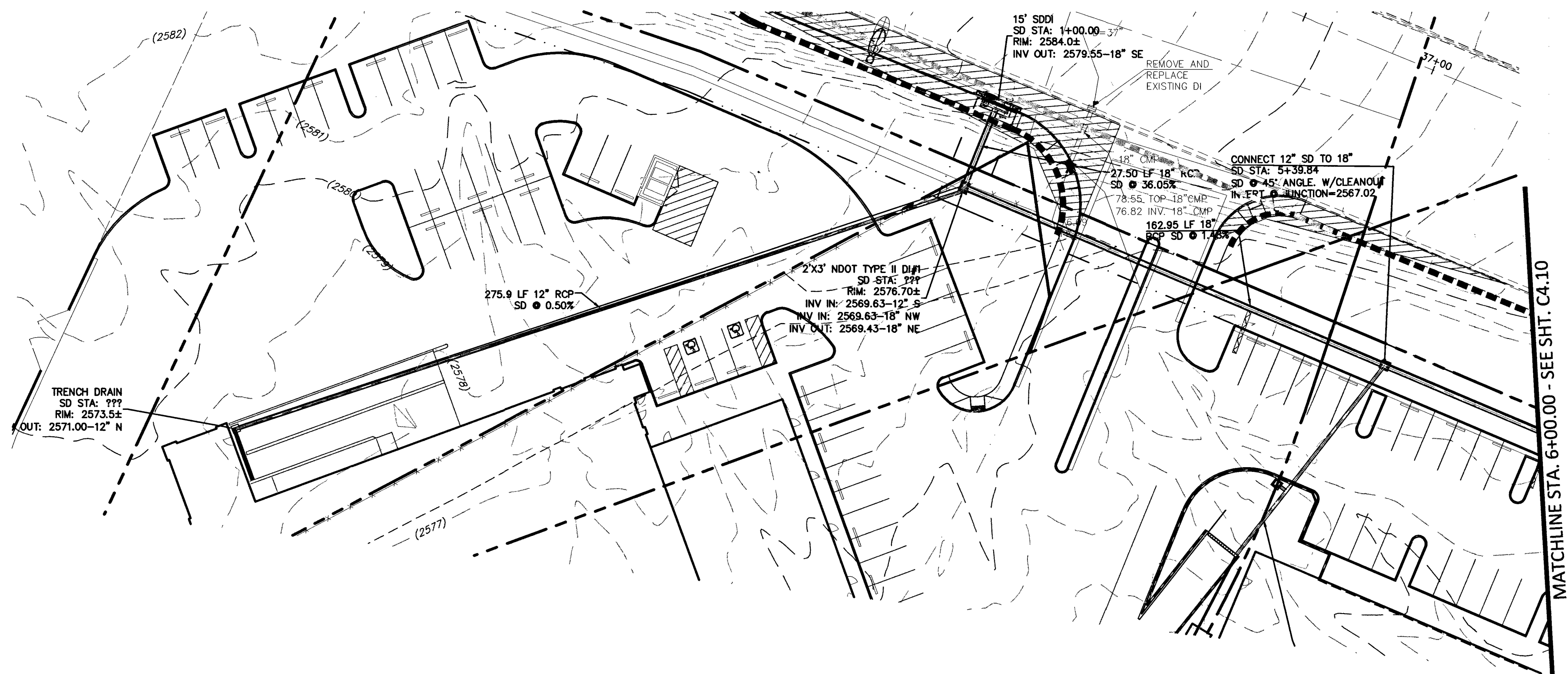




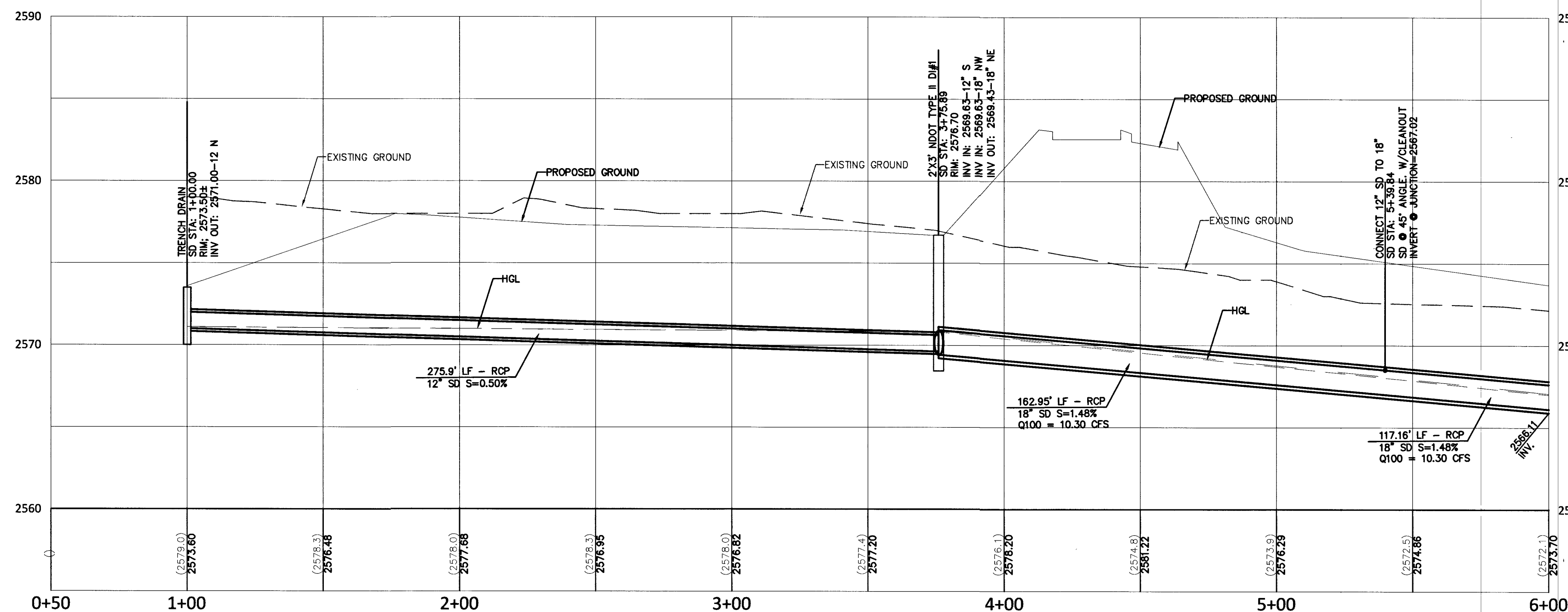
PLAN VIEW  
SCALE: 1"=30'

## NOTE

STORM SEWER TWENTY FOUR(24) INCHES IN DIAMETER OR GREATER MAY BE INSTALLED WITH WATERTIGHT JOINTS USING AGENCY APPROVED INTERNAL ELASTOMERIC JOINT SEALANT, IN COMPLIANCE WITH ASTM C920, OR JOINT GASKETS, WITH PROVISIONS TO INSURE AGAINST DIFFERENTIAL SETTLEMENT OF THE STORM DRAIN.

AT MANHOLE INSTALLATION USE A WATERTIGHT GASKET BY A-LOK, KOR-N-SEAL OR APPROVED EQUAL.

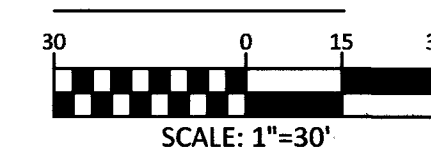
NDOT PERMIT REQUIRED  
FOR WORK IN NDOT R/W.



PROFILE VIEW  
H: 1"=30'  
V: 1"=5'

MATCHLINE STA. 6+00.00 - SEE SHT. C4.10

## GRAPHIC SCALE



## BASIS OF BEARING

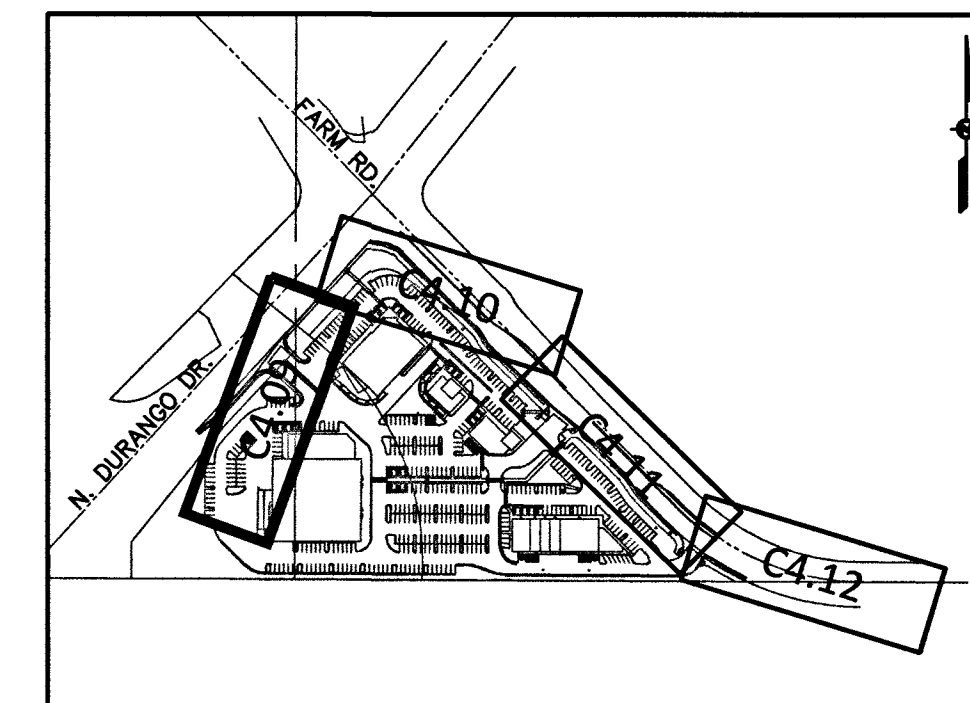
SOUTH 00°06'57\"/>

## BENCHMARK

CITY OF LAS VEGAS BENCHMARK # 5LV90 1756

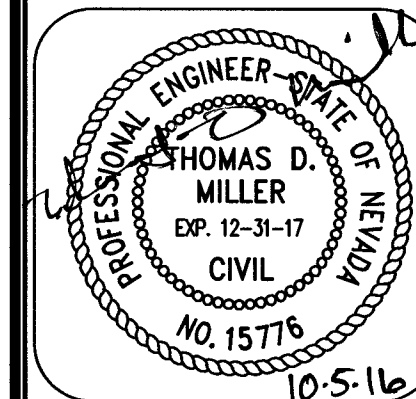
A RIVET AND PLATE IN THE TOP OF CURB AT THE NORTHWEST CORNER OF OSO BLANCA ROAD AND DURANGO DRIVE.

NAVD 88 ELEVATION = 798.4331 METERS / 2619.53 FEET  
NORTH AMERICAN DATUM OF 1988



KEY MAP  
NTS

**COLLINS ENGINEERS**  
3130 S. DURANGO DR., SUITE 404  
LAS VEGAS, NV 89117  
PHONE: (702) 248-8000  
FAX: (702) 248-8070  
WWW.COLLINSENGR.COM



## IMPROVEMENT PLANS FOR DC PLAZA APN:125-17-601-007,010,013,020 AND 021 STORM DRAIN PLAN & PROFILE STA. 1+00.00 TO 6+00.00

8451 FARM ROAD  
LAS VEGAS, NEVADA

APPROVED FOR CONSTRUCTION  
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER  
DATE: 10/24/16 PROJECT NO: 124663  
LYVMD APPROVED FIRE FLOW: 1000 GPM AT 20 PSI RESIDUAL  
SHEETS: C1.01, C1.02, C4.05-C4.09, C4.10, C4.11, C4.12, C4.13, C5.01, C5.02, C5.03, C5.04, C5.05, C5.11, C5.12.

## NOTE:

ALL ON-SITE STORM DRAIN SYSTEMS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE OWNERS/HOA.

## FLOOD ZONE NOTE:

THE PROJECT SITE LIES WITHIN ZONE X AS PER FEMA FIRM PANEL 32003C1745E DATED NOVEMBER 16, 2011.

## OFFSITE IMPROVEMENTS

SEE SHEETS C4.05-C4.08 FOR OFFSITE IMPROVEMENT PLANS.

ALL GRADING WORK SHALL BE IN STRICT ACCORDANCE WITH THE SOILS REPORT FOR THE SITE ENTITLED "PROPOSED COMMERCIAL DEVELOPMENT SOUTH CORNER OF DURANGO DR. AND FARM RD."

PROJECT NO.: 4125XD130, DATED DECEMBER 22, 2015

PREPARED BY:  
WESTERN TECHNOLOGIES INC.  
6633 WEST POST ROAD  
LAS VEGAS, NV 89118  
PHONE NO. (702) 798-8050  
FAX NO. (702) 798-7864

ALL WORK SHALL BE PERFORMED UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL SOILS ENGINEER.

I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE WITH THE CITY OF LAS VEGAS. DS# 4710A

THOMAS D. MILLER - 15776  
DATE: 10-5-16

CALL BEFORE YOU DIG  
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

CALL BEFORE YOU DO OVERHEAD WORK  
AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.

CALL BEFORE YOU DO UNDERGROUND WORK  
AVOID HITTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

1-800-227-2600  
1-702-432-5300  
1-702-227-2929

COLLINS ENGINEERS ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IF A CONFLICT EXISTS BETWEEN WHAT IS SHOWN ON THESE DRAWINGS AND WHAT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE ARCHITECT OR ENGINEER IMMEDIATELY.

**LEGEND**

| EXISTING | PROPOSED | DESCRIPTION                |
|----------|----------|----------------------------|
| (0.00%)  | 0.00%    | SLOPE                      |
| XX       | XX       | ELEVATION TAG              |
| ⊙        | ⊙        | STORM MANHOLE              |
| ⊙        | ⊙        | DROP INLET                 |
| —        | —        | CONTOUR                    |
| —        | —        | RETAINING WALL             |
| —        | —        | SCREEN WALL                |
| —        | —        | PL-RIGHT-OF-WAY            |
| —        | —        | PL-ADJACENT CENTERLINE     |
| —        | —        | EASEMENT LINE              |
| —        | —        | FLOW LINE                  |
| —        | —        | SIGN W/POLE                |
| —        | —        | SAWCUT LINE                |
| —        | —        | AC PAVEMENT                |
| —        | —        | 6" TYPE "A" CURB           |
| —        | —        | 24" TYPE "L" CURB & GUTTER |
| —        | —        | 30" ROLL CURB              |
| —        | —        | CONCRETE                   |

| DESCRIPTION    |                 |
|----------------|-----------------|
| DESIGN BY      | DATE            |
| NO.            | DATE            |
| CEI PROJECT:   | 4136            |
| DESIGN BY:     | JDM SR          |
| DRAWN BY:      | JDM SR          |
| CHECKED BY:    | TDM P.E.        |
| DATE:          | 09/19/16        |
| SCALE:         | 1"=30'          |
| SHEET NUMBER   | C4.09           |
| SHEET 15 OF 46 | 107V6734 H#6496 |