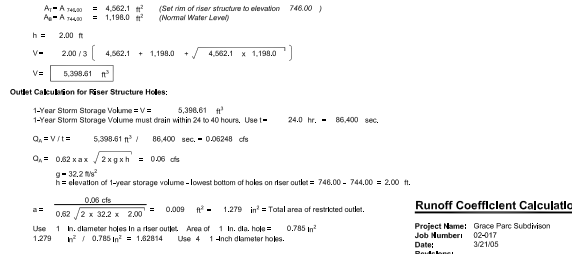
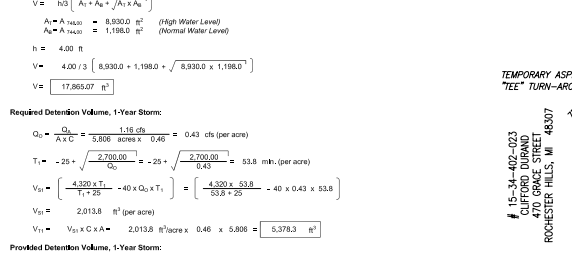
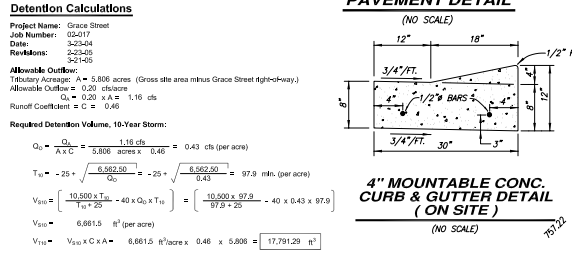
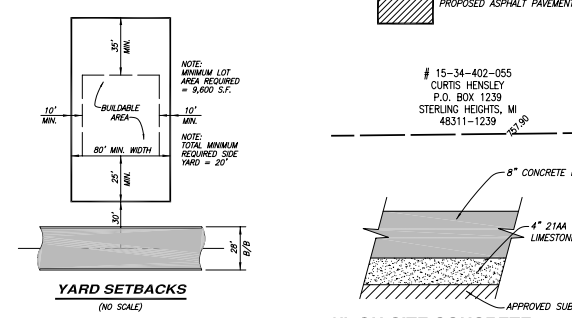


LEGEND

	EXISTING GRADE		EXISTING TREES		PROPOSED SANITARY SEWER
	EXISTING CONTOURS, 2' INTERVAL		PROP. ON-SITE CONCRETE WITH INTERLOCK 4" MOUNTABLE CURB PAVEMENT		PROPOSED STORM SEWER
	EXISTING ASPHALT PAVEMENT		PROPOSED CONCRETE		PROPOSED WATER MAIN W/ TYPICAL GATE VALVE & WELL & STD. HYDRANT ASSEMBLY
	PROPOSED ASPHALT PAVEMENT		PROPOSED CONCRETE		PROPOSED WATER MAIN W/ TYPICAL GATE VALVE & WELL & STD. HYDRANT ASSEMBLY



CURVE DATA

NO.	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD LENGTH	CHORD BEARING
1	61.00'	2.99'	28.73°	34.00'	S 89°14'21" E
2	61.00'	2.99'	28.73°	34.00'	S 21°32'51" E
3	60.00'	33.79'	32°17'47"	33.31'	N 15°26'35" E
4	78.50'	108.37'	35°27'59"	149.23'	S 43°41'09" E
5	60.00'	32.81'	31°19'57"	32.40'	S 72°44'19" W
6	260.00'	48.30'	10°39'15"	48.28'	S 8°30'44" W
7	260.00'	109.27'	21°14'17"	109.10'	S 26°20'15" W
8	260.00'	29.70'	08°32'40"	29.68'	N 08°28'19" E
9	201.45'	22.84'	06°29'30"	22.83'	S 07°02'27" W
10	260.00'	109.27'	21°14'17"	109.10'	S 26°20'15" W
11	200.00'	72.85'	19°28'50"	72.50'	S 79°19'28" W
12	260.00'	75.68'	16°40'36"	75.41'	N 80°59'36" E
13	200.00'	58.20'	16°40'36"	58.00'	N 80°59'36" E
14	115.00'	21.20'	8°59'55"	19.09'	N 45°40'06" W
15	67.00'	48.81'	41°44'30"	47.74'	S 20°11'37" W
16	43.50'	68.12'	38°29'55"	61.51'	N 43°41'09" E
17	230.00'	68.94'	16°40'28"	66.70'	N 80°59'36" E
18	230.00'	68.94'	16°40'28"	66.71'	N 80°59'36" E
19	230.00'	108.59'	27°03'11"	107.26'	N 03°46'51" W
20	230.00'	26.27'	08°32'40"	26.26'	S 08°28'19" W

CONTRACTOR'S NOTE

The locations of existing underground utilities are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities before commencing work. He agrees to be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve any and all underground utilities. The contractor shall be responsible for adhering to all applicable local, state, and federal standards, specifications, and guidelines for construction.

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 (TOLL FREE) for the location of underground utilities.

SHEET INDEX

- TENTATIVE PRELIMINARY PLAN
- EXISTING CONDITIONS AND NATURAL FEATURES BASE PLAN
- DRAINAGE PATTERN AND SLOPE GRADIENT SKETCH
- EXISTING TREE AND TREE REPLACEMENT PLAN
- TREE REPLACEMENT PLAN SUPPLEMENTAL SHEET

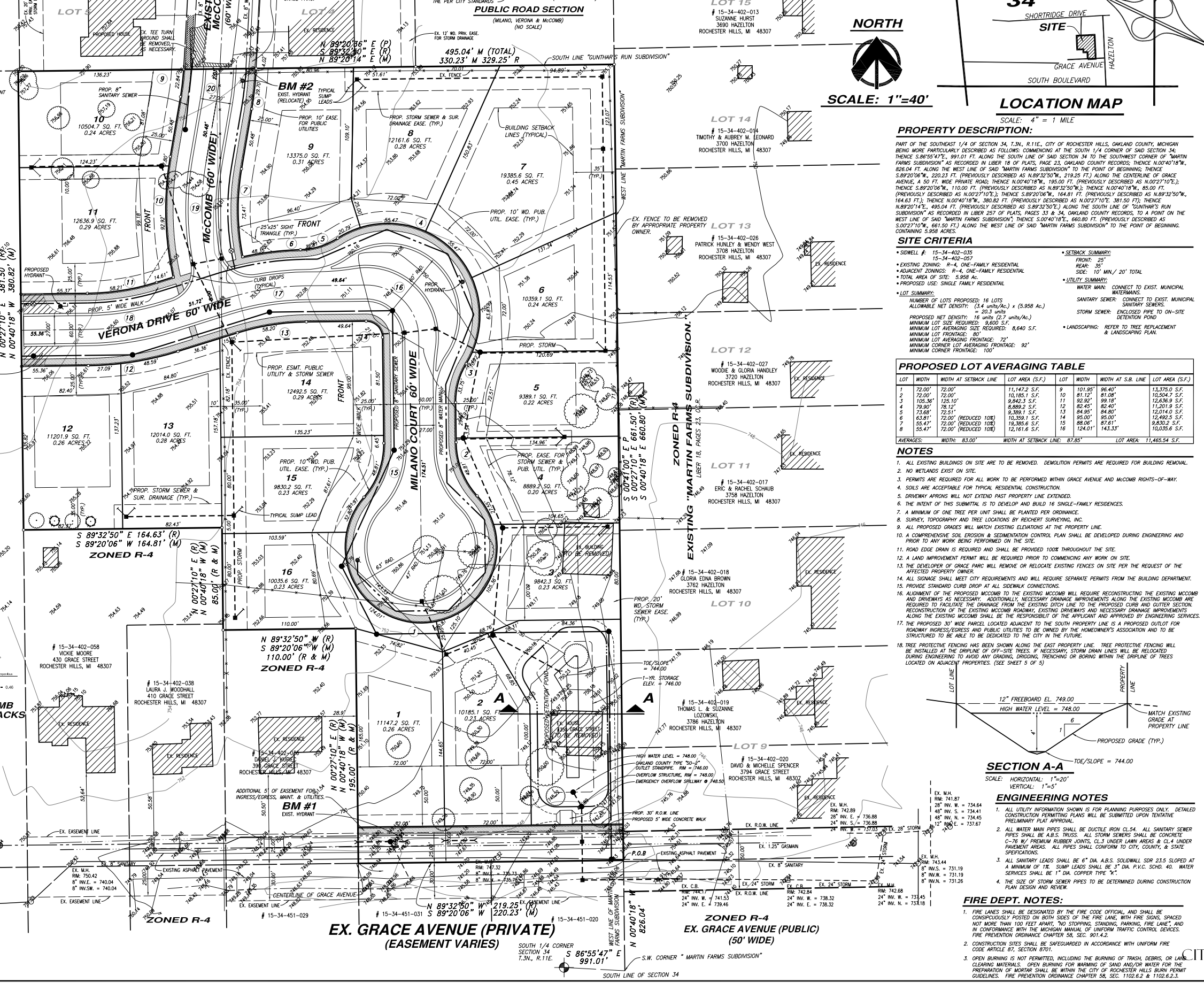
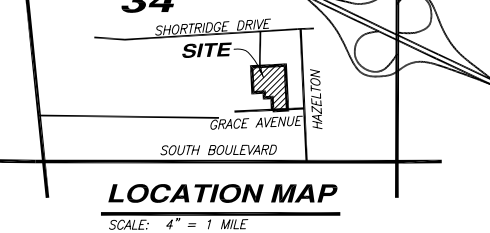
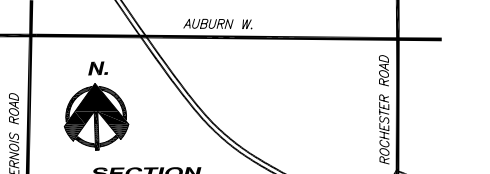
1. ROADWAY GEOMETRIC PLAN

NOT TO BE USED AS CONSTRUCTION DRAWINGS

EXISTING "GUNTHER'S RUN" LIBER 257, PAGES 33-34, O.C.R. ZONED R-4

APPLICANT & OWNER:
GRACE STREET DEVELOPMENT, INC.
C/O FRANCO C. MANCINI
47858 VAN DYKE AVENUE
SHELBY TWP., MI 48317

OWNERSHIP IS FEE SIMPLE.



PROPERTY DESCRIPTION:

PART OF THE SOUTHWEST 1/4 OF SECTION 34, T.3N., R.11E., CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 34; THENCE S.89°20'06" W., 229.23 FT. ALONG THE SOUTH LINE OF SAID SECTION 34 TO THE SOUTHWEST CORNER OF "MARTIN FARMS SUBDIVISION" AS RECORDED IN LIBER 18 OF PLATS, PAGE 23, OAKLAND COUNTY RECORDS; THENCE N.00°40'18" W., 826.04 FT. ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING; THENCE S.89°20'06" W., 110.00 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50" W.); THENCE N.00°40'18" W., 85.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10" E.); THENCE S.89°20'06" W., 164.81 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50" W., 164.81 FT.); THENCE N.00°40'18" W., 360.82 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10" E., 360.82 FT.); THENCE N.89°20'14" E., 495.04 FT. (PREVIOUSLY DESCRIBED AS S.89°32'50" W.) ALONG THE SOUTH LINE OF "GUNTHER'S RUN SUBDIVISION" AS RECORDED IN LIBER 257 OF PLATS, PAGES 33 & 34, OAKLAND COUNTY RECORDS; TO A POINT ON THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION"; THENCE S.00°40'18" E., 660.80 FT. (PREVIOUSLY DESCRIBED AS S.00°27'10" E., 661.50 FT.) ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING. CONTAINING 5.908 ACRES.

SITE CRITERIA

- SETBACK SUMMARY:
 - FRONT: 25'
 - REAR: 35'
 - SIDE: 10' MIN./20' TOTAL
- WATER MAIN: CONNECT TO EXIST. MUNICIPAL WATER MAINS.
- SANITARY SEWER: CONNECT TO EXIST. MUNICIPAL SANITARY SEWERS.
- STORM SEWER: ENCLOSED PIPE TO ON-SITE RETENTION POND.
- LANDSCAPING: REFER TO TREE REPLACEMENT & LANDSCAPING PLAN.

PROPOSED LOT AVERAGING TABLE

LOT	WIDTH	WIDTH AT SETBACK LINE	LOT AREA (S.F.)	LOT	WIDTH	WIDTH AT S.B. LINE	LOT AREA (S.F.)
1	72.00'	72.00'	11,147.2 S.F.	9	101.95'	96.40'	13,379.0 S.F.
2	72.00'	72.00'	10,185.1 S.F.	10	81.12'	81.08'	10,504.7 S.F.
3	105.36'	125.10'	9,842.3 S.F.	11	92.92'	89.18'	12,636.9 S.F.
4	79.50'	78.12'	6,989.2 S.F.	12	82.45'	82.40'	11,291.9 S.F.
5	73.68'	72.51'	9,389.1 S.F.	13	84.95'	84.80'	12,014.0 S.F.
6	63.81'	72.00' (REDUCED 10%)	10,359.1 S.F.	14	95.00'	95.00'	12,482.5 S.F.
7	55.47'	72.00' (REDUCED 10%)	19,385.6 S.F.	15	88.06'	87.61'	9,830.2 S.F.
8	55.47'	72.00' (REDUCED 10%)	12,161.6 S.F.	16	124.01'	143.33'	10,035.6 S.F.

NOTES

- ALL EXISTING BUILDINGS ON SITE ARE TO BE REMOVED. DEMOLITION PERMITS ARE REQUIRED FOR BUILDING REMOVAL.
- NO WETLANDS EXIST ON SITE.
- PERMITS ARE REQUIRED FOR ALL WORK TO BE PERFORMED WITHIN GRACE AVENUE AND McCOMB RIGHTS-OF-WAY.
- SOILS ARE ACCEPTABLE FOR RESIDENTIAL CONSTRUCTION.
- DRIVEWAY APRONS WILL NOT EXTEND PAST PROPERTY LINE EXTENDED.
- THE INTENT OF THIS SUBMITTAL IS TO DEVELOP AND BUILD 16 SINGLE-FAMILY RESIDENCES.
- A MINIMUM OF ONE TREE PER UNIT SHALL BE PLANTED PER ORDINANCE.
- SURVEY, TOPOGRAPHY AND TREE LOCATIONS BY REICHERT SURVEYING, INC.
- ALL PROPOSED GRADES WILL MATCH EXISTING ELEVATIONS AT THE PROPERTY LINE.
- A COMPREHENSIVE SOIL EROSION & SEDIMENTATION CONTROL PLAN SHALL BE DEVELOPED DURING ENGINEERING AND PRIOR TO ANY WORK BEING PERFORMED ON THE SITE.
- ROAD EDGE DRAIN IS REQUIRED AND SHALL BE PROVIDED 100% THROUGHOUT THE SITE.
- A LAND IMPROVEMENT PERMIT WILL BE REQUIRED PRIOR TO COMMENCING ANY WORK ON SITE.
- THE DEVELOPER OF GRACE PARC WILL REMOVE OR RELOCATE EXISTING FENCES ON SITE PER THE REQUEST OF THE AFFECTED PROPERTY OWNER.
- ALL SIGNAGE SHALL MEET CITY REQUIREMENTS AND WILL REQUIRE SEPARATE PERMITS FROM THE BUILDING DEPARTMENT.
- PROVIDE STANDARD CURB DROP AT ALL SIDEWALK CONNECTIONS.
- ALIGNMENT OF THE PROPOSED McCOMB TO THE EXISTING McCOMB WILL REQUIRE RECONSTRUCTING THE EXISTING McCOMB AND DRIVEWAYS AS NECESSARY. ADDITIONALLY, NECESSARY DRAINAGE IMPROVEMENTS ALONG THE EXISTING McCOMB ARE REQUIRED TO FACILITATE THE DRAINAGE FROM THE PROPOSED CURB AND GUTTER SECTION. RECONSTRUCTION OF THE EXISTING McCOMB ROADWAY, EXISTING DRIVEWAYS AND NECESSARY DRAINAGE IMPROVEMENTS ALONG THE EXISTING McCOMB SHALL BE THE RESPONSIBILITY OF THE APPLICANT AND APPROVED BY ENGINEERING SERVICES.
- THE PROPOSED 30' WIDE PARCEL LOCATED ADJACENT TO THE SOUTH PROPERTY LINE IS A PROPOSED OUTLOT FOR ROADWAY INGRESS/EGRESS AND PUBLIC UTILITIES TO BE OWNED BY THE HOMEOWNER'S ASSOCIATION AND TO BE STRUCTURED TO BE ABLE TO BE DEDICATED TO THE CITY IN THE FUTURE.
- TREE PROTECTIVE FENCING HAS BEEN SHOWN ALONG THE EAST PROPERTY LINE. TREE PROTECTIVE FENCING WILL BE INSTALLED AT THE DRUMLINE OF OFF-SITE TRENCHES. IF NECESSARY, STORM DRAINAGE WILL BE RELOCATED DURING ENGINEERING TO AVOID ANY GRADING, DRIPPING, TRENCHING OR BORING WITHIN THE DRUMLINE OF TREES LOCATED ON ADJACENT PROPERTIES. (SEE SHEET 5 OF 5)

SECTION A-A
SCALE: HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

ENGINEERING NOTES

- ALL UTILITY INFORMATION SHOWN IS FOR PLANNING PURPOSES ONLY. DETAILED CONSTRUCTION PERMITTING PLANS WILL BE SUBMITTED UPON TENTATIVE PRIMARY PLAT APPROVAL.
- ALL WATER MAIN PIPES SHALL BE DUCTILE IRON C45.4. ALL SANITARY SEWER PIPES SHALL BE A.B.S. TRUSS. ALL STORM SEWERS SHALL BE CONCRETE C-76 W/ PREMIUM RUBBER JOINTS, CL3 UNDER LAWN AREAS & CL4 UNDER PARKING AREAS. ALL PIPES SHALL CONFORM TO CITY, COUNTY, & STATE SPECIFICATIONS.
- ALL SANITARY LEADS SHALL BE 6" DIA. A.B.S. SOLIDWALL SDR 23.5 SLOPED AT A MINIMUM OF 1% SLOPE. LEADS SHALL BE 3" DIA. P.V.C. SCHED. 40. WATER SERVICES SHALL BE 1" DIA. COPPER TYPE K.
- THE SIZE OF STORM SEWER PIPES TO BE DETERMINED DURING CONSTRUCTION PLAN DESIGN AND REVIEW.

FIRE DEPT. NOTES:

- FIRE LINES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL, AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE WITH FIRE SPACED NOT MORE THAN 100 FEET APART, "NO STOPPING, STANDING, PARKING, FIRE LANE", AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH UNIFORM FIRE CODE ARTICLE 87, SECTION 8701.
- OPEN BURNING IS NOT PERMITTED, INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR THE PREPARATION OF MORTAR SHALL BE WITHIN THE CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES. FIRE PREVENTION ORDINANCE CHAPTER 58, SEC. 1102.6.2 & 1102.6.2.3.

APPEX
ENGINEERING GROUP, INC.
CIVIL ENGINEERING & LAND PLANNING CONSULTANTS

CLIENT: GRACE STREET DEVELOPMENT, INC.
47858 VAN DYKE AVENUE
SHELBY TWP., MI 48317
(585) 729-1041

PROJECT: "GRACE PARC" SUBDIVISION

JOB NO: 02-017
DATE: 4/29/04
DRAWN BY: R.E.K.
CHECKED BY: W.E.M.

PART OF THE S.E. 1/4 OF SECTION 34,
CITY OF ROCHESTER HILLS, MACOMB CO., MI

PHONE: 586-739-5200
FAX: 586-254-5314

REVISIONS:

SHEET 1 OF 5

MUNICIPAL REVIEW NUMBERS:
CITY FILE #04-011

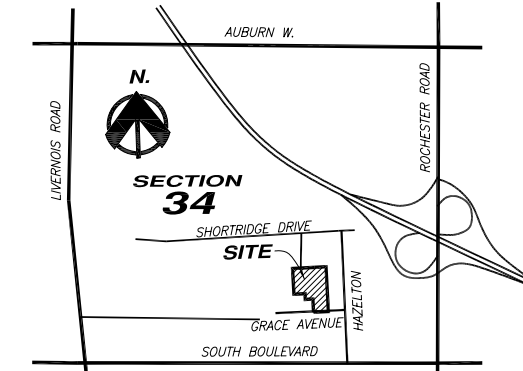
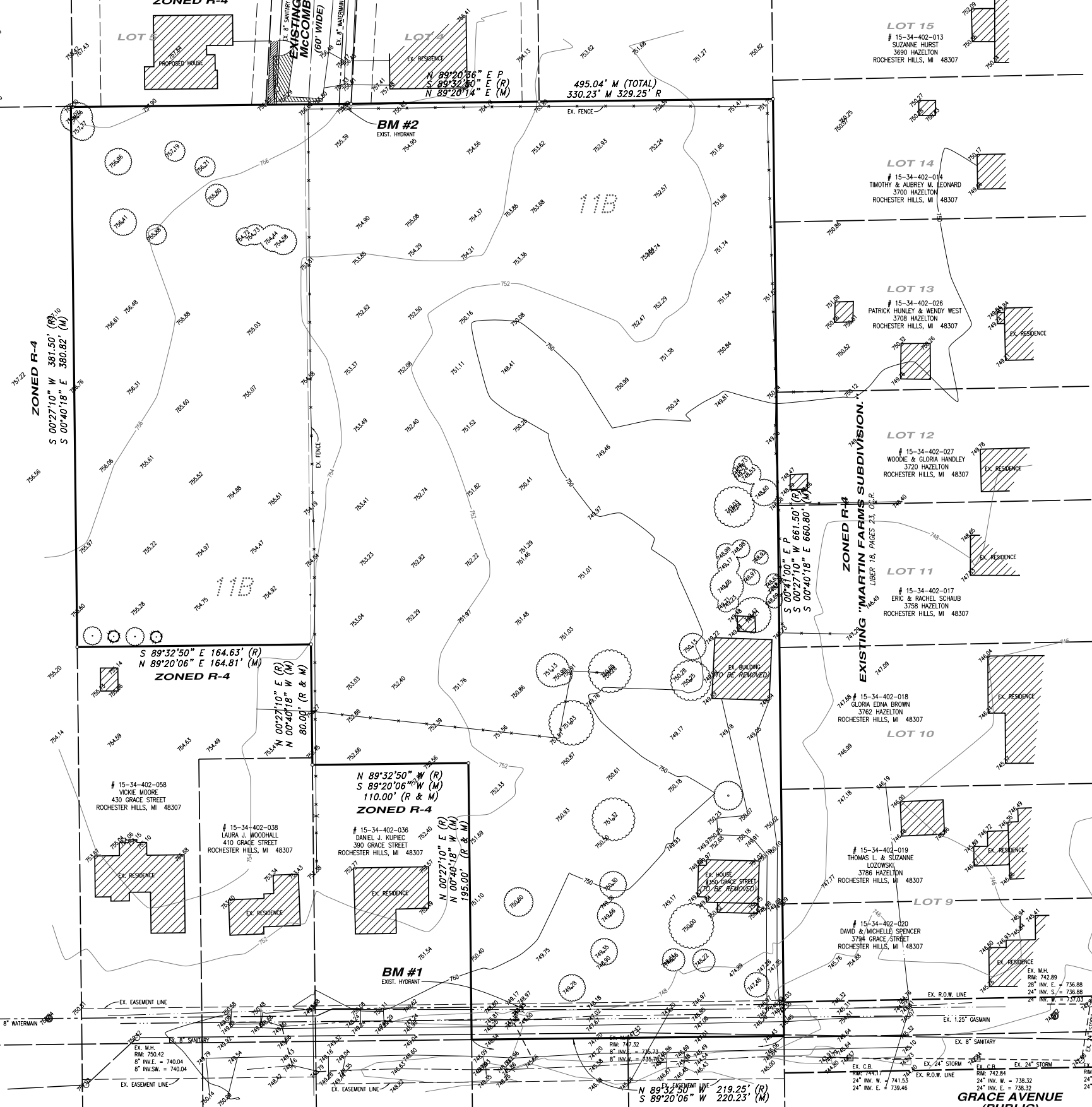
LEGEND

- EXISTING GRADE
- EXISTING CONTOURS, 2' INTERVAL
- EXISTING ASPHALT PAVEMENT
- EXISTING TREES

15-34-402-055
CURTIS HENSLEY
P.O. BOX 1239
STERLING HEIGHTS, MI
48311-1239

15-34-402-023
CLIFFORD DURAND
470 GRACE STREET
ROCHESTER HILLS, MI 48307

EXISTING "GUNTAR'S RUN"
LIBER 257, PAGES 33-34, O.C.R.
ZONED R-4



LOCATION MAP
SCALE: 4" = 1 MILE
NORTH

SCALE: 1"=40'

SITE CRITERIA

- SDEWELL #: 15-34-402-035
- 15-34-402-057
- EXISTING ZONING: R-4, ONE-FAMILY RESIDENTIAL
- ADJACENT ZONINGS: R-4, ONE-FAMILY RESIDENTIAL
- TOTAL AREA OF SITE: 5.958 AC.
- PROPOSED USE: SINGLE FAMILY RESIDENTIAL

BENCHMARKS

1. ARROW ON HYDRANT LOCATED 10 FEET EAST OF THE SOUTHEAST PROPERTY CORNER OF #390 GRACE STREET.
ELEV: 751.23
2. ARROW ON HYDRANT AT THE END OF MCCOMB STREET ON THE EAST SIDE.
ELEV: 758.18

SOILS

11B CAPAC SANDY LOAM (0 TO 4% SLOPES).
0"-8" VERY DARK GRAYISH-BROWN SANDY LOAM, 8"-20" BROWN CLAY LOAM,
20"-32" GRAYISH-BROWN CLAY LOAM, 32"-60" PALE BROWN LOAM,
MODERATELY SLOW PERMEABILITY, SLOW RUNOFF.

PROPERTY DESCRIPTION:

PART OF THE SOUTHEAST 1/4 OF SECTION 34, T.34N., R.11E., CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 34; THENCE S.86°55'47"E., 991.01 FT. ALONG THE SOUTH LINE OF SAID SECTION 34 TO THE SOUTHWEST CORNER OF "MARTIN FARMS SUBDIVISION" AS RECORDED IN LIBER 18 OF PLATS, PAGE 23, OAKLAND COUNTY RECORDS; THENCE N.00°40'18"W., 826.04 FT. ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING; THENCE S.89°20'06"W., 220.23 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W., 219.25 FT.) ALONG THE CENTERLINE OF GRACE STREET, A 50 FT. WIDE PRIVATE ROAD; THENCE N.00°40'18"W., 195.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E.); THENCE S.89°20'06"W., 110.00 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W.); THENCE N.00°40'18"W., 85.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E.); THENCE S.89°20'06"W., 164.81 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W., 164.63 FT.); THENCE N.00°40'18"W., 380.82 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E., 381.50 FT.); THENCE N.89°20'14"E., 495.04 FT. (PREVIOUSLY DESCRIBED AS S.89°32'50"E.) ALONG THE SOUTH LINE OF "GUNTAR'S RUN SUBDIVISION" AS RECORDED IN LIBER 257 OF PLATS, PAGES 33 & 34, OAKLAND COUNTY RECORDS; TO A POINT ON THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION"; THENCE S.00°40'18"E., 660.80 FT. (PREVIOUSLY DESCRIBED AS S.00°27'10"W., 661.50 FT.) ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING, CONTAINING 5.958 ACRES.

CONTRACTOR'S NOTE

The locations of existing underground utilities are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities before commencing work. He agrees to be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve any and all underground utilities.

The contractor shall be responsible for adhering to all applicable local, state, and federal standards, specifications, and guidelines for construction.

NOT TO BE USED AS CONSTRUCTION DRAWINGS

FIRE DEPT. NOTES:

1. FIRE LINES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL, AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LINE, WITH FIRE SIGNS, SPACED NOT MORE THAN 100 FEET APART, NO STOPPING, STANDING, PARKING, FIRE LINE, AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. FIRE PREVENTION ORDINANCE CHAPTER 58, SEC. 901.4.2.
2. CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH UNIFORM FIRE CODE ARTICLE 87, SECTION 8701.
3. OPEN BURNING IS NOT PERMITTED, INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. FIRE PREVENTION ORDINANCE CHAPTER 58, SEC. 1102.6.2 & 1102.6.2.3.

APPEX
ENGINEERING & LAND PLANNING CONSULTANTS
CIVIL ENGINEERING & LAND PLANNING CONSULTANTS
47745 VAN DYKE AVENUE
SHELBY TOWNSHIP, MI 48317
PHONE: 586-739-5200
FAX: 586-254-5314

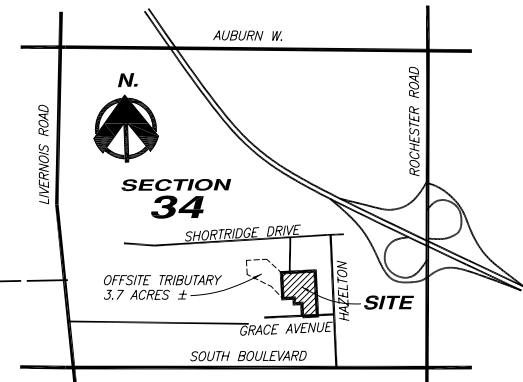
PROJECT: "GRACE PARC" SUBDIVISION
CLIENT: FRANCO C. MANGINI, FRANCIS J. MANGINI, INC., 47768 VAN DYKE AVE., SHELBY TOWNSHIP, MI 48317 (586) 726-1501
JOB NO: 02-017
DATE: 04/04/24
DRAWN BY: R.L.K.
CHECKED BY: W.E.M.

REVISIONS:

22/05 REVISION PER CITY MEETING
12/24 REVISION PER CITY REVIEW COMMENTS
12/24 REVISION PER CITY REVIEW COMMENTS
08/24 REVISION PER CITY PLAN REVIEW MEETING

EXISTING CONDITIONS AND NATURAL FEATURES BASE PLAN

SHEET 2 OF 5
MUNICIPAL REVIEW NUMBERS:
CITY FILE #04-011



LOCATION MAP
SCALE: 4" = 1 MILE

NORTH



SCALE: 1"=40'

PROPERTY DESCRIPTION:

PART OF THE SOUTHEAST 1/4 OF SECTION 34, T.3N., R.11E., CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 34; THENCE S.86°55'47"E., 991.01 FT. ALONG THE SOUTH LINE OF SAID SECTION 34 TO THE SOUTHWEST CORNER OF "MARTIN FARMS SUBDIVISION" AS RECORDED IN LIBER 18 OF PLATS, PAGE 23, OAKLAND COUNTY RECORDS; THENCE N.00°40'18"W., 826.04 FT. ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING; THENCE S.89°20'06"W., 220.23 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W., 219.25 FT.) ALONG THE CENTERLINE OF GRACE STREET, A 50 FT. WIDE PRIVATE ROAD; THENCE N.00°40'18"W., 195.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E.); THENCE S.89°20'06"W., 110.00 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W.); THENCE N.00°40'18"W., 85.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E.); THENCE S.89°20'06"W., 164.81 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W., 164.63 FT.); THENCE N.00°40'18"W., 380.82 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E., 381.50 FT.); THENCE N.89°20'14"E., 495.04 FT. (PREVIOUSLY DESCRIBED AS S.89°32'50"E.) ALONG THE SOUTH LINE OF "GUNTHER'S RUN SUBDIVISION" AS RECORDED IN LIBER 257 OF PLATS, PAGES 33 & 34, OAKLAND COUNTY RECORDS, TO A POINT ON THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION"; THENCE S.00°40'18"E., 660.80 FT. (PREVIOUSLY DESCRIBED AS S.00°27'10"W., 661.50 FT.) ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING, CONTAINING 5.958 ACRES.

LEGEND

- EXISTING GRADE
- EXISTING CONTOURS, 2' INTERVAL
- EXISTING GROUND SLOPE: 0 - 2%
- EXISTING GROUND SLOPE: 2 - 4%
- EXISTING GROUND SLOPE: 4 - 10%
- EXISTING DIRECTION OF NATURAL SURFACE DRAINAGE
- WATERSHED BOUNDARY & TOTAL TRIBUTARY AREA TO DETENTION POND

NOT TO BE USED AS CONSTRUCTION DRAWINGS

BENCHMARKS

1. ARROW ON HYDRANT LOCATED 10 FEET EAST OF THE SOUTHEAST PROPERTY CORNER OF #390 GRACE STREET. ELEV: 751.23
2. ARROW ON HYDRANT AT THE END OF MCCOMB STREET ON THE EAST SIDE. ELEV: 758.18

OFFSITE TRIBUTARY APPROXIMATELY 3.7 ACRES.

PROPOSED WATERSHED BOUNDARY & TOTAL TRIBUTARY AREA TO RETENTION POND, 5.806 ACRES.

APEX
ENGINEERING GROUP INC.
CIVIL ENGINEERING & LAND PLANNING CONSULTANTS
47745 VAN DYKE AVENUE
SHELBY TOWNSHIP, MI 48317
PHONE: 586-739-5200
FAX: 586-254-5314

PROJECT: "GRACE PARC" SUBDIVISION
CLIENT: FRANCO C. MANCINI, GRACE STREET DEVELOPMENT, INC., 12500 VAN DYKE AVENUE, SHELBY TOWNSHIP, MI 48317, (981) 729-1101
JOB NO: 02-017
DATE: 4/26/04
DRAWN BY: N.P.R.
CHECKED BY: W.L.M.

REVISIONS:

SEAL: **DRAINAGE PATTERN & SLOPE GRADIENT SKETCH**

SHEET **3** OF 5

MUNICIPAL REVIEW NUMBERS: CITY FILE #04-011

LEGEND

- EXISTING GRADE
- EXISTING CONTOURS, 2' INTERVAL
- EXISTING TREES
- EXISTING TREES TO BE REMOVED

PROPERTY DESCRIPTION:

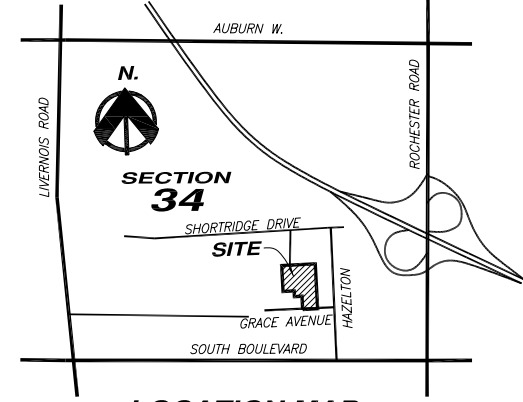
PART OF THE SOUTHEAST 1/4 OF SECTION 34, T.3N., R.11E., CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 34; THENCE S.86°55'47"E, 991.01 FT. ALONG THE SOUTH LINE OF SAID SECTION 34 TO THE SOUTHWEST CORNER OF "MARTIN FARMS SUBDIVISION" AS RECORDED IN LIBER 19 OF PLATS, PAGE 23, OAKLAND COUNTY RECORDS; THENCE N.00°40'18"W, 826.04 FT. ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING; THENCE S.89°20'06"W, 220.23 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W, 219.25 FT.) ALONG THE CENTERLINE OF GRACE STREET, A 50 FT. WIDE PRIVATE ROAD; THENCE N.00°40'18"W, 195.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E); THENCE S.89°20'06"W, 110.00 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W); THENCE N.00°40'18"W, 85.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E); THENCE S.89°20'06"W, 164.81 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W, 164.63 FT.); THENCE N.00°40'18"W, 380.82 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E, 381.50 FT.); THENCE N.89°20'14"E, 495.04 FT. (PREVIOUSLY DESCRIBED AS S.89°32'50"E) ALONG THE SOUTH LINE OF "GUNTHER'S RUN SUBDIVISION" AS RECORDED IN LIBER 257 OF PLATS, PAGES 33 & 34, OAKLAND COUNTY RECORDS; TO A POINT ON THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION"; THENCE S.00°40'18"E, 660.80 FT. (PREVIOUSLY DESCRIBED AS S.00°27'10"E, 661.50 FT.) ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING, CONTAINING 5.958 ACRES.

SITE CRITERIA

- SOWELL #: 15-34-402-035
- 15-34-402-057
- EXISTING ZONING: R-4, ONE-FAMILY RESIDENTIAL
- ADJACENT ZONINGS: R-4, ONE-FAMILY RESIDENTIAL
- TOTAL AREA OF SITE: 5.958 AC.
- PROPOSED USE: SINGLE FAMILY RESIDENTIAL

BENCHMARKS

1. ARROW ON HYDRANT LOCATED 10 FEET EAST OF THE SOUTHEAST PROPERTY CORNER OF #390 GRACE STREET, ELEV. 751.23
2. ARROW ON HYDRANT AT THE END OF MCCOMB STREET ON THE EAST SIDE, ELEV. 758.18



LOCATION MAP

SCALE: 4" = 1 MILE

NORTH



SCALE: 1" = 40'

TREE INVENTORY

TAG #	SIZE	SPECIES	ELEV.	REMOVE?
3235	12-13	BOX ELDER	750.60	YES
3236	12	FRUIT	749.28	NO
3237	8.3-12	FRUIT	746.35	YES
3238	8.5-12	FRUIT	749.66	YES
3239	15.2-12	FRUIT	750.30	YES
3240	2-15.19	FRUIT	751.32	YES
3241	26	OAK	751.03	YES
3242	19	BOX ELDER	750.65	YES
3243	15	BOX ELDER	751.13	YES
3244	9	BOX ELDER	750.99	YES
3245	13	PINE	750.00	YES
3246	25	WALNUT	750.00	YES
3247	8.2-10.2-6	FRUIT	748.56	YES
3248	10.7	FRUIT	748.22	YES
3249	11	PINE	747.48	YES
3250	7 12	BOX ELDER	749.24	NO
3251	8	BOX ELDER	748.76	NO
3252	8	BOX ELDER	748.53	NO
3253	8	BOX ELDER	748.73	NO
3254	12	BOX ELDER	748.60	NO
3255	9	BOX ELDER	748.64	NO
3256	9 18	BOX ELDER	749.01	NO
3257	8	BOX ELDER	748.98	NO
3258	9 9	BOX ELDER	748.99	YES
3259	10	BOX ELDER	749.17	YES
3260	7	BOX ELDER	748.97	NO
3261	15	BOX ELDER	749.65	YES
3262	6	BOX ELDER	749.23	NO
3263	7	BOX ELDER	749.71	YES
3264	16	BOX ELDER	749.42	NO
3265	7	BOX ELDER	748.69	NO
3266	7	BOX ELDER	748.51	NO
3267	6 7	BOX ELDER	748.63	NO
3268	6	BOX ELDER	748.92	NO
3269	12	BOX ELDER	750.13	YES
3270	18	WALNUT	750.25	YES
3271	11	MAPLE	757.77	NO
3272	2-13	OAK	756.36	NO
3273	13	OAK	758.02	NO
3274	12	ASH	756.96	DISEASED
3275	9	ELM	757.19	YES
3276	9	ELM	756.21	YES
3277	10	POPULAR	755.80	YES
3278	9	BOX ELDER	754.73	YES
3279	8	BOX ELDER	754.72	YES
3280	12	BOX ELDER	754.44	YES
3281	12	BOX ELDER	754.58	YES
3282	13	BOX ELDER	756.41	YES
3283	9	BOX ELDER	755.88	YES

TREE SUMMARY:

TOTAL # OF TAGGED TREES:	49	TOTAL # OF TREES TO BE REMOVED:	-30
TOTAL # OF DISEASED ASH TREES:	0	TOTAL # OF TREES TO BE SAVED:	18
TOTAL # OF TREES OFFSITE:	0		
TOTAL # OF REGULATED TREES:	48	TOTAL # OF REGULATED TREES:	48
REQUIRED PERCENTAGE OF TREES TO BE SAVED:	37% (18 TREES)		
PROPOSED PERCENTAGE OF TREES TO BE SAVED:	18 TREES / 48 = 37%		

NOT TO BE USED AS CONSTRUCTION DRAWINGS

CONTRACTOR'S NOTE

The locations of existing underground utilities are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities before commencing work. He agrees to be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve any and all underground utilities.

The contractor shall be responsible for adhering to all applicable local, state, and federal standards, specifications, and guidelines for construction.

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG
1-800-482-7171
(TOLL FREE) for the location of underground utilities

APEX
ENGINEERING GROUP INC.
CIVIL ENGINEERING & LAND PLANNING CONSULTANTS
47745 VAN DYKE AVENUE
SHELBY TOWNSHIP, MI 48317
PHONE: 586-759-5200
FAX: 586-254-5314

PROJECT: "GRACE PARC" SUBDIVISION

CLIENT: FRANCO C. MANGINI
GRACE STREET DEVELOPMENT, INC.
47855 VAN DYKE AVE
SHELBY TOWNSHIP, MI 48317
(586) 724-1501

JOB NO: 02-017
DATE: 4/28/04
DRAWN BY: R.K.F.
CHECKED BY: W.E.M.

7/18/06 UPDATED UTILITIES
5/22/06 REVISION PER CITY MEETING
3/22/04 REVISION PER CITY MEETING
10/23/04 REVISION PER CITY MEETING
05/02/04 REVISION PER CITY MEETING

REVISIONS:

EXISTING TREE AND TREE REMOVAL PLAN

SHEET

4 OF 5

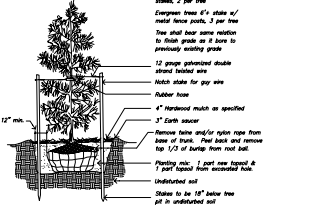
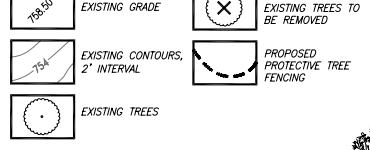
MUNICIPAL REVIEW NUMBERS:
CITY FILE #04-011

PLANT SCHEDULE & COST ESTIMATE

DECIDUOUS TREES:		QUANTITY:	BOTANICAL NAME:	COMMON NAME:	SIZE:	ROOT:	UNIT PRICE:	UNIT TOTAL:
	Pc	9 EA.	ACER RUBRUM	RED SUNSET	3" CAL	B&B	\$425.00	\$3,825.00
EVERGREEN TREES:		QUANTITY:	BOTANICAL NAME:	COMMON NAME:	SIZE:	ROOT:	UNIT PRICE:	UNIT TOTAL:
	Pp	8 EA.	PICEA PUNGENS	COLORADO SPRUCE	9' HT.	B&B	\$400.00	\$3,200.00
TOTAL TREES:		17						
SUBTOTAL COST:							\$7,025.00	
5% CONTINGENCY:							\$351.25	
TOTAL ESTIMATE:							\$7,376.25	

* THE LANDSCAPE CONTRACTOR SHALL SEED AND MULCH ALL AREAS DISTURBED DURING CONSTRUCTION THROUGHOUT THE DEVELOPMENT.

LEGEND



TREE PLANTING RESTRICTIONS

PRIOR APPROVAL IS REQUIRED TO PLANT ANY TREE OR SHRUB ON THE PUBLIC RIGHT-OF-WAY. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC ROAD. SHADE TREES AND SHRUBS MUST BE PLANTED AT LEAST 5' FROM THE EDGE OF THE PUBLIC WALKWAY. EVERGREENS AND ORNAMENTALS MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC WALKWAY. NO TREES OR SHRUBS MAY BE PLANTED WITHIN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY STREET RIGHT-OF-WAY LINES AT A DISTANCE ALONG EACH LINE OF 25' FROM THEIR POINT OF INTERSECTION. NO TREES OR SHRUBS MAY BE PLANTED IN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY DRIVEWAY WITH PUBLIC WALKWAY AT A DISTANCE ALONG EACH LINE OF 15' FROM THEIR POINT OF INTERSECTION. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM ANY FIRE HYDRANT. SHADE AND EVERGREEN TREES MUST BE AT LEAST 15' AWAY FROM THE NEAREST OVERHEAD WIRES AND AT LEAST 5' FROM THE NEAREST UNDERGROUND UTILITY.

CLOSING COMMENTS

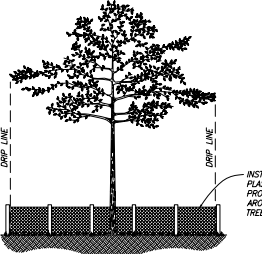
PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS FORESTRY DIVISION NEEDS TO INSPECT ALL TREES, EXISTING OR PLANTED, TO IDENTIFY ANY THAT POSE A HAZARD TO THE SAFE USE OF THE PUBLIC RIGHT-OF-WAY. FORESTRY MAY REQUIRE THE DEVELOPER TO REMOVE, AND POSSIBLY REPLACE, ANY SUCH TREES.

CONTRACTOR'S NOTICE

The locations of existing underground utilities are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities before commencing work. He agrees to be fully responsible for any and all damages to existing utilities occasioned by his failure to exactly locate and preserve any and all underground utilities. The contractor shall be responsible for adhering to all applicable local, state, and federal standards, specifications, and guidelines for construction.

TREE PROTECTION NOTES

- TREE PROTECTIVE FENCING (TPF) SHALL BE ERRECTED FOR THE PLANS APPROVED BY THE CITY OF ROCHESTER HILLS PLANNING DEPARTMENT. THE TPF MUST BE IN PLACE AND BE INSPECTED BY THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT PRIOR TO THE START OF ANY EXCAVATION OR CONSTRUCTION OPERATIONS. IT IS THE DEVELOPER'S RESPONSIBILITY TO CONTACT THE CITY PLANNING DEPARTMENT AT 1-248-656-4660 TO SCHEDULE A TPF INSPECTION. THE TPF SHALL REMAIN IN PLACE THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS OR UNTIL THE CITY AUTHORIZES THE REMOVAL OR ISSUES A FINAL CERTIFICATE OF OCCUPANCY, WHICHEVER OCCURS FIRST.
- UPON COMPLETION OF GRADING AND THE INSTALLATION OF THE INFRASTRUCTURE A SECOND INSPECTION OF THE TPF AND THE TREES DESIGNATED FOR PRESERVATION IS REQUIRED BY THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT PRIOR TO THE START OF ANY ADDITIONAL CONSTRUCTION. IT IS THE DEVELOPER'S RESPONSIBILITY TO CONTACT THE CITY PLANNING DEPARTMENT AT 1-248-656-4660 TO SCHEDULE THIS TPF INSPECTION.
- UPON COMPLETION OF ALL CONSTRUCTION AND PRIOR TO THE REMOVAL OF THE TPF THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT MUST INSPECT ALL TREES DESIGNATED TO BE PRESERVED. THE LANDSCAPE ARCHITECT'S PERFORMANCE BOND WILL NOT BE RELEASED UNTIL THE INSPECTION IS COMPLETE AND ALL RELATED ISSUES ARE RESOLVED. IT IS THE DEVELOPER'S RESPONSIBILITY TO CONTACT THE CITY PLANNING DEPARTMENT AT 1-248-656-4660 TO SCHEDULE THIS INSPECTION.
- A FINAL INSPECTION BY THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT IS REQUIRED AT THE END OF THE WARRANTY AND MAINTENANCE PERIOD. THE LANDSCAPE ARCHITECT'S PERFORMANCE BOND WILL NOT BE RELEASED UNTIL THIS INSPECTION IS COMPLETE AND ALL RELATED ISSUES ARE RESOLVED. IT IS THE DEVELOPER'S RESPONSIBILITY TO CONTACT THE CITY PLANNING DEPARTMENT AT 1-248-656-4660 TO SCHEDULE THIS INSPECTION.
- THE TREE CONSERVATION ORDINANCE PROHIBITS ANY CONSTRUCTION OR DEVELOPMENT ACTIVITIES WITHIN THE DRIP LINE OF REGULATED TREES NOT APPROVED FOR REMOVAL, INCLUDING BUT NOT LIMITED TO LAND CLEARING, GRUBBING, BENCHING, GRADING OR FILLING, NO PERSON SHALL PLACE ANY SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT, SOIL DEPOSITS, OR HARMFUL MATERIALS WITHIN THE DRIP LINE LIMIT OF TREES DESIGNATED FOR PRESERVATION.
- PROPOSED GRADIES ARE TO MATCH THE EXISTING ELEVATIONS OUTSIDE THE LIMITS OF THE TPF. NO GRADING EITHER CUT OR FILL IS PERMITTED WITHIN THE DRIP LINE OF ANY TREE DESIGNATED FOR PRESERVATION.
- DURING THE CONSTRUCTION PROCESS NO PERSON SHALL ATTACH ANY DEVICE OR WIRE/CABLE/CORD/ROPE TO AN EXISTING TREE DESIGNATED TO BE PRESERVED.
- ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRIPPING SHALL OCCUR OUTSIDE THE TPF.
- SWALES SHALL BE ROUTED TO AVOID THE AREA WITHIN THE DRIP LINE OF ANY TREE DESIGNATED FOR PRESERVATION. SWALES SHALL BE CONSTRUCTED SO AS NOT TO DIRECT ANY ADDITIONAL FLOW INTO THE DRIP LINE OF A TREE DESIGNATED FOR PRESERVATION.
- IF TREE PROTECTION CANNOT BE MAINTAINED FOR A TREE THROUGHOUT THE ENTIRE PERIOD REQUIRED, THE REPLACEMENT OF THAT TREE WILL BE REQUIRED ON AN INCH FOR INCH BASIS PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
- REGULATED TREES LOCATED OFF-SITE ON ADJACENT PROPERTIES THAT MAY BE AFFECTED BY CONSTRUCTION OPERATIONS MUST BE PROTECTED AS DEFINED HEREIN.
- THE TPF SHALL CONSIST OF 4- FEET HIGH ORANGE SHAW FENCING TO BE INSTALLED ALONG THE DRIP LINE OF ALL TREES DESIGNATED TO BE SAVED. THIS FENCING SHALL BE SUPPORTED BY 6- FEET LONG METAL T-SHAPED POSTS 4 FEET ON CENTER AND ORNEN A MINIMUM OF 4 INCHES INTO THE GROUND. THE TPF SHALL REMAIN UPRIGHT AND SECURELY IN PLACE FOR THE REQUIRED TIME AS SPECIFIED ABOVE.

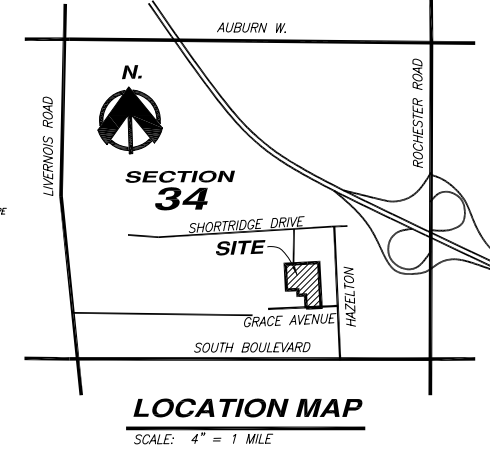
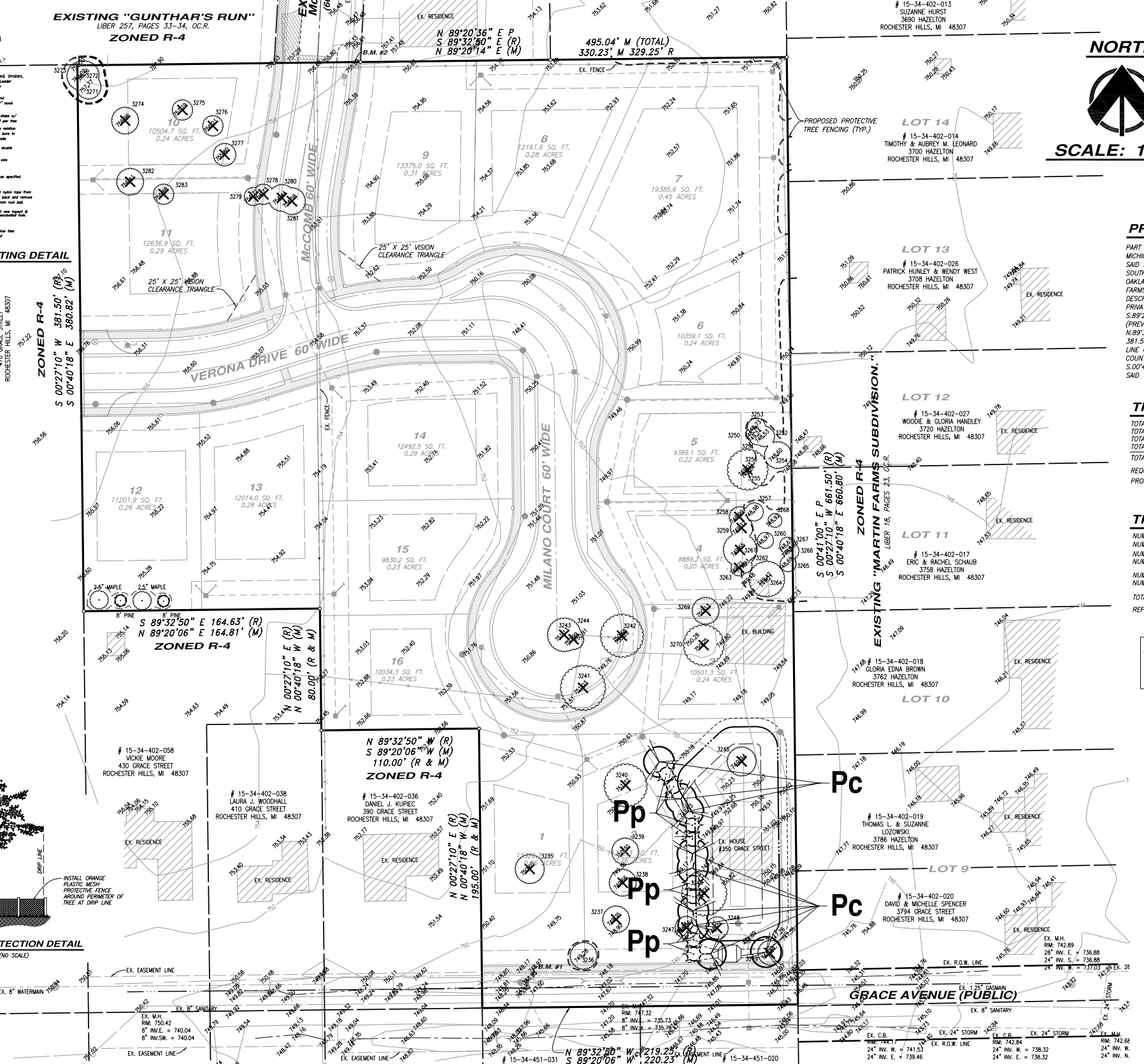


BENCHMARKS

- ARROW ON HYDRANT LOCATED 10 FEET EAST OF THE SOUTHEAST PROPERTY CORNER OF #390 GRACE STREET. ELEV: 751.23
- ARROW ON HYDRANT AT THE END OF MCCOMB STREET ON THE EAST SIDE. ELEV: 759.18

LANDSCAPING NOTES

- ALL PLANT MATERIAL SHALL BE TRUE TO NAME, FREE FROM PHYSICAL DAMAGE AND WIND BURN.
- PLANTS SHALL BE FULL, WELL-BRANCHED, AND IN HEALTHY VIGOROUS GROWING CONDITION.
- PLANTS SHALL BE WATERED BEFORE AND AFTER PLANTING IS COMPLETE.
- WHEN ALL LANDSCAPING IS COMPLETE THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT WILL INSPECT AND IF EVERYTHING IS ACCEPTABLE THE PERFORMANCE BOND WILL BE RELEASED. AT THIS TIME AND FOR THE TWO-YEAR WARRANTY PERIOD A MAINTENANCE BOND WILL BE HELD. AT THE END OF TWO YEARS THE LANDSCAPING WILL BE INSPECTED AGAIN. AT THIS TIME IF EVERYTHING IS IN GOOD CONDITION THE MAINTENANCE BOND WILL BE RELEASED.
- ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED IN THE MOST RECENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK. PROVIDE CLEAN BACKFILL SOIL USING MATERIAL STOCKPILED ON SITE. SOIL SHALL BE SCREENED AND FREE OF ANY FOREIGN MATERIAL AND STONE.
- "AGROMOR" TABS OR SIMILAR SLOW-RELEASE FERTILIZER SHALL BE ADDED TO THE PLANTING PITS BEFORE BEING BACKFILLED.
- ALL PLANTINGS SHALL BE MULCHED WITH SHREDED HARDWOOD BARK, SPREAD TO A MINIMUM DEPTH OF 4". MULCH IS TO BE FREE FROM DEBRIS AND FOREIGN MATERIAL, AND SHALL CONTAIN NO PIECES OF INCONSISTENT SIZE.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK SHOWN ON THE LANDSCAPE DRAWINGS AND SPECIFICATIONS.
- NO SUBSTITUTIONS OR CHANGES OF LOCATION OR PLANT TYPES SHALL BE MADE WITHOUT THE APPROVAL OF THE DEVELOPER AND THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT.
- THE DEVELOPER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS PRIOR TO INSTALLATION.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PLANT MATERIAL IN A VERTICAL CONDITION THROUGHOUT THE GUARANTEED PERIOD.
- THE DEVELOPER AND/OR THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT SHALL HAVE THE RIGHT, AT ANY STAGE OF THE INSTALLATION, TO REJECT ANY WORK OR MATERIAL THAT DOES NOT MEET THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING PLANT QUANTITIES TO ENSURE QUANTITIES ON DRAWINGS AND PLANT LIST ARE THE SAME. IN THE EVENT OF A DISCREPANCY, THE QUANTITIES ON THE PLANS SHALL PREVAIL.
- THE LANDSCAPE CONTRACTOR SHALL SEED AND MULCH ALL AREAS DISTURBED DURING CONSTRUCTION, THROUGHOUT THE DEVELOPMENT.
- ALL TREES MUST BE STAKED, FERTILIZED, MULCHED.



SITE CRITERIA

- SIDWELL #: 15-34-402-035, 15-34-402-057
- EXISTING ZONING: R-4, ONE-FAMILY RESIDENTIAL
- ADJACENT ZONINGS: R-4, ONE-FAMILY RESIDENTIAL
- TOTAL AREA OF SITE: 5.959 AC.
- PROPOSED USE: SINGLE FAMILY RESIDENTIAL

PROPERTY DESCRIPTION:

PART OF THE SOUTHEAST 1/4 OF SECTION 34, T.3N., R.11E., CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 34, THENCE S.89°55'47"E, 891.01 FT. ALONG THE SOUTH LINE OF SAID SECTION 34 TO THE SOUTHWEST CORNER OF "MARTIN FARMS SUBDIVISION" AS RECORDED IN LIBER 18 OF PLATS, PAGE 23, OAKLAND COUNTY RECORDS; THENCE N.00°40'18"W, 826.04 FT. ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING; THENCE S.89°20'06"W, 220.23 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W, 219.25 FT.) ALONG THE CENTERLINE OF GRACE STREET, A 50 FT. WIDE PRIVATE ROAD, THENCE N.00°40'18"W, 195.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E); THENCE S.89°20'06"W, 110.00 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W); THENCE N.00°40'18"W, 85.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E); THENCE S.89°20'06"W, 164.81 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W, 164.63 FT.); THENCE N.00°40'18"W, 380.82 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E, 381.50 FT.); THENCE N.89°20'14"E, 495.04 FT. (PREVIOUSLY DESCRIBED AS S.89°32'50"E) ALONG THE SOUTH LINE OF "GUNTHER'S RUN SUBDIVISION" AS RECORDED IN LIBER 257 OF PLATS, PAGES 33 & 34, OAKLAND COUNTY RECORDS, TO A POINT ON THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION"; THENCE S.00°40'18"E, 660.80 FT. (PREVIOUSLY DESCRIBED AS S.00°27'10"E, 661.50 FT.) ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING, CONTAINING 5.959 ACRES.

TREE SUMMARY:

TOTAL # OF TAGGED TREES:	49	TOTAL # OF TREES TO BE REMOVED:	-30
TOTAL # OF DISEASED ASH TREES:	0	TOTAL # OF TREES TO REMAIN:	19
TOTAL # OF TREES OFF-SITE:	0	TOTAL # OF REGULATED TREES:	48
TOTAL # OF TAGGED TREES:	49	TOTAL # OF REGULATED TREES:	48

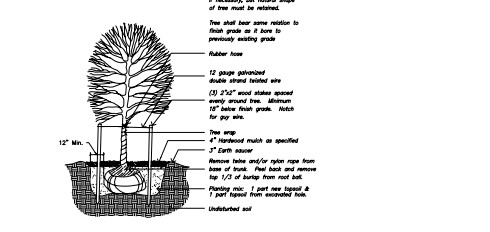
REQUIRED PERCENTAGE OF TREES TO BE SAVED: 37% (18 TREES)
PROPOSED PERCENTAGE OF TREES TO BE SAVED: 18 TREES / 48 = 37%

TREE REPLACEMENT CALCULATION:

NUMBER OF EXISTING TREES TO BE REMOVED: 30 + 1 DISEASED ASH TREE
NUMBER OF REPLACEMENT CREDITS REQUIRED = 30
NUMBER OF PROPOSED 1" CALIPER DECIDUOUS REPLACEMENT TREES: 9
NUMBER OF CREDITS = (9 trees) x (2 credits/tree) = 18 CREDITS
NUMBER OF 9" HIGH EVERGREEN REPLACEMENT TREES: 8
NUMBER OF CREDITS = (8 trees) x (1.5 credits/tree) = 12 CREDITS
TOTAL NUMBER OF CREDITS = 30
REPLACEMENT TREES CANNOT BE PLANTED WITHIN 4 FEET OF ANY PROPERTY LINE.

NOTE:

MINIMUM TREE SPACING SHALL BE AS FOLLOWS:
DECIDUOUS TREES: 10' O.C.
EVERGREEN TREES: 10' O.C.



NOT TO BE USED AS CONSTRUCTION DRAWINGS

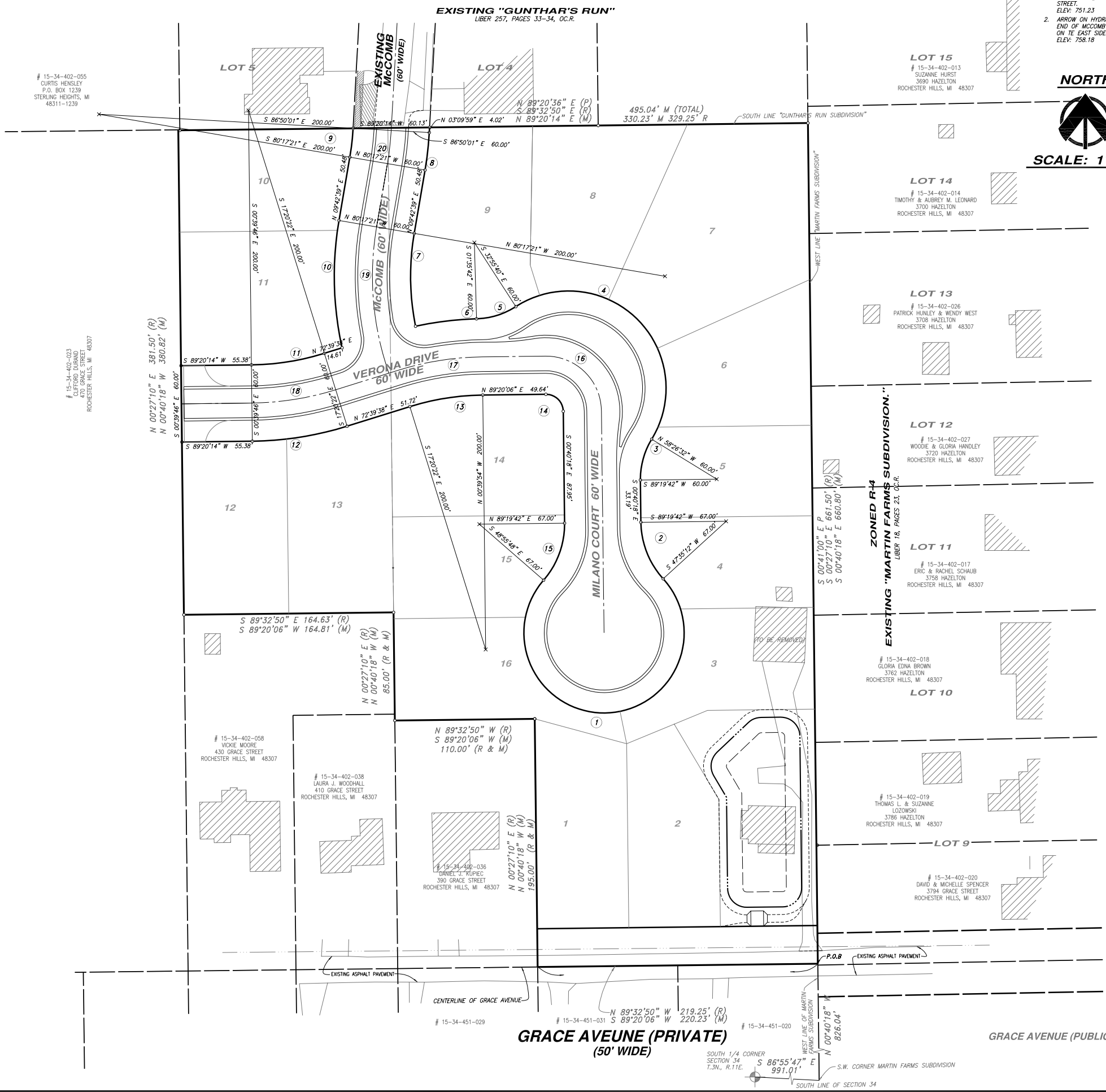
APEX ENGINEERING GROUP INC.
ENGINEERING & LAND PLANNING CONSULTANTS
CIVIL ENGINEERING & LAND PLANNING CONSULTANTS
PHONE: 506-254-5200 FAX: 506-254-5314
47745 VAN DYKE AVENUE SHELBY TOWNSHIP, MI 48317

PROJECT: "GRACE PARC" SUBDIVISION
CLIENT: FRANCO C. MANONI, GRACE STREET DEVELOPMENT, INC., SHELBY TOWNSHIP, MI 48317 (989) 726-1501
JOB NO: 02-017
DATE: 4/26/04
DRAWN BY: R.K.T.
CHECKED BY: W.E.M.

REVISIONS:
7/12/06 UPDATED UTILITIES
6/29/06 REVISION PER CITY MEETING
3/22/05 REVISION PER CITY MEETING
12/13/04 REVISION PER CITY PLAN COMMENTS
10/25/04 REVISION PER CITY PLAN COMMENTS
8/9/04 REVISION PER CITY PLAN MEETING

LANDSCAPE ARCHITECT FOR THIS PROJECT:
JOSEPH COTTONE, R.L.A.
16679 WISLER DRIVE
BROWNSTOWN, MI 48173
(586) 231-0420
REG. #1155

TREE REPLACEMENT PLAN
SHEET 5 OF 5
MUNICIPAL REVIEW NUMBERS: CITY FILE #04-011

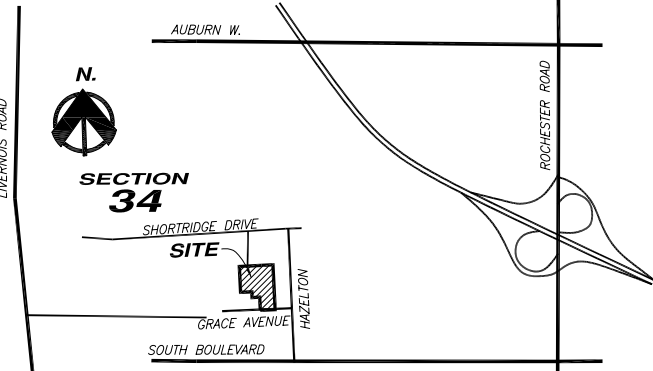


BENCHMARKS

- ARROW ON HYDRANT LOCATED 10 FEET EAST OF THE SOUTHEAST PROPERTY CORNER OF #390 GRACE STREET. ELEV. 751.23
- ARROW ON HYDRANT AT THE END OF MCCOMB STREET ON THE EAST SIDE. ELEV. 758.18

NORTH

SCALE: 1"=40'



LOCATION MAP

SCALE: 4" = 1 MILE

PROPERTY DESCRIPTION:

PART OF THE SOUTHEAST 1/4 OF SECTION 34, T.3N., R.11E., CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 34; THENCE S.86°55'47"E., 991.01 FT. ALONG THE SOUTH LINE OF SAID SECTION 34 TO THE SOUTHWEST CORNER OF "MARTIN FARMS SUBDIVISION" AS RECORDED IN LIBER 18 OF PLATS, PAGE 23, OAKLAND COUNTY RECORDS; THENCE N.00°40'18"W., 828.04 FT. ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING; THENCE S.89°20'06"W., 220.23 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W., 219.25 FT.) ALONG THE CENTERLINE OF GRACE STREET, A 50 FT. WIDE PRIVATE ROAD; THENCE N.00°40'18"W., 195.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E.); THENCE S.89°20'06"W., 110.00 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W.); THENCE N.00°40'18"W., 85.00 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E.); THENCE S.89°20'06"W., 164.81 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W., 164.83 FT.); THENCE N.00°40'18"W., 380.82 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E., 381.50 FT.); THENCE N.89°20'14"E., 495.04 FT. (PREVIOUSLY DESCRIBED AS S.89°32'50"E.) ALONG THE SOUTH LINE OF "GUNTHER'S RUN SUBDIVISION" AS RECORDED IN LIBER 257 OF PLATS, PAGES 33 & 34, OAKLAND COUNTY RECORDS, TO A POINT ON THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION"; THENCE S.00°40'18"E., 660.80 FT. (PREVIOUSLY DESCRIBED AS S.00°27'10"W., 661.50 FT.) ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING. CONTAINING 5.958 ACRES.

SITE CRITERIA

- SIDWELL #:** 15-34-402-035
- EXISTING ZONING:** R-4, ONE-FAMILY RESIDENTIAL
- ADJACENT ZONINGS:** R-4, ONE-FAMILY RESIDENTIAL
- TOTAL AREA OF SITE:** 5.958 Ac.
- PROPOSED USE:** SINGLE FAMILY RESIDENTIAL
- NUMBER OF LOTS PROPOSED:** 16 LOTS
- ALLOWABLE NET DENSITY:** (3.4 units/Ac.) x (5.958 Ac.) = 20.3 units
- PROPOSED NET DENSITY:** 16 units (2.6 units/Ac.)
- MINIMUM LOT SIZE REQUIRED:** 9,600 S.F.
- MINIMUM LOT AVERAGING SIZE REQUIRED:** 8,640 S.F.
- MINIMUM LOT FRONTAGE:** 80'
- MINIMUM LOT AVERAGING FRONTAGE:** 72'
- MINIMUM CORNER LOT AVERAGING FRONTAGE:** 92'
- MINIMUM CORNER FRONTAGE:** 100'
- SETBACK SUMMARY:** FRONT: 25', REAR: 35', SIDE: 10' MIN./20' TOTAL
- UTILITY SUMMARY:** WATER MAIN: CONNECT TO EXIST. MUNICIPAL WATERMANS. SANITARY SEWER: CONNECT TO EXIST. MUNICIPAL SANITARY SEWERS. STORM SEWER: ENCLOSED PIPE TO ON-SITE DETENTION POND
- LANDSCAPING:** REFER TO TREE REPLACEMENT & LANDSCAPING PLAN.

CURVE DATA

NO.	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD LENGTH	CHORD BEARING
1	63.00'	289.72'	263°29'00"	94.02'	S 89°19'42" E
2	67.00'	48.81'	41°44'30"	49.79'	S 21°32'33" E
3	60.00'	33.75'	32°13'47"	33.31'	N 15°26'35" E
4	76.50'	206.27'	154°29'08"	149.22'	S 45°41'06" E
5	60.00'	32.81'	31°19'57"	32.40'	S 72°44'19" W
6	260.00'	48.35'	10°39'15"	48.28'	S 85°04'40" W
7	200.00'	73.41'	21°01'50"	73.00'	N 00°48'16" W
8	260.00'	29.70'	06°32'40"	29.68'	N 06°26'19" E
9	201.45'	22.84'	06°29'50"	22.83'	S 06°27'02" W
10	260.00'	100.72'	22°11'47"	100.10'	S 01°23'14" E
11	200.00'	72.85'	18°26'50"	72.50'	S 78°19'26" W
12	260.00'	75.68'	16°40'36"	75.41'	N 80°59'56" E
13	200.00'	58.20'	16°40'28"	58.00'	N 80°59'52" E
14	13.50'	21.20'	89°59'35"	19.09'	N 45°40'06" W
15	67.00'	48.81'	41°44'30"	47.74'	S 20°11'57" W
16	43.50'	68.32'	89°59'35"	61.51'	S 45°40'06" E
17	230.00'	66.94'	16°40'28"	66.70'	N 80°59'52" E
18	230.00'	66.94'	16°40'36"	66.71'	S 80°59'56" W
19	230.00'	108.59'	27°03'01"	107.58'	N 03°48'51" W
20	230.00'	26.27'	06°32'40"	26.26'	S 06°26'19" W

NOT TO BE USED AS CONSTRUCTION DRAWINGS

CONTRACTOR'S NOTE

The locations of existing underground utilities are shown in an approximate way only. The contractor shall determine the exact location of all existing utilities before commencing work. He agrees to be fully responsible for any and all damages which might be occasioned by his failure to exactly locate and preserve any and all underground utilities. The contractor shall be responsible for adhering to all applicable local, state, and federal standards, specifications, and guidelines for construction.

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 (TOLL FREE) for the location of underground utilities.

APEX
ENGINEERING GROUP INC.
CIVIL ENGINEERING & LAND PLANNING CONSULTANTS
47745 VAN DYKE AVENUE
SHELBY TOWNSHIP, MI 48317
PHONE: 586-759-5200
FAX: 586-254-5314

PROJECT: "GRACE PARC" SUBDIVISION

CLIENT: FRANCO G. MANCINI
GRACE STREET DEVELOPMENT, INC.
47745 VAN DYKE AVE
SHELBY TOWNSHIP, MI 48317
(586) 724-1501

JOB NO: 02-017
DATE: 12/09/04
DRAWN BY: R.K.F.
CHECKED BY: W.E.M.

SEAL:

ROADWAY GEOMETRIC PLAN

SHEET

1 OF 1

MUNICIPAL REVIEW NUMBERS:
CITY FILE #04-011