

## Information for File #2012-01994-SEW

**Applicant:** D.R. Horton, Inc., c/o Mr. Michael Suel

**Corps Contact:** Sarah Wingert, U.S. Army Corps of Engineers, 180 5<sup>th</sup> Street East, Suite 700, St. Paul, Minnesota 55101-1678; [sarah.e.wingert@usace.army.mil](mailto:sarah.e.wingert@usace.army.mil); 651-290-5358

**Primary County:** Scott

**Location:** Section 10, Township 114N., Range 22W.

**Information Complete On:** April 14, 2014

**Posting Expires On:** April 25, 2014

**Authorization Type:** Section 404 Letter of Permission (LOP-05-MN)

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above.

### PROJECT INVOLVES:

*A Listed State-Impaired Water:* The project would **not** have direct impacts to any listed state-impaired waters. Upper Prior Lake, which is about one mile north of the project site, is listed by the MPCA as impaired for aquatic consumption by mercury in fish and aquatic life by nutrient and biological indicators. The wetlands that would be impacted for this project drain into Rice Lake, which is connected to Upper Prior Lake via Crystal Lake and a channel that leads into Upper Prior Lake.

*FEMA 100-Year Floodplain:* The project area is **not** within the FEMA 100 and 500-year floodplains (see FIRM Community-Panel Number 2704280050C).

**PROJECT DESCRIPTION AND PURPOSE:** D.R. Horton, Inc. proposes to construct a 34-lot residential development called "Hickory Shores South" on a 40.25-acre parcel in the City of Prior Lake. The lots would be used for single-family homes. The project would be consistent with the City of Prior Lake Comprehensive Land Use Plan, which indicates "Urban Low-Density Residential" land use for this site. The project would also be consistent with adjacent land use in the area, as residential developments exist to the north, west and south of the project area. Rice Lake and its adjacent wetlands lie along the eastern border of the site. The site contains four delineated wetland areas (Wetlands 1, 2, 3, and 4). The purpose of the project is to meet demand for single family homes in the City of Prior Lake.

The lots would be developed to meet City of Prior Lake lot standards and dimensions for Urban Low-Density Zoning. The project would include the construction of two stormwater detention and filtration basins, along with three residential roads (Turner Drive, Golden View Lane, and

Wedgewood Lane), and utilities (water, sanitary sewer, storm sewer, electric, and communications utilities). Turner Drive would be constructed in the north portion of the site to connected two existing dead-end sections of Turner Drive. Golden View Lane would connect from Turner Drive and cross the wetland in the middle of the site (Wetland 4) in a north-south direction, and would terminate at the south end of the parcel in a dead-end. Wedgewood Lane would connect from Golden View Lane in an east-west fashion to an existing dead-end segment of Wedgewood Lane on the west side of the parcel. The two stormwater treatment areas would be constructed south of Turner Drive and north of Wetland 4. All stormwater generated by the site would be directed to the proposed on-site stormwater treatment basins before discharge to the adjacent wetland areas.

A 62-foot long, 8-foot wide boardwalk consisting of cedar planks and aluminum posts would be constructed over the far east side of Wetland 4. The boardwalk would have a height of approximately 2-3 feet above the wetland floor, and 5 feet above the ordinary high water level of Rice Lake. The boardwalk would connect to an existing recreational trail on the east side of Turner Drive just north of the Hickory Shores South site, but would dead-end on the east side of the site. Additionally, a paved recreational trail would be constructed from an existing trail located adjacent to Skinner Street Southwest (located just north west of the Hickory Shores south site), and would enter the north side of the site through an upland area between Wetlands 1 and 2. This trail would connect to the proposed Turner Drive on the west side of the Hickory Shores South site, and to an existing trail on the west side of Turner Drive just north of the site. The proposed trail connection between Wetlands 1 and 2 would also connect to the proposed boardwalk trail over Wetland 4.

Finally, a buffer averaging 30 feet in width would be established around the boundaries of Wetlands 1, 2, and 4. As required by the City of Prior Lake, signs stating wetland restrictions would be placed on buffer edges that intersect with lot boundaries, and the buffer and Wetlands 1, 2, and 4 would be permanently protected by drainage easements that would be recorded with the plat.

#### NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS:

The project would permanently impact the entirety of Wetland 3 (approximately 15,912 square feet, or 0.36 acre), a wet meadow wetland adjacent to Rice Lake. Wetland 3 is dominated by reed canary grass and giant goldenrod, with lesser amounts of sedge, fowl bluegrass, sensitive fern, timothy, American elm saplings, and green ash saplings, among others.

The project would also permanently impact approximately 13,564 square feet (0.31 acre) of Wetland 4, an open water wetland with a shallow marsh and wet meadow fringe adjacent to Rice Lake. Wetland 4 is dominated by reed canary grass with lesser amounts of lake sedge and jewelweed in the wet meadow areas, and cattail in the shallow marsh portions. Wetland 4 would be impacted by the construction of the Golden View Lane road crossing. A 100-foot long, 18-inch diameter reinforced concrete pipe culvert would be installed in Wetland 4 to accommodate the movement of water toward Rice Lake. Golden View Lane would be designed to City standards and would consist of two 12-foot travel lanes with 4-foot shoulders, a 14-foot wide boulevard with a 5-foot sidewalk on one side of the road, sideslopes of 1V:3H, and a 60-foot wide right-of-way. The road would need to be raised about twelve feet in this location due to the slope of the land toward the wetland on either side.

There are no temporary wetland impacts, stream impacts, or lake impacts proposed for this project.

#### ALTERNATIVES CONSIDERED:

1. *No-Build*: The applicant considered not building the project. This alternative would avoid all wetland impacts, but would also not meet the purpose of the project, so it was rejected by the applicant.

2. *Construct Cul-de-sacs on Turner Drive:* This alternative would involve constructing two cul-de-sacs on Turner Drive on either side of Wetland 3, and eliminating Golden View Lane from the proposal. This alternative would avoid all wetland impacts. It was eliminated by the applicant because it would fail to provide an east-west connection between the dead-end stubs of Turner Drive, and it would result in an illogical and inefficient road design that is not considered viable by the developer and the City of Prior Lake. This alternative would also limit access to the southern half of the site to Wedgewood Lane; the City of Prior Lake prefers multiple accesses to a neighborhood to assist in public safety emergency response times.
3. *Relocate Golden View Lane to the far east side of Wetland 4:* This alternative would result in approximately 11,612 square feet of impact to Wetland 4, which is less than the applicant's proposed alternative. However, the applicant believes their proposed alternative would have less impact on the wetland and Rice Lake than this alternative because: 1) the proposed Golden View Lane wetland crossing would be located in an area that has been degraded by an existing shed and landscaping, and 2) locating the road closer to Rice Lake would result in impacts to the wetland fringe of Rice Lake, and there would be less buffer between the lake and the roadway. Thus, the applicant rejected this alternative.
4. *Relocate Golden View Lane to the far west side of Wetland 4:* There is a strip of upland area between the far west side of Wetland 4 and the west site boundary; this alternative would relocate the Golden View Lane crossing to this upland strip to reduce impacts to Wetland 4 to approximately 2,000 square feet. This alternative would require removing approximately 52 additional trees ranging in 8-inches to 36-inches in diameter as compared to the proposed alternative. It would also require crossing an overland drainage. The applicant rejected this alternative based on their preference to preserve more trees on the site and to avoid blocking the overland drainage.
5. *Construct Golden View Lane as cul-de-sac on south side of Wetland 4:* This alternative would eliminate the crossing of Wetland 4 with Golden View Lane, and instead would construct Golden View Lane on the south side of the wetland area, terminating in a cul-de-sac near the southern wetland boundary. Golden View Lane would also connect to Wedgewood Lane on the southwest side of the site. This alternative would avoid permanent impacts to Wetland 4. The applicant rejected this alternative because it would limit access on the south side of the site to Wedgewood Lane. The City of Prior Lake prefers multiple access points to a neighborhood in order to reduce public safety response times. By installing Golden View Lane in a north-south fashion through the whole site, response times to the south half of the Hickory Shores South site from City Public Safety facilities would be reduced by approximately two minutes, (to about six minutes as compared to eight minutes). Also, even if Golden View Lane was constructed as a cul-de-sac and didn't cross Wetland 4, utility connections would still need to be made through Wetland 4 to accommodate utility services to the new lots, which would result in temporary impacts to the wetland.
6. *Relocating Turner Drive north of Wetland 3:* This alternative would involve routing Turner Drive around Wetland 3 between the two existing Turner Drive stubs on the perimeter of the site. This alternative would allow the two stubs of Turner Drive to be connected, but would avoid impacts to Wetland 3. The applicant rejected this alternative because it would result in curve radiuses that are sharper than allowed by the City of Prior Lake for safety purposes.

7. *Using retaining walls in Wetland 4 Crossing in proposed location:* This alternative would reduce impacts to Wetland 4 by allowing a narrower crossing; the applicant eliminated it from consideration because the City of Prior Lake does not allow the use of retaining walls.
8. *Bridge crossing of Wetland 4 in proposed location:* This alternative would reduce fill impacts to Wetland 4 through bridge construction, though impacts would still occur for bridge abutments and piers. The applicant eliminated this alternative because the City of Prior Lake does not want to be responsible for future bridge maintenance costs.

*Wetland Avoidance and Minimization Information:* The applicant proposes to avoid impacts to Wetlands 1 and 2, which are located in the northwest corner of the site and also extend off-site. No residential lots or stormwater treatment facilities would be constructed in wetlands. Impacts to Wetland 4 would be minimized through the following: 1) locating the proposed crossing in a narrow portion of the wetland that is already disturbed by a shed and landscaping; 2) using the City of Prior Lake road design standards for Golden View Lane; 3) using the steepest road sideslopes allowed by the City of Prior Lake's safety standards for Golden View Lane; and 4) installing a culvert under the road crossing to allow flow to continue through Wetland 4. Also, Wetlands 1, 2, and 4 and Rice Lake would receive some protection from the secondary impacts of the development through the construction of a buffer upslope of the wetland boundaries. Stormwater would be directed to proposed stormwater treatment basins before discharging to the natural wetland areas. Appropriate erosion control best management practices would be used to protect the remaining wetland areas during and after construction.

**COMPENSATORY MITIGATION:** The applicant has proposed to mitigate for unavoidable adverse wetland impacts by debiting a total of 1.35 standard wetland credits from the Minnesota Wetland Bank. Specifically, approximately 1.35 shallow marsh credits would be debited from Account 1168 located in Scott County, major watershed 33 (Minnesota River-Shakopee), Bank Service Area 9. The proposed aquatic resource impacts are also in major watershed 33, Bank Service Area 9.

**DRAWINGS:** See attached drawings labeled "2012-01994-SEW, Figures 1-10 of 10".



**2012-01994-SEW  
Hickory Shores South  
Prior Lake, Scott County**

U.S. Army Corps of Engineers  
St. Paul District

2012-01994-SEW, Figure 1 of  
10: Location Map



0 215 430 860 1,290 1,720  
Feet

Base Map Source: MnGeo WMS Service, 2013 Scott County

 approx. project location

Note: Site boundaries on this figure are approximate and do not constitute an official survey product.

2012-01994-SEW, Figure 2 of 10: Delineated Wetlands

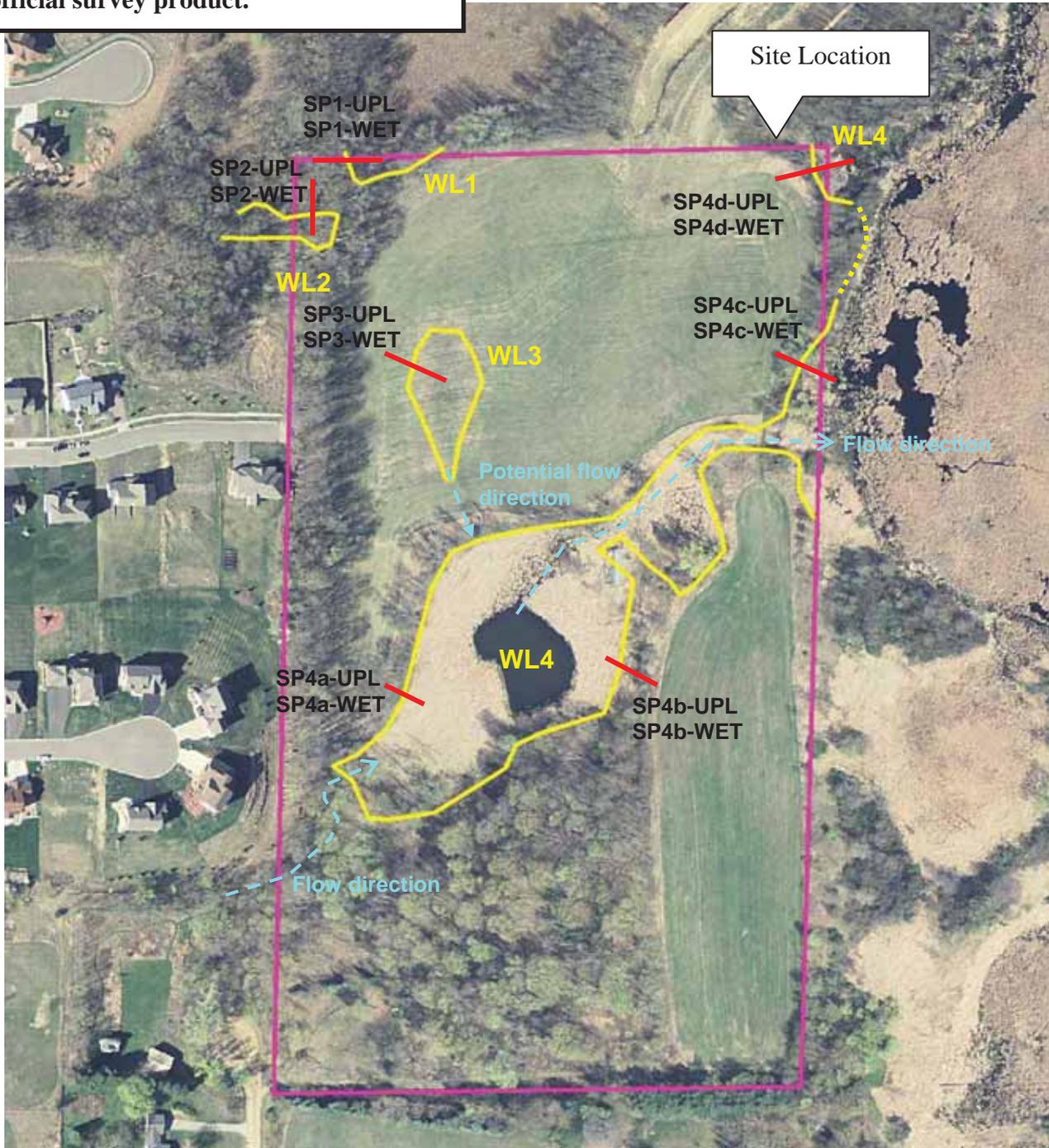


Figure 2 – 2012 Aerial Photograph with Delineated Wetlands

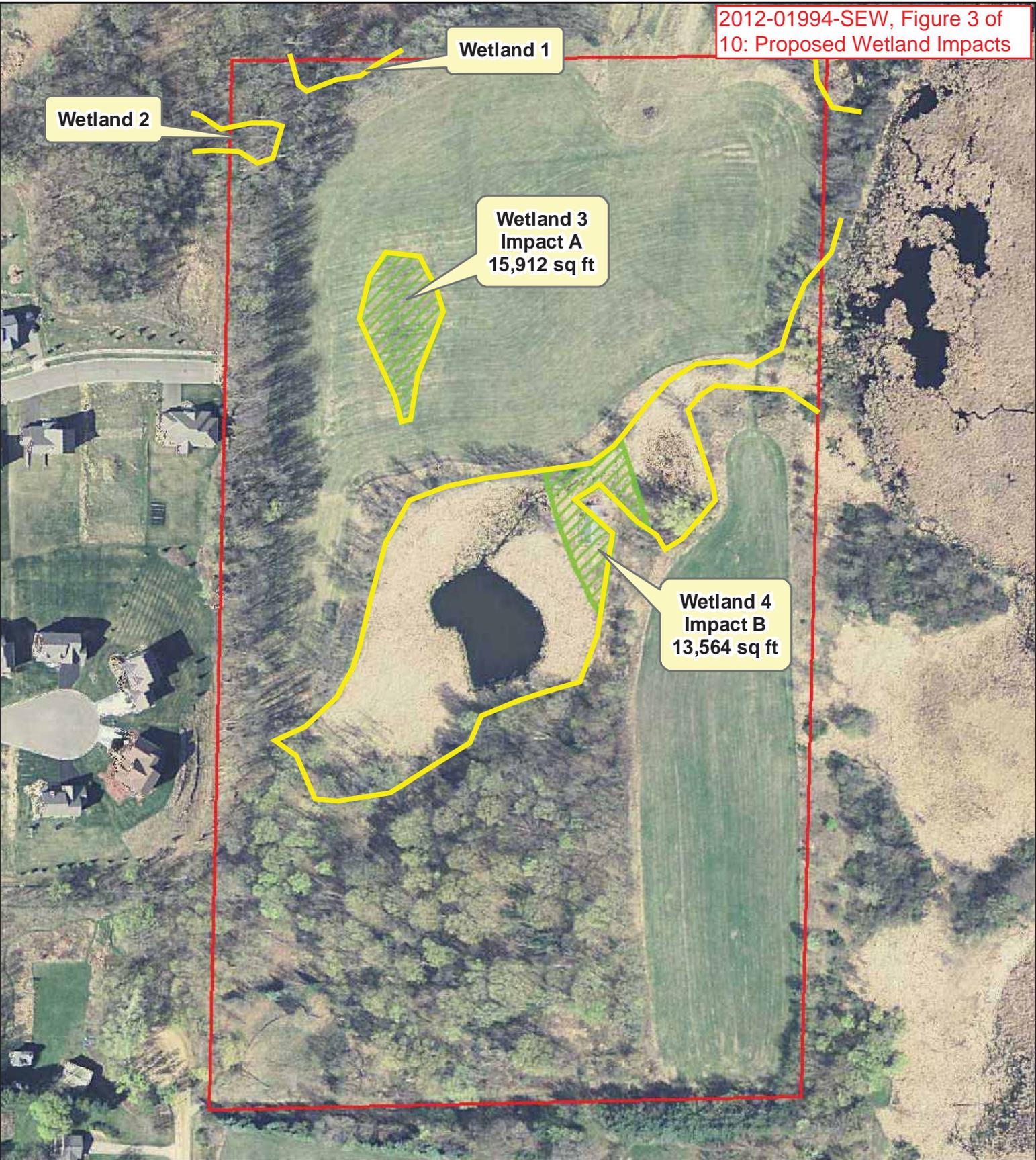
Hickory Shores South (KES No. 2013-029)  
Prior Lake, Minnesota



**KJOLHAUG** ENVIRONMENTAL SERVICES COMPANY



1 inch ~ 227 feet



Wetland 2

Wetland 1

Wetland 3  
Impact A  
15,912 sq ft

Wetland 4  
Impact B  
13,564 sq ft

1 inch equals 178 feet

### Wetland Impact Map

Overlaid on 2012 Aerial Image

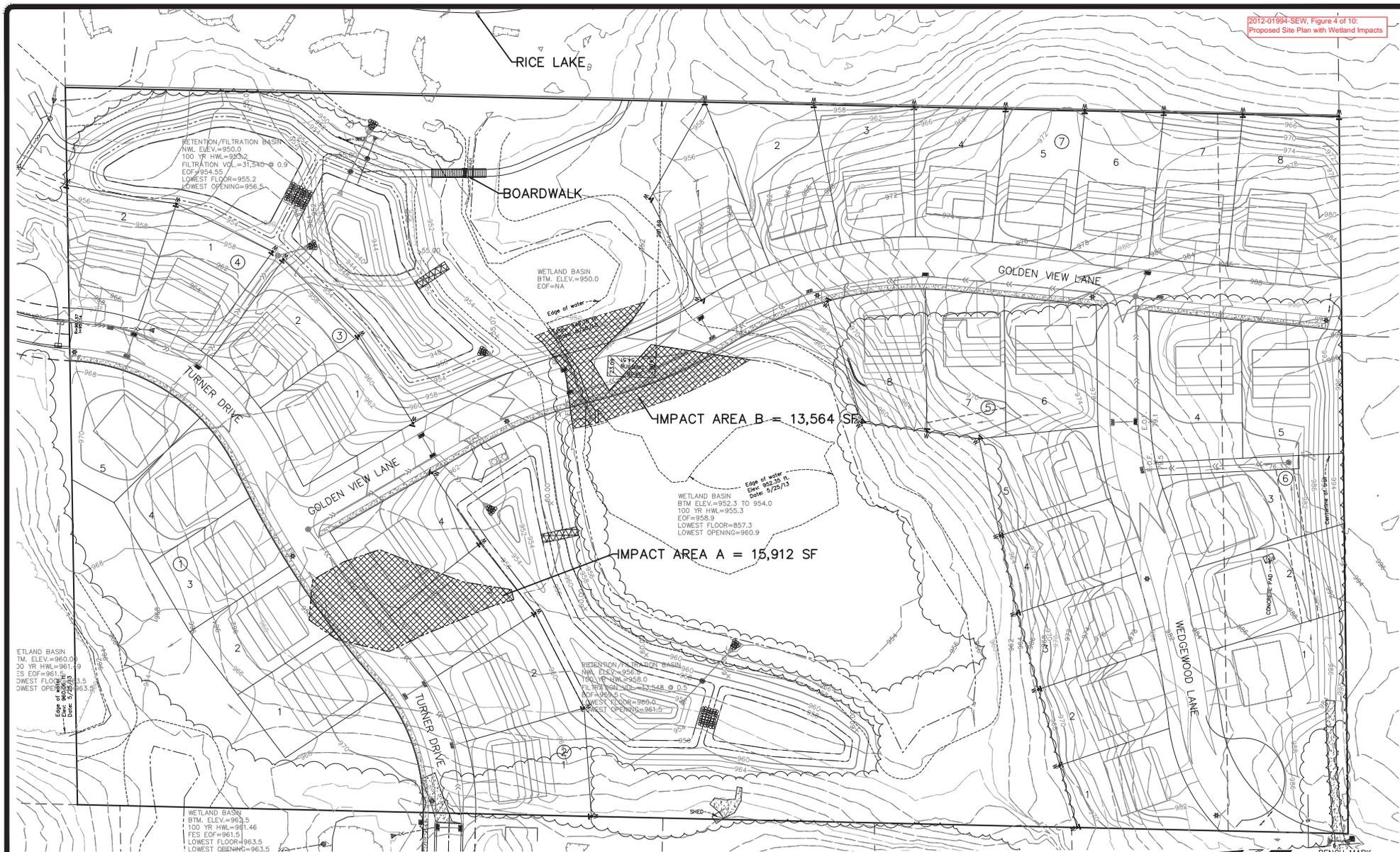


Approximate Parcel Boundary
 
 Wetland Boundary
 
 Wetland Impact Area



**KJOLHAUG** ENVIRONMENTAL SERVICES COMPANY

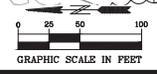
Hickory Shores  
Prior Lake, MN



WETLAND BASIN  
BTM. ELEV.=960.0  
100 YR HWL.=961.9  
ES EOF=961.5  
LOWEST FLOOR=963.5  
LOWEST OPENING=963.5  
Edge of water  
Date: 5/22/13

WETLAND BASIN  
BTM. ELEV.=962.5  
100 YR HWL.=961.46  
FES EOF=961.5  
LOWEST FLOOR=963.5  
LOWEST OPENING=963.5

WETLAND BASIN  
BTM. ELEV.=952.3 TO 954.0  
100 YR HWL.=955.3  
EOF=956.9  
LOWEST FLOOR=857.9  
LOWEST OPENING=960.9  
Edge of water  
Date: 5/22/13



BENCH MARK  
T.M. ON TURNER DRIVE  
800' SOUTH OF  
HICKORY CIRCLE  
ELEV.=970.15  
BENCH 1145-SHEET-WETLAND

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Fax: 681-9488

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Name: Keith A. Wilshing  
Reg. No.: 25526 Date: 06-21-2013

Revisions

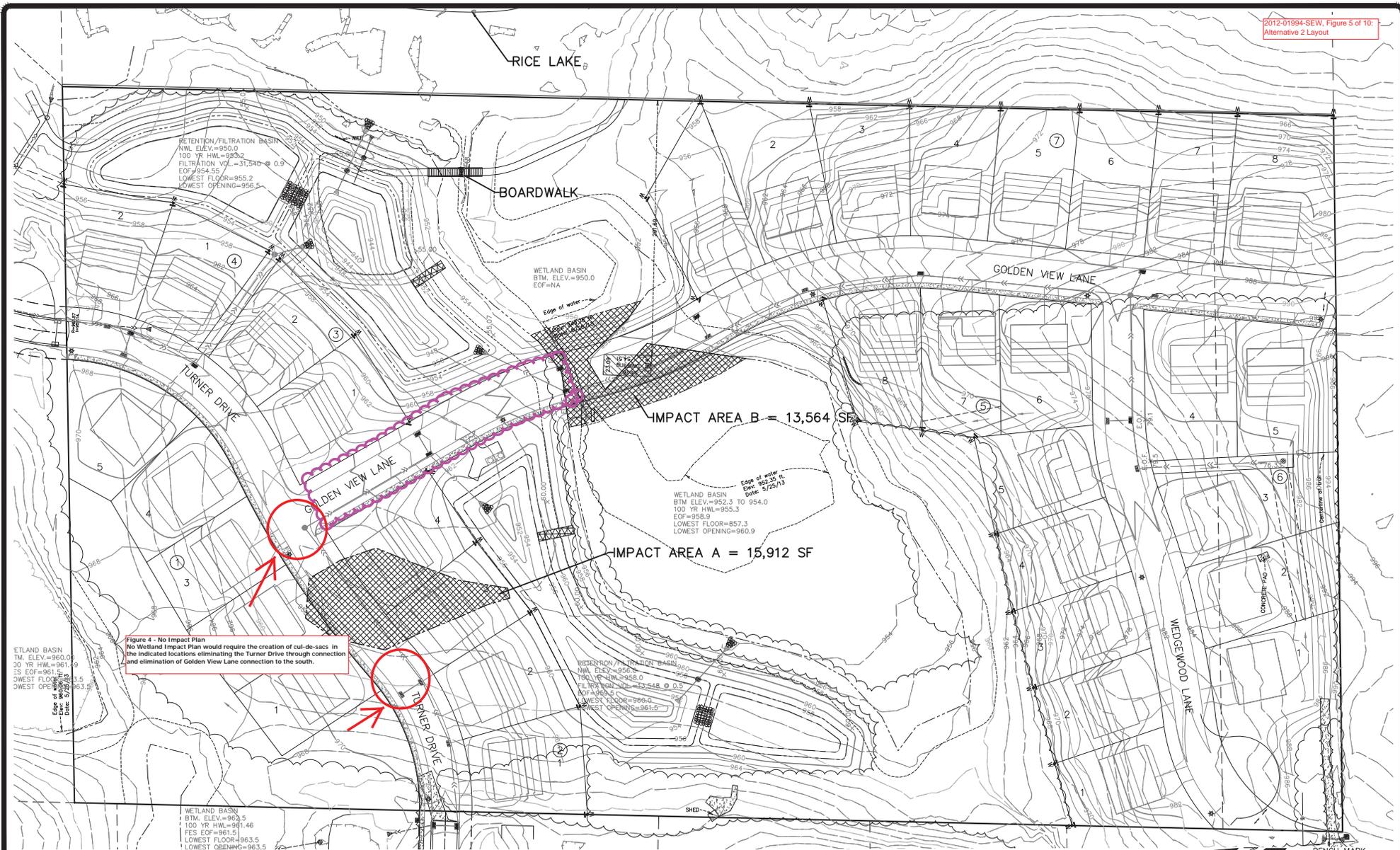
Date: 06-21-2013  
Designed: JLKAJ  
Drawn: KAW

WETLAND IMPACT

DR HORTON  
20860 KENBRIDGE CT STE. 100  
LAKEVILLE, MN 55041

HICKORY SHORES SOUTH  
PRIOR LAKE, MINNESOTA

10 OF 12



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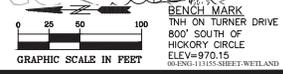
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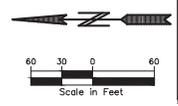
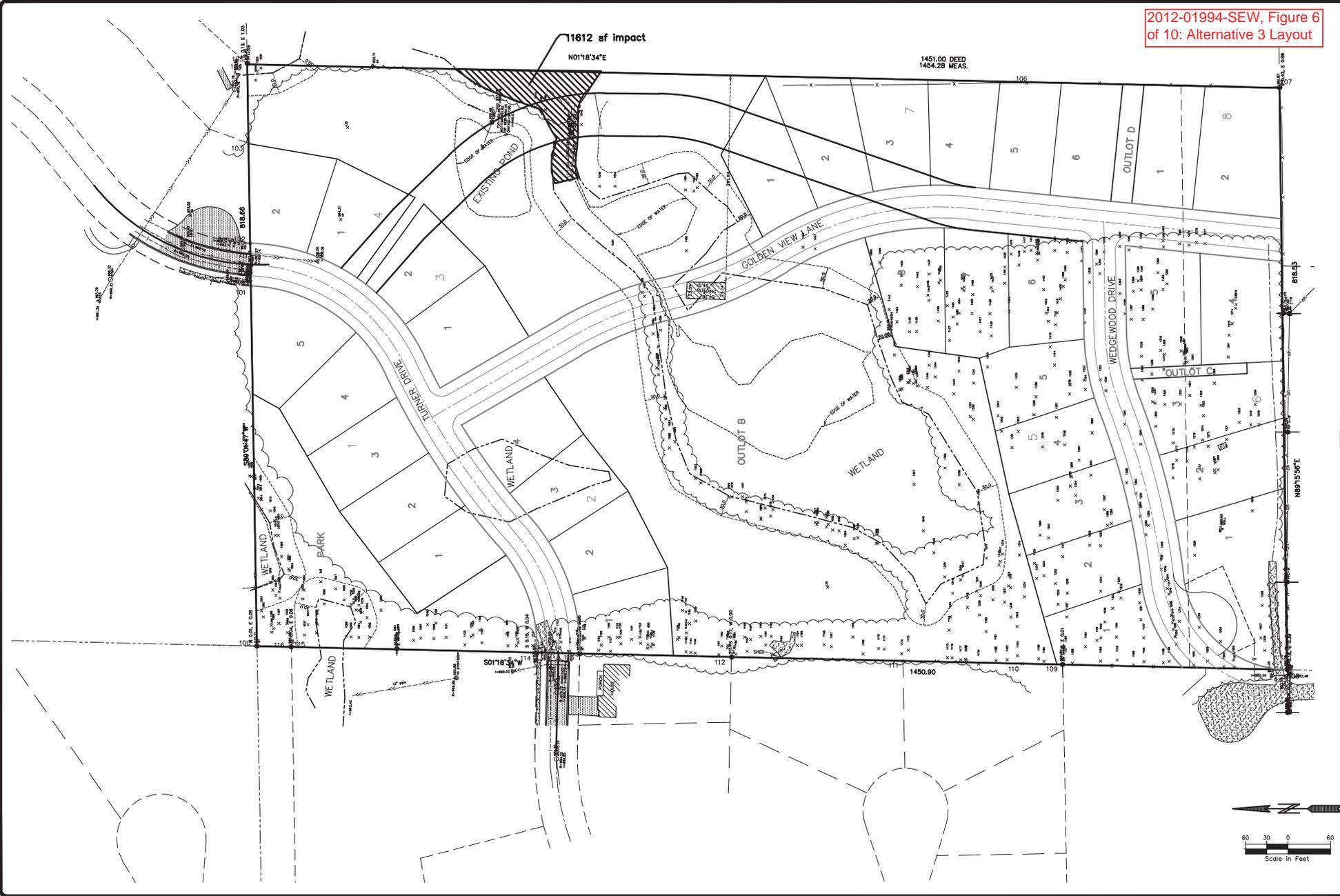
**WETLAND IMPACT**

**DR HORTON**  
 20860 KENBRIDGE CT STE. 100  
 LAKEVILLE, MN 55041

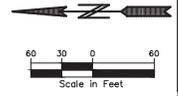
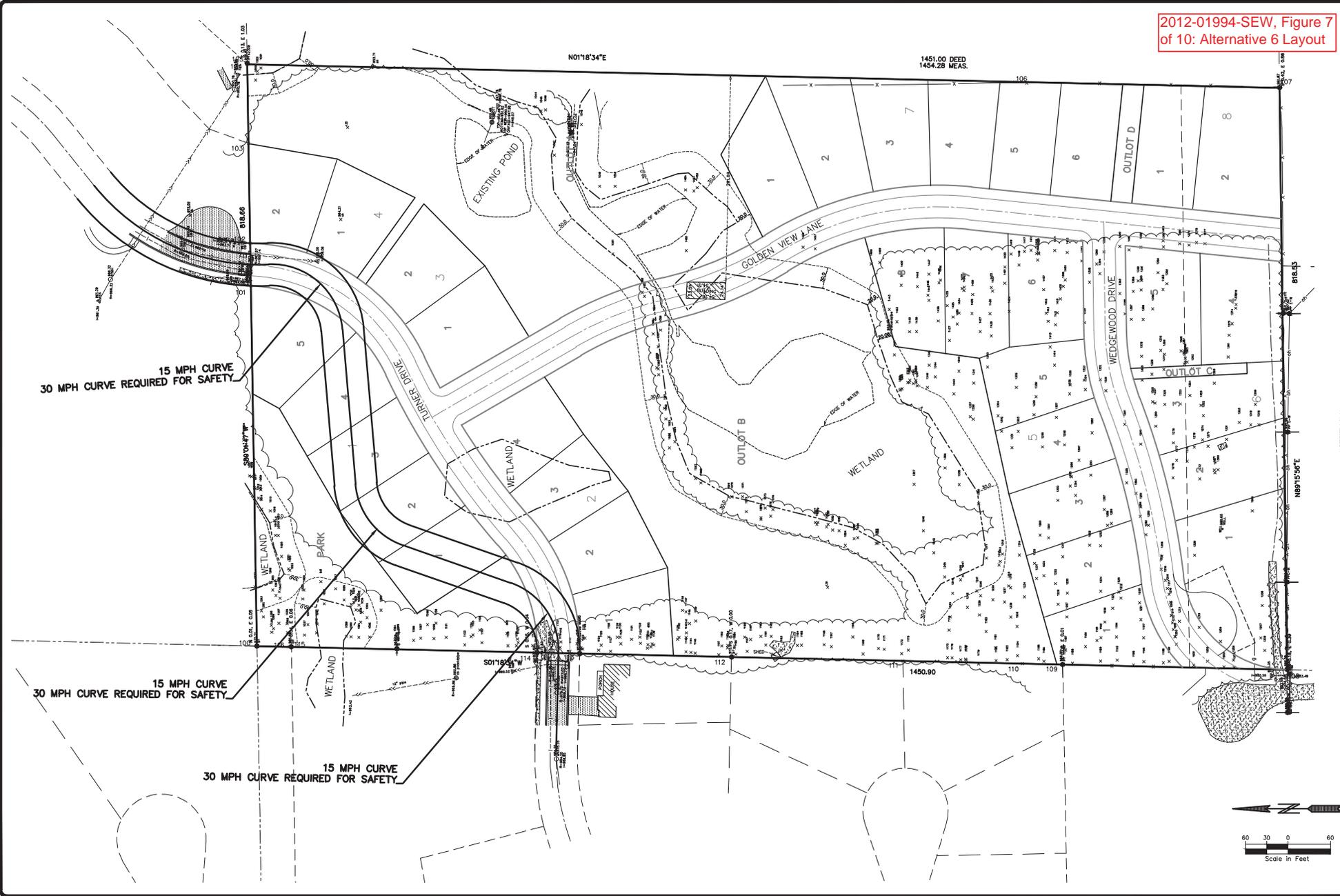
**HICKORY SHORES SOUTH**  
 PRIOR LAKE, MINNESOTA



2012-01994-SEW, Figure 6  
of 10: Alternative 3 Layout



2012-01994-SEW, Figure 7 of 10: Alternative 6 Layout



WETLAND OPTION - TURNER DRIVE  
HICKORY SHORES SOUTH

DATE: 08/07/14  
DRAWN BY: J. S. D.  
CHECKED BY: J. S. D.  
DESIGNED BY: J. S. D.

PROJECT NO: 2012-01994-SEW

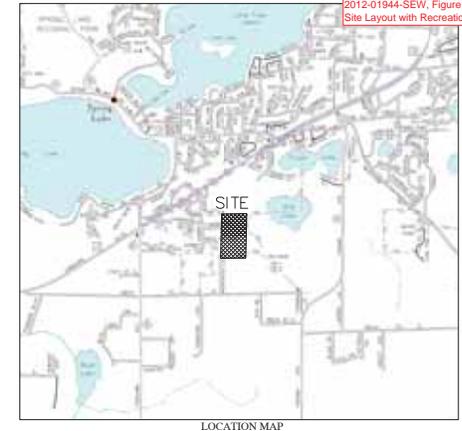
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Sheet 1 of 1

**LEGEND**

EXISTING	PROPOSED	FUTURE	DESCRIPTION
○	○	○	SANITARY MANHOLE
—	—	—	EXISTING SANITARY SEWER
—	—	—	PROPOSED SANITARY SEWER
—	—	—	FUTURE SANITARY SEWER
—	—	—	HYDRANT
—	—	—	GATE VALVE
—	—	—	REDUCER
—	—	—	EXISTING WATERMAIN
—	—	—	PROPOSED WATERMAIN
—	—	—	FUTURE WATERMAIN
—	—	—	CATCH BASIN
—	—	—	BEEHIVE
—	—	—	STORM MANHOLE
—	—	—	FLARED END SECTION
—	—	—	CONTROL STRUCTURE
—	—	—	EXISTING STORM SEWER
—	—	—	PROPOSED STORM SEWER
—	—	—	FUTURE STORM SEWER
—	—	—	SURMOUNTABLE CURB & GUTTER
—	—	—	B-STYLE CURB & GUTTER
—	—	—	RIBBON CURB & GUTTER
—	—	—	PHASE LINE
—	—	—	EASEMENT LINE
—	—	—	EXISTING 2' CONTOUR LINE
—	—	—	EXISTING 10' CONTOUR LINE
—	—	—	PROPOSED 2' CONTOUR LINE
—	—	—	PROPOSED 10' CONTOUR LINE
—	—	—	POND OUTLET LINE
—	—	—	POND HIGH WATER LINE
—	—	—	PROPOSED SPOT ELEVATION
—	—	—	EMERGENCY OVERFLOW
—	—	—	DELINEATED WETLAND LINE
—	—	—	FEMA FLOODPLAIN BOUNDARY
—	—	—	STANDARD EROSION CONTROL
—	—	—	HEAVY-DUTY EROSION CONTROL
—	—	—	TREE FENCE
—	—	—	RETAINING WALL
—	—	—	CONSERVATION AREA SIGN
—	—	—	WETLAND BUFFER SIGN
—	—	—	EX. CULVERT
—	—	—	EX. OVERHEAD UTILITY LINES
—	—	—	EX. UNDERGROUND TELEVISION LINE
—	—	—	EX. UNDERGROUND TELEPHONE LINE
—	—	—	EX. UNDERGROUND FIBER OPTIC LINE
—	—	—	EX. UNDERGROUND ELECTRIC LINE
—	—	—	EX. UNDERGROUND GAS LINE
—	—	—	EX. FENCE (BARBED WIRE)
—	—	—	EX. FENCE (CHAIN LINK)
—	—	—	EX. FENCE (WOOD)
—	—	—	EX. CAST IRON MONUMENT
—	—	—	EX. ELECTRIC BOX
—	—	—	EX. FLAG POLE
—	—	—	EX. NATURAL GAS METER
—	—	—	EX. HAND HOLE
—	—	—	EX. FOUND IRON PIPE
—	—	—	EX. JUDICIAL LAND MARK
—	—	—	EX. LIGHT POLE
—	—	—	EX. PK NAIL
—	—	—	EX. UTILITY POLE
—	—	—	EX. LAWN SPRINKLER VALVE
—	—	—	EX. LAWN SPRINKLER HEAD
—	—	—	EX. SEMAPHORE
—	—	—	EX. SERVICE
—	—	—	EX. TELEPHONE BOX
—	—	—	EX. TEST HOLE
—	—	—	EX. TELEVISION BOX
—	—	—	EX. SPIKE
—	—	—	EX. WATER WELL
—	—	—	EX. MONITORING WELL
—	—	—	EX. MAILBOX
—	—	—	EX. CONTROL POINT
—	—	—	EX. SIGN
—	—	—	EX. CLEANOUT
—	—	—	EX. SIGNIFICANT TREE
—	—	—	EX. TREE LINE
—	—	—	EX. GRAVEL SURFACE
—	—	—	EX. BITUMINOUS SURFACE
—	—	—	EX. CONCRETE SURFACE
—	—	—	SELECT BACKFILL MATERIAL
—	—	—	GRAVEL CONST. ENTRANCE

# HICKORY SHORES SOUTH UTILITY & STREET CONSTRUCTION PLANS PRIOR LAKE, MINNESOTA

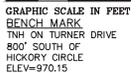


PREPARED BY PIONEER ENGINEERING, P.A.  
 KEITH A. WILLENBRING  
 PROFESSIONAL CIVIL ENGINEER  
 25504  
 REG. NO.  
 PETER J. HAWKINS  
 PROFESSIONAL LAND SURVEYOR  
 42299  
 REG. NO.  
 DEVELOPER  
 D.R. HORTON  
 20860 KENBRIDGE COURT, SUITE 100  
 LAKEVILLE, MN 55044  
 CONTACT: MIKE SUELL  
 952-985-7272

STORM WATER POLLUTION PREVENTION MANAGER  
 D.R. HORTON  
 20860 KENBRIDGE COURT, SUITE 100  
 LAKEVILLE, MN 55044  
 CONTACT: MIKE SUELL  
 612-366-3355 (MOBILE)  
 952-985-7272 (OFFICE)

- WORKING HOURS  
 7AM-7PM M-F  
 8AM-5PM SAT
- SHEET INDEX**
- UTILITY & STREETS COVER SHEET
  - OVERALL UTILITY PLAN
  - SANITARY SEWER & WATERMAIN
  - SANITARY SEWER & WATERMAIN
  - SANITARY SEWER & WATERMAIN
  - STORM SEWER
  - STREET CONSTRUCTION
  - STREET CONSTRUCTION
  - STREET CONSTRUCTION
  - BITUMINOUS TRAIL CONSTRUCTION
  - BITUMINOUS TRAIL CONSTRUCTION
  - CITY DETAILS
  - CITY DETAILS
  - EROSION & SEDIMENT CONTROL DETAILS

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I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota  
 Reg. No. 25504 Date: 08-15-2013

Name: Keith A. Willenbring  
 License No. 25504  
 Date: 08-15-2013

Revisions  
 1. 09-03-11 CITY COMMENTS  
 2. 05-11-14 CITY COMMENTS  
 3. 03-26-14 CITY COMMENTS

Date: 08-15-2013  
 Designed: KAW  
 Drawn: BNM

COVER SHEET

D.R. HORTON  
 20860 KENBRIDGE CT STE. 100  
 LAKEVILLE, MN 55044

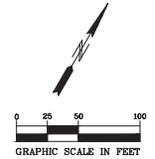
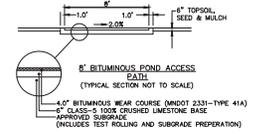
CITY PROJECT:DEV-2013-0009B 01-ENG-113155-SHEET-CVR

HICKORY SHORES SOUTH  
 PRIOR LAKE, MINNESOTA

1 OF 17

2012-01944-SEW, Figure 9 of 10:  
Recreational Trail between  
Wetlands 1 and 2

NOTE:  
FINAL DATE FOR PAVING BIT. BASE: NOV. 1  
FINAL DATE FOR PAVING BIT. WEAR: SEPT 30  
NO PAVING UNTIL AFTER SEASONAL ROAD  
RESTRICTIONS ARE REMOVED.



BENCH MARK  
TINH ON TURNER DRIVE  
800' SOUTH OF  
HICKORY CIRCLE  
ELEV=970.15



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I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Name: *Krista Williams*  
E.O.B.A. No. 25526 Date: 02-15-2013

Revisions:  
1. 09-03-11 CITY COMMENTS  
2. 02-11-14 CITY COMMENTS  
3. 03-26-14 CITY COMMENTS

Date: 06-15-2013  
Designed: KAW  
Drawn: BNM

**BITUMINOUS TRAIL CONSTRUCTION**

**D.R. HORTON**  
20860 KENBRIDGE CT STE. 100  
LAKEVILLE, MN 55041

CITY PROJECT: DEV-2013-0009B 01-ENG-113155-SHEET-334  
**HICKORY SHORES SOUTH**  
PRIOR LAKE, MINNESOTA  
13 OF 17

NOTE:  
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 NO PAVING UNTIL AFTER SEASONAL ROAD RESTRICTIONS ARE REMOVED.

