

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of the Wal-Mart Corporation (WMC), authorization for the incidental take of the State listed Sandhill crane (*Grus canadensis*) and Blanding's turtle (*Emydoidea blandingii*) in McHenry County, Illinois [associated with the Wal-Mart Development Project in Johnsburg, Illinois - Store #1377-04] is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of the Wal-Mart Center in McHenry County, Illinois.

Wal-Mart Stores, Inc. ("Wal-Mart") proposes to construct an approximately 181,163 square foot building with approximately 856 parking spaces, covering approximately 22.5 acres of an approximate 63.6-acre site (the "Site") located in Johnsburg, McHenry County, Illinois. The Site, which is primarily agricultural land, is located north of the town of McHenry. The Site borders Dutch Creek (Fox River tributary) on the north, abuts Illinois Route 31 on the east, is adjacent to cropland to the west and southwest, and abuts wetlands interspersed with commercial areas to the southeast.

In order to investigate whether suitable habitat for either Blanding's turtles or Sandhill cranes exists on the Site which might be adversely impacted by the project, Atwell-Hicks, LLC (Atwell/AH), on behalf of Wal-Mart, retained Dr. Gary Casper, a herpetologist, and Dr. William Southern, an ornithologist, to review available data, conduct habitat surveys and evaluate the Site. Based on their investigation, as detailed in the Conservation Plan, the Site is not ideal habitat, but may be suitable seasonal habitat for Blanding's turtles and Sandhill cranes. Turtles may temporarily traverse the cropland in transit from more favorable habitats (North Gate West ADID wetlands) located south of subject property to Dutch Creek (ADID wetlands on said stream east of site) and floodplain areas along northern portions of the Site. Sandhill cranes footprints have been observed in the agricultural fields, which indicate that cranes may occasionally use the Site to forage.

The planned construction activities, as well as long-term maintenance of the preserved on-site wetlands, restored wetlands, prairie buffers, and naturalized stormwater management areas, may result in the incidental disturbance / harassment of Blanding's turtles and/or Sandhill cranes, hence a technical "taking" of these species. Per 17 IAC CH. I. sec 1070.10 the definition of "take" is "in reference to animals and animal products, to harm, hunt, shoot, pursue, lure, wound, kill, destroy, harass, gig, spear, ensnare, trap, capture, collect, or attempt to engage in such conduct." Wal-Mart applied for Incidental Take Authorization and submitted a Conservation Plan to the IDNR (16 July 2009) to address possible impacts to these two species as part of the Wal-Mart development, but such incidental taking is not the purpose of carrying out this lawful development activity.

The Site development plan has been revised several times to lessen wetland impacts and incorporate best management practices (BMPs) to improve water quality by pre-treatment of all stormwater runoff and improve wildlife habitat, where little currently exists.

Among other measures, the approximate 29.77 acres of designated native wetland and prairie plantings on the north and west sides of the development for wetland and floodplain restoration and stormwater detention basins will create a habitat corridor suitable for possible Blanding's turtle migration to and from Dutch Creek to North Gate West ADID wetlands located south of the Wal-Mart property, as well as potential stopover and foraging areas for Sandhill cranes.

Procedural History

Wal-Mart Stores, Inc. ("Wal-Mart") proposes to construct an approximately 181,163 square foot building with approximately 856 parking spaces, covering approximately 22.5 acres of an approximate 63.6-acre site (the "Site") located in Johnsburg, McHenry County, Illinois. The Site, which is primarily agricultural land, is located north of the town of McHenry. The Site borders Dutch Creek (Fox River tributary) on the north, abuts Illinois Route 31 on the east, is adjacent to cropland to the west and southwest, and abuts wetlands interspersed with commercial areas to the southeast.

Atwell-Hicks, LLC [AH] (on behalf of WMC) prepared a conservation plan for the Wal-Mart Center Development Project in Johnsburg, Illinois as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and WMC's request for the incidental take of the State listed Sandhill crane (*Grus canadensis*) and Blanding's turtle (*Emydoidea blandingii*) in McHenry County, Illinois were received by the Illinois Department of Natural Resources (Department) on 16 July 2009. Public notice of WMC's request for authorization of incidental take of these State listed species was published in the Northwest Daily Herald (local circulation) and the Daily Herald (Official State newspaper) on July 24, 2009, as well as on July 31, 2009, and August 7, 2009. Public comments on WMC's conservation plan were accepted by the Department until September 7, 2009. No comments were received by the public during the period of July 24, 2009 through September 7, 2009.

Target Species

Sandhill Crane (*Grus canadensis*) - (Illinois) State Endangered [As of 16 July 2009]

Blanding's Turtle (*Emydoidea blandingii*)- State Threatened [As of 16 July 2009]

Wal-Mart/WMC has proposed construction of a Wal-Mart Store on an approximately 63.6-acre parcel of land located on the west side of Illinois State Route 31 (Route 31), approximately one mile north of McCullom Lake Road in the Village of Johnsburg, McHenry County, Illinois (T45N, R8E, Section 23). Specifically, the project will be located on Parcel Numbers 09-23-100-021 and 09-23-100-023, which is currently owned by First Midwest Bank Trust 13376. Wal-Mart is the contract purchaser of the property. The Site currently consists of active agricultural field, 2.96 acres of delineated wetlands (intact functional and farmed wetlands) and waters of the U.S., including portions of Dutch Creek, and an upland wooded corridor. The Site is bounded by Dutch Creek, riparian wetlands adjacent to creek, agricultural fields, and new residential development to the north; oak woodland, farmland, wetland and commercial development to the south; Route 31, commercial development, an apartment complex, and single family residence to the east, and agricultural lands to the west.

Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below.

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

Wal-Mart Stores, Inc. ("Wal-Mart")/WMC proposes to construct an approximately 181,163 square foot building with approximately 856 parking spaces, covering approximately 22.5 acres of an approximate 63.6-acre site (the "Site") located in Johnsburg, McHenry County, Illinois. The Site, which is primarily agricultural land, is located north of the town of McHenry. The Site borders Dutch Creek (Fox River tributary) on the north, abuts Illinois Route 31 on the east, is adjacent to cropland to the west and southwest, and abuts wetlands interspersed with commercial areas to the southeast.

Given the findings of the habitat assessments and the measures proposed in the Conservation Plan to minimize and mitigate for the potential taking (disturbance / harassment) of Blanding's turtles and Sandhill cranes, Wal-Mart does not anticipate that the proposed activity would diminish the likelihood of the survival of either species within the State of Illinois, the biotic community of which the species are a part, or the habitat essential to the species' existence in Illinois. Wal-Mart believes that the enhancements to the marginal habitat as proposed in the 16 July 2009 Conservation Plan, especially with regard to Blanding's turtles, will in fact improve and provide additional habitat and connectivity for isolated populations, thereby increasing the likelihood of survival of the species.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking.

The Site plan has gone through several design revisions in order to reduce environmental and ecological impacts to the 63.6-acre parcel. The original plan designed in 2006 included a 203,819 square foot Wal-Mart building facing east towards IL Route 31, 1,021 parking spaces, and contained several truck maneuvering areas and a Tire Lube Express. The 2006 site plan included wetland impacts from filling Farmed Wetlands 2, 3, 4 and 5, and Wetland 2 [all specific Wetlands are listed/numbered and mapped in the final 16 July 2009 Conservation Plan maintained by the Department and used in this document for continuity purposes], removal of wooded corridor along the southern property line, construction of stormwater detention ponds, and creation of floodplain compensatory storage basins. The 2008 revision to the site plan reduced the size of the store building to 196,006 sq. ft., rotated the building to face north towards Running Brook Farm Road, reduced the number of parking spaces to 980, and eliminated the impact to Wetland 2.

The current 2009 proposed development further reduces the store size and consists of an approximately 181,000 sq. ft. Wal-Mart building, associated access drives, parking, stormwater management system, Route 31 improvements, two stabilized out lots, and one stabilized excess parcel. Lots identified as Lot 1 (SE corner of site, 1.11 acre in size) and Lot 2 (NE corner of site, 2.77 acre in size) will be constructed and graded, along with adjacent roads and stormwater drain connections constructed.

Then these two lots will be seeded with turf grass for stabilization and maintained until future development options are exercised. Excess soils from excavation of stormwater detention basin and floodplain areas not used elsewhere on Site will be stockpiled on Lot 5 (West side of site, 4.08 acres in size). The graded slopes will then be seeded with turf grass for stabilization and maintained until future development options are exercised.

As part of the Site plan construction, Running Brook Farm Boulevard will be constructed from Route 31 west across the site to provide access to the new store, as well as undeveloped property remaining to the west. Permanent impacts are proposed to include a total of 0.65 acre of farmed wetland and 0.07 acre of Dutch Creek and its associated riparian wetland by the Route 31 Bridge.

Temporary wetland impacts include a total of 0.10 acre involving Wetland 1, Dutch Creek Bridge crossing at Route 31, and Wetland 2. The project proposes a number of habitat restoration and enhancement activities including: restoration and enhancement of 1.72 acres of farmed wetland (FW 1 and FW 2); enhancement of 0.59 acre of wetland (Wetland 1 and 2) and farmed wetland (FW 5); native plantings and restoration of approximately 19.94 acres of floodplain and slopes; preservation of a 0.30-acre wooded corridor; construction of 0.65 acre of bio-swales planted with native vegetation, and construction of approximately 8.11 acres of naturalized stormwater management basins and buffer.

Approximately 31.53 acres or 50% of the subject property will be dedicated to the preservation, enhancement, restoration and creation of naturalized wetlands, floodplain, woodland, bioswales, buffers and stormwater basins planted with native vegetation. Approximately 29.77 acres of designated native vegetation plantings on the north and west sides of the development will create a habitat improvement corridor suitable for possible Blanding's turtle and Sandhill crane usage. The current Conservation Plan will increase turtle and crane friendly habitat through use of Best Management Practices (BMPs) within the stormwater and floodplain management plans compared to earlier Site Plans of 2006 and 2008.

Where invasive plants like buckthorn, mulberry, honeysuckle, reed canary grass, and garlic mustard are present on-site in the existing Wetland 1 and 2 and/or located within the woodland-savanna corridor, these plants will be eradicated by appropriate herbicide and/or mechanical methods. Adjoining natural and undeveloped areas located off-site and not part of the Wal-Mart development that contain invasive vegetation will be identified, but the management of these areas shall not be under the control of Wal-Mart.

*See Also: Authorization Section of this document for more details.

Habitat Requirements/Species Status:

A. Blanding's Turtle

Habitat Requirements

The range of Blanding's turtle extends from southern Quebec and Ontario through the Great Lakes region to central Illinois and west to central Nebraska; disjunct populations occur in northern New England, New York, and Nova Scotia (Ernst et al. 1994, Harding 1997). Blanding's turtles prefer productive, shallow, lentic waters with abundant submergent and emergent vegetation. In addition to marshes, the species is also found in swamps, bogs, wet prairies, river backwaters, slow-moving rivers, ephemeral ponds, and lake shallows (Harding and Holman 1990, Van Dam 1993, Harding 1997). Blanding's turtles also utilize wet prairies, sedge meadows, and shrub-carrs to forage, bask, and hibernate, and terrestrial habitats adjacent to lakes and wetlands such as forests and meadows are utilized as movement corridors and for late summer foraging. As waters dry in the summer and fall, turtles typically move to other bodies of water or aestivate on land in mud or roots (Van Dam, 1993). Deeper water is important for hibernation, which typically occurs in the mucky or organic substrate underlying open bodies of water, but also takes place in ephemeral wetlands, sedge meadows and wet prairies where turtles burrow under hummocks (Casper, personal observations. Some individuals may remain semi-active throughout the winter (Ernst et al. 1994, Lee 1999).

Species Status in the Action Area

Habitat destruction has been the primary threat to Blanding's turtles. Habitat loss includes draining and flooding wetlands, stream channelization, water impoundments, development of upland nesting area, loss of land to agriculture and habitat degradation due to agricultural, herbicide and pesticide runoff. Road kills during seasonal movement are another serious threat (Illinois NHS 2006, Van Dam 1993, Harding 1997, Piepgras 1998). Recent information provided from the Natural Heritage Database Management Section of the IDNR documents Blanding's turtles records are 835 feet south and 2,200 feet east of the Site, while other records are listed northwest, southwest and southeast of the property. A significant challenge to achieving Blanding's turtle conservation is maintaining turtle-friendly connectivity on the landscape among the various critical habitat components such as over-wintering sites, summer foraging sites, and nesting sites.

B. Sandhill Crane

Habitat Requirements

There are six subspecies of Sandhill cranes found in North America. The Eastern population of the greater Sandhill crane (*G. c. tabida*) nests in the northern United States and southern Canada, including Illinois. It is a migratory species, arriving in northern Illinois in early spring and returning south in the fall. Primary components of breeding habitat include a nest site, roosting area and feeding area (Armbruster 1987, Ohio DNR 2009). Nest sites are typically located in relatively large, undisturbed, freshwater marshes and prairie ponds containing cattails (*Typha* spp.), bulrushes (*Scirpus* spp., *Schoenoplectus* spp.), and sedges (*Carex* spp.). Roosting habitat is characterized by uniformly shallow standing water located beyond the edge of emergent vegetation within a large expanse of marsh. Feeding areas include emergent wetlands, wet meadows, pasture, grain fields, and riparian areas (Tacha et al. 1992, Ohio DNR 2009).

Juxtaposition of water (i.e., nesting and roosting sites) and food sources in isolation from human disturbances appears to be more important to habitat quality than the specific composition of the cover types (Ohio DNR 2009, Armbruster 1987). Habitats used along migration routes tend to be large, open marshes and riparian wetlands near agricultural areas, especially harvested grain fields, hay fields, and pastures (Northern Prairie Wildlife Research Center 2006).

Species Status in the Action Area

The leading threat to the greater Sandhill crane subspecies is the loss and degradation of wetland habitat, particularly within the Midwestern breeding range and on the wintering grounds in California and Florida (Northern Prairie Wildlife Research Center 2006). Additional localized threats to the crane include increased predation pressure, collisions, and lead poisoning (Northern Prairie Wildlife Research Center 2006). According to Illinois Natural History Survey (INHS) records, there are no apparent breeding records for the Sandhill crane in McHenry County (INHS Database, April 17, 2009). However, recent information provided from the Natural Heritage Database Management Section of the IDNR documents approximately 17 breeding records or records for Sandhill cranes in McHenry County. There are numerous 2008 records for the Kettle Moraine Nature Preserve in McHenry County located south of the project site. A 2005 Sandhill crane record is only 2,989 feet east of the subject property, which indicates they are known to occur within the vicinity of the Site.

Removal of the Sandhill crane from the list of state threatened birds was approved by the Illinois Endangered Species Protection Board on February 20, 2009 (Illinois Endangered Species Board 2009). The de-listing is based on increases in the population within the state, including a significantly increasing population in the northeastern part of the state (Ward et al. 2008) and establishing occurrences outside of northeastern Illinois (e.g., Calhoun, Carroll, Champaign, Grundy, Whiteside, and Winnebago counties) (Nyboer et al. 2006, Illinois Endangered Species Board 2008). The delisting/removal of the Sandhill crane from the Illinois state threatened birds list officially occurred on 31 October 2009.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

Wal-Mart has submitted a Regional Permit 404/401 Joint Application to the USACE (LRC # 2009-017) and permit application copies were provided to the Illinois Environmental Protection Agency (IEPA), IDNR and USFWS. A Stormwater Watershed Development Permit application to the Village of Johnsburg and McHenry County for this development has been submitted.

Financial assurance for all mitigation activities and programs proposed herein (and/or in the official Conservation Plan) will be provided by the full faith and credit of Wal-Mart Stores, Inc. Wal-Mart Stores, Inc. is public company based in the United States and is currently the world's largest. Wal-Mart operates over 7,800 Wal-Mart stores and Sam's Club locations in 16 markets worldwide and employs more than 2 million associates. Wal-Mart's common stock is listed on the New York Stock Exchange under the symbol WMT. Net sales for the first quarter of fiscal year 2009 were approximately \$108 billion. Additional financial information concerning Wal-Mart can be accessed at www.walmartstores.com.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

Given that Blanding's turtles appear to be present in the area, there is a possibility that they could traverse the property before, during and after construction. Actual determination of viability and habitat use would require further study, utilizing mark-recapture and radio telemetry techniques. However, the potential impact to the habitat of any resident or transitory Blanding's turtles is likely to be positive overall, due to the planned increase in wetland and upland habitats associated with the substantial wetland and buffer areas proposed. Moreover, suitable habitats will be connected along the north, west and south sides of the Wal-Mart store and parking lots, by designing a span or culvert suitable for Blanding's turtles to cross under the new Running Brook Farm Boulevard. The loss of potential nesting habitat will be mitigated by designing some well-drained areas (mounds) in the floodplain and stormwater management areas to accommodate potential turtle nesting.

As a result of the habitat assessment findings, it is the opinion of qualified species experts retained by AH and WMC that the proposed development is not likely to reduce the likelihood of survival of the turtle by impacting habitat essential to the species existence. While there is potential for the development to negatively impact individual turtles, the proposed enhancements including floodplain and wetland restoration, establishment of native vegetation, creation of nesting and foraging areas and installation of preventative barriers will likely improve the condition of any established or transitory Blanding's turtle population associated with Dutch Creek riparian corridor and North Gate West ADID wetlands.

In addition, conditions at the site demonstrated nothing to suggest attractive habitat for nesting or foraging cranes. Site wetlands are farmed and lack vegetative cover necessary for nest construction and concealment. In addition, the potential for human disturbance is high. The property was fall plowed in 2008 and, as a result, has limited value as foraging habitat for cranes in April and May 2009. It is the professional opinion of species experts retained by AH and WMC that the Site does not contribute to any critical habitat for Sandhill cranes that may exist in this area. It should be noted, however, that once the wetlands and buffer areas are created and restored, the naturalized areas of the Site will become suitable habitat for foraging and resting.

There are numerous 2008 IDNR records for Sandhill cranes at the Kettle Moraine Nature Preserve in McHenry County located south of the Site. A 2005 Sandhill crane record is only 2,989 feet east of the subject property closer to the Fox River, which indicates they are known to occur within the vicinity of the Site. The off-site assessment of the surrounding area revealed that little optimal crane habitat exists except in close proximity to the Fox River. Given these findings, it is the opinion of species experts retained by AH and WMC that it is highly unlikely that the subject property is essential to the success/survival of any population of Sandhill cranes that occurs in McHenry County. As a result of the habitat assessment findings, it is the opinion of species experts retained by WMC and AH that the proposed Wal-Mart development will have no detrimental impact on Sandhill crane reproductive success in the state or the local area.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], will be performed:

Additional measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and official WMC's signature(s) on this authorization indicates their commitment to performing those measures.

As a point of reference, the following impact minimization measures were considered, but were not incorporated into the construction plans.

A. Relocate the proposed development to another site – This proposed site is within the Village of Johnsburg limits and is zoned for business. The current operating Wal-Mart store is located in the adjacent City of McHenry and is undersized. Wal-Mart looked at other store sites in the City of McHenry along busy Route 31 and Route 120, but available lots of sufficient size (50-plus acres) and appropriate zoning were unavailable. This new site is located within Village of Johnsburg limits and has nearby existing potable water, sanitary sewer, electric, telephone, cable and gas utilities. It is actively being marketed by the owner and Village for business development. State Highway Route 31 provides adequate access to site and this commercial business corridor is almost fully developed south of Dutch Creek and the store site on both sides of the roadway. This site is a good location for the Wal-Mart store.

B. Redesign the site to avoid separating wetlands from adjacent uplands – The pre-existing intersection alignment of Running Brook Farm Boulevard and Route 31, the separate 5-acre LFI parcel at the eastern property boundary, and the presence of 100-year floodplain and floodway along the entire northern portion of the parcel dictated the location of the proposed current layout.

To the greatest extent practicable, the store, parking, and drives were shifted toward the southeastern portion of the property to accommodate a potential wildlife and suitable habitat travel corridor constructed across the western and northern portions onsite connecting to natural wetland areas off-site to the north (Dutch Creek riparian community) and to the south (North Gate West wetland complex). However, it is not possible to maintain an uninterrupted corridor from the southern to the northern property boundary without completely losing access to the land west of the development. Under the current proposed development, the use of a roundabout at the western end of Running Brook Farm Boulevard will reduce the amount of traffic across site, and therefore reduce potential vehicular mortality for wildlife. The proposed culverts and road design have been proposed specifically to promote safe movement of Blanding's turtles after the future extension of Running Brook Farm Boulevard.

C. Providing a bridge span in lieu of a box culvert – Wal-Mart considered providing a bridge span in lieu of a box culvert for the future proposed Running Brook Farm Boulevard crossing of the turtle corridor and floodplain basin's connection. However, the cost of the bridge would be considerably more than the proposed culvert. Whether done by Wal-Mart or another business development, the economics of the site development costs have to provide an acceptable rate of return for the proposed development. The additional cost of the bridge and fill would not be economically feasible for this development, especially given the minimal benefit to be gained over the proposed box culvert design that specifically addresses Blanding's turtle concerns.

Overall, because of the findings of the habitat assessments and the measures proposed to minimize and mitigate for the potential taking (disturbance/harassment) of Blanding's turtles and Sandhill cranes, Wal-Mart does not anticipate that the proposed activity would diminish the likelihood of the survival of either species within the State of Illinois, the biotic community of which the species are a part, or the habitat essential to the species' existence in Illinois.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

Atwell-Hicks, LLC [AH] (on behalf of WMC) prepared a conservation plan for the Wal-Mart Center Development Project in Johnsborg, Illinois as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and WMC's request for the incidental take of the State listed Sandhill crane (*Grus canadensis*) and Blanding's turtle (*Emydoidea blandingii*) in McHenry County, Illinois were received by the Illinois Department of Natural Resources (Department) on 16 July 2009. Public notice of WMC's request for authorization of incidental take of these State listed species was published in the Northwest Daily Herald (local circulation) and the Daily Herald (Official State newspaper) on July 24, 2009, as well as on July 31, 2009, and August 7, 2009. Public comments on WMC's conservation plan were accepted by the Department until September 7, 2009. No comments were received by the public during the period of July 24, 2009 through September 7, 2009.

PROBABLE EFFECTS OF THE PROPOSED ACTION:

Blanding's Turtle

Overall, potential impact to any resident Blanding's turtles is likely to be positive. While the proposed development will remove some potential nesting habitat, it will increase wetland and upland habitat, adding to similar restorations to the north. The existing movement corridor along the stream on the north parcel boundary will be maintained and improved by a substantial buffer on the Wal-Mart property. An oversized culvert (to be designed) will allow turtles to pass under the east-west roadway to be constructed to access the new stormwater facilities south of this road. Wal-Mart will take measures to prevent the taking of Blanding's turtles during and after construction and does not anticipate a negative impact on the local population. However, because this species may travel through the site, or nest on the site, the development could result in a potential taking of the species by direct mortality of individuals by vehicles injuring or killing them and/or by indirect negative effects of habitat loss and fragmentation.

Potential adverse impacts on the Blanding's turtle may include:

*Construction activities may cause turtles to become trapped within the confines of the property and/or be crushed by construction equipment or vehicles;

*Post-construction, buildings, drives, and roads (curbs) may act as physical barriers to overland movement;

*Water quality may be degraded from stormwater runoff, automotive pollutants and road salt;

*Management of turf grass entailing the use of broad-spectrum, broadleaf herbicides, fertilizers, and insecticides that can result in damage to vegetation in and around detention basins and subsequent poor water quality (i.e., algal blooms) may be transferred to downstream waters; and

*Heightened mortality or displacement of insects due to lighting that may alter the food chain.

Sandhill Crane

Wal-Mart will take measures to prevent the taking of Sandhill cranes during and after construction and does not anticipate a negative impact on the local population. The site assessment revealed that the site does contain suitable foraging habitat for the species, since records indicate the species occurs within the general project area.

Potential adverse impacts on the Sandhill crane may include:

*Loss of foraging habitat due to conversion of upland cornfield habitat to a commercial development; and

*Cranes are/become scared and fly off due to noise from construction vehicles/equipment.

Again, due to the absence of “attractive” habitat on the Site, and the measures to minimize adverse effects, the potential for incidental take by harassment from the proposed project is low.

Authorization

It is the determination of the Department that the measures to be implemented by the Wal-Mart Corporation (WMC) will adequately minimize and mitigate for the anticipated taking (disturbance and/or harassment) of a small number of the State listed Sandhill cranes (*Grus canadensis*) and Blanding’s turtles (*Emydoidea blandingii*) in McHenry County, Illinois [associated with the Wal-Mart Development Project in Johnsburg, Illinois]. Further, it is our opinion that the take (disturbance and/or harassment) authorized herein would not diminish the likelihood of the survival of either these aforementioned species in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species’ existence in Illinois.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain in effect for a period of 5 (five) years after the first day of official public opening of the Johnsburg, Illinois Wal-Mart Center, unless terminated pursuant to Section 5.5. of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.80].

2. The following measures shall/will be implemented with regards to the Wal-Mart Development Project in Johnsburg, Illinois (McHenry County - Store #1377-04):

Exclusionary Silt Fence

A toed-in silt fence will act as a physical barrier and discourage turtles from potentially traversing the site during construction. The silt fence will be installed prior to any land clearing, disturbance and/or construction. The silt fence will be installed in March and remain onsite throughout construction and shall be removed at the completion of construction after the site has been stabilized, and/or until late October. The fence will exclude turtles from the limits of work for construction activities.

The toed-in silt fence will be erected along the northern property line from Route 31 ROW on the east, and then extended west wrapping around Farmed Wetland 1, and continuing west along the boundary until intercepting Wetland 1 boundary onto the western property line. The fence will then extend south along the western property line to the southwest corner of the parcel. Another section of silt fence will be erected along the southern property line and around the Wetland 2 and woodland strip boundary, and then continues to southeast corner adjacent to Route 31 ROW. Additional silt fencing will be installed around the south, west and north sides of the LFI out lot. Daily site inspections for the first two weeks and weekly inspections thereafter will be performed throughout the construction period to ensure that the exclusionary fencing is properly installed and to check if any turtles are present. Under current plans, fencing would be erected in November, after any potential nests in the project area have hatched and offspring have moved to wetlands outside the limits of work.

Construction Personnel Training

Construction personnel will be trained to visually identify the target species prior to commencing work on the site. Training will be conducted by Atwell personnel and a flyer with an illustration of the target species to be protected shall be provided to all contractors working on the site. This flyer will contain color photographs of adult and juvenile turtles and cranes. The flyer will be provided to the IDNR and to the work crews. Dedicated construction personnel will conduct periodic visual surveys for the target species during construction phase, as appropriate. Should either target species be identified during the construction phase, the dedicated construction superintendent shall immediately notify the IDNR Heritage Biologist at 815-675-2386 or McHenry County Conservation District (MCCD) Biologist at 815-338-6223. In addition, Mr. Thomas Mangan at Atwell will be contacted at 630-577-0800. If turtles are encountered, work crews will not handle them. If the turtles are in danger, work/vehicles must immediately stop until IDNR or MCCD personnel arrive to resolve the turtle situation.

Utility Trenches

Because utility trenches may trap turtles, trenches shall be checked by construction personnel for turtles prior to being backfilled. Trenches will be covered each night and checked first thing in the morning for presence of turtles.

Natural Habitat - Wetland, Floodplain, Woodland and Nesting

Natural landscape consisting of native grasses and forbs is proposed throughout 29.77 acres in the southern, western, and northern portions of the property. This includes areas of wetland restoration, enhancement and preservation; floodplain compensation and restoration; woodland seeding and stormwater detention basins. These areas will be interconnected via the naturalized stormwater management basins and culverts in order to provide a naturalized habitat corridor across the site for Blanding's turtles. Additionally, these same areas will also provide habitat for resting and foraging by Sandhill cranes. Invasive plant species, if present in these on-site areas, will be removed and replaced with native seed mixes.

-Wetland Preservation, Enhancement and Restoration

With the exception of 0.07 acres of impact Wetland 1/Dutch Creek and the Route 31 bridge expansion, the development only anticipates impacts to those 0.65 acres (Farmed Wetland 3 and 4) wetlands that are currently farmed. Wetland enhancement with native plantings is proposed in 0.59 acres of wetlands preserved by the development (Wetland 1, Wetland 2, Farmed Wetland 5) that include 0.29 acres of enhancement, and 1.72 acres of farmed wetland (Farmed Wetland 1, Farmed Wetland 2) shall be restored and enhanced through native vegetation plantings. The enhanced and restored wetlands shall be protected by vegetated buffers and shallow earthen berms within the floodplain compensation and floodplain restoration areas.

-Floodplain Compensation and Restoration

Approximately 14.28 acres of floodplain compensation and floodplain restoration are proposed on the north side of the site, north of Running Brook Farm Boulevard. These areas include the restoration of Farmed Wetland 1 as well as additional areas of native emergent, wetland fringe, sedge meadow, and mesic prairie planting. The floodplain compensation and restoration areas are designed specifically with Blanding's turtles and Sandhill cranes in mind, by providing emergent pools and sedge meadow areas with shallow earthen berm adjacent to an upland prairie plant community. Additionally, these areas will provide a natural vegetated buffer between Dutch Creek and the development and aid in maintaining connectivity across the northern and southern portions of the site. This floodplain and wetland restoration will have standing water periodically across the entire area during heavy precipitation events that cause Dutch Creek to flood and its waters leave the main channel entering the floodplain. A majority of time the floodplain basins will be dry to moist, with open water present only in the emergent pools scattered across these areas per the plan.

Additional floodplain compensation and restoration of Farmed Wetland 2 with emergent pools, wetland fringe, sedge meadow, and upland buffer areas totaling 7.15 acres is proposed south of Running Brook Farm Boulevard, west of the store site, and north of the stormwater treatment basins. This basin and wetland will have standing water periodically across the entire area during heavy precipitation events. The existing drain tile by existing Farmed Wetland 3 (filled) and Wetland 2 (preserved) will be rerouted west along the north side of the Wal-Mart building and then swung north around the west side of the building and parking lot to discharge into restored Farmed Wetland 2 to assist sustaining the hydrology of the wetland.

-Woodland Corridor

An existing 0.30-acre wooded area of oak, cherry and cottonwood trees along the southern property boundary adjacent to the Firestone property shall be preserved and enhanced with native understory seeding. Invasive vegetation will be removed from this area. A designated woodland-savanna seed mix will be sown in this area and the adjoining 0.97-acre buffer zone.

-Nesting Habitat

Currently, there is some potential seasonal turtle nesting habitat in sandy upland soils, where agricultural production occurs and the same areas where the Wal-Mart store and associated improvements are to be built. In order to off-set that loss of potential nest sites, several designated higher elevation areas on the west end of the parcel located both south and north of the new road could become potential nesting areas if constructed of well-drained soils with sparse vegetation. To the extent practicable, some of the earthen berms around the basins will be designed with these nesting features in mind. The creation of turtle nesting areas north of the new east-west Running Brook Farm Boulevard would be preferable, so turtles are not dependant on passing under the road through the box culvert(s) or bridge span. Mound areas of mixed sand, gravel and clay will be constructed one foot higher than surrounding topography in the floodplain for potential turtle nest areas. Corresponding swale areas one foot deep will be constructed in the floodplain next to the mounds. Both areas will be planted with native seed mixes.

-Connectivity of Habitats

Two identified off-site ADID wetlands have recorded Blanding's turtle sightings and provide suitable habitat. The Wal-Mart site of mostly farmland is located between these two wetlands in the Dutch creek watershed and currently offers marginal connectivity of these two ADID habitats. No ADID wetlands have been identified on site. However, ADID wetlands have been identified on Dutch Creek east of the subject site and Illinois Route 31 bridge crossing, while North Gate West ADID wetlands have been identified south of the subject property adjacent to commercial development and farmland.

The Dutch creek ADID wetland is riparian wetland habitat that extends east one mile from the subject property and connects to the Fox River habitat system, where turtle populations have mobility to relocate. The north portion of the project site is floodplain and its planned restoration into a mosaic of wetland and prairie communities with variable micro topography will connect this new floodplain habitat to the existing stream corridor that extends to the Fox River. The restoration of 14.28 acres of floodplain and 0.23 acre Farmed Wetland 1 on the north end of the site into suitable wetland and turtle habitat that merges into the adjoining 2.73-acre Dutch creek wetland will have a strong possibility of success at creating an east to west stream corridor connectivity along this waterway all of which is located in the Village of Johnsburg.

The off-site ADID wetland to the south of Wal-Mart site and Firestone is mostly marsh and meadow that provide suitable turtle habitat, but it is largely surrounded by commercial and agricultural development that isolates this wetland located in the town of McHenry. Drainage from these North Gate West wetlands flows northwest around the west side of the Firestone Store into Wetland 2's off-site extension, and into Wetland 2, where runoff enters a functional drain tile system. This drain tile system carries the stormwater north across the subject property crossing the northern property line and discharges into Dutch Creek.

The planned creation of native vegetated stormwater basins and floodplain wetlands along the west and north sides of the Wal-Mart store should improve the landscape connectivity of the south ADID wetlands through a south to north corridor to the east to west stream corridor of wetlands. However, while the Wal-Mart site plan will provide sustainable connectivity between the east to west and south to north habitat corridors on the subject property, current unobstructed connectivity south of the Wal-Mart site is limited to a narrow swale running west of the Firestone development, and connectivity is otherwise compromised with existing and planned roads and development with attendant high traffic volumes. The long-term suitability of the south ADID wetlands for supporting a viable Blanding's turtle population, absent participation of more landowners in a landscape level conservation plan, remains questionable, and these wetlands may act as a population sink.

The site development plan for the 63.6-acre Wal-Mart property that is currently farmland and contains 2.96 acres of wetlands has been revised several times to lessen wetland impacts and incorporate best management practices (BMPs) to improve water quality by pre-treatment of all stormwater runoff and improve wildlife habitat. The approximate 29.77 acres (14.51 acres north and 15.26 acres west) of native plantings (mosaic of emergent pools, sedge meadows, mesic prairie meadows and meandering berms) on the north and west sides of the development will preserve and enhance a connectivity corridor of suitable habitat for possible Blanding's turtle migration to and from Dutch Creek to Wetland 2 and North Gate West wetlands located south of the Wal-Mart property, as well as potential stopover and foraging areas for Sandhill cranes. Approximately 50% of the site (~31.53-acres) will be green space after development is complete.

Naturalized Stormwater Management and Water Quality

Stormwater runoff will be treated by a number of best management practices (BMPs) prior to leaving the site in order to minimize adverse impacts to aquatic habitats and wildlife. Stormwater runoff from all of the developed portions of the site (including the store, parking lots, roads and out lot parcels) will be captured by the stormwater system and conveyed to the naturalized stormwater treatment basins located west of the store footprint towards the southern property line. Two bioswales (0.64 acres) planted with native wetland fringe and prairie buffer plants will collect pavement runoff from the northern out lot, adjacent road, and northern portion of the parking lot to provide first flush pretreatment before reaching the stormwater treatment basins. Additionally, the store will utilize non-asphalt, non-adhesive roof membrane to improve the quality of roof runoff compared to standard roofing materials.

The naturalized stormwater treatment basin(s) include a "forebay" that will aid in sediment settling. This sedimentation basin will treat and remove the oil and grit collected from the parking lot areas not pretreated by the two bioswales that cover 0.65 acres. The bioswales and sedimentation forebay basin replace the need for a CDS system at this Site. From the forebay, normal level basin waters will be forced by the half-foot raised 50-foot wide wetland shelf, to flow towards the south end of the basin where a swale allowed waters to flow into the main wet bottom detention basin, which will be lined with emergent/fringe wetland vegetation that will further aid in removal of suspended solids. A raised shallow earthen berm planted with native vegetation will guide the detention pond waters westward and then north for further treatment before discharge via a restrictor pipe into the mitigated floodplain and restored farmed Wetland 2 basin. The stormwater treatment basin(s) and slopes cover approximately 8.11 acres. This basin bottom and its surrounding earthen berm slopes will be planted entirely with native prairie and wetland vegetation.

This floodplain-farmed Wetland 2 basin measuring approximately 7.15 acres will be connected through a series of box culverts or equivalent span across Running Brook Farm Boulevard to the restored, native-planted floodplain areas along the northern site boundary. These native-planted mesic and wetland areas will provide additional filtration and promote infiltration and ground water recharge. These BMPs will reduce adverse effects on stormwater quality and quantity of stormwater leaving the site. The naturalized stormwater management basins and buffer, and floodplain restoration areas will provide 30.42 acres of natural landscape on the site. These basins will periodically dry up and their shallow bottoms will be exposed.

In order to promote the use of the stormwater treatment basins by the Blanding's turtle, numerous micro topographic mounds and habitat structures will be located within the basins. The standard cyclone fencing surrounding the stormwater treatment basins shall be elevated approximately one foot above the ground in order to allow access for Blanding's turtles and other wildlife species to pass. In addition, weekly parking lot sweeping and cleanup will be part of Wal-Mart's BMP maintenance plan.

Road Crossings

The initial site design of two 36-inch diameter RCP culverts approximately 127 feet long is being changed to one RCP box culvert measuring 36" high by 54 ½ " wide beneath Running Brook Farm Boulevard between the floodplain/wetland areas. The culvert will be at a flat grade which should allow turtles to see the planting areas and sunlight on the other side of the culvert. A partially buried wire mesh fence and/or a retaining wall to be constructed is proposed along and the future western extension of Running Brook Farm Boulevard to prevent adults from getting onto road. Wing walls will be attached to the box culvert to lead turtles into the crossing.

Curbs

In order to prevent young turtles from entering the parking lot or drives and being trapped by the curbs, Wal-Mart proposes to use a mix of barriers and mountable curbs. Curbs along the drives and parking lots that border naturalized areas shall be installed with a back six inches above grade to function as a vertical barrier to prevent young turtles from entering the developed portion of the site. Curbs are not expected to represent a barrier to adult Blanding's turtles. Sections of mountable curbs (maximum four inches high at a 3:1 slope) shall be installed on either side of catch basins to provide an exit for any turtles that somehow gain access to the developed portion of the site.

Interpretive Signage

Interpretive signage shall be placed along the perimeter of the floodplain restoration area, floodplain compensation/wetland restoration area, and stormwater treatment basins to inform the public of the potential presence of Blanding's turtles and Sandhill cranes. The signs shall instruct the public to immediately notify the IDNR Heritage Biologist at 815-675-2386 or contact the MCCD Biologist 815-338-6223 if a Blanding's turtle is sighted. Turtle crossing signs shall be installed along Running Brook Farm Boulevard west of the roundabout to increase public awareness and reduce road kills.

Pollutants

It is proposed that the snow removal program incorporated at the site will include only limited use of sodium chloride (salt) for snow melting purposes. The snow removal program will focus on snow plowing as a means of snow removal on the site. In addition, bulk salt storage for site snow removal is not intended for the site. Because Wal-Mart does not typically use pesticides as part of its standard site maintenance, there is no need for any specific changes to such maintenance protocols to avoid impacts to species or habitat due to use of pesticides.

Lighting

To minimize the possible effects of outdoor lighting attracting insects and thereby disrupting the food chain, the Wal-Mart will utilize high pressure sodium lights or utilize amber lenses. This type of lighting has an orange glow that falls within the pink to red hues that tend to minimize the attraction of insects, as recommended by the IDNR.

3. The following Monitoring Measures shall be implemented with regards to the Wal-Mart Development in Johnsburg - McHenry County, Illinois.

A. The onsite natural areas (Restored Farmed Wetland 1, Restored Farmed Wetland 2, Enhanced Farmed Wetland 5, Enhanced Wetland 2, floodplain compensation and restoration areas, and the woodland corridor) shall be managed and monitored for a period of three (3) years in accordance with the USACE regional permit program, and for an additional two (2) years, or a total of five (5) years in accordance with the McHenry County Stormwater Ordinance, and the request of the IDNR. The purpose of the management and monitoring will be to measure and assess the effectiveness of the native plantings and stormwater BMPs. An annual monitoring report shall be submitted to the USACE, IDNR and Village of Johnsburg (McHenry County) by the 28th of February of the following year. A copy of this report shall be provided to the IDNR.

B. Post-construction: Wal-Mart will develop a training program, in which employees will be made aware that the target species have been documented in the vicinity. Employees will be trained to report any turtle or Sandhill crane sighting on the site to designated Wal-Mart personnel, who will be properly trained to visually identify the target species. Should either of the target species be identified on the site, the designated personnel will be responsible for reporting identified target species to the IDNR.

C. If it is determined that the measures taken to minimize Blanding's turtle and/or Sandhill crane takings are not effective, potential modifications to the conservation plan will be evaluated.

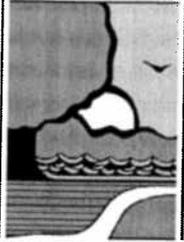
4. The following Party Responsibilities shall be in effect with regards to the Wal-Mart Development in Johnsburg - McHenry County, Illinois.

WMC and its various consultants (i.e. AH - but not exclusively limited to this firm) will be responsible for overseeing all minimization, monitoring, and mitigation efforts identified within the Conservation Plan. WMC and its various consultants will be responsible for planning, contract execution, and construction supervision for the entire project.

5. The effective period of this authorization may be altered by mutual agreement between WMC and the Department.

6. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that WMC has failed to comply with any of these terms and conditions and/or has been responsible for the take of any State Listed Species beyond that which is incidental to the construction of the Wal-Mart Development Project in Johnsburg, Illinois, McHenry County (Store #1377-04).

7. The Wal-Mart Corporation official(s) identified below is/are authorized to execute this agreement. Execution by an official from any one of these organizations indicates acceptance of all terms and conditions described in this document.



Illinois
Department of
Natural Resources

One Natural Resources Way • Springfield, Illinois 62702-1271

<http://dnr.state.il.us>

For the IL. Department of Natural Resources

Marc Miller, Director
Illinois Department of Natural Resources

11-23-09
Date Signed

For the Wal-Mart Corporation (WMC)

Signature

Regional Vice President

J. Chris Callaway

Please print name and official title

12-11-09
Date Signed

SN
JWC