

APPENDIX F

Habitat Management Plan

**MILL SEAT LANDFILL
HABITAT MANAGEMENT PLAN**

APRIL 2011

Prepared for:

**WASTE MANAGEMENT OF NEW YORK, LLC
MILL SEAT LANDFILL
303 BREW ROAD
BERGEN, NEW YORK 14416**



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1.0 Introduction

The intent of this document is to summarize the wildlife enhancements required as per New York State Department of Environmental Conservation (NYSDEC) Operating Permit No. 8-2648-00014/1-0, Permit Condition I. General Applicability 1. (I) Habitat Management Plan (HMP), Figure 1, dated February 9, 2005.

Features of the HMP are proposed to be modified based on the proposed East and West Soil Borrow Areas; therefore, Figure 1 – HMP has been revised to reflect the development of the soil borrow project.

2.0 Summary of Wildlife Enhancements

The required wildlife enhancements are summarized on Figure 1 – HMP. The NYSDEC requirements are summarized below. The NYSDEC had additional recommendations that are also summarized below. Waste Management of New York (WMNY) will implement the recommendations, if possible.

Requirements

Brush Piles:

On an annual basis, a February site visit of brush piles and augment will be conducted, if necessary.

Wood Duck Boxes:

Check, clean and add nesting material annually prior to the breeding season (prior to ice thawing, first week of March). After breeding season check for species usage (end of August).

One time activity: add predator guards, increase height (10 feet), relocate out of viewing area.

Blue Bird and Kestrel Boxes

Check, clean and add nesting material annually prior to the breeding season (first week of March). After breeding season check for species usage (end of August). Mow/weed whack around boxes as necessary.

Mowing of old field/meadow areas

Mow meadow east of administration building and south of landfill in odd numbered years. Mow meadow east of landfill in even numbered years. The mowing should occur after August 1, in the month of August. Mowing height is 6 – 8 inches. See Figure 1 – HMP, dated February 9, 2005.

Existing trails through RG-7

Mow during the month of August in odd numbered years. The mowing should occur after August 1, in the month of August. Mowing height is 6 – 8 inches.

These activities are summarized on Figure 1 – HMP and Table 1 – Annual Checklist of Wildlife Enhancements.

Recommendations

Mowing of old field/meadow areas

WMNY will review the possible addition of mowing five other field areas on an annual basis.

Bat houses and screech owl boxes

Place several bat houses and screech owl boxes in ideal habitat throughout property. Check, clean and add nesting material annually prior to the breeding season (first week of March). After breeding season check for species usage (end of August).

Invasive plants

WMNY will review the invasive plants on an annual basis.

3.0 Conclusion

Stantec has prepared this report to meet the requirements of the Permit Condition I-1. HMP in Figure 1 – HMP. Table 1 – Annual Checklist will be submitted with the annual report each year.

TABLES

Mill Seat Landfill
Riga, New York
Table 1 - Habitat Management Plan

_____ Year of annual checklist
Name of person completing checklist _____

Task/Action	Enhance or Augment as Necessary	Inspect, Clean & Add Nesting Material Annually (early March)	Check for Species Usage (late August)	Trim/Mow Around Poles as Needed	Mowing (After August 1st in August) Mow Height 6 - 8 inches	
					odd numbered years	even numbered years
Brush Piles						
Wood Duck Boxes						
Blue Bird Boxes						
Kestrel Nest Boxes						
Bat Houses (Recommended)						
Screech Owl Boxes (Recommended)						
Old field/meadow areas						
Existing trails through RG-7						

Notes:

- 1) Mow during the month of August (after August 1st) in odd numbered years. Mow Height 6-8 inches.
- 2) During August, mow meadow east of administration building and south of landfill in odd numbered years. Mow meadow east of landfill in even numbered years. Refer to HMP Figure 1
- 3) Pattern indicates applicability

FIGURES

VEGETATION KEY

- (EW)** EMERGENT WETLAND
- (LA)** LANDFILL AREA
- (OF)** OLD FIELD
- (SSW)** SCRUB-SHRUB WETLAND
- (AG)** AGRICULTURE
- (OW)** OPEN WATER
- (FW)** FORESTED WETLAND
- (DF)** DECIDUOUS FOREST
- (SSU)** SCRUB-SHRUB UPLAND
- (ML)** MOWED LAWN/BUILDING

NOTE
 FIELD/MEADOW AREAS WILL BE MOWED ANNUALLY BETWEEN 8/1 AND 9/1 (AUGUST)

- LEGEND**
- APPROXIMATE PROPERTY LINE
 - APPROXIMATE BUFFER AREA

Recommended Nestbox Setbacks

Bluebird nestbox setbacks:	Distance
Woods*	200 feet
Roads**	100 feet
Other bluebird nestboxes*	300 feet
Tree swallow nestbox**	10 feet
Minimum height from ground* 5 feet	
Kestrel nestbox setbacks from:	
Other kestrel nestboxes	0.5 mile
Minimum height of nestbox entrance from ground	15 feet
Desirable distance to hunting perch (dead tree, utility pole,	60 feet

*North American Bluebird Society recommendation
 **Orient nestbox entrance parallel to road (not facing directly toward or away from road, especially if 100' setback cannot be achieved).

** Pair bluebird nestboxes 10 feet apart, with pairs of boxes separated by 300 feet, to accommodate competition from tree swallows.

BIRD BOXES NOTES:
 BOXES IN POOR REPAIR OR WHICH CANNOT BE CLEANED OF DIRT, INFESTATION, MOLD AND ROT, OR WHICH CANNOT BE EASILY INSPECTED AND MAINTAINED, SHALL BE REPLACED WITH NEW NEST BOXES MEETING THE FOLLOWING SPECIFICATIONS:

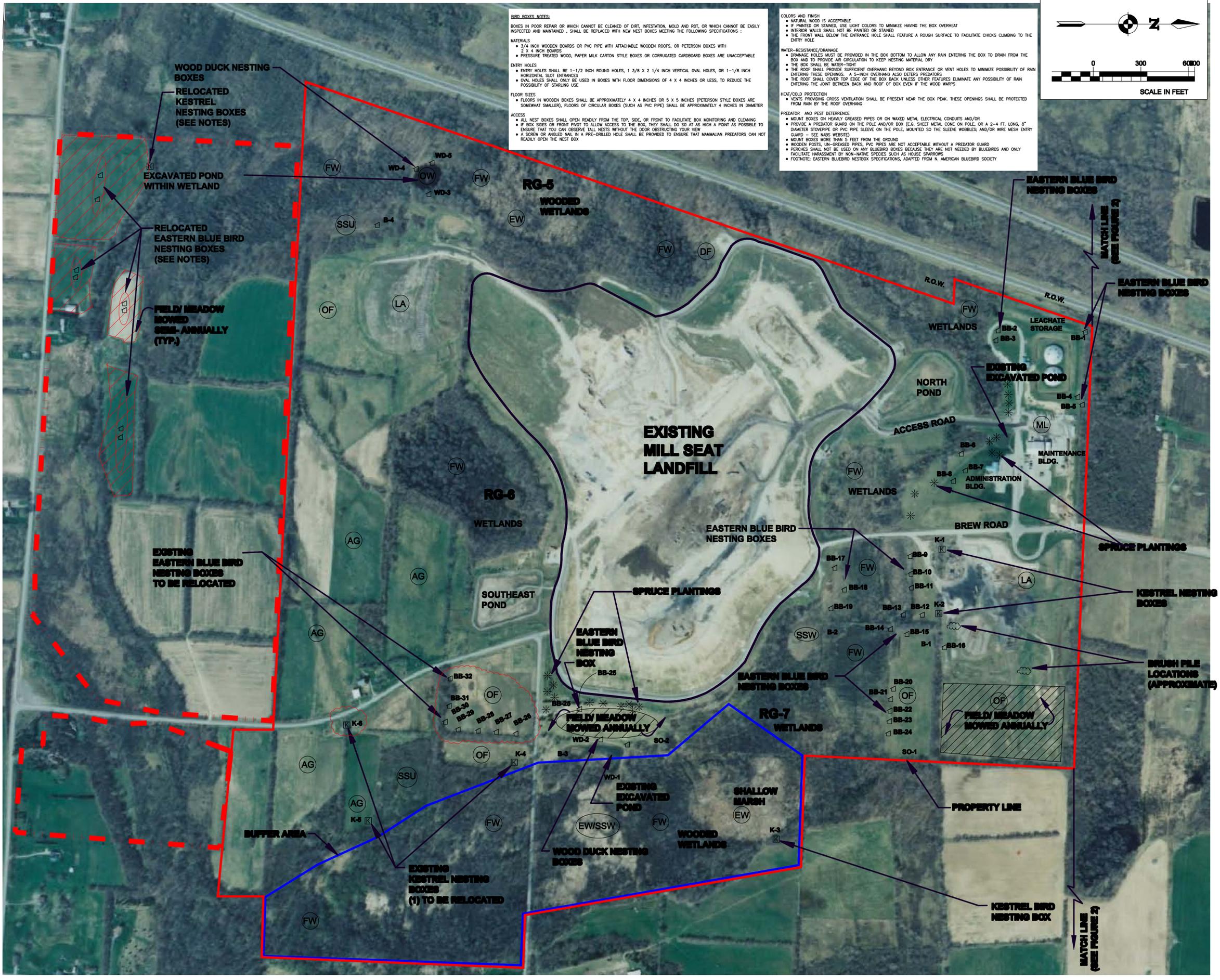
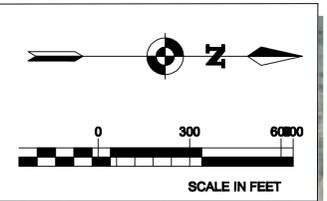
MATERIALS
 • 3/4 INCH WOODEN BOARDS OR PVC PIPE WITH ATTACHABLE WOODEN ROOFS, OR PETERSON BOXES WITH 2 X 4 INCH BOARDS
 • PRESSURE TREATED WOOD, PAPER MILK CARTON BOXES OR CORRUGATED CARDBOARD BOXES ARE UNACCEPTABLE

ENTRY HOLES
 • ENTRY HOLES SHALL BE 1-1/2 INCH ROUND HOLES, 1 3/8 X 2 1/4 INCH VERTICAL OVAL HOLES, OR 1-1/8 INCH HORIZONTAL SLOT ENTRANCES
 • OVAL HOLES SHALL ONLY BE USED IN BOXES WITH FLOOR DIMENSIONS OF 4 X 4 INCHES OR LESS, TO REDUCE THE POSSIBILITY OF STARLING USE

FLOOR SIZES
 • FLOORS IN WOODEN BOXES SHALL BE APPROXIMATELY 4 X 4 INCHES OR 5 X 5 INCHES (PETERSON STYLE BOXES ARE SOMEWHAT SMALLER), FLOORS OF CIRCULAR BOXES (SUCH AS PVC PIPE) SHALL BE APPROXIMATELY 4 INCHES IN DIAMETER

ACCESS
 • ALL NEST BOXES SHALL OPEN READILY FROM THE TOP, SIDE, OR FRONT TO FACILITATE BOX MONITORING AND CLEANING
 • IF BOX SIDES OR FRONT PROUD TO ALLOW ACCESS TO THE BOX, THEY SHALL DO SO AT AS HIGH A POINT AS POSSIBLE TO ENSURE THAT YOU CAN OBSERVE TALL NESTS WITHOUT THE DOOR OBSTRUCTING YOUR VIEW
 • A SCREW OR ANGLED NAIL IN A PRE-DRILLED HOLE SHALL BE PROVIDED TO ENSURE THAT MAMMALIAN PREDATORS CAN NOT READILY OPEN THE NEST BOX

- COLORS AND FINISH**
 • NATURAL WOOD IS ACCEPTABLE
 • IF PAINTED OR STAINED, USE LIGHT COLORS TO MINIMIZE HAVING THE BOX OVERHEAT
 • INTERIOR WALLS SHALL NOT BE PAINTED OR STAINED
 • THE FRONT WALL BELOW THE ENTRANCE HOLE SHALL FEATURE A ROUGH SURFACE TO FACILITATE CHICKS CLIMBING TO THE ENTRY HOLE
- WATER-RESISTANCE/DRAINAGE**
 • DRAINAGE HOLES MUST BE PROVIDED IN THE BOX BOTTOM TO ALLOW ANY RAIN ENTERING THE BOX TO DRAIN FROM THE BOX AND TO PROVIDE AIR CIRCULATION TO KEEP NESTING MATERIAL DRY
 • THE BOX SHALL BE WATER-TIGHT
 • THE ROOF SHALL PROVIDE SUFFICIENT OVERHANG BEYOND BOX ENTRANCE OR VENT HOLES TO MINIMIZE POSSIBILITY OF RAIN ENTERING THESE OPENINGS. A 5-INCH OVERHANG ALSO DETERS PREDATORS
 • THE ROOF SHALL COVER TOP EDGE OF THE BOX BACK UNLESS OTHER FEATURES ELIMINATE ANY POSSIBILITY OF RAIN ENTERING THE JOINT BETWEEN BACK AND ROOF OF BOX EVEN IF THE WOOD WARPS
- HEAT/COLD PROTECTION**
 • VENTS PROVIDING CROSS VENTILATION SHALL BE PRESENT NEAR THE BOX PEAK. THESE OPENINGS SHALL BE PROTECTED FROM RAIN BY THE ROOF OVERHANG
- PREDATOR AND PEST DETERRENCE**
 • MOUNT BOXES ON HEAVILY GREASED PIPES OR ON WAXED METAL ELECTRICAL CONDUITS AND/OR
 • PROVIDE A PREDATOR GUARD ON THE POLE AND/OR BOX (E.G. SHEET METAL CONE ON POLE OR A 2-4 FT. LONG, 8" DIAMETER STOVEPIPE OR PVC PIPE SLEEVE ON THE POLE, MOUNTED SO THE SLEEVE WOBBLES; AND/OR WIRE MESH ENTRY GUARD - SEE NABS WEBSITE)
 • MOUNT BOXES MORE THAN 5 FEET FROM THE GROUND
 • WOODEN POSTS, UN-GREASED PIPES, PVC PIPES ARE NOT ACCEPTABLE WITHOUT A PREDATOR GUARD
 • PERCHES SHALL NOT BE USED ON ANY BLUEBIRD BOXES BECAUSE THEY ARE NOT NEEDED BY BLUEBIRDS AND ONLY FACILITATE HARASSMENT BY NON-NATIVE SPECIES SUCH AS HOUSE SPARROWS
 • FOOTNOTE: EASTERN BLUEBIRD NESTBOX SPECIFICATIONS, ADAPTED FROM N. AMERICAN BLUEBIRD SOCIETY



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PROJECT
**HABITAT MANAGEMENT PLAN
 WASTE MANAGEMENT OF NEW YORK
 MILL SEAT LANDFILL, BERGEN, NEW YORK**

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PROJECT NO.
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DRAWING NO.
FIG. 1

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