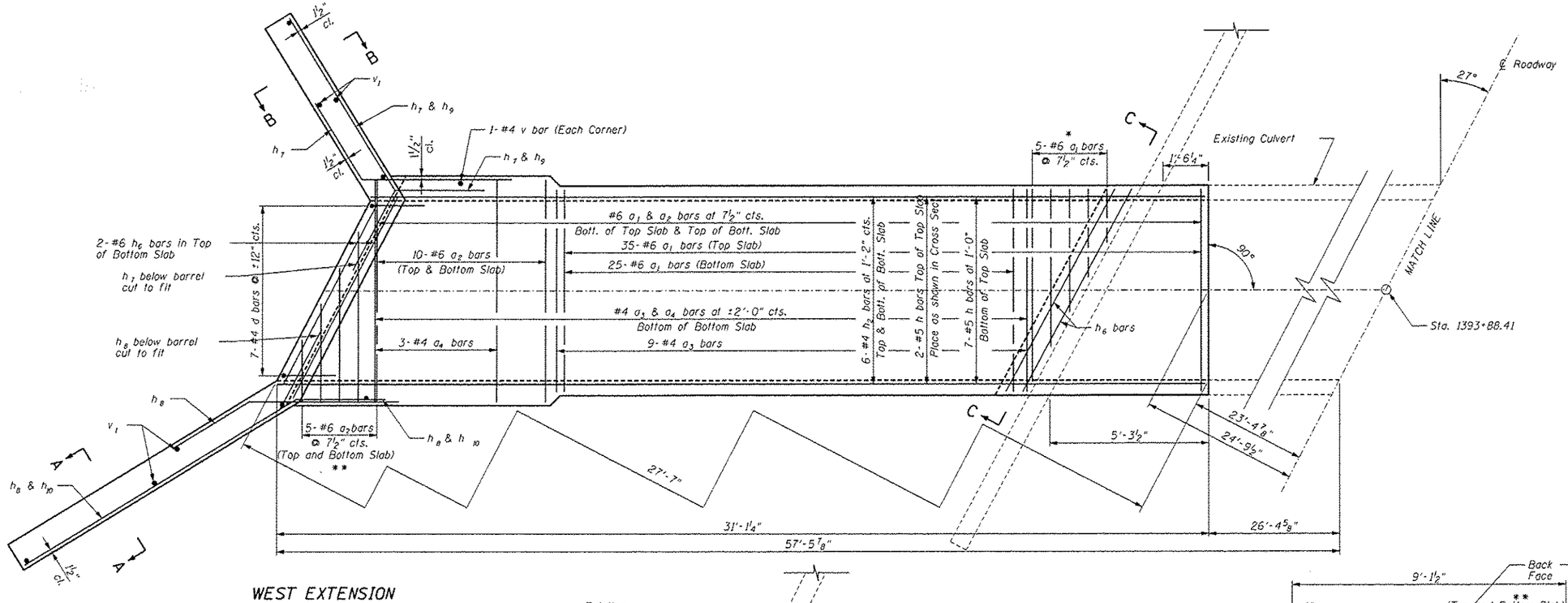
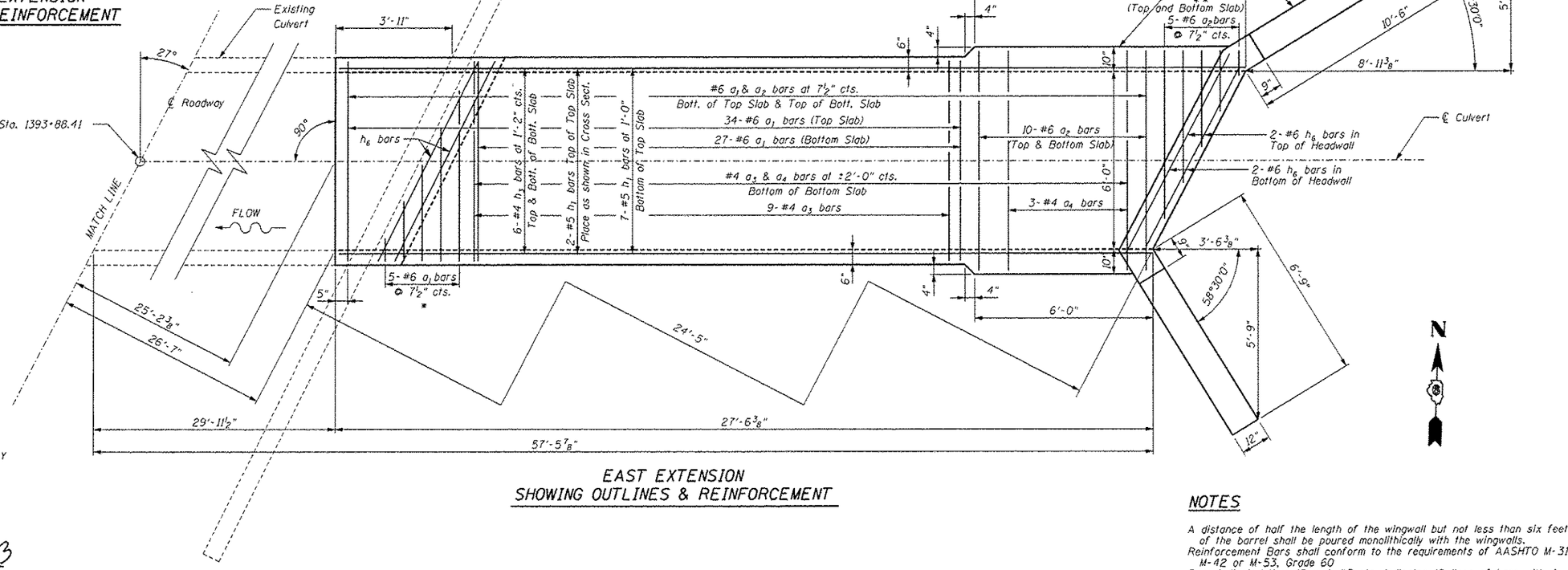



* $a_1$ bars in skew portion of slab shall be ordered full length and cut to fit. Balance of bar to be used in opposite end of culvert.

** $a_2$ bars in skew portion of slab shall be ordered full length and cut to fit. Balance of bar to be used either in top or bottom of same end or opposite end of culvert.

## WEST EXTENSION SHOWING REINFORCEMENT




## LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

## DESIGN SPECIFICATIONS

2012 AASHTO LRFD
BRIDGE DESIGN SPECIFICATIONS 6th EDITION

## DESIGN STRESSES

FIELD UNITS

$f'_c$ = 3,500 psi
$f_y$ = 60,000 psi

LICENSED STRUCTURAL ENGINEER
CHARLES S. BACH, Jr.
081-004116
STATE OF ILLINOIS

*TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS CULVERT DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOW ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF STRUCTURE AND COMPLIES WITH THE REQUIREMENTS OF THE CURRENT "AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES."*

Charles S. Bach 8-16-2013

STRUCTURAL ENGINEER — EXPIRES: 11/30/2014
PSBA

## EAST EXTENSION SHOWING OUTLINES & REINFORCEMENT

## NOTES

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
All construction joints shall be bonded.

| | | | |
|---|---|---|---|
| FILE NAME = culvert1393+8841.dgn | USER NAME = natel | DESIGNED - TCD | REVISED - |
| | | DRAWN - PSBA | REVISED - |
| | PLOT SCALE = 41.1369 '/ in. | CHECKED - CSB | REVISED - |
| | PLOT DATE = 8/16/2013 | DATE - 07/2013 | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**CULVERT DETAILS**
**CULVERT EXTENSION: STA 1393+88.41 LT & RT**

SCALE: NTS | SHEET 1 OF 3 SHEETS | STA. | TO STA.

| F.A.S. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 1597 | 14 (W, RS-7) | ADAMS/PIKE | 152 | 61 |
| | | CONTRACT NO. 72781 | | |
| | ILLINOIS FED. AID PROJECT | | | |