

DEVELOPER:
 AVALON HOUSING, INC
 WENDY CARTY-SAXON
 1327 JONES DR. SUITE 102
 ANN ARBOR, MI 48105
 PHONE: 734-663-5858

ARCHITECT:
 FUSCO, SHAFFER & PAPPAS, INC.
 550 E NINE MILE ROAD
 FERNDALE, MI 48220
 PHONE: 248-543-4100

ENGINEER:
 MACON ENGINEERING, LLC
 KATHY KEINATH, PE
 PO BOX 314
 CHELSEA, MICHIGAN 48118
 PHONE: 734 216 9941

OWNERS
 CITY OF ANN ARBOR
 1146 S MAPLE ROAD
 ANN ARBOR, MI 48103

SURVEYOR:
 ARBOR LAND CONSULTANTS
 KEVIN GINGRAS
 6653 SCHNEIDER ROAD
 MANCHESTER, MI 48158
 PHONE: 734-669-2960

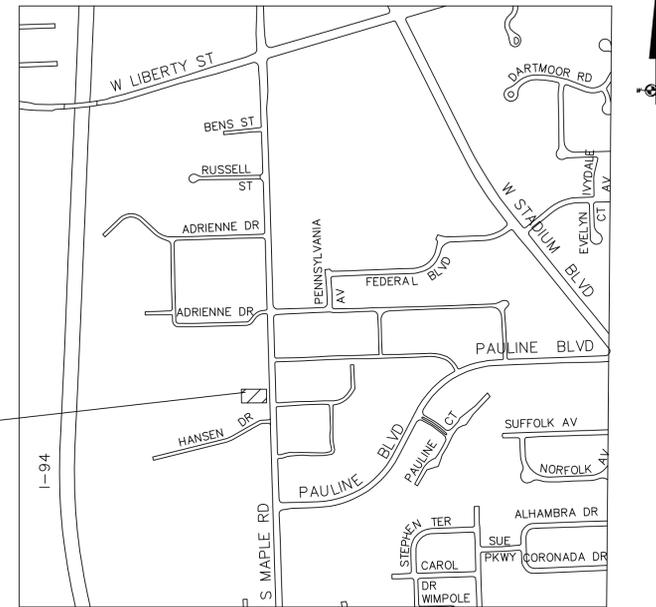
HICKORY WAY III

ANNEXATION, ZONING AND SITE PLAN

CITY OF ANN ARBOR

WASHTENAW COUNTY

SP24-TBD



PROJECT SITE

LOCATION MAP
 N.T.S.

LEGAL DESCRIPTION

(PER TITLE COMMITMENT)
 COMMENCING AT THE NORTHEAST CORNER OF SECTION 36, SCIO TOWNSHIP, WASHTENAW COUNTY, MICHIGAN; THENCE SOUTH 01 DEGREES 19 MINUTES EAST 954.44 FEET IN THE LAST LINE OF SECTION FOR A PLACE OF BEGINNING; THENCE CONTINUING SOUTH 1 DEGREES 19 MINUTES EAST 155.00 FEET; THENCE SOUTH 88 DEGREES 09 MINUTES WEST 320.00 FEET; THENCE NORTH 4 DEGREES 27 MINUTES WEST 155.23 FEET; THENCE NORTH 88 DEGREES 09 MINUTES EAST 328.50 FEET TO THE PLACE OF BEGINNING, BEING PART OF THE EAST 1/2 OF NORTHEAST 1/4, SECTION 36, TOWN 2 SOUTH, RANGE 5 EAST, WASHTENAW COUNTY, MICHIGAN.

COMMUNITY ANALYSIS

THE PROPOSED PROJECT IS LOCATED ON THE WEST SIDE OF SOUTH MAPLE ROAD BETWEEN LIBERTY ROAD AND PAULINE BOULEVARD. THE SITE CONSISTS OF ONE PARCEL CURRENTLY IN SCIO TOWNSHIP AND CONTAINING A SINGLE FAMILY HOME. THE PROPOSED PROJECT INCLUDES ANNEXATION AND ZONING TO PUD FOR MULTI FAMILY RESIDENTIAL WITH ONE BUILDING PROVIDING AFFORDABLE HOUSING.

THE PROPERTIES TO THE NORTH AND EAST ARE USED AS MULTI FAMILY RESIDENTIAL. TO THE SOUTH AND WEST OF THE PROJECT SITE IS CURRENTLY THE HANSEN NATURE AREA (A CITY PARK).

THE PROPOSED DEVELOPMENT WILL HAVE MINIMAL IMPACT ON PUBLIC SCHOOLS SINCE THE UNITS PROPOSED ARE SMALLER 1-BEDROOM UNITS. AIR AND WATER QUALITY SHOULD NOT BE AFFECTED, AND THE SITE IS NOT PART OF A HISTORIC DISTRICT. THE PROPOSED MULTIFAMILY USE IS CONSISTENT WITH THE SURROUNDING AREA AND WITH THE MASTER PLAN FOR THIS SITE WITH THE INCLUSION OF AFFORDABLE HOUSING.

STATEMENT OF INTEREST

AVALON HOUSING WILL BE THE OWNER AND DEVELOPER OF THE PARCEL. THE PROPERTY WILL BE PURCHASED FROM THE CURRENT OWNER (CITY OF ANN ARBOR) AFTER COMPLETION OF THE SITE PLAN PROCESS AND APPROVAL OF FUNDING.

DEVELOPMENT PROGRAM

THE PROPOSED DEVELOPMENT WILL BE MULTIFAMILY RESIDENTIAL WITH 39 UNITS TOTAL, IN ONE BUILDING WITH FOUR FLOORS. THE UNITS WILL INCLUDE ONE BEDROOM APARTMENTS AND ARE PLANNED TO MEET AFFORDABILITY STANDARDS. THE BUILDING DESIGNS, WITH ELEVATOR ACCESS TO UPPER FLOORS, AND COMMON INTERIOR HALLWAYS, ARE INTENDED TO PROVIDE AVALON WITH OPTIONS THEY DO NOT CURRENTLY HAVE FOR ACCESSIBILITY AND VISITABILITY AT MANY OF THEIR EXISTING PROPERTIES. THE DEVELOPMENT HAS BEEN PLANNED TO PROVIDE ADEQUATE PARKING, INGRESS AND EGRESS, STORM WATER MANAGEMENT FACILITIES, PEDESTRIAN CONNECTIONS AND ALL OTHER REQUIRED SITE ELEMENTS. THE SITE IS TO BE DEVELOPED IN ONE PHASE. THE ESTIMATED COST OF CONSTRUCTION IS \$10,000,000.

STANDARD SIDEWALK REPAIR AND MAINTENANCE NOTE

ALL SIDEWALKS ARE TO BE KEPT AND MAINTAINED IN GOOD REPAIR BY THE OWNER OF THE LAND ADJACENT TO AND ABUTTING THE SAME. PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY FOR THIS SITE, ALL EXISTING SIDEWALKS IN NEED OF REPAIR MUST BE REPAIRED IN ACCORDANCE WITH CITY STANDARDS.

SOLID WASTE DISPOSAL PLAN

THE DEVELOPMENT PROPOSES TO PROVIDE TWO DUMPSTERS LOCATED IN THE PARKING AREA. THE LOCATION OF THE DUMPSTERS AND A DETAIL HAVE BEEN INCLUDED IN THE SITE PLAN.

TRAFFIC IMPACT ANALYSIS

VEHICULAR, PEDESTRIAN AND BICYCLE ROUTES ARE SHOWN ON THE PLANS. NO TRUCK TRAFFIC TO THE SITE IS ANTICIPATED. THE DEVELOPER'S HISTORY WITH THIS TYPE OF MULTIFAMILY DEVELOPMENT INDICATES THAT A MAJORITY OF THE TENANTS UTILIZE MASS TRANSIT. BECAUSE OF THIS, THE SITE HAS BEEN DESIGNED TO MINIMIZE PARKING SPACES

COMPARISON CHART

	EXISTING	PROPOSED
ZONING	N/A	PUD
RESIDENTIAL UNITS	1	39
TOTAL FLOOR AREA	1,330 sf	37,451 sf
LOT AREA/DWELLING UNIT	45,200 sf	1,050 sf
ACTIVE OPEN SPACE PER DWELLING UNIT	n/a	507 sf
BUILDING HEIGHT	n/a	48 ft 4 stories
LOT SIZE	45,200 sf	40,966 sf
LOT WIDTH	155 ft	154.97 ft
OPEN SPACE	n/a	53%
FRONT SETBACK	39 ft	1 ft
REAR SETBACK	208 ft	90 ft
SIDE SETBACK	44 ft	13 ft
OFF STREET PARKING	REQUIRED	PROVIDED
PARKING	0	20
BICYCLE PARKING RESIDENTIAL 1/5 UNITS 50%A 50%C	4A/4C	6A/4B
LOADING SPACES	0	0
EV PARKING:		
90%EVC	18	18
10%EVI	2	2
1 HP VAN EVI	1	1

* EXCLUDES PROPOSED ROW

SHEET INDEX

- SP-01 COVER
- SP-02 ALTA SURVEY
- SP-03 DEMOLITION PLAN
- SP-04 LAYOUT PLAN
- SP-05 NATURAL FEATURES OVERLAY
- SP-06 NATURAL FEATURES ALTERNATIVES ANALYSIS
- SP-07 LANDSCAPE
- SP-08 UTILITIES
- SP-09 FIRE PROTECTION PLAN
- SP-10 GRADING
- SP-11 SOIL EROSION CONTROL
- SP-12 STORM WATER MANAGEMENT
- SP-13 SOLID WASTE MANAGEMENT PLAN
- SP-14 SITE DETAILS
- SP-15 PHOTOMETRIC PLAN
- AS.100 ARCHITECTURAL SITE PLAN AND SITE SECTION
- A.100 BUILDING PLANS
- A.200 EXTERIOR ELEVATIONS
- A.201 EXTERIOR ELEVATIONS
- A.202 PERSPECTIVE RENDERINGS

SOIL EVALUATION

THE SOILS ON THE SITE ARE MIAMI SERIES PRIMARILY MmB AND CoB. INFILTRATION TESTING WAS COMPLETED ON THE SITE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WASHTENAW COUNTY WATER RESOURCES COMMISSIONER'S OFFICE. A COMPLETE REPORT HAS BEEN PROVIDED. INFILTRATION RESULTS ARE PROVIDED ON THE STORM WATER MANAGEMENT SHEET. NO GROUND WATER WAS OBSERVED.

NATURAL FEATURES

THERE ARE NO WOODLANDS ON THE SITE. THERE IS ONE WETLAND AREA LOCATED NEAR THE MIDDLE OF THE SITE. A COMPLETE WETLAND REPORT HAS BEEN PROVIDED. THE REPORT INDICATES THAT THE WETLAND IS A LOW-QUALITY WETLAND WITHOUT CRITICAL FUNCTION OR VALUE. THERE ARE LANDMARK TREES LOCATED ON THE PROPERTY AND ALONG THE PROPERTY BOUNDARY. THE TREES ARE SHOWN BY THE TREE SURVEY PROVIDED IN THE SITE PLAN. THE NATURAL FEATURES SHEET SHOWS THE LANDMARK TREES TO BE REMOVED AND ALSO PROVIDES AN ALTERNATIVE ANALYSIS TO DEMONSTRATE THAT THE PROPOSED DEVELOPMENT MINIMIZES IMPACTS TO THE LANDMARK TREES AND THE WETLANDS.

SUSTAINABILITY

AVALON HOUSING'S HICKORY WAY III APARTMENTS REPRESENTS A STEP IN THE COMMITMENT TO ADDRESS BOTH THE URGENT NEED FOR AFFORDABLE HOUSING IN ANN ARBOR AND FOSTER ENVIRONMENTALLY RESPONSIBLE DEVELOPMENT PRACTICES. AS THE SECOND DEVELOPMENT ON MAPLE STREET AND THE THIRD PHASE FOR AVALON HOUSING, THIS PROJECT IS DEDICATED TO CREATING THRIVING COMMUNITIES WHILE MINIMIZING OUR ECOLOGICAL FOOTPRINT.

WITH 39 SUPPORTIVE HOUSING APARTMENTS DIRECTED TOWARD LOW-INCOME FAMILIES, OUR AIM IS TO ALLEVIATE THE HOUSING CRUNCH IN ANN ARBOR BUT ALSO TO PROVIDE SUSTAINABLE SOLUTIONS THAT CONTRIBUTE TO A HEALTHIER PLANET. OUR MAIN DIRECTIVE IS TO SURPASS CONVENTIONAL BUILDING STANDARDS AND ACHIEVE A SUSTAINABLE ENVIRONMENTAL OUTCOME THAT MITIGATES GREENHOUSE GAS EMISSIONS AND PROMOTES LONG-TERM RESILIENCE.

OUR BUILDING INCORPORATES SUSTAINABLE ELEMENTS DESIGNED TO EXCEED MICHIGAN BUILDING CODE REQUIREMENTS. THESE FEATURES INCLUDE A SUPER-INSULATED ENVELOPE, HIGH-PERFORMANCE WINDOWS, ADVANCED AIR SEALING, AND ALL-ELECTRIC SPACE CONDITIONING SYSTEMS. ENERGY EFFICIENT LIGHTING FIXTURES, EQUIPPED WITH OCCUPANCY SENSORS, FURTHER ENHANCE ENERGY CONSERVATION EFFORTS WHILE LOW-VOC MATERIALS ENSURE INDOOR AIR QUALITY REMAINS OPTIMAL.

WE HAVE INTEGRATED ENERGY STAR-RATED APPLIANCES, COOL ROOF TECHNOLOGY, AND DURABLE EXTERIOR PRODUCTS PROMOTING ENERGY EFFICIENCY AND DURABILITY. OUR HEATING, VENTILATION, AND AIR CONDITIONING SYSTEMS BOAST 95% HIGH-EFFICIENCY FURNACES AND AIR CONDITIONING UNITS, COMPLEMENTED BY ENERGY STAR-RATED EXHAUST FANS AND ELECTRIC WATER HEATERS. WATER EFFICIENT PLUMBING FIXTURES, COUPLED WITH EPA WATER SENSE – CERTIFIED TOILETS, MINIMIZE WATER CONSUMPTION WITHOUT COMPROMISING PERFORMANCE.

THE INTERIOR FLOORING MATERIALS MEET STRINGENT ENVIRONMENTAL CERTIFICATIONS THAT ARE COMMITTED TO SUSTAINABLE LIVING PRACTICES. BY ADHERING TO NSF140 GOLD AND CRADLE TO CRADLE V3.1 SILVER CERTIFIED STANDARDS FOR CARPETING AND FLOOR COVERING INSTITUTE'S FLOOR SCORE INDOOR ADVANTAGE GOLD PROGRAM FOR LUXURY VINYL TILE, VCT, AND TILE, ENSURES THAT EVERY ASPECT OF THIS DEVELOPMENT ALIGNS WITH SUSTAINABILITY GOALS.

IN ADDITION TO THE BENEFITS OF REDUCED ENERGY BILLS AND ENHANCED THERMAL COMFORT, THESE MEASURES SIGNIFICANTLY ENHANCE AIR QUALITY, MITIGATE NOISE POLLUTION, AND PROMOTE A HEALTHIER LIVING ENVIRONMENT FOR OUR RESIDENTS. AVALON HOUSING HONORS THE COMMITMENT TO CREATING AFFORDABLE, SUSTAINABLE COMMUNITIES THAT EMPOWER INDIVIDUALS AND CONTRIBUTE POSITIVELY TO THE BROADER ECOSYSTEM.



Know what's below.
 Call before you dig.

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING RECORDS. THE SHOWN UTILITIES ARE NOT GUARANTEED TO BE ACCURATE. THE SHOWN UTILITIES DO NOT INCLUDE ALL UTILITIES IN THE AREA. THERE IS NO WARRANTY, REPRESENTATION OR LIABILITY FOR THE INFORMATION PROVIDED HEREIN. THE SHOWN UTILITIES ARE NOT TO BE USED AS A BASIS FOR ANY DESIGN OR CONSTRUCTION. THE SHOWN UTILITIES ARE NOT TO BE USED AS A BASIS FOR ANY DESIGN OR CONSTRUCTION. THE SHOWN UTILITIES ARE NOT TO BE USED AS A BASIS FOR ANY DESIGN OR CONSTRUCTION.

Macon Engineering, LLC.

P.O. Box 314, Chelsea, MI 48118 734-216-9941

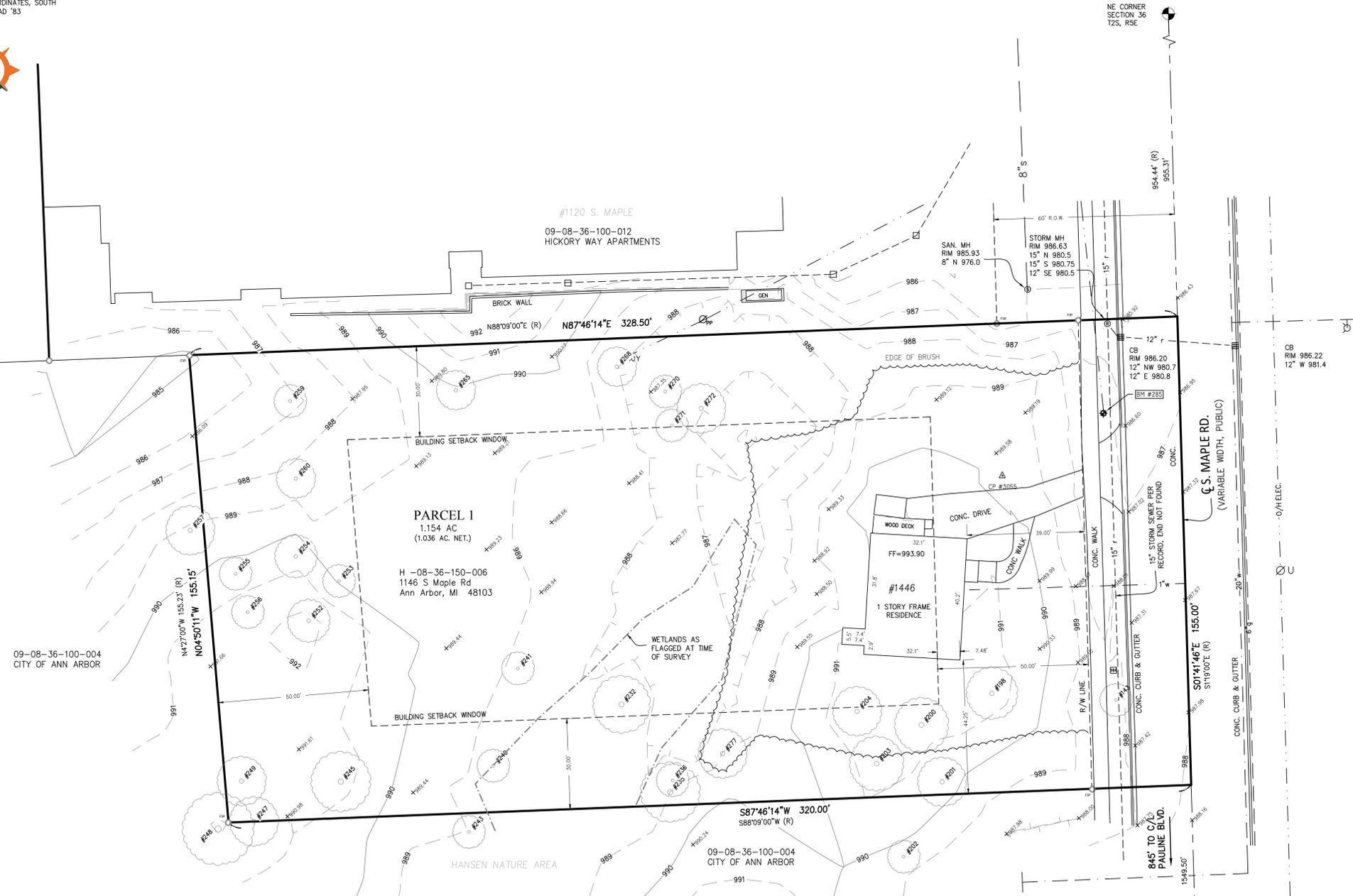
HICKORY WAY III
 ANN ARBOR, MI

SITE PLAN
 COVER



DATE	4-25-24
SCALE	N.T.S.
SHEET NO.	SP-01

BEARINGS BASED ON MICHIGAN STATE PLANE COORDINATES, SOUTH ZONE, NAD '83



09-08-36-100-004
CITY OF ANN ARBOR

PARCEL 1

1.154 AC
(1.036 AC NET.)

H -08-36-150-006
1146 S Maple Rd
Ann Arbor, MI 48103

WETLANDS AS FLAGGED AT TIME OF SURVEY

PARCEL INFORMATION:

PID: H -08-36-150-006 (SCIO TWP.)
OWNER: CITY OF ANN ARBOR
ADDRESS: 1146 S. MAPLE RD.
ANN ARBOR, MI 48103

ZONING:

A-1 GENERAL AGRICULTURE (SCIO TOWNSHIP)
SETBACKS: FRONT = 50', REAR = 50', SIDE = 30'
MIN. LOT WIDTH: 200'
MIN. AREA: 2.5 AC.

FLOOD_ZONE INFO:

The subject property lies within flood zone(s) X as plotted on FEMA FIRM NO. 26161C0243E, dated April 3, 2012 and, based thereon, except as specifically noted on the survey, no part of the subject property lies within any area designated as "flood prone area," "special flood hazard area" or 100 year flood plain by the Federal Emergency Management Agency, the United States Army Corps of Engineers, the U.S. Department of Housing and Urban Development, the State of Michigan, City Ann Arbor, Scio Township, Washtenaw County or any other governmental agency or authority having jurisdiction over the subject property nor is any portion of the Project Property located within any lake or any creek, stream, river or other watercourse required to be undisturbed by an appropriate governmental agency or authority.

SURVEYOR'S NOTE:

NO GAPS OR OVERLAPS WITH THE ADJOINING PROPERTY DESCRIPTIONS WERE FOUND
NO EVIDENCE OF RECENT EARTH MOVING WAS OBSERVED AT THE TIME OF THE SURVEY
NO INFORMATION REGARDING PROPOSED CHANGES IN STREET RIGHT OF WAY LINES WAS PROVIDED TO THE SURVEYOR.
ALL KNOWN PLOTTABLE OFFSITE EASEMENTS ARE SHOWN
THIS PARCEL EXTENDS TO THE CENTERLINE OF MAPLE ROAD AND THEREFORE HAS DIRECT ACCESS TO A PUBLIC ROAD

WETLAND NOTE:

AN AREA OF PRESUMED WETLANDS HAD BEEN FLAGGED ON THE SITE AND ARE SHOWN HEREON.

TITLE COMMITMENT:

FIRST AMERICAN TITLE INSURANCE COMPANY FILE 919712, DATED 10/7/2022
THERE ARE NO EXCEPTIONS LISTED IN SCHEDULE B, PART II THAT ARE ABLE TO BE SHOWN ON THE SURVEY

LEGAL DESCRIPTION:

(PER TITLE COMMITMENT)
COMMENCING AT THE NORTHEAST CORNER OF SECTION 36, SCIO TOWNSHIP, WASHTENAW COUNTY, MICHIGAN; THENCE SOUTH 01 DEGREES 19 MINUTES EAST 954.44 FEET IN THE LAST LINE OF SECTION FOR A PLACE OF BEGINNING; THENCE CONTINUING SOUTH 1 DEGREE 19 MINUTES EAST 155.00 FEET; THENCE SOUTH 88 DEGREES 09 MINUTES WEST 320.00 FEET; THENCE NORTH 4 DEGREES 27 MINUTES WEST 155.23 FEET; THENCE NORTH 88 DEGREES 09 MINUTES EAST 328.50 FEET TO THE PLACE OF BEGINNING, BEING PART OF THE EAST 1/2 OF NORTHEAST 1/4, SECTION 36, TOWN 2 SOUTH, RANGE 5 EAST, WASHTENAW COUNTY, MICHIGAN.

TREE TABLE

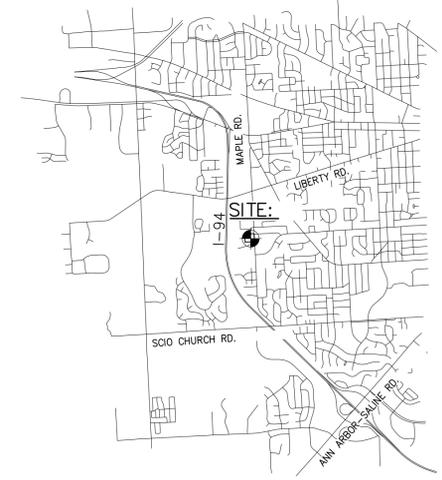
TREE #	SIZE (IN.)	SPECIES
143	13	OAK
198	19	MAPLE
200	20	MAPLE
201	17	TWIN WALNUT
202	13	WALNUT
203	20	WALNUT
204	18	MAPLE
232	21	COTTONWOOD
235	22	WALNUT
236	12	WALNUT
240	13	TWIN WALNUT
241	12	WALNUT
243	13	ELM
245	22	TWIN OAK
247	17	OAK
248	26	WALNUT
249	17	WALNUT
252	15	OAK
253	13	WALNUT
254	15	OAK
255	12	OAK
256	12	OAK
257	18	MAPLE
259	12	COTTONWOOD
260	14	OAK
265	14	OAK
268	14	WALNUT
270	12	WALNUT
271	12	WALNUT
272	15	WALNUT
277	17	WALNUT

BENCHMARK:
SET SPIKE IN UTILITY POLE / LIGHT POLE ON W. SIDE S. MAPLE ROAD IN FRONT OF #1146 S MAPLE ROAD
ELEV. - 988.83' NAVD 88

STRUCTURE LEGEND:

- STORM MARKING
- YARD DRAIN
- BEEHIVE CATCH BASIN
- ROUND CATCH BASIN
- SQUARE CATCH BASIN
- STORM MANHOLE
- CULVERT/END SECTION
- DOWN SPOUT
- STORM CLEAN-OUT
- OUTLET CONTROL STRUCTURE
- WATER MANHOLE
- FIRE HYDRANT
- GATE VALVE & BOX
- WATER SHUT OFF VALVE
- WELL
- POST INDICATOR VALVE
- SPIGOT / HOSE BIB
- SPRINKLER HEAD
- WATER MARKER
- MONITORING WELL
- TUNNEL MARKER
- TELEPHONE POLE
- COMMUNICATION MARKING
- COMMUNICATION HAND HOLE
- COMMUNICATION MANHOLE
- TELEPHONE POLE
- TELEPHONE RISER
- POLICE/EMERGENCY CALL
- ELECTRIC METER
- ELECTRIC MANHOLE
- GROUND LIGHT
- LIGHT POLE
- GUY POLE
- POWER POLE
- UTILITY POLE
- GUY POLE
- GUY ANCHOR
- ELECTRIC RISER
- TRANSFORMER
- ELECTRIC HAND HOLE
- ELECTRIC MARKING
- TRAFFIC SIGNAL POST
- SANITARY MANHOLE
- SANITARY CLEAN-OUT
- SANITARY MARK

VICINITY MAP:



6653 Schneider Rd. • Manchester, MI • 48158
(734) 669-2960 • arborlandinc.com

DATE: 9-25-2023
REVISION: 3-11-2024

CLIENT: AVALON HOUSING
ALTA/NSPS LAND TITLE SURVEY
#1146 S. MAPLE ROAD
IN THE NE 1/4 OF SECTION 36
T2S, R5E, SCIO TOWNSHIP
WASHTENAW COUNTY, MICHIGAN

JOB No. 21623
SHEET 1 OF 1
SCALE 1 INCH = 20 FEET

UTILITY NOTE:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UTILITIES SHOWN ARE ACCURATELY LOCATED. THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED BY THE SYMBOLS AND DIMENSIONS. THE SURVEYOR HAS NOT PHYSICALLY LOCATED FROM INFORMATION AVAILABLE. THE ARE LOCATED AS ACCURATELY AS POSSIBLE. THE STRUCTURE INVENTORY SHOWN HEREON IS FOR INFORMATION ONLY.

SECTION CORNER

- FOUND IRON PIPE
- FOUND IRON ROD
- SET IRON PIPE
- SET IRON ROD
- SET MAG NAIL
- FOUND MAG NAIL
- SET WOOD LATH
- CONTROL POINT
- MEASURED DIMENSION
- RECORDED DIMENSION
- SURFACE FLOW

WATER MANHOLE

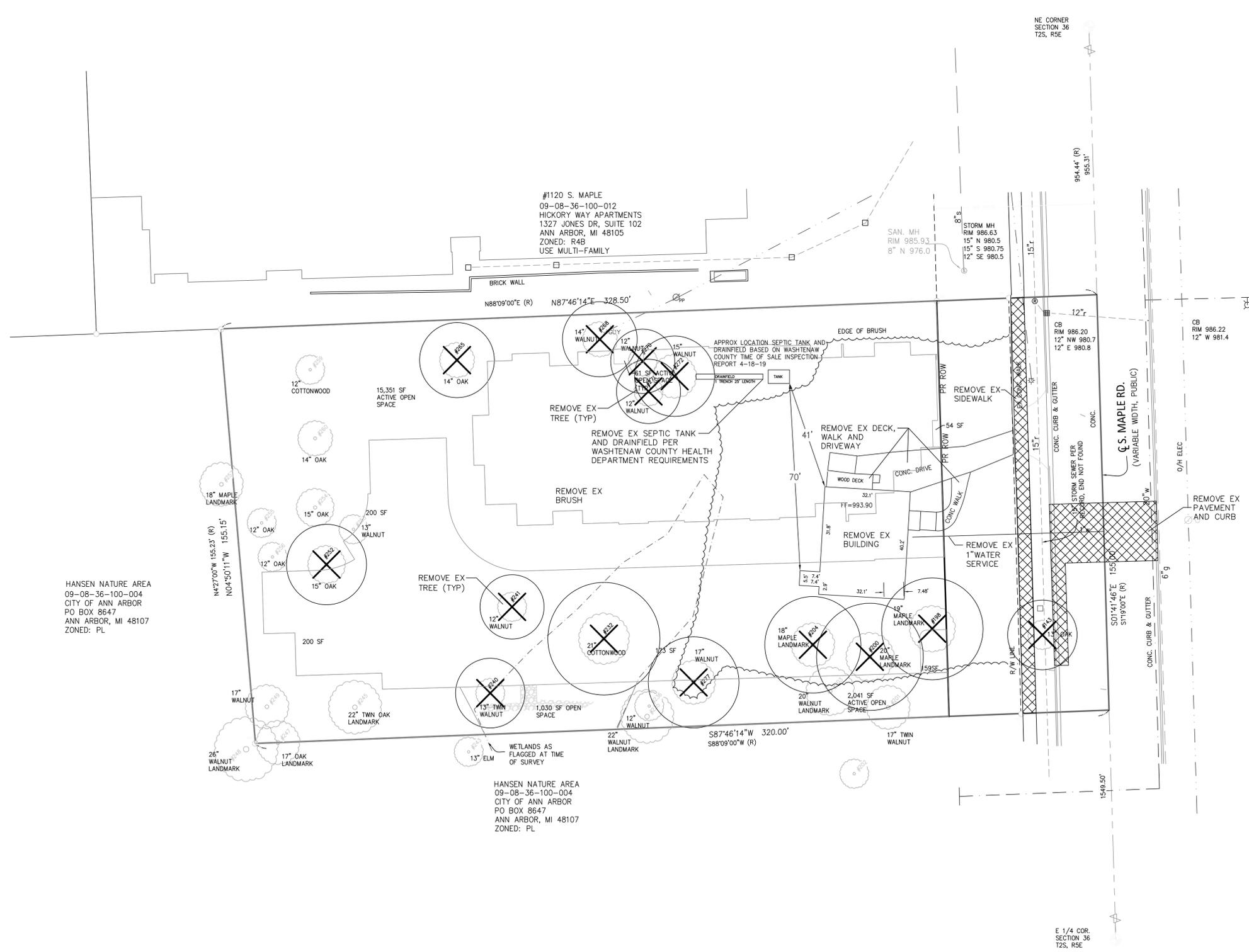
- FIRE HYDRANT
- GATE VALVE
- BEEHIVE CATCH BASIN
- CURB CATCH BASIN
- STORM MANHOLE
- CULVERT/END SECTION
- SANITARY MANHOLE
- UTILITY POLE
- LIGHT POLE
- TELEPHONE RISER
- GAS MAIN RISER

ELECTRIC LINE

- GAS MAIN
- WATER MAIN
- STORM LINE
- SANITARY LINE
- CABLE TV LINE
- PHONE LINE
- CHAIN LINK FENCE
- WOOD FENCE
- BARBED WIRE FENCE

0/4 ELEC.

- 8" g
- 8" w
- 18" r
- 6"
- 0/4 CATH
- 1/2 COMM
- CHAIN LINK FENCE
- WOOD FENCE
- BARBED WIRE FENCE

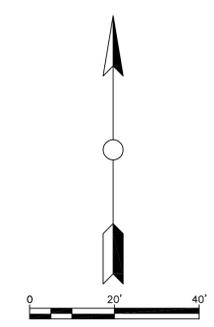


HANSEN NATURE AREA
09-08-36-100-004
CITY OF ANN ARBOR
PO BOX 8647
ANN ARBOR, MI 48107
ZONED: PL

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09-08-36-100-004
CITY OF ANN ARBOR
PO BOX 8647
ANN ARBOR, MI 48107
ZONED: PL

#1120 S. MAPLE
09-08-36-100-012
HICKORY WAY APARTMENTS
1327 JONES DR, SUITE 102
ANN ARBOR, MI 48105
ZONED: R4B
USE MULTI-FAMILY

- LEGEND**
- SECTION CORNER
 - FIP FOUND IRON PIPE
 - FIR FOUND IRON ROD
 - S SET IRON PIPE
 - SMN SET MAG NAIL
 - FMN FOUND MAG NAIL
 - SET WOOD LATH
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 - (M) MEASURED DIMENSION
 - (R) RECORDED DIMENSION
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 - CABLE TV LINE
 - PHONE LINE
 - CHAIN LINK FENCE
 - WOOD FENCE
 - BARBED WIRE FENCE
 - PR STORM SEWER
 - PR SANITARY SEWER
 - PR WATER MAIN
 - PR SILT FENCE
 - PR TREE FENCE
 - PR INLET FILTER
 - PR CONCRETE
 - PR ASPHALT
 - PR GRAVEL
 - PR CURB
 - 700 PR CONTOUR LINE
 - 700.00 X PR SPOT GRADE
 - PR REMOVAL
 - PR TREE REMOVAL

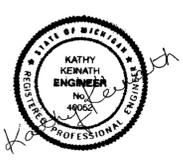


811
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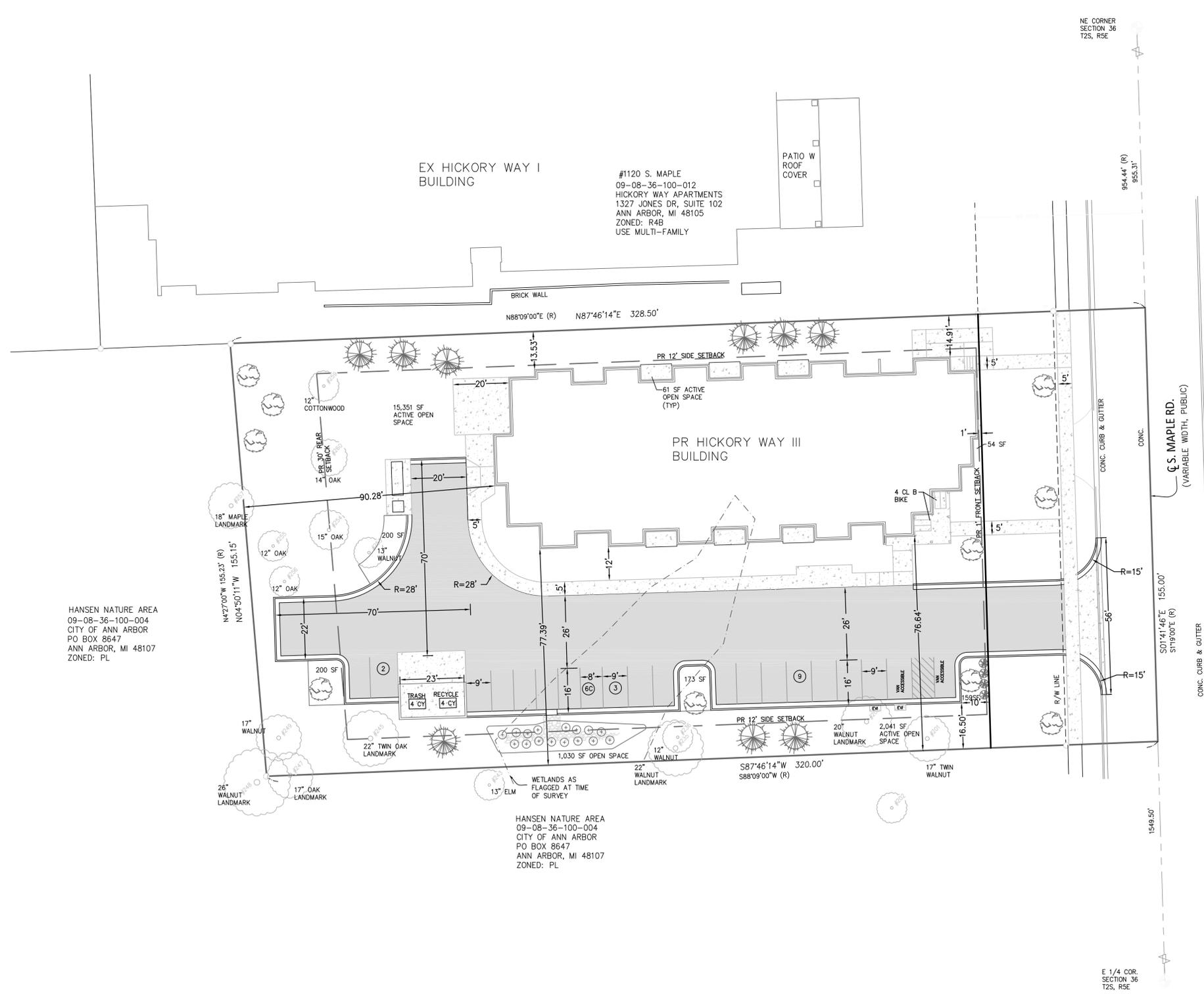
Macon Engineering, LLC.
P.O. Box 314, Chelsea, MI 48118 734-216-9941

HICKORY WAY III
ANN ARBOR, MI
SITE PLAN
DEMOLITION

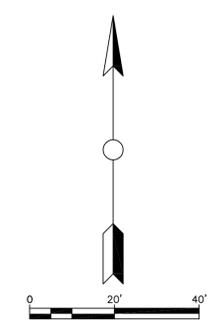


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DATE	4-25-24
SCALE	1"=20'
SHEET NO.	SP-03



- LEGEND**
- SECTION CORNER
 - FIP FOUND IRON PIPE
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 - SMN SET MAG NAIL
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 - PR SANITARY SEWER
 - PR WATER MAIN
 - PR SILT FENCE
 - PR TREE FENCE
 - PR INLET FILTER
 - PR CONCRETE
 - PR ASPHALT
 - PR GRAVEL
 - PR CURB
 - PR CONTOUR LINE
 - PR SPOT GRADE

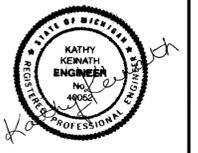


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Macon Engineering, LLC.
P.O. Box 314, Chelsea, MI 48118 734-216-9941

HICKORY WAY III
ANN ARBOR, MI
SITE PLAN
LAYOUT



STANDARD SIDEWALK REPAIR AND MAINTENANCE NOTE:
PER CHAPTER 49, SECTION 4-58 OF THE CITY CODE, ALL SIDEWALKS ARE TO BE KEPT AND MAINTAINED IN GOOD REPAIR BY THE OWNER OF THE LAND ADJACENT TO AND ABUTTING THE SAME. PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY FOR THIS SITE, ALL EXISTING SIDEWALKS IN NEED OF REPAIR MUST BE REPAIRED IN ACCORDANCE WITH CITY STANDARDS.

DATE	4-25-24
SCALE	1"=20'
SHEET NO.	SP-04



Know what's below.
Call before you dig.

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Macon Engineering, LLC.

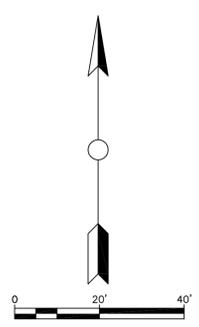
P.O. Box 314, Chelsea, MI 48118 734-216-9941

HICKORY WAY III
ANN ARBOR, MI
SITE PLAN
NATURAL FEATURES
OVERLAY

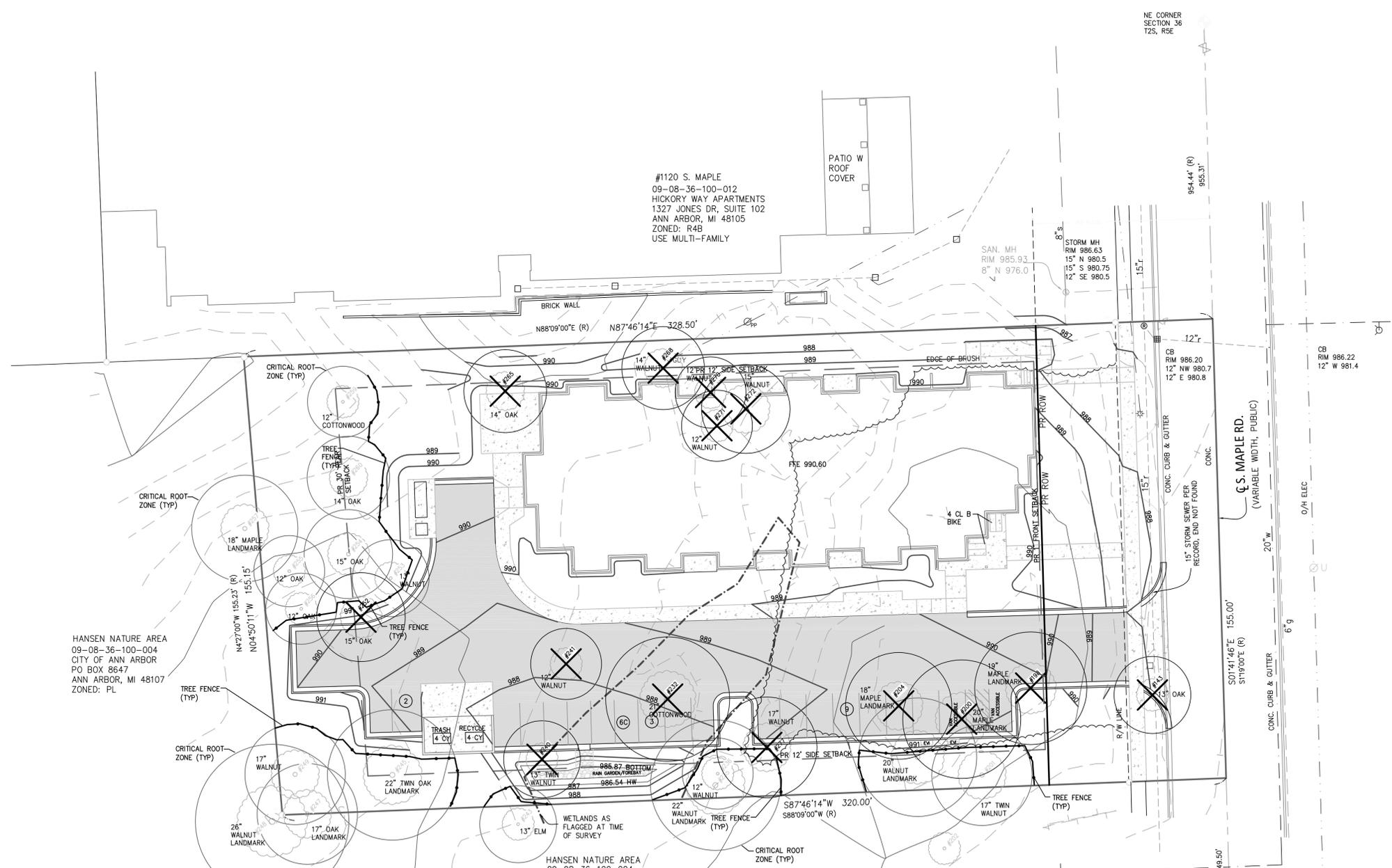


DATE 4-25-24
SCALE 1"=20'
SHEET NO. SP-05

LEGEND



- SECTION CORNER
- FOUND IRON PIPE
- FOUND IRON ROD
- SET IRON PIPE
- SET MAG NAIL
- FOUND MAG NAIL
- SET WOOD LATH
- CONTROL POINT
- MEASURED DIMENSION
- RECORDED DIMENSION
- SURFACE FLOW
- WATER MANHOLE
- FIRE HYDRANT
- GATE VALVE
- BEEHIVE CATCH BASIN
- CURB CATCH BASIN
- STORM MANHOLE
- CULVERT/END SECTION
- SANITARY MANHOLE
- LIGHT POLE
- UTILITY POLE
- TELEPHONE RISER
- GAS MAIN RISER
- ELECTRIC LINE
- GAS MAIN
- WATER MAIN
- STORM LINE
- SANITARY LINE
- CABLE TV LINE
- PHONE LINE
- CHAIN LINK FENCE
- WOOD FENCE
- BARBED WIRE FENCE
- PR STORM SEWER
- PR SANITARY SEWER
- PR WATER MAIN
- PR SILT FENCE
- PR TREE FENCE
- PR INLET FILTER
- PR CONCRETE
- PR ASPHALT
- PR GRAVEL
- PR CURB
- PR CONTOUR LINE
- PR SPOT GRADE
- PR TREE REMOVAL



#1120 S. MAPLE
09-08-36-100-012
HICKORY WAY APARTMENTS
1327 JONES DR, SUITE 102
ANN ARBOR, MI 48105
ZONED: R4B
USE MULTI-FAMILY

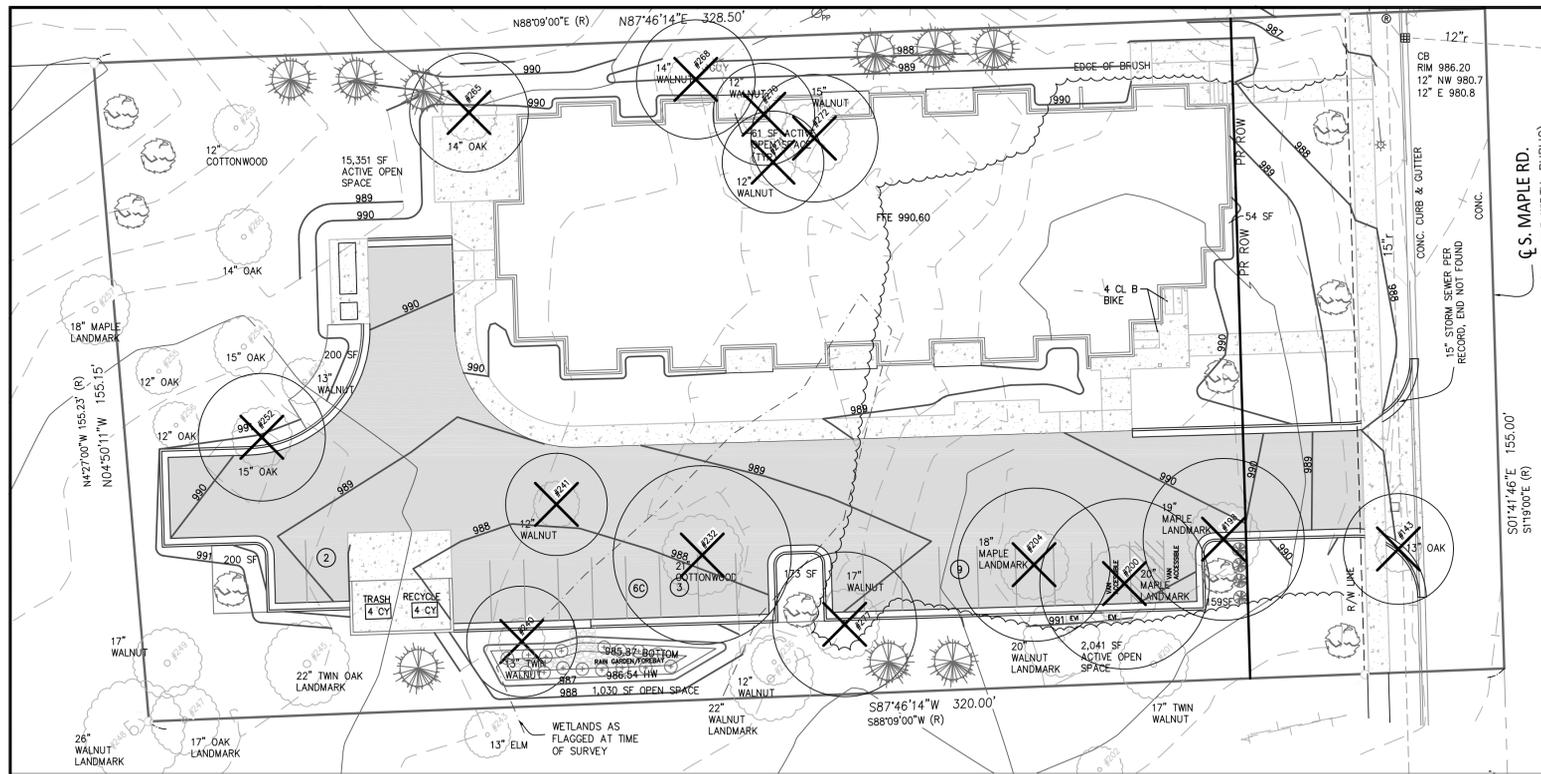
HANSEN NATURE AREA
09-08-36-100-004
CITY OF ANN ARBOR
PO BOX 8647
ANN ARBOR, MI 48107
ZONED: PL

HANSEN NATURE AREA
09-08-36-100-004
CITY OF ANN ARBOR
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ANN ARBOR, MI 48107
ZONED: PL

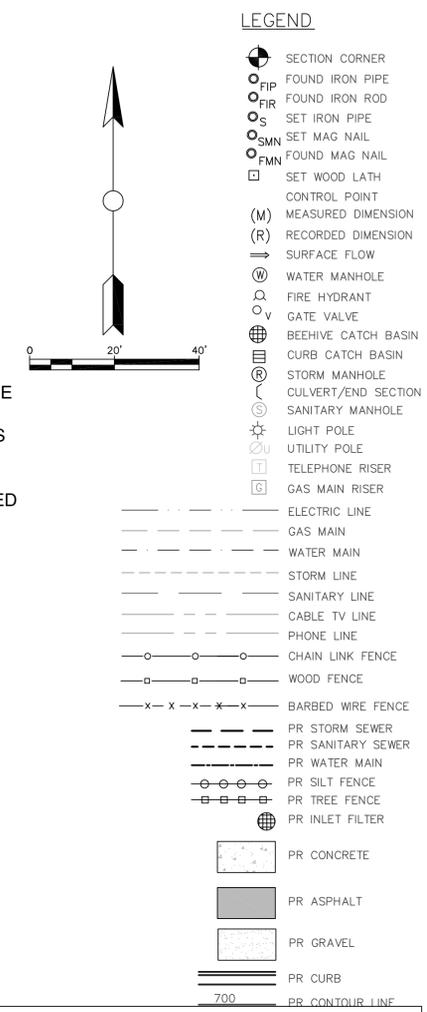
ID	SIZE	SPECIES	LANDMARK	REMOVE	CONDITION
143	13	OAK		X	
198	19	MAPLE	X	X	
200	20	MAPLE	X	X	
201	17	TWIN WALNUT			
202	13	WALNUT			
203	20	WALNUT	X		
204	18	MAPLE	X	X	
232	21	COTTONWOOD		X	
235	22	WALNUT	X		
236	12	WALNUT			
240	13	TWIN WALNUT		X	
241	12	WALNUT		X	
243	13	ELM			
245	22	TWIN OAK	X		
247	17	OAK	X		
248	26	WALNUT	X		
249	17	WALNUT			
252	15	OAK		X	
253	13	WALNUT			
254	15	OAK			
255	12	OAK			
256	12	OAK			
257	18	MAPLE	X		
259	12	COTTONWOOD			
260	14	OAK			
265	14	OAK		X	
268	14	WALNUT		X	
270	12	WALNUT		X	
271	12	WALNUT		X	
272	15	WALNUT		X	
277	17	WALNUT		X	

NATURAL FEATURES IMPACT STATEMENT:
THERE ARE LANDMARK TREES AND A SMALL LOW QUALITY WETLAND ON THE SITE. THE TREE INVENTORY SHOWS THE LANDMARK TREES THAT ARE TO BE REMOVED. THESE TREES ARE ALSO IDENTIFIED ON THE DEMOLITION SHEET. MITIGATION FOR THE LANDMARK TREES IS SHOWN ON THE LANDSCAPING PLAN. TREE FENCE WILL BE PROVIDED TO PROTECT THE TREES THAT ARE TO REMAIN. THE TREE FENCE IS ALSO SHOWN ON THE SOIL EROSION CONTROL SHEET. THE GRADING HAS BEEN MINIMIZED IN AREAS WHERE TREES ARE TO REMAIN TO REDUCE POSSIBLE IMPACTS WITHIN THE CRITICAL ROOT ZONES.

APPROXIMATELY 3,470 SF OF WETLAND ARE PROPOSED TO BE DISTURBED. THE WETLAND WAS DETERMINED TO BE A LOW QUALITY WETLAND BASED ON THE REPORT PREPARED BY ASTI ENVIRONMENTAL DATED SEPTEMBER 14, 2023.



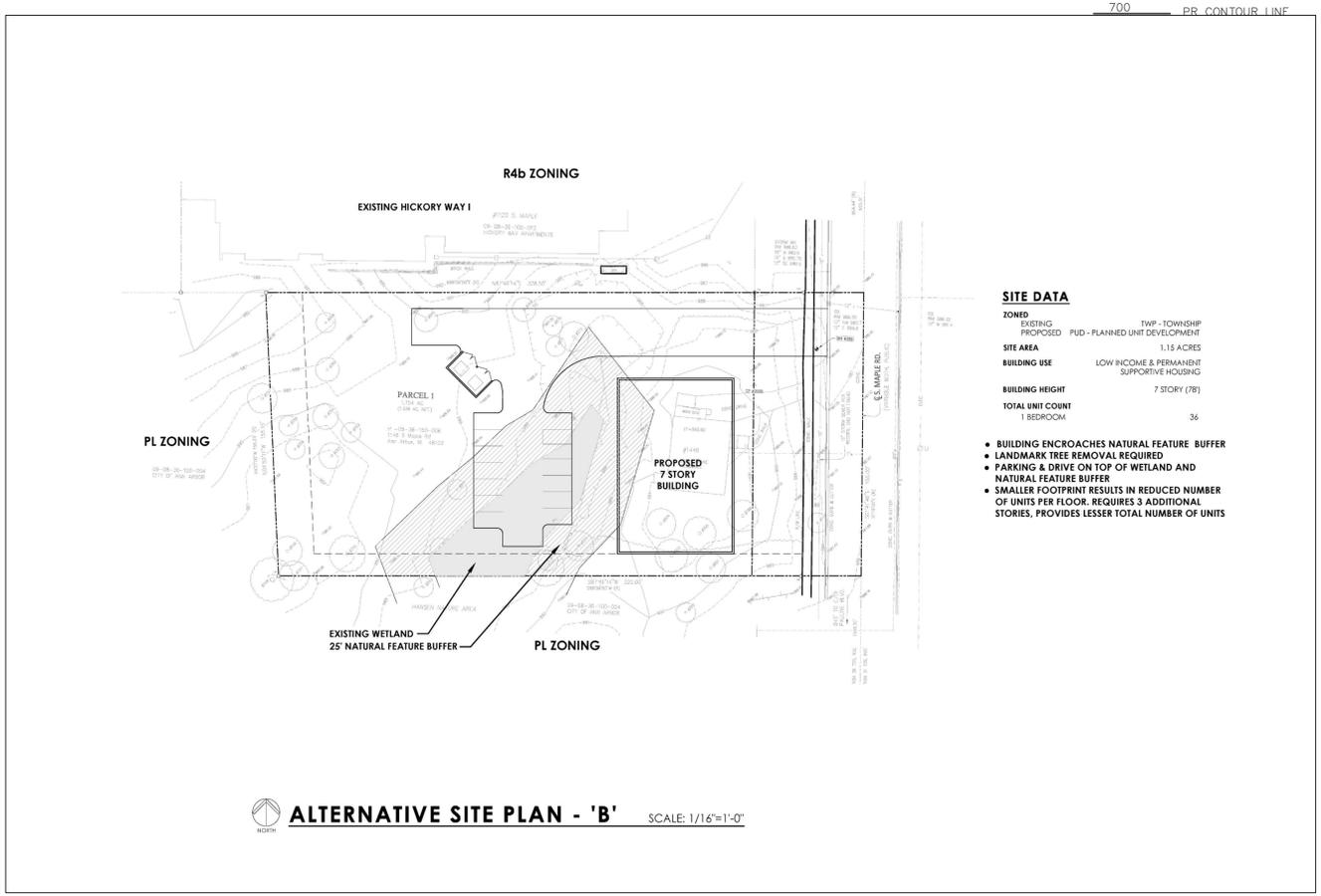
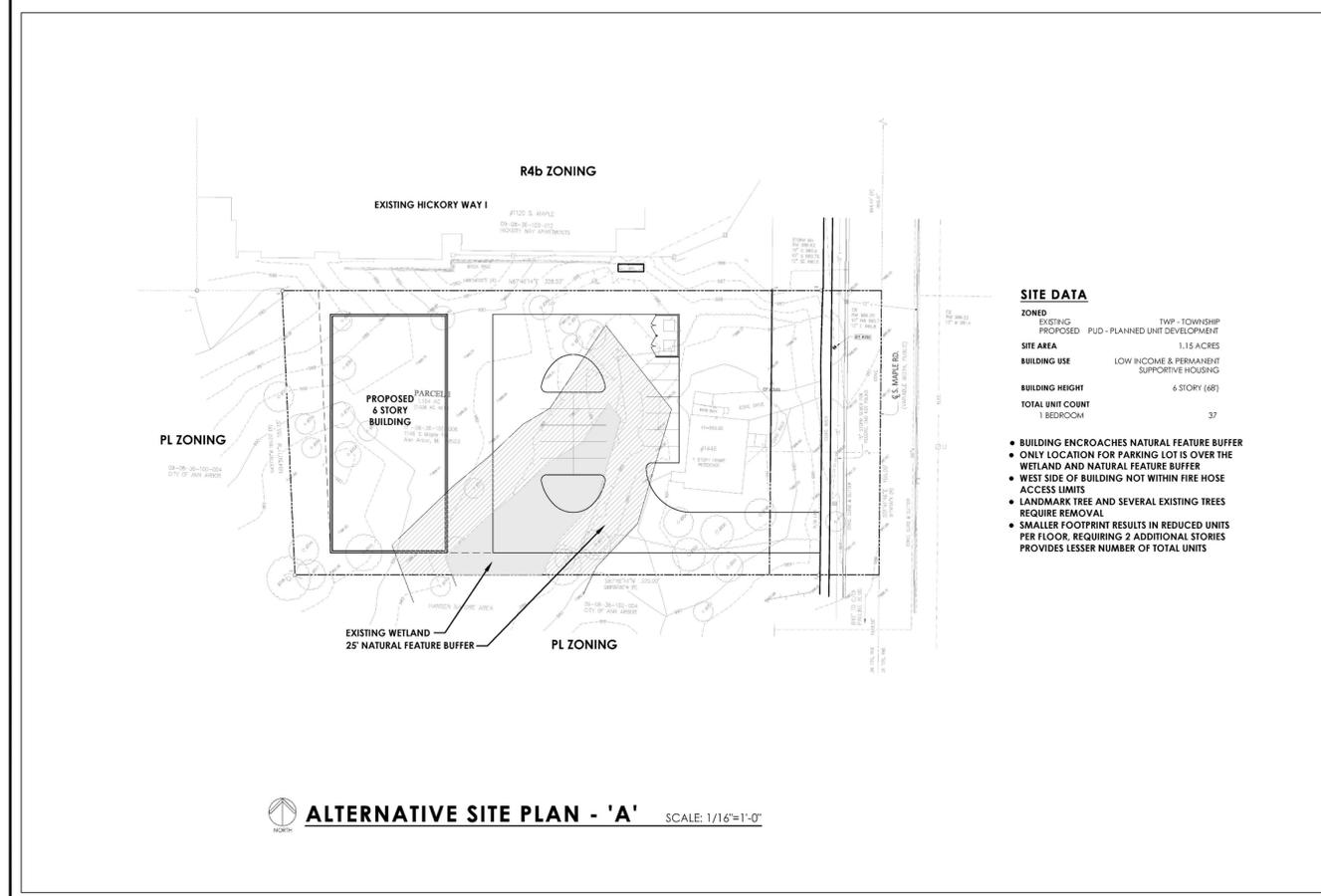
SELECTED ALTERNATIVE
 THE PROPOSED PROJECT PRESERVES SEVERAL OF THE MATURE TREES ON THE PROPERTY. THE LAYOUT INCLUDES SAVING THE MAJORITY OF THE TREES LOCATED ALONG THE WEST PROPERTY LINE AND INCORPORATING THEM INTO THE SITE DESIGN. EXISTING DRAINAGE PATTERNS HAVE BEEN MAINTAINED TO MINIMIZE IMPACTS TO THESE TREES. THE LAYOUT OF THE BUILDINGS HAS ALSO BEEN ESTABLISHED TO HAVE A LARGE PORCH ALONG THE PERIMETER OF THE TREADED AREAS TO PROVIDE THE RESIDENTS WITH A NATURALIZED SETTING. A SIGNIFICANT AREA ON THE WEST SIDE OF THE SITE ADJACENT TO THE HANSEN NATURE AREA IS PROPOSED TO REMAIN WITH THE EXISTING TREES AND GRADES.



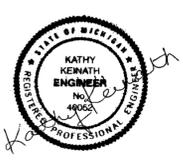
811
 Know what's below.
 Call before you dig.

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Macon Engineering, LLC.
 P.O. Box 314, Chelsea, MI 48118 734-216-9941



HICKORY WAY III
 ANN ARBOR, MI
 SITE PLAN
 NATURAL FEATURES
 ALTERNATIVES ANALYSIS



DATE	4-25-24
SCALE	1"=20'
SHEET NO.	SP-06

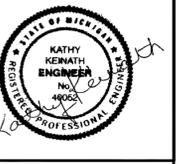


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Macon Engineering, LLC. P.O. Box 314, Chelsea, MI 48118 734-216-9941

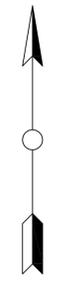
HICKORY WAY III ANN ARBOR, MI SITE PLAN LANDSCAPE



DATE 4-25-24 SCALE 1"=20' SHEET NO. SP-07

LEGEND

- SECTION CORNER, FOUND IRON PIPE, FOUND IRON ROD, SET IRON PIPE, SET MAG NAIL, FOUND MAG NAIL, SET WOOD LATH, CONTROL POINT, MEASURED DIMENSION, RECORDED DIMENSION, SURFACE FLOW, WATER MANHOLE, FIRE HYDRANT, GATE VALVE, BEEHIVE CATCH BASIN, CURB CATCH BASIN, STORM MANHOLE, CULVERT/END SECTION, SANITARY MANHOLE, LIGHT POLE, UTILITY POLE, TELEPHONE RISER, GAS MAIN RISER, ELECTRIC LINE, GAS MAIN, WATER MAIN, STORM LINE, SANITARY LINE, CABLE TV LINE, PHONE LINE, CHAIN LINK FENCE, WOOD FENCE, BARBED WIRE FENCE, PR STORM SEWER, PR SANITARY SEWER, PR WATER MAIN, PR SILT FENCE, PR TREE FENCE, PR INLET FILTER, PR CONCRETE, PR ASPHALT, PR GRAVEL, PR CURB, PR CONTOUR LINE, PR SPOT GRADE

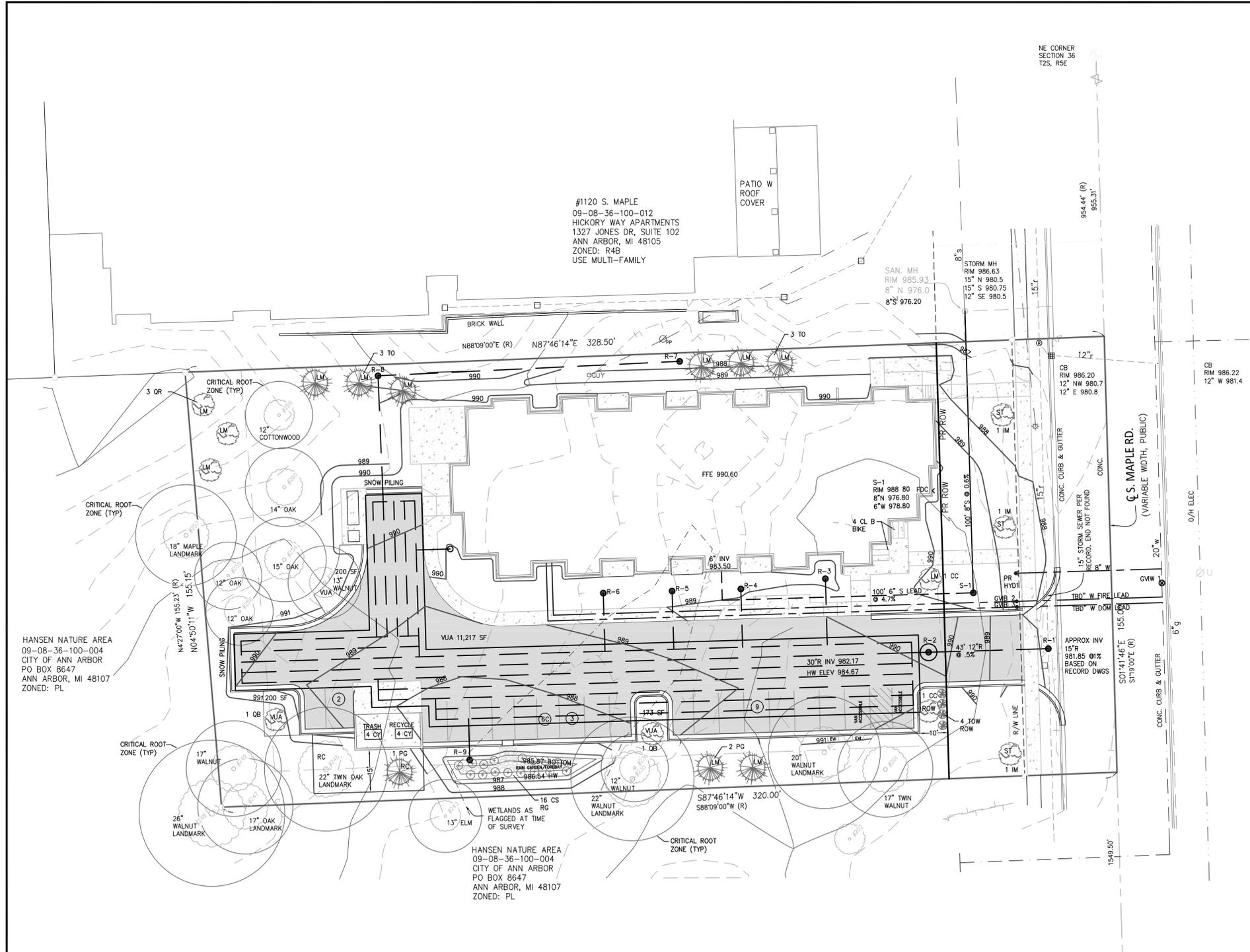


LANDSCAPING SPECIFICATIONS:

- 1. ALL LANDSCAPING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH CITY STANDARDS AND IN ACCORDANCE WITH CURRENT INDUSTRY STANDARDS IN A NEAT, HEALTHY AND WEED FREE CONDITION. ANY DEAD, DISEASED OR DAMAGED PLANT MATERIAL IS TO BE REPLACED WITHIN ONE YEAR, OR THE NEXT APPROPRIATE PLANTING PERIOD, AS A CONTINUING OBLIGATION FOR THE DURATION OF THE SITE PLAN.
2. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES. PLANT MATERIAL IS TO BE LOCATED SUCH THAT IT WILL NOT INTERFERE WITH ANY UNDERGROUND OR OVERHEAD UTILITIES. CANOPY AND EVERGREEN TREES SHALL NOT BE PLANTED WITHIN 15 FEET OF THE SANITARY SEWER.
3. PLANT TREES AND SHRUBS AT THE SAME GRADE LEVEL AT WHICH THEY WERE GROWN AT THE NURSERY. IF HEAVY CLAY SOILS ARE EVIDENT, PLANT TREES AND SHRUBS HIGHER, APPROXIMATELY 1/3 OF THE ROOT BALL ABOVE THE GRADE.
4. REMOVE ALL TWINE, WIRE, NURSERY TREE GUARDS, TAGS AND INORGANIC MATERIAL FROM ROOT BALLS.
5. PEEL BACK THE TOP 1/3 OF BURLAP FROM EARTH BALLS AND REMOVE ANY BURLAP AROUND TREE TRUNKS.
6. ALL LANDSCAPE AREAS SHALL BE EXCAVATED OF ALL BUILDING/CONSTRUCTION MATERIAL AND POOR SOILS TO A DEPTH OF 18-24" AND BACKFILLED WITH GOOD, MEDIUM TEXTURED PLANTING SOIL. APPLICATIONS OF FERTILIZER BEYOND THE INITIAL TOPSOIL AND SEEDING SHALL BE A FERTILIZER WITH NO PHOSPHORUS.
7. BACKFILL DIRECTLY BEHIND ALL CURBS AND ALONG SIDEWALKS AND COMPACT TO TOP OF CURB OR WALK TO SUPPORT VEHICLE AND PEDESTRIAN WEIGHT WITHOUT SETTLING.
8. ALL DISTURBED UNPAVED AREAS ARE TO BE RESTORED. AREAS OF INDIVIDUAL TREES ARE TO BE MULCHED WITH A MINIMUM OF 4 INCHES SHREDDED HARDWOOD BARK. LAWN TREES ARE TO BE MULCHED WITH A 4" DIAMETER SHREDDED BARK RING. BARK IS TO BE PULLED AWAY FROM THE TRUNK OF TREES LEAVING A 3" CLEAR AREA AROUND THE TRUNK.
9. TOPSOIL SHALL BE REMOVED FROM STOCKPILES AND SPREAD IN THE AREAS SHOWN ON THE PLANS. THE DEPTH OF TOPSOIL SHALL BE A MINIMUM OF 4 INCHES IN LAWN AREAS AND A MINIMUM OF 8 INCHES IN LANDSCAPE PLANTING AREAS.
10. AFTER THE TOPSOIL IS IN PLACE IT SHALL BE FINE GRADED REMOVING ALL ROOTS, STICKS, STONES AND DEBRIS GREATER THAN 2 INCHES IN ANY DIMENSION. THE TOPSOIL SHALL BE FINE GRADED TO THE LINES AND GRADES SHOWN ON THE PLANS.
11. THE TOPSOIL SOIL SHALL HAVE A PH OF 5.5 TO 7.6 AND AN ORGANIC CONTENT OF 3 TO 20%. THE GRADATION OF THE TOPSOIL SHALL BE 100% PASSING 2 INCH SIEVE, 85 TO 100% PASSING THE 1 INCH SIEVE, 65 TO 100% PASSING THE 1/2 INCH SIEVE AND 20 TO 80% PASSING THE NO. 200 SIEVE.
12. WATER LAWN AREAS AS NEEDED TO PROMOTE GROWTH. THE CONTRACTOR WILL BE RESPONSIBLE TO WATER, RESEED OR WORK WHEN NECESSARY TO INSURE THE GROWTH OF THE LAWN UNTIL A COMPLETE AND UNIFORM STAND OF GRASS HAS GROWN AND BEEN CUT AT LEAST TWICE. EACH TREE AND SHRUBS SHALL BE WATERED WITH 5 GALLONS OF WATER ONE TIME PER WEEK, UNLESS ONE INCH OF RAIN HAS FALLEN THAT WEEK, FOR THE FIRST GROWING SEASON.
13. UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL AREAS NOT RECEIVING STRUCTURES, PAVEMENT, RIP RAP, LANDSCAPING OR OTHER IMPROVEMENTS OR FUTURE IMPROVEMENTS SHALL BE CONSIDERED LAWN AREAS AND RECEIVE TOPSOIL AND SEEDING.
14. PLANTINGS SHALL BE SUPPLIED IN GOOD HEALTH, VIGOROUS, AND FREE OF INSECTS, LARVAE, EGGS, DEFECTS AND DISEASE.
15. PLANTING BEDS SHALL BE PREPARED BY LOOSENING THE TOP 1 FOOT OF TOPSOIL. PLANTS SHALL BE LOCATED PER THE PLANS. THE HOLES SHALL BE EXCAVATED WITH THE CENTER SLIGHTLY HIGHER TO PROMOTE DRAINAGE. BERM AROUND PLANTS TO FORM A BOWL SHAPE.

NOTES:

- 1. THE CITY OF ANN ARBOR HAS ADOPTED AN ORDINANCE LIMITING PHOSPHORUS IN FERTILIZER. TO ASSIST IN COMPLIANCE WITH THE STATE MANDATED TMDL FOR PHOSPHORUS WITHIN THE MIDDLE HURON RIVER BASIN, APPLICATIONS OF FERTILIZER BEYOND THE INITIAL TOPSOIL AND SEEDING SHALL BE A FERTILIZER WITH NO PHOSPHORUS.
2. ALL SPECIES DEVIATIONS FROM THE APPROVED SITE PLAN MUST BE APPROVED IN WRITING PRIOR TO INSTALLATION BY THE CITY OF ANN ARBOR.



#1120 S. MAPLE 09-08-36-100-012 HICKORY WAY APARTMENTS 1327 JONES DR, SUITE 102 ANN ARBOR, MI 48105 ZONED: R4B USE MULTI-FAMILY

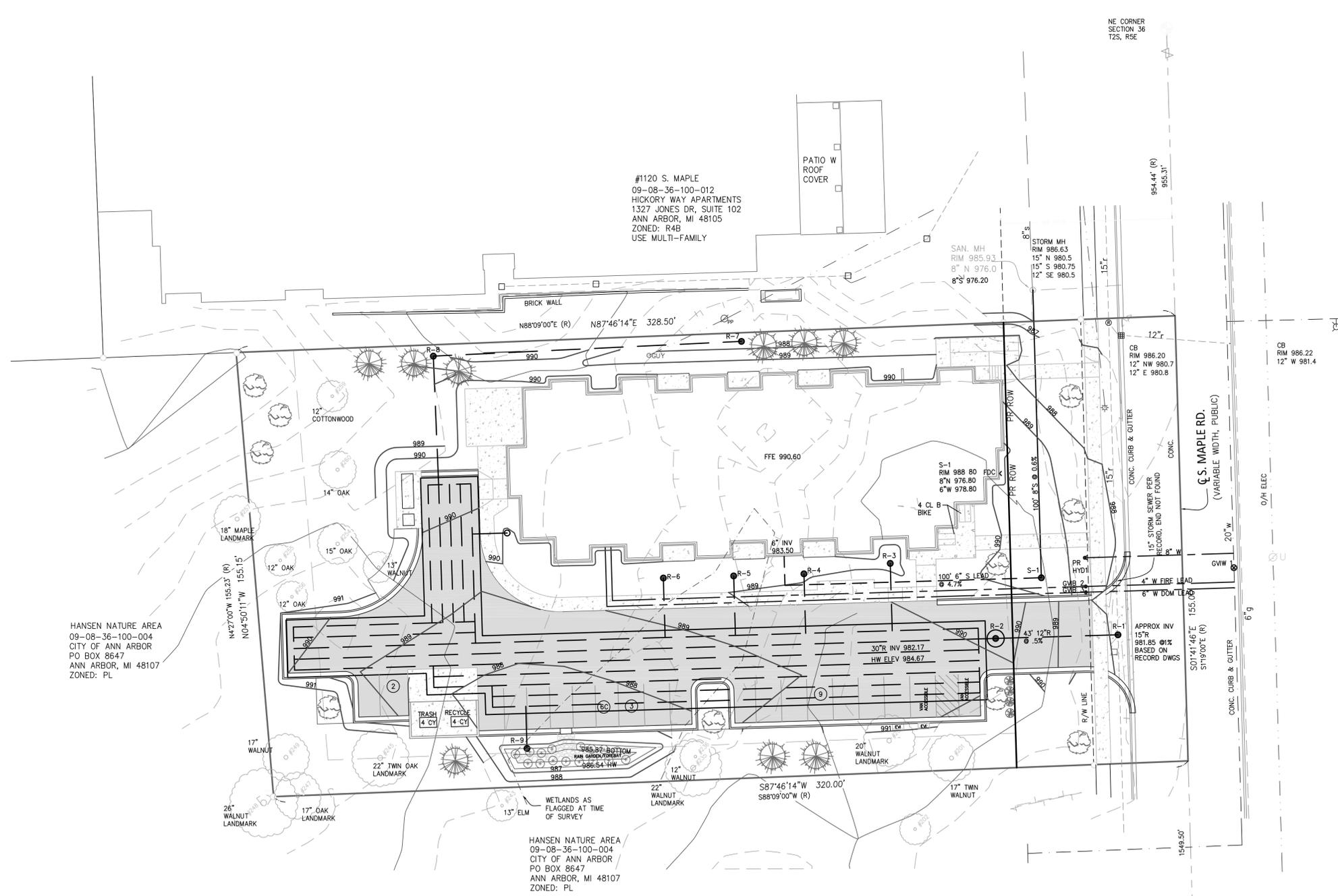
HANSEN NATURE AREA 09-08-36-100-004 CITY OF ANN ARBOR PO BOX 8647 ANN ARBOR, MI 48107 ZONED: PL

HANSEN NATURE AREA 09-08-36-100-004 CITY OF ANN ARBOR PO BOX 8647 ANN ARBOR, MI 48107 ZONED: PL

LANDSCAPE REQUIREMENT CHART table with columns: Required, Existing, Provided, Total Provided. Rows include Interior Landscape Areas, Parking Island Landscaping, Street Tree Requirements, Right of Way Screening, Landmark Tree Mitigation, Refuse Container Screening, and Street Tree Escrow.

PLANT LIST table with columns: KEY, QTY, SPECIES, SIZE, SPECS, NATIVES, CATEGORY. Lists various plants like Cercis canadensis, Gleditsia triacanthos inermis, etc.

LEGEND table with columns: KEY, CATEGORY. Lists symbols for Rain Garden, Vehicular Use Area, Street Tree, Landmark Tree Mitigation, and Refuse Screening.



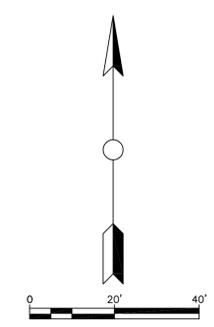
#1120 S. MAPLE
 09-08-36-100-012
 HICKORY WAY APARTMENTS
 1327 JONES DR, SUITE 102
 ANN ARBOR, MI 48105
 ZONED: R4B
 USE MULTI-FAMILY

HANSEN NATURE AREA
 09-08-36-100-004
 CITY OF ANN ARBOR
 PO BOX 8647
 ANN ARBOR, MI 48107
 ZONED: PL

HANSEN NATURE AREA
 09-08-36-100-004
 CITY OF ANN ARBOR
 PO BOX 8647
 ANN ARBOR, MI 48107
 ZONED: PL

LEGEND

- SECTION CORNER
- FOUND IRON PIPE
- FOUND IRON ROD
- SET IRON PIPE
- SET MAG NAIL
- FOUND MAG NAIL
- SET WOOD LATH
- CONTROL POINT
- MEASURED DIMENSION
- RECORDED DIMENSION
- SURFACE FLOW
- WATER MANHOLE
- FIRE HYDRANT
- GATE VALVE
- BEEHIVE CATCH BASIN
- CURB CATCH BASIN
- STORM MANHOLE
- CULVERT/END SECTION
- SANITARY MANHOLE
- LIGHT POLE
- UTILITY POLE
- TELEPHONE RISER
- GAS MAIN RISER
- ELECTRIC LINE
- GAS MAIN
- WATER MAIN
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- PR TREE FENCE
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- PR CONCRETE
- PR ASPHALT
- PR GRAVEL
- PR CURB
- PR CONTOUR LINE
- PR SPOT GRADE



- NOTES:
- FIRE WALLS DO NOT EXIST.
 - BOOSTER PUMPS MAY BE REQUIRED. FOR THE BUILDING'S WATER SERVICE. THIS IS TO BE CONFIRMED BY AVAILABLE WATER USING CURRENT HYDRANT FLOW TEST TO ENGINEER THE AUTOMATIC SPRINKLER SYSTEM.
 - THERE IS A FIRE SUPPRESSION SYSTEM IN THE BUILDING.
 - FDC TO HAVE TWO 2.5" NST
 - KNOX BOX(S) TO BE PROVIDED AND LOCATION(S) COORDINATED WITH THE FIRE DEPARTMENT.

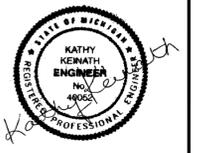
SANITARY SEWER MITIGATION CALCULATIONS

Existing	
Existing Residence (Septic)	
Not Connected to City Utilities	0 gpd
Total Existing Dry Weather Flow	0 gpd
Proposed	
Residential Units up to 600 sf	39
Design Dry Weather Flow Rate	175 gpd/unit
Residential Units 601 to 1200 sf	0
Design Dry Weather Flow Rate	250 gpd/unit
Total Proposed Dry Weather Flow	6,825 gpd
Peaking Factor	4
System Recovery Factor	10%
Flow to be mitigated	30,030.00 gpd
Flow to be mitigated	21 gpm



Macon Engineering, LLC.
 P.O. Box 314, Chelsea, MI 48118 734-216-9941

HICKORY WAY III
 ANN ARBOR, MI
 SITE PLAN
 UTILITIES



DATE 4-25-24
 SCALE 1"=20'
 SHEET NO. SP-08



Know what's below.
Call before you dig.

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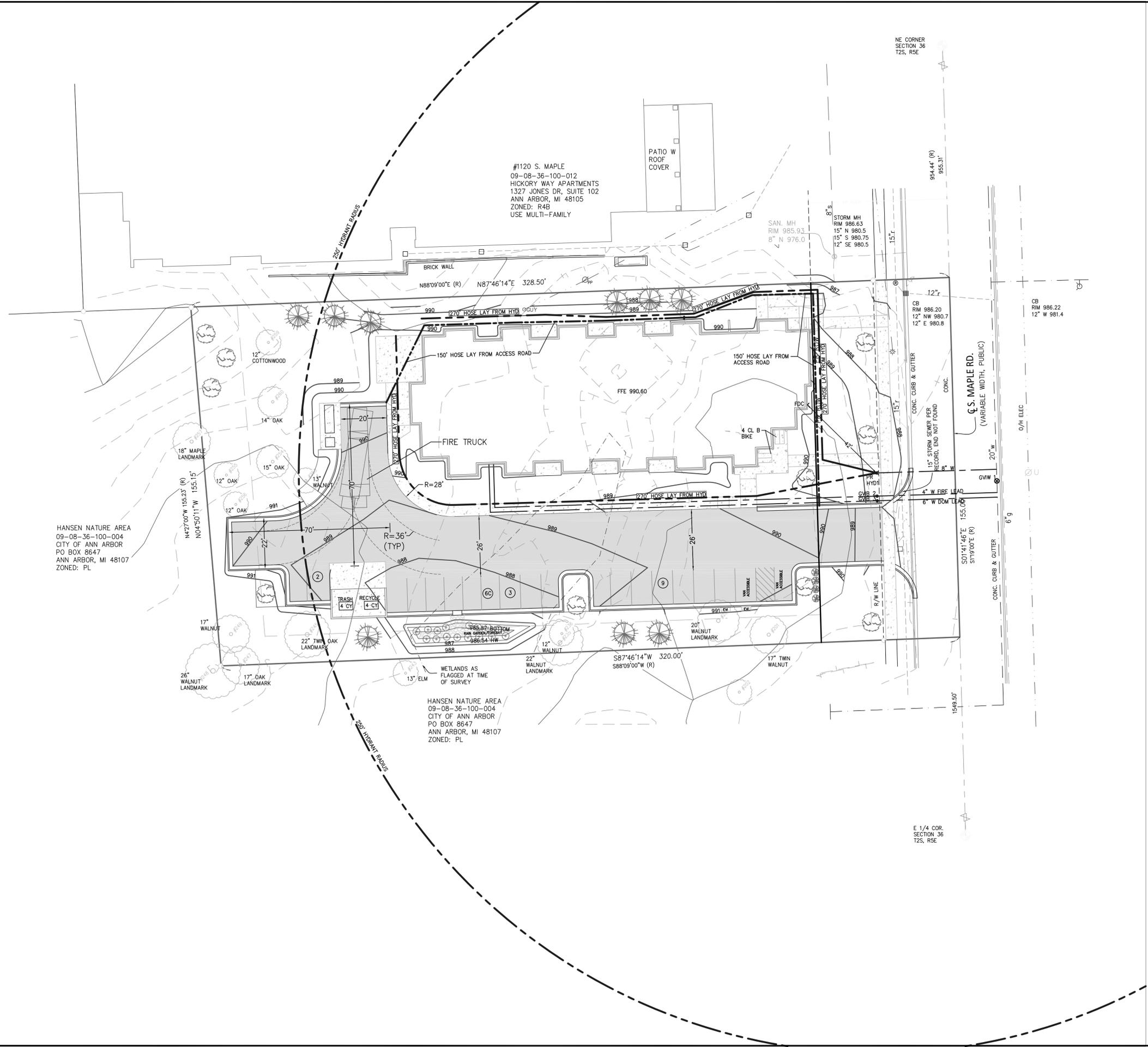
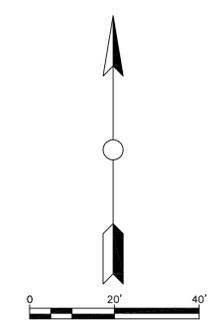
HICKORY WAY III
ANN ARBOR, MI
SITE PLAN
FIRE PROTECTION PLAN



DATE	4-25-24
SCALE	1"=20'
SHEET NO.	SP-09

LEGEND

- SECTION CORNER
- FOUND IRON PIPE
- FOUND IRON ROD
- SET IRON PIPE
- SET MAG NAIL
- FOUND MAG NAIL
- SET WOOD LATH
- CONTROL POINT
- MEASURED DIMENSION
- RECORDED DIMENSION
- SURFACE FLOW
- WATER MANHOLE
- FIRE HYDRANT
- GATE VALVE
- BEEHIVE CATCH BASIN
- CURB CATCH BASIN
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- PR GRAVEL
- PR CURB
- PR CONTOUR LINE
- PR SPOT GRADE



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 3. THERE IS A FIRE SUPPRESSION SYSTEM IN THE BUILDING.
 4. FDC TO HAVE TWO 2.5" NST
 5. KNOX BOX(S) TO BE PROVIDED AND LOCATION(S) COORDINATED WITH THE FIRE DEPARTMENT.



Know what's below.
Call before you dig.

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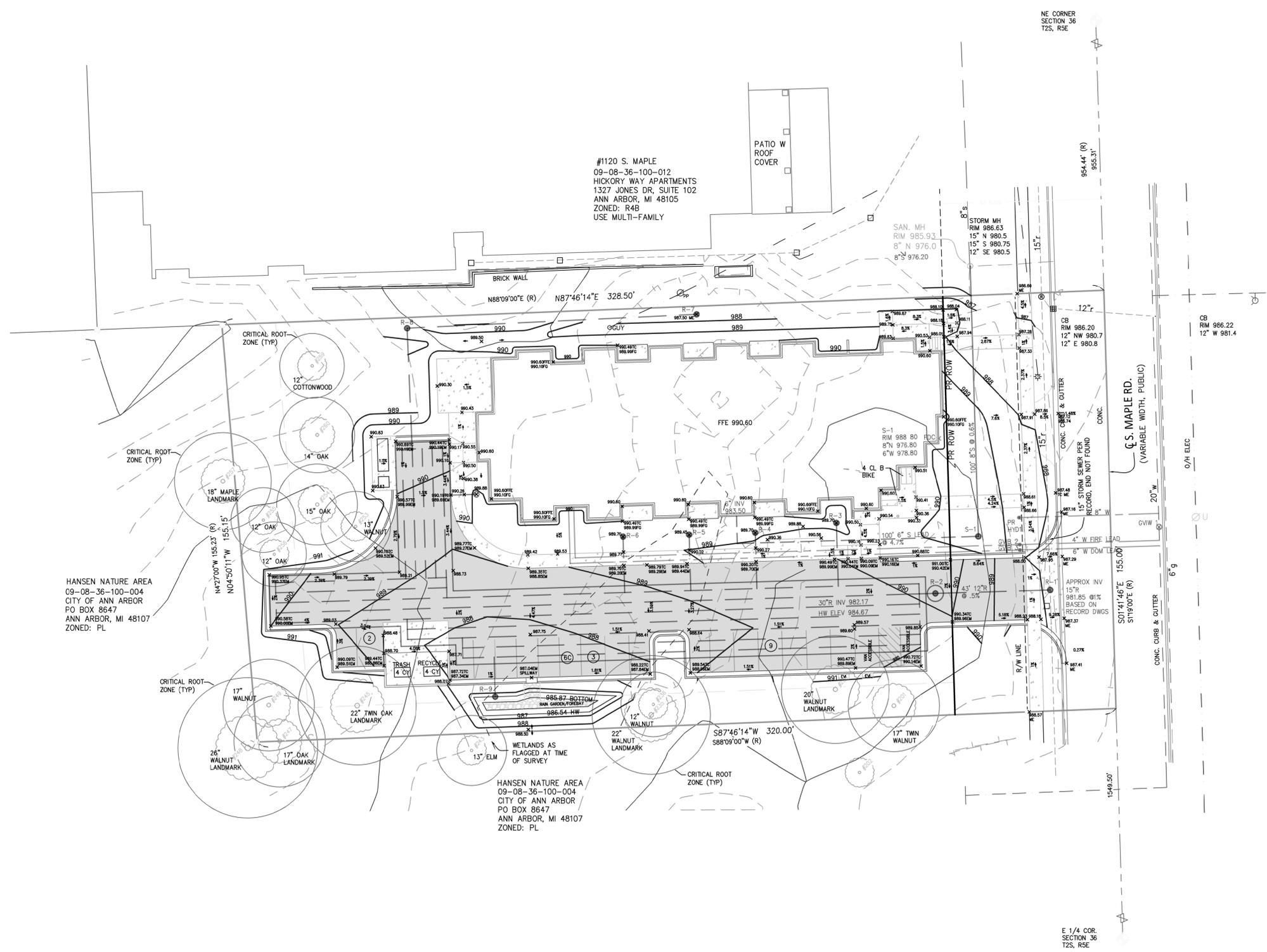
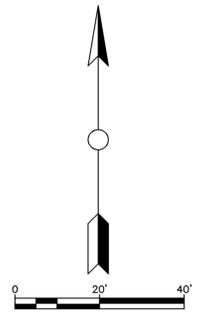
Macon Engineering, LLC.
P.O. Box 314, Chelsea, MI 48118 734-216-9941

HICKORY WAY III
ANN ARBOR, MI
SITE PLAN
GRADING



LEGEND

- SECTION CORNER
- FIP FOUND IRON PIPE
- FIR FOUND IRON ROD
- S SET IRON PIPE
- SMN SET MAG NAIL
- FMN FOUND MAG NAIL
- SET WOOD LATH
- CONTROL POINT
- (M) MEASURED DIMENSION
- (R) RECORDED DIMENSION
- SURFACE FLOW
- WATER MANHOLE
- FIRE HYDRANT
- GATE VALVE
- BEEHIVE CATCH BASIN
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- UTILITY POLE
- TELEPHONE RISER
- GAS MAIN RISER
- ELECTRIC LINE
- GAS MAIN
- WATER MAIN
- STORM LINE
- SANITARY LINE
- CABLE TV LINE
- PHONE LINE
- CHAIN LINK FENCE
- WOOD FENCE
- BARBED WIRE FENCE
- PR STORM SEWER
- PR SANITARY SEWER
- PR WATER MAIN
- PR SILT FENCE
- PR TREE FENCE
- PR INLET FILTER
- PR CONCRETE
- PR ASPHALT
- PR GRAVEL
- PR CURB
- PR CONTOUR LINE
- 700.00 X PR SPOT GRADE



STANDARD SIDEWALK REPAIR AND MAINTENANCE NOTE:
ALL SIDEWALKS ARE TO BE KEPT AND MAINTAINED IN GOOD REPAIR BY THE OWNER OF THE LAND ADJACENT TO AND ABUTTING THE SAME. PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY FOR THIS SITE, ALL EXISTING SIDEWALKS IN NEED OF REPAIR MUST BE REPAIRED IN ACCORDANCE WITH CITY STANDARDS.

DATE	4-25-24
SCALE	1"=20'
SHEET NO.	SP-10

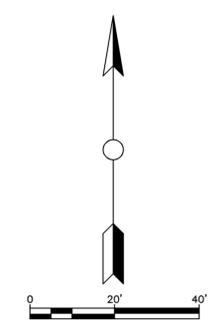
1327 JONES DR, SUITE 102
ANN ARBOR, MI 48105
ZONED: R4B
USE: MULTI-FAMILY

HANSEN NATURE AREA
09-08-36-100-004
CITY OF ANN ARBOR
PO BOX 8647
ANN ARBOR, MI 48107
ZONED: PL

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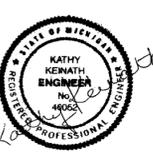
LEGEND

- SECTION CORNER
- FOUND IRON PIPE
- FOUND IRON ROD
- SET IRON PIPE
- SET MAG NAIL
- FOUND MAG NAIL
- SET WOOD LATH
- CONTROL POINT
- MEASURED DIMENSION
- RECORDED DIMENSION
- SURFACE FLOW
- WATER MANHOLE
- FIRE HYDRANT
- GATE VALVE
- BEEHIVE CATCH BASIN
- CURB CATCH BASIN
- STORM MANHOLE
- CULVERT/END SECTION
- SANITARY MANHOLE
- LIGHT POLE
- UTILITY POLE
- TELEPHONE RISER
- GAS MAIN RISER
- ELECTRIC LINE
- GAS MAIN
- WATER MAIN
- STORM LINE
- SANITARY LINE
- CABLE TV LINE
- PHONE LINE
- CHAIN LINK FENCE
- WOOD FENCE
- BARBED WIRE FENCE
- PR STORM SEWER
- PR SANITARY SEWER
- PR WATER MAIN
- PR SILT FENCE
- PR TREE FENCE
- PR INLET FILTER
- PR CONCRETE
- PR ASPHALT
- PR GRAVEL
- PR CURB
- PR CONTOUR LINE
- PR SPOT GRADE



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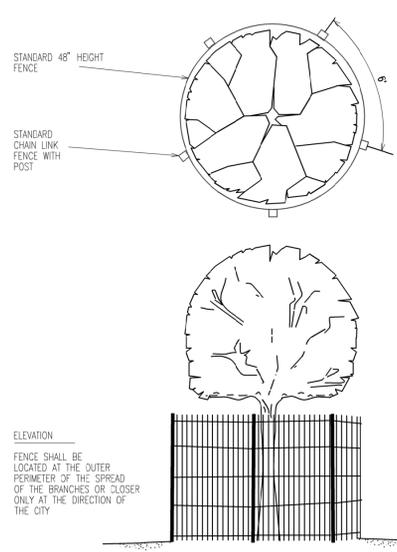
HICKORY WAY III
ANN ARBOR, MI
SITE PLAN
SOIL EROSION CONTROL



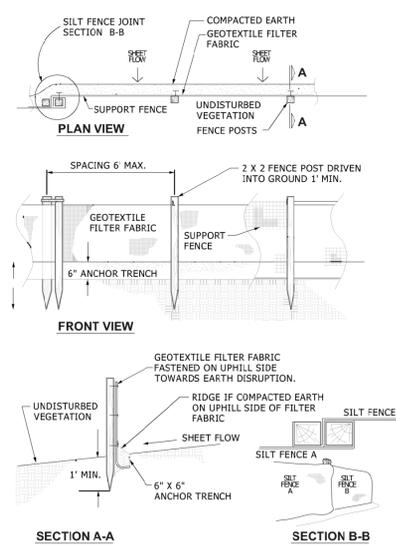
- SEQUENCE OF CONSTRUCTION
1. SOIL EROSION CONTROL KICK OFF MEETING WITH CITY 1 DAY
 2. INSTALL INLET FILTERS AND TRACKING SURFACE 1 DAY
 3. REMOVE EXISTING CONCRETE AND BUILDING 1 WEEKS
 4. CLEAR SITE 2 WEEKS
 5. INSTALL TREE FENCE AND SILT FENCE 1 WEEK
 6. ROUGH GRADE SITE 2 WEEKS
 7. INSTALL UNDERGROUND UTILITIES 4 WEEKS
 8. INSTALL CURB AND FIRST COURSE OF PAVING 2 WEEKS
 9. BUILDING CONSTRUCTION 18 MONTHS
 10. MAINTAIN SOIL EROSION CONTROL MEASURES AS NECESSARY. ONGOING
 11. CONSTRUCT DRIVES AND SIDEWALKS 2 WEEKS
 12. INSTALL FILTERS ON NEW INLETS & REPLACE AS REQUIRED. ONGOING
 13. COMPLETE CONSTRUCTION OF BUILDINGS. ONGOING
 14. REMOVE TEMPORARY EROSION CONTROLS. 1 DAY

- NOTES:
1. STREETS WILL BE CLEANED OF ANY TRACKED MUD IMMEDIATELY FOLLOWING EACH MUD-TRACKING OCCURRENCE.
 2. NO SOIL WILL BE STOCKPILED ON-SITE.
 3. PERMANENT SOIL EROSION CONTROLS ARE TO BE IN PLACE FIVE (5) DAYS AFTER FINAL GRADING.

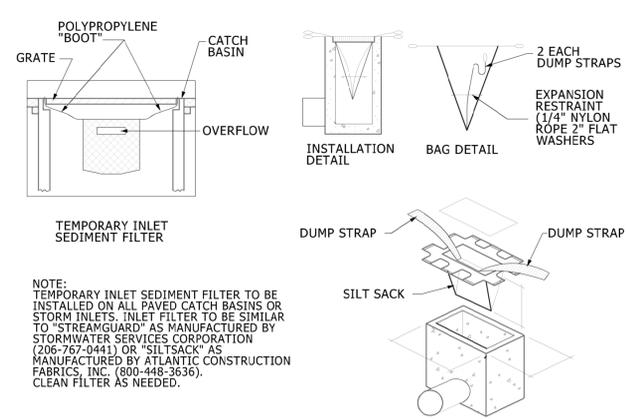
SOIL EROSION CONTROL COST ESTIMATE				TOTAL PRICE
SILT SACS	8	EA	\$100.00	\$800
MUD TRACKING	72	SY	\$75.00	\$5,375
SILT FENCE	660	LF	\$4.00	\$2,640
TOTAL				\$8,815
PROTECTING EXPOSED SURFACES				\$2,000



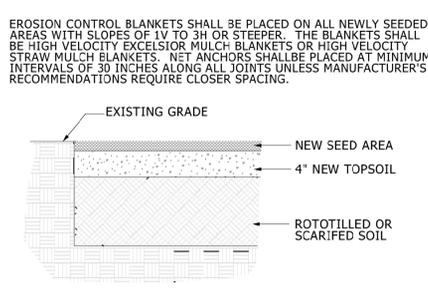
TREE PROTECTION DETAIL



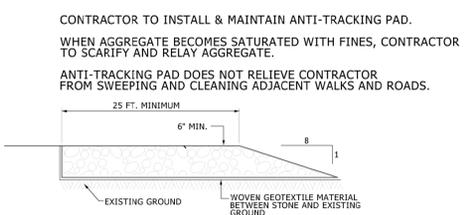
SILT FENCE DETAIL



SILT SACK DETAIL



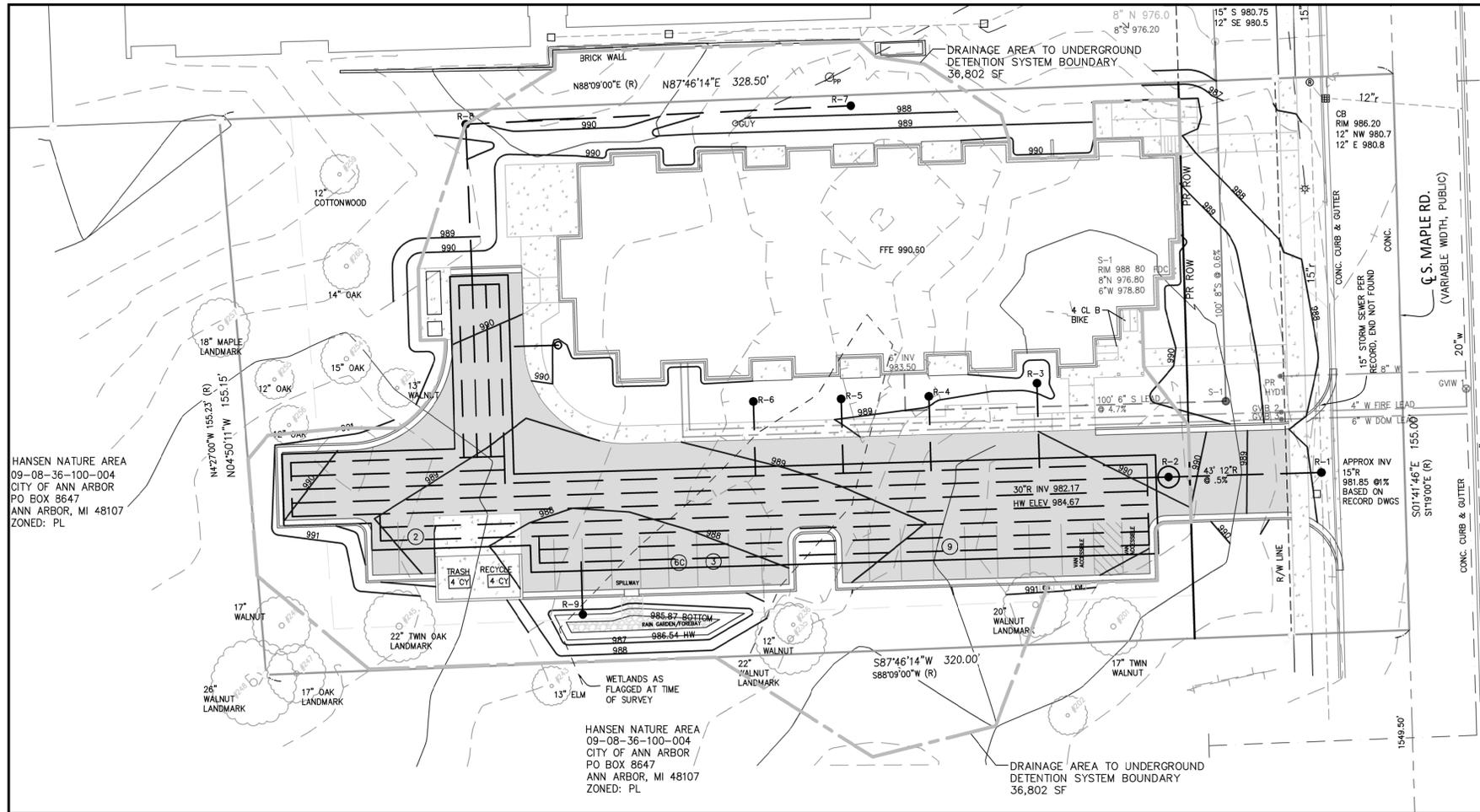
NEW SEEDDED AREA



MUD TRACKING PAD AREA

NOTE: TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVED CATCH BASINS OR STORM INLETS. INLET FILTER TO BE SIMILAR TO "STREAMGUARD" AS MANUFACTURED BY STORMWATER SERVICES CORPORATION (206-767-0441) OR "SILTSACK" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC. (800-448-3636). CLEAN FILTER AS NEEDED.

EROSION CONTROL BLANKETS SHALL BE PLACED ON ALL NEWLY SEEDDED AREAS WITH SLOPES OF 1V TO 3H OR STEEPER. THE BLANKETS SHALL BE HIGH VELOCITY EXCELSIOR MULCH BLANKETS OR HIGH VELOCITY STRAW MULCH BLANKETS. NET ANCHORS SHALL BE PLACED AT MINIMUM INTERVALS OF 30 INCHES ALONG ALL JOINTS UNLESS MANUFACTURER'S RECOMMENDATIONS REQUIRE CLOSER SPACING.



PROPOSED DETENTION
 Total Site Area = 0.94 ac
 Total Drainage Area to Detention System = 0.84 ac
 36802 sf

W1: POST DEVELOPMENT COVER TYPES, AREAS, CURVE NUMBERS AND RUNOFF COEFFICIENTS
 Rational Method Variables

Cover Type	Soil Type	Area (sf)	Area (ac)	Curve Number	(CN)/Area
Building Roof	B	10,149	0.233	95	0.22
Sidewalk & Walls	B	2,311	0.053	95	0.05
Pavement	B	11,386	0.261	95	0.25
Road	B	0	0.000	95	0.00
Penious	B	16,892	0.388	0.35	0.14
Rain Garden	B	228	0.005	0.95	0.00
Total = Sum (CN/A)		40,966	0.94	0.66	
Area Total = Sum A (ac)			0.94		
Weighted C = Sum (C/A)/Area Total			0.70		

NRCS Variables Penious

Cover Type	Soil Type	Area (sf)	Area (ac)	Curve Number	(CN)/Area
Lawn	B	16,892	0.388	61	24
Rain Garden	B	0	0.000	98	0
Penious Pavement	B	0	0.000	98	0
Total = Sum (CN/A)		16,892	0.388	61	24
Area Total = Sum A (ac)			0.39		
Weighted CN = Sum (CN(A)/Area Total			61		

NRCS Variables Impenious

Cover Type	Soil Type	Area (sf)	Area (ac)	Curve Number	(CN)/Area
Building Roof	B	10,149	0.233	98	23
Concrete	B	2,311	0.053	98	5
Pavement	B	11,386	0.261	98	26
Rain Garden	B	228	0.005	98	1
Total = Sum (CN/A)		24,074	0.55	98	54.16
Area Total = Sum A (ac)			0.55		
Weighted CN = Sum (CN(A)/Area Total			98		

W2: STANDARD METHOD RUNOFF VOLUME CALCULATIONS
 First Flush Runoff Calculations (VF)

VF=(1.1712)^(43560sf/1ac)AC = VF = 2,399 cf

W3: STANDARD METHOD RUNOFF VOLUME CALCULATIONS
 Pre-development Bankfull Runoff Calculations (Vbpre)
 2 yr/24 hr storm event
 Pre-development Land Cover
 S=(1000)CN/10
 Q=(P-0.25)^(2)/(P+0.85)
 Total site area (sf) excluding self crediting
 Vbpre=Q(1/12)Area
 Vbpre=559 cf

W4: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Penious Cover Post-Development Bankfull Runoff Calculations (Vbpost)
 2 yr/24 hr storm event
 Penious Cover CN from WS1
 S=(1000)CN/10
 Q=(P-0.25)^(2)/(P+0.85)
 Penious Cover Area from WS1
 Vbpost=Q(1/12)Area
 Vbpost=216 cf

W5: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Impenious Cover Post-Development Bankfull Runoff Calculations (Vbimp-post)
 2 yr/24 hr storm event
 Penious Cover CN from WS1
 S=(1000)CN/10
 Q=(P-0.25)^(2)/(P+0.85)
 Impenious Cover Area from WS1
 Vbimp-post=Q(1/12)Area
 Vbimp-post=4,256 cf

W6: STANDARD METHOD RUNOFF VOLUME CALCULATIONS
 Penious Cover Post-Development 100-yr Storm Runoff Calculations (V100-per-post)
 100-yr Storm Event
 Penious Cover CN from WS1
 S=(1000)CN/10
 Q=(P-0.25)^(2)/(P+0.85)
 Penious Cover Area from WS1
 V100-per-post=Q(1/12)Area
 V100-per-post=2,021 cf

W7: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Impenious Cover Post-Development 100-yr Storm Runoff Calculations (V100-imp-post)
 100-yr Storm Event
 Impenious Cover CN from WS1
 S=(1000)CN/10
 Q=(P-0.25)^(2)/(P+0.85)
 Impenious Cover Area from WS1
 V100-imp-post=Q(1/12)Area
 V100-imp-post=9,776 cf

W8: STANDARD METHOD RUNOFF VOLUME CALCULATIONS
 Determine Time of Concentration for Applicable Flow Types (Tc-hrs)
 Change in Elevation
 Sheet Flow (<300)
 Waterway
 Waterway
 Small Tributary
 Total Time of Concentration (Tc-hrs) = 0.09

W9: STANDARD METHOD RUNOFF VOLUME CALCULATIONS
 Runoff Summary & Onsite Infiltration Requirement
 Runoff Summary from Previous Worksheets
 First Flush
 Pre-development Bankfull Runoff Volume
 Penious Cover Post-Development Bankfull Volume
 Impenious Cover Post-Development Bankfull Volume
 Penious Cover Post-Development 100-yr Volume
 Impenious Cover Post-Development 100-yr Volume
 Determine Onsite Infiltration Requirement
 Subtract the Pre-Development Bankfull Volume from the Post-Development Bankfull Volume
 Total Post-Development Bankfull Volume
 Pre-development Bankfull Runoff Volume
 Bankfull Volume Difference
 Compare Bankfull Volume Difference with the First Flush Volume
 Bankfull Volume Difference = 3,914 cf
 First Flush Volume = 2,399 cf
 Onsite Infiltration Requirement (Vinf)
 Vinf = 3,914 cf

W10: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Detention/Retention Requirement
 Detention
 Qp=238.67cfs
 Total Site Area
 Q100=Q100-per+Q100-imp (W6 and W7)
 Peak Flow (PF)=Qp*Q100/A/640
 D=PF/15'A
 Vdet=(D*PF)/V100

W11: STANDARD METHOD RUNOFF CALCULATIONS
 Determine Applicable BMPs and Associated Volume Credits allowed to be Calculated w/ Infiltration
 Determine Applicable BMPs and Associated Volume Credits allowed to be Calculated w/ Infiltration
 Proposed BMP
 Area (sf)
 Storage Volume (cf)
 Rate (in/hr)
 Storm (cf)
 Reduction (cf)

W12: STANDARD METHOD RUNOFF CALCULATIONS
 Subsurface Storage
 Minimum Infiltration Area = Contributing Impenious Area
 Contributing Area = 40,966 sf

W13: STANDARD METHOD RUNOFF CALCULATIONS
 Infiltration Pipe Area 1
 Infiltration Area Provided = 7,285 sf
 Infiltration Volume = Area*Infiltration rate*6 hr*1/12
 Area = 7,285 sf
 Infiltration Rate = 0.13 in/hr
 Infiltration Rate w/ Safety Factor 2 = 0.065 in/hr
 Infiltration Period = 6.00 hr
 Infiltration Volume = 0 cf

W14: STANDARD METHOD RUNOFF CALCULATIONS
 Storage Volume Pipe = Length * Area of Pipe
 Area 30" Pipe = 4,90625 sf
 Length of Pipe = 1,868 ft
 Volume = 9,165 cf
 Storage Volume Aggregate = Volume Storage - Volume Pipe * Voids Ratio
 Volume Storage = 18,213 cf
 Volume Pipe = 9,165 cf
 Volume Aggregate = 9,048 cf
 Voids Ratio = 0.30
 Volume Aggregate Storage = 2,714 cf
 Total Subsurface Storage = 11,879 cf

OUTLET STRUCTURE

	Xo =	Yo =	C of
	982.17	984.67	11876 cf
	982.67	983.11	
	984.63	984.63	

W15: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Determine Onsite Infiltration Requirement
 Subtract the Pre-Development Bankfull from the Post-Development Bankfull Volume
 Total Post-Development Bankfull Volume
 Pre-development Bankfull Runoff Volume
 Bankfull Volume Difference
 Compare Bankfull Volume Difference with the First Flush Volume
 Bankfull Volume Difference = 1,806 cf
 First Flush Volume = 1,005 cf
 Onsite Infiltration Requirement (Vinf)
 Vinf = 1,806 cf

W16: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Detention/Retention Requirement
 Detention
 Qp=238.67cfs
 Total Site Area Excluding Self-Crediting
 Q100=Q100-per+Q100-imp (W6 and W7)
 Peak Flow (PF)=Qp*Q100/A/640
 D=PF/15'A
 Vdet=(D*PF)/V100
 Vdet=5,216 cf

W17: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Determine Onsite Infiltration Requirement
 Subtract the Pre-Development Bankfull from the Post-Development Bankfull Volume
 Total Post-Development Bankfull Volume
 Pre-development Bankfull Runoff Volume
 Bankfull Volume Difference
 Compare Bankfull Volume Difference with the First Flush Volume
 Bankfull Volume Difference = 1,806 cf
 First Flush Volume = 1,005 cf
 Onsite Infiltration Requirement (Vinf)
 Vinf = 1,806 cf

W18: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Detention/Retention Requirement
 Detention
 Qp=238.67cfs
 Total Site Area Excluding Self-Crediting
 Q100=Q100-per+Q100-imp (W6 and W7)
 Peak Flow (PF)=Qp*Q100/A/640
 D=PF/15'A
 Vdet=(D*PF)/V100
 Vdet=5,216 cf

RAIN GARDEN 1 DRAINAGE AREA (FOREBAY)
 Total Site Area = 0.29 ac
 Total Site Area Excluding "Self-Crediting" BMPs = 0.29 ac

Rational Method Variables

Cover Type	Soil Type	Area (sf)	Area (ac)	Curve Number	(CN)/Area
Building Roof	B	0	0.000	95	0.00
Sidewalk & Walls	B	1,311	0.030	95	0.03
Pavement	B	11,386	0.261	95	0.25
Road	B	0	0.000	95	0.00
Penious	B	0	0.000	0.35	0.00
Rain Garden	B	228	0.005	0.95	0.00
Total = Sum (CN/A)		12,925	0.29	0.28	
Area Total = Sum A (ac)			0.30		
Weighted C = Sum (C/A)/Area Total			0.95		

NRCS Variables Penious

Cover Type	Soil Type	Area (sf)	Area (ac)	Curve Number	(CN)/Area
Lawn	B	0	0.000	74	0
Rain Garden	B	228	0.005	98	1
Penious Pavement	B	0	0.000	98	0
Total = Sum (CN/A)		228	0.005	98	1
Area Total = Sum A (ac)			0.01		
Weighted CN = Sum (CN(A)/Area Total			98		

NRCS Variables Impenious

Cover Type	Soil Type	Area (sf)	Area (ac)	Curve Number	(CN)/Area
Building Roof	B	0	0.000	98	0
Concrete	B	1,311	0.030	98	3
Pavement	B	11,386	0.261	98	26
Rain Garden	B	0	0.000	98	0
Total = Sum (CN/A)		12,925	0.29	28.57	
Area Total = Sum A (ac)			0.29		
Weighted CN = Sum (CN(A)/Area Total			98		

W2: STANDARD METHOD RUNOFF VOLUME CALCULATIONS
 First Flush Runoff Calculations (VF)
 VF=(1.1712)^(43560sf/1ac)AC = VF = 1,005 cf

W3: STANDARD METHOD RUNOFF VOLUME CALCULATIONS
 Pre-development Bankfull Runoff Calculations (Vbpre)
 2 yr/24 hr storm event
 Pre-development Land Cover
 S=(1000)CN/10
 Q=(P-0.25)^(2)/(P+0.85)
 Total site area (sf) excluding self crediting
 Vbpre=Q(1/12)Area
 Vbpre=479 cf

W4: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Penious Cover Post-Development Bankfull Runoff Calculations (Vbpost)
 2 yr/24 hr storm event
 Penious Cover CN from WS1
 S=(1000)CN/10
 Q=(P-0.25)^(2)/(P+0.85)
 Penious Cover Area from WS1
 Vbpost=Q(1/12)Area
 Vbpost=40 cf

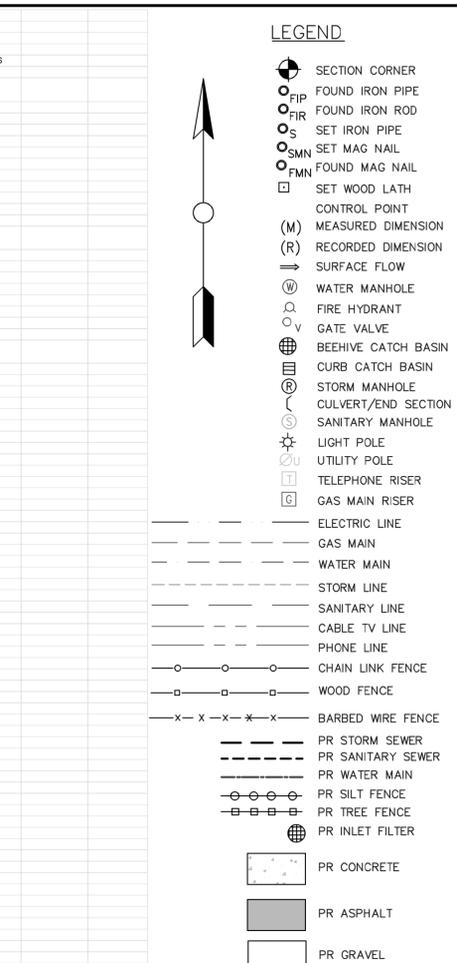
W5: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Impenious Cover Post-Development Bankfull Runoff Calculations (Vbimp-post)
 2 yr/24 hr storm event
 Impenious Cover CN from WS1
 S=(1000)CN/10
 Q=(P-0.25)^(2)/(P+0.85)
 Impenious Cover Area from WS1
 Vbimp-post=Q(1/12)Area
 Vbimp-post=2,245 cf

W6: STANDARD METHOD RUNOFF VOLUME CALCULATIONS
 Determine Time of Concentration for Applicable Flow Types (Tc-hrs)
 Change in Elevation
 Sheet Flow (<300)
 Waterway
 Waterway
 Small Tributary
 Total Time of Concentration (Tc-hrs) = 0.09

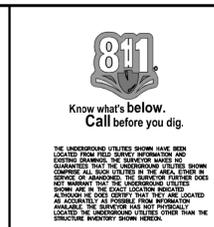
W7: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Impenious Cover Post-Development 100-yr Storm Runoff Calculations (V100-imp-post)
 100-yr Storm Event
 Impenious Cover CN from WS1
 S=(1000)CN/10
 Q=(P-0.25)^(2)/(P+0.85)
 Impenious Cover Area from WS1
 V100-imp-post=Q(1/12)Area
 V100-imp-post=93 cf

W8: STANDARD METHOD RUNOFF VOLUME CALCULATIONS
 Determine Onsite Infiltration Requirement
 Subtract the Pre-Development Bankfull from the Post-Development Bankfull Volume
 Total Post-Development Bankfull Volume
 Pre-development Bankfull Runoff Volume
 Bankfull Volume Difference
 Compare Bankfull Volume Difference with the First Flush Volume
 Bankfull Volume Difference = 1,806 cf
 First Flush Volume = 1,005 cf
 Onsite Infiltration Requirement (Vinf)
 Vinf = 1,806 cf

W9: STANDARD METHOD RUNOFF VOLUME CALCULATION
 Storage Volume Pipe = Length * Area of Pipe
 Area 30" Pipe = 4,90625 sf
 Length of Pipe = 1,868 ft
 Volume = 9,165 cf
 Storage Volume Aggregate = Volume Storage - Volume Pipe * Voids Ratio
 Volume Storage = 18,213 cf
 Volume Pipe = 9,165 cf
 Volume Aggregate = 9,048 cf
 Voids Ratio = 0.30
 Volume Aggregate Storage = 2,714 cf
 Total Subsurface Storage = 11,879 cf

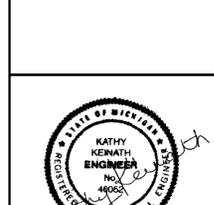


STORM WATER MANAGEMENT NARRATIVE:
 THE EXISTING SITE HAS ONE SINGLE FAMILY RESIDENCE THAT WILL BE DEMOLISHED. THERE IS NO STORM WATER MANAGEMENT SYSTEM ON THE EXISTING SITE. THE PROPOSED SITE WILL PROVIDE A STORM WATER MANAGEMENT SYSTEM THAT HAS BEEN DESIGNED TO STORE A 100 YEAR RAIN EVENT AS DEFINED BY THE WASHTEN COUNTY WATER RESOURCES COMMISSION CURRENT REGULATIONS. THE BUILDING ROOF WATER DOES NOT REQUIRE PRE-TREATMENT AND WILL BE PIPED DIRECTLY TO THE UNDERGROUND DETENTION SYSTEM. THE PARKING LOT AND SIDEWALKS WILL SHEET FLOW TO A RAIN GARDEN LOCATED ON THE SOUTH SIDE OF THE PARKING LOT AT THE EXISTING AND PROPOSED LOW POINT ON THE SITE. AN OVERFLOW IS PROVIDED IN THE RAIN GARDEN THAT WILL THEN FLOW TO THE UNDERGROUND DETENTION SYSTEM. THE RAIN GARDEN WILL PROVIDE THE REQUIRED FOREBAY PRE-TREATMENT VOLUME FOR THE PAVEMENT AND THE SIDEWALKS. AN OUTLET CONTROL STRUCTURE IS PROVIDED ON THE EAST SIDE OF THE PARKING LOT THAT WILL CONTROL THE RELEASE OF THE FIRST FLUSH, BANKFULL AND 100-YEAR VOLUMES. THE OUTLET CONTROL STRUCTURE BAFFLE WILL PROVIDE AN EMERGENCY OVERFLOW WITH THE TOP OF THE BAFFLE SET AT THE HIGH WATER ELEVATION OF THE UNDERGROUND DETENTION SYSTEM. THE STRUCTURE WILL OUTLET TO THE EXISTING CITY STORM SEWER IN THE S MAPLE RIGHT-OF-WAY. THE SITE HAS BEEN GRADED TO MAINTAIN EXISTING DRAINAGE PATTERNS TO THE EXTENT POSSIBLE. AREAS ALONG THE WEST SIDE OF THE SITE WILL REMAIN UNDISTURBED AND CONTINUE TO FLOW TO THE WEST. THERE IS OFF SITE DRAINAGE THAT FLOWS TOWARDS THE SITE FROM THE NORTH AND THE SOUTH. THIS AREA IS SHOWN BY THE DRAINAGE AREA TO UNDERGROUND DETENTION SYSTEM BOUNDARY.

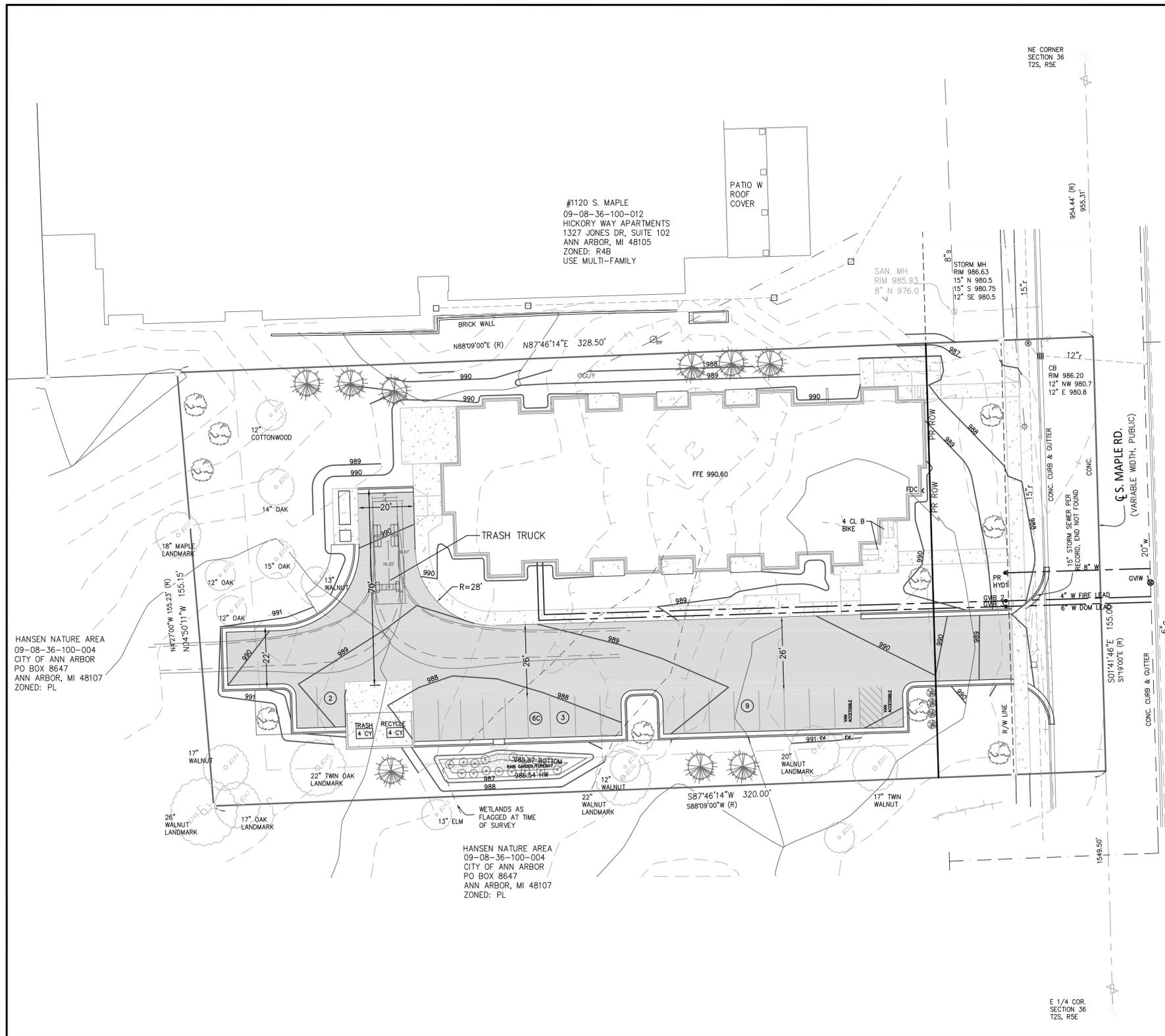


Macon Engineering, LLC.
 P.O. Box 314, Chelsea, MI 48118 734-216-9941

HICKORY WAY III
 ANN ARBOR, MI
 SITE PLAN
 STORM WATER
 MANAGEMENT



DATE: 4-25-24
 SCALE: 1"=20'
 SHEET NO.: SP-10



HANSEN NATURE AREA
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ZONED: PL

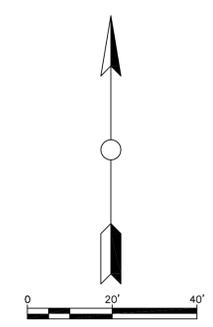
HANSEN NATURE AREA
09-08-36-100-004
CITY OF ANN ARBOR
PO BOX 8647
ANN ARBOR, MI 48107
ZONED: PL

#1120 S. MAPLE
09-08-36-100-012
HICKORY WAY APARTMENTS
1327 JONES DR, SUITE 102
ANN ARBOR, MI 48105
ZONED: R4B
USE MULTI-FAMILY

SOLID WASTE MANAGEMENT PLAN:
THE DEVELOPMENT PROPOSES TO PROVIDE BOTH REFUSE AND RECYCLING DUMPSTERS FOR STORAGE LOCATED IN THE DUMPSTER ENCLOSURE PROVIDED ON THE SOUTH SIDE OF THE PARKING LOT. CALCULATIONS ARE PROVIDED TO VERIFY THE NUMBER OF DUMPSTERS THAT ARE NEEDED TO SERVE THE PROJECT. ONE 4 CY DUMPSTER FOR TRASH AND ONE 4 CY DUMPSTER FOR RECYCLING WILL BE PROVIDED. ONE COLLECTION PER WEEK IS ANTICIPATED. TRUCKS WOULD ACCESS THE SITE FROM THE PROPOSED DRIVEWAY OFF S MAPLE ROAD AND THEN DRIVE WESTERLY TO THE LOCATION OF THE DUMPSTER PICK UP AREA AS SHOWN ON THE PLAN. A TURNAROUND AREA HAS BEEN PROVIDED FOR THE TRUCKS TO MANUEVER ON THE SITE. THE TRUCK WOULD EXIT THE SITE ON S MAPLE ROAD.

LEGEND

- SECTION CORNER
- FOUND IRON PIPE
- FOUND IRON ROD
- SET IRON PIPE
- SET MAG NAIL
- FOUND MAG NAIL
- SET WOOD LATH
- CONTROL POINT
- MEASURED DIMENSION
- RECORDED DIMENSION
- SURFACE FLOW
- WATER MANHOLE
- FIRE HYDRANT
- GATE VALVE
- BEEHIVE CATCH BASIN
- CURB CATCH BASIN
- STORM MANHOLE
- CULVERT/END SECTION
- SANITARY MANHOLE
- LIGHT POLE
- UTILITY POLE
- TELEPHONE RISER
- GAS MAIN RISER
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- GAS MAIN
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- STORM LINE
- SANITARY LINE
- CABLE TV LINE
- PHONE LINE
- CHAIN LINK FENCE
- WOOD FENCE
- BARBED WIRE FENCE
- PR STORM SEWER
- PR SANITARY SEWER
- PR WATER MAIN
- PR SILT FENCE
- PR TREE FENCE
- PR INLET FILTER
- PR CONCRETE
- PR ASPHALT
- PR GRAVEL
- PR CURB
- PR CONTOUR LINE
- PR SPOT GRADE



Solid Waste Generation		
Office	1 lb/day per 100 sf	Wastecare Corporation Industry Standards/National Solid Waste Management Association
Residential (Apartment)	2.5 lbs/person	Wastecare Corporation Industry Standards/National Solid Waste Management Association
Residential (Apartment)	4 lbs/person	Wastecare Corporation Industry Standards/National Solid Waste Management Association
Approximately 30% of waste is recycled from USEPA data		

Proposed Office		
Building	Area	Waste per Day
Hickory Way III	2500 sf	25 lbs/day
Total Waste		175 lbs/week
Trash Generated		123 lbs/week
Recycle Generated		53 lbs/week

Proposed Residential		
Building	Units	Waste per Day
Efficiency	0	0 lbs/day
1 Bedroom	39	156 lbs/day
2 Bedroom	0	0 lbs/day
Total Waste		156 lbs/week
Trash Generated		109 lbs/week
Recycle Generated		47 lbs/week

Totals		
Total Waste		331 lbs/week
Trash Generated		232 lbs/week
Recycle Generated		99 lbs/week

Conversion Factors		
96 gal waste cart =	336 lbs	max capacity from City of Ann Arbor's website
1 gal waste =	3.5 lbs	max capacity from City of Ann Arbor's website
96 gal waste cart =	224 lbs	max capacity w/ 1.5 factor of safety
1 gal waste =	2.3 lbs	max capacity w/ 1.5 factor of safety
2 cy dumpster holds	400 lbs	Waste Management Capacity
2 cy dumpster holds	267 lbs	max capacity w/ 1.5 factor of safety
4 cy dumpster holds	800 lbs	Waste Management Capacity
4 cy dumpster holds	533 lbs	max capacity w/ 1.5 factor of safety
6 cy dumpster holds	1200 lbs	Waste Management Capacity
6 cy dumpster holds	800 lbs	max capacity w/ 1.5 factor of safety

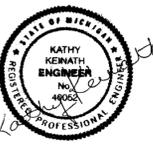
Dumpsters Required w/o Compactor		
2 cy dumpster	0.868875 ea	Trash per week
2 cy dumpster	0.372375 ea	Recycle per week
4 cy dumpster	0.434438 ea	Trash per week
4 cy dumpster	0.186188 ea	Recycle per week
6 cy dumpster	0.289625 ea	Trash per week
6 cy dumpster	0.124125 ea	Recycle per week

Dumpsters Provided		
Trash Dumpsters	1 ea	4 cy w/o compactor
Recycle Dumpster	1 ea	4 cy w/o compactor

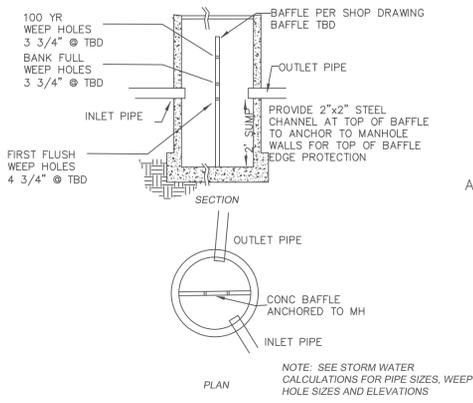


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P.O. Box 314, Chelsea, MI 48118 734-216-9941

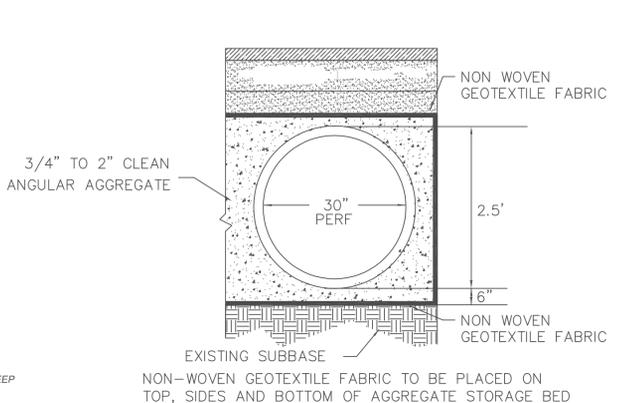
HICKORY WAY III
ANN ARBOR, MI
SITE PLAN
SOLID WASTE
MANAGEMENT PLAN



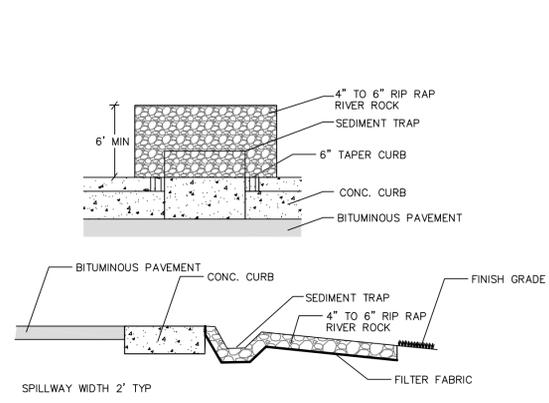
DATE 4-25-24
SCALE 1"=20'
SHEET NO. SP-13



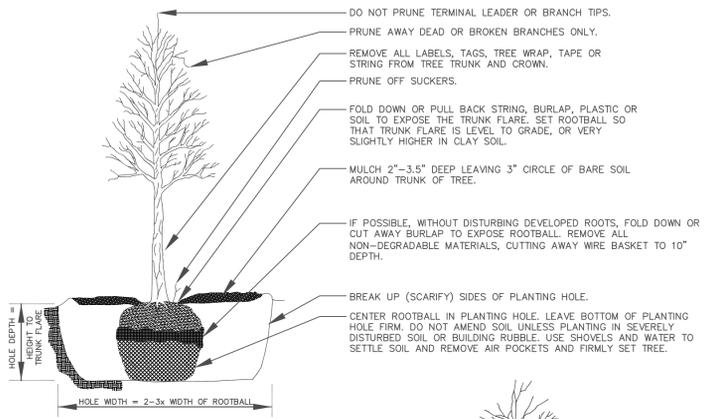
4' DIAMETER OUTLET STRUCTURE



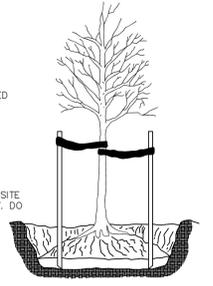
UNDERGROUND DETENTION SECTION



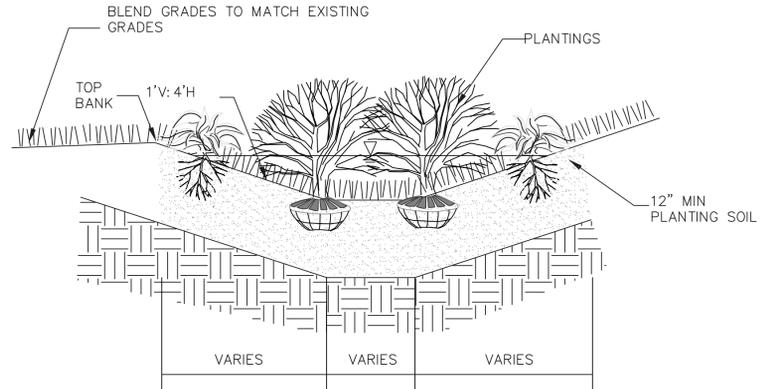
CURB CUT SPILLWAY AND SEDIMENT TRAP



- DO NOT PRUNE TERMINAL LEADER OR BRANCH TIPS.
- PRUNE AWAY DEAD OR BROKEN BRANCHES ONLY.
- REMOVE ALL LABELS, TAGS, TREE WRAP, TAPE OR STRING FROM TREE TRUNK AND CROWN.
- PRUNE OFF SUCKERS.
- FOLD DOWN OR PULL BACK STRING, BURLAP, PLASTIC OR SOIL TO EXPOSE THE TRUNK FLARE. SET ROOTBALL SO THAT TRUNK FLARE IS LEVEL TO GRADE, OR VERY SLIGHTLY HIGHER IN CLAY SOIL.
- MULCH 2"-3.5" DEEP LEAVING 3" CIRCLE OF BARE SOIL AROUND TRUNK OF TREE.
- IF POSSIBLE, WITHOUT DISTURBING DEVELOPED ROOTS, FOLD DOWN OR CUT AWAY BURLAP TO EXPOSE ROOTBALL. REMOVE ALL NON-DEGRADABLE MATERIALS, CUTTING AWAY WIRE BASKET TO 10" DEPTH.
- BREAK UP (SCARIFY) SIDES OF PLANTING HOLE.
- CENTER ROOTBALL IN PLANTING HOLE. LEAVE BOTTOM OF PLANTING HOLE FIRM. DO NOT AMEND SOIL UNLESS PLANTING IN SEVERELY DISTURBED SOIL OR BUILDING RUBBLE. USE SHOVELS AND WATER TO SETTLE SOIL AND REMOVE AIR POCKETS AND FIRMLY SET TREE.



TREE PLANTING



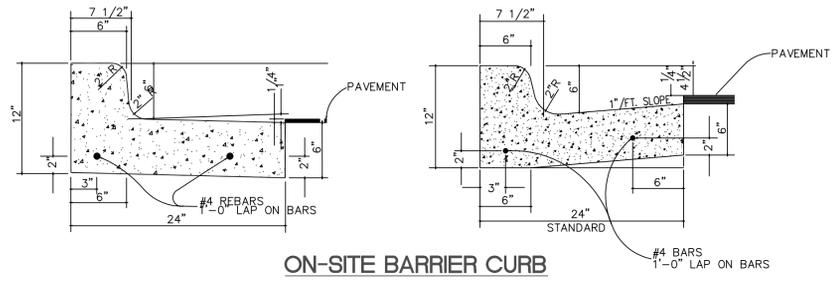
Top Soil
A
Topsoil planting mix in infiltration area shall be stockpiled or from offsite and shall be screened and meet the following criteria:
pH range between 5.5 - 6.5
organic content between 5 and 30%
sand 30-50%
clay content less than 5%

RAIN GARDEN/BIORETENTION CROSS-SECTION

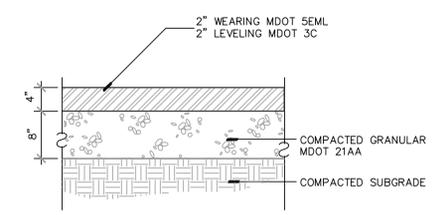
PERMANENT MAINTENANCE TASKS AND SCHEDULE

TASKS	Catch Basin Inlet Castings	Rain Gardens	Rip-Rap	Subsurface Infiltration	Emergency Overflow	SCHEDULE
Inspect for sediment accumulation	X	X	X	X	X	Following storms over 1 inch
Removal of sediment accumulation	X	X	X	X	X	As needed
Inspect for floatables and debris	X	X		X	X	Annually
Clearing of floatables and debris	X	X		X	X	Annually
Inspection for erosion		X	X			Annually
Re - establish permanent vegetation on eroded slopes		X				As needed
Replacement of stone			X			Every 3-5 years
Inspect Storm system components following storms of 1 inch or more	X	X	X	X	X	As needed
Make adjustments or replacements as determined by annual wet weather inspection	X	X	X	X	X	As needed
Keep records of inspections and maintenance activities and report to owner.	X	X	X	X	X	Annually
Keep records of costs for inspections, maintenance & repairs. report to owner.	X	X	X	X	X	Annually

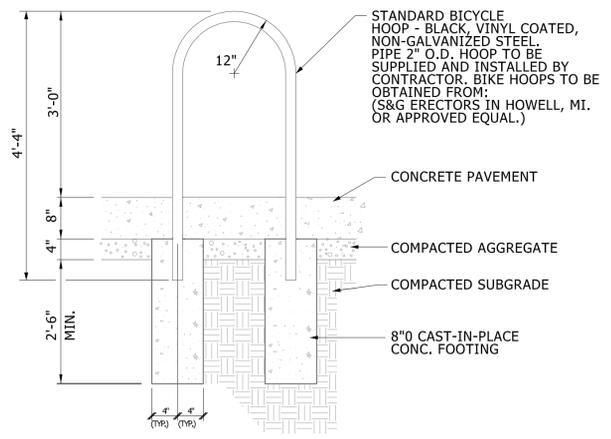
The responsible party for implementing the maintenance plan will be the owner
The estimated cost for implementing the maintenance plan is \$1,000 annually.



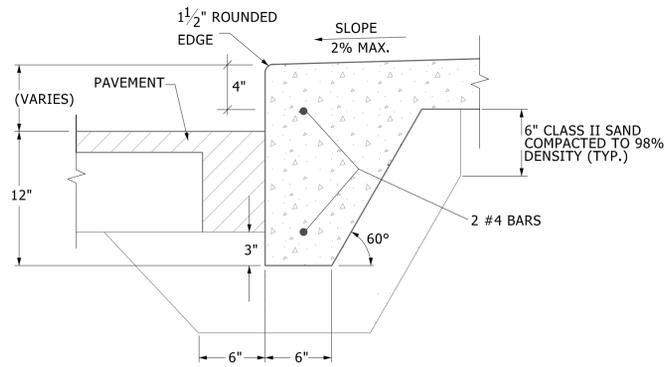
ON-SITE BARRIER CURB



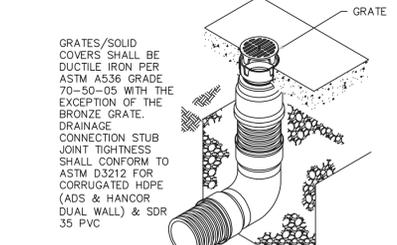
ON-SITE BITUMINOUS PAVEMENT



ON-SITE BICYCLE HOOP DETAIL

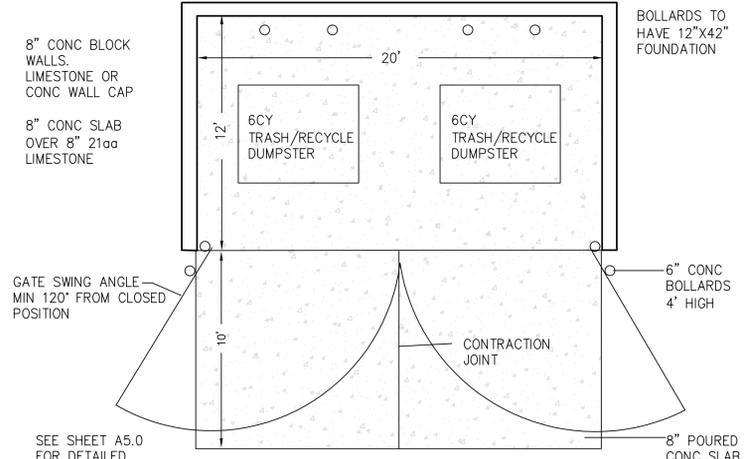


ON-SITE THICKENED EDGE WALK DETAIL



NYLOPLAST INLINE YARD DRAIN

GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PREDERTRANSFORMED	LIGHT DUTY	0896C03	700-110-194
SOLID COVER	LIGHT DUTY	0896C04	700-110-195
BRONZE	LIGHT DUTY	0896C08	700-110-196
LOOSE	N/A	0896C09	700-110-197
DROP IN GRATE	LIGHT DUTY	08010	700-110-019



DUMPSTER ENCLOSURE



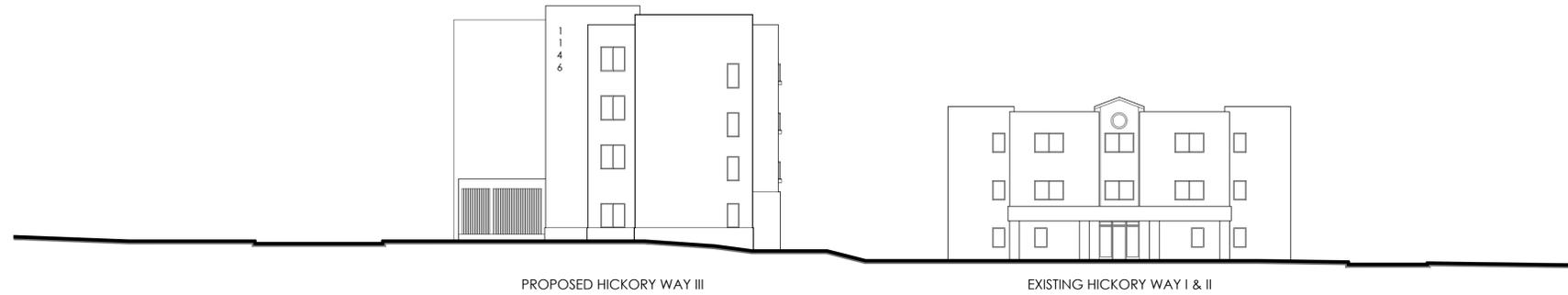
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HICKORY WAY III
ANN ARBOR, MI
SITE PLAN
DETAILS

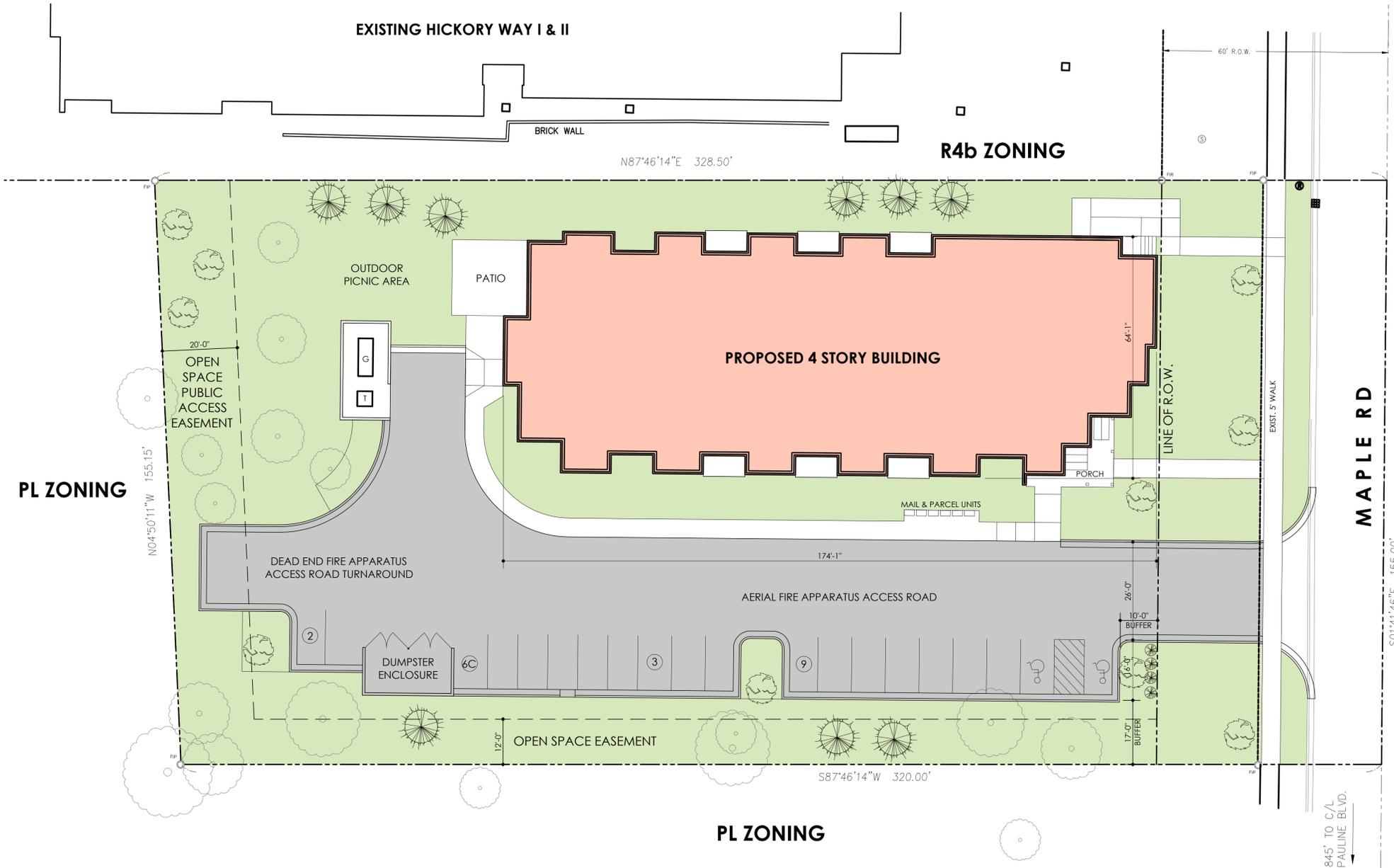


DATE	4-25-24
SCALE	N.T.S.
SHEET NO.	SP-14



VERTICAL SITE SECTION

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



SITE DATA

ZONING	EXISTING PROPOSED	TWP PUD
SITE AREA		1.15 ACRES
BUILDING USE		LOW INCOME & PERMANENT SUPPORTIVE HOUSING (MSHDA 9%)
BUILDING HEIGHT		4 STORY (48')
TOTAL UNIT COUNT		
	FIRST FLOOR	6
	SECOND FLOOR	11
	THIRD FLOOR	11
	FOURTH FLOOR	11
	TOTAL	39
BUILDING AREA		
	FIRST FLOOR	9,569
	SECOND FLOOR	9,294
	THIRD FLOOR	9,294
	FOURTH FLOOR	9,294
	TOTAL	37,451
VEHICLE PARKING		
	REQUIRED	0
	PROVIDED	20



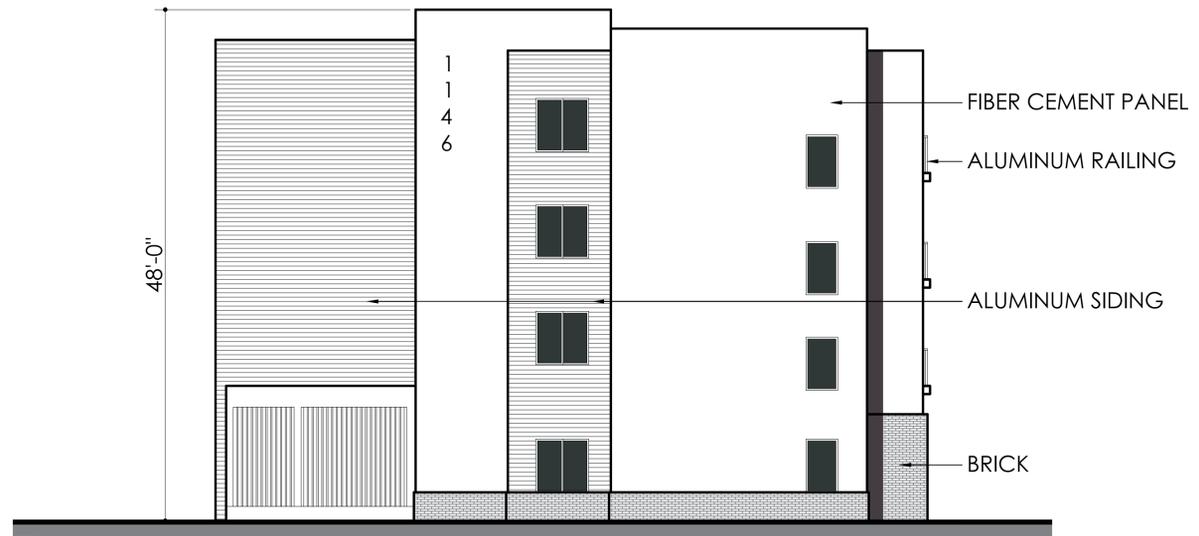
PROPOSED SITE PLAN

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

HICKORY WAY III
ANN ARBOR MICHIGAN

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ELEVATION at MAPLE RD SCALE: 1/8"=1'-0"



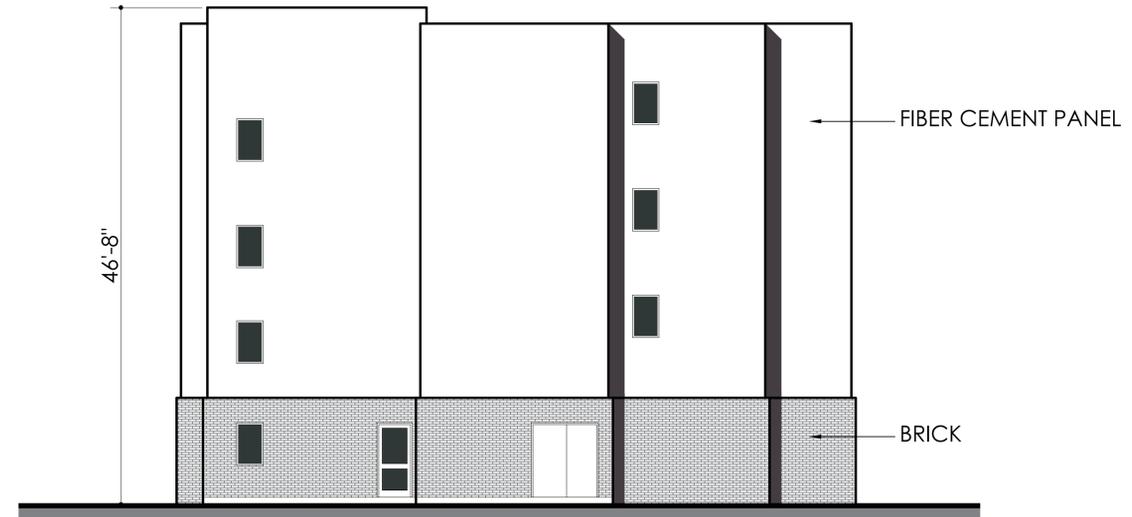
FRONT ELEVATION

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

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END ELEVATION

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



REAR ELEVATION

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

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