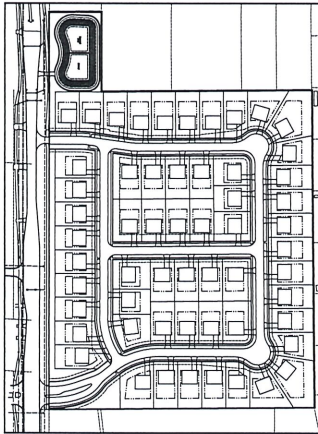


Cumberland Village

SITE CONDOMINIUM COMMUNITY SITE PLANS
IN SECTION 27, T3N, R11E, ROCHESTER HILLS,
OAKLAND COUNTY, MICHIGAN



SITE PLAN
N.T.S.



LOCATION MAP
SCALE: 1" = 2000'

LEGAL DESCRIPTION:

THE SOUTH 270 FEET OF LOT 1, AND ALL OF THE LOTS 5 THROUGH 9, BOTH INCLUSIVE, OF "28th ESTATES", BEING A SUBDIVISION IN A PART OF THE NORTHWEST 1/4 OF SECTION 27, TOWNSHIP 3 NORTH, RANGE 11 EAST, MICHIGAN TOWNSHIP AND CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, ACCORDING TO THE PLAT RECORDED IN BOOK 44 OF PLATS, PAGE 33, OAKLAND COUNTY RECORDS, MORE PARTICULARLY RECORDED AS BEARING AT THE SOUTHWEST CORNER OF SAID LOT 1, SOUTH 80 FEET OF WEST 140 FEET AND NORTH 10 FEET OF EAST 170 FEET, AS CALCULATED AND MEASURED, FROM THE NORTHWEST CORNER OF SAID SECTION 27, THENCE ALONG THE WEST LINE OF LOT 1, NORTH 80 FEET OF EAST 170 FEET, THENCE NORTH 80 FEET OF EAST 170 FEET, AS CALCULATED AND MEASURED, TO A POINT ON THE EAST LINE OF LOT 5, THENCE ALONG SAID EAST LINE, SOUTH 80 FEET OF EAST 170 FEET, AS CALCULATED AND MEASURED, TO THE SOUTHWEST CORNER OF LOT 1 AND A POINT ON THE NORTH LINE OF LOT 5, THENCE ALONG THE NORTH LINE OF LOT 5, NORTH 80 FEET OF EAST 170 FEET, AS CALCULATED AND MEASURED (RECORDED AS 700.0 FEET), TO THE NORTHWEST CORNER OF LOT 5, THENCE ALONG THE EAST LINE OF LOTS 5 THROUGH 9, AND IN PART ALONG THE WEST LINE OF "CUMBERLAND HILLS SUB. NO. 2" (UNDER 187, PAGES 10-11), SOUTH 80 FEET OF EAST 170 FEET, AS CALCULATED AND MEASURED (RECORDED AS 579.84 FEET), TO THE SOUTHWEST CORNER OF LOT 9, THENCE ALONG THE SOUTH LINE OF LOT 9 AND IN PART ALONG THE WEST LINE OF "CUMBERLAND HILLS SUB. NO. 2" (UNDER 187, PAGES 10-11), SOUTH 80 FEET OF EAST 170 FEET, AS CALCULATED AND MEASURED (RECORDED AS 579.84 FEET), TO THE SOUTHWEST CORNER OF LOT 9, THENCE ALONG THE WEST LINE OF LOTS 5 THROUGH 9, NORTH 80 FEET OF EAST 170 FEET, AS CALCULATED AND MEASURED (RECORDED AS 107.84 FEET), BACK TO THE POINT OF BEGINNING AND CONTAINING 211.07 FEET OF LAND AS SHOWN AND CALCULATED.

Cumberland Village

A Lombardo Community

DEVELOPER:
LOMBARDO HOMES
13001 23 MILE ROAD, SUITE 200, SHELBY TOWNSHIP, MI 48315
(586) 781-2364

ENGINEER:
COMMUNITY E.S., INC.
CIVIL ENGINEERING & SURVEYING
(586) 677-4081
5805 24 MILE ROAD, STE. B, SHELBY TWP., MI 48316

LANDSCAPE ARCHITECT:
DONALD C. WESTPHAL ASSOCIATES L.L.C.
LANDSCAPE ARCHITECTS AND SITE PLANNERS
(248) 651-5518
71 N. LIVERNOIS, SUITE A, ROCHESTER HILLS, MI 48307

PRELIMINARY
NOT FOR CONSTRUCTION



LEGEND	
SANITARY SEWER	---
STORM SEWER	---
WATER MAIN	---
EXISTING MAJOR CONTOUR	---
EXISTING MINOR CONTOUR	---
EXISTING SPOT GRADE	---
PROPOSED SPOT GRADE	836.30
PROPOSED MANHOLE	○
EXISTING CATCH BASIN AND MANHOLE AS NOTED	○
PROPOSED B.Y.C.S.	⊗
EXISTING PAVEMENT CATCH BASIN	⊠
PROPOSED PAVEMENT CATCH BASIN	⊠
EXISTING GATE VALVE	⊗
PROPOSED GATE VALVE	⊗
EXISTING HYDRANT	⊗
PROPOSED HYDRANT	⊗
SIGN	⊗
UTILITY POLE	⊗
DRAINAGE ARROW	→
EXISTING FENCE	---
CL ROAD OR DITCH AS NOTED	---
TREE/BRUSH LINE	---
10'± TOP OF CURB	---
60"± CUTTER	---
THIS TEXT TYPE (H445) REPEATS EXISTING	

SHEET INDEX:	
0 OF 13	COVER SHEET
1 OF 13	SITE PLAN
2 OF 13	TOPOGRAPHY SURVEY
3 OF 13	TOPOGRAPHY SURVEY
4 OF 13	UTILITY PLAN
5 OF 13	GRADING PLAN
6 OF 13	DETAILS
7 OF 13	R.O.W. IMPROVEMENTS
8 OF 13	SIDEWALK RAMP AND DETECTABLE WARNING DETAILS
9 OF 13	LANDSCAPE PLAN
10 OF 13	LANDSCAPE PLAN & DETAILS
11 OF 13	EAST BOUNDARY BUFFER LANDSCAPE PLAN
12 OF 13	ENTRANCE SIGN DETAILS
13 OF 13	EMERGENCY EXIT DETAILS

	DATE: 08/02/2007	SHEET NO. 0 OF 13
	REVISION: 02/02/2007-FIN REVIEW COMPLETE	
	04/02/2007-FIN REVIEW COMPLETE 04/22/2007	
	05/04/2007-COMMUNITY REVIEW COMPLETE	
LANDSCAPE ARCHITECTS AND SITE PLANNERS 71 N. LIVERNOIS, SUITE A, ROCHESTER HILLS, MI 48307 (248) 651-5518	DRAWN BY: J.E.B. DRAWING # 1002	

CITY FILE #17-019

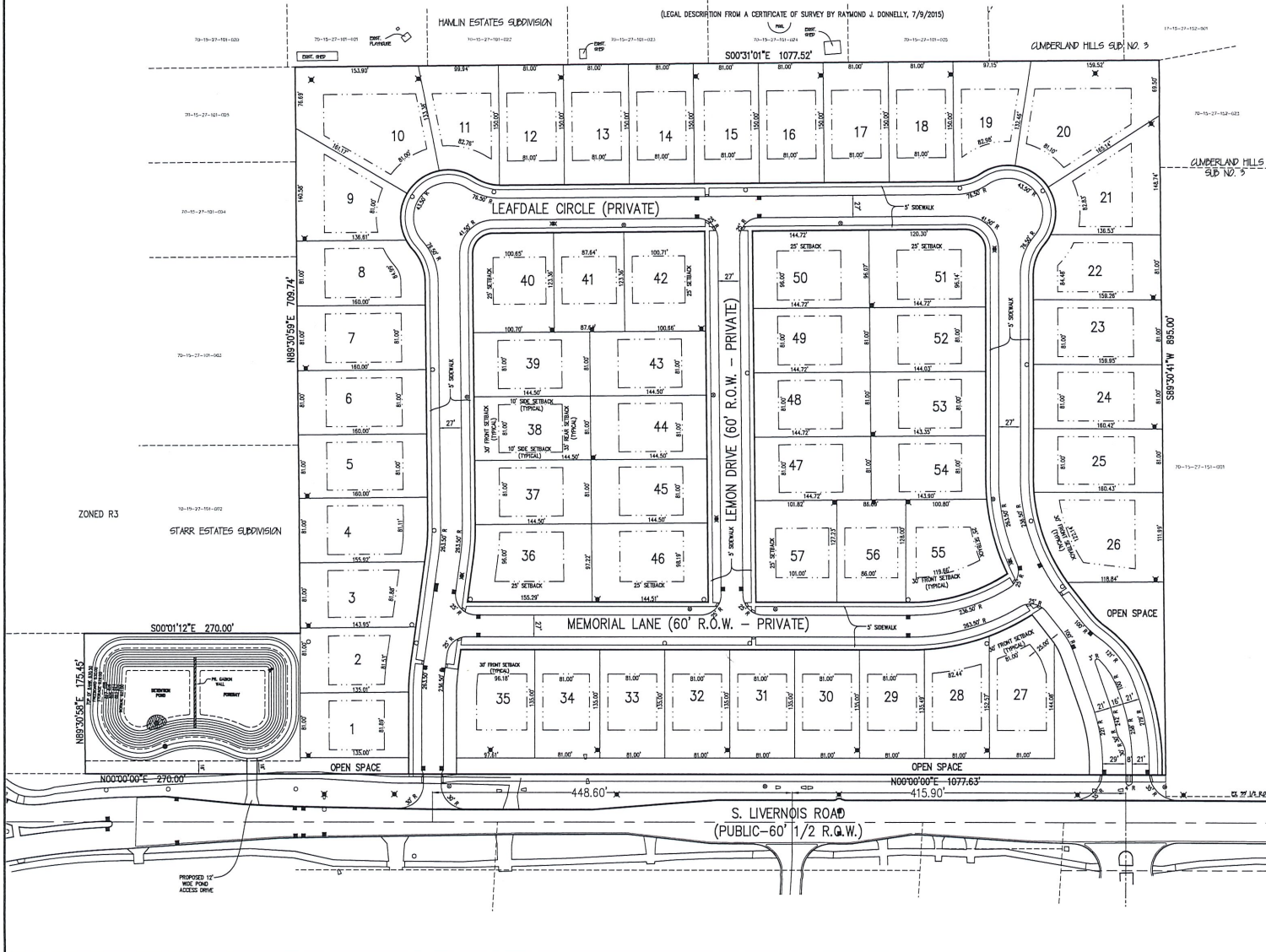
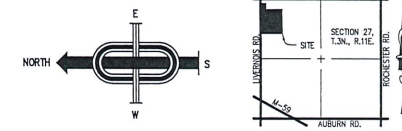
"CUMBERLAND VILLAGE"

PART OF THE NORTHWEST 1/4 OF SECTION 27, T. 3N., R. 11E.,
CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN.

LEGAL DESCRIPTION:

THE SOUTH 270 FEET OF LOT 1 AND ALL OF THE LOTS 5 THROUGH 9, BOTH INCLUSIVE, OF "STAR ESTATES" BEING A SUBDIVISION IN A PART OF THE NORTHWEST 1/4 OF SECTION 27, TOWN 3 NORTH, RANGE 11 EAST, AVON TOWNSHIP (NOW CITY OF ROCHESTER HILLS), OAKLAND COUNTY, MICHIGAN ACCORDING TO THE PLAN RECORDED IN LIBER 64 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, MORE PARTICULARLY DESCRIBED AS: BEGINNING AT THE SOUTHWEST CORNER OF SAID LOT 1, NORTH 00°00'00" WEST 461.50 FEET AND NORTH 89°30'59" EAST 80.00 FEET, AS CALCULATED AND MEASURED, FROM THE NORTHWEST CORNER OF SAID SECTION 27; THENCE ALONG THE WEST LINE OF LOT 1, NORTH 00°00'00" EAST 270.00 FEET, THENCE NORTH 89°30'59" EAST 175.45 FEET, AS CALCULATED AND MEASURED, TO A POINT ON THE EAST LINE OF LOT 1; THENCE ALONG SAID EAST LINE, SOUTH 00°01'12" EAST 270.00 FEET, AS CALCULATED AND MEASURED, TO THE SOUTHEAST CORNER OF LOT 1 AND A POINT ON THE NORTH LINE OF LOT 5; THENCE ALONG THE NORTH LINE OF LOT 5, NORTH 89°30'59" EAST 709.74 FEET, AS CALCULATED AND MEASURED (RECORDED AS 709.23 FEET), TO THE NORTHEAST CORNER OF LOT 5; THENCE ALONG THE EAST LINE OF LOTS 5 THROUGH 9, AND IN PART ALONG THE WEST LINE OF "HAMLIN ESTATES SUBDIVISION" (LIBER 74, PAGE 16) AND IN PART ALONG THE WEST LINE OF "CUMBERLAND HILLS SUB. NO. 3" (LIBER 167, PAGES 46-43), SOUTH 00°31'01" EAST 1077.52 FEET, AS CALCULATED AND MEASURED (RECORDED AS 1077.44 FEET), TO THE SOUTHEAST CORNER OF LOT 9; THENCE ALONG THE SOUTH LINE OF LOT 9, AND IN PART ALONG THE WEST LINE OF "HAMLIN ESTATES SUBDIVISION" (LIBER 74, PAGE 16) AND IN PART ALONG THE WEST LINE OF "CUMBERLAND HILLS SUB. NO. 3" (LIBER 167, PAGES 46-43), SOUTH 00°31'01" EAST 1077.52 FEET, AS CALCULATED AND MEASURED (RECORDED AS 1077.44 FEET), TO THE SOUTHWEST CORNER OF LOT 9; THENCE ALONG THE WEST LINE OF LOTS 5 THROUGH 9, NORTH 00°00'00" EAST 1077.43 FEET, AS CALCULATED AND MEASURED (RECORDED AS 1077.64 FEET), BACK TO THE POINT OF BEGINNING AND CONTAINING 23.1073 ACRES OF LAND AS SURVEYED AND CALCULATED.

(LEGAL DESCRIPTION FROM A CERTIFICATE OF SURVEY BY RAYMOND J. DONNELLY, 7/9/2015)



NOTES:

- FLOOD PLAIN REQUIREMENTS:**
BASED ON THE FLOOD INSURANCE RATE MAP (FIRM) FOR THE CITY OF ROCHESTER HILLS, ACCORDING TO COMMUNITY PANEL NUMBER 261200394F, DATED SEPTEMBER 29, 2008 A 100-YEAR FLOODPLAIN DOES NOT AFFECT THIS PROPERTY.
- ZONING REQUIREMENTS:**
THIS PROPERTY IS ZONED R3 - ONE FAMILY RESIDENTIAL ZONING DISTRICT. BASED ON THE ROCHESTER HILLS ZONING ORDINANCE, THE FOLLOWING REQUIRED SETBACKS APPLY:
MINIMUM WIDTH 30 FEET
MINIMUM AREA 12,000 SF
FRONT YARD SETBACK 30 FEET
SIDE YARD SETBACK 10 FEET (20' TOTAL)
REAR YARD SETBACK 35 FEET
MAXIMUM FLOOR AREA 2 STORES
MINIMUM FLOOR AREA 1,200 SF
MAXIMUM BUILDING COVERAGE 30%
- NOTES:**
1. THE DEVELOPER IS PROPOSING AN 57 UNIT SITE CONDOMINIUM.
2. ALL SIGNS SHALL BE IN CONFORMANCE WITH THE CITY OF ROCHESTER HILLS REQUIREMENTS. A SEPARATE SIGN PERMIT MUST BE OBTAINED FROM THE BUILDING DEPARTMENT.
3. THE ROADS IN THIS DEVELOPMENT WILL BE PRIVATE.
4. THE PROPOSED ROADS WITHIN THIS DEVELOPMENT WILL BE PAVED WITH 3" MOUNTABLE CONCRETE CURB AND GUTTERS.
5. STORM WATER INFILTRATION IS NOT PROVIDED BASED ON THE SOIL INVESTIGATION PERFORMED BY WOODHEAD & ASSOCIATES.
- FIRE DEPARTMENT NOTES:**
1. CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH FIC 2006 CHAPTER 14.
2. OPEN BURNING IS NOT PERMITTED INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR THE PREPARATION OF MORTAR SHALL BE WITHIN THE CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES. FIRE PREVENTION ORDINANCE CHAPTER 24, SEC. 207.1 & 207.2.2.
3. THE BUILDINGS WILL BE CONSTRUCTION TYPE V-B.

UNIT SIZE VARIATION TABLE

UNIT	WIDTH	DEPTH	AREA
1	81.89	135.00	11,055 SF
2	81.53	138.21	11,268 SF
3	81.88	148.87	12,278 SF
4	81.11	159.98	12,978 SF
5	81.00	160.00	12,960 SF
6	81.00	160.00	12,960 SF
7	81.00	160.00	12,960 SF
8	84.90	158.58	13,553 SF
9	81.00	148.89	12,060 SF
10	81.00	178.49	14,256 SF
11	82.76	135.33	11,175 SF
12	81.00	150.00	12,150 SF
13	81.00	150.00	12,150 SF
14	81.00	150.00	12,150 SF
15	81.00	150.00	12,150 SF
16	81.00	150.00	12,150 SF
17	81.00	150.00	12,150 SF
18	81.00	150.00	12,150 SF
19	82.98	137.31	11,394 SF
20	81.00	211.87	17,130 SF
21	82.83	148.31	12,285 SF
22	84.48	157.95	13,344 SF
23	81.00	158.38	12,810 SF
24	81.00	160.29	12,983 SF
25	81.00	160.87	13,030 SF
26	123.14	148.87	18,177 SF
27	81.00	168.52	13,649 SF
28	82.44	140.89	11,615 SF
29	81.00	135.00	10,935 SF
30	81.00	135.00	10,935 SF
31	81.00	135.00	10,935 SF
32	81.00	135.00	10,935 SF
33	81.00	135.00	10,935 SF
34	81.00	135.00	10,935 SF
35	96.18	135.00	12,884 SF
36	96.74	148.20	14,337 SF
37	81.00	144.50	11,704 SF
38	81.00	144.50	11,704 SF
39	81.00	144.50	11,704 SF
40	100.85	123.28	12,408 SF
41	87.64	123.34	10,810 SF
42	100.71	123.39	12,427 SF
43	81.00	144.50	11,704 SF
44	81.00	144.50	11,704 SF
45	81.00	144.50	11,704 SF
46	98.18	144.50	14,088 SF
47	81.00	144.72	11,722 SF
48	81.00	144.72	11,722 SF
49	81.00	144.72	11,722 SF
50	96.00	144.72	13,893 SF
51	96.14	145.12	13,952 SF
52	81.00	144.38	11,695 SF
53	81.00	143.01	11,584 SF
54	81.00	143.00	11,583 SF
55	118.86	123.07	14,504 SF
56	86.00	127.81	10,974 SF
57	101.00	128.85	12,812 SF
58	85.32	148.17	12,428 SF AVERAGE

PREPARED FOR:
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LOUARDO HOMES
13007 23 MILE ROAD
SHELBY TOWNSHIP, MI 48315
(586) 781-2364
gregm@louardohomes.com

PREPARED BY:
COMMUNITY E.S., INC.
610 RICHARD HOBSON, P.E. #48078
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SHELBY TOWNSHIP, MI 48316
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rich@communityes.com

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REV. 3/29/18 FINAL SITE PLAN
REV. 1/17/18 REVISIONS FOR CITY
REV. 1/17/18 INFILTRATION REGS
REV. 9/29/17 REVISIONS PER CITY



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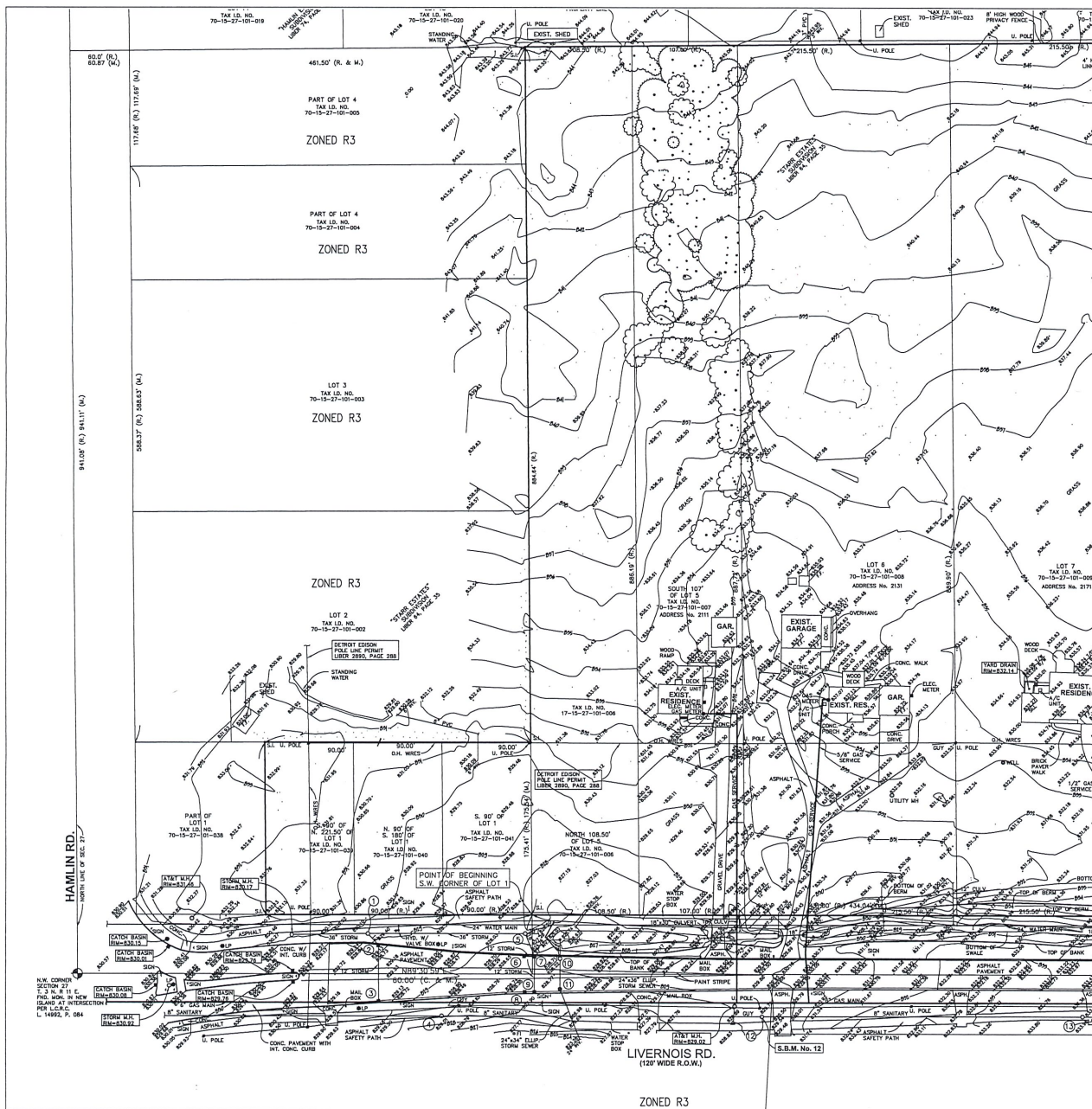
CUMBERLAND VILLAGE
PART OF THE NORTHWEST 1/4 OF
SECTION 27, T. 3N., R. 11E.,
CITY OF ROCHESTER HILLS,
OAKLAND COUNTY, MICHIGAN

DATE: May 04, 2017 SCALE: 1" = 60'
DRAWN BY: D.N. SHEET: 1 OF 12
CHECKED BY: R.S.H. DRAWING: Z-17-099

NOTES: IN SOME CASES (WHERE THE UNIT NARROWS TO THE REAR) THE UNIT WIDTH WAS MEASURED AT A POINT 24' BACK FROM THE FRONT YARD SETBACK.

CITY FILE #17-019, SECTION 27

SITE PLAN



BENCH MARK DATA

(N.A.V.D. 88 DATUM)
 S.B.M. No. 12
 NORTH RM OF SANITARY MANHOLE LOCATED ON THE WEST SIDE OF LIVERNOIS RD., 694'± SOUTH OF CENTERLINE OF HAMLIN RD. AND 42'± WEST OF CENTERLINE OF LIVERNOIS RD. AT ADDRESS No. 2130.
 ELEV. = 825.35

EXISTING STRUCTURE LISTING

- STORM MH
 RM = 829.54
 12" INV. SW = 823.28 - CONCRETE
 30" INV. N = 818.85 - CONCRETE
 30" INV. S = 818.33 - CONCRETE
- CATCH BASIN
 RM = 828.75
 12" INV. W = 823.65 - CONCRETE
 12" INV. NE = 823.75 - CONCRETE
- CATCH BASIN
 RM = 828.75
 12" INV. E = 824.55 - CONCRETE
- SANITARY MH
 RM = 829.03
 8" INV. W = 815.37 - CONCRETE
 8" INV. S = 815.37 - CONCRETE
- STORM MH
 RM = 828.09
 18" INV. NW = 820.17 - CONCRETE
 18" INV. N = 818.39 - CONCRETE
 30" INV. S = 819.68 - CONCRETE
- CATCH BASIN
 RM = 828.13
 12" INV. S = 820.68 - CONCRETE
- CATCH BASIN
 RM = 828.15
 12" INV. W = 820.30 - CONCRETE
 12" INV. N = 823.03 - CONCRETE
 18" INV. NE = 820.15 - CONCRETE
- CATCH BASIN
 RM = 828.17
 12" INV. S = 821.60 - CONCRETE
- CATCH BASIN
 RM = 828.13
 12" INV. N = 821.08 - CONCRETE
 12" INV. W = 822.16 - CONCRETE
- STORM MH
 RM = 828.28
 24"x36" ELLIP. INV. W. = 824.42 - CONCRETE
 27" INV. E = 824.33 - CONCRETE
- CATCH BASIN
 RM = 828.42
 24"x36" ELLIP. INV. S.W. = 824.00 - CONCRETE
 24"x36" ELLIP. INV. E. = 824.00 - CONCRETE
- SANITARY MH
 RM = 828.33
 8" INV. N = 818.81 - CONCRETE
 8" INV. S = 818.81 - CONCRETE

NOTE
 SEE SHEETS 3 AND 4 FOR TREE SURVEY
 SEE SHEET 5 AND 6A FOR TREE INVENTORY LISTING
 SEE SHEET 6 FOR BOUNDARY SURVEY

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 1-800-482-7171

NOTE: UTILITY INFORMATION ON THIS DRAWING MAY BE FROM INFORMATION OBTAINED TO THIS DATE BY THE SURVEYING SURVEY COMPANY, AND IS GUARANTEED TO SHOW AS TO THE COMPLETENESS OR ACCURACY THEREOF.
 ANY INFORMATION OF DATA ON THIS DRAWING IS NOT INTENDED TO BE RELIABLE FOR USE BY ANY PERSON, FIRM OR CORPORATION, IN ANY OTHER PROJECT, ANY USES WITHOUT WRITTEN NOTIFICATION AND AGREEMENT BY THE SURVEYOR OR ENGINEER. THE USER SHALL BEAR AND WHOLLY ASSUME ALL LIABILITY INCURRED TO THE SURVEYOR OR ENGINEER.



- ABBREVIATIONS**
- FF FOUND IRON ROD
 - FP FOUND IRON PIPE
 - FM FOUND CONCRETE MONUMENT
 - CL CALCULATED
 - SET IRON ROD
 - M MEASURED
 - R RECORD
 - CLF CHAIN LINK FENCE
 - CB CATCH BASIN
 - CO CLEAN OUT
 - S DOWNHOLE
 - FF FINISHED FLOOR
 - GVW GATE VALVE & WELL
 - HYD HYDRANT
 - INS. INLET
 - IE INVERT ELEVATION
 - LP LIGHT POLE
 - MH MANHOLE
 - NTS NOT TO SCALE
 - OVH OVERHEAD
 - SB SOIL BORING
 - TOP TOP OF CURB
 - UG UNDERGROUND
 - UP UTILITY POLE
- SYMBOLS**
- CABLE
 - ELECTRIC
 - FENCE
 - GAS
 - GUY WIRE & ANCHOR
 - SANITARY SEWER
 - STORM SEWER
 - TELEPHONE
 - ▲ TRANSFER/CONTROL POINT
 - WATER MAIN
 - EXISTING CONTOURS
 - EXISTING ELEVATIONS

825-15 ADDITIONAL TOPOGRAPHY AND TREES ADDED FOR ADDRESS 211 LIVERNOIS



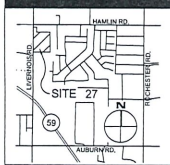
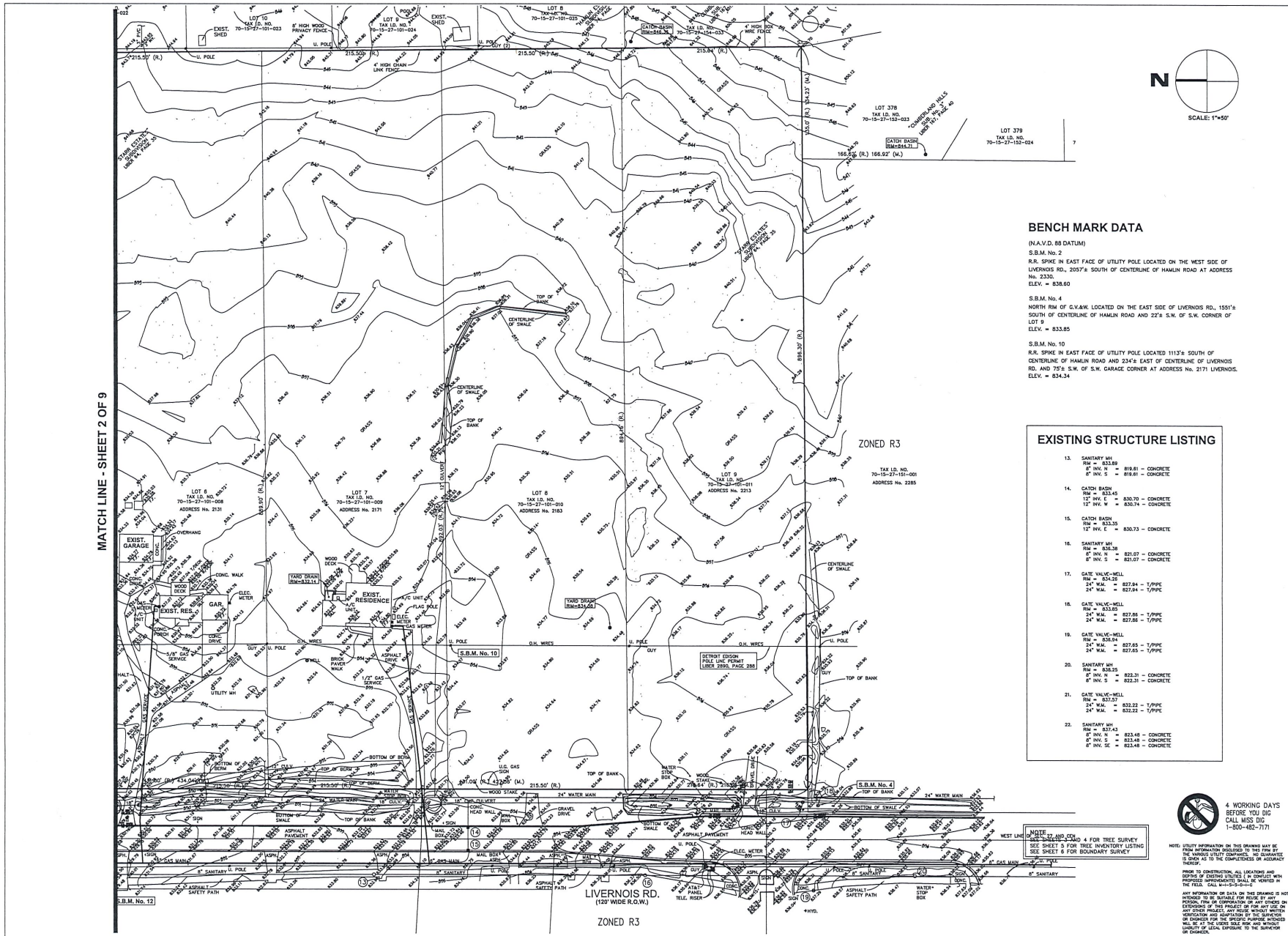
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 Troy, MI 48063-4207
 Phone: 248.689.5555
 Fax: 248.689.5677
 Web: www.rjdsurveyors.com

TOPOGRAPHICAL SURVEY
 STARR ESTATES
 ROCHESTER HILLS, MI

COMMUNITY E.S., INC.
 6303 26 MILE ROAD, SUITE 110
 WASHINGTON, MI 48094

J.E.K. 8-20-15 1"=50'

MATCH LINE - SHEET 2 OF 9



BENCH MARK DATA
(N.A.V.D. 88 DATUM)

S.B.M. No. 2
R.R. SPIKE IN EAST FACE OF UTILITY POLE LOCATED ON THE WEST SIDE OF LIVERNOIS RD., 2057' S. SOUTH OF CENTERLINE OF HAMLIN ROAD AT ADDRESS No. 2330.
ELEV. = 838.60

S.B.M. No. 4
NORTH RM OF C.V.W. LOCATED ON THE EAST SIDE OF LIVERNOIS RD., 1551' S. SOUTH OF CENTERLINE OF HAMLIN ROAD AND 22' S.W. CORNER OF LOT 9
ELEV. = 835.85

S.B.M. No. 10
R.R. SPIKE IN EAST FACE OF UTILITY POLE LOCATED 1113' S. SOUTH OF CENTERLINE OF HAMLIN ROAD AND 234' E. EAST OF CENTERLINE OF LIVERNOIS RD. AND 75' S.W. OF S.W. GARAGE CORNER AT ADDRESS No. 2171 LIVERNOIS.
ELEV. = 834.34

EXISTING STRUCTURE LISTING

13.	SANITARY MH	RM = 833.89
	8" INV. S = 819.81 - CONCRETE	
	8" INV. S = 819.81 - CONCRETE	
14.	CATCH BASIN	RM = 833.43
	12" INV. S = 830.70 - CONCRETE	
	12" INV. S = 830.74 - CONCRETE	
15.	CATCH BASIN	RM = 833.33
	12" INV. S = 830.73 - CONCRETE	
16.	SANITARY MH	RM = 833.38
	8" INV. S = 821.07 - CONCRETE	
	8" INV. S = 821.07 - CONCRETE	
17.	GATE VALVE-WELL	RM = 834.28
	24" W.M. = 827.04 - T/PIPE	
	24" W.M. = 827.04 - T/PIPE	
18.	GATE VALVE-WELL	RM = 833.85
	24" W.M. = 827.86 - T/PIPE	
	24" W.M. = 827.86 - T/PIPE	
19.	GATE VALVE-WELL	RM = 833.94
	24" W.M. = 827.65 - T/PIPE	
	24" W.M. = 827.65 - T/PIPE	
20.	SANITARY MH	RM = 835.29
	8" INV. S = 822.31 - CONCRETE	
	8" INV. S = 822.31 - CONCRETE	
21.	GATE VALVE-WELL	RM = 837.57
	24" W.M. = 832.22 - T/PIPE	
	24" W.M. = 832.22 - T/PIPE	
22.	SANITARY MH	RM = 837.43
	8" INV. S = 823.48 - CONCRETE	
	8" INV. S = 823.48 - CONCRETE	
	8" INV. S = 823.48 - CONCRETE	

- ABBREVIATIONS**
- FI FOUND IRON ROD
 - FIP FOUND IRON PIPE
 - FCM FOUND CONCRETE MONUMENT
 - SE SET IRON ROD
 - C CALCULATED
 - M MEASURED
 - R RECORD
 - CLF CHAIN LINK FENCE
 - CB CATCH BASIN
 - CO CLEAN OUT
 - DS DOWNPOUT
 - FF FINISHED FLOOR
 - OVWV GATE VALVE & WELL
 - HYD HYDRAUNT
 - INLET
 - IE INVERT ELEVATION
 - LI LIGHT POLE
 - MH MANHOLE
 - MTS NOT TO SCALE
 - OH OVERHEAD
 - SB 200' BOUNDARY
 - TOP OF CURB
 - UG UNDERGROUND
 - U. POSIBILITY POLE
- SYMBOLS**
- CABLE
 - ELECTRIC
 - FENCE
 - GAS
 - GUY WIRE & ANCHOR
 - SANITARY SEWER
 - STORM SEWER
 - TELEPHONE
 - TRAVELER/CONTROL POINT
 - WATER MAIN
 - EXISTING CONTOURS
 - EXISTING ELEVATIONS



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TOPOGRAPHICAL SURVEY
STARR ESTATES
ROCHESTER HILLS, MI

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6303 26 MILE ROAD, SUITE 110
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J.E.K. 7-09-15 1"=50'

2015-025 18 OF 19

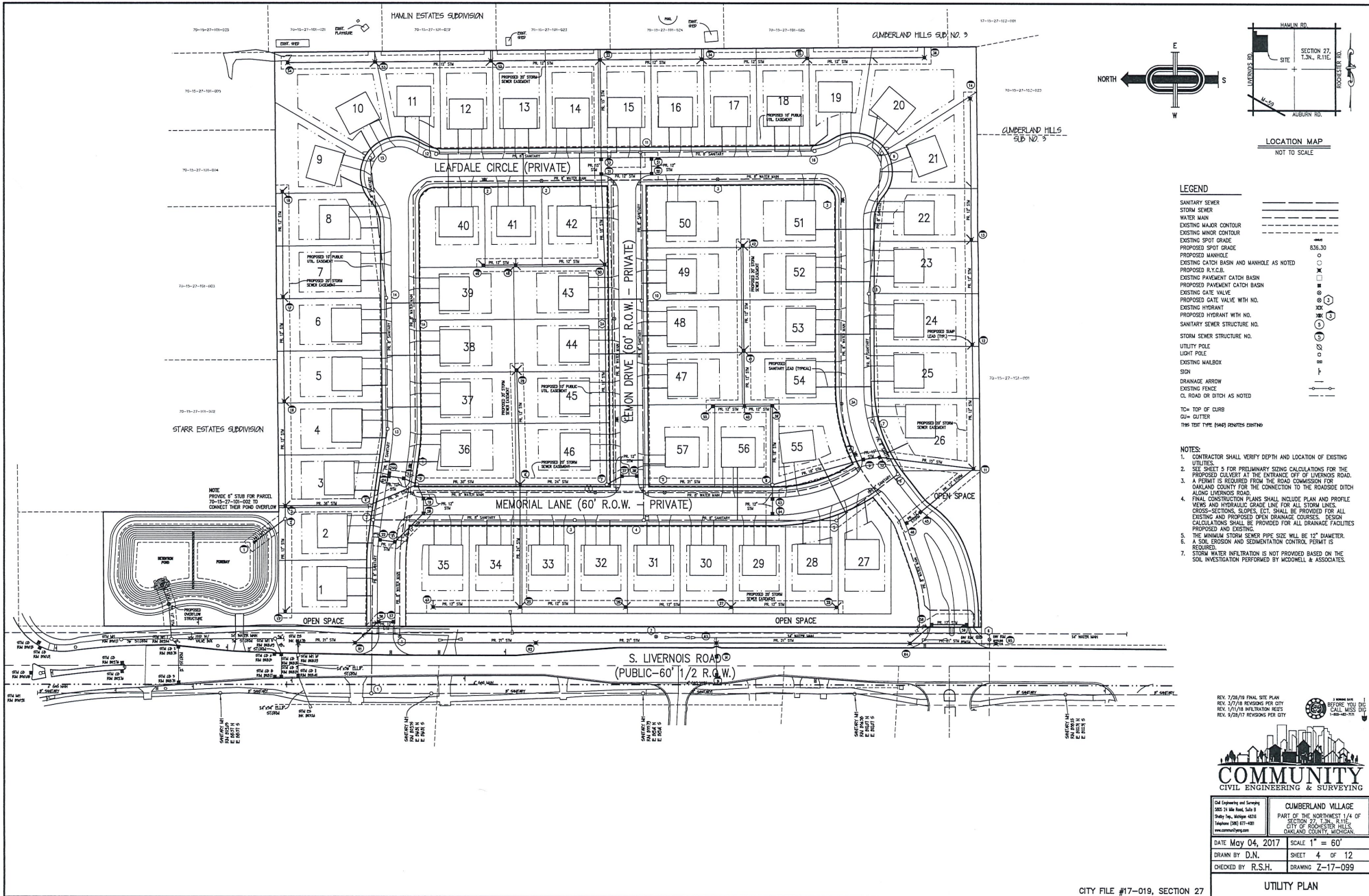


4 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171

NOTE: SEE SHEET 2 AND SHEET 4 FOR TREE SURVEY AND SHEET 5 FOR TREE INVENTORY LISTING. SEE SHEET 6 FOR BOUNDARY SURVEY.

NOTE: UTILITY INFORMATION ON THIS DRAWING HAS BEEN PROVIDED BY THE UTILITY COMPANIES AND IS GUARANTEED TO THE BEST OF THEIR KNOWLEDGE. THE USER SHALL BE RESPONSIBLE FOR THE COMPLETENESS OF ACCURACY THEREOF.

ANY INFORMATION ON THIS DRAWING IS NOT INTENDED TO BE RELIABLE FOR PURPOSES OF ANY PERIOD, PERMITS OR CONSTRUCTION OF ANY KIND OR FOR ANY OTHER PURPOSES. ANY RELIANCE THEREON WITHOUT KNOWLEDGE AND AGREEMENT BY THE USER SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY OF COMMUNITY E.S., INC. OR THE SURVEYOR OR ENGINEER.



- LEGEND**
- SANITARY SEWER
 - STORM SEWER
 - WATER MAIN
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - EXISTING SPOT GRADE
 - PROPOSED SPOT GRADE
 - PROPOSED MANHOLE
 - EXISTING CATCH BASIN AND MANHOLE AS NOTED
 - PROPOSED R.T.C.B.
 - EXISTING PAVEMENT CATCH BASIN
 - PROPOSED PAVEMENT CATCH BASIN
 - EXISTING GATE VALVE
 - PROPOSED GATE VALVE WITH NO. 1
 - EXISTING HYDRANT
 - PROPOSED HYDRANT WITH NO. 2
 - SANITARY SEWER STRUCTURE NO. 3
 - STORM SEWER STRUCTURE NO. 4
 - UTILITY POLE
 - LIGHT POLE
 - EXISTING MAILBOX
 - SIGN
 - DRAINAGE ARROW
 - EXISTING FENCE
 - CL. ROAD OR DITCH AS NOTED
 - TOP OF CURB
 - CURB CUTTER
 - THIS TEXT TYPE [HANG] PRINTED EXISTING

- NOTES:**
1. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES.
 2. SEE SHEET 5 FOR PRELIMINARY SIZING CALCULATIONS FOR THE PROPOSED CULVERT AT THE ENTRANCE OFF OF LIVERNOIS ROAD.
 3. A PERMIT IS REQUIRED FROM THE ROAD COMMISSION FOR OAKLAND COUNTY FOR THE CONNECTION TO THE ROADSIDE DITCH ALONG LIVERNOIS ROAD.
 4. FINAL CONSTRUCTION PLANS SHALL INCLUDE PLAN AND PROFILE VIEWS AND HYDRAULIC GRADE LINE FOR ALL STORAGE LINES. CROSS-SECTIONS, SLOPES, ECT. SHALL BE PROVIDED FOR ALL EXISTING AND PROPOSED OPEN DRAINAGE COURSES. DESIGN CALCULATIONS SHALL BE PROVIDED FOR ALL DRAINAGE FACILITIES PROPOSED AND EXISTING.
 5. THE MINIMUM STORM SEWER PIPE SIZE WILL BE 12" DIAMETER.
 6. A SOIL EROSION AND SEDIMENTATION CONTROL PERMIT IS REQUIRED.
 7. STORM WATER INFILTRATION IS NOT PROVIDED BASED ON THE SOIL INVESTIGATION PERFORMED BY MCDOWELL & ASSOCIATES.

REV. 7/29/18 FINAL SITE PLAN
 REV. 5/17/18 REVISIONS PER CITY
 REV. 1/17/18 INFILTRATION REQS
 REV. 1/29/17 REVISIONS PER CITY



COMMUNITY
 CIVIL ENGINEERING & SURVEYING

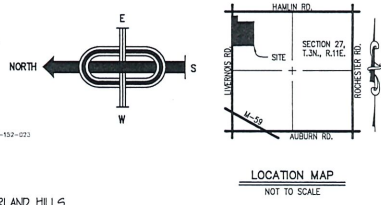
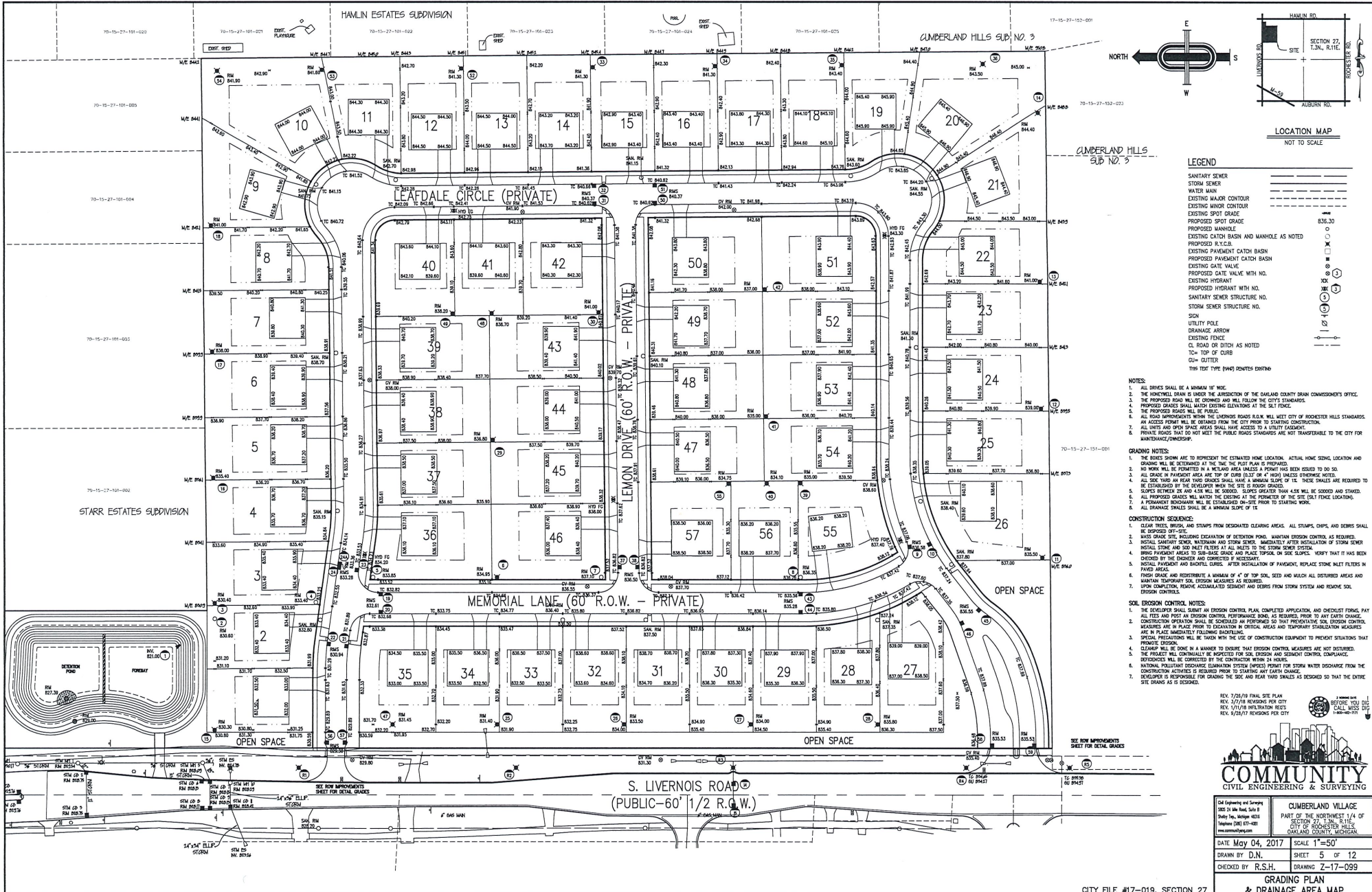
One Corporate and Dunwoody
 105-74 14th Street, Suite 8
 Shady Side, Michigan 48226
 Telephone: (248) 671-4444
 www.communityeng.com

CUMBERLAND VILLAGE
 PART OF THE NORTHWEST 1/4 OF
 SECTION 27, T.34N., R.11E.,
 CITY OF ROCHESTER HILLS,
 OAKLAND COUNTY, MICHIGAN

DATE: May 04, 2017 SCALE: 1" = 60'
 DRAWN BY: D.N. SHEET: 4 OF 12
 CHECKED BY: R.S.H. DRAWING: Z-17-099

CITY FILE #17-019, SECTION 27

UTILITY PLAN



LEGEND

---	SANITARY SEWER
---	STORM SEWER
---	WATER MAIN
---	EXISTING MAJOR CONTOUR
---	EXISTING MINOR CONTOUR
---	EXISTING SPOT GRADE
---	PROPOSED SPOT GRADE
---	PROPOSED MANHOLE
---	EXISTING CATCH BASIN AND MANHOLE AS NOTED
---	PROPOSED PAVEMENT CATCH BASIN
---	EXISTING PAVEMENT CATCH BASIN
---	EXISTING GATE VALVE
---	PROPOSED GATE VALVE WITH NO.
---	EXISTING HYDRANT
---	PROPOSED HYDRANT WITH NO.
---	SANITARY SEWER STRUCTURE NO.
---	STORM SEWER STRUCTURE NO.
---	SIEN
---	UTILITY POLE
---	DRAINAGE ARROW
---	EXISTING FENCE
---	CL. ROAD OR DITCH AS NOTED
---	TO: TOP OF CURB
---	CL. CUTTER

THIS SHEET (THIS SHEET) DERIVES FROM:

- NOTES:**
1. ALL DRIVES SHALL BE A MINIMUM 18" WIDE.
 2. THE HOMEWELL DRAIN IS UNDER THE JURISDICTION OF THE GARLAND COUNTY DRAIN COMMISSIONER'S OFFICE.
 3. THE PROPOSED ROAD WILL BE CROWNED AND WILL FOLLOW THE CITY'S STANDARDS.
 4. PROPOSED GRADES SHALL MATCH EXISTING GRADES UNLESS A POINT HAS BEEN ISSUED TO DO SO.
 5. ALL SLOPES SHALL BE AT LEAST 1% UNLESS OTHERWISE NOTED.
 6. THE PROPOSED ROADS WILL BE PUBLIC.
 7. ALL ROAD IMPROVEMENTS WITHIN THE IMPROVING AREAS SHALL BE CITY OF ROCHESTER HILLS STANDARDS.
 8. AN ACCESS PERMIT WILL BE OBTAINED FROM THE CITY PRIOR TO STARTING CONSTRUCTION.
 9. ALL UTILS AND OPEN SPACE AREAS SHALL HAVE ACCESS TO A UTILITY GOSHOOP.
 10. PRIVATE ROADS THAT DO NOT MEET THE PUBLIC ROAD STANDARDS ARE NOT TRANSFERABLE TO THE CITY FOR MAINTENANCE/OWNERSHIP.

- GRADING NOTES:**
1. CLEAR TREES WITHIN AND STRIPS FROM DESIGNATED CLEARING AREAS. ALL STUMPS, CHIPS, AND DEBRIS SHALL BE DISPOSED OFF-SITE.
 2. NO WORK WILL BE PERMITTED IN A HAZARDOUS AREA UNLESS A PERMIT HAS BEEN ISSUED TO DO SO.
 3. ALL GRADE IN PAVEMENT AREA ARE TOP OF CURB (3.0' OR 4' HIGH) UNLESS OTHERWISE NOTED.
 4. ALL SLOPES SHALL BE AT LEAST 1% UNLESS OTHERWISE NOTED.
 5. SLOPES BETWEEN 2% AND 4.5% WILL BE 2000:1. SLOPES GREATER THAN 4.5% WILL BE 3000:1 AND STAGED.
 6. ALL PROPOSED GRADES WILL MATCH THE EXISTING AT THE PERIMETER OF THE SITE (EAT) EXCEPT LOCATIONS.
 7. A FORDMANT BROADWAY WILL BE ESTABLISHED ON-SITE PRIOR TO STARTING WORK.
 8. ALL DRAINAGE SWALES SHALL BE A MINIMUM 3% SLOPE.

- CONSTRUCTION SEQUENCE:**
1. CLEAR TREES WITHIN AND STRIPS FROM DESIGNATED CLEARING AREAS. ALL STUMPS, CHIPS, AND DEBRIS SHALL BE DISPOSED OFF-SITE.
 2. MAINTAIN EXISTING UTILS INCLUDING EXCAVATION OF DETENTION POND. MAINTAIN EXISTING UTILS AS REQUIRED.
 3. INSTALL SANITARY SEWER, WATER MAIN AND STORM SEWER. IMMEDIATELY AFTER INSTALLATION OF STORM SEWER.
 4. INSTALL STONE AND SOI TO MATCH EXISTING AT ALL LOCATIONS TO THE STORM SEWER SYSTEM.
 5. BRUSH PAVEMENT AREAS TO SUB-BASE GRADE AND PLACE TOPSOIL ON SIDE SLOPES. VERIFY THAT IT HAS BEEN CHECKED BY THE ENGINEER AND CORRECTED IF NECESSARY.
 6. INSTALL PAVEMENT AND BACKFILL CURBES. AFTER INSTALLATION OF PAVEMENT, REPLACE STONE INLET FILTERS IN PAVED AREAS.
 7. FINISH GRADE AND REDISTRIBUTE A MINIMUM OF 4" OF TOP SOIL, SEED AND MULCH ALL DISTURBED AREAS AND MAINTAIN TEMPORARY SOIL EROSION MEASURES AS REQUIRED.
 8. UPON COMPLETION, REMOVE ACCUMULATED SEDIMENT AND DEBRIS FROM STORM SYSTEM AND REMOVE SOIL EROSION CONTROL.

- SOIL EROSION CONTROL NOTES:**
1. THE DEVELOPER SHALL SUBMIT AN EROSION CONTROL PLAN, COMPLETED APPLICATION, AND CHECKLIST FORMS, PAY ALL FEES AND POST AN EROSION CONTROL PERFORMANCE BOND, AS REQUIRED, PRIOR TO ANY EARTH CHANGE.
 2. CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTIVE SOIL EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION IN CRITICAL AREAS AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING SCHEDULING.
 3. SPECIAL PRECAUTIONS WILL BE TAKEN WITH THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PRESENT EROSION.
 4. CLEANUP WILL BE DONE IN A MANNER TO ENSURE THAT EROSION CONTROL MEASURES ARE NOT DISTURBED.
 5. THE PROJECT WILL CONTINUALLY BE MONITORED FOR SOIL EROSION AND STABILIZATION COMPLIANCE.
 6. IDENTIFIERS WILL BE COMPLETED BY THE CONTRACTOR WITHIN 24 HOURS.
 7. NATIONAL POLLUTANT DISCHARGE EXPLANATION SYSTEM (NPDES) PERMIT FOR STORM WATER DISCHARGE FROM THE CONSTRUCTION ACTIVITIES IS REQUIRED PRIOR TO STARTING ANY EARTH CHANGE.
 8. DEVELOPER IS RESPONSIBLE FOR GRADING THE SITE AND REAR YARD SWALES AS DESIGNED SO THAT THE ENTIRE SITE DRAINS AS IS DESIGNED.

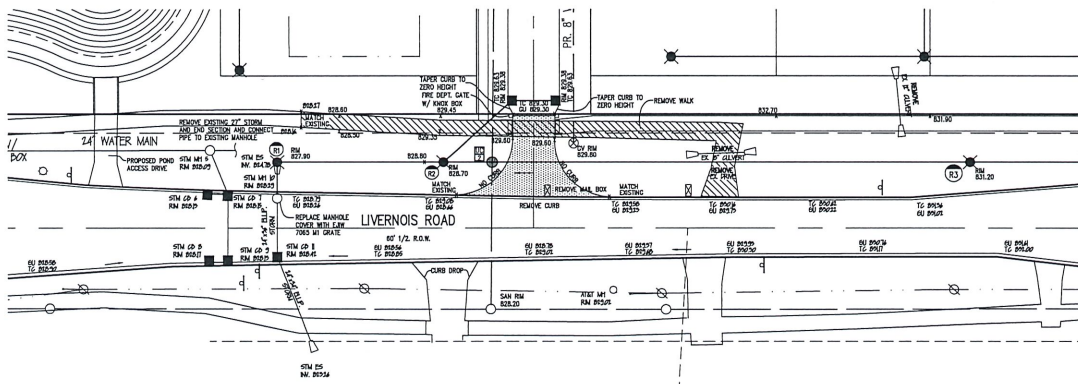
REV. 7/25/19 FINAL SITE PLAN
 REV. 10/17/19 RESPONSE FOR CITY
 REV. 1/17/20 INFILTRATION RECORD
 REV. 7/25/19 RESPONSE FOR CITY



CUMBERLAND VILLAGE
 PART OF THE NORTHWEST 1/4 OF SECTION 27, T.3N., R.11E.
 CITY OF ROCHESTER HILLS,
 GARLAND COUNTY, MICHIGAN

DATE: May 04, 2017 SCALE: 1"=50'
 DRAWN BY: D.N. SHEET: 5 OF 12
 CHECKED BY: R.S.H. DRAWING: Z-17-099

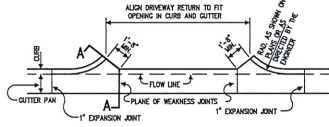
CITY FILE #17-019, SECTION 27 & DRAINAGE AREA MAP



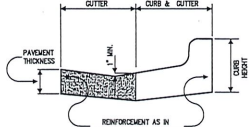
R.O.W. IMPROVEMENTS PLAN - LIVERNOIS ROAD
SCALE: 1"=30'

NOTE:
LIVERNOIS ROAD IS UNDER THE JURISDICTION OF THE ROAD COMMISSION OF DAHLGAM COUNTY. ANY WORK DONE WITHIN THE RIGHT-OF-WAY REQUIRES A PERMIT.

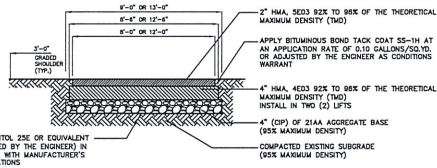
NOTE:
PAVEMENT FOR EMERGENCY ACCESS SHALL BE STAMPED CONCRETE AND MUST COMPLY WITH IFC 2006, SECTION 0102.1) LOAD SUPPORT REQUIREMENT OF AT LEAST 75,000 LBS.



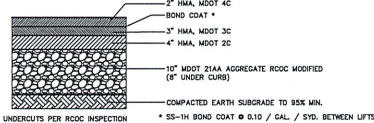
CONCRETE DRIVEWAY OPENING - DETAIL M
NOT TO SCALE



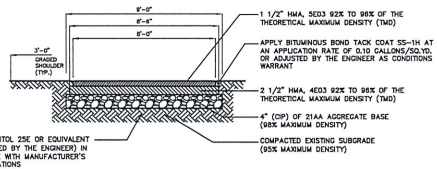
SECTION A-A



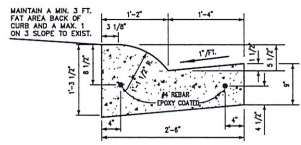
8\"/>



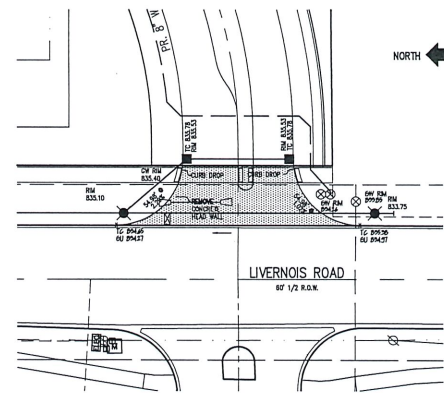
HEAVY DUTY BITUMINOUS PAVEMENT (LIVERNOIS RD. R.O.W.)
(ROAD STAMPING DETAIL)
NOT TO SCALE



8\"/>

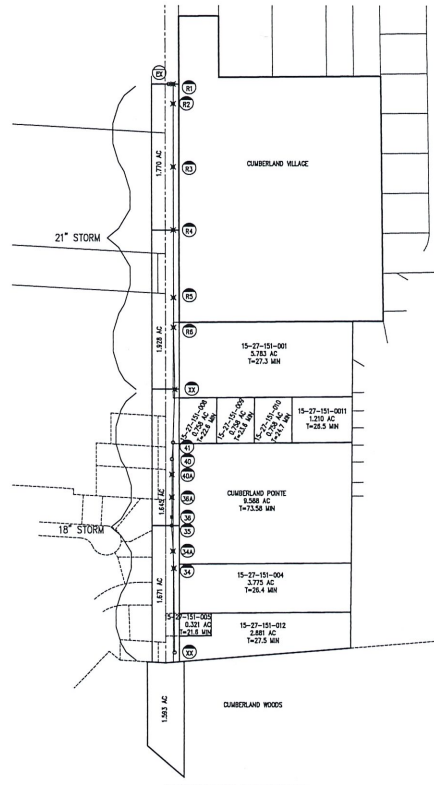


M.D.O.T. B-2 CURB & GUTTER DETAIL
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

- LEGEND**
- SANITARY SEWER
 - STORM SEWER
 - WATER MAIN
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - EXISTING SPOT GRADE
 - PROPOSED SPOT GRADE
 - PROPOSED MANHOLE
 - EXISTING CATCH BASIN AND MANHOLE AS NOTED
 - PROPOSED R.V.C.B.
 - EXISTING PAVEMENT CATCH BASIN
 - PROPOSED PAVEMENT CATCH BASIN
 - EXISTING GATE VALVE
 - PROPOSED GATE VALVE
 - EXISTING HYDRANT
 - PROPOSED HYDRANT
 - SANITARY SEWER STRUCTURE NO.
 - STORM SEWER STRUCTURE NO.
 - SIGN
 - UTILITY POLE
 - DRAINAGE ARROW
 - EXISTING FENCE
 - CL ROAD OR DITCH AS NOTED
 - EXISTING TREE/BRUSH SCHEDULED TO BE SAVED
 - TOP OF CURB
 - DOWN GUTTER
 - THIS TEXT (P44) REMAINS EXISTING



LIVERNOIS R.O.W. DRAINAGE MAP
SCALE: 1"=200'

REV. 7/25/19 FINAL SITE PLAN
REV. 10/17/18 REVISIONS PER CITY
REV. 11/11/18 IRRIGATION REVISIONS
REV. 12/26/17 REVISIONS PER CITY

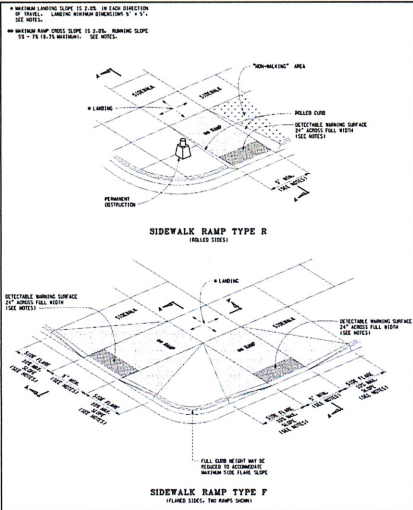


COMMUNITY CIVIL ENGINEERING & SURVEYING
1000 North Zeeb Road, Suite 100
Rochester, NY 14610
716.243.1111
www.communityeng.com

DATE: May 04, 2017 SCALE: 1"=30'
DRAWN BY: D.N. SHEET: 7 OF 12
CHECKED BY: R.S.H. DRAWING: Z-17-099

ROW IMPROVEMENTS

CITY FILE #17-019, SECTION 27

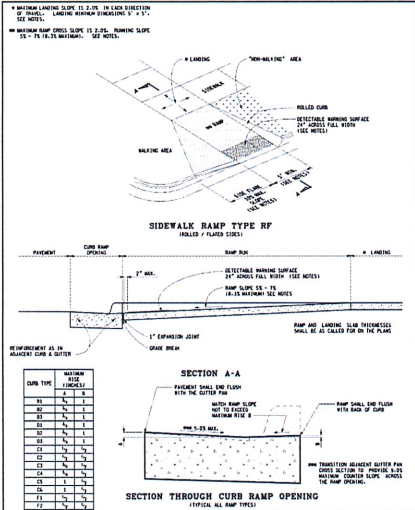


SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION PROGRAMS

DESIGNED BY: R-28-J
CHECKED BY: R-28-J

DATE: 02-11-2013
SHEET 1 OF 1

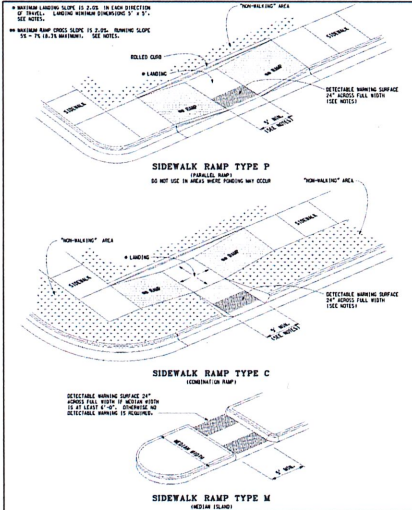


SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION PROGRAMS

DESIGNED BY: R-28-J
CHECKED BY: R-28-J

DATE: 02-11-2013
SHEET 2 OF 1

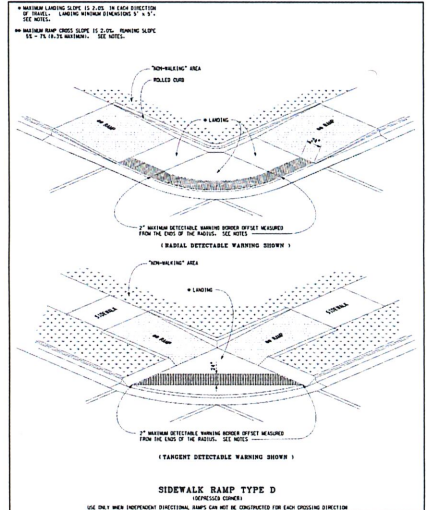


SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION PROGRAMS

DESIGNED BY: R-28-J
CHECKED BY: R-28-J

DATE: 02-11-2013
SHEET 4 OF 1

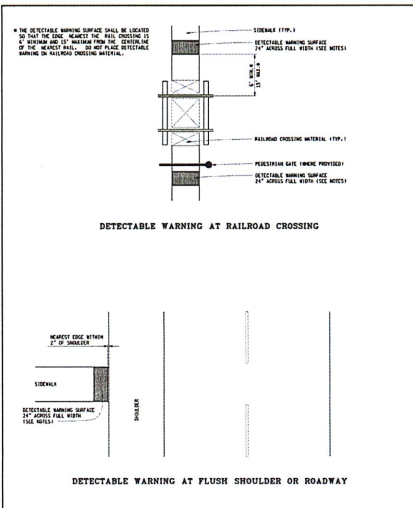


SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION PROGRAMS

DESIGNED BY: R-28-J
CHECKED BY: R-28-J

DATE: 02-11-2013
SHEET 3 OF 1

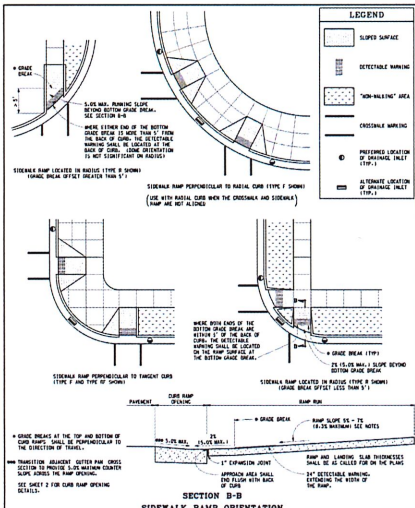


SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION PROGRAMS

DESIGNED BY: R-28-J
CHECKED BY: R-28-J

DATE: 02-11-2013
SHEET 1 OF 1

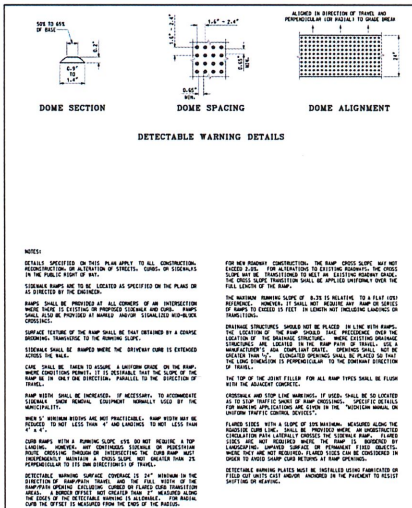


SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION PROGRAMS

DESIGNED BY: R-28-J
CHECKED BY: R-28-J

DATE: 02-11-2013
SHEET 2 OF 1



SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION PROGRAMS

DESIGNED BY: R-28-J
CHECKED BY: R-28-J

DATE: 02-11-2013
SHEET 7 OF 1



SIDEWALK RAMP AND DETECTABLE WARNING DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION PROGRAMS

DESIGNED BY: R-28-J
CHECKED BY: R-28-J

DATE: 02-11-2013
SHEET 4 OF 1

REV: 7/28/79 FINAL SITE PLAN
REV: 10/19 REVISIONS PER CITY
REV: 10/18 INFILTRATION NEEDS
REV: 1/26/13 REVISIONS PER CITY

CUMBERLAND VILLAGE
PART OF THE NORTHWEST 1/4 OF
SECTION 27, T-156, R-15E,
CITY OF ROCHESTER HILLS,
COMMISSIONED COUNTY, MICHIGAN

DATE: May 04, 2017 SCALE: 1"=50'
DRAWN BY: D.N. SHEET 8 OF 12
CHECKED BY: R.S.H. DRAWING Z-17-099

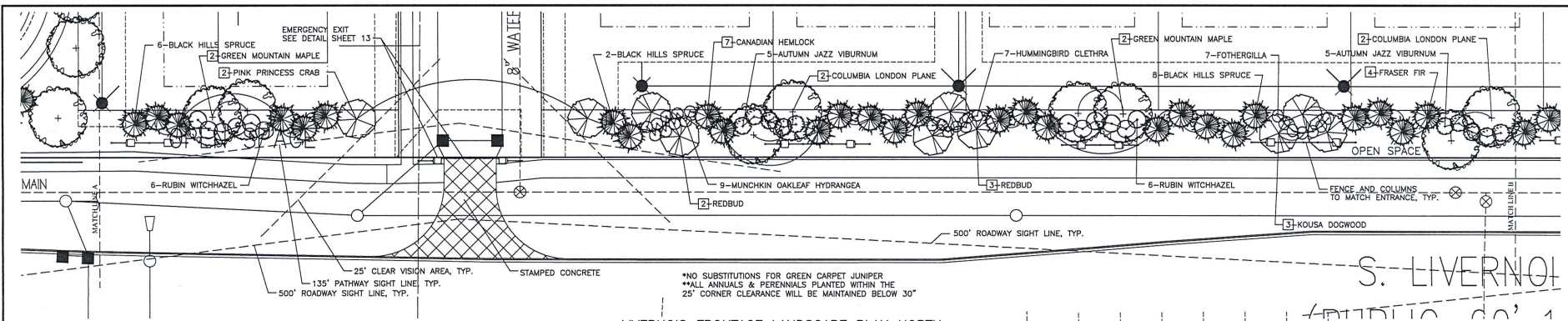
**SIDEWALK RAMP AND
DETECTABLE WARNING DETAILS**

STATE OF MICHIGAN
 DEPARTMENT OF NATURE RESOURCES
 DIVISION OF LAND AND WATER
 LANDSCAPE ARCHITECTURE & SITE PLANNING
 410 EAST WASHINGTON STREET
 LANSING, MI 48224
 DRAWN BY: J.L. WESTPHAL
 CHECKED BY: J.L. WESTPHAL

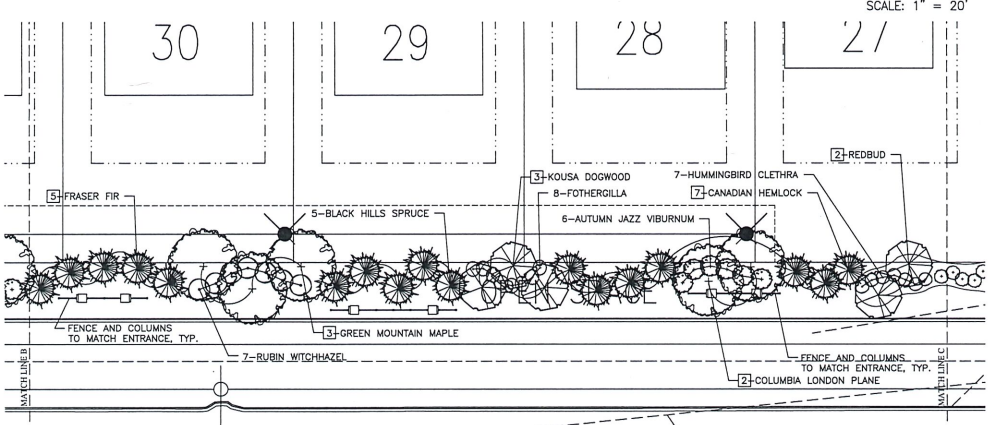
donald c. westphal
 LANDSCAPE ARCHITECT
 1000 W. WASHINGTON ST., SUITE 100
 LANSING, MI 48224
 (313) 487-1000
 www.donaldwestphal.com

LANDSCAPE PLAN

Cumberland Village
 Rochester Hills, Oakland County, Michigan

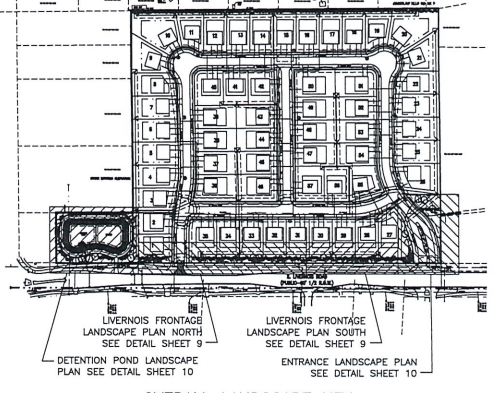


LIVERNOIS FRONTAGE LANDSCAPE PLAN NORTH
 SCALE: 1" = 20'



LIVERNOIS FRONTAGE LANDSCAPE PLAN SOUTH
 SCALE: 1" = 20'

PRELIMINARY
 NOT FOR CONSTRUCTION



OVERALL LANDSCAPE KEY
 SCALE: 1" = 200'

PLANT LIST

TREES:

NO.	COMMON NAME	BOTANICAL NAME	SIZE	SPACING
21	BLACK HILLS SPRUCE	PICEA GLAUCO VAR. DENSATA	10' HT. B.A.B.	NA

SHRUBS:

NO.	COMMON NAME	BOTANICAL NAME	SIZE	SPACING
18	AUTUMN JAZZ VIBURNUM	VIBURNUM SPICATUM 'BALPH SENIOR'	35' HT. B.A.B.	4' O.C.
15	FOTHERGILLA	FOTHERGILLA GARDENII 'M.T. ARY'	30' HT. B.A.B.	NA
14	HUMMINGBIRD CLETHRA	CLETHRA KANTOLA 'HUMMINGBIRD'	30' HT. B.A.B.	NA
9	MUNCHKIN HYDRANGEA	HYDRANGEA OLEIFOLIA 'MUNCHKIN'	30' HT. B.A.B.	4.25' O.C.
19	RUBIN WITCHHAZEL	WAMMUS X INTERMEDIA 'RUBIN'	35' HT. B.A.B.	4.25' O.C.

RIGHT OF WAY TREES:

NO.	COMMON NAME	BOTANICAL NAME	SIZE	SPACING
14	CANADIAN HEMLOCK	TSUGA CANADENSIS	10' HT. B.A.B.	NA
6	COLUMBIA LONDON PLANE	PLATANUS ACERIFOLIA 'COLUMBA'	3" CAL. B.A.B.	NA
9	FRASER FIR	ABIES FRASERI	10' HT. B.A.B.	NA
7	GREEN MOUNTAIN MAPLE	ACER SACCHARINUM 'GREEN MOUNTAIN'	3" CAL. B.A.B.	NA
6	KOUSA DOGWOOD	CORNUS KOUSA	3" CAL. B.A.B.	NA
2	PINK PRINCESS CRAB	MALUS 'PARRIS'	3" CAL. B.A.B.	NA
2	REDBUD	CEPIDIS CANADENSIS	3" CAL. B.A.B.	NA

*NO SUBSTITUTIONS FOR GREEN CARPET JUNIPER
 **SUBSTITUTIONS TO BE APPROVED BY LANDSCAPE ARCHITECT.



LEGEND

- PROPOSED DECIDUOUS TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED SHRUB
- NUMBERS WITH SQUARES INDICATE REQUIRED RIGHT OF WAY LANDSCAPING
- CIRCLED NUMBERS INDICATE REQUIRED DETENTION POND LANDSCAPING

COST ESTIMATES

RIGHT-OF-WAY LANDSCAPING ESTIMATE:	\$ 36,375.00
MAIN ENTRANCE LANDSCAPE ESTIMATE:	\$ 6,375.00
DETENTION POND LANDSCAPE ESTIMATE:	\$ 13,625.00
IRRIGATION ESTIMATE:	\$ 18,500.00
TOTAL LANDSCAPING ESTIMATE:	\$ 72,235.00

LANDSCAPE REQUIREMENTS

STORMWATER MANAGEMENT POND BUFFER: 1.5 DECIDUOUS TREES + 1 EVERGREEN TREE + 4 SHRUBS PER 100 LINEAL FEET

LINEAL FEET OF STORMWATER POND PERIMETER: 828 LF

NUMBER OF DECIDUOUS TREES REQUIRED (0.828/100)*1.5: 13

NUMBER OF EVERGREEN TREES REQUIRED (0.828/100)*1.9: 9

NUMBER OF SHRUBS REQUIRED (0.828/100)*4: 13

NUMBER OF DECIDUOUS TREES PROVIDED: 13

NUMBER OF EVERGREEN TREES PROVIDED: 9

NUMBER OF SHRUBS PROVIDED: 13

RIGHT-OF-WAY: 1.5 DECIDUOUS TREES PER 35 LINEAL FEET + 1 ORNAMENTAL TREE PER 60 LINEAL FEET

LINEAL FEET OF RIGHT OF WAY (LIVERNOIS): 1348 LF

NUMBER OF DECIDUOUS TREES REQUIRED (1348/35)*1.5: 59

NUMBER OF ORNAMENTAL TREES REQUIRED (1348/60)*1.9: 23

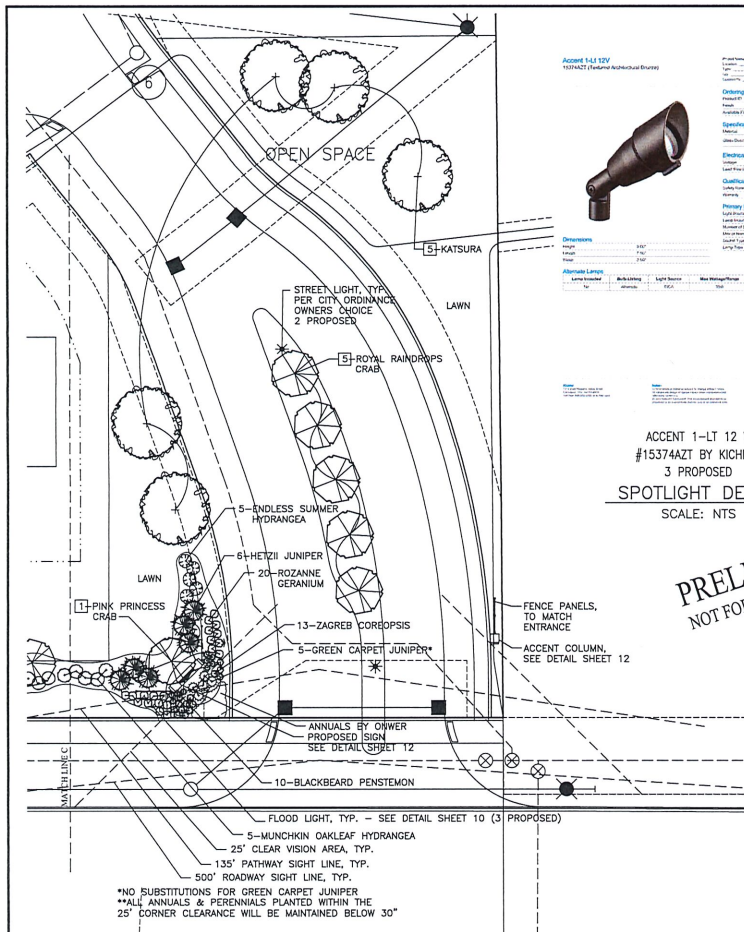
NUMBER OF DECIDUOUS TREES PROVIDED: 39

NUMBER OF ORNAMENTAL TREES PROVIDED: 23

*NOTE--ALL CALCULATIONS INCLUDE PLANT MATERIALS ON SHEETS 8 & 9.

- LANDSCAPE NOTES
- NO TREE OR SHRUB MAY BE PLANTED WITHIN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY STREET RIGHT-OF-WAY AT A DISTANCE OF 25' FROM THEIR POINT OF INTERSECTION. NO TREE OR SHRUB MAY BE PLANTED IN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY DRIVEWAY WITH A PUBLIC SIDEWALK AT A DISTANCE ALONG EACH LINE OF 15' FROM THEIR POINT OF INTERSECTION. ROAD AND PATHWAY SIGHT LINES MUST BE UNOBSTRUCTED BY LANDSCAPING OR OTHER OBJECTS.
 - ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC ROAD. SHADE TREES AND SHRUBS MUST BE PLANTED AT LEAST 5' FROM THE EDGE OF A PUBLIC WALKWAY. EVERGREEN AND ORNAMENTAL TREES MUST BE PLANTED AT LEAST 10' FROM THE PUBLIC WALKWAY. TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM A FIRE HYDRANT, AND 5' FROM AN UNDERGROUND UTILITY LINE, AND 15' FROM THE NEAREST OVERHEAD UTILITY LINE.
 - PRIOR APPROVAL IS REQUIRED TO PLANT ANY TREE OR SHRUB ON THE PUBLIC RIGHT-OF-WAY.
 - THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES.
 - A MINIMUM 4 INCHES OF TOPSOIL SHALL BE PROVIDED FOR ALL LAWN AREAS, GROUND COVERS, AND PLANTING BEDS.
 - LAWN TREES AND PLANTING BEDS SHALL BE MULCHED WITH A MINIMUM OF 4 INCHES OF SHREDED HARKWOOD BARK. GROUNDCOVERS SHALL BE MULCHED WITH 2 INCHES OF SHREDED HARKWOOD BARK.
 - ALL LANDSCAPED AREAS, INCLUDING LAWNS, SHALL BE IRRIGATED BY AUTOMATIC UNDERGROUND OR SHIP IRRIGATION SYSTEM DESIGNED TO MINIMIZE WATER USAGE. IRRIGATION OVERSPRAY SHALL NOT BROADCAST ONTO CITY PATHWAY.
 - ALL LANDSCAPING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF ROCHESTER HILLS STANDARDS.
 - NO SUBSTITUTIONS OR CHANGES OF LOCATION OR PLANT TYPES SHALL BE MADE WITHOUT THE APPROVAL OF THE DEVELOPER AND THE CITY OF ROCHESTER HILLS LANDSCAPE ARCHITECT.
 - PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS FORESTRY DIVISION NEEDS TO INSPECT ALL TREES, EXISTING OR PLANTED, TO IDENTIFY ANY THAT POSE A HAZARD TO THE SAFE USE OF THE PUBLIC RIGHT-OF-WAY. FORESTRY MAY REQUIRE THE DEVELOPER TO REMOVE AND POSSIBLY REPLACE ANY SUCH TREES.
 - THESE REQUIREMENTS ARE INCORPORATED INTO THE PLAN.
 - BEST MANAGEMENT PRACTICES WILL BE STRICTLY FOLLOWED DURING CONSTRUCTION TO MINIMIZE IMPACTS ON NATURAL FEATURES SETTINGS.

CITY FILE #17-019

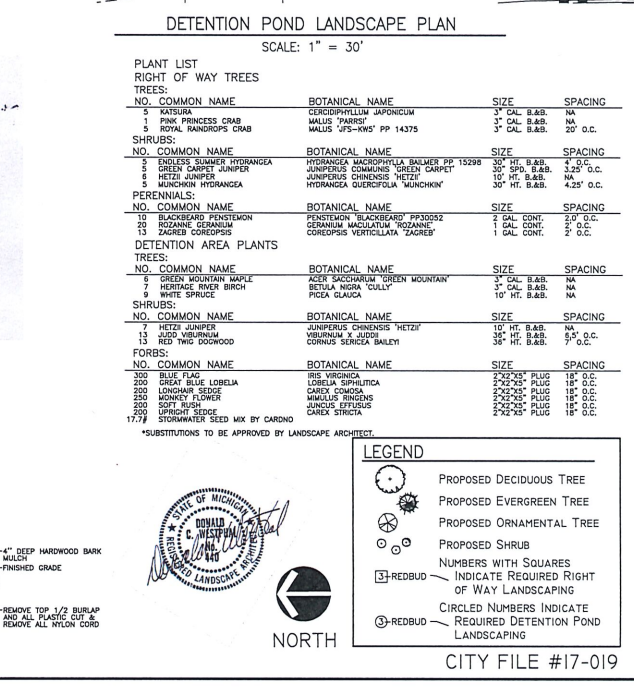
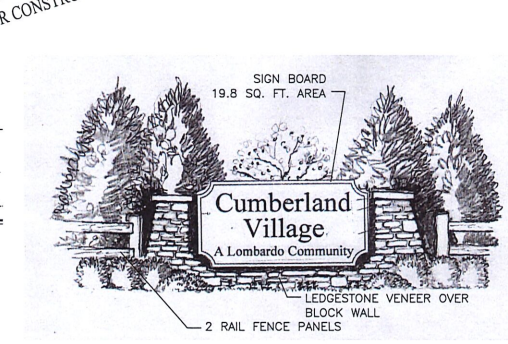
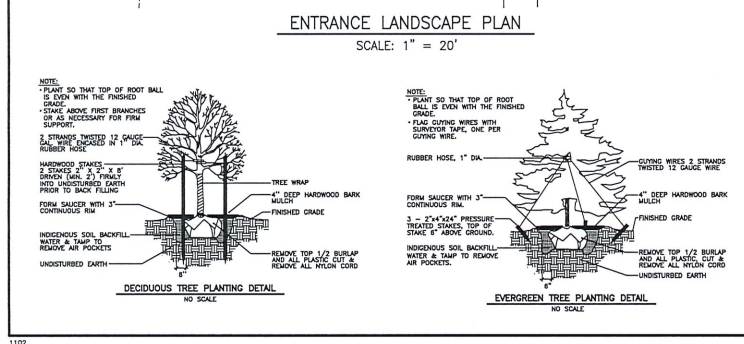
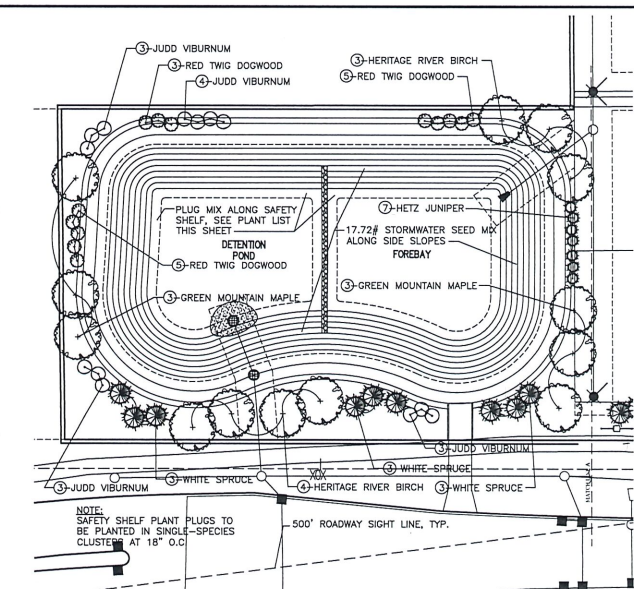


PLANT NOTES:

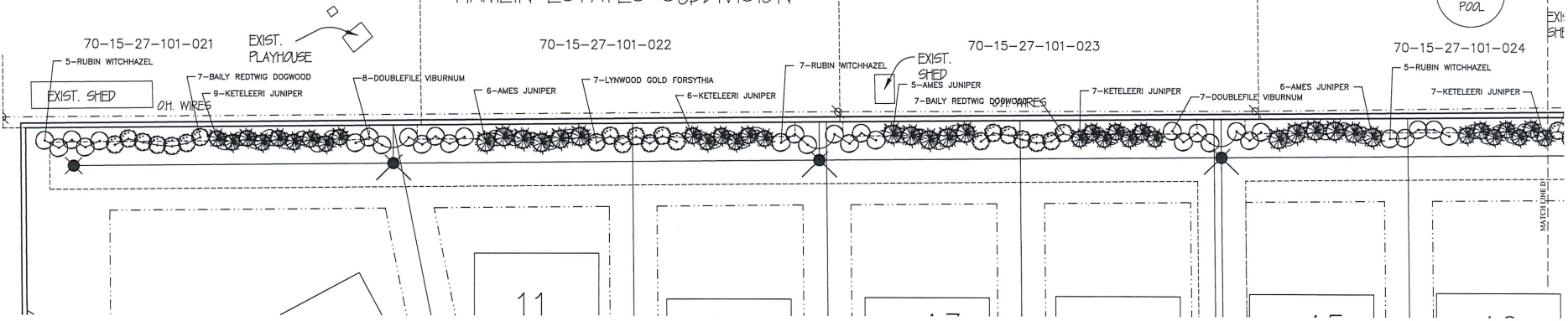
- PLANT MATERIALS SHALL BE SOUND, HEALTHY, WOODRUE, FREE FROM PLANT DISEASES AND INSECTS OR THEIR EGGS AND SHALL HAVE NORMAL, HEALTHY ROOT SYSTEMS. CALIPER MEASUREMENTS SHALL BE TAKEN 8" ABOVE THE GROUND LEVEL. ALL OTHER MEASUREMENTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "HANDBOOK STANDARD FOR NURSERY STOCK" (ANSI Z-601.1-1993).
- PLANTING POCKETS SHALL BE DUE SO THAT THE POCKET DIAMETER IS A MINIMUM OF 12" LARGER THAN THE ROOT BALL AND THE SIDES OF POCKET ARE VERTICAL AND FRACTURED. INDIVIDUAL SOILS SHALL BE TAMPED AND WATERED DURING BACK FILLING PROCEDURE.
- PLANTING POCKETS SHALL BE NO DEEPER THAN THE HEIGHT OF THE ROOT BALL. SAUCER SHALL BE MADE ON THE EDGES OF PLANTING POCKET.
- TREES SHALL BE CUTTED WITH TWO STRINGS TWISTED OF 12 GAUGE GALVANIZED WIRE. PROTECT THE TREE TRUNK WITH HOSE OR OTHER ACCEPTABLE MEANS. CUT TO TWO HARDWOOD 2" x 2" x 8' POSTS, DRIVEN 2' DEEP IN UNDISTURBED SOIL.
- MULCH SHALL BE GRASS (SHREDED HARDWOOD BARK, FREE FROM SELENERGIC MATERIALS AND SUITABLE AS A TOP DRESSING OF PLANTING BEDS AND INDIVIDUAL TREE PLANTINGS).
- TREES SHALL BE MULCHED WITH MIN. 4" DEEP HARDWOOD BARK MULCH 30" DIAMETER CIRCLE AROUND THE TREE.
- SHRUBS SHALL BE MULCHED IN BEDS ACCORDING WITH THE DETAIL ON THIS SHEET. MULCH SHALL BE MIN. 4" DEEP HARDWOOD BARK. SEE LANDSCAPE PLAN FOR LOCATION OF PLANTING BEDS. SEE PLANTING DETAILS FOR INDIVIDUAL PLANTINGS.
- PLANTS SHALL BE GUARANTEED FOR ONE COMPLETE GROWING SEASON (12 MONTHS). DEAD MATERIALS SHALL BE REPLACED AS NEEDED PRIOR TO THE EXPIRATION OF THE GUARANTEE PERIOD, IN ACCORDANCE WITH THE CITY OR TOWNSHIP ORDINANCE REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE IN WRITING A LIST OF RECOMMENDED MAINTENANCE PROCEDURES FOR THE FIRST GROWING SEASON.
- EXISTING TREES SHOWN ON THE PLAN LIST SHALL HAVE IN HEIGHT IN THE WORKING DRAWING TOP 1/2 OF BURLAP OR ALL IF WRAPPED IN PLASTIC COVERING AND/OR ALL NYLON CORD.
- PLANT MATERIALS SHALL BE USED IN COMPLIANCE WITH THE PROVISIONS OF THE CITY OR TOWNSHIP ORDINANCE AND SHALL BE NURSERY GROWN, FREE OF PESTS AND DISEASES, WASTY IN THE COUNTY, IN CONFORMANCE WITH THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERMEN AND SHALL HAVE PASSED INSPECTIONS REQUIRED UNDER STATE REGULATIONS. IN ADDITION, PLANT MATERIALS SHALL CONFORM TO THE STANDARDS OF THE COUNTY COOPERATIVE EXTENSION SERVICE, A COPY OF WHICH SHALL BE KEPT ON FILE WITH THE PLANNING OFFICE.
- SOIL SHALL BE CERTIFIED TURF GRASS SOIL COMPLYING WITH A.S.P.A. SPECIFICATIONS FOR MACHINES-CUT THICKNESS SPECIES, STRENGTH, MOISTURE CONTENT, AND MOIST WIELD, AND FREE OF WEEDS AND UNDESIRABLE NATIVE GRASSES. PROVIDE VISIBLE SOIL OF UNIFORM CONSISTENCY, COLOR, AND TEXTURE. SOIL SHALL BE COMPLETELY ROOTED AND CAPABLE OF VIGOROUS GROWTH AND DEVELOPMENT WHEN PLANTED. CUT SOIL SHALL NOT BE PERMITTED TO DRY OUT AND SHALL BE LAID WITHIN 24 HOURS OF WHEN CUT. FERTILIZE AND WATER THE SOIL AS REQUIRED DURING THE FIRST GROWING SEASON TO MAINTAIN A GREEN AND VIGOROUS GROWING SOIL.
- PLANTING BED SOIL FOR ANNUALS SHALL BE SCREENED TOPSOIL. TO DETAIL WEDG DURING THE ESTABLISHMENT OF ANNUAL BEDS. PROVIDE PRE-COMPOSTED (FRESH) TREES OF 4" CALIPER AND GREATER SHALL BE WRAPPED WITH 8" WIRE BRAFT DREPE. WRAP THE TRUNK TO THE FIRST LIMBS. OVERLAP HALF OF EACH SPIRAL WRAP TO FORM A DOUBLE WRAPPING. SECURE WRAPPING WITH TRAIL. DO NOT WRAP SPECIES SUBJECT TO BOGERS.

LANDSCAPE CONTRACTOR'S
"ONE-YEAR IRRIGATION REQUIREMENT PERIOD"

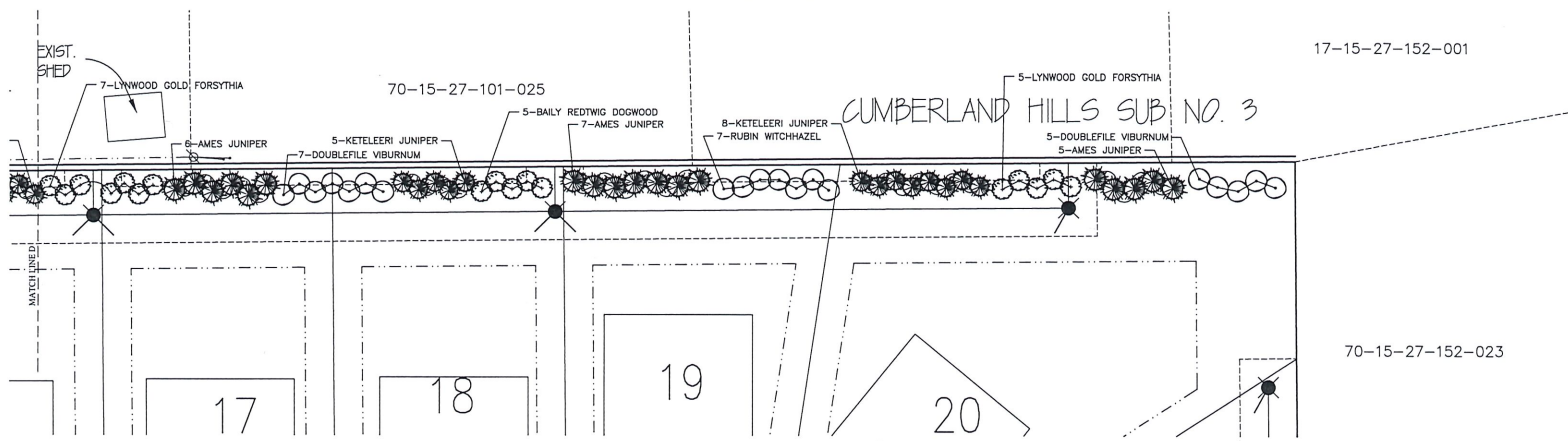
IT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO DESIGN AND PERIODICALLY ADJUST THE IRRIGATION SYSTEM (PROVIDED BY OTHERS) AS REQUIRED TO MAINTAIN GROWTH OF PLANTS AND ADEQUATE WATER SUPPLY TO ALL PLANT MATERIALS. SOIL AND SEEDING LAWN AREAS (SERVICED BY THE IRRIGATION SYSTEM) TO INSURE THE ESTABLISHMENT OF HEALTHY PLANT MATERIALS AND LAWNS FOR THEIR FIRST YEAR OF GROWTH. FOLLOWING THE LANDSCAPE CONTRACTOR'S "ONE-YEAR IRRIGATION REQUIREMENT PERIOD" THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE OWNER WITH A SUGGESTED "IRRIGATION MAINTENANCE SCHEDULE" FOR HIS USE.



HAMLIN ESTATES SUBDIVISION



EAST BOUNDARY BUFFER LANDSCAPE PLAN NORTH
SCALE: 1" = 20'

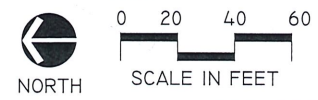


EAST BOUNDARY BUFFER LANDSCAPE PLAN SOUTH
SCALE: 1" = 20'

PLANT LIST
SHRUBS:

NO.	COMMON NAME	BOTANICAL NAME	SIZE	SPACING
35	AMES JUNIPER	JUNIPERUS CHINENSIS 'AMES'	2" HT. B.&B.	8' O.C.
19	BAILY RED TWIG DOGWOOD	CORNUS SERICEA 'BAILY'	42" HT. B.&B.	6' O.C.
27	DOUBLEFILE VIBURNUM	VIBURNUM PUCATUM VAR. TOMENTOSUM 'WARREN'	42" HT. B.&B.	6' O.C.
42	KETELEERI JUNIPER	JUNIPERUS CHINENSIS 'KETELEERI'	2" HT. B.&B.	6.5' O.C.
19	LYNWOOD GOLD FORSYTHIA	FORSYTHIA X INTERMEDIA 'LYNWOOD GOLD'	42" HT. B.&B.	6.5' O.C.
24	RUBIN WITCHHAZEL	HAMAMELIS X INTERMEDIA 'RUBIN'	42" HT. B.&B.	6.5' O.C.

PRELIMINARY
NOT FOR CONSTRUCTION



LEGEND

- PROPOSED DECIDUOUS TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED SHRUB
- NUMBERS WITH SQUARES INDICATE REQUIRED RIGHT OF WAY LANDSCAPING
- CIRCLED NUMBERS INDICATE REQUIRED DETENTION POND LANDSCAPING

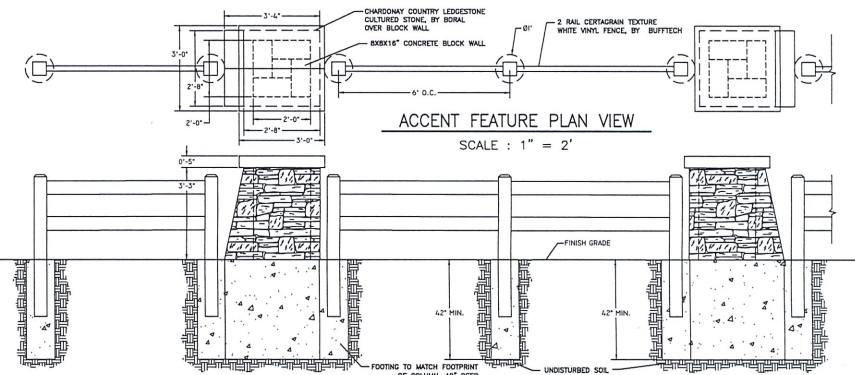
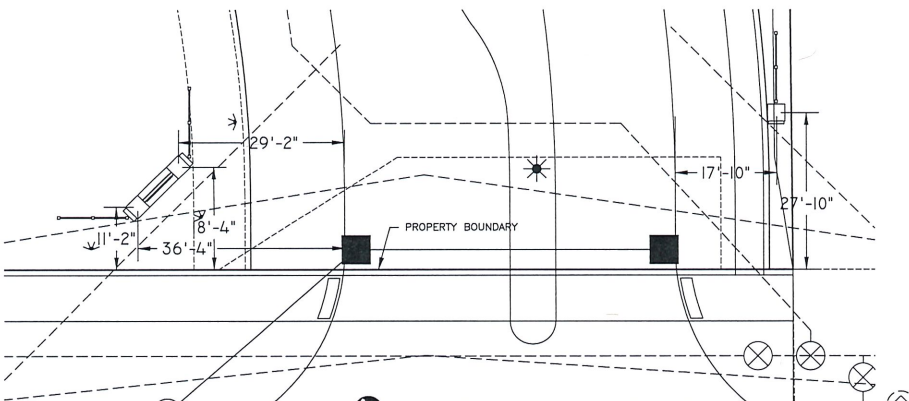
CITY FILE #17-019

SHEET NO. 13 OF 13

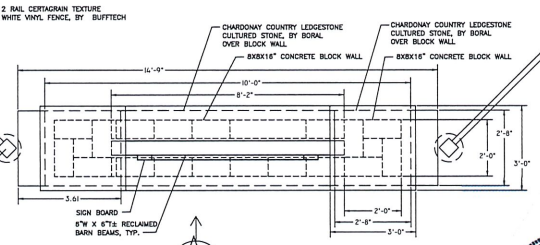
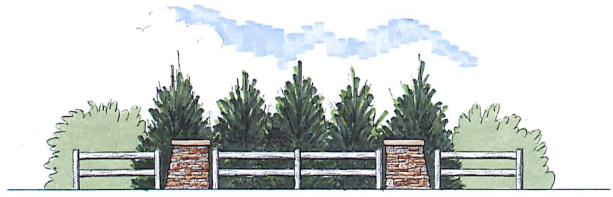
donald c. westphal
LANDSCAPE ARCHITECT, L.L.C.
1000 W. WOODSTOCK RD., SUITE 100
CUMBERLAND HILLS, MI 48324
PH: 248-463-1111 FAX: 248-463-1112

EAST BOUNDARY BUFFER
LANDSCAPE PLAN

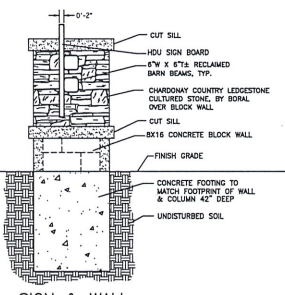
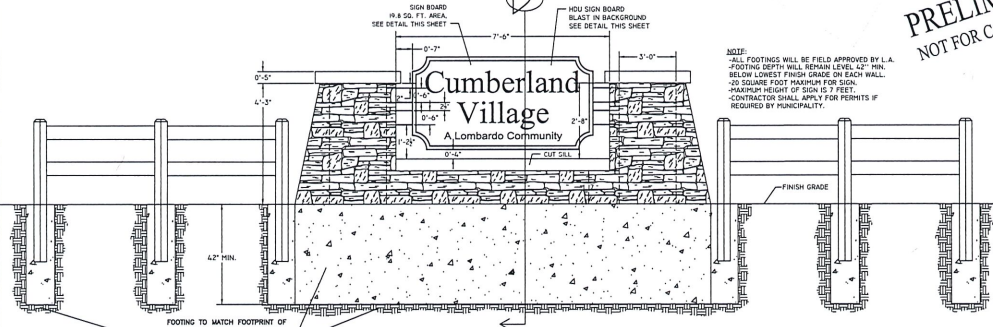
Cumberland Village
Rochester Hills, Oakland County, Michigan



NOTES:
 ACCENT FEATURES MAY HAVE 2 OR 4 FENCE PANELS BETWEEN COLUMNS. SEE LANDSCAPE PLAN SHEET 9



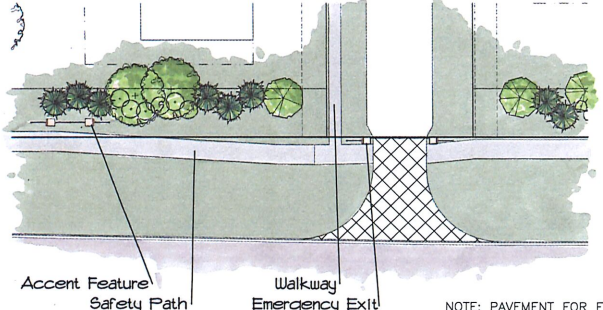
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NOTES:
 - HDU SIGN BOARD
 - BLAST IN BACKGROUND
 - SIGN BOARD AREA = 19.8 SQ. FT.

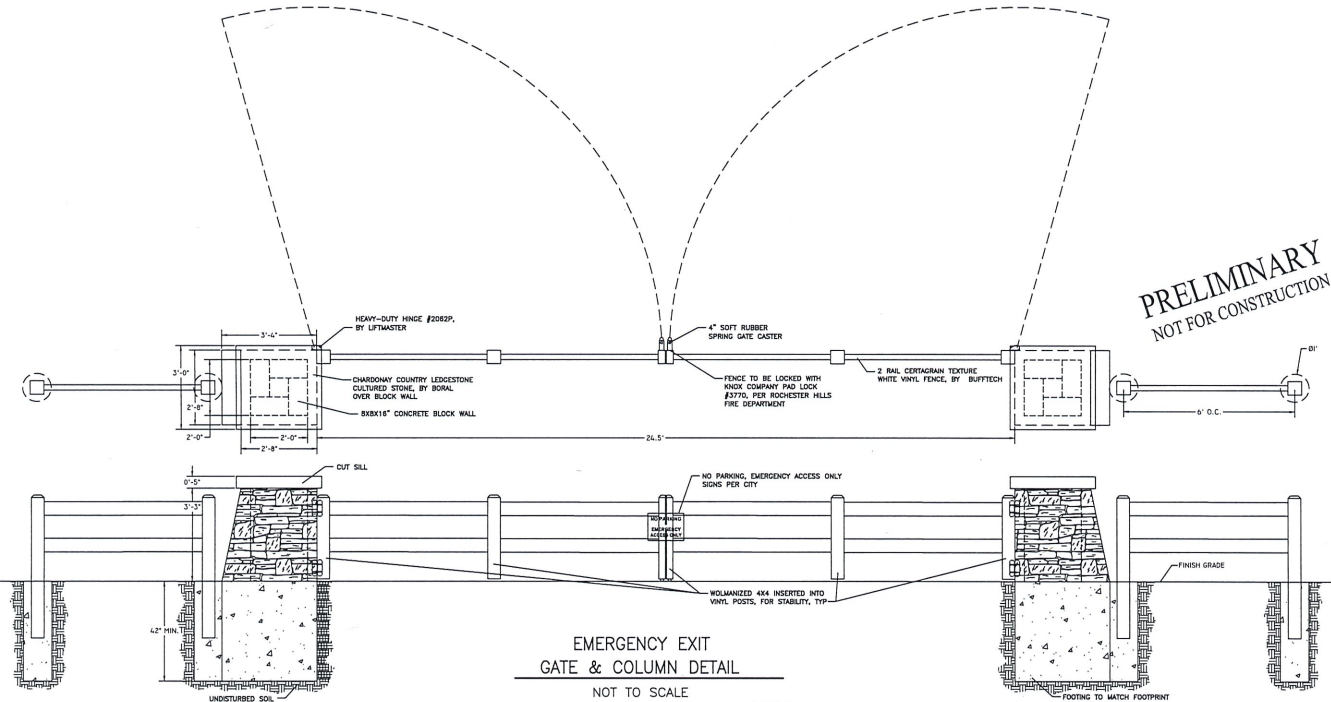


EMERGENCY EXIT
 ELEVATION RENDERING
 NOT TO SCALE



EMERGENCY EXIT
 PLAN VIEW RENDERING
 NOT TO SCALE

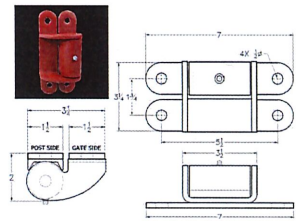
NOTE: PAVEMENT FOR EMERGENCY ACCESS SHALL BE STAMPED CONCRETE AND MUST COMPLY WITH (IFC 2006, SECTION D 102.1) LOAD SUPPORT REQUIREMENT OF AT LEAST 75,000 LBS.



EMERGENCY EXIT
 GATE & COLUMN DETAIL
 NOT TO SCALE

NOTES:
 SIGNAGE PER FIRE DEPARTMENT REQUIREMENTS.

PRELIMINARY
 NOT FOR CONSTRUCTION



HEAVY DUTY HINGE
 #2062P, BY LIFTMASTER
 NOT TO SCALE



4" SOFT RUBBER
 SPRING GATE CASTER
 NOT TO SCALE



KNOX COMPANY
 PADLOCK #3770
 NOT TO SCALE

