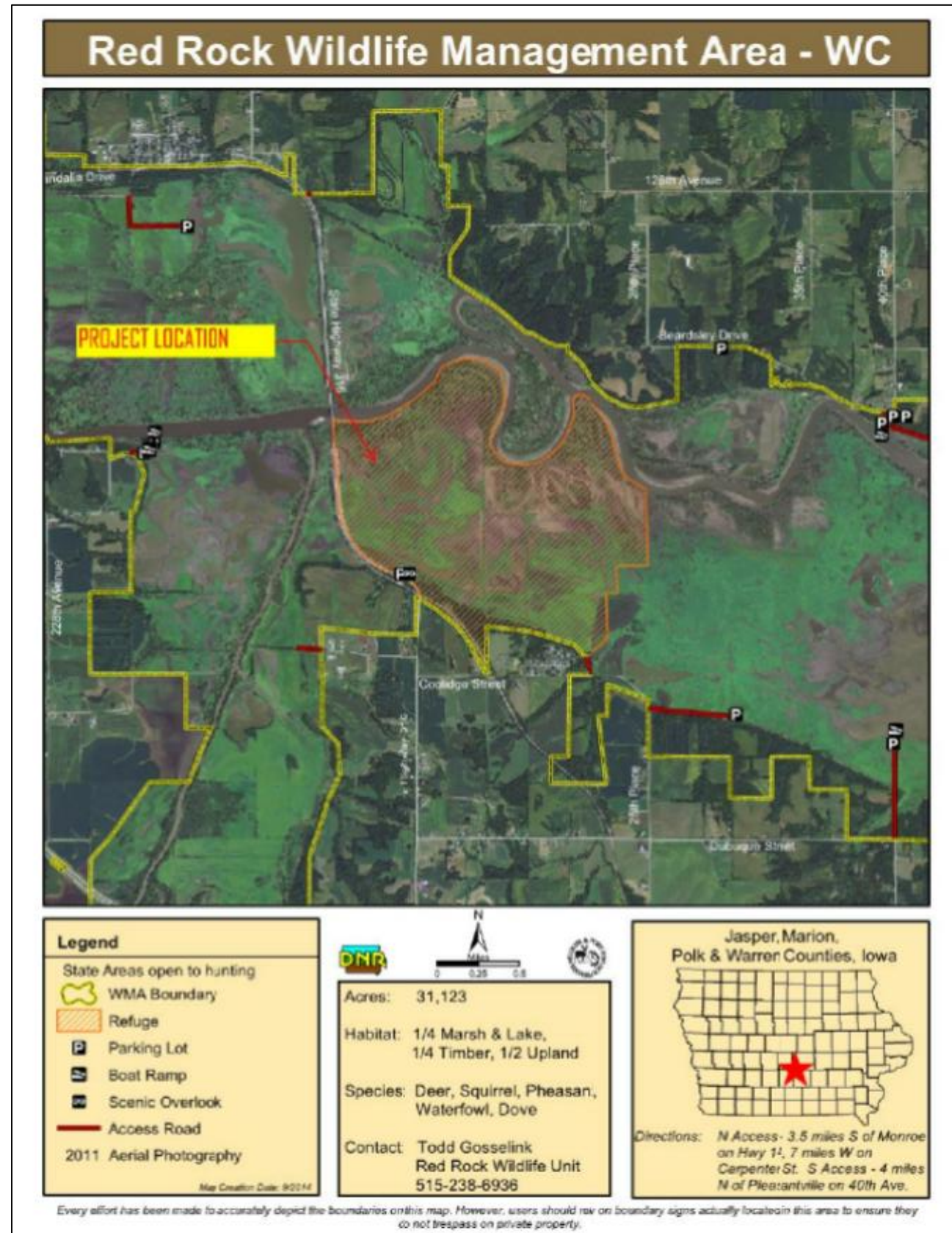
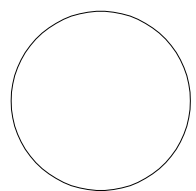


PROJECT LOCATION



CONSULTANT:



IOWA DEPARTMENT OF NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



PROJECT LOCATION

SWAN REFUGE DIKE REPAIR FOR:

RED ROCK WILDLIFE UNIT

WARREN COUNTY, IA

NO.	BY	REVISION

DRAWN BY: PROJECT NUMBER:
E.S. 17-05-63-02
CHK'D BY: DATE:
B.D. JUNE/2017
SHEET No:

ESTIMATED PROJECT QUANTITIES

ITEM	DESCRIPTION	UNIT	TOTAL
1	MOBILIZATION	L.S	1
2	EARTHWORK(CLASS 10 EXCAVATION & BORROW)	C.Y	12,709
3	REMOVE DEBRIS	L.S	1

GENERAL NOTES:

The contractor shall notify the following two weeks prior to construction:

1. District Inspector:
 JASON KRUSE
 (515)-250-3707

2. Project Manager:
 EMMANUEL SANG
 (515)-321-7005

The contractor shall verify actual locations and elevations with the D.N.R Inspector. All work shall conform to and be performed in accordance with all applicable codes and ordinances. The contractor shall visit the site and inspect the project area and thoroughly familiarize themselves with the actual job conditions prior to the start of work. Failure to visit the project site shall not relieve the contractor from performing the work in accordance to the plans, specifications, special provisions and contract.

The contractor shall verify, at the site, all dimensions and conditions shown on the plans and shall notify the D.N.R Inspector of any discrepancies, omissions and/or conflicts prior to proceeding with the work.

The contractor is responsible for disposal for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project. No payment for overhaul will be allowed for material hauled to these sites. No material shall be placed within the right-of-way, unless specifically stated in the plans or approved by the D.N.R Inspector.

The contractor shall not disturb desirable grass areas and desirable trees outside construction limits. The contractor will not be permitted to park or service vehicles and equipment or use these areas for storage of materials. Storage, parking and service areas will be subject to the approval of the D.N.R inspector.

The contractor is expected to have materials, equipment and labor available on a daily basis to install and maintain erosion control features on the project.

The contractor shall be responsible for any damage to existing facilities resulting from their negligence, or that of a subcontractor, and said repairs shall be approved by the owner.

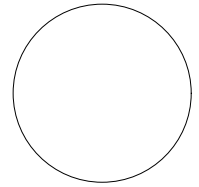
ESTIMATED REFERENCE INFORMATION

ITEM	DESCRIPTION
2	EARTH WORK - BID ITEM IS FOR HAULING, PLACING AND COMPACTING FILL ON EMBANKMENTS AS SHOWN ON THESE PLANS. MATERIALS SHALL BE OBTAIN FROM DESIGNATED AREAS. MATERIAL SHALL BE PLACED AND COMPACTED AS DESCRIBED ON THE IA D.O.T STANDARD SPECIFICATIONS. 2102.01. ALSO IT INCLUDES CLEANING OUT CHANNELS, REMOVING AND HAULING AS DIRECTED BY THE D.N.R FIELD ENGINEER THE MATERIAL SHALL BE GRADED TO SUITABLE ENOUGH FOR SEEDING.
4	REMOVE DEBRIS - BID ITEM IS FOR REMOVAL,HAULING, AND STOCK PILING OF ALL TRESS AND BRUSH AS SHOWN IN THIS PLANS AND AS DIRECTED BY THE D.N.R FIELD ENGINEER. THE CONTRACTOR SHALL REMOVE AS MUCH DIRT FROM TRESS AND BRUSH.

DIKE REPAIR CONSTRUCTION NOTE

ITEM	DESCRIPTION
2	DIKE REPAIRS SHALL BE STABILIZED WITH A TEMPORARY RURAL MIXTURE: 62 LBS. PER ACRE OATS, 62 LBS. PER ACRE GRAIN RYE, AND 7 LBS. PER ACRE CANADA WILD RYE. STABILIZING CROP IS INCIDENTAL TO OTHER WORK. APPROXIMATE AREA TO BE SEED 1.22 ACRES. ACTUAL AREA TO BE DETERMINED ON SITE BY THE D.N.R FIELD ENGINEER.

CONSULTANT:



IOWA DEPARTMENT OF
 NATURAL RESOURCES
 ENGINEERING SERVICES - WALLACE BUILDING
 502 E. 9TH ST., DES MOINES, IA 50319-0034



ESTIMATED QUANTITIES

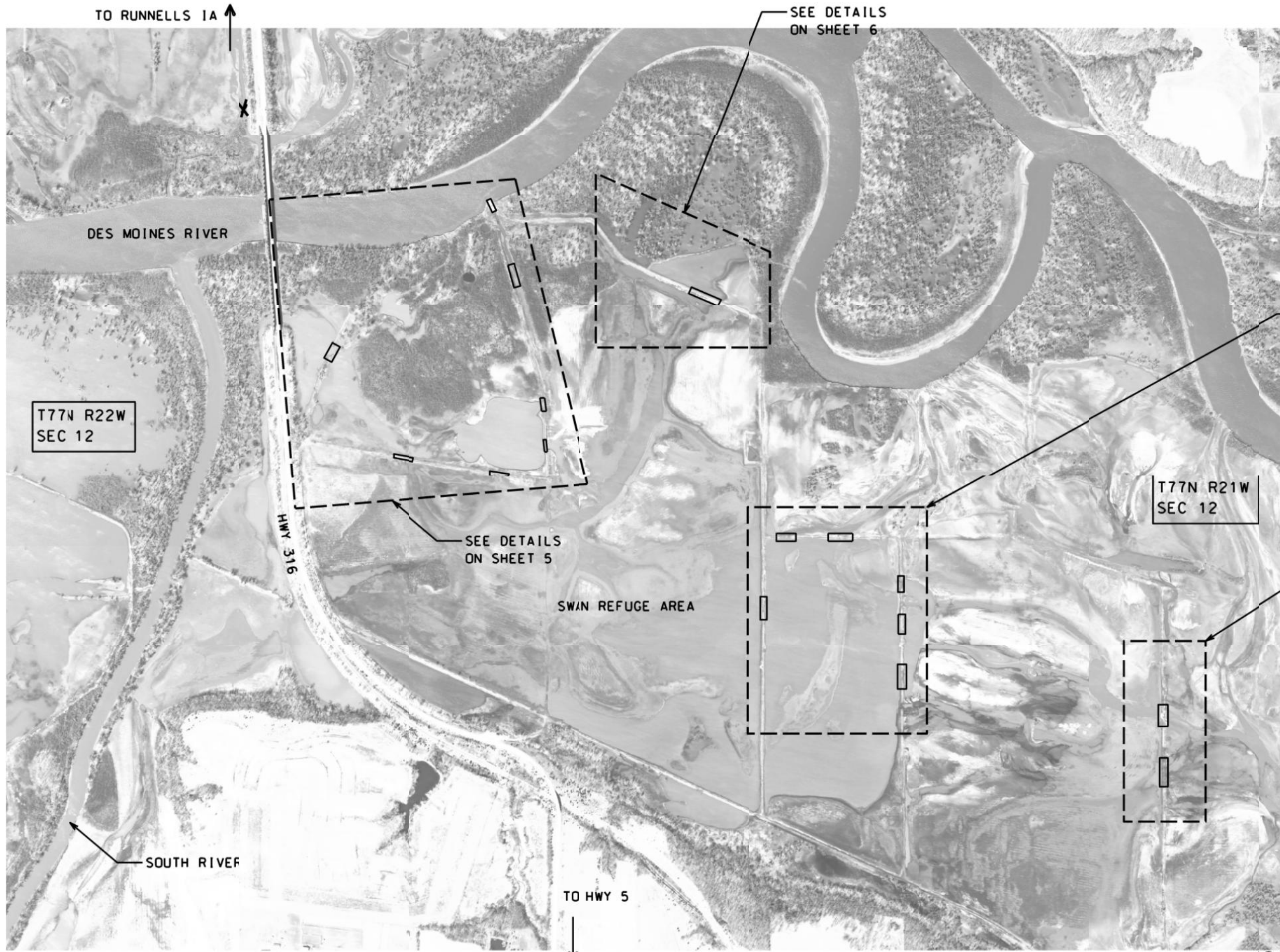
SWAN REFUGE DIKE REPAIR FOR:
RED ROCK WILD LIFE MGT AREA

WARREN COUNTY, IA

NO.	BY DATE	REVISION

DRAWN BY: ES PROJECT NUMBER: 17-05-63-02
 CHK'D BY: M.D DATE: JUNE/2017

SHEET No:



CONSULTANT:

IOWA DEPARTMENT OF
NATURAL RESOURCES

ENGINEERING SERVICES: WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



SITE PLAN

SWAN REFUGE DIKE REPAIR FOR:

RED ROCK WILDLIFE MGT AREA

WARREN COUNTY, IA

NO.	BY	REVISION

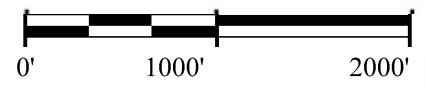
DRAWN BY: ES PROJECT NUMBER: 17-05-63-02
CHKD BY: DATE: JUNE /2017

SHEET No:

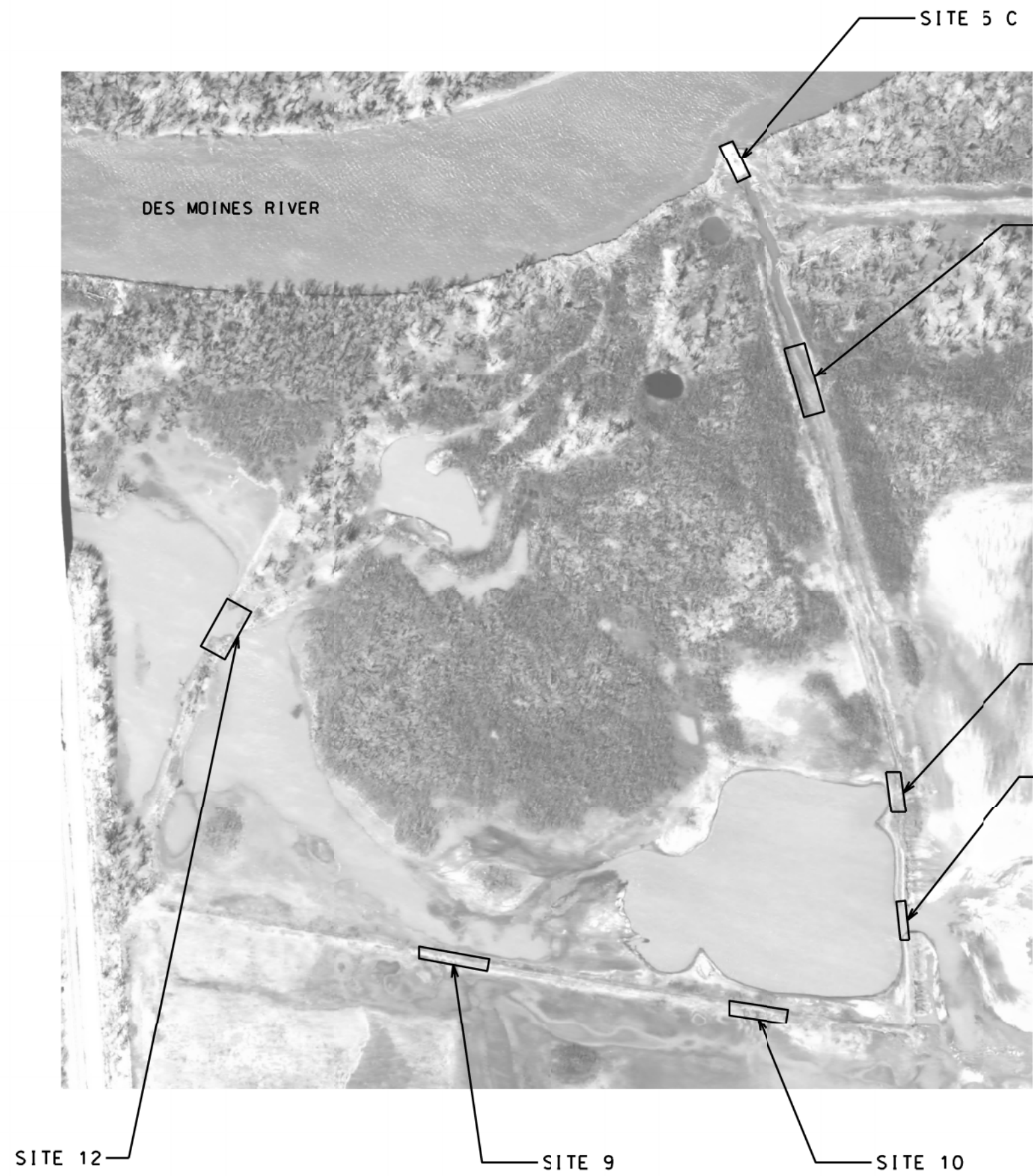


NORTH

SCALE: 1" = 1000'

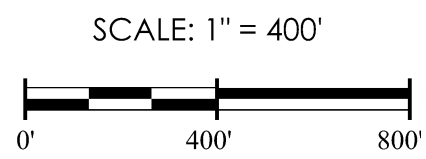
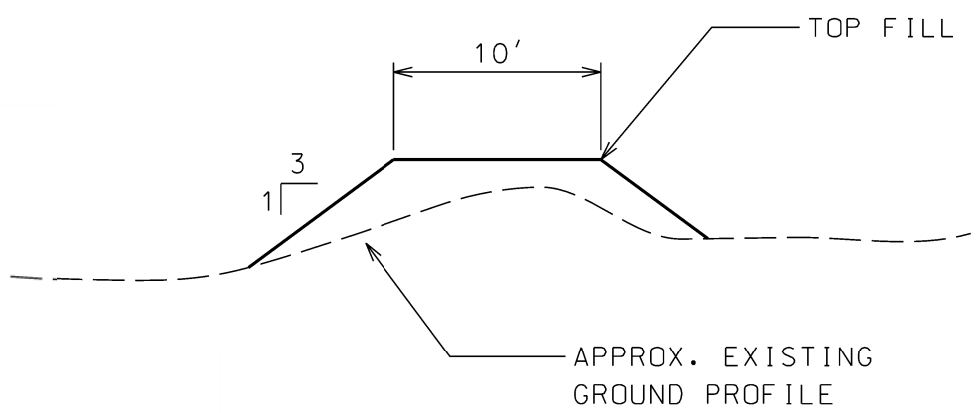


4



CONSTRUCTION NOTE:
 THE CONTRACTOR SHALL REPAIR EXISTING BREACH EMBANKMENT TO THE ORIGINAL ELEVATION AND WIDTH AS DIRECTED BY THE D.N.R FIELD ENGINEER.
 SEE DETAIL BELOW

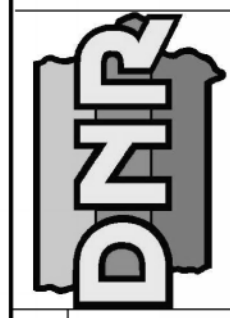
UTM :	
SITE 1	X-473243 Y-4591703
SITE 2	X-473070 Y-4592779
SITE 5	X-472496 Y-4592716
SITE 6	X-473648 Y-4591680
SITE 7	X-474462 Y-4591494
SITE 8	X-474458 Y-4591325
SITE 9	X-472127 Y-4592281
SITE 10	X-472536 Y-4592210
SITE 11	X-472580 Y-4592352
SITE 12	X-471921 Y-4592592
RICHARD'S STRUCTURE	X-469800 Y-4592708



CONSULTANT:

IOWA DEPARTMENT OF
 NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
 502 E. 9TH ST., DES MOINES, IA 50319-0034



PLAN

SWAN REFUGE DIKE REPAIR FOR:
 RED ROCK WILDLIFE MGT AREA
 WARREN COUNTY, IA

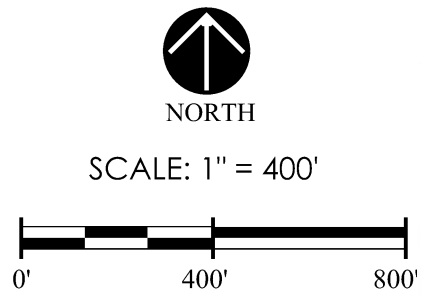
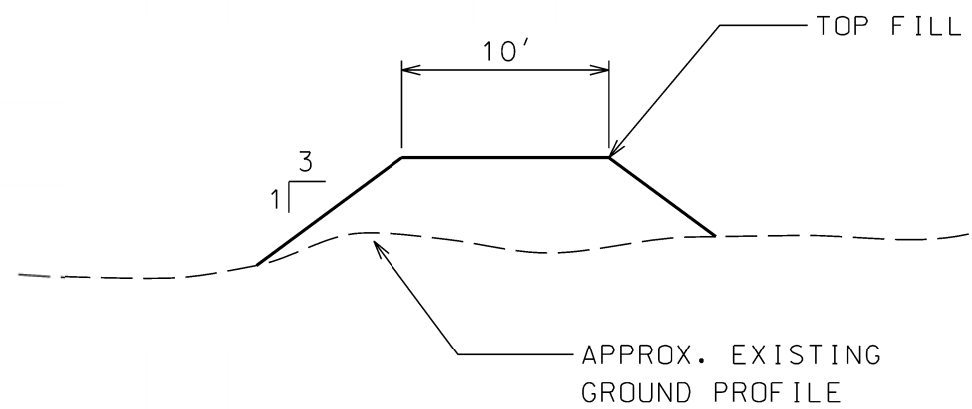
NO.	BY	REVISION

DRAWN BY: PROJECT NUMBER:
 ES 17-05-63-02
 CHKD BY: DATE:
 DR JUNE /2017
 SHEET No:



CONSTRUCTION NOTE:
 THE CONTRACTOR SHALL REPAIR EXISTING BREACH EMBANKMENT TO THE ORIGINAL ELEVATION AND WIDTH AS DIRECTED BY THE D.N.R FIELD ENGINEER.
 SEE DETAIL BELOW

UTM :
 SITE 1 X-473243 Y-4591703
 SITE 2 X-473070 Y-4592779
 SITE 6 X-473648 Y-4591680



CONSULTANT:

IOWA DEPARTMENT OF
 NATURAL RESOURCES

ENGINEERING SERVICES: WALLACE BUILDING
 502 E. 9TH ST., DES MOINES, IA 50319-0034



PLAN

SWAN REFUGE DIKE REPAIR FOR:

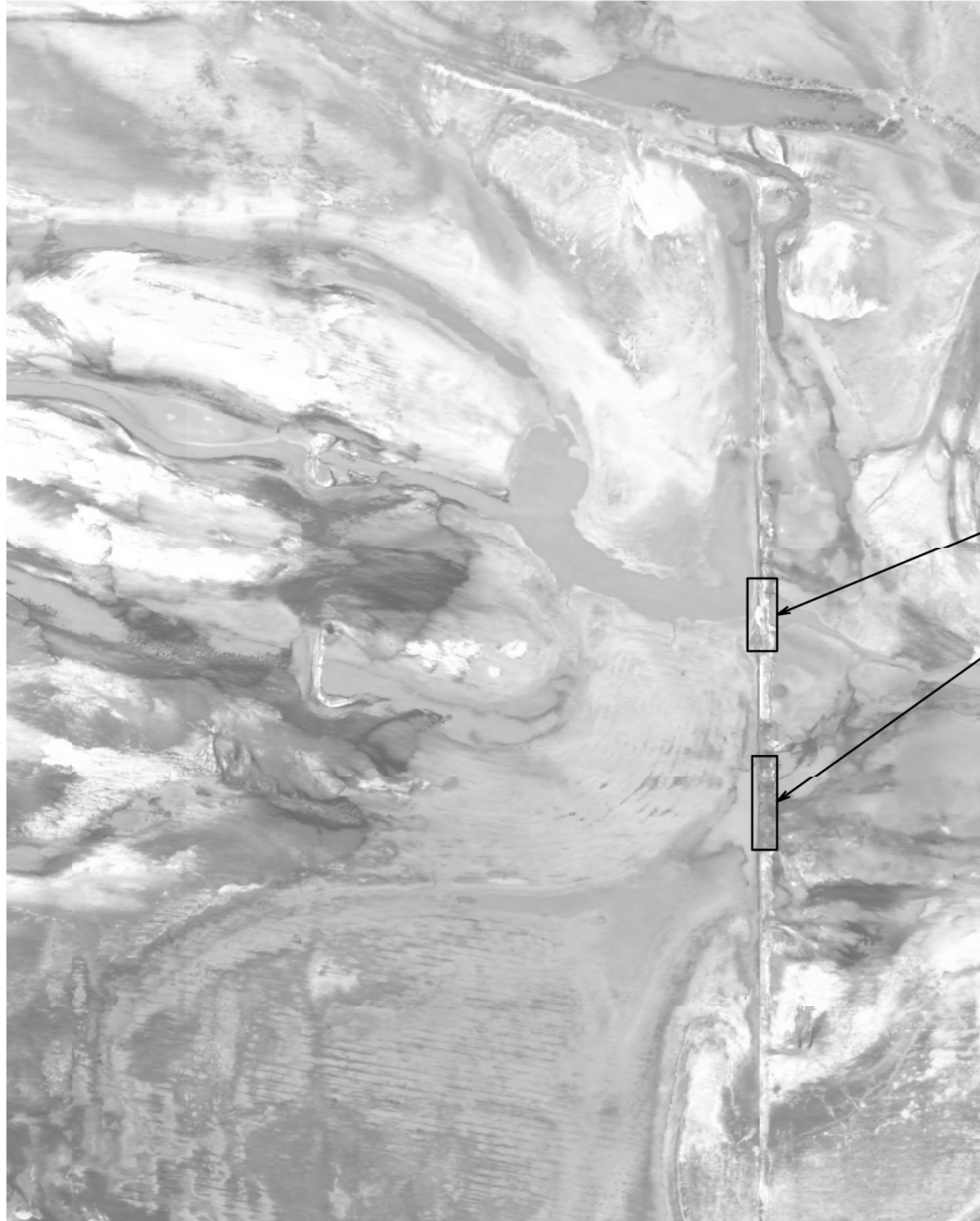
RED ROCK WILDLIFE MGT AREA

WARREN COUNTY, IA

NO.	BY	REVISION

DRAWN BY:	PROJECT NUMBER:
ES	17-05-63-02
CHKD BY:	DATE:
DR	JUNE /2017
SHEET No:	

6

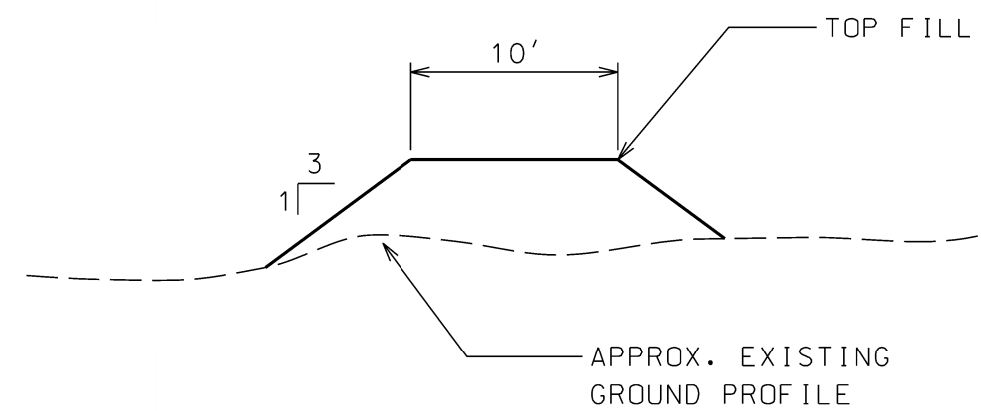


CONSTRUCTION NOTE:
THE CONTRACTOR SHALL REPAIR EXISTING BREACH EMBANKMENT
TO THE ORIGINAL ELEVATION AND WIDTH AS DIRECTED BY THE
D.N.R FIELD ENGINEER.
SEE DETAIL BELOW

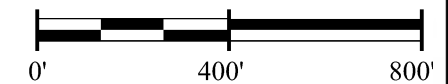
UTM :
SITE 7
X-474462 Y-4591494
SITE 8
X-474458 Y-4591325

SITE 7

SITE 8



SCALE: 1" = 400'



CONSULTANT:

IOWA DEPARTMENT OF
NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



PLAN

SWAN REFUGE DIKE REPAIR FOR:

RED ROCK WILDLIFE MGT AREA

WARREN COUNTY, IA

NO. BY REVISION

NO.	BY	REVISION

DRAWN BY: PROJECT NUMBER:

ES 17-05-63-02

CHKD BY: DATE:

DR JUNE /2017

SHEET No: