

### LEGEND

	EXISTING GRADE		EXISTING TREES		PROPOSED SANITARY SEWER
	EXISTING CONTOURS, 2' INTERVAL		PROP. ON-SITE CONCRETE WITH INTEGRAL CURB PAVEMENT		PROPOSED STORM SEWER
	EXISTING ASPHALT PAVEMENT		PROPOSED CONCRETE BASE		PROPOSED WATERMAIN W/ TYPICAL GATE VALVE & WELL & STD. HYDRANT ASSEMBLY
	YARD SETBACKS (NO SCALE)		PROPOSED ASPHALT PAVEMENT		

### SHEET INDEX

- TENTATIVE PRELIMINARY PLAN
- EXISTING CONDITIONS AND NATURAL FEATURES BASE PLAN
- DRAINAGE PATTERN AND SLOPE GRADIENT SKETCH
- EXISTING TREE AND TREE REMOVAL PLAN
- TREE REPLACEMENT PLAN
- ROADWAY GEOMETRIC PLAN

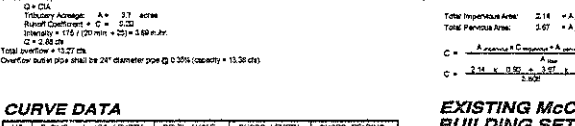
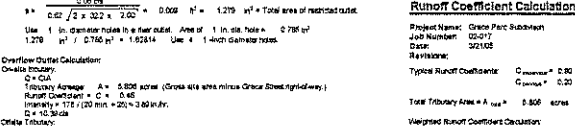
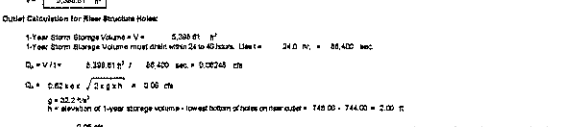
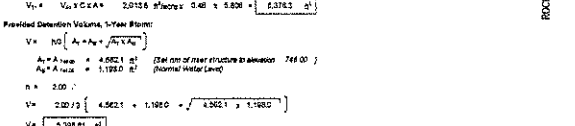
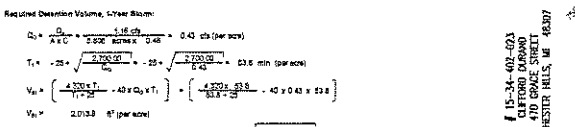
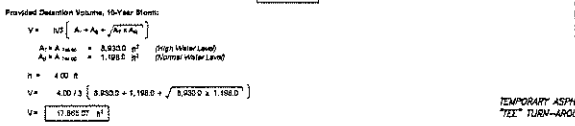
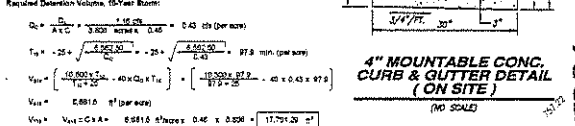
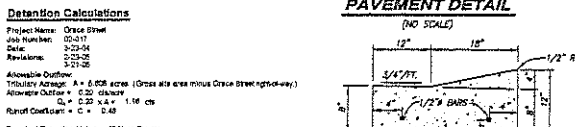
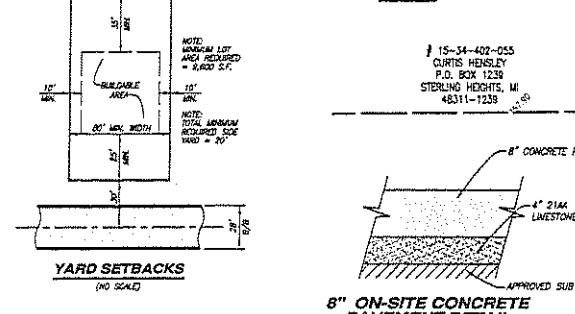
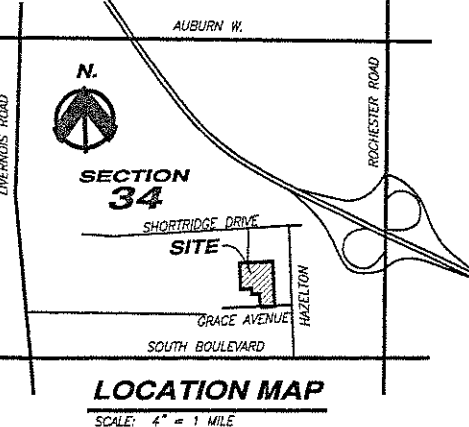
**NOT TO BE USED AS CONSTRUCTION DRAWINGS**

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

**OWNERSHIP IS FEE SIMPLE.**

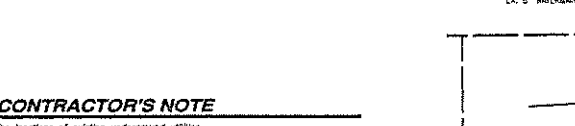
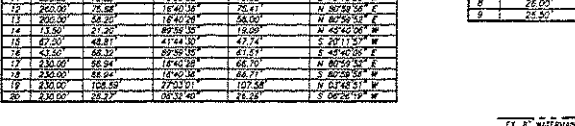
### BENCHMARKS

- ARROW ON HYDRANT LOCATED 10 FEET EAST OF THE SOUTHWEST CORNER OF 3500 GRACE STREET. ELEV. 751.23
- ARROW ON HYDRANT AT THE END OF MICHIGAN STREET ON THE EAST SIDE. ELEV. 758.18



### CURVE DATA

NO.	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD LENGTH	CHORD BEARING
1	63.00	288.79	263.29°	84.92	S 89°19'42\"
2	67.00	314.61	248.79°	88.79	S 89°15'11\"
3	60.00	279.79	271.97°	83.17	S 89°22'35\"
4	78.00	355.77	194.29°	148.27	S 42°41'35\"
5	85.00	387.41	177.57°	159.60	S 42°41'35\"
6	262.00	46.35	103°51'51\"	48.28	S 89°20'40\"
7	200.00	72.47	121°30'00\"	73.00	N 03°48'17\"
8	263.00	29.79	291°30'00\"	29.79	N 03°48'17\"
9	201.45	28.84	092°30'00\"	28.84	S 02°22'03\"
10	260.00	120.77	271.11°	106.10	S 01°23'17\"
11	200.00	42.00	092°30'00\"	42.00	S 02°22'03\"
12	200.00	78.56	164°30'00\"	78.56	N 89°20'06\"
13	200.00	78.56	164°30'00\"	78.56	N 89°20'06\"
14	200.00	78.56	164°30'00\"	78.56	N 89°20'06\"
15	200.00	78.56	164°30'00\"	78.56	N 89°20'06\"
16	200.00	78.56	164°30'00\"	78.56	N 89°20'06\"
17	200.00	78.56	164°30'00\"	78.56	N 89°20'06\"
18	200.00	78.56	164°30'00\"	78.56	N 89°20'06\"
19	200.00	78.56	164°30'00\"	78.56	N 89°20'06\"
20	200.00	78.56	164°30'00\"	78.56	N 89°20'06\"



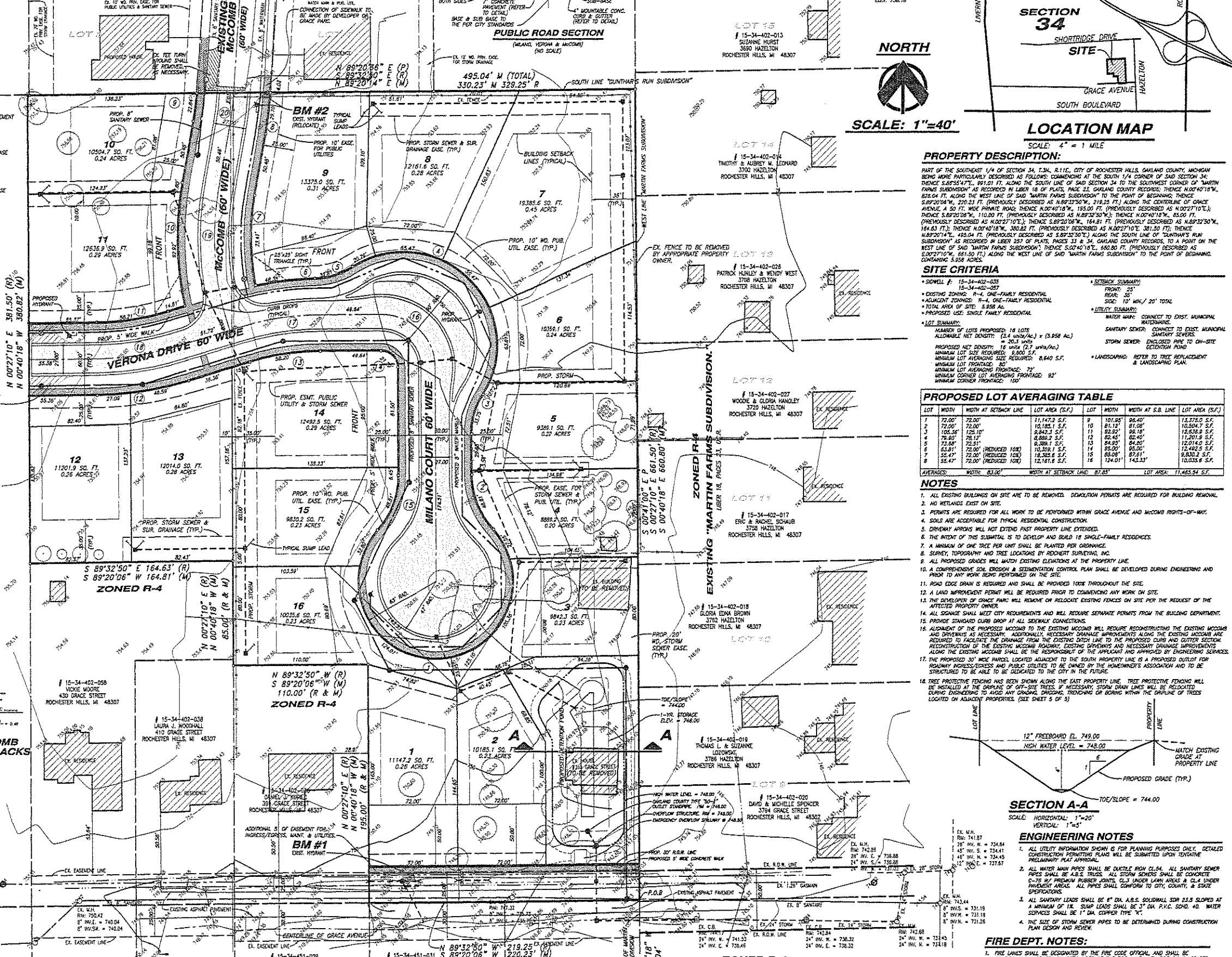
### CONTRACTOR'S NOTE

The location of existing underground utilities are shown as an approximate only. The contractor shall determine the exact location of all existing utilities before commencing work. The contractor shall be fully responsible for any and all damages which might be occasioned by the failure to correctly 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.

**J WORKING DAYS BEFORE YOU DIG CALL MISS DIG**

1-800-422-7171

(TOLL FREE) for the location of underground utilities



### PROPERTY DESCRIPTION:

PART OF THE SOUTHWEST 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.88°55'47\"

### SITE CRITERIA

**\* SOWELL #:** 15-34-402-035  
 15-34-402-037

**\* DISTRICT ZONING:** R-4, ONE-FAMILY RESIDENTIAL  
**\* ADJACENT ZONING:** R-4, ONE-FAMILY RESIDENTIAL  
**\* TOTAL AREA OF SITE:** 3.88 AC.  
**\* PROPOSED USE:** SINGLE FAMILY RESIDENTIAL

**\* LOT SUMMARY:**  
 NUMBER OF LOTS PROPOSED: 16 LOTS  
 ALLOWABLE NET DENSITY: (3.4 units/acre) = (3.95 AC.)  
 PROPOSED NET DENSITY: 16 units (2.7 units/acre)  
 MINIMUM LOT FRONTAGE: 35.00 FT.  
 MINIMUM LOT AVERAGE SIDE FRONTAGE: 8.60 FT.  
 MINIMUM LOT FRONTAGE: 80'  
 MINIMUM LOT AVERAGE SIDE FRONTAGE: 27'  
 MINIMUM CORNER LOT AVERAGE FRONTAGE: 92'  
 MINIMUM CORNER FRONTAGE: 100'

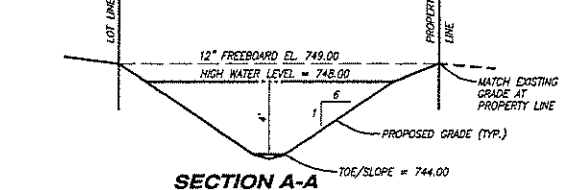
**\* WATER MAIN:** CONNECT TO EXIST. MUNICIPAL WATERMAINS  
**\* SANITARY SEWER:** CONNECT TO EXIST. MUNICIPAL SANITARY SEWERS  
**\* STORM SEWER:** ENCLOSED PIPE TO ON-SITE DETENTION POND  
**\* LANDSCAPING:** REFER TO TREE REPLACEMENT & LANDSCAPING PLAN

### 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	101.05'	96.40'	13,376.0 S.F.
2	72.00'	72.00'	10,185.1 S.F.	10	81.12'	81.00'	10,504.7 S.F.
3	106.56'	125.10'	9,842.1 S.F.	11	92.59'	92.14'	12,556.8 S.F.
4	78.00'	78.12'	6,888.2 S.F.	12	62.45'	62.00'	11,201.8 S.F.
5	72.00'	72.00'	9,388.1 S.F.	13	84.95'	84.00'	12,014.0 S.F.
6	63.81'	72.00'	10,381.1 S.F.	14	84.00'	85.00'	14,498.2 S.F.
7	55.47'	72.00'	19,355.6 S.F.	15	68.08'	67.81'	9,830.2 S.F.
8	55.47'	72.00'	12,167.6 S.F.	16	124.01'	143.23'	10,038.6 S.F.

AVERAGES: WIDTH: 83.00'    WIDTH AT SETBACK LINE: 87.85'    LOT AREA: 11,465.94 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 PHYSICAL RESIDENTIAL CONSTRUCTION.
  - DRIVEWAY APPROXIS 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 RECENT SURVEYING.
  - 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 SCORME SHALL MEET CITY REQUIREMENTS AND WILL REQUIRE SEPARATE PERMITS FROM THE BUILDING DEPARTMENT.
  - PROVIDE STANDARD CURB DRAIN AT ALL SIDEWALK CONNECTIONS.
  - ALIGNMENT OF THE PROPOSED McCOMB ROAD WILL REQUIRE RECONSTRUCTING THE EXISTING McCOMB ROAD AND DRIVEWAYS AS NECESSARY. ADDITIONALLY, NECESSARY DRAINAGE IMPROVEMENTS ALONG THE EXISTING McCOMB ROAD ARE REQUIRED TO FACILITATE THE DRAINAGE TO THE PROPOSED CURB AND GUTTER SECTION.
  - RECONSTRUCTION OF THE EXISTING McCOMB ROADWAY, EXISTING DRIVEWAYS AND NECESSARY DRAINAGE IMPROVEMENTS ALONG THE EXISTING McCOMB ROAD SHALL BE THE RESPONSIBILITY OF THE APPLICANT AND APPROVED BY ENGINEERING SERVICES.
  - THE PROPOSED 30' WIDE PARCELS LOCATED ADJACENT TO THE SOUTH PROPERTY LINE IS A PROPOSED OUTLET FOR ROADWAY ACCESS/DRIVEWAY AND PUBLIC UTILITIES TO BE OWNED BY THE HOMEOWNERS 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 DRAINAGE OF OFF-SITE TRESS. IF NECESSARY, STORM DRAIN LINES WILL BE RELOCATED DURING CONSTRUCTION TO AVOID ANY CONFLICTING DRIVING, PROTECTING OR BORING WITHIN THE PERIMETER OF TREES LOCATED ON ADJACENT PROPERTIES. (SEE SHEET 5 OF 5)
  - TREE PROTECTIVE FENCING HAS BEEN SHOWN ALONG THE EAST PROPERTY LINE. TREE PROTECTIVE FENCING WILL BE INSTALLED AT THE DRAINAGE OF OFF-SITE TRESS. IF NECESSARY, STORM DRAIN LINES WILL BE RELOCATED DURING CONSTRUCTION TO AVOID ANY CONFLICTING DRIVING, PROTECTING OR BORING WITHIN THE PERIMETER OF TREES LOCATED ON ADJACENT PROPERTIES. (SEE SHEET 5 OF 5)



### ENGINEERING NOTES

SCALE: HORIZONTAL: 1"=20'  
 VERTICAL: 1"=5'

- ALL UTILITY INFORMATION SHOWN IS FOR PLANNING PURPOSES ONLY. DETAILED CONSTRUCTION PERMITTING PLANS WILL BE SUBMITTED UPON TENTATIVE PRELIMINARY PLAN APPROVAL.
- ALL WATER MAIN PIPES SHALL BE DUCTILE IRON CL-54. ALL SANITARY SEWER PIPES SHALL BE 4.0 S.D. TRUSS. ALL STORM SEWERS SHALL BE CONCRETE C-76 W/ PREPARED RUBBER JOINTS, CL-3 UNDER LAMIN AREAS & CL-4 UNDER PAVEMENT AREAS. ALL PIPES SHALL CONFORM TO CITY, COUNTY, & STATE SPECIFICATIONS.
- ALL SANITARY LEADS SHALL BE 8" DIA. A.B.S. SCHEDULE 40 STD. 2.5 SLOPED AT A MINIMUM OF 1%. SWAMP 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 REVIEW 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 SIGNS, SPACED NOT MORE THAN 100 FEET APART, 30 STOPS, SIGNAGE, PAINTING, FIRE LANE, AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF URBAN TRAFFIC CONTROL DEVICES. FIRE PREVENTION ORDINANCE CHAPTER 50, SEC. 901.4.2.
- CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH UNIFORM FIRE CODE ARTICLE 81, SECTION 601.
- OPEN BURNING IS NOT PERMITTED, INCLUDING THE BURNING OF TRUNKS, LIMBS, OR LANKS. CLEARING MATERIALS. OPEN BURNING FOR REMOVAL OF SAID AND/OR WATER FOR THE PREPARATION OF WORTHY SHALL BE WITHIN THE CITY OF ROCHESTER HILLS QUIET PERIOD REGULATIONS. THE PREVENTION ORDINANCE CHAPTER 50, SEC. 1102.4.1 & 1102.4.2.

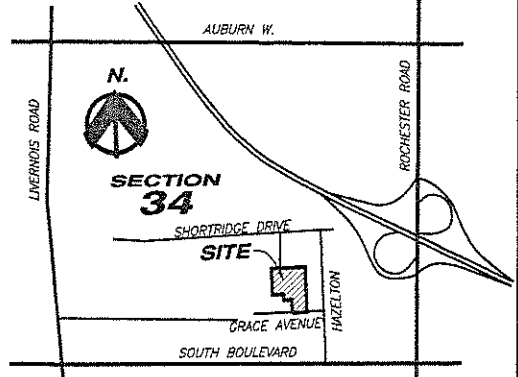
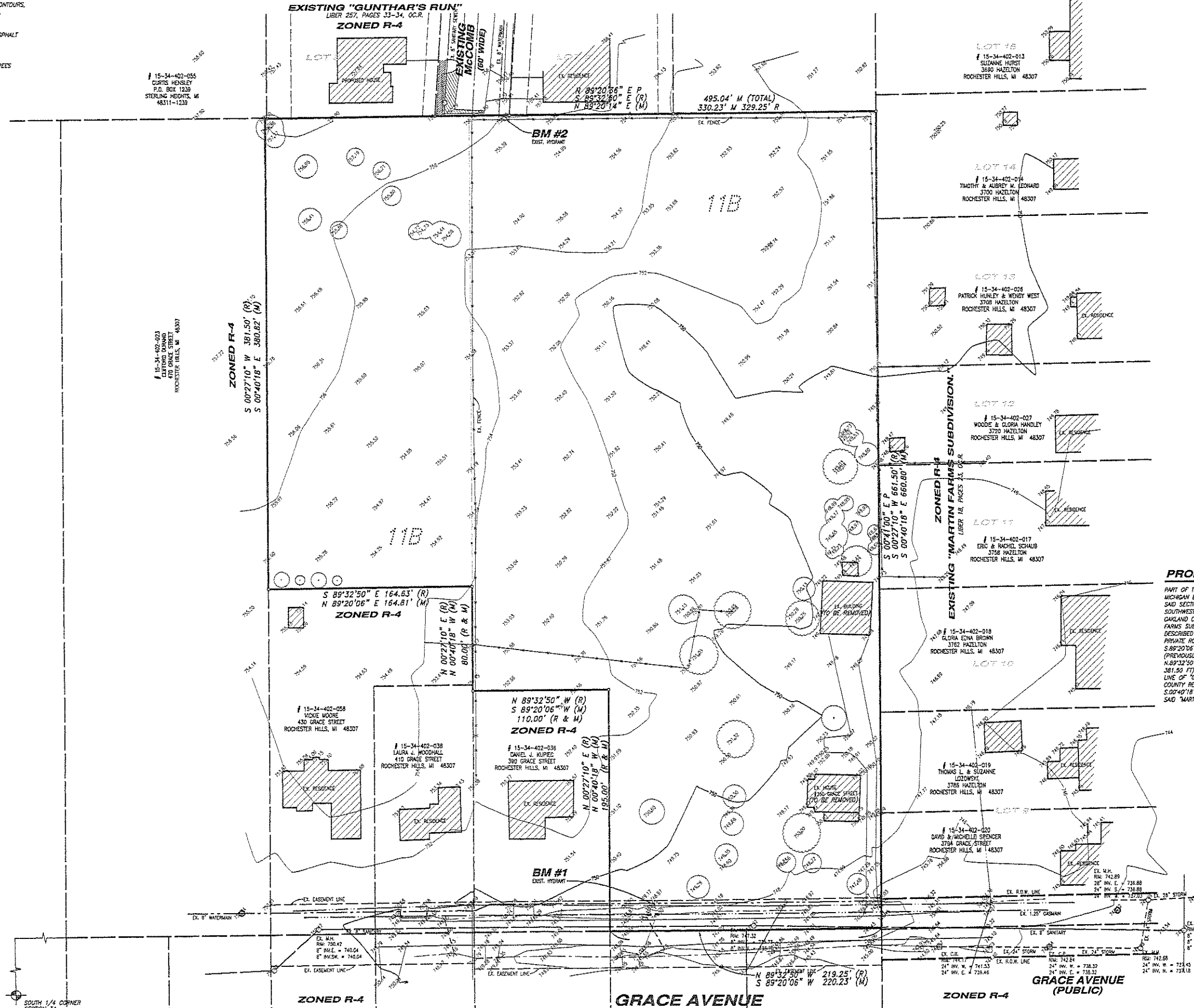
**APPEX ENGINEERING & LAND PLANNING CONSULTANTS**  
 CIVIL ENGINEERING & LAND PLANNING CONSULTANTS  
 47745 VAN DYKE AVENUE, SUITE 200  
 ROCHESTER HILLS, MI 48317  
 PHONE: 508-739-8200  
 FAX: 508-739-8304  
 PROJECT: GRACE PARC SUBDIVISION  
 SHEET: TENTATIVE PRELIMINARY PLAN  
 JOB NO: 02-017  
 DATE: 4/26/04  
 CHECKED BY: W.F.C.  
 DRAWN BY: W.F.C.  
 MUNICIPAL REVIEW NUMBER: 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 1230  
STERLING HEIGHTS, MI  
48111-1230

15-34-402-023  
CLIFFORD DORNAD  
4798 VAN DYKE AVE.  
SHELBY TOWNSHIP, MI 48317



**LOCATION MAP**

SCALE: 4" = 1 MILE

**NORTH**



SCALE: 1"=40'

**SITE CRITERIA**

- SDELL # 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 SOUTHWEST 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  
0"-8" 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 SOUTHWEST 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.89°55'17"E., 591.01 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., 825.04 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., 185.00 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.

**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 correctly 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 LANE WITH FIRE SIGNS, SPACED NOT MORE THAN 100 FEET APART, TWO STOPPING STANDING, PARKING, FIRE LANE, AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. FIRE PREVENTION ORDINANCE CHAPTER 58, SEC. 5014.2.
2. CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH UNIFORM FIRE CODE ARTICLE 67, SECTION 6701.
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.

EX. M.H.	741.87
RM.	741.87
28" INV. W.	734.04
48" INV. S.	734.11
48" INV. N.	734.45
24" INV. E.	738.88
24" INV. W.	738.88
12" INV. E.	737.67

**APPEX**  
ENGINEERING & LAND PLANNING CONSULTANTS  
CIVIL ENGINEERING & LAND PLANNING CONSULTANTS  
PHONE: 586-736-5200  
FAX: 586-254-5314

PROJECT: GRACE PARC SUBDIVISION  
CLIENT: FRANCIS O. HANCOCK  
4798 VAN DYKE AVE.  
SHELBY TOWNSHIP, MI 48317  
(586) 720-1501

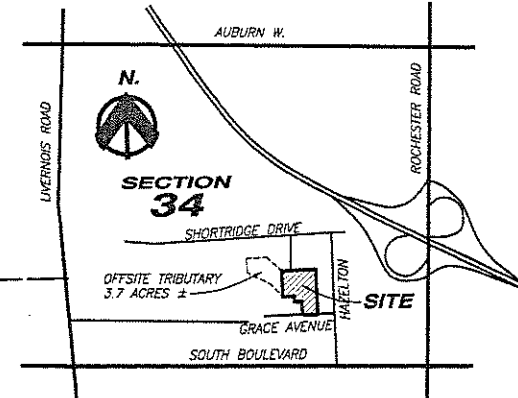
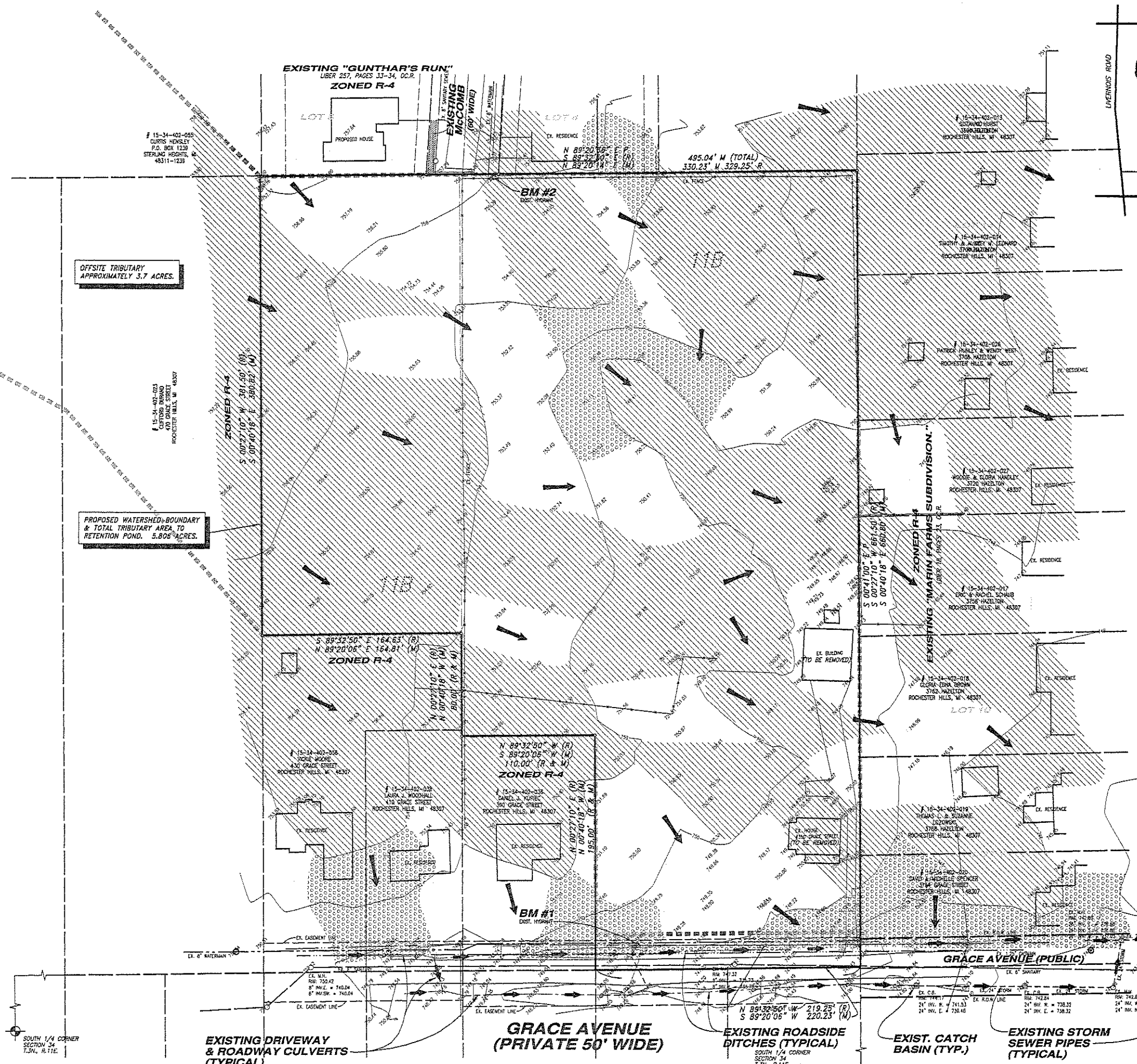
JOB NO: 02.017  
DATE: 4/26/04  
DRAWN BY: H.C.T.  
CHECKED BY: W.E.M.

EXISTING CONDITIONS AND NATURAL FEATURES BASE PLAN

2

OF 5

MUNICIPAL REVIEW NUMBERS  
CITY FILE #04-011



**LOCATION MAP**  
SCALE: 1" = 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 TO THE SOUTHWEST CORNER OF SAID SECTION 34 AS RECORDED IN LIBER 18 OF PLATS, PAGE 22, OAKLAND COUNTY RECORDS; THENCE N.00°40'18"W., 82.64 FT. ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING; THENCE S.89°32'50"W., 220.23 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W., 219.23 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., 381.50 FT.); THENCE S.89°32'50"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°32'50"W., 164.81 FT. (PREVIOUSLY DESCRIBED AS N.89°32'50"W., 164.81 FT.); THENCE N.00°40'18"W., 350.82 FT. (PREVIOUSLY DESCRIBED AS N.00°27'10"E., 381.50 FT.); THENCE S.89°32'50"W., 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"W., 660.80 FT. (PREVIOUSLY DESCRIBED AS S.00°27'10"W., 661.80 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 1390 GRACE STREET. ELEV: 751.23  
2. ARROW ON HYDRANT AT THE END OF HAZELTON 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 & 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: GRACE STEEL DEVELOPMENT, INC.  
SHELBY TOWNSHIP, MI 48317  
(981) 240-1501

DATE: 02/20/17  
JOB NO: 02-0107  
DRAWN BY: W.E.M.  
CHECKED BY: N.P.R.

REVISIONS:  
NO. 1: ISSUED FOR PERMITS  
NO. 2: REVISED PER CITY REVIEW COMMENTS  
NO. 3: REVISED PER CITY REVIEW COMMENTS  
NO. 4: REVISED PER CITY REVIEW COMMENTS

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.89°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°32'06"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., 860.80 FT. (PREVIOUSLY DESCRIBED AS S.00°27'10"W., 861.50 FT.) ALONG THE WEST LINE OF SAID "MARTIN FARMS SUBDIVISION" TO THE POINT OF BEGINNING, CONTAINING 5.558 ACRES.

15-34-402-023  
CLYDE BARBARO  
REGISTERED PROFESSIONAL ENGINEER  
ROCHESTER HILLS, MI 48307

15-34-402-023  
CLYDE BARBARO  
REGISTERED PROFESSIONAL ENGINEER  
ROCHESTER HILLS, MI 48307

15-34-402-055  
CURTIS HENSLEY  
P.O. BOX 1236  
STERLING HEIGHTS, MI 48311-1236

15-34-402-058  
NOCKE WOODR  
430 GRACE STREET  
ROCHESTER HILLS, MI 48307

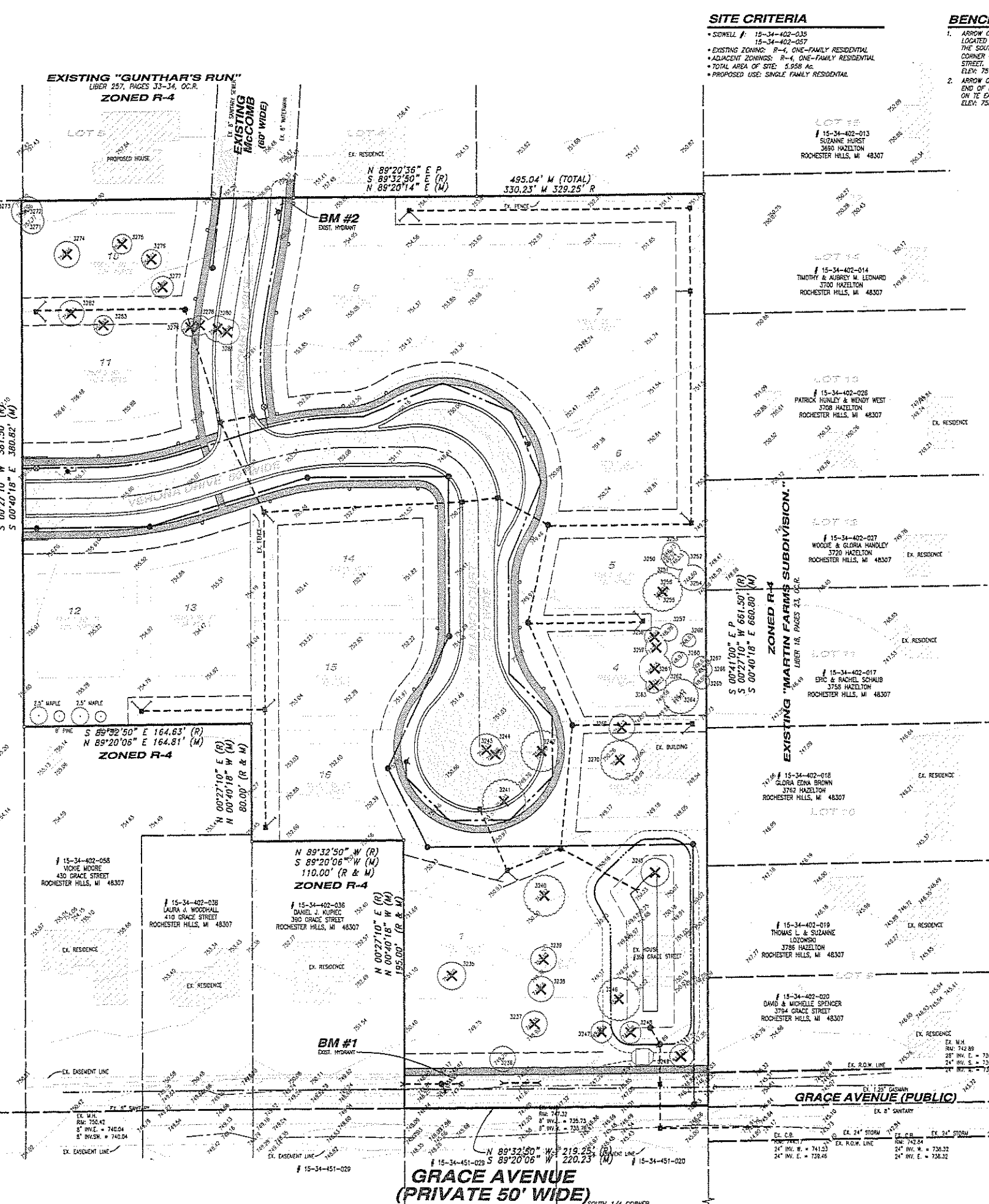
15-34-402-038  
LAURA & WOODHALL  
410 GRACE STREET  
ROCHESTER HILLS, MI 48307

15-34-402-036  
DANIEL J. KUPIEC  
390 GRACE STREET  
ROCHESTER HILLS, MI 48307

15-34-402-019  
THOMAS L. & SUZANNE  
LOTOWSKI  
3788 HAZELTON  
ROCHESTER HILLS, MI 48307

15-34-402-020  
DAVID & MICHELLE SPENKER  
3784 GRACE STREET  
ROCHESTER HILLS, MI 48307

15-34-451-029  
SOUTH 1/4 CORNER  
SECTION 34  
T.3N., R.11E.

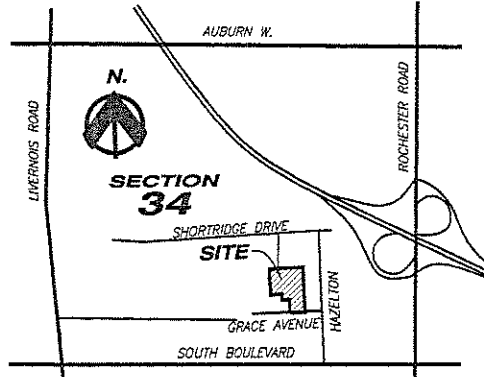


**SITE CRITERIA**

- SOWELL #: 15-34-402-036, 15-34-402-057
- EXISTING ZONING: R-4, ONE-FAMILY RESIDENTIAL
- ADJACENT ZONINGS: R-4, ONE-FAMILY RESIDENTIAL
- TOTAL AREA OF SITE: 5.558 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. 756.18



**LOCATION MAP**

SCALE: 4" = 1 MILE

**NORTH**



SCALE: 1" = 40'

**TREE INVENTORY**

TAG #	SIZE	SPECIES	ELEV.	REMOVE?
3235	12-13	BOXELDER	750.60	YES
3236	12	FRUIT	749.28	NO
3237	8.3-12	FRUIT	749.35	YES
3238	8.3-12	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	9	BOXELDER	750.65	YES
3243	15	BOXELDER	751.13	YES
3244	9	BOXELDER	750.59	YES
3245	13	PINE	749.94	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	BOX ELDER	749.28	NO
3251	12	BOX ELDER	748.79	NO
3252	9	BOX ELDER	748.53	NO
3253	9	BOX ELDER	748.73	NO
3254	9	BOX ELDER	748.60	NO
3255	9	BOX ELDER	748.64	NO
3256	9	BOX ELDER	749.03	YES
3257	6	BOX ELDER	748.69	NO
3258	9	BOX ELDER	748.92	NO
3259	10	BOX ELDER	749.17	YES
3260	7	BOX ELDER	748.97	NO
3261	18	BOX ELDER	748.56	NO
3262	6	BOX ELDER	749.23	NO
3263	7	BOX ELDER	749.71	YES
3264	18	BOX ELDER	749.42	NO
3265	17	BOX ELDER	748.69	NO
3266	7	BOX ELDER	748.51	NO
3267	6	BOX ELDER	748.63	NO
3268	8	BOX ELDER	748.92	NO
3269	12	BOX ELDER	750.35	YES
3270	18	WALNUT	750.25	YES
3271	11	MAPLE	757.77	NO
3272	2-13	OAK	758.36	NO
3273	13	OAK	758.02	NO
3274	12	ASH	758.96	DISEASED
3275	9	ELM	757.19	YES
3276	9	ELM	758.21	YES
3277	10	POPLAR	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	755.68	YES

**TREE SUMMARY:**

TOTAL # OF TAGGED TREES:	48	TOTAL # OF TREES TO BE REMOVED:	-30
TOTAL # OF DISEASED TREES:	-1	TOTAL # OF TREES TO BE SAVED:	18
TOTAL # OF TREES OFFSITE:	0		
TOTAL # OF REGULATED TREES:	0	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 the 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.

**APPEX**  
ENGINEERING GROUP INC.  
CIVIL ENGINEERING & LAND PLANNING CONSULTANTS  
PHONE: 586-759-5200  
FAX: 586-254-5314

PROJECT: GRACE PARC SUBDIVISION  
CLIENT: FRANCO C. MANZINI  
47888 VAN DYKE AVE.  
SHELBY TOWNSHIP, MI 48317  
JOB NO: 02-017  
DATE: 4/20/04  
DRAWN BY: DRAYAN BYRNE  
CHECKED BY: W.E.M.

REVISIONS:  
1/20/04 REVISED FOR PERMITS ENVELOPMENT  
2/22/04 REVISED PER UTILITY MEETING  
3/22/04 REVISED PER CITY MEETING  
4/20/04 REVISED PER CITY MEETING

REVISIONS:  
1/20/04 REVISED FOR PERMITS ENVELOPMENT  
2/22/04 REVISED PER UTILITY MEETING  
3/22/04 REVISED PER CITY MEETING  
4/20/04 REVISED PER CITY MEETING

EXISTING TREE AND TREE REMOVAL PLAN

SHEET

4 OF 5

MUNICIPAL REVIEW NUMBERS  
CITY FILE #04-011

PLANT SCHEDULE & COST ESTIMATE

DECIDUOUS TREES:

Table with columns: SYMBOL, QUANTITY, BOTANICAL NAME, COMMON NAME, SIZE, ROOT, UNIT PRICE, UNIT TOTAL. Includes Acer rubrum (Red Sunset).

EVERGREEN TREES:

Table with columns: SYMBOL, QUANTITY, BOTANICAL NAME, COMMON NAME, SIZE, ROOT, UNIT PRICE, UNIT TOTAL. Includes Picea pungens (Colorado Spruce).

Summary table for plant schedule with columns: TOTAL TREES, SUBTOTAL COST, 5% CONTINGENCY, TOTAL ESTIMATE.

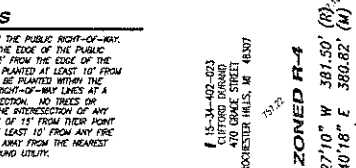
LEGEND

Legend symbols for existing grade, existing trees to be removed, existing trees, and proposed protective tree fencing.

15-34-402-055 CURTIS HENSLEY 910 BOX 1239 STERLING HEIGHTS, MI 48311-1239

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

EVERGREEN TREE PLANTING DETAIL



TREE PLANTING RESTRICTIONS

FROM 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.

CLOSING COMMENTS

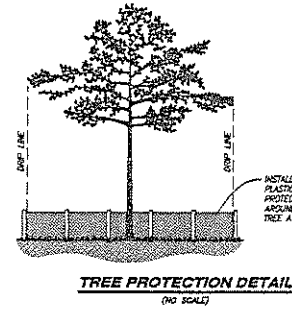
PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS FORESTRY DIVISION NEEDS TO INSPECT ALL TREES EXISTING ON THE SITE THAT POSE A HAZARD TO THE SAFE USE OF THE PUBLIC RIGHT-OF-WAY.

CONTRACTOR'S NOTE

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

TREE PROTECTION NOTES

- 1. TREE PROTECTIVE FENCING (TPF) SHALL BE INSTALLED FOR THE PERIOD APPROVED BY THE CITY OF ROCHESTER HILLS PLANNING DEPARTMENT. THE TPF MUST BE IN PLACE AND BE MAINTAINED BY THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT PRIOR TO THE START OF ANY CONSTRUCTION OPERATIONS.



BENCHMARKS

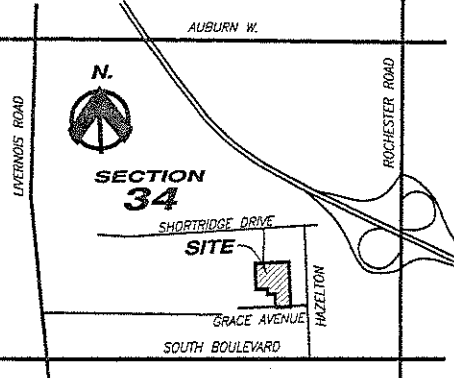
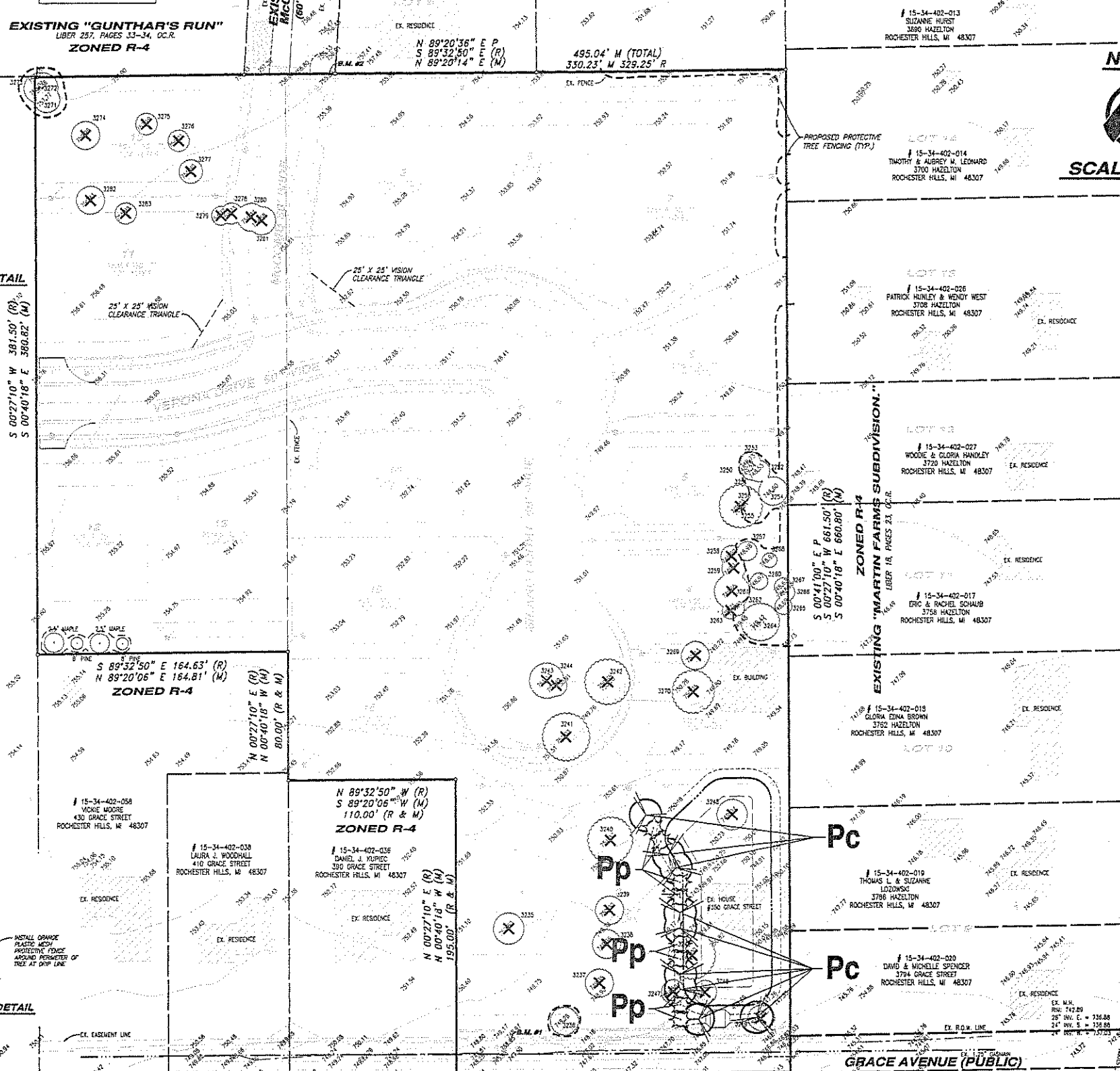
- 1. BENCHMARK ON HYDRANT LOCATED 10 FEET EAST OF THE SOUTHWEST CORNER OF #390 GRACE STREET. ELEV. 751.23

LANDSCAPING NOTES

- 1. ALL PLANT MATERIAL SHALL BE TRUE TO NAME, FREE FROM PHYSICAL DAMAGE AND VIVID BURN.

LANDSCAPE CONTRACTOR RESPONSIBILITIES

- 16. A PRE-EMERGENT WEED CONTROL AGENT, "TRIFLOR" OR EQUAL, SHALL BE APPLIED UNIFORMITY TO ALL PLANTING BEDS PRIOR TO MULCHING.



LOCATION MAP

SCALE: 4" = 1 MILE

SITE CRITERIA

- SOWELL #: 15-34-402-035, 15-34-402-057

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°33'47\"/>

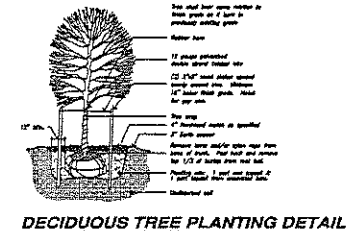
TREE SUMMARY:

Summary table for tree counts: TOTAL # OF TARGETED TREES: 49, TOTAL # OF TREES TO BE REMOVED: -30, TOTAL # OF TREES TO REMAIN: 19.

TREE REPLACEMENT CALCULATION:

NUMBER OF EXISTING TREES TO BE REMOVED: 30 + 1 DISEASED ASH TREE = 31. NUMBER OF REPLACEMENT CREDITS REQUIRED = 30.

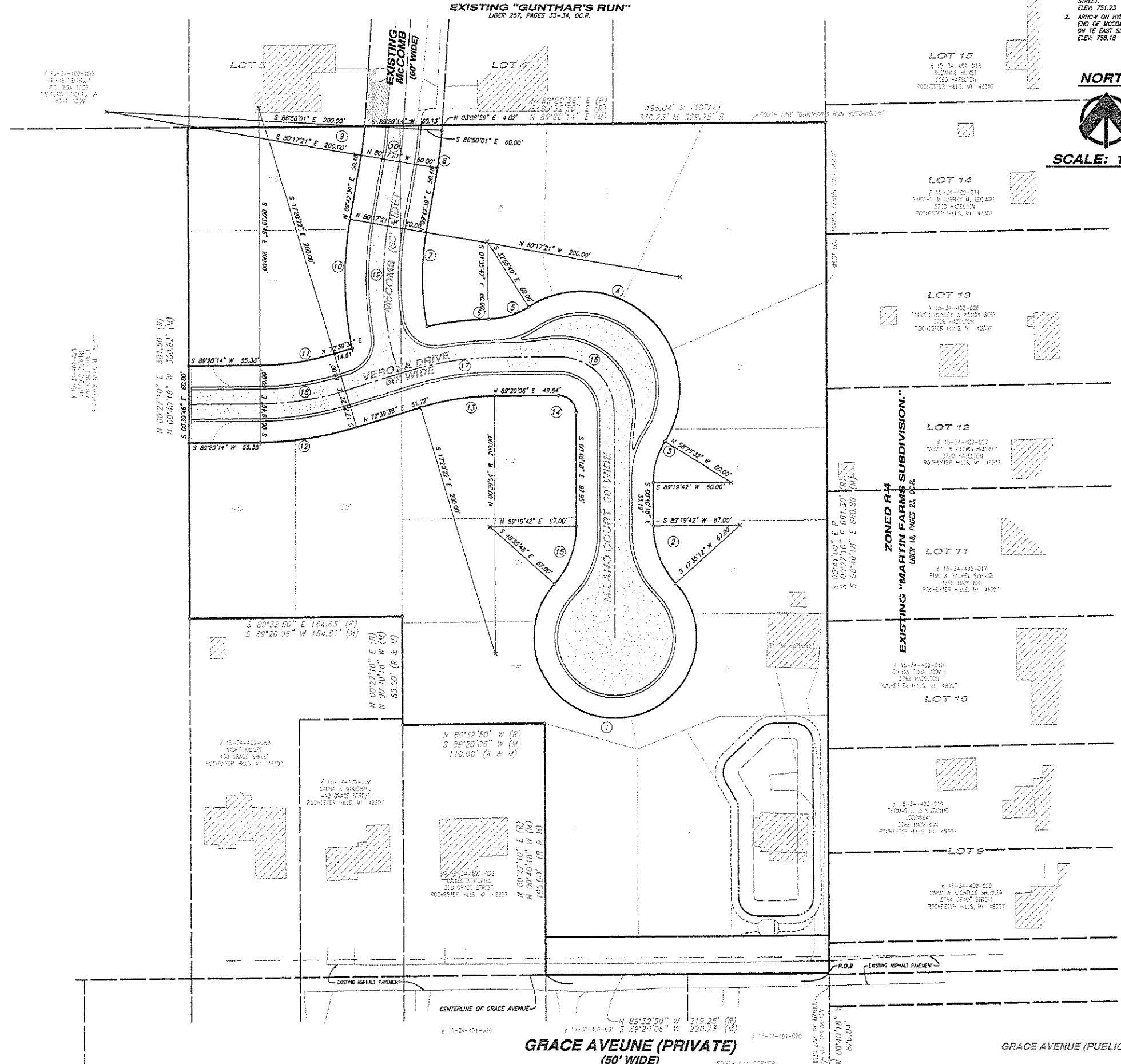
NOTE: MINIMUM TREE SPACING SHALL BE AS FOLLOWS: DECIDUOUS TREES: 10' O.C., EVERGREEN TREES: 10' O.C.



DECIDUOUS TREE PLANTING DETAIL

NOT TO BE USED AS CONSTRUCTION DRAWINGS

Vertical sidebar containing project information: PROJECT: GRACE PARC SUBDIVISION, CLIENT: FRANCISCO C. MANCINI, JOB NO: 02-017, and APPEX ENGINEERING & LAND PLANNING CONSULTANTS logo.



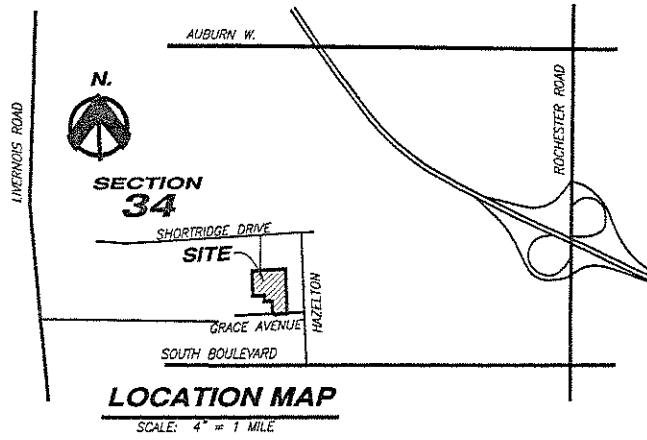
**BENCHMARKS**

- ARROW ON HYDRANT LOCATED 10 FEET EAST OF THE SOUTHEAST CORNER OF 4380 GRACE STREET. ELEV: 751.23
- ARROW ON HYDRANT AT THE END OF MCCOMB STREET ON THE EAST SIDE. ELEV: 755.18

**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.89°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 13 OF PLATS, PAGE 23, OAKLAND COUNTY RECORDS; THENCE N.00°40'18"W, 866.04 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 60 FT. WIDE PRIVATE ROAD; THENCE N.00°40'18"W, 125.00 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°20'06"W, 485.04 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, 664.80 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 3.958 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:** 3.958 AC.
- PROPOSED USE:** SINGLE FAMILY RESIDENTIAL
- SETBACK SUMMARY:** FRONT: 25', REAR: 35', SIDE: 10' MIN./20' TOTAL
- UTILITY SUMMARY:** WATER MAIN: CONNECT TO EXIST. MUNICIPAL WATERMAINS. SANITARY SEWER: CONNECT TO EXIST. MUNICIPAL SANITARY SEWERS. STORM SEWER: ENCLOSED PIPE TO ON-SITE RETENTION POND
- LANDSCAPING:** REFER TO TREE REPLACEMENT & LANDSCAPING PLAN.
- NUMBER OF LOTS PROPOSED:** 16 LOTS
- ALLOWABLE NET DENSITY:** (3.4 units/Ac.) x (3.958 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:** 5,640 S.F.
- MINIMUM LOT FRONTAGE:** 80'
- MINIMUM LOT AVERAGING FRONTAGE:** 72'
- MINIMUM CORNER LOT AVERAGING FRONTAGE:** 92'
- MINIMUM CORNER FRONTAGE:** 100'

**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	48.97	41°44'30"	49.79	N 21°23'33" E
3	60.00	33.74	37°13'42"	33.31	N 16°28'10" E
4	76.50	298.27	154°28'28"	149.22	S 45°41'08" E
5	60.00	32.81	31°19'57"	32.40	S 72°44'18" W
6	260.00	48.35	10°39'15"	48.28	S 83°04'40" W
7	200.00	73.41	21°07'50"	73.00	N 00°48'18" W
8	260.00	29.70	06°32'40"	29.58	N 02°26'19" E
9	201.45	32.84	09°29'50"	32.83	S 02°27'02" W
10	260.00	100.72	22°11'42"	100.10	S 01°23'14" E
11	200.00	72.85	18°26'50"	72.50	S 79°19'26" W
12	260.00	75.68	18°40'36"	75.41	N 80°59'56" E
13	200.00	59.20	16°40'28"	58.00	N 80°59'52" E
14	13.50	21.20	89°59'54"	13.09	N 43°43'08" W
15	67.00	48.81	41°44'30"	47.74	S 20°11'57" W
16	43.50	68.32	89°59'55"	61.51	S 45°40'06" E
17	230.00	66.94	16°40'28"	66.70	N 80°59'56" E
18	230.00	66.94	16°40'28"	66.71	S 80°59'56" W
19	230.00	108.59	27°03'01"	107.58	N 03°49'11" W
20	230.00	26.27	06°32'40"	26.26	S 06°29'18" 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 may be occasioned by his failure to locate and preserve any and all underground utilities.  
3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 (TOLL FREE) for the location of underground utilities.  
The contractor shall be responsible for adhering to all applicable local, state, and federal standards, specifications, and guidelines for construction.

**APPEX ENGINEERING GROUP INC.**  
ENGINEERING & LAND PLANNING CONSULTANTS  
47745 VAN DYKE AVENUE  
ROCHESTER HILLS, MI 48066  
PHONE: 586-799-5200

**GRACE PARC SUBDIVISION**

CLIENT: FRANCIS G. MANCINI, GRACE STREET DEVELOPMENT, INC., 430 GRACE STREET, ROCHESTER HILLS, MI 48067  
(909) 720-1601

PROJECT: PART OF THE SE 1/4 OF SECTION 34

JOB NO: 02-017  
DATE: 12/08/04  
DRAWN BY: J.R.F.

REVISIONS:

SCALE: ROADWAY GEOMETRIC PLAN

SHEET 1 OF 1

MUNICIPAL REVIEW NUMBER: CITY FILE #04-011