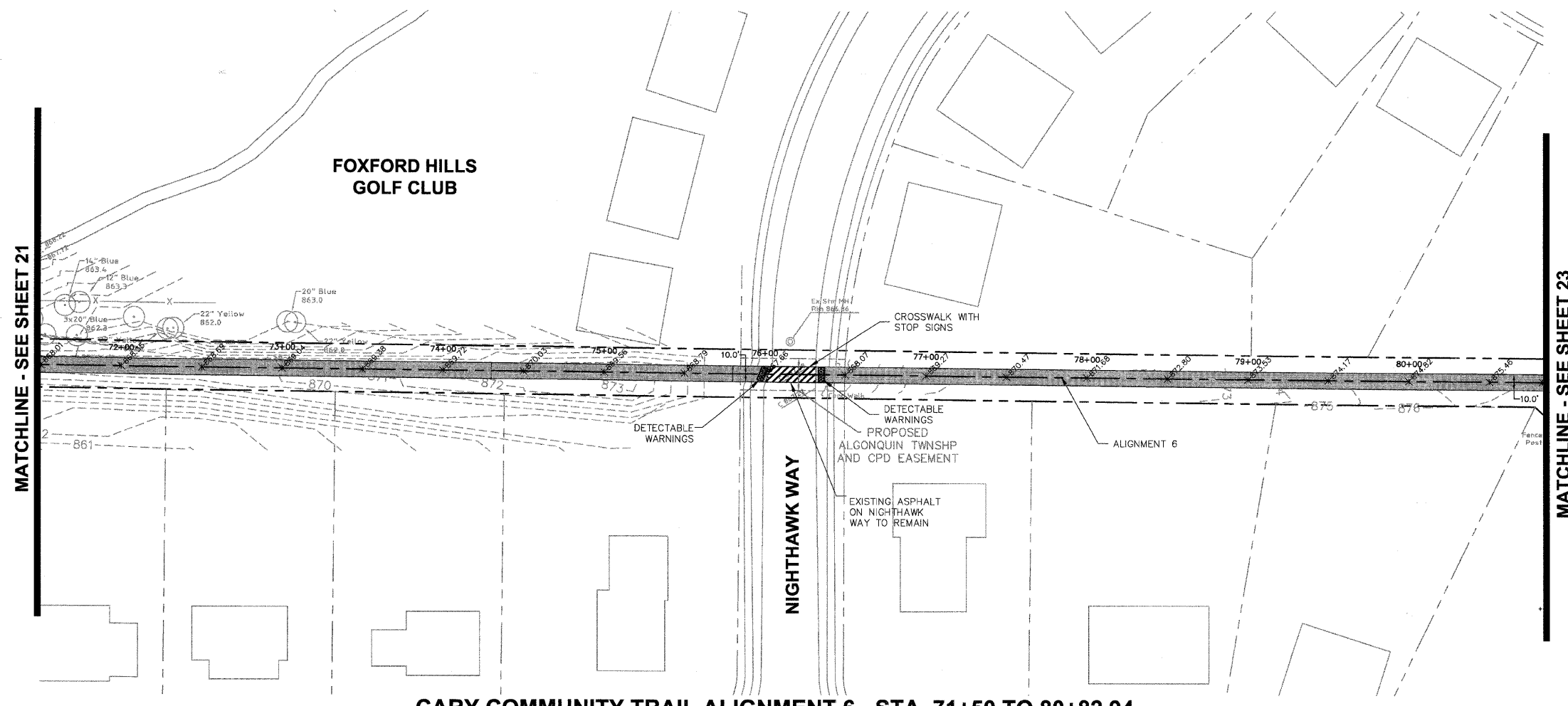
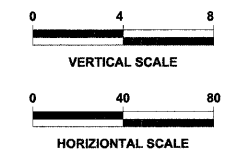
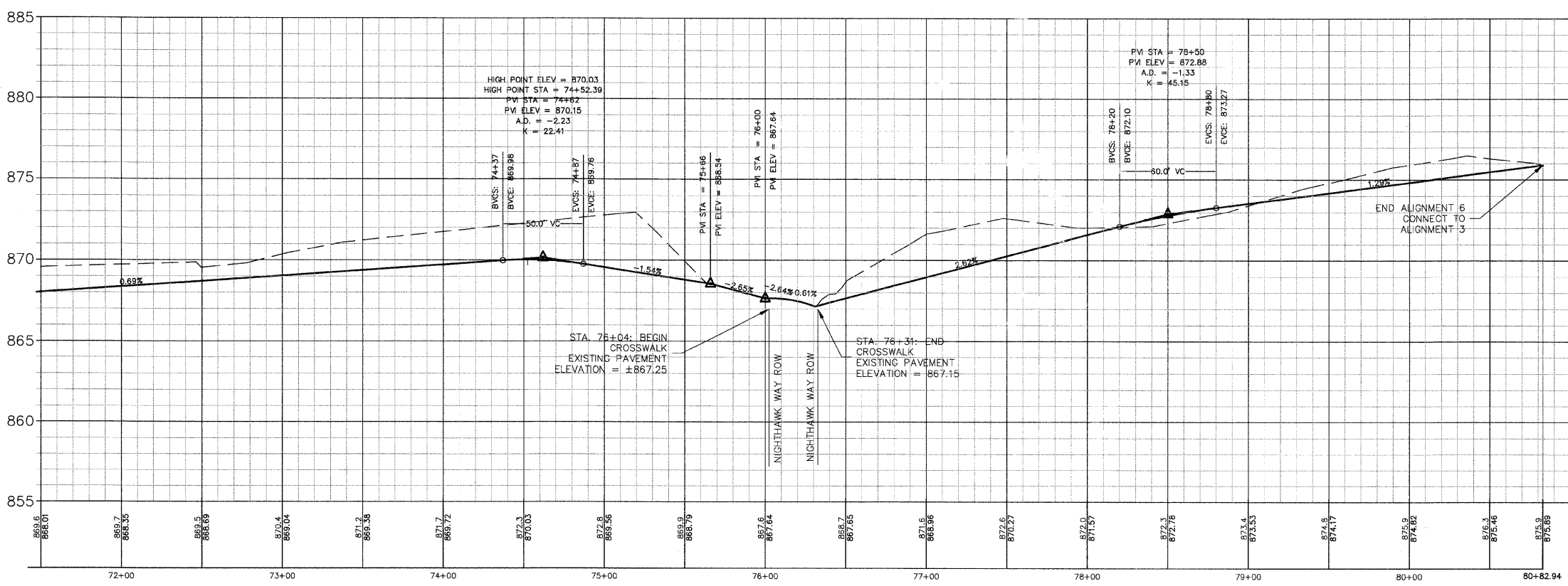
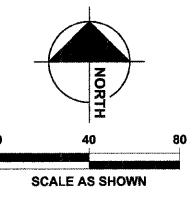


**PLAN LEGEND:**

- PROPOSED SPOT ELEVATIONS
- PROPOSED BIKE TRAIL
- PROPOSED AGGREGATE SHOULDER
- PROPERTY LINE



**CARY COMMUNITY TRAIL ALIGNMENT 6 - STA. 71+50 TO 80+82.94**



**DATUM CONVERSION FOR CARY COMMUNITY BIKE TRAIL TOPOGRAPHIC SURVEY**

THE DATUM USED FOR THE CARY COMMUNITY BIKE TRAIL TOPOGRAPHIC SURVEY PERFORMED BY HAEGER ENGINEERING, LLC DATED FEB. 2, 2008 ("THE TOPO") WAS BASED ON MH 46 ON PAGE 25 OF 38 ON THE MANHARD CONSULTING LTD. RECORD DRAWINGS FOR FOXFORD HILLS SUBDIVISION - PHASE 1 DATED MARCH 8, 2007. THIS DATUM WAS REQUESTED TO BE USED IN ORDER FOR THE TOPO TO STAY CONSISTENT WITH PROJECTS DONE IN THE AREA (FOXFORD HILLS). THE PUBLISHED RECORD ELEVATION FOR MH 46 WAS 801.45 FEET. THIS ELEVATION WAS USED TO ESTABLISH THE ELEVATIONS REPORTED BY THE TOPO. IT IS UNKNOWN TO HAEGER ENGINEERING, LLC AS TO THE SOURCE BENCHMARK OR PUBLISHED DATUM THAT WAS ORIGINALLY USED FOR THE RECORD DRAWINGS OF FOXFORD HILLS SUBDIVISION PROJECT. DUE TO THE FACT HAEGER ENGINEERING, LLC WAS NEVER SUPPLIED THIS INFORMATION HOWEVER, HAEGER ENGINEERING, LLC DID CHECK INTO MH 46 ELEVATION WITH ITS RTK GPS UNIT THAT IS BASED ON KANSA COMPANYS RTK CORS REFERENCE NETWORK USING NAVD 88 (GEOID 03) AS ITS REFERENCE DATUM. HAEGER ENGINEERING, LLC FOUND MH 46 ELEVATION (861.45) TO BE 0.11' HIGHER THAN THAT MEASURED WITH THE GPS EQUIPMENT (861.34) USING NAVD 88 (GEOID 03) AS THE REFERENCE DATUM. BASED ON THE GPS MEASURED HEIGHT THE CONVERSION TO NAVD 23 ELEVATION FOR MH 46 USING NAD VERTICAL CONVERSION WOULD BE 861.52 (0.07' HIGHER THAN PUBLISHED MH 46 ELEVATION). THEREFORE DUE TO VERTICAL ACCURACY OF THE GPS RTK MEASUREMENT (PLUS OR MINUS 0.02') IT IS UNKNOWN TO HAEGER ENGINEERING, LLC AS TO THE TRUE PUBLISHED DATUM USED FOR "THE TOPO" WITH OUT BEING SUPPLIED THE SOURCE BENCHMARK OR CONTROL INFORMATION THE FOXFORD HILLS SUBDIVISION WAS BUILT ON. BASED ON HAEGER ENGINEERING, LLC GPS RTK MEASUREMENT OF MH 46 THE DATUM CONVERSION FOR "THE TOPO" IS AS FOLLOWS:

NAVD 88 (GEOID 03)-LOWER TOPO 0.11' (WITH AN ACCURACY OF PLUS OR MINUS 0.05')  
 NAVD 23-RAISE TOPO 0.07' (WITH AN ACCURACY OF PLUS OR MINUS 0.05')

**BENCHMARKS**

**SOURCE BENCHMARK**  
 DESCRIPTION: MANHOLE #46 FROM THE ASBUILT RECORD DRAWINGS BY MANHARD CONSULTING LTD DATED 3-8-07 FOR THE FOXFORD HILLS SUBDIVISION-PHASE 1 IN THE VILLAGE OF CARY, ILLINOIS.  
 LOCATION: 120' NORTHEAST OF THE OAKMAN DRIVE AND PARKSTONE DRIVE INTERSECTION ON OAKMAN DRIVE.  
 ELEVATION: 861.45

**SITE BENCHMARKS**  
 HL CP #100  
 DESCRIPTION: IRON PIPE  
 LOCATION: 100' EAST OF THE INTERSECTION OF 1ST AND THREE OAKS ROAD, 564' NORTH OF THE NORTH SIDE OF THREE OAKS ROAD, 31' NORTHEAST OF STORM MANHOLE, AND 20' NORTHEAST OF POWER POLE.  
 ELEVATION: 854.94

HL CP #1  
 DESCRIPTION: "P" NAIL IN EDGE OF PAVEMENT.  
 LOCATION: 582' WEST OF THE INTERSECTION OF RAMSON BRIDGE ROAD AND MINN TRAIL, 45' WESTWEST OF TREE, 27' SOUTHWEST OF IRON ROD, AND 10' SOUTH OF CONCRETE WALK.  
 ELEVATION: 856.87

HL CP #6  
 DESCRIPTION: RAIL ROAD SPIKE  
 LOCATION: NORTHWEST CORNER OF INTERSECTION OF CRYSTAL LAKE ROAD AND RAMSON BRIDGE ROAD, 22' SOUTHWEST OF FENCE CORNER, 18' SOUTHWEST OF POWER POLE, AND 11' NORTHWEST OF PAVEMENT.  
 ELEVATION: 823.23



This document, together with the concepts and designs presented herein, is intended only for the specific purpose and site for which it was prepared. Reuse or modification of this document for any other project without the written consent of the engineer is prohibited. The engineer and its staff shall not be held responsible for any errors or omissions in this document.

DESIGNED	JWH	REVISED	
DRAWN	LES	REVISED	
CHECKED	JMM	REVISED	
DATE	10/02/2009	REVISED	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CARY PARK DISTRICT**  
**CARY COMMUNITY TRAIL**

**TRAIL ALIGNMENT**  
**PLAN & PROFILE**  
**STA. 71+50 TO STA. 80+82.94**

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
06-P4001-00-BR	MCHENRY	64	22
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 63333	