HOPE AVENUE HOMES

2923/2929 Hope Avenue,
South Bend, IN 46615

April 2, 2021

CONSTRUCTION DRAWINGS

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OWNER/DEVELOPER

South Bend Heritage

803 LINCOLNWAY WEST SOUTH
BEND, IN 46616
574-289-1066

ARCHITECT

ALLIANCE ARCHITECTS

929 Lincolnway East, Suite 200 | South Bend, Indiana 46601

PROJECT PARTNERS

ihcda Indiana Housing & Community Development Authority

IHCDA National Housing Trust Fund

CSH The Source for Housing Solutions

Corporation for Supportive Housing Institute (CSH)

St. Joseph County Housing Consortium

St. Joseph County Housing Consortium

THE CITY OF SOUTH BEND · INDIANA · PEACE · 1865

City of South Bend

OAKLAWN

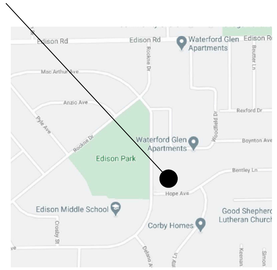
Oaklawn

VIEW LOOKING SOUTHWEST

VIEW OF MAIN ENTRY

VIEW LOOKING NORTHWEST

2923 HOPE AVENUE



VICINITY MAP

NORTH

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JOSEPH G. NUCCIARONE
REGISTERED
No.
AR00890043
STATE OF
INDIANA
ARCHITECT

South Bend
Heritage

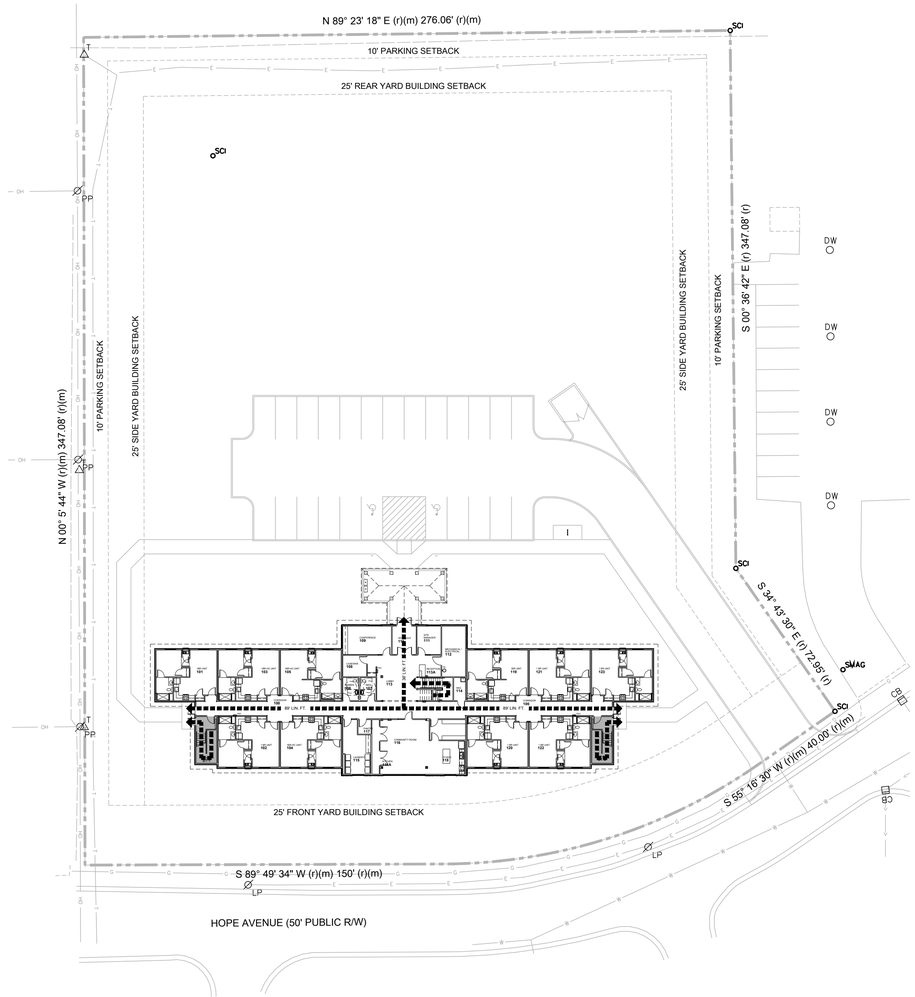
HOPE AVENUE HOMES

2923/2929 Hope Avenue
South Bend, IN 46615

DATE:
BID DATE: 4/2/21

SHEET NO.

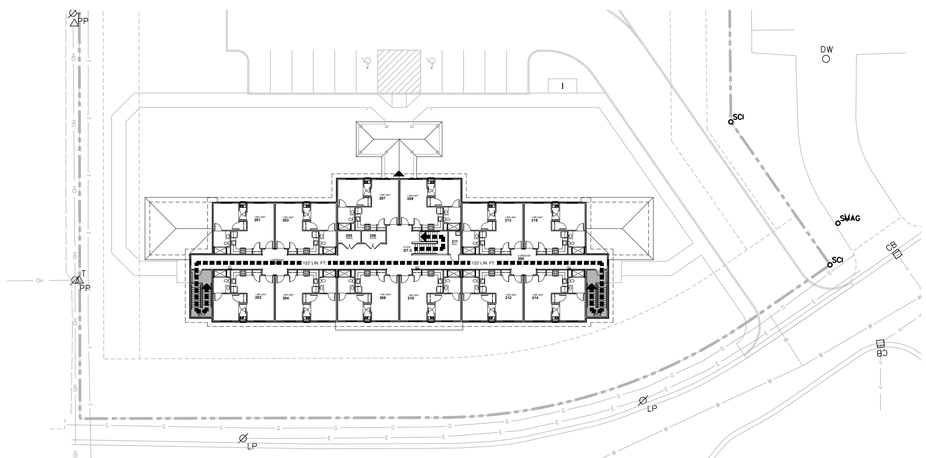
G1.0



LIFE SAFETY PLAN - GROUND FLOOR

NORTH

SCALE: 1" = 30'-0"



LIFE SAFETY PLAN - UPPER FLOOR

NORTH

SCALE: 1" = 30'-0"

FIRE RATED ASSEMBLIES

- CORRIDOR - 1 HOUR FIRE RATED
  UL ASSEMBLY NO. U311
- DEMISING WALL
  UL ASSEMBLY NO. U341
- FLOOR/CEILING - 1 HOUR FIRE RATED
  UL ASSSEMBLY NO. L521
- STAIR ENCLOSURE - 1 HOUR FIRE RATED FIRE BARRIER WALLS
  UL ASSEMBLY NO. U311

FLOOR PLAN LEGEND

EGRESS/EXIT DISCHARGE
PATH OF EGRESS

1-HOUR FIRE BARRIER
ENCLOSED SPACE

CODE SUMMARY

DESCRIPTION: THIS PROJECT CONSISTS OF RESIDENTIAL UNITS ON THE FIRST AND SECOND FLOORS.

APPLICABLE CODES

- 2014 INDIANA BUILDING CODE
  (2012 INTERNATIONAL BUILDING CODE WITH INDIANA AMENDMENTS)
  ACCESSIBILITY- CHAPTER 11 INDIANA BUILDING CODE – ANSI A117.1 2009
- 2012 INDIANA PLUMBING CODE
  (2006 INTERNATIONAL PLUMBING CODE WITH INDIANA AMENDMENTS)
- 2009 INDIANA ELECTRICAL CODE
  (2008 NFPA 70 WITH INDIANA AMENDMENTS)
- 2014 INDIANA MECHANICAL CODE
  (2012 INTERNATIONAL MECHANICAL CODE WITH INDIANA AMENDMENTS)
- 2014 INDIANA FUEL GAS CODE
  (2012 INTERNATIONAL FUEL GAS CODE WITH INDIANA AMENDMENTS)
- 2010 NDIANA ENERGY CONSERVATION CODE
  (ASHRAE 90.1 2007 WITH INDIANA AMENDMENTS)
- 2014 INDIANA FIRE CODE
  (2012 INTERNATIONAL FIRE CODE WITH INDIANA AMENDMENTS)
- 2011 INDIANA ELEVATOR SAFETY CODE (IESC)

USE AND OCCUPANCY GROUP CLASSIFICATION (CHAPTER 3)

- R-2 RESIDENTIAL GROUP - RESIDENTIAL APARTMENT USE

GENERAL BUILDING HEIGHTS AND AREAS (CHAPTER 5)

RESIDENTIAL OCCUPANCY

ALLOWABLE HEIGHT (TABLE NO. 503, IBC):	2 STORIES, 40 FEET
ACTUAL HEIGHT:	2-STORIES, 34 FEET
ALLOWABLE AREA PER STORY (TABLE NO. 503, IBC):	7,000 SQ. FT.
AREA MODIFICATIONS: $A_t=\{A_s \times I_s\}$	5,138 SQ. FT.
AREA PER STORY: $A_a = \{A_s + [A_s \times I_s] + [A_s \times I_s]\}$	14,000 SQ. FT.
	26,138 SQ. FT.

		ALLOWABLE:	ACTUAL:
AREA PER STORY (SECTION 506.4):	1ST:	26,138 SQ. FT.	10,427 SQ. FT.
	2ND:	26,138 SQ. FT.	8,917 SQ. FT.
MAX ALLOWABLE BUILDING AREA: $A_t = (2 \times A_a)$		52,276 SQ. FT.	19,344 SQ. FT.

CONSTRUCTION TYPE (IBC CHAPTER 6): VB

FIRE RESISTANT DESIGN (TABLE 601 & 602, IBC):

FIRE RESISTANT DESIGNS FOR BUILDING SHALL BE EQUAL TO OR GREATER THAN THOSE USED ON THE TABLE LISTED BELOW.

BUILDING ELEMENT	FIRE RESISTANCE RATING (HOURS)
1. STRUCTURAL FRAME	0
2. BEARING WALLS - EXTERIOR	0
3. BEARING WALLS - INTERIOR	0
4. NON-BEARING WALLS - EXTERIOR	0 WHERE X>30' SEPARATION
5. NON-BEARING WALLS - INTERIOR	0
6. FLOOR CONSTRUCTION	0
7. ROOF CONSTRUCTION	0

REQUIRED FIRE SEPARATION:

- STAIR ENCLOSURES SHALL HAVE A FIRE-RESISTANCE RATING OF 1 HOUR (SECTION 707.3, IBC.).
- DWELLING UNIT SEPARATIONS IN BUILDINGS OF TYPE VB CONSTRUCTION SHALL HAVE FIRE-RESISTANCE RATINGS OF NOT LESS THAN 0.5 HOURS IN BUILDINGS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1, (SECTION 708, IBC).
- CORRIDOR WALLS IN OCCUPANCY R HAVE A FIRE RESISTANCE RATING REQUIREMENT OF 0.5 HOURS (TABLE 1017.1), UNLESS CORRIDOR WALLS ARE CLASSIFIED AS INTERIOR BEARING WALLS IN WHICH CASE A FIRE RESISTANCE RATING OF 1 HOUR IS REQUIRED.
- HORIZONTAL ASSEMBLIES BETWEEN DWELLING UNITS IN TYPE VB CONSTRUCTION SHALL BE HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 0.5 HOURS IN BUILDINGS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1 (SECTION 711, IBC)..

FIRE PROTECTION SYSTEMS (IBC CHAPTER 9):

THE ENTIRE BUILDING WILL BE SERVED BY AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13R ON THE FIRST FLOOR AND SECOND FLOORS.

MEANS OF EGRESS REQUIREMENTS (IBC CHAPTER 10):

OCCUPANT LOAD PER STORY (PER TABLE 1004.1.1) AND EXITS REQUIRED (PER TABLE 1015.1) - PER FLOOR

	EXITS REQ'D. PER SPACE	PROVIDED	TOTAL OCCUPANTS
FIRST FLOOR			
RESIDENTIAL UNITS (3 PERSONS PER UNIT)	1	1	33
COMMUNITY ROOM / KITCHEN	1	1	33
CONFERENCE ROOM	1	1	16
OFFICE	1	1	4
ACCESSORY / MECHANICAL / STORAGE	1	1	2
LAUNDRY	1	1	2
		TOTAL	90 PERSONS
		2 EXITS REQ'D., 3 PROVIDED	
SECOND FLOOR			
RESIDENTIAL UNITS (3 PERSONS PER UNIT)	1	1	36
ACCESSORY / MECHANICAL / STORAGE	1	1	3
		TOTAL	39
		2 EXITS REQ'D., 3 PROVIDED	

AREAS OF REFUGE NOT REQUIRED AT EXIT STAIRWAYS IN BUILDINGS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM (1007.3, EXCEPTION 2).

PLUMBING OCCUPANT LOAD: MIN. NUMBER OF PLUMBING FACILITIES (TABLE 29)

RESIDENTIAL	WATER CLOSET:	LAVATORY	TUB OR SHOWER	KITCHEN SINK
REQUIRED	1 PER UNIT	1 PER UNIT	1 PER UNIT	1 PER UNIT
PROVIDED	1 WC	1 LAV	1 TUB OR SHOWER	1 SINK

	WATER CLOSET: MEN	WOMEN	LAVATORY	DRINKING FOUNTAIN	SERVICE SINK
OFFICE	1/75	1/75	1/200	1/1000	1
REQUIRED	1	1	1	1	1
PROVIDED	2 WC	2 WC	2 LAV'S.	1	2

ACCESSIBILITY (CHAPTER 11)

(1107.6.2 GROUP R-2) ALL DWELLING UNITS WILL BE TYPE B UNITS, DESIGNED TO COMPLY WITH HANDICAPPED ACCESSIBILITY REQUIREMENTS PER ICC/ANSI 117.1 2003.

ALLIANCE ARCHITECTS
929 Lincolnway East, Suite 200 | South Bend, Indiana 46601

JOSEPH G. NUCCIARONE REGISTERED No. AR00890043 STATE OF INDIANA ARCHITECT

South Bend Heritage

HOPE AVENUE HOMES

2923/2929 Hope Avenue
South Bend, IN 46615

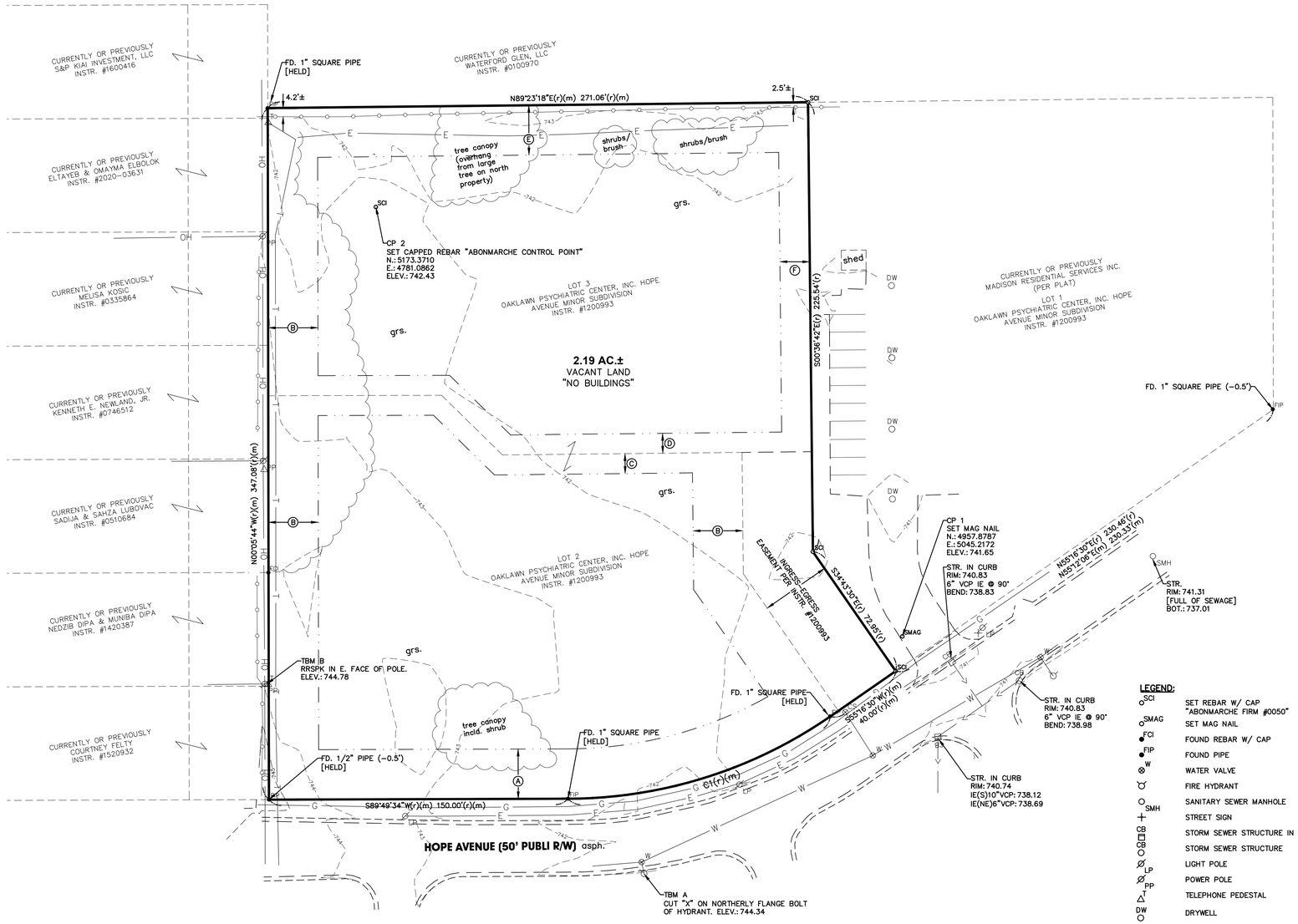
DATE:
BID DATE: 4/2/21

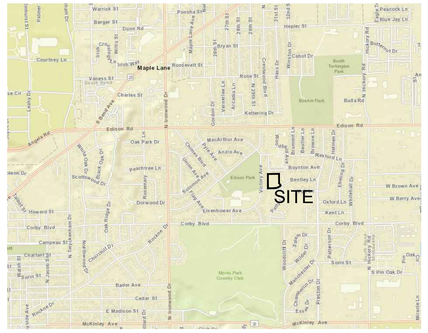
SHEET NO.

G1.1

ALTA/NSPS LAND TITLE SURVEY

TITLE INSURANCE COMMITMENT NO. 4041-163907
EFFECTIVE DATE: JULY 3, 2020 @ 8:00 AM
NAME OF INSURER: METROPOLITAN TITLE OF INDIANA, LLC
ADDRESS: 2923 & 2929 HOPE AVE., SOUTH BEND, IN 46615





LOCATION MAP
NOT TO SCALE

LEGAL DESCRIPTION: (PER TITLE POLICY NO. 4041-163907)

LOTS NUMBERED TWO (2) AND THREE (3) AS SHOWN ON THE PLAT OF OAKLAWN PSYCHIATRIC CENTER, INC. HOPE AVENUE MINOR SUBDIVISION, RECORDED JANUARY 12, 2012 IN THE OFFICE OF THE RECORDER OF ST. JOSEPH COUNTY, INDIANA, AS INSTRUMENT NO. 1200993

TABLE "A" ITEMS:

1. SEE PLAT FOR MONUMENTS FOUND AND SET
2. 2923 & 2929 HOPE AVE., SOUTH BEND, IN 46615
3. THE SUBJECT PROPERTY IS WITHIN AN AREA DESIGNATED AS "ZONE X, NO SPECIAL FLOOD HAZARD AREA", AS DETERMINED FROM FEMA FIRM PANEL NO. 18141C0204D WITH AN EFFECTIVE DATE OF JANUARY 06, 2011.
4. GROSS LAND AREA: 12.14± ACRES (528,702± SQ. FT.)
5. CONTOURS LINES SHOWN ON PLAT ARE 1 FOOT INTERVAL. THE CONTOUR ELEVATIONS ARE AT THE NAVD88 DATUM AND DERIVED FROM GPS OBSERVATION THROUGH THE INCORS SYSTEM. SEE DRAWING FOR TBM LOCATIONS AND ELEVATIONS.

SURVEYOR'S REPORT:

IN ACCORDANCE WITH TITLE 865, ARTICLE 1.1, CHAPTER 12, OF THE INDIANA ADMINISTRATIVE CODE, THE FOLLOWING OBSERVATIONS AND OPINIONS ARE SUBMITTED REGARDING THE VARIOUS UNCERTAINTIES IN THE LOCATIONS OF THE LINES AND CORNERS ESTABLISHED ON THIS SURVEY AS RESULT OF:

A) AVAILABILITY AND CONDITION OF REFERENCE MONUMENTS;
B) OCCUPATION OR POSSESSION LINES;
C) CLARITY OR AMBIGUITY OF THE RECORD DESCRIPTION USED AND OF ADJOINERS' DESCRIPTIONS AND THE RELATIONSHIP OF THE LINES OF THE SUBJECT TRACT WITH ADJOINERS' LINES;
D) THE RELATIVE POSITIONAL ACCURACY OF THE MEASUREMENTS.

CLIENT NAME: ALLIANCE ARCHITECTS
OWNERS OF RECORD: DIEGO FERNANDO ESTRADE RIVERA
TYPE OF SURVEY AND PURPOSE: ALTA/NSPS LAND TITLE SURVEY FOR SITE DESIGN

A) THE REFERENCE MONUMENTS ARE AS SHOWN ON THE FACE OF THE SURVEY.
B) RIGHT-OF-WAYS, FENCES, IMPROVEMENTS AND UTILITIES AS SHOWN.
C) AMBIGUITY OF RECORD DESCRIPTIONS: NONE
D) THE CLASSIFICATION OF THIS SURVEY IS AN URBAN SURVEY: 0.07 FEET (21 MILLIMETERS) PLUS 50 PARTS PER MILLION.

AS A RESULT OF THE ABOVE OBSERVATIONS, IT IS MY OPINION THAT THE UNCERTAINTIES IN THE LOCATIONS OF THE LINES AND CORNERS ESTABLISHED ON THIS SURVEY ARE AS FOLLOWS:

DUE TO VARIANCES IN REFERENCE MONUMENTS: EAST/WEST 0.3' NORTH/SOUTH 0.3'
DUE TO DISCREPANCIES IN THE RECORD DESCRIPTION: NONE
DUE TO INCONSISTENCIES IN LINES OF OCCUPATION: 5'+/-

THEORY OF LOCATION:
HELD THE FOUND CORNERS AS SHOWN ON THE FACE OF THE SURVEY. ALL THE HELD IRONS WERE REFERENCED ON A PLAT OF SURVEY BY VALLEY ENGINEERING DATED 1-18-93 AND RECORDED UNDER INSTRUMENT NUMBER 9338472. ALL THE FOUND POINTS WERE THOUGHT TO BE ORIGINAL TO SAID SURVEY.

PLATS AND NOTES USED:

1. ABONMARCHE RECORDS
2. ADJOINING DEEDS
3. PLAT OF SURVEY BY VALLEY ENGINEERING
4. HOPE AVE MINOR SUBDIVISION
5. OAKLAWN PSYCHIATRIC CENTER, INC. HOPE AVE MINOR SUBDIVSION
6. EDISON PARK SUBDIVSION

- GPS AND A ROBOTIC TOTAL STATION WERE USED TO COLLECT THE DATA FOR THE PROJECT.
- THE FIELD WORK FOR THE PROJECT WAS COLLECTED IN AUGUST 2020
- TITLE WORK WAS PROVIDED BY METROPOLITAN TITLE (4041-163907)
- BASIS OF BEARING: RECORD PLAT INFORMATION

LAND SURVEYOR'S CERTIFICATE:

TO: SOUTH BEND HERITAGE FOUNDATION, INC., METROPOLITAN TITLE OF INDIANA, LLC:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1 – 5 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON 9/1/2020.

I AFFIRM UNDER THE PENALTIES FOR PERJURY, THAT I HAVE TAKEN REASONABLE CARE TO REDACT EACH SOCIAL SECURITY NUMBER IN THIS DOCUMENT, UNLESS REQUIRED BY LAW.

DATE: 9/9/20

MICHAEL J. ROZYCKI, PS
mrozycki@abonmarche.com
PROFESSIONAL LAND SURVEYOR #20500010
STATE OF INDIANA

LEGEND:

SCI	SET REBAR W/ CAP "ABONMARCHE FIRM #0050"
SMAG	SET MAG NAIL
FCI	FOUND REBAR W/ CAP
FIP	FOUND PIPE
W	WATER VALVE
	FIRE HYDRANT
SMH	SANITARY SEWER MANHOLE
	STREET SIGN
CB	STORM SEWER STRUCTURE IN CURB
CB	STORM SEWER STRUCTURE
LP	LIGHT POLE
PP	POWER POLE
T	TELEPHONE PEDESTAL
DW	DRYWELL
OH	OVERHEAD CABLE
E	BURIED ELECTRIC
T	BURIED TELEPHONE
G	BURIED GAS
W	BURIED WATER
	CHAIN LINK FENCE
asph.	ASPHALT
conc.	CONCRETE
grs.	GRASS
(r)	RECORD
(m)	MEASURED
(A)	25 FOOT FRONT YARD BUILDING SETBACK
(B)	25 FOOT SIDE YARD BUILDING SETBACK
(C)	10 FOOT REAR YARD BUILDING SETBACK
(D)	10 FOOT FRONT YARD BUILDING SETBACK
(E)	25 FOOT REAR YARD BUILDING SETBACK
(F)	15 FOOT SIDE YARD BUILDING SETBACK

CURVE TABLE					
CURVE #	LENGTH	RADIUS	C/A	CHORD BEARING	CORD LENGTH
C1	139.99'	231.59'	34°38'03"	S72°35'30"W	137.87'

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

NO.	REVISION DESCRIPTION:	BY:	DATE:

ABONMARCHE
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South Bend, IN 46601
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Goshen
Indianapolis
Lafayette
South Bend
Valparaiso
Engineering · Architecture · Land Surveying

ALTA/NSPS LAND TITLE SURVEY
2923 & 2929 HOPE AVE., SOUTH BEND, IN 46615

DRAWN BY: CMR
FIELDBOOK: MJR#6, PG. 44
PM REVIEW: MJR
QA/QC REVIEW: RBS
DATE: 9/9/2020
SEAL:
MICHAEL J. ROZYCKI REGISTERED LS20500010 STATE OF INDIANA LAND SURVEYOR
SIGNATURE:
SECTION-TOWNSHIP-RANGE: SEC. 5-T37N-R3E

HARD COPY IS INTENDED TO BE 24" X 36" WHEN PLOTTED. SCALE(S) INDICATED AND GRAPHIC QUALITY MAY NOT BE ACCURATE FOR ANY OTHER SIZES

SCALE:
HORZ: 1" = 30'
VERT:

ACI JOB #
20-1359

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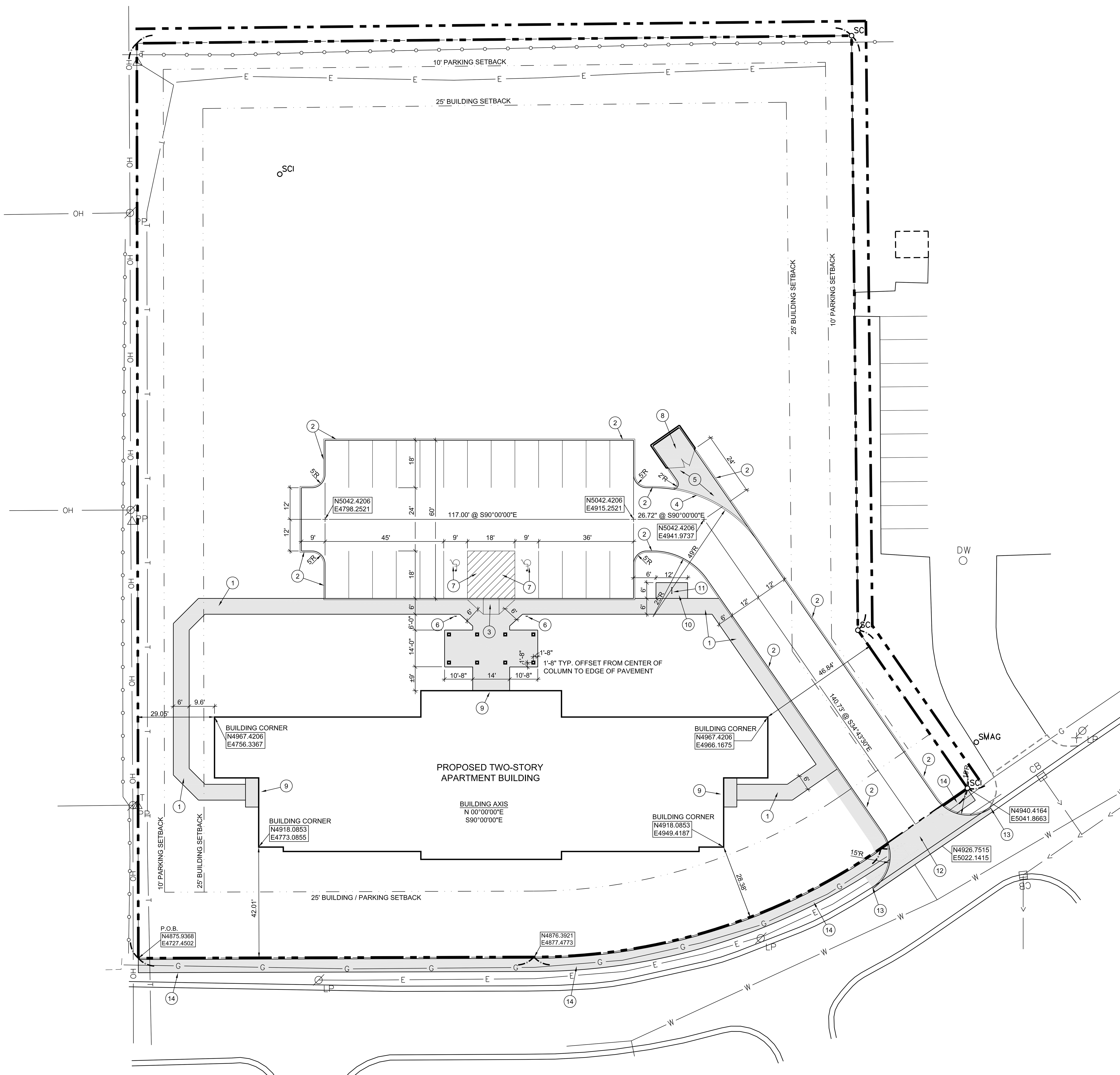
1 of 1



LAND USE

SITE = ±2.18 ACRE = 95,277 SF

ZONING "S2" SUBURBAN NEIGHBORHOOD 2

FRONT YARD SETBACK	25'
SIDE YARD SETBACK	25'
REAR YARD SETBACK	25'
PARKING SETBACK - FRONT	25'
PARKING SETBACK - FRONT/CORNER	25'
PARKING SETBACK - SIDE/REAR	10'
BUILDING HEIGHT	40' MAX. / 3 STORIES
BUILDING COVERAGE	50% MAX.

IMPERVIOUS SURFACE

BUILDING (GROUND FLOOR)	= 10,428 SF	10.9%
PAVEMENT	= 11,609 SF	12.2%
WALKS	= 3,668 SF	3.8%
TOTAL	= 25,705 SF	26.9%
LAWN / LANDSCAPE	= 69,572 SF	73.1%

PARKING REQUIREMENTS
1 SPACE / DWELLING UNIT
BUILDING 22 UNITS = 22 VEHICLE SPACES REQUIRED

PROPOSED PARKING PROVIDED

9' x 18' SPACES	= 20
ACCESSIBLE SPACES	= 2
TOTAL VEHICLE PARKING	= 22 PROVIDED
BICYCLE PARKING = 1 SPACE / 10 UNITS	= 2.2 SPACES
BICYCLE PARKING PROVIDED	= 4 SPACES

PATRICK S. BROWN 7-22-82 No. 55 STATE OF INDIANA LANDSCAPE ARCHITECT

SiteScapes INC.
Landscape Architecture & Planning
P.O. Box 391 • Mishawaka, Indiana 46546
Telephone (574) 255-4677
www.SiteScapes-Inc.com

NOTE

THIS PROJECT SITE IS LOCATED WITH A "WELLHEAD PROTECTION AREA". CONTRACTOR IS TO FOLLOW ALL REQUIREMENTS, STANDARDS AND OBTAIN NECESSARY PERMITS FROM ST. JOSEPH COUNTY HEALTH DEPT.

PAVEMENT DESIGN

ASPHALT PAVEMENT

SURFACE:	1-1/2" - #11 H.A.C. SURFACE COURSE
BINDER:	2-1/2" - #9 H.A.C. BINDER COURSE
SUBBASE:	6" - #53 AGGREGATE, COMPACT TO 98% MAXIMUM STANDARD PROCTOR DENSITY
SUBGRADE:	COMPACT TO 98% MAXIMUM STANDARD PROCTOR DENSITY

GENERAL NOTES

1. CONTRACTOR SHALL ARRANGE FOR FIELD LOCATION AND VERIFICATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS WITH NEW CONSTRUCTION.
2. CONTRACTOR SHALL HAVE PROPOSED BUILDING FIELD LOCATED AND STAKED BY AN INDIANA REGISTERED LAND SURVEYOR.
3. DO NOT SCALE DRAWINGS, USE WRITTEN DIMENSIONS. DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, EDGE OF WALK, FACE OF FOUNDATION OR AS NOTED.
4. REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS.
5. CONTRACTOR IS OBLIGATED TO FIELD VERIFY DIMENSIONS AND LAYOUT IN THE FIELD AND NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS.
6. REPAIR AND/OR REPLACE EXISTING STRUCTURES, PAVEMENTS OR IMPROVEMENTS THAT ARE TO REMAIN, INCLUDING ON-SITE AND OFF-SITE, THAT ARE DAMAGED BY CONSTRUCTION TRAFFIC OR ACTIVITIES.
7. REFER TO SHEET L2.0 IRRIGATION PLAN FOR LOCATION OF IRRIGATION SLEEVES TO BE INSTALLED BY IRRIGATION SUBCONTRACTOR. G.C. TO COORDINATE WORK.

KEY NOTES

1. NEW CONCRETE SIDEWALK, SEE DETAIL 1, SHEET C4.0
2. NEW CONCRETE STRAIGHT CURB, SEE DETAIL 2, SHEET C4.0
3. NEW ACCESSIBLE CURB RAMP, SEE DETAIL 3, SHEET C4.0
4. NEW FLUSH 6" x 12" CONCRETE CURB BETWEEN DRIVE AND TRASH ENCLOSURE APPROACH.
5. CONSTRUCT CONCRETE APPROACH FOR TRASH AREA. 5" THICK, FIBER REINFORCED 1.5 LB/CY, 4,000 PSI, LIMESTONE AGGREGATE ON 4" #53 CRUSHED STONE SUBBASE.
6. STANDARD 12"X18" ALUMINUM ACCESSIBLE PARKING SIGN. SEE DETAIL 4, SHEET C4.0
7. PAINT STANDARD ADA SYMBOL IN DESIGNATED PARKING SPACES AND PAINT STRIPES FOR NO PARKING AISLE, 4" WIDE AT 18" O.C. COLOR: WHITE. TYPICAL FOR ALL ADA SPACES.
8. TRASH ENCLOSURE AND GATES, REFER TO DETAIL 5, SHEET C4.0
9. CONCRETE STOOP, REFER TO ARCHITECTURAL PLANS.
10. 6' x 12' x 4" THICK CONCRETE PAD FOR BIKE PARKING. REFER TO DETAIL 1, SHEET C4.0
11. BIKE RACK - SERPENTINE BIKE LOOP RACK, 13 GAGE x 2 3/8" O.D. STEEL TUBING, POWDER COAT FINISH. 3 LOOPS FOR 5 BIKES. COLOR: BLACK. BIKE RACK MODEL #BRK538S BY WABASH VALLEY, OR APPROVED EQUAL.
12. DRIVEWAY APPROACH, WITH CROSSING SIDEWALK, PER CITY OF SOUTH BEND STANDARDS FOR DESIGN AND CONSTRUCTION. 8" THICK, CLASS 'A' CONCRETE.
13. CONSTRUCT SMOOTH TRANSITION BETWEEN NEW AND EXISTING CURB. MATCH CURB LINE ELEVATIONS.
14. ALTERNATE #4: CONSTRUCT NEW 5' WIDE CONCRETE SIDEWALK ALONG HOPE AVENUE. SET EDGE OF WALK 6" SOUTH OF PROPERTY LINE. SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SOUTH BEND STANDARD SPECIFICATIONS.

NORTH

SITE PLAN

SCALE: 1" = 20'

ALLIANCE ARCHITECTS
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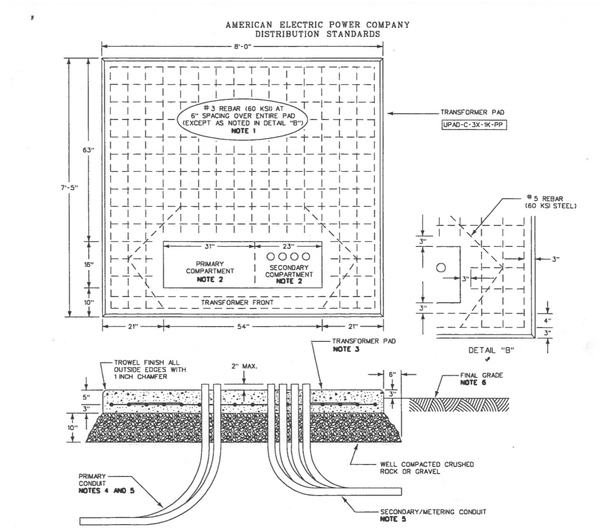
2923/2929 Hope Avenue
South Bend, IN 46615

DATE:
BID DATE: 4/2/21

SHEET NO.
C1.0

3/31/2021 8:12:29 AM



NOTES:

1. PROVIDE 3,500 PSI CONCRETE WITH A MINIMUM 3 INCH COVER OVER ALL REBAR. WIRE MESH WITH A MINIMUM CROSS SECTIONAL AREA OF 0.176 SQUARE INCHES PER FOOT OF PAD WIDTH MAY BE USED IN PLACE OF REBAR.
2. THE NUMBER AND PLACEMENT OF CONDUITS TO BE DETERMINED BY ENGINEERING. SECONDARY CONDUIT MAY EXTEND IN ANY DIRECTION AS REQUIRED BY THE CUSTOMER.
3. FOR TRANSFORMER PAD AND GUARD POST LOCATIONS REFER TO D.S. 2050.
4. PRIMARY CONDUIT NUMBER, SIZE, LOCATION AND DIRECTION TO BE SPECIFIED BY ENGINEERING. CONDUIT CAN BE FLEXIBLE, TYPE EB OR DB PVC CONDUIT WITH 90°, 36 INCH RADIUS BENDS.TO AVOID DISTURBING THE GROUND UNDER THE REAR OF THE PADAND TO MINIMIZE SETTLING, BRING CONDUITS TO THE FRONT OR SIDES WHENEVER POSSIBLE AND MARK THE CONDUIT END LOCATIONS.
5. BURIAL DEPTH IS DEFINED AS THE DISTANCE BETWEEN FINAL GRADE AND THE TOP OF THE BURIED CABLE OR CONDUIT. PRIMARY CABLES SHALL BE INSTALLED AT A BURIAL DEPTH OF NOT LESS THAN 3'-0" AND SECONDARY CABLES SHALL BE INSTALLED AT A BURIAL DEPTH OF NOT LESS THAN 2'-6". IT IS RECOMMENDED THAT PRIMARY CABLES AND SECONDARY CABLES MAINTAIN BURIAL DEPTHS OF 2'-6" AND 2'-0" RESPECTIVELY; THE INITIAL 3'-0" AND 2'-6" BURIAL DEPTHS ARE TO ALLOW FOR CHANGES IN SURFACE CONDITIONS.
6. FINAL GRADE SHALL BE ESTABLISHED BEFORE INSTALLATION OF PAD.

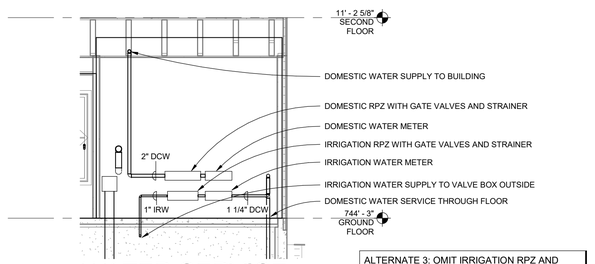
CONCRETE PAD FOR THREE PHASE PAD-MOUNT TRANSFORMERS
112.5 kVA - 1000 kVA, 120/208 VOLT
112.5 kVA - 750 kVA, 277/480 VOLT
25 kV AND BELOW

JULY 15, 2002 D.S. 2020

TRANSFORMER PAD DETAIL

SCALE: 12" = 1'-0"

2 C1.1



WATER SERVICE ELEVATION

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

1 C1.1

ALTERNATE 3: OMIT IRRIGATION RPZ AND METER, PROVIDE CAPPED CONNECTIONS FOR FUTURE METER AND RPZ

REQUIRED UTILITIES

WATER SERVICE:
2" DOMESTIC WATER SERVICE
6" FIRE PROTECTION SERVICE
ONE NEW FIRE HYDRANT

SEWER SERVICE:
8" SANITARY SEWER, EXTEND TO EXISTING MANHOLE IN VICTORY AVE, 6" SANITARY BUILDING DRAIN.

ELECTRIC SERVICE:
PAD MOUNT TRANSFORMER
1000A 120/208V 3ϕ 4 WIRE

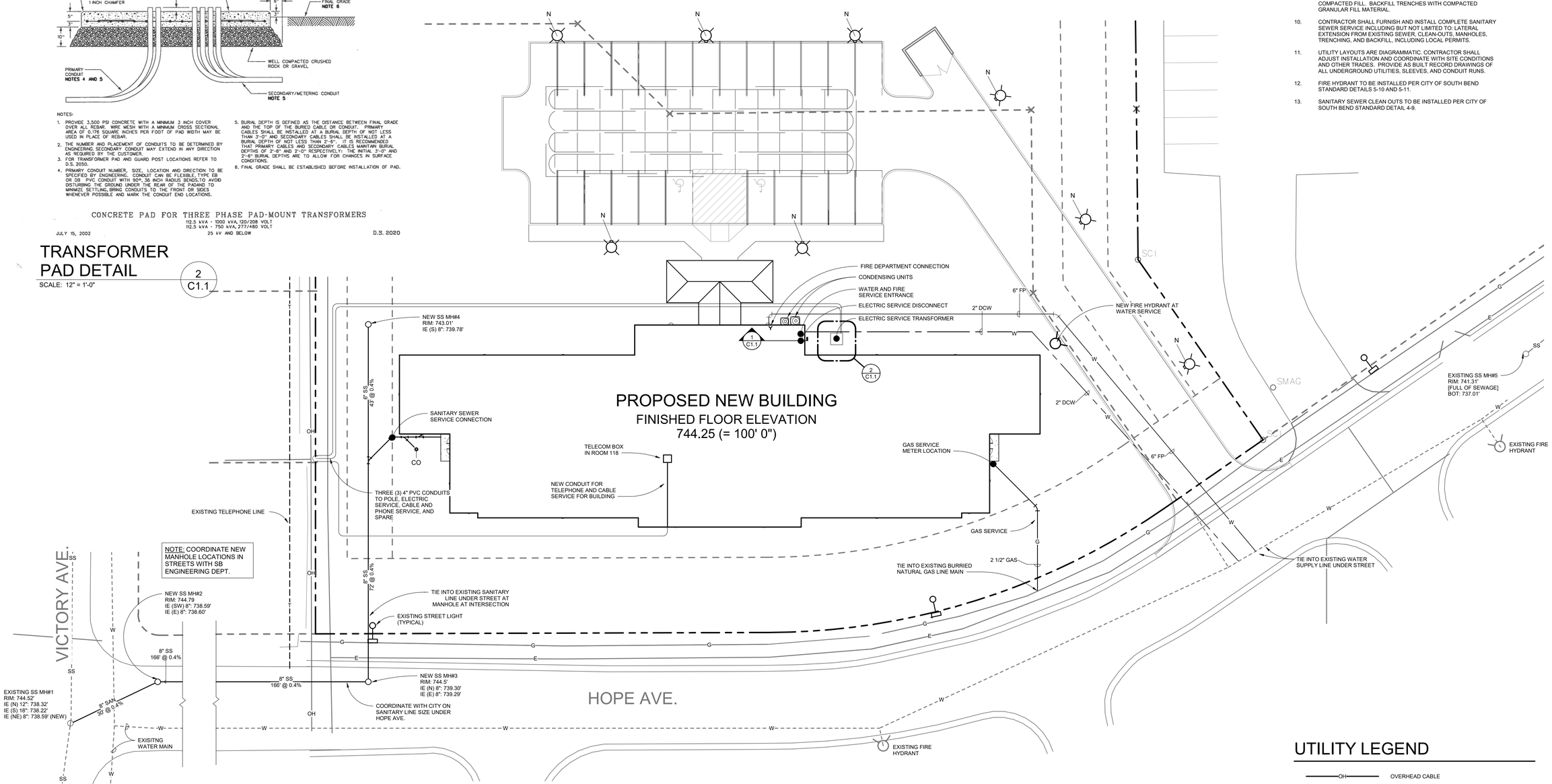
GAS SERVICE:
2-1/2" LOW PRESSURE (6INWC) 150MBH

TELECOMM SERVICE:
LANDLINE SERVICE FOR 22 APARTMENT AND 4 HOUSE LINES
COAXIAL TV CABLE FOR 22 APARTMENTS AND 2 HOUSE LINES

CONTRACTOR IS REQUIRED TO COORDINATE ALL UTILITIES WITH OWNER AND RESPECTIVE UTILITY COMPANY, OWNER TO PAY COSTS DIRECTLY TO UTILITY.

UTILITY GENERAL NOTES

1. CONTRACTOR SHALL ARRANGE FOR FIELD LOCATION AND VERIFICATION OF EXISTING UTILITIES WITHIN PROJECT LIMITS INCLUDING ANY OFF-SITE CONNECTIONS PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT/ENGINEER IMMEDIATELY OF ANY CONFLICTS.
2. ALL SITEWORK WITHIBN PUBLIC RIGHT-OF-WAYS TO BE IN ACCORDANCE WITH CITY OF SOUTH BEND DESIGN AND CONSTRUCTION STANDARDS AND PREVAILING SPECIFICATIONS.
3. ALL WORK TO BE IN ACCORDANCE WITH LOCAL AND STATE STANDARDS AND REQUIREMENTS. CONTRACTOR SHALL OBTAIN CITY OF SOUTH BEND EXCAVATION PERMIT FOR INSTALLATION OF WATER AND SEWER LINES.
4. REFER TO BUILDING PLANS FOR ADDITIONAL INFORMATION AND UTILITY HOOK-UPS.
5. SITE TELEPHONE SERVICE WILL BE INSTALLED BY OTHERS. THE CONTRACTOR SHALL PROVIDE AND INSTALL NECESSARY SLEEVES/CONDUITS UNDER PAVEMENTS AND AS OTHERWISE INDICATED.
6. NEW ELECTRICAL TRANSFORMER BY AEP INDIANA MICHIGAN POWER. CONCRETE PAD AND CONDUITS BY CONTRACTOR. REFER TO ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.
7. PRIMARY GAS SERVICE TO AND INCLUDING METER BY NIPSCO. DISTRIBUTION FROM METER BY CONTRACTOR.
8. CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE WATER SERVICE, INCLUDING BY NOT LIMITED TO: CONNECTION OF SERVICE TO EXISTING MAIN, VALVES, TRENCHING, AND BACKFILL, INCLUDING LOCAL PERMITS.
9. ALL PIPE SLEEVES SHALL BEAR ON UNDISTURBED OR COMPACTED FILL. BACKFILL TRENCHES WITH COMPACTED GRANULAR FILL MATERIAL.
10. CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE SANITARY SEWER SERVICE INCLUDING BUT NOT LIMITED TO: LATERAL EXTENSION FROM EXISTING SEWER, CLEAN OUTS, MANHOLES, TRENCHING, AND BACKFILL, INCLUDING LOCAL PERMITS.
11. UTILITY LAYOUTS ARE DIAGRAMMATIC. CONTRACTOR SHALL ADJUST INSTALLATION AND COORDINATE WITH SITE CONDITIONS AND OTHER TRADES. PROVIDE AS BUILT RECORD DRAWINGS OF ALL UNDERGROUND UTILITIES, SLEEVES, AND CONDUIT RUNS.
12. FIRE HYDRANT TO BE INSTALLED PER CITY OF SOUTH BEND STANDARD DETAILS 5-10 AND 5-11.
13. SANITARY SEWER CLEAN OUTS TO BE INSTALLED PER CITY OF SOUTH BEND STANDARD DETAIL 4-9.



SITE UTILITY PLAN

NORTH

SCALE: 1/16" = 1'-0"

UTILITY LEGEND

OH	OVERHEAD CABLE
E	BURIED ELECTRIC
T	BURIED TELEPHONE
G	BURIED GAS
W	BURIED WATER
SS	BURIED SANITARY SEWER

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GRADLEY A. WHITE
REGISTERED
No. PE11100682
STATE OF INDIANA
PROFESSIONAL ENGINEER

South Bend Heritage

HOPE AVENUE HOMES

2923/2929 Hope Avenue
South Bend, IN 46615

DATE:
04/02/21

SHEET NO.
C1.1

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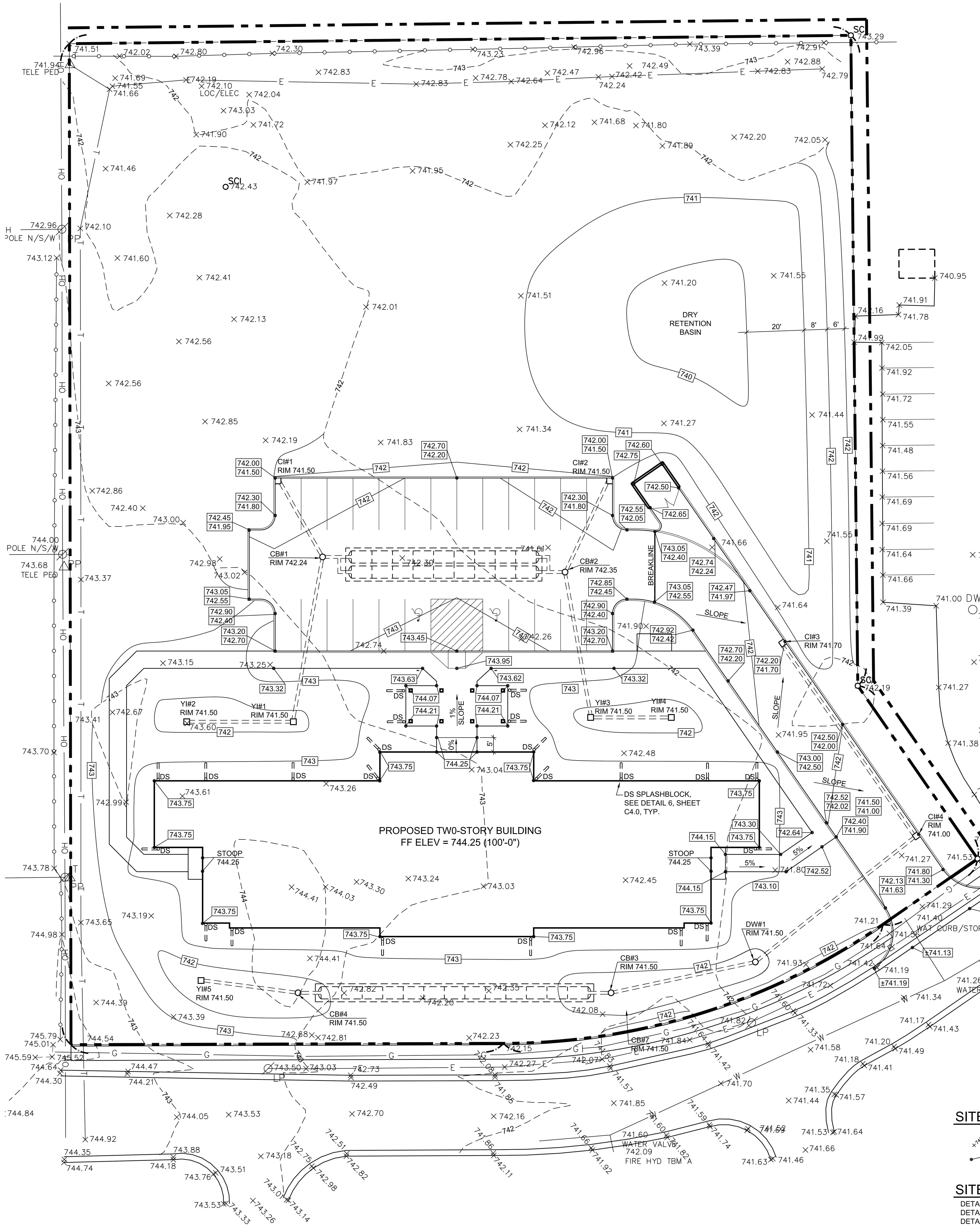
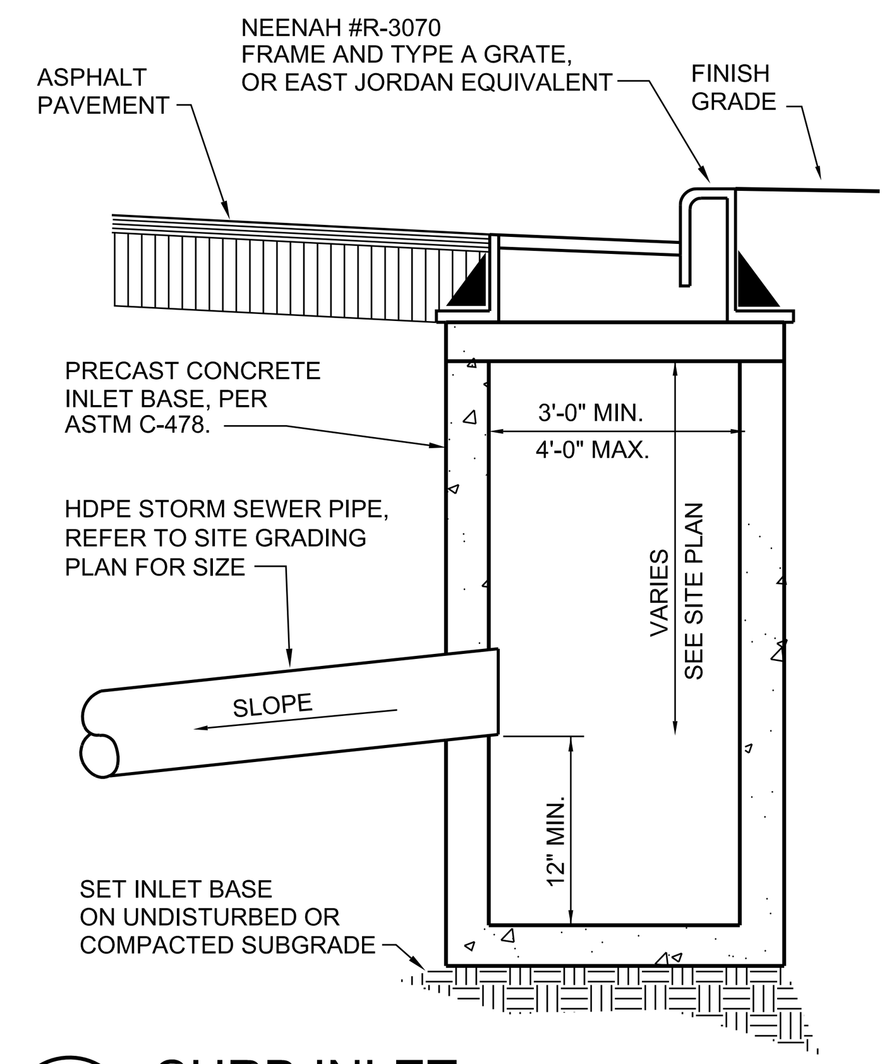
www.SiteScapes-Inc.com

PATRICK S. BROWN
7-22-82
No. 55
STATE OF INDIANA
LANDSCAPE ARCHITECT





1 CURB INLET

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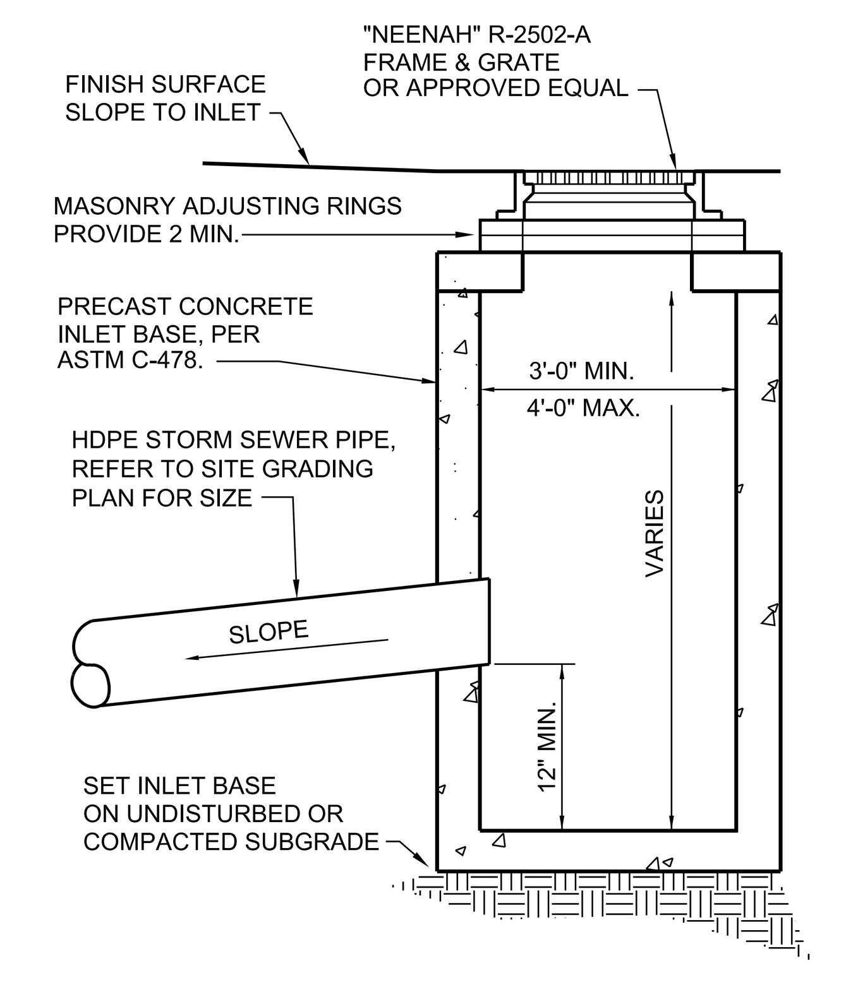
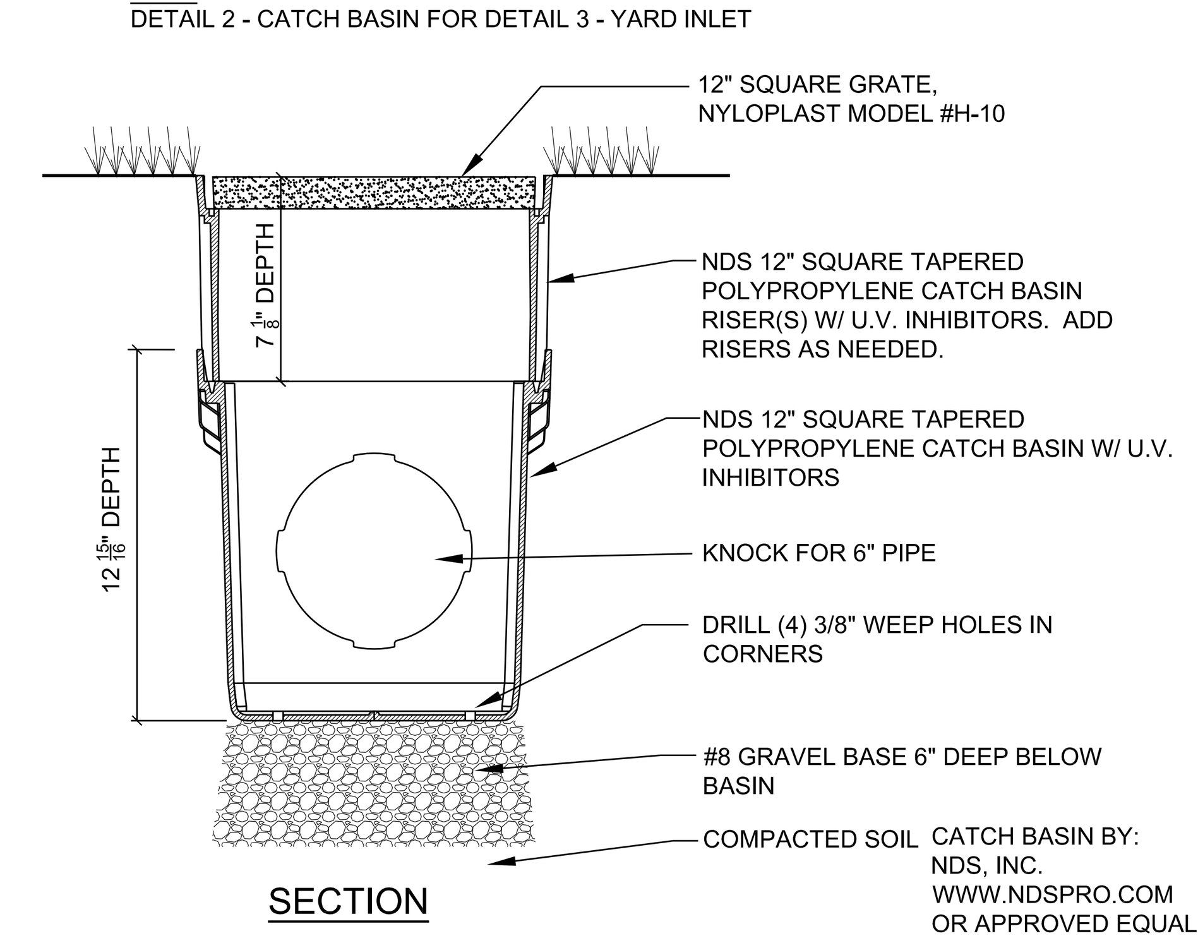


2 CATCH BASIN

NOT TO SCALE

NOTE: CONTRACTOR MAY SUBSTITUTE DETAIL 2 - CATCH BASIN FOR DETAIL 3 - YARD INLET



CATCH BASIN BY: NDS, INC. WWW.NDSPRO.COM OR APPROVED EQUAL

3 YARD INLET - 12" SQUARE

NOT TO SCALE

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL SITE CONDITIONS PRIOR TO THE START OF WORK.
2. CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT OF CONFLICTS OR DISCREPANCIES.
3. SPOT ELEVATIONS INDICATES FINISH GRADE/TOP OF PAVEMENT, TOP OF CURB IS 6" ABOVE FINISH GRADE OF PAVEMENT UNLESS OTHERWISE NOTED.
4. ALL EXCAVATIONS TO BE KEPT WELL DRAINED AT ALL TIMES. CONTRACTOR TO EMPLOY TEMPORARY STORM DRAINAGE AND DEWATERING METHODS AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD.
5. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES TO STOP ANY EROSION/RUNOFF OF SEDIMENT OR DEBRIS LEAVING THE SITE. CONTRACTOR IS RESPONSIBLE FOR ASSURING COMPLIANCE WITH ALL LOCAL REQUIREMENTS FOR EROSION CONTROL.
6. TOPSOIL TO BE PLACED IN NEW LAWN AREAS AT 3" MIN. AND 4" MAX. DEPTH.
7. SITE SHALL BE GRADED TO PROVIDE SMOOTH CONTOURS AND POSITIVE DRAINAGE AWAY FROM BUILDING. DO NOT ALLOW FOR PONDING OF WATER. PROVIDE SMOOTH TRANSITION WITH EXISTING LAWNS/GRADES.
8. FINISH GRADE OF TOPSOIL IS FLUSH WITH WALKS AND TOP OF CURBS, UNLESS OTHERWISE NOTED.

SITE CLEARING

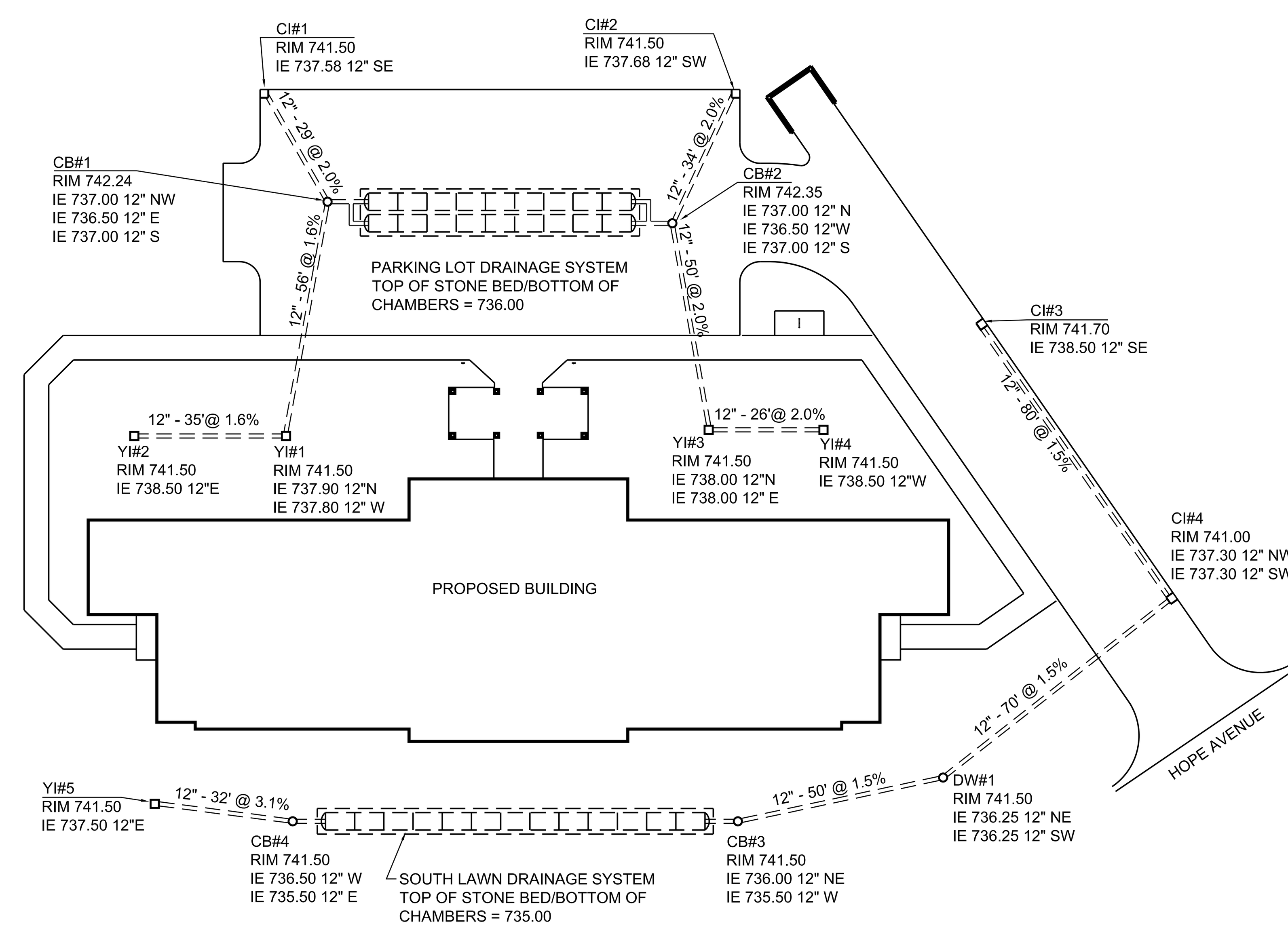
ENTIRE SITE TO BE CLEARED AND GRUBBED OF EXISTING VEGETATION, SHRUBS AND TREES. REMOVE MATERIALS FROM SITE.

SITE GRADING PLAN - LEGEND

+748.42	EXISTING GRADE SPOT ELEVATION
749.42	PROPOSED SPOT ELEVATION - FINISH GRADE, TOP OF PAVEMENT, TOP OF WALK

SITE GRADING PLAN - DETAILS

DETAIL 1 - SHEET C2.0 - NEW CURB INLET
DETAIL 2 - SHEET C2.0 - NEW CATCH BASIN
DETAIL 3 - SHEET C2.0 - NEW YARD INLET
DETAIL 1 - SHEET C2.1 - STORMWATER CHAMBER SYSTEM
DETAIL 2 - SHEET C2.1 - CHAMBER SYSTEM STORMWATER CAPACITY
DETAIL 6 - SHEET C4.0 - DOWN SPOUT SPLASHBLOCK
DETAIL 7 - SHEET C4.0 - DRYWELL



1 STORM DRAINAGE LAYOUT

SCALE: 1" = 30'-0"

NORTH

SITE GRADING PLAN

SCALE: 1" = 20'

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JOSEPH G. NUCCIARONE
REGISTERED
No. AR00890043
STATE OF INDIANA
ARCHITECT

South Bend Heritage

HOPE AVENUE HOMES

2923/2929 Hope Avenue
South Bend, IN 46615

DATE:
BID DATE: 4/2/21

SHEET NO.

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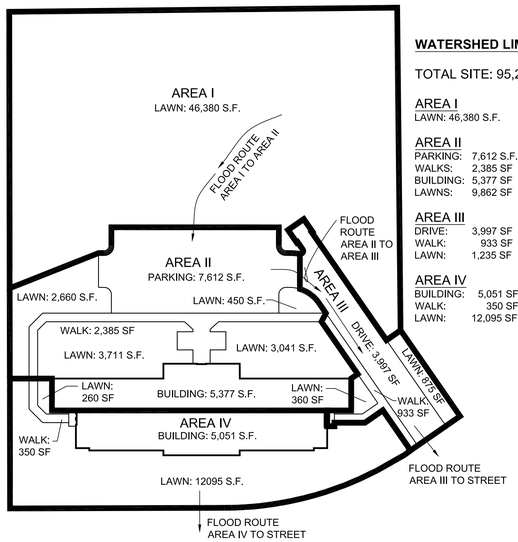


WATERSHED LIMITS

TOTAL SITE: 95,277 SF

AREA I
LAWN: 46,380 S.F.

AREA II
PARKING: 7,612 S.F.
WALKS: 2,385 SF
BUILDING: 5,377 SF
LAWNS: 9,862 SF

AREA III
DRIVE: 3,997 SF
WALK: 933 SF
LAWN: 1,235 SF

AREA IV
BUILDING: 5,051 SF
WALK: 350 SF
LAWN: 12,095 SF

WATERSHED /FLOOD ROUTE PLAN

NORTH SCALE: 1" = 50'

STORMWATER DRAINAGE CALCULATIONS

AREA I

STORAGE REQUIRED = (A x C x I) / 12
= (46,380 SF) x (0.2) x (4.90") / 12
= 3,788 CU.FT.
= 227 CU.FT. (6% SILTATION)
4,015 CU.FT. MIN. STORAGE REQUIRED

RETENTION AREA
CONTOUR 741 6,906.59 SF ┐
CONTOUR 740 1,544.95 SF ┘ 4,225.78 CF

STORAGE PROVIDED = 4,225.78 CU.FT.

1' FREEBOARD
CONTOUR 742 20,503.08 SF ┐
CONTOUR 741 6,906.59 SF ┘ 13,704.83 CF
FREEBOARD = 3.4 TIMES REQUIRED STORAGE

THIS IS A "DRY RETENTION BASIN" BASED ON SOILS REPORT, SOILS ARE HIGHLY PERMEABLE AND BASIN WILL DRAIN WITHIN 48 HOURS.

Hope Avenue Homes, South Bend
Storm Drainage Calculations 3/29/21
SiteScapes, Inc.

Area II - Site Information

Project Area	0.579 acres	
Total Non-impervious areas	9,862 sq.ft. = 0.226 acres	
Total Impervious areas	15,374 sq.ft. = 0.353 acres	
Building	5,377 sq.ft.	
Parking	7,612 sq.ft.	
Walks	2,385 sq.ft.	-

Weighted C = $\frac{(0.226)\ (0.30) + (0.353)\ (0.95)}{0.579} = \frac{0.403}{0.579} = 0.696$

City of South Bend requirements: 25 yr, 24 hr storm

Modified Rational Method with Infiltration
Calculated Infiltration Rate (per Geotechnical report 104 in/hr)
3 Safety Factor = (104) / (3.0) = 34 in/hr
Drainage Bed = 11.5' x 70.05' = 805.57 SF
Ground Infill Rate = 805 sf (34 in/hr) / 12 / 3600
= 0.63 cfs

Storm Duration (hrs)	Rainfall Intensity "I" 25 year (in/hr)	Inflow Rate "Q" (cfs)	Ground Infiltration Rate (cfs)	Storage Rate (cfs)	Required Storage (cfs)	Required Storage (CuFt)	
0.083	8.240	3.32	0.63	2.691	0.02	811	
0.167	6.310	2.54	0.63	1.913	0.03	1,160	
0.250	5.190	2.09	0.63	1.461	0.03	1,326	
0.500	**3.670**	**1.48**	**0.63**	**0.849**	**0.04**	**1,541**	**Peak**
1.00	2.380	0.96	0.63	0.329	0.03	1,195	
2.00	1.460	0.59	0.63	-0.042	-0.01	-302	
3.00	1.050	0.42	0.63	-0.207	-0.05	-2,253	
6.00	0.628	0.25	0.63	-0.377	-0.19	-6,209	
12.00	0.358	0.14	0.63	-0.486	-0.49	-21,158	
24.00	0.204	0.08	0.63	-0.548	-1.10	-47,724	

Storm Retention Storage Required

Peak Discharge	1,541 CuFt
6% Siltation Factor	93 CuFt
Total Storage Required	**1,634 CuFt**

Hope Avenue Homes, South Bend
Storm Drainage Calculations 3/29/21
SiteScapes, Inc.

Area III & IV - Site Information

Project Area	23,661 sq.f.t = 0.543 acres	
Total Non-impervious areas	13,330 sq.ft. = 0.306 acres	
Total Impervious areas	10,331 sq.ft. = 0.237 acres	
Building	5,051 sq.ft.	
Drive	3,997 sq.ft.	
Walks	1,283 sq.ft.	-

Weighted C = $\frac{(0.306)\ (0.30) + (0.237)\ (0.95)}{0.543} = \frac{0.317}{0.543} = 0.584$
Min. C = 0.60

City of South Bend requirements: 25 yr, 24 hr storm

Modified Rational Method with Infiltration
Calculated Infiltration Rate (per Geotechnical report 104 in/hr)
3 Safety Factor = (104) / (3.0) = 34 in/hr
Drainage Bed = 6.25' x 98.52' = 615.75 SF
Ground Infill Rate = 615 sf (34 in/hr) / 12 / 3600
= 0.48 cfs

Storm Duration (hrs)	Rainfall Intensity "I" 25 year (in/hr)	Inflow Rate "Q" (cfs)	Ground Infiltration Rate (cfs)	Storage Rate (cfs)	Required Storage (cfs)	Required Storage (CuFt)	
0.083	8.240	2.68	0.48	2.205	0.02	664	
0.167	6.310	2.06	0.48	1.576	0.02	955	
0.250	5.190	1.69	0.48	1.211	0.03	1,099	
0.500	**3.670**	**1.20**	**0.48**	**0.716**	**0.03**	**1,299**	**Peak**
1.00	2.380	0.78	0.48	0.295	0.02	1,072	
2.00	1.460	0.48	0.48	-0.004	0.00	-31	
3.00	1.050	0.34	0.48	-0.138	-0.03	-1,502	
6.00	0.628	0.20	0.48	-0.275	-0.14	-5,998	
12.00	0.358	0.12	0.48	-0.363	-0.36	-15,828	
24.00	0.204	0.07	0.48	-0.414	-0.83	-36,027	

Storm Retention Storage Required

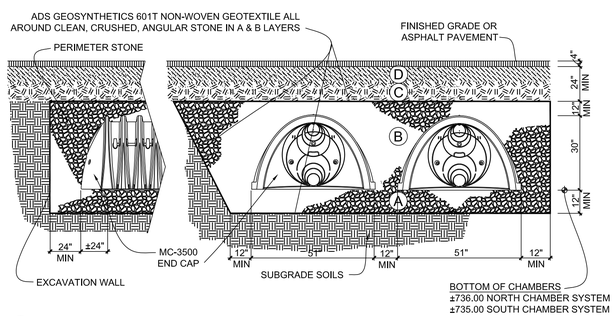
Peak Discharge	1,299 CuFt
6% Siltation Factor	78 CuFt
Total Storage Required	**1,377 CuFt**

ACCEPTABLE FILL MATERIALS: STORMTECH DC-780 CHAMBER SYSTEMS

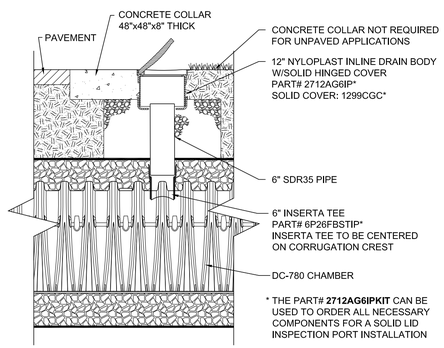
	MATERIAL LOCATION	DESCRIPTION	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT SUBBASE	PAVEMENT SUBBASE MATERIAL, 8" MIN. THICKNES, INDOT #53 DENSE GRADED, CRUSHED AGGREGATE - CRUSHED STONE, CRUSHED GRAVEL OF RECYCLED CONCRETE	COMPACT LAYERS IN 6" MAX LIFTS TO A MINIMUM 98% MAXIMUM DRY DENSITY PER STANDARD PROCTOR ASTM D698
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	FILL MATERIAL, INDOT #53 DENSE GRADED, CRUSHED AGGREGATE - CRUSHED STONE, CRUSHED GRAVEL OF RECYCLED CONCRETE	COMPACT LAYERS IN 6" MAX LIFTS TO A MINIMUM 98% MAXIMUM DRY DENSITY PER STANDARD PROCTOR ASTM D698
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, INDOT #2 LIMESTONE	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, INDOT #2 LIMESTONE	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE

NOTES:

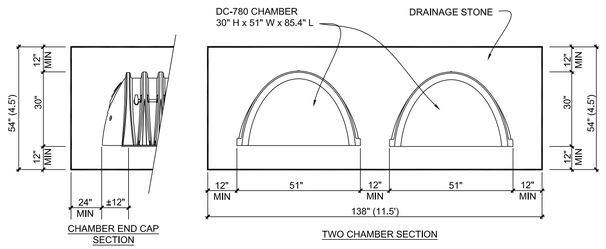
1. DC-780 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. DC-780 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
4. INSTALL COMPLETE SYSTEM AS PER MANUFACTURER'S REQUIREMENTS. SUBMIT SHOP DRAWINGS ON LAYOUT, PRODUCTS, ETC.

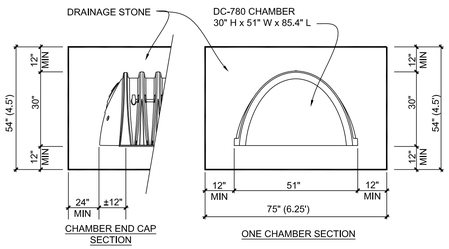


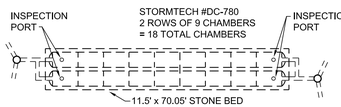
1 STORMWATER CHAMBER SYSTEM
NOT TO SCALE



DC-780 6" INSPECTION PORT DETAIL







PARKING LOT - PLAN VIEW

PARKING LOT - DRAINAGE

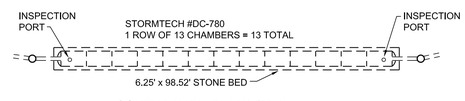
TWO CHAMBER SECTION
DRAINAGE STONE CROSS SECTIONAL AREA
= 11.5' x 4.5' = 51.75 SQ.FT.
@ 7.12 L.F. CHAMBER LENGTH
= 368.46 CU.FT. GROSS STONE VOLUME

CHAMBER STORAGE AREA
= CHAMBER @ 30" x 51" x 85.4" = 46.2 CU.FT. EACH
= 2 CHAMBERS = 92.4 CU.FT.

TWO CHAMBER STONE STORAGE AREA
= 368.46 CU.FT. STONE AREA LESS 92.4 CU.FT. CHAMBERS
= 276.06 CU.FT. NET STONE AREA

VOLUME
= 276.06 CU.FT. STONE AT 35%
= 96.62 CU.FT. STONE VOLUME
PLUS 2 CHAMBERS @ 92.4 CU.FT.
= 189.02 CU.FT. VOLUME PER 2 CHAMBERS

CHAMBER STORAGE
9 SECTIONS OF 2 CHAMBERS AT 189.02 CU.FT. EACH
= 1,701 CU.FT. STORAGE
STORAGE REQUIRED = 1,634 CU.FT.



SOUTH LAWN - PLAN VIEW

SOUTH LAWN - DRAINAGE

ONE CHAMBER SECTION
DRAINAGE STONE CROSS SECTIONAL AREA
= 6.25' x 4.5' = 28.12 SQ.FT.
@ 7.12 L.F. CHAMBER LENGTH
= 200.21 CU.FT. GROSS STONE VOLUME

CHAMBER STORAGE AREA
= CHAMBER @ 30" x 51" x 85.4"
= 46.2 CU.FT.

CHAMBER STONE STORAGE AREA
= 200.21 CU.FT. STONE AREA LESS 46.2 CU.FT. CHAMBER
= 154.01 CU.FT. NET STONE AREA

VOLUME
= 154.01 CU.FT. STONE AT 35%
= 53.90 CU.FT. STONE VOLUME
PLUS CHAMBER @ 46.2 CU.FT.
= 100.1 CU.FT. VOLUME PER CHAMBER

CHAMBER STORAGE
13 SECTIONS OF CHAMBER AT 100.1 CU.FT. EACH
= 1301 CU.FT. STORAGE
DRYWELL #1 - 1,800 GAL = 240 CU.FT.
TOTAL STORAGE PROVIDED = 1,541 CU.FT.

TOTAL STORAGE REQUIRED = 1,377 CU.FT.

2 CHAMBER SYSTEM - STORMWATER CAPACITY
NOT TO SCALE

STORM DRAINAGE DETAILS

PATRICK S. BROWN 7-22-82 No. 55 STATE OF INDIANA LANDSCAPE ARCHITECT

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ALLIANCE ARCHITECTS
929 Lincolnway East, Suite 200 | South Bend, Indiana 46601

JOSEPH G. NUCCIARONE REGISTERED No. AR00890043 STATE OF INDIANA ARCHITECT

South Bend Heritage

HOPE AVENUE HOMES
2923/2929 Hope Avenue
South Bend, IN 46615

DATE:
BID DATE: 4/2/21

SHEET NO.
C2.1

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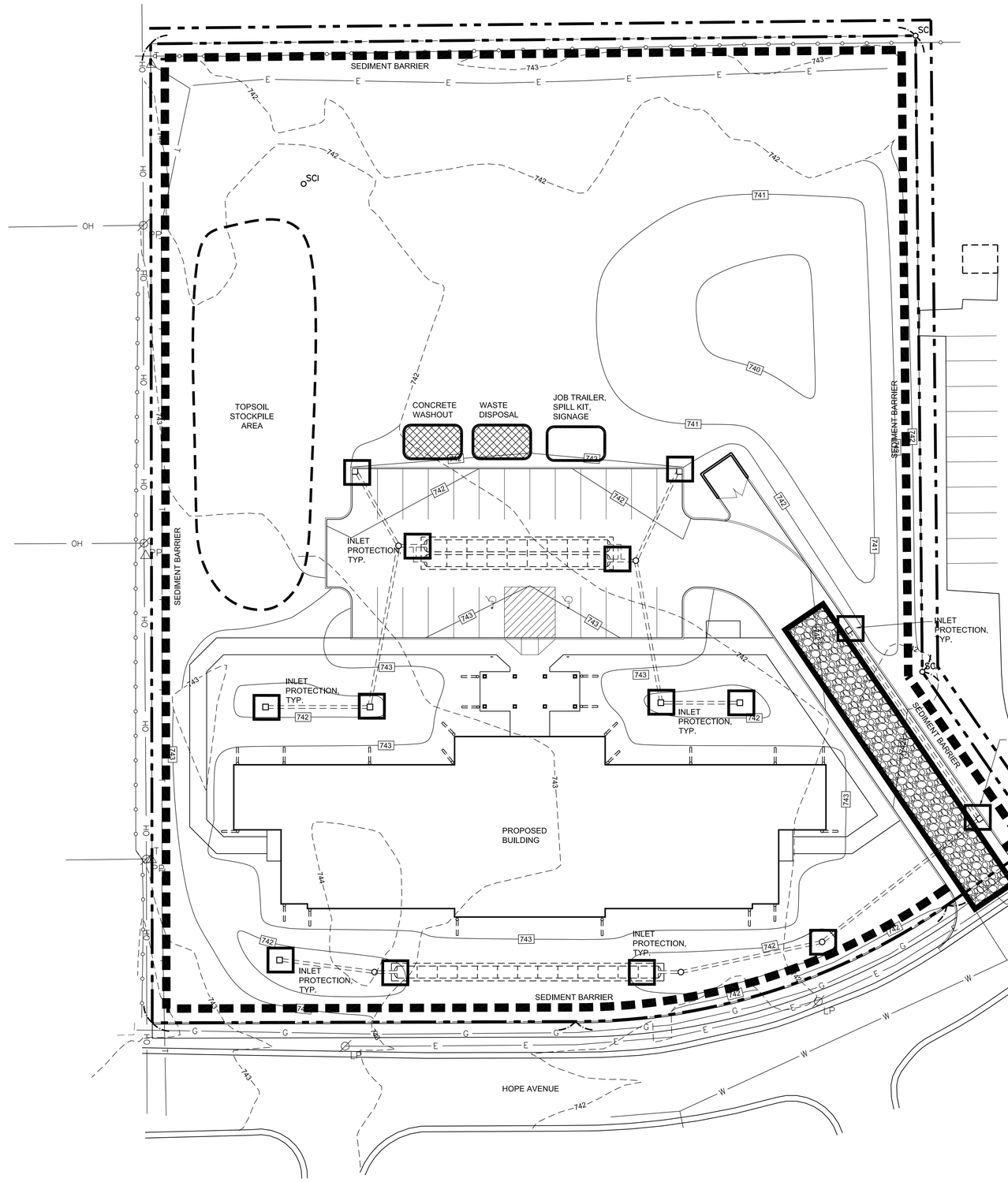

LOCATION MAP
NOT TO SCALE

EROSION AND SEDIMENT CONTROL

1. INSTALLATION: CONTRACTOR WILL PROVIDE, INSTALL AND MAINTAIN REQUIRED EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED AND SPECIFIED, INCLUDING ANY TEMPORARY OR ADDITIONAL CONTROL MEASURES THAT MAY BE NEEDED DURING THE PHASES OF CONSTRUCTION.

2. INSPECTIONS. INSPECTIONS REQUIRED BY LOCAL AUTHORITIES DURING THE COURSE OF CONSTRUCTION SHALL BE ARRANGED AS REQUIRED BY THE CONTRACTOR, CONTRACTOR RESPONSIBLE TO INSPECT PROJECT SITE, FILE REPORTS AND SUBMIT DOCUMENTATION TO MS4 CONSERVATIONIST.
   - INSPECT AFTER EACH 1/2" RAIN EVENT.
   - INSPECT ONCE EVERY WEEK DURING CONSTRUCTION ACTIVITIES.

3. DOCUMENTATION: CONTRACTOR SHALL MAINTAIN COPIES OF EROSION CONTROL PLANS AND SPECIFICATIONS, PERMITS, INSPECTION REPORTS AND MAINTENANCE FORMS ON-SITE FOR REVIEW BY ARCHITECT, OWNER AND MS-4 CONSERVATIONIST. CONTRACTOR SHALL SUBMIT REQUIRED DOCUMENTATION TO CITY OF SOUTH BEND MS4 CONSERVATIONIST,

4. ALL SHEET FLOW ONTO IMPERVIOUS AREAS SHALL BE CONTROLLED WITH EROSION CONTROL MEASURES (SILT FENCE, WATTLES, ETC.) AND STABILIZED WITH TEMPORARY AND PERMANENT SEEDING.

5. ALL EXPOSED PERVIOUS AREAS TO BE STABILIZED WITH NEW LAWN. REFER TO SHEET L1 - LANDSCAPE PLAN FOR PERMANENT LAWN SPECIFICATIONS AND SEEDING INFORMATION.

NOTE:
DRAWINGS INDICATE THE BASIC REQUIREMENTS AND MINIMUM EROSION CONTROL MEASURES FOR THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST MEASURES AND/OR INSTALL ADDITIONAL MEASURES AS NECESSARY FOR EARTHWORK OPERATIONS AND PHASING OF CONSTRUCTION, INCLUDING PROTECTING EXISTING IMPROVEMENTS DURING CONSTRUCTION PHASES IN ACCORDANCE WITH RULE 5 REQUIREMENTS AND LOCAL REGULATIONS.

CONTRACTOR SHALL INSPECT SITE AND ALL EROSION CONTROL MEASURES WITHIN 24 HRS AFTER EACH ONE-HALF INCH RAIN EVENT AND MAKE ANY NECESSARY REPAIRS OR ADJUSTMENTS. CONTRACTOR SHALL SUBMIT REQUIRED WRITTEN REPORTS TO MS-4 COORDINATOR WITH COPIES TO OWNER AND ARCHITECT.

PATRICK S. BROWN
7-22-22
No. 55
STATE OF INDIANA
LANDSCAPE ARCHITECT

SWPPP LIMITS

SWPPP LIMITS INCLUDES: ENTIRE PROJECT SITE

LEGEND

DESIGNATED AREAS:
- TRASH/DISPOSAL AREA
- FUEL STORAGE/FUELING AREA
- CONCRETE WASHOUT AREA

DESIGNATED AREA IS APPROXIMATE IN LOCATION AND SIZE. CONTRACTOR MAY RELOCATE AND/OR ADJUST SIZE AS NECESSARY FOR CONSTRUCTION ACTIVITIES. ALL DESIGNATED AREAS TO MEET LOCAL, STATE AND FEDERAL REGULATIONS FOR HAZARDROUS MATERIALS AND SAFETY.

20' W x 150' L - GRAVEL CONSTRUCTION ENTRANCE/EXIT PAD. CONTRACTOR MAY RELOCATE AS NECESSARY FOR CONSTRUCTION PHASING

EROSION CONTROL BARRIER
- SILT FENCE
- WATTLES
- VEGETATIVE BARRIER

INLET PROTECTION

TOPSOIL STOCKPILE
AREA FOR STOCKPILING EXISTING TOPSOIL. CONTRACTOR MAY RELOCATE AND PROVIDE ADDITIONAL STOCKPILE AREAS AS NECESSARY FOR CONSTRUCTION. REFER TO TOPSOIL SALVAGE AND UTILIZATION ON SHEET C3.1 FOR REQUIREMENTS.

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF THE (SWPPP) EROSION AND SEDIMENT CONTROL PLAN.
2. CONSERVATION PRACTICES FOR EROSION & SEDIMENT CONTROL ON THIS PROJECT SHALL MEET OR EXCEED THE CITY OF SOUTH BEND STANDARDS AND REQUIREMENTS OF RULE 5.
3. PRIOR TO COMMENCING ANY EARTHWORK AND GRADING OPERATIONS WHICH DISTURBS THE PRESENT SITE CONDITIONS, THE CONTRACTOR SHALL IMPLEMENT REQUIRED EROSION AND SEDIMENT CONTROL PRACTICES FOR EACH PHASE OF WORK. SEDIMENT CONTROL MEASURES MAY BE ADJUSTED TO MEET FIELD CONDITIONS AT TIME OF CONSTRUCTION.
4. PERIODIC INSPECTIONS AND MAINTENANCE OF ALL SEDIMENT CONTROL DEVICES MUST BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. THE CONTRACTOR IS TO REPAIR ALL SEDIMENT CONTROL DEVICES DAMAGED.
5. ALL VEHICLES, TRUCKS, AND EQUIPMENT ENTERING AND LEAVING THE CONSTRUCTION SITE SHALL USE THE DESIGNATED "CONSTRUCTION ACCESS" AND BE FREE OF EXTERIOR DIRT. THE CONTRACTOR MAY RELOCATE AND/OR PROVIDE ADDITIONAL "PADS" AS NECESSARY FOR CONSTRUCTION ACTIVITIES.
6. FOLLOWING PLACEMENT OF TOPSOIL, TEMPORARY AND/OR PERMANENT STABILIZATION SHALL BE COMPLETED WITHIN FIFTEEN (15) CALENDAR DAYS ON FINISHED GRADE AREAS ON THE PROJECT SITE. DELAY OF SEEDING AND MULCHING OF DISTURBED AREAS MAY RESULT IN EXCESSIVE EROSION
7. MAINTAIN STORM PIPING FREE OF DEBRIS, SEDIMENT, ETC. CLEAN PERIODICALLY AS NEEDED.
8. CONTRACTOR SHALL RESTORE LAWN AND LANDSCAPE AREAS WHEN EROSION CONTROL MEASURES ARE REMOVED.
9. CONTRACTOR SHALL PROTECT AND INSTALL MEASURES TO PROTECT SHEET FLOW AREAS IN UNPAVED AREAS.
10. ALL EXCESS SOILS SHALL BE REMOVED FROM SITE AND DISPOSED LEGALLY. IF ANY OFF-SITE DISPOSAL AREAS EXCEED 1 ACRE IN SIZE, CONTRACTOR SHALL NOTIFY CITY OF SOUTH BEND MS4 COORDINATOR.

PROJECT INFORMATION

PROJECT:	HOPE AVENUE HOMES 2923/2929 HOPE AVENUE SOUTH BEND, INDIANA 46615	
LOCATION:	PORTAGE TOWNSHIP NE 1/4 OF SECTION 5, T-36-N, R-3-E CITY OF SOUTH BEND, ST. JOSEPH COUNTY, INDIANA	LAT. N 41° 41' 24.9" LONG. W 86° 12' 21.3"
OWNER:	SOUTH BEND PERMANENT SUPPORTIVE HOUSING, LP SOUTH BEND HERITAGE 803 LINCOLNWAY WEST SOUTH BEND, INDIANA 46616 TELEPHONE (574) 289-1066 CONTACT PERSON: MARCO MARIANI	
PLAN PREPARER:	SITESCAPES, INC. P.O. BOX 391 MISHAWAKA, INDIANA 46546 TELEPHONE: (574) 255-4677 CONTACT PERSON: PATRICK S. BROWN, ASLA, LEED-AP	
OPERATOR:	SOUTH BEND PERMANENT SUPPORTIVE HOUSING, LP SOUTH BEND HERITAGE 803 LINCOLNWAY WEST SOUTH BEND, INDIANA 46616 TELEPHONE (574) 289-1066 CONTACT PERSON: MARCO MARIANI	

HYDROLOGIC 14 UNIT CODE

04050001240020

PROJECT NARRATIVE

SOUTH BEND HERITAGE IS PLANNING THE CONSTRUCTION OF A NEW TWO-STORY HOPE AVENUE HOMES FACILITY LOCATED AT 2923/2929 HOPE AVENUE IN THE CITY OF SOUTH BEND, INDIANA. THE CURRENT SITE IS VACANT AND UNDEVELOPED. THERE IS NO CURRENT STORM WATER SYSTEMS ON SITE. RECEIVING WATERS FOR OVERFLOW DISCHARGE FROM THE VACANT SITE IS THE CITY OF SOUTH BEND MUNICIPAL SEWER SYSTEM ON HOPE AVENUE, WHICH OVERFLOW IS DIRECTED TO THE ST. JOSEPH RIVER. THE SITE IS NOT WITHIN A 100-YEAR FLOODPLAIN. NO LOCAL AND STATE FLOODPLAIN PERMITS WILL BE REQUIRED. NO FEDERAL WATER QUALITY PERMITS ARE REQUIRED.

THE PROJECT INVOLVES EARTHWORK AND SITE DEVELOPMENT FOR THE CONSTRUCTION OF A NEW 23,240 SQ. FT. TWO-STORY BUILDING , PARKING LOT, DRIVES AND OTHER IMPERVIOUS SITE IMPROVEMENTS.

ADJACENT LAND USES ARE SINGLE-FAMILY RESIDENTIAL TO THE NORTH AND WEST, AND MULTI-FAMILY RESIDENTIAL TO THE EAST AND SOUTH. EXISTING SITE IS SERVED BY MUNICIPAL WATER AND SANITARY SEWER. IT IS THE INTENT TO REMOVE EXCESS AND UNSUITABLE SOILS FROM THE SITE AND LEGALLY DISPOSED OF SUCH SOILS OFF-SITE.

PERMANENT STABILIZATION OF THE PROJECT SITE WILL BE ACCOMPLISHED THROUGH THE IMPLEMENTATION OF LANDSCAPE PLANTINGS AND LAWNS.

IT IS ANTICIPATED THIS PROJECT WILL BEGIN MAY 2021 HAVE A PROJECT DURATION OF 10 MONTHS COMPLETING IN MARCH 2022.

NORTH

SWPPP PLAN

SCALE: 1" = 20'

SiteScapes INC.
Landscape Architecture & Planning
P.O. Box 391 • Mishawaka, Indiana 46546
Telephone (574) 255-4677
www.SiteScapes-Inc.com

STORM WATER POLLUTION PREVENTION PLAN PREPARED BY:

CERTIFIED PREPARER CPSWPPP SWPPP

Patrick S. Brown, ASLA
Certification # 4b1b929
Exp. Date: 2022-05-10
Mishawaka, IN 46544
www.StormwaterUSA.com

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ARCHITECTS
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JOSEPH G. NUCCHIONE
REGISTERED
No. AR00850043
STATE OF INDIANA
ARCHITECT

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TOPSOIL (SALVAGE AND UTILIZATION)

Requirements
Material: Normally darker, friable and loamy surface soil taken from areas that have not been stripped or graded.
Storage Area: To be kept free of stumps, roots, rocks and construction debris.

Application
Salvaging and Storcking Topsoil
1. Prior to stripping topsoil, install any site specific downslope practices needed to control reunoff and sediment.
2. Stockpile the material in accessible locations that nither interfere with other construction activities or block natural drainage; install silt fences to trap sediment.
3. If topsoil is stockpiled for more than 15 days, it shall be temporarily seeded, covered with a tarp, or surrounded by a sediment barrier.

Spreading Topsoil
1. Prior to spreading topsoil, grade the subsoil and roughen the top 3-4 inches by disking.
2. Do not spread topsoil when site is wer, muddy or frozen.
3. Spread topsoil evenly to a depth of at least 4 inches, then compact lightly.
4. After spreading, grade and stabilize.

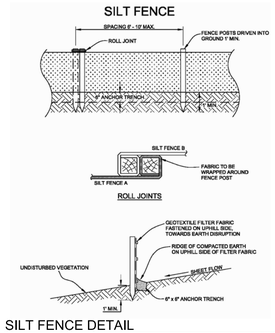
Maintenance
Inspect newly topsoil areas weekly and after each ½ inch rain or greater storm event until vegetation is established.
Repair eroded or damaged areas and revegetate.

SILT FENCE

Requirements
1. Trench 8 inches minimum depth, flat bottom or V-shaped, filled with compacted soil or gravel to bury lower portion of support wire and/or fence fabric.
2. Support posts to be 2" x 2" hardwood posts set at least 18 inches below grade.
3. Spacing of posts 8 foot maximum if fence supported by wire, otherwise 6 fket for maximum strength fabric without wire backing.
4. Fence height to be sufficient so depth of impounded water does not exceed 18 inches at any point along fence line.
5. Support wire (optional) 14 guage, 6" mesh wire fence. (Required If using standard strength fabric).
6. Fence fabric is woven or non-woven geotextile fabric with specified filtering efficiency, tensile strength and containing UV inhibitors and stabilizers to ensure six month minimum life at temperatures 0 to 120 degrees F.

Installation
1. Along the entire intended fence line, maintain contour as much as possible, dig an 8 inch deep flat bottom or V-shaped trench.
2. On the downslope side of the trench, drive the post at least 18 inches into the ground.
3. Fasten support wire fence to the upslope side of the posts, extending it 8 inches into trench (to be used only with standard strength fabrics).
4. Run a continuous length of geotextile fabric along upstream site of posts, avoiding joints in low points in the fence line.
5. If a joint is necessary, nail the overlap to the nearest post with wood lath.
6. Place the bottom 1-foot of fabric in the 8 inch deep trench, extending the remaining 4 inches of fabric toward the upslope side.
7. Backfill the trench with compacted earth.

Maintenance
1. Inspect silt fence after each ½ inch rain or greater storm event.
2. If fence fabric tears, starts to decompose, or becomes ineffective, replace the affected portion.
3. Remove deposited sediment when it reaches half the height of the fence at its lowest point or is causing the fabric to bulge.
4. Take care to avoid undermining the fence during clean out.
5. After watershed has been stabilized, remove fence and sediment deposits, bring the disturbed area to grade and stabilize.



SILT FENCE DETAIL

VEHICLE AND EQUIPMENT MAINTENANCE MANAGEMENT MEASURES

Description and Purpose
Prevent or reduce the contamination of storm water resulting from vehicle and equipment maintenance by running a "dry and clean site". Outdoor vehicle or equipment maintenance is a potentially significant source of storm water pollution. Activities that can contaminate storm water include engine repair and service, cleaning or replacement of fluids, and outdoor equipment storage and parking. The best option would be to perform maintenance activities at an off-site facility. If this option is not available then work should be performed in designated areas only, while providing cover for materials stored outside, checking for leaks and spills, and containing and cleaning up spills immediately.

Implementation
If maintenance must occur on-site, use designated areas only, located away from drainage courses and protected from storm water run-on and runoff.

- Establish a schedule to inspect all vehicles and equipment for leaks and excessive buildup of contaminants.
- Conduct vehicle and equipment maintenance at one location away from storm drains.
- Cover maintenance areas with a permanent roof to help minimize storm water runoff.
- Use drip pans and drop cloths to catch drips and spills when draining or replacing fluids.
- Avoid using water to clean work areas. Try to use dry methods to clean up materials. Clean small spills with rags, larger spills with absorbent material.
- Use nontoxic substitutes for chemicals where possible.
- Do not use storm drains for disposal of materials.
- Store recyclable materials (oil, batteries, etc.) for proper disposal.
- When possible, connect processing areas to a sanitary sewer or wastewater treatment facility.
- Recycle greases, oil and filters, antifreeze, cleaning solutions, batteries, and transmission fluids through proper disposal agencies.
- Buy recycled engine oil, engine coolant, tires, and other vehicle parts when possible.
- Train employees on reducing pollutant discharge, spill prevention, and cleanup.
- Be sure that employees are aware of all illegal actions associated with pollutant disposal.

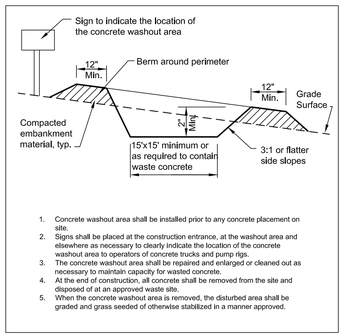
CONCRETE WASHOUT

Description and Purpose
The following steps will help reduce storm water pollution from concrete wastes. Discuss the concrete management techniques described in this BMP, such as handling of concrete waste and washout, with the redi-mix concrete supplier before any deliveries are made.

Implementation
Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.

- Store dry and wet materials under cover away from drainage areas.
- Avoid mixing excess amounts of fresh concrete.
- Perform washout of concrete trucks off-site or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets or streams.
- Do not allow excess concrete to be dumped on-site, except in designated areas.

For On-Site Washout
- Locate washout area at least 50 feet from storm drains, open ditches or water bodies.
- Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
- Wash out wastes into the temporary pit where the concrete can set, be broken up and then disposed properly.
- Avoid creating runoff by draining water to a bermed or level area when washing concrete to remove fine particles and expose the aggregate.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile or dispose in the trash.



1. Concrete washout area shall be installed prior to any concrete placement on site.
2. Signs shall be placed at the construction entrance, at the washout area and elsewhere as necessary to clearly indicate the location of the concrete washout area to operators of concrete trucks and pump rigs.
3. The concrete washout area shall be repaired and enlarged or cleaned out as necessary to maintain capacity for wasted concrete.
4. At the end of construction, all concrete shall be removed from the site and disposed of at an approved waste site.
5. When the concrete washout area is removed, the disturbed area shall be graded and grass seeded of otherwise stabilized in a manner approved.

CONCRETE WASHOUT AREA

TEMPORARY SEEDING

Requirements
1. Site and seedbed preparation: Graded and fertilizer applied.
2. Grass Seed: Annual rye grass selected on basis of optimum planting dates.
3. Fertilize: Use 400 lbs. per acre, 12-12-12 analysis or equal.
4. Mulch: 1.5 to 2.0 tons per acre, straw must be dry, unchopped and free of undesirable seeds. Mulch must cover 75% of soil surface.

Application
Site Preparation
1. Install practices needed to control erosion, sheet flow areas, sedimentation and water runoff, such as temporary diversions, sediment traps and silt fences.
2. Grade site as specified in the construction plan.

Seedbed Preparation
1. Apply fertilizer as recommended by soil test. If testing is not done, apply 400 lbs. per acre of 12-12-12 analysis or equal.
2. Till the soil to obtain a uniform seedbed, working the fertilizer into the soil 2-4 inches deep with a disk of rake operated across the slope.

Seeding
1. Use an annual rye grass seed mixture, apply at 40 lbs. per acre minimum.
2. Apply seed uniformly with a drill or cultipacker seeded or by broadcasting, and cover to required depth.
3. If drilling or broadcasting, firm seedbed with a roller or cultipacker.
4. Mulch all seeded areas, anchor all mulch by crimping or tackifying. Use erosion control fabric on all slopes greater than 4:1. Curtex Erosion Blanket by American Excelsoir Co. or equal.

Maintenance
1. Inspect weekly and after ¼ inch rain or greater storm event until after stand is adequately established (80% density), reseed as necessary.
2. Check for erosion damage after storm events and repair; reseed and mulch as necessary.

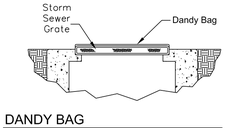
INLET PROTECTION

Requirements
1. Work covered under this item consists of installing a Dandy Bag® inlet protection system. The purpose is to keep silt, sediment and construction debris out of the storm water system.

Materials
1. The Dandy Bag® inlet protection unit shall be a **sewn in the U.S.A.** geotextile fabric unit fitted to the individual grate(s) and completely enclosing the grate(s).
2. The Dandy Bag® shall have lifting devises to allow manual inspection of the storm water system.
3. The Dandy Bag® unit shall utilize an orange monofilament fabric

Installatiion
1. Place the empty Dandy Bag® over the grate as the grate stands on end.
2. Tuck the enclosure flap inside to completely enclose the grate.
3. Holding the lifting devises, Insert the grate into the inlet being careful not to damage the Dandy Bag® unit.

Maintenance
1. The contractor shall remove all accumulated sediment and debris from surface and vicinity of unit after each 1/2" rain event or as directed by engineer/inspector. Dispose of unit no longer in use at an appropriate recycling or solid waste facility.



DANDY BAG

ENTRANCE/EXIT PAD

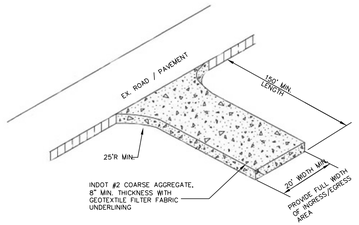
Design Requirements
Width - 20 foot minimum

Length - 150 foot minimum

Material - INDOT #2 Coarse Aggregate
Thickness - 8 inch minimum

Installation
1. Remove all vegetation and other objectionable material from the foundation area, foundation area to be undercut 4" below natural ground elevation.
2. Install geotextile fabric on the graded foundation area prior to stone placement.
3. Place stone to dimensions and grade shown in the erosion sediment control plan, leaving the surface smooth and sloped for drainage.
4. Divert all surface runoff and drainage from the stone pad towards project site.

Maintenance
1. Inspect entrance pad for sediment deposits weekly and after ¼ inch rain or greater storm events or heavy use.
2. Reshape pad as needed for drainage and runoff control.
3. Topdress with clean stone as needed.
4. Remove mud and sediment tracked or washed onto public road with brushing or sweeping. No flushing or sediment off the street.



TEMPORARY CONSTRUCTION ENTRANCE/EXIT PAD

VEHICLE & EQUIPMENT MAINTENANCE & WASHING AREAS

Vehicle and Equipment Fueling Management Measures
Vehicle equipment fueling procedures and practices are designed to prevent fuel spills and leaks, and reduce or eliminate contamination or storm water. This can be accomplished by using off-site facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedures.

- Cover fueling areas to help intercept precipitation and reduce storm water runoff.
- Design fueling areas to drain inward to a sump or an oil-water separator.
- Perimeter drains can be installed as an alternative to inward-draining areas.
- Discourage "topping off" fuel tanks and install vapor recovery nozzles to control drips.
- Where appropriate, use drip pans to catch spills.
- Clean up spills immediately to minimize safety hazards and prevent spreading.
- Mop up small spills or use absorbent materials. Remove absorbent material promptly.
- Transport industrial equipment to a designated fueling area rather than using mobile fueling.
- Make sure that all employees are trained in proper fueling and cleanup procedures.

Vehicle and Equipment Washing and Cleaning Management Measures
When possible, use commercial washing and cleaning facilities that employ proper pollution control measures.

- Use designated wash areas (preferably covered). Use bermed wash areas or other measures to contain wash water.
- Stabilize entrances and on-site roads to reduce off-site transportation of sediments.
- Designate a paved washing site for vehicles where the water will drain down slope.
- Divert wash water to a vegetated area so it can percolate into the ground or use at-grade storm drains fitted with inserts. Inserts hang down into a drain's catch basin to filter out solids and other pollutants from rinse water runoff. Trapped materials can be removed or the inserts replaced.
- Wash vehicles with biodegradable, phosphate-free detergent and use nontoxic cleaning products.
- If possible, use "dry" cleaning methods (such as wiping down) rather than hosing equipment.
- Avoid pressure washing on site if commercial washing facilities are available. If commercial facilities are not practical, design a pressure-washing area that can capture and properly dispose of or recycle all of the wash water. Use high-pressure, low-volume washers to reduce overspray.
- When multi-stage washing is practiced, wash and rinse waters can be recycled by reusing the water from the final stage for the first pre-wash and rinse stage.
- Properly contain, label, and dispose of cleanup materials (rags, towels, absorbent materials).
- Train employees on proper washing methods.

Inspection and Maintenance
Inspect and verify that BMP's are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect weekly to verify continued BMP implementation.

- Keep ample supplies of spill cleanup materials on-site.
- Maintain waste fluid containers in leak proof condition.
- Vehicles and equipment should be inspected on each day of use. Leaks should be repaired immediately or the problem vehicle(s) or equipment should be removed from the project site.
- Inspect equipment for damaged hoses and leaky gaskets routinely. Repair or replace as needed.

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STORMWATER POLLUTANT PREVENTION

CONSTRUCTION POTENTIAL POLLUTANT SOURCES
POLLUTANT SOURCES DURING CONSTRUCTION INCLUDE EQUIPMENT FUEL & OILS, CONSTRUCTION DEBRIS AND TRASH/DEBRIS DISPOSAL. CONTRACTOR SHALL PROTECT OPEN SHEET FLOW AREAS IN UNPAVED AREAS WITH TEMPORARY SEEDING, MULCH, ETC. REMOVE SEDIMENT FROM SHEET FLOW AREAS.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE SITE AND IMPROVEMENTS FROM POTENTIAL POLLUTANTS THROUGH DESIGNATED FUEL STORAGE & FUELING AREAS AND DESIGNATED TRASH DISPOSAL AREAS. LOCATION OF DISPOSAL AREAS MAY BE ADJUSTED BY CONTRACTOR TO FIT SITE CONDITIONS AND CONTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN DISPOSAL AREAS IN CLEAN AND NEAT ORDER.

MATERIAL HANDLING & SPILL PREVENTION PLAN
CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN FUELING AREAS, CONSTRUCTION TRASH, CONSTRUCTION STAGING AND CONTRACTOR'S PARKING AREAS IN A SAFE AND CLEAN MANNER. DESIGNATED AREAS SHALL BE CONTAINED TO PROHIBIT SPILLAGE OF POLLUTANTS OUTSIDE THE AREAS.

EMERGENCY PROCEDURES WILL BE REVIEWED AT PRE-CONSTRUCTION MEETING WITH ALL PARTIES. EMERGENCY CONTACTS, HAZMAT AND PHONE NUMBERS WILL BE VERIFIED FOR PROJECT SITE IN CASE OF ACCIDENTAL POLLUTANT SPILLAGE, ETC. CONTRACTOR IS REQUIRED TO MAINTAIN WRITTEN EMERGENCY PROCEDURES AND CONTACT LIST ON-SITE DURING CONSTRUCTION PERIOD. EMERGENCY PHONE/HAZMAT TELEPHONE: 911

POST CONSTRUCTION POLLUTANT SOURCES
POLLUTANT SOURCES AFTER CONSTRUCTION ARE MINIMAL. THERE WILL BE NO ON-SITE FUELING STATION OR OPERATIONS THAT ARE HIGH RISK. POTENTIAL POLLUTANT SOURCES WILL MAINLY BE LIMITED TO FUELS/OILS FOR SNOW REMOVAL / LAWN MOWING / LANDSCAPE MAINTENANCE EQUIPMENT. ALL NON-PAVEMENT AREAS WILL BE LAWN WHICH WILL REDUCE SURFACE RUNOFF OF STORM WATER AND ALLOW FILTRATION INTO SUBSOILS.

POST DEVELOPMENT MAINTENANCE

POST DEVELOPMENT AND LONG TERM MAINTENANCE FUNCTIONS TO BE PERFORMED BY OWNER INCLUDE:

1. PERIODIC INSPECTIONS OF STORM STRUCTURES AND RETENTION AREAS TO REMOVE ANY BUILD UP OF SEDIMENTS AND TRASH. FUNCTION TO BE PERFORMED ON AN ANNUAL BASIS TO ENSURE THE STRUCTURES AND PIPING DOES NOT FILL UP WITH SEDIMENT AND POLLUTANTS. ALL SEDIMENT AND POLLUTANTS SHALL BE REMOVED AND STRUCTURES AND PIPING CLEANED AS NECESSARY TO ENSURE PROPER FUNCTION.
2. REPAIR AND RESTORE ANY LAWN EROSION ON AN AS NEEDED BASIS.
3. SWEEP PARKING LOT AND DRIVES ON A REGULAR BASIS TO REMOVE SEDIMENT AND DEBRIS. FUNCTION TO BE PERFORMED TWICE A YEAR MINIMALLY - ONCE IN THE FALL BEFORE WINTER AND ONCE IN THE SPRING AFTER WINTER, OTHERS SWEEPINGS AS NEEDED.

POST-DEVELOPMENT AND LONG TERM MAINTENANCE FUNCTIONS TO BE INCLUDED IN OWNER'S STANDARD OPERATIONS MANUAL TO ESTABLISH BOTH SHORT AND LONG TERM CARE.

STORM DRAINAGE CALCULATIONS

SUMMARY

PRE-DEVELOPMENT CONDITIONS	7,781 CU. FT.
POST-DEVELOPMENT CONDITIONS	15,474 CU. FT.
INCREASE	7,693 CU. FT.

REFER TO SHEET C2.0 FOR ADDITIONAL STORM WATER CALCULATIONS

PROPOSED CONSTRUCTION SCHEDULE

	2021 MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2022 JAN	FEB	MAR
SITE PREP / EARTHWORK / UTILITY WORK											
SITE DEVELOPMENT / CONSTRUCTION											
BUILDING CONSTRUCTION											
LAWNS / LANDSCAPE WORK											

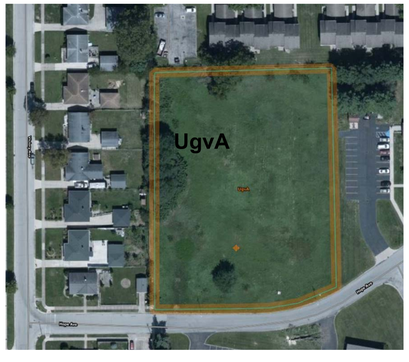
INSTALL EROSION CONTROL MEASURES PRIOR TO BEGINNING OF SITE PREP/DEMOLITION AND GRADING OPERATIONS.
REPAIR AND PLACE ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY DURING ALL CONSTRUCTION PHASES.

SOIL STABILIZATION CHART

	2021 MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2022 JAN	FEB	MAR
TEMPORARY GRASS SEEDING											
LAWNS / LANDSCAPE WORK											

SOIL STABILIZATION IS REQUIRED ON ALL GRADED AREAS SCHEDULED TO BE INACTIVE FOR MORE THAN 15 DAYS.
PERMANENT SEEDING MAY BE USED FOR SOIL STABILIZATION IF APPLIED WITHIN 15 DAYS OF GRADING.

SOIL CHARACTERISTICS



SOILS MAP
THE SOILS ON THE SITE, AS IDENTIFIED IN THE "SOIL SURVEY OF ELKHART COUNTY, INDIANA"

NORTH

UgvA--Urban Land-Tyner Complex
0 to 1 percent slopes

Map Unit Setting
National map unit symbol: 5k72
Elevation: 570 to 1,540 feet
Mean annual precipitation: 34 to 40 inches
Mean annual air temperature: 47 to 50 degrees F
Frost-free period: 140 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Urban land: 50 percent
Tyner and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting
Landform: Outwash plains

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Other vegetative classification: Trees/Timber (Woody Vegetation)
Hydric soil rating: Unranked

Description of Tyner

Setting
Landform: Outwash plains
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Side slope
Down-slope shape: Convex *Across-slope shape:* Convex
Parent material: Sandy outwash

Typical profile
Ap - 0 to 12 inches: loamy sand
Bw1 - 12 to 20 inches: loamy sand
Bw2 - 20 to 41 inches: sand
Bw3 - 41 to 80 inches: sand

Properties and qualities
Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches *Natural drainage class:* Excessively drained *Runoff class:* Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.7 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Other vegetative classification: Trees/Timber (Woody Vegetation)
Hydric soil rating: No

Minor Components

Osolo
Percent of map unit: 5 percent
Landform: Outwash plains, outwash terraces
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Other vegetative classification: Trees/Timber (Woody Vegetation)
Hydric soil rating: No

Bristol
Percent of map unit: 3 percent
Landform: Outwash plains, outwash terraces
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Other vegetative classification: Trees/Timber (Woody Vegetation)
Hydric soil rating: No

Coloma
Percent of map unit: 2 percent
Landform: Outwash plains, moraines
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Other vegetative classification: Trees/Timber (Woody Vegetation)
Hydric soil rating: No

STANDARDS AND SPECIFICATIONS

ALL EROSION CONTROL PRACTICES TO BE ACCORDANCE WITH FEDERAL, STATE, LOCAL AND THE STATE OF INDIANA - RULE 5.

EROSION & SEDIMENT CONTROL PRACTICES
THE MAJORITY OF THE GRADING AND DRAINAGE WORK WILL OCCUR DURING THE SPRING AND SUMMER. EROSION AND SEDIMENT CONTROL PRACTICES WILL CONSIST MAINLY OF SEDIMENT TRAPPING AND RUNOFF DIVERTING PRACTICES. THESE INCLUDE TEMPORARY PRACTICES SUCH AS NATURAL VEGETATIVE BARRIERS, SILT FENCES, GRAVEL CONSTRUCTION ENTRANCE/EXIT PAD AND TEMPORARY SEEDING.

PERMANENT STABILIZATION
AS THE CONSTRUCTION ACTIVITY PROGRESSES, TEMPORARY PRACTICES WILL BE REMOVED AS PERMANENT MEASURES ARE READY TO BE PLACED. FINISHED AREAS SHALL RECEIVE GRASS SEED AS PER LANDSCAPE PLAN. ALL REMAINING TEMPORARY MEASURES WILL BE REMOVED AT COMPLETION OF CONSTRUCTION AND STABILIZATION OF AREAS.

STORMWATER MANAGEMENT CONSIDERATION
STORMWATER DRAINAGE WILL BE DIRECTED TO ON-SITE STORM DRAIN SYSTEM. OVERFLOW DISCHARGE IS TO THE ST. JOSEPH RIVER WATERSHED.

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STORM WATER POLLUTION PREVENTION PLAN PREPARED BY:
CPSWPPP SWPPP
Patrick S. Brown, ASLA
Certification # 4618/029
Exp. Date: 2022-05-10
Mishawaka, IN 46544
www.StormwaterUSA.com

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JOSEPH G. NICOLARONI
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STATE OF INDIANA
ARCHITECT

HOPE AVENUE HOMES
2923/2929 Hope Avenue
South Bend, IN 46615

DATE:
BID DATE: 4/2/21

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C3.1

SWPPP DETAILS

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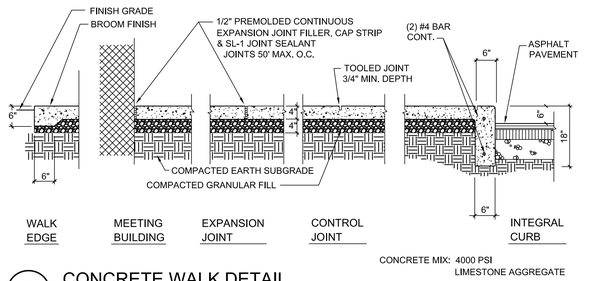
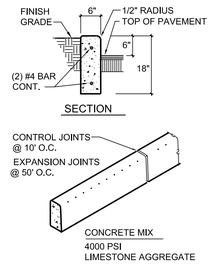


1 CONCRETE WALK DETAIL
NOT TO SCALE



2 STRAIGHT CURB
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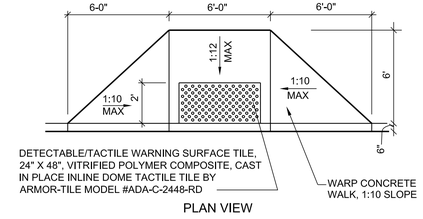

3 ACCESSIBLE WALK RAMP
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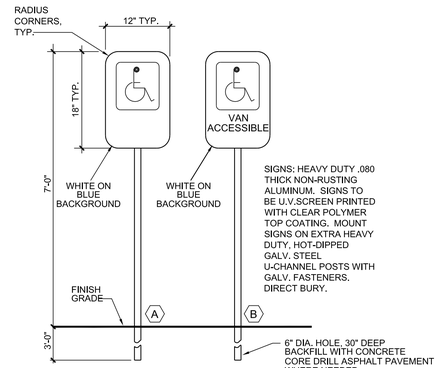

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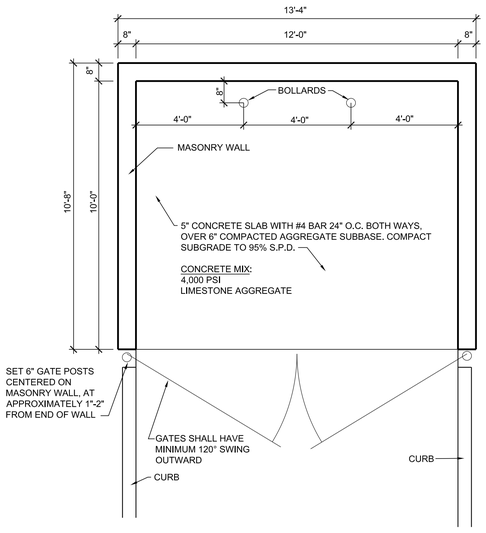

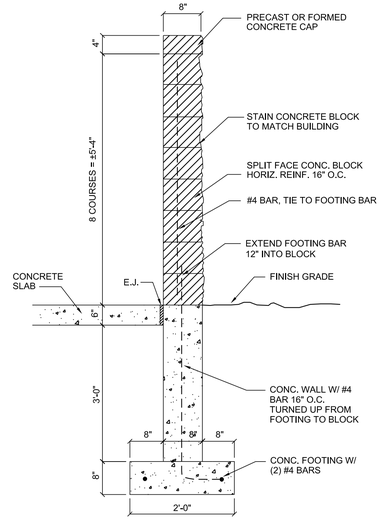

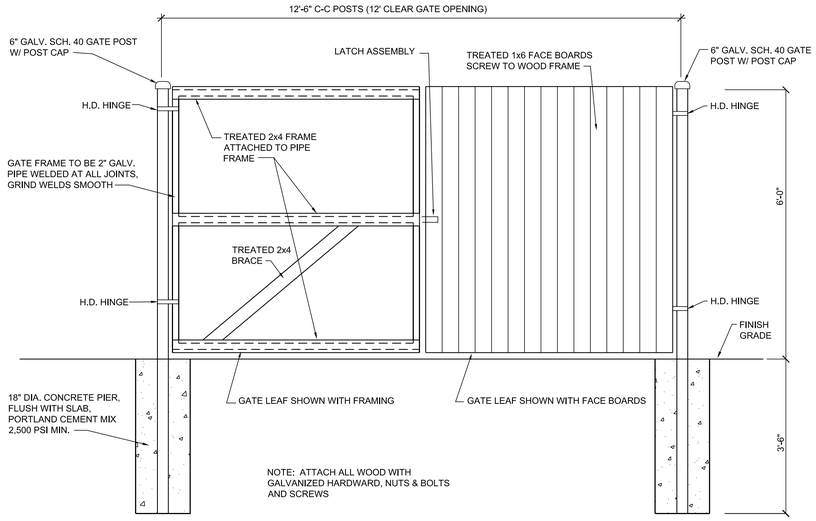

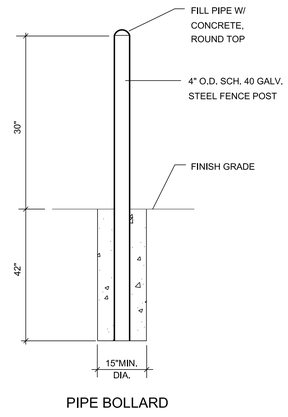

5 TRASH ENCLOSURE
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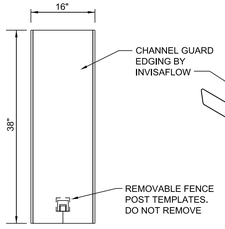

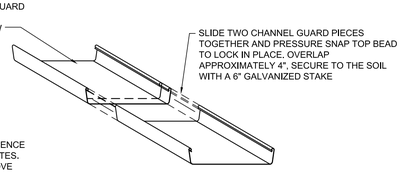

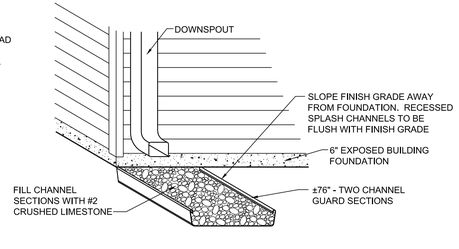

6 DOWNSPOUT CONNECTION
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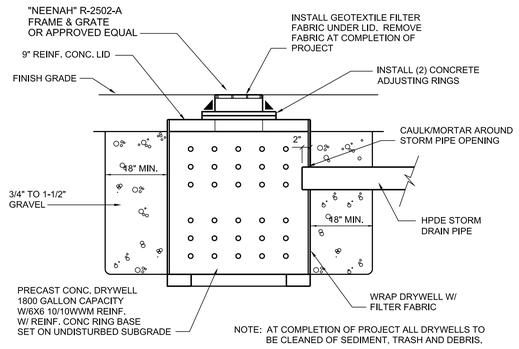

7 1800 GALLON DRYWELL
NOT TO SCALE

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SITE DETAILS

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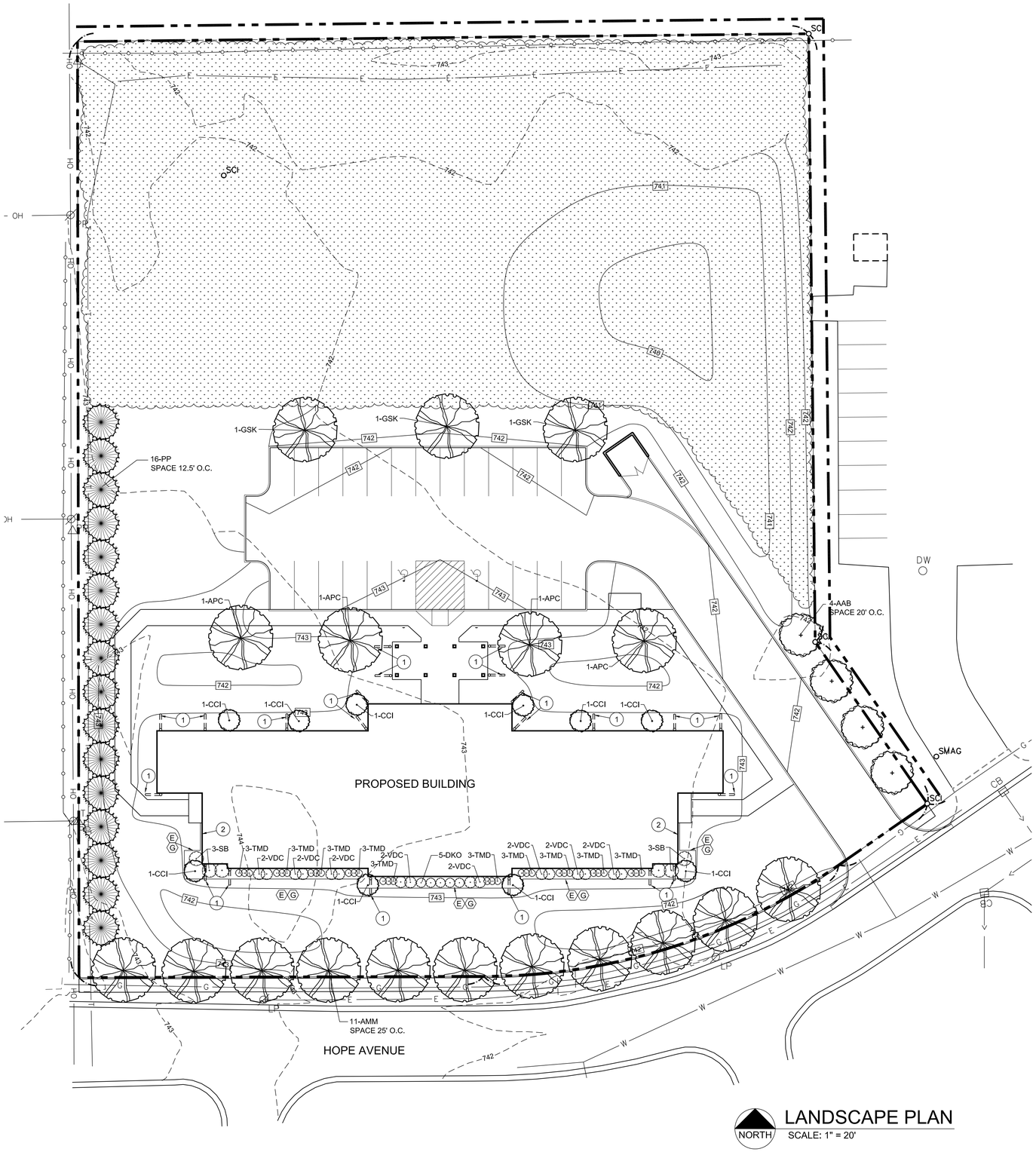
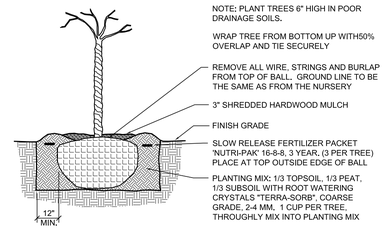


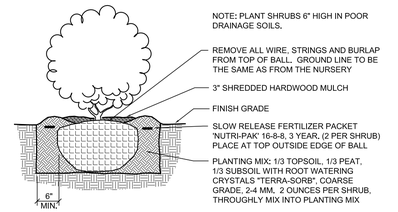
LANDSCAPE PLAN

NORTH SCALE: 1" = 20'



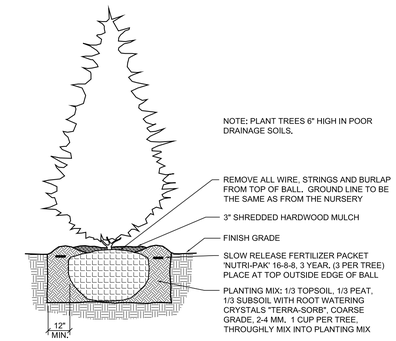
1 TREE PLANTING DETAIL

NOT TO SCALE



2 SHRUB PLANTING DETAIL

NOT TO SCALE



3 EVERGREEN PLANTING DETAIL

NOT TO SCALE

LANDSCAPE REQUIREMENTS

SITE: S2-SUBURBAN NEIGHBORHOOD 2
NORTH, EAST & WEST: S2-SUBURBAN NEIGHBORHOOD 2
EAST: S1-SUBURBAN NEIGHBORHOOD 1

LANDSCAPE REQUIREMENTS:
1 TREE / 30 LF ALONG FRONTAGE
BUILDING FOUNDATION: 1 SHRUB / 5 LF OF FACADE
WEST PROPERTY LINE: TYPE 3 BUFFER

REQUIRED TREES:
FRONTAGE = 330.01' = 11 TREES PER 30 LF
PROVIDED TREES: 11 NEW TREES

BUILDING FOUNDATION: 200 LF = 40 SHRUBS MIN.
PROVIDED:

PARKING LOT LANDSCAPE: NO LANDSCAPE REQUIRED

SIDE YARD: TYPE 3 BUFFER: (EAST SIDE ADJACENT TO S1 ZONE)
REQUIRED: 8 EVERGREENS PER 100 LF
AFFECTED SIDE YARD: 200' = 16 EVERGREENS
PROVIDED: 16 EVERGREENS

SITE COVERAGE
TOTAL SITE = 95,277 SF
LAWN/LANDSCAPE = 69,965 SF (73.5%)
SITE DEVELOPMENT = 25,312 SF (26.5%)

LANDSCAPE NOTES

1. CONTRACTOR SHALL ARRANGE FOR ON-SITE MARKING OF UNDERGROUND UTILITIES PRIOR TO ANY WORK ON-SITE. NOTIFY ARCHITECT OF ANY CONFLICTS WITH PROPOSED WORK.
2. TREE CALIPER SIZE INDICATES THE DIAMETER OF THE TRUNK TAKEN AT 6" ABOVE GROUND LEVEL.
3. KEEP THE SOIL MOIST OF BALLED AND CONTAINER PLANTS UNTIL THEY ARE PLANTED.
4. IF PLANTS CANNOT BE PLANTED IMMEDIATELY, THEY SHOULD BE HEELED IN AND BALLS/CONTAINERS COVERED WITH MULCH.
5. ALL PLANTING LOCATIONS TO BE FIELD STAKED BY LANDSCAPE SUBCONTRACTOR AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION FOR PROPER AESTHETIC AND FUNCTIONAL USE.
6. ALL SOIL PREPARATION OF PLANTING AREAS TO BE DONE BY LANDSCAPE SUBCONTRACTOR.
7. ALL PLANTING BEDS SHALL HAVE 3" SHREDDED HARDWOOD MULCH AND METAL LANDSCAPE EDGING.
8. ALL NEWLY GRADED AREAS INCLUDING DISTURBED EXISTING LAWN AREAS SHALL BE FINE GRADED AND SEEDED.
9. ALL PROPOSED PLANT MATERIALS ARE SHOWN AT MATURE GROWTH. SPACE AS INDICATED ON PLANT LIST OR TO PROPER HORTICULTURAL METHODS.
10. LANDSCAPE SUBCONTRACTOR TO NOTIFY ARCHITECT IMMEDIATELY OF ANY FOREIGN SUBSTANCE THAT MAY BE DAMAGING TO PLANT MATERIAL, PRIOR TO PLANTING.
11. LANDSCAPE SUBCONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH OTHER WORK FOR PROPER PLACEMENT OF PLANT MATERIALS AND LANDSCAPE WORK.
12. QUANTITIES SHOWN ON THE PLANT LIST IS FOR CONTRACTORS INFORMATION ONLY. IN CASE OF DISCREPANCY, THE ACTUAL COUNT ON THE LANDSCAPE PLAN PREVAILS.
13. CONTRACTOR SHALL OBTAIN APPROPRIATE PERMIT FROM CITY ARBORIST FOR TREES TO BE PLANTED IN TREE LAWNS.

KEY NOTES

(E) 4" x 1/8" PREFINISHED METAL LANDSCAPE EDGING, SUBMIT SAMPLE FOR REVIEW AND APPROVAL.

(G) #8 LANDSCAPE GRAVEL MULCH BED WITH WEED BARRIER FABRIC, SUBMIT SAMPLE FOR REVIEW AND APPROVAL.

(1) INSTALL SOD AT END OF DOWNSPOUT SPLASHBLOCK, 3' WIDE x 8' LONG.

(2) 12" WIDE GRAVEL MOW STRIPE ALONG BUILDING.

(3) LAWN GRASS SEED AREA, SEE SPECIFICIATIONS.

NATIVE GRASS / NO MOW SEEDING

NATIVE GRASS / NO MOW AREA: 38,700 SF

SEED MIXTURE
A. TEMPORARY SEEDING
32 LBS/ACRE AVENA SATIVA (SEED OATS)
5 LBS/ACRE LOLIUM MULTIFOLORUM (ANNUAL RYEGRASS)

B. PERMANENT SEEDING
250 LBS/ACRE SCOTTISH LINKS MIXTURE BY JACKLIN SEED

NATIVE GRASS / NO MOW LIMITS

SEEDING OPERATION:
EXAMINATION: VERIFY THE SITE IS CLEAN, FREE OF DEBRIS, FINED GRADED, SUFFICIENTLY FIRM AND READY FOR SEEDING

PREPARATION:
A. APPLY A GLYPHOSATE HERBICIDE AT LEAST 3 DAYS PRIOR TO SEEDING ON NATIVE GRASS AREAS.
B. PLANT SEED WHEN SOIL IS SUFFICIENTLY DRY SO THAT SOIL DOES NOT STICK TO THE WHEELS OF THE SEEDING EQUIPMENT.
C. ENSURE THE SEEDING EQUIPMENT IS PROPERLY CALIBRATED TO SOW THE SPECIFIED AMOUNT OF SEED OVER THE SPECIFIED AREA. ENSURE COMPLETE COVERAGE OF THE SPECIFIED AREA.

SEEDING:
A. SOW TEMPORARY SEED MIXTURE SEPARATELY AT SPECIFIED RATES OVER ENTIRE AREAS AS INDICATED ON PLANS.
B. SOW PERMANENT SEED MIXTURE SEPARATELY AT SPECIFIED RATES OVER ENTIRE AREAS AS INDICATED ON PLANS.
C. PROTECT NEWLY SEEDED AREAS WITH HYDROMULCH AT THE RATE OF 1,500 LBS/ACRE

PLANT LIST

CODE	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	REMARKS
AMM	ACER MIYABEI 'MORTON'	STATE STREET MAPLE	2-1/2" CAL	11	B&B
APC	ACER PLATANOIDES 'COLUMNARE'	COLUMNAR NORWAY MAPLE	2-1/2" CAL	4	B&B
AAB	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	6'	4	B&B, CLUMP FORM
CCI	CRATAEGUS CRUSGALLI 'INERMIS'	THORNLESS COCKSPUR HAWTHORN	2" CAL	10	
DKO	DIERVILLA 'KODIAK ORANGE'	KODIAK ORANGE BUSH HONEYSUCKLE	24"	5	
GSK	GLEDITSIA TRIACANTHOS var. INERMIS 'DRAVES'	STREETKEEPER HONEYLOCUST	2-1/2" CAL	3	B&B
PP	PICEA PUNGENS var. GLAUCA	COLORADO BLUE SPRUCE	8'	16	B&B
SB	SYRINGA x 'BLOOMERANG'	BLOOMERANG LILAC	24"	6	
TMD	TAXUS X MEDIA 'DENSIFORMIS'	DENSE SPREADING YEW	24"	30	
VDC	VIBURNUM DENTATUM 'CHRISTOM'	BLUE MUFFIN ARROWWOOD VIBURNUM	36"	16	

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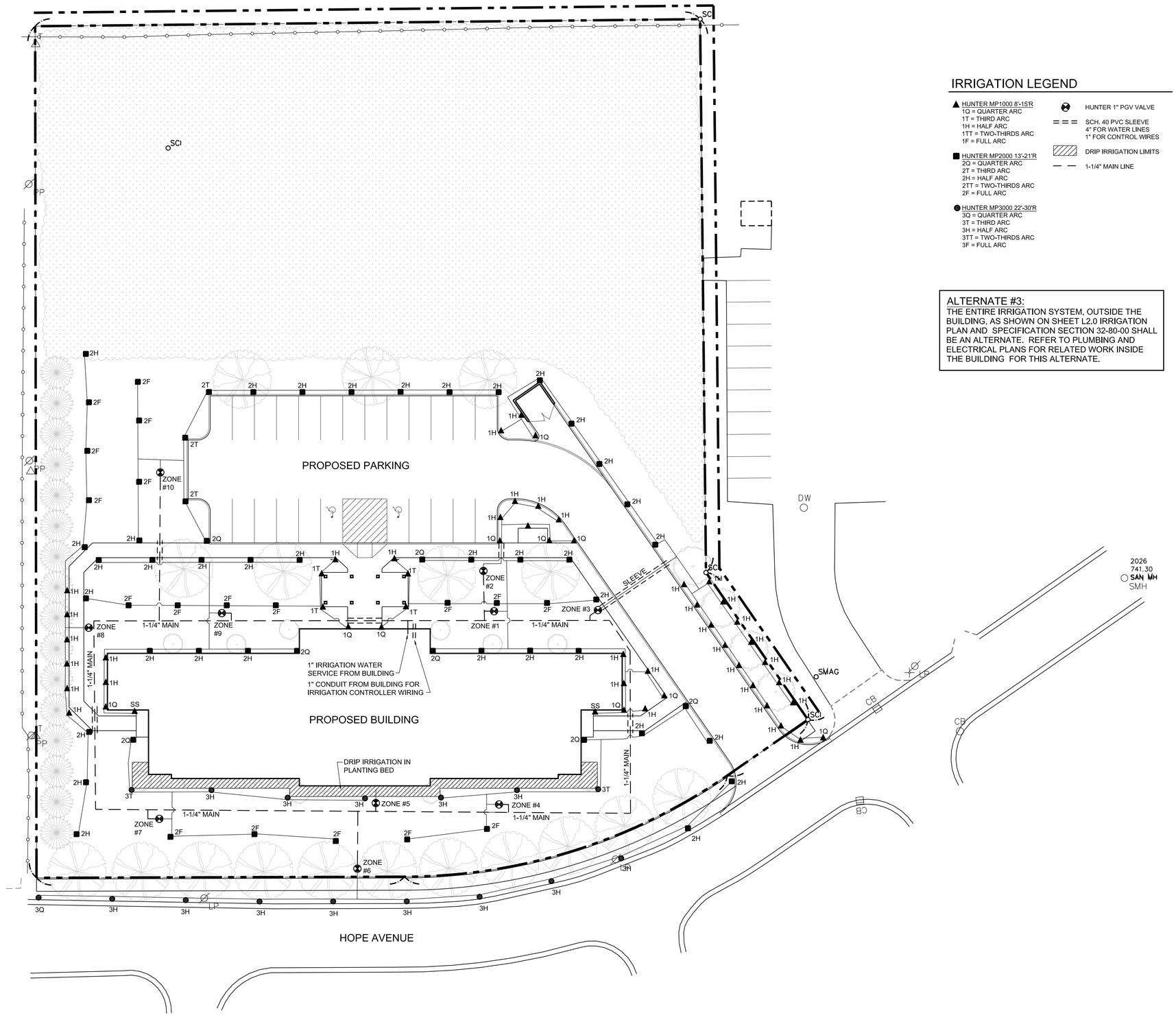

IRRIGATION LEGEND

- ▲ HUNTER MP1000 8'-15'R
  - 1Q = QUARTER ARC
  - 1T = THIRD ARC
  - 1H = HALF ARC
  - 1TT = TWO-THIRDS ARC
  - 1F = FULL ARC
- ■ HUNTER MP2000 13'-21'R
  - 2Q = QUARTER ARC
  - 2T = THIRD ARC
  - 2H = HALF ARC
  - 2TT = TWO-THIRDS ARC
  - 2F = FULL ARC
- ● HUNTER MP3000 22'-30'R
  - 3Q = QUARTER ARC
  - 3T = THIRD ARC
  - 3H = HALF ARC
  - 3TT = TWO-THIRDS ARC
  - 3F = FULL ARC

- HUNTER 1" PGV VALVE
- SCH. 40 PVC SLEEVE
  - 4" FOR WATER LINES
  - 1" FOR CONTROL WIRES
- DRIP IRRIGATION LIMITS
- 1-1/4" MAIN LINE

ALTERNATE #3:

THE ENTIRE IRRIGATION SYSTEM, OUTSIDE THE BUILDING, AS SHOWN ON SHEET L2.0 IRRIGATION PLAN AND SPECIFICATION SECTION 32-80-00 SHALL BE AN ALTERNATE. REFER TO PLUMBING AND ELECTRICAL PLANS FOR RELATED WORK INSIDE THE BUILDING FOR THIS ALTERNATE.

IRRIGATION NOTES

1. SITE PLAN ONLY FOR CONTRACTOR'S INFORMATION. IRRIGATION SUBCONTRACTOR SHALL FIELD VERIFY LAYOUT AND ADJUST FOR SITE CONDITIONS TO PROVIDE FULL COVERAGE.
2. ALL IRRIGATION WORK SHALL CONFORM TO LOCAL AND STATE STANDARDS, CODES AND REGULATIONS. IRRIGATION SUBCONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN NECESSARY PERMITS AND INSPECTIONS.
3. VERIFY LOCATIONS OF ON-SITE UTILITIES AND WATER SERVICE PRIOR TO INSTALLATION. NOTIFY ARCHITECT OF ANY CONFLICTS.
4. REPAIR AND/OR REPLACE ANY EXISTING IMPROVEMENTS TO THEIR ORIGINAL CONDITION IF DAMAGED DURING IRRIGATION WORK.
5. IRRIGATION SUBCONTRACTOR WILL ADJUST LOCATION OF ANY SPRINKLER HEAD OR RISER, UP TO 18" IN ANY DIRECTION AT NO ADDITIONAL COST, AFTER REVIEW OF SYSTEM BY ARCHITECT FOR PROPER COVERAGE AND DISTRIBUTION.
6. MINIMUM LATERAL PIPE SIZE IS 3/4 INCH.
7. IRRIGATION SUBCONTRACTOR WILL INTERCHANGE NOZZLES ON ANY SPRINKLER HEAD REQUIRED FOR PROPER COVERAGE WITHOUT ADDITIONAL COST.
8. NO PART OF THE IRRIGATION SYSTEM SHALL BE INSTALLED PRIOR TO FIELD STAKING OF LANDSCAPE PLANTINGS AND BED OUTLINES. IRRIGATION WORK TO BE COORDINATED WITH LANDSCAPE WORK.
9. IRRIGATION SUBCONTRACTOR SHALL NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT KNOWN OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN THE AREA DIMENSIONS DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION SUBCONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.

NOTE:
IRRIGATION SUBCONTRACTOR SHALL PROVIDE AND INSTALL ALL SLEEVES UNDER PAVEMENTS AND WALKS FOR IRRIGATION SYSTEM. COORDINATE WITH OTHER TRADES. INSTALL SLEEVES AT 18" BELOW FINISH GRADE, EXTEND 12" BEYOND EDGE OF WALK AND BACK OF CURB. INCLUDE SLEEVE LOCATIONS ON AS-BUILT DRAWING.

WATER/ELECTRIC SERVICE

WATER SERVICE:
1-1/2" WATER SERVICE FOR IRRIGATION SYSTEM IS LOCATED ON NORTH SIDE OF BUILDING EXTENDED FROM MECHANICAL ROOM FOR SITE IRRIGATION AREAS. REFER TO PLUMBING PLANS. IRRIGATION CONTRACTOR SHALL FIELD VERIFY SERVICES, CONNECT AND EXTEND FOR NEW IRRIGATION SYSTEM. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS.

ELECTRICAL SERVICE:
1" CONDUIT FOR IRRIGATION SYSTEM IS LOCATED NORTH SIDE OF BUILDING NEAR WATER SERVICE FOR SITE IRRIGATION AREAS. REFER TO ELECTRICAL PLANS. IRRIGATION CONTRACTOR SHALL FIELD VERIFY CONDUIT, CONNECT AND EXTEND FOR CONTROL WIRING FOR NEW IRRIGATION SYSTEM. CONTROLLER TO BE MOUNTED INSIDE MECHANICAL ROOM. ELECTRICAL CONTRACTOR SHALL PROVIDE 20 AMP OUTLET RECEPTACLE FOR CONTROLLER HOOKUP. FIELD VERIFY MOUNTING LOCATION. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS.

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JOSEPH G. NUCCIONE — REGISTERED — No. AR00690043 — STATE OF INDIANA — ARCHITECT

South Bend Heritage

HOPE AVENUE HOMES
2923/2929 Hope Avenue
South Bend, IN 46615

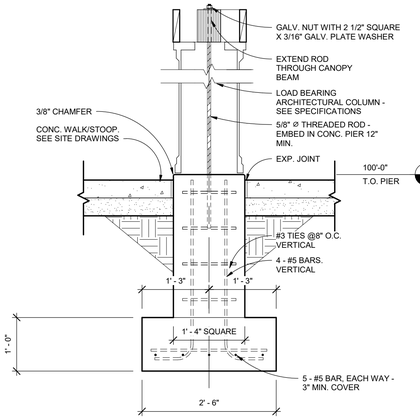
DATE:
BID DATE: 4/2/21

SHEET NO.
L2.0

NORTH

IRRIGATION PLAN
SCALE: 1" = 20'

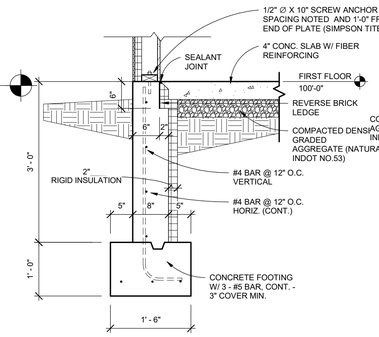
3/30/2021 2:28:19 PM



FTG. / PIER SECTION

SCALE: 3/4" = 1'-0"

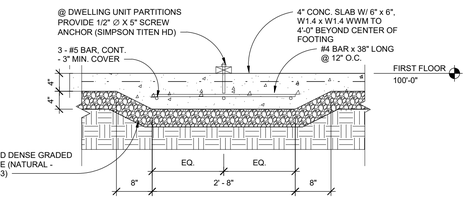
1 S1.0



FOOTING DETAIL (W1)

SCALE: 3/4" = 1'-0"

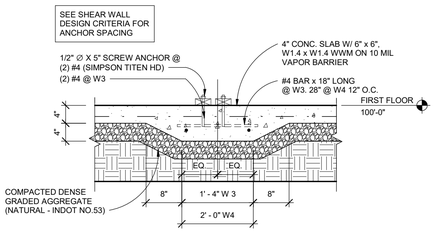
2 S1.0



THICKENED SLAB DETAIL (W2)

SCALE: 3/4" = 1'-0"

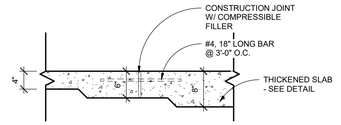
3 S1.0



THICKENED SLAB DETAIL (W3 & W4)

SCALE: 3/4" = 1'-0"

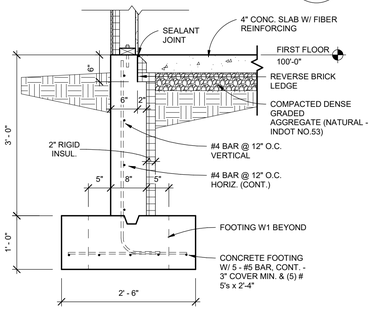
4 S1.0



CONSTRUCTION JOINT DETAIL

SCALE: 3/4" = 1'-0"

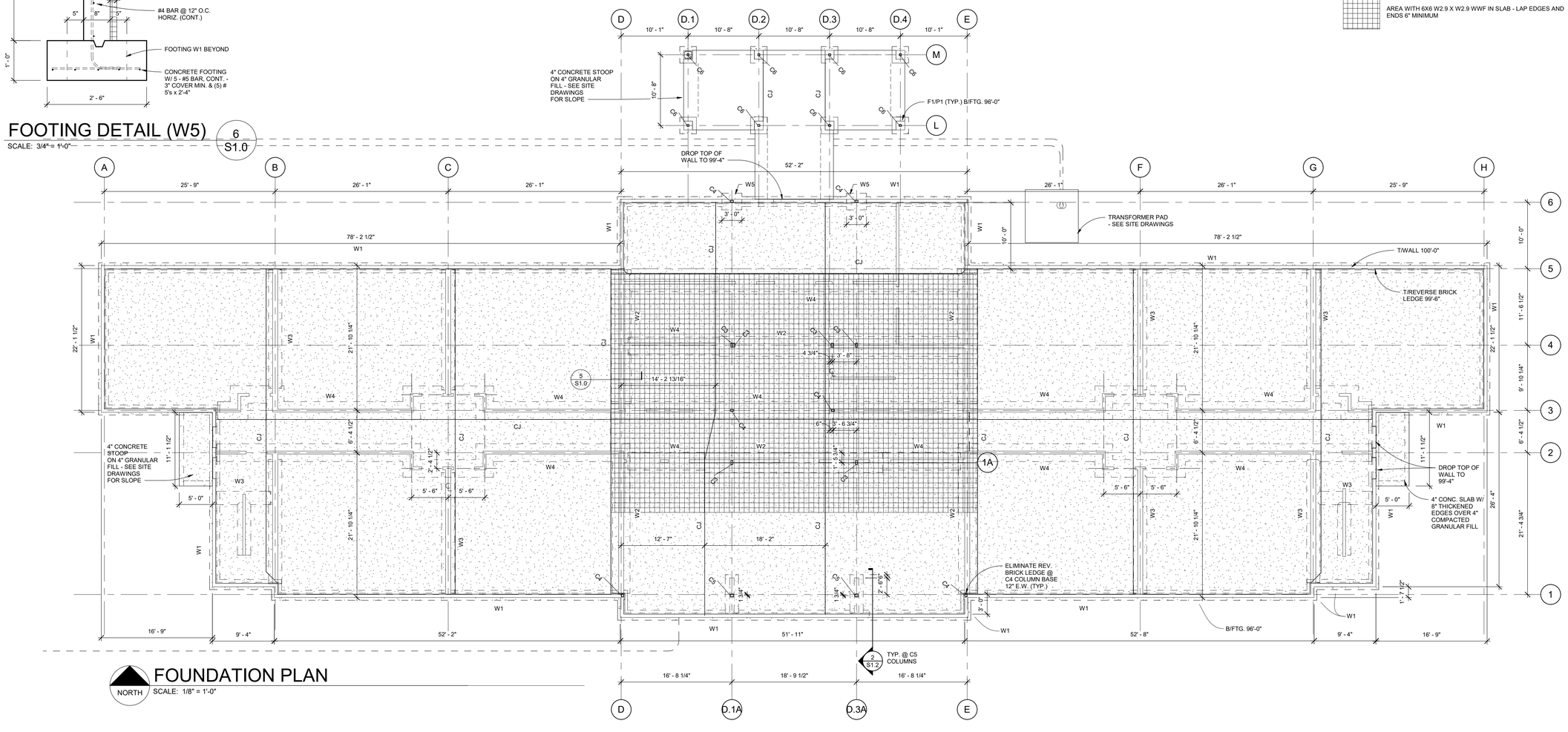
5 S1.0



FOOTING DETAIL (W5)

SCALE: 3/4"= 1'-0"

6 S1.0



NORTH

FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

CAST-IN-PLACE CONCRETE

CAST-IN-PLACE CONCRETE:

1. CAST-IN-PLACE CONCRETE SHALL BE REGULAR WEIGHT AND SHALL CONFORM TO THE LATEST ACI CODES AND STANDARDS, EXCEPT AS MODIFIED IN THE DESIGN DRAWINGS.
2. PROVIDE CONTROL JOINTS IN ALL INTERIOR AND EXTERIOR SLABS ON GRADE AND IN FOUNDATION WALLS, AS SHOWN ON DESIGN DRAWINGS. TOOL JOINTS WHILE CONCRETE IS STILL GREEN. FLUSH JOINTS CLEAN.
3. REINFORCING BARS: ASTM A-615, GRADE 60: ALL LAP SPLICES SHALL BE 30 BAR DIAMETER UNLESS NOTED OTHERWISE.
   - A) PROVIDE CORNER BARS AT ALL CONCRETE INTERSECTIONS
   - B) DETAIL ALL REINFORCING STEEL PER ACI 318 AND ACI 315, CRSI "MANUAL OF STANDARD PRACTICE".
4. WELDED WIRE FABRIC: ASTM A-185
5. PORTLAND CEMENT: ASTM C-150 TYPE 1 CEMENT
6. FINE AGGREGATE: ASTM C-33, NATURAL, HARD, CLEAN SAND
7. COARSE AGGREGATE: ASTM C-33
8. AIR-ENTRAINED ADMIXTURE: ASTM C-260
9. ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE AT AGE 28 DAYS SHALL BE:

FOUNDATIONS - FOOTINGS	3000PSI
FOUNDATION WALLS AND PIERS	4000PSI
SLABS ON GRADE	4000PSI
EXTERIOR FLATWORK	4000PSI
ALL OTHER CONCRETE	4000PSI

10. FINISH:
    - A) FLATWORK: TROWEL FINISH.
11. SEALER: WATER-BORNE SEALER "MASTERKURE CC 1315WB" AS MANUFACTURED BY BASF, INC, OR EQUAL. APPLY TO INTERIOR / EXTERIOR FLATWORK AS PER MANUFACTURERS RECOMMENDATIONS.

LEGEND

W1	18" WIDE WALL FOOTING - SEE DETAIL 2 THIS SHEET
F1/P1	FOOTING/PIER (COLUMN) - SEE DETAIL 1 THIS SHEET
W2	2'-8" WIDE THICKENED SLAB - SEE DETAIL 4 THIS SHEET
W3	1'-4" WIDE THICKENED SLAB - SEE DETAIL 4 THIS SHEET
W4	2'-0" WIDE THICKENED SLAB - SEE DETAIL 3 THIS SHEET
W5	30" WIDE WALL FOOTING - SEE DETAIL 6 THIS SHEET
CJ	1 1/4" x 1/8" CONTROL JOINT
	AREA WITH 6X6 W2.9 X W2.9 WWF IN SLAB - LAP EDGES AND ENDS 6" MINIMUM

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DATE:
04/02/21

SHEET NO.

S1.0

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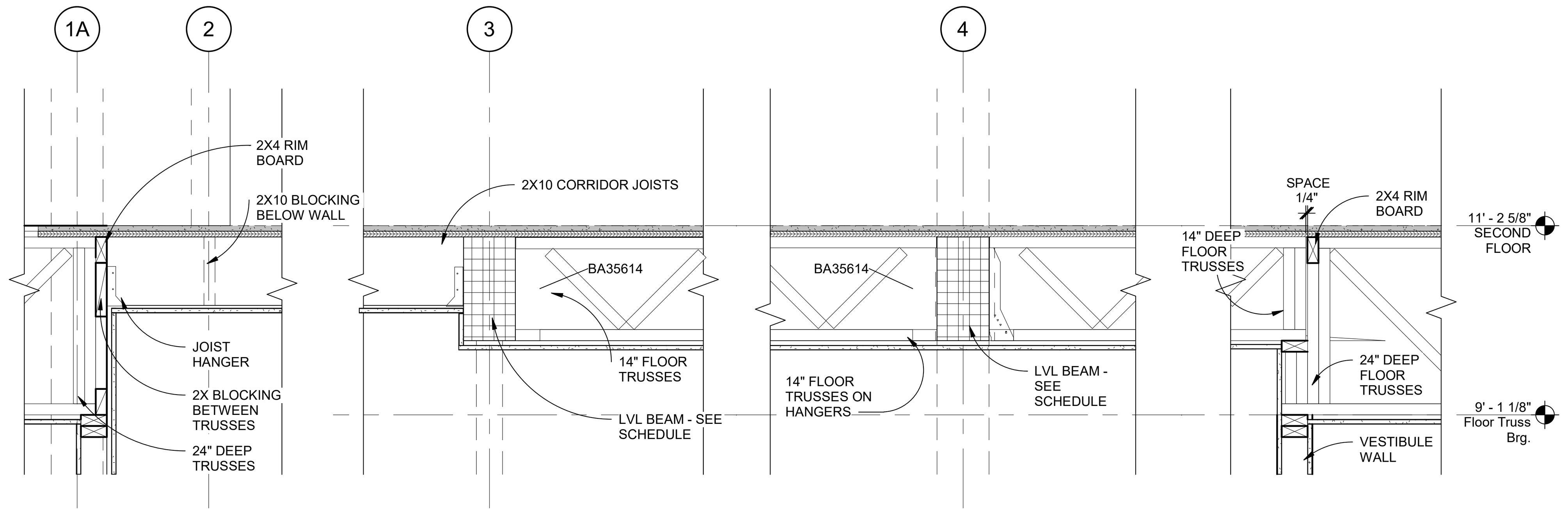


LOBBY FRAMING DETAIL

SCALE: 3/4" = 1'-0"

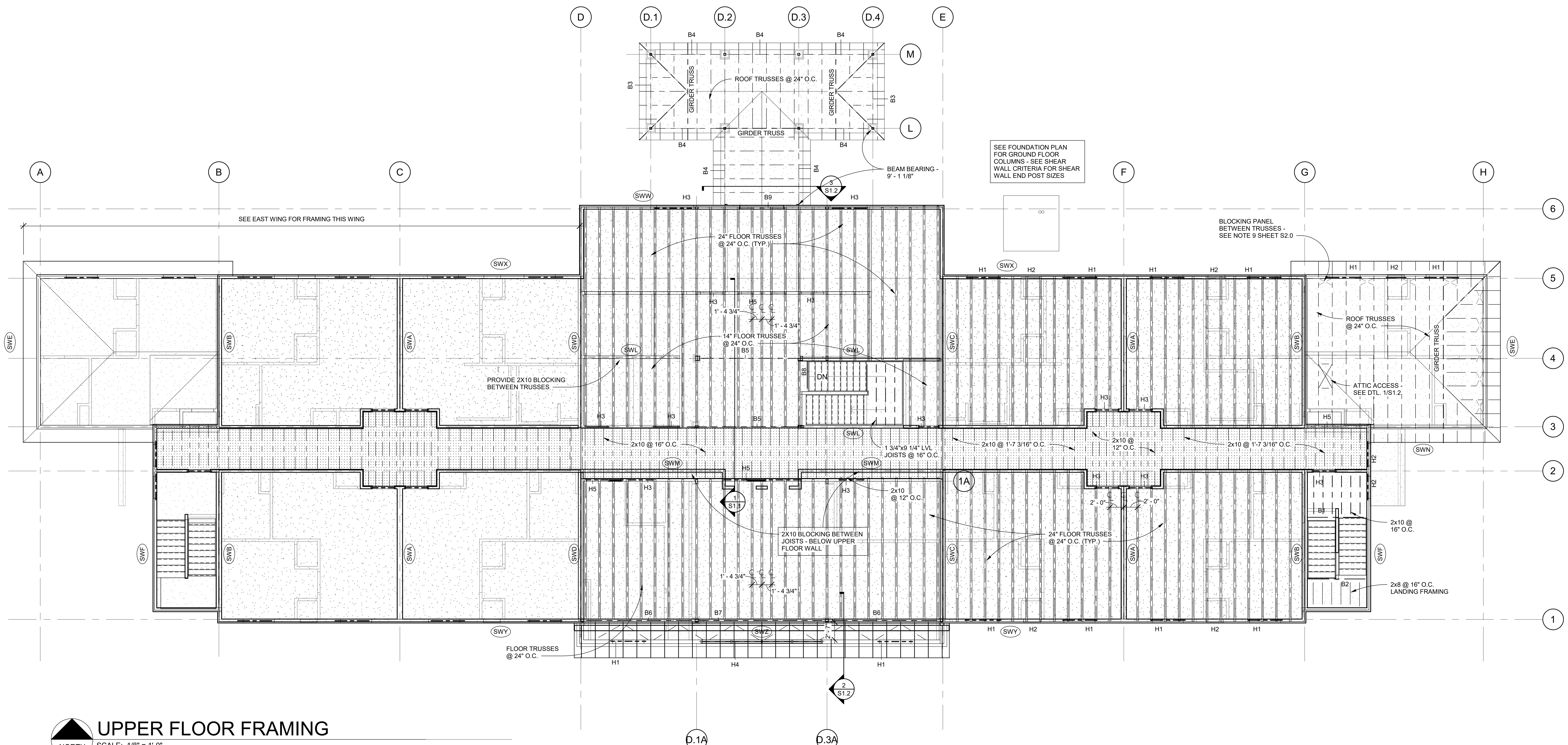
1
S1.1

COLUMN SCHEDULE

MARK	SIZE	REMARKS
C1	3 1/2" X 3 1/2" PSL	SET ON WALL PLATE
C2	3 1/2" X 3 1/2" PSL	WITH STANDOFF BASE
C3	7" x 3 1/2" PSL	PROVIDE EMBEDDED COLUMN BASE
C4	5 1/4" x 3 1/2" PSL	SET ON WALL PLATE
C5	5 1/4" x 5 1/4" PSL	PROVIDE EMBEDDED COLUMN BASE
C6	16" ARCHITECTURAL COL.	SEE DETAIL

NOTES:

1. COORDINATE COLUMN AND BEARING REQUIREMENTS BETWEEN TRUSS MFG. AND PANEL MFG. PROVIDE (2) 2x4 MIN. UNDER TRUSS GIRDER AND TRUSS HEADER BEARING (TYPICAL).
2. SEE "STRUCTURAL NOTES" SHEET S1.2 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. SEE SHEAR WALL CRITERIA TABLE ON SHEET S2.0 FOR SHEAR WALL LENGTHS, SHEATHING TYPE, FASTENERS AND HOLD DOWN TIES.



NORTH

UPPER FLOOR FRAMING

SCALE: 1/8" = 1'-0"

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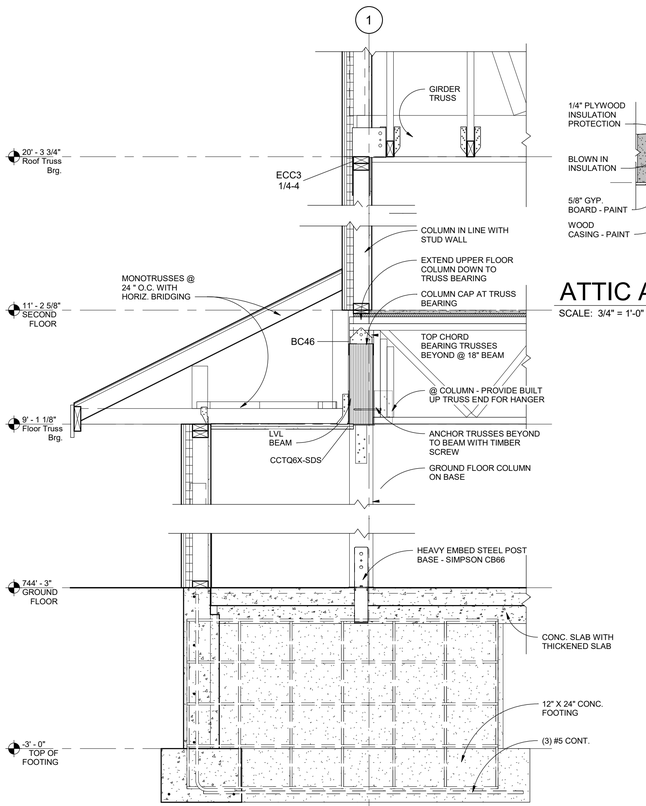
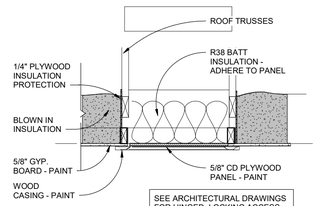


SECTION @ COLUMN

SCALE: 3/4" = 1'-0"

2 S1.2



ATTIC ACCESS DETAIL

SCALE: 3/4" = 1'-0"

1 S1.2

BEAM & HEADER SCHEDULE

TAG	FIRST FLOOR @ TWO STORY PORTION MEMBER	UPPERMOST FLOOR MEMBER	WALL STUDS UNDER BEARING.	
			GND. FLR.	UPPER FLR.
H1	(2) 1 3/4" x 5 1/2" LVL	(2) 2 x 8	2	1
H2	(2) 2 x 6	(2) 2 x 4	2	1
H3	(2) 1 3/4" x 5 1/2" LVL	---	1 SYP	---
H4	(2) 1 3/4" x 11 7/8" LVL	---	2 SYP	---
H5	(2) 1 3/4" x 9 1/2" LVL	---	2 SYP	---
	BEAM SIZE		POST SIZE	REQ'D BRG.
B1	(2) 2 x 10		2	1 1/2"
B2	(2) 2 X 8		2	1 1/2"
B3	(1) 1 3/4" x 9 1/4" LVL		SEE PLAN	1 1/2"
B4	(2) 1 3/4" x 9 1/4" LVL		"	2"
B5	(4) 1 3/4" x 16" LVL		"	3 1/2"
B6	(3) 1 3/4" x 18" LVL		"	2 1/2"
B7	(3) 1 3/4" x 24" LVL		"	3 1/2"
B8	(1) 1 3/4" x 11 7/8" LVL		2	1 1/2"
B9	(2) 1 3/4" x 7 1/4" LVL		2 SYP	3"

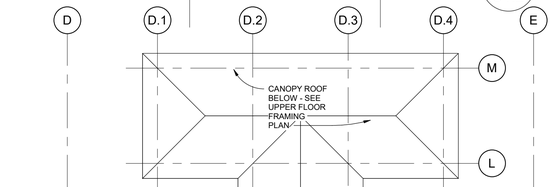
NOTES:

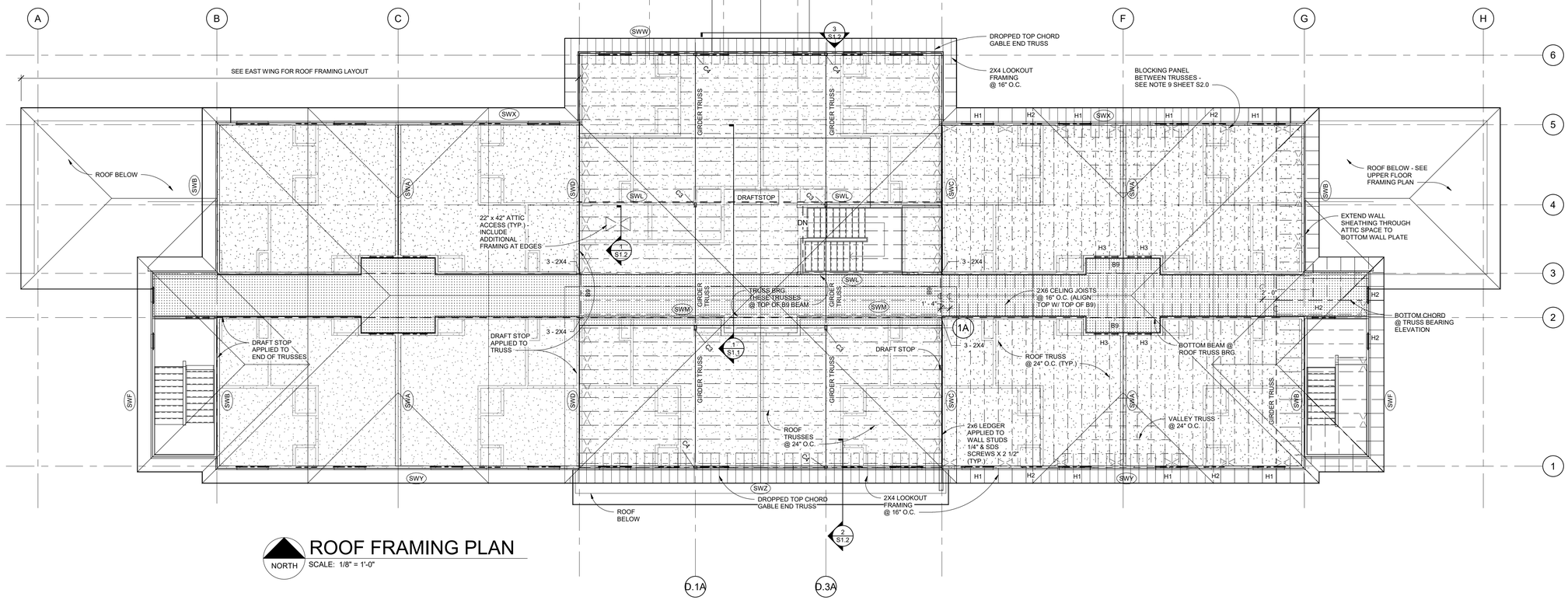
1. INSTALL (2) 2x6s W/ 1/2" PLYWOOD SPACER(S) AT ALL OPENINGS IN NON-BEARING WALLS U.N.O..
2. INSTALL (2) 2x10s W/ 1/2" PLYWOOD SPACER(S) AT ALL OPENINGS IN BEARING WALLS UNLESS NOTED OTHERWISE.
3. STUDS UNDER BEARING ARE TO BE THE SIZE AND TYPE SPECIFIED FOR BEARING WALLS. U.N.O.
5. CORRIDOR FLOOR JOISTS SHALL BE SUPPORTED WITH FACE MOUNT HANGER SIMPSON HUS 7.8 1/16 ON RIM BOARD AND BLOCKING.

CANOPY ROOF SECTION

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

3 S1.2





ROOF FRAMING PLAN

NORTH

SCALE: 1/8" = 1'-0"

STRUCTURAL NOTES

1. REFER TO SPECIFICATIONS FOR ADDITIONAL WOOD FRAMING DESIGN VALUES.
2. ROOF AND FLOOR TRUSSES SHALL BE ENGINEERED & DESIGNED BY TRUSS MANUFACTURER. SUBMIT CERTIFIED SHOP & ERECTION DRAWINGS FOR ARCHITECT'S REVIEW. DESIGN LOADS ARE AS FOLLOWS:

ROOF:
- TOP CHORD LOAD: -- 20 PSF
- TOP CHORD DEAD LOAD: -- 10 PSF, 13 PSF @ DOUBLE STACK TRUSSES
- BOTTOM CHORD DEAD LOAD: -- 5 PSF

FLOOR:
LIVE LOADS
- APARTMENTS: -- 40 PSF
- COORIDORS & STAIRS: -- 100 PSF

DEAD LOADS:
- TOP CHORD: -- 20 PSF
- BOTTOM CHORD: -- 5 PSF
- NON-BEARING PARTITIONS: -- 15 PLF

DESIGN SNOW DESIGN CRITERIA ARE AS FOLLOWS:
- FLAT ROOF SNOW LOAD (Pf): -- 30 PSF
- SNOW DRIFT LOAD (AT ONE STORY ROOF) -- 25 PSF - 0 PSF
- SNOW EXPOSURE -- 1.0
- SNOW IMPORTANCE FACTOR -- 1.0
- THERMAL COEFFICIENT (Ct.) -- 1.1

DESIGN WIND DESIGN CRITERIA AS FOLLOWS:
- BASIC WIND SPEED -- 115 MPH (3 SEC. GUST)
- WIND EXPOSURE -- B
- INTERNAL PRESSURE COEF. -- -0.18/+0.18
- COMPONENT & CLADDING DESIGN PRESSURE -- -22.6 PSF WALLS
- -- -26.9 PSF ROOF
- -- -39.8 PSF ROOF CORNERS

ROOF TRUSS SPACING 2'-0" O.C. U.N.O. ON PLANS. SEE WALL SECTIONS & ROOF PLAN FOR REQUIRED GEOMETRY. PROVIDE CAMBER FOR ALL ROOF TRUSSES OVER 20' BASED UPON THE DEAD LOADS LISTED ABOVE.

WHERE ROOF TRUSSES ARE SHOWN HUNG FROM THE FLOOR FRAMING, MANUFACTURER SHALL DESIGN FOR ROOF LOADS TRANSFERRED INTO FLOOR SYSTEM.

ALL REQUIREMENTS FOR BLOCKING, BEARING, BRACING, ETC. SHALL COMPLY WITH CODE AND MFG.'S RECOMMENDATIONS. PROVIDE SOLID BLOCKING BETWEEN FLOOR TRUSSES AND BELOW SECOND FLOOR BEARING WALLS.

PROVIDE ALL HANGERS AND ENGINEER ALL HEADERS, GIRDERS, ETC. NOT A PART OF THE WALL SYSTEM.

3. COLUMNS SHALL BE AS FOLLOWS: PROVIDE STUDS UNDER ALL TRUSS GIRDERS, HEADERS, BEAMS AS NOTED ON BEAM HEADER SCHEDULE. NUMBER OF STUDS / COLUMN REFERS TO THE NUMBER OF TRIMMER STUDS.
4. BEAMS AND HEADERS: SEE BEAM & HEADER SCHEDULE
5. PROVIDE 3 1/2" x 3 1/2" x 5/16" STEEL LINTEL AT ALL DOOR AND WINDOW OPENINGS IN FACE BRICK. (7'-0" OR SMALLER) BEARING SHALL BE 6" MIN. EACH SIDE. AT LARGER OPENINGS USE 3 1/2" x 5" x 3/8" LLV STEEL ANGLE LINTEL W/ 8" BEARING.
6. GROUND FLOOR NON-BEARING PARTITIONS SHALL NOT BE ERECTED UNTIL FULL DEAD LOAD HAS BEEN APPLIED TO FLOOR FRAMING. AT THAT TIME INSTALL PARTITIONS TIGHT TO UNDERSIDE OF JOISTS.
7. SEE WALL SECTIONS AND ROOF PLAN FOR DRAFT STOPS.
8. NAIL AND GLUE FLOOR SHEATHING TO JOISTS.
9. FLOOR/CEILING SYSTEM SHALL PROVIDE A CONTINUOUS ONE HOUR RATED ASSEMBLY.
10. PROVIDE SIMPSON H10S TIE AT ALL GIRDER TRUSSES WHICH SET ON WALL PLATES. (VS HANGER)
11. PROVIDE SIMPSON HTS STRAP FROM UPPER FLOOR COLUMNS TO GROUND FLOOR COLUMNS..
10. WHERE DUCTS FOR HVAC ARE RUN THRU ADJACENT FLOOR TRUSSES, WEB MEMBERS SHALL ALIGN TO ALLOW FOR CLEAR PASSAGE. REFER TO MECHANICAL SHEETS FOR LOCATION AND DUCT SIZES.
11. PROVIDE SUPPORT @ ENDS OF HEADERS AND BEAMS AS LISTED IN BEAM & HEADER SCHEDULE (U.N.O.): (FOR CONDITIONS NOT LISTED REFER TO NOTE 3)
12. ALL WALL FRAMING SHALL BE 16" O.C. EXCEPT INTERIOR NON-BEARING WALLS SHALL BE 24" O.C.
13. SEISMIC DESIGN PARAMETERS ARE AS FOLLOWS:
- SEISMIC USE GROUP = I
- SEISMIC IMPORTANCE FACTOR = 1.0
- MAPPED SPECTRAL RESPONSE ACCELERATIONS
  - S S = 0.317g
  - S 1 = 0.083g
- SPECTRAL RESPONSE COEFFICIENTS
  - S DS = 0.327 g
  - S D1 = 0.133g
- SITE CLASSIFICATION = D
- SEISMIC DESIGN CATEGORY = C
- BASIC SEISMIC FORCE RESISTING SYSTEM
  - LIGHT FRAME BEARING WALLS W/ STRUCTURAL PANEL SHEATHING
  - MIXED WITH GYPSUM BOARD & INSULATED WALL SHEATHING
- SEISMIC RESPONSE COEF. (Cs) = 0.102g
- RESPONSE MODIFICATION FACTOR (R) = 2 @ WD. FRAMED WALLS
- ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

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DATE:
04/02/21

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FILE PATH: C:\Users\sgrant\Documents\Revit Local Files\South Bend PSH Model_lgrant5QUHF.rvt
PLOT DATE: 4/1/2021 11:20:16 AM

SHEAR WALL DESIGN CRITERIA

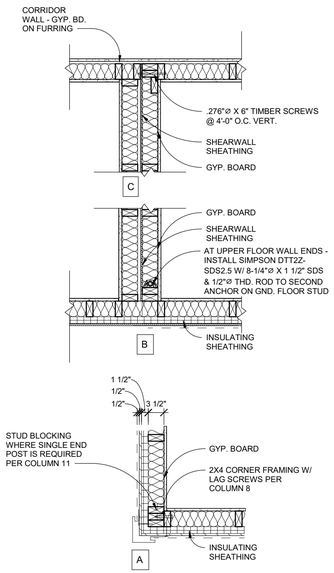
SHEAR WALL MARK	WALL SHEATHING REQUIREMENTS		FASTENER SPACING				MULTI-STORY HOLD DOWN SYSTEM (MSHD)	MSHD UPPER FLOOR PLATE OR END CONDITIONS PER 1/S2.0	MSHD HOLD DOWN ANCHOR BOLT OR HOLD DOWN @ SILL PL	STUDS @ HOLDOWN & PANEL ENDS	
	UPPER FLOOR	UPPER FLOOR	FND. (1/2"Ø ANCHORS U.N.O.)	UPPER FLR. SHEATHING	UPPER FLR. WALL PLATE TO TRUSS	ROOF DECK TO TRUSS				GND. FLR.	UPPER FLR.
	COL. 1	COL. 2	3	4	5	6	7	8	9	10	11
SWA	A1	A1	1/2"Ø X 5" @ 7'-0" O.C.	1/2"Ø THRU BOLTS @ 3'-6" O.C., LTP4 @ 4'-0" O.C.	SIMPSON A34 @ 2'-0" O.C.	8d NAILS @ 12" O.C.	--	B & C	DTT2Z-SDS2.5 W 8-1/4"Ø X 1 1/2" SDS & 1/2"Ø X 8" LONG TITEN HD	3 - 2x4	2 - 2x4
SWB			1/2"Ø X 5" @ 8'-0" O.C.	1/2"Ø THRU BOLTS @ 4'-0" O.C., LTP4 @ 4'-0" O.C.	SIMPSON A34 @ 2'-6" O.C.	8d NAILS @ 12" O.C. @ INT. (4) 8D NAILS EA. PANEL @ EXT.	---	A - B - C & D	DTT2Z-SDS2.5 W 8-1/4"Ø X 1 1/2" SDS & 1/2"Ø X 8" LONG TITEN HD	3 - 2x4	1 - 2x4
SWC	A1 / B1	A1 / B1	1/2"Ø X (5" @ 8'-0" O.C. INT.) 10" @ 6' O.C. EXT.	1/2"Ø THRU BOLTS @ 4'-0" O.C., LTP4 @ 4'-0" O.C.	SIMPSON A34 @ 2'-6" O.C.	(4) 8d NAILS EA. PANEL	---	A - B - C & D	DTT2Z-SDS2.5 W 8-1/4"Ø X 1 1/2" SDS & 1/2"Ø X 8" LONG TITEN HD	1 - C1	2 - 2x4
SWD			1/2"Ø X (5" @ 8'-0" O.C. INT.) 10" @ 6' O.C. EXT.	1/2"Ø THRU BOLTS @ 4'-0" O.C., LTP4 @ 4'-0" O.C.	SIMPSON A34 @ 2'-6" O.C.	(4) 8d NAILS EA. PANEL	---	A - B - C & D	DTT2Z-SDS2.5 W 8-1/4"Ø X 1 1/2" SDS & 1/2"Ø X 8" LONG TITEN HD	1 - C1	2 - 2x4
SWE	B1	---	1/2"Ø X 10" @ 6'-0" O.C.	H10A @ EA. TRUSS	H2.5A @ TRUSS	(4) 8d NAILS EA. PANEL	---	A	DTT2Z-SDS2.5 W 8-1/4"Ø X 1 1/2" SDS & 1/2"Ø X 8" LONG TITEN HD	1 - 2x4	---
SWF		B1	1/2"Ø X 10" 5'-0" O.C.	1/2"Ø THRU BOLTS @ 2'-6" O.C., LTP4 @ 3'-6" O.C.	SIMPSON A34 @ 2'-6 O.C. H2.5A @ EA. TRUSS TO STAIR WALL LTP4 @ 5'-0" O.C.	(4) 8d NAILS EA. PANEL	CLP SYSTEMS 3/8" Ø THD. ROD	2-1/2"x2-1/2" STL PLATE - CLP SYSTEMS	1/2"Ø TH. ROD W/ EPOXY ADHESIVE	2 - 2x4	1 - 2x4
SWL	C1	C1	1/2"Ø X 5" @ ENDS W/O HOLD DOWNS	16d NAILS @ 16" O.C.	---	---	CLP SYSTEMS 3/8" Ø THD. ROD	2-1/2"x2-1/2" STL PLATE - CLP SYSTEMS	1/2"Ø TH. ROD W/ EPOXY ADHESIVE	2 - 2x4	1 - 2x4
SWM			1/2"Ø X 5" @ ENDS W/O HOLD DOWNS	16d NAILS @ 16" O.C.	H2.5A @ TRUSS	---	LTT19 @ EACH END BY OPENING @ GND. FLOOR	CS20 W/ (7) 10d NAILS @ EA. END OF STRAP	TITEN HD THD50 400HMG (2 3/4" EMBED)	1 - 2x4	1 - 2x4
SWN	B1	B1	1/2"Ø X 10" 2'-4" O.C.	1/2"Ø THRU BOLTS @ 2'-0"	H2.5A @ EA TRUSS	---	---	A & D	HOLD DOWN IS IN ADJOINING WALL	2 - 2x4	--
SWW	B2	B2	1/2"Ø X 10" 4'-0" O.C.	16d NAILS @ 10" O.C.	H10A @ EA. TRUSS	(4) 8d NAILS EA. PANEL	CLP SYSTEMS 3/8" Ø THD. ROD PER DETAIL 2/S2.0	2-1/2"x2-1/2" STL PLATE - CLP SYSTEMS	1/2"Ø TH. ROD W/ EPOXY ADHESIVE	2 - 2x4	1 - 2x4
SWX	B1	B1	1/2"Ø X 10" 6'-0" O.C.	16d NAILS @ 1'-4" O.C.	H10A @ EA. TRUSS	(4) 8d NAILS EA. PANEL	CLP SYSTEMS 3/8" Ø THD. ROD PER DETAIL 2/S2.0	2-1/2"x2-1/2" STL PLATE - CLP SYSTEMS	1/2"Ø TH. ROD W/ EPOXY ADHESIVE	2 - 2x4	1 - 2x4
SWY			1/2"Ø X 10" 6'-0" O.C.	16d NAILS @ 1'-4" O.C.	H10A @ EA. TRUSS	(4) 8d NAILS EA. PANEL	CLP SYSTEMS 3/8" Ø THD. ROD PER DETAIL 2/S2.0	2-1/2"x2-1/2" STL PLATE - CLP SYSTEMS	1/2"Ø TH. ROD W/ EPOXY ADHESIVE	2 - 2x4	1 - 2x4
SWZ	B2	B2	1/2"Ø X 10" 6'-0" O.C.	16d NAILS @ 1'-4" O.C.	H10A @ EA. TRUSS	(4) 8d NAILS EA. PANEL	CLP SYSTEMS 3/8" Ø THK. ROD PER DETAIL 3/S2.0	2-1/2"x2-1/2" STL PLATE	---	3-2x4	1 - 2x4

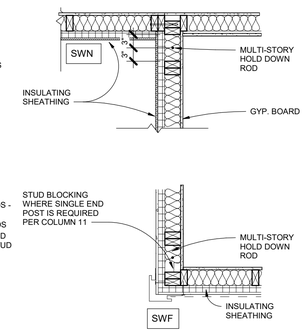
NOTES

1. SHEATHING SHALL BE INSTALLED ON THE SAME SIDE AT THE SHEAR WALL CALL OUT AT SINGLE STUD WALLS. AT DOUBLE STUD WALLS INSTALL SHEATHING ON THE SAME SIDE AS THE SHEAR WALL CALL OUT (CAVITY SIDE OF STUD)
2. NAILING IN FIELD OF SHEAR WALL SHEATHING TO BE 12" O.C. MAX. NAILS SHALL BE AT LEAST 3/8" FROM EDGES AT INSULATED SHEATHING, NAILING IN FIELD SHALL BE 6" O.C. MAX. UNLESS NOTED OTHERWISE.
3. PROVIDE STUD COLUMN(S) AT EACH END OF SHEAR WALL AS NOTED IN COLUMNS 10 & 11 ABOVE.
4. SHEAR WALL SHEATHING PANELS SHALL CONFORM TO DEPT. OF COMMERCE PRODUCT STANDARDS PS 1 OR PS 2. SEE SPECIFICATIONS FOR REQUIRED MATERIAL THICKNESS UNLESS NOTED ON THE SHEATHING SCHEDULE.
5. WALLBOARD NAILS SHALL BE 6d COATED NAILS, 1-7/8" LONG, 1/4" HEAD OR WALLBOARD NAIL 1-7/8" LONG, 19/64" HEAD OR 0.12 NAIL W/ 3/8"Ø HEAD.
6. TOP PLATE OF SHEAR WALLS TO LAP 4'-0" MINIMUM AND EXTEND OVER INTERSECTING WALLS.
7. WHERE NOTED TO INSTALL A SIMPSON H10A TIE @ TRUSS BEARING POINT, INSTALL ON INTERIOR FACE OF WALL.
8. WHERE SHOWN ON THE ROOF PLAN, INSTALL DRAFTSTOP MATERIAL ON SIDE OF TRUSS ABOVE THE SHEAR WALL. NAIL ROOF SHEATHING TO TRUSS PER COL. 6.
9. AT TRUSS ENERGY HEEL, INSTALL TRUSS BLOCKING PANELS BETWEEN TRUSSES WHERE INDICATED ON PLAN. FASTEN TO TOP PLATE WITH SIMPSON A23 TIE W/ (4) 0.148" X 1 1/2" NAILS EACH MEMBER. NAIL ROOF SHEATHING TO TOP PLATE OF PANEL PER NAILING NOTED IN COL. 6. SEE WALL SECTIONS.
10. AT SWZ, PROVIDE DIAGONAL TRANSFER BLOCKING ABOVE GROUND FLOOR WALL ON TOP OF ROOF TRUSS BOTTOM CHORD. FASTEN TO CROSSING TRUSSES WITH 1/4"Ø X 2 1/2" SDS SCREWS.
11. AT SHEAR WALL SWW, SWX, & SWY PROVIDE HOLD DOWN ANCHORS AS NOTED IN COLUMN 7 AND SHOWN IN DETAIL 5/S2.0 AT EITHER SIDE OF WINDOW OR DOOR OPENINGS. PROVIDE SHEAR WALL STRAPPING AS SHOWN ON THE DETAIL AT MECHANICAL UNIT OPENINGS.
12. AT STAIR DOUBLE WALL, PROVIDE THRU BOLTS LISTED ABOVE AT UNIT WALL SIDE. EXTEND FLOOR LANDING SHEATHING THRU WALL TO UNIT SIDE.
13. IN COLUMN #6, '---' INDICATES THAT NO MULTI-STORY HOLD DOWN IS REQUIRED. PROVIDE WALL INTERSECTION FASTENING AS NOTED IN COLUMN #7.
14. EXTEND SHEATING FROM BOTTOM PLATE OF WALL TO LOWER PLATE AT THE TOP OF THE WALL, TYPICAL EACH FLOOR. INFILL AT FLOOR LINE WITH INSULATING SHEATHING FASTENED TO TRUSS ENDS AND PLATES WITH NAILING NOTED FOR WALL AREAS.

SHEATHING SCHEDULE

MARK	SHEATHING	NAILS -SPACING EDGE/FIELD	REMARKS
A1	EXT. WALL SHTH. OR SHEAR WALL SHTH.	8d NAILS @ 6"/12" OR 6d NAILS @ 6"/12"	SPF STUDS @ 24" O.C.
A2	EXT. WALL SHTH.	8d NAILS @ 4"/12"	R=9.6 SPF STUDS @ 24" O.C. UNO
B1	INSULATED EXT. WALL SHTH.	0.131" SHANK NAILS @ 3"/6"	INSTALL IN ACCORDANCE W/ MFG. INSTRUCTION
B2	5/8" GYP. BD. (INTERIOR) / INSULATED EXTERIOR WALL SHEATHING	WALLBOARD NAILS 7" O.C. @ EDGES / 0.131" SHANK NAILS 3"/6"	EDGES BLOCKED
C1	5/8" GYP. BD. ONE SIDE	WALLBOARD NAILS 7" O.C. @ EDGES	EDGES UNBLOCKED

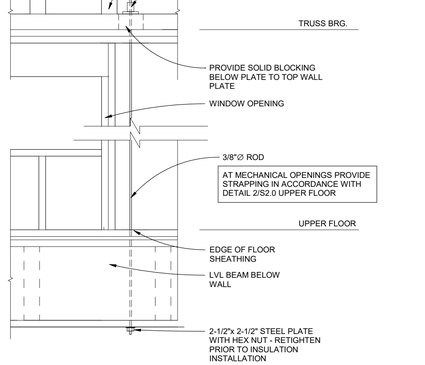




SHEAR WALL END DETAILS

SCALE: 3/4" = 1'-0"

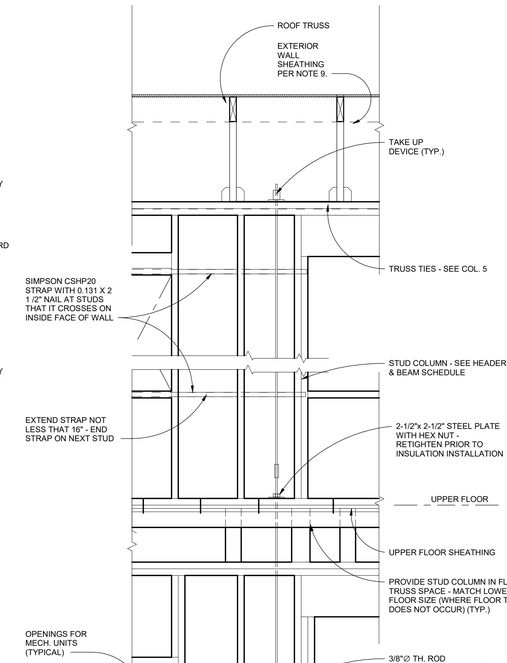
1 / S2.0



DETAIL @ SWZ

SCALE: 3/4" = 1'-0"

3 / S2.0



DETAIL @ SWW, SWX, SWY OPENINGS

SCALE: 3/4" = 1'-0"

2 / S2.0

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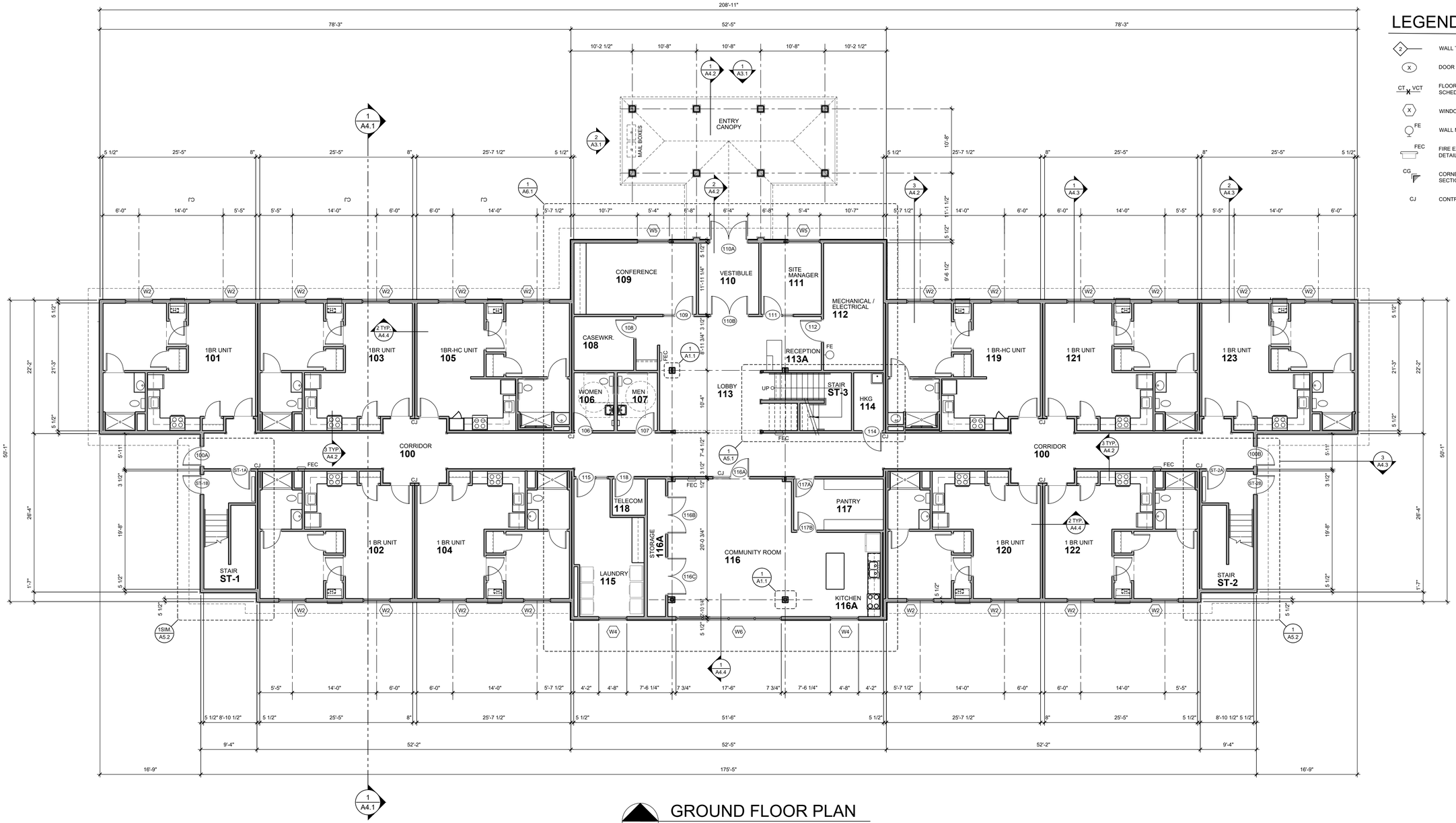


GROUND FLOOR PLAN

NORTH

SCALE: 1/8" = 1'-0"

LEGEND

- WALL TAG - SEE WALL SCHEDULE
- DOOR TAG - SEE DOOR SCHEDULE
- CT / VCT — FLOOR TRANSITION; SEE FINISH SCHEDULE
- WINDOW TAG - SEE WINDOW SCHEDULE
- FE — WALL MOUNTED FIRE EXTINGUISHER
- FEC — FIRE EXTINGUISHER CABINET - SEE DETAIL 1/A1.2
- CG — CORNER GUARD - SEE SPECIFICATION SECTION 10 26 13 CORNER GUARDS
- CJ — CONTROL JOINT (SEE 2/A1.1)

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE INDIANA BUILDING CODE (AMENDS 2012 INTERNATIONAL BUILDING CODE), AS WELL AS OTHER CODES AND REGULATIONS.
2. MAINTAIN SAFE AND CLEAR PASSAGE IN ALL REQUIRED EGRESS AREAS. DO NOT STORE DEMOLITION OR CONSTRUCTION MATERIALS IN EGRESS PASSAGES OR PUBLIC WAYS. CONDUCT OPERATIONS TO PREVENT TO INJURY TO ALL PERSONS AND PROPERTY.
3. PROTECT PUBLIC AREAS FROM CONSTRUCTION AREAS USING SUITABLE BARRIERS AND WALLS CONFORMING TO APPLICABLE CODES.
4. VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS . REPORT DISCREPANCIES TO THE ARCHITECT UPON DISCOVERY.
5. DIMENSIONS ON DRAWINGS ARE TAKEN FROM FACE OF EXISTING CONSTRUCTION TO FACE OF STUD, TO FACE OF MASONRY, TO CENTERLINE OF COLUMNS, UNLESS NOTED OTHERWISE.
6. ALL CHANGES TO PLANS AND FIELD MODIFICATIONS SHALL BE APPROVED BY THE ARCHITECT.
7. IN INTERIOR OR EXTERIOR BEARING WALLS OF WOOD CONSTRUCTION, PLACE WOOD STUD DIRECTLY UNDER EACH FLOOR/CEILING AND ROOF TRUSSES - SEE STRUCTURAL FRAMING PLANS S3 AND S4 FOR LINTEL BEARING REQUIREMENTS.
8. FIREBLOCK AND DRAFTSTOP CONCEALED SPACES IN ACCORDANCE WITH IBC SECTION 717 CONCEALED SPACES, AS FOLLOWS:

A. REFERENCE IBC SECTION 717.2 FIREBOCKING..FIREBLOCKING SHALL BE INSTALLED TO CUT OFF CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND SHALL FORM AN EFFECTIVE BARRIER BETWEEN FLOORS, BETWEEN A TOP STORY AND A ROOF OR ATTIC SPACE. FIREBLOCKING SHALL BE INSTALLED IN THE LOCATIONS SPECIFIED IN IBC SECTIONS 717.2.2 THROUGH 717.2.7.

B. REFERENCE IBC SECTION 717.3 DRAFTSTOPPING IN FLOORS...IN COMBUSTIBLE CONSTRUCTION, DRAFTSTOPPING SHALL BE INSTALLED TO SUBDIVIDE FLOOR/CEILING ASSEMBLIES IN THE LOCATIONS SPECIFIED IN IBC SECTIONS 717.3.2 THROUGH 717.3.3.

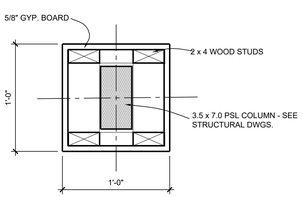
1. REFERENCE IBC SECTION 717.3.2 GROUPS R-2... DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR/CEILING SPACES IN GROUP R-2 BUILDINGS WITH WITH THREE OR MORE DWELLING UNITS..SHALL BE LOCATED ABOVE AND IN LINE WITH THE DWELLING UNIT SEPARATIONS...

C. REFERENCE IBC SECTION 717.4 DRAFTSTOPPING IN ATTICS...IN COMBUSTIBLE CONSTRUCTION, DRAFTSTOPPING SHALL BE INSTALLED TO SUBDIVIDE ATTIC SPACES AND CONCEALED ROOF SPACES IN THE LOCATIONS SPECIFIED IN IBC SECTIONS 717.4.2 AND 717.4.3

1. REFERENCE IBC SECTION 717.4.2 GROUPS R-2... DRAFTSTOPPING SHALL BE PROVIDED IN ATTICS, MANSARDS,OVERHANGS, OR OTHER CONCEALED ROOF SPACES SPACES IN GROUP R-2 BUILDINGS WITH WITH THREE OR MORE DWELLING UNITS..SHALL BE LOCATED ABOVE AND IN LINE WITH THE DWELLING UNIT SEPARATION WALLS THAT DO NOT EXTEND TO THE UNDERSIDE OF THE ROOF SHEATHING ABOVE...

a. EXCEPTIONS:...IN GROUP R-2 THAT DO NOT EXCEED FOUR STORIES IN HEIGHT, THE ATTIC SPACE SHALL BE SUBDIVIDED BY DRAFTSTOPS...ABOVE EVERY TWO DWELLING UNITS...

9. VENTILATE CONCEALED ROOF SPACES IN ACCORDANCE WITH IBC SECTION 1203.2
10. FURNISH AND INSTALL TREATED WOOD BLOCKING IN FRAME WALLS AS REQUIRED FOR ALL TOILET ACCESSORIES, SHELVES, RAILINGS, CHAIR RAILS, ETC.
11. DIFFERING FLOOR MATERIALS SHALL MEET UNDER THE CENTERLINE OF THE DOOR, UNLESS NOTED OTHERWISE.



COLUMN DETAIL 1 — 1 1/2" = 1'-0"

WALL LEGEND

1. **PARTITION WALLS**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 2x4 WOOD STUDS @ 16" O.C.
   - SOUND ATTENUATION BATTS
2. **CORRIDOR WALLS (1 HOUR)**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 1/2" RESILENT CHANNELS (CORRIDOR SIDE)
   - 2x4 WOOD STUDS @ 16" O.C.
   - SOUND ATTENUATION BATTS
3. **DEMISING WALL (SEE DETAIL 1/A1.2)**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 2 ROWS, 2x4 WOOD STUDS @ 16" O.C. (ALTERNATE STUDS)
   - SHEAR SHEATHING, SEE STRUCTURAL
   - SOUND ATTENUATION BATTS
4. PLUMBING **WALLS**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 2x6 WOOD STUDS @ 16" O.C.
   - SOUND ATTENUATION BATTS

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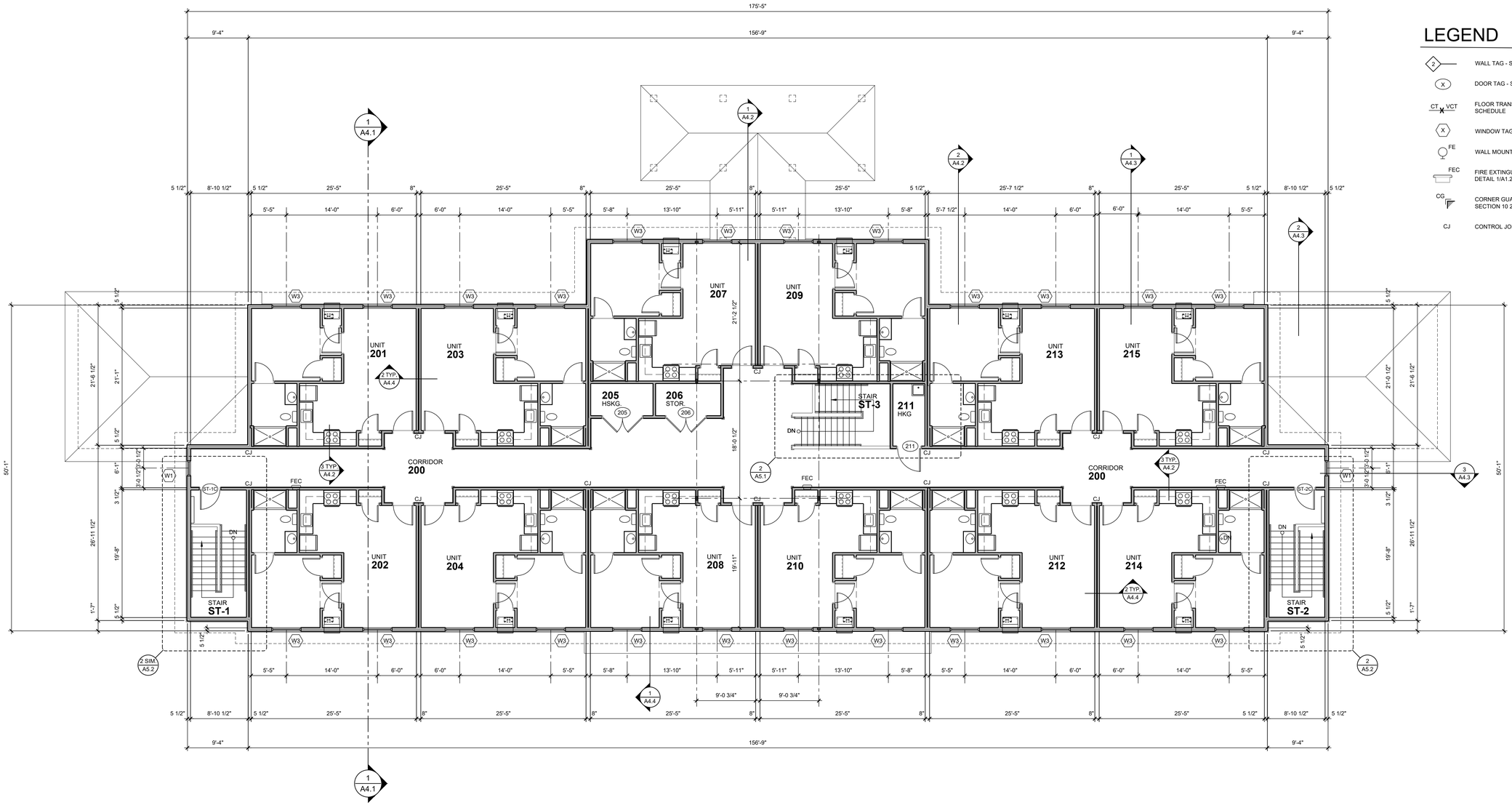


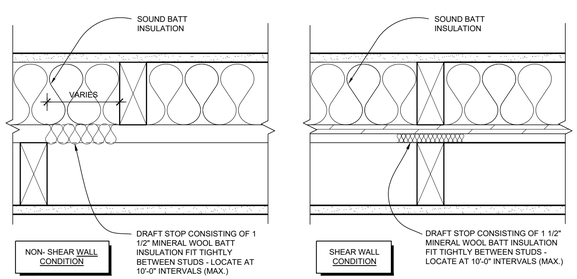
LEGEND

- WALL TAG - SEE WALL SCHEDULE
- DOOR TAG - SEE DOOR SCHEDULE
- CT / VCT — FLOOR TRANSITION; SEE FINISH SCHEDULE
- WINDOW TAG - SEE WINDOW SCHEDULE
- FE — WALL MOUNTED FIRE EXTINGUISHER
- FEC — FIRE EXTINGUISHER CABINET - SEE DETAIL 1/A1.2
- CG — CORNER GUARD - SEE SPECIFICATION SECTION 10 26 13 CORNER GUARDS
- CJ — CONTROL JOINT (SEE 2/A1.1)

SECOND FLOOR PLAN

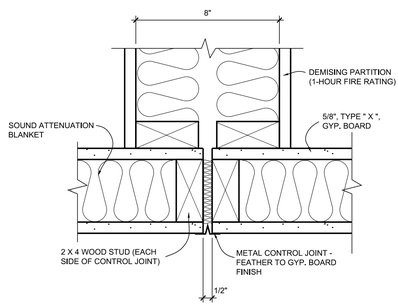
NORTH

SCALE: 1/8" = 1'-0"



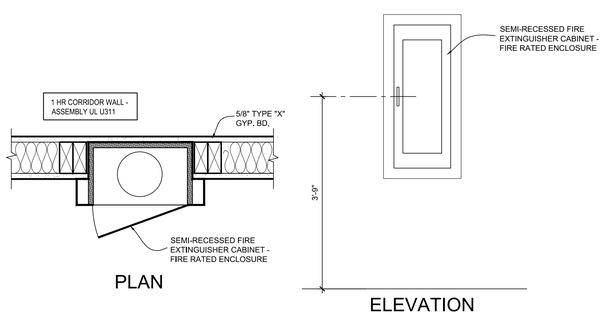
DEMISING PARTITION — 1/A1.2

3" = 1'-0"



INT. CONTROL JOINT — 2/A1.2

3" = 1'-0"



FIRE EXTINGUISHER CABINET — 3/A1.2

NTS

WALL LEGEND

1. **PARTITION WALLS**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 2x4 WOOD STUDS @ 16" O.C.
   - SOUND ATTENUATION BATTS
2. **CORRIDOR WALLS (1 HOUR)**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 1/2" RESILENT CHANNELS (CORRIDOR SIDE)
   - 2x4 WOOD STUDS @ 16" O.C.
   - SOUND ATTENUATION BATTS
3. **DEMISING WALL (SEE DETAIL 1/A1.2)**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 2 ROWS, 2x4 WOOD STUDS @ 16" O.C. (ALTERNATE STUDS)
   - SHEAR SHEATHING, SEE STRUCTURAL
   - SOUND ATTENUATION BATTS
4. PLUMBING **WALLS**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 2x6 WOOD STUDS @ 16" O.C.
   - SOUND ATTENUATION BATTS

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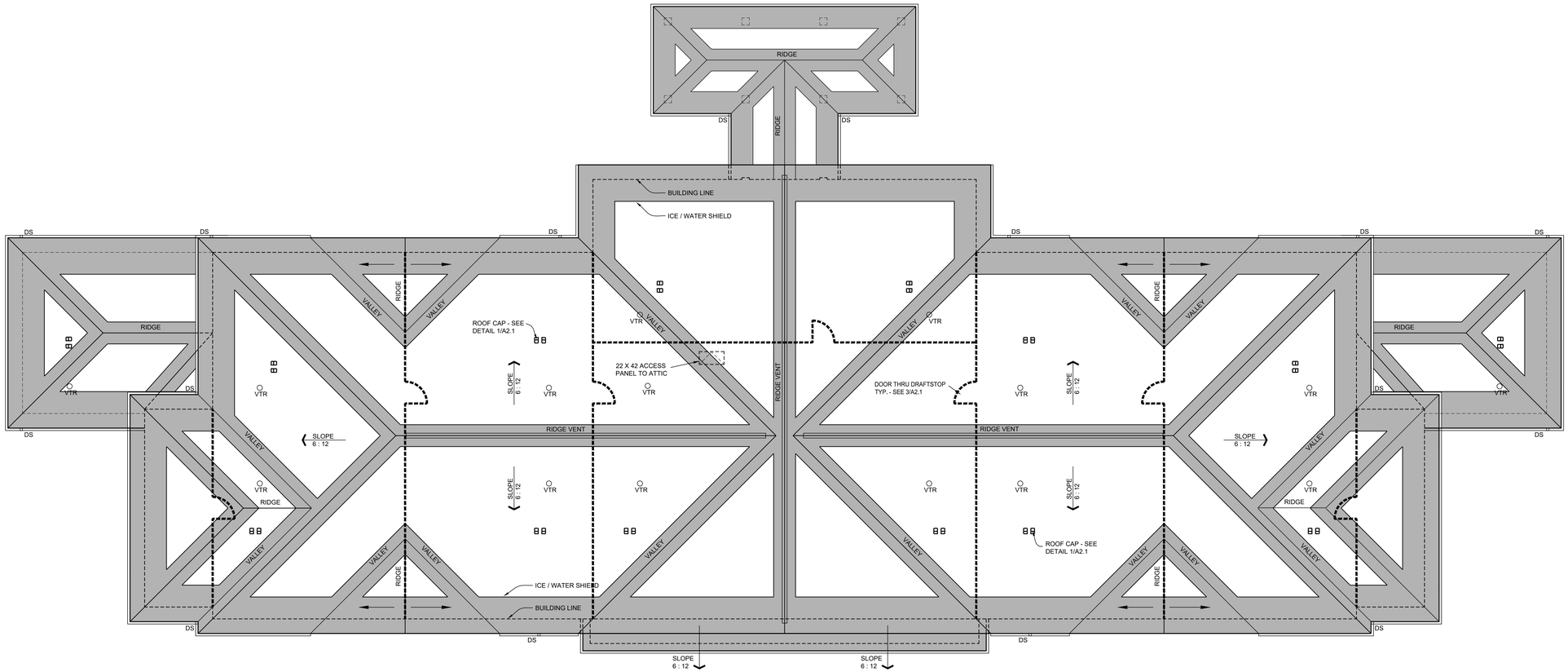
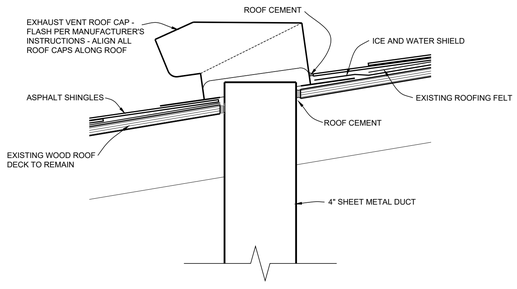


ROOF PLAN

NORTH

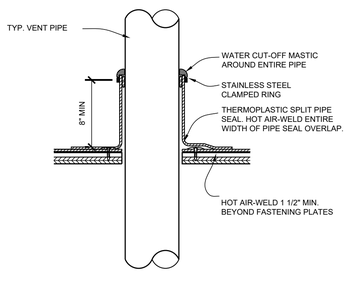
SCALE: 3/32" = 1'-0"



ROOF CAP DETAIL

1 1/2" = 1'-0"

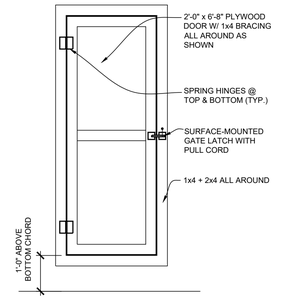
1 A2.1



ROOF VENT DETAIL

1 1/2" = 1'-0"

2 A2.1



ELEVATION

DOOR THRU DRAFTSTOP

1/2" = 1'-0"

3 A2.1

ROOF PLAN LEGEND

- EXHAUST VENT ROOF CAP - SEE DETAIL 1/A2.1 - COORDINATE W/ MECHANICAL PLANS
- SLOPE TO DRAIN
- ROOF SADDLE/CRICKET
- VTR — VENT THRU ROOF - SEE DETAIL 2/A5 - COORDINATE W/ MECHANICAL PLANS
- DRAFTSTOP (IN ATTIC SPACE BELOW)
- FIRE BARRIER WALL (THRU ATTIC SPACE BELOW)
- ICE AND WATER SHIELD (PLACE FROM EDGE TO 3'-0" BEYOND EAVE BELOW; PLACE IN VALLEY AND OVER RIDGE)
- RIDGE VENT

GENERAL NOTES:

1. ALL CHANGES TO PLANS AND FIELD MODIFICATIONS SHALL BE APPROVED BY THE ARCHITECT.
2. OPENINGS IN ROOF SHALL BE CUT BY CONTRACTOR WARRANTING ROOF. COORDINATE LOCATION OF ALL OPENINGS WITH THE WORK OF OTHER CONTRACTORS.
3. WOOD BLOCKING AND NAILERS SHALL BE PRESSURE TREATED.
4. PROTECT ALL ROOF DRAINS FROM CONSTRUCTION DEBRIS. INSPECT AND CLEAR ALL ROOF DRAINS PRIOR TO COMPLETION OF WORK TO ENSURE THAT ALL ROOF DRAINS ARE FREE OF DEBRIS AND FUNCTIONING PROPERLY.
5. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ALL ROOF PENETRATIONS.

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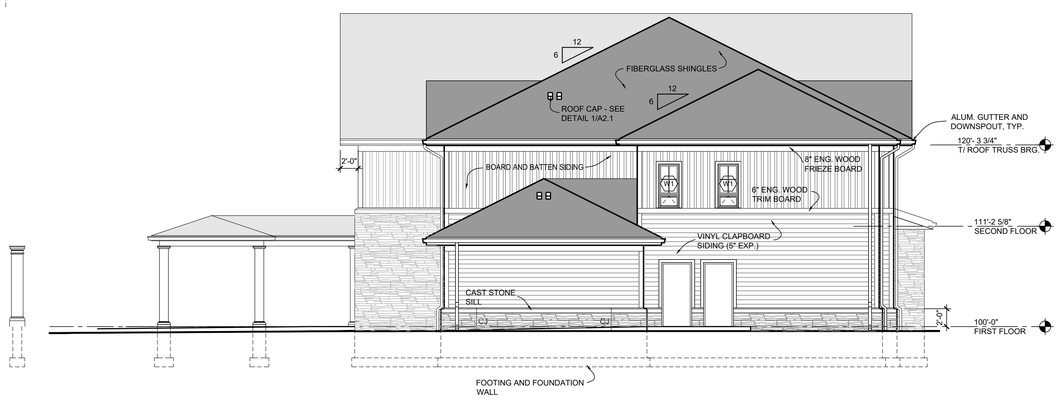
NORTH ELEVATION

SCALE: 1/8" = 1'-0"



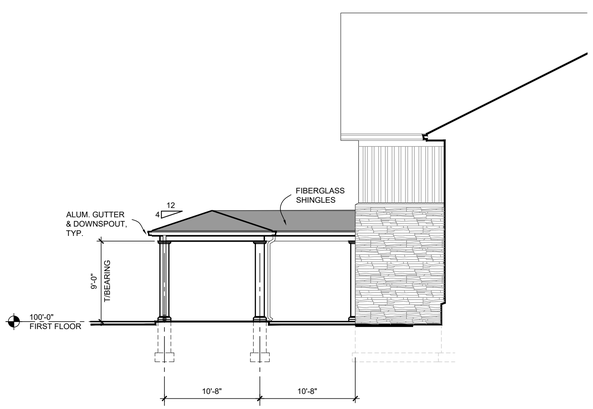
WEST ELEVATION

SCALE: 1/8" = 1'-0"

CANOPY ELEVATION

SCALE: 1/8" = 1'-0"

1 A3.1



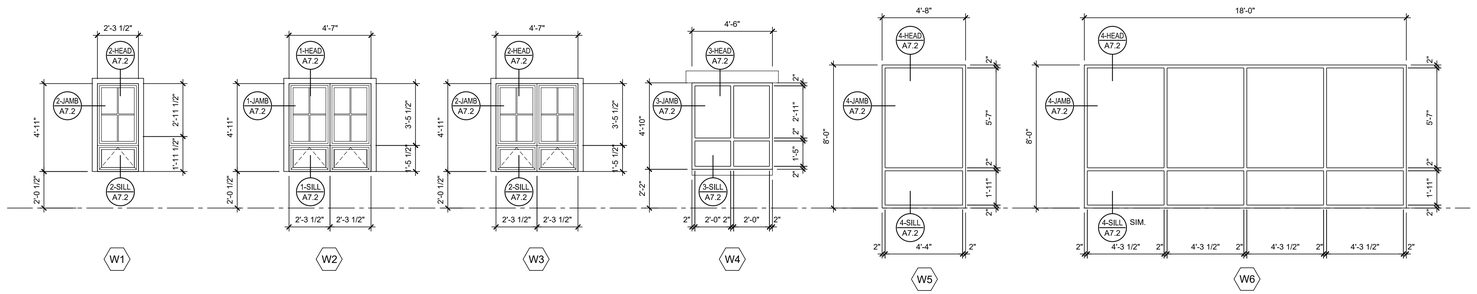
CANOPY ELEVATION

SCALE: 1/8" = 1'-0"

2 A3.1

WINDOW TYPES

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



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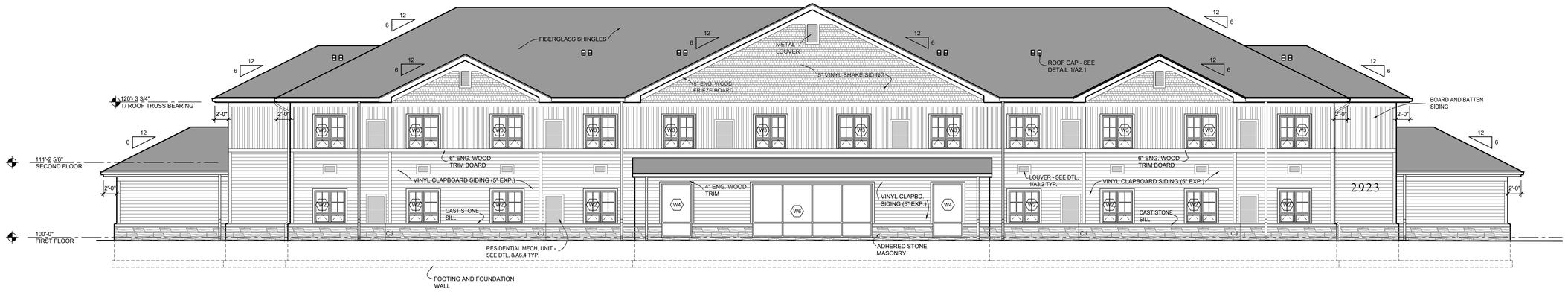


SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

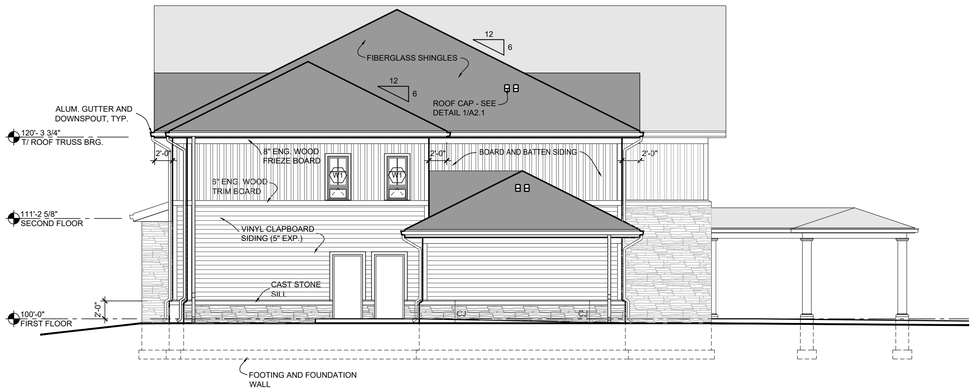
15" PRE-FINISHED ALUMINUM LETTERS - FONT: TIMES NEW ROMAN - PROJECT 1" CLEAR FROM WALL SURFACE

2923

SIGNAGE

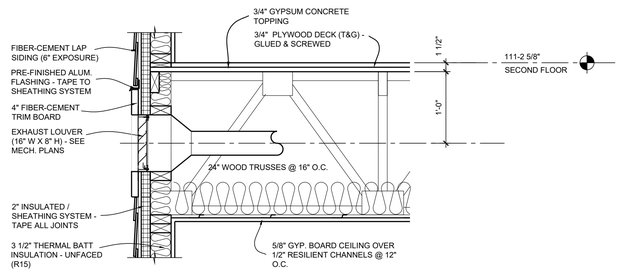
SCALE: 1/4" = 1'-0"

2 / A3.2



EAST ELEVATION

SCALE: 1/8" = 1'-0"



DETAIL

1" = 1'-0"

1 / A3.2

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South Bend Heritage

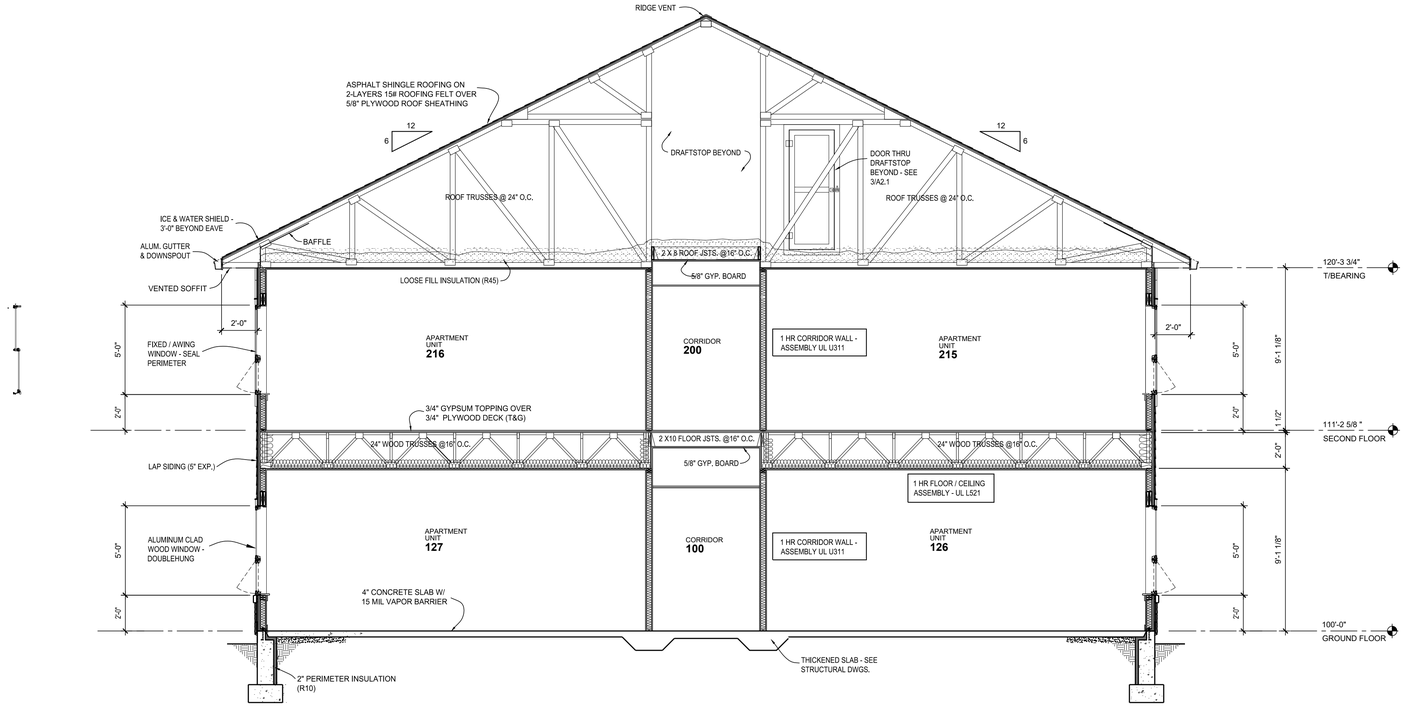
HOPE AVENUE HOMES

2923/2929 Hope Avenue
South Bend, IN 46615

DATE:
BID DATE: 4/2/21

SHEET NO.

A3.2



BUILDING SECTION 1 / A4.1

1/4" = 1'-0"

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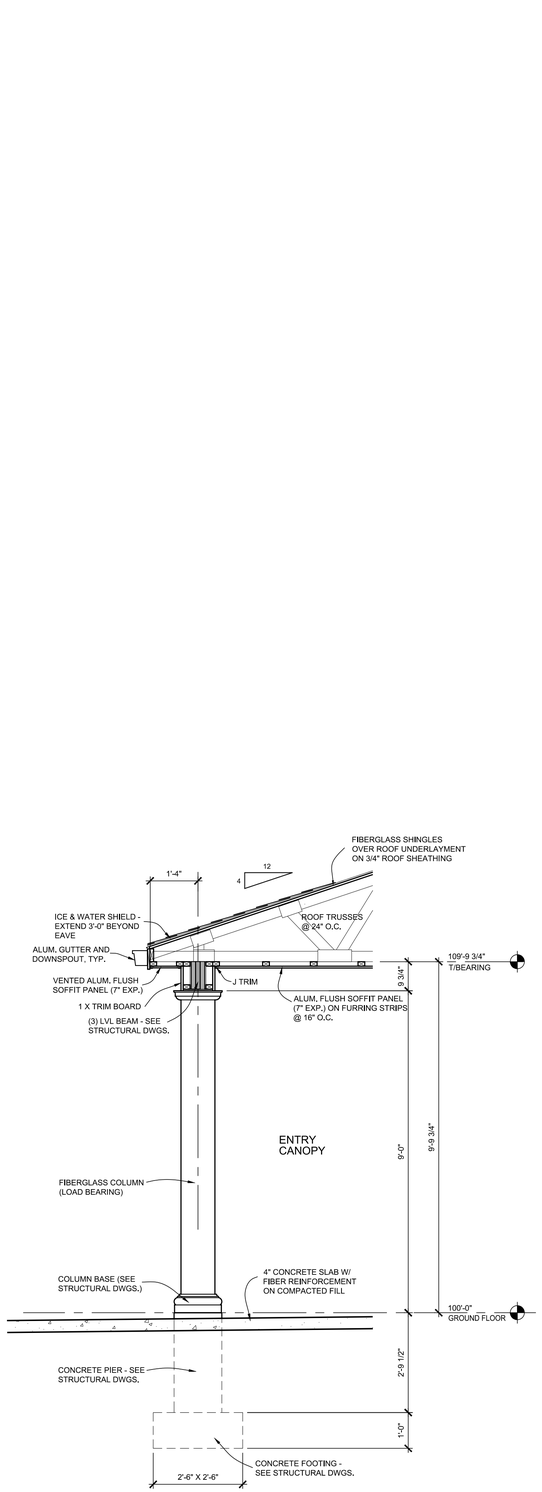
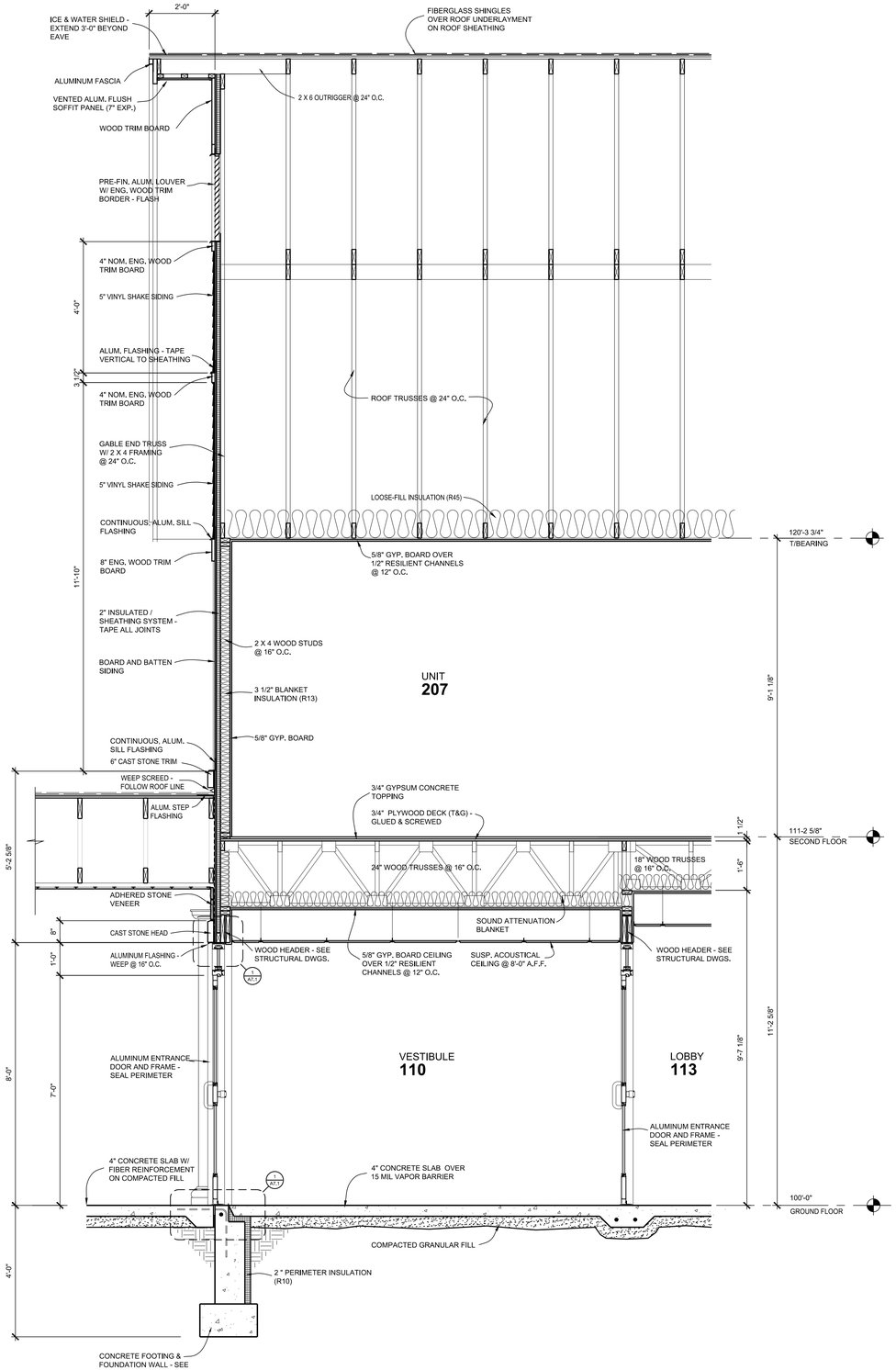
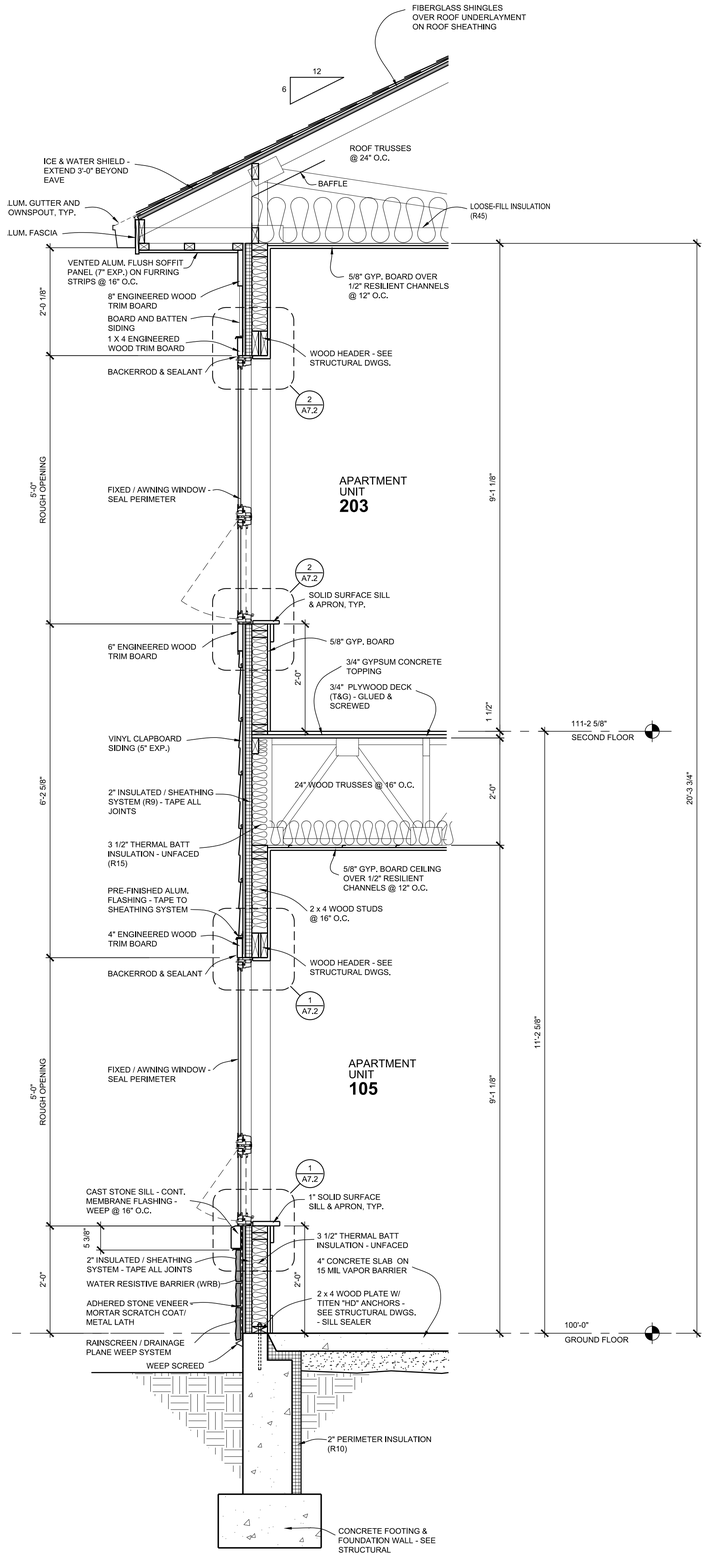
A4.1



WALL SECTION 1
1/2" = 1'-0"
A4.2



WALL SECTION 2
1/2" = 1'-0"
A4.2



WALL SECTION 3
3/4" = 1'-0"
A4.2

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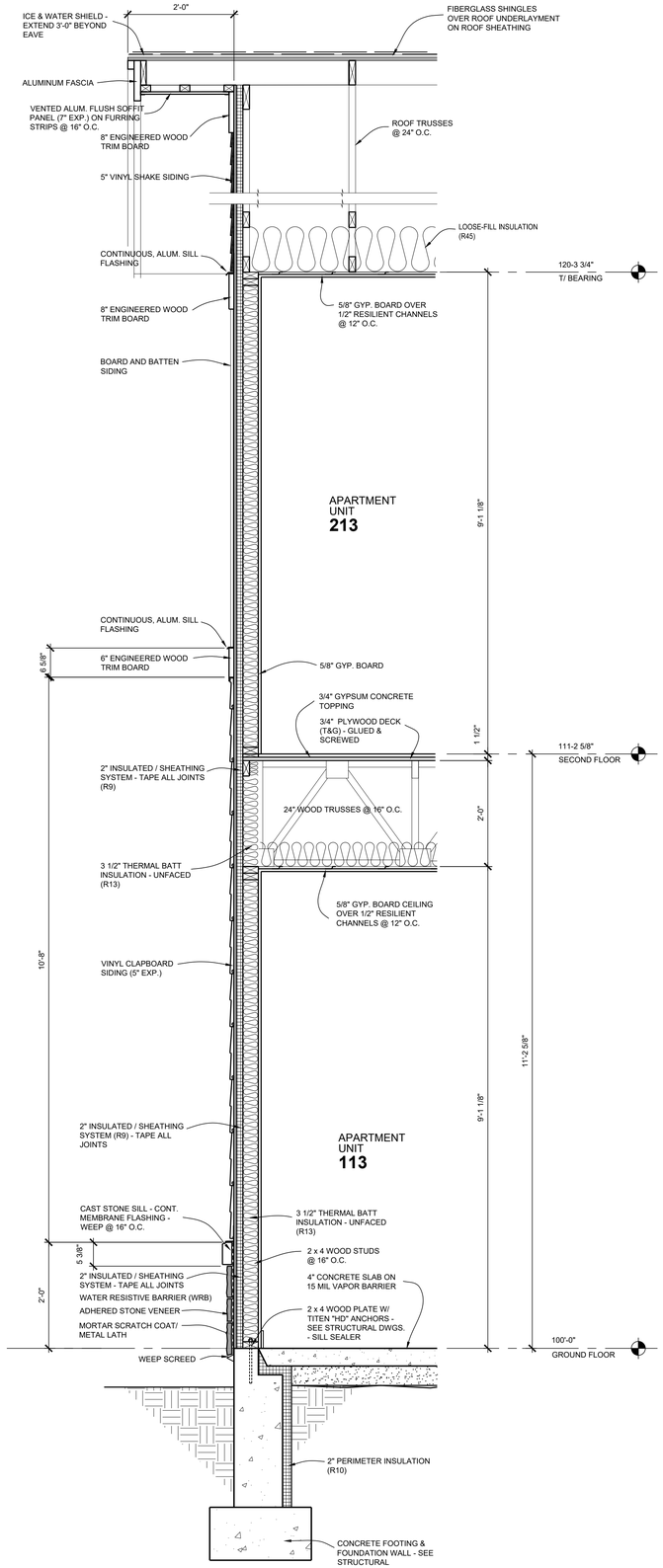
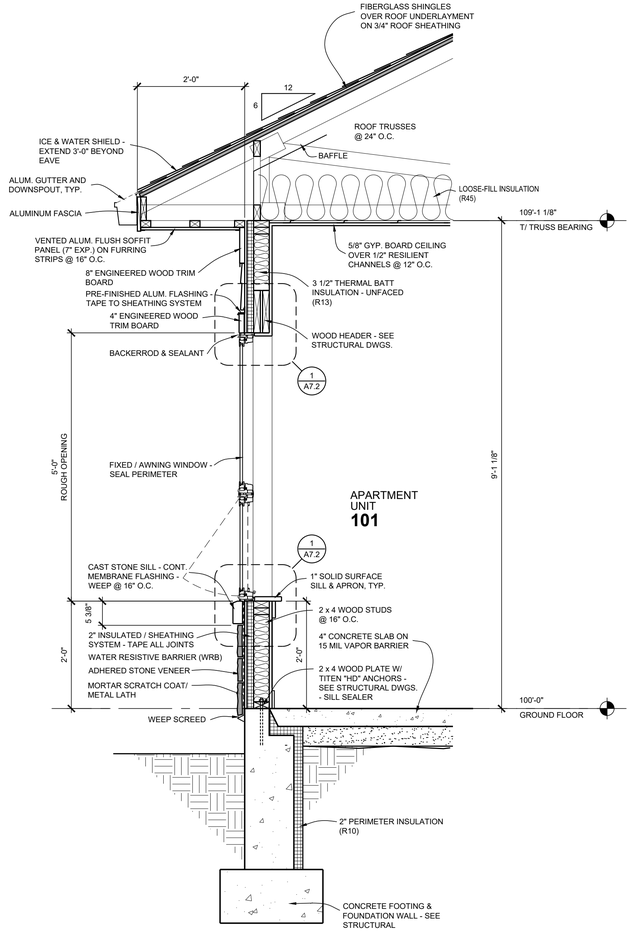
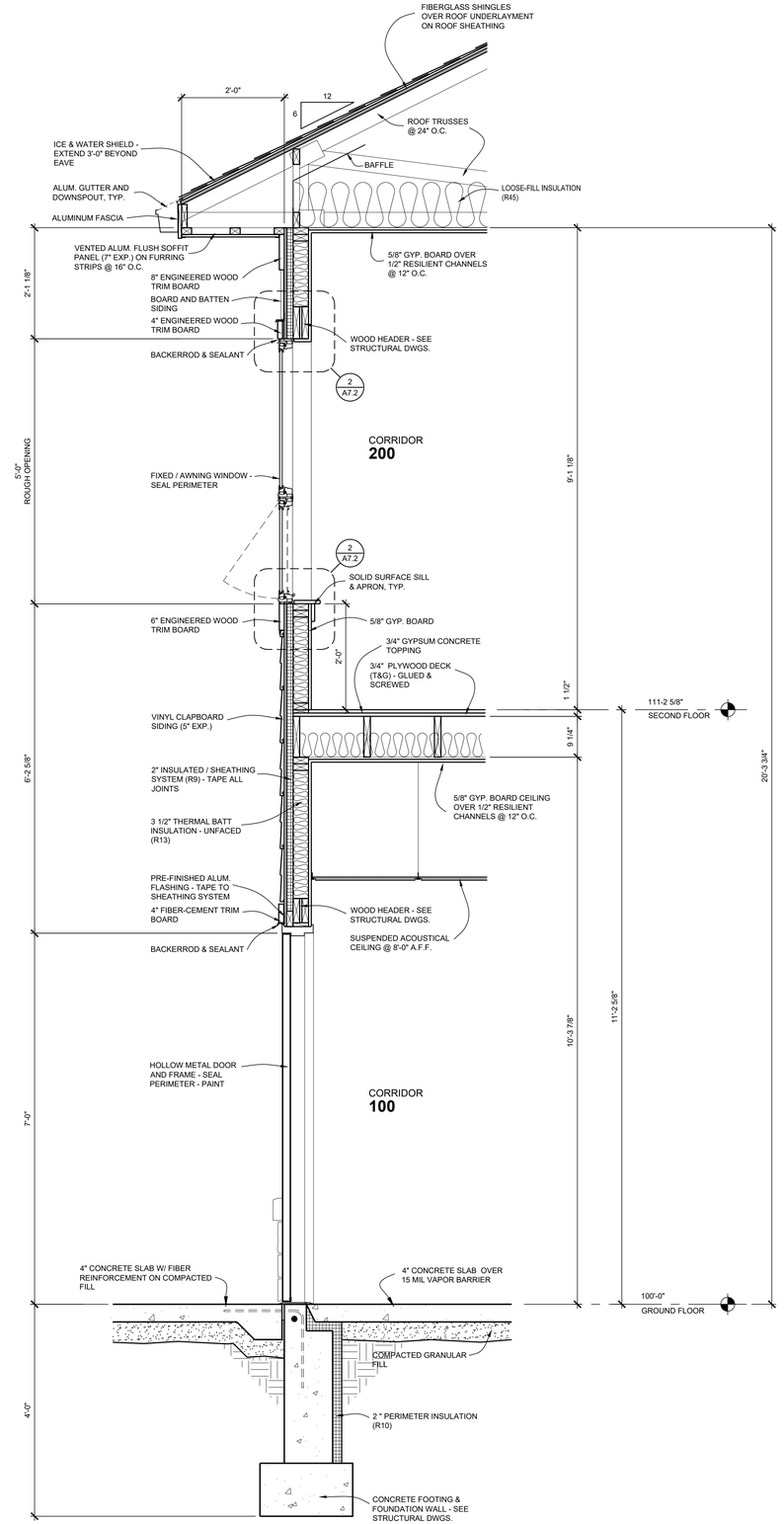
SHEET NO.
A4.2



WALL SECTION 1 / A4.3
3/4" = 1'-0"



WALL SECTION 2 / A4.3
3/4" = 1'-0"



WALL SECTION 3 / A4.3
3/4" = 1'-0"

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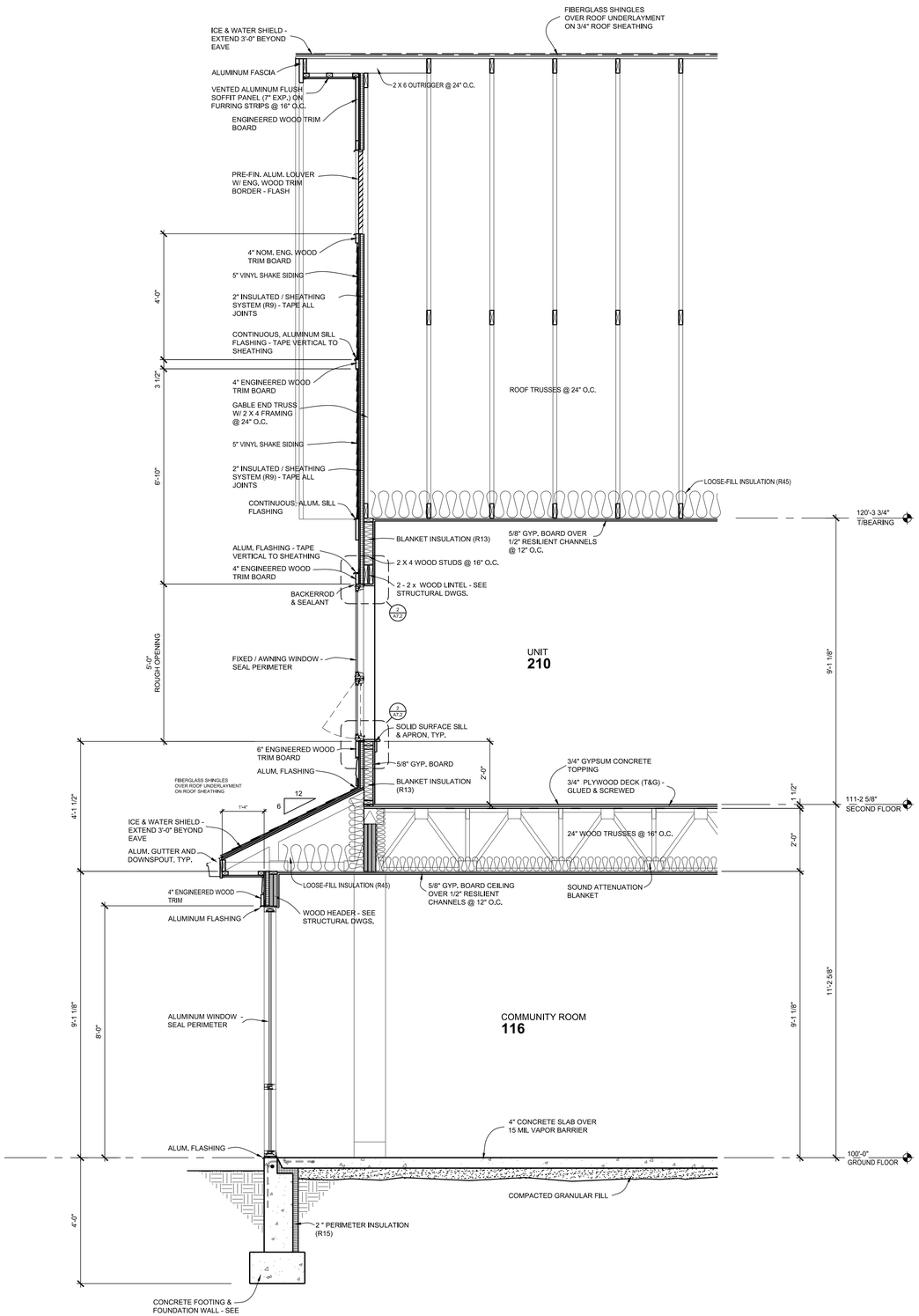
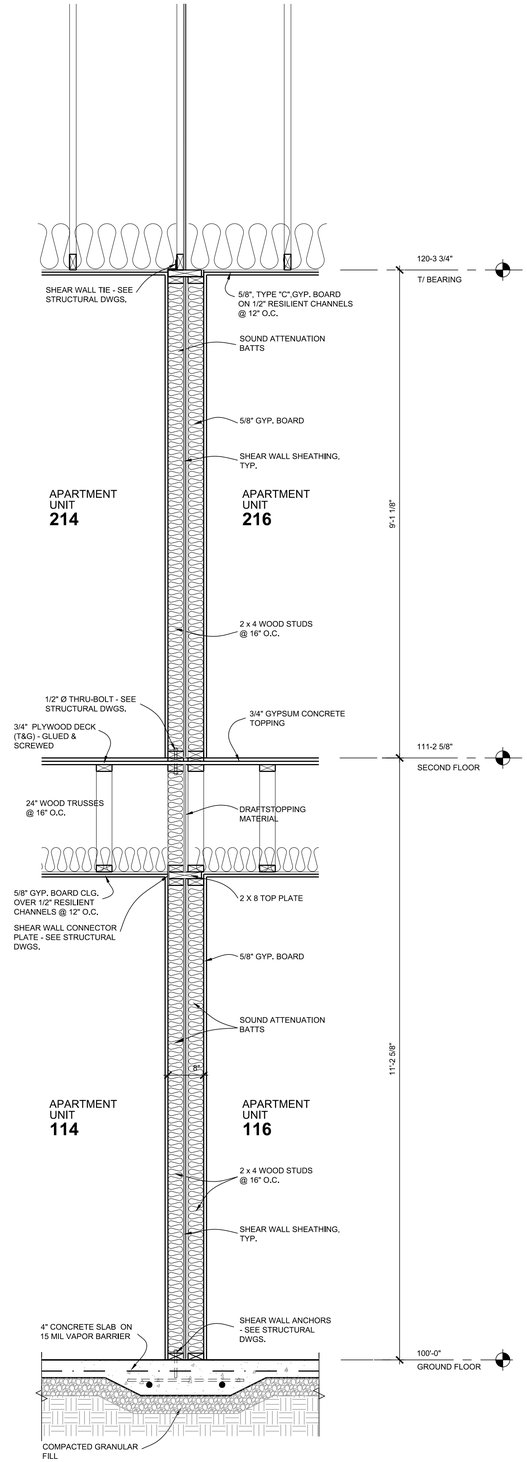
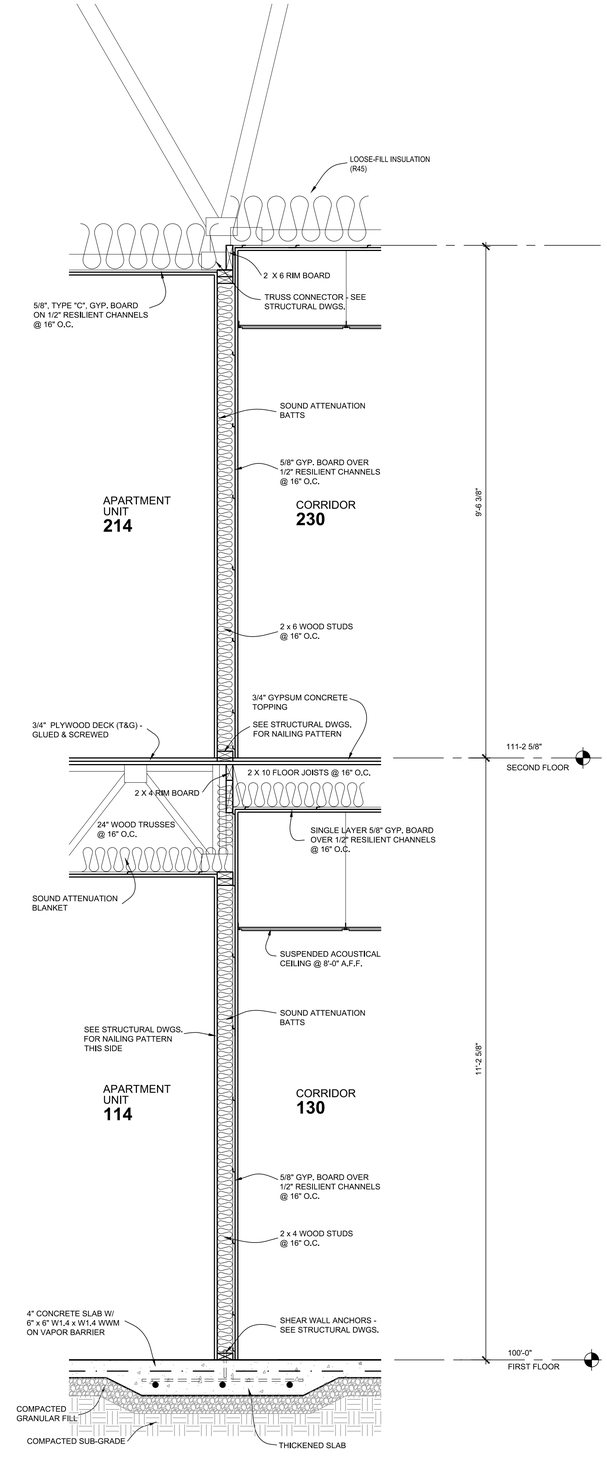
SHEET NO.
A4.3



WALL SECTION 1 / A4.4
1/2" = 1'-0"



WALL SECTION 2 / A4.4
3/4" = 1'-0"



WALL SECTION 3 / A4.4
3/4" = 1'-0"

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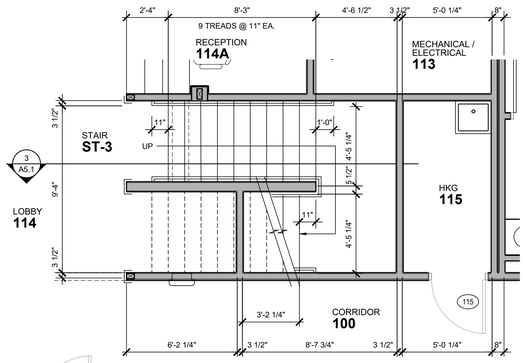
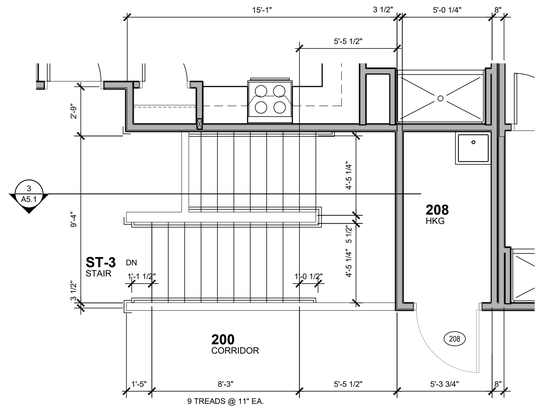
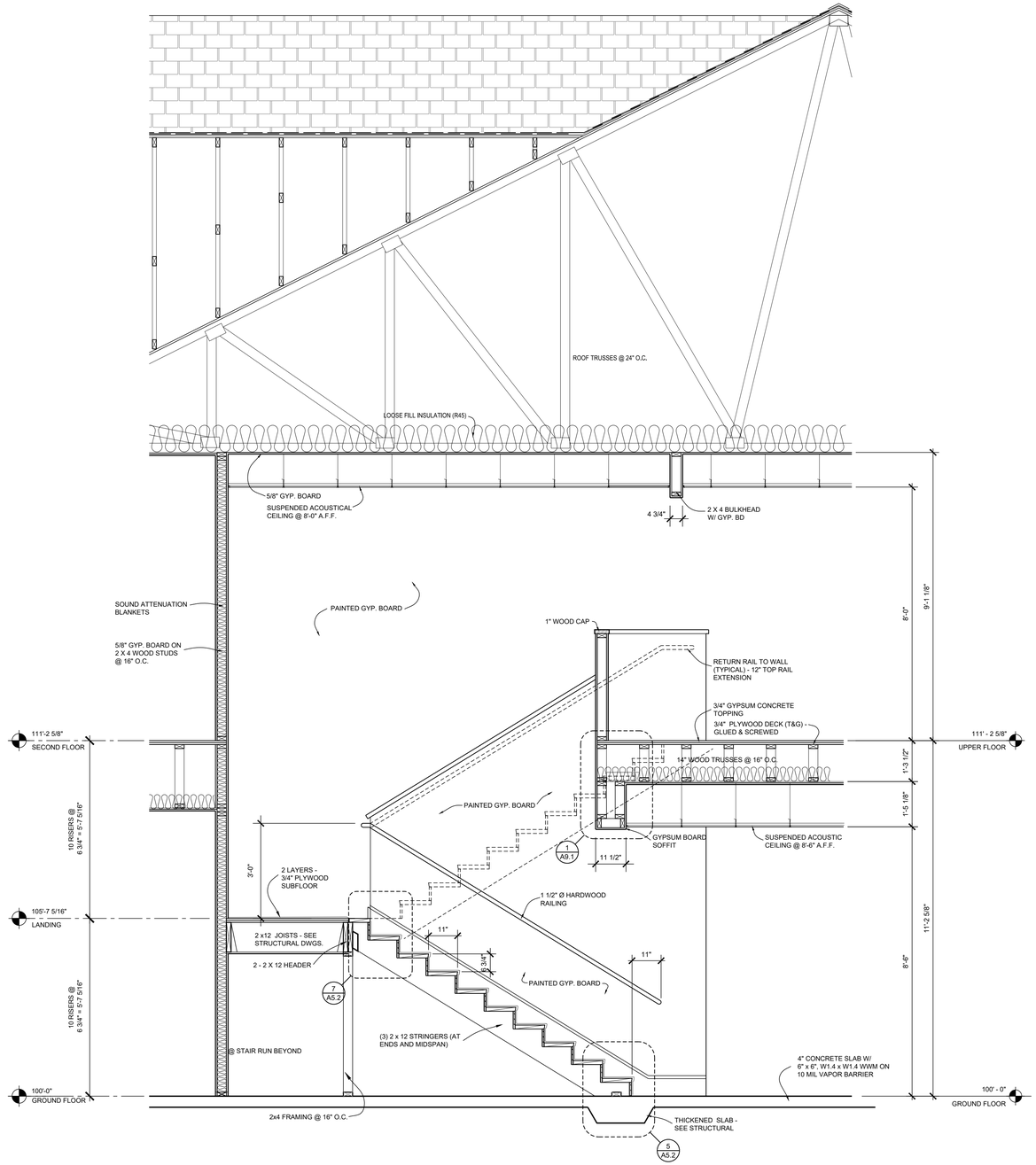
SHEET NO.
A4.4



GROUND FLOOR PARTIAL PLAN
STAIR #3
NORTH
SCALE: 1/4" = 1'-0"
1
A5.1



SECOND FLOOR PARTIAL PLAN
STAIR #3
NORTH
SCALE: 1/4" = 1'-0"
2
A5.1



STAIR #3 SECTION
SCALE: 1/2" = 1'-0"
3
A5.1

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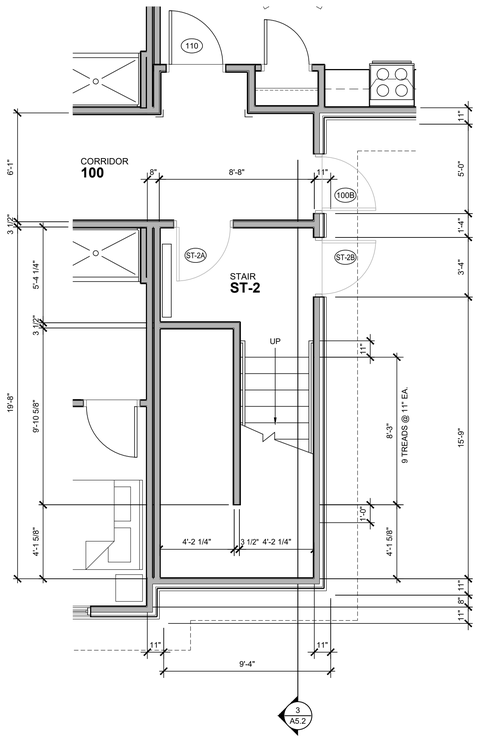
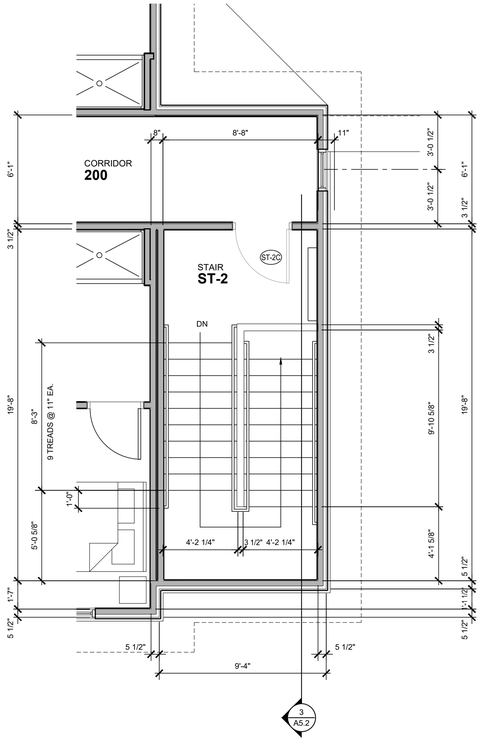
SHEET NO.
A5.1



GROUND FLOOR PARTIAL PLAN
STAIR #2

NORTH SCALE: 1/4" = 1'-0" STAIR #1 SIMILAR

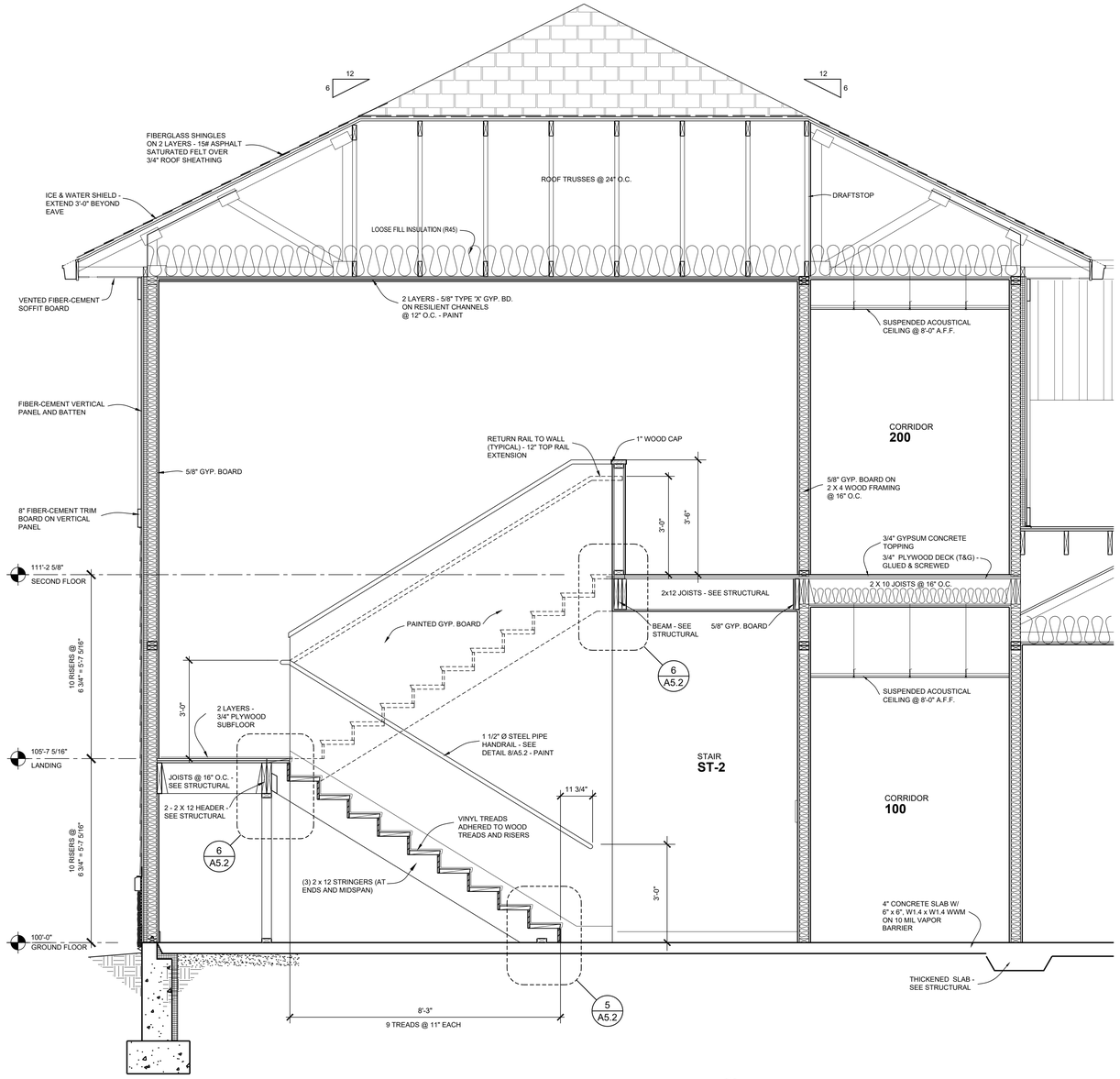
1 A5.2



UPPER FLOOR PARTIAL PLAN
STAIR #2

NORTH SCALE: 1/4" = 1'-0" STAIR #1 SIMILAR

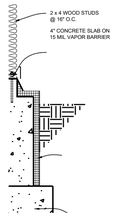
2 A5.2

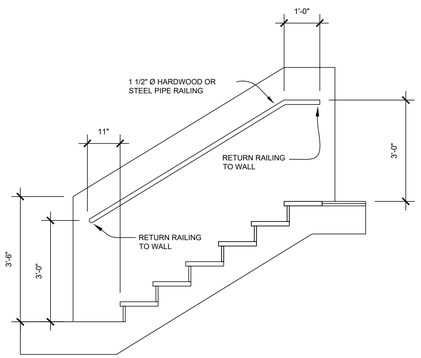


STAIR # 1 SECTION

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

3 A5.2

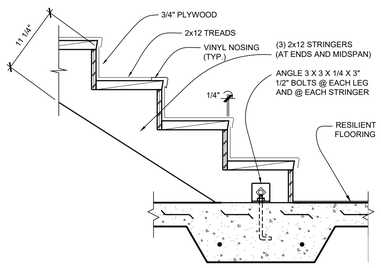




TYPICAL STAIR RAILING HEIGHTS

NOT TO SCALE

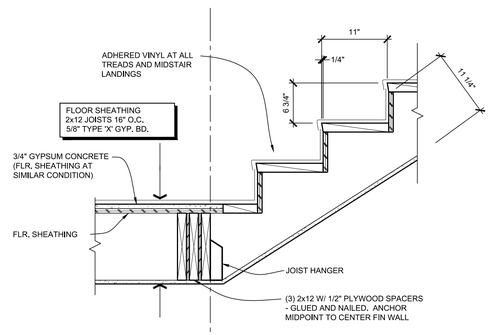
4 A5.1



STAIR DETAIL

SCALE: 1" = 1'-0"

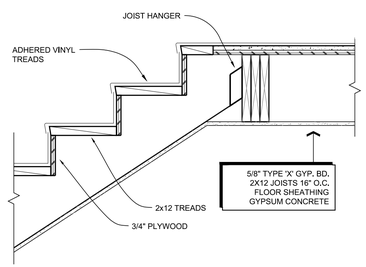
5 A5.2



STAIR DETAIL

SCALE: 1" = 1'-0"

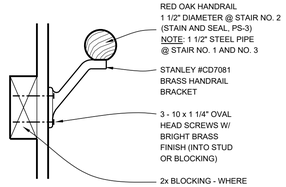
6 A5.2



STAIR DETAIL

SCALE: 1" = 1'-0"

7 A5.2



NOTE: SCREWS SPECIFIED ARE LONGER THAN THOSE PROVIDED STANDARD.

STAIR HANDRAIL DETAIL

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

8 A5.2

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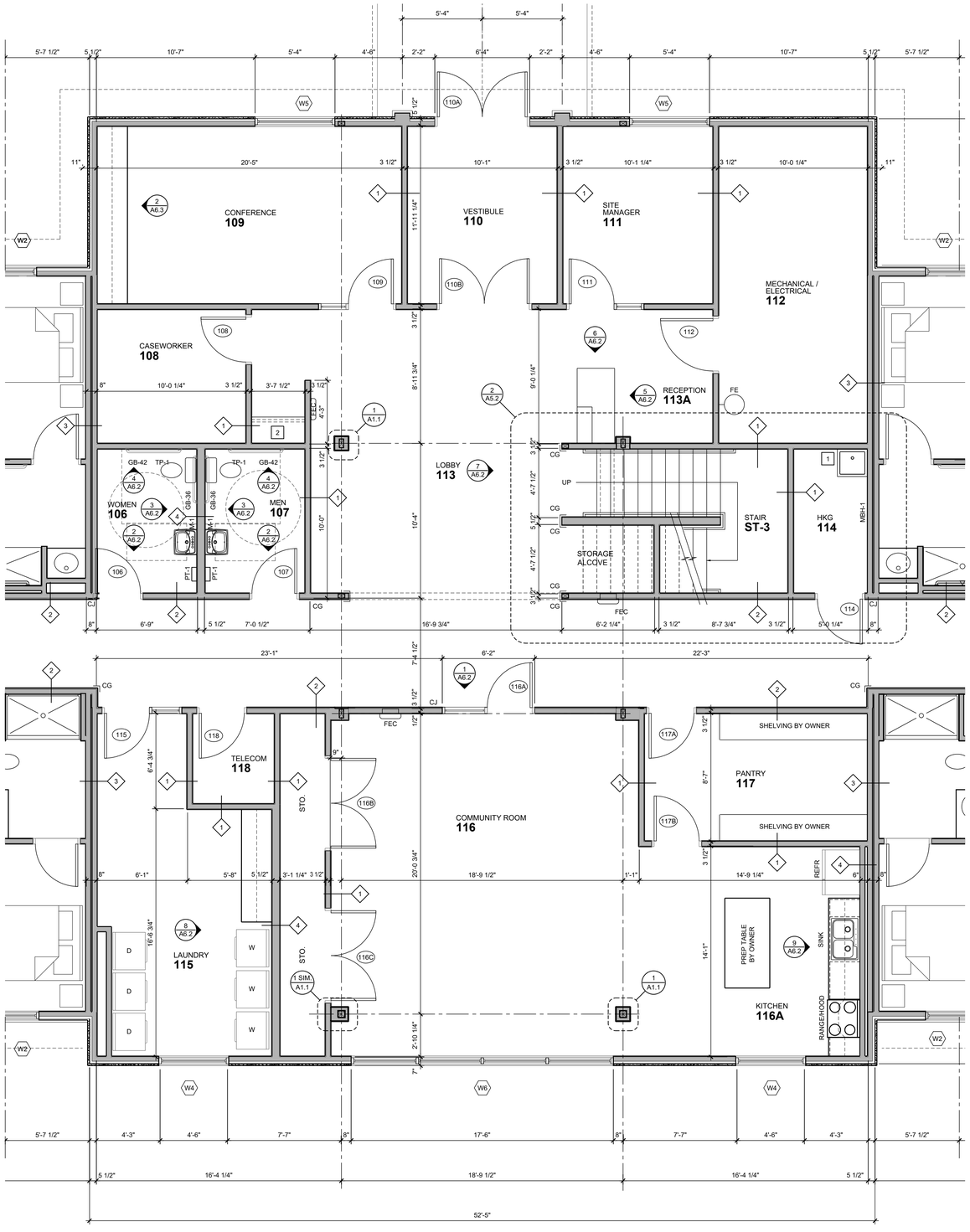
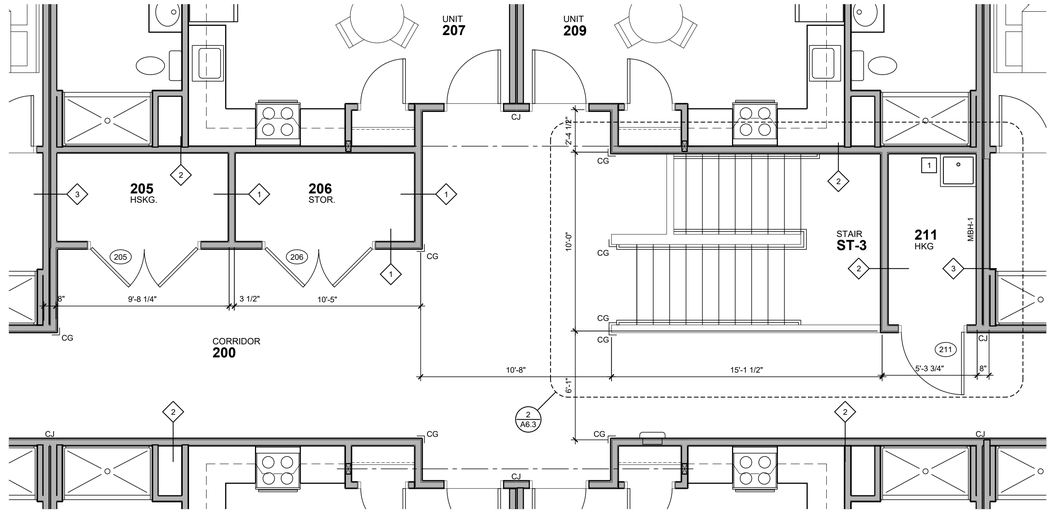


NORTH

GROUND FLOOR COMMON AREA PLAN

1/4" = 1'-0"

1 / A6.1



NORTH

UPPER FLOOR COMMON AREA PLAN

1/4" = 1'-0"

2 / A6.1

LEGEND

- WALL TAG - SEE WALL LEGEND
- DOOR TAG - SEE DOOR SCHEDULE
- FLOOR TRANSITION; SEE FINISH SCHEDULE (CT / VCT)
- WINDOW TAG - SEE WINDOW SCHEDULE
- FE — WALL MOUNTED FIRE EXTINGUISHER
- FEC — FIRE EXTINGUISHER CABINET - SEE DETAIL 1/A1.2
- CG — CORNER GUARD - SEE SPECIFICATION SECTION 10 26 13 CORNER GUARDS
- CJ — CONTROL JOINT (SEE 2/A1.1)

KEYNOTES

1. STAINLESS STEEL PANEL, 3'-0W x 4'-0H AT MOP SINK ON (2) SIDES
2. SHELF & ROD

WALL LEGEND

1. **PARTITION WALLS**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 2x4 WOOD STUDS @ 16" O.C.
   - SOUND ATTENUATION BATTS
2. **CORRIDOR WALLS (1 HOUR)**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 1/2" RESILENT CHANNELS (CORRIDOR SIDE)
   - 2x4 WOOD STUDS @ 16" O.C.
   - SOUND ATTENUATION BATTS
3. **DEMISING WALL**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 2 ROWS, 2x4 WOOD STUDS @ 16" O.C. (ALTERNATE STUDS)
   - SHEAR SHEATHING, SEE STRUCTURAL
   - SOUND ATTENUATION BATTS
4. PLUMBING **WALLS**
   - 5/8" GYPSUM BOARD (BOTH SIDES)
   - 2x6 WOOD STUDS @ 16" O.C.
   - SOUND ATTENUATION BATTS

TOILET ACCESSORY SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL #	REMARKS
GB-36 GB-42	GRAB BAR	BOBRICK	B-6806	42", 36", 24" HORIZONTAL 18" VERTICAL
-	HAT AND COAT HOOK	BOBRICK	B-6827	SATIN STAINLESS STEEL
M-1	MIRROR	BOBRICK	B-165	18" x30" WITH STAINLESS STEEL CHANNEL FRAME
PT-1	PAPER TOWEL DISPENSER	BOBRICK	B-262	SURFACE MOUNTED, STAINLESS STEEL
TP-1	TOILET TISSUE DISPENSER	BOBRICK	B-2840	WITH UTILITY SHELF
MBH-1	MOP AND BROOM HOLDER	BOBRICK	B-239	
-	TRASH RECEPTACLE			BY OWNER

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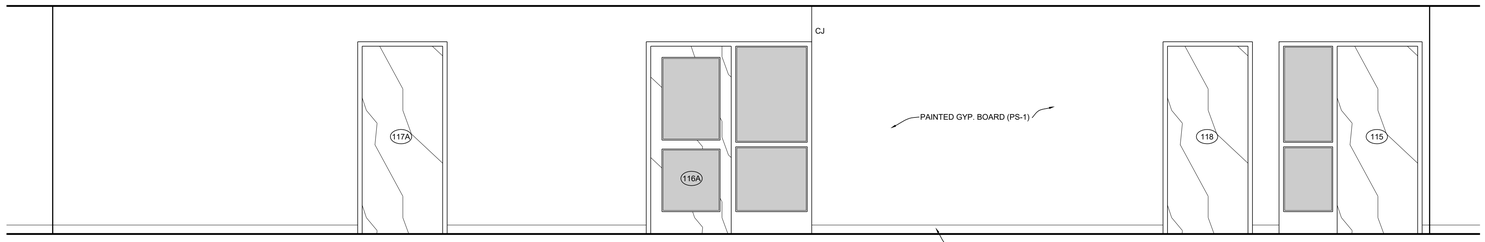
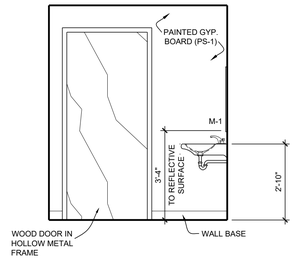
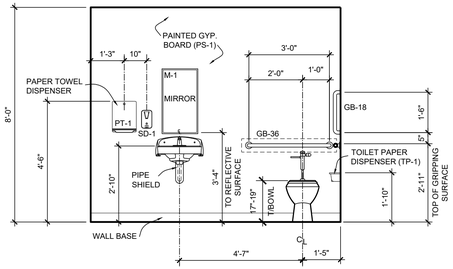


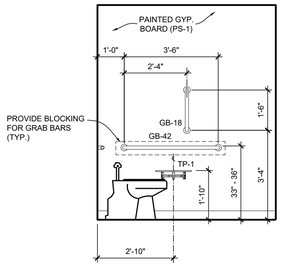
INTERIOR ELEVATION 1 A6.2
3/8" = 1'-0"



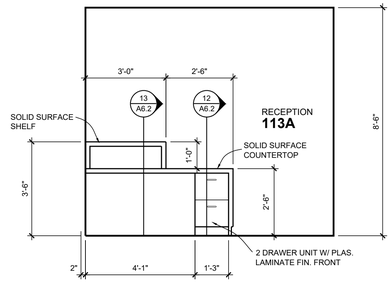
INTERIOR ELEVATION 2 A6.2
3/8" = 1'-0"



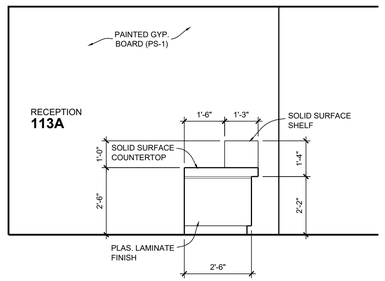
INTERIOR ELEVATION 3 A6.2
3/8" = 1'-0"



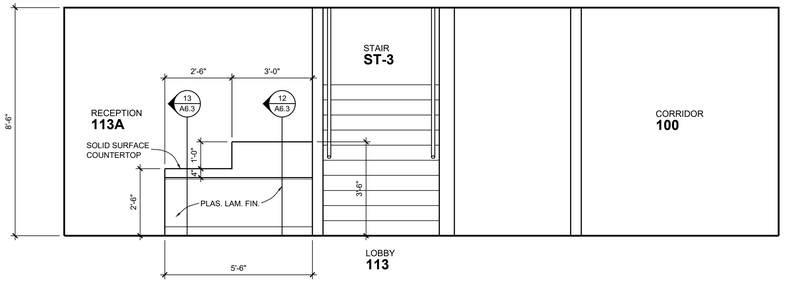
INTERIOR ELEVATION 4 A6.2
3/8" = 1'-0"



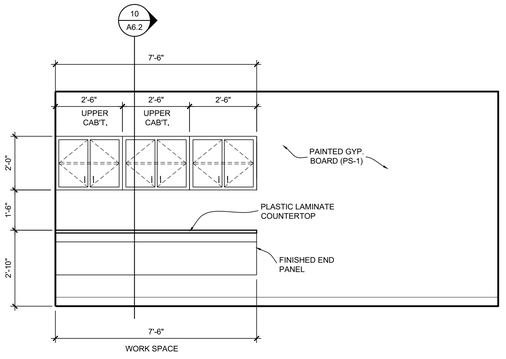
INTERIOR ELEVATION 5 A6.2
3/8" = 1'-0"



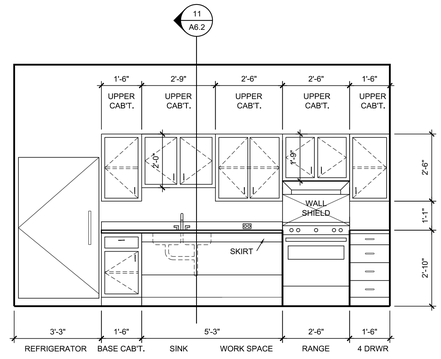
INTERIOR ELEVATION 6 A6.2
3/8" = 1'-0"



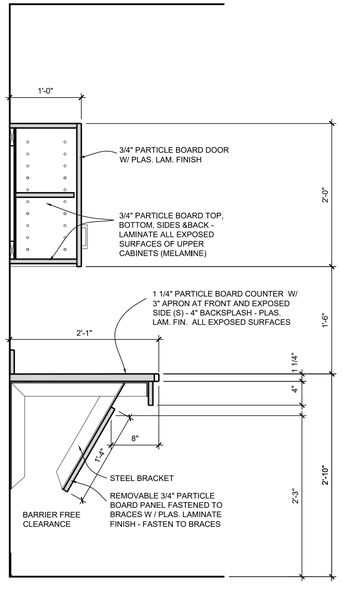
INTERIOR ELEVATION 7 A6.2
3/8" = 1'-0"



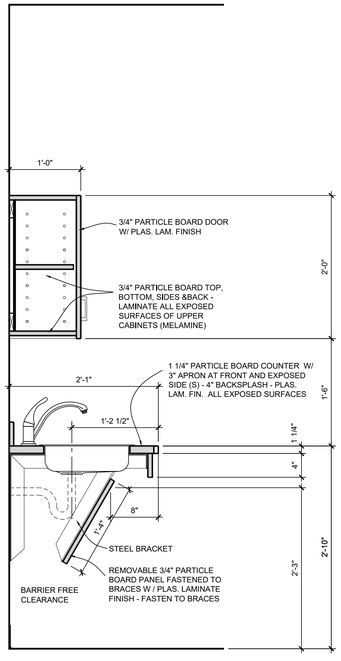
INTERIOR ELEVATION 8 A6.2
3/8" = 1'-0"



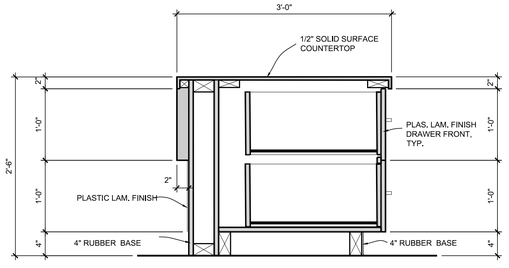
INTERIOR ELEVATION 9 A6.2
3/8" = 1'-0"



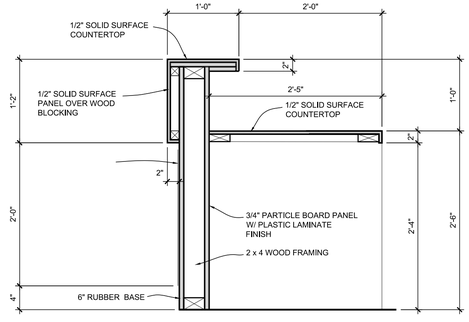
CASEWORK DETAIL 10 A6.2
1" = 1'-0"



CASEWORK DETAIL 11 A6.2
1" = 1'-0"



CASEWORK DETAIL 12 A6.2
1" = 1'-0"



CASEWORK DETAIL 13 A6.2
1" = 1'-0"

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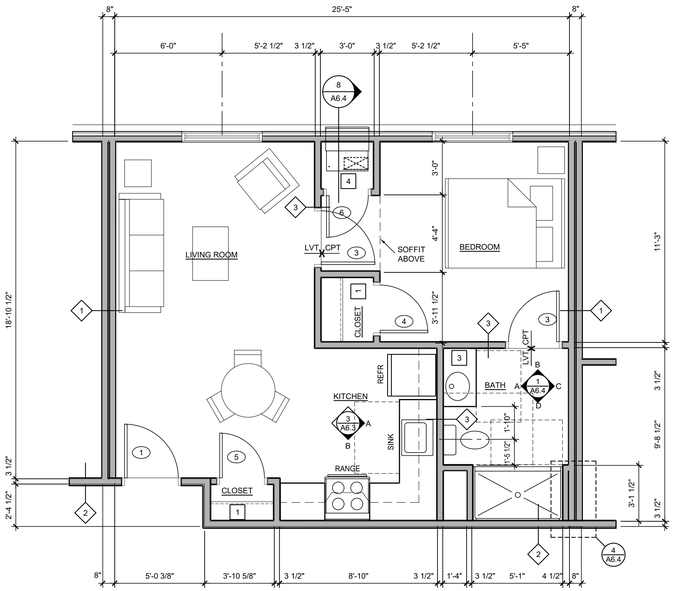
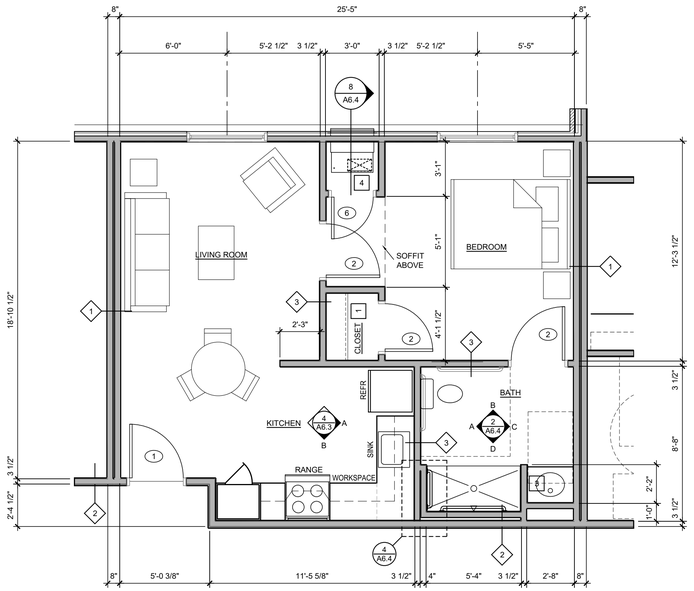




1 BR UNIT

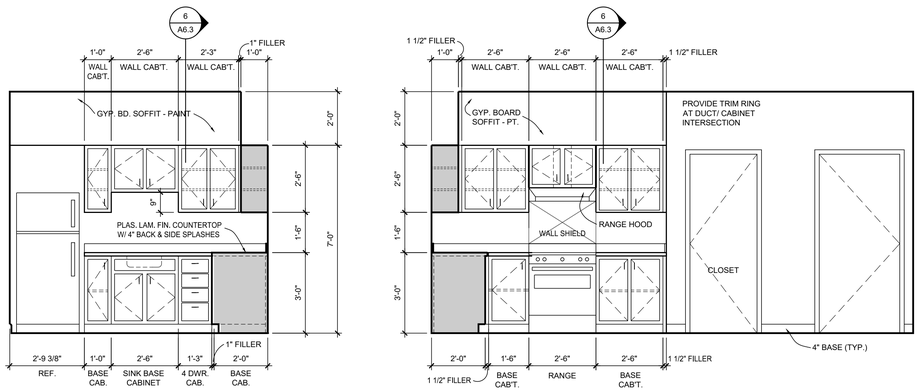
SCALE: 1/4" = 1'-0"

1 A6.3

1 BR H/C UNIT

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

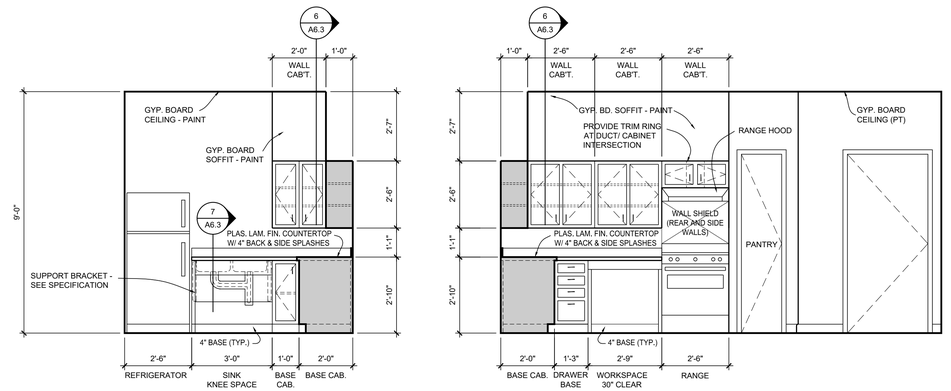
2 A6.3



1 BR UNIT KITCHEN ELEVATIONS

SCALE: 3/8" = 1'-0"

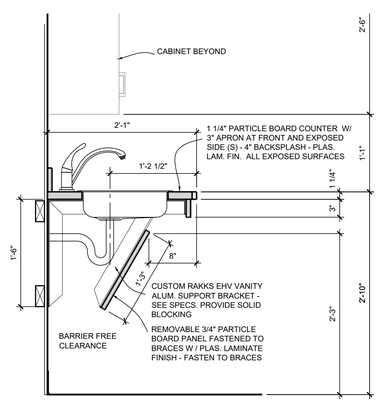
3 A6.3



1 BR H/C UNIT KITCHEN ELEVATIONS

SCALE: 3/8" = 1'-0"

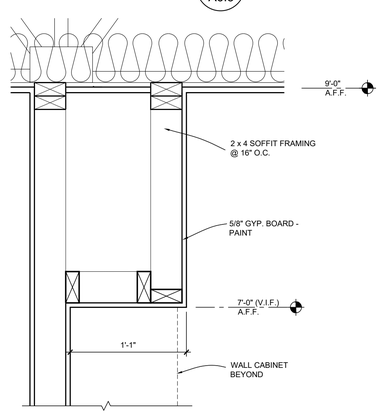
4 A6.3



KITCHEN SINK

SCALE: 1" = 1'-0"

5 A6.3



SOFFIT DETAIL

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

6 A6.3

PLAN NOTES

1. 12" DEEP SHELF AND ROD, CLOSET MADE PRODUCT NO. 7300
2. 16" DEEP LINEN SHELF, (4) PER CLOSET, CLOSET MADE PRODUCT NO. 7320
3. RECESSED MEDICINE CABINET BOBRICK 397
4. PACKAGED HVAC UNIT - SEE MECHANICAL PLAN

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HOPE AVENUE HOMES

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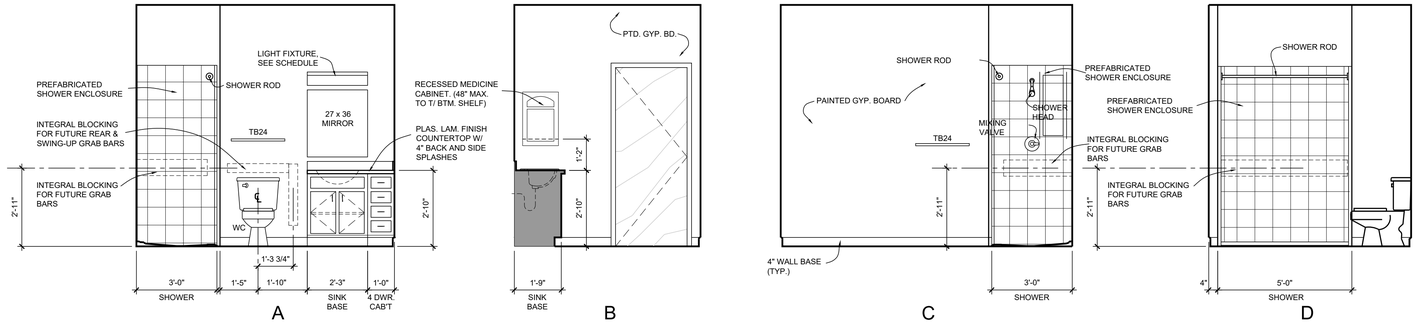
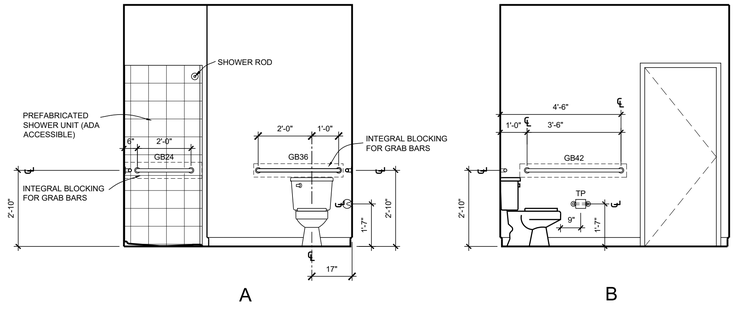
SHEET NO.
A6.3



1 BR UNIT BATHROOM ELEVATIONS

SCALE: 3/8" = 1'-0"

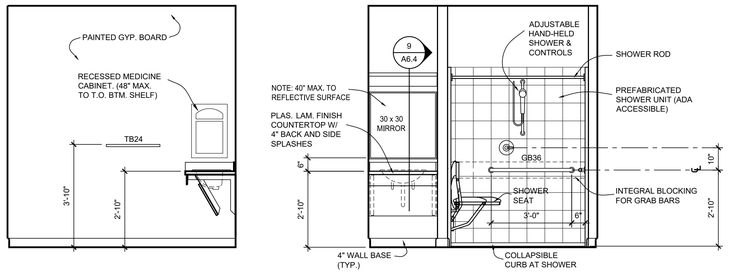
1 / A6.4



1 BR H/C UNIT BATHROOM ELEVATIONS

SCALE: 3/8" = 1'-0"

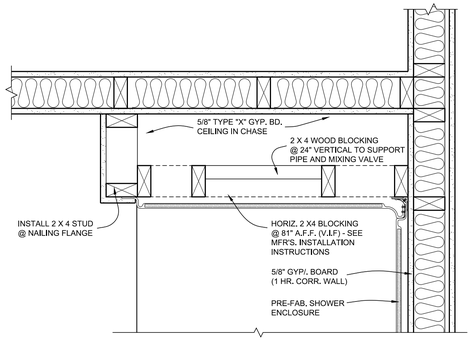
2 / A6.4



1 BR H/C UNIT BATHROOM ELEVATIONS

SCALE: 3/8" = 1'-0"

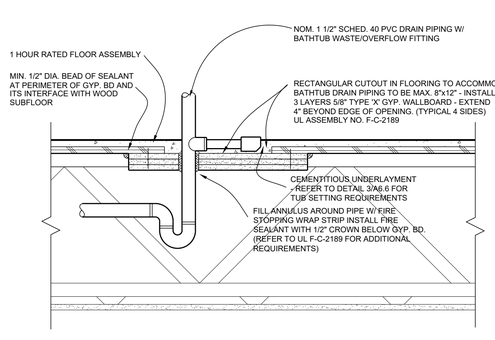
2 / A6.4



DETAIL @ SHOWER

SCALE: NOT TO SCALE

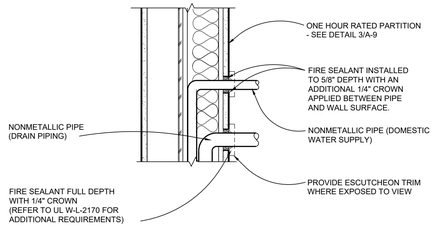
4 / A6.4



DETAIL

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

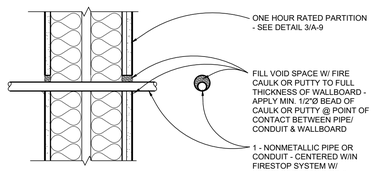
5 / A6.4



DETAIL

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

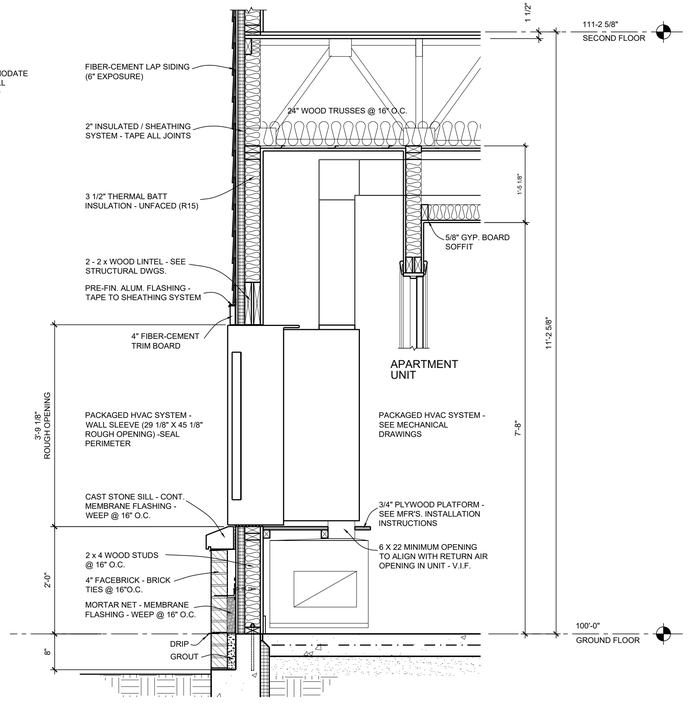
6 / A6.4



DETAIL

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

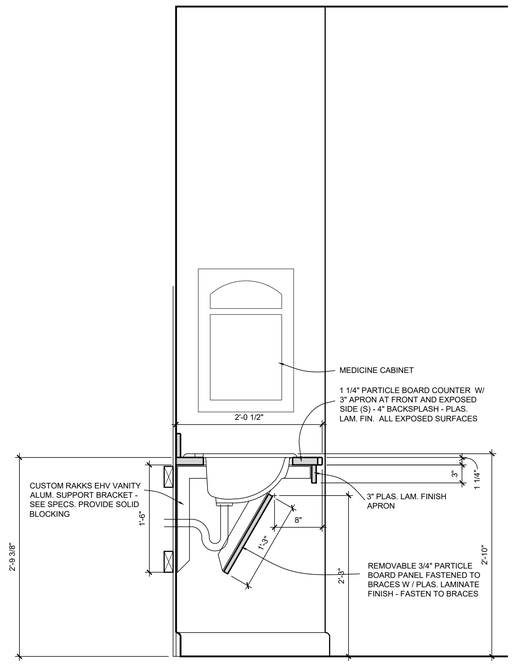
7 / A6.4



MECH. UNIT DETAIL

SCALE: 1" = 1'-0"

8 / A6.4



BATHROOM SINK

SCALE: 1" = 1'-0"

9 / A6.4

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SHEET NO.

A6.4

COMMON AREA DOOR SCHEDULE

DOOR				FRAME		HARDWARE			
TAG	SIZE	MAT.	THICK-NESS	MAT.	GLASS	SET ID	TYPE	FIRE RATING	REMARKS
100A	3'0"	HM	1 3/4"	HM	-	10	C	--	
100B	3'0"	HM	1 3/4"	HM	-	10	C	--	
106	3'6"	SC	1 3/4"	HM	-	04	D	20 MIN	
107	3'6"	SC	1 3/4"	HM	-	04	D	20 MIN	
108	3'6"	SC	1 3/4"	HM	-	06	D	20 MIN	
109	3'6"	SC	1 3/4"	HM	1/4" FIRE RATED SIDELITE	06	G	20 MIN	
110A	6'0"	AL	1 3/4"	AL	1" INSULATED/ TEMPERED	02	A	--	ENTRY DOOR W/ INSULATED TEMPERED GLASS. PROVIDE PUSH BUTTON ACCESS.
110B	6'0"	AL	1 3/4"	AL	1/4" TEMPERED	01	B	--	ENTRY DOOR W/ 1/4" TEMPERED GLASS. PROVIDE PUSH BUTTON ACCESS.
111	3'6"	SC	1 3/4"	HM	1/4" FIRE RATED SIDELITE	06	G	20 MIN	
112	3'6"	SC	1 3/4"	HM	-	08	D	20 MIN	
114	3'6"	SC	1 3/4"	HM	-	08	D	20 MIN	
115	3'6"	SC	1 3/4"	HM	1/4" FIRE RATED SIDELITE	03	G	20 MIN	
116A	3'6"	SC	1 3/4"	HM	1/4" FIRE RATED SIDELITE	11	H	20 MIN	
116B	6'6"	SC	1 3/4"	HM	-	07	F	-	
116C	6'6"	SC	1 3/4"	HM	-	07	F	-	
117A	3'6"	SC	1 3/4"	HM	-	05	D	20 MIN	
117B	3'6"	SC	1 3/4"	HM	-	05	D	-	
118	3'6"	SC	1 3/4"	HM	-	05	D	20 MIN	
ST1-A	3'6"	SC	1 3/4"	HM	1/4" FIRE RATED VISION LITE	09	E	60 MIN	FIRE RATED GLASS
ST1-B	3'0"	HM	**1 3/4"**	HM	-	10	C	--	GALVANIZED AND INSULATED
ST1-C	3'6"	SC	1 3/4"	HM	1/4" FIRE RATED VISION LITE	09	E	60 MIN	FIRE RATED GLASS
ST2-A	3'6"	SC	1 3/4"	HM	1/4" FIRE RATED VISION LITE	09	E	60 MIN	FIRE RATED GLASS
ST2-B	3'0"	HM	**1 3/4"**	HM	-	10	C	--	GALVANIZED AND INSULATED
ST2-C	3'6"	SC	1 3/4"	HM	1/4" FIRE RATED VISION LITE	09	E	60 MIN	FIRE RATED GLASS
205	6'6"	SC	1 3/4"	HM	-	07	F	--	
206	6'6"	SC	1 3/4"	HM	-	07	F	--	
211	3'6"	SC	1 3/4"	HM	-	08	D	--	

UNIT DOOR SCHEDULE

	DOOR			FRAME		HARDWARE			
TAG	SIZE	MAT.	THICK-NESS	MAT.	GLASS	SET ID	TYPE	FIRE RATING	REMARKS
1	3'6"	SC	1 3/4"	HM	-	12	1	20 MIN.	HC ACCESSIBLE
2	3'6"	HC	1 3/4"	WD	-	13	2	--	HC ACCESSIBLE, PRE-HUNG DOOR/FRAME
3	2'10"	HC	1 3/4"	WD	-	13	2	--	PRE-HUNG WOOD DOOR AND FRAME
4	2'8"	HC	1 3/4"	WD	-	14	2	--	PRE-HUNG WOOD DOOR AND FRAME
5	2'6"	HC	1 3/4"	WD	-	14	2	--	PRE-HUNG WOOD DOOR AND FRAME
6	2'6"	HC	1 3/4"	WD	-	14	2	--	PRE-HUNG WOOD DOOR AND FRAME

DOOR & FRAME NOTES

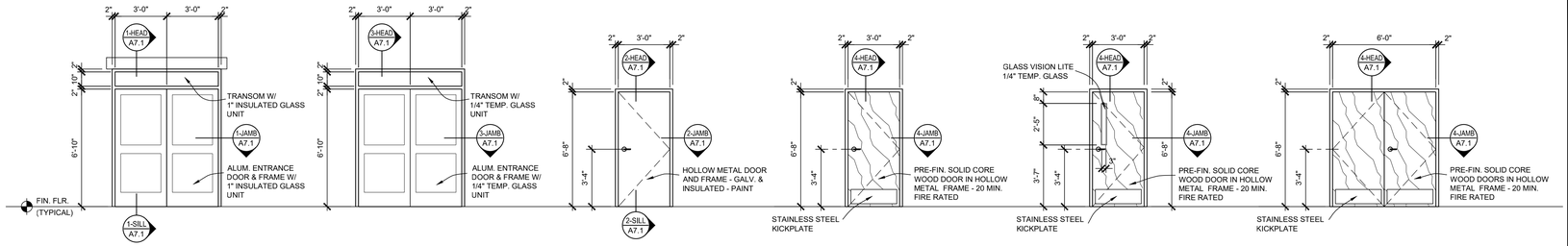
1. DOOR SIZES ARE INDICATED THUS: 3'6" (3'-0"W. x 6'-8"H). DOOR AND FRAME SIZES SHOWN ARE NOMINAL. APPROVED SHOP DRAWINGS MUST BE DISTRIBUTED BETWEEN TRADES TO COORDINATE AND VERIFY ACTUAL DOOR AND FRAME SIZES.
2. GROUT ALL NEW HOLLOW METAL JAMB FRAMES IN CONCRETE OR MASONRY WALLS.
3. HARDWARE SETS ARE NOTED IN SPECIFICATIONS. PROVIDE NEW DOOR HARDWARE AS SCHEDULED.
4. UL FRAME ANCHORS ARE REQUIRED FOR ALL DOORS AND FRAMES @ LABELED OPENINGS.
5. FOR PAIRS OF INTERIOR DOORS: STRICTLY MAINTAIN MAXIMUM 1/8 INCH SPACE BETWEEN MEETING EDGES OF DOORS WITH OR WITHOUT METAL CHANNEL EDGES.
6. CLOSERS SHALL BE THE LAST HARDWARE ITEMS INSTALLED. CONTRACTOR SHALL VERIFY MAXIMUM DEGREE OF DOOR SWING THAT FIELD CONDITIONS WILL ALLOW AND INSTALL CLOSERS ACCORDINGLY, REGARDLESS OF SWING SHOWN ON DRAWINGS.
7. ALL DIMENSIONS INDICATED ARE NOMINAL. FIELD VERIFY DIMENSIONS OF ALL NEW AND EXISTING OPENINGS PRIOR TO FABRICATION OF DOORS OR FRAMES.
8. REFER TO FLOOR PLANS FOR DIRECTION OF DOOR SWINGS.
9. PAINT HOLLOW METAL DOORS AND FRAMES. ALSO PAINT BORROWED LITE FRAMING, ETC.
10. PAINT APARTMENT DOORS, FRAMES, AND TRIM. INSTALL WOOD TRIM @ APARTMENT ENTRANCE DOORS, CORRIDOR SIDE ONLY.

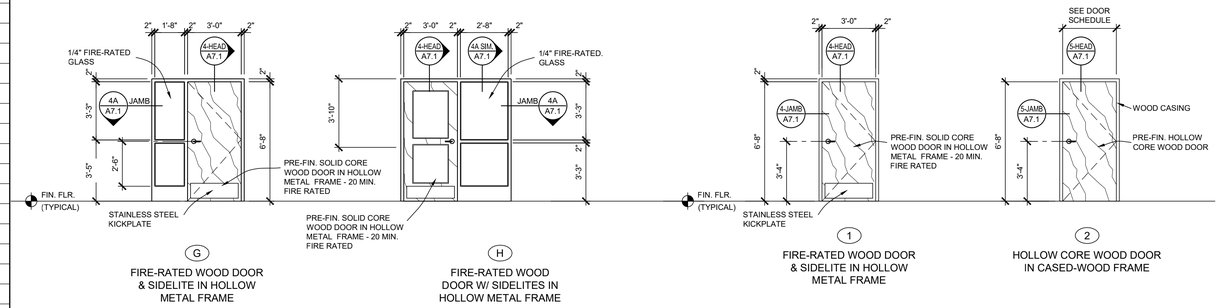
DOOR SCHEDULE LEGEND

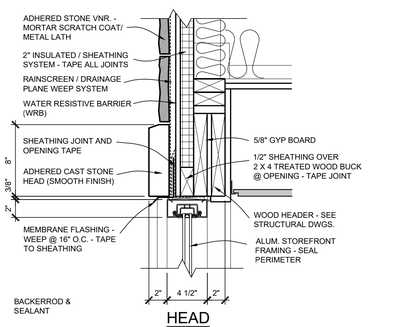
AL	- ALUMINUM
BF	- BI-FOLD
BP	- BI-PASS
EX	- EXISTING
FH	- FLUSH
FL	- FULL LITE
HC	- WOOD HOLLOW CORE
HL	- HALF LITE
HM	- HOLLOW METAL
MI	- HOLLOW METAL INSULATED
NL	- NARROW LITE
SC	- WOOD SOLID CORE
WD	- WOOD

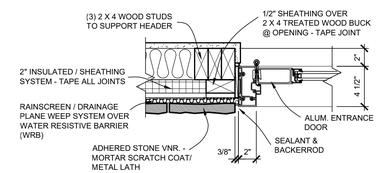
DOOR TYPES

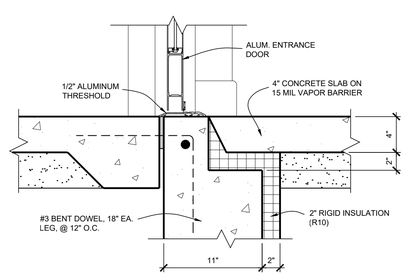
NOT TO SCALE

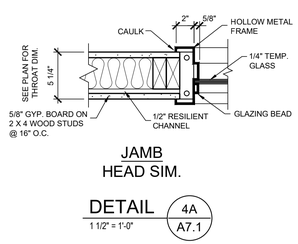












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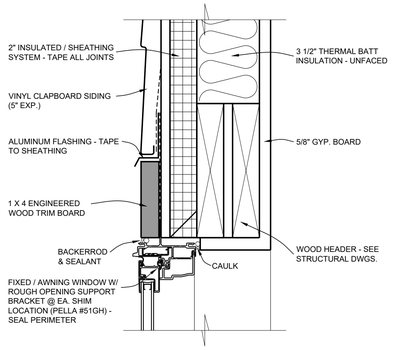

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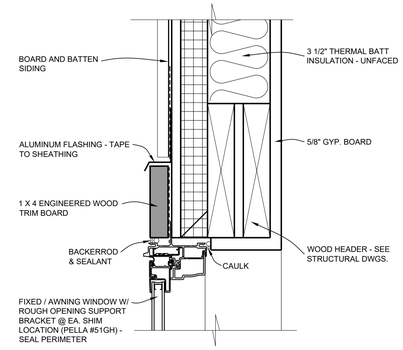

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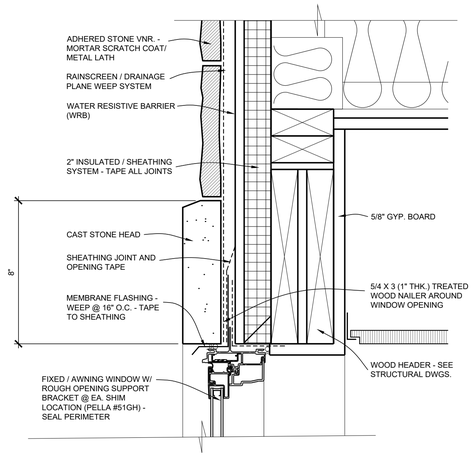

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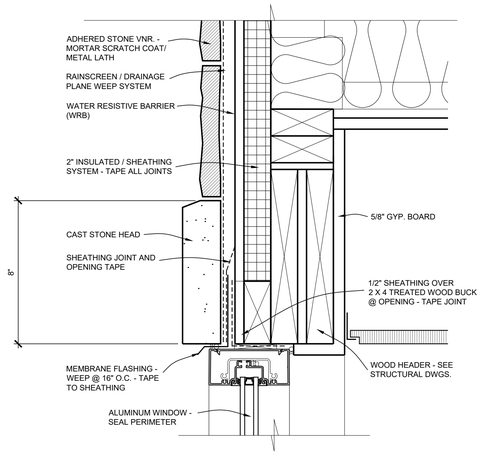

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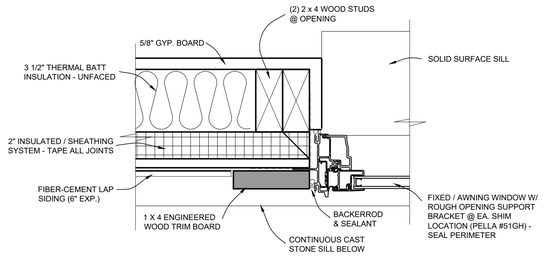
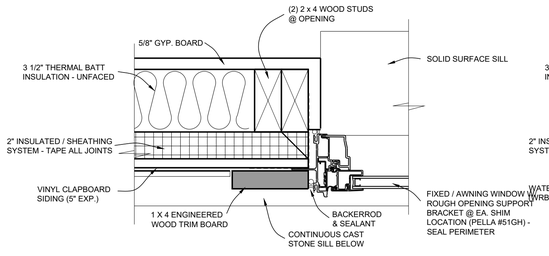


JAMB



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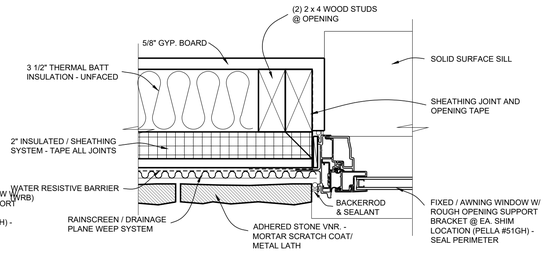

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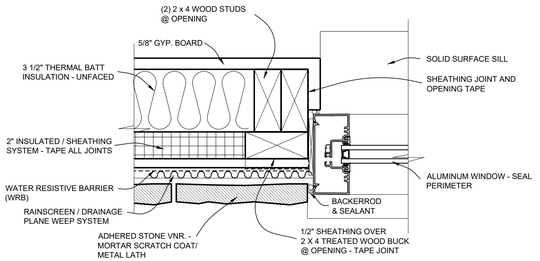

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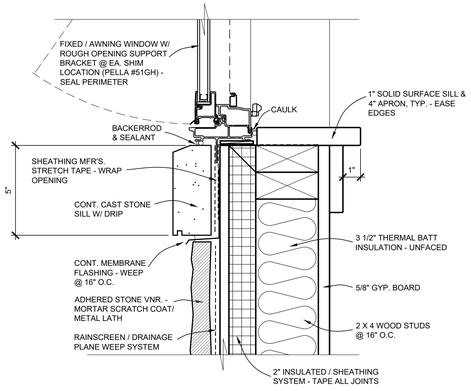
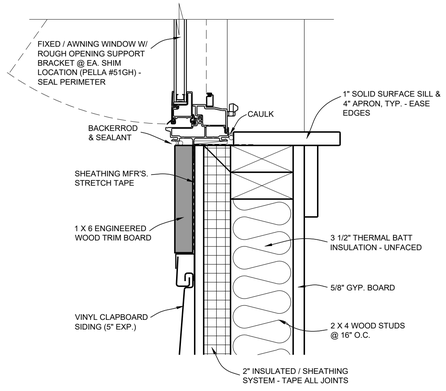


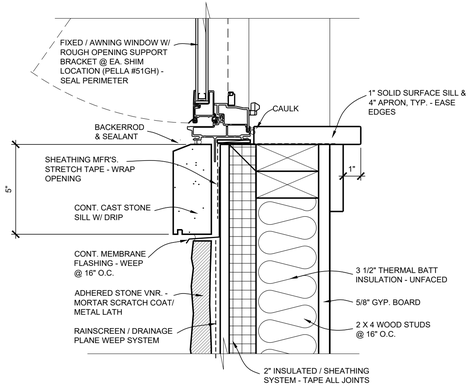
SILL

DETAIL 1 / A7.2
3" = 1'-0"



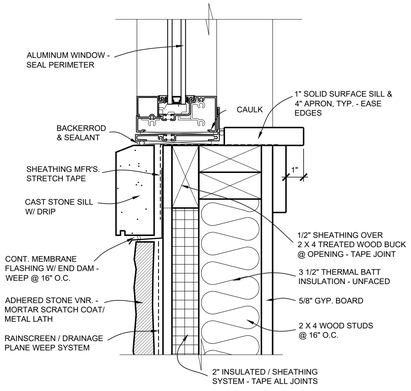
SILL

DETAIL 2 / A7.2
3" = 1'-0"



SILL

DETAIL 3 / A7.2
3" = 1'-0"



SILL

DETAIL 4 / A7.2
3" = 1'-0"

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COMMON AREA ROOM FINISH SCHEDULE

NO.	ROOM NAME	FLOOR	BASE	WALL FINISH				CEILING	CEILING HEIGHT	REMARKS
				NORTH	SOUTH	EAST	WEST			
	COMMON AREAS GROUND FLOOR									
100	CORRIDOR	LVT-1	VB-1	--	PS-1	PS-1	PS-1	ACT-1/ GYP	7'-8" / 8'-0"	
106	WOMEN'S RESTROOM	VCT-1	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1	8'-0"	
107	MEN'S RESTROOM	VCT-1	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1	8'-0"	
108	CASEWORKER	CPT-2	VB-1	PS-1	PS-1	PS-1	PS-1		8'-0"	
109	CONFERENCE ROOM	CPT-2	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1	8'-0"	
110	VESTIBULE	CPT-1	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1/GYP	7'-8" / 8'-0"	
111	SITE MANAGER	CPT-2	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1	8'-0"	
112	MECHANICAL	SC / PS-6	VB-1	PS-1	PS-1	PS-1	PS-1	GYP	9'-0"	
113	LOBBY	LVT-1	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1	8'-6"	
113A	RECEPTION	LVT-1	VB-1	--	PS-1	PS-1	--	ACT-1	8'-6"	
114	HOUSEKEEPING	VCT-1	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1	8'-0"	
115	LAUNDRY	VCT-1	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1	8'-0"	
116	COMMUNITY ROOM	LVT-1	VB-1	PS-1	PS-1	PS-1	PS-1	GYP	9'-0"	
116A	STORAGE	LVT-1	VB-1	--	--	--	PS-1	GYP	9'-0"	
117	FOOD PANTRY	VCT-1	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1	8'-0"	
118	TELECOM	SC/PS-6	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1	8'-0"	
	COMMON AREAS UPPER FLOOR									
200	CORRIDOR	LVT-1	VB-1	PS-1	PS-1	PS-1	PS-1	ACT-1 / GYP	7'-8" / 8'-0"	
222	HOUSEKEEPING	VCT-1	VB-1	PS-2	PS-2	PS-2	PS-2	PS-3	9'-0"	
210	STORAGE	VCT-1	VB-1	PS-2	PS-2	PS-2	PS-2	PS-3	9'-0"	
222	HOUSEKEEPING	VCT-1	VB-1	PS-2	PS-2	PS-2	PS-2	PS-3	9'-0"	
	COMMON AREAS STAIRS									
ST-1	STAIR 1	VCT-1	VB-1	PS-2	PS-2	PS-2	PS-2	PS-3	--	STAIR HANDRAIL, PS-4, PROVIDE VINYL STAIR NOSINGS AT EACH TREAD AND EDGE OF LANDING
ST-2	STAIR 2	VCT-1	VB-1	PS-2	PS-2	PS-2	PS-2	ACT-1	--	STAIR HANDRAIL, PS-4, PROVIDE VINYL STAIR NOSINGS AT EACH TREAD AND EDGE OF LANDING
ST-3	STAIR 3	VCT-1	VB-1	PS-2	PS-2	PS-2	PS-2	PS-3	--	STAIR HANDRAIL, PS-4, PROVIDE VINYL STAIR NOSINGS AT EACH TREAD AND EDGE OF LANDING

APARTMENT UNIT FINISH SCHEDULE

ROOM NAME	FLOOR	BASE	WALLS	CEILING	REMARKS
KITCHEN	LVT-1	VB-1	PS-1	PS-3	
LIVING ROOM / BEDROOM TYPICAL UNIT	CPT-1	VB-1	PS-1	PS-3	
LIVING ROOM / BEDROOM HC UNIT	LVT-1	VB-1	PS-1	PS-3	
BATH - TYPICAL UNIT	LVT-1	VB-1	PS-2	PS-3	INSTALL WATER RESISTANT GYPSUM BOARD @ SHOWER/TUB
BATH - HC UNIT	LVT-1	VB-1	PS-2	PS-3	INSTALL WATER RESISTANT GYPSUM BOARD @ SHOWER
CLOSETS	LVT-1	VB-1	PS-1	PS-3	
ENTRY	LVT-1	VB-1	PS-1	PS-3	

ROOM FINISH NOTES

1. PROVIDE ADA COMPLIANT VINYL TRANSITION STRIPS WHERE DISSIMILAR FLOORING MATERIALS ABUT. SEE SPECIFICATIONS.
2. FLOOR FINISH TRANSITIONS SHALL OCCUR BELOW CENTERLINE OF DOORS (UNLESS NOTED OTHERWISE).
3. EXTEND FLOOR AND WALL BASE AT ALL CABINET TOE SPACES, END PANELS, APPLIANCE RECESSES, KNEE SPACES, AND REMOVABLE CABINETS (UNLESS NOTED OTHERWISE).
4. PAINT EXPOSED COLUMNS, PIPES, DUCTWORK, BREACHING, CONDUIT, INSULATED PIPES, CONDUIT HANGERS, SUPPORTS, BRACING, MECHANICAL CABINETS, ETC., WHICH OCCUR IN SPACES SCHEDULED TO BE PAINTED IN PART OR WHOLE; PS-4
5. SEE REFLECTED CEILING PLANS FOR ACT AND GYPSUM BOARD BULKHEADS AND SOFFITS. PAINT ALL GYPSUM BOARD BULKHEADS AND SOFFITS; PS-1.
6. INSTALL WINDOW TREATMENTS AT ALL WINDOWS IN COMMON AREAS. SEE SPECIFICATIONS.

LEGEND

ACT	ACOUSTICAL CEILING TILE (2X4)	SPEC SECTION 09 51 00
CPT	CARPET (BROADLOOM)	SPEC SECTION 09 68 00
GYP	GYPSUM DRYWALL	SPEC SECTION 09 21 16
PS	PAINT SYSTEM	SPEC SECTION 09 91 00
LVT	LUXURY VINYL TILE	
SC	SEALED CONCRETE	SPEC SECTION 03
VB	VINYL BASE (4")	SPEC SECTION 09 65 00
VCT	VINYL COMPOSITE TILE (12X12)	SPEC SECTION 09 65 00
VP	VINYL PLANK (6X48)	SPEC SECTION 09 65 00

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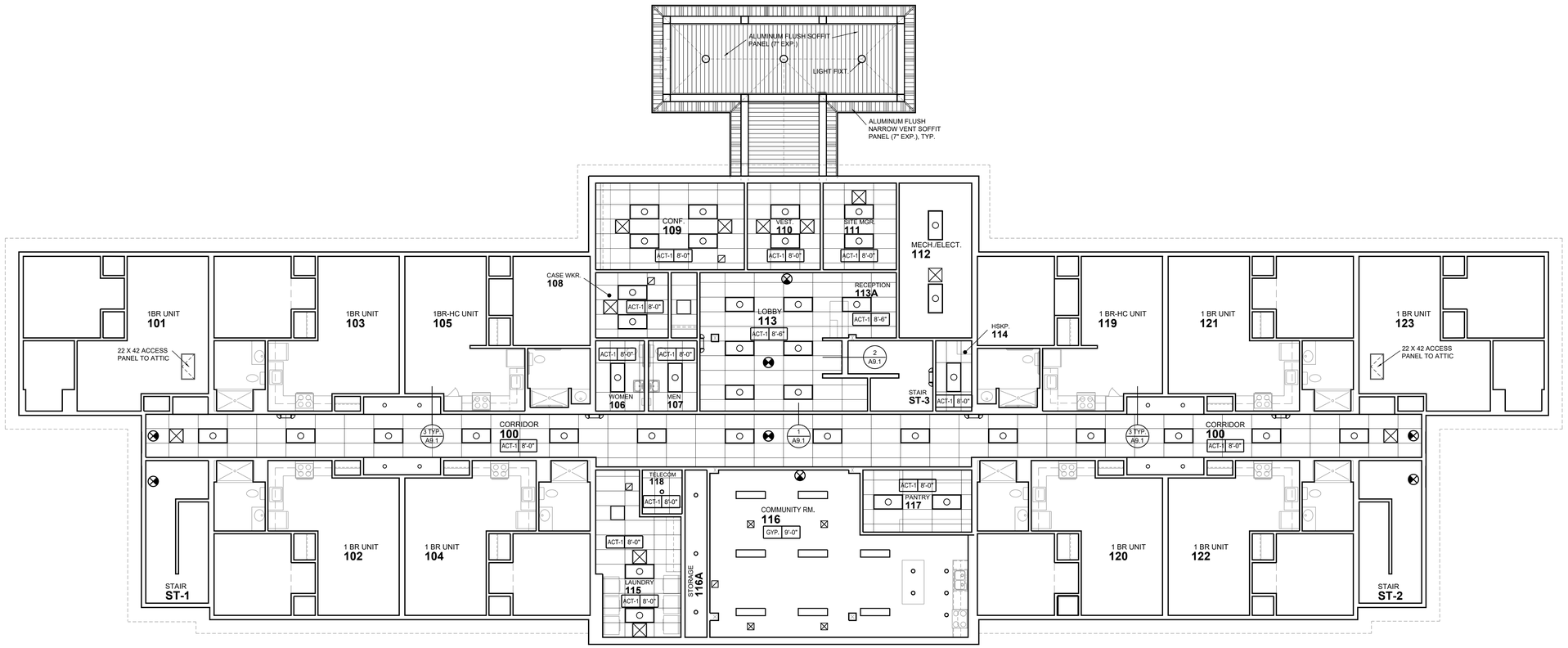
A8.1



LEGEND

CEILING MATERIAL / CEILING HEIGHT — ACT-1 | 8'-6"

2 X 4 RECESSED LED LIGHT FIXTURE

6" RECESSED DOWNLIGHT

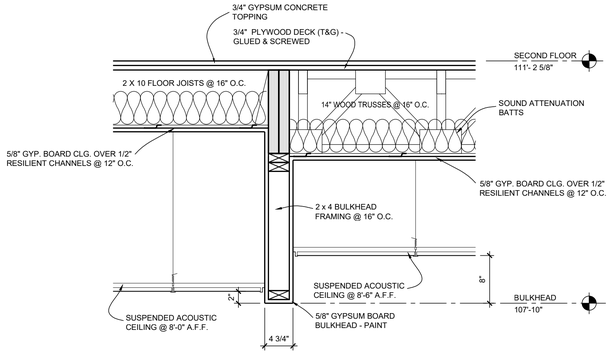
EXIT LIGHT

EMERGENCY LIGHT

NORTH

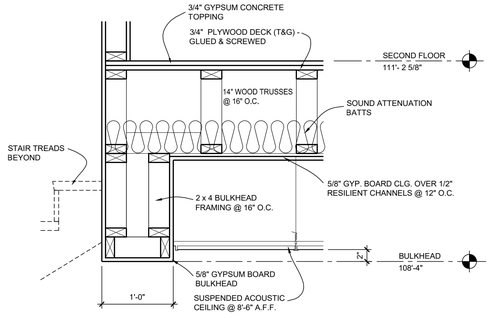
GROUND FLOOR PLAN

SCALE: 1/8" = 1'-0"



DETAIL 1 / A9.1

1" = 1'-0"



DETAIL 2 / A9.1

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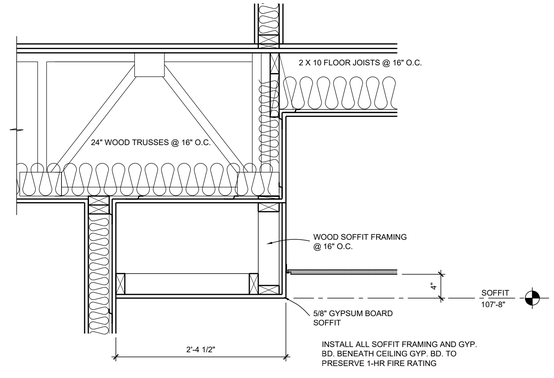

DETAIL 3 / A9.1

1" = 1'-0"

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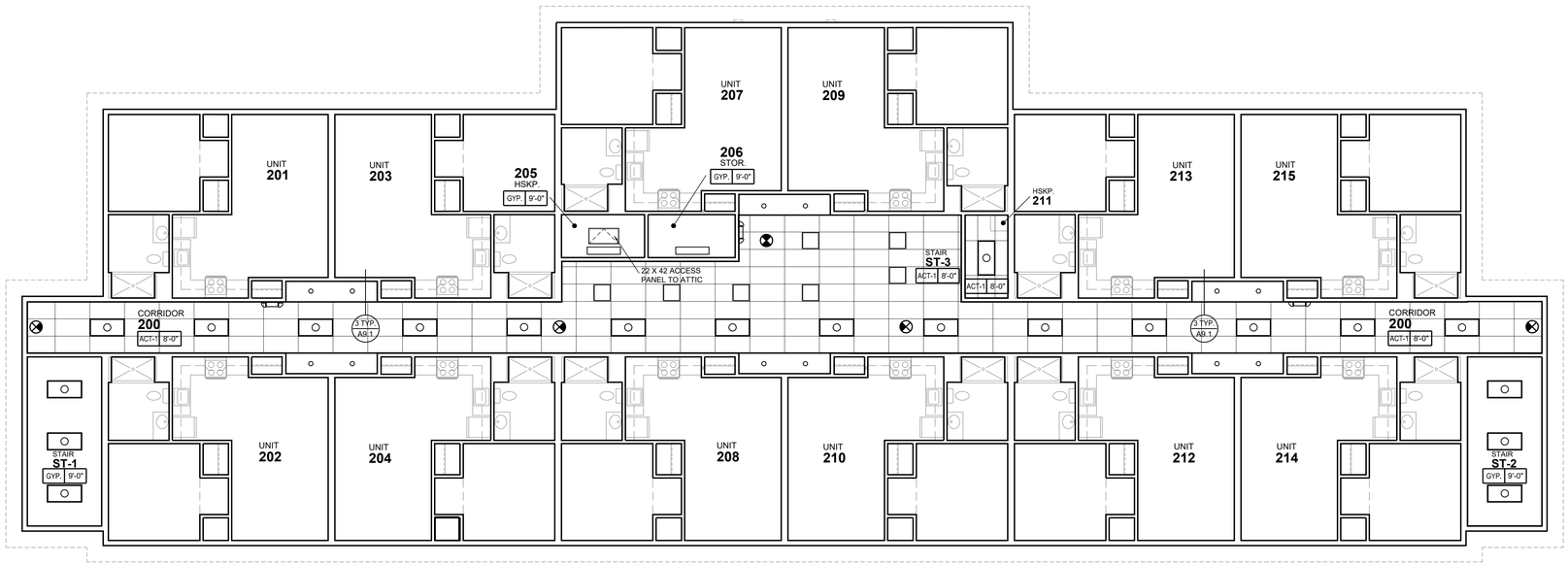

NORTH

UPPER FLOOR PLAN

SCALE: 1/8" = 1'-0"

LEGEND

CEILING MATERIAL / CEILING HEIGHT — ACT-1 | 8'-6"

2 X 4 RECESSED LED LIGHT FIXTURE

6" RECESSED DOWNLIGHT

EXIT LIGHT

EMERGENCY LIGHT

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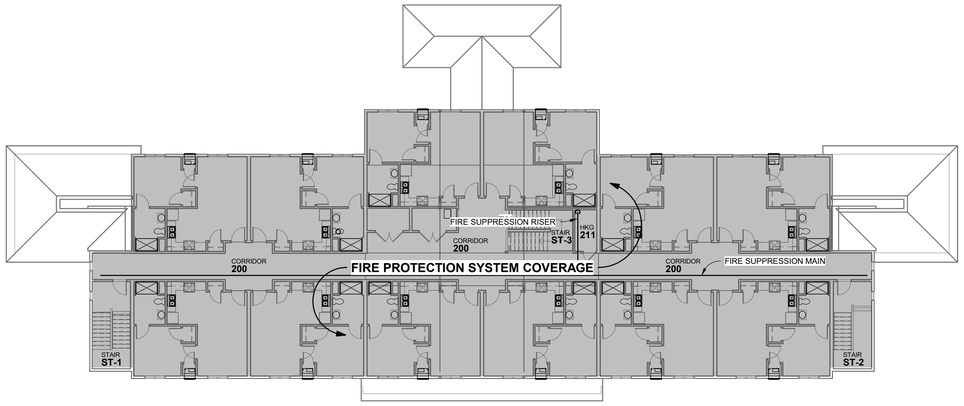
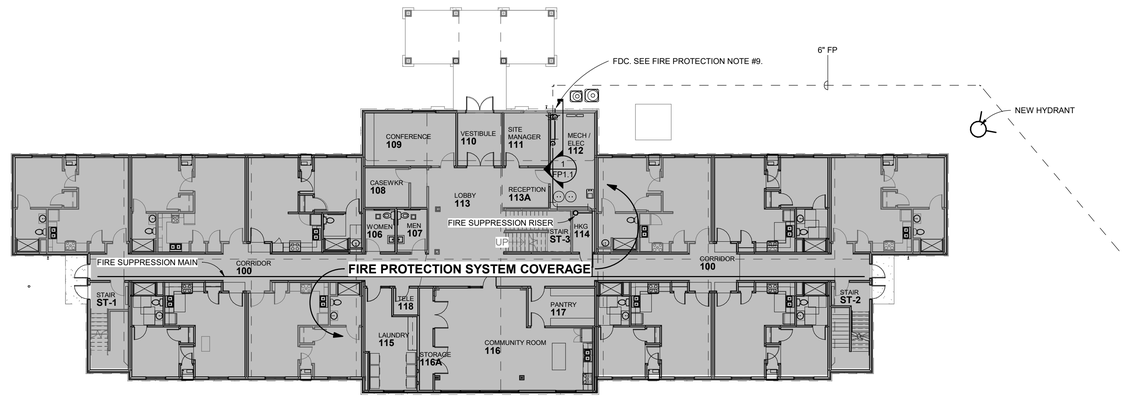
A9.2



2ND FLOOR FIRE SUPRESSION SYSTEM

NORTH

SCALE: 1/16" = 1'-0"



GROUND FLOOR FIRE SUPRESSION SYSTEM

NORTH

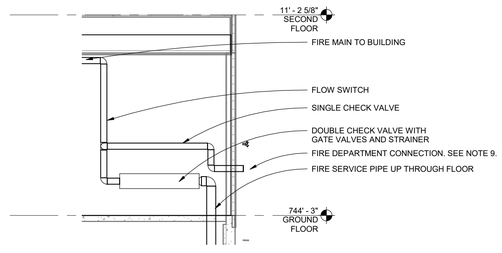
SCALE: 1/16" = 1'-0"

FIRE PROTECTION HATCH LEGEND

SHADED: NFPA 13R

FIRE PROTECTION NOTES

1. SEE SPECIFICATIONS FOR DETAILED REQUIREMENTS
2. ALL WORK AND MATERIALS SHALL BE IN COMPLIANCE WITH STATE AND LOCAL CODE REQUIREMENTS. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTION FEES AND STATE PLAN REVIEW FEES AS NECESSARY FOR CONSTRUCTION. PRIOR TO SUBMITTAL TO THE STATE, SUBMIT COMPLETE SYSTEM DRAWINGS SHOWING ALL CEILING SUPPORTED MECHANICAL AND ELECTRICAL ITEMS TO THE ARCHITECT FOR COMMENT. SUBMIT SPRINKLER HEAD PRODUCT INFORMATION FOR REVIEW AND APPROVAL.
3. THE BUILDING SHALL BE PROTECTED WITH A WET PIPE FIRE PROTECTION SYSTEM IN ACCORDANCE WITH NFPA 13R. ALL FIRE PROTECTION SYSTEMS AND COMPONENTS SHALL BE IN COMPLIANCE WITH NFPA SECTIONS 13 AND 14, AS WELL AS LOCAL FIRE PREVENTION BUREAU STANDARDS. LOCATIONS OF DRAINS TO BE REMOTE LOCATED FROM THE RISER SHALL BE APPROVED BY THE ARCHITECT AND BE ACCESSIBLE WITHIN THE BUILDING.
4. SPRINKLER HEADS IN ACOUSTICAL CEILINGS AND IN GYPSUM BOARD CEILINGS TO BE VIKING CONCEALED PENDANT HEADS. UTILIZE MODEL FSC-25U FLEXIBLE SPRINKLER CONNECTION SUPPORTED FROM CEILING GRID.
5. FIRE PROTECTION SPRINKLER COVERAGE SHALL BE PROVIDED IN ALL SPACES WITHIN UNIT. INCLUDING RESTROOMS REGARDLESS OF SIZE, EXCEPT FOR ELEVATOR EQUIPMENT ROOM. SPRINKLER COVERAGE SHALL BE PROVIDED ON THE ROOF DECK.
6. MAXIMUM SPRINKLER HEAD SPACING SHALL BE BASED ON SPACE HAZARD LEVEL AND NFPA 13 TABLES 8.8.2.1.2 AND 8.9.2.2.1
7. CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS FOR THE BUILDING SPRINKLER SYSTEM. THE CONTRACTOR IN COORDINATION WITH LOCAL AUTHORITIES SHALL FLOW TEST THE WATER SUPPLY SYSTEM TO ASCERTAIN ACTUAL STATIC, RESIDUAL AND FLOW PRESSURES AND QUANTITIES TO VERIFY EXISTING CONDITIONS, PRIOR TO ORDERING ANY EQUIPMENT OR SUBMITTING FINAL CALCULATIONS. RISER AND PIPE SIZING TO BE DETERMINED BY THE SPRINKLER SYSTEM DESIGNER BASED UPON THE WATER PRESSURE AVAILABLE AFTER THE BACKFLOW PREVENTION DEVICE AND VALVES. SPRINKLER SYSTEM DESIGNER TO SUBMIT DRAWINGS AND CALCULATIONS FOR STATE REVIEW.
8. SIAMESE CONNECTION SHALL BE GUARDIAN FIRE EQUIPMENT, INC. MODEL 6114. THREAD TO COMPLY WITH LOCAL FIRE DEPARTMENT STANDARDS. FINAL LOCATION(S) TO BE CONFIRMED WITH THE FIRE AUTHORITIES HAVING JURISDICTION. PROVIDE AUTOMATIC CHECK VALVE WITH DRAIN TO OUTDOORS.
9. CONTRACTOR SHALL DO ALL NECESSARY CUTTING AND PATCHING, AS WELL AS ALL NECESSARY PIPE AND EQUIPMENT SUPPORTS.
10. PRESSURE TEST ENTIRE SYSTEM AND REPAIR ANY LEAKS. CONTRACTOR TO BE RESPONSIBLE FOR ANY DAMAGE TO PROPERTY AND PERSONNEL CAUSED BY FAULTY INSTALLATION OR MATERIALS.
11. THE SPRINKLER CONTRACTOR SHALL FURNISH AND INSTALL AN APPROVED DOUBLE CHECK VALVE ASSEMBLY, AS REQUIRED BY STATE CODE AND LOCAL RULES.
12. THE SPRINKLER CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND MAKE ADJUSTMENTS TO NUMBER OF HEADS AND FINISHED CEILING MATERIAL TYPES AS NECESSARY TO ENSURE THAT HEADS ARE PLACED IN CENTER OF SUSPENDED ACOUSTICAL CEILING TILES. HE SHALL ALSO COORDINATE HIS FINAL SHOP DRAWINGS WITH THE OTHER TRADES TO AVOID CONFLICT BETWEEN HIS PIPING AND THE PIPING, CONDUITS, AND DUCTWORK OF THE OTHER RESPECTIVE CONTRACTORS ON THIS PROJECT.
13. THE SPRINKLER CONTRACTOR SHALL FIRE STOP ALL PENETRATIONS THROUGH RATED WALLS AND FLOORS.
14. IT IS THE DESIGN INTENT THAT THE FIRE PROTECTION SYSTEM BE BY DELEGATED DESIGN. SYSTEM AS SHOWN IS SCHEMATIC ONLY. CONTRACTOR TO FULLY DESIGN SYSTEM AND SUBMIT ALL REQUIRED DRAWINGS AND HYDRAULIC CALCULATIONS FOR STATE AND LOCAL REVIEW.
15. MAIN AND RISERS SHOWN FOR PLANNED ROUTE AND COORDINATION, CONTRACTOR TO CONFIRM ROUTE AND SIZE.



FIRE SERVICE ELEVATION

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

1
FP1.1

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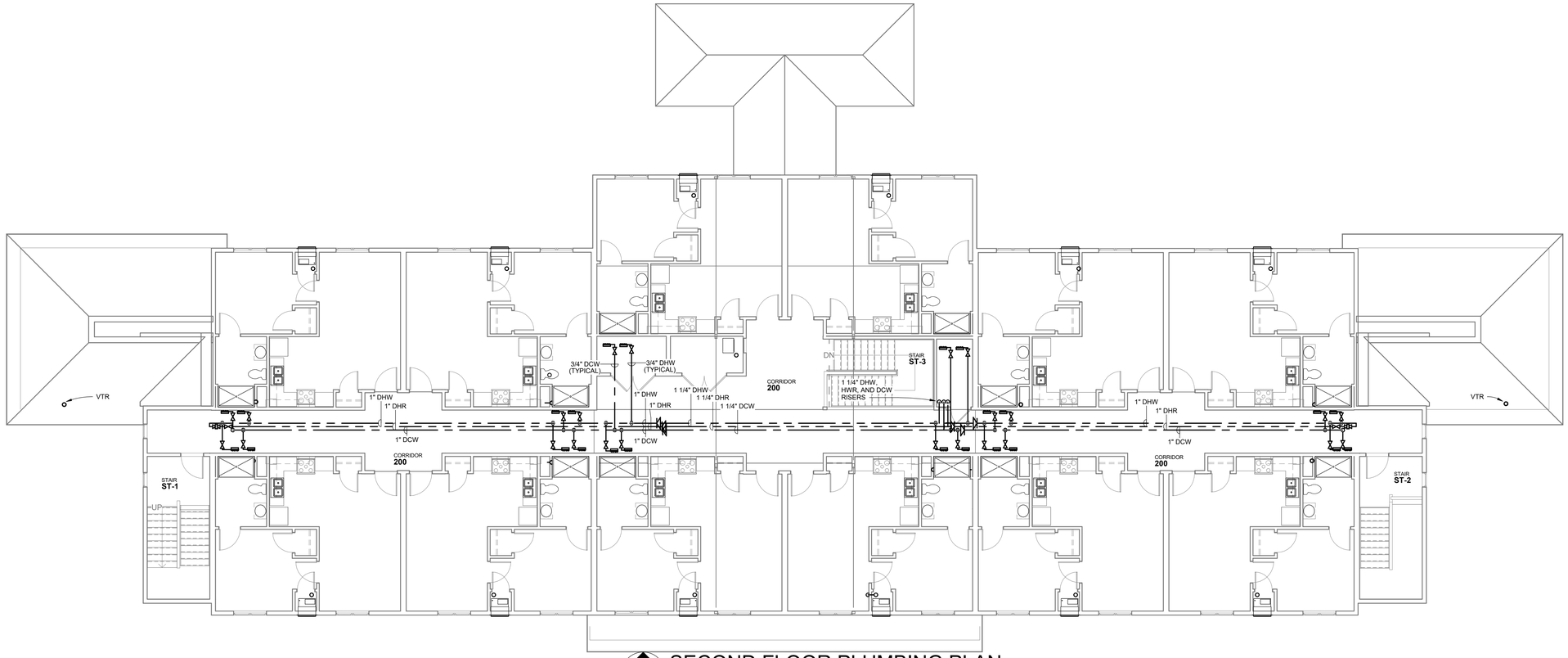
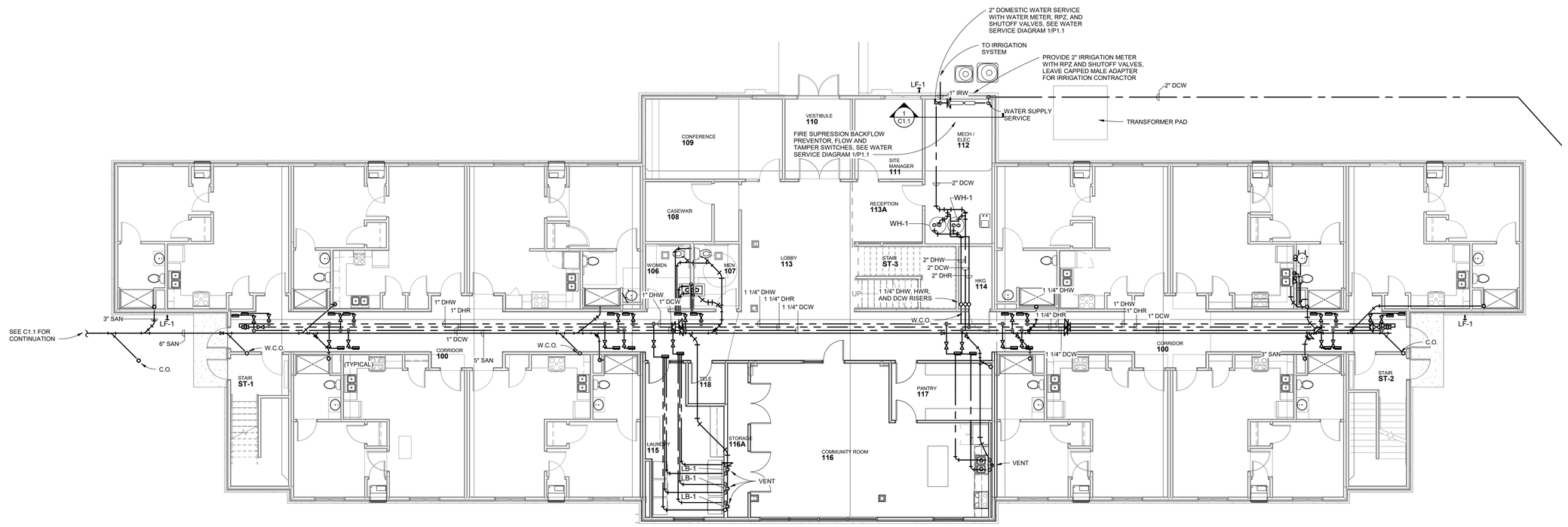


NORTH

SECOND FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"



NORTH

GROUND FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"

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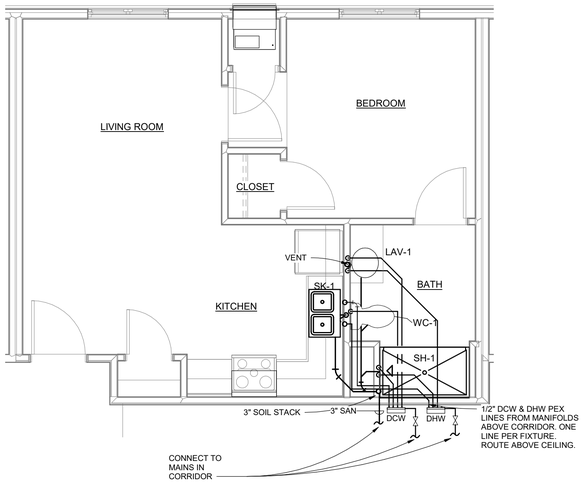
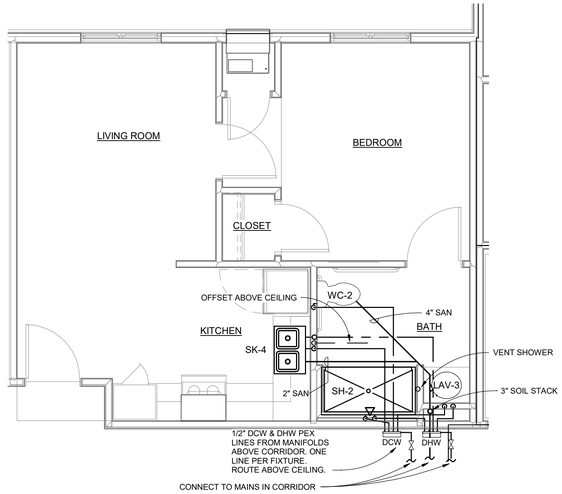


1 BR UNIT PLUMBING PLAN

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



1 BR-HC PLUMBING PLAN

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

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	MAKE	MODEL	PIPE SIZE			NOTES
				CW	HW	SAN	
CO	CLEANOUT						SEE SPECS
LAV-1	DROP IN LAVATORY WITH 4" CENTERS	STERLING	441904	3/8"	3/8"	1 1/2"	PROVIDE MOEN WS4503. 1.5GPM MAX
LAV-2	WALL HUNG LAVATORY WITH SHROUD BELOW	KOHLER	K-2035 W. SHROUD	1/2"	1/2"	1 1/2"	PROVIDE MOEN L4605 FAUCET. PROVIDE CHROME STRAINER DRAIN, INCLUDE PROTECTIVE INSULATION ON SUPPLY AND RETURN PIPING.
LAV-3	ADA DROP IN LAVATORY WITH 4" CENTERS	STERLING	441904	3/8"	3/8"	1 1/2"	PROVIDE MOEN L4605 FAUCET. 1.5GPM MAX
LB-1	LAUNDRY BOX	IPSCORP	W4702 HA	1/2"	1/2"	2 1/2"	1/2" SUPPLY CONNECTORS ARE PEX CONX.
LF-1	LAWN FAUCET	ZURN	Z1341XL	1/2"			
SH-1	SHOWER	BEST BATH	5LRS6034E75B	3/8"	3/8"	1 1/2"	PROVIDE KOHLER K-T10276-4E W/ K-99243 HAND SHOWER AND K-T10290 TRANSFER VALVE MOEN L82694P W/ S3870EP
SH-2	ADA SHOWER	BEST BATH	5LES6331A75B	3/8"	3/8"	1 1/2"	PROVIDE KOHLER K-T10276-4E W/ K-99243 HAND SHOWER AND K-T10290 TRANSFER VALVE MOEN L82694P W/ S3870EP
SK-1	STAINLESS STEEL DOUBLE BOWL - LEVER HANDLE FAUCET W/ SIDE SPRAY	JUST MANUFACTURING	DL-2133-A-GR	1/2"	1/2"	1 1/2"	8" DEPTH. FAUCET TO PROVIDE 1.5 GPM MAX. PROVIDE DELTA 340-WE-DST FAUCET AND SIDE SPRAY.
SK-3	STAINLESS STEEL DOUBLE BOWL ADA KITCHEN SINK	JUST MANUFACTURING	UDF-ADA-1632-A	1/2"	1/2"	2"	SPECIFY "CENTER REAR" DRAIN LOCATION 4 1/2" DEPTH. PROVIDE DELTA 140-WE-DST. PROVIDE SIDE SPRAY AT HC UNITS. FAUCET TO PROVIDE 1.5 GPM MAX
SK-4	STAINLESS STEEL DOUBLE BOWL ADA KITCHEN SINK	JUST MANUFACTURING	DL-ADA-2133-A-GR	1/2"	1/2"	2"	SPECIFY "CENTER REAR" DRAIN LOCATION 4 1/2" DEPTH. PROVIDE DELTA 140-WE-DST. PROVIDE SIDE SPRAY AT HC UNITS. FAUCET TO PROVIDE 1.5 GPM MAX
WC-1	BOTTOM OUTLET, HANDICAPPED HEIGHT 1.6 MAX GPF WATER CLOSET	KOHLER	HIGHLINE K-6393/K-6393-RA-0	3/8"	0"	3"	PROVIDE TANK LEVER ON OPEN SIDE, INCLUDE SEAT W/ LID BEMIS 7900TJ
WC-2	BOTTOM OUTLET, HANDICAPPED HEIGHT 1.6 MAX GPF WATER CLOSET	KOHLER	HIGHLINE K-6393/K-6393-RA-0	3/8"	0"	3"	PROVIDE TANK LEVER ON OPEN SIDE, INCLUDE SEAT W/ LID BEMIS 7900TJ
WC-3	BOTTOM OUTLET, HANDICAPPED HEIGHT 1.6 MAX GPF WATER CLOSET	KOHLER	HIGHLINE K-6393/K-6393-RA-0	3/8"	0"	3"	PROVIDE TANK LEVER ON OPEN SIDE, INCLUDE OPEN SEAT W/O LID - BEMIS 1955CT.

WATER HEATER SCHEDULE

MARK	DESCRIPTION	MAKE	MODEL	VOLUME	HEATING		ELECTRICAL		NOTES
					CAPACITY	EFFICIENCY	VOLTAGE	POWER	
WH-1	DOMESTIC WATER HEATER	BRADFORD WHITE	LG2100H803N	95 GALLONS	80000 Btu/h	0.57	NA	NA	

PLUMBING NOTES

1. ALL WORK AND MATERIALS SHALL BE IN COMPLIANCE WITH STATE AND LOCAL CODE REQUIREMENTS, AS WELL AS ALL APPLICABLE ORDINANCES AND REGULATIONS HAVING JURISDICTION. INSTALL EQUIPMENT TO MEET MANUFACTURER'S INSTRUCTIONS AND CLEARANCE REQUIREMENTS, AND ALL APPLICABLE CODE REQUIREMENTS.
2. DRAWINGS ARE DIAGRAMMATIC AND GENERALLY INDICATIVE OF THE WORK. DUCTWORK, PIPING, AND SYSTEMS SHALL FOLLOW ARRANGEMENT AS MUCH AS POSSIBLE, HOWEVER, ACTUAL FIELD CONDITIONS SHALL DICTATE. PROVIDE NECESSARY MODIFICATIONS AND TRANSITIONS TO MEET FIELD CONDITIONS AND AVOID CONFLICT WITH OTHER TRADES. IF RESOLUTION CANNOT BE REACHED WITHOUT COMPROMISING THE DESIGN, THESE CONFLICTS SHALL BE PRESENTED TO THE ARCHITECT FOR RESOLUTION. IN CONFLICT AREAS, COMPLETE ONLY WORK NOT AFFECTED BY THE CONFLICT PRIOR TO RESOLUTION.
3. THE FLOOR PLANS DO NOT SHOW ALL VALVES, FITTINGS, APPURTENANCES, ACCESS PANELS, ELEVATION CHANGES, AND VARIOUS OTHER ITEMS, THESE SHALL BE PROVIDED WITHOUT ADDITIONAL COST FOR A COMPLETE AND FULLY OPERATIONAL SYSTEM.
4. COORDINATE ROUTING OF PIPING, DUCTWORK, FIRE SUPRESSION, ETC. PRIOR TO STARTING INSTALLATION. MECHANICAL AND ELECTRICAL TRADES SHALL REVIEW AVAILABLE SPACING AND COORDINATE ALL SYSTEM ROUTING PRIOR TO INSTALLATION. FIELD VERIFY ALL FRAMING, CEILING HEIGHTS, ETC. BEFORE ORDERING OR FABRICATING SYSTEMS AND/OR PARTS OF SYSTEMS.
5. HANGER SYSTEM FOR DUCTWORK, PIPING AND EQUIPMENT SHALL BE SECURED TO BUILDING STRUCTURAL SYSTEM. MOTORIZED EQUIPMENT SUPPORTED FROM WOOD FRAMING SHALL INCLUDE VIBRATION ISOLATION MOUNTS.
6. SEAL ALL PENETRATIONS THRU INTERIOR AND/OR EXTERIOR WALLS AND THROUGH CEILINGS AND/OR ROOFS.
7. VENTS THROUGH ROOF SHALL BE LOCATED AS SHOWN ON ROOF PLAN.
8. PROVIDE CLEAN OUTS AT DRAIN LINES PER CODE AND AS SHOWN.
9. SEE MECHANICAL SHEETS FOR EQUIPMENT, PROVIDE CONDENSATE DRAIN TO NEAREST FLOOR DRAIN OR HUB DRAIN
10. INSTALL FULL SIZE PIPING FROM WATER HEATER RELIEF VALVE TO FLOOR DRAIN.
11. CLEAN DEBRIS FROM DRAIN LINES PRIOR TO SETTING FIXTURES.
12. UNLESS NOTED OTHERWISE, ALL SANITARY DRAIN PIPING IS SHOWN UNDER SLAB.
13. PROVIDE HAMMER ARRESTORS AT KITCHEN SINK SUPPLIES AND AT UPPER FLOOR MANIFOLDS.
14. ALL FIXTURES TO BE WHITE, UNLESS NOTED OTHERWISE.
15. AT COMMON AREA TOILET ROOMS, PROVIDE ASSE 1070 COMPLIANT TEMPERING VALVE AT EACH LAVATORY, WATTS LFUSG-B OR EQUAL.

WATER SUPPLY NOTES

1. SEAL ALL PENETRATIONS THRU INTERIOR AND/OR EXTERIOR WALLS AND THROUGH CEILINGS AND/OR ROOFS.
2. INSTALL FULL SIZE PIPING FROM WATER RELIEF VALVE TO FLOOR DRAIN.
3. PROVIDE SHUT OFFS FOR FROST PROOF SILL COCKS IN THE CEILING SPACE ADJACENT TO THE EXTERIOR WALL.
4. PROVIDE INDIVIDUAL STOPS AT EACH FIXTURE FOR CW AND HW SUPPLY.
5. STORAGE WATER HEATERS TO HAVE 140°F SETPOINT, THERMOSTATIC MIXING VALVES TO HAVE 120°F SETPOINT.
6. ADJUST ALL LAVATORY FAUCETS TO 110°F MAX.
7. UNLESS OTHERWISE NOTED OR TERMINATING AT FIXTURE, ALL HORIZONTAL PIPING SHOWN IS OVERHEAD OR ABOVE CEILING

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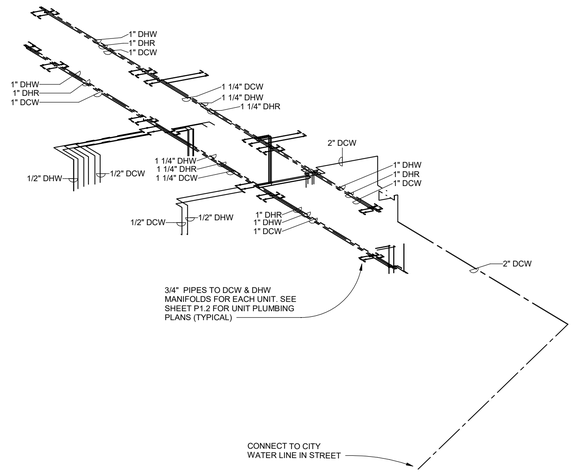
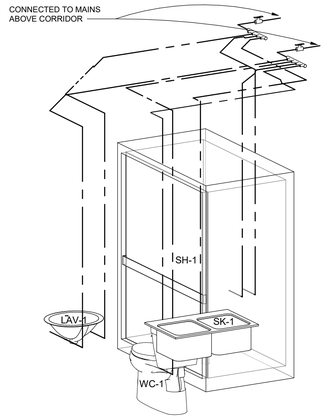


DCW & DHW SUPPLY MAINS ISOMETRIC



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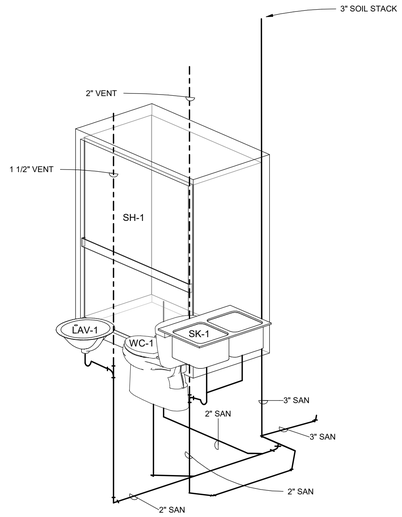

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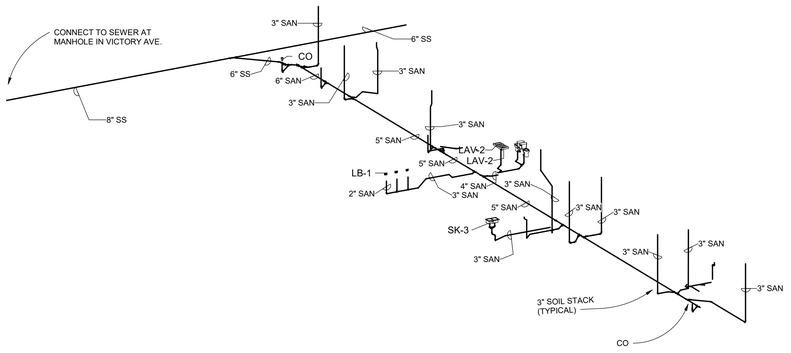
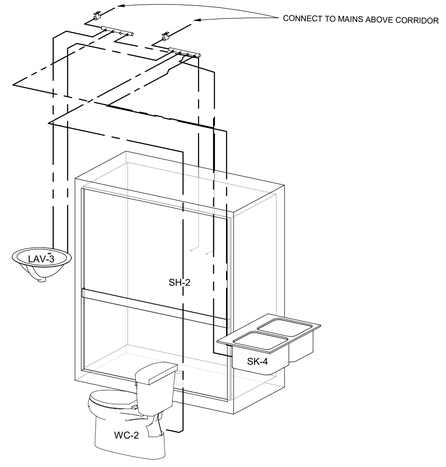
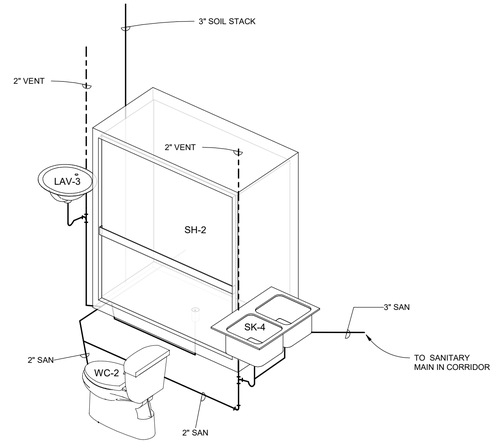


SANITARY MAINS ISOMETRIC



HC SUPPLY ISOMETRIC



HC SANITARY ISOMETRIC

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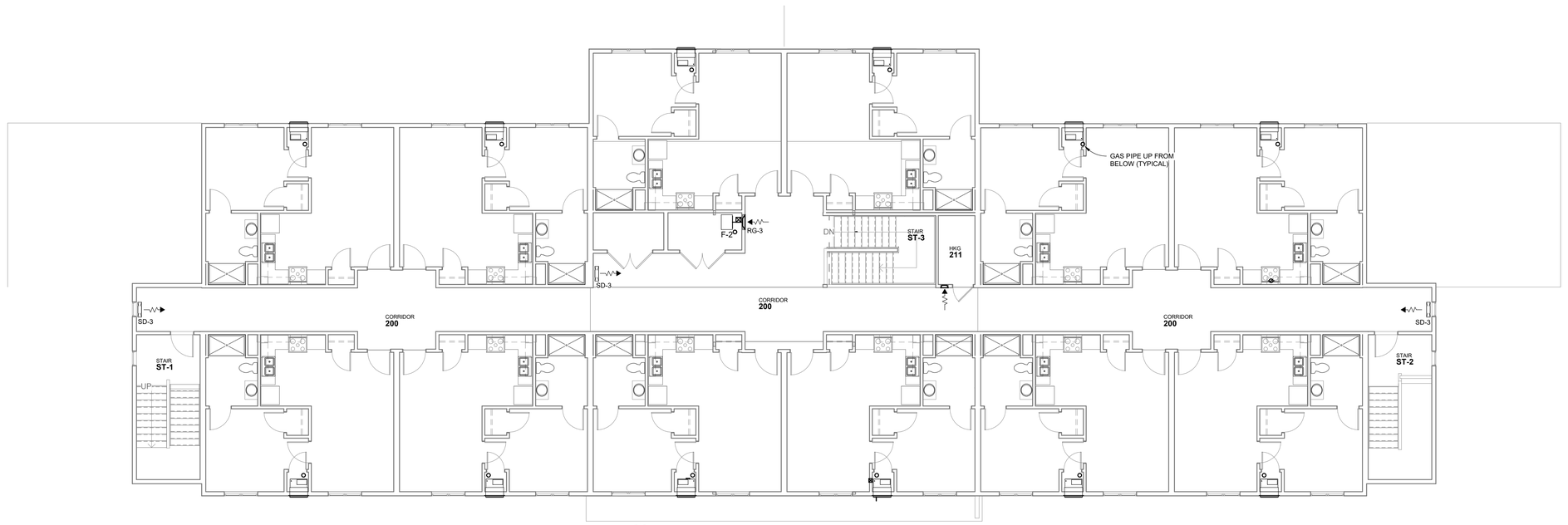
NOTE: SEE SHEET M1.2 FOR MECHANICAL EQUIPMENT SCHEDULE, NOTES, AND TABLES.

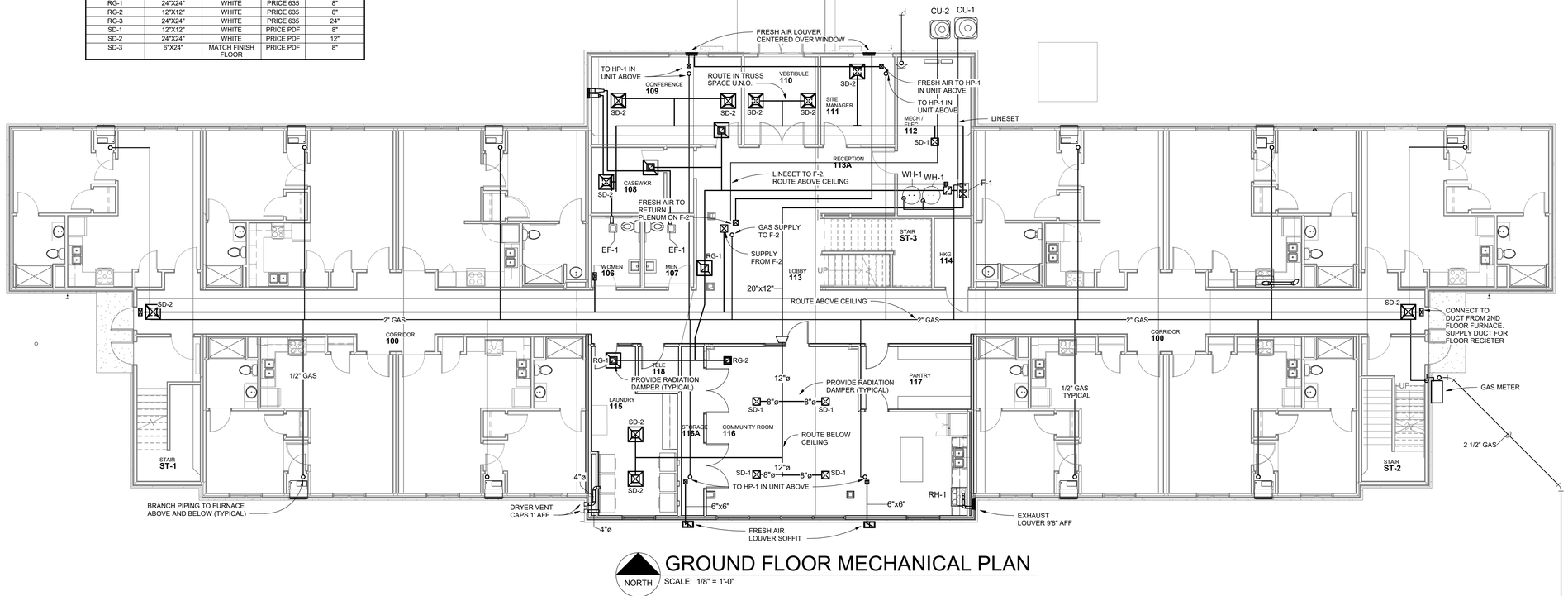


SECOND FLOOR MECHANICAL PLAN

NORTH SCALE: 1/8" = 1'-0"

AIR TERMINAL SCHEDULE

MARK	SIZE	COLOR	FAMILY	NECK SIZE
RG-1	24"X24"	WHITE	PRICE 635	8"
RG-2	12"X12"	WHITE	PRICE 635	8"
RG-3	24"X24"	WHITE	PRICE 635	24"
SD-1	12"X12"	WHITE	PRICE PDF	8"
SD-2	24"X24"	WHITE	PRICE PDF	12"
SD-3	6"X24"	MATCH FINISH FLOOR	PRICE PDF	8"



GROUND FLOOR MECHANICAL PLAN

NORTH SCALE: 1/8" = 1'-0"

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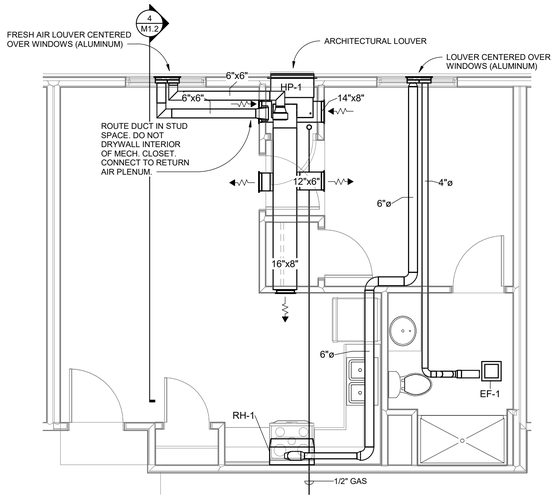
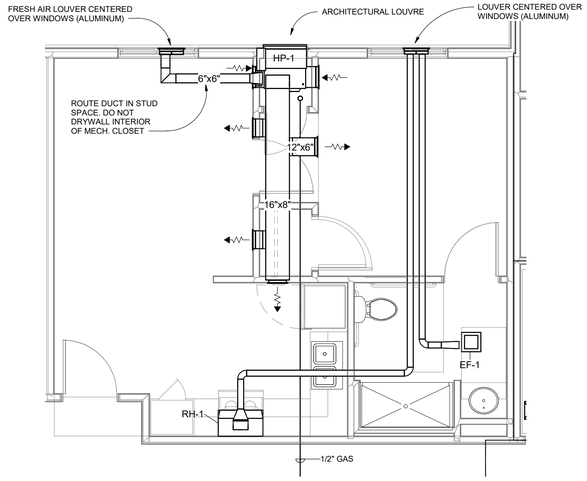


1 BR UNIT MECHANICAL PLAN

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

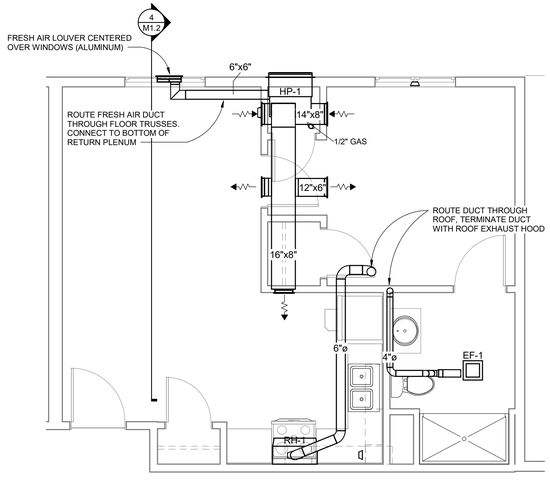
1 / M1.2



1 BR-HC MECHANICAL PLAN

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

2 / M1.2



1 BR UNIT 2ND FLOOR MECHANICAL PLAN

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

3 / M1.2

TYPICAL HVAC DUCT DETAIL

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

4 / M1.2

MECHANICAL NOTES

1. INSTALL FIRE DAMPERS WHERE NOTED ON PLAN. RIGID DUCT PENETRATING CEILING OR FLOOR MEMBRANE DO NOT REQUIRE A DAMPER.
2. FIRE STOP AND/OR SEAL ALL PENETRATINOS THRUFIRE RATED WALLS, CEILINGS, DRAFT STOPS, ETC.
3. TRUSS MEMBERS SHALL NOT BE DRILLED OR CUT. COORDINATE PIPING AND DUCT ROUTING WITH FRAMING PLANS AND OTHER TRADES.
4. PACK CEILING PENETRATINOS AT MECHANICAL ROOMS WITH HILTI #FS-1 OR EQUAL FIRE STOP CAULKING.
5. PROVIDE TEMPERATURE SENSOR IN RETURN AIR PLENUM OF EACH AIR HANDLING UNIT.
6. REGISTERS AND GRILLES - TITUS TMS-3 AND TRIM SIZES AS NOTED (24X24 AT ACCOUSTICAL TILE CEILING)
7. FIRE DAMPERS - RUSKIN CFD FDS - RUSKIN CSD 35
8. DRYER VENT, OUTSIDE AIR DUCT AND BATH EXHAUST VENTS MUST BE RIGID DUCTWORK.
9. DUCT SYSTEM SHALL BE TESTED AND BALANCED BY AN INDEPENDENT CONTRACTOR. SUBCONTRACTOR TO ADJUST AIR VOLUME TO WITHIN 5% OF DESIGN FLOWS.
10. SEE ELECTRICAL POWER PLANS FOR BASEBOARD HEAT.
11. INCLUDE ALL PENETRATIONS IN CONTRACTOR'S BID.
12. NEEDLE POINT BIPOLAR IONIZATION MODULES SHALL MEET UL 867 FOR ELECTRONIC AIR CLEANERS AND UL 2998 FOR OZONE FREE OPERATION.

VENTILATION TABLE

ZONE NAME	VENTILATION AIRFLOW	AREA
COMMUNITY ROOM	350 CFM	673 SF
DOWNSTAIRS CORRIDOR	130 CFM	1077 SF
LAUNDRY	50 CFM	221 SF
MAIN OFFICES	50 CFM	566 SF
MECHANICAL ROOM	0 CFM	259 SF
PUBLIC BATHROOMS	0 CFM	128 SF
UPSTAIRS CORRIDOR	92 CFM	1383 SF

GAS PIPING NOTES

1. UNLESS NOTED OTHERWISE, ALL HORIZONTAL GAS PIPING SHOWN IS OVERHEAD OR ABOVE CEILINGS.
2. ALL GAS PIPING EITHER EXPOSED OR CONCEALED WITHIN CEILINGS OR WALLS SHALL BE BLACK STEEL PIPE.
3. ALL BURIED DISTRIBUTION PIPING TO BE SLEEVED AND SHIELDED CORRUGATED STAINLESS STEEL TUBE, WITH SLEEVE VENTED TO THE OUTDOORS.
4. ALL 5PSI REGULATORS TO BE LEVER ACTING LINE REGULATORS, CAPABLE OF REGULATING OUTLET TO SPECIFIED VALUE AT INLET PRESSURE RANGING FROM 2.5PSI TO 5PSI AND SIZED FOR IDENTIFIED PRESSURE OUTLET AT TOTAL CONNECTED FLOW RATE, BASIS OF DESIGN TO BE MAXITROL 325 SERIES.
5. WHERE 5PSI REGULATORS ARE INSTALLED INDOORS, PIPE VENT TO THE OUTDOORS THROUGH THE ROOF. VENT LIMITING DEVICES TO INDOOR SPACES SHALL NOT BE USED.

MECHANICAL EQUIPMENT SCHEDULE

MARK	MAKE	MODEL	DESCRIPTION	AIRFLOW	HEATING		COOLING		ELECTRICAL				NOTES
					CAPACITY	EFFICIENCY	CAPACITY	EFFICIENCY	VOLTAGE	POWER	MCA	MOCP	
CU-1	DUCANE	4AC16L59P-50	OUTDOOR CONDENSING UNIT	--			56000.0 Btu/h	EER 11.70 SEER 14.00	208 V	3.3KW	28 A	45 A	MOUNT ON CONCRETE PAD, PROVIDE REFRIGERANT LINESET TO F-1
CU-2	DUCANE	4AC16L30P-50	OUTDOOR CONDENSING UNIT	--			28400.0 Btu/h	EER 12.20 SEER 14.00	208 V	1.5 KW	17 A	25 A	MOUNT ON CONCRETE PAD, PROVIDE REFRIGERANT LINESET TO F-2
EF-1	PANASONIC	FV-08-11VF5	BATHROOM EXHAUST FAN	80CFM					120 V	16W			ON ALL FIRST FLOOR UNITS, PROVIDE RADIATION DAMPER PC-RD05C3
F-1	DUCANE	96G2UH135DV20	UPFLOW FURNACE FOR COMMON AREAS	2000CFM	74000.0 Btu/h	AFUE 96%	54000.0 Btu/h	EER 11.70 SEER 14.00	120 V				PROVIDE DUCANE CONDENSING UNIT 4AC16L59P-50 WITH EVAPORATOR EAC4X60C. PROVIDE NEEDLE POINT BIPOLAR IONIZATION MODULE, SEE NOTE 12.
F-2	DUCANE	92G1DF070BE12	DOWNFLOW FURNACE FOR CORRIDORS	1200CFM	64000.0 Btu/h	AFUE 92.1%	30000.0 Btu/h	EER 12.20 SEER 14.00	120 V				PROVIDE DUCANE CONDENSING UNIT 4AC16L30P-50 WITH EVAPORATOR EAC4X30B. PROVIDE NEEDLE POINT BIPOLAR IONIZATION MODULE, SEE NOTE 12
F-3	MAGIC-PAK	HWC9N3312P18A	PACKAGE UNIT WITH GAS HEATING AND ELECTRIC COOLING	560CFM	31000.0 Btu/h	95%	17000.0 Btu/h	0.75	208 V	2700W	13 A	15 A	PROVIDE NEEDLE POINT BIPOLAR IONIZATION MODULE, SEE NOTE 12
RH-1	BROAN	46000	30" DUCTED RANGE HOOD	180CFM					120 V	220W	2 A		WHITE ON WHITE FINISH. IN HC UNITS AND COMMON AREA, PROVIDE HORIZONTALLY MOUNTED WALL SWITCHES TO CONTROL FAN AND LIGHT SEPERATELY

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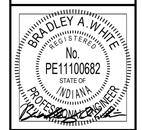

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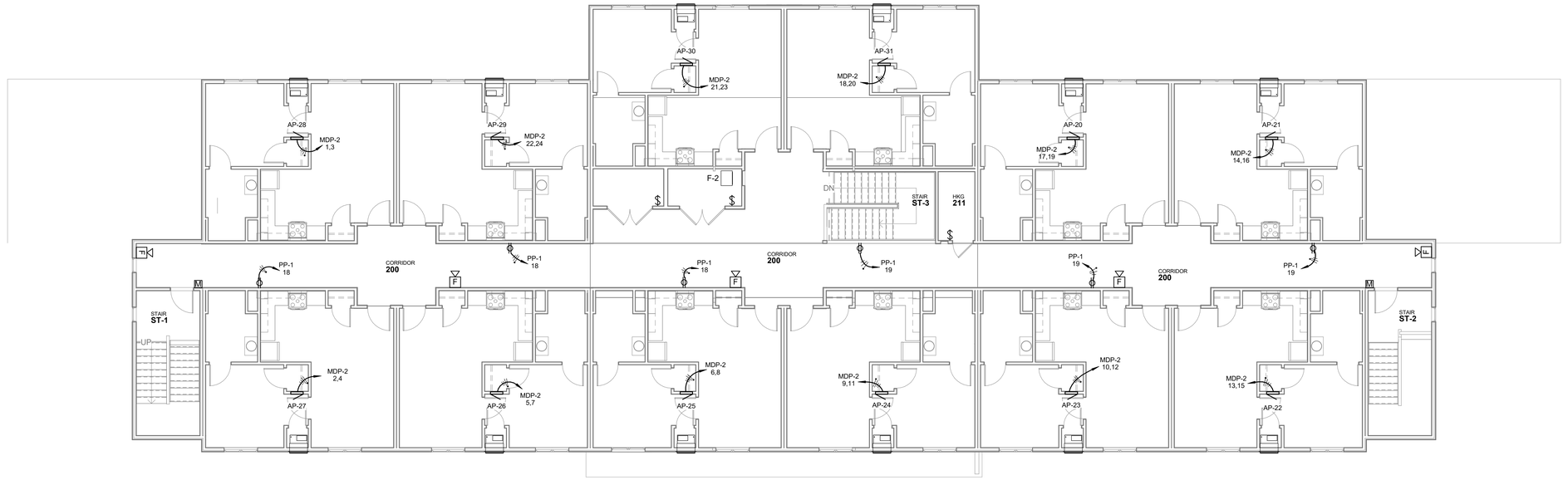

SECOND FLOOR ELECTRICAL PLAN

NORTH

SCALE: 1/8" = 1'-0"

GROUND FLOOR ELECTRICAL PLAN

NORTH

SCALE: 1/8" = 1'-0"

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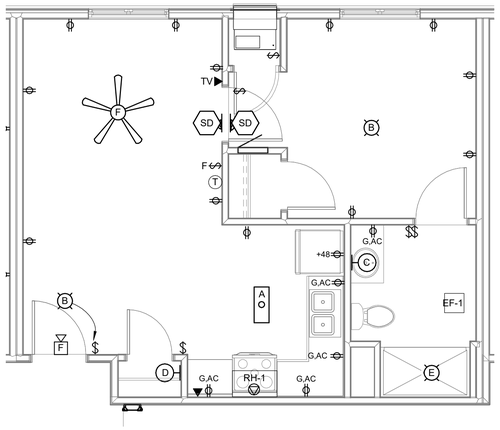
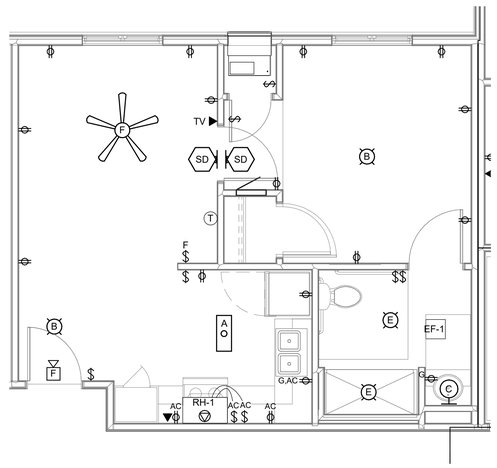


NORTH

1 BR UNIT ELECTRICAL PLAN

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



NORTH

1 BR-HC ELECTRICAL PLAN

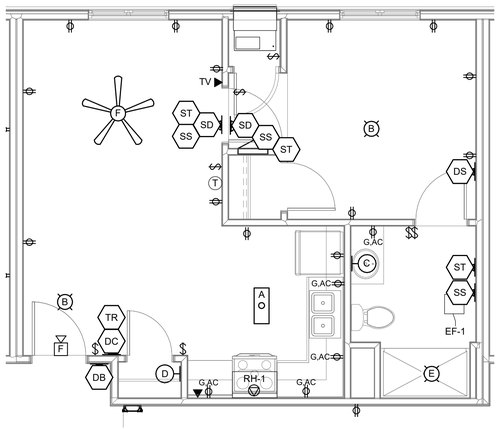
SCALE: 1/4" = 1'-0"

Typical Unit Panel

Location: | **Volts:** 120/208 Single | **A.I.C. Rating:**
Supply From: MDP-1 | **Phases:** 1 | **Mains Type:**
Mounting: Recessed | **Wires:** 3 | **Mains Rating:** 100 A
Enclosure: | **MCB Rating:** 100 A

CKT	Circuit Description	Trip	Poles	A		B		Poles	Trip	Circuit Description	CKT
1	Kitchen Receptacles	20 A	1	0.4 kVA	0.7 kVA			1	20 A	Kitchen Receptacles	2
3	Living Room Receptacles - AFCI	20 A	1			1.1 kVA	1.1 kVA	2	40 A	Kitchen Range	4
5	Bedroom Receptacles - AFCI	20 A	1	0.5 kVA	1.1 kVA						6
7	Living Room/Kitchen Light Fixtures	20 A	1			0.0 kVA	0.0 kVA	1	20 A	Bathroom/Bedroom Light Fixtures	8
9	Heat/Cooling Through wall Unit	25 A	2	1.3 kVA	0.5 kVA			1	20 A	Bedroom Receptacles - AFCI	10
11						1.3 kVA	0.0 kVA	1	20 A	Spare	12
				Total Load:	4.5 kVA		3.5 kVA				
				Total Amps:	42 A		34 A				

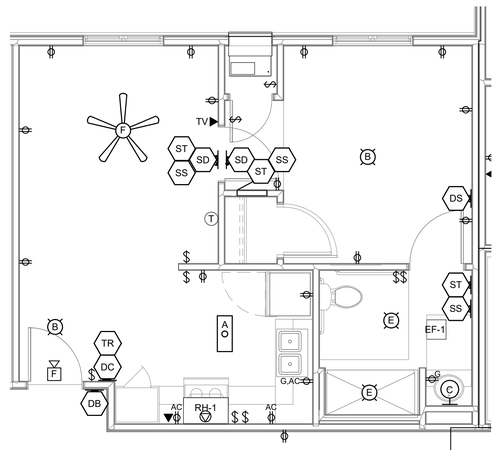
Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	85 VA	100.00%	85 VA		
Appliance - Dwelling Unit	2200 VA	100.00%	2200 VA	**Total Conn. Load:**	8.0 kVA
Cooling	2510 VA	100.00%	2510 VA	**Total Est. Demand:**	8.0 kVA
Receptacle	3240 VA	100.00%	3240 VA	**Total Conn.:**	39 A
				Total Est. Demand:	39 A



NORTH

1 BR S/I UNIT ELECTRICAL PLAN

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



NORTH

1 BR-HC S/I ELECTRICAL PLAN

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

ANNOTATION LEGEND

MARK	DESCRIPTION
	DEVICE NOTES
AC	MOUNTED ABOVE COUNTER, 6" TO CENTER OF DEVICE UNLESS NOTED OTHERWISE
G	GROUND FAULT CIRCUIT INTERRUPTER (GFCI) RECEPTACLE
+XX	MOUNTED AT XX INCHES A.F.F., SEE ARCHITECTURAL ELEVATIONS FOR COORDINATION AND EXACT DIMENSIONS
3	THREE WAY SWITCH
F	FAN SWITCH PROGRESS MODEL# P2630-30
SD	SMOKE DETECTOR
ST	SMOKE DETECTOR STROBE LIGHT
DS	DOOR SIGNALER BASE, PROVIDE NEW PHONE OUTLET IN WALL WITH PHONE CABLE EXTENDED TO SERVICE ENTRANCE
TR	DOOR SIGNALER TRANSMITTER, INTERCONNECT TO NEW DOOR CHIME, PROVIDE REMOTE LOCATED 24V TRANSFORMER
SS	DOOR SINGALER STROBE, PROVIDE DUPLEX RECEPTACLE AT 84" AFF, MOUNT ON RECEPTACLE
DB	HARDWIRED DOOR BELL BUTTON, EXTEND WIRING TO CHIME AT TRANSMITTER TR
KF	KEY FOB DOOR CONTROL, SEE DOOR HARDWARE SPECIFICATIONS

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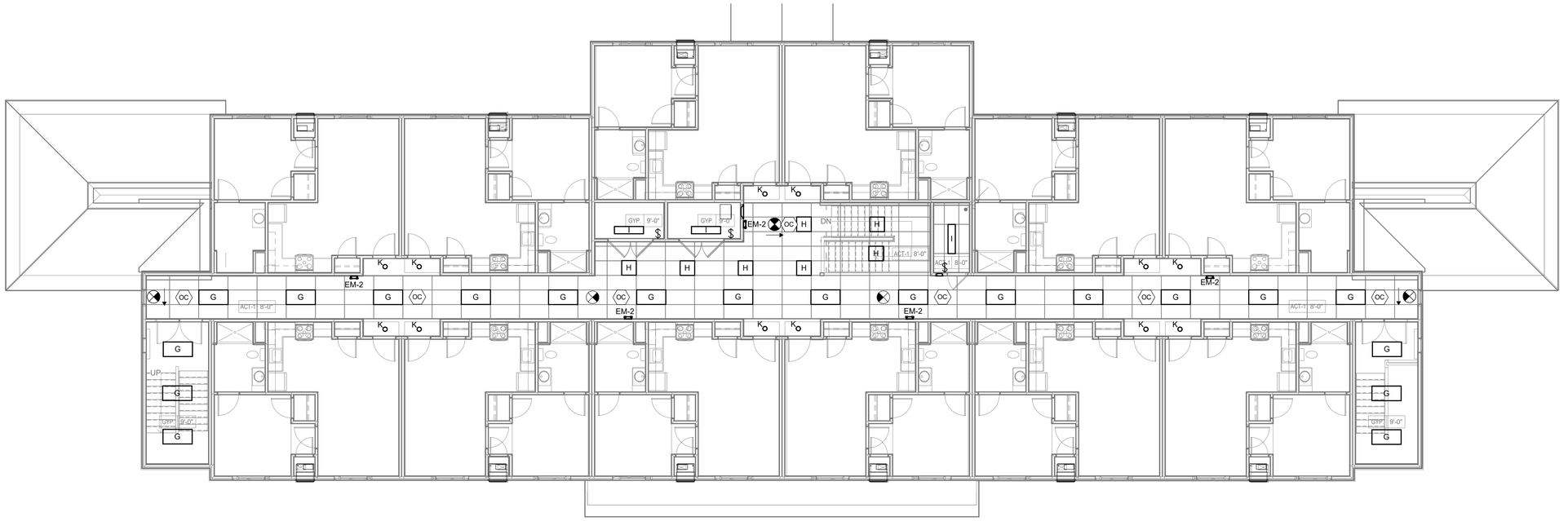
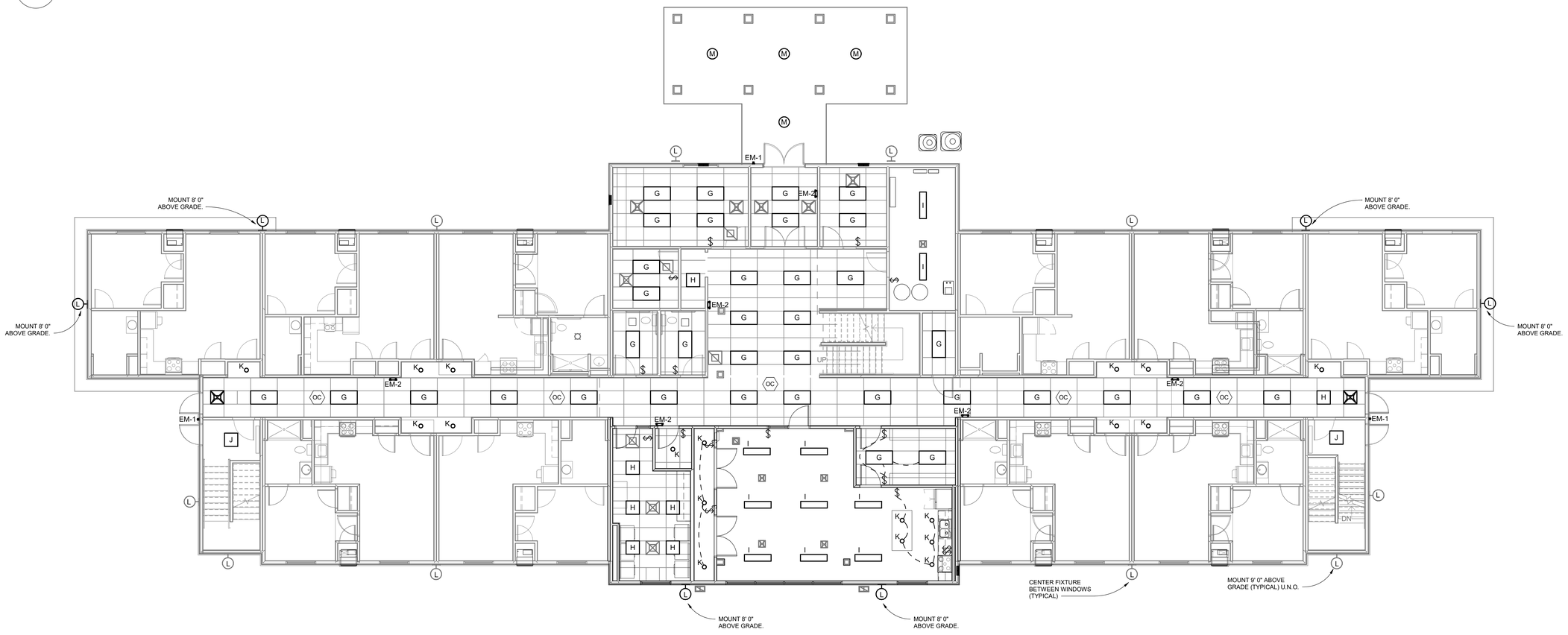


SECOND FLOOR LIGHTING PLAN

NORTH

SCALE: 1/8" = 1'-0"



GROUND FLOOR LIGHTING PLAN

NORTH

SCALE: 1/8" = 1'-0"

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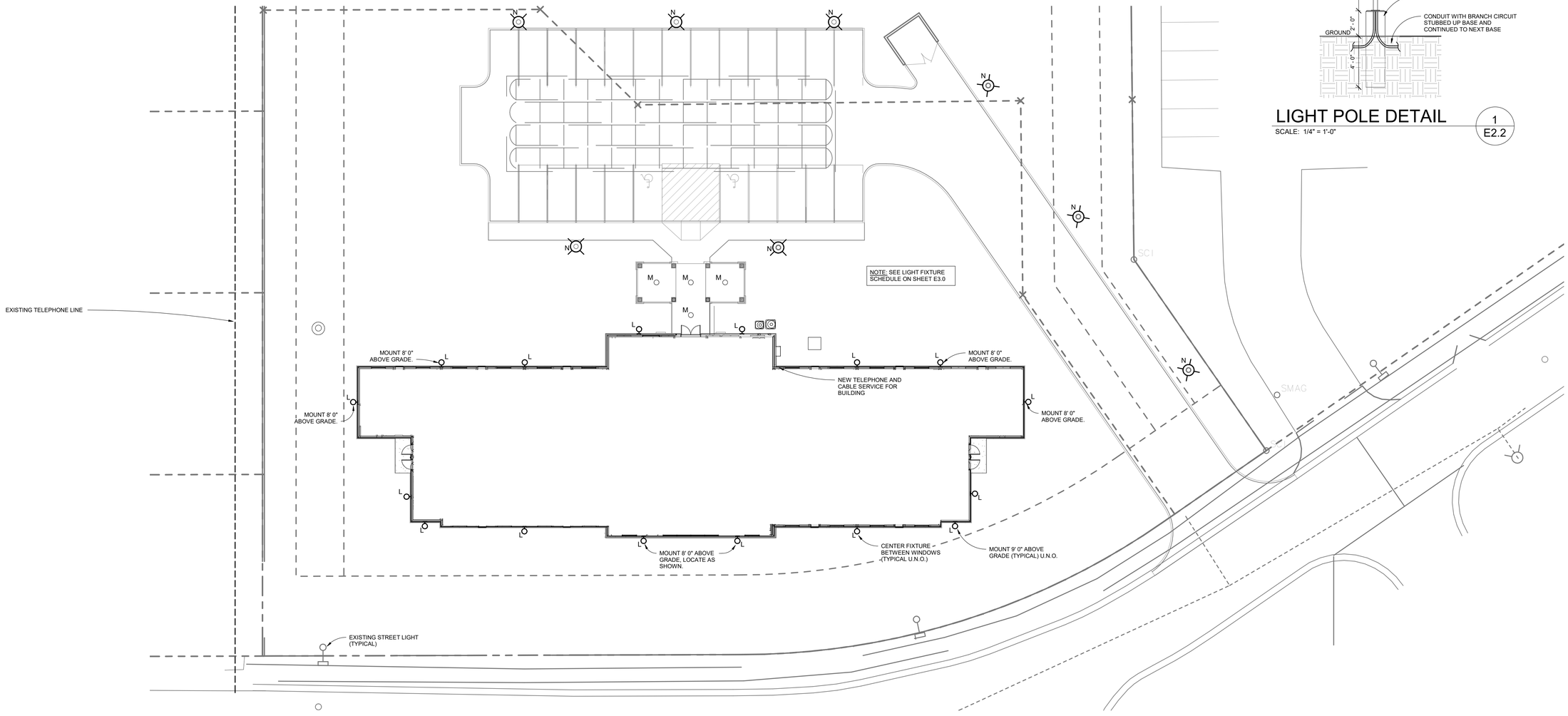
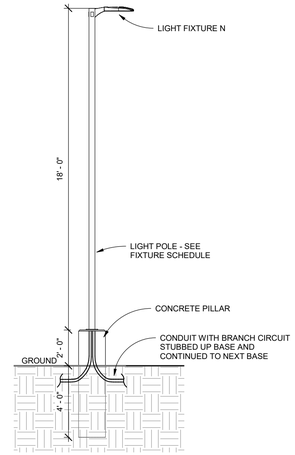


SITE LIGHTING PLAN

NORTH

SCALE: 1/16" = 1'-0"



LIGHT POLE DETAIL

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

1
E2.2

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MDP-1

Location: Space 20 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10kA
Supply From: SVDS | **Phases:** 3 | **Mains Type:** MLO
Mounting: Surface | **Wires:** 4 | **Mains Rating:** 1000 A
Enclosure: 1 | **MCB Rating:** 1000 A

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1				15.3... 4.0 kVA			2	100 A	AP-8 100A, 120 V/208 V, Single Phase, 3 Wires	2
3	PP-1	200 A	3		12.6 kVA 4.0 kVA					4
5						10.5 kVA 4.0 kVA	2	100 A	AP-9 100A, 120 V/208 V, Single Phase, 3 Wires	6
7	AP-1 100A, 120 V/208 V, Single Phase, 3 Wires	100 A	2	4.0 kVA 4.0 kVA						8
9					4.0 kVA 4.5 kVA		2	100 A	AP-2	10
11	AP-7 100A, 120 V/208 V, Single Phase, 3 Wires	100 A	2			4.0 kVA 3.5 kVA				12
13				4.0 kVA 4.0 kVA			2	100 A	AP-11 100A, 120 V/208 V, Single Phase, 3 Wires	14
15	AP-10	100 A	2		4.0 kVA 4.0 kVA					16
17						4.0 kVA 4.0 kVA	2	100 A	AP-5 100A, 120 V/208 V, Single Phase, 3 Wires	18
19	AP-4 100A, 120 V/208 V, Single Phase, 3 Wires	100 A	2	4.0 kVA 4.0 kVA						20
21					4.0 kVA 4.0 kVA		2	100 A	AP-3 100A, 120 V/208 V, Single Phase, 3 Wires	22
23						4.0 kVA				24
25										26
27										28
29										30
	Total Load:			43.4 kVA	41.2 kVA	33.8 kVA				
	Total Amps:			371 A	352 A	282 A				

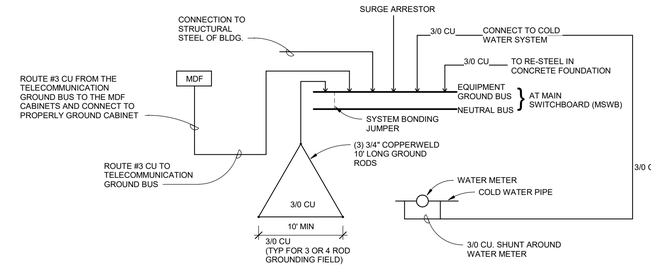
Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	850 VA	100.00%	850 VA		
Appliance - Dwelling Unit	25500 VA	75.00%	19125 VA	**Total Conn. Load:**	118.3 kVA
Cooling	32926 VA	100.00%	32926 VA	**Total Est. Demand:**	96.1 kVA
Electric Clothes Dryer	10500 VA	100.00%	10500 VA	**Total Conn.:**	328 A
HVAC	240 VA	100.00%	240 VA	**Total Est. Demand:**	267 A
Other	903 VA	100.00%	903 VA		
Receptacle	43200 VA	61.57%	26600 VA		

MDP-2

Location: Space 20 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 10kA
Supply From: SVDS | **Phases:** 3 | **Mains Type:** MLO
Mounting: Surface | **Wires:** 4 | **Mains Rating:** 1000 A
Enclosure: 1 | **MCB Rating:** 1000 A

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1	AP-28 100A, 120 V/208 V, Single Phase, 3 Wires	100 A	2	4.0 kVA 4.0 kVA			2	100 A	AP-27 100A, 120 V/208 V, Single Phase, 3 Wires	2
3					4.0 kVA 4.0 kVA					4
5	AP-26 100A, 120 V/208 V, Single Phase, 3 Wires	100 A	2			4.0 kVA 4.0 kVA	2	100 A	AP-25 100A, 120 V/208 V, Single Phase, 3 Wires	6
7				4.0 kVA 4.0 kVA						8
9	AP-24 100A, 120 V/208 V, Single Phase, 3 Wires	100 A	2		4.0 kVA 4.0 kVA		2	100 A	AP-23 100A, 120 V/208 V, Single Phase, 3 Wires	10
11						4.0 kVA 4.0 kVA				12
13	AP-22 100A, 120 V/208 V, Single Phase, 3 Wires	100 A	2	4.0 kVA 4.0 kVA			2	100 A	AP-21 100A, 120 V/208 V, Single Phase, 3 Wires	14
15					4.0 kVA 4.0 kVA					16
17	AP-20 100A, 120 V/208 V, Single Phase, 3 Wires	100 A	2			4.0 kVA 4.0 kVA	2	100 A	AP-31 100A, 120 V/208 V, Single Phase, 3 Wires	18
19				4.0 kVA 4.0 kVA						20
21	AP-30 100A, 120 V/208 V, Single Phase, 3 Wires	100 A	2		4.0 kVA 4.0 kVA		2	100 A	AP-29 100A, 120 V/208 V, Single Phase, 3 Wires	22
23						4.0 kVA 4.0 kVA				24
25										26
27										28
29										30
	Total Load:			32.1 kVA	32.1 kVA	32.1 kVA				
	Total Amps:			268 A	268 A	268 A				

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting - Dwelling Unit	1020 VA	100.00%	1020 VA		
Appliance - Dwelling Unit	26400 VA	75.00%	19800 VA	**Total Conn. Load:**	96.4 kVA
Cooling	30120 VA	100.00%	30120 VA	**Total Est. Demand:**	75.4 kVA
Receptacle	38880 VA	62.86%	24440 VA	**Total Conn.:**	268 A
				Total Est. Demand:	209 A



NOTES:
1. CONTRACTOR SHALL FOLLOW THIS DETAIL FOR PROPER GROUNDING CONNECTIONS, INCLUDING FURNISH AND INSTALL ALL CONDUCTORS AND QUIPMENT SUCH AS GROUND RODS, SURGE ARRESTOR, GROUND BUS, ETC. TO PROPERLY GROUND/BOND ALL EQUIPMENT.
2. SYSTEM ROUNDING FOR INTERIOR DISTRIBUTION TRANSFORMERS SHALL BE MADE TOA GROUNDING ELECTRODE AS NEAR AS PRACTICAL TO, AND PREFERABLY IN THE SAME AREA AS, THE TRANSFORMER THE ELECTRODE SHALL BE THE NEAREST OF A METAL WATER PIPE GROUNDING ELECTRODE OR STRUCTURAL METAL GROUNDING ELECTRODE.
3. GROUNDING ELECTRODE RESISTANCE SHALL BE 25 OHMS OR LESS, SHOULD THE MEASURED RESISTANCE BE HIGHER THAN 25 OHMS, ADDITIONAL SUPPLEMENTAL ELECTRODES SHALL BE PROVIDED AS REQUIRED TO REACH A RESISTANCE TO EARTH OF 25 OHMS OR LESS.
4. IN ADDITION TO THE ABOVE DEPICTED CONNECTIONS, CONTRACTOR SHALL PROVIDE ALL GROUND RODS, GROUND GRIDS, AND OTHER GROUNDING ELECTRODES AS REQUIRED BY THE UTILITYCOMPANY AND MAKE CONNECTIONS TO UTILITY EQUIPMENT PER UTILITY COMPANY STANDARDS.

ELECTRIC GROUNDING DETAIL

PP-1

Location: Space 20 | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: MDP-1 | **Phases:** 3 | **Mains Type:**
Mounting: Surface Mount | **Wires:** 4 | **Mains Rating:** 200 A
Enclosure: | **MCB Rating:** 200 A

CKT	Circuit Description	Trip	Poles	A	B	C	Poles	Trip	Circuit Description	CKT
1,3	Electric Clothes Dryer	20 A	2	3.5 kVA 1.8 kVA			2	20 A	Electric Clothes Dryer	2,4
					3.5 kVA 1.8 kVA					
5,7	Appliance - Dwelling Unit	20 A	2			1.8 kVA 2.5 kVA	2	20 A	CU-2	6,8
				1.8 kVA 2.5 kVA						
9,11	CU-1	20 A	2		2.1 kVA 0.7 kVA		1	20 A	Receptacles Office 2	10
						2.1 kVA 0.7 kVA	1	20 A	Receptacles Entrance to Building	12
13	Receptacles Office 1	20 A	1	1.1 kVA 0.7 kVA			1	20 A	Receptacles Office 3	14
15	Bathroom GFCI Receptacles	20 A	1		1.4 kVA 0.7 kVA		1	20 A	Receptacles Ground Floor West	16
17	Receptacles Ground Floor East	20 A	1			0.5 kVA 0.5 kVA	1	20 A	Upstairs West Corridor Receptacles	18
19	Upstairs East Corridor Receptacles	20 A	1	0.5 kVA 0.4 kVA			1	20 A	Furnace F-2	20
21	Furnace F-1	20 A	1		0.7 kVA 0.4 kVA		1	20 A	Receptacle Mech/Elec, HKG, Outdoor	22
23	Lighting Office 1	20 A	1			0.2 kVA 1.1 kVA	1	20 A	Water Heaters	24
25	Main Lobby Lighting	20 A	1	0.4 kVA 0.6 kVA			1	20 A	Corridor West Lighting	26
27	Lighting Office 2	20 A	1		0.2 kVA 0.2 kVA		1	20 A	Stairwell Lighting	28
29	Lighting Ground Floor Stairwell	20 A	1			0.1 kVA 0.4 kVA	1	20 A	Lighting Community Room	30
31	Lighting Laundry and Closet	20 A	1	0.0 kVA 1.4 kVA			1	20 A	Receptacles Common Room	32
33	Receptacles in Closet	20 A	1		0.4 kVA 0.5 kVA		1	20 A	Washing Machine Circuits	34
35	Wall Mounted Site Lighting	20 A	1			0.6 kVA 0.2 kVA	1	20 A	Outdoor Under Canopy Lights	36
37	Lighting Common Bathroom	20 A	1	0.3 kVA 0.7 kVA			1	20 A	Upper Floor Corridor Lighting	38
39	Pole Site Lighting	20 A	1		0.2 kVA 0.1 kVA		1	20 A	Lighting Upstairs Corridor Coves	40
41	Lighting Upstairs Closets	20 A	1			0.1 kVA 0.1 kVA	1	20 A	Lighting Main Floor Corridor Coves	42
	Total Load:			15.3 kVA	12.6 kVA	10.5 kVA				
	Total Amps:			130 A	108 A	87 A				

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	3114 VA	125.00%	3893 VA		
HVAC	240 VA	100.00%	240 VA	**Total Conn. Load:**	38.2 kVA
Receptacle	10800 VA	96.30%	10400 VA	**Total Est. Demand:**	38.6 kVA
Power	1345 VA	100.00%	1345 VA	**Total Conn.:**	106 A
Other	903 VA	100.00%	903 VA	**Total Est. Demand:**	107 A
Appliance - Dwelling Unit	3500 VA	100.00%	3500 VA		

ELECTRICAL LEGEND

- DUPLEX RECEPTACLE
- DOUBLE DUPLEX RECEPTACLE
- SPECIAL RECEPTACLE, SEE SPECIFIC NOTE FOR REQUIREMENTS
- LIGHT SWITCH
- NETWORK PORT, PROVIDE MINIMUM 2 CABLES TO RACK
- EXIT SIGN, VISIBLE FROM THE SHADED DIRECTION(S)
- M — MANUAL PULL STATION
- F — HORN/STROBE FIRE ALARM

{ SEE ELEC. GENERAL NOTE #18 }

SYMBOL TAG NOTES:

G	GROUNT FAULT CIRCUIT INTERUPTER (GFCI) PROTECTED
+XX	MOUNT AT XX" ABOVE FINISH FLOOR TO CENTERLINE OF DEVICE
AC	MOUNT ABOVE COUNTER TOP, SEE WALL ELEVATIONS
UC	MOUNT BELOW COUNTER TOP IN BASE CABINET

FIRE ALARM GENERAL NOTES

1. FIRE ALARM SYSTEM SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA72 AND BE FULLY MONITORED.
2. PROVIDE PULL STATIONS AS SHOWN ON PLANS, FLOW ALARMS ON SPRINKLER SYSTEM, TAMPER SWITCHES, CORRIDOR SMOKE DETECTORS (IF REQUIRED), ELEVATOR DOOR SMOKE DETECTORS, STROBE/HORNS EACH FLOOR (CORRIDORS AND PUBLIC ROOMS) AND FIRE ALARM CONTROL PANEL. SYSTEM SHALL BE MONITORED BY OUTSIDE MONITORING COMPANY, AND SYSTEM SHALL BE FULLY OPERABLE.
3. SEE UNIT ELECTRICAL PLANS FOR SMOKE DETECTORS OR SMOKE/CO2 DETECTORS. ALL APARTMENT SMOKE DETECTORS SHALL BE HARD WIRED, INTERCONNECTED WITHIN ONE APARTMENT AND HAVE BATTERY BACKUP.
4. PROVIDE SMOKE DETECTORS OUTSIDE ELEVATOR AT EACH FLOOR AND CONNECT TO FIRE ALARM CONTROL PANEL FOR ELEVATORS.
5. INSTALL FIRE ALARM HORNS IN EACH APARTMENT UNIT IN SUFFICIENT QUANTITY TO PROVIDE THE MINIMUM SOUND LEVELS REQUIRED BY APPLICABLE CODE. TESTING FOR SOUND LEVEL (75 dBA) ABOVE AMBIENT) SHALL BE COMPLETED IN ACCORDANCE WITH NFPA 72 AND SUBMITTED TO THE AUTHORITY HAVING JURISDICTION.
6. AT HEARING IMPAIRED UNITS, PROVIDE FIRE ALARM HORN/STROBES IN LIEU OF HORNS DESCRIBED IN NOTE 5 ABOVE, ALSO PROVIDE STROBE UNITS IN BATHROOMS AND BEDROOMS WHERE AS SHOWN ON THE UNIT ELECTRICAL PLANS.
7. THE SYSTEM SHALL HAVE THE CAPACITY TO SUPPORT ADDITIONAL DEVICES IN NON-HEARING IMPAIRED UNITS. EXTEND FIRE ALARM INDICATING APPLIANCE CIRCUITS INTO EACH UNIT AND TO EACH DEVICE LOCATION (J-BOXES FOR FUTURE STROBES ARE SHOWN ON UNIT ELECTRICAL PLANS).
8. FIRE ALARM SHALL BE INITIATED BY THE FOLLOWING DEVICES: MANUAL PULLS, DUCT SMOKE DETECTORS, SMOKE DETECTORS AT EACH ELEVATOR OPENING, WATER FLOW SWITCH(ES) IN THE FIRE SUPPRESSION SYSTEM, CORRIDOR SMOKE DETECTORS AS SHOWN AND AS REQUIRED BY LOCAL ORDINANCE. TROUBLE ALARM SHALL BE INITIATED BY THE FOLLOWING DEVICES: FIRE SUPPRESSION SYSTEM TAMPER SWITCHES, DEVICE OR SYSTEM MALFUCTION AS REQUIRED BY NFPA 72, P/V ACTIVATION (VALVE CLOSED)
9. PROVIDE INTERCONNECTION WITH ERV-COM AND ERV-CORE TO SHUT OFF SYSTEMS WHEN ALARM IS INITIATED

ELECTRICAL GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE NATIONAL, STATE, AND LOCAL CODES AT THE TIME OF BIDDING, INCLUDING BUT NOT LIMITED TO THOSE NOTED ON THE COVER SHEET.
2. DRAWINGS ARE DIAGRAMMATIC. FIELD VERIFY ALL EXISTING CONDITIONS AND COORDINATE LOCATIONS WITH OTHER TRADES
3. SUBSTITUTIONS FOR BRAND OR MODEL OF DEVICES ARE NOT PERMITTED IN THE BASE BID UNLESS OTHERWISE STATED OR APPROVED IN WRITING BY THE ARCHITECT/ENGINEER. SUBSTITUTIONS MAY BE SUBMITTED WITH WRITTEN EXPLANATION AS VOLUNTARY ALTERNATES. SEE SPECIFICATIONS.
4. SCHEDULED EQUIPMENT REFLECTS THE BASIS-OF-DESIGN FOR THIS PROJECT'S DESIGN INTENT. IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM AND COORDINATE THE SPECIFIC PARAMETERS OF IDENTIFIED ITEMS WITH THE OTHER IDENTIFIED COMPONENTS WITHIN THE CONTRACT DOCUMENTS. IT IS THE DESIGN INTENT THAT THE EQUIPMENT SELECTED SHALL BE INSTALLED TO ESTABLISH FULLY OPERATIONAL MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS.
5. INSTALL ALL EQUIPMENT, DEVICES, AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURES INSTRUCTIONS.
6. ALL INTERIOR WIRING TO BE INSULATED THHN OR EQUIVALENT. EXTERIOR WIRING AND ALL WIRING IN WET LOCATIONS. TO BE THWN OR EQUIVALENT.
7. CONDUIT SERVING UP TO 3 CURRENT CARRYING CONDUCTORS OF SIZE 10AWG OR SMALLER PERMITTED TO BE MC CABLE.
8. CONDUIT RUN WITHIN FIRE RATED WALLS TO BE EMT. ALL OTHER CONDUIT TO BE EITHER PVC OR EMT, UNLESS OTHERWISE NOTED.
9. ALL CONDUCTORS RUN IN BASEMENT TO BE INSTALLED IN CONDUIT SUITABLE FOR WET LOCATIONS AND ALL JUNCTION BOXES/ENCLOSURES TO BE RATED NEMA 3R
10. ALL DEVICES AND COVER BLANKS SHALL BE WHITE COLOR UNLESS OTHERWISE NOTED, OR OTHERWISE DIRECTED BY ARCHITECT.
11. SEE LIGHTING CONTROL SEQUENCE FOR SWITCHING AND DIMMING REQUIREMENTS, PROVIDE POWER PACK RELAYS AND DIMMING OUTPUTS AS REQUIRED TO ACHIEVE CONTROL SEQUENCE.
12. WHERE OCCUPANCY SENSORS ARE CALLED OUT, INTEGRATE OCCUPANCY SENSOR INTO LIGHT SWITCHING.
13. WIRE EXIT AND EGRESS LIGHTS TO THE NEAREST CONTINUOUSLY ENERGIZED LIGHTING CIRCUIT.
14. PROVIDE OCCUPANCY SENSORS IN ALL SPACES AND WIRE ALL LIGHTS NOT NOTED AS NIGHT LIGHTS OR EMERGENCY LIGHTS TO BE CONTROLLED.
15. IT IS THE DESIGN INTENT THAT ALL LIGHT FIXTURES NOT NOTED AS NIGHT OR EMERGENCY LIGHTS HAVE OCCUPANCY BASED CONTROL, PROVIDE COMBINATION SWITCH AND OCCUPANCY SWITCHES IN SPACES WHERE NO DEDICATED OCCUPANCY CONTROL IS INDICATED.
16. INCREASE BRANCH CIRCUIT CONDUCTORS TO ACCOMMODATE FOR VOLTAGE INCREASE BRANCH CIRCUIT CONDUCTORS TO ACCOMMODATE FOR VOLTAGE DROP. 120V CIRCUITS OVER 100' SHALL BE #10 AWG MINIMUM. 277V CIRCUITS OVER 250' SHALL BE #10 AWG MINIMUM.
17. UNLESS OTHERWISE NOTED, ALL DEVICE ELEVATIONS REFER TO CENTER OF OUTLET BOX. (SEE SPECIFICATIONS.) DIV. 16 SHALL VERIFY ALL OUTLET LOCATIONS WITH OTHER TRADES.
18. ELECTRICAL CONTRACTOR TO PROVIDE WIRING TO FIRE ALARM DEVICE LOCATIONS, FIRE ALARM CONTRACTOR TO INSTALL AND CONFIGURE DEVICES.

SERVICE TRANSFORMER

Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:**
Mounting: | **Wires:** 4 | **Mains Rating:** 1000 A
Enclosure: | **MCB Rating:** 1000 A

CKT	Circuit Description	# of Poles	Trip Rating	Load	Remarks
1	SVDS (SERVICE DISCONNECT SWITCH)	3	1000 A	214643 VA	
				214643 VA	
				596 A	

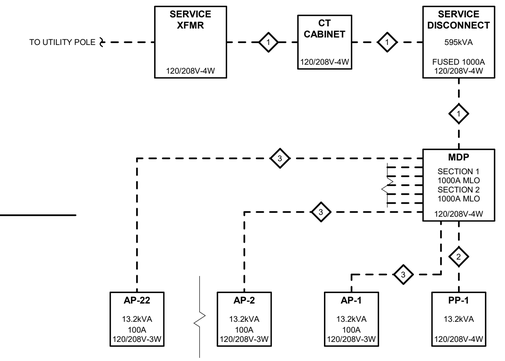
Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Appliance - Dwelling Unit	51900 VA	75.00%	38925 VA		
Cooling	62823 VA	100.00%	62823 VA	**Total Conn. Load:**	214643 VA
Electric Clothes Dryer	10500 VA	100.00%	10500 VA	**Total Est. Demand:**	166428 VA
HVAC	240 VA	100.00%	240 VA	**Total Conn.:**	596 A
Lighting - Dwelling Unit	1870 VA	100.00%	1870 VA	**Total Est. Demand:**	462 A
Other	903 VA	100.00%	903 VA		
Receptacle	82080 VA	56.09%	46040 VA		
WATER HEATER	40 VA	100.00%	40 VA		

LIGHT FIXTURE SCHEDULE

MARK	MAKE	MODEL	DESCRIPTION	LIGHT SOURCE	LIGHT LUMENS	LIGHT COLOR	ELECTRICAL VOLTAGE	ELECTRICAL POWER	APPROVED EQUALS (MAKE/MODEL)	NOTES
A	LITHONIA	LBL2 2000LM 80CRI 35K IN10 GZT MVOLT	2' LINEAR WRAPAROUND	LED	2000	3500K	120V	17W	METALUX /2WSNLED-LD4-20SL-UNV-L835-CD1-U, ILP / SQ2-22WLED-UNIV-35	
B	PROGRESS	P3516-30	CEILING MOUNT MEDIUM BASE	SCREW IN BULB	--	--	120V	10W	--	SUPPLY 60W LED BULB WITH MEDIUM BASE AND 3500K COLOR TEMP. SCREW INTO BASE.
C	PROGRESS	P300208-009-30	LINEAR BATH VANITY	LED	2600	3000K	120V	17W	--	SUPPLY TWO (2) 2X17.00 WATTS BI-PIN T8 BULBS.
D	LITHONIA	FMMCL840S1	WALL MOUNT CLOSET LIGHT	LED	575	4000K	120V	11W	--	
E	LITHONIA	4BEMWLED40K90CRIM6	RECESSED CAN	LED	700	4000K	120V	10W	HALO / LT460WH6940, GREEN CREATIVE / 97990-10FL4DIM/940	WET LOCATION RATED
EM-1	LITHONIA	ELMRW SP640L DDBTXD SGL	EXTERIOR EMERGENCY EGRESS LIGHT	LED	320	5000K	120V	3.3W	COR / CORSB	WALL MOUNTED SINGLE HEAD EGRESS EMERGENCY LIGHT
EM-2	LITHONIA	ELM6L UVOLTLTP	EMERGENCY EGRESS LIGHT	LED	1100	5000K	120V	10.6W	COMPASS / CU2HLHO	WALL MOUNTED EGRESS LIGHTS WITH BATTERY BACKUP. MOUNT AT 7'5" AFF.
EX-1	LITHONIA	LQM-S-W-3-R-MVOLT	EXIT SIGN	LED	NFPA APPROVED	RED	120V	0.62W	COMPASS / CERRC	CEILING MOUNT. SEE E2.2 FOR DOUBLE SIDED FIXTURE LOCATIONS
F	WESTINGHOUSE	7230800	PETITE CEILING FAN AND LIGHT	LED	800	3000K	120V	10W	--	SUPPLY FAN/LIGHT CONTROL P2630-30.
G	LITHONIA	2VTS4 48L ADP GZ1 LP840	2'X4' RECESSED	LED	4800	4000K	120V	38.4W	METALUX / 24CZ2-50-S-UNV-L840-CD1-U, ILP / VOL24-34WLED-UNIV-40	
H	LITHONIA	2VTS2 33L ADP GZ1 LP840	2'X2' RECESSED	LED	3300	4000K	120V	26.3W	METALUX / 22CZ2-32-S-UNV-L840-CD1-U, ILP / VOL22-30WLED-UNIV-35	
I	LITHONIA	STL4 48L EZ1 LP840	1'X4' SURFACE MOUNTED	LED	5088	4000K	120V	45.2W	--	
J	LITHONIA	STL2 40L EZ1 LP840 N80	1'X2' SURFACE MOUNTED	LED	3443	4000K	120V	39W	--	
K	LAUREN ILLUMINATION	LCLCV 6 40 W HE	6" RECESSED DOWNLIGHT	LED	725	4000K	120V	8.24W	HALO / HLB6099FS010MW, GREEN CREATIVE / 58030-11.6DLNC6DIM/840	PROVIDE LD25 DRIVERS FOR PAIRS OF FIXTURES, LD16 FOR SINGLE FIXTURES.
L	LITHONIA	DSXW1 LED 10C 1000 30K TFTM MVOLT DNAXD	OUTDOOR WALL LIGHT	LED	3673	3000K	120V	39W	BROWNLEE / 7047-C49-30K, ILP / SWP-5L-U-CCTS-FINISH	TOP OF FIXTURE TO BE FLUSH WITH TOP OF WINDOW FRAMING
M	LITHONIA	VCPGLED V4 P3 40K T5E MVOLT SRM DNAXD	UNDER CANOPY LIGHT	LED	6187	3000K	120V	43W	MCGRAW-EDISON / TT-D2-830-U-CQ-BZ, ILP / UFO-58WLED-UNIV-40-LB-SILVER	FINISH SHALL BE NATURAL ALUMINUM
N	LITHONIA	DSXO LED P3 30K VLS MVOLT SPA DDBXD	POLE MOUNTED LIGHT	LED	10911	3000K	120V	116W	LUMARK / PRV-PA1B-730-U-5WQ-BZ, ILP / AL-90W-U-30-T5S-UPMB	PROVIDE ACUITY POLE SSS 12 5C PT DDBXD. MOUNT POLE ON CONCRETE PILLAR 2' ABOVE GRADE.

FEEDER LEGEND

1. 3 RUNS OF 4-400MCM AND 1-#2/0 GND IN 4" CONDUIT
2. 3-#3/0 AND 1-#6 GND IN 2-1/2" CONDUIT
3. 4-#3/0 AND 1-#6 GND (SE CABLE)



ELECTRICAL ONE LINE DIAGRAM

ALLIANCE ARCHITECTS
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South Bend Heritage

HOPE AVENUE HOMES
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