

**FOX RIVER BRIDGES -- STEARNS ROAD CORRIDOR
VISION DOCUMENT**

Revision Date: February 5, 2004

(CBBEL Job Number 99-51)



CHRISTOPHER B. BURKE ENGINEERING, LTD.

9575 West Higgins Road

Suite 600

Rosemont, Illinois 60018-4920

Tel (847) 823-0500 FAX (847) 823-0520

TABLE OF CONTENTS

INTRODUCTION

DISCUSSION OF SENSITIVE ENVIRONMENTAL AND MITIGATION SITES

LIST OF EXHIBITS:

EXHIBIT 1 -- ENVIRONMENTAL GREENWAY CORRIDOR PLAN

EXHIBIT 2 -- SOUTH ELGIN SEDGE MEADOW

EXHIBIT 3 -- SAND HILL ANNEX

EXHIBIT 4 -- McLEAN BLVD FEN PRESERVE

EXHIBIT 5 -- DIRECT IMPACT MITIGATION SITE

EXHIBIT 6 -- GREENWAY CORRIDOR SECTION

APPENDIX A: SUMMARY OF MANAGEMENT, RESTORATION, AND ANTICIPATED COSTS

INTRODUCTION

The Record of Decision for the Fox River Bridges Crossings included several environmental commitments to be fulfilled by the Kane County Division of Transportation, with regard to further environmental mitigation for the Stearns Road Corridor. One of those commitments was to facilitate work by the Forest Preserve District of Kane County to develop long-term goals for the restoration and management of properties bought, where the disposition of the properties may or may not be directly related to either the roadway improvements or mitigation for direct impacts to environmental resources in the roadway corridor. These goals and objectives have been loosely termed a "vision document", and this report presents the vision of the Forest Preserve District of Kane County for the long-term management and maintenance of these properties.

The Forest Preserve District's vision is conveyed in the attached six exhibits. Exhibit 1 includes an overall view of the Environmental Greenway Corridor, showing its connectivity and the relationship of the major properties addressed in this document to the Greenway Corridor, and to other properties, which the Forest Preserve District will also maintain and manage, but whose disposition is more directly influenced by either the roadway or direct mitigation for roadway impacts. Exhibit 6 includes Exhibits 2 – 4, showing in more detail the three most significant sensitive environmental sites, which are called the McLean Boulevard Fen, the South Elgin Sedge Meadow, and the Sand Hill Annex. The Environmental Impact Statement refers to the McLean Boulevard Fen as Day's Fen, but the FPD prefers McLean Boulevard as the title going forward. Exhibit 5 shows, in general, the concept for the site, which is most suitable for direct mitigation for wetland fill, fill in the regulatory floodplain/floodway, and management of stormwater runoff for both quantity and quality. Appendix A contains tables that enumerate and quantify both the short-term and long-term maintenance or restoration tasks and the associated costs. In all, the Environmental Roadway Corridor will provide to the Forest Preserve District, at no cost:

- 216 acres total of open space
- Of the total, 116 acres is considered Environmentally Sensitive

An integral part of the Greenway Corridor Plan is interconnecting the major environmental sites within the Corridor both to promote passage of wildlife and people. Opportunities to facilitate wildlife movement while reducing wildlife/vehicle interaction will be further explored beyond concept in Phase II design. The multi-use trail includes:

- Seven miles of multi-use trails built by KDOT and transferred to KCFPD;

- Two new multi-use Trail Bridges over highways and one over the Fox River built by KDOT and transferred to KCFPD.

Further, discussion of improvements at each of the major environmental sites is included below.

DISCUSSION OF SENSITIVE ENVIRONMENTAL AND MITIGATION SITES

Exhibit 2, the **McLean Boulevard Fen** area (known in the EIS as Day's Fen), is a site whose overall environmental mitigation value rests with the need to protect a sensitive groundwater recharge area for the McLean Boulevard Fen. The Forest Preserve District already owns parts of the McLean Boulevard Fen area. However, its viability long-term is highly threatened by development activities, which are encroaching more and more on recharge areas for the seep. Earlier studies by the Illinois State Water Survey helped identify the existence of two different aquifers, one of them shallow and one of them deep, which contribute to the seepage along the base of the bluff that constitutes the Fen. The upper aquifer is highly threatened: much of its area has already been mined and other parts of it have been covered by single-family residential development. The majority of the purchase was dictated by the need to protect this sensitive upper aquifer or risk losing the Fen in aerial extent. Also, this area is a valuable destination point along the bicycle trail, which enhances the connectivity of the overall Greenway Corridor. Other activities at this site include the establishment of a bicycling destination, including parking and other facilities, which contribute both to the maintenance and management activities of this parcel. The immediate construction/restoration work includes the following:

- Enhance and protect **11.6 acres** of predominantly Fen vegetation
- Restore **36.7 acres** of mesic prairie in a savanna mosaic
- Restore **8.5 acres** of dry-mesic prairie with an oak/hazel savanna
- Provide a **10 to 20 space car parking lot** and bicycle destination point
- Provide vegetative screening from adjacent industrial land use

The **South Elgin Sedge Meadow**, Exhibit 3, is a sensitive environmental site adjacent to the majority of the high quality South Elgin Sedge Meadow area. The highest quality environmental resource is on land still under private ownership, although it is currently being negotiated for dedication as an Illinois Nature Preserve. The restoration activities on this site include creation of an accessible

natural environment, and reversal of certain anthropogenic activities related to its former use as single-family homes. The immediate construction/ restoration work includes the following:

- Create a native vegetation buffer of **4.8 acres**
- Manage and enhance habitat value of existing **5.8 acre** pond/wetland complex
- Remove turf grass and restore **11 acres** mesic prairie in a savanna matrix
- Create a buffer of sumac along railroad
- Construct a bicycle destination point

Exhibit 4, the **Sand Hill Annex**, illustrates a mitigation site that provides continuity for the Greenway and Environmental Corridor. There, activities are mainly re-establishment of certain ecological communities, including a Black Oak Hill community. The name is derived from the Sand Hill Prairie community to be restored. The immediate construction/restoration activities for this site include:

- Restore an **8.4 acre** oak community
- Restore **10.0 acres** of sand hill prairie

The area shown on Exhibit 5 labeled "**The Direct Impact Mitigation Site**" is a property currently utilized to grow and market landscaping materials by Midwest Groundcover. This proposed plan for this property includes a number of existing, enhanced, restored, and created environmental resources whose design character is driven by other resource agency requirements. The vision document includes post construction and permit sign-off, maintenance, and management of the direct impacts mitigation site. This site will include wetland mitigation for direct impacts from the roadway project, as well as the ongoing maintenance activities associated with stormwater management ponds. The impacts to be mitigated at this site are:

1. Create (restore) 7.8 acres of impacted wetland at 1.5 to 1 for a total of **11.7 acres** of new wetland.
2. Provide 12.8 acre-feet of compensatory storage for floodplain fill.

After establishment and acceptance by permitting authorities, all properties not containing roadway facilities are to be turned over to the Forest Preserve District, at no cost, with the improvements and the first five years management activities funded by the roadway agencies.

APPENDIX A:

**SUMMARY OF MANAGEMENT, RESTORATION, AND
ANTICIPATED COSTS**

**STEARNS CORRIDOR VISION PLAN
SUMMARY OF MANAGEMENT, RESTORATION AND ANTICIPATED COSTS
April 24, 2003**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
OVERALL TRAIL SYSTEM MARKING				
1. Green Posts – Emergency Numbers (@ 1/2 mile intervals)	Each	10	\$300.00	\$3,000.00
2. Trail Designators – Kane County Forest Preserve District (@ 1/2 mile intervals)	Each	10	\$400.00	\$4,000.00
3. MOW 3-4 Feet Along Side Trail (5 mile length) (Buffer 10.78 acres)	N/A	N/A	N/A	\$0.00
4. 10 Ft Wide Bike Trail (5 mile length) (Buffer 10.78 ac)	N/A	N/A	N/A	\$0.00
5. 20-30 Foot Wide ROW for Trail (calculated at 30')	N/A	N/A	N/A	\$0.00
6. Need Typical Section – Kerry Leigh to Develop (attached)	N/A	N/A	N/A	\$0.00
7. No Provision for Horse Trailer Parking	N/A	N/A	N/A	\$0.00
Overall Trail System Marking Subtotal				\$7,000.00
Contingency (15%)				\$1,050.00
Overall Trail System Marking TOTAL				\$8,050.00
TRI-COUNTY GATEWAY				
1. Tie into Tri-County Park Trails/System	N/A	N/A	N/A	\$0.00
2. Trail Head (10 – 12 Parking Spaces) of Crushed Limestone	Sq. Yd.	4165	\$20.00	\$83,300.00
2a. Earth Excavation	Cu. Yd.	2780	\$30.00	\$83,400.00
3. Non-flush Toilet - No Elec. or Water	Lump Sum	1	\$15,000.00	\$15,000.00
4. Interpretive Signage – Map Board	Lump Sum	1	\$2,000.00	\$2,000.00
5. Trail-Head Native Landscape Plantings (2 1/2 " plugs on 2' c/s w/s/straw mulch)	Acres	0.52	\$65,000.00	\$33,800.00
6. ADA Accessible	N/A	N/A	N/A	\$0.00
7. Well Drilled/Potable Water	N/A	N/A	N/A	\$0.00
8. FPD Design/Create Water Connection	Each	1	\$4,000.00	\$4,000.00
Tri-County Gateway Subtotal				\$221,500.00
Contingency (15%)				\$33,225.00
Tri-County Gateway TOTAL				\$254,725.00
SOUTH ELGIN SEDGE MEADOW				
Overall				
Initial				
1. Drain Tile/Soil Evaluation (see below)	N/A	N/A	N/A	\$0.00
2. Access from Trail Only – No Vehicular Access, except for maintenance vehicles	N/A	N/A	N/A	\$0.00
3. Native Revegetation (see separate areas below)	N/A	N/A	N/A	\$0.00
4. (Bike Parking/Internal Pedestrian Trails) Bike Racks with 8 spaces each	Each	3	\$2,000.00	\$6,000.00
5. below)	N/A	N/A	N/A	\$0.00
6. No Beaver Management	N/A	N/A	N/A	\$0.00
7. (Mown walking trail with a) boardwalk section (40'x5')	Lin. Ft.	40	\$160.00	\$6,400.00
8. Internal Bike Trail - Parking	Sq. Yd.	1,911	\$20.00	\$38,220.00
8a. Earth Excavation (trail)	Cu. Yd.	1,275	\$30.00	\$38,250.00

STEARNS CORRIDOR VISION PLAN
SUMMARY OF MANAGEMENT, RESTORATION AND ANTICIPATED COSTS
 April 24, 2003

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
Long Term				
9. Invasive Species Control (Herbaceous; selective 4 events - see below)	N/A	N/A	N/A	\$0.00
Buffer Treatment (Includes Areas 1, 2 & 3 and portions of Area 4) (7.3 acres)				
Area 1 (Sesuvium Reintroduction) (within Buffer 1.8 acres)				
Initial				
1. Groundwater Evaluation to Establish Hydrology	Each	1	\$6,500.00	\$6,500.00
2. Minor Excavation (average depth 4')	Cu. Yd.	720	\$40.00	\$28,800.00
3. Drain Tile Removal	Acre	1.8	\$2,000.00	\$3,600.00
4. Herbicide Turf	Acre	1.8	\$1,500.00	\$2,700.00
5. Reintroduce native species (seed-no mulch)	Acre	1.8	\$5,200.00	\$9,360.00
Long Term				
6. Fire Management (each event)	Acre	1.8	\$1,500.00	\$2,700.00
7. Invasive Species Control	Acre	1.8	\$2,600.00	\$4,680.00
Area 2 (within Buffer 3.0 acres)				
Initial				
1. Drain Tile Evaluation	Acre	3	\$2,500.00	\$7,500.00
2. Turf Herbicide	Acre	3	\$1,300.00	\$3,900.00
3. Plant Native Species (seed-no mulch)	Acre	3	\$5,200.00	\$15,600.00
4. Similar to Area 1	N/A	N/A	N/A	\$0.00
Long Term				
5. Fire Management (each event)	Acre	3	\$1,200.00	\$3,600.00
6. Invasive Species Control	Acre	3	\$2,600.00	\$7,800.00
Area 3 (Mesic Prairie Reintroduction) (within Buffer 0.93 acres)				
Initial				
1. Herbicide Turf	Acre	0.93	\$1,300.00	\$1,209.00
2. Plant Native Species (seed-no mulch)	Acre	0.93	\$5,200.00	\$4,836.00
Long Term				
3. Fire Management (each event)	Acre	0.93	\$1,500.00	\$1,395.00
4. Invasive Species Control	Acre	0.93	\$2,600.00	\$2,418.00
Area 4 (Mesic Prairie - Savanna Matrix) (within Buffer 1.56 acres)				
Initial				
1. Herbicide Turf	Acre	9.56	\$1,300.00	\$12,428.00
2. Plant Native Species (seed-no mulch)	Acre	9.56	\$5,200.00	\$49,712.00
3. Woody Exotic Species Removal	Acre	9.56	\$5,200.00	\$49,712.00
4. Native Shrub Reintroduction (@ 100 per acre)	Acre	9.56	\$6,500.00	\$62,140.00
Long Term				
5. Fire Management (each event)	Acre	9.56	\$750.00	\$7,170.00
6. Invasive Species Control	Acre	9.56	\$2,600.00	\$24,856.00
Area 5 (Ponds & Wetlands)				
Initial				
1. events	Acre	5.8	\$5,500.00	\$31,900.00
2. Limited Live Plant Reintroduction	Each	2,000	\$5.50	\$13,000.00

**STEARNS CORRIDOR VISION PLAN
SUMMARY OF MANAGEMENT, RESTORATION AND ANTICIPATED COSTS
April 24, 2003**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
3. Herbiciding (See #1 above)	N/A	N/A	N/A	\$0.00
4. Plant Native Species (seed-no mulch)	Acre	5.8	\$5,200.00	\$30,160.00
5. No Beaver Management	N/A	N/A	N/A	\$0.00
Long Term				
6. Fire Management (each event)	Acre	5.8	\$800.00	\$4,640.00
7. Consider the Use of Beetles for Purple Loosestrife Control (no conclusion drawn)	Acre	5.8	\$2,600.00	\$15,080.00
8. Invasive Species Control	Acre	5.8	\$2,600.00	\$15,080.00
Area 6 (Limestone Trail & Bike Parking)				
1. Landscaping at Bike Access - Native Decorative/Planting along access trail and bike park (2 1/2' plugs on 2' c/s w/straw mulch) (15 ft wide buffer)	Acre	0.44	\$65,000.00	\$28,600.00
Area 7 (Buffer/Screen from UPRR)				
1. Buffer of Sumac Along UPRR. (25 ft. wide planted 7' c/s, or 3000 per acre)	Acre	1.02	\$100,000.00	\$102,000.00
2. Need Plat for ROLOFF to Determine Where Buffer Occurs	N/A	N/A	N/A	\$0.00
South Elgin Sedge Meadow Subtotal				
Contingency (15%)				
South Elgin Sedge Meadow TOTAL				
\$641,948.00				
\$96,291.90				
\$738,237.90				
DIRECT IMPACT MITIGATION SITE (MIDWEST GROUND COVERS - 66.9)				
Initial				
1. Compensatory Storage	N/A	N/A	N/A	\$0.00
2. Remove Landscape Pads (excavate limestone and haul away) (\$35.00 cu yd.)	N/A	N/A	N/A	\$0.00
3. Wetland Mitigation	N/A	N/A	N/A	\$0.00
4. Maintenance Access	N/A	N/A	N/A	\$0.00
5. Access Control (Trail Safety) Management Will Come from Mitigation Design	N/A	N/A	N/A	\$0.00
Long Term				
6. Fire Management (each event)	Acre	66.9	\$350.00	\$23,415.00
Direct Impact Mitigation Site Subtotal				
Contingency (15%)				
Direct Impact Mitigation Site TOTAL				
\$23,415.00				
\$3,512.25				
\$26,927.25				
ROUTE 31 TO MCLEAN BOULEVARD				
Initial				
1. Limestone Trail Connection	Sq. Yd	1099	\$20.00	\$21,980.00
1a. Earth Excavation (trail)	Cu. Yd	735	\$30.00	\$22,050.00
2. Wildlife Corridor	N/A	N/A	N/A	\$0.00
3. Spur onto Proposed Subdivision With a Destination Point Near Pond (see #1 above)	N/A	N/A	N/A	\$0.00
4. (Trailside Minimal Mowing) with Dry Prairie Plantings (2 1/2" plugs on 2' c/s w/straw mulch)	Acre	0.34	\$65,000.00	\$22,100.00
5. Dry Prairie Without Soil Amendment (seed-no mulch) (alternate to #4 above)	Acre	0.34	\$5,200.00	\$1,768.00
6. Safety Rail Fencing - Aluminum Guard Rail (n - s combined)	N/A	N/A	N/A	\$0.00
Route 31 to McLean Boulevard Subtotal				
\$67,898.00				

**STEARNS CORRIDOR VISION PLAN
SUMMARY OF MANAGEMENT, RESTORATION AND ANTICIPATED COSTS
April 24, 2003**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
Contingency (15%)				\$10,184.70
Route 31 to McLean Boulevard TOTAL				\$78,082.70
MCLEAN BOULEVARD FEN				
Initial				
1. Parking (10-20 spaces)	Sq. Yd.	4165	\$20.00	\$83,300.00
1a. Earth Excavation	Cu. Yd.	2780	\$30.00	\$83,400.00
2. Toilet Facility	Each		\$0.00	\$0.00
3. Potable Water – Well Drill (South Eigin water possible)	Each	1	\$4,000.00	\$4,000.00
4. Kiosk – with Map Board	N/A	N/A	\$0.00	\$0.00
5. Portion ADA Accessible	Acre	1.5	\$100,000.00	\$150,000.00
6. Screening Plantings Along Industrial Park on NW Part of Project (25' wide)	N/A	N/A	\$0.00	\$0.00
7. above	N/A	N/A	\$0.00	\$0.00
8. Plantings in Tall and Short Grass Prairie (seed-no mulch) (see areas below)	N/A	N/A	\$0.00	\$0.00
9. Soils/Drain Tile Investigation	Acre	51.25	\$800.00	\$41,000.00
10. Establish a Management Agreement with ComEd (CE)	N/A	N/A	\$0.00	\$0.00
11. Also Trail Access on CE Land	N/A	N/A	\$0.00	\$0.00
12. Need to Establish Property Boundaries by Plat	N/A	N/A	\$0.00	\$0.00
13. Parking Area Planting	Acre	0.52	\$65,000.00	\$33,800.00
Long Term				
14. Trail Head Access – Interpretive Signage	Each	5	\$2,000.00	\$10,000.00
15. above	N/A	N/A	\$0.00	\$0.00
16. Mowed Path Internal Trail System	Lin. Ft.	240	\$160.00	\$38,400.00
17. Boardwalk (240' x 5')				
Area 1 (FEN)				
Initial				
1. Supplemental Native Species Seeding (no mulch)	Acre	6	\$5,200.00	\$31,200.00
2. Woody Invasive Species Removal	Acre	6	\$5,200.00	\$31,200.00
3. Fence Removal (Lin. Ft. assumed)	Lin. Ft.	1000	\$26.00	\$26,000.00
4. Groundwater Management	N/A	N/A	\$0.00	\$0.00
Long Term				
5. Fire Management (each event)	Acre	6	\$800.00	\$4,800.00
6. Invasive Species Control (herbaceous selective - 4 events)	Acre	6	\$2,600.00	\$15,600.00
Area 2 (FEN Reintroduction)				
Initial				
1. Woody Invasive Species Removal/Management	Acre	5.6	\$5,200.00	\$29,120.00
2. Herbicide (Reed Canary) and other herbaceous weeds (selective)	Acre	5.6	\$2,600.00	\$14,560.00
3. Groundwater Management	N/A	N/A	\$0.00	\$0.00
4. Re-introduce Native Species (seed-no mulch)	Acre	5.6	\$5,200.00	\$29,120.00
Long Term				
5. Fire Management (each event)	Acre	5.6	\$800.00	\$4,480.00
Area 3 (Mesic Prairie – Savanna Mosaic – To Elevation 795):				
Initial				

**STEARNS CORRIDOR VISION PLAN
SUMMARY OF MANAGEMENT, RESTORATION AND ANTICIPATED COSTS
April 24, 2003**

ITEM	UNIT	QUANTITY	UNIT COST	TOTAL
1. Remove hedgerow except Oaks above Elevation 795 (clear & grub)	Acre	1	\$6,000.00	\$6,000.00
2. Woody Invasive Species Removal	Acre	35.65	\$1,000.00	\$35,650.00
3. Supplemental Native Seeding (no mulch)	Acre	35.65	\$5,200.00	\$185,380.00
Long Term				
4. Canada Thistle, Teasel Management (Herbaceous, selective - 4 events)	Acre	35.65	\$2,600.00	\$92,690.00
5. Fire Management (each event)	Acre	35.65	\$500.00	\$17,825.00
Area 4 (Dry-Messic Prairie - Same as 3 but Above Elev. 795 ft.)				
Initial				
1. Oak and Hazel Reintroduction (@ 200 per acre seeding size)	Acre	8.5	\$6,500.00	\$55,250.00
2. Remove hedgerow (clear & grub)	Acre	1.5	\$6,000.00	\$9,000.00
3. Install Native Prairie Seed (no mulch)	Acre	8.5	\$5,200.00	\$44,200.00
Long Term				
4. Manage for Grassland Birds (Fire Management - each event)	Acre	8.5	\$800.00	\$6,800.00
5. White Sweet Clover Control (mow 4 times - 2 seasons)	Acre	8.5	\$1,500.00	\$12,750.00
McLean Boulevard Fen Subtotal				\$1,095,525.00
Contingency (15%)				\$164,328.75
McLean Boulevard Fen TOTAL				\$1,259,853.75
SAND HILL ANNEX				
Initial				
1. Excavate & Remove Road/Buildings	N/A	N/A	N/A	\$0.00
2. Hill's Oak/Black Oak Community Restoration (trees) (Area 8) (mixed age)	Acre	8.43	\$8,000.00	\$67,440.00
3. Sand Hill Prairie Restoration (seed)	Acre	10.85	\$6,000.00	\$65,100.00
4. Remove Woody Invasive Species	Acre	8.43	\$5,200.00	\$43,836.00
5. Herbicide Turf	Acre	19.3	\$1,300.00	\$25,090.00
6. Install Oak Understory (seed)	Acre	8.43	\$6,000.00	\$50,580.00
Long Term				
7. Herbaceous Selective Herbicide (4 events)	Acre	19.3	\$2,600.00	\$50,180.00
8. Fire Management (each event)	Acre	19.3	\$550.00	\$10,615.00
Sand Hill Annex Subtotal				\$312,841.00
Contingency (15%)				\$46,926.15
Sand Hill Annex TOTAL				\$359,767.15
OVERALL TOTAL				\$2,725,643.75
DESIGN/ENGINEERING (8%)	Lump Sum			\$218,051.50