Date Released: November 6, 2025

Bid: New construction of one single-family home at 68 Pulaski Street, Buffalo, NY 14206

Deadline: **Wednesday, November 19th, 2025 at 9:00 AM**

Submit bids to: BENLIC
403 Main Street, Suite 602
Buffalo, NY 14203

Method of Submittal: Sealed Bid - US overnight mail, priority mail, 1st class mail, or in-person (**email bids will not be accepted**)

CONTACT – QUESTIONS REGARDING WORK:
JOHN GOOD, CONSTRUCTION MANAGER
TELEPHONE #: 716-609-1473
EMAIL: J.GOOD@BENLIC.ORG

CONTACT – QUESTIONS REGARDING ALL OTHER:
MATT AZZANO, PROGRAM COORDINATOR
TELEPHONE #: 716-243-3996 EXT. 104
EMAIL: M.AZZANO@BENLIC.ORG

Bid Details:

Bidding contractors shall be expected to review the attached architectural plans and these directions in placing a bid for consideration. Review of these documents is the contractor and sub-contractor's responsibility and failure to do so may result in bids not being considered complete and being rejected. Failure to properly review plans will not be considered cause for a change order or additional payments.

General:

General Contractor shall be responsible for obtaining all necessary building permits, right of way permits, sewer and water tap and work permits, as well as any other permits deemed necessary by the City of Buffalo. Permit fees will be paid by BENLIC directly to the permitting agency.

General Site Requirements:

Contractor shall be responsible for installation of **Silt Socks** around all four sides of the construction site and around any street drains downstream of the construction site on Pulaski Street. Silt control measures shall be inspected regularly and replaced as necessary to ensure proper protection of off-site infrastructure.

Contractor shall establish a stabilized **construction entrance** to the site utilizing 1.5 to 3 inch stone. This entrance will be maintained with new stone as necessary for the duration of construction.

During work, the site shall be secured with a temporary (or permanent for duration of construction) 6-foot-tall chain link **fence** across the front of the lot parallel to the street. The other three sides shall be protected with minimum 4-foot-high snow fence with metal fence posts driven into the ground every 6 feet minimum. Fences shall be maintained in good condition and shall be in place during all non-working hours.

Upon clearing site and excavating for foundation work, no **dirt** or spoils will remain on site. All excavated dirt and spoils shall be removed from the site to a holding area (General Contractor's responsibility) or properly disposed of at a disposal site. Clearing of site shall include removal of sidewalks on the public right of way (permit required) and installation of detour and construction in progress signage to warn the public. Care shall be taken to prevent spillage of dirt or spoils in the roadway or any other public way. Any spillage shall be promptly cleaned up and disposed of properly.

At completion of construction, contractor shall install **new sidewalks** along the full width of the property within the public Right of Way, per City of Buffalo standards and Department of

Public Works requirements. Sidewalks shall also be installed on property, providing a path from the front porch to the public sidewalk

Grading of site at completion of construction shall consist of installation of 4 to 6 inches of clean topsoil over entire site graded to ensure proper drainage away from dwelling foundation. After final grading is complete entire site shall be hydroseeded with a quick growing grass mixture. Site shall be maintained by contractor until a minimum growth of 3 to 4 inches of grass over entire seeded area.

During construction contractor shall be responsible for site maintenance including **lawn mowing** or **snow removal** as necessary. All **utilities** will be put in contractors name and bills will be paid by contractor until dwelling is turned over to The Land Bank with all proper paperwork.

Minority Women owned Business Enterprise (MWBE) requirements:

Based upon the contractors bid amount, the contractor shall be required at minimum to meet a goal of 25% minority-owned business participation and 15% women-owned business participation. Companies hired to meet these goals must be New York State certified (County certification without state certification is not adequate).

Tracking of MWBE participation shall be verified utilizing the attached Affirmation of Income Payments to MBE/WBE and/or SDVOB form. This form shall be submitted on a quarterly basis as follows:

Quarter:	Form due date or next business day if on holiday or weekend:
January-March	April 15th
April-June	July 15th
July-September	August 15th
October-December	January 15th

The final reporting form must be submitted with the contractor's final retention pay application.

Radon Reduction:

Contractor shall follow section 302.1 of ANSI/AARST standards CCAH-2013 and install rough-in of a radon mitigation system per sections 402.1 through 901.1 as required in section 302.1.

At completion of construction, radon testing shall be performed by BENLIC. Contractor shall provide an alternate estimate for completion of Radon mitigation system in accordance with section 901, if necessary based on results of Radon testing.

Utility Hook-ups:

Contractor shall be responsible for utility hook-ups for sewer, water and electricity. This will include any work in the right of way and road, following all guidelines from the City of Buffalo, Buffalo Sewer Authority and Buffalo Water Authority including obtaining appropriate permits. Permit costs will be paid by BENLIC.

Toilet Facilities:

Contractor shall provide porta potty on site for use during construction.

Please write your total bid amount next to the corresponding property in both numbers and words.

(For example: " $10,250 ;   Ten thousand two hundred and fifty   Dollars")

In case of discrepancy, amounts shown in words will govern.

1. **New Construction of Single-Family Home at 68 Pulaski Street, Buffalo, NY according to attached building plans**

Total bid amount: $_____; _____ Dollars

Total MBE amount: $_____; _____ Dollars

Total WBE amount: $_____; _____ Dollars

Business Name: _____

Mailing Address: _____

Federal EIN #: _____

Primary Contact: _____

Phone Number: _____

Email: _____

Total bid amount for all properties contractor is bidding on:

$_____; _____ Dollars

CONTRACTOR QUALIFICATIONS

In addition to filling out the bid sheet, attach the following:

- Provide three past customers as references
- Provide a brief description of your construction experience along with before and after photos of past projects if available
- Insurance Certificates
- EPA Lead Paint Contractor Certification
- Subcontractor Utilization Plan

BID DETAILS:

BENLIC is not responsible for delays occasioned by the U.S. Postal Service, the internal mail delivery system or any other means of delivery employed by the bidder. Similarly, BENLIC is not responsible for, and will not consider, any response which was received in our office later than the date and time stated above. Late bids shall not be considered and shall be returned to the late bidder. BENLIC reserves the right to reject any or all bids or waive any informality in a bid if it believes that the public interest will be promoted thereby. BENLIC may reject any bid, if, in its judgment, the business and technical organization, plant, resources, financial standing, or experience of the bidder justifies such rejection in view of the work to be performed. Any questions about the meaning, intent or specifications must be inquired into by the Bidder via mail, fax or email prior to the time set for the Bid Opening.

Bids will be submitted to the BENLIC Board of Directors for consideration and approval at a regularly scheduled meeting. Bid may be awarded to the lowest responsible bidder who, in the opinion of the corporation and approved by the Board, is qualified to perform the work required and who is responsible and reliable. The meeting is open to the public. In the case of tie bids, BENLIC will make the award based on priority factors. A bid tabulation summary of the received, reviewed and appropriate bids will be included in the minutes of BENLIC. Bidder agrees that his/her bid price remains effective for 120 days past the Deadline for Submittal.

The work cannot begin until contractor executes a BENLIC Standard Construction Contract and proves proper Certificate(s) of Insurance has been reviewed and approved by BENLIC.
Subcontractors may be used. All subcontractors will need to provide adequate insurance certificates. Job is not prevailing wage rate.

EQUAL EMPLOYMENT OPPORTUNITY

This organization will not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability or marital status, will undertake or continue existing programs of affirmative action to ensure that minority group members are afforded equal employment opportunities without discrimination, and shall make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on State contracts.

This organization shall state in all solicitation or advertisements for employees that in the performance of the State contract all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex disability or marital status.

At the request of the contracting agency, this organization shall request each employment agency, labor union, or authorized representative for a statement that it will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of this organization's obligations herein.

Contractor shall comply with the provisions of the Human Rights Law, all other State and Federal statutory and constitutional non-discrimination provisions. Contractor and subcontractors shall not discriminate against any employee or applicant for employment because of race, creed (religion), color, sex, national origin, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status or domestic violence victim status, and shall also follow the requirements of the Human Rights Law with regard to nondiscrimination on the basis of prior criminal conviction and prior arrest.

NEW YORK STATE SALES AND LOCAL TAX EXEMPTION NOTE
Some materials for this project may be purchased tax-exempt. BENLIC is exempt from payment of New York State and local sales and use tax. BENLIC will furnish the winning bidder an Exempt Purchase Certificate (ST 119.1) as proof of its exemption. Personal property made part of the real property of project sites (that is materials, e.g. siding, shingles, gutters, windows, etc.) may be purchased exempt from such taxes provided that the winning bidder provide to his seller(s) properly completed Contractor Exempt Purchase Certificate(s) (ST 120.1). The cost benefit of exemption from such taxes is the benefit of BENLIC only. BENLIC seeks the lowest, responsible, and qualified bid. Bidders acknowledge that their bid herein contains pricing inclusive of this cost benefit.

MINORITY/WOMEN-OWNED BUSINESS ENTERPRISE UTILIZATION
This stabilization project will be funded by New York State Homes and Community Renewal (HCR). NYS-certified Minority- and Women-Owned Business Enterprises are encouraged to bid. To be considered certified as an M/WBE, the business enterprise must be listed on the NYS M/WBE directory. (This line is for HCR projects)

TERM OF PAYMENT
Pursuant to Contractor Agreement

BID AGREEMENT
The undersigned bidder offers and agrees, if this bid is accepted to enter into an agreement with the BUFFALO ERIE NIAGARA LAND IMPROVEMENT CORPORATION to complete all work as specified for the contract price and within the contract time indicated in accordance with these documents.

Bidder declares by submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his knowledge and belief:

1) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;

2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to the opening, directly or indirectly, to any other bidder or to any competitor; and

3) No attempt has been made or will be made by the bidder to induce any other person partnership or corporation to submit or not to submit a bid for the purpose of restriction competition.

A bid shall not be considered for award nor shall any award be made where (a) (1) (2) and (3) above have not been complied with; provided however, that if in any case the bidder cannot make the foregoing certification, the bidder shall so state and furnish with the bid a signed statement which sets forth in detail the reasons therefor. Where (a) (1) (2) and (3) above have not been complied with, the bid shall not be considered for award nor shall any award be made unless the agency to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition that no person(s) other than those named herein are interested in this bid;

In submitting this bid, Bidder represent that he has examined the Instruction to Bidders; all other documents; that he has examined the proposed work site; that he has familiarized himself with all legal requirements (federal, state and local laws; ordinances; rules and regulations); that he as made such independent investigations as he deems necessary; he has satisfied himself as to all conditions affecting cost, progress or

performance of work; and that by signing this bid waives all rights to plead to misunderstanding regarding the same.

The Bidder further agrees that:

1. This bid shall remain open and may not be withdrawn for the time period set forth in the Instruction to Bidders.

2. That he accepts all terms and conditions in the Instruction to Bidders

3. The BUFFALO ERIE NIAGARA LAND IMPROVEMENT CORPORATION has the right to delete bid items and/or sections prior to award if the BUFFALO ERIE NIAGARA LAND IMPROVEMENT CORPORATION deems this to be in the BUFFALO ERIE NIAGARA LAND IMPROVEMENT CORPORATION'S best interest.

4. That upon acceptance of this bid, he will execute the agreement and will furnish the required contract insurance certificates (if not submitted with his bid) within a time period acceptable to the BUFFALO ERIE NIAGARA LAND IMPROVEMENT CORPORATION.

Respectfully Submitted on _____ 2025

By _____ (Signature of Bidder)

BUFFALO ERIE NIAGARA LAND IMPROVEMENT CORPORATION

TERMS AND CONDITIONS

1. Bidder agrees to provide goods and/or services as described in this bid proposal to complete the Work, in a manner consistent with the highest standards of persons regularly engaged in providing such goods or services.

2. Bidder shall be compensated at the rates and prices set forth in this bid proposal once approved by the BENLC Board of Directors, for goods and/or services actually provided and only after receipt of an original invoice within thirty (30) days and after all services are rendered, inspected and accepted. Surcharges (i.e. fuel surcharges) shall NOT be allowed to be added to invoices. In no event shall the BENLIC's liability for payment to Bidder under this Contract, exceed the sum stated in the bid proposal and approved by the BENLIC Board of Directors.

3. Bidder shall have seven (7) days from receipt of a Project Award Letter to provide BENLIC proof of insurance as detailed in the insurance requirements. Upon receipt of proof of insurance, BENLIC may issue a Notice and Order to Proceed Letter and Bidder shall within fifteen (15) days from receipt of same letter secure permits and start work. Bidder must forward copies of permits secured and notify BENLIC of the Start Date. From the Start Date, Bidder shall have forty-five (45) days to complete the work. Bidder shall immediately inform the BENLIC in writing by mail or facsimile transmission of any delay in providing goods and services to the BENLIC.

4. BENLIC may, with or without cause, terminate Bidder's services, in whole or in part, immediately upon giving notice to Bidder. In such event Bidder shall be compensated and the BENLIC shall be liable only for payment for services already rendered.

5. All records, if any, compiled by Bidder in providing services to BENLIC shall become and remain the property of BENLIC. Bidder may retain copies of such records for its own use.

6. No portion of the work necessary to provide goods or services to BENLIC may be assigned or subcontracted without the prior written consent of BENLIC.

7. Bidder agrees that it is an independent contractor and hereby waive all claims to benefits or privileges, if any available to persons as employees. Bidder shall comply, at Bidder's own cost and expense, with the provisions of all federal, state or local laws, ordinances, regulations or rules applicable to Bidder including without limitation, the N.Y.S. Labor Law and Worker's Compensation Law and any applicable license requirements.

9. Bidder agrees that in providing goods or services to BENLIC, Bidder or any person working on Bidder's behalf, shall not, by reason of race, creed, color, sex, age, physical disability, national origin, genetic predisposition, carrier status, marital status or any other protected class, discriminate against, intimidate or harass any individual.

10. Bidder agrees that, except for the amount, if any, of damage contributed to, caused by or resulting from the acts or omissions of BENLIC, Bidder shall indemnify, defend and hold harmless the BENLIC, its governmental sponsors-County of Erie, Cities of Buffalo, Lackawanna and/or Tonawanda, the Empire State Development Corporation, the Office of the New York Attorney General, their officers, employees and agents from and against any and all liability, damage, claims, demands, costs, judgments, fees, attorney's fees or loss arising directly or indirectly out of Bidder's acts or omissions or the acts or omissions of third parties under Bidder's direction and control.

BENLIC STANDARD INSURANCE PROVISIONS

CLASSIFICATION A: Construction or Maintenance

BUFFALO ERIE NIAGARA LAND IMPROVEMENT CORPORATION STANDARD INSURANCE REQUIREMENTS

Vendor Insurance Classification A: Contracts Involving Construction or Maintenance

1. The contractor shall obtain, at its own cost and expense, the following insurance coverages with insurance companies licensed in the State of New York and shall provide a certificate of insurance as evidence of such coverages on the standard ACCORD Certificate, together with the corresponding policy endorsements.

A. Commercial General Liability - with a minimum combined single limit of liability for Bodily Injury and Property Damage of $3,000,000 per occurrence and $3,000,000 general aggregate and $3,000,000 Products – Completed Operation Aggregate. The coverage shall include:
- Premises and Operations
- Products and Completed Operations
- Independent Contractors
- Blanket Broad Form Contractual Liability (sufficient to cover all liability assumed under contracts with BENLIC
- Broad Form Property Damage
- Explosion, Collapse and Underground Hazards (x, c, u) must NOT be excluded.

Deductible must not exceed $10,000.00

B. Automobile Liability - with a minimum combined single limit of liability for Bodily Injury and Property Damage of $1,000,000 each occurrence. The coverage shall include Owned, Hired, and Non-Owned Autos (Symbol "1" should be designated for Liability coverage on the Business Auto Policy). The deductible shall not exceed $10,000.

C. Excess "Umbrella" Liability - with a minimum limit of $1,000,000 each occurrence / $1,000,000 aggregate.

D. Worker's Compensation and Employer's Liability - providing statutory coverage in compliance with the Worker's Compensation Law of the State of New York (Forms C-105.2; SI-12; GSI-105.2; or U-26.3). The deductible shall not exceed $10,000.

E. Disability Benefits - providing statutory coverage in compliance with the New York State Disability Benefits Law (Forms DB-120.1 or DB-155).

2. Commercial General Liability, Automobile Liability and Excess "Umbrella" Liability shall name the Buffalo Erie Niagara Land Improvement Corporation (BENLIC), and if applicable, HOUSING TRUST FUND CORPORATION, 38-40 State Street, Albany, NY 12207, and STATE OF NEW YORK, One Commerce Plaza, 99 Washington Ave, Albany, NY 12231-0001. Coverage should be provided on a primary and non-contributory bases. Designated Construction Project General Aggregate Limit Per Person Endorsement CG 2503 is required. Waiver of Subrogation is required on all lines in favor of BENLIC.

3. All policies in which BENLIC, and if applicable, HOUSING TRUST FUND CORPORATION and STATE OF NEW YORK is/are named as an additional insured(s) shall provide that:

A. The insurance company or companies issuing the policies shall have no recourse against the BENLIC and/or HOUSING TRUST FUND CORPORATION and STATE OF NEW YORK for payment of any premiums or for assessments under any form of policy.
B. The insurance shall apply separately to each insured (except with respect to the limit of the liability).

4. Prior to cancellation, non-renewal or material change of the above policies, at thirty (30) days advance written notice shall be given to the Executive Director of BENLIC with a copy to Counsel for BENLIC c/o John P. Sidd – Hancock Estabrook, LLP, 1800 AXA Tower I, 100 Madison Street, Syracuse, New York 13202, and the Agency requesting the certificate.

5. All certificates of insurance and policy endorsements shall be approved by the BENLIC Counsel prior to the inception of any work. Any request for a waiver of the above requirements shall be in writing to BENLIC Counsel c/o John P. Sidd – Hancock Estabrook, LLP, 1800 AXA Tower I, 100 Madison Street, Syracuse, New York 13202.

Failure to maintain coverage herein shall constitute a material breach of the contract and the Contractor shall suspend all work immediately upon such lapse in coverage.

68 PULASKI STREET - SINGLE FAMILY HOME

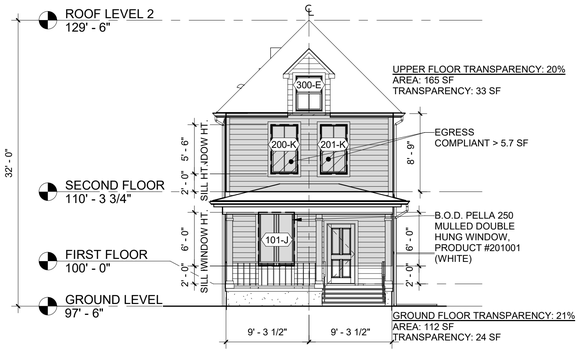
ISSUED FOR BID AND BUILDING PERMIT

68 PULASKI ST., BUFFALO NY
GOOGLE EARTH IMAGE

DRAWING INDEX

SBL: 123.26-4-16
KAISERTOWN, LOVEJOY DISTRICT
N-3R RESIDENTIAL ZONING

	REQUIRED	ACTUAL
		LOT AREA: +/-2,565 SF (0.059 AC)
A	LOT AREA: 1,800 SF MIN. LOT WIDTH MIN/MAX: 30'/75'	LOT WIDTH: 30' LOT DEPTH: 85.5'
C	LOT COVERAGE: 70% MAX.	HOUSE AREA (955 SF) + PAD (64 SF) = 1,019 SF SITE COVERAGE: 39.7%
D	IMPERVIOUS COVERAGE: 80% MAX.	IMPERVIOUS COVERAGE: 55.1%
E	FRONT YARD (MIN/MAX) +/- 5' FROM EST. FRONT YARD LINE	FRONT YARD: SEE SITE PLAN
F	BUILD TO PERCENTAGE: 65% MIN.	BUILD TO PERCENTAGE: 100%
G	SIDE YARDS TOTAL: 20% OF LOT WIDTH	SIDE YARD TOTAL: 6'
H	INTERIOR SIDE YARD: 3' MIN.	INTERIOR SIDE YARD: 3.0'
I	REAR YARD: 20% OF LOT DEPTH	REAR YARD: 17.1'
	BUILDING HEIGHT: MAX. 3 STORIES/40'	BUILDING HEIGHT: 32'-0"
	FIN. GROUND FL. LEVEL: MIN/MAX: 0'/4'	FIN. GROUND FL. LEVEL: 2'-6"
	GROUND FL. TRANSPARENCY: 20% MIN.	GROUND FL. TRANSPARENCY: 21%
	UPPER FL. TRANSPARENCY: 20% MIN.	UPPER FL. TRANSPARENCY: 20%
	MAIN ENTRANCE: FRONT, INTERIOR SIDE OR CORNER SIDE FACADE	MAIN ENTRANCE: FRONT FACADE



2 FRONT ELEVATION - TRANSPARENCY 68 PULASKI STREET
1/8" = 1'-0"

FR-1 FIRE RATED WALL CONSTRUCTION 1-HOUR

ENTRY DOOR

IMPERVIOUS SURFACE

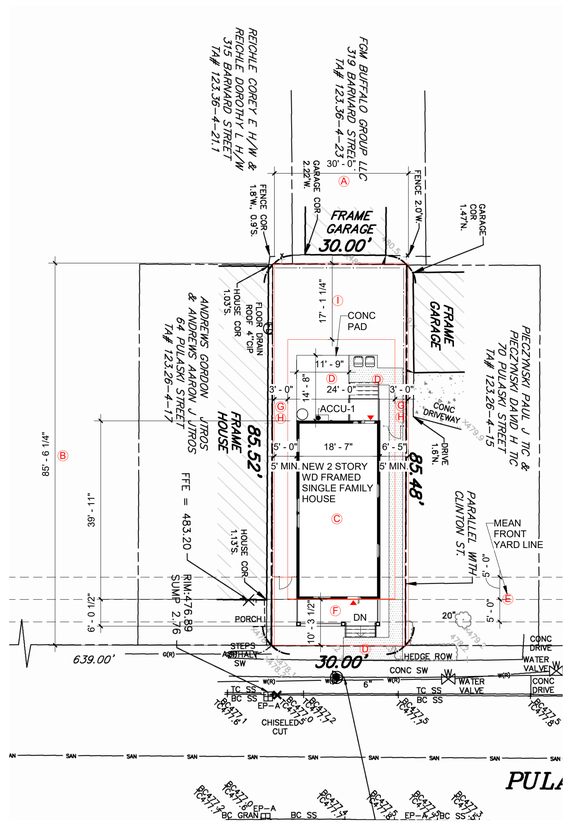
TRASH/RECYCLING TOTE

EXISTING FENCE TO REMAIN

PROPOSED FENCE

50 GAL. RAIN BARREL

SITE PLAN KEY



1 SITE PLAN - 68 PULASKI ST.
1/16" = 1'-0"

N

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [X] ISSUED FOR CONSTRUCTION
[ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [ ] CONSTRUCTION DOCUMENTS
ARCHITECT OF RECORD

HHL Architects
172 Allen Street, Buffalo, New York 14201
716.885.0743 ■ F: 716.885.6414
HHLArchitects.com

TREDO ENGINEERING
STRUCTURAL
755 SENECA ST., #202
BUFFALO, NY 14210
(716) 876 - 7147

BUFFALO ENG., PC
MEP
4245 UNION RD.
BUFFALO, NY 14225
(716) 633 - 5598

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET - SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC
403 MAIN STREET, SUITE 402
BUFFALO, NEW YORK 14203

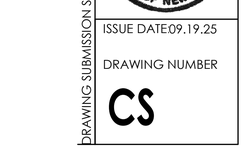
PROJECT NUMBER: **2317.006**

DRAWING TITLE
COVER - 68 PULASKI ST.

REVISIONS AFTER ISSUANCE

NO.	DATE	DESCRIPTION

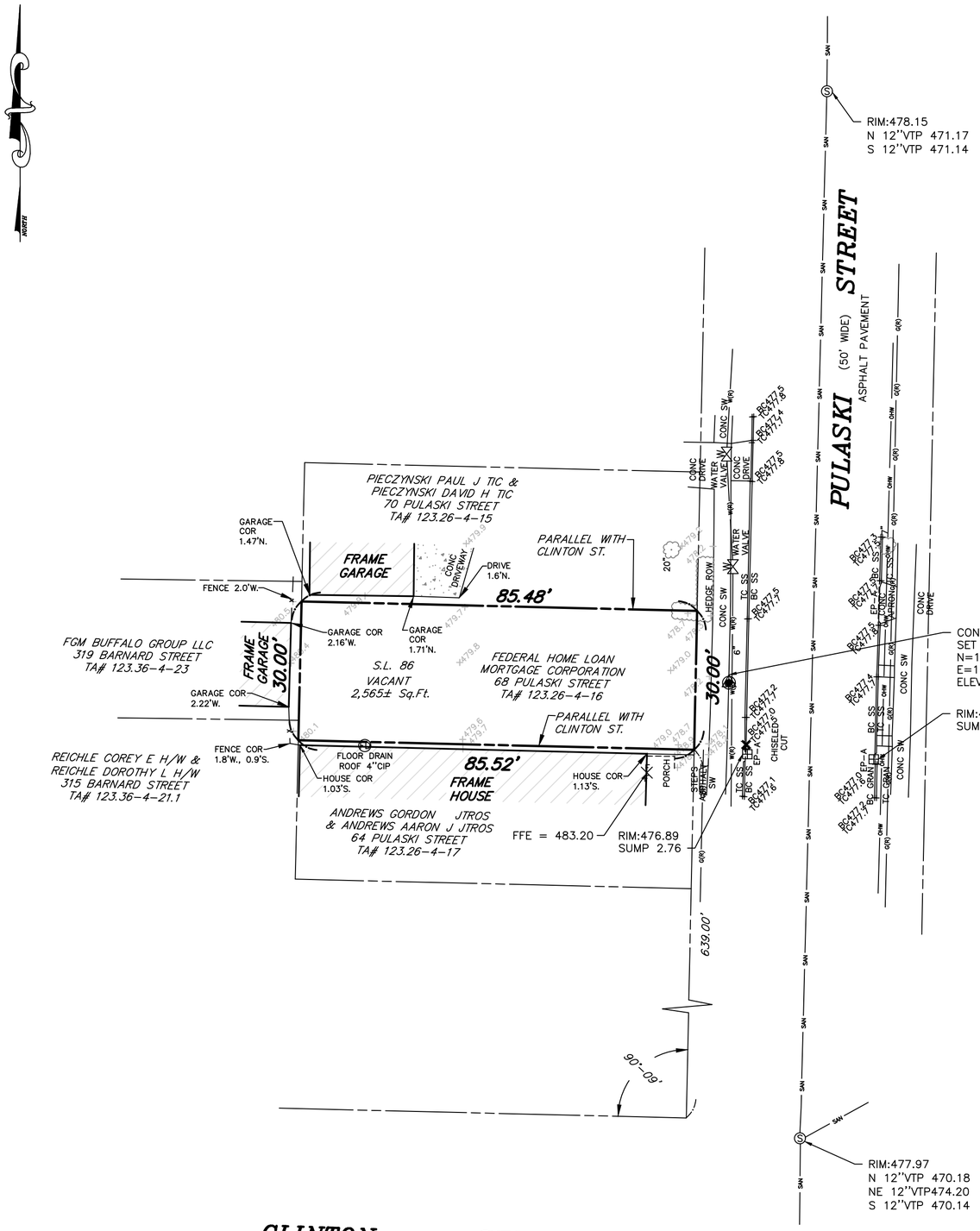
SEAL



ISSUE DATE: 09.19.25

DRAWING NUMBER
CS

NOTE: THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE AND IS SUBJECT TO ANY STATE OF FACTS THAT MAY BE REVEALED BY AN EXAMINATION OF SUCH.



DIG SAFE UTILITY:

TYPE	COMPANY	RESPONSE	AFFECTED
COMMUNICATION	CHARTER	YES	NO
	LEVEL 3 COMMUNICATIONS	YES	NO
	VERIZON	YES	NO
ELECTRIC	NATIONAL GRID	YES	NO
GAS	NATIONAL FUEL	YES	YES
STORM/SANITARY SEWER	BUFFALO SEWER AUTHORITY	YES	YES
	ERIE COUNTY DIVISION OF SEWER MANAGEMENT	YES	YES
WATER	CITY OF BUFFALO WATER AUTHORITY	YES	YES
	ERIE COUNTY WATER AUTHORITY	YES	NO
OTHER	G4S SECURE INTEGRATION LLC	NO	NO INFO

NOTE:

UTILITY INFORMATION WAS PROVIDED FROM FIELD SURVEY AND DIG SAFE. DIG SAFE DESIGN TICKETS ARE #07085-001-055 & 07095-000-563 07/08/2025. UTILITY COMPANIES WERE CONTACTED VIA PHONE AND EMAIL. IF NO RESPONSE FROM UTILITY COMPANY BEFORE PROJECT GOES TO CLIENT; KHEOPS WILL FORWARD ON TO THE CLIENT ANY LATE UTILITY INFO/EMAILS RECEIVED.

THE UTILITY INFORMATION SHOWN ON THE SURVEY DRAWING ARE FROM A DIG SAFE DESIGN TICKET AND SHOULD NOT REPLACE AN ACTUAL DIG LOCATION TICKET.

LEGEND:

- CATCH BASIN
- CHISELED CUT
- CONTROL POINT
- DECIDUOUS TREE
- FIRST FLOOR ELEVATION
- FLOOR DRAIN
- GROUND SHOT 1DP
- MAG NAIL
- SANITARY MANHOLE
- WATER VALVE

SURVEY LINE TYPES:

- EDGE OF PAVEMENT
- FENCE
- PROPERTY LOT LINE (APPROX)

UTILITY LINE TYPES:

- GAS LINE (RECORD) G(R)
- OVERHEAD WIRES OHW
- WATER LINE (RECORD) W(R)

ABBREVIATIONS:

BC	BOTTOM OF CURB
TC	TOP OF CURB
CONC	CONCRETE
SS	SANDSTONE
SW	SIDEWALK
EP-A	END OF PAVEMENT ASPHALT
GRAN	GRANITE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

"BOUNDARY & TOPOGRAPHIC SURVEY"

SUBLOT 86 ~ MAP LIBER 307, PAGE 358

V-100

PART OF L 160 S ____ T 10 R 7 OF THE BUFFALO CREEK RESERVATION
VILLAGE OF ____ ; CITY/~~TOWN~~ OF BUFFALO ; COUNTY OF ERIE ; STATE OF NEW YORK

STATE OF NEW YORK
GRANT E. McEWEN
No. 050754
LICENSED LAND SURVEYOR

NOTE: UNAUTHORIZED ALTERATION OR ADDITION TO ANY SURVEY, DRAWING, DESIGN SPECIFICATION PLAN OR REPORT IS A VIOLATION OF SECTION 7209 PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

REVISION

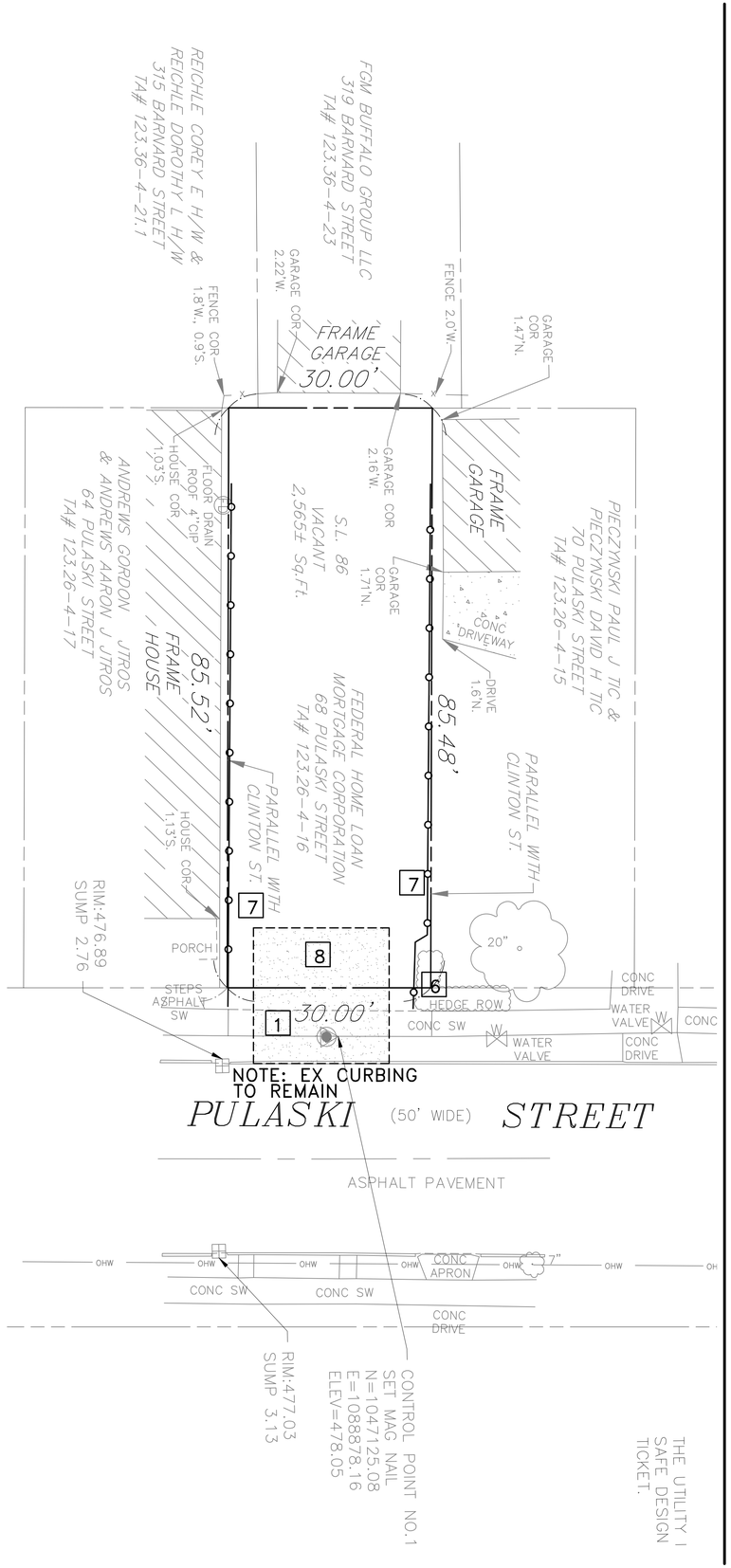
DATE	JOB	DESCRIPTION

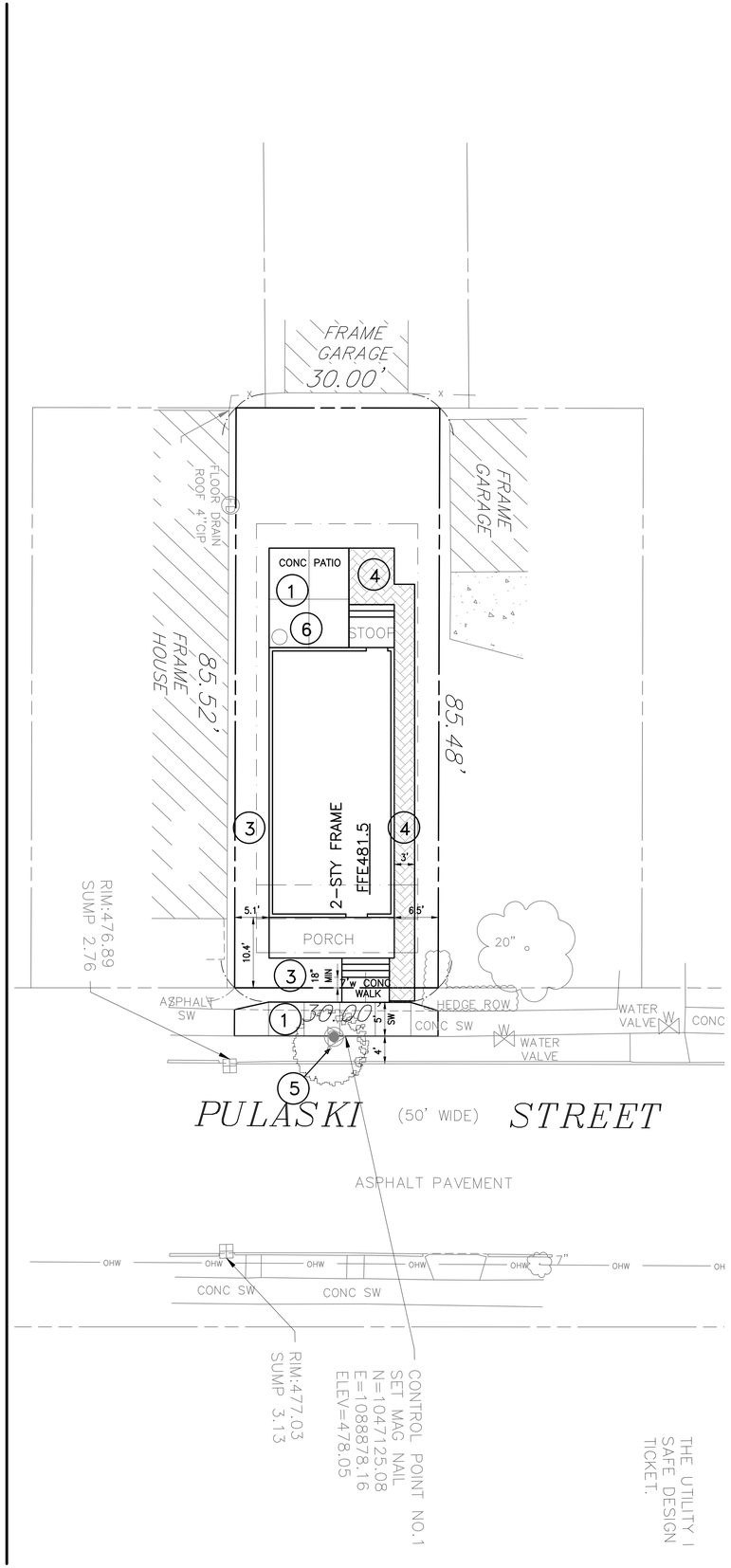
SBL No. AS NOTED

KHEOPS
ARCHITECTURE, ENGINEERING & SURVEY, DPC
392 Pearl Street, Suite 401
Buffalo, New York 14202
P. 716.849.8739
F. 716.856.0981
WWW.KHEOPSDPC.COM

DRAWN BY ANJ SCALE 1" = 20'
CHECKED BY GEM JOB NO. 25NY016.03
CAD FILE 68 PULANSKI AVE - 66188 FIELD/OFFICE DATE 7/8/2025

BOOK 434 PAGE 138 MAP 66188





SITE DEMOLITION & EROSION CONTROL PLAN

1" = 10'

SITE LAYOUT PLAN

1" = 10'

N

PLAN NOTES:

1. BOUNDARY AND TOPOGRAPHIC DATA SHOWN ON THIS DRAWING IS FOR INFORMATION ONLY. REFER TO SURVEYS PROVIDED BY THE OWNER. ENGINEER ASSUMES NO LIABILITY FOR UNFORESEEN CONDITIONS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL BUILDING DIMENSIONS & FEATURES, AND M.E.P. PLANS FOR UTILITY CONNECTIONS.

SITE DEMOLITION & EROSION CONTROL NOTES:

1. SAWCUT & REMOVE PORTION OF CONCRETE/ASPHALT PAVT
2. NOT USED
3. NOT USED
4. NOT USED
5. NOT USED
6. PROTECT EXISTING PLANTING FROM DAMAGE THROUGHOUT CONSTRUCTION
7. 12" DIA COMPOST FILTER SOCK STAKED-IN
8. TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION NOTES:

1. CONCRETE PAVEMENT SECTION
2. NOT USED
3. 4-INCH MINIMUM TOPSOIL & LAWN SEED
4. PERVIOUS PAVER SECTION
5. STREET TREE: ACER RUBRUM -RED SUNSET MAPLE 2.5" CAL. B&B -COORD. LOCATION WITH UTILITIES
6. RAIN BARREL

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION

PROJECT NAME/LOCATION:
DESCRIPTION[NEW CONSTRUCTION]
68 PULASKI ST - SINGLE FAMIILY HOME

PROJECT NUMBER: **2317.006**
T.E. PROJ. NUMBER: **25-60**

BENLIC DEVELOPMENT LLC
403 MAIN ST, SUITE 602
BUFFALO, NY 14203

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BUFFALO, NY 14225
(716) 633-5598

HHL Architects
ARCHITECT OF RECORD
172 Allen Street Buffalo, New York 14201
716.885.0743 ■ F: 716.885.6414
HHLArchitects.com

DRAWING TITLE
SITE PLANS

REVISIONS AFTER ISSUANCE		
NO.	DATE	DESCRIPTION
-	-	-

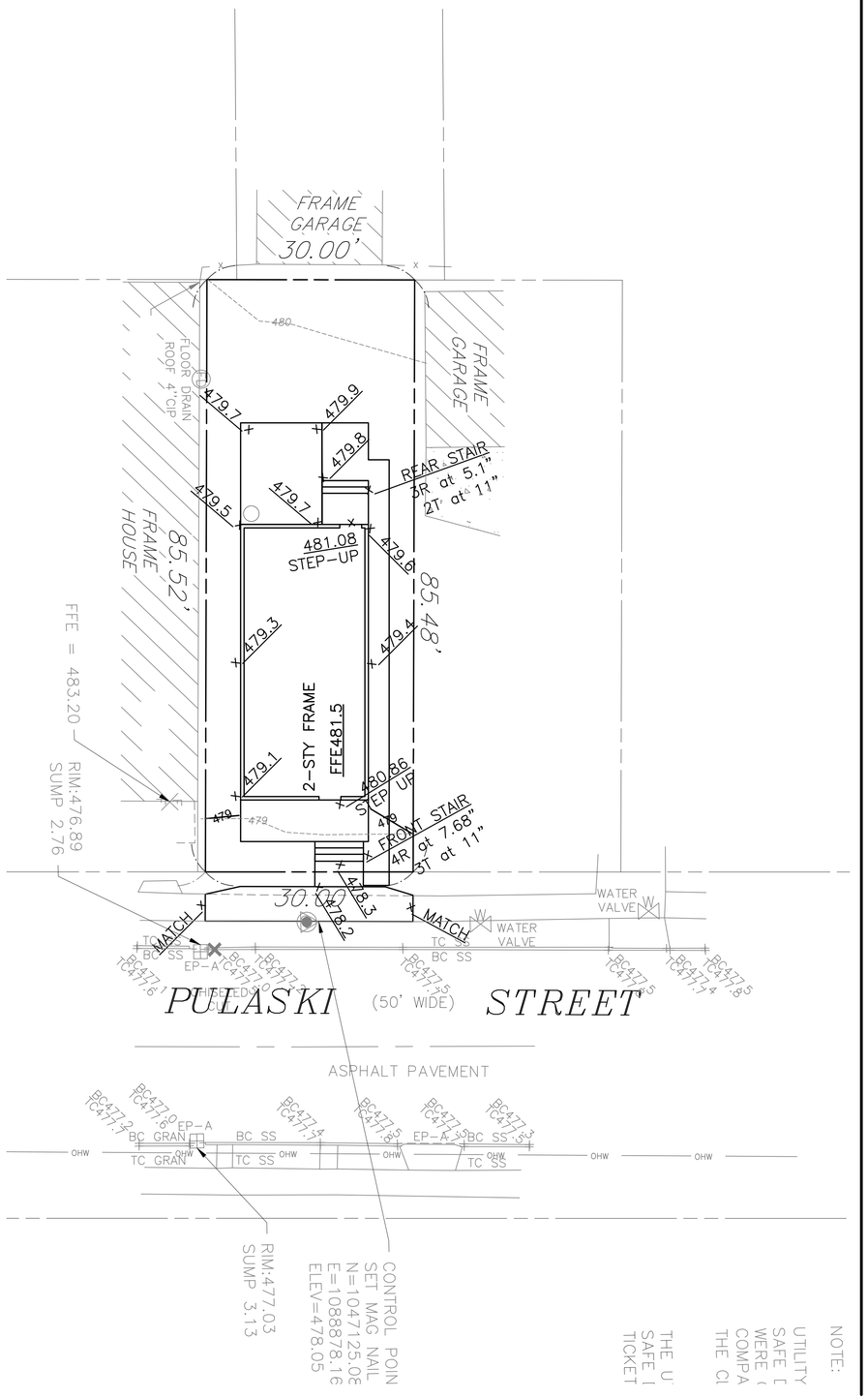
SEAL

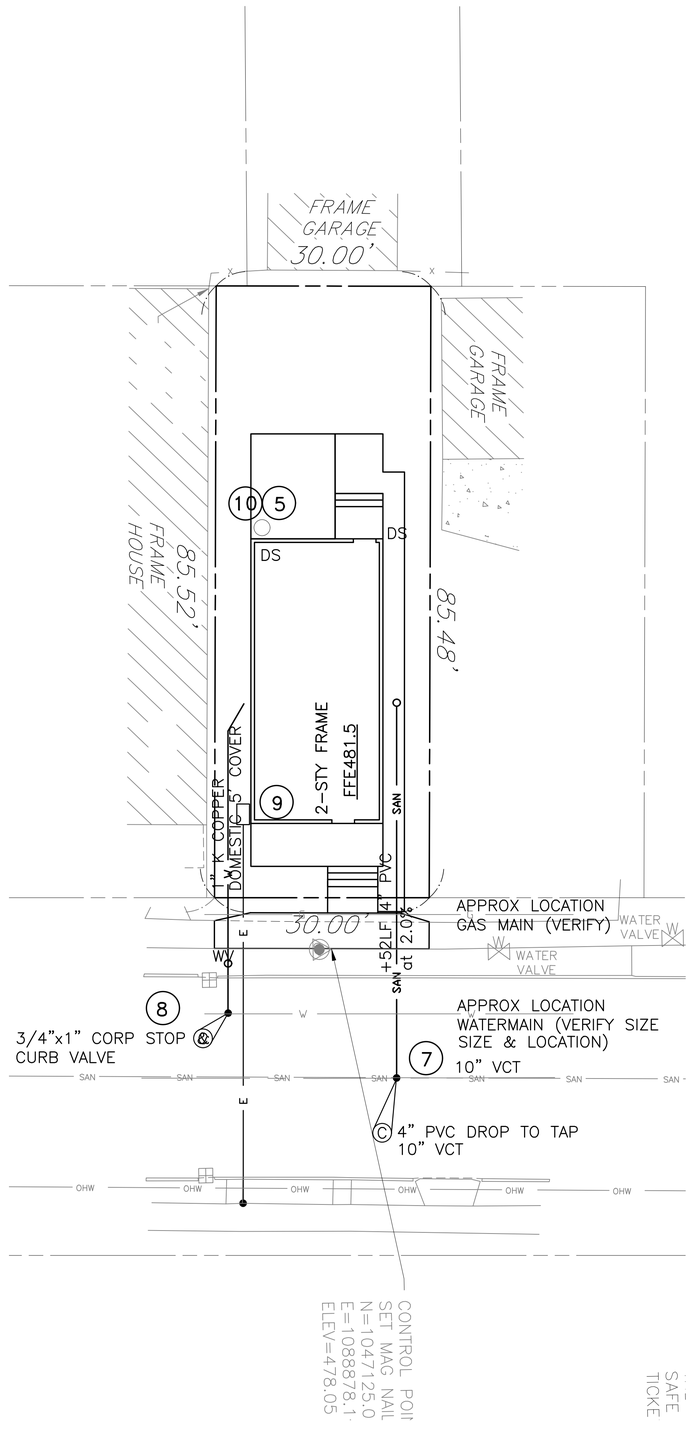
EXPIRES: 10.31.25

ISSUE DATE: **9.19.25**

DRAWING NUMBER

SP101



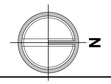


SITE GRADING PLAN

1" = 10'

SITE UTILITIES PLAN

1" = 10'



LEGEND:

ELEV	DENOTES PROPOSED SPOT ELEVATIONS	ELEV	DENOTES EXISTING SPOT ELEVATIONS
		DI	DENOTES EXISTING STORM SEWER DROP INLET
CO	DENOTES PROPOSED CLEANOUT	ST	DENOTES EXISTING STORM SEWER MANHOLE
C	DENOTES CONNECTION TO EXISTING UTILITY	SAN	DENOTES EXISTING SANITARY SEWER MANHOLE
			DENOTES EXISTING HYDRANT
			DENOTES EXISTING LIGHT POLE
DS	DENOTES PROPOSED DOWNSPOUT		DENOTES EXISTING WATER VALVE
ELEV	DENOTES NEW CONTOURS	ELEV	DENOTES EXISTING CONTOURS
X X X X X		X X X X X	DENOTES EXISTING FENCING
		OHE	DENOTES EXISTING UTILITY POLE AND OVERHEAD UTILITIES
		ST	DENOTES EXISTING STORM SEWER LINE
		SAN	DENOTES EXISTING SANITARY SEWER LINE
		W	DENOTES EXISTING WATER LINE
		E	DENOTES EXISTING ELECTRIC LINE
		G	DENOTES EXISTING GAS LINE
		ST	DENOTES PROPOSED STORM SEWER LINE
		SAN	DENOTES PROPOSED SANITARY SEWER LINE
		W	DENOTES PROPOSED WATER LINE

CONSTRUCTION NOTES:

1. CONCRETE PAVEMENT SECTION
2. NOT USED
3. 4-INCH MINIMUM TOPSOIL & LAWN SEED
4. PERVIOUS PAVER SECTION
5. CONCRETE SPLASH BLOCK AT DOWNSPOUT ELBOW DAYLIGHT IN DIRECTION SHOWN
6. NOT USED
7. 4-INCH PVC (SDR35) WASTEWATER LATERAL at 2.0% MIN. SLOPE -PROVIDE 4-FT MINIMUM COVER -DROP TO TAP
8. TYPE K COPPER DOMESTIC WATER SERVICE CORP. STOP & CURB VALVE -PROVIDE 5-FT MIN. COVER -COORD. METER LOCATION w/ M.E.P. PLANS & SUPPLIER
9. POWER SERVICE & METER COORD. w/ M.E.P. PLANS & SUPPLIER
10. 50 GALLON RAIN BARREL PER 10/SP201

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION
[ ] RECORD

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PROJECT NAME/LOCATION:
DESCRIPTION[NEW CONSTRUCTION]
68 PULASKI ST - SINGLE FAMIILY HOME

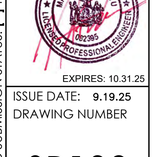
BENLIC DEVELOPMENT LLC
403 MAIN ST. SUITE 602
BUFFALO, NY 14203

PROJECT NUMBER: **2317.006**
T.E. PROJ. NUMBER: **25-60**

DRAWING TITLE
SITE PLANS

REVISIONS AFTER ISSUANCE		
NO.	DATE	DESCRIPTION

SEAL.

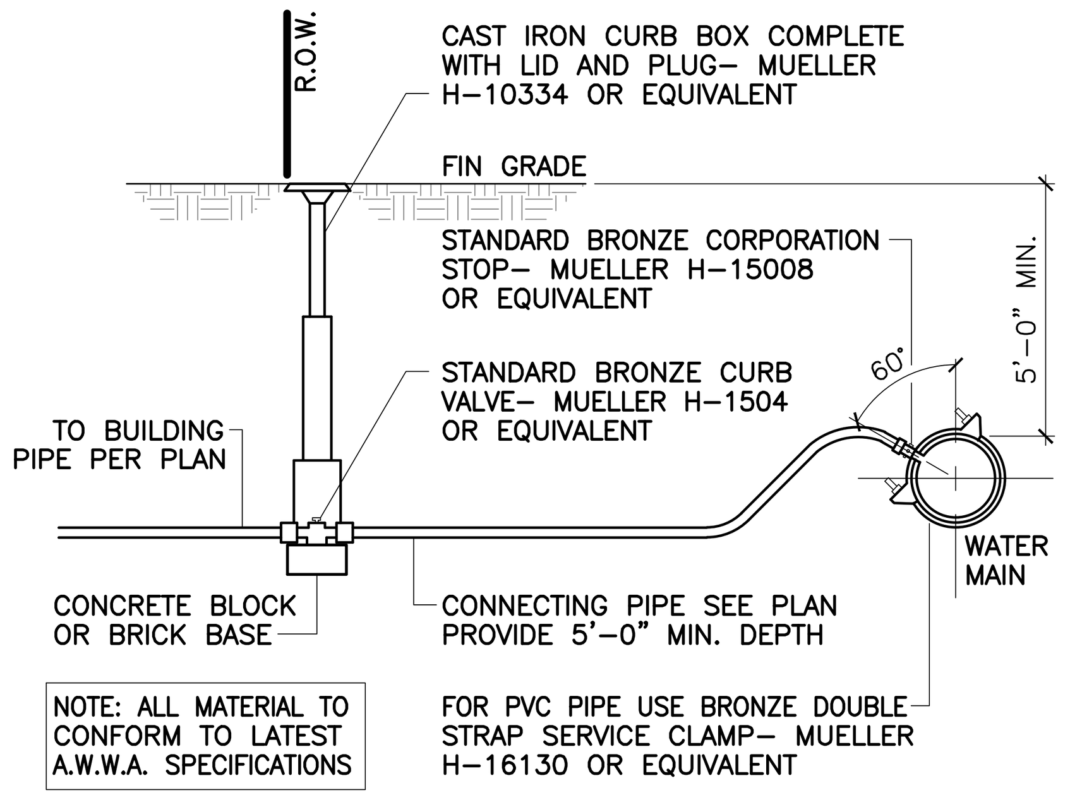


EXPIRES: 10.31.25

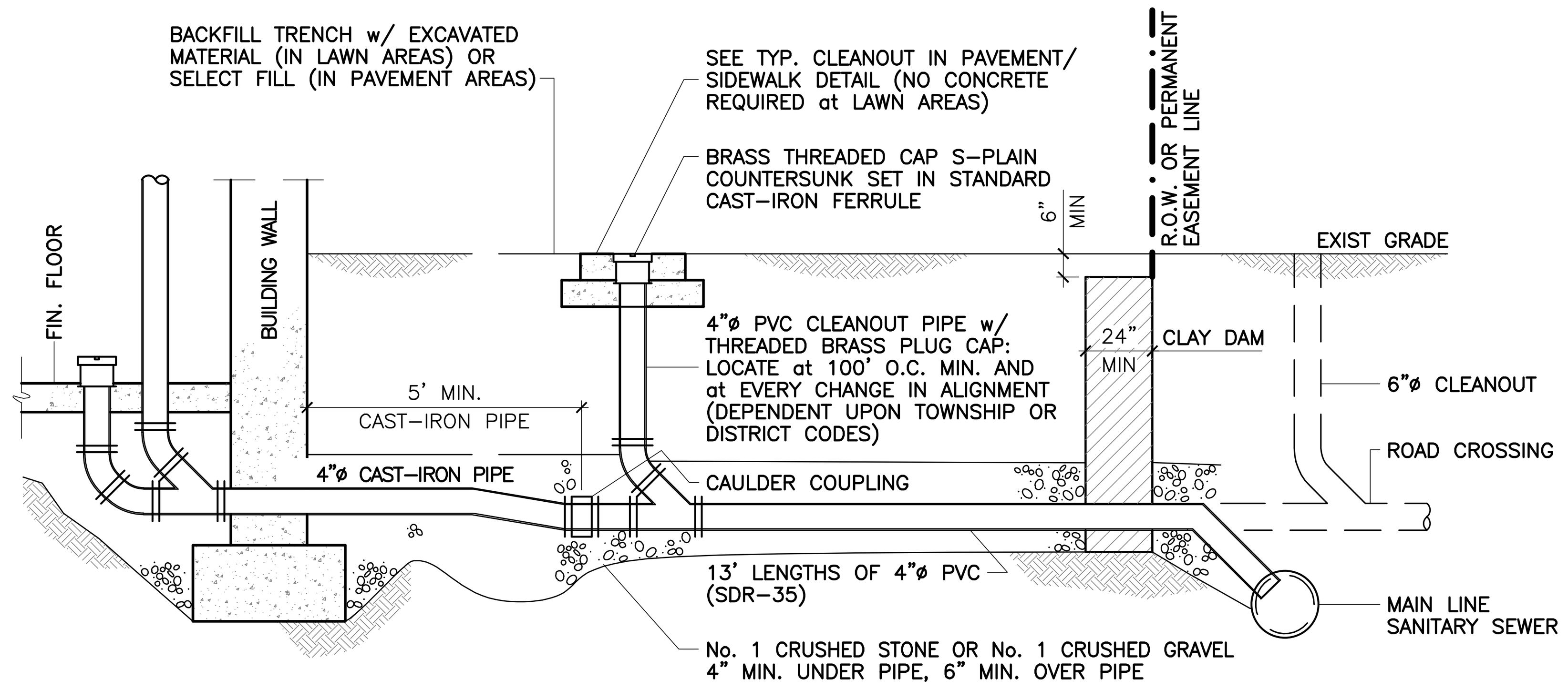
ISSUE DATE: **9.19.25**

DRAWING NUMBER

SP102



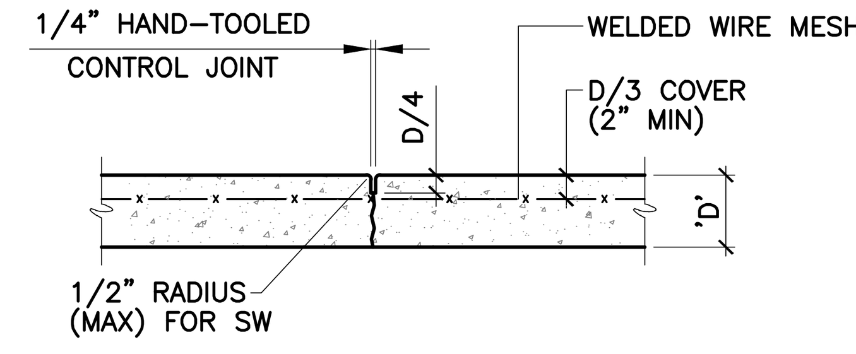
6 WATER SERVICE LINE CONNECTION DETAIL
≤ 2–INCH PIPE



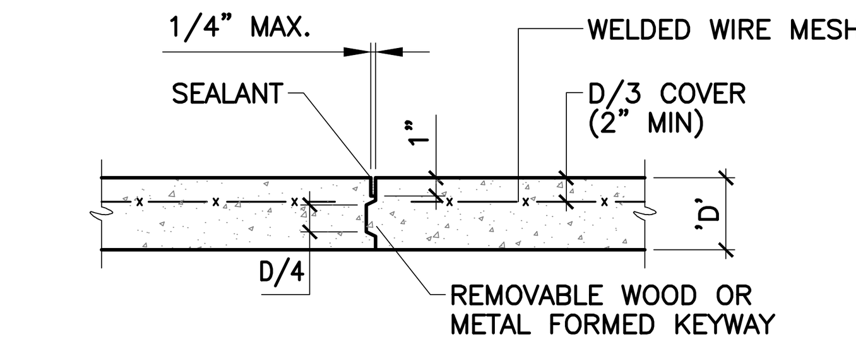
5 RESIDENTIAL SERVICE DETAIL

RESIDENTIAL SERVICE NOTES:

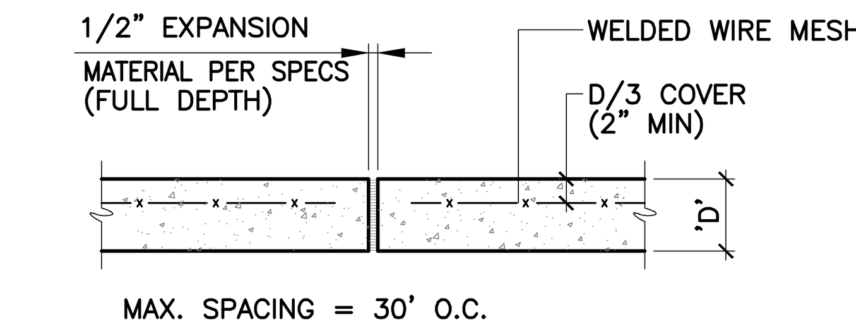
1. THE SERVICE LATERAL MUST BE INSTALLED A MIN. OF 10" ABOVE THE BASEMENT FLOOR (IF APPLICABLE). WHERE LOCAL BUILDING ORDINANCES REQUIRE A GREATER DISTANCE, THE CONTRACTOR SHALL COMPLY TO THE MORE STRINGENT.
2. PVC PIPE MATERIAL SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATEST REQUIREMENTS OF ASTM D–3033/D–3034. CAST–IRON PIPE MATERIAL SHALL BE EXTRA HEAVY ASTM A74–42.
3. PURSUANT TO DISTRICT RULES AND REGULATIONS, PIPE SHALL BE LAID AT 1/4" PER FOOT GRADE. ANY VARIANCE MUST BE APPROVED BY THE DISTRICT MANAGER. IN NO CASE SHALL PIPE GRADE BE LESS THAN 1/8" PER FOOT.
4. A MANUAL VALVE SHALL BE INSTALLED ON ALL BASEMENT DRAIN LINES.
5. VENTS MUST BE INSTALLED IN LAWN AREAS, NOT IN SIDEWALK OR DRIVEWAY AREAS.
6. SELECT BACKFILL IS REQUIRED UNDER PAVED AREAS.
7. CONCRETE ENCASEMENT IS REQUIRED IF COVER DEPTH IS LESS THAN 4'–0" UNDER PAVED AREAS.
8. MINIMUM DEPTH OF COVER SHALL BE 3'–0".



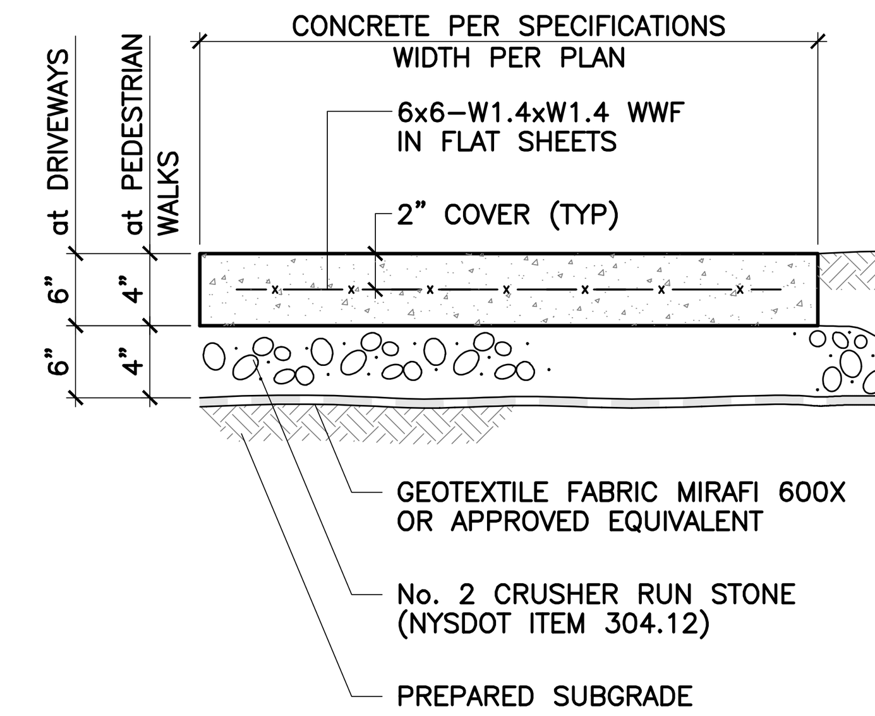
2 CONTROL JOINT IN EXTERIOR CONC PAVEMENT



3 CONSTRUCTION JOINT IN EXTERIOR CONC PAVEMENT

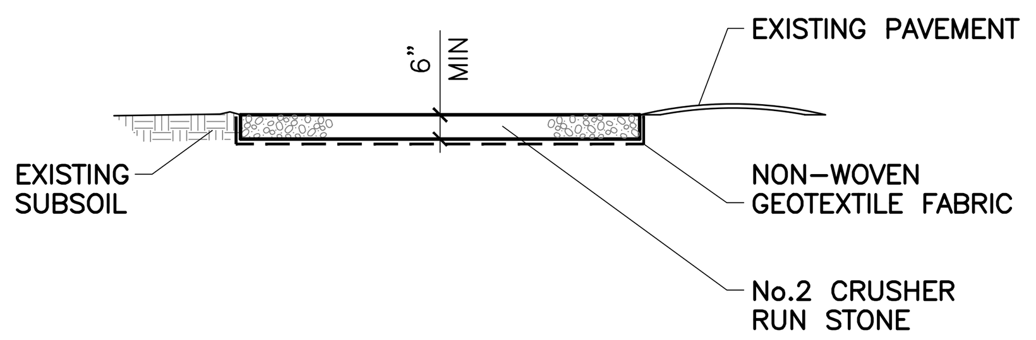


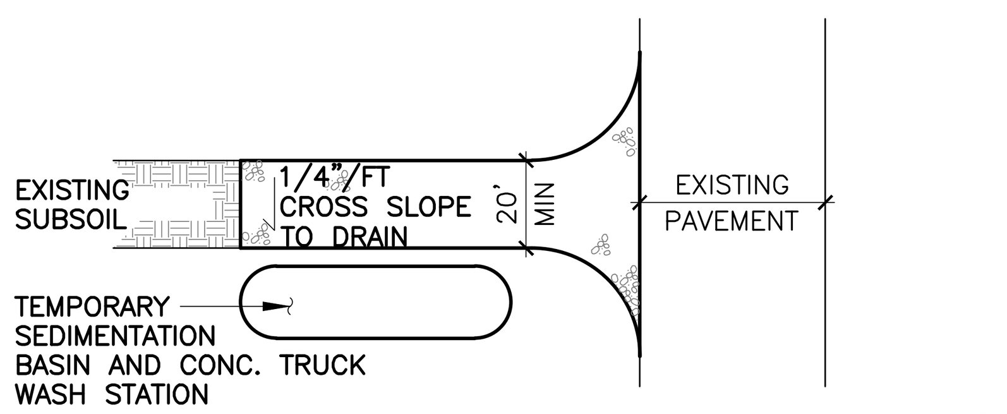
4 EXPANSION JOINT IN EXTERIOR CONC PAVEMENT



NOTE: CONC. SHALL BE 4000 PSI at 28–DAYS, 6% AIR–ENTRAINED, 4" MAX. SLUMP–PROVIDE LT. BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAFFIC

1 TYPICAL CONCRETE SIDEWALK

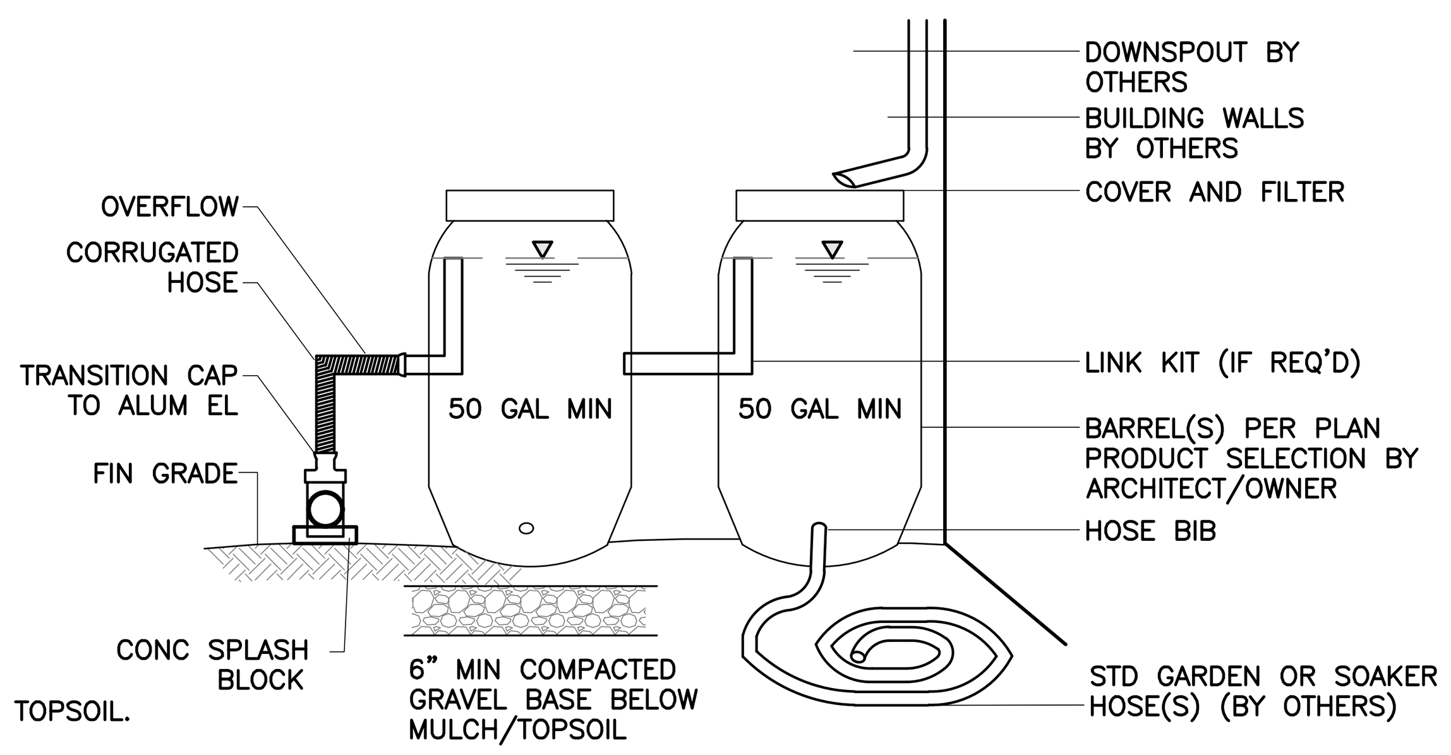




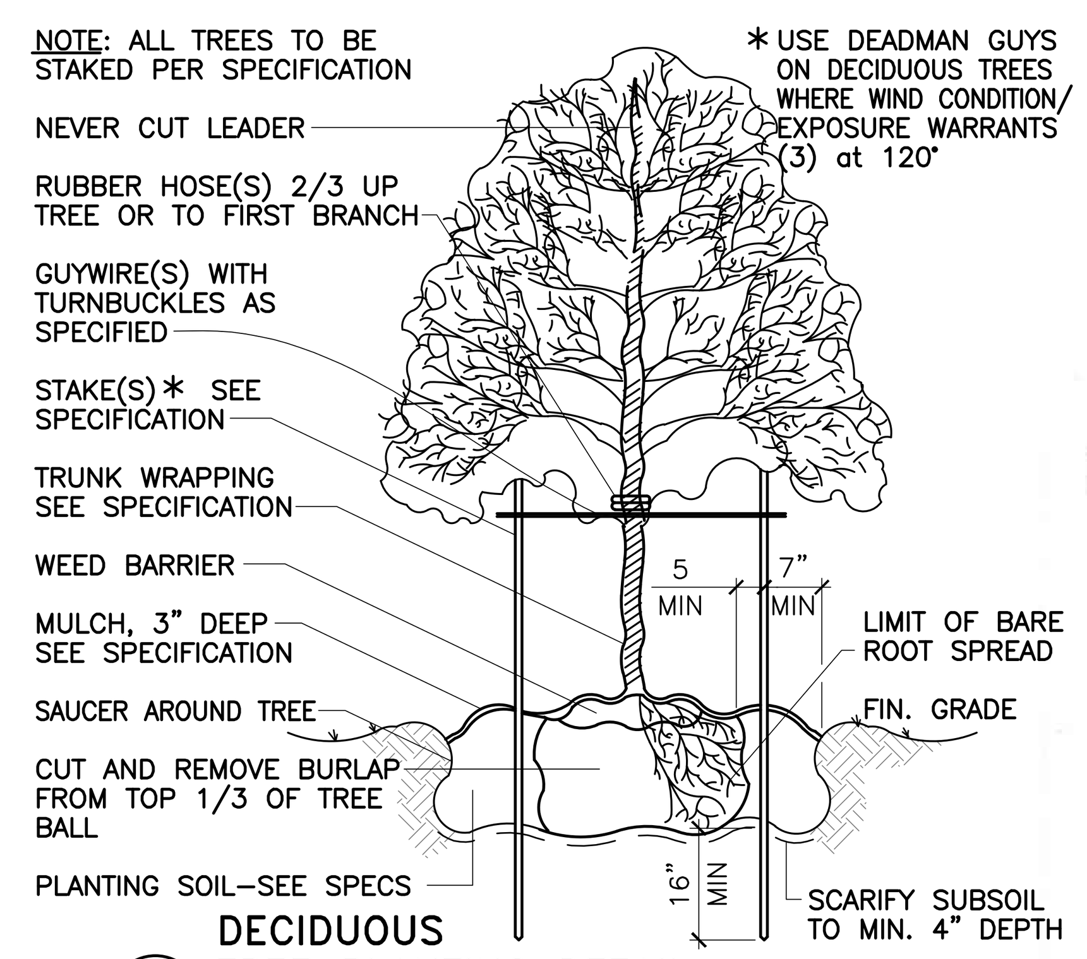
11 STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION NOTES:

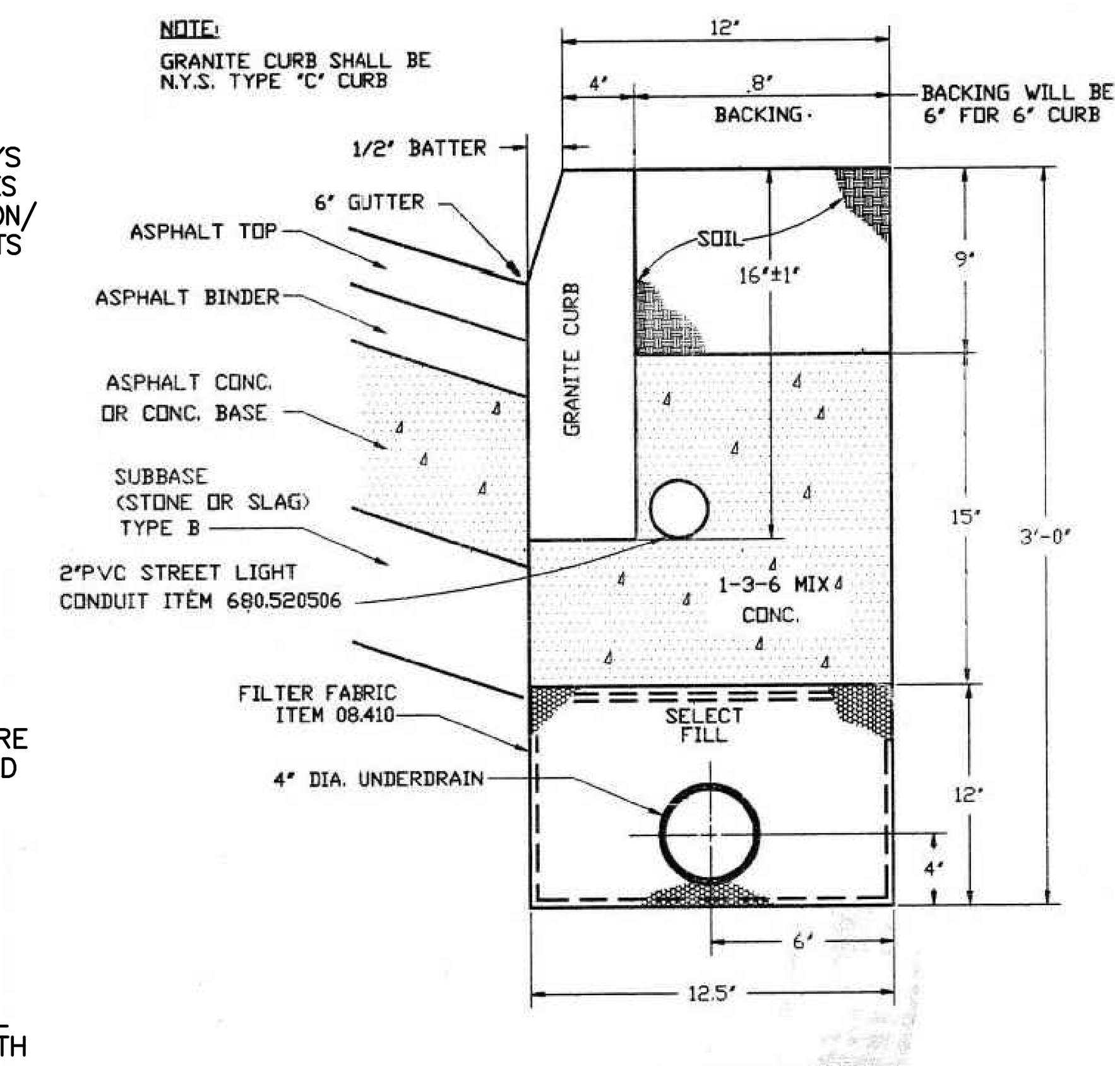
1. STONE SIZE No.2 CRUSHER RUN.
2. LENGTH TO BE (20) FEET MINIMUM.
3. WIDTH TO BE (20) FEET MINIMUM.
4. THICKNESS NOT LESS THAN (6) INCHES AFTER STRIPPING TOPSOIL.
5. GEOTEXTILE FABRIC WILL BE PLACED OVER THE ENTIRE AREA AFTER TOPSOIL IS STRIPPED, AND PRIOR TO PLACEMENT OF STONE.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
7. WHEN EQUIPMENT WASHING IS REQUIRED IT SHALL BE DONE ON AN AREA WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



10 RAIN BARREL SYSTEM



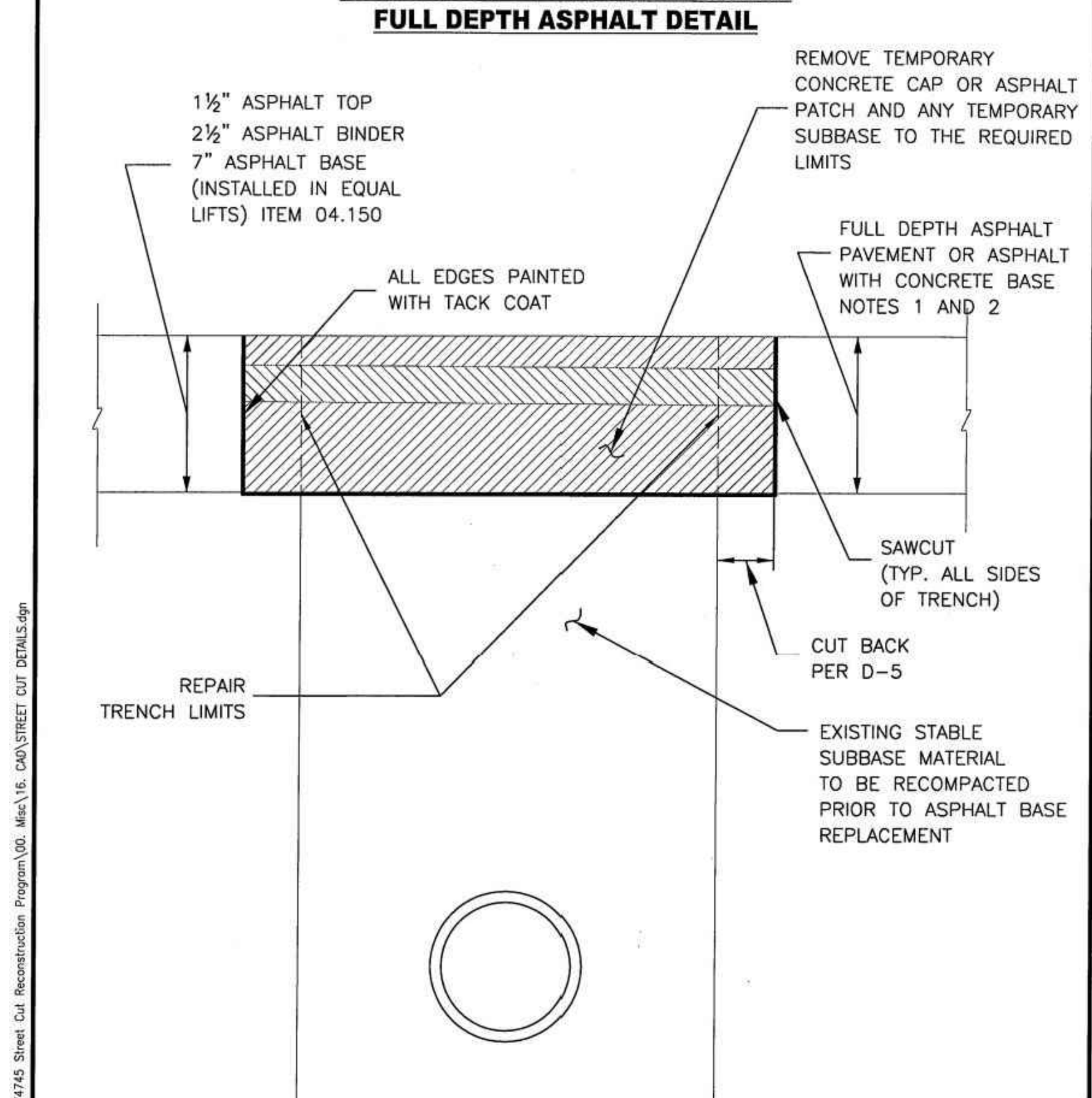
9 DECIDUOUS TREE PLANTING DETAIL



GRANITE CURB

N.T.S.

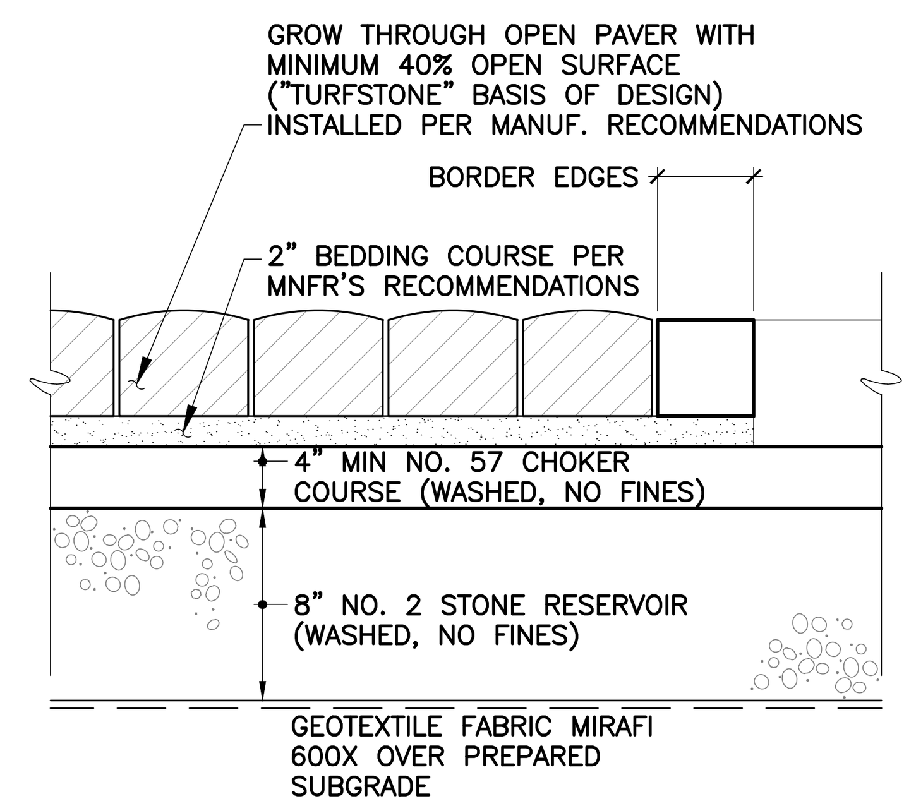
CITY OF BUFFALO, DEPT. OF PUBLIC WORKS, DIV. OF ENGINEERING
S.S.–1



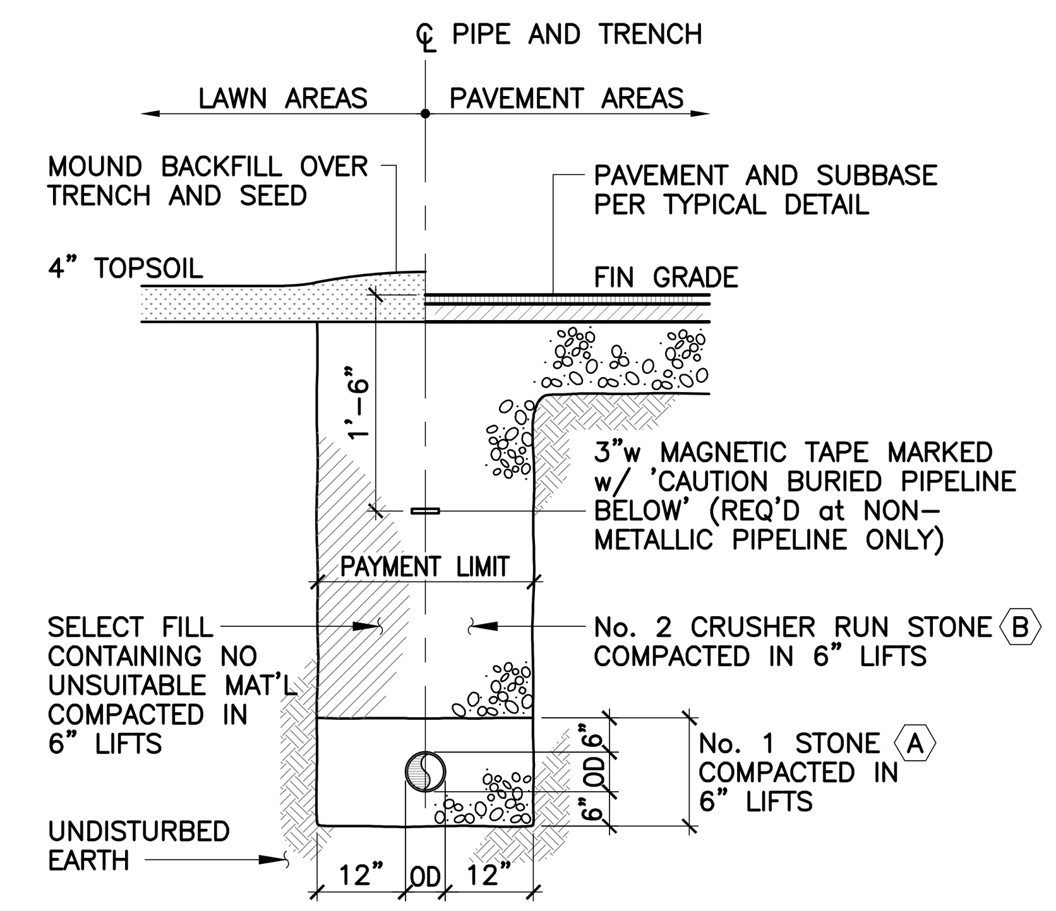
ROADWAY SPOT RECONSTRUCTION
FULL DEPTH ASPHALT DETAIL

NOTES:
1. CUTS INTO ROADWAYS WITH FULL DEPTH ASPHALT SHALL BE RESTORED WITH FULL DEPTH ASPHALT.
2. CUTS INTO ROADWAYS WITH CONCRETE BASE THAT IS DETERIORATED SHALL BE RESTORED WITH FULL DEPTH ASPHALT AS ORDERED BY THE E.I.C.

STREET CUT RECONSTRUCTION DETAIL D–3	Proj. No.	GROUP #770
	Date	JUNE 2013
STREET CUT REPAIRS 2013 N.T.S.	Ref. Dwg.	
	No.	D–3



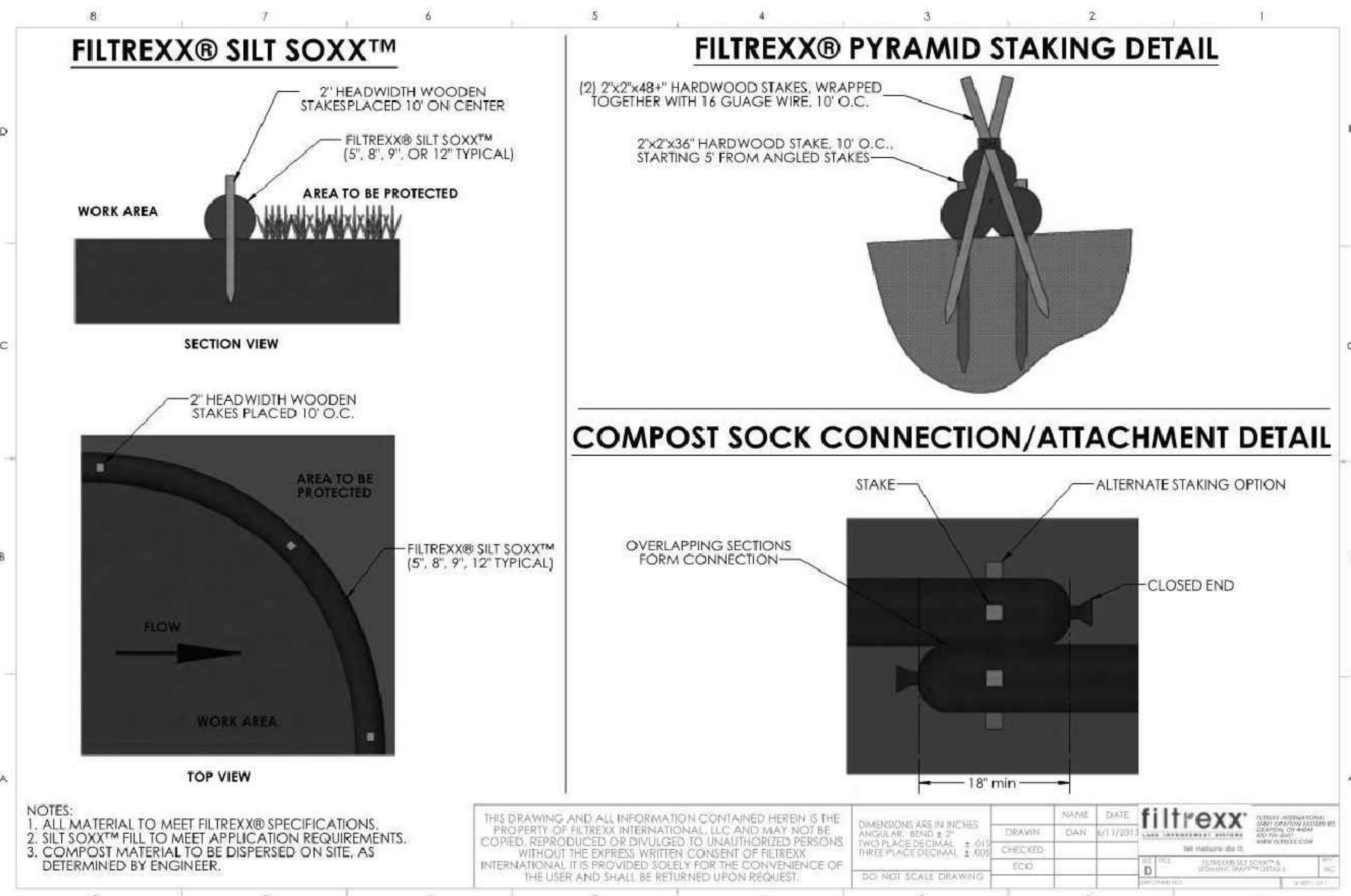
7 PERVIOUS PAVER SECTION (BASIS OF DESIGN)

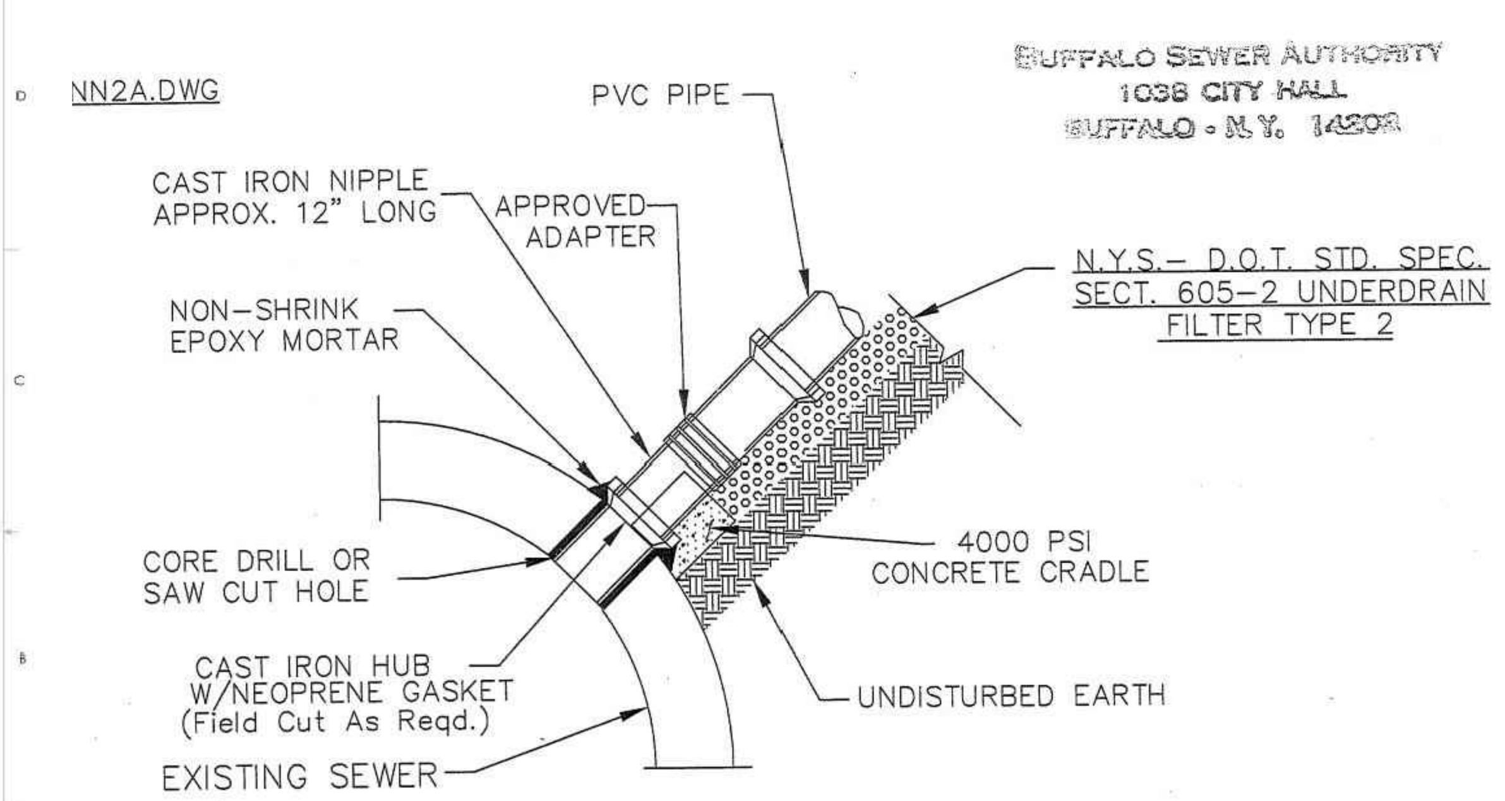


NOTES:
1. PIPE SHALL BE IN ACCORDANCE w/ MANUFACTURER'S RECOMMENDATIONS
2. TRENCHING OPERATIONS SHALL INCLUDE ALL NECESSARY DEWATERING
3. TRENCH DETAILS ARE ONLY SHOWN FOR MATERIAL PLACEMENT PURPOSES
4. AN OSHA APPROVED MOVEABLE PROTECTIVE TRENCH SHIELD MAY BE USED.

MATERIALS:
(A) No. 1 STONE WITH A GRADATION CONFORMING TO NYSDOT SECTION 703–02, LATEST EDITION. THE CRUSHED STONE SHALL BE WELL GRADED WITH NO PARTICLES LARGER THAN (1) INCH AND HAVING A MAX. GRADATION MEETING THE LIMITS DESCRIBED IN THE SPECIFICATIONS. NO SLAG SHALL BE USED IN PLACE OF MATERIAL 'A'.
(B) No. 2 CRUSHER RUN STONE OR No. 2 RUN OF CRUSHED GRAVEL WITH A GRADATION CONFORMING WITH NYSDOT SECTION 304–2.02 TYPE 4 AND NYSDOT SECTION 703–02 (COMPACTED IN 6" LIFTS TO 90% DENSITY). NO SLAG SHALL BE USED IN PLACE OF MATERIAL 'B'.

8 UTILITY TRENCH SECTION





DETAIL
TYPICAL CONNECTION
TO EXISTING SEWER
N.T.S.

GENERAL SITEWORK NOTES:

1. ALL WATERLINE, SANITARY SEWER AND OTHER WORK WITHIN THE R.O.W. SHALL BE IN ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF THE CITY OF BUFFALO CODE ENFORCEMENT OFFICE, DPW, BUFFALO WATER AUTHORITY, BUFFALO SEWER AUTHORITY, AND NEW YORK STATE DEPT. OF TRANSPORTATION SPECIFICATIONS.
2. WORK SHALL BE COMPLETED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND OSHA SAFETY RULES AND REGULATIONS.
3. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE SITE. NOTIFY OWNER OF ANY DISCREPANCIES IN CONDITIONS SHOWN ON THE DRAWINGS PRIOR TO PROCEEDING WITH THE WORK.
4. CONTRACTOR SHALL ASCERTAIN THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION SO THAT THIS WORK DOES NOT DISTURB EXISTING LINES AND/OR INSTALLATIONS. COORDINATE ALL WORK WITH THE APPLICABLE UTILITY COMPANIES.
5. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS NECESSARY TO PERFORM THE WORK.

PROJECT NAME/LOCATION:
DESCRIPTION(NEW CONSTRUCTION)
68 PULASKI ST - SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC
403 MAIN ST, SUITE 602
BUFFALO, NY 14203

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DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [N] CONSTRUCTION DOCUMENTS [N] ISSUED FOR CONSTRUCTION

DRAWING TITLE
SITE DETAILS

REVISIONS AFTER ISSUANCE

NO.	DATE	DESCRIPTION

SFAI

STATE OF NEW YORK · MATTHEW JOHN ... · LICENSED PROFESSIONAL ENGINEER

EXPIRES: 10.31.25

ISSUE DATE: 9.19.25

DRAWING NUMBER

SP201

DIVISION 1 – GENERAL CONDITIONS

A. ALL WORK SHALL COMPLY WITH THE LATEST ADDITION OF THE BUILDING CODE OF NEW YORK STATE, ACI BUILDING CODE (ACI–318), ASTM STANDARDS, NYSDOT, NYSDEC, AND ANY OTHER APPLICABLE CODES, RULES AND REGULATIONS BY AGENCIES HAVING JURISDICTIONS INCLUDING BUT NOT LIMITED TO THE LOCAL MUNICIPALITY. WHERE CODES OVERLAP, COMPLY WITH THE MORE STRINGENT REQUIREMENTS.

B. THE CONTRACTOR SHALL MAINTAIN INSURANCE AS WILL PROTECT HIM FROM LIABILITY UNDER WORKMAN'S COMPENSATION ACTS AND OTHER EMPLOYEE BENEFITS ACTS IN ACCORDANCE WITH THE LAWS OF NEW YORK STATE, AND FROM LIABILITY FOR DAMAGES BECAUSE OF BODILY INJURY, INCLUDING DEATH AND PROPERTY DAMAGE.

C. CONTRACTOR IS TO REVIEW DRAWINGS AND EXISTING SITE CONDITIONS AND DIMENSIONS FOR SCOPE OF WORK INVOLVED. CONTRACTOR IS TO INCLUDE IN HIS PROPOSAL ALL ITEMS, MATERIALS, ETC...TO ACHIEVE THE DESIGN CONCEPTS SHOWN ON THE DRAWINGS. MINOR CHANGES IN THE WORK, DUE TO EXISTING CONDITIONS, WILL BE ALLOWED IF APPROVED BY THE ENGINEER BEFORE PROCEEDING.

D. EXISTING DIMENSIONS SHOWN ARE APPROXIMATE; CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE JOB. BOUNDARY SURVEY INFORMATION SHOWN IS FOR INFORMATION ONLY, REFER TO SURVEY(S) PROVIDED BY THE OWNER. SITE PLANS MAY NOT HAVE BEEN PREPARED WITH THE BENEFIT OF RECENT TOPOGRAPHIC SURVEY AND UTILITY SEARCH AND ENGINEER ASSUMES NO LIABILITY FOR INFO CONTAINED HEREIN OR UNFORESEEN CONDITIONS BELOW GROUND. CONTRACTOR IS ADVISED TO CONTACT UNDERGROUND UTILITY LOCATION SERVICES PRIOR TO ANY EXCAVATION ACTIVITIES.

E. CONTRACTOR IS TO INCLUDE IN HIS PROPOSAL ALL ADDITIONAL MATERIALS AND LABOR AS REQUIRED TO WORK AROUND EXISTING CONDITIONS AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED.

F. ALL WORKMANSHIP MUST BE IN THE BEST PRACTICE OF THE TRADE AS DETERMINED BY THE ENGINEER. ANY WORK NOT MEETING THESE STANDARDS WILL BE REJECTED.

G. CONTRACTOR IS TO DISPOSE OF ALL DEMOLITION MATERIALS AND LEAVE THE WORK IN A READY TO USE CONDITION. STATE AND FEDERAL CODE REQUIREMENTS SHALL CONTROL THE DISPOSAL OF WASTE MATERIALS AND CONTAMINATED SOILS, IF ENCOUNTERED.

H. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ANY EXISTING UTILITIES ON OR ADJACENT TO PROPERTY.

I. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS AND/OR PRODUCT INFORMATION FOR ENGINEER REVIEW AND APPROVAL. MINOR ITEMS IN THE WORK ARE NOT SPECIFIED. CONTRACTOR IS TO USE QUALITY AND QUANTITY THAT IS STANDARD TO THE TRADE. FOR ALL PRODUCTS, WORK MUST COMPLY WITH THE MANUFACTURER'S STRICT RECOMMENDATIONS FOR INSTALLATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN INSTRUCTIONS AND TO THEN FOLLOW THEM.

J. TYPICAL DETAILS APPLY TO ALL DRAWINGS AND SHALL BE USED EXCEPT WHERE OTHERWISE SHOWN OR NOTED.

DIVISION 2.1 – SITE CLEARING

A. CONDUCT SITE CLEARING OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.

B. PROVIDE PROTECTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED TO REMAIN IN PLACE.

C. PROTECT IMPROVEMENTS ON ADJOINING PROPERTIES AND ON OWNER'S PROPERTY.

D. PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE, AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING.

E. CAREFULLY REMOVE ITEMS INDICATED TO BE SALVAGED, AND STORE ON OWNER'S PREMISES WHERE INDICATED OR DIRECTED.

F. REMOVE TREES, SHRUBS, GRASS AND OTHER VEGETATION, IMPROVEMENTS, OR OBSTRUCTIONS AS REQUIRED TO PERMIT INSTALLATION OF NEW CONSTRUCTION. REMOVE SMALLER ITEMS ELSEWHERE ON SITE OR PREMISES AS SPECIFICALLY INDICATED. "REMOVAL" INCLUDES DIGGING OUT AND OFF–SITE DISPOSING OF STUMPS AND ROOTS.

G. CUT MINOR ROOTS AND BRANCHES OF TREES INDICATED TO REMAIN IN A CLEAN AND CAREFUL MANNER, WHERE SUCH ROOTS AND BRANCHES OBSTRUCT INSTALLATION OF NEW CONSTRUCTION. PROVIDE PROTECTION FOR ROOTS OVER 1–1/2 INCH DIAMETER THAT ARE CUT DURING CONSTRUCTION OPERATIONS. COAT CUT FACES WITH AN EMULSIFIED ASPHALT, OR OTHER ACCEPTABLE COATING, FORMULATED FOR USE ON DAMAGED PLANT TISSUES. COVER EXPOSED ROOTS WITH WET BURLAP TO PREVENT ROOTS FROM DRYING OUT; COVER WITH EARTH AS SOON AS POSSIBLE.

H. STRIP TOPSOIL (REFERENCE DIVISION 2.2) TO WHATEVER DEPTHS ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER OBJECTIONABLE MATERIAL. REMOVE HEAVY GROWTHS OF GRASS FROM AREAS BEFORE STRIPPING. WHERE EXISTING TREES ARE INDICATED TO REMAIN, LEAVE EXISTING TOPSOIL IN PLACE WITHIN DRIP LINES TO PREVENT DAMAGE TO ROOT SYSTEM. STOCKPILE TOPSOIL IN STORAGE PILES IN AREAS INDICATED OR DIRECTED. CONSTRUCT STORAGE PILES TO PROVIDE FREE DRAINAGE OF SURFACE WATER. COVER STORAGE PILES, IF REQUIRED, TO PREVENT WIND EROSION.

I. CLEAR SITE OF TREES, SHRUBS AND OTHER VEGETATION, EXCEPT FOR THOSE INDICATED TO BE LEFT STANDING. COMPLETELY REMOVE STUMPS, ROOTS AND OTHER DEBRIS EXTENDING THROUGH GROUND SURFACE. USE ONLY HAND METHODS FOR GRUBBING INSIDE DRIP LINE OF TREES INDICATED TO REMAIN. FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL, UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES LOOSE DEPTH, AND THOROUGHLY COMPACT TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.

J. REMOVE EXISTING ABOVE GRADE AND BELOW–GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION. REMOVAL OF ABANDONED UNDERGROUND PIPING OR CONDUIT INTERFERING WITH CONSTRUCTION IS INCLUDED UNDER THIS SECTION.

K. REMOVE WASTE MATERIALS AND UNSUITABLE OR EXCESS TOPSOIL FROM OWNER'S PROPERTY.

DIVISION 2.2 – EARTHMOVING

A. SLOPED SIDES OF EXCAVATIONS ARE TO COMPLY WITH THE LOCAL CODES, ORDINANCES AND REQUIREMENTS OF AGENCIES HAVING JURISDICTION. SHORE AND/OR BRACE WHERE SLOPING IS NOT POSSIBLE BECAUSE OF SPACE RESTRICTIONS OR STABILITY OF MATERIAL EXCAVATED. MAINTAIN SIDES AND SLOPES OF EXCAVATIONS IN SAFE CONDITION UNTIL COMPLETION OF BACKFILLING.

B. PROVIDE MATERIALS FOR SHORING AND BRACING, SUCH AS SHEET PILING, UP–RIGHTS, STRINGERS, AND CROSS BRACES, AS REQUIRED. MAINTAIN SHORING AND BRACING IN EXCAVATIONS REGARDLESS OF TIME PERIOD EXCAVATIONS WILL REMAIN OPEN. EXTEND SHORING AND BRACING AS EXCAVATION PROGRESSES.

C. BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND POST WITH WARNING LIGHTS. OPERATE WARNING LIGHTS DURING HOURS FROM DUSK TO DAWN EACH DAY AND AS OTHERWISE REQUIRED.

D. PREVENT SURFACE WATER AND SUBSURFACE GROUND WATER FROM FLOWING INTO EXCAVATIONS AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. NO MATERIALS SHALL BE PLACED IN WATER OR ON FROZEN GROUND.

E. MATERIALS:

1. GENERAL FILL: SAND, GRAVEL, FRIABLE EARTH OR CLAYS OF LOW PLASTICITY, FREE OF ORGANIC MATERIALS, FROZEN MATERIAL, TRASH, MASONRY, RUBBLE, CONCRETE, DEBRIS AND FREE OF STONES HAVING A DIMENSION OF 4–INCHES OR GREATER
2. CONCRETE SAND: NYSDOT ITEM 703–07
3. GROUT SAND: NYSDOT 703–04
4. GRAVEL: NYSDOT ITEM 703–02, TYPE 1
5. STRUCTURAL FILL: NYSDOT ITEM 304–12.02, TYPE 2 OR TYPE 4
6. CRUSHED STONE: NYSDOT 703–02, BLEND OF TYPE 1 AND TYPE 2, WITH 100% PASSING 1.5", 90–100% PASSING 1", 25–60% PASSING ½", 0–10% PASSING #4, AND 0–5% PASSING #8.
7. WOVEN GEOTEXTILE FABRIC: MIRAFI 500X
8. NON–WOVEN GEOTEXTILE FABRIC: MIRAFI 140N
9. TOPSOIL: NATURAL, FERTILE, FRIABLE GRANULAR SOIL CHARACTERISTIC OF PRODUCTIVE SOILS IN THE VICINITY, UNIFORM IN COMPOSITION AND TEXTURE, FREE FROM SUBSOIL, CLAY LUMPS, STONES, ORGANIC MATERIAL, TOXIC OR HAZARDOUS SUBSTANCES, AND ANY MATERIAL TWO INCHES OR MORE IN GREATEST DIMENSION
10. SLAG NOT PERMITTED

F. REMOVE EXISTING SURFACE SOIL MATERIAL, INCLUDING VEGETATION, TOPSOIL AND LOOSE BOULDERS TO A MINIMUM DEPTH OF 12 INCHES BELOW EXISTING SURFACE GRADE OR AS REQUIRED TO COMPLY WITH CROSS–SECTIONS, ELEVATIONS, AND GRADES AS INDICATED. THE EXPOSED SURFACE SOIL MUST BE PROOFROLLED, WITH A MINIMUM 10–TON STATIC ROLLER, IN THE PRESENCE OF THE SOILS TESTING AGENCY. WHERE UNCONTROLLED FILL, SOFT, LOOSE OR YIELDED MATERIAL EXISTS, THESE AREAS MUST BE UNDERCUT A MINIMUM OF 2'–0". TESTING AND INSPECTION OF THE UNDERCUT SUBGRADE, BY THE SOILS TESTING AGENCY, MAY REQUIRE FURTHER UNDERCUTTING ON SOME AREAS, DEPENDING ON THE TYPE AND NATURE OF FILL/UNSUITABLE MATERIAL EXPOSED.

G. EXCAVATE TRENCHES TO THE UNIFORM WIDTH REQUIRED FOR PARTICULAR ITEM TO BE INSTALLED AND SUFFICIENTLY WIDE TO PROVIDE AMPLE WORKING ROOM. PROVIDE 1'–0" MINIMUM CLEARANCE ON BOTH SIDES OF PIPE OR CONDUIT, BUT NOT LESS THAN 3'–0" TOTAL TRENCH WIDTH. EXCAVATE TRENCHES TO DEPTH INDICATED OR REQUIRED. CARRY DEPTH OF TRENCHES FOR PIPING TO ESTABLISH INDICATED FLOW LINES AND INVERT ELEVATIONS. GRADE BOTTOMS OF TRENCHES AS INDICATED, NOTCHING TO PROVIDE SOLID BEARING FOR ENTIRE BODY OF PIPE. REMOVE UNSTABLE, SOFT, AND UNSUITABLE MATERIALS AT THE SURFACE UPON WHICH PIPES ARE TO BE LAID AND BACKFILL WITH CLEAN SAND OR PEA GRAVEL TO INDICATED LEVEL. FILL UNEVENNESS WITH TAMPED SAND BACKFILL. DIG BELL HOLES AT EACH PIPE JOINT TO RELIEVE THE BELLS OF ALL LOADS AND TO ENSURE CONTINUOUS BEARING OF THE PIPE BARREL ON THE FOUNDATION. DO NOT BACKFILL TRENCHES UNTIL TESTS AND INSPECTIONS HAVE BEEN MADE AND BACKFILLING AUTHORIZED BY THE ARCHITECT/ENGINEER. USE CARE IN BACKFILLING TO AVOID DAMAGE OR DISPLACEMENT OF PIPE SYSTEMS.

H. CONTRACTORS WILL TAKE EVERY PRECAUTION DURING FINAL STAGES OF EXCAVATION TO PREVENT DISTURBANCE OF THE NATURAL SOIL AT PROPOSED SUBGRADE ELEVATIONS. SUCH PRECAUTIONS SHALL INCLUDE, BUT NOT BE LIMITED TO, KEEPING EQUIPMENT OFF FINAL SUBGRADE DURING THE LAST SEVERAL FEET OF EXCAVATION, USING EXCAVATING BUCKETS WITHOUT TEETH, PLACING CONCRETE MUD MATS BELOW FOUNDATIONS AND DEWATERING EXCAVATIONS.

I. SET GRADE STAKES WHERE SPOT ELEVATIONS ARE SHOWN, AT BREAKS IN GRADE, ALONG DRAINAGE "SWALES" AND AS OTHERWISE REQUIRED TO CORRECTLY GRADE THE AREA ACCORDING TO ELEVATIONS SHOWN ON PLANS. MAXIMUM SPACING OF STAKES TO BE 50 FEET ON CENTER. UNLESS NOT OTHERWISE INDICATED SHALL BE UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE GIVEN OR BETWEEN SUCH POINTS AND EXISTING FINISHED GRADES. ABRUPT CHANGES IN SLOPES SHALL BE ROUNDED. ALL NEW GRADES, OTHER THAN GRADES FOR PAVED AREAS, TO BE WITHIN PLUS OR MINUS 0.50" OF GRADES INDICATED ON DRAWINGS OR IN SPECIFICATIONS. GRADE FOR PAVED AREAS, BOTH SUBGRADE AND BASE COURSES, TO BE PLUS OR MINUS 0.25" OF INDICATED GRADES.

J. COMPACTION OF FILL: UNIFORMLY SPREAD EACH LAYER, MOISTEN OR DRY AS REQUIRED FOR OPTIMUM MOISTURE CONTENT, AND THEN COMPACT SO DENSITY OF THE COMPACTED MATERIAL MEETS OR EXCEEDS 95% MAXIMUM DRY DENSITY EXCEPT IN NON–LOADED GRASSED AREAS WHICH NEED NOT EXCEED 90%.

K. REPAIR TO PROPER GRADE ANY SETTLEMENT OF SLAB, PAVEMENT, UTILITY, STRUCTURE, OR LAWN, ADVERSELY AFFECTED BY SETTLEMENT, WITHIN ONE YEAR AFTER FINAL ACCEPTANCE AT NO EXPENSE TO THE OWNER.

DIVISION 2.3 – TEMPORARY EROSION AND SEDIMENT CONTROL

A. FURNISH, INSTALL, INSPECT, MAINTAIN, AND REMOVE SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE CONTRACT DOCUMENTS OR AS ORDERED BY THE ENGINEER DURING THE LIFE OF THE CONTRACT. COORDINATE WITH THE SOIL EROSION AND SEDIMENT CONTROL FEATURES SPECIFIED ELSEWHERE IN THE CONTRACT DOCUMENTS TO THE EXTENT PRACTICAL TO ASSURE EFFECTIVE AND CONTINUOUS SOIL EROSION AND SEDIMENT CONTROL THROUGHOUT THE CONSTRUCTION AND POST CONSTRUCTION PERIOD IN ACCRODANCE WITH REFERENCE STANDARDS NOTED IN DIVISION 1 AND "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SOIL AND WATER CONSERVATION SOCIETY, EMPIRE STATE CHAPTER. IN THE EVENT OF CONFLICT BETWEEN THESE SPECIFICATION REQUIREMENTS AND POLLUTION CONTROL LAWS, RULES, REGULATIONS OR PERMIT CONDITIONS BY OTHER FEDERAL OR STATE OR LOCAL GOVERNMENT AGENCIES, THE MORE RESTRICTIVE LAWS, RULES OR REGULATIONS SHALL APPLY.

B. MATERIALS:

1. STONE FILLING: STONE FILLING SHALL MEET THE REQUIREMENTS OF NYSDOTSS SECTION 620–2.02 STONE FILLING, LIGHT.
2. GEOTEXTILE: GEOTEXTILES SHALL MEET THE REQUIREMENTS OF NYSDOTSS SECTION 207–2 MATERIALS. UV SENSITIVE GEOTEXTILES SHALL BE PROTECTED FROM EXPOSURE TO SUNLIGHT DURING TRANSPORT AND STORAGE.

C. PERIMETER SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO PERFORMING GRUBBING, EXCAVATION, AND BORROW OR FILL OPERATIONS.

D. TEMPORARY SEED AND MULCH

1. SEED SHALL BE RYEGRASSES (ANNUAL OR PERENNIAL) OR CEREAL GRASSES SUITABLE TO THE AREA AND AS A TEMPORARY COVER WHICH WILL NOT COMPETE WITH THE GRASSES SOWN LATER FOR PERMANENT COVER.
2. THE CONTRACTOR SHALL APPLY SEED AND MULCH ON DISTURBED AREAS CONSISTENT WITH THE APPROVED PHASING SCHEDULE
3. PRIOR TO THE APPLICATION OF SEED, ALL AREAS WHERE COMPACTION HAS OCCURRED SHALL BE SCARIFIED. THE SEED BED SHALL BE LOOSE AND FRIABLE FOR POSITIVE SEED RETENTION.
4. RYEGRASSES SHALL BE SPREAD AT A RATE OF 3.5 G/M2 TO UNIFORMLY COVER THE GROUND. CEREAL GRASSES SHALL BE SPREAD AT A RATE OF 11.2 G/M2 TO UNIFORMLY COVER THE GROUND. SEEDS SHALL BE EVENLY DISTRIBUTED BY ANY METHOD OF SOWING THAT DOES NOT INJURE THE SEEDS IN THE PROCESS OF SPREADING.
5. MULCH SHALL BE SPREAD IMMEDIATELY FOLLOWING APPLICATION OF SEED. MULCH SHALL BE SPREAD UNIFORMLY IN A CONTINUOUS BLANKET AT AN APPROXIMATE RATE OF 4 T/HA. MULCH MAY BE SPREAD BY HAND, MECHANICAL SPREADERS, OR BLOWERS. MULCH AND SEED SHALL NOT BE PLACED SIMULTANEOUSLY, EXCEPT IN THE CASE OF HYDROSEEDING.

E. TEMPORARY SILT FENCE

1. SILT FENCE SHALL BE LISTED IN THE NYSDOT APPROVED LIST. A SILT FENCE ASSEMBLY SHALL CONSIST OF SILT FENCE GEOTEXTILE, POSTS, AND FASTENERS AND MAY INCLUDE MESH SUPPORT CONSISTENT WITH THE APPROVED LIST.
   a. POSTS SHALL BE DRIVEN INTO THE GROUND. POSTS SHALL BE EITHER WOOD, METAL, OR SYNTHETIC. SOFTWOOD POST SHALL BE 1B MM X 89 MM, HARDWOOD POST SHALL BE AT LEAST 32 MM X 32 MM, STEEL POST SHALL BE "I" OR "L" SHAPED IN CROSS SECTION, WITH A MINIMUM WEIGHT OF 2 KG/M. POSTS SHALL BE A MINIMUM OF 1.2 M LONG AND SHALL BE SPACED CONSISTENT WITH THE MATERIAL SELECTED AND AS INDICATED IN THE NYSDOT APPROVED LIST.
   b. GEOTEXTILE AND ANY MESH SUPPORT (IF APPLICABLE) SHALL BE PLACED ON THE UPSTREAM SIDE OF THE POSTS. FOR WOVEN SILT FENCE ASSEMBLIES ON THE NYSDOT APPROVED LIST THAT REQUIRE A MESH SUPPORT, THE SUPPORT SHALL CONSIST OF 14 GAUGE (MIN) WELDED WIRE MESH WITH A MAXIMUM 150 MM X 150 MM OPENING OR POLYMERIC MESH. ALL MESH SUPPORT SHALL BE A MINIMUM OF 750 MM IN HEIGHT.
   c. THE GEOTEXTILE SHALL BE FASTENED TO EACH POST IN NO LESS THAN 4 LOCATIONS WITH APPROVED FASTENERS. THE MESH SUPPORT SHALL BE FASTENED TO EACH POST AT THE TOP, BOTTOM, AND TWO ADDITIONAL EVENLY SPACED LOCATIONS, OR BY A CONTINUOUS CORDED ATTACHMENT ALONG THE TOP OF THE ASSEMBLY. FASTENERS SHALL BE HEAVY–DUTY STAPLES, HOG RINGS, TIE WIRES, OR ANY OTHER FASTENER COMPATIBLE WITH THE POST MATERIAL.
   d. GEOTEXTILE AT THE BOTTOM OF THE FENCE SHALL BE BURIED IN A TRENCH TO A DEPTH OF 150 MM. THE TRENCH SHALL BE BACK FILLED WITH THE EXCAVATED SOIL AND THE SOIL COMPACTED BY TAMPING.
   e. ANY GEOTEXTILE OR MESH SPLICES NECESSARY FOR FENCE ERECTION SHALL BE CONTINUOUS BETWEEN TWO POST SECTIONS.

F. TEMPORARY COMPOST FILTER SOCK –12–INCH DIA MINUMUM BY FILTREXX OR ACCEPTED EQUIVALENT. STAKE–IN PERMANUFACTURER'S RECOMMENDATIONS.

G. DRAINAGE STRUCTURE INLET PROTECTION

1. DRAINAGE STRUCTURE INLET PROTECTION SHALL BE PLACED WHERE SHOWN IN THE CONTRACT DOCUMENTS AND CONSTRUCTED IN ACCORDANCE WITH THE STANDARD DETAIL SHEETS.

H. CONSTRUCTION ENTRANCES

1. CONSTRUCTION ENTRANCES SHALL BE PLACED WHERE SHOWN IN THE CONTRACT DOCUMENTS AND CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SHEETS. CONSTRUCTION ENTRANCES SHALL CONSIST OF A GEOTEXTILE, CRUSHED STONE OR GRAVEL AND, IF NECESSARY, A DRAINAGE PIPE TO MAINTAIN BOTH FLOW AND CONSTRUCTION.
   a. GEOTEXTILE SHALL MEET THE REQUIREMENTS OF NYSDOTSS SECTION 207–2 MATERIALS, GEOTEXTILE STABILIZATION, STRUCTURE CLASS 1.
   b. CRUSHED STONE OR GRAVEL SHALL BE 150 MM OF COARSE AGGREGATE MATERIAL MEETING THE GRADATION REQUIREMENTS OF SIZE DESIGNATION #3 ON NYSDOTSS TABLE 703–4.
   c. THE CONTRACTOR SHALL PROVIDE A DRAINAGE PIPE SIZED WITH SUFFICIENT CAPACITY TO CARRY DITCH FLOW. THE PIPE DIMENSION SHALL BE CONSISTENT WITH THE MODIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE ENGINEER. THE DRAINAGE PIPE MAY CONSIST OF NEW OR USED MATERIAL, AS SATISFACTORY CONDITION AND SUITABLE FOR THE INTENDED USE. THE ENGINEER WILL REJECT ANY MATERIALS DETERMINED TO BE UNSATISFACTORY
2. THE CONTRACTOR SHALL GRADE, INCLUDING EXCAVATING OR PLACING FILL, TO PREPARE THE ORIGINAL GROUND SURFACE FOR THE PLACEMENT OF A STABILIZED PAD OF 150 MM OR COARSE AGGREGATE MATERIAL, UNDERLAIN BY A GEOTEXTILE. IF NECESSARY, A DRAINAGE PIPE SHALL BE INSTALLED TO MAINTAIN THE CAPACITY OF THE DITCH. THE PIPE DIMENSION SHALL BE CONSISTENT WITH THE MODIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE ENGINEER. ALL AREAS CUT OR FILLED AND NOT STABILIZED BY THE CONSTRUCTION ENTRANCE MATERIAL SHALL BE COVERED WITH AN EROSION CONTROL TREATMENT (TEMPORARY MULCH, TEMPORARY SEED AND MULCH, ETC.) AND SHALL BE INCLUDED IN THIS PAY ITEM.
3. WHEN WASHING IS PERFORMED, THE WASHING AREA WITHIN THE CONSTRUCTION ENTRANCE SHALL BE LOCATED IN AN AREA WHICH WILL DRAIN INTO AN APPROVED SEDIMENT CONTROL MEASURE(S).
4. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE RIGHT–OF–WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO THE RIGHT–OF–WAY SHALL BE REMOVED IMMEDIATELY. IN THE EVENT THE ENTRANCE IS NO LONGER PERFORMING PROPERLY (I.E. THE ENTRANCE AGGREGATE BECOMES CLOGGED WITH SEDIMENT), THE CONTRACTOR SHALL TOP–DRESS THE ENTRANCE WITH ADDITIONAL COARSE AGGREGATE MATERIAL.

J. TEMPORARY PIPE INLET/OUTLET PROTECTION, SILT FENCE

1. TEMPORARY PIPE INLET/OUTLET, SILT FENCE, SHALL BE PLACED WHERE SHOWN IN THE CONTRACT DOCUMENTS AND CONSTRUCTED IN ACCORDANCE WITH THE STANDARD DETAIL SHEETS.

DIVISION 2.4 – PAVING

A. FINE GRADE AND PROOF ROLL SUBGRADE UNDER PAVEMENT IN ALL AREAS IN ACCORDANCE WITH NYSDOT SPECIFICATIONS 203–3.14.

B. BITUMINOUS PAVING MATERIALS

1. SUB–BASE COURSE – STRUCTURAL FILL PER DIVISION 2.2
2. ASPHALT BINDER: SEE DETAIL
3. ASPHALT TOPPING: SEE DETAIL
4. TACK COAT: SEE DETAIL
5. BITUMINOUS PAVEMENT SEALER: A COAL TAR EMULSION MATERIAL SPECIFICALLY FORMULATED TO SEAL ASPHALT CONCRETE PAVEMENT. ADD FOUR POUNDS OF GROUT SAND PER GALLON OF UNDILUTED PAVEMENT SEALER AND MIX TO A UNIFORM CONSISTENCY. DILUTE SEALER WITH POTABLE WATER IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

E. BITUMINOUS PAVING PLACEMENT

1. ALL COURSES: ROLL EACH COURSE WITH 10 TON ROLLER OR EQUIVALENT. COMMENCE ROLLING ALONG LOWER EDGE AND CONTINUE UNTIL EDGE IS THOROUGHLY COMPACTED, AFTER WHICH GRADUALLY ADVANCE TO THE CROWN. CONTINUE ROLLING UNTIL THE LAYER HAS BECOME THOROUGHLY COMPACTED AND IS TIGHT, FREE FROM ROLLER MARKS.
2. SUB–BASE COURSE: PLACE ON DRY SUBGRADE IN MAXIMUM LIFTS OF 6" WITH A MINIMUM COMPACTION OF 95% OF MAXIMUM DRY DENSITY. REMOVE SUBGRADE MATERIAL WHICH BECOMES MIXED WITH BASE COURSE AND RECONSTRUCT. GRADE TOLERANCE: PLUS OR MINUS 3/8" FROM INDICATED GRADES.
3. ASPHALT TOPPING COURSE: DO NOT INSTALL ASPHALT PAVING OVER WET BASE COURSE OR IF AMBIENT TEMPERATURE IS BELOW 50 DEGREES F. PLACE IN TWO COURSES TO COMPACTED THICKNESS AS DETAILED. WHERE PAVEMENT ABUTS CURBS, CONCRETE WALKS, OR EXISTING PAVEMENT, APPLY A LIBERAL APPLICATION OF TACK COAT MATERIAL. CHECK WITH 10' STRAIGHT EDGE AND CORRECT ALL DEPRESSIONS AND HIGH AREAS GREATER THAN 1/4". FORM OR CUT ALL PAVEMENT EDGES TO CLEAN, SHARP LINES OR RADIUS, AS INDICATED. COMPACTION FOR WEARING COURSE SHALL BE MINIMUM OF 92% OF LABORATORY SPECIMEN DENSITY.

F. PAVEMENT SEALER, REQUIRED FOR ALL PARKING AREAS AND LOTS (NOT ON ROADWAYS): ALLOW PAVEMENT TO WEATHER A MINIMUM OF FOUR WEEKS PRIOR TO SEALING. CLEAN SURFACE OF DIRT AND OTHER FOREIGN MATTER. APPLY TWO COATS OF SEALER UNIFORMLY AT A MINIMUM TOTAL COVERAGE OF 0.18 GALLONS PER SQUARE YARD PER COAT. ALLOW A MINIMUM OF 24 HOURS FOR CURING PRIOR TO CHECKING SEALED PAVEMENT FOR VEHICLE USAGE.

DIVISION 2.5 – WATER SERVICE PIPING

A. SUBMIT PRODUCT DATA FOR VALVES, WATER METER, AND IDENTIFICATION DEVICES ALONG WITH SHOP DRAWINGS FOR PRECAST CONCRETE VALVE PITS AND METER PIT, INCLUDING FRAMES AND COVERS. ALL MATERIALS AND PRODUCTS USED WITHIN THE SAME SYSTEM SHALL BE PROVIDED BY THE SAME MANUFACTURER.

B. SUBMIT RECORD DRAWINGS AT PROJECT CLOSEOUT OF INSTALLED WATER SERVICE PIPING AND PRODUCTS.

C. SUBMIT MAINTENANCE DATA FOR VALVES AND WATER METER, FOR INCLUSION IN OPERATING AND MAINTENANCE MANUALS.

D. WATER SERVICE PIPING QUALITY CONTROLS SHALL COMPLY WITH REQUIREMENTS OF UTILITY SUPPLYING WATER TO THE PROJECT.

E. WATER VALVES SHALL BE PROPERLY PREPARED, STORED AND HANDLED PRIOR TO INSTALLATION.

F. COORDINATE CONNECTION TO PUBLIC WATER MAIN WITH UTILITY COMPANY, INTERIOR WATER DISTRIBUTION PIPING AND WITH OTHER UTILITY WORK.

G. PIPE AND PIPE FITTING MATERIALS SHALL BE COMPATIBLE WITH EACH OTHER. WHERE MORE THAN ONE TYPE OF MATERIAL OR PRODUCT IS INDICATED, SELECTION IS INSTALLER'S OPTION.

H. COPPER WATER TUBE 2 INCHES AND SMALLER: ASTM B 88; TYPE K, SEAMLESS, ANNEALED TEMPER. COPPER FITTINGS: ANSI B16.22, WROUGHT–COPPER, SOLDER–JOINT PRESSURE TYPE. INSTALL IN ACCORDANCE WITH CDA "COPPER TUBE" HANDBOOK.

I. COUPLINGS: IRON BODY SLEEVE ASSEMBLY FABRICATED TO MATCH OUTSIDE DIAMETERS OF PIPES TO BE JOINED. SLEEVE: ASTM A 126, CLASS B, GRAY IRON.FOLLOWERS: ASTM A 47, GRADE 32510 OR ASTM A 536 DUCTILE IRON. GASKETS: RUBBER. BOLTS AND NUTS: AWWA C111. FINISH: ENAMEL PAINT.

J. NONRISING STEM GATE VALVES, 2 INCHES AND SMALLER: MSS SP–80; BODY AND SCREW BONNET OF ASTM B 62 CAST BRONZE; WITH CLASS 125 THREADED ENDS, SOLID WEDGE, NONRISING COPPER–SILICON ALLOY STEM, BRASS PACKING GLAND, TEFLON–IMPREGNATED PACKING, AND MALLEABLE IRON HANDWHEEL. COMPLY WITH AWWA C800 BRONZE CORPORATION STOPS AND VALVES, WITH ENDS COMPATIBLE TO PIPING, FOR 2–INCH AND SMALLER INSTALLATION. USE THREADED AND FLANGED END VALVES FOR INSTALLATION IN PITS AND INSIDE BUILDING. INSTALL BURIED VALVES WITH STEM POINTING UP AND WITH CAST–IRON VALVE BOX.

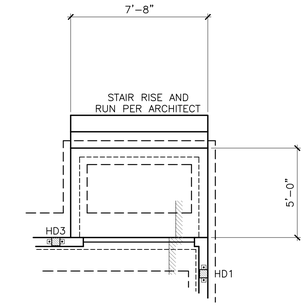
K. VALVE BOXES: CAST–IRON BOX HAVING TOP SECTION AND COVER WITH LETTERING "WATER," BOTTOM SECTION WITH BASE OF SIZE TO FIT OVER VALVE AND BARREL APPROXIMATELY 5 INCHES IN DIAMETER, AND ADJUSTABLE CAST–IRON EXTENSION OF LENGTH REQUIRED FOR DEPTH OF BURY OF VALVE. PROVIDE A STEEL TEE–HANDLE OPERATING WRENCH WITH EACH VALVE BOX. WRENCH SHALL HAVE TEE HANDLE WITH ONE POINTED END, STEM OF LENGTH TO OPERATE VALVE, AND SOCKET FITTING VALVE OPERATING NUT.

L. CURB STOPS: BRONZE BODY, GROUND KEY PLUG OR BALL, AND WIDE TEE HEAD, WITH INLET AND OUTLET TO MATCH SERVICE PIPING MATERIAL.

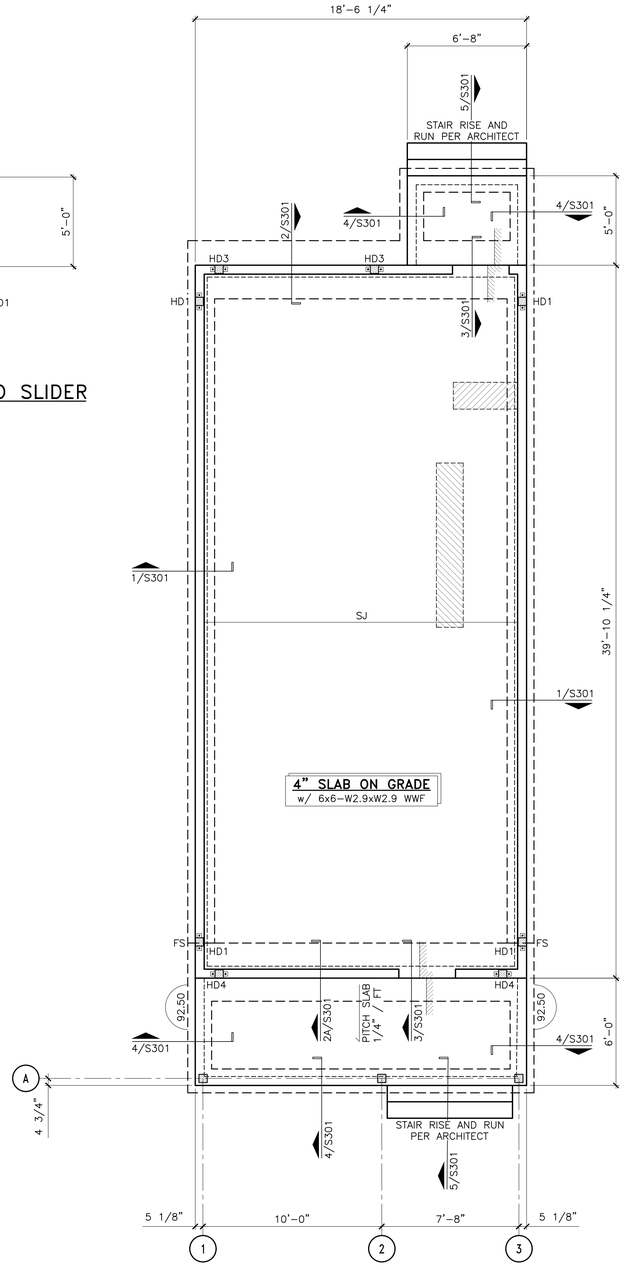
M. SERVICE CLAMPS AND CORPORATION STOPS: PROVIDE A COMPLETE ASSEMBLY, INCLUDING SERVICE CLAMP, CORPORATION STOP, AND BOLTS AND NUTS. THE CLAMP AND STOP SHALL BE COMPATIBLE WITH THE DRILLING MACHINE TO BE USED. SERVICE CLAMP: CAST IRON OR DUCTILE IRON WITH GASKET AND AWWA C800 THREADED OUTLET FOR CORPORATION STOP, AND THREADED END STRAPS. CORPORATION STOPS: BRONZE BODY AND GROUND KEY PLUG, WITH AWWA C800 THREADED INLET AND OUTLET TO MATCH SERVICE PIPING MATERIAL. MANIFOLD: COPPER WITH TWO TO FOUR INLETS, AS REQUIRED, WITH ENDS MATCHING CORPORATION STOPS, AND OUTLET MATCHING SERVICE PIPING. COMPLY WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL BURIED CURB STOPS WITH HEAD POINTED UP AND WITH CAST_IRON CURB BOX.

N. PROVIDE ANCHORAGES FOR TEES, PLUGS AND CAPS, BENDS, CROSSES, VALVES, AND HYDRANT BRANCHES.

1. CLAMPS, STRAPS, AND WASHERS: ASTM A 506, STEEL
2. RODS: ASTM A 575,



FIRST FLOOR PLAN
ALTERNATE #3-PATIO SLIDER



HOLDOWN SCHEDULE					
LABEL	at FIRST FLOOR			at SECOND FLOOR	
	PRODUCT	POST SIZE	ANCHOR ROD	STRAP	No. of NAILS (0.148"x 3 1/4")
HD1	HDU2-SDS2.5	3x6	PAB5x54	CMSTC-16x69	22
HD2	HDU5-SDS2.5	3x6	PAB5x54	N/A	N/A
HD3	HDQ8-SDS3	6x6	PAB7x72	CMSTC-16x69	44
HD4	HDQ8-SDS3	6x6	PAB7x72	CMST-14x69	56

NOTES: 1. ALL HOLDOWNS TO BE SUPPLIED IN PAIRS
2. LOCATE HOLDOWNS WHERE SHOWN ON PLAN AS CLOSE TO CORNERS OR ROUGH OPENINGS ABOVE AS POSSIBLE
3. STRAP SHALL EXTEND AT LEAST 25" ABOVE SILL PLATE AND BELOW TOP PLATES. HALF OF THE NAILS IN EACH MEMBER BEING CONNECTED.

FOUNDATION/FIRST FLOOR PLAN
1/4" = 1'-0"

1. TOP OF FINISHED FLOOR SLAB EL. 100.00' UON [+ OR -] FROM EL. 100.00'
2. BOTTOM OF TRENCH FOOTING EL. 93.50' (-6'-6") UNLESS NOTED THUS: _◠_
3. FS INDICATES STEPPED BOTTOM OF TRENCH FOOTING AS PER TYPICAL DETAIL
4. SJ INDICATES SAWCUT SLAB CONTROL JOINTS AS PER TYPICAL DETAIL
5. HD# INDICATES LOCATION OF SIMPSON HOLDOWN PER SCHEDULE AND TYPICAL DETAIL
6. INDICATES THICKENED SLAB PER TYPICAL DETAIL BENEATH STAIR STRINGERS AND INTERIOR BEARING WALL: COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION

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CIVIL/STRUCTURAL
755 SENECA ST. #202
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ARCHITECT OF RECORD
HHL Architects
172 Allen Street, Buffalo, New York 14201
716.885.0743 ■ F: 716.885.6414
HHLArchitects.com

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET - SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

PROJECT NUMBER: **2317.006**
T.E. PROJ. NUMBER: **25-61**

DRAWING TITLE
FOUNDATION / FLOOR PLAN

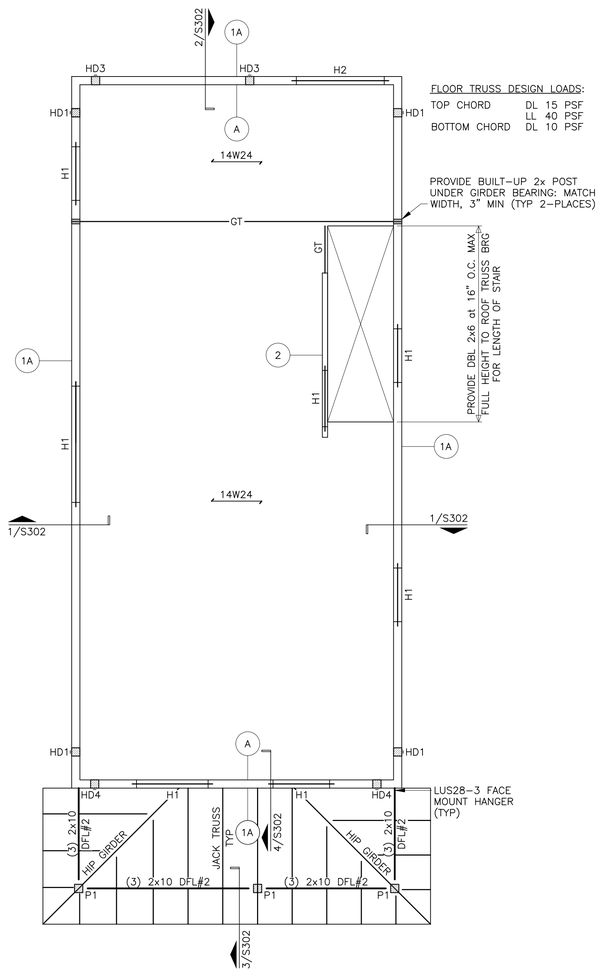
REVISIONS AFTER ISSUANCE	
NO.	DESCRIPTION
X	XXX
DATE	XX/XX/XX

SEAL

EXPIRES: 10.31.25

ISSUE DATE: 9.19.25
DRAWING NUMBER

S101



FLOOR TRUSS DESIGN LOADS:

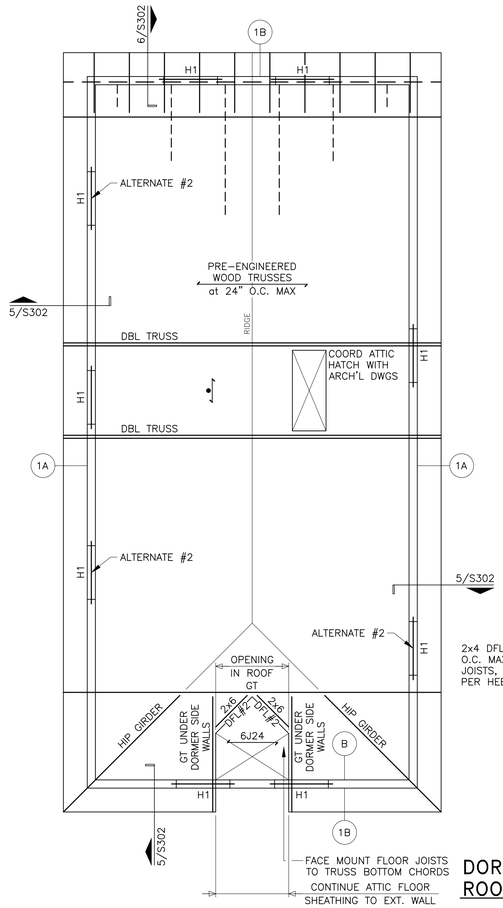
TOP CHORD	DL 15 PSF
	LL 40 PSF
BOTTOM CHORD	DL 10 PSF

STRUCTURAL WALL TYPES	
MARK	DESCRIPTION
1	2x6 SPF STUD GRADE at 16" O.C.
2	2x4 SPF STUD GRADE at 16" O.C.

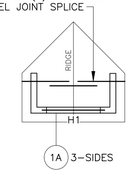
NOTES: 1. PROVIDE PT 2x MATERIAL FOR ALL SILL PLATES IN CONTACT WITH FOUNDATIONS
2. TAG POINTS TO SIDE OF WALL WITH SHEATHING UON

LABEL	NAILING PATTERN	SOLE PLATE ANCHOR SPACING		SILL PLATE ANCHOR SPACING	
		SINGLE SHEATHED	DOUBLE SHEATHED	SINGLE SHEATHED	DOUBLE SHEATHED
A	8d at 6"	6'-0"	4'-0"	16" O.C.	8" O.C.
B	8d at 4"	5'-0"	3'-0"	--	--
C	10d at 6"	6'-0"	3'-0"	--	--
D	10d at 4"	4'-0"	2'-6"	--	--

NOTES: 1. ALL SHEATHING TO BE 7/16" APA RATED EXPOSURE 1 OSB OR PLYWOOD
2. ALL SOLE ANCHORS TO BE 1/2"ø gr.36 HOOKED ANCHOR RODS WITH 7" MIN EMBEDMENT
3. SILL PLATE NAILS TO BE 16d (0.135"x 3 1/2")



2x4 DFL#2 RAFTERS at 16" O.C. MAX WITH 2x4 CEILING JOISTS, WITH (3) 16d NAILS PER HEEL JOINT SPLICE



DORMER ROOF FRAMING PLAN

SECOND FLOOR FRAMING PLAN

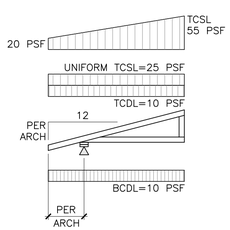
1/4" = 1'-0"

1. TOP OF PLYWOOD SUBFLOOR EL. 110.31' (+10'-3 3/4" A.F.F. 1st FLOOR)
2. FLOOR TRUSS BEARING EL. 109.08' (+9'-1" A.F.F. 1st FLOOR)
3. FLOOR SHEATHING TO BE 3/4" T&G APA RATED EXP. 1 PLYWOOD (GLUED AND NAILED) TYPICAL
   ROOF SHEATHING TO BE 5/8" APA RATED EXP. 1 PLYWOOD TYPICAL
4. d t s — INDICATES FLOOR FRAMING THUS:
   - SPACING (IN INCHES)
   - TYPE OF FRAMING: J = DFL#2 2x LUMBER; L = 1.9E LVL (1 3/4"w); W = OPEN WEB TRUSS; T = TJI
   - DEPTH (IN INCHES)
5. —○— INDICATES WALL TYPE PER SCHEDULE
6. HD3 — INDICATES LOCATION OF SIMPSON STRAP PER HOLDOWN SCHEDULE ON DRAWING S101: PROVIDE SQUASH BLOCK at RIM BOARD
7. —GT— INDICATES LOCATION OF GIRDER TRUSS
8. H* INDICATES LOAD BEARING WOOD LINTEL REQUIRED PER SCHEDULE: REF. TYPICAL DETAILS
9. P1□ INDICATES 6x6 POST PT SPF STUD GRADE OR BETTER WITH ABW66Z BASE AND 1/2"ø TITEN HD (4" EMBED): PROVIDE PC6Z CAP UNLESS OTHERWISE NOTED

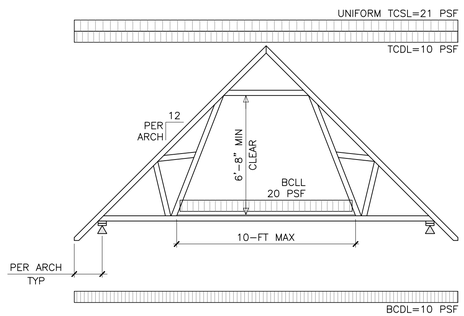
ROOF FRAMING PLAN

1/4" = 1'-0"

1. TOP OF PLATE (TRUSS BEARING) EL. 118.83' (+8'-6 1/4" ABOVE 2nd FLOOR PLYWOOD SUBFLOOR)
2. ROOF SHEATHING TO BE 5/8" APA RATED EXP. 1 PLYWOOD (TYP)
   ATTIC FLOOR SHEATHING TO BE 3/4" T&G APA RATED EXP. 1 PLYWOOD (GLUED AND NAILED) TYPICAL
3. —○— INDICATES WALL TYPE PER SCHEDULE
4. —— INDICATES LOCATION OF GIRDER TRUSS
5. d t s — INDICATES FLOOR FRAMING THUS:
   - SPACING (IN INCHES)
   - TYPE OF FRAMING: J = DFL#2 2x LUMBER; L = 1.9E LVL (1 3/4"w); W = OPEN WEB TRUSS; T = TJI
   - DEPTH (IN INCHES)
6. INDICATES SPAN DIRECTION OF 2x6 DFL#2 at 16" O.C. MAX, LOCATED at BOTTOM CHORD OF TRUSS FOR WIDTH OF ATTIC AND at TOP CHORD FULL WIDTH OF ROOF



JACK TRUSS LOAD DIAGRAM



ROOF TRUSS LOAD DIAGRAM

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION

ARCHITECT OF RECORD

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PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET - SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

PROJECT NUMBER: **2317.006**
T.E. PROJ. NUMBER: **25-61**

DRAWING TITLE
SECOND FLOOR and ROOF FRAMING PLANS

REVISIONS AFTER ISSUANCE	
NO.	DESCRIPTION
DATE	

SEAL

EXPIRES: 10.31.25

ISSUE DATE: 9.19.25

DRAWING NUMBER

S102

DIVISION 1 - GENERAL CONDITIONS

A. ALL WORK SHALL COMPLY WITH THE LATEST ADDITION OF THE BUILDING CODE OF NEW YORK STATE, AISC CODE, ACI BUILDING CODE (ACI-318), AWS CODE, ASTM STANDARDS AND ANY OTHER APPLICABLE CODES, RULES AND REGULATIONS BY AGENCIES HAVING JURISDICTIONS. WHERE CODES OVERLAP, COMPLY WITH THE MORE STRINGENT REQUIREMENTS.

B. THE CONTRACTOR SHALL MAINTAIN INSURANCE AS WILL PROTECT HIM FROM LIABILITY UNDER WORKMAN'S COMPENSATION ACTS AND OTHER EMPLOYEE BENEFITS ACTS IN ACCORDANCE WITH THE LAWS OF NEW YORK STATE, AND FROM LIABILITY FOR DAMAGES BECAUSE OF BODILY INJURY, INCLUDING DEATH AND PROPERTY DAMAGE.

C. CONTRACTOR IS TO REVIEW DRAWINGS AND EXISTING SITE CONDITIONS AND DIMENSIONS FOR SCOPE OF WORK INVOLVED. CONTRACTOR IS TO INCLUDE IN HIS PROPOSAL ALL ITEMS, MATERIALS, ETC...TO ACHIEVE THE DESIGN CONCEPTS SHOWN ON THE DRAWINGS. MINOR CHANGES IN THE WORK, DUE TO EXISTING CONDITIONS, WILL BE ALLOWED IF APPROVED BY THE ARCHITECT/ENGINEER BEFORE PROCEEDING.

D. EXISTING DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE JOB. VERIFICATION OF EXISTING DIMENSIONS AND CONDITIONS SHALL BE DONE PRIOR TO PREPARATION OF SHOP DRAWINGS.

E. CONTRACTOR IS TO INCLUDE IN HIS PROPOSAL ALL ADDITIONAL MATERIALS AND LABOR AS REQUIRED TO WORK AROUND EXISTING CONDITIONS, AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED.

F. ALL WORKMANSHIP MUST BE IN THE BEST PRACTICE OF THE TRADE AS DETERMINED BY THE ARCHITECT. ANY WORK NOT MEETING THESE STANDARDS WILL BE REJECTED.

G. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS APPROVED IN WRITING BY THE ARCHITECT/ENGINEER.

H. CONTRACTOR IS TO DISPOSE OF ALL DEMOLITION MATERIALS AND LEAVE THE WORK IN A READY TO USE CONDITION.

I. CONTRACTOR IS RESPONSIBLE FOR ALL MEANS, METHODS, LABOR PROCEDURES AND SAFETY PRECAUTIONS FOR COMPLETING THE WORK.

J. CONTRACTOR IS RESPONSIBLE FOR ALL WORK DURING CONSTRUCTION UNTIL FINAL APPROVAL BY ARCHITECT, OWNER AND LOCAL OFFICIALS.

K. DURING DEMOLITION WORK, THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING TO PREVENT DAMAGE TO ANY ADJACENT EXISTING STRUCTURES.

L. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ANY EXISTING UTILITIES ON OR ADJACENT TO PROPERTY.

M. WHERE A SPECIFIC MANUFACTURER'S PRODUCT IS CALLED OUT, ALL MATERIALS AND WORK MUST COMPLY WITH THE MANUFACTURER'S STRICT RECOMMENDATIONS FOR INSTALLATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN INSTRUCTIONS AND TO THEN FOLLOW THEM.

N. WHERE A NAME BRAND IS NOT CALLED OUT, THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS AND/OR PRODUCT INFORMATION FOR ARCHITECT/ENGINEER REVIEW AND APPROVAL. MINOR ITEMS IN THE WORK ARE NOT SPECIFIED. CONTRACTOR IS TO USE QUALITY AND QUANTITY THAT IS STANDARD TO THE TRADE.

O. CONSULT THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AND DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, WASHES, DRIPS, REVEALS, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS.

P. TYPICAL DETAILS APPLY TO ALL DRAWINGS AND SHALL BE USED EXCEPT WHERE OTHERWISE SHOWN OR NOTED.

DIVISION 1.4 - SPECIAL INSPECTIONS AND TESTING

A. PROVIDE SPECIAL INSPECTIONS AND TESTING IN ACCORDANCE WITH CHAPTER 17 OF THE BUILDING CODE OF NEW YORK STATE. THE PROGRAM OF SPECIAL INSPECTIONS AND TESTING IS A QUALITY ASSURANCE PROGRAM INTENDED TO ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THIS SECTION IS INTENDED TO INFORM THE CONTRACTOR OF THE OWNER'S QUALITY ASSURANCE PROGRAM AND EXTENT OF THE CONTRACTOR'S RESPONSIBILITIES. THIS SECTION IS ALSO INTENDED TO NOTIFY THE SPECIAL INSPECTORS, TESTING LABORATORIES, AND OTHER AGENTS OF THE SPECIAL INSPECTORS OF THEIR REQUIREMENTS AND RESPONSIBILITIES.

B. REQUIRED INSPECTIONS AND TESTS ARE INDENTIFIED IN THE SUPPLEMENTAL STATEMENT OF SPECIAL INSPECTIONS. THE SERVICES AND QUANTITIES OF TESTING SPECIFIED ARE APPROXIMATE AND MAY VARY. ACTUAL SERVICES AND QUANTITIES OF TESTING WILL BE DETERMINED BY THE OWNER AND/OR ARCHITECT AND CONSTRUCTION MANAGER DURING THE CONSTRUCTION PERIOD.

C. THE ARCHITECT, ENGINEER AND/OR CONSTRUCTION MANAGER WILL DETERMINE THE LOCATIONS FOR TAKING SAMPLE SPECIMENS FOR TESTING IN ACCORDANCE WITH THE STATEMENT OF SPECIAL INSPECTIONS.

D. SPECIAL INSPECTORS MUST DEMONSTRATE, TO THE ENGINEER OF RECORD AND BUILDING OFFICIAL'S SATISFACTION, EXPERIENCE AND SKILLS TO SATISFACTORILY CONDUCT TESTING INDICATED WITHOUT DELAYING THE PROGRESS OF THE WORK. THE OWNER WILL EMPLOY AND PAY FOR THE SERVICES OF THE SPECIAL INSPECTOR'S TO PERFORM THE SERVICES SPECIFIED HEREIN; HOWEVER, THE CONTRACTOR SHALL REIMBURSE THE OWNER FOR THE COST OF THOSE SERVICES WHICH, IN THE OPINION OF THE ARCHITECT/ENGINEER (AND CONSTRUCTION MANAGER), ARE REQUIRED DUE TO THE FOLLOWING:

a. FAILURE OF MATERIALS OR WORKMANSHIP TO MEET CONTRACT REQUIREMENTS.

b. MATERIALS OR PRACTICES, NOT COMPLYING WITH THE SPECIFICATIONS WHICH COULD POSSIBLY RESULT IN DEFECTIVE WORK THEREBY RENDERING IT NECESSARY OR ADVISABLE TO PERFORM TESTS TO DETERMINE WHETHER OR NOT WORK IS ACCEPTABLE.

c. CHANGES IN SOURCE, QUALITY OR CHARACTERISTICS OF MATERIALS.

d. SITE CURED CYLINDERS REQUESTED BY THE CONTRACTOR.

E. THE SPECIAL INSPECTOR SHALL RETAIN THE SERVICES OF A FULL TIME REGISTERED PROFESSIONAL ENGINEER WHO SHALL CERTIFY ALL TEST REPORTS. THE ENGINEER SHALL BE RESPONSIBLE FOR THE TRAINING OF THE TESTING TECHNICIANS AND SHALL BE IN RESPONSIBLE CHARGE OF THE FIELD AND LABORATORY TESTING OPERATIONS.

F. SPECIAL INSPECTIONS SHALL BE PERFORMED BY SPECIAL INSPECTORS WHO ARE CERTIFIED AS IDENTIFIED BELOW, OR ARE WORKING UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER.

a. TECHNICIANS PERFORMING SAMPLING AND TESTING OF CONCRETE SHALL BE ACI CERTIFIED CONCRETE FIELD TESTING TECHNICIANS - GRADE 1.

b. INSPECTORS PERFORMING INSPECTIONS OF CONCRETE WORK SUCH AS INSPECTIONS OF CONCRETE PLACEMENT, BATCHING, REINFORCING PLACEMENT, CURING AND PROTECTION, SHALL BE ACI CERTIFIED CONCRETE CONSTRUCTION INSPECTORS OR ICBO CERTIFIED REINFORCED CONCRETE SPECIAL INSPECTORS.

c. TECHNICIANS PERFORMING VISUAL INSPECTION OF WELDING SHALL BE AWS CERTIFIED WELDING INSPECTORS OR ICBO CERTIFIED STRUCTURAL STEEL AND WELDING SPECIAL INSPECTORS; TECHNICIANS PERFORMING NON-DESTRUCTIVE TESTING SUCH AS ULTRASONIC TESTING, RADIOGRAPHIC TESTING, MAGNETIC PARTICLE TESTING, OR DYE-PENETRATE TESTING SHALL BE CERTIFIED AS AN ASNT-TC LEVEL II OR LEVEL III TECHNICIAN.

d. TECHNICIANS PERFORMING STANDARD TESTS DESCRIBED BY SPECIFIC ASTM STANDARDS SHALL HAVE TRAINING IN THE PERFORMANCE OF SUCH TESTS AND MUST BE ABLE TO DEMONSTRATE EITHER BY ORAL OR WRITTEN EXAMINATION COMPETENCE FOR THE TEST TO BE CONDUCTED. THEY SHALL BE UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER AND SHALL NOT BE PERMITTED TO INDEPENDENTLY EVALUATE TEST RESULTS.

G. CONTRACTOR'S SHALL COOPERATE WITH LABORATORY PERSONNEL AND PROVIDE ACCESS TO THE WORK AND TO MANUFACTURERS/FABRICATOR'S FACILITIES AS REQUIRED FOR THE PERFORMANCE OF THEIR SERVICES, SHALL RETAIN THE LATEST SET OF CONSTRUCTION DRAWINGS, FIELD SKETCHES, APPROVED SHOP DRAWINGS, AND SPECIFICATION AT THE PROJECT SITE FOR USE BY THE INSPECTORS AND TESTING TECHNICIANS. CONTRACTOR'S SHALL ALSO PROVIDE CASUAL LABOR AND FACILITIES TO PROVIDE ACCESS TO THE WORK TO BE INSPECTED OR TESTED, TO OBTAIN AND HANDLE SAMPLES AT THE SITE, TO FACILITATE INSPECTIONS AND TESTS, TO CONSTRUCT A STORAGE BOX ON THE SITE OF SUFFICIENT SIZE TO STORE CYLINDERS, WHICH WILL AFFORD PROTECTION, REQUIRED BY ASTM C_31.

H. CONTRACTOR'S SHALL PROVIDE THE LABORATORY WITH PRELIMINARY REPRESENTATIVE SAMPLES OF MATERIALS TO BE TESTED, IN REQUESTED QUANTITIES. WHEN THE SOURCE, QUALITY OR CHARACTERISTIC OF AN APPROVED MATERIAL CHANGES OR INDICATES LACK OF COMPLIANCE WITH CONTRACT REQUIREMENTS, CONTRACTOR'S SHALL SUBMIT ADDITIONAL SAMPLES OF MATERIALS TO TESTING LABORATORY.

DIVISION 1.4 - SPECIAL INSPECTIONS AND TESTING (CONTINUED)

I. WHEN REQUESTED BY THE ARCHITECT/ENGINEER, OR THE TESTING LABORATORY, THE CONTRACTOR SHALL IMMEDIATELY PROVIDE COPIES OF MILL REPORTS, CUTTING LISTS, MATERIAL BILLS, SHIPPING BILLS, TIME AND PLACE OF SHIPMENT OF MATERIALS TO SHOP AND FIELD AND ANY RELEVANT DATA ON PREVIOUS TESTING AND INVESTIGATIONS OF MATERIALS.

J. CONTRACTOR'S SHALL REVIEW THE STATEMENT OF SPECIAL INSPECTIONS AND BE RESPONSIBLE FOR COORDINATING AND SCHEDULING INSPECTIONS AND TESTS TO FACILITATE THE TIMELY SEQUENCE OF INSPECTION AND TESTING. THE CONTRACTOR SHALL GIVE ADVANCED NOTIFICATION TO THE TESTING LABORATORY AND THE ARCHITECT/ENGINEER (AND CONSTRUCTION MANAGER) THAT WORK HAS PROGRESSED TO A POINT WHERE INSPECTION AND TESTING MAY PROCEED.

K. ADVANCED NOTIFICATION, SHALL BE 48 HOURS (MIN.) PRIOR TO COMMENCEMENT OF THE FOLLOWING:

a. SITE PREPARATION:
i. EXCAVATION FOR FOUNDATIONS AND SLAB ON GRADE.
ii. PROOF-ROLLING OF SLAB ON GRADE SUBGRADE.

b. SOIL COMPACTION:
i. DELIVERY OF FILL TO THE SITE.
ii. PLACEMENT AND COMPACTION OF FILL OR BACKFILL.

c. CONCRETE:
i. SETTING OF REINFORCING AND FORMWORK.
ii. PLACING CONCRETE.

d. WOOD:
i. SHOP FABRICATION OF TRUSSES.
ii. ERECTION OF WALLS.
iii. ERECTION OF TRUSSES.
iv. INSTALLATION OF WALL, FLOOR, AND/OR ROOF SHEATHING.

L. THE SPECIAL INSPECTION PROGRAM DOES NOT, IN ANY WAY, RELIEVE THE CONTRACTOR OF HIS OBLIGATION TO PERFORM WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS OR FROM IMPLEMENTING AN EFFECTIVE QUALITY CONTROL PROGRAM. ALL WORK THAT IS TO BE SUBJECTED TO SPECIAL INSPECTIONS SHALL FIRST BE REVIEWED BY THE CONTRACTOR'S QUALITY CONTROL PERSONNEL.

M. SERVICES OF TESTING LABORATORY RETAINED BY THE OWNER IS FOR VERIFICATION OF CONTRACTOR'S COMPLIANCE AND IF SUCH TESTS OF INSPECTION INDICATES FAILURE TO COMPLY WITH THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BEAR ALL COST ASSOCIATED WITH ADDITIONAL TESTING AND INSPECTION, AFTER THE WORK HAS BEEN CORRECTED, TO VERIFY COMPLIANCE. AREAS WHERE SAMPLES ARE TAKEN FOR PURPOSES OF TESTING SHALL BE PATCHED TO THE SATISFACTION OF THE ARCHITECT.

N. THE SPECIAL INSPECTORS OR TESTING LABORATORIES MAY NOT RELEASE, REVOKE, ALTER, OR ENLARGE ON THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE SPECIAL INSPECTORS OR TESTING LABORATORIES WILL NOT HAVE CONTROL OVER THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION. THE SPECIAL INSPECTORS OR TESTING LABORATORIES ARE NOT RESPONSIBLE FOR CONSTRUCTION SITE SAFETY. THE SPECIAL INSPECTORS OR TESTING LABORATORIES HAVE NO AUTHORITY TO STOP THE WORK.

O. THE SPECIAL INSPECTOR SHALL SUBMIT THREE COPIES OF BI-WEEKLY REPORTS OF EACH INSPECTION OR TEST ON SOILS, CONCRETE, MASONRY, AND STRUCTURAL STEEL TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INCLUDE THE FOLLOWING:

a. DATE OF TEST OR INSPECTION.
b. NAME OF INSPECTOR OR TECHNICIAN.
c. LOCATION OF SPECIFIC AREAS TESTED OR INSPECTED.
d. DESCRIPTION OF TEST OR INSPECTION AND RESULTS.
e. APPLICABLE ASTM STANDARD.
f. WEATHER CONDITIONS.
g. SIGNATURE OF SPECIAL INSPECTOR OR TECHNICIAN.

P. SUBMIT INTERIM REPORTS TO THE BUILDING OFFICIAL WHICH INCLUDE ALL INSPECTIONS AND TEST REPORTS RECEIVED THAT WEEK. PROVIDE COPIES TO THE ARCHITECT, AND CONTRACTOR. THE FREQUENCY OF THE INTERIM REPORTS SHALL BE AS REQUIRED BY THE TOWNSHIP.

Q. ANY DISCREPANCIES FROM THE CONTRACT DOCUMENTS FOUND DURING A SPECIAL INSPECTION SHALL BE IMMEDIATELY REPORTED TO THE CONTRACTOR. IF THE DISCREPANCIES ARE NOT CORRECTED, THE SPECIAL INSPECTOR SHALL NOTIFY THE EOR AND BUILDING OFFICIAL. REPORTS SHALL DOCUMENT ALL DISCREPANCIES IDENTIFIED AND THE CORRECTIVE ACTION TAKEN.

R. THE TESTING LABORATORY SHALL IMMEDIATELY NOTIFY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE BY TELEPHONE OR FAX OF ANY TEST RESULTS WHICH FAIL TO COMPLY WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

S. PROVIDE A STATEMENT TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AT THE COMPLETION OF THE WORK REQUIRING SPECIAL INSPECTIONS FROM EACH INSPECTION AGENCY AND TESTING LABORATORY THAT ALL WORK WAS COMPLETED IN SUBSTANTIAL CONFORMANCE WITH THE CONTRACT DOCUMENTS AND THAT ALL APPROPRIATE INSPECTIONS AND TESTS WERE PERFORMED.

a. COMPLETE FINAL REPORT OF SPECIAL INSPECTIONS BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND SUBMIT TO THE EOR AND BUILDING OFFICIAL PRIOR TO THE INSURANCE OF A CERTIFICATE OF USE AND OCCUPANCY.
b. USE C.A.S.E. FORM 102 - 2001 FOR THE FINAL REPORT OF SPECIAL INSPECTIONS.
c. THE FINAL REPORT OF SPECIAL INSPECTIONS WILL CERTIFY THAT ALL REQUIRED INSPECTIONS HAVE BEEN PERFORMED AND WILL ITEMIZE ANY DISCREPANCIES THAT WERE NOT CORRECTED OR RESOLVED.

T. THE SPECIAL INSPECTORS AND TESTING LABORATORIES SHALL SUBMIT TO THE EOR AND BUILDING OFFICIAL FOR REVIEW A COPY OF THEIR QUALIFICATIONS WHICH SHALL INCLUDE THE NAMES AND QUALIFICATIONS OF EACH OF THE INDIVIDUAL INSPECTORS AND TECHNICIANS WHO WILL BE PERFORMING INSPECTIONS OR TESTS.

U. THE SPECIAL INSPECTORS AND TESTING LABORATORIES SHALL DISCLOSE ANY PAST OR PRESENT BUSINESS RELATIONSHIP OR POTENTIAL CONFLICT OF INTEREST WITH THE CONTRACTOR OR ANY OF THE SUBCONTRACTORS WHOSE WORK WILL BE INSPECTED OR TESTED.

V. THE FREQUENCY OF INSPECTIONS SHALL CONFORM TO THE PROGRAM OF SPECIAL INSPECTIONS. AND SHALL BE COMPLY WITH THE FOLLOWINGDEFINITIONS:

a. PERIODIC - IN GENERAL, NO MORE THAN A HALF DAY SITE VISIT, NOT LESS THAN 48 HOURS APART, UNLESS OTHERWISE DIRECTED BY OWNER, ARCHITECT, OR ENGINEER, OR SPECIFIED BELOW.
b. CONTINUOUS - IN GENERAL, THE SPECIAL INSPECTOR OR AGENT SHOULD BE ON SITE BEFORE, DURING, AND AFTER OPERATION REQUIRING INSPECTION.

W. TESTING AND INSPECTIONS FOR EXISTING SUBGRADES SHALL INCLUDE LABORATORY TESTING AND FIELD VERIFICATION AS FOLLOWS:

a. LABORATORY TESTS

i. FOR EXISTING SITE MATERIAL
1. COHESIVE SOILS AND SEMI_COHESIVE SOILS: PROVIDE ONE OPTIMUM MOISTURE_MAXIMUM DENSITY CURVE FOR EACH TYPE OF SUBGRADE SOIL ENCOUNTERED IN ACCORDANCE WITH ASTM D_1557.
2. NON-COHESIVE SOILS: PROVIDE MAXIMUM AND MINIMUM INDEX DENSITIES AND RELATIVE DENSITIES FOR EACH TYPE OF SUBGRADE SOIL ENCOUNTERED IN ACCORDANCE WITH ASTM D_4254.

ii. FOR BORROW MATERIALS: ANALYZE EACH TYPE OF BORROW MATERIALS BEFORE ACCEPTANCE AND DELIVERY TO THE SITE. ANY CHANGE IN THE SOURCE OR QUALITY OF THE MATERIAL WILL REQUIRE A NEW SERIES OF TESTS TO DETERMINE ACCEPTABILITY.
1. PARTICLE SIZE ANALYSIS OF SOILS ASTM D_422, ASTM D_421, ASTM D_420, ASTM C_117 RECOMMENDED PRACTICE.
2. PLASTICITY INDEX DETERMINATION ASTM D_4318.
3. MOISTURE_DENSITY CURVE DETERMINATION ASTM D_1557 OR RELATIVE DENSITY (ASTM D_4253 OR ASTM D_4254) AS SPECIFIED ABOVE.
4. FROST SUSCEPTIBILITY ANALYSIS.

b. FIELD TESTS:

i. THE OWNER'S SOILS TESTING AGENCY REPRESENTATIVE SHALL BE PRESENT DURING DELIVERY AND COMPACTION OF FILL MATERIALS. OBSERVE PROOFROLLING OPERATIONS, IDENTIFY LOCATION AND EXTENT OF SOFT, LOOSE, OR YIELDED SUBGRADE MATERIAL THAT MUST BE REMOVED OR UNDERCUT, AND INSPECT UNDERCUT SUBGRADE.
ii. ESTABLISH SUITABLE BEARING GRADES FOR FOUNDATIONS AND STRUCTURAL FILL BELOW SLABS ON GRADE.
iii. VERIFY NATURAL SOIL AND STRUCTURAL FILL SUBGRADES FOR ALL SLABS ON GRADE.
iv. IN_PLACE DENSITY TESTS: TEST IN ACCORDANCE WITH ASTM D_1556 (SAND CONE METHOD) OR ASTM D_2922 (NUCLEAR METHOD) ON COMPACTED NATURAL SOILS OR STRUCTURAL FILL MATERIALS AS FOLLOWS:
v. ONE TEST FOR EACH 2000 SQ. FT. OF SLAB ON GRADE AND PAVEMENT SUBGRADE PER 12" LIFT.
vi. ONE TEST FOR EACH 200 CU. YD. OF FILL AND BACKFILL AT EXTERIOR SIDE OF FOUNDATION WALLS AND UNPAVED AREAS.

DIVISION 1.4 - SPECIAL INSPECTIONS AND TESTING (CONTINUED)

X. CONCRETE SAMPLES SHALL BE TAKEN IN ACCORDANCE WITH ASTM C_172 "SAMPLING FRESH CONCRETE" AND COMPRESSION TESTS TO VERIFY THAT DESIGN MIX COMPLIES WITH CONTRACT DOCUMENTS SHALL BE COMPLETED. TEST SLUMP AND AIR CONTENT OF CONCRETE AT SAME FREQUENCY AND FROM SAME TRUCKLOAD AS COMPRESSION TESTS AND MORE OFTEN WHEN DIRECTED BY THE OWNER'S REPRESENTATIVE.

a. SLUMP TEST SHALL BE MADE IN ACCORDANCE WITH ASTM C_143 "METHODS FOR SLUMP OF PORTLAND CEMENT CONCRETE".
b. DETERMINE AIR CONTENT BY ASTM C_231 "METHOD OF TEST FOR AIR CONTENT OF FRESHLY MIXED CONCRETE BY THE VOLUMETRIC METHOD".
c. LABEL EACH COMPRESSION TEST CYLINDER IDENTIFYING THE TRUCKLOAD OF CONCRETE FROM WHICH SAMPLE WAS TAKEN AND THE EXACT LOCATION IN CONSTRUCTION WHERE DEPOSITED.
d. TEST SPECIMENS IN ACCORDANCE WITH ASTM C_39 "METHODS OF TESTS FOR COMPRESSIVE STRENGTH OF MOLDED CONCRETE CYLINDERS". INCLUDE WEIGHT TEST.
e. ONE COMPRESSION TEST, AS USED HEREIN SHALL CONSIST OF 3 TEST CYLINDERS MADE FROM COMPOSITE SAMPLES SECURED FROM A SINGLE TRUCKLOAD OF CONCRETE. ONE COMPRESSION TEST WILL BE REQUIRED FOR EACH OF THE FOLLOWING CONDITIONS;
f. EACH 50 CU. YD. OF CONCRETE OR FRACTION THEREOF.
g. EACH CLASS OF CONCRETE PLACED IN ONE DAY.
h. BREAK 1 TEST CYLINDER AT 7 DAYS AND THE REMAINING 2 AT 28 DAYS. IF DESIRED BY THE ARCHITECT, ENGINEER, OR CONSTRUCTION MANAGER A FOURTH TEST CYLINDER CAN BE MADE AND HELD FOR 56 DAYS.

Y. INSPECT FORMWORK AND REINFORCING PRIOR TO PLACING OF CONCRETE.

Z. INSPECT BATCHING, MIXING AND DELIVERY OPERATIONS FOR COMPLIANCES WITH THE SPECIFICATIONS.

AA. VERIFY THAT EACH FABRICATOR MAINTAINS A COMPLETE, ACCURATE, DETAILED FABRICATION AND QUALITY CONTROL PROCEDURE EVALUATED RELATIVE TO THE CODE REQUIREMENTS AND FABRICATOR'S SCOPE OF WORK.

BB. INSPECT FABRICATOR'S PLANT BASED ON PROGRAM DESCRIBED ABOVE.

CC. REVIEW THE FOLLOWING CONNECTIONS DURING CONSTRUCTION:

a. FIELD GLUING - ENSURE THAT ALL SUBFLOORING IS GLUED WITH APPROVE CONSTRUCTION ADHESIVE.
b. NAILING - VERIFY SIZE AND SPACING OF NAILS FOR:
i. SHEATHING TO WALL STUDS AT SHEAR WALLS.
ii. SUBFLOORING TO FLOOR JOISTS AT FLOOR LEVELS.
iii. ROOF SHEATHING TO FRAMING.
iv. CONFIRM PROPER INSTALLATION OF ADDITIONAL NAILS REQUIRED BY THE CONSTRUCTION DOCUMENTS INCLUDING BUT NOT LIMITED TO DRAG STRUTS, HOLDOWN LOCATIONS, BRACES, ETC.
c. BOLTING
i. CONFIRM SIZE, SPACING, AND PROJECTION OF SILL BOLTS.
ii. CONFIRM SIZE, SPACING AND LOCATION OF HOLDDOWN ANCHORS.
iii. CONFIRM SIZE AND SPACING OF EDGE BOLTS.
iv. CONFIRM PROPER INSTALLATION OF ADDITIONAL BOLTS REQUIRED BY THE CONSTRUCTION DOCUMENTS INCLUDING BUT NOT LIMITED TO DRAG STRUTS, HOLDOWN LOCATIONS, BRACES, ETC.
d. ANCHORING

DD. CONFIRM TYPE, QUANTITY AND LOCATIONS OF SIMPSON-TYPE METAL FRAMING ANCHORS SUCH AS HOLDOWNS, STRAPS, HURRICANE TIES, FRAMING HANGERS, ETC.

EE. VERIFY GENERAL COMPLIANCE WITH CONSTRUCTION DOCUMENTS AND MANUFACTURER'S RECOMMENDED PROCEDURES INCLUDING THE INSTALLATION OF ADDITIONAL BLOCKING, BRIDGING, PERIMETER BRACING, ETC.

ABBREVIATION	AGENT
SER	STRUCTURAL ENGINEER OF RECORD LISTED ABOVE.
AOR	ARCHITECT OF RECORD LISTED ABOVE.
SI	SPECIAL INSPECTOR
OIAF	OWNER'S INSPECTION AGENCY - FIELD
OIAP	OWNER'S INSPECTION AGENCY - PLANT
GE	GEOTECHNICAL ENGINEER
FQP	FABRICATOR'S QUALITY CONTROL PROGRAM
CQP	CONTRACTOR'S QUALITY CONTROL PROGRAM
NR	NOT REQUIRED
NA	NOT APPLICABLE

DIVISION 3 - CONCRETE

A. ALL CONCRETE SHALL HAVE A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. PORTLAND CEMENT SHALL BE ASTM C150, TYPE 1 OR II OR ASTM C595 TYPE IL. LIMIT CEMENTITIOUS SUBSTITUTION TO BETWEEN 10 AND 20% BY WEIGHT. THE USE OF GROUND GRANUALTED BLAST FURNACE SLAG (ASTM C989, GRADE 100 OR 120) IS PROHIBITED FOR USE IN CONCRETE EXPOSED TO VIEW WITHOUT WRITTEN CONSENT FROM THE ARCHITECT.

B. ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE WITH A NOMINAL AIR DRY DENSITY OF 145 PCF.

C. CONCRETE ACCEPTANCE SHALL BE ON THE BASIS OF "30 CONSECUTIVE TEST" OR "TRIAL MIXTURES" AS DESCRIBED IN ACI 318, SECTION 5.3. PROVIDE TRIAL MIXTURES FOR THREE DIFFERENT WATER-CEMENT RATIOS INDICATING 7-DAY AND 28-DAY COMPRESSIVE STRENGTH (Fc); 1200 PSI GREATER THAN REQUIRED SHALL BE ACCEPTED.

D. A MINIMUM OF ONE SET OF THREE STANDARD TEST CYLINDERS FOR EACH DAY'S PLACEMENT SHALL BE TAKEN, AND THE OWNER'S TESTING AGENCY WILL PERFORM COMPRESSION TESTS ON ONE CYLINDER AT 7 DAYS AND 28 DAYS, LEAVING ONE CYLINDER IN RESERVE.

E. ADMIXTURES, ADD TO MIX PER MANUFACTURER'S RECOMMENDATIONS:
WATER REDUCING ADMIXTURE (ASTM A494, TYPE A)
AIR ENTRAINING ADMIXTURE (ASTM C2260)

F. ADD AIR ENTRAINING ADMIXTURE TO PRODUCE MAXIMUM AIR BY VOLUME OF:

6% +/- 1% CLASS A CONCRETE, FOR EXPOSURE TO EARTH OR WEATHER.
3.5%, +1%, -2% CLASS A CONCRETE, FOR INTERIOR FLOOR SLABS.

G. FINE AGGREGATE SHALL CONSIST OF WASHED NATURAL SAND CONFORMING TO ASTM C-33 AND COARSE AGGREGATE SHALL CONSIST OF WELL-GRADED CRUSHED STONE OR WASHED GRAVEL CONFORMING TO ASTM C-33, 3/4" SIZE.

H. WATER CEMENT RATIO SHALL NOT EXCEED 0.45 FOR CLASS A CONCRETE. WATER SHALL BE CLEAN AND FREE FROM DELETERIOUS AMOUNTS OF ACIDS, ALKALIS OR ORGANIC MATERIALS.

I. SLUMP SHALL BE:

PAVEMENTS AND SLAB ON GROUND	3" +/-1"
FOOTINGS	3" +/-1"
REINFORCED WALLS	4" +/-1"
MAX WITH MID-RANGE WATER REDUCER (PLANT ADDED)	5" +/-1"
MAX WITH HIGH-RANGE WATER REDUCER (FIELD ADDED)	8"

J. ALL CONCRETE SHALL BE TRUCK MIXED.

K. WALLFORM PANELS SHALL BE PLYWOOD OR TEMPERED HARDBOARD FACES WITH AN ACCEPTED APPLIED FORM RELEASE AGENT.

L. CLEARANCE OF MAIN REINFORCEMENT FROM ADJACENT SURFACES SHALL CONFORM TO THE FOLLOWING (UNLESS OTHERWISE SHOWN IN DETAIL):

1.	UNFORMED SURFACES IN CONTACT WITH GROUND (FOOTINGS)	3 INCHES
2.	SLABS ON GRADE	1/2 INCHES
3.	FORMED SURFACES IN CONTACT WITH GROUND OR EXPOSED TO WEATHER (WALLS)	2 INCHES
4.	IN ALL CASES, CLEARANCE NOT LESS THAN DIAMETER OF BARS.	

NOTE: MAXIMUM DEVIATION FROM THESE REQUIREMENTS SHALL BE +1/4" FOR SECTIONS TEN (10) INCHES OR LESS AND +1/2" FOR SECTIONS OVER TEN (10) INCHES THICK.

DIVISION 3 - CONCRETE

M. ALL PLACEMENT OF CONCRETE AND REINFORCEMENT:

ACCORDING TO ACI 318 (INCLUDING ACI RECOMMENDATIONS FOR HOT AND COLD WEATHER CONDITIONS); AND CRSI RECOMMENDED PRACTICES FOR 'PLACING REINFORCING BARS'.

N. CURING COMPOUND:

FOUNDATION WALLS: MASTER BUILDERS CO. MB-429.
BUILDING FLOORS: MASTER BUILDERS CO. "MASTERSEAL".

O. FLOOR FINISH: HARD STEEL TROWEL UNLESS OTHERWISE INDICATED ON DRAWINGS.

P. EXPANSION JOINT FILLERS: SEE DETAILS AND NOTES ON DRAWINGS.

Q. FORM REMOVAL (MINIMUM TIME):

5-DAYS FOR AIR TEMPERATURES BETWEEN 40 & 50 DEGREES.
3-DAYS FOR AIR TEMPERATURE ABOVE 55 DEGREES.

R. WHERE EXPOSED ABOVE GRADE, EITHER INTERIOR OR EXTERIOR, CONCRETE SHALL HAVE A SMOOTH FINISH AS OBTAINED BY THE USE OF SMOOTH PLYWOOD OR TEMPERED BOARD FORMS. GRIND OFF FINS, JOINT MARKS, BULGES AND OTHER PROMINENT GRAIN MARKINGS. FILL AND GRIND OFF HONEYCOMBED OR DEPRESSED AREAS AND LEAVE SMOOTH AND WASHED CLEAN.

S. REINFORCING BARS SHALL BE NEW ASTM A615, GRADE 60.

T. STEEL WELDED WIRE FABRIC SHALL BE NEW ASTM A185. FURNISH IN FLAT SHEETS. LAP 1-1/2 SQUARES IN ALL DIRECTIONS AT JOINTS.

U. BAR SUPPORTS SHALL BE GALVANIZED OR STAINLESS STEEL. BAR SUPPORTS IN CONTACT WITH EXPOSED SURFACES SHALL BE GALVANIZED AND PLASTIC TIPPED.

V. WHERE CONTINUOUS REINFORCING IS CALLED FOR, IT SHALL BE RUN CONTINUOUSLY AROUND CORNERS, LAPPED AT NECESSARY SPLICES AND HOOKED AT DISCONTINUOUS ENDS.

W. SUBMIT SHOP DRAWINGS TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION OF REBAR.

X. ALL REINFORCING SHALL BE INSPECTED BY THE OWNER'S TESTING AGENCY BEFORE CONCRETE IS PLACED.

Y. NON-SHRINK GROUT SHALL BE A MIXTURE OF WATER AND MASTERFLOW 713 BY MASTER BUILDERS.

Z. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.

BEAM, SLAB AND WALL REINFORCING LAP SPLICE LENGTHS

LAP SPLICE LENGTHS FOR REINFORCING IN 4000 PSI CONCRETE ARE AS FOLLOWS:

	TENSION SPLICE		
BAR SIZE	TOP	OTHER	DEVELOPMENT LENGTH
3	21	15	13
4	29	20	17
5	36	26	21
6	43	31	25
7	54	39	32
8	71	51	42
9	90	65	53
10	115	82	68
11	163	101	83

NOTES:

1. LAPPED SPLICE LENGTHS BASED ON ASTM A-615, GRADE 60, REBAR.
2. REINFORCING BARS ARE CLASSED AS

DIVISION 5E - POST-INSTALLED ANCHORS

A. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST INSTALLED ANCHORS SHALL CONSIST OF THE FOLOWING ANCHOR TYPES AND INSTALLED IN ACCORDANCE WITH THEIR RESPECTIVE ICC-ES REPORT AND MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS:

APPLICATION	ANCHORING SYSTEM	ICC-ES REPORT
ANCHORAGE TO CONCRETE	HILTI KWIK-X DUAL ACTION SYSTEM HILTI HY 200 V3 ADHESIVE HILTI KWIK HUS EZ	ESR-5065 ESR-4878 ESR-3027
REBAR DOWELING	HILTI HY 200 V3 WITH SAFESET INSTALLATION	ESR-3187
ANCHORAGE TO SOLID GROUTED MASONRY	HILTI HY 270 ADHESIVE WITH SAFESET	ESR-4143
ANCHORAGE TO HOLLOW / MULTI-WYTHE MASONRY	HILTI HY 270 ADHESIVE WITH SCREEN TUBE	ESR-4143, ESR-4144

BASIS OF DESIGN INCLUDES THE FOLLOWING DESIGN PARAMETERS:
(1) CRACKED CONCRETE
(2) WATER-SATURATED CONCRETE
(3) BASE MATERIAL TEMPERATURE OF 23-104 DEGREES FAHRENHEIT
(4) ALLOWABLE DRILLING METHOD: HAMMER-DRILL HOLLOW DRILL BIT SYSTEM
(5) CURRENT ICC-ES REPORT WITH APPROVAL FOR DEVELOPMENT OF BAR USING ACI PROVISIONS FOR EMBEDMENT DEPTHS GREATER THAN 20 BAR DIAMETERS

B. ACI 318 REQUIRES ADHESIVE ANCHORS TO BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT THE TIME OF ANCHOR INSTALLATION.

C. FOR ADHESIVE ANCHORS INSTALLED IN CONCRETE AGED LESS THAN 21 DAYS, CONTACT ENGINEER TO RE-EVALUATE THE ANCHOR DESIGN BASED ON THE CONCRETE STRENGTH AT THE TIME OF INSTALLATION AND USE A BOND STRENGTH VALUE FOR WATER SATURATED CONCRETE. SITE TESTING IS RECOMMENDED TO VERIFY THE FASTENING CAPACITY.

D. ANCHOR CAPACITY USED IN DESIGN MUST BE BASED ON THE TECHNICAL DATA PUBLISHED BY ANCHOR MANUFACTURER OR SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. PRIOR TO USE, CONTRACTOR MUST PROVIDE CALCULATIONS STAMPED BY PROFESSIONAL ENGINEER DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, AND INSTALLATION TEMPERATURE. CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF SHOP DRAWINGS IN ACCORDANCE WITH THE DESIGN DOCUMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

E. THE DESIGN OF STRAIGHT POST-INSTALLED REINFORCING BARS TO CONCRETE MUST BE PERFORMED PER THE DEVELOPMENT AND SPLICE REQUIREMENTS OF ACI 318. THE POST-INSTALLED REINFORCING BAR SYSTEM IS AN ALTERNATIVE TO CAST-IN-PLACE REINFORCING BARS GOVERNED BY ACI 318 AND BCNYS CHAPTER 19. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER PRIOR TO USE. CONTRACTOR MUST PROVIDE SIGNED AND SEALED CALCULATIONS SEALED BY PROFESSIONAL ENGINEER. THE EPOXY SYSTEM MUST BE TESTED IN ACCORDANCE WITH THE ICC-ES ACCEPTANCE CRITERIA FOR POST-INSTALLED EPOXY ANCHORS IN CONCRETE ELEMENTS (AC308), TABLE 3.8. TECHNICAL DATA MUST BE PUBLISHED IN AN ICC-ES EVALUATION SERVICE REPORT SHOWING COMPLIANCE WITH IBC.

F. CONTINUOUSLY THREADED CARBON STEEL ANCHOR ELEMENTS MUST BE HILTI ASTM F1554 COMPLIANT UNLESS NOTED OTHERWISE.

G. DRILL HOLES WITH ROTARY IMPACT HAMMER DRILLS USING HOLLOW DRILL BIT WITH INTEGRAL VACUUM CLEAN AS PERMITTED BY ICC-ESR. USE OF DIAMOND CORE BIT WITH ROUGHENING TOOL SHALL BE PERMITTED AFTER ENGINEERS OF RECORD APPROVAL. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, ALL HOLES MUST BE DRILLED PERPENDICULAR TO THE CONCRETE SURFACE.

H. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING. THE CONTRACTOR MUST ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.

I. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS MUST BE PERFORMED BY PERSONNEL CERTIFIED BY AN APPLICABLE CERTIFICATION PROGRAM. CERTIFICATION MUST INCLUDE WRITTEN AND PERFORMANCE TESTS IN ACCORDANCE WITH THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM, OR APPROVED EQUIVALENT.

J. ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.

DIVISION 6 - WOOD

SECTION 6A - ROUGH CARPENTRY AND STRUCTURAL LAMINATED MEMBERS

A. LUMBER SHALL COMPLY WITH PS20 "AMERICAN SOFTWOOD LUMBER STANDARD" WITH APPLICABLE GRADING RULES.

B. ALL LUMBER SHALL BE VISUALLY GRADED OR MACHINE RATED WITH THE FOLLOWING MINIMUM ALLOWABLE UNIT STRESSES:

		SPRUCE PINE FIR/DOUGLAS FIR LARCH STUD GRADE	No. 2
Fb	EXTREME FIBER IN BENDING:	675 PSI	900 PSI
Fc	COMPRESSION PARALLEL TO GRAIN	725 PSI	1350 PSI
Fv	HORIZONTAL SHEAR	135 PSI	180 PSI
E	MODULUS OF ELASTICITY	1,200,000 PSI	1,600,000 PSI

C. ALL LUMBER SHALL HAVE A MAXIMUM MOISTURE CONTENT AT TIME OF DRESSING OF 19%.

D. PLYWOOD SHALL CONFORM TO REQUIREMENTS OF PS1 "U.S. PRODUCT STANDARD FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD" AND AMERICAN PLYWOOD ASSOCIATION (APA) "PERFORMANCE STANDARD AND POLICIES FOR STRUCTURAL USE PANELS", FORM No. E445.

E. FACTORY MARK EACH CONSTRUCTION PANEL WITH APA TRADEMARK INDICATING EXPOSURE DURABILITY CLASSIFICATION: EXPOSURE 1. WHILE OSB (OR EQUIVALENT) IS ACCEPTABLE FOR ALL APPLICATIONS, PLYWOOD IS RECOMMENDED FOR USE ON HORIZONTAL SURFACES TO AVOID WATER DAMAGE DURING CONSTRUCTION.

F. PROVIDE FASTENERS AND ANCHORAGE AS INDICATED AND AS RECOMMENDED BY APPLICABLE STANDARDS, COMPLYING WITH FEDERAL STANDARDS FOR NAILS, STAPLES, SCREWS, BOLTS, NUTS, WASHERS AND ANCHORING DEVICES.

G. WHERE ROUGH CARPENTRY WORK IS EXPOSED TO GROUND OR WEATHER, USE FASTENERS WITH A HOT-DIP ZINC COATING (ASTM A153).

H. PRESSURE TREATED LUMBER WITH WATER BORNE PRESERVATIVES TO COMPLY WITH AWPB LP-2 FOR ALL LUMBER EXPOSED TO MOISTURE INCLUDING BUT NOT LIMITED TO WOOD CANTS, NAILERS, BLOCKING, STRIPPING, MEMBERS IN CONNECTION WITH ROOFING, FLASHING, VAPOR BARRIERS AND WATERPROOFING, SILLS, SLEEPERS, MEMBERS IN CONTACT WITH MASONRY OR CONCRETE, AND MEMBERS LESS THAN 18" ABOVE GRADE.

I. STRUCTURAL LAMINATED MEMBERS SHALL BE ENGINEERED LUMBER CONSISTING OF THIN PLYWOOD VENEERS SECURELY BONDED TOGETHER. ACCEPTABLE PRODUCTS ARE MICRO=LAM BY TRUS JOIST CORPORATION, GANG-LAM LVL BY LOUISIANA-PACIFICA CORPORATION, AND ASI LAMINATED VENEER LUMBER BY ALPINE WOOD PRODUCTS, INC. EQUIVALENT SUBSTITUTIONS MAY BE USED IF SUBMITTED TO, AND ACCEPTED BY, THE ARCHITECT/ENGINEER. INSTALL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

SECTION 6B - PREFABRICATED WOOD TRUSSES

A. SUBMIT ENGINEERED AND CHECKED TRUSS SHOP DRAWINGS TO THE ARCHITECT/ENGINEER FOR REVIEW. SHOW SHOP FABRICATION DETAILS, FIELD ASSEMBLY DETAILS AND ERECTION PLANS FOR ALL PREFABRICATED WOOD TRUSSES.

B. SUBMIT TRUSS MEMBER, METAL PLATE CONNECTOR, BEAM TO TRUSS AND TRUSS TO TRUSS CONNECTION DESIGN CALCULATIONS, PREPARED AND SEALED BY A QUALIFIED STRUCTURAL ENGINEER REGISTERED IN THE STATE OF NEW YORK, TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO FABRICATION.

C. DESIGN ALL TRUSS MEMBERS AND CONNECTIONS IN ACCORDANCE WITH THE LATEST EDITIONS OF TPI "DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES" AND THE AF&PA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" TO SUPPORT ALL LOAD CONFIGURATIONS INDICATED.

D. ALL LUMBER SHALL BE NEW LUMBER.

E. TRUSS CONNECTOR PLATES SHALL BE FORMED FROM NEW SHEET STEEL, 20 GAGE MINIMUM, CONFORMING TO ASTM A446 WITH A MINIMUM YIELD STRENGTH OF 33,000 PSI. CONNECTOR PLATES SHALL BE HOT-DIPPED GALVANIZED, COATING DESIGNATION G60.

F. PROVIDE TRUSSES WITH AN UPWARD CAMBER, WHICH OFFSETS TRUSS DEFLECTIONS CAUSED BY MEMBER SELF-WEIGHT, ROOF SHEATHING, HUNG CEILING AND MECHANICAL UNITS.

G. THE TRUSS MANUFACTURER SHALL DESIGN AND PROVIDE ALL TEMPORARY TRUSS BRACING, BRIDGING AND SHORING AS REQUIRED FOR THE SAFETY, STABILITY AND ALIGNMENT OF THE ROOF AND/OR FLOOR TRUSS SYSTEM. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL THE PERMANENT LATERAL LOAD RESISTING SYSTEM IS FULLY OPERATIONAL.

H. HANDLE AND ERECT ALL TRUSSES IN SUCH A MANNER AS TO AVOID PERMANENT STRUCTURAL DAMAGE TO TRUSS MEMBERS OR CONNECTIONS. HOIST TRUSSES INTO POSITION ONLY AT POINTS SPECIFICALLY DESIGNED AND DESIGNATED BY THE TRUSS MANUFACTURER.

I. DO NOT FIELD CUT OR MODIFY TRUSS MEMBERS OR CONNECTIONS WITHOUT THE PRIOR REVIEW OR ACCEPTANCE OF THE ARCHITECT/ENGINEER OR TRUSS MANUFACTURER.

DIVISION 31 - SITE WORK/EARTHWORK/FOUNDATIONS

A. A TESTING AGENCY WILL BE EMPLOYED BY THE OWNER TO VERIFY ACCEPTABILITY OF WORKMANSHIP AND MATERIALS.

B. SLOPE SIDES OF EXCAVATIONS ARE TO COMPLY WITH THE LOCAL CODES, ORDINANCES AND REQUIREMENTS OF AGENCIES HAVING JURISDICTION. SHORE AND/OR BRACE WHERE SLOPING IS NOT POSSIBLE BECAUSE OF SPACE RESTRICTIONS OR STABILITY OF MATERIAL EXCAVATED. MAINTAIN SIDES AND SLOPES OF EXCAVATIONS IN SAFE CONDITION UNTIL COMPLETION OF BACKFILLING.

C. PROVIDE MATERIALS FOR SHORING AND BRACING, SUCH AS SHEET PILING, UP-RIGHTS, STRINGERS, AND CROSS BRACES, AS REQUIRED. MAINTAIN SHORING AND BRACING IN EXCAVATIONS REGARDLESS OF TIME PERIOD EXCAVATIONS WILL REMAIN OPEN. EXTEND SHORING AND BRACING AS EXCAVATION PROGRESSES.

D. BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND POST WITH WARNING LIGHTS. OPERATE WARNING LIGHTS DURING HOURS FROM DUSK TO DAWN EACH DAY AND AS OTHERWISE REQUIRED.

E. ALL SUBGRADE SUPPORTED FOOTINGS AND CONCRETE PIERS SHALL BEAR ON UNDISTURBED NATURAL SUBGRADE MATERIAL MEETING OR EXCEEDING THE PRESUMPTIVE LOAD-BEARING VALUE OF OF 1.5 KIPS PER SQUARE FOOT (1 KIP=1000 LBS.) AS DEFINED BY TABLE 1806.2 OF THE BUILDING CODE OF NEW YORK STATE. NATIVE SUBGRADE SHALL BE INSPECTED AND CONFIRMED BY THE OWNER'S SOIL TESTING AGENCY.

REFERENCE SUMMARY TABLE FOR APPROXIMATE FILL DEPTHS BY ADDRESS. WHERE NATURAL SUBGRADE IS NOT PRESENT AT BOTTOM OF FOOTING ELEVATION, CONTINUE EXCAVATION AND FILL WITH EITHER LEAN CONCRETE OR OVERCAST FOOTING PER TYPICAL DETAIL.

F. PREVENT SURFACE WATER AND SUBSURFACE GROUND WATER FROM FLOWING INTO EXCAVATIONS AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. NO FOOTINGS, GRADE BEAMS OR SLABS SHALL BE PLACED IN WATER OR ON FROZEN GROUND.

G. ALL FOOTING EXCAVATIONS ARE TO BE FINISHED BY HAND.

H. ALL FINISHED EXCAVATIONS AND BEARING GRADES SHALL BE INSPECTED AND APPROVED BY THE OWNER'S SOIL TESTING AGENCY BEFORE ANY CONCRETE IS PLACED.

I. USE SIDE FORMS FOR ALL WALLS. FOOTINGS MAY BE TRENCH FORMED. THEY MAY BE WIDER BUT MUST BE NO LESS THAN THE DIMENSIONS SHOWN IN DETAILS.

J. SHOULD ROCK BE ENCOUNTERED DURING FOUNDATION EXCAVATION, NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY. DO NOT PROCEED WITH ROCK EXCAVATION UNTIL GIVEN AUTHORIZATION TO DO SO. SUCH EXCAVATION WILL BE PAID FOR ON THE BASIS OF UNIT PRICES AS GIVEN IN THE BID FORM.

K. IN GENERAL, EXTERIOR CONSTRUCTION SHALL BE CARRIED DOWN NOT LESS THAN 4-FEET BELOW FINISHED EXTERIOR GRADE.

L. BACKFILL AGAINST FOUNDATION WALLS BELOW GRADE SO THAT DIFFERENCE IN FILL LEVEL ON OPPOSITE SIDE DOES NOT EXCEED 1'-0" AT ANY TIME OR PROVIDE TEMPORARY LATERAL SUPPORT UNTIL PERMANENT LATERAL SUPPORT SYSTEM IS IN PLACE AND OF ADEQUATE STRENGTH TO WITHSTAND THE APPLIED LATERAL PRESSURES.

MISCELLANEOUS

M1 CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE JOB. VERIFICATION OF EXISTING DIMENSIONS AND CONDITIONS SHALL BE DONE PRIOR TO PREPARATION OF SHOP DRAWINGS.

M2 ALL OPENINGS THROUGH SLABS AND WALLS ARE NOT SHOWN. PROVIDE UNIT PRICES FOR ADDITIONAL FRAMING AND REINFORCING.

M3 CONSULT THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AND DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, WASHES, DRIPS, REVEALS, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS.

M4 TYPICAL DETAILS APPLY TO ALL DRAWINGS AND SHALL BE USED EXCEPT WHERE OTHERWISE SHOWN OR NOTED.

DESIGN LOADS

RESIDENTIAL	
DWELLING (ONE- AND TWO-FAMILY)	
UNINHABITABLE ATTICS WITH STORAGE	20 PSF
ALL OTHER AREAS INCLUDING STAIRS, EXCEPT BALCONIES	40 PSF
BALCONIES (NOT EXCEEDING 100-SF)	60 PSF
PARTITION ALLOWANCE	15 PSF
CEILINGS	5 PSF
MECHANICAL ITEMS SUSPENDED FROM STRUCTURAL FRAMING	5 PSF
GROUND SNOW LOAD, Pg=	50 PSF
WIND	
ULTIMATE WIND SPEED	115 MPH
WIND EXPOSURE	B
SEISMIC	
SEISMIC DESIGN CATEGORY	B
SITE CLASS	D

BUILDING IS NOT DESIGNED FOR ADDITIONAL HORIZONTAL OR VERTICAL EXTENSIONS.

EXISTING FILL DEPTHS BY ADDRESS

#	STREET	FILL DEPTH (FT)	REMARKS
18	CALUMET	3.5	A thin layer of 'clean' fill with old pipes underlying debris laden fill
144	HERTEL	3.5	A thin layer of 'clean' fill with old pipes underlying debris laden fill
88	BUSH	3.5	
143	HOWELL	2	
143	LA SALLE	3.5-5.5	Bedrock encountered at 7.5-ft below grade
362	EAST	2	
253	EAST	6.3	A thin layer of 'clean' fill with old pipes underlying debris laden fill
111	AUSTIN	7	
57	HOFFMAN	2	
911	COLUMBUS PKWY	5.5	
198	FOURTEENTH	5.5-7.5	3.5" concrete slab at 3.5-ft below grade
383	FOURTEENTH	5	
230	MASSACHUSETTS	6	
251	NORMAL	4	
873	PROSPECT	5	Bedrock encountered at 5.7-ft below grade
875	PROSPECT	3	
238	RHODE ISLAND	3	
240	RHODE ISLAND	n/a	
242	RHODE ISLAND	4.5	Intact wall/slab at 4.2-ft below grade
138	JERSEY	4.5	Concrete slab at 4.5-ft below grade
142	JERSEY	2.5	
144	JERSEY	2	1 to 2-ft slabs of dolomite at 5.5-ft below grade
226	MARYLAND	7	6" broken concrete slab at 6-ft below grade
258	WHITNEY	2	
262	WHITNEY	6.5	Intact wall/slab from 0.8- to 3.5-ft below grade
206	MIAMI	5.5	
208	MIAMI	4	
230	MIAMI	5	
236	MIAMI	4.5	
288	MIAMI	6.5	
66	O CONNELL	5	
92	GORTON	3	
116	HAMILTON	3.5	
153	THOMPSON	5	A thin layer of 'clean' fill with old pipes underlying debris laden fill and 12-in stone wall at 4-ft below grade
248	LAIRD	5	Concrete slab at 4.0-ft below grade
670	WEST	5.8	
762	AMHERST EAST	2.5	Concrete wall at 1.5-ft below grade
764	AMHERST EAST	n/a	
766	AMHERST EAST	2.7	
291	BERKSHIRE	4.5	
440	BERKSHIRE	5	Concrete slab at 3.7-ft below grade
442	BERKSHIRE	5	
447	BERKSHIRE	4	
449	BERKSHIRE	3.5	
256	HEWITT	5	Intact masonry wall/slab at 5.0-ft below grade
685	MINNESOTA	3	
130	ROUNDS	n/a	
431	SHIRLEY	3.5	

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION

ARCHITECT OF RECORD

HHL Architects
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PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET - SINGLE FAMILY HOME

PROJECT NUMBER: **2317.006**
T.E. PROJ. NUMBER: **25-61**

BENLIC DEVELOPMENT LLC
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

TREDO ENGINEERS
CIVIL/STRUCTURAL
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BUFFALO ENG. PC
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DRAWING TITLE
SPECIFICATIONS

REVISIONS AFTER ISSUANCE	
NO.	DATE
	DESCRIPTION

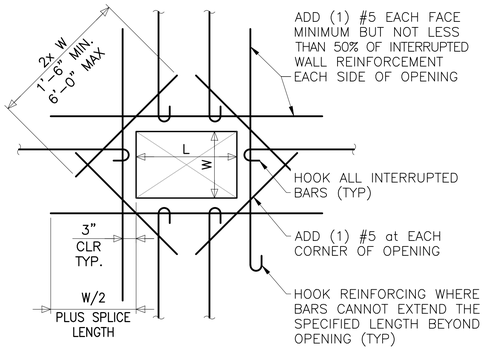
SEAL

EXPIRES: 10.31.25

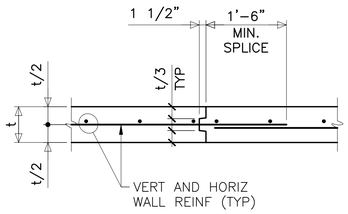
ISSUE DATE: 9.19.25

DRAWING NUMBER

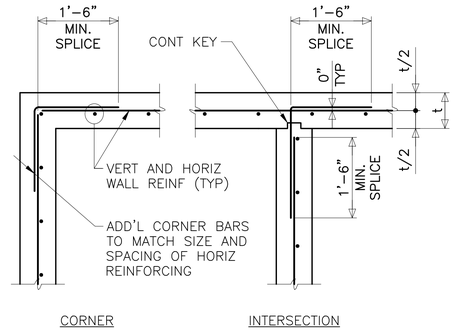
S201b



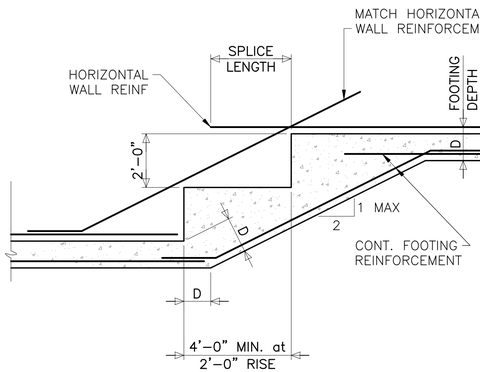
3 REINFORCING at OPENINGS IN CONCRETE WALLS
(4'-0" SQ. MAXIMUM OPENING SIZE)



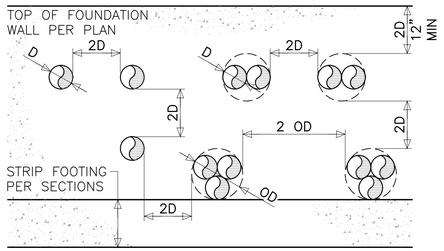
2 WALL CONSTRUCTION JOINT



1 HORIZONTAL WALL REINFORCEMENT



5 ELEVATION OF STEPPED WALL FOOTING



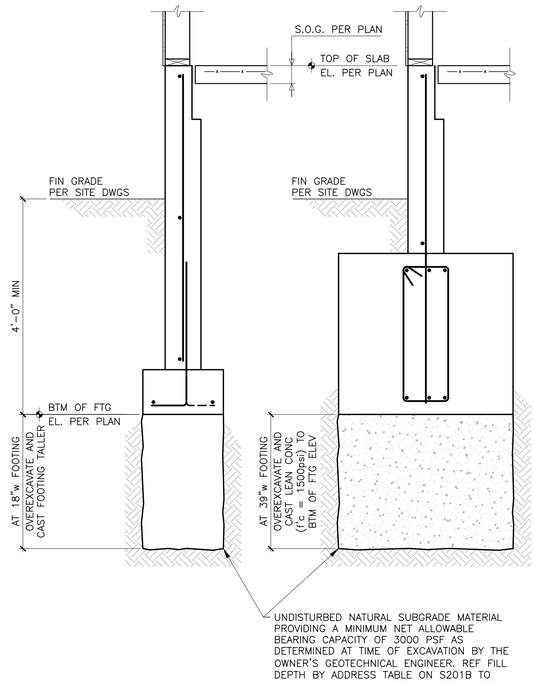
ALL BELOW GRADE UTILITIES SHALL PASS THRU STEM WALL (NOT FOOTING). IF UTILITY ELEVATION IS BELOW TOP OF FOOTING, UTILIZE TYPICAL ELEVATION OF STEPPED WALL FOOTING DETAIL TO LOWER FOUNDATIONS BELOW PENETRATION.

MEP SUBCONTRACTOR TO COORDINATE WITH CONTRACTOR ALL PENETRATIONS, SLEEVES, ETC.

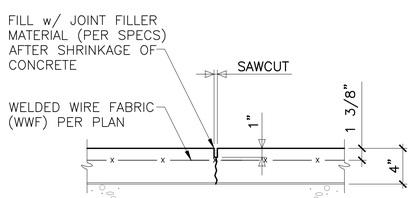
NO PENETRATIONS OR SLEEVES SHALL BE CORED OR FIELD CUT WITHOUT THE EXPRESS APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD.

IF BUNDLED UTILITIES EXCEED 24" IN WIDTH, UTILIZE TYPICAL REINFORCING at OPENING IN CONCRETE WALLS DETAIL.

4 TYPICAL SLEEVE SPACE DETAIL IN FROST WALL



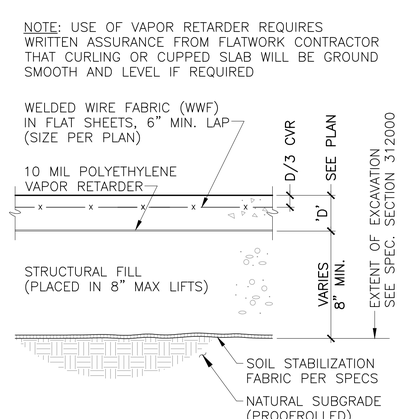
6 FOUNDATION UNDERCUT AT DEEP FILL SITES



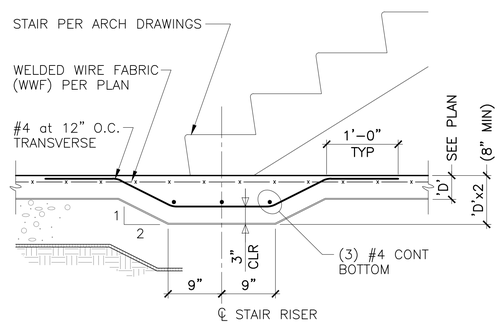
SAWCUT JOINT (PER SPECS)
REFER TO TYPICAL SLAB ON GRADE DETAIL
FOR ADDITIONAL INFORMATION NOT SHOWN

8 SAWCUT JOINT DETAIL (SJ) at SLAB ON GRADE

NOTE: USE OF VAPOR RETARDER REQUIRES WRITTEN ASSURANCE FROM FLATWORK CONTRACTOR THAT CURLING OR CUPPED SLAB WILL BE GROUND SMOOTH AND LEVEL IF REQUIRED



7 TYPICAL SLAB ON GRADE DETAIL
FOR AREAS WITH VCT, TILE OR CARPET
COORDINATE WITH ARCH. DRAWINGS



REFER TO TYPICAL SLAB ON GRADE DETAIL
FOR ADDITIONAL INFORMATION NOT SHOWN

9 THICKENED SLAB DETAIL at STAIR BASE

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[ ] ARCHITECT OF RECORD

DRAWING TITLE
TYPICAL DETAILS

REVISIONS AFTER ISSUANCE
NO. DATE DESCRIPTION

SEAL
STATE OF NEW YORK
MATTHEW JOHN TREDO
LICENSED PROFESSIONAL ENGINEER
082385
EXPIRES: 10.31.25

ISSUE DATE: 9.19.25
DRAWING NUMBER
S202

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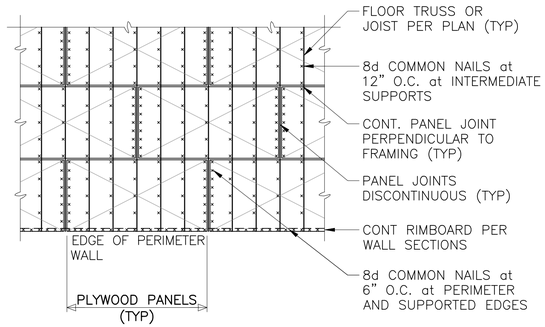
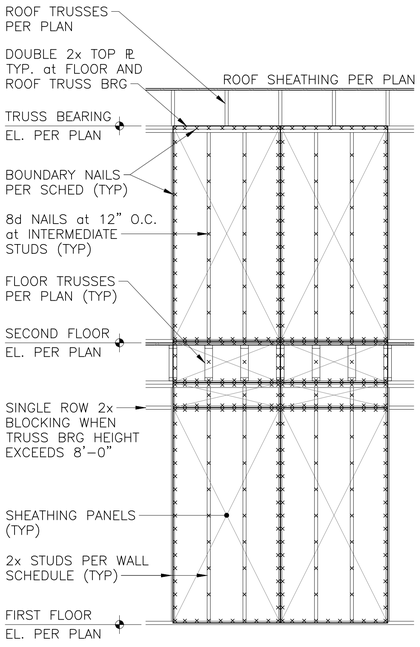
PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET - SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

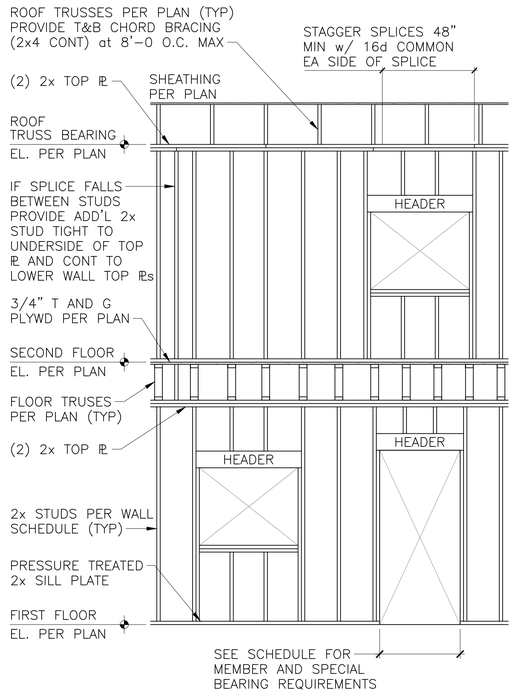
PROJECT NUMBER: 2317.006
T.E. PROJ. NUMBER: 25-61



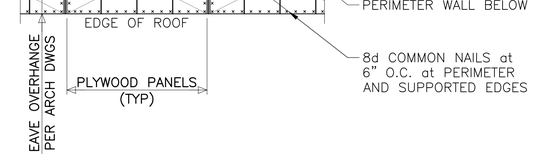
3 TYP. PLYWOOD NAILING at FLOOR DIAPHRAGM



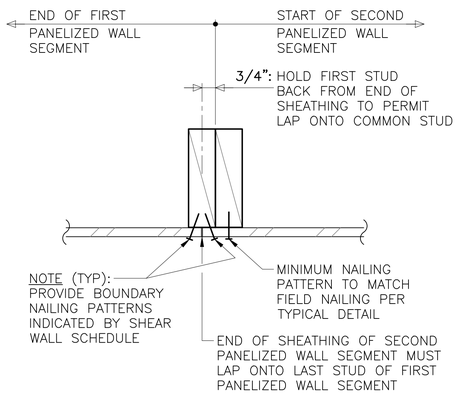
2 TYP. SHEATHING NAILING PATTERN at SHEAR WALLS



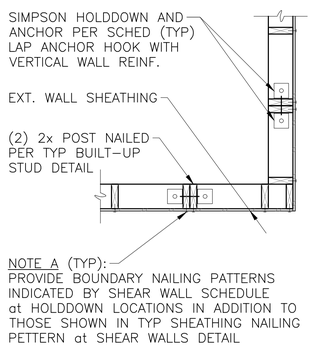
1 TYPICAL LOAD BEARING WALL



4 TYP. PLYWOOD NAILING at ROOF DIAPHRAGM



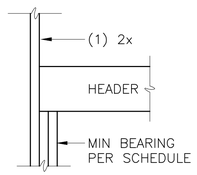
8 TYP. DETAIL FOR END LAPS OF PANELIZED SHEAR WALLS



7 PLAN VIEW at HOLDOWNS

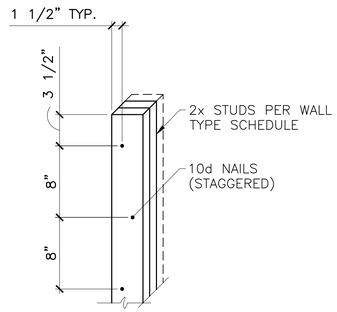
STUDWALL BEARING HEADER SCHEDULE		
MARK	SIZE	MINIMUM BEARING EACH END
H1	(2) 2x6 DFL#2	(1) 2x
H2	(2) 2x8 DFL#2	(1) 2x

NOTES
1. ALL HEADERS TO HAVE A MINIMUM BEARING AS SHOWN
2. COORDINATE OPENING SIZE AND LOCATION WITH ARCH DRAWINGS
3. SEE ARCH DRAWINGS FOR NON-LOAD BEARING HEADERS



HEADER BEARING

6 STUDWALL BEARING HEADER SCHEDULE



5 TYP. BUILT-UP STUD DETAIL

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T.E. PROJ. NUMBER: **25-61**

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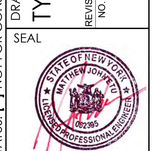
SEAL



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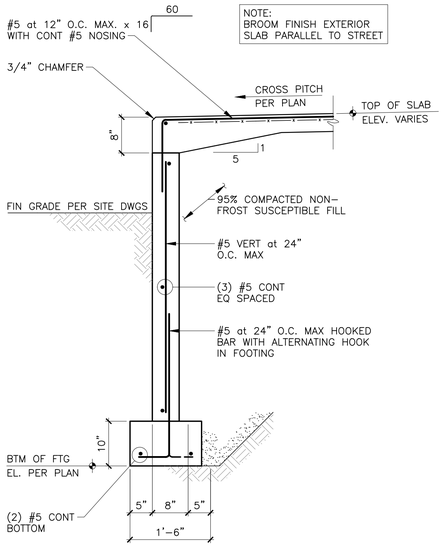
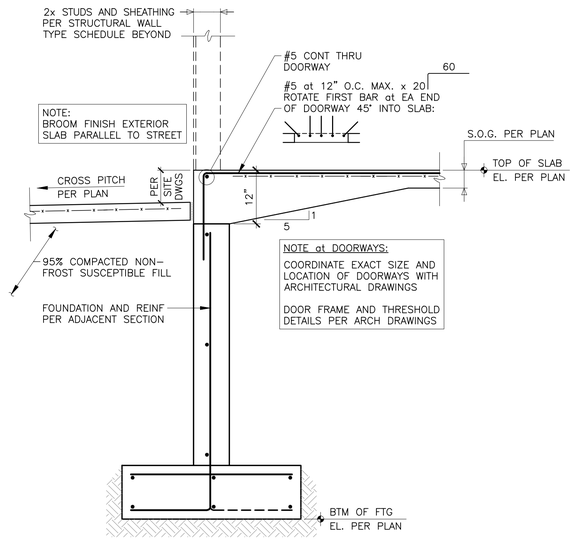
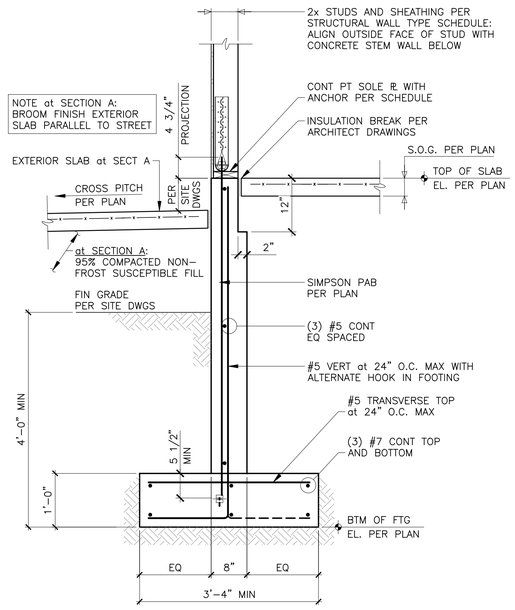


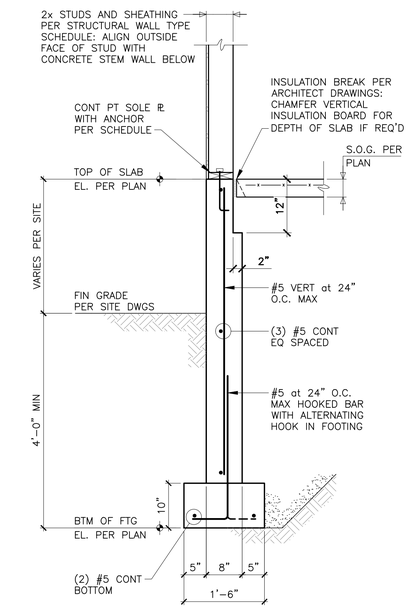
4 3/4" = 1'-0"



3 3/4" = 1'-0"



2A 2 3/4" = 1'-0"



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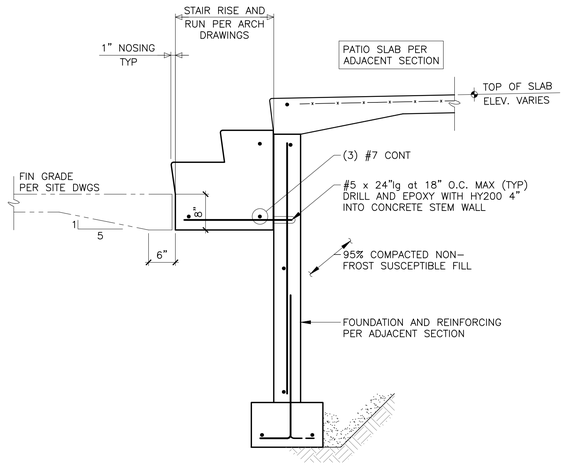

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DRAWING TITLE
SECTIONS and DETAILS

REVISIONS AFTER ISSUANCE	
NO.	DATE
	DESCRIPTION

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EXPIRES: 10.31.25

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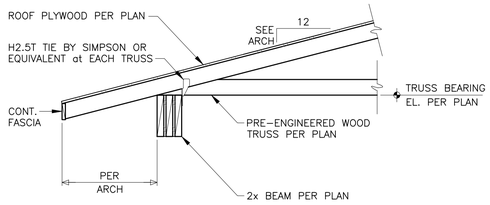
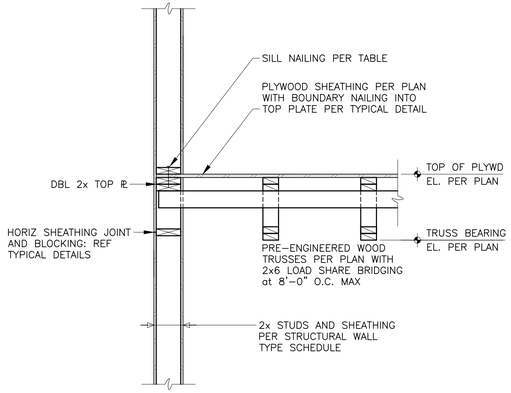
S301



3 3/4" = 1'-0"



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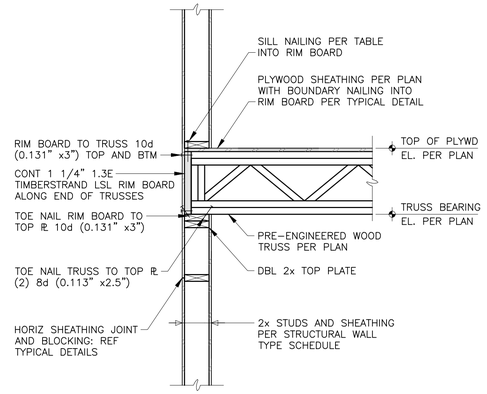
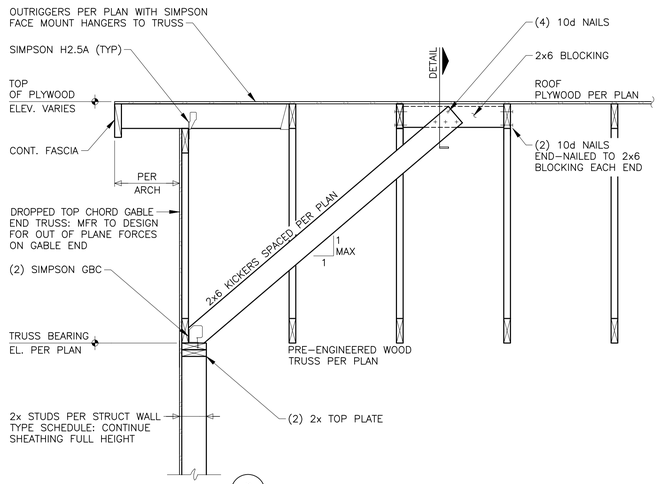
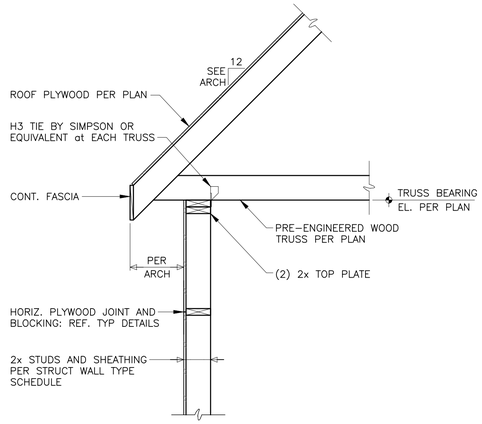


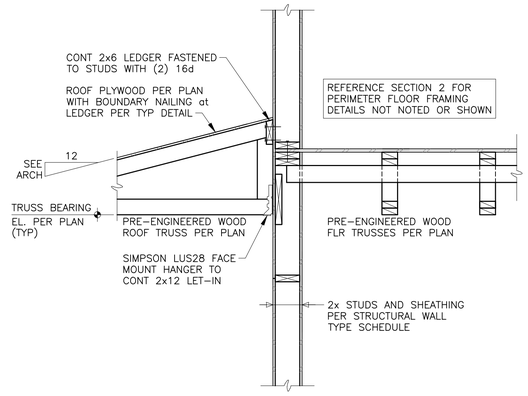
1 3/4" = 1'-0"



6 3/4" = 1'-0"



5 3/4" = 1'-0"



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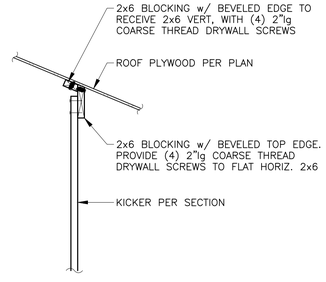

7 DETAIL
3/4" = 1'-0"

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SE.

EXPIRES: 10.31.25

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DRAWING NUMBER

S302

ABBREVIATIONS

#	NUMBER OR POUNDS
#/CF	POUNDS PER CUBIC FOOT
/	OF
@	AT
A/E	ARCHITECTS / ENGINEER
AB	ANCHOR BOLT
AC DR	ACCESS DOOR
ACOUS	ACOUSTICAL
ACPLAS CLG	ACOUSTICAL PLASTER CEILING
ACT	ACOUSTICAL CEILING TILE
AD	AREA DRAIN
ADDL	ADDITIONAL
ADJ	ADJUSTABLE, ADJACENT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
ALUM	ALUMINIUM
ANOD	ANODIZED
APC	ACOUSTICAL PANEL CEILING
APPR	APPROXIMATE
ARCH	ARCHITECTURAL (OR ARCHITECT)
ASPH	ASPHALT
AVG	AVERAGE
B/O	BY OTHERS
BC	BRICK COURSE
BD	BOARD
BETWN	BETWEEN
BEY	BEYOND
BITUM	BITUMINOUS
BL	BUILDING LINE
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BMK	BENCH MARK
BOT	BOTTOM
BTU	BRITISH THERMAL UNIT
BUR	BUILT-UP ROOFING
C	CENTER
CAB	CABINET
CAV	CAVITY
CB	CATCH BASIN
CCTV	CLOSED CIRCUIT TELEVISION
CEM	CEMENT, CEMENTITIOUS
CF	CUBIC FEET
CFMF	COLD FORMED METAL FRAMING
CFT	CERAMIC FLOOR TILE
CG	CORNER GUARD
CH BD	CHALK BOARD
CHLF	CHAIN LINK FENCE
CI	CAST IRON
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLL	CONTRACT LIMIT LINE
CLOS	CLOSET
CLR	CLEAR
CM	CONSTRUCTION MANAGER
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPRESSIBLE
CONC	CONCRETE
CONN	CONNECTION
CONSTN	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CORR	CORRIDOR
CPT	CARPET
CPTT	CARPET LINE
CS	CAST STONE
CSMT	CASEMENT
CT	CERAMIC TILE
CTSK	COUNTERSUNK
CU	CUBIC
CUH	CABINET UNIT HEATER
CW	COLD WATER
D	DEEP, DEPTH
DBL	DOUBLE
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DH	DOUBLE HUNG
DIA	DIAMETER
DIM	DIMENSION
DL	DEAD LOAD
DN	DOWN
DO	DITTO
DS	DOWNSPOUT
DSP	DRY STANDPIPE
DWG	DRAWING
DWR	DRAWER
E	EAST
EA	EACH
EDP	ELETRONIC DATA PROCESSOR
EF	EXHAUST FAN
EIFS	EXTERIOR INSUL & FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE
ENGR	ENGINEER(ING)
ENTR	ENTRANCE
EP	EPOXY PAINT
EPDM	ETHYLENE PROPYLENE DIENE MEMBRANE
EQ	EQUAL
EQPT	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXP	EXPOSED
EXT	EXTERIOR
EXTG	EXISTING
EXTR	EXTERIOR
FBD	FIBER BOARD
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FEHC	FIRE EXTINGUISHER HOSE CABINET
FFE	FINISHED FLOOR ELEVATION
FHC	FIRE HOSE CABINET
FIN	FINISH
FIXT	FIXTURE
FLOUR	FLOURESCENT
FLR	FLOOR, FLOORING
FND	FOUNDATION
FOW	FACE OF WALL
FRJS	FIRE RESISTIVE JOINT SYSTEM
FRP	FIRBERGLASS REINFORCED PLASTIC
FRT	FIRE RETARDANT TREATED
FS	FULL SIZE
FSP	FIRE STANDPIPE
FT	FOOT OR FEET
FTG	FOOTING
FTR	FIN TUBE RADIATION
FURR	FURRING
FUT	FUTURE
FWC	FABRIC WALL COVERING
FWP	FABRIC WRAPPED PANEL
GA	GAGE
GALV	GALVANIZED
GB	GRAB BAR
GFA	GROSS FLOOR AREA
GFRC	GLASS FIBER REINFORCED CONCRETE
GL	GLASS
GND	GROUND
GR	GRADE
GRG	GLASS REINFORCED GYPSUM
GSF	GROSS SQUARE FEET
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
H	HIGH
HB	HOSE BIB
HC	HANDICAPPED
HD	HEAD
HDW	HARDWARE
HM	HOLLOW METAL
HO	HOLD OPEN
HOR	HORIZONTAL
HP	HIGH POINT
HR	HOUR
HT	HEIGHT
HVAC	HEATING VENTILATING & AIR CONDITIONING
HW	HOT WATER
ID	INSIDE DIAMETER
IG	INSULATING GLASS
IN	INCHES
IND	INDICATED
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
IPS	IRON PIPE SIZE
JAN	JANITOR
JC	JANITOR'S CLOSET
JCT	JUNCTION
JT	JOINT
KIT	KITCHEN
L	LONG. LENGTH
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LB	POUND
LIN	LINEAR
LINO	LINOLEUM
LKR	LOCKER
LL	LIVELOAD
LP	LOW POINT
LT	LIGHT
LTW	LIGHT WEIGHT
LVR	LOUVER
MAX	MAXIMIUM
MB	MARKER BOARD
MDF	MEDIUM DENSITY FIBERBOARD
MDO	MIDEUM DENSITY OVERLAY
MECH	MECHANICAL
MEMB	MEMBRANE
MEP	MECHANICAL, ELECTRICAL & PLUMBING
MFR	MANUFACTURER
MH	MANHOLE
MHO	MAGNETIC HOLD OPEN
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MOD BIT	MODIFIED BITUMEN (ROOF)
MTD	MOUNTED
MTG	MOUNTING
N	NORTH
NEC	NATIONAL ELECTRIC CODE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NPS	NOMINAL PIPE SIZE
NSF	NET SQUARE FEET
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFF	OFFICE
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
P	PAINT
PART	PARTIAL
PB	PEG BOARD
PBD	PARTICLE BOARD
PERF	PERFORATED
PFAB	PREFRABICATED
PFIN	PREFINISHED
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLBG	PLUMBING
PLWD	PLYWOOD
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESERVATIVE TREATED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PVDF	POLYVINYLIDNE FLOURIDE (KYNAR)
QT	QUARRY TILE
QUAL	QUALITY
QUAN	QUANTITY
R	RISER
RAD	RADIUS
RB	RESILIANT BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
RE	REFERENCE
RECT	RECTANGLE
REF	REFRIGERATOR
REINF	REINFORCE(D)(ING)(MENT)
REQD	REQUIRED
RESIL	RESILIANT
RFS	ROOM FINISH SCHEDULE
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RWC	RAIN WATER CONDUCTOR
S	SOUTH
SB	SPLASH BLOCK
SC	COLID CORE
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FEET
SFRM	SPRAYED FIRE RESISTIVE MATERIAL
SFWS	STRETCH FABRIC WALL SYSTEM
SHR	SHOWER
SIM	SIMILAR
SPEC	SPECIFICATIONS
SPKLR	SPRINKLER
SPMR	SINGLE PLY MEMBRANE ROOFING
SQ	SQUARE
SS	SERVICE SINK
SSM	SOLID SURFACING MATERIAL
SST	STAINLESS STEEL
STA	STATION
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SYM	SYMMETRICAL
T	TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TB	TACK BOARD
TBD	TO BE DETERMINED
TEL	TELEPHONE
TEL/COM	TELECOMMUNICATION
TER	TERRAZZO
TH	THICK(NESS)
TLT	TOILET
TMPD	TEMPERED
TO	TOP OF
TOC	TOP OF CONCRETE, CURB
TOS	TOP OF SLAB
TOST	TOP OF STEEL
TOW	TOP OF WALL
TPFS	THROUGH PENETRATION FIRESTOP SYSTEM
TYP	TYPICAL
UC	UNDERCUT
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES
UNFIN	UNFINISHED
UON	UNLESS OTHERWISE NOTED
UR	URINAL
V	VENT
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VN	VENEER
VP	VENT PIPE
VR	VAPOR RETARDER
VT	VINYL TILE
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
W/O	WITHOUT
WB	WOOD BASE
WC	WATER CLOSET
WD	WOOD
WD. FL	WOOD FLOOR
WP	WORKING POINT
WT	WEIGHT
WTRPRF	WATERPROOF
WWF	WLDED WIRE FABRIC

MATERIAL SYMBOLS

EARTH

GRAVEL OR POROUS FILL

CONCRETE MASONRY UNIT

STONE

CONCRETE

FIBROUS INSULATION

FIBER BOARD OR RIGID INSULATION

PLASTER, GYPSUM WALL BOARD, MORTAR, OR PARTICLE BOARD

FINISHED WOOD

ROUGH WOOD

PLYWOOD

STEEL OR IRON

ALUMINUM

KEY TO SYMBOLS:

BUILDING REFERENCE LINE
FACE OF CMU OR FRAMING

ELEVATION

ENLARGED DETAIL

SECTION DETAIL

BUILDING SECTION

WALL SECTION

ROOM SIGN

DOOR NUMBER

ROOM NAME AND NUMBER

GLAZING TYPE

WINDOW TYPE

ROOF TYPE

NEW DOOR

EXISTING DOOR

REVISION NOTE

TOILET ACCESSORY

PARTITION TYPE

KEYED NOTE

GENERAL NOTES

A. ALL WORK IS TO CONFORM WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND AGENCIES HAVING JURISDICTION.

B. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. DO NOT SCALE DRAWINGS OR DETAILS.

C. WHERE DIMENSIONAL DISCREPANCIES ARISE, REVIEW FIELD CONDITIONS WITH THE OWNERS REPRESENTATIVE BEFORE PROCEEDING WITH WORK OR ORDERING MATERIALS.

D. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL CONDITIONS AND MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREA.

E. ALL DETAILS, SECTIONS, AND MATERIALS SHOWN OR NOTED ON DRAWINGS SHALL APPLY TO ALL OTHER SIMILAR LOCATIONS UNLESS NOTED OTHERWISE.

F. ALL FINISH TRIM JOINTS SHALL BE MITERED UNLESS NOTED OTHERWISE.

G. ALL CORNERS AND JUNCTIONS WHERE TWO MATERIALS ADJOIN SHALL BE SEALED.

H. ALL FLOOR, WALL AND CEILING INTERFACES AND PENETRATIONS SHALL BE PROPERLY SEALED TO MAINTAIN ACOUSTICAL INTEGRITY. EACH TRADE CONTRACTOR IS RESPONSIBLE FOR PENETRATION SEALING & FIRE STOPPING.

I. ALL PENETRATIONS, GAPS AND JOINTS AT RATED FLOORS, ROOFS AND WALLS TO BE FIRE STOPPED. GAPS AND JOINTS INCLUDE (BUT NOT LIMITED TO) TOP OF WALL TO FLOOR OR ROOF DECK, WALL BEAMS, AND CONTROL OR EXPANSION JOINTS. FIRE STOPPING INCLUDES BOTH FORM OR PACKING MATERIAL AND THE FILL, VOID OR CAVITY MATERIAL.

J. PROVIDE ACCESS PANELS OF APPROPRIATE SIZE, TYPE, AND FIRE RATING FOR ALL CONCEALED ITEMS THAT REQUIRE ADJUSTMENT, MAINTENANCE, MONITORING, ETC. COORDINATE LOCATION WITH OWNERS REPRESENTATIVE.

K. THIS CONTRACT REQUIRES COMPLETE, FINISHED SPACES IN ALL AREAS INDICATED BY THE CONTRACT DOCUMENTS. INCLUDE ALL MATERIALS AND LABOR NECESSARY TO COMPLETE SAME, REGARDLESS OF WHETHER OR NOT EACH AND EVERY NECESSARY ITEM IS SPECIFICALLY INDICATED IN THE DRAWINGS AND/OR NOTES.

L. ALL CONTRACTORS ARE RESPONSIBLE TO VERIFY ALL SITE, FIELD AND BUILDING CONDITIONS PRIOR TO SUBMITTING BIDS AND COMMENCING WORK. IF THERE ARE ANY DISCREPANCIES BETWEEN DRAWINGS AND FIELD CONDITIONS, CONFER WITH THE OWNERS REPRESENTATIVE FOR RESOLUTION.

M. WOOD USED FOR BLOCKING OR OTHER PURPOSES ON OR ABOVE THE ROOF DECK SHALL BE PRESSURE TREATED TYP (P.T.).

N. FINISHED DOOR OPENINGS SHALL BE NOMINAL @ 4" FROM FINISHED CORNER OF ROOM AT HINGE SIDE, EXCEPT WHERE DIMENSIONED OTHERWISE.

P. MAINTAIN CONTINUITY OF ALL AIR/VAPOR BARRIERS (TYP) COORDINATE WITH ALL TRADES.

Q. GC SHALL COORDINATE ALL WORK AT ROOF NOT TO VOID MFGR WARRANTIES.

R. BUILDING SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE NOT EXCEEDING THREE AIR CHANGES PER HOUR TO COMPLY WITH SECTION N1102.4.1.2 (R402.4.1.2) IN THE RESIDENTIAL CODE OF NYS. WHERE REQUIRED BY THE BUILDING OFFICIAL, TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY.

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME
PROJECT NUMBER: **2317.006**

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DRAWING SUBMISSION STATUS [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION
ARCHITECT OF RECORD

DRAWING TITLE
GENERAL NOTES, LEGENDS, ABBREVIATIONS & PARTITIONS

REVISIONS AFTER ISSUANCE
NO. DATE DESCRIPTION

SEAL

ISSUE DATE 09.19.25

DRAWING NUMBER
A-001

TECHNICAL SPECIFICATIONS - OUTLINE FORMAT

DIVISION 01 - GENERAL REQUIREMENTS

012500 - SUBSTITUTION PROCEDURES
1. SUBSTITUTION REQUESTS SHALL BE SUBMITTED TO ARCHITECT WITH DOCUMENTATION SHOWING COMPLIANCE WITH REQUIREMENTS. SUBSTITUTIONS MUST BE COMPATIBLE WITH OTHER PORTIONS OF THE WORK. SUBSTITUTIONS MUST BE COORDINATED WITH OTHER PORTIONS OF THE WORK AND ACCEPTABLE TO ALL TRADES INVOLVED. INCLUDE ANY CHANGES THE PROPOSED SUBSTITUTION HAS ON SCHEDULE AND/OR CONTRACT SUM.

012600 - CONTRACT MODIFICATION PROCEDURES
1. ARCHITECT WILL ISSUE SUPPLEMENTAL INSTRUCTIONS AUTHORING MINOR CHANGES IN THE WORK, NOT INVOLVING ADJUSTMENTS TO SCHEDULE OR CONTRACT SUM.
2. PROPOSAL REQUEST: CHANGES TO THE WORK THAT MAY REQUIRE ADJUSTMENT TO SCHEDULE OR CONTRACT SUM WILL BE REQUESTED WITH A DESCRIPTION OF PROPOSED CHANGES. WITHIN 14 DAYS OF REQUEST, SUBMIT A QUOTATION ESTIMATING COST OF ADJUSTMENT TO CONTRACT SUM AND SCHEDULE NECESSARY TO EXECUTE THE CHANGE. UPON OWNER'S APPROVAL OF PROPOSAL REQUEST, A CHANGE ORDER WILL BE ISSUED FOR SIGNATURES OF ARCHITECT, CONTRACTOR, AND OWNER.

012900 - PAYMENT PROCEDURES
1. SCHEDULE OF VALUES: SUBMIT SCHEDULE OF VALUES CONSISTENT WITH FORMAT OF AIA DOCUMENT G703 AT EARLIEST POSSIBLE DATE, BUT NO LATER THAN 7 DAYS BEFORE THE DATE SCHEDULE FOR SUBMITTAL OF INITIAL APPLICATIONS FOR PAYMENT.
2. APPLICATIONS FOR PAYMENT: SUBMIT MONTHLY. SUBMIT DRAFT COPY 7 DAYS PRIOR TO DUE DATE FOR REVIEW BY ARCHITECT. FINAL PAYMENT FORM WILL BE NOTARIZED AND INCLUDE LIEN WAIVERS.

013100 - PROJECT MANAGEMENT AND COORDINATION
1.1 REQUEST FOR INFORMATION (RFI)
A. UPON THE DISCOVERY OF THE NEED FOR ADDITIONAL INFORMATION, CLARIFICATION, OR INTERPRETATION OF THE CONTRACT DOCUMENTS, CONTRACTOR SHALL PREPARE AND SUBMIT AN RFI. COORDINATE AND SUBMIT RFIS IN A PROMPT MANNER TO AVOID DELAYS IN CONTRACTOR'S WORK OR WORK OF SUBCONTRACTORS.
B. INCLUDE ALL PERTINENT INFORMATION NECESSARY TO FULLY DESCRIBE ITEMS NEEDING INTERPRETATION. INCLUDE SKETCHES, DESCRIPTIONS, MEASUREMENTS, PHOTOS, PRODUCT DATA, AND SHOP OR COORDINATION DRAWINGS. INCLUDE CONTRACTOR'S SUGGESTED RESOLUTION AND IMPACTS TO THE SCHEDULE OR CONTRACT SUM.
C. ARCHITECT'S ACTION: ALLOW 7 DAYS FOR ARCHITECT TO REVIEW, DETERMINE ACTION REQUIRED, AND RESPOND TO EACH RFI.
D. REQUESTS FOR APPROVAL OF CONTRACTOR'S MEANS AND METHODS WILL BE RETURNED WITHOUT ACTION.
1.2 PROJECT MEETINGS: CONSTRUCTION MANAGER WILL SCHEDULE AND CONDUCT MEETINGS.

013300 - SUBMITTAL PROCEDURES
1.1 SUBMITTAL FORMAT
A. SUBMITTALS SHALL BE FORMATTED CONSISTENTLY WITH IDENTIFYING INFORMATION INCLUDING PROJECT NAME, DATE, NAMES OF ARCHITECT AND CONTRACTOR, UNIQUE SUBMITTAL NUMBER, AND LOCATIONS WHERE PRODUCT IS TO BE INSTALLED, AS APPROPRIATE.
B. ELECTRONIC SUBMITTALS: PREPARE SUBMITTALS AS PDF PACKAGE, INCORPORATING COMPLETE INFORMATION INTO EACH PDF FILE. NAME PDF FILE WITH SUBMITTAL NUMBER.
1.2 SUBMITTAL PROCEDURES
A. COORDINATE PREPARATION AND PROCESSING OF SUBMITTALS WITH PERFORMANCE OF CONSTRUCTION ACTIVITIES.
B. COORDINATE TRANSMITTAL OF SUBMITTALS FOR RELATED PARTS OF THE WORK SPECIFIED IN DIFFERENT SECTIONS, SO PROCESSING WILL NOT BE DELAYED BECAUSE OF NEED TO REVIEW SUBMITTALS CONCURRENTLY FOR COORDINATION. ARCHITECT RESERVES THE RIGHT TO WITHHOLD ACTION ON SUBMITTAL REQUIRING COORDINATION WITH OTHER SUBMITTALS UNTIL RELATED SUBMITTALS ARE RECEIVED.
1.3 PROCESSING TIME
A. ALLOW 7 DAYS PROCESSING TIME FOR ARCHITECT'S INITIAL REVIEW.
B. ALLOW 7 DAYS PROCESSING TIME FOR REVIEW OF EACH RESUBMITTAL.
C. SEQUENTIAL REVIEW: WHERE SEQUENTIAL REVIEW OF SUBMITTALS BY ARCHITECT'S CONSULTANTS, OWNER, OR OTHER PARTIES IS INDICATED, ALLOW 14 DAYS FOR INITIAL REVIEW OF EACH SUBMITTAL.
1.4 CONTRACTOR'S REVIEW: REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK OF THE CONTRACT AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS. NOTE CORRECTIONS AND FIELD DIMENSIONS. SUBMITTALS SHALL BE MARKED WITH CONTRACTOR'S APPROVAL BEFORE SUBMITTING TO ARCHITECT.
1.5 ARCHITECT'S REVIEW:
A. ARCHITECT WILL RETURN PDF FILE WITH ARCHITECT AND/OR ENGINEER MARKUPS, INDICATING APPROPRIATE ACTION.
B. INCOMPLETE SUBMITTALS WILL BE RETURNED FOR RESUBMITTAL WITHOUT REVIEW.
C. ARCHITECT WILL RETURN WITHOUT REVIEW SUBMITTALS RECEIVED FROM SOURCES OTHER THAN CONTRACTOR.

DIVISION 03 - CONCRETE (RE STRUCT DWGS)

DIVISION 05 - METALS

057300 - DECORATIVE METAL RAILINGS
1.1 SUMMARY: ALUMINUM DECORATIVE RAILINGS
1.2 SUBMITTALS
A. PRODUCT DATA
B. SHOP DRAWINGS
C. SAMPLES
D. DELEGATED DESIGN SUBMITTAL
2.1 PERFORMANCE REQUIREMENTS
A. RAILINGS, INCLUDING ATTACHMENT TO BUILDING CONSTRUCTION, ARE TO WITHSTAND THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED:
1. HANDRAILS AND TOP RAILS OF GUARDS:
a. UNIFORM LOAD OF 50 LBF/FT. APPLIED IN ANY DIRECTION.
b. CONCENTRATED LOAD OF 200 LBF APPLIED IN ANY DIRECTION.
2. INFILL OF GUARDS: CONCENTRATED LOAD OF 50 LBF APPLIED HORIZONTALLY ON ANY AREA OF 1 SQ. FT.
3. LOAD ASSUMPTION: LOADS NEED NOT BE ASSUMED TO ACT CONCURRENTLY.
B. THERMAL MOVEMENTS: ALLOW FOR THERMAL MOVEMENTS FROM AMBIENT AND SURFACE TEMPERATURE CHANGES ACTING ON EXTERIOR RAILINGS BY PREVENTING BUCKLING, OPENING OF JOINTS, OVERSTRESSING OF COMPONENTS, FAILURE OF CONNECTIONS, AND OTHER DETRIMENTAL EFFECTS.
2.2 BASIS-OF-DESIGN: ALUMI-GUARD
A. PRODUCT: YORKSHIRE
B. STYLE: CONTINUOUS TOP-CAP
C. FINISH: POWDER COAT
D. COLOR: TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE
3.1 INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS
3.2 TOUCH-UP PAINT SCRATCHED SURFACES USING PAINT PENS SUPPLIED BY MANUFACTURER THAT MATCH GUARDRAIL COLOR.

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

061000 - ROUGH CARPENTRY (RE STRUCT DWGS)

061600 - SHEATHING
1.1 SUMMARY:
A. WALL SHEATHING
B. ROOF SHEATHING
C. SUBFLOORING AND UNDERLAYMENT
1.2 SUBMITTALS: PRODUCT DATA
2.1 PERFORMANCE REQUIREMENTS
A. FIRE-RESISTANCE RATINGS: AS TESTED IN ACCORDANCE WITH ASTM E119; TESTING BY A QUALIFIED TESTING AGENCY. IDENTIFY PRODUCTS WITH APPROPRIATE MARKINGS OF APPLICABLE TESTING AGENCY.
2.2 PLYWOOD WALL SHEATHING (RE STRUCT DWGS)
2.3 GLASS-MAT GYPSUM SHEATHING, WALLS: GEORGIA-PACIFIC DENSGLASS SHEATHING, TYPE X, 5/8 INCH THICK.
2.4 PLYWOOD ROOF SHEATHING (RE STRUCT DWGS)
2.5 SUBFLOORING AND UNDERLAYMENT:
A. PLYWOOD SUBFLOOR (RE STRUCT DWGS)
B. UNDERLAYMENT: 1/4 INCH SANDED PLYWOOD

061753 - SHOP-FABRICATED WOOD TRUSSES (RE STRUCT DWGS)

062013 - EXTERIOR FINISH CARPENTRY
1.1 SUMMARY: CELLULAR PVC EXTERIOR TRIM
1.2 SUBMITTALS:
A. PRODUCT DATA
B. SAMPLES
2.1 BASIS-OF-DESIGN: AZEK TRIM
A. TEXTURE: SMOOTH
3.1 INSTALL PVC TRIM TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

062023 - INTERIOR FINISH CARPENTRY
1.1 SUMMARY: INTERIOR TRIM
1.2 SUBMITTALS:
A. PRODUCT DATA
1.3 FIELD CONDITIONS: DO NOT DELIVER OR INSTALL INTERIOR FINISH CARPENTRY MATERIALS UNTIL BUILDING IS ENCLOSED AND WEATHERPROOF, WET-WORK IN SPACE IS COMPLETED AND NOMINALLY DRY, AND HVAC SYSTEM IS OPERATING AND MAINTAINING TEMPERATURE AND RELATIVE HUMIDITY AT OCCUPANCY LEVELS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.
2.1 MATERIALS:
A. LUMBER TRIM FOR OPAQUE (PAINTED) FINISH: EASTERN WHITE, IDAHO WHITE, LODGEPOLE, PONDEROSA, RADIATA, OR SUGAR PINT
1. OPTIONAL MATERIAL: PRIMED MDF OF SAME ACTUAL DIMENSIONS AS LUMBER INDICATED MAY BE USED IN LIEU OF LUMBER.
B. LUMBER FOR TRANSPARENT FINISH (STAIN OR CLEAR FINISH): RED OAK OR WHITE MAPLE

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

072100 - THERMAL INSULATION
1.1 SUMMARY:
A. EXTRUDED POLYSTYRENE (XPS) FOAM-PLASTIC BOARD INSULATION
B. GLASS-FIBER BLANKET INSULATION
1.2 SUBMITTALS:
A. PRODUCT DATA
2.1 PERFORMANCE REQUIREMENTS
A. SURFACE-BURNING CHARACTERISTICS: MAXIMUM FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES LESS THAN 25 AND 450 WHEN TESTED IN ACCORDANCE WITH ASTM E84.
B. THERMAL-RESISTANT VALUE: R-VALUE AS INDICATED ON DRAWINGS.
2.2 EXTRUDED POLYSTYRENE FOAM-PLASTIC BOARD INSULATION, TYPE IV: ASTM C578, TYPE IV, 25-PSI MINIMUM COMPRESSIVE STRENGTH, UNFACED.
2.3 GLASS-FIBER BLANKET INSULATION, KRAFT FACED: ASTM C665, TYPE II (NONREFLECTIVE FACED), CLASS C (FACED SURFACE NOT RATED FOR FLAME PROPAGATION); CATEGORY 1 (MEMBRANE IS A VAPOR BARRIER).
2.4 ACCESSORIES
A. INSULATION FOR MISCELLANEOUS VOIDS: SPRAY POLYURETHANE FOAM INSULATION: ASTM C1029, TYPE II, CLOSED CELL, WITH MAXIMUM FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF 75 AND 450, RESPECTIVELY, PER ASTM E84.
B. EAVE VENTILATION TROUGHS; PREFORMED, RIGID FIBERBOARD OR PLASTIC SHEETS DESIGNED AND SIZED TO FIT BETWEEN ROOF FRAMING MEMBERS AND TO PROVIDE VENTILATION BETWEEN INSULATED ATTIC SPACES AND VENTED EAVES.
3.1 EXECUTION
A. PREP SURFACES & INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

072500 - WEATHER BARRIERS
1.1 SUMMARY:
A. BUILDING WRAP
B. FLEXIBLE FLASHING
1.2 SUBMITTALS: PRODUCT DATA
2.1 BUILDING WRAP BASIS-OF-DESIGN: TYVEK HOMEWRAP OR APPROVED EQUAL
2.2 FLEXIBLE FLASHING BASIS-OF-DESIGN: DUPONT FLEXWRAP OR APPROVED EQUAL
3.1 INSTALLATION:
A. COVER EXPOSED EXTERIOR SURFACE OF SHEATHING WITH BUILDING WRAP SECURELY FASTENED TO FRAMING IMMEDIATELY AFTER SHEATHING IS INSTALLED. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND WARRANTY REQUIREMENTS.
B. APPLY FLEXIBLE FLASHING TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. LAP FLASHING OVER BUILDING WRAP AT BOTTOM AND SIDES OF OPENINGS. LAP BUILDING WRAP OVER FLASHING AT HEADS OF OPENINGS.

073113 - ASPHALT SHINGLES
1.1 SUMMARY:
A. GLASS-FIBER-REINFORCED ASPHALT SHINGLES
B. UNDERLAYMENT MATERIALS
C. RIDGE VENTS
D. METAL FLASHING AND TRIM
1.2 SUBMITTALS: PRODUCT DATA & SAMPLES
1.3 MAINTENANCE MATERIALS SUBMITTALS: FURNISH 33 SQ. FT. OF ASPHALT SHINGLES IN UNOPENED, PACKAGED BUNDLE.
1.4 STORE ROOFING MATERIALS IN A DRY, WELL-VENTILATED LOCATION PROTECTED FROM WEATHER, SUNLIGHT, AND MOISTURE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
1.5 WARRANTY:
A. MATERIALS: 25 YEARS FROM DATE OF SUBSTANTIAL COMPLETION, PRORATED, WITH FIRST 10 YEARS NONPRORATED.
B. WIND-SPEED: UP TO 130 MPH
C. ALGAE-RESISTANCE WARRANTY: 25 YEARS
2.1 GLASS-FIBER-REINFORCED ASPHALT SHINGLES BASIS-OF-DESIGN:
1. PINNACLE PRISTINE HIGH PERFORMANCE ARCHITECTURAL SHINGLES WITH SCOTCHGUARD ASPHALT SHINGLES
2. COLOR: MAJESTIC SHAKE
2.2 UNDERLAYMENT MATERIALS:
1. SYNTHETIC UNDERLAYMENT BASIS-OF-DESIGN: OWENS CORNING PROARMOR
2. ICE & WATER BARRIER BASIS-OF-DESIGN: OWENS CORNING RHINOROOF GRANULATED
2.3 RIDGE VENTS: MANUFACTURER'S STANDARD, RIGID-SECTION, HIGH-DENSITY, UV-STABILIZED PLASTIC RIDGE VENT FOR USE UNDER RIDGE SHINGLES.
2.4 METAL FLASHING AND TRIM: ALUMINUM, MILL FINISHED
2.5 ACCESSORIES: AIR INTAKE VENTS: DCI PRODUCTS SMARTVENT, TAPERED UNDER-SHINGLE ATTIC INTAKE VENTILATION
A. APRON FLASHINGS, STEP FLASHINGS, AND DRIP EDGE FLASHINGS
B. VENT-PIPE FLASHINGS: ASTM B749, TYPE L51121, AT LEAST 1/16 INCH THICK. PROVIDE LEAD SLEEVE SIZED TO SLIP OVER AND TURN DOWN INTO PIPE, SOLDERED TO SKIRT AT SLOPE OF ROOF, AND EXTENDING AT LEAST 4 INCHES FROM PIPE ONTO ROOF.
3.1 INSTALLATION
A. FOLLOW MANUFACTURERS' WRITTEN INSTRUCTIONS.
B. INSTALL METAL FLASHINGS IN ACCORDANCE WITH RECOMMENDATIONS IN NRCA'S "NRCA GUIDELINES FOR ASPHALT SHINGLE ROOF SYSTEMS."

074633 - VINYL SIDING
1.1 SUMMARY:
A. VINYL SIDING
B. VINYL SOFFIT
1.2 SUBMITTALS:
A. PRODUCT DATA INCLUDE CONSTRUCTION DETAILS, MATERIAL DESCRIPTION, DIMENSIONS OF INDIVIDUAL COMPONENTS AND PROFILES AND FINISHES.
B. SAMPLES OF COLOR AND TEXTURE
C. SAMPLE WARRANTY: MANUF. AGREES TO REPAIR OR REPLACE PRODUCTS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN 10 YEARS.
1. FAILURES INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
A. STRUCTURAL FAILURES INCLUDING CRACKING, FADING AND DEFORMING
B. DETERIORATION OF MATERIALS BEYOND NORMAL WEATHERING.
2. FADING IS DEFINED AS LOSS OF COLOR, AFTER CLEANING WITH PRODUCT RECOMMENDED BY MANUF OF MORE THAN 4 HUNTER COLOR DIFFERENCE UNITS AS MEASURED ACCORDING TO ASTM D2244.
2.1 PRODUCTS:
A. VINYL SIDING BASIS-OF-DESIGN: ALSIDE ODYSSEY PLUS PREMIUM VINYL SIDING
1. SUBTLE WOODGRAIN TEXTURE
2. 0.044 INCH PANEL THICKNESS.
3. ROLLED OVER NAILING HEM
4. 1/2 INCH PANEL PROJECTION (D4) PROFILE
5. 5 INCH CLAPBOARD
6. COLOR: SEE FINISH SCHEDULE, A-901
B. VINYL SOFFIT BASIS-OF-DESIGN: ALSIDE ALLIANCE T4 PREMIUM VINYL SOFFIT
1. TEXTURE: SMOOTH
2. COLOR: GLACIER WHITE
3. VENTILATION: PROVIDE UNPERFORATED SOFFIT UNLESS OTHERWISE INDICATED.
3.1 EXECUTION:
A. INSTALL ALL VINYL PRODUCTS IN COMPLIANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND ASTM D4756.
1. CENTER NAIL IN ELONGATED NAILING SLOTS WITHOUT BINDING SIDING TO ALLOW FOR THERMAL MOVEMENT.
2. INSTALL FASTENERS FOR HORIZONTAL VINYL SIDING NO MORE THAN 16 IN. O.C.
B. INSTALL JOINT SEALANTS TO PRODUCE WEATHERTIGHT INSTALLATION.
C. CLEAN FINISHED SURFACES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND MAINTAIN IN A CLEAN CONDITION DURING CONSTRUCTION.

077100 - ROOF SPECIALTIES
1.1 SUMMARY: ROOF-EDGE DRAINAGE SYSTEMS
A. SUBMITTALS: PRODUCT DATA
2.1 PERFORMANCE REQUIREMENTS: ROOF-EDGE DRAINAGE SYSTEMS
A. GUTTERS: MANUFACTURED IN UNIFORM SECTION LENGTHS NOT EXCEEDING 12 FEET WITH MATCHING CORNER UNITS, ENDS, OUTLET TUBES, AND OTHER ACCESSORIES. ELEVATE BACK EDGE AT LEAST 1 INCH ABOVE FRONT EDGE. FURNISH FLAT-STOCK GUTTER STRAPS, GUTTER BRACKETS, EXPANSION JOINTS, AND EXPANSION-JOINT COVERS FABRICATED FROM SAME METAL AS GUTTERS.
1. ALUMINUM SHEET MATERIAL: 0.032 INCH THICK, ASTM B209
2. GUTTER PROFILE: STYLE K
3. ACCESSORIES: CONTINUOUS SCREENED LEAF GUARD W/ SHEET METAL FRAME
B. DOWNSPOUTS: CORRUGATED RECTANGULAR COMPLETE WITH MACHINE-CRIMPED ELBOWS, MANUFACTURER FROM THE SAME METAL AS GUTTERS. FURNISH WITH METAL HANGERS, FROM SAME MATERIAL AS DOWNSPOUTS, AND ANCHORS.
C. ALUMINUM FINISH: TWO-COAT FLUOROPOLYMER
1. COLOR: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
3.1 EXECUTION;
A. INSTALL ROOF SPECIALTIES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. ANCHOR ROOF SPECIALTIES IN PLACE, WITH PROVISIONS FOR THERMAL AND STRUCTURAL MOVEMENT. USE FASTENERS, SOLDER, PROTECTIVE COATINGS, SEPARATORS, SEALANTS, AND OTHER MISCELLANEOUS ITEMS AS REQUIRED TO COMPLETE ROOF-SPECIALTY SYSTEMS.
B. COORDINATE INSTALLATION OF ROOF PERIMETER FLASHING WITH INSTALLATION OF ROOD-EDGE DRAINAGE SYSTEM.

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION
ARCHITECT OF RECORD

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PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME
PROJECT NUMBER: **2317.006**

DRAWING TITLE
OUTLINE SPECS

REVISIONS AFTER ISSUANCE	
NO.	DATE	DESCRIPTION

SEAL

ISSUE DATE 09.19.25

DRAWING NUMBER
A-002

079200 - JOINT SEALANTS
1.1 SUMMARY:
A. SILICONE JOINT SEALANTS
B. URETHANE JOINT SEALANTS
C. MILDEW-RESISTANT JOINT SEALANTS
D. LATEX JOINT SEALANTS
1.2 SUBMITTALS: PRODUCT DATA
2.1 PRODUCTS
A. COMPATIBILITY: PROVIDE JOINT SEALANTS, BACKINGS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY JOINT-SEALANT MANUFACTURER, BASED ON TESTING AND FIELD EXPERIENCE.
B. COLOR OF EXPOSED JOINT SEALANTS: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
C. SILICONE JOINT SEALANT: SINGLE-COMPONENT, NONSAG, PLUS 25 PERCENT AND MINUS 25 PERCENT MOVEMENT CAPABILITY, NONTRAFFICE-USE, NEUTRAL-CURING SILICONE JOINT SEALANT; ASTM C920, TYPE S, GRADE NS, CLASS 25, USE NT.
D. URETHANE JOINT SEALANT: SINGLE-COMPONENT, NON SAG, PLUS 25 PERCENT AND MINUS 25 PERCENT MOVEMENT CAPABILITY, TRAFFIC- AND NONTRAFFIC-USE, URETHANE JOINT SEALANT; ASTM C920, TYPE S, GRADE NS, CLASS 25, USES T AND NT.
E. MILDEW-RESISTANT JOINT SEALANT: SILICONE, MILDEW RESISTANT, SINGLE-COMPONENT, NONSAG, PLUS 25 AND MINUS 25 PERCENT MOVEMENT CAPABILITY, NONTRAFFICE-USE, ACID-CURING SILICONE JOINT SEALANT; ASTM C920, TYPE S, GRADE NS, CLASS 25, USE NT.
F. LATEX JOINT SEALANT:ACRYLIC LATEX OR SILICONIZED ACRYLIC LATEX, ASTM C834, TYPE OP, GRADE NF.
G. JOINT-SEALANT BACKING MATERIAL: NONSTAINING, COMPATIBLE WITH JOINT SUBSTRATES, SEALANTS, PRIMERS, AND OTHER JOINT FILLERS; AND APPROVED FOR APPLICATIONS INDICATED BY SEALANT MANUFACTURER. CYLINDRICAL SEALANT BACKINGS, ASTM C1330, TYPE C, AND OF SIZE AND DENSITY TO CONTROL SEALANT DEPTH.
3.1 PREPARATION: SURFACE CLEANING OF JOINTS TO COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTRUCTIONS. PRIME JOINT SUBSTRATE WHERE RECOMMENDED.
3.2 INSTALLATION: COMPLY WITH JOINT-SEALANT MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. COMPLY WITH RECOMMENDATIONS IN ASTM C1193.
3.3 CLEAN OFF EXCESS SEALANT OR SEALANT SMEARS ADJACENT TO JOINTS.

DIVISION 08 - OPENINGS

081433 - STILE AND RAIL WOOD DOORS
1.1 SUMMARY: EXTERIOR AND INTERIOR STILE AND RAIL WOOD DOORS.
1.2 SUBMITTALS: PRODUCT DATA
1.3 ENVIRONMENTAL LIMITATIONS: DO NOT DELIVER OR INSTALL DOORS UNTIL SPACES ARE ENCLOSED AND WEATHERTIGHT, WET WORK IN SPACES IS COMPLETE AND DRY, AND HVAC SYSTEM IS OPERATING AND MAINTAINING TEMPERATURE AND RELATIVE HUMIDITY LEVELS DESIGNED FOR BUILDING OCCUPANTS FOR THE REMAINDER OF CONSTRUCTION PERIOD.
1.4 WARRANTY PERIOD: ONE YEAR
2.1 PERFORMANCE REQUIREMENTS:
A. EXTERIOR DOOR THERMAL TRANSMITTANCE: MAXIMUM WHOLE FENESTRATION PRODUCT U-FACTOR OF 0.30 BTU/SQ. FT. X H X DEG F, IN ACCORDANCE WITH AAMA 1503, ASTM E1423, OR NFRC 100.
2.2 EXTERIOR STILE AND RAIL WOOD DOORS: EXTERIOR STOCK DOORS COMPLYING WITH THE AWI, AWMAC, AND WI'S ARCHITECTURAL WOODWORK STANDARDS OR WDMA I.S. 6A.
A. PERFORMANCE GRADE: HEAVY DUTY
B. FINISH: TRANSPARENT
C. SPECIES: DOUGLAS FIR, RED OAK, OR MAPLE
2.3 INTERIOR STILE AND RAIL WOOD DOORS: INTERIOR STOCK DOORS COMPLYING WITH AWI, ASMAC, AND WI'S ARCHITECTURAL WOODWORK STANDARDS OR WDMA I.S. 6A.
A. PERFORMANCE GRADE: STANDARD DUTY
B. FINISH: OPAQUE
3.1 INSTALLATION: INSTALL DOORS AND FRAMES TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND REFERENCED QUALITY STANDARDS.

081613 - FIBERGLASS DOORS
1.1 SUMMARY: PREHUNG EXTERIOR FIBERGLASS DOORS
1.2 SUBMITTALS: PRODUCT DATA
2.1 PERFORMANCE REQUIREMENTS:
A. EXTERIOR DOOR THERMAL TRANSMITTANCE: MAXIMUM WHOLE FENESTRATION PRODUCT U-FACTOR OF 0.30 BTU/SQ. FT. X H X DEG F.
B. MANUFACTURE: MASONITE OR APPROVED EQUAL
C. FACTORY FINISHED, COLOR AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
3.1 INSTALLATION: INSTALL DOORS AND FRAMES TO COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

085313 - VINYL WINDOWS
1.1 SUMMARY: VINYL-FRAMED WINDOWS
1.2 SUBMITTALS:
A. PRODUCT DATA
B. PRODUCT SCHEDULE: USE SAME DESIGNATIONS INDICATED ON DRAWINGS.
1.3 MANUFACTURER'S WARRANTY: MANUFACTURER AGREES TO REPAIR OR REPLACE VINYL WINDOWS THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN WARRANTY PERIOD OF 10 YEARS.
2.1 WINDOW PERFORMANCE REQUIREMENTS
A. PRODUCT STANDARD: COMPLY WITH AAMA/WDMA/CSA 101/I.S.2/A440 FOR DEFINITIONS AND MINIMUM STANDARDS OF PERFORMANCE, MATERIALS, COMPONENTS, ACCESSORIES, AND FABRICATION.
1. WINDOW CERTIFICATION: WDMA CERTIFIED WITH LABEL ATTACHED TO EACH WINDOW.
B. PERFORMANCE CLASS AND GRADE: AAMA/WDMA/CSA 101/I.S.2/A440 AS FOLLOWS:
1. MINIMUM PERFORMANCE CLASS: R
2. MINIMUM PERFORMANCE GRADE: 35
C. THERMAL TRANSMITTANCE: NFRC 100 MAXIMUM WHOLE-WINDOW U-FACTOR OF 0.30 BTU/SQ. FT. X H X DEG F.
D. SOLAR HEAT-GAIN COEFFICIENT (SHGC): NFRC 200 MAXIMUM WHOLE-WINDOW SHGC OF 0.50.
E. SOUND TRANSMISSION CLASS (STC): RATED FOR NOT LESS THAN 26 STC WHEN TESTED FOR LABORATORY SOUND TRANSMISSION LOSS ACCORDING TO ASTM E90 AND DETERMINED BY ASTM E413.
2.2. VINYL WINDOW BASIS-OF-DESIGN: PELLA 250 SERIES
A. FRAMES AND SASHES: IMPACT-RESISTANT, UV-STABILIZED PVC COMPLYING WITH AAMA/WDMA/CSA 101/I.S.2/A440
1. FINISH: INTEGRAL COLOR, WHITE
B. INSULATING-GLASS UNITS: ASTM E2190
1. DUAL-PANE INSULATING GLASS W/ ARGON
2. LOW E COATING
2. KIND: FULLY TEMPERED WHERE INDICATED ON DRAWINGS
C. HARDWARE: MANUFACTURER'S STANDARD HARDWARE IN WHITE FINISH.
1. WINDOW OPENING CONTROL DEVICE TO LIMIT CLEAR OPENING TO 4 INCHES FOR VENTILATION W/ OVERRIDE FOR EMERGENCY ESCAPE AND RESCUE.

2.3 ACCESSORIES:
A. DIVIDERS (FALSE MUNTINS): PROVIDE DIVIDER GRILLES IN PATTERN AS INDICATED ON DRAWINGS. BASIS-OF-DESIGN: PELLA GRILLES-BETWEEN-THE-GLASS CONTOUR 3/4"
1. COLOR: TO MATCH EXTERIOR FRAME COLOR
2.4 INSECT SCREENS: FULL-SIZE SET IN ALUMINUM FRAME AND FITTED TO EXTERIOR OF WINDOW. SCREEN FRAME FINISH IS BAKED ENAMEL, COLOR TO MATCH EXTERIOR
3.1 INSTALLATION: COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLING WINDOWS, HARDWARE, ACCESSORIES, AND OTHER COMPONENTS. FOR INSTALLATION PROCEDURES AND REQUIREMENTS NOT ADDRESSED IN MANUFACTURER'S WRITTEN INSTRUCTIONS, COMPLY WITH INSTALLATION REQUIREMENTS IN ASTM E2112.
3.2 CLEANING AND PROTECTION: CLEAN EXPOSED SURFACES IMMEDIATELY AFTER INSTALLING WINDOWS. KEEP PROTECTIVE FILMS AND COVERINGS IN PLACE UNTIL FINAL CLEANING.
A. REMOVE AND REPLACE SASHES IF GLASS HAS BEEN BROKEN, CHIPPED, CRACKED, ABRADED, OR DAMAGED DURING CONSTRUCTION PERIOD.

086000 - RETRACTABLE ATTIC LADDERS
1.1 SUBMITTAL: PRODUCT DATA
2.1 BASIS-OF-DESIGN: FAKRO STEEL FOLDING ATTIC LADDER LMS 22.5X47
A. ANSI TESTED LOAD CAPACITY OF 350 LB MIN.
B. ACCESSORIES: OPENING ROD
3.1 INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS

087100 - DOOR HARDWARE
1.1 SUBMITTALS:
A. PRODUCT DATA
B. FINISH SAMPLES
D. DOOR HARDWARE SCHEDULE
2.1 PRODUCTS: RE DOOR SCHEDULE FOR HARDWARE SETS BASIS-OF-DESIGN
2.2 PERFORMANCE REQUIREMENTS: MEANS OF EGRESS DOORS: LATCHES DO NOT REQUIRE MORE THAN 15 LBF TO RELEASE THE LATCH. LOCKS DO NOT REQUIRE USE OF A KEY, TOOL, OR SPECIAL KNOWLEDGE FOR OPERATION.
2.3 FINISHES: PROVIDE FINISHES COMPLYING WITH ANSI/BHMA A156.18 AS INDICATED IN DOOR HARDWARE SCHEDULE.
3.1 PREPARATION & INSTALLATION: COMPLY WITH DOOR AND HARDWARE MANUFACTURER'S WRITTEN INSTRUCTIONS.
A. THRESHOLDS: SET THRESHOLDS FOR EXTERIOR DOORS AND OTHER DOORS INDICATED IN FULL BED OF SEALANT.
3.2 CLEAN AND PROTECT EXPOSED SURFACES

DIVISION 09 - FINISHES

092900 - GYPSUM BOARD
1.1 SUMMARY:
A. INTERIOR GYPSUM BOARD
B. RELATED REQUIREMENTS: SEE SECTION 061600 "SHEATHING" FOR GYPSUM SHEATHING FOR EXTERIOR WALLS.
1.2 SUBMITTALS: PRODUCT DATA
1.3 FIELD CONDITIONS: DO NOT INSTALL PAPER-FACED GYPSUM PANELS UNTIL INSTALLATION AREAS ARE ENCLOSED AND CONDITIONED. DO NOT INSTALL PANELS THAT ARE WET, MOISTURE DAMAGED, OR MOLD DAMAGED.
2.1 PERFORMANCE REQUIREMENTS:
A. FIRE-RESISTANCE-RATED ASSEMBLIES: FOR FIRE-RESISTANCE-RATED ASSEMBLIES, PROVIDE MATERIALS AND CONSTRUCTION IDENTICAL TO THOSE TESTED IN ASSEMBLY INDICATED IN ACCORDANCE WITH ASTM E119 BY AN INDEPENDENT TESTING AGENCY.
2.2 INTERIOR GYPSUM BOARD PRODUCTS
A. GYPSUM WALLBOARD: ASTM C1396/C1396M
1. MANUFACTURER: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
a. GEORGIA-PACIFIC GYPSUM LLC
b. NATIONAL GYPSUM COMPANY
c. PABCO GYPSUM
d. USG CORPORATION
2. THICKNESS: 1/2 INCH
B. GYPSUM BOARD, TYPE X: ASTM C1396/C1396M
1. MANUFACTURER: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
a. GEORGIA-PACIFIC GYPSUM LLC
b. NATIONAL GYPSUM COMPANY
c. PABCO GYPSUM
d. USG CORPORATION
2. THICKNESS: 5/8 INCH
C. MOLD-RESISTANT GYPSUM BOARD: ASTM C1396M. WITH MOISTURE- AND MOLD-RESISTANT CORE AND PAPER SURFACES.
1. MANUFACTURER: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
a. GEORGIA-PACIFIC GYPSUM LLC
b. NATIONAL GYPSUM COMPANY
c. PABCO GYPSUM
d. USG CORPORATION
2.3 INTERIOR TRIM: ASTM C1047
A. MATERIAL: GALVANIZED OR ALUMINUM-COATED STEEL SHEET, ROLLED ZINC, OR PAPER-FACED GALVANIZED-STEEL SHEET
B. SHAPE: CORNERBEAD
2.4 JOINT TREATMENT MATERIALS: COMPLY W/ ASTM C475/C475M.
A. JOINT TAPE: PAPER
B. JOINT COMPOUND: TYPE FOR EACH COAT, USE FORMULATION THAT IS COMPATIBLE WITH OTHER COMPOUNDS APPLIED ON PREVIOUS OR FOR SUCCESSIVE COATS.
2.5 SOUND-ATTENUATION BLANKETS: ASTM C665, TYPE I (BLANKETS WITHOUT MEMBRANE FACING)
2.6 ACOUSTICAL SEALANT
3.1 INSTALLATION: COMPLY WITH ASTM C840.
A. INSTALL GYPSUM PANELS OVER WOOD FRAMING, WITH FLOATING INTERNAL CORNER CONSTRUCTION. DO NO ATTACH GYPSUM PANELS ACROSS THE FLAT GRAIN OF WIDE-DIMENSION LUMBER, INCLUDING FLOOR JOISTS AND HEADERS. FLOAT GYPSUM PANELS OVER THESE MEMBERS OR PROVIDE CONTROL JOINTS TO COUNTERACT WOOD SHRINKAGE.
B. ON CEILINGS, APPLY GYPSUM PANELS BEFORE WALL/PARTITION BOARD APPLICATION TO GREATEST EXTEND POSSIBLE AND AT RIGHT ANGLES TO FRAMING UNLESS OTHERWISE INDICATED.
C. CONTROL JOINTS: INSTALL CONTROL JOINTS IN ACCORDANCE WITH ASTM C840 AND IN SPECIFIC LOCATIONS APPROVED BY ARCHITECT FOR VISUAL EFFECT.
3.2 GYPSUM BOARD FINISH LEVELS: FINISH PANELS TO LEVELS INDICATED BELOW AND IN ACCORDANCE WITH ASTM C840:
A. LEVEL 1: CONCEALED AREAS, ATTIC, MECHANICAL CLOSET
C. LEVEL 3: ALL FINISHED WALLS & CEILINGS UNLESS OTHERWISE NOTED
3.3 PROTECT INSTALLED PRODUCTS FROM DAMAGE FROM WEATHER, CONDENSATION, DIRECT SUNLIGHT, CONSTRUCTION, AND OTHER CAUSES DURING REMAINDER OF THE CONSTRUCTION PERIOD.

093013 - CERAMIC TILING
1.1 SUMMARY: GLAZED WALL TILE
1.2 SUBMITTALS:
A. PRODUCT DATA
B. SAMPLES
2.1 TILE PRODUCTS: SEE INTERIOR FINISH SCHEDULE FOR BASIS-OF-DESIGN PRODUCTS
A. GROUT COLOR: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE
2.2 SETTING MATERIALS: ORGANIC ADHESIVE: ANSI A136.1, TYPE 1
2.3 GROUT MATERIALS: STANDARD CEMENT GROUT: ASNI A118.6
2.4 MIXING MORTARS AND GROUT: MIX MORTARS AND GROUTS TO COMPLY WITH REFERENCED STANDARDS AND MORTAR AND GROUT MANUFACTURER'S WRITTEN INSTRUCTIONS.
3.1 INSTALLATION: COMPLY WITH TCNA'S "HANDBOOK FOR CERAMIC, GLASS, AND STONE TILE INSTALLATION" FOR INSTALLATION METHOD: TCNA W242, ORGANIC ADHESIVE ON GYPSUM BOARD.
A. JOINT WIDTH: AS RECOMMENDED BY TILE MANUFACTURER
3.2 CLEANING: ON COMPLETION OF PLACEMENT AD GROUTING, CLEAN ALL CERAMIC TILE SURFACES SO THEY ARE FREE OF FOREIGN MATTER.
3.3 PROTECT FINISHED WORK DURING CONSTRUCTION

096519 - RESILIENT TILE FLOORING
1.1 SUMMARY: SOLID VINYL FLOOR TILE
1.2 SUBMITTALS:
A. PRODUCT DATA
B. SAMPLES
C. MAINTENANCE MATERIALS: FURNISH ONE BOX OF SOLID VINYL FLOOR TILES THAT ARE PACKAGED WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFIED WITH LABELS DESCRIBING CONTENTS.
1.3 FIELD CONDITIONS: INSTALL FLOOR TILE AFTER OTHER FINISHING OPERATIONS, INCLUDING PAINTING, HAVE BEEN COMPLETE.
2.1 SOLID VINYL FLOOR TILE PRODUCTS: SEE INTERIOR FINISH SCHEDULE FOR BASIS-OF-DESIGN PRODUCTS.
2.2 INSTALLATION MATERIALS
A. TROWELABLE LEVELING AND PATCHING COMPOUNDS: HYDRAULIC, PORTLAND/CSA CEMENT COMPOUND APPROVED BY FLOOR TILE AND ADHESIVE MANUFACTURERS FOR APPLICATIONS INDICATED.
C. ADHESIVES: WATERPROOF ADHESIVE RECOMMENDED BY FLOOR TILE AND ADHESIVE MANUFACTURERS TO SUIT FLOOR TILE AND SUBSTRATE CONDITIONS INDICATED.
1. BASIS-OF-DESIGN: AQUAFLEX WATERPROOF INSTALLATION SYSTEM
3.1 EXECUTION: PREPARE SUBSTRATES, FILL CRACKS & DEPRESSIONS, AND INSTALL FLOOR TILE TO COMPLY WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.
3.2 WOOD SUBFLOORS: VERIFY UNDERLAYMENT OVER SUBFLOOR COMPLIES WITH REQUIREMENTS SPECIFIED IN SECTION 061600 "SHEATHING."
3.3 CLEAN AND PROTECT FINISHED WORK DURING CONSTRUCTION

096816 - SHEET CARPETING
1.1 SUMMARY: TUFTED CARPET
1.2 SUBMITTALS:
A. PRODUCT DATA
B. SAMPLES
C. WARRANTY-10 YEARS
1.3 FIELD CONDITIONS: DO NOT INSTALL CARPET CONCRETE SLABS UNTIL SLABS HAVE CURED AND ARE SUFFICIENTLY DRY TO BOND WITH ADHESIVE AND CONCRETE SLABS HAVE PH RANGE RECOMMENDED BY CARPET TILE MANUFACTURER.
2.1 CARPET PRODUCTS: SEE INTERIOR FINISH SCHEDULE FOR BASIS-OF-DESIGN PRODUCTS.
A. ACCESSORIES: PROVIDE MATCHING CARPET FOR INSTALLATION ON STAIRS.
3.1 EXAMINATION: PERFORM CONCRETE SLAB MOISTURE TESTS AS RECOMMENDED IN WRITING BY ADHESIVE AND CARPET TILE MANUFACTURERS.
A. WOOD SUBFLOORS: VERIFY UNDERLAYMENT OVER SUBFLOOR COMPLIES WITH REQUIREMENTS SPECIFIED IN SECTION 061600 "SHEATHING."
3.2 PREPARE, INSTALL, CLEAN & PROTECT CARPET . FOLLOW MANUFACTURER'S WRITTEN INSTRUCTIONS.

099123 - INTERIOR PAINTING
1.1 SUMMARY
A. PRIMERS
B. WATER-BASED FINISH COATINGS
C. SUBMITTALS:
A. PRODUCT DATA
B. SAMPLES
C. MAINTENANCE MATERIAL SUBMITTALS: FURNISH 1 GAL OF EACH PAINT PRODUCT OF EACH MATERIAL AND COLOR APPLIED THAT ARE PACKAGED WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFIED WITH LABELS DESCRIBING CONTENTS.
1.2 FIELD CONDITIONS: APPLY PAINTS ONLY WHEN TEMPERATURE OF SURFACES TO BE PAINTED AND AMBIENT AIR TEMPERATURES ARE BETWEEN 50 AND 95 DEG F. DO NOT APPLY PAINTS WHEN RELATIVE HUMIDITY EXCEEDS 85 PERCENT; AT TEMPERATURES OF LESS THAN 5 DEG F ABOVE THE DEW POINT, OR TO DAMP OR WET SURFACES.
2.1 PRODUCTS:
A. PRIMER FOR DRYWALL: SHERWIN WILLIAMS PROMAR 200 ZERO VOC LATEX PRIMER
B. PRIMER FOR WOOD: SHERWIN WILLIAMS PREMIUM WALL & WOOD PRIMER
C. WATER-BASED FINISH COATING: INTERIOR, LATEX; PIGMENTED, WATER-BASED PAINT FOR USE ON PRIMED/SEALED INTERIOR GYPSUM BOARD, AND ON PRIMED WOOD: BASIS-OF-DESIGN: SHERWIN-WILLIAMS PROMAR 200 ZERO VOC. SEE INTERIOR FINISH SCHEDULE FOR COLORS AND SHEEN LEVELS.
3.1 EXECUTION
A. VERIFY GYPSUM BOARD AND WOOD SUBSTRATES ARE SANDED SMOOTH AND CLEANED.
B. APPLY PAINTS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
C. CLEAN AND PROTECT WORK.
D. PROVIDE LEVEL 4 FINISH.

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

PROJECT NUMBER: **2317.006**

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A-003

DIVISION 10 - SPECIALTIES

102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES
1.1 SUMMARY: PRIVATE-USE BATHROOM ACCESSORIES
1.2 SUBMITTALS: PRODUCT DATA
2.1 PRODUCTS: SEE BATHROOM ELEVATIONS & ACCESSORY SCHEDULE ON DRAWINGS FOR BASIS-OF-DESIGN PRODUCTS
3.1 INSTALLATION: INSTALL ACCESSORIES IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS, USING ASTERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.

105500.13 - USPS-DELIVERY POSTAL SPECIALTIES
1.1 SUMMARY: TRADITIONAL WALL MOUNTED MAILBOXES
A. SUBMITTALS: PRODUCT DATA
2.1 TRADITIONAL WALL MOUNTED MAILBOXES
A. 10-1/2" W X 14-1/2" H X 3-1/2" D
B. DETACHABLE MAGAZINE HOOKS
C. ELECTRO-GALVANIZED 20 GAUGE STEEL W/ POWER COATED FINISH TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.

DIVISION 11 - EQUIPMENT

113013 - RESIDENTIAL APPLIANCES
1.1 SUMMARY:
A. COOKING APPLIANCES
B. REFRIGERATION APPLIANCES
C. CLEANING APPLIANCES
1.2 SUBMITTALS: PRODUCT DATA
2.1 PRODUCTS: SEE APPLIANCE SCHEDULE ON DRAWINGS
2.2 PERFORMANCE REQUIREMENTS:
A. ELECTRICAL APPLIANCES: LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.
2.3 COOKING APPLIANCES
A. ELECTRIC RANGE, 30" WIDTH
B. MICROWAVE OVEN, 30" WIDTH, UNDER CABINET MOUNT W/ EXHAUST FAN
2.4 REFRIGERATION APPLIANCES: REFRIGERATOR/FREEZER, TWO-DOOR SIDE-BY-SIDE REFRIGERATOR/FREEZER, FREESTANDING
2.5 CLEANING APPLIANCES
A. DISHWASHER, BUILT-IN UNDERCOUNTER, 24" WIDTH
B. CLOTHES WASHER, FRONT LOADING
C. CLOTHES DRYER, FRONT LOADING
1. STACKABLE WASHER/DRYER - INSTALL WHERE INDICATED TO BE STACKABLE
3.1 INSTALLATION: INSTALL APPLIANCES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

DIVISION 12 - FURNISHINGS

122413 - ROLLER WINDOW SHADES
1.1 SUMMARY: MANUALLY OPERATED, SINGLE-ROLLER SHADES
1.2 SUBMITTALS:
A. PRODUCT DATA
B. SAMPLES
1.3 FIELD CONDITIONS: DO NOT INSTALL ROLLER SHADES UNTIL CONSTRUCTION AND FINISH WORK IN SPACES, INCLUDING PAINTING, IS COMPLETE AND DRY AND AMBIENT TEMPERATURE AND HUMIDITY CONDITIONS ARE MAINTAINED AT THE LEVELS INDICATED FOR PROJECT WHEN OCCUPIED FOR ITS INTENDED USE.
1.4 FIELD MEASURE
2.1 BASIS-OF-DESIGN MANUFACTURER: LEVOLOR, OR APPROVED EQUAL.
A. CHAIN-AND-CLUTCH OPERATING MECHANISM: WITH CONTINUOUS-LOP BEAD CHAIN AND CLUTCH THAT STOPS SHADE MOVEMENT WHEN BEAD CHAIN IS RELEASED; PERMANENTLY ADJUSTED AND LUBRICATED.
B. SHADE MATERIAL: LEVOLOR SOLAR SCREEN 3, (3% OPENNESS); WHITE
2.2 FABRICATION: FABRICATE UNITS IN SIZES TO FILL WINDOW OPENINGS
A. BETWEEN (INSIDE) JAMB INSTALLATION: WIDTH EQUAL TO JAMB-TO-JAMB DIMENSION OF OPENING IN WHICH SHAD IS INSTALLED LESS 1/4 INCH PER SIDE OR 1/2 INCH TOTAL, PLUS OR MINIMUM 1/8 INCH.
3.1 INSTALL ROLLER SHADES LEVEL, PLUMB, AND ALIGNED WITH ADJACENT UNITS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
A. ROLLER SHADE LOCATIONS: AT DOUBLE HUNG WINDOWS AS INDICATED ON DRAWINGS.
3.2 CLEAN & PROTECT THE WORK

123530 - RESIDENTIAL CASEWORK
1.1 SUMMARY: KITCHEN AND VANITY CABINETS.
1.2 SUBMITTALS:
A. PRODUCT DATA
B. SHOP DRAWINGS
C. FINISH SAMPLES
1.3 FIELD CONDITIONS:
A. ENVIRONMENTAL LIMITATIONS: DO NOT DELIVER OR INSTALL CASEWORK UNTIL BUILDING IS ENCLOSED, WET-WORK IS COMPLETE, AND HVAC SYSTEM IS OPERATING AND MAINTAINING TEMPERATURE AND RELATIVE HUMIDITY LEVELS PLANNED FOR BUILDING OCCUPANTS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.
B. ESTABLISHED DIMENSIONS: WHERE CASEWORK IS INDICATED TO FIT TO OTHER CONSTRUCTION, ESTABLISH DIMENSIONS FOR AREAS WHERE CASEWORK IS TO FIT. COORDINATE CONSTRUCTION TO ENSURE THAT ACTUAL DIMENSIONS CORRESPOND TO ESTABLISHED DIMENSIONS. PROVIDE FILLERS AND SCRIBES TO ALLOW FOR TRIMMING AND FITTING.
2.1 CABINETS: QUALITY STANDARDS: PROVIDE CABINETS THAT COMPLY WITH KCMA A161.1.
A. CABINET STYLE: FACE FRAME, "SHAKER STYLE" DOORS
1. VANITY CABINETS: INCORPORATED FINISHED CABINET FEET INTO FRAME (WITH TOE KICKS LEFT OPEN)
B. EXPOSED WOOD SPECIES: MANUFACTURER'S STANDARD DOMESTIC HARDWOOD SPECIES.
C. FACTORY FINISH CABINETS: WHITE
2.2 HARDWARE: MANUFACTURER'S STANDARD UNITS COMPLYING WITH BHMA A156.9, OF TYPE, SIZE, STYLE, MATERIAL, AND FINISH AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
3.1 INSTALLATION:
A. INSTALL CASEWORK WITH NO VARIATIONS IN ADJOINING SURFACES; USE CONCEALED SHIMS.
B. INSTALL CASEWORK WITHOUT DISTORTION SO DOORS AND DRAWERS FIT THE OPENINGS, ARE ALIGNED, AND ARE UNIFORMLY SPACED. COMPLETE INSTALLATION OF HARDWARE AND ACCESSORIES.
C. INSTALL CASEWORK LEVEL AND PLUMB TO A TOLERANCE OF 1/8 INCH IN 8 FEET.
D. FASTEN CASEWORK TO ADJACENT UNITS AND TO BACKING. FASTEN WALL CABINETS THROUGH BACK, NEAR TOP AND BOTTOM, AND AT ENDS NOT MORE THAN 16 INCHES O.C.
E. CLEAN CASEWORK. TOUCH UP AS REQUIRED TO RESTORE DAMAGED OR SOILED AREAS TO MATCH ORIGINAL FACTORY FINISH.

123623.13 - PLASTIC-LAMINATE-CLAD COUNTERTOPS
1.1 SUMMARY: PLASTIC-LAMINATE-CLAD COUNTERTOPS
1.2 SUBMITTALS:
A. PRODUCT DATA
B. SHOP DRAWINGS
C. SAMPLES
1.3 DELIVER COUNTERTOPS ONLY AFTER CASEWORK AND SUPPORTS ON WHICH THEY WILL BE INSTALLED HAVE BEEN COMPLETED IN INSTALLATION AREAS.
1.4 FIELD MEASUREMENTS: WHERE COUNTERTOPS ARE INDICATED TO FIT TO OTHER CONSTRUCTION, VERIFY DIMENSIONS OF OTHER CONSTRUCTION BY FIELD MEASUREMENTS BEFORE FABRICATION AND INDICATE MEASUREMENTS ON SHOP DRAWINGS. COORDINATE FABRICATION SCHEDULE WITH CONSTRUCTION PROGRESS TO AVOID DELAYING THE WORK.
2.1 QUALITY STANDARD: UNLESS OTHERWISE INDICATED, COMPLY WITH THE "ARCHITECTURAL WOODWORK STANDARDS" FOR GRADES OF PLASTIC-LAMINATE COUNTERTOPS INDICATED FOR CONSTRUCTION, FINISHES, INSTALLATION, AND OTHER REQUIREMENTS.
A. GRADE: CUSTOM
B HIGH-PRESSURE DECORATIVE LAMINATE: ISO 4586-3, GRADE HGS
C. BASIS-OF-DESIGN: WILSONART PREMIUM LAMINATE
D. AS INDICATED ON DRAWINGS
E. CORE MATERIAL: AS SELECTED BY FABRICATOR TO COMPLY WITH QUALITY STANDARD
F. CORE MATERIAL AT SINKS: MDF MADE WITH EXTERIOR GLUE OR EXTERIOR-GRADE PLYWOOD
2.2 ADHESIVE FOR BONDING PLASTIC LAMINATE: TYPE I, WATERPROOF TYPE AS SELECTED BY FABRICATOR TO COMPLY WITH REQUIREMENTS.
3.1 INSTALLATION:
A. SCRIBE AND CUT COUNTERTOPS TO FIT ADJOINING WORK, REFINISH CUT SURFACES, AND REPAIR DAMAGED FINISH AT CUTS.
B. ANCHOR SECURELY BY SCREWING THROUGH CORNER BLOCKS OF BASE CABINETS OR OTHER SUPPORTS INTO UNDERSIDE OF COUNTERTOP. INSTALL COUNTERTOPS LEVEL AND TRUE IN LINE. USE CONCEALED SHIMS AS REQUIRED TO MAINTAIN NOT MORE THAN 1/8-INCH-IN-96-INCHES VARIATION FROM A STRAIGHT, LEVEL PLANE.
C. SEAL JOINTS WHERE COUNTERTOP ABUT WALLS WITH MILDEW-RESISTANT SILICONE SEALANT OR OTHER PERMANENTLY ELASTIC SEALING COMPOUND RECOMMENDED BY COUNTERTOP MATERIAL MANUFACTURER.
3.2 CLEAN & PROTECT THE WORK.

DIVISION 22 - PLUMBING (RE PLUMB DWGS)

DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING (RE MECH DWGS)

DIVISION 26 - ELECTRICAL (RE ELEC DWGS)

DIVISION 31 - EARTHWORK (RE CIVIL & STRUCT DWGS)

DIVISION 32 - EXTERIOR IMPROVEMENTS (RE CIVIL DWGS)

DIVISION 33 - UTILITIES (RE CIVIL DWGS)

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION

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PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC.
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

PROJECT NUMBER: **2317.006**

DRAWING TITLE
OUTLINE SPECS

REVISIONS AFTER ISSUANCE
NO. DATE DESCRIPTION

SEAL

ISSUE DATE09.19.25

DRAWING NUMBER
A-004

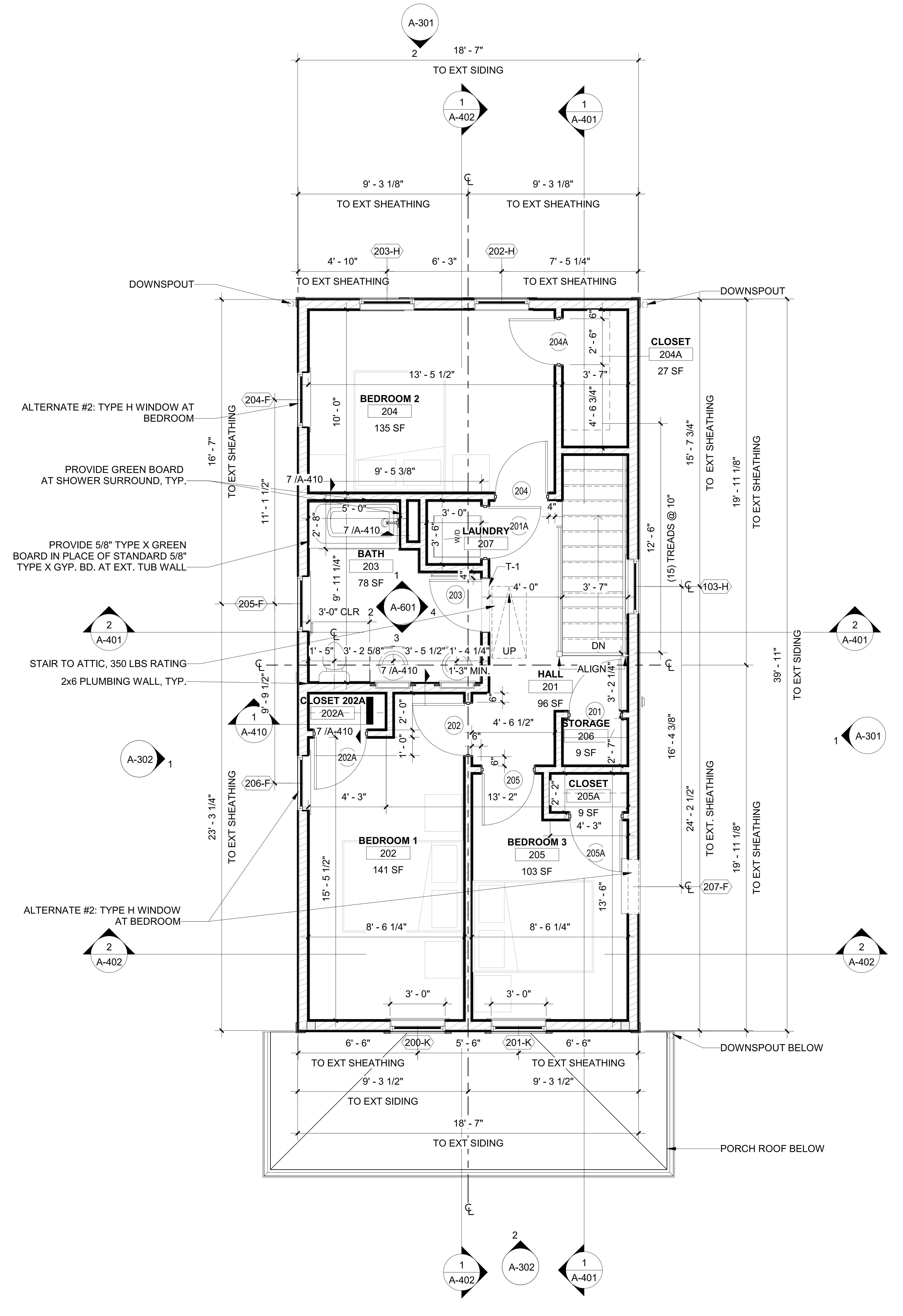
CONSTRUCTION NOTE:
ALL INTERIOR WALLS ARE 2X4 WD. FRAME CONSTRUCTION, 3/A-410, UNLESS NOTED OTHERWISE ON PLAN

ALTERNATES:

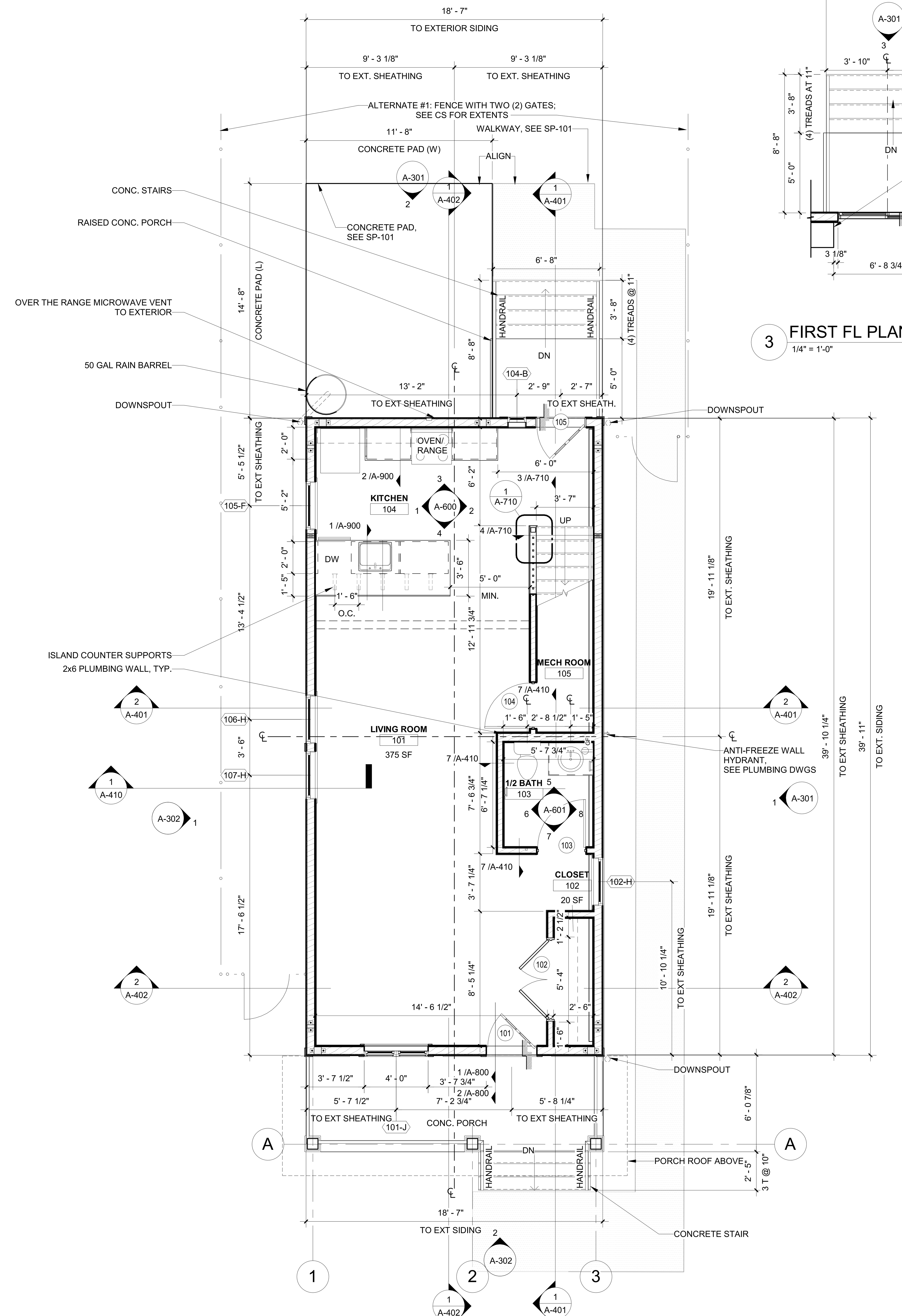
ALTERNATE #1: PROPERTY FENCE WITH TWO (2) GATES (6'-0" (H))

ALTERNATE #2: THREE (3) ADDITIONAL TYPE F BEDROOM WINDOWS, (WINDOWS 204, 206 & 207); SEE PLAN

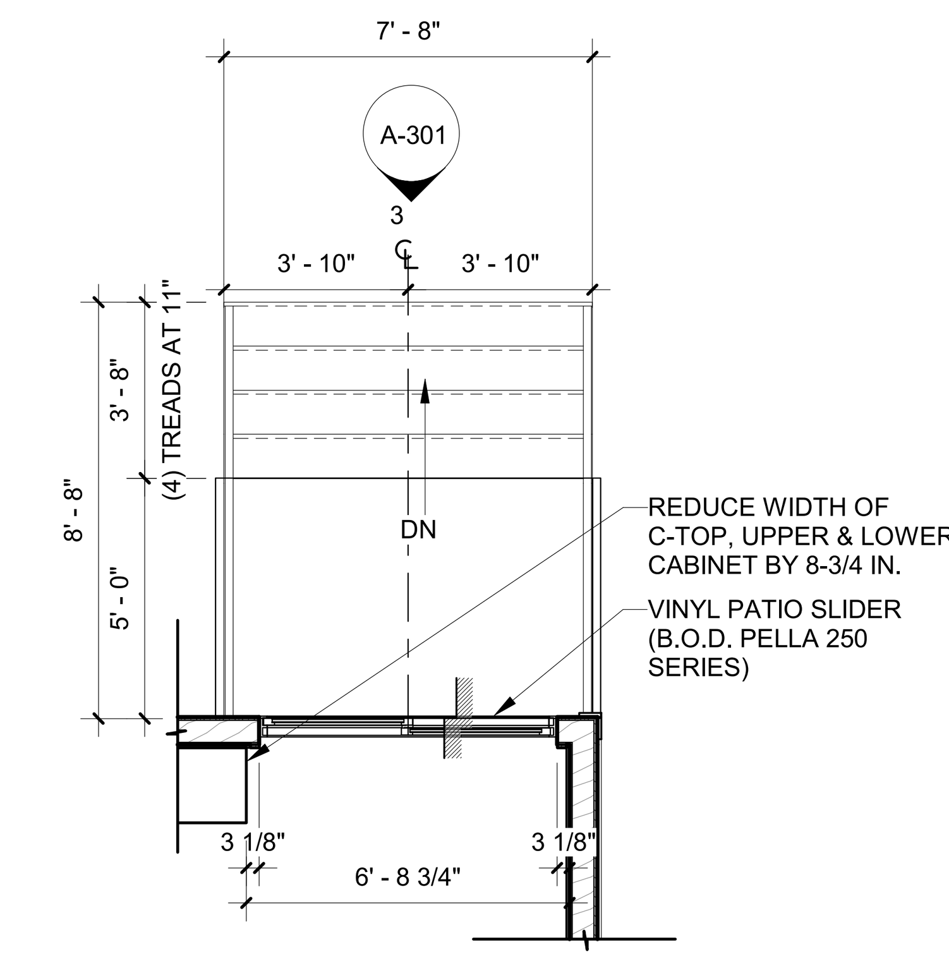
ALTERNATE #3: VINYL PATIO SLIDER AT REAR DOOR 105 LOCATION (B.O.D. PELLA 250 SERIES)



2 SECOND FLOOR PLAN
1/4" = 1'-0"



1 FIRST FLOOR PLAN
1/4" = 1'-0"



3 FIRST FL PLAN ALT #3 PATIO SLIDER
1/4" = 1'-0"

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

BENLIC DEVELOMENT LLC
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

PROJECT NUMBER: **2317.006**

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DRAWING TITLE
FIRST & SECOND FL. PLANS

REVISIONS AFTER ISSUANCE

NO.	DATE	DESCRIPTION

SEAL

REGISTERED ARCHITECT
STATE OF NEW YORK
021581-1

ISSUE DATE09.19.25

DRAWING NUMBER
A-101

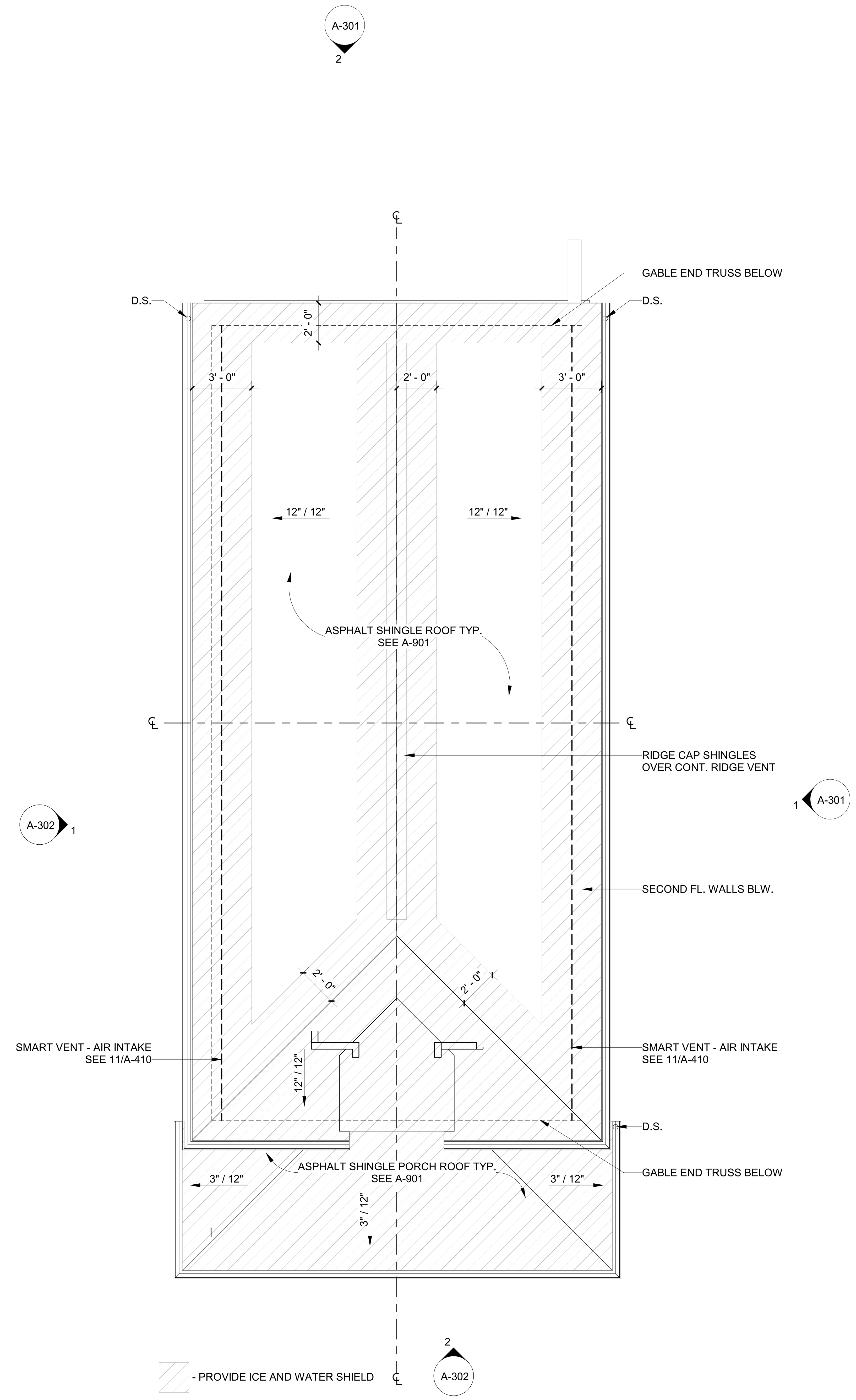
CONSTRUCTION NOTE:
ALL INTERIOR WALLS ARE 2X4 WD. FRAME CONSTRUCTION, 3/A-410, UNLESS NOTED OTHERWISE ON PLAN

ALTERNATES:

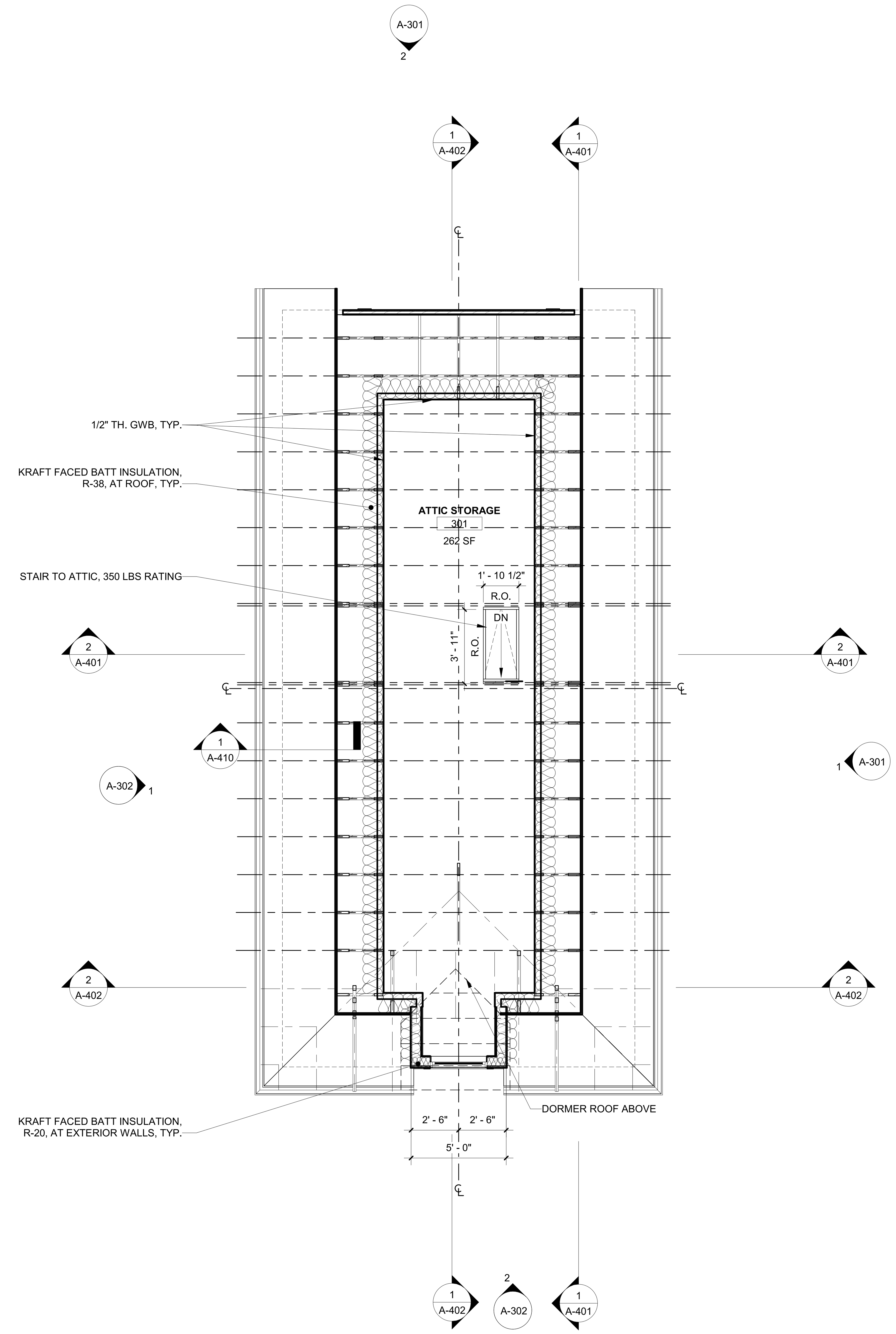
ALTERNATE #1: PROPERTY FENCE WITH TWO (2) GATES (6'-0" (H))

ALTERNATE #2: THREE (3) ADDITIONAL TYPE F BEDROOM WINDOWS, (WINDOWS 204, 206 & 207); SEE PLAN

ALTERNATE #3: VINYL PATIO SLIDER AT REAR DOOR 105 LOCATION (B.O.D. PELLA 250 SERIES)



2 ROOF PLAN
1/4" = 1'-0"



1 ATTIC FLOOR PLAN
1/4" = 1'-0"

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

BENLIC DEVELOMENT LLC
403 MAIN STREET, SUITE 602
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PROJECT NUMBER: **2317.006**

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DRAWING TITLE
ATTIC & ROOF PLANS

REVISIONS AFTER ISSUANCE
NO. DATE DESCRIPTION

SEAL

ISSUE DATE09.19.25

DRAWING NUMBER
A-102

CONSTRUCTION NOTE:
ALL INTERIOR WALLS ARE 2X4 WD. FRAME CONSTRUCTION, 3/A-410, UNLESS NOTED OTHERWISE ON PLAN

ALTERNATES:

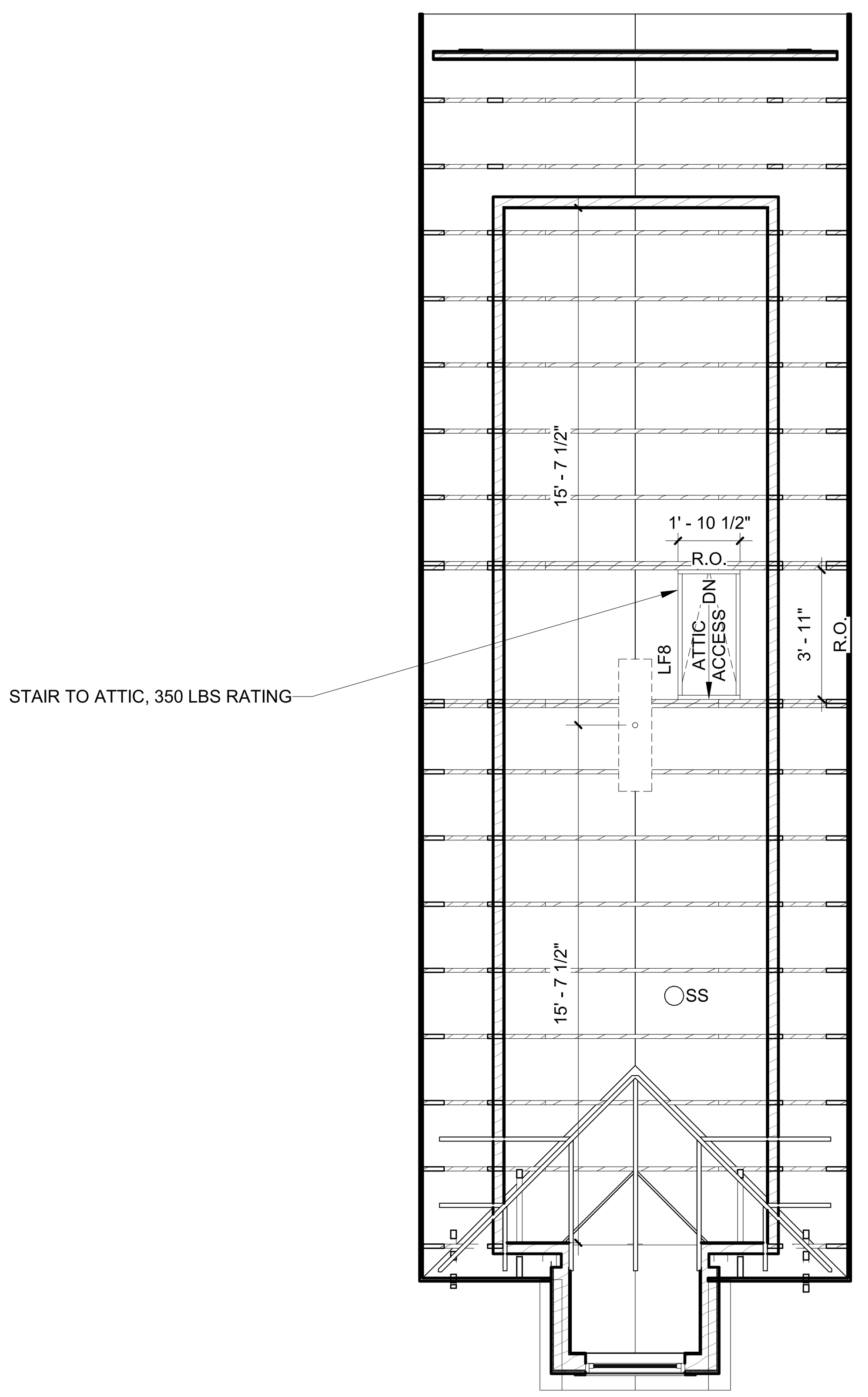
ALTERNATE #1: PROPERTY FENCE WITH TWO (2) GATES (6'-0" (H))

ALTERNATE #2: THREE (3) ADDITIONAL TYPE F BEDROOM WINDOWS, (WINDOWS 204, 206 & 207); SEE PLAN

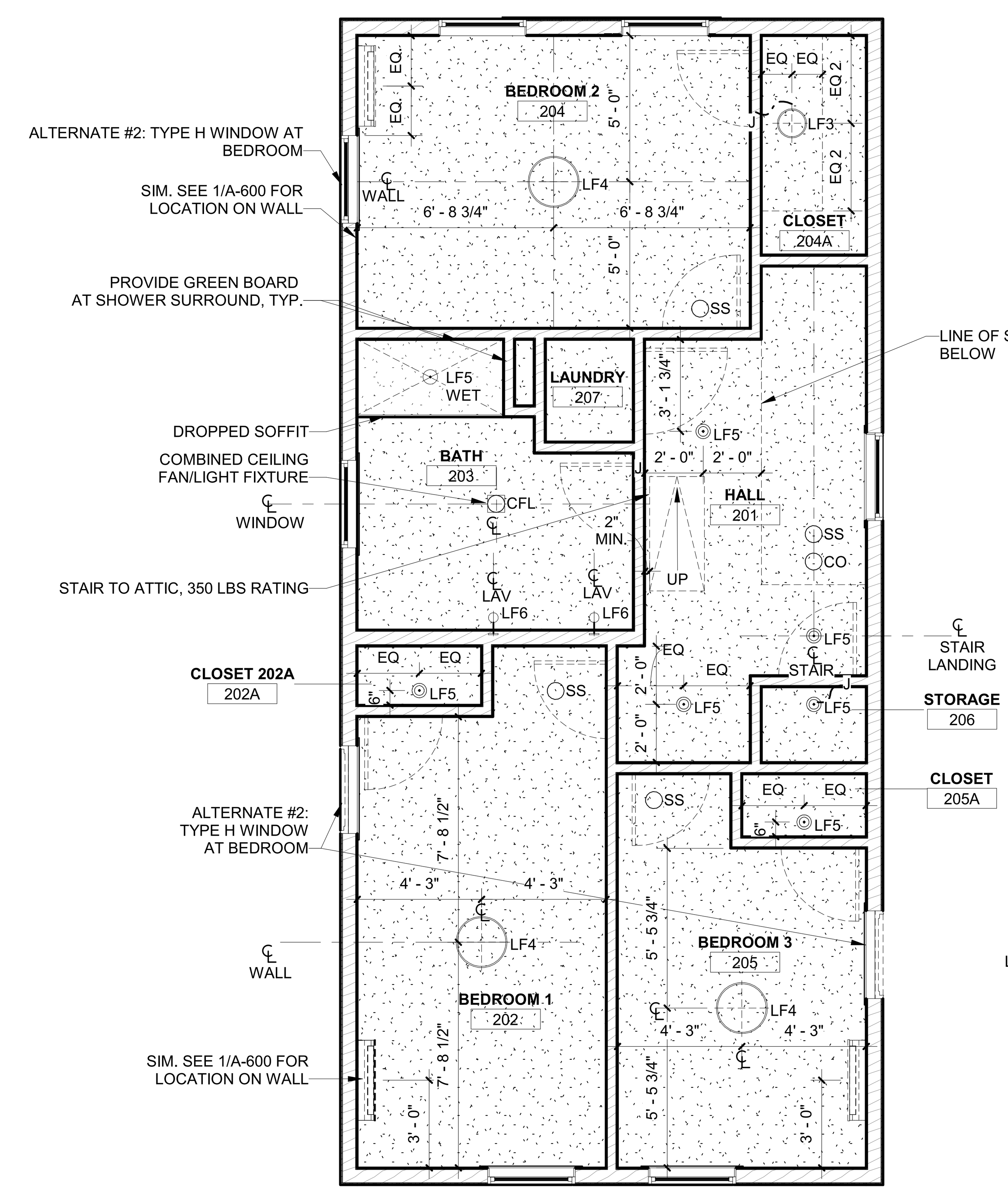
ALTERNATE #3: VINYL PATIO SLIDER AT REAR DOOR 105 LOCATION (B.O.D. PELLA 250 SERIES)

LIGHT FIXTURE KEY

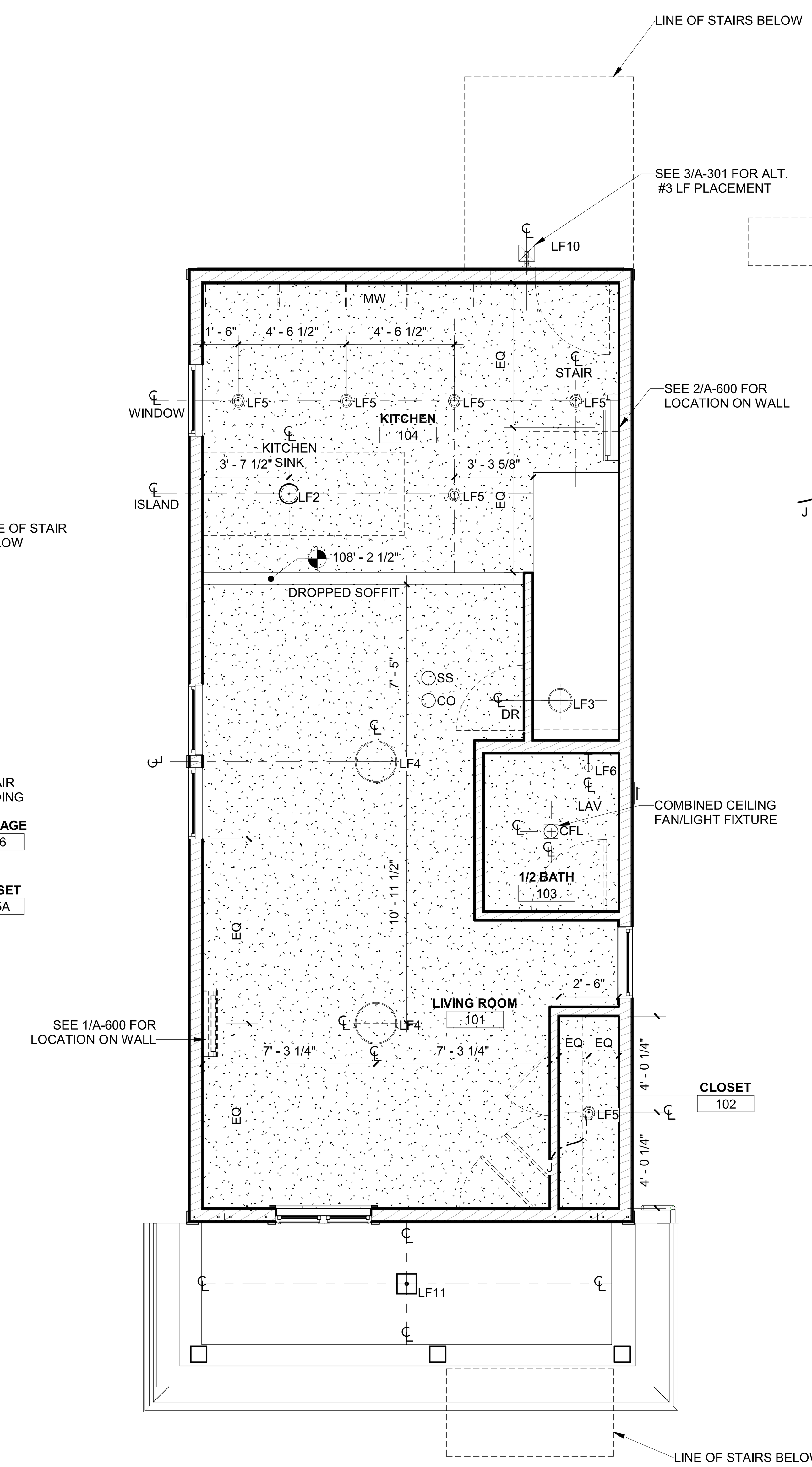
LF2	KITCHEN ISLAND PENDANT
LF3	15 IN. DIAM CEILING SURFACE MOUNT- STAIR HALL & BEDROOMS
LF4	21 IN. DIAM. CEILING SURFACE MOUNT- DINING AND LIVING ROOM
LF5	RECESSED LED CEILING FIXTURE
LF5 WET	RECESSED LIGHT FIXTURE- WET AREA UL RATED
LF6	WALL SCONCE
LF8	UTILITY PENDANT LIGHT FIXTURE - 1' X 4'
LF10	EXTERIOR WALL SCONCE W/ MOTION SENSOR
LF11	EXTERIOR PORCH SURFACE MTD CEILING LIGHT W/ MOTION SENSOR
J	JAMB SWITCH: B.O.D. LEVITON 1865 BRASS DOOR JAM SWITCH 3 AM 125 VOLT
SS	SMOKE DETECTOR
CO	CARBON MONOXIDE DETECTOR
CFL	CEILING MOUNT VENTILATION FAN AND LIGHT



3 ATTIC REFLECTED CEILING PLAN
1/4" = 1'-0"



2 SECOND FLOOR REFLECTED CEILING PLAN
1/4" = 1'-0"



1 FIRST FLOOR REFLECTED CEILING PLAN
1/4" = 1'-0"

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PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

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DRAWING TITLE
REFLECTED CEILING PLANS

REVISIONS AFTER ISSUANCE

NO.	DATE	DESCRIPTION

SEAL
REGISTERED ARCHITECT MATTHEW W. MEIER 021581-1 STATE OF NEW YORK

ISSUE DATE:09.19.25

DRAWING NUMBER
A-201

GENERAL NOTE:

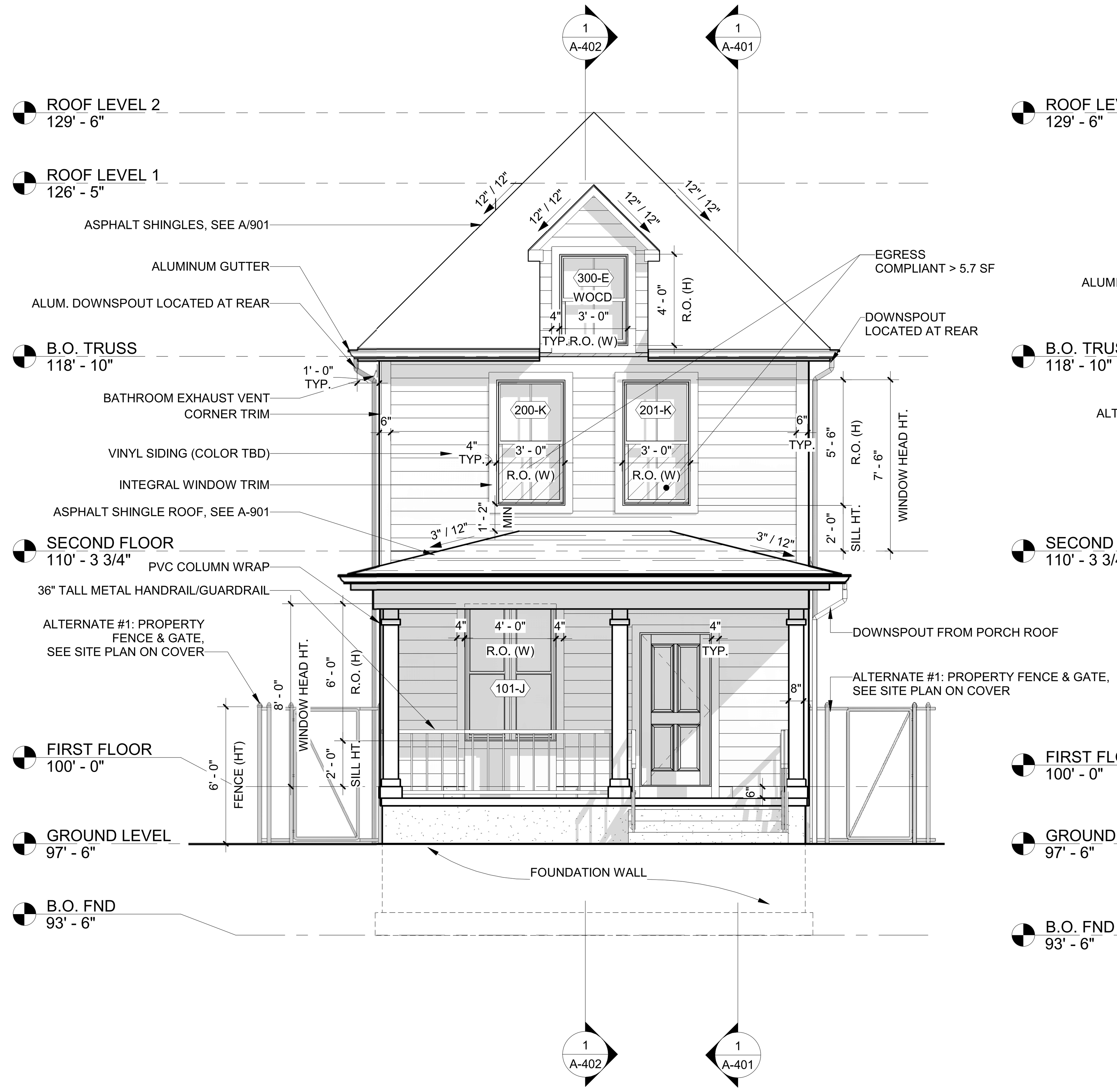
1. INSTALL WINDOW OPENING CONTROL DEVICE (WOCD) WITH OVERRIDE FOR EMERGENCY ESCAPE & RESCUE AT ALL WINDOWS MEETING THE CRITERIA OF 2020 NYS RESIDENTIAL BUILDING CODE: R3.12: SECTION 1 AND 2:
1A. INSTALL WOCD AT WINDOWS WHERE:
THE SILL IS LOWER THAN 24" ABOVE FINISHED FLOOR AND MORE THAN 72" ABOVE FINISHED GRADE.
1B. WOCD: A 4" SPHERE CANNOT PASS THROUGH THE LARGEST OPENING ALLOWED.

ALTERNATES:

ALTERNATE #1: PROPERTY FENCE WITH TWO (2) GATES (6'-0" (H))

ALTERNATE #2: THREE (3) ADDITIONAL TYPE F BEDROOM WINDOWS, (WINDOWS 203, 304 & 205); SEE PLAN

ALTERNATE #3: VINYL PATIO SLIDER AT REAR DOOR 105 LOCATION (B.O.D. PELLA 250 SERIES)



2 EAST ELEVATION
1/4" = 1'-0"

1 SOUTH ELEVATION
1/4" = 1'-0"

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

BENLIC DEVELOMENT LLC
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PROJECT NUMBER: 2317.006

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DRAWING TITLE
EXTERIOR ELEVATIONS

REVISIONS AFTER ISSUANCE
NO. | DATE | DESCRIPTION

SEAL
REGISTERED ARCHITECT
STATE OF NEW YORK
021581-1

ISSUE DATE09.19.25

DRAWING NUMBER
A-300

GENERAL NOTE:

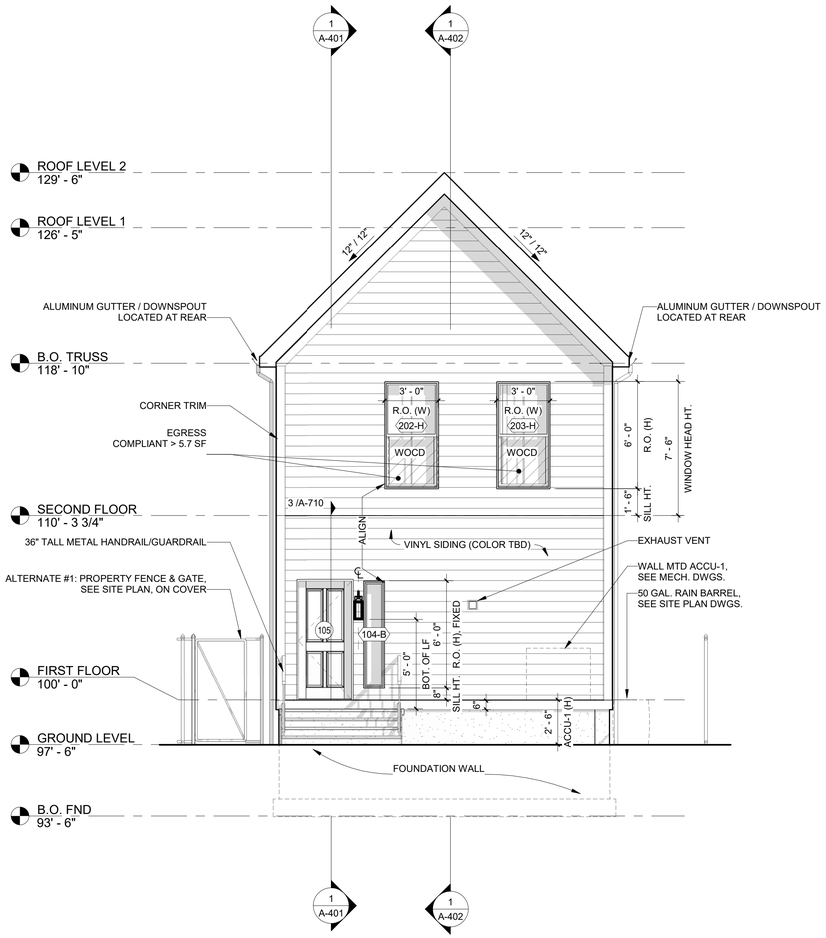
1. INSTALL WINDOW OPENING CONTROL DEVICE (WOCD) WITH OVERRIDE FOR EMERGENCY ESCAPE & RESCUE AT ALL WINDOWS MEETING THE CRITERIA OF 2020 NYS RESIDENTIAL BUILDING CODE: R3.12: SECTION 1 AND 2:
1A. INSTALL WOCD AT WINDOWS WHERE:
THE SILL IS LOWER THAN 24" ABOVE FINISHED FLOOR AND MORE THAN 72" ABOVE FINISHED GRADE.
1B. WOCD: A 4" SPHERE CANNOT PASS THROUGH THE LARGEST OPENING ALLOWED.

ALTERNATES:

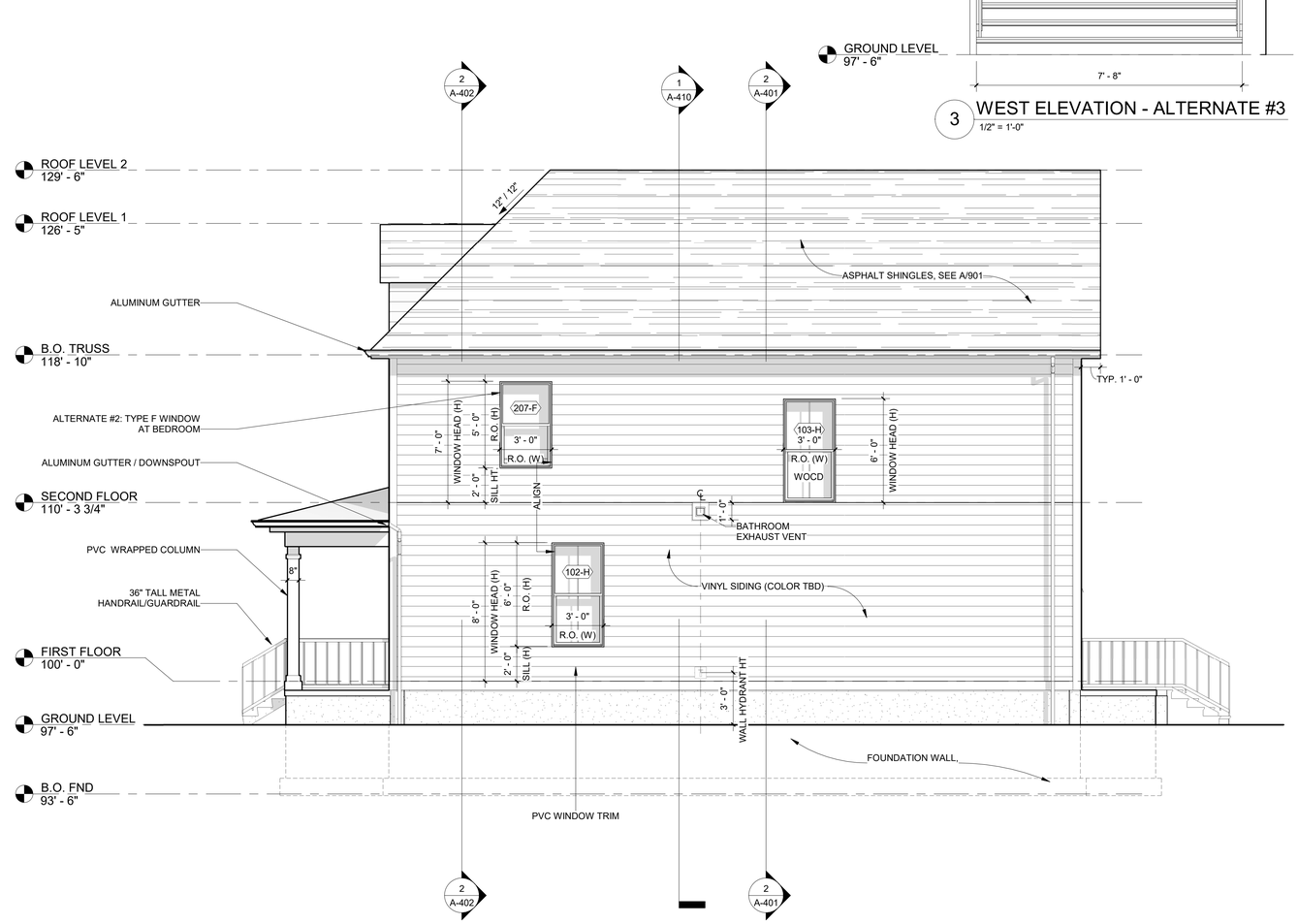
ALTERNATE #1: PROPERTY FENCE WITH TWO (2) GATES (6'-0" (H))

ALTERNATE #2: THREE (3) ADDITIONAL TYPE F BEDROOM WINDOWS, (WINDOWS 203, 304 & 205); SEE PLAN

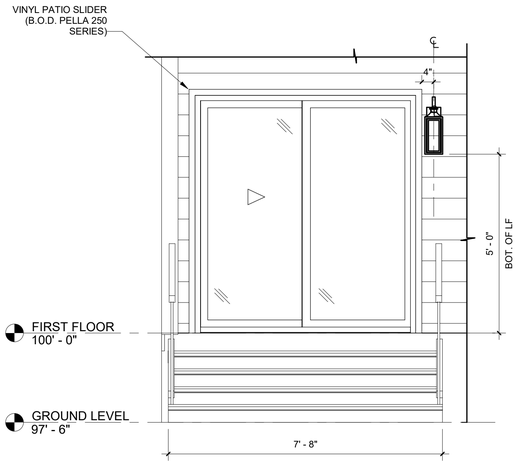
ALTERNATE #3: VINYL PATIO SLIDER AT REAR DOOR 105 LOCATION (B.O.D. PELLA 250 SERIES)



2 WEST ELEVATION
1/4" = 1'-0"



1 NORTH ELEVATION
1/4" = 1'-0"



3 WEST ELEVATION - ALTERNATE #3
1/2" = 1'-0"

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

PROJECT NUMBER: **2317.006**

BENLIC DEVELOPMENT LLC.
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ARCHITECT OF RECORD

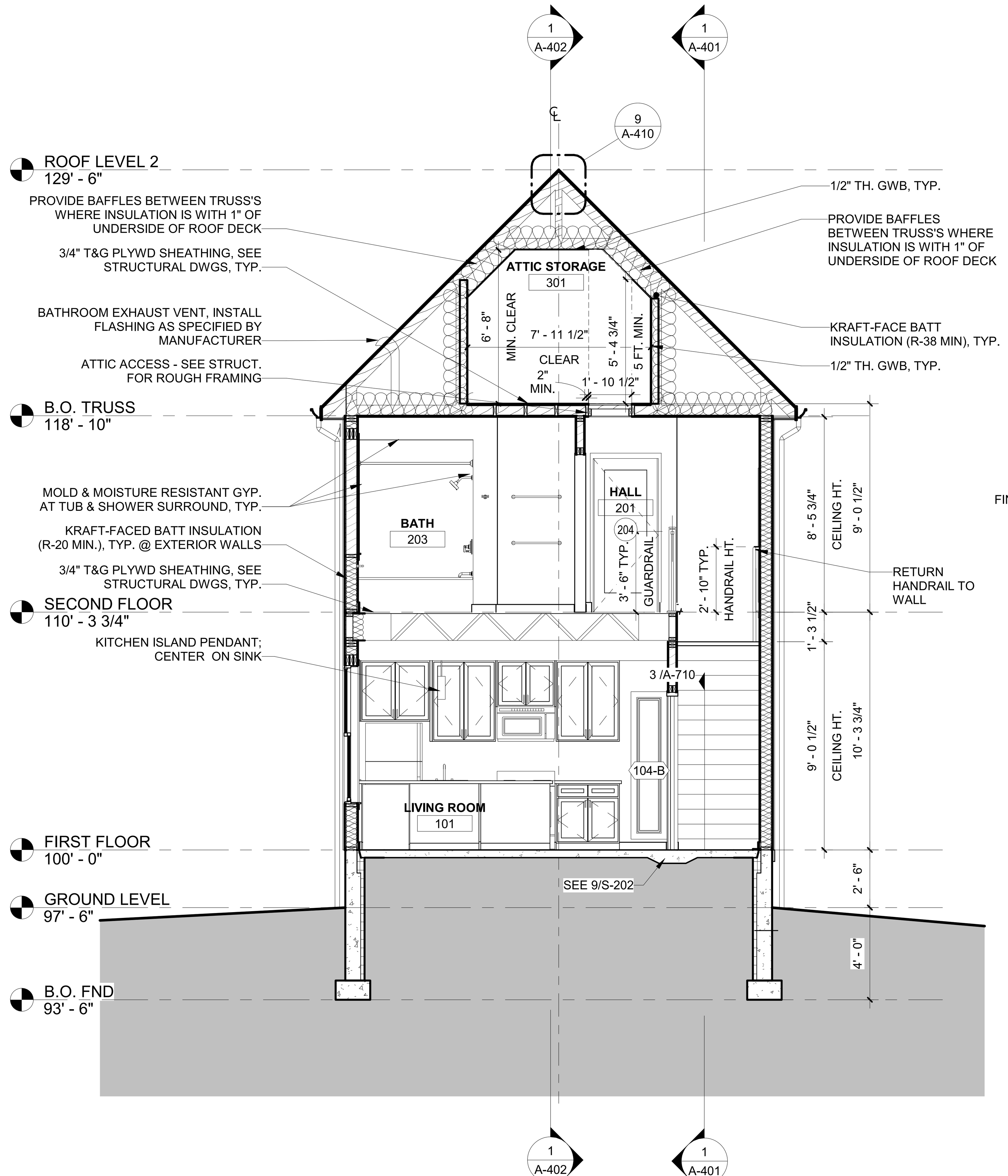
DRAWING TITLE
EXTERIOR ELEVATIONS

REVISIONS AFTER ISSUANCE
NO. DATE DESCRIPTION

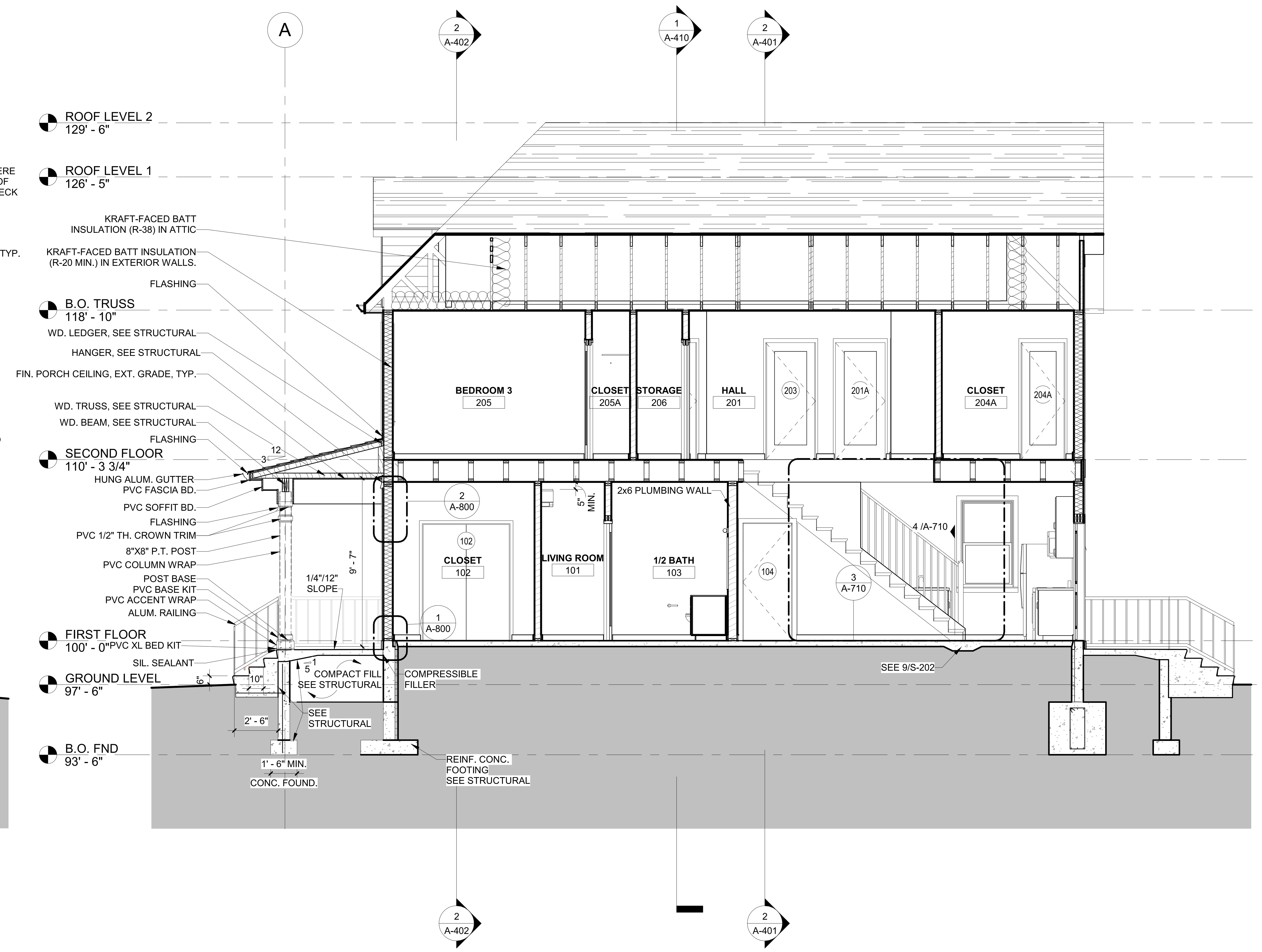
SEAL

ISSUE DATE: 09.19.25

DRAWING NUMBER
A-301



Section 1
1/4" = 1'-0"



Section 2
1/4" = 1'-0"

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PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

BENLIC DEVELOMENT LLC
403 MAIN STREET, SUITE 602
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PROJECT NUMBER: 2317.006

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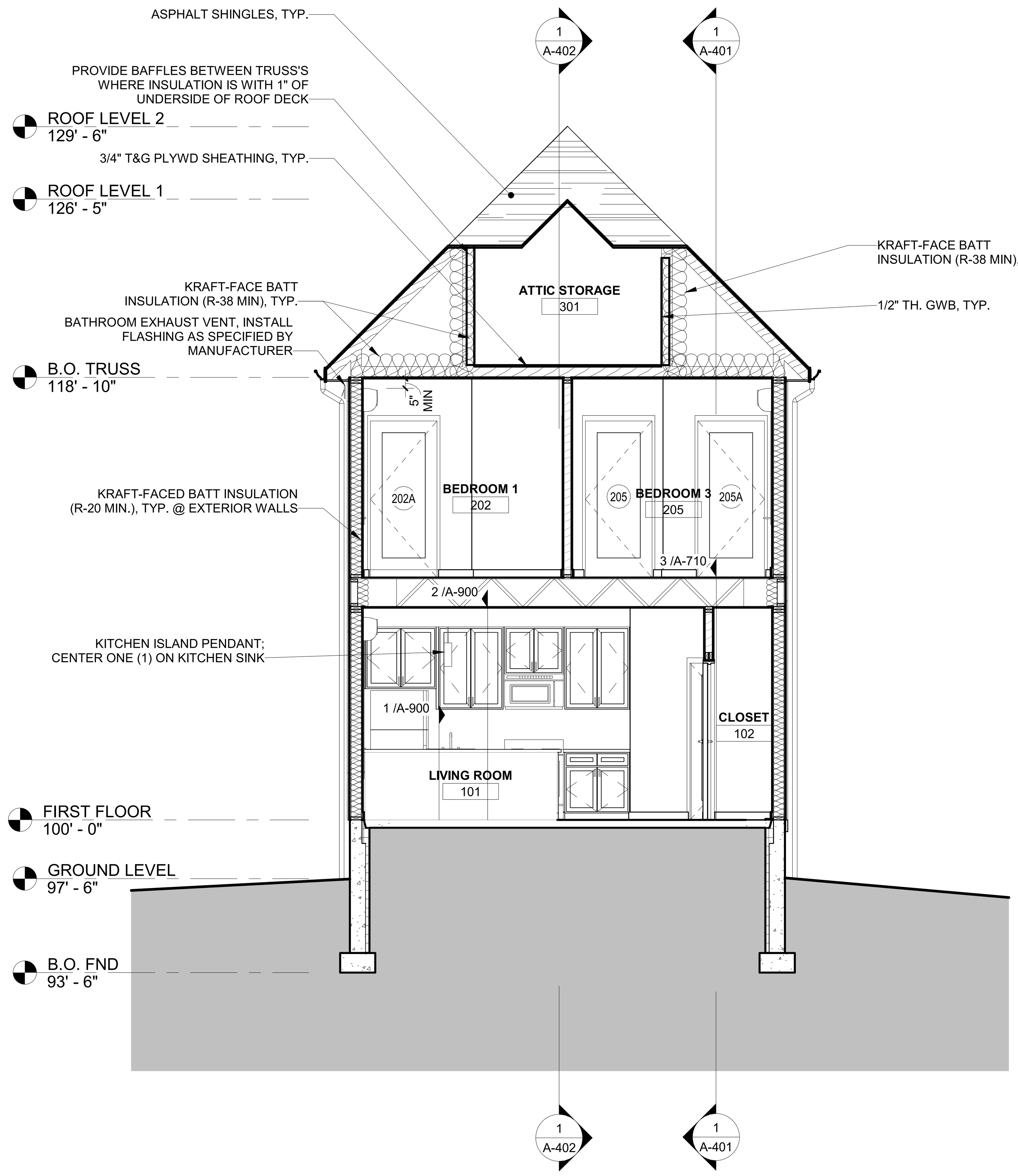
DRAWING TITLE
BUILDING SECTIONS

REVISIONS AFTER ISSUANCE
NO. DATE DESCRIPTION

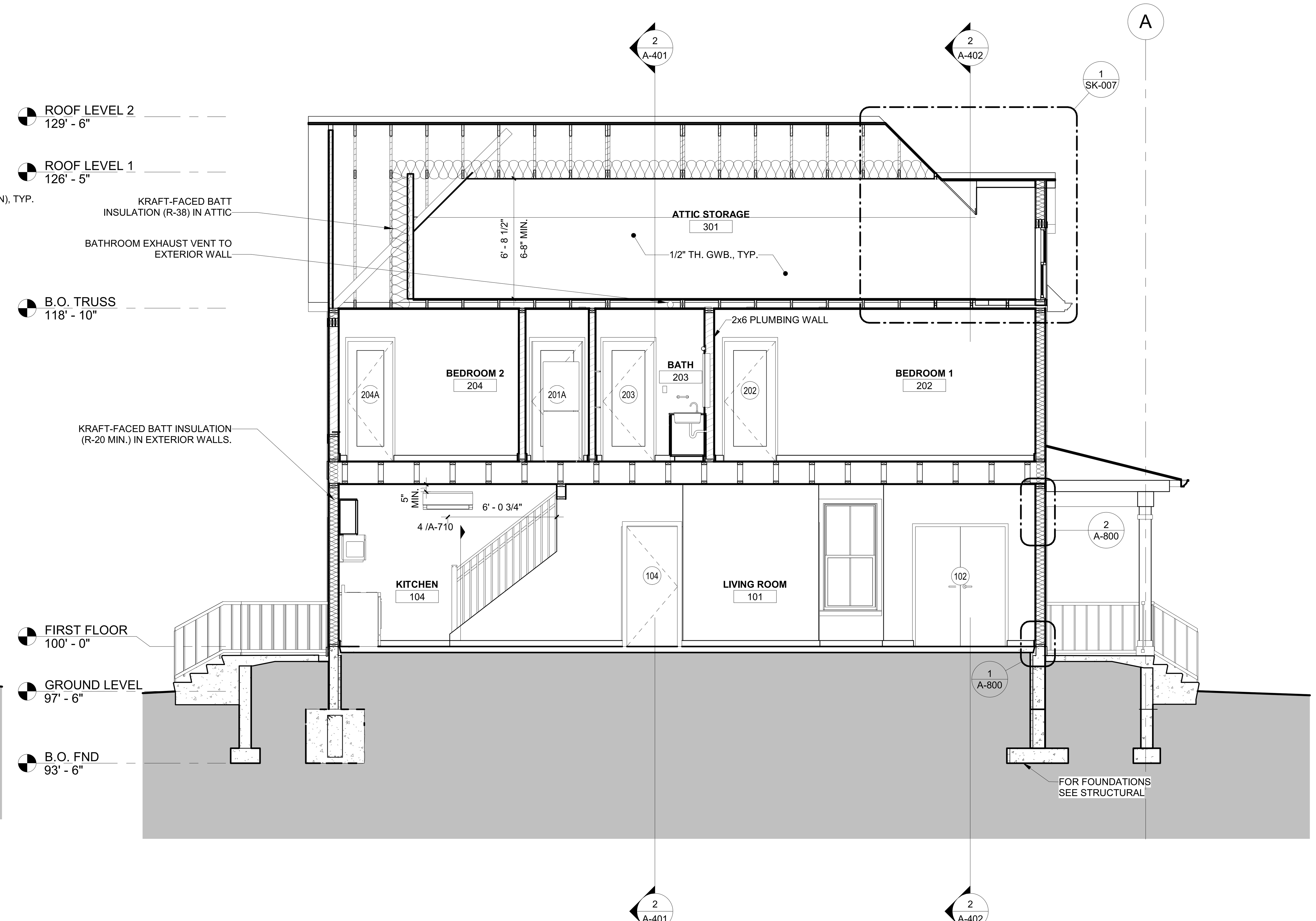
SEAL

ISSUE DATE 09.19.25

DRAWING NUMBER
A-401



2 Section 3
1/4" = 1'-0"



1 Section 4
1/4" = 1'-0"

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

BENLIC DEVELOMENT LLC
403 MAIN STREET, SUITE 602
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PROJECT NUMBER: 2317.006

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DRAWING TITLE
BUILDING SECTIONS

REVISIONS AFTER ISSUANCE

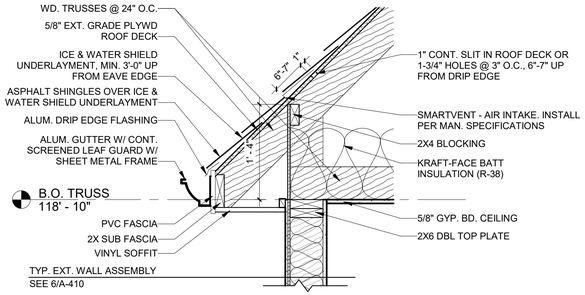
NO.	DATE	DESCRIPTION

SEAL

REGISTERED ARCHITECT · MATTHEW W. MEIER · 021581-1 · STATE OF NEW YORK

ISSUE DATE 09.19.25

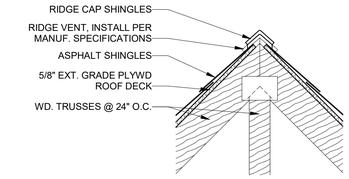
DRAWING NUMBER
A-402



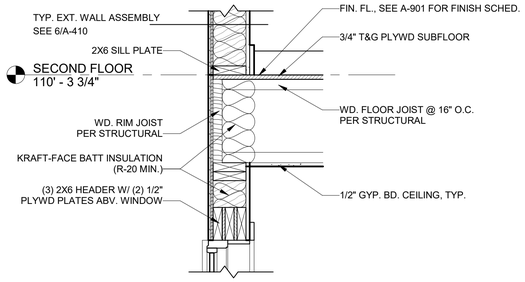
10 EAVE DETAIL, TYP.
1" = 1'-0"

GENERAL NOTE:

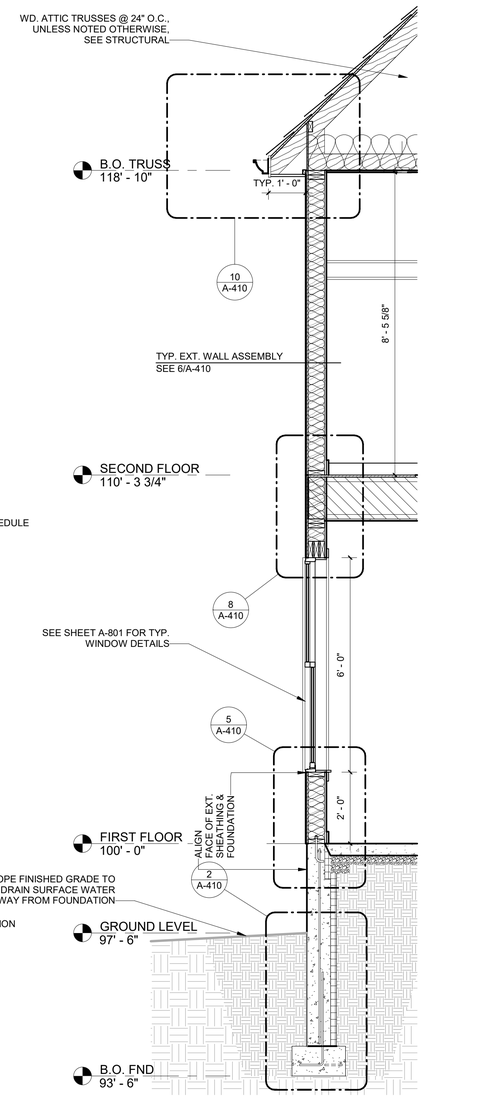
A. SEE A-901 FOR EXTERIOR FINISHES



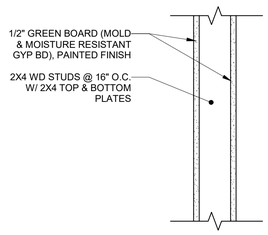
9 RIDGE DETAIL, TYP.
1" = 1'-0"



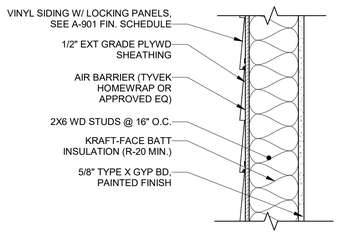
8 SECOND FLOOR DETAIL, TYP.
1" = 1'-0"



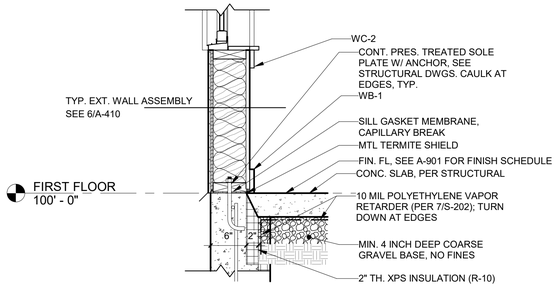
1 TYP. EXT. WALL SECTION (SLAB ON GRADE)
1/2" = 1'-0"



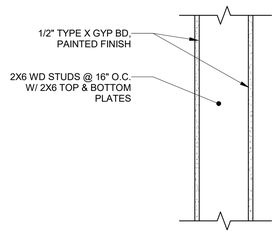
7 INTERIOR PARTITION IN WET AREAS
1 1/2" = 1'-0"



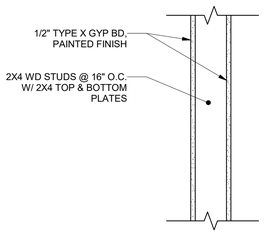
6 TYP EXT WALL ASSEMBLY
1 1/2" = 1'-0"



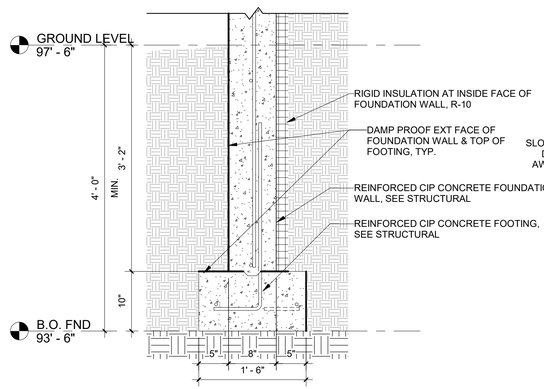
5 FIRST FLOOR DETAIL (SLAB ON GRADE)
1" = 1'-0"



4 INTERIOR 2X6 PARTITION
1 1/2" = 1'-0"



3 TYP INTERIOR PARTITION
1 1/2" = 1'-0"



2 TYPICAL FOUNDATION DETAIL
1" = 1'-0"

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PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

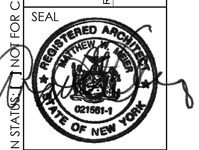
PROJECT NUMBER: **2317.006**

BENLIC DEVELOPMENT LLC.
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

DRAWING TITLE
WALL SECTIONS

REVISIONS AFTER ISSUANCE	
NO.	DATE
	DESCRIPTION

SEAL

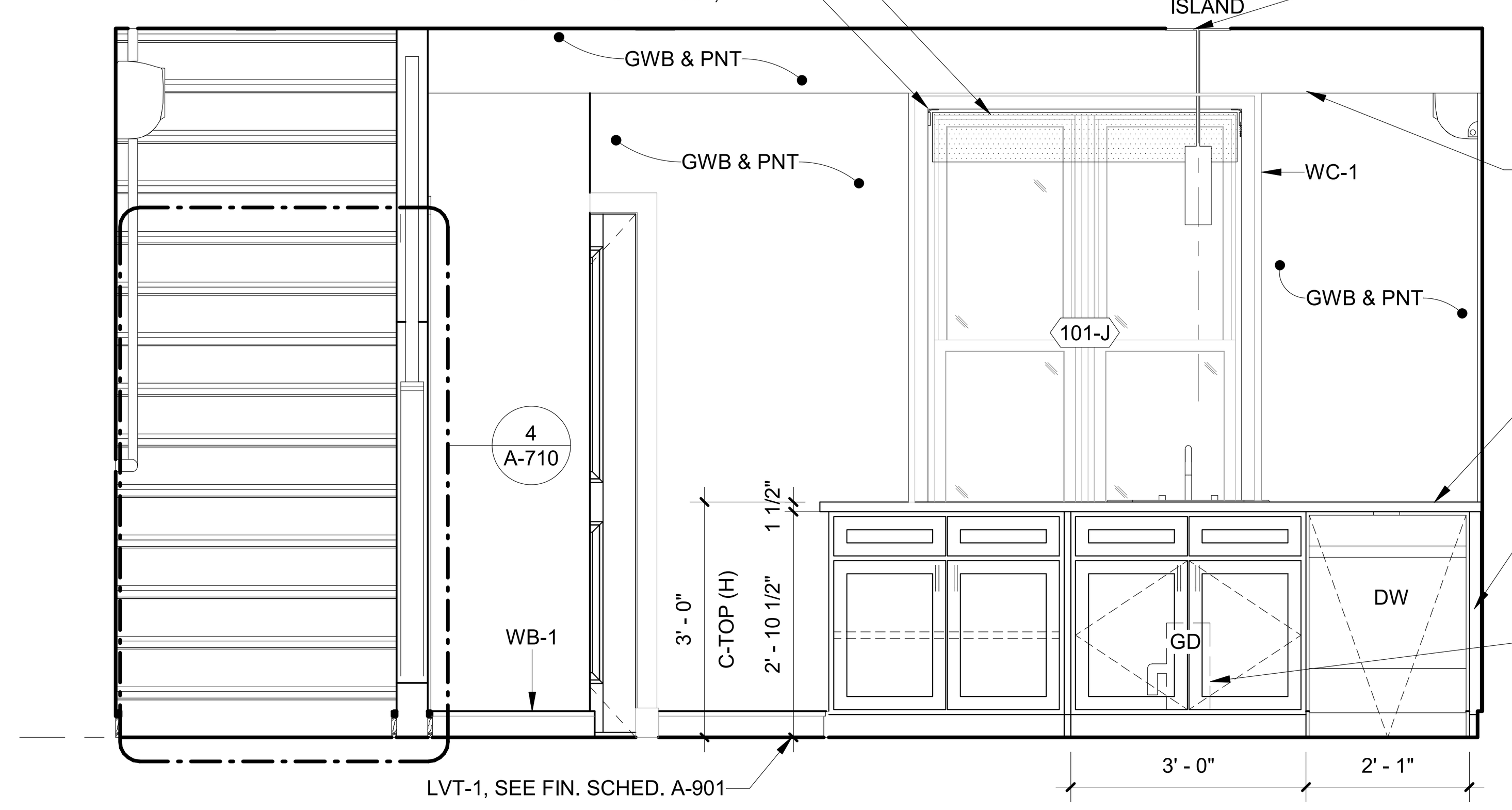


ISSUE DATE 09.19.25

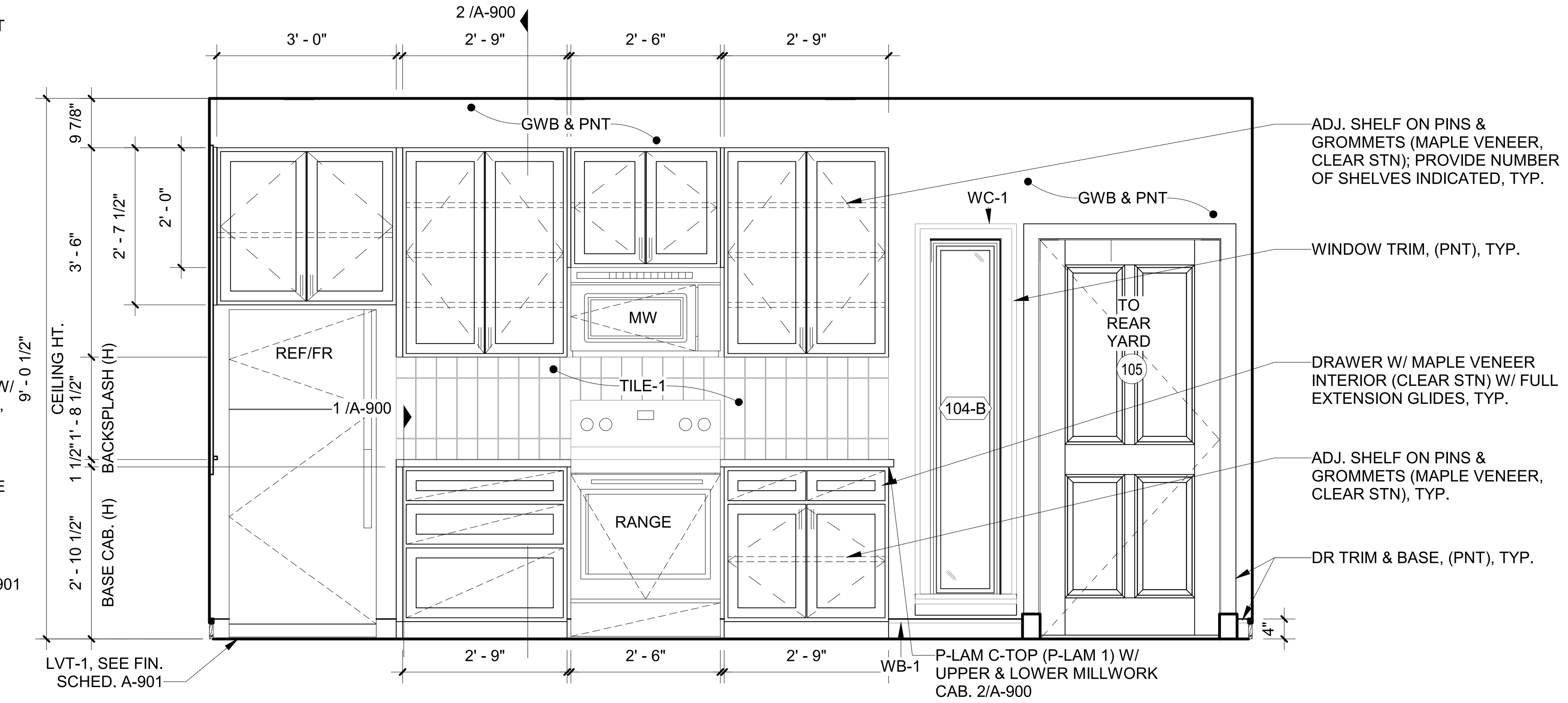
DRAWING NUMBER
A-410

GENERAL NOTE:

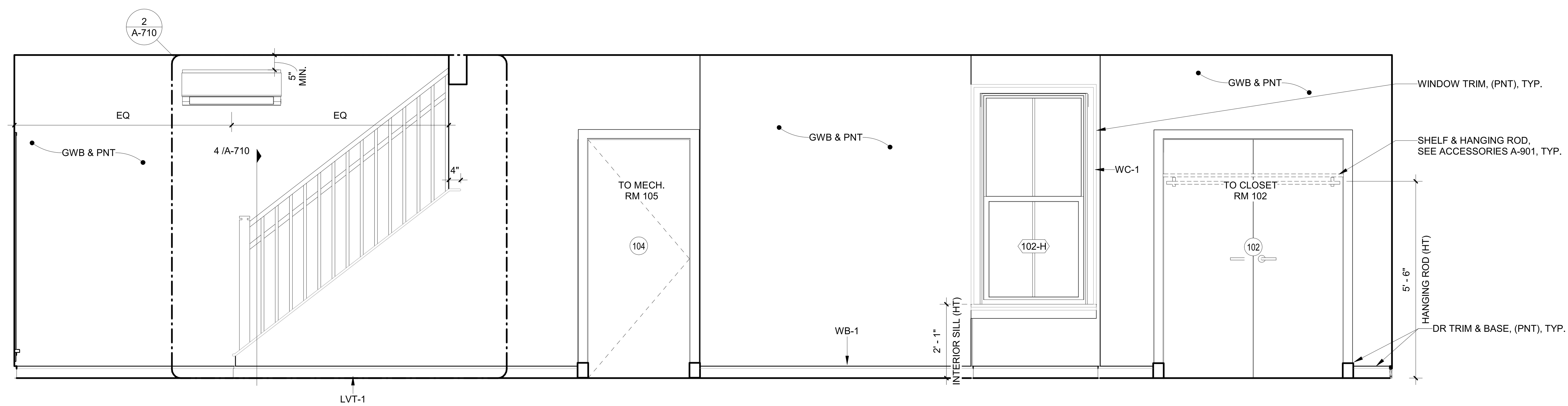
1. FOR APPLIANCES SEE A-901
2. FOR KITCHEN MILLWORK DETAILS SEE A-900
3. FOR DOOR & BASE DETAILS SEE A-901.
4. FOR CLOSET SHELVING SEE A-901



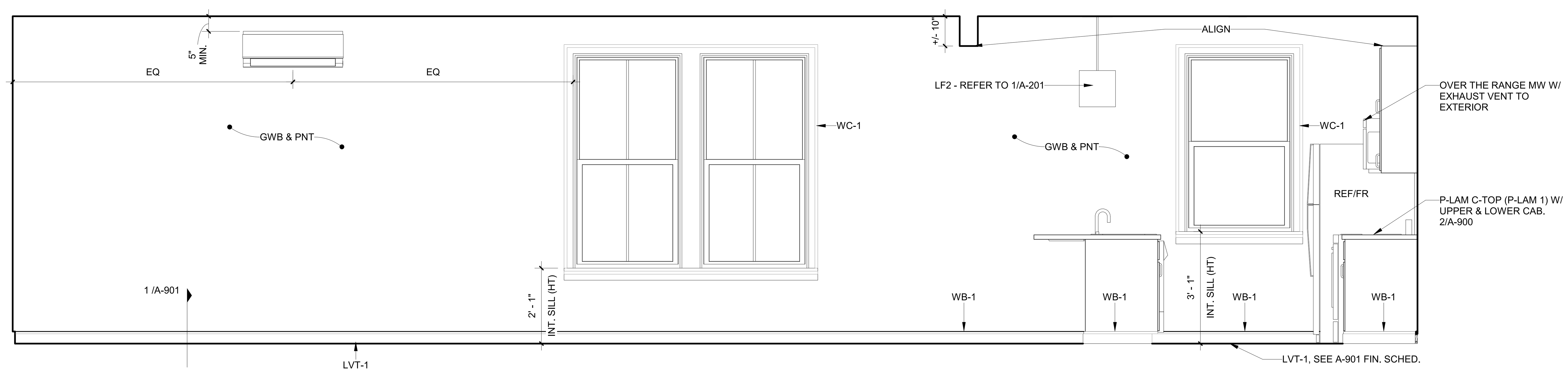
4 KITCHEN - DINING -EAST ELEVATION
1/2" = 1'-0"



3 KITCHEN -WEST ELEVATION
1/2" = 1'-0"



2 DINING - LIVING ROOM NORTH ELEVATION
1/2" = 1'-0"



1 KITCHEN - DINING - LIVING ROOM - SOUTH ELEVATION
1/2" = 1'-0"

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PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

PROJECT NUMBER: **2317.006**

BENLIC DEVELOMENT LLC
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DRAWING TITLE
INTERIOR ELEVATIONS

REVISIONS AFTER ISSUANCE

NO.	DATE	DESCRIPTION

SEAL

REGISTERED ARCHITECT MATTHEW W. MEIER 021581-1 STATE OF NEW YORK

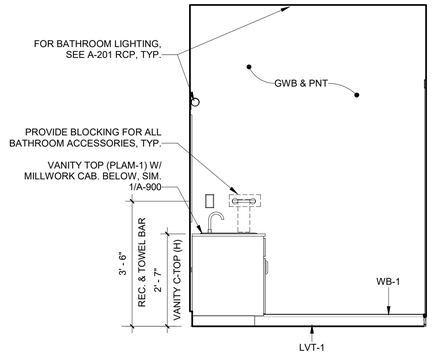
ISSUE DATE09.19.25

DRAWING NUMBER

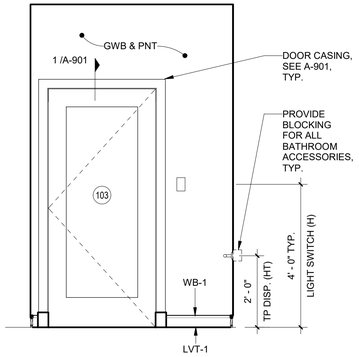
A-600

GENERAL NOTE:

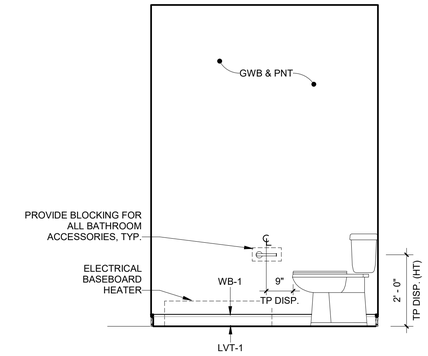
1. FOR BATH MILLWORK DETAILS SEE A-900
2. FOR DOOR CASING & BASE DETAILS SEE A-901.
3. FOR TOILET ACCESSORIES SEE A-901



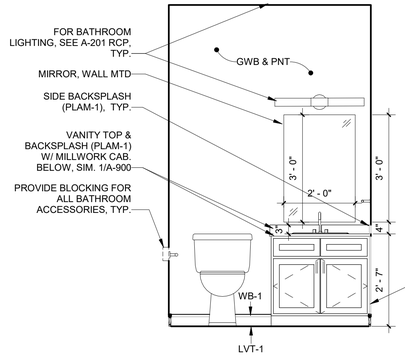
8 1/2 BATHROOM NORTH ELEVATION
1/2" = 1'-0"



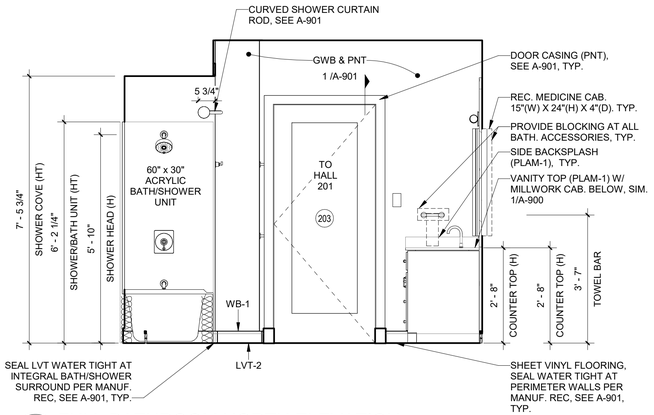
7 1/2 BATHROOM EAST ELEVATION
1/2" = 1'-0"



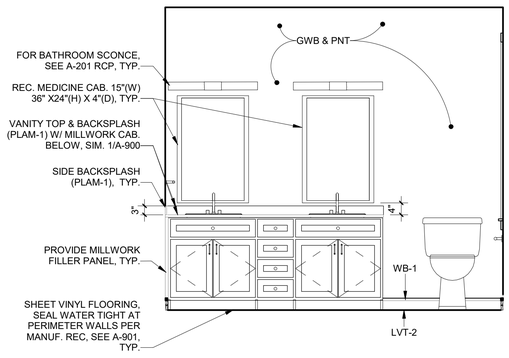
6 1/2 BATHROOM SOUTH ELEVATION
1/2" = 1'-0"



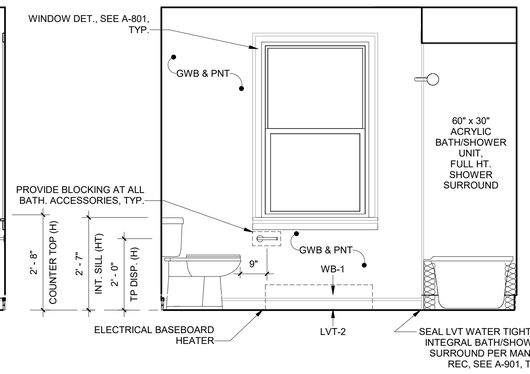
5 1/2 BATHROOM WEST ELEVATION
1/2" = 1'-0"



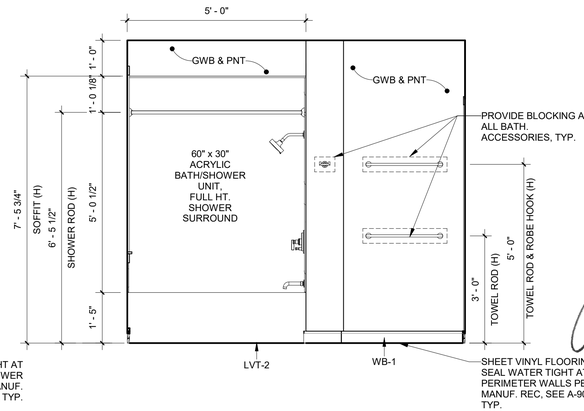
4 FULL BATHROOM NORTH ELEVATION
1/2" = 1'-0"



3 FULL BATHROOM EAST ELEVATION
1/2" = 1'-0"



2 FULL BATHROOM SOUTH ELEVATION
1/2" = 1'-0"



1 FULL BATHROOM WEST ELEVATION
1/2" = 1'-0"

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC.
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

PROJECT NUMBER: **2317.006**

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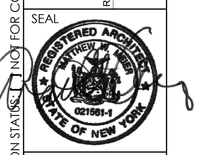
DRAWING TITLE
INTERIOR ELEVATIONS

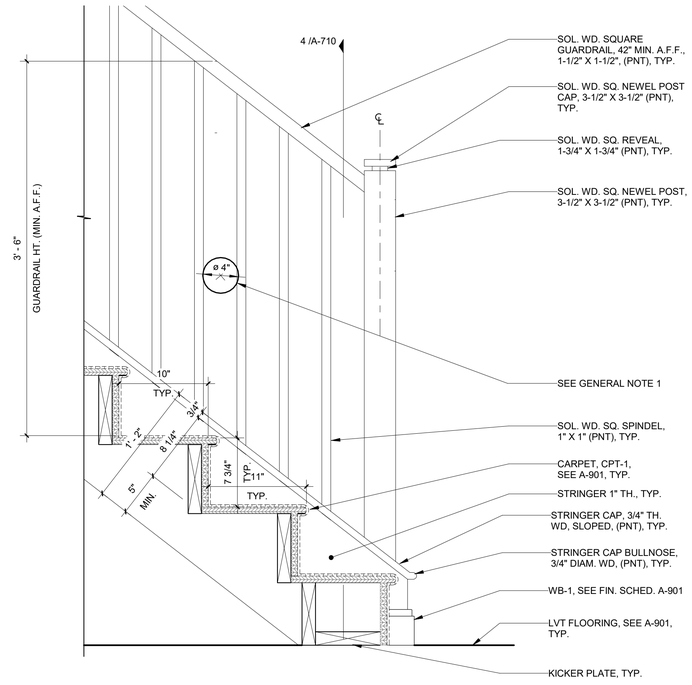
REVISIONS AFTER ISSUANCE	
NO.	DESCRIPTION
DATE	

SEAL



ISSUE DATE09.19.25

DRAWING NUMBER
A-601

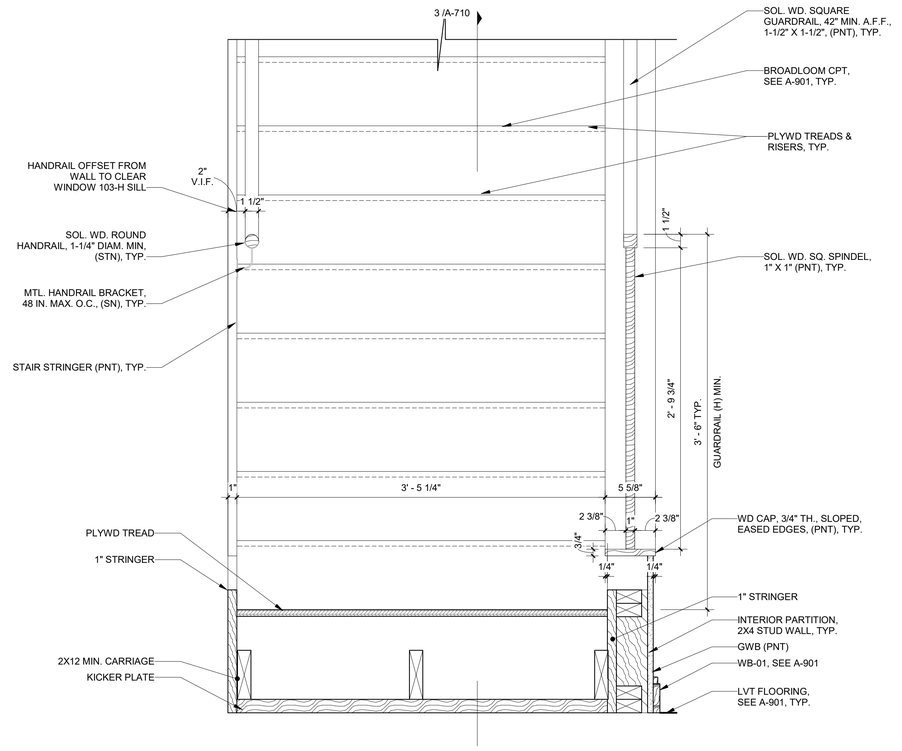


5 STAIR SECTION DETAIL 1
1 1/2" = 1'-0"

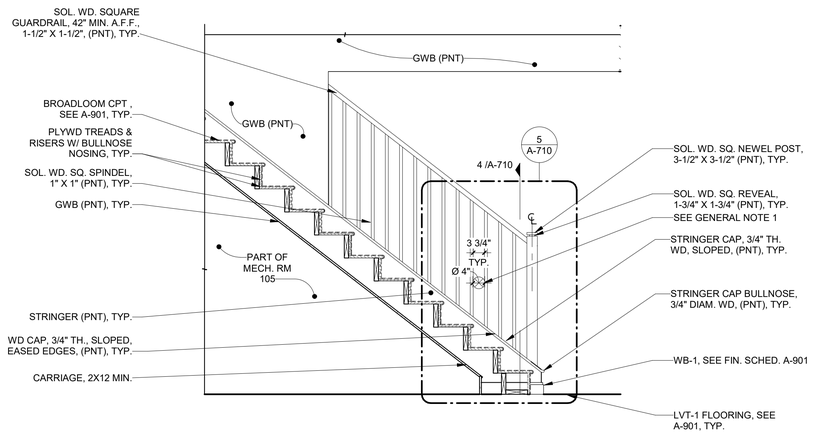
GENERAL NOTES:

1. AT GUARDRAILS, ALL OPENINGS MUST NOT ALLOW A 4" DIAM SPHERE TO PASS THROUGH.

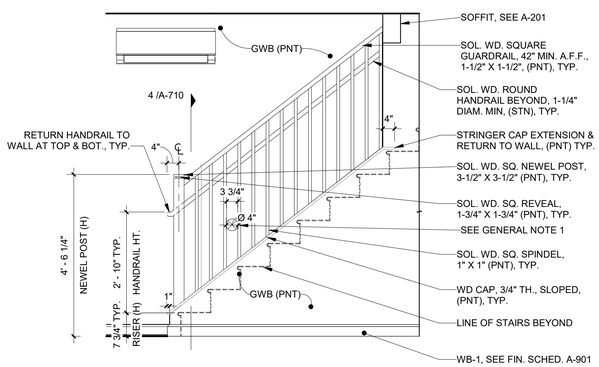
2. HANDRAIL SUPPORT BRACKETS SPACED 48 IN. MAX. O.C.
2A. PROVIDE BLOCKING IN WALL TO SUPPORT BRACKETS.



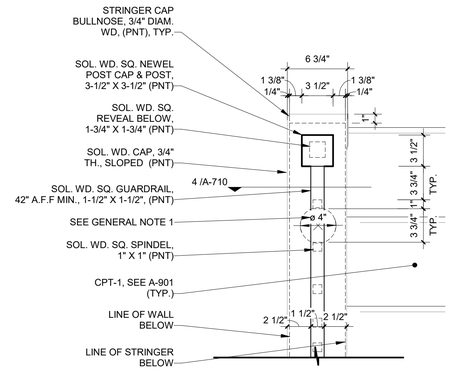
4 STAIR SECTION DETAIL 2
1 1/2" = 1'-0"



3 STAIR SECTION
1/2" = 1'-0"



2 STAIR GUARDRAIL ELEVATION
1/2" = 1'-0"



1 STAIR - PLAN SECTION DETAIL
1 1/2" = 1'-0"

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[ ] ARCHITECT OF RECORD

DRAWING TITLE
STAIR DETAILS

REVISIONS AFTER ISSUANCE

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REGISTERED ARCHITECT MATTHEW L. HESS 021581-1 STATE OF NEW YORK

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A-710

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BENLIC DEVELOPMENT LLC.
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

PROJECT NUMBER: **2317.006**

GENERAL NOTES:

1. PREHUNG INTERIOR DOORS (1-3/8" TH) HINGES TO MATCH FINISH OF DOOR HARDWARE
2. USE DOOR STOP HINGE PIN FROM HARDWARE SET #1 AT ALL DOORS.

HOUSE TYPE 4: DOOR HARDWARE SETS: BASIS OF DESIGN

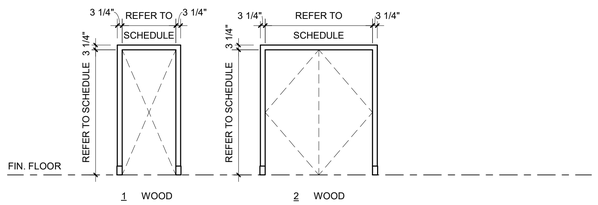
DOOR HARDWARE #	DOOR TYPE	COMPONENTS	MANUF./ SERIES	FIN	MODEL #	DIM	COMMENTS
1	EXTERIOR - FRONT & BACK	DOOR HANDLE SET: DEAD BOLT, EXTERIOR HANDLE SET, INTERIOR PASSAGE DOOR/LEVER	SCHLAGE / CENTURY	SATIN NICKEL	F60 G CEN 619 LAT	17.19 IN H X 2.5 IN W X 2.25 IN D	DR. TH. 1-3/8" - 1-7/8" ; UNIVERSAL HANDING; LIFETIME FINISH & MECHANICAL WARRANTY
		SECURITY GUARD	DEFIANT	SATIN NICKEL	70612	4.151 IN H X 2.48 IN W X 0.833 IN D	
		DOOR SEAL	M-D BULD. PRODUCTS	BROWN	70612	36 IN L X 2 IN W X 1-3/4 H	VINYL U SHAPED SLIDE ON UNDER DOOR SEAL
		DOOR STOP: HINGE PIN	DK HARDWARE	SAT. CHROME	01273		REPLACES HINGE PIN
2	CLOSET- DOUBLE DOORS	PASSAGE SET	SCHLAGE / LATITUDE	SATIN NICKEL	F10 V LAT 619	2.75 IN H X 5.39 IN W X 2.25 IN D	DR. TH. 1-3/8" - 1-3/4" ; UNIVERSAL HANDING; LIFETIME FINISH & MECHANICAL WARRANTY
			SCHLAGE / LATITUDE	SATIN NICKEL	F170 V LAT 619	2.75 IN H X 5.39 IN W X 2.25 IN D	DUMMY HANDLE, DR. TH. 1-3/8" - 1-3/4" ; UNIVERSAL HANDING; LIFETIME FINISH & MECHANICAL WARRANTY
3	BATHROOM / BEDROOM	PRIVACY SET	SCHLAGE / LATITUDE	SATIN NICKEL	F40 V LAT 619	2.75 IN H X 5 IN W X 2.375 IN D	DR. TH. 1-3/8" - 1-3/4" ; UNIVERSAL HANDING; LIFETIME FINISH & MECHANICAL WARRANTY
4	CLOSET/ MECH. RM / STORAGE/LAUNDRY	PASSAGE SET	SCHLAGE / LATITUDE	SATIN NICKEL	F10 V LAT 619	2.75 IN H X 5.39 IN W X 2.25 IN D	DR. TH. 1-3/8" - 1-3/4" ; UNIVERSAL HANDING; LIFETIME FINISH & MECHANICAL WARRANTY

POSITION DR. 104 R.O., MECH. RM, TO CLEAR UNDERSIDE OF STAIR STRINGER

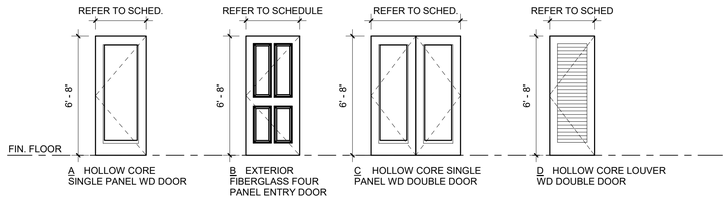
DOOR SCHEDULE

OPENING NUMBER	TYPE	DOOR SIZE OPENING WIDTH	DOOR SIZE LEAF WIDTH	DOOR OPENING HEIGHT	DOOR THK	DOOR MATL	DOOR FINISH	DOOR GLASS	FRAME TYPE	FRAME MATL	FRAME FINISH	FRAME DETAILS HEAD	FRAME DETAILS JAMB	FRAME DETAILS SILL	FRAME GLASS	FIRE RATING (MIN.)	HDW SET	REMARKS
FIRST FLOOR																		
101	B	3' - 0"		6' - 8"	1 3/8"	FIBERGLASS	PNT-1	--	1	WD	PNT-1				--		1	
102	C	5' - 0"		6' - 8"	1 3/4"	WD	PNT-1	--	2	WD	PNT-1				--		2	
103	A	3' - 0"		6' - 8"	1 3/8"	WD	PNT-1	--	1	WD	PNT-1				--		3	
104	A	2' - 10"		6' - 8"	1 3/8"	WD	PNT-1	--	1	WD	--				--		4	
105	B	3' - 0"		6' - 8"	1 3/8"	FIBERGLASS	--	--	1	WD	PNT-1				--		1	
201H	OX	6' - 2 1/2"		6' - 8"	6 3/8"													
SECOND FLOOR																		
201	A	2' - 10"		6' - 8"	1 3/8"													
201A	D	2' - 10"		6' - 8"	1 3/8"	WD	--	--	1	WD	--				--		4	LOUVER DOOR
202	A	2' - 10"		6' - 8"	1 3/8"													
202A	A	2' - 10"		6' - 8"	1 3/8"													
203	A	2' - 10"		6' - 8"	1 3/8"	WD	PNT-1	--	1	WD	PNT-1				--		3	
204	A	2' - 10"		6' - 8"	1 3/8"	WD	PNT-1	--	1	WD	PNT-1				--		3	
204A	A	2' - 6"		6' - 8"	1 3/8"	WD	PNT-1	--	1	WD	PNT-1				--		4	
205	A	2' - 10"		6' - 8"	1 3/8"													
205A	A	2' - 10"		6' - 8"	1 3/8"													

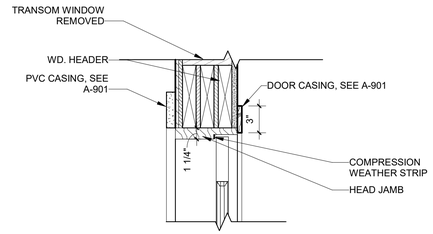
Grand total: 15



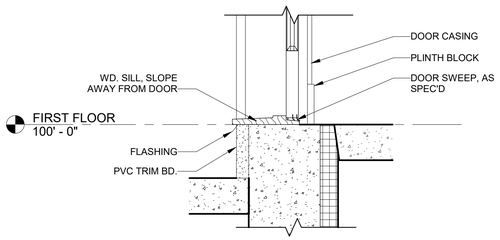
FRAME TYPES



DOOR TYPES



2 EXTERIOR DOOR HEAD DETAIL
1 1/2" = 1'-0"



1 EXTERIOR DOOR JAMB AND SILL DETAIL
1 1/2" = 1'-0"

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
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BENLIC DEVELOPMENT LLC.
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK, 14203
PROJECT NUMBER: **2317.006**

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION
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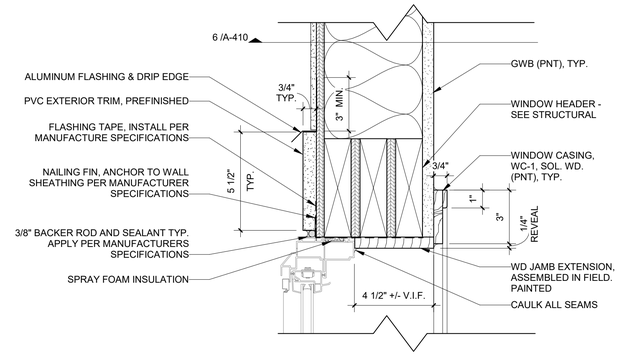
DRAWING TITLE
DOOR SCHEDULE AND DETAILS

REVISIONS AFTER ISSUANCE NO.	DATE	DESCRIPTION

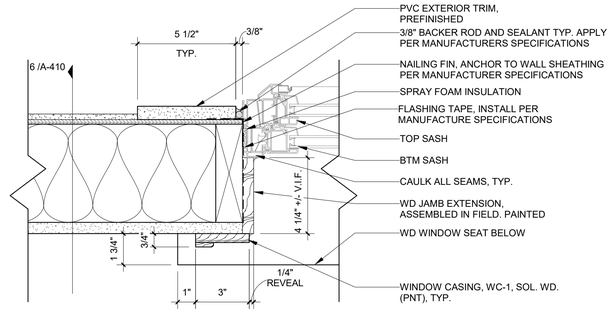
SEAL

ISSUE DATE 09.19.25

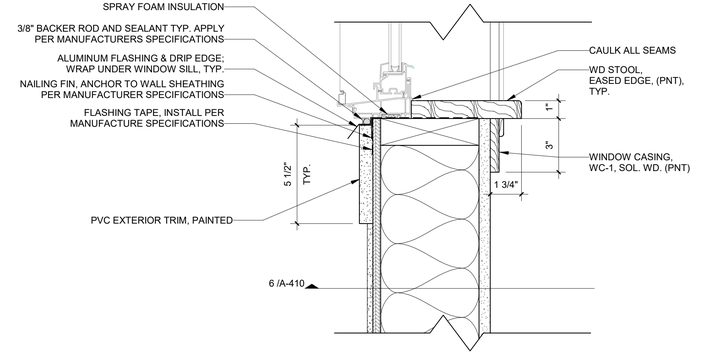
DRAWING NUMBER
A-800



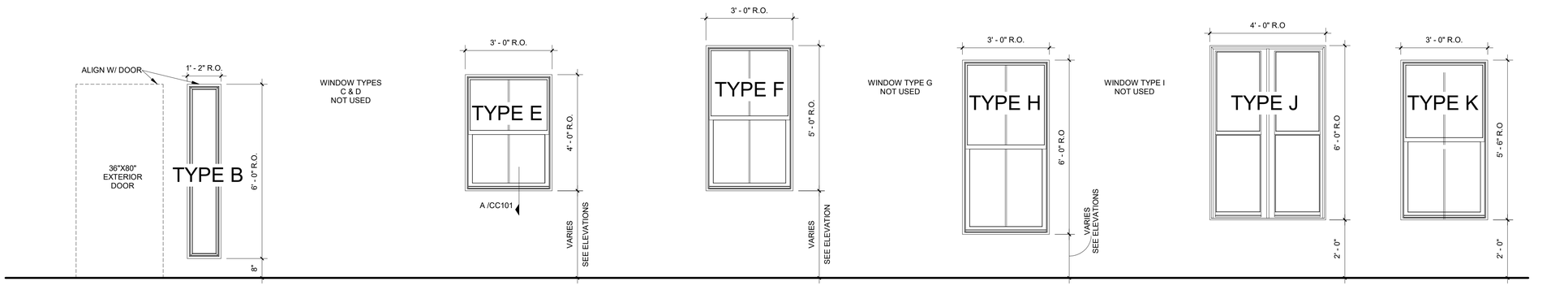
4 HEAD DETAIL - TYPICAL
3" = 1'-0"



2 JAMB DETAIL - TYPICAL
3" = 1'-0"



1 SILL DETAIL - TYPICAL
3" = 1'-0"



TYPE B

WINDOW STYLE: FIXED FRAME
ROUGH OPENING: 13-1/2" X 79-1/2"
COUNT: 1
TEMPERED GLASS

TYPE E

WINDOW STYLE: DOUBLE HUNG
ROUGH OPENING: 35-1/2" X47-1/2"
COUNT: 1

TYPE F

WINDOW STYLE: DOUBLE HUNG
ROUGH OPENING: 35-1/2" X 59-1/2"
COUNT: 2

TYPE H

WINDOW STYLE: DOUBLE HUNG
UNIT SIZE: 29-1/2" X 41-1/2"
COUNT: 8

TYPE J

WINDOW STYLE: DOUBLE HUNG
UNIT SIZE: 48" X 72"
COUNT: 1

TYPE K

WINDOW STYLE: DOUBLE HUNG
UNIT SIZE: 33" X 66"
COUNT: 2

DRAWING SUBMISSION STATUS [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION
[ ] AS BUILT [ ] ARCHITECT OF RECORD

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PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC.
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

PROJECT NUMBER: **2317.006**

DRAWING TITLE
WINDOW SCHEDULE AND DETAILS

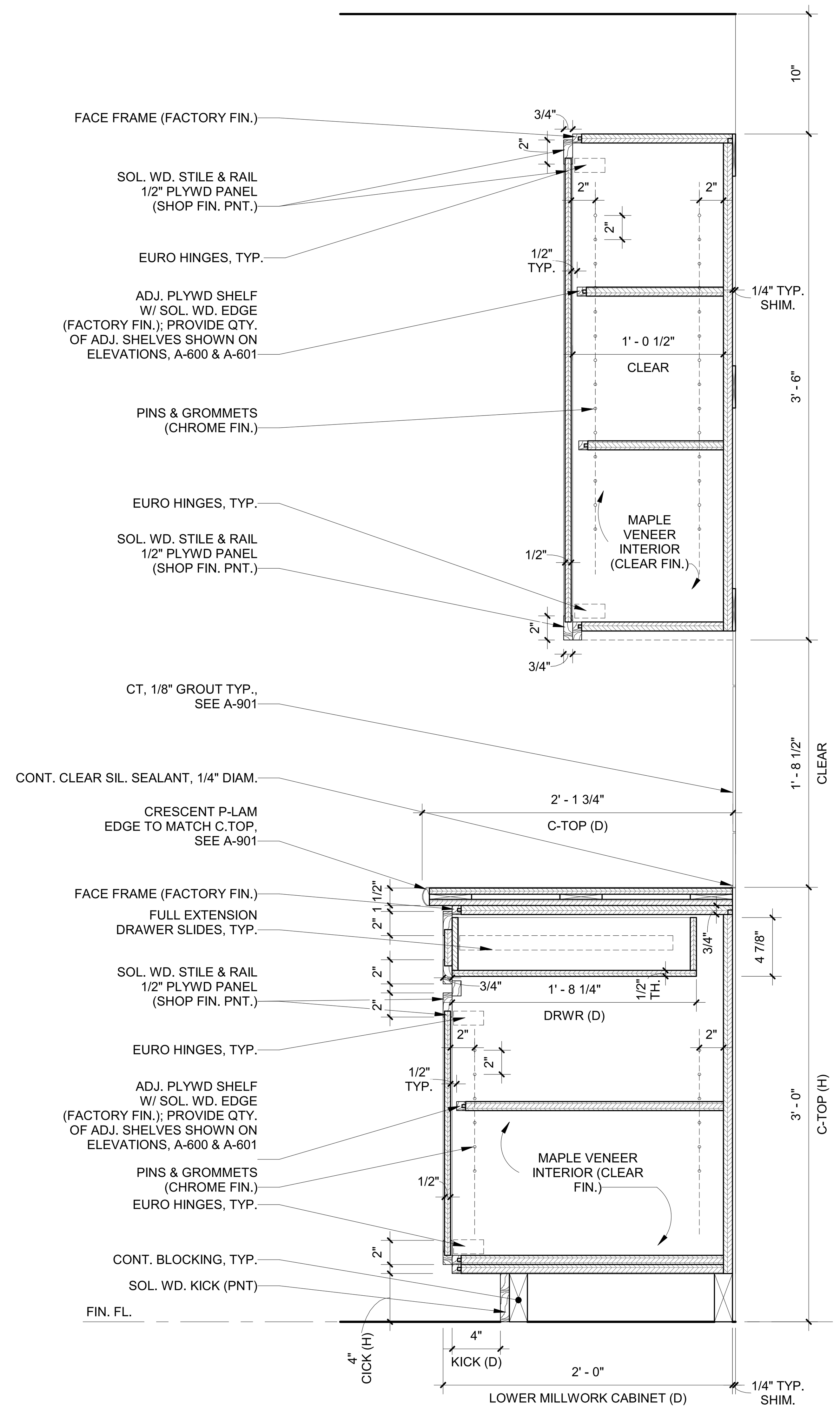
REVISIONS AFTER ISSUANCE

NO.	DATE	DESCRIPTION

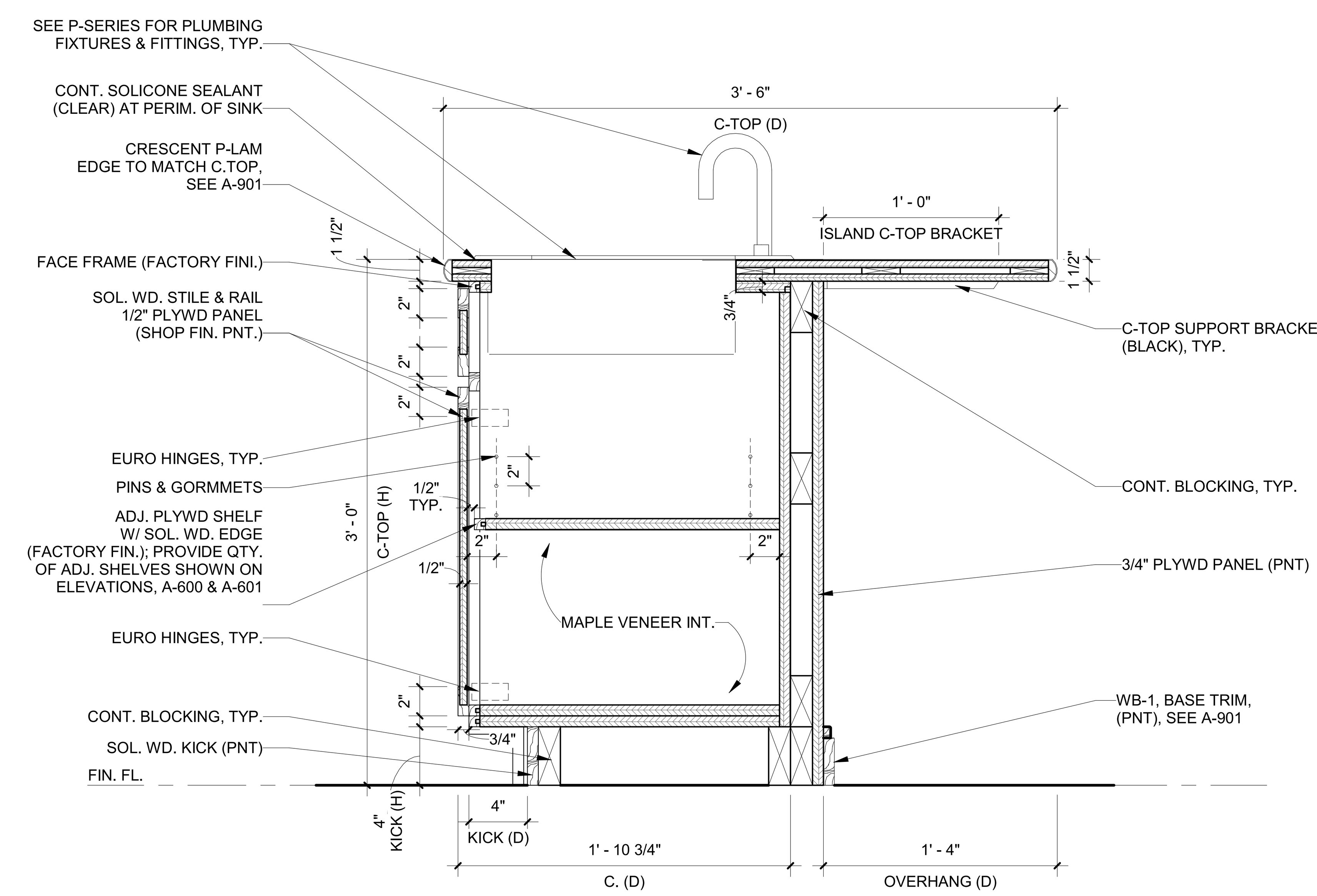
SEAL
REGISTERED ARCHITECT
MATTHEW J. HASEP
021581-1
STATE OF NEW YORK

ISSUE DATE09.19.25

DRAWING NUMBER
A-801



2 KITCHEN CABINET DETAIL
1 1/2" = 1'-0"



1 KITCHEN ISLAND MILLWORK DETAIL
1 1/2" = 1'-0"

PROJECT NAME/LOCATION:
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DRAWING TITLE
MILLWORK DETAILS

REVISIONS AFTER ISSUANCE

NO.	DATE	DESCRIPTION

SEAL
REGISTERED ARCHITECT MATTHEW W. MEIER 021581-1 STATE OF NEW YORK

ISSUE DATE09.19.25

DRAWING NUMBER
A-900

ALTERNATES:

ALTERNATE #1: PROPERTY FENCE WITH TWO (2) GATES (6'-0" (H))

ALTERNATE #2: THREE (3) ADDITIONAL TYPE F BEDROOM WINDOWS, (WINDOWS 203, 304 & 205); SEE PLAN

ALTERNATE #3: VINYL PATIO SLIDER AT REAR DOOR 105 LOCATION (B.O.D. PELLA 250 SERIES)

FINISHES:

LVT-1 FOR FIRST FLOOR ONLY: SHAW FLOORS ENDURA 512C PLUS 0736V, 7" X 48" SPC VINYL PLANK (FLOATING), 4.8 MM TH., 12 MIL WEAR LAYER, ARMOUR BEAD FINISH, MICRO BEVEL EDGE, COLOR: 5091 LIGHTHOUSE

LVT-2 FOR SECOND FL. BATH 203 ONLY:
SHAW FLOORS ASPECT VINYL SHEET, FULLY ADHERED (COLOR: 05229 IRON WEAVE)

PNT-1 FOR TRIM ONLY: SHERWIN WILLIAMS-PROMAR 200 ZERO VOC INTERIOR ACRYLIC LATEX (COLOR: SW 7012 CREAMY, SHEEN: GLOSS)

PNT-2 FOR WALLS ONLY: SHERWIN WILLIAMS-PROMAR 200 ZERO VOC INTERIOR ACRYLIC LATEX (COLOR: SW 7005 PURE WHITE, SHEEN: EGG SHELL)

PNT-3 FOR CEILINGS ONLY: SHERWIN WILLIAMS-PROMAR 200 ZERO VOC INTERIOR ACRYLIC LATEX (COLOR: SW 7757 HIGH REFLECTIVE WHITE, SHEEN: EGG SHELL)

PNT-4 ACCENT WALL AT LIVING ROOM/KITCHEN NORTH ELEVATION (1/A-600) ONLY:
SHERWIN WILLIAMS - PROMAR 200 ZERO VOC INTERIOR ACRYLIC LATEX (COLOR: SW 9185 MAREA BAJA, SHEEN: EGG SHELL)

PNT-5 BEDROOM 2 RM 204 REAR FACADE WINDOW WALL, WEST ELEVATION ONLY: SHERWIN WILLIAMS - PROMAR 200 ZERO VOC INTERIOR ACRYLIC LATEX (COLOR: SW 7057 SILVER STRAND, SHEEN: EGG SHELL)

SHADE-1 AT FRONT WINDOWS (FIRST & SECOND FLOORS): ECOFABRIX SOLAR ROLLER SHADE 3% OPENNESS, POLYESTER PVC (COLOR: 253-18 WHITE/GREY)

PLAM-1 WILSONART PREMIUM LAMINATE TEXTURED GLOSS #4925K-07 FINISH AEON SCRATCH RESISTANCE W/ SQUARE EDGE (COLOR: CALCUTTA MARBLE)

TILE-1 BEST TILE NEW YORK WHITE 4" X 12" GLOSSY CERAMIC WALL TILE 10400 ECWNEW307769

GROUT-LATICRETE PERMACOLOR GROUT (COLOR: SILVER SHADOW 88)

CPT-1 SHAW FLOORS CABANA BAY E-9955 W/ COLORGUARD BLEACH & FADE RESISTANT TECHNOLOGY & R2X STAIN TREATMENT, 100% PET POLYESTER, 10 YEAR WARRANTY (COLOR STAINLESS 542)

T-1 MSI: WHITE DOUBLE BEVELED 6.13" X 36.13 IN X 1.2 IN POL. ENGINEERED MARBLE THRESHOLD TILE TRIM MODEL #: THD2WH6X36DB

EXTERIOR

ALSIDE ODYSSEY PLUS PREMIUM VINYL SIDING (COLOR: CYPRESS)

TRIM:
ALSIDE: ALLIANCE T4: VINYL SOFFIT (COLOR: GLACIER WHITE)
ALSIDE: PERFORMANCE G8: ALUM. TRIM COIL (COLOR: GLACIER WHITE)
MOUNT BLOCKS FOR METERS & VENTS (COLOR: WHITE)
COLUMN WRAP & PORCH RAILINGS: VERSATEX (COLOR: WHITE)

PINNACLE PRISTINE HIGH PERFORMANCE ARCHITECTURAL SHINGLES WITH SCOTCHGUARD ASPHALT SHINGLES (COLOR: MAJESTIC SHAKE)

FINISH SCHEDULE

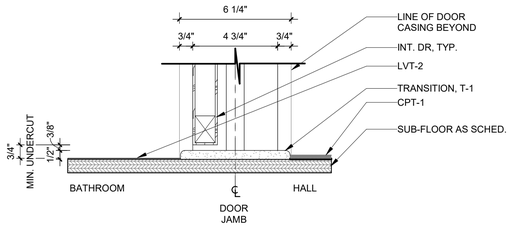
RM #	ROOM	FLOOR			WALL	WINDOW			DOOR			CEILING	HARDWARE/ LIGHTING	COMMENTS
		FL. FINISH	BASE	BASE FIN.	WALL FIN.	TREATMENT	TRIM	TRIM FIN.	FINISH	TRIM	TRIM FIN.	CEILING FIN.	HARDWARE & LIGHTING FIN.	
101	LIVING ROOM	LVT-1	WB-1	PNT-1	PNT-2 & PNT-4	SHADE-1	WC-1	PNT-1	PNT-1	DC-1	PNT-1	PNT-3	BRUSHED NICKEL POL. CHROME	
102	CLOSET	LVT-1	NONE		PNT-2	NONE			PNT-1	DC-1	PNT-1	PNT-3		
103	1/2 BATH	LVT-1	WB-1	PNT-1	PNT-2	NONE			PNT-1	DC-1	PNT-1	PNT-3	BRUSHED NICKEL POL. CHROME	LAVATORY FAUCET POLISHED CHROME & ACCESSORIES (POL. CHROME); PLAM-1 C-TOP
104	KITCHEN	LVT-1	WB-1	PNT-1	PNT-2/ TILE-1	NONE	WC-1	PNT-1	PNT-1	DC-1	PNT-1	PNT-3	BRUSHED NICKEL POL. CHROME	VIBRANT STAINLESS FOR KITCHEN FAUCET; PLAM-1 FOR C-TOP & TILE-1 FOR BACKSPLASH
105	MECH. RM.	LVT-1	NONE		PNT-2	NONE			PNT-1			PNT-3		
201	HALL	CPT-1	WB-1	PNT-1	PNT-2	NONE	WC-1	PNT-1	PNT-1	DC-1	PNT-1	PNT-3	BRUSHED NICKEL POL. CHROME	
202	BEDRM 1	CPT-1	WB-1	PNT-1	PNT-2	SHADE-1	WC-1	PNT-1	PNT-1	DC-1	PNT-1	PNT-3	BRUSHED NICKEL POL. CHROME	
202A	CLOSET	CPT-1	NONE		PNT-2	NONE			PNT-1			PNT-3	BRUSHED NICKEL POL. CHROME	
203	BATHROOM	LVT-2/T-1	WB-1	PNT-1	PNT-2	NONE	WC-1	PNT-1	PNT-1	DC-1	PNT-1	PNT-3	BRUSHED NICKEL POL. CHROME	POL. CHROME FOR BATH/SHOWER FITTINGS; LAVATORY FAUCET POL. CHROME & ACCESSORIES (POL. CHROME); PLAM-1 C-TOP
204	BEDRM 2	CPT-1	WB-1	PNT-1	PNT-2	SHADE-1	WC-1	PNT-1	PNT-1	DC-1	PNT-1	PNT-3	BRUSHED NICKEL POL. CHROME	
204A	CLOSET	CPT-1	NONE		PNT-2	NONE			PNT-1			PNT-3	BRUSHED NICKEL POL. CHROME	
205	BEDRM 3	CPT-1	WB-1	PNT-1	PNT-2	SHADE-1	WC-1	PNT-1	PNT-1	DC-1	PNT-1	PNT-3	BRUSHED NICKEL POL. CHROME	
205A	CLOSET	CPT-1	NONE		PNT-2	NONE			PNT-1			PNT-3	BRUSHED NICKEL POL. CHROME	
206	STORAGE	CPT-1	NONE		PNT-2	NONE			PNT-1			PNT-3		
207	LAUNDRY	LVT-2/T-1	WB-1	PNT-1	PNT-2	NONE			PNT-1	DC-1	PNT-1	PNT-3		

ACCESSORY SCHEDULE

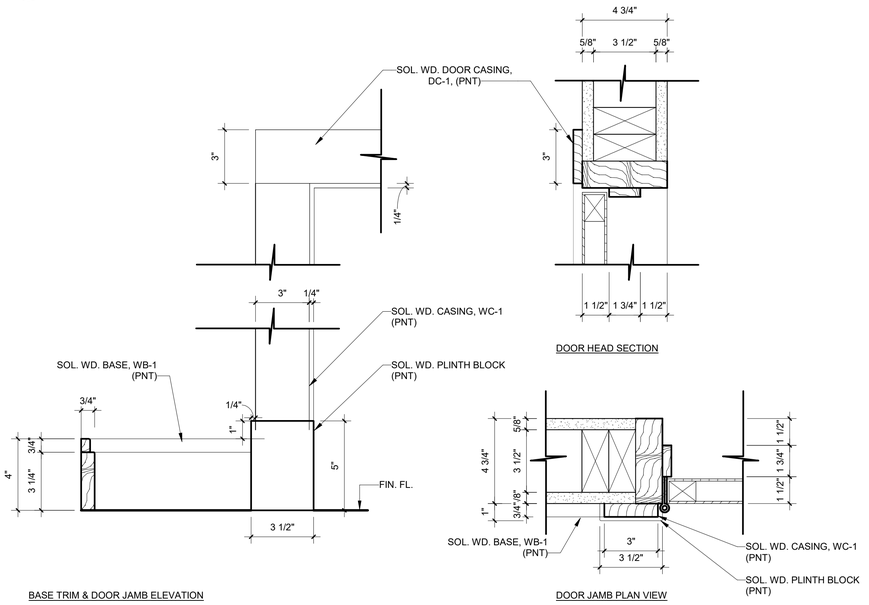
RM #	ROOM	ACCESSORY	MANUF.	FINISH	QTY	DESCRIPTION
102	CLOSET	SHELF & ROD	CLOSETMAID SUPERSLIDE	WHITE	1	5 FT TO 8 FT VENTILATED WIRE CLOSET ORGANIZER W/ SHOE, DOUBLE HANGING, LONG HANGING AND FOLDED STORAGE UP TO 400LBS; MODEL # 5037; PROVIDE BLOCKING FOR ALL HANGING SYSTEMS.
103	1/2 BATH	HAND TOWEL BAR; TP DISPENSER; ROBE HOOK; TOWEL BAR	BWE	POL. CHROME	1	4 PIECE SET: (1) ROBE HOOK, TOILET PAPER HOLDER, HAND TOWEL BAR AND TOWEL BAR; SUS304 ST. STL.; MODEL: A-91012-4-CP; PROVIDE BLOCKING
202A	CLOSET	SHELF & ROD	CLOSETMAID SUPERSLIDE	WHITE	1	5 FT TO 8 FT VENTILATED WIRE CLOSET ORGANIZER W/ SHOE, DOUBLE HANGING, LONG HANGING AND FOLDED STORAGE UP TO 400LBS; MODEL # 5037; PROVIDE BLOCKING FOR ALL HANGING SYSTEMS.
203	BATHRM	HAND TOWEL BAR; TP DISPENSER; (2) HOOKS; TOWEL BAR	BWE	POL. CHROME	1	5 PIECE SET: (2) ROBE HOOK, TOILET PAPER HOLDER, HAND TOWEL BAR AND TOWEL BAR; SUS304 ST. STL.; MODEL: A-91012-4-CP; PROVIDE BLOCKING
		24" TOWEL BAR	BWE	POL. CHROME	1	24.2 IN TOWEL BAR; MODEL # A-91089-CP
		SHOWER SHELF	GATCO	CHROME	2	8.4 IN (W) X 2.7 IN (H) X 5.9 IN (D); 5LB; MODEL #1452 PROVIDE BLOCKING
		SHOWER ROD	ZENNA HOME	CHROME	1	NEVER RUST 50 IN TO 72 IN; MODEL # 72S2ALSSL; PROVIDE BLOCKING
204A	CLOSET	SHELF & ROD	CLOSETMAID SUPERSLIDE	WHITE	1	5 FT TO 8 FT VENTILATED WIRE CLOSET ORGANIZER W/ SHOE, DOUBLE HANGING, LONG HANGING AND FOLDED STORAGE UP TO 400LBS; MODEL # 5037; PROVIDE BLOCKING FOR ALL HANGING SYSTEMS.
205A	CLOSET	SHELF & ROD	CLOSETMAID SUPERSLIDE	WHITE	1	5 FT TO 8 FT VENTILATED WIRE CLOSET ORGANIZER W/ SHOE, DOUBLE HANGING, LONG HANGING AND FOLDED STORAGE UP TO 400LBS; MODEL # 5037; PROVIDE BLOCKING FOR ALL HANGING SYSTEMS.
206	STORAGE	SHELF & ROD	CLOSETMAID SUPERSLIDE	WHITE	1	5 FT TO 8 FT VENTILATED WIRE CLOSET ORGANIZER W/ SHOE, DOUBLE HANGING, LONG HANGING AND FOLDED STORAGE UP TO 400LBS; MODEL # 5037; PROVIDE BLOCKING FOR ALL HANGING SYSTEMS.
205	LAUNDRY	SHELF & ROD	EZ SHELF	WHITE	1	EXPANDABLE LAUNDRY ROOM SHELVES; ONE SHELF W/ CLOSET ROD & ONE W/O ROD; 200 LBS PER SHELF; MODEL #EZS-K-WLR; PROVIDED BLOCKING FOR ALL HANGING SYSTEMS

APPLIANCE SCHEDULE

105	KITCHEN	30" RANGE OVEN; ADA COMPLIANT FRONT CONTROLS, 4.8 CU. FT.	WHIRLPOOL	WHITE	1	WFC315S0JW; 29-7/8" W X 47-7/8" H X 28" D; ELECTRIC RANGE & OVEN; KEEP WARM SETTING
105	KITCHEN	OVER THE RANGE MICROWAVE	WHIRLPOOL	WHITE	1	WMMS3130RW 29-7/8" W X 15-9/16" H X 17-7/8" D; **EXTERNAL VENTING**
105	KITCHEN	REF/FR 18.3 CU. FT. ; ENERGY STAR QUALIFIED	WHIRLPOOL	WHITE	1	WRT148FZDW; 29-1/2" W X 65-7/8" H X 33-1/2" D; LED LIGHTING, ADJ. SHELVES, TEMP. CONTROLS, ADA COMPLIANT
105	KITCHEN	DISHWASHER, TOP CONTROL W/ ST. STL. INTERIOR; ENERGY STAR	WHIRLPOOL	WHITE	1	WDT550SAPW; 23-9/16" W X 32-5/16" H X 25-3/8" D; ST. STL TUB, ENERGY STAR QUALIFIED, ADA COMPLIANT, 44dBA
105	KITCHEN	GARBAGE DISPOSAL	SINK PRO	ST. STL.	1	SEE ADD ALTERNATE 2; SINK PRO X0D12PRO; 3 BOLT MOUNT SYSTEM CONTINUOUS FEED W/ ON/OFF SWITCH
205	LAUNDRY	UNITIZED STACKING W/D	WHIRLPOOL	WHITE	1	WET4027HW; 27-1/4" W X 75-1/2" H X 32-7/16" D; 3.5 CU. FT. WASHER, 5.9 CU. FT. DRYER; 4 DRYING CYCLES



2 T1 TRANSITION LVT TO CPT
3" = 1'-0"



1 TRIM BASE CASING AND PLINTH BLOCK
3" = 1'-0"

PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET , SINGLE FAMILY HOME
PROJECT NUMBER: **2317.006**

BENLIC DEVELOPMENT LLC.
403 MAIN STREET, SUITE 402
BUFFALO, NEW YORK, 14203

[X] ISSUED FOR CONSTRUCTION
[ ] DESIGN DEVELOPMENT
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DRAWING TITLE
SCHEDULES & DETAILS

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NO.	DATE	DESCRIPTION

SEAL

ISSUE DATE 09.19.25

DRAWING NUMBER
A-901

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	DRAINAGE		WATER		G	MAKE AND MODEL AND ACCESSORIES
		SAN	VENT	CW	HW		
WC–1	WATER CLOSET FLUSH TANK FLOOR MOUNT, ELONGATED WHITE VITREOUS CHINA	3"	2"	3/4"	–	–	GERBER MODEL GWS20918, "MAXWELL" WATER CLOSET, 1.28 GPF, ELONGATED BOWL, ADA COMPLIANT, WATERSENSE CERTIFIED, WITH TANK COVER AND TRIP LEVER. COORDINATE TRIP LEVER LOCATION WITH OPEN SIDE OF WATER CLOSET. CHURCH MODEL # 1400TTC RESIDENTIAL TOILET SEAT, CLOSED FRONT, ELONGATED, WITH COVER. PROVIDE FLEXIBLE DOMESTIC WATER SUPPLY.
L–1	LAVATORY UNDERMOUNT WHITE VITREOUS CHINA MANUAL FAUCET	2"	2"	1/2"	1/2"	–	GERBER MODEL G0012834CH, DROP IN, ADA COMPLIANT, FRONT OVERFLOW, OVAL DESIGN. GERBER MODEL G0040024, SINGLE HANDLE FAUCET WITH METAL TOUCH DOWN DRAIN ASSEMBLY, 4" CENTERS, SINGLE LEVER HANDLE, 1.0 GPM AERATOR, WATERSENSE CERTIFIED. PROVIDE FLEXIBLE DOMESTIC WATER SUPPLY.
S–1	KITCHENETTE SINKS	2"	2"	1/2"	1/2"	–	ELKAY MODEL D12522, SINGLE BOWL DROP IN, 18 GAUGE 304 STAINLESS STEEL WITH CENTER DRAIN. GERBER MODEL 40–210–W, THREE HOLE WITH SIDE SPRAYER, 1.75 GPM, ADA COMPLIANT. PROVIDE FLEXIBLE DOMESTIC WATER SUPPLY. PROVIDE OFFSET TRAP FOR ADA LOCATIONS. PLUMBING ADD ALTERNATE TO PROVIDE PROVISIONS FOR GARBAGE DISPOSAL TO BE PROVIDED BY OTHERS.
BT–1	BATHTUB	2"	2"	1/2"	1/2"	–	STERLING MODEL 71370120, 60"X30" BATH/SHOWER, RIGHT DRAIN, 16" APRON. GERBER MODEL G000G9155TC, SINGLE HANDEL TUB AND SHOWER TRIM KIT, DIVERTER ON TUB SPOUT, WATER SENSE CERTIFIED, ADA COMPLIANT, G00GS505 TUB AND SHOWER FAUCET ROUGH IN VALVE.
SH–1	SHOWER	2"	2"	1/2"	1/2"	–	OASIS MODEL SHFW–6235, 62"Wx36.25"Dx76.25"H, ONE PIECE FIBERGLASS COMPOSITE CONSTRUCTION, CENTER DRAIN. KOHLER MODEL K–TS45106–4G, RITE TEMP SHOWER KIT, 1.75 GPM, WATER SENSE CERTIFIED, ANTI–SCALD PROTECTION, PROVIDE WITH K–8304 VALVE AND CARTRIDGE KITS. PROVIDE ALL SHOWER ACCESSORIES INCLUDING GRAB BARS PER ARCHITECTURAL ELEVATIONS.
WH–1	NON–FREEZE WALL HYDRANT	–	–	3/4"	–	–	JAY R. SMITH MODEL # 5509QT BRONZE NICKEL PLATED QUARTER TURN SELF DRAINING NON–FREEZE HYDRANT WITH HOSE CONNECTION, INTEGRAL VACUUM BREAKER, "T" HANDLE KEY WITH SPARE, CHROME PLATED, NSF/ANSI STANDARD 61.
FD–1	FLOOR DRAIN	3"	2"	–	–	–	OATEY MODEL 72000 SERIES, ADJUSTABLE PVC DRAIN, 3", NO HUB, 5" DIAMETER ADJUSTABLE ROUND. PROSET SYSTEMS FLOOR DRAIN TRAP GUARD, VERIFY SIZE BASED ON MANUFACTURERS SPECIFICATIONS.
FD–2	FLOOR DRAIN	4"	2"	–	–	–	OATEY MODEL 72000 SERIES, ADJUSTABLE PVC DRAIN, 4", NO HUB, 5" DIAMETER ADJUSTABLE ROUND. PROSET SYSTEMS FLOOR DRAIN TRAP GUARD, VERIFY SIZE BASED ON MANUFACTURERS SPECIFICATIONS.
WMB–1	WASHING MACHINE BOX	–	–	3/4"	3/4"	–	SIOUX CHIEF MODEL # 696RG1W, NO LEAD VALVES, WITH ARRESTER, FIRE RATED OUTLET BOX. PROVIDE DRAIN PANS FOR WASHING MACHINES.
EWH–1	ELECTRIC WATER HEATER	–	–	–	–	–	'BRADFORD WHITE' MODEL 'RE255T6' 5.5 KW, 240V, 55 GALLON CAPACITY, 75 GALLON FIRST HOUR RATING, 0.94 UEF, 25 GALLON RECOVERY AT 90 DEGREE RISE.

NOTE:
REFER TO SPECIFICATIONS FOR LISTING OF ACCEPTABLE MANUFACTURERS AND FURTHER PRODUCT REQUIREMENTS.
MANUFACTURERS LISTED ABOVE WERE USED FOR BASIS OF DESIGN. REFER TO DRAWINGS FOR ADDITIONAL REQUIRED ITEMS.

PIPING INSULATION SCHEDULE

INSULATE THE FOLLOWING:

A. HOT WATER PIPING

B. COLD WATER PIPING

C. LAVATORY TRAP AND WATER SUPPLIES (ON HANDICAPPED INSTALLATION).

D. ROOF DRAINAGE (ROOF DRAIN & ALL HORIZONTAL STORM WATER).

INSULATION PRODUCTS AND INSTALLATION SHALL COMPLY WITH ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

HOT WATER PIPING INSULATION SHALL BE PREFORMED, SNAP–ON FIBERGLASS INSULATION WITH PAINTABLE WHITE KRAFT OR ALUMINUM FOIL JACKET.

DOMESTIC COLD WATER AND ROOF DRAINAGE INSULATION SHALL BE SIMILAR TO HOT WATER WITH VAPOR BARRIER.

INSULATION THICKNESS SCHEDULE

SERVICES	INSULATION THICKNESS			
	CONDUCTIONS ($\frac{BTU\,IN}{HR\cdot FT^2\cdot °F}$)	1" AND LESS	1" TO 1–1/2"	1–1/2" TO 4"
<40°F	0.20–0.26	0.5	1.0	1.0
40–60°F	0.21–0.27	0.5	0.5	1.0
105–140°F	0.21–0.28	1.0	1.0	1.5

GENERAL NOTES:

A. BACKFILLING REQUIREMENTS WITHIN BUILDING: (CONTRACTOR'S RESPONSIBILITY) SUPPORT BURIED PIPING THROUGHOUT ITS ENTIRE LENGTH. WHERE TRENCHES ARE EXCAVATED SUCH THAT THE BOTTOM OF THE TRENCH FORMS THE BED FOR THE PIPE, SOLID AND CONTINUOUS LOAD BEARING SUPPORT SHALL BE PROVIDED BETWEEN JOINTS. BACKFILL SHALL BE FREE FROM DISCARDED CONSTRUCTION MATERIAL AND DEBRIS. CHECK AND COMPLY WITH LOCAL AND FEDERAL BUILDING CODE REQUIREMENTS.

B. THIS CONTRACTOR TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND FEES REQUIRED TO PERFORM ALL WORK SHOWN WITH THE PROPER AUTHORITIES.

C. REFER TO ARCHITECTURAL SITE PLANS AND LANDSCAPE DRAWINGS FOR AREAS OF GRADING, SIDEWALKS, DRIVES, ETC.

D. ALL PIPING UNDER PAVED AREAS TO BE BACKFILLED WITH SELECT FILL.

E. COORDINATE WITH OWNER PRIOR TO MAKING ANY SHUTDOWNS OF EXISTING SERVICES TO LIMIT DISTURBANCES TO BUILDING OPERATION.

F. PROVIDE FINAL CONNECTION TO ALL FIXTURES AND EQUIPMENT INCLUDING ALL REQUIRED VALVES, TRAPS, SUPPLIES, REDUCERS, ETC.

G. FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS, FLOORS AND CEILING WITH APPROVED FIRESTOP SEALANT. PROVIDE INTUMESCENT SEAL FOR PLASTIC PIPING PENETRATING FIRE RATED ASSEMBLIES INCLUDING WALLS, FLOORS AND CEILINGS.

H. ALL WORK IS TO BE IN ACCORDANCE WITH ENERGY STAR . NYSERDA'S MULTIFAMILY PERFORMANCE PROGRAM FOR NEW CONSTRUCTION HOUSING, THIRD PARTY STANDARD REQUIREMENTS VERSIONS 1.1. REFER TO AIR SEALING NOTES (G–002), SPECIFICATIONS CHECKLIST AS WELL AS TYPICAL GREEN BUILDING DETAILS (A–701–704).

I. ALL WORK TO BE IN ACCORDANCE WITH ENTERPRISE GREEN COMMUNITIES 2020, MANDATORY AND PROJECT – SELECTED CRITERIA. REFER TO CHECKLIST IN SPECIFICATIONS.

J. SUB CONTRACTORS / SPECIFIC TRADES ARE RESPONSIBLE TO REVIEW ALL SETS FOR COORDINATION TO ACHIEVE INTENT OF DOCUMENTS AS IT RELATES TO THE FINAL PRODUCT AND REQUIRED ENERGY CONSERVATION AND AIR SEALING COMPLIANCE. CONTRACTOR OR SUBCONTRACTOR(S) WILL NOT BE RELIEVED OF OBLIGATIONS FOR NOT COORDINATING WITH ALL DRAWINGS WITHIN THIS SET.

PIPING MATERIAL SCHEDULE

SERVICE		PIPE MATERIALS	FITTINGS	CONNECTION
WATER	ABOVE GROUND	TYPE "L" COPPER/PEX–A	WROUGHT COPPER/ PEX–A	NO–LEAD SOLDER/COMPRESSION JOINTS
	BELOW GROUND	TYPE "K" COPPER	TYPE "K" COPPER	BRAZED OR COMPRESSED JOINTS
SANITARY		SCHEDULE 40 PVC	NO HUB OR HUB AND SPIGOT	SOLVENT/WELD
VENT		SCHEDULE 40 PVC	NO HUB OR HUB AND SPIGOT	SOLVENT/WELD
STORM		SCHEDULE 40 PVC	NO HUB OR HUB AND SPIGOT	SOLVENT/WELD
GAS	2" AND UNDER	SCHEDULE 40 BLACK STEEL	MALLEABLE IRON	THREADED
	OVER 2"	SCHEDULE 40 BLACK STEEL	BUTT WELDED STEEL	WELDED

SHOCK ABSORBER SCHEDULE

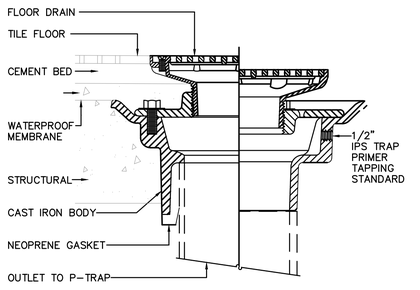
P.D.I. UNITS	FIXTURE UNITS	PIPE SIZE
A	1 – 11	1/2"
B	12 – 32	3/4"
C	33 – 60	1"
D	61 – 113	1–1/4"
E	114 – 154	1–1/2"
F	155 – 330	2"

LEGENDS AND ABBREVIATIONS

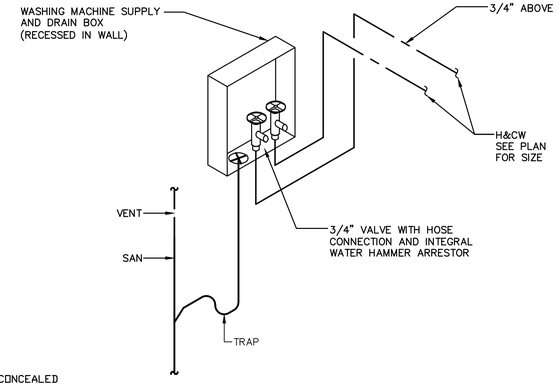
CW	CW	COLD WATER
HW	HW	HOT WATER
RHW	RHW	RECIRCULATING HOT WATER
SAN	SAN	SANITARY SEWER (BELOW FLOOR)
SAN	SAN	SANITARY SEWER (ABOVE FLOOR)
V	V	VENT
ST	ST	PRIMARY STORM (BELOW FLOOR)
ST	ST	PRIMARY STORM (ABOVE FLOOR)
ST	SST	SECONDARY STORM (ABOVE FLOOR)
IW	IW	INDIRECT WASTE
G	G	GAS
G	G	GAS (BELOW FLOOR)
		SHUT OFF VALVE
		CHECK VALVE
		GAS VALVE (AGA APPROVED)
		SOLENOID VALVE
		UNION
		STRAINER
		BALANCING VALVE
M		WATER METER

		REMOVE PIPING TO THIS POINT
		CONNECT NEW TO EXISTING
	WH	WALL HYDRANT (EXTERIOR)
X	SA	SHOCK ABSORBER (SIZE PER PDI)
	VTR	VENT THRU ROOF
	PDI	PLUMBING DRAINAGE INSTITUTE
	CFH	CUBIC FEET PER HOUR
	FCO	FLOOR CLEANOUT
	CO	CLEANOUT
	FD	FLOOR DRAIN
E		CAP
	TFA	TO FLOOR ABOVE
	TFB	TO FLOOR BELOW
	FFA	FROM FLOOR ABOVE
	FFB	FROM FLOOR BELOW
	EX.	EXISTING
	TYP	TYPICAL
	CONT'D	CONTINUED
	WCO	WALL CLEANOUT
	COND	CONDENSATE

NOTE:
ALL LEGENDS AND ABBREVIATIONS MAY NOT BE USED ON DRAWINGS.



1 FLOOR DRAIN DETAIL
NONE



2 WASHING MACHINE CONNECTION
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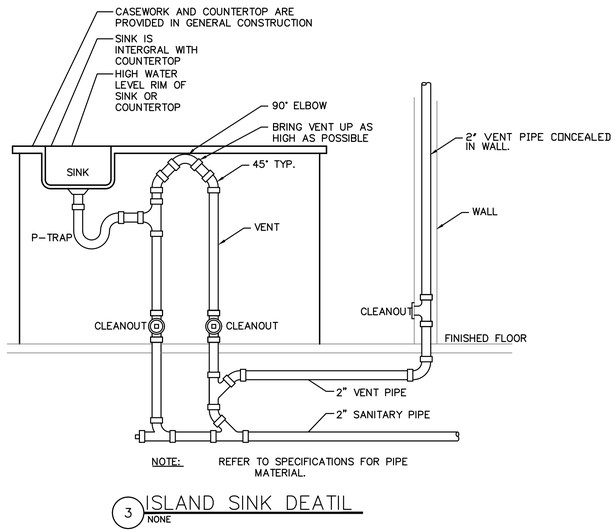

3 ISLAND SINK DEATIL
NONE

PROJECT NAME/LOCATION: [NEW CONSTRUCTION]
DESCRIPTION 68 PULASKI STREET - SINGLE FAMILY HOME
PROJECT NUMBER: **2317.006**

BENLIC DEVELOPMENT LLC
403 MAIN STREET, SUITE 602
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DRAWING TITLE
PLUMBING COVERSHEET

REVISIONS AFTER ISSUANCE		
NO.	DATE	DESCRIPTION

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ISSUE DATE 09.19.2025

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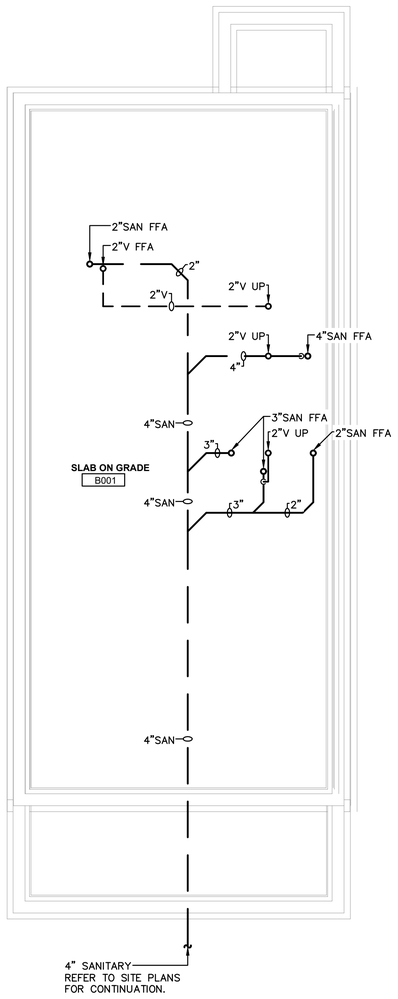
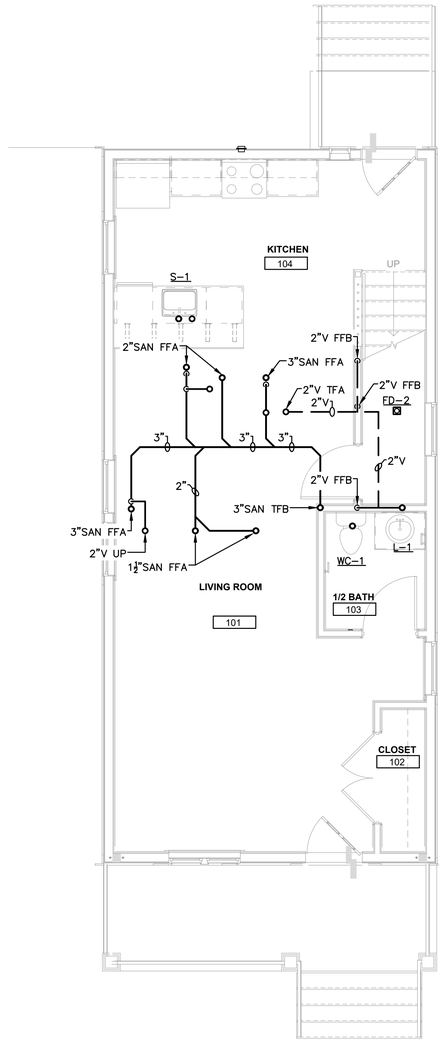
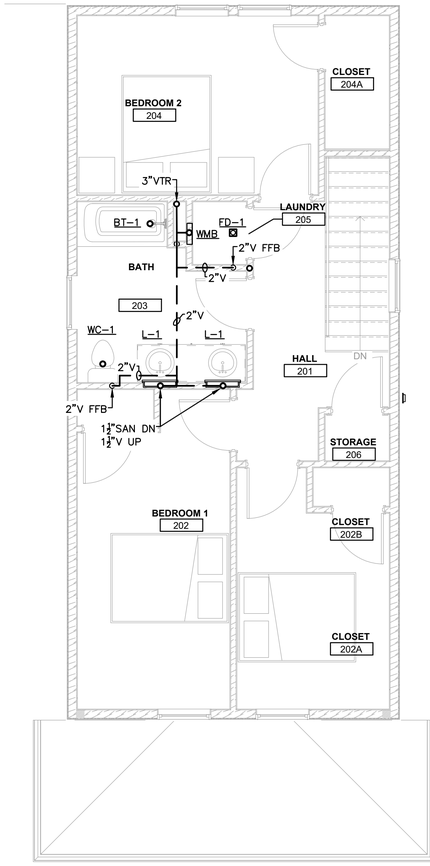
P-001



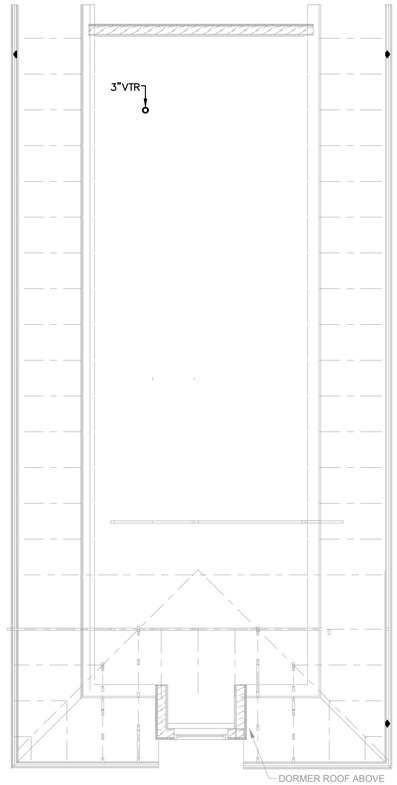
1 SANITARY AND VENT UNDER SLAB PLAN
SCALE: 1/4" = 1'-0"



2 SANITARY AND VENT FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



3 SANITARY AND VENT SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"



4 SANITARY AND VENT ATTIC PLAN
SCALE: 1/4" = 1'-0"

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PROJECT NAME/LOCATION:
DESCRIPTION [NEW CONSTRUCTION]
68 PULASKI STREET - SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC
403 MAIN STREET, SUITE 602
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PROJECT NUMBER: **2317.006**

DRAWING TITLE
SANITARY AND VENT PLUMBING PLANS

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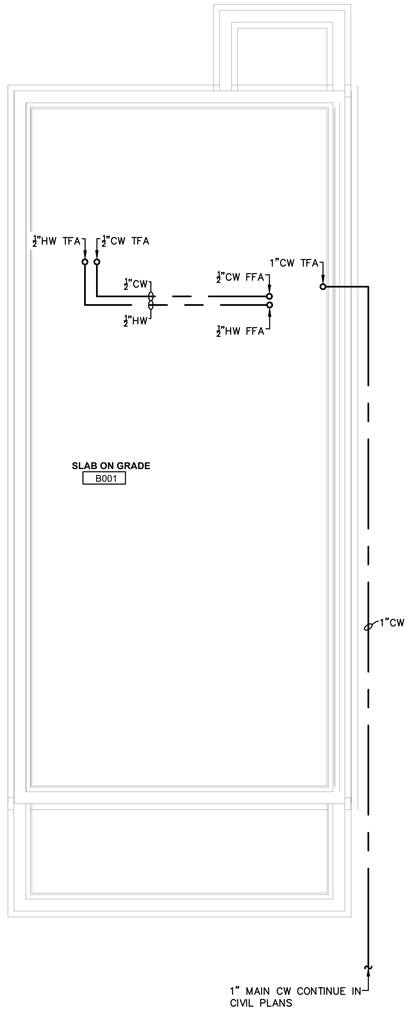
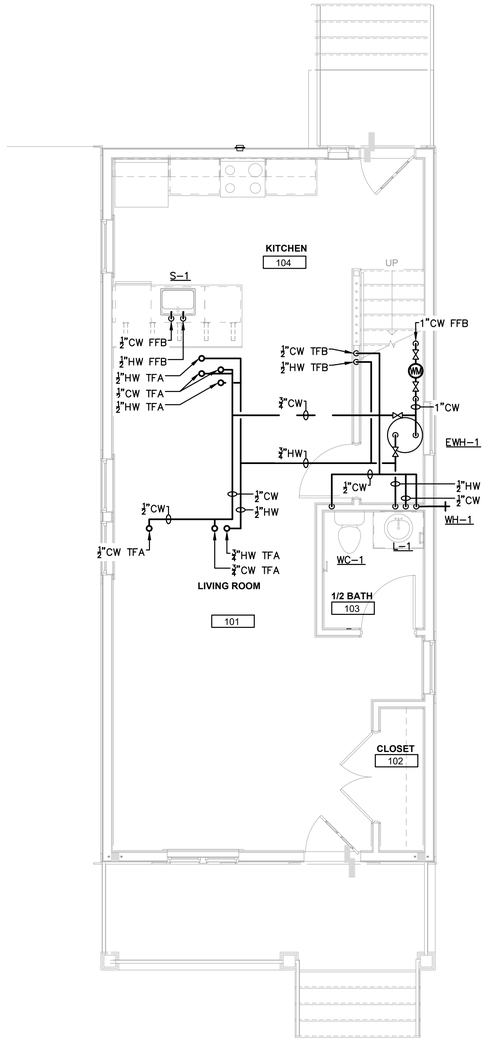
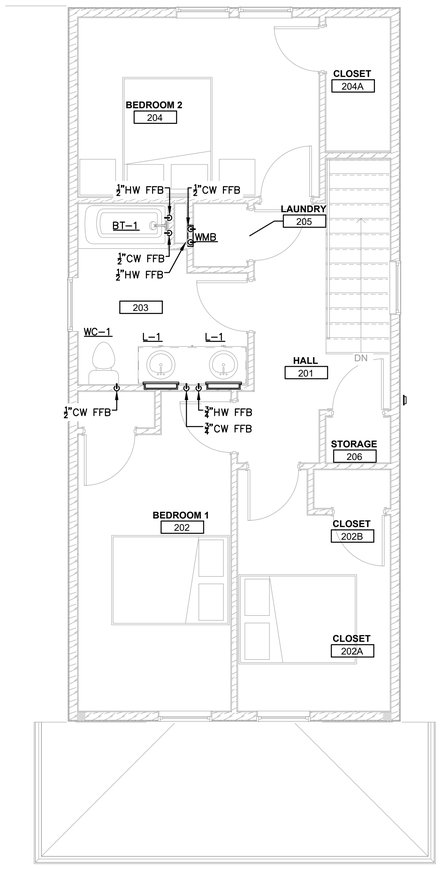


1 PLUMBING UNDERSLAB PLAN – DOMESTIC
SCALE: 1/4" = 1'-0"



2 PLUMBING FIRST FLOOR PLAN – DOMESTIC
SCALE: 1/4" = 1'-0"



3 PLUMBING SECOND FLOOR PLAN – DOMESTIC
SCALE: 1/4" = 1'-0"

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PROJECT NAME/LOCATION: [NEW CONSTRUCTION]
DESCRIPTION
68 PULASKI STREET - SINGLE FAMILY HOME
PROJECT NUMBER: **2317.006**

DRAWING TITLE
DOMESTIC WATER PLUMBING PLANS

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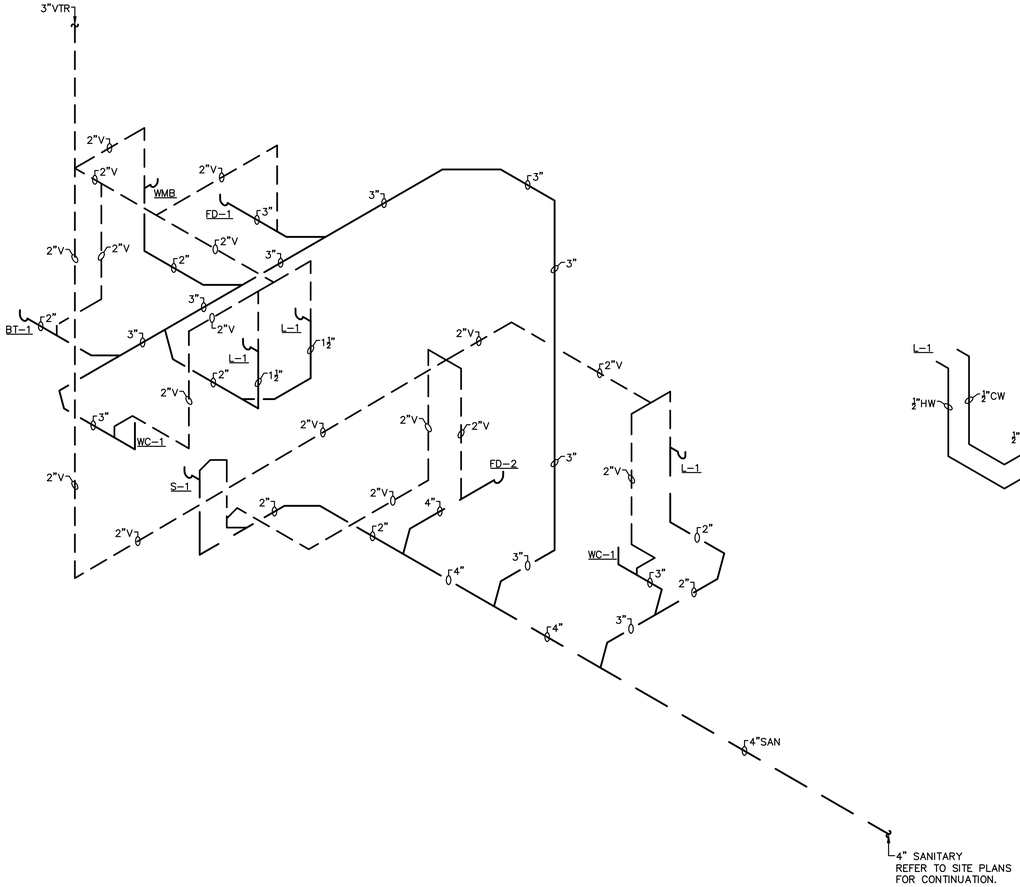
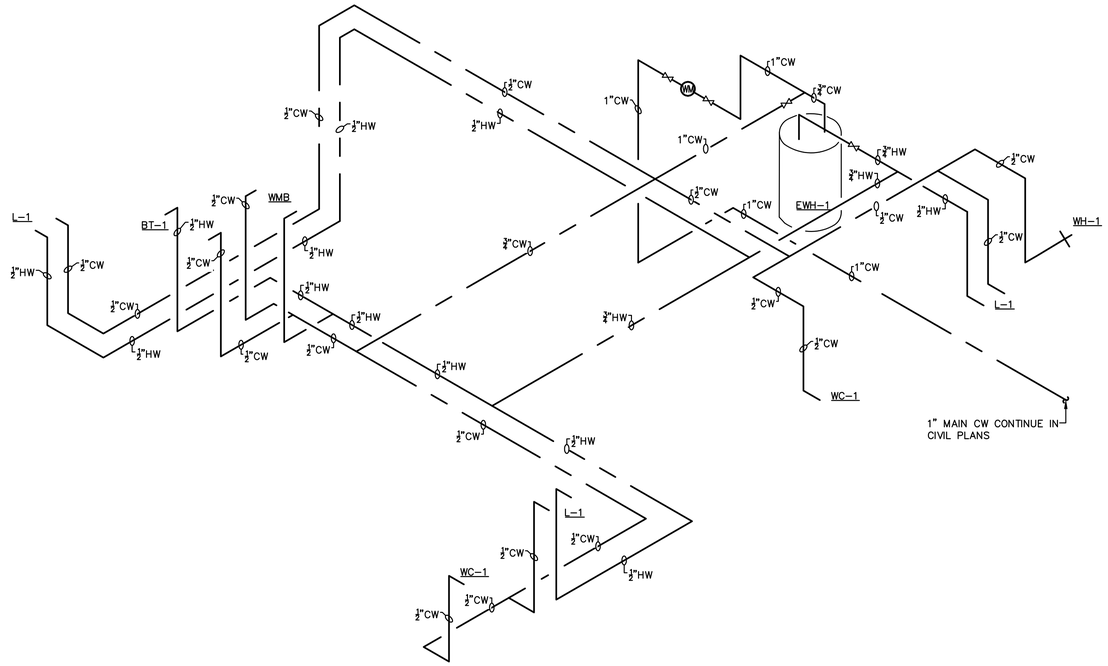


1 SANITARY AND VENT RISER DIAGRAM
SCALE: 1/4" = 1'-0"



2 DOMESTIC RISER DIAGRAM
SCALE: 1/4" = 1'-0"

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PROJECT NAME/LOCATION: [NEW CONSTRUCTION]
DESCRIPTION
68 PULASKI STREET - SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC
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PROJECT NUMBER: **2317.006**

DRAWING TITLE
PLUMBING RISER DIAGRAMS

REVISIONS AFTER ISSUANCE

NO.	DATE	DESCRIPTION

SEAL

ISSUE DATE 09.19.2025

DRAWING NUMBER
P-102

PLUMBING SPECIFICATIONS

PART 1 – GENERAL:

1. SYSTEMS ARE TO BE COMPLETE AND WORKABLE IN ALL RESPECTS, PLACED IN OPERATION, AND PROPERLY ADJUSTED.
2. CONTRACTOR SHALL PROVIDE FOR HIS OWN CLEAN–UP, REMOVAL AND LEGAL DISPOSAL OF ALL RUBBISH ON A DAILY BASIS.
3. FULLY COORDINATE ALL WORK WITH OTHER CONTRACTORS, SUBCONTRACTORS, THE OWNER, AND COOPERATE COMPLETELY.

PART 2 – CODES AND STANDARDS:

1. CONFORM TO ALL APPLICABLE CODES, GOVERNMENT REGULATIONS, AND LOCAL REQUIREMENTS. CODES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING, NYS BUILDING CODES (PLUMBING, MECHANICAL, AND FUEL GAS), AND NFPA.

PART 3 – BASE EQUIPMENT AND SUBSTITUTIONS:

1. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND FREE OF DEFECTS AND HOLD A U.L. LABEL.
2. BASE EQUIPMENT, MANUFACTURER, MODEL, AND CAPACITY OF EQUIPMENT ARE LISTED IN SCHEDULE ON DRAWING. ANY OTHER MANUFACTURER OR MODEL IS CONSIDERED A SUBSTITUTION.
3. SUBSTITUTIONS ARE SUBJECT TO THE APPROVAL OF THE OWNER. IF A SUBSTITUTION IS SUBMITTED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO EVALUATE IT AND CERTIFY THAT THE SUBSTITUTION IS EQUIVALENT IN ALL RESPECTS TO THE BASE SPECIFICATIONS.
4. IF SUBSTITUTIONS ARE APPROVED, NOTIFY ALL OTHER CONTRACTORS, SUBCONTRACTORS OR TRADES AFFECTED BY SUBSTITUTION AND FULLY COORDINATE. ANY COSTS RESULTING FROM SUBSTITUTION, WHETHER BY CONTRACTOR OR OTHERS, SHALL BE RESPONSIBILITY OF AND PAID FOR BY SUBSTITUTING CONTRACTOR.
5. ALL EQUIPMENT SHALL BE INSTALLED IN FULL ACCORDANCE WITH THE MANUFACTURERS DATA AND INSTALLATION INSTRUCTIONS. IT IS THIS CONTRACTORS RESPONSIBILITY TO CHECK AND CONFORM TO THESE REQUIREMENTS PRIOR TO START OF WORK.

PART 4 – CHECK, START, ADJUST, AND BALANCING INSTRUCTIONS:

1. AFTER INSTALLATION AND SERVICING, CHECK ALL EQUIPMENT AND PERFORM START UP IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
2. ALL PIPING SHALL BE FULLY TESTED AND MADE FREE OF LEAKS.
3. INSTRUCT OWNER IN OPERATION OF SYSTEMS AND SUBMIT OPERATING AND MAINTENANCE MANUAL ON ALL EQUIPMENT AND SYSTEMS.

PART 5 – CUTTING, PATCHING, AND DRILLING:

1. DO NOT CUT ANY STRUCTURAL COMPONENTS WITHOUT THE APPROVAL OF THE ARCHITECT OF RECORD.
2. PATCH AND FINISH TO MATCH ADJACENT AREAS THAT HAVE BEEN CUT, DAMAGED OR MODIFIED AS A RESULT OF THE INSTALLATION OF PLUMBING EQUIPMENT. FIRE STOP ALL PENETRATIONS OF FIRE RATED CONSTRUCTION IN A CODE APPROVED MANNER IN ORDER TO MAINTAIN A FIRE RATING.

PART 6 – PIPE SLEEVES AND SEALS

1. PROVIDE SLEEVES FOR ALL PIPING PASSING THRU FLOORS, WALLS OR CEILINGS AND SEAL OPENING.
2. FIRESTOP ALL PIPING PENETRATIONS THROUGH RATED FLOORS, WALLS AND PARTITIONS.
3. PROVIDE WATERTIGHT SEAL ON ALL PIPES PASSING THRU EXTERIOR WALLS, FOUNDATIONS OR WATERPROOF FLOORS.
4. PROVIDE CHROME ESCUTCHEON PLATES ON ALL EXPOSED PIPING PASSING THRU FLOORS, WALLS OR CEILINGS.

PART 7 – WARRANTY

1. FULLY WARRANT ALL MATERIALS, EQUIPMENT AND WORKMANSHIP FOR ONE (1) YEAR FROM DATE OF ACCEPTANCE.
2. REPAIR OR REPLACE WITHOUT CHARGE TO THE OWNER ALL ITEMS FOUND DEFECTIVE DURING THE WARRANTY PERIOD.

PART 8 – SCOPE:

1. FURNISH ALL PLUMBING FIXTURES, EQUIPMENT AND MATERIAL INDICATED AND SHOWN ON DRAWINGS AND INSTALL COMPLETE AND PLACE IN PROPER OPERATION.
2. PLUMBING SYSTEMS CONSISTS OF, BUT NOT LIMITED TO THE FOLLOWING:
   A. PLUMBING FIXTURES WITH ALL REQUIRED TRIM AND VALVES.
   B. PLUMBING SPECIALTIES AS REQUIRED FOR COMPLETE INSTALLATION.
   C. COLD/HOT WATER, WASTE, VENT AND NATURAL GAS PIPING.
   D. INSULATION OF PIPING ITEMS AS NOTED.

PART 9 – SANITARY SEWERS/DRAINAGE SYSTEMS:

1. INSTALL SANITARY SEWERS, STACKS, VENTS, FLOOR DRAINS AND CLEANOUTS FOR PROJECT AND EXTEND AS INDICATED ON THE DRAWINGS.

PART 10 – VALVES:

1. PROVIDE BALL VALVES, CHECK VALVES OR BALANCING VALVES AS INDICATED OR WHERE REQUIRED FOR PROPER MAINTENANCE, ISOLATION AND SAFETY.
2. DOMESTIC WATER: BALL VALVES SIMILAR TO MILWAUKEE NO. BA–100S THREADED OR NO. BA–150S SOLDERED WITH BUNA SEATS, PACKING AND GASKETS, 300 PSIG W.O.G. WORKING PRESSURE OR EQUIVALENT APPOLLO, GRINNELL OR WATTS.
3. PROVIDE UL LISTED AND AGA APPROVED LUBRICATED PLUG VALVES AND RATED FOR 125 PSIG.
   A. 3" AND SMALLER – THREADED ENDS.
   B. 4" AND LARGER – FLANGES ENDS.

PART 11 – PIPING INSULATION:

1. INSULATE THE FOLLOWING:
   A. HOT WATER PIPING.
   B. COLD WATER PIPING.
   C. ANY REMOVED OR UN–INSULATED PIPING IN WORK AREA.
2. INSULATION PRODUCTS AND INSULATION SHALL COMPLY WITH ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.
3. WATER PIPING INSULATION SHALL BE PREFORMED, SNAP–ON FIBERGLASS INSULATION WITH PAINTABLE WHITE KRAFT OR ALUMINUM FOIL JACKET.
4. ROOF DRAINAGE INSULATION SHALL BE SIMILAR TO HOT WATER WITH VAPOR BARRIER.

PART 12 – WATER PIPING:

1. PROVIDE DOMESTIC WATER PIPING AS NOTED PER PLUMBING FIXTURE AND EQUIPMENT SCHEDULE.
2. INCLUDE UNIONS, OR OTHER DISCONNECT MEANS. STOPS OR VALVES FOR ISOLATION OF FIXTURES AND EQUIPMENT. VALVES TO BE FULLY COMPATIBLE WITH PIPING FOR SERVICE INTENDED AS MANUFACTURED BY NIBCO, CRANE OR OTHER APPROVED MANUFACTURER.

PART 13 – STERILIZATION OF WATER PIPING:

1. THE WATER SUPPLY AND DISTRIBUTION SYSTEM SHALL BE STERILIZED WITH CHLORINE IN SOLUTION IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION PUBLICATION C–601–1954 AND LOCAL ORDINANCES.
2. ALL WORK AND CERTIFICATION OF PERFORMANCE SHALL BE DONE BY APPROVED APPLICATIONS OR QUALIFIED PERSONNEL WITH CHEMICAL AND LABORATORY EXPERIENCE. SUBMIT A CERTIFICATE OF STERILIZATION.

PART 14 – PIPING TEST:

1. ALL PIPING SYSTEMS INCLUDING VALVES AND ACCESSORIES SHALL BE TESTED AS FOLLOWS: TEST PRESSURE SHALL BE MAINTAINED WITH NO LEAKS FOR DURATION SPECIFIED.
   A. SOIL, WASTE, AND VENT – FILL WITH WATER TO 10 FT. ABOVE HIGHEST FIXTURE ON OUTLET, TIGHT FOR 8 HOURS.
   B. HOT AND COLD WATER – 150 PSIG HYDROSTATIC. TIGHT FOR HOURS.
   C. NATURAL GAS PIPING – TEST AT 15 PSIG AIR PRESSURE FOR MINIMUM OF 1 HOUR.

PART 15 – SUPPORTS AND HANGERS:

1. HANGERS AND SUPPORTS ARE TO BE PROVIDED TO PROPERLY SUPPORT, SECURE AND ALIGN PIPING AND TO MEET CONDITIONS. SPACING AND TO COMPLY WITH LOCAL CODE REQUIREMENTS.

PART 16 – EQUIPMENT IDENTIFICATION:

1. PREPARATION:
   A. CLEAN PIPING AND EQUIPMENT SURFACES OF SUBSTANCES THAT COULD IMPAIR BOND OF IDENTIFICATION DEVICES, INCLUDING DIRT, OIL, GREASE, RELEASE AGENTS, AND INCOMPATIBLE PRIMERS, PAINTS, AND ENCAPSULANTS.
   B. LOCATE EQUIPMENT LABELS WHERE ACCESSIBLE AND VISIBLE.
2. PIPING IDENTIFICATION:
   A. GENERAL REQUIREMENTS FOR MANUFACTURED PIPE LABELS: PREPRINTED, COLOR–CODED, WITH LETTERING INDICATING SERVICE, AND SHOWING FLOW DIRECTION.
   B. PRETENSIONED PIPE LABELS: PRECOILED, SEMIRIGID PLASTIC FORMED TO COMPLETELY COVER THE CIRCUMFERENCE OF PIPE AND TO ATTACH TO PIPE WITHOUT FASTENERS OR ADHESIVE.
   C. SELF–ADHESIVE PIPE LABELS: PRINTED PLASTIC WITH CONTACT–TYPE, PERMANENT–ADHESIVE BACKING.
   D. PIPE LABEL CONTENTS: INCLUDE IDENTIFICATION OF PIPING SERVICE USING SAME DESIGNATIONS OR ABBREVIATIONS AS USED ON DRAWINGS, PIPE SIZE, AND AN ARROW INDICATING FLOW DIRECTION.
      a. FLOW–DIRECTION ARROWS: INTEGRAL WITH PIPING SYSTEM SERVICE LETTERING TO ACCOMMODATE BOTH DIRECTIONS, OR AS SEPARATE UNIT ON EACH PIPE LABEL TO INDICATE FLOW DIRECTION EVERY 20'–0".
      b. LETTERING SIZE: AT LEAST 1–1/2 INCHES HIGH.
3. VALVE TAGS:
   A. VALVE TAGS: STAMPED OR ENGRAVED WITH 1/4–INCH LETTERS FOR PIPING SYSTEM ABBREVIATION AND 1/2–INCH NUMBERS.
      a. TAG MATERIAL: BRASS, 0.032–INCH MINIMUM THICKNESS, AND HAVING PREDRILLED OR STAMPED HOLES FOR ATTACHMENT HARDWARE.
      b. FASTENERS: BRASS WIRE–LINK OR BEADED CHAIN; OR S–HOOK.
   B. VALVE SCHEDULES: FOR EACH PIPING SYSTEM, ON 8–1/2–BY–11–INCH BOND PAPER. TABULATE VALVE NUMBER, PIPING SYSTEM, SYSTEM ABBREVIATION (AS SHOWN ON VALVE TAG), LOCATION OF VALVE (ROOM OR SPACE), NORMAL–OPERATING POSITION (OPEN, CLOSED, OR MODULATING), AND VARIATIONS FOR IDENTIFICATION. MARK VALVES FOR EMERGENCY SHUTOFF AND SIMILAR SPECIAL USES.
      a. VALVE–TAG SCHEDULE SHALL BE INCLUDED IN OPERATION AND MAINTENANCE DATA.
   C. INSTALL TAGS ON VALVES AND CONTROL DEVICES IN PIPING SYSTEMS, EXCEPT CHECK VALVES; VALVES WITHIN FACTORY–FABRICATED EQUIPMENT UNITS; SHUTOFF VALVES; FAUCETS; CONVENIENCE AND LAWN–WATERING HOSE CONNECTIONS; AND SIMILAR ROUGHING–IN CONNECTIONS OF END–USE FIXTURES AND UNITS. LIST TAGGED VALVES IN A VALVE SCHEDULE.
   D. VALVE–TAG APPLICATION SCHEDULE: TAG VALVES ACCORDING TO SIZE, SHAPE, AND COLOR SCHEME AND WITH CAPTIONS SIMILAR TO THOSE INDICATED IN THE FOLLOWING SUBPARAGRAPHS:
      a. VALVE–TAG SIZE AND SHAPE:
         a.a. COLD WATER: 2 INCHES, ROUND.
         a.b. HOT WATER: 2 INCHES, ROUND.
         a.c. GAS: 2 INCHES, ROUND.
      b. VALVE–TAG COLOR:
         b.a. COLD WATER: NATURAL.
         b.b. HOT WATER: NATURAL.
         b.c. GAS: NATURAL.
      c. LETTER COLOR:
         c.a. COLD WATER: BLACK.
         c.b. HOT WATER: BLACK.
         c.c. GAS: YELLOW.

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PLUMBING SPECIFICATIONS

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PROJECT NAME/LOCATION: [NEW CONSTRUCTION]
DESCRIPTION
68 PULASKI STREET - SINGLE FAMILY HOME

BENLIC DEVELOPMENT LLC
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

PROJECT NUMBER: **2317.006**

SPECIFICATION

1. IDENTIFICATION:

EQUIPMENT NAMEPLATES SHALL INCLUDE MANUFACTURER, PRODUCT NAME, MODEL AND SERIAL NUMBERS, CAPACITY, OPERATING AND POWER CHARACTERISTICS, ESSENTIAL DATA, AND LABELS OF TESTED COMPLIANCES.

DUCT AND PIPE MARKERS SHALL BE ENGRAVED COLOR CODED LAMINATED PLASTIC. INCLUDE DIRECTION OF AIRFLOW AND DUCT SERVICE (i.e. SUPPLY, RETURN, EXHUAST).

PIPING MARKERS SHALL COMPLY WITH ASME A13.1 FOR LOCATION, SIZE, AND COLOR.

2. DUCTWORK AND ACCESSORIES.

TYPE OF SYSTEM: LOW PRESSURE.

ALL DUCTWORK AND FITTINGS, SELECTIONS, APPLICATIONS AND INSTALLATION SHALL BE IN ACCORDANCE WITH "SMANCA" - "HVAC DUCT CONSTRUCTION STANDARDS".

CONSTRUCTION: LOW PRESSURE DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED STEEL SHEETS. DUCTWORK SHALL CONFORM ACCURATELY TO THE DIMENSIONS INDICATED, AND SHALL BE STRAIGHT AND SMOOTH ON THE INSIDE WITH JOINTS NEATLY FINISHED. DUCTS SHALL BE SECURE AND ANCHORED TO THE BUILDING'S STRUCTURAL COMPONENTS AND FRAMING, AND SHALL BE FABRICATED AND SUPPORTED IN SUCH A MANNER AS TO PREVENT VIBRATION AND PULSATION UNDER OPERATING CONDITIONS. BUTTON PUNCH OR BOLD CONNECTIONS IN STANDING SEAMS SHALL BE SPACED AT NOT GREATER THAN 6-INCHES ON CENTERS. LONGITUDINAL LOCKS OR SEAMS TERMED "BUTTON PUNCH SNAP LOCK" ARE ACCEPTABLE IN LIEU OF PITTSBURGH LOCKS. ELBOWS SHALL BE RADIUS TYPE WITH A CENTER RADIUS OF 1-1/2 TIMES THE WIDTH OR DIAMETER OF THE DUCT. WHERE SPACE DOES NOT PERMIT, THE USE OF SHORT RADIUS ELBOWS HAVING A MINIMUM RADIUS OF 1.0 TIMES THE WIDTH OR DIAMETER OF THE DUCT, OR SQUARE ELBOWS WITH FACTORY FABRICATED TURNING VANES MAY BE USED.

ALL DUCT JOINTS AND TRANSVERSE AND LONGITUDINAL SEAMS SHALL BE SEALED WITH A LATEX TYPE DUCT SEALER APPROVED BY THE ENGINEER.

FITTINGS: SQUARE ELBOWS, FITTINGS, AND BRANCH TAKE-OFFS SHALL BE DESIGNED AND CONSTRUCTED AS SPECIFIED IN SMACNA. ALL GENERAL VENTILATION ITEMS SHALL COMPLY WITH NFPA BULLETIN 90A.

SLEEVED AND FRAMED OPENINGS: SPACE BETWEEN THE SLEEVED OR FRAMED OPENING AND THE DUCT AND THE DUCT INSULATION SHALL BE PACKED WITH MINERAL WOOL OR OTHER APPROVED MATERIAL AND SEALED WITH APPROPRIATE MATERIAL TO MEET THE REQUIREMENTS OF WALL CONSTRUCTION FOR SMOKE OR FIRE CONTROL.

SINGLE WALL ROUND FITTINGS: MANUFACTURERS STANDARD FITTINGS FABRICATED AS INDICATED BELOW. UNLESS OTHERWISE INDICATED JOINTS MAY BE OF STANDING SEAM CONSTRUCTION, SOLID WELDED OR SPOTWELDED AND BONDED.

ELBOWS: FABRICATE IN DIE-FORMED, GORED, PLEATED, OR MITERED CONSTRUCTION. FABRICATE THE BEND RADIUS OF DIE-FORMED, GORED, AND PLEATED ELBOWS 1.5 TIMES THE ELBOW DIAMETER. UNLESS ELBOW CONSTRUCTION IS INDICATED, PROVIDE ELBOWS MEETING THE FOLLOWING REQUIREMENTS:

MITERED ELBOWS: FABRICATE WITH SOLID WELDED CONSTRUCTION IN GAUGES SPECIFIED BELOW:

NUMBER OF MITERED PIECES:

90 DEGREE ELBOW: 5 PIECES

60 DEGREE ELBOW: 4 PIECES

45 DEGREE ELBOW: 3 PIECES

ROUND MITERED ELBOW MATERIAL THICKNESS:

3 TO 14 INCH: 24 GAUGE.

15 TO 26 INCH: 22 GAUGE.

3. INSULATION:

PROVIDE ALL LABOR, MATERIALS, ETC., REQUIRED TO PRODUCE A COMPLETE FINISH INSULATION SYSTEM FOR THE FOLLOWING SYSTEMS:

-REFRIGERANT, AND CONDENSATE PIPING.

FLAME/SMOKE RATINGS:

PROVIDE COMPOSITE MECHANICAL INSULATION (INSULATION JACKETS, COVERINGS, SEALERS, MASTICS, AND ADHESIVES) WITH FLAME-SPREAD RATING OF 25 OR LESS AND SMOKE-DEVELOPED RATING OF 15 OR LESS, AS TESTED BY ANSI/ASTM E84 (NFPA 255) METHODS.

PIPING INSULATION:

MAKE: ARMAFLEX, OWEN-CORNING, CERTAINTEED, ARMSTRONG

TYPE: 1.5" THICK FOR REFRIGERATION PIPING, AND 1/2" FOR CONDENSATE PIPING.

SPECIAL: ALL OUTDOOR PIPING ON SHALL HAVE A PVC JACKET (22MM). ALL SEAMS CAULKED WATERTIGHT.

OUTDOOR INSULATION FINISH:

PIPING EXPOSED TO WEATHER SHALL HAVE INSULATION PROTECTIVE FINISH OR JACKETING INSTALLED AS RECOMMENDED BY THE MANUFACTURER. PIPING SHALL HAVE ALUMINUM JACKETING WITH MOISTURE BARRIER WITH LOCKING LONGITUDINAL SEAM AND BUTT STRAPS. FITTINGS, VALVES, FLANGES, ETC. SHALL HAVE FACTORY OR JOB FABRICATED ALUMINUM COVER SECURED WITH BANDING AND OR SCREWS.

4. PIPE AND FITTINGS:

PIPE AND FITTINGS:

ALL PIPING AND FITTINGS SECTION, APPLICATION, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:

AMERICAN SOCIETY FOR TESTING STANDARDS (ASTM).

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME).

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).

PIPE HANGERS: CARPENTER AND PATERSON FEE AND MASON, GINNELL, F&S, CENTRAL, CONFORMING TO MANUFACTURERS STANDARDIZATION SOCIETY SPECIFICATION SP-58. INSULATED PIPING SHALL HAVE HANGERS OVERSIZED TO BE OUTSIDE THE PIPE INSULATION AND GALVANIZED INSULATION PROTECTION SHIELDS AT EACH HANGER.

BALL VALVES: BALL VALVES SHALL BE METAFLEX, MILWAUKEE, WATTS, OR NIBCO. VALVES SHALL BE 150 PSI, TWO PIECE CONSTRUCTION WITH ANTI-BLOWOUT STEM. VALVE SHALL BE CONSTRUCTED OF BRASS AND HAVE TEFLON SEATS.

5. REFRIGERANT PIPING

GENERAL: PROVIDE ALL COMPONENTS TO FURNISH A FULLY FUNCTIONAL HVAC SYSTEM PER THE EQUIPMENT MANUFACTURERS INSTALLATION REQUIRES. COMPONENTS SHALL INCLUDE CHECK VALVES, SERVICE VALVES, SAFETY VALVES, EXPANSION VALVES, FILTER DRIERS, MOISTURE/LIQUID INDICATORS, ETC - COMPLETE.

SUCTION LINES: COPPER, TYPE ACR, ANNEALED-TEMPER TUBING AND WROUGHT-COPPER FITTINGS WITH BRAZED OR SOLDERED JOINTS.

LIQUID LINES: COPPER, TYPE ACR, ANNEALED OR DRAWING-TEMPER TUBING AND WROUGHT-COPPER FITTINGS WITH BRAZED OR SOLDERED JOINTS.

INSTALLATION: INSTALL PIPING IN CONCEALED LOCATIONS UNLESS OTHERWISE INDICATED AND EXCEPT IN EQUIPMENT ROOMS AND SERVICE AREAS. INSTALL PIPING FREE OF SAGS AND BENDS. ARRANGE PIPING TO ALLOW INSPECTION AND SERVICE OF REFRIGERATION EQUIPMENT AND VALVES AND GAUGES IN ACCESSIBLE LOCATIONS FOR SERVICE AND INSPECTION.

PIPING SLOPE: INSTALL HORIZONTAL SUCTION LINES WITH UNIFORM SLOPE DOWNWARD TO COMPRESSOR. INSTALL TRAPS AND SOUBLE RISERS TO ENTRAIN OIL IN VERTICAL RUNS. LIQUID LINES MAY BE INSTALLED LEVEL. WHEN BRAZING OR SOLDERING, REMOVE SOLENOID-VALE AND SIGHT GLASSES, ALSO REMOVE VALVE STEMS, SEATS, AND PACKING, AND ACCESSIBLE INTERNAL PARTS OF REFRIGERANT SPECIALTIES. DO NOT APPLY HEAT NEAR EXPANSION-VALVE BULB.

SYSTEM CHARGING: INSTALL CORE IN FILTER DRYERS AFTER LEAK TEST, BUT BEFORE EVACUATION. EVACUATE ENTIRE REFRIGERANT SYSTEM WITH A VACUUM PUMP TO 500 MICROMETERS. IF VACUUM HOLDS FOR 12 HOURS, SYSTEM IS READY FOR CHARGING. BREAK VACUUM WITH REFRIGERANT GAS, ALLOWING PRESSURE TO BUILD UP TO 2 PSIG. CHARGE SYSTEM WITH NEW FILTER-DRYER CORE IN CHARGING LINE.

6. MULTI-ZONE SPLIT SYSTEM INDOOR UNITS

CABINET: ENAMEL STEEL WITH REMOVABLE PANELS ON FRONT AND OR ENDS. COLOR SELECTED BY THE ARCHITECT.

REFRIGERANT COIL: COPPER TUBE, WITH MECHANICALLY BONDED ALUMINUM FINS AND THERMAL-EXPANSION VALVE, COMPLY WITH ARI 210/240.

FAN: DIRECT DRIVE, CENTRIFUGAL.

FAN MOTORS: COMPLY WITH NEMA DESIGNATION, TEMPERATURE RATING, SERVICE FACTOR, ENCLOSURE TYPE, AND EFFICIENCY REQUIREMENTS SPECIFIED.

FILTERS: PER,ANENT, CLEANABLE.

CONDENSATE DRAIN PANS: FABRICATED WITH ONE PERCENT SLOPE IN AT LEAST TWO PLANES TO COLLECT CONDENSATE FROM COOLING COILS, INCLUDING COIL PIPING CONNECTIONS, COIL HEADERS, AND RETURN BENDS.

CONDENSATE LIFT PUMPS: WHEN REQUIRED (SEE PLAN SCHEDULES). MANUFACTURER: BLUE DIAMOND. MODEL NUMBER: BD-BLUE-230.

BASIS OF DESIGN: LG.

ACCEPTABLE ALTERNATES: MITSUBISHI/TRANE, SAMSUNG, HITACHI.

7. MULTI-ZONE SPLIT SYSTEM AIR COOLED CONDENSING UNIT

CASING: STEEL, FINISHED WITH BAKED ENAMEL IN COLOR SELECTED BY THE ARCHITECT, WITH REMOVABLE PANELS FOR ACCESS TO CONTROLS, WEEP HOLES FOR WATER DRAINAGE, AND MOUNTING HOLES IN BASE. PROVIDE BRASS SERVICE VALVES, FITTINGS, AND GAGE PORTS ON EXTERIOR OF CASING.

COMPRESSOR: HERMETICALLY SEALED WITH CRANKCASE HEATER NAD MOUNTED ON VIBRATION ISOLATION DEVICE. COMPRESSOR MOTOR SHALL HAVE THERMAL-AND CURRENT-SENSITIVE OVERLOAD DEVICES, START CAPACITOR RELAY, AND CONTRACTOR. COMPRESSOR TYPE SHALL BE SCROLL.

REFRIGERANT: R-410A

REFRIGERANT COIL: COPPER TUBE, WITH MECHANICALLY BONDED ALUMINUM FINES AND LIQUID SUBCOOLER. COMPLY WITH ARI 210/240.

HEAT PUMP COMPONENTS: REVERSING VALVE AND BRANCH REFRIGERANT DISTRIBUTION BOXES.

FAN: ALUMINUM-PROPELLER TYPE DIRECTLY CONNECT TO MOTOR.

MOUNTING BASE: WALL MOUNTED.

CERTIFICATION: ENERGY STAR CERTIFIED, COLD CLIMATE CERTIFICATION, NEEP (NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS) CERTIFIED.

ACCESSORIES: AS NOTED IN THE SCHEDULES.

BASIS OF DESIGN: LG.

ACCEPTABLE ALTERNATES: MITSUBISHI/TRANE, SAMSUNG, HITACHI.

8. CEILING TYPE VENTILATORS

FINISH: PROVIDE FAN WITH ENAMEL FINISH, COLOR SELECTED BY THE ARCHITECT.

GENERAL: CENTRIFUGAL FAN, DIRECT DRIVE, DESIGNED FOR INSTALLATION IN CEILINGS.

HOUSING: GALVANIZED STEEL, LINED WITH ACOUSTICAL INSULATION.

FAN WHEEL: CENTRIFUGAL WHEELS DIRECTLY MOUNTED ON MOTOR SHAFT FAN SHROUDS, MOTOR, AND FAN WHEEL SHALL BE REMOVABLE FOR SERVICE.

CONTROL: SWITCHED.

ACCESSORIES: MANUFACTURERS WALL CAP, INTEGRAL BACKDRAFT DAMPER, VIBRATION ISOLATORS.

CERTIFICATION: ENERGY STAR CERTIFIED.

BASIS OF DESIGN: BROAN.

ACCEPTABLE ALTERNATES: PANASONIC, COOK.

9. ELECTRIC RESISTANCE HEATERS

GENERAL: AS SCHEDULED.

ACCESSORIES: AS SCHEDULED.

BASIS OF DESIGN: RUNTAL, MARKEL.

ACCEPTABLE ALTERNATES: Q-MARK, BERKO, DAYTON.

8. RECORD DRAWINGS

COMPUTER AIDED DRAWINGS (CAD) RECORD DRAWINGS SHALL BE SUPPLIED BY THE HVAC CONTRACTOR AFTER THE SYSTEM HAS BEEN ACCEPTED BUT PRIOR TO FINAL PAYMENT.

9. OPERATOR INSTRUCTION

AFTER SYSTEM COMMISSIONING THE HVAC CONTRACTOR SHALL PROVIDE ON-SIGHT OPERATOR INSTRUCTION TO THE OWNERS OPERATING PERSONNEL. OPERATOR INSTRUCTION DURING NORMAL WORKING HOURS SHALL BE PERFORMED BY THE COMPETENT REPRESENTATIVES FAMILIAR WITH THE INSTALLED SYSTEM. AT A TIME MUTUALLY AGREED UPON WITH THE OWNER'S REPRESENTATIVE, THE HVAC CONTRACTOR SHALL GIVE FOUR (4) HOURS (OR REQUIRED AMOUNT OF TIME) OF INSTRUCTIONS TO THE OWNERS DESIGNATED PERSONNEL ON THE OPERATION OF ALL EQUIPMENT IN THE SYSTEM AND DESCRIBE ITS INTENDED USE. AN OWNERS MANUAL PREPARED FOR THE PROJECT BY THE HVAC CONTRACTOR SHALL BE USED DURING INSTRUCTION. THREE (3) COPIES OF THE OWNERS MANUAL SHALL BE PROVIDED TO THE OWNERS REPRESENTATIVE.

10. ADJUSTING, BALANCING, TESTING, AND INSPECTION:

ALL AIR AND WATER SYSTEMS SHALL BE BALANCED. TESTING, BALANCING, AND ADJUSTING SHALL BE PERFORMED BY FIRMS CERTIFIED BY THE NATIONAL ENVIRONMENT BALANCING BUREAU "NEBB" OF FIRMS QUALIFYING IN COMPLIANCE WITH THE PARAGRAPH ON PERFORMANCE.

FIELD TESTS: PROPOSED TESTING PROGRAM SHALL BE SUBMITTED TO THE ENGINEER AT LEAST TWO WEEKS PRIOR TO THE SCHEDULED TEST TO ASSURE AGREEMENT AS TO PERSONNEL AND INSTRUMENTATION REQUIRED, AND THE SCOPE OF THE TESTING PROGRAM. FINAL TEST REPORT SHALL BE ON PREPARED FORMS REQUIRED BY NEBB.

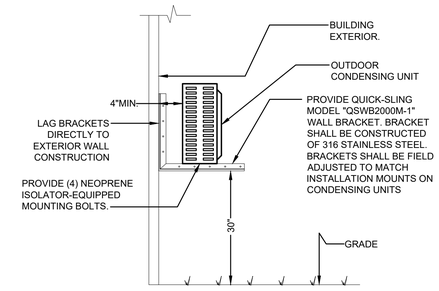
11. VERIFICATION OF DIMENSIONS: THE CONTRACTOR SHALL BECOME FAMILIAR WITH ALL DETAILS OF THE WORK, VERIFY ALL DIMENSIONS IN THE FIELD, AND SHALL ADVISE THE ENGINEER OF ANY DISCREPANCY BEFORE PERFORMING WORK.

12. COORDINATION: HEATING CONTRACTOR SHALL COORDINATE ALL WORK AND MATERIALS WITH OTHER CONTRACTORS.

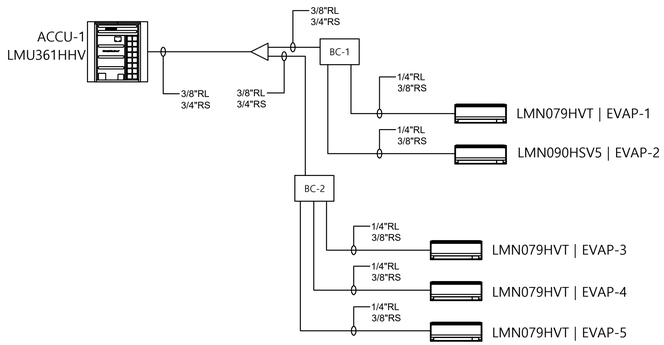
13. GUARANTEE: PROVIDE 1 YEAR GUARANTEE THAT ANY DEFECTS IN MATERIALS OR WORKMANSHIP OCCURRING DURING TERMS OF SAID GUARANTEE SHALL BE MADE GOOD BY THE CONTRACTOR WITHOUT EXPENSE TO OWNER.

HVAC SYMBOL LIST

	FLOW ARROW	8"Ø	TYPICAL ROUND DUCT DESIGNATION
	PITCH PIPING (DOWN IN DIRECTION OF ARROW)	24x12	TYPICAL DUCT SIZE DESIGNATION (INSIDE SHEETMETAL DIMENSIONS)
RS/RL	REFRIGERANT PIPING	EF	EXHAUST FAN
	PIPING DROP/RISE	EVAP	EVAPORATOR
T	THERMOSTAT	ACCU	AIR COOLED CONDENSING UNIT
EB	ELECTRIC BASEBOARD	CD	CONDENSATE DRAIN PIPING
RL	REFRIGERANT LIQUID LINE		
RS	REFERIGERANT SUCTION LINE		
DV	ALUMINUM DRYER VENTING		
ER	ELECTRIC WALL RADIATOR		
KH	KITCHEN HOOD		
CO	CLEAN OUT		



2 AIR COOLED CONDENSING UNIT INSTALLATION DETAIL
SCALE: NTS



1 SPLIT SYSTEM REFRIGERANT PIPING DIAGRAM
SCALE: NTS

PROJECT NAME/LOCATION: [NEW CONSTRUCTION]
DESCRIPTION
68 PULASKI STREET - SINGLE FAMILY HOME
PROJECT NUMBER: 2317.006

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DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [ ] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION

DRAWING TITLE
MECHANICAL SPECIFICATIONS & DETAILS

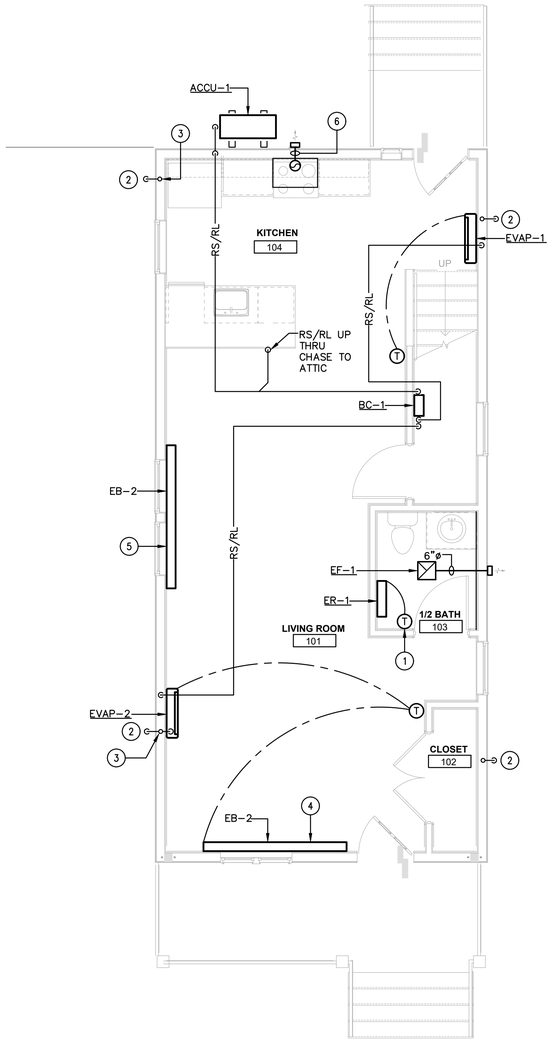
REVISIONS AFTER ISSUANCE		
NO.	DATE	DESCRIPTION

SEAL

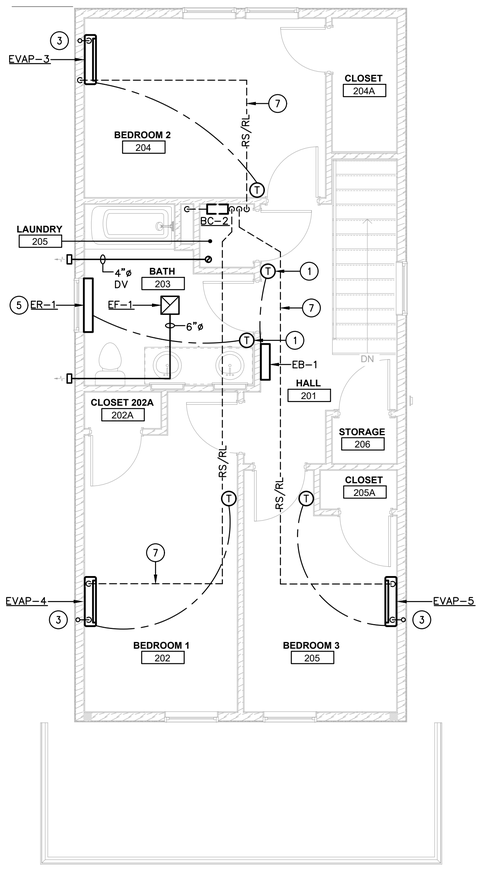
STATE OF NEW YORK · BRIAN P. ZINTEL · 099870 · LICENSED PROFESSIONAL ENGINEER

ISSUE DATE 09.19.2025

DRAWING NUMBER
M-001



1 TYPE 4 – MECHANICAL FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 TYPE 4 – MECHANICAL SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

GENERAL PLAN NOTES

THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE SIZE AND GENERAL ARRANGEMENT OF PIPING, DUCTWORK, EQUIPMENT, ETC. EXACT LOCATIONS AND ROUTINGS SHALL BE DETERMINED IN THE FIELD BEFORE AND AS THE WORK PROGRESSES. CAREFULLY COORDINATE THE WORK OF THIS TRADE WITH ALL OTHER TRADES.

DRAWINGS DO NOT INDICATE ALL OFFSETS, CHANGES IN ELEVATION, ETC. WHICH MAY BE REQUIRED BY ACTUAL FIELD CONDITIONS.THE CONTRACTOR IS TO FIELD VERIFY CONDITIONS PRIOR TO INSTALLATION AND MAKE SUCH CHANGES IN PIPING, DUCTWORK, EQUIPMENT LOCATIONS, ETC. AS NECESSARY TO ACCOMMODATE FIELD CONDITIONS. COORDINATE ALL CHANGES WITH OTHER TRADES AND ARCHITECT/ENGINEER.

ALL CUTTING AND PATCHING OF BUILDING COMPONENTS REQUIRED TO ACCOMMODATE THE WORK OF THIS CONTRACT SHALL BE THE RESPONSIBILITY OF THIS CONTRACT. ALL PATCHING SHALL MATCH THE EXISTING COMPONENTS AND FINISHES. CUTTING AND PATCHING WORK SHALL BE PERFORMED BY PERSONNEL TRAINED AND REGULARLY EMPLOYED FOR SUCH SERVICES.

INSTALL ALL PIPING, DUCTWORK, EQUIPMENT, ETC. TO AVOID INTERFERENCE WITH THE OPERATION AND SERVICING OF ALL EQUIPMENT. IN GENERAL, DO NOT INSTALL ANYTHING ABOVE OR WITHIN 3 FT. IN FRONT OF ELECTRICAL GEAR.

THE WORK INCLUDED IN THIS CONTRACT ENCOMPASSES BOTH THE DRAWINGS AND SPECIFICATIONS. WORK INCLUDED ON THE DRAWINGS ONLY, OR IN THE SPECIFICATION ONLY, SHALL BE INCORPORATED AS IF INCLUDED IN BOTH. SYSTEMS ARE INTENDED TO BE COMPLETE AND FULLY FUNCTIONING. IT IS NOT INTENDED TO SHOW EVERY ITEM OF WORK OR MINOR PIECE OF EQUIPMENT. THE CONTRACTOR SHALL PROVIDE SUCH COMPONENTS, ETC. AS NECESSARY OR REQUIRED FOR A FULLY FUNCTIONING SYSTEM.

FLEXIBLE DUCT CONNECTIONS AT AIR DEVICES ARE NOT ALLOWED.

ALL CONDENSATE DRAIN PIPING SHALL BE 1"Ø, UNLESS OTHERWISE NOTED.

DRYER VENTING (DV) NOTES: DRYER VENTING SHALL BE CONSTRUCTED OF ALUMINUM AND SHALL BE ASSEMBLED USING AN APPROVED JOINING METHOD. NO SCREWS SHALL PENETRATE THE INTERIOR OF THE PIPE. INSTALLATION SHALL COMPLY WITH SECTION 504 OF THE IBC 2015. PROVIDE FLEXIBLE CONNECTION TO EACH DRYER. VERTICAL PIPING SHALL BE HARD DUCT. ALL DUCTWORK LOCATED ABOVE INACCESSIBLE AREA'S SHALL BE HARD DUCT CONNECTIONS. DO NOT PROVIDE LINT SCREEN AT TERMINATION. PROVIDE RECESSED DRYER VENTING BOX. COORDINATE EXACT LOCATION WITH THE ARCHITECT.

REFER TO STRUCTURAL PLANS FOR CONCEALED PIPE ROUTING REQUIREMENTS. THE M.C. SHALL BE RESPONSIBLE FOR ALL CORE PENETRATIONS ASSOCIATED WITH THIS CONTRACT.

MECHANICAL PLAN NOTES (#)

1. PROVIDE HONEYWELL MODEL "TH115-240S" LINE VOLTAGE WALL MOUNTED THERMOSTAT. REFER TO SPECIFICATIONS FOR THERMOSTAT REQUIREMENTS. REFER TO ARCHITECTURAL ELEVATIONS FOR THERMOSTAT MOUNTING HEIGHTS.
2. TERMINATE 1"Ø SCH.-40 CONDENSATE PIPING 3'-0" ABOVE GRADE. TERMINATE WITH 45 DEGREE FITTING AND 1"Ø OPEN ENDED TERMINATION CAP WITH SCREENING.
3. 1"Ø CONDENSATE RISER DOWN TO 3'-0" ABOVE GRADE. INSTALL CONDENSATE RISER WITHIN EXTERIOR WALL CONSTRUCTION, INSIDE THE THERMAL ENVELOPE.
4. ALTERNATE No.1 - PROVIDE "LG" MODEL "PRARS1" AUXILIARY HEAT CONTROLLER. FIELD LOCATE CONTROLLER(S) IN THE 1ST FLOOR MECHANICAL ROOM. PROVIDE ALL INTERCONNECTING POWER, 12VDC, AND 24VAC COMMUNICATION WIRING. PROVIDE COMPATIBLE CONTROL RELAY RATED FOR THE SPECIFIED BASEBOARD WATTAGE. BASE BID - PROVIDE INTEGRAL KNOB STYLE THERMOSTAT.
5. PROVIDE INTEGRAL KNOB STYLE THERMOSTAT.
6. PROVIDE 3-1/4" x 10" DUCT CONNECTION TO KITCHEN RANGE HOOD BY OTHERS. PROVIDE SLOPPED WALL PENETRATION WITH INTEGRAL BACKDRAFT DAMPER.
7. RS/RL PIPING ROUTED IN ATTIC SPACE.

MULTI-ZONE HEAT PUMP SYSTEM INDOOR UNIT SCHEDULE (EVAP)

SYSTEM	UNIT No.	"LG" MODEL No.	TYPE	SUPPLY FAN H/M/L (CFM)	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	ELECTRICAL		OPERATING WEIGHT (LBS)	REMARKS
							POWER	MCA		
ACCU-1	EVAP-1	LMN079HVT	WALL MOUNTED	254/204/148	7.0	8.1	230-1-60	0.4	18.3	1-2
	EVAP-2	LMN090HSV5	WALL MOUNTED	268/218/169	9.0	10.9	230-1-60	0.4	18.3	1-2
	EVAP-3	LMN079HVT	WALL MOUNTED	254/204/148	7.0	8.1	230-1-60	0.4	18.3	1-2
	EVAP-4	LMN079HVT	WALL MOUNTED	254/204/148	7.0	8.1	230-1-60	0.4	18.3	1-2
	EVAP-5	LMN079HVT	WALL MOUNTED	254/204/148	7.0	8.1	230-1-60	0.4	18.3	1-2

NOTES:
1. PROVIDE WALL MOUNTED BRACKET.
2. PROVIDE "LG" MODEL "PREMTBVC2" WIRED THERMOSTAT/CONTROLLER

ELECTRIC RADIATOR SCHEDULE (ER)

UNIT TYPE	MANUFACTURER	MODEL No.	LENGTH	WATTS	BTU'S	POWER	AMPS	REMARKS
ER-1	RUNTAL	EWP-6	36	880	3003	240-1-60	3.7	SEE NOTES

NOTES:
1. REFER TO FLOOR PLANS FOR CONTROL REQUIREMENTS/ACCESSORIES.
2. COLOR SELECTION BY THE ARCHITECT.
3. PROVIDE ELECTRICAL DISCONNECT.

ELECTRIC BASEBOARD HEATER SCHEDULE (EB)

UNIT TYPE	MANUFACTURER	MODEL No.	LENGTH	WATTS	BTU'S	POWER	AMPS	REMARKS
EB-1	MARKEL	H3703-024	24"	375	1275	240-1-60	1.6	SEE NOTE S
EB-2	MARKEL	H3720-096	96"	2000	6826	240-1-60	8.3	SEE NOTES
EB-3	MARKEL	H3706-036	36"	600	2040	240-1-60	2.5	SEE NOTES

NOTES:
1. REFER TO FLOOR PLANS FOR CONTROL REQUIREMENTS/ACCESSORIES.
2. PROVIDE 12-GAUGE HEAVY DUTY EXTRUDED ALUMINUM HOUSING.
3. COLOR SELECTION BY THE ARCHITECT.
4. PROVIDE ELECTRICAL DISCONNECT.

EXHAUST FAN SCHEDULE (EF)

UNIT TAG	SERVICE/LOCATION	TYPE	CFM	E.S.P.	DRIVE	MOTOR			SOUND (SONES)	WEIGHT (LBS.)	DESIGN EQUIPMENT	REMARKS
						AMPS	POWER	VOLTAGE				
EF-1	BATHROOM'S	CEILING	80	0.10	DIRECT			120-60-1	0.70	10.0	NUTONE AERN80LK	1-3

NOTES:
1. PROVIDE INLET/OUTLET FLANGE ADAPTERS.
2. PROVIDE INTEGRAL BACKDRAFT DAMPER.
3. PROVIDE HANGING KIT W/ NEOPRENE ISOLATORS.
4. PROVIDE ENERGY STAR CERTIFICATION.

MULTI-ZONE HEAT PUMP SCHEDULE (ACCU)

UNIT No.	MANUFACTURER	SYSTEM MODEL No.	NOMINAL TONAGE	RATED COOLING CAPACITY (MBH)	RATED HEATING CAPACITY (MBH)	POWER			HEATING COP	COOLING COP	OPERATING WEIGHT (LBS)	REMARKS
						POWER	MCA	MOP				
ACCU-1	LG	LMU361HHV	3.0	36.0	45.0	208-1-60	32.7	40A	4.0	4.25	218	1-7

NOTES:
1. 100% HEATING CAPACITY AT -13°F OUTSIDE AMBIENT CONDITIONS. OVERSIZED COOLING CAPACITY SHALL NOT BE ACCEPTED.
2. PROVIDE WALL MOUNTED BRACKET.
3. PROVIDE RL/RS PIPING BETWEEN INDOOR/OUTDOOR UNITS.
4. PROVIDE ELECTRICAL DISCONNECT SWITCH.
5. PROVIDE BASE PAN HEATERS.
6. PROVIDE COLD CLIMATE ENERGY STAR LABELED EQUIPMENT.

SPLIT SYSTEM BRANCH CONTROLLER SCHEDULE (BC)

UNIT No.	"LG" MODEL NUMBER	NUMBER OF BRANCHES	ELECTRICAL			OPERATING WEIGHT (LBS)	NOTES
			POWER	MCA	WATTS		
BC-1	PMBD3620	2	208/1/60	0.08	16	13	1
BC-2	PMBD3620	3	208/1/60	0.12	24	14.3	1

NOTES:
1. PROVIDE SERVICE VALVES FOR EACH PORT.

PROJECT NAME/LOCATION: [NEW CONSTRUCTION]
DESCRIPTION
68 PULASKI STREET - SINGLE FAMILY HOME
PROJECT NUMBER: 2317.006

BENLIC DEVELOPMENT LLC
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ARCHITECT OF RECORD

DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [X] CONSTRUCTION DOCUMENTS [ ] AS BUILT RECORD

DRAWING TITLE
MECHANICAL PLANS & SCHEDULES

REVISIONS AFTER ISSUANCE
NO. | DESCRIPTION | DATE

SEAL
STATE OF NEW YORK
BRIAN P. ZITEL
069970
LICENSED PROFESSIONAL ENGINEER

ISSUE DATE 09.19.2025

DRAWING NUMBER
M-101

ELECTRICAL SYMBOL LIST

#10 2(GFI) PP–1A — 120 VOLT CIRCUIT HOMERUN WITH GROUND TO PANEL INDICATED
IF PRESENT INDICATES MINIMUM CONDUCTOR SIZING.
IF NO # IS PRESENT BRANCH CIRCUITING SHALL BE #12AWG.
'GFI' IF PRESENT INDICATES GFI BREAKER.

#10 PP–1A 20A,2P (7,9) — 240V 1 OR 3 PHASE CIRCUIT HOMERUN WITH GROUND TO PANEL
SOLID ARROWHEAD INDICATES MULTIPOLE CIRCUIT
IF PRESENT INDICATES MINIMUM CONDUCTOR SIZING.
IF NO # IS PRESENT BRANCH CIRCUITING SHALL BE #12AWG.

SURFACE MOUNTED 120/240 VOLT PANELBOARD

RECESSED 120/240 VOLT PANELBOARD

CONTRACTOR TO MAKE COMPLETE 120 VOLT EQUIPMENT CONNECTION

CONTRACTOR TO MAKE COMPLETE 240 VOLT EQUIPMENT CONNECTION

MOTOR CONNECTION

(J) OR [JB] — JUNCTION BOX – CEILING OR WALL MOUNTED

WP [S3] — 240 VAC DISCONNECT SWITCH, LEFT NUMERAL INDICATES AMPERE RATING RIGHT NUMERAL INDICATES NO. OF POLES, HEAVY DUTY TYPE. 'WP' IF PRESENT INDICATES NEMA 3R ENCLOSURE REQUIRED.

C — 20 AMP 120 VOLT RATED TAMPER RESISTANT DUPLEX RECEPTACLE +18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. COLOR AS SELECTED BY ARCHITECT 'C', IF PRESENT, INDICATES RECEPTACLE SHALL BE MOUNTED +6" ABOVE COUNTER BACKSPLASH

C GFI — 20 AMP 120 VOLT RATED TAMPER RESISTANT GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE +18" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. COLOR AS SELECTED BY ARCHITECT 'C', IF PRESENT, INDICATES RECEPTACLE SHALL BE MOUNTED +6" ABOVE COUNTER BACKSPLASH

TAMPER RESISTANT QUAD RECEPTACLE 20AMP 120 VOLT RATED COLOR AS SELECTED BY ARCHITECT

$ II a,b — TOGGLE SWITCH, 1 POLE, ROMAN NUMERALS INDICATE NO. OF GANGS AND SMALL CASE LETTERS INDICATE SWITCH LEG CONTROL

$ — SINGLE POLE TOGGLE SWITCH, 20 AMP RATING, 125/277 VAC

$3 — THREE WAY SWITCH, 20 AMP RATING, 125/277 VAC

$T — THERMAL DISCONNECT SWITCH, TOGGLE TYPE, 120V, 16 AMP

CO — SINGLE STATION 120VAC CARBON MONOXIDE ALARM WITH LOCAL AUDIBLE ALARMS, INTERCONNECTION CAPABILITY AND BATTERY BACK–UP. KIDDE KN–COB–IC SERIES OR APPROVED EQUAL. ALARMS TO BE TANDEM WIRED WITH OTHER SMOKE/CO ALARMS WITHIN THE SAME APARTMENT.

SS — SINGLE STATION 120VAC SMOKE ALARM WITH LOCAL AUDIBLE ALARMS, INTERCONNECTION CAPABILITY AND BATTERY BACK–UP, KIDDE P12040 SERIES OR APPROVED EQUAL. ALARMS TO BE TANDEM WIRED WITH OTHER SMOKE/CO ALARMS WITHIN THE SAME APARTMENT.

▽ — FUTURE TELEPHONE OUTLET (SHOWN FOR REFERENCE ONLY)

TV — FUTURE TELEVISION (SHOWN FOR REFERENCE ONLY)

B — DOORBELL CHIME, NEWHOUSE MODEL #CHM1 OR APPROVED EQUAL. REFER TO DOOR BELL WIRING DETAIL #4 ON DRAWING E–002 FOR ADDITIONAL INFORMATION.

ILLUMINATED DOORBELL, NEWHOUSE #BT5BL OR APPROVED EQUAL. REFER TO DOOR BELL WIRING DETAIL #4 ON DRAWING E–002 FOR ADDITIONAL INFORMATION.

DOORBELL TRANSFORMER, 16 VOLT, 30VA NEWHOUSE MODEL #30TR OR APPROVED EQUAL. REFER TO DOOR BELL WIRING DETAIL #4 ON DRAWING E–002 FOR ADDITIONAL INFORMATION.

ABBREVIATIONS

WP	WEATHER PROOF
+	INDICATES ABOVE FINISHED FLOOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
OC	ABOVE COUNTER
GFI	GROUND FAULT INTERRUPTER
AFCI	ARC FAULT CIRCUIT INTERRUPTER
E.C.	ELECTRICAL CONTRACTOR
TYP	TYPICAL

MOUNTING HEIGHTS:

UNLESS OTHERWISE INDICATED OR CALLED FOR, OR BECAUSE OF SPECIAL CONDITIONS, THE MOUNTING HEIGHTS OF ALL OUTLETS SHALL GENERALLY BE AS FOLLOWS:

LOCAL SWITCHES	4'–0" ABOVE FLOOR TO CENTER	TELEVISION OUTLET & ASSOCIATED RECEPTACLE OUTLET (HIGH)	VERIFY WITH OWNER/ARCHITECT
RECEPTACLES	1'–6" ABOVE FLOOR TO CENTER		
WALL MOUNTED FIXTURES	HEIGHT AS DIRECTED	RECEPTACLES & SWITCHES OVER COUNTERS	COORDINATE W/ ARCH. DRAWINGS OR HEIGHT AS INDICATED WHERE THE OBSTRUCTED HIGH REACH SHALL NOT EXCEED 48" MAX. FOR A REACH DEPTH OF 20" MAX.; 44" MAX. FOR A REACH DEPTH THAT EXCEEDS 20" BUT NOT MORE THAN 25" MAX.
MOTOR CONTROLS	4'–0" ABOVE FLOOR TO CENTER		
DISCONNECT AND SAFETY SWITCHES	4'–0" ABOVE FLOOR TO CENTER		
PANELBOARDS	APTS: 48" A.F.F. TO CENTER OF TOP–MOST DEVICE HANDLE.		
TELEPHONE OUTLET (DESK TYPE) OR COMPUTER OUTLET	1'–6" ABOVE FLOOR TO CENTER		
TELEPHONE OUTLET (WALL)	4'–0" ABOVE FLOOR TO CENTER		
TELEVISION OUTLET & ASSOCIATED RECEPTACLE OUTLET (LOW)	1'–6" ABOVE FLOOR TO CENTER		

GENERAL DRAWING NOTES

(THESE NOTES APPLY TO ALL ELECTRICAL DRAWINGS)

A. ALL CIRCUITING SHALL BE CONCEALED (EXCEPT IN ELECTRICAL AND MECHANICAL SPACES). ALL CONDUITS SHALL BE INSTALLED AS HIGH AS POSSIBLE ABOVE FINISHED CEILINGS AND CONCEALED IN WALLS UNLESS OTHERWISE INDICATED. UNDER NO CIRCUMSTANCES SHALL ANY RACEWAY OR WIRING BE INSTALLED EXPOSED IN EXISTING ROOMS, CORRIDORS OR FINISHED AREAS.

B. CIRCUIT NUMBERS INDICATED ON THE DRAWINGS ARE SHOWN FOR THE PURPOSE OF CLARIFYING THE GROUPING OF OUTLETS. THE ACTUAL NUMBER ASSIGNED TO THE CIRCUIT IN THE PANELBOARD SHALL SUIT THE BUSSING AND BRANCH CIRCUITING TO THE PANEL. PROVIDE COMPLETE AND ACCURATE TYPEWRITTEN PANEL DIRECTORIES FOR ALL BRANCH CIRCUIT PANELBOARDS.

C. LOCATIONS INDICATED FOR LIGHT FIXTURES ARE APPROXIMATE. LOCATE FIXTURES AS REQUIRED TO AVOID INTERFERENCE WITH EXISTING AND NEW BUILDING STEEL, PIPING, DUCTWORK, CONDUIT, DIFFUSERS, SMOKE DETECTORS, etc. FIELD COORDINATE THE LOCATIONS AS NEAR AS POSSIBLE TO THOSE INDICATED ON THE PLANS. ALSO REFER TO ARCHITECTURAL REFLECTED CEILING PLANS.

D. EXACT LOCATIONS OF CEILING MOUNTED SMOKE ALARMS SHALL BE COORDINATED WITH OTHER CEILING MOUNTED EQUIPMENT TO AVOID CONFLICT. LOCATE DEVICES AS NEAR AS POSSIBLE TO THE LOCATION INDICATED. FIRE ALARM SMOKE ALARMS SHALL BE REQUIRED TO BE INSTALLED A MINIMUM OF THREE (3) FEET AWAY FROM SUPPLY OR RETURN AIR GRILLES OR PER MANUFACTURERS INSTALLATION REQUIREMENTS AND NFPA 72.

E. THE CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW OTHER TRADES PROJECT CONTRACT DOCUMENTS TO DETERMINE MOUNTING HEIGHTS FOR ELECTRICAL DEVICES OR EQUIPMENT. THE LOCATIONS FOR MECHANICAL AND PLUMBING EQUIPMENT THAT REQUIRES ELECTRICAL CONNECTIONS ARE SHOWN ON THE MECHANICAL AND PLUMBING DRAWINGS. COORDINATE EXACT MOUNTING LOCATIONS AND HEIGHTS IN THE FIELD WITH OTHER TRADES PRIOR TO INSTALLATION.

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MOUNTING	VOLTAGE/ BALLAST	LAMPS	MANUFACTURER & CATALOG NO.	NOTES/REMARKS
LF2	KITCHEN ISLAND PENDANT LIGHT	SUSPENDED	120V	(1) 4W LED ST58 STYLE LAMP E12 BASE 3000'K	HAMPTON BAY #25228 SERIES OR APPROVED EQUAL.	COORDINATE SUSPENSION LENGTH WITH ARCHITECT/OWNER. PROVIDE ALL MOUNTING HARDWARE AS REQUIRED.
LF3	15" DIAMETER SURFACE MOUNT FIXTURE	SURFACE	120V	26.4W 1700 LUMEN LED 3000'K	HAMPTON BAY #CA9AA026FR1D25 SERIES OR APPROVED EQUAL.	
LF4	21" DIAMETER SURFACE MOUNT FIXTURE	SURFACE	120V	29W 2150 LUMENS LED 3000'K	ARTIKA #CL–ERR–HD2 SERIES OR APPROVED EQUAL.	
LF5	4" LED DOWNLIGHT. IC RATED, WET LOCATION RATED	RECESSED	120V	12W 883 LUMENS LED 3000'K	RP LIGHTING #8744–5CCT SERIES OR APPROVED EQUAL	
LF6	LED VANITY LIGHT	SURFACE	120V	(2) 8.5W LED A19 STYLE LAMP E26 BASE 3000'K	AVIANCE LIGHTING #HD76730 OR APPROVED EQUAL.	COORDINATE EXACT MOUNTING HEIGHTS AND LOCATIONS WITH ARCHITECT PRIOR TO ROUGH–IN.
LF8	4'–0" LED LENSED STRIPLIGHT	SURFACE	120V	20W 1800 LUMENS LED 4000'K	RP LIGHTING #4312 SERIES OR APPROVED EQUAL	COORDINATE ALL CEILING TYPES WITH ARCHITECTURAL REFLECTED CEILING PLANS AND PROVIDE ALL MOUNTING HARDWARE AS REQUIRED.
LF10	WET LOCATION RATED SCONCE LIGHT WITH MOTION SENSOR AND INTEGRAL PHOTOCELL	SURFACE	120V	(1) 8.5W LED A19 STYLE LAMPS E26 BASE 3000'K	C CATTLEYA LIGHTING #HLA2586–LIN–W SERIES OR APPROVED EQUAL	COORDINATE EXACT MOUNTING HEIGHTS AND LOCATIONS WITH ARCHITECT PRIOR TO ROUGH–IN.
LF11	WET LOCATION RATED SURFACE MOUNT FIXTURE WITH MOTION SENSOR AND INTEGRAL PHOTOCELL	SURFACE	120V	(2) 8.5W LED A19 STYLE LAMPS E26 BASE 3000'K	C CATTLEYA LIGHTING #HLA2599–JES–FM SERIES OR APPROVED EQUAL	COORDINATE EXACT MOUNTING HEIGHTS AND LOCATIONS WITH ARCHITECT PRIOR TO ROUGH–IN.

LIGHTING FIXTURE SCHEDULE GENERAL NOTES

1. CONTRACTOR SHALL PROVIDE ALL NECESSARY FIXTURE LAMPS.
2. CONTRACTOR SHALL VERIFY ALL FINAL FIXTURE COLORS WITH ARCHITECT/OWNER PRIOR TO PURCHASING FIXTURES.
3. CONTRACTOR SHALL PROVIDE LIGHTING FIXTURES THAT ARE LISTED, LABELED AND APPROVED BY UNDERWRITERS LABORATORIES INC. FOR USE WITH THE SPECIFIED CEILING TYPE AND RATING. COORDINATE WITH ARCHITECTURAL DRAWINGS, REFLECTED CEILING PLANS AND FIELD VERIFICATION OF EXISTING CEILING TYPES AND CONDITIONS BY CONTRACTOR.
4. CONTRACTOR SHALL PROVIDE ALL REQUIRED MOUNTING HARDWARE FOR A COMPLETE INSTALLATION.
5. FOR ALL LIGHTING FIXTURES, PROVIDE TRIM KITS AS REQUIRED. COORDINATE EXACT REQUIREMENTS WITH ARCH. REFLECTED CEILING PLAN FOR GYP BOARD/GRID CEILING PLACEMENTS. FOR EXISTING CEILINGS FIELD VERIFY TYPES PRIOR TO PURCHASE.
6. COORDINATE FINAL FIXTURE SELECTION WITH OWNER PRIOR TO PURCHASING.

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

EQUIPMENT/MOTOR DATA								SOURCE PROTECTION DEVICE				BRANCH CIRCUIT CONDUIT & WIRE	REFERENCE NOTES
EQUIPMENT DESIGNATION (#)		LOCATION	HP OR KW	FLA	MCA	PHASE	VOLTS	BREAKER	POLES	PANEL	CIRCUIT NO.	QUANTITIES AND SIZE	
EVAP–1	EVAPORATOR–1	DINING ROOM	–	–	0.4	1	240	15A	2	LCA	26,28	(2) #12 & (1) #12 GND IN 1/2" C.	1,2,3
EVAP–2	EVAPORATOR–2	LIVING ROOM	–	–	0.4	1	240	15A	2	LCA	26,28	(2) #12 & (1) #12 GND IN 1/2" C.	1,2,3
EVAP–3	EVAPORATOR–3	BEDROOM 2	–	–	0.4	1	240	15A	2	LCA	26,28	(2) #12 & (1) #12 GND IN 1/2" C.	1,2,3
EVAP–4	EVAPORATOR–4	BEDROOM 1	–	–	0.4	1	240	15A	2	LCA	26,28	(2) #12 & (1) #12 GND IN 1/2" C.	1,2,3
EVAP–5	EVAPORATOR–5	BEDROOM 3	–	–	0.4	1	240	15A	2	LCA	26,28	(2) #12 & (1) #12 GND IN 1/2" C.	1,2,3
BC–1	BRANCH CONTROLLER–1	MECH. RM	16 W	–	0.08	1	240	15A	2	LCA	26,28	(2) #12 & (1) #12 GND IN 1/2" C.	1,2,3
BC–2	BRANCH CONTROLLER–1	LAUNDRY	16 W	–	0.08	1	240	15A	2	LCA	26,28	(2) #12 & (1) #12 GND IN 1/2" C.	1,2,3
ACCU–1	AIR COOLED CONDENSING UNIT–1	EXTERIOR	–	–	32.7	1	240	40A	2	LCA	10,12	(2) #8 & (1) #10 GND IN 3/4" C.	1,2,3
EB–1	ELECTRIC BASEBOARD–1	REFER TO PLAN FOR LOCATIONS	375 W	2.5	–	1	240	20A	2	LCA	REFER TO PLAN FOR CIRCUITING	(2) #12 & (1) #12 GND IN 1/2" C.	1,2
EB–2	ELECTRIC BASEBOARD–2	REFER TO PLAN FOR LOCATIONS	2000 W	8.3	–	1	240	20A	2	LCA	REFER TO PLAN FOR CIRCUITING	(2) #12 & (1) #12 GND IN 1/2" C.	1,2
EB–3	ELECTRIC BASEBOARD–3	REFER TO PLAN FOR LOCATIONS	600 W	2.5	–	1	240	20A	2	LCA	REFER TO PLAN FOR CIRCUITING	(2) #12 & (1) #12 GND IN 1/2" C.	1,2
ER–1	ELECTRIC RADIATOR–1	REFER TO PLAN FOR LOCATIONS	880 W	3.7	–	1	240	20A	2	LCA	REFER TO PLAN FOR CIRCUITING	(2) #12 & (1) #12 GND IN 1/2" C.	1,2
EF–1	EXHAUST FAN–1	REFER TO PLAN FOR LOCATIONS	–	–	0.2	1	120	20A	1	LCA	REFER TO PLAN FOR CIRCUITING	(2) #12 & (1) #12 GND IN 1/2" C.	1,4,6
WH–1	DOMESTIC WATER HEATER–1	MECH. RM	5.5 KW	23.0	–	1	208	30A	2	LCA	6,8	(2) #10 & (1) #10 GND IN 3/4" C.	1,5

MECHANICAL EQUIPMENT WIRING SCHEDULE GENERAL NOTE

A. THE ELECTRICAL CONTRACTOR (E.C.) SHALL BE RESPONSIBLE TO VERIFY ALL ELECTRICAL CHARACTERISTICS (VOLTAGE, PHASE, HORSEPOWER, AMPERES, ETC.) OF MECHANICAL EQUIPMENT AGAINST APPROVED MANUFACTURER SHOP DRAWINGS PRIOR TO ELECTRICAL ROUGH–IN. COORDINATE EQUIPMENT LOCATIONS WITH MECHANICAL PLANS.

MECHANICAL EQUIPMENT WIRING SCHEDULE REFERENCE NOTES

1. CONTRACTOR TO PROVIDE HACR TYPE CIRCUIT BREAKER.
2. CONTRACTOR SHALL RECEIVE DISCONNECT SWITCH FROM EQUIPMENT INSTALLER. CONTRACTOR SHALL INSTALL DISCONNECT SWITCH AND LOCATE ADJACENT TO MECHANICAL EQUIPMENT. FIELD COORDINATE EXACT LOCATION TO MAINTAIN PROPER WORKSPACE CLEARANCES PER NEC ARTICLE 110.
3. COORDINATE WITH THE MECHANICAL CONTRACTOR FOR CONTROL WIRING/PATHWAY REQUIREMENTS, AND PROVIDE 3/4" CONDUIT WITH PULLSTRING BETWEEN EVAPORATOR AND OUTDOOR CONDENSING UNITS. ALL PENETRATIONS THROUGH FLOORS/ROOF SHALL UTILIZE RGS CONDUIT. PROVIDE UL APPROVED FIRE–STOPPING MATERIALS FOR ALL PENETRATIONS OF RATED ASSEMBLIES – COORDINATE WITH ARCHITECTURAL DRAWINGS.
4. FURNISH AND INSTALL THERMAL DISCONNECT SWITCH. LOCATE ADJACENT TO MECHANICAL EQUIPMENT. FIELD COORDINATE EXACT LOCATION TO MAINTAIN PROPER WORKSPACE CLEARANCES PER NEC ARTICLE 110.
5. FURNISH AND INSTALL 30A 2 POLE, 240 VOLT, NEMA 1 HEAVY DUTY DISCONNECT SWITCH. LOCATE ADJACENT TO MECHANICAL EQUIPMENT. FIELD COORDINATE EXACT LOCATION TO MAINTAIN PROPER WORKSPACE CLEARANCES PER NEC ARTICLE 110.
6. COMBINATION EXHAUST FAN/LIGHT. PROVIDE SEPARATE SWITCHES TO INDIVIDUALLY CONTROL LIGHTING AND FAN.

PROJECT NAME/LOCATION: [NEW CONSTRUCTION]
DESCRIPTION 68 PULASKI STREET - SINGLE FAMILY HOME
PROJECT NUMBER: **2317.006**

BENLIC DEVELOPMENT LLC
403 MAIN STREET, SUITE 602
BUFFALO, NEW YORK 14203

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DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [ ] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION
ARCHITECT OF RECORD

HHL Architects
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DRAWING TITLE
ELECTRICAL SYMBOL LEGEND AND SCHEDULES

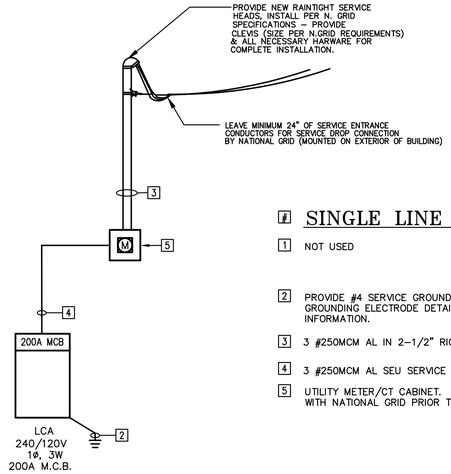
REVISIONS AFTER ISSUANCE

NO:	DATE	DESCRIPTION

SEAL
STATE OF NEW YORK BRIAN P. ZINTEL 099970 LICENSED PROFESSIONAL ENGINEER

ISSUE DATE 09.19.2025

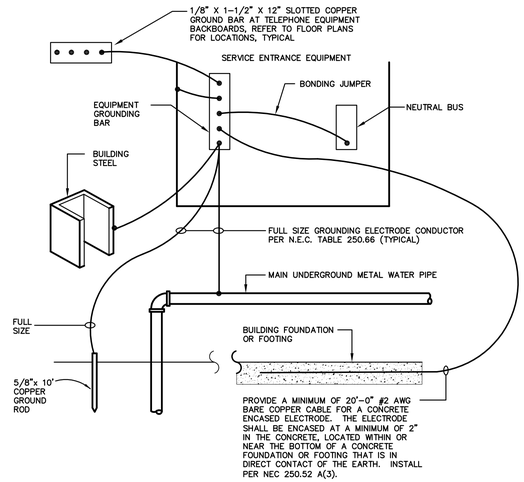
DRAWING NUMBER
E-001



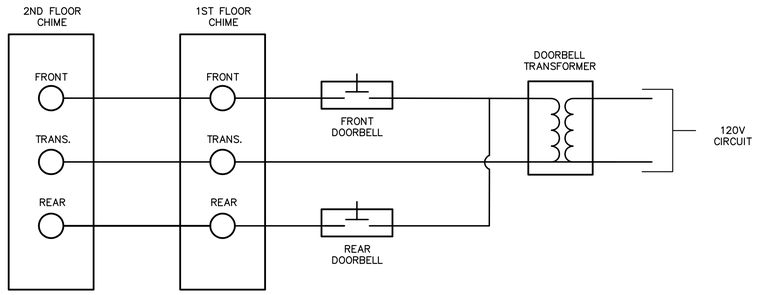
SINGLE LINE KEYED NOTES:

1. NOT USED
2. PROVIDE #4 SERVICE GROUND PER NEC. ALL GROUNDING PER NEC 250. REFER TO GROUNDING ELECTRODE DETAIL #2 ON THIS DRAWING FOR ADDITIONAL INFORMATION.
3. 3 #250MCM AL IN 2–1/2" RIGID CONDUIT
4. 3 #250MCM AL SEU SERVICE ENTRANCE RATED CABLE.
5. UTILITY METER/CT CABINET. COORDINATE FINAL REQUIREMENTS AND SEQUENCING WITH NATIONAL GRID PRIOR TO PERFORMING ANY WORK.

1 / E-002 SINGLE LINE DIAGRAM
SCALE: NONE



2 / E-002 GROUNDING ELECTRODE DETAIL
SCALE: NONE



4 / E-002 DOOR BELL WIRING DETAIL
SCALE: NONE

PROJECT NAME/LOCATION: [NEW CONSTRUCTION]
DESCRIPTION 68 PULASKI STREET - SINGLE FAMILY HOME
PROJECT NUMBER: **2317.006**

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DRAWING TITLE
ELECTRICAL DETAILS

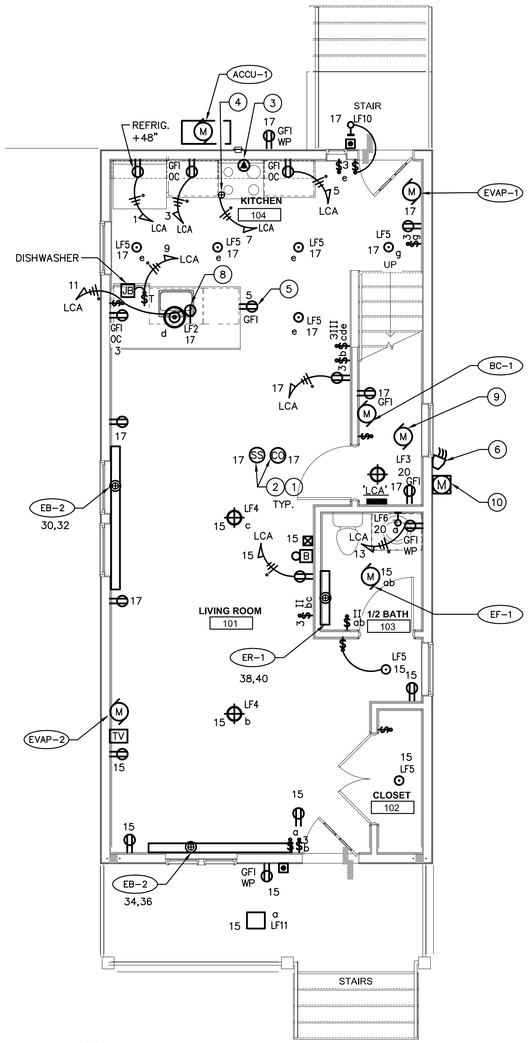
REVISIONS AFTER ISSUANCE

NO.	DATE	DESCRIPTION

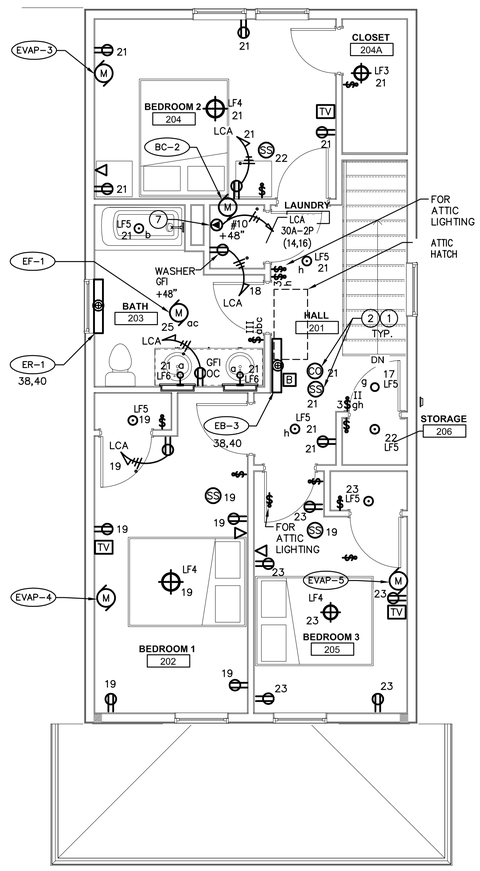
SEAL
STATE OF NEW YORK · BRIAN P. ZINTEL · 099870 · LICENSED PROFESSIONAL ENGINEER

ISSUE DATE 09.19.2025

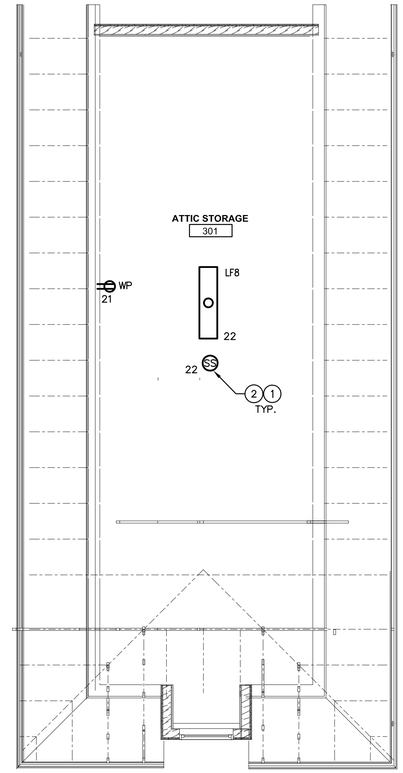
DRAWING NUMBER
E-002



1 E-101 ELECTRICAL FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 E-101 ELECTRICAL SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"



3 E-101 ELECTRICAL ATTIC PLAN
SCALE: 1/4" = 1'-0"

GENERAL DRAWING NOTES:

A. REFER TO DRAWING E-001 FOR ELECTRICAL SYMBOL LEGENDS AND SCHEDULES.

B. E.C. SHALL PROVIDE FIRESTOPPING MATERIALS FOR ALL PANELS, OUTLET BOXES, RACEWAYS, ETC. PENETRATING THROUGH FIRE RATED WALLS. ALL OUTLETS IN RATED WALLS MUST BE INSTALLED A MINIMUM OF 12" FROM EACH OTHER OR PROPERLY FIRE-STOPPED IF WITHIN THE SAME WALL OR CEILING CAVITY.

C. ALL 15A AND 20A, 125VAC RECEPTACLES IN RESIDENTIAL UNITS AND AREAS MUST BE LISTED AS TAMPER RESISTANT AS DEFINED IN 406.12.

D. E.C. SHALL FURNISH AND INSTALL AFCI TYPE CIRCUIT BREAKERS FOR ALL 15A OR 20A, 120V BRANCH CIRCUITS SUPPLYING OUTLETS (INCLUDING SMOKE ALARMS) IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATIONS ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS OR SIMILAR ROOMS.

E. ALL 15A AND 20A, 120V VOLT BRANCH CIRCUITS SHALL BE WIRED WITH 2 #12 & 1 #12 GROUND IN 3/4" CONDUIT UNLESS OTHERWISE NOTED.

F. REFER TO DRAWING E-002 FOR SINGLE LINE DIAGRAM AND ELECTRICAL DETAILS.

G. REFER TO DRAWING E-201 FOR ELECTRICAL SPECIFICATIONS.

ELECTRICAL KEYED NOTES:

1. SINGLE STATION SMOKE DETECTORS AND CARBON MONOXIDE DETECTORS SHALL BE TANDEM WIRED WITH OTHER SMOKE DETECTORS IN UNIT.
2. ALL SINGLE STATION SMOKE DETECTORS AND CARBON MONOXIDE DETECTORS TO BE CONNECTED INTO LIGHTING BRANCH CIRCUIT AHEAD OF LOCAL SWITCHES.
3. FURNISH AND INSTALL 50 AMP, 125/250 VOLT RATED NEMA 14-50R RECEPTACLE FOR ELECTRIC RANGE. PROVIDE MATCHING CORD AND PLUG, COORDINATE INSTALLATION WITH EQUIPMENT MANUFACTURER'S INSTRUCTIONS PRIOR TO ORDERING ELECTRICAL EQUIPMENT. PROVIDE 3 #6 AWG & 1 #10 AWG GROUND TO UNIT LOAD CENTER AND CONNECT TO 50A-2P CIRCUIT BREAKER (CIRCUITS 2,4).
4. HOOD MOUNTED ABOVE RANGE. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
5. INSTALL RECEPTACLES WITHIN 12" OF THE COUNTERTOP WORK SURFACE.
6. ELECTRIC SERVICE WEATHERHEAD. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH UTILITY PRIOR TO PERFORMING ANY WORK.
7. PROVIDE NEMA 14-30R OUTLET FOR ELECTRIC DRYER.
8. COORDINATE LOCATION OF GARBAGE DISPOSAL SWITCH WITH OWNER PRIOR TO ROUGH-IN.
9. ELECTRIC WATER HEATER. CONTRACTOR TO MAKE COMPLETE ELECTRICAL CONNECTION TO EQUIPMENT. PROVIDE 2 #10 AWG & 1 #10 AWG GROUND TO UNIT LOAD CENTER AND CONNECT TO 30A-2P CIRCUIT BREAKER (CIRCUITS 6,8). COORDINATE FINAL REQUIREMENTS WITH HEATER INSTALLER.
10. ELECTRICAL UTILITY METER. REFER TO SINGLE LINE DIAGRAM ON DRAWING E-002 FOR ADDITIONAL REQUIREMENTS.

LCA — 120/240 VOLTS, 1 ø, 40 CIRCUITS, 200A MCB, 200 AMP. MAINS, 3 WIRE, 22 KAIC, SURFACE MOUNTING. LUGS ONLY / MAIN BRKR. [3]

		DESCRIPTION	BRKR.	L1		L2		BRKR.	DESCRIPTION		
[1]	1	REFRIGERATOR	20A-1P	6.0	40.0			50A	ELECTRIC RANGE	2	
[1]	3	KITCHEN COUNTER	20A-1P			3.0	40.0	2P		4	
[1]	5	KITCHEN COUNTER	20A-1P	3.0	23.0			30A	WATER	6	
[1]	7	HOOD	20A-1P			12.0	23.0	2P	HEATER (WH-1)	8	
[4]	9	DISHWASHER	20A-1P GFI	8.0	32.7			40A	CONDENSING	10	[2]
[4]	11	GARBAGE DISPOSER	20A-1P GFI			6.0	32.7	2P	UNIT (ACCU-1)	12	
	13	BATHROOM GFI	20A-1P	1.5	22.0			30A	ELECTRIC	14	
[1]	15	LIVING ROOM RECEPTS.	15A-1P			9.0	22.0	2P	DRYER	16	
[1]	17	DINING ROOM RECEPTS.	15A-1P	9.0	10.0			20A-1P	WASHER	18	[1]
[1]	19	BEDROOM 1 RECEPTS/LTG.	15A-1P			9.0			SPACE	20	
[1]	21	BEDROOM 2 RECEPTS/LTG.	15A-1P	6.0					SPACE	22	
[1]	23	BEDROOM 3 RECEPTS/LTG.	15A-1P			9.0			SPACE	24	
	25	BATHROOM GFI	20A-1P	1.5	1.6			15A	EVAP- 1-5, BC-1,2	26	[2]
	27	SPACE					1.6	2P		28	
	29	SPACE			8.3			20A	ELECTRIC BASEBOARDS	30	[2]
	31	SPACE					8.3	2P		32	
	33	SPACE			8.3			20A	ELECTRIC BASEBOARDS	34	[2]
	35	SPACE					8.3	2P		36	
	37	SPACE			10.0			20A	ELECTRIC BASEBOARDS	38	[2]
	39	SPACE					10.0	2P		40	
TOTAL CONNECTED AMPS/LEG				190.9		193.9		TOTAL CONNECTED KVA		46.2	

NEMA 1 ENCLOSURE

[#] NOTES:
1. AFCI CIRCUIT BREAKER
2. HACR CIRCUIT BREAKER
3. PANEL SHALL BE EATON LOAD CENTER 'BR SERIES' C/W PLUG-ON BREAKERS, 14" WIDE ENCLOSURE C/W GROUNDING KIT, COPPER BUS.
4. E.C. SHALL FURNISH AND INSTALL AFCI/GFI DUAL FUNCTION CIRCUIT BREAKER.

PROJECT NAME/LOCATION: [NEW CONSTRUCTION]
DESCRIPTION: 68 PULASKI STREET - SINGLE FAMILY HOME
PROJECT NUMBER: 2317.006

BENLIC DEVELOPMENT LLC
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DRAWING SUBMISSION STATUS: [ ] NOT FOR CONSTRUCTION [ ] SCHEMATIC DESIGN [ ] DESIGN DEVELOPMENT [ ] CONSTRUCTION DOCUMENTS [X] ISSUED FOR CONSTRUCTION
ARCHITECT OF RECORD

DRAWING TITLE: ELECTRICAL FLOOR PLANS

REVISIONS AFTER ISSUANCE

NO:	DATE	DESCRIPTION

SEAL
STATE OF NEW YORK BRIAN P. ZINTEL 099870 LICENSED PROFESSIONAL ENGINEER

ISSUE DATE 09.19.2025

DRAWING NUMBER
E-101

ELECTRICAL SPECIFICATIONS

BASIC ELECTRICAL REQUIREMENTS

A. THE INSTRUCTIONS TO BIDDERS, FORM OF BID, FORM OF CONTRACT, GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS AND THE CONTRACT DRAWINGS ARE A PART OF THE SPECIFICATIONS FOR THIS DIVISION OF WORK AND THIS CONTRACTOR SHALL REFER TO THEM FOR INSTRUCTIONS PERTAINING TO HIS WORK.

B. "THE CONTRACTOR", "THIS CONTRACTOR", AND "EC", AS USED IN THESE DRAWINGS AND SPECIFICATIONS, MEANS THE ELECTRICAL CONTRACTOR. "FURNISH AND INSTALL", "SUPPLY", AND "INSTALL", AS USED IN THESE SPECIFICATIONS, MEANS A COMPLETE AND WORKABLE INSTALLATION BY THE E.C.

C. WHERE SPECIFICATIONS AND/OR DRAWINGS CONFLICT WITH ANY CODE REQUIREMENT, CODE REQUIREMENTS SHALL BE FOLLOWED.

D. CODES AND STANDARDS:

1. NYS UNIFORM FIRE PREVENTION AND BUILDING CODE
2. NFPA STANDARDS
3. ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES
4. NYS ENERGY CONSERVATION CONSTRUCTION CODE
5. NATIONAL ELECTRICAL CODE

E. THE ELECTRICAL SYSTEMS COVERED BY THIS CONTRACT INCLUDE, BUT ARE NOT LIMITED TO:

1. BRANCH CIRCUIT WIRING AND RACEWAYS
2. WIRING DEVICES
3. DISCONNECTS
4. MOTOR STARTERS AND MOTOR STARTING EQUIPMENT
5. GROUNDING AND BONDING
6. LIGHTING CONTROLS
7. LIGHTING FIXTURES AND LAMPS
8. ELECTRICAL DISTRIBUTION SYSTEM, INCLUDING OVERCURRENT DEVICES
9. EXISTING CONSTRUCTION AND COORDINATION OF DEMOLITION WORK
10. CONNECTIONS TO HVAC, PLUMBING, FIRE PROTECTION, AND ALL OTHER ELECTRICALLY SUPPLIED EQUIPMENT, CONTROLS, CONTROL PANELS, MOTOR STARTERS, MOTOR STARTING EQUIPMENT AND DISCONNECTS NOT FURNISHED UNDER HVAC, PLUMBING, FIRE PROTECTION, OR OTHER CONTRACTS.
11. FIRE ALARM SYSTEM

F. PAY FOR ALL PERMITS, INSPECTION FEES, LICENSES AND FOR TESTS WHICH MAY BE REQUIRED IN DETERMINING THE COMPLETENESS OF THE ELECTRICAL WORK.

G. ALL ELECTRICAL PRODUCTS USED ON THIS PROJECT SHALL BE LISTED BY UNDERWRITER'S LABORATORIES (UL).

H. ALL ELECTRICAL PRODUCTS USED ON THIS PROJECT SHALL CONFORM TO APPLICABLE STANDARD OF THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA).

I. ALL ELECTRICAL INSTALLATION AND PRODUCTS USED ON THIS PROJECT SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC).

J. THE PLANS SHOW THE APPROXIMATE LOCATION OF ALL PARTS OF THE WORK. THE ARCHITECT WILL GIVE EXACT LOCATIONS. WHERE STRUCTURAL CONDITIONS ENCOUNTERED NECESSITATE MINOR CHANGES, THESE SHALL BE MADE WITHOUT CHARGE, BUT MUST MEET WITH THE APPROVAL OF THE ARCHITECT. WHERE MAJOR CHANGES ARE REQUIRED, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR DECISION BEFORE PROCEEDING WITH THE WORK.

K. NOTIFY THE ARCHITECT, AND OBTAIN APPROVAL, BEFORE ANY COMPONENTS OF THE ELECTRICAL SYSTEM ARE CONCEALED BY CLOSING OFF AREAS, POURING CONCRETE, ETC.

L. DETERMINE AND BE RESPONSIBLE FOR PROPER SIZE AND LOCATION OF OPENINGS AND CHASES, AND GIVE GENERAL CONTRACTOR NOTICE OF REQUIREMENTS. INSTALL ALL SLEEVES NECESSARY FOR THE WORK. WHEREVER ANY RACEWAY PASSES THROUGH A WALL, THE OPENING SHALL BE SEALED TIGHT AGAINST THE RACEWAY BY THIS CONTRACTOR. RACEWAYS THROUGH FOUNDATION WALLS AND ROOFS SHALL BE SEALED WATERTIGHT BY THIS CONTRACTOR.

M. THIS CONTRACTOR SHALL DO ALL NECESSARY CUTTING AND PATCHING WHICH IS NOT CALLED TO BE DONE UNDER ANOTHER DIVISION. ALL CUTTING AND REPAIRING SHALL BE PERFORMED BY SKILLED WORKERS.

N. PAINT ALL EXPOSED RACEWAYS IN FINISHED ROOMS WITH TWO COATS OF PAINT TO MATCH SURROUNDINGS. INSTALL PANELBOARD TRIMS, CABINETS, ENCLOSURES, ETC., IN SUFFICIENT TIME SO THAT THE PAINTING CONTRACTOR MAY PAINT THESE SURFACES WITH THE WALLS. THIS CONTRACTOR SHALL PAY FOR ALL NECESSARY PAINTING IF THE ABOVE PROCEDURE IS NOT FOLLOWED.
THE CONTRACTOR SHALL FURNISH AND INSTALL THE POWER AND LIGHTING REQUIRED FOR THE CONSTRUCTION. THE SCOPE SHALL INCLUDE, BUT NOT LIMITED TO:

1. TEMPORARY POWER DISTRIBUTION
2. LAMP SOCKETS AND LAMPS
3. OUTLETS AND CONSTRUCTION EQUIPMENT CONNECTION INCLUDING WELDERS.
4. REMOVAL OF TEMPORARY DISTRIBUTION AFTER COMPLETION OF CONSTRUCTION.

O. THE CONTRACTOR SHALL INSTALL HIS RACEWAYS IN SUCH A MANNER THAT THE EXPANSION JOINTS OF THE BUILDING WILL FUNCTION PROPERLY AND NOT STRESS ANY ELECTRICAL RACEWAYS. EXPANSION JOINTS SHALL BE INSTALLED IN ALL RACEWAYS AT THE EXPANSION JOINTS OF THE BUILDING.

P. BEFORE ORDERING ANY MATERIAL OR DOING ANY WORK THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AT THE BUILDING AND SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF SAME. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED ON ACCOUNT OF DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND THE MEASUREMENTS INDICATED ON THE DRAWINGS; ANY DIFFERENCE WHICH MAY BE FOUND SHALL BE SUBMITTED TO THE ARCHITECT FOR CONSIDERATION BEFORE PROCEEDING WITH THE WORK.

Q. SUBMITALS: PROVIDE PRODUCT DATA, CATALOG CUT SHEETS WITH MFG. SPECIFICATIONS FOR REVIEW BY ARCH./ENGR. FOR THE FOLLOWING ITEMS:

1. SAFETY DISCONNECT SWITCHES
2. LIGHTING FIXTURES
3. LIGHTING CONTROL DEVICES
4. CONDUCTORS & CABLES
5. WIRING DEVICES
6. PANELBOARDS
7. FIRE ALARM SYSTEM

R. PROVIDE ELECTRONIC SUBMITTAL COPIES FOR EACH ITEM LISTED ABOVE.

S. MAINTAIN THROUGHOUT PROJECT A SET OF PLANS WHICH ACCURATELY PORTRAY THE ACTUAL INSTALLATION, INCLUDING LOCATION OF ALL WIRING, EQUIPMENT, CIRCUIT NUMBERS, ETC. TURN OVER TO OWNER AT COMPLETION OF JOB.

RACEWAYS AND FITTINGS

A. WHERE CALLED FOR ON THE DRAWINGS, FLOOR OUTLET BOXES AND POKE-THROUGH DEVICE SHALL BE AS MANUFACTURED BY HUBBELL, WALKER, LEGRAND.

B. WIRING AND RACEWAYS SHALL BE CONCEALED IN ALL ROOMS AND SPACES UNLESS OTHERWISE NOTED.

C. FOR INDOOR USE IN FINISHED ROOMS INSIDE HOLLOW WALL OR CEILING CAVITIES: WIRE IN NM ROMEX CABLE.

D. FOR USE IN UNFINISHED INTERIOR AREAS: WIRE IN SURFACE MOUNTED EMT CONDUIT, SET SCREW FITTINGS.

E. WHERE EXPOSED IN EXTERIOR, DAMP/WET LOCATIONS OR WHERE SUBJECT TO PHYSICAL DAMAGE, WIRE IN SURFACE MOUNTED RGS CONDUIT.

F. FOR UNDERGROUND CONDUIT RUNS, WIRE IN SCHEDULE 80 PVS CONDUIT UNLESS OTHERWISE CALLED FOR ON THE DRAWINGS.

G. FOR FLOOR PENETRATIONS: WIRE IN RGS.

H. FOR FINAL CONNECTION IN DAMP OR WET LOCATIONS: LIQUID TIGHT FLEXIBLE METAL CONDUIT, WITH LISTED FITTINGS.

I. IN ALL INSTANCES, INCLUDE A SEPARATE GREEN INSULATED GROUNDING CONDUCTOR IN EACH RACEWAY, SIZE PER NEC.

J. FURNISH ALL FITTINGS REQUIRED, BUT NOT LIMITED TO: BUSHINGS TO PREVENT WIRE ABRASION; SINGLE-AND MULTIPLE-GANG BOXES TO ACCOMMODATE DEVICE INSTALLATION; ADAPTERS FROM CONDUIT TO RACEWAY; TRANSITIONS TO BOTH LARGER AND SMALLER SURFACE METAL RACEWAYS; 90 DEGREE ELBOWS, TEES, FIXTURE BOXES, AND FLEXIBLE SECTIONS.

K. SURFACE METAL RACEWAY AND FITTINGS SHALL MEET ALL REQUIREMENTS OF NEC ARTICLE 352A AND SHALL BE UL LISTED.

L. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER APPLICATION, INSTALLATION, AND LOCATION OF ALL NECESSARY AND REQUIRED INSERTS, SUPPORTS, AND ANCHOR BOLTS, AND FOR A SATISFACTORY RACEWAY SYSTEM UPON COMPLETION OF THE PROJECT.

M. WHERE ANY COMPONENT OF THE RACEWAY SYSTEM IS DAMAGED PRIOR TO FINAL ACCEPTANCE BY THE OWNER, THIS CONTRACTOR SHALL BE REQUIRED TO REPLACE SAME OR PROVIDE A NEW RACEWAY SYSTEM, AT THE EXPENSE OF THE CONTRACTOR RESPONSIBLE FOR THE DAMAGE.

N. CONDUITS SHALL BE RUN TO AVOID ADVERSE CONDITIONS SUCH AS HEAT AND MOISTURE AND TO AVOID ALL MATERIALS AND EQUIPMENT OF OTHER TRADES. CONDUITS SHALL MAINTAIN A MINIMUM CLEARANCE OF SIX INCHES FROM ALL HOT WATER PIPES, FLUES, OR AND HIGH TEMPERATURE PIPING OR DUCTWORK. SHOULD IT BE FOUND NECESSARY TO INSTALL CONDUIT CLOSER THAN THIS TO HOT WATER PIPES AN INSULATING COVERING SHALL BE USED TO PROTECT THE CONDUIT FROM HIGH TEMPERATURE.

O. RACEWAYS SHALL NOT BE SMALLER THAN THE SIZE REQUIRED BY THE NATIONAL ELECTRICAL CODE FOR THE CONDUCTORS ENCLOSED AND SHALL BE LARGER WHERE SO SPECIFIED OR INDICATED ON THE PLANS.

P. ALL EXPOSED RUNS OF CONDUIT SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO WALLS OR CEILINGS. SUPPORTS SHALL BE FROM THE MASONRY OR STEEL STRUCTURE RATHER THAN FROM OTHER MECHANICAL WORK SUCH AS DUCTS, PIPING, ETC., IN ACCORDANCE WITH GOOD INDUSTRY PRACTICE IN A MANNER ACCEPTABLE TO THE ARCHITECT.

Q. SUPPORTS AND ATTACHMENTS PROVIDED SHALL BE SPECIFICALLY DESIGNED FOR THE APPLICATIONS. PERFORATED HANGERS OR WIRE TIE SUPPORTS ARE NOT ACCEPTABLE. ALL HANGERS AND SUPPORTS SHALL HAVE CORROSION RESISTANT FINISH.

R. ALL CONDUITS PASSING THROUGH WALLS, FLOORS, AND CEILINGS SHALL BE SLEEVED WITH A PIECE OF SCHEDULE 40 GALVANIZED STEEL PIPE WITH PLAIN ENDS. ALL SLEEVES SHALL BE SEALED WATERTIGHT USING A MATERIAL SIMILAR IN APPEARANCE TO THE SURROUNDING AREA OR APPROVED MATERIAL.

S. CONDUITS EXTENDING THROUGH ROOFS SHALL BE EQUIPPED WITH PITCH POCKETS.

T. ALL EMPTY RACEWAYS SHALL BE PROVIDED WITH A NYLON PULLWIRE.

U. ALL CONDUIT PASSING THROUGH A FIRE ZONE SHALL HAVE A FIRE RATED INSTALLATION.

V. CONDUIT SHALL BE INSTALLED SO THAT A CONTINUOUS GROUNDING SYSTEM WILL BE MAINTAINED FROM THE FURTHERMOST OUTLET TO THE ESTABLISHED WATER PIPE GROUND.

W. CONDULETS, UNILETS, OR SIMILAR APPROVED TYPE FITTINGS SHALL BE USED ON EXPOSED WORK WHERE CONDUIT CHANGES DIRECTION AND WHERE BENDS WILL NOT MAKE A NEAT JOB.

X. EXPOSED CONDUIT SHALL BE SECURELY FASTENED TO THE BUILDING AT EIGHT-FOOT MINIMUM INTERVALS, USING APPROVED HANGERS, STRAPS, CLAMPS, OR SCREWS. WOOD PLUGS SHALL NOT BE USED FOR FASTENING PURPOSES. CONDUIT RUN ABOVE HUNG CEILING OR IN CRAWL SPACES SHALL BE SUPPORTED IN THE SAME MANNER AS FOR EXPOSED RUNS. WIRE TIES ARE NOT ACCEPTABLE SUPPORTS.

Y. CARE SHALL BE EXERCISED TO MAKE CERTAIN THAT THE CONDUIT SYSTEM NOW PLANNED WILL PERMIT REMOVAL OF CONDUCTORS FOR FUTURE CHANGES AS MAY BE REQUIRED. ALTHOUGH UP TO FOUR 90 DEGREE BENDS ARE PERMITTED BY THE NATIONAL ELECTRICAL CODE, THE PRACTICE OF USING MORE THAN THREE 90 DEGREE BENDS PER RUN SHALL BE AVOIDED. PULL BOXES SHALL BE USED IF AT ALL FEASIBLE.

Z. PULLBOXES SHALL BE INSTALLED AT 100 FOOT INTERVALS IN LONG STRAIGHT RUNS. CLOSE NIPPLES WILL NOT BE PERMITTED.

AA. CONDUIT SMALLER THAN 1/2" TRADE SIZE SHALL NOT BE USED.

BB. THE REQUIRED STRENGTH OF THE SUPPORTING EQUIPMENT AND THE SIZE AND TYPE OF ANCHORS SHALL BE BASED ON THE COMBINED WEIGHT OF CONDUIT, HANGERS, AND CONDUCTORS. THE USE OF PERFORATED IRON STRAPS FOR SUPPORTING CONDUITS WILL NOT BE PERMITTED.

CC. SINGLE RUNS:

1. WHERE CONDUITS ARE RUN INDIVIDUALLY, THEY SHALL BE SUPPORTED BY APPROVED PIPE STRAPS, SECURED BY MEANS OF TOGGLE BOLTS IN HOLLOW MASONRY; EXPANSION SHIELDS AND MACHINE SCREWS OR STANDARD PRESET INSERTS IN CONCRETE OR SOLID MASONRY; MACHINE SCREWS OR BOLTS IN METAL SURFACES; AND WOOD SCREWS IN WOOD CONSTRUCTION. THE USE OF PERFORATED IRON STRAPS WILL NOT BE PERMITTED.
2. CONDUITS INSTALLED EXPOSED ON THE SURFACE IN DAMP LOCATIONS OR IN REFRIGERATED AREAS SHALL BE PROVIDED WITH CLAMP BACKS UNDER EACH CONDUIT CLAMP TO PREVENT ACCUMULATION OF MOISTURE AROUND THE CONDUITS.
3. WHERE INDIVIDUAL CONDUITS ARE SUSPENDED FROM THE CEILING THEY SHALL BE SUPPORTED BY HANGERS EQUIVALENT TO STEEL CITY NO. C-149.

DD. MULTIPLE RUNS:

1. WHERE A NUMBER OF CONDUITS ARE TO BE RUN EXPOSED AND PARALLEL, ONE WITH ANOTHER, THEY SHALL BE GROUPED AND SUPPORTED BY TRAPEZE HANGERS.
2. HANGER RODS SHALL BE FASTENED TO STRUCTURAL STEEL MEMBERS WITH SUITABLE BEAM CLAMPS, OR TO CONCRETE INSERTS SET FLUSH WITH SURFACE.

EE. THE CONTRACTOR SHALL FURNISH AND INSTALL JUNCTION BOXES, PULLBOXES, AND CABLE SUPPORT BOXES AS SHOWN ON THE DRAWINGS, SPECIFIED HEREIN, OR AS OTHERWISE REQUIRED. BOXES SHALL BE SECURED IN POSITION INDEPENDENTLY OF CONDUITS ENTERING THEM BY MEANS OF BOLTS, ROD HANGERS, BRACKETS, OR OTHER APPROVED METHODS. OUTLET BOXES SHALL BE SECURELY FASTENED TO CEILINGS, WALLS OR COLUMNS.

FF. BOXES INSTALLED IN FINISHED CEILINGS, WALLS OR COLUMNS SHALL BE SET SO THAT THE FRONT EDGE OF THE BOX SHALL BE FLUSH WITH FINISHED CEILINGS, WALLS OR COLUMNS.

GG. UNLESS OTHERWISE NOTED ON THE DRAWINGS OR SPECIFIED HEREIN, RECEPTACLE OUTLET CENTERLINES SHALL BE INSTALLED 18" ABOVE THE FLOOR.

HH. PROVIDE FIRESTOPPING TO CABLE AND RACEWAY PENETRATIONS OR FIRE-RATED FLOOR AND WALL ASSEMBLIES TO ACHIEVE FIRE-RESISTANCE RATING OF THE ASSEMBLY.

WIRE AND CABLE

A. ACCEPTABLE MANUFACTURERS SHALL BE ANACONDA, GENERAL ELECTRIC, CERRO, OR SOUTHWIRE.

B. ALL CONDUCTORS SHALL BY COPPER, WITH 600 VOLT INSULATION, UNLESS OTHERWISE NOTED; STRANDING AND INSULATION TYPES AS FOLLOWS:

C. BRANCH CIRCUIT FEEDERS

1. #10 AWG AND SMALLER (SOLID OR STRANDED) – TYPE THHN/THWN INSULATION.
2. #8 AWG AND LARGER (STRANDED) – TYPE THHN/THWN INSULATION.

D. ALL WIRE AND CABLE SHALL BE NEW, WITHIN ONE YEAR OF MANUFACTURE WHEN DELIVERED TO THE SITE AND BEAR THE UL LABEL, INSULATION TYPE, VOLTAGE, AND MANUFACTURER'S NAME AT REGULAR INTERVALS ON THE INSULATION.

E. ALL WIRING SHALL BE DONE SO THAT THE SYSTEM WILL BE CONTINUOUSLY POLARIZED THROUGHOUT, FOLLOWING THE COLOR CODING INDICATED IN THE NEC.

F. ALL CONNECTIONS USING COPPER SHALL BE MADE WITH CONNECTORS THAT ARE DESIGNED AND APPROVED FOR COPPER.

G. JOINTS, TAPS AND SPLICES OF WIRES OF SIZES #10 AWG AND SMALLER SHALL BE MADE BY MEANS OF "SCOTCHLOK" SPRING CONNECTORS.

H. JOINTS, TAPS AND SPICES OF WIRES OF SIZE #8 AWG AND LARGER SHALL BE MADE WITH THOMAS AND BETTS ALUMINUM/COPPER COLOR –KEYED COMPRESSION CONNECTORS, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

I. WIRE SIZES SHALL BE AS SHOWN ON THE DRAWINGS OR SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.

J. ALL FEEDER CABLES SHALL BE CONTINUOUS FROM ORIGIN TO EQUIPMENT TERMINATION WITHOUT RUNNING SPLICES IN INTERMEDIATE PULL OR SPLICE BOXES AS FAR AS PRACTICABLE. NO SPLICES ARE ALLOWED IN "C" CONDULETS.

K. CONDUCTORS SHALL NOT BE SMALLER THAN CODE SIZE FOR THE LOADS BEING HANDLED AND SHALL BE LARGER IF SO INDICATED IN THE PLANS OR SPECIFICATIONS. NO CONDUCTOR SHALL BE LESS THAN #12 AWG EXCEPT FOR CONTROL CIRCUITS, WHICH MAY BE #14 WIRE WHEN INDICATED.

L. PROVIDE SEPARATE GREEN INSULATED GROUND (EQUIPMENT GROUND) CONDUCTOR IN ALL FEEDERS AND BRANCH CIRCUITS.

WIRING DEVICES

A. FOR FINISHED AREAS, USE DEVICES, COLOR AS SELECTED BY ARCHITECT, WITH MATCHING WALL PLATE.

B. FOR UNFINISHED DRY INTERIOR SPACES, USE DEVICES IN STEEL UTILITY BOXES WITH MATCHING RAISED STEEL DEVICE COVERS.

C. FOR INTERIOR AND EXTERIOR WET LOCATIONS, USE DEVICES INSTALLED WITH AN OUTLET ENCLOSURE CLEARLY MARKED "SUITABLE FOR WET LOCATIONS WHILE IN USE", AS MANUFACTURED BY TAYMAC CORP., WITH PUSH-BUTTON RELEASE.

D. RECEPTACLES:

15A, 125V DUPLEX RECEPTACLE: HUBBELL #DR15TR
20A, 125V DUPLEX RECEPTACLE: HUBBELL #DR20TR
20A, 125V DUPLEX GFI RECEPTACLE: HUBBELL #GFSG53621
15A, 125V HEAVY DUTY GRADE DUPLEX WEATHER RESISTANT GFI RECEPT.: HUBBELL #GFSG52621 OR APPR. EQUAL
20A, 125V HEAVY DUTY GRADE DUPLEX WEATHER RESISTANT GFI RECEPT.: HUBBELL #GFSG53621 OR APPR. EQUAL

E. SWITCHES:

20A, 120/277V A.C. TOGGLE SWITCH: HUBBELL #DS120
20A, 120/277V A.C. THREE-WAY SWITCH: HUBBELL #DS320
20A, 120/277V A.C. FOUR-WAY SWITCH: HUBBELL #DS420

F. MOUNTING: MOUNT DEVICES IN SINGLE OR GANGED ARRANGEMENT, AS CALLED FOR ON THE DRAWINGS. PROVIDE APPROPRIATE STEEL BACKBOX AS REQUIRED; USE SINGLE OR MULTIPLE DEVICE COVERS, AS REQUIRED. MULTIPLE DEVICES TO BE EQUALLY SPACED, AND ALIGNED STRAIGHT SO AS TO ALLOW DEVICE PLATE TO FIT SNUGLY AND PROPERLY.

G. WHERE MOUNTING ON MILLWORK OR OTHER EQUIPMENT, VERIFY PROPER ROUGH-IN DIMENSIONS WITH ARCHITECT.

H. DEVICES TO BE INSTALLED AT HEIGHTS TO COMPLY WITH APPLICABLE ADA REQUIREMENTS. REFER TO TYPICAL MOUNTING HEIGHTS ON DRAWINGS FOR FURTHER REQUIREMENTS.

I. MANUFACTURERS: HUBBELL, PASS & SEYMOUR, LEVITON, COOPER.

SAFETY DISCONNECT SWITCHES

A. DISCONNECTION SWITCH RATING SHALL BE AS SHOWN ON THE DRAWINGS, HEAVY-DUTY, "QUICK-MAKE, QUICK-BREAK", SAFETY SWITCHES WITH INTERLOCKING COVER, CONSTRUCTED OF CODE GAGE STEEL (UL 98). ENCLOSURES SHALL BE TREATED WITH RUST INHIBITING PHOSPHATE AND FINISHED IN GRAY BAKED ENAMEL.

B. DISCONNECTS SHALL BE FUSED OR NON-FUSED AS INDICATED ON THE DRAWINGS, OR AS REQUIRED BY NEC. NUMBER OF POLES, WITH OR WITHOUT SOLID NEUTRAL, SHALL BE AS INDICATED ON THE DRAWINGS, OR AS REQUIRED.

C. ENCLOSURES FOR INDOOR USE SHALL BE NEMA 1 UNLESS NOTED OTHERWISE FOR DAMP/WET LOCATIONS. ENCLOSURES FOR EXTERIOR USE SHALL BE NEMA 3R, ENCLOSURES FOR HOSE DOWN/DUST TIGHT LOCATIONS SHALL BE NEMA 4X.

D. DISCONNECTS SHALL REQUIRE THE USE OF A SCREWDRIVER FOR ACCESS TO INTERIOR WITHOUT OPENING CONTACTS.

E. DISCONNECTS SHALL HAVE PROVISIONS FOR PADLOCKING THE SWITCH IN THE "OFF", OR "OPEN" POSITION.

F. ACCEPTABLE MANUFACTURERS ARE SQUARE D, CUTLER-HAMMER, OR GENERAL ELECTRIC.

G. FURNISH A SAFETY DISCONNECT DEVICE ON ALL EQUIPMENT CONNECTIONS WHERE INDICATED ON THE DRAWINGS, OR AS REQUIRED BY CODE.

H. DISCONNECTS SHALL BE MOUNTED TO PERMANENT STRUCTURAL ELEMENTS WITH APPROVED FASTENING MEANS. DISCONNECTS SHALL NOT BE FASTENED BY WELDING THE ENCLOSURE TO ITS DESIGNATED STRUCTURAL SUPPORT. BEAM CLAMPS, UNISTRUT AND BOLTED WASHERS COMPRISE ACCEPTABLE FASTENING MEANS.

I. NAMEPLATES SHALL BE PLASTIC LAMINATE WITH WHITE BACKGROUND AND 1/4" BLACK ENGRAVED LETTERS WITH THE TITLE OF THE EQUIPMENT THAT IS FED. NAMEPLATES SHALL BE ATTACHED USING RIVETS OR NUTS, WASHERS, AND BOLTS.

CABINETS, BOXES, AND FITTINGS

A. USE SHEET STEEL JUNCTION, OUTLET AND PULL BOXES SIZED PER NEC IN ALL DRY LOCATIONS.

B. USE CAST BOXES FOR EXTERIOR USE, WHERE IN CONCRETE FLOORS, AND IN ALL DAMP OR WET LOCATIONS.

C. USE STEEL OR MALLEABLE IRON FITTINGS SPECIFICALLY DESIGNED FOR EACH RACEWAY TYPE, AS DICTATED BY GOOD PRACTICE.

D. IN ALL CASES, ALL CABINETS, JUNCTION AND OUTLET BOXES SHALL BE ACCESSIBLE.

ELECTRICAL CONNECTIONS FOR EQUIPMENT

A. FIXED EQUIPMENT REQUIRING ATTACHMENT PLUGS SHALL BE PROVIDED WITH APPROPRIATE RECEPTACLE TO MATCH PLUG.

B. FIXED EQUIPMENT REQUIRING DIRECT WIRED CONNECTIONS SHALL BE PROVIDED WITH LOCAL JUNCTION BOX, AND FLEXIBLE NONMETALLIC CONDUIT, OR LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT CONNECTIONS TO EQUIPMENT.

C. PROVIDE SEPARATE FUSIBLE DISCONNECT FOR EQUIPMENT NOT FURNISHED WITH INTEGRAL OR FACTORY FURNISHED DISCONNECTING MEANS.

D. PROVIDE MOTOR STARTER FOR EQUIPMENT NOT FURNISHED WITH FACTORY STARTER.

NEW LOAD CENTERS

A. PHASE, NEUTRAL AND GROUND BUSSES SHALL BE COPPER, AND PHASE BUSSES SHALL EXTEND THE ENTIRE HEIGHT OF PANELBOARD. CIRCUIT BREAKERS CONNECTIONS TO THE BUS SHALL BE: BOLT-ON, DOUBLE ROW ARRANGEMENT, DISTRIBUTED PHASE BUS TYPE.

B. CIRCUIT BREAKERS SHALL BE MOLDED CASE, THERMAL MAGNETIC, BOLT-ON TYPE, DEAD FRONT DESIGN, WITH QUICK-MAKE, QUICK-BREAK, COMMON TRIP TYPE SINGLE TOGGLE OPERATING MECHANISMS, 1, 2, OR 3 POLE, AND HACR LISTED WHEN USED FOR HVAC EQUIPMENT, SIZED PER PANELBOARD SCHEDULE.

C. BACKBOXES SHALL BE FABRICATED FROM GALVANIZED, CODE GAUGE, SHEET STEEL, MEETING OR EXCEEDING NECESSARY REQUIREMENT FOR WIRE BENDING SPACE, WITHOUT KNOCKOUTS.

D. COVERS SHALL BE DEAD FRONT DESIGN, WITH HINGED DOOR, CONCEALED FASTENERS, FABRICATED FROM CODE GAGE STEEL WITH POINTED ENAMEL FINISH, FLUSH LOCK AND CATCH.

E. PANELBOARD DIRECTORY CARD, WITH CLEAR PLASTIC COVER, SHALL BE PROVIDED ON BACK OR DOOR. CONTRACTOR SHALL COMPLETE TYPE-WRITTEN DIRECTORY CARD, WITH CIRCUIT BREAKER NUMBERS CROSS REFERENCED TO THEIR RESPECTIVE LOAD(S), BY LOAD TYPE AND ROOM OR SPACE NAME AND NUMBER.

F. PROVIDE PERMANENT LAMACOID OR EQUAL TYPE LABEL INSIDE PANELBOARD DOOR, IDENTIFYING PANELBOARD NAME.

G. DESIGN EQUIPMENT SHALL BE SQUARE D, SIEMENS, EATON/CUTLER HAMMER OR GENERAL ELECTRIC.

H. LOAD BALANCING: AFTER SUBSTANTIAL COMPLETION, BUT NOT MORE THAN 60 DAYS AFTER FINAL ACCEPTANCE, MEASURE LOAD BALANCING AND MAKE CIRCUIT CHANGES.

1. MEASURE AS DIRECTED DURING PERIOD OF NORMAL SYSTEM LOADING.
2. PERFORM LOAD-BALANCING CIRCUIT CHANGES OUTSIDE NORMAL OCCUPANCY/WORKING SCHEDULE OF THE FACILITY AND AT TIME DIRECTED. AVOID DISRUPTING CRITICAL 24-HOUR SERVICES SUCH AS FAX MACHINES AND ON-LINE DATA PROCESSING, COMPUTING, TRANSMITTING, AND RECEIVING EQUIPMENT.
3. AFTER CIRCUIT CHANGES, RECHECK LOADS DURING NORMAL LOAD PERIOD. RECORD ALL LOAD READINGS BEFORE AND AFTER CHANGES AND SUBMIT TEST RECORDS.
4. TOLERANCE: DIFFERENCE EXCEEDING 20 PERCENT BETWEEN PHASE LOADS, WITHIN A PANELBOARD, IS NOT ACCEPTABLE. REBALANCE AND RECHECK AS NECESSARY TO MEET THIS MINIMUM REQUIREMENT.

INFRARED SCANNING: PERFORM THE FOLLOWING INFRARED SCAN TESTS AND INSPECTIONS AND PREPARE REPORTS:

I.
1. INITIAL INFRARED SCANNING: AFTER SUBSTANTIAL COMPLETION, BUT NOT MORE THAN 60 DAYS AFTER FINAL ACCEPTANCE, PERFORM AN INFRARED SCAN OF EACH PANELBOARD. REMOVE FRONT PANELS SO JOINTS AND CONNECTIONS ARE ACCESSIBLE TO PORTABLE SCANNER.
2. FOLLOW-UP INFRARED SCANNING: PERFORM AN ADDITIONAL FOLLOW-UP INFRARED SCAN OF EACH PANELBOARD 11 MONTHS AFTER DATE OF SUBSTANTIAL COMPLETION.
3. INSTRUMENTS AND EQUIPMENT: USE AN INFRARED SCANNING DEVICE DESIGNED TO MEASURE TEMPERATURE OR TO DETECT SIGNIFICANT DEVIATIONS FROM NORMAL VALUES.

GROUNDING AND BONDING

A. GROUND SERVICE, EQUIPMENT, CIRCUITS PER NEC. USE COPPER CONDUCTORS.

B. PROVIDE SEPARATE GROUND WIRE FOR EACH NEW BRANCH CIRCUIT CONDUIT.

C. COMPLY WITH NEC ARTICLE 250.

LIGHTING

A. PROVIDE AND INSTALL ITEMS AS SPECIFIED HEREIN AND LISTED ON THE LIGHTING FIXTURE SCHEDULE ON THE DRAWINGS.

B. CATALOG NAMES AND NUMBERS USED IN THE LIGHTING FIXTURE SCHEDULE ARE TO ESTABLISH A STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION.

C. IF ALTERNATED, OR OPTIONAL, METHODS ARE PROPOSED AS SUBSTITUTION FOR ANY ONE OF THE LIGHTING FIXTURES, THEY MUST BE EQUAL IN DESIGN AND QUALITY, AS DETERMINED BY THE ARCHITECT/ENGINEER. THE DATA SUBMITTED MUST INCLUDE A DESCRIPTION OF THE LIGHTING FIXTURE, LENS, BALLAST, SHEET METAL GAGE, PHOTOMETRIC DATA, ETC.

D. UPON REQUEST OF THE ENGINEER, A SAMPLE OF THE PROPOSED SUBSTITUTION SHALL BE PROVIDED.

E. FURNISH AND INSTALL ALL LIGHTING FIXTURES COMPLETE WITH LAMPS. PROVIDE 10% ADDITIONAL LAMPS FOR EACH TYPE OF LAMP REQUIRED ON PROJECT AND TURN OVER TO OWNER.

F. ALL LIGHTING FIXTURES SHALL CARRY THE UNDERWRITER'S LABEL OF APPROVAL.

G. FIXTURES SHALL BE FREE OF IMPERFECTIONS, HANDLING, OR INSTALLATION DAMAGE.

H. OBTAIN EXACT LOCATION OF ALL CEILING OUTLETS FROM THE ARCHITECT.

I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIT OF ALL LIGHTING FIXTURES INTO THE ACTUAL CEILING INSTALLED.

J. ALL WIRING WITHIN EACH LIGHTING FIXTURE SHALL BE CONTAINED IN METALLIC WIRING CHANNEL AND NOT IN THE LAMP CHAMBER.

K. LED LIGHTING FIXTURES – PROVIDE 'LIGHTING FACTS' INFORMATION SHEETS. PROVIDE LED COLOR TEMPERATURE PER DRAWINGS, CRI 80 (MINIMUM).

LED FIXTURES SHALL BE TESTED IN ACCORDANCE WITH LM-79, TM21. PROJECTED LIFE OF OVER 75,000 HOURS AT 50° C.

L. LED CHIPS/MODULES SHALL BE TESTED IN ACCORDANCE WITH LM-80 TESTING STANDARDS.

M. CONFIRM COMPATIBILITY AND INTERFACE OF OTHER MATERIALS WITH LUMINAIRE AND CEILING SYSTEM. REPORT DISCREPANCIES TO THE ENGINEER/ARCHITECT AND DEFER ORDERING UNTIL CLARIFIED.

N. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS BETWEEN LUMINARIES, SUPPORTS, FITTINGS, AND MECHANICAL EQUIPMENT.

O. IT WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VERIFY, WITH THE CONSTRUCTION CONTRACTOR, THE TYPES OF CEILINGS IN ALL ROOMS HAVING TROFFERS, AS TO THE TYPE OF TROFFER CONSTRUCTION REQUIRED TO MATCH THE CEILING CONSTRUCTION

P. ALL METAL PARTS SHALL BE GROUNDED AS A COMMON UNIT.

Q. SUPPORT LUMINARIES DIRECTLY FROM BUILDING STRUCTURE BY ROD HANGERS AND INSERTS.

R. INSTALL RECESSED LUMINARIES TO PERMIT REMOVAL FROM BELOW, TO GAIN ACCESS TO OUTLET OR PRE-WIRED LIGHTING FIXTURE BOX.

PROJECT NAME/LOCATION: [NEW CONSTRUCTION]
DESCRIPTION 68 PULASKI STREET - SINGLE FAMILY HOME
PROJECT NUMBER: **2317.006**

BENLIC DEVELOPMENT LLC
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