

Record Detail (This section is required.)

Permit Type Building/Residential/Mech/Add Alt Permit Number M24001298 Opened Date 11/15/2024
 Description of Work REPLACE EXISTING HVAC SYSTEM WITH GEOTHERMAL SYSTEM USING (1) W5AV048 4-TON UNIT, (1) W5AV026 2-TON UNIT AND (1) NDZ049 4-TON UNIT; WE WILL USE EXISTING DUCTWORK AND USE NEW HORIZONTAL GEOTHERMAL LOOPS.

3P for Horizontal Loop
 approved 1/8/25 (MJ)

[check spelling](#)

Address (This section is required.)

Search Reset Clear Get Parcel & Owner
 Street # 12580 Street Name HALL SHOP Street Type RD
 Unit Type -Select- Unit # X Coordinate -76.9488 Y Coordinate 39.17724
 City FULTON State MD Zip Code 20759 Primary Yes

Parcel (This section is required.)

Search Reset Clear Get Address & Owner
 GIS ID 850465 Parcel 333 Parcel Area 5.76 Land Value 290700 Improved Value 0 Exemption Value 1179800 Plan Area RURAL
 Legal Description 5.755 A []12580 HALL SHOP RD []HIGHLAND

[check spelling](#)

Block Lot Census Tract 605102 Council Dist 4 Inspection Dist Supervisor Dist Map # DAP Zone
 Plan Area State Tax Id 1405364086 Subdivision Name
 Section Area Tax Map 40
 Grid 40-5 Zoning District RR-DEO ADC Map 5051-J2
 SDP No. Final Plan No. WP File No.
 Record Plat No. WS Contract No. FDP No. Primary Yes
 Owner Occupied Year Built 1994 Historic District Yes No
 Historic District Registry No. Stat Area 5-15A Flood Plain Yes No
 Building No

Owner (This section is required.)

Search Reset Clear
 Name MOEHI
 Address Line 1 12580 HALL SHOP RD
 Address Line 2
 Address Line 3
 Mail City FULTON
 Mail State MD
 Mail Zip Code 20759
 Phone 443-797-3340
 Primary Yes
 E-mail

Cell Number Fax Number

Professionals (This section is required.)

License #
05010006539

License Type
HVACR

Primary
Yes

Business Name
GROUND LOOP HEATING & AIR CONDITIONING, INC

First Name **Middle Name** **Last Name**
MICHAEL E CULLUM

Address Line 1
1701 WHITEFORD RD

Address Line 2

City **State** **ZIP Code**
DARLINGTON MD 21034-0000

Phone 1 **Phone 2** **Fax**
4108361706 4104570581

E-mail
MIKE@GROUNDLOOP.COM

Applicant (This section is not required.)

Search **As Owner** **As Lic. Prof** **As Contact**

Type
Applicant

Relationship
Applicant

Primary
Yes

First Name **MI** **Last Name**
MICHAEL E CULLUM

Full Name

Organization Name
GROUND LOOP HEATING & AIR CONDITIONING, INC

Street Address
1701 WHITEFORD RD

Address Line 2

City **State** **Zip Code**
DARLINGTON MD 21034-0000

Phone **Cell** **Fax**
4108361706 4104570581

E-mail
MIKE@GROUNDLOOP.COM

HVAC INFORMATION

HVAC INFORMATION

Capital Project-No Fee **Capital Project Number** **Fee Exempt** **Building Permit No** **Existing Use** **Geothermal**
 Yes No (Text) Yes No N/A (Text) SFD Yes No

Number of Zones **Number of MF Units** **HVACR System** **Water Supply** **Sewage Disposal** **Expiration Date**
3 ZONES (Number) 0 UNITS (Number) --Select-- Public Public 5/18/2025

Submit **Cancel**

ABBREVIATIONS & SYMBOLS

Ø DIA	DIAMETER	LF	LINEAR FOOT
AB	ANCHOR BOLT	LL	LIVE LOAD
ADDL	ADDITIONAL	LLH	LONG LEG HORIZONTAL
AGG	AGGREGATE	LLV	LONG LEG VERTICAL
ANC	ANCHOR ANCHORAGE	LOC	LOCATION
BLDG	BUILDING	LONGIT	LONGITUDINAL
BM	BEAM	LW	LONG WAY
BTM	BOTTOM	MATL	MATERIAL
BP	BASE PLATE	MAX	MAXIMUM
BUL	BUILT UP	MFR	MANUFACTURE, MANUFACTURER
BW	BOTH WAYS	MIB	MISCELLANEOUS
CANT	CANTILEVER	MISC	MISCELLANEOUS
CC	CENTER TO CENTER	MTL	METAL
CAST	CAST IN PLACE	NO#	NUMBER
CJ	CONTROL JOINT	NOM	NOMINAL
CJP	COMPLETE JOINT PENETRATION	NS	NEAR SIDE
CL	CENTER LINE	NTS	NOT TO SCALE
CLR	CLEAR	OC	ON CENTER
COL	COLUMN	OH	OVER HEAD, OPPOSITE HAND
CONC	CONCRETE	OPP	OPPOSITE
CONN	CONNECTION	OPNG	OPENING
CONT	CONTINUOUS	PCF	POUNDS PER CUBIC FOOT
COORD	COORDINATE COORDINATION	PEN	PENETRATION
CTR	CENTER	PERP	PERPENDICULAR
D	DEEP/DEPTH	PJP	PARTIAL JOINT PENETRATION
DBL	DOUBLE	PL	PLATE
DET	DETAIL	PSF	POUNDS PER SQUARE FOOT
DIMPH	DIMPH/SM	PSI	POUNDS PER SQUARE INCH
DIM	DIMENSION	PT	POINT-TO-TENSION
DL	DEAD LOAD	R	RADIUS
DWG	DRAWING	REF	REFERENCE
EA	EACH	REINF	REINFORCEMENT REINFORCE
EF	EACH FACE	REV	REVISE/REVISION
EL	ELEVATION	RH	RIGHT HAND
ES	EACH SIDE	SC	SLIP CRITICAL
EQ	EQUAL	SCHED	SCHEDULE
EW	EACH WAY	SECT	SECTION
EXIST	EXISTING	SHIT	SHEET
EXP	EXPANSION	SIM	SIMILAR
EXPJT	EXPANSION JOINT	SOG	SLAB ON GRADE
FDN	FOUNDATION	SPEC	SPECIFICATION
FF	FAR FACE	SS	STAINLESS STEEL
FR	FINISH	SSL	SHORT SLOTTED(HOLES)
FTG	FEET FOOT	STD	STANDARD
FTQ	FOOTING	STL	STEEL
GA	GAGE GAUGE	STRUCT	STRUCTURAL STRUCTURE
GALV	GALVANIZED	SYM	SYMMETRICAL
GEN	GENERAL	T	TOP
GL	GRID LINE	T&B	TOP&BOTTOM
HORIZ	HORIZONTAL	TEMP	TEMPERATURE TEMPORARY
HS	HIGH STRENGTH	THK	THICK THICKNESS
HSS	HOLLOW STEEL SHAPE	THRU	THROUGH
HGT	HEIGHT	TYP	TYPICAL
INCH	INCH	UNO	UNLESS NOTED OTHERWISE
JT	JOINT	VERT.	VERTICAL
K	KIPS (1,000 LB)	W	WIDTH
KSF	KIPS PER SQUARE FOOT	W	WIDTH/WIDE
LB	POUND	WO	WITHOUT
DL	DEVELOPMENT LENGTH	WP	WORKING POINT

David Wawro

757 Weller Dr Mt Airy, MD 21771

DRAWING INDEX

SHEET NUMBER	SHEET NAME
C101	COVER SHEET
A101	EXISTING ARCHITECTURAL FLOOR PLAN
A102	PROPOSED ARCHITECTURAL FLOOR PLAN
A103	ELEVATIONS
A104	ARCHITECTURAL SCHEDULE
A105	ARCHITECTURAL GENERAL NOTES
S101	PROPOSED STRUCTURAL FLOOR PLAN
S102	PROPOSED STRUCTURAL FLOOR PLAN
S103	PROPOSED STRUCTURAL FLOOR PLAN AND DETAILS
S104	PROPOSED STRUCTURAL FLOOR PLAN AND DETAILS
S105	PROPOSED STRUCTURAL DETAILS
S106	PROPOSED STRUCTURAL DETAILS
S107	GENERAL STRUCTURAL NOTES
M101	MECHANICAL FLOOR PLAN
P101	PLUMBING FLOOR PLAN
P102	PLUMBING GENERAL NOTE

DESIGN CRITERIA
SCOPE TO ADD A 3 STORES ADDITIONAL

2018 IBC/IRC referenced Codes include:

- 2018 International Residential Code
- 2018 International Mechanical Code
- 2018 International Plumbing Code
- 2018 International Existing Building Code

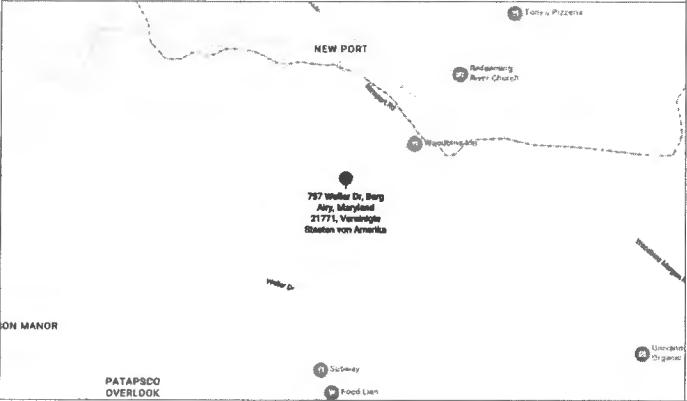
GOVERNING CODE:

- Residential Code 2018 of Maryland IRC 2018
- Existing Building Code 2015 of Maryland EBC 2015
- Plumbing Code 2015 of Maryland PFC 2015
- Mechanical Code 2018 of Maryland MFC 2018
- Energy Conservation Code 2018 of Maryland ECC 2018
- Property Maintenance Code 2017 of Maryland PFC 2017
- Approved Electrical Code 2017 of Maryland MFC 2017
- Building Code Requirements for Structural Concrete of Maryland ACI 318 2014

GENERAL CONSTRUCTION NOTES

- 1- GENERAL NOTES APPLY TO ALL DRAWINGS
- 2- DO NOT SCALE DIMENSIONS. ANY DIMENSIONAL INFORMATION REQUIRED WHICH IS NOT INDICATED ON DRAWING DIMENSION STRIPES SHALL BE OBTAINED FROM THE ARCHITECT.
- 3- DIMENSIONS SHOWN ARE FINISH SURFACE OF EXISTING CONSTRUCTION, UNLESS NOTED OTHERWISE
- 4- CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS (IE EXISTING MATERIALS, FINISHING MATERIALS AND LOCATIONS, METHODS OF CONSTRUCTION). IF DISCREPANCIES ARE FOUND, NOTIFY ARCHITECT BEFORE PROCEEDING WITH WORK.
- 5- CONTRACTOR SHALL PAY ALL PERMIT FEES.
- 6- CONTRACTOR SHALL MAINTAIN THE EXISTING CONSTRUCTION SITE IN A SECURE, CLEAN AND SAFE MANNER.
- 7- PROTECTION: CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR TAKING ALL NECESSARY STEPS TO PROTECT THE PUBLIC FROM BLURRY AND ADJACENT PROPERTY DAMAGES DURING CONSTRUCTION AS REQUIRED BY LOCAL ORDINANCES.
- 8- REPAIR ALL EXISTING CONSTRUCTION AFFECTED BY NEW WORK TO ITS ORIGINAL CONDITION.
- 9- THESE DRAWINGS MUST BE APPROVED BY THE COUNTY AND BUILDING PERMITS BUREAU. THESE PLANS SHALL NOT BE USED FOR CONSTRUCTION WITHOUT PERMITS AUTHORIZED BY THE COUNTY.

VICINITY PLAN



UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO FACE UNLESS INDICATED OTHERWISE. DIMENSIONS TO FACE SHALL BE INDICATED BY A DIMENSION LINE WITH AN ARROW POINTING TO THE FACE TO WHICH THE DIMENSION APPLIES. DIMENSIONS TO CENTER SHALL BE INDICATED BY A DIMENSION LINE WITH AN ARROW POINTING TO THE CENTER OF THE OBJECT TO WHICH THE DIMENSION APPLIES. DIMENSIONS TO SURFACE SHALL BE INDICATED BY A DIMENSION LINE WITH AN ARROW POINTING TO THE SURFACE TO WHICH THE DIMENSION APPLIES. DIMENSIONS TO CENTER OF GRAVITY SHALL BE INDICATED BY A DIMENSION LINE WITH AN ARROW POINTING TO THE CENTER OF GRAVITY OF THE OBJECT TO WHICH THE DIMENSION APPLIES.

Empower Infrastructure LLC
1140 3rd St NE, Second Floor
Washington, DC 20002
USA
www.empower.com

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Date: 2024.04.10 16:48:26 -04'00'

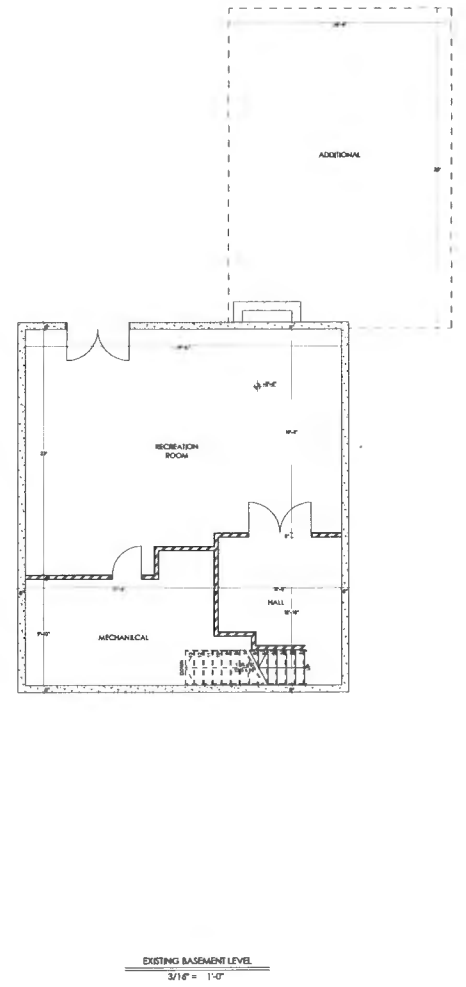
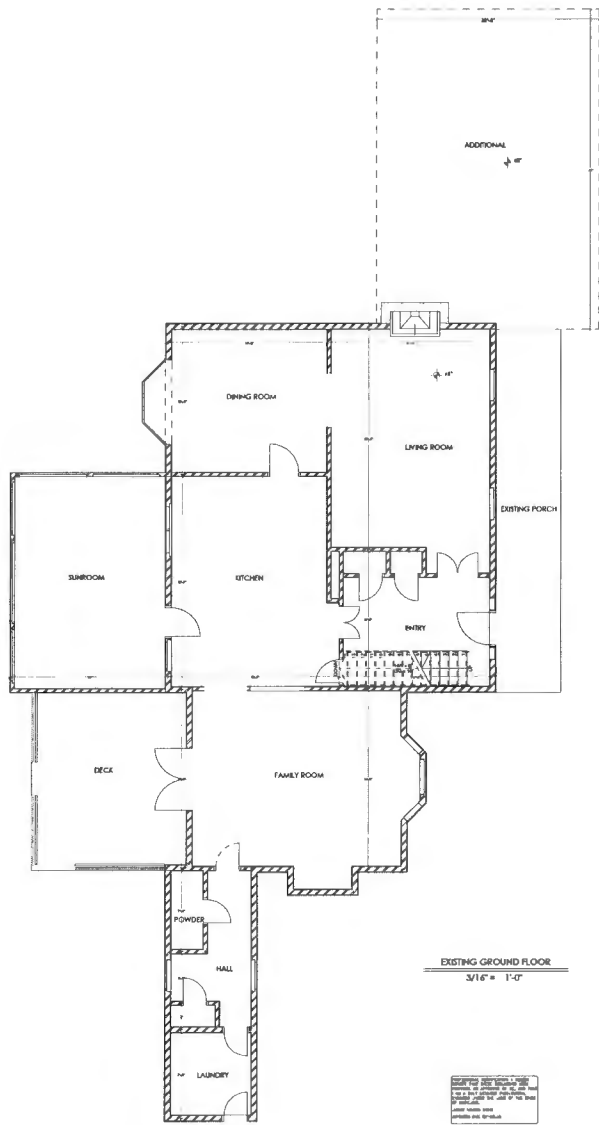
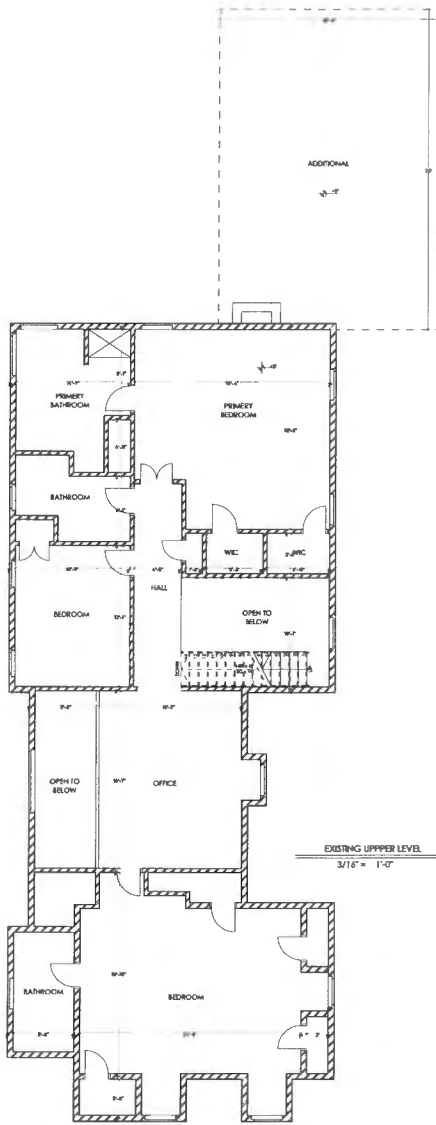
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REVISIONS	DATE	DESCRIPTION

Owner: **David Wawro**
Project Address: **757 Weller Dr Mt Airy, MD 21771**

Drawn By: **N. SOORANI**
Designed By: **A. ZAMANI**
Checked By: **A. ZAMANI**
Scale:

Project No. **MD-20703**
Rev. No. **C101**



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 1140 3rd St. NE, Second Floor
 Washington, DC 20002
 USA
 www.adm.com



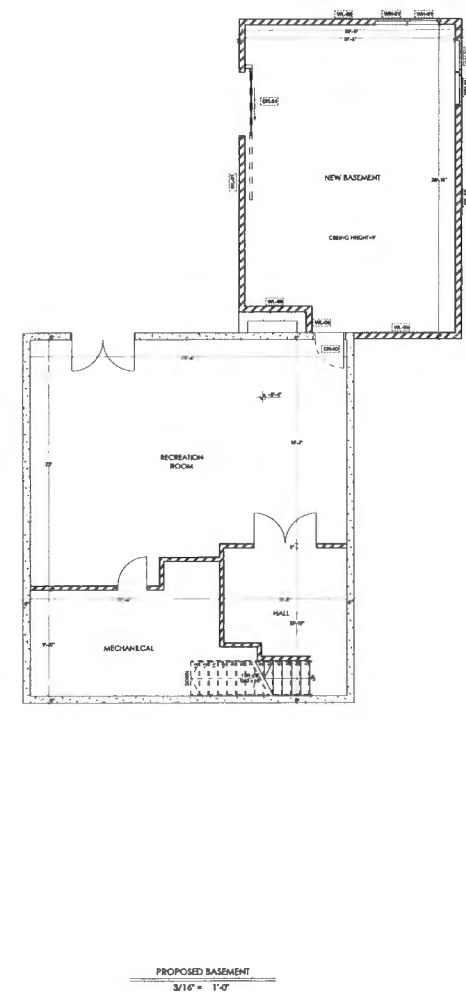
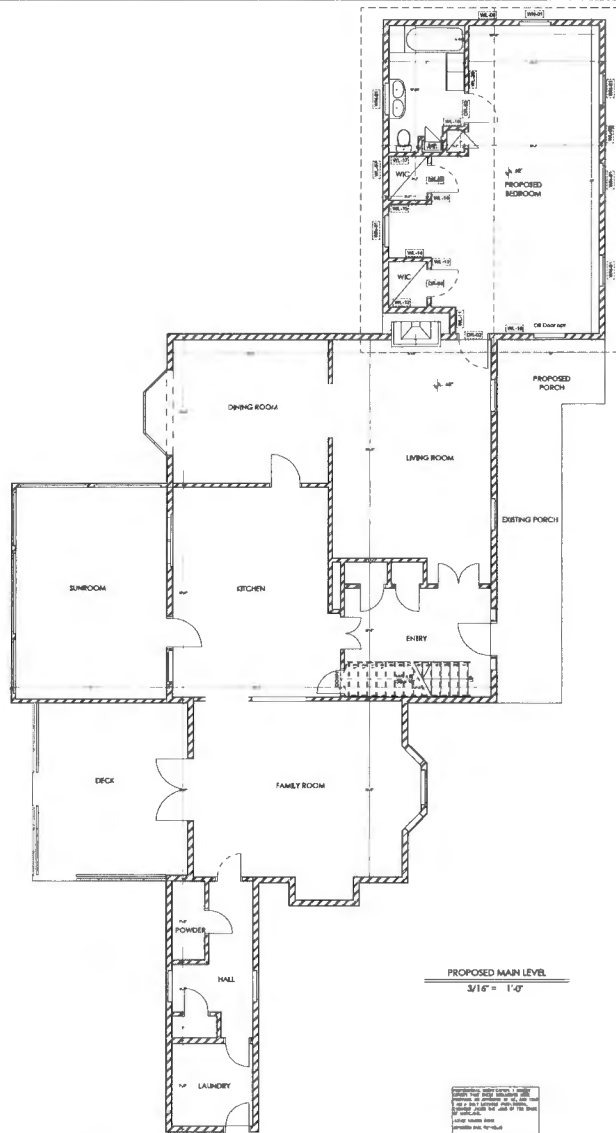
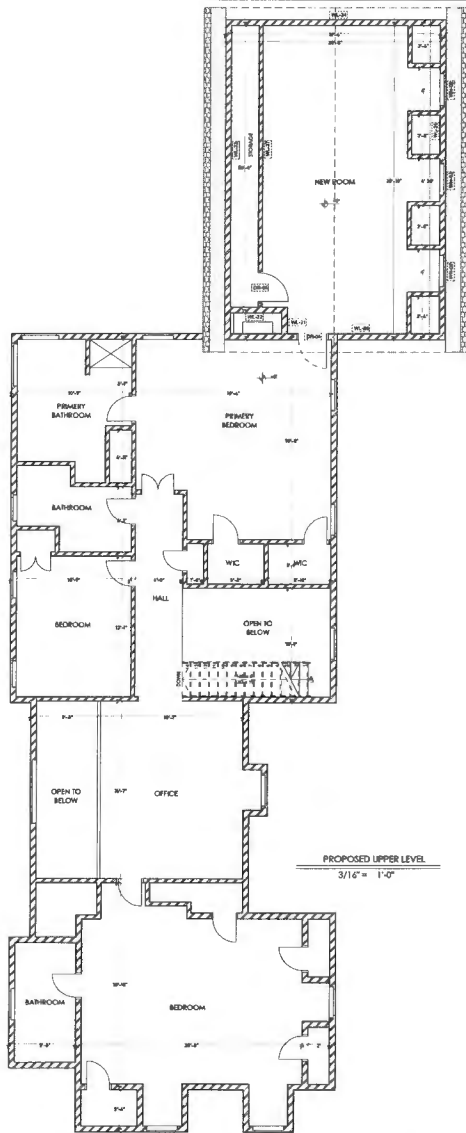
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REVISIONS

Owner: **David Wawro**
 Project Address:
757 Weller Dr Mt Airy, MD 21771

Drawn By: H.SOORANI	Dep. Title:
Designed By: H.SOORANI	EXISTING ARCHITECTURAL FLOOR PLAN
Checked By: A.ZAMANI	
Scale: 3/16" = 1'-0"	Project No. MD-20703
	Dep. No. A101
	Rev. No.



PROPOSED UPPER LEVEL
3/16" = 1'-0"

PROPOSED MAIN LEVEL
3/16" = 1'-0"

PROPOSED BASEMENT
3/16" = 1'-0"



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USA
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Date: 2024.04.10 16:49:15 -04'00'

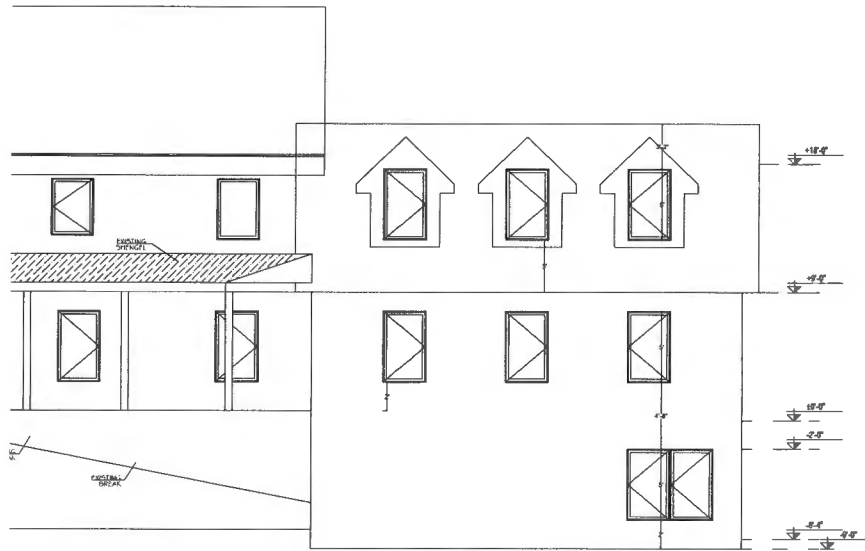
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NO.	REVISIONS

Owner: **David Wawro**
Project Address: **757 Weller Dr Mt Airy, MD 21771**

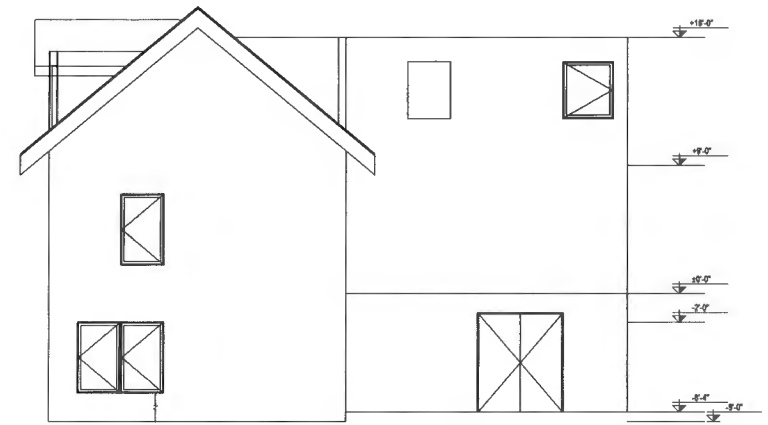
Drawn By: **M.SOORANI**
Designed By: **M.SOORANI**
Checked By: **A.ZAMANI**
Scale: **3/16" = 1'-0"**

Dwg. Title: **PROPOSED ARCHITECTURAL FLOOR PLAN**
Project No.: **MD-20703**
Dwg. No.: **A102**
Rev. No.:



East Elevation

1/4" = 1'-0"



North Elevation

1/4" = 1'-0"

DATE PLOTTED: 2024/04/10 16:49:31
 PLOT SCALE: 1/4" = 1'-0"
 PLOT AREA: 11.00 X 11.00
 PLOT TITLE: ELEVATIONS
 PLOT NUMBER: A103



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 Washington, DC 20002
 USA
 www.aimv.com



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 Arzhang Zamani,
 PhD, PE
 Date: 2024.04.10
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EXISTING CONDITIONS SHOWN ON DRAWINGS ARE BASED ON BEST AVAILABLE SOURCES AND MAY DIFFER FROM ACTUAL CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURE AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES AND INTERFERENCE BEFORE PROCEEDING WITH THE WORK.

REVISIONS	DATE	DESCRIPTION

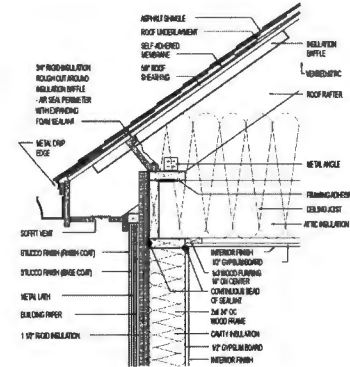
Owner: **David Wawro**
 Project Address:
757 Weller Dr Mt Airy, MD 21771

Drawn By: **M.SOORANI**
 Designed By: **M.SOORANI**
 Checked By: **A.ZAMANI**
 Scale: 1/4" = 1'-0"

ELEVATIONS		Rev. No.
Project No.	MD-20703	
Desig. No.	A103	

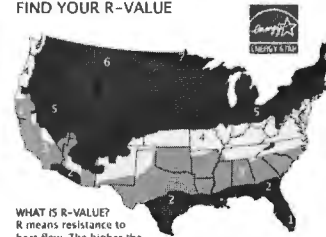
Window Schedule		
Renovation Status	Proposed	Proposed
Element ID	WN-01	WN-02
Quantity	1	3
W x H Size	3'-5"	3'-5"
Sill height	2"	3"
2D Symbol		
3D Front View		

Door Schedule					
Renovation Status	Proposed	Proposed	Proposed	Proposed	Proposed
Element ID	DR-01	DR-02	DR-03	DR-04	DR-05
Quantity	1	3	2	1	1
W x H Size	4'-7"	3'-7"	2'-10"x7"	3'-4'-7"	3'-4'
2D Symbol					
3D Back View					



Wall Schedule									
Renovation Status	Element ID	2D Plan Preview	Wall Type	Height [m]	Thickness [m]	Area [m2]	Position	Length of the Wall on the Inside Face	Length of the Wall on the Outside Face
Proposed	WL-01		Stud Partition 7"	8'-4"	7"	12.19	Exterior	24'-4"	27'-6"
Proposed	WL-02		Stud Partition 7"	8'-4"	7"	11.97	Exterior	19'-6"	20'-8"
Proposed	WL-03		Stud Partition 7"	8'-4"	7"	17.16	Exterior	28'-10"	30"
Proposed	WL-04		Stud Partition 7"	8'-4"	7"	5.54	Exterior	10"	9'-5"
Proposed	WL-05		Stud Partition 7"	6'-4"	7"	1.17	Exterior	1'-11"	2'-6"
Proposed	WL-06		Stud Partition 7"	6'-4"	7"	3.65	Exterior	6'-3"	6'-3"
Proposed	WL-07		Stud Partition 7"	9"	7"	15.65	Exterior	27'-4"	26'-4"
Proposed	WL-08		Stud Partition 7"	9"	7"	11.95	Exterior	19'-4"	20'-8"
Proposed	WL-09		Stud Partition 7"	9"	7"	17.14	Exterior	28'-10"	30"
Proposed	WL-10		Stud Partition 7"	9"	7"	5.50	Exterior	10"	9'-5"
Proposed	WL-11		Stud Partition 7"	8'-4"	7"	1.19	Interior	1'-11"	2'-6"
Proposed	WL-12		Stud Partition 7"	8'-4"	7"	3.63	Interior	6'-3"	6'-3"
Proposed	WL-13		Stud Partition 4"	9"	5"	0.73	Interior	4'-3"	4'-8"
Proposed	WL-14		Stud Partition 4"	9"	5"	1.53	Interior	3'-7"	4"
Proposed	WL-15		Stud Partition 4"	9"	5"	1.64	Interior	3'-7"	4"
Proposed	WL-16		Stud Partition 4"	9"	5"	0.00	Interior		
Proposed	WL-14		Stud Partition 4"	9"	5"	0.55	Interior	4'-7"	4'-6"
Proposed	WL-17		Stud Partition 4"	9"	5"	3.05	Interior	7'-5"	7"
Proposed	WL-18		Stud Partition 4"	9"	5"	0.98	Interior	2'-5"	2"
Proposed	WL-20		Stud Partition 4"	9"	5"	0.13	Interior	8"	3"
Proposed	WL-20		Stud Partition 4"	9"	5"	2.90	Interior	10"	10"
Proposed	WL-21		Stud Partition 7"	9"	7"	1.19	Interior	3'-1"	3'-1"
Proposed	WL-22		Stud Partition 7"	9"	7"	3.10	Exterior	4'-10"	5'-5"
Proposed	WL-23		Stud Partition 7"	9"	7"	16.84	Exterior	30"	30"
Proposed	WL-24		Stud Partition 7"	12"	7"	11.95	Exterior	19'-4"	20'-8"
Proposed	WL-25		Stud Partition 7"	9"	7"	16.82	Exterior	30"	28'-10"
Proposed	WL-26		Stud Partition 7"	9"	7"	5.78	Interior	9'-5"	9'-5"
Proposed	WL-27		Stud Partition 4"	9"	5"	9.74	Interior	24'-4"	24'-4"
Proposed	WL-ATTIC		Stud Partition 4"	9"	5"	1.23	Interior	3"	2'-7"
Proposed	WL-ATTIC		Stud Partition 4"	9"	5"	1.62	Interior	3'-4"	3'-11"
Proposed	WL-ATTIC		Stud Partition 4"	9"	5"	1.12	Interior	3"	2'-7"
Proposed	WL-ATTIC		Stud Partition 4"	9"	5"	1.23	Interior	2'-7"	3"
Proposed	WL-ATTIC		Stud Partition 4"	9"	5"	1.70	Interior	3'-8"	4'-6"
Proposed	WL-ATTIC		Stud Partition 4"	9"	5"	1.80	Interior	3'-4"	3'-11"
Proposed	WL-ATTIC		Stud Partition 6"	9"	5"	1.59	Interior	3'-8"	6'-4"
Proposed	WL-ATTIC		Stud Partition 4"	9"	5"	1.23	Interior	2'-7"	3"
Proposed	WL-ATTIC		Stud Partition 4"	9"	5"	1.12	Interior	3"	2'-7"
Proposed	WL-ATTIC		Stud Partition 4"	9"	5"	1.23	Interior	2'-7"	3"

FIND YOUR R-VALUE



WHAT IS R-VALUE?
R means resistance to heat flow. The higher the R-Value, the greater the insulation power. As R-Value increases, so does energy efficiency.

Zone	Attic	2x4 walls	2x6 walls	Floors
1	R30-R49			R13 R13-R19
2	R30-R60			R25 R19-R25
3	R38-R60	R13-R15	R19-R21	
4	R49-R60			R25-R30

ENERGY STAR® Certified in High-Impact Regions

World's Best Window Co. Series "2000" Casement Vent Chair Wood Frame Double-Paneled Argon F&Low E XYZ-20-140003-00001

ENERGY PERFORMANCE RATINGS

U-Factor (U S / I / F) Solar Heat Gain Coefficient

0.35 **0.32**

ADDITIONAL PERFORMANCE RATINGS

Visible Transmittance Air Leakage (U S / I / P)

0.51 **≤0.3**

Condensation Resistance

51 **-**

Manufacturer regulates that these ratings comply to applicable code provisions for determining window product performance. RSH ratings are based on the level of environmental conditions and system product. The U-Factor, SHGC, and Air Leakage ratings are based on the level of the product. For more information, please contact the manufacturer or visit the manufacturer's website.

Empower Infrastructure
Empower Infrastructure LLC
1140 3rd St. NE, Second Floor
Washington, DC 20002
USA
www.eidm.com

Digitally signed by Arzhang Zamani, Ph.D. PE
Date: 2024.04.10 16:49:48 -04'00'

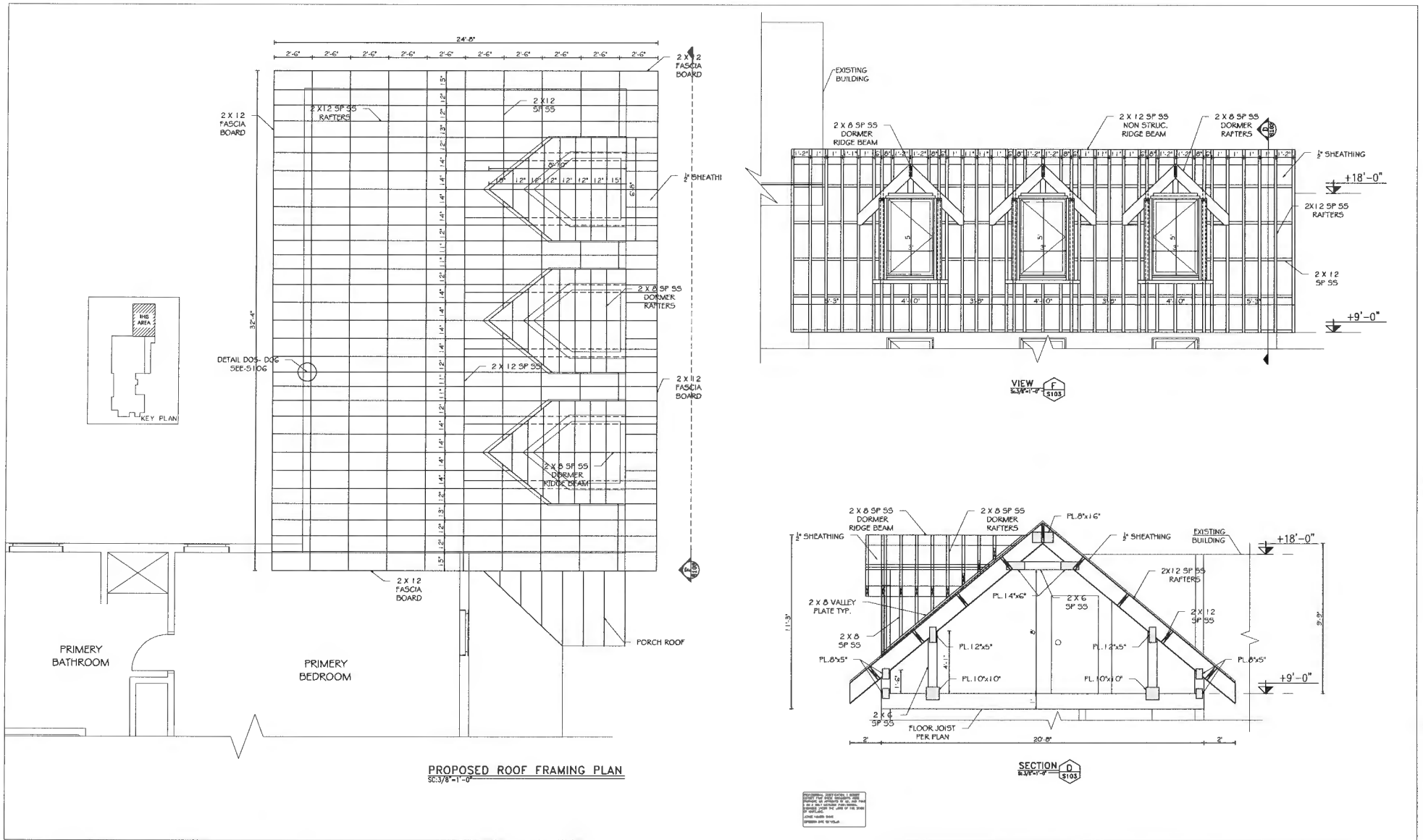
EXISTING CONDITIONS SHOWN ON DRAWINGS ARE BASED ON BEST AVAILABLE SOURCES AND MAY DIFFER FROM ACTUAL CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURE AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES AND INTERFERENCE BEFORE PROCEEDING WITH THE WORK.

REVISIONS	

Owner: David Wawro
Project Address: 757 Weller Dr Mt Airy, MD 21271

Drawn By: M.SOORANI
Designed By: M.SOORANI
Checked By: A.ZAMANI
Scale:

Dwg. Title: ARCHITECTURAL SCHEDULE
Project No.: MD-20703
Dwg. No.: A104
Rev. No.:



PROPOSED ROOF FRAMING PLAN
SC:3/8-1-0

SECTION D
SC:3/8-2-0

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURE AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES AND INTERFERENCE BEFORE PROCEEDING WITH THE WORK.

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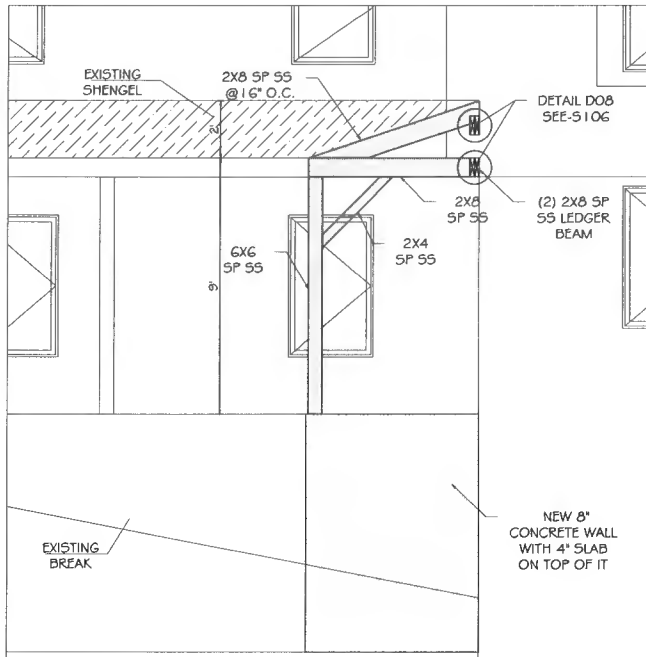
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Arzhang Zamani, PhD, PE
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EXISTING CONDITIONS SHOWN ON DRAWINGS ARE BASED ON BEST AVAILABLE SOURCES AND MAY DIFFER FROM ACTUAL CONDITIONS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURE AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES AND INTERFERENCE BEFORE PROCEEDING WITH THE WORK.

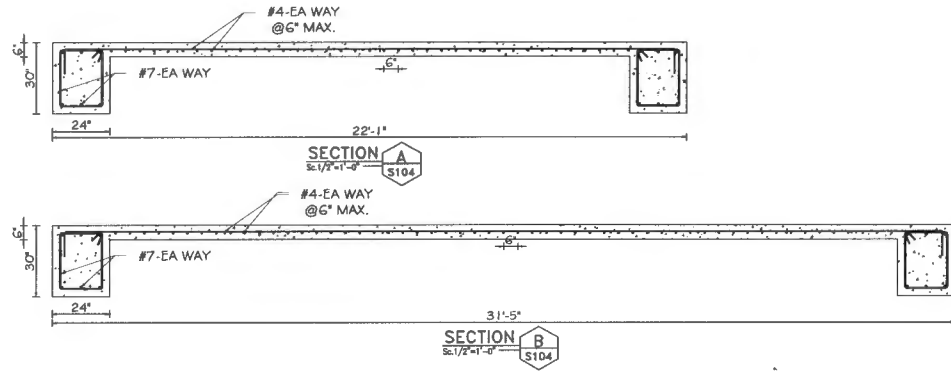
REVISIONS	Owner
	David Wawro
	Project Address: 757 Weller Dr Mt Airy, MD 21771

Drawn By: M. TAHERI	Desig. Title
Designed By: A. ZAMANI	
Checked By: A. ZAMANI	
Scale: 3/8"=1'-0"	Project No. MD-20703
	Desig. No. S103

PROPOSED STRUCTURAL PLANS AND DETAILS	
Project No. MD-20703	Rev. No.
Desig. No. S103	



VIEW F
Scale: 1/2"=1'-0"



No field cut holes in hatched zones; knockouts permitted.

Minimum distance from support A

Minimum distance from support B

1 1/2" holes may be cut anywhere in web outside of hatched zone if they are located 3" away horizontally (edge-to-edge) from a larger hole.

Do not cut holes larger than 1 1/2" in cantilever.

2 x D1 D1

Closely grouped round minimum holes are permitted if they (applies to all holes group perimeter meets except knockouts) requirements for round or square holes

2 x L2 L2

End Support: Minimum distance from edge of hole to inside face of nearest end and support

Depth	TJI	Round Hole Size										Square or Rectangular Hole Size											
		2"	3"	4"	6"	8"	10"	11"	13"	2"	3"	4"	6"	8"	10"	11"	13"						
FROM SUPPORT A	11 7/8"	360	1'-8"	2'-0"	3'-0"	3'-6"	4'-6"	5'-0"	7'-0"	7'-0"	---	---	---	1'-8"	2'-8"	3'-8"	4'-8"	6'-8"	8'-8"	11'-8"	---	---	---
FROM SUPPORT B	11 7/8"	360	2'-0"	3'-0"	4'-0"	5'-6"	7'-0"	7'-6"	11'-0"	---	---	---	---	2'-0"	3'-8"	5'-0"	7'-0"	8'-8"	11'-8"	---	---	---	---

See General Notes for size limit of additional holes

See General Notes for size limit of additional holes

Minimum distance from Table A

24" max.

48" min.

48" min.

Minimum distance from Table A

Hole at center of simple span

No field cut holes in hatched zones; knockouts permitted.

No field cut holes in hatched zones; knockouts permitted.

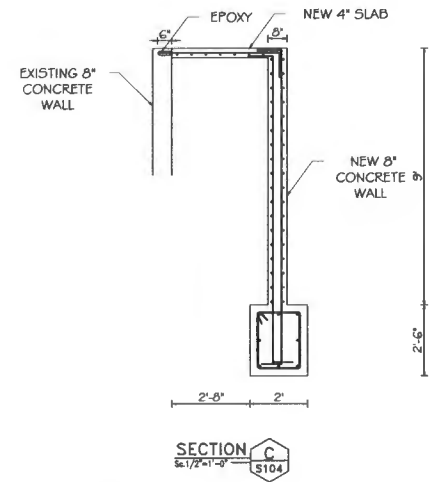
Maximum Hole at Mid-Span for TJI 360

Maximum Hole at Mid-Span for TJI 360 Joists

Depth	TJI	Maximum Hole Size (height x length)
11 7/8"	360	8 7/8" x 24"

General Notes

- Simple span (8' minimum) uniformly loaded joist only. Not for use in applications that have code mandated concentrated load requirements.
- 24" wide hole (maximum) located at center of span.
- Leave 1/2" of web (minimum) at top and bottom of hole.
- Two (2) additional holes may be added to the joist provided:
 - Additional holes are a minimum of 48" (edge to edge) from maximum hole.
 - Square or Rectangular: longest dimension is less than or equal to 0.65 x web depth.
 - Round: diameter is less than or equal 0.75 x web depth.



Empower Infrastructure

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Digitally signed by Arzhang Zamani, PhD, PE
Date: 2024.04.10 16:52:02 -04'00'

EXISTING CONDITIONS SHOWN ON DRAWINGS ARE BASED ON BEST AVAILABLE SOURCES AND MAY DIFFER FROM ACTUAL CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURE AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES AND INTERFERENCE BEFORE PROCEEDING WITH THE WORK.

REVISIONS

No.	Description

Owner: David Wawro

Project Address: 757 Weller Dr Mt Airy, MD 21771

Drawn By: M.TAHERI
Designed By: A.ZAMANI
Checked By: A.ZAMANI
Scale: AS SHOWN

PROPOSED STRUCTURAL PLANS AND DETAILS

Project No. MD-20703
Dwg. No. S104
Rev. No.

PLUMBING MATERIALS AND NOTES

DOMESTIC WATER PIPING:

- DOMESTIC WATER PIPING AND JOINTS ABOVE GRADE: PROVIDE TYPE 'L' HARD DRAWN SEAMLESS COPPER TUBING (ASTM B 88) AND CAST COPPER ALLOY FITTINGS (ASME B16.18). JOINTS 2" AND SMALLER SHALL BE LEAD FREE 95-5 TINNERS SOLDER JOINTS (ASTM B 32).
- TERMINATE THE DOMESTIC WATER SYSTEM IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION'S SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
- INSULATE DOMESTIC WATER PIPING ABOVE GRADE (EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES) WITH

NOT EXCEEDING 0.27 BTUH x SQ. FT. FOLLOW SCHEDULE BELOW:	PIPE SIZES INSULATION THICKNESS	
SERVICE TYPE	1/2" - 1-1/2"	1"
DOMESTIC HOT WATER & CIRCULATION	1-1/2" - 4"	1-1/2"
DOMESTIC HOT WATER & CIRCULATION	1/2" - 1-1/4"	1/2"
DOMESTIC COLD WATER	1-1/2" - 4"	1"

- DOMESTIC WATER PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE REQUIRED TO MEET A FLAME-SPREAD RATING OF 25 OR LESS AND A SMOKE-DEVELOPED RATING OF 50 OR LESS, AS TESTED BY BETWEEN PIPE HANGER AND INSULATION.

- PROVIDE TWO-PIECE, BRONZE OR BRASS BODY, FULL PORT, 600 PSI WOG, BALL TYPE SHUT-OFF VALVES WITH BUILDING OR FINISHED MATERIALS.

- PROTECT COPPER PIPING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS AND PIPING, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL TO PREVENT CONTACT WITH DISSIMILAR OTHER METALS.

- PROTECT COPPER PIPING AGAINST CONTACT WITH ALL MASONRY. WHERE COPPER IS SLEEVED THROUGH MASONRY, PARTITIONS, PROVIDE A HEAVY COATING OF ASPHALTIC ENAMEL ON THE COPPER PIPING AND 1/8" ASPHALT SATURATED FELT BETWEEN THE PIPING AND THE MASONRY PARTITION.

- DOMESTIC WATER SUPPLY PIPING SHALL BE TESTED AND PROVED WATER TIGHT UNDER A WATER PRESSURE OF NO LESS THAN THE WORKING PRESSURE OF THE SYSTEM, OR AN AIR TEST OF NO LESS THAN ONE HUNDRED (100) PSI. THIS PRESSURE SHALL BE HELD FOR AT LEAST FIFTEEN (15) MINUTES. WATER USED IN TESTING SHALL BE OBTAINED FROM A POTABLE SOURCE OF SUPPLY.

SANITARY WASTE / VENT PIPING:

- SANITARY WASTE BELOW GRADE: PROVIDE SCHEDULE 40 PVC PIPE AND SOCKET FITTINGS (ASTM D 2665) WITH SOLVENT WELD JOINTS (ASTM D2855). FOAM CORE PVC PIPE IS NOT APPROVED.

- SANITARY WASTE/VENT ABOVE GRADE: PROVIDE SERVICE WEIGHT CAST IRON NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET AND STAINLESS STEEL CLAMP JOINTS (CISPI 310).

- SLOPE SANITARY WASTE PIPING AT 1/4" PER FOOT MINIMUM FOR PIPING 2-1/2" AND SMALLER AND 1/8" PER FOOT MINIMUM FOR PIPING 3" AND LARGER UNLESS NOTED OTHERWISE.

- WHERE WASTE PIPING IS EXPOSED IN REST ROOM AREAS, PROVIDE CHROME PLATED BRASS PIPING, REMOVABLE P-TRAPS, MATCHING STOPS AND ESCUTCHEONS FOR ALL LAVATORIES.

- SANITARY WASTE AND VENT SYSTEMS SHALL BE TESTED AND PROVED WATER TIGHT UNDER A HEAD PRESSURE OF NO LESS THAN 10 FT. THIS PRESSURE SHALL BE HELD FOR A PERIOD OF NO LESS THAN 15 MINUTES.

- INSULATE MECHANICAL ROOM FLOOR DRAIN BODIES, P-TRAP AND HORIZONTAL DRAIN PIPING ABOVE GRADE WITH 1" THICK GLASS FIBER INSULATION WITH VAPOR BARRIER AND JACKET.

- INSULATE ROOF DRAIN BODIES AND HORIZONTAL PRIMARY AND SECONDARY STORM DRAIN PIPING ABOVE GRADE WITH 1" THICK GLASS FIBER INSULATION WITH VAPOR BARRIER AND JACKET.

- PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE REQUIRED TO MEET A FLAME-SPREAD RATING OF 25 OR LESS AND A SMOKE-DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 BETWEEN PIPE HANGER AND INSULATION.

GENERAL NOTES:

- FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING PLUMBING INCLUDING INVERTS. REPORT ANY DISCREPANCIES TO THE ENGINEER.
- REFER TO ARCHITECTURAL DOCUMENTS FOR ALL MILLWORK AND PLUMBING FIXTURE HEIGHTS.
- COORDINATE LOCATIONS OF ALL WATER AND HOT WATER SERVICE VALVES TO BE ACCESSIBLE.
- DEMOLISH ALL UNUSED PLUMBING WHERE ACCESSIBLE. NO DEAD ENDS SHALL REMAIN PER 2018 NPCC 704.5. PROVIDE CLEANOUTS WHERE NECESSARY.
- ROUTE NEW LINES TO EXISTING PLUMBING. FIELD VERIFY EXACT LOCATION.

PLUMBING GENERAL NOTES

GENERAL REQUIREMENTS:

- PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2018 NORTH CAROLINA STATE PLUMBING CODE AND WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- SCOPE: PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL PLUMBING SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES.
- PERMITS: APPLY AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION. ACREAGE CHARGES, FACILITIES CHARGES AND BOND PROPERTY ASSESSMENTS ARE NOT TO BE CONSIDERED TO BE A PART OF THIS CONTRACT.

- WARRANTY: PROVIDE A ONE YEAR WARRANTY, FROM THE DATE OF ACCEPTANCE OF WORK BY THE OWNER, FOR ALL PLUMBING MATERIALS AND EQUIPMENT.

- COORDINATE ALL PLUMBING PIPING LOCATIONS, ROUGH-IN LOCATIONS AND EQUIPMENT LOCATIONS WITH OTHER COMPLIANT INSTALLATION FOR ALL TRADES.

- FIELD VERIFY PROPER OPERATION OF EXISTING SYSTEMS BEFORE STARTING CONSTRUCTION. NOTIFY THE ARCHITECT / ENGINEER OF RECORD OF ANY PROBLEMS OR DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS AND/OR ANY POTENTIAL PROBLEMS OBSERVED BEFORE CONTINUING WORK IN THE EFFECTED AREAS.

- WHERE DISCREPANCIES ARE FOUND IN THE DRAWINGS AND SPECIFICATIONS THE MORE STRINGENT SHALL APPLY. CONTACT ENGINEER FOR CLARIFICATION.

- ALL PIPING SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA.

- ALL VALVES, BACKFLOW PREVENTERS, BOOSTER PUMPS, ETC. SERVING THE DOMESTIC WATER SYSTEM SHALL MEET LEAD FREE STANDARDS PER ANS/NSF 372 AND NSF 61, ANNEX G.

- CUT WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF PLUMBING WORK. ALL CUTTING SHALL BE

- PLUMBING PLANS SHALL NOT BE SCALED. REFERENCE THE ARCHITECTURAL PLANS FOR ALL LOCATIONS OF PLUMBING FIXTURES, WALLS, DOORS, WINDOWS, ETC.

- PLUMBING PIPING AND SPECIALTIES SHALL BE LOCATED CONCEALED IN WALLS, PARTITIONS OR ABOVE CEILINGS UNLESS NOTED OTHERWISE. PLUMBING PIPING IN EXPOSED AREAS SHALL BE RUN TIGHT TO UNDERSIDE OF STRUCTURE. PROVIDE ACCESS DOORS FOR CONCEALED SPECIALTIES.

- DO NOT INSTALL PLUMBING PIPING IN AREAS SUBJECT TO FREEZING TEMPERATURES. INSTALL PLUMBING PIPING SHOWN IN EXTERIOR WALLS ON THE CONDITIONED SIDE OF THE WALL INSULATION.

- PROVIDE NON-CONDUCTING DIELECTRIC UNIONS WHENEVER CONNECTING DISSIMILAR METALS.

- ATTACH HANGERS TO STRUCTURE. HANGERS SHALL NOT ATTACH TO THE DECK.

- PROVIDE ACCESS DOORS FOR VALVES, WATER HAMMER ARRESTORS, TRAP PRIMERS, ETC. CONCEALED IN MASONRY WALLS, GYBOARD WALLS AND/OR CEILINGS THAT WILL REQUIRE MAINTENANCE ACCESS.

- CORE DRILL THROUGH MASONRY (CMU BLOCK) WALLS FOR ALL PIPE PENETRATIONS. WHEN DRILLING OPENINGS FOR INSULATED PIPES THE OPENING'S DIAMETER SHALL BE LARGE ENOUGH FOR PIPE INSULATION TO REMAIN CONTINUOUS PASSING THROUGH THE OPENING. SEAL WATER TIGHT. PROVIDE ESCUTCHEONS IN EXPOSED FINISHED AREAS.

- PLUMBING SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO: PLUMBING FIXTURES, DOMESTIC WATER SYSTEM, SANITARY WASTE AND VENT SYSTEM, NATURAL GAS SYSTEM.

- PLUMBING FIXTURES AND EQUIPMENT:

- PROVIDE COMPLETE PLUMBING FIXTURES AND EQUIPMENT. INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAIL PIECES, ESCUTCHEONS, ETC.

- NO PRIVATE LABELED MATERIALS WILL BE ACCEPTED AS EQUALS TO PRODUCTS SPECIFIED HEREIN.

- PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SUBSTITUTIONS TO SPECIFIED PLUMBING FIXTURES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO: PROVIDING MAINTENANCE ACCESS CLEARANCE, PIPING, ELECTRICAL, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC. AND ANY MODIFICATIONS TO ASSOCIATED MECHANICAL, ELECTRICAL OR PLUMBING SYSTEMS REQUIRED BY THE EQUIPMENT'S INSTALLATION INSTRUCTIONS. ALL COSTS ASSOCIATED WITH SUBSTITUTIONS SHALL BE INCLUDED IN THE ORIGINAL BASE BID.



MECHANICAL GENERAL NOTES

- DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, CEILING DIFFUSERS, ETC.

- ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT TO COMPLY WITH BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, PIPING, BEST METAL, ELECTRICAL, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC. SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT WILL BE APPROVED DURING CONSTRUCTION AND ALL COST WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR. THIS INCLUDES ANY MODIFICATIONS TO ANY ASSOCIATED MECHANICAL, PLUMBING, OR ELECTRICAL SYSTEMS REQUIRED BY THIS SPECIFIC MANUFACTURER'S INSTALLATION INSTRUCTIONS.

- ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH THE LATEST SMACNA STANDARD. ALL SUPPLY RETURN AND OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 2" THICK DUCT WRAP WITH VAPOR BARRIER. INSULATION INCLUDING FLEXIBLE DUCT INSULATION SHALL HAVE A MINIMUM R-VALUE OF R-6.

- ALL DUCTWORK SHALL BE SEALED PER THE REQUIREMENTS OF THE NORTH CAROLINA MECHANICAL CODE. SEAL LOW PRESSURE SUPPLY RETURN OUTSIDE AIR AND EXHAUST DUCTWORK FOR POSITIVE/NEGATIVE 2" PRESSURE CLASS. SMACNA SEAL CLASS A. SMACNA LEAKAGE CLASS 1.

- ALL PIPING, DUCTS, VENTS, ETC. EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED AND

- ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER DIVISIONS OF THE SPECIFICATION TO AVOID INTERFERENCE.

- THE MECHANICAL CONTRACTOR SHALL BALANCE ALL MECHANICAL SYSTEMS TO THE PERFORMANCE SPECIFICATIONS INDICATED ON PLANS AND PROVIDE THE ENGINEER WITH THREE COPIES OF A COMPLETE TEST AND BALANCE REPORT. THE REPORT IS TO BE ISSUED A MINIMUM OF TWO WEEKS PRIOR TO PROJECT COMPLETION. THE TEST AND BALANCE REPORT WILL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER. ANY ADDITIONAL TESTING, ADJUSTING AND BALANCING REQUIRED BY ENGINEER'S REQUEST AFTER REVIEW OF THE INITIAL REPORT SHALL BE PROVIDED AT NO ADDITIONAL COST. TESTING AND BALANCING CONTRACTOR TO CONFIRM FRICTION ARE CLEAR AND FREE OF DEBRIS PRIOR TO BEGINNING WORK. THE MECHANICAL CONTRACTOR SHALL REPLACE ANY DIRTY FILTERS AS NEEDED. TEST AND BALANCE REPORT TO BE COMPLETED BY AN INDEPENDENT, CERTIFIED TEST AND BALANCE CONTRACTOR.

- UPON PROJECT COMPLETION, THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER INSTALLATION INFORMATION INCLUDING RECORD SUBMITTALS (WITH ANY SUBMITTAL REVIEW COMMENTS ADDRESSED) AND O&M MANUALS FOR EACH PIECE OF EQUIPMENT INCLUDING ALL SELECTED OPTIONS. THE NAME AND ADDRESS OF AT LEAST ONE SERVICE AGENCY, FULL CONTROL SYSTEM O&M AND CALIBRATION INFORMATION INCLUDING WIRING DIAGRAMS, SCHEMATIC, P&ID, REQUIREMENTS OF OPERATION AND PROGRAMS SETPOINTS, IF APPLICABLE. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO HIRE A REGISTERED DESIGN PROFESSIONAL TO COMMISSION THE INSTALLED SYSTEM AND PROVIDE THE OWNER AND CODE REVIEWER A SEALED STATEMENT OF SYSTEM COMMISSIONING (PER 2018 NCCCO APPENDIX C).

- PROVIDE A ONE YEAR WARRANTY FOR ALL WORK PERFORMED INCLUDING ON THE DAY THE SYSTEM IS COMPLETELY OPERATIONAL AND ACCEPTABLE BY THE OWNER.

- PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND ALL EQUIPMENT FOR MAINTENANCE AND FILTER REMOVAL.

- CONDENSATE DRAIN PIPING SHALL BE SCHEDULE 40 PVC PIPE FOR TYPE 'L' HARD DRAWN COPPER WHEN IN FLOORING AND FITTINGS. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED. CONDENSATE DRAINS SHALL BE INSULATED WITH 1/2" THICK ARMBULFED INSULATION. MINIMUM DRAIN SIZE SHALL BE 3/4".

- ALL REFRIGERANT PIPE SHALL BE REFRIGERATED AIR COPPER TUBE, SIZE, INSULATE, AND INSTALL REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. REFRIGERANT PIPING INSULATION EXPOSED OUTDOORS SHALL BE COVERED WITH AN OUTER ALUMINUM JACKET.

- ANY DEVICE REQUIRING A THERMOSTAT FOR CONTROL SHALL BE FURNISHED WITH A THERMOSTAT WHETHER MOUNTED ON THE DRAWING OR NOT.

- INSTALL THE TOP OF ALL THERMOSTATS, SENSORS, AND SWITCHES AT 6" (MINIMUM) ABOVE FINISH FLOOR. COORDINATE EXACT THERMOSTAT LOCATION WITH OWNER PRIOR TO INSTALLATION. ANY DEVICE ON A PERIMETER WALL SHALL BE MOUNTED ON A FOAM-FILLED ELECTRICAL BOX WITH ALL GAPS BETWEEN BOX AND WALL SEALED TO PREVENT BLEED-THROUGH.

- CONTRACTOR SHALL LOCATE EXHAUST FANS, OUTLETS, AND GAS PILES A MINIMUM OF 10'-0" FROM ANY OUTSIDE AIR INTAKE.

- PROVIDE UNDER FLANGES OR COUPLERS AT CONNECTION TO ALL VALVES AND EQUIPMENT. DO NOT USE DIRECT WELDED OR THREADED CONNECTIONS TO VALVES, EQUIPMENT OR OTHER APPARATUS.

- PROVIDE NON-CONDUCTING DIELECTRIC UNIONS WHENEVER CONNECTING DISSIMILAR METALS.

- ALL ISOLATOR VALVES, TERMINAL WHITE CONTROLS, ETC. REQUIRING ACCESS AND SERVICE SHALL BE INSTALLED WITHIN 18" OF THE CEILING FOR SERVICE ACCESSIBILITY. LOCATIONS SHALL BE INDICATED ON THE CEILING GRID PER THE SPECIFICATIONS.

- DUCTWORK AND PIPING PASSING THROUGH ABOVE ELECTRICAL ROOMS SHALL BE CLOSETY COORDINATED WITH THE ELECTRICAL CONTRACTOR. DUCTWORK OR PIPING SHALL NOT BE LOCATED ABOVE ELECTRICAL PANELS.

- EQUIPMENT OPERATED DURING CONSTRUCTION SHALL USE FILTERED MEDIA TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING COILS, DUCTWORK SYSTEMS, AIR TERMINALS, ETC. AT COMPLETION OF CONSTRUCTION, MECHANICAL CONTRACTOR SHALL CLEAN ALL SYSTEMS WITH ALL CONTROL DEVICES WIDE OPEN AND REMOVE ANY REMAINING DEBRIS PRIOR TO TEST AND BALANCING. MECHANICAL CONTRACTOR SHALL REPLACE ALL FILTERS WITH NEW FILTERS AT COMPLETION OF CONSTRUCTION. AIR DUCTWORK, AIR TERMINALS, AND/OR OTHER EQUIPMENT UPSTREAM OF FILTRATION SHALL BE CLEANED THOROUGHLY OF CONSTRUCTION DEBRIS BEFORE HANDING OVER TO OWNER.

- MECHANICAL CONTRACTOR SHALL PROVIDE PRE-PRINTED COLOR-CODED PIPE LABELS WITH 1-1/2" HIGH LETTING INDICATING SERVICE AND FLOW DIRECTION. ALL PIPING TO MATCH EXISTING FACILITIES (WHEN OF APPLICABLE) OTHERWISE, PIPE LABELS SHALL MATCH THE FOLLOWING: REFRIGERANT PIPING: VIL OF BACKGROUND, BLACK LETTING.

- ALL MECHANICAL EQUIPMENT SHALL BE U.L. LISTED AND LABELED AS A COMPLETE PACKAGE, NOT THROUGH INDIVIDUAL COMPONENTS OR PARTS. PROVIDE REQUIRED 3RD PARTY FIELD LISTING SERVICES AS REQUIRED TO COMPLY.



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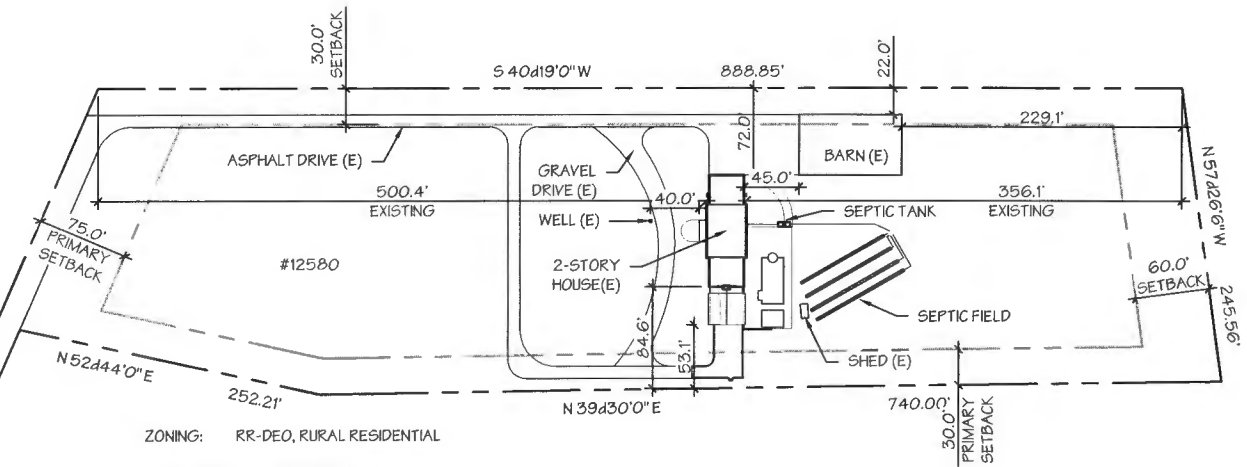
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Date: 2024.04.10
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REVISIONS	Owner
	David Wawro
	Project Address:
	757 Weller Dr Mt Airy, MD 21771

Drawn By:	Desig. Title	PLUMBING GENERAL NOTE	
A.AZJOMANI	Dwg. Title		
Designed By: A.AZJOMANI			
Checked By: A.ZAMANI			
Scale:	Project No.	MD-20703	
	Dwg. No.	P102	Rev. No.

LOCATIONS OF WELL, SEPTIC TANK, SEPTIC TRENCHES, AND LEECH FIELD ARE TRANSPOSED FROM HAND DRAW AS-BUILT SEPTIC INSTALLATION DRAWINGS PROVIDED BY OTHERS AT TIME OF THEIR INSTALLATION AND PERMITTING. THESE DRAWINGS ARE TO ILLUSTRATE THE NEW WORK WILL NOT AFFECT THESE SYSTEMS.

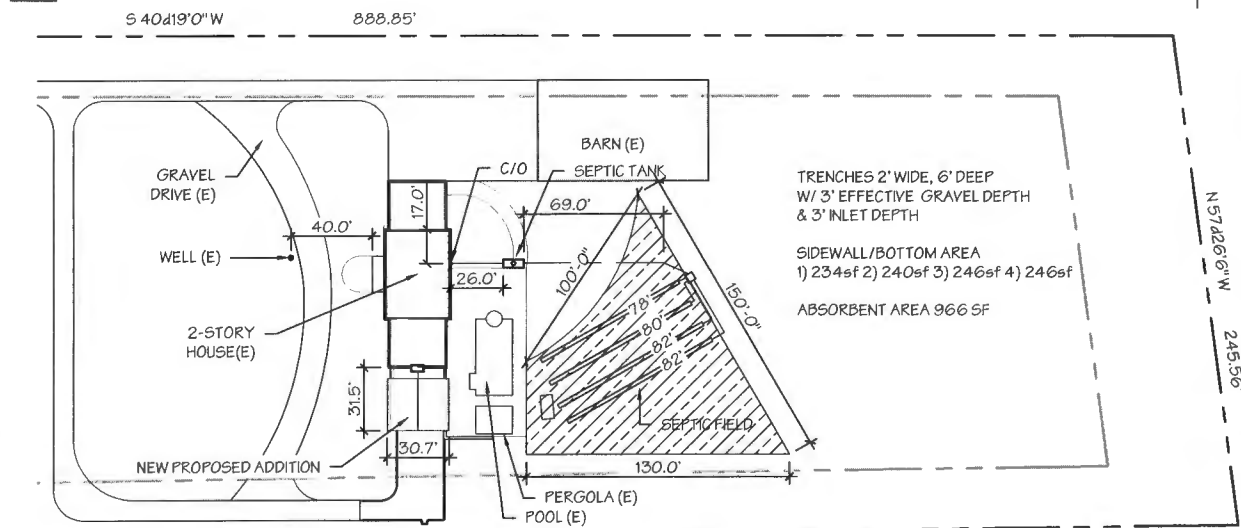


ZONING: RR-DEO, RURAL RESIDENTIAL

SITE AND BUILDING PROPERTIES

TYPE	REQUIRED	EXISTING	PROPOSED
MIN LOT SIZE	40,000 SF	250,421 SF (5.75 AC)	NO CHANGE
FRONT SETBACK	75 FT	500.4 FT	NO CHANGE
REAR SETBACK	60 FT	356.1 FT	NO CHANGE
SIDE SETBACK	30 FT	72.0/84.6 FT	72.0/53.1 FT
MAX HEIGHT	40 FT	34 FT	NO CHANGE

1 SITE PLAN
L1 1"=100'-0"

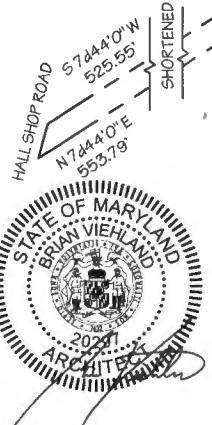


TRENCHES 2' WIDE, 6' DEEP
W/ 3' EFFECTIVE GRAVEL DEPTH
& 3' INLET DEPTH

SIDEWALL/BOTTOM AREA
1) 234sf 2) 240sf 3) 246sf 4) 246sf

ABSORBENT AREA 966 SF

2 ENLARGED PARTIAL SITE PLAN
L1 1"=60'-0"



PROFESSIONAL CERTIFICATION.
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20297, EXPIRATION DATE: 03/29/2024

DESIGN ON THE SQUARE

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REVISIONS

REV 0: 2022.09.19
REV 1:
REV 2:
PRINTED: 2023.04.14
DRAWN BY:

SHEET INFO

SITE PLAN

SHEET NUMBER

L
1

DESIGN ON THE SQUARE

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REVISIONS

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 REV 1:
 REV 2:
 PRINTED: 2023.04.16
 DRAWN BY:

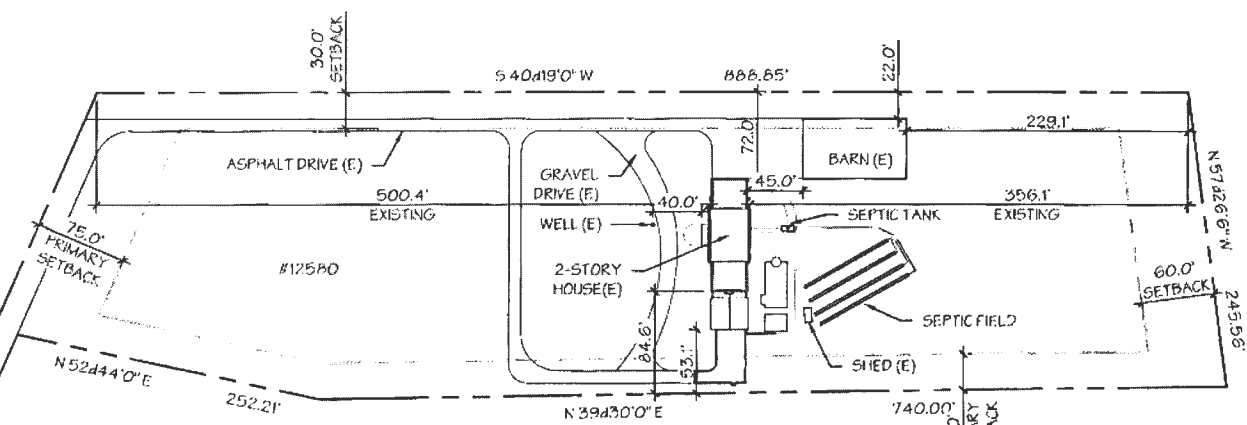
SHEET INFO

SITE PLAN

SHEET NUMBER

L
1

LOCATIONS OF WELL, SEPTIC TANK, SEPTIC TRENCHES, AND LEECH FIELD ARE TRANSPOSED FROM HAND DRAW AS-BUILT SEPTIC INSTALLATION DRAWINGS PROVIDED BY OTHERS AT TIME OF THEIR INSTALLATION AND PERMITTING. THESE DRAWINGS ARE TO ILLUSTRATE THE NEW WORK WILL NOT AFFECT THESE SYSTEMS.

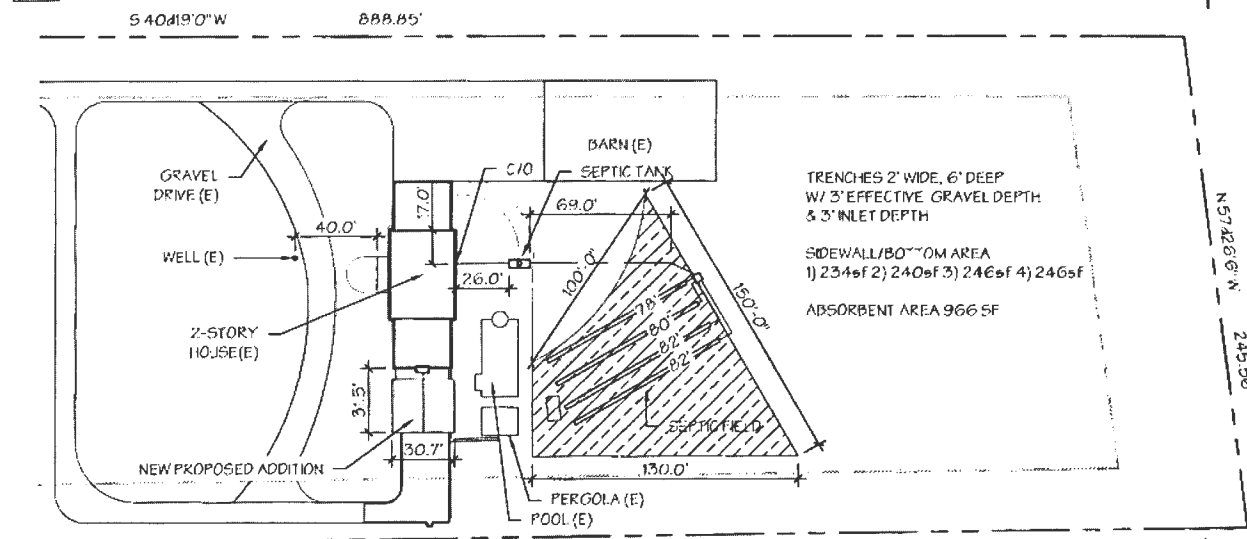


ZONING: RR-DEO, RURAL RESIDENTIAL

SITE AND BUILDING PROPERTIES

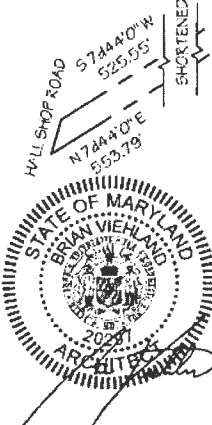
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REAR SETBACK	60 FT	356.1 FT	NO CHANGE
SIDE SETBACK	30 FT	72.0/84.6 FT	72.0/53.1 FT
MAX HEIGHT	40 FT	34 FT	NO CHANGE

1 SITE PLAN
 LI 1"=100.0'

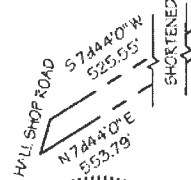


TRENCHES 2' WIDE, 6' DEEP
 W/ 3' EFFECTIVE GRAVEL DEPTH
 & 3" INLET DEPTH
 SIDEWALL/80" OM AREA
 1) 234sf 2) 240sf 3) 246sf 4) 246sf
 ABSORBENT AREA 966 SF

2 ENLARGED PARTIAL SITE PLAN
 LI 1"=60.0'



PROFESSIONAL CERTIFICATION.
 I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20297, EXPIRATION DATE: 03/29/2024



12580 Hall Shop Rd

FILE INQUIRY NOTES

DATE	RESULTS OF REVIEW FOR FILE
12/16	Received site plan from Ground Loop Heating + Air (MA)
12/16	Property has not yet been staked (MA)
1/8/25	Site has been staked. Area meets setbacks for the proposed Horizontal Closed Loop System to be
	installed (MA)