

NOTES:

TO MAINTAIN A PERMANENT POOL, WET SEDIMENTATION BASINS SHALL INCLUDE 40 MIL HDPE LINER INSTALLED UNDER APPROXIMATELY 6" OF SOIL WITH A TOP ELEVATION EQUAL TO THE NORMAL WATER LEVEL (NWL) INDICATED.

LOT SIZE 140,137 SQ. FT. (3.2 ACRES)

IMPERVIOUS AREA, EXISTING AND PROPOSED:

STRUCTURES, INCLUDING DECKS AND WALKS	6,264 SQ. FT.
DRIVEWAY	3,077 SQ. FT.
TOTAL	9,341 SQ. FT. (6.7%)

NORTH COLLECTION AREA VOLUME (1195' TO 1196'): 2,489 CU. FT.

SOUTH COLLECTION AREA VOLUME (1195' TO 1195.4'): 956 CU. FT.

EARTHWORK SUMMARY:

CUT	294 CU. YD.
FILL (@1.2 CORRECTION FACTOR)	1,258 CU. YD.
NET (FILL)	964 CU. YD.

STORMWATER CALCULATION SUMMARY AND ESTIMATE:

FUTURE IMPERVIOUS COVERAGE (AT 14% OF 140,137)	19,619 SQ. FT.
FUTURE INCREASE IN IMPERVIOUS COVERAGE (19,619 - 9,341)	10,278 SQ. FT.
NOAA ATLAS 14 10-YEAR STORM EVENT	3.86 IN.
3.86 IN. RAINFALL x 10,278 SQ. FT. FUTURE IMPERVIOUS AREA	3,306 CU. FT.
CAPACITY OF TWO PROPOSED BASINS (2,489 + 956)	3,445 CU. FT.

NORTH

SCALE (IN FEET)

KEY	
- - - 1200 - - -	EXISTING GROUND CONTOUR
— 1200 —	FINISHED GROUND CONTOUR

WIDSETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT THAT I AM A FULLY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

MICHAEL E. RUDE
DATE: 10/21/16 LIC. NO. 43896

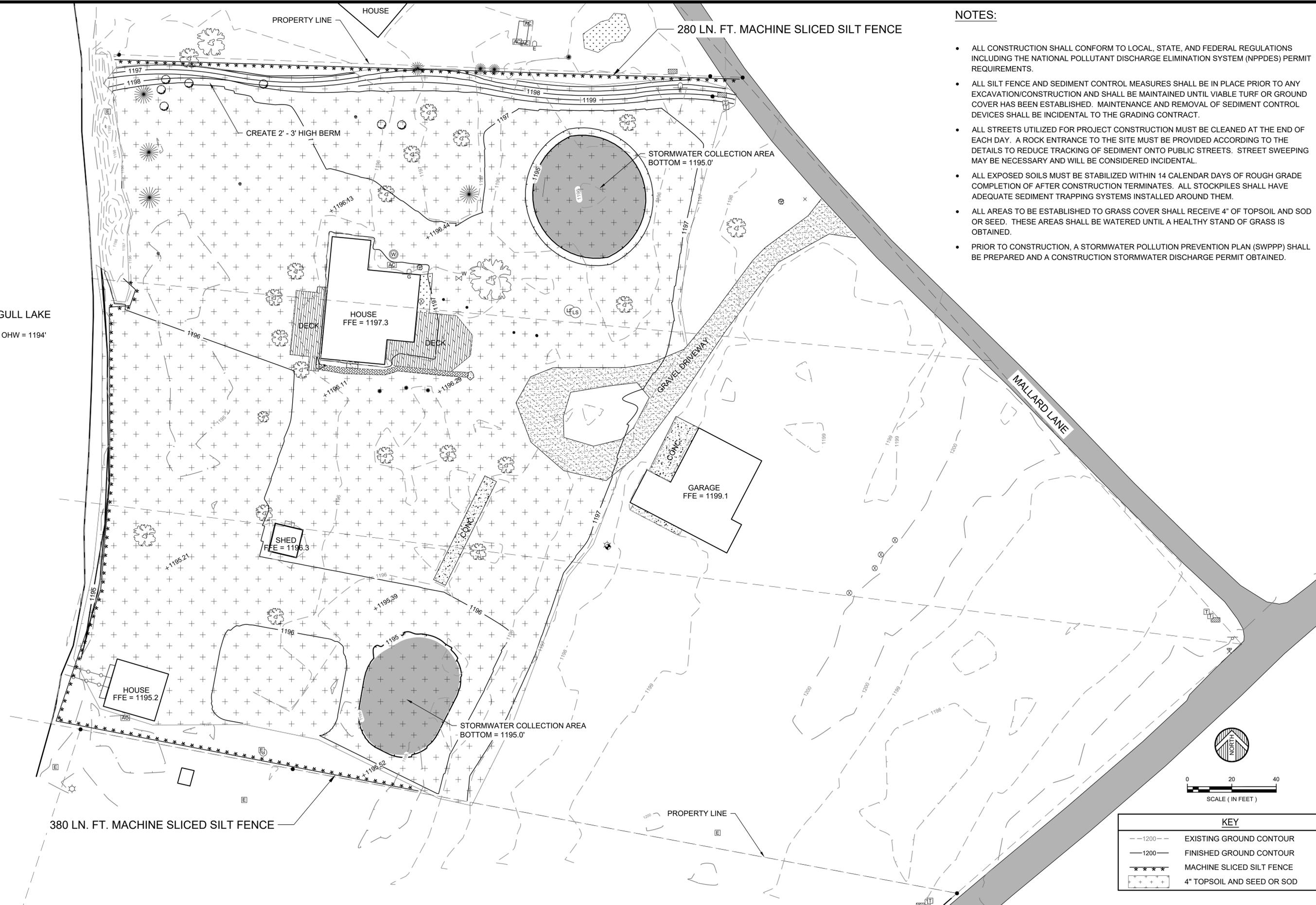
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OCTOBER, 2016 <td>AS SHOWN <td></td> </td>	AS SHOWN <td></td>	
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DATE: OCTOBER, 2016
SCALE: AS SHOWN
DRAWN BY: MER
CHECKED BY: MER
JOB NUMBER: 0293B2167.000

GRADING AND STORMWATER MANAGEMENT PLAN
GEORGE CARNEY
EAST GULL LAKE, MINNESOTA
GRADING AND STORMWATER MANAGEMENT

SHEET NO. **C1.0**

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GULL LAKE
OHW = 1194'

280 LN. FT. MACHINE SLICED SILT FENCE

MALLARD LANE

380 LN. FT. MACHINE SLICED SILT FENCE

KEY	
---1200---	EXISTING GROUND CONTOUR
—1200—	FINISHED GROUND CONTOUR
*****	MACHINE SLICED SILT FENCE
+ + + +	4" TOPSOIL AND SEED OR SOD

NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO LOCAL, STATE, AND FEDERAL REGULATIONS INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPPDES) PERMIT REQUIREMENTS.
- ALL SILT FENCE AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION/CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED. MAINTENANCE AND REMOVAL OF SEDIMENT CONTROL DEVICES SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
- ALL STREETS UTILIZED FOR PROJECT CONSTRUCTION MUST BE CLEANED AT THE END OF EACH DAY. A ROCK ENTRANCE TO THE SITE MUST BE PROVIDED ACCORDING TO THE DETAILS TO REDUCE TRACKING OF SEDIMENT ONTO PUBLIC STREETS. STREET SWEEPING MAY BE NECESSARY AND WILL BE CONSIDERED INCIDENTAL.
- ALL EXPOSED SOILS MUST BE STABILIZED WITHIN 14 CALENDAR DAYS OF ROUGH GRADE COMPLETION OF AFTER CONSTRUCTION TERMINATES. ALL STOCKPILES SHALL HAVE ADEQUATE SEDIMENT TRAPPING SYSTEMS INSTALLED AROUND THEM.
- ALL AREAS TO BE ESTABLISHED TO GRASS COVER SHALL RECEIVE 4" OF TOPSOIL AND SOD OR SEED. THESE AREAS SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- PRIOR TO CONSTRUCTION, A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE PREPARED AND A CONSTRUCTION STORMWATER DISCHARGE PERMIT OBTAINED.

WIDSETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental

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Michael E. Rude
MICHAEL E. RUDE DATE: 10/12/16 LIC. NO. 43896

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GRADING AND STORMWATER MANAGEMENT PLAN
GEORGE CARNEY
EAST GULL LAKE, MINNESOTA
EROSION CONTROL

SHEET NO.
C2.0