TO THE WALL WITH A SIMPSON H2.5A.
- R9 FLANK THE CHIMNEY WITH A RAFTER.
- R10 OVERBUILT CRICKET

- S1 PT2X10 CLEAT WITH $\frac{1}{2}$ "Ø EPOXY BOLTS AT 32" O.C. TOP AND BOTTOM STAGGERED.
- S2 PLACE BLOCKING OR BRIDGING BETWEEN THE FLOOR JOISTS WITHIN 12" OF THE EXISTING WALL.
- S3 PLACE THE NEW FLOOR JOISTS ON THE EXISTING SILL PLATE. EACH FLOOR JOIST SHALL ALIGN WITH THE NEW STUDS IN THE WALL ABOVE.
- S4 PLACE A FLOOR JOIST NEXT TO THE CHIMNEY WITH 2" OF CLEARANCE.
- S5 EXISTING 2ND FLOOR FRAMING.
- S6 EXISTING LOAD BEARING WALL
- S7 PLACE SOLID BLOCKING AT 24" O.C. IN THE FIRST BAY ON THE EXISTING SILL PLATE. EACH BLOCKING SHALL ALIGN WITH THE NEW STUDS IN THE WALL ABOVE.
- F1 EXISTING FOUNDATION WALL AND CONCRETE FOOTING. THE EXISTING WALL AND FOOTING CAN SAFELY SUPPORT THE WEIGHT OF THE EXISTING HOME AND THE PROPOSED RENOVATION.
- F2 EXISTING DECK UNCHANGED.
- F3 EXISTING STAIRS UNCHANGED.
- F4 EXISTING 1ST FLOOR FRAMING.
- F5 EXISTING STEEL BEAM

WIND BRACING NOTES:

NO SPECIAL DETAILS ARE REQUIRED LATERAL BRACING SINCE THE HOME IS BRACED BY THE EXISTING MASONRY SHEAR WALLS THAT WILL NOT BE MODIFIED. THE HOMES ON THE BLOCK FORM AN E SHAPED SYSTEM OF WIND RESISTANCE WITH AN OPEN END ON THE SOUTH SIDE SIMILAR TO LOW RISE SHOPPING CENTERS. THE PARTY WALLS RESIST WIND IN THE NORTH/SOUTH DIRECTION AND FRONT WALL OF THE HOME ACTS AS A PERFORATED SHEAR WALL IN CONJUNCTION WITH THE REST OF THE HOMES ON THE BLOCK TO RESIST EAST/WEST WIND. TO ACCOMPLISH THIS ALL OF THE PARTY WALLS ON THE BLOCK RESIST THE ECCENTRICITY IN THE SYSTEM. THE FLOOR AND ROOF DIAPHRAGMS TRANSFER THE WIND SHEAR TO THE SHEAR WALLS. SEE THE ATTACHED CALCULATION FOR VERIFICATION.



VAN DYCK
RESIDENCE
710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

HPRB/BZA 12-19-14

ROOF FRAMING
PLAN

S3

1. All work and materials to comply with the requirements of the 2012 IBC codes with the DCMR 12A-2013 Supplement.
2. Codes: the following design standards are applicable by reference:
ACI 530-11/ASCE 5-11 Building Code Requirements for Masonry Structures.
AITC - Timber Construction Manual - fifth Ed.
ACI 318-11 Building Code Requirements for Reinforced Concrete
AISC - Manual of Steel Construction Ninth Ed.
3. Foundations: footings and slab on grades are designed to bear on native soil type SM or SC with an allowable bearing pressure of 1500 psf. A qualified soil-bearing inspector prior to placement of concrete shall verify all bearing values.
4. Structural steel:

A. All structural steel, including detail material shall conform to ASTM A572 Fy = 50ksi, U.N.O.

B. All structural tubing shall conform to ASTM A500, grd.B

C. All steel pipe shall be ASTM A53, type E or S, grade B

D. All welders shop and field, shall be certified. Use E70xx electrodes only.

E. All steel exposed to weather and exterior masonry support shall receive one shop coat of corrosion-inhibiting primer.

F. Detailing, fabrication and erection shall be in accordance with AISC. Adequately brace all steel against lateral loads during erection.

G. All exterior structural steel shall receive rust preventative paint.

H. Connections:

I. All beam connections shall be simple shear connections, U.N.O. Where no reaction is provided, the beam shall be assumed to carry 120 % of the allowable uniform load in Kips for beams laterally supported, as given in the AISC steel construction manual.

II. Except as noted, all fasteners shall be 3/4" diameter ASTM A325 bolts, designed to act in bearing type connections with threads included.
5. Lumber:

A. Lumber shall be SPF #2 with a min. Fb = 875psi Min. Fv = 135psi and min. E = 1,400,000psi.

B. LVL and PSL shall have a min. Fb = 2850psi; Fv = 285psi; E = 2,000,000psi.

C. Floor decking shall be ¾" APA rated decking. Roof decking shall be 5/8" APA rated decking. Wall sheathing shall be 7/16"OSB. Glue and nail roof and floor decking to joists and rafters.

D. Exterior wood walls shall be 2x6 studs at 24" o.c. and interior wood walls shall be 2x4 studs at 24" O.C. with a single top plate and bottom plate. Provide solid blocking at the midheight of each wall and at a minimum of 48" O.C. vertically. All studs, joists and rafters shall align.

E. Provide double joists under all walls that run parallel to floor framing.

F. Nail all multiple members together per the manufacturer's recommendations and at a minimum use 2-10d nails at 6" O.C. staggered.

G. Provide bridging at center of all joist spans Exceeding 8'-0" and at 1/3 points of all joist spans exceeding 16'-0". Provide solid blocking at all bearing points on top of walls or beams.

H. Provide solid blocking below all wood posts.

I. All posts shall have Simpson Cap and Base Plates typ.

J. All joists shall have Simpson Hangers where applicable.

K. Glue all multiple studs together. Nail together with 2-10d nails at 3" O.C. Stagger the sides of the studs that the nails are driven from.

L. All lumber in contact with masonry or concrete or within in 8" of soil shall be pressure treated. All lumber to conform to IRC R319 for protection against corrosion and termite damage.

M. All lumber shall be kiln dried. Store lumber on site in such a manner as to prevent the seepage of water into the wood.

N. Wood Lintels shall be as follows:

Opening ≤ 3'-0" - 2-2x6

3'-0" < Opening ≤ 5'-0" - 2-2x8

5'-0"< Opening ≤ 8'-0" - 2-2x10

Greater than 8'-0" - See plans

6. Fasteners:

A. All prefabricated angles, bearing plates, and joist hangers shall be installed per the manufacturer recommendations.

B. Follow the manufacturer recommendations for setting epoxy bolts.

C. Expansion bolts shall be rawl power studs.
7. Masonry:

A. Masonry construction shall be in conformance with the applicable sections of ACI 530-11/ASCE5-11, "Specifications for Masonry Structures."

B. Concrete masonry units shall be hollow load bearing units (ASTM C90) grade n-1 with a net strength of 2000psi and F'm - 1500psi.

C. All joints to be filled solid with mortar.

D. Mortar to comply with ASTM C270 (type M or S).

E. Provide corrugated masonry ties between brick facia and wood walls or cmu walls at 16" O.C. in each direction.

F. Provide 9ga truss style joint reinforcement @ 16" O.C. vertically.

G. Lintels shall be as follows:

Opening ≤ 3'-0" - L4x3½ x¼ LLV/ 4" of wall

3'-0" < Opening ≤ 7'-0" - L6x3½x5/16 LLV/ 4" of wall.

Opening > 7'-0" - See Plan
8. Cast in place concrete:

A. Concrete construction shall be in conformance with the applicable sections of ACI 318-11, "Part 3 - Construction Requirements."

B. Concrete shall have a minimum compressive strength at 28 days of 3000psi, UNO (unless noted otherwise).

C. All concrete shall be placed with a slump of 4" (± ½")

D. All concrete shall be normal weight, UNO.

E. All concrete exposed to weather shall have 6% ±1% entrained air.

F. Contractor shall pour extra concrete to account for the deflection of the formwork to provide a flat finished surface.

G. Concrete cover for reinforcement shall be:

Columns and beams 1½"

Slabs ¾"

Footings 3"
9. Reinforcement:

A. Reinforcing bars shall be deformed bars conforming to ASTM A615, grade 60 (Fy = 60ksi)

B. Welded wire fabric (wwf) shall conform to ASTM a185. Lap edges of wire fabric at least 6" in each direction.
10. Dimensions: The contractor shall field verify all dimensions prior to fabrication of structural components.
11. Coordination: The contractor shall coordinate all sleeves, duct openings and holes between trades. Any conduits or pipes embedded in concrete must be in accordance with ACI 318-11, chapter 6. Where sleeves are closely spaced in a group, the group shall be treated as an opening and reinforced accordingly. Submit drawings showing all opening sizes and locations for the approval by the structural engineer.

Dead Loads:	
SPF #2 -	25 PCF
½ Decking -	1.7 PSF
¾" Decking -	2.5 PSF
Asphalt Shingles -	2.5 PSF
Slate Shingles -	15 PSF
½" Drywall -	2.2 PSF
Insulation -	1.5 PSF
Siding -	2.0 PSF
CMU -	87 PCF
Brick -	130 PCF
LIVE LOADS:	
DECK:	40PSF
ATTIC:	20PSF
FLOOR:	40PSF
BALCONY	60PSF
BEDROOM	40PSF
ROOF:	30PSF
WIND LOADS	
BASIC WIND SPEED:	90MPH
WIND LOAD IMPORTANCE FACTOR:	1.0
WIND EXPOSURE FACTOR:	B
WIND DESIGN PRESSURE:	20PSF
SNOW LOADS:	
GROUND SNOW LOAD (PG):	30PSF
FLAT ROOF SNOW LOAD(PF):	30PSF
SNOW EXPOSURE FACTOR (CE):	0.9
SNOW IMPORTANCE FACTOR (I):	1.0
Deflection Limitations:	
Rafters:	L/240
Interior Walls and Partitions:	H/180
Floors and Plastered Ceilings:	L/360
All Other Structural Members:	L/240
Ext. Walls with plaster or stucco finishes:	L/360
Ext. Walls - Wind Loads with Brittle Finishes:	L/240
Ext. walls - Wind Loads with Flexible Finishes:	L/120
SEISMIC DESIGN DATA:	
SEISMIC IMPORTANCE FACTOR (Ie):	1.0
SPECTRAL RESPONSE ACCELERATIONS:	
(Ss):	20.0%
(S1):	8.0%
SPECTRAL RESPONSE COEFFICIENTS:	
(Sds):	33%
(Sd1):	18.7%
SEISMIC DESIGN CATEGORY:	B
SEISMIC SITE CLASSIFICATION:	D
SEISMIC COEFFICIENT (Cs):	0.22
SEISMIC MODIFICATION FACTOR (R):	1.5
BASE SHEAR:	12.3k
ANALYSIS PROCEDURE:	EQUIV.
LATERAL FORCE	
BASIC SFRS:	ORDINARY
PLAIN MASONRY	
	SHEAR WALLS
	FRAMED
AND LIGHT	
WALLS.	

VAN DYCK
RESIDENCE
710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

LICENCES:
DC: ARC I0I3I5
EXPIRES 4/30/16
MD: I6049
EXPIRES II/23/I5
VA: 040I0I5785
EXPIRES 9/23/I5

ISSUE:

HPRB/BZA 12-19-14

STRUCTURAL NOTES

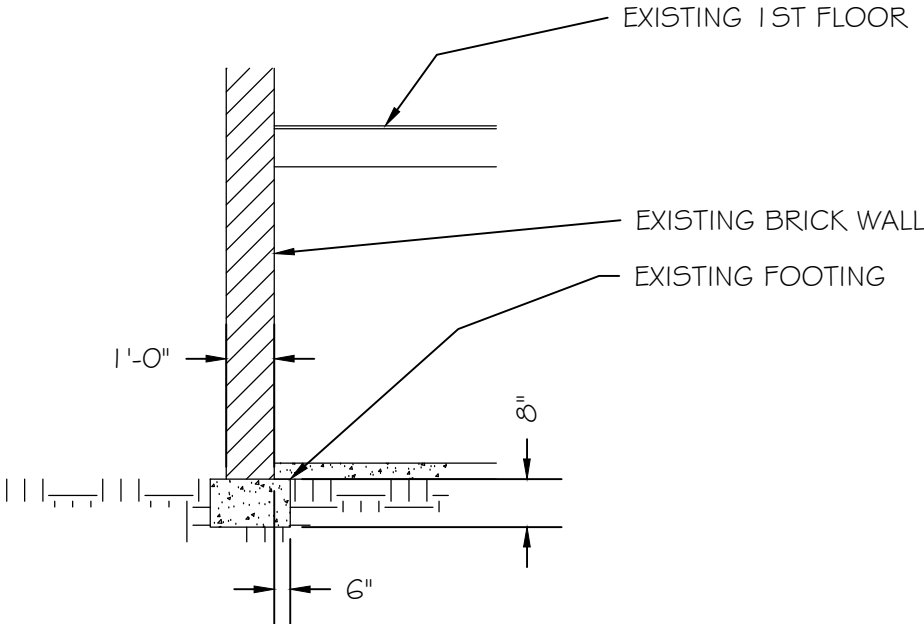
Existing Foundation				
Item	Dead plf	Live plf	Snow plf	Trib A SF
Roof	218		435	203
Attic	0	0		0
2nd	34	136		48
1st	34	136		48
Exterior Wall	1134			
Foundation Wall	756			
Footing	200			
Totals:	2375	271	435	299

LL Reduction = 86%
D + L = 2610 plf
D + 0.75L + 0.75S = 2877 plf Governs

Footing Width = 2.00 Ft **Wall is 12" thick + (2)*6" = 24" wide footing**
Bearing Pressure = 1439 PSF < 1500 PSF Okay

For the purposes of determining the tributary width for LL reduction loads are assumed to spread through the wall at a slope of 12H:12V; Therefore the tributary width for the 1st floor, 2nd floor and Roof are taken as 14' of the existing foundation wall

Existing Footing Calculation



Test Pit Results

Scale: NOT TO SCALE

and 1st Floor diaphragms shall transfer the wind shear to the existing perforated walls at the front of the home (South).

Diaphragm Calculation

Specific Gravity Factor = 0.92; Wind Increase Factor = 1.4
Allowable Load Per Table R2306.2.1(1) (6d Nails) Pa = 185x1.4x0.92 = 238PLF > 180 PLF max Okay

L = 54.5 ft b = 18.67 ft
v = 180 plf Gt = 77500 pli
A = 154.0275 sqin en = 0.03 in
E = 1.00E+06 psi Sigma Delta C*X 10.92 in-ft

Delta = 0.63 in = L/ 1036

Masonry Shear Wall Design

North South Wind

h = 28 ft
W = 420 plf
S = 248832 cu-in
Dead Load = 33 psi
0.6 D Pressure = 19.69 psi
Fb = 58.00 psi
(0.6D + Fb) 77.7 psi
M = 164,640 lbs-ft
Ma = 1,610,928 lbs-ft

East West Wind

h = 28 ft
W = 216 plf
S = 82032 cu-in
Dead Load 18 psi
0.6 D Pres: 11.03 psi
Fb = 58.00 psi
(0.6D + Fb) 69.0 psi
M = 84,672 lbs-ft
Ma = 471,854 lbs-ft

Existing Masonry Shear Walls Okay

Existing Masonry Shear Walls Okay

Wind Bracing Calculation

VAN DYCK
RESIDENCE

710 A STREET, NE
WASHINGTON, DC
20002

ADDITION PROJECT

HARDWICK
STUDIO, PLLC

GAY WIERDSMA
HARDWICK
A.I.A., LEED AP, MBA

3505 KENT STREET
KENSINGTON, MD 20895
202.455.6733
GAY@GREENARCHITECTDC.COM

NOT FOR
CONSTRUCTION OR
PERMIT APPLICATION

LICENCES:
DC: ARC 101315
EXPIRES 4/30/16
MD: 16049
EXPIRES 11/23/15
VA: 0401015785
EXPIRES 9/23/15

ISSUE:

HPRB/BZA 12-19-14

STRUCTURAL
CALCULATIONS

DISTRICT OF COLUMBIA GOVERNMENT
OFFICE OF THE SURVEYOR

Washington, D.C., October 15, 2014

Plat for Building Permit of: SQUARE 896 LOT 41

Scale: 1 inch = 20 feet Recorded in Book 17 Page 8

Receipt No. 15-00305

Furnished to: GAY W. HARDWICK

I hereby certify that all existing improvements shown thereon, are completely dimensioned, and are correctly platted; that all proposed buildings or construction, or parts thereof, including covered porches, are correctly dimensioned and platted and agree with plans accompanying the application; that the foundation plans as shown hereon is drawn, and dimensioned accurately to the same scale as the property lines shown on this plat; and that by reason of the proposed improvements to be erected as shown hereon the size of any adjoining Lot or premises is not decreased to an area less than is required by the Zoning Regulations for light and ventilation; and it is further certified that all Lot divisions or combinations pending at the Office of Tax & Revenue are correctly depicted, and it is further certified and agreed that accessible parking area where required by the Zoning Regulations will be reserved in accordance with the Zoning Regulations, and that this area has been correctly drawn and dimensioned hereon. It is further agreed that the elevation of the accessible parking area with respect to the Highway Department approved curb and alley grade will not result in a rate of grade along centerline of driveway at any point on private property in excess of 20% for single-family dwellings or flats, or in excess of 12% at any point for other buildings. (The policy of the Highway Department permits a maximum driveway grade of 12% across the public parking and private restricted property.) Owner/Agent shall indemnify, defend, and hold the District, its officers, employees and agents harmless from and against any and all losses, costs, claims, damages, liabilities, and causes of action (including reasonable attorneys' fees and court costs) arising out of death of or injury to any person or damage to any property occurring on or adjacent to the Property and directly or indirectly caused by any acts done thereon or any acts or omissions of Owner/Agent; provided however, that the foregoing indemnity shall not apply to any losses, costs, claims, damages, liabilities, and causes of action due solely to the gross negligence or willful misconduct of District or its officers, employees or agents.

Surveyor, D.C.

By: A.S.

Date: _____

(Signature of owner or his authorized agent)

NOTE: Data shown for Assessment and Taxation Lots or Parcels are in accordance with the records of the Department of Finance and Revenue, Assessment Administration, and do not necessarily agree with deed description.

