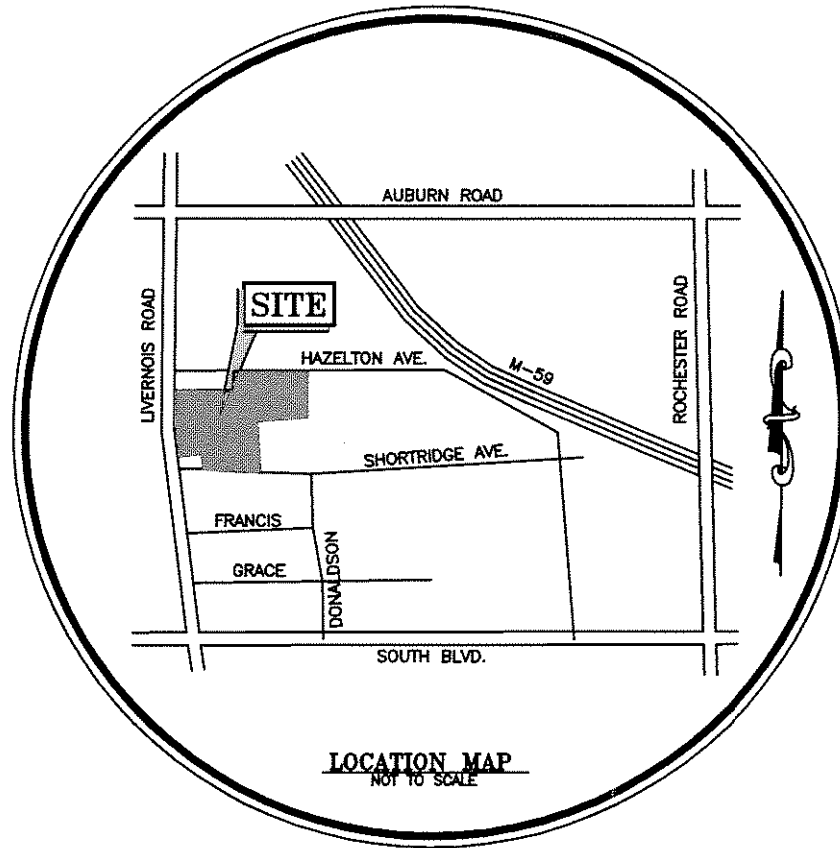


# FINAL SITE PLAN FOR: "HICKORY RIDGE" SITE CONDOMINIUM PART OF SECTION 34, T3N, R11E, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

NOTE: THIS DEVELOPMENT IS BASED  
ON LOT AVERAGING SEE SHEET 4



01-25-06 RLH  
05-077 HICKORY RIDGE BOUNDARY COMBINATION

**DESCRIPTION OF PROPERTY (FROM RECORD 18-34-301-012)**  
LOTS 15 AND 16, "SUPERIOR'S PLAT NO. 8", PART OF THE SW1/4 OF SECTION 34, T3N, R11E, ACON TOWNSHIP, OAKLAND COUNTY, MICHIGAN, RECORDED IN LIBER 5 OF PLATS, PAGE 56, OAKLAND COUNTY RECORDS, EXCEPT THE WEST 7 FEET OF THE NORTH 40 FEET OF LOT 15 TAKEN FOR ROAD PURPOSES.

**DESCRIPTION OF PROPERTY (FROM RECORD 18-34-301-016)**  
PART OF LOTS 17 AND 18, "SUPERIOR'S PLAT NO. 8", PART OF THE SW1/4 OF SECTION 34, T3N, R11E, ACON TOWNSHIP, OAKLAND COUNTY, MICHIGAN, RECORDED IN LIBER 5 OF PLATS, PAGE 56, OAKLAND COUNTY RECORDS, EXCEPT REMAINS AT A POINT DISTANT 807'44"10"E 228.75 FEET AND N62°15'00"E 53.00 FEET FROM THE W1/4 CORNER; THENCE N62°15'00"E 250.00 FEET; THENCE 807'44"10"E 288.06 FEET; THENCE N62°42'20"W 42.37 FEET; THENCE S82°22'01"W 210.03 FEET; THENCE N07°44'10"W 232.00 FEET ALONG THE WEST LINE OF LOTS 17 AND 18 TO THE POINT OF BEGINNING.

**DESCRIPTION OF PROPERTY (FROM RECORD 18-34-301-007)**  
PART OF LOTS 17 AND 18, "SUPERIOR'S PLAT NO. 8", PART OF THE SW1/4 OF SECTION 34, T3N, R11E, ACON TOWNSHIP, OAKLAND COUNTY, MICHIGAN, RECORDED IN LIBER 5 OF PLATS, PAGE 56, OAKLAND COUNTY RECORDS, BEGINNING AT A POINT DISTANT 807'44"10"E 228.75 FEET ALONG THE WEST LINE OF SECTION 34 AND N62°15'00"E 53.00 FEET FROM THE W1/4 CORNER; THENCE N62°15'00"E 250.00 FEET; THENCE 807'44"10"E 100.00 FEET; THENCE S82°15'00"W 250.00 FEET; THENCE N07°44'10"W 100.00 FEET ALONG THE WEST LINE OF LOTS 17 AND 18 TO THE POINT OF BEGINNING.

**DESCRIPTION OF PROPERTY (FROM RECORD 18-34-301-002)**  
LOT 14, "SUPERIOR'S PLAT NO. 8", PART OF THE SW1/4 OF SECTION 34, T3N, R11E, ACON TOWNSHIP, OAKLAND COUNTY, MICHIGAN, RECORDED IN LIBER 5 OF PLATS, PAGE 56, OAKLAND COUNTY RECORDS, EXCEPT THE SOUTH 5 FEET.

**DESCRIPTION OF PROPERTY (FROM RECORD 18-34-151-004)**  
LOT 1, "SUPERIOR'S PLAT NO. 8", PART OF THE SW1/4 OF SECTION 34, T3N, R11E, ACON TOWNSHIP, OAKLAND COUNTY, MICHIGAN, RECORDED IN LIBER 6 OF PLATS, PAGE 55, OAKLAND COUNTY RECORDS, EXCEPT THE WEST 10 FEET.

**DESCRIPTION OF PROPERTY (FROM RECORD 18-34-151-003)**  
LOT 2, "SUPERIOR'S PLAT NO. 8", PART OF THE SW1/4 OF SECTION 34, T3N, R11E, ACON TOWNSHIP, OAKLAND COUNTY, MICHIGAN, RECORDED IN LIBER 6 OF PLATS, PAGE 55, OAKLAND COUNTY RECORDS, EXCEPT THE WEST 10 FEET.

**DESCRIPTION OF PROPERTY (FROM RECORD 18-34-178-001)**  
LOT 118, "SUPERIOR'S PLAT OF ANACROFT'S SUBDIVISION NO. 1", A REPLAT OF LOTS 41 AND 42 OF SUPERIOR'S PLAT NO. 8, PART OF THE N1/2 OF SECTION 34, T3N, R11E, ACON TOWNSHIP, OAKLAND COUNTY, MICHIGAN, RECORDED IN LIBER 48 OF PLATS, PAGE 55, OAKLAND COUNTY RECORDS.

**DESCRIPTION OF PROPERTY (FROM RECORD 18-34-151-012)**  
PART OF LOT 3, EXCEPT THE WEST 636 FEET OF THE NORTH 130 FEET, ALSO EXCEPT THE WEST 10 FEET OF THE SOUTH 15.02 FEET OF "SUPERIOR'S PLAT NO. 8", PART OF THE N1/2 OF SECTION 34, T3N, R11E, ACON TOWNSHIP, OAKLAND COUNTY, MICHIGAN, RECORDED IN LIBER 6 OF PLATS, PAGE 55, OAKLAND COUNTY RECORDS.

SUBJECT TO RESTRICTIONS, RESERVATIONS AND EASEMENTS, IF ANY.

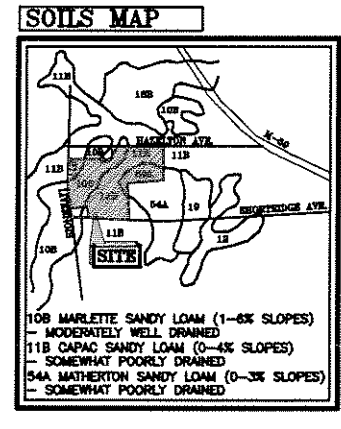
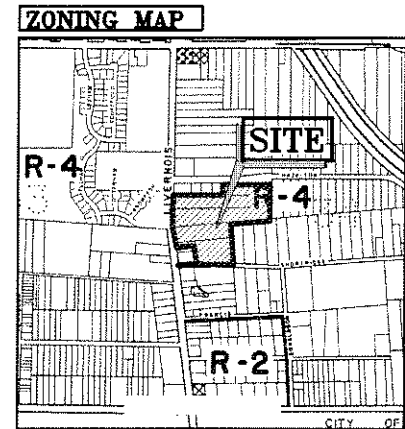
**DESCRIPTION OF PROPERTY (COMBINED PARCELS)**  
PART OF THE SW1/4 AND PART OF THE NW1/4 OF SECTION 34, T3N, R11E, ACON TOWNSHIP (NOW CITY OF ROCHESTER HILLS), OAKLAND COUNTY, MICHIGAN AND PART OF "SUPERIOR'S PLAT NO. 8", RECORDED IN LIBER 5 OF PLATS, PAGE 56, OAKLAND COUNTY RECORDS AND PART OF "SUPERIOR'S PLAT NO. 8", RECORDED IN LIBER 6 OF PLATS, PAGE 55, OAKLAND COUNTY RECORDS AND PART OF "SUPERIOR'S PLAT OF ANACROFT'S SUBDIVISION NO. 1", RECORDED IN LIBER 48 OF PLATS, PAGE 55, OAKLAND COUNTY RECORDS, DESCRIBED AS: COMMENCING AT THE W1/4 CORNER OF SECTION 34; THENCE N62°31'00"E 80.17 FEET TO THE EAST RIGHT OF WAY OF LIVERNOIS ROAD (60 FEET HALF WIDTH) AND FOR THE POINT OF BEGINNING; THENCE N00°45'00"E 138 FEET ALONG THE EAST RIGHT OF WAY OF LIVERNOIS ROAD (60 FEET HALF WIDTH) TO THE E-W1/4 LINE OF SECTION 34; THENCE CONTINUING N07°44'00"E 418.81 FEET ALONG THE EAST RIGHT OF WAY OF LIVERNOIS ROAD (60 FEET HALF WIDTH); THENCE N62°31'00"E 80.17 FEET TO THE NORTH LINE OF LOT 3; THENCE N00°45'00"E 100.00 FEET TO THE NORTH LINE OF LOT 3; THENCE N62°31'00"E 80.17 FEET TO THE SOUTH RIGHT OF WAY OF HAZELTON AVENUE (WIDTH VARIES); THENCE N62°31'00"E 157.80 FEET ALONG THE NORTH LINE OF LOT 3; THENCE S82°22'01"W 210.03 FEET TO THE E-W1/4 LINE OF SECTION 34; THENCE S82°22'01"W 541.17 FEET ALONG THE E-W1/4 LINE OF SECTION 34 TO THE NE CORNER OF LOT 14, "SUPERIOR'S PLAT NO. 8"; THENCE S03°47'00"E 558.43 FEET ALONG THE EAST LINE OF LOT 14, "SUPERIOR'S PLAT NO. 8" TO THE NORTH RIGHT OF WAY OF SHORTRIDGE DRIVE (WIDTH VARIES); THENCE ALONG THE NORTH RIGHT OF WAY OF SHORTRIDGE DRIVE (WIDTH VARIES) THE FOLLOWING THREE (3) COURSES: (1) N67°54'30"W 191.88 FEET, (2) N67°10'30"W 513.02 FEET AND (3) S82°15'00"W 210.00 FEET TO THE EAST RIGHT OF WAY OF LIVERNOIS ROAD (60 FEET HALF WIDTH); THENCE N07°44'10"W 5.04 FEET ALONG THE EAST RIGHT OF WAY OF LIVERNOIS ROAD (60 FEET HALF WIDTH); THENCE N62°17'30"E 211.08 FEET; THENCE S57°10'00"E 42.83 FEET; THENCE N07°54'01"W 168.90 FEET; THENCE S82°02'20"W 250.84 FEET TO THE EAST RIGHT OF WAY OF LIVERNOIS ROAD (60 FEET HALF WIDTH); THENCE ALONG THE EAST RIGHT OF WAY OF LIVERNOIS ROAD (60 FEET HALF WIDTH) THE FOLLOWING THREE (3) COURSES: (1) N67°44'10"W 288.42 FEET, (2) N62°37'30"E 7.01 FEET AND (3) N07°44'10"W 38.11 FEET TO THE POINT OF BEGINNING. CONTAINING 1055677 SQUARE FEET OR 24.2280 ACRES, MORE OR LESS.

SUBJECT TO RESTRICTIONS, RESERVATIONS AND EASEMENTS, IF ANY.

BEARING DATA ORIGINATES FROM THE E-W1/4 LINE OF SECTION 34 AS SHOWN IN "SUPERIOR'S PLAT NO. 8", RECORDED IN LIBER 6 OF PLATS, PAGE 55 AND "SUPERIOR'S PLAT NO. 8", RECORDED IN LIBER 5 OF PLATS, PAGE 56, OAKLAND COUNTY RECORDS.

THIS PROPERTY LIES WITHIN AN AREA DESIGNATED AS ZONE C (AREA OF MINIMAL FLOODING) AS DEPICTED BY THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 280471 0000 B, DATED SEPTEMBER 02, 1994, PROVIDED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

SITE DATA	
ZONE	R-4
TOTAL SITE AREA	24.28 ACRES
LIVERNOIS ROAD RIGHT-OF-WAY	0.048 ACRES
NET SITE ADJACENT	24.21 ACRES
REQUIRED UNIT SIZE	9,800 SF., 80 FT. W/DF
DENSITY CALC.	
PROPOSED UNITS	50 UNITS
PERMITTED DENSITY (3.4 UNITS/ACRE)	79.6 UNITS
UNIT SIZES PROVIDED	
AVERAGE AREA	11,900 SF.
MAX. AREA	32,288 S.F. (UNIT 42)
MIN. AREA	9,840 S.F.
MAX. WIDTH	157.82 FEET (UNIT 42)
MIN. WIDTH	72.00 FEET
USING LOT AVERAGING	
MIN. UNIT AREA PERMITTED	9,840 S.F.
MIN. UNIT WIDTH	72 FEET
UNIT SUBTRACTS	
FRONT	25.0'
STOP W/.	10.0'
10/14 SIDE	20.0'
REAR	25.0'
OPEN SPACE PROVIDED	
	5.47 acres
	0.49 acres
	0.14 acres
	0.03 acres
	5.73 acres



ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF ALL GOVERNING AGENCIES.

ALL WATERMANS, SANITARY SEWERS (AND LEADS) AND STORM SEWERS UNDER PROPOSED OR EXISTING PAVEMENT OR WITHIN 3 FT. OF PAVEMENT TO BE SAND BACK FILLED AND COMPACTED TO 95% OPTIMUM DENSITY (PROCTOR). ALSO ALL UTILITY CROSSINGS TO BE SAND BACK FILLED. SAND BACK FILLING TO BE INCIDENTAL TO CONTRACT.

ALL DRAWINGS, SPECIFICATIONS, AND OTHER RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF FAZAL KHAN & ASSOC. INC. AND SHALL BE RETURNED UPON REQUEST.

REPRODUCTION OF DRAWINGS AND RELATED DOCUMENTS, IN WHOLE OR IN PART, IS FORBIDDEN WITHOUT THE WRITTEN PERMISSION OF FAZAL KHAN & ASSOCIATES INC.

THE CONTRACTOR SHALL CHECK AND VERIFY ALL PERTINENT DIMENSIONS AND REPORT ANY DISCREPANCIES TO FAZAL KHAN & ASSOCIATES INC. BEFORE PROCEEDING WITH THE WORK.

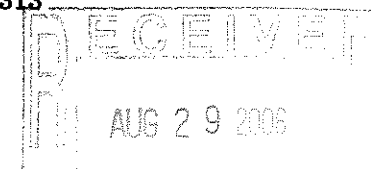
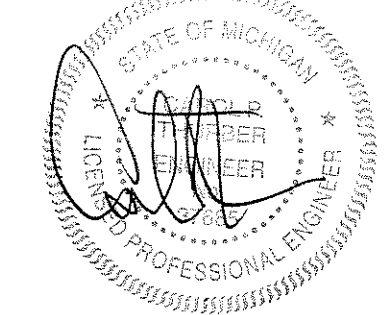
- SHEET 1 - COVER SHEET
- SHEET 2 - TOPOGRAPHIC SURVEY
- SHEET 3A - TREE SURVEY (NORTH)
- SHEET 3B - TREE INVENTORY LIST (NORTH)
- SHEET 3C - TREE SURVEY AND INVENTORY (SOUTH)
- SHEET 3D - TREE SURVEY AND INVENTORY (SHORTRIDGE)
- SHEET 3E - TREE SURVEY AND INVENTORY (ADDITIONAL PARCEL ON NORTH PORTION OF SITE)
- SHEET 4 - PRELIMINARY PLAN AND GENERAL UTILITY PLAN
- SHEET 5A - GRADING PLAN, STORM DRAINAGE AND DRAINAGE DISTRICTS MAP
- SHEET 5B - GRADING PLAN, STORM DRAINAGE AND DRAINAGE DISTRICTS MAP
- SHEET 6 - APPROACH PLAN
- SHEET 7 - LANDSCAPE PLAN
- SHEET 8 - LANDSCAPE NOTES AND DETAILS

**OWNER / DEVELOPER:**  
BLUEWOOD PROPERTIES, LLC  
1717 STUTZ  
TROY, MICHIGAN 48084  
PHONE: (248) 614-9780  
FAX: (248) 614-9980

**WETLANDS FLAGGED BY:**  
KING & MACGREGOR ENVIR., INC.  
200 MAPLE PARK BOULEVARD, SUITE 208  
ST. CLAIR SHORES, MICHIGAN 48082  
CONTACT: DEREK STRATELAK  
PHONE: (586) 498-9596  
FAX: (586) 498-9902

**TREES IDENTIFIED BY:**  
KING & MACGREGOR ENVIR., INC.  
200 MAPLE PARK BOULEVARD, SUITE 208  
ST. CLAIR SHORES, MICHIGAN 48082  
CONTACT: PAMELA RICE  
PHONE: (586) 498-9596  
FAX: (586) 498-9902

**ENGINEERS & SURVEYORS:**  
FAZAL KHAN & ASSOCIATES, INC.  
43345 SCHOENHERR ROAD  
STERLING HEIGHTS, MICHIGAN 48313  
PHONE (586) 739-8007  
FAX: (586) 739-6994



PLANS SUBMITTED TO: ROCHESTER HILLS PLANNING DEPARTMENT ROCHESTER HILLS CITY COUNCIL	DATE SUBMITTED: AUGUST 24, 2006	COMMENTS RECEIVED:	RE-SUBMITTED:	COMMENTS RECEIVED:	RE-SUBMITTED:	DATE APPROVED:	ADDRESS AND PHONE #:
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**CITY FILE  
#05-006**

NOT TO BE USED AS CONSTRUCTION DRAWINGS

"HICKORY RIDGE" SITE CONDOMINIUM  
PART OF SECTION 34, T3N, R11E, CITY OF ROCHESTER HILLS,  
OAKLAND COUNTY, MICHIGAN

FAZAL KHAN & ASSOCIATES, INC.  
ENGINEERS & SURVEYORS  
43345 SCHOENHERR ROAD  
STERLING HEIGHTS, MI 48313  
PHONE (586) 739-8007 FAX (586) 739-6994

PROJECT NO. 03-349  
DATE 01-25-06  
DRAWN BY B.A.V. CHECKED BY C.P.T.

CLIENT  
BLUEWOOD PROPERTIES, LLC  
CONSTRUCTION AS-BUILT

COVER SHEET

**TOPOGRAPHIC SURVEY AND SITE GRADIENT SKETCH "HICKORY RIDGE SITE CONDOMINIUM"**  
 PART OF SECTION 34, T3N, R11E, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

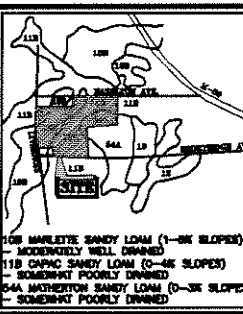
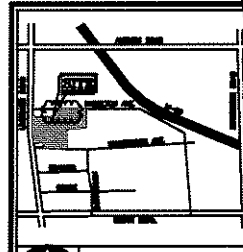
**LEGEND**

- BORN FOUND
- BORN SET
- MONUMENT FOUND
- MONUMENT SET
- WATERMAIN
- SANITARY SEWER
- STORM SEWER
- FENCE LINE
- GAS LINE
- GAS LINE
- UNDERHEAD WIRE
- WIRE
- UTILITY POLE
- ROAD ALIET
- ROAD DITCH BASH
- REAR-YARD ALIET
- REAR-YARD CLA
- DIS-SECTER
- WELL
- CONCRETE PAVEMENT
- GRVEL

KENSINGTON FOREST  
 SUBDIVISION NO. 1  
 LIBER 222, PAGES 31-37  
 ZONED R4

BROMPTON PARK  
 (PRIVATE)  
 (REAR-YARD DRIVE, DRIVE AND SIDE DRIVE)  
 ZONED R4

BROMPTON ROAD (WIDTH VARIES)  
 (REAR-YARD DRIVE, DRIVE AND SIDE DRIVE)  
 COUNTY RECORDS



**DESCRIPTION OF PROPERTY (DOMINED PARCELS)**

PART OF THE SW1/4 AND PART OF THE NW1/4 OF SECTION 34, T3N, R11E, A00N TOWNSHIP (NOW CITY OF ROCHESTER HILLS), OAKLAND COUNTY, MICHIGAN AND PART OF "SUPERVISOR'S PLAT NO. 5", RECORDED IN LIBER 8 OF PLATS, PAGE 88, OAKLAND COUNTY RECORDS AND PART OF "SUPERVISOR'S PLAT NO. 17", RECORDED IN LIBER 8 OF PLATS, PAGE 88, OAKLAND COUNTY RECORDS AND PART OF "SUPERVISOR'S PLAT OF ANCHOR'S SUBDIVISION NO. 1", RECORDED IN LIBER 48 OF PLATS, PAGE 88, OAKLAND COUNTY RECORDS, DESCRIBED AS: COMMENCING AT THE W1/4 CORNER OF SECTION 34; THENCE N07°31'00"E 80.17 FEET TO THE EAST RIGHT OF WAY OF LIVERMORE ROAD (80 FEET HALF WIDTH) AND FOR THE POINT OF BEGINNING; THENCE N02°48'00"E 0.98 FEET ALONG THE EAST RIGHT OF WAY OF LIVERMORE ROAD (80 FEET HALF WIDTH) TO THE E-W1/4 LINE OF SECTION 34; THENCE CONTINUING N02°48'00"E 418.81 FEET ALONG THE EAST RIGHT OF WAY OF LIVERMORE ROAD (80 FEET HALF WIDTH); THENCE N07°30'42"E 858.00 FEET TO THE NORTH LINE OF LOT 3, "SUPERVISOR'S PLAT NO. 5", THE SOUTH RIGHT OF WAY OF HAZELTON AVENUE (WIDTH VARIES); THENCE N07°30'42"E 837.83 FEET ALONG THE NORTH LINE OF LOT 3, "SUPERVISOR'S PLAT NO. 5" AND THE SOUTH RIGHT OF WAY OF HAZELTON AVENUE (WIDTH VARIES) TO THE EAST LINE OF LOT 3, "SUPERVISOR'S PLAT NO. 5" AND THE WEST LINE OF LOT 118, "SUPERVISOR'S PLAT OF ANCHOR'S SUBDIVISION NO. 1"; THENCE N07°30'42"E 43.97 FEET ALONG THE WEST LINE OF LOT 118, "SUPERVISOR'S PLAT OF ANCHOR'S SUBDIVISION NO. 1" TO THE SOUTH RIGHT OF WAY OF HAZELTON ROAD (WIDTH VARIES); THENCE S87°09'30"E 157.80 FEET ALONG THE NORTH LINE OF LOT 118, "SUPERVISOR'S PLAT OF ANCHOR'S SUBDIVISION NO. 1"; SOUTH RIGHT OF WAY OF HAZELTON ROAD (WIDTH VARIES) TO THE EAST LINE OF LOT 118, "SUPERVISOR'S PLAT OF ANCHOR'S SUBDIVISION NO. 1"; THENCE S00°01'40"W 303.38 FEET ALONG THE EAST LINE OF LOT 118, "SUPERVISOR'S PLAT OF ANCHOR'S SUBDIVISION", TO "SUPERVISOR'S PLAT NO. 5", AND TO THE E-W1/4 LINE OF SECTION 34; THENCE S87°37'30"W 841.17 FEET ALONG THE E-W1/4 LINE OF SECTION 34 TO THE NE CORNER OF LOT 14, "SUPERVISOR'S PLAT NO. 5"; THENCE S03°47'08"E 868.43 FEET ALONG THE EAST LINE OF LOT 14, "SUPERVISOR'S PLAT NO. 5" TO THE NORTH RIGHT OF WAY OF SHERRIDGE DRIVE (WIDTH VARIES); THENCE ALONG THE NORTH RIGHT OF WAY OF SHERRIDGE DRIVE (WIDTH VARIES) THE FOLLOWING THREE (3) COURSES: (1) N17°24'00"W 191.89 FEET, (2) N17°10'30"W 513.02 FEET AND (3) S87°17'36"W 210.32 FEET TO THE EAST RIGHT OF WAY OF LIVERMORE ROAD (80 FEET HALF WIDTH); THENCE N07°44'10"W 81.04 FEET ALONG THE EAST RIGHT OF WAY OF LIVERMORE ROAD (80 FEET HALF WIDTH); THENCE N17°36'E 211.08 FEET; THENCE S87°10'00"E 48.83 FEET; THENCE N07°54'01"W 183.80 FEET; THENCE S82°05'28"W 250.84 FEET TO THE EAST RIGHT OF WAY OF LIVERMORE ROAD (80 FEET HALF WIDTH); THENCE ALONG THE EAST RIGHT OF WAY OF LIVERMORE ROAD (80 FEET HALF WIDTH) THE FOLLOWING THREE (3) COURSES: (1) N07°44'10"W 298.42 FEET, (2) N17°37'02"E 7.01 FEET AND (3) N07°44'10"W 38.11 FEET TO THE POINT OF BEGINNING, CONTAINING 108877 SQUARE FEET OR 24.2880 ACRES, MORE OR LESS.

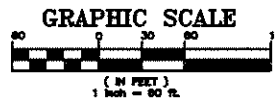
SUBJECT TO RESTRICTIONS, RESERVATIONS AND EASEMENTS, IF ANY.

BEARING DATA ORIGINATES FROM THE E-W1/4 LINE OF SECTION 34 AS SHOWN IN "SUPERVISOR'S PLAT NO. 5", RECORDED IN LIBER 8 OF PLATS, PAGE 88 AND "SUPERVISOR'S PLAT NO. 17", RECORDED IN LIBER 5 OF PLATS, PAGE 88, OAKLAND COUNTY RECORDS.

THIS PROPERTY LIES WITHIN AN AREA DESIGNATED AS ZONE C (AREA OF MINIMAL FLOODING) AS DEPICTED BY THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 280471 0203 B, DATED SEPTEMBER 02, 1994.

**BENCHMARK**  
 ARROW ON FIRE HYDRANT LOOKED ON EAST SIDE LIVERMORE AVE. APPROX. NORTH OF HOUSE #3333. ELEV=813.72

**NOTE:**  
 UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATIONS.



**WETLANDS FLAGGED BY:**  
 KING & MACGREGOR ENVR., INC.  
 200 MAPLE PARK BOULEVARD, SUITE 208  
 ST. CLAIR SHORES, MICHIGAN 48082  
 CONTACT: BRENK STRATZELAK  
 PHONE: (586) 488-2508  
 FAX: (586) 488-0902

72 HOURS BEFORE YOU DIG CALL MISS DICK 800-482-7111 (MI. ONLY)

**HICKORY RIDGE SITE CONDOMINIUM**  
 PART OF SECTION 34, T3N, R11E, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

**PAUL KAY & ASSOCIATES, INC.**  
 2000 W. BROADWAY, SUITE 100, ROCHESTER HILLS, MI 48063  
 PHONE (586) 739-8007 FAX (586) 739-6894

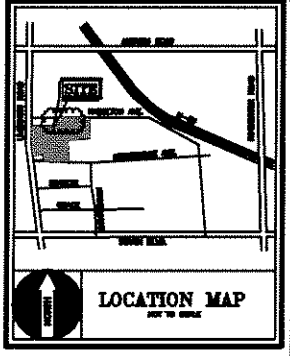
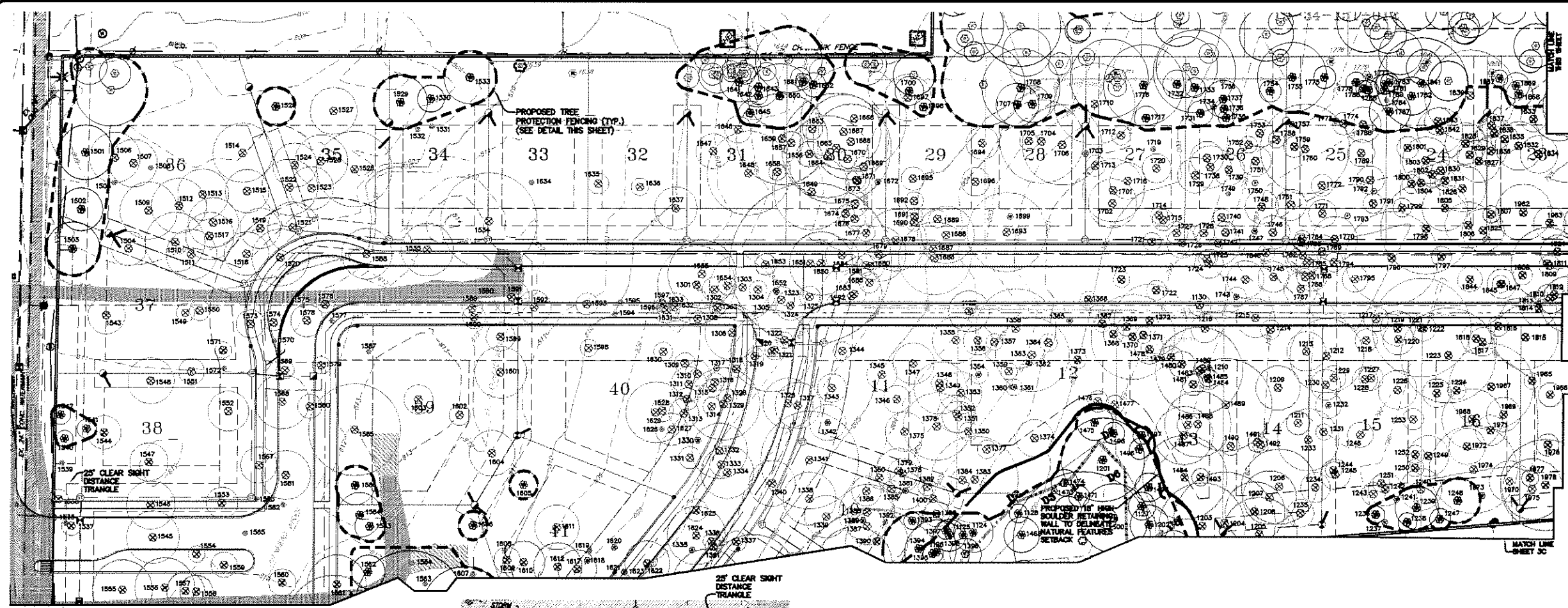
**TOPOGRAPHIC SURVEY AND SITE GRADIENT SKETCH**

PROJECT NO. 03-349  
 DATE 08-24-08  
 CLIENT BLUEWOOD PROPERTIES, LLC  
 DRAWN BY B.A.V.  
 CHECKED BY C.P.T.  
 SCALE 1" = 80'

SHEET NO. 2/8

**CITY FILE #05-006**

NOT TO BE USED AS CONSTRUCTION DRAWINGS

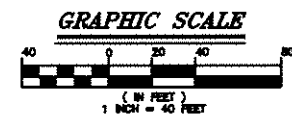
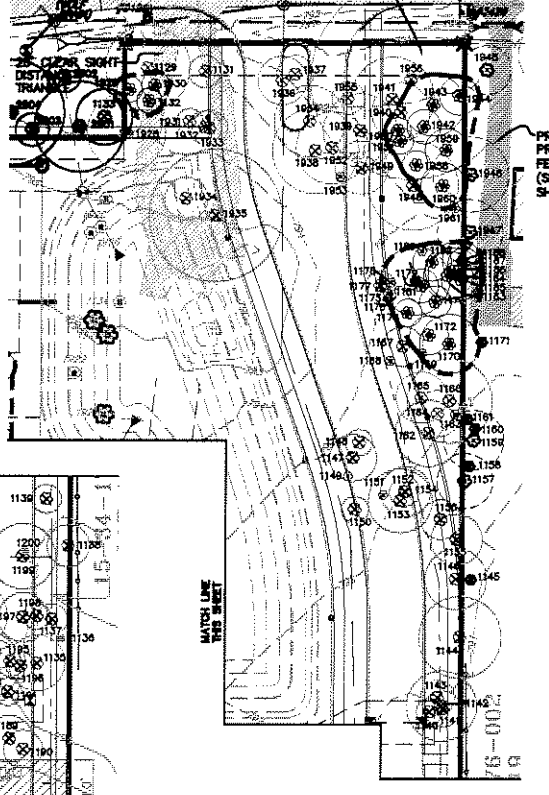
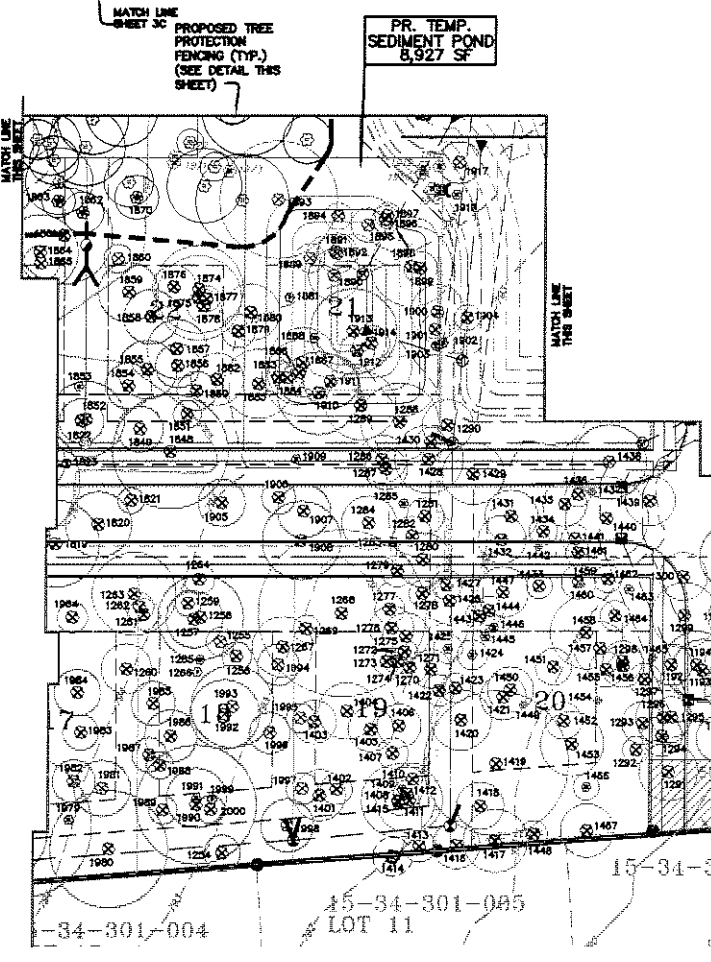


**LEGEND**

● IRON FOUND	● IRON SET
● MAIL FOUND	● MAIL SET
● MONUMENT FOUND	● SEC. CORNER FOUND
— WATERMAIN	— SANITARY SEWER
— ROAD INLET	— STORM SEWER
— ROAD DITCH BASIN	— OVERHEAD WIRES
— REAR-YARD INLET	— CONTOUR
— REAR-YARD C.B.	
— END-SECTION	
— UTILITY POLE	

**TREE PLAN LEGEND**

○ ○ ○ ○ ○	EXISTING TREE TO BE SAVED
○ ○ ○ ○ ○	EXISTING TREE TO BE REMOVED
○ ○ ○ ○ ○	EXISTING TREE OFF-SITE
○ ○ ○ ○ ○	EXISTING TREE (DEAD)
○ ○ ○ ○ ○	EXISTING ASH TREE
○ ○ ○ ○ ○	EXISTING TREE - <6"Ø
○ ○ ○ ○ ○	TREE PROTECTION FENCING



○ ADDITIONAL TREES ON NORTH PORTION OF PROPERTY - SHEET 3E

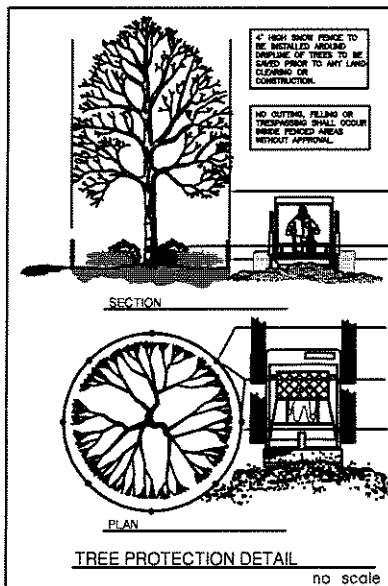
SEE SHEET 3B FOR LIST OF EXISTING TREES ON THE NORTH PORTION OF THE SITE.

SHEET 3C CONTAINS DRAWING AND LIST OF EXISTING TREES ON THE SOUTH PORTION OF THE SITE.

NOTE: FOR OVERALL SITE TREE SUMMARY SEE SHEET 7.

NOTE: THE TREE CONSERVATION ORDINANCE (TCO) DOES NOT REGULATE THIS SITE.

NOTE: ALL ASH TREES NOT LOCATED IN A NATURAL AREA ARE TO BE REMOVED.



**TREE PROTECTION NOTES**

- The tree protection fencing (TPF) shall be erected per the plans approved by the City of Rochester Hill Planning Department. The TPF must be in place and erected by the City of Rochester Hill Landscape Architect prior to the start of any earthwork 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 Hill 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 Hill Landscape Architect must inspect all trees designated to be preserved. The Landscape 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 Hill Landscape Architect is required at the end of the warranty and maintenance period. The Landscape Maintenance 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 said regulated tree not approved for removal, including but not limited to land clearing, grubbing, razing, 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 grades 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/rod/pipe 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 trenching shall occur outside the TPF.
- Swales shall be installed 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 entire period required, the replacement of that tree will be required on end and must be replaced prior to the issuance of the Certificate of Occupancy.
- Regulated tree located off-site or adjacent property that may be affected by construction operations must be protected as defined here in.
- The TPF shall consist of 4 feet high orange snow fencing to be installed around the drip line of all trees designated to be saved. This fencing shall be supported by 6 feet metal T-tube posts 3 feet on center and driven a minimum of 24" into ground. The TPF being shall remain upright and securely in place for the required time as specified above.

NOT TO BE USED AS CONSTRUCTION DRAWINGS

72 HOURS BEFORE THE CALL US AT 1-800-462-7171 (TOL. FREE)

**HICKORY RIDGE SITE CONDOMINIUM**  
PART OF SECTION 34, T3N, R11E, CITY OF ROCHESTER  
HILL, GARLAND COUNTY, MICHIGAN

**MAIL IN & ASSOCIATES, INC.**  
LAND SURVEYORS & ENGINEERS  
1500 W. WASHINGTON ST., SUITE 100  
ANN ARBOR, MI 48106  
PHONE: (888) 739-8007 FAX: (866) 739-6994

**TREE SURVEY NORTH**


PROJECT NO. 03-349  
DATE 08-24-08  
DRAWN BY B.A.V.  
CHECKED BY C.P.T.

CLIENT BLUEWOOD PROPERTIES, LLC  
CONTRACTOR  
SCALE 1" = 40'

SHEET NO. 3A/8

Tag No.	Common Name	Class	DBH	Height	Condition	Notes	Notes (2)
101	American Elm	14.4	0.0		Good		
102	Black Birch	14.4	0.0		Good		
103	Red Oak	14.4	0.0		Good		
104	Black Birch	14.4	0.0		Good		
105	Black Birch	14.4	0.0		Good		
106	Black Birch	14.4	0.0		Good		
107	Black Birch	14.4	0.0		Good		
108	Black Birch	14.4	0.0		Good		
109	Black Birch	14.4	0.0		Good		
110	Black Birch	14.4	0.0		Good		
111	Black Birch	14.4	0.0		Good		
112	Black Birch	14.4	0.0		Good		
113	Black Birch	14.4	0.0		Good		
114	Black Birch	14.4	0.0		Good		
115	Black Birch	14.4	0.0		Good		
116	Black Birch	14.4	0.0		Good		
117	Black Birch	14.4	0.0		Good		
118	Black Birch	14.4	0.0		Good		
119	Black Birch	14.4	0.0		Good		
120	Black Birch	14.4	0.0		Good		
121	Black Birch	14.4	0.0		Good		
122	Black Birch	14.4	0.0		Good		
123	Black Birch	14.4	0.0		Good		
124	Black Birch	14.4	0.0		Good		
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194	Black Birch	14.4	0.0		Good		
195	Black Birch	14.4	0.0		Good		
196	Black Birch	14.4	0.0		Good		
197	Black Birch	14.4	0.0		Good		
198	Black Birch	14.4	0.0		Good		
199	Black Birch	14.4	0.0		Good		
200	Black Birch	14.4	0.0		Good		

**72 HOURS BEFORE YOU DIG**



CALL 800-4-A- Dig

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**HICKORY RIDGE SITE**

**CONDONUM**

**TREE SURVEY NORTH**

PART OF SECTION 24, TOWNSHIP 41 N., RANGE 10 W., COUNTY, MICHIGAN

---

**PAUL DAN & ASSOCIATES, INC.**

4346 SCHOENBERG STREET, BRIGHTON, MI 48115

PHONE (568) 739-9007 FAX (568) 739-6944

---

**PRELIMINARY**  **CONSTRUCTION**  **AS-BUILT**

CLIENT: **BLUEWOOD PROPERTIES, LLC**

DATE: **08-24-06**

DRAWN BY: **B.A.V.**

CHECKED BY: **C.P.T.**

SHEET NO.: **3B/8**

SCALE: **NONE**

---

**NOT TO BE USED AS CONSTRUCTION DRAWINGS**

**CITY FILE #05-006**

G:\2003\03-349\dwg\F-SH-FP.dwg, 11/26/2006 2:23:39 PM, Carol

NORTH PARCEL TREE SUMMARY

TOTAL NUMBER OF TREES LOCATED ON THE NORTH PORTION OF THE SUBJECT PARCEL: 877

TOTAL NUMBER OF ALL NON-REGULATED TREES: 153

TOTAL NUMBER OF REGULATED TREES: 724

TOTAL NUMBER OF TREES SAVED: 195

\* NON-REGULATED TREES INCLUDE DEAD, ASH, OFF-SITE AND TREES LESS THAN 6" CALIPER.

W.P. INDICATES PRESENCE OF WOODPECKERS

E.A.B. INDICATES PRESENCE OF EMERALD ASH BORER

NOTE: FOR OVERALL SITE TREE SUMMARY, SEE SHEET 7.

NOTE: THE TREE CONSERVATION ORDINANCE (TCO) DOES NOT REGULATE THIS SITE.

NOTE: ALL ASH TREES NOT LOCATED IN A NATURAL AREA ARE TO BE REMOVED.

**SOUTH PARCEL TREE SUMMARY**

TOTAL NUMBER OF TREES LOCATED ON THE SOUTH PORTION OF THE SUBJECT PARCEL	562
MINUS ALL NON-REGULATED TREES	215
TOTAL NUMBER OF REGULATED TREES	347
TOTAL NUMBER OF TREES SAVED	211
TOTAL NUMBER OF TREES REMOVED	136

\* NON-REGULATED TREES INCLUDE DEAD, ASH, OFF-SITE AND TREES LESS THAN 8" CALIPER.

Tag No.	Botanical Name	DBH	H	Sp	Qual	Notes
100	American Elm	2.0	8.0	FAIR	SAVE	
101	American Elm	2.5	8.0	FAIR	SAVE	
102	American Elm	3.0	8.0	FAIR	SAVE	
103	American Elm	3.5	8.0	FAIR	SAVE	
104	American Elm	4.0	8.0	FAIR	SAVE	
105	American Elm	4.5	8.0	FAIR	SAVE	
106	American Elm	5.0	8.0	FAIR	SAVE	
107	American Elm	5.5	8.0	FAIR	SAVE	
108	American Elm	6.0	8.0	FAIR	SAVE	
109	American Elm	6.5	8.0	FAIR	SAVE	
110	American Elm	7.0	8.0	FAIR	SAVE	
111	American Elm	7.5	8.0	FAIR	SAVE	
112	American Elm	8.0	8.0	FAIR	SAVE	
113	American Elm	8.5	8.0	FAIR	SAVE	
114	American Elm	9.0	8.0	FAIR	SAVE	
115	American Elm	9.5	8.0	FAIR	SAVE	
116	American Elm	10.0	8.0	FAIR	SAVE	
117	American Elm	10.5	8.0	FAIR	SAVE	
118	American Elm	11.0	8.0	FAIR	SAVE	
119	American Elm	11.5	8.0	FAIR	SAVE	
120	American Elm	12.0	8.0	FAIR	SAVE	
121	American Elm	12.5	8.0	FAIR	SAVE	
122	American Elm	13.0	8.0	FAIR	SAVE	
123	American Elm	13.5	8.0	FAIR	SAVE	
124	American Elm	14.0	8.0	FAIR	SAVE	
125	American Elm	14.5	8.0	FAIR	SAVE	
126	American Elm	15.0	8.0	FAIR	SAVE	
127	American Elm	15.5	8.0	FAIR	SAVE	
128	American Elm	16.0	8.0	FAIR	SAVE	
129	American Elm	16.5	8.0	FAIR	SAVE	
130	American Elm	17.0	8.0	FAIR	SAVE	
131	American Elm	17.5	8.0	FAIR	SAVE	
132	American Elm	18.0	8.0	FAIR	SAVE	
133	American Elm	18.5	8.0	FAIR	SAVE	
134	American Elm	19.0	8.0	FAIR	SAVE	
135	American Elm	19.5	8.0	FAIR	SAVE	
136	American Elm	20.0	8.0	FAIR	SAVE	
137	American Elm	20.5	8.0	FAIR	SAVE	
138	American Elm	21.0	8.0	FAIR	SAVE	
139	American Elm	21.5	8.0	FAIR	SAVE	
140	American Elm	22.0	8.0	FAIR	SAVE	
141	American Elm	22.5	8.0	FAIR	SAVE	
142	American Elm	23.0	8.0	FAIR	SAVE	
143	American Elm	23.5	8.0	FAIR	SAVE	
144	American Elm	24.0	8.0	FAIR	SAVE	
145	American Elm	24.5	8.0	FAIR	SAVE	
146	American Elm	25.0	8.0	FAIR	SAVE	
147	American Elm	25.5	8.0	FAIR	SAVE	
148	American Elm	26.0	8.0	FAIR	SAVE	
149	American Elm	26.5	8.0	FAIR	SAVE	
150	American Elm	27.0	8.0	FAIR	SAVE	
151	American Elm	27.5	8.0	FAIR	SAVE	
152	American Elm	28.0	8.0	FAIR	SAVE	
153	American Elm	28.5	8.0	FAIR	SAVE	
154	American Elm	29.0	8.0	FAIR	SAVE	
155	American Elm	29.5	8.0	FAIR	SAVE	
156	American Elm	30.0	8.0	FAIR	SAVE	
157	American Elm	30.5	8.0	FAIR	SAVE	
158	American Elm	31.0	8.0	FAIR	SAVE	
159	American Elm	31.5	8.0	FAIR	SAVE	
160	American Elm	32.0	8.0	FAIR	SAVE	
161	American Elm	32.5	8.0	FAIR	SAVE	
162	American Elm	33.0	8.0	FAIR	SAVE	
163	American Elm	33.5	8.0	FAIR	SAVE	
164	American Elm	34.0	8.0	FAIR	SAVE	
165	American Elm	34.5	8.0	FAIR	SAVE	
166	American Elm	35.0	8.0	FAIR	SAVE	
167	American Elm	35.5	8.0	FAIR	SAVE	
168	American Elm	36.0	8.0	FAIR	SAVE	
169	American Elm	36.5	8.0	FAIR	SAVE	
170	American Elm	37.0	8.0	FAIR	SAVE	
171	American Elm	37.5	8.0	FAIR	SAVE	
172	American Elm	38.0	8.0	FAIR	SAVE	
173	American Elm	38.5	8.0	FAIR	SAVE	
174	American Elm	39.0	8.0	FAIR	SAVE	
175	American Elm	39.5	8.0	FAIR	SAVE	
176	American Elm	40.0	8.0	FAIR	SAVE	
177	American Elm	40.5	8.0	FAIR	SAVE	
178	American Elm	41.0	8.0	FAIR	SAVE	
179	American Elm	41.5	8.0	FAIR	SAVE	
180	American Elm	42.0	8.0	FAIR	SAVE	
181	American Elm	42.5	8.0	FAIR	SAVE	
182	American Elm	43.0	8.0	FAIR	SAVE	
183	American Elm	43.5	8.0	FAIR	SAVE	
184	American Elm	44.0	8.0	FAIR	SAVE	
185	American Elm	44.5	8.0	FAIR	SAVE	
186	American Elm	45.0	8.0	FAIR	SAVE	
187	American Elm	45.5	8.0	FAIR	SAVE	
188	American Elm	46.0	8.0	FAIR	SAVE	
189	American Elm	46.5	8.0	FAIR	SAVE	
190	American Elm	47.0	8.0	FAIR	SAVE	
191	American Elm	47.5	8.0	FAIR	SAVE	
192	American Elm	48.0	8.0	FAIR	SAVE	
193	American Elm	48.5	8.0	FAIR	SAVE	
194	American Elm	49.0	8.0	FAIR	SAVE	
195	American Elm	49.5	8.0	FAIR	SAVE	
196	American Elm	50.0	8.0	FAIR	SAVE	
197	American Elm	50.5	8.0	FAIR	SAVE	
198	American Elm	51.0	8.0	FAIR	SAVE	
199	American Elm	51.5	8.0	FAIR	SAVE	
200	American Elm	52.0	8.0	FAIR	SAVE	

**LEGEND**

- IRON FOUND
- IRON SET
- MONUMENT FOUND
- SEC. CORNER FOUND
- WATERMAIN
- SANITARY SEWER
- STORM SEWER
- OVERHEAD WIRES
- CONTOUR
- ROAD INLET
- ROAD CATCH BASIN
- REAR-YARD INLET
- REAR-YARD C.I.B.
- DND-SECTION
- UTILITY POLE

**TREE PLAN LEGEND**

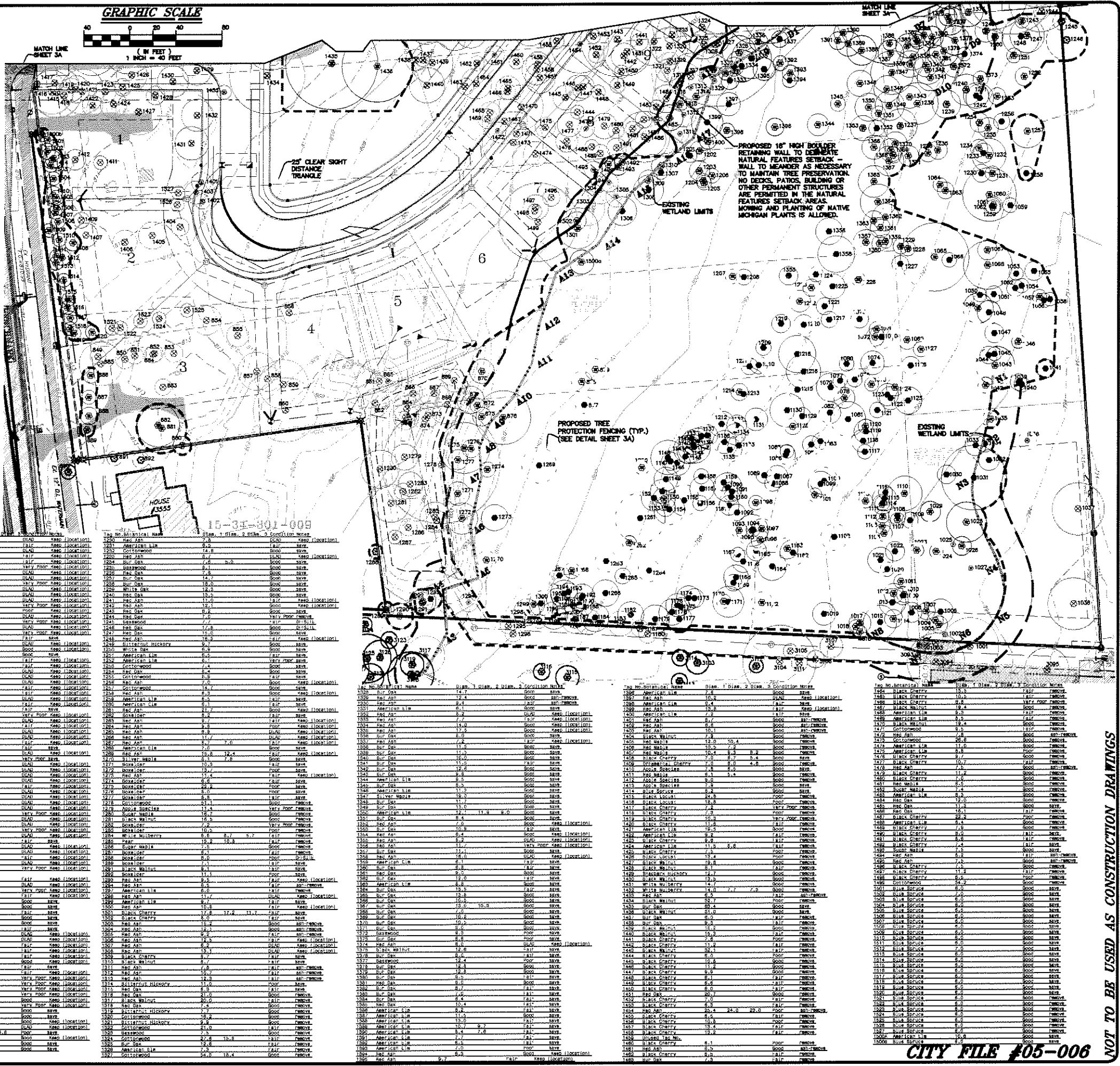
- EXISTING TREE TO BE SAVED
- EXISTING TREE TO BE REMOVED
- EXISTING TREE OFF-SITE
- EXISTING TREE (DEAD)
- EXISTING ASH TREE
- EXISTING TREE - <8"
- TREE PROTECTION FENCING

SEE SHEET 3A & 3B FOR DRAWING AND LIST OF TREES ON NORTH PORTION OF SITE

SEE SHEET 7 FOR OVERALL TREE INVENTORY CALCULATIONS

NOTE: THE TREE CONSERVATION ORDINANCE (TCO) DOES NOT REGULATE THIS SITE.

NOTE: ALL ASH TREES NOT LOCATED IN A NATURAL AREA ARE TO BE REMOVED.



**HICKORY RIDGE SITE**

**CONDOMINIUM**

PART OF SECTION 34, T4N, R11E, CITY OF ROCHESTER  
FIELD, OREGON COUNTY, MICHIGAN

**PAUL DAVY & ASSOCIATES, INC.**  
CONSULTING ENGINEERS, ARCHITECTS, LAND SURVEYORS  
1000 S. WASHINGTON ST., SUITE 100, ROCHESTER, MI 48063  
PHONE: (568) 733-8007 FAX: (568) 733-8994

**TREE SURVEY SOUTH**

PROJECT NO. 03-349  
DATE 08-24-06  
DRAWN BY B.A.V. CHECKED BY C.P.T.  
SCALE 1" = 40'

**CITY FILE #05-006**

**NOT TO BE USED AS CONSTRUCTION DRAWINGS**

C:\2003\03-349\dwg\FSP\FSP.dwg, 11/28/2006 2:26:13 PM, Carol

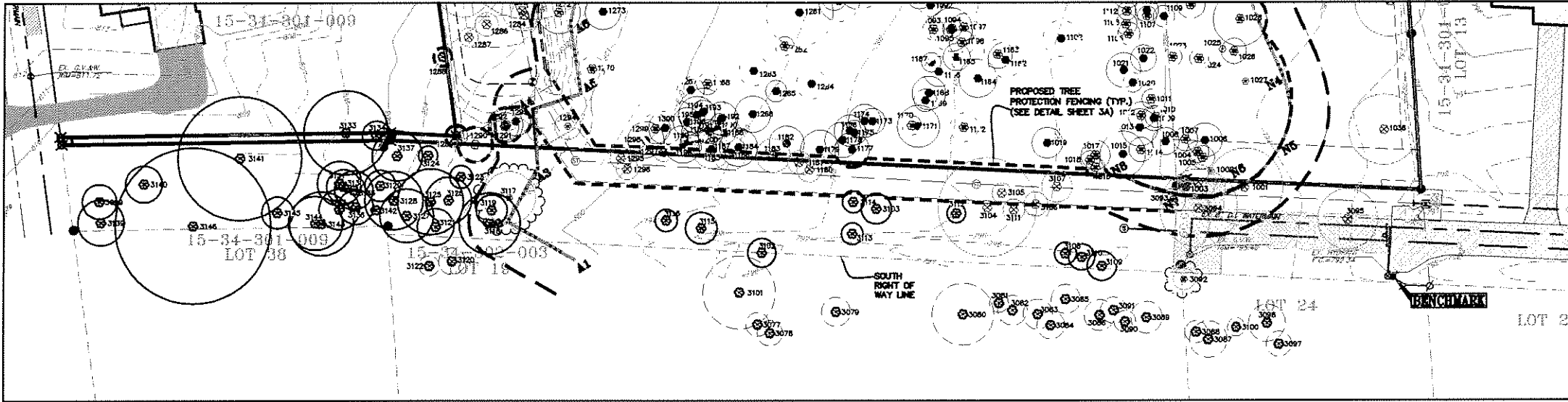


Table listing tree details including TAG No., Common Name, Size 1, Size 2, Size 3, Location, Notes, and other relevant data.

SHORTRIDGE RIGHT OF WAY TREE SUMMARY table with columns for ASH, OFF-SITE, REGULATED TREES, SAVE, REMOVE, and TOTAL NUMBER OF TREES SURVEYED.

NOTE: THE TREE CONSERVATION ORDINANCE (TCO) DOES NOT REGULATE THIS SITE.
NOTE: ALL ASH TREES NOT LOCATED IN A NATURAL AREA ARE TO BE REMOVED.
NOTE: SEE SHEET 7 FOR OVERALL SITE TREE SUMMARY.
NOTE: ALL R.O.W. TREES ARE UNDER THE JURISDICTION OF THE FORESTRY DEPARTMENT

TREE PLAN LEGEND defining symbols for existing trees to be saved, removed, off-site, dead, ash trees, and tree protection fencing.

LEGEND defining symbols for iron found, monument found, watermain, sanitary sewer, storm sewer, overhead wires, contour, road inlet, road catch basin, rear-yard inlet, rear-yard c.b., end-section, and utility pole.



HICKORY RIDGE SITE CONDOMINIUM PROJECT information including address: 2545 HICKORY RIDGE, HILLS, OAKLAND COUNTY, MICHIGAN.

PAL DAN & ASSOCIATES, INC. logo and contact information: 4845 CASAL SCHROEDER, STUBBING HEIGHTS, MI 48315.

TREE SURVEY FOR SHORTRIDGE RIGHT OF WAY

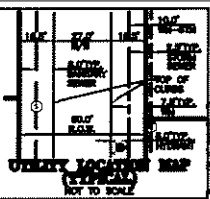
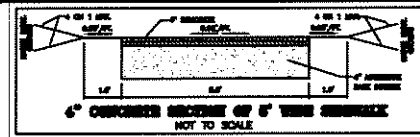
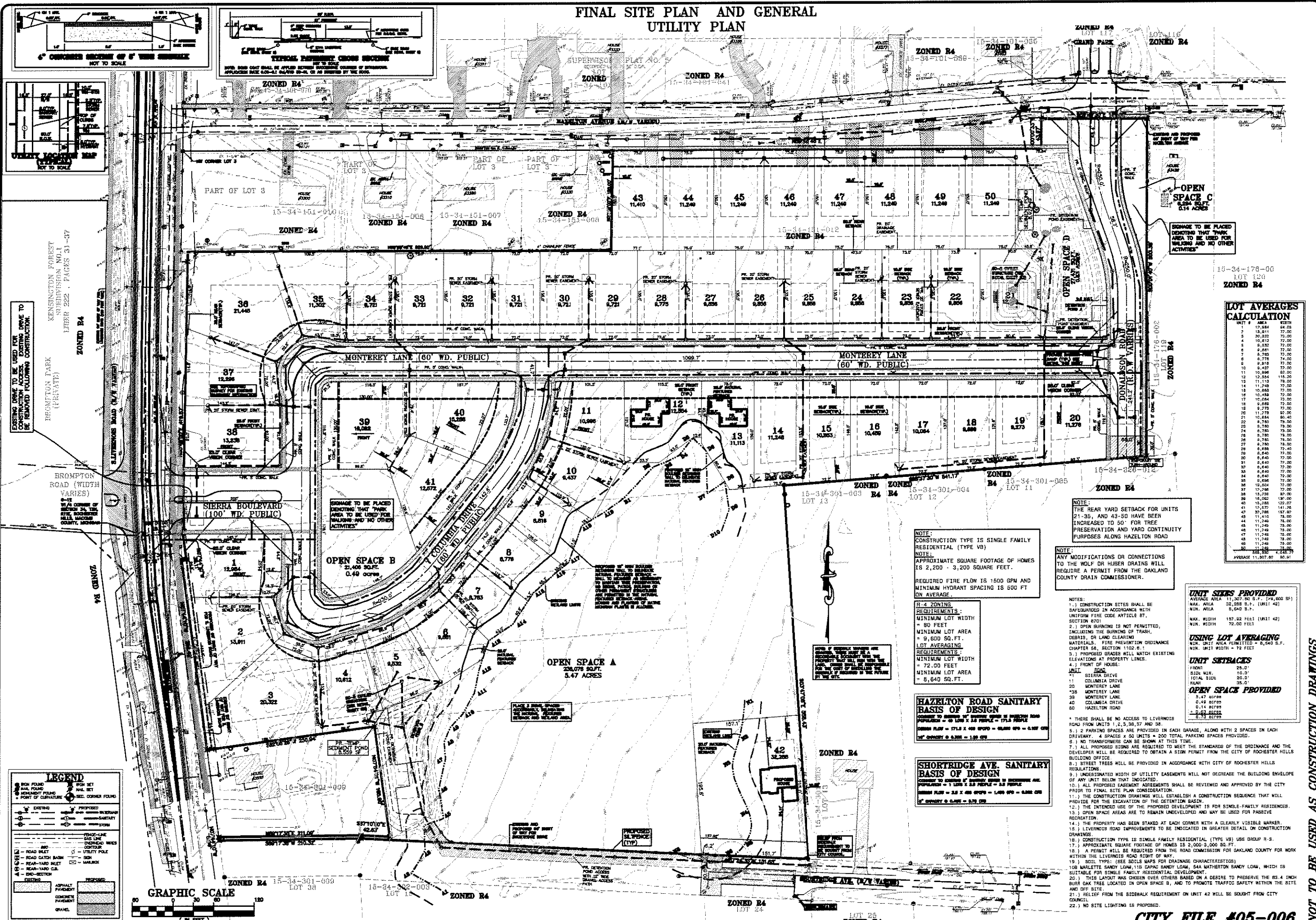
PROJECT INFO: PROJECT NO. 03-349, CLIENT BLUEWOOD PROPERTIES, L.L.C., PRELIMINARY CONSTRUCTION, SCALE 1" = 40', SHEET NO. 3D/8.

CITY FILE #05-008

NOT TO BE USED AS CONSTRUCTION DRAWINGS



# FINAL SITE PLAN AND GENERAL UTILITY PLAN



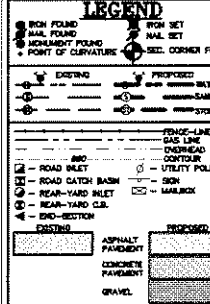
EXISTING DRIVE TO BE USED FOR CONSTRUCTION ACCESS. EXISTING DRIVE TO BE REMOVED FOLLOWING CONSTRUCTION.

KENSINGTON FOREST SUBDIVISION NO. 1 PAPER 222, PAGES 41-47

BRIMPTON ROAD (WIDTH VARIES)

SIERRA BOULEVARD (100' WD. PUBLIC)

MONTEREY LANE (60' WD. PUBLIC)



### LOT AVERAGES CALCULATION

UNIT #	AREA (SQ. FT.)	AREA (ACRES)
1	10,884	0.248
2	13,811	0.315
3	20,232	0.465
4	10,812	0.247
5	6,832	0.156
6	6,788	0.155
7	11,249	0.257
8	8,818	0.201
9	8,818	0.201
10	10,884	0.248
11	10,884	0.248
12	12,854	0.294
13	11,249	0.257
14	11,249	0.257
15	10,884	0.248
16	10,884	0.248
17	10,884	0.248
18	8,818	0.201
19	8,818	0.201
20	11,249	0.257
21	11,249	0.257
22	8,818	0.201
23	8,818	0.201
24	8,818	0.201
25	8,818	0.201
26	8,818	0.201
27	8,818	0.201
28	8,818	0.201
29	8,818	0.201
30	8,818	0.201
31	8,818	0.201
32	8,818	0.201
33	8,818	0.201
34	8,818	0.201
35	11,249	0.257
36	21,448	0.493
37	12,854	0.294
38	13,238	0.303
39	14,082	0.322
40	13,238	0.303
41	12,854	0.294
42	32,288	0.742
43	11,410	0.261
44	11,249	0.257
45	11,249	0.257
46	11,249	0.257
47	11,249	0.257
48	11,249	0.257
49	11,249	0.257
50	11,249	0.257
<b>TOTAL</b>	<b>11,807,600</b>	<b>0.268</b>

**NOTE:**  
CONSTRUCTION TYPE IS SINGLE FAMILY RESIDENTIAL (TYPE VB)  
**NOTE:**  
APPROXIMATE SQUARE FOOTAGE OF HOMES IS 2,200 - 3,200 SQUARE FEET.  
REQUIRED FIRE FLOW IS 1500 GPM AND MINIMUM HYDRANT SPACING IS 500 FT ON AVERAGE.

**R-4 ZONING REQUIREMENTS:**  
MINIMUM LOT WIDTH = 80 FEET  
MINIMUM LOT AREA = 9,600 SQ. FT.  
**LOT AVERAGING REQUIREMENTS:**  
MINIMUM LOT WIDTH = 72.00 FEET  
MINIMUM LOT AREA = 8,840 SQ. FT.

**HAZELTON ROAD SANITARY BASIS OF DESIGN**  
DESIGN FLOW = 17.8 X 400 GPD = 7,120 GPD = 0.187 CFS  
1\"/>

**SHORTRIDGE AVE. SANITARY BASIS OF DESIGN**  
DESIGN FLOW = 2.5 X 400 GPD = 1,000 GPD = 0.028 CFS  
1\"/>

**NOTE:**  
THE REAR YARD SETBACK FOR UNITS 21-30, AND 43-50 HAVE BEEN INCREASED TO 50' FOR TREE PRESERVATION AND YARD CONTINUITY PURPOSES ALONG HAZELTON ROAD.

**NOTE:**  
ANY MODIFICATIONS OR CONNECTIONS TO THE WOLF DR HUBER DRAINS WILL REQUIRE A PERMIT FROM THE OAKLAND COUNTY DRAIN COMMISSIONER.

**UNIT SIZES PROVIDED**  
AVERAGE AREA 11,207.50 S.F. (25,000 SQ. FT.)  
MAX. AREA 20,232 S.F. (UNIT 42)  
MIN. AREA 6,840 S.F.  
MAX. WIDTH 157.82 FEET (UNIT 42)  
MIN. WIDTH 72.00 FEET

**USING LOT AVERAGING**  
MIN. UNIT AREA PERMITTED = 8,840 S.F.  
MIN. UNIT WIDTH = 72 FEET

**UNIT SETBACKS**  
FRONT 25.0'  
SIDE MIN. 10.0'  
TOTAL SIDE 20.0'  
REAR 35.0'

**OPEN SPACE PROVIDED**  
3.47 ACRES  
0.49 ACRES  
0.14 ACRES  
0.63 ACRES  
5.73 ACRES

\* THERE SHALL BE NO ACCESS TO LIVERNOIS ROAD FROM UNITS 1, 2, 3, 20, 27 AND 38.  
5. 1) 2 PARKING SPACES ARE PROVIDED IN EACH GARAGE, ALONG WITH 2 SPACES IN EACH DRIVEWAY. 4 SPACES X 50 UNITS = 200 TOTAL PARKING SPACES PROVIDED.  
6. ) NO TRANSFORMERS CAN BE SHOWN AT THIS TIME.  
7. ) ALL PROPOSED EASEMENT AGREEMENTS SHALL BE REVIEWED AND APPROVED BY THE CITY PRIOR TO FINAL SITE PLAN CONSIDERATION.  
8. ) THE INTENDED USE OF THE PROPOSED DEVELOPMENT IS FOR SINGLE-FAMILY RESIDENCES.  
9. ) OPEN SPACE AREAS ARE TO REMAIN UNDEVELOPED AND MAY BE USED FOR PASSIVE RECREATION.  
10. ) THE PROPERTY HAS BEEN STAKED AT EACH CORNER WITH A CLEARLY VISIBLE MARKER.  
11. ) LIVERNOIS ROAD IMPROVEMENTS TO BE INDICATED IN GREATER DETAIL ON CONSTRUCTION DRAWINGS.  
12. ) CONSTRUCTION TYPE IS SINGLE FAMILY RESIDENTIAL (TYPE VB) USE GROUP R-3.  
13. ) APPROXIMATE SQUARE FOOTAGE OF HOMES IS 2,000-3,000 SQ. FT.  
14. ) A PERMIT WILL BE REQUIRED FROM THE ROAD COMMISSIONER FOR OAKLAND COUNTY FOR WORK WITHIN THE LIVERNOIS ROAD RIGHT OF WAY.  
15. ) SOIL TYPE: (SEE SOILS MAPS FOR DRAINAGE CHARACTERISTICS)  
16. ) MARLETTE SANDY LOAM 115 CAPAC SANDY LOAM, 54A HATHERTON SANDY LOAM, WHICH IS SUITABLE FOR SINGLE-FAMILY RESIDENTIAL DEVELOPMENT.  
17. ) THIS LAYOUT HAS BEEN CHANGED OVER OTHERS BASED ON A DESIRE TO PRESERVE THE 8.4 INCH BURR OAK TREE LOCATED IN OPEN SPACE B, AND TO PROMOTE TRAFFIC SAFETY WITHIN THE SITE AND OFF SITE.  
18. ) A PERMIT FROM THE SIDEWALK REQUIREMENT ON UNIT 42 WILL BE SOUGHT FROM CITY COUNCIL.  
19. ) NO SITE LIGHTING IS PROPOSED.

72 HOURS BEFORE YOU DIG CALL 811 (TOL FREE) 1-800-4-A-DIG

**HICKORY RIDGE SITE CONDOMINIUM DEVELOPMENT**  
PART OF SECTION 16, T14N, R10E, OAKLAND COUNTY, ILLINOIS

**PAUL EMM & ASSOCIATES, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS  
4345 SCHOENBERG STERLING HEIGHTS, MI 48313  
PHONE (588) 730-8007 FAX (588) 738-6994

**FINAL SITE PLAN AND GENERAL UTILITY PLAN**

PROJECT NO. 03-346  
DATE 08-24-06  
DRAWN BY: [Name]  
CHECKED BY: [Name]  
SCALE 1" = 60'

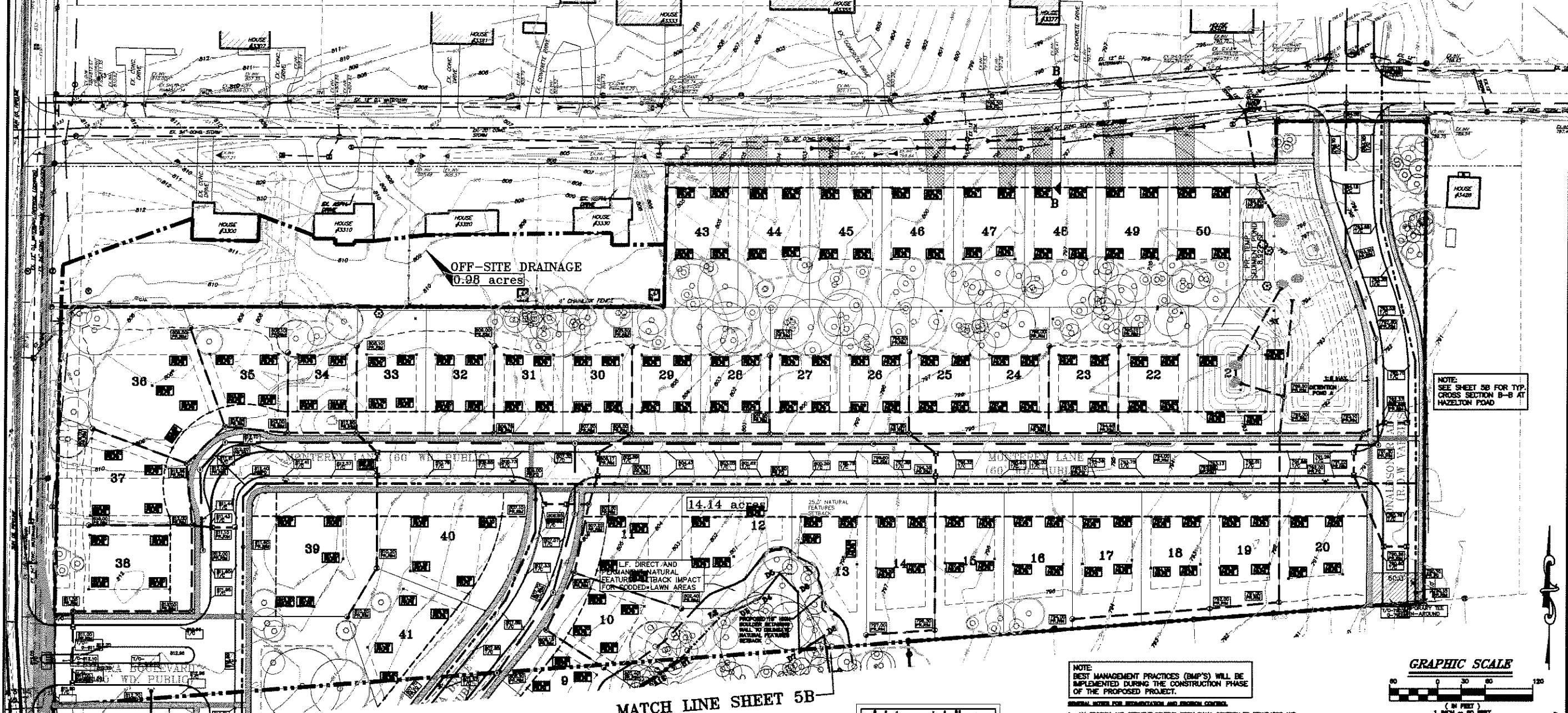
SHEET NO. 4/8

**CITY FILE #05-006**

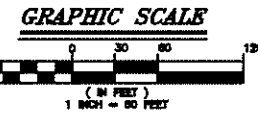
**NOT TO BE USED AS CONSTRUCTION DRAWINGS**



GRADING PLAN, STORM DRAINAGE AND DRAINAGE DISTRICT MAP



NOTE: SEE SHEET 5B FOR TYP. CROSS SECTION B-B AT HAZELTON ROAD

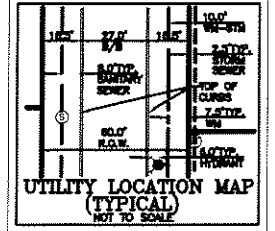
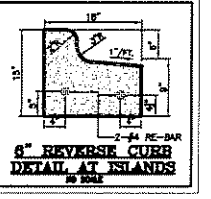
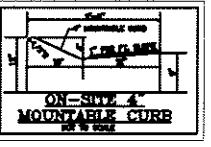
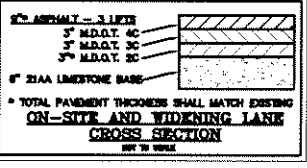


MATCH LINE SHEET 5B

C FACTOR = 0.37

IMPERVIOUS AREA	84,580 SQ. FT.
ROADWAY PAVEMENT	27,436 SQ. FT.
WALKS	88,000 SQ. FT.
DRIVEWAY AREA	41,850 SQ. FT.
TOTAL	261,866 SQ. FT.
IMPERVIOUS AREA PER UNIT	6.77 ACRES @ 0.9 = 6.20
PERVIOUS AREA	18.49 ACRES @ 0.2 = 3.70
TOTAL ACRES OF SITE	24.28 ACRES
IMPERVIOUS AREA x C1 + PERVIOUS AREA x C2	6.9
TOTAL AREA	24.28

NOTE: THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A FLOODPLAIN ZONE PER FIRM MAP COMMUNITY PANEL No. 220471 0020 B DATED SEPTEMBER 2, 1994.



NOTE: PROPOSED FINISHED FLOOR ELEVATION TO BE 1.5 FEET ABOVE FINISHED GRADE ELEVATION.

LEGEND

EXISTING	PROPOSED
ROADWAY	WALKWAY
SEWER	STORM
MANHOLE	MANHOLE
UTILITY POLE	UTILITY POLE
ROAD INLET	ROAD CATCH BASIN
ROAD-YARD INLET	ROAD-YARD INLET
END-SECTION	END-SECTION
EXISTING	PROPOSED
DENOTES DRAINAGE AREAS	DENOTES DRAINAGE AREAS
DRAINAGE FLOW ARROW	DRAINAGE FLOW ARROW

DETENTION CALCULATION 10 YEAR STORM PER OAKLAND COUNTY STANDARDS FOR NORTH POND A

10 YEAR STORM DETENTION DESIGN (OAKLAND COUNTY DESIGN METHOD)

Contributing Area (A): 14.729 acres (on-site) includes 0.304 acres flowing undetained + 1.015 acres (off-site), c = 0.37 Q = 1.46 cfs

Undetained flow A = 0.304ac C = 0.37  
 (front of 43-50) C = 0.37  
 Q = 0.438cfs

Allowable Discharge (Qa) 2.95 cfs ( = 0.2 CFS/AC \* 14.729)

Calculation of Required Discharge/Acre

Qr = ((Qa)/(A)(C)) = 0.54 cfs/acre imperv.  
 T = -25 + ((0.5625/Qr)) \* 0.5 = 85.15 min.

Storage Volume Required:

Vs = ((10500(T)/(T+25)) - 400)(T) = 8275.81 cubic ft./ acre imperv.  
 Vt = (Vs)(A)(Cr) = 34,201 cubic feet  
 Volume provided: 34,424 cubic feet

SEDIMENT POND DESIGN

RUNOFF COEFF C = 0.37

VOLUME REQUIRED (V) = 4320 x C x A = 2542,224 CUFT.  
 DEPTH REQUIRED (D) = V/A = 5.74 FT.  
 SURFACE AREA REQUIRED (AS) = V / D = 427,120 SQ. FT.

DRAINAGE AREA (DA) = (SURFACE AREA / 43560) = 0.00981000 SQ. FT.  
 175000

NUMBER OF 1' HOLES (N) = (DA / (1/4 \* 12 \* 12)) = 5.83

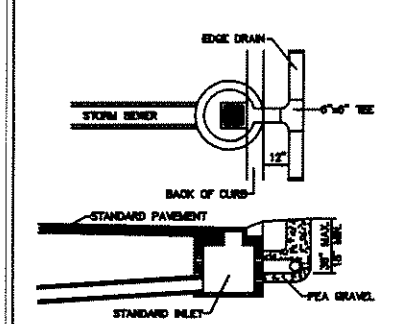
STORAGE HEIGHT PROVIDED H = 4.30 FEET  
 MEAN SURFACE PROVIDED Hs = 287.00 SQ. FT.  
 STORAGE PROVIDED (Vs) = Hs x A = 287,000 CUFT.

VOLUME PROVIDED (Vp) = 287,000 CUFT.  
 VOLUME REQUIRED (Vr) = 2542,224 CUFT.  
 VOLUME PROVIDED IS MORE THAN VOLUME REQUIRED

NOTE: BEST MANAGEMENT PRACTICES (BMP'S) WILL BE IMPLEMENTED DURING THE CONSTRUCTION PHASE OF THE PROPOSED PROJECT.

GENERAL NOTES FOR SEDIMENTATION AND EROSION CONTROL:

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS AND SPECIFICATIONS OF THE OAKLAND COUNTY DRAIN COMMISSION.
2. ALL TEMPORARY AND PERMANENT (POST CONSTRUCTION) SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE CITY OF ROOSTER HILLS CURRENT REG. PERMITS. ANY CONFLICT BETWEEN THESE STANDARDS AND THE REG. PERMITS, THE PERMITS CONDITIONS SHALL TAKE PRECEDENCE.
3. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR FOR EVIDENCES OF EROSION AND SEDIMENTATION CONTROL MEASURES, AND ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
4. ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN STREAMS.
5. CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS ORDERED ON THESE PLANS. HE SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER EARTH CHANGES HAVE BEEN ACCOMPLISHED. THIS WOULD INCLUDE TEMPORARY SEDIMENTATION PANS AND TEMPORARY SOG FILLS.
6. STORMS THE WORK WILL BE DONE BY THE CONTRACTOR AS ORDERED IN THESE PLANS AND AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH.
7. SOIL EROSION CONTROL PRACTICES SHALL BE ESTABLISHED IN THE EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES SHALL BE APPLIED AS A PREVENTION MEASURE AGAINST ANY EVIDENCES OF SOIL OFF THE SITE.
8. CONSTRUCTION EROSION AND SEDIMENTATION CONTROL MEASURES SHALL:
  1. INSTALL SILT FENCE AND SOD PANS FOR THE PERIMETER.
  2. STOP ROAD RIGHT-OF-WAY AND SELECT HIGH AND LOW AREAS, STOCK PILES TOPSOIL, MAINTAIN EXISTING VEGETATIVE BUFFER ZONE AROUND PERIMETER OF SITE AND ON LOTS.
  3. EVALUATE SEDIMENTATION AND DETENTION BASINS, SOUL GRASS SITE AND SOULIZE DISTURBED AREAS.
  4. INSTALL STORM SENSER. IMMEDIATELY PLACE STONE SILET FILTERS ON ALL STRUCTURES ACCEPTING EXHAUSTAGE.
  5. INSTALL SANDPIT SENSER AND WATER MARK.
  6. INSTALL PAVEMENT, REPAIR AND/OR REPLACE STONE SILET FILTERS AS REQUIRED.
  7. BACKFILL CURBS AND INSTALL DRAIN TILE.
  8. INSTALL MESH/SHIELD BELL TELEPHONE, DETECT EROSION AND CONSUMERS POWER UNDERGROUND UTILITIES.
  9. FINISH GRADER, SPREAD TOPSOIL, AND ESTABLISH VEGETATION AS FOLLOWS:
    1. 30 FT. W. AREA ALONG ALL PAVEMENT.
    2. 10 FT. W. AREA CONTINUED ON ALL NEAR YARD SHADE AREAS IF OCCURRED.
  10. CLEAN STREETS, STORM SENSERS AND SEDIMENTATION BASIN OF ALL ACCUMULATED DEBRIS.
  11. FILL SEDIMENTATION BASIN AND REMOVE PILES WITHIN 70% OF LOTS ARE BUILT.



NOTE: 1. EDGE DRAIN TO BE CONSTRUCTED IN THE BACK OF THE CURB LINE FOR THE FULL LENGTH OF CURB, BACKFILLED WITH 20# SAND.  
 2. THE EDGE DRAIN TO BE USED FOR THIS PROJECT SHALL BE 4" SLOTTED PIPE AND SHALL BE INSTALLED UNDER GEOTEXTILE FILTER FABRIC, WITHOUT PROTECTIVE ROCK. OTHER PIPE MATERIAL MUST BE PROPOSED TO THE CITY FOR REVIEW AND CONSIDERATION FOR APPROVAL.

72 HOURS  
 24 HOURS  
 12 HOURS  
 6 HOURS  
 3 HOURS  
 1 HOUR  
 30 MIN  
 15 MIN  
 5 MIN  
 1 MIN  
 30 SEC  
 15 SEC  
 5 SEC  
 1 SEC

HICKORY RIDGE SITE  
 CONDOMINIUM  
 PART OF SECTION 24, T4N, R11E, CITY OF ROOSTER HILLS, OAKLAND COUNTY, MICHIGAN

PAUL KIM & ASSOCIATES, INC.  
 CIVIL ENGINEERING & LAND SURVEYING  
 10000 W. HAZELTON ROAD, SUITE 100, ROOSTER HILLS, MI 48063  
 PHONE: (313) 739-8807 FAX: (313) 739-8884

GRADING PLAN, STORM DRAINAGE AND DRAINAGE DISTRICT MAP

PROJECT NO. 03-349  
 DATE 08-24-08  
 DRAWN BY B.A.V.  
 CHECKED BY C.P.T.  
 SCALE 1" = 50'

CLIENT BLUEWOOD PROPERTIES, LLC  
 PRELIMINARY CONSTRUCTION AS-BUILT

SHEET NO. 5A/8

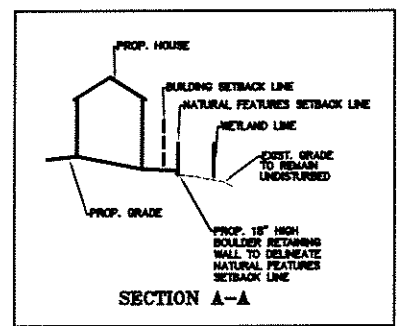
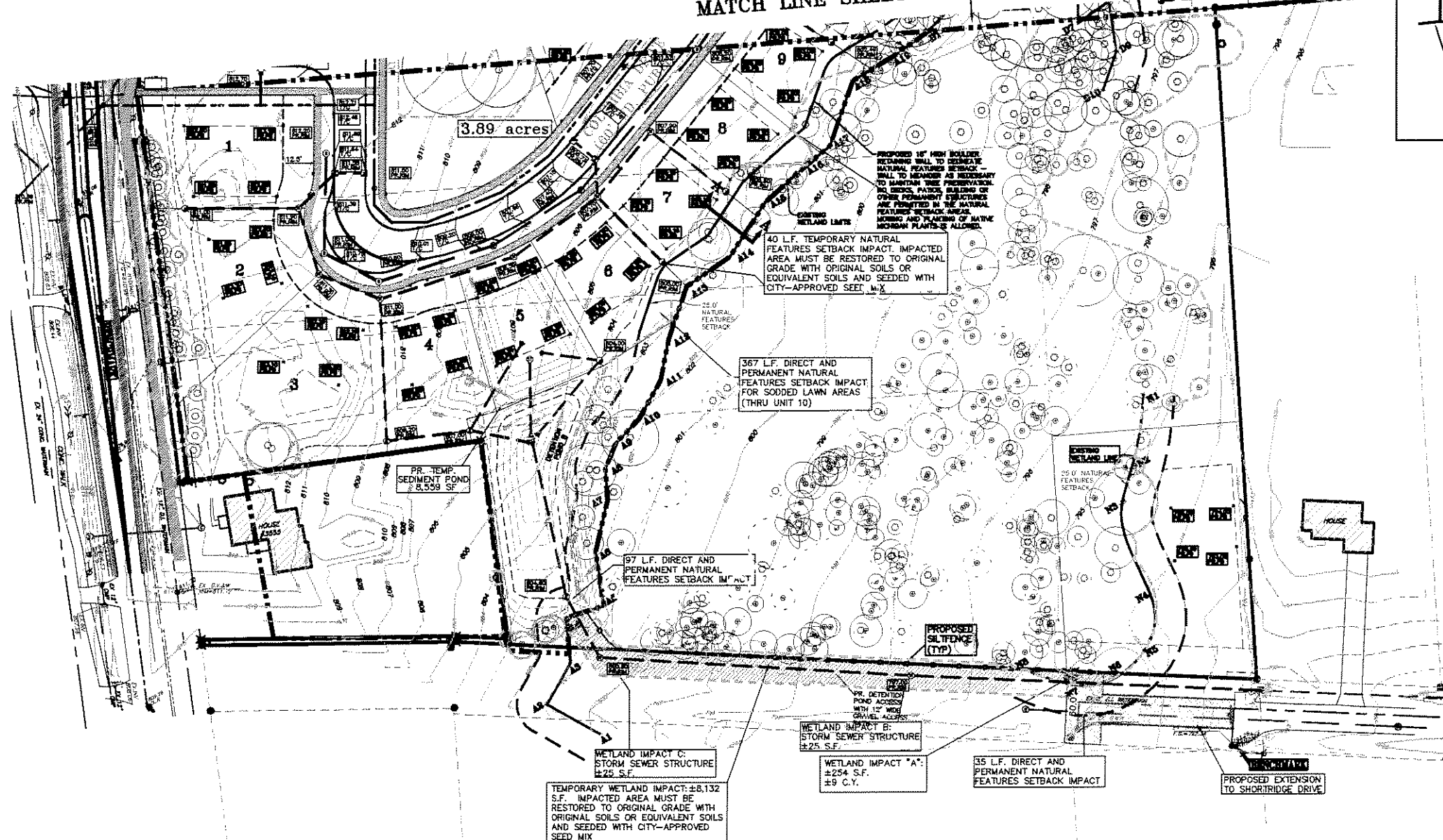
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NOT TO BE USED AS CONSTRUCTION DRAWINGS

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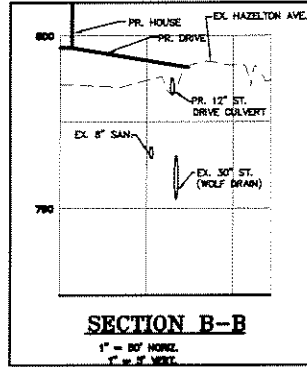
# GRADING PLAN, STORM DRAINAGE AND DRAINAGE DISTRICT MAP

MATCH LINE SHEET 5A



NOTE: THE SUBJECT PROPERTY IS NOT LOCATED WITHIN A FLOODPLAIN ZONE PER FEMA MAP COMMUNITY PANEL NO. 220-471 0023 B DATED SEPTEMBER 2, 1994.

C FACTOR	NUMBER OF UNITS	49
IMPERVIOUS AREA	84,600 SQ. FT.	
ROADWAY PAVEMENT	27,436 SQ. FT.	
PARKS	= 98,000 SQ. FT.	
ROOF AREA	= 41,600 SQ. FT.	
DRIVEWAY AREA	= 251,066 SQ. FT.	
TOTAL	= 8.77 ACRES	
IMPERVIOUS AREA	5.77 ACRES @ 0.8 = 5.20	
PERVIOUS AREA	18.49 ACRES @ 0.2 = 3.70	
TOTAL ACREAGE OF SITE	24.28 ACRES	
IMPERVIOUS AREA X C1 = (PERVIOUS AREA X C1)	= 8.9	
TOTAL AREA	= 24.28	
C FACTOR	= 0.37	



ALLOWABLE DISCHARGE (Q <sub>0</sub> )/ACRE	C1 = 0.30 CFS
TIME DETENTION	T = 20.00 MINUTES
PERVIOUS COEFF	C = 0.37
VOLUME REQUIRED (V <sub>0</sub> )	= 4325 X C X A = 267,919 CU FT.
DEPTH REQUIRED (D)	= 225 X C X A = 2.38 FT.
SURFACE AREA REQUIRED (A <sub>0</sub> )	= V <sub>0</sub> / D = 238,000 SQ. FT.
DRIFTS AREA (A <sub>0</sub> )	= (SURFACE AREA REQUIRED) X (SURFACE AREA COEFFICIENT) = 17500
NUMBER OF 1" HOLES (N)	= (A <sub>0</sub> / (3.14 X (1/2") <sup>2</sup> X (1/2") X 1.0)) = 1.98
STORAGE HEIGHT PROVIDED (H)	= 4.85 FEET
MIN. SURFACE AREA REQUIRED	A <sub>0</sub> = 238,000 SQ. FT.
STORAGE PROVIDED (V)	V <sub>0</sub> = 432,500 CU FT.
VOLUME REQUIRED (V)	V <sub>0</sub> = 267,919 CU FT.

### DETENTION CALCULATION 10 YEAR STORM PER OAKLAND COUNTY STANDARDS FOR SOUTH POND B

10 YEAR STORM DETENTION DESIGN (OAKLAND COUNTY DESIGN METHOD)

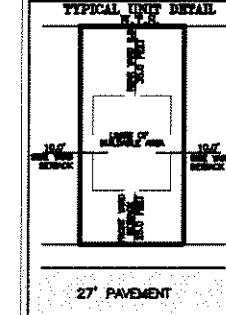
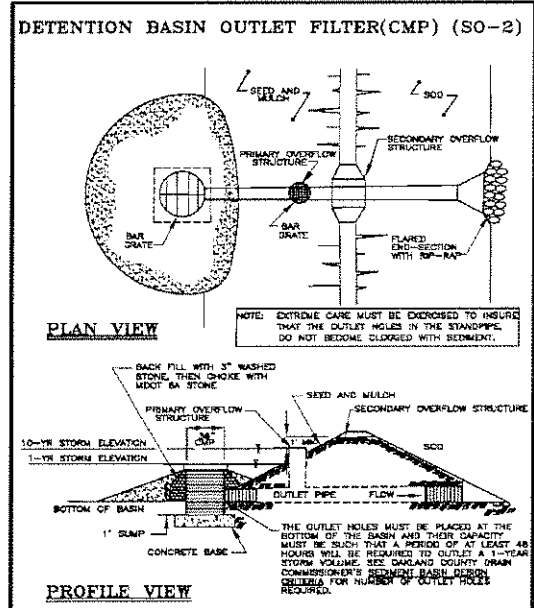
Contributing Area (A): 3.851 acres (on-site includes 0.321 acres flowing undetained) (off-site), c = 0.37 Q = 1.66 cfs

Undetained flow: A = 0.321 ac  
Unit 42) C = 0.37  
Q = 0.442 cfs

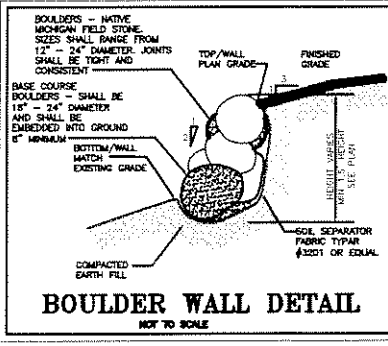
Allowable Discharge (Q<sub>0</sub>) = (0.2 x 3.851) = 0.79 cfs  
Coefficient of Runoff (Cr) (Developed Area) = 0.37

Calculation of Required Discharge/Acre  
Q<sub>0</sub> = ((Q<sub>0</sub>)/(A)(Cr)) = 0.54 cfs/acre Imperv.  
T = 25 + ((6582.5/Q<sub>0</sub>)<sup>0.5</sup>) = 85.18 min.

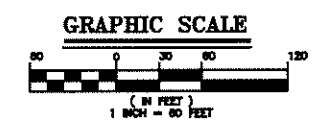
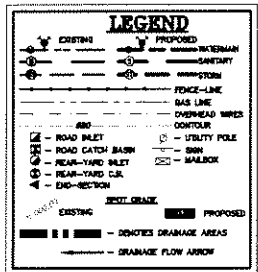
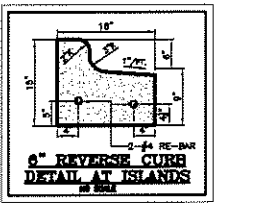
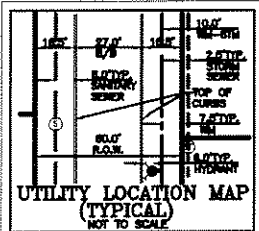
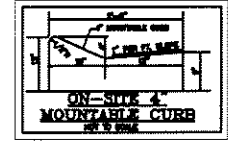
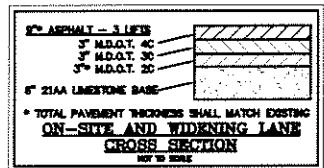
Storage Volume Required:  
V<sub>0</sub> = (10500(T)/(T+25)) - 400Q(T) = 6275.81 cubic ft./ acre imperv.  
V<sub>0</sub> = (V<sub>0</sub>)(A)(Cr) = 9,174 cubic feet  
Volume Provided: 13,772 cubic feet



- GENERAL NOTES FOR SEDIMENTATION AND EROSION CONTROL:
1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS AND SPECIFICATIONS OF THE OAKLAND COUNTY DRAIN COMMISSIONER.
  2. ALL TEMPORARY AND PERMANENT (POST CONSTRUCTION) SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE CITY OF ROCHESTER HILLS CURRENT MS4 PERMIT. ANY CONFLICT BETWEEN THESE STANDARDS AND THE MS4 PERMIT, THE PERMIT'S REQUIREMENTS SHALL TAKE PRECEDENCE.
  3. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES, AND ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
  4. ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS.
  5. CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS SPECIFIED ON THESE PLANS. HE SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER EARTH CHANGES HAS BEEN ACCOMPLISHED. THIS WOULD INCLUDE TEMPORARY SEDIMENTATION PONDS AND TEMPORARY SOIL FILTERS.
  6. STAGING THE WORK WILL BE DONE BY THE CONTRACTOR AS SPECIFIED IN THESE PLANS AND AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH.
  7. SOIL EROSION CONTROL PRACTICES SHALL BE ESTABLISHED IN THE EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PREEMPTIVE MEASURE AGAINST ANY TRANSPORTATION OF SILT OFF THE SITE.
  8. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
  9. STEP ROAD RIGHT-OF-WAY AND SELECT HIGH AND LOW AREAS, STOCK PILING TEMPORARILY EXISTING VEGETATION BUFFER ZONE AROUND PERIMETER OF SITE AND ON LOTS.
  10. EXCAVATE SEDIMENTATION AND DETENTION BASINS, BUSH GRASS SITE AND STABILIZE DISTURBED AREAS.
  11. INSTALL STORM SEWER. IMMEDIATELY PLACE STONE INLET FILTERS ON ALL STRUCTURES ACCEPTING DRAINAGE.
  12. INSTALL SANITARY SEWER AND WATER MAIN.
  13. INSTALL PAVEMENT, REPAIR AND/OR REPLACE STONE INLET FILTERS AS REQUIRED.
  14. BACKFILL CURBS AND INSTALL DRAIN TILE.
  15. INSTALL SIDEWALK BELL TELEPHONE, DETECT EROSION AND COMMENSAL POND/ UNDERGROUND UTILITIES.
  16. FINISH GRADES, SPREAD TOPSOIL AND ESTABLISH VEGETATION AS FOLLOWS:  
A. 30 FT. WIDE AREA ALONG ALL PAVEMENT.  
B. 10 FT. WIDE AREA CENTERED ON ALL REAR YARD SHALE AREAS IF DISTURBED.
  17. CLEAN STREETS, STORM SEWERS AND SEDIMENTATION BASIN OF ALL ACCUMULATED SEDIMENT.
  18. FILL SEDIMENTATION BASIN AND REMOVE PIPES WHEN TOP OF LOTS ARE BUILT.



NOTE: BEST MANAGEMENT PRACTICES (BMP'S) WILL BE IMPLEMENTED DURING THE CONSTRUCTION PHASE OF THE PROPOSED PROJECT.



NOT TO BE USED AS CONSTRUCTION DRAWINGS

7/2 - 11/20/05  
BEFORE YOU BEGIN  
CALL US OR  
ALL US OR  
CALL US  
(734) 271-7777

HICKORY RIDGE SITE  
CONDOMINIUM  
PART OF SECTION 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

PAUL TAYLOR & ASSOCIATES, INC.  
CIVIL ENGINEERS & LAND SURVEYORS  
4836 SCHUMBERGER STREET, ROCHESTER, MI 48313  
PHONE (566) 739-8007 FAX (566) 739-6994

PROJECT NO. 03-349  
DATE 06-24-06  
DRAWN BY B.A.V.  
CHECKED BY C.P.T.

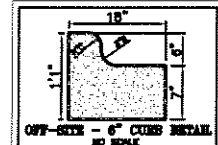
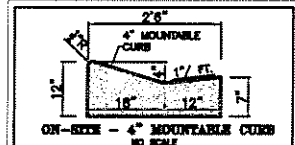
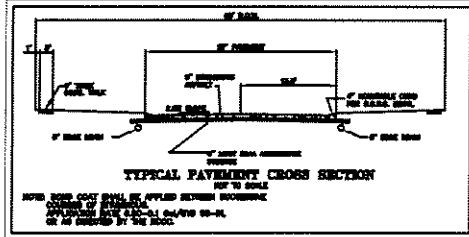
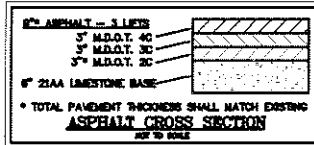
PREPARED BY BLENWOOD PROPERTIES, LLC  
CONSTRUCTION  
SCALE 1" = 50'  
AS-BUILT

SHEET NO. 5B/8

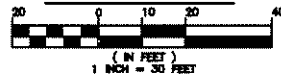
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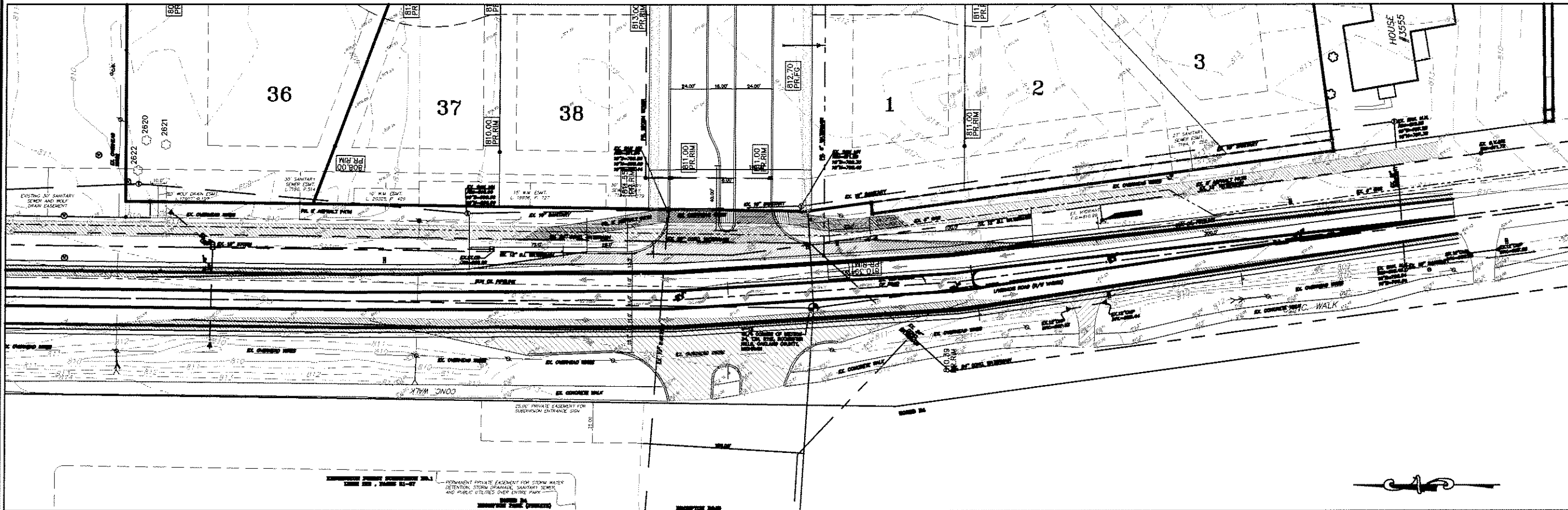
APPROACH PLAN



GRAPHIC SCALE



LEGEND	
● IRON FOUND	○ IRON SET
● NAIL FOUND	○ NAIL SET
● MONUMENT FOUND	○ SEC. CORNER FOUND
— WATERMAIN	— SANITARY SEWER
— STORM SEWER	— GAS LINE
— TELEPHONE	— UTILITY POLE
— ROAD MILET	— ROAD DITCH BASIN
— REAR-YARD MILET	— IRON
— REAR-YARD C&G	— MARSH
— D&D-SECTION	
EXISTING ASPHALT PAVEMENT	PROPOSED ASPHALT PAVEMENT
EXISTING CONCRETE PAVEMENT	PROPOSED CONCRETE PAVEMENT
EXISTING GRAVEL	PROPOSED GRAVEL



LIVERNOIS ROAD IMPROVEMENTS INCLUDE CENTER LEFT-TURN LANE IMPROVEMENTS TO CREATE A DEDICATED CENTER LEFT-TURN LANE. THE CENTER LEFT-TURN LANE STACKING STORAGE LENGTH FOR SOUTHBOUND LIVERNOIS ROAD SHOULD BE 150 FEET WITH A 300-FOOT TRANSITION TAPER, AND PROPOSED THREE (3) FOOT WIDE PAVED AND THREE (3) FOOT WIDE GRAVEL SHOULDER ON BOTH SIDES. IMPROVEMENTS TO CONFORM TO THE REQUIREMENTS OF THE CITY OF ROCHESTER HILLS AND THE ROAD COMMISSION FOR OAKLAND COUNTY, AND ARE ADDRESSED ON THE CONSTRUCTION PLANS.

72 HOURS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171

**HICKORY RIDGE SITE CONDOMINIUM**  
PART OF SECTION 34, T4N, 41E, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

**PAUL DUNN & ASSOCIATES, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS  
2500 W. WYOMING ST., SUITE 100, ROCHESTER HILLS, MI 48063  
PHONE (588) 739-8887 FAX (588) 739-8994

PROJECT NO. 03-349  
DATE 08-24-08  
CHECKED BY: B.A.V. C.P.T.

CLIENT: BLUEWOOD PROPERTIES, LLC  
SCALE: 1"=20'

PRELIMINARY:  CONSTRUCTION:  AS-BUILT:

SHEET NO. 6/8

NOT TO BE USED AS CONSTRUCTION DRAWINGS

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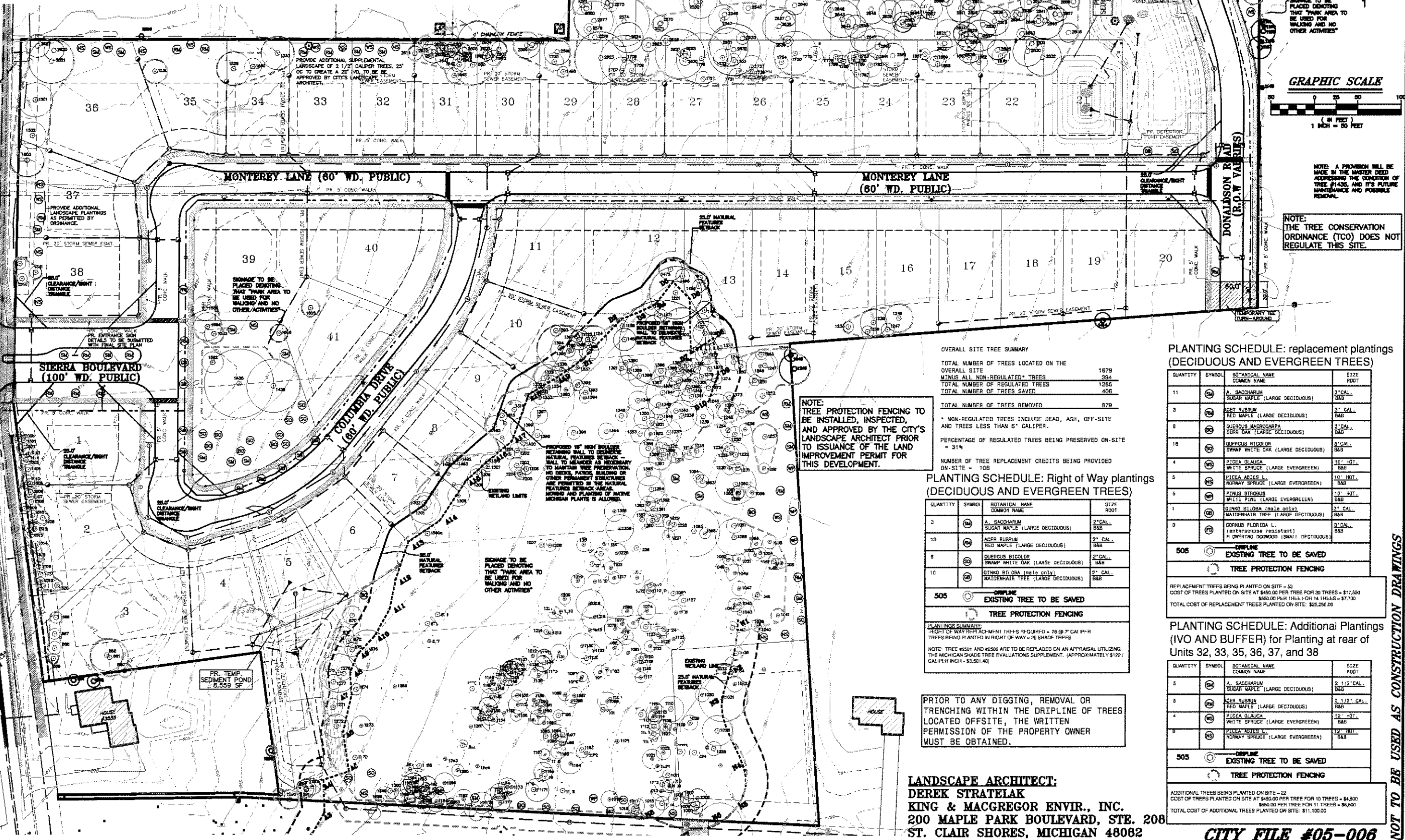
# LANDSCAPE PLAN

NOTE: NO GRADING OR FILLING IS PERMITTED WITHIN THE DRIPLINE OF TREES DESIGNATED TO BE PRESERVED

NOTE: GREAT CARE IS TO BE TAKEN TO ENSURE THE PRESERVATION OF TREE #1435 (LOCATED SOUTH OF LOT 39). IF ANY GRADING DIGGING OR TRENCHING IS TO OCCUR WITHIN OR NEAR THE DRIPLINE OF THIS TREE THE CITY OF ROCHESTER HILLS' LANDSCAPE ARCHITECT SHALL OBTAIN ANY SUCH WORK. HENCE THE CITY OF ROCHESTER HILLS' LANDSCAPE ARCHITECT SHALL BE NOTIFIED AT LEAST THREE (3) DAYS PRIOR TO THE START OF ANY SUCH WORK.

NOTE: IF A TREE DESIGNATED FOR PRESERVATION ON THE APPROVED CONSTRUCTION DOCUMENTS IS DAMAGED OR REMOVED AT ANYTIME DURING THE DEVELOPMENT PROCESS, THE DEVELOPER IS LIABLE FOR A FINE IN THE SUM OF \$122.00 PER CALIBER INCH FOR EACH TREE DAMAGED.

- NOTES:
1. PLANT QUANTITIES ARE ESTIMATED ONLY. LANDSCAPE CONTRACTOR TO VERIFY AND PROVIDE ALL PLANT MATERIALS AS SHOWN ON THE DRAWINGS.
  2. STREET TREES: STREET TREES TO BE PLANTED BY CITY \$200.00 PER LOT TO BE PAID TO THE CITY FOR THE INSTALLATION OF STREET TREES. TOTAL VALUE = \$10,000.00.
  3. PLACEMENT OF STREET TREES TO BE ADJUSTED FOR UNDERGROUND UTILITIES AND DRIVEWAY PLACEMENTS.
  4. ALL TREES BEING RETAINED WILL BE IDENTIFIED BY PAINTING, FLAGGING OR SOME OTHER APPROVED METHOD.
  5. TREES TO BE LOCATED A MINIMUM OF (TEN) 10 FEET FROM UNDERGROUND UTILITIES.
  6. WHEN PROTECTIVE BARRIERS ARE REQUIRED, THEY WILL BE ERECTED PRIOR TO COMMENCEMENT OF WORK.
  7. AN EASEMENT AND AGREEMENT WILL BE OBTAINED BY THE OWNER FROM THE ADJACENT PROPERTY OWNER FOR PLACEMENT OF REPLACEMENT TREES ON ADJACENT PROPERTY.
  8. PRIOR TO ANY DIGGING, REMOVAL, OR TRENCHING WITHIN THE DRIPLINE OF TREES LOCATED OFFSITE, THE WRITTEN PERMISSION OF THE PROPERTY OWNER MUST BE OBTAINED.



NOTE: A PROVISION WILL BE MADE IN THE MASTER DEED ADDRESSING THE CONDITION OF TREE #1435 AND ITS FUTURE MAINTENANCE AND POSSIBLE REMOVAL.

NOTE: THE TREE CONSERVATION ORDINANCE (TCO) DOES NOT REGULATE THIS SITE.

NOTE: TREE PROTECTION FENCING TO BE INSTALLED, INSPECTED, AND APPROVED BY THE CITY'S LANDSCAPE ARCHITECT PRIOR TO ISSUANCE OF THE LAND IMPROVEMENT PERMIT FOR THIS DEVELOPMENT.

OVERALL SITE TREE SUMMARY

TOTAL NUMBER OF TREES LOCATED ON THE OVERALL SITE	1879
MINUS ALL NON-REGULATED TREES	294
TOTAL NUMBER OF REGULATED TREES	1285
TOTAL NUMBER OF TREES SAVED	408
TOTAL NUMBER OF TREES REMOVED	879

\* NON-REGULATED TREES INCLUDE DEAD, ASH, OFF-SITE AND TREES LESS THAN 6" CALIPER.

PERCENTAGE OF REGULATED TREES BEING PRESERVED ON-SITE = 31%

NUMBER OF TREE REPLACEMENT CREDITS BEING PROVIDED ON-SITE = 106

### PLANTING SCHEDULE: Right of Way plantings (DECIDUOUS AND EVERGREEN TREES)

QUANTITY	SYMBOL	BOTANICAL NAME COMMON NAME	SIZE ROOT
3	SM	A. SACCHARUM SUGAR MAPLE (LARGE DECIDUOUS)	2" CAL. BAB
10	PM	ACER RUBRUM RED MAPLE (LARGE DECIDUOUS)	2" CAL. BAB
6	QD	QUERCUS BICOLOR SWAMP WHITE OAK (LARGE DECIDUOUS)	2" CAL. BAB
10	QD	QUERCUS BICOLOR SWAMP WHITE OAK (LARGE DECIDUOUS)	2" CAL. BAB

505 EXISTING TREE TO BE SAVED

TREE PROTECTION FENCING

PLANTING SUMMARY:  
RIGHT OF WAY TREE: 43-MIN 110-15 REQUIRED - 28 @ 2" CAL IPH  
TREES BEING PLANTED IN RIGHT OF WAY - 28 SHADE TREES

NOTE: TREE #2501 AND #2502 ARE TO BE REPLACED ON AN APPRAISAL UTILIZING THE MICHIGAN SHADE TREE EVALUATIONS SUPPLEMENT. (APPROXIMATELY \$122 / CALIPER INCH = \$3,501.40)

PRIOR TO ANY DIGGING, REMOVAL OR TRENCHING WITHIN THE DRIPLINE OF TREES LOCATED OFFSITE, THE WRITTEN PERMISSION OF THE PROPERTY OWNER MUST BE OBTAINED.

**LANDSCAPE ARCHITECT:**  
DEREK STRATELAK  
KING & MACGREGOR ENVIR., INC.  
200 MAPLE PARK BOULEVARD, STE. 208  
ST. CLAIR SHORES, MICHIGAN 48062

### PLANTING SCHEDULE: replacement plantings (DECIDUOUS AND EVERGREEN TREES)

QUANTITY	SYMBOL	BOTANICAL NAME COMMON NAME	SIZE ROOT
11	SM	A. SACCHARUM SUGAR MAPLE (LARGE DECIDUOUS)	2" CAL. BAB
3	PM	ACER RUBRUM RED MAPLE (LARGE DECIDUOUS)	2" CAL. BAB
8	QD	QUERCUS BICOLOR SWAMP WHITE OAK (LARGE DECIDUOUS)	2" CAL. BAB
10	QD	QUERCUS BICOLOR SWAMP WHITE OAK (LARGE DECIDUOUS)	2" CAL. BAB
4	PM	PICEA GLAUCO WHITE SPRUCE (LARGE EVERGREEN)	12" HT. BAB
5	PM	PICEA ABIES L. NORWAY SPRUCE (LARGE EVERGREEN)	10" HT. BAB
5	PM	PTACUS STROBUS WILDLIFE PINE (LARGE EVERGREEN)	10" HT. BAB
1	QD	QUERCUS BICOLOR SWAMP WHITE OAK (LARGE DECIDUOUS)	2" CAL. BAB
0	QD	CORNUS FLORIDA L. (anthracnose resistant) PI DWARTING DOGWOOD (SMALL DECIDUOUS)	2" CAL. BAB

505 EXISTING TREE TO BE SAVED

TREE PROTECTION FENCING

REPLACEMENT TREES BEING PLANTED ON SITE - 50  
COST OF TREES PLANTED ON SITE AT \$450.00 PER TREE FOR 30 TREES = \$17,500  
\$500.00 PER TREE FOR 10 TREES = \$5,000  
TOTAL COST OF REPLACEMENT TREES PLANTED ON SITE: \$22,500.00

### PLANTING SCHEDULE: Additional Plantings (IVO AND BUFFER) for Planting at rear of Units 32, 33, 35, 36, 37, and 38

QUANTITY	SYMBOL	BOTANICAL NAME COMMON NAME	SIZE ROOT
5	SM	A. SACCHARUM SUGAR MAPLE (LARGE DECIDUOUS)	2 1/2" CAL. BAB
5	PM	ACER RUBRUM RED MAPLE (LARGE DECIDUOUS)	2 1/2" CAL. BAB
4	PM	PICEA GLAUCO WHITE SPRUCE (LARGE EVERGREEN)	12" HT. BAB
5	PM	PICEA ABIES L. NORWAY SPRUCE (LARGE EVERGREEN)	12" HT. BAB

505 EXISTING TREE TO BE SAVED

TREE PROTECTION FENCING

ADDITIONAL TREES BEING PLANTED ON SITE - 22  
COST OF TREES PLANTED ON SITE AT \$450.00 PER TREE FOR 10 TREES = \$4,500  
\$550.00 PER TREE FOR 11 TREES = \$6,050  
TOTAL COST OF ADDITIONAL TREES PLANTED ON SITE: \$11,000.00

72 HOURS BEFORE ANY DIGGING CALL 811 (800-487-7171)

**HICKORY RIDGE SITE CONDOMINIUM**  
PART OF SECTION 34, T3N, R11E, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

**KING & MACGREGOR ENVIR., INC.**  
LANDSCAPE ARCHITECTS  
10000 W. 14TH AVENUE, SUITE 400  
DENVER, CO 80202  
PHONE (303) 758-0007 FAX (303) 759-6994

**LANDSCAPE PLAN**

PROJECT NO. 03-348  
DATE 08-21-06  
CLIENT BLUEWOOD PROPERTIES, LLC  
SCALE 1" = 50'  
DRAWN BY AS-BRAT  
CHECKED BY C.P.T.

NOT TO BE USED AS CONSTRUCTION DRAWINGS

7/8

