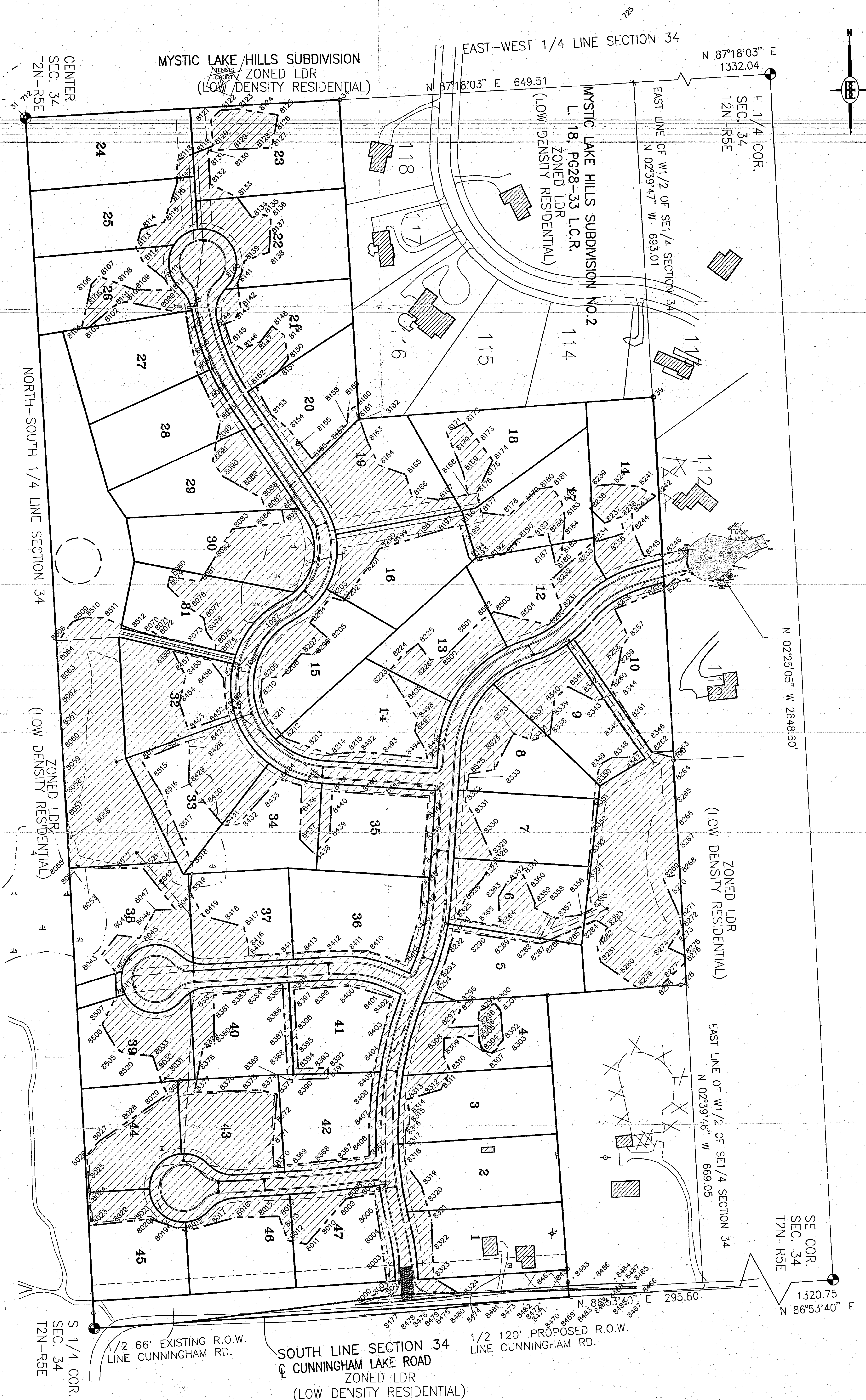
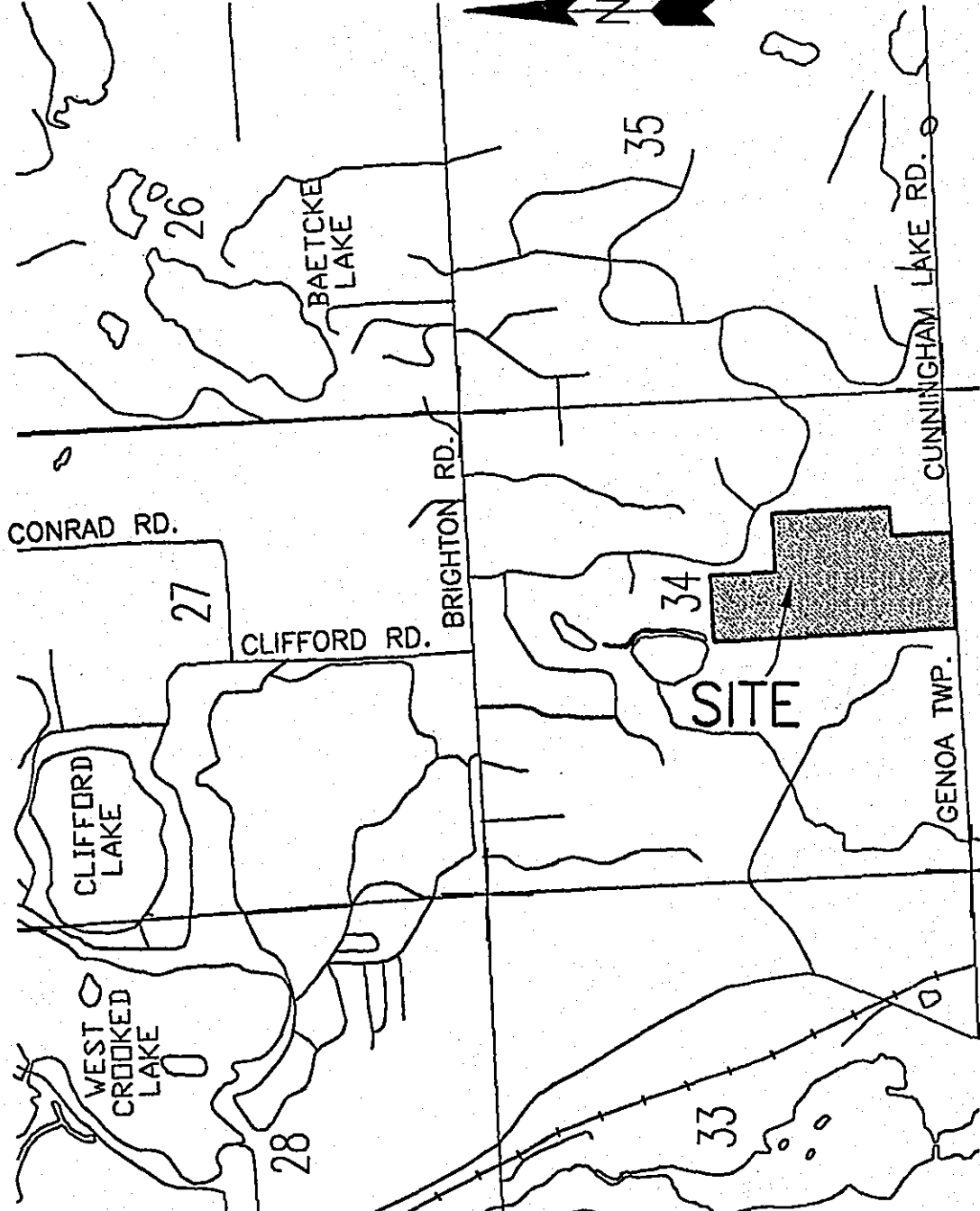
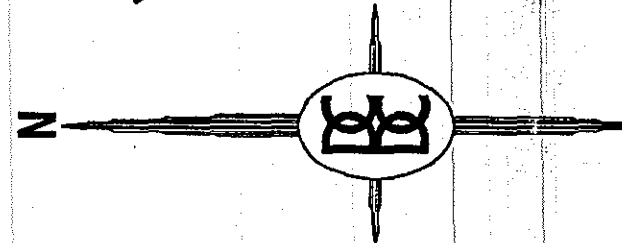


POINT PLOT OF CLEARING LIMITS

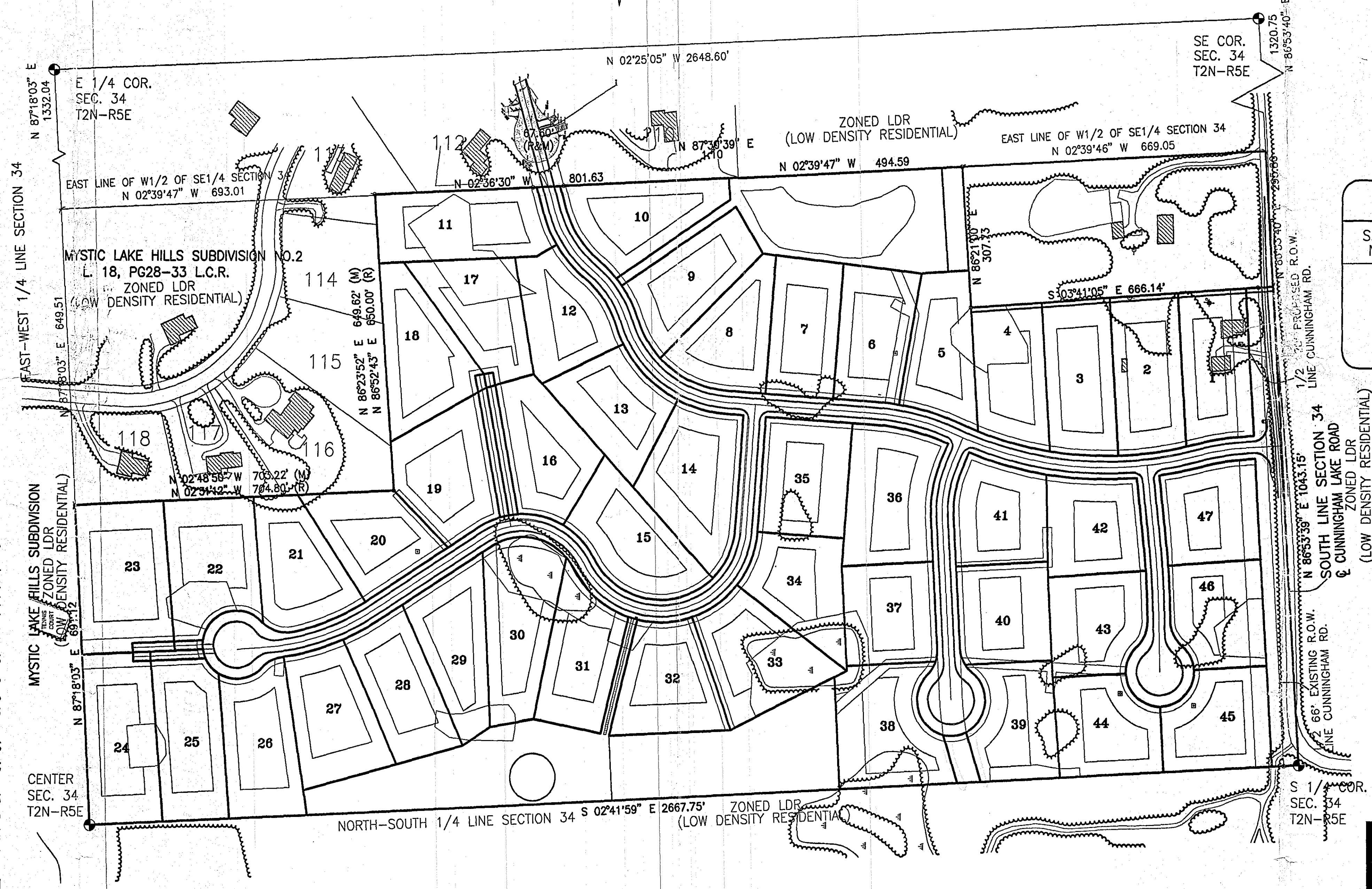


1 OF 1	SHEET NO.	PLOTING INFORMATION 6/2-01021\dwg\CP\2-01021CLEFT.dwg	DATE 07-26-02	JOB NO. 2-01021	SCALE 1" = 100'	CHECKED BY: KJH	DRAWN BY: KJH	DESIGNED BY: KJH	CLIENT THE TERRA LAND GROUP, L.L.C.			BOSS ENGINEERING ENGINEERS • SURVEYORS • PLANNERS LANDSCAPE ARCHITECTS					
									PROJECT COPPERLEAF								
									TITLE POINT PLOT OF CLEARING LIMITS			HOWELL OFFICE: 3121 E. GRAND RIVER AVE. HOWELL, MI 48843 (517) 546-4836 FAX (517) 548-1670 (800) 246-6735 E-MAIL: be@bosseng.com			WEST BLOOMFIELD OFFICE: 7125 ORCHARD LAKE RD. SUITE 108 WEST BLOOMFIELD, MI 48322 (248) 626-BOSS FAX (248) 626-9480		
									NO BY CK	PER CLIENT REVISION	DATE 7/26/02						

FINAL SITE PLAN
FOR
COPPERLEAF
SITE CONDOMINIUM
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



LOCATION MAP
GENOA TOWNSHIP
T2N-R5E
NO SCALE



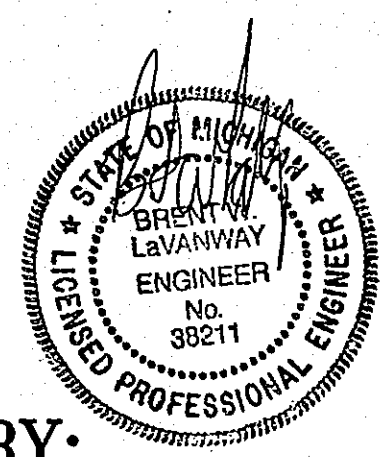
LEGAL DESCRIPTION:

PART OF THE SOUTHEAST 1/4 OF SECTION 34, T2N-R5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE S 1/4 CORNER OF SAID SECTION 34; THENCE ALONG THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 34, N 02°41'59" W, 2667.75 FEET; THENCE ALONG THE EAST-WEST 1/4 LINE N 87°18'03" E, 691.12 FEET; THENCE ALONG THE WEST LINE OF MYSTIC HILLS SUBDIVISION NO. 2, A SUBDIVISION AS RECORDED IN LIBER 18 OF PLATS ON PAGES 28-33 OF THE LIVINGSTON COUNTY RECORDS, S 02°48'50" E, 703.22 FEET, (PREVIOUSLY RECORDED AS S 02°31'12" E, 704.80 FEET,) TO A FOUND CONCRETE MONUMENT; THENCE ALONG THE SOUTH LINE OF SAID MYSTIC HILLS SUBDIVISION NO. 2, N 86°23'52" E, 649.62 FEET, (PREVIOUSLY RECORDED AS N 86°52'43" W, 650.00 FEET,) TO A FOUND CONCRETE MONUMENT; THENCE ALONG THE WEST LINE OF SAID MYSTIC HILLS SUBDIVISION NO. 2, S 02°36'30" E, 801.63 FEET, (PREVIOUSLY RECORDED AS S 02°31'12" E, 802.86 FEET); THENCE S 87°30'39" W, 1.10 FEET; THENCE ALONG THE EAST LINE OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF SECTION 34, S 02°39'47" E, 494.59 FEET; THENCE S 86°21'00" W, 307.73 FEET; THENCE S 03°41'05" E, 666.14 FEET; THENCE ALONG THE SOUTH LINE OF SAID SECTION 34 AND THE CENTERLINE OF CUNNINGHAM LAKE ROAD, S 86°53'39" W, 1043.15 FEET, TO THE POINT OF BEGINNING, CONTAINING 66.91 ACRES, MORE OR LESS, AND SUBJECT TO THE RIGHTS OF THE PUBLIC OVER THE EXISTING CUNNINGHAM ROAD. ALSO SUBJECT TO ANY OTHER EASEMENTS OR RESTRICTIONS OF RECORD.

BEARINGS ARE BASED ON THE MICHIGAN COORDINATE SYSTEM OF 1983 (M.C.S. 83- 94) SOUTH ZONE. GOVERNMENT CORNER COORDINATES ARE MICHIGAN COORDINATE SYSTEM SOUTH ZONE AS DEFINED IN ACT 154 OF PUBLIC ACTS OF 1988.

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	NATURAL FEATURES PLAN
3	FINAL SITE PLAN
4	LANDSCAPE PLAN
5	FINAL GRADING PLAN

GENOA TOWNSHIP
APR - 1 2002
RECEIVED
PREPARED FOR:
THE TERRA LAND GROUP, L.L.C.
45500 E. GRAND RIVER AVENUE
NOVI, MICHIGAN 48050
(248) 735-4883



PREPARED BY:

BOSS ENGINEERING
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS

HOWELL OFFICE: 3121 E. GRAND RIVER AVE., HOWELL, MI 48843
(517)546-4836 FAX (517)546-1670 (800)248-6735
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WEST BLOOMFIELD, MI 48322
(248)626-BOSS FAX (248)626-9480

GENOA TOWNSHIP
SITE PLAN APPROVED
DATE 4/15/02

REV. 4/1/02	12
REV. 3/20/02	
REV. 2/27/02	
DATE 2/6/02	

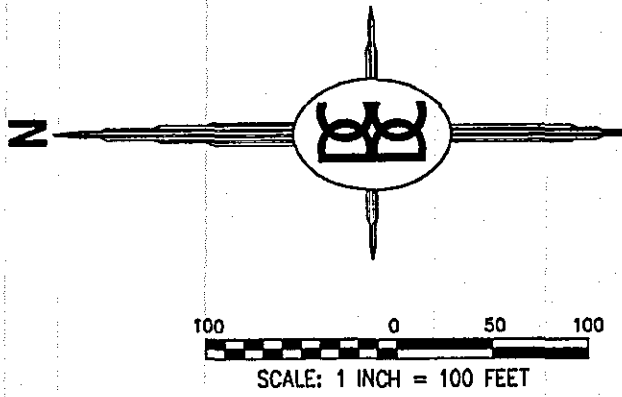
NATURAL FEATURES PLAN

LEGEND

- EXISTING
- 92.9 CONTOUR
 - 922.88 SPOT ELEVATION
 - POWER POLE
 - FENCE
 - WETLAND BOUNDARY
 - TREE LINE

SOIL CHARACTERISTICS

ON SITE SOILS CONSIST MOSTLY OF FOX-BOYER COMPLEX, 2% TO 6% AND 12% TO 45% SLOPES, BOYER-OSHTIMO LOAMY SANDS, 12% TO 18% AND 25% TO 35% SLOPES, HOUGHTON MUCK, AND RIFLE MUCK. BASED ON THE SOIL SURVEY OF LIVINGSTON COUNTY, MICHIGAN BY THE UNITED STATES DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE.



BENCHMARKS:

R.R. SPIKE 18" PIN OAK, S. SIDE
CUNNINGHAM LAKE ROAD APPROX. 480'
SOUTH OF HOUSE #6266. ELEV 930.19

PK NAIL N. SIDE OF POWER POLE AT
S. SIDE OF BRIGHTON ROAD, 75' W.
OF CLIFFORD. ELEV 994.82



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(MI 182)
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PREPARED FOR:
THE TERRA LAND GROUP, L.L.C.
45500 GRAND RIVER AVENUE
NOVI, MICHIGAN 48050
(248) 735-4883

THIS SHEET IS FOR SITE
PLAN APPROVAL ONLY, NOT
FOR CONSTRUCTION.

CLIENT THE TERRA LAND GROUP, L.L.C.
PROJECT COPPERLEAF
TITLE NATURAL FEATURES PLAN

NO.	BY	DATE

DESIGNED BY: KJH
DRAWN BY: TD
CHECKED BY: TD
SCALE 1" = 100'
JOB NO. 2-01021
DATE 02/06/02
PLOTING INFORMATION
FINAL\2-01021EX.dwg
SHEET NO. 2

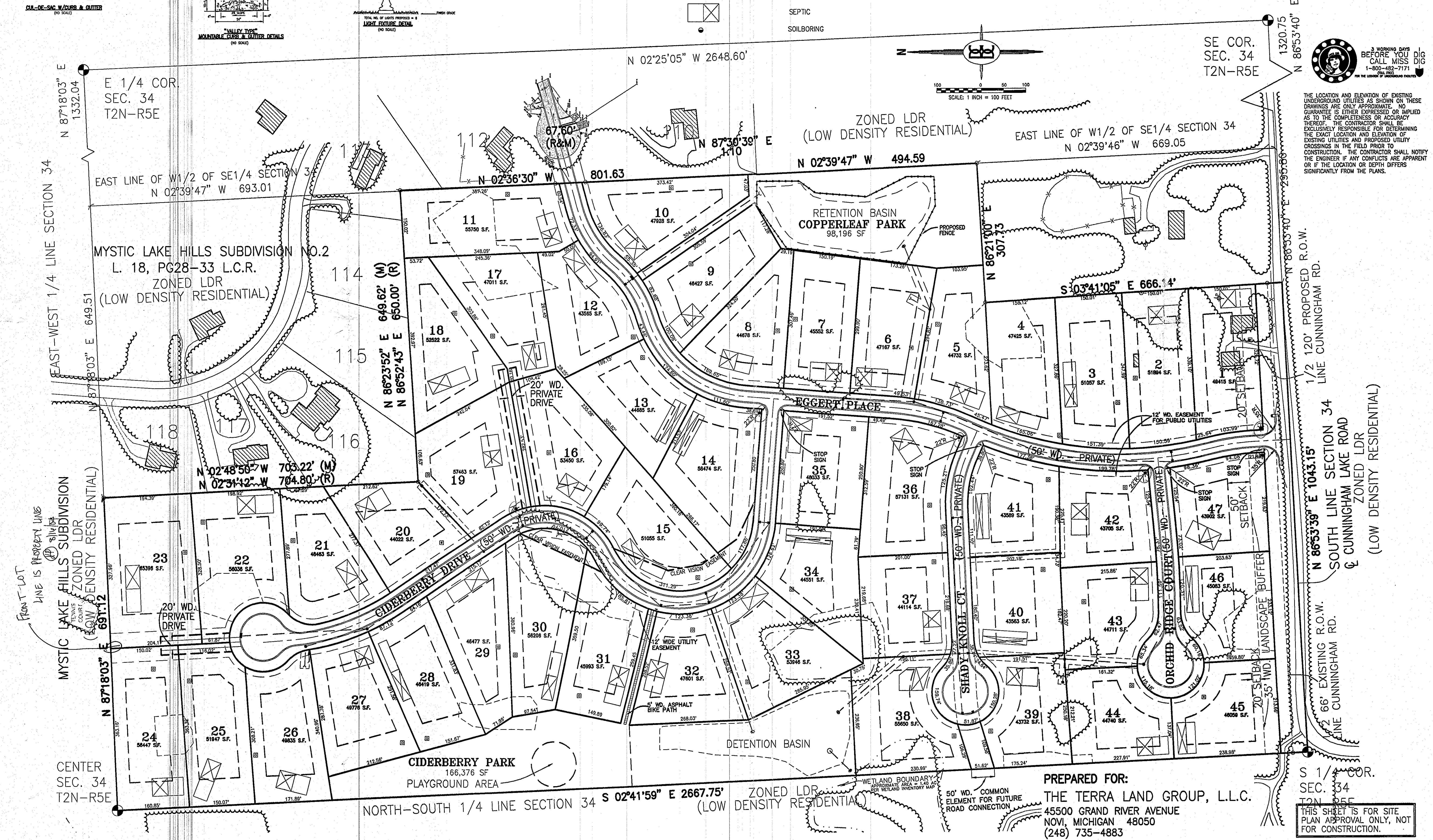
ZONED LDR (LOW DENSITY RESIDENTIAL)
ACCORDING TO GENOA TOWNSHIP FUTURE
LAND USE PLAN - 2015

TOTAL UNITS = 47
MAXIMUM BUILDING HEIGHT = 35'
FRONT SETBACK = 50'
SIDE YARD SETBACK = 30'
REAR SETBACK = 60'
MAXIMUM UNITS PER ACRE = 1
TOTAL PARCEL AREA = 66.91 ac.-100%
TOTAL UNIT AREA = 52.30 ac.-78.2%
R.O.W. AREA = 8.14 ac. - 12.1%
TOTAL OPEN SPACE = 6.47 ac.-9.7%
TOTAL IMPERVIOUS AREA = 7.6 ac.-11.4% OF SITE

<u>PROPOSED</u>	<u>EXISTING</u>	
		CONTOUR
		STORM DRAINAGE FLOW
		POWER POLE
		STORM SEWER
		FENCE
		SIGN
		LIMITS OF WETLANDS
		WELL
		STREET LIGHT
		SEPTIC
		SOILBORING

1. PROPOSED RESIDENTIAL DENSITY = 0.81 UNITS/ACRE
2. ON SITE SOILS CONSIST MOSTLY OF FOX-BOYER COMPLEX, 2% TO AND 12% TO 45% SLOPES, BOYER-OSHTOMO LOAMY SANDS, 12% 18% AND 25% TO 35% SLOPES, HOUGHTON MUCK, AND RIFLE M BASED ON THE SOIL SURVEY OF LIVINGSTON COUNTY, MICHIGAN E UNITED STATES DEPT. OF AGRICULTURE, SOIL CONSERVATION SERV
3. PROPOSED SEWAGE SYSTEM = INDIVIDUAL SEPTIC FIELD
4. PROPOSED WATER SUPPLY = INDIVIDUAL WELL
5. PROPOSED ELECTRICAL SUPPLY = UNDERGROUND DETROIT EDISON
6. PROPOSED GAS SERVICE = UNDERGROUND CONSUMERS ENERGY
7. PROPOSED TELEPHONE = UNDERGROUND AMERITECH
8. PROPOSED ROAD MINIMUM CENTERLINE = 230 FT. RADIUS JURISDICTION OF ALL DRAINAGE STRUCTURES, DRAINAGE PIPES, AND DETENTION, DETENTION AND SEDIMENTATION PONDS SHALL BE UNDER THE COPPERLEAF ASSOCIATION.
10. ALL IMPROVEMENTS ARE TO CONFORM TO GENOA TOWNSHIP DESIGN AND ENGINEERING STANDARDS.
11. THE WETLAND BOUNDARY SHALL BE DELINEATED ON THE FINAL SITE PLAN.
12. SOIL EROSION AND SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH ACT 347 PUBLIC ACTS OF 1972
13. PROPOSED SIGNAGE SHALL MEET THE STANDARDS OF GENOA TOWNSHIP.

14. PERMITS SHALL BE REQUIRED BY LCRC FOR ALL WORK IN THE CUNNINGHAM ROAD R.O.W.
15. TRASH COLLECTION SHALL BE CURBSIDE
16. ROAD DRAINAGE AND DETENTION WILL BE PROVIDED IN ACCORDANCE WITH GENOA TOWNSHIP AND LIVINGSTON COUNTY DRAIN COMMISSION STANDARDS. A MAINTENANCE AGREEMENT WILL BE REQUIRED FOR THE RETENTION/DETENTION BASINS AND ALL STORM DRAINAGE FACILITIES.
17. PRIOR TO THE START OF CONSTRUCTION A SOIL EROSION CONTROL PERMIT WILL BE OBTAINED FROM THE LIVINGSTON COUNTY DRAIN COMMISSION.
18. PROPOSED STREET R.O.W. = 50 FT. (PRIVATE)
19. THE OUTLET FROM THE DETENTION POND WILL BE RESTRICTED TO AN AGRICULTURAL FLOW RATE OF 0.20 CFS/ACRE.
20. TWO STREET TREES WILL BE PROVIDED PER LOT.
21. DUST, NOISE, VIBRATION, AND SMOKE SHALL BE CONTROLLED BY APPLYING APPROPRIATE PROCEDURES TO MINIMIZE THE EFFECTS, SUCH AS WATERING FOR DUST CONTROL AND WORKING NEAR ADJACENT BUILDINGS ONLY DURING DAYTIME HOURS.
22. TENTATIVE APPROVAL FROM GENOA TOWNSHIP WAS RECEIVED ON SEPTEMBER 10, 2001 FOR COPPERLEAF.
23. LOTS 45, 46 AND 47 SHALL NOT HAVE DIRECT ACCESS TO CUNNINGHAM LAKE ROAD.




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CLIENT	THE TERRA LAND GROUP, L.L.C.
PROJECT	COPPERLEAF
TITLE	FINAL SITE PLAN

[illegible]

DESIGNED BY: KJH
DRAWN BY: TD
CHECKED BY: TD
SCALE 1" = 100'
JOB NO. 2--01021
DATE 02/06/02
PLOTTING INFORMATION FINAL\2--01021SP.dwg
SHEET NO. 3

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8 MAIL: be@bossing.com

WEST BLOWFIELD OFFICE:
1000 W. BLOWFIELD RD. SUITE 200
WEST BLOWFIELD, MI 48380
(248) 626-6655 FAX (248) 626-6262

FINAL LANDSCAPE PLAN

GENERAL LANDSCAPE NOTES:

1. ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE GOVERNING MUNICIPALITY AND SHALL BE NURSERY GROWN. ALL SIZES AND MEASUREMENTS SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS. ALL PLANT MATERIAL SHALL BE OF SELECTED SPECIMEN QUALITY AND HAVE A NORMAL HABIT OF GROWTH. ALL PLANT MATERIAL IS SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
2. ALL PLANT MATERIALS SHALL BE BALLED AND BURLAPPED STOCK OR CONTAINER STOCK. NO BARE ROOT STOCK IS PERMITTED. ALL PLANT BALLS SHALL BE FIRM, INTACT AND SECURELY WRAPPED AND BOUND.
3. ALL PLANT BEDS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND OTHER EXTRANEEOUS OBJECTS AND FILL TO A MINIMUM DEPTH OF 12 INCHES AND BACKFILLED TO GRADE WITH PLANTING MIX (SEE BELOW).
4. PLANTING MIXTURE SHALL CONSIST OF 4 PARTS TOPSOIL FROM ON SITE, 1 PART PEAT, AND 5 POUNDS OF SUPERPHOSPHATE PER CUBIC YARD OF MIX. INGREDIENTS SHALL BE THOROUGHLY BLENDED TO A UNIFORM CONSISTENCY.
5. ALL PLANT BEDS AND INDIVIDUAL PLANTS SHALL BE MULCHED WITH A 4 INCH LAYER OF SHREDDED BARK MULCH.
6. ALL PLANTS AND PLANT BEDS SHALL BE THOROUGHLY WATERED UPON COMPLETION OF PLANTING AND STAKING OPERATIONS.
7. THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF 1 YEAR FROM THE DATE THE WORK IS ACCEPTED. IN WRITING, BY THE LANDSCAPE ARCHITECT, THE CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, WITHIN A SPECIFIED PERIOD TIME, ALL DEAD PLANTS, AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE LANDSCAPE ARCHITECT DURING AND AT THE END OF THE GUARANTEE PERIOD. REPLACEMENT STOCK SHALL CONFORM TO THE ORIGINAL REQUIREMENTS.
8. EDGING, WHERE NOTED ON THE PLANS, SHALL BE RYERSON STEEL EDGING, 3/16" X 4". INSTALL PER MANUFACTURER'S INSTRUCTIONS. ALL EDGING SHALL BE INSTALLED IN STRAIGHT LINES OR SMOOTH CURVES WITHOUT IRREGULARITIES.
9. SOD SHALL BE DENSE, WELL ROOTED TURF, FREE OF WEEDS. IT SHALL BE COMPOSED OF A BLEND OF AT LEAST TWO KENTUCKY BLUEGRASSES AND ONE FESCUE. IT SHALL HAVE A UNIFORM THICKNESS OF 3/4 INCH, AND CUT IN UNIFORM STRIPS NOT LESS THAN 10 INCHES BY 18 INCHES. SOD SHALL BE KEPT MOIST AND LAID WITHIN 36 HOURS AFTER CUTTING.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ALL SODDED AREAS THAT BROWN OUT OR HAVE NOT FIRMLY KNITTED TO THE SOIL BASE WITHIN A PERIOD OF ONE MONTH SHALL BE REPLACED BY THE CONTRACTOR, AT NO COST TO THE OWNER.

10. ALL AREAS OF THE SITE THAT BECOME DISTURBED DURING CONSTRUCTION AND ARE NOT TO BE PAVED, STONED, LANDSCAPED, OR SODDED SHALL BE SEEDED AND MULCHED.

SEED MIXTURE SHALL BE AS FOLLOWS:

KENTUCKY BLUEGRASS (CHOOSE 3 VARIETIES):
ADELPHI, RUGBY, GLADE OR PARADE 30%
RUBY RED OR DAWSON RED FINE FESCUE 30%
ATLANTA RED FESCUE 20%
PENFINE PERENNIAL RYE 20%

THE ABOVE SEED MIXTURE SHALL BE SOWN AT A RATE OF 250 POUNDS PER ACRE. PRIOR TO SEEDING, THE TOPSOIL LAYER SHALL BE FERTILIZED WITH A COMMERCIAL FERTILIZER WITH A 10-20-10 ANALYSIS:

10% NITROGEN; A MINIMUM OF 25% FROM A UREA/FORMALDEHYDE SOURCE
20% PHOSPHATE
10% POTASH; SOURCE TO BE POTASSIUM SULFATE OR POTASSIUM NITRATE.

THE FIRST FERTILIZER APPLICATION SHALL BE AT A RATE OF 10 POUNDS OF BULK FERTILIZER PER 1000 SQUARE FEET.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ANY PART OF THE SITE THAT FAILS TO SHOW A UNIFORM GERMINATION SHALL BE RESEED AND SUCH RESEEDING SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEEDING AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.

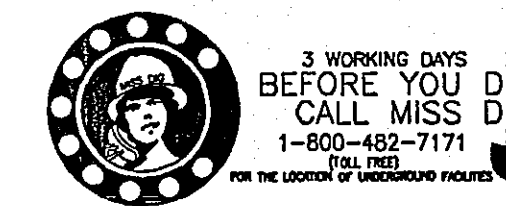
11. ALL AREAS OF THE SITE SCHEDULED FOR SEEDING OR SODDING SHALL FIRST RECEIVE A 4 INCH LAYER OF CLEAN, FRABLE TOPSOIL. THIS SOIL SHALL BE DISCED AND SHALL BE GRADED IN CONFORMANCE WITH THE GRADING PLAN.

12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES AND TO INFORM THE LANDSCAPE ARCHITECT OF ANY CONFLICTS PRIOR TO COMMENCING LANDSCAPING.

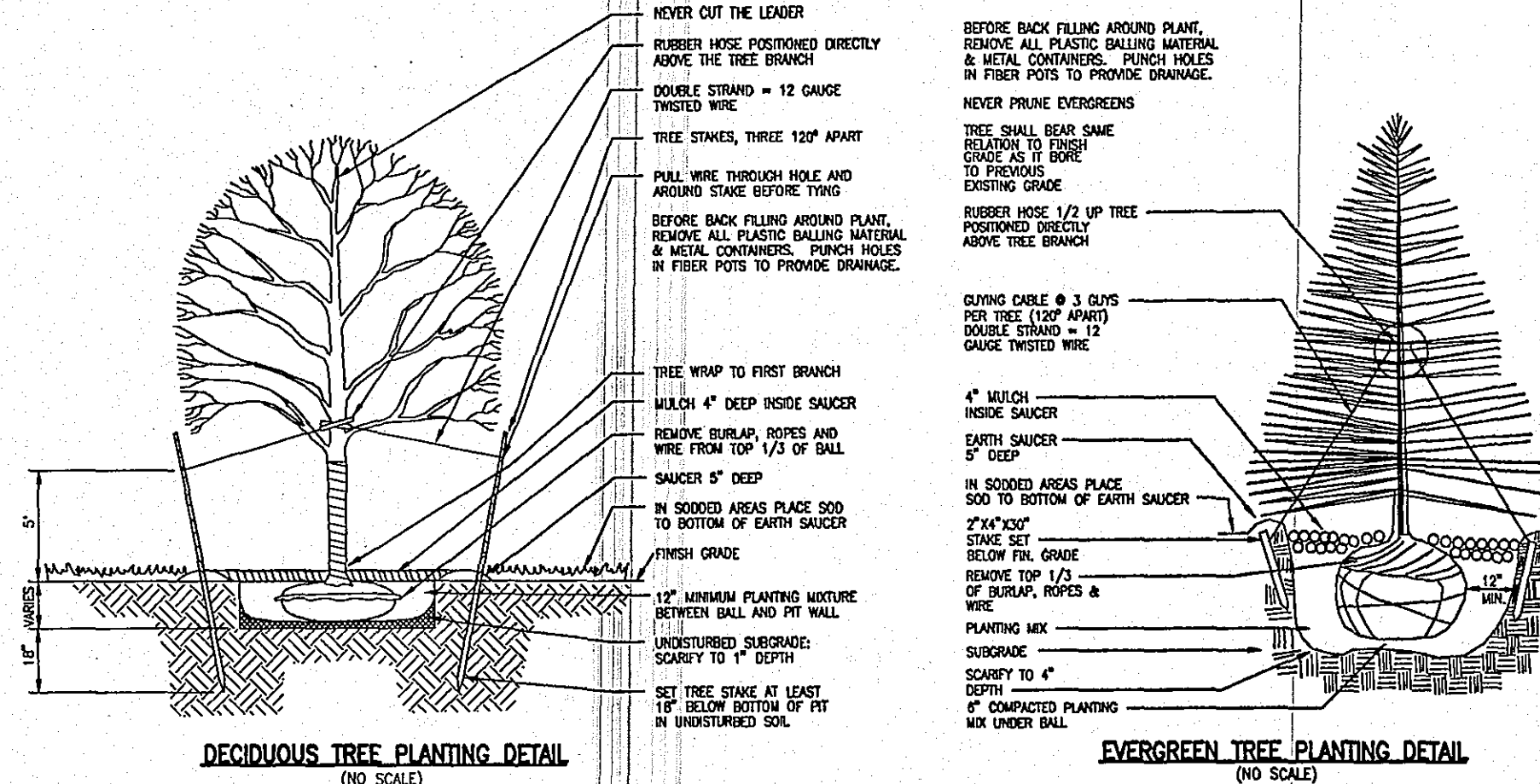
13. ALL PLANT MATERIALS SHALL BE FREE OF WEEDS, INSECTS AND DISEASE.

PLANT LIST

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
TREES					
AB	16	Abies concolor	White Spruce	6'-8' ht.	B-B
AR	25	Acer rubrum 'Red Sunset'	Red Sunset Maple	2 1/2' col.	B-B
AS	25	Acer saccharum	Sugar Maple	2 1/2' col.	B-B
FP	23	Fraxinus pennsylvanica	Green Ash	2 1/2' col.	B-B
PS	17	Pinus strobus	Eastern White Pine	6'-8' ht.	B-B
PU	16	Picea pungens	Green Spruce	6'-8' ht.	B-B
QR	25	Quercus rubra	Red Oak	2 1/2' col.	B-B
TC	22	Tilia cordata 'Greenspire'	Greenspire Linden	2 1/2' col.	B-B
ZS	25	Zelkova serrata 'Village Green'	Village Green Zelkova	2 1/2' col.	B-B
SHRUBS					
EA	9	Euonymus alatus var. Compactus	Dwarf Burning Bush	24"-36" ht.	B-B
HV	8	Hamamelis vernalis	Vernal Witch Hazel	24"-36" ht.	B-B
JC	13	Juniperus chinensis 'Gold Coast'	Gold Coast Juniper	24"-32" sprd.	B-B
SV	13	Syringa vulgaris	Common Lilac	24"-36" ht.	B-B
TD	10	Taxus x media 'densiformis'	Dense Yew	24"-32" sprd.	B-B
VT	11	Viburnum trilobum Compactum	Comp. Cranberrybush	24"-36" ht.	B-B

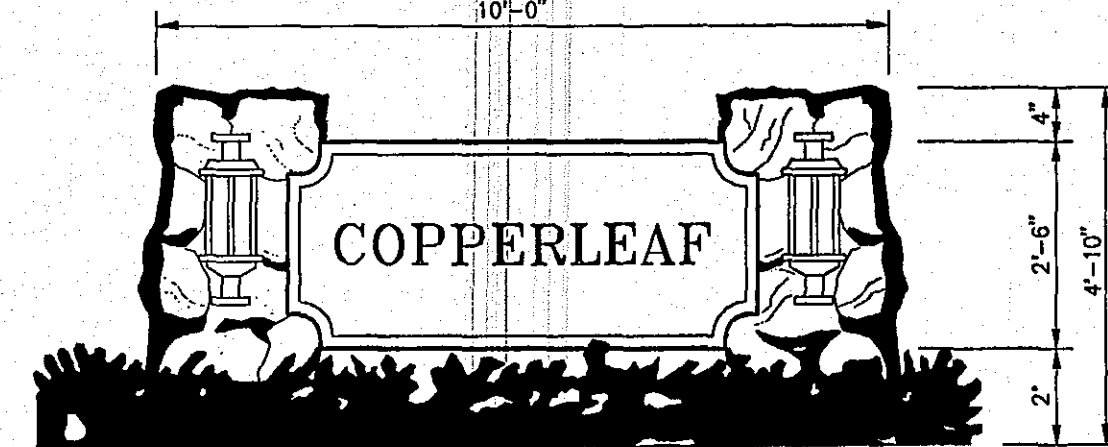


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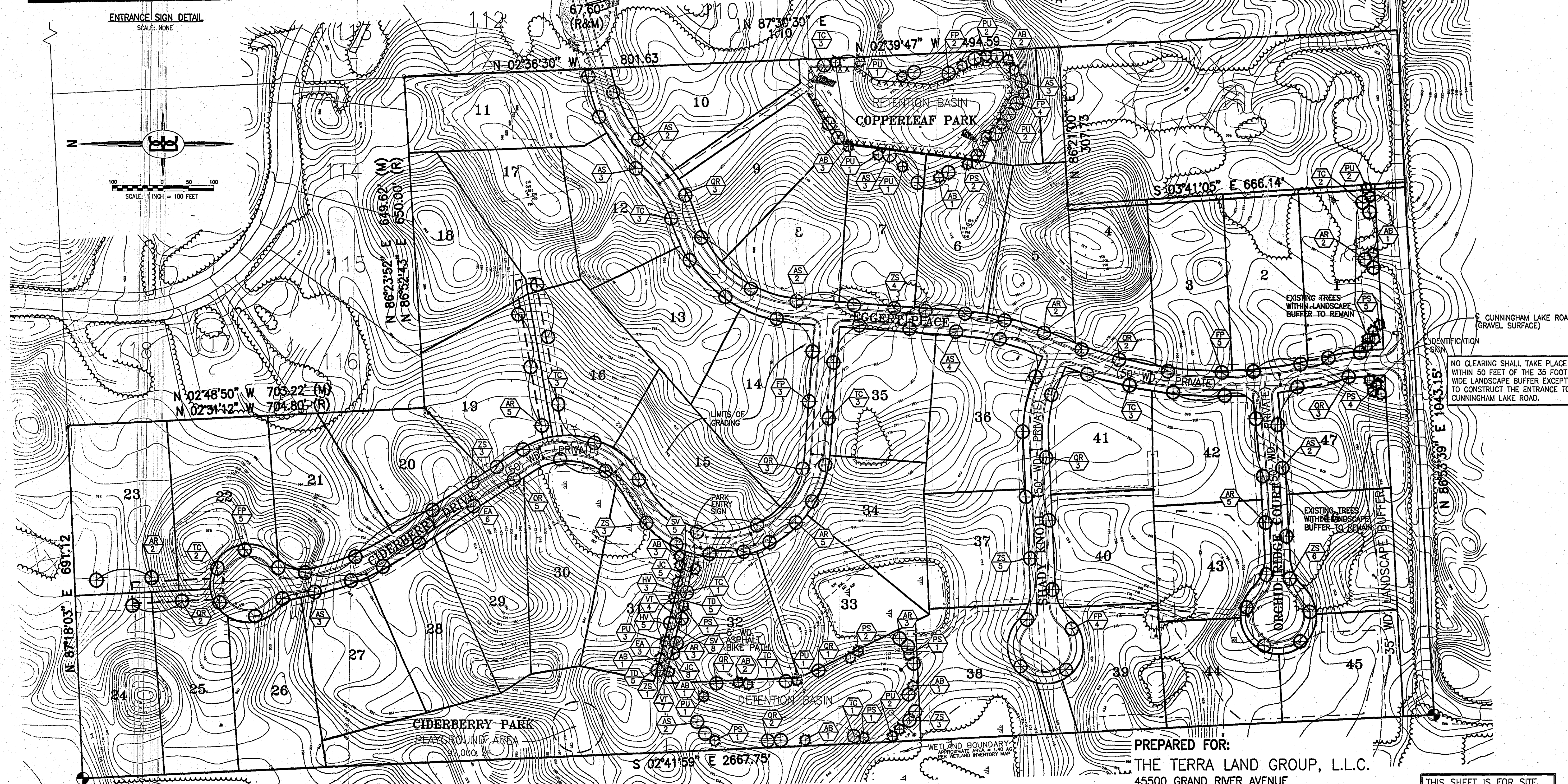


DECIDUOUS TREE PLANTING DETAIL
(NO SCALE)

EVERGREEN TREE PLANTING DETAIL
(NO SCALE)



ENTRANCE SIGN DETAIL
SCALE: NONE



PREPARED FOR:
THE TERRA LAND GROUP, L.L.C.
45500 GRAND RIVER AVENUE
NOVI, MICHIGAN 48050
(248) 735-4883

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CLIENT THE TERRA LAND GROUP, L.L.C.

PROJECT COPPERLEAF

TITLE FINAL LANDSCAPE PLAN

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DESIGNED BY: TD
DRAWN BY: TD
CHECKED BY: TD
SCALE 1" = 100'
JOB NO. 2-01021
DATE 02/06/02
PLOTING INFORMATION
FINAL\2-01021LP.dwg

SHEET NO.

4

BOSS ENGINEERING
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS

NOVILL OFFICE
3921 E. GRAND RIVER AVE.
(571)466-4838 FAX (571)548-1670
E-MAIL: b@bosseng.com

WEST BLOOMFIELD OFFICE
7125 WEST BLOOMFIELD AVE. #202
(248)626-8055 FAX (248)626-9480

GRADING PLAN



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE APPARENT OR IF THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

BOSS ENGINEERING
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS

HOWELL OFFICE:
3121 E. GRAND RIVER AVE.
(517) 546-4836 FAX (517) 546-1670
E-MAIL: bosseng@bosseng.com

CLIENT
THE TERRA LAND GROUP, L.L.C.

PROJECT
COPPERLEAF

TITLE
GRADING PLAN

NO.	REVISION	DATE
3	PER PLANNING COMMISSION	4/1/02
2	PER PLANNING COMMISSION	3/20/02
1	PER TOWNSHIP REVIEW	2/27/02
NO BY CK	REVISION	

DESIGNED BY: KJH
DRAWN BY: TD
CHECKED BY: TD
SCALE 1" = 100'
JOB NO. 2-01021
DATE 02/06/02
PLOTTING INFORMATION FINAL 2-01021GR.dwg
SHEET NO.

5

- LEGEND**
- PROPOSED**
- 900 CONTOUR
- 900.5 SPOT ELEVATION
- STORM DRAINAGE FLOW
- POWER POLE
- ST- STORM SEWER
- FENCE
- SIGN
- LIMITS OF WETLANDS
- LIMITS OF GRADING
- WELL
- SEPTIC
- EXISTING**
- 900 CONTOUR
- 900.5 SPOT ELEVATION
- STORM DRAINAGE FLOW
- POWER POLE
- ST- STORM SEWER
- FENCE
- SIGN
- LIMITS OF WETLANDS
- LIMITS OF GRADING
- WELL
- SEPTIC

DETENTION BASIN

DESIGN REQUIREMENTS

TRIBUTARY AREA = 19.57 ACRES

RUNOFF COEF. (C) = 0.38

ALLOWABLE RELEASE RATE = 0.20 CFS/ACRE

VOLUME REQ'D (60 YR) = 60,839 C.F.

POND STATISTICS

VOLUME PROVIDED = 120,607 C.F.

TOP OF POND (1 FT. FREEBOARD) = 938.0

DESIGN HIGH WATER = 937.5

BOTTOM OF POND (GRADED @ 12) = 931.5

OVERFLOW SPILLWAY = 937.5

OUTLET STRUCTURE

RM = 937.0

HW = 931.5

63" 1" DIA HOLES IN STANDPIPE

24" DIA CSP

RETENTION BASIN #1

DESIGN REQUIREMENTS

TRIBUTARY AREA = 15.82 ACRES

VOLUME REQ'D = 114,854 C.F.

(2 IN. OVER TRIBUTARY AREA)

POND STATISTICS

VOLUME PROVIDED = 117,123 C.F.

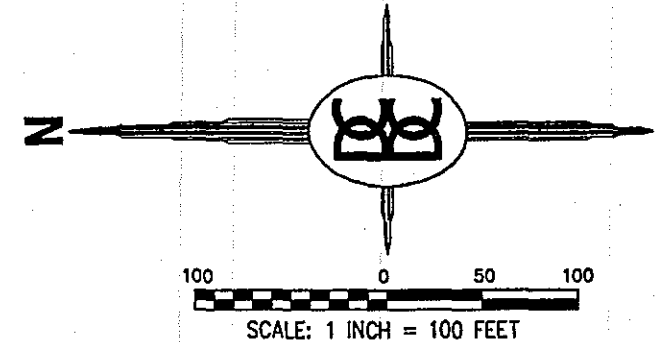
VOLUME PROVIDED IN FREEBOARD = 136,048 C.F.

TOP OF POND = 943.00

(3 FT. FREEBOARD)

DESIGN HIGH WATER = 939.00

BOTTOM OF POND = 935.00



NOTE

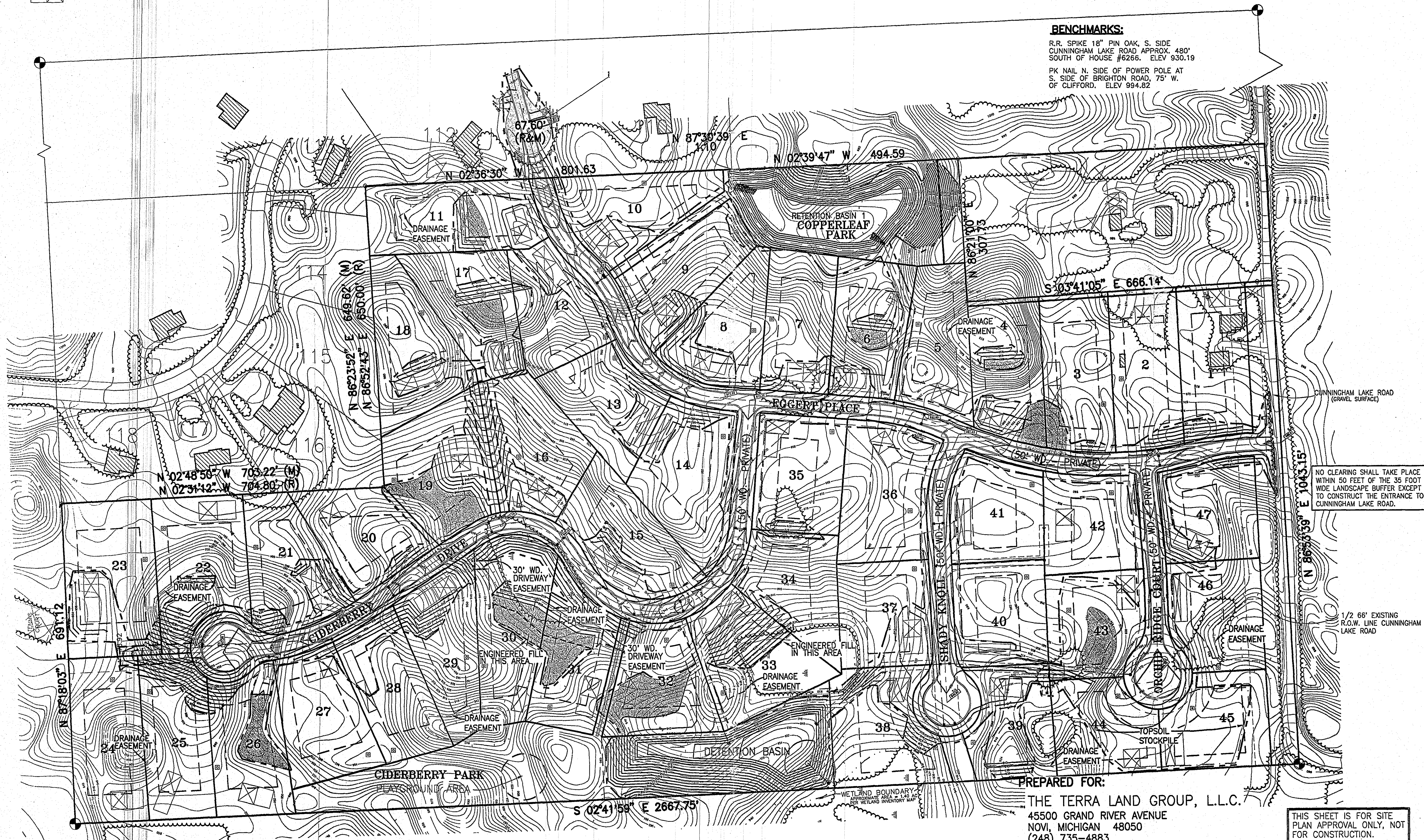
DUE TO THE EXTREME CHANGE IN ELEVATION THROUGHOUT THE SITE, EACH LOT WILL BE GRADED SUBJECT TO SPECIFIC DRIVE AND HOUSE LOCATIONS.

NOTE: A 12" CMP DRIVEWAY CULVERT SHALL BE INSTALLED BY THE LOT OWNERS AT LOTS 30 & 31 TO MAINTAIN DRAINAGE FLOW.

BENCHMARKS:

R.R. SPIKE 18" PIN OAK, S. SIDE CUNNINGHAM LAKE ROAD APPROX. 480' SOUTH OF HOUSE #6266. ELEV 930.19

PK NAIL N. SIDE OF POWER POLE AT S. SIDE OF BRIGHTON ROAD, 75' W. OF CLIFFORD. ELEV 994.82



NO CLEARING SHALL TAKE PLACE WITHIN 50 FEET OF THE 35 FOOT WIDE LANDSCAPE BUFFER EXCEPT TO CONSTRUCT THE ENTRANCE TO CUNNINGHAM LAKE ROAD.

1/2 66' EXISTING R.O.W. LINE CUNNINGHAM LAKE ROAD

PREPARED FOR:

THE TERRA LAND GROUP, L.L.C.

45500 GRAND RIVER AVENUE
NOVI, MICHIGAN 48050
(248) 735-4883

THIS SHEET IS FOR SITE PLAN APPROVAL ONLY, NOT FOR CONSTRUCTION.