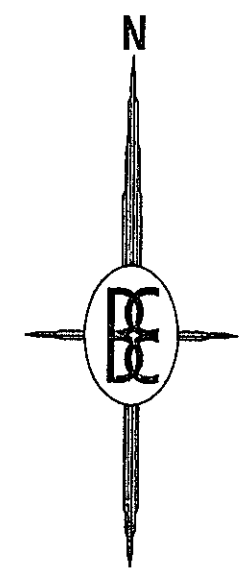


# FINAL SITE PLAN FOR PHASE VII

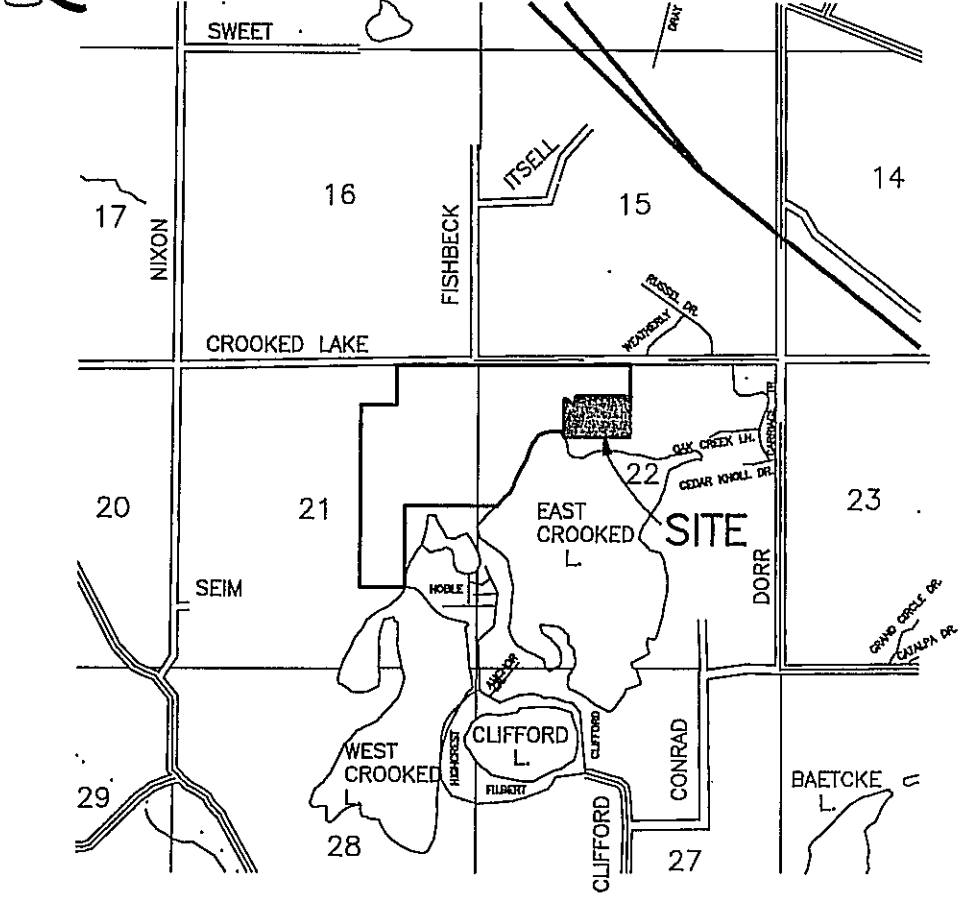
NORTH SHORE  
VILLAGE

22-102-

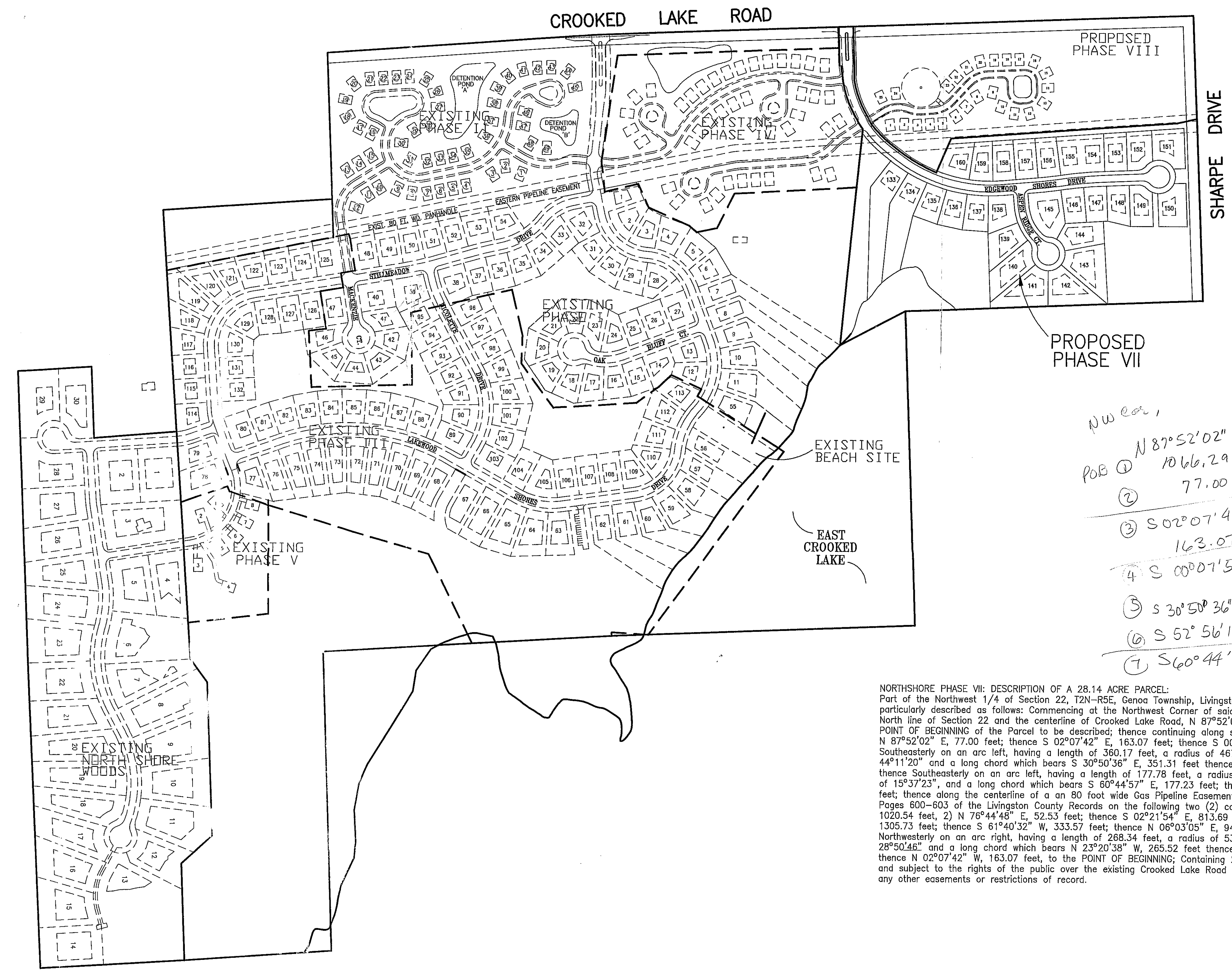


# NORTH SHORE

GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



LOCATION MAP  
SCALE: 1" = 2000'



| SHEET INDEX |                               |
|-------------|-------------------------------|
| SHEET NO.   | DESCRIPTION                   |
| 1           | COVER SHEET                   |
| 2           | OVERALL SITE AND UTILITY PLAN |
| 3           | FINAL SITE PLAN               |
| 4           | PRELIMINARY GRADING PLAN      |
| 5           | LANDSCAPE PLAN                |

- NW cor.  
POB ① N 87°52'02" E 1066.29  
② 77.00  
③ S 02°07'42" E 163.07  
④ S 00°07'50" E 68.43  
⑤ S 30°50'36" E 351.31  
⑥ S 52°56'16" E 46.03  
⑦ S 60°44'51" E 177.23
- ⑧ N 23° 81' 49" E 165.11  
⑨ N 85° 85' 44" E 1020.54  
⑩ N 76° 44' 48" E 52.53  
⑪ S 02° 21' 54" E 813.69  
⑫ S 87° 58' 08" W 1306.73  
⑬ S 61° 40' 32" W 333.57  
⑭ N 06° 03' 05" E 945.65  
⑮ N 23° 20' 38" W 265.52  
⑯ N 08° 55' 15" W 78.13  
⑰ N 02° 07' 42" W 163.07  
TO POB  
28.19Ac

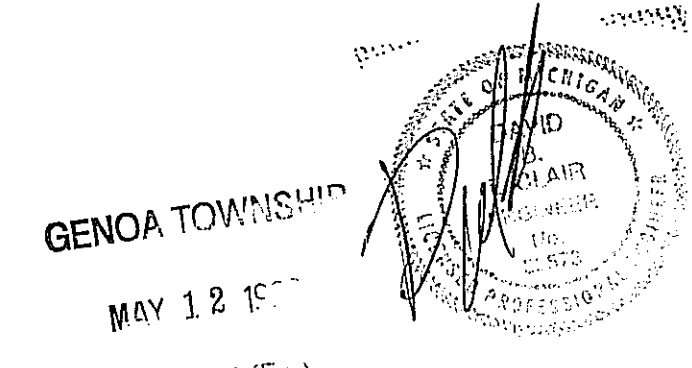
PREPARED FOR:  
NORTH SHORE DEVELOPMENT, L.L.C.  
21611 E. ELEVEN MILE ROAD  
ST. CLAIR SHORES, MICHIGAN 48081  
(810) 779-0400

PREPARED BY:

**BOSS ENGINEERING**  
**ENGINEERS & SURVEYORS**

3121 E. GRAND RIVER  
HOWELL, MICHIGAN 48843  
(517) 546-4836

NORTHSHORE PHASE VII: DESCRIPTION OF A 28.14 ACRE PARCEL:  
Part of the Northwest 1/4 of Section 22, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the Northwest Corner of said Section; thence along the North line of Section 22 and the centerline of Crooked Lake Road, N 87°52'02" E, 1066.29 feet, to the POINT OF BEGINNING of the Parcel to be described; thence continuing along said Section line and centerline N 87°52'02" E, 77.00 feet; thence S 02°07'42" E, 163.07 feet; thence S 00°07'50" E, 68.43 feet; thence Southeasterly on an arc left, having a length of 360.17 feet, a radius of 467.00 feet, a central angle of 44°11'20" and a long chord which bears S 30°50'36" E, 351.31 feet thence S 52°56'16" E, 46.03 feet; thence Southeasterly on an arc left, having a length of 177.78 feet, a radius of 652.00 feet, a central angle of 15°37'23", and a long chord which bears S 60°44'57" E, 177.23 feet; thence N 23°81'49" E, 165.11 feet; thence along the centerline of an 80 foot wide Gas Pipeline Easement as recorded in Liber 559 on Pages 600-603 of the Livingston County Records on the following two (2) courses: 1) N 85°85'48" E, 1020.54 feet, 2) N 76°44'48" E, 52.53 feet; thence S 02°21'54" E, 813.69 feet; thence S 87°58'08" W, 1306.73 feet; thence S 61°40'32" W, 333.57 feet; thence N 06°03'05" E, 945.65 feet; thence Northwesterly on an arc right, having a length of 268.34 feet, a radius of 533.00 feet, a central angle of 28°50'46" and a long chord which bears N 23°20'38" W, 265.52 feet thence N 08°55'15" W, 78.13 feet; thence N 02°07'42" W, 163.07 feet, to the POINT OF BEGINNING; Containing 28.14 acres, more or less, and subject to the rights of the public over the existing Crooked Lake Road (66 feet wide). Also subject to any other easements or restrictions of record.



RECEIVED

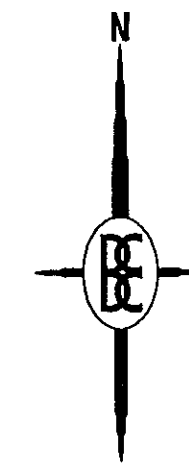
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| NO | BY | CK | PER TOWNSHIP REVISION | DATE    |
| 1  | SW | W  | PER TOWNSHIP          | 5-11-99 |

987560V1  
03/01/99

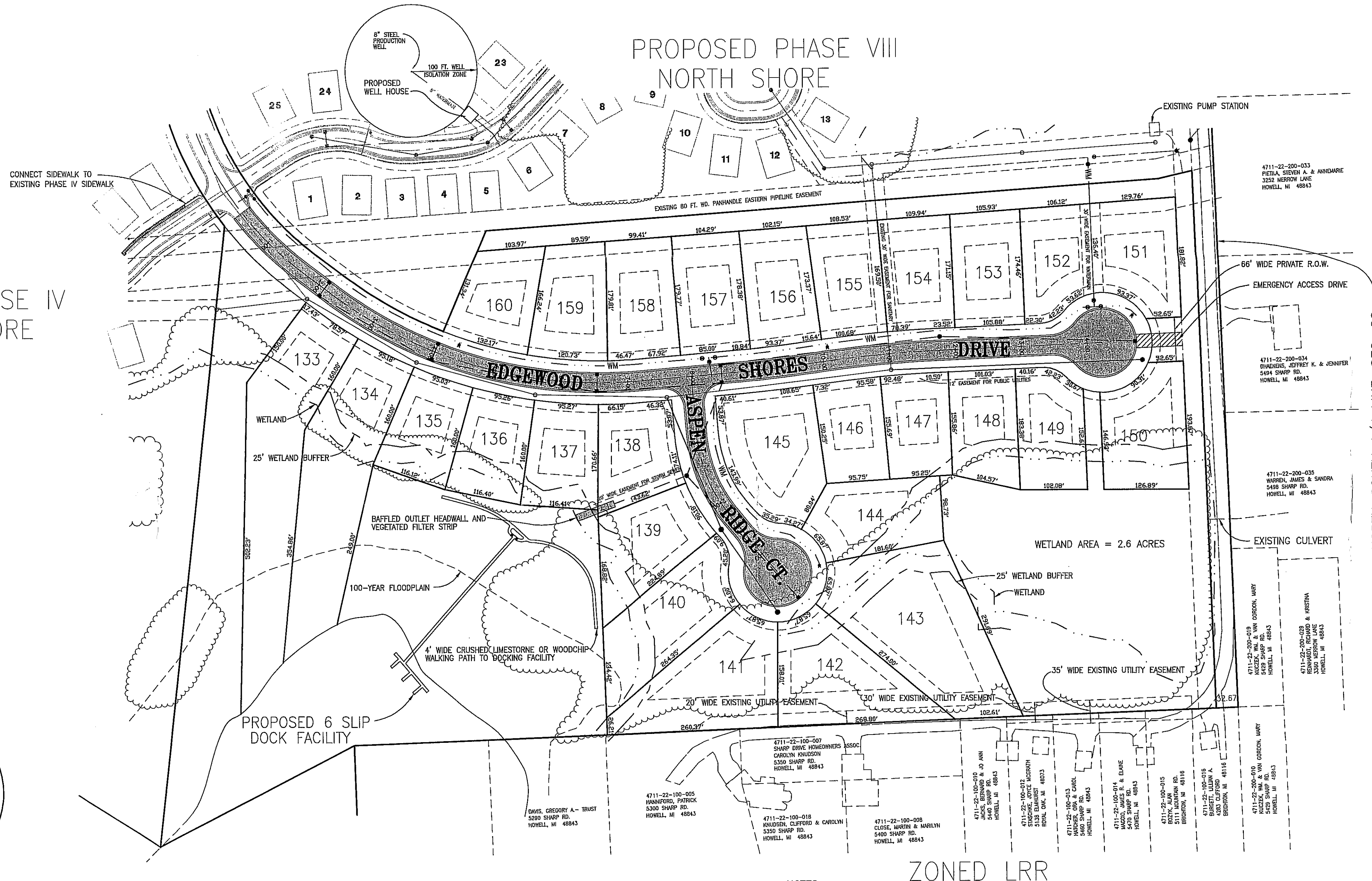
53W

# FINAL SITE PLAN FOR NORTH SHORE PHASE VII

| LOT NO. | AREA  | LOT NO. | AREA  |
|---------|-------|---------|-------|
| 133     | 48579 | 147     | 15446 |
| 134     | 44055 | 148     | 17126 |
| 135     | 16750 | 149     | 18062 |
| 136     | 16790 | 150     | 21929 |
| 137     | 16791 | 151     | 20889 |
| 138     | 18029 | 152     | 16971 |
| 139     | 21223 | 153     | 18297 |
| 140     | 26121 | 154     | 17995 |
| 141     | 31371 | 155     | 18777 |
| 142     | 28823 | 156     | 18605 |
| 143     | 45877 | 157     | 18831 |
| 144     | 21293 | 158     | 19074 |
| 145     | 27403 | 159     | 18243 |
| 146     | 15179 | 160     | 17271 |



| PROPOSED | EXISTING | LEGEND                      |
|----------|----------|-----------------------------|
| ---      | ---      | CONTOUR                     |
| ---      | ---      | SPOT ELEVATION              |
| ---      | ---      | STORM DRAINAGE FLOW         |
| ---      | ---      | POWER POLE                  |
| ---      | ---      | SANITARY SEWER              |
| ---      | ---      | WATERMAIN                   |
| ---      | ---      | STORM SEWER                 |
| ---      | ---      | MANHOLE                     |
| ---      | ---      | CATCH BASIN                 |
| ---      | ---      | FIRE HYDRANT                |
| ---      | ---      | GATE VALVE                  |
| ---      | ---      | WETLAND BOUNDARY            |
| ---      | ---      | 100 YEAR FLOODPLAIN CONTOUR |
| ---      | ---      | 25' WETLAND BUFFER          |



EXISTING PHASE IV  
NORTH SHORE

ZONED SR

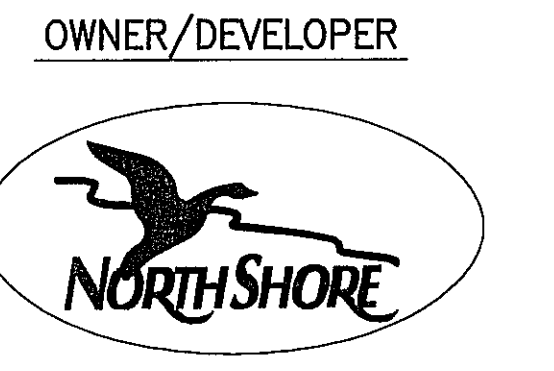
ZONED LRR

**NOTES:**

- ON-SITE SOILS CONSIST MOSTLY OF FOX-BOYER COMPLEX WITH 2-12% SLOPES AND BOYER-OSHTIMO LOAMY SANDS WITH 18-25% SLOPES, BASED ON THE SOIL SURVEY OF LIVINGSTON COUNTY, MICHIGAN BY THE UNITED STATES DEPT. OF AGRICULTURE, SOIL CONSERVATION SERVICE.
- PROPOSED STREET R.O.W. = 66 FT. (PUBLIC)
- 40' FRONT YARD SETBACK
- 20' SIDE YARD SETBACK
- 50' REAR YARD SETBACK
- PROPOSED SEWAGE SYSTEM = SANITARY SEWER SYSTEM
- PROPOSED WATER SUPPLY = WATERMAIN
- PROPOSED ELECTRICAL SUPPLY = UNDERGROUND DETROIT EDISON
- PROPOSED GAS SERVICE = UNDERGROUND CONSUMERS POWER
- PROPOSED TELEPHONE SERVICE = UNDERGROUND AMERITECH
- PROPOSED C. RADIUS = 230 FT. (MIN.)
- PROPERTY IS ZONED P.U.D./SR
- MINIMUM ROAD ELEVATION = 957.5
- JURISDICTION OF ALL DRAINAGE STRUCTURES, DRAINAGE PIPES, AND DETENTION, RETENTION AND SEDIMENTATION POND SHALL BE UNDER THE LIVINGSTON COUNTY DRAIN COMMISSIONER.
- THE WETLANDS SHOWN WERE MAPPED BY KING ENVIRONMENTAL AND SURVEYED BY BOSS ENGINEERING.
- THE FOLLOWING AGENCY APPROVALS ARE REQUIRED PRIOR TO FINAL APPROVAL:  
LIVINGSTON COUNTY DRAIN COMMISSION  
LIVINGSTON COUNTY ROAD COMMISSION  
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
- LOTS 133 AND 134 WILL HAVE DIRECT RIPARIAN RIGHTS TO CROOKED LAKE.
- LOTS 135-140 WILL HAVE RIPARIAN RIGHTS TO CROOKED LAKE VIA THE 6 SLIP DOCK FACILITY AND ARE ALLOWED ONE BOAT PER UNIT. A MARINA-OPERATING PERMIT WILL BE REQUIRED FOR THE DOCKING FACILITY.
- UNITS 142 AND 143 SHALL HAVE A SHARED ACCESS DRIVE UNLESS OTHERWISE PERMITTED BY THE MDOE.

**SITE INFORMATION**

28 SINGLE FAMILY LOTS  
28.14 ACRES TOTAL

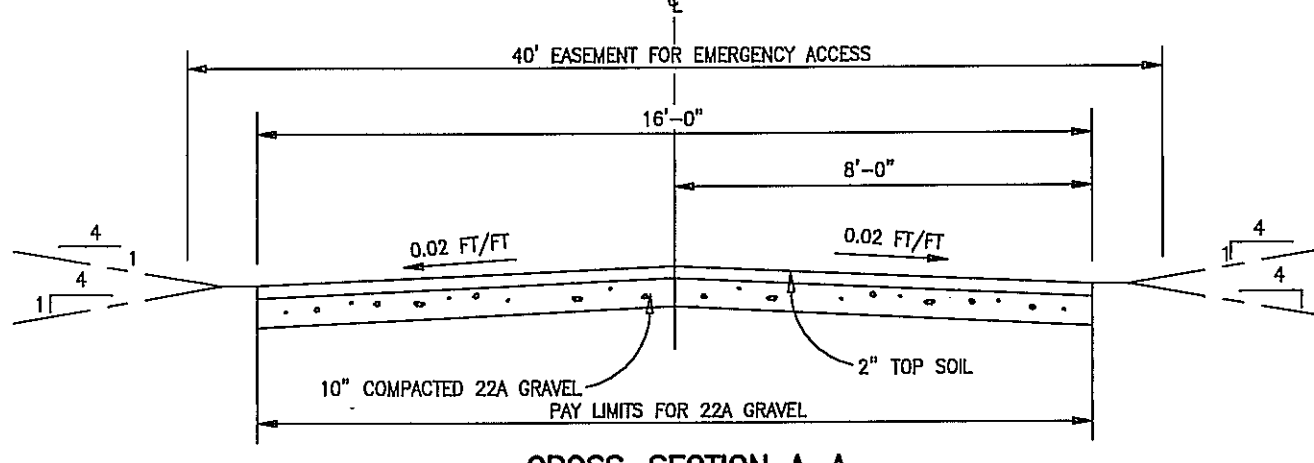
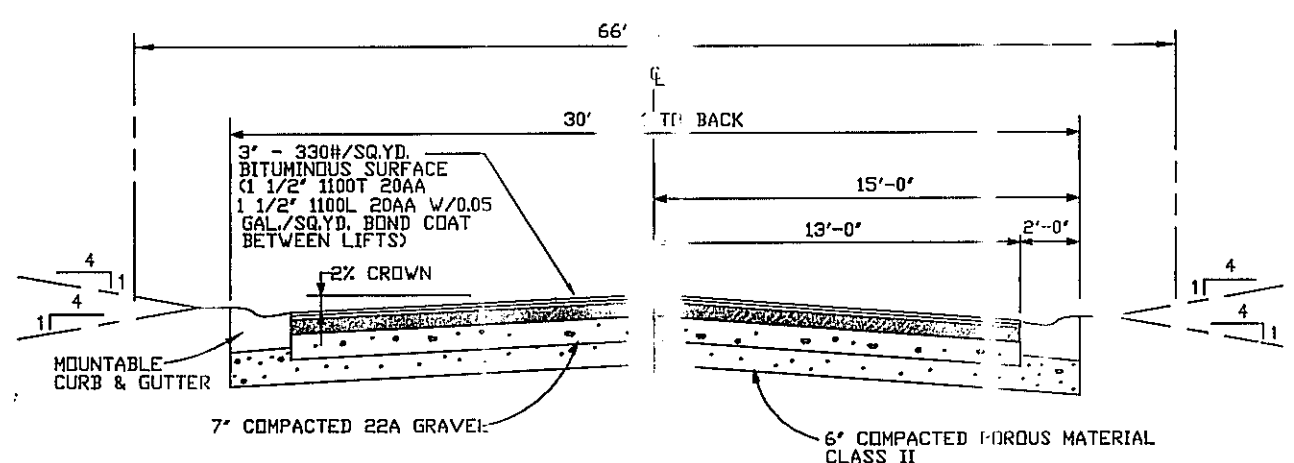
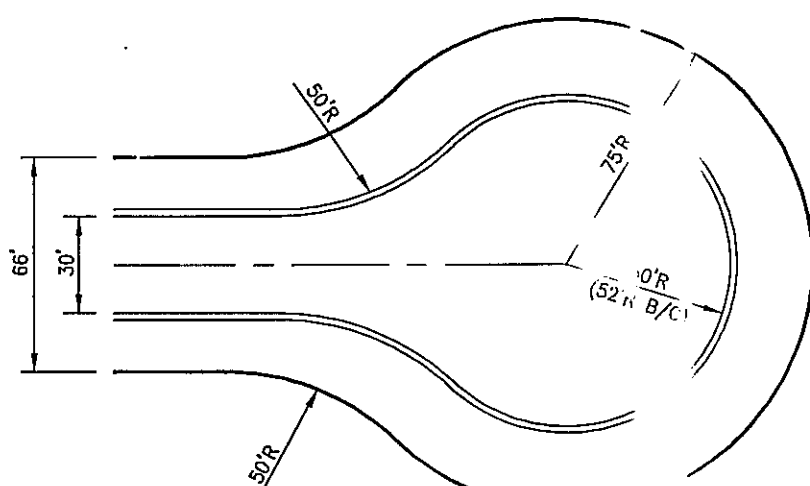


**OWNER/DEVELOPER**  
NORTH SHORE LAND DEVELOPMENT LTD.  
21611 EAST ELEVEN MILE RD.  
ST. CLAIR SHORES 48081  
(810) 779-0400



3 WORKING DAYS  
BEFORE YOU DIG  
CALL MISS DIG  
1-800-482-7171  
FOR THE LOCATION OF ALL  
UTILITIES

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.

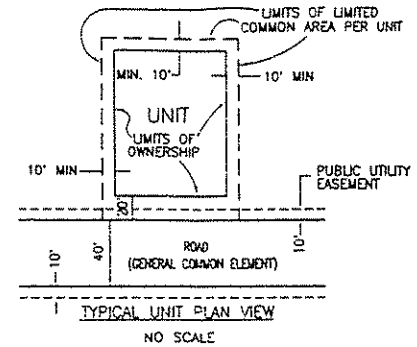
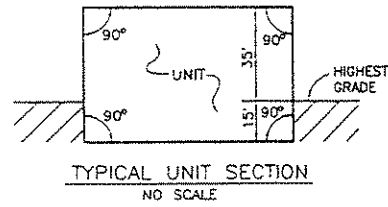
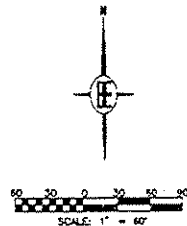


BOSS ENGINEERING  
ENGINEERS • SURVEYORS • PLANNERS  
LANDSCAPE ARCHITECTS  
HOWELL OFFICE  
321 E. GRAND RIVER AVE. HOWELL, MI 48843  
157546-4825 FAX: 157546-8750 (800)246-0735  
E-MAIL: bosseng@earthlink.net

|                              |                       |                 |      |
|------------------------------|-----------------------|-----------------|------|
|                              |                       |                 |      |
| CLIENT                       | PROJECT               | TITLE           | DATE |
| NORTH SHORE LAND DEVELOPMENT | NORTH SHORE PHASE VII | FINAL SITE PLAN |      |
|                              |                       |                 |      |
|                              |                       |                 |      |
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# UNIT AREAS & PERIMETER PLAN

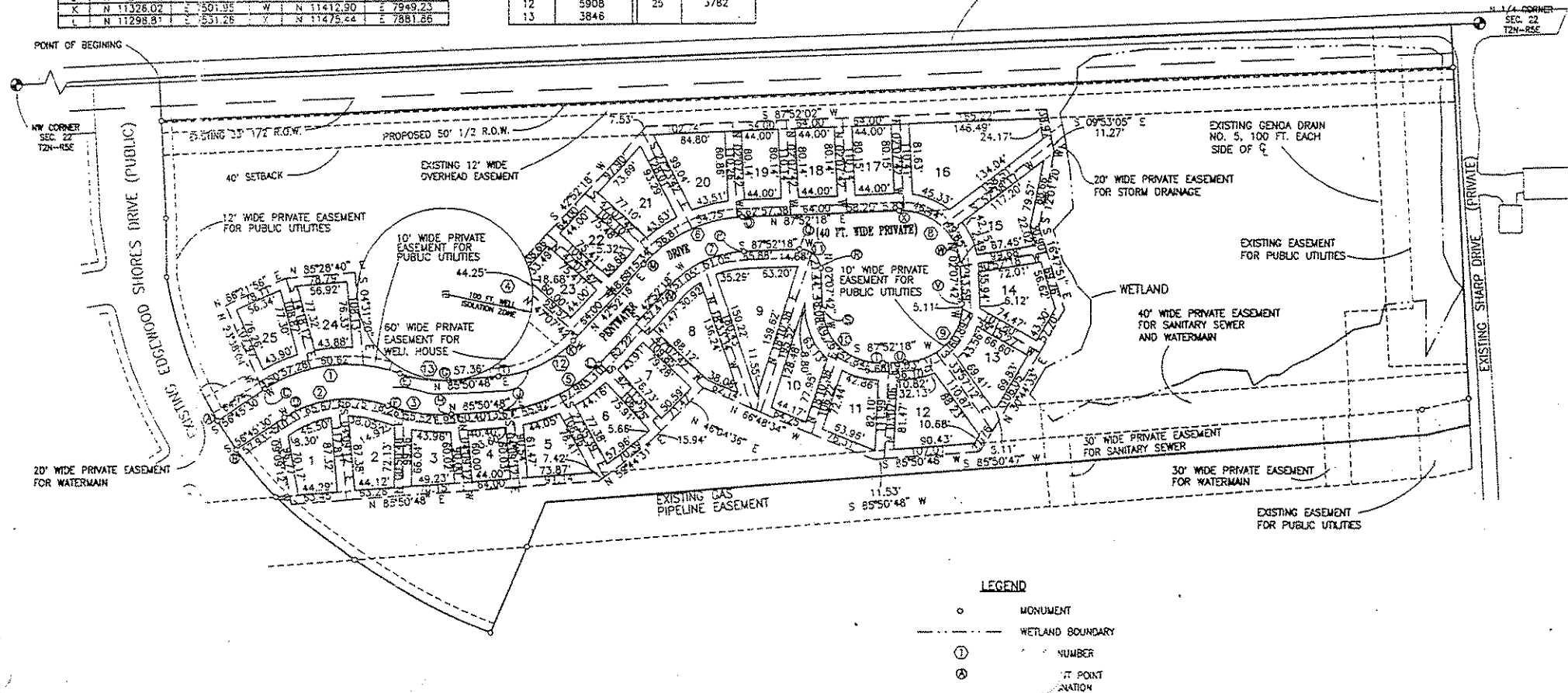
| CURVE DATA |        |               |            |              |                   |
|------------|--------|---------------|------------|--------------|-------------------|
| CURVE      | RADIUS | CENTRAL ANGLE | ARC LENGTH | CHORD LENGTH | BEARING DIRECTION |
| 1          | 170.00 | 53°57'12"     | 160.08     | 154.23       | N 83°44'06" E     |
| 2          | 130.00 | 53°57'12"     | 122.42     | 117.94       | S 83°44'06" W     |
| 3          | 170.00 | 2°51'54"      | 73.78      | 73.20        | N 81°43'15" W     |
| 4          | 100.00 | 22°12'50"     | 38.77      | 38.53        | N 10°17'42" W     |
| 5          | 170.00 | 42°58'30"     | 127.51     | 124.54       | S 64°21'33" W     |
| 6          | 170.00 | 45°00'00"     | 133.52     | 130.11       | S 65°22'18" W     |
| 7          | 130.00 | 45°00'00"     | 102.10     | 99.50        | S 65°22'18" W     |
| 8          | 65.00  | 90°00'00"     | 102.10     | 91.52        | N 47°07'42" W     |
| 9          | 65.00  | 90°00'00"     | 102.10     | 91.92        | N 42°52'18" E     |
| 10         | 65.00  | 90°00'00"     | 102.10     | 91.92        | S 47°07'42" E     |
| 11         | 23.00  | 90°00'00"     | 36.13      | 32.53        | N 47°07'42" W     |
| 12         | 130.00 | 42°58'30"     | 97.51      | 95.24        | N 64°21'33" E     |
| 13         | 130.00 | 2°51'54"      | 56.42      | 55.98        | S 81°43'15" E     |



| MONUMENT COORDINATE POINTS |            |         |     |            |         |
|----------------------------|------------|---------|-----|------------|---------|
| PT.                        | NORTHING   | EASTING | PT. | NORTHING   | EASTING |
| A                          | N 11234.48 | 785.10  | M   | N 11414.54 | 7584.13 |
| B                          | N 11201.02 | 1115.03 | N   | N 11387.33 | 7613.44 |
| C                          | N 11271.85 | 150.18  | O   | N 11468.77 | 7702.40 |
| D                          | N 11238.43 | 172.11  | P   | N 11428.79 | 7703.88 |
| E                          | N 11288.72 | 703.48  | Q   | N 11431.24 | 7739.72 |
| F                          | N 11251.30 | 289.34  | R   | N 11409.11 | 7793.56 |
| G                          | N 11280.66 | 558.26  | S   | N 11361.05 | 7795.34 |
| H                          | N 11240.75 | 581.78  | T   | N 11288.52 | 7862.71 |
| I                          | N 11284.81 | 116.09  | U   | N 11299.48 | 7888.40 |
| J                          | N 11244.82 | 118.99  | V   | N 11366.85 | 7950.84 |
| K                          | N 11326.02 | 501.95  | W   | N 11412.90 | 7949.23 |
| L                          | N 11298.81 | 531.26  | Y   | N 11475.24 | 7881.86 |

| SCHEDULE OF UNIT AREAS |                | SCHEDULE OF UNIT AREAS |                |
|------------------------|----------------|------------------------|----------------|
| UNIT NO.               | AREA (SQ. FT.) | UNIT NO.               | AREA (SQ. FT.) |
| 1                      | 3858           | 14                     | 5438           |
| 2                      | 3865           | 15                     | 5114           |
| 3                      | 2887           | 16                     | 10407          |
| 4                      | 2640           | 17                     | 3526           |
| 5                      | 3932           | 18                     | 3526           |
| 6                      | 4068           | 19                     | 3526           |
| 7                      | 3680           | 20                     | 5481           |
| 8                      | 5495           | 21                     | 4826           |
| 9                      | 7382           | 22                     | 3318           |
| 10                     | 4203           | 23                     | 3232           |
| 11                     | 3925           | 24                     | 3802           |
| 12                     | 5908           | 25                     | 3782           |
| 13                     | 3846           |                        |                |

C CROOKED LAKE ROAD (PUBLIC)  
NORTH LINE SECTION 22



**BOSS ENGINEERING**  
 ENGINEERS - SURVEYORS - PLANNERS  
 LANDSCAPE ARCHITECTS  
 1115 EAST BROADWAY, SUITE 400, DENVER, CO 80202  
 TEL: 303.733.8888 FAX: 303.733.8889  
 WWW.BOSS-ENGINEERING.COM

CLIENT: NORTH SHORE LAND DEVELOPMENT, L.L.C.  
 PROJECT: NORTH SHORE COMMONS EAST  
 TITLE: UNIT AREAS & PERIMETER PLAN

DESIGNED BY: GJ  
 DRAWN BY: GJ  
 CHECKED BY:  
 SCALE: 1" = 50'  
 JOB NO.: 05  
 DATE: 03/06/06