

## SIGN PLAN

### Swan Lake National Wildlife Refuge

#### A. Introduction

Swan Lake National Wildlife Refuge occupies 10,670 acres in the bottomlands of the Grand River, Elk Creek, and Yellow Creek. It is situated in the north-central part of Missouri which is characterized by gently rolling prairie, interrupted by many southerly flowing streams. Forest cover has typically been removed and now remains as second growth timber only along stream banks and the sides of adjacent hills.

Refuge topography is flat with the exception of an area of rolling prairie on the east side. Much of it was marginal farmland subject to annual flooding, and attempts to drain and farm Swan Lake at the turn of the century were unsuccessful.

Shortly after being set aside in 1937, CCC levee work created Silver Lake and enlarged Swan Lake. South Lake was added later and these three shallow impoundments cover almost half of the refuge. Moist soil plants and some 2700 acres of cropland attract one of the largest single concentrations of Canada geese in North America and this refuge is the primary wintering area for the Eastern Prairie Population whose numbers have exceeded 100,000 every year since 1962.

Our present goal is to produce about 125,000 bushels of grain for wildlife annually. This can only be achieved by force account farming and then only if the crops are not flooded out. Total habitat diversity is enhanced by 1000 acres of the southern boundary along Yellow Creek that are set aside to preserve mixed bottomland hardwoods with oxbow lakes and another 1500 acres covered by forest, permanent grass or native prairie.

#### B. Visitor Use Patterns

The interior of Swan Lake NWR is open from March 1 - September 30. Approximately 100,000 people come each year; about half of whom are local repeat visitors. Fishermen are representative of this group and comprise a fourth of our total visitation.

During 1978, we had almost 12,000 goose hunters at Swan Lake. Canada geese are also the focal point for most non-consumptive use at this refuge. Nearly one-third of our total visitation occurs in October after these birds have arrived and when the interior of the refuge has been closed for the season.

### C. Roads and Facilities

Swan Lake has three main entrances (Appendix A: points A,B,&C) and a secondary entrance near the present headquarters. Some 14 miles of graveled all-weather roads are shown in blue and about 10 miles of patrol roads appear as solid red lines. These latter are impassable during certain times of the year.

Public use facilities at Swan Lake are limited to an observation tower, a photo blind, one comfort station, two pit toilets, and 59 goose pits. There are no interpretive facilities at present but we hope to begin constructing our new office/visitor contact station this fiscal year, and an interpretive trail and four wayside exhibits are planned to be built with the assistance of YCC and YACC enrollees this summer.

### D. Inventory of Existing Signs

With the obvious exception of boundary and area closed signs, nearly all of our refuge signs are routed with yellow letters on a brown background. A majority of these were ordered in August 1968, to replace the old blue and white series. The rest of our routed signs were acquired between 1976-78. Locations for all are plotted in Appendix B. The 1968 signs are listed with an asterisk (\*), and those installed later appear with a plus (+). Black and white photographs are included where appropriate.

#### Point A. Main/Sumner Entrance

1. Entrance sign - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 4'x6' suspended, with 2-1/2", 4-1/2", and 5-1/2" letters (U.S. Fish and Wildlife Service add on) \*
2. 25 MPH speed limit +
3. "Refuge Open Daylight Hours Only", 1'x3-1/2' with 3" letters +



Main entrance; 1968 sign with a pole frame erected in 1960. Note shadow of old Bureau emblem.



Our visitors first impression when entering the refuge from Swan Lake Drive. The stone pillars were erected by the CCC. We plan to eliminate the one on the right after erecting the new entrance sign.

Point B. State Entrance

1. Entrance sign - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 4'x6' suspended, with 4-1/2", 4-1/2", and 5-1/2" letters (U.S. Fish and Wildlife Service add on) \*
2. 25 MPH speed limit +
3. "Refuge Open Daylight Hours Only", 1x3-1/2' with 3" letters +



This entrance sign just off of County Route E and near the Missouri Dept. of Conservation headquarters is seen only by visitors approaching the refuge from the east.

Point C. East Entrance.

1. 25 MPH speed limit +
2. "Refuge Open Daylight Hours Only", 9"x3-1/2' with 3" letters +





The East entrance is 1 mile north of Mendon on County Route CC. The fact that it is an entrance to a national wildlife refuge is esoteric.

#### Section C - D. Levee #1

1. Road Closed, for Official Use Only \*
2. Road Closed +
3. Road Closed, for Official Use Only \*



Section C-D, 1&2: Junction at the east end of Levee 1 and the Yellow Creek patrol road



Section C-D, sign 3

Point D. Junction, Levees 1 & 3

1. "Road Closed, for Official Use Only" \*
2. "Road Closed" on cable +

Section D-E, Levee 3

1. Road Closed on cable +
2. "Road Closed" \*
3. "No Vehicles Beyond This Point" (masonite) +



Section D-E, Signs 2&3. Judging by the tire tracks, some people do read these old signs

Point E. (No signs at present)

Section E-G. Levee 5 road

1. Road Closed \*
2. Area Beyond This Sign Closed +
3. Area Beyond This Sign Closed +
4. No Vehicles +

Point F. South Lake

1. "Road Closed For Official Use Only" \*
2. "Road Closed" on cable +

Point G. Junction, South Lake & Levee 5 roads

1. No Boats \*



## Section G-H

## 1. Road Closed \*

## Point H. Headquarters area

1. Entrance Sign - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 4'x6' suspended, with 2-1/2", 4-1/2" and 5-1/2" letters (U.S. Fish and Wildlife Service add on) \*
2. "Observation Tower" with left arrow \*
3. "Photo Blind Check At Office" with left arrow +
4. "Photo Blind" +
5. Office \*
6. Road Closed \*
7. Road Closed \*
8. Road Closed \*



From the Secondary Entrance  
near headquarters



Sign H-3. Sign pointing to the trailhead of a short boardwalk leading to the photo blind



Sign H-5. Our present office is in the maintenance area



Visitors are encouraged to avoid the maintenance area with this "Road Closed"; 1 of 3 in the headquarters area

Point I. Environmental Study Area Junction with main entrance road (no signs at present)

#### MISCELLANEA

Points M-1,2, & 3 - Highway Signs

These are identical to the current entrance signs and are placed at three corners where the refuge boundary begins to run parallel to the road again after a distance of private property.



Sign M-3 on the east boundary



### Boundary Signs

Some reposting has been done by YCC during the past three summers and most boundary signs are in good shape. Exceptions are portions of the northeastern, southwestern, and southern boundaries which still require work.



We still have a few of these! Some on the northeast boundary were nailed to trees which have begun to grow over them and many have at least one bullet hole.



Field access to the white barn on the northern boundary. This is conspicuously posted. Six others are further off the road and do not invite curiosity



Missouri State Highway posting of our "Waterfowl Area" at the junction of County Routes CC & E. We'll strive for something more appropriate when we get our own house in order.

### E. Proposed Signs

Most of our wooden signs have deteriorated after 10 years of service and need to be replaced. In the case of our entrance signs, precipitation has collected in the holes drilled through the 2"x12" boards for the long 1/2" rods which hold these signs together causing the boards to rot from the inside. This problem could be reduced in this type of sign by squeezing a liberal amount of silicone cement into the top bolt recesses.

We would like to stay with routed signs at this refuge and propose that they be made using the Modified Gothic Number 2 Alphabet, series D. Except for entrance and other special signs, 3" high letters should be used. All signs should have white letters on a dark brown background, using treated 2" thick timber. All require wording on one side only and most will be mounted on treated 4"x4" wood posts which we will obtain locally.

Locations for all proposed signs are plotted in Appendix C. New signs are listed in the following text with a (N); replacements are coded with a (R). All signs that we want to order this fiscal year are tabulated in Appendix F with the quantity needed in parenthesis. Wood, metal signs, and corten steel stanchions are on separate purchase orders.

#### Point A. Main/Sumner Entrance

1. Entrance Sign - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 5'x8' mounted on stanchions, with 3", 5" and 8" letters (R). Please refer to sketches, Appendix D 1 & 2.
2. a. "Refuge Open, Daylight Hours Only", 1'x3-1/2' with 3" letters (R). Sketch, Appendix D 3.
2. b. "Headquarters Open, Daylight Hours Only", 1'x3-1/2' with 3" letters (N). Sketch, Appendix D 8. Note: Signs 2a and 2b should be the same width, since one will replace the other as the season requires.
3. 25 MPH Speed Limit - already ordered
4. Recreational Symbol - Firearms with prohibitive slash, 8"x8" (N).

Point B. State Entrance

- 1.-4. Are the same as for the Sumner Entrance.
5. "Information" with left arrow. 8"x26" (N). Appendix D 3.
6. Recreational Symbol - Parking 8"x8" (N).

Point C. East Entrance

- 1.-6. Are the same as for the State Entrance.
7. "Headquarters, 9 Miles" with straight ahead arrow, 10"x28" (N). Appendix D 3.

Section C-D, Levee #1

1. "Road Closed", 6"x26" (R). Appendix D 3.
2. As above.

Point D. Junction Levees #1 and #3

1. "Road Closed", 6"x26" (R).

Section D-E. Levee #3

1. Recreational Symbols - "Row Boating" and "Motor Boating with prohibitive slash", both 8"x8" (N).
2. "Road Closed", 6"x26" (N)
3. As above.
4. Recreational Symbol - Parking with prohibitive slash, 8"x8" (N).
5. a. Recreational Symbol - Restrooms (N) 8"x8".
5. b. Recreational Symbol - Men's Restroom (N) 6"x6".
5. c. Recreational Symbol - Women's Restroom (N) 6"x6".
6. Recreational Symbols - "Row Boating" and "Motor Boating with prohibitive slash", both 8"x8" (N).
7. "Road Closed", 6"x26" (R).

Point E. Junction State Entrance and Silver Lake Roads

1. "Silver Lake, 1/2 Mile" with left arrow; and "Headquarters, 2-1/2 Miles" with right arrow, 18"x28" (N). Appendix D 3.
2. "Silver Lake, 1/2 Mile" with right arrow, 10"x26" (N). Appendix D 4.
3. "Headquarters, 2-1/2 Miles" with left arrow 10"x28" (N). Appendix D 4.

Section E-G, Levee #5

1. "Road Closed", 6"x26" (R).
2. "Road Closed", 6"x26" (N).
3. "Road Closed", 6"x26" (R).
4. Recreational Symbols - "Row Boating" and "Motor Boating with prohibitive slash", both 8"x8".
5. As above.

Point F. South Lake

- 1.-3. "Road Closed", 6"x26" (R)

Point G. Junction South Lake and Levee #5 Roads

1. Recreational Symbols - Row Boats with prohibitive slash and Motor Boats with prohibitive slash, both 8"x8" (N)
2. "Headquarters" with right arrow and "South Lake, 1 Mile" with left arrow; 12"x32" (N). Sketch, Appendix D 4.
3. "Headquarters" with straight ahead arrow and "Silver Lake, 3 Miles" with right arrow; 12"x32" (N). Appendix D 4.
4. "Silver Lake, 3 Miles" with left arrow and "South Lake, 1 Mile" with straight arrow, 18"x28" (N). Appendix D 4.

Point H. Headquarters Area - (Please refer to Appendix E for specific locations of the following signs)

1. Entrance Sign - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 5'x8' mounted on stanchions, with 3", 5", and 8" letters (R). Sketch, Appendix D 1&2.
2. Headquarters/Office Sign - "Headquarters, Swan Lake National Wildlife Refuge, 34"x8' mounted on stanchions, with 5" and 8" letters (N). Sketches, Appendix D 5 & 6.
3. "Observation Tower" with straight ahead arrow, 10"x30" (N). Sketch, Appendix D 4.
4. "Maintenance Area" with right arrow, 10"x30" (N). Sketch, Appendix D 7.
5. "Office, Information" with left arrow, 10"x30" (N). Sketch, Appendix D 7.
6. "Visitor Parking" with left arrow and "Bus Parking" with right arrow, 10"x38" (N). Sketch, Appendix D 7.
7. "Visitor's Entrance", 8"x22" with 2" letters (N). Appendix D 7.
8. "Staff Entrance", 8"x16" with 2" letters (N). Appendix D 7.
9. "Auto Tour, Please Get Brochure At Office" 16"x42" (N) Appendix D 7.
10. "Marsh View Boardwalk" 8"x20" with 2" letters (N). Appendix D 7.
11. a. Recreational Symbol - Restrooms (N) 8"x8".
11. b. Recreational Symbol - 2 Men's Restroom (N) 6"x6".
11. c. Recreational Symbol - 2 Women's Restroom (N) 6"x6".
12. Recreational Symbol - Handicapped (N) 8"x8".
13. "Road Closed" 6"x26" (R).



Section H-I. Levee #4

1. & 2. "Viewing Area" with left arrows, 10"x22" (N).  
Appendix D 8.

Point I. Environmental Study Area and Junction with Main  
Entrance Road.

1. "Habitat Trail, 1/2 Mile", with right arrow 10"x34" (N).  
Sketch, Appendix D 8.
2. "Habitat Trail, 1/2 Mile", with left arrow 10"x34" (N).  
Sketch, Appendix D 8.
3. "Habitat Trail" with 2" letters 8"x14" (N). Sketch,  
Appendix D 8.
4. "Information", 2" letters in verticle format 4"x36" (N).  
Sketch, Appendix D 8.
5. Recreational Symbols - Environmental Study Area, two  
8"x8" and two 6"x6".
6. "Information" with left arrow, 8"x26" (N). Appendix D 3.
7. Recreational Symbols - Parking (N) 8"x8", three needed.
8. "Headquarters, 1-1/2 Miles" with left arrow and "Sumner,  
1 Mile" with right arrow 16"x28" (N). Sketch, Appendix D 8.
9. a. Recreational Symbol - Restrooms (N) 8"x8".
9. b. Recreational Symbol - Men's Restroom (N) 6"x6".
9. c. Recreational Symbol - Women's Restroom (N) 6"x6".

Edward R. Moyer,  
Outdoor Recreation Planner  
7/18/79

## APPENDIX F

### F. Summary of Needed Signs, Materials and Quantities Required

#### 1. Routed Wood Signs

- a. Entrance Signs - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 5' x 8' mounted on stanchions, with 3", 5", and 8" letters. Sketches, Appendix D 1&2. (4)
- b. "Refuge Open, Daylight Hours Only", 1' x 3-1/2' with 3" letters. Sketch, Appendix D 3. (3)
- c. "Headquarters Open, Daylight Hours Only", 1' x 3-1/2' with 3" letters. Sketch, Appendix D 8. (3)
- d. "Information" with left arrow, 8" x 26". Appendix D 3. (3)
- e. "Headquarters, 9 Miles" with straight ahead arrow, 10" x 28". Appendix D 3. (1)
- f. "Road Closed", 6' x 26'. Appendix D 3. (13)
- g. "Silver Lake, 1/2 Mile" with left arrow and "Headquarters, 2-1/2 Miles" with right arrow, 18" x 28". Appendix D 3. (1)
- h. "Silver Lake, 1/2 Mile" with right arrow, 10" x 26". Appendix D 4. (1)
- i. "Headquarters, 2-1/2 Miles" with left arrow, 10" x 28". Appendix D 4. (1)
- j. "Headquarters" with right arrow and "South Lake, 1 Mile" with left arrow, 12" x 32". Appendix D 4. (1)
- k. "Headquarters" with straight ahead arrow and "Silver Lake, 3 Miles" with right arrow, 12" x 32". Appendix D 4. (1)
- l. "Silver Lake, 3 Miles" with left arrow and "South Lake, 1 Mile" with straight arrow, 18" x 28". Appendix D 4. (1)
- m. "Headquarters, Swan Lake National Wildlife Refuge", 34" x 8' mounted on stanchions, with 5" and 8" letters. Appendix D 5 and 6. (1)

- n. "Observation Tower" with straight ahead arrow, 10" x 30".  
Appendix D 4. (1)
- o. "Maintenance Area" with right arrow, 10" x 30". Appendix  
D 7. (1)
- p. "Office, Information" with left arrow, 10" x 30".  
Appendix D 7. (1)
- q. "Visitor Parking" with left arrow and "Bus Parking"  
with right arrow, 10" x 38". Appendix D 7. (1)
- r. "Visitor's Entrance", 8" x 22" with 2" letters.  
Appendix D 7. (1)
- s. "Staff Entrance", 8" x 16" with 2" letters. Appendix  
D 7. (1)
- t. "Auto Tour, Please Get Brochure At Office", 16" x 42".  
Appendix D 7. (1)
- u. "Marsh View Boardwalk", 8" x 20" with 2" letters.  
Appendix D 7. (1)
- v. "Viewing Area" with left arrow, 10" x 22". Appendix D 8.  
(2)
- w. "Habitat Trail, 1/2 Mile" with right arrow 10" x 34".  
Appendix D 8. (1)
- x. "Habitat Trail, 1/2 Mile" with left arrow 10" x 34".  
Appendix D 8. (1)
- y. "Habitat Trail" with 2" letters 8" x 14". Appendix  
D 8. (1)
- z. "Information" 2" letters in verticle format 4" x 36".  
Appendix D 8. (1)
- !. "Headquarters, 1-1/2 Miles" with left arrow and "Sumner,  
1 Mile" with right arrow, 16" x 28". Appendix D 8. (1)

## 2. Metal Signs

- a. Recreational Symbol - Firearms with prohibitive slash, 8" x 8", brown background with white symbol. Aluminum reflective. RS-001. \$21.60 (3)
- b. Recreational Symbol - Parking, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-034. \$31.50 (5)
- c. Recreational Symbol - Parking as above except with prohibitive slash. RS-034. \$15.15 (1)
- d. Recreational Symbol - Row Boating, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-057. \$21.00 (4)
- e. Recreational Symbol - Row Boating as above except with prohibitive slash. RS-057. \$15.15 (1)
- f. Recreational Symbol - Motor Boating with prohibitive slash, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-055 \$22.25 (5)
- g. Recreational Symbol - Restrooms, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-022 \$18.90 (3)
- h. Recreational Symbol - Men's Restroom, 6" x 6", brown background with white symbol. Aluminum non-reflective. RS-021 \$20.00 (4)
- i. Recreational Symbol - Women's Restroom, 6" x 6", brown background with white symbol. Aluminum non-reflective. RS-023. \$20.00 (4)
- j. Recreational Symbol - Handicapped, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-028. \$14.60 (1)
- k. Recreational Symbol - Environmental Study Area, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-076. \$16.70 (2)
- l. Recreational Symbol - As above except 6" x 6". \$16.20 (2)

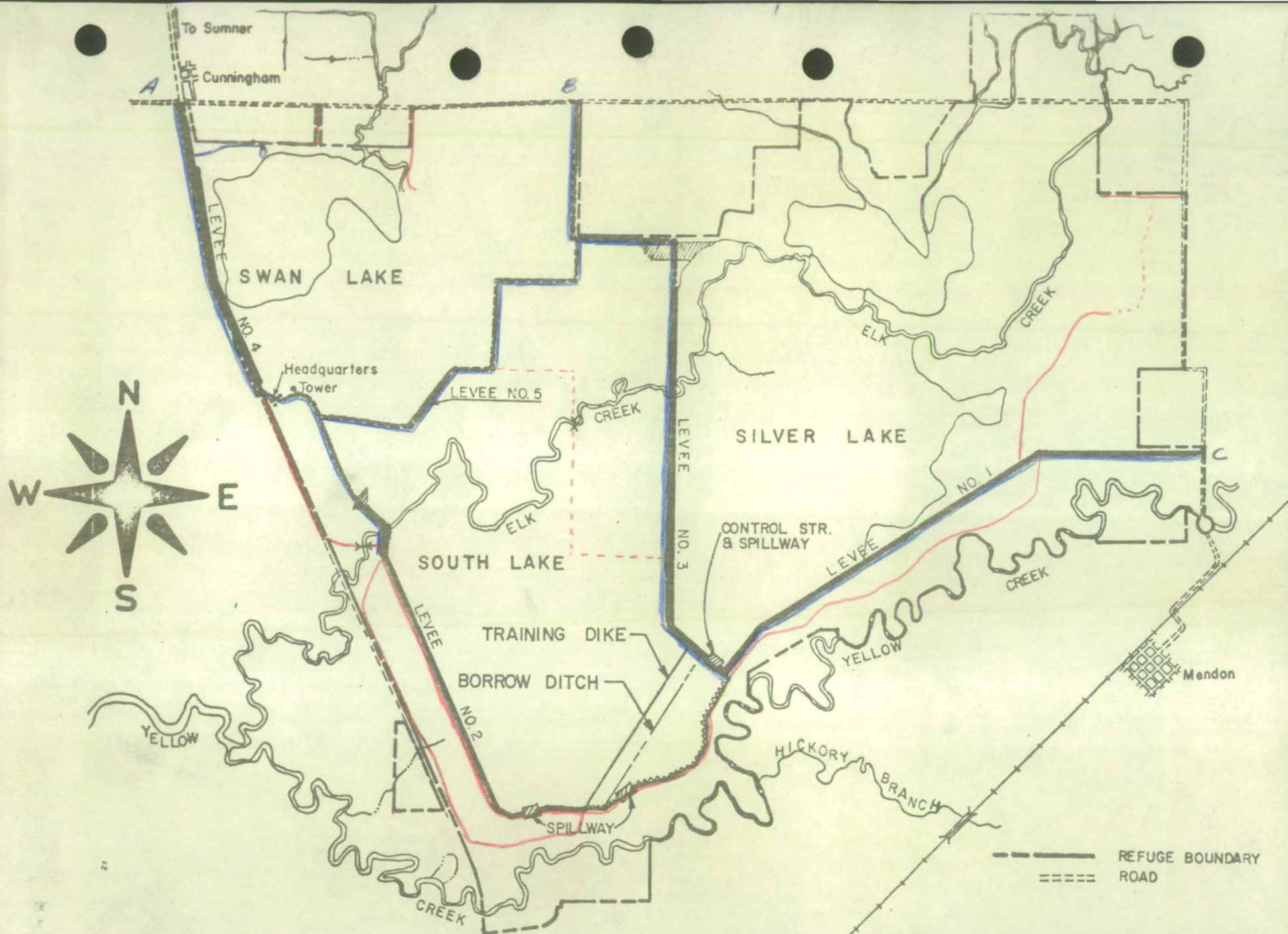
- m. Recreational Symbol - Interpretive Trail, 8" x 8", brown background with white symbol. Aluminum. Non-reflective. RS-074. \$16.70 (2)

Total cost of above signs - \$249.75. Estimated shipping weight is 35 pounds.

### 3. Corten Steel Stanchion Sign Supports/Posts

- a. Entrance Signs - each of these signs will require three 2-1/2" x 4" x 9' stanchions. There will be four such signs. Twelve, 2-1/2" x 4" x 9' stanchions at \$1.75/linear foot per post - \$189.00.
- b. "Headquarters, Swan Lake National Wildlife Refuge" will require two, 2-1/2" x 4" x 6' stanchions at \$1.75/linear foot - \$21.00.
- c. 25 MPH Speed Limit Signs - Five of these have already been ordered. They should be mounted not less than 5' above the road surface. We will require five, 2" x 2" x 10' corten steel posts at \$1.30/linear foot - \$65.00
- d. Recreational Symbols - We plan to order 37 of these signs. They will not need to be mounted as high above the road surface as our speed limit signs and 8' posts should be sufficient. Many recreational symbols will be doubled up. We will require twenty-four, 2" x 2" x 8' corten steel posts at \$1.30/linear foot - \$249.60.

Total cost of above corten steel stanchion sign supports/posts will be \$524.60. Estimated shipping weight - 1205 pounds.

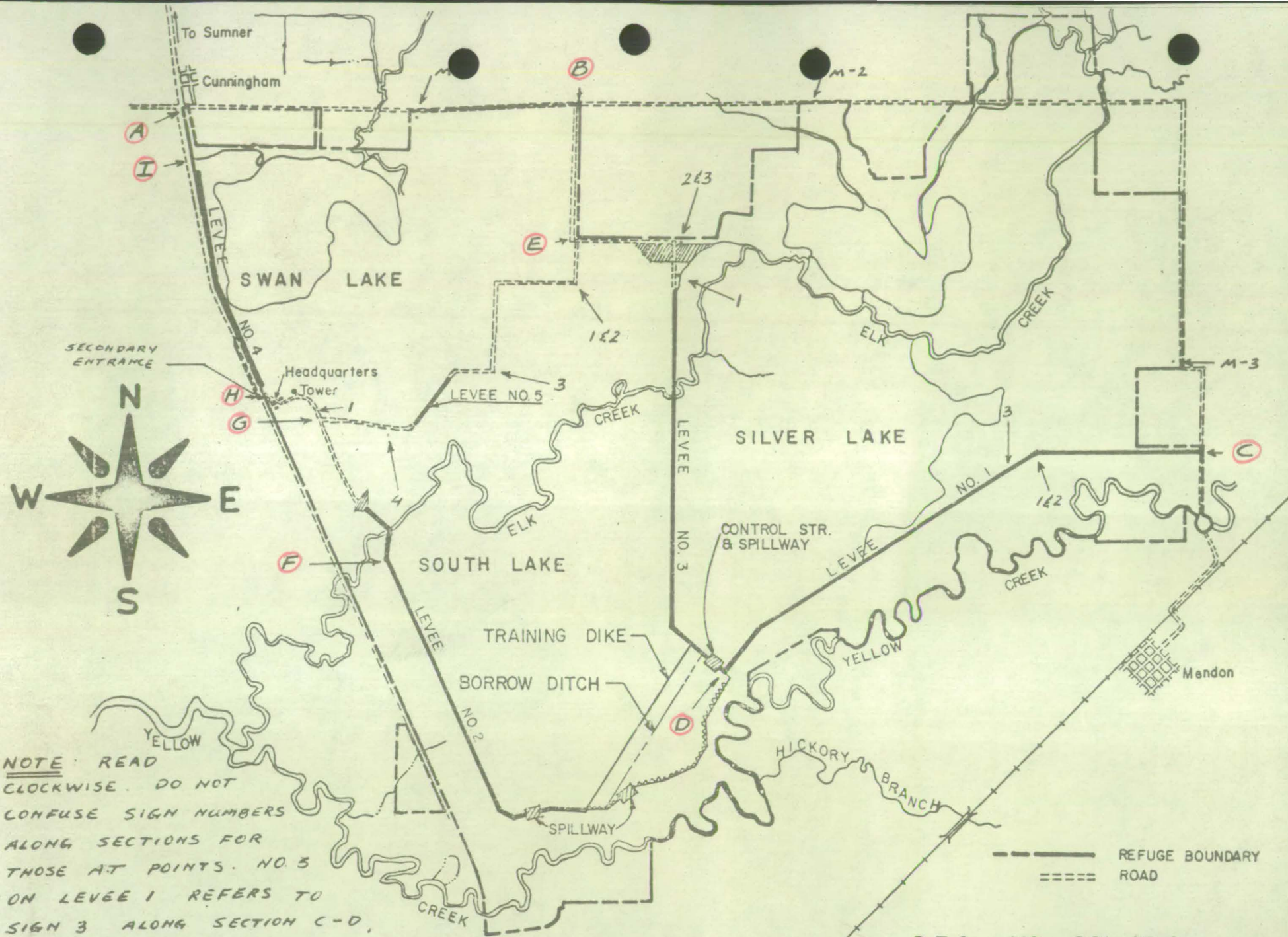


D.E.C. - MO. - 201-17.0

SWAN LAKE N.W.R.

APPENDIX A  
ROADS



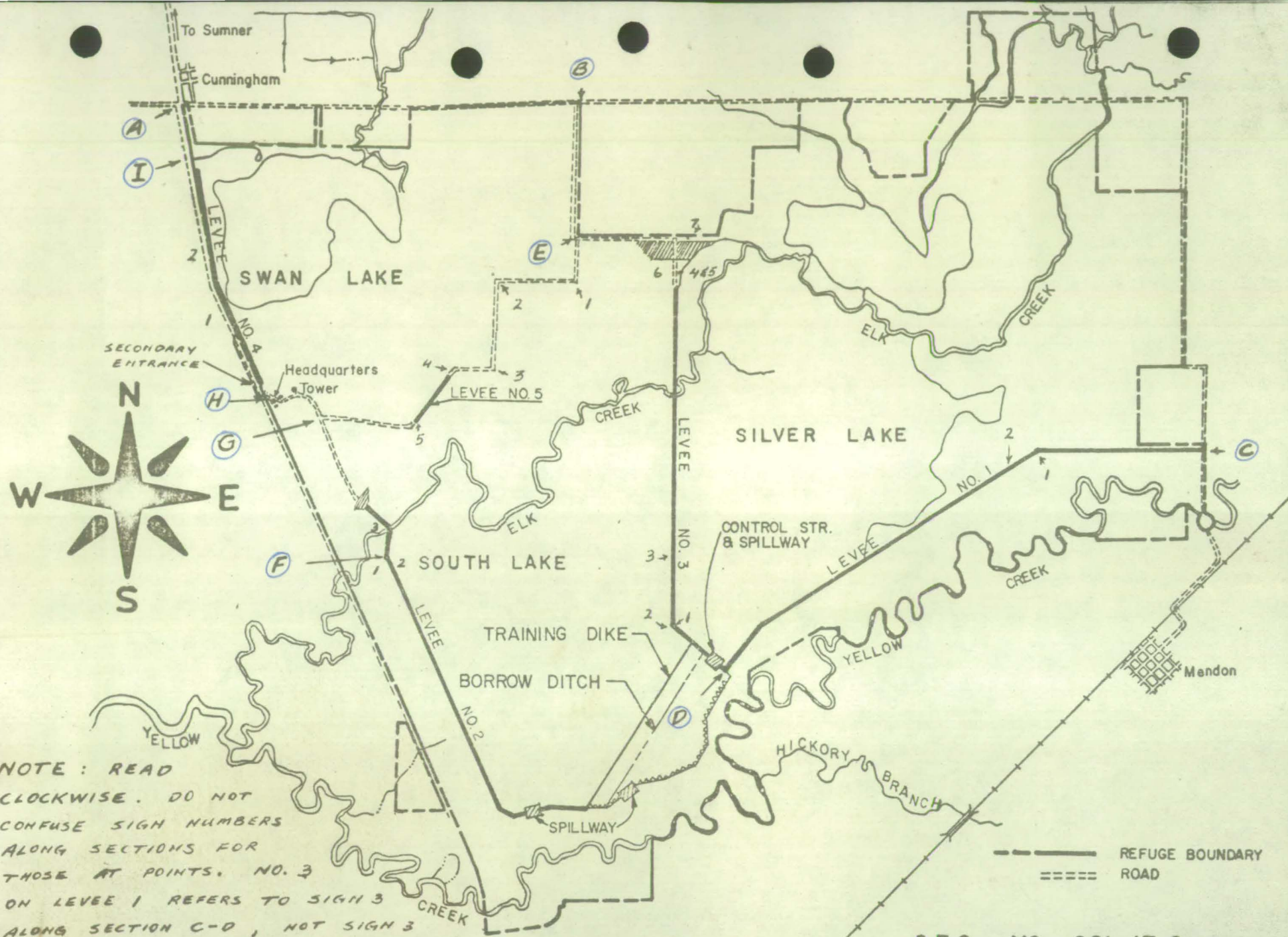


# SWAN LAKE N.W.R.

D.E.C. - MO. - 201-17.0

APPENDIX **B**  
EXISTING SIGNS INVENTORY

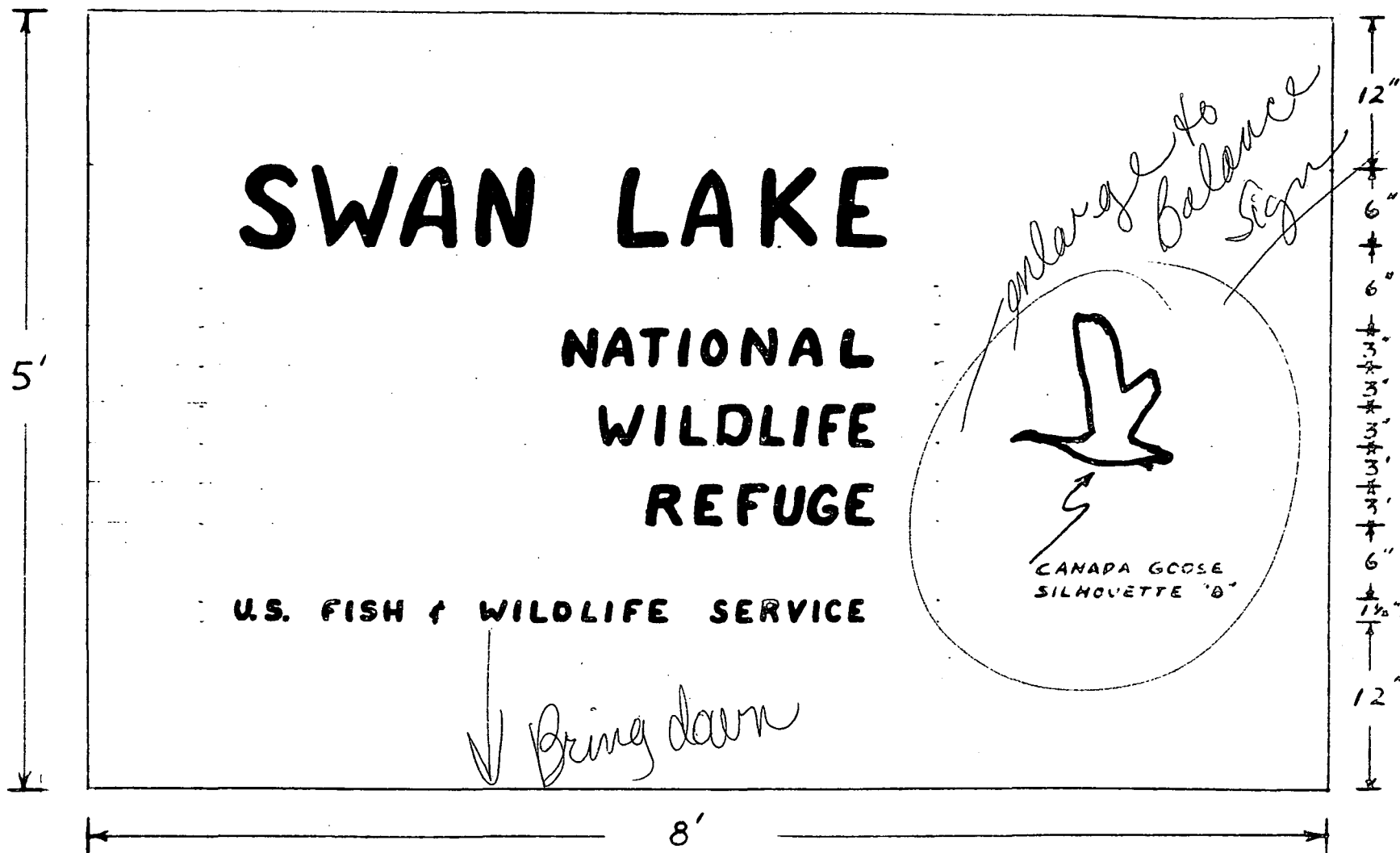




# SWAN LAKE N.W.R.

D.E.C. - MO. - 201-17.0

APPENDIX C  
PROPOSED SIGNS INVENTORY

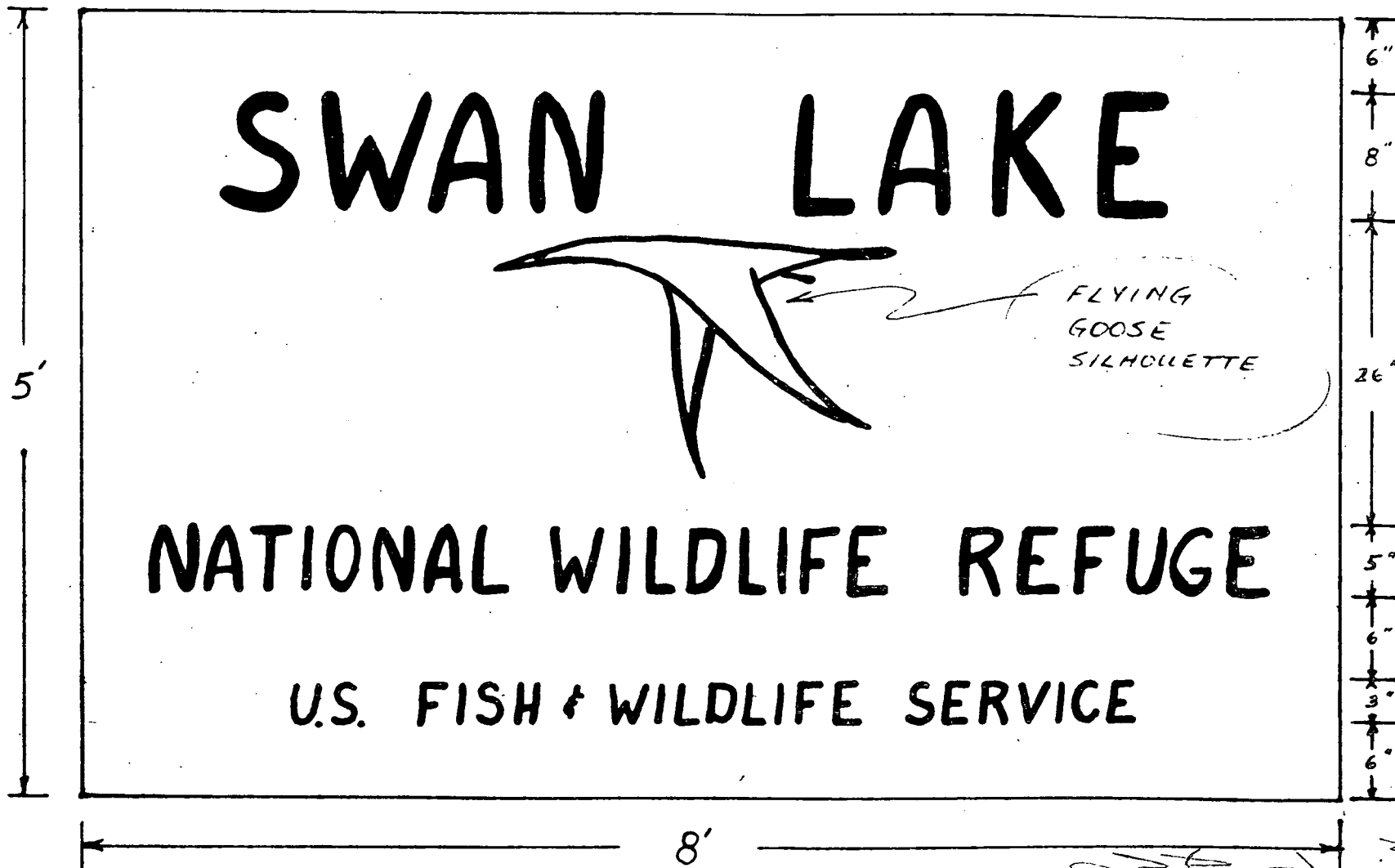


**ENTRANCE SIGN SKETCH  
(REVISION NO. THREE)**

**SCALE: 1"=1'**

**APPENDIX D:1**

*New design*  
*ERM*



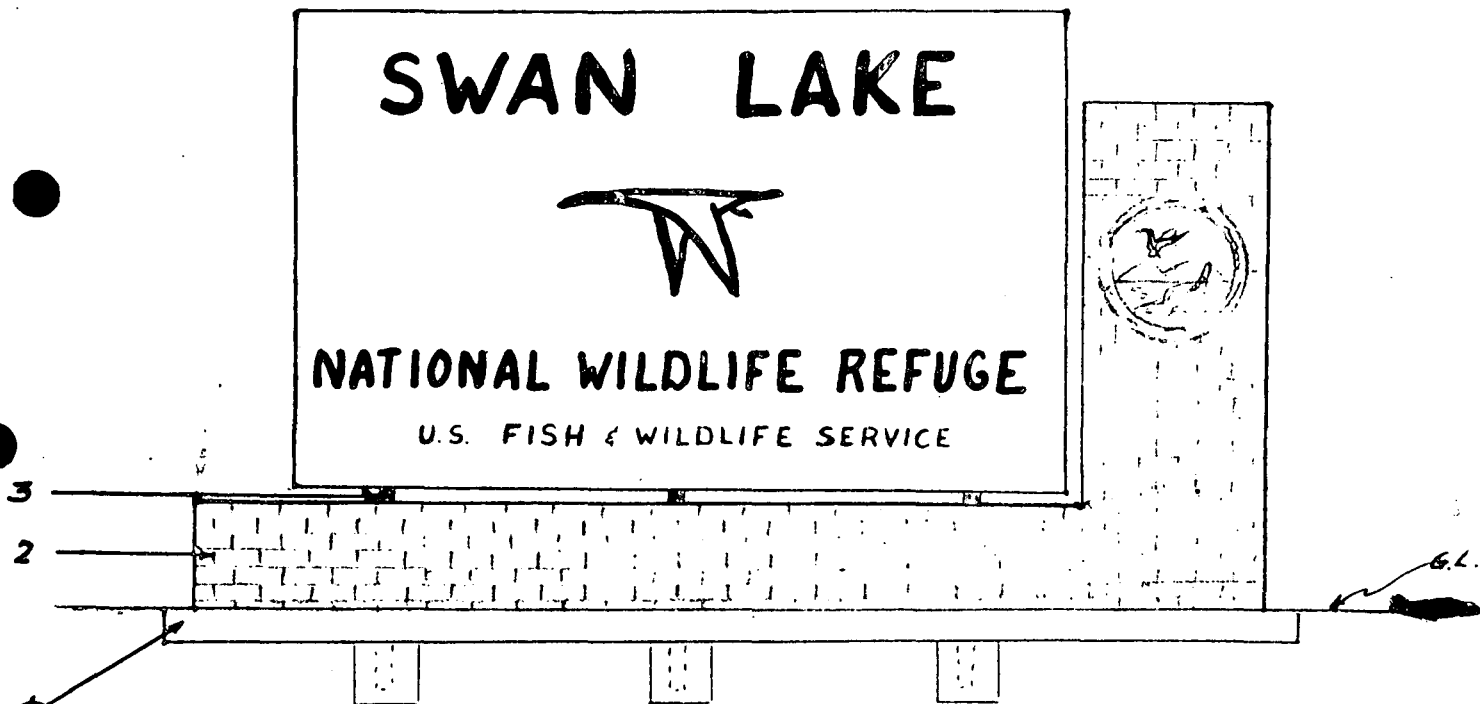
ENTRANCE SIGN SKETCH

SCALE: 1"=1'

APPENDIX D:1

ERM

## ENTRANCE SIGN SKETCH



### CONSTRUCTION MATERIALS:

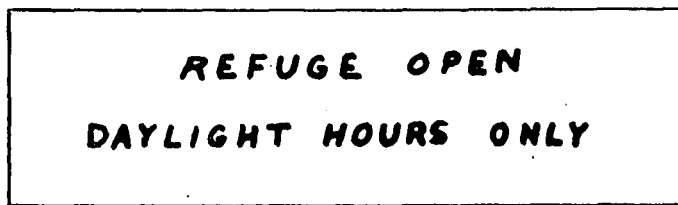
- 1) Reinforced concrete slab
- 2) Cement block construction faced with brick.  
(Brick color will match the color of our  
new Office/VCS as nearly as possible)
- 3) Three stanchions:  $2\frac{1}{2}'' \times 4'' \times 9'$ ; carbon steel  
from FPI.

Scale:  $1'' = 2'$

3" LETTERS  
UNLESS SPECIFIED  
OTHERWISE

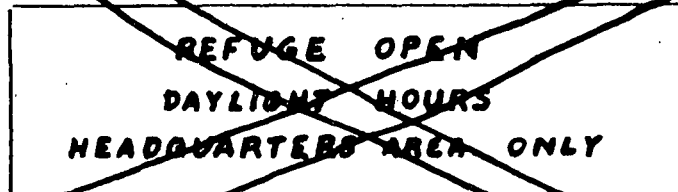
A

2 a)



1' x 3 1/2'

b)



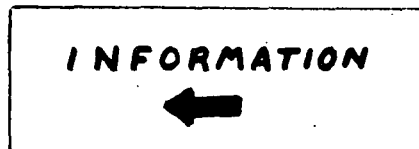
1' x 3 1/2'

PLEASE SEE  
APPENDIX D:8

2"

B

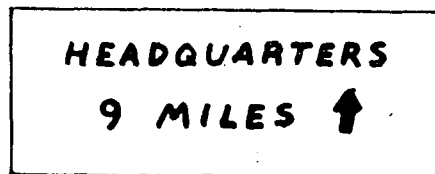
5)



8" x 26"

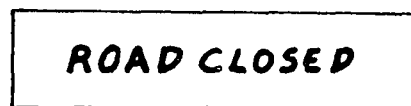
C

7)



10" x 28"

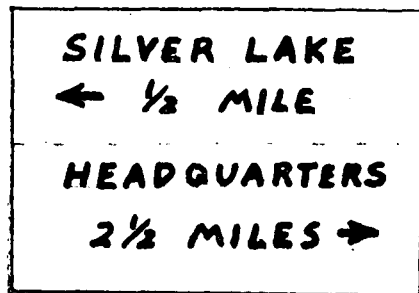
C-D)  
et al)



6" x 26"

E

1)



18" x 28"



REFUGE CODE:

E

2)

SILVER LAKE  
1/2 MILE →

10" x 26"

3)

HEADQUARTERS  
← 2 1/2 MILES

10" x 28"

G

2)

HEADQUARTERS →  
SOUTH LAKE  
← 1 MILE

12" x 32"

3)

↑ HEADQUARTERS  
SILVER LAKE  
3 MILES →

12" x 32"

4)

SILVER LAKE  
← 3 MILES  
SOUTH LAKE  
1 MILE ↑

18" x 28"

H

3)

OBSERVATION  
TOWER ↑

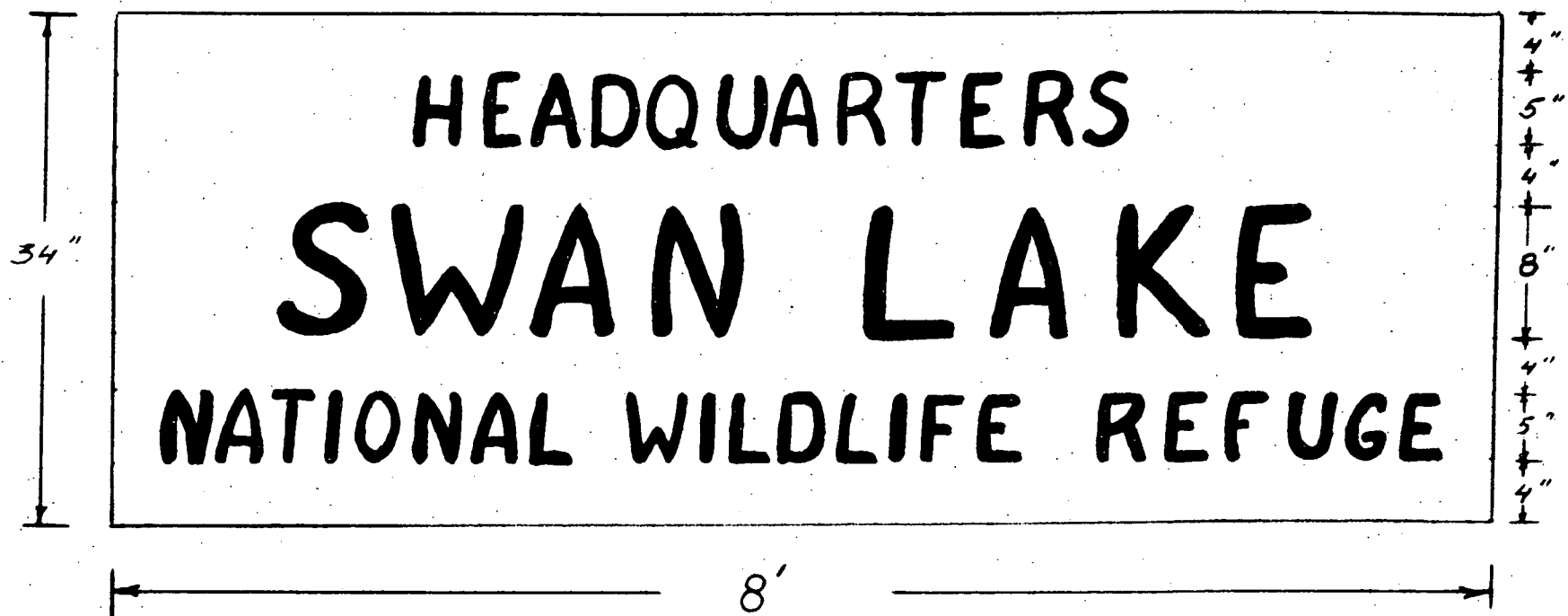
10" x 30"

3" LETTERS  
UNLESS SPECIFIED  
OTHERWISE

SCALE: 1" = 1'

APPENDIX D: 4

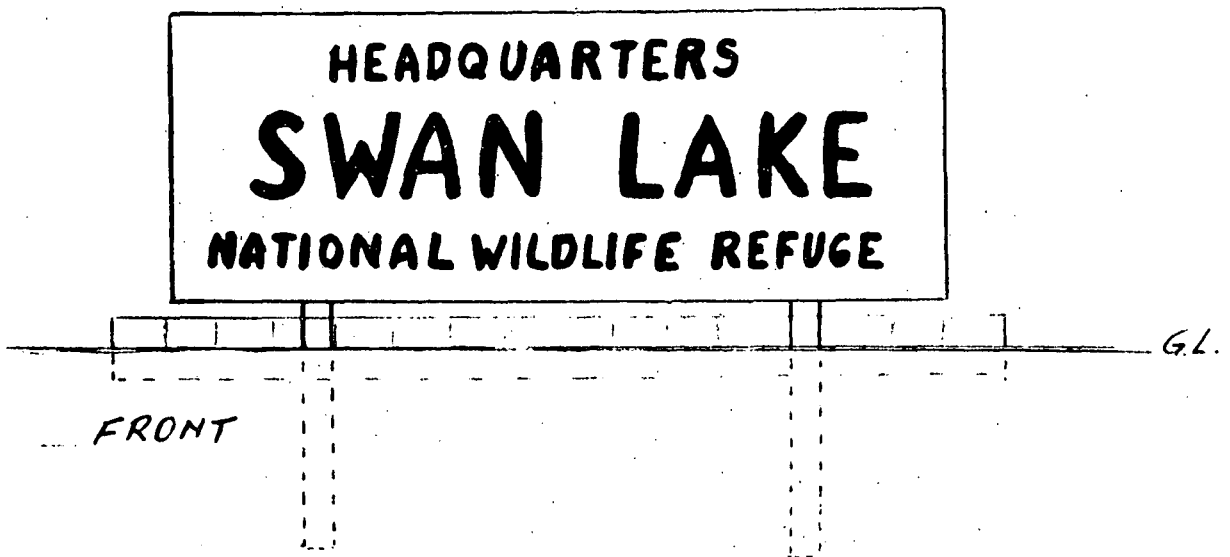
HQT'S / OFFICE SIGN SKETCH



Scale: 1" = 1'

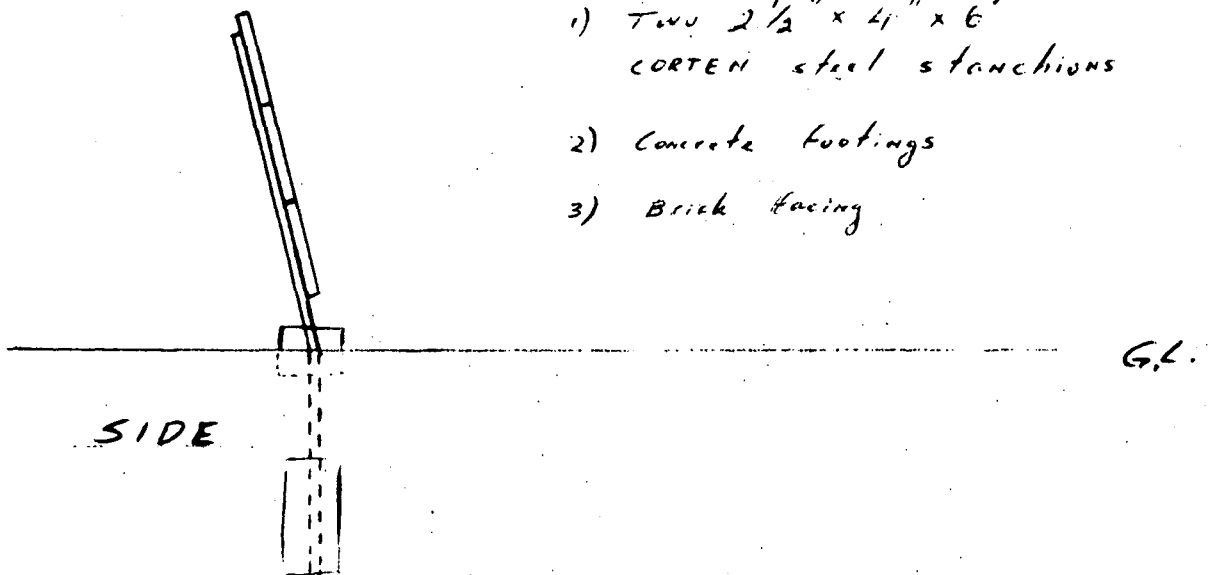
APPENDIX D:5

# HEADQUARTERS / OFFICE SIGN



## MATERIALS:

- 1) Two  $2\frac{1}{2}$ " x 4" x 6'  
CORTEN steel stanchions
- 2) Concrete footings
- 3) Brick facing

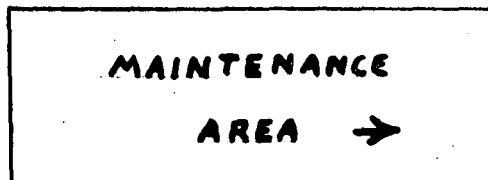


Scale: 1" = 2'

REFUGE CODE:

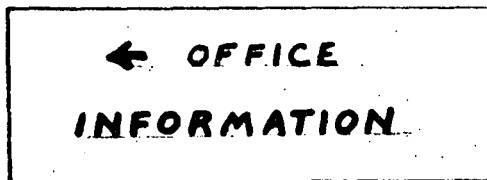
3" LETTERS  
UNLESS SPECIFIED  
OTHERWISE

H 4)



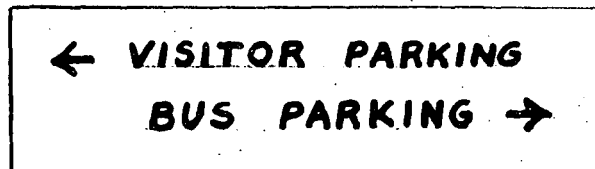
10" x 30"

5)



10" x 30"

6)



10" x 38"

7)



8" x 22"

} ————— 2"

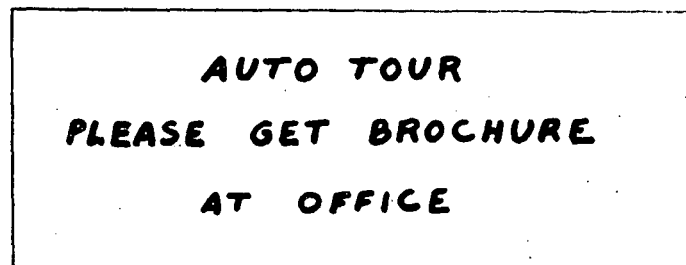
8)



8" x 16"

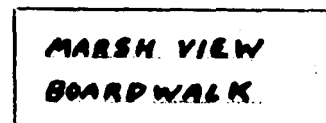
} ————— 2"

9)



16" x 42"

10)



8" x 20"

} ————— 2"

SCALE: 1" = 1'

APPENDIX D: 7

REFUGE CODE:

H-I

1 (2)

VIEWING  
← AREA

10" x 22"

3" LETTERS  
UNLESS SPECIFIED  
OTHERWISE

I

1)

HABITAT TRAIL  
1/2 MILE →

10" x 34"

2)

HABITAT TRAIL  
← 1/2 MILE

10" x 34"

3)

HABITAT  
TRAIL

8" x 14"

2"

4)

8)

HEADQUARTERS  
← 1 1/2 MILES  
SUMNER  
1 MILE →

16" x 28"

A

26)

HEADQUARTERS OPEN  
DAYLIGHT HOURS ONLY

1' x 3 1/2'

I  
N  
F  
O  
R  
M  
A  
T  
I  
O  
N

2"  
LETTERS

4" x 36"

SCALE: 1" = 1'

APPENDIX D: B

SWAN LAKE

Levee 4

To Summer

URS  
HEADQUARTERS  
BUILDING

POND

OBSERVATION  
TOWER

Visitor/Staff Parking  
(14 car capacity)

Bus Parking

COMFORT  
STATION

Visitor Parking  
(6 car capacity)

To AUTO TOUR

MAINTENANCE  
AREA

PROPOSED SITE DEVELOPMENT  
HEADQUARTERS AREA  
SWAN LAKE NATIONAL WILDLIFE REFUGE

NOT TO SCALE

APPENDIX E

Regional Director, Denver, Co. (RW/IR)  
through Area Manager, Kansas City, Mo. (RW)

July 18, 1979

Refuge Manager, Swan Lake NWR, Sumner, Mo.

Sign Plan -- Swan Lake National Wildlife Refuge

Attached is our proposed Sign Plan for your approval.

cc: Area Manager, KCAO



## SIGN PLAN

### Swan Lake National Wildlife Refuge

#### A. Introduction

Swan Lake National Wildlife Refuge occupies 10,670 acres in the bottomlands of the Grand River, Elk Creek, and Yellow Creek. It is situated in the north-central part of Missouri which is characterized by gently rolling prairie, interrupted by many southerly flowing streams. Forest cover has typically been removed and now remains as second growth timber only along stream banks and the sides of adjacent hills.

Refuge topography is flat with the exception of an area of rolling prairie on the east side. Much of it was marginal farmland subject to annual flooding, and attempts to drain and farm Swan Lake at the turn of the century were unsuccessful.

Shortly after being set aside in 1937, CCC levee work created Silver Lake and enlarged Swan Lake. South Lake was added later and these three shallow impoundments cover almost half of the refuge. Moist soil plants and some 2700 acres of cropland attract one of the largest single concentrations of Canada geese in North America and this refuge is the primary wintering area for the Eastern Prairie Population whose numbers have exceeded 100,000 every year since 1962.

Our present goal is to produce about 125,000 bushels of grain for wildlife annually. This can only be achieved by force account farming and then only if the crops are not flooded out. Total habitat diversity is enhanced by 1000 acres of the southern boundary along Yellow Creek that are set aside to preserve mixed bottomland hardwoods with oxbow lakes and another 1500 acres covered by forest, permanent grass or native prairie.

#### B. Visitor Use Patterns

The interior of Swan Lake NWR is open from March 1 - September 30. Approximately 100,000 people come each year; about half of whom are local repeat visitors. Fishermen are representative of this group and comprise a fourth of our total visitation.

During 1978, we had almost 12,000 goose hunters at Swan Lake. Canada geese are also the focal point for most non-consumptive use at this refuge. Nearly one-third of our total visitation occurs in October after these birds have arrived and when the interior of the refuge has been closed for the season.

### C. Roads and Facilities

Swan Lake has three main entrances (Appendix A: points A,B,&C) and a secondary entrance near the present headquarters. Some 14 miles of graveled all-weather roads are shown in blue and about 10 miles of patrol roads appear as solid red lines. These latter are impassable during certain times of the year.

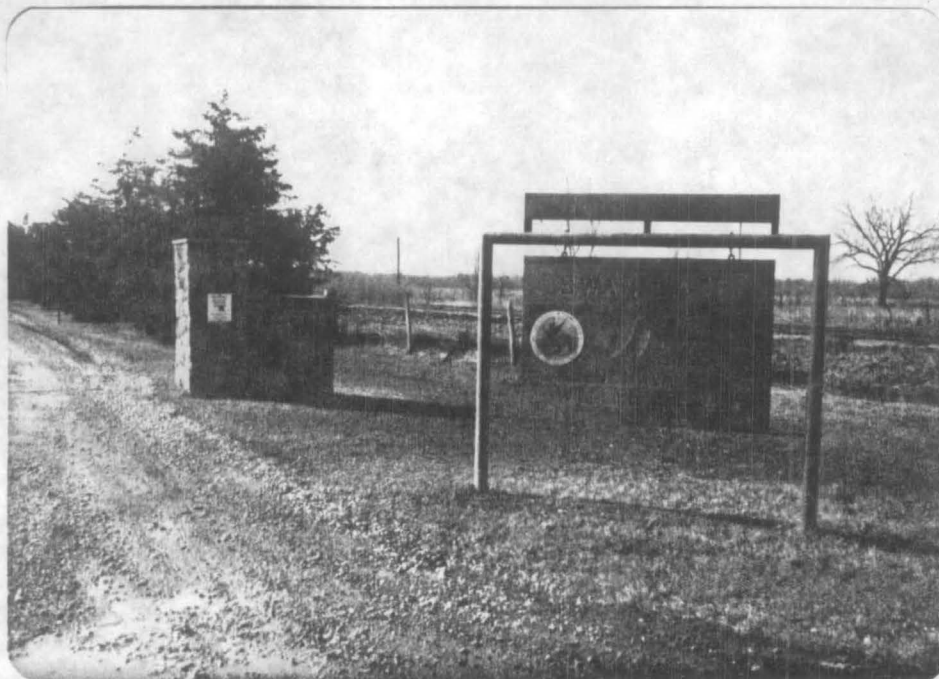
Public use facilities at Swan Lake are limited to an observation tower, a photo blind, one comfort station, two pit toilets, and 59 goose pits. There are no interpretive facilities at present but we hope to begin constructing our new office/visitor contact station this fiscal year, and an interpretive trail and four wayside exhibits are planned to be built with the assistance of YCC and YACC enrollees this summer.

### D. Inventory of Existing Signs

With the obvious exception of boundary and area closed signs, nearly all of our refuge signs are routed with yellow letters on a brown background. A majority of these were ordered in August 1968, to replace the old blue and white series. The rest of our routed signs were acquired between 1976-78. Locations for all are plotted in Appendix B. The 1968 signs are listed with an asterisk (\*), and those installed later appear with a plus (+). Black and white photographs are included where appropriate.

#### Point A. Main/Summer Entrance

1. Entrance sign - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 4'x6' suspended, with 2-1/2", 4-1/2", and 5-1/2" letters (U.S. Fish and Wildlife Service add on) \*
2. 25 MPH speed limit +
3. "Refuge Open Daylight Hours Only", 1'x3-1/2' with 3" letters +



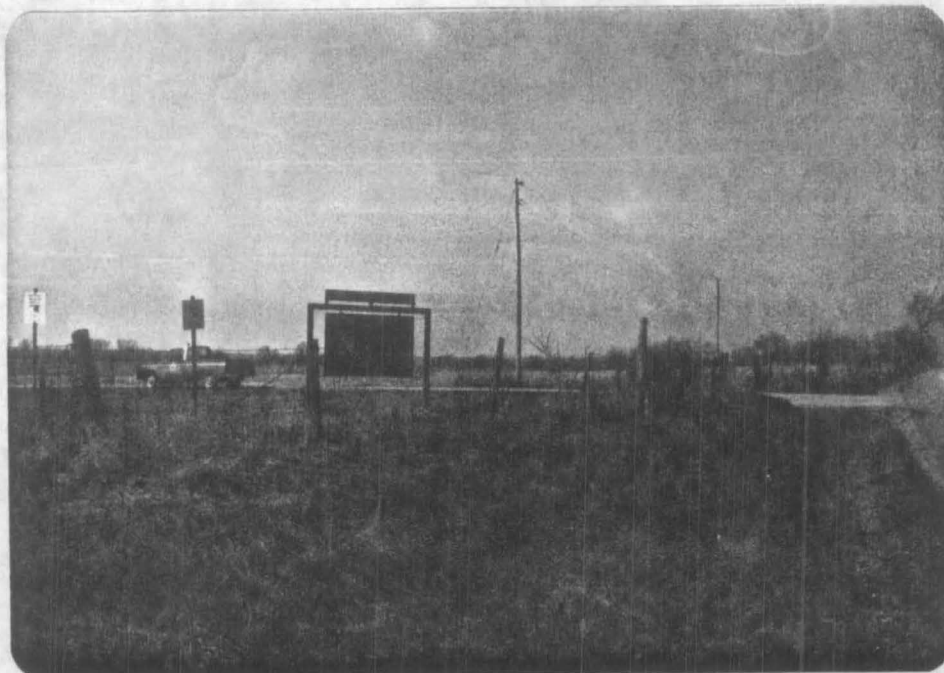
Main entrance; 1968 sign with a pole frame erected in 1960. Note shadow of old Bureau emblem.



Our visitors first impression when entering the refuge from Swan Lake Drive. The stone pillars were erected by the CCC. We plan to eliminate the one on the right after erecting the new entrance sign.

Point B. State Entrance

1. Entrance sign - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 4'x6' suspended, with 4-1/2", 4-1/2", and 5-1/2" letters (U.S. Fish and Wildlife Service add on) \*
2. 25 MPH speed limit +
3. "Refuge Open Daylight Hours Only", 1x3-1/2' with 3" letters +



This entrance sign just off of County Route E and near the Missouri Dept. of Conservation headquarters is seen only by visitors approaching the refuge from the east.

Point C. East Entrance.

1. 25 MPH speed limit +
2. "Refuge Open Daylight Hours Only", 9"x3-1/2' with 3" letters +





The East entrance is 1 mile north of Mendon on County Route CC. The fact that it is an entrance to a national wildlife refuge is esoteric.

Section C - D. Levee #1

1. Road Closed, for Official Use Only \*
2. Road Closed +
3. Road Closed, for Official Use Only \*



Section C-D, 1&2: Junction at the east end of Levee 1 and the Yellow Creek patrol road



Section C-D, sign 3

Point D. Junction, Levees 1 & 3

1. "Road Closed, for Official Use Only" \*
2. "Road Closed" on cable +

Section D-E, Levee 3

1. Road Closed on cable +
2. "Road Closed" \*
3. "No Vehicles Beyond This Point" (masonite) +





Section D-E, Signs 2&3. Judging by the tire tracks, some people do read these old signs

Point E. (No signs at present)

Section E-G. Levee 5 road

1. Road Closed \*
2. Area Beyond This Sign Closed +
3. Area Beyond This Sign Closed +
4. No Vehicles +

Point F. South Lake

1. "Road Closed For Official Use Only" \*
2. "Road Closed" on cable +

Point G. Junction, South Lake & Levee 5 roads

1. No Boats \*

**Section G-H****1. Road Closed \*****Point H. Headquarters area**

1. Entrance Sign - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 4'x6' suspended, with 2-1/2", 4-1/2" and 5-1/2" letters (U.S. Fish and Wildlife Service add on) \*

2. "Observation Tower" with left arrow \*

3. "Photo Blind Check At Office" with left arrow +

4. "Photo Blind" +

5. Office \*

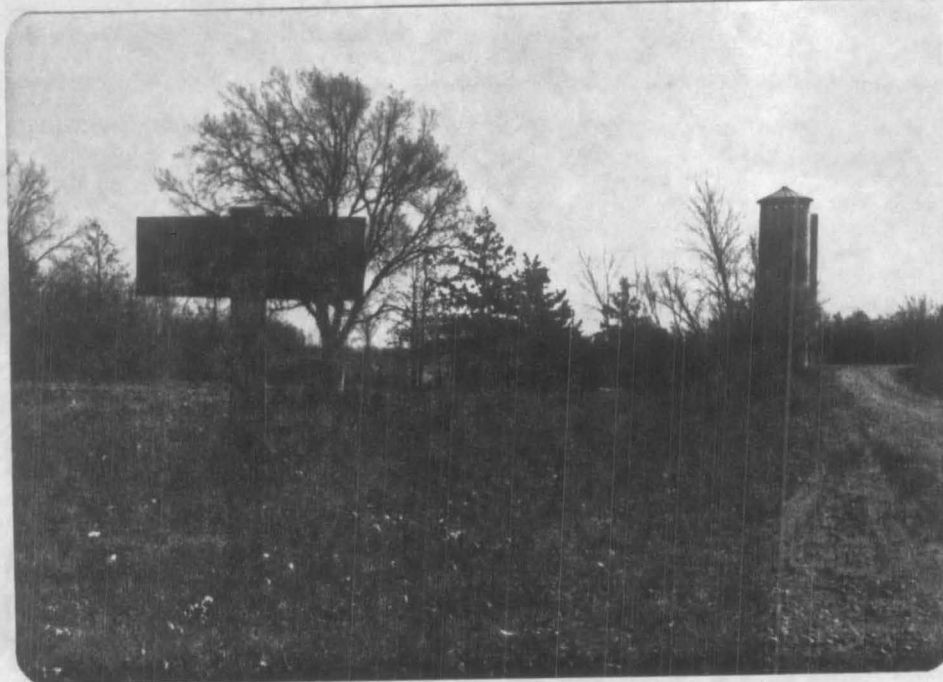
6. Road Closed \*

7. Road Closed \*

8. Road Closed \*



From the Secondary Entrance  
near headquarters



Sign H-3. Sign pointing to the trailhead of a short boardwalk leading to the photo blind



Sign H-5. Our present office is in the maintenance area





Visitors are encouraged to avoid the maintenance area with this "Road Closed"; 1 of 3 in the headquarters area

Point I. Environmental Study Area Junction with main entrance road  
(no signs at present)

#### MISCELLANEA

Points M-1,2, & 3 - Highway Signs

These are identical to the current entrance signs and are placed at three corners where the refuge boundary begins to run parallel to the road again after a distance of private property.



Sign M-3 on the east boundary

### Boundary Signs

Some reposting has been done by YCC during the past three summers and most boundary signs are in good shape. Exceptions are portions of the northeastern, southwestern, and southern boundaries which still require work.



We still have a few of these! Some on the northeast boundary were nailed to trees which have begun to grow over them and many have at least one bullet hole.



Field access to the white barn on the northern boundary. This is conspicuously posted. Six others are further off the road and do not invite curiosity



Missouri State Highway posting of our "Waterfowl Area" at the junction of County Routes CC & E. We'll strive for something more appropriate when we get our own house in order.



### **E. Proposed Signs**

Most of our wooden signs have deteriorated after 10 years of service and need to be replaced. In the case of our entrance signs, precipitation has collected in the holes drilled through the 2"x12" boards for the long 1/2" rods which hold these signs together causing the boards to rot from the inside. This problem could be reduced in this type of sign by squeezing a liberal amount of silicone cement into the top bolt recesses.

We would like to stay with routed signs at this refuge and propose that they be made using the Modified Gothic Number 2 Alphabet, series D. Except for entrance and other special signs, 3" high letters should be used. All signs should have white letters on a dark brown background, using treated 2" thick timber. All require wording on one side only and most will be mounted on treated 4"x4" wood posts which we will obtain locally.

Locations for all proposed signs are plotted in Appendix C. New signs are listed in the following text with a (N); replacements are coded with a (R). All signs that we want to order this fiscal year are tabulated in Appendix F with the quantity needed in parenthesis. Wood, metal signs, and corten steel stanchions are on separate purchase orders.

#### **Point A. Main/Summer Entrance**

1. Entrance Sign - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 5'x8' mounted on stanchions, with 3", 5" and 8" letters (R). Please refer to sketches, Appendix D 1 & 2.

2. a. "Refuge Open, Daylight Hours Only", 1'x3-1/2' with 3" letters (R). Sketch, Appendix D 3.

2. b. "Headquarters Open, Daylight Hours Only", 1'x3-1/2' with 3" letters (N). Sketch, Appendix D 8. Note: Signs 2a and 2b should be the same width, since one will replace the other as the season requires.

3. 25 MPH Speed Limit - already ordered

4. Recreational Symbol - Firearms with prohibitive slash, 8"x8" (N).

**Point B. State Entrance**

- 1.-4. Are the same as for the Summer Entrance.
5. "Information" with left arrow. 8"x26" (N). Appendix D 3.
6. Recreational Symbol - Parking 8"x8" (N).

**Point C. East Entrance**

- 1.-6. Are the same as for the State Entrance.
7. "Headquarters, 9 Miles" with straight ahead arrow, 10"x28" (N). Appendix D 3.

**Section C-D, Levee #1**

1. "Road Closed", 6"x26" (R). Appendix D 3.
2. As above.

**Point D. Junction Levees #1 and #3**

1. "Road Closed", 6"x26" (R).

**Section D-E. Levee #3**

1. Recreational Symbols - "Row Boating" and "Motor Boating with prohibitive slash", both 8"x8" (N).
2. "Road Closed", 6"x26" (N)
3. As above.
4. Recreational Symbol - Parking with prohibitive slash, 8"x8" (N).
5. a. Recreational Symbol - Restrooms (N) 8"x8".
5. b. Recreational Symbol - Men's Restroom (N) 6"x6".
5. c. Recreational Symbol - Women's Restroom (N) 6"x6".
6. Recreational Symbols - "Row Boating" and "Motor Boating with prohibitive slash", both 8"x8" (N).
7. "Road Closed", 6"x26" (R).

**Point E. Junction State Entrance and Silver Lake Roads**

1. "Silver Lake, 1/2 Mile" with left arrow; and "Headquarters, 2-1/2 Miles" with right arrow, 18"x28" (N). Appendix D 3.
2. "Silver Lake, 1/2 Mile" with right arrow, 10"x26" (N). Appendix D 4.
3. "Headquarters, 2-1/2 Miles" with left arrow 10"x28" (N). Appendix D 4.

**Section E-G, Levee #5**

1. "Road Closed", 6"x26" (R).
2. "Road Closed", 6"x26" (N).
3. "Road Closed", 6"x26" (R).
4. Recreational Symbols - "Row Boating" and "Motor Boating with prohibitive slash", both 8"x8".
5. As above.

**Point F. South Lake**

- 1.-3. "Road Closed", 6"x26" (R)

**Point G. Junction South Lake and Levee #5 Roads**

1. Recreational Symbols - Row Boats with prohibitive slash and Motor Boats with prohibitive slash, both 8"x8" (N)
2. "Headquarters" with right arrow and "South Lake, 1 Mile" with left arrow; 12"x32" (N). Sketch, Appendix D 4.
3. "Headquarters" with straight ahead arrow and "Silver Lake, 3 Miles" with right arrow; 12"x32" (N). Appendix D 4.
4. "Silver Lake, 3 Miles" with left arrow and "South Lake, 1 Mile" with straight arrow, 18"x28" (N). Appendix D 4.

**Point H. Headquarters Area - (Please refer to Appendix E for specific locations of the following signs)**

1. Entrance Sign - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 5'x8' mounted on stanchions, with 3", 5", and 8" letters (R). Sketch, Appendix D 1&2.
2. Headquarters/Office Sign - "Headquarters, Swan Lake National Wildlife Refuge, 34"x8' mounted on stanchions, with 5" and 8" letters (N). Sketches, Appendix D 5 & 6.
3. "Observation Tower" with straight ahead arrow, 10"x30" (N). Sketch, Appendix D 4.
4. "Maintenance Area" with right arrow, 10"x30" (N). Sketch, Appendix D 7.
5. "Office, Information" with left arrow, 10"x30" (N). Sketch, Appendix D 7.
6. "Visitor Parking" with left arrow and "Bus Parking" with right arrow, 10"x38" (N). Sketch, Appendix D 7.
7. "Visitor's Entrance", 8"x22" with 2" letters (N). Appendix D 7.
8. "Staff Entrance", 8"x16" with 2" letters (N). Appendix D 7.
9. "Auto Tour, Please Get Brochure At Office" 16"x42" (N) Appendix D 7.
10. "Marsh View Boardwalk" 8"x20" with 2" letters (N). Appendix D 7.
11. a. Recreational Symbol - Restrooms (N) 8"x8".
11. b. Recreational Symbol - 2 Men's Restroom (N) 6"x6".
11. c. Recreational Symbol - 2 Women's Restroom (N) 6"x6".
12. Recreational Symbol - Handicapped (N) 8"x8".
13. "Road Closed" 6"x26" (R).

# Section H-I. Levee #4

1. & 2. "Viewing Area" with left arrows, 10"x22" (N).  
Appendix D 8.

## Point I. Environmental Study Area and Junction with Main Entrance Road.

1. "Habitat Trail, 1/2 Mile", with right arrow 10"x34" (N).  
Sketch, Appendix D 8.
2. "Habitat Trail, 1/2 Mile", with left arrow 10"x34" (N).  
Sketch, Appendix D 8.
3. "Habitat Trail" with 2" letters 8"x14" (N). Sketch,  
Appendix D 8.
4. "Information", 2" letters in verticle format 4"x36" (N).  
Sketch, Appendix D 8.
5. Recreational Symbols - Environmental Study Area, two  
8"x8" and two 6"x6".
6. "Information" with left arrow, 8"x26" (N). Appendix D 3.
7. Recreational Symbols - Parking (N) 8"x8", three needed.
8. "Headquarters, 1-1/2 Miles" with left arrow and "Summer,  
1 Mile" with right arrow 16"x28" (N). Sketch, Appendix D 8.
9. a. Recreational Symbol - Restrooms (N) 8"x8".
9. b. Recreational Symbol - Men's Restroom (N) 6"x6".
9. c. Recreational Symbol - Women's Restroom (N) 6"x6".

Edward R. Moyer,  
Outdoor Recreation Planner  
7/18/79



## APPENDIX F

### F. Summary of Needed Signs, Materials and Quantities Required

#### 1. Routed Wood Signs

- a. Entrance Signs - "Swan Lake National Wildlife Refuge, U.S. Fish and Wildlife Service" with flying goose, 5' x 8' mounted on stanchions, with 3", 5", and 8" letters. Sketches, Appendix D 1&2. (4) at \$394.10 each = 1,576.40
- b. "Refuge Open, Daylight Hours Only", 1' x 3-1/2' with 3" letters. Sketch, Appendix D 3. (3) at \$61.80 each = 185.40
- c. "Headquarters Open, Daylight Hours Only", 1' x 3-1/2' with 3" letters. Sketch, Appendix D 8. (3) at \$69.60 = 208.80
- d. "Information" with left arrow, 8" x 26". Appendix D 3. (3) at \$30.30 each = 90.90
- e. "Headquarters, 9 Miles" with straight ahead arrow, 10" x 28". Appendix D 3. (1) only = 31.60
- f. "Road Closed", 6' x 26". Appendix D 3. (13) 13 at \$21. - each = 273. -
- g. "Silver Lake, 1/2 Mile" with left arrow and "Headquarters, 2-1/2 Miles" with right arrow, 18" x 28". Appendix D 3. (1) only = 58.80
- h. "Silver Lake, 1/2 Mile" with right arrow, 10" x 26". Appendix D 4. (1) only = 38.10
- i. "Headquarters, 2-1/2 Miles" with left arrow, 10" x 28". Appendix D 4. (1) only = 43.30
- j. "Headquarters" with right arrow and "South Lake, 1 Mile" with left arrow, 12" x 32". Appendix D 4. (1) only = 60.40
- k. "Headquarters" with straight ahead arrow and "Silver Lake, 3 Miles" with right arrow, 12" x 32". Appendix D 4. (1) only = 63. -
- l. "Silver Lake, 3 Miles" with left arrow and "South Lake, 1 Mile" with straight arrow, 18" x 28". Appendix D 4. (1) only = 52. -
- m. "Headquarters, Swan Lake National Wildlife Refuge", 34" x 8' mounted on stanchions, with 5" and 8" letters. Appendix D 5 and 6. (1) only = 246.60

- n. "Observation Tower" with straight ahead arrow, 10" x 30". Appendix D 4. (1) only = 47.40
- o. "Maintenance Area" with right arrow, 10" x 30". Appendix D 7. (1) only = 44.80
- p. "Office, Information" with left arrow, 10" x 30". Appendix D 7. (1) only = 39.40
- q. "Visitor Parking" with left arrow and "Bus Parking" with right arrow, 10" x 38". Appendix D 7. (1) only = 56.50
- r. "Visitor's Entrance", 8" x 22" with 2" letters. Appendix D 7. (1) only = 38.10
- s. "Staff Entrance", 8" x 16" with 2" letters. Appendix D 7. (1) only = 24.90
- t. "Auto Tour, Please Get Brochure At Office", 16" x 42". Appendix D 7. (1) only = 73.60
- u. "Marsh View Boardwalk", 8" x 20" with 2" letters. Appendix D 7. (1) only = 39.40
- v. "Viewing Area" with left arrow, 10" x 22". Appendix D 8. (2) at 15.80 each = 31.60
- w. "Habitat Trail, 1/2 Mile" with right arrow 10" x 34". Appendix D 8. (1) only = 48.70
- x. "Habitat Trail, 1/2 Mile" with left arrow 10" x 34". Appendix D 8. (1) only = 48.70
- y. "Habitat Trail" with 2" letters 8" x 14". Appendix D 8. (1) only = 23.60
- z. "Information" 2" letters in verticle format 4" x 36". Appendix D 8. (1) only = 22.30
- !. "Headquarters, 1-1/2 Miles" with left arrow and "Summer, 1 Mile" with right arrow, 16" x 28". Appendix D 8. (1) only = 57.60

Total = \$3,524.90  
all routed signs

## 2. Metal Signs

- a. Recreational Symbol - Firearms with prohibitive slash, 8" x 8", brown background with white symbol. Aluminum reflective. RS-001. \$21.60 (3)
- b. Recreational Symbol - Parking, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-034. \$31.50 (5)
- c. Recreational Symbol - Parking as above except with prohibitive slash. RS-034. \$15.15 (1)
- d. Recreational Symbol - Row Boating, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-057. \$21.00 (4)
- e. Recreational Symbol - Row Boating as above except with prohibitive slash. RS-057. \$15.15 (1)
- f. Recreational Symbol - Motor Boating with prohibitive slash, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-055 \$22.25 (5)
- g. Recreational Symbol - Restrooms, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-022 \$18.90 (3)
- h. Recreational Symbol - Men's Restroom, 6" x 6", brown background with white symbol. Aluminum non-reflective. RS-021 \$20.00 (4)
- i. Recreational Symbol - Women's Restroom, 6" x 6", brown background with white symbol. Aluminum non-reflective. RS-023. \$20.00 (4)
- j. Recreational Symbol - Handicapped, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-028. \$14.60 (1)
- k. Recreational Symbol - Environmental Study Area, 8" x 8", brown background with white symbol. Aluminum non-reflective. RS-076. \$16.70 (2)
- l. Recreational Symbol - As above except 6" x 6". \$16.20 (2)

- m. Recreational Symbol - Interpretive Trail, 8" x 8", brown background with white symbol. Aluminum. Non-reflective. RS-074. \$16.70 (2)

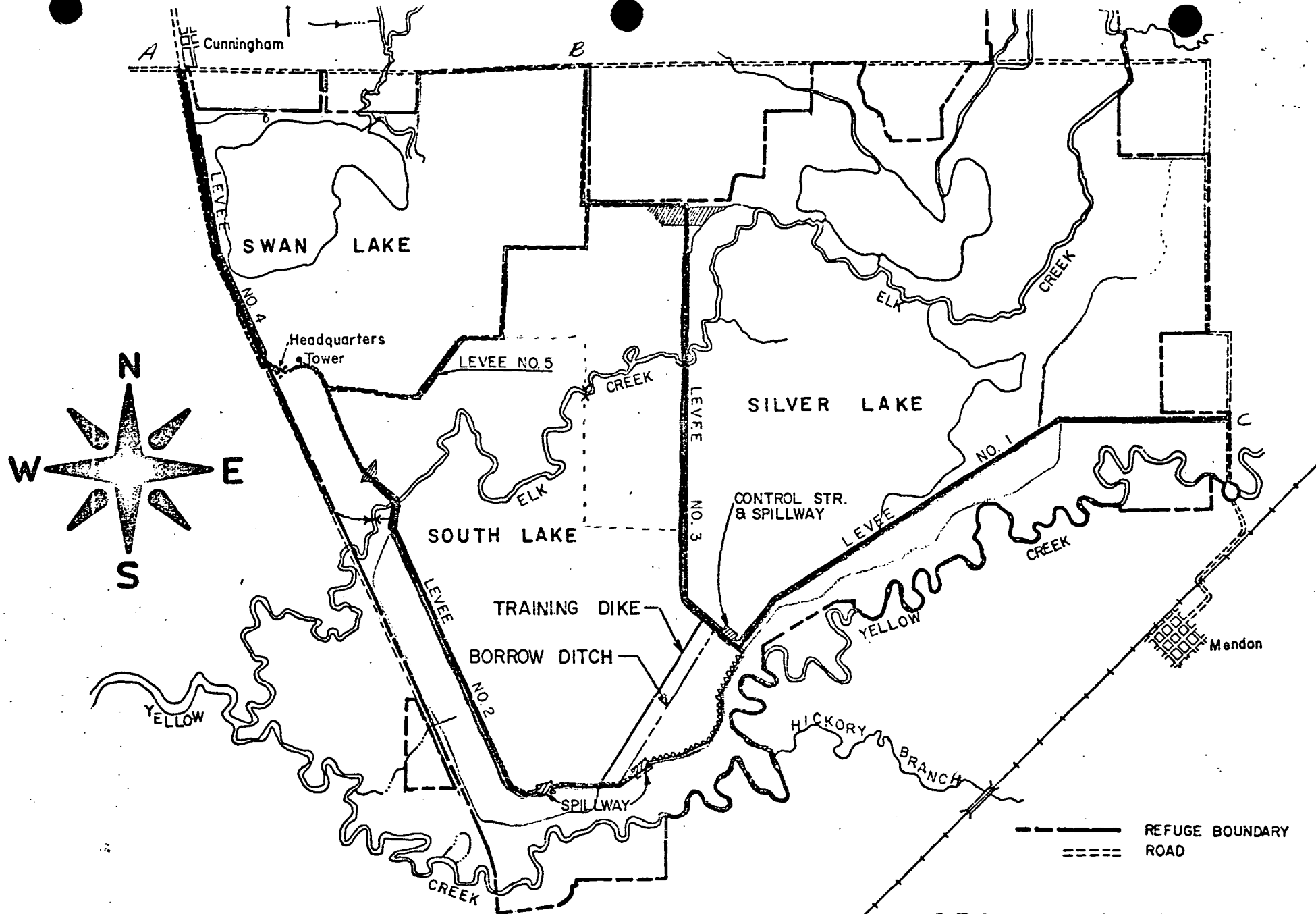
Total cost of above signs - \$249.75. Estimated shipping weight is 35 pounds.

### 3. Corten Steel Stanchion Sign Supports/Posts

- a. Entrance Signs - each of these signs will require three 2-1/2" x 4" x 9' stanchions. There will be four such signs. Twelve, 2-1/2" x 4" x 9' stanchions at \$1.75/linear foot per post - \$189.00.
- b. "Headquarters, Swan Lake National Wildlife Refuge" will require two, 2-1/2" x 4" x 6' stanchions at \$1.75/linear foot - \$21.00.
- c. 25 MPH Speed Limit Signs - Five of these have already been ordered. They should be mounted not less than 5' above the road surface. We will require five, 2" x 2" x 10' corten steel posts at \$1.30/linear foot - \$65.00
- d. Recreational Symbols - We plan to order 37 of these signs. They will not need to be mounted as high above the road surface as our speed limit signs and 8' posts should be sufficient. Many recreational symbols will be doubled up. We will require twenty-four, 2" x 2" x 8' corten steel posts at \$1.30/linear foot - \$249.60.

Total cost of above corten steel stanchion sign supports/posts will be \$524.60. Estimated shipping weight - 1205 pounds.

*Total, all signs &  
stanchion sign supports =  
\$4,299.25*



# SWAN LAKE N.W.R.

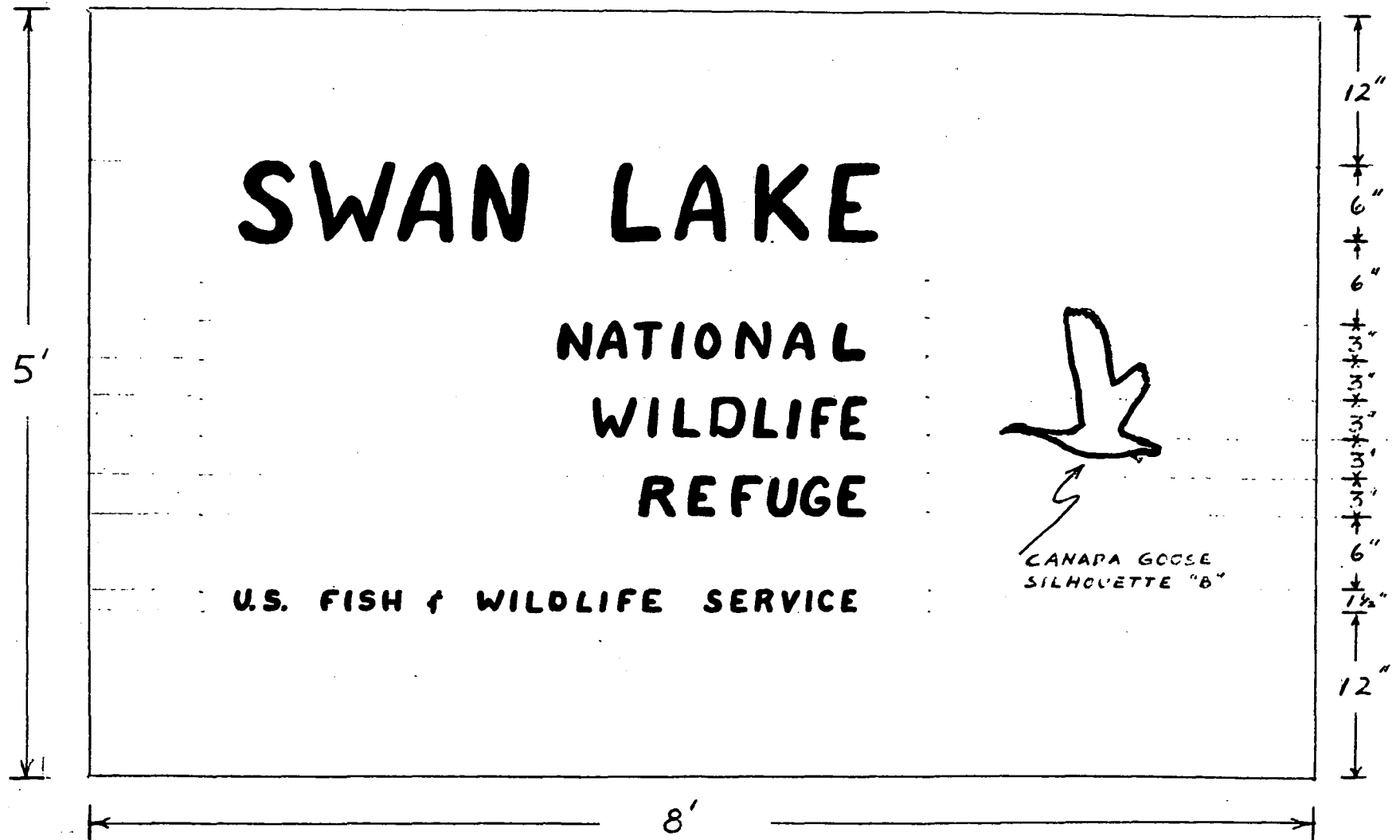
D.E.C. - MO. - 201-17.0

APPENDIX A  
ROADS









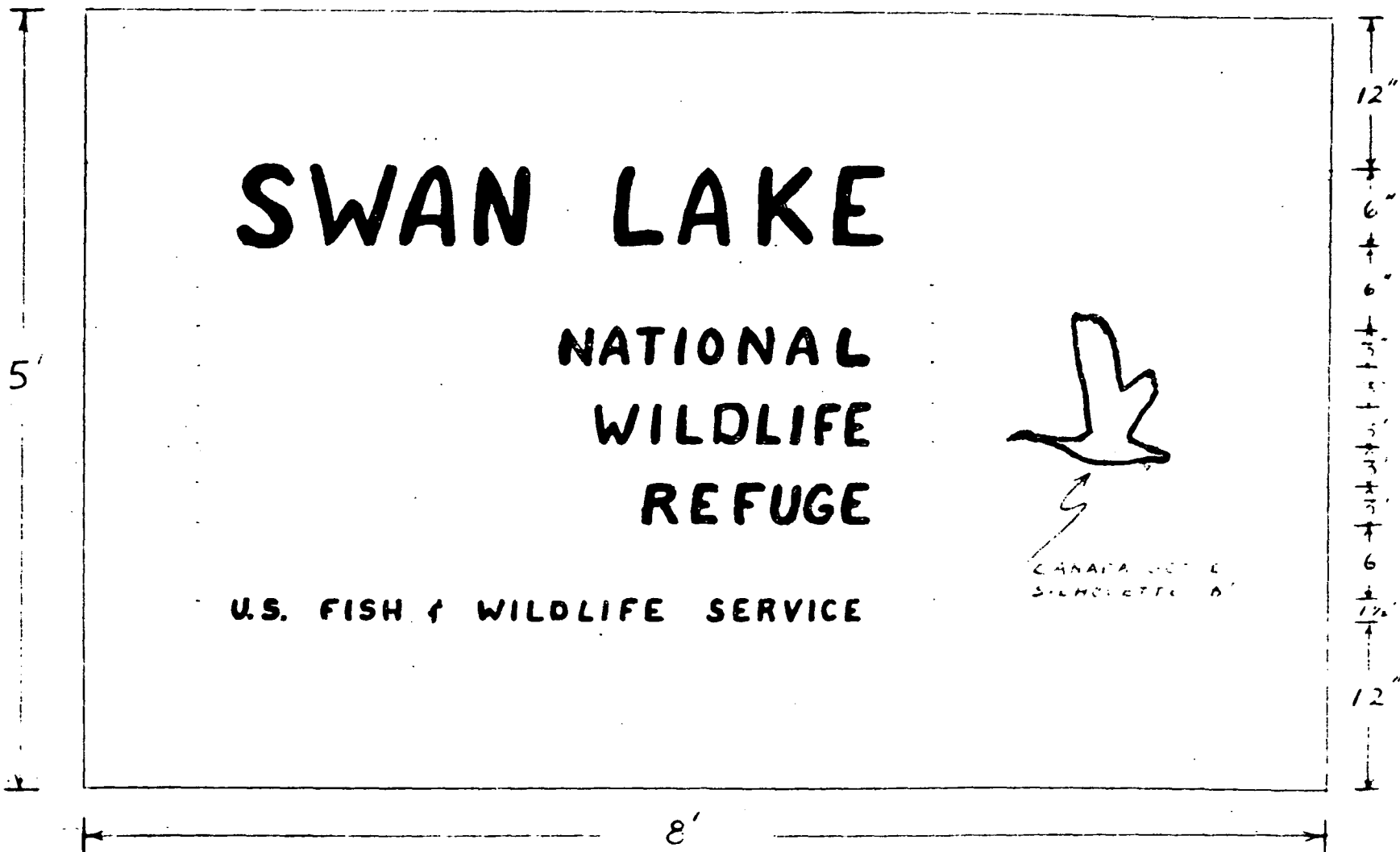
**ENTRANCE SIGN SKETCH**

**(REVISION NO. THREE)**

**SCALE: 1"=1'**

APPENDIX D:1

ERM

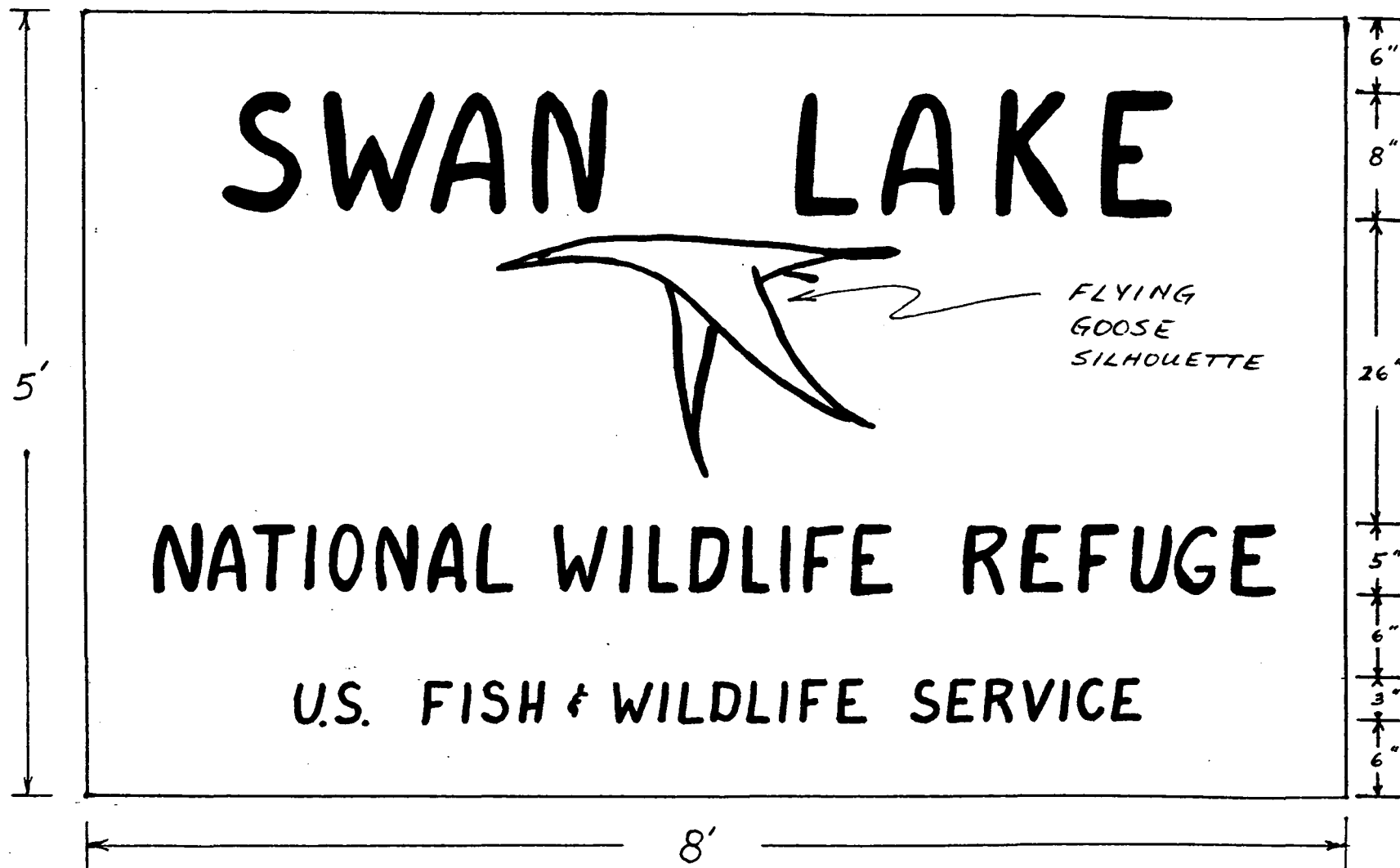


**ENTRANCE SIGN SKETCH**  
**(REVISION NO. THREE)**

SCALE: 1"=1'

APPENDIX D-1

EX-11



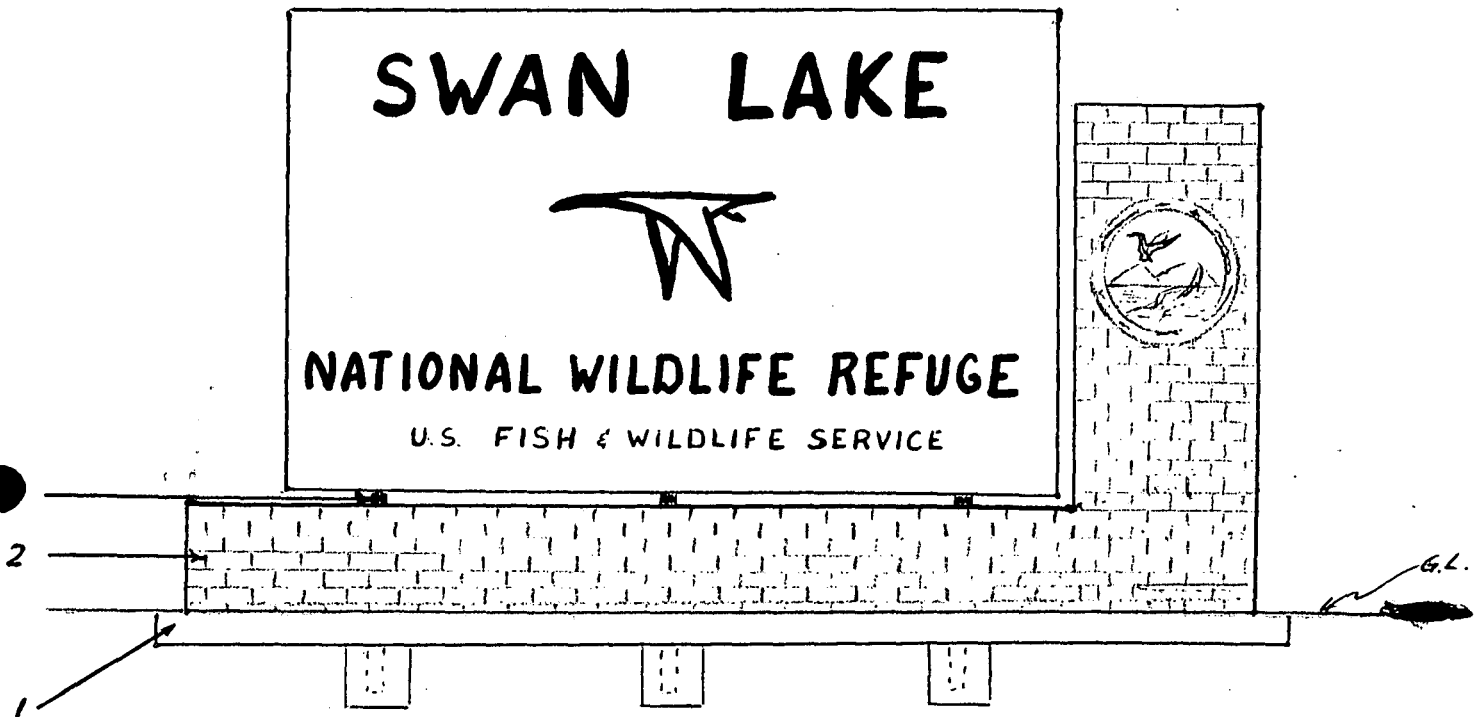
ENTRANCE SIGN SKETCH

SCALE: 1"=1'

APPENDIX D:1

ERM

## ENTRANCE SIGN SKETCH



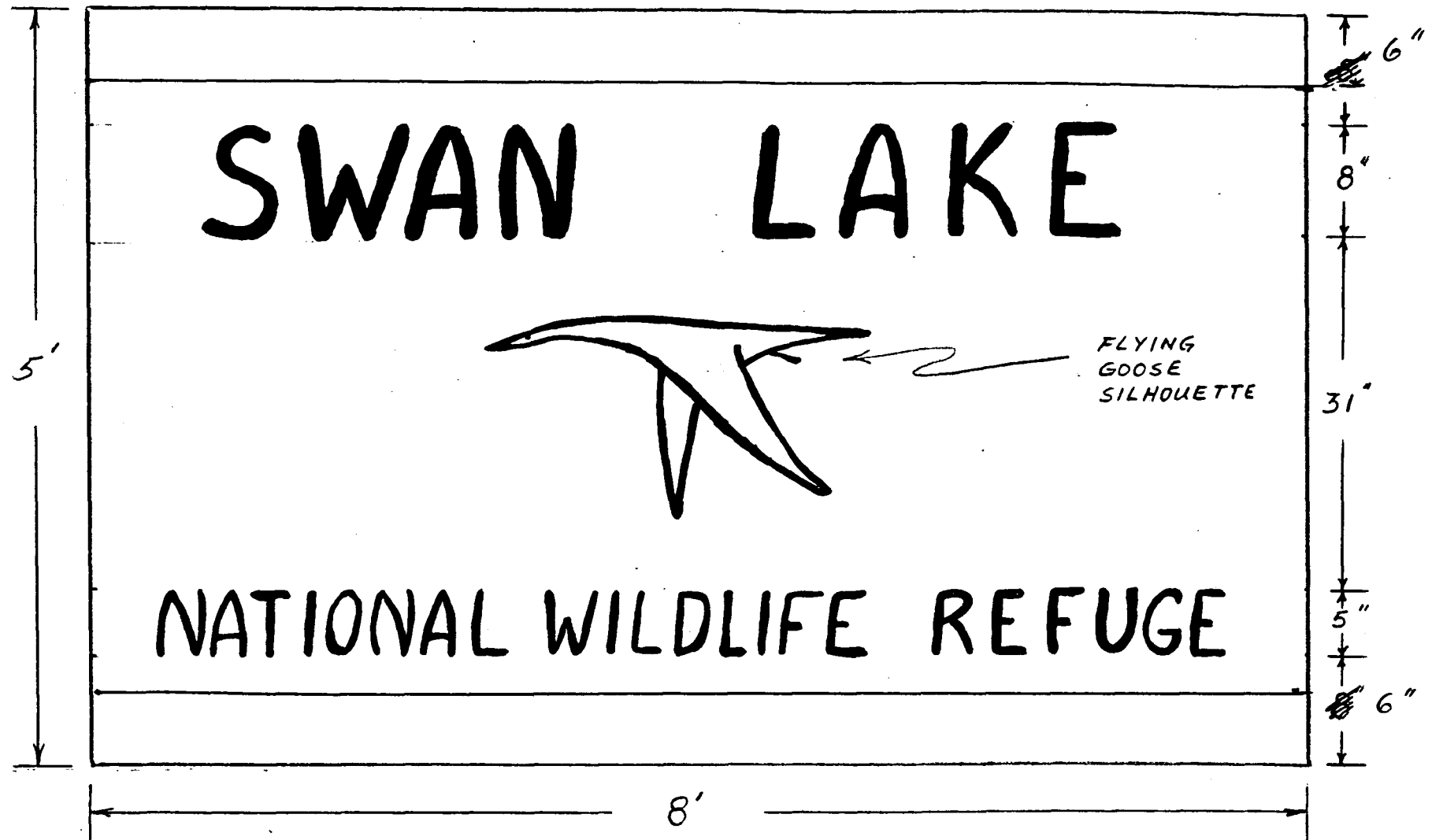
### CONSTRUCTION MATERIALS:

- 1) Reinforced concrete slab
- 2) Cement block construction faced with brick.  
(Brick color will match the color of our  
new Office/VCS as nearly as possible)
- 3) Three stanchions:  $2\frac{1}{2}'' \times 4'' \times 9'$ ; corten steel  
from FPI.

Scale:  $1'' = 2'$

APPENDIX D:2

ENTRANCE SIGN SKETCH



SCALE: 1" = 1'

APPENDIX D:1

ERM

REFUGE CODE:

A

2 a)

REFUGE OPEN  
DAYLIGHT HOURS ONLY

1' x 3 1/2'

b)

~~REFUGE OPEN  
DAYLIGHT HOURS  
HEADQUARTERS AREA ONLY~~

1' x 3 1/2'

3" LETTERS  
UNLESS SPECIFIED  
OTHERWISE

PLEASE SEE  
APPENDIX D:8

2"

B

5)

INFORMATION



8" x 26"

C

7)

HEADQUARTERS  
9 MILES ↑

10" x 28"

C-D)  
et al)

ROAD CLOSED

6" x 26"

E

1)

SILVER LAKE  
← 1/2 MILE  
HEADQUARTERS  
2 1/2 MILES →

18" x 28"

SCALE: 1" = 1'

APPENDIX D:3



REFUGE CODE:

E

2)

SILVER LAKE

1/2 MILE →

10" x 26"

3)

HEADQUARTERS

← 2 1/2 MILES

10" x 28"

G

2)

HEADQUARTERS →

SOUTH LAKE

← 1 MILE

12" x 32"

3)

↑ HEADQUARTERS

SILVER LAKE

3 MILES →

12" x 32"

4)

SILVER LAKE

← 3 MILES

SOUTH LAKE

1 MILE ↑

18" x 28"

H

3)

OBSERVATION

TOWER

↑

10" x 30"

3" LETTERS  
UNLESS SPECIFIED  
OTHERWISE

SCALE: 1" = 1'

APPENDIX D:4

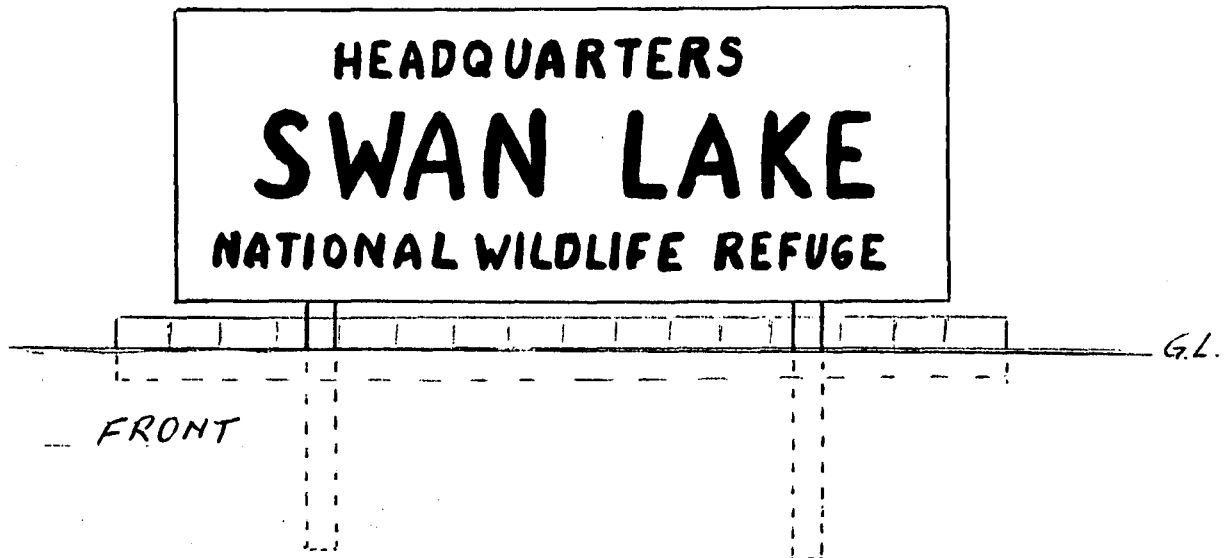
HQT'S / OFFICE SIGN SKETCH



Scale: 1" = 1'

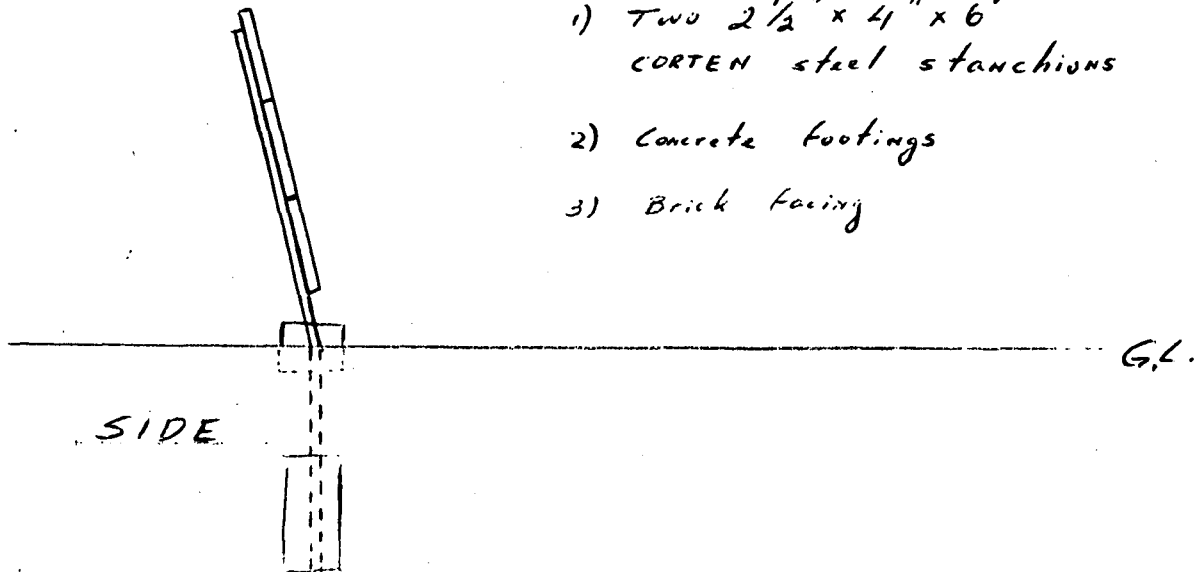
APPENDIX D:5

# HEADQUARTERS / OFFICE SIGN



## MATERIALS:

- 1) TWO 2 1/2" x 4" x 6'  
CORTEN steel stanchions
- 2) Concrete footings
- 3) Brick facing



Scale: 1" = 2'

APPENDIX D: 6

H 4)

**MAINTENANCE  
AREA →**

10" x 30"

5)

**← OFFICE  
INFORMATION**

10" x 30"

6)

**← VISITOR PARKING  
BUS PARKING →**

10" x 38"

7)

**VISITOR'S  
ENTRANCE**

8" x 22"

} ————— 2"

8)

**STAFF  
ENTRANCE**

8" x 16"

} ————— 2"

9)

**AUTO TOUR  
PLEASE GET BROCHURE  
AT OFFICE**

16" x 42"

10)

**MARSH VIEW  
BOARDWALK**

8" x 20"

} ————— 2"

REFUGE CODE:

H-I

1 (2)

VIEWING  
← AREA

10" x 22"

3" LETTERS  
UNLESS SPECIFIED  
OTHERWISE

I

1)

HABITAT TRAIL  
1/2 MILE →

10" x 34"

2)

HABITAT TRAIL  
← 1/2 MILE

10" x 34"

3)

HABITAT  
TRAIL

8" x 14"

2"

4)

8)

HEADQUARTERS  
← 1 1/2 MILES  
SUMNER  
1 MILE →

16" x 28"

A

26)

HEADQUARTERS OPEN  
DAYLIGHT HOURS ONLY

1' x 3 1/2'

INFORMATION

4" x 36"

2" LETTERS

SCALE: 1" = 1'

APPENDIX D: 8

SWAN LAKE

Levee 4

To Summer

URS  
HEADQUARTERS  
BUILDING

POND

OBSERVATION  
TOWER

Visitor/Staff Parking  
(19 car capacity)

Bus Parking

COMFORT  
STATION

Visitor Parking  
(6 car capacity)

MAINTENANCE  
AREA

PROPOSED SITE DEVELOPMENT  
HEADQUARTERS AREA  
SWAN LAKE NATIONAL WILDLIFE REFUGE

To AUTO TOUR

NOT TO SCALE

APPENDIX E

ERH  
17.4.77



UNITED STATES GOVERNMENT

# Memorandum

**TO :** Regional Director, Denver, Co. (RW/IR)  
through Area Manager, Kansas City, Mo. (RW)

**DATE:** July 18, 1979

**FROM :** Refuge Manager, Swan Lake NWR, Sumner, Mo.

**SUBJECT:** Sign Plan -- Swan Lake National Wildlife Refuge

Attached is our proposed Sign Plan for your approval.

cc: Area Manager, KCAO

*Alfred D. Marke*



5010-110

*Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan*

Refuge Manager, Swan Lake NWR  
Sumner, MO

5/21/79

Assistant Area Manager, Area 3  
North Kansas City, MO (RW)

### Sign Plan

I have reviewed the plan and have the following comments.

Very complete. Obviously much thought has gone into this plan.

The inventory section might be improved by eliminating reference to the origin of existing signs. There is little to be gained by frequent reference to signs being made by YCC, which is contrary to policy.

### Main/Sumner Entrance, Point A:

Shouldn't U.S. Fish and Wildlife Service be included on the entrance signs?

How will signs 2a, 2b, 3 and 4 be erected in relation to 1?

Same questions for signs at Point B. There is a potential for cluttering.

What would be the chances for getting an easement in the field east of the main entrance for placing the new sign? Maybe you should check into this. If such an arrangement could be made, you might not have to tear down the CCC columns.

Your desire for wood-routed entrance signs may need more justification. The new materials of adhesive overlays or fiberglass are very attractive, durable and maintenance-free. We are aware that bullet holes are more easily repaired in wood than in other materials. The RO-I&R staff have some good thoughts on materials.

Good plan -- good photos! I appreciate your efforts.

JWS:cpb

UNITED STATES GOVERNMENT

# Memorandum

TO : Area Manager, Kansas City, Mo. (RW)

DATE: July 18, 1979

FROM : Refuge Manager, Swan Lake NWR, Sumner, Mo.

SUBJECT: Sign Plan -- Mr. Salyer's memo dated 5/21/79

The origin of existing signs has been eliminated as you suggested. The code to distinguish between those signs installed in 1968, and the ones we put up between 1976-78 have been retained. This is required by RO-I&R.

Having U.S. Fish and Wildlife Service on entrance signs was prohibited by Service policy (telecom Moyer-Lively). This has changed with the second draft of the new Sign Manual and our sign plan has been modified accordingly.

At our entrances (Points A, B, & C), signs 2a and 2b are the same size and interchangeable according to the season. These will be mounted on wood posts approximately 100' along the road from the entrance signs. The 25 MPH speed limit signs (sign 3) will need to be mounted on 2" x 2" corten steel stanchions at a height of at least 5', measured from the bottom of the signs to the road surface, and should be at least 6' from the edge of the traveled portion of our graveled roads. Spacing between signs at 25 MPH should be at least 100'. Our recreational symbols (sign 4) firearms with prohibitive slash will be mounted on 2" x 2" corten steel stanchions approximately 100' along the road from the speed limit signs.

Excluding the entrance signs, we will have only three signs at our entrances; all providing essential information. We agree there still remains the potential for cluttering and our firearms prohibited glyphs could possibly be moved to alternate locations further inside the refuge.

Easement: We finally located one of the landowners, Roy A. McCallum of Kansas City, on 6/22/79. He firmly believes that we already have an easement "big enough for a gas station" on the corner of his property due east of the stone pillars at our main entrance.

A thorough check of our files and a phone call to RO-RE (Moyer-Kutcher 7/5/79) confirmed that Mr. McCallum is in error. Even though he gets a great deal of income from goose hunters during the season he cannot be called a friend of the refuge, and an unfavorable negotiating climate exists for getting an easement for our sign.



5010-110

*Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan*

The location is not ideal anyway for visitors to see the entrance sign from both the eastern and northern approaches to the main entrance. The road tends to be very icy at this spot in the winter and the pillars pose a hazard to traffic. It has also been mentioned that these pillars make the road too narrow to get our present farming equipment through.

For these reasons, we propose to eliminate the CCC pillar on the west side of the road upon erection of the new entrance sign.

Justification for routed entrance signs: We still want routed entrance signs for these reasons: 1) maintenance; we share your concern over bullet holes. The 3-M materials will blister severely around any puncture after moisture penetrates. Patch kits are available but you almost need to be around when the shot is fired to prevent moisture from entering. 2) color; the 3-M sheeting varies in color from one lot to another. This is a problem not only with repairs if your kit material is not the same color as the sign, but also because there is a chance of getting "two-tone" signs like one recently seen in an Annual Narrative which passed through this office. 3) letter style; we want to maintain the same letter style throughout the refuge. 3-M signs are manufactured using either the Helvetica Medium or Futura Alphabets which would definitely not match our routed alphabet.

After investigating materials options further with the RO-I&R staff we are convinced that the routed-wood entrance signs are the ones we want for this refuge.

ERMoyer:AOManke;jat

*Alfred O Manke*

