



**MEETING DATE:** November 6, 2023

**TOPIC:** PC-23-005 - Starboard Orion Site Plan Review #2

**BACKGROUND BRIEF:** Starboard Orion is a site plan request for a 12-unit multiple-family development at 10 S. Park Boulevard. The site contains three parcels (09-02-460-032, 09-02-460-033, & 09-02-460-036), southwest of the Flint Street and S. Park Boulevard (M-24) intersection. The Project scope includes:

- Demolition of two former marina buildings;
- Construction of 11 townhouses in a new 3-story building fronting on S. Park Boulevard;
- Rehabilitation of an existing boat house into a one-unit dwelling;
- Improvements to the Lake Orion boardwalk frontage.
- Harbormaster building to be used as continued office space.

**ATTACHMENTS:**

2023-07-20 Starboard Site Plan Submittal

2023-07-27 Starboard MU Write-up

2023-07-27 Starboard Site Plan Submittal

2023-09-25 Starboard Resubmittal

2023-09-25 Starboard Site Plan Preliminary Response (1)

2023-10-30 Starboard Response Letter

Application-Proof Ownership-Checks

Boathouse Plans-Approval

L1716 P228



Lake Orion Schedule of Regs Update

MU RDU Section

N033 LT-02 Site Plan Review Starboard - Engineering Review #1

N033 LT-03 Site Plan Review #2 Starboard

OTFD - Starboard Site Plan Review 1

OTFD Starboard Site Plan Review 2

Starboard Orion (PC 23-007) - Site Plan Review #1 - August 28, 2023

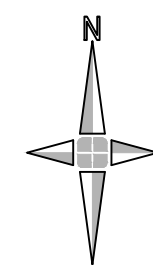
Starboard Orion (PC 23-005) - Site Plan Review #2 October 25, 2023 (rev)



**LANDSCAPE ARCHITECT**  
**GIFFELS WEBSTER**  
**MR. MARK HANSEN, RLA**  
**1025 E. MAPLE, SUITE 100**  
**BIRMINGHAM, MI 48009**  
**PHONE: (248) 852-3100**

# SITE PLANS

## VILLAGE OF LAKE ORION, OAKLAND COUNTY, MI



( NOT TO SCALE )

BEGINNING AT THE INTERSECTION OF THE SOUTH RIGHT OF WAY LINE OF FLINT STREET (60 FEET WIDE) AND THE WESTERLY RIGHT OF WAY LINE OF M-24 (VARIABLE WIDTH); SAID POINT BEING ON THE NORTH LINE OF SAID LOT 19; THENCE THE FOLLOWING: (1) THREE COURSES BEING ALONG THE WESTERLY LINE OF M-24: (1) S.73°08'59" E., 93.09 FEET, AND (2) N.73°40'09" E., 123 FEET; AND (3) S.73°08'59" E., 96.34 FEET TO A POINT ON THE SOUTH LINE OF LOT 21; THENCE S.73°21'31" W., 209.70 FEET ALONG SAID SOUTH LINE TO THE SOUTHWEST CORNER OF SAID LOT 21; THENCE THE FOLLOWING THREE COURSES BEING ALONG THE EASTERNLY AND NORTHERN LINES OF LOT 26: (1) N.07°18'23" W., 59.19 FEET; AND (2) N.09°10'51" E., 36.00 FEET; AND (3) S.88°45'51" W., 47.33 FEET TO THE SOUTHWEST CORNER OF LOT 18; THENCE N.02°27'59" W., 5.27 FEET TO THE SOUTHEAST CORNER OF LOT 17; THENCE THE FOLLOWING SEVEN (7) COURSES ALONG THE SOUTHERLY LINES OF LOTS 17 THROUGH 8: (1) S.75°40'21" W., 22.52 FEET; AND (2) S.11°49'49" E., 19.97 FEET; AND (3) S.75°40'21" W., 18.00 FEET; AND (4) N.51°14'49" W., 19.97 FEET; AND (5) S.75°40'21" W., 91.50 FEET; AND (6) S.55°40'51" W., 20.97 FEET; AND (7) S.47°52'51" W., 25.95 FEET TO THE SOUTHWEST CORNER OF LOT 8; THENCE N.44°07'14" W., 34.86 FEET ALONG THE WEST LINE OF SAID LOT 8 TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF LAKE STREET (VARIABLE WIDTH) SAID POINT ALSO BEING THE NORTHWEST CORNER OF LOT 8; THENCE THE FOLLOWING FOUR (4) COURSES BEING ALONG THE SOUTHERLY AND EASTERLY RIGHT OF WAY LINE OF LAKE STREET; (1) N.54°32'51" E., 52.77 FEET; AND (2) N.75°40'21" E., 147.08 FEET; AND (3) N.02°27'59" W., 26.08 FEET; AND (4) N.64°46'31" E., 122.88 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF FLINT STREET; THENCE N.88°16'41", 21.56 FEET ALONG SAID SOUTH LINE TO THE POINT OF BEGINNING AND CONTAINING 0.83 ACRES.

3 PROPOSED SLIP LOCATIONS  
4 EXISTING SLIP LOCATIONS

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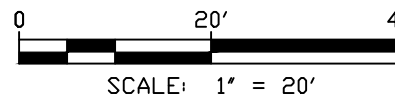
Professional Seal

Developed For:

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VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

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	SECTION LINE		SAN. MH		GAS METER		MISC. TOPO. FEATURE
	E/ PAVEMENT		SAN. CLEAN OUT		GAS RISER		SURVEY CONTROL POINT
	CURB		SAN. RISER		GAS VALVE		FOUND IRON
	E/ GRAVEL		SAN. PUMP STATION		GAS MH		FOUND NAIL
	CL. ROAD		COMB. MH		TELE. RISER		F. CUT CROSS
	E/ WALK		GATE VALVE		TELE. MH		SECTION COR.
	RAILROAD		HYDRANT		TELE. CROSS BOX		BENCHMARK
	E/ BRICK		WATER VALVE		CABLE RISER		FOUND PIPE
	MISC. LINE		WATER METER		PAY PHONE		FOUND MON.
	FENCE		WELL INDICATOR VALVE		MANHOLE		ASPH.
	GUARD RAIL		POST HEAD		SIGN		CONCRETE
	WALL		FDC CONNECTION		PROT. POSTGUARD POST		A.C. AIR CONDITIONER
	BLDG. LINE		IRRIGATION CONTROL BOX		GUY		G.P. GUARD POST
	OVERHEAD WIRES		STORM MH		DECIDUOUS TREE		C.L.F. CHAIN-LINK FENCE
	RAILING		CATCH BASIN		CONIFEROUS TREE		D.L. DOOR LEDGE
	OVERHANG LINE		BEEHIVE CB		DEAD TREE		F.F. FINISHED FLOOR
	T/ BANK		CULVERT E.S.		UTILITY FLAG		O.H. OVERHANG
	B/ BANK		ROOF/DOWN SPOUT		BLDG. CORNER (FIELD LOCATED)		I.F. FOUND IRON
	CL DITCH/STREAM		OVERFLOW/OUTLET STRUCTURE		HANDICAP PARKING		S.I. SET IRON
	SHRUB LINE		SAN. CLEAN OUT		WETLAND FLAG		F.I.P. FOUND IRON PIPE
	TREE LINE		ROUND CB		BUSH/SHRUB		(M) MEASURED
	WATER EDGE		LIGHT POLE		PARKING METER		(R) RECORD
	WETLAND LINE		UTILITY POLE		RESIDENTIAL MAILBOX		F.M. FOUND MONUMENT
	STORM LINE		ELEC. TRANS.		U.S. MAILBOX		S.N. SET NAIL
	SAN. LINE		AIR CONDITIONER		EXISTING ELEVATION		CMP CORRUGATED METAL PIPE
	WATER LINE		ELEC. MH		SOIL BORING		RCP REINFORCED CONCRETE PIPE
	GAS LINE		ELEC. METER		MONITORING WELL		G.L. GROUND LIGHT
	UG ELEC. LINE		ELEC. RISER		LAWN IRRIG. HEAD		
	UG TEL. LINE		TRAFFIC CONTROL BOX		CENTERLINE R.R. TRACK		
	UG CABLE TV LINE		STEAM MH				
	PAINT STRIPE		PUBLIC LIGHTING MH				
	COMBINED SEWER						
	PLD LINE						
	STEAM LINE						
	ELECTRIC OVERHEAD						
	TELEPHONE OVERHEAD						

- MEASURED BEARINGS ARE BASED ON THE STATE PLANE COORDINATE SYSTEM, MICHIGAN SOUTH (2113) NAD83.

SET NAIL WITH GW TAG #85435 IN THE NORTH FACE OF 10" WALNUT LOCATED  $\pm 20.5$  FEET WEST OF THE SOUTHERN MOST PROPERTY CORNER OF PARCEL NO. 09-02-458-015.  
ELEVATION=987.66'

(R) = UTILITY SHOWN FROM RECORDS OR PLANS, & FIELD  
LOCATED WHERE POSSIBLE.

PRIOR TO THE PLANNED BUILDING IMPROVEMENTS, AND/OR CONSTRUCTION, THE RESPECTIVE UTILITY COMPANIES MUST BE NOTIFIED TO STAKE THE PRECISE LOCATION OF THEIR UTILITIES



Executive:	MP
Manager:	NS
Designer:	-
Quality Control:	MP
Section:	2
T-04-N R-10-E	

Professional Seal:



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DATE:	ISSUE:
08.05.2022	SUBMIT FOR PRELIMINARY PUD APPROVAL
08.22.2022	REVISE FOR PRELIMINARY PUD APPROVAL
07.20.2023	SUBMIT FOR SITE PLAN APPROVAL

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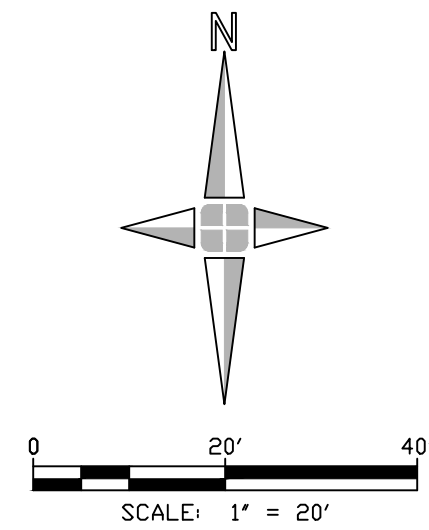
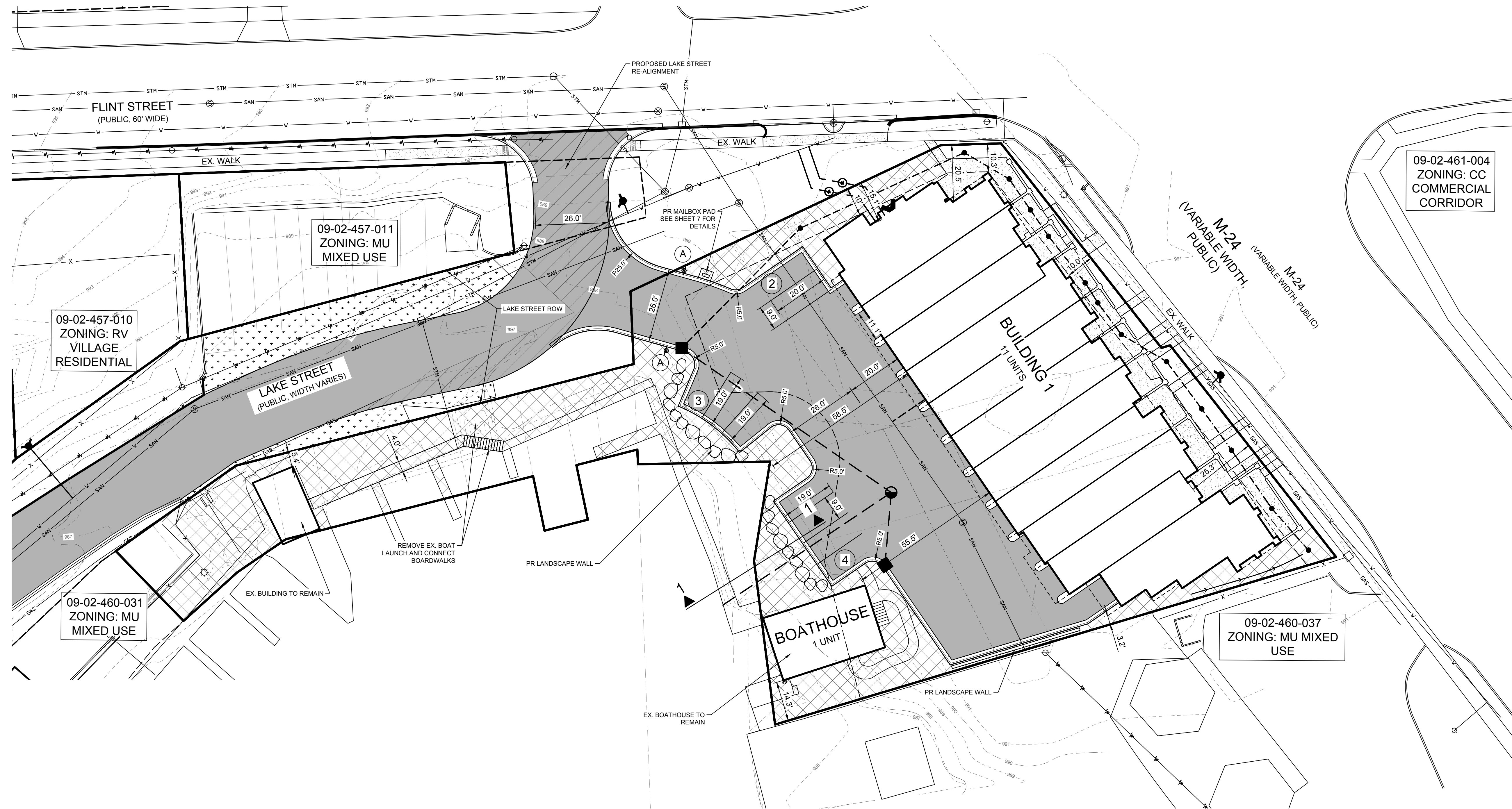
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248.340.9400

## SITE AND PAVING PLAN

THE STARBOARD

VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

Date:	08.05.2022
Scale:	1" = 20'
Sheet:	C3
Project:	20107.30



### AREA, HEIGHT, BULK AND PLACEMENT REGULATIONS:

#### SETBACKS

	PROPOSED	REQUIRED	EX. BOATHOUSE
M-24 FRONT	10' / 25'	10' MIN / 25' MAX	NA
LAKE ST. FRONT	10' / 15.1'	10' MIN / 25' MAX	NA
FLINT STREET FRONT	10.3' / 20.5'	10' MIN / 25' MAX	NA
WATER	58.5'	25'	0'
SIDE	3.2'	0'	14.3'

LOT COVERAGE 33%

IMPERVIOUS AREA  
EXISTING:  
BUILDING: 8,356 SF  
PAVEMENT: 16,373 SF  
TOTAL: 24,729 SF = 68%

PROPOSED:  
BUILDING: 11,884 SF  
PAVEMENT: 12,948 SF  
TOTAL: 24,832 SF 68%

### SITE PLAN NOTES:

ZONING: MU, MIXED USE (34,112 SF)  
TOTAL AREA OF BOTTOM LANDS IN MU (2,141 SF) 0.05 ACRES  
TOTAL AREA FOR DENSITY 0.83 ACRES

DENSITY  
MU = 15 RES./ACRE X 0.83 ACRES = 12.45 RESIDENCES

PROPOSED RESIDENCES:  
THE STARBOARD 11 RESIDENCES  
BOAT HOUSE 1 RESIDENCES  
TOTAL 12 RESIDENCES

TOTAL OPEN SPACE REQUIRED PER MU ORDINANCE 10%

PROPOSED OPEN SPACE: 8,974 SF, 0.21 ACRES 25%

PARKING:  
REQUIRED:  
MULTI-FAMILY REQUIREMENTS  
2 SPACES PER UNIT  
12 x 2 = 24 SPACES  
TOTAL REQUIRED: 24 SPACES

PROVIDED:  
GARAGE SPACES 11 SPACES  
DRIVEWAY SPACES 9 SPACES  
OFF-STREET SPACES 9 SPACES  
TOTAL SPACES 29 SPACES

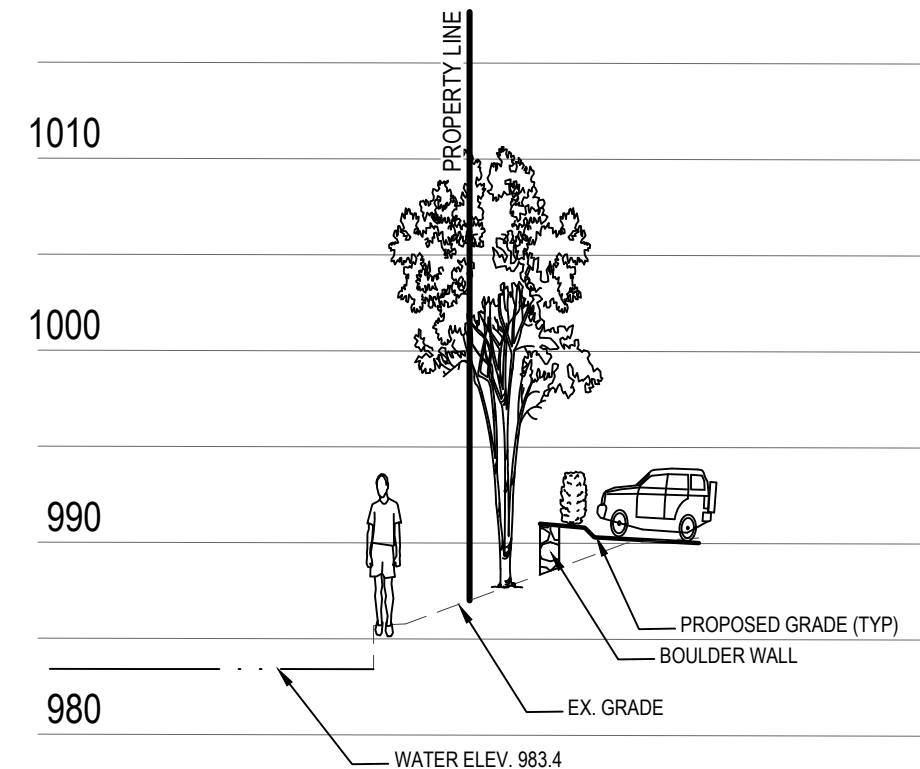
PROPOSED BEDROOM BREAKDOWN:  
1 BEDROOM 1 RESIDENCE  
2 BEDROOMS 11 RESIDENCES  
TOTAL 12 RESIDENCES

#### NOTES:

- STARBOARD IS PROPOSED MULTI-FAMILY RESIDENCE COMMUNITY.
- TRASH RECEPTACLES WILL BE STORED IN THE RESIDENCE GARAGES AND ROLLED OUT ON GARBAGE DAY.
- NO PARKING FIRE LANE SIGN

### LEGEND

	PR GATE VALVE AND WELL
	PR HYDRANT
	PR VALVE AND BOX
	PR WATERMAIN
	PR STORM CATCH BASIN
	PR STORM MANHOLE
	PR STORM END SECTION
	PR RIP RAP
	PR STORM SEWER
	PR CLEAN OUT
	PR SANITARY MANHOLE
	PR SANITARY SEWER
	PR UNDERGROUND ELECTRIC SERVICE
	PR UNDERGROUND GAS SERVICE
	PR UNDERGROUND TELEPHONE SERVICE
	PR UTILITY CROSSING
	PR CONTOUR MINOR (1')
	PR CONTOUR MAJOR (5')
	PR SPOT ELEVATION
	PR SWALE
	PR CURB AND GUTTER
	PR REVERSE CURB AND GUTTER
	PR STD. DUTY ASPHALT
	PR CONCRETE PAVEMENT
	PR OPEN SPACE AREA



SECTION 1-1  
SCALE: H:1"=30', V:1"=10'



Executive:	MP
Manager:	NS
Designer:	-
Quality Control:	MP
Section:	2
T-04-N R-10-E	

Professional Seal:



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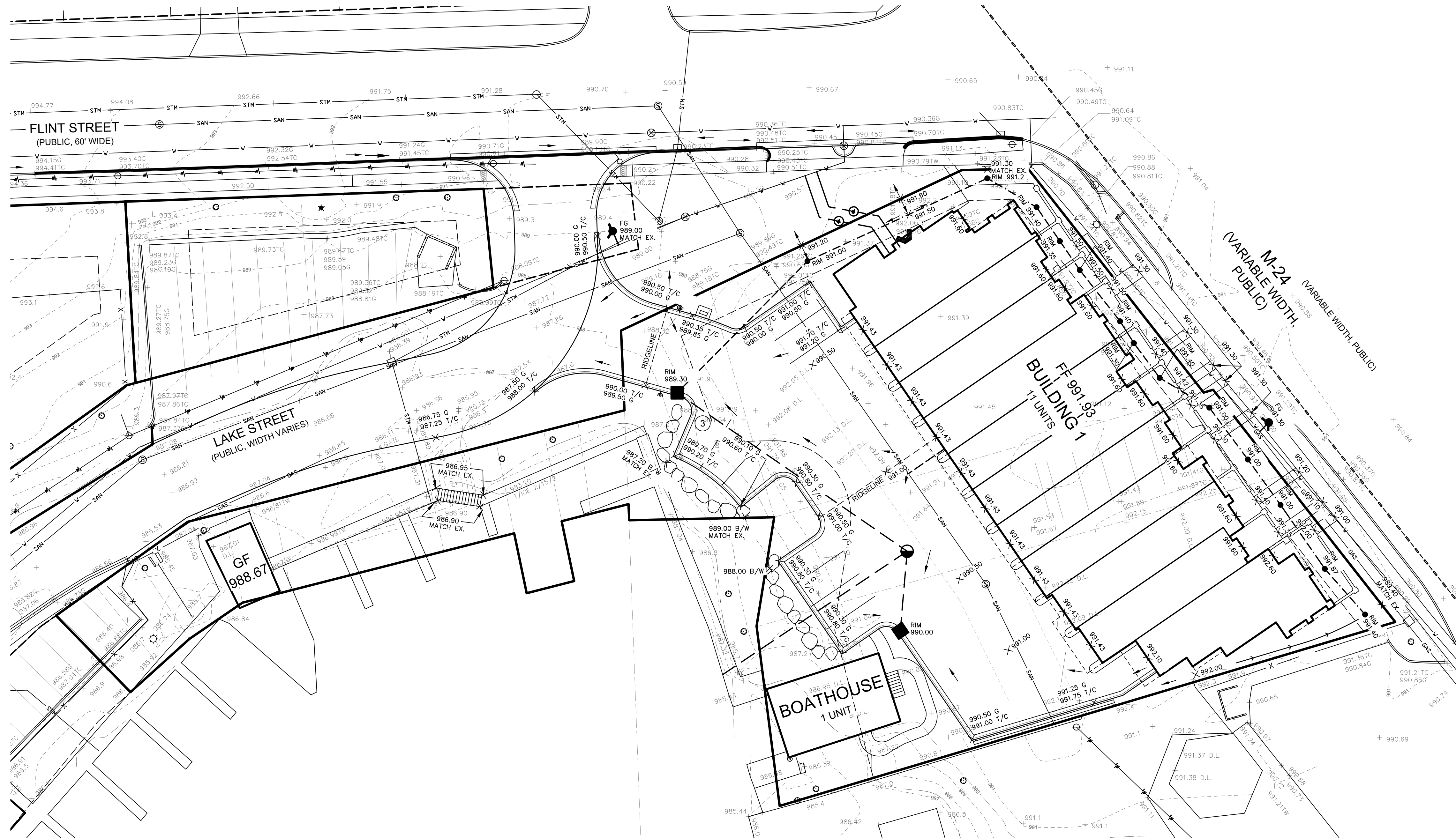
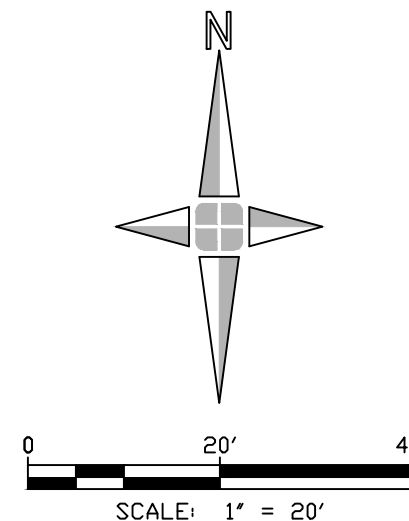
## GRADING PLAN

THE STARBOARD

VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

Date:	08.05.2022
Scale:	1" = 20'
Sheet:	C4
Project:	20107.30

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### GRADING NOTES:

- EXCESS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR. COST OF DISPOSAL WILL BE INCIDENTAL TO THE PROJECT.
- THE FINAL SUB-GRADE SHALL BE THOROUGHLY PROOF-ROLLED UNDER THE OBSERVATION OF THE SOILS ENGINEER.
- NO FROZEN MATERIAL SHALL BE PERMITTED AS BACKFILL UNDER ANY ROADWAY, DRIVEWAY OR PARKING AREA.
- PRIOR TO THE START OF ANY FILLING, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ALL OTHER UNACCEPTABLE SOIL FROM THE FILL AREAS, AND PROPERLY BACKFILL WITH ACCEPTABLE SOIL.
- GENERAL GRADING REQUIREMENTS ARE AS FOLLOWS:
  - FINISH GRADE AT EXISTING BUILDING SHALL MATCH BRICK LEDGES, DOORWAYS OR BASEMENT WINDOWS
  - MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING: 5% WITHIN THE FIRST 10' AND 2% AFTER.
  - PAVEMENT SLOPES (1.0% MINIMUM, 4.0% MAXIMUM) UNIFORMLY BETWEEN FINISH GRADE ON PLANS
  - LAWN AREAS ± 2% MINIMUM TO 25% MAXIMUM
- PRIOR TO THE PLACEMENT OF ANY BASE ASPHALT OR LEVELING COURSE, THE CURBS SHALL BE PARTIALLY BACKFILLED AND THE SUB-GRADE SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF THE SOILS ENGINEER.
- ALL SIDEWALK AND PATHWAYS IN ANY PUBLIC R.O.W. SHALL BE INSPECTED BY THE AGENCY WITH JURISDICTION.

### ADA NOTES:

- WALKS: CROSS SLOPES SHALL NOT EXCEED 2% AND LONGITUDINAL SLOPES SHALL NOT EXCEED 5%.
- LANDINGS: CROSS AND LONGITUDINAL SLOPES SHALL NOT EXCEED 2% ON ALL LANDINGS.
- RAMPS: CROSS SLOPES SHALL NOT EXCEED 2% AND LONGITUDINAL SLOPES SHALL NOT EXCEED 8.3%.

### ABBREVIATIONS:

PW - PERMANENT WATER ELEVATION  
HW - HIGH WATER / 100 YR. STORM ELEVATION  
FB - FREEBOARD ELEVATION  
CD - CURB DROP FOR WALK  
T/C - TOP OF CURB  
G - GUTTER  
T/A - TOP OF ASPHALT  
BR - BOTTOM OF RAMP  
TR - TOP OF RAMP  
R - RAMP  
L - LANDING  
T/WALL - TOP OF WALL  
B/WALL - BOTTOM OF WALL

### NOTES:

- LAKE STREET RECONFIGURATION IS PROPOSED TO TAKE PLACE JUST PRIOR OR DURING THE CONSTRUCTION OF THE STARBOARD DEVELOPMENT.

### LEGEND

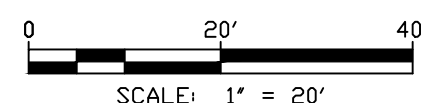
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	PR UNDERGROUND TELEPHONE SERVICE
	PR UTILITY CROSSING
	PR CONTOUR MINOR (1')
	PR CONTOUR MAJOR (5')
	PR SPOT ELEVATION
	PR SWALE
	PR CURB AND GUTTER
	PR REVERSE CURB AND GUTTER



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1. COVER OVER PROPOSED STORM SEWER SHALL BE A MINIMUM OF 1.5'.
2. THE ULTIMATE STORM SEWER OUTLET IS TO LAKE ORION.
3. THE STORM SEWER OUTLET SHALL BE IN ACCORDANCE WITH THE VILLAGE OF LAKE ORION.
4. STORM SEWER SHALL BE A PRIVATE SYSTEM.
5. STORMWATER WILL BE PRETREATED WITH A MANUFACTURED PRETREATMENT DEVICE PER VILLAGE STANDARDS. SINCE DISTURBED AREA IS LESS THAN 1 ACRE, 100-DAY DETENTION.







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Manager:	NS
Designer:	-
Quality Control:	MP
Section:	2
T-04-N R-10-E	

Professional Seal:



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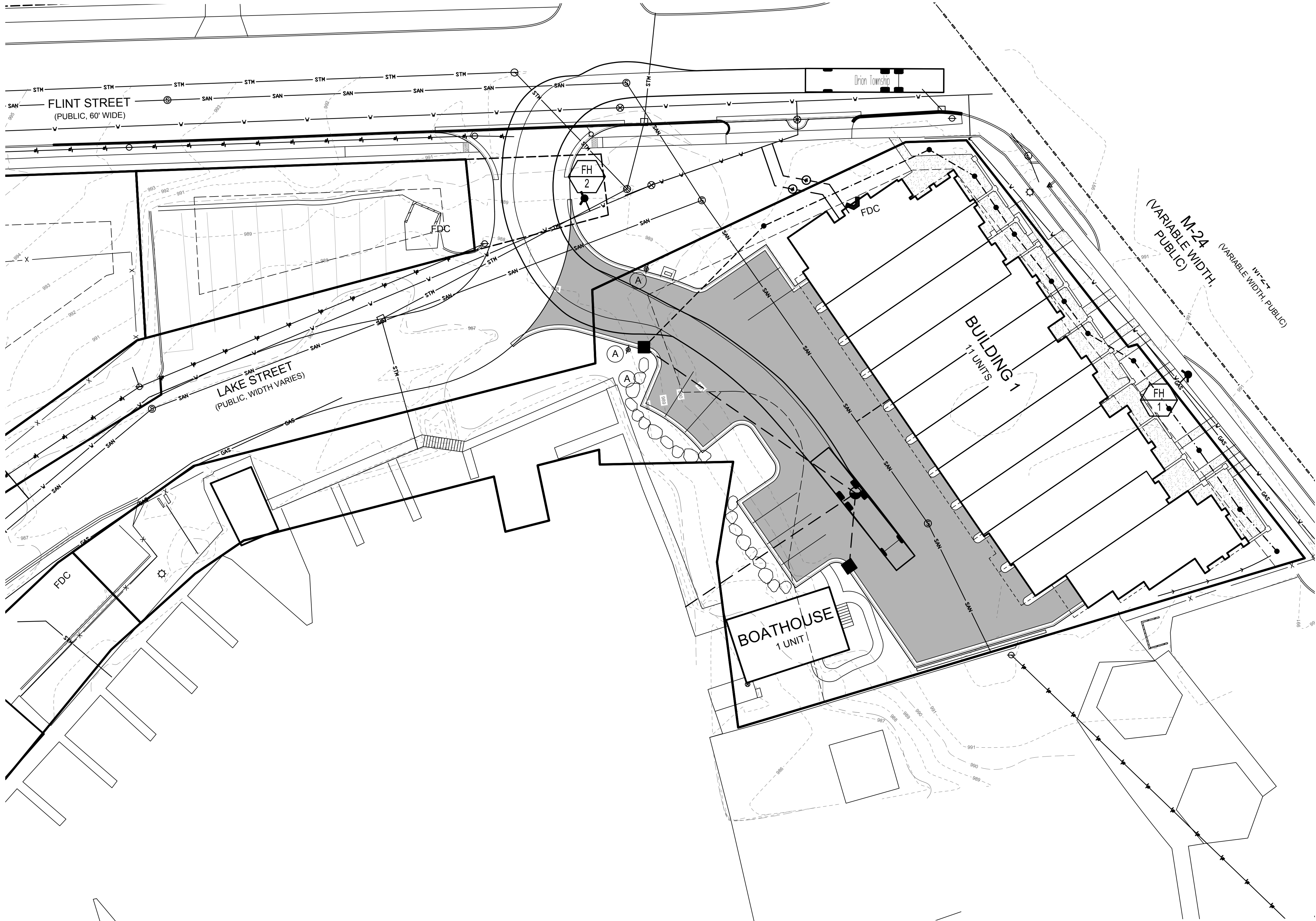
FIRE PROTECTION  
PLAN

THE STARBOARD

VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

Date:	08.05.2022
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Project:	20107.30

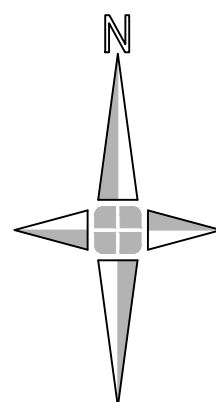
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- NOTES:  
1. NO PARKING FIRE LANE SIGN (A)

LEGEND

- PR GATE VALVE AND WELL
- PR HYDRANT
- PR VALVE AND BOX
- PR WATERMAIN
- PR STORM CATCH BASIN
- PR STORM MANHOLE
- PR STORM END SECTION
- PR STORM END SECTION
- PR RIP RAP
- PR STORM SEWER
- PR CLEAN OUT
- PR SANITARY MANHOLE
- PR SANITARY SEWER
- PR UNDERGROUND ELECTRIC SERVICE
- GAS
- PR UNDERGROUND GAS SERVICE
- T
- PR UNDERGROUND TELEPHONE SERVICE
- PR UTILITY CROSSING
- PR CONTOUR MINOR (1')
- PR CONTOUR MAJOR (5')
- PR SPOT ELEVATION
- PR SWALE
- PR CURB AND GUTTER
- PR REVERSE CURB AND GUTTER



0 20' 40'  
SCALE: 1" = 20'



Executive:	MP
Manager:	NS
Designer:	-
Quality Control:	MP
Section:	2

T-04-N R-10-E

Professional Seal:



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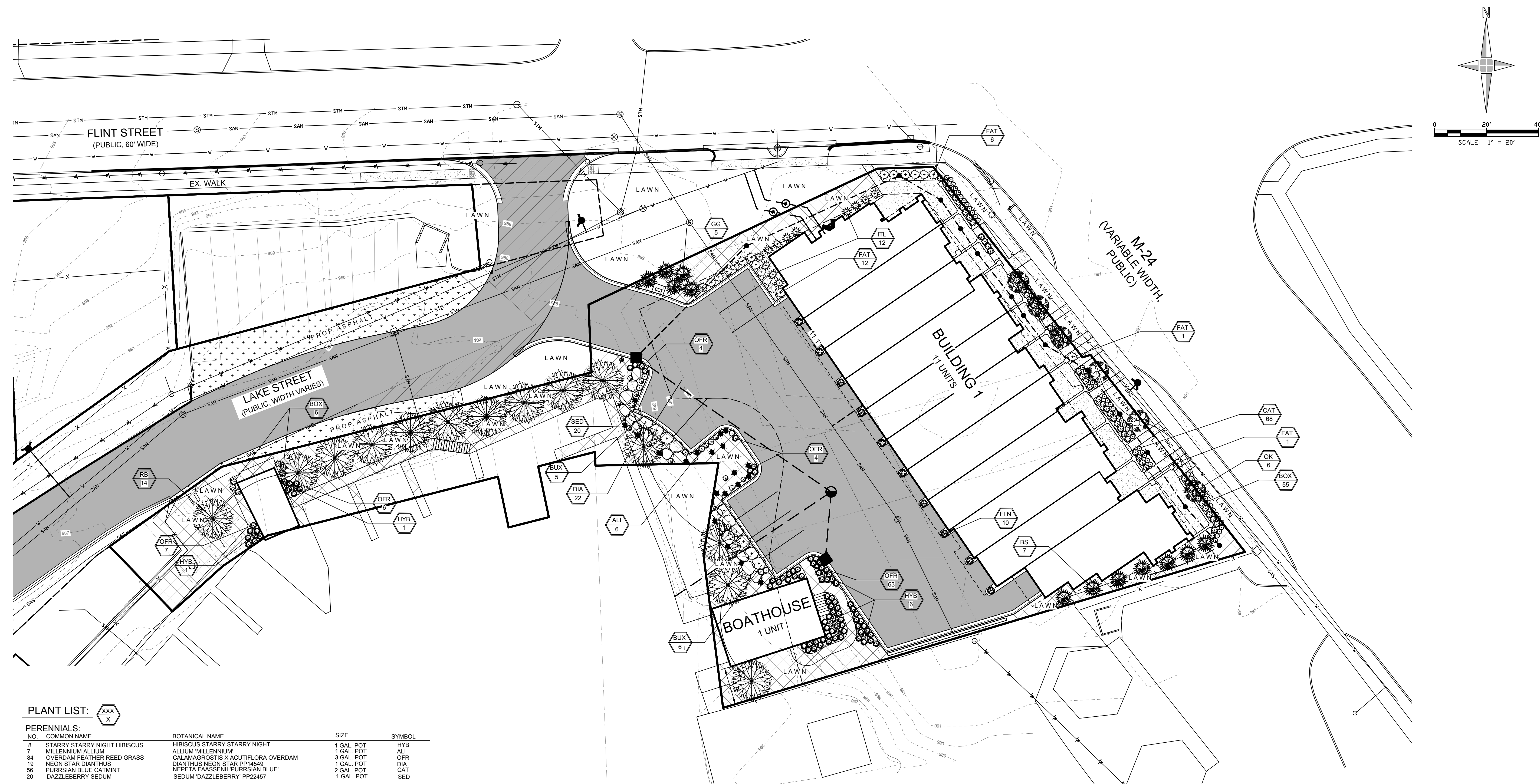
LANDSCAPE  
PLAN

## THE STARBOARD

VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

Date:	08.05.2022
Scale:	1" = 20'
Sheet:	LA-100
Project:	20107.30

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PLANT LIST:

PERENNIALS:				
NO.	COMMON NAME	BOTANICAL NAME	SIZE	SYMBOL
8	STARRY STARRY NIGHT HIBISCUS	HIBISCUS STARRY STARRY NIGHT	1 GAL. POT	HYB
17	MILLENNIUM ALLIUM	ALLIUM 'MILLENNIUM'	1 GAL. POT	ALI
84	OVERDAM FEATHER REED GRASS	CALAMAGROSTIS T. ACUTIFLORA OVERDAM	3 GAL. X	GR
9	NEON STAR DIANTHUS	DIANTHUS NEON STAR PP14549	1 GAL. POT	DI
56	PURRSIAN BLUE CATMINT	NEPETA FASSENII 'PURRSIAN BLUE'	2 GAL. POT	CAT
20	DAZZLEBERRY SEDUM	SEDUM 'DAZZLEBERRY' PP22457	1 GAL. POT	SED



























SHRUBS:

NO.	COMMON NAME	BOTANICAL NAME	SIZE	SYMBOL
10	FINE LINE	RHAMNUS FRANGULA	5-6" HT. B&B	FLN
61	GREEN LANE EUONYMUS	EUONYMUS FORTUNEI 'GREEN LANE'	30" DIA. B&B	BOX
12	TAYLOR JUNIPER	JUNIPERUS VIRGINIANA 'TAYLOR'	6-7" HT. B&B	ITL
20	FRANKY BOY ARBORVITAE	THUJA ORIENTALIS 'FRANKY BOY'	2 GAL. POT	FAT
11	GREEN GEM BOXWOOD	BUXUS 'GREEN GEM'	36" B&B	BUX

TREES:

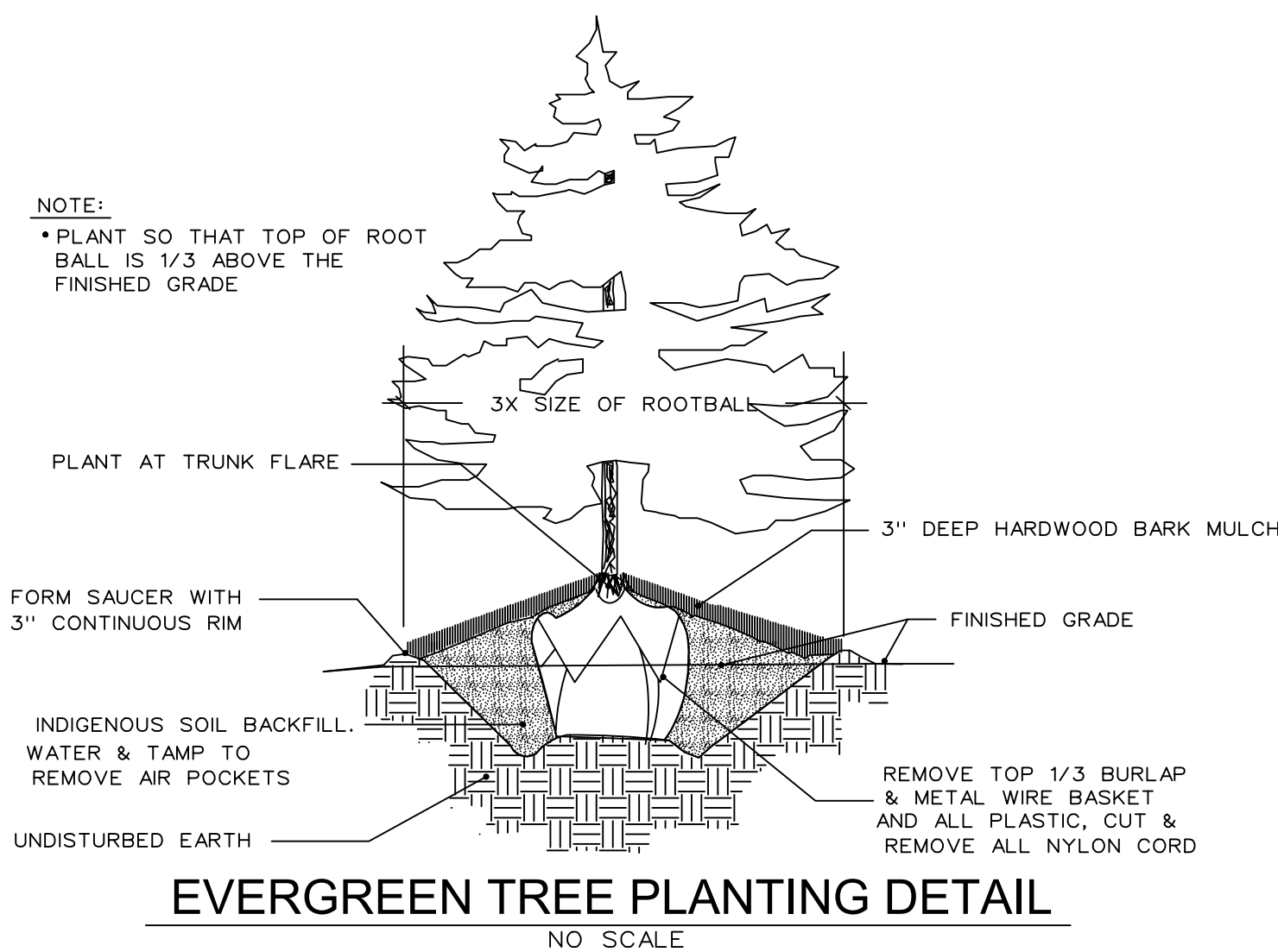
NO.	COMMON NAME	SIZE	SYMBOL
5	GREEN GIANT ARBORVITAE	8' HT. B&B	GG
7	BALD CYPRESS	8' HT. B&B	BS
6	CRIMSON SPIRE OAK	3" CAL. B&B	OK
14	RIVER BIRCH	3" CAL. B&B	RB

### LEGEND

	PR GATE VALVE AND WELL
	PR HYDRANT
	PR VALVE AND BOX
	PR WATERMAIN
	PR STORM CATCH BASIN
	PR STORM MANHOLE
	PR STORM END SECTION
	PR STORM END SECTION
	PR RIP RAP
	PR STORM SEWER
	PR CLEAN OUT
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	PR UNDERGROUND GAS SERVICE
	PR UNDERGROUND TELEPHONE SERVICE
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	PR CONTOUR MAJOR (5')
	PR SPOT ELEVATION
	PR SWALE
	PR CURB AND GUTTER
	PR REVERSE CURB AND GUTTER
	PR STD. DUTY ASPHALT
	PR CONCRETE PAVEMENT
	PR OPEN SPACE AREA

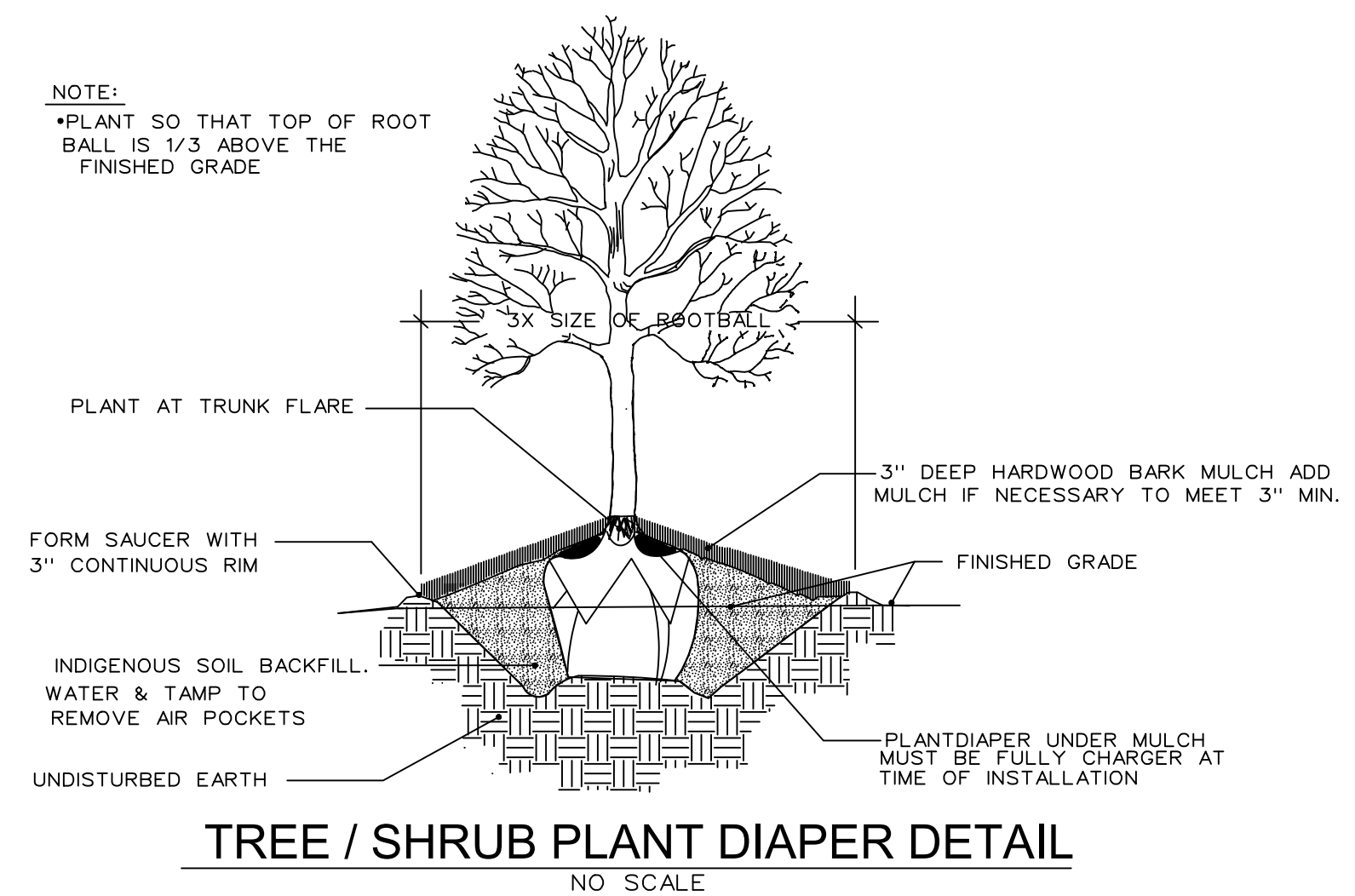
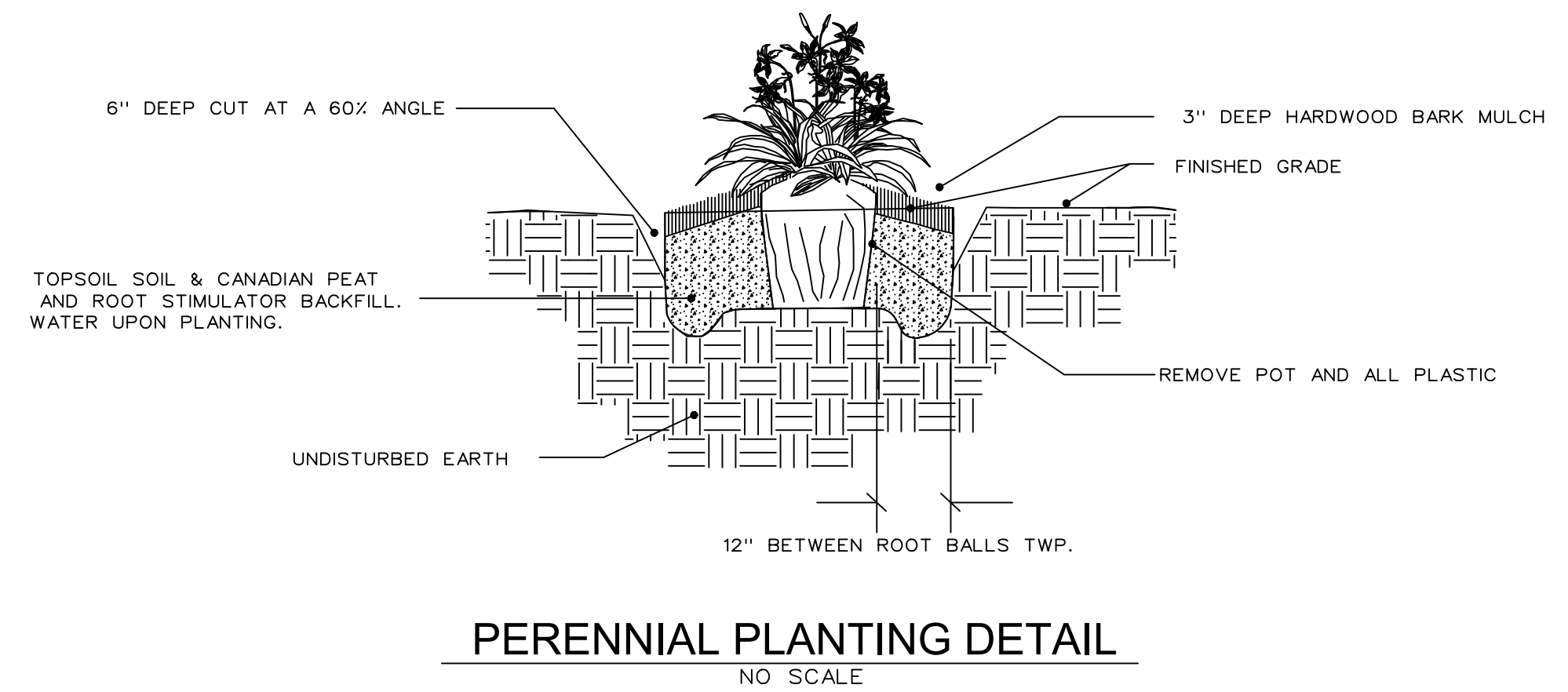
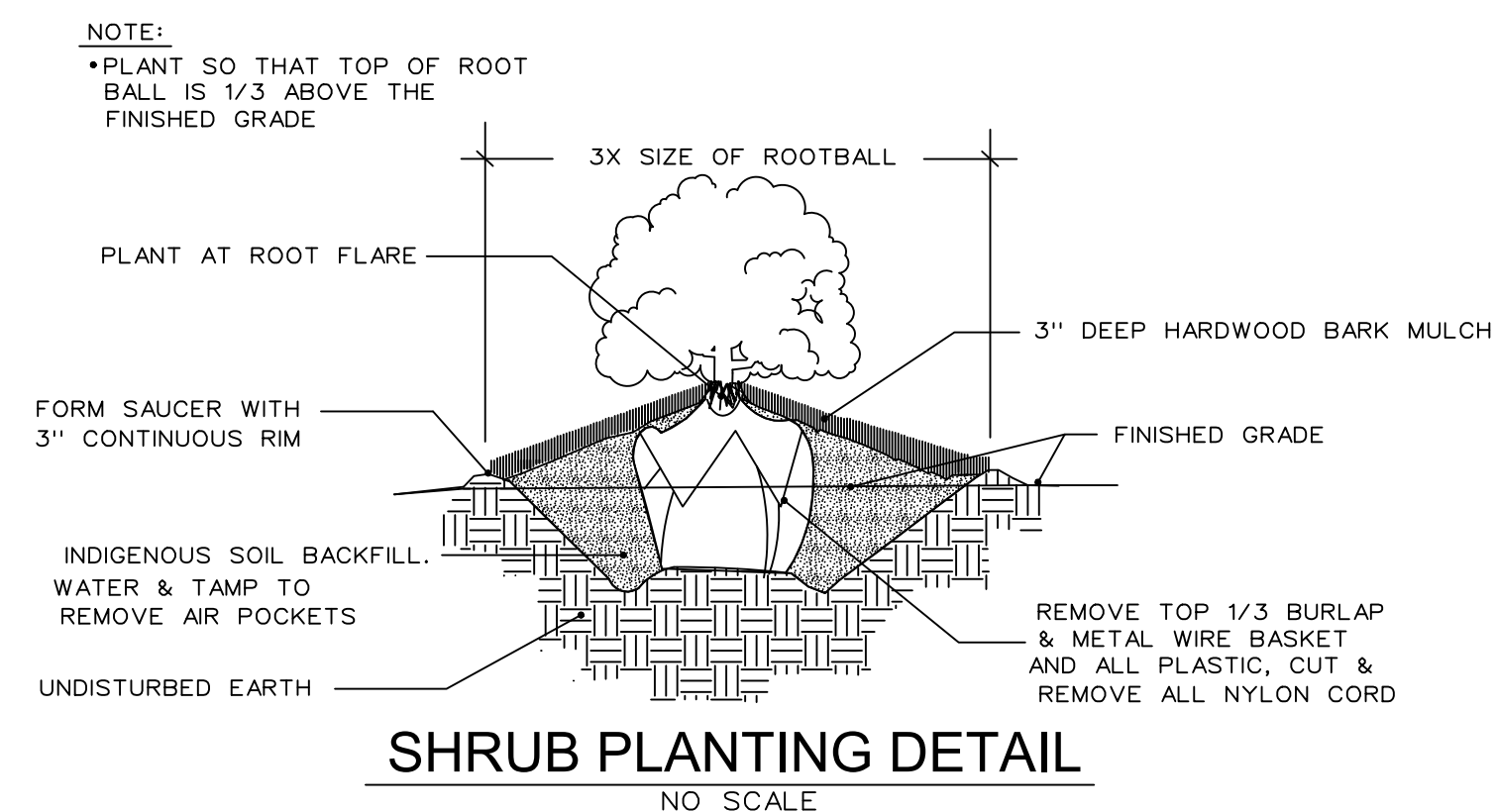
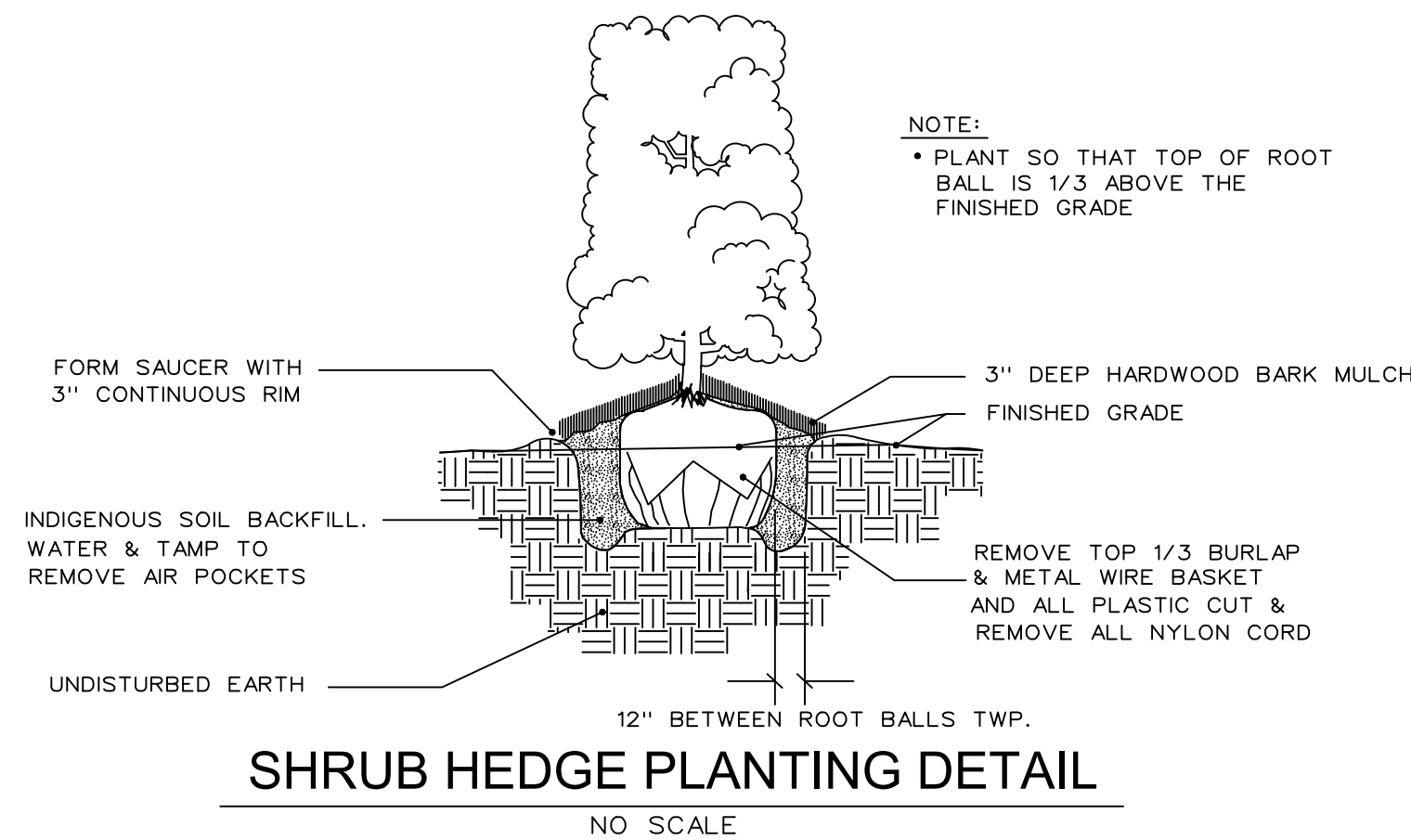


1. Plant materials shall be sound, healthy vigorous, free from plant diseases and insects or their eggs, and shall have normal, healthy root systems. Caliper measurements shall be taken 6" above the ground level. All other measurements shall be in accordance with the latest edition of "American Standard for Nursery Stock" (ANSI Z-60.1 + A3002004.)
2. Planting bed soil for annuals shall be screened topsoil. To deter weed growth during the establishment of annual, & perennial bed, apply a pre-emergent ("Preen" or equal) after planting 2-3 times per growing season, at a rate per recommendation of product manufacturer.
3. Planting pockets shall be no deeper than the height of the root ball, saucer shall be made on the edges of the plant pocket.
4. All tree wrap shall be removed upon planting.
5. Mulch shall be shredded hardwood bark, free deleterious materials and suitable as a top dressing of planting beds and individual tree plantings.
6. Trees shall be mulched with minimum of 3" deep hardwood bark mulch.
7. Grass seed shall be certified turf grass seed complying with A.S.P.A. specifications, and free of weed seeds and undesirable native grasses. Seeded areas shall not be permitted to dry out. All lawn areas shall be fertilized and watered as required during the first growing season to maintain a dense and vigorous growing lawn.
8. Plants shall be guaranteed for two complete growing seasons (24 months). Dead material shall be replaced as needed prior to the expiration of the guarantee period, in accordance with the local ordinance requirements.
9. Contractor shall provide in writing a list of recommended maintenance procedures for the first two (2) growing seasons.
10. Remove top 1/3 of burlap on root ball or all if wrapped in plastic covering and/or nylon cord.
11. Plant materials shall be used in compliance with the provisions of the local ordinance and shall be nursery grown, free of pests and diseases, hardy in this county, in conformance with the standards of the American Association of Nurserymen, and shall have passed inspections required under state regulations. In addition, plant materials shall conform to the standard of the county cooperative extension service.



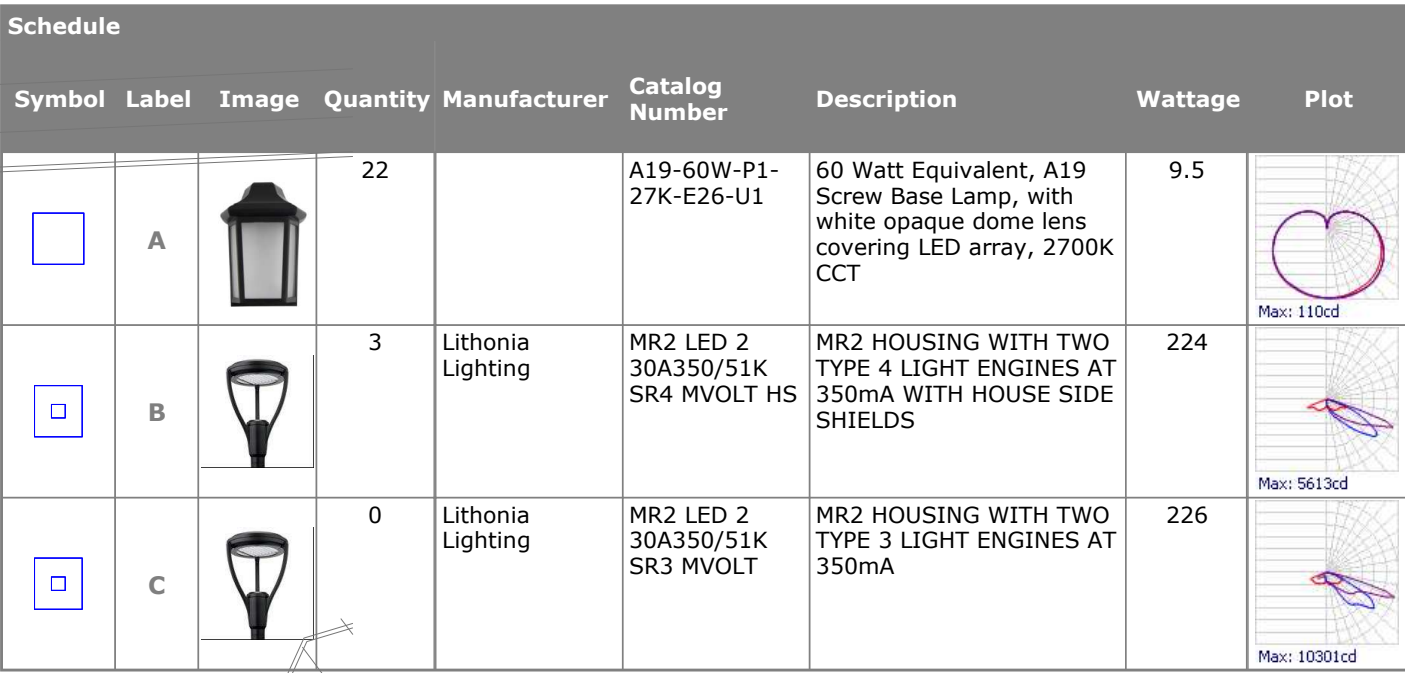
1. All Construction shall conform to the current standards and specifications of local ordinances.
2. All areas not built, landscaped, or paved upon shall be seeded or sodded. Terra seed system or approved equal is encouraged.
3. Contractor to provide tree gaters, one per tree as shown on plan, to convey water for the first two years.
4. Two (2) year guarantee period begins at Final Inspection of landscape material by the City's representative, a landscape architect or nurseryman, and prior to the authorization of the occupancy permit. This is the first of two (1 of 2) required City inspections of the Landscape Plan installation.
5. Building Department will not release construction bonds until City approved landscape architect or nurseryman has inspected the site and approved the installation of landscape plans. Final bond will not be released until the two (2) year guarantee expires and final inspection is made.
6. Owner is then responsible for care and maintenance of all plants upon return of bonds. All plant material is to be maintained for the natural life of the plant. No removal of any plants material is permitted without replacement.

It shall be the responsibility of the landscape contractor to program and periodically adjust the irrigation system (provided by others) as required to ensure delivery of proper and adequate water supply to all plant material, and seeded lawn areas serviced by the same irrigation system, to ensure the establishment of healthy plant material and lawn for their first year of growth. Following the landscape contractor's two-year irrigation requirement period, the contractor shall provide the owner with suggested irrigation maintenance schedule for their use.



30% PERENNIAL RYGRASS  
20% PARK KENTUCKY BLUEGRASS  
45% CREEPING RED FESCUE  
5% ANNUAL RYEGRASS  
4#/1000 S.F. SEEDING RATE





Statistics			
Description	Symbol	Avg	Max
Parking Area	+	1.6 fc	9.5 fc
Property Line	+	0.1 fc	0.5 fc
Street Side Area	+	0.6 fc	2.2 fc

### Mounting Height Note

Mounting height is measured from grade to face of fixture. Pole height should be calculated as the mounting height less base height.

### General Note

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 indicate 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](mailto:ASG@gasserbush.com) OR 734-266-6705.

### Ordering Note

For Inquiries Contact Gasser Bush at [quotes@gasserbush.com](mailto:quotes@gasserbush.com).

### Drawing Note

This drawing was generated from an electroinc image for estimation purpose only. Layout to be verified in field by others. Site to comply with all lighting requirements.



## Wall Pack



## Pole Fixture

Executive:	MP
Manager:	NS
Designer:	-
Quality Control:	MP
Section:	2
T-04-N R-10-E	

Professional Seal:



Know what's below.  
Call before you dig.

[illegible]

Developed For:

**MOCERI COMPANIES**  
3500 UNIVERSITY DRIVE  
AUBURN HILLS, MI  
48326  
248.340.9400

## LIGHTING PLAN

## THE STARBOARD

VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

Date:	08.05.2022
Scale:	
Sheet:	LI-1
Project:	20107.30

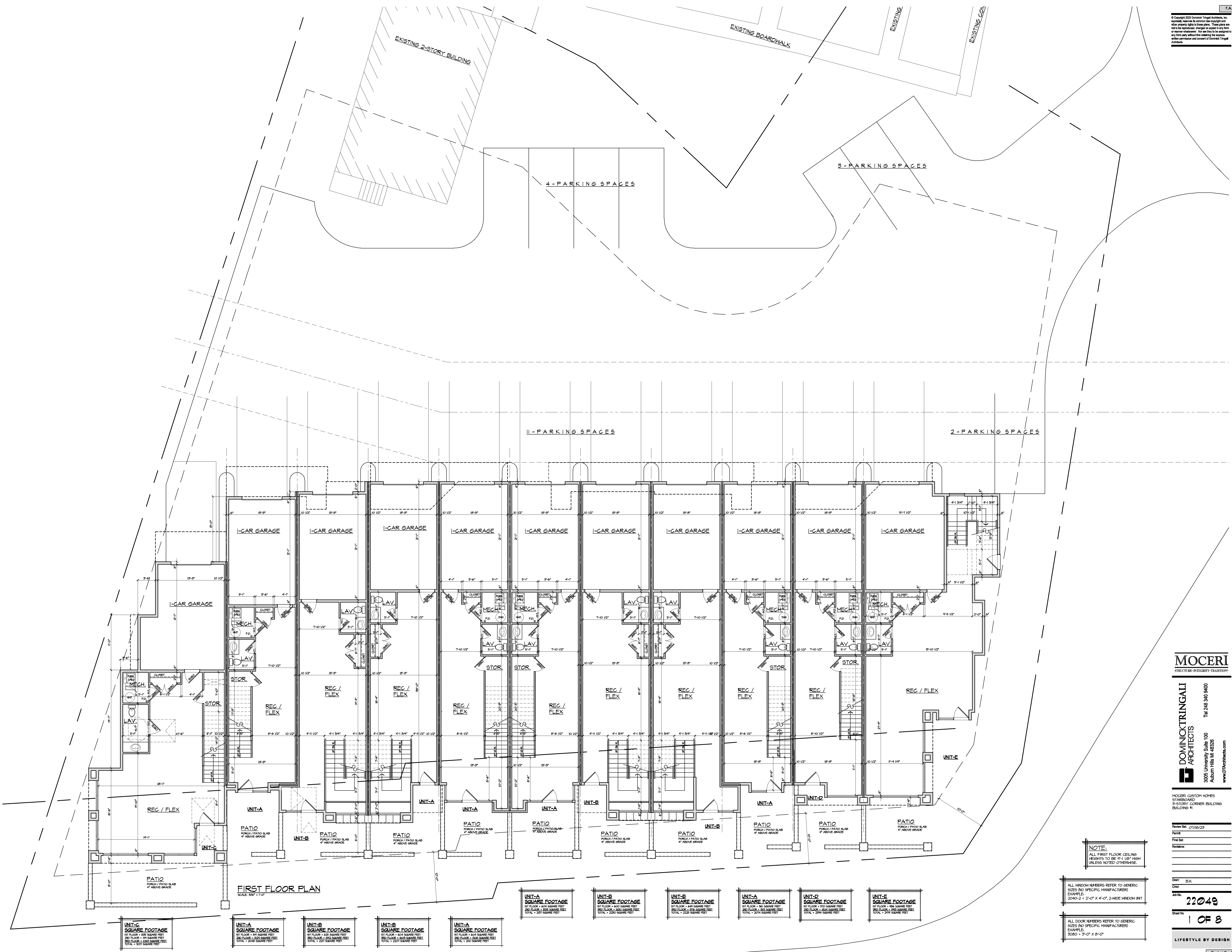


# Starboard

## Village of Lake Orion







**UNIT-C SQUARE FOOTAGE**  
1ST FLOOR = 835 SQUARE FEET  
2ND FLOOR = 185 SQUARE FEET  
TOTAL = 1020 SQUARE FEET

**UNIT-A SQUARE FOOTAGE**  
1ST FLOOR = 835 SQUARE FEET  
2ND FLOOR = 185 SQUARE FEET  
TOTAL = 1020 SQUARE FEET

**UNIT-B SQUARE FOOTAGE**  
1ST FLOOR = 835 SQUARE FEET  
2ND FLOOR = 185 SQUARE FEET  
TOTAL = 1020 SQUARE FEET

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TOTAL = 1020 SQUARE FEET

**UNIT-D SQUARE FOOTAGE**  
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2ND FLOOR = 185 SQUARE FEET  
TOTAL = 1020 SQUARE FEET

**UNIT-E SQUARE FOOTAGE**  
1ST FLOOR = 835 SQUARE FEET  
2ND FLOOR = 185 SQUARE FEET  
TOTAL = 1020 SQUARE FEET

ALL WINDOW NUMBERS REFER TO GENERIC SIZES (NO SPECIFIC MANUFACTURER)  
EXAMPLE:  
2040-2 = 2'-0" X 4'-0", 2-WIDE WINDOW UNIT

ALL DOOR NUMBERS REFER TO GENERIC SIZES (NO SPECIFIC MANUFACTURER)  
EXAMPLE:  
3080 = 3'-0" X 8'-0"

**NOTE:**  
ALL FIRST FLOOR CEILING HEIGHTS TO BE 11'-1 1/8" HIGH UNLESS NOTED OTHERWISE.

**MOCERI**  
STRUCTURE-INTegrity-TRADITION

**DOMINICK TRINGALI ARCHITECTS**  
3005 University Suite 100  
Auburn Hills, MI 48326  
www.DTArchitects.com

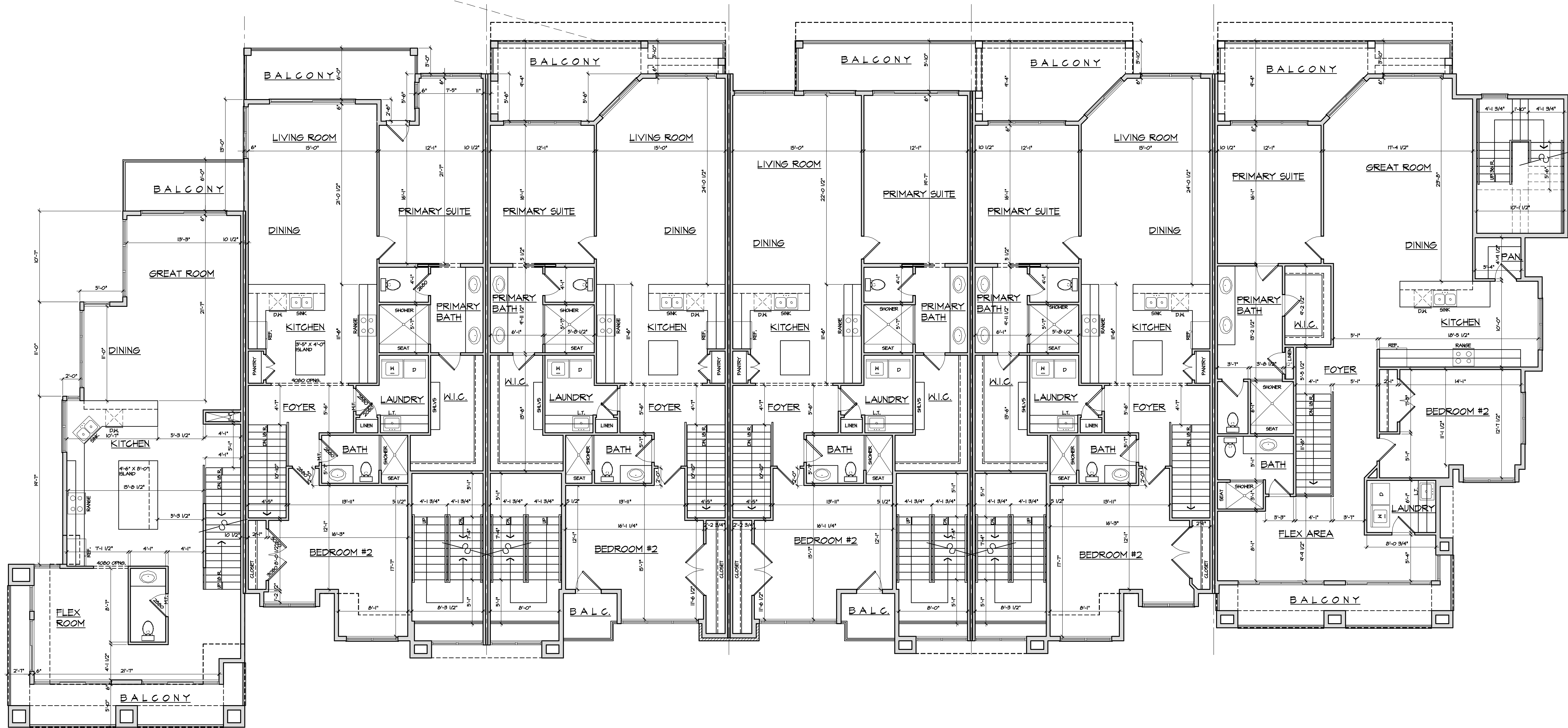
MOCERI CUSTOM HOMES  
STARBOARD  
3-STORY CORNER BUILDING  
BUILDING #1

Review Set: 07/18/23  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Revisions: \_\_\_\_\_  
Date: \_\_\_\_\_  
Drawn: B.H.  
Check: \_\_\_\_\_  
Job No.: **22049**  
Sheet No.: **1 OF 8**

LIFESTYLE BY DESIGN

Packet Pg. 26





SECOND FLOOR PLAN  
SCALE: 3/8" = 1'-0"

NOTE:  
ALL SECOND FLOOR CEILING  
HEIGHTS TO BE 8'-1" UP" HIGH  
UNLESS NOTED OTHERWISE.

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STRUCTURE-INTEGRITY-TRADITION

**DOMINICK TRINGALI**  
ARCHITECTS

3005 University Suite 100  
Auburn Hills, MI 48306  
www.DTArchitects.com

Tel 248.340.9400

MOCERI CUSTOM HOMES  
STARBOARD  
3-STORY CORNER BUILDING  
BUILDING #1

Review Set:	07/18/23
Drawn:	B.J.H.
Checked:	
Approved:	
Job No.:	22049

Sheet No. 2 OF 8





**NOTE:**  
ALL THIRD FLOOR CEILING  
HEIGHTS TO BE 9'-1 1/8" HIGH  
UNLESS NOTED OTHERWISE.













EAST ELEVATION  
SCALE: 3/16" = 1'-0"



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Tel 248.340.9400  
www.DTArchitects.com

MOCERI CUSTOM HOMES  
STARBOARD  
3-STORY CORNER BUILDING  
BUILDING #1

Review Set: 07/18/23  
Name:  
Title Set:  
Revisions:

Dwn: B.J.H.  
Cktd:

Job No. 22049

Sheet No. 6 OF 8

LIFESTYLE BY DESIGN





WEST ELEVATION  
SCALE: 3/16" = 1'-0"

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STARBOARD  
3-STORY CORNER BUILDING  
BUILDING #1

Review Set: 07/18/23  
Title Set:  
Revisions:

Drawn: B.J.H.  
Checked:

Job No.: 22049

Sheet No.: 7 OF 8

LIFESTYLE BY DESIGN





NORTH ELEVATION  
SCALE: 3/16" = 1'-0"



SOUTH ELEVATION  
SCALE: 3/16" = 1'-0"

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STRUCTURE-INTegrity-TRADITION

**DOMINICK TRINGALI**  
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Auburn Hills, MI 48306  
Tel: 248-340-9400  
www.DTArchitects.com

MOCERI CUSTOM HOMES  
STARBOARD  
3-STORY CORNER BUILDING  
BUILDING #1

Review Set: 07/18/23  
Permit:  
Final Set:  
Revisions:

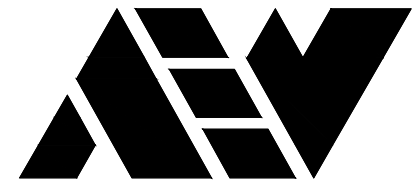
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Job No.:

22049

Sheet No. 8 OF 8

LIFESTYLE BY DESIGN





ANDERSON, ECKSTEIN AND  
WESTRICK, INC.

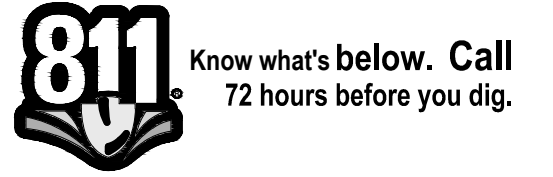
CIVIL ENGINEERS SURVEYORS ARCHITECTS

51301 Schoenherr Road Phone 586 726 1234  
Shelby Township Fax 586 726 8780  
Michigan 48315

www.aewinc.com

ENGINEERING STRONG COMMUNITIES

DATE	SUBMITTALS/REVISIONS
PROJECT NAME:	
STARBOARD BAY	
SHEET TITLE:	
PROPOSED SLIP LOCATIONS	
CLIENT:	
LAKE ORION	
<div><div><div></div><div>PRELIMINARY</div></div><div><div></div><div>CONSTRUCTION</div></div><div><div></div><div>RECORD</div></div></div> <div><div>DRAWN BY: DB</div><div>CHECKED BY: SVP</div><div>DATE: JUNE 2022</div></div> <div>SCALE: 1" = 40'</div> <div><div>0</div><div>20</div><div>40</div><div>80</div></div>	



UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES, (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL UTILITIES THAT ARE ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH THAT UTILITY).

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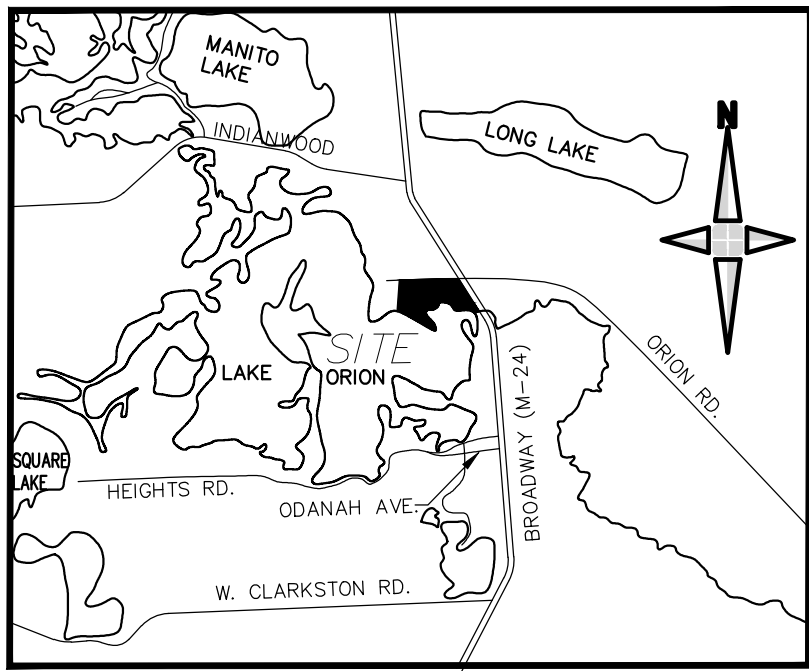
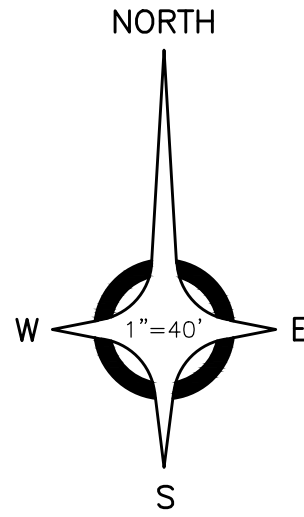
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0361-0072

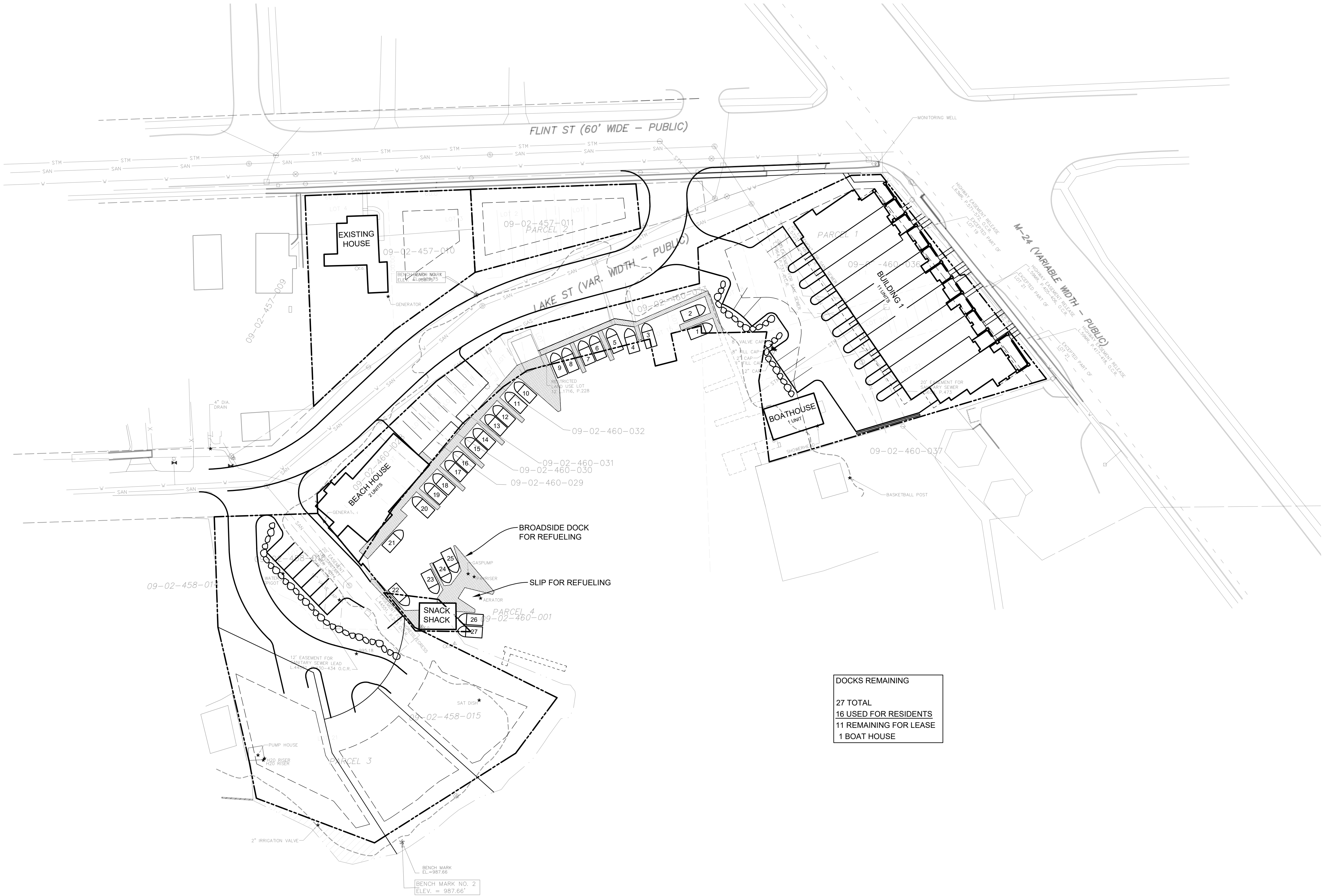
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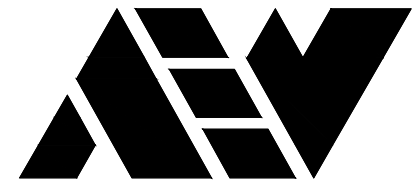
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LOCATION MAP  
( NOT TO SCALE )







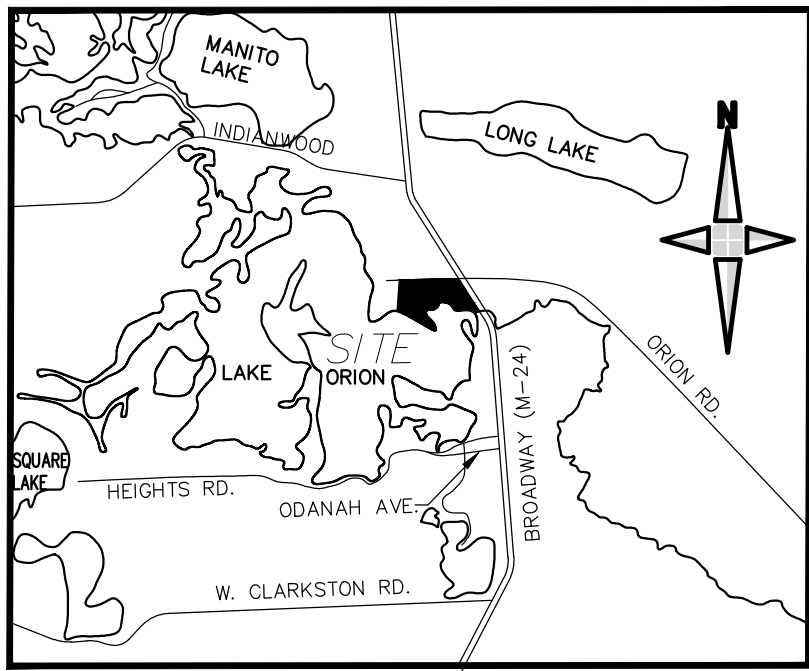
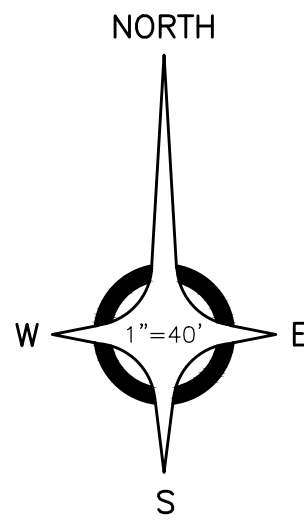
ANDERSON, ECKSTEIN AND  
WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS

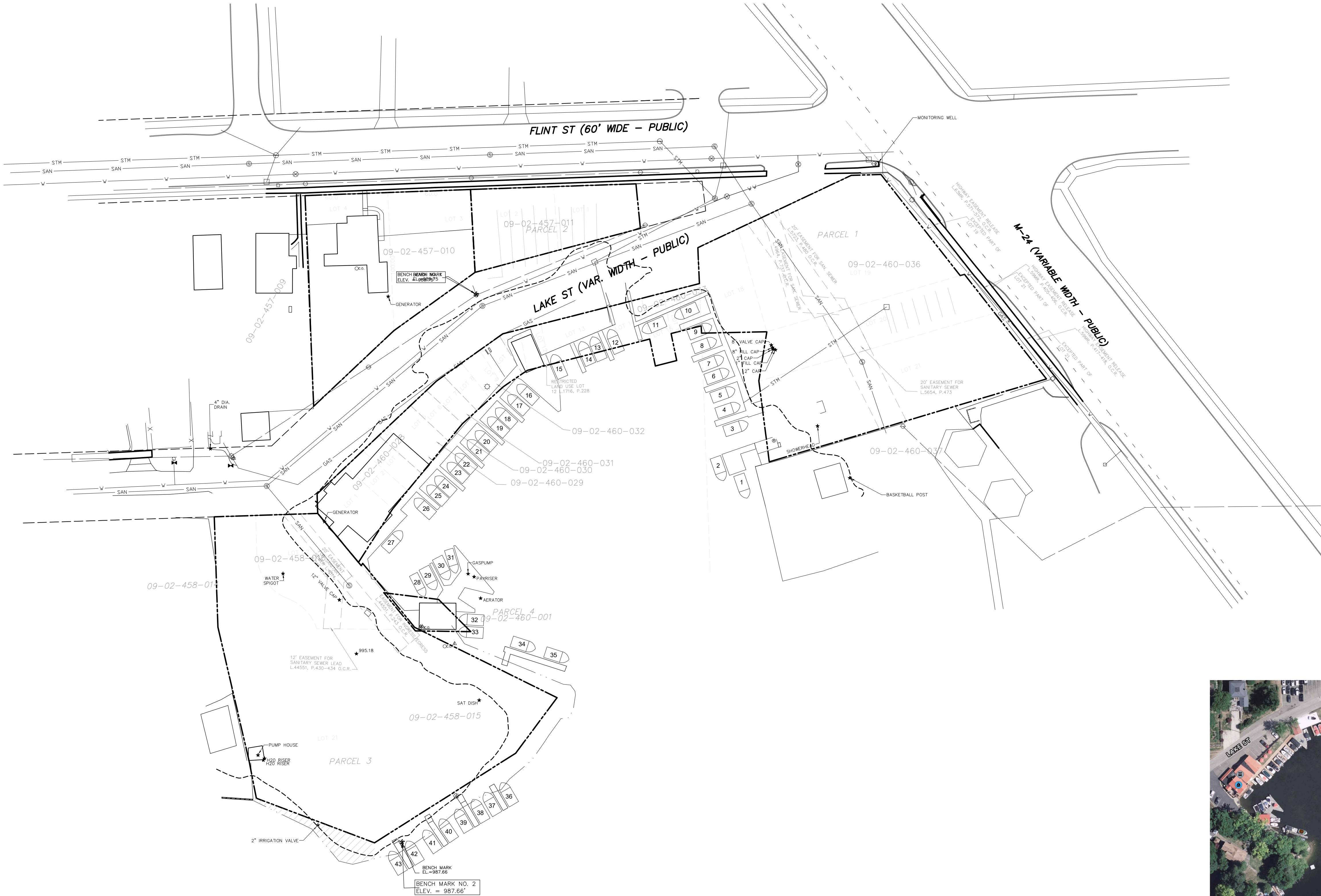
51301 Schoenherr Road Phone 586 726 1234  
Shelby Township Fax 586 726 8780  
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ENGINEERING STRONG COMMUNITIES



LOCATION MAP  
( NOT TO SCALE )



DATE	SUBMITTALS/REVISIONS
PROJECT NAME:	
STARBOARD BAY	
SHEET TITLE:	
EXISTING SLIP LOCATIONS	
CLIENT:	
LAKE ORION	
PRELIMINARY CONSTRUCTION RECORD	
DRAWN BY: DB	CHECKED BY: SVP
DATE: JUNE 2022	DATE: JUNE 2022
SCALE: 1" = 40'	
0 20 40 80	

STARBOARD BAY

EXISTING SLIP LOCATIONS

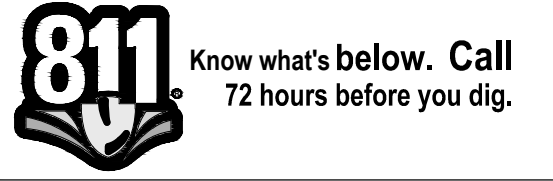
CLIENT: LAKE ORION

PRELIMINARY CONSTRUCTION RECORD

DRAWN BY: DB CHECKED BY: SVP DATE: JUNE 2022

SCALE: 1" = 40'

0 20 40 80



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PROJECT NO. 0361-0072

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SHEET NO.



# STARBOARD MIXED USE ORDINANCE CONFORMANCE

## MU-MIXED USE DISTRICT REQUIREMENTS

### • Sec 9.01

- Office, commercial, and retail development should be located along M-24
- Buffer Lake and existing single-family neighborhoods from nonresidential uses and M-24 with residential land uses.
  - *Given the small size of this site, providing commercial on M-24 and residential on the lake is not feasible. As noted in the Section 9.01 and 9.03.C.1a of the zoning ordinance and pages 105 #3, page 119 and appendix A3 and A5 in the Master Plan and the comments of the residents at the previous meetings, the lake is the priority of the community and the goal was to buffer the lake with residential from the commercial M-24 corridor and buffer the existing single family neighborhoods from the commercial M-24 corridor. The proposed project meets these requirements by providing multi-family uses on the lake and buffers the existing single family homes from commercial uses.*
- Screen Parking lots from M-24 and Lake
  - *Requirement satisfied. Buildings front M-24. No parking lots are located along the roadway. Parking along the lake has been buffered with landscaping. The site parking lot is also 8' higher than the lake which also provides some parking lot screening.*
- Maintain and enhance pedestrian and/or image connectivity to the downtown area.
  - *Requirement satisfied. Enhanced & improved pedestrian connections provided along lake edge and M-24 frontage.*

### • Sec 9.02 (A10) (Permitted uses)

- Residential units subject to the design standards of 9.03C when located above the ground story and subject to ground story being only non-residential use.
  - *Requirement does not apply. Exclusively non-residential first story uses will not be allowed.*
- 1b. Pedestrian connection to downtown center and nearby neighborhoods
  - *Requirement satisfied. Walk to be maintained along M-24 and building front doors have direct connection to the M-24 walkway.*

### • Sec 9.02 C Permitted Accessory Uses

- Accessory buildings, structures, or uses occasionally incidental to any principal permitted uses in the MU district
  - Requirement not applicable to: (1) existing boathouse to be preserved and renovated

### • Sec 9.03 B Area, Height, Bulk and Placement Requirements

<u>Requirement</u>	<u>Conformance</u>
Building Height (per Height overlay standards)	yes
Minimum Setbacks	
○ Front (min 10) / (max 25ft)	10' min / 25' max
○ Water (25')	58'



- Side (0', 20') abutting residential 3'
- Rear (25') 58.5
- Side street (10') NA
- Maximum Lot Coverage (50%) 33%

• **Sec 9.03 C Design Standards**

1. Site Layout / Uses

Buffer Lake and all existing residential neighborhood from nonresidential uses and M-24

- *Requirement satisfied. Buildings along the lake are residential uses.*

2. Parking

Minimum parking spaces shall be the sum of all individual uses required in Article 14

- *Requirement satisfied. Required 24 Spaces, Provided 131 Spaces*

Screening from M24 and Lake

- *Requirement satisfied parking buffered from the lake and M-24 by the buildings.*

3. Building Design

- *Requirement satisfied. See Architectural elevations, floor plans, and renderings.*

4. Floor Area (Maximum 12,500 sq ft (first floor for each building)

- *Requirement satisfied. See architectural plans.*

5. Common Area (10% of the lot area)

- *Requirement satisfied. 25% open space provided.*

6. Cross access to adjacent units to be accommodated for future connection.

- *Site is adjacent to Green's Park. Since the park is not open to the general public, a connection will not be provided.*

7. Residential Dwelling Units

Residential density in areas of the site shall be as permitted in the RM District based on that area of the site dedicated solely to residential use.

- *Requirement satisfied.*  
*All the site area is dedicated solely to residential use. Maximum density shall be 15du/ac.*

8. Pedestrian Connectivity

- *Requirement satisfied.*  
*Connections to abutting MU District properties will be permitted. Constellation Bay currently has 5 driveways on M-24 and will be reduced to 1.*

**D. Environmentally Sensitive Design**

- *Requirement satisfied. Project proposes providing a stormwater pretreatment device to pretreat stormwater before being discharged into the lake. Prior uses had no pretreatment. Project is proposing updated enhanced landscaping. Development will maintain the existing lake edge and will clean-up debris along the lake edge.*



# giffels Transmittal webster

To: Village of Lake Orion  
21 East Church Street  
Lake Orion, MI 48362

Date: July 27, 2023

Attn: Gage Belko

From: Nancy Standish, PE

Project: Starboard

RE: Site Plan Submittal

Project Number: 20107.30

Sent Via: ☐ US Mail ☐ UPS Ground ☐ UPS Overnight ☒ Personal Delivery

Please find the following enclosed:

Copies	Dated	Sht No.	Description
2	07.20.2023	23	Starboard Site Plan Submittal Set
2	-	-	Starboard MU Ordinance Conformance
2	-	-	Application
2	-	-	Proof of Ownership
1	-	-	Check for required fees

These are transmitted as marked below:

☒ For your approval  
☐ For your use  
☐ For your review and comment
 ☐ Approved as noted  
☐ Approved as submitted  
☐ Returned w/ comments
 ☐ As requested  
☐ Other

Gage,

An electronic set was sent over on 07.27.2023. Please reach out if you have any questions. Thanks,  
Nancy Standish

Cc: Dominic F. Mocerri (Mocerri Companies)

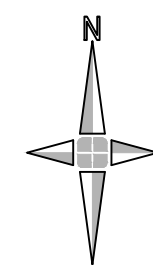
Attachment: 2023-07-27 Starboard Site Plan Submittal (6369 : PC-23-005 - Starboard Orion Site Plan Review #2)



**LANDSCAPE ARCHITECT**  
**GIFFELS WEBSTER**  
**MR. MARK HANSEN, RLA**  
**1025 E. MAPLE, SUITE 100**  
**BIRMINGHAM, MI 48009**  
**PHONE: (248) 852-3100**

# SITE PLANS

## VILLAGE OF LAKE ORION, OAKLAND COUNTY, MI



( NOT TO SCALE )

LOTS 8 THROUGH 18, BOTH INCLUSIVE, AND LOTS 19 THROUGH 21, EXCEPT THAT PART TAKEN FOR M-24 HIGHWAY, OF "SUPERVISOR'S PLAT NO. 6," AS RECORDED IN LIBER 34, PAGE 48, OAKLAND COUNTY RECORDS, BEING MORE PARTICULARLY DESCRIBED AS:

BEGINNING AT THE INTERSECTION OF THE SOUTH RIGHT OF WAY LINE OF FLINT STREET (60 FEET WIDE) AND THE WESTERLY RIGHT OF WAY LINE OF M-24 (VARIABLE WIDTH); SAID POINT BEING ON THE NORTH LINE OF SAID LOT 19; THENCE THE FOLLOWING THREE (3) COURSES, BEING ALONG THE WESTERLY LINE OF M-24: (1) S.38°05'39"E., 93.09 FEET; AND (2) N.73°48'09"E., 3.23 FEET; AND (3) S.38°05'39"E., 96.34 FEET TO A POINT ON THE SOUTH LINE OF LOT 19; THENCE S.73°21'31"W., 209.70 FEET ALONG SAID SOUTH LINE TO THE SOUTHWEST CORNER OF SAID LOT 21; THENCE THE FOLLOWING THREE (3) COURSES BEING ALONG THE WESTERLY LINES OF LOTS 20 AND 21 AND SOUTHERLY LINES OF LOT 18; (1) N.07°18'23"W., 59.19 FEET; AND (2) N.09°10'51"E., 36.00 FEET; AND (3) S.47°33'33"EET TO THE SOUTHWEST CORNER OF LOT 18; THENCE N.02°27'58"W., 5.27 FEET TO THE SOUTHEAST CORNER OF LOT 17; THENCE THE FOLLOWING SEVEN (7) COURSES ALONG THE SOUTHERLY LINES OF LOTS 17 THROUGH 8: (1) S.75°40'21"W., 22.52 FEET; AND (2) S.11°49'49"E., 19.97 FEET; AND (3) S.75°40'21"W., 16.00 FEET; AND (4) N.11°49'49"W., 19.97 FEET; AND (5) S.75°40'21"W., 91.50 FEET; AND (6) S.55°40'21"W., 20.97 FEET; AND (7) S.47°52'51"W., 25.95 FEET TO THE SOUTHWEST CORNER OF LOT 8; THENCE N.44°07'14"W., 34.86 FEET ALONG THE WEST LINE OF SAID LOT 8 TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF LAKE STREET (VARIABLE WIDTH) SAID POINT ALSO BEING THE NORTHWEST CORNER OF LOT 8; THENCE THE FOLLOWING FOUR (4) COURSES BEING ALONG THE SOUTHERLY AND EASTERLY RIGHT OF WAY LINE OF LAKE STREET: (1) S.75°40'21"W., 52.97 FEET; AND (2) S.75°40'21"W., 14.00 FEET; AND (3) S.75°40'21"W., 14.00 FEET; AND (4) N.64°46'31"W., 122.88 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF FLINT STREET; THENCE N.88°16'41"E., 21.56 FEET ALONG SAID SOUTH LINE TO THE POINT OF BEGINNING AND CONTAINING 0.83 ACRES.

3 PROPOSED SLIP LOCATIONS  
4 EXISTING SLIP LOCATIONS

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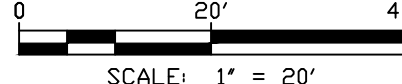
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VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

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- NO BOUNDARY SURVEY WAS PERFORMED BY GIFFELS WEBSTER.
- PROPERTY LINES AND EASEMENTS ARE BASED ON ALTA/SPS LAND TITLE SURVEY BY KENNEDY SURVEYING INC., DATED JANUARY 5TH, 2022.
- THIS TOPOGRAPHIC SURVEY WAS PROVIDED WITH EXISTING SNOW COVER OF 01" - 06". EFFORT HAS BEEN MADE TO LOCATE OBSERVABLE UTILITY STRUCTURES AND EVIDENCE. HOWEVER THE SURVEYOR CANNOT WARRANT COMPLETE FIELD IDENTIFICATION.
- GAS & WATER LEAD LOCATION SHOULD BE CONSIDERED AS APPROXIMATE.
- MEASURED BEARINGS ARE BASED ON THE STATE PLANE COORDINATE SYSTEM, MICHIGAN SOUTH (2113), NAD83.

( NAVD88 ) DATUM  
BENCH MARK NO. 1  
SET NAIL WITH GW TAG #85436 IN THE NORTH FACE OF  
UTILITY POLE LOCATED ±16 FEET SOUTH OF THE SOUTHWEST  
PROPERTY CORNER OF PARCEL NO. 09-02-457-011.  
ELEVATION=989.75'

BENCH MARK NO. 2

SET NAIL WITH GW TAG #85435 IN THE NORTH FACE OF 10" WALNUT LOCATED ±20.5 FEET WEST OF THE SOUTHERN MOST PROPERTY CORNER OF PARCEL NO. 09-02-458-015.

ELEVATION=987.66'

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

(R) = UTILITY SHOWN FROM RECORDS OR PLANS, & FIELD  
LOCATED WHERE POSSIBLE.

PRIOR TO THE PLANNED BUILDING IMPROVEMENTS, AND/ OR CONSTRUCTION, THE RESPECTIVE UTILITY COMPANIES MUST BE NOTIFIED TO STAKE THE PRECISE LOCATION OF THEIR UTILITIES.

**LEGEND – EXISTING**

	SECTION LINE		SAN. MH		GAS METER		MISC. TOPO. FEATURE
	P/ PAVEMENT		SAN. CLEAN OUT		GAS RISER		SURVEY CONTROL POINT
	CURB		SAN. RISER		GAS VALVE		FOUND IRON
	E/ GRAVEL		SAN. PUMP STATION		GAS MH		FOUND NAIL
	CL ROAD		COMB. MH		TELE. RISER		F. OUT CROSS
	E/ WALK		GATE VALVE		TELE. MH		SECTION COR.
	RAILROAD		HYDRANT		TELE. CROSS BOX		BENCHMARK
	E/ BRICK		WATER VALVE		CABLE RISER		FOUND PIPE
	MISC. LINE		WATER METER		PAY PHONE		FOUND MON.
	FENCE		POST INDICATOR VALVE		MANHOLE		ASPH.
	GUARD RAIL		WELL HEAD		SIGN		CONC.
	WALL		FDC CONNECTION		PROT. POST/GUARD POST		A.C. AIR CONDITIONER
	BLDG. OVERHEAD		IRRIGATION CONTROL BOX		GUY		G.P. GUARD POST
	OVERHEAD WIRES		STORM MH		DECIDUOUS TREE		C.L.F. CHAIN-LINK FENCE
	RAILING		CATCH BASIN		CONIFEROUS TREE		D.L.D. DOOR LEDGE
	OVERHANG LINE		BEEHIVE CB		DEAD TREE		F.F. FINISHED FLOOR
	T/ BANK		CULVERT E.S.		UTILITY FLAG		O.H. OVERHANG
	B/ BANK		ROOF/DOWN SPOUT		BLDG. CORNER (FIELD LOCATED)		I.F. FOUND IRON
	CL DITCH/STREAM		OVERFLOW/OUTLET STRUCTURE		HANDICAP PARKING		S.I. SET IRON
	SHRUB LINE		STORM CLEAN OUT		WETLAND FLAG		F.I.P. FOUND IRON PIPE
	TREE LINE		ROUND CB		BUSH/SHRUB		M MEASURED
	WATER EDGE		LIGHT POLE		PARKING METER		R RECORD
	WETLAND LINE		UTILITY POLE		RESIDENTIAL MAILBOX		F.M. FOUND MONUMENT
	STORM LINE		ELEC. TRANS.		U.S. MAILBOX		S.N. SET NAIL
	SAN. LINE		AIR CONDITIONER		EXISTING ELEVATION		CMP CORRUGATED METAL PIPE
	WATER LINE		ELEC. MH		SOIL BORING		RCP REINFORCED CONCRETE PIPE
	GAS LINE		ELEC. METER		MONITORING WELL		G.L. GROUND LIGHT
	UG ELEC. LINE		ELEC. RISER		LAWN IRRIG. HEAD		
	UG TEL. LINE		TRAFFIC CONTROL BOX		CENTERLINE R. TRACK		
	UG CABLE TV LINE		STEAM MH				
	PAINT STRIPE		PUBLIC LIGHTING MH				
	COMBINED SEWER						
	P/LD LINE						
	STEAM LINE						
	ELECTRIC OVERHEAD						
	TELEPHONE OVERHEAD						



Executive: MP  
 Manager: NS  
 Designer: -  
 Quality Control: MP  
 Section: 2  
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08.18.2023	RESUBMIT FOR SITE PLAN APPROVAL

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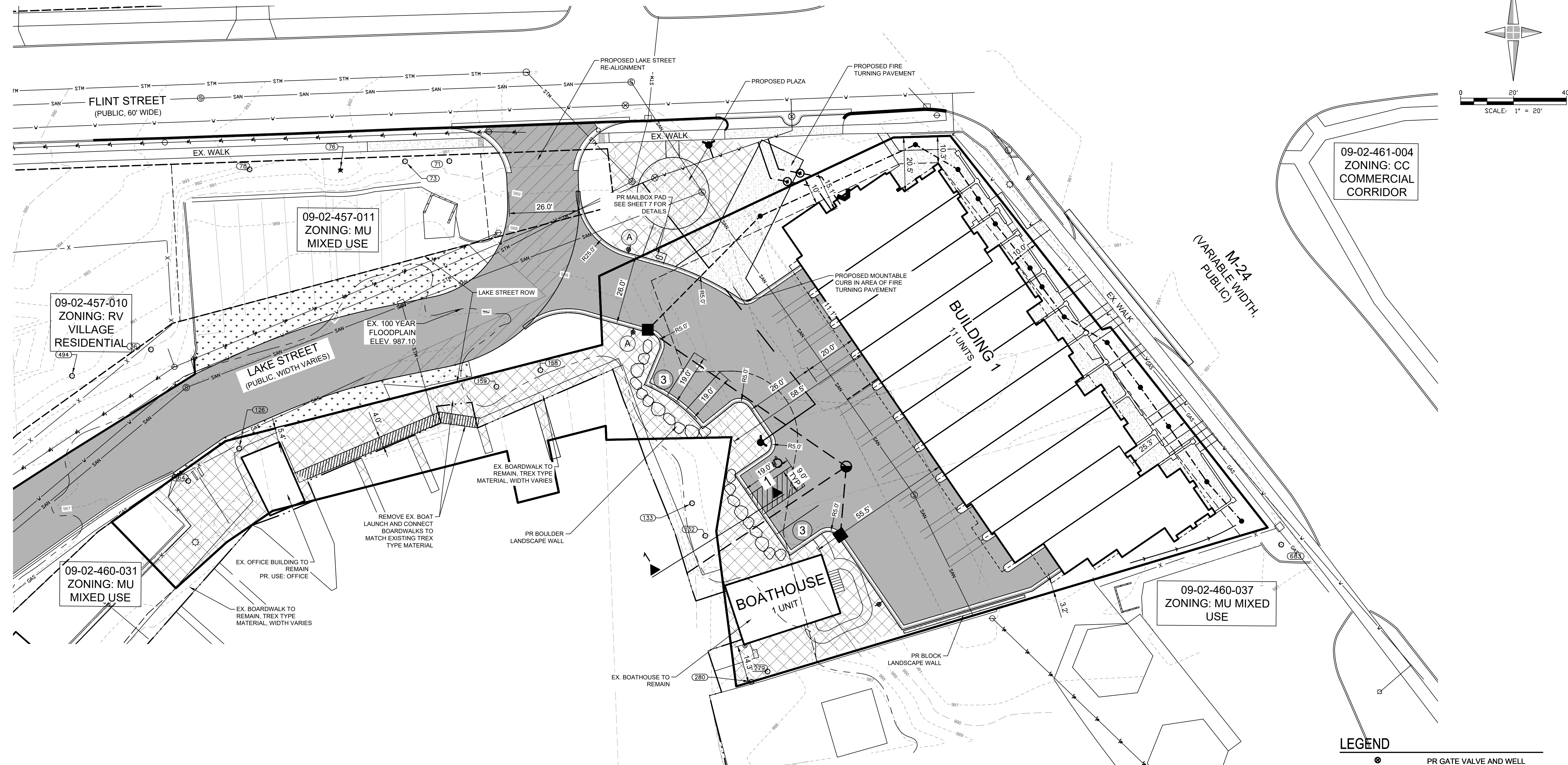
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 AUBURN HILLS, MI  
 48326  
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## SITE AND PAVING PLAN

THE STARBOARD

 VILLAGE OF LAKE ORION  
 OAKLAND COUNTY  
 MICHIGAN

 Date: 08.05.2022  
 Scale: 1" = 20'  
 Sheet: C3  
 Project: 20107.30

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### AREA, HEIGHT, BULK AND PLACEMENT REGULATIONS:

#### SETBACKS

	PROPOSED	REQUIRED	EX. BOATHOUSE
M-24 FRONT	10' / 25'	10' MIN / 25' MAX	NA
LAKE ST. FRONT	10' / 15.1'	10' MIN / 25' MAX	NA
FLINT STREET FRONT	10.3' / 20.5'	10' MIN / 25' MAX	NA
WATER	58.5'	25'	0'
SIDE	3.2'	0'	14.3'

#### LOT COVERAGE

33%

#### IMPERVIOUS AREA

 EXISTING:  
 BUILDING: 8,356 SF  
 PAVEMENT: 16,373 SF  
 TOTAL: 24,729 SF = 68%

 PROPOSED:  
 BUILDING: 11,884 SF  
 PAVEMENT: 12,948 SF  
 TOTAL: 24,832 SF 68%

### SITE PLAN NOTES:

 ZONING: MU, MIXED USE (34,112 SF) 0.78 ACRES  
 TOTAL AREA OF BOTTOM LANDS IN MU (2,141 SF) 0.05 ACRES  
 TOTAL AREA FOR DENSITY 0.83 ACRES

 DENSITY  
 MU = 15 RES./ACRE X 0.83 ACRES = 12.45 RESIDENCES

 PROPOSED RESIDENCES:  
 THE STARBOARD 11 RESIDENCES  
 BOAT HOUSE 1 RESIDENCES  
 TOTAL 12 RESIDENCES

TOTAL OPEN SPACE REQUIRED PER MU ORDINANCE 10%

PROPOSED OPEN SPACE: 8,810 SF, 0.20 ACRES 24%

#### PARKING:

##### REQUIRED:

 MULTI-FAMILY REQUIREMENTS  
 2 SPACES PER UNIT  
 12 x 2 = 24 SPACES  
 OFFICE  
 1 SPACE PER 350 SF GROSS AREA  
 367 SF / 350 = 1 SPACE  
 TOTAL REQUIRED: 25 SPACES

##### PROVIDED:

 GARAGE SPACES 11 SPACES  
 DRIVEWAY SPACES 9 SPACES  
 OFF-STREET SPACES 6 SPACES  
 TOTAL SPACES 26 SPACES

##### PROPOSED BEDROOM BREAKDOWN:

 1 BEDROOM 1 RESIDENCE  
 2 BEDROOMS 11 RESIDENCES  
 TOTAL 12 RESIDENCES

#### NOTES:

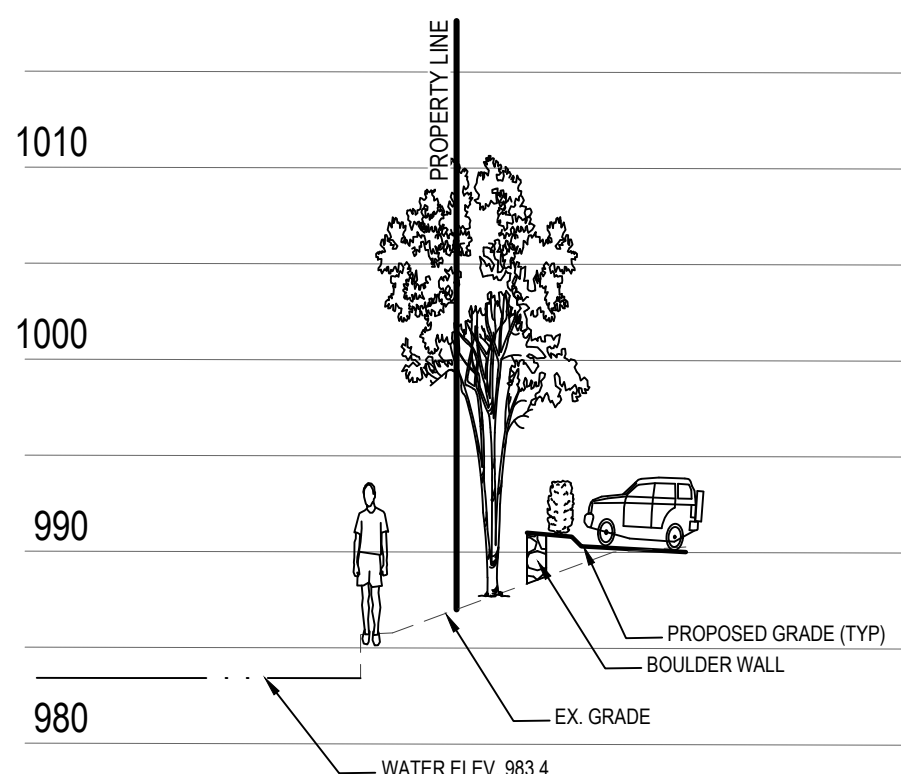
- STARBOARD IS PROPOSED MULTI-FAMILY RESIDENCE COMMUNITY.
- TRASH RECEPTACLES WILL BE STORED IN THE RESIDENCE GARAGES AND ROLLED OUT ON GARBAGE DAY.
- NO PARKING FIRE LANE SIGN

### LEGEND

	PR GATE VALVE AND WELL
	PR HYDRANT
	PR VALVE AND BOX
	PR WATERMAIN
	PR STORM CATCH BASIN
	PR STORM MANHOLE
	PR STORM END SECTION
	PR STORM END SECTION
	PR RIP RAP
	PR STORM SEWER
	PR CLEAN OUT
	PR SANITARY MANHOLE
	PR SANITARY SEWER
	PR UNDERGROUND ELECTRIC SERVICE
	PR UNDERGROUND GAS SERVICE
	PR UNDERGROUND TELEPHONE SERVICE
	PR UTILITY CROSSING
	PR CONTOUR MINOR (1')
	PR CONTOUR MAJOR (5')
	PR SPOT ELEVATION
	PR SWALE
	PR CURB AND GUTTER
	PR REVERSE CURB AND GUTTER
	PR STD. DUTY ASPHALT
	PR CONCRETE PAVEMENT
	PR OPEN SPACE AREA
	BOTTOM LANDS
	PR GRASS PAVERS

## SECTION 1-1

SCALE: H:1"=30', V:1"=10'





Executive:	MP
Manager:	NS
Designer:	-
Quality Control:	MP
Section:	2
T-04-N R-10-E	

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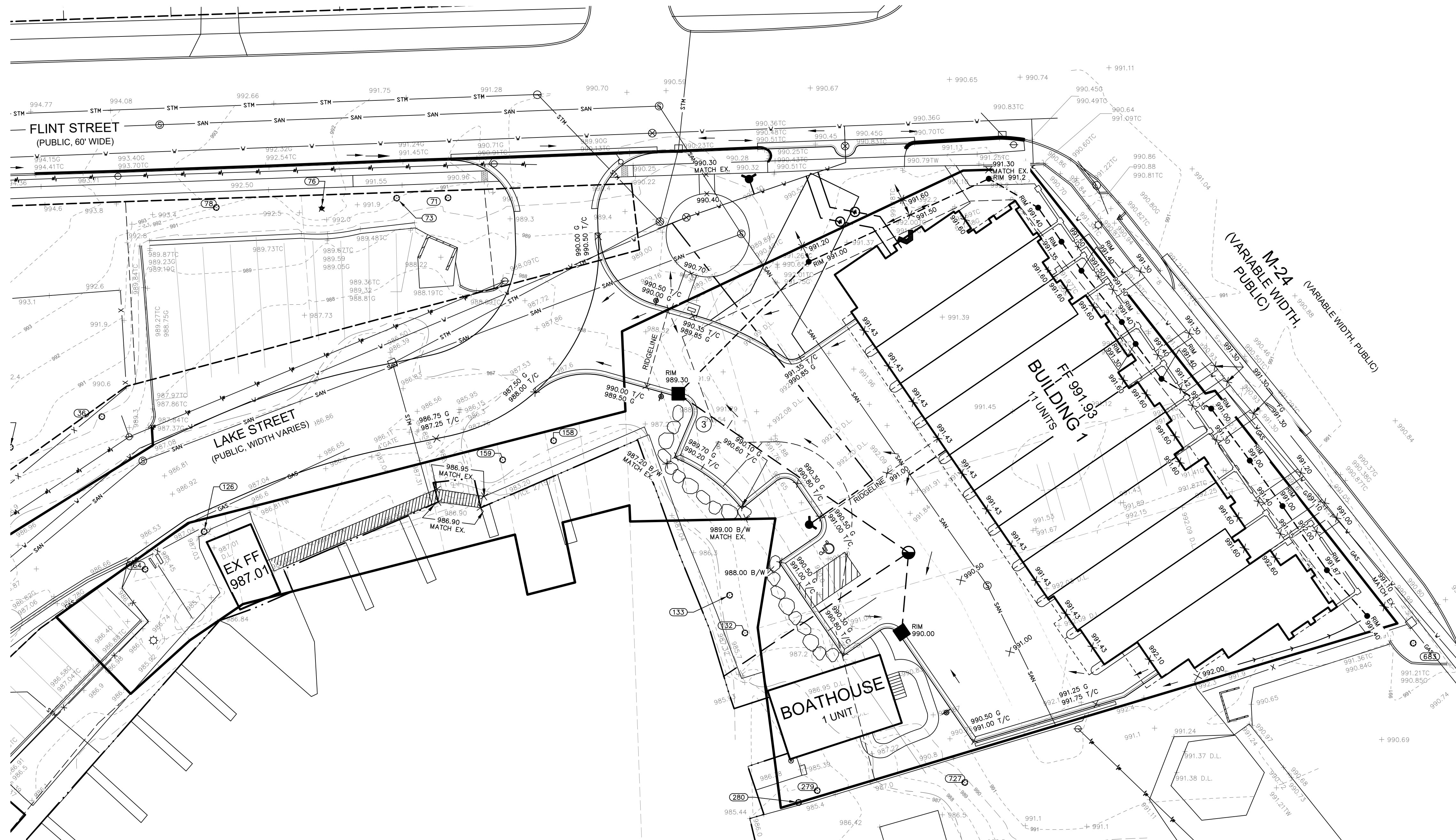
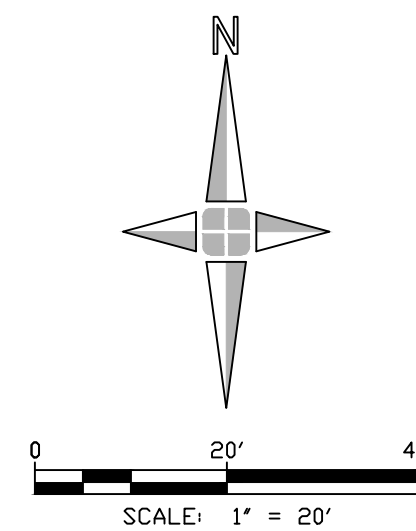
## GRADING PLAN

THE STARBOARD

VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

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Project:	20107.30

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### GRADING NOTES:

- EXCESS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR. COST OF DISPOSAL WILL BE INCIDENTAL TO THE PROJECT.
- THE FINAL SUB-GRADE SHALL BE THOROUGHLY PROOF-ROLLED UNDER THE OBSERVATION OF THE SOILS ENGINEER.
- NO FROZEN MATERIAL SHALL BE PERMITTED AS BACKFILL UNDER ANY ROADWAY, DRIVEWAY OR PARKING AREA.
- PRIOR TO THE START OF ANY FILLING, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ALL OTHER UNACCEPTABLE SOIL FROM THE FILL AREAS, AND PROPERLY BACKFILL WITH ACCEPTABLE SOIL.
- GENERAL GRADING REQUIREMENTS ARE AS FOLLOWS:
  - FINISH GRADE AT EXISTING BUILDING SHALL MATCH BRICK LEDGES, DOORWAYS OR BASEMENT WINDOWS
  - MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING: 5% WITHIN THE FIRST 10' AND 2% AFTER.
  - PAVEMENT SLOPES (1.0% MINIMUM, 4.0% MAXIMUM) UNIFORMLY BETWEEN FINISH GRADE ON PLANS
  - LAWN AREAS  $\pm$  2% MINIMUM TO 25% MAXIMUM
- PRIOR TO THE PLACEMENT OF ANY BASE ASPHALT OR LEVELING COURSE, THE CURBS SHALL BE PARTIALLY BACKFILLED AND THE SUB-GRADE SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF THE SOILS ENGINEER.
- ALL SIDEWALK AND PATHWAYS IN ANY PUBLIC R.O.W. SHALL BE INSPECTED BY THE AGENCY WITH JURISDICTION.

### ADA NOTES:

- WALKS: CROSS SLOPES SHALL NOT EXCEED 2% AND LONGITUDINAL SLOPES SHALL NOT EXCEED 5%.
- LANDINGS: CROSS AND LONGITUDINAL SLOPES SHALL NOT EXCEED 2% ON ALL LANDINGS.
- RAMPS: CROSS SLOPES SHALL NOT EXCEED 2% AND LONGITUDINAL SLOPES SHALL NOT EXCEED 8.3%.

### ABBREVIATIONS:

PW - PERMANENT WATER ELEVATION  
HW - HIGH WATER / 100 YR. STORM ELEVATION  
FB - FREEBOARD ELEVATION  
CD - CURB DROP FOR WALK  
T/C - TOP OF CURB  
G - GUTTER  
T/A - TOP OF ASPHALT  
BR - BOTTOM OF RAMP  
TR - TOP OF RAMP  
R - RAMP  
L - LANDING  
T/WALL - TOP OF WALL  
B/WALL - BOTTOM OF WALL

### NOTES:

- LAKE STREET RECONFIGURATION IS PROPOSED TO TAKE PLACE JUST PRIOR OR DURING THE CONSTRUCTION OF THE STARBOARD DEVELOPMENT.

### LEGEND

	PR GATE VALVE AND WELL
	PR HYDRANT
	PR VALVE AND BOX
	PR WATERMAIN
	PR STORM CATCH BASIN
	PR STORM MANHOLE
	PR STORM END SECTION
	PR STORM END SECTION
	PR RIP RAP
	PR STORM SEWER
	PR CLEAN OUT
	PR SANITARY MANHOLE
	PR SANITARY SEWER
	PR UNDERGROUND ELECTRIC SERVICE
	PR UNDERGROUND GAS SERVICE
	PR UNDERGROUND TELEPHONE SERVICE
	PR UTILITY CROSSING
	PR CONTOUR MINOR (1')
	PR CONTOUR MAJOR (5')
	PR SPOT ELEVATION
	PR SWALE
	PR CURB AND GUTTER
	PR REVERSE CURB AND GUTTER



Executive:	MP
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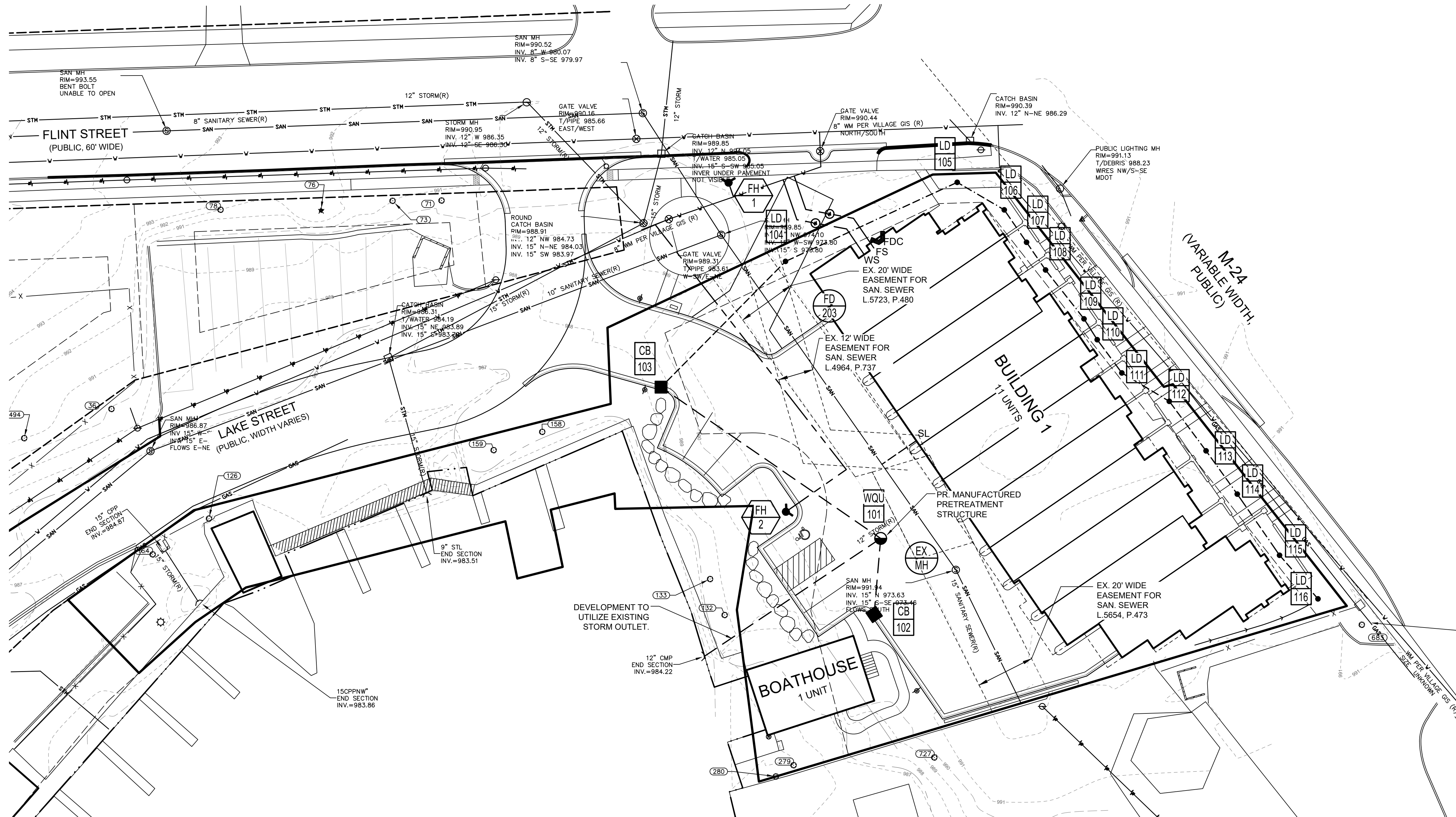
## UTILITY PLAN

THE STARBOARD

VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

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Project:	20107.30

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### WATERMAIN NOTES OF INTENT:

1. WATER LEADS SHALL CONNECT TO EXISTING MAIN IN FLINT STREET.
2. THE COVER OVER EXISTING AND PROPOSED WATERMAIN SHALL HAVE A MINIMUM COVER OF 5.5'
3. PROJECT PROPOSES ONE NEW HYDRANT ON M-24 AND A REPLACEMENT FOR THE ONE REMOVED FOR THE LAKE STREET REALIGNMENT.

### SANITARY SEWER NOTES OF INTENT:

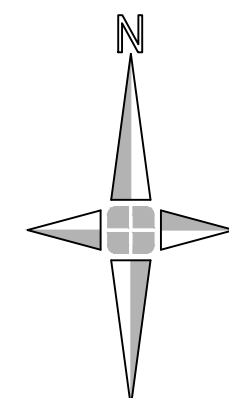
1. SANITARY LEADS SHALL BE 6" AND AT A MINIMUM SLOPE OF 1.00%.

### STORMWATER NOTES OF INTENT:

1. COVER OVER PROPOSED STORM SEWER SHALL BE A MINIMUM OF 1.5'.
2. THE ULTIMATE STORM SEWER OUTLET IS TO LAKE ORION.
3. THE STORM SEWER OUTLET SHALL BE IN ACCORDANCE WITH THE VILLAGE OF LAKE ORION.
4. STORM SEWER SHALL BE A PRIVATE SYSTEM.
5. STORMWATER WILL BE PRETREATED WITH A MANUFACTURED PRETREATMENT DEVICE PER VILLAGE STANDARDS. SINCE DISTURBED AREA IS LESS THAN 1 ACRE, 100-YEAR DETENTION.

### LEGEND

	PR GATE VALVE AND WELL
	PR HYDRANT
	PR VALVE AND BOX
	PR WATERMAIN
	PR STORM CATCH BASIN
	PR STORM MANHOLE
	PR STORM END SECTION
	PR RIP RAP
	PR STORM SEWER
	PR CLEAN OUT
	PR SANITARY MANHOLE
	PR SANITARY SEWER
	PR UNDERGROUND ELECTRIC SERVICE
	PR UNDERGROUND GAS SERVICE
	PR UNDERGROUND TELEPHONE SERVICE
	PR UTILITY CROSSING
	PR CONTOUR MINOR (1')
	PR CONTOUR MAJOR (5')
	PR SPOT ELEVATION
	PR SWALE
	PR CURB AND GUTTER
	PR REVERSE CURB AND GUTTER



0 20' 40'  
SCALE: 1" = 20'







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Designer:	-
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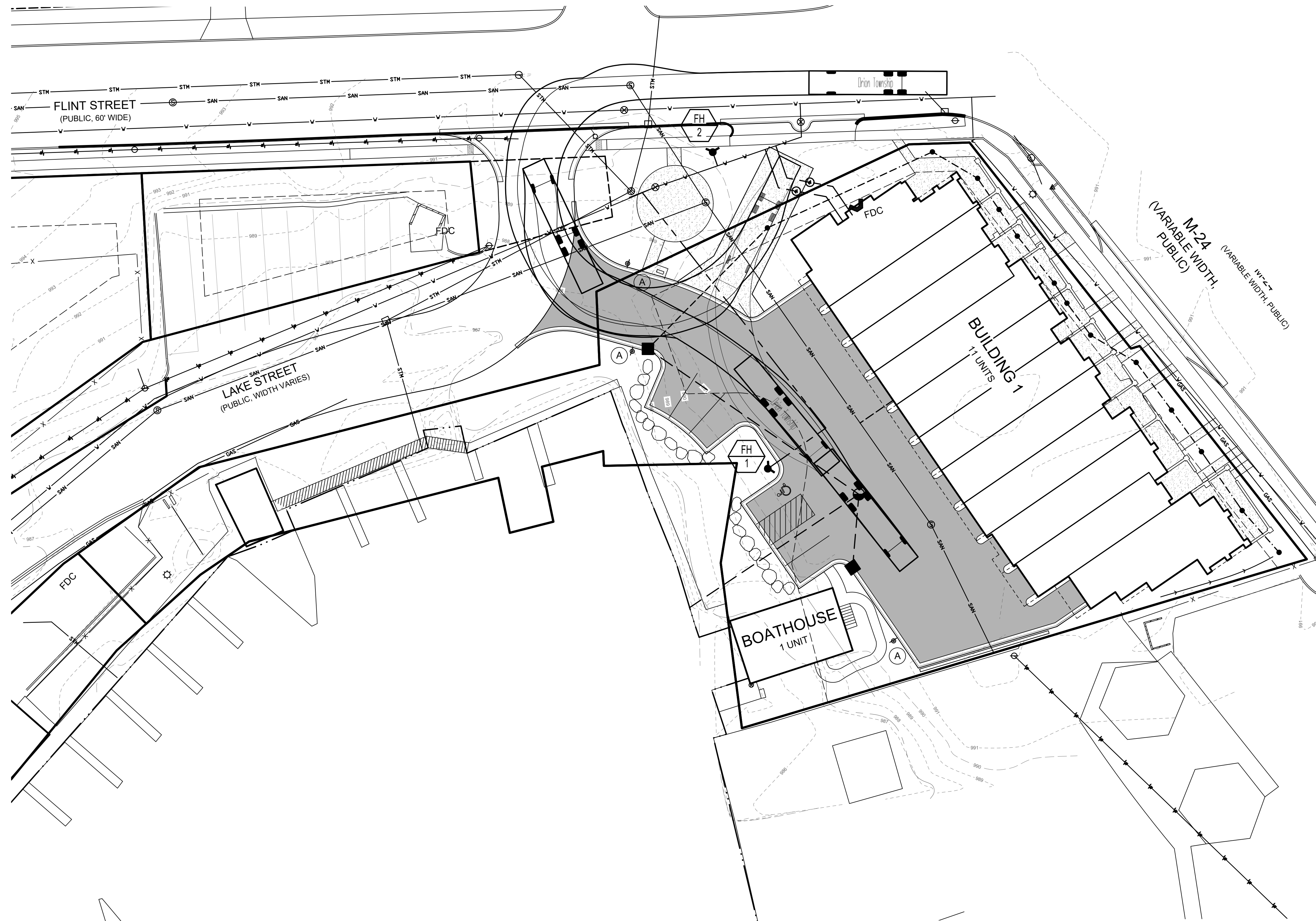
## FIRE PROTECTION PLAN

THE STARBOARD

VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

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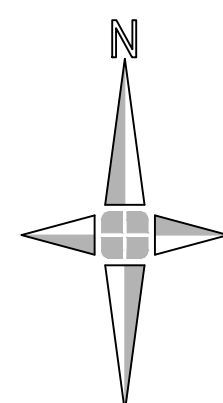
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NOTES:  
1. NO PARKING FIRE LANE SIGN (A)

### LEGEND

- PR GATE VALVE AND WELL
- PR HYDRANT
- PR VALVE AND BOX
- PR WATERMAIN
- PR STORM CATCH BASIN
- PR STORM MANHOLE
- PR STORM END SECTION
- PR STORM END SECTION
- PR RIP RAP
- PR STORM SEWER
- PR CLEAN OUT
- PR SANITARY MANHOLE
- PR SANITARY SEWER
- PR UNDERGROUND ELECTRIC SERVICE
- GAS
- PR UNDERGROUND GAS SERVICE
- T
- PR UNDERGROUND TELEPHONE SERVICE
- PR UTILITY CROSSING
- PR CONTOUR MINOR (1')
- PR CONTOUR MAJOR (5')
- PR SPOT ELEVATION
- PR SWALE
- PR CURB AND GUTTER
- PR REVERSE CURB AND GUTTER



0 20' 40'  
SCALE: 1" = 20'





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## TRUCK TURNING MOVEMENTS PLAN

## THE STARBOARD

VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

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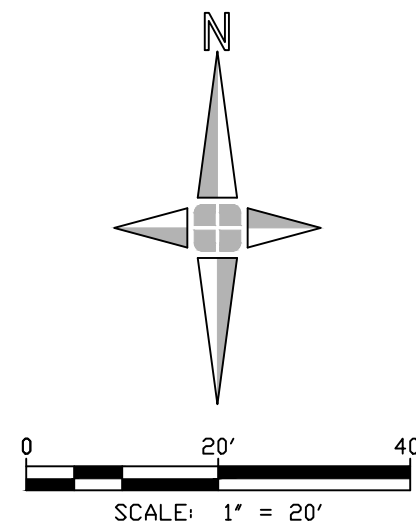
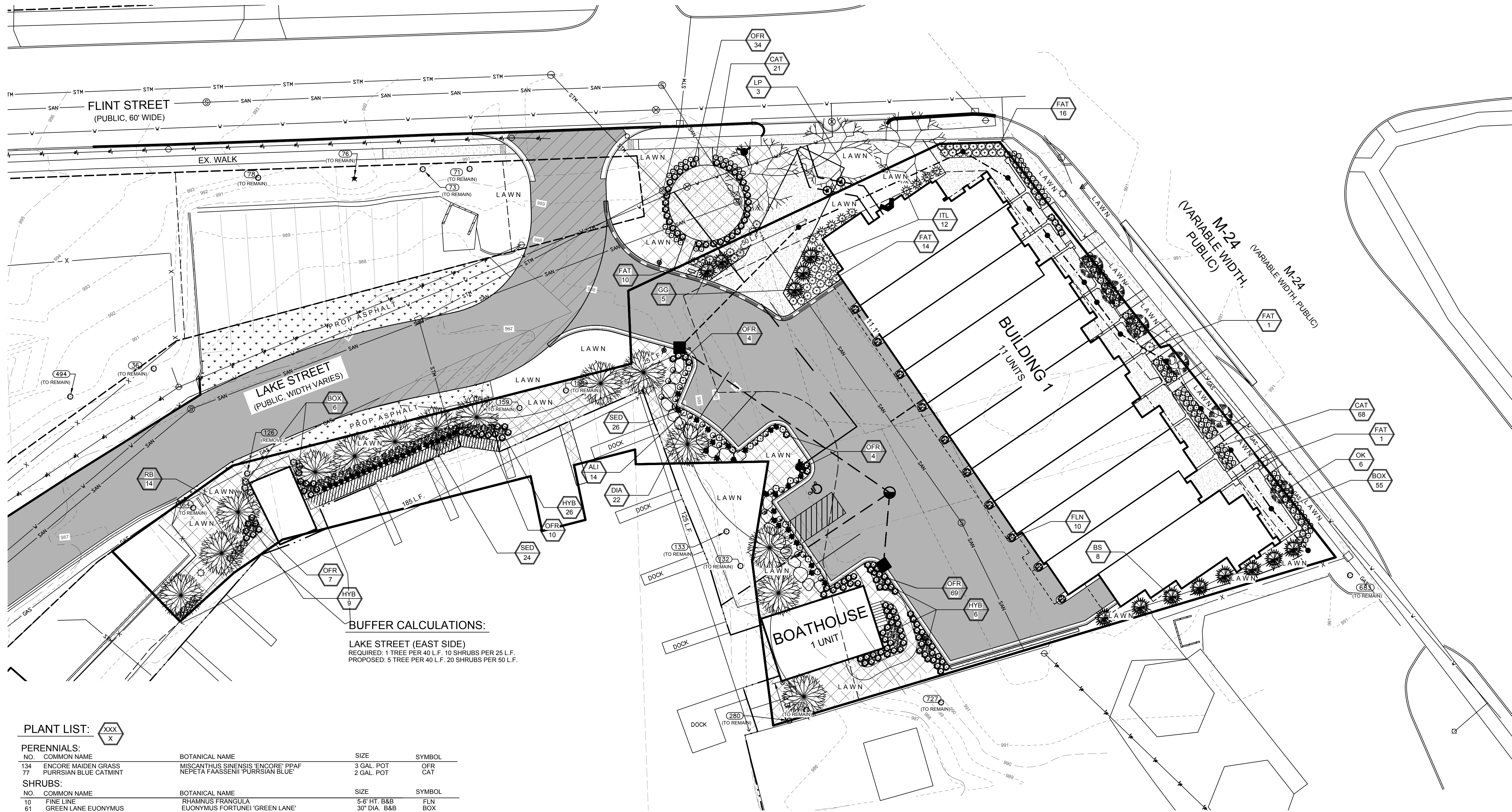
## LANDSCAPE PLAN

THE STARBOARD

VILLAGE OF LAKE ORION  
OKLAID COUNTY  
MICHIGAN

Date:	08.05.2022
Scale:	1" = 20'
Sheet:	LA-100
Project:	20107.30

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### BUFFER CALCULATIONS:

LAKE STREET (EAST SIDE)  
REQUIRED: 1 TREE PER 40 L.F. 10 SHRUBS PER 25 L.F.  
PROPOSED: 5 TREE PER 40 L.F. 20 SHRUBS PER 50 L.F.

### PLANT LIST:

NO.	COMMON NAME	BOTANICAL NAME	SIZE	SYMBOL
<b>PERENNIALS:</b>				
134	ENCORE MAIDEN GRASS	MISCANTHUS SINENSIS 'ENCORE' PPAF	3 GAL. POT	OFR
77	PURRSIAN BLUE CATMINT	NEPETA FAASSENII 'PURRSIAN BLUE'	2 GAL. POT	CAT
<b>SHRUBS:</b>				
10	FINE LINE	RHAMNUS FRANGULA	5-8' HT. B&B	FLN
61	GREEN LANE EUONYMUS	EUONYMUS FORTUNEI 'GREEN LANE'	30" DIA. B&B	BOX
12	TAYLOR JUNIPER	JUNIPERUS VIRGINIANA 'TAYLOR'	6-7' HT. B&B	ITL
42	FRANKY BOY ARBORVITAE	THUJA ORIENTALIS 'FRANKY BOY'	2 GAL. POT	FAT
22	SWEET EMOTION ABELIA	ABELIA MOSANENSIS 'SUNNAMES' PP27370	1 GAL. POT	DIA
50	WHIPCORD ARBORVITAE	THUJA PLICATA WHIPCORD	1 GAL. POT	SED
14	HAKURO NISHIKI WILLOW	SALIX INTEGR A HAKURO NISHIKI	1 GAL. POT	ALI
43	STARRY STARRY NIGHT HIBISCUS	HIBISCUS STARRY STARRY NIGHT	1 GAL. POT	HYB
<b>TREES:</b>				
5	GREEN GIANT ARBORVITAE	THUJA PLICATA 'GREEN GIANT'	8' HT. B&B	GG
6	BALD CYPRESS	TAXODIUM DISTICHUM	3"-3 1/2" CAL. B&B	BS
8	CRIMSON SPIRE OAK	QUERCUS X CRIMSCHMIDT PP#9103	3" CAL. B&B	OK
14	RIVER BIRCH	BETULA NIGRA	3" CAL. B&B	RB
3	LONDON PLANE TREE	PLATANUS X ACERIFOLIA 'BLOODGOOD'	3"-3 1/2" CAL. B&B	LP

### BUFFER CALCULATIONS:

LAKE STREET (EAST SIDE)  
REQUIRED: 1 TREE PER 40 L.F. 10 SHRUBS PER 25 L.F.  
PROPOSED: 5 TREE FOR 50 L.F. 20 SHRUBS FOR 50 L.F.  
LAKE STREET (WEST SIDE)  
REQUIRED: 1 TREE PER 40 L.F. 10 SHRUBS PER 25 L.F.  
PROPOSED: 1 TREE FOR 25 L.F. 12 SHRUBS FOR 25 L.F.  
LAKE FRONT (EAST SIDE)  
REQUIRED: 1 TREE PER 40 L.F. 10 SHRUBS PER 25 L.F.  
PROPOSED: 4 TREE PER 125 L.F. 50 SHRUBS PER 125 L.F.  
LAKE FRONT (SOUTH SIDE)  
REQUIRED: 1 TREE PER 40 L.F. 10 SHRUBS PER 25 L.F.  
PROPOSED: 9 TREE PER 185 L.F. 74 SHRUBS PER 185 L.F.

### LEGEND

	PR GATE VALVE AND WELL
	PR HYDRANT
	PR VALVE AND BOX
	PR WATERMAIN
	PR STORM CATCH BASIN
	PR STORM MANHOLE
	PR STORM END SECTION
	PR STORM END SECTION
	PR RIP RAP
	PR STORM SEWER
	PR CLEAN OUT
	PR SANITARY MANHOLE
	PR SANITARY SEWER
	PR UNDERGROUND ELECTRIC SERVICE
	PR UNDERGROUND GAS SERVICE
	PR UNDERGROUND TELEPHONE SERVICE
	PR UTILITY CROSSING
	PR CONTOUR MINOR (1')
	PR CONTOUR MAJOR (5')
	PR SPOT ELEVATION
	PR SWALE
	PR CURB AND GUTTER
	PR REVERSE CURB AND GUTTER
	PR STD. DUTY ASPHALT
	PR CONCRETE PAVEMENT
	PR OPEN SPACE AREA



Professional Seal



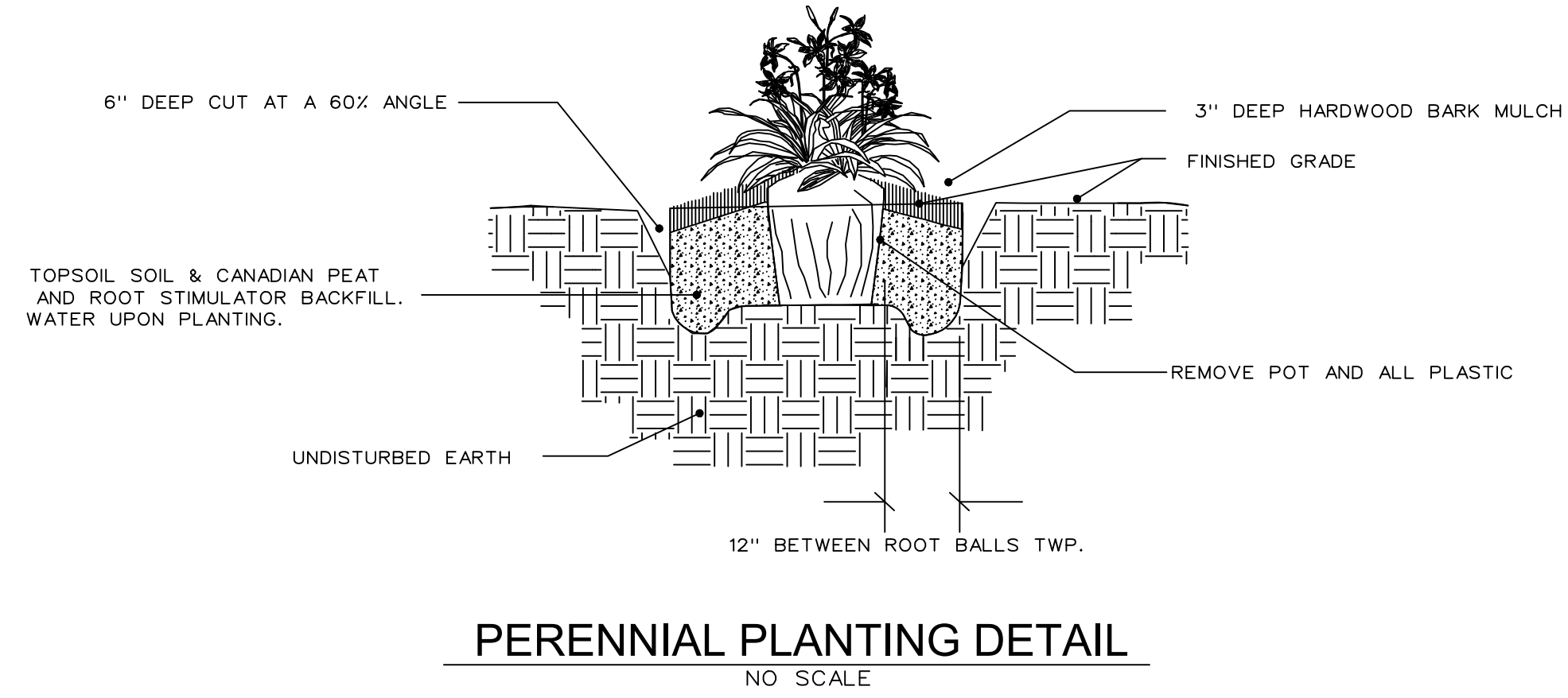
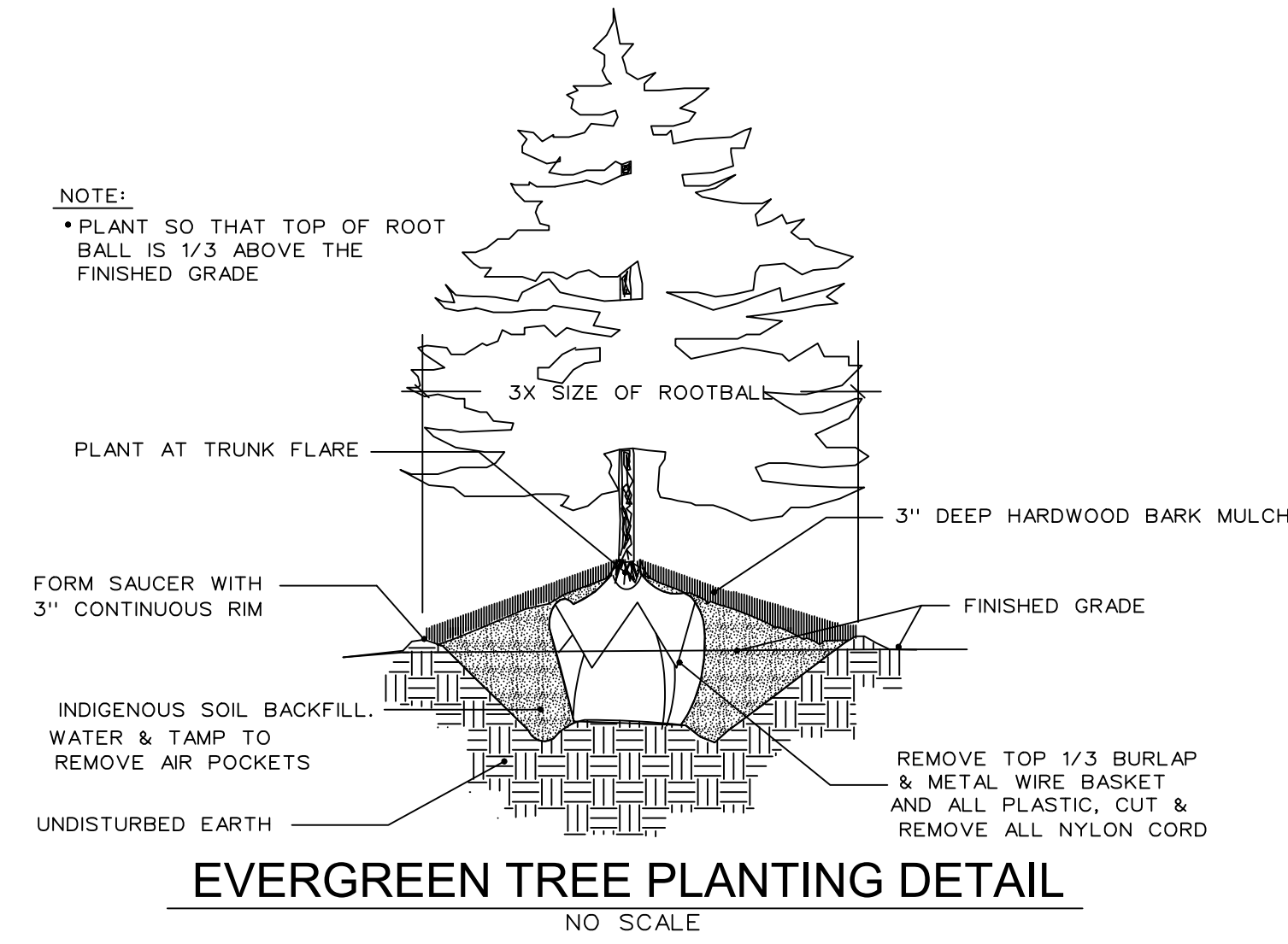
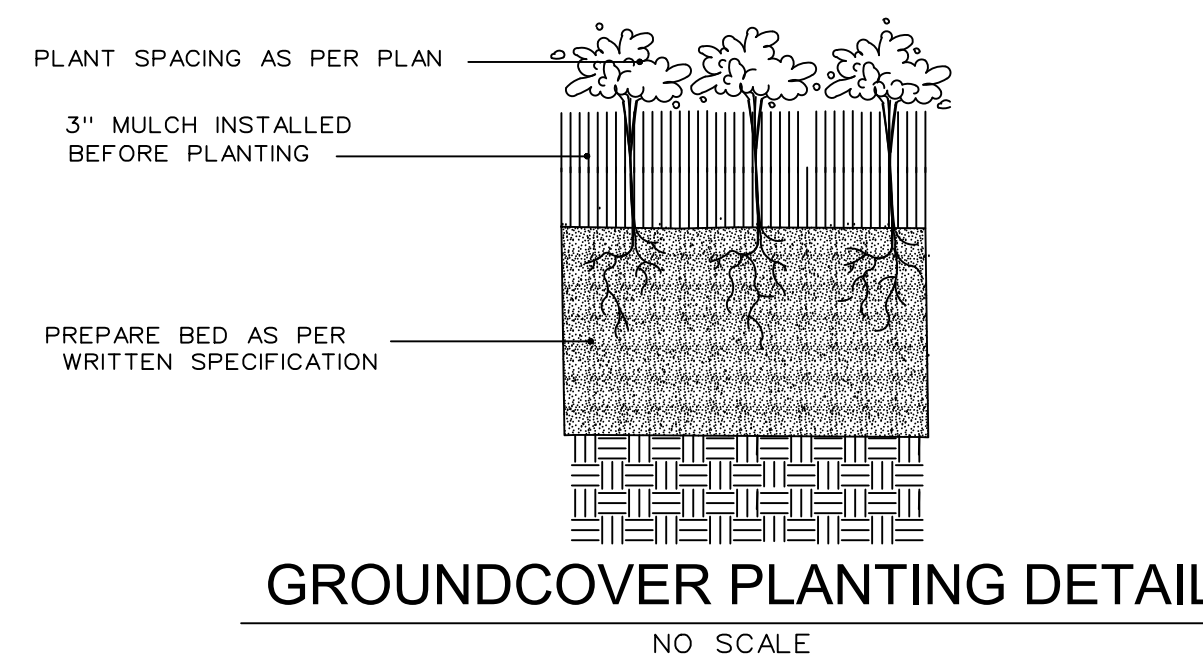
Developed For:

248.340.9400

## Project: 20107.30

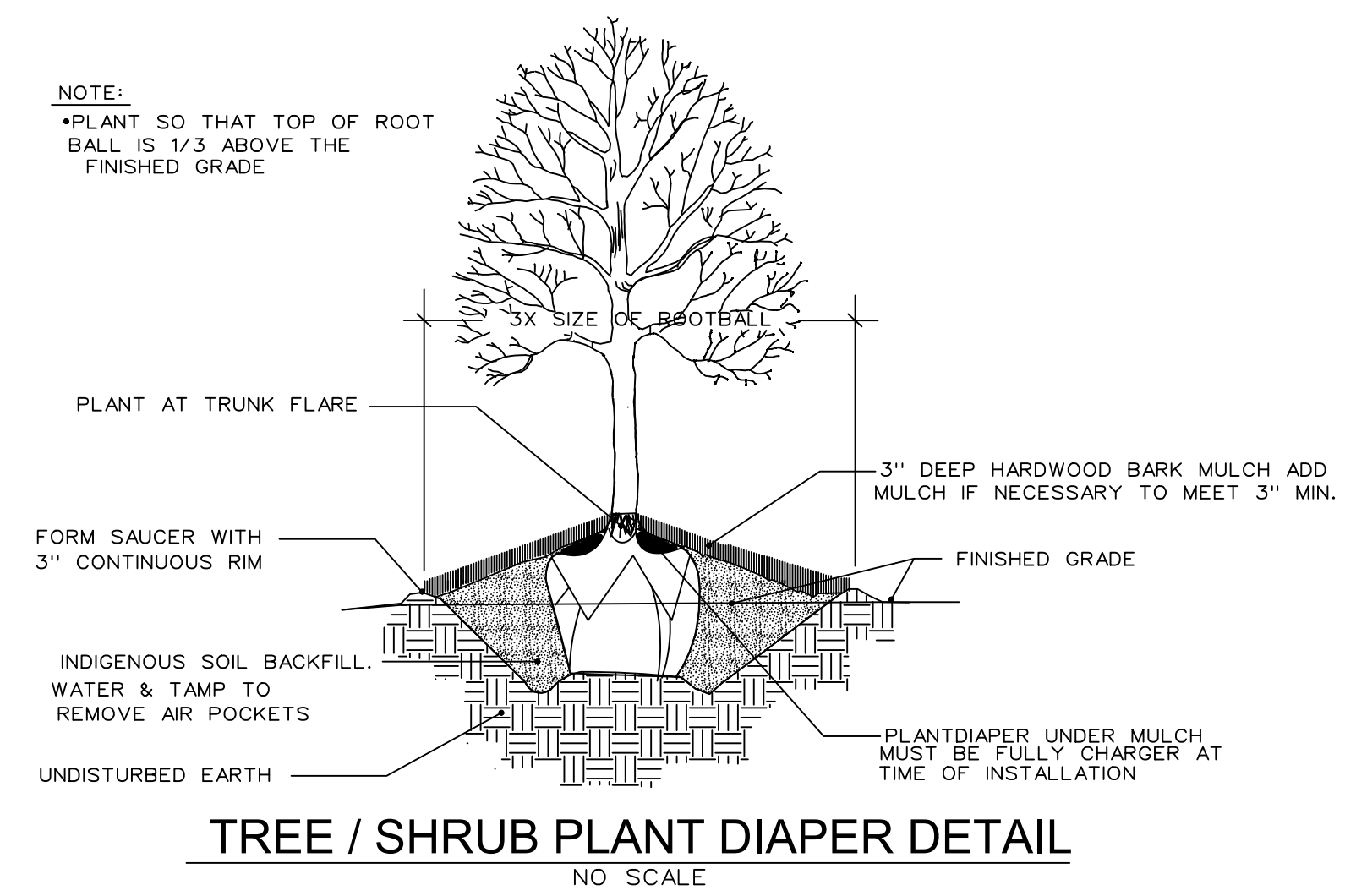
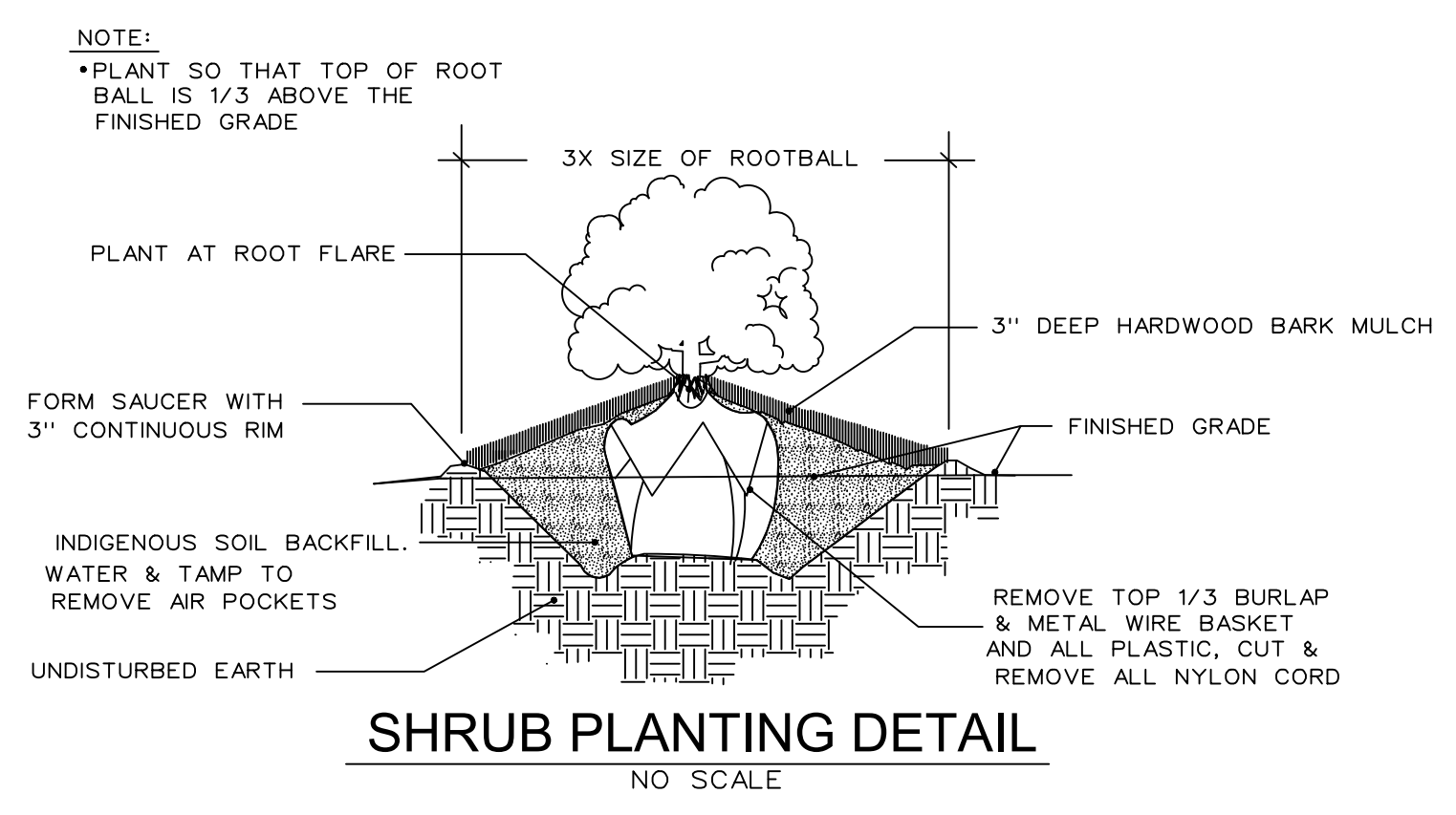
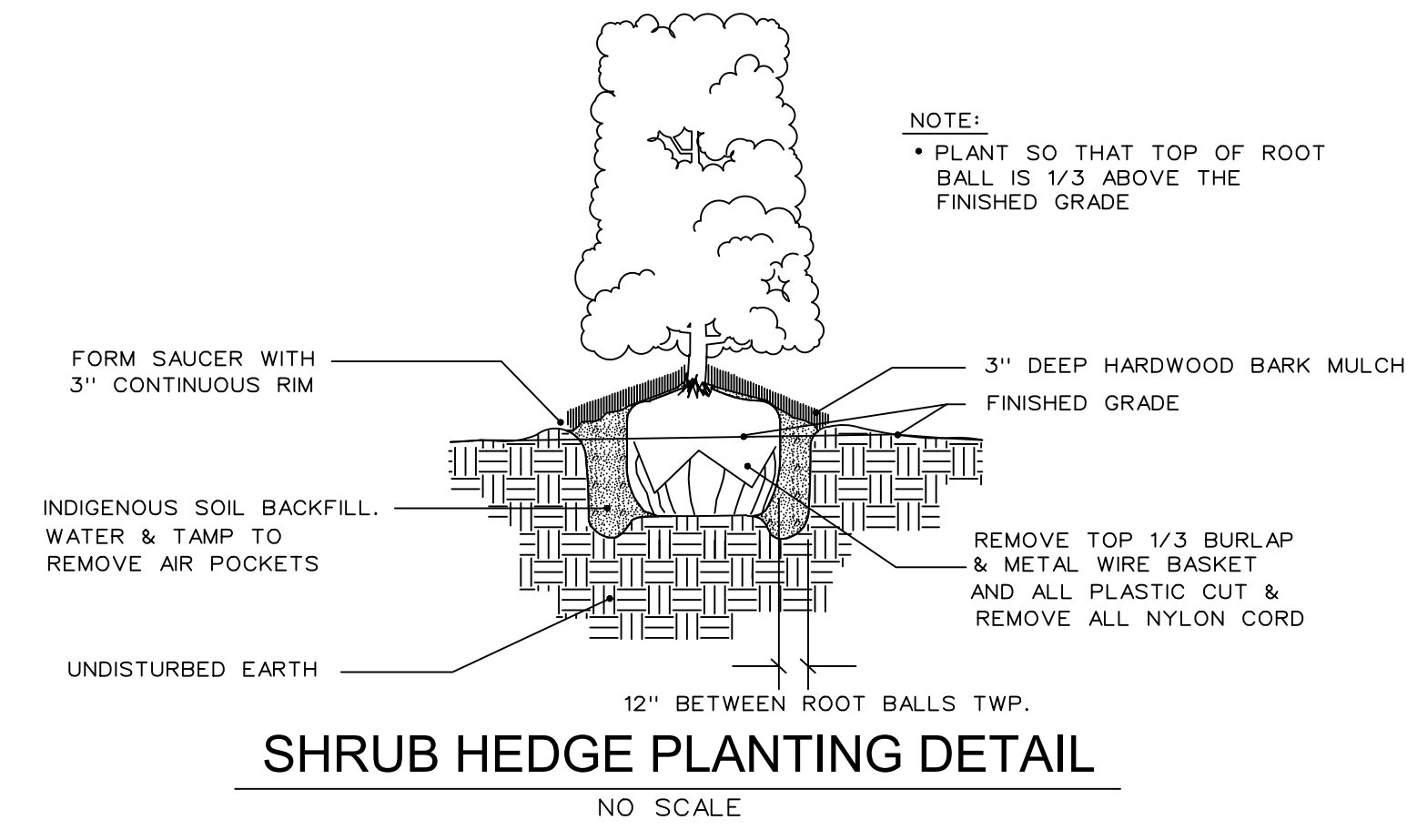
Packet Pg. 48

1. Plant materials shall be sound, healthy vigorous, free from plant diseases and insects or other pests, and shall have normal, healthy root systems. Caliper measurements shall be taken 6" above the ground level. All other measurements shall be in accordance with the latest edition of "American Standard for Nursery Stock" (ANSI Z-60.1 + A3002004.)
2. Planting bed soil for annuals shall be screened topsoil. To deter weed growth during the establishment of annual, 8 perennial bed, apply a pre-emergent ('Preen' or equal) after planting 2-3 times per growing season, at a rate per recommendation of product manufacturer.
3. Planting pockets shall be no deeper than the height of the root ball, saucer shall be made on the edges of the plant pocket.
4. All tree wrap shall be removed upon planting.
5. Mulch shall be shredded hardwood bark, free from deleterious materials and suitable as a top dressing of planting beds and individual tree plantings.
6. Trees shall be mulched with minimum of 3" deep hardwood bark mulch.
7. Grass seed shall be certified turf grass seed complying with A.S.P.A. specifications, and free of weed seeds and undesirable native grasses. Seeded areas shall not be permitted to dry out. All lawn areas shall be fertilized and watered as required during the first growing season to maintain a dense and vigorous growing lawn.
8. Plants shall be guaranteed for two complete growing seasons (24 months). Dead material shall be replaced as needed prior to the expiration of the guarantee period, in accordance with the local ordinance requirements.
9. Contractor shall provide in writing a list of recommended maintenance procedures for the first two (2) growing seasons.
10. Remove top 1/3 of burlap on root ball or all if wrapped in plastic covering and/or nylon cord.
11. Plant materials shall be used in compliance with the provisions of the local ordinance and shall be nursery grown, free of pests and diseases, hardy in this county, in conformance with the standards of the American Association of Nurserymen, and shall have passed inspections required under state regulations. In addition, plant materials shall conform to the standard of the county cooperative extension service.

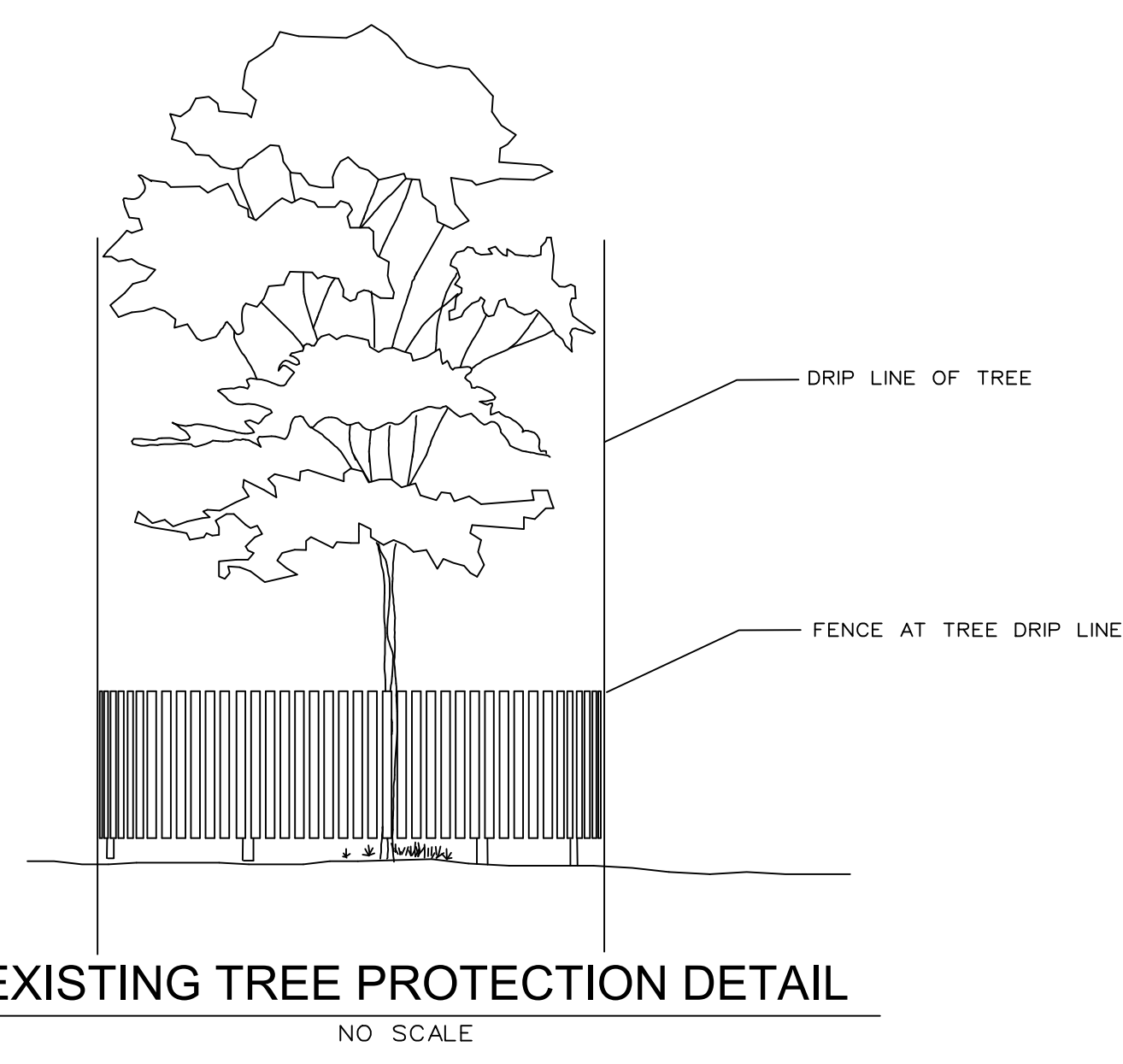
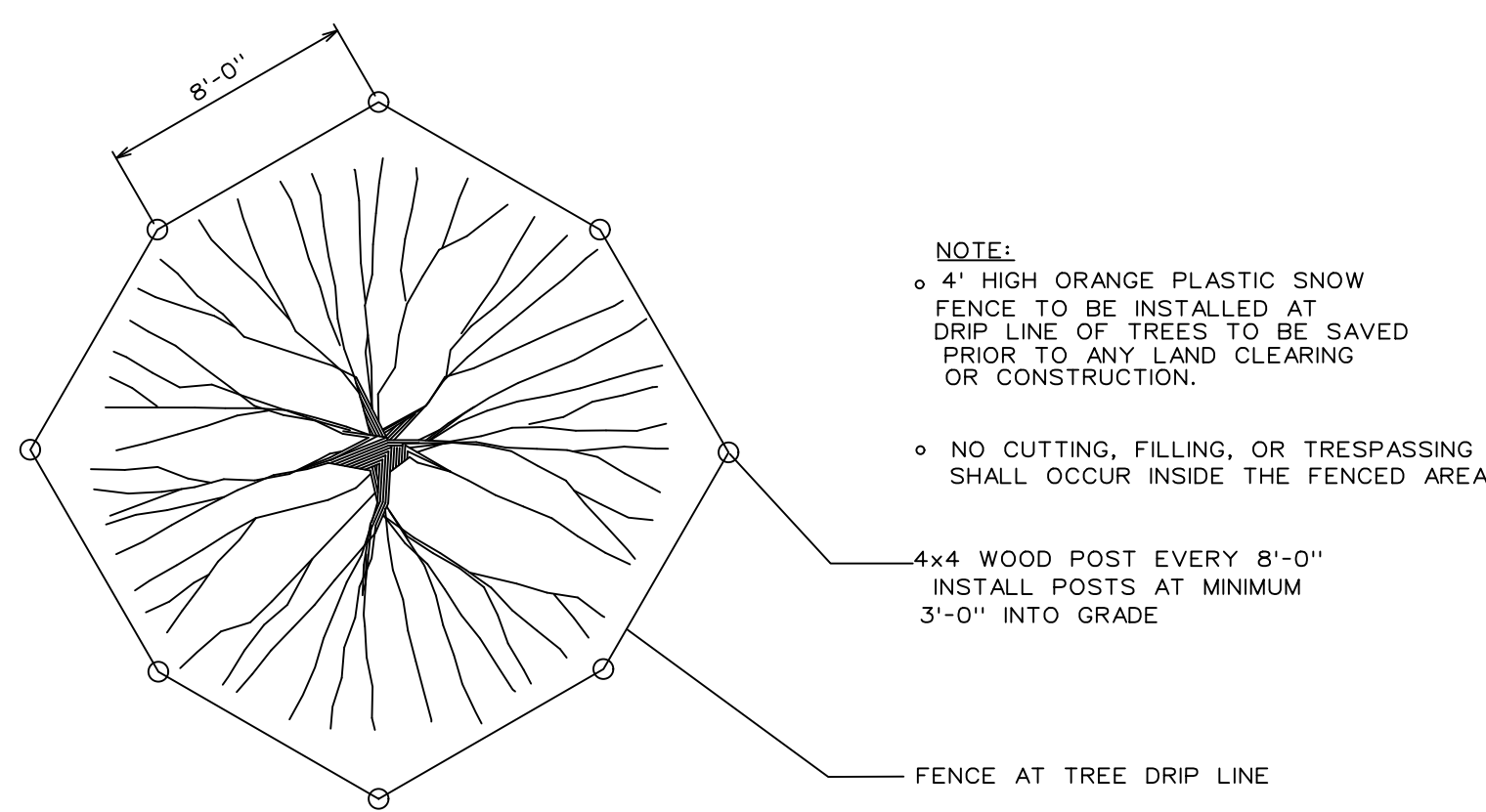


1. All Construction shall conform to the current standards and specifications of local ordinances.
2. All areas not built, landscaped, or paved upon shall be seeded or sodded. Terra seed system or approved equal is encouraged.
3. Contractor to provide tree gaters, one per tree as shown on plan, to convey water for the first two years.
4. Two (2) year guarantee period begins at Final Inspection of landscape material by the City's representative, a landscape architect or nurseryman, and prior to the authorization of the occupancy permit. This is the first of two (1 of 2) required City inspections of the Landscape Plan installation.
5. Building Department will not release construction bonds until City approved landscape architect or nurseryman has inspected the site and approved the installation of landscape plans. Final bond will not be released until the two (2) year guarantee expires and final inspection is made.
6. Owner is then responsible for care and maintenance of all plants upon return of bonds. All plant material is to be maintained for the natural life of the plant. No removal of any plants material is permitted without replacement.

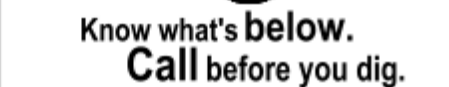
It shall be the responsibility of the landscape contractor to program and periodically adjust the irrigation system (provided by others) as required to ensure delivery of proper and adequate water supply to all plant material, and seeded lawn areas serviced by the same irrigation system, to ensure the establishment of healthy plant material and lawn for their first year of growth. Following the landscape contractor's two-year irrigation requirement period, the contractor shall provide the owner with suggested irrigation maintenance schedule for their use.



30% PERENNIAL RYGRASS  
20% PARK KENTUCKY BLUEGRASS  
45% CREEPING RED FESCUE  
5% ANNUAL RYGRASS  
4#/1000 S.F. SEEDING RATE



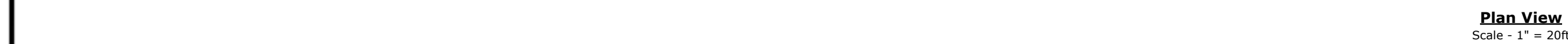


Professional Seal:Developed For:

## LIGHTING PLAN

VILLAGE OF LAKE ORION  
OAKLAND COUNTY  
MICHIGAN

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B LIGHTS: 12'

09-02-461-  
ZONING:  
COMMERC  
CORRIDO

**Mounting Height Note**  
Mounting height is measured from grade to face of fixture. Pole height should be calculated as the mounting height less base height.

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.

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](mailto:ASG@gasserbush.com) OR 734-266-6705.

For Inquiries Contact Gasser Bush at [quotes@gasserbush.com](mailto:quotes@gasserbush.com).

This drawing was generated from an electroinc image for estimation purpose only. Layout to be verified in field by others. Site to comply with all lighting requirements.



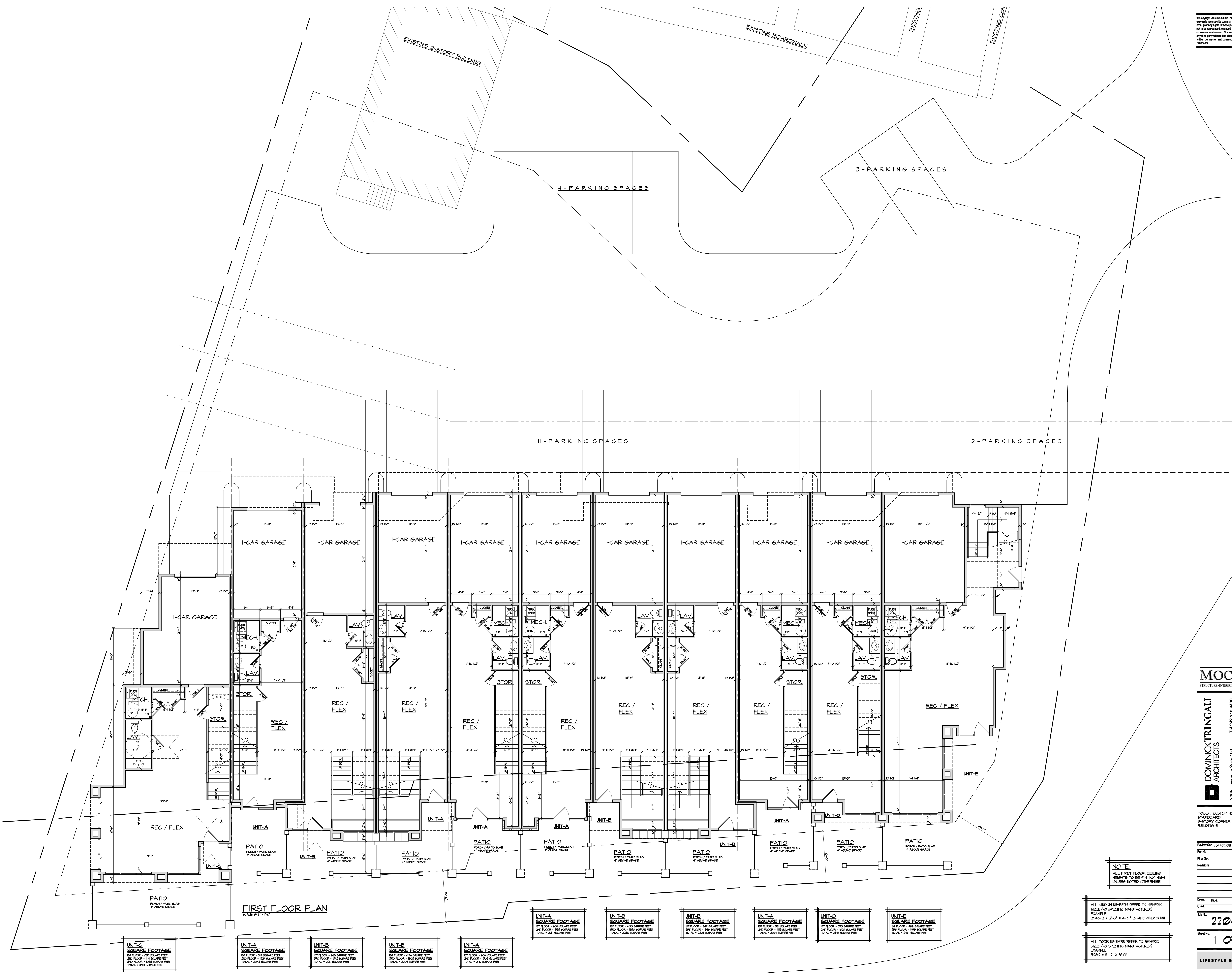


# Starboard

## Village of Lake Orion







**UNIT-C  
SQUARE FOOTAGE**  
1ST FLOOR = 835 SQUARE FEET  
2ND FLOOR = 185 SQUARE FEET  
TOTAL = 1,020 SQUARE FEET

**UNIT-A  
SQUARE FOOTAGE**  
1ST FLOOR = 425 SQUARE FEET  
2ND FLOOR = 150 SQUARE FEET  
TOTAL = 575 SQUARE FEET

**UNIT-B  
SQUARE FOOTAGE**  
1ST FLOOR = 425 SQUARE FEET  
2ND FLOOR = 150 SQUARE FEET  
TOTAL = 575 SQUARE FEET

**UNIT-B  
SQUARE FOOTAGE**  
1ST FLOOR = 425 SQUARE FEET  
2ND FLOOR = 150 SQUARE FEET  
TOTAL = 575 SQUARE FEET

**UNIT-A  
SQUARE FOOTAGE**  
1ST FLOOR = 425 SQUARE FEET  
2ND FLOOR = 150 SQUARE FEET  
TOTAL = 575 SQUARE FEET

**UNIT-A  
SQUARE FOOTAGE**  
1ST FLOOR = 425 SQUARE FEET  
2ND FLOOR = 150 SQUARE FEET  
TOTAL = 575 SQUARE FEET

**UNIT-B  
SQUARE FOOTAGE**  
1ST FLOOR = 425 SQUARE FEET  
2ND FLOOR = 150 SQUARE FEET  
TOTAL = 575 SQUARE FEET

**UNIT-B  
SQUARE FOOTAGE**  
1ST FLOOR = 425 SQUARE FEET  
2ND FLOOR = 150 SQUARE FEET  
TOTAL = 575 SQUARE FEET

**UNIT-A  
SQUARE FOOTAGE**  
1ST FLOOR = 425 SQUARE FEET  
2ND FLOOR = 150 SQUARE FEET  
TOTAL = 575 SQUARE FEET

**UNIT-D  
SQUARE FOOTAGE**  
1ST FLOOR = 370 SQUARE FEET  
2ND FLOOR = 175 SQUARE FEET  
TOTAL = 545 SQUARE FEET

**UNIT-E  
SQUARE FOOTAGE**  
1ST FLOOR = 425 SQUARE FEET  
2ND FLOOR = 150 SQUARE FEET  
TOTAL = 575 SQUARE FEET

ALL WINDOW NUMBERS REFER TO GENERIC SIZES (NO SPECIFIC MANUFACTURER)  
EXAMPLE:  
2040-2 = 2'-0" X 4'-0", 2-WIDE WINDOW UNIT

ALL DOOR NUMBERS REFER TO GENERIC SIZES (NO SPECIFIC MANUFACTURER)  
EXAMPLE:  
3080 = 3'-0" X 8'-0"

**NOTE:**  
ALL FIRST FLOOR CEILING HEIGHTS TO BE 11'-1/8" HIGH UNLESS NOTED OTHERWISE.

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STRUCTURE-INTegrity-TRADITION

**DOMINICK TRINGALI**  
ARCHITECTS

3005 University Suite 100  
Auburn Hills, MI 48326  
www.DTArchitects.com

MOCCRI CUSTOM HOMES  
STARBOARD  
3-STORY CORNER BUILDING  
BUILDING #1

Review Set: 04/07/23  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Revision: \_\_\_\_\_

Dwn: B.H.  
Cnst: \_\_\_\_\_  
Job No: \_\_\_\_\_

**22049**

Sheet No: **1 OF 8**

LIFESTYLE BY DESIGN

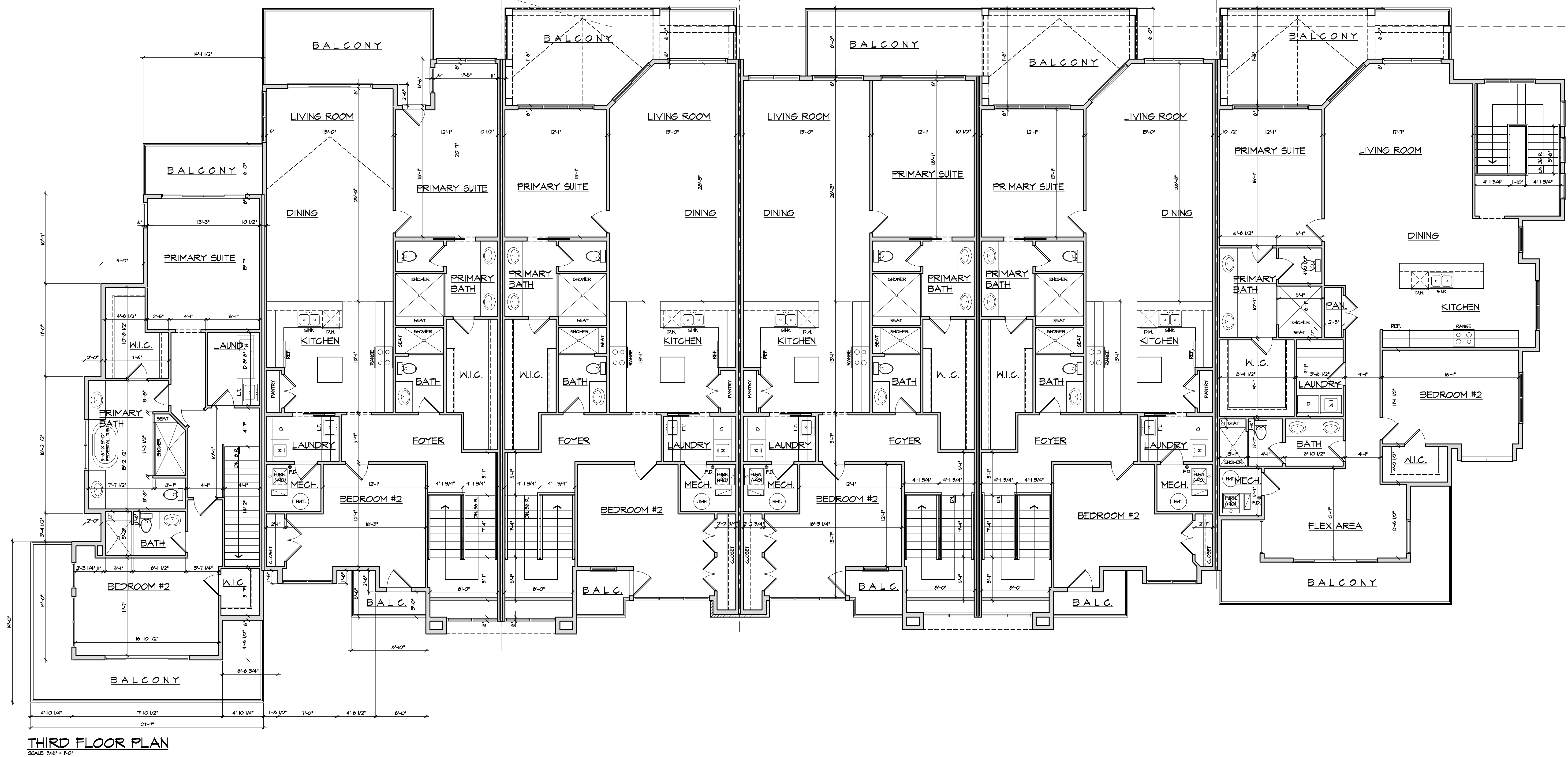
Packet Pg. 51





**NOTE:**  
ALL SECOND FLOOR CEILING  
HEIGHTS TO BE 9'-1 1/8" HIGH  
UNLESS NOTED OTHERWISE.





NOTE:  
ALL THIRD FLOOR CEILING  
HEIGHTS TO BE 9'-1 1/8" HIGH  
UNLESS NOTED OTHERWISE.

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MOCERI CUSTOM HOMES  
STARBOARD  
3-STORY CORNER BUILDING  
BUILDING #1

Review Set: 09/07/23  
Name:  
Title:  
Revisions:  
Dwn: B.H.  
Cktd:  
Job No. 22049

Sheet No. 3 OF 8

LIFESTYLE BY DESIGN





**SOUTH ELEVATION**  
SCALE: 3/8" = 1'-0"



**PARTIAL EAST ELEVATION**  
SCALE: 3/8" = 1'-0"



**EAST ELEVATION**  
SCALE: 3/8" = 1'-0"









EAST ELEVATION  
SCALE: 3/16" = 1'-0"



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MOCERI CUSTOM HOMES  
STARBOARD  
3-STORY CORNER BUILDING  
BUILDING #1

Review Set: 04/07/23  
Name:  
Title Set:  
Revisions:

Dwn: B.J.  
Cktd:  
Job No.:

22049

Sheet No. 6 OF 8

LIFESTYLE BY DESIGN





WEST ELEVATION  
SCALE: 3/16" = 1'-0"

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MOCERI CUSTOM HOMES  
STARBOARD  
3-STORY CORNER BUILDING  
BUILDING #1

Review Set: 09/07/23  
Drawn: B.J.H.  
Checked: B.J.H.  
Revisions:

Job No. 22049

Sheet No. 7 OF 8

LIFESTYLE BY DESIGN





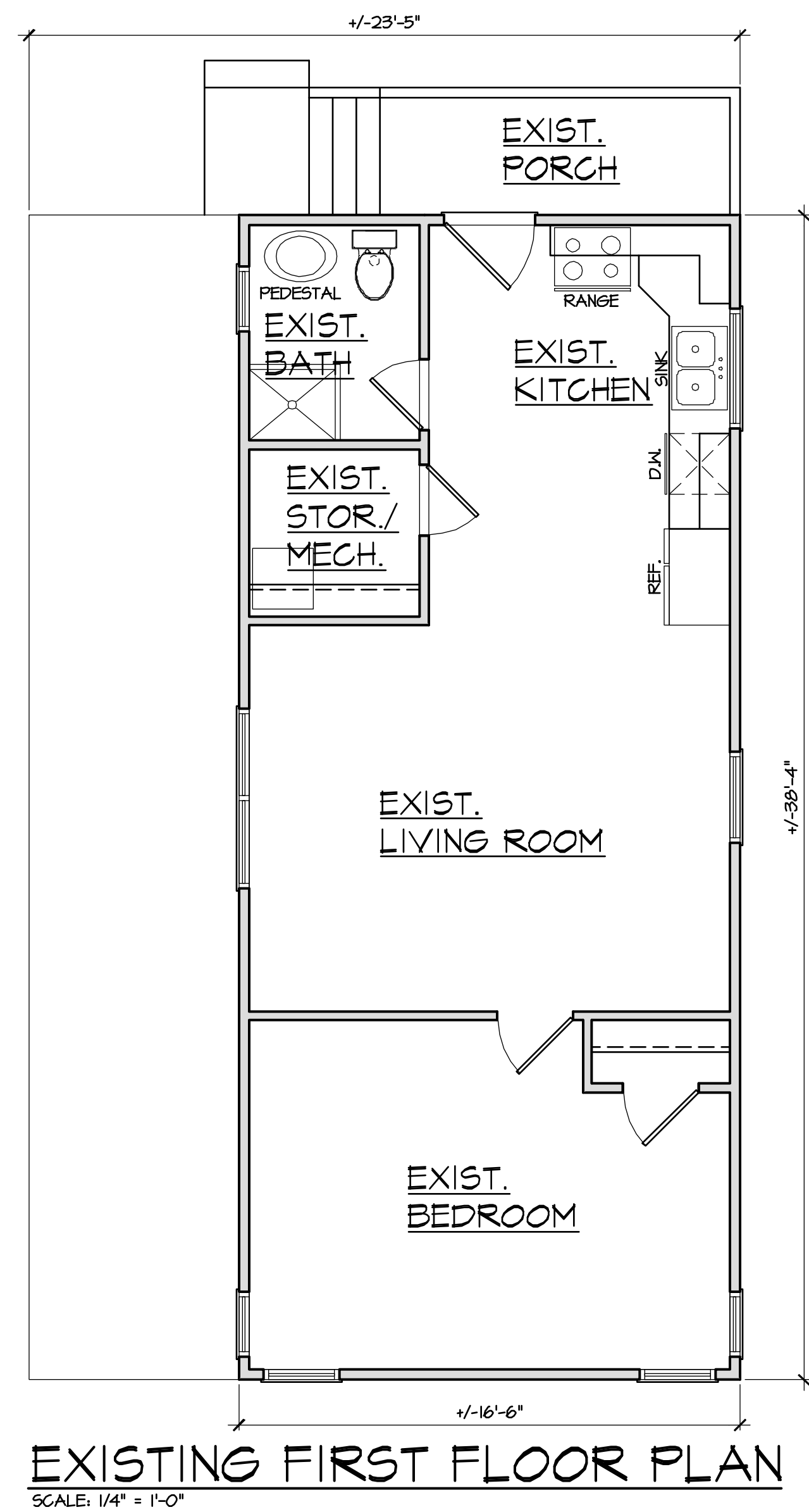
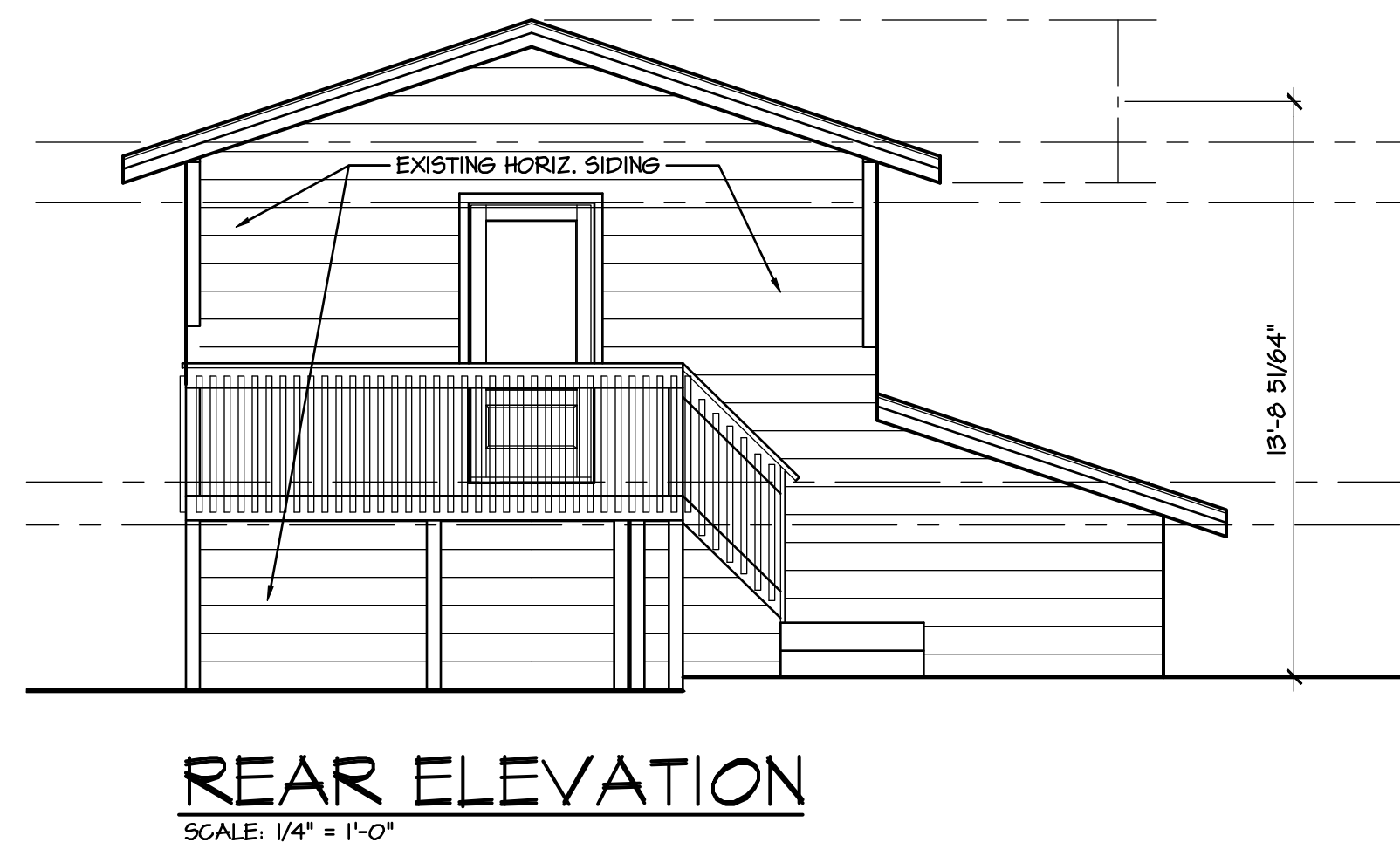
NORTH ELEVATION  
SCALE: 3/16" = 1'-0"



SOUTH ELEVATION  
SCALE: 3/16" = 1'-0"



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# MOGERI STARBOARD BOAT HOUSE RENOVATION

Review Set: 09/06/23  
 Permit:  
 Final Set:  
 Revisions:  
 Drawn: B.H.  
 Checked:  
 Job No.

23022

---

Sheet No. 1 OF 3

## LIFESTYLE BY DESIGN



## A white, single-story building with a red metal roof and four windows, situated on a concrete pad next to a wooden deck. The building has vertical siding and a small dark spot on the right side. The roof has a small black vent. The building is on a concrete pad, and there are wooden posts and a railing in the foreground. The background shows trees and a fence.



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Tel 248 340 9400

[www.DTAarchitects.com](http://www.DTAarchitects.com)

MOGERI  
STARBOARD  
HARBOR MASTER OFFICE  
RENOVATION

Review Set: 09/11/23

Permit:

Final Set:

Revisions:

Drawn: B.H.

Checked:

Job No.

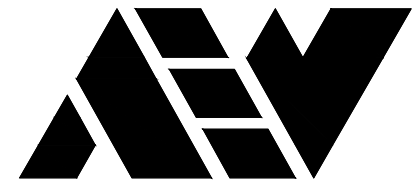
Job No. **23023**

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Sheet No. **3 OF 3**

**LIFESTYLE BY DESIGN**





ANDERSON, ECKSTEIN AND  
WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS

51301 Schoenherr Road Phone 586 726 1234  
Shelby Township Fax 586 726 8780  
Michigan 48315

www.aewinc.com

ENGINEERING STRONG COMMUNITIES

DATE	SUBMITTALS/REVISIONS

PROJECT NAME:

STARBOARD  
BAY

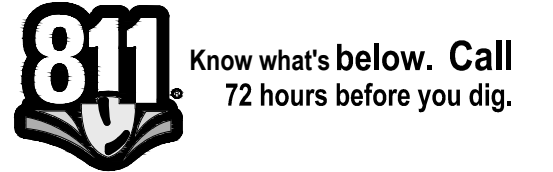
SHEET TITLE:

PROPOSED SLIP  
LOCATIONS

CLIENT:

LAKE ORION

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DRAWN BY:	CHECKED BY:	DATE:
DB	SVP	JUNE 2022
SCALE: 1" = 40'		
<div><div>0</div><div>20</div><div>40</div><div>80</div></div>		



UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

PRIOR TO CONSTRUCTION, ALL LOCATIONS AND DEPTHS OF EXISTING OVERHEAD AND UNDERGROUND UTILITIES (IN CONFLICT WITH THE CONSTRUCTION OF THESE PROPOSED IMPROVEMENTS) SHALL BE VERIFIED IN THE FIELD. DURING THE CONSTRUCTION, THE CONTRACTOR SHALL PROTECT AND SUPPORT ALL UTILITIES THAT ARE ENCOUNTERED. (ALL COSTS FOR UTILITY LOCATION VERIFICATION, SUPPORT AND PROTECTION SHALL BE INCLUDED IN THE PROPOSED PAY ITEM CONFLICTING WITH THAT UTILITY).

DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL OVERHEAD AND / OR BURIED UTILITIES.

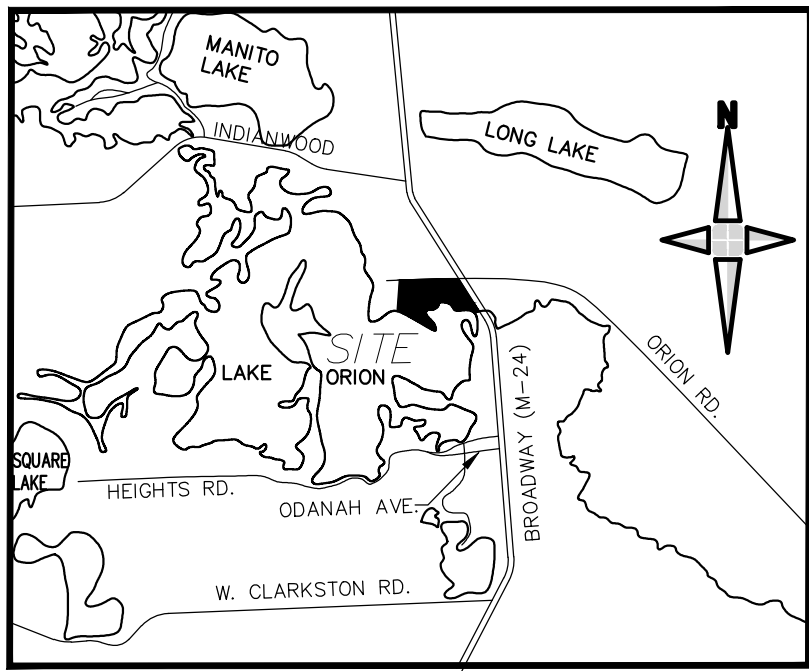
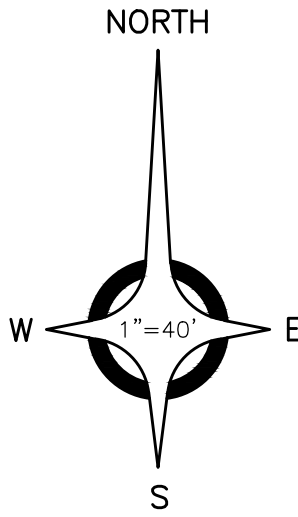
PROJECT NO.

0361-0072

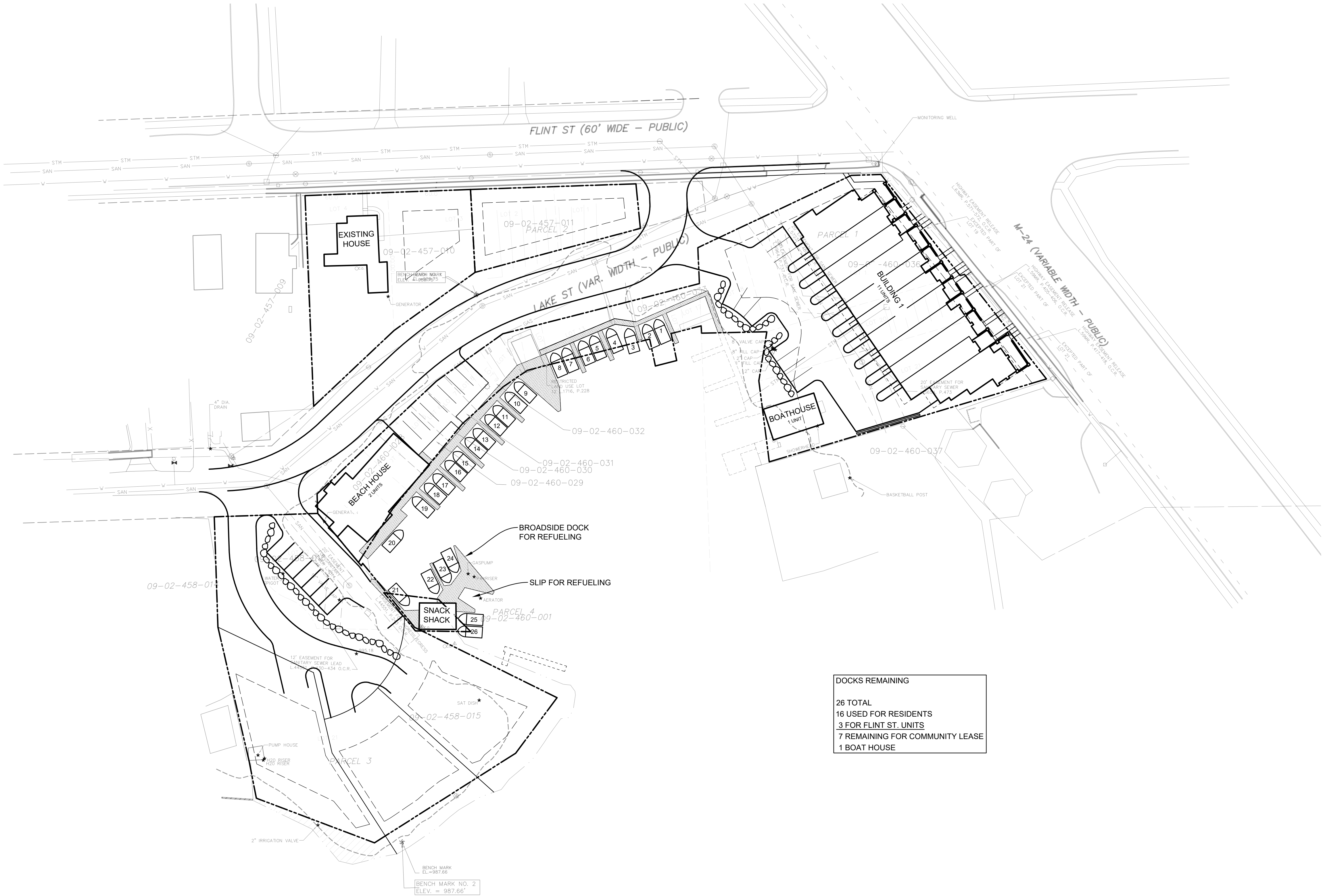
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SHEET NO.

3

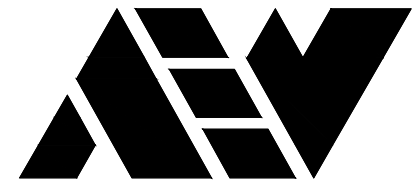


LOCATION MAP  
( NOT TO SCALE )



DOCKS REMAINING  
26 TOTAL  
16 USED FOR RESIDENTS  
3 FOR FLINT ST. UNITS  
7 REMAINING FOR COMMUNITY LEASE  
1 BOAT HOUSE





ANDERSON, ECKSTEIN AND  
WESTRICK, INC.

CIVIL ENGINEERS SURVEYORS ARCHITECTS

51301 Schoenherr Road Phone 586 726 1234  
Shelby Township Fax 586 726 8780  
Michigan 48315

www.aewinc.com

ENGINEERING STRONG COMMUNITIES

DATE	SUBMITTALS/REVISIONS
PROJECT NAME:	

STARBOARD  
BAY

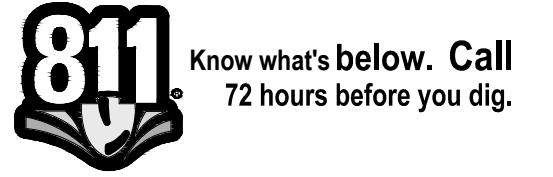
SHEET TITLE:

EXISTING SLIP  
LOCATIONS

CLIENT:

LAKE ORION

<input checked="" type="checkbox"/> PRELIMINARY	<input type="checkbox"/> CONSTRUCTION	<input type="checkbox"/> RECORD
DRAWN BY: DB	CHECKED BY: SVP	DATE: JUNE 2022
SCALE: 1" = 40'		



UTILITY INFORMATION, AS SHOWN, INDICATES APPROXIMATE LOCATIONS AND TYPES OF EXISTING FACILITIES ONLY, AS DISCLOSED BY RECORDS PROVIDED TO THIS FIRM FROM THE VARIOUS UTILITY COMPANIES. NO GUARANTEE IS GIVEN OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF.

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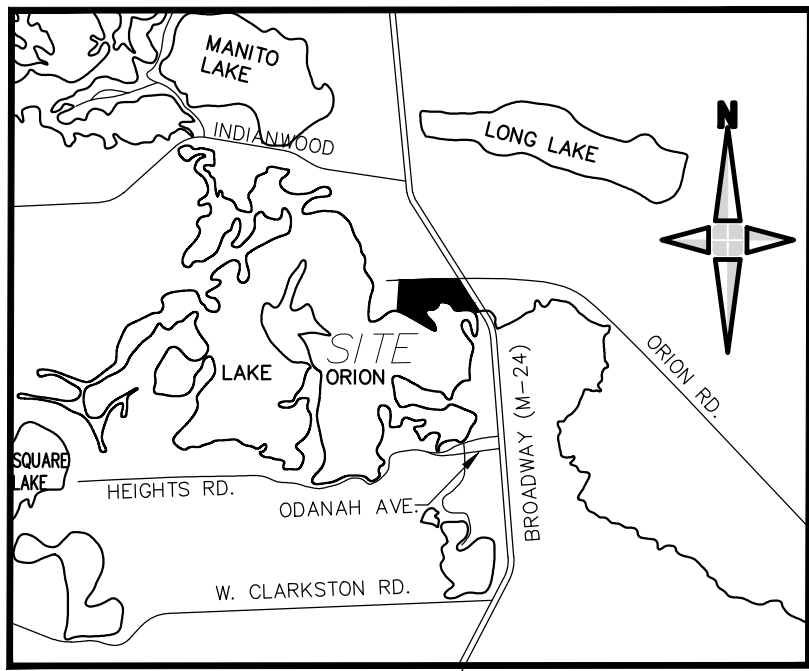
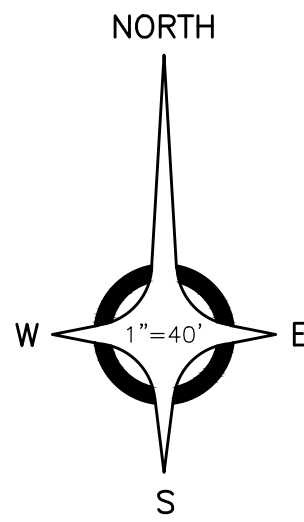
DURING CONSTRUCTION, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN OPERATING NEAR ANY AND ALL OVERHEAD AND / OR BURIED UTILITIES.

PROJECT NO.

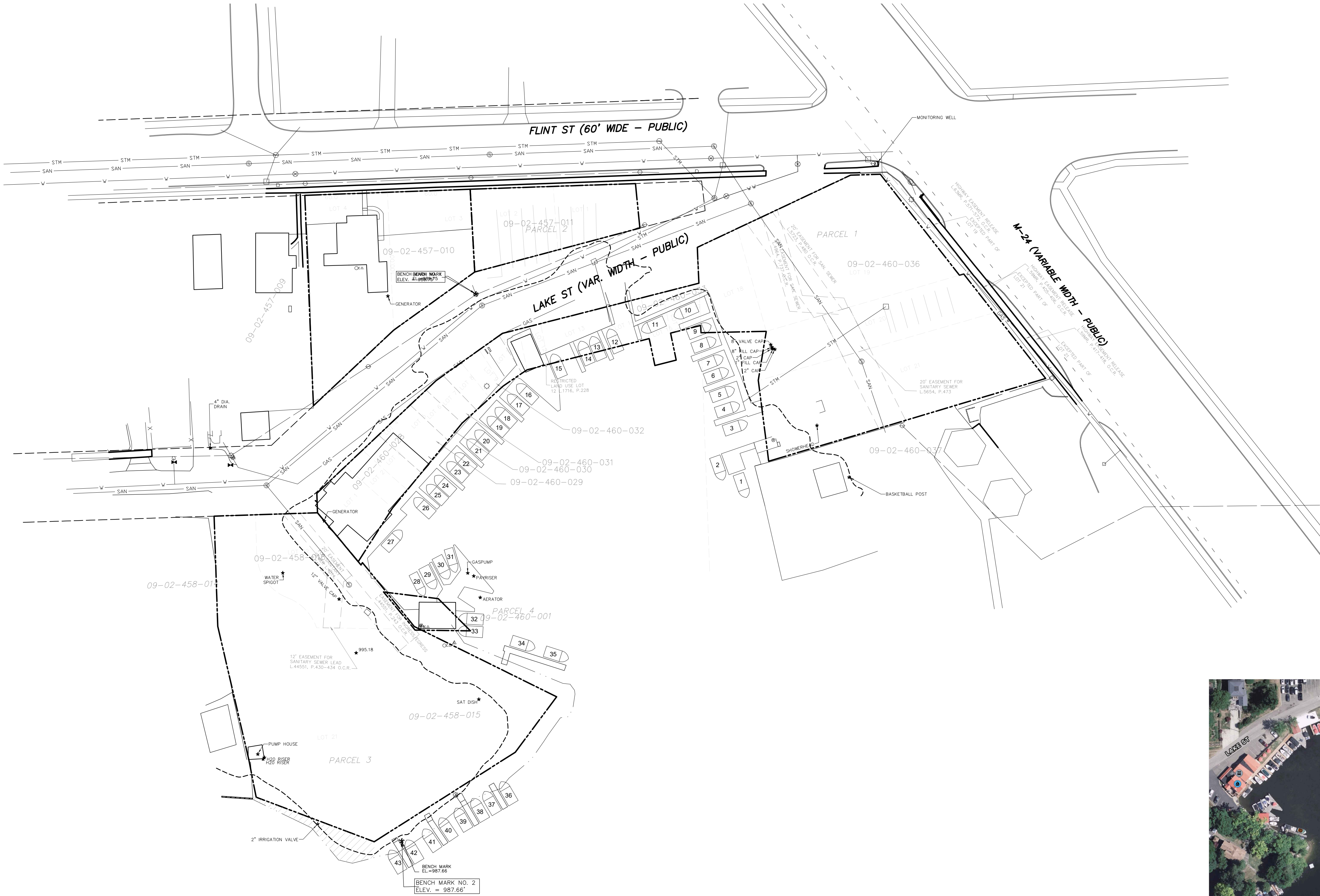
0361-0072

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04\_Starboard Bay-Ex-3/28/2023 2:22:54 PM

SHEET NO.



LOCATION MAP  
( NOT TO SCALE )







September 6, 2023 (preliminary)  
September 25, 2023 (full submittal)

Village of Lake Orion  
21 E. Church Street  
Lake Orion, MI 48362

Attn: Mr. Gage Belko

GW# 20107.31

Re: The Starboard Site Plan Review

Dear Mr. Belko,

Please see the attached revised site plan documents addressing the review comments from McKenna review letter dated August 28, 2023, Nowak and Fraus's review letter dated August 16, 2023 and Orion Township Fire Department review letter dated August 24, 2023 (responses are *italicized*):

#### **McKenna Review Letter**

1. To achieve greater clarity, we recommend that the Planning Commission review Article 9: the MU, Mixed Use District, and consider a text amendment to the Zoning Ordinance that would allow for multiple-family residential developments on the ground floor, and to specify the allowable density for the RM district (currently unspecified). In our professional opinion, multiple-family units are a suitable housing typology for the MU, Mixed Use District as they promote the intent of the Zoning District and promote greater walkability. Should the Planning Commission agree to consider such a text amendment to Article 9, we recommend this application be tabled until the Ordinance language can be clarified.  
*It should be noted that the density is clearly specified in the ordinance. The ordinance points to the multifamily ordinance which a maximum of 15 units per acre. This was updated in June 2021. I have included a copy of the updated schedule of regulations that depicted the 15 units/acre which is no longer on the Village's website. This isn't a variance; we conform to the word of the ordinance with residential only on the lake. Both the master plan and zoning ordinance state only residential on the lake and this was approved this way for the previous developments with acknowledgment from your attorney.*
2. The proposed boat house unit is not compliant with Village dimensional standards and almost no information regarding its design or occupancy has been provided. Its location proximate to the lake would require variances from the Zoning Ordinance. It has been implied that there is a pre-existing use of the structure as a residence; however, no evidence has been provided that shows this use was **legally** established. Further, even if this were a protected nonconformity, a 6-month period of non-use would require any such use to cease. The boat house **may** continue as an accessory/commercial structure only and renovations/modernization are limited to 50% of the true cash value. We defer to the Village Attorney for additional information regarding this matter.  
*Per documentation provided by the Village with our FOIA request, building was permitted as a watchman's living quarters (see enclosed documentation which was provided to McKenna) and has continued as such since then. No other documentation was provided to our FOIA that it was previously permitted as an accessory/commercial structure. There were no violations or city indications that the sleeping quarters were not permitted. We will provide the existing plans provided by the village for required floor plans. We will follow the residential code to upgrade to current fire code health and safety standards. No additional upgrades are planned at this time.*
3. The plans show significant landscaping provided along the lake-parking lot perimeter, which appear to sufficiently screen the parking lot from the lake; however, dimensions showing the linear feet of applicable frontage and associated landscaping is required to determine compliance. The applicant must provide more detail regarding the



landscaping wall adjacent to Green's Park; additional landscaping or a higher screening wall is required to adequately shield the parking area from the public right of way.

*Plans have been updated to show calculations. Parking lot is indicated screened using arborvitae along the ROW frontage.*

4. It does not appear that any landscaping is proposed in the right-of-way for S. Park Boulevard or Flint Street, and this is strongly encouraged. One option would be to add environmentally sensitive features (permeable patio pavers, rain gardens, etc.) or additional landscaping to meet the 10% common area requirements (see notes below for details). *Plant material has been added as much as possible however there are many utilities in the right-of-way that cannot have trees on them, as was the case with the previous two projects. Site is contaminated, therefore infiltration practices are not allow.*
5. While the proposed plant material is of high quality, they do not fulfill diversity requirements, nor do they follow required plant material specifications. *Due to the small size of this site, uniformity of the landscape is more important than diversity to have a harmonious landscape design.*
6. The applicant must adjust the number and distribution of plant species for the site to comply. The Planning Commission may opt to waive this requirement if they find the site's landscaping to be sufficient. *Due to the small size of this site, uniformity of the landscape is more important than diversity to have a harmonious landscape design. We will review to determine if more diversity can be incorporated.*
7. Since bald cypress are deciduous trees, they must follow the 3" - 3 1/2" caliper requirement. *Plans have been updated.*
8. The applicant should attempt to incorporate existing plant material into the proposed landscaping plan. *Plans have been updated to better depict trees to be saved.*
9. Per section 9.03(C.6), a minimum area of 10% of the lot area must include site amenities (pocket parks, plazas, pedestrian areas) over and above the minimum landscape and open space Ordinance requirements. Additional information must be provided by the applicant to determine compliance with this standard. *Site plan meets this requirement. Site amenities include boardwalk, docks, areas for residents to sit by the water. Existing paved areas are restored with lawn and landscaping to provide plant material for shade and reduced impervious surfaces.*
10. Per section 9.03(D) MU sites must incorporate environmentally sensitive design in order to protect and enhance water quality, the environment, community health and the general public welfare. To meet this, the Project must incorporate more than just the pre-treatment stormwater; possible additions of environmentally sensitive design include replacing interior concrete walkways with permeable pavers, the installation solar panels, the installation of rain gardens within lawn areas to mitigate stormwater and pollution, etc. *Site is proposing stormwater pretreatment where it currently does not exist. Half the site drains directly into the lake and the other half of the site drains into the MDOT roadway. Site is currently contaminated, and it is proposed to follow all recommendations from the ESA during construction. This provides for protection of the community and lake health but prevents any means of infiltration practices on the site. Landscaping provided also exceeds what is existing and will be a more cohesive design.*
11. The site appears to be maneuverable for a fire engine when entering the site, however, it may be difficult for a fire engine to leave the site, as there is no space for them to turn around. Refer to the engineering review letter, dated August 16, 2023, and the fire department letter, dated August 24, 2023 for more information. *See response to fire review.*
12. The applicant must detail where this will be taking place, as garbage trucks must be able to maneuver the site. It does not appear they will be able to sufficiently enter and exit the site as currently configured. *There is sufficient space for a garbage truck. Truck turning movements will be provided. This type of scenario is not uncommon throughout Southeast Michigan, and our vendor has reviewed the plans and does not have any issues with maneuverability.*
13. The applicant must detail the number of current docks and if any expansion or improvements to the docks are proposed. Several docks to the west appear to be located outside of the Project site area, but remain under common ownership; additional information must be provided by the applicant. Structures such as the beach house and snack



shack are also shown on the dock exhibits in the plan set, it must be clarified if these properties are included in the Project scope or if they will be redeveloped under separate review.

*All docks shown on the proposed dock plan are existing docks to remain. The remainder of the docks shown on the existing plan will be removed (those removed are on Village owned property). Docks will be for Starboard residents, the fueling station and the remainder will be rented out seasonally for the community.*

14. However, the driveway parking spaces are not striped and dimensioned on the site plan, the drive aisle between these and the guest parking spaces must also be dimensioned. These must be detailed and accounted for on the truck turning plan as well to ensure that there is enough space to maneuver for larger vehicles.

*Dimensions were shown on the plan. Driveway lines have been added but will not be constructed with the lines. Truck turning movements have been added.*

15. However, no barrier-free spaces are proposed at this time. At least one barrier-free space must be incorporated into the parking lot.

*One barrier free space has been provided and one off street parking space will be removed to accommodate this.*

16. Building designs and materials must also be provided for the boathouse.

*Building will not be modified with the exception of upgrades to meet fire code health and safety. Existing floor plan and pictures of the existing elevations are provided.*

17. The applicant must specify what materials are proposed with labeled building elevations so that compliance may be determined. Material samples and color elevations must be provided to and approved by the Planning Commission.

*Colored elevation was provided on the first sheet of the building plans. Building elevations have been labeled with material types and color.*

18. All stormwater and utility requirements must be addressed to the satisfaction of the Village Engineer (see report dated August 16).

*See response to Nowak Fraus review.*

19. The applicant must provide proposed mounting heights so that compliance with Zoning Ordinance can be determined.

*Mounting heights have been provided.*

#### **Nowak Fraus Review Letter**

1. The Site Plan Notes show a density calculation of 15 residences per acre and cite the MU zoning district. The Zoning Ordinance section for the MU zoning district (9.03.C.7.c) states "Dwelling units proposed on the second floor of mixed-use buildings shall be permitted, not to exceed ten (10) dwelling units per acre"; alternatively (9.03.C.7.b), "Residential density in areas of the site dedicated solely to residential land use shall be as permitted in the RM district...". Neither of these provisions allow for 15 units per acre.

*It should be noted that the density is clearly specified in the ordinance. The ordinance points to the multifamily ordinance which a maximum of 15 units per acre. This was updated in June 2021. I have included a copy of the updated schedule of regulations that depicted the 15 units/acre which is no longer on the Village's website.*

2. The write-up states that "exclusively non-residential first story uses will not be allowed", therefore the MU district density of 10 units per acre does not apply to this development as submitted. Reviewing the submittal under the alternate density allowance for RM districts, each proposed 2-bedroom unit requires 4000 s.f. of land area and each 1-bedroom unit requires 3600 s.f. of land area within the parcel to be developed. As proposed (11 two-bedroom units and 1 one-bedroom unit), the parcel would have to include no less than 1.09 acres of land ( $11 \times 4000 \text{ sf} + 1 \times 3600 \text{ sf} = 47,600 \text{ sf} = 1.093 \text{ acres}$ ). The property as originally platted included lake bottomlands. This parcel, which is shown as it was originally platted, contains less than an acre (0.83 ac.) of land.

*It should be noted that the density is clearly specified in the ordinance. The ordinance points to the multifamily ordinance which a maximum of 15 units per acre. This was updated in June 2021. I have included a copy of the updated schedule of regulations that depicted the 15 units/acre which is no longer on the Village's website.*

3. We note that dry land and improvements, specifically an existing boardwalk, exist outside the area of the site boundary between the rear lot lines and the current lake edge. It is apparent this area of shoreline was filled at some point in the past (prior to 1963, per aerial imagery). We note this for clarity, and also note that the developer's plans do not appear to propose changes to this section of land adjacent to the



proposed development site, though at least two numbered mature trees (132 and 133) exist in this area, which should be identified.

*This is not the developer's property and no work will be done on this property.*

4. The legal description refers to "the easterly and northerly lines of Lot 26"; it appears these calls actually are the westerly lines of lots 21 and 20, and the southerly line of lot 18.  
*Legal description has been revised.*
5. For clarity, show the Flint Street label and ROW width on the topographic survey, in order to make following the legal description easier.  
*ROW lines have been labeled.*
6. Clearly identify the 100-year flood plain contour and the water's edge.  
*The floodplain and water's edge has been clarified.*
7. We note the existence of several mature trees along the lake side that are numbered on the topographic survey but not labeled with size or species. The provisions of the MU District call for environmentally sensitive design, including tree preservation as a possible element. Provide information on existing mature trees. Also clearly identify the intent regarding the trees (132 & 133) on the land outside the site boundary.  
*Trees to be saved have been better depicted.*
8. Label the size of existing water main. All mains shown on the topographic survey are 8" diameter.  
*Water size has been labeled.*
9. For clarity, on all sheets differentiate the line weights of the subject property from the remainder of parcels owned by the developer.  
*Parcel lines have been updated.*
10. Label the existing building north of the wood shed with height and use.  
*Building will be demolished. Previous use has been added.*
11. Label the existing building on lots 11 and 12 with height, existing use and proposed use. Include this within the site density / coverage calculations.  
*Existing and proposed uses have been labeled on the plans. Architectural plans have been added.*
12. Explain the "restricted land use" on lot 12.  
*Document is no longer enforceable. A copy is provided with the submittal.*
13. Label Green's Park and the existing gazebos / structures.  
*Structures have been labeled.*
14. Show and label the 9 parking spaces listed in the Site Plan Notes as "off-street spaces". It does not appear that any are shown.  
*Parking spaces were labeled with the number of spaces and a circle.*
15. At least one ADA accessible space must be provided; none are shown.  
*One ADA space has been provided.*
16. We note that the submitted write-up states 131 parking spaces are provided.  
*Write-up has been revised.*
17. Label the existing boardwalk with width, material and note that it is to remain, if that is the intent.  
*Boardwalk has been labeled.*
18. Show that the existing drive approach off of M-24 is to be removed and curb and gutter placed.  
*The existing drive approach has been shown to be removed.*
19. Details for a "landscape wall" and a "boulder wall" are provided; however, the Site Plan labels two features with different symbols both as "landscape wall". Please clarify.  
*Details have been clarified. Both are landscape walls, one is block and other is boulder materials.*
20. Show reverse curb and gutter where required (i.e. parts of the parking bays, north drive curb, south property line).  
*Reverse curb and gutter has been depicted.*
21. We note that some of the proposed grading, particularly along M-24, will need to be refined before engineering submittal to match the existing walk and minimize excessive proposed slope (12.5% near SE corner).  
*Grading will be reviewed prior to engineering submittal to match existing and comply with village requirements.*



22. Provide a minimum slope on asphalt pavement of 1% (0.6% shown in parking bay north of the boathouse). Detailed grading will be reviewed as part of the engineering plan submittal; this comment and the previous one are provided based on a limited review of proposed grades provided at this point and can be addressed during the engineering phase of the project.  
*Grading will be reviewed prior to engineering submittal to match existing and comply with village requirements.*
23. It appears that proposed Hydrant 1 is located in the middle of the existing M-24 sidewalk.  
*Per Fire Marshal review, hydrant will not be proposed but placed closer to the boathouse.*
24. It appears that the intent of the storm system is to utilize the existing segment and end section into Lake Orion near the boathouse. Please confirm / clarify.  
*It is intended to use this segment and end section but will be confirmed during detailed engineering design.*
25. The submitted write-up states that stormwater pretreatment will be provided. Please identify on the plans.  
*Pretreatment structure has been noted on the plans.*
26. We note that all of the yard drains have the same structure number, which must be corrected before engineering plan submittal.  
*Labels have been updated.*
27. The site as shown does not appear to provide stormwater detention. Ordinance 23.39 adopted in May 2022 requires compliance with Oakland County Stormwater Engineering Design Standards for sites "including projects less than one (1) acre that are part of a larger common plan of development". We interpret that to include this developer's contiguous parcels under development, being commonly called The Starboard, The Peninsula and the proposed boat slips connecting them, which total approximately 1.9 acres.  
*The parcels were proposed to be part of a common plan development; however the community was not in support of that development. The Starboard is no longer part of a larger common development. Properties adjacent have different owner entities, different partners within the ownership and are different developments. The lots on Flint Street are in the building development/plot plan phase, The Beach House property will not be developed further. The Peninsula parcel is in for site condominium review for single family lots not related to this. The fuel pumps parcel will remain as is.*
28. We believe both the boathouse and the unlabeled existing building to remain along Lake Street may be located within the 100-year floodplain. Any modernization or improvements to these structures that exceed 50% of their real cash value would require the properties to be upgraded to meet current flood protection requirements.  
*Acknowledged. No extensive improvements are proposed at this time.*
29. Any grading proposed within the existing 100-year floodplain will require a LOMR from FEMA.  
*Acknowledged.*
30. We note that the plan views indicate walled patios along M-24, but the architectural elevations do not reflect this.  
*Elevations have been updated.*
31. We find no reference to a transformer pad location or screening, nor to any site signage. If either are proposed, please indicate on plans.  
*Signage will be provided under separate permit on the building. We will coordinate with DTE on transformer location once detailed engineering is performed. Any transformers will be properly screened.*
32. Symbols shown on the lighting plan do not match the legend, thus it is not clear what lighting is being proposed.  
*All lighting symbols were properly labeled on the lighting plan with the fixture type. No changes necessary.*
33. The Village has adopted International Fire Code 2021, which requires dead-end fire apparatus access roads in excess of 150' long to provide an approved area for turning around. Show the length of the proposed driveway / parking area. As shown, it measures in excess of 150' and noturn-around is indicated.  
*This is under the jurisdiction of the Fire Marshal, see fire review response.*
34. Add a "no parking fire lane" sign at the curb in front of the boathouse.  
*Sign has been added.*
35. Show how the proposed hydrant locations provide the required double coverage for the boathouse.  
*See Fire Marshal response.*

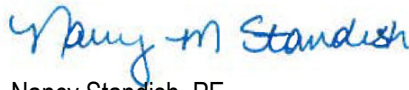
**Fire Marshal Review Letter**



1. Dead end fire apparatus access roads in excess of 150 feet length shall be provided with an approved area for turning around fire apparatus. The fire access road located behind the newly proposed building is in excess of 150'. It is the fire department's recommendation that the access road be provided with an approved turnaround in compliance with IFC or the drive isle be extended past the structure and connected to Lapper Road.  
*Fire access has been coordinated with the Fire Marshal. An area for turnaround has been provided.*
2. The fire hydrant located on the East side of the building shall be relocated to the West side of the structure near the Northeast corner of the Boathouse.  
*Hydrant has been moved to the island between the two western parking bays.*

Please feel free to contact me if you have any questions.

Respectfully,  
**GIFFELS-WEBSTER**



Nancy Standish, PE  
Partner

Cc: Dominic F. Mocer, Mocer Companies (by email)  
Dominick Tringali, Mocer Companies (by email)





October 30, 2023

Village of Lake Orion  
21 E. Church Street  
Lake Orion, MI 48362

Attn: Mr. Gage Belko

GW# 20107.31

Re: The Starboard Site Plan Review

Dear Mr. Belko,

Please see the attached revised site plan documents addressing the review comments from McKenna review letter dated October 25, 2023, Nowak and Fraus's review letter dated October 24, 2023 and Orion Township Fire Department review letter dated October 20, 2023 (responses are *italicized*):

#### **McKenna Review Letter**

1. According to the Zoning Ordinance, multi-family residential is not permitted use unless there is a non-residential (commercial) component on the ground floor facing M-24, with dwelling units on the upper level(s). This use classification would limit density to 10 units per acre.

*The zoning ordinance has contradicting language. As mentioned in the Village Attorney opinion (September 29, 2022) for the Mystic and Constellation site, "we believe that the language of the MU zoning ordinance also permits and encourages exclusive residential use along the lakeside of any proposed development in the MU district and would exclude office, commercial, retail and/or combination "live-work" units from being located along the lakeside...Furthermore, the MU zoning ordinance permit and encourages single or multifamily uses and structures that are adjacent to, or abut, the lakeside of any given development property and does not require and appears to prohibit structures such as office, commercial, retail or "live-work" units abutting or adjacent to the lake."*

*Both the purpose of the MU ordinance and the design standards in Section 9.03C state that "it is the intent of the MU district to promote nonresidential land uses along M-24 and residential land uses to buffer the lake and existing residential neighborhoods from the impacts of nonresidential commercial development and M-24. Section 9.03.C.7 also breaks down how to calculate density for Single family, Multifamily only and multifamily with commercial. If multifamily was not intended to be an allowed use, it wouldn't have it's own RDU calculation.*

*While this site is smaller than Mystic and Constellation, whereas live-work buildings cannot be provided along M-24 and residential along the lake due to the small size of the site. We provided residential only on the corner of M-24 and Flint streets since the Lake is the priority of the community and we felt it was more important to respect the prohibition on non residential uses along the lake edge, buffering the lake and the existing single family residences along Lake and Flint Streets from the M-24 corridor. Also, MDOT will not allow an entrance to the site from M-24 which reduces the viability of commercial uses at that corner.*

2. The southern boundary of Green's Park is enclosed by a 6' chain link fence on the western side and a decorative brick and cast-iron fence on the eastern side. We recommend the applicant continue the decorative brick and cast-iron fence and provide additional screening of the parking area from the right of way via upright evergreen trees.



*The proposed plans will be updated to include additional plantings along Green's Park. There is not enough space to accommodate the fencing.*

3. While the proposed plant material is of high quality, they do not fulfill diversity requirements, outlined in Section 15.02(H)(2). This standard is to ensure overall resistance to disease, and therefore no plant species shall consist of more than 20% of any particular type of plant material provided on-site. The Planning Commission may opt to waive this requirement, should they find the site's landscaping to be sufficient.

*Due to the small size of this site, uniformity of the landscape is more important than diversity to have a harmonious landscape design. We request a waiver.*

4. The landscaping plans also indicate these tree's locations. 9 trees are proposed to be saved. It should be noted that tree 727 is not within the project boundaries.

*Acknowledged.*

5. The applicant has also noted that there are areas for residents to sit next to the water. We recommend the applicant consider installing benches, if possible. The applicant is also proposing a plaza and corresponding landscaping outside of the parcel boundaries to the north within the right of way. No other development or use of land in the right of way, beyond what is in the Lake Street Roadway Configuration agreement, is permitted without additional Village approval. It must be clarified whether such approval is being sought and who is to maintain these improvements should they be approved. Open-space calculations must be contained within the site.

*Plans will be revised to only include site areas and still meet the 10% minimum.*

6. The applicant has stated that these plans have been approved by the Fire Marshall, however, much of the proposed T-turn is located outside of the project boundaries, within the right of way, and would be subject to Village Council approval.

*Due to the small size and configuration of the site, this is the only feasible way for a turnaround. We will request Village Council approval.*

7. While the site can accommodate a garbage truck, via the newly proposed T-turn and 26-foot wide maneuvering lane, it is required that collection points be identified for each unit as access to the southernmost unit may be impaired by parked vehicles. The unit's driveway parking and overall vehicular access is not feasible.

*This is a very common scenario on sites like this throughout southeast Michigan. We will provide a letter from our trash hauler.*

8. For Mixed-Use developments, Section 9.03(C) indicates that sidewalks are required both within the site and between other MU sites. While the proposed project fulfills connectivity requirements along M-24, a sidewalk is required along Lake Street. We recommend that the internal sidewalks be connected as much as possible.

*The boardwalk acts as the Lake Street sidewalk. See engineering response.*

9. There is a village-owned piece of land just north of the "boathouse" that is now cut-off from access. The Village may choose to request an access easement.



*This piece of land has always had this situation, it is not newly "cut off". This is the same parcel of land that includes Green's Park. The village has always only had access via water. We are open to future discussions on this matter after approval of Starboard.*

10. We note an additional concern with the proposed T-turn for service vehicles, which will likely encourage passenger or overflow parking, which could severely impact public safety.

*The turnaround will be signed.*

11. Should the applicant choose to update the façade of the building, including design and material, these details must also be provided.

*Acknowledged.*

12. Material samples must be provided to and approved by the Planning Commission.

*Acknowledged.*

13. All stormwater and utility requirements must be addressed to the satisfaction of the Village Engineer.

*Acknowledged.*

#### **Nowak Fraus Review Letter**

1. The Site Plan Notes show a density calculation of 15 residences per acre, but no calculations to include the existing Harbormaster office area, which is proposed to remain.  
*Acknowledged. Revised calculations will still allow for 12 units.*
2. The write-up states that "exclusively non-residential first story uses will not be allowed". We note that the plan calls for the existing one-story Harbormaster office to remain and continue as an office (non-residential) use.  
*Acknowledged. This will be revised.*
3. Regarding the dry land area behind the proposed development, we note that this submittal clarifies the property belongs to the Village. However, there is no public access overland to this area. We recommend that the Village require an access easement. If not, this lawn and boardwalk area will apparently benefit only the future Starboard residents. It must be clarified who will be responsible for maintenance and any associated liability.  
*This condition has always existed without issue. We are open to future discussions on this matter after approval of Starboard. The parcel will not be used by the development and all improvements stay on the Starboard parcel.*
4. A chart identifying the existing trees on and closely adjacent to the site has been provided. The provisions of the MU District call for environmentally sensitive design, including tree preservation as a possible element. We note for consideration by the Planning Commission that the proposed grading and layout plans indicate the potential for three mature maples (tags 134, 143 and 144 with diameters of 15", 19" and 16") to be saved that are called out for removal and replacement by 3" river birch, lawn, and 3" river birch respectively. Also, tag 727, the 30" walnut to be "saved" is located in Green's Park, not on the subject property.  
*Acknowledged.*
5. The Site Plan Notes state 24% proposed open space. However, a portion of this "open space" is highlighted outside the boundaries of this property within the existing Lake Street right-of-way. This particular area includes a proposed concrete plaza, lawn and perennial landscaping. The required landscape and open space areas must be clarified and labeled to differentiate between MU-required 10% amenities and all other required landscape areas and must be calculated on the subject



property only.

*Plans will be revised to only include site areas and still meet the 10% minimum.*

6. Dimensions must be shown for the proposed plaza and for the newly-proposed "fire turning pavement" T-turn.

*Dimensions will be provided.*

7. All proposed parking is located in close proximity to the residential buildings, including the one stall required for the Harbormaster office. No landside pedestrian access is shown linking the parking space to the office, and access via the existing lakeside boardwalk is blocked by the proposed boulder retaining walls.

*A walkway has been added per our meeting.*

8. We note that the submitted write-up refers to Constellation Bay in its discussion of pedestrian connectivity and drive approaches to M-24, but does not address the Starboard site.

*This will be revised.*

9. Regarding connectivity, the site does not provide pedestrian access to the existing office, to or along Lake Street, or between the existing boardwalk and the adjacent parking.

*Per our meeting, a connection has been provided:*



10. Proposed boulder wall and landscape block wall have been clarified. We note for the Planning Commissioners' convenience that the maximum height of the boulder wall appears to be about 3.5' and the block wall less than 2', per the preliminary grading plan.

*Acknowledged.*

11. A "no parking" sign must be provided at unit that is second from the south end of the building. If a car is parked outside the garage, access is blocked to the southernmost unit. The floor plan provided (Sheet 1 of 8) is inconsistent with the parking spaces indicated on the site plan.



- A sign will be added and architectural plans updated.*
12. The garbage truck turning movements do not indicate how the garbage truck will service the southernmost unit.  
*The southernmost unit will place its trash receptacle out near the boathouse so the truck can reach it.*
  13. The site as shown does not provide stormwater detention on site. Ordinance 23.39 adopted in May 2022 requires compliance with Oakland County Stormwater Engineering Design Standards for sites "including projects less than one (1) acre that are part of a larger common plan of development". We interpret that to include this developer's contiguous parcels under development, being commonly called The Starboard, The Peninsula and the proposed boat slips connecting them, which total approximately 1.9 acres. The response letter claims that each of these closely adjacent properties are under separate ownership and thus do not comprise a "larger common plan of development". We understand the Village Attorney is reviewing the issue.  
*Acknowledged. It should be noted that this is no longer a common plan development as the PUD was not feasible. The Starboard will be a for lease development. The lots along Flint Street are for sale for custom homes. The Beach House property, the fuel pumps and the eastern lot on the peninsula will not be redeveloped. The Peninsula is a parcel split via condominium process with lots for sale for custom homes with a separate ownership structure and operating agreement. This was provided via email on 10.26.2023.*
  14. The response letter states that the transformer pad location will be determined during site engineering, and that it will be screened as required by the Zoning Ordinance. Typically, applicants have been required to show the location and screening at the site planning stage, as required by the Zoning Ordinance.  
*Acknowledged. A location can be shown with landscaping but is subject to change based on DTE design.*
  15. If the improvements to the Boathouse (also noted as Watchmen's Quarters in the plan set) and the Harbor Master building exceed 50 percent of the market value of the building(s), they must be brought up to current floodplain management standards.  
*Acknowledged.*
  16. Revised plans show a proposed T-turn "fire turning pavement" near the entrance to Lake Street as a means of vehicle maneuvering, which applicant states has been approved by the Fire Marshall. We note that approximately half of this drive is located outside the subject property within Lake Street right-of-way. Such a location will require approval by the Village Council.  
*Acknowledged. Developer is requesting Village Council approval.*
  17. The proposed paved T-turn has the potential to be coopted for parking. We recommend "no parking fire lane" signs be installed if this drive location is determined to be acceptable to the Village Council.  
*Signs will be provided.*
  18. A fire hydrant has been located on-site closer to the Boathouse, as required by the Fire Marshall. It appears this location may interfere with existing underground oil storage tank(s). This issue must be clarified as part of the engineering design phase.  
*Acknowledged.*

#### **Fire Marshal Review Letter**

1. Details for the No Parking Fire Lane signage including road striping (cross hatching) area shall be indicated on the plan. Please provide Fire Lane signage for the T-Turnaround located on site.  
*Acknowledged.*
2. Dimensions shall be provided for the proposed T-Turnaround showing compliance with International Fire Code Figure D103.1.  
*Dimensions will be provided.*





Date: 10.30.2023  
Project: 20107.31  
Page: 6

Please feel free to contact me if you have any questions.

Respectfully,  
**GIFFELS-WEBSTER**

A handwritten signature in blue ink that reads "Nancy M Standish".

Nancy Standish, PE  
Partner

Cc: Dominic F. Mocerì, Mocerì Companies (by email)  
Dominick Tringali, Mocerì Companies (by email)

Attachment: 2023-10-30 Starboard Response Letter (6369 : PC-23-005 - Starboard Orion Site Plan Review #2)





## Village of Lake Orion

21 E. Church Street  
 Lake Orion, Michigan 48362  
 Tel 248.693.8391  
 Fax 248.693.5874  
[www.lakeorion.org](http://www.lakeorion.org)

### SITE PLAN and / or SPECIAL LAND USE APPLICATION

#### PROPERTY INFORMATION

Site Address: 10 S. Park & 175 Lake St.

Parcel ID # (Refer to Tax Bill): 09-02-460-032 thru -033 and -036 Zoning District: MU

#### PROPERTY OWNER INFORMATION

Name: Starboard Orion, LLC Address, City, Zip: 3005 University Drive, Auburn Hills, MI 48326

Phone #: 248.340.9400 Owner E-Mail: dfm@mocerri.com

#### APPLICANT INFORMATION (If applicant is NOT property owner)

Name: \_\_\_\_\_ Address, City, Zip: \_\_\_\_\_

Phone #: \_\_\_\_\_ Applicant E-Mail: \_\_\_\_\_

Applicant is: (i.e. contractor or business owner or architect, etc.) \_\_\_\_\_

#### APPLICANT REQUEST

Site Plan Approval: X

Use Permitted After Special Approval: \_\_\_\_\_

Use Type Requiring Special Approval: \_\_\_\_\_

#### REQUIRED INFORMATION

Please place your initials below to acknowledge that all applicable items are included with your application.

DFM 1) Final Site Plan. Two (2) Copies not less than 24 inches by 36 inches in size that meet the requirements of Section 19.02.D. Including, but not limited to:

- a. Dimensioned floor plans and building elevations
- b. Hard surface plan identifying parking areas with dimensions and number of spaces provided
- c. General landscape and lighting plan
- d. Location of trash receptacle and method of screening

DFM 2) Project Narrative. A Narrative must accompany Special Land Use applications that identifies the detailed use of the property under review.

DFM 3) Property Owner Verification.

DFM 4) Digital copies of all documents. (Digital copies are used for Planning Commission review. They may be submitted via email to the Planning & Zoning Coordinator at [zoning@lakeorion.org](mailto:zoning@lakeorion.org), through Dropbox, or using an external USB drive.)

DFM 5) Village, Planning, Engineering, and Attorney fees as necessary.



***By signing below you acknowledge all of the following:***

- The undersigned acknowledges that any lack of information which may result in a delay of the review process is the sole responsibility of the applicant.
- The undersigned deposes that the forgoing statements and answers and accompanying information are true and correct.
- The undersigned hereby authorizes Village representatives to enter the subject property in connection with this application, if necessary.

Signature of Property Owner: \_\_\_\_\_

Date: \_\_\_\_\_

7.21.22

Signature of Applicant/Contractor: \_\_\_\_\_

Date: \_\_\_\_\_

**TO BE COMPLETED BY VILLAGE STAFF:**

Date Received: \_\_\_\_\_

# of Hard Copies Received: \_\_\_\_\_

Electronic Copies Included: Y / N

Fee: \_\_\_\_\_

Receipt #: \_\_\_\_\_

Anticipated Meeting Date: \_\_\_\_\_

Attachment: Application-Proof Ownership-Checks (6369 : PC-23-005 - Starboard Orion Site Plan Review #2)



CHARTER TOWNSHIP OF ORION  
2023 VILLAGE TAX STATEMENT

Fiscal years covered by this statement  
Village 07-1-2023 to 06-30-2024

**PAYABLE JULY 1, 2023 - SEPT. 14, 2023**

See reverse side regarding additional penalties  
and interest beginning Sept. 15, 2023.

All payments must be received on or before  
September 14, 2023 to avoid interest.  
U.S. POSTMARKS ARE NOT ACCEPTED

STARBOARD ORION LLC

3005 UNIVERSITY DR  
AUBURN HILLS, MI 48326-4609

Property Address

T4N, R10E, SEC 2 SUPERVISOR'S  
PLAT NO 6 LOTS 8, 9 & 10

SEE REVERSE SIDE FOR  
IMPORTANT INFORMATION

**Kimberly Urbanowski, Treasurer**

248-391-0304 EXT. 8000

MAIL TAX PAYMENTS TO:  
CHARTER TOWNSHIP OF ORION  
2323 JOSLYN RD  
LAKE ORION MI 48360-1904

CODE NO.	*P.R.E. TAX BASE	PARCEL I.D. NUMBER	SCHOOL DIST.
	0	OL-09-02-460-032	63230
% DECLARED AS P.R.E.	*NON-P.R.E. TAX BASE	TAXABLE VALUE	STATE EQUALIZED VALUE
0.0000	3,290	3,290	3,290
TAX DESCRIPTION		BASE PER \$1,000	AMOUNT
GENERAL OPERATE		9.78440	32.19
VILLAGE POLICE		2.89120	9.50
*P.R.E. = Principal Residence Exemption			
TOTAL	Int/Penalty	Total Paid	Balance Due
41.69			41.69

2023 VILLAGE TAX STATEMENT \* RETURN THIS PORTION WITH YOUR REMITTANCE

Charter Township Of Orion  
2323 Joslyn Rd  
Lake Orion MI 48360-1904

[www.orientownship.org](http://www.orientownship.org)

**PAYABLE JULY 1, 2023 - SEPT. 14, 2023**

Please make checks payable to  
CHARTER TOWNSHIP OF ORION



Partial Payments Accepted

TOTAL	Int/Penalty	Total Paid	Balance Due
41.69			41.69

PARCEL I.D. NUMBER
OL-09-02-460-032

STARBOARD ORION LLC

3005 UNIVERSITY DR  
AUBURN HILLS, MI 48326-4609

CHARTER TOWNSHIP OF ORION  
2323 JOSLYN ROAD  
LAKE ORION MI 48360-1904



CHARTER TOWNSHIP OF ORION  
2023 VILLAGE TAX STATEMENT  
Fiscal years covered by this statement  
Village 07-1-2023 to 06-30-2024  
**PAYABLE JULY 1, 2023 - SEPT. 14, 2023**  
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September 14, 2023 to avoid interest.  
U.S. POSTMARKS ARE NOT ACCEPTED


STARBOARD ORION LLC  
  
3005 UNIVERSITY DR  
AUBURN HILLS, MI 48326-4609  
  
Property Address  
175 LAKE ST  
LAKE ORION, MI 48362-3044

T4N, R10E, SEC 2 SUPERVISOR'S  
PLAT NO 6 LOTS 11 TO 17 INCL

**SEE REVERSE SIDE FOR  
IMPORTANT INFORMATION**  
  
**Kimberly Urbanowski, Treasurer**  
  
248-391-0304 EXT. 8000  
  
MAIL TAX PAYMENTS TO:  
CHARTER TOWNSHIP OF ORION  
2323 JOSLYN RD  
LAKE ORION MI 48360-1904

CODE NO.	*P.R.E. TAX BASE	PARCEL I.D. NUMBER	SCHOOL DIST.
	0	OL-09-02-460-033	63230
% DECLARED AS P.R.E.	*NON-P.R.E. TAX BASE	TAXABLE VALUE	STATE EQUALIZED VALUE
0.0000	23,230	23,230	23,230
TAX DESCRIPTION		BASE PER \$1,000	AMOUNT
GENERAL OPERATE		9.78440	227.29
VILLAGE POLICE		2.89120	67.15
*P.R.E. = Principal Residence Exemption			
TOTAL	Int/Penalty	Total Paid	Balance Due
294.44			294.44

2023 VILLAGE TAX STATEMENT \* RETURN THIS PORTION WITH YOUR REMITTANCE

Charter Township Of Orion  
2323 Joslyn Rd  
Lake Orion MI 48360-1904  
[www.oriontownship.org](http://www.oriontownship.org)  
**PAYABLE JULY 1, 2023 - SEPT. 14, 2023**  
Please make checks payable to  
CHARTER TOWNSHIP OF ORION  
  
**175 LAKE ST**  
Partial Payments Accepted

TOTAL	Int/Penalty	Total Paid	Balance Due
294.44			294.44

PARCEL I.D. NUMBER
OL-09-02-460-033

STARBOARD ORION LLC  
  
3005 UNIVERSITY DR  
AUBURN HILLS, MI 48326-4609  
  
CHARTER TOWNSHIP OF ORION  
2323 JOSLYN ROAD  
LAKE ORION MI 48360-1904

Attachment: Application-Proof Ownership-Checks (6369 : PC-23-005 - Starboard Orion Site Plan Review #2)



**CHARTER TOWNSHIP OF ORION  
2023 VILLAGE TAX STATEMENT**

Fiscal years covered by this statement

Village 07-1-2023 to 06-30-2024

**PAYABLE JULY 1, 2023 - SEPT. 14, 2023**

See reverse side regarding additional penalties  
and interest beginning Sept. 15, 2023.

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September 14, 2023 to avoid interest.  
**U.S. POSTMARKS ARE NOT ACCEPTED**

STARBOARD ORION LLC

3005 UNIVERSITY DR  
AUBURN HILLS, MI 48326-4609

**Property Address**

10 S PARK BLVD  
LAKE ORION, MI 48362-3156

T4N, R10E, SEC 2 SUPERVISOR'S  
PLAT NO 6 LOT 18, ALSO LOTS 19,  
20 & 21 EXC THAT PART LYING NELY  
OF LI 35 FT SWLY OF & PARA TO CEN  
LI OF M-24 HWY 6-4-93 FR 019 &  
035

**SEE REVERSE SIDE FOR  
IMPORTANT INFORMATION**

**Kimberly Urbanowski, Treasurer**

248-391-0304 EXT. 8000

MAIL TAX PAYMENTS TO:  
CHARTER TOWNSHIP OF ORION  
2323 JOSLYN RD  
LAKE ORION MI 48360-1904

CODE NO.	*P.R.E. TAX BASE	PARCEL I.D. NUMBER	SCHOOL DIST.
	0	OL-09-02-460-036	63230
*DECLARED AS P.R.E.	*NON-P.R.E. TAX BASE	TAXABLE VALUE	STATE EQUALIZED VALUE
0.0000	455,970	455,970	455,970
TAX DESCRIPTION		BASE PER \$1,000	AMOUNT
GENERAL OPERATE		9.78440	4,461.39
VILLAGE POLICE		2.89120	1,318.29
*P.R.E. = Principal Residence Exemption			
TOTAL	Int/Penalty	Total Paid	Balance Due
5,779.68			5,779.68

**2023 VILLAGE TAX STATEMENT \* RETURN THIS PORTION WITH YOUR REMITTANCE**

Charter Township Of Orion  
2323 Joslyn Rd  
Lake Orion MI 48360-1904

[www.orientownship.org](http://www.orientownship.org)

**PAYABLE JULY 1, 2023 - SEPT. 14, 2023**

Please make checks payable to  
CHARTER TOWNSHIP OF ORION

Partial Payments Accepted



**10 S PARK BLVD**

TOTAL	Int/Penalty	Total Paid	Balance Due
5,779.68			5,779.68

PARCEL I.D. NUMBER
OL-09-02-460-036

STARBOARD ORION LLC

3005 UNIVERSITY DR  
AUBURN HILLS, MI 48326-4609

CHARTER TOWNSHIP OF ORION  
2323 JOSLYN ROAD  
LAKE ORION MI 48360-1904



Village of Lake Orion			7/20/23		Paym	7.A.g
Date	Type	Reference	Original Amt.	Balance Due		
7/20/23	Bill	SO ADM FEE	555.00	555.00	555.00	
7/20/23	Bill	SO PLAN ESCRW	895.00	895.00	895.00	
7/20/23	Bill	SO ENG ESCRW	785.00	785.00	785.00	
7/20/23	Bill	SO ATTY ESCRW	895.00	895.00	895.00	
Check Amount					3,130.00	

Cash on Deposit, Che 3,130.00

**Starboard Orion LLC**  
3005 University Dr. Suite 100  
Auburn Hills, MI 48326

Huntington National Bank  
74-347/724

113

DATE	7/20/23
AMOUNT	**3,130.00

PAY Three Thousand One Hundred Thirty and 00/100\*\*\*\*\* Dollars

TO THE ORDER OF Village of Lake Orion  
21 East Chrch Street  
Lake Orion, MI 48362

**\*\*COPY\*\***

113

Village of Lake Orion			7/20/23		Payment
Date	Type	Reference	Original Amt.	Balance Due	
7/20/23	Bill	SO ADM FEE	555.00	555.00	555.00
7/20/23	Bill	SO PLAN ESCRW	895.00	895.00	895.00
7/20/23	Bill	SO ENG ESCRW	785.00	785.00	785.00
7/20/23	Bill	SO ATTY ESCRW	895.00	895.00	895.00
Check Amount					3,130.00

Cash on Deposit, Che 3,130.00

THIS CHECK IS VOID WITHOUT A BLUE & RED BACKGROUND AND A WATERMARK - HOLD UP TO THE LIGHT TO VERIFY

**Starboard Orion LLC**  
3005 University Dr. Suite 100  
Auburn Hills, MI 48326

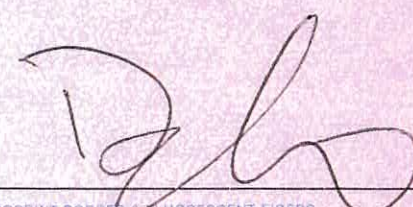
Huntington National Bank  
74-347/724

113

DATE	7/20/23
AMOUNT	**3,130.00

PAY Three Thousand One Hundred Thirty and 00/100\*\*\*\*\* Dollars

TO THE ORDER OF Village of Lake Orion  
21 East Chrch Street  
Lake Orion, MI 48362



CHECK IS PRINTED ON SECURITY PAPER WHICH INCLUDES A MICROPRINT BORDER & FLUORESCENT FIBERS

1130 0724034731 0138317744211



Village of Lake Orion			7/20/23		
Date	Type	Reference	Original Amt.	Balance Due	Discount
7/20/23	Bill	SO ADM FEE	555.00	555.00	
7/20/23	Bill	SO PLAN ESCRW	895.00	895.00	
7/20/23	Bill	SO ENG ESCRW	785.00	785.00	
7/20/23	Bill	SO ATTY ESCRW	895.00	895.00	
				Check Amount	3,130.00

Cash on Deposit, Che 3,130.00

7.A.g

<b>Starboard Orion LLC</b> 3005 University Dr. Suite 100 Auburn Hills, MI 48326	Huntington National Bank 74-347/724	11
		DATE 7/20/23
		AMOUNT **3,130.00
PAY Three Thousand One Hundred Thirty and 00/100***** Dollar		
TO THE ORDER OF Village of Lake Orion 21 East Chrch Street Lake Orion, MI 48362		
**COPY**		

11

Village of Lake Orion			7/20/23		
Date	Type	Reference	Original Amt.	Balance Due	Discount
7/20/23	Bill	SO ADM FEE	555.00	555.00	
7/20/23	Bill	SO PLAN ESCRW	895.00	895.00	
7/20/23	Bill	SO ENG ESCRW	785.00	785.00	
7/20/23	Bill	SO ATTY ESCRW	895.00	895.00	
				Check Amount	3,130.00

Cash on Deposit, Che 3,130.00

<b>Starboard Orion LLC</b> 3005 University Dr. Suite 100 Auburn Hills, MI 48326	Huntington National Bank 74-347/724	11
		DATE 7/20/23
		AMOUNT **3,130.00
PAY Three Thousand One Hundred Thirty and 00/100***** Dollar		
TO THE ORDER OF Village of Lake Orion 21 East Chrch Street Lake Orion, MI 48362		
COPY		

Attachment: Application-Proof Ownership-Checks (6369 : PC-23-005 - Starboard Orion Site Plan Review #2)



IES WILSON AIA  
DAVISON LK. RD.  
RD.MI. 48371  
-628-1535

on plate Set of Plans  
12-8-93

landscaping including BZA  
approved plans - SpAp + SPR +  
spelling Corrections.

Require Hold Harmless agreement  
Special Approval

APPROVED  
VILLAGE OF LAKE ORION

DEPT.  
DATE  
BY

PCM  
9-8-92  
L Subett

C-1

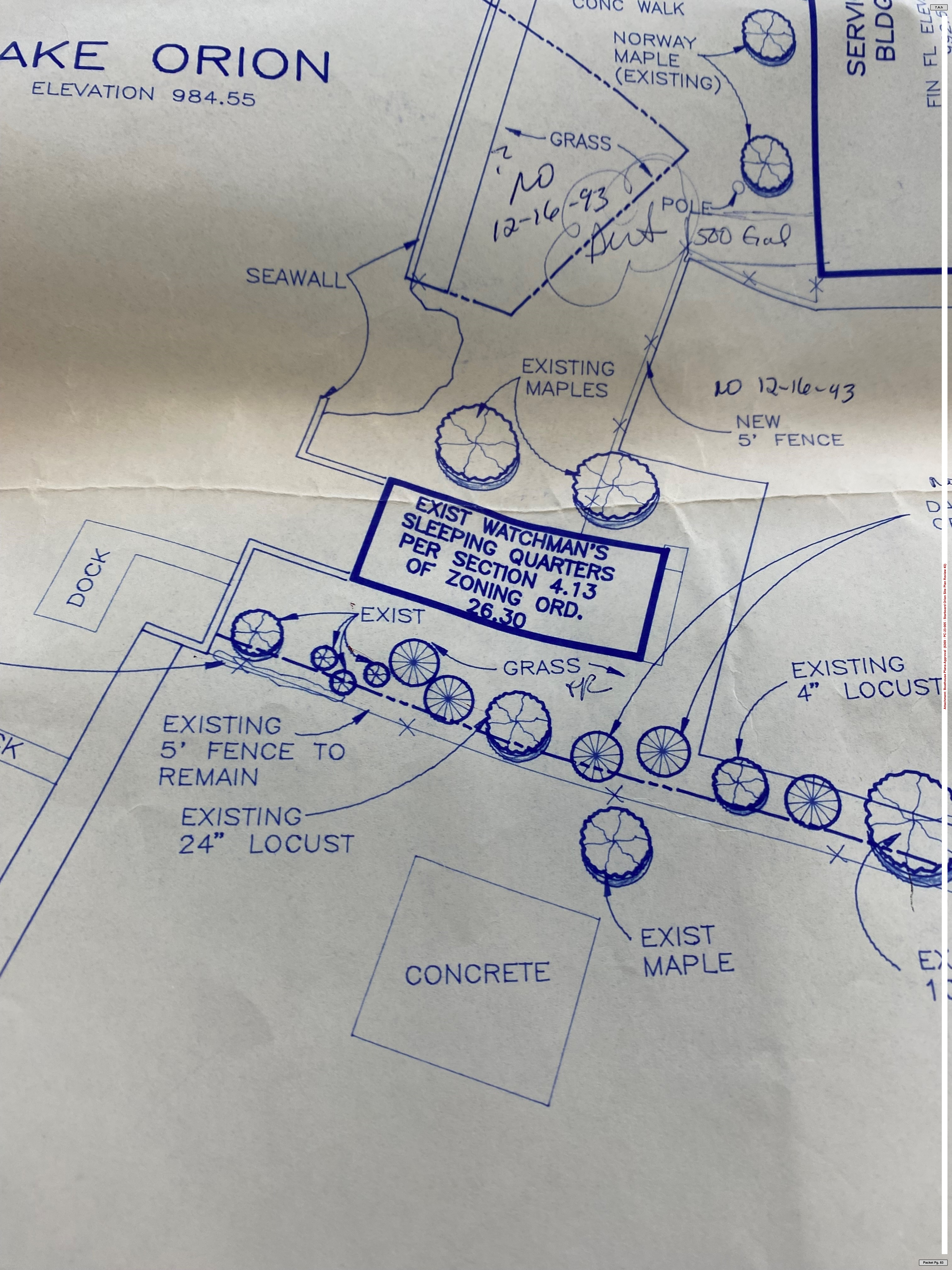
Landscape

RECEIVED  
JUL 28 1992  
REGISTERED



# LAKE ORION

ELEVATION 984.55







Village Of  
Lake Orion

37 E. Flint Street, Lake Orion  
Mi. 48362  
(313)-693-8391

February 18, 1994

Mr. Scott Campbell, President  
Orion Marine Center, Inc.  
10 N. Park Boulevard  
Lake Orion, Michigan 48362

RE: REQUIREMENTS TO BE MET PRIOR TO ISSUANCE OF TEMPORARY AND FINAL  
CERTIFICATE OF OCCUPANCY  
Orion Marine Center - 10 N. Park Boulevard, Lake Orion, MI 48362

Dear Scott:

Enclosed you will find two (2) separate lists of requirements necessary to assist you in finalizing your project. The first list addresses requirements necessary for a Temporary Certificate of Occupancy, which will expire on May 15, 1994. The second list addresses requirements necessary for a Final Certificate of Occupancy.

Your cooperation and immediate attention to this matter is appreciated. Should you have any questions or concerns, please do not hesitate in contacting me at the Village Office.

Sincerely,

VILLAGE OF LAKE ORION

Lori Jubelt  
Planning & Zoning Administrator

cc: Ron Zilka, Contractor  
Tom Berger, Building Official



FEBRUARY 18, 1994

REQUIREMENTS TO BE MET  
PRIOR TO ISSUANCE OF FINAL CERTIFICATE OF OCCUPANCY  
TO

ORION MARINE CENTER, INC.  
10 N. PARK BOULEVARD  
LAKE ORION, MICHIGAN 48362

INSTALL LANDSCAPING - LABOR AND MATERIALS

Main Site

\$ 45 Grass restoration north side of service building - 162 sf *done*  
67 Grass restoration south side of main building - 240 sf *done*

Lake Street

\$1100 Sod/grass - 4000 sf *e of dumpster - needs sod*  
1000 5 - Norway Maples - 2" caliper - 4'-6"ht *(2)*  
495 9 - Mugo Pines - 24" diameter *(9) - 18" diameter oh*  
340 4 - Dark Green Cedar - 6'ht *(6) oh*  
175 5 - Brown Yews - 24" diameter *(5) oh*

Green's Park Property Line Near Watchman's House

\$ 425 5 - Dark Green Cedar - 6'ht *(13) Cedars but main  
is supposed to have  
have removed  
existing landsc*

INSTALL FENCING

\$ 833 Green's Park installation of new fence - 70 ft *oh*  
240 South side of service building - 69 ft plus gate *oh*



Village Of  
**Lake Orion**

EST. 1859

37 E. Flint Street, Lake Orion  
Mi. 48362  
(313)-693-8391

FEBRUARY 18, 1994

REQUIREMENTS TO BE MET  
PRIOR TO ISSUANCE OF TEMPORARY CERTIFICATE OF OCCUPANCY  
TO

ORION MARINE CENTER, INC.  
10 N. PARK BOULEVARD  
LAKE ORION, MICHIGAN 48362

ORION MARINE CENTER, INC. SHALL:

1. Post a Performance Guarantee to ensure completion of site improvements, cash, certified check, or irrevocable letter of credit, in the amount of \$19,985.00 - See attached for form of Letter of Credit.
2. Submit a copy of the State Fire Marshall's report verifying inspections and approval of installation and operation of equipment - 300 gallon underground storage tank and oil interceptor.
3. Submit a copy of the MDOT final inspection report  
Permit No. 63112-050-93-0219-ME March 29, 1993.
4. Submit documentation that Orion Township Fire Department granted all final approvals for the fire suppression system.
5. Scott Campbell shall sign revised landscaping plan, including BZA requirements.

TEMPORARY CERTIFICATE OF OCCUPANCY SHALL EXPIRE ON MAY 15, 1994



WARRANTY DEED

# This Indenture

Made this Eighth day of December in the year of our Lord one thousand nine hundred and forty-four Between William Deere and Clara L. Deere, his wife, of Lake Orion, Michigan,

parties of the first part; and John V. Deere, a married man, of Lake Orion, Michigan,

Witnesseth that the said part ies of the first part, for and in consideration of the sum of One Dollar and other valuable considerations

to them, in hand paid by the said party of the second part; the receipt whereof is hereby acknowledged by the said party of the first part; and the said party of the second part, in full confidence into said party of the second part, and his heirs and assigns, that certain piece of land

located in the Village of Lake Orion in the County of Oakland,

Being a part of the S.W. 1/4 of the S.E. 1/4 of Section Two (2) in T.4 N. R.10 E.; commencing at a point on the south side of Lake Street One Hundred Fifteen (115) feet west from lands heretofore sold by James Andrews to the Orion Park Association; thence southeasterly at right angles with said Lake Street, Forty (40) feet; thence at right angles sixteen (16) feet; thence at right angles northwesterly Forty (40) feet; thence at right angles northeasterly on the south line of Lake Street sixteen (16) feet to the place of beginning, containing more or less. As a further part of the consideration, the party agrees that no boats used for hire shall ever be hired to use any part of the above described property, and it is further restricted to the private use of the owner and occupants thereof.

This lot is sometimes described as: Lot No. 12 of Supervisor's Plat No. 6, being a re-plat of Park Row Block of J. Andrews' Add. and part of W. 1/2 of S.E. 1/4 of Section

*W* *1-4* *41*  
*Clara L. Deere*

together with all and singular the appurtenances thereto in anywise appertaining: To have and to hold the said premises, as herein described, with the appurtenances, unto the said party of the second part and his heirs and assigns, forever; and the said William Deere and Clara L. Deere do hereby covenant, sell, grant, release, warrant, defend, and assign, that at the time of the sealing and delivery of these presents they are well seized of the above granted premises in fee simple; that they are free from all incumbrances, whatever except such, if any, as are excepted from the covenants following; and that they and their

For your safety and protection, close all your real estate transactions in Escrow Department of Abstract and Title Guaranty Company

1716-228

1716-228



226

against, if any, claims, whatsoever, except

shall warrant and defend the same

In witness whereof the said part 185 of the first party, Ye hereunto set their hand and seal the day and year first above written.

Signed, sealed and delivered in presence of

William Deere

Marguerite Stier

Clara E. Deane

Harry Slater

Stift zu Micheldorf.

CHINA 111

October 18th 1944

forty-four

a Notary Public, in and for said county of \_\_\_\_\_

Clara L. Vere

... the ... of ...

60-10798-10

Harry Gardner

31. Dennis Don Espar, June 21, 1957

by [redacted] [redacted]

cutting in all the fields.

Acting in Oklahoma County, Mich.

read figure 100

REGISTER

100

1945-46

and Robert

62

OAKLAND REG. DESO. REC'D

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Leszek

THE UNIVERSITY OF CHICAGO

January 10, 1944

December 1980

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## Attachmen

Packet Pg. 88



67  
D.W.

PONTIAC, MICH.

1716-228

William Deere &  
Clara L. Deere, his wf,  
to

WD \$1 & o v e s  
Dec 8, 1944  
"

John W. Deere, married man,  
Lake Orion, Mich.

Jan 5, 1945

2 Ld in Vill of Lake Orion, O C, M: Being a pt  
of the SW  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of Sec 2 in T 4 N R 10 E;  
comm at a point on the S side of Lake St 119 ft W  
from lds heretofore sold by James Andrews to the  
Orion Park Assn; th SEly at rt angles with sd Lake St,  
40 ft; th at rt angles 16 ft; th at rt angles Nely  
40 ft; th at rt angles NELY on the S line of Lake  
St 16 ft to the pl of beg, contg about 640 sq ft  
of ld, be the same m or l. As a further pt of the  
(OVER)



cons 2nd pty agrees that no boats used for hire shall ever be allowed to use any pt of the above des property, & its use is further restricted to the private use of the owner & occupants thereof.

This lot is sometimes des as Lot 12 of Supervisor's Plat No. 6, being a re-plat of Park Row Block of S. Andrew's Add & pt of W  $\frac{1}{2}$  of SE  $\frac{1}{4}$  of Sec 2.

No Rev.

353



STATE OF MICHIGAN  
COUNTY OF OAKLAND  
VILLAGE OF LAKE ORION  
ORDINANCE NO. 26.103

---

An Ordinance to amend the Zoning Ordinance, Article 12, Schedule of Regulations  
Section 12.02 Schedule of Regulations

THE VILLAGE OF LAKE ORION ORDAINS:

Article 12, Schedule of Regulations  
Section 12.02 Schedule of Regulations  
Table 12.02 – Table of Regulations

Section 12.02 of the Village Zoning Ordinance is recommended to be amended by the Planning Commission, after public hearing was held on June 7, 2021 and is amended by the Village Council, after public hearing was held on August 9, 2021.

Section 12.02 – Schedule of Regulations

Table 12.02 Footnotes to Schedule of Regulations

**Section 12.02 – SCHEDULE OF REGULATIONS**

All buildings, structures, uses and parcels of land shall comply with the regulations set forth in the following Schedule of Regulations and footnotes thereto, except as otherwise provided for accessory buildings and structures under Section 13.11.



- e. Where any CC or MU District borders on a side street there shall be provided a setback of ten (10) feet from the side street right-of-way line for all commercial buildings and parking and loading areas.
- f. Where any DC, CC or MU District abuts a residential zoning district there shall be required a 20 foot wide yard space; otherwise, no yard space is required.
- g. The minimum dimensional requirements for residential dwellings in the RM District shall be as follows:

<u>Requirement</u>	<u>Multiple Family</u>	<u>Duplex</u>	<u>Single Family</u>
Maximum Building Height	40 ft.	30 ft.	30 ft.
Setbacks			
Front	25 ft.	25 ft.	25 ft.
Side (each)	15 ft.	10 ft.	10 ft.
Rear	25 ft.	25 ft.	25 ft.
Maximum Lot Coverage	35%	40%	40%
Minimum Lot Area	*	8,400 sq. ft.	7,200 sq. ft.
Minimum Lot Width	70 ft.	70 ft.	60 ft.

\* See Section 12.02 footnote h.

All other uses permitted in the RM District shall comply with the standards in Table 12.02, Schedule of Regulations.

- h. The maximum density in the RM District shall be 15 dwelling units per acre.
- i. Where stacked flats, townhouses, apartments and efficiency units are permitted, the minimum required floor area per unit shall be as follows:

<u>Dwelling Unit Size</u>	<u>Unit Floor Area</u>
Efficiency unit	350 square feet
One bedroom unit	600 square feet
Two bedroom units	800 square feet
Three bedroom units	1,000 square feet
Four bedroom units	1,200 square feet, plus 150 square feet for each bedroom over four bedrooms in the dwelling unit.

- j. The minimum floor area per dwelling unit shall not include areas of basements, breezeways, unenclosed porches, terraces, garages or accessory buildings.
- k. In the case of lots located in an existing platted subdivision, the Planning Commission may recommend and Village Council may permit the creation of



The following procedures shall be used in determining the EFS

1. On the exterior face of the principal building on each adjacent lot fronting on the same street, measure the distance from the point on the building that is closest to the front lot line. Balconies, porches and decks with surfaces (excluding railings) raised more than 8 inches above the surrounding grade, shall be included when determining the EFS.
  2. Any structure 8 inches or less above grade shall be disregarded when determining the EFS.
  3. In the event that one of the adjacent lots is vacant, then the minimum required 25 foot front setback shall be used for that lot in calculating the EFS.
  4. In the event that the subject lot is on a corner, then the minimum required 25 foot front setback shall be used in the EFS calculations as the adjacent setback figure for the side of the lot that adjoins a street.
  5. In no event shall the permitted front setback be less than 17 feet.
- o. Four (4)-story buildings within the Height Overlay Zone may be permitted, as defined on the Village of Lake Orion Zoning Map and per the requirements of Article 10.
- p. There are no minimum required setbacks in the DC District. The maximum permitted setback in any front, side, or side street yard is 10 feet, except as may be required under FOOTNOTES TO THE SCHEDULE OF REGULATIONS 12.02.f.
- q. The maximum setback in the front street yard shall be 25 feet.

Amended only as specified above and in this Section, the Code of Lake Orion shall remain in full force and effect.



plazas, pedestrian walkways, expanded landscape areas and buffers, cross access provisions, decorative water features and similar features in the determination of the Planning Commission

6. Cross Access. All developments in the MU district shall permit pedestrian and vehicle cross access for adjacent MU sites. A cross-access agreement shall be submitted, pursuant to Section 13.17. Cross access connections for vehicles should generally be located in parking areas.
7. Residential Dwelling Units.
  - a. Single family dwelling units shall have a minimum floor area of 900 square feet.
  - b. Residential density in areas of the site dedicated solely to residential land uses shall be as permitted in the RM District, based on that area of the site dedicated solely to residential use.
  - c. Dwelling units proposed on the second floor of a mixed-use building shall be permitted, not to exceed ten (10) dwelling units per acre of lot area.
8. Pedestrian Connectivity. Sidewalks and other pedestrian connections shall be provided within and between sites in the MU district. Pedestrian connections should also be provided between developments in the MU district and the Downtown Center district.

**D. Environmentally Sensitive Design**

Sites shall incorporate environmentally sensitive design in order to protect and enhance water quality, the terrestrial environment, community and environmental health, and the general public welfare. Consideration will be given during the site plan review process to encourage design and construction that furthers the implementation of recognized sustainable and green design, without detracting from the other purposes of this Zoning Ordinance.

Plans shall include, as determined feasible by the Planning Commission, reduction of impervious surfaces, shared parking, use of permeable paving, minimization of building footprint size, building orientation to optimize natural light penetration into the building, landscaping for groundwater recharge, tree preservation, use of native species in landscaping, green roof technology, and similar practices.





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August 16, 2023

Darwin McClary  
Village Manager  
Village of Lake Orion  
21 E. Church St.  
Lake Orion, MI 48362

Re: The Starboard  
Site Plan Review #1  
NFE Job No. N033-01

Dear Mr. McClary:

We have reviewed the Site Plan for the above referenced site. Our review is consistent with the requirements of Article 19 of the Zoning Ordinance, Section D – Required Information and relevant sections of the Zoning Ordinance related to the zoning district. We have the following comments:

**Density / Overall Concept:**

1. The Site Plan Notes show a density calculation of 15 residences per acre and cite the MU zoning district. The Zoning Ordinance section for the MU zoning district (9.03.C.7.c) states “Dwelling units proposed on the second floor of mixed-use buildings shall be permitted, not to exceed ten (10) dwelling units per acre”; alternatively (9.03.C.7.b), “Residential density in areas of the site dedicated solely to residential land use shall be as permitted in the RM district...”. Neither of these provisions allow for 15 units per acre.
2. The write-up states that “exclusively non-residential first story uses will not be allowed”, therefore the MU district density of 10 units per acre does not apply to this development as submitted. Reviewing the submittal under the alternate density allowance for RM districts, each proposed 2-bedroom unit requires 4000 s.f. of land area and each 1-bedroom unit requires 3600 s.f. of land area within the parcel to be developed. As proposed (11 two-bedroom units and 1 one-bedroom unit), the parcel would have to include no less than 1.09 acres of land ( $11 \times 4000 \text{ sf} + 1 \times 3600 \text{ sf} = 47,600 \text{ sf} = 1.093 \text{ acres}$ ). The property as originally platted included lake bottomlands. This parcel, which is shown as it was originally platted, contains less than an acre (0.83 ac.) of land.
3. We note that dry land and improvements, specifically an existing boardwalk, exist outside the area of the site boundary between the rear lot lines and the current lake edge. It is apparent this area of shoreline was filled at some point in the past (prior to 1963, per aerial imagery). We note this for clarity, and also note that the developer’s plans do not appear to propose changes to this section of land adjacent to the proposed development site, though at least two numbered mature trees (132 and 133) exist in this area, which should be identified.

**Plan Contents:**

4. The legal description refers to “the easterly and northerly lines of Lot 26”; it appears these calls actually are the westerly lines of lots 21 and 20, and the southerly line of lot 18.
5. For clarity, show the Flint Street label and ROW width on the topographic survey, in order to make following the legal description easier.
6. Clearly identify the 100-year flood plain contour and the water’s edge.
7. We note the existence of several mature trees along the lake side that are numbered on the topographic survey but not labeled with size or species. The provisions of the MU District call for

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environmentally sensitive design, including tree preservation as a possible element. Provide information on existing mature trees. Also clearly identify the intent regarding the trees (132 & 133) on the land outside the site boundary.

8. Label the size of existing water main. All mains shown on the topographic survey are 8" diameter.
9. For clarity, on all sheets differentiate the line weights of the subject property from the remainder of parcels owned by the developer.
10. Label the existing building north of the wood shed with height and use.
11. Label the existing building on lots 11 and 12 with height, existing use and proposed use. Include this within the site density / coverage calculations.
12. Explain the "restricted land use" on lot 12.
13. Label Green's Park and the existing gazebos / structures.
14. Show and label the 9 parking spaces listed in the Site Plan Notes as "off-street spaces". It does not appear that any are shown.
15. At least one ADA accessible space must be provided; none are shown.
16. We note that the submitted write-up states 131 parking spaces are provided.
17. Label the existing boardwalk with width, material and note that it is to remain, if that is the intent.
18. Show that the existing drive approach off of M-24 is to be removed and curb and gutter placed.
19. Details for a "landscape wall" and a "boulder wall" are provided; however, the Site Plan labels two features with different symbols both as "landscape wall". Please clarify.
20. Show reverse curb and gutter where required (i.e. parts of the parking bays, north drive curb, south property line).
21. We note that some of the proposed grading, particularly along M-24, will need to be refined before engineering submittal to match the existing walk and minimize excessive proposed slope (12.5% near SE corner).
22. Provide a minimum slope on asphalt pavement of 1% (0.6% shown in parking bay north of the boathouse). Detailed grading will be reviewed as part of the engineering plan submittal; this comment and the previous one are provided based on a limited review of proposed grades provided at this point and can be addressed during the engineering phase of the project.
23. It appears that proposed Hydrant 1 is located in the middle of the existing M-24 sidewalk.
24. It appears that the intent of the storm system is to utilize the existing segment and end section into Lake Orion near the boathouse. Please confirm / clarify.
25. The submitted write-up states that stormwater pretreatment will be provided. Please identify on the plans.
26. We note that all of the yard drains have the same structure number, which must be corrected before engineering plan submittal.
27. The site as shown does not appear to provide stormwater detention. Ordinance 23.39 adopted in May 2022 requires compliance with Oakland County Stormwater Engineering Design Standards for sites "including projects less than one (1) acre that are part of a larger common plan of development". We interpret that to include this developer's contiguous parcels under development, being commonly called The Starboard, The Peninsula and the proposed boat slips connecting them, which total approximately 1.9 acres.
28. We believe both the boathouse and the unlabeled existing building to remain along Lake Street may be located within the 100-year floodplain. Any modernization or improvements to these structures that exceed 50% of their real cash value would require the properties to be upgraded to meet current flood protection requirements.
29. Any grading proposed within the existing 100-year floodplain will require a LOMR from FEMA.
30. We note that the plan views indicate walled patios along M-24, but the architectural elevations do not reflect this.

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Darwin McClary  
 August 16, 2023  
 RE: The Starboard Site Plan Review #1  
 Page 3 of 3

31. We find no reference to a transformer pad location or screening, nor to any site signage. If either are proposed, please indicate on plans.
32. Symbols shown on the lighting plan do not match the legend, thus it is not clear what lighting is being proposed.

Fire Protection Plan:

33. The Village has adopted International Fire Code 2021, which requires dead-end fire apparatus access roads in excess of 150' long to provide an approved area for turning around. Show the length of the proposed driveway / parking area. As shown, it measures in excess of 150' and no turn-around is indicated.
34. Add a "no parking fire lane" sign at the curb in front of the boathouse.
35. Show how the proposed hydrant locations provide the required double coverage for the boathouse.

After site plan approval, complete Engineering Plans meeting the requirements of Ordinance 31.26, Design and Construction Standards must be submitted for review, and no construction shall begin prior to engineering approval.

We recommend that the plan be revised and resubmitted subject to the above comments. If you have any questions, please do not hesitate to call.

Sincerely,

Nowak & Fraus Engineers



Wendy E. Spence, PE  
 Senior Project Manager

CC: Laura Haw, McKenna  
 Gage Belko, McKenna  
 Wesley Sanchez, DPW Director  
 Todd Stanfield, Acting Chief of Police, Lake Orion  
 John Pender, Assistant Chief, Orion Township Fire Department  
 Jeffrey Williams, Fire Marshall, Orion Township Fire Department  
 David Goodloe, Building Official, Orion Township  
 Susan Galeczka, Clerk, Lake Orion

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October 24, 2023

Darwin McClary  
Village Manager  
Village of Lake Orion  
21 E. Church St.  
Lake Orion, MI 48362

Re: The Starboard  
Site Plan Review #2  
NFE Job No. N033-01

Dear Mr. McClary:

We have reviewed the revised Site Plan for the above referenced site. Our review is consistent with the requirements of Article 19 of the Zoning Ordinance, Section D – Required Information, relevant sections of the Zoning Ordinance related to the zoning district, Title XV: Land Usage, of the Lake Orion Code of Ordinances, and sound engineering design principles. We offer the following comments:

Density / Overall Concept:

1. The Site Plan Notes show a density calculation of 15 residences per acre, but no calculations to include the existing Harbormaster office area, which is proposed to remain.
2. The write-up states that “exclusively non-residential first story uses will not be allowed”. We note that the plan calls for the existing one-story Harbormaster office to remain and continue as an office (non-residential) use.
3. Regarding the dry land area behind the proposed development, we note that this submittal clarifies the property belongs to the Village. However, there is no public access overland to this area. We recommend that the Village require an access easement. If not, this lawn and boardwalk area will apparently benefit only the future Starboard residents. It must be clarified who will be responsible for maintenance and any associated liability.

Plan Contents:

4. A chart identifying the existing trees on and closely adjacent to the site has been provided. The provisions of the MU District call for environmentally sensitive design, including tree preservation as a possible element. We note for consideration by the Planning Commission that the proposed grading and layout plans indicate the potential for three mature maples (tags 134, 143 and 144 with diameters of 15”, 19” and 16”) to be saved that are called out for removal and replacement by 3” river birch, lawn, and 3” river birch respectively. Also, tag 727, the 30” walnut to be “saved” is located in Green’s Park, not on the subject property.
5. The Site Plan Notes state 24% proposed open space. However, a portion of this “open space” is highlighted outside the boundaries of this property within the existing Lake Street right-of-way. This particular area includes a proposed concrete plaza, lawn and perennial landscaping. The required landscape and open space areas must be clarified and labeled to differentiate between MU-required 10% amenities and all other required landscape areas and must be calculated on the subject property only.
6. Dimensions must be shown for the proposed plaza and for the newly-proposed “fire turning pavement” T-turn.

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7. All proposed parking is located in close proximity to the residential buildings, including the one stall required for the Harbormaster office. No landside pedestrian access is shown linking the parking space to the office, and access via the existing lakeside boardwalk is blocked by the proposed boulder retaining walls.
8. We note that the submitted write-up refers to Constellation Bay in its discussion of pedestrian connectivity and drive approaches to M-24, but does not address the Starboard site.
9. Regarding connectivity, the site does not provide pedestrian access to the existing office, to or along Lake Street, or between the existing boardwalk and the adjacent parking.
10. Proposed boulder wall and landscape block wall have been clarified. We note for the Planning Commissioners' convenience that the maximum height of the boulder wall appears to be about 3.5' and the block wall less than 2', per the preliminary grading plan.
11. A "no parking" sign must be provided at unit that is second from the south end of the building. If a car is parked outside the garage, access is blocked to the southernmost unit. The floor plan provided (Sheet 1 of 8) is inconsistent with the parking spaces indicated on the site plan.
12. The garbage truck turning movements do not indicate how the garbage truck will service the southernmost unit.
13. The site as shown does not provide stormwater detention on site. Ordinance 23.39 adopted in May 2022 requires compliance with Oakland County Stormwater Engineering Design Standards for sites "including projects less than one (1) acre that are part of a larger common plan of development". We interpret that to include this developer's contiguous parcels under development, being commonly called The Starboard, The Peninsula and the proposed boat slips connecting them, which total approximately 1.9 acres. The response letter claims that each of these closely adjacent properties are under separate ownership and thus do not comprise a "larger common plan of development". We understand the Village Attorney is reviewing the issue.
14. The response letter states that the transformer pad location will be determined during site engineering, and that it will be screened as required by the Zoning Ordinance. Typically, applicants have been required to show the location and screening at the site planning stage, as required by the Zoning Ordinance.
15. If the improvements to the Boathouse (also noted as Watchmen's Quarters in the plan set) and the Harbor Master building exceed 50 percent of the market value of the building(s), they must be brought up to current floodplain management standards.

#### Fire Protection Plan:

16. Revised plans show a proposed T-turn "fire turning pavement" near the entrance to Lake Street as a means of vehicle maneuvering, which applicant states has been approved by the Fire Marshall. We note that approximately half of this drive is located outside the subject property within Lake Street right-of-way. Such a location will require approval by the Village Council.
17. The proposed paved T-turn has the potential to be coopted for parking. We recommend "no parking fire lane" signs be installed if this drive location is determined to be acceptable to the Village Council.
18. A fire hydrant has been located on-site closer to the Boathouse, as required by the Fire Marshall. It appears this location may interfere with existing underground oil storage tank(s). This issue must be clarified as part of the engineering design phase.

After site plan approval, complete Engineering Plans meeting the requirements of Ordinance 31.26, Design and Construction Standards must be submitted for review, and no construction shall begin prior to engineering approval.



Darwin McClary  
October 24, 2023  
RE: The Starboard Site Plan Review #2  
Page 3 of 3

We recommend that the plan be revised and resubmitted subject to the above comments. If you have any questions, please do not hesitate to call.

Sincerely,

Nowak & Fraus Engineers



Wendy E. Spence, PE  
Senior Project Manager

CC: Laura Haw, McKenna  
Gage Belko, McKenna  
Wesley Sanchez, DPW Director  
Todd Stanfield, Acting Chief of Police, Lake Orion  
John Pender, Assistant Chief, Orion Township Fire Department  
Jeffrey Williams, Fire Marshall, Orion Township Fire Department  
David Goodloe, Building Official, Orion Township  
Susan Galeczka, Clerk, Lake Orion

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Attachment: N033 LT-03 Site Plan Review #2 Starboard (6369 : PC-23-005 - Starboard Orion Site Plan Review #2)





# Charter Township of Orion

3365 Gregory Rd., Lake Orion MI 48359  
www.oriontownship.org

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## Fire Department

Phone: (248) 391-0304, ext. 2000

Fax: (248) 309-6993

To: Darwin McClary, Village Manager  
From: Jeff Williams, Fire Marshal  
Re: The Starboard Site Plan Review #1  
Date: August 24, 2023

The Orion Township Fire Department has completed its review of the application for the Starboard project for the limited purpose of compliance with Charter Township of Orion Ordinance's, Michigan Building Code, and all applicable Fire Codes.

Based upon the application and documentation provided, the Fire Department has the following recommendation:

Approved  
Approved with Comments (See below)  
X Not approved

### Comments:

- Dead end fire apparatus access roads in excess of 150 feet length shall be provided with an approved area for turning around fire apparatus. The fire access road located behind the newly proposed building is in excess of 150'. It is the fire department's recommendation that the access road be provided with an approved turnaround in compliance with IFC or the drive isle be extended past the structure and connected to Lapper Road.
- The fire hydrant located on the East side of the building shall be relocated to the West side of the structure near the Northeast corner of the Boathouse.

If there are any questions, the Fire Department may be reached at 248-391-0304 ext. 2004.

Sincerely,

*Jeffrey Williams*

Jeff Williams, Fire Marshal  
Orion Township Fire Department

Attachment: OTFD - Starboard Site Plan Review 1 (6369 : PC-23-005 - Starboard Orion Site Plan Review #2)





# Charter Township of Orion

3365 Gregory Rd., Lake Orion MI 48359  
www.oriontownship.org

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## Fire Department

Phone: (248) 391-0304, ext. 2000

Fax: (248) 309-6993

To: Planning Commission/Planning & Zoning Director  
From: Jeff Williams, Fire Marshal  
Re: Starboard Site Plan Review #2  
Date: October 20, 2023

The Orion Township Fire Department has completed its review of the Starboard Application for the limited purpose of compliance with Village of Lake Orion's Ordinance's, Michigan Building Code, and all applicable Fire Codes.

Based upon the application and documentation provided, the Fire Department has the following recommendation:

Approved  
X Approved with Requirements (See below)  
Not approved

### Requirements:

- Details for the No Parking Fire Lane signage including road striping (cross hatching) area shall be indicated on the plan. Please provide Fire Lane signage for the T-Turnaround located on site.
- Dimensions shall be provided for the proposed T-Turnaround showing compliance with International Fire Code Figure D103.1.

This approval is limited to the application and materials reviewed which at this time do not raise a specific concern with regard to location and/or impact on health and safety. However, the approval is conditioned upon the applicant providing sufficient additional information at time of building permit application that includes data or documents, confirming full compliance with all applicable building codes, fire codes and Township Ordinances.

If there are any questions, the Fire Department may be reached at 248-391-0304 ext. 2004.

Sincerely,

*Jeffrey Williams*

Jeff Williams, Fire Marshal  
Orion Township Fire Department

Attachment: OTFD Starboard Site Plan Review 2 (6369 : PC-23-005 - Starboard Orion Site Plan Review #2)





August 28, 2023

Mr. Darwin McClary  
Village Manager  
Village of Lake Orion  
21 E. Church St.  
Lake Orion, MI 48362

**Subject: PC 23-007 – Starboard Orion, Site Plan Review #1**

Dear Mr. McClary:

Starboard Orion (the “Project”) is a site plan request for a twelve-unit multiple-family development at 10 S. Park Boulevard. The Project is located on three parcels (09-02-460-032, 09-02-460-033, and 09-02-460-036), all southwest of the Flint Street and S. Park Boulevard (M-24) intersection (approximate parcel locations shown below in red outline). The Project scope includes the following:

- Demolition of two former marina buildings;
- Construction of 11 townhouses in a new 3-story building fronting on S. Park Boulevard;
- Rehabilitation of an existing boat house into a one-unit dwelling;
- Improvements and realignment of the Flint Street and Lake Street intersection and right-of-way; and
- Improvements to the Lake Orion boardwalk frontage.



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## SITE HISTORY / BACKGROUND

This Project site, along with ten other parcels, was previously submitted by Mocer Companies for review and consideration as a Planned Unit Development (PUD). Encompassing a much larger footprint for redevelopment, it was originally designed as a mixed-use development including several apartments, single-family homes, townhomes, and live/work units. A snack shop and fuel pump station were also to be improved as part of the PUD, as well as infrastructure improvements to both Lake Street and Flint Street.

While the PUD Eligibility was granted by the Planning Commission, and subsequently by Village Council (June of 2022), the project was later withdrawn by the applicant and the file has been closed.

This application, Starboard Orion, is for a smaller site (mostly located on the former Orion Marine Center at 10 S. Park Boulevard), directly adjacent to Green's Park, and with access to lake frontage to the west and south. Improvements to Lake and Flint Street are being pursued under separate review.

## SUMMARY OF COMPLIANCE

A summary of the site plan findings are noted in the table below. Further specifications, review, and recommendations regarding the site plan are detailed on the following pages.

Ordinance Standards	Compliance Met?	Comments
Use & Harmonious Design	No	See item #1.
Dimensional Standards	No	Missing information, see item #2.
Natural Features / Landscaping	No	Missing information and corrections, see item #3.
Access & Circulation	No	Concerns and missing items to be addressed. Refer to item #4 and the Engineering Report (dated August 16, 2023).
Parking & Loading	No	Refer to item #5.
Building Design & Architecture	No	Refer to item #6.
Engineering / Stormwater Management	TBD	Outstanding items per the Engineering Report (dated August 16, 2023).
Lighting	No	Refer to item #8.
Misc. Outstanding Items	-	Outstanding items noted in the Engineering review letter (dated August 16, 2023) and if the modernization/improvement of the boat house is to exceed 50% of its real cash value, must be upgraded to meet flood protection requirements. References to a PUD on several sheets in the plan set must also be revised (see title blocks).





# Site Plan Review

Standards for Site Plan Approval are set forth by [Article 19: Administrative Procedures and Standards](#). This project is reviewed against the Village's [Zoning Ordinance](#), Master Plan, existing site conditions, and sound planning and design principles.

Underlined text denotes items that require additional information, consideration, or a waiver from the Code.

We offer the following comments for your consideration:

## 1. USE & HARMONIOUS DESIGN

**Zoning Ordinance Standards:** *All elements of the site must be harmoniously and efficiently designed in relation to the topography, size, and type of land, and the character of the adjacent properties and the proposed use. The site will be developed so as not to impede the normal and orderly development or improvement of surrounding properties for uses permitted on such property.*

**Findings:** The site is zoned the MU, Mixed Use District where, per section 9.02(A.10), single-family and multiple-family dwelling units are permitted when located above the ground story and subject to the ground story being only a non-residential use. However, the Intent section of Article 9: MU – Mixed Use District (section 9.01) reads:

*“...to promote compatible combinations of commercial, office, service, and residential development along M-24 south of Paint Creek to serve as a gateway into the DC, Downtown Center District. Office, commercial, and retail development should be located along M-24, with residential land uses located along the Lake to buffer existing single-family neighborhoods from the impacts of non-residential uses and M-24.*

*Development in this district is intended to serve the nearby neighborhoods and is not intended to be highway-oriented in scale. Parking lots should not be exposed to view from M-24 or the Lake but, should be screened from these important frontages by buildings. Site design should maintain and enhance pedestrian and/or image connectivity to the Downtown area.”*

While there appears to be a conflict in the Intent statement of the district versus the allowable uses, as the Code is currently written, multiple-family uses are not a permitted use within the MU, Mixed Use District unless located above the ground floor (ex: a mixed-use building with retail on the first floor or a live/work unit).

To achieve greater clarity, we recommend that the Planning Commission review Article 9: the MU, Mixed Use District, and consider a text amendment to the Zoning Ordinance that would allow for multiple-family residential developments on the ground floor, and to specify the allowable density for the RM district (currently unspecified). In our professional opinion, multiple-family units are a suitable housing typology for the MU, Mixed Use District as they promote the intent of the Zoning District and promote greater walkability. Should the Planning Commission agree to consider such a text amendment to Article 9, we recommend this application be tabled until the Ordinance language can be clarified.





## 2. DIMENSIONAL STANDARDS

**Zoning Ordinance Standards:** The site plan must comply with the district requirements for minimum floor area, height of building, lot size, yard space, density and all other requirements as set forth in the Schedule of Regulations.

**Findings:** The Project may comply with the dimensional standards of the MU, Mixed Use District. The table below outlines the dimensional standards required and whether compliance has been met:

Dimensional Measurement	Required	Proposed	Comments
Max. Density	<u>Unclear</u>	12 units / 0.83 acres	<u>Unclear.</u>
Front Yard Setback (Build-To Line)	10' (min) 25' (max)	10' (min) 25.3' (max)	In compliance.
Min. Side Yard Setback (both)	0**	10' (north) 3.2' (south)	In compliance.
Min. Rear Yard Setback	25'	58.5' (New building) 0' (Boathouse)	<u>May comply, additional information necessary.</u>
Min. Water Setback	25'	58.5' (New building) 0' (Boathouse)	<u>May comply, additional information necessary.</u>
Min. Floor Area: 2-Bedroom Unit	800 sq. ft.	>800 sq. ft.	In compliance.
Max. Building Height	36'	36'	In compliance.
Max. Lot Coverage (by structures)	50%	33%	In compliance.

*\*Increases to 20' if abutting a residential district, does not apply in this instance.*

The proposed boat house unit is not compliant with Village dimensional standards and almost no information regarding its design or occupancy has been provided. Its location proximate to the lake would require variances from the Zoning Ordinance. It has been implied that there is a pre-existing use of the structure as a residence; however, no evidence has been provided that shows this use was **legally** established. Further, even if this were a protected nonconformity, a 6-month period of non-use would require any such use to cease. The boat house **may** continue as an accessory/commercial structure only and renovations/modernization are limited to 50% of the true cash value. We defer to the Village Attorney for additional information regarding this matter.

## 3. NATURAL FEATURES, SCREENING & LANDSCAPING

**Zoning Ordinance Standards:** The existing natural landscape shall be preserved in its natural state as much as possible, by minimizing tree and soil removal and by topographic modifications that result in maximum harmony with adjacent properties.





*There must be reasonable visual and sound privacy. Fences, walks, barriers, and landscaping must be used, as appropriate, for the protection and enhancement of property and the safety and privacy of occupants and users.*

### Findings:

**Landscaping and Plant Material.** The applicant has provided a landscaping plan on sheets LA-100 and LA-101. The following landscaping and screening standards are relevant to this Project:

**Parking Lot Landscaping.** Perimeter landscaping must be provided along the edge of any parking lot facing and located within 100 feet of a public right-of-way or lake. The plans show significant landscaping provided along the lake-parking lot perimeter, which appear to sufficiently screen the parking lot from the lake; however, dimensions showing the linear feet of applicable frontage and associated landscaping is required to determine compliance. The applicant must provide more detail regarding the landscaping wall adjacent to Green's Park; additional landscaping or a higher screening wall is required to adequately shield the parking area from the public right of way.

**Right-of-Way Landscaping.** It does not appear that any landscaping is proposed in the right-of-way for S. Park Boulevard or Flint Street, and this is strongly encouraged. One option would be to add environmentally sensitive features (permeable patio pavers, rain gardens, etc.) or additional landscaping to meet the 10% common area requirements (see notes below for details).

**Plant Materials and Landscape Elements.** The proposed plant materials and landscape elements must be of high quality, be of diverse species types, and follow the required plant material specifications. While the proposed plant material is of high quality, they do not fulfill diversity requirements, nor do they follow required plant material specifications.

The Ordinance requires that no single plant species may consist of more than 20% of any category of plant material. The applicant must adjust the number and distribution of plant species for the site to comply. The Planning Commission may opt to waive this requirement if they find the site's landscaping to be sufficient.

Regarding plant material specifications, deciduous trees must have a minimum caliper of 3"-3 ½", while evergreen trees must have a minimum height of 6-feet when planting. The plans note bald cypress planted on-site would be 8-feet in height. Since bald cypress are deciduous trees, they must follow the 3"-3 ½" caliper requirement.

**Existing Plant Materials.** The applicant should attempt to incorporate existing plant material into the proposed landscaping plan.

**Common Open Space Area.** Per section 9.03(C.6), a minimum area of 10% of the lot area must include site amenities (pocket parks, plazas, pedestrian areas) over and above the minimum landscape and open space Ordinance requirements. Additional information must be provided by the applicant to determine compliance with this standard.

**Environmentally Sensitive Design.** Per section 9.03(D) MU sites must incorporate environmentally sensitive design in order to protect and enhance water quality, the environment, community health and the general public welfare. To meet this, the Project must incorporate more than just the pre-treatment stormwater; possible additions of environmentally sensitive design include replacing interior concrete



walkways with permeable pavers, the installation solar panels, the installation of rain gardens within lawn areas to mitigate stormwater and pollution, etc.

#### 4. ACCESS & CIRCULATION

**Zoning Ordinance Standards:** *All buildings or groups of buildings shall be so arranged as to permit convenient and direct emergency vehicle access.*

*The arrangement of public or common ways for vehicular and pedestrian circulation shall respect the pattern of existing or planned streets or pedestrian or bicycle pathways in the vicinity of the site. Streets and drives that are a part of an existing or planned street system serving adjacent developments shall be of an appropriate width to the volume of traffic they are planned to carry and shall have a dedicated right-of-way equal to that specified in a recognized source of reference.*

*There shall be a pedestrian circulation system that is insulated as completely as possible from the vehicular circulation system.*

*Where the Planning Commission determines, after expert consultation, that public safety would be substantially promoted in a particular location by reducing the number of points of ingress and egress between private property and an adjoining highway, cross-access may be required. Shared drive approaches between adjoining parcels may also be permitted under this Section.*

##### Findings:

**Vehicular Access.** Vehicular access to the site is provided from the driveway off Flint Street, the existing curb cut on S. Park Boulevard will be eliminated as part of this project. The new rear driveway connects to both Lake Street and the proposed site and is a much better option compared to the current driveway location which is too close to the intersection. The design and construction of the Lake-Flint driveway reconfiguration is being reviewed under separate cover, as this involves significant public right of way modifications. The applicant has proposed moving the existing driveway towards the west.

Additionally, the applicant submitted a proposed vehicle routing plan for fire engines. The site appears to be maneuverable for a fire engine when entering the site, however, it may be difficult for a fire engine to leave the site, as there is no space for them to turn around. Refer to the engineering review letter, dated August 16, 2023, and the fire department letter, dated August 24, 2023 for more information.

The applicant notes that trash disposal will consist of occupants rolling their trash outside. The applicant must detail where this will be taking place, as garbage trucks must be able to maneuver the site. It does not appear they will be able to sufficiently enter and exit the site as currently configured.

The proposed maneuvering lanes and driveways are to be 26' in width, which complies with Zoning Ordinance standards.

**Boat Docks.** For aquatic vehicles, 16 dock spaces are utilized for residents and 11 are leasable, adding up to 27 total spots within the marina. The applicant must detail the number of current docks and if any expansion or improvements to the docks are proposed. Several docks to the west appear to be located outside of the Project site area, but remain under common ownership; additional information must be provided by the applicant. Structures such as the beach house and snack shack are also shown on the dock exhibits in the





plan set, it must be clarified if these properties are included in the Project scope or if they will be redeveloped under separate review.

**Pedestrian Connectivity.** There is an existing sidewalk within Flint Street and Park Boulevard rights-of-way that is proposed to be maintained. The applicant proposes to extend the sidewalk from the proposed units so that it connects to the sidewalk within the Park Boulevard right-of-way. Additionally, a sidewalk extending from the northern portion of the building connects to the sidewalk within the Flint Street right-of-way. Finally, there are existing boardwalks along portions of the waterfront, which the applicant proposes to connect to allow for pedestrian mobility.

## 5. PARKING & LOADING

**Zoning Ordinance Standards:** *Off-street parking, loading, and unloading areas and outside refuse storage areas, or other storage areas that face or are visible from adjacent homes, or from public thoroughfares, shall be screened by walls, fencing or landscaping of effective height.*

**Findings:** Each residential unit includes a one-car garage and one-driveway space. However, the driveway parking spaces are not striped and dimensioned on the site plan, the drive aisle between these and the guest parking spaces must also be dimensioned. These must be detailed and accounted for on the truck turning plan as well to ensure that there is enough space to maneuver for larger vehicles.

There are nine off-street (guest) spaces in the parking lot. Should the driveway spaces prove to be acceptable, in total, the proposed parking configuration will add up to 29 spaces. This number of parking spaces complies with multiple-family parking standard, which require two spaces per unit, totaling 24 required spaces. However, no barrier-free spaces are proposed at this time. At least one barrier-free space must be incorporated into the parking lot.

## 6. BUILDING DESIGN & ARCHITECTURE

**Zoning Ordinance Standards:** *All buildings along the street frontage of the parcel shall have a primary entrance or entrances on the façade facing the street. All primary entrances must be accessible to pedestrians. Primary entrances should be highlighted through the incorporation of architectural features such as canopies, awnings, porticos, raised cornice parapets over the doors arches, large windows, or architectural details such as tile work and moldings that are integrated into the building structure and design.*

*Building materials used on exteriors of new buildings shall be appropriate for the character and size of the proposed building, and shall complement the materials used on surrounding buildings and in the Village Downtown. Brick, stone, integrally colored architectural block are preferred building materials. Clapboard materials such as cement siding ("Hardy Plank" or similar) and shake shingles are encouraged as accent building materials. E.I.F.S. and metal may be acceptable as accent materials only, and should not comprise more than 20% of the wall area of any façade. Vinyl or metal siding is discouraged.*

*Building design and architecture shall relate to and be harmonious with the surrounding neighborhood in terms of texture, scale, mass, proportion, materials, and color. Buildings should be designed with stylistic harmony and aim to serve people of all ages and abilities.*

**Findings:**



**Building Design.** The proposed multi-family units have slightly varied front setbacks and façade elements, providing relief to the massing of the building. Four open gable roof segments, layered balconies, and large vertical windows help ground the design and provide vertical interest. Awnings are proposed above doorways and exposed balconies, which clearly signify the front entrances are along S. Park Boulevard. Building designs and materials must also be provided for the boathouse.

**Building Materials.** The proposed elevations feature white and grey materials; however, the materials are not specified within the plans. The applicant must specify what materials are proposed with labeled building elevations so that compliance may be determined. Material samples and color elevations must be provided to and approved by the Planning Commission.

## 7. ENGINEERING / STORMWATER MANAGEMENT

**Zoning Ordinance Standards:** *Appropriate measures shall be taken to ensure that the removal of stormwater will not adversely affect adjoining properties or the capacity of the public storm drainage system and shall comply with State and Federal standards. Provisions shall be made for the construction of stormwater facilities, and the prevention of erosion and dust. Surface water on all paved areas shall be collected at intervals so that it will not obstruct the flow of vehicles or pedestrian traffic and will not create nuisance ponding in paved areas.*

*Adequate services and utilities and improvements shall be available or provided, located and constructed with sufficient capacity and durability to properly serve the development. All utilities shall be located underground unless modified by the Planning Commission based on persuasive evidence provided by the applicant indicating it is not feasible to locate utilities underground. Where possible and practical, drainage design shall recognize existing natural drainage patterns.*

**Findings:** Stormwater pre-treatment infrastructure is not proposed for this Project. All stormwater and utility requirements must be addressed to the satisfaction of the Village Engineer (see report dated August 16).

## 8. LIGHTING

**Zoning Ordinance Standards:** *Exterior lighting must be arranged so that it is deflected away from adjoining properties and so that it does not impede vision of drivers along adjacent streets.*

**Findings:** Fully shielded building-mounted lighting and light pole fixtures are proposed within the Project; however, their mounting heights are not provided at this time. The applicant must provide proposed mounting heights so that compliance with Zoning Ordinance can be determined. Parking areas, driveways, and pedestrian walkways within the site are proposed to be adequately illuminated (see table below).

Standards	Required (footcandles – fc.)	Proposed Lighting	Compliance
Max. Height of Light Fixtures	22' or the height of the building, whichever is less.	<u>Unknown</u>	<u>Unknown</u>
Max. Illumination at Any Given Point	10 fc.	9.5 fc.	Yes
Max. Illumination at the Property Line	0.5 fc.	0.5 fc.	Yes





# Recommendation

At this time, we recommend the applicant make revision to the site plan addressing the outstanding items in this report (along with any outstanding items from the Village Engineer and Fire Marshal) and re-submit to the Village for future review.

Concurrently, the Village will explore text amendments to Article 9: the MU Mixed Use District to clarify the use of multiple-family dwellings as a permitted use, and the allowable density per acre.

If you have any questions, please do not hesitate to contact us. Thank you.

Respectfully submitted,

**McKENNA**

Gage Belko, AICP  
Associate Planner

Ashley Amey  
Assistant Planner

**CC:** **Village Manager**, Mr. Darwin McClary ([mcclaryd@lakeorion.org](mailto:mcclaryd@lakeorion.org))  
**Village Clerk**, Ms. Susan Galeczka ([galeczkas@lakeorion.org](mailto:galeczkas@lakeorion.org))

21 E. Church Street, Lake Orion, MI 48362



# MCKENNA

October 25, 2023

Mr. Darwin McClary  
Village Manager  
Village of Lake Orion  
21 E. Church St.  
Lake Orion, MI 48362

**Subject: PC 23-005 – Starboard Orion, Site Plan Review #2**

Dear Mr. McClary:

Starboard Orion (the “Project”) is a site plan request for a 12-unit multiple-family development at 10 S. Park Boulevard. The site contains three parcels (09-02-460-032, 09-02-460-033, & 09-02-460-036), southwest of the Flint Street and S. Park Boulevard (M-24) intersection. The Project scope includes:

- Demolition of two former marina buildings;
- Construction of 11 townhouses in a new 3-story building fronting on S. Park Boulevard;
- Rehabilitation of an existing boat house into a one-unit dwelling;
- Improvements to the Lake Orion boardwalk frontage.
- Harbormaster building to be used as continued office space.

## SUMMARY OF COMPLIANCE

Ordinance Standards	Compliance	Comments
Use & Harmonious Design	<u>May Comply</u>	Permitted use subject to BZA decision on variance request.
Dimensional Standards	<u>May Comply</u>	Density subject to BZA decision on use variance request.
Natural Features / Landscaping	<u>May Comply.</u>	Common space in ROW; Landscaping diversity waiver from Planning Commission required.
Access & Circulation	<u>May Comply</u>	T-turn/plaza in ROW subject to Council approval; Lake St. pedestrian access required; possible Village access easement; see item #4 and Village Engineering review.
Parking & Loading	Complies.	See item #5.
Building Design & Architecture	Complies.	Material samples to be provided to Planning Commission.
Stormwater Management	TBD	Subject to Village Engineering review and approval.
Lighting	Complies.	See item #8.

## SITE HISTORY / BACKGROUND

### HEADQUARTERS

235 East Main Street  
Suite 105  
Northville, Michigan 48167

O 248.596.0920  
F 248.596.0930  
MCKA.COM

Communities for real life.





This Project site, along with ten other parcels, was previously submitted by Mocer Companies for review and consideration as a Planned Unit Development (PUD). Encompassing a much larger footprint for redevelopment, it was originally designed as a mixed-use development including several apartments, single-family homes, townhomes, and live/work units. A snack shop and fuel pump station were also to be improved as part of the PUD, as well as infrastructure improvements to both Lake Street and Flint Street. While the PUD Eligibility was granted by the Planning Commission, and subsequently by Village Council (June of 2022), the project was later withdrawn by the applicant and the file has been closed.

This application, Starboard Orion, is for a smaller site (mostly located on the former Orion Marine Center at 10 S. Park Boulevard), directly adjacent to Green's Park, and with access to lake frontage to the west and south. Improvements to Lake and Flint Street are being pursued under separate review. While these projects are being pursued separately, they are contiguous, under the same development control, and will be developed under overlapping timelines.







# Site Plan Review

Standards for Site Plan Approval are set forth by [Article 19: Administrative Procedures and Standards](#). This project is reviewed against the Village's [Zoning Ordinance](#), Master Plan, existing site conditions, and sound planning and design principles.

Underlined text denotes items that require additional information, consideration, or a waiver from the Code.

We offer the following comments for your consideration:

## 1. USE & HARMONIOUS DESIGN

**Zoning Ordinance Standards:** *All elements of the site must be harmoniously and efficiently designed in relation to the topography, size, and type of land, and the character of the adjacent properties and the proposed use. The site will be developed so as not to impede the normal and orderly development or improvement of surrounding properties for uses permitted on such property.*

**Findings:** The site is zoned the MU, Mixed Use District where, per section 9.02(A.10), single-family and multiple-family dwelling units are permitted when located above the ground story and subject to the ground story being only a non-residential use.

The applicant is proposing multi-family residential along M-24 and reutilization of the harbormaster's building as a continued office use. According to the Zoning Ordinance, multi-family residential is not a permitted use unless there is a non-residential (commercial) component on the ground floor facing M-24, with dwelling units on the upper level(s). This use classification would limit density to 10 units per acre.

Clarification – and a variance – is required from the Board of Zoning Appeals to allow the use of the land for multifamily residential only, without a commercial component.

## 2. DIMENSIONAL STANDARDS

**Zoning Ordinance Standards:** *The site plan must comply with the district requirements for minimum floor area, height of building, lot size, yard space, density and all other requirements as set forth in the Schedule of Regulations.*

**Findings:** The table below outlines the dimensional standards required in the MU, Mixed Use District and whether compliance has been met:

Dimensional Measurement	Required	Proposed	Comments
Max. Density	10 units per acre	<u>12 units / 0.83 acres</u>	<u>May Comply.</u>
Front Yard Setback (Build-To Line)	10' (min) 25' (max)	10' (min) 25.3' (max)	Complies.
Min. Side Yard Setback (both)	0'	10' (north) 3.2' (south)	Complies..
Min. Rear Yard Setback	25'	58.5' (New building) <u>0' (Boathouse)</u>	Complies.
Min. Water Setback	25'	58.5' (New building)	Complies.



Dimensional Measurement	Required	Proposed	Comments
		0' (Boathouse)	
Min. Floor Area: 2-Bedroom Unit	800 sq. ft.	>800 sq. ft.	Complies.
Max. Building Height	36'	36'	Complies.
Max. Lot Coverage (by structures)	50%	33%	Complies.

**Nonconforming Structures and Use of Land.** The proposed boat house, which deviates from the rear and water setback requirements, is a legal pre-existing, nonconforming structure (by way of encroachments) and use (by way of dwelling within an accessory structure). This is evidenced by the site plans the applicant attached, which were approved in September 1992, indicating a “watchman’s quarters” within part of the boathouse structure. The building has been occupied since the Orion Marina closed its doors and possibly before that. Though this is a protected nonconformity, a 12-month period of non-use would require any such nonconforming use to cease.

The boat house and harbormaster building **may** continue as a residential and office use, respectively, and renovations/modernization are limited to 50% of the true cash value. Additionally, these structures shall not be enlarged and any dwelling space within the boathouse shall not be expanded within the structure. The applicant must submit the plans for these two structures and indicate costs for improving these structures.

**Density.** Density is determined by the use of the land. The permitted use is a mixed-use multifamily building, with commercial uses on the ground floor, fronting M-24. For such mixed-use buildings, residential density is limited to 10 units per acre. This project is proposed as a residential-only, multifamily development, which is not permitted by-right or through special land use per Section 9.02. A variance from the Board of Zoning Appeals would be required to allow for the proposed use.

### 3. NATURAL FEATURES, SCREENING & LANDSCAPING

**Zoning Ordinance Standards:** *The existing natural landscape shall be preserved in its natural state as much as possible, by minimizing tree and soil removal and by topographic modifications that result in maximum harmony with adjacent properties.*

*There must be reasonable visual and sound privacy. Fences, walks, barriers, and landscaping must be used, as appropriate, for the protection and enhancement of property and the safety and privacy of occupants and users.*

#### **Findings:**

**Landscaping and Plant Material.** The applicant has provided a landscaping plan on sheets LA-100 and LA-101. The following landscaping and screening standards are relevant to this Project:

**Parking Lot Landscaping.** Perimeter landscaping must be provided along the edge of any parking lot facing and located within 100 feet of a public right-of-way or lake. Per our previous comment, the applicant has provided the ratio of trees per lake and street frontage, which demonstrates compliance with these standards.

The southern boundary of Green’s Park is enclosed by a 6’ chain link fence on the western side and a decorative brick and cast-iron fence on the eastern side. We recommend the applicant continue the decorative brick and cast-iron fence and provide additional screening of the parking area from the right of way via upright evergreen trees.



**Right-of-Way Landscaping.** The applicant has noted that landscaping within the rights-of-way is not possible due to the placement of existing utilities.

**Plant Materials and Landscape Elements.** The proposed plant materials and landscape elements must be of high quality, be of diverse species types, and follow the required plant material specifications. While the proposed plant material is of high quality, they do not fulfill diversity requirements, outlined in Section 15.02(H)(2). This standard is to ensure overall resistance to disease, and therefore no plant species shall consist of more than 20% of any particular type of plant material provided on-site. The Planning Commission may opt to waive this requirement, should they find the site's landscaping to be sufficient.

**Existing Plant Materials.** Per our previous review letter, we recommended the applicant incorporate existing plant material into the proposed landscaping plan. The applicant has provided a survey that depicts the existing trees on site alongside a table indicating which trees will be saved. The landscaping plans also indicate these tree's locations. 9 trees are proposed to be saved. It should be noted that tree 727 is not within the project boundaries.

**Common Open Space Area.** Per section 9.03(C.6), a minimum area of 10% of the lot area must include site amenities (pocket parks, plazas, pedestrian areas) over and above the minimum landscape and open space Ordinance requirements. The applicant has provided a boardwalk and docks. The applicant has also noted that there are areas for residents to sit next to the water. We recommend the applicant consider installing benches, if possible. The applicant is also proposing a plaza and corresponding landscaping outside of the parcel boundaries to the north within the right of way. No other development or use of land in the right of way, beyond what is in the Lake Street Roadway Configuration agreement, is permitted without additional Village approval. It must be clarified whether such approval is being sought and who is to maintain these improvements should they be approved. Open-space calculations must be contained within the site.

**Environmentally Sensitive Design.** Per section 9.03(D) MU sites must incorporate environmentally sensitive design in order to protect and enhance water quality, the environment, community health, and the general public welfare. To meet this, the Project must incorporate more than just the pre-treatment stormwater. The applicant has since stated that they intend to preserve existing trees, as indicated in the Topographic Survey and Landscaping plan.

#### 4. ACCESS & CIRCULATION

**Zoning Ordinance Standards:** *All buildings or groups of buildings shall be so arranged as to permit convenient and direct emergency vehicle access.*

*The arrangement of public or common ways for vehicular and pedestrian circulation shall respect the pattern of existing or planned streets or pedestrian or bicycle pathways in the vicinity of the site. Streets and drives that are a part of an existing or planned street system serving adjacent developments shall be of an appropriate width to the volume of traffic they are planned to carry and shall have a dedicated right-of-way equal to that specified in a recognized source of reference.*

*There shall be a pedestrian circulation system that is insulated as completely as possible from the vehicular circulation system.*

*Where the Planning Commission determines, after expert consultation, that public safety would be substantially promoted in a particular location by reducing the number of points of ingress and egress between private property and an adjoining highway, cross-access may be required. Shared drive approaches between adjoining parcels may also be permitted under this Section.*



**Findings:**

**Vehicular Access.** Vehicular access to the site is provided from the driveway off Flint Street, the existing curb cut on S. Park Boulevard will be eliminated as part of this project. The new rear driveway connects to both Lake Street and the proposed site and is a much better option compared to the current driveway location which is too close to the intersection. The design and construction of the Lake-Flint roadway reconfiguration is being reviewed under separate cover, as this involves significant public right-of-way modifications. The applicant has proposed moving the existing driveway towards the west.

Additionally, the applicant submitted a proposed vehicle routing plan for fire engines. Per our previous recommendation, the applicant has added a turn-around for fire engines. The location of this T-turn turn-around is the northwestern portion of the site, where Lake Street is presently. The applicant has stated that these plans have been approved by the Fire Marshall, however, much of the proposed T-turn is located outside of the project boundaries, within the right of way, and would be subject to Village Council approval.

The applicant notes that trash disposal will consist of occupants rolling their trash outside. While the site can accommodate a garbage truck, via the newly proposed T-turn and 26-foot wide maneuvering lane, it is required that collection points be identified for each unit as access to the southernmost unit may be impaired by parked vehicles. The unit's driveway parking and overall vehicular access is not feasible.

**Boat Docks.** For aquatic vehicles, 16 dock spaces are utilized for residents and 11 are leasable, adding up to 27 total spots within the marina. The docks depicted outside of the project scope are Village-owned, but not a part of the project scope. The fueling station and snack shack to the west will be rented out seasonally for the community.

**Pedestrian Connectivity.** There is an existing sidewalk along Flint Street and Park Boulevard rights-of-way which will be maintained. The applicant proposes to extend the sidewalk from the proposed units so that it connects to the sidewalk within the Park Boulevard right-of-way. Additionally, a sidewalk extending from the northern portion of the building connects to the sidewalk within the Flint Street right-of-way. Finally, there are existing boardwalks along portions of the waterfront, which the applicant proposes to connect to allow for pedestrian mobility.

For Mixed-Use developments, Section 9.03(C) indicates that sidewalks are required both within the site and between other MU sites. While the proposed project fulfills connectivity requirements along M-24, a sidewalk is required along Lake Street. We recommend that the internal sidewalks be connected as much as possible.

**Easements.** There is a village-owned piece of land just north of the "boathouse" that is now cut-off from access. The Village may choose to request an access easement.

## 5. PARKING & LOADING

**Zoning Ordinance Standards:** *Off-street parking, loading, and unloading areas and outside refuse storage areas, or other storage areas that face or are visible from adjacent homes, or from public thoroughfares, shall be screened by walls, fencing or landscaping of effective height.*

**Findings:** Each residential unit includes a one-car garage and one driveway space.

There are nine off-street (guest) spaces in the parking lot. Including driveway spaces and proposed ADA parking space, the total proposed parking configuration will add up to 29 spaces. This number of parking spaces complies with multiple-family parking standards, which require two spaces per unit, or 24 required spaces. We note an additional concern with the proposed T-turn for service vehicles, which will likely encourage passenger or overflow parking, which could severely impact public safety.





## 6. BUILDING DESIGN & ARCHITECTURE

**Zoning Ordinance Standards:** *All buildings along the street frontage of the parcel shall have a primary entrance or entrances on the façade facing the street. All primary entrances must be accessible to pedestrians. Primary entrances should be highlighted through the incorporation of architectural features such as canopies, awnings, porticos, raised cornice parapets over the doors arches, large windows, or architectural details such as tile work and moldings that are integrated into the building structure and design.*

*Building materials used on exteriors of new buildings shall be appropriate for the character and size of the proposed building, and shall complement the materials used on surrounding buildings and in the Village Downtown. Brick, stone, integrally colored architectural block are preferred building materials. Clapboard materials such as cement siding ("Hardy Plank" or similar) and shake shingles are encouraged as accent building materials. E.I.F.S. and metal may be acceptable as accent materials only, and should not comprise more than 20% of the wall area of any façade. Vinyl or metal siding is discouraged.*

*Building design and architecture shall relate to and be harmonious with the surrounding neighborhood in terms of texture, scale, mass, proportion, materials, and color. Buildings should be designed with stylistic harmony and aim to serve people of all ages and abilities.*

### **Findings:**

**Building Design.** The proposed multi-family units have slightly varied front setbacks and façade elements, providing relief to the massing of the building. Four open gable roof segments, layered balconies, and large vertical windows help ground the design and provide vertical interest. Awnings are proposed above doorways and exposed balconies, which clearly signify the front entrances are along S. Park Boulevard. The applicant states that there will be no modifications to the existing boathouse with the exception of upgrades to meet fire, health, and safety codes. Should the applicant choose to update the façade of the building, including design and material, these details must also be provided.

**Building Materials.** The proposed elevations feature white and grey materials including asphalt shingles, stone, shake siding, panel siding, and horizontal siding, which follow the Zoning Ordinance recommendation of utilizing shake shingles and stone as building materials. Material samples must be provided to and approved by the Planning Commission.



## 7. ENGINEERING / STORMWATER MANAGEMENT

**Zoning Ordinance Standards:** *Appropriate measures shall be taken to ensure that the removal of stormwater will not adversely affect adjoining properties or the capacity of the public storm drainage system and shall comply with State and Federal standards. Provisions shall be made for the construction of stormwater facilities, and the prevention of erosion and dust. Surface water on all paved areas shall be collected at intervals so that it will not obstruct the flow of vehicles or pedestrian traffic and will not create nuisance ponding in paved areas.*

*Adequate services and utilities and improvements shall be available or provided, located and constructed with sufficient capacity and durability to properly serve the development. All utilities shall be located underground unless modified by the Planning Commission based on persuasive evidence provided by the applicant indicating it is not feasible to locate utilities underground. Where possible and practical, drainage design shall recognize existing natural drainage patterns.*

**Findings:** Stormwater pre-treatment infrastructure is not proposed for this Project. All stormwater and utility requirements must be addressed to the satisfaction of the Village Engineer.

## 8. LIGHTING

**Zoning Ordinance Standards:** *Exterior lighting must be arranged so that it is deflected away from adjoining properties and so that it does not impede vision of drivers along adjacent streets.*

**Findings:** Fully shielded building-mounted lighting and light pole fixtures are proposed within the Project; however, their mounting heights are not provided at this time. Parking areas, driveways, and pedestrian walkways within the site are proposed to be adequately illuminated (see table below).

Standards	Required (footcandles – fc.)	Proposed Lighting	Compliance
Max. Height of Light Fixtures	22' or the height of the building, whichever is less.	8'-12'	Complies
Max. Illumination at Any Given Point	10 fc.	9.5 fc.	Complies
Max. Illumination at the Property Line	0.5 fc.	0.5 fc.	Complies



# Recommendation

We find that the project complies with the overall intent of the Zoning Ordinance; however, there are several items that remain to be addressed to bring the project into compliance. These can be addressed administratively or through the appropriate Village decision-making bodies. Therefore, we recommend that the preliminary site plan be approved, subject to the following items being addressed by the Planning Commission:

- Waiver of the plant diversity requirements for the proposed landscaping is granted.
- Building materials samples are provided and approved.

Further, we recommend that the site plan be approved, subject to the following items being addressed administratively during final site plan approval:

- Pedestrian connections through the site are clearly shown (boardwalk access).
- Open space calculations are revised to include only areas within the project site (not in the ROW).
- Complete screening of the parking area from Greens Park is provided along the southern property line.
- The proposed site layout for trash collection is approved by the anticipated waste management service.
- Preliminary stormwater management is approved by the Village Engineer; detailed engineering review and approval is required prior to submitting for building permits.
- A note is included on the site plan stating future improvements to the boathouse and harbormaster structures will be limited to 50% of the true cash value over the previous 12 months, subject to review and approval by the Township Building Official.

Finally, we recommend that the preliminary site plan be approved, subject to the following items being addressed by the appropriate bodies, prior to administrative review and approval of the final site plan:

- Board of Zoning Appeals grants a use variance from the requirement that states multiple family dwellings shall only be located above the ground floor, subject to the ground floor being a non-residential use.
- Village Council approves the proposed emergency access (T-turn) and pedestrian plaza encroachment into the right of way.

Should the approvals from the Board of Zoning Appeals and the Village Council not be granted, substantial changes to the proposed site layout will be required. If necessary, we recommend that the applicant address the concerns noted in the staff review letters on an amended site plan and request approval from the Planning Commission at that time.

If you have any questions, please do not hesitate to contact us. Thank you.

Respectfully submitted,

**McKENNA**

  
Gage Belko, AICP  
Associate Planner

  
Ashley Amey  
Assistant Planner

**CC:** **Village Manager**, Mr. Darwin McClary ([mcclaryd@lakeorion.org](mailto:mcclaryd@lakeorion.org))  
**Village Clerk**, Ms. Susan Galeczka ([galeczkas@lakeorion.org](mailto:galeczkas@lakeorion.org))  
**Village Engineers**, Ms. Carol Thurber, Ms. Wendy Spence (Nowak and Fraus)  
**Township Fire Marshal**, Mr. Jeffrey Williams