



Special/Study Session Meeting
7:30 p.m., Wednesday, May 24
Conference Room
23600 Liberty Street
Farmington, MI 48335

STUDY SESSION AGENDA

- 1. Roll Call**
- 2. Approval of Agenda**
- 3. Public Comment**
- 4. Consideration of Planned Unit Development (PUD) for Maxfield Training Center (Hillside Townes)**
- 5. Other Business**
- 6. Council Comment**
- 7. Adjournment**

The City will follow its normal procedures for accommodation of persons with disabilities. Those individuals needing accommodations for effective participation in this meeting should contact the City Clerk (248) 474-5500, ext. 2218 at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.

Farmington City Council Staff Report	Special Council Meeting Date: May 24, 2023	Reference Number 4
Submitted by: City Manager		
<u>Description</u> Consideration of Planned Unit Development (PUD) for Maxfield Training Center (Hillside Townes) and Consideration to Approve Fourth Amendment to Agreement to Purchase and Develop Property—Maxfield Training Center/Robertson Bros.		
<u>Requested</u> (1) Approve the proposed Fourth Amendment to Agreement to Purchase and Develop Property and authorize the City Manager and City Attorney to finalize the document with any final minor amendments, to be signed by the Mayor and City Clerk; (2) Tentative approval of PUD Plan, subject to approval of acceptable PUD Agreement and final PUD Concept Plan incorporating Council conditions as discussed.		
<p><u>Background</u> The City signed a Purchase Agreement with Robertson Bros for the sale and development of the Maxfield Training Center and two residential parcels effective August 31, 2021. There have been three amendments to the Agreement so far, all extending dates for various actions required under the Agreement.</p> <p>The Developer has now submitted the PUD application and has received recommendations of approval from the Planning Commission and DDA Design Committee. The last Planning Commission meeting occurred in November 2022. The next step in the process under the ordinance is City Council approval. However, under the Agreement to Purchase and Develop Property, the submission of the PUD to the City Council is to be contemporaneous with the submission of the Developer’s Brownfield Plan and DDA TIF Credit Plan. While the City Council has not received an actual Brownfield Plan or TIF Credit Plan, Council has received significant documentation relating to both, and has met with the City’s consultant, Eric Helzer, to discuss what it is expected and intended to be in those plans, which are well underway.</p> <p>At this meeting, Council is expected to review the current proposed PUD Concept Plan—submitted with some minor revisions since its review by the Planning Commission and DDA Design Committee. A copy of the Concept Plan packet is attached to this report.</p> <p>Robertson Bros and City Staff are hoping for the Council to hear a presentation from Robertson Bros, make any comments that Council determines to be appropriate, and then consider directing the staff, City Attorney, and Robertson Bros to prepare a proposed PUD Agreement for consideration by Council at its next available meeting. If Council determines that it will likely approve the Concept Plan, City Administration will work to have the matter back before Council as soon as possible.</p>		

In that vein, also before City Council is a proposed Fourth Amendment to the Purchase Agreement between the City and Robertson Bros. The purpose of the Agreement would be to extend the date for the Developer to receive PUD approval from the City Council to July 24, 2023, and extends the final date for Robertson Bros to have all “conditions to closing” satisfied to November 24, 2023. Given the time invested in the project by the City so far, and its current status, City Administration recommends approval of the Fourth Amendment.

Agenda Review

Department Head	Finance/Treasurer	City Attorney	City Manager
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Existing Staircase /
Connection to Park

Site Data:
 Gross Site Area: 3.00 Ac.
 Proposed Units: 53
 Proposed Density: 17.67 Du./Ac.

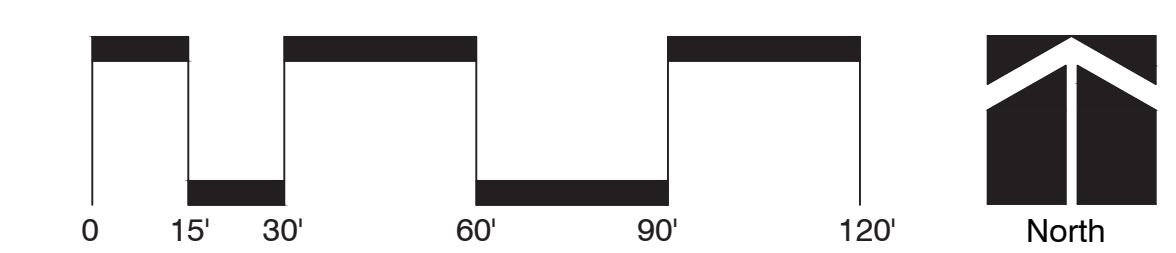
Building Setbacks:
 - Front Yard: 9' min. (to Deck)
 - Building Separation: 15' min.

Parking:
 - Garage Parking: 54 spaces
 - Guest Parking: 42 spaces
 - Street Parking: 15 spaces
 - Parking Distribution: 2.06 spaces / Du.
 *Shared Parking Available with Church

Hillside Townes

Rendered Site Plan
 Farmington, Michigan

November 2022



CONSULTANT:

Project :
 ROBERTSON
 BROTHERS CITY OF
 FARMINGTON
 TOWNHOME
 DEVELOPMENT

Issued for :
 REVIEW 02/07/2023

Drawn by :
 JRM
 Checked by :
 JRM

Sheet Title :
 EXTERIOR
 ELEVATIONS
 FIVE-UNIT BUILDING

Project No. :
 2020036

Sheet No. :
A3.2

GENERAL ELEVATION/SECTION NOTES:

1. THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE SET OF WORK AS INDICATED AND SHALL FIELD VERIFY ALL WORK, COORDINATE ALL DRAWINGS / NEW WORK AND SHALL NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES.
2. ALL DIMENSIONS ARE SHOWN FROM FINISH FACE TO FINISH FACE OF PARTITION UNLESS OTHERWISE NOTED.
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL LOCAL, STATE, COUNTY CODE REGULATIONS, O.S.H.A., AND THE AMERICAN WITH DISABILITIES ACT (ADA). REFER TO THE CODE PLAN FOR MORE INFORMATION.
4. ALL FOUNDATIONS TO EXTEND 42" MIN. BELOW GRADE
5. ALL FOUNDATIONS ADJACENT TO EXIST. FND'S TO MATCH BOTTOM ON FOOTING ELEVATION.
6. UNDER NO CIRCUMSTANCES EXCAVATE BELOW BOTTOM OF EXIST. FND'S TO A MIN. INFLUENCE ZONE DELINEATED BY 1 VERTICAL, 2 HORIZONTAL LINE



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

NOT FOR CONSTRUCTION

DO NOT SCALE DRAWINGS © 2021 Timothy Fimoff Architect, PLLC

SENDER STRIP LOCATION

CONSULTANT:

Project :
 ROBERTSON
 BROTHERS CITY OF
 FARMINGTON
 TOWNHOME
 DEVELOPMENT

Issued for :
 REVIEW 02/07/2023

Drawn by :
 JRM
 Checked by :
 JRM

Sheet Title :
 EXTERIOR
 ELEVATIONS
 EIGHT-UNIT BUILDING

Project No. :
 2020036

Sheet No. :
A3.4

GENERAL ELEVATION/SECTION NOTES:

1. THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE SET OF WORK AS INDICATED AND SHALL FIELD VERIFY ALL WORK, COORDINATE ALL DRAWINGS / NEW WORK AND SHALL NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES.
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NOT FOR CONSTRUCTION

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1 EIGHT-UNIT BUILDING - REAR ELEVATION
 SCALE: 3/16" = 1'-0"

BINDER STRIP LOCATION





CONSULTANT:

Project :
 ROBERTSON
 BROTHERS CITY OF
 FARMINGTON
 TOWNHOME
 DEVELOPMENT

Issued for :
 REVIEW 02/07/2023

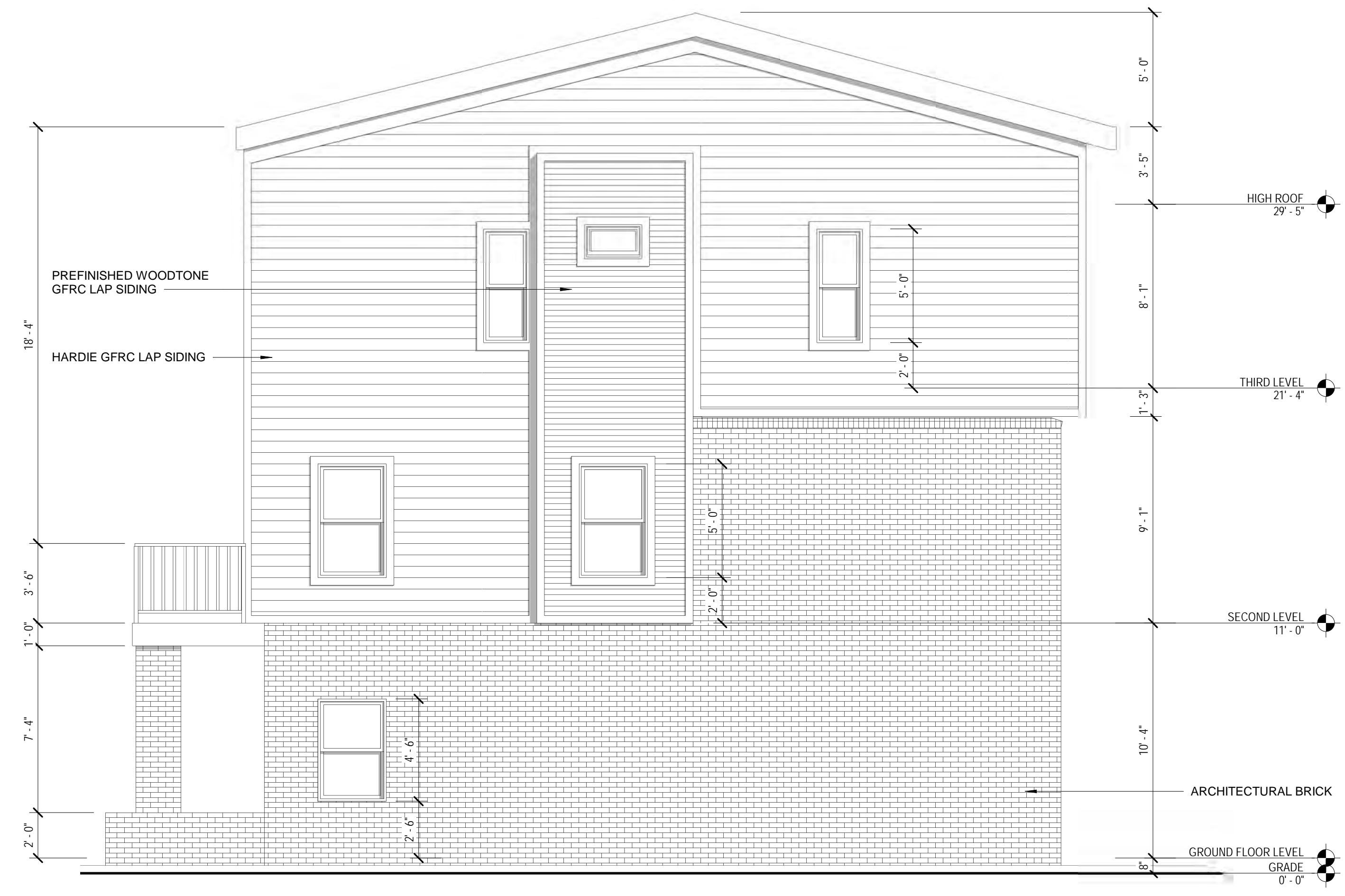
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 JRM
 Checked by :
 JRM

Sheet Title :
 EXTERIOR
 ELEVATIONS
 NINE-UNIT BUILDING

Project No. :
 2020036

Sheet No. :

A3.5



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



1 NINE-UNIT BUILDING - REAR ELEVATION
 SCALE: 3/16" = 1'-0"

NOT FOR CONSTRUCTION

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Owner / Developer

ROBERTSON BROTHERS HOMES
6905 Telegraph Road
Bloomfield Hills, MI 48301
Tel. (248) 282-1428

CONTACT: Tim Loughrin

Civil Engineer

NOWAK & FRAUS ENGINEERS
46777 Woodward Ave.
Pontiac, MI 48342-5032
Tel. (248) 332-7931
Fax. (248) 332-8257

CONTACT: Brad W. Brickel, P.E.

Landscape Architect

LAND DESIGN STUDIO
750 Forest Ave., Suite 101
Birmingham, MI 48009
Tel. (248) 594-3220

CONTACT: Tad Krear

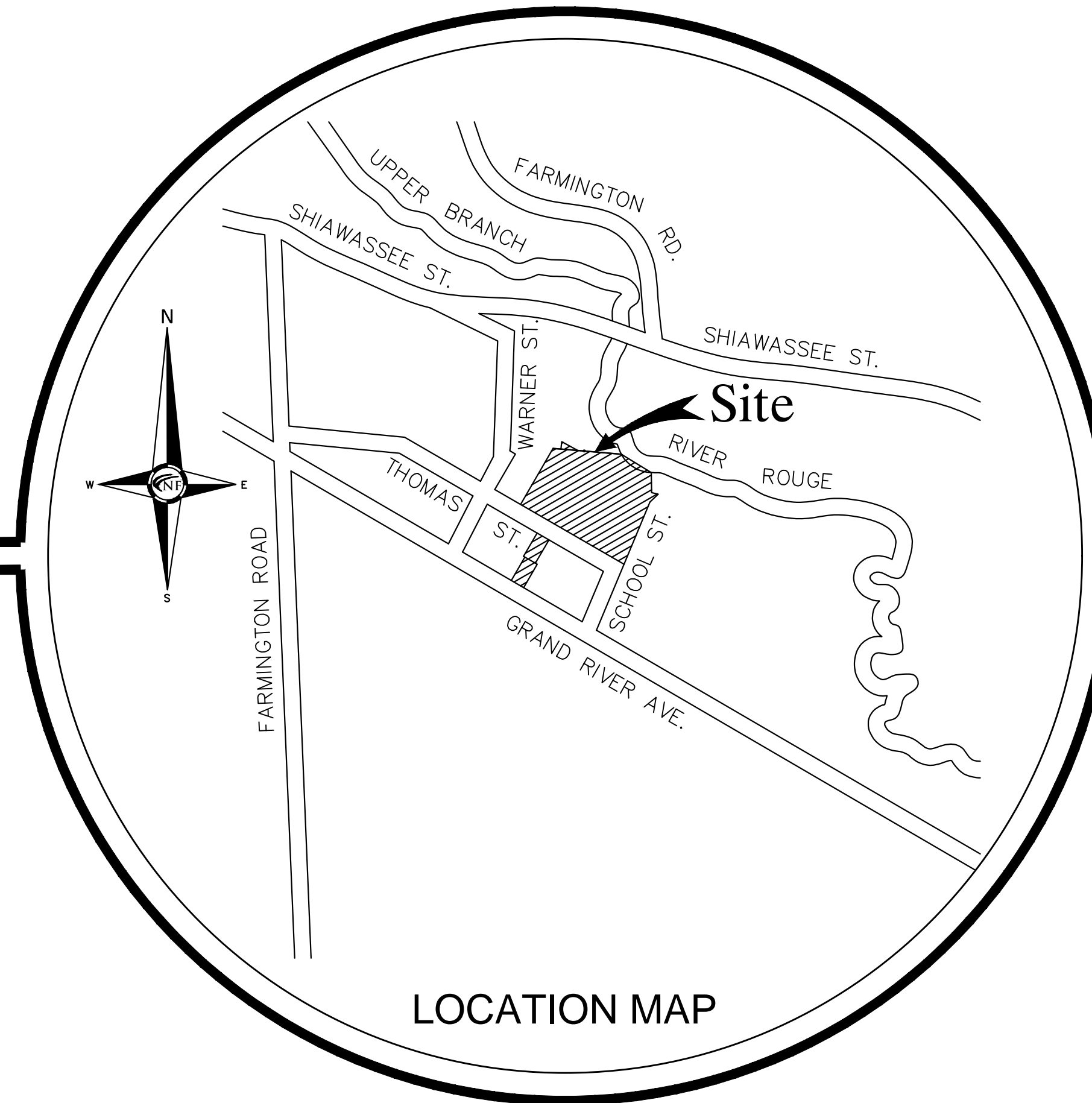
City of Farmington,
Oakland County, Michigan
SITE PLAN DOCUMENTS
Prepared For
Robertson Brothers Homes
PART OF THE NW 1/4 OF SECTION 27, T.1N., R.9E.,
CITY OF FARMINGTON,
OAKLAND COUNTY, MICHIGAN

SHEET INDEX

- C00 Cover Sheet
- C01 ALTA/NSPS Land Title/ Topographic/ Tree Survey
- C02 Cross Sections A & B
- C03 Cross Sections C & D
- C04 Survey Notes-Tree List
- C05 Site Plan
- C06 Aerial Vicinity Plan
- C07 Fire Truck Turning Plan
- C08 Garbage Truck Turning Plan
- C09 Paving & Grading Plan (1 of 2)
- C10 Paving & Grading Plan (2 of 2)
- C11 Calculation, Notes & Details Plan

- L-1 Conceptual Landscape Plan
- L-2 Conceptual Promenade Plan
- L-3 Conceptual Linear Park Plan & Details
- L-4 Landscape Details and Notes

- 1 of 1 Site Photometric Plan
- 1 of 1 Park Area Photometric Plan



LOCATION MAP

LEGAL DESCRIPTION - PER TITLE COMMITMENT

LAND IN THE CITY OF FARMINGTON, OAKLAND COUNTY, MI, DESCRIBED AS FOLLOWS:

PARCEL 1:
LOT 2, BLOCK 8, OF AMENDED PLAT OF LOTS 21, 22, 23 AND 24 OF BLOCK 6, LOTS 31, 32, 33 AND 34 OF BLOCK 4, LOTS 35 AND 36 OF BLOCK 5, VACATED THIRD STREET AND VACATED PART OF CASS STREET OF "PLAT OF DAVIS ADDITION TO THE VILLAGE OF FARMINGTON", ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 297 OF PLATS, PAGES 19 AND 20, OAKLAND COUNTY RECORDS.

PARCEL 2:
PART OF LOT 5, OF ASSESSOR'S PLAT NO. 3, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 54 OF PLATS, PAGE 7, OAKLAND COUNTY RECORDS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHWEST CORNER OF LOT 2, BLOCK 8 OF "AMENDED PLAT OF LOTS 21, 22, 23 AND 24 OF BLOCK 6, LOTS 31, 32, 33 AND 34 OF BLOCK 4, LOTS 35 AND 35 OF BLOCK 5, VACATED THIRD STREET AND VACATED PART OF CASS STREET OF PLAT OF DAVIS ADDITION TO THE VILLAGE OF FARMINGTON", ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 297 OF PLATS, PAGES 19 AND 20, OAKLAND COUNTY RECORDS; THENCE SOUTH 87 DEGREES 12 MINUTES 02 SECONDS EAST ALONG THE NORTH LINE OF SAID LOT 2, BLOCK 8, 39.20 FEET TO THE POINT OF BEGINNING, ALSO BEING THE SOUTHWEST CORNER OF SAID LOT 5; THENCE NORTH 03 DEGREES 45 MINUTES 48 SECONDS EAST ALONG THE WEST LINE OF SAID LOT 5, 36.74 FEET; THENCE SOUTH 63 DEGREES 19 MINUTES 21 SECONDS EAST, 90.75 FEET TO A POINT ON THE NORTH LINE OF SAID LOT 2, BLOCK 8; THENCE NORTH 87 DEGREES 12 MINUTES 02 SECONDS WEST, ALONG SAID NORTH LINE OF LOT 2, BLOCK 8, 83.60 FEET TO THE POINT OF BEGINNING.

PARCEL 4:
THE NORTH 90 FEET OF LOT 15, BLOCK 3, EXCEPT THE EAST 5.75 FEET, OF PLAT OF DAVIS' ADDITION TO VILLAGE (NOW CITY) OF FARMINGTON, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 2 OF PLATS, PAGE 36, OAKLAND COUNTY RECORDS.

PARCEL 5:
THE EAST 47 FEET OF THE SOUTH 110 FEET OF LOT 15, BLOCK 3, OF PLAT OF DAVIS' ADDITION TO VILLAGE (NOW CITY) OF FARMINGTON, ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 2 OF PLATS, PAGE 36, OAKLAND COUNTY RECORDS.

TAX ITEM NUMBER: 23-27-152-019, AS TO PARCEL 1
VACANT, FARMINGTON, MI 48336

TAX ITEM NUMBER: 23-27-152-017, AS TO PARCEL 2
VACANT, FARMINGTON, MI 48336

TAX ITEM NUMBER: 23-27-154-004, AS TO PARCEL 4
ADDRESS: 33107 THOMAS STREET, FARMINGTON, MI 48336

TAX ITEM NUMBER: 23-27-154-008, AS TO PARCEL 5
ADDRESS: 33104 GRAND RIVER AVENUE, FARMINGTON, MI 48336

REVISIONS:
09-01-20 ISSUED FOR SITE PLAN REVIEW
05-15-23 REVISED PER SITE PLAN REVIEW

LIST OF DEVIATIONS

- REAR YARD SETBACK REQUIRED IS 25 FEET AND PROPOSED SETBACK IS 7.5 FEET.
- LOT LINE ABUTTING A RESIDENTIAL ZONE SETBACK REQUIRED IS 30 FEET AND PROPOSED SETBACK IS 7.5 FEET.

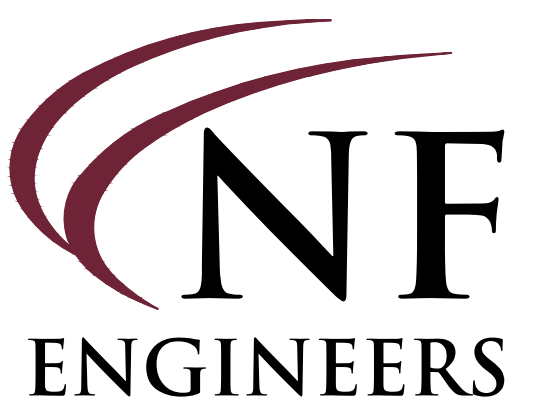
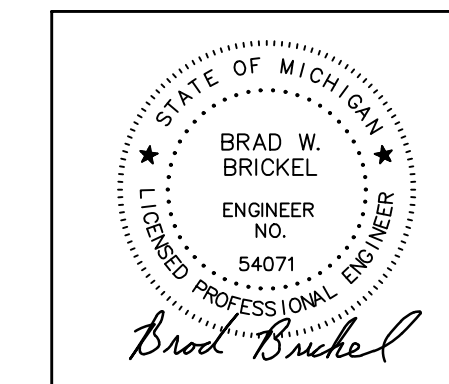
Project Name

Hillside Townes



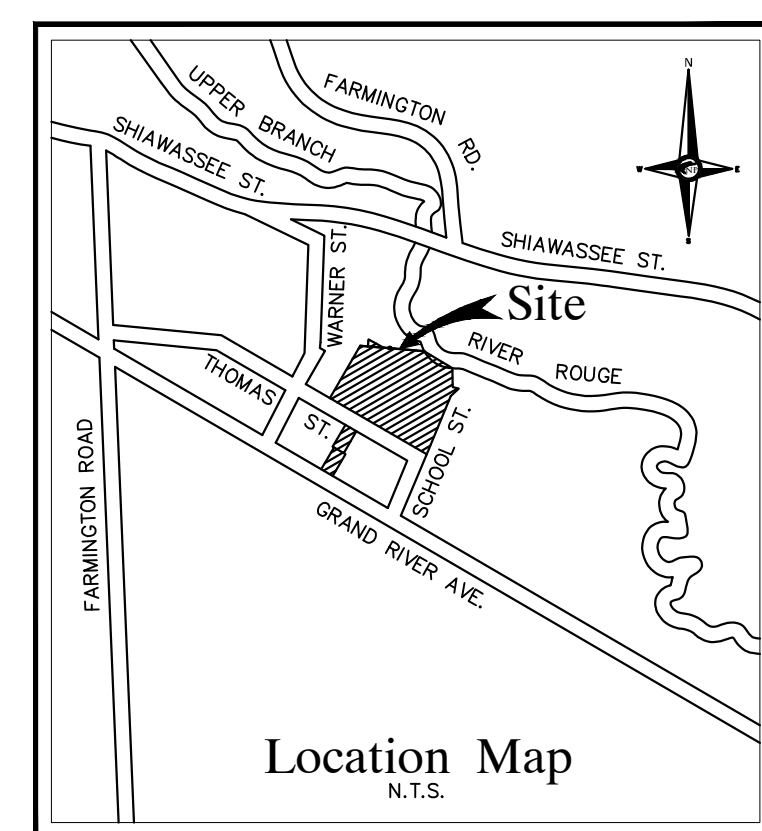
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N & F JOB #H900-04



CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM



MATCH LINE C04

MATCH LINE C04

SEAL

PROJECT
Maxfield Training Site
33000 Thomas Street
Farmington, MI 48336

CLIENT
Robertson Brothers Homes
6905 Telegraph Road
Bloomfield Hills, MI 48301

Contact: Tim Loughrin
Phone: 248.282.1428
Email: loughrin@robertsonhomes.com

PROJECT LOCATION
Part of the NW 1/4
of Section 27
T.1N., R.9E.
City of Farmington,
Oakland County, Michigan

SHEET
ALTA/NSPS Land Title /
Topographic / Tree Survey



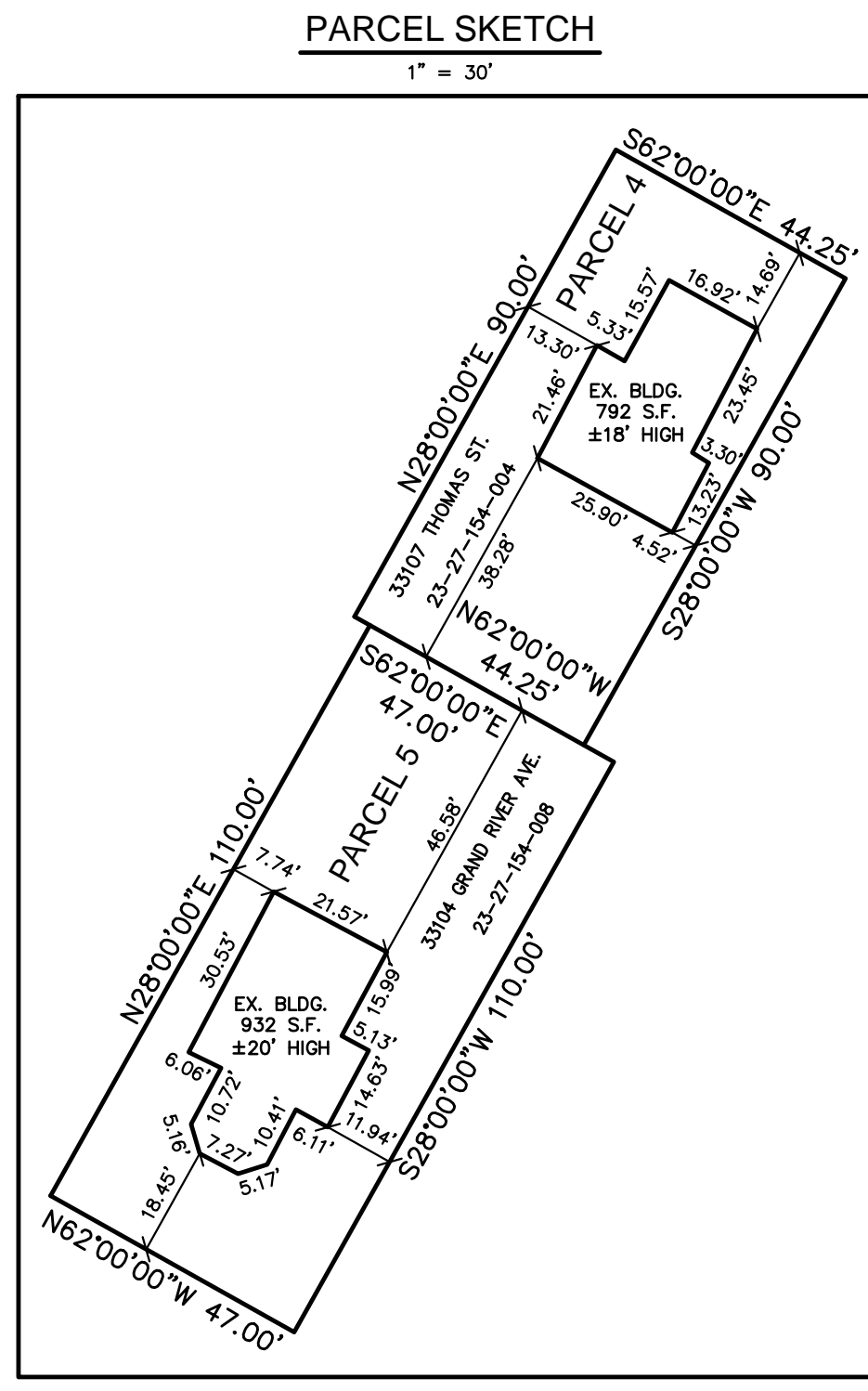
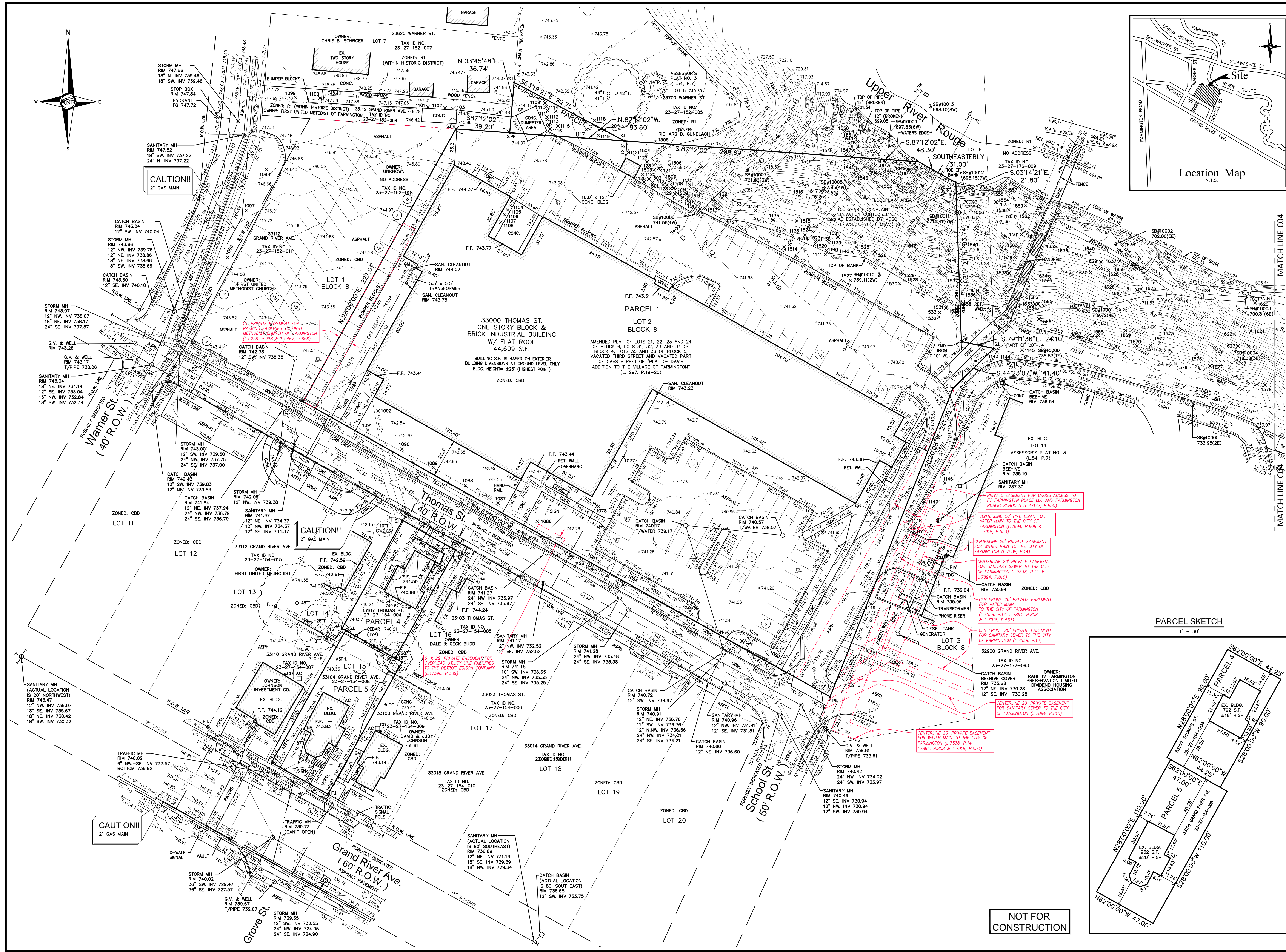
DATE	ISSUED/REVISED
06-30-21	SURVEY ISSUED
07-13-21	SURVEY REVISED
10-21-21	ALTA SURVEY ISSUED
11-29-21	ADDITIONAL TOPO NEAR RIVER
12-22-21	EXTRA TOPO NEAR RIVER
01-11-22	SOIL BORINGS ADDED
07-05-22	TREE SURVEY ADDED
05-15-23	REVISED PER SITE PLAN REVIEW

DRAWN BY:
M. Carnaghi
DESIGNED BY:

APPROVED BY:
K. Navaroli
DATE:
July 13, 2021

SCALE: 1" = 30'
30 15 0 15 30 45

NFE JOB NO. H900-04 **SHEET NO.** C01



33000 THOMAS ST.
ONE STORY BLOCK &
BRICK INDUSTRIAL BUILDING
W/ FLAT ROOF
44,609 S.F.
BUILDING S.F. IS BASED ON EXTERIOR
BUILDING DIMENSIONS AT GROUND LEVEL ONLY.
BLDG. HEIGHT= 225' (HIGHEST POINT)
ZONED: CBD

**AMENDED PLAT OF LOTS 21, 22, 23 AND 24
OF BLOCK 4, LOTS 31, 32, 33 AND 34 OF
BLOCK 5, LOTS 35 AND 36 OF BLOCK 6,
VACATED THIRD STREET AND VACATED PART
OF CASS STREET OF "PLAT OF DAVID
ADDISON TO THE VILLAGE OF FARMINGTON"
(L. 297, P.19-20)**

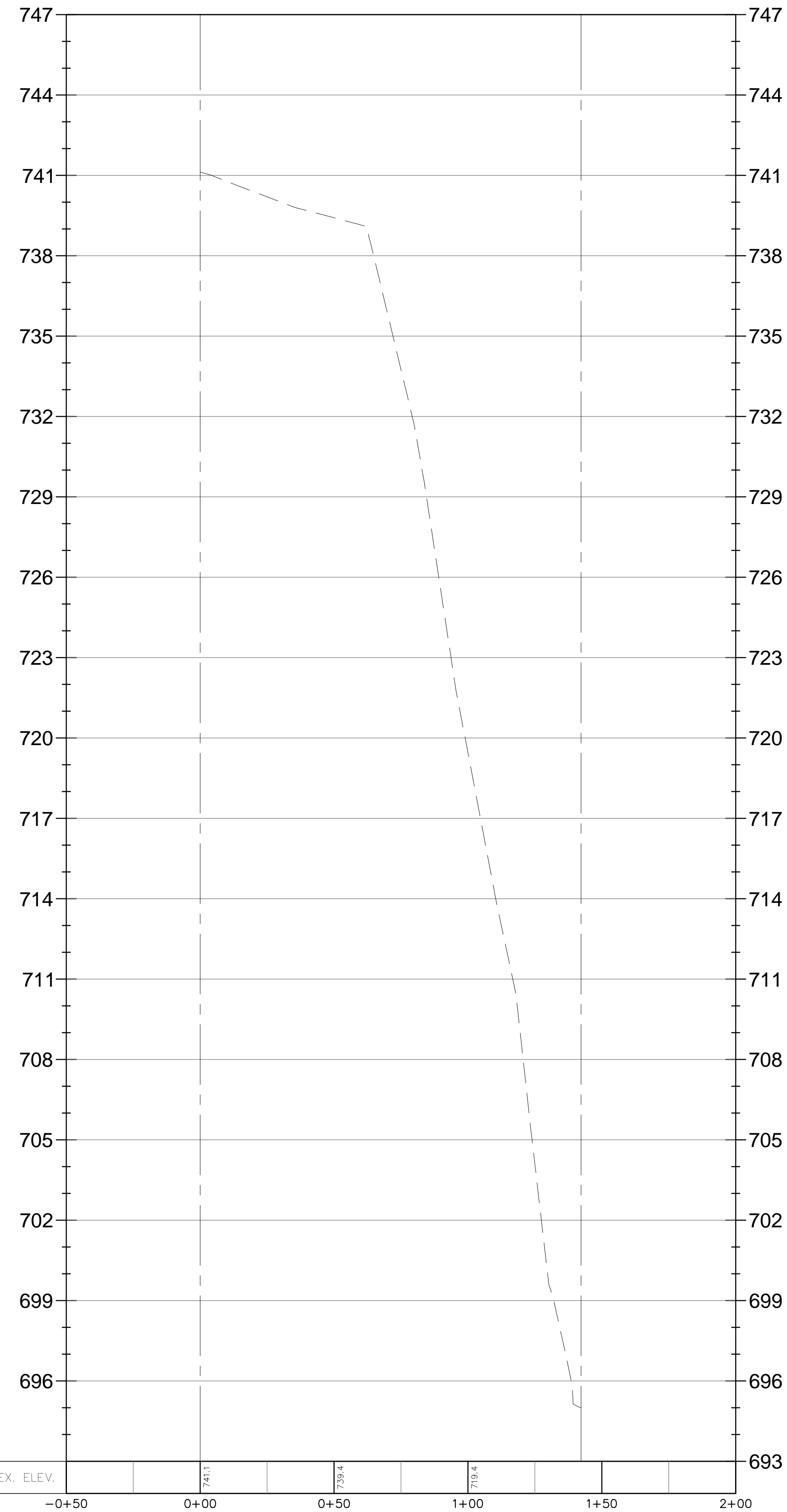
CAUTION!!
2" GAS MAIN

CAUTION!!
2" GAS MAIN

CAUTION!!
2" GAS MAIN

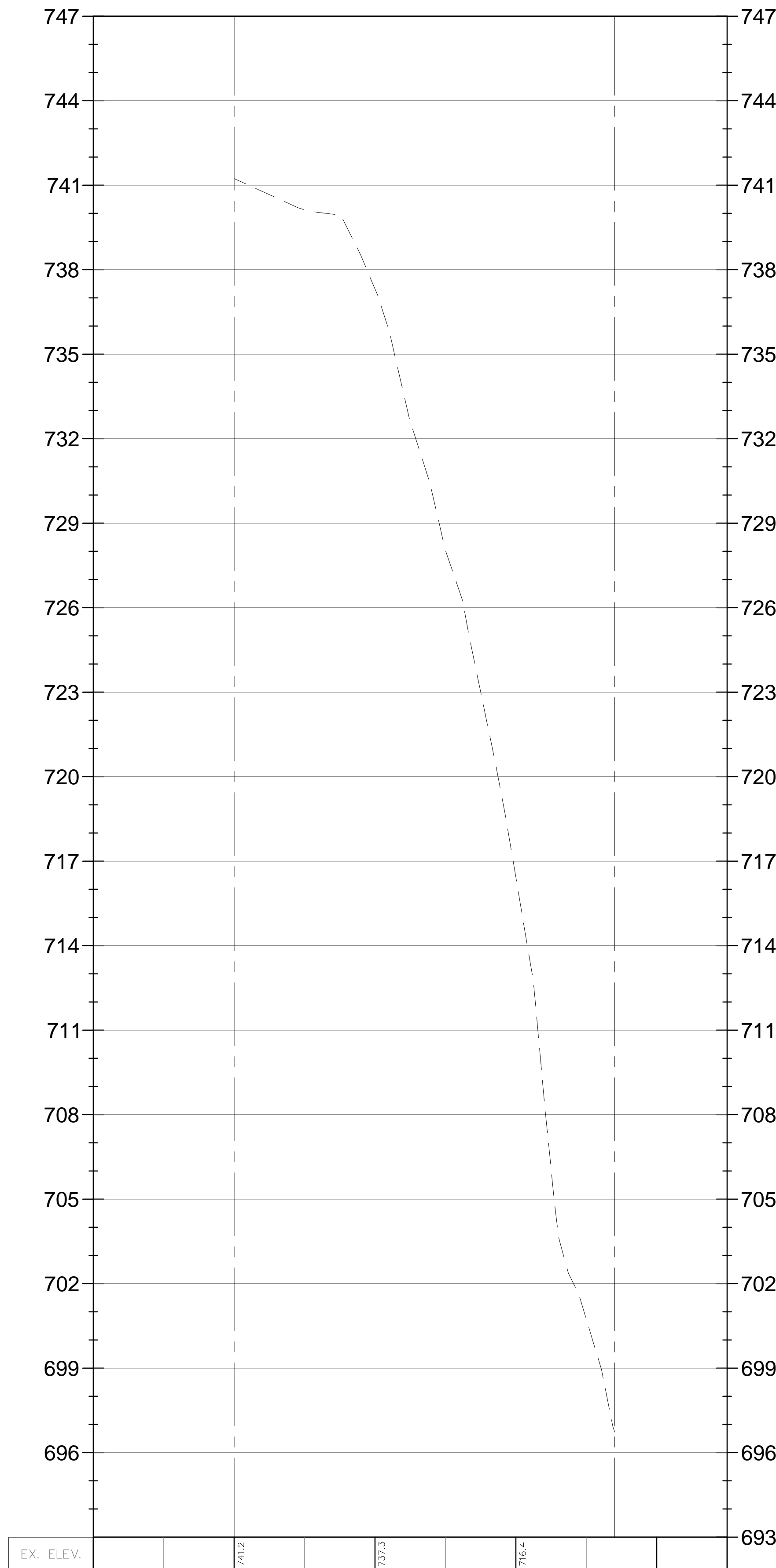
NOT FOR CONSTRUCTION

Profile View of Section A-A

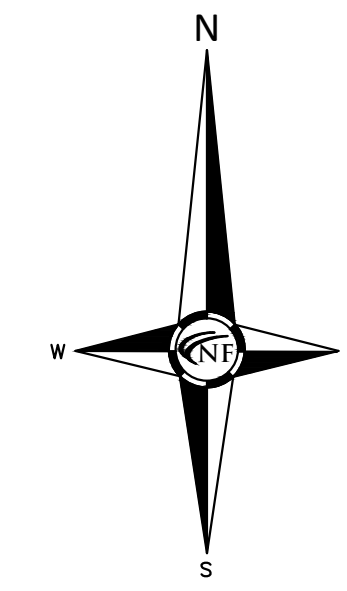
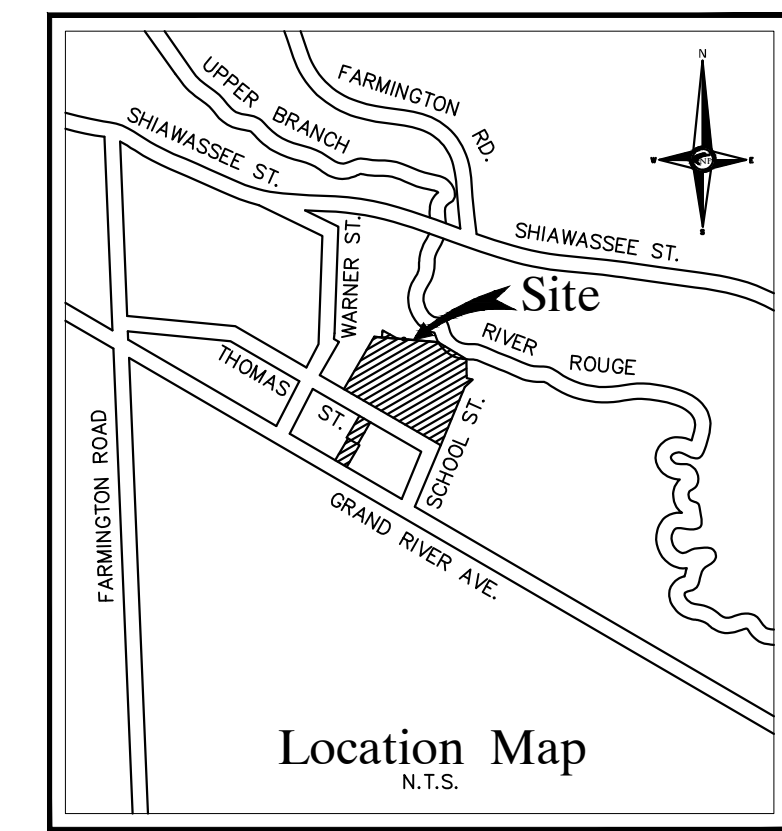


(Station -0+50.00 - 2+00.00)

Profile View of Section B-B



(Station -0+50.00 - 1+75.00)



SEAL

PROJECT
Maxfield Training Site
33000 Thomas Street
Farmington, MI 48336

CLIENT
Robertson Brothers Homes
6905 Telegraph Road
Bloomfield Hills, MI 48301

Contact: Tim Loughrin
Phone: 248.282.1428
Email:
toughrin@robertsonhomes.com

PROJECT LOCATION
Part of the NW 1/4
of Section 27
T. 1N., R. 9E.
City of Farmington,
Oakland County, Michigan

SHEET
Cross Sections A & B



DATE ISSUED/REVISED

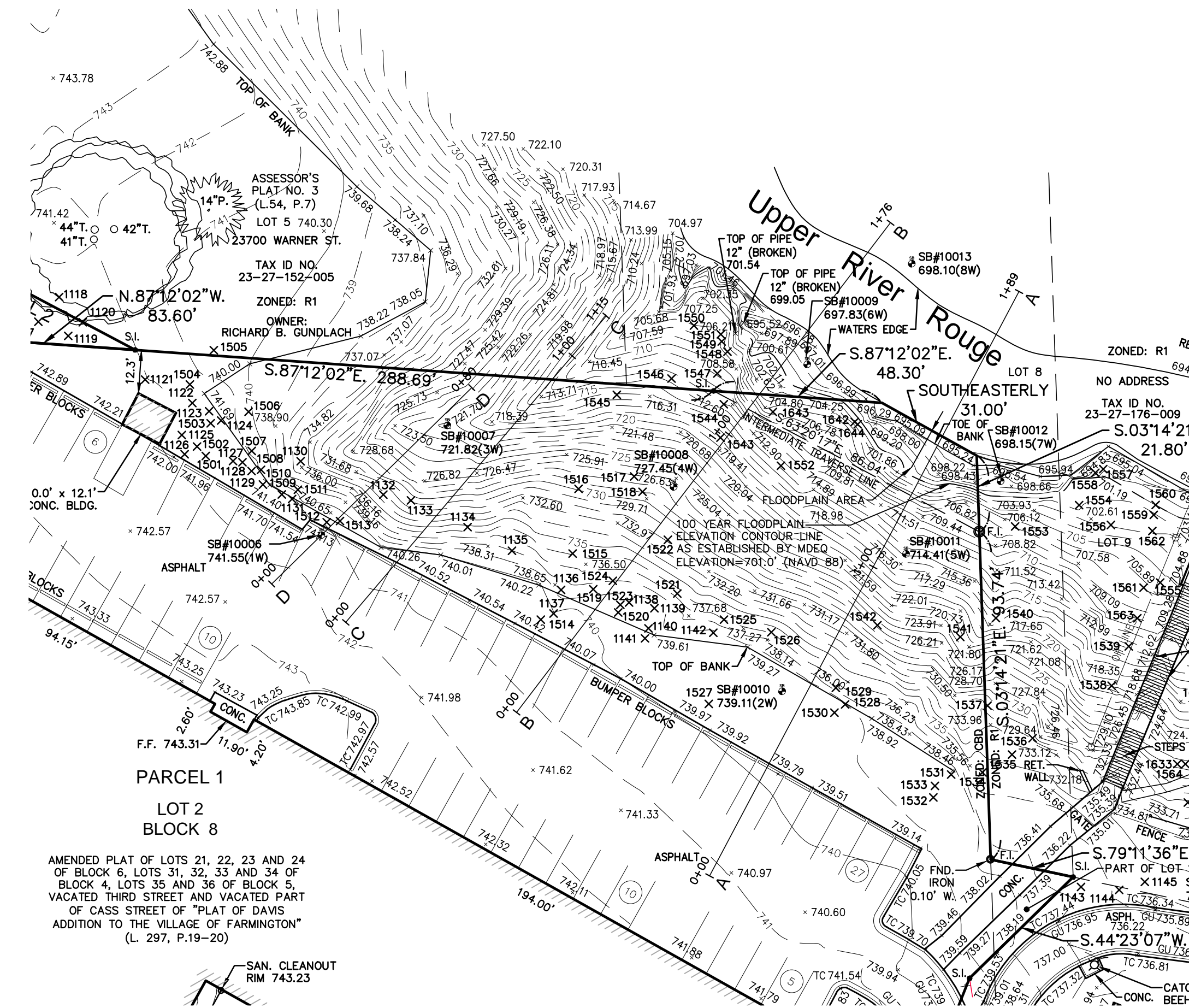
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06-30-21	SURVEY ISSUED
07-13-21	SURVEY REVISED
10-21-21	ALTA SURVEY ISSUED
11-29-21	ADDITIONAL TOPO NEAR RIVER
12-22-21	EXTRA TOPO NEAR RIVER
01-11-22	SOIL BORINGS ADDED
07-05-22	TREE SURVEY ADDED
05-15-23	REVISED PER SITE PLAN REVIEW

DRAWN BY:
M. Carnaghi
DESIGNED BY:

APPROVED BY:
K. Navaroli
DATE:
July 13, 2021

SCALE: 1" = 30'

NFE JOB NO. SHEET NO.
H900-04 C02



NOT FOR CONSTRUCTION



SEAL

PROJECT
Maxfield Training Site
33000 Thomas Street
Farmington, MI 48336

CLIENT
Robertson Brothers Homes
6905 Telegraph Road
Bloomfield Hills, MI 48301

Contact: Tim Loughrin
Phone: 248.282.1428
Email:
toughrin@robertsonhomes.com

PROJECT LOCATION
Part of the NW 1/4
of Section 27
T.1N., R.9E.
City of Farmington,
Oakland County, Michigan

SHEET
Cross Sections C & D



Know what's below
Call before you dig.

DATE	ISSUED/REVISED
06-30-21	SURVEY ISSUED
07-13-21	SURVEY REVISED
10-21-21	ALTA SURVEY ISSUED
11-29-21	ADDITIONAL TOPO NEAR RIVER
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DRAWN BY:
M. Carnaghi

DESIGNED BY:

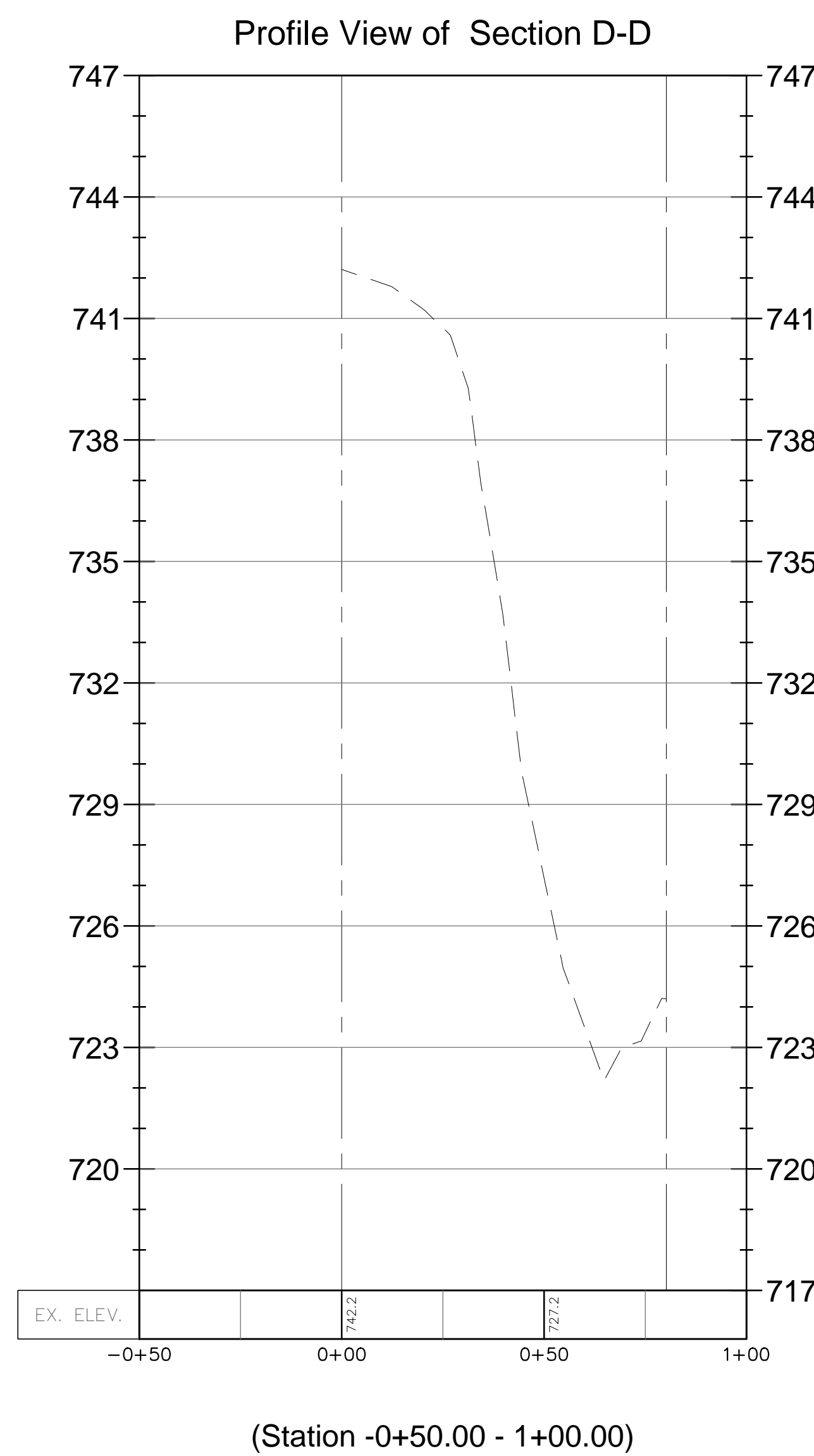
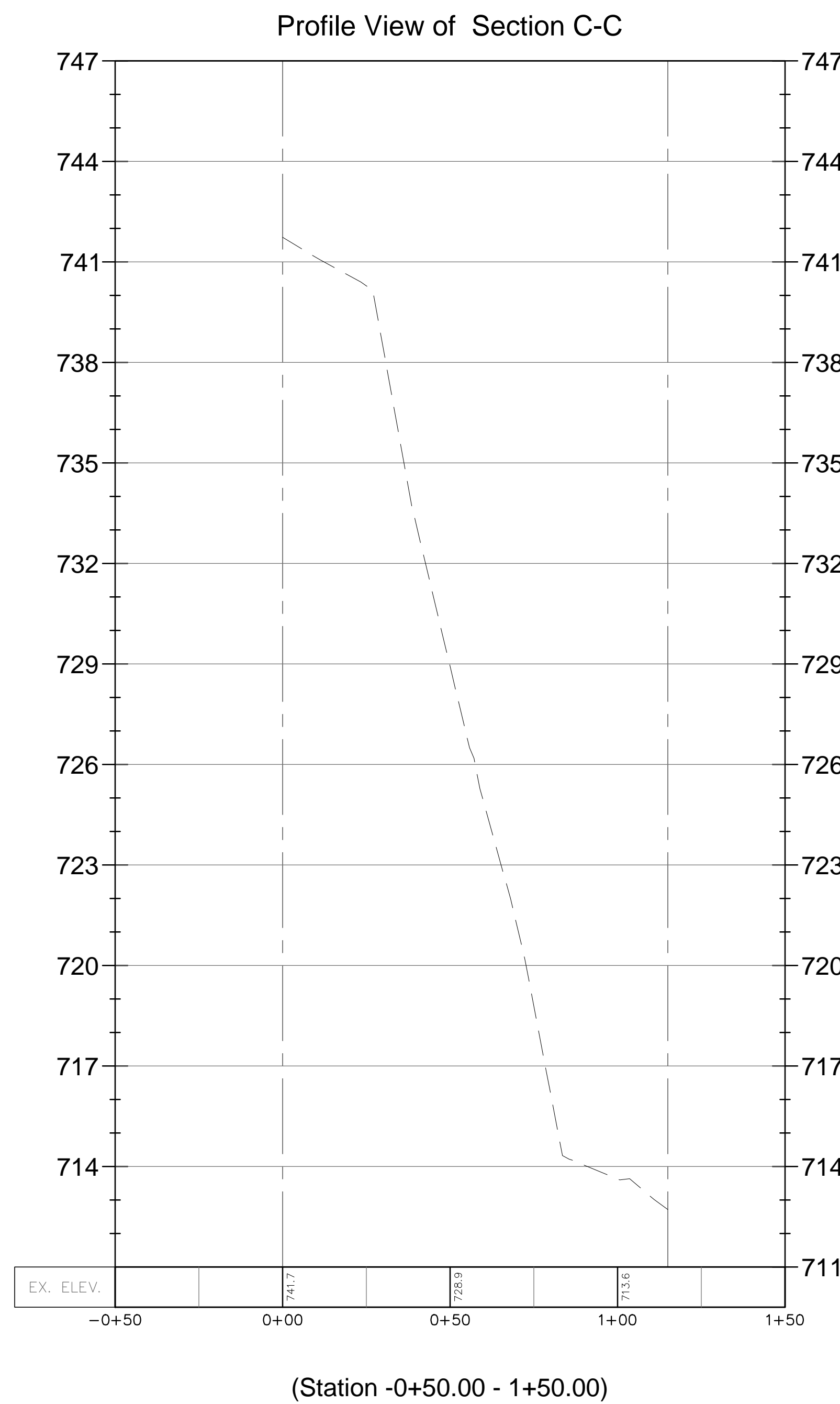
APPROVED BY:
K. Navaroli

DATE:
July 13, 2021

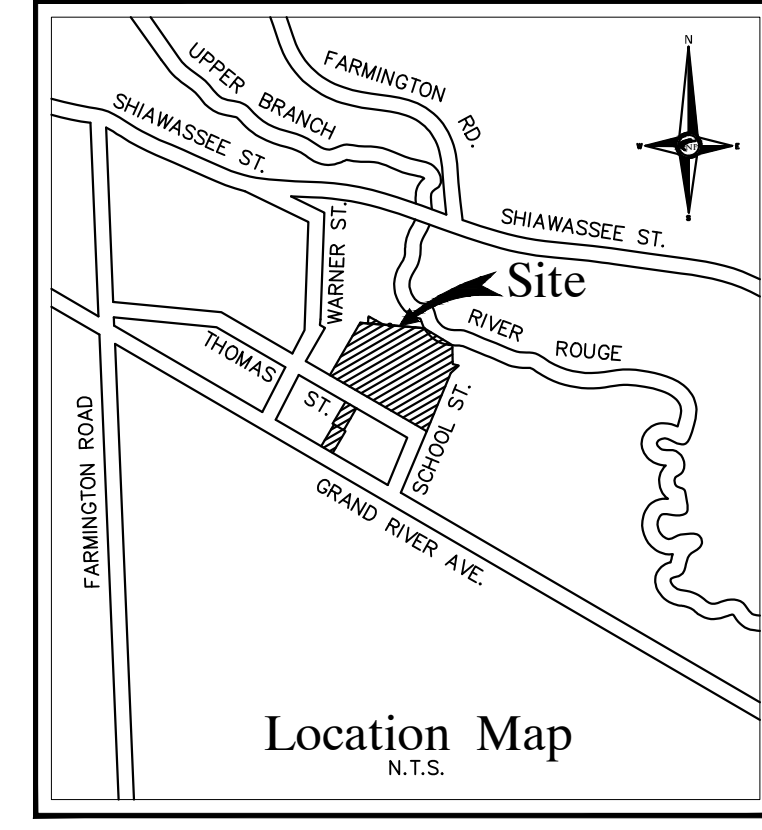
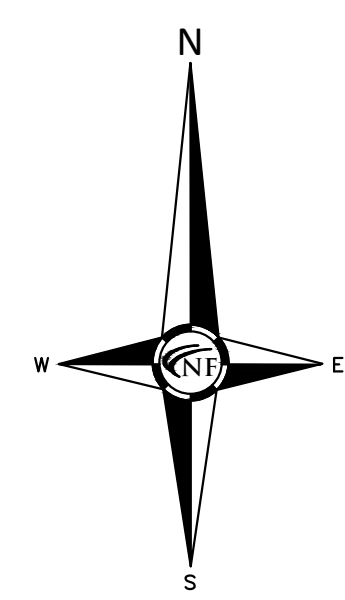
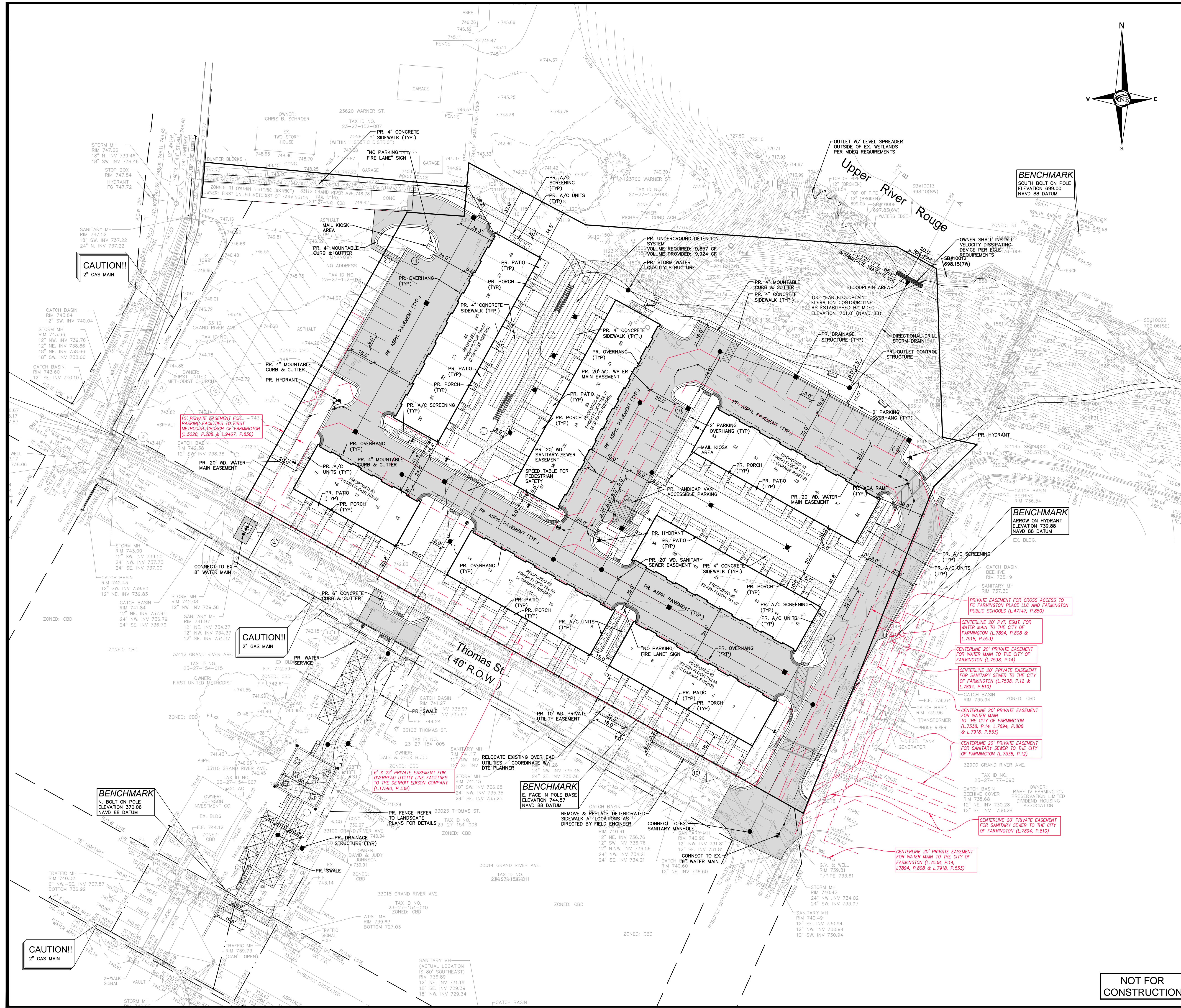
SCALE: 1" = 30'

NFE JOB NO.
H900-04

SHEET NO.
C03



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NF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOWAK & FRAUS ENGINEERS
 46777 WOODWARD AVE.
 PONTIAC, MI 48342-5032
 TEL. (248) 332-7931
 FAX. (248) 332-8257
 WWW.NOWAKFRAUS.COM

NOTES
 REFER TO SHEETS C09-C10 FOR DETAIL SITE GRADING (TYP)
 REFER TO SHEET C11 FOR NOTES AND DETAILS.

NOTE
 ALL DRIVE ISLES ARE A MINIMUM OF 22' WDE.

CONSTRUCTION NOTE
 NO CONSTRUCTION TRAFFIC WILL BE PERMITTED ON WARNER STREET DURING SITE CONSTRUCTION.

SANITARY NOTE
 THE DEVELOPER SHALL TELESEAL THE SANITARY SEWER DRAINAGE OF EXISTING CONNECTION.

GARBAGE NOTE
 TRASH PICK-UP SHALL BE DONE BY THE MUNICIPAL TRASH PROVIDED ON A WEEKLY BASIS. THE GARBAGE WILL BE STORED IN INDIVIDUAL INTERIOR TRASH BINS AND MOVED OUTSIDE OF GARBAGE ON DESIGNATED TRASH COLLECTION DAYS.

UTILITY NOTE
 CONTRACTOR TO EXPOSE FIBER/ ELECTRIC/ TELEPHONE CONDUIT PRIOR TO COMMENCING CONSTRUCTION. UTILITY OWNER TO BE PRESENT. CONTRACTOR SHALL NOTIFY CIVIL ENGINEER OR RECORD FOLLOWING EXPOSURE TO COORDINATE.

SITE DATA
 SITE AREA:
 PARCEL 1: 128,908.20 SQUARE FEET OR 2.959 ACRES
 PARCEL 2: 1,636.32 SQUARE FEET OR 0.038 ACRES
 PARCEL 4: 3,982.50 SQUARE FEET OR 0.091 ACRES
 PARCEL 5: 5,170.00 SQUARE FEET OR 0.119 ACRES

ZONING:
 PARCEL 1: CBD, CENTRAL BUSINESS DISTRICT
 PARCEL 2: R1, SINGLE FAMILY RESIDENTIAL DISTRICT
 PARCEL 4: CBD, CENTRAL BUSINESS DISTRICT
 PARCEL 5: CBD, CENTRAL BUSINESS DISTRICT

PARKING SPACES:
 PARCEL 1: 100 SPACES, INCLUDING 6 BARRIER-FREE SPACES
 PARCEL 2: NONE
 PARCEL 4: NONE
 PARCEL 5: NONE

PARKING PROVIDED:
 GARAGE: 54 SPACES
 GUEST: 42 SPACES
 STREET: 15 SPACES
 PARKING DISTRIBUTION: 2.06 SPACES/ DU
 SHARED PARKING AVAILABLE WITH CHURCH

BUILDING SETBACKS (CENTRAL BUSINESS DISTRICT):
 FRONT: 3 FEET REQUIRED; 9' MIN. (TO DECK)
 SIDE: 20 FEET REQUIRED
 REAR: 30 FEET REQUIRED
 BUILDING SEPARATION: 15' MIN.

ROAD WIDTH: 24'
ROAD LENGTH: 1,158 LF
ROAD LENGTH PER UNIT: 21.44 LF/DU.

MAXIMUM BUILDING HEIGHT (CENTRAL BUSINESS DISTRICT):
 4 STORIES / 45 FEET

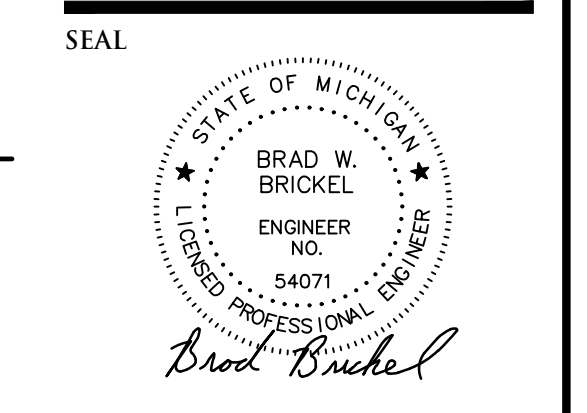
PAVING LEGEND

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

LEGEND

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		SAN. CLEAN OUT
	MANHOLE CATCH BASIN		EXISTING WATER MAIN
	UTILITY POLE		EXISTING STORM SEWER
	GUY POLE		EX. R. Y. CATCH BASIN
	OVERHEAD LINES		EXISTING BURIED CABLES
	LIGHT POLE		SIGN
	EXISTING GAS MAIN		PR. SANITARY SEWER
	HYDRANT GATE VALVE		PR. WATER MAIN
	INLET		PR. STORM SEWER
	PR. R. Y. CATCH BASIN		PROPOSED LIGHT POLE

NOT FOR CONSTRUCTION



PROJECT
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 33000 Thomas Street
 Farmington, MI 48336

CLIENT
 Robertson Brothers Homes
 6905 Telegraph Road
 Bloomfield Hills, MI 48301

Contact: Tim Loughrin
 Tel. (248) 282-1428
 Email: toughrin@robertsonhomes.com

PROJECT LOCATION
 Part of the NW 1/4 of Section 27
 T.1N, R.9E
 City of Farmington, Oakland, Michigan

SHEET
 Site Plan



Know what's below
 Call before you dig.

DATE ISSUED/REVISED
 09-01-20 ISSUED FOR SITE PLAN REVIEW
 05-15-23 REVISED PER SITE PLAN REVIEW

DRAWN BY:
 J. Lawrey

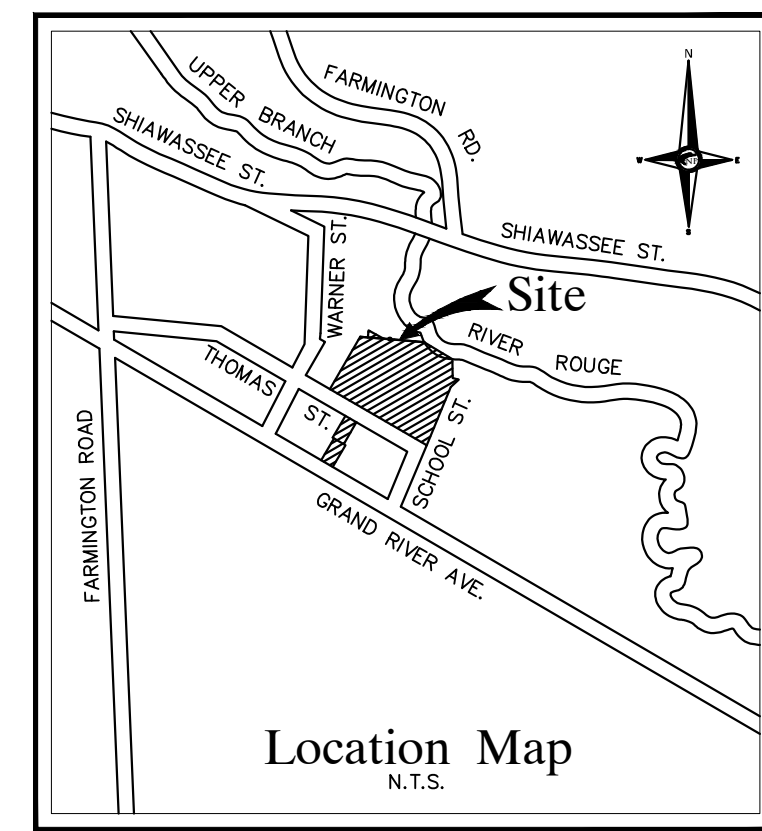
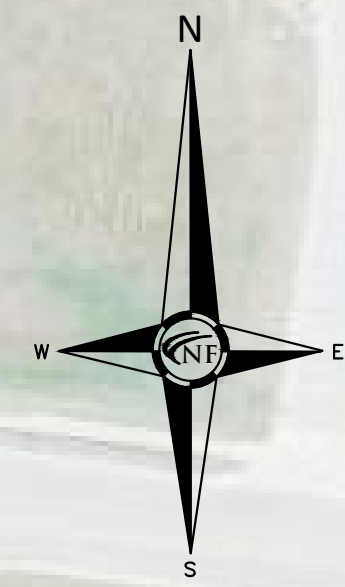
DESIGNED BY:
 B. Brickel

APPROVED BY:
 B. Brickel

DATE:
 July 13, 2021

SCALE: 1" = 30'
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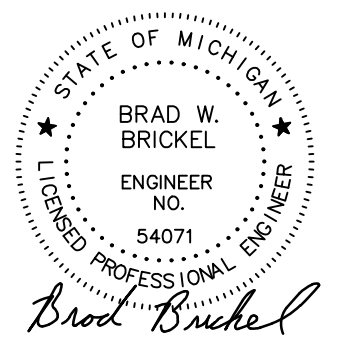
NFE JOB NO. SHEET NO.
 H900-04 C05



NF
ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL



PROJECT
Hillside Townes
33000 Thomas Street
Farmington, MI 48336

CLIENT
Robertson Brothers Homes
6905 Telegraph Road
Bloomfield Hills, MI 48301

Contact: Tim Loughrin
Tel. (248) 282-1428
Email:
tloughrin@robertsonhomes.com

PROJECT LOCATION
Part of the NW 1/4
of Section 27
T.1N, R.9E.
City of Farmington,
Oakland, Michigan

SHEET
Aerial Vicinity Plan



Know what's below
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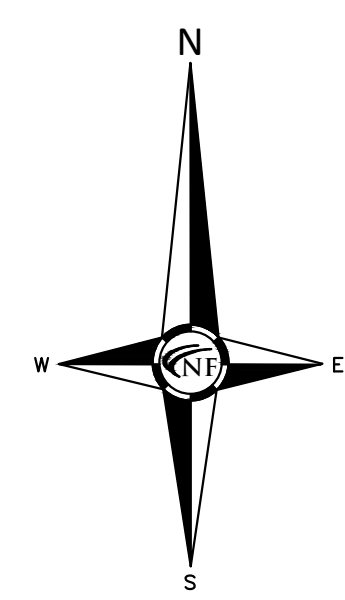
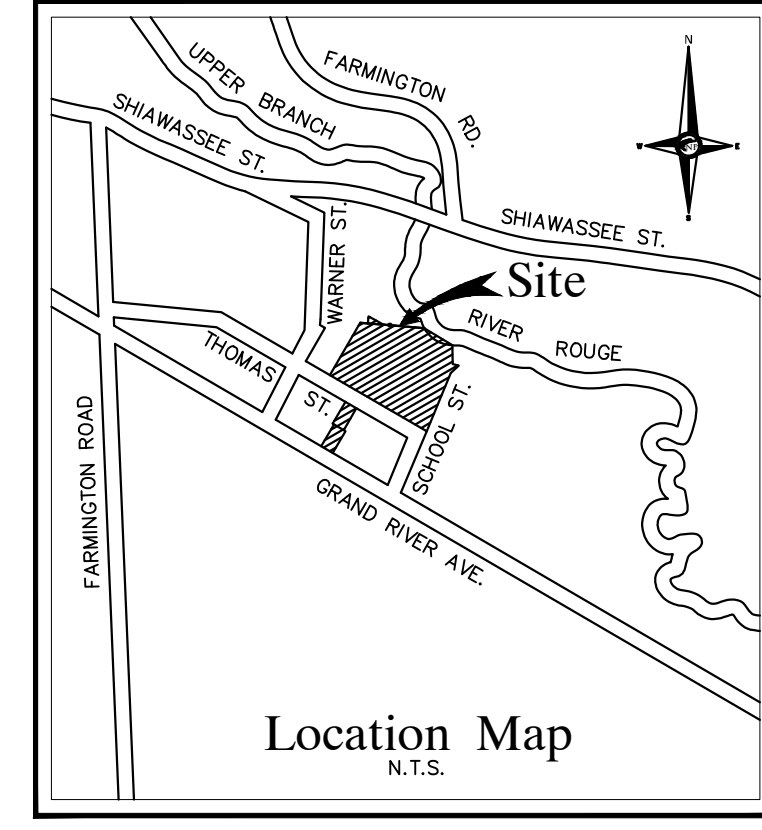
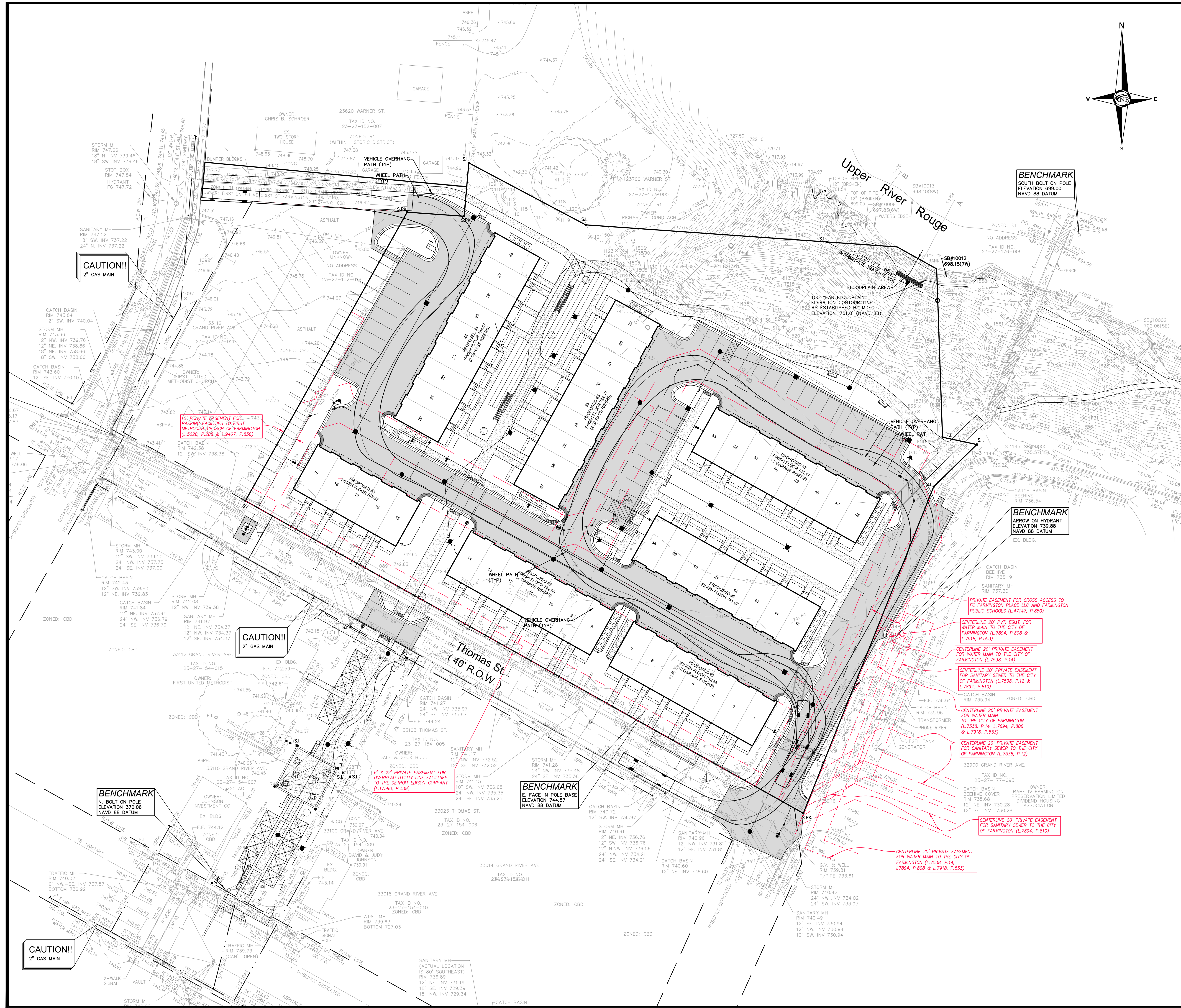
DATE ISSUED/REVISED
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05-15-23 REVISED PER SITE PLAN REVIEW

DRAWN BY:
J. Lawrey
DESIGNED BY:
B. Brickel
APPROVED BY:
B. Brickel
DATE:
July 13, 2021

SCALE: 1" = 60'

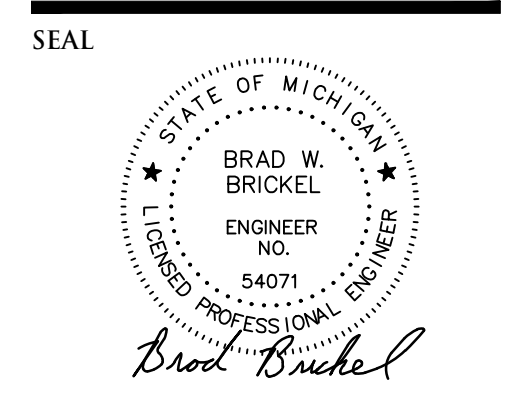
NFE JOB NO. SHEET NO.
H900-04 C06

NOT FOR
CONSTRUCTION



ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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PROJECT
 Hillside Townes
 33000 Thomas Street
 Farmington, MI 48336

CLIENT
 Robertson Brothers Homes
 6905 Telegraph Road
 Bloomfield Hills, MI 48301

Contact: Tim Loughrin
 Tel. (248) 282-1428
 Email: toughrin@robertsonhomes.com

PROJECT LOCATION
 Part of the NW 1/4
 of Section 27
 T.1N, R.9E
 City of Farmington,
 Oakland, Michigan

SHEET
 Fire Truck Turning Plan



Know what's below
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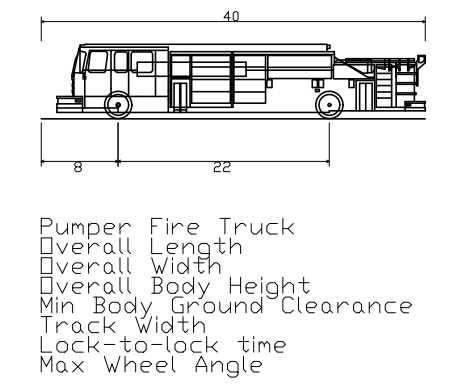
DRAWN BY:
 J. Lawrey
DESIGNED BY:
 B. Brickel
APPROVED BY:
 B. Brickel

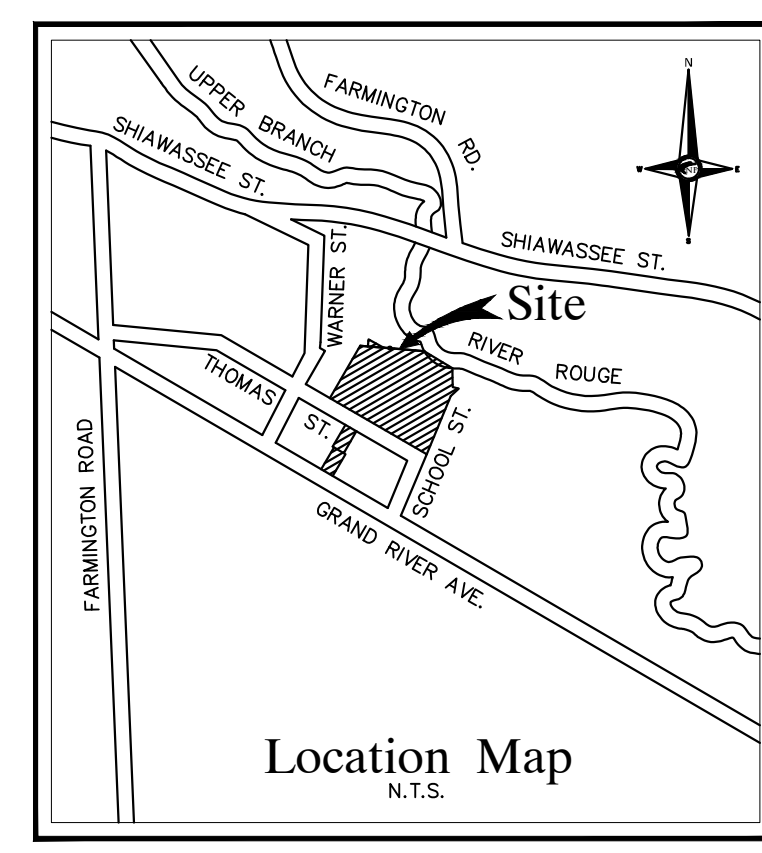
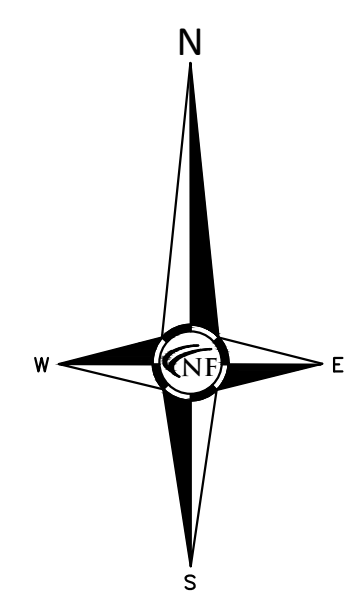
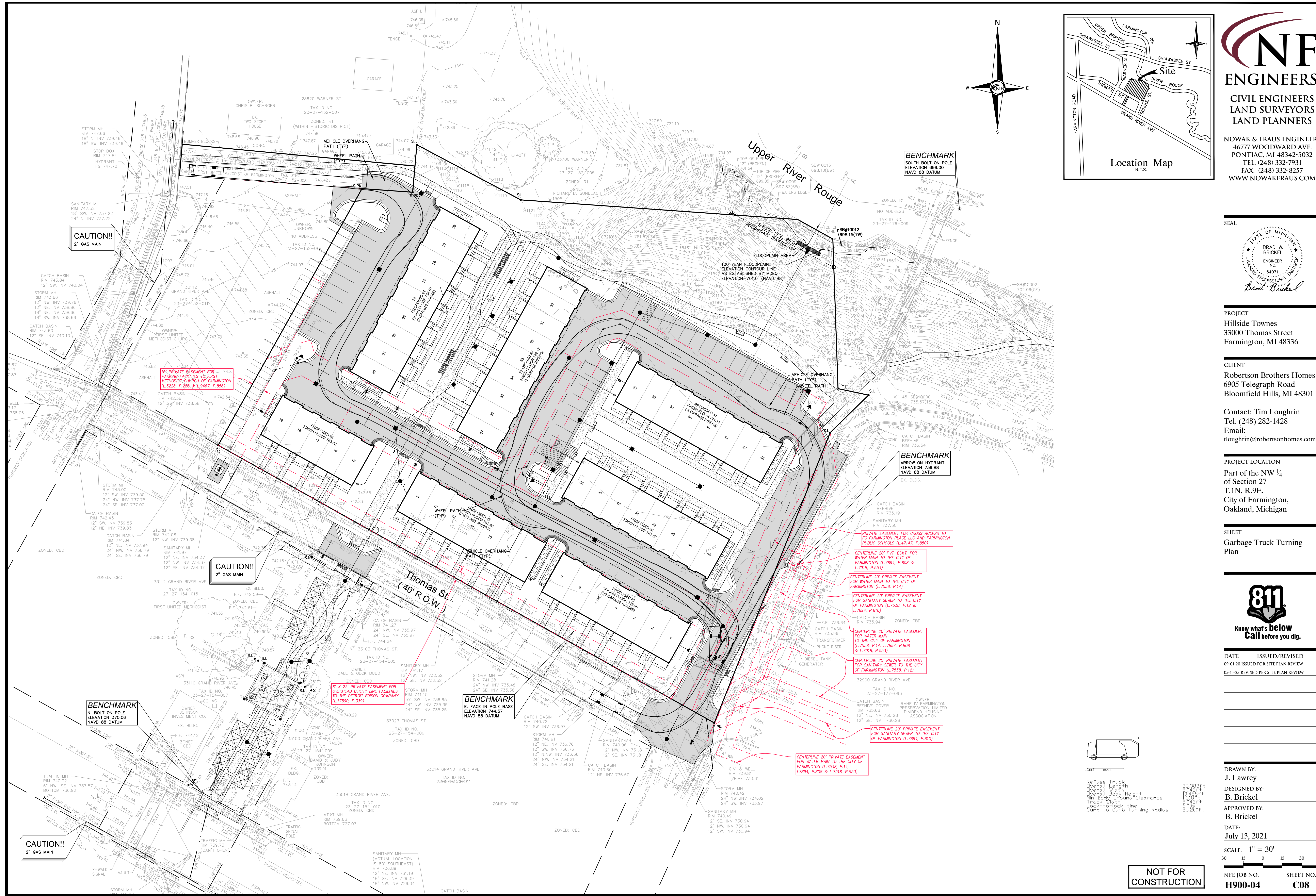
DATE:
 July 13, 2021

SCALE: 1" = 30'
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NFE JOB NO. SHEET NO.
H900-04 C07

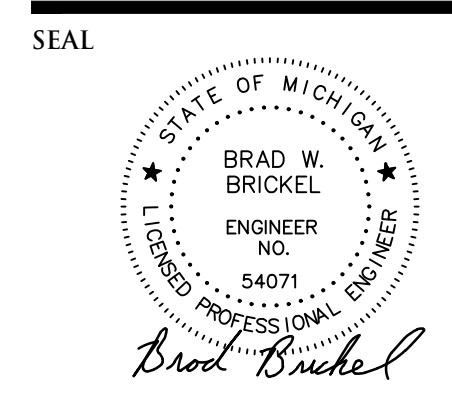
NOT FOR CONSTRUCTION





NF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

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PROJECT
 Hillside Townes
 33000 Thomas Street
 Farmington, MI 48336

CLIENT
 Robertson Brothers Homes
 6905 Telegraph Road
 Bloomfield Hills, MI 48301

Contact: Tim Loughrin
 Tel. (248) 282-1428
 Email: toughrin@robertsonhomes.com

PROJECT LOCATION
 Part of the NW 1/4
 of Section 27
 T.1N, R.9E
 City of Farmington,
 Oakland, Michigan

SHEET
 Garbage Truck Turning
 Plan



DATE ISSUED/REVISED
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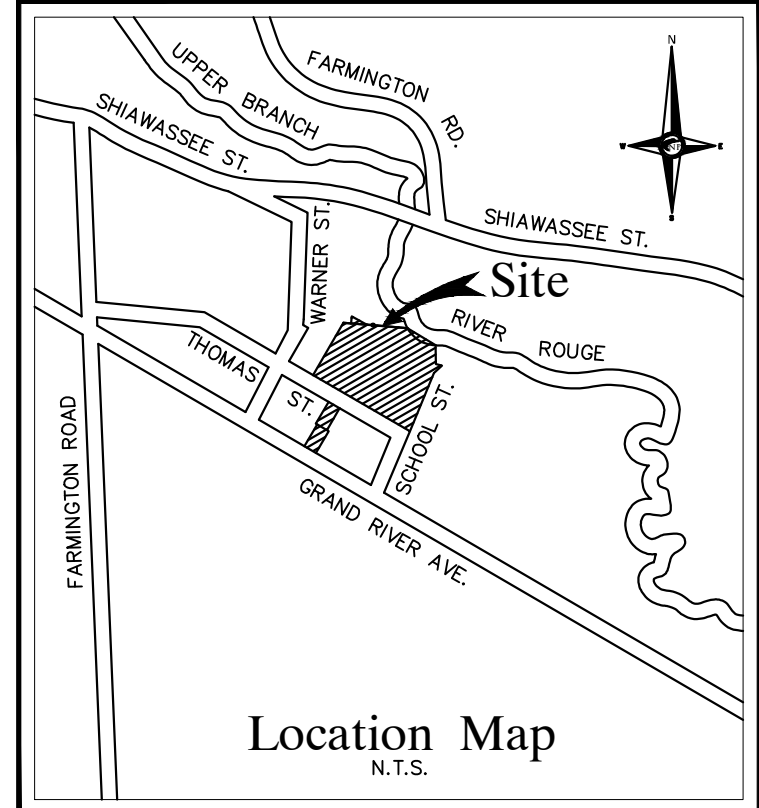
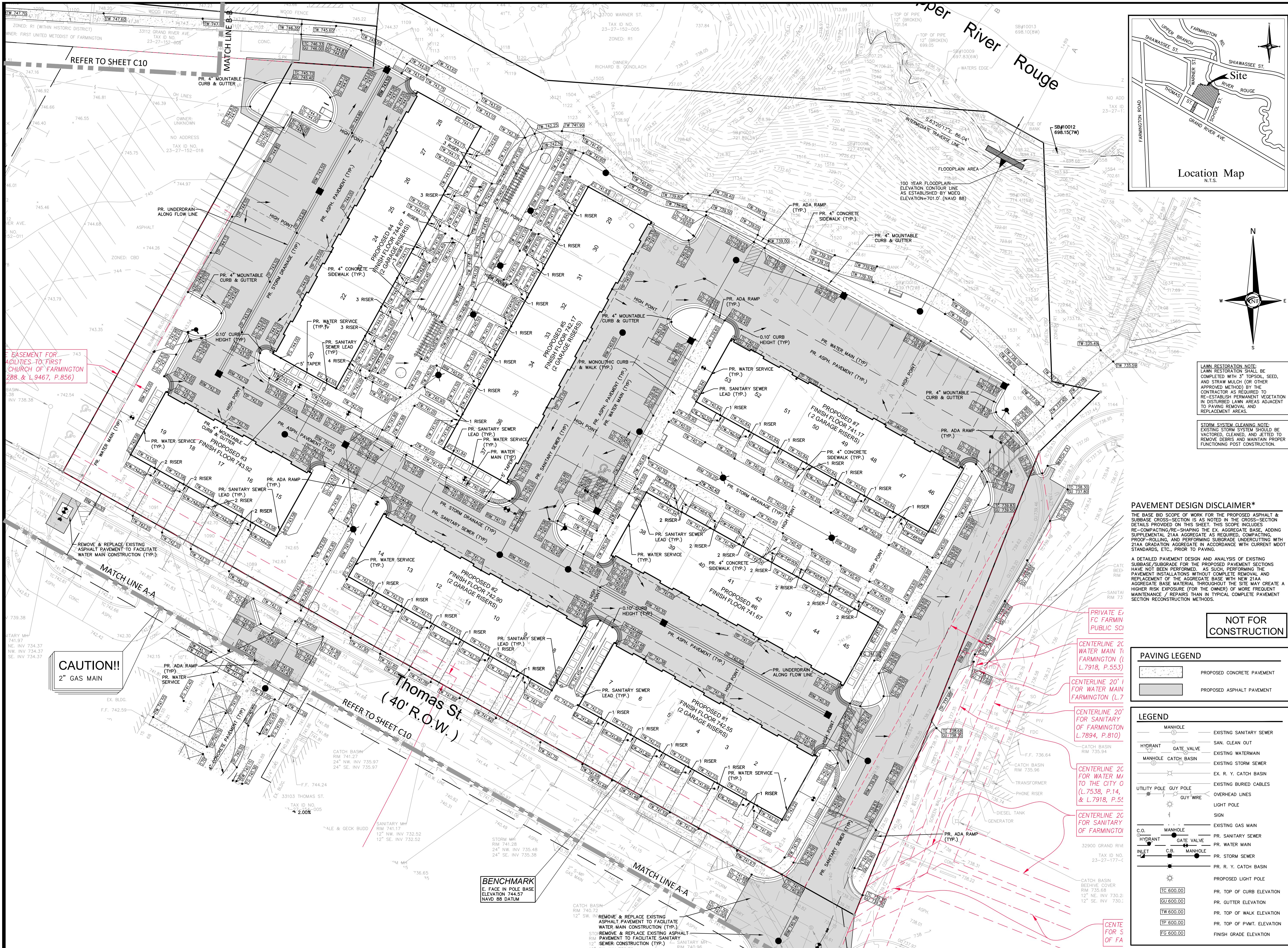
DRAWN BY:
 J. Lawrey
 DESIGNED BY:
 B. Brickel
 APPROVED BY:
 B. Brickel
 DATE:
 July 13, 2021

SCALE: 1" = 30'

NFE JOB NO. SHEET NO.
H900-04 C08

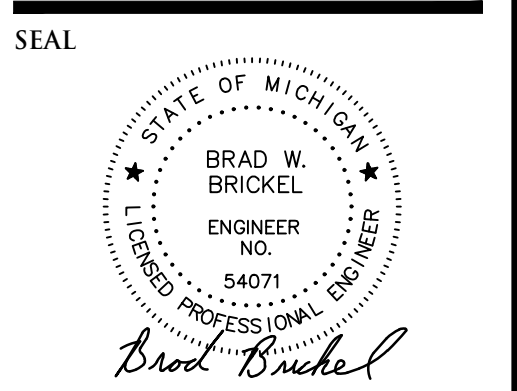
NOT FOR CONSTRUCTION

Refuse Truck	26'-39.9ft
Overall Length	8'-0.4ft
Overall Body Height	10'-4.8ft
Min. Body Ground Clearance	1'-1.1ft
Track Width	8'-0.4ft
Lock-to-lock time	5'-0.0ft
Turn to Curb Turning Radius	25'-2.0ft



NF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
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 Farmington, MI 48336

CLIENT
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 Bloomfield Hills, MI 48301

Contact: Tim Loughrin
 Tel. (248) 282-1428
 Email: toughrin@robertsonhomes.com

PROJECT LOCATION
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 T.1N, R.9E.
 City of Farmington,
 Oakland, Michigan

SHEET
 Paving & Grading Plan
 (1 of 2)



DATE ISSUED/REVISED
 09-01-20 ISSUED FOR SITE PLAN REVIEW
 05-15-23 REVISED PER SITE PLAN REVIEW

DRAWN BY:
 J. Lawrey
 DESIGNED BY:
 B. Brickel
 APPROVED BY:
 B. Brickel

DATE:
 July 13, 2021
 SCALE: 1" = 20'
 NFE JOB NO. SHEET NO.
H900-04 C09

LAWN RESTORATION NOTE:
 LAWN RESTORATION SHALL BE COMPLETED WITH 3" TOPSOIL, SEED, AND STRAW MULCH (OR OTHER APPROVED METHOD) BY THE CONTRACTOR AS REQUIRED TO RE-ESTABLISH PERMANENT VEGETATION IN DISTURBED LAWN AREAS ADJACENT TO PAVING REMOVAL AND REPLACEMENT AREAS.

STORM SYSTEM CLEANING NOTE:
 EXISTING STORM SYSTEM SHOULD BE VACUATED, CLEANED, AND JETTED TO REMOVE DEBRIS AND MAINTAIN PROPER FUNCTIONING POST CONSTRUCTION.

PAVEMENT DESIGN DISCLAIMER*
 THE BASE BID SCOPE OF WORK FOR THE PROPOSED ASPHALT & SUBBASE CROSS-SECTION IS AS NOTED IN THE CROSS-SECTION DETAILS PROVIDED ON THIS SHEET. THIS SCOPE INCLUDES RE-COMPACTING/RE-SHAPING THE EX. AGGREGATE BASE, ADDING SUPPLEMENTAL 21AA AGGREGATE AS REQUIRED, COMPACTING, PROF-ROLLING, AND PERFORMING SUBGRADE UNDERCUTTING WITH 21AA GRADATION AGGREGATE IN ACCORDANCE WITH CURRENT MDOT STANDARDS, ETC., PRIOR TO PAVING.

A DETAILED PAVEMENT DESIGN AND ANALYSIS OF EXISTING SUBBASE/SUBGRADE FOR THE PROPOSED PAVEMENT SECTIONS HAVE NOT BEEN PERFORMED. AS SUCH, PERFORMING THE PAVEMENT INSTALLATIONS WITHOUT COMPLETE REMOVAL AND REPLACEMENT OF THE AGGREGATE BASE WITH NEW 21AA AGGREGATE BASE MATERIAL THROUGHOUT THE SITE MAY CREATE A HIGHER RISK EXPOSURE (FOR THE OWNER) OF MORE FREQUENT MAINTENANCE / REPAIRS THAN IN TYPICAL COMPLETE PAVEMENT SECTION RECONSTRUCTION METHODS.

NOT FOR CONSTRUCTION

PAVING LEGEND

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

LEGEND

	EXISTING SANITARY SEWER		SAN. CLEAN OUT
	EXISTING WATERMAIN		PR. WATER MAIN
	EXISTING STORM SEWER		PR. STORM SEWER
	EXISTING BURIED CABLES		PROPOSED LIGHT POLE
	OVERHEAD LINES		PR. TOP OF CURB ELEVATION
	SIGN		PR. GUTTER ELEVATION
	EXISTING GAS MAIN		PR. TOP OF WALK ELEVATION
	PR. SANITARY SEWER		PR. TOP OF P.W.M. ELEVATION
	PR. WATER MAIN		FINISH GRADE ELEVATION
	PR. STORM SEWER		
	PR. R. Y. CATCH BASIN		
	PROPOSED LIGHT POLE		
	PR. TOP OF CURB ELEVATION		
	PR. GUTTER ELEVATION		
	PR. TOP OF WALK ELEVATION		
	PR. TOP OF P.W.M. ELEVATION		
	FINISH GRADE ELEVATION		

PRIVATE E/FC FARMINGTON PUBLIC SCI
 CENTERLINE 20' WATER MAIN TO FARMINGTON (L.7918, P.553)
 CENTERLINE 20' FOR WATER MAIN FARMINGTON (L.7
 CENTERLINE 20' FOR SANITARY OF FARMINGTON (L.7894, P.810)
 CENTERLINE 20' FOR WATER MA TO THE CITY O (L.7538, P.14, & L.7918, P.55
 CENTERLINE 20' FOR SANITARY OF FARMINGTON

BENCHMARK
 E. FACE IN POLE BASE
 ELEVATION 744.57
 NAVD 88 DATUM

CAUTION!!
 2" GAS MAIN

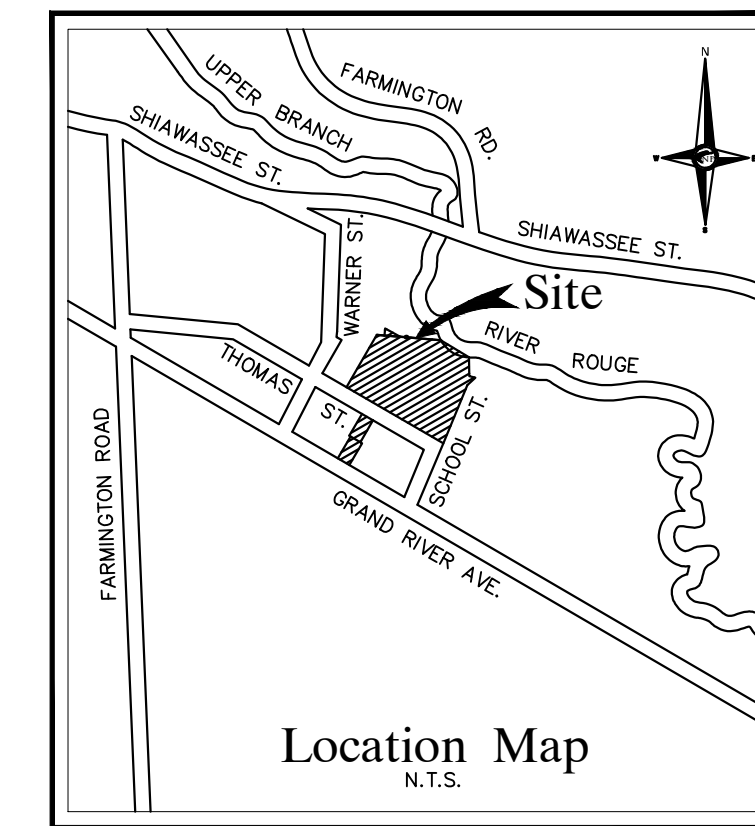
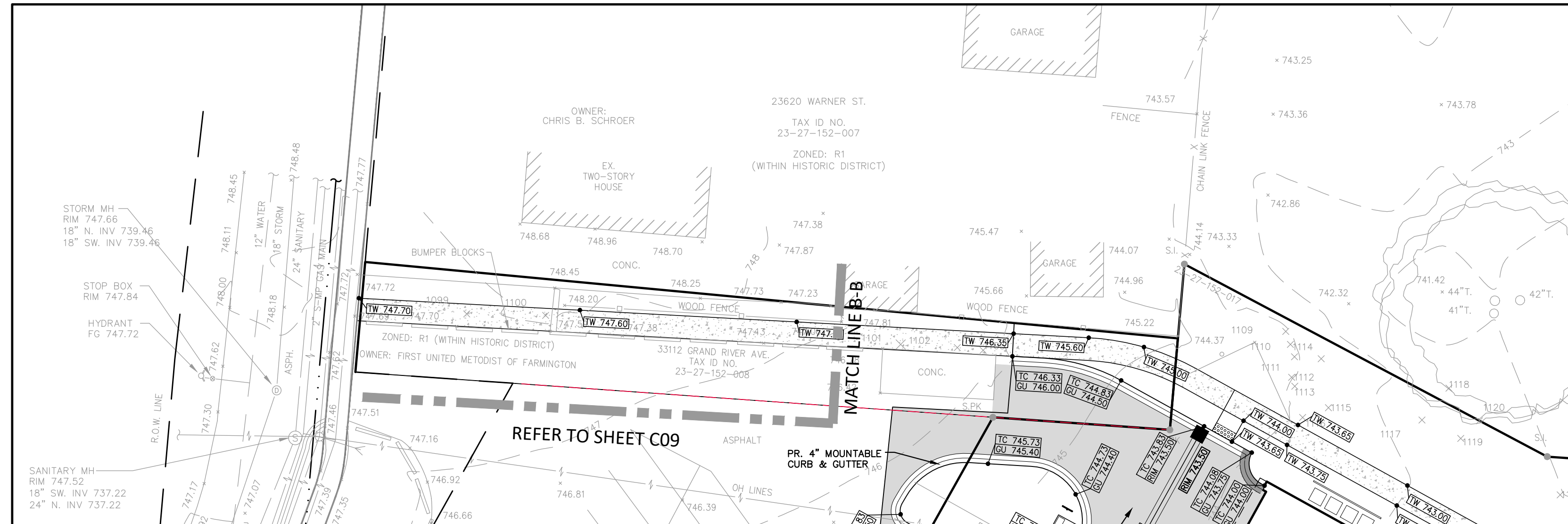
REFER TO SHEET C10

Thomas St.
 (40' R.O.W.)
 REFER TO SHEET C10

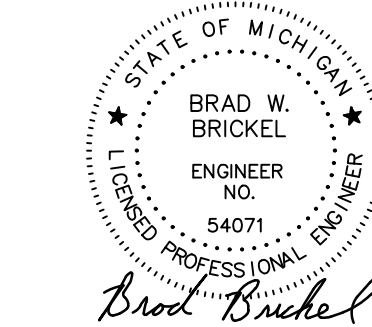
MATCH LINE A-A

MATCH LINE B-B

MATCH LINE A-A



SEAL



PROJECT
Hillside Townes
33000 Thomas Street
Farmington, MI 48336

CLIENT
Robertson Brothers Homes
6905 Telegraph Road
Bloomfield Hills, MI 48301

Contact: Tim Loughrin
Tel. (248) 282-1428
Email:
toughrin@robertsonhomes.com

PROJECT LOCATION
Part of the NW 1/4
of Section 27
T.1N, R.9E.
City of Farmington,
Oakland, Michigan

SHEET
Paving & Grading Plan
(2 of 2)



Know what's below
Call before you dig.

DATE ISSUED/REVISED
09-01-20 ISSUED FOR SITE PLAN REVIEW
05-15-23 REVISED PER SITE PLAN REVIEW

DRAWN BY:
J. Lawrey

DESIGNED BY:
B. Brickel

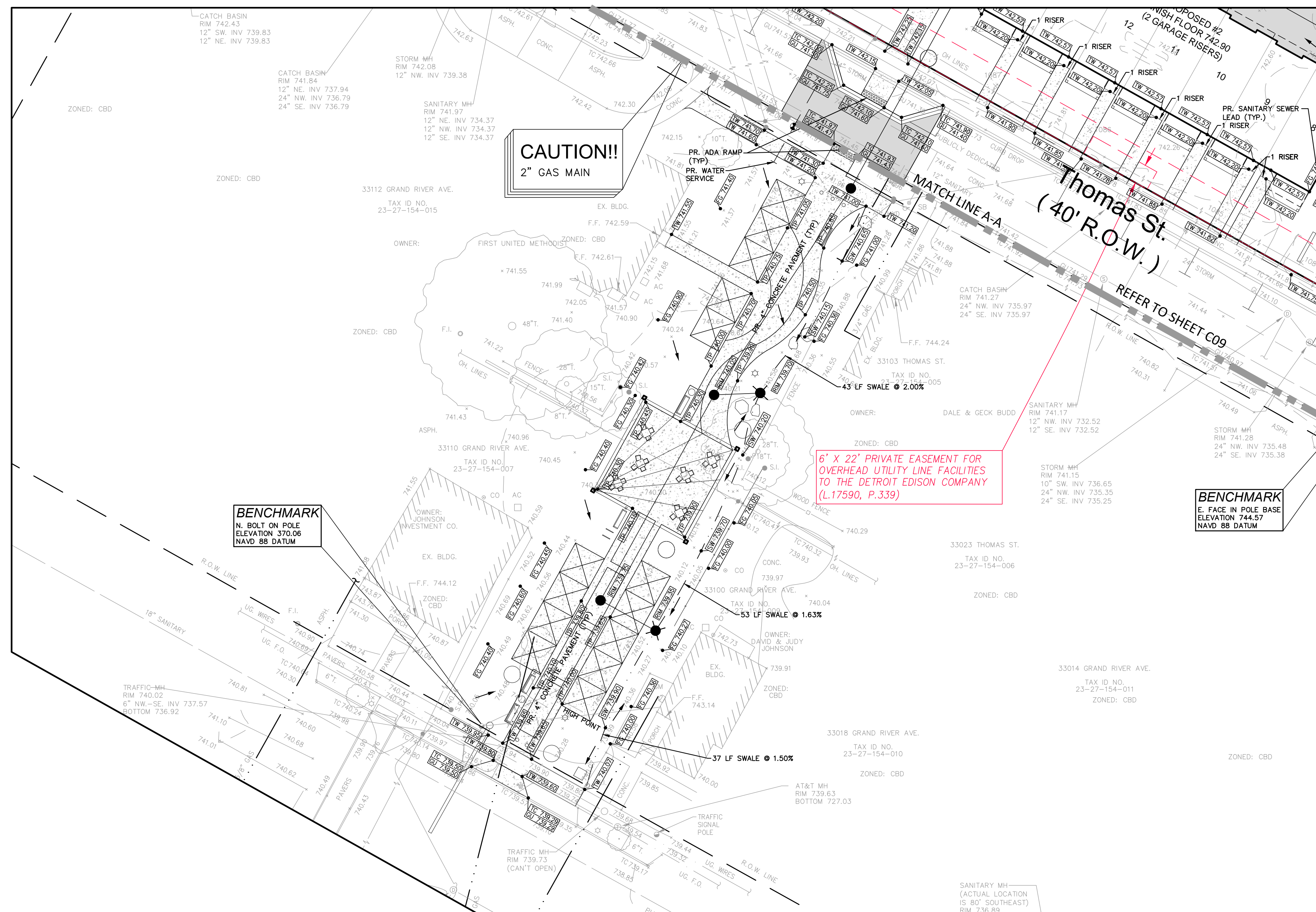
APPROVED BY:
B. Brickel

DATE:
July 13, 2021

SCALE: 1" = 20'

20 10 0 10 20 30

NFE JOB NO. SHEET NO.
H900-04 C10



LAWN RESTORATION NOTE:
LAWN RESTORATION SHALL BE COMPLETED WITH 1" TOPSOIL, SEED, AND STRAW MULCH (OR OTHER APPROVED METHOD) BY THE CONTRACTOR AS REQUIRED TO RE-ESTABLISH PERMANENT VEGETATION IN DISTURBED LAWN AREAS ADJACENT TO PAVING REMOVAL AND REPLACEMENT AREAS.

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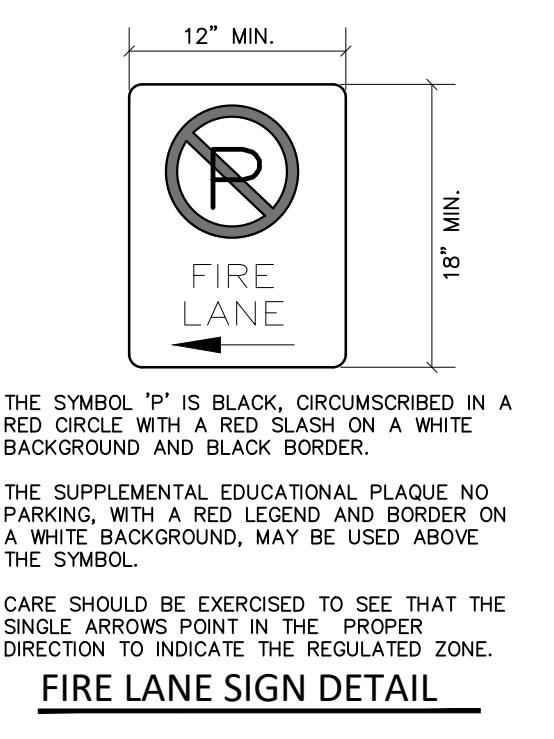
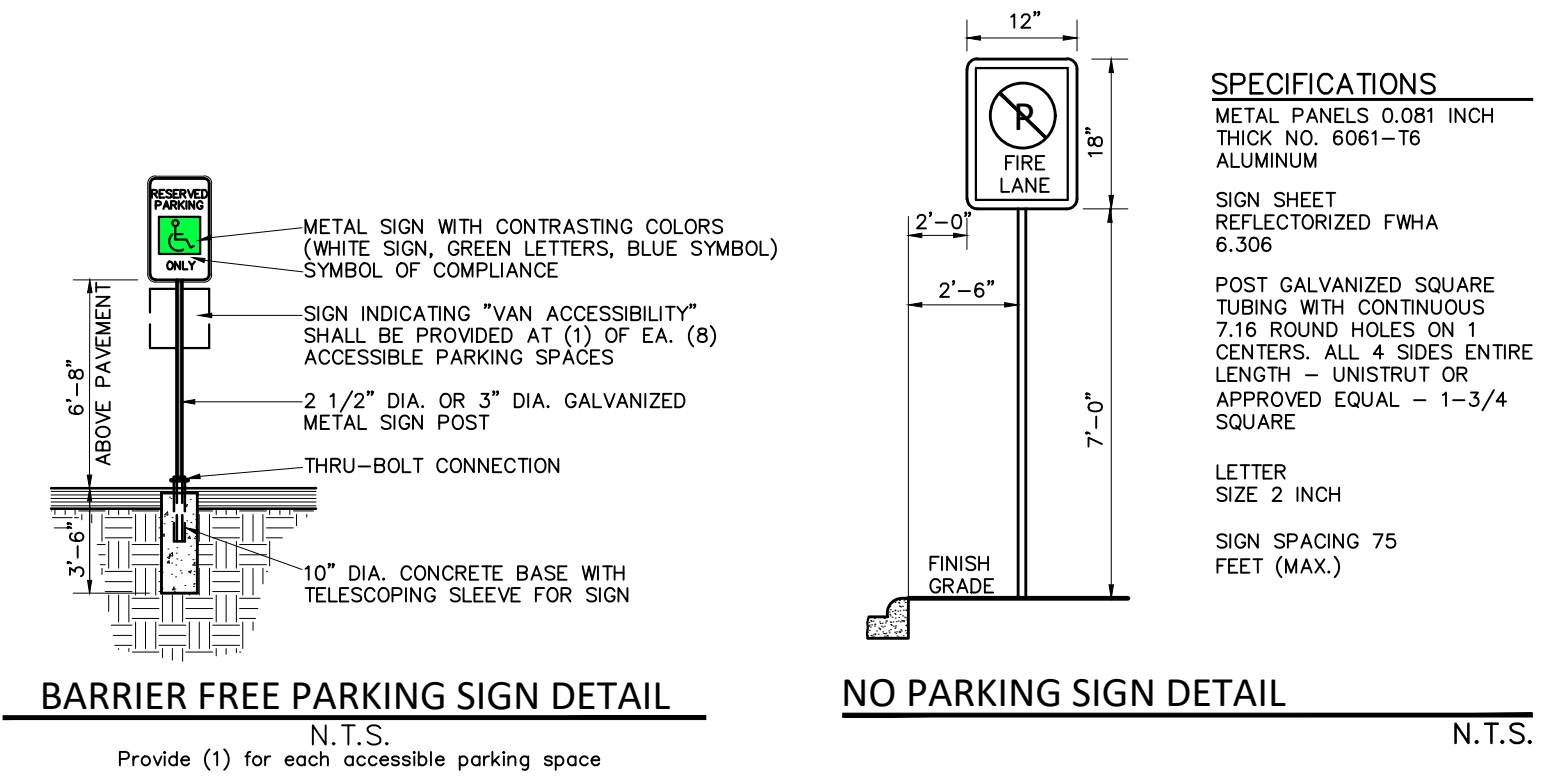
NOT FOR CONSTRUCTION

PAVING LEGEND

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

LEGEND

	EXISTING SANITARY SEWER
	SAN. CLEAN OUT
	EXISTING WATERMAIN
	EXISTING STORM SEWER
	EX. R. Y. CATCH BASIN
	EXISTING BURIED CABLES
	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
	PR. SANITARY SEWER
	PR. WATER MAIN
	PR. STORM SEWER
	PR. R. Y. CATCH BASIN
	PROPOSED LIGHT POLE
	PR. TOP OF CURB ELEVATION
	PR. GUTTER ELEVATION
	PR. TOP OF WALK ELEVATION
	PR. TOP OF PAVT. ELEVATION
	FINISH GRADE ELEVATION



GENERAL PAVING NOTES
PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:
CONCRETE: PORTLAND CEMENT TYPE IA (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.
ASPHALT: BASE COURSE - MDT BITUMINOUS MIXTURE NO. 13A; SURFACE COURSE - MDT BITUMINOUS MIXTURE NO. 13A; ASPHALT CEMENT SHALL BE PG 64-22, BOND COAT - MDT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD; MAXIMUM 2.5 INCH LIFT.
PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.
ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT Poured RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-S164.
ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.
ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.
ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS SHOWN ON THE PLANS.
CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.
FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKewise ARRANGE FOR ALL INSPECTION.
EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.
EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.
SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.
ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.
FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.
THE MAXIMUM ALLOWABLE RECYCLED ASPHALT PAVEMENT (R.A.P.) CONTENT IN H.M.A. SURFACE AND BASE COURSES SHALL BE 20%.

REQUIRED DETENTION VOLUME CALCULATIONS
Based on Oakland County Water Resources Commissioner Equations for 100 Year Storm

Name of Project: **Maxfield Farmington, MI M183**
Location of Project: **Maxfield Farmington, MI M183**
NFE Project No.: **M183**
Contributing Acreage "A": **2.456 acres**
Weighted Runoff Coefficient "C": **0.790**

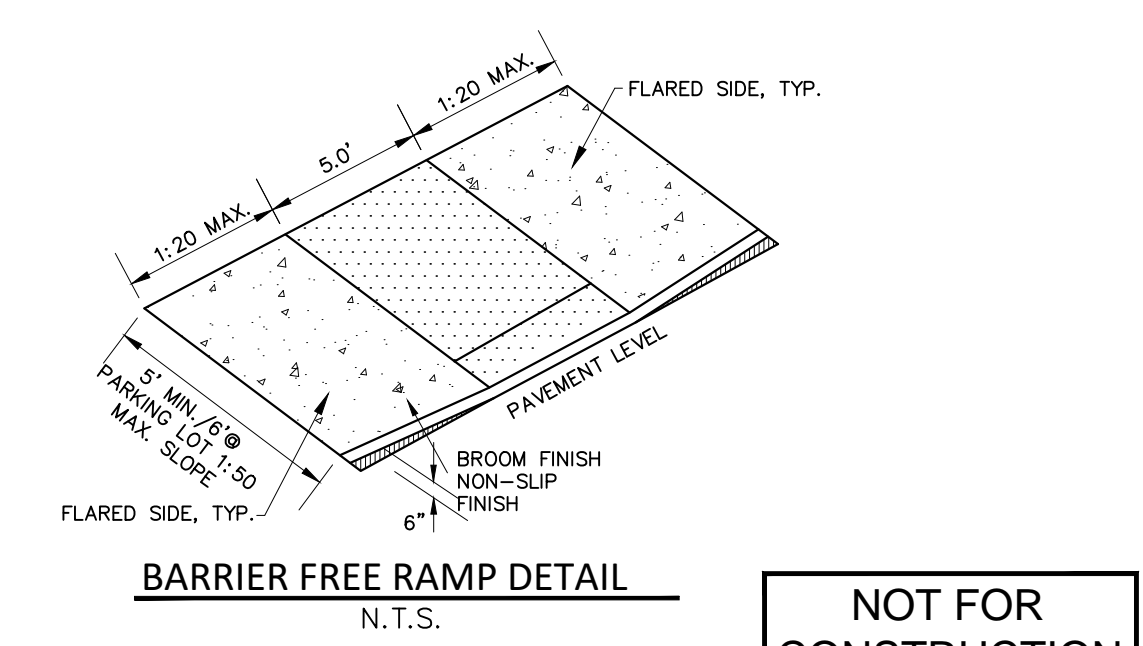
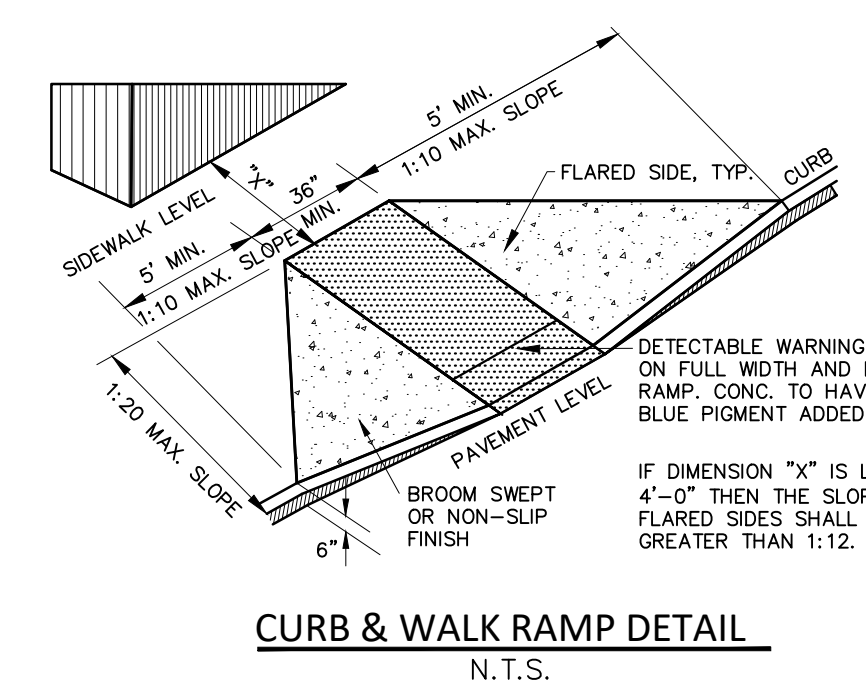
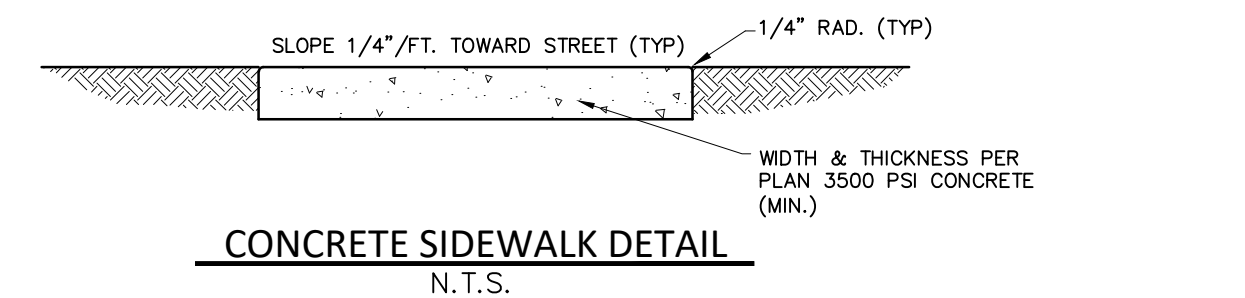
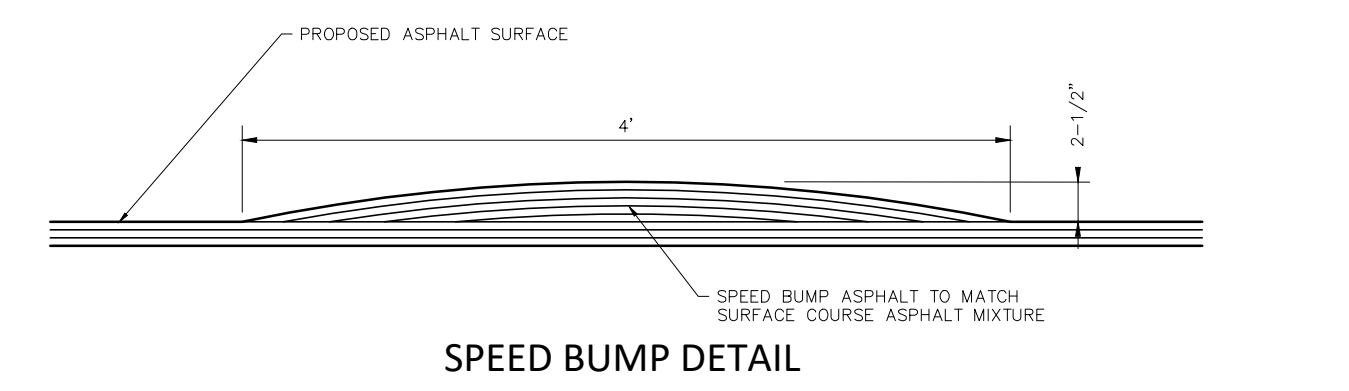
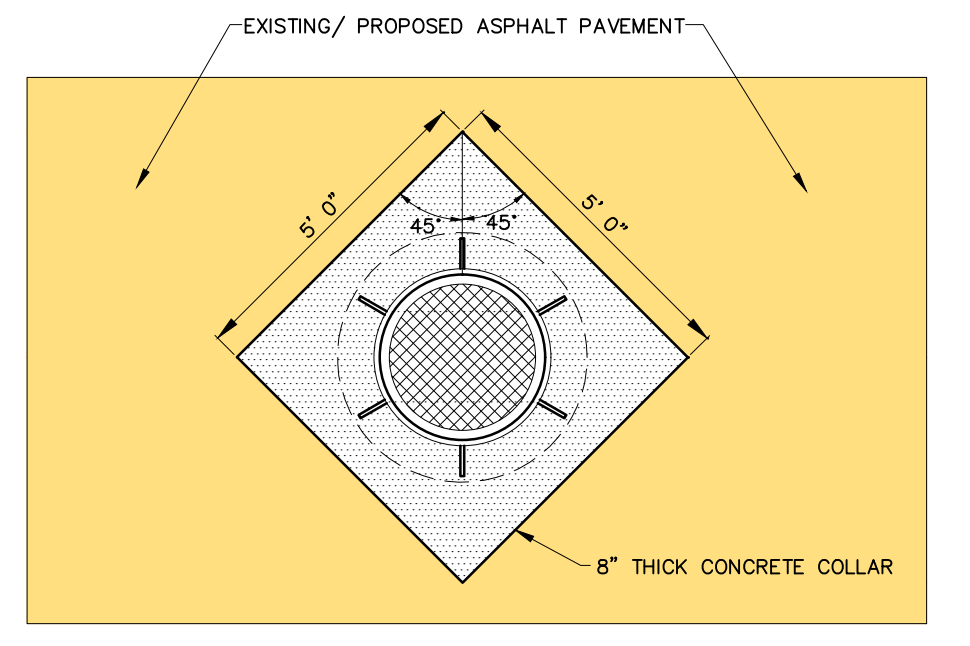
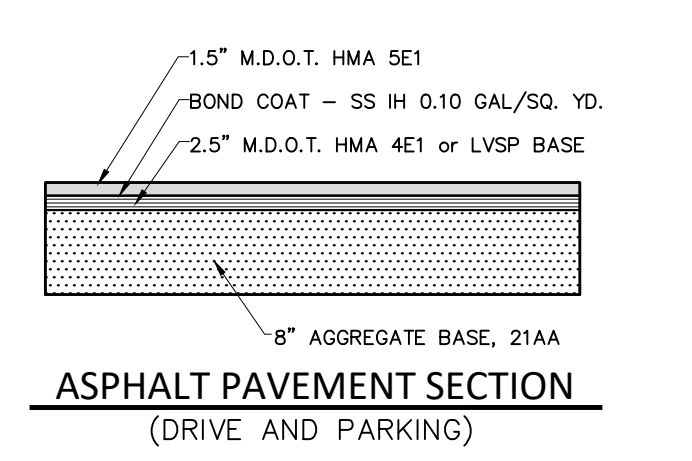
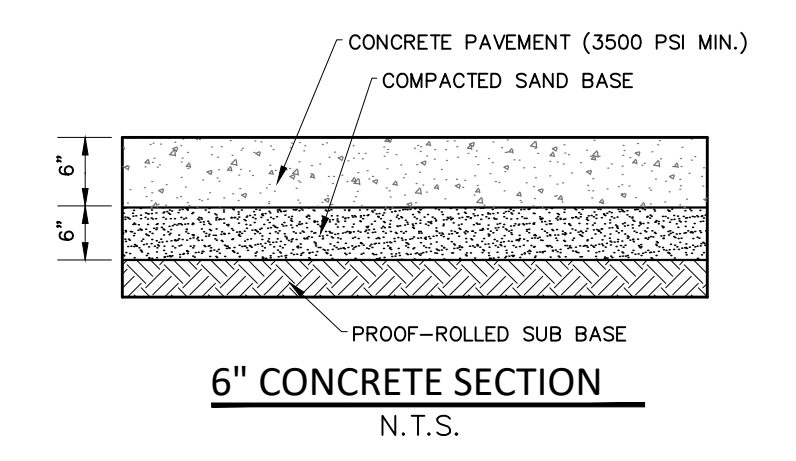
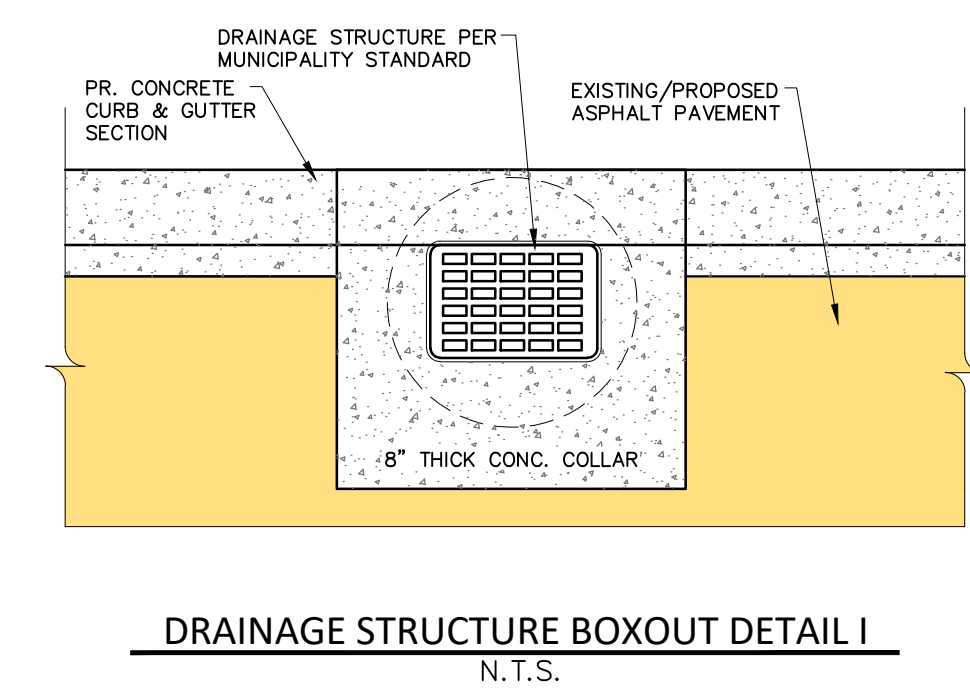
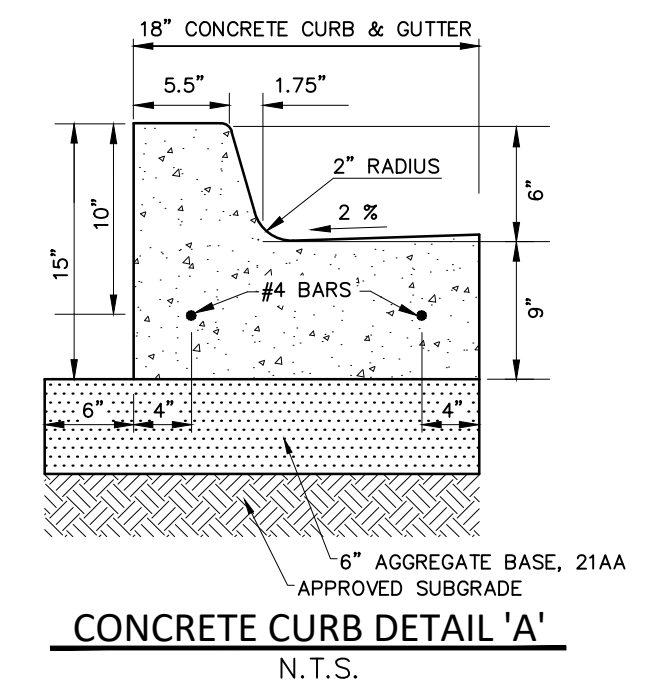
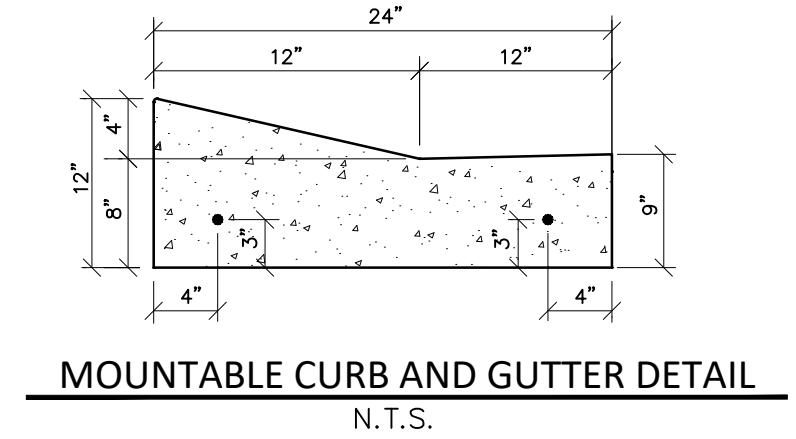
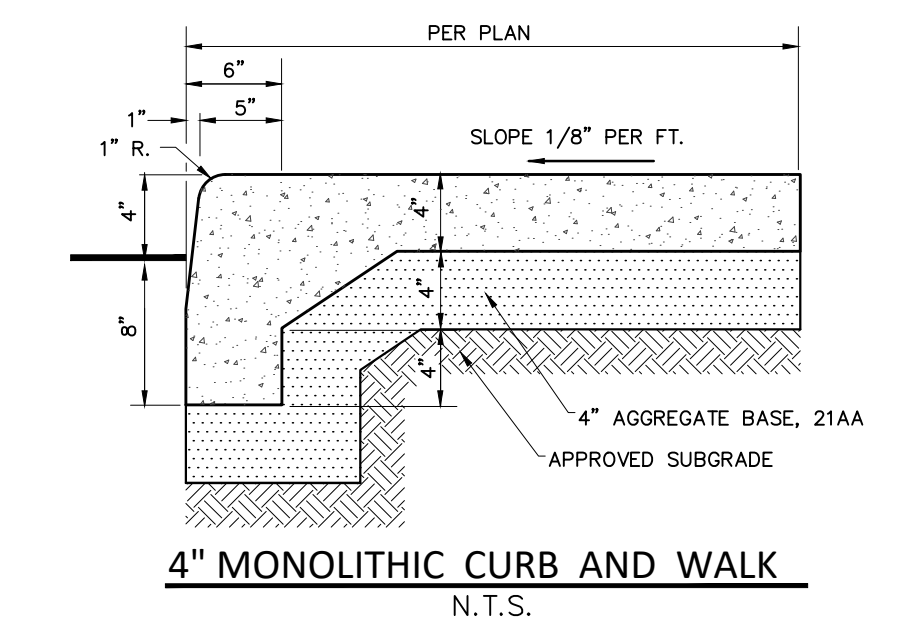
- Calculate Required Water Quality Control (Vwq) (1" rainfall event)
Vwq = 3630(C)(A) **7,043 cft**
- Calculate Required Forebay Volume (Vf) (15% of Vwq)
Vf = 545(C)(A) **1,057 cft**
- Calculate Channel Protection Volume Control (CPVC) (1.3" rainfall event)
Calculate Channel Protection Volume (Vcp)
Vcp = 4719(C)(A) = Required Infiltration Volume **9,156 cft**
- Calculate Channel Protection Rate Control (CPRC) (1.9" rainfall event)
Calculate Extended Detention Volume (Ved)
Ved = 6897(C)(A) = Minimum Extended Detention Volume **13,382 cft**
- Calculate Extended Detention Volume Discharge Rate (Qed) (48 hour discharge)
Qed = Ved / [(48 hr)(60 min)(60 sec)] = Ved/172800 **0.077 cfs**
- Calculate 100-year Storm Inlet Rate (Q¹⁰⁰-in)
Input Time of Concentration (Tc) (From Storm Sewer Design) **22.00 minutes**
Calculate 100-year rainfall intensity, I¹⁰⁰ = 83.3018/(Tc+9.1747)^{0.8069} **5.192 in/hr**
Q¹⁰⁰-in = (C)(I)(A) **10.073 cfs**
- Calculate 100-year Storm Allowable Outlet Rate (Q¹⁰⁰-out) (Lesser of Variable Release Rate (Qvrr) or Restricted Rate for Drain (Qr))
CHECK: Calculate Qvrr (1.1055-0.206²/LN(A)) **0.92 cfs/acre**
Since Qvrr > Qr, Use Qr as the allowable release rate, Qr = **2.720 cfs/acre**
Q¹⁰⁰-out = Qr(A) **6.680 cfs**
- Calculate Storage Curve Factor (R)
R = 0.206-(0.15)(LN(Q¹⁰⁰-in)/Q¹⁰⁰-out) **0.268**
- Calculate 100-year Storm Volume In (V¹⁰⁰-in)
V¹⁰⁰-in = 18,985(C)(A) **36,835 cft**
- Calculate 100-year Storm Detention Storage Volume (V¹⁰⁰-det)
Vcp(credit) **0 cft**
V100D = (V100R)(R)-Vcp(credit) **9,857 cft**

Notes:
1. Since infiltration potential in detention pond is negligible, Vcp credit is assumed to be 0.
2. Since V¹⁰⁰-in is larger than Ved, V100-det represents the minimum required storm detention volume.

Detention Volume Calculation - Underground Pipe Storage

Formula: $V = 3.14159 \times (\text{Pipe Radius})^2 \times \text{Length of Pipe}$

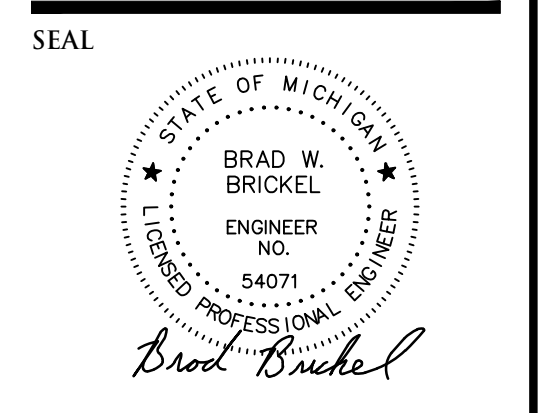
Pipe Diameter	72.00	Inch
Length, L:	351.00	Linear Feet
Radius, R:	3.00	Feet
Volume Required:	9,857.00	Cubic Feet
Volume Provided:	9,924.28	Cubic Feet



NOT FOR CONSTRUCTION

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM



PROJECT
Hillside Townes
33000 Thomas Street
Farmington, MI 48336

CLIENT
Robertson Brothers Homes
6905 Telegraph Road
Bloomfield Hills, MI 48301

Contact: Tim Loughrin
Tel. (248) 282-1428
Email: toughrin@robertsonhomes.com

PROJECT LOCATION
Part of the NW 1/4 of Section 27
T. 1N, R. 9E
City of Farmington,
Oakland, Michigan

SHEET
Calculation, Notes &
Details Plan



DATE ISSUED/REVISED
09-01-20 ISSUED FOR SITE PLAN REVIEW
05-15-23 REVISED PER SITE PLAN REVIEW

DRAWN BY:
J. Lawrey
DESIGNED BY:
B. Brickel
APPROVED BY:
B. Brickel
DATE:
July 13, 2021
SCALE: N.T.S.

NFE JOB NO. **H900-04** SHEET NO. **C11**

Landscape Summary

- Frontage Greenbelt Landscape**
Required: 10' Width Greenbelt
1 Tree & 6 Shrubs / 30 LF of Frontage
Thomas St. Frontage: 438.67 LF
Required: 10' Width Greenbelt
15 Trees & 88 Shrubs
Provided: 10' Width Greenbelt
13 Trees & 88 Shrubs (4 Canopy Trees
& 18 Ornamental Trees) (2 Credits from
Saved Trees)
- Parking Lot Landscape**
Required: 1 Canopy Tree & 100 SF of Landscape
Area / 8 Parking Spaces
Number of Spaces: 43
Required: 6 Trees & 537.50 SF Landscape Area
Provided: 6 Trees & 1,335 SF Landscape Area
- Street Trees**
Required: 1 Tree per 40 LF of street frontage
Total Street Frontage: 2,170 LF
Required: 54 Trees
Provided: 23 Trees (31 Credits from Saved Trees)
- Landscape Diversity**
Required: No one species comprising more than
33% of all proposed landscape
Total Proposed Plants: 997
Proposed Diversity:

common name	qty.	% of proposed
Arctic Fire Red Twig Dogwood	29	2.91%
Armstrong Freeman Maple	13	1.30%
Autumn Brilliance Serviceberry	9	0.90%
Big Blue Lilyturf	80	8.02%
Blue Angel Hosta	8	0.80%
Carousel Little Bluestem	8	0.80%
Dense Yew	83	8.32%
Diabolo Ninebark	22	2.21%
First Frost Hosta	16	1.60%
Goldsturm Black-Eyed Susan	101	10.13%
Green Gem Boxwood	14	1.40%
Heritage Oak	6	0.60%
Karl Foerster Feather Reed Grass	57	5.72%
Kodiak Orange Diervilla	22	2.21%
Little Business Daylily	131	13.14%
Low Scape Hedger Chokeberry	48	4.81%
Magnus Purple Coneflower	10	1.00%
Palace Purple Coral Bells	18	1.81%
Patriot Hosta	28	2.81%
Princeton American Elm	4	0.40%
Princeton Sentry Ginkgo	3	0.30%
Quickfire Panicle Hydrangea	33	3.31%
Royal Raindrops Crabapple	9	0.90%
Russian Sage	6	0.60%
Shenandoah Switchgrass	64	6.42%
Slender Silhouette Sweetgum	3	0.30%
Sun King Japanese Spikenard	24	2.41%
Tulip Tree	4	0.40%
Visions in Red Astilbe	64	6.42%
Walker's Low Catmint	80	8.02%



Overall Landscape Plan

Hillside Townes

Farmington, Michigan

prepared for:
Robertson Brothers Homes
6905 Telegraph Rd. - Suite 200
Bloomfield Hills, MI 48301
Phone: 248.657.4968

job number: 20051
date: 07.18.2022

drawn by: EMJ
checked by: WTK

Tree Preservation Summary

Total Trees Surveyed:	217
- Total Trees Offsite:	122
Total Onsite Trees:	95
Total Trees Saved:	45
Total Trees Removed:	50
- Offsite Trees Removed:	5
Credits from Saved Trees	
Trees larger than 12"	7
Trees smaller than 11.9"	38
Total Credits from Saved Trees	52

* Credits are calculated using the parameters set forth in the City of Farmington Ordinance, Section 35-183 - Incentives for Preserving Existing Vegetation.

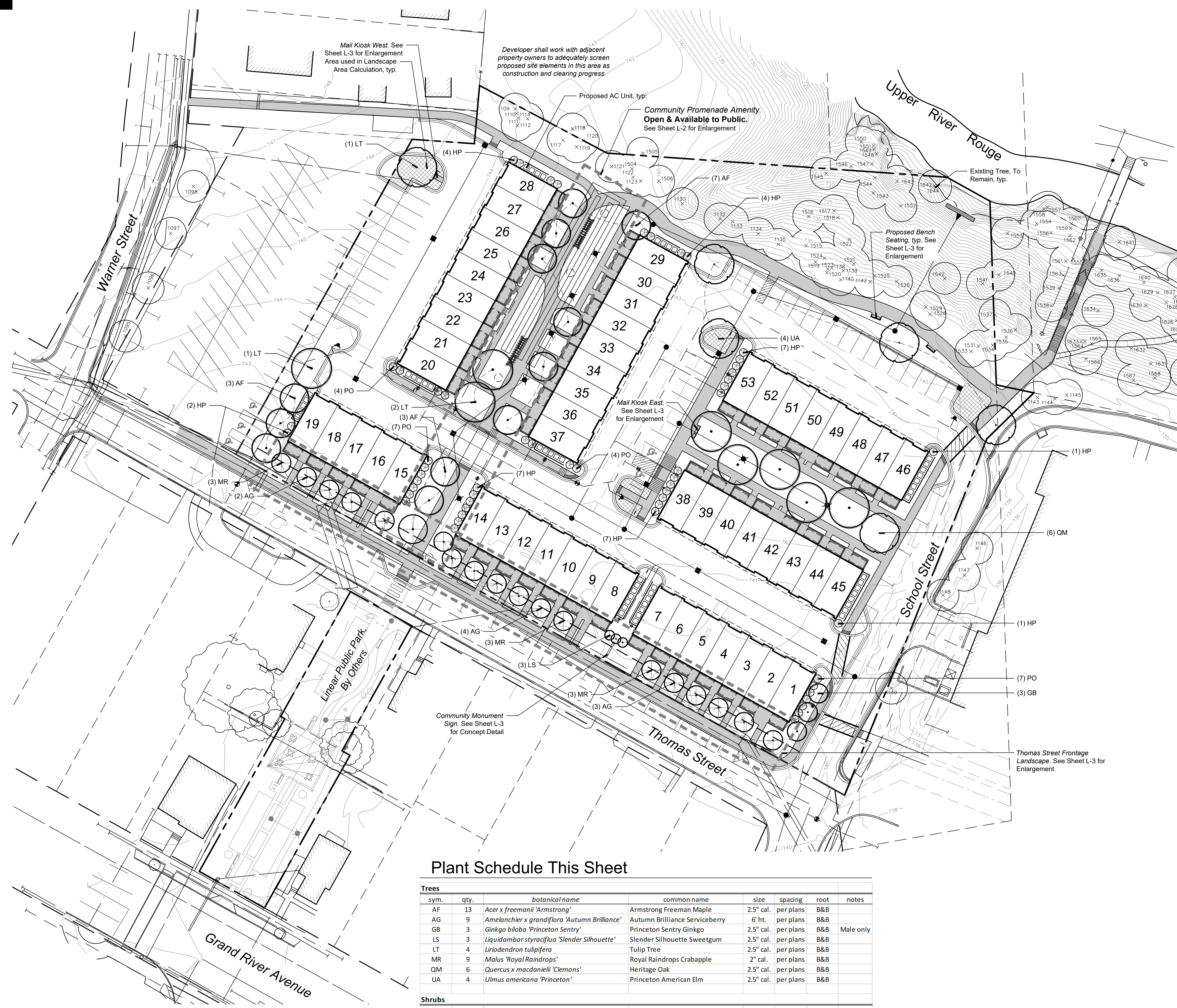
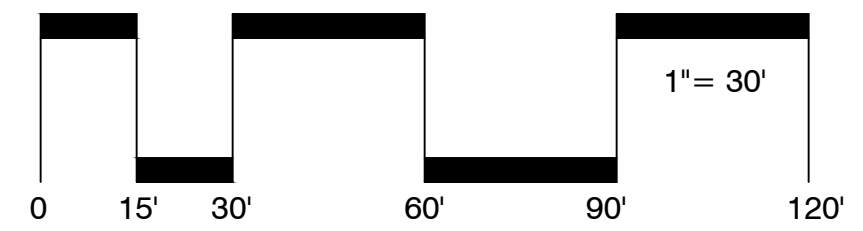
General Notes

- All landscaped areas shall be provided with irrigation via automatic irrigation system or a readily available and acceptable water supply. Irrigation systems shall include separate zones for Lawn and Plants.
- Landscape shall be installed as construction activity progresses and conditions become favorable for the health, protection, and longevity of the installed plant material.



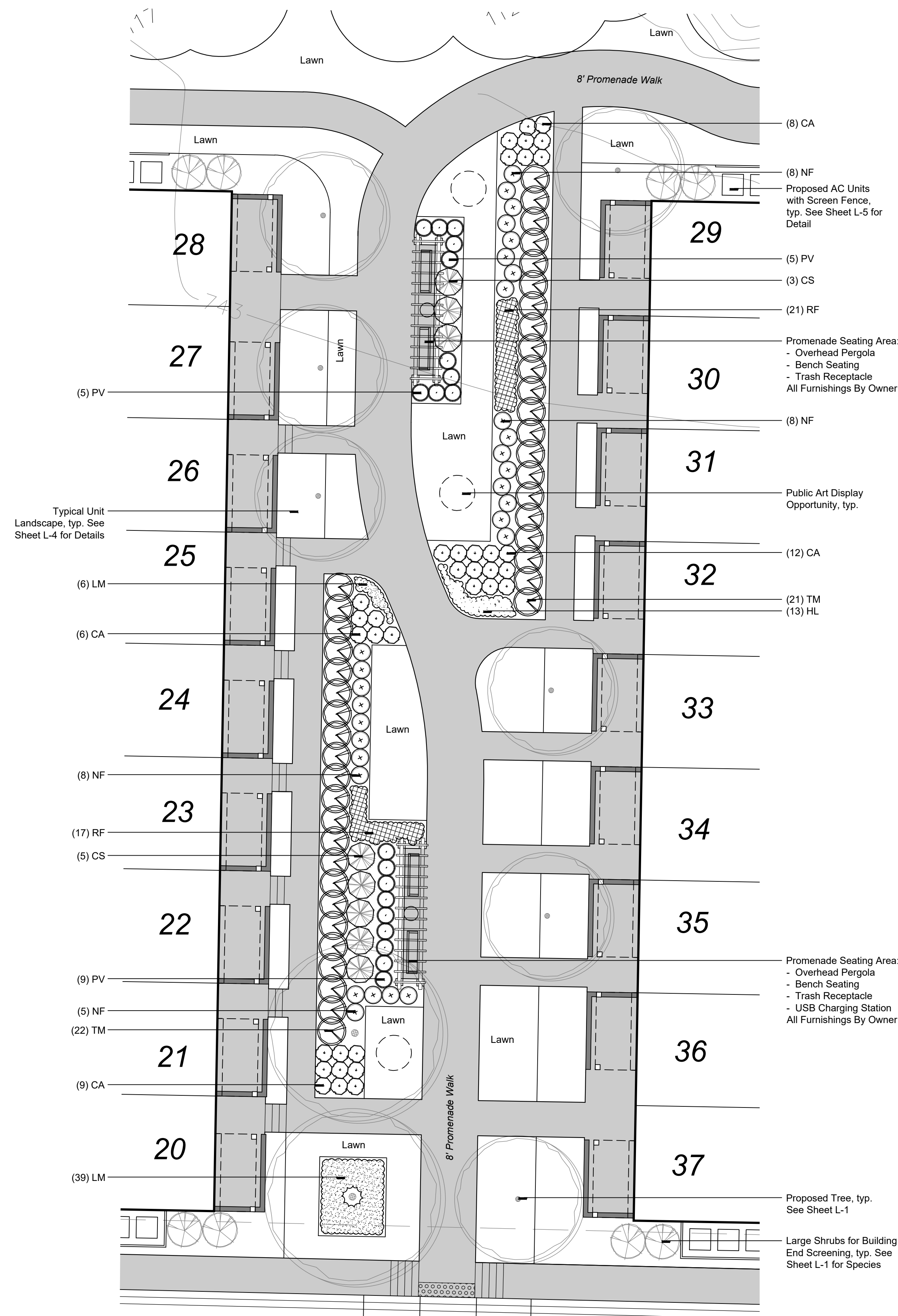
revisions:

09.01.2022	Per Municipal Review
11.14.2022	Per Municipal Review
05.15.2023	Per Landscape Development

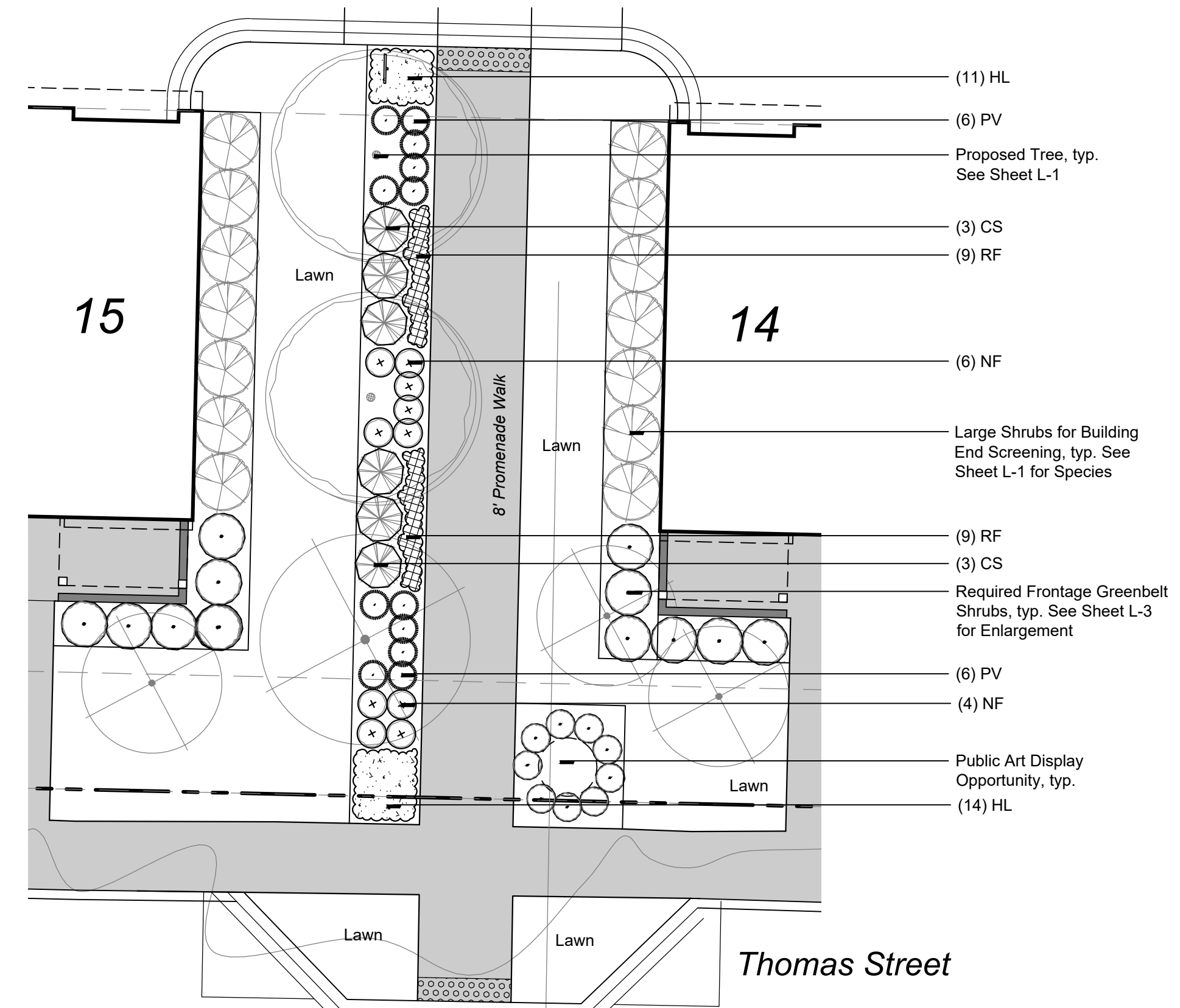


Plant Schedule This Sheet

Trees						
sym.	qty.	botanical name	common name	size	spacing	root notes
AF	13	<i>Acer x freemanii</i> 'Armstrong'	Armstrong Freeman Maple	2.5" cal.	per plans	B&B
AG	9	<i>Amelanchier x grandiflora</i> 'Autumn Brilliance'	Autumn Brilliance Serviceberry	6' ht.	per plans	B&B
GB	3	<i>Ginkgo biloba</i> 'Princeton Sentry'	Princeton Sentry Ginkgo	2.5" cal.	per plans	B&B Male only
LS	3	<i>Liquidambar styraciflua</i> 'Slender Silhouette'	Slender Silhouette Sweetgum	2.5" cal.	per plans	B&B
LT	4	<i>Liriodendron tulipifera</i>	Tulip Tree	2.5" cal.	per plans	B&B
MR	9	<i>Malus</i> 'Royal Raindrops'	Royal Raindrops Crabapple	2" cal.	per plans	B&B
QM	6	<i>Quercus x macdanielii</i> 'Clemons'	Heritage Oak	2.5" cal.	per plans	B&B
UA	4	<i>Ulmus americana</i> 'Princeton'	Princeton American Elm	2.5" cal.	per plans	B&B
Shrubs						
sym.	qty.	botanical name	common name	size	spacing	root notes
HP	33	<i>Hydrangea paniculata</i> 'Quickfire'	Quickfire Panicle Hydrangea	#3	5' o.c.	cont.
PO	22	<i>Physocarpus opulifolius</i> 'Monlo'	Diabolo Ninebark	#3	5' o.c.	cont.



Community Promenade Amenity - North Concept Enlargement



Community Promenade Amenity - South Concept Enlargement

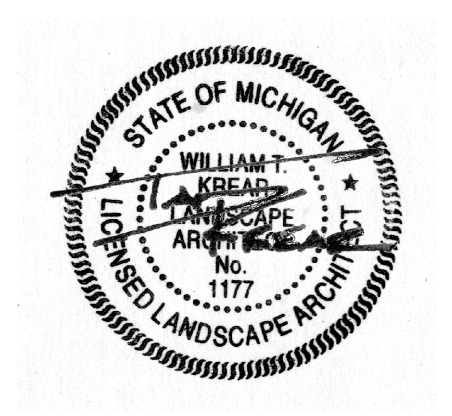
Plant Schedule This Sheet

Shrubs							
sym.	qty.	botanical name	common name	size	spacing	root	notes
CS	14	<i>Cornus stolonifera</i> 'Arctic Fire'	Arctic Fire Red Twig Dogwood	#3	48" o.c.	cont.	
TM	43	<i>Taxus x media</i> 'Densiflora'	Dense Yew	24" ht.	36" o.c.	B&B	Hedge at 36" ht.

Ornamental Grasses, Perennials & Bulbs							
sym.	qty.	botanical name	common name	size	spacing	root	notes
CA	35	<i>Calamagrostis x acutiflora</i> 'Karl Foerster'	Karl Foerster Feather Reed Grass	#2	30" o.c.	cont.	
HL	38	<i>Hemerocallis</i> 'Little Business'	Little Business Daylily	#1	18" o.c.	cont.	
LM	45	<i>Liriope muscarii</i> 'Big Blue'	Big Blue Lilyturf	#1	18" o.c.	cont.	
NF	39	<i>Nepeta x faassenii</i> 'Walker's Low'	Walker's Low Catmint	#1	30" o.c.	cont.	
PV	31	<i>Panicum virgatum</i> 'Shenandoah'	Shenandoah Switchgrass	#2	30" o.c.	cont.	
RF	56	<i>Rudbeckia fulgida</i> 'Goldsturm'	Goldsturm Black-Eyed Susan	#1	18" o.c.	cont.	

General Notes

- All landscaped areas shall be provided with irrigation via automatic irrigation system or a readily available and acceptable water supply. Irrigation systems shall include separate zones for Lawn and Plants.
- Landscape shall be installed as construction activity progresses and conditions become favorable for the health, protection, and longevity of the installed plant material.
- Community Promenade Amenity shall be open and accessible to the Public



sheet title:
Promenade Enlargement Plans

project title:
Hillside Townes
Farmington, Michigan

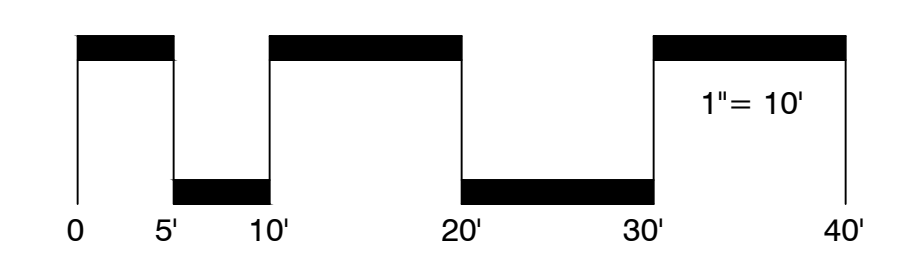
prepared for:
Robertson Brothers Homes
6905 Telegraph Rd. - Suite 200
Bloomfield Hills, MI 48301

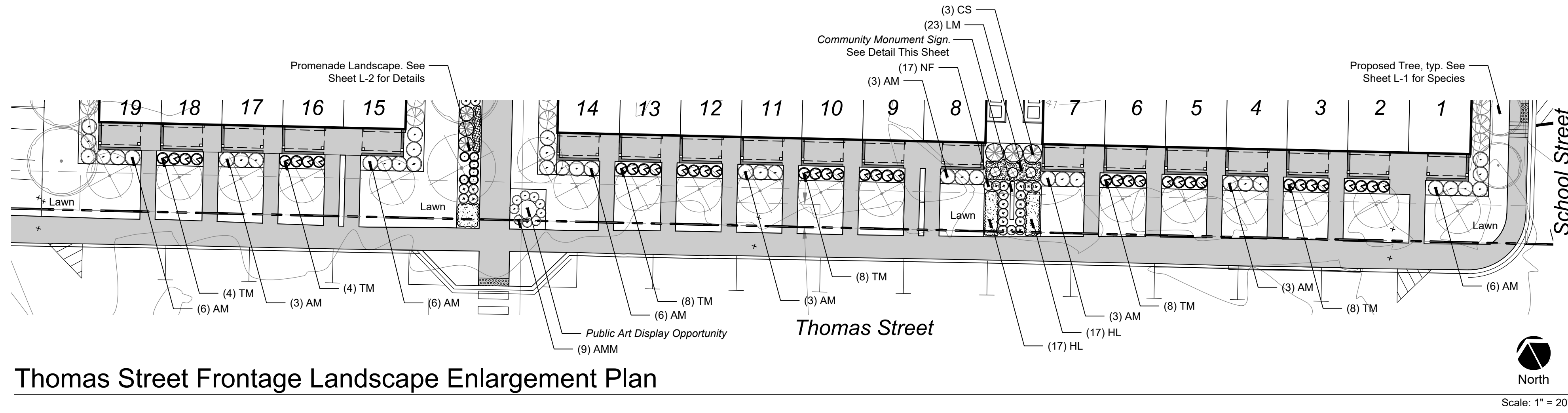
Phone: 248.657.4968

job number: 20051
date: 07.18.2022

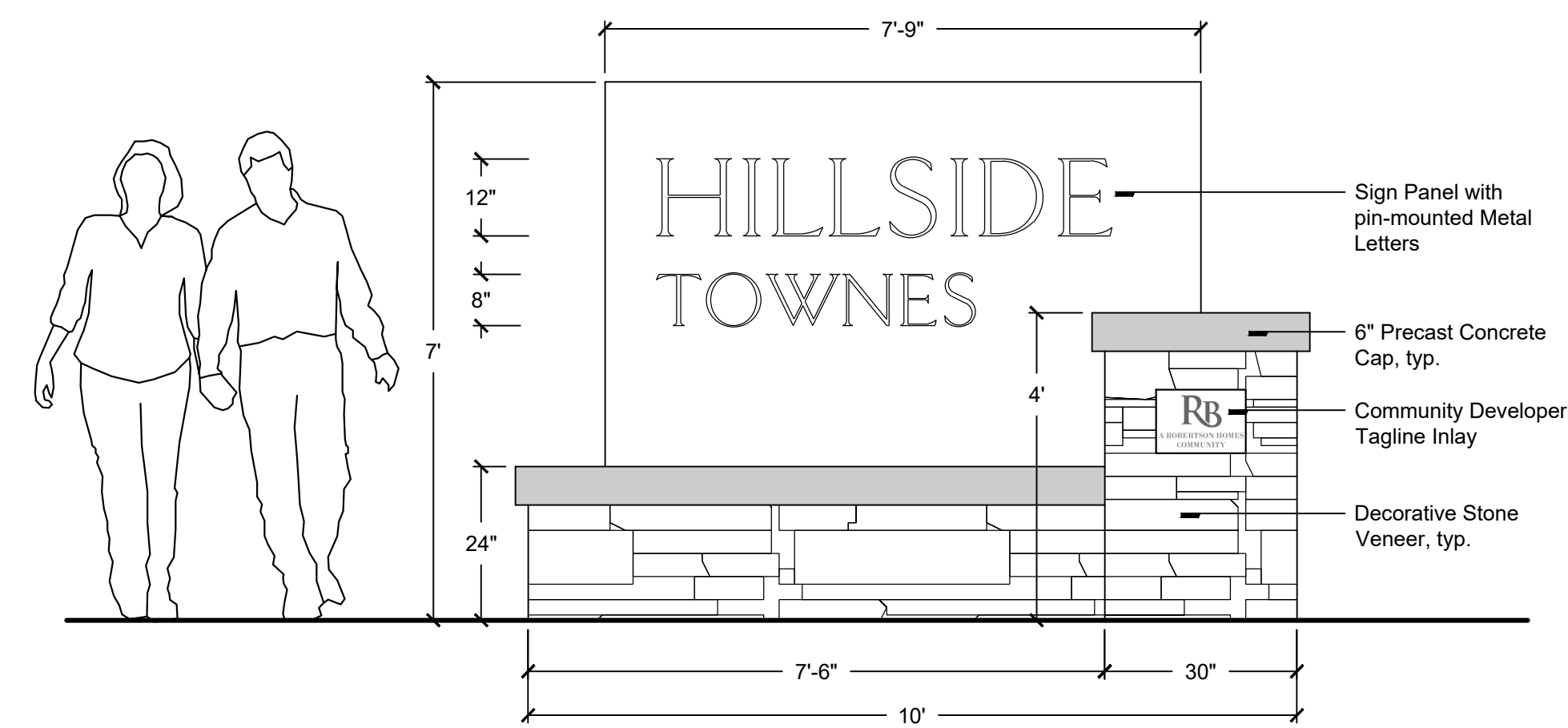
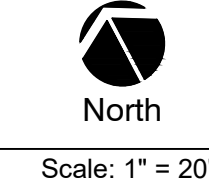
drawn by: EMJ
checked by: WTK

revisions:
09.01.2022 Per Municipal Review
11.14.2022 Per Municipal Review
05.15.2023 Per Landscape Development





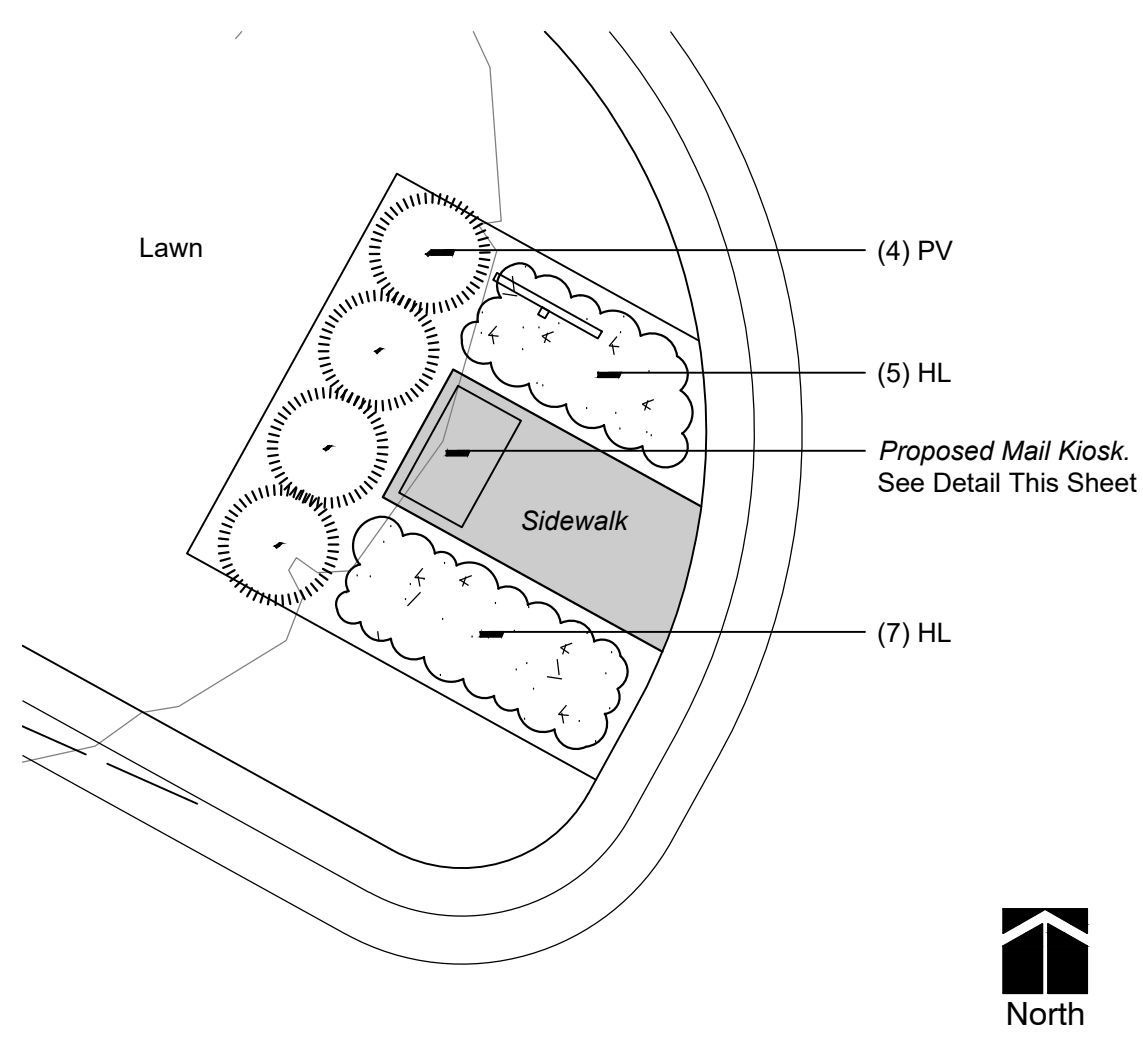
Thomas Street Frontage Landscape Enlargement Plan



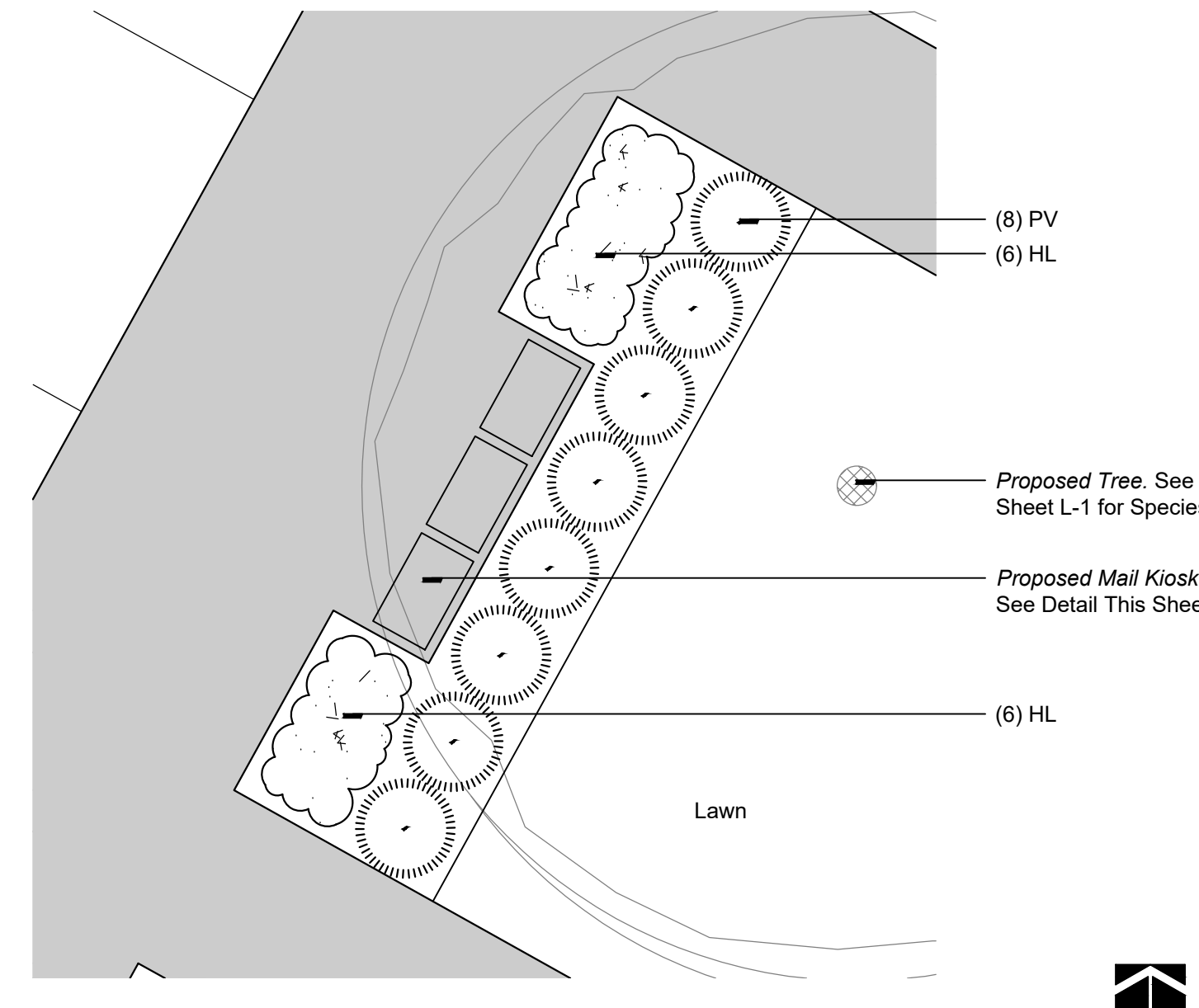
Conceptual Sign Elevation Detail

Ordinance Summary
- Allowable Area: 50 sf
- Proposed Area: 36.17 sf
- Allowable Height: 8'
- Proposed Height: 7'
*Sign is Double Sided

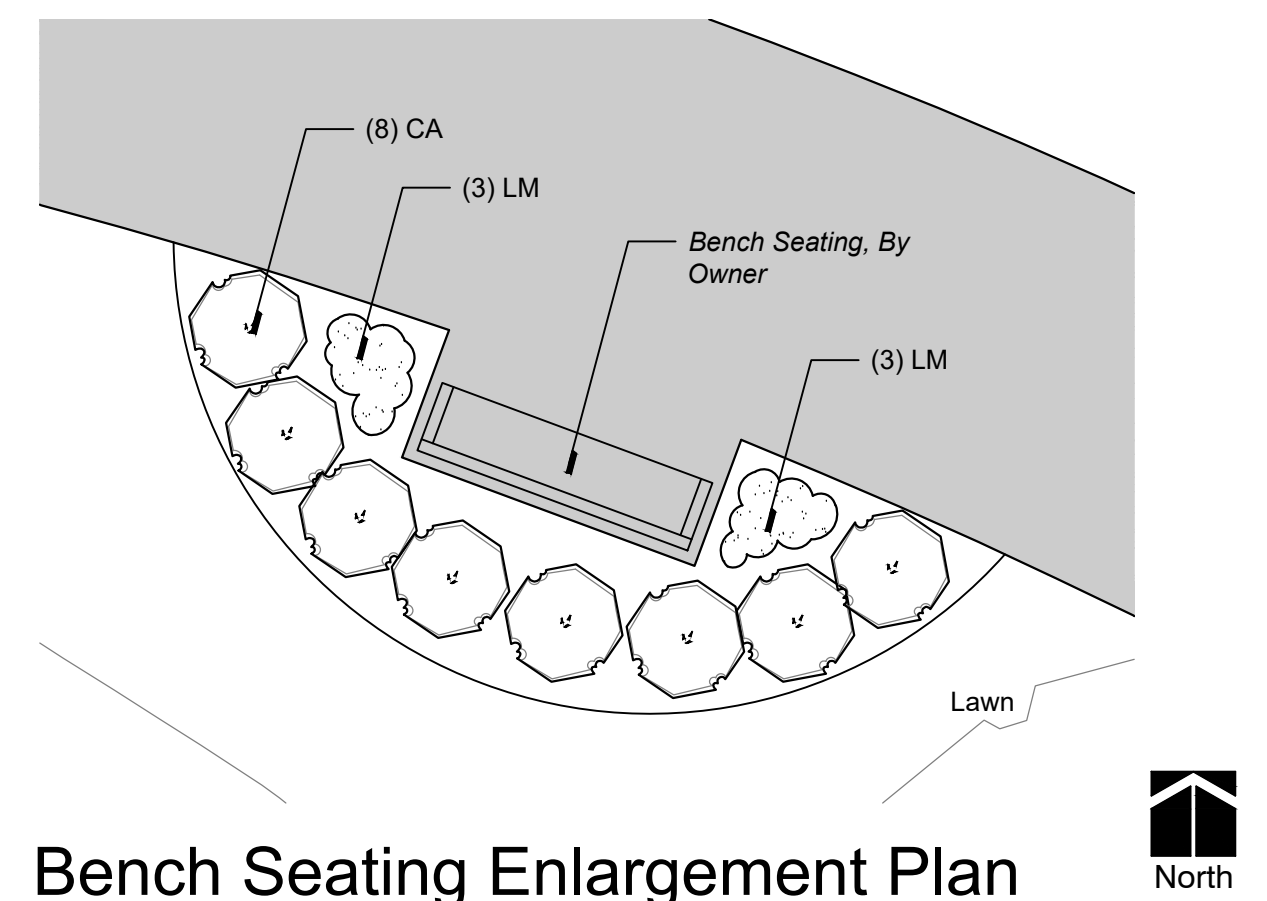
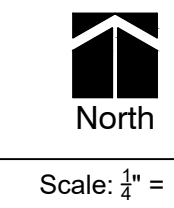
Scale: 1/4" = 1'



Mail Kiosk West Enlargement Plan

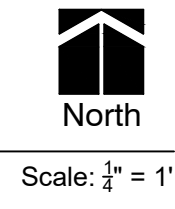


Mail Kiosk East Enlargement Plan



Bench Seating Enlargement Plan

*Note: There are two instances of this Plan. Quantities in Plant Schedule shall reflect total quantity needed



Decorative Mailbox - 16 Gang CBU
Scale: NTS
Manufacturer: Salsbury Industries
18300 Central Avenue
Carson, CA 90746
800.624.5269
www.mailboxes.com
Model: CBU 16 Doors & 2 Parcel Lockers
3316BLK-U
Black
Quantity: 4 Total

Plant Schedule This Sheet

Shrubs							
sym.	qty.	botanical name	common name	size	spacing	root	notes
AM	39	<i>Aronia melanocarpa</i> 'Low Scape Hedger'	Low Scape Hedger Chokeberry	#3	48" o.c.	cont.	Hedge at 36" ht.
AMM	9	<i>Aronia melanocarpa</i> 'Low Scape Mound'	Low Scape Mound Chokeberry	#3	30" o.c.	cont.	
CS	3	<i>Cornus stolonifera</i> 'Arctic Fire'	Arctic Fire Red Twig Dogwood	#3	48" o.c.	cont.	
TM	40	<i>Taxus x media</i> 'Densiflora'	Dense Yew	24" ht.	36" o.c.	B&B	Hedge at 36" ht.
Ornamental Grasses, Perennials & Bulbs							
sym.	qty.	botanical name	common name	size	spacing	root	notes
CA	16	<i>Calamagrostis x acutiflora</i> 'Karl Foerster'	Karl Foerster Feather Reed Grass	#2	30" o.c.	cont.	
HL	58	<i>Heimerocallis</i> 'Little Business'	Little Business Daylily	#1	18" o.c.	cont.	
LM	35	<i>Liriope muscarii</i> 'Big Blue'	Big Blue Lilyturf	#1	18" o.c.	cont.	
NF	17	<i>Nepeta x faassenii</i> 'Walker's Low'	Walker's Low Catmint	#1	30" o.c.	cont.	
PV	12	<i>Panicum virgatum</i> 'Shenandoah'	Shenandoah Switchgrass	#2	30" o.c.	cont.	

sheet title:
Landscape Enlargement Plans

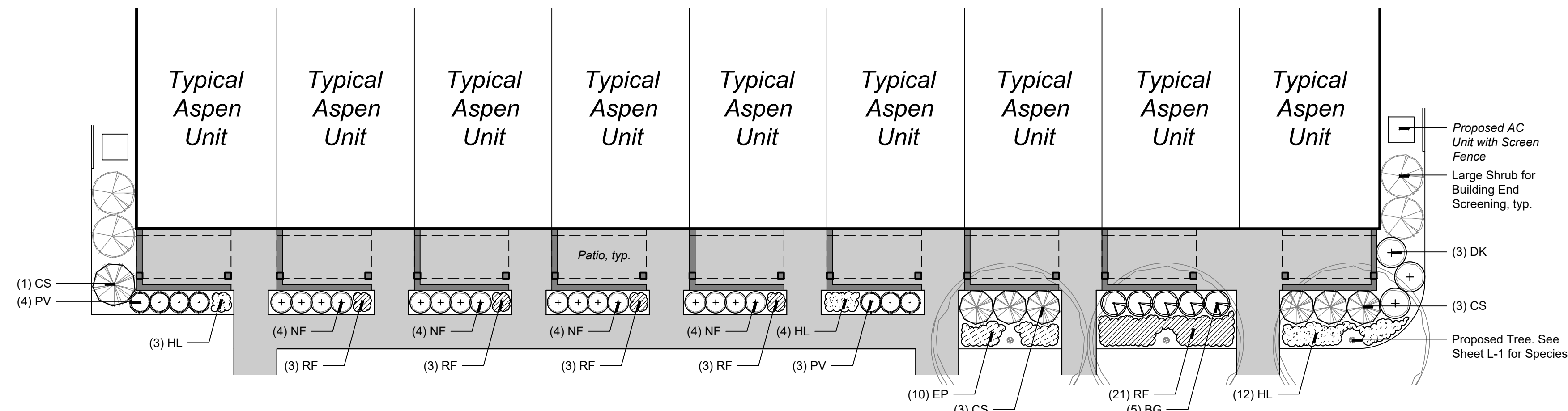
project title:
Hillside Townes

Farmington, Michigan
prepared for:
Robertson Brothers Homes
6905 Telegraph Rd. - Suite 200
Bloomfield Hills, MI 48301
Phone: 248.657.4968

job number: 20051
date: 07.18.2022
drawn by: EMJ
checked by: WTK

revisions:
09.01.2022 Per Municipal Review
11.14.2022 Per Municipal Review
05.15.2023 Per Landscape Development





Promenade West Unit Landscape Plan

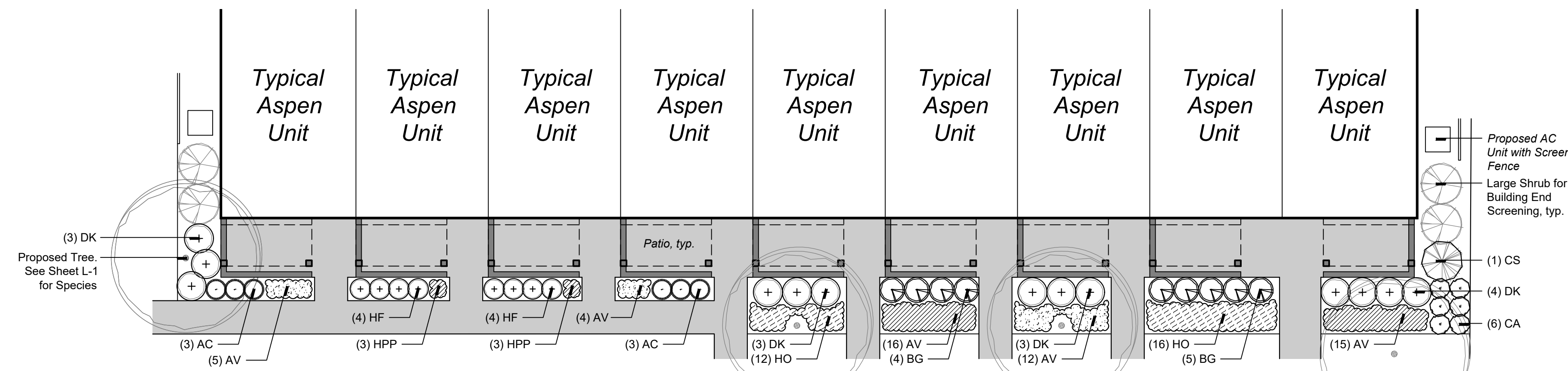
This Unit Landscape Plan applies to Units 20-28

Scale: 1" = 10'

Plant Schedule This Sheet

Shrubs						
sym.	qty.	botanical name	common name	size	spacing	root notes
BG	14	<i>Buxus 'Green Gem'</i>	Green Gem Boxwood	18"-24" ht.	36" o.c.	B&B Hedge at 30" ht.
CS	12	<i>Cornus sericea 'Arctic Fire'</i>	Arctic Fire Red Twig Dogwood	No. 3	48" o.c.	cont.
DK	22	<i>Diervilla 'Kodiak Orange'</i>	Kodiak Orange Diervilla	No. 3	42" o.c.	cont.

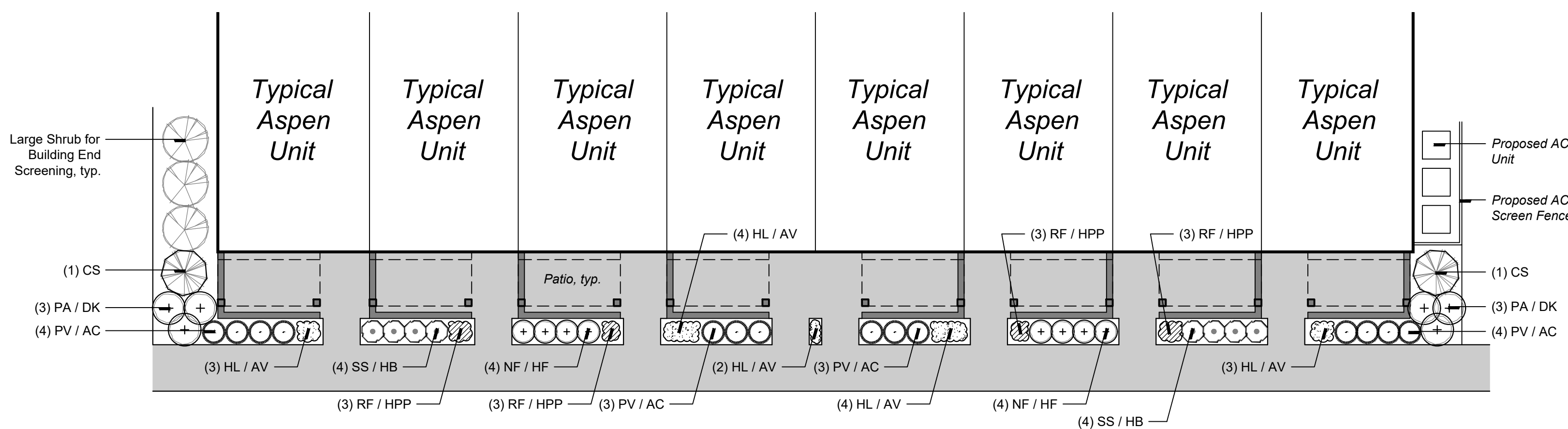
Ornamental Grasses, Perennials & Bulbs						
sym.	qty.	botanical name	common name	size	spacing	root notes
AC	24	<i>Aralia cordata 'Sun King'</i>	Sun King Japanese Spikenard	No. 2	30" o.c.	cont.
AV	64	<i>Astilbe 'Visions in Red'</i>	Visions in Red Astilbe	No. 1	18" o.c.	cont.
CA	6	<i>Calamagrostis x acutiflora 'Karl Foerster'</i>	Karl Foerster Feather Reed Grass	No. 2	30" o.c.	cont.
EP	10	<i>Echinacea purpurea 'Magnus'</i>	Magnus Purple Coneflower	No. 1	18" o.c.	cont.
HB	8	<i>Hosta 'Blue Angel'</i>	Blue Angel Hosta	No. 1	30" o.c.	cont.
HF	16	<i>Hosta 'First Frost'</i>	First Frost Hosta	No. 1	30" o.c.	cont.
HL	35	<i>Hemerocallis 'Little Business'</i>	Little Business Daylily	No. 1	18" o.c.	cont.
HO	28	<i>Hosta 'Patriot'</i>	Patriot Hosta	No. 1	18" o.c.	cont.
HPP	18	<i>Heuchera 'Palace Purple'</i>	Palace Purple Coral Bells	No. 1	18" o.c.	cont.
NF	24	<i>Nepeta x faassenii 'Walker's Low'</i>	Walker's Low Catmint	No. 1	30" o.c.	cont.
PA	6	<i>Perovskia atriplicifolia</i>	Russian Sage	No. 2	36" o.c.	cont.
PV	21	<i>Panicum virgatum 'Shenandoah'</i>	Shenandoah Switchgrass	No. 2	30" o.c.	cont.
RF	45	<i>Rudbeckia fulgida 'Goldsturm'</i>	Goldsturm Black-Eyed Susan	No. 1	18" o.c.	cont.
SS	8	<i>Schizachyrium scoparium 'Carousel'</i>	Carousel Little Bluestem	No. 2	30" o.c.	cont.



Promenade East Unit Landscape Plan

This Unit Landscape Plan applies to Units 29-37

Scale: 1" = 10'



Eastern Typical Unit Landscape Plan

This Unit Landscape Plan applies to Units 38-54
Plant Material depends upon Solar Orientation

Scale: 1" = 10'



sheet title:

Typical Unit Landscape Plans

project title:

Hillside Townes

Farmington, Michigan

prepared for:

Robertson Brothers Homes
6905 Telegraph Rd. - Suite 200
Bloomfield Hills, MI 48301

Phone: 248.657.4968

job number:

20051

date:

05.15.2023

drawn by:

EMJ

checked by:

WTK

revisions:



Know what's below.
Call before you dig.

sheet no.

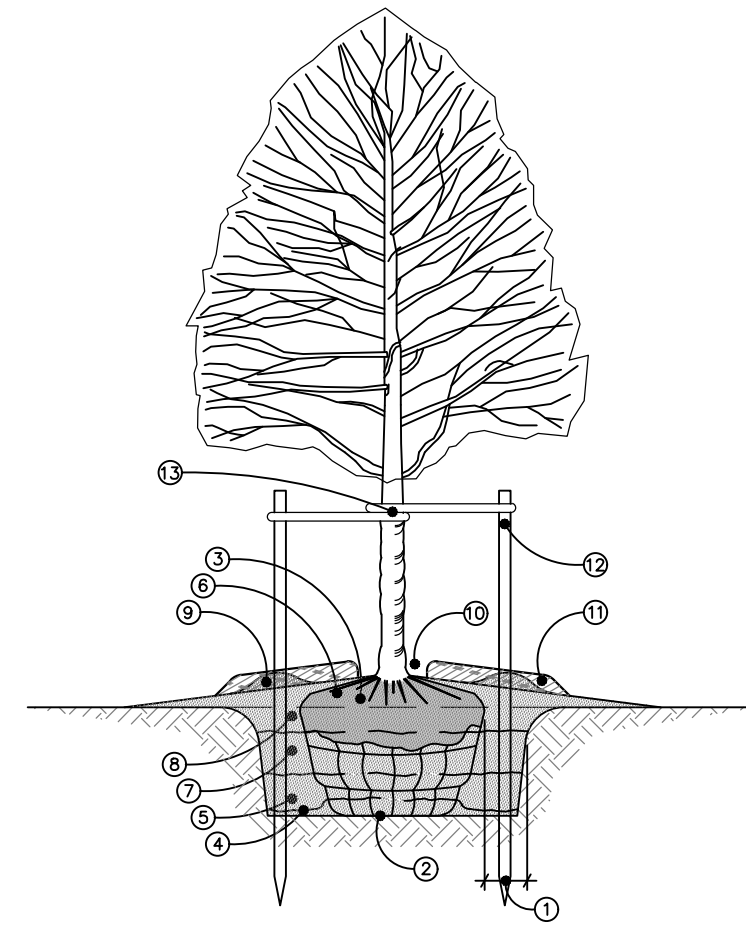
L-4

Landscape Notes

- All landscaping and landscape elements shall be planted, and earth moving or grading performed, in a sound workmanlike manner, according to accepted planting and grading procedure.
- Landscaping required by this Ordinance shall be maintained in a reasonably healthy condition, free from refuse and debris.
- All unhealthy or dead material shall be replaced within one (1) year of damage or death or the next appropriate planting period, whichever comes first.
- All landscaped areas shall be provided with irrigation via an automatic irrigation system or a readily available and acceptable water supply. Irrigation systems shall include separate zones for Lawn and Plants.
- Topsoil removed during construction shall be stockpiled in an appropriate manner to prevent erosion, and shall be redistributed on regraded surfaces to be landscaped, and provide a minimum of four (4) inches of even cover.
- Plants shall be mulched with shredded hardwood bark mulch at a depth of two (2) inches. Mulch is to be free from debris and foreign material and shall contain no pieces of inconsistent size.
- All plant material shall be true to name and free from physical damage and wind burn.
- Plants shall be full, well-branched, and in a healthy, vigorous growing condition.
- Plants shall be watered before and after planting is complete.
- All trees must be staked, fertilized, and mulched and shall be guaranteed to exhibit a normal growth cycle for at least one (1) full year following planting.
- All material shall conform to the guidelines established in the most recent edition of the American Standard for Nursery Stock.
- Provide clean backfill soil, using material stockpiled on site. Soil shall be screened and free of any debris, foreign material, or stone.
- "Agriform" tabs or similar slow-release fertilizer shall be added to the planting pits before being backfilled.
- Amended planting mix shall consist of 1/3 screened topsoil, 1/3 sand, and 1/3 peat.
- The Landscape Contractor shall be responsible for all work shown on the landscape drawings and specifications.
- No substitutions or changes of location, or plant types shall be made without the approval of the Landscape Architect or Owner's representative.
- The Landscape Architect shall be notified of any discrepancies between the plans and field conditions prior to installation.
- The Landscape Contractor shall be responsible for maintaining all plant material in a vertical condition throughout the guaranteed period.
- The Landscape Architect shall have the right at any stage of the installation to reject any work or material that does not meet the requirements of the plan and specifications, if requested by the owner.
- The Contractor shall be responsible for checking plant quantities to ensure quantities on drawings and plant list are the same. In the event of a discrepancy, the quantities on the plans shall prevail.
- The Landscape Contractor shall seed and mulch or sod (as indicated on plans) all areas disturbed during construction, throughout the contract limits.
- A pre-emergent weed control agent, "Preen" or equal, shall be applied uniformly to all planting beds prior to mulching.
- The Developer and Landscape Architect reserve the right to change location of plant material and alter plant species/variety at the time of installation based upon availability and quantity of material as well as site conditions. Materials will be of similar size, appearance and growth habit.
- All Lawn areas shall be Seeded or Sodded

INSTALLATION NOTES:

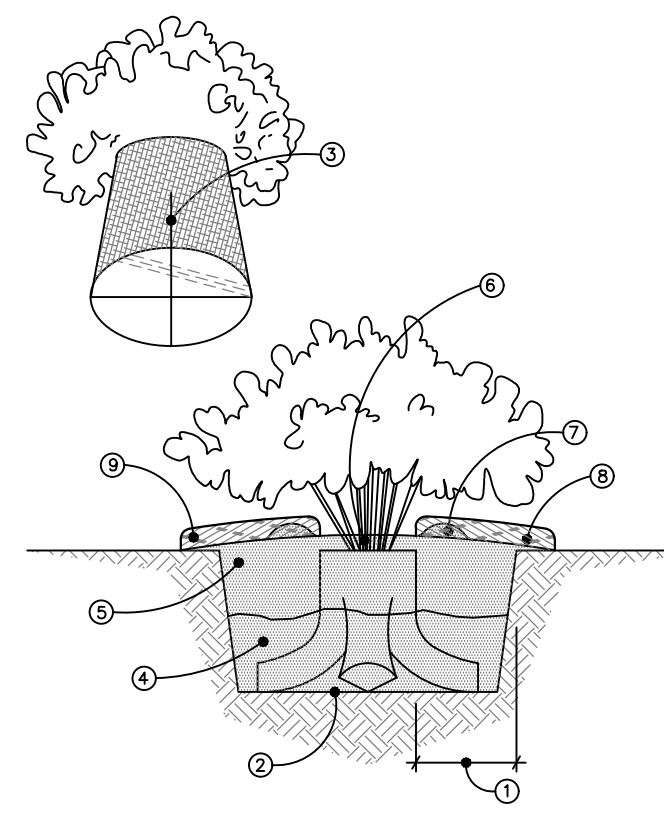
- DIG PLANT POCKET 12" WIDER THAN EDGE OF ROOTBALL.
- THOROUGHLY COMPACT BOTTOM OF PLANT POCKET.
- REMOVE ALL TWINE FROM TOP OF ROOTBALL. EXAMINE TRUNK COLLAR & REMOVE EXCESS SOIL FROM TOP OF ROOTBALL DOWN TO THE UPPER LEVEL OF THE ROOT SYSTEM. SET ROOTBALL WITH TOP 1/4 OF BALL ABOVE FINISH GRADE.
- PLACE BACKFILL UNDER & ALONGSIDE BASE OF BALL TO STRAIGHTEN TREE. THOROUGHLY COMPACT TO FILL ALL VOIDS.
- BACKFILL PLANT POCKET 1/3 WITH PLANTING MIX CONSISTING OF 50% TOPSOIL & 50% NATIVE SOIL & COMPACT THOROUGHLY, ASSURING TREE IS STILL STRAIGHT.
- BEFORE CONTINUING WITH BACKFILL, REMOVE TOP WIRE LOOPS, OR BEND DOWN UNTIL THEY TOUCH SIDE OF BALL. REMOVE EXCESS BURLAP.
- BACKFILL PLANT POCKET SECOND 1/3 WITH PLANTING MIX & COMPACT THOROUGHLY, ASSURING TREE IS STILL STRAIGHT.
- BACKFILL PLANT POCKET LAST 1/3 WITH PLANTING MIX & COMPACT THOROUGHLY, ASSURING TREE IS STILL STRAIGHT. SLOPE GRADE AWAY FROM TREE.
- IF PLANTED IN NON-IRRIGATED AREAS, FORM A SAUCER WITH SOIL AT OUTSIDE EDGE OF ROOTBALL.
- SHREDED BARK MULCH, 2" DEPTH. MULCH TO BE NATURAL IN COLOR. LEAVE 3" RING EXPOSED AT BASE OF TRUNK.
- MULCH RINGS TO BE CONSISTENT WITH PLANT TYPE/SIZE THROUGHOUT PROJECT & SHOULD NOT EXTEND BEYOND PLANT POCKET.
- MINIMUM 2"x2"x80" HARDWOOD STAKES TO EXTEND INTO UNDISTURBED SOIL UNDER PLANT POCKET. STAKE LOCATIONS PER TREE TO BE CONSISTENT THROUGHOUT PROJECT.
- 1" WIDE BELT LIKE NYLON, PLASTIC, OR OTHER ACCEPTABLE MATERIAL. NO WIRE OR HOSE TO BE USE TO GUY TREES. TWO (2) GUYS PER TREE.



Deciduous Tree Planting Detail - 4" Cal. and Under

0202
LANDSCAPE MANAGEMENT
SOLUTIONS

Scale: NTS



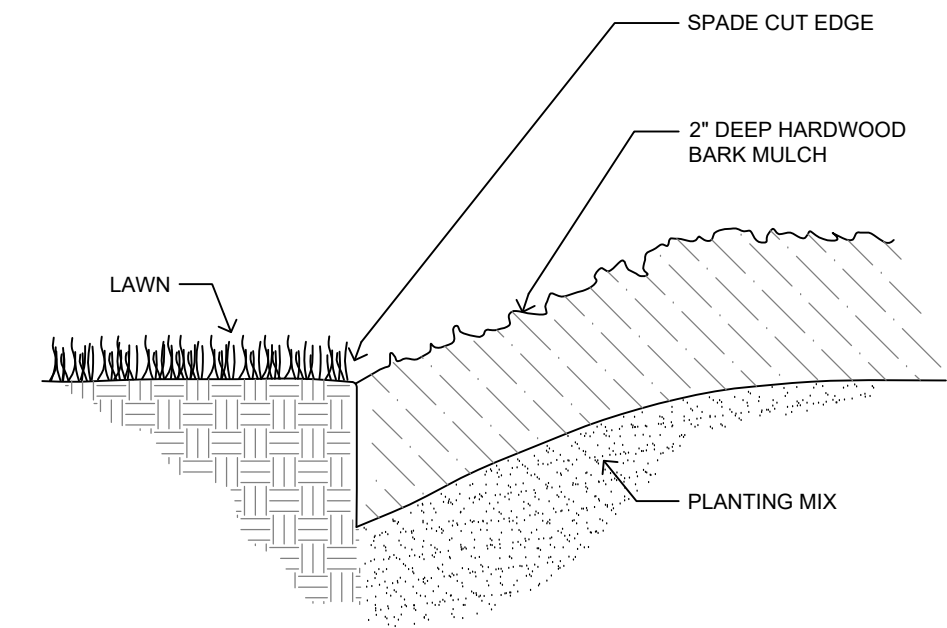
INSTALLATION NOTES:

- DIG PLANT POCKET 6" WIDER THAN EDGE OF ROOTBALL.
- THOROUGHLY COMPACT BOTTOM OF PLANT POCKET.
- REMOVE PLANT FROM CONTAINER AND EXAMINE ROOTMASS. IF ROOTMASS IS LOOSE, INTEGRATE PLANT ROOTS & POTTING MEDIA WITH PLANTING MIX. IF A ROOTBOUND CONDITION EXISTS, DISRUPT THE ROOTMASS BY CUTTING THROUGH BOTTOM HALF OF ROOTMASS. ROTATE ROOTMASS 90° AND CUT AGAIN, FORMING FOUR (4) LOBES. SPREAD THE FOUR LOBES, DISRUPTING ROOTMASS AND INTEGRATE PLANT ROOTS & POTTING MEDIA WITH PLANTING MIX. PLACE PLANT IN POCKET SLIGHTLY ABOVE GRADE.
- BACKFILL PLANT POCKET 1/2 WITH PLANTING MIX CONSISTING OF 50% TOPSOIL & 50% NATIVE SOIL, ASSURING SHRUB IS STRAIGHT.
- BACK FILL REMAINING 1/2 OF PLANT POCKET WITH PLANTING MIX & COMPACT THOROUGHLY, ASSURING SHRUB IS STILL STRAIGHT.
- SPREAD 1" OF PLANTING MIX OVER TOP OF CONTAINER ROOTBALL. SLOPE GRADE AWAY FROM SHRUB.
- IF PLANTED IN NON-IRRIGATED AREAS, FORM A SAUCER WITH SOIL AT OUTSIDE EDGE OF ROOTBALL.
- SHREDED BARK MULCH, 2" DEPTH. MULCH TO BE NATURAL IN COLOR. LEAVE 1" RING EXPOSED AT BASE OF PLANT.
- IF NOT PLANTED WITHIN A LANDSCAPE BED, MULCH RINGS TO BE CONSISTENT IN SIZE WITH PLANT TYPE/SIZE THROUGHOUT PROJECT.

Shrub Planting Detail - Container

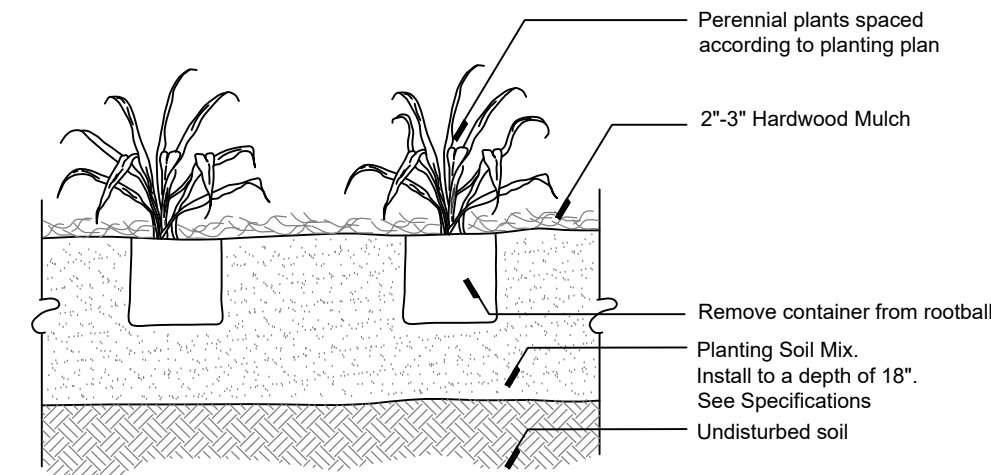
0202
LANDSCAPE MANAGEMENT
SOLUTIONS

Scale: NTS



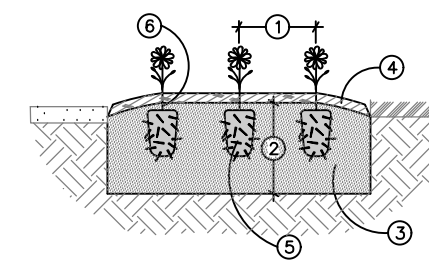
Spade Cut Edging Detail

NTS



Perennial Planting Detail

NTS



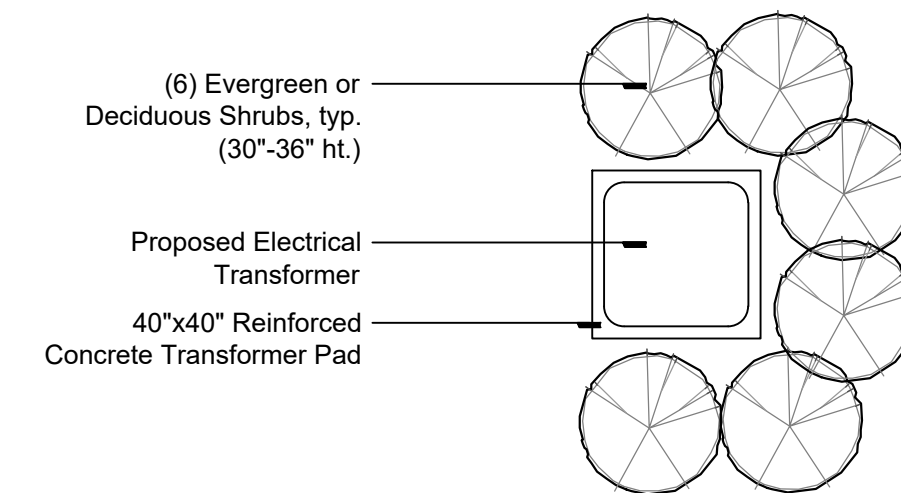
Annual & Ground Cover Planting Detail

0202
LANDSCAPE MANAGEMENT
SOLUTIONS

Scale: NTS

INSTALLATION NOTES:

- SEE DRAWING FOR PLANT SPACING.
- EXCAVATE BED TO A MINIMUM 6" DEPTH. BACKFILL WITH PREPARED PLANTING MIX.
- PLANTING MIX TO CONSIST OF 50% TOPSOIL & 50% LEAF COMPOST.
- SHREDED BARK MULCH, 1" DEPTH. MULCH TO BE NATURAL IN COLOR.
- REMOVE ALL CONTAINERS. IF ROOTBOUND, DISRUPT ROOT PLUG TO LOOSEN ROOT MASS.
- PLANT THE ANNUAL OR GROUND COVER PLANT THROUGH THE MULCH INTO THE PLANTING MIX ASSURING THAT PLANTING MIX COVERS ENTIRE ROOT MASS OF PLANT.



(6) Evergreen or Deciduous Shrubs, typ. (30"-36" ht.)
Proposed Electrical Transformer
40"x40" Reinforced Concrete Transformer Pad

- *Notes:
- Transformer Pad shall be screened on a minimum of three sides
- Actual Pad and Plant Locations shall be determined in the field, based on actual construction, orientation, and desired screening

Transformer Screening Detail

Scale: 1/4" = 1'



4' ht. AC Screen Fence Detail

Available: American Fence & Supply Co., Inc.
21200 Schoenherr Rd.
Warren, MI 48089
www.amerifence.com
248.545.7070
Model: Vinyl Privacy Fence (PVC)
Color: Dark Walnut

Scale: NTS

sheet title:

Landscape Details and Notes

project title:

Hillside Townes

Farmington, Michigan

prepared for:

Robertson Brothers Homes
6905 Telegraph Rd. - Suite 200
Bloomfield Hills, MI 48301

Phone: 248.657.4968

job number:

20051

date:

07.18.2022

drawn by:

EMJ

checked by:

WTK

revisions:

09.01.2022 Per Municipal Review
11.14.2022 Per Municipal Review
05.15.2023 Per Landscape Development



Know what's below.
Call before you dig.

sheet no.

L-5

Statistics						
Description	Symbol	Avg	Max	Min	Avg/Min	Max/Min
Grade	+	0.1 fc	1.3 fc	0.0 fc	N/A	N/A
Property Line	+	0.1 fc	0.3 fc	0.0 fc	N/A	N/A

GENERATION LIGHTING

8338701-12: Small One Light Downlight Outdoor Wall Lantern



Dimensions:
 Width: 6 1/2"
 Height: 12 1/2"
 Weight: 2.2 lbs.

Extends: 7 3/4"
Wire: 6 1/2" (color/Black/White)
Mounting Proc: Cap Nuts
Connection: Mounted To Box

Bulbs:
 1- Medium A19 100w Max. 120v - Not included

Features:

- Clear bulb(s) recommended for this fixture
- Easily converts to LED with optional replacement lamps
- Meets Title 24 energy efficiency standards
- Title 24 compliant if used with Joint Appendix (JA8) approved light bulbs listed in the California Energy Commission Appliance database.

Material List:
 1 Body - Die Cast Aluminum - Black

Safety Listing:
 Safety Listed for Wet Locations

Instruction Sheets:
 English (990W83387_1-SEV)

Collection: Sevier
 Supplied with 6.5-inches of wire

For an eco-friendly lighting design, convert to LED bulbs to offer savings and reduce energy.

Designed for damp and wet environments allowing for direct wall contact

1-year manufacturer warranty

Meets Title 24 energy efficiency standards

UPC #: 785652027550

Finish: Black (12)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Filter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Panel	Glass	Clear	6		2 1/8	6						

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	5 3/8	4 1/2	7/8		2 3/4	9 3/4

Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Frt. Class	UPS Ship
Individual	8338701-12	1	785652027550	16	10.25	9.25	0.878	3.3	250	Yes
NJ Pallet		96		48	40	77	85.556	316.8		No
NV Pallet		96		48	40	77	85.556	316.8		No

Generation Lighting reserves the right to revise the design of components of any product due to parts availability or change in safety listing standards without assuming any obligation or liability to modify any products previously manufactured and without notice. The trademark is a product design that is the sole and exclusive property of Generation Lighting. In compliance with U.S. copyright and patent requirements, modification is hereby prevented in this form that the fixture, or the product it depicts, is not to be copied, altered or used in any manner without the express written consent of, or contrary to the best interests of Generation Lighting, a Visual Comfort & Co brand.

General Note

1. LUMINAIRE MOUNTING HEIGHT 7' - 0"
2. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0"
3. LIGHTING ALTERNATES REQUIRE NEW PHOTOMETRIC CALCULATION AND RESUBMISSION TO CITY FOR APPROVAL.

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

FOR ORDERING INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

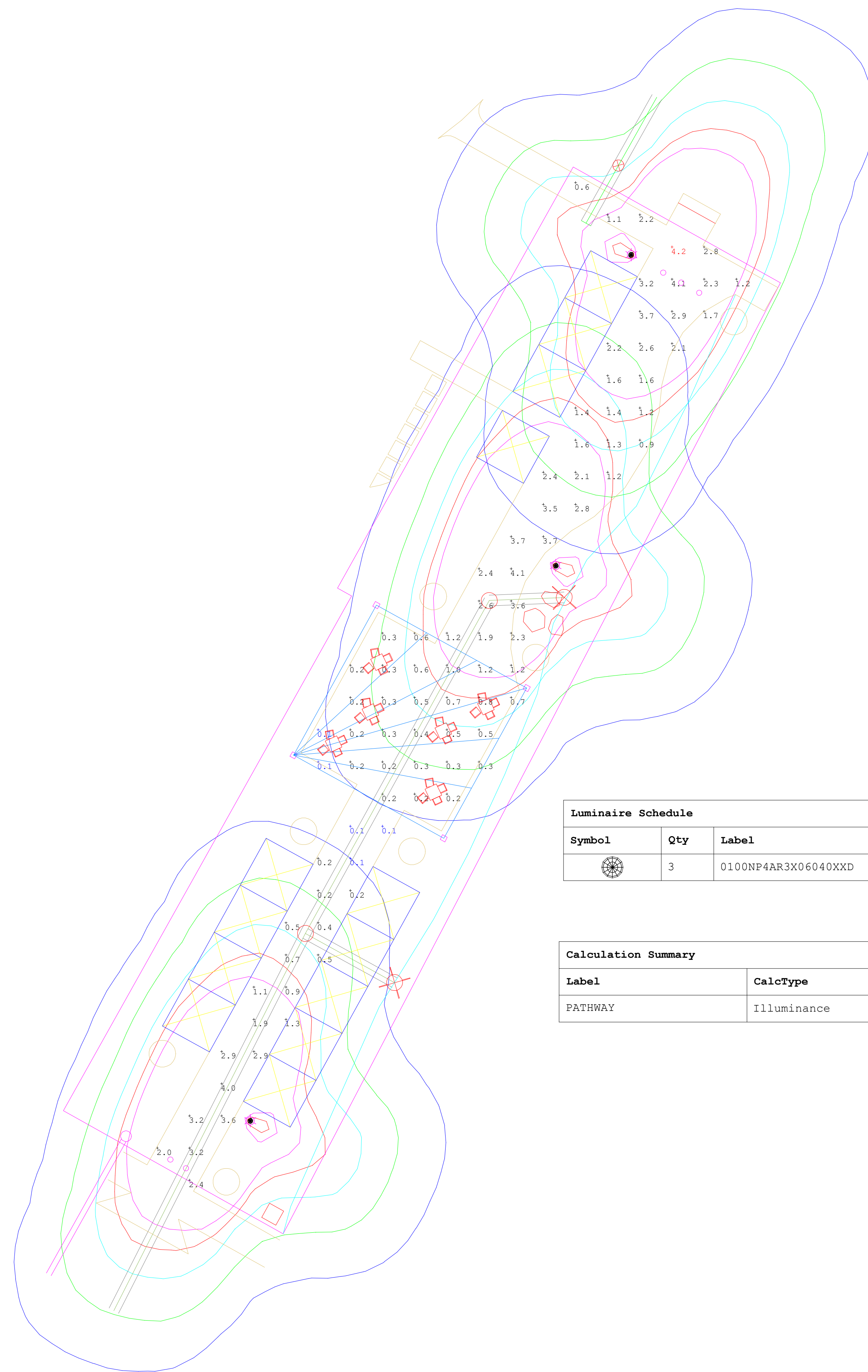
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.



Plan View
 Scale - 1" = 30ft

Schedule										
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Lumens Per Lamp	Light Loss Factor	Wattage	
	A	116	GENERATION LIGHTING BRANDS	8338701-12	SMALL ONE LIGHT DOWNLIGHT OUTDOOR WALL LANTERN	LED A19	813	1	7.8	



Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Lum. Watts	Lumens/Lamp	LLF	Filename	Arm	Description
	3	0100NP4AR3X06040XXD	SINGLE	59.8	N.A.	0.810	0100NP4AR3X06040XXD.	0	K100-P4AR-III-60 (SSL)-1030 - 11.5' MH

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PATHWAY	Illuminance	Fc	1.48	4.2	0.1	14.80	42.00



City of Farmington Standard Light Detail

REV.	ALTERATION	DATE	BY

LUMINAIRE SPECIFICATIONS
 CATALOGUE NO.: K13AR-P4AR-III-60(SSL)-1030
 -120.277-K4/K12-4K-#7
 QUANTITY: 25
 OPTICAL SYSTEM: FLAT ARRAY ACRYLIC RIPPLED
 IES CLASS.: TYPE III
 WATTAGE: 60W (1030 SERIES)
 SOLID STATE LIGHTING
 LINE VOLTAGE: 120.277V
 POLE ADAPTOR: K4/K12
 CCT: 4000K
 PAINT: TEXTURED BLACK
 OPTIONS: C/W #7 FINIAL

POLE SPECIFICATIONS
 CATALOGUE NO.: KM31FC-10-DR
 QUANTITY: 25
 MATERIAL: CAST ALUMINUM
 POWDERCOAT: TEXTURED BLACK
 POLE TOP DIA.: 3 1/2"
 POLE WGT.: 140 lbs.
 POLE HGT.: 9' 6"
 ANCHOR BOLTS: (4) 3/4" x 27"L
 BOLT CIRCLE: 12 1/2" ø
 OPTIONS: DUPLEX RECEPTACLE

CUSTOMER APPROVAL & DATE:

CUSTOMER ORDER No: 8834587	STRESSCRETE ORDER No: SC3-2205083	PROJECT/CUSTOMER: MDOT ITEM 17 FARMINGTON	DATE: 05/25/22
KWFG ORDER No: -	DRAWN BY: V.V.	CHECKED BY: SC1	REVISION:
KING U.S. ORDER No: -	DRAWING TYPE: APPROVAL DWG.		DRAWING NUMBER: SC3-2205083-1

Manufacturing Locations:
 Burlington, Ontario: 1-800-268-7809
 Northport, Alabama: 1-800-435-6563
 Atchison, Kansas: 1-800-837-1024
 Jefferson, Ohio: 1-800-268-7809

 King Luminaire StressCrete Est. 1953 THE STRESSCRETE GROUP	PROJECT/AGI FILE NAME: (Q-2208070) HILLSIDE TOWNES.AGI		DATE: 8/26/22	CALC. BY: MJ
	REV: 0	REVISION DATE/DESCRIPTION: XX	1 of 1	