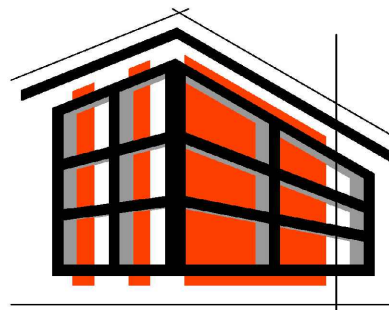


400 PENNSYLVANIA AVENUE

Quadplex Multifamily Condominiums

5 / 26 / 24 - PERMITS / BIDDING



4848 Freer Street, Rochester Hills, Michigan 48306 586-243-5945,
trcallaway@hotmail.com, www.trcallaway.com

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF LANSING.
2. THE CONTRACTOR SHALL NOTIFY "MISS DIG" AT LEAST THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
3. THE CONTRACTOR SHALL NOTIFY THE CITY OF LANSING'S OFFICE OF ENGINEERING 48 HOURS PRIOR TO THE START OF CONSTRUCTION OF PUBLIC UTILITIES OR CONSTRUCTION IN THE STREET RIGHT-OF-WAY.
4. HANDICAPPED PARKING SPACES SHALL BE IDENTIFIED WITH THE INTERNATIONAL SYMBOL.
5. ACCESS TO A STRUCTURE SHALL BE PROVIDED FOR THE PHYSICALLY HANDICAPPED.
6. ONSITE PARKING SHALL BE PROVIDED FOR CONSTRUCTION WORKERS.
7. AN AS-BUILT PLANS SHALL BE SUBMITTED TO THE CITY OF LANSING PRIOR TO THE ISSUANCE OF AN OCCUPANCY PERMIT OR RELEASE OF SURETY'S BOND.
8. ALL POTENTIAL UTILITY CONFLICTS MUST BE PHYSICALLY DETERMINED PRIOR TO THE START OF CONSTRUCTION OF UTILITIES. A CITY OF LANSING INSPECTOR MUST BE PRESENT.
9. FIRE LANES SHALL BE DESIGNED AND CONSTRUCTED PER THE CITY OF LANSING STANDARDS.
10. FOUR-FOOT WIDE SIDEWALKS SHALL BE PROVIDED 2.5 FEET OFF OF THE PROPERTY LINE WITHIN THE RIGHTS-OF-WAY, UNLESS A SIDEWALK EASEMENT IS PROVIDED FOR A MEANDERING SIDEWALK OR AN ALTERNATIVE DESIGN IS APPROVED BY THE CITY. BARRIER-FREE RAMPS, PER THE CITY OF LANSING STANDARDS, SHALL BE PROVIDED ON SIDEWALKS AT ALL CURB CROSSINGS.
11. MECHANICAL UNITS, DUMPSTERS, AND TRASH COMPACTORS SHALL BE SCREENED IN ACCORDANCE WITH THE ZONING ORDINANCE.
12. ALL SIGNAGE CONTINGENT UPON APPROVAL BY THE CITY OF LANSING.
13. ALL ELECTRICAL TRANSMISSION, DISTRIBUTION, AND SERVICE LINES SHALL BE UNDERGROUND.
14. USES SHALL CONFORM IN OPERATION, LOCATION, AND CONSTRUCTION TO THE CITY OF LANSING STANDARDS FOR NOISE, SMOKE AND PARTICULATE MATTER, ODOROUS MATTER, FIRE OR EXPLOSIVE HAZARD MATERIAL, TOXIC AND NOXIOUS MATTER, VIBRATION, AND/OR OTHER PERFORMANCE STANDARDS.

PROJECT SCOPE

PROJECT STATEMENT:
 THE PROPERTY IS LOCATED AT 400 BLOCK OF PENNSYLVANIA AVENUE, IN LANSING MICHIGAN 48906. THE 0.218-ACRE SITE IS ZONED R-MX MIXED RESIDENTIAL. THE PROPOSED QUADPLEX MULTIPLE FAMILY (TOWNHOUSE) CONDOMINIUM IS A PRINCIPAL PERMITTED USE. THE PROPOSED MULTIPLE FAMILY CONDOMINIUMS MUST COMPLY WITH THE REGULATIONS SPECIFIED IN CHAPTER 1244.12, R-MX MIXED RESIDENTIAL, AND BUT NOT LIMITED TO , THE FOLLOWING REGULATIONS:

- CHAPTER 1250 - GENERAL PROVISIONS
- CHAPTER 1252 - LANDSCAPING
- CHAPTER 1254 - PARKING

THIS IS NOT A BROWNFIELD SITE AND STORM WATER WILL BE DISCHARGED ONSITE. THIS SITE IS SUBJECT TO THE CONDITIONS AND DEVELOPMENT LIMITATIONS OF LIGHT INDUSTRIAL SPECIFICATIONS.

PROJECT TEAM

OWNER:
 INGHAM COUNTY LAND BANK
 3024 TURNER RD
 LANSING, MICHIGAN

ENGINEER:
 C&A ENGINEERING, LLC
 10722 CORKERY LN GRAND LEDGE, MI 48837
 CAENGINEERLLC@CAENGINEERSLLC.COM
 517-898-8152

COVER SHEET

INGHAM COUNTY LAND BANK
HICKORY POINTE CONDOMINIUM'S
 400 BLOCK S. PENNSYLVANIA
 LANSING, MI 48912

PROJECT SHEET INDEX

TITLE	SHEET
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FLOOR PLAN	14

ADDITIONAL DOCUMENTS & REQUIREMENT

GEOTECHNICAL INVESTIGATION / SOIL REPORT

REPORT ENTITLED GEOTECHNICAL REPORT FOR INGHAM COUNTY LAND BANK, PREPARED BY PROFESSIONAL SERVICES INDUSTRY (PSI), PROJECT GEOTECHNICAL ENGINEER, IS PART OF THE CONSTRUCTION DOCUMENTS. ALL WORK MUST COMPLY WITH SOIL REPORT REQUIREMENTS & RECOMMENDATIONS, THE MICHIGAN BUILDING CODE, AND ALL OTHER APPLICABLE CODES & ENFORCED BY LOCAL JURISDICTION.

MICHIGAN ENERGY CODE COMPLIANCE

MICHIGAN ENERGY CODE COMPLIANCE SERVICE PROVIDED BY CUSTOM HOME ENERGY SERVICES, PO BOX 237, BATH, MI 48808, DATED TBD, IS PART OF THE CONSTRUCTION DOCUMENTS. ALL WORK MUST COMPLY WITH ENERGY REPORT REQUIREMENTS & RECOMMENDATIONS, MICHIGAN ENERGY CODE, & ALL OTHER APPLICABLE CODES & ORDINANCES AS ADOPTED, AMENDED, & ENFORCED BY LOCAL JURISDICTION.

COORDINATE WITH STRUCTURAL ENGINEER

COORDINATE WITH ENGINEER TO PROVIDE REQUIRED NOTICE & TO SCHEDULE MANDATORY CONSTRUCTION OBSERVATION. PROVIDE ENGINEER WITH MINIMUM 48 HOURS ADVANCE NOTICE AND THE OPPORTUNITY TO BE PRESENT FOR ANY & ALL SITE VISITS & CONSTRUCTION OBSERVATION ATTENDED BY THE ENGINEER. SUBMIT ALL REQUESTS FOR INFORMATION TO ENGINEER, COPY ALL CORRESPONDENCE WITH PROJECT MANGER AND ALL OTHER PROFESSIONAL CONSULTANTS.

CONSTRUCTION OBSERVATION REQUIRED

GENERAL CONTRACTOR IS REQUIRED TO SCHEDULE & COORDINATE THE FOLLOWING MANDATORY CONSTRUCTION OBSERVATION SITE VISITS WITH ENGINEER PRESENT. PROVIDE NOTICE TO ENGINEER AT LEAST 48 HOURS PRIOR TO SUCH VISITS. PRIOR TO BEGINNING WORK, PROVIDE ENGINEER & OWNER WITH A CRITICAL PATH SCHEDULE SHOWING THE FOLLOWING CONSTRUCTION MILESTONES:

1. SITE VISIT MILESTONE
2. GRADING
3. STORM WATER/WASTE WATER PRE CONSTRUCTION SITE MEETING
4. COMPLETION OF STORM WATER (RAIN GARDEN) CONSTRUCTION
5. UTILITY PRE CONSTRUCTION SITE MEETING
6. COMPLETION OF STORM WATER CONSTRUCTION
7. SOIL EROSION INSPECTION SITE MEETINGS AS NEEDED

AGENCY REFERRALS

ZONING
 PLANNING & ZONING
 316 N CAPITAL AVE, SUITE D
 LANSING, MI 48933
 PH: (517) 483-4066

FIRE
 LANSING FIRE DEPT.
 316 N CAPITAL AVE, SUITE C
 LANSING, MI 48933
 PH: (517) 483-4105

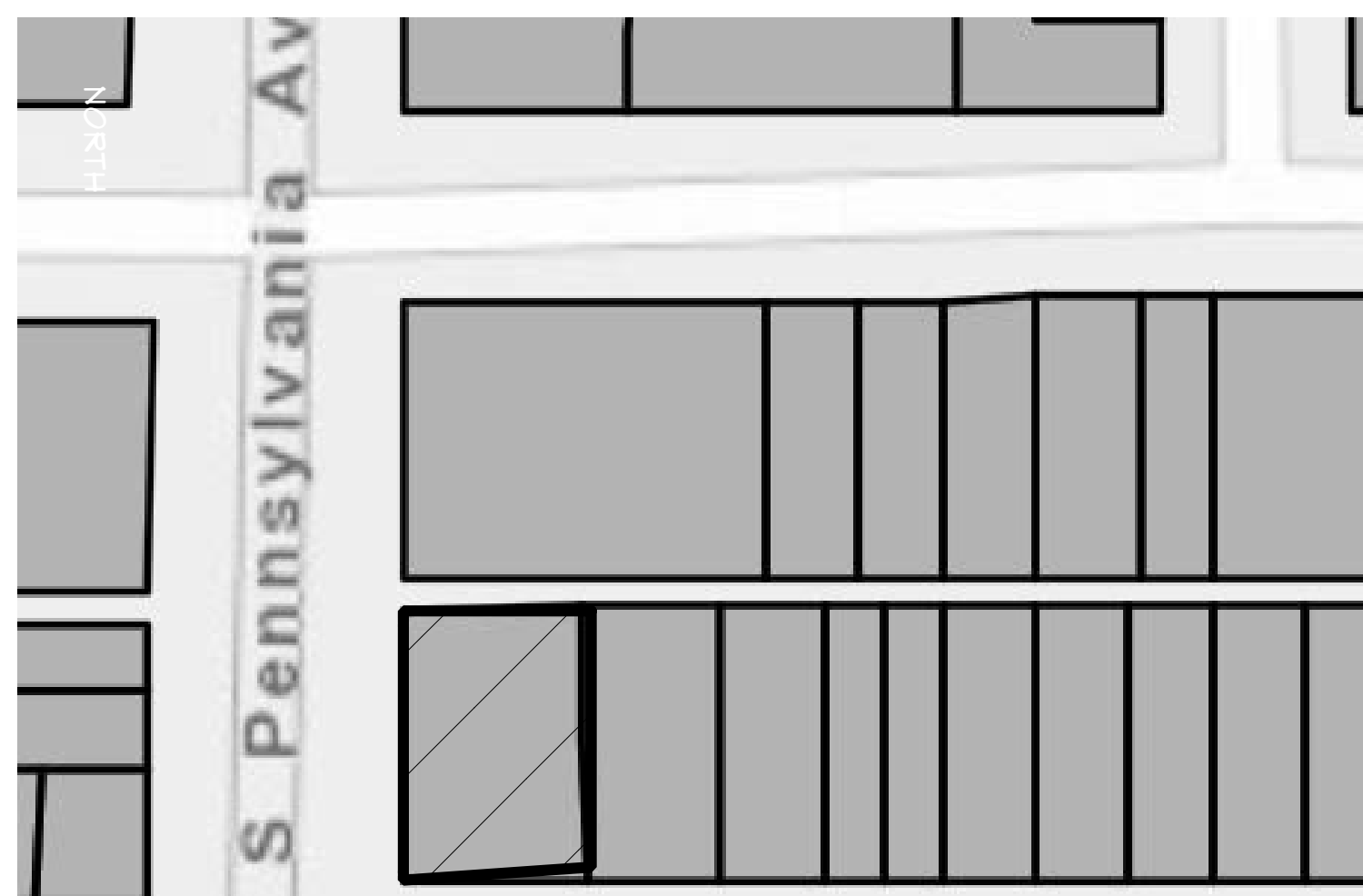
ROADWAY
 2700 PORT LANSING RD,
 LANSING, MI 48906
 PH: (517) 335-3754

EROSION CONTROL
 PUBLIC SERVICE
 124 W. MICHIGAN AVENUE
 7TH FLOOR CITY HALL
 LANSING, MI 48933
 PH: (517) 483-4455

ELECTRIC
 LANSING BWL
 1232 HACO DR,
 LANSING, MI 48912
 PH: (517) 702-6006

GAS
 CONSUMERS ENERGY
 1 ENERGY PLAZA DR,
 JACKSON, MI 49201
 PH: 800-805-0490

PARCEL MAP



VICINITY MAP



REVISION TABLE	DATE

C & A ENGINEERS, LLC
 10722 CORKERY LN
 GRAND LEDGE MI 48837
 P: 517.898.8152 E: www.caengineers.com

INGHAM COUNTY LAND BANK
 HICKORY POINTE CONDOMINIUM'S
 400 BLOCK S. PENNSYLVANIA
 LANSING, MI 48912

COVER SHEET

OWNER:
 INGHAM COUNTY LAND BANK
 3024 TURNER RD LANSING, MICHIGAN

DATE:

5/24/2024

SCALE:

SHEET NO:

CS.1

SITE DATA

PROJECT ADDRESS: 400 BLOCK OF PENNSYLVANIA AVE LANSING MI 48906
 OWNER: INGHAM COUNTY LAND BANK
 3024 TURNER RD LANSING, MICHIGAN

PARCEL#: 33-01-01-15-376-021, 33-01-01-15-376-011, 33-01-01-15-376-031

LEGAL DESCRIPTION: LOTS 20 & 21 BLOCK 2 LANSING IMPROVEMENT COMPANYS ADD SPLIT/
 COMBINED ON 11/14/2022 FROM 33-01-01-15-376-021, 33-01-01-15-376-011, 33-01-01-15-376-031

ZONING: R-MX
 PROPOSED ZONING: R-MX
 LOT AREA: 0.218 ACRES±
 UNITS: 4
 BLDG. AREA: 4,679 SQ.FT.
 STORIES: 2
 CONSTRUCTION TYPE: VB
 FIRE SPRINKLERS: NO
 BUILDING HEIGHT: 26'-4" FT
 PARKING:

PARKING PROVIDED: 8 SPACES
 DIMENSIONS: 10' W X 20' L
 *MINIMUM DRIVE AISLE: 24'

PROJECT NARRATIVE

THE PROPERTY IS LOCATED AT 400 BLOCK OF PENNSYLVANIA AVENUE, IN LANSING MICHIGAN 48906. THE 0.218-ACRE SITE IS ZONED R-MX MIXED RESIDENTIAL. THE PROPOSED QUADPLEX MULTIPLE FAMILY (TOWNHOUSE) CONDOMINIUM IS A PRINCIPAL PERMITTED USE. THE PROPOSED MULTIPLE FAMILY CONDOMINIUMS MUST COMPLY WITH THE REGULATIONS SPECIFIED IN CHAPTER 1244.12, R-MX MIXED RESIDENTIAL, AND BUT NOT LIMITED TO, THE FOLLOWING REGULATIONS:

- CHAPTER 1250 - GENERAL PROVISIONS
- CHAPTER 1252 - LANDSCAPING
- CHAPTER 1254 - PARKING

SITE REQUIREMENTS

ACCORDING TO CURRENT CITY ZONING ORDINANCE THIS PROPERTY IS CURRENTLY ZONED "R-MX"

(a) BUILDING MASSING		
A. Minimum Height	20'	2 Stories
B. Maximum Height	45'	4 Stories

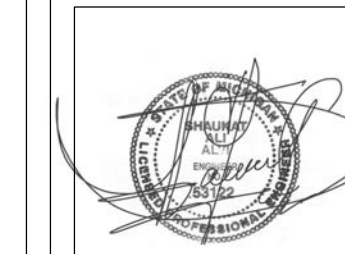
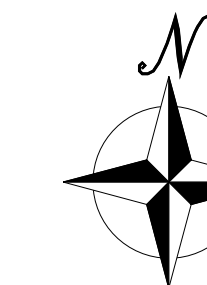
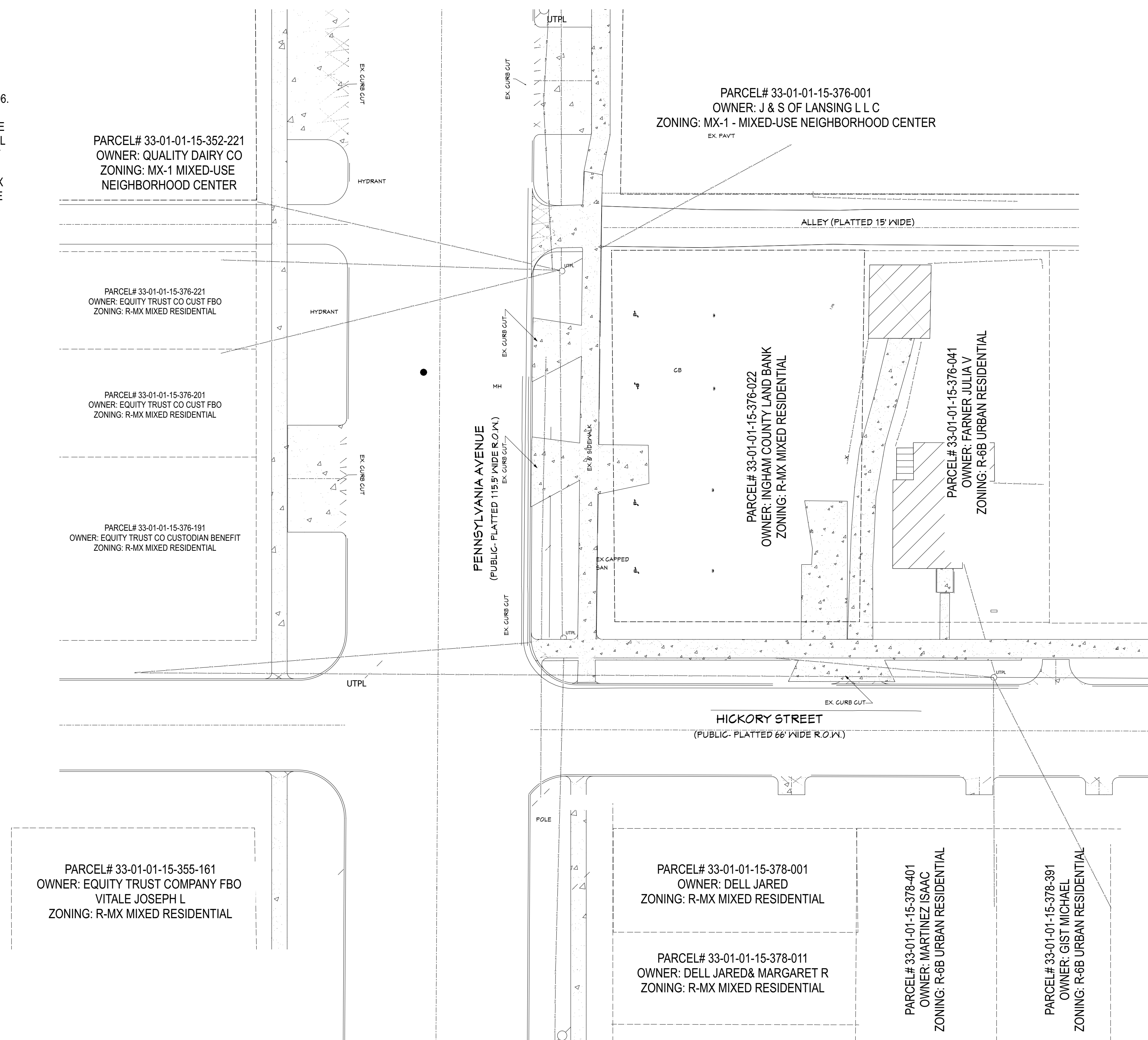
(b) BUILDING PLACEMENT		
C. Front Setback	20'	
D. Minimum Side Setback	5', total of two side yards 15'	
E. Minimum Rear Setback	30'	
Minimum Lot Size (per dwelling unit)	Efficiency: 1200 sq. ft., 1-bdrm: 1300 sq. ft., 2-bdrm: 1500 sq. ft., 3+ bdrms: 2200 sq. ft.	
F. Lot Width - min., max.	40' - 60'	
G. Lot Depth - min., max.	150' - 200'	
Maximum Lot Coverage	Total Impervious Surfaces	65%
	Building Coverage	45%

(c) PARKING	
Parking	See Chapter 1254 for parking standards. Parking permitted in rear or side yard. Property and Parking Lot Setback / Screening per Chapter 1252.
H. Garages	Rear yard or along alley

LEGEND

- POLE UTILITY - EXISTING
- POLE UTILITY
- TRANSFORMER - PAD MOUNTED
- TRANSFORMER - POLE MOUNTED
- CABLE
- CABLE - TO BE REMOVED
- CABLE OVERHEAD - TO BE REMOVED
- CABLE IN CONDUIT - TO BE REMOVED
- CABLE IN CONDUIT - DIRECTIONAL BORE
- COMMUNICATION
- FIBER OPTIC
- FIBER OPTIC - OUT OF SERVICE
- FIBER OPTIC - OVERHEAD
- FIBER OPTIC MARKER
- CABLE
- CABLE - OUT OF SERVICE
- CABLE - OVERHEAD
- CABLE MARKER
- CABLE PEDESTAL
- TELEPHONE
- TELEPHONE - OUT OF SERVICE
- TELEPHONE - OVERHEAD
- TELEPHONE BOX
- TELEPHONE HANDBOLE
- TELEPHONE METER
- NATURAL GAS
- GAS LINE
- GAS LINE - OUT OF SERVICE
- MARKER
- VALVE
- WELL
- SANITARY SEWER
- HANDBOLE WITH COVER (SIA VARIES)
- SEWER
- SEWER - OUT OF SERVICE
- SEWER - TO BE TAKEN OUT OF SERVICE
- SEWER - TO BE REMOVED
- METER
- FIRE HYDRANT
- GATE VALVE AND BOX
- IRRIGATION CONTROL VALVE
- IRRIGATION SPRINKLER HEAD
- SERVICE METER
- SERVICE SHUTOFF
- WATER WELL
- IRRIGATION
- WATER MAIN
- WATER MAIN - OUT OF SERVICE
- WATER MAIN - TO BE TAKEN OUT OF SERVICE
- WATER MAIN - TO BE REMOVED
- CATCH BASIN COVER
- SEWER CLEANOUT ACCESS
- STRUCTURE BOTTOM (SIA VARIES)
- UTILITY BOX
- UTILITY
- GUY ANCHOR
- ROW - FREE ACCESS
- PARCEL LINE
- EASEMENT LINE
- SIGN POST - DOUBLE
- SIGN POST - SINGLE
- SIDEWALK
- CONCRETE
- ASPHALT

EXISTING SITE LAYOUT



REVISION TABLE	
REVISED BY	DATE

C & A ENGINEERS, LLC
 10722 CORKERY LN
 GRAND EDGE MI 48837
 P. 517.588.8122 E. www.candae.com

INGHAM COUNTY LAND BANK
 HICKORY POINTE CONDOMINIUM'S
 400 BLOCK S. PENNSYLVANIA
 LANSING, MI 48912

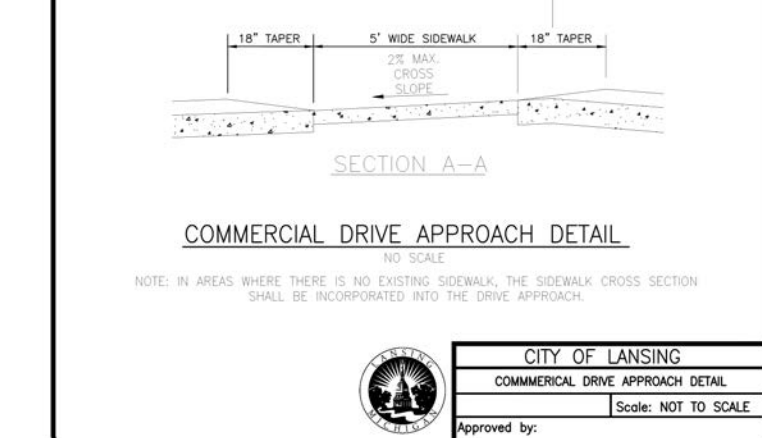
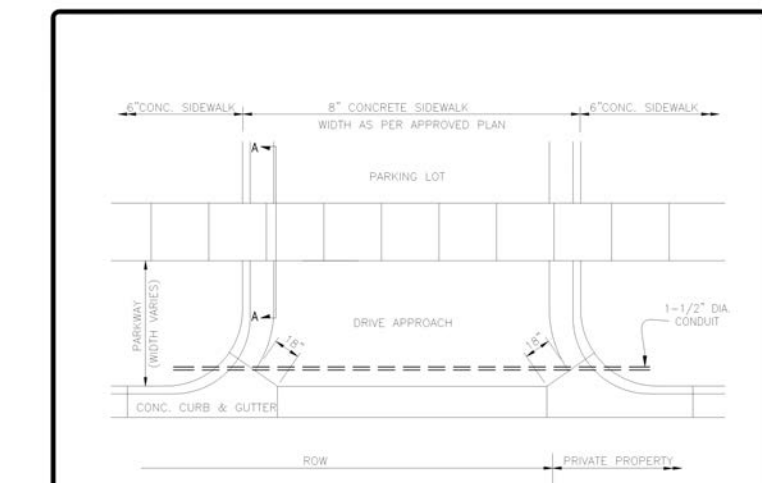
EXISTING SITE LAYOUT

OWNER:
 INGHAM COUNTY LAND BANK
 3024 TURNER RD LANSING, MICHIGAN

DATE:
 5/24/2024

SCALE:
 1" = 20'

SHEET NO:
 CS.2



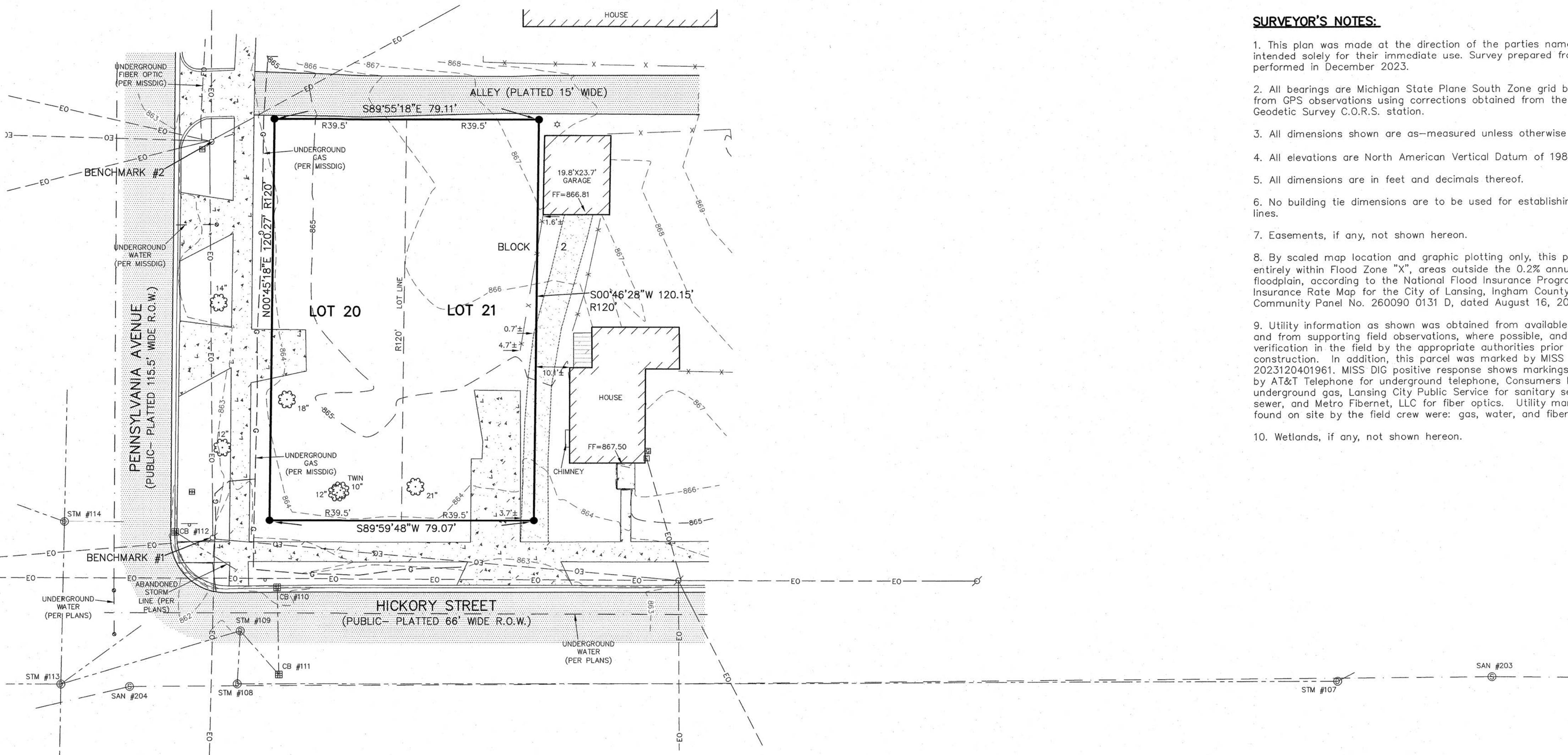
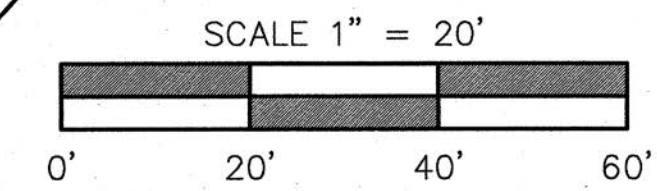
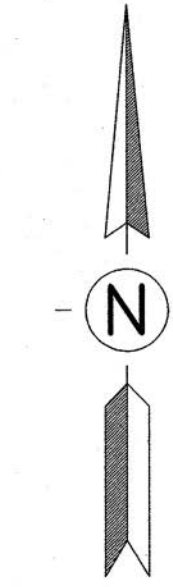
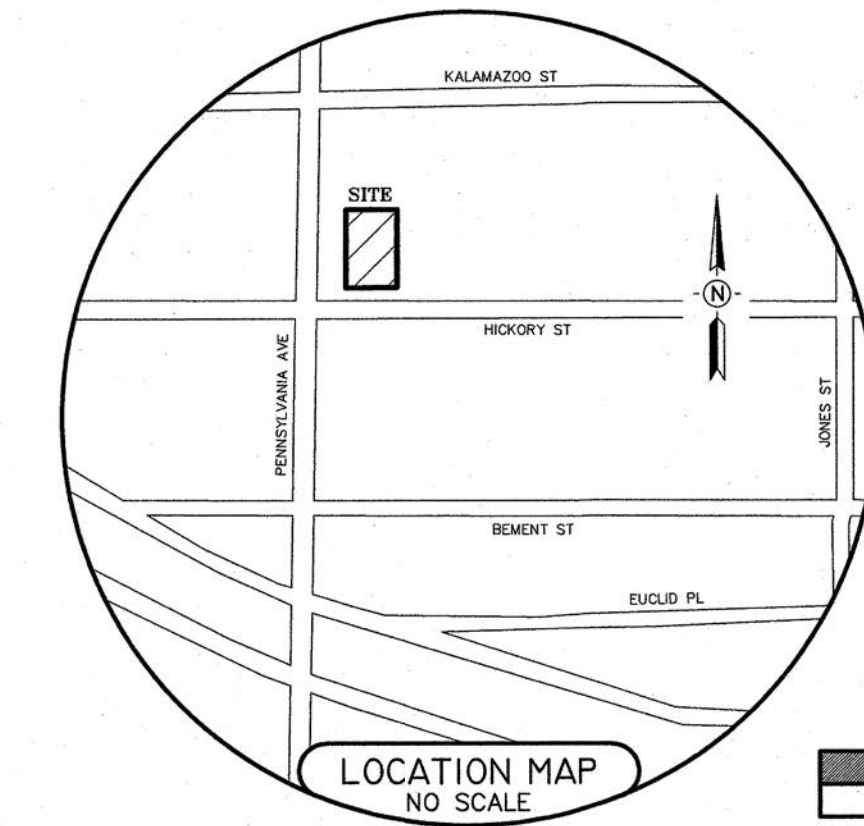
LOT & TOPOGRAPHIC SURVEY

"VACANT- S. PENNSYLVANIA AVE, LANSING, MI 48912"

FOR: INGHAM COUNTY LAND BANK

LEGAL DESCRIPTION:

(As provided)
TAX ID: 33-01-01-15-376-022
Lots 20 and 21, Block 2, Lansing Improvement Company's Addition, City of Lansing, Ingham County, Michigan, according to the recorded plat thereof, as recorded in Liber 2 of Plats, Page 14, Ingham County Records.



SURVEYOR'S NOTES:

1. This plan was made at the direction of the parties named herein and is intended solely for their immediate use. Survey prepared from fieldwork performed in December 2023.
2. All bearings are Michigan State Plane South Zone grid bearings obtained from GPS observations using corrections obtained from the nearest National Geodetic Survey C.O.R.S. station.
3. All dimensions shown are as-measured unless otherwise noted.
4. All elevations are North American Vertical Datum of 1988 (NAVD88).
5. All dimensions are in feet and decimals thereof.
6. No building tie dimensions are to be used for establishing the property lines.
7. Easements, if any, not shown hereon.
8. By scaled map location and graphic plotting only, this property lies entirely within Flood Zone "X", areas outside the 0.2% annual chance floodplain, according to the National Flood Insurance Program, Flood Insurance Rate Map for the City of Lansing, Ingham County, Michigan, Community Panel No. 260090 0131 D, dated August 16, 2011.
9. Utility information as shown was obtained from available public records and from supporting field observations, where possible, and is subject to verification in the field by the appropriate authorities prior to use for construction. In addition, this parcel was marked by MISS DIG Ticket No. 2023120401961. MISS DIG positive response shows markings were completed by AT&T Telephone for underground telephone, Consumers Energy Gas for underground gas, Lansing City Public Service for sanitary sewer and storm sewer, and Metro FiberNet, LLC for fiber optics. Utility markings actually found on site by the field crew were: gas, water, and fiber optic lines.
10. Wetlands, if any, not shown hereon.

SEWER INVENTORIES

- STORM MANHOLE #107
RIM - 868.38
12" RCP NE - 865.10
12" RCP W - 862.34
- STORM MANHOLE #108
RIM - 861.87
12" RCP N - 855.77
12" RCP E - 856.03
- STORM MANHOLE #109
RIM - 861.90
12" RCP S - 854.86
12" RCP SW - 854.58
12" RCP SE - 857.82
- CATCH BASIN #110
RIM - 861.67
12" RCP S - 859.12
- CATCH BASIN #111
RIM - 861.40
12" RCP N - 858.22
12" RCP NW - 858.16
- CATCH BASIN #112 (ABANDONED PER PLANS)
RIM - 861.80
12" RCP SE - 858.24
- STORM MANHOLE #113
RIM - 861.76
12" RCP NE - 855.00
30" RCP S - 851.50
12" RCP E - 853.92
30" RCP N - 851.66
12" RCP W - 854.24
- STORM MANHOLE #114
RIM - 861.86
30" RCP S - 852.12
30" RCP N - 852.16
12" RCP NW - 854.68
12" RCP E - 854.57
- SANITARY MANHOLE #203
RIM - 869.52
8" PVC E - 861.56
8" PVC W - 861.53
- SANITARY MANHOLE #204
RIM - 861.76
8" PVC E - 850.04
8" PVC SW - 849.77

LEGEND

- (M) = MEASURED DIMENSION
- (R) = RECORDED DIMENSION
- = SET 1/2" BAR WITH CAP UNLESS NOTED
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = DECK
- = GRAVEL
- = EXISTING CONTOUR ELEVATION
- = SANITARY SEWER
- = STORM SEWER
- = WATER LINE
- = GAS LINE
- = OVERHEAD WIRES
- = UNDERGROUND FIBER OPTIC
- ⊙ = SANITARY MANHOLE
- ⊕ = DRAINAGE MANHOLE
- ⊗ = GAS METER
- ⊞ = CATCH BASIN
- ⊙ = VALVE
- = SIGN
- = POST
- = UTILITY POLE
- ☆ = LIGHT POLE
- = GUY WIRE
- ⊞ = HANDHOLE
- ⊞ = ELECTRIC METER



ERICK R. FRIESTROM
PROFESSIONAL SURVEYOR
DATE 01-11-2024
NO. 53497

BENCHMARKS

BENCHMARK #1 ELEV. = 863.57 (NAVD88)
SET PK NAIL IN WEST SIDE OF POWER POLE, NORTHEAST QUADRANT OF PENNSYLVANIA AND HICKORY, ±10' EAST OF EAST BACK OF CURB OF PENNSYLVANIA

BENCHMARK #2 ELEV. = 865.11 (NAVD88)
SET PK NAIL IN NORTH SIDE OF POWER POLE, SOUTHEAST QUADRANT OF ALLEY AND PENNSYLVANIA, ±9' EAST OF EAST BACK OF CURB OF PENNSYLVANIA

REVISIONS	COMMENTS	KEBS, INC. ENGINEERING AND LAND SURVEYING	
01/11/2024	ORIGINAL	2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX 517-339-8047 WWW.KEBS.COM	
		Marshall Office - Ph. 269-781-9800	
		DRAWN BY AN	SECTION 15, T4N, R2W
		FIELD WORK BY NW	JOB NUMBER:
		SHEET 1 OF 1	102095.LOT

REVISION TABLE	
REVISED BY	DATE

C & A ENGINEERS, LLC
10722 CORKERY LN
GRAND LEDGE MI 48837
P. 517.588.8122 E. www.candae.com

INGHAM COUNTY LAND BANK
HICKORY POINTE CONDOMINIUMS
400 BLOCK S. PENNSYLVANIA
LANSING, MI 48912

SURVEY HOUSE

OWNER:
INGHAM COUNTY LAND BANK
3024 TURNER RD LANSING, MICHIGAN

DATE:

5/24/2024

SCALE:

SHEET NO:

5.1

SITE DATA

PROJECT ADDRESS: 400 BLOCK OF PENNSYLVANIA AVE LANSING MI 48906
 OWNER: INGHAM COUNTY LAND BANK
 3024 TURNER RD LANSING, MICHIGAN

PARCEL#: 33-01-01-15-376-021, 33-01-01-15-376-011, 33-01-01-15-376-031

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 COMBINED ON 11/14/2022 FROM 33-01-01-15-376-021, 33-01-01-15-376-011, 33-01-01-15-376-031

ZONING: R-MX
 PROPOSED ZONING: R-MX
 LOT AREA: 0.218 ACRES±
 UNITS: 4
 BLDG. AREA: 4,679 SQ.FT.
 STORIES: 2
 CONSTRUCTION TYPE: VB
 FIRE SPRINKLERS: NO
 BUILDING HEIGHT: 26'-4" FT
 PARKING:

GREEN SPACE

TOTAL LOT AREA
 LAWN: 0.218 ACRES +/-
 BLDG: 0.107 ACRES (4,679 SQ.FT.) +/-
 PAVT: 0.167 (7,274 SQ.FT) +/-

LOT COVERAGE CALCULATIONS

PARKING PROVIDED: 8 SPACES
 DIMENSIONS: 10' W X 20' L
 *MINIMUM DRIVE AISLE: 24'

BUILDING = BLDG / ACRE = 0.107 / 0.218 = 0.49 = 49%
 LOT = BLDG+PAVT / ACRE = 0.167 / 0.218 = 0.77 = 77%

FLOOD PLAIN NOTES:

PROPERTY SHOWN HEREON IS NOT LOCATED IN A FLOOD ZONE PER MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE). THIS SURVEYOR/ENGINEER MAKES NO GUARANTEES AS TO THE ACCURACY OF THE ABOVE INFORMATION.

SANITARY SEWER & WATER NOTE:

THE SITE CURRENTLY DOES NOT HAS EXISTING WATER SERVICE AND SANITARY SEWER, HOWEVER THE SITE HAS ACCESS TO BOTH WATER AND SEWER.

ENGINEERS NOTES:

THE CURRENT ZONING AS EVIDENCED BY THE CITY IS "R-MX" PER OBSERVATION. THIS SITE IS EITHER CURRENTLY HAS ACCESS TO THE FOLLOWING PUBLIC UTILITIES; SANITARY SEWER GAS, ELECTRIC, AND TELEPHONE. EITHER LOCATED ADJACENT TO THE SUBJECT SITE OR WITHIN PUBLIC RIGHT-OF-WAY.

CITY OF LANSING NOTES

ALL BROKEN AND DAMAGED SIDEWALK ALONG THE PROPERTY R.O.W. SHALL BE REMOVED AND REPLACED BY OWNER. ALL EXISTING SIDEWALK ON THE PROPOSED SITE DETERMINED TO NOT BE ADA COMPLIANT SHALL BE REMOVED AND REPLACED BY OWNER. SIDEWALK REPLACEMENT SHALL BE ACCORDING TO DETAILS SPECIFIED IN THE PLANS AND THE CITY OF LANSING STANDARDS

THE CONTRACTOR SHALL OBTAIN A CITY PERMIT FOR ALL ROAD CUTS WHICH WILL BE BACK FILLED PER CITY STANDARDS TO THE BASE COURSE COMPACTED FINISHED GRADE.

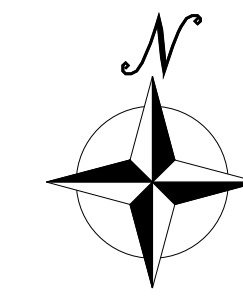
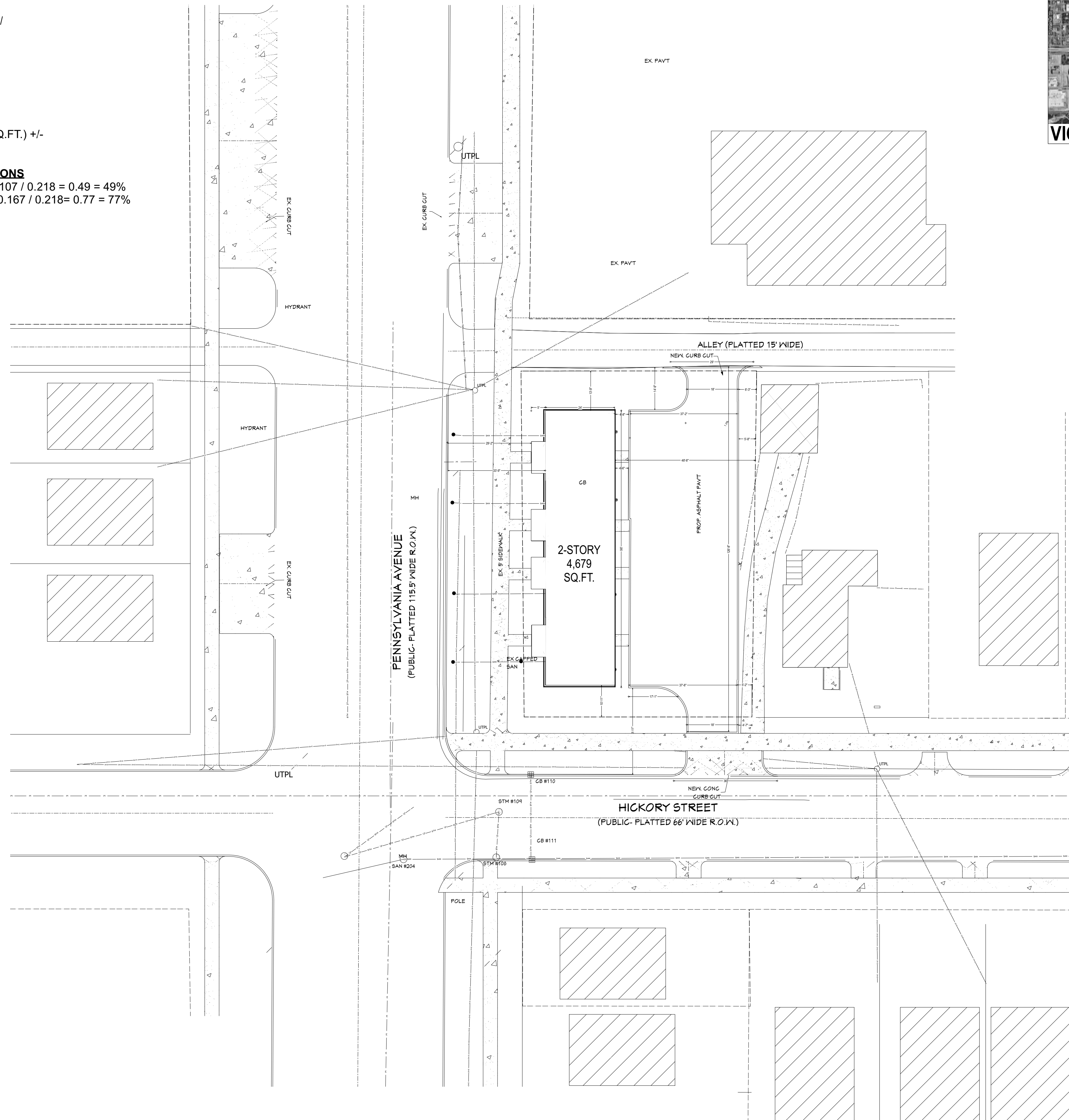
CONTRACTOR SHALL OBTAIN CITY PERMIT FOR ALL CONCRETE WORK INCLUDING CURB AND GUTTER, DRIVE APPROACHES AND SIDEWALKS.

THE CONTRACTOR MUST CONTACT THE CITY OF LANSING, TO SECURE THE REQUIRED PERMITS AND BONDS PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR MUST FOLLOW ALL REQUIREMENTS IN THE PERMIT, UTILIZING MAINTAINING TRAFFIC TYPICALS, REQUIRED AND THE PROPER CONSTRUCTION TRAFFIC SIGNING.

LEGEND

- POLE UTILITY - EXISTING
- POLE UTILITY
- TRANSFORMER - PAD MOUNTED
- TRANSFORMER - POLE MOUNTED
- CABLE
- CABLE - TO BE REMOVED
- CABLE OVERHEAD
- CABLE OVERHEAD - TO BE REMOVED
- CABLE IN CONDUIT
- CABLE IN CONDUIT - TO BE REMOVED
- CABLE IN CONDUIT - DIRECTIONAL BORE
- COMMUNICATION**
- FIBER OPTIC
- FIBER OPTIC - OUT OF SERVICE
- FIBER OPTIC - OVERHEAD
- FIBER OPTIC - OVERHEAD
- CABLE
- CABLE - OUT OF SERVICE
- CABLE - OVERHEAD
- CABLE MARKER
- CABLE PEDESTAL
- TELEPHONE
- TELEPHONE - OUT OF SERVICE
- TELEPHONE - OVERHEAD
- TELEPHONE BOX
- TELEPHONE HANDBOLE
- TELEPHONE HYDRANT
- NATURAL GAS**
- GAS LINE
- GAS LINE - OUT OF SERVICE
- MARKER
- VALVE
- WELL
- SANITARY SEWER**
- MANHOLE WITH COVER (SIA VARIES)
- SEWER
- SEWER - OUT OF SERVICE
- SEWER - TO BE TAKEN OUT OF SERVICE
- SEWER - TO BE REMOVED
- METER
- FIRE HYDRANT
- GATE VALVE AND BOX
- GATE VALVE IN WELL
- IRRIGATION CONTROL VALVE
- IRRIGATION SPRINKLER HEAD
- SERVICE METER
- SERVICE SHUTOFF
- WATER WELL
- IRRIGATION
- WATER MAIN
- WATER MAIN - OUT OF SERVICE
- WATER MAIN - TO BE TAKEN OUT OF SERVICE
- WATER MAIN - TO BE REMOVED
- CATCH BASIN COVER
- CATCH BASIN COVER
- "SEWER" CLEAROUT ACCESS
- STRUCTURE BOTTOM (SIA VARIES)
- UTILITY BOX
- UTILITY
- OUT ANCHOR
- ROW - FREE ACCESS
- PARCEL LINE
- EASEMENT LINE
- SIGN POST - DOUBLE
- SIGN POST - SINGLE
- SIDEWALK
- CONCRETE
- ASPHALT

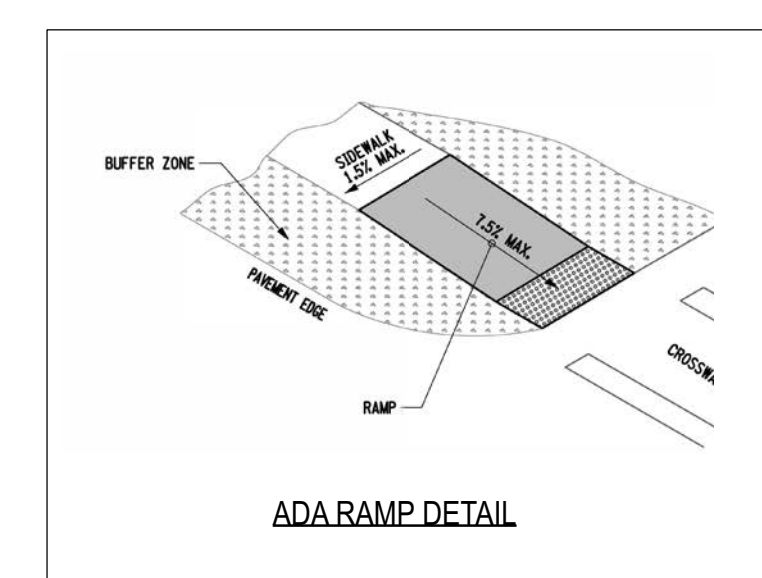
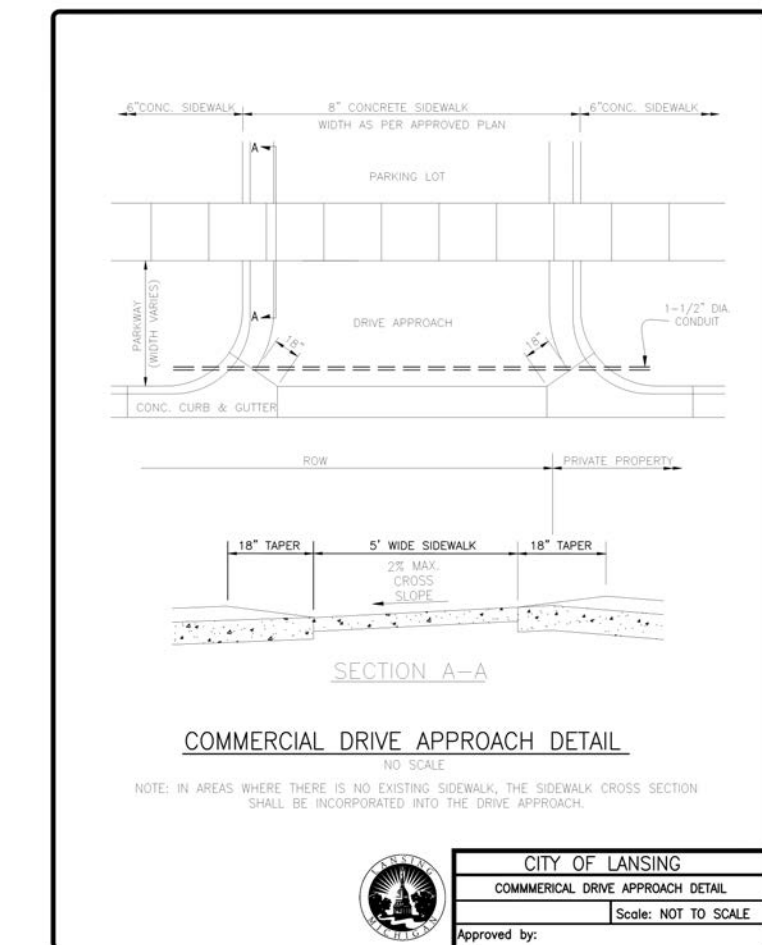
PROPOSED SITE PLAN



VICINITY MAP

PROJECT SHEET INDEX

TITLE	SHEET
COVER SHEET	1
EXISTING SITE LAYOUT	2
SURVEY	3
PROPOSED SITE PLAN	4
SITE PARKING PLAN	5
LANDSCAPE & LIGHTING PLAN	6
SESC/GRADING/DRAINAGE PLAN	7
UTILITIES	8
STORMWATER PLAN	9
STORMTECH DETAILS	10
CONSTRUCTION DETAILS	11
CONSTRUCTION DETAILS	12
ELEVATION	13
FLOOR PLAN	14



UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS PROVIDED BY KEBS. THE SURVEYOR AND/OR ENGINEER MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR AND/OR ENGINEER FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR AND/OR ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.



REVISION TABLE
REVISED BY
DATE

C & A ENGINEERS, LLC
 10722 CORKERY LN
 GRAND EDGE MI 48837
 P: 517.888.8122 E: www.candae.com

INGHAM COUNTY LAND BANK
 HICKORY POINTE CONDOMINIUM'S
 400 BLOCK S. PENNSYLVANIA
 LANSING, MI 48912

PROPOSED SITE PLAN
 SITE PLAN

OWNER:
 INGHAM COUNTY LAND BANK
 3024 TURNER RD LANSING, MICHIGAN

DATE:

5/24/2024

SCALE:

1" = 20'

SHEET NO:

C.1

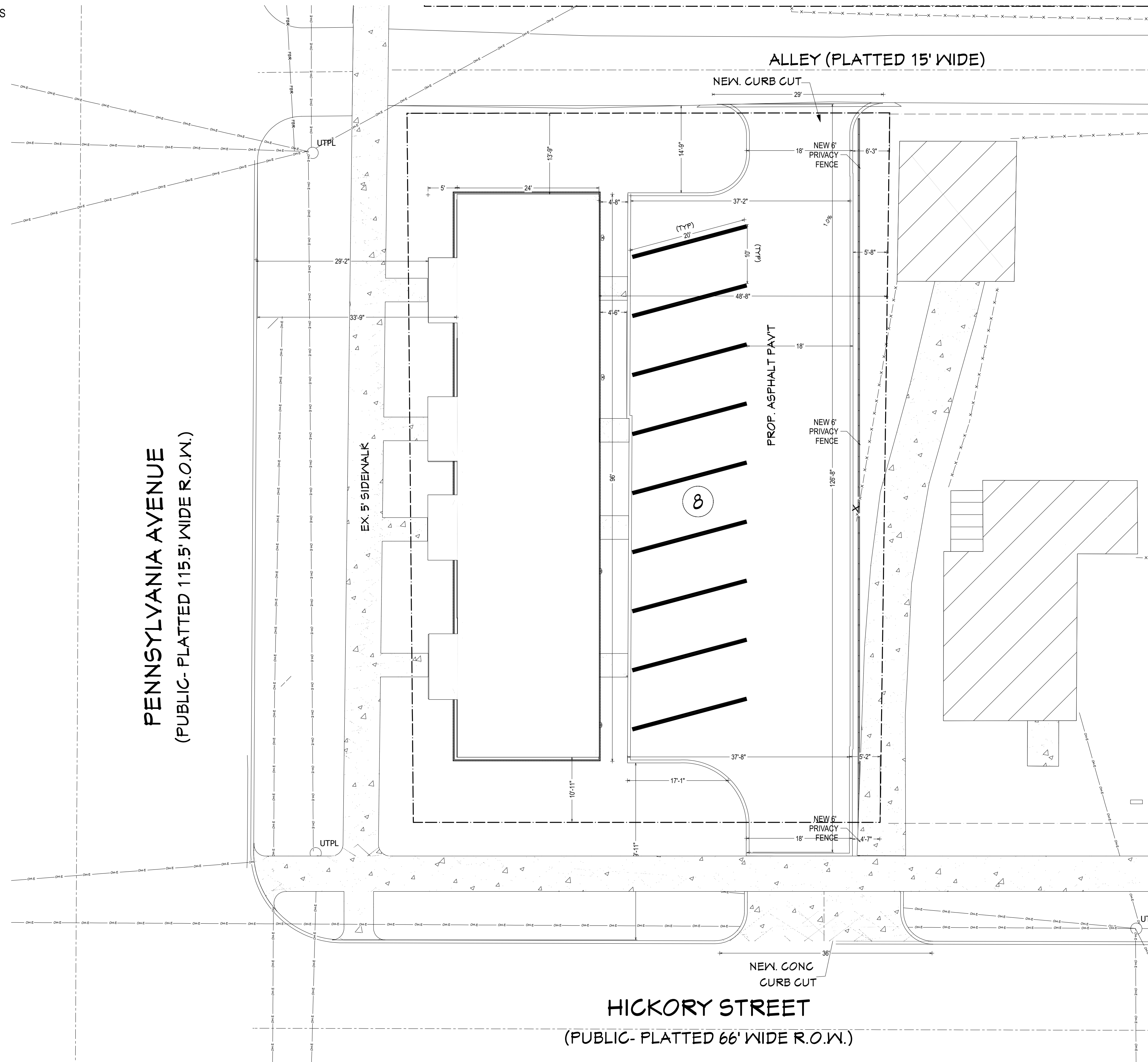
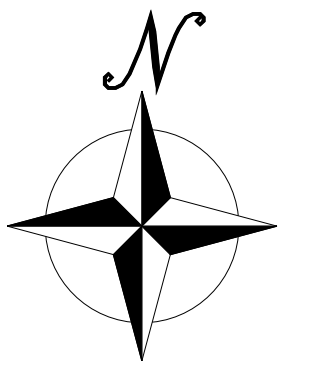
CODED NOTES

CO-OWNERS WILL UTILIZE CITY TRASH/DUMPSTER SERVICE.

SHEET NOTES

SIDEWALK SHOWN ON SITE PLAN IS FOR GENERAL INFORMATION ONLY. C&A ENGINEERS, LLC IS NOT RESPONSIBLE FOR THESE SCOPES OF WORK MEETING ACCESSIBILITY REQUIREMENTS. SITE MODIFICATIONS SHALL MEET ACCESSIBILITY REQUIREMENTS AND THE OWNER IS TO ASSIGN THIS RESPONSIBILITY.

SITE PARKING PLAN



PARKING:

PROPOSED STRIPING OF THE PARKING COMPLIES WITH THE TOWNSHIP STANDARDS FOR ZONING "R-MX MIXED RESIDENTIAL"

Multiple-Family dwellings	One (1) space per each efficiency. One and a half (1.5) spaces per 1 bedroom dwelling unit. Two (2) spaces per each unit with 2 or more bedroom.
---------------------------	--

*PARKING PROVIDED: 8 SPACES
*DIMENSIONS: 10' W X 20' L



REVISION TABLE	REVISOR	DATE

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INGHAM COUNTY LAND BANK
HICKORY POINTE CONDOMINIUMS
400 BLOCK S. PENNSYLVANIA
LANSING, MI 48912

SITE PARKING PLAN
4 UNIT BUILDING

OWNER:
INGHAM COUNTY LAND BANK
3024 TURNER RD LANSING, MICHIGAN

DATE:
5/24/2024

SCALE:
1" = 10'

SHEET NO:
C.2

LIGHTING NOTES:

THE BUILDINGS WILL HAVE EIGHT (8) LIGHTS ON THE BUILDING (ONE (1) AT EACH FRONT AND REAR DOOR).
ALL PROPOSED LIGHTS ARE 1200 LUMENS

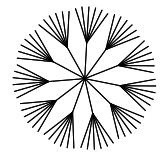
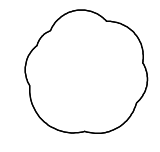
LANDSCAPE NOTES


PLANT MATERIAL SIZES AND SPACING

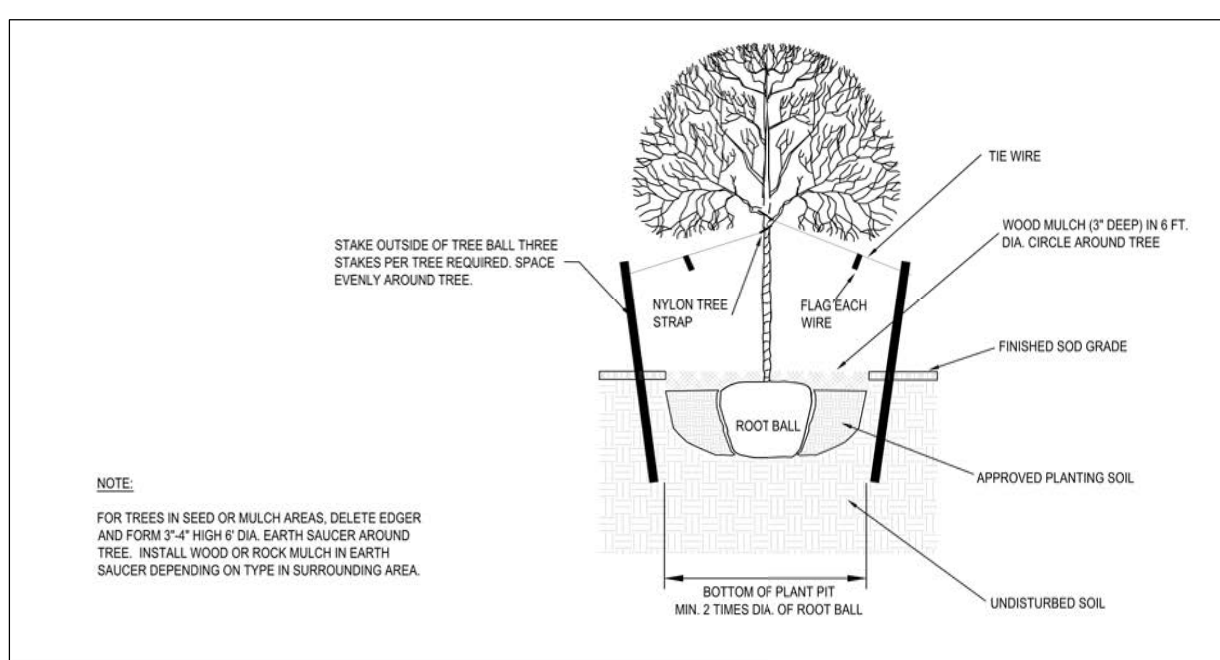
- A) TREES AND WOODY SHRUBS SHALL NOT BE PLACED CLOSER THAN THREE (3) FEET TO THE FENCE LINE OR PROPERTY LINE AS MEASURED FROM THE CENTER OF ROOT BALL. BRANCHES OF TREES MAY EXTEND OVER PROPERTY LINE BUT SHRUBS MUST BE PROPERLY TRIMMED AT THE PROPERTY LINE. ADJACENT PROPERTY OWNERS RESERVE THE RIGHT TO TRIM BRANCHES OF VEGETATION EXTENDING ONTO THEIR PROPERTY.
- B) EVERGREEN TREES SHALL HAVE A MINIMUM STARTING SIZE OF AT LEAST FIVE (5) FEET IN HEIGHT.
- C) DECIDUOUS TREES SHALL HAVE A MINIMUM STARTING SIZE OF AT LEAST TWO CALIPER INCHES.
- D) SHRUBS SHALL HAVE A MINIMUM STARTING SIZE OF AT LEAST 24 INCHES IN HEIGHT AND SPREAD AND SPACED A DISTANCE APART EQUAL TO OR LESS THAN 75 PERCENT OF THE SHRUB'S MATURE SPREAD DIAMETER.

SPECIES

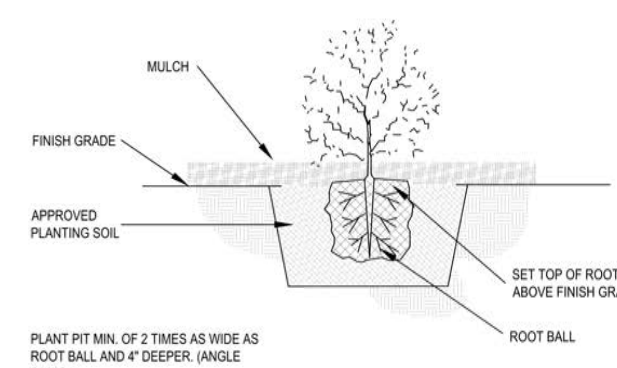
- A) MIXING OF SPECIES. THE OVERALL LANDSCAPE PLAN SHALL NOT CONTAIN MORE THAN 33 PERCENT OF ANY ONE PLANT SPECIES. THE USE OF TREES NATIVE TO THE AREA, AND MIXTURE OF TREES FROM THE SAME SPECIES ASSOCIATION, IS ENCOURAGED IN ALL LANDSCAPED AREA.
- B)
- C) THE USE OF NATIVE VEGETATION SPECIES WITH DEEP ROOTS IN RAIN GARDENS, BIOSWALES, BUFFER AREAS, AND OTHER FORMS OF NATURALIZED LANDSCAPING TO ACCOMPLISH THE GOAL OF STORMWATER RETENTION AND FILTRATION IS ENCOURAGED.
- D)
- E) PROHIBITED SPECIES. SPECIES DEEMED INVASIVE BY THE STATE OF MICHIGAN OR MICHIGAN STATE UNIVERSITY WILL BE HEAVILY DISFAVORED DURING LANDSCAPE PLAN REVIEW. SUCH INVASIVE SPECIES MAY BE REJECTED IN THE DISCRETION OF THE ZONING ADMINISTRATOR.

PLANT SCHEDULE				
NUMBER	QTY	COMMON NAMES	SCIENTIFIC NAME	2D SYMBOL
P01	48	ENGLISH COMMON BOXWOOD	BUXUS SEMPERVIRENS	
P02	8	NORWAY MAPLE, EUROPEAN MAPLE	ACER PLATANOIDES	

ELECTRICAL SCHEDULE				
NUMBER	QTY	DESCRIPTION	2D SYMBOL	LUMENS
E01	16	BOX SCONCE VERTICAL		1200

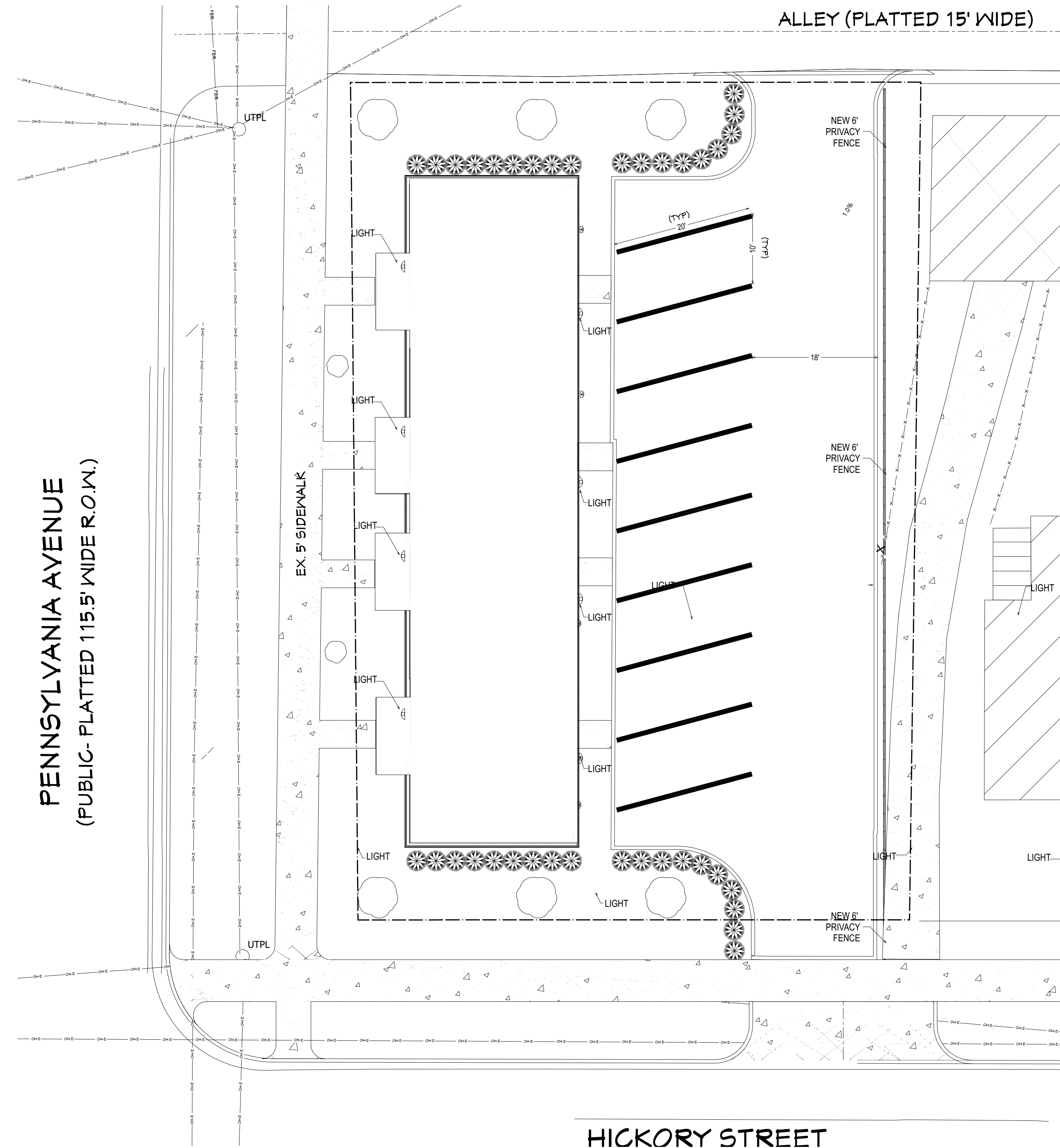
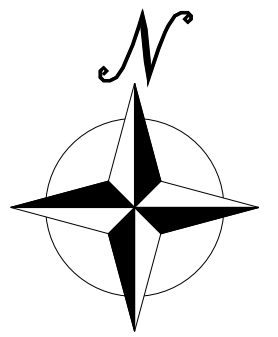


1 NO SCALE TYPICAL TREE PLANTING DETAILS



2 NO SCALE SHRUB PLANTING DETAILS

LANDSCAPE & LIGHTING PLAN



REVISION TABLE	
REVISED BY	DATE

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INGHAM COUNTY LAND BANK
HICKORY POINTE CONDOMINIUM'S
400 BLOCK S. PENNSYLVANIA
LANSING, MI 48912

LANDSCAPE & LIGHTING PLAN

OWNER:
INGHAM COUNTY LAND BANK
3024 TURNER RD LANSING, MICHIGAN

DATE:

5/24/2024

SCALE:

1" = 15'

SHEET NO:

C.3

MAINTENANCE NOTES

SOIL EROSION CONTROL MEASURES SHALL BE INSPECTED BY A CERTIFIED STORM WATER OPERATOR ON A WEEKLY BASIS OR WITHIN 24 HOURS OF A PRECIPITATION EVENT RESULTING IN ONE-HALF INCH OR MORE OF RAINFALL. THE OPERATOR MUST KEEP A WRITTEN LOG OF ALL INSPECTIONS AND COMPLETED REPORTS SHALL BE KEPT ON FILE AT THE CONSTRUCTION SITE. ALL REQUIRED MAINTENANCE SHALL BE PROMPTLY PROVIDED.

ALL DIRT AND MUD TRACKED ONTO ROADS DUE TO CONSTRUCTION BE REMOVED ON A DAILY BASIS BY THE CONTRACTOR.

SHOULD DUST BECOME A PROBLEM AT THE SITE, THE CONTRACTOR SHALL PROVIDE WATERING OR OTHER METHOD OF DUST CONTROL ACCEPTABLE TO THE CITY OF LANSING PUBLIC WORKS DEPARTMENT.

TEMPORARY STONE ACCESS DRIVE:

CRUSHED LIMESTONE BASE SHALL BE PLACED ON A GEOTEXTILE LIMESTONE BASE, GEOTEXTILE FILTER CLOTH OR APPROVED ALTERNATIVE.

ADDITIONAL LAYERS OF STONE OR CRUSHED LIMESTONE BASE SHALL BE ADDED IN LAYERS AND COMPACTED.

STEPS SHALL BE TAKEN TO REPAIR IF RUTS OR POOLING WATER APPEAR.

SILT FENCE:

BUILT UP SEDIMENT SHALL BE REMOVED WHEN SEDIMENT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE SILT FENCE.

IF SILT FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USEABLE LIFE, AND THE BARRIER IS STILL REQUIRED, THE FABRIC SHALL BE PROMPTLY REPLACED.

INLET FILTERS:

INLET FILTERS SHALL BE INSPECTED WEEKLY UNDER, WITHIN 24 HOURS OF RAINFALL AND WITHIN 24 HOURS OF RAINFALL DAILY DURING PROLONGED RAIN

BUILT-UP SEDIMENT AND DEBRIS SHALL BE REMOVED PROMPTLY.

IF INLET FILTER DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO END OF THE EXPECTED USEABLE LIFE AND THE BARRIER IS STILL REQUIRED, INLET FILTER SHALL BE REPLACED.

GENERAL SOIL EROSION CONTROL NOTES:

THE CONTRACTOR SHALL CONFORM TO PART 91 OF ACT 451 OF THE PUBLIC ACTS OF 1994; EROSION AND SEDIMENT CONTROL OF RUNOFF DURING CONSTRUCTION (AS AMENDED) AND CURRENT LOCAL ORDINANCES FOR EROSION AND SEDIMENTATION CONTROL.

PRIOR TO ANY EARTH CHANGE, THE DEVELOPER SHALL SUBMIT A DETAILED EROSION CONTROL PLAN, COMPLETED APPLICATION AND CHECKLIST FORMS, PAY ALL FEES AND POST AN EROSION CONTROL PERFORMANCE BOND, AS REQUIRED.

CONSTRUCTION OPERATION SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING OPERATIONS.

SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.

CLEANUP WILL BE DONE IN A MANNER TO ENSURE THAT EROSION CONTROL MEASURES ARE NOT DISTURBED.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR STORM WATER DISCHARGE FROM THE CONSTRUCTION ACTIVITIES IS REQUIRED PRIOR TO ANY EARTH CHANGE.

THE CONTRACTOR IS REQUIRED TO KEEP A COPY OF THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN AND PERMIT AT THE CONSTRUCTION SITE.

ALL SOIL EROSION CONTROL PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL SUCH MEASURES ARE PERMANENTLY STABILIZED AS DETERMINED BY THE SOIL EROSION INSPECTOR.

DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR CONTROL SEDIMENT BEYOND THOSE MEASURES SHOWN ON THE APPROVED PLANS SHALL BE INSTALLED OR EMPLOYED AT THE DIRECTION OF THE LOCAL JURISDICTION OR THE SOIL EROSION INSPECTOR.

ALL DISTURBED AREAS SHALL BE TOP SOILED, SEEDED, AND FERTILIZED WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCH TO BE USED AS NECESSARY FOR PROTECTION UNTIL PERMANENT VEGETATION IS ESTABLISHED.

DEWATERING MAY BE REQUIRED. IF REQUIRED, CONTRACTOR SHALL ENSURE THAT DEWATERING DISCHARGE SHALL BE FREE OF ANY SEDIMENTATION PRIOR TO LEAVING THE SITE. IF USING A FILTER BAG, IT SHOULD BE PLACED ON FLAT GROUND TO ENSURE EFFICIENCY. THE FILTER BAG SHOULD BE LOCATED A SUFFICIENT DISTANCE FROM THE EXISTING WATERCOURSE OR WETLAND TO ALLOW PROPER SETTLING OR FILTERING THROUGH NATURAL VEGETATION. DEWATERING DISCHARGE SHALL BE MONITORED FOR ANY EROSION CONDITIONS. IF EROSION OCCURS, DEWATERING OPERATIONS MUST CEASE, AND THE ERODED AREA MUST BE STABILIZED IMMEDIATELY, AND MAY RESUME ONLY AFTER STABILIZATION IS COMPLETE.

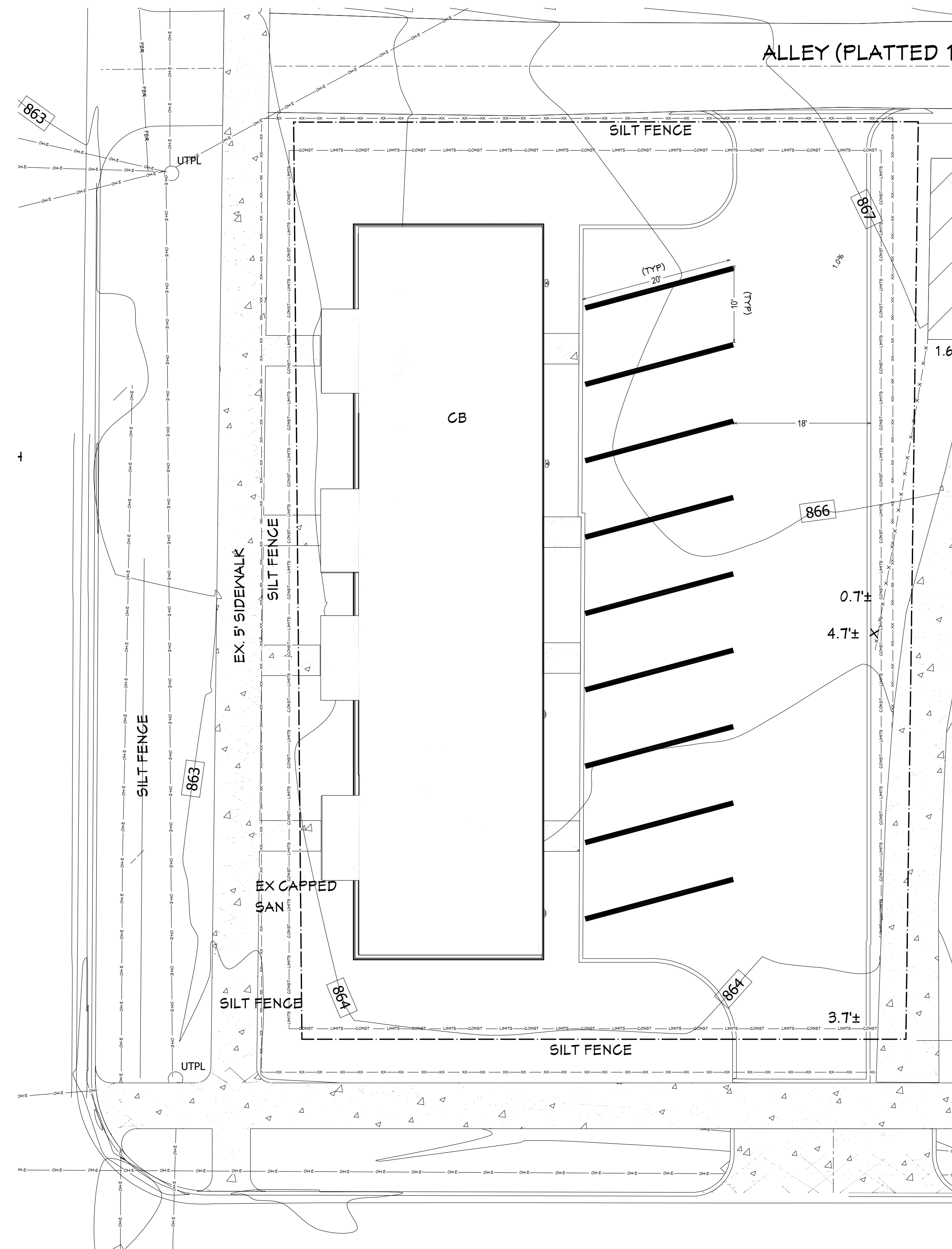
ANY TEMPORARY SOILS STOCKPILE SHALL OCCUR WITHIN THE LIMITS OF THE SILT FENCE. STOCKPILES TO BE GRADED TO A MAXIMUM OF 3:1 SIDE SLOPE.

A CONCRETE WASHOUT AREA SHALL BE DESIGNATED AND UTILIZED AS NECESSARY.

GRADING SHALL BE DONE AS TO NOT DISRUPT THE STORM WATER FROM ADJACENT PROPERTIES.

THE CONTRACTOR SHALL MAINTAIN ALL TEMPORARY AND PERMANENT CONTROL MEASURES DURING THE DURATION OF CONSTRUCTION.

SESC/GRADING/DRAINAGE PLAN

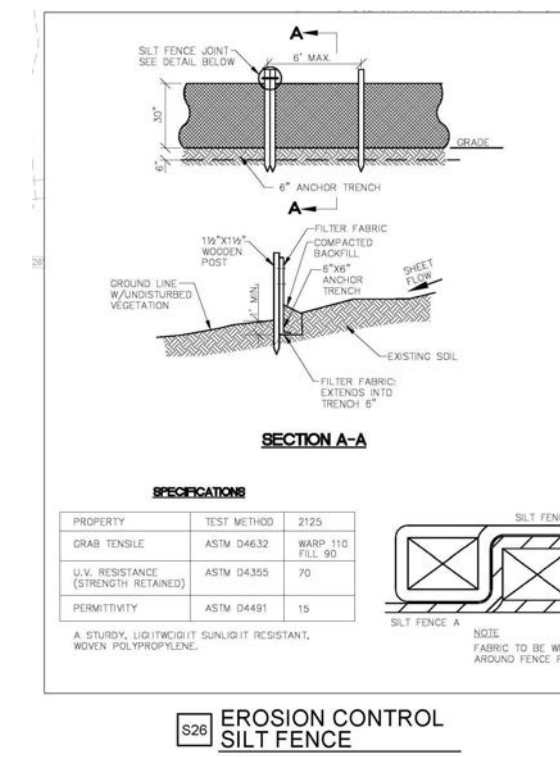


SEQUENCE OF CONSTRUCTION:

- HOLD A SESC PRE-GRADING MEETING - JULY, 2024.
- INSTALL TRACKING MAT, ALL PERIMETER SESC MEASURES - AUG. 2024.
- CLEAR AND EXCAVATE SITE TO SUBGRADE - AUG. 2024.
- INSTALL BUILDING FOOTINGS & FOUNDATIONS IN ACCORDANCE WITH PERMIT - AUG. 2024.
- CONSTRUCT UNDERGROUND UTILITIES - OCT. 2024.
- MAINTAIN SESC MEASURES, INCLUDING CATCH BASINS AND TRACKING MAT - AS NEEDED.
- BRING ASPHALT PAV'T TO SUBBASE GRADE AND PAV'T LEVEL COURSE - JAN 2025.
- CONTINUE BUILDING CONSTRUCTION - OCT. 2024
- FINISH GRADE, REDISTRIBUTE TOP SOIL, SEED AND MULCH ALL DISTURBED AREAS - SEPT. 2025.
- ENSURE ALL PERMANENT CONTROL MEASURES ARE INSTALLED AND FUNCTIONING - OCT. 2025.
- REMOVE ALL TEMPORARY SESC MEASURES - NOV. 2025.

SILT FENCE NOTE:

- BUILT UP SEDIMENT SHALL BE REMOVED WHEN SEDIMENT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE SILT FENCE.
- IF SILT FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USEABLE LIFE, AND THE BARRIER IS STILL REQUIRED, THE FABRIC SHALL BE PROMPTLY REPLACED.



GRADING NOTES

ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.

THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.

PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.

THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.

MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:

- CURB GUTTER: 0.50%
- CONCRETE SURFACES: 1.00%
- ASPHALT SURFACES: 1.00%

A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF THIS CONDITION CANNOT BE MET.

FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

ADA NOTES

THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.

THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.

THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.

THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP, AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALK-UP ATM, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL. THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.

THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00% IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP. FOR ALTERATIONS, A CURB RAMP FLARE SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURBS RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.

ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.

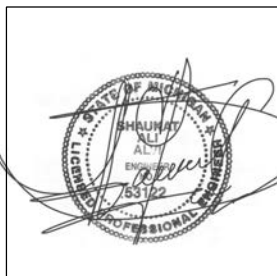
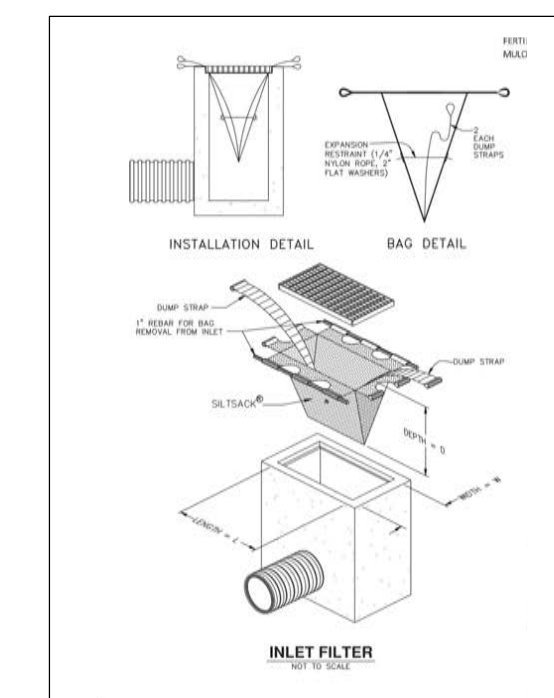
A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.

THE CONTRACTOR SHALL ENSURE A MAXIMUM OF ¼ INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN ¼ INCHES AND ½ INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP ¼ INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN 1 UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).

THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN ½ INCH.

INLET FILTERS NOTE:

- INLET FILTERS SHALL BE INSPECTED WEEKLY UNDER NORMAL CONDITIONS, WITHIN 24 HOURS OF RAINFALL AND DAILY DURING PROLONG RAIN.
- BUILT UP SEDIMENT AND DEBRIS SHALL BE REMOVED PROMPTLY.
- IF THE FABRIC DECOMPOSES OR BECOMES INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USEABLE LIFE, AND THE BARRIER IS STILL REQUIRED, THE FABRIC SHALL BE PROMPTLY REPLACED



REVISION TABLE	DATE

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INGHAM COUNTY LAND BANK
HICKORY POINTE CONDOMINIUM'S
400 BLOCK S. PENNSYLVANIA
LANSING, MI 48912

SESC/GRADING/DRAINAGE PLAN

OWNER:
INGHAM COUNTY LAND BANK
3024 TURNER RD LANSING, MICHIGAN

DATE:

5/24/2024

SCALE:

1" = 10'

SHEET NO:

C.4

GENERAL NOTES:

1. IN THE EVENT OF CONFLICT BETWEEN THESE PLANS AND THE CITY'S STANDARD NOTES, THE CITY'S STANDARDS SHALL PREVAIL.
2. ALL PROPOSED UTILITY MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS, SPECIFICATIONS AND CONSTRUCTION DETAILS OF THE CITY OF LANSING.
3. REFER TO THE STANDARD DETAILS OF THE AUTHORITY HAVING JURISDICTION REGARDING UTILITY TRENCH BEDDING AND BACKFILL REQUIREMENTS.
4. REFER TO THE STANDARD DETAILS OF THE AUTHORITY HAVING JURISDICTION REGARDING REQUIRED MANHOLE AND CASTING DETAILS AND TYPES.
5. CONTRACTOR SHALL COORDINATE SCHEDULING AND PROCEDURES WITH THE AUTHORITY HAVING JURISDICTION PRIOR TO PERFORMING THE PROPOSED CONNECTIONS TO THE EXISTING UTILITIES.
6. A MINIMUM VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED BETWEEN CROSSING UTILITIES, UNLESS OTHERWISE APPROVED.
7. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET SHALL BE MAINTAINED BETWEEN SANITARY SEWER LINES AND POTABLE WATER LINES.
8. NO CONNECTIONS TO EXISTING WATER MAINS SHALL BE MADE UNTIL AFTER THE NEW MAIN HAS SUCCESSFULLY PASSED BACTERIOLOGICAL AND HYDROSTATIC TESTS.
9. NO CONNECTION RECEIVING STORM WATER, SURFACE WATER OR GROUND WATER SHALL BE MADE TO SANITARY SEWERS.
10. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ALL UTILITY CONNECTIONS TO THE BUILDING. CONTRACTOR SHALL CONFIRM ALL BUILDING CONNECTION LOCATIONS AND ELEVATIONS AND NOTIFY THE PROJECT TEAM OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
11. PRIVATE UTILITIES (INCLUDING ELECTRIC, GAS, PHONE, AND CABLE) SHOWN FOR SCHEMATIC PURPOSES ONLY. ALL PRIVATE UTILITY ROUTING AND INSTALLATION SHALL BE COORDINATED BY THE RESPECTIVE UTILITY COMPANY AND/OR THE CONTRACTOR.
12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WITHIN THE AREAS OF PROPOSED DEVELOPMENT.
13. THE CONTRACTOR SHALL CALL "MISS DIG" AT LEAST THREE BUSINESS DAYS PRIOR TO THE START OF ANY CONSTRUCTION ON THE SITE.
14. THERE ARE FIRE WALLS WITHIN THE PROPOSED BUILDING.
15. BOOSTER PUMPS ARE NOT PROPOSED WITHIN THE PROPOSED BUILDING.
16. PIPE MATERIALS FOR PUBLIC SANITARY SEWER SYSTEMS
 - (1) VCP C700ES FOR DIAMETER UP TO 18 INCHES AND DEPTHS LESS THAN 14 FEET.
 - (2) PVC - SDR 26 OR TRUSS PIPE
16. ALL SANITARY SEWER PIPE AND LEADS SHALL BE 6 INCH

GRADING NOTES

ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DE-WATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DE-WATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL FILL MATERIALS BROUGHT TO THE SITE.

THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES, INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES, TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.

PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CURBS.

THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.

MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:

- CURB GUTTER: 0.50%
- CONCRETE SURFACES: 1.00%
- ASPHALT SURFACES: 1.00%

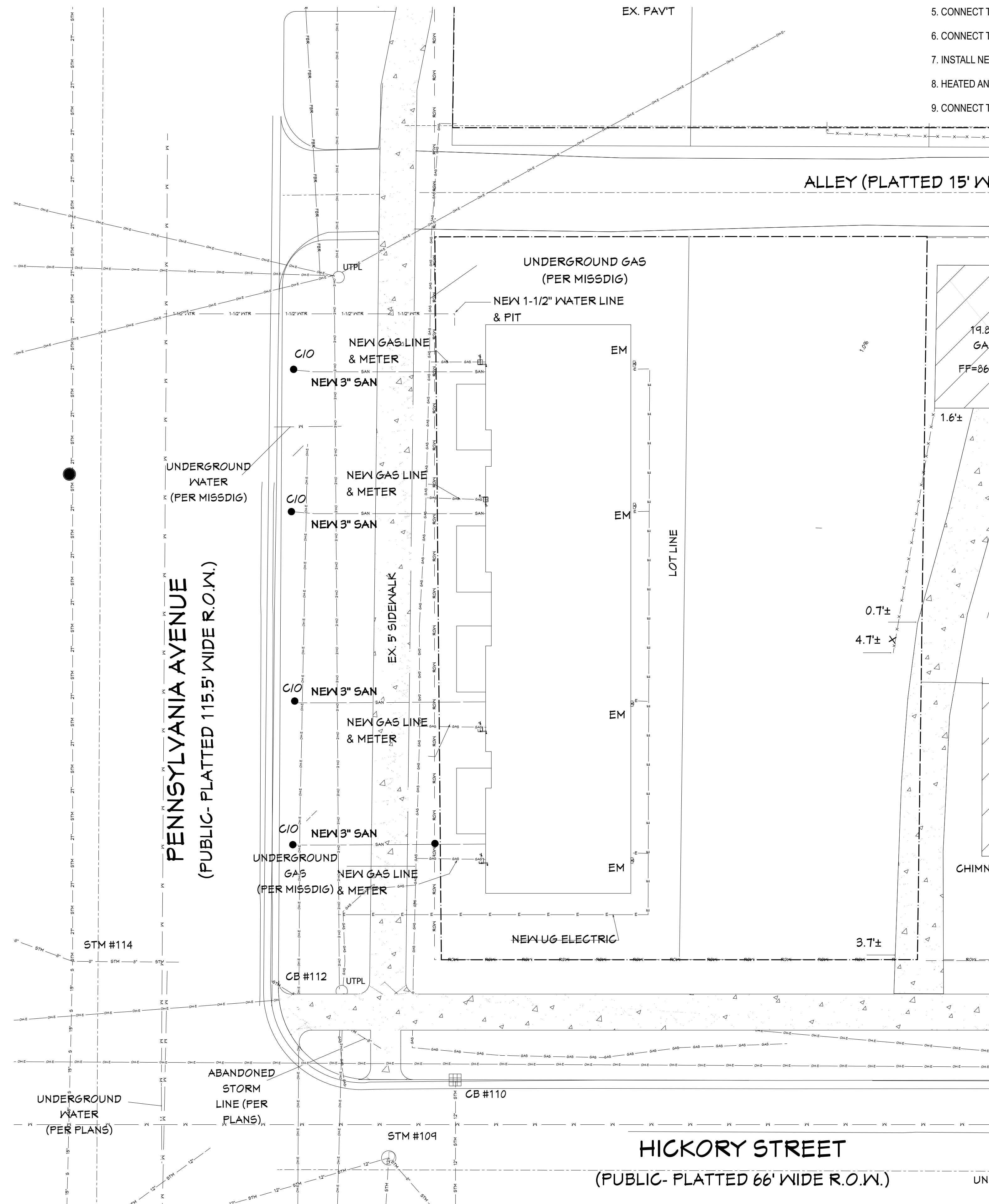
A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF THIS CONDITION CANNOT BE MET.

FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE DEVELOPER IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE UTILIZED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

UTILITIES

UTILITY KEY NOTES:

1. CONNECT DIRECTLY TO EXISTING CITY SANITARY. THE LEAD SHALL BE TIED IN TOWARD THE TOP OF THE EXISTING SANITARY SEWER.
2. INSTALL NEW 2 INCH COPPER WATER LINE SUPPLY SERVICE, WITH SHUT OFF VALVES.
- 3.
4. INSTALL 6" PVC-SDR 26, SANITARY SEWER LINE. PIPE SLOPE SHALL BE 1% MIN.
5. CONNECT TO NEW GAS LINE (UNDERGROUND)
6. CONNECT TO NEW ELECTRICAL LINE (UNDERGROUND) W/DISCONNECT & METER BANK
7. INSTALL NEW SANITARY SEWER CLEAN-OUT (EVERY 100 FEET)
8. HEATED AND LOCK METER ROOM
9. CONNECT TO BWL WATER MAIN COORDINATE WITH BWL



REVISION TABLE	DATE

C & A ENGINEERS, LLC
 10722 CORKERY LN
 GRAND EDGE MI 48837
 P: 517.588.8122 E: www.candae.com

INGHAM COUNTY LAND BANK
 HICKORY POINTE CONDOMINIUM'S
 400 BLOCK S. PENNSYLVANIA
 LANSING, MI 48912

UTILITIES

OWNER:
 INGHAM COUNTY LAND BANK
 3024 TURNER RD LANSING, MICHIGAN

DATE:

5/24/2024

SCALE:

1" = 10'

SHEET NO:

C.5

GENERAL SHEET NOTES:

1. IN THE EVENT OF CONFLICT BETWEEN THESE PLANS AND THE CITY'S STANDARD NOTES, THE CITY'S STANDARDS SHALL PREVAIL.
2. ALL PROPOSED UTILITY MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS, SPECIFICATIONS AND CONSTRUCTION DETAILS OF THE CITY OF LANSING.
3. REFER TO THE STANDARD DETAILS OF THE AUTHORITY HAVING JURISDICTION REGARDING UTILITY TRENCH BEDDING AND BACKFILL REQUIREMENTS.
4. CONTRACTOR SHALL COORDINATE SCHEDULING AND PROCEDURES WITH THE AUTHORITY HAVING JURISDICTION PRIOR TO PERFORMING THE PROPOSED CONNECTIONS TO THE EXISTING UTILITIES.
5. A MINIMUM VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED BETWEEN CROSSING UTILITIES, UNLESS OTHERWISE APPROVED.
6. NO CONNECTION RECEIVING STORM WATER, SURFACE WATER OR GROUND WATER SHALL BE MADE TO SANITARY SEWERS.
7. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ALL UTILITY CONNECTIONS TO THE BUILDING. CONTRACTOR SHALL CONFIRM ALL BUILDING CONNECTION LOCATIONS AND ELEVATIONS AND NOTIFY THE PROJECT TEAM OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WITHIN THE AREAS OF PROPOSED DEVELOPMENT.
9. THE CONTRACTOR SHALL CALL "MISS DIG" AT LEAST THREE BUSINESS DAYS PRIOR TO THE START OF ANY CONSTRUCTION ON THE SITE.

STORMWATER PLAN

EXISTING ELEV XXX
PROPOSED ELEV XXX

- 1 NEW STORM STRUCTURE
- 2 NEW 6" STORM SEWER
- 3 CONNECT TO EX. CATCH BASIN

Proposed Stormwater Calculation Tool - Stormwater Management TRM

Stormwater Management Requirements

Site Name: 400 PENNSYLVANIA AVE
Outlet ID: 0

If Restricted Outflow Rate is required by Receiving Agency:
25 Year Allowable Peak Discharge: 0.00 cfs
* Allowable peak discharge rate shall be used when Receiving Agency limits flow rate below existing peak flow. Based on hydraulic limitations of receiving system. Values shall remain if flow restricted pipe is specified.

Sub-Drainage District ID	Area (ac)	Description/Drainage Group	Runoff Coefficient (C)	A/C	Curve Number (CN)	A/CN
1	0.20	Lawn (Type B)	0.30	0.60	58	11.60
2	0.00	Impervious Cover (sidewalk)	0.90	0.07	91	1.61
3	0.00		0.00			0.00
4	0.00		0.00			0.00
5	0.00		0.00			0.00
6	0.00		0.00			0.00
TOTAL AREA (ac)	0.20		Weighted C	0.33	Weighted CN	61

Sub-Drainage District ID	Area (ac)	Description/Drainage Group	Runoff Coefficient (C)	A/C	Curve Number (CN)	A/CN
1	0.11	Impervious Cover (pavement)	0.95	0.10	98	10.49
2	0.05	Lawn (Type B)	0.30	0.15	58	3.15
3	0.00	Impervious Cover (rooftop)	0.95	0.04	98	0.38
4	0.00		0.00			0.00
5	0.00		0.00			0.00
6	0.00		0.00			0.00
TOTAL AREA (ac)	0.16		Weighted C	0.79	Weighted CN	88

Summary

Outlet ID	0
Total Acreage (ac)	0.22
Weighted C - Proposed Conditions	0.79
Weighted CN - Proposed Conditions	88
Time of Concentration PRE (hr)	0.85
Time of Concentration POST (hr)	0.85
Water Quality (WQ) Volume (ft ³)	624
Channel Protection (CP) Volume (ft ³)	1,126
Infiltration Volume (ft ³) - Required	1,126
Infiltration Volume (ft ³) - Provided	3,535
25-Year Peak Allowable Discharge (cfs)	0.00
25-Year Flood Protection (FP) Volume (ft ³)	1,785
25-Year TOTAL BASIN VOLUME (ft ³) - Pre vs Post	1,785
25-Year TOTAL BASIN VOLUME (ft ³) - Restricted Outlet	2,598
25-Year Volume (ft ³) - REQUIRED (net of infiltration)	-937

Other #1

f BMP	STORMTECH CHAMBER
Avg Design Infiltration Rate (in/hr)	0.00
sa (ft ²)	0
Volume (ft ³)	2,910

ADS

User Inputs

Chamber Model: MC7200
Outlet Control Structure: Yes
Project Name: 400 Pennsylvania Ave
Engineer: JAMES CARTER
Project Location: Michigan
Measurement Type: Imperial
Required Storage Volume: 208 cubic ft.
Stone Porosity: 40%
Stone Foundation Depth: 9 in.
Stone Above Chambers: 12 in.
Design Concrete Dimensions: (84 ft. x 35 ft.)

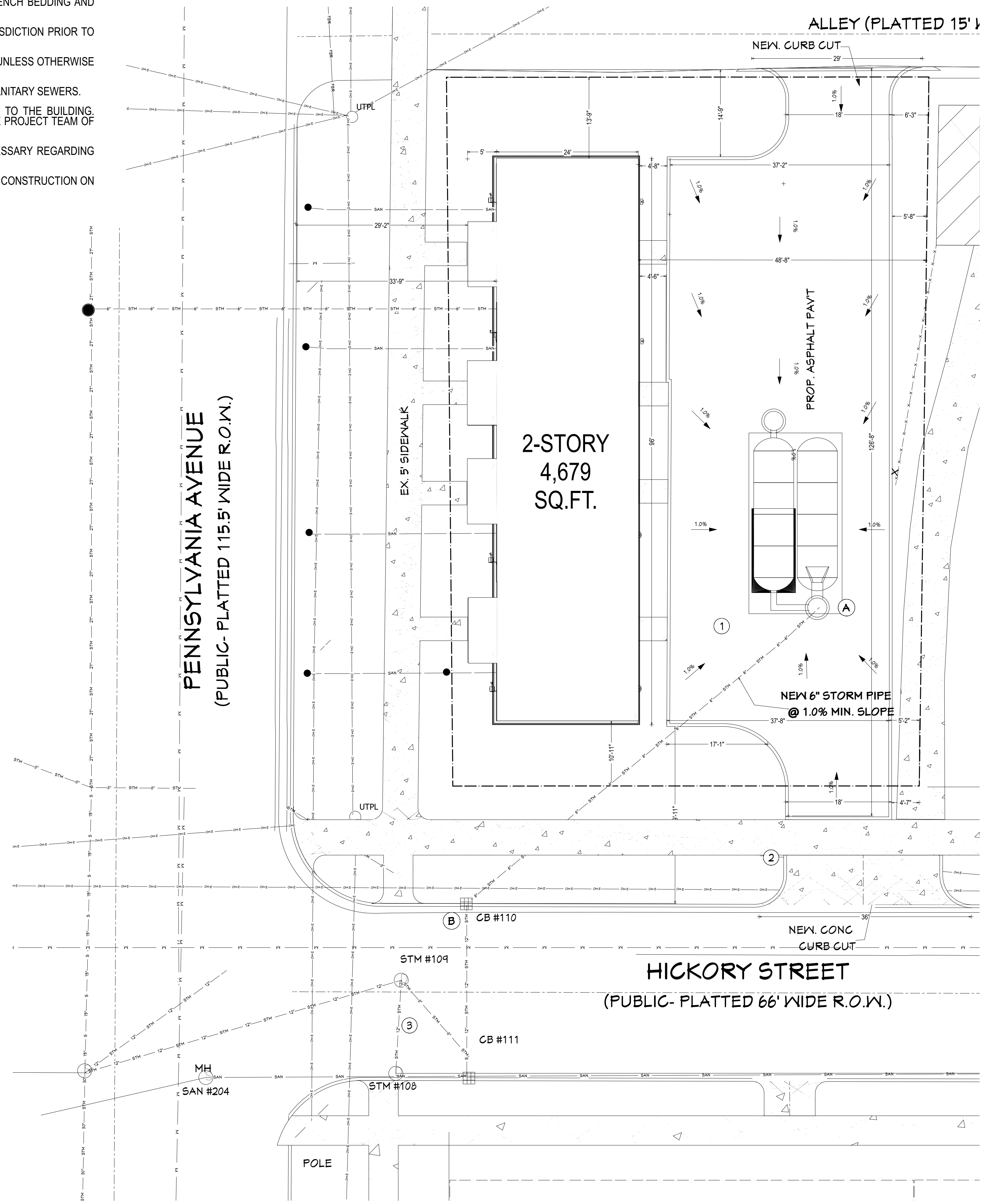
Results

System Volume and Bed Size

Installed Storage Volume: 2910.41 cubic ft.
Storage Volume Per Chamber: 175.90 cubic ft.
Number of Chambers Required: 8
Number of End Caps Required: 4
Chamber Rows: 2
Maximum Length: 37.60 ft.
Maximum Width: 19.42 ft.
Approx. Bed Size Required: 793.11 square ft.
Average Cover Over Chambers: N/A

System Components

Amount of Stone Required: 125 cubic yards
Volume of Excavation (Not including 183 cubic yards fill):
Total Non-woven Geotextile Required: 290 square yards
Woven Geotextile Required (excluding 22 square yards Isolator Rows):
Woven Geotextile Required (Isolator Rows): 75 square yards
Total Woven Geotextile Required: 96 square yards
Impervious Liner Required: 0 square yards



Flood Protection Volume: 10-yr

Site Name: 400 PENNSYLVANIA AVE
Total Site Area (acres): 0.00
10-Year, 24-Hour Rainfall: 3.56

Pre-development Conditions

Cover Type/Soil Type	Area (sf)	Area (ac)	CN	S	Q Runoff (in)	Runoff Volume (ft ³)
Lawn (Type B)	8,712	0.20	58	7.2	0.48	346
Impervious Cover (sidewalk)	784	0.02	91	1.0	2.60	170
	0	0	0.00	0		0
	0	0	0.00	0		0
	0	0	0.00	0		0
TOTAL	9,496	0.22	N/A	N/A	N/A	516

Post-development Conditions

Cover Type/Soil Type	Area (sf)	Area (ac)	CN	S	Q Runoff (in)	Runoff Volume (ft ³)
Impervious Cover (pavement)	4,661	0.11	98	0.2	3.33	1,292
Lawn (Type B)	2,352	0.05	58	7.2	0.48	93
Impervious Cover (rooftop)	2,483	0.06	98	0.2	3.33	688
	0	0	0.00	0		0
	0	0	0.00	0		0
TOTAL	9,496	0.22	N/A	N/A	N/A	2,074

V₁₀ Runoff Volume Increase (ft³) = 1,558
10-year peak detention pond discharge (cfs) = 0.06

Flood Protection Volume: 100-yr

Site Name: 400 PENNSYLVANIA AVE
Total Site Area (acres): 0.00
100-Year, 24-Hour Rainfall: 5.71

Pre-development Conditions

Cover Type/Soil Type	Area (sf)	Area (ac)	CN	S	Q Runoff (in)	Runoff Volume (ft ³)
Lawn (Type B)	8,712	0.20	58	7.2	1.58	1,146
Impervious Cover (sidewalk)	784	0.02	91	1.0	4.67	305
	0	0	0.00	0		0
	0	0	0.00	0		0
	0	0	0.00	0		0
TOTAL	9,496	0.22	N/A	N/A	N/A	1,452

Post-development Conditions

Cover Type/Soil Type	Area (sf)	Area (ac)	CN	S	Q Runoff (in)	Runoff Volume (ft ³)
Impervious Cover (pavement)	4,661	0.11	98	0.2	5.47	2,125
Lawn (Type B)	2,352	0.05	58	7.2	1.58	309
Impervious Cover (rooftop)	2,483	0.06	98	0.2	5.47	1,132
	0	0	0.00	0		0
	0	0	0.00	0		0
TOTAL	9,496	0.22	N/A	N/A	N/A	3,567

V₁₀₀ Runoff Volume Increase (ft³) = 2,116
100-year peak detention pond discharge (cfs) = 0.21

Flood Protection Volume: 25-yr

Site Name: 400 PENNSYLVANIA AVE
Total Site Area (acres): 0.00
25-Year, 24-Hour Rainfall: 4.33

Pre-development Conditions

Cover Type/Soil Type	Area (sf)	Area (ac)	CN	S	Q Runoff (in)	Runoff Volume (ft ³)
Lawn (Type B)	8,712	0.20	58	7.2	0.82	596
Impervious Cover (sidewalk)	784	0.02	91	1.0	3.33	218
	0	0	0.00	0		0
	0	0	0.00	0		0
	0	0	0.00	0		0
TOTAL	9,496	0.22	N/A	N/A	N/A	813

Post-development Conditions

Cover Type/Soil Type	Area (sf)	Area (ac)	CN	S	Q Runoff (in)	Runoff Volume (ft ³)
Impervious Cover (pavement)	4,661	0.11	98	0.2	4.09	1,590
Lawn (Type B)	2,352	0.05	58	7.2	0.82	161
Impervious Cover (rooftop)	2,483	0.06	98	0.2	4.09	847
	0	0	0.00	0		0
	0	0	0.00	0		0
TOTAL	9,496	0.22	N/A	N/A	N/A	2,598

V₂₅ Runoff Volume Increase (ft³) = 1,785
25-year peak detention pond discharge (cfs) = 0.11

REVISION TABLE

DATE	REVISION BY

C & A ENGINEERS, LLC
10722 CORKERY LN
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P: 517.988.8125 E: www.candae.com

INGHAM COUNTY LAND BANK
HICKORY POINTE CONDOMINIUMS
400 BLOCK S. PENNSYLVANIA
LANSING, MI 48912

STORMWATER PLAN

OWNER:
INGHAM COUNTY LAND BANK
3024 TURNER RD LANSING, MICHIGAN

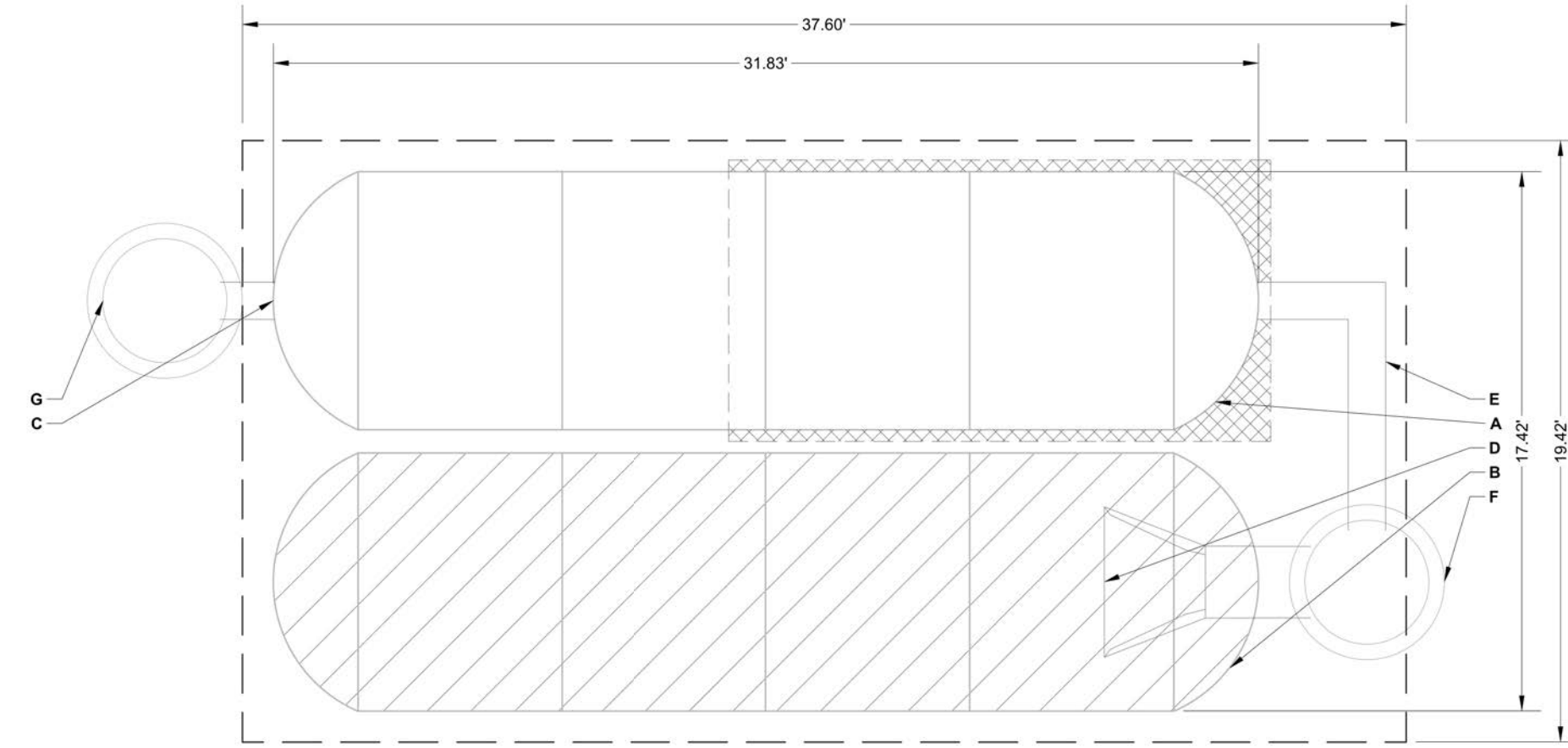
DATE:
5/24/2024

SCALE:
1" = 20'

SHEET NO:
C.6

STORMTECH DETAILS

PROPOSED LAYOUT		CONCEPTUAL ELEVATIONS:		PART TYPE		ITEM ON LAYOUT		DESCRIPTION		INVERT ABOVE BASE OF CHAMBER		MAX FLOW
8	STORMTECH MC-7200 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	19.75'	A	12" TOP PARTIAL CUT END CAP, PART# MC7200EP12T / TYP OF ALL 12" TOP CONNECTIONS	35.69'						
9	STORMTECH MC-7200 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	7.75'	B	24" BOTTOM PARTIAL CUT END CAP, PART# MC7200EP24B / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.20'						
12	STONE ABOVE (IN)	MINIMUM ALLOWABLE GRADE (CONCRETE PAVEMENT):	7.75'	C	12" BOTTOM PARTIAL CUT END CAP, PART# MC7200EP12B / TYP OF ALL 12" BOTTOM CONNECTIONS	1.55'						
9	STONE BELOW (IN)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	7.75'	D	FLAMP							
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	7.75'	E	12" X 12" TOP MANIFOLD, ADS N-12	35.69'						
2911	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED)	TOP OF STONE	4.75'	F	CONCRETE STRUCTURE							2.5 CFS IN
		12" X 12" TOP MANIFOLD INVERT	3.72'	G	CONCRETE STRUCTURE							2.0 CFS OUT
		BASE STONE INCLUDED	0.85'									
730	SYSTEM AREA (SF)	12" BOTTOM CONNECTION INVERT	0.73'									
114.9	SYSTEM PERIMETER (ft)	BOTTOM OF MC-7200 CHAMBER	0.00'									
		BOTTOM OF STONE	0.00'									



- ISOLATOR ROW PLUS (SEE DETAIL)
- PLACE MINIMUM 17.50' OF ADSPLUS175 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS
- BED LIMITS

NOTES:

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM MUST BE REVIEWED AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR PROVIDING THE NECESSARY INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

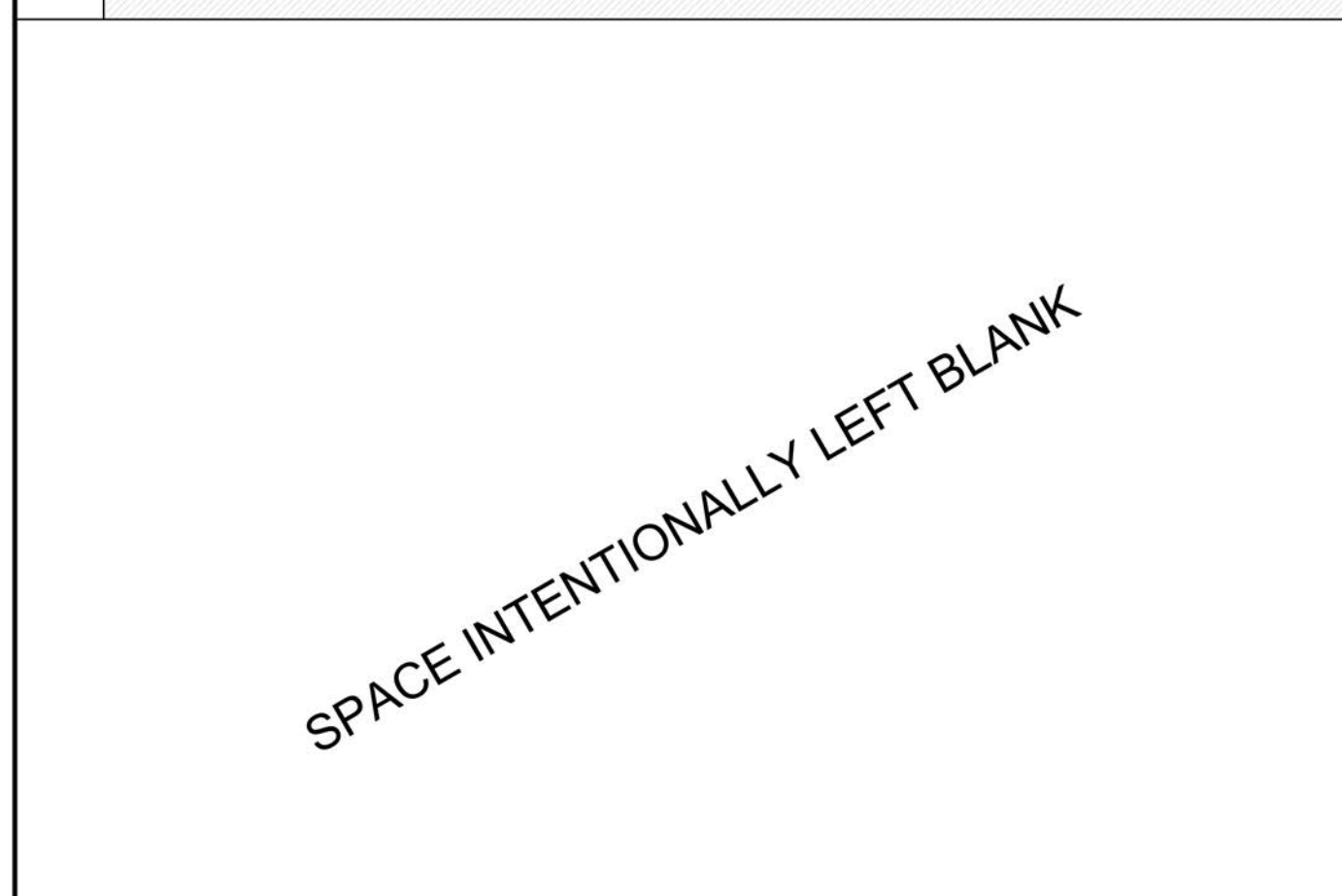
INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT**
- INSPECTION PORTS (IF PRESENT).
 - REMOVE/OPEN LID ON HYDROPLAST INLINE DRAIN.
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED.
 - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG.
 - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL).
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS**
- REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS USING A FLASHLIGHT. INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE.
 - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY.
 - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE.
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS**
- A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED.
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN.
 - VACUUM STRUCTURE SLUMP AS REQUIRED.
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.**
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.**

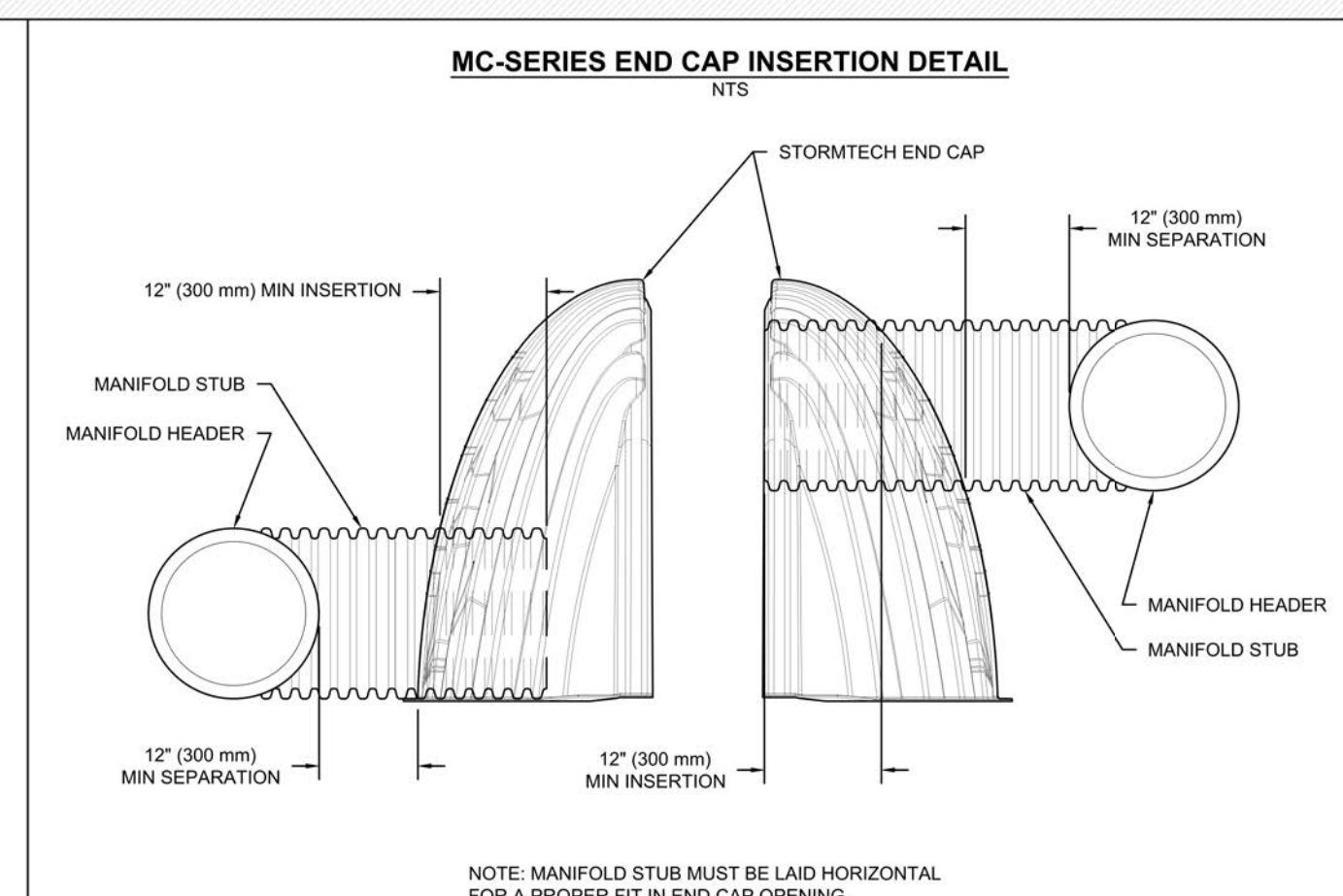
NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

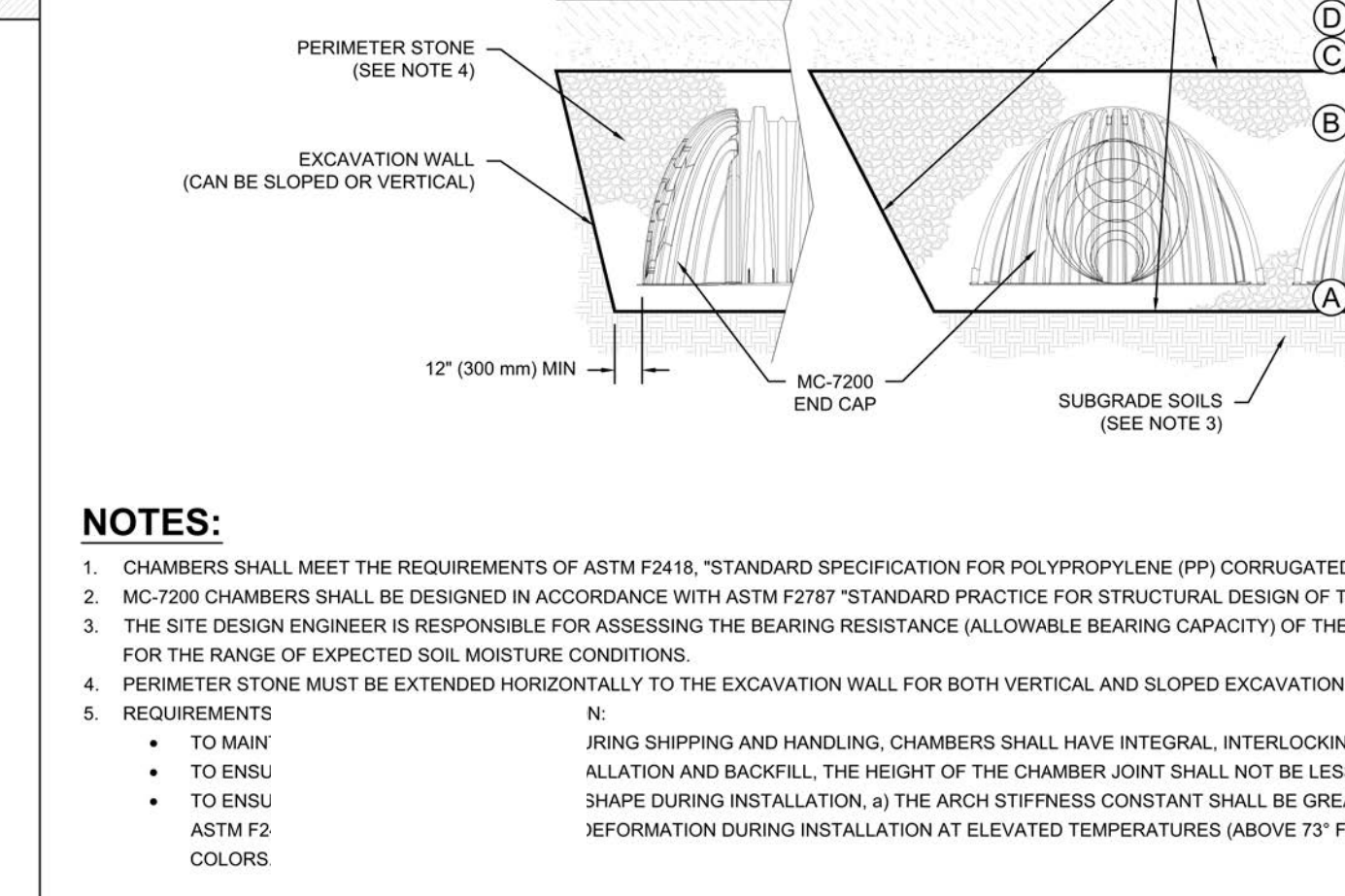
3 MC-7200 ISOLATOR ROW PLUS DETAIL



SPACE INTENTIONALLY LEFT BLANK



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
- MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS"
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS:
 - TO MAIN
 - TO ENSU
 - TO ENSU
 - ASTM F2
 - COLORS

NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-7200 TECHNICAL SPECIFICATION

NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	100.0" X 60.0" X 79.1" (2540 mm X 1524 mm X 2010 mm)
CHAMBER STORAGE	175.8 CUBIC FEET (4.96 m³)
MINIMUM INSTALLED STORAGE*	297.3 CUBIC FEET (7.56 m³)
WEIGHT (NOMINAL)	205 lbs.

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	90.0" X 61.0" X 32.8" (2286 mm X 1549 mm X 833 mm)
END CAP STORAGE	39.5 CUBIC FEET (1.12 m³)
MINIMUM INSTALLED STORAGE*	115.3 CUBIC FEET (3.26 m³)
WEIGHT (NOMINAL)	90 lbs. (40.8 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BEDDING BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B" PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T" END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC7200IEP06T	6" (150 mm)	42.54" (1081 mm)	---
MC7200IEP06B	---	---	0.86" (22 mm)
MC7200IEP06T	8" (200 mm)	40.50" (1029 mm)	---
MC7200IEP06B	---	---	1.01" (26 mm)
MC7200IEP10T	10" (250 mm)	38.37" (975 mm)	---
MC7200IEP10B	---	---	1.33" (34 mm)
MC7200IEP12T	12" (300 mm)	35.69" (907 mm)	---
MC7200IEP12B	---	---	1.55" (39 mm)
MC7200IEP15T	15" (375 mm)	32.72" (831 mm)	---
MC7200IEP15B	---	---	1.70" (43 mm)
MC7200IEP18T	18" (450 mm)	29.38" (746 mm)	---
MC7200IEP18B	---	---	1.97" (50 mm)
MC7200IEP24T	24" (600 mm)	23.05" (585 mm)	---
MC7200IEP24B	---	---	2.28" (57 mm)
MC7200IEP24W	---	---	2.95" (75 mm)
MC7200IEP30W	---	---	3.25" (83 mm)
MC7200IEP36W	---	---	3.55" (90 mm)

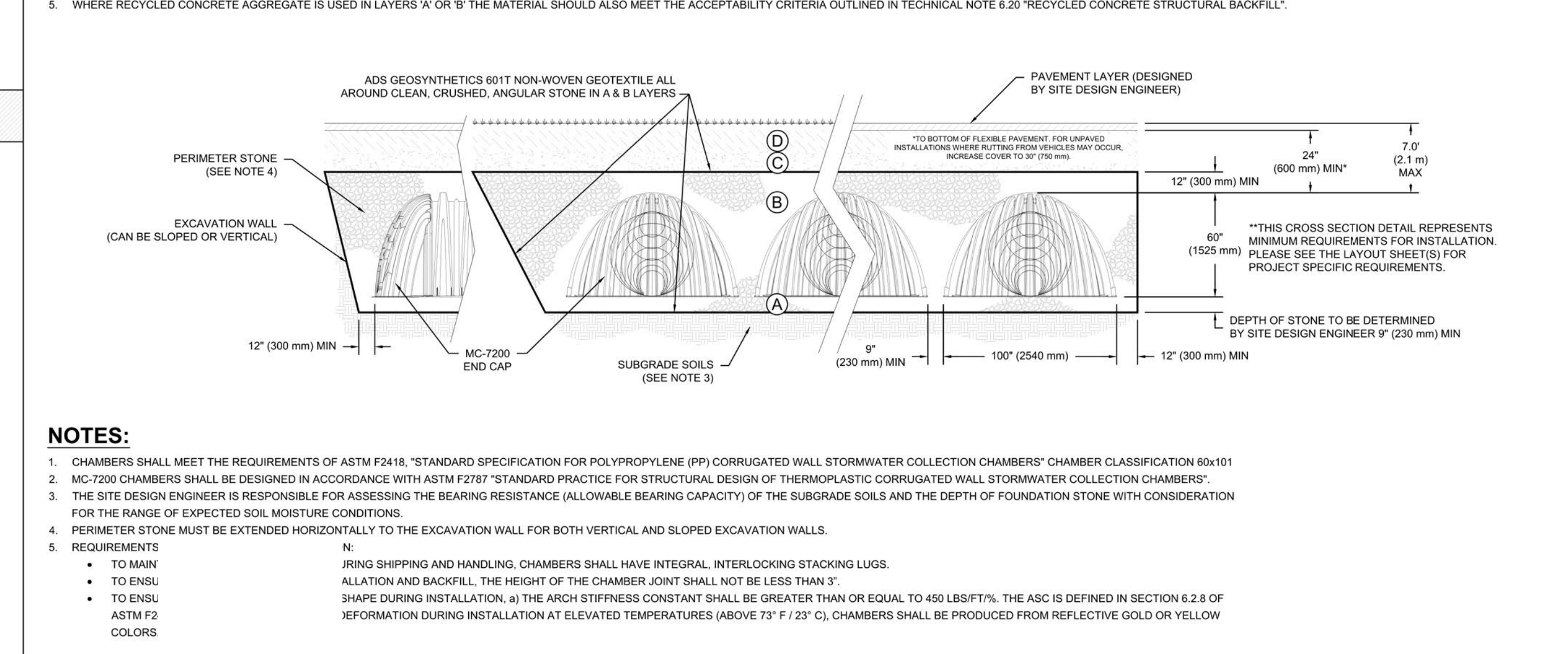
CUSTOM PREFABRICATED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-7200 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

2 MC-7200 TECHNICAL SPECIFICATION

ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	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 OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.	
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE 'B' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 90% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ²	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ²	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATOR COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
 - WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

DATE: _____ PROJECT #: _____ NOT TO SCALE

DRAWN: JC CHECKED: N/A REV: _____

400 PENNSYLVANIA AVE
LANSING, MI, USA

StormTech Chamber System
888-892-2694 | WWW.STORMTECH.COM

4640 TRUEWMAN BLVD
HILLIARD, OH 43026
1-800-733-7473

SHEET 1 OF 1

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10722 CORKERY LN
GRAND LEDGE MI 48837
P. 517.588.8152 E. WWW.CAENGINEERS.COM

INGHAM COUNTY LAND BANK
HICKORY POINTE CONDOMINIUM'S
400 BLOCK S. PENNSYLVANIA
LANSING, MI 48912

STORMTECH DETAILS

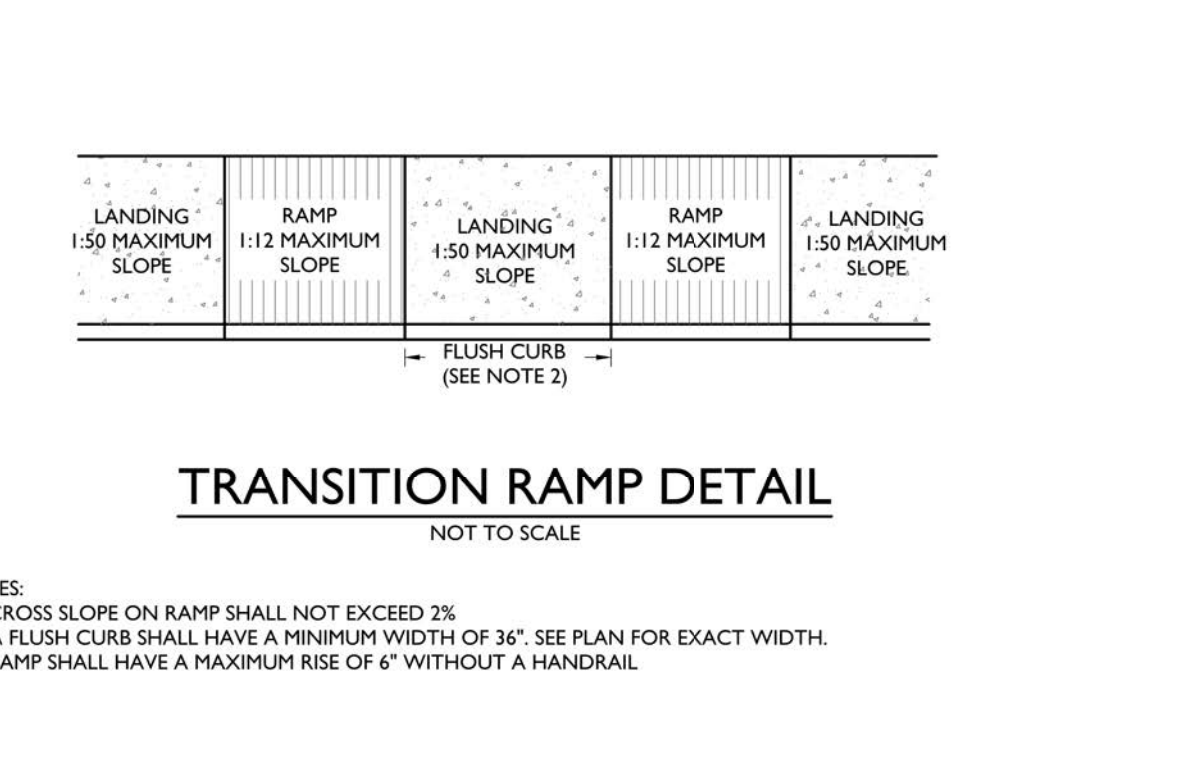
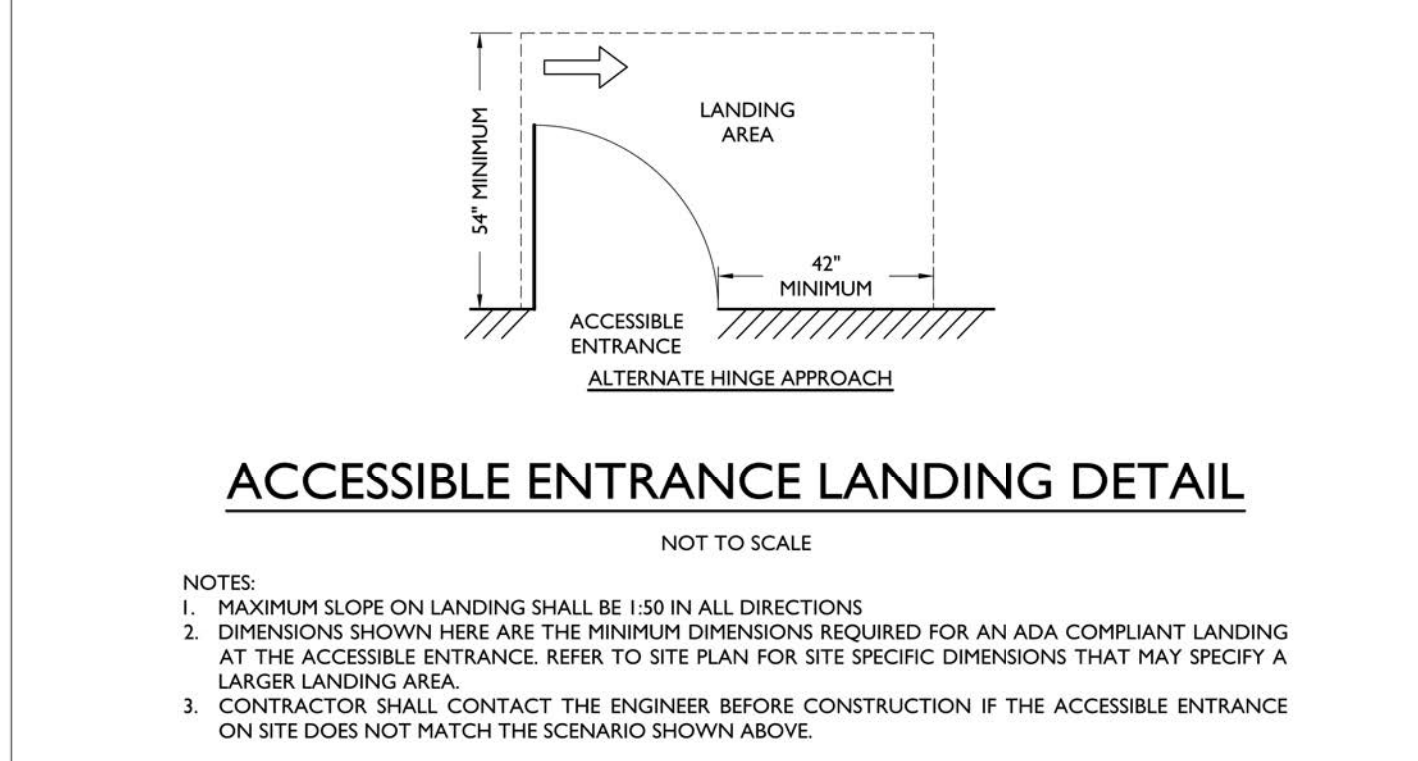
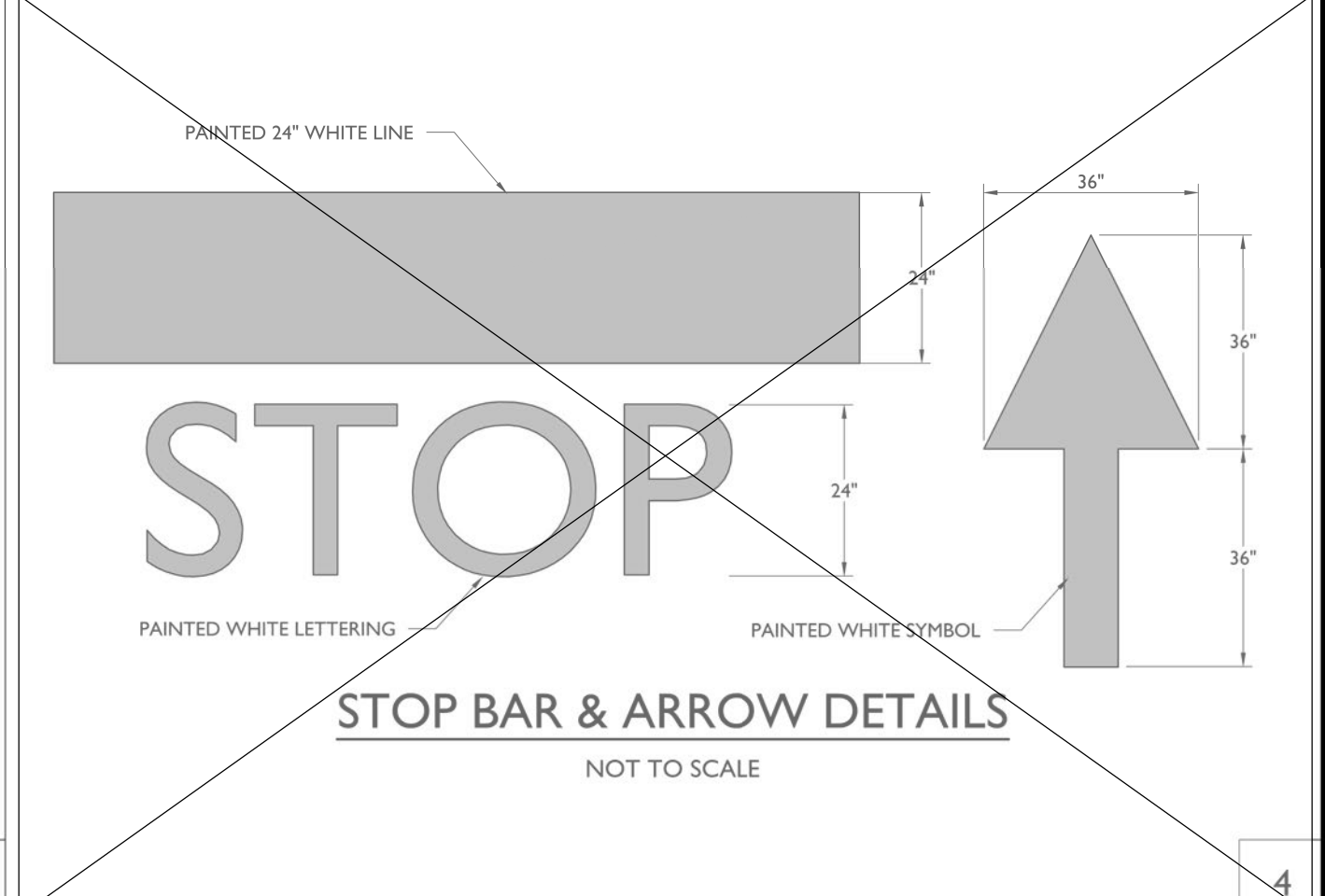
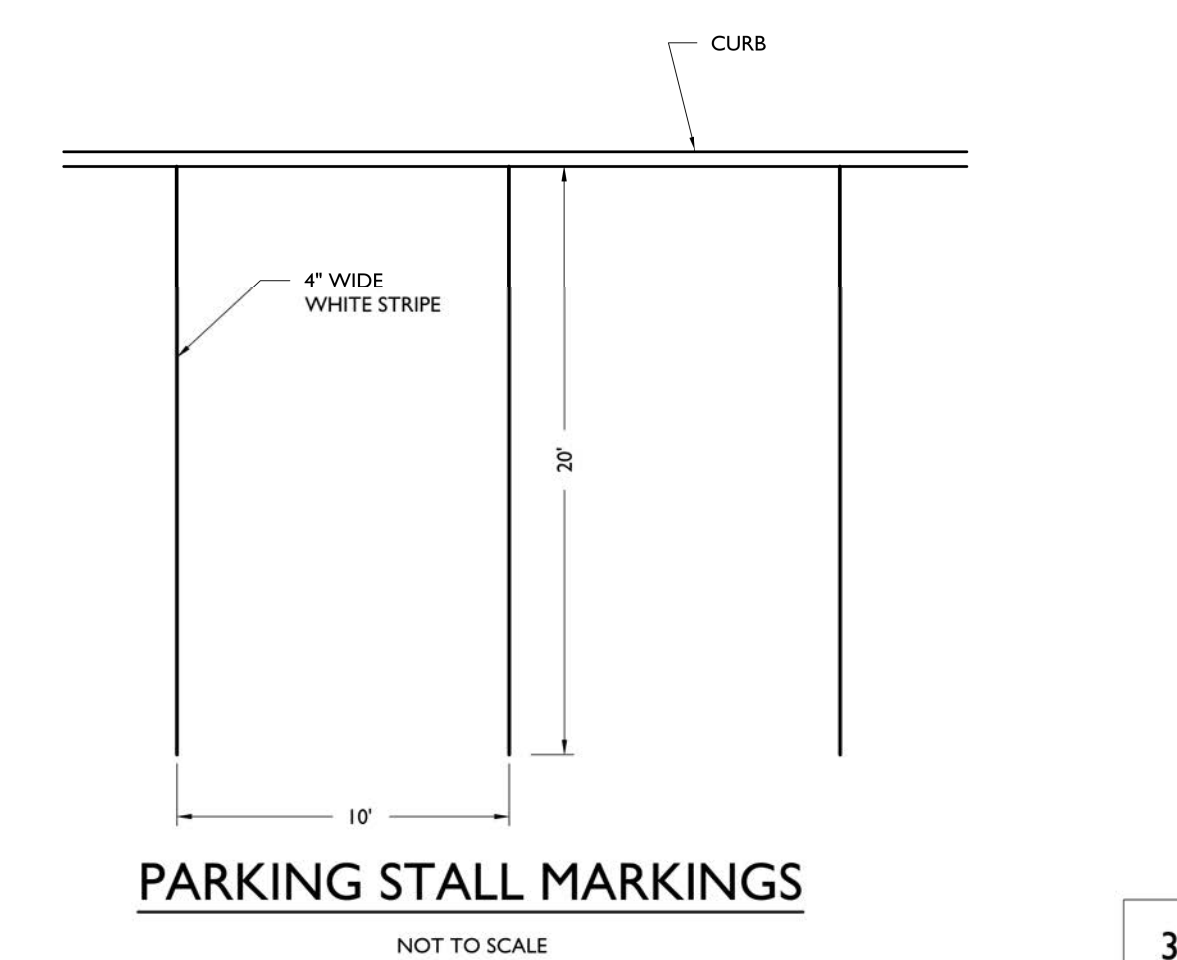
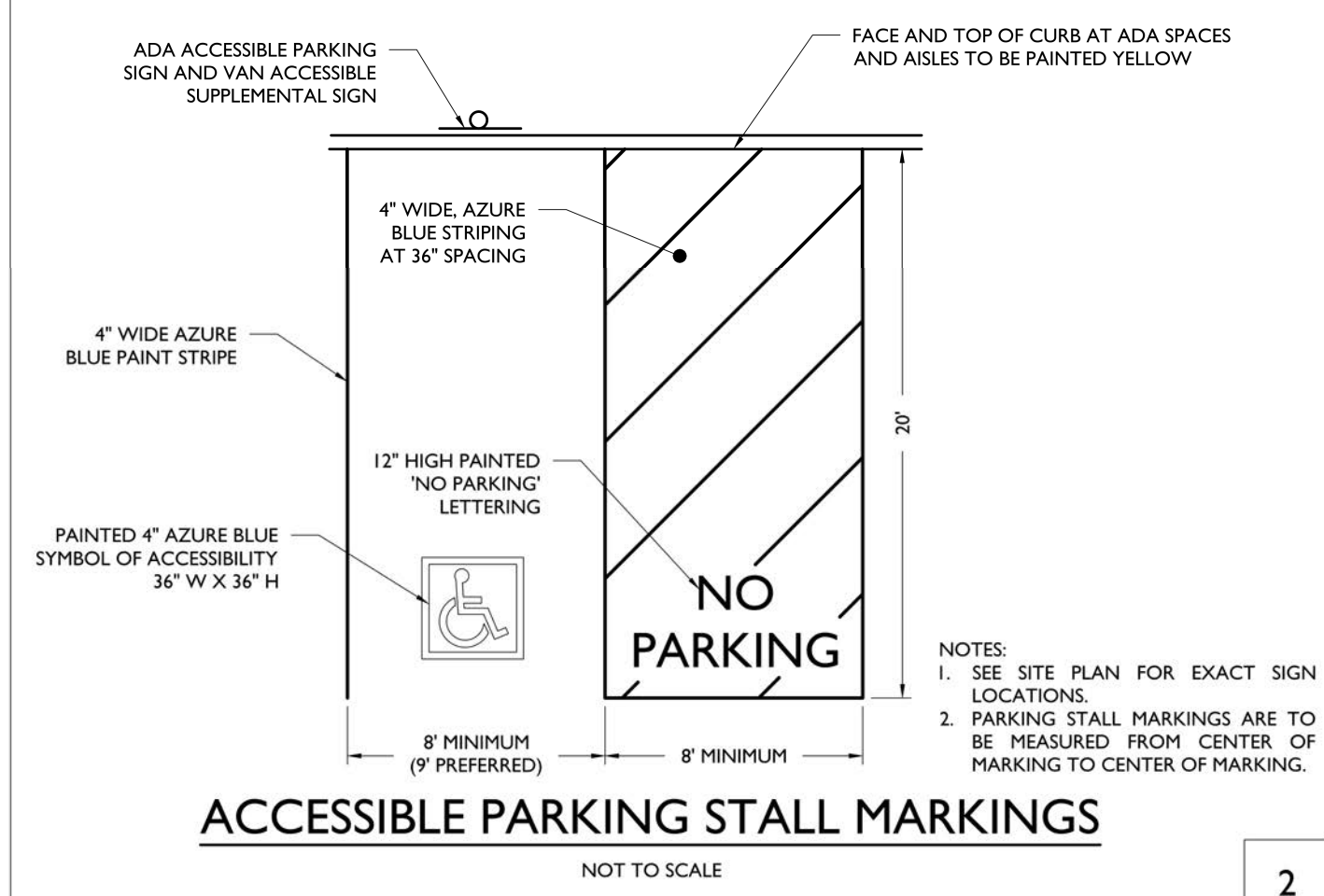
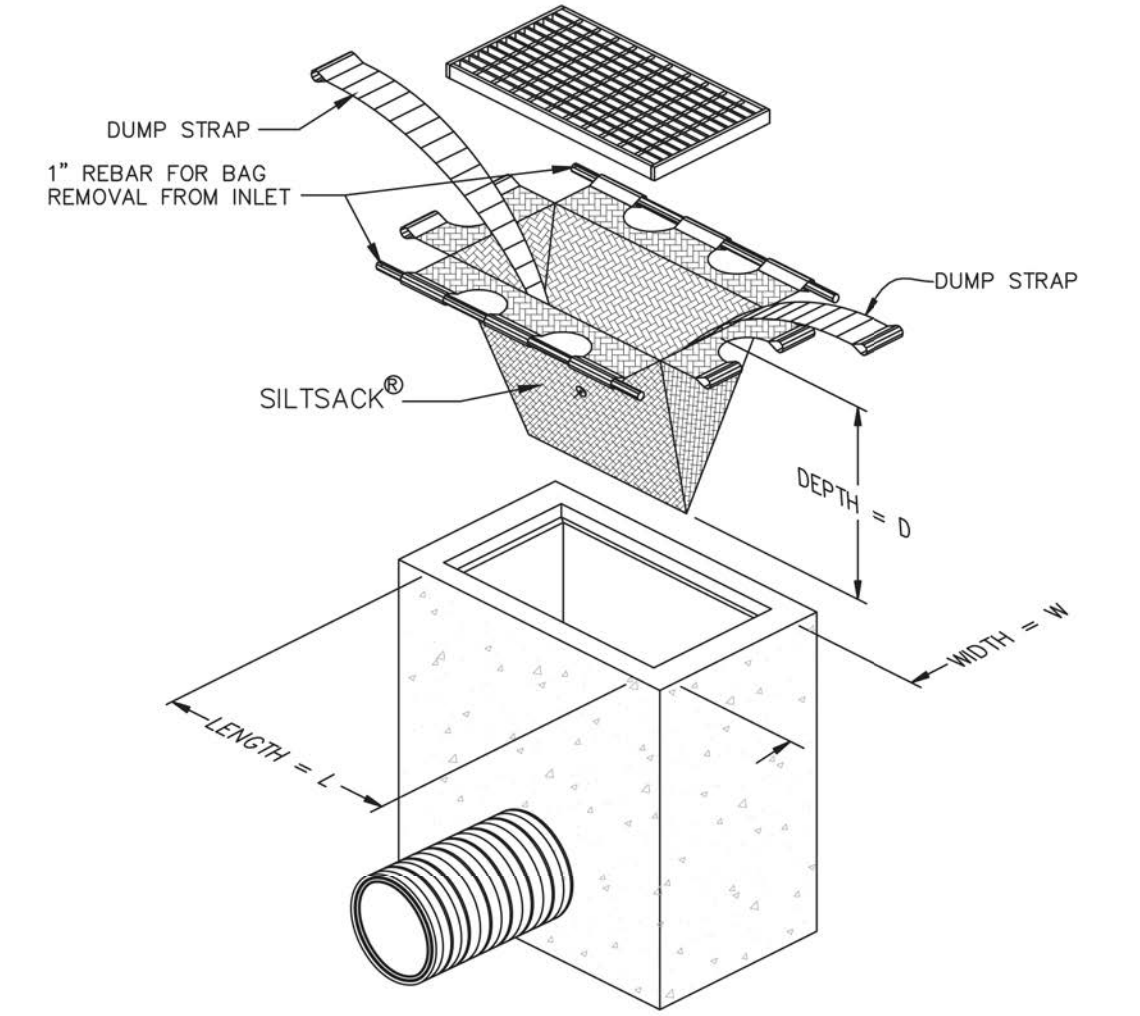
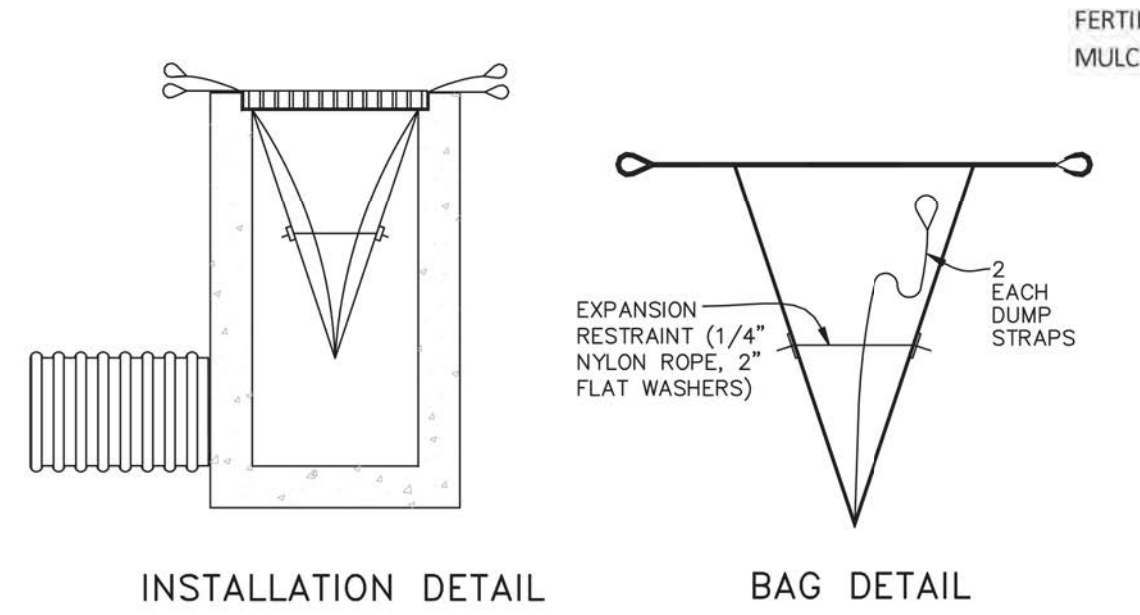
OWNER:
INGHAM COUNTY LAND BANK
3024 TURNER RD LANSING, MICHIGAN

DATE: 5/24/2024

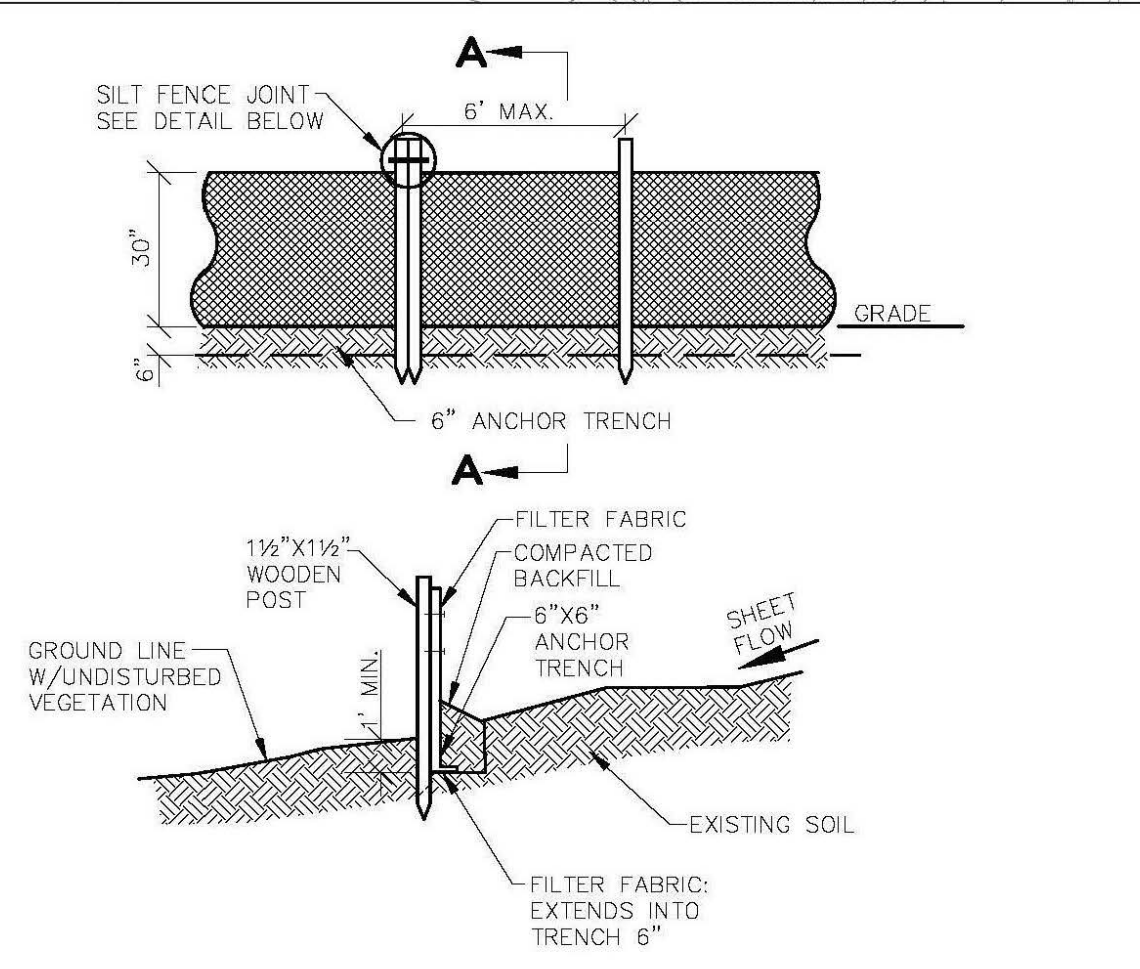
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SHEET NO: C.7

CONSTRUCTION DETAILS

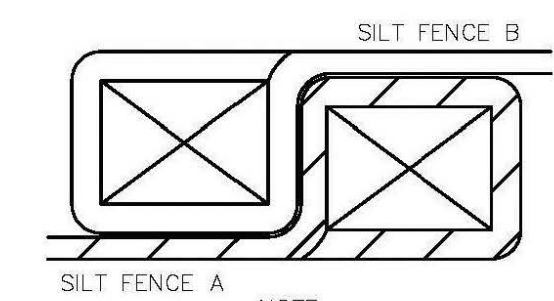


- PAVEMENT STRIPING & MARKINGS NOTES:**
1. ALL SIGNING AND STRIPING IN EXISTING CONDITION IN CONFLICT WITH THE PROPOSED DESIGN PLAN SHALL BE REMOVED.
 2. ALL PROPOSED SIGNING AND STRIPING SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
 3. PAVEMENT STRIPING AND MARKINGS SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL, COUNTY AND STATE REQUIREMENTS.
 4. UNLESS OTHERWISE SPECIFIED, ALL STRIPING AND MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE OF THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.
 5. UNLESS OTHERWISE SPECIFIED, ON SITE PARKING STALL STRIPING, FIRE LANE STRIPING AND DIRECTIONAL ARROWS SHALL BE EPOXY PAINT. ON SITE STOP BARS, "DO NOT ENTER" BARS, AND ASSOCIATED LETTERING SHALL BE THERMOPLASTIC PAINT OR PREFORMED THERMOPLASTIC MARKINGS.

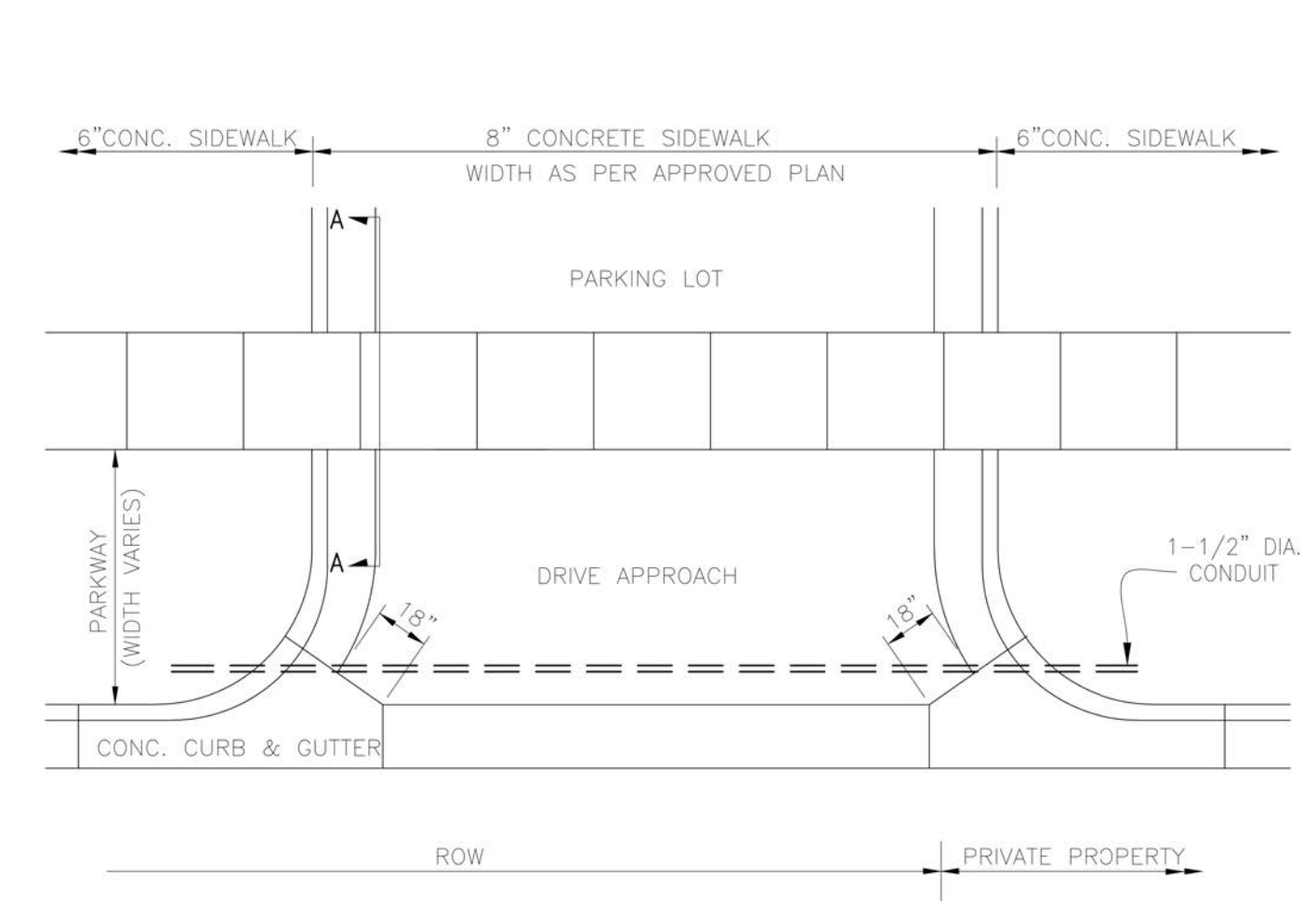
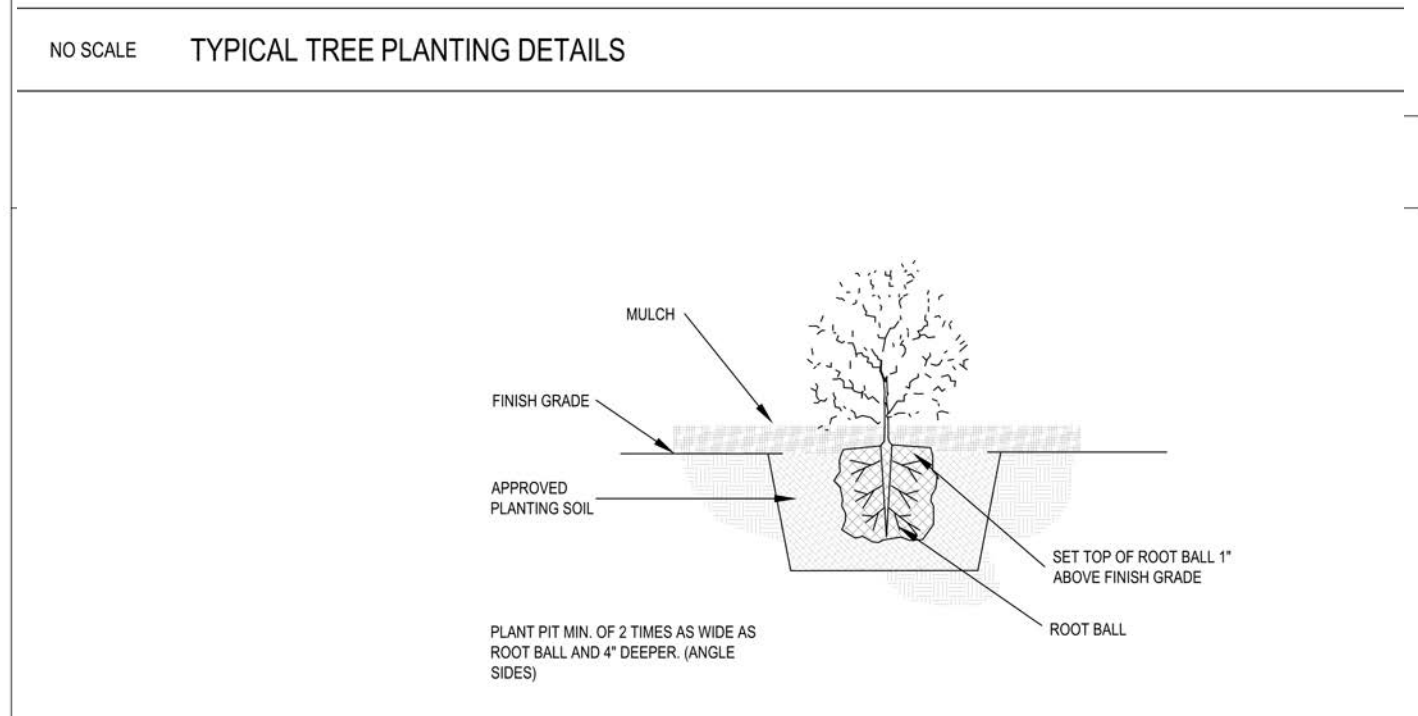
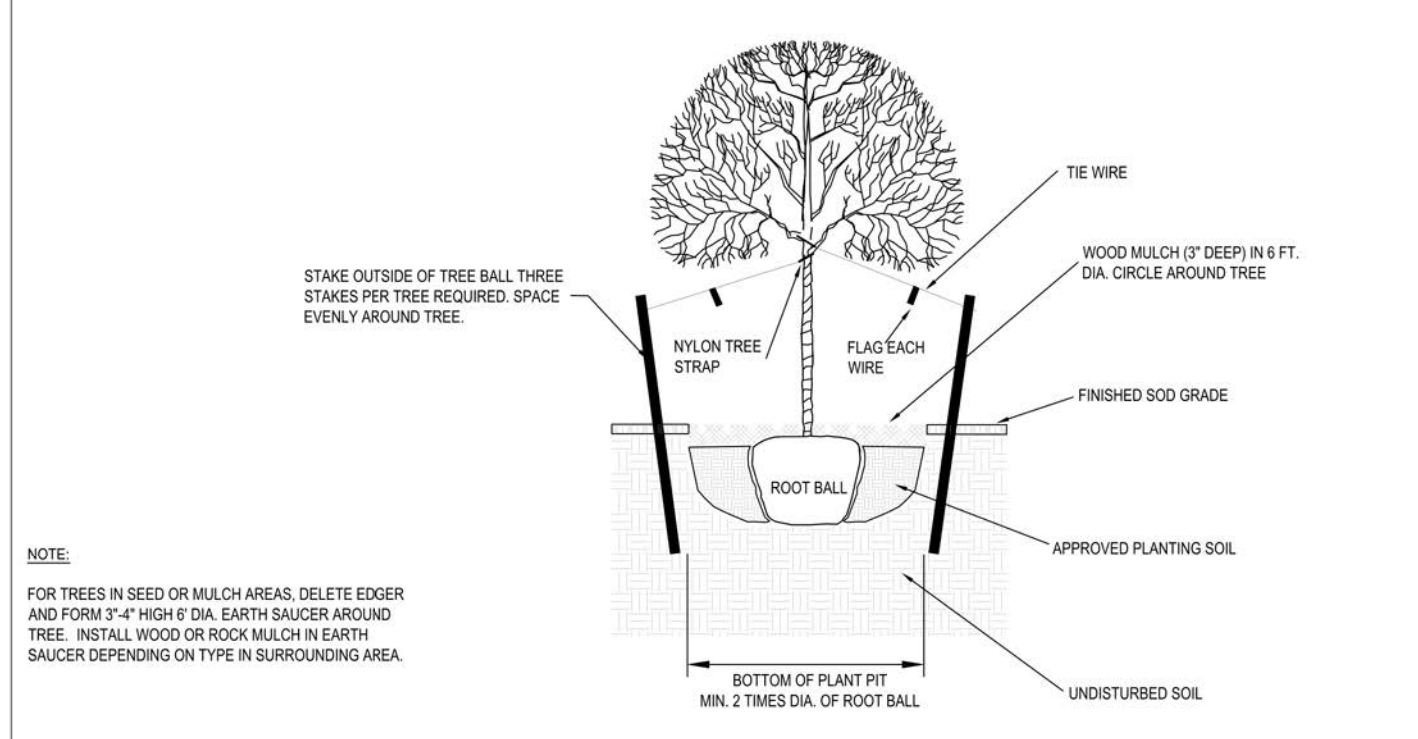


SPECIFICATIONS

PROPERTY	TEST METHOD	2125
GRAB TENSILE	ASTM D4632	WARP 110 FILL 90
U.V. RESISTANCE (STRENGTH RETAINED)	ASTM D4355	70
PERMITIVITY	ASTM D4491	15

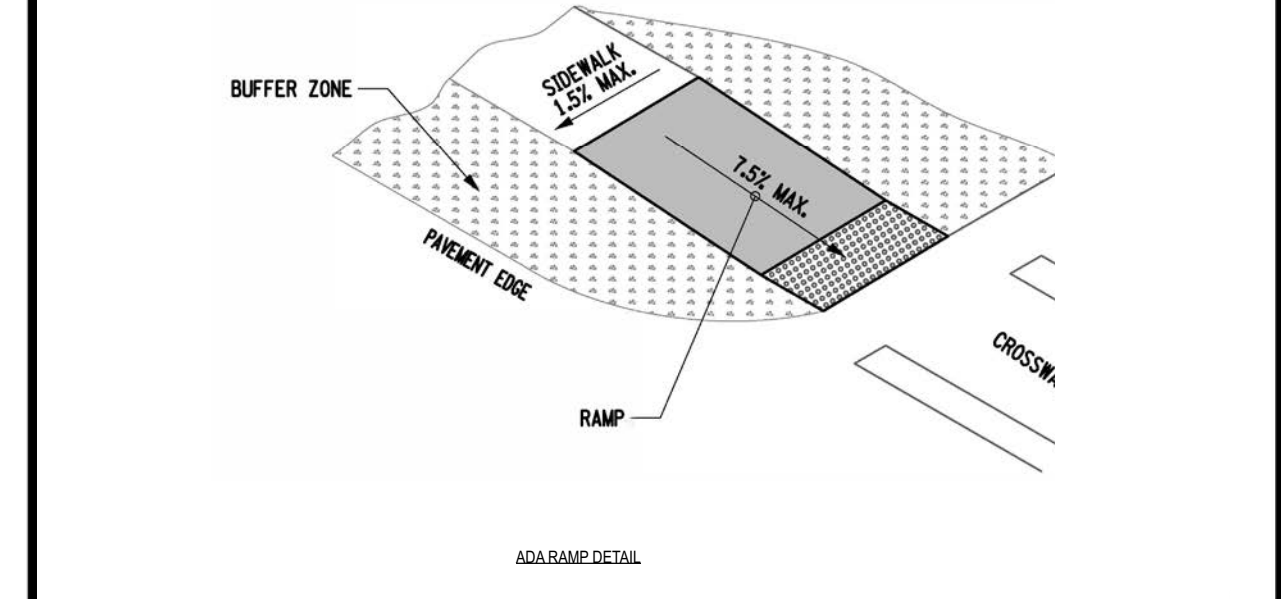


S26 EROSION CONTROL SILT FENCE
 NO SCALE

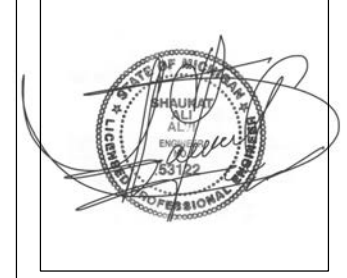


COMMERCIAL DRIVE APPROACH DETAIL
 NO SCALE

NOTE: IN AREAS WHERE THERE IS NO EXISTING SIDEWALK, THE SIDEWALK CROSS SECTION SHALL BE INCORPORATED INTO THE DRIVE APPROACH.



CITY OF LANSING
 COMMERCIAL DRIVE APPROACH DETAIL
 Scale: NOT TO SCALE
 Approved by:



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C & A ENGINEERS, LLC
 10722 CORKERY LN
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INGHAM COUNTY LAND BANK
 HICKORY POINTE CONDOMINIUM'S
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CONSTRUCTION DETAILS

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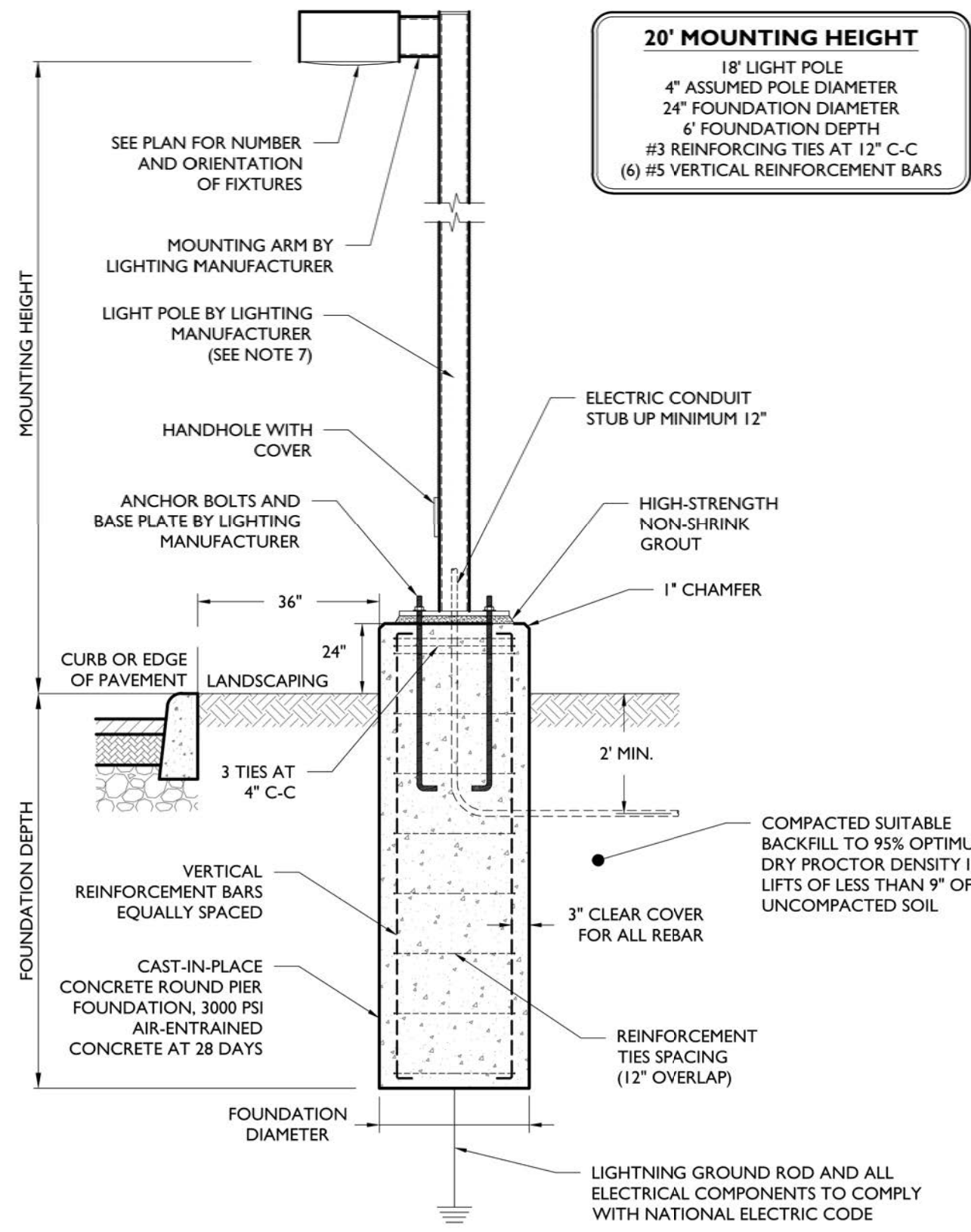
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SHEET NO:

C.8

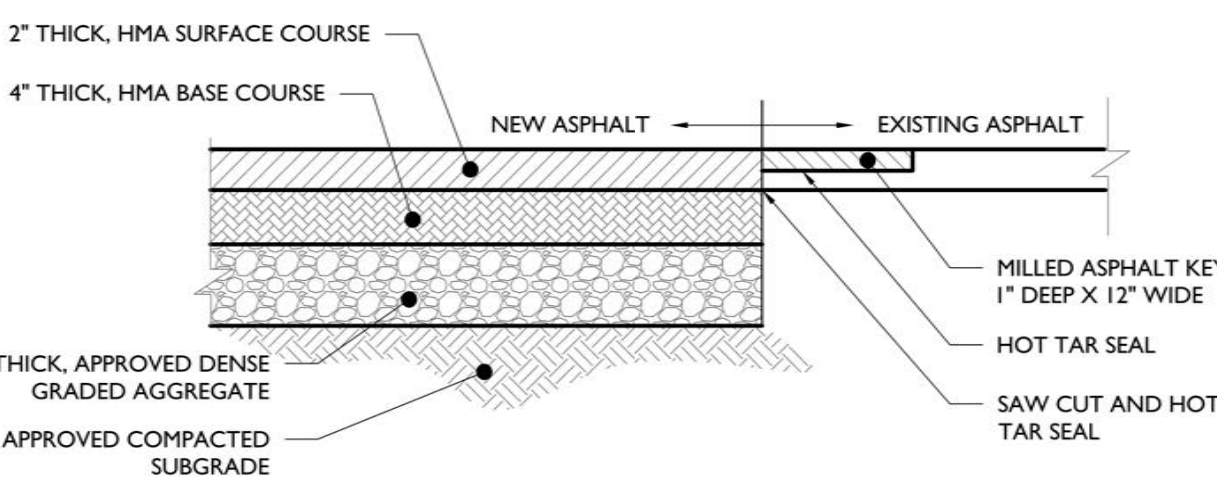
V:\0122024\0122024-001\11-0424\GAGE CANANDA'S STATE BANK DRIVE, BANGOR, TOWNSHIP, HICKORY POINTE CONDOMINIUM'S DEVELOPING

CONSTRUCTION DETAILS



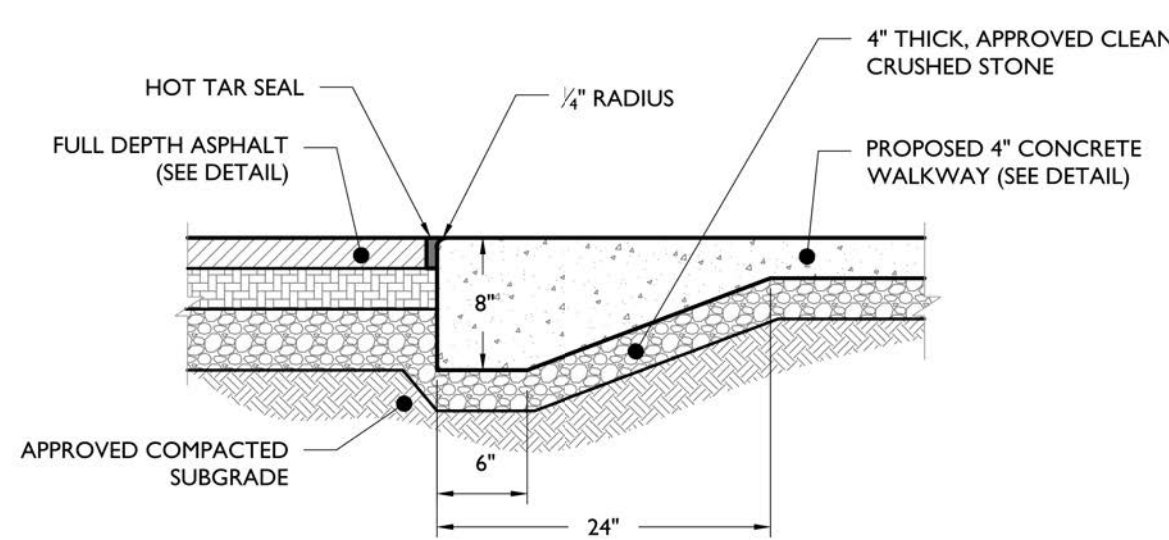
LIGHT POLE INSTALLATION DETAIL

- NOTES:
1. MINIMUM SOIL BEARING PRESSURE OF 1500 PSF, SOIL FRICTION ANGLE OF 30 DEGREES, AND SOIL DRY UNIT WEIGHT OF 120 PCF SHALL BE CONFIRMED IN THE FIELD BY A QUALIFIED PROFESSIONAL.
 2. CAST-IN-PLACE CONCRETE SHALL BE CONSOLIDATED USING VIBRATOR.
 3. ALL REBAR TO BE NEW GRADE 60 STEEL.
 4. PRE-CAST PIERS ACCEPTABLE UPON WRITTEN APPROVAL OF SHOP DRAWING BY ENGINEER.
 5. CONCRETE TO BE INSTALLED A MINIMUM OF 7 DAYS PRIOR TO INSTALLING LIGHT POLE. POURED CONCRETE MIX REQUIRED TO OBTAIN 80% OF DESIGN STRENGTH PRIOR TO INSTALLING LIGHT POLE.
 6. CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" (WITHIN 1" TOLERANCE).
 7. POLE SHALL BE RATED FOR 10 MPH HIGHER THAN MAXIMUM WIND SPEED 33FT ABOVE GROUND FOR THE AREA BASED ON ANS/AISC 7-93.
 8. POUR TO BE TERMINATED AT A FORM.
 9. WORK SHALL CONFORM TO ACI BEST PRACTICES FOR APPROPRIATE TEMPERATURE AND WEATHER CONDITIONS.
 10. CONTRACTOR TO TEMPORARILY SUPPORT ADJACENT SOIL AND STRUCTURES DURING EXCAVATION IF REQUIRED.



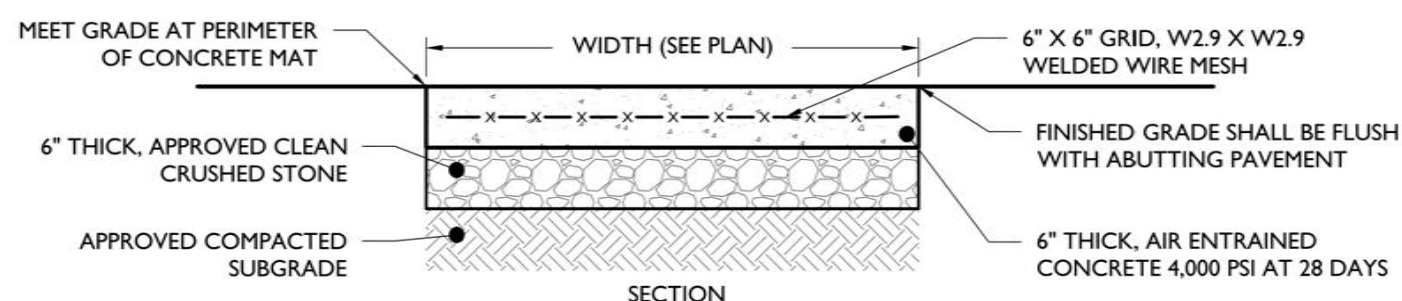
FULL DEPTH ASPHALT PAVEMENT DETAIL

NOTE:
HMA MIX AND DENSE GRADED AGGREGATE SHALL CONFORM TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.



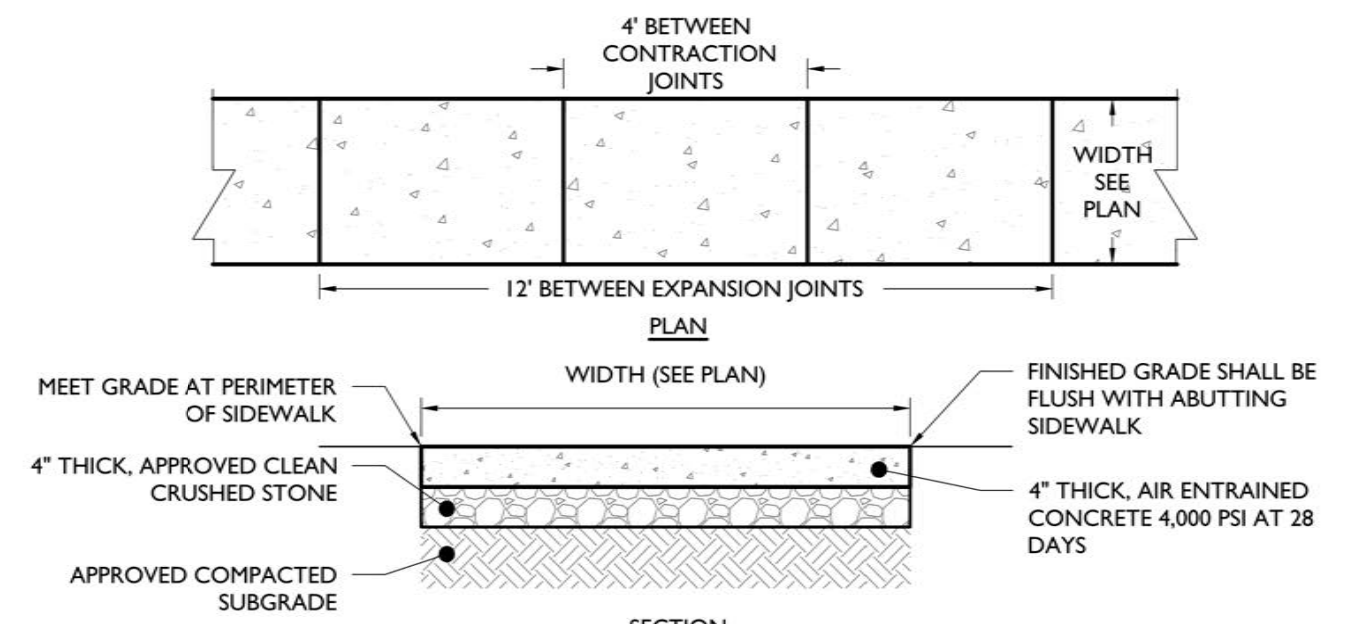
CONCRETE WALKWAY TO ASPHALT TRANSITION DETAIL

NOT TO SCALE



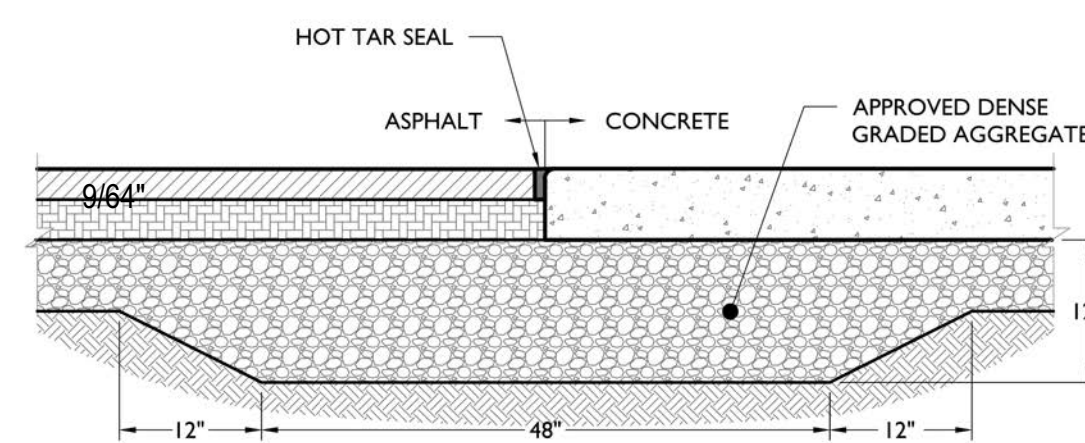
REINFORCED 6" CONCRETE MAT

- NOTES:
1. 1/2" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
 2. 1" DEEP BY 1/2" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
 3. CONCRETE SHALL RECEIVE BROOM FINISH.
 4. ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.



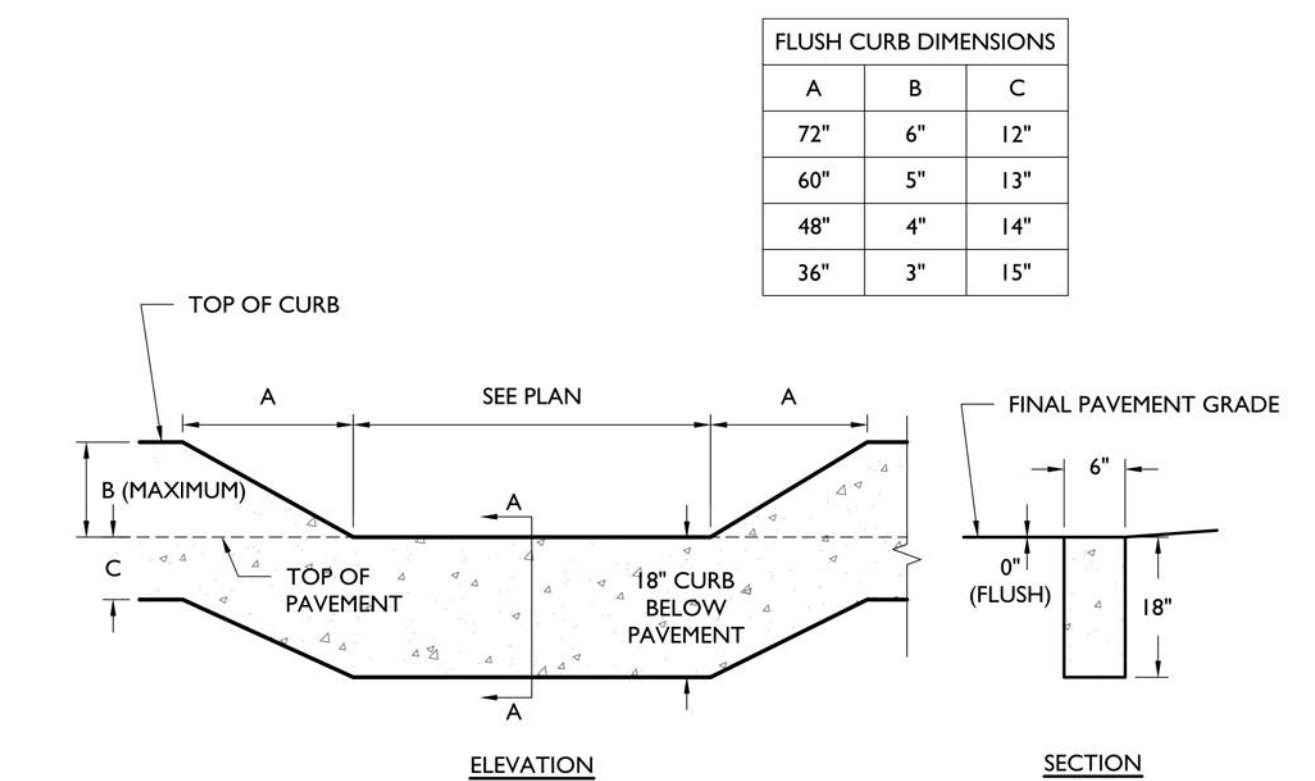
CONCRETE WALKWAY DETAIL

- NOTES:
1. MAXIMUM CROSS SLOPE SHALL BE 1/4" PER FOOT.
 2. 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE.
 3. 1" DEEP BY 1/2" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT 4' INTERVALS.
 4. EXPANSION JOINT SHALL BE PROVIDED WHERE ADJACENT TO A BUILDING.



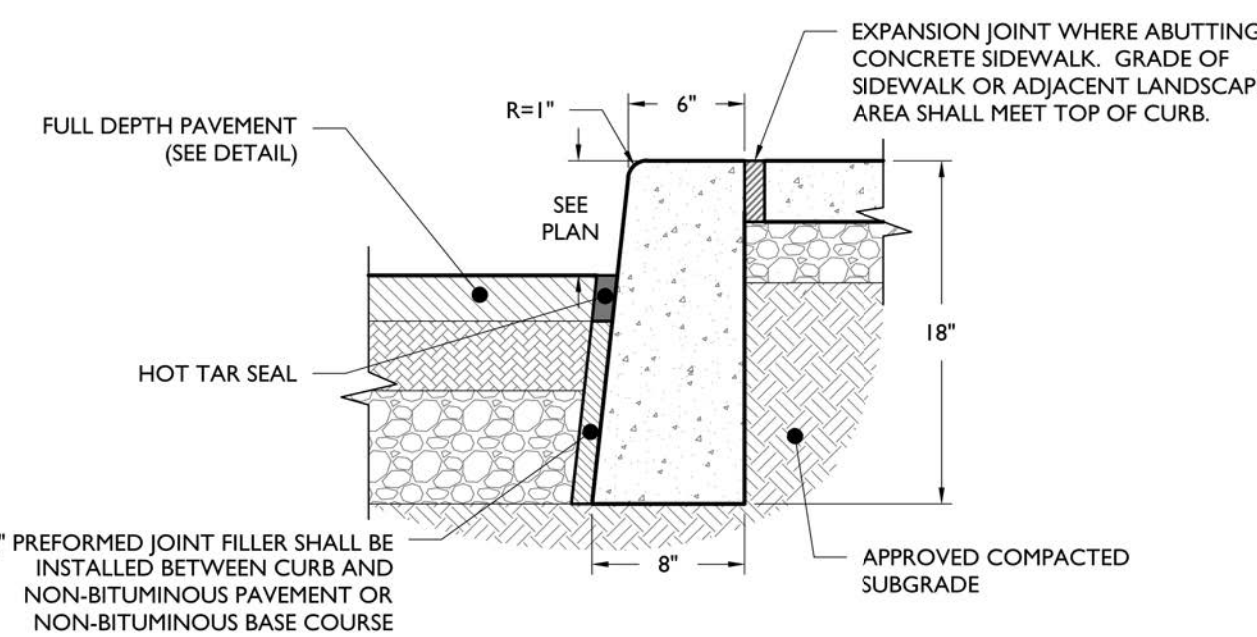
CONCRETE TO ASPHALT TRANSITION DETAIL

NOT TO SCALE



FLUSH CURB DETAIL

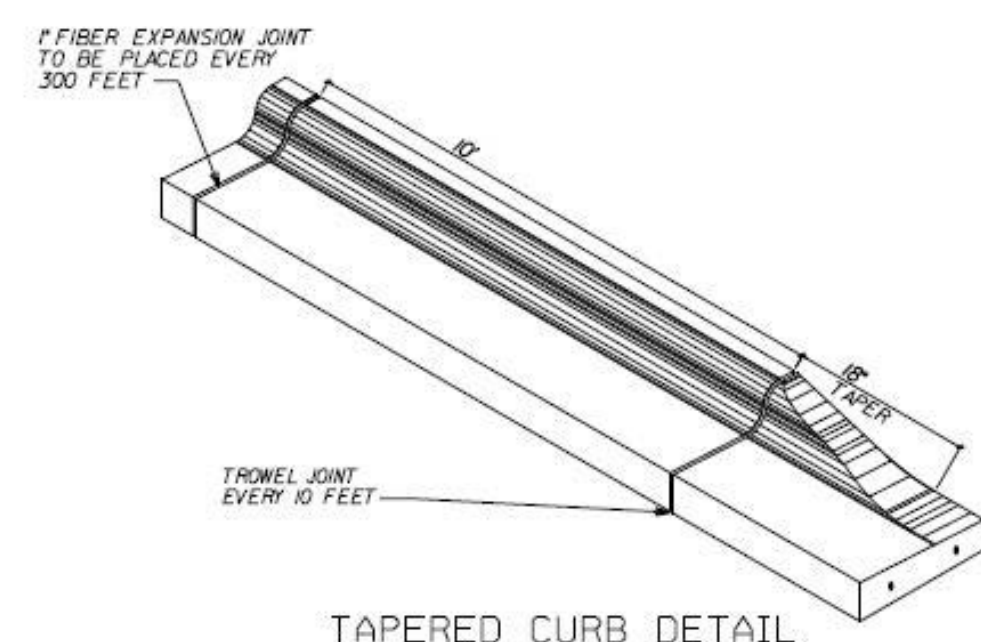
NOT TO SCALE



CONCRETE CURB DETAIL

NOT TO SCALE

- NOTES:
1. CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
 2. TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.
 3. HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
 4. 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.



TAPERED CURB DETAIL

9



REVISION	DATE

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GRAND LEDGE, MI 48837
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INGHAM COUNTY LAND BANK
HICKORY POINTE CONDOMINIUM'S
400 BLOCK S. PENNSYLVANIA
LANSING, MI 48912

CONSTRUCTION DETAILS

OWNER:
INGHAM COUNTY LAND BANK
3024 TURNER RD LANSING, MICHIGAN

DATE:

5/24/2024

SCALE:

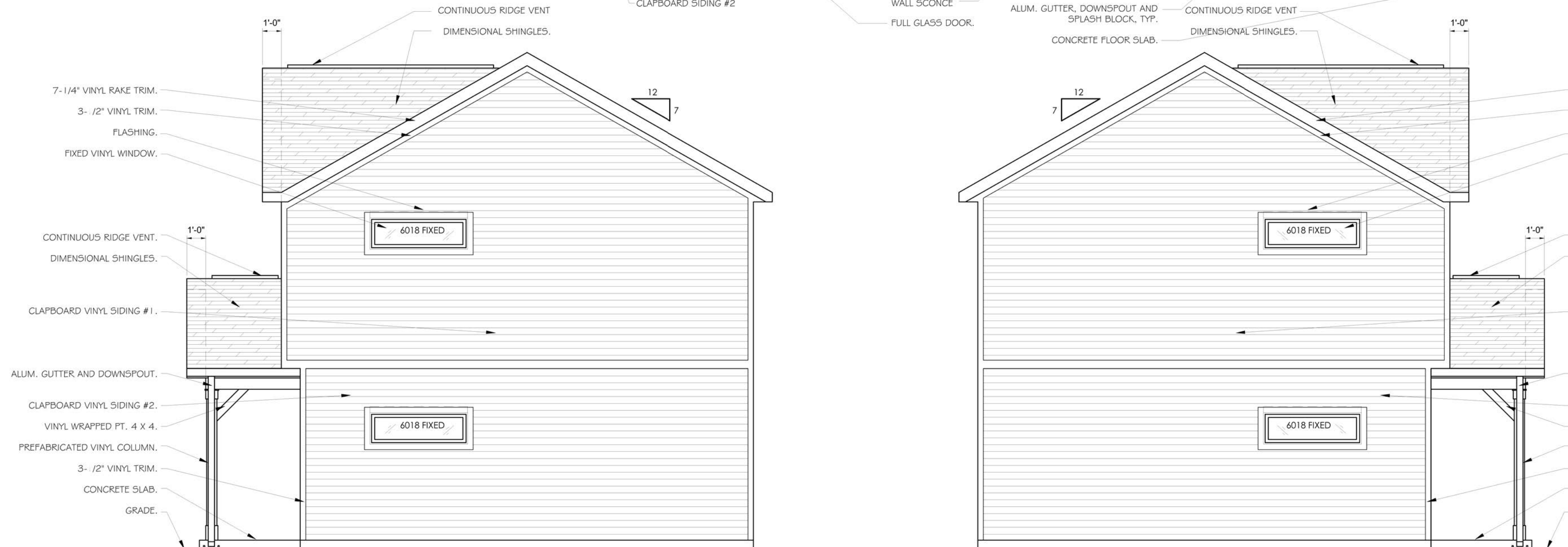
SHEET NO:

C.9

ELEVATION



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



RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"



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



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ELEVATION

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3024 TURNER RD LANSING, MICHIGAN

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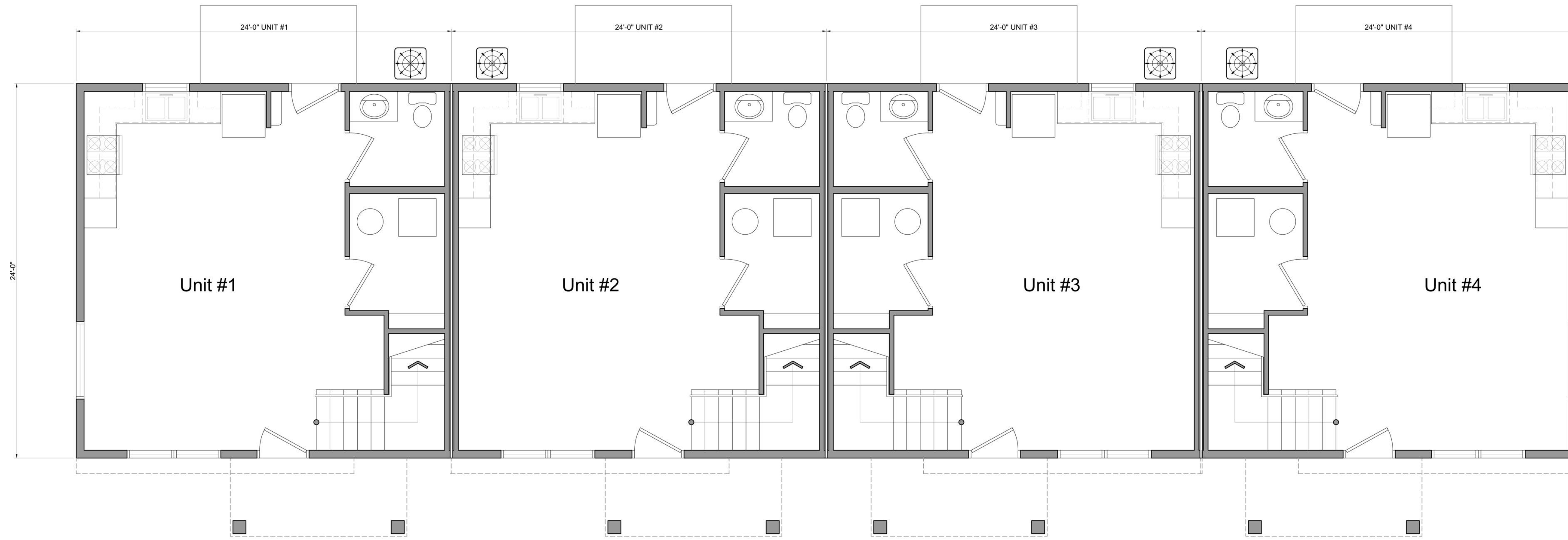
SCALE:

1/4" = 1'

SHEET NO:

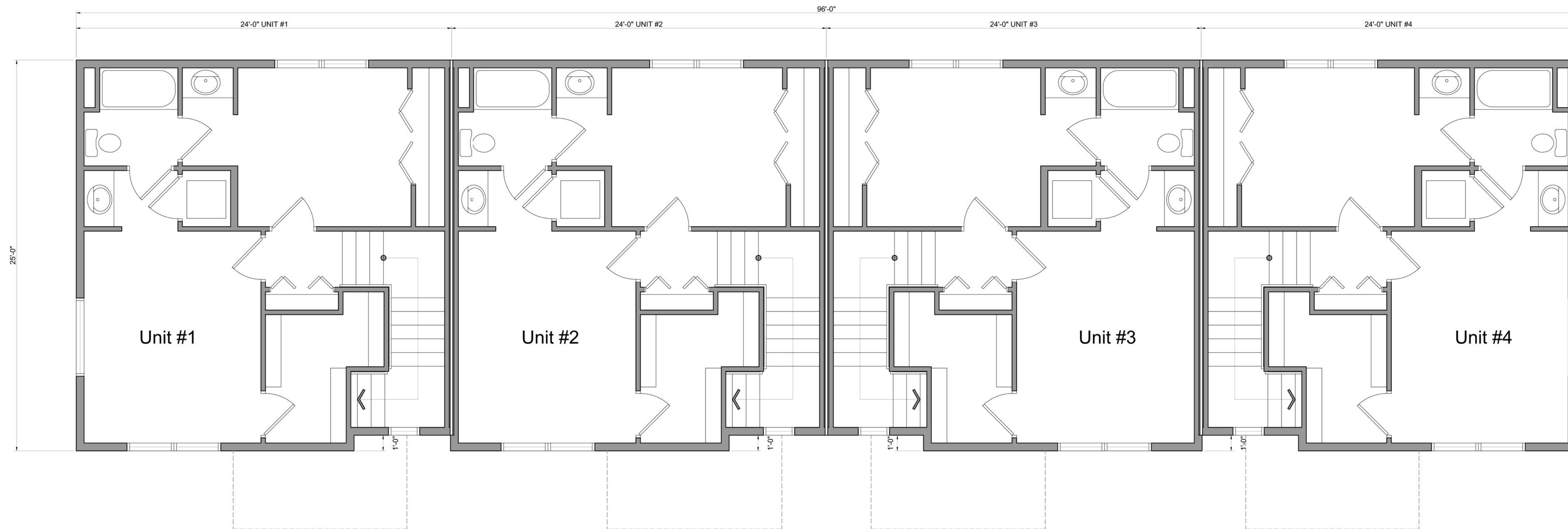
A.1

FLOOR PLAN



OVERALL FIRST FLOOR PLAN

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



OVERALL SECOND FLOOR PLAN

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



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FLOOR PLAN

OWNER:
 INGHAM COUNTY LAND BANK
 3024 TURNER RD LANSING, MICHIGAN

DATE:

5/24/2024

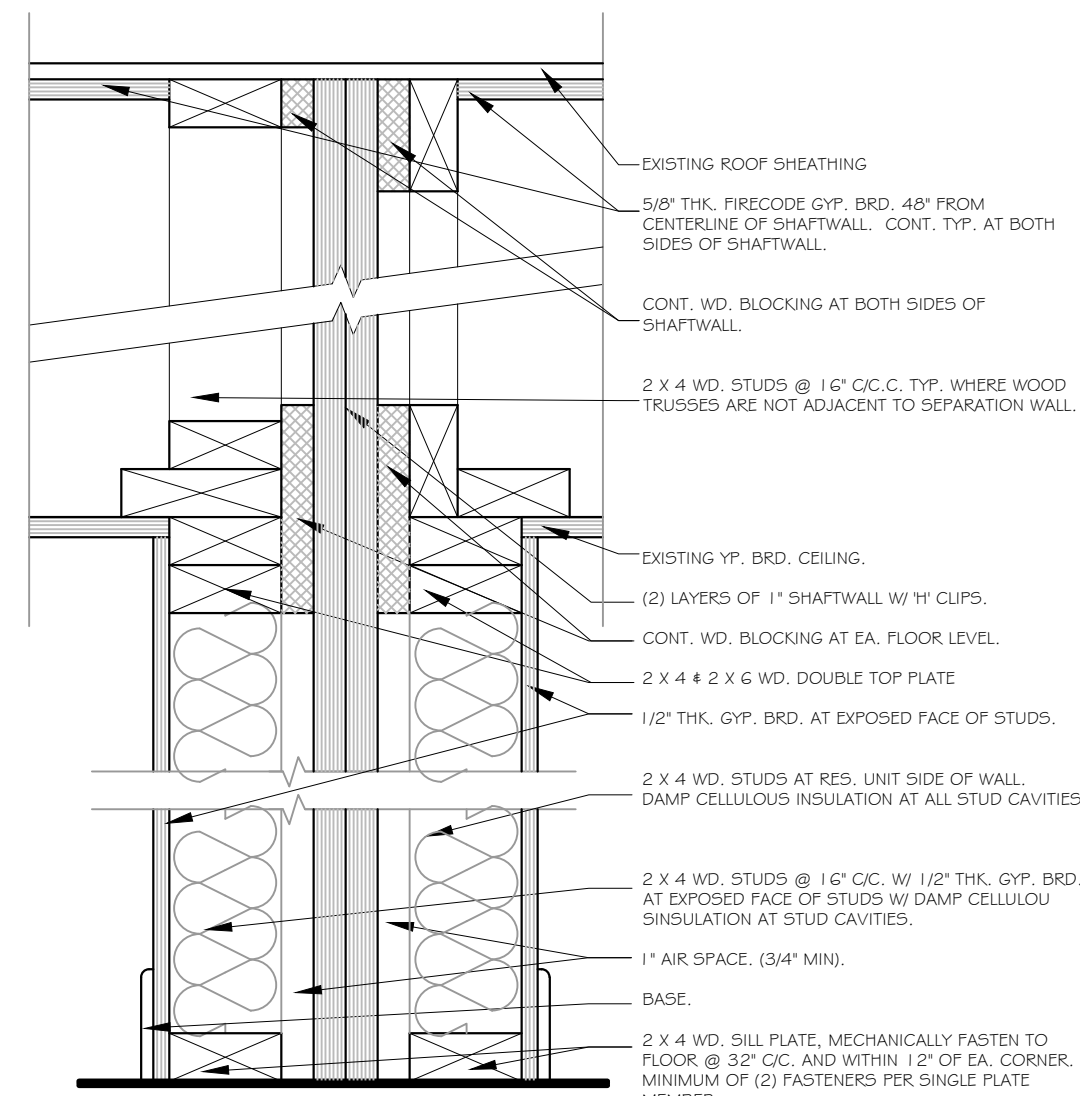
SCALE:

1/8" = 1'

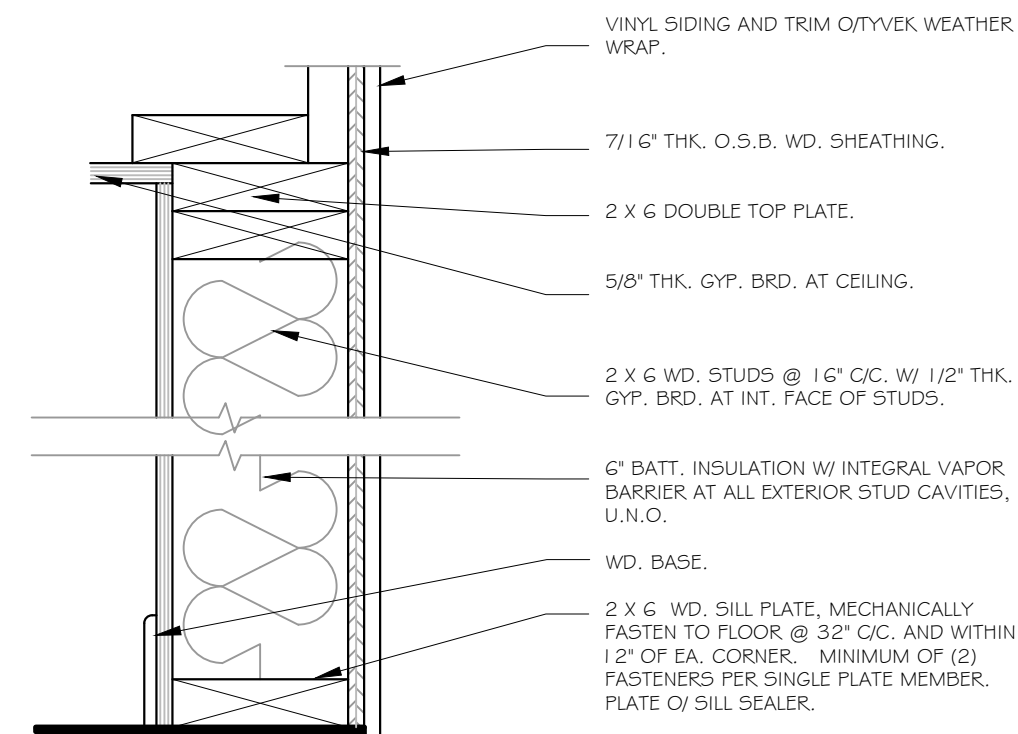
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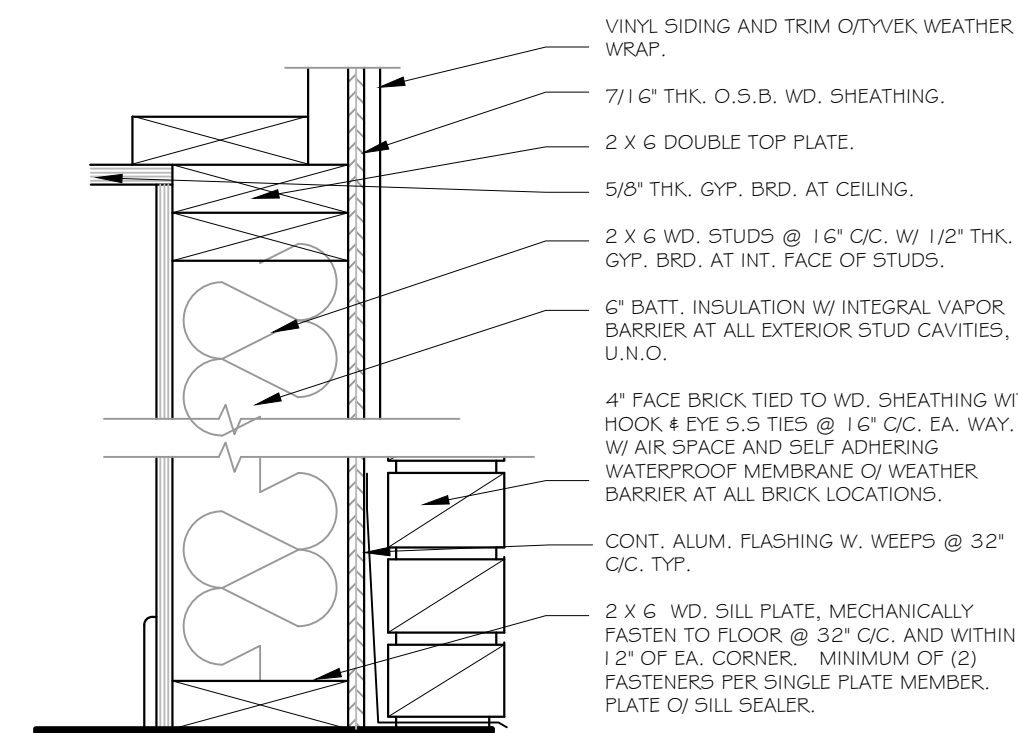
WALL TYPE SECTIONS



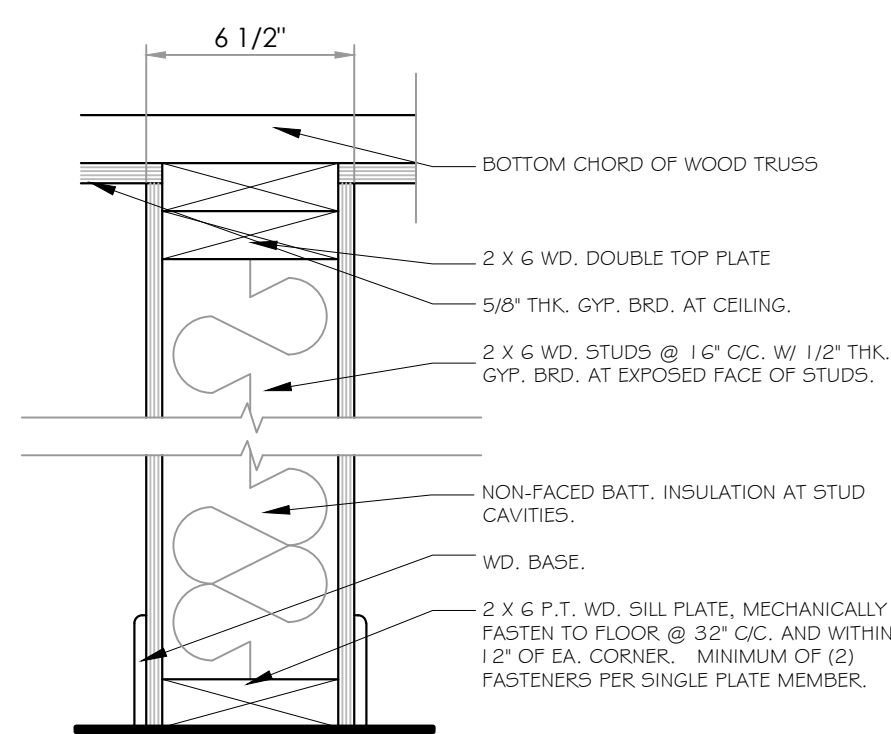
WALL TYPE #5



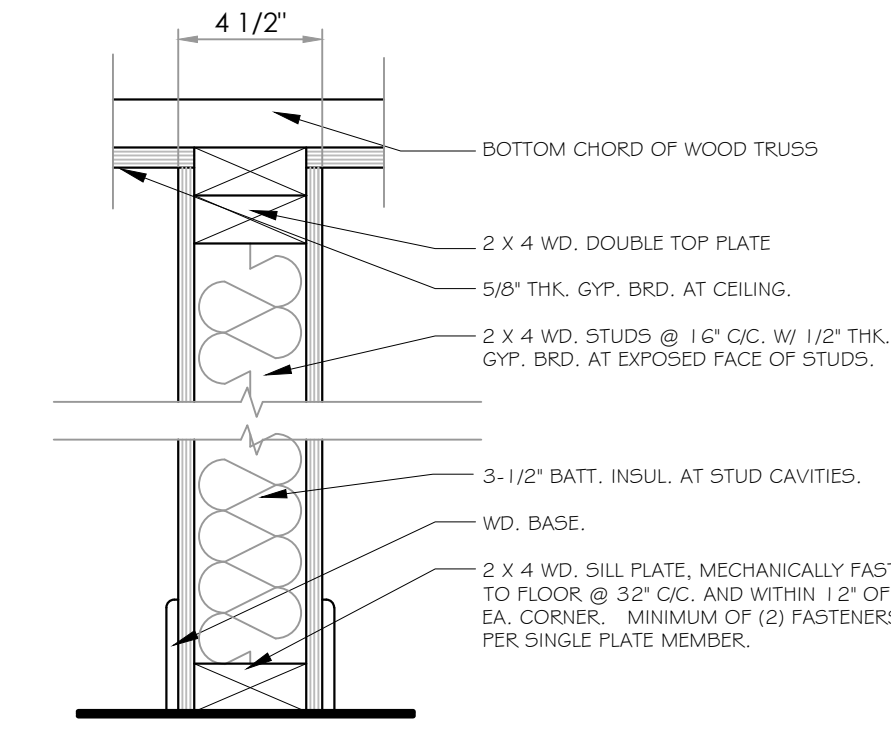
WALL TYPE #3



WALL TYPE #4



WALL TYPE #1



WALL TYPE #2

WALL TYPES

1 WALL TYPE #1 NON-RATED 2 X 6 INTERIOR STUD WALL
STC RATING: NA

2 WALL TYPE #2 NON-RATED 2 X 4 WOOD STUD WALL
STC RATING: NA

3 WALL TYPE #3 2 X 6 EXTERIOR WOOD STUD WALLS - E.I.F.S. FINISH

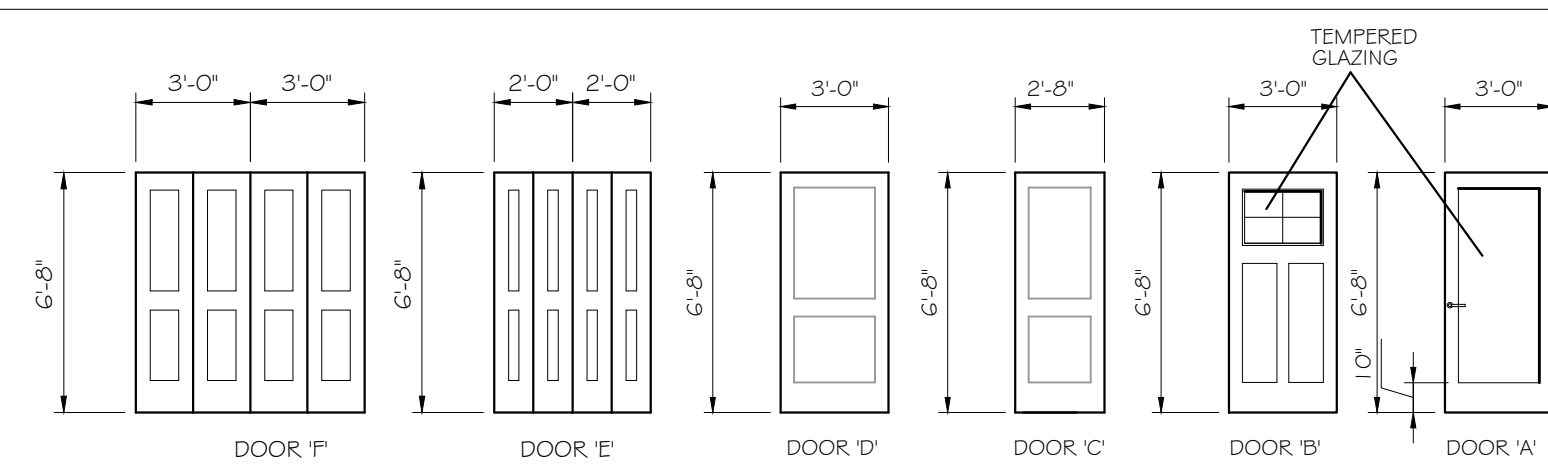
4 WALL TYPE #4 2 X 6 EXTERIOR WOOD STUD WALLS W/ BRICK VENEER

5 WALL TYPE #6 (2) HOUR RATED 2 X 4 WOOD STUD SHAFT WALL
STC RATING: GG | FIRE TEST: U.L. U336 - (2) HOUR RATED, AREA SEPARATION WALL

DOOR SCHEDULE

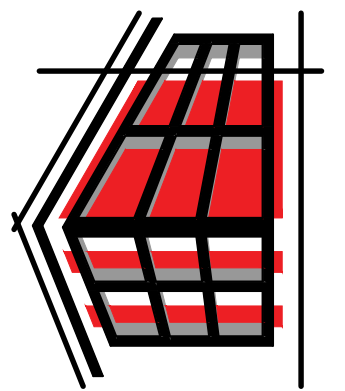
DOOR NO.	DOOR SIZE	HARDWARE GROUP	DOOR MAT.	DOOR RATING	DOOR LETTER	FRAME SIZE	FRAME MAT.	FRAME RATING	REMARKS
002A	3'-0" X 6'-8"	4	FIBERGLASS	N/A	B	PRE-HUNG DOOR.	WOOD	N/A	SOLID CORE INSULATED, INSUL. & TEMPERED GLAZING.
003A	3'-0" X 6'-8"	3	WOOD	N/A	E	PRE-HUNG DOOR.	WOOD	N/A	HOLLOW CORE WOOD DOOR (2) PANEL
004A	3'-0" X 6'-8"	4	FIBERGLASS	N/A	A	PRE-HUNG DOOR.	WOOD	N/A	SOLID CORE INSULATED, INSUL. & TEMPERED GLAZING.
005A	3'-0" X 6'-8"	1	WOOD	N/A	D	PRE-HUNG DOOR.	WOOD	N/A	HOLLOW CORE WOOD DOOR (2) PANEL
006A	FR. 2'-0" X 6'-8"	2	WOOD	N/A	E	PRE-HUNG DOOR.	WOOD	N/A	HOLLOW CORE WOOD DOOR (2) PANEL
007A	FR. 3'-0" X 6'-8"	2	WOOD	N/A	F	PRE-HUNG DOOR.	WOOD	N/A	HOLLOW CORE WOOD DOOR (2) PANEL
007B	2'-8" X 6'-8"	1	WOOD	N/A	C	PRE-HUNG DOOR.	WOOD	N/A	HOLLOW CORE WOOD DOOR (2) PANEL
008A	2'-8" X 6'-8"	1	WOOD	N/A	C	PRE-HUNG DOOR.	WOOD	N/A	HOLLOW CORE WOOD DOOR (2) PANEL
008B	2'-8" X 6'-8"	1	WOOD	N/A	C	PRE-HUNG DOOR.	WOOD	N/A	HOLLOW CORE WOOD DOOR (2) PANEL
009A	2'-8" X 6'-8"	3	WOOD	N/A	C	PRE-HUNG DOOR.	WOOD	N/A	HOLLOW CORE WOOD DOOR (2) PANEL
009B	2'-8" X 6'-8"	1	WOOD	N/A	C	PRE-HUNG DOOR.	WOOD	N/A	HOLLOW CORE WOOD DOOR (2) PANEL
009C	2'-8" X 6'-8"	3	WOOD	N/A	C	PRE-HUNG DOOR.	WOOD	N/A	HOLLOW CORE WOOD DOOR (2) PANEL

DOOR ELEVATIONS & NOTES



DOOR NOTE #1:	HARDWARE GROUP #G	HARDWARE GROUP #4	HARDWARE GROUP #1
ALL DOORS SHALL BE FACTORY PRIMED AND FIELD PAINTED.	(1) SECTIONAL DOOR HARDWARE (1) DOOR OPENER W/ REMOTE SWITCH AND CONTROLLERS.	(3) BUTT HINGES (1) DOOR STOP (1) LEVER HANDLE LOCKSET. (1) DEADBOLT (2) STRIKE PLATES (1) MTL. THRESHOLD. (1) WEATHERSTRIPPING.	(3) BUTT HINGES (1) LEVER HANDLE LOCKSET (1) STRIKE PLATE (1) DOOR STOP
DOOR NOTE #2:		HARDWARE GROUP #5	HARDWARE GROUP #2
ALL EXTERIOR DOORS WITH GLAZING SHALL HAVE TEMPERED AND INSULATED GLASS.		(3) BUTT HINGES (1) DOOR STOP (1) LEVER HANDLE LOCKSET. (1) STRIKE PLATE (1) MTL. THRESHOLD. (1) WEATHERSTRIPPING.	BIFOLD HARDWARE WITH TRACK AND KNOB HANDLE AT ONE SIDE OF EA. DOOR.
		HARDWARE GROUP #3	HARDWARE GROUP #3
			(3) EA. BUTT HINGES (1) LEVER HANDLE PASSAGE SET. (1) DOOR STOP (1) DOOR STRIKE

TODD R. CALLAWAY & ASSOCIATES
ARCHITECTS - DESIGNERS
4848 Fraser Street, Rochester Hills, Michigan 48066
PH: 866-243-5945, email: tcallaway@trcallaway.com, www.trcallaway.com



SHEET DATES / DESC.
4/15/24 PERMITS

NEW CONSTRUCTION
Pennsylvania Townhouses
INGHAM COUNTY LAND BANK
LANSING, MICHIGAN

WALL TYPES
DOOR SCHEDULE

C1.2

CONSTRUCTION NOTES

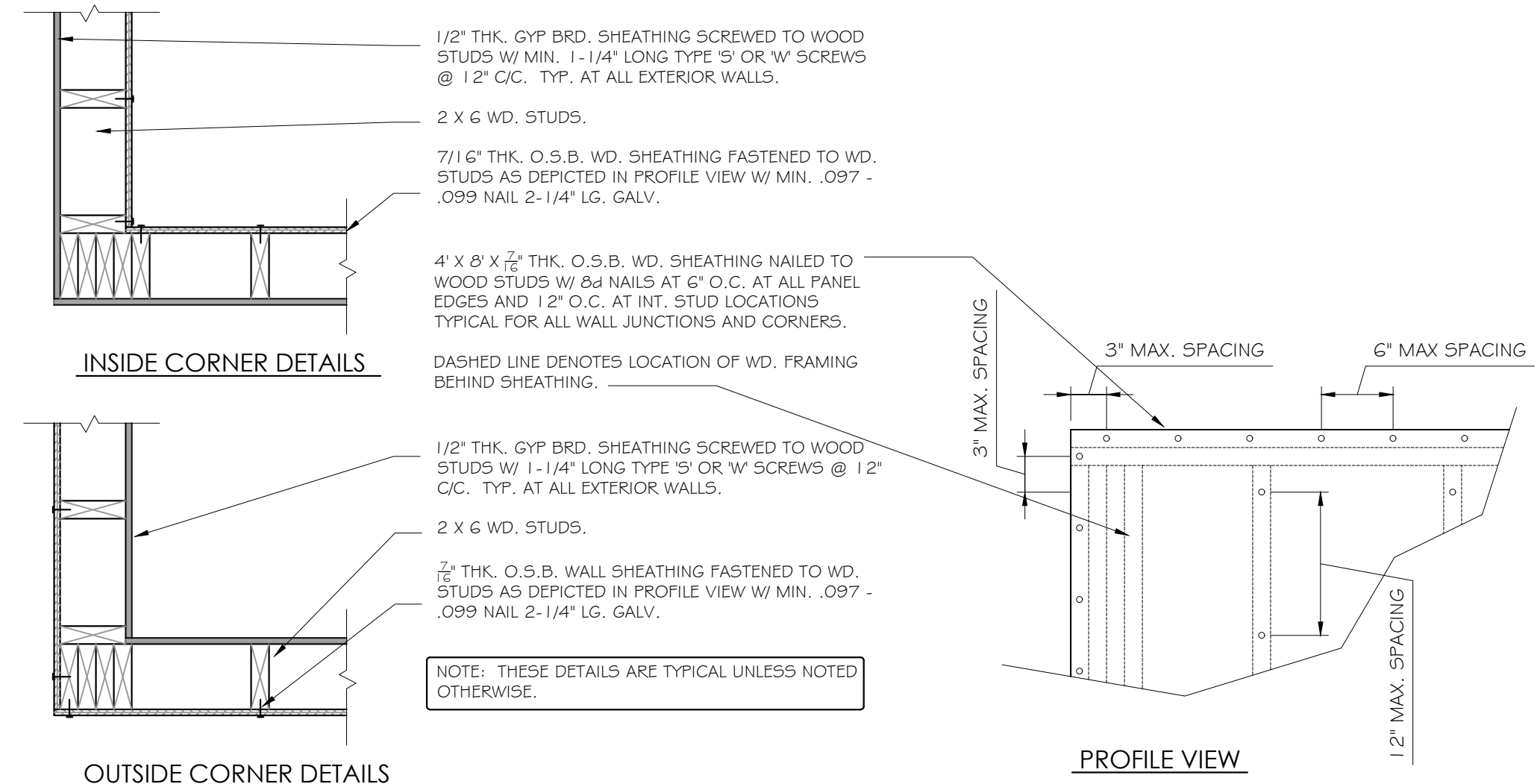
- THE CONTRACTOR SHALL EXAMINE AND BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS IN THEIR ENTIRETY. SURVEY THE PROJECT AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND SCOPE OF WORK. ALL COSTS SUBMITTED SHALL BE BASED ON THOROUGH KNOWLEDGE OF ALL WORK AND MATERIALS REQUIRED. ANY DISCREPANCY AND/OR UNCERTAINTY AS TO WHAT MATERIAL OR PRODUCT IS TO BE USED SHOULD BE VERIFIED WITH THE OWNER OR ARCHITECT.
- ALL CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE FEDERAL, LOCAL, AND STATE CODES AND AMENDMENTS
- ALL SITE WORK AND LANDSCAPING IS TO BE ESTABLISHED AND DESIGNED BY CIVIL AND LANDSCAPE ARCHITECT.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES REQUIRED FOR SAFE EXECUTION AND COMPLETION OF WORK, AND FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
- ANY ERRORS, OMISSIONS OR INCONSISTENCIES ON THESE DRAWINGS OR ANY VARIATIONS OR AMBIGUITIES BETWEEN THESE DRAWINGS AND ACTUAL SITE AND CONSTRUCTION CONDITIONS AND/OR REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING IMMEDIATELY.
- IN THE EVENT A DISCREPANCY IS FOUND IN THE CONTRACT DOCUMENTS, THE OWNER AND ARCHITECT SHALL BE NOTIFIED IMMEDIATELY.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AT SITE AND BE RESPONSIBLE FOR ACCURACY AND CORRECTNESS OF SAME.
- CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- INSTALLATION OF ALL EQUIPMENT SHALL BE IN CONFORMANCE WITH ALL MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS NOT USED
- STORE MATERIALS IN SPACES DESIGNATED BY OWNER.
- REMOVE RUBBISH FROM PREMISES AS OFTEN AS NECESSARY OR AS DIRECTED TO MAINTAIN CLEAN AND SAFE PROJECT.
- ALL WORK AND EQUIPMENT SHALL BE CLEANED TO THE SATISFACTION OF THE OWNER BEFORE TURNING SAME OVER TO OWNER.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND OWNER FOR APPROVAL PRIOR TO ORDERING, FABRICATION AND INSTALLATION FOR ANY EQUIPMENT. SEE NOTE SHEET FOR SUBMITTAL REQUIREMENTS.
- THE CONTRACTOR SHALL PAY ALL FEES. GIVE ALL NOTICES. FILE ALL NECESSARY DRAWINGS AND OBTAIN ALL PERMITS AND CERTIFICATES OR APPROVAL REQUIRED IN CONNECTION WITH ALL WORK UNDER THESE CONTRACT DOCUMENTS. HE OR SHE SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION.
- THERE SHALL BE NO DEVIATION FROM SPECIFICATIONS WITHOUT THE WRITTEN APPROVAL OF THE OWNER, ARCHITECT AND/OR ENGINEER.
- THE CONTRACTOR SHALL EMPLOY AN APPROVED TESTING LABORATORY TO MAKE ALL TESTS FOR CONCRETE, SOIL COMPACTION, WELDING OF STEEL, SHEER NAILING, AND ROOFING TO INSURE COMPLIANCE WITH PLANS, STANDARDS AND CODES. ALSO PROVIDE WRITTEN RESULTS TO ARCHITECT AND BUILDING DEPARTMENT, FOR THEIR REVIEW.
- DRYWALL INSTALLATION SHALL BE IN CONFORMANCE WITH THE GYPSUM ASSOCIATION'S RECOMMENDED PRACTICES FOR THICKNESS, NAILING, TAPING AND CORRECT STUD SPACING.
- ALL FRAMING TO BE IN CONFORMANCE WITH THE NATIONAL FOREST PRODUCTS "MANUAL FOR HOUSE FRAMING."
- THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, OPENINGS AND CHARACTERISTICS OF ALL WORK AND EQUIPMENT TO BE FURNISHED BY THE OWNER OR OTHERS WITH THE MANUFACTURER OR SUPPLIER BEFORE STARTING ANY CONSTRUCTION RELATED TO SAID WORK AND/OR EQUIPMENT.
- ALL MATERIALS SHALL BE NEW AND OF PREFERRED DOMESTIC MANUFACTURE AND SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS AND/OR RECOMMENDATIONS UNLESS INDICATED OTHERWISE IN THE DRAWINGS AND SPECIFICATIONS. ANY CONFLICT FOUND BETWEEN MANUFACTURER'S INSTRUCTIONS AND THE DRAWINGS OR SPECIFICATIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER/ARCHITECT PRIOR TO INSTALLATION.
- UNLESS NOTED OTHERWISE IN THE PLANS ALL LUMBER SHALL BE SPF #2 OR BETTER FOR ROUGH CARPENTRY.
- REFER TO MEP AND LANDSCAPE DRAWINGS FOR EXTERIOR SITE LIGHTING.
- REFER TO CIVIL AND LANDSCAPE DRAWINGS FOR LOCATION OF SIDEWALKS AND DETAILS.
- NEVER ASSUME DIMENSIONS FOR SHOP DRAWINGS. IF NO DIMENSION IS LISTED FOR A REQUIRED ITEM, CONSULT WITH THE ARCHITECT IMMEDIATELY. ITEMS THAT REQUIRED ARCHITECTS SPECIAL ATTENTION SHALL BE LISTED WITHIN THE SHOPS. THE ARCHITECT AND OWNER SHALL NOT BE RESPONSIBLE FOR FIELD DIMENSIONS, EVERY TRADE SHALL BE HELD RESPONSIBLE FOR FIELD MEASURING THEIR PORTION OF WORK.
- ALL STAINED WOOD SHALL HAVE ONE COAT OF STAIN AND TWO COATS OF VARNISH. LIGHTLY SAND BETWEEN VARNISH APPLICATIONS.
- DO NOT SCALE DRAWINGS. ALL DIMENSIONS ARE TO FACE OF STUD U.N.O.
- LOCATION OF MECHANICAL UNITS ARE APPROXIMATE. INSTALL PER MANUFACTURER'S REQUIREMENTS.
- REFER TO CIVIL DRAWINGS FOR DIMENSIONAL CONTROL PLAN AND ROUGH GRADING.
- REFER TO CIVIL DRAWINGS FOR FIRE HYDRANT LOCATIONS.
- REFER TO CIVIL AND MEP AND LANDSCAPE DRAWINGS FOR TRANSFORMER LOCATIONS. (TO BE VERIFIED WITH LOCAL UTILITY SERVICE.)
- REFER TO CIVIL DRAWINGS FOR CURB CUTS.
- REFER TO MEP DRAWINGS FOR LOCATION OF ELECTRICAL AND GAS METERS.
- CONTRACTOR TO VERIFY WITH ARCHITECT FOR ANY REQUIRED CHASE AREAS NOT SHOWN ON DRAWINGS. ALL SHOP DRAWINGS TO BE SUBMITTED FOR REVIEW PRIOR TO ORDERING ANY EQUIPMENT.
- ALL EXISTING WORK OR LANDSCAPING NOT SHOWN TO BE ALTERED OR REMOVED SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE FOR AND SHALL REPAIR, TO EXISTING CONDITION, ANY DAMAGE TO EXISTING CONSTRUCTION, EQUIPMENT OR IMPROVEMENTS NOT INDICATED IN THE DRAWINGS OR SPECIFICATIONS TO RECEIVE ALTERATIONS, ADDITIONS OR REMOVAL.
- THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE FOR, AND SHALL REPAIR TO EXISTING CONDITION, ANY DAMAGE TO EXISTING UNDERGROUND UTILITIES, PIPING, CONDUIT OR EQUIPMENT.
- SPECIFIED PRODUCTS HAVE BEEN USED IN PREPARING THE CONTRACT DOCUMENTS TO ESTABLISH MINIMUM QUALITIES.
- WHEN A SPECIFICATION HAS NOT BEEN PROVIDED, SEE NOTE SHEETS WITHIN THIS PACKAGE FOR A LIST OF PRODUCTS.
- THE CONTRACTOR MUST PROVIDE ALL REQUIRED RATINGS FOR FIRE-RESISTIVE TENANT SEPARATION WALLS, FLOOR/CEILING ASSEMBLIES, IN ACCORDANCE WITH THE LATEST EDITION OF THE GOVERNING CODE AND LOCAL CODES.
- STATIC COEFFICIENT OF FRICTION (SCOF) SHALL BE A MINIMUM OF 0.1 FOR ALL RAMPS AND ALL ACCESSIBLE ROUTES (SIDEWALKS) 0.8 TO AVOID SLIPPERY FOOTING.
- THE CONTRACTOR SHALL VERIFY ALL ROUGH OPENINGS.
- ALL WINDOW AND DOOR OPENINGS SHALL BE FLASHED IN CONFORMANCE WITH MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.

GENERAL NOTES

- ALL STUD WALLS ARE DIMENSIONED 3 1/2" OR 5 1/2" FOR INTERIOR WALLS AND 6" FOR EXTERIOR WALLS. (ACTUAL) U.N.O.
- STUD SPACING SHALL BE AS FOLLOWS: REFER TO ARCHITECTURAL NOTES AND STRUCTURAL FRAMING PLANS FOR ALL STUD SIZING AND SPACING OR AS CODE REQUIRES.
- ATTIC ACCESSSES TO BE NOT LESS THAN 20" X 30" (CLEAR OPENING).
- ROOFING SHALL BE CLASS-A (MINIMUM). SEE STRUCTURAL INFORMATION FOR OTHER CRITERIA.
- ALL WOOD SOLE PLATES IN CONTACT WITH CONCRETE TO BE BE PRESSURE TREATED AND HAVE A CONTINUOUS SILL SEALER BETWEEN THE TOP OF THE FOUNDATION WALL AND THE BOTTOM OF THE PLATE.
- ALL HOSE BIBS SHALL BE FROST FREE.
- ALL HANDICAPPED RAMPS SHALL BE BROOM FINISHED PERPENDICULAR TO SLOPE. CONTRACTOR MUST PROVIDE 0.8 SLOPE ON ALL RAMPS. SLOPE RAMPS AT 1:12 (MAX.) REFER TO LANDSCAPE AND CIVIL DRAWINGS FOR DETAILS. ZERO TOLERANCE ALLOWED.
- CABINET SUPPLIER TO FIELD MEASURE AREA OF WORK AFTER ROUGH FRAMING, TO ASSURE AN EXACT FIT. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
- CEMENT BACKER BOARD SHALL BE USED IN BOTH TUB AND SHOWER COMPARTMENTS WHERE TILE IS APPLIED, UNLESS NOTED OTHERWISE. INSTALLATION OF ALL TILE SHALL CONFORM WITH THE TCA LATEST EDITION FOR TILE INSTALLATION. WHERE TILE ABUTS A RATED WALL TILE BACKER BOARD SHALL BE INSTALLED OVER RATED DRYWALL.
- SEE ROOM FINISH SCHEDULE FOR SPECIFIED FLOOR FINISHES.
- SEE TITLE SHEET FOR FLAME SPREAD RATINGS OF MATERIALS.
- ALL EXPOSED MATERIALS FOR BALCONIES, SOFFITS, OVERHANGS, ETC, TO BE APPROVED EXTERIOR GRADE MATERIALS ONLY AND PER CODE.
- SPECIAL CARE SHALL BE TAKEN TO MAKE SURE THAT ALL PIPING LOCATED WITHIN EXTERIOR WALLS ARE PROTECTED FROM FREEZING, BUILDING SHRINKAGE AND MOVEMENT.
- SUBMIT ENGINEERED SHOP DRAWINGS FOR PREFABRICATED WOOD TRUSSES AND FOR THE FIRE SUPPRESSION SYSTEM (WHEN REQUIRED) TO THE ARCHITECT FOR REVIEW PRIOR TO START OF GENERAL CONSTRUCTION.
- FRAMING AT WINDOWS AND DOORS SHALL BE ADEQUATE TO MINIMIZE MOVEMENT AND LESSEN CRACKING OF EXTERIOR MATERIALS. (DOUBLE STUDS REQUIRED IN SOME LOCATIONS).
- ANY AND ALL PRECAUTIONS OVER AND ABOVE ANY SHOWN ON PLANS SHALL BE TAKEN BY CONTRACTOR TO MINIMIZE EXTERIOR AND INTERIOR MATERIALS FROM CRACKING.
- INSULATE ALL EXTERIOR WALLS AS INDICATED WITHIN THESE CONSTRUCTION DRAWINGS. SEE WALL AND FLOOR/ROOF ASSEMBLIES FOR MORE INFORMATION. TAKE PRECAUTIONS SO THAT ANY PIPING IN WALLS IS CLOSE TO THE BACK SIDE OF DRYWALL AND PROPERLY INSULATED SO THAT FREEZING DOES NOT OCCUR.
- INSTALL EPDM OR CORROSION RESISTANT FLASHING AT THE HEAD, SILL, AND JAMBS OF ALL WINDOWS, ROOF OPENINGS, AND THE INTERSECTION OF ROOF AND FRAME WALLS. SEALANT TO BE USED AT THE TOP AND SIDES TO GUARANTEE LEAK-PROOF CONSTRUCTION. U.N.O.
- ADD SEALANT TO ALL EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, BETWEEN WALL PANELS, AND TO ALL PENETRATIONS OR UTILITIES THROUGH WALLS AND ROOFS. REF. TO LOCAL CODES (OR M.E.P.) FOR ADDITIONAL REQUIREMENTS.
- PROVIDE SELF-ADHEREING BITUTHENE AT HEAD, JAMB AND SILL OF ALL DOORS AND WINDOWS.
- WIND BRACE WALLS PER STRUCTURAL DRAWINGS OR AS REQUIRED BY CODE.
- SEE DRAWINGS FOR STAIR RISER HEIGHTS AND TREAD DEPTHS.
- SMOKE DETECTORS ARE REQUIRED AND SHALL CONFORM TO MBC 907.2.9 AND LOCAL GOVERNMENTAL OR NATIONAL REQUIREMENTS INCLUDING NUMBER, LOCATION, ETC.
- ALL PATIOS AND PORCHES AND GARAGE SLABS TO SLOPE IN A DIRECTION AWAY FROM THE BUILDING SO AS TO SHED WATER AWAY FROM THE BUILDING. U.N.O.
- NOT USED
- NOT USED
- MINIMUM GUTTER SIZE TO BE 5" WITH 3" X 4" DOWNSPOUT LEADERS OFF GUTTERS. WHERE DOWNSPOUTS DISCHARGE TO GRADE ALL DOWNSPOUTS SHALL BE TIED TO SUBSURFACE DRAINAGE U.N.O. ALL GUTTERS AND DOWNSPOUTS SHALL BE EXTRUDED ALUMINUM.
- INSTALL BLOCKING IN BATH AND KITCHEN WALL CAVITIES WHERE NEEDED TO SUPPORT CABINETS. PROVIDE ADEQUATE WOOD BLOCKING BETWEEN STUDS FOR ATTACHMENT OF STAIR HANDRAILS, BALCONY GUARDRAILS, LIGHT FIXTURES AND ALL OTHER WALL HUNG ITEMS. SEE INTERIOR ELEVATIONS FOR ADDITIONAL LOCATIONS.
- WHERE INDICATED, RAILING SUB-CONTRACTOR TO VERIFY POUND FORCE ON GUARD RAILING TO DETERMINE ADEQUATE NUMBER OF SUPPORT POSTS. NO MIDDLE SUPPORT PREFERRED.
- FLASHING SHALL BE INSTALLED AROUND ALL WINDOW, DOOR AND ROOF OPENINGS AND AT THE INTERSECTION OF CHIMNEYS, WOOD CONSTRUCTION, AND FRAME WALLS. CAULK AND MAKE WEATHER-TIGHT.
- TOWEL BARS AND TOILET PAPER HOLDERS ARE REQUIRED IN EACH BATHROOM. PROPER BLOCKING IS REQUIRED FOR INSTALLATION.
- PRE-ROCK ALL TRUSS CAVITIES AS REQUIRED TO MAINTAIN FIRE RATING AT DUCT PENETRATIONS, WHERE THEY OCCUR.
- INSULATE ALL EXTERIOR WET WALLS AS REQUIRED TO PROTECT PIPING FROM FREEZING.
- ALL DRYER VENT HOOKUP TO BE AT STANDARD HEIGHT. ALL RANGE HOODS TO BE DUCTED DIRECTLY TO THE OUTSIDE. ALL EXHAUST FANS SHALL BE DUCTED TO THE OUTSIDE AND SHALL MAINTAIN A CONSISTENT PENETRATION PATTERN IN BOTH WALLS AND ROOFS.
- PROVIDE SOLID BLOCKING AND/OR DOUBLE JOISTS UNDER ALL PERPENDICULAR AND PARALLEL PARTITIONS AND AT STAIR OPENINGS.
- ALL WORK AND EQUIPMENT TO BE FULLY GUARANTEED FOR ONE (1) YEAR FROM DATE OF FINAL PAYMENT AND ACCEPTANCE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERSONALLY INSPECT THE WORK IN PROGRESS, AND AS A WHOLE, ASSURING HIMSELF THAT THE WORK ON ANY OR ALL OR PART OF THE PROJECT IS READY FOR PERIODIC AND/OR FINAL REVIEW, BEFORE CALLING UPON THE ARCHITECT AND OWNER TO MAKE THEIR SITE/PROJECT OBSERVATION VISIT OF THE WORK.
- IF NO WINDOW IS PART OF THE MAIN ENTRANCE DOOR A "PEEP HOLE" VIEWER SHALL BE INSTALLED. ACCESSIBLE UNITS TO HAVE TWO DOOR VIEWERS AT REQUIRED HEIGHTS.
- PROVIDE WOOD BLOCKING IN CEILING AT CEILING FIXTURE OF ALL BEDROOMS FOR FUTURE CEILING FAN INSTALLATION
- IN COMBUSTIBLE CONSTRUCTION, 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 PROVIDED IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT 10-FOOT INTERVALS BOTH VERTICAL AND HORIZONTAL. TYPICAL FOR MULTI-UNIT BLDGS ONLY.
- UNLESS NOTED OTHERWISE ALL WOOD SHALL BE SPRUCE-PINE-FUR #2. ALL INTERIOR PAINTED WOOD TRIM SHALL BE POPLAR WITH THE EXCEPTION OF ANY CABINETRY ITEMS AND ALL EXTERIOR TRIM SHALL BE COMPOSITE MATERIALS TO MATCH SIDING AND SHALL BOTH BE SUPPLIED BY A SINGLE MANUFACTURER. COMPOSITE TRIM SHALL BE COLOR IMPREGNATED AND 3/4" THK. UNLESS NOTED OTHERWISE.
- ALL GARAGES SHALL BE FINISHED WITH 5/8" FIRECODE GYP. BRD. AT ALL INTERIOR WALLS THAT ABUT THE COMMON WALLS WITH THE HOME, AND ALL CEILINGS.

BRACED WALL COMPLIANCE

BRACED WALL COMPLIANCE



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SHEET DATES / DESC.
4/15/24 REVIEW

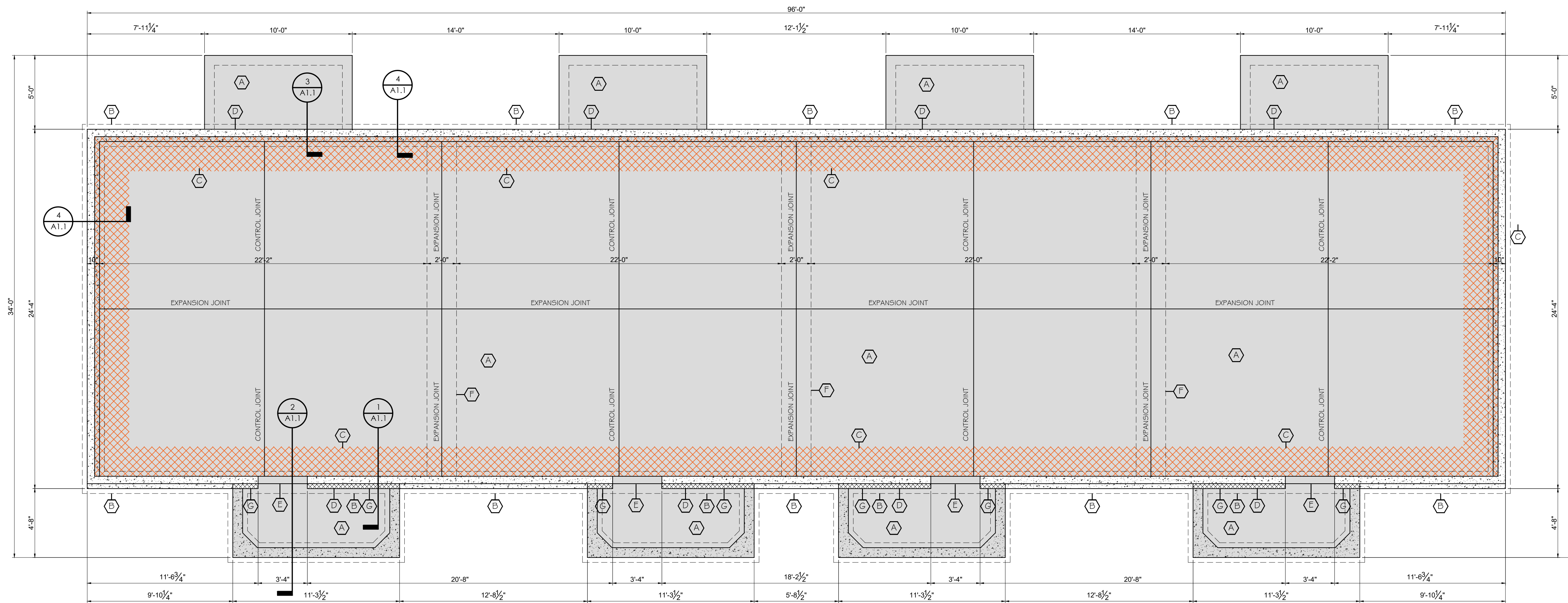
NEW CONSTRUCTION

Pennsylvania Townhouses
INGHAM COUNTY LAND BANK

LANSING, MICHIGAN

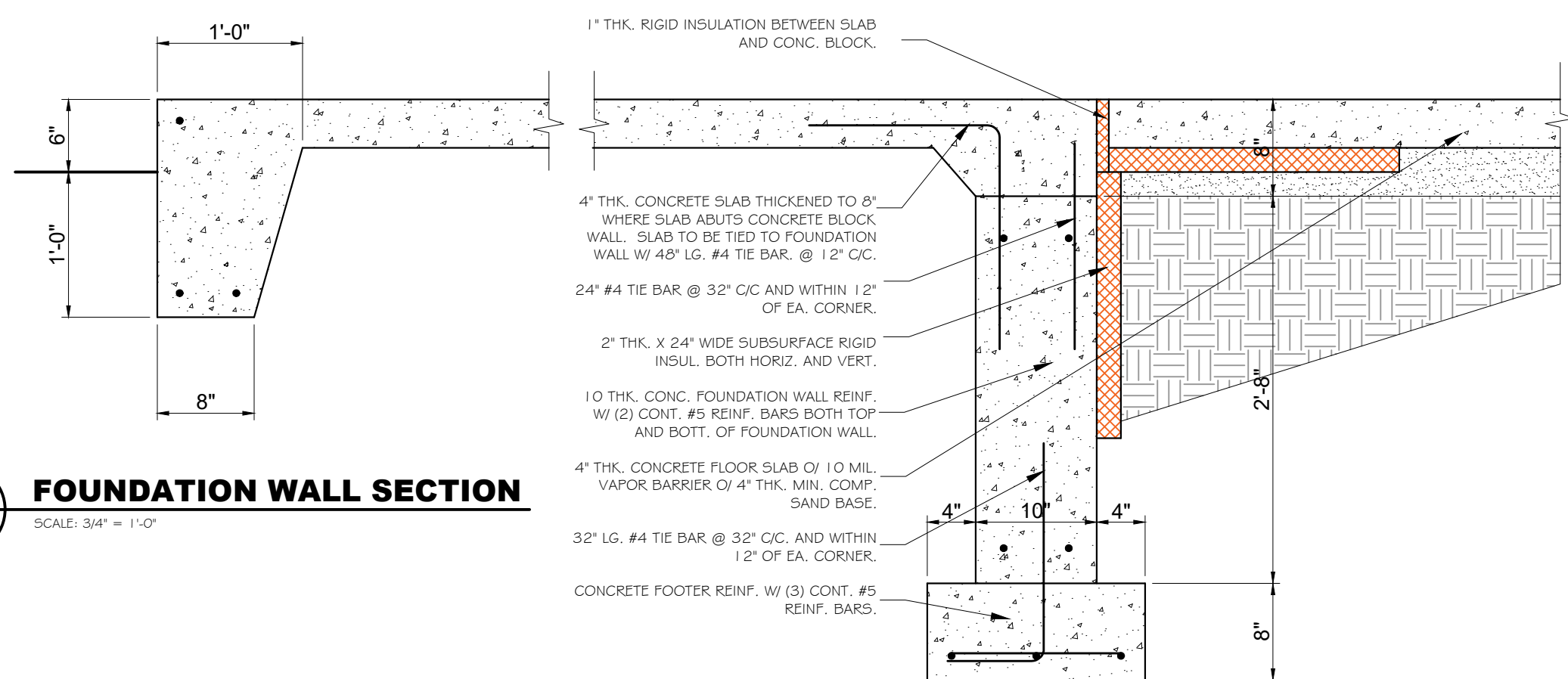
PROJ. NOTES

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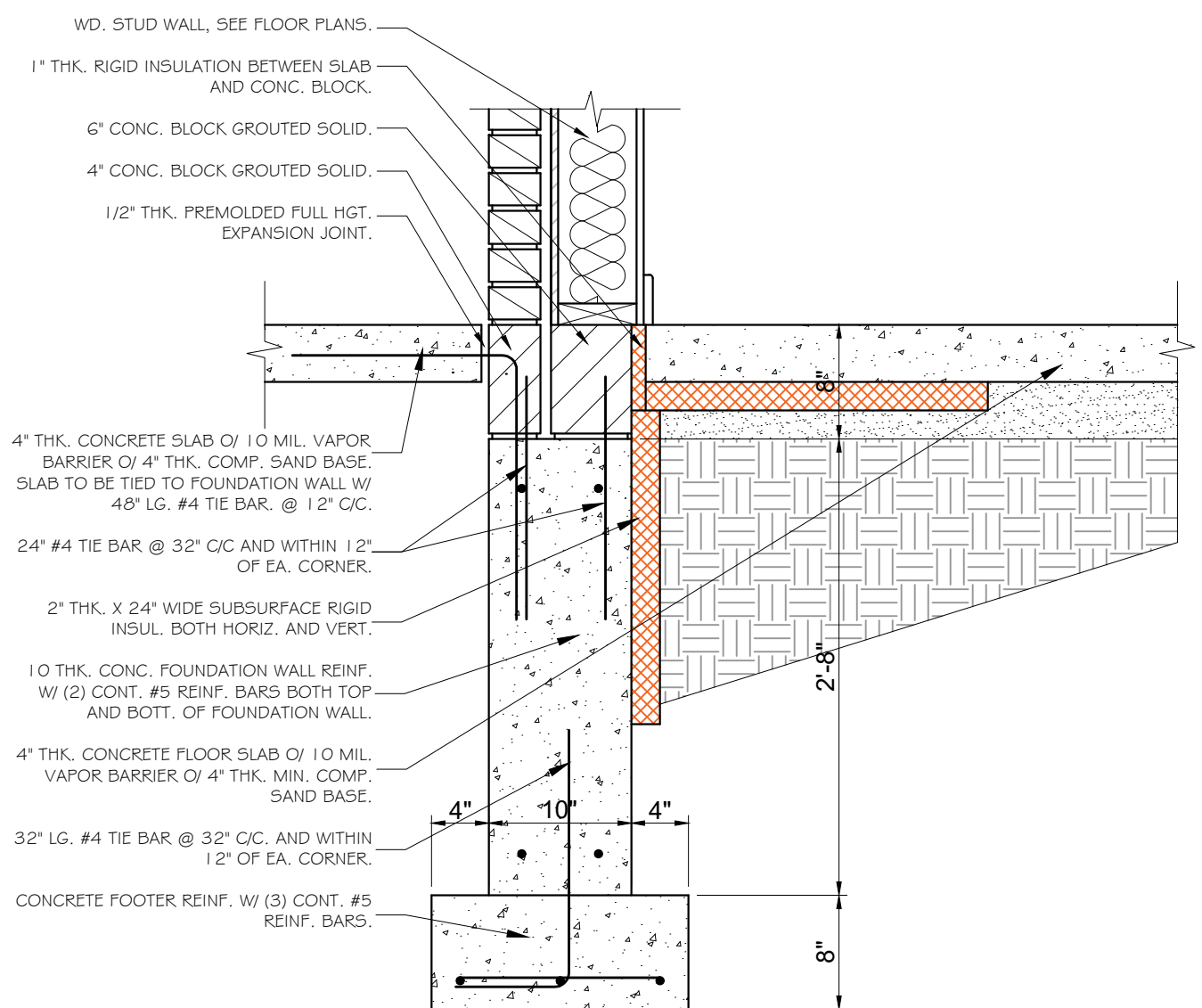


FOUNDATION PLAN

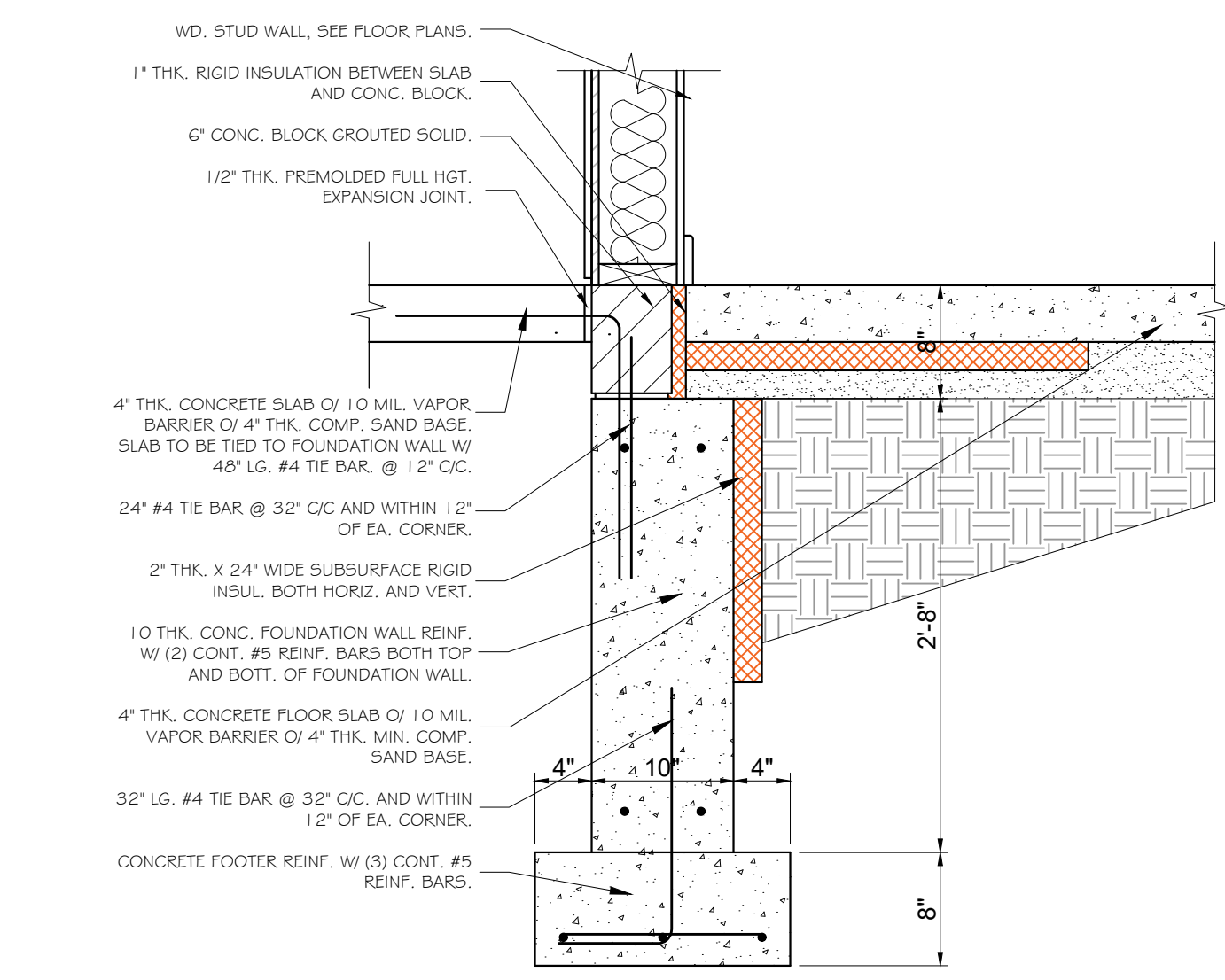
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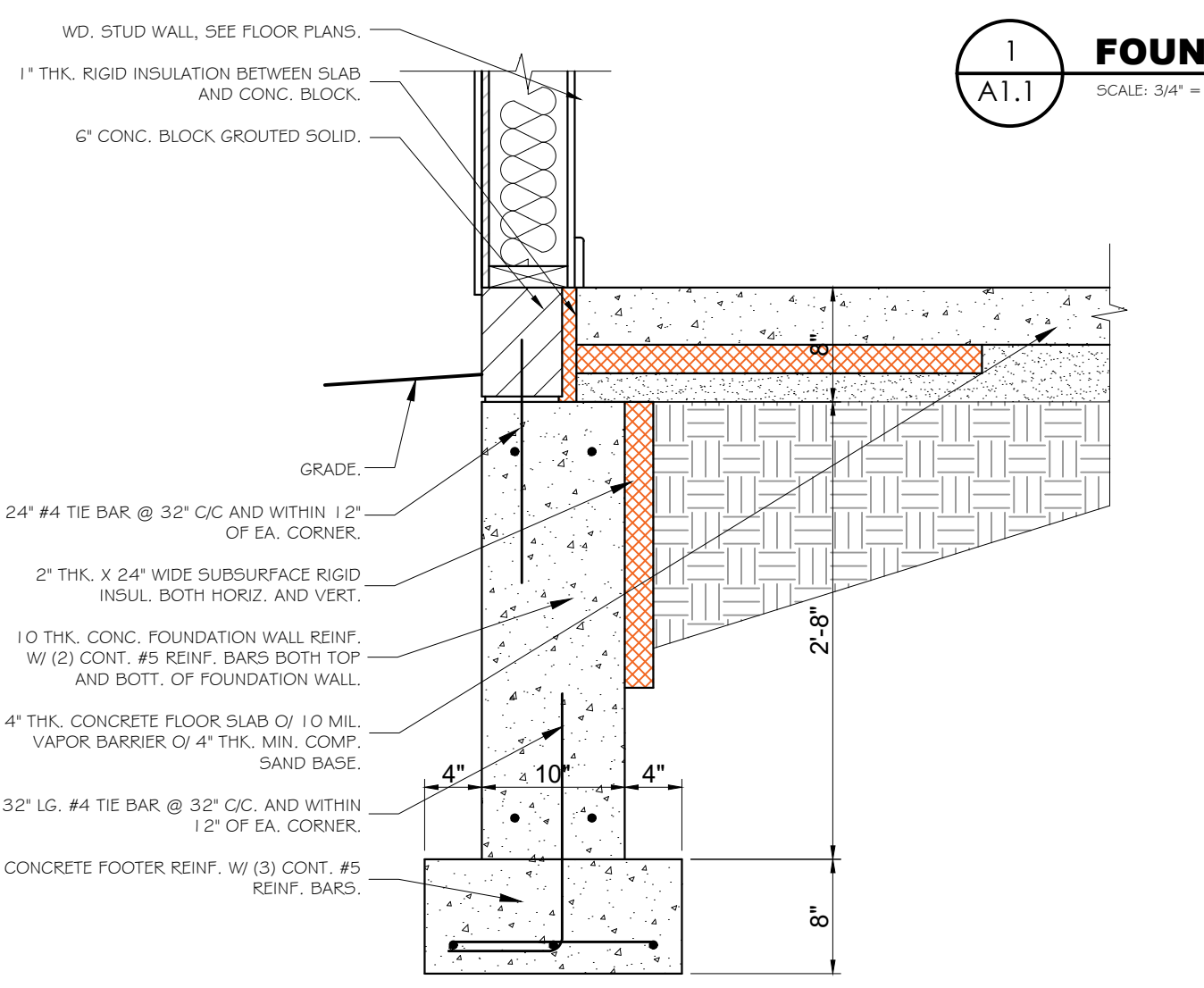
2 FOUNDATION WALL SECTION
SCALE: 3/4" = 1'-0"



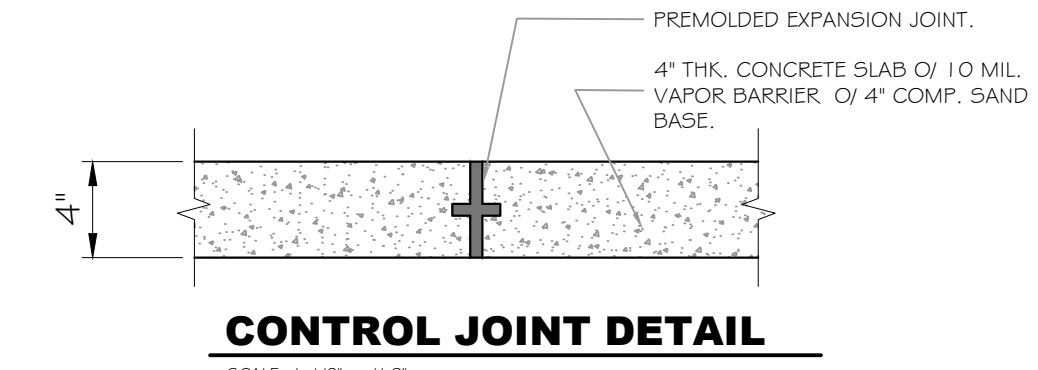
1 FOUNDATION WALL SECTION
SCALE: 3/4" = 1'-0"



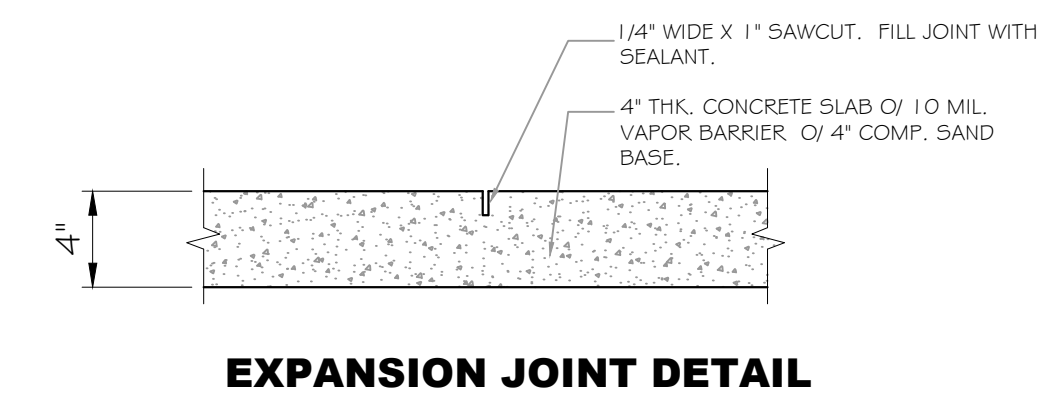
3 FOUNDATION WALL SECTION
SCALE: 3/4" = 1'-0"



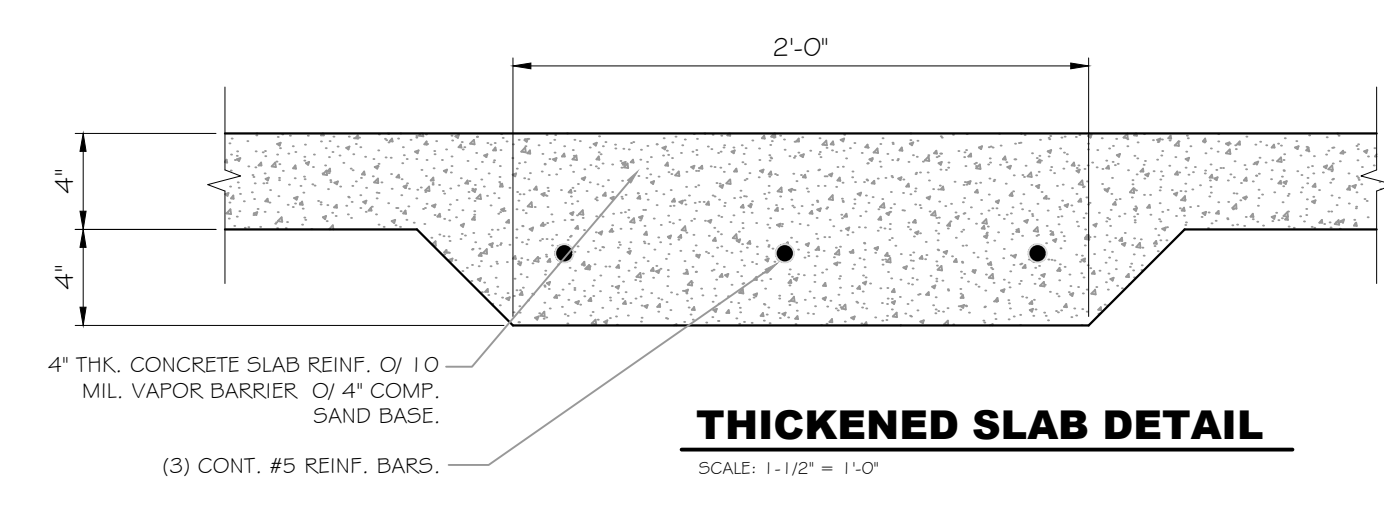
4 FOUNDATION WALL SECTION
SCALE: 3/4" = 1'-0"



CONTROL JOINT DETAIL
SCALE: 1-1/2" = 1'-0"



EXPANSION JOINT DETAIL
SCALE: 1-1/2" = 1'-0"



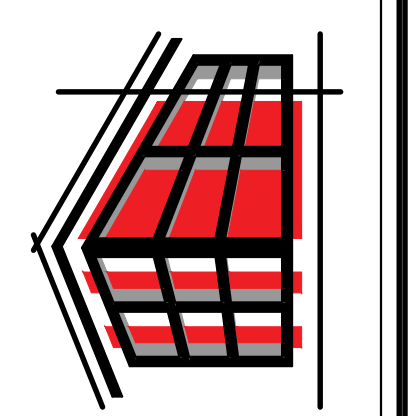
THICKENED SLAB DETAIL
SCALE: 1-1/2" = 1'-0"

- GENERAL NOTES**
- CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO THE START OF CONSTRUCTION. ANY CONDITIONS FOUND TO BE CONTRARY TO WHAT IS INDICATED WITHIN THESE DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY.
 - ALL CONTRACTORS AND ANY OTHER PERSONS DOING WORK ON THIS BUILDING SHALL BE RESPONSIBLE TO BE FAMILIAR WITH THE CONTENTS OF ALL OF THE CONSTRUCTION DOCUMENTS.
 - ALL INTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF THE STUD. ALL EXTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF THE WALL OR SHEATHING U.N.O. AND ALL WINDOWS ARE TAKEN TO THE CENTERLINE OF THE WINDOW.
 - ALL ANGLES ARE 45 DEG. TO HORIZONTAL & VERTICAL DIRECTIONS U.N.O.
 - SOUND INSULATE ALL WALLS SURROUNDING LAUNDRY ROOMS, PLUMBING STACKS AND HVAC UTILITY CLOSETS. ALL WATER SUPPLY PIPING INSTALLED IN EXTERIOR WALLS SHALL BE PLACED CLOSE TO BACK SIDE OF DRYWALL AND FULLY PROTECTED FROM FREEZING.
 - ALL INTERIOR DOORS SHALL BE UNDERCUT 3/4" TO ALLOW FOR RETURN AIR FLOW.
 - INSTALL WD. BLOCKING IN ALL WALLS TO RECEIVE WALL HUNG ITEMS.
 - UTILIZE TEMPERED GLAZING AS REQUIRED TO MEET ALL LOCAL CODE COMPLIANCE ISSUES. WINDOW SUPPLIER SHALL BE RESPONSIBLE FOR PROVIDING TEMPERED WINDOW GLAZING IN THE APPROPRIATE AREAS.
 - TOWEL BARS LOCATED ABOVE TOILETS SHALL BE LOCATED AT 60" A.F.F., ALL OTHER TOWEL BARS SHALL BE LOCATED AT 48" A.F.F., TOILET PAPER DISPENSERS SHALL BE LOCATED AT 24" A.F.F. AND TOWEL RINGS LOCATED ABOVE LAVATORY COUNTERS SHALL BE SET AT 24" ABOVE COUNTER. BARRIER FREE REQUIREMENTS SUPERCEDE THESE DIMENSIONS AS DEPICTED ON THE BARRIER FREE STANDARDS SHEET.
 - VERIFY ALL TUB AND SHOWER ROUGH OPENING DIMENSIONS WITH AN ACTUAL TUB AND SHOWER UNIT.
 - ALL PRODUCTS SHALL BE INSTALLED IN COMPLIANCE WITH ALL MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.
 - WATER RESISTANT GYP. BRD. SHALL BE USED IN LIEU OF STANDARD GYP. BRD. AT ALL BATHROOMS AND WET AREAS.
 - INSTALL STANDARD WOOD BLOCKING OR METAL STRAPS WITHIN ALL WALLS THAT ARE TO RECEIVE WALL HUNG ITEMS AND FUTURE WALL HUNG ITEMS.
 - INTERIOR ELEVATIONS ARE FOR SCHEMATIC PURPOSES ONLY. ACTUAL DIMENSIONS AND CABINET DESIGNS SHALL BE BY THE CABINET SUPPLIER.
 - ALL PRODUCT SELECTIONS SHALL BE BY THE OWNER. VERIFY DIMENSIONS INDICATED WITH OWNER SUPPLIED PRODUCTS.
 - SEE MECHANICAL AND ELECTRICAL DRAWINGS, SUPPLIED BY OTHERS, FOR ALL OF THOSE ITEMS AND THEIR APPROXIMATE LOCATIONS.
 - ALL TUB/SHOWER UNITS TO HAVE SHOWER RODS MOUNTED AT 76-1/2" FROM FINISH FLOOR TO BOTTOM OF ROD. ALL WALK IN SHOWER UNITS TO HAVE SHOWER RODS MOUNTED AT 79" A.F.F.
 - PROVIDE ADJUSTABLE SHELVES, HINGES, DRAWER PULLS AT ALL APPLICABLE LOCATIONS.
 - ALL RANGE EXHAUST HOODS SHALL BE RECIRCULATING TO INTERIOR U.N.O.
 - INSTALL 'J' CHANNEL AT ALL WINDOWS.
 - UTILIZE 3,000 PSI CONCRETE ALL INTERIOR SLABS, FOUNDATION WALLS AND FOOTERS. EXTERIOR SLABS SHALL UTILIZE 4,000 PSI CONCRETE.
 - BACKFILL ALL FOUNDATION WALLS WITH GRANULAR MATERIAL ONLY. ALL DRAIN TILE SHALL HAVE SILT SOCKS AND SHALL BE SURROUND WITH A MINIMUM OF 24" OF PEASTONE VERT. AND HORIZONTALLY.
 - FOUNDATIONS ARE ENGINEERED WITH ASSUMED SOIL BEARING CAPACITY OF 2,500 PSF. CONTRACTOR SHALL VERIFY SOIL CONDITIONS.
 - INSULATED CONCRETE FORMS SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.

FOUNDATION NOTES

- A 4" THK. CONCRETE FLOOR SLAB OF 10 MIL. VAPOR BARRIER OF MIN. 4" THK. COMP. SAND BASE.
- B DASHED LINE DENOTES LOCATION CONCRETE FOOTER.
- C HATCHED AREA DENOTES LOCATION OF 2" THK. X 24" WIDE SUB-SURFACE OF HORIZ. INSULATION. SEE SECTIONS FOR MORE INFORMATION.
- D INSTALL TIE BARS WHERE SLAB ABUTS BLOCK WALL. SEE DETAILS.
- E ROLL DOWN INTERIOR CONC. SLAB TO TOP OF FOUNDATION WALL. INSTALL NEW 1/2" PREMOLDED EXPANSION JOINT BETWEEN INTERIOR AND EXTERIOR FLOOR SLABS.
- F THICKENED SLAB LOCATION.
- G CROSS HATCHED AREA DENOTES LOCATION OF 4" CONC. BLOCK LOCATIONS.

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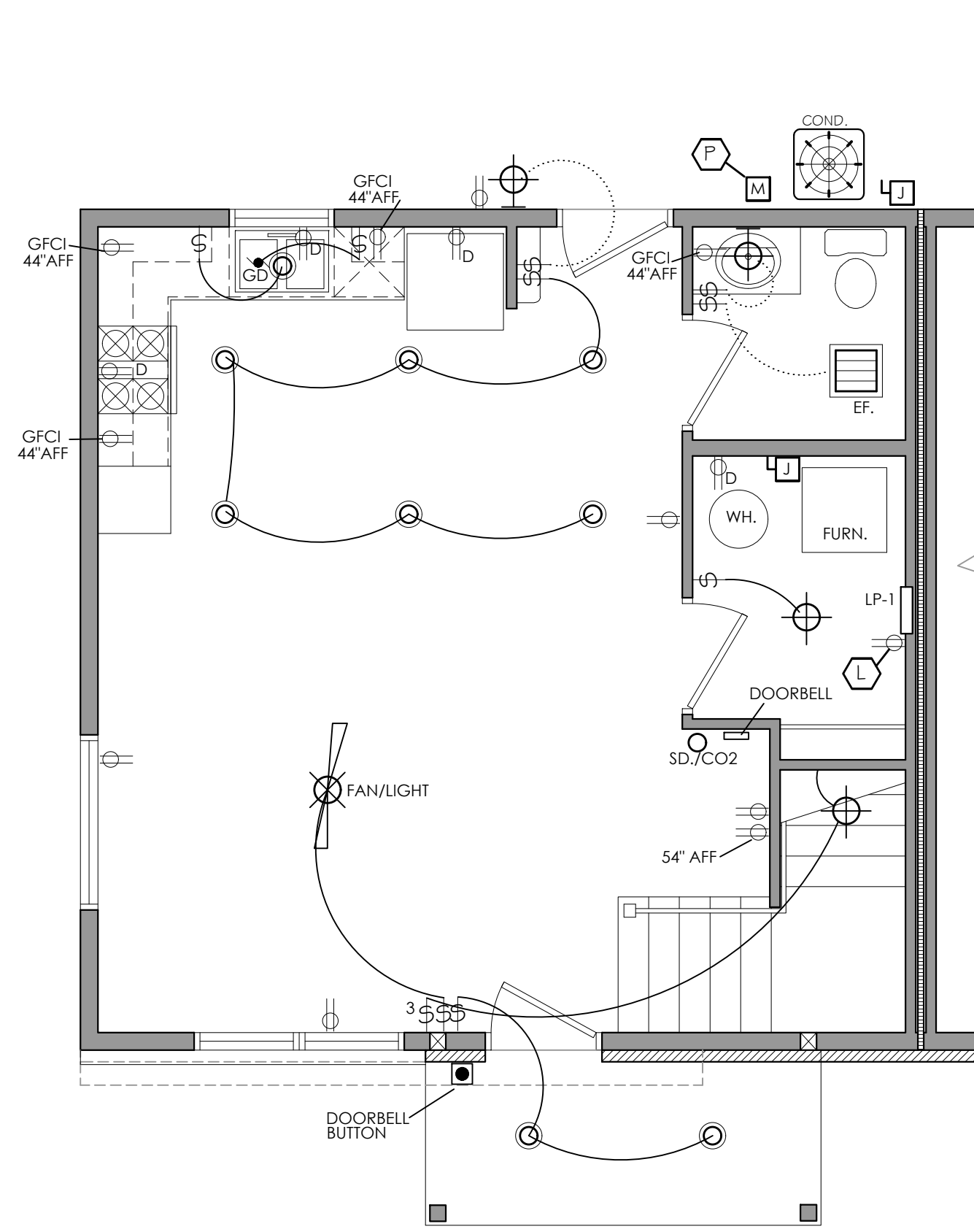


SHEET DATES / DESC.
4/15/2024

NEW CONSTRUCTION
Pennsylvania Townhouses
INGHAM COUNTY LAND BANK
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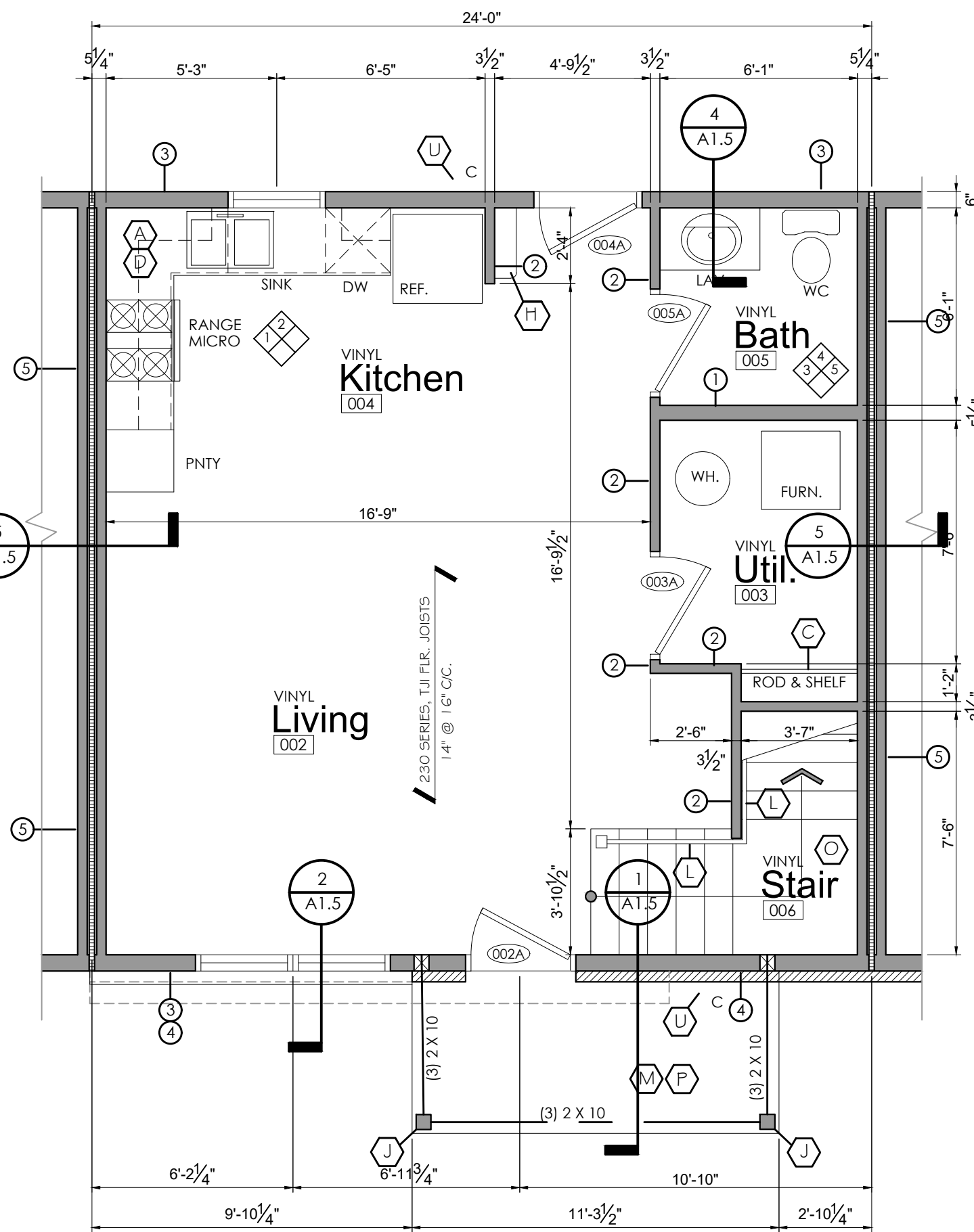
FOUNDATION PLAN

A1.1



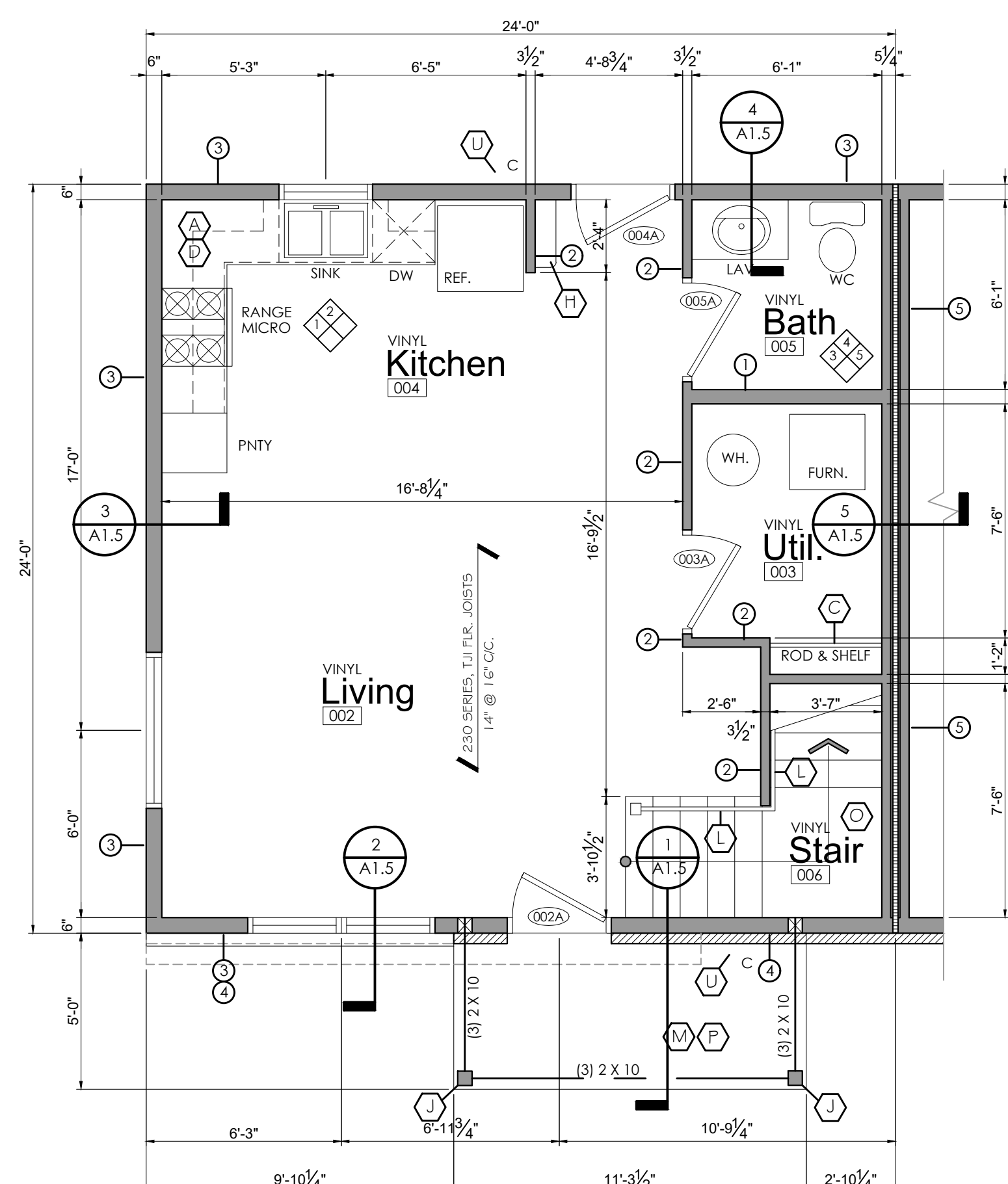
TYPICAL FIRST FLOOR ELECTRICAL PLAN

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



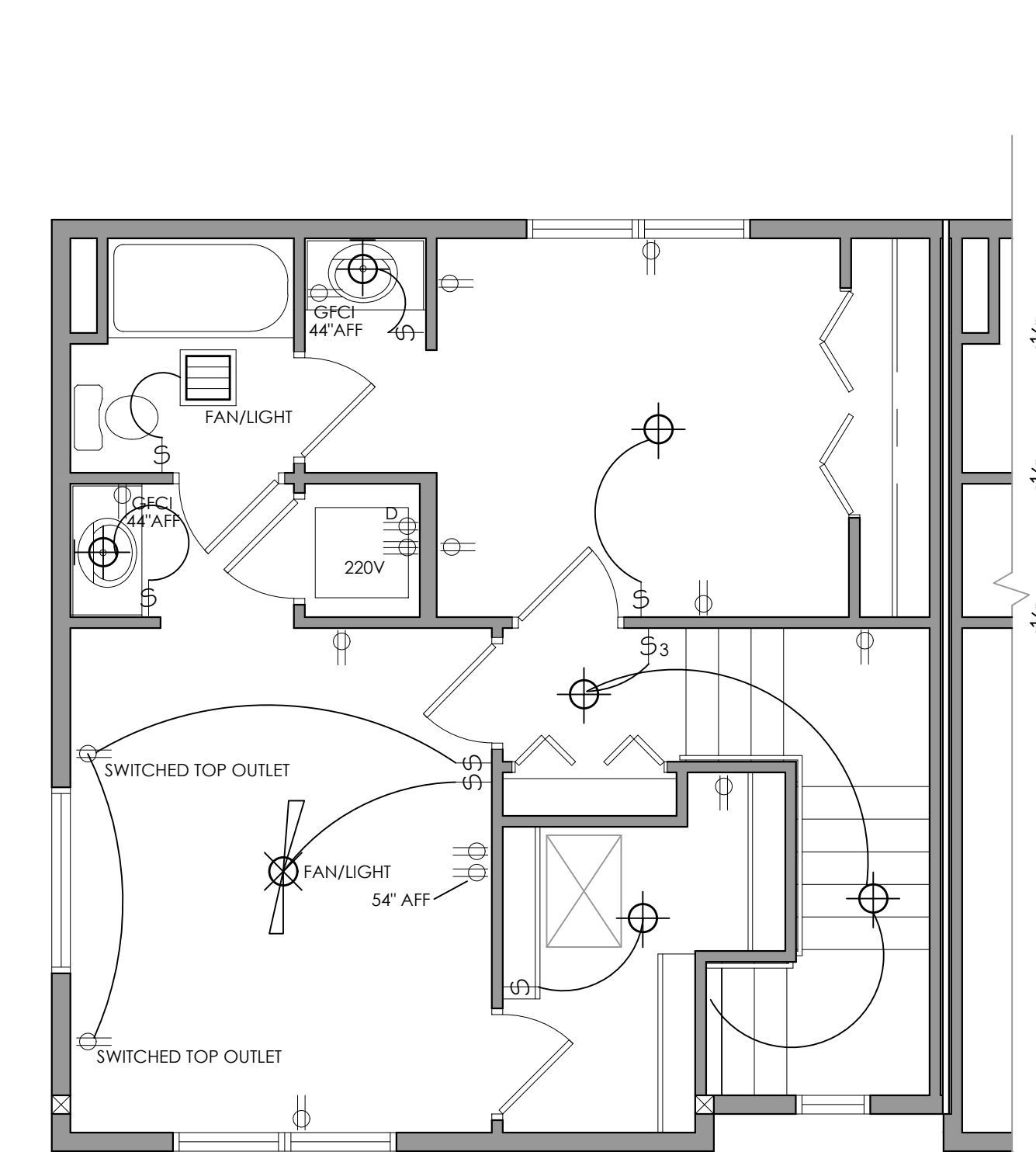
FIRST FLOOR UNIT PLAN - UNITS #2 & #3

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



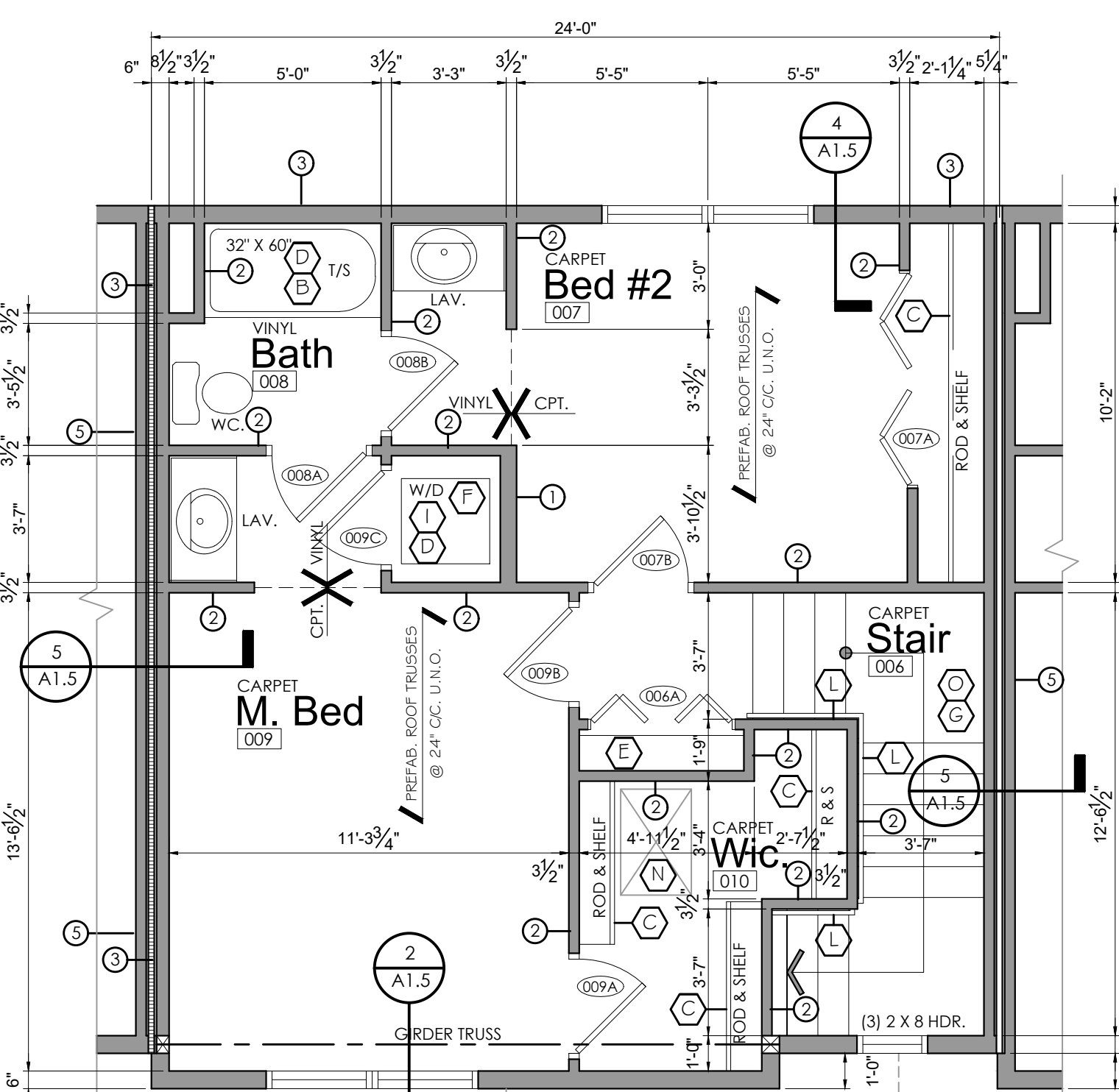
FIRST FLOOR UNIT PLAN - UNITS #1 & #4

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



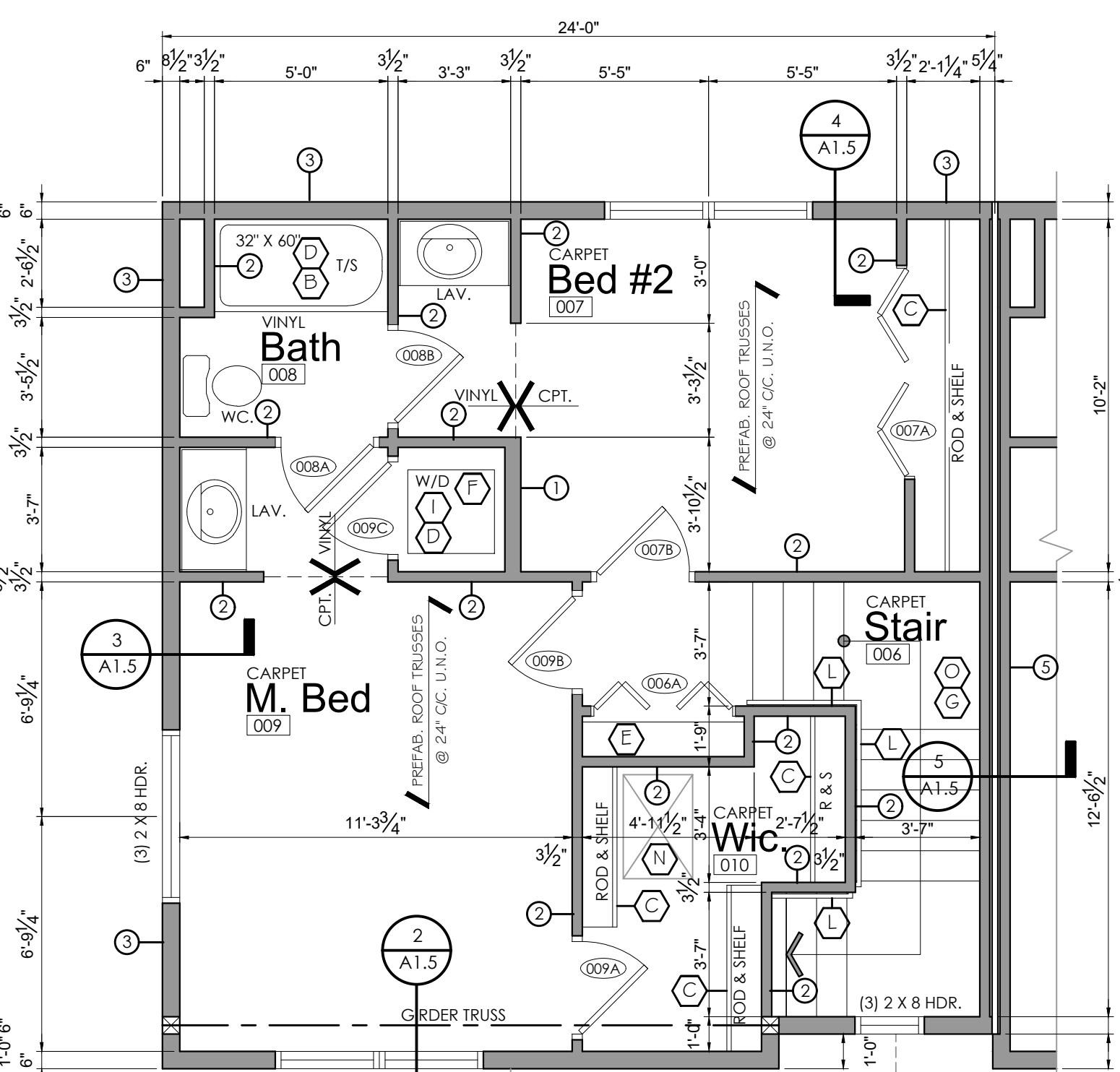
TYPICAL SECOND FLOOR UNIT PLAN

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



SECOND FLOOR UNIT PLAN - UNITS #2 & #3

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



SECOND FLOOR UNIT PLAN - UNITS #1 & #4

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

WALL TYPES

- ① WALL TYPE #1 - 2 X 6 WD. STUDS @ 16" C.C. W/ 1/2" THK. GYP. BRD. AT EXPOSED FACE OF STUDS. PAINT FIN. WALLS. SOUND BATT. AT ALL INTERIOR STUD CAVITIES. 6" NON-FACED FRICION FIT BATT.
- ② WALL TYPE #2 - 2 X 4 WD. STUDS @ 16" C.C. W/ 1/2" THK. GYP. BRD. AT EXPOSED FACE OF STUDS. PAINT FIN. WALLS. 3-1/2" NON-FACED BATT. AT ALL STUD CAVITIES.
- ③ WALL TYPE #3 - VINYL SIDING AND TRIM O/ TYVEK WEATHER WRAP O/ 7/16" THK. O.S.B. W/ SHEATHING O/ 2 X 6 WD. STUDS @ 16" C.C. FILL STUD CAVITIES W/ 6" BATT. INSUL. W/ INTEGRAL VAPOR BARRIER. INSTALL 1/2" THK. GYP. BRD. AT INTERIOR FACE OF WALLS.
- ④ WALL TYPE #4 - 4" FACE BRICK O/ AIR SPACE W/ SELF ADHERING O/ TYVEK WEATHER WRAP O/ 7/16" THK. O.S.B. W/ SHEATHING O/ 2 X 4 WD. STUDS @ 16" C.C. FILL STUD CAVITIES W/ 6" BATT. INSUL. W/ INTEGRAL VAPOR BARRIER. INSTALL 1/2" THK. GYP. BRD. AT EXPOSED FACE OF STUDS. HOLD OFF WALLS 3/4" FROM FACE OF SHAFT WALL. TYE AT BOTH SIDES OF SHAFT WALL.

BLOCK SYMBOLS

DESCRIPTION OF USE	SYMBOL
WALL TAG	X
DOOR NUMBER	XXX
ROOM NUMBER	XXX
INTERIOR ELEVATION	X
WINDOW TAG	X
NOTE TAG	X
SECTION CUTS	X-X
MULTIPLE INTERIOR ELEVATION TAG	X-X-X
ICE AND WATER SHIELD LOCATED ON ROOF PLAN, SUBSURFACE RIGID INSULATION AT FOUNDATION PLAN.	[Symbol]
RECESSED LED PLUCK LIGHT.	[Symbol]
RECESSED LED PLUCK LIGHT, WITH W/D. BLOCKING AND WIRING FOR FUTURE LIGHT / FAN.	[Symbol]
SURFACE MOUNTED LIGHT FIXTURE.	[Symbol]
WALL SCONCE LIGHT FIXTURE.	[Symbol]
PENDANT LIGHT FIXTURE 78" A.F.F.	[Symbol]
EXHAUST FAN	[Symbol]
SMOKE DETECTOR / CO2 SENSOR	[Symbol]
UNIT MEDIA CENTER: 2CT. FIBER HOME RUNS W/ COAXIAL SPLITTER, MEDIA CONVERTER, FIBERSYNC RECEIVER AND ETHERNET SWITCH.	[Symbol]
OUTLET = (1) RGG BLACK W/ SPARE + (1) CAT5E BLUE W/ SPARE (YELLOW).	[Symbol]

HEADER SCHEDULE

HEADERS FOR 6'-0" WIDE WINDOWS OR LESS - (3) 2 X 1 2, (2) JACK STUD + (1) KING STUD.
HEADERS FOR 3'-0" OR LESS WINDOW OPENINGS - (3) 2 X 6, (1) JACK STUD AND (1) KING STUD.

GENERAL NOTES

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO THE START OF CONSTRUCTION. ANY CONDITIONS FOUND TO BE CONTRARY TO WHAT IS INDICATED WITHIN THESE DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY.
2. ALL CONTRACTORS AND ANY OTHER PERSONS DOING WORK ON THIS BUILDING SHALL BE RESPONSIBLE TO BE FAMILIAR WITH THE CONTENTS OF ALL OF THE CONSTRUCTION DOCUMENTS.
3. ALL INTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF THE STUD. ALL EXTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF THE WALL SHEATHING U.N.O. AND ALL WINDOWS ARE TAKEN TO THE CENTERLINE OF THE WINDOW.
4. ALL ANGLES ARE 45 DEG. TO HORIZONTAL 4 VERTICAL DIRECTIONS U.N.O.
5. SOUND INSULATE ALL WALLS SURROUNDING LAUNDRY ROOMS, PLUMBING STACKS AND HVAC UTILITY CLOSETS. ALL WATER SUPPLY PIPING INSTALLED IN EXTERIOR WALLS SHALL BE PLACED CLOSE TO BACK SIDE OF DR/WALL AND FULLY PROTECTED FROM FREEZING.
6. ALL INTERIOR DOORS SHALL BE UNDERCUT 3/4" TO ALLOW FOR RETURN AIR FLOW.
7. INSTALL WD. BLOCKING IN ALL WALLS TO RECEIVE WALL HUNG ITEMS.
8. UTILIZE TEMPERED GLAZING AS REQUIRED TO MEET ALL LOCAL CODE COMPLIANCE ISSUES. WINDOW SUPPLIER SHALL BE RESPONSIBLE FOR PROVIDING TEMPERED WINDOW GLAZING IN THE APPROPRIATE AREAS.
9. TOWEL BARS LOCATED ABOVE TOILETS SHALL BE LOCATED AT 60" A.F.F. ALL OTHER TOWEL BARS SHALL BE LOCATED AT 48" A.F.F. TOILET PAPER DISPENSERS SHALL BE LOCATED AT 24" A.F.F. AND TOWEL RINGS LOCATED ABOVE LAVATORY COUNTERS SHALL BE SET AT 24" ABOVE COUNTER. BARRIER FREE REQUIREMENTS SUPERSEDE THESE DIMENSIONS AS DEPICTED ON THE BARRIER FREE STANDARDS SHEET.
10. VERIFY ALL TUB AND SHOWER ROUGH OPENING DIMENSIONS WITH AN ACTUAL TUB AND SHOWER UNIT.
11. ALL PRODUCTS SHALL BE INSTALLED IN COMPLIANCE WITH ALL MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.
12. WATER RESISTANT GYP. BRD. SHALL BE USED IN LIEU OF STANDARD GYP. BRD. AT ALL BATHROOMS AND WET AREAS.
13. INSTALL STANDARD WOOD BLOCKING OR METAL STRAPS WITHIN ALL WALLS THAT ARE TO RECEIVE WALL HUNG ITEMS AND FUTURE WALL HUNG ITEMS.
14. INTERIOR ELEVATIONS ARE FOR SCHEMATIC PURPOSES ONLY. ACTUAL DIMENSIONS INDICATED WITH OWNER SUPPLIED PRODUCTS.
15. ALL PRODUCT SELECTIONS SHALL BE BY THE OWNER. VERIFY DIMENSIONS INDICATED WITH OWNER SUPPLIED PRODUCTS.
16. SEE MECHANICAL AND ELECTRICAL DRAWINGS, SUPPLIED BY OTHERS, FOR ALL OF THOSE ITEMS AND THEIR APPROXIMATE LOCATIONS.
17. ALL TUBSHOWER UNITS TO HAVE SHOWER RODS MOUNTED AT 76-1/2" FROM FINISH FLOOR TO BOTTOM OF ROD. ALL WALK IN SHOWER UNITS TO HAVE SHOWER RODS MOUNTED AT 79" A.F.F.
18. PROVIDE ADJUSTABLE SHELVES, HINGES, DRAWER PULLS AT ALL APPLICABLE LOCATIONS.
19. ALL RANGE EXHAUST HOODS SHALL EXHAUST DIRECTLY TO THE OUTSIDE U.N.O.
20. INSTALL 1/2" CHANNEL AT ALL WINDOWS.

PROJECT NOTES

- A. PREFABRICATED BASE CABINETS W/ SOLID SURFACE TOPS W/ BACK AND SIDE SPLASHES AS DIRECTED BY OWNER. INSTALL ALL APPLIANCES. SEE INTERIOR ELEVATIONS FOR MORE INFORMATION.
- B. PREFABRICATED SHOWER / TUB. INSTALL WATER RESISTANT GYP. BRD. AT ALL AREAS WITHIN BATH ROOM AREA. INSTALL WOOD BLOCKING AT ALL AREAS REQUIRED FOR GRAB BARS AND OTHER WALL HUNG ITEMS. SEE INTERIOR ELEVATIONS FOR LOCATIONS. INSTALL DUROCK SUBSTRATE AT ALL TILED WALL AREAS.
- C. VINYL COATED METAL WIRE SHELVING WITH INTEGRAL HANGER WIRE. INSTALL WOOD BLOCKING AT WALLS TO ACCOMMODATE WALL HUNG ITEMS. SEE INTERIOR ELEVATIONS FOR MORE INFORMATION.
- D. (3) 16" VINYL COATED WIRE SHELVING.
- E. 16" VINYL COATED METAL WIRE SHELVING.
- F. WOOD STAIRS WITH WOOD HANDRAIL AT ONE SIDE OF STAIR.
- G. PREMANUFACTURED KITCHEN ISLAND.
- H. INSTALL SHOWER PAN DIRECTLY BENEATH WASHER.
- I. P.T. 6 X 6 WD. COLUMN WRAPPED WITH COMPOSITE TRIM. SEE DETAIL.
- J. 18" TOWEL BAR 48" A.F.F. INSTALL WD. BLOCKING.
- K. 125 AMP, 120/208 1 PH. ELEC. PANEL TIED TO INDIVIDUAL METER.
- L. UNVENTED DECORATIVE ALUM. CEILING W/ COMPOSITE TRIM AT PERIMETER.
- M. ATTIC ACCESS PANEL WITH 5/8" THK. FIRECODE GYP. BRD. AT BOTT. SIDE.
- N. CARPETED STAIRS AND LANDING AREA AT BOTT.
- O. PREFERRED LOCATION FOR ELECTRIC METER.
- P. MTL. GRATE O/ TOP OF WINDOW WELL W/ EMERGENCY RELEASE.
- Q. PAINTED PRE-MANUFACTURED WD. HANDRAIL.
- R. NOT USED.
- S. NOT USED.
- T. WALL MOUNTED FROST FREE SPIGOT W/ COLD WATER ONLY.

NOTE:

NOT ALL NOTES LISTED ABOVE MAY BE USED.

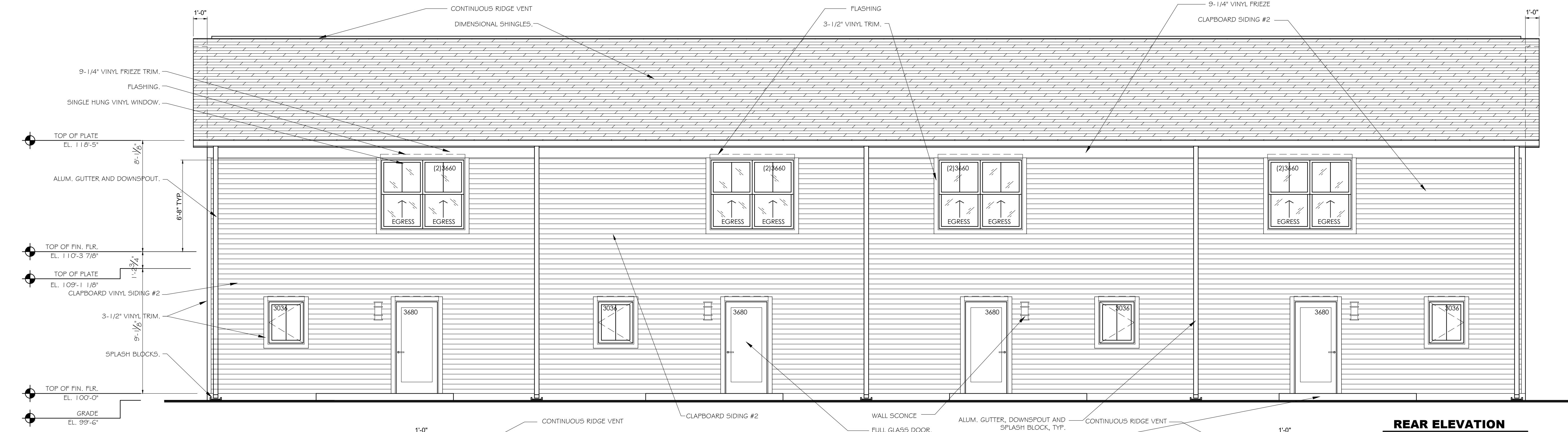
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SHEET DATES / DESC.
 4/15/2024

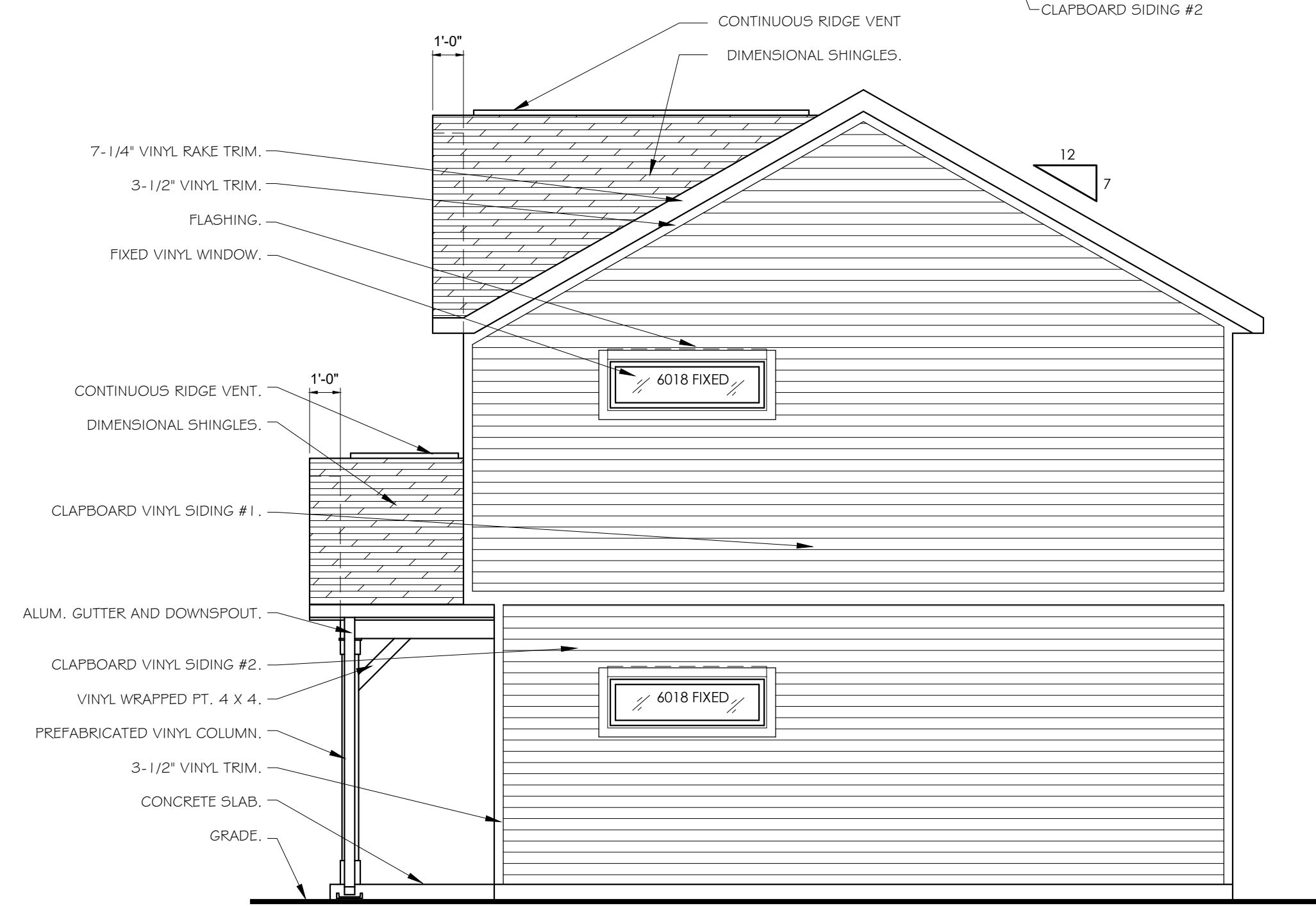
NEW CONSTRUCTION
Pennsylvania Townhouses
 INGHAM COUNTY LAND BANK
 LANSING, MICHIGAN

UNIT PLANS

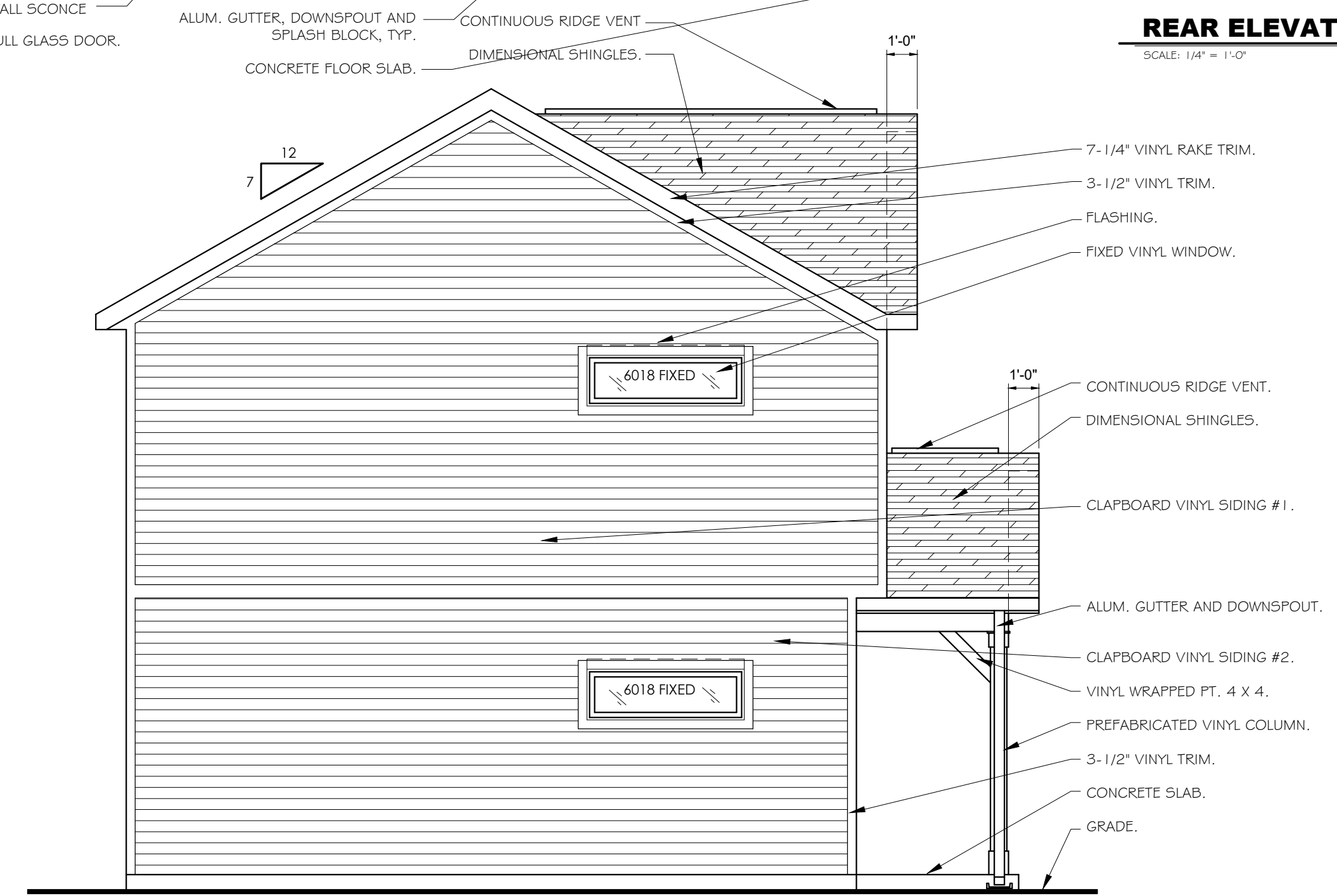
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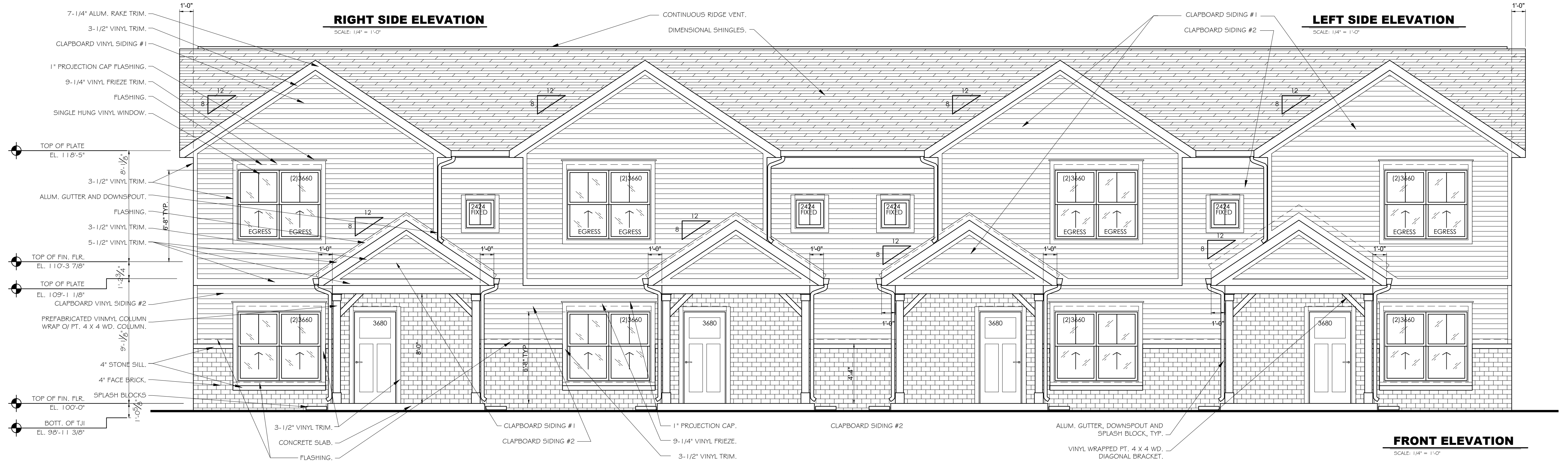
REAR ELEVATION
 SCALE: 1/4" = 1'-0"



RIGHT SIDE ELEVATION
 SCALE: 1/4" = 1'-0"



LEFT SIDE ELEVATION
 SCALE: 1/4" = 1'-0"



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

From: [Nick Szotko](#)
Sent: Tuesday, May 14, 2024 3:41 PM
To: [Todd Callaway](#)
Subject: Fwd: 400 Pennsylvania PME
Attachments: [240514 400 pennsylvania townhomes PME sealed set.pdf](#)

Sent from my Verizon, Samsung Galaxy smartphone
Get [Outlook for Android](#)

From: morgan@mldon.com <morgan@mldon.com>
Sent: Tuesday, May 14, 2024 3:38:38 PM
To: Nick Szotko <nick@division-26.com>
Subject: 400 Pennsylvania PME

500 Pennsylvania to follow shortly.

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2054 Brandon Drive NW
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616-890-9321