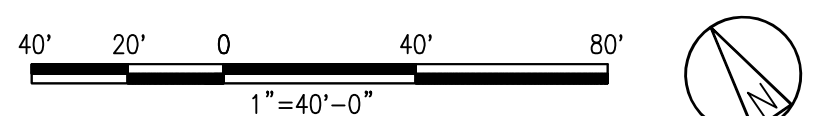


GENERAL NOTES:  
 1. THE ROUNDABOUT DESIGN IS PRELIMINARY AND WILL BE FINALIZED AFTER APPROVAL FROM THE CITY.

**PRELIMINARY**  
 NOT TO BE USED FOR CONSTRUCTION

<b>BLACK &amp; VEATCH</b> Building a world of difference®									
DESIGNER	TKD	DRAWN	WDS						
CHECKED		DATE							
PROJECT #	186535								
NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.			
F	11/16/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BD	JBS	TKD	MAV			
E	10/28/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BD	JBS	TKD	MAV			
D	10/09/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BGG/CRE	JDG	TKD	MAV			
C	07/27/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	TKD	MAV			
B	06/19/2015	ISSUED FOR EMF STUDY-PROJECT 186535-BAIRD REPLACEMENT	WDS/B/F	JDG	TKD	MAV			
A	04/30/2015	ISSUED FOR UI 30% REVIEW-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	ASV	MAV			



**NEW DRAWING**

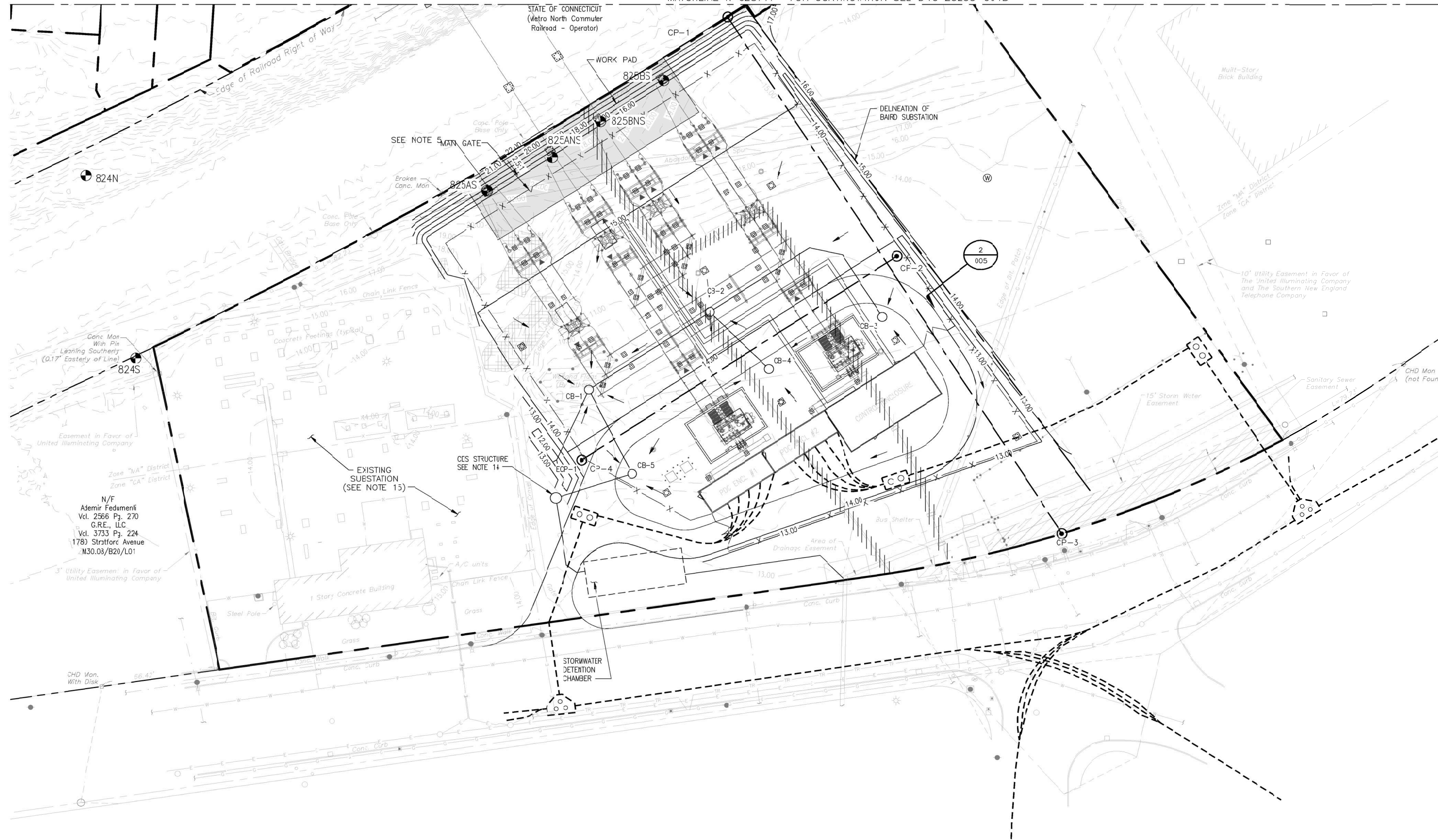
1	11/2015	BAIRD REPLACEMENT SUBSTATION	CRE	-	TKD	MAV
No	Date	Revision	By	Chkd.	Engr.	Supv.

**ui**  
 The United Illuminating Company

Drawn: \_\_\_\_\_ Date: 04/29/2015 Scale: 1"=40'  
 Chkd.: \_\_\_\_\_ Design Engr.: \_\_\_\_\_ Design Supv.: \_\_\_\_\_

SITE PLAN		
BAIRD SUBSTATION		
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
	-	25253-401

MATCHLINE N 628717- FOR CONTINUATION SEE DWG 25253-004B



**GENERAL NOTES:**

- 1 REMOVE EXISTING FENCE AS SHOWN ON DRAWING.
- 2 REMOVE EXISTING BITUMINOUS PAVEMENT. DISPOSAL OF PAVEMENT SHALL BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
- 3 SEE DRAWING 25253-005 FOR CATCH BASIN AND CULVERT DETAILS AND INFORMATION.
- 4 GRADING PLAN DOES NOT INCLUDE FUTURE REQUIREMENTS FOR THE 100 FEET PAVED BUFFER AREA.
- 5 CONTRACTOR SHALL ADJUST GRADING ALONG NORTHWEST FENCE LINE TO ENSURE ALL DISTURBANCE IS WITHIN PROPERTY BOUNDARY.
- 6 GRADE SHALL SLOPE UNIFORMLY BETWEEN FINISH SPOT ELEVATIONS AND CONTOURS SHOWN ON THE PLANS.
- 7 SLOPES SHALL BE 3(H):1(V) OR FLATTER, UNLESS NOTED OTHERWISE.
- 8 THE CONTRACTOR IS RESPONSIBLE FOR TYING FINISHED CONTOURS INTO EXISTING CONTOURS IN AREAS WHERE THERE IS INSUFFICIENT SURVEY DATA OF THE EXISTING GRADE.
- 9 EXISTING CONTOURS AND SPOT ELEVATIONS ARE BASED ON THE 05/04/2015 PROPERTY/TOPOGRAPHIC SURVEY PRODUCED BY EL COMPANIES. COORDINATES ARE BASED ON THE CONNECTICUT STATE PLANE COORDINATE SYSTEM (CT NAD83) AND ELEVATIONS REFER TO DATUM NAVD88.
- 10 SPOT ELEVATIONS AND CONTOURS ON THESE DRAWINGS ARE TOP OF FINISHED GRADE. SUBTRACT FINISH SURFACING MATERIAL THICKNESS TO OBTAIN TOP OF SUBGRADE.
- 11 ALL AREAS OUTSIDE OF THE SUBSTATION THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR RE-CONSTRUCTION CONDITIONS, AND STABILIZED, UNLESS NOTED OTHERWISE.
- 12 THE FINISHED GRADE IS SET 6 INCHES BELOW TOP OF CONCRETE, UNLESS NOTED OTHERWISE. FINISHED GRADE SHOULD SLOPE AWAY FROM THE STRUCTURE AT A MINIMUM SLOPE OF 1%.
- 13 INTERSECTION RECONSTRUCTION INFORMATION IS NOT SHOWN ON THESE DRAWINGS. PROPOSED INTERSECTION FOOTPRINT HAS BEEN REVIEWED RELATIVE TO SUBSTATION GRADING.
- 14 CONTRACTOR SHALL INSTALL A CONTECH CDS 2020 PER MANUFACTURER'S SPECIFICATION. STRUCTURE IS LOCATED AT N 628441.97, E 891546.59.
- 15 ALL WORK SHOWN ON THIS DRAWING SHALL BE FURNISHED AND INSTALLED BY CONTRACT 16653571.0200 UNLESS NOTED OTHERWISE.

**LEGEND**

- PROPERTY LINE
- BOUNDARY LINE
- X-X- NEW SUBSTATION FENCE
- 230 NEW CONTOUR
- SURFACE FLOW INDICATOR
- CB-X CATCH BASIN
- X-X- EXISTING FENCE
- 230 EXISTING CONTOUR
- 15' WIDE STORMWATER EASEMENT
- /////// FENCE TO BE REMOVED
- ~~~~~ WETLANDS
- ▨ LEDGE
- EXISTING WATER
- EXISTING TRAFFIC
- EXISTING ELECTRICAL
- EXISTING GAS
- EXISTING SANITARY
- \* > ● □ EXISTING STRUCTURES

**REFERENCE DRAWINGS:**



- GRADING AND DRAINAGE SITE PLAN BAIRD TO CONGRESS 25253-004B
- CULVERT AND RIP RAP DETAILS 25253-005
- EROSION CONTROL SITE PLAN 25253-006
- EROSION CONTROL SITE PLAN BAIRD TO CONGRESS 25253-006A
- EROSION CONTROL DETAILS 25253-007
- SURFACING AND FENCING PLAN 25253-008
- 15 FT SUBSTATION FENCE SECTIONS AND DETAILS 25253-014A
- CONSTRUCTION FACILITIES PLAN 25253-005

PROJECT SURVEY CONTROL			
CONTROL MONUMENT LOCATIONS			
MONUMENT NO.	NAD83 COORDINATES		ELEVATION
	NORTHING	EASTING	
CP-1	628710.01	891642.56	-
CP-2	628576.74	891736.83	-
CP-3	628422.08	891828.72	-
CP-4	628463.04	891561.00	-


**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

<b>BLACK &amp; VEATCH</b> Building a world of difference®							
DESIGNER	SMR	DRAWN	JTG				
CHECKED		DATE					
PROJECT #	186535						
NO.	DATE	REVISION	DRN	CHKD	DES	SUPR.	
E	11/20/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	RRH		SMR	NAV	
D	10/28/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	JDL		SMR	NAV	
C	10/23/15	ISSUED FOR UI REVIEW-CSC DRAWINGS-PROJECT 186535-BAIRD REPLACEMENT	JDL		SMR	NAV	
B	10/09/15	ISSUED FOR CSC APPLICATION	JDL		SMR	NAV	
A	07/28/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	JTG		SMR	NAV	

  
  
 1" = 30'  
**NEW DRAWING**

1	11/2015	BAIRD REPLACEMENT SUBSTATION	JDL	SMR	NAV
No.	Date	Revision	By	Chkd.	Engr. Supr.

  
**The United Illuminating Company**

Drwn	JDL	Date	11/18/15	Scale:	1" = 30'
Chkd.		Design Engr.	SMR	Design Supr.	NAV

GRADING AND DRAINAGE SITE PLAN BAIRD SUBSTATION		
CAD FILE NAME	SEQUENCE NO.	DRAWING NUMBER
		25253-004



**GENERAL NOTES:**

1. GRADE SHALL SLOPE UNIFORMLY BETWEEN FINISH SPOT ELEVATIONS AND CONTOURS SHOWN ON THE PLANS.
2. SLOPES SHALL BE 3(H):1(V) OR FLATTER, UNLESS NOTED OTHERWISE.
3. THE CONTRACTOR IS RESPONSIBLE FOR TYING FINISHED CONTOURS INTO EXISTING CONTOURS IN AREAS WHERE THERE IS INSUFFICIENT SURVEY DATA OF THE EXISTING GRADE.
4. ALL WORK SHOWN ON THIS DRAWING SHALL BE FURNISHED AND INSTALLED BY CONTRACT LTR UNLESS NOTED OTHERWISE.
5. CONTRACTOR SHALL REMOVE VEGETATION TO SUPPORT CRANE SWING FOR POLE ERECTION.

**LEGEND**

- PROPERTY LINE
- RIGHT-OF-WAY LINE (MNR)
- NEW CONTOUR
- EXISTING CONTOUR
- 825N TRANSMISSION LINE POLE
- WORK PAD/ACCESS ROAD
- EXISTING STRUCTURES

MATCHLINE N 628717 - FOR CONTINUATION SEE DWG 25253-004

**REFERENCE DRAWINGS:**

- |   |            |
|---|------------|
| GRADING AND DRAINAGE SITE PLAN              | 25253-004  |
| CULVERT AND RIP RAP DETAILS                 | 25253-005  |
| EROSION CONTROL SITE PLAN                   | 25253-006  |
| EROSION CONTROL SITE PLAN BAIRD TO CONGRESS | 25253-006A |
| EROSION CONTROL DETAILS                     | 25253-007  |
| SURFACING AND FENCING PLAN                  | 25253-008  |
| 15 FT SUBSTATION FENCE SECTIONS AND DETAILS | 25253-014A |
| CONSTRUCTION FACILITIES PLAN                | 25253-805  |

**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

<b>BLACK &amp; VEATCH</b> Building a world of difference®							
DESIGNER	JDL	DRAWN	JTG				
CHECKED		DATE					
PROJECT #	186535						
NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.	
C	11/20/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	RRH		SMR	MAV	
B	11/20/2015	ISSUED FOR UI REVIEW-PROJECT 186535-BAIRD REPLACEMENT	MEM		SMR	MAV	
A	11/18/2015	ISSUED FOR UI REVIEW-PROJECT 186535-BAIRD REPLACEMENT	RRH		SMR	MAV	

TRUE NORTH  
 1" = 30'  
**NEW DRAWING**

No	Date	Revision	By	Chkd.	Engr.	Supv.
1	11/2015	BAIRD REPLACEMENT SUBSTATION	RRH		SMR	MAV

**The United Illuminating Company**  
 Drawn \_\_\_\_\_ Date 11/17/2015 Scale: 1" = 30'  
 Chkd. \_\_\_\_\_ Design Engr. \_\_\_\_\_ Design Supv. \_\_\_\_\_

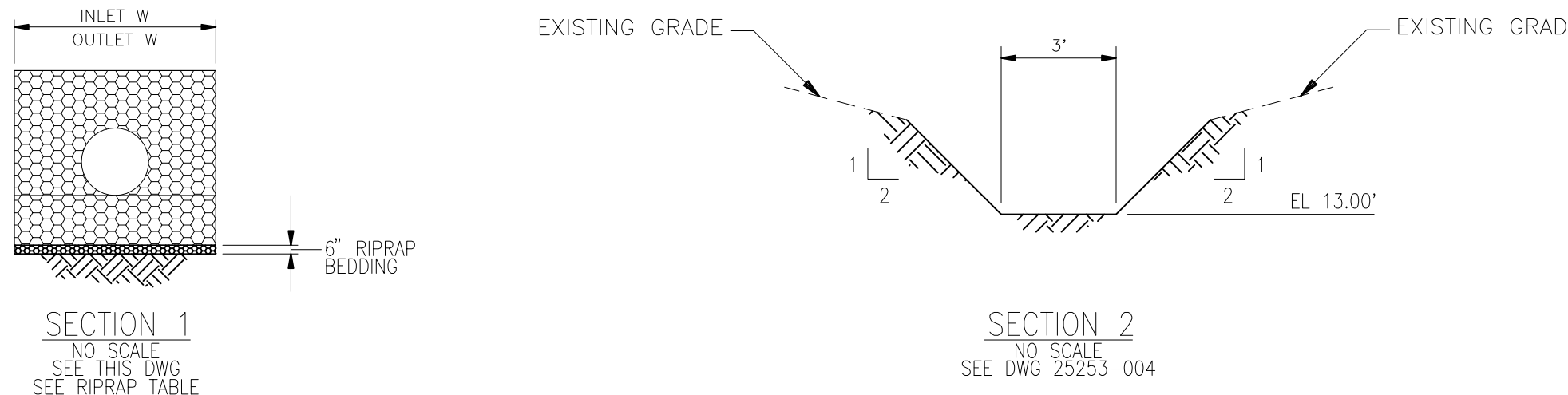
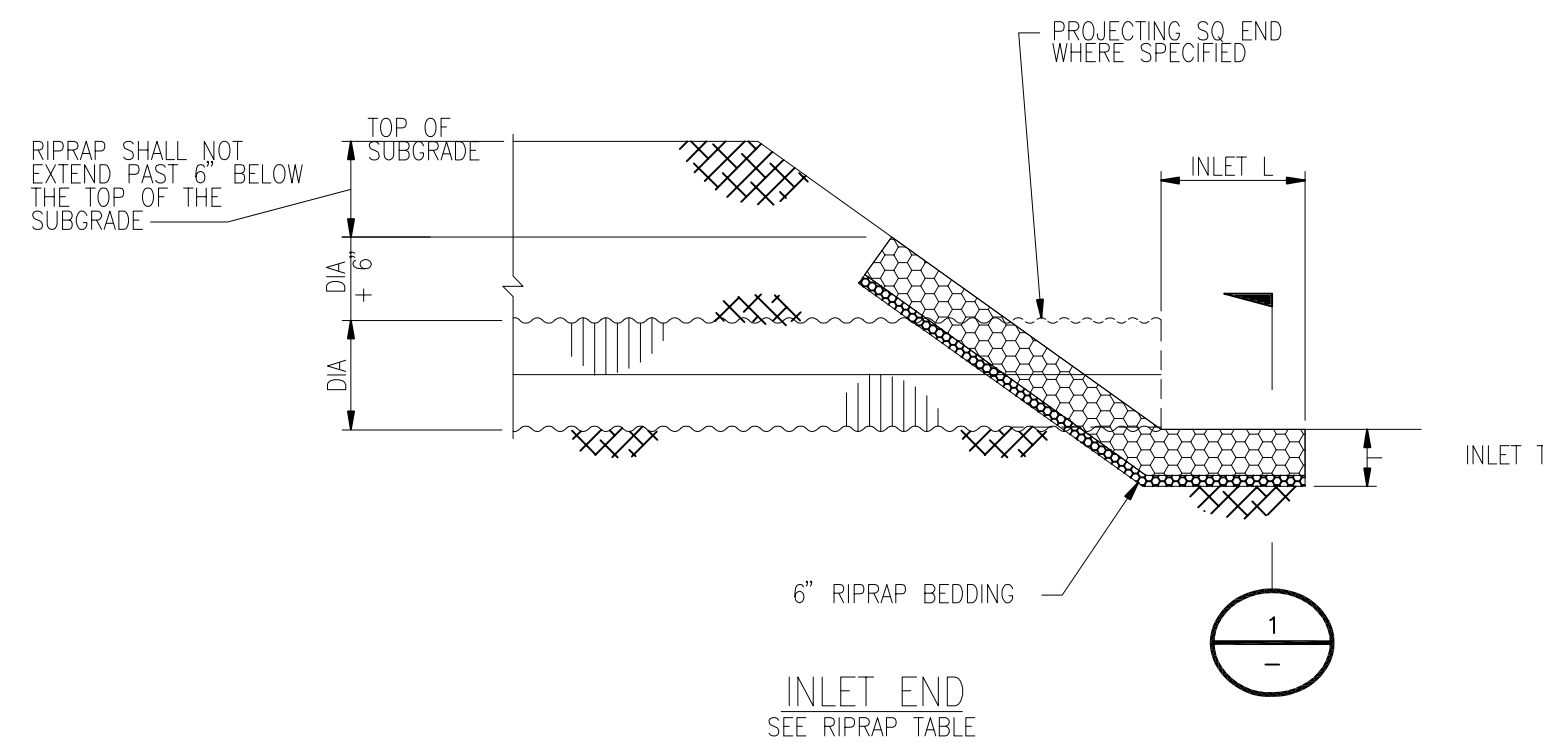
GRADING AND DRAINAGE		
SITE PLAN BAIRD SUBSTATION		
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
	-	25253-004B

**RIPRAP TABLE**

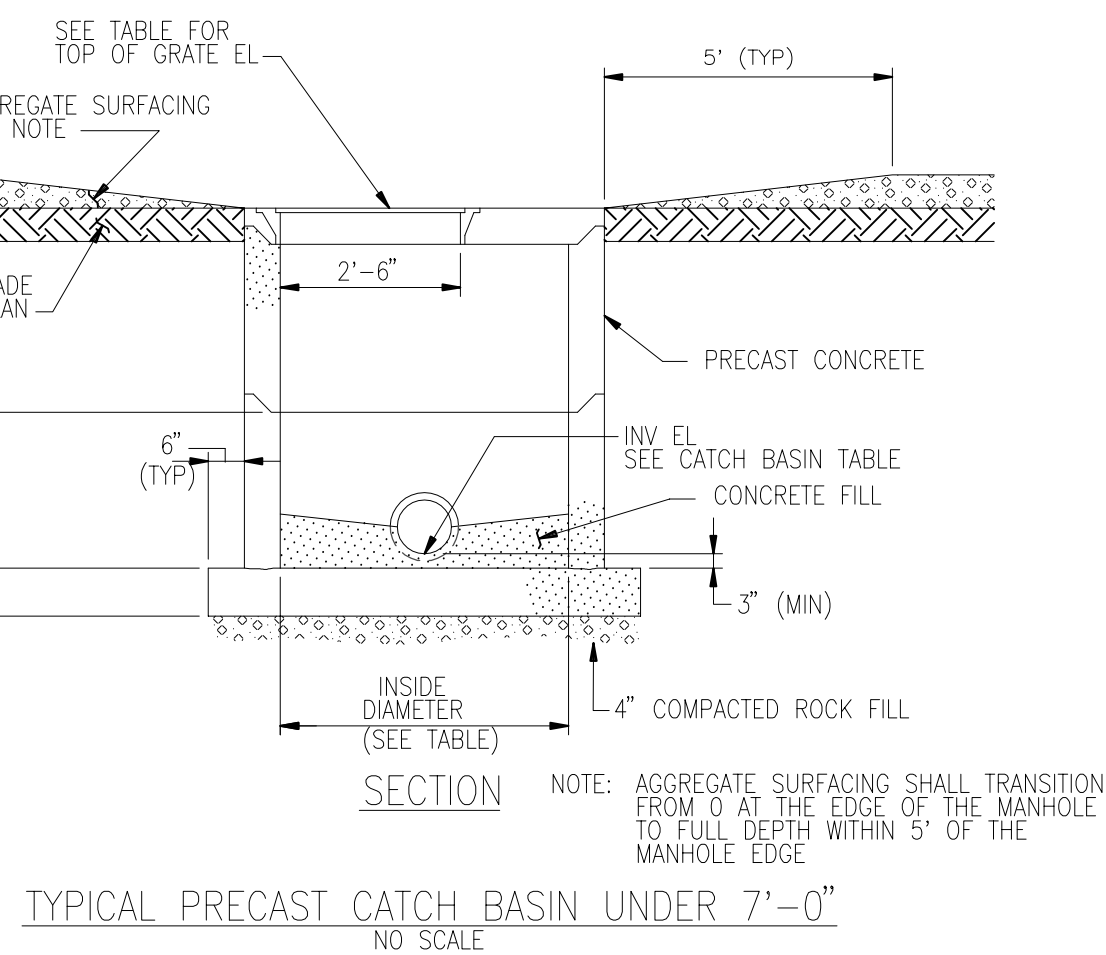
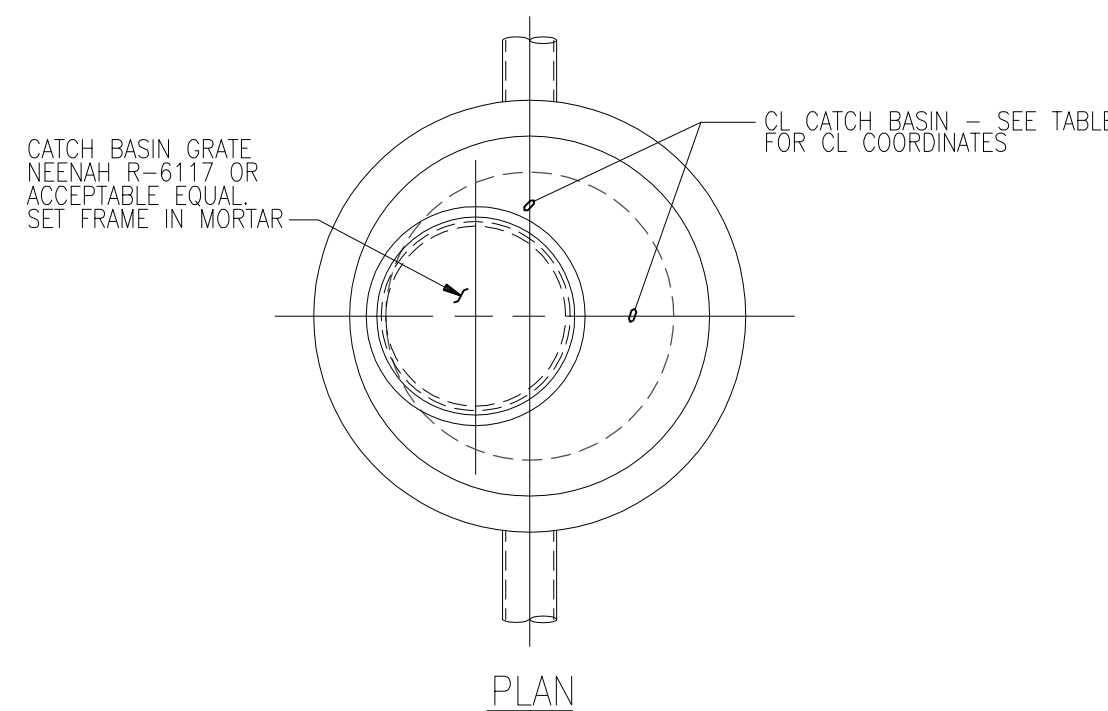
CULVERT NO.	INLET L	OUTLET L	INLET T	OUTLET T	INLET W	OUTLET W	INLET D50	OUTLET D50	REMARKS
EOP-1	5.0'	-	0.75'	-	3.75'	-	0.5'	-	

**CULVERT TABLE**

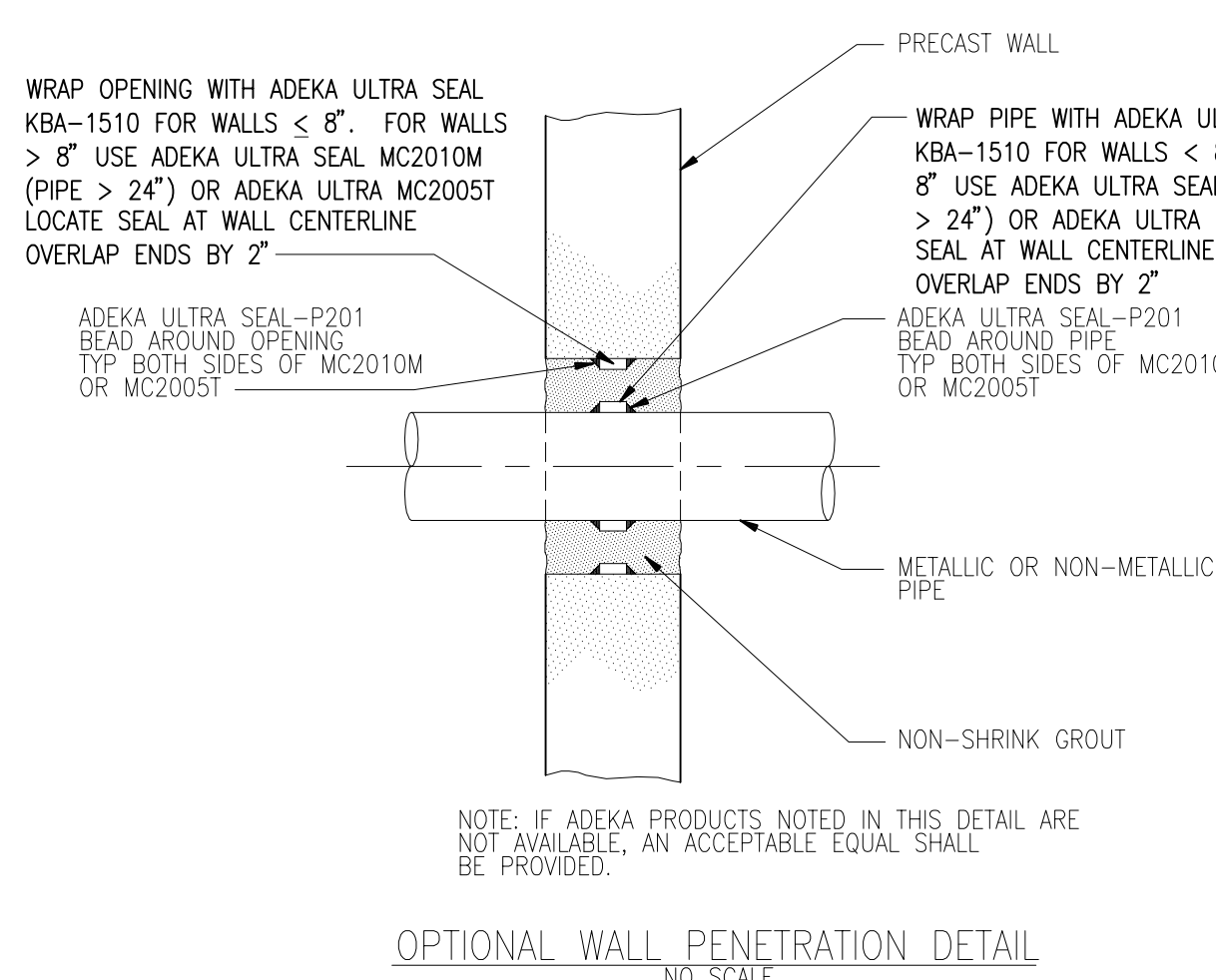
CULVERT NO.	CENTERLINE COORDINATES				LENGTH	INLET INV. ELEVATION	OUTLET INV. ELEVATION	END TYPE	PIPE DIAMETER	NUMBER OF BARRELS	PIPE MATERIAL	REMARKS
	INLET END		OUTLET END									
	NORTH	EAST	NORTH	EAST								
EOP-1	628463.20	891547.01	-	-	-	12.00	11.80	PROJECTING	15"	1	CHDPE	CONNECTS TO CB-1



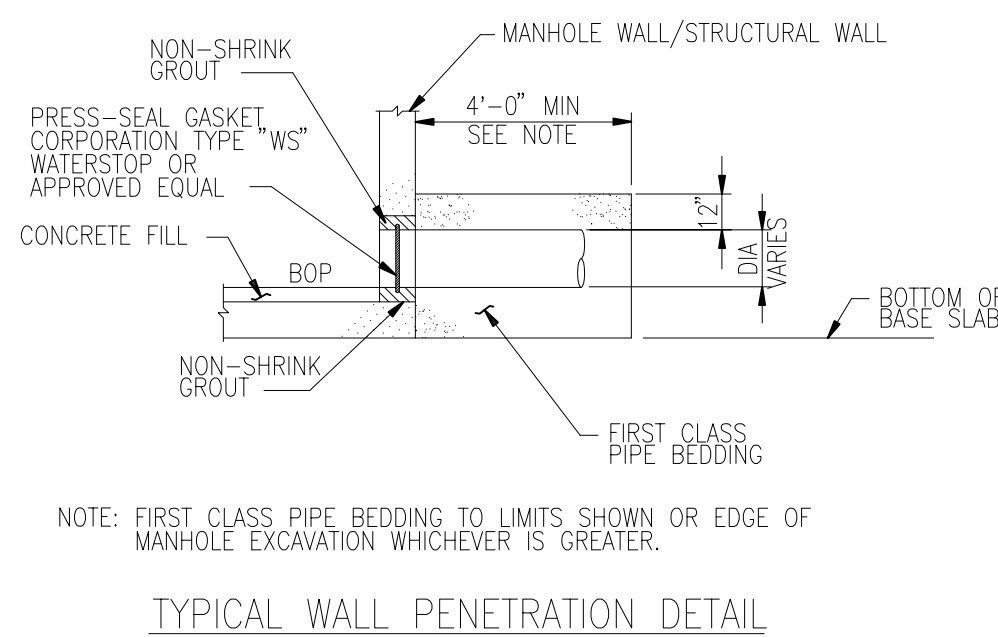
TYPICAL CULVERT RIPRAP  
NO SCALE



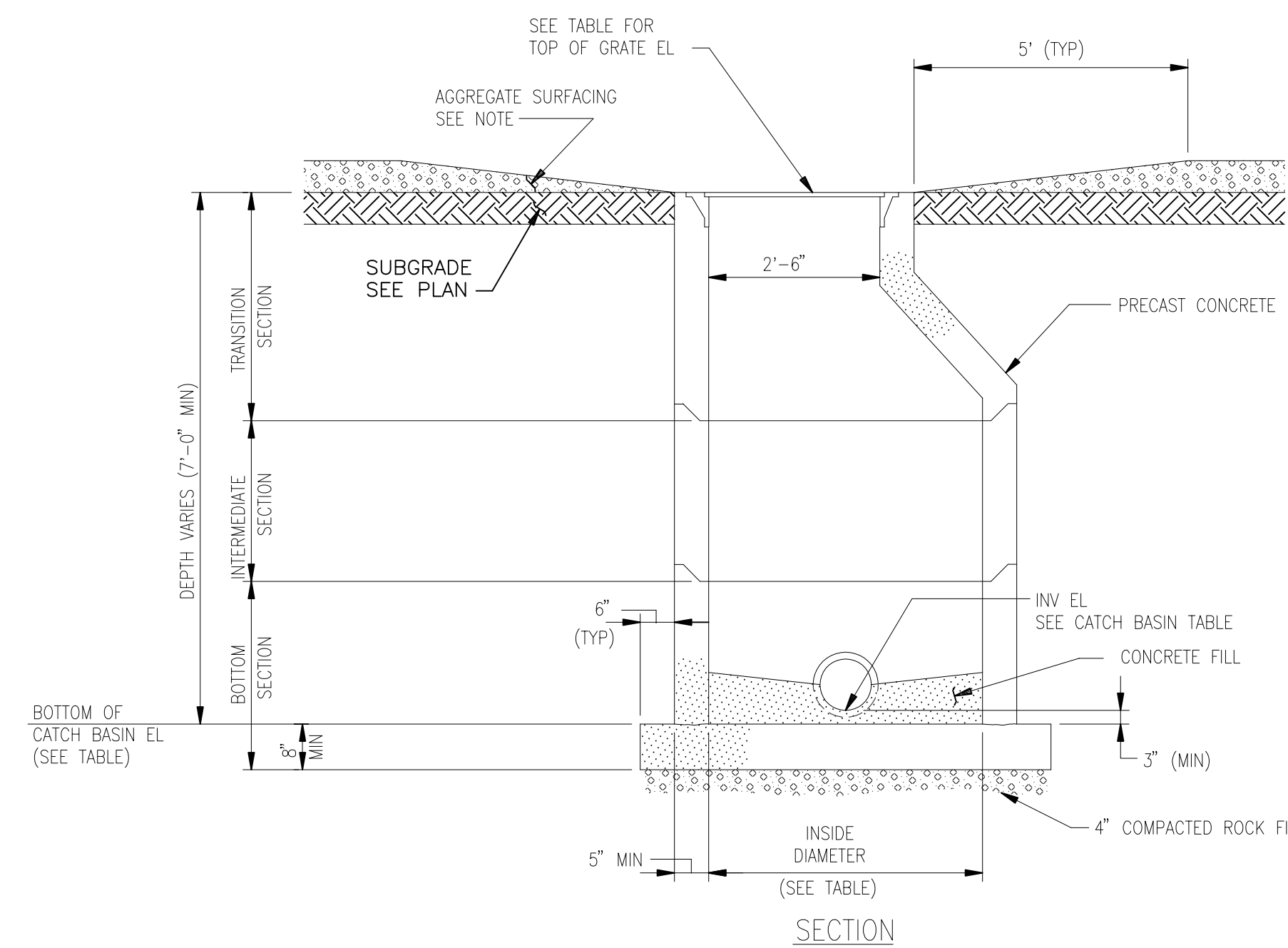
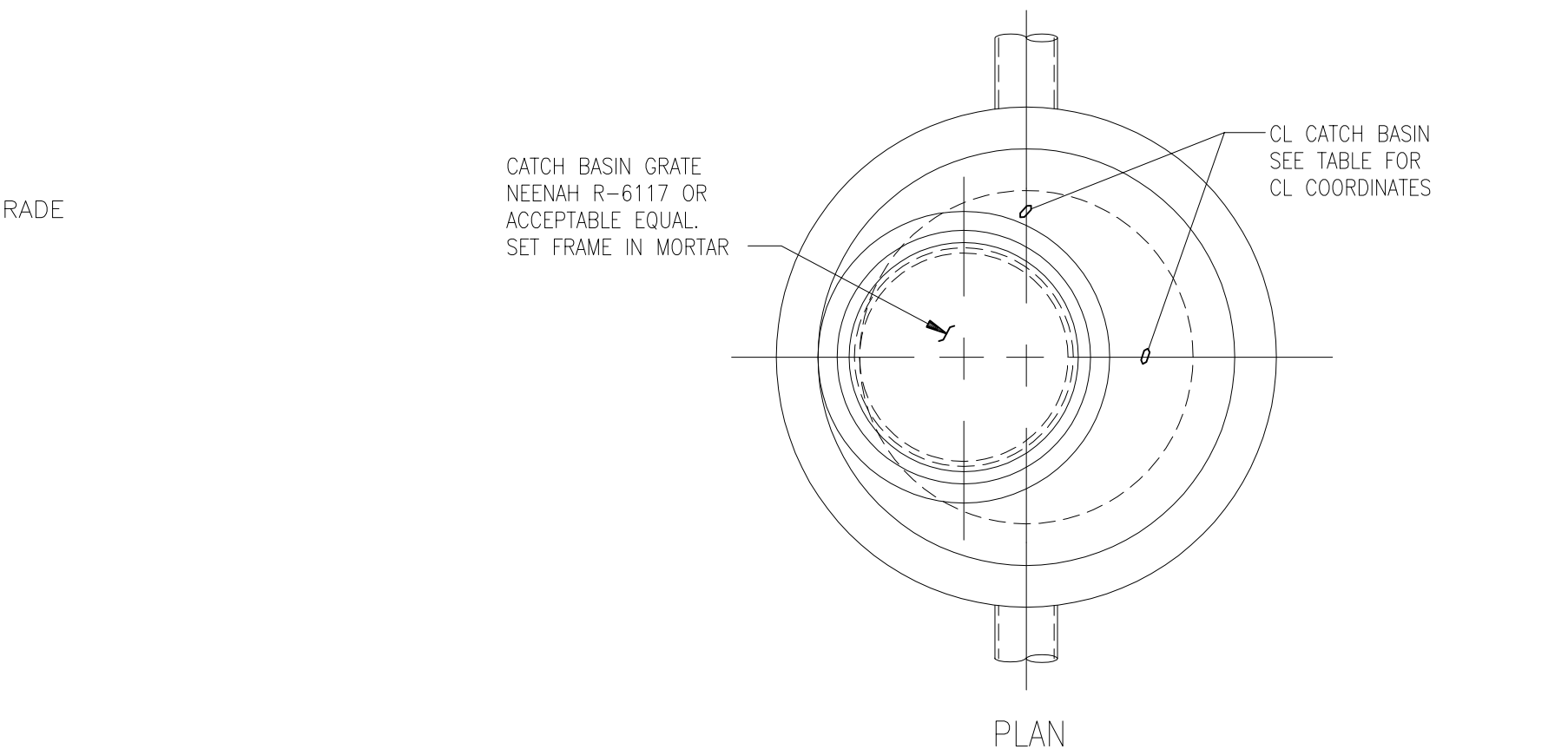
TYPICAL PRECAST CATCH BASIN UNDER 7'-0"  
NO SCALE



OPTIONAL WALL PENETRATION DETAIL  
NO SCALE



TYPICAL WALL PENETRATION DETAIL



TYPICAL PRECAST CATCH BASIN 7'-0" AND OVER  
NO SCALE

**NOTES**

- SEE DWG 25253-004 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
- GRADATION OF RIPRAP BEDDING SHALL BE ACCORDING TO CONDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- CONTRACTOR SHALL INSTALL UNDERGROUND STORMWATER DETENTION CHAMBER. INVERT EL. 6.60. OUTLET SHALL BE CONNECTED TO EXISTING CATCH BASIN.

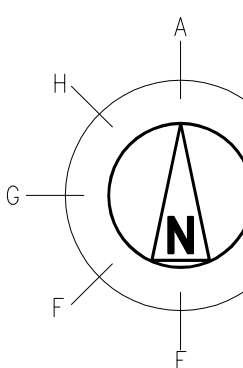
# PRELIMINARY

NOT TO BE USED FOR CONSTRUCTION

**CATCH BASIN TABLE**

STRUCTURE NO.	DRAWING NO.	CENTERLINE COORDINATES		STRUCTURE SIZE ID	TOP OF GRATE ELEVATION	BOTTOM OF CATCH BASIN ELEVATION	INLET & OUTLET PIPE INFORMATION																REMARKS		
		NORTH	EAST				A		B		C		D		E		F		G		H				
							INV EL	DIA	INV EL	DIA	INV EL	DIA	INV EL	DIA	INV EL	DIA	INV EL	DIA	INV EL	DIA	INV EL	DIA			
CB-1	25253-004	628502.34	891565.06	6'-0"	13.90	6.85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CB-2	25253-004	628545.61	891632.52	5'-0"	13.90	7.25	-	-	-	7.10	18"	-	-	6.90	18"	-	-	-	-	-	-	-	-	-	-
CB-3	25253-004	628542.87	891728.71	5'-0"	13.80	8.05	-	-	-	7.70	18"	-	-	8.05	15"	-	-	-	-	-	-	-	-	-	-
CB-4	25253-004	628513.86	891665.46	5'-0"	13.80	8.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.30	18"	-	-
CB-5	25253-004	628455.45	891589.15	5'-0"	13.80	6.20	-	-	-	-	-	-	-	-	-	-	-	6.45	18"	6.65	18"	-	-	-	OUTLET TO CONTECH CDS

ALL DIMENSIONS ARE IN FEET, EXCEPT DIAMETER, WHICH IS IN INCHES FOR PIPELINE MATERIAL. SEE PIPELINE LIST.

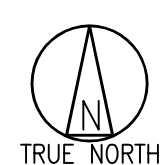


**REFERENCE DRAWINGS:**

GRADING AND DRAINAGE SITE PLAN BAIRD TO CONGRESS	25253-004B
EROSION CONTROL SITE PLAN	25253-006
EROSION CONTROL SITE PLAN BAIRD TO CONGRESS	25253-006A
EROSION CONTROL DETAILS	25253-007
SURFACING AND FENCING PLAN	25253-008
15 FT SUBSTATION FENCE SECTIONS AND DETAILS	25253-014A
CONSTRUCTION FACILITIES PLAN	25253-805

<b>BLACK &amp; VEATCH</b> Building a world of difference®		DESIGNER: SMR DRAWN: JTG		CHECKED: DATE		PROJECT # 186535		NO DATE REVISION	
E	11/20/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT					JTG	SMR	MAV
D	10/28/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT					JDL	SMR	MAV
C	10/23/15	ISSUED FOR UI REVIEW-CSC DRAWINGS-PROJECT 186535-BAIRD REPLACEMENT					JDL	SMR	MAV
B	10/09/15	ISSUED FOR CSC APPLICATION					JDL	SMR	MAV
A	07/28/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT					JTG	SMR	MAV
NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.			

## NEW DRAWING



No	Date	Revision	By	Chkd.	Engr.	Supv.
1	11/2015	BAIRD REPLACEMENT SUBSTATION	JDL	SMR	MAV	

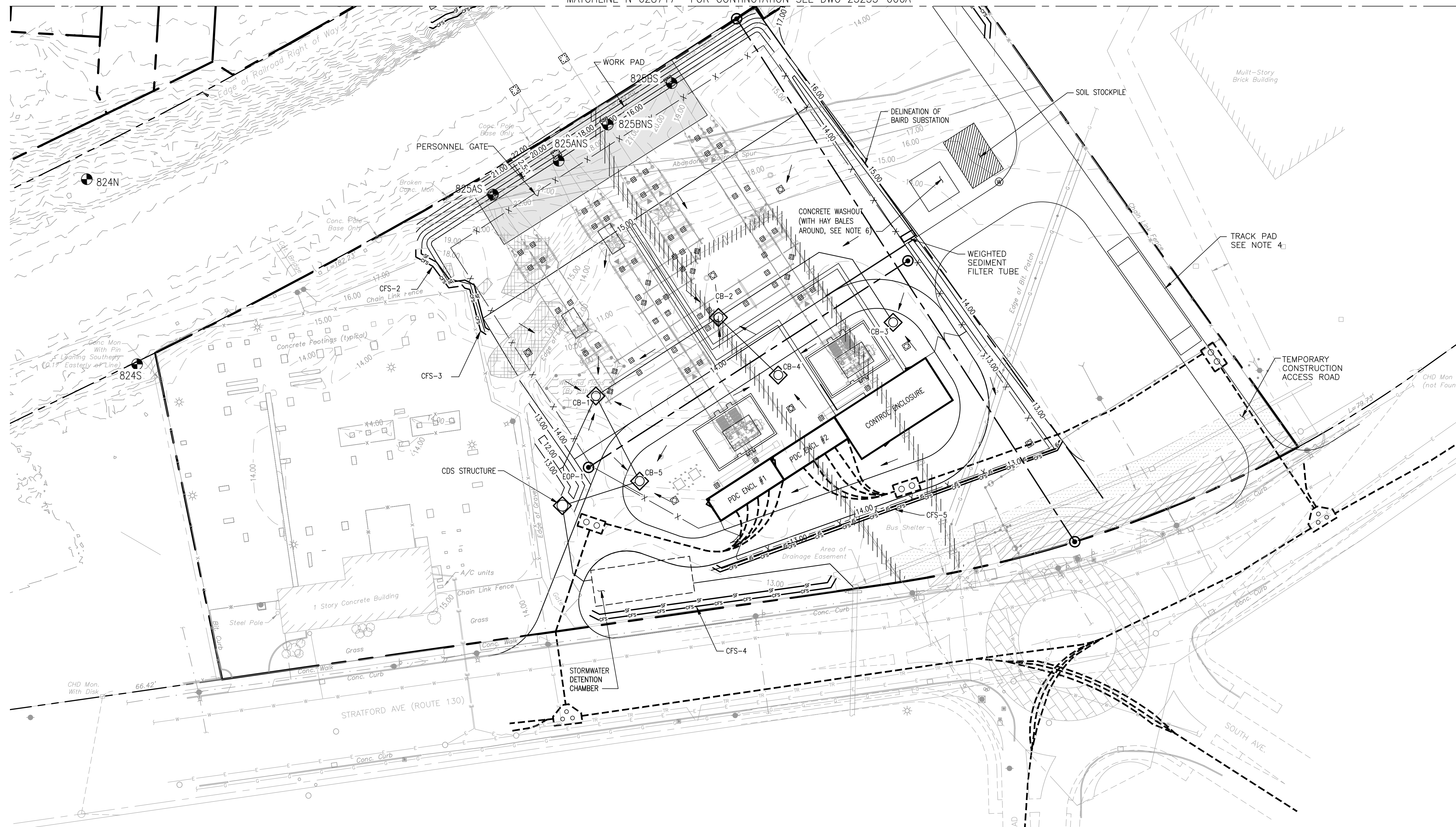


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GRADING AND DRAINAGE DETAILS  
BAIRD SUBSTATION

Drawn	JDL	Date	11/18/15	Scale:	NO SCALE	CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
By	Chkd. Engr.	Supv.	Chkd.	Design Engr.	SMR	Design Supv.	MAV	25253-005

MATCHLINE N 628717- FOR CONTINUATION SEE DWG 25253-006A



GENERAL NOTES:

- SEE DRAWING 25253-004 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
- SEE DRAWING 25253-007 FOR EROSION CONTROL DETAILS.
- LOCATION OF CONCRETE WASHOUT AND SOIL STOCKPILE TO BE CONFIRMED BY BVCI CONSTRUCTION MANAGER.
- CONTRACTOR SHALL CUT AND REMOVE EXISTING ASPHALT PAVEMENT PREPARATION FOR INSTALLATION OF TRACK PAD.
- SUBSTATION AND CONSTRUCTION FACILITIES DISTURBED AREA IS 112671 SF.
- SEE STORMWATER POLLUTION CONTROL PLAN DEVELOPED BY GHD FOR ADDITIONAL INFORMATION.
- ALL WORK SHOWN ON THIS DRAWING SHALL BE FURNISHED AND INSTALLED BY CONTRACT 186535.71.0200 UNLESS NOTED OTHERWISE.

LEGEND

- PROPERTY LINE
- BOUNDARY LINE
- NEW SUBSTATION FENCE
- NEW CONTOUR
- COMPOST FILTER SOCK
- SILT FENCE
- EXISTING FENCE
- EXISTING CONTOUR
- 15' WIDE STORMWATER EASEMENT
- EROSION CONTROL BLANKET
- WETLANDS
- EDGE
- INLET PROTECTION
- EXISTING WATER
- EXISTING TRAFFIC
- EXISTING ELECTRICAL
- EXISTING GAS
- EXISTING SANITARY
- EXISTING STRUCTURES

REFERENCE DRAWINGS:

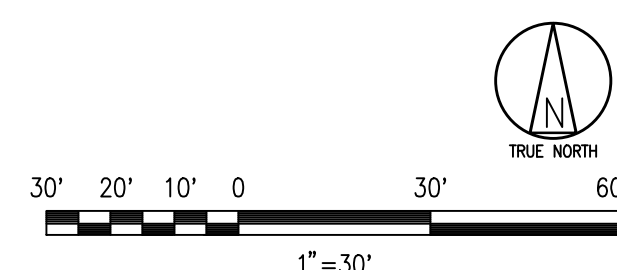
GRADING AND DRAINAGE SITE PLAN BAIRD TO CONGRESS	25253-004B
CULVERT AND RIP RAP DETAILS	25253-005
EROSION CONTROL SITE PLAN BAIRD TO CONGRESS	25253-006A
EROSION CONTROL DETAILS	25253-007
SURFACING AND FENCING PLAN	25253-008
15 FT SUBSTATION FENCE SECTIONS AND DETAILS	25253-014A
CONSTRUCTION FACILITIES PLAN	25253-805

**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

<b>BLACK &amp; VEATCH</b> Building a world of difference®					
DESIGNER	SMR	DRAWN	JTG		
CHECKED		DATE			
PROJECT #	186535				
NO	DATE	REVISION	DRN	CHKD	DESN
F	11/20/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	RRH	SMR	MAV
E	10/28/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	JDL	SMR	MAV
D	10/23/15	ISSUED FOR UI REVIEW-CSC DRAWINGS-PROJECT 186535-BAIRD REPLACEMENT	JDL	SMR	MAV
C	10/09/15	ISSUED FOR CSC APPLICATION	JDL	SMR	MAV
B	09/24/2015	ISSUED FOR CLIENT REVIEW	JDL	SMR	MAV
A	07/28/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	JTG	SMR	MAV

**NEW DRAWING**

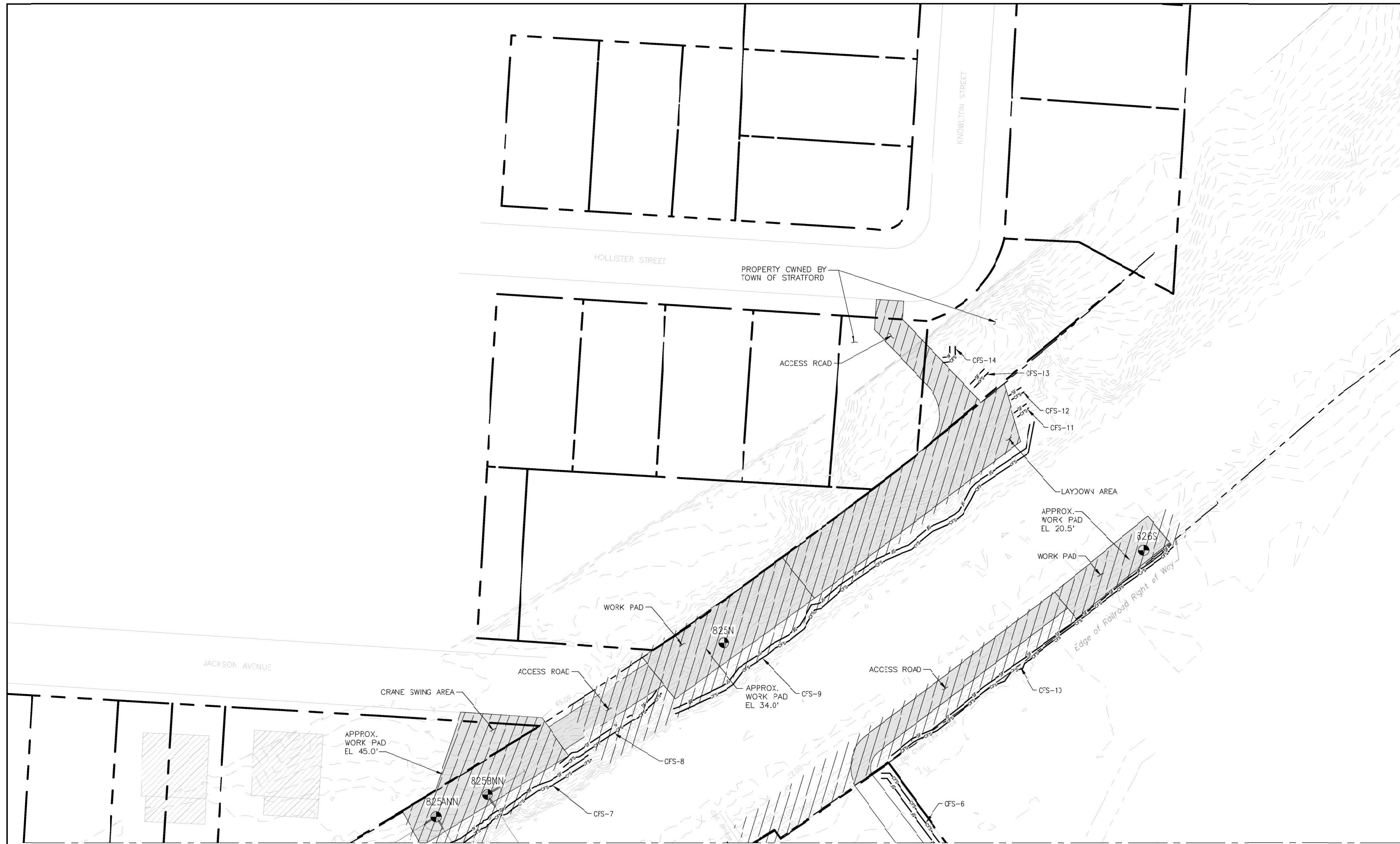


No	Date	Revision	By	Chkd.	Engr.	Supv.
1	11/2015	BAIRD REPLACEMENT SUBSTATION	JDL		SMR	MAV

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Drawn JDL Date 11/18/15 Scale: 1"=30'  
 Chkd. - Design Engr. SMR Design Supv. MAV

EROSION CONTROL SITE PLAN BAIRD SUBSTATION		
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
		25253-006



**GENERAL NOTES:**

1. SEE DRAWING 25253-004 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
2. SEE DRAWING 25253-007 FOR EROSION CONTROL DETAILS.
3. EROSION CONTROL BEST MANAGEMENT PRACTICES FOR SUBSTATION ARE SHOWN ON DRAWING 25253-006.
4. WORK PAD AND ACCESS ROAD DISTURBED AREA IS 17342 SF.
5. VEGETATION CLEARING OUTSIDE OF WORK AND ACCESS ROAD FOOTPRINT FOR TRANSMISSION LINE CONSTRUCTION DOES NOT INCLUDE GRUBBING OF STUMPS OR ROOTS.
6. SEE STORMWATER POLLUTION CONTROL PLAN DEVELOPED BY GHD FOR ADDITIONAL INFORMATION.
7. ALL WORK SHOWN ON THIS DRAWING SHALL BE FURNISHED AND INSTALLED BY CONTRACT 186535.71 0200 UNLESS NOTED OTHERWISE.

**LEGEND**

- PROPERTY LINE
- BOUNDARY LINE
- NEW SUBSTATION FENCE
- NEW CONTOUR
- COMPOST FILTER SOCK
- SILT FENCE
- EXISTING FENCE
- EXISTING CONTOUR
- EXISTING STRUCTURES
- WORK PAD/ACCESS ROAD
- VEGETATION CLEARING (SEE NOTE 5)
- 824N TRANSMISSION LINE POLE

WATCHLINE N 628717 - FOR CONTINUATION SEE DWG 25253-005

**REFERENCE DRAWINGS:**

- |  |            |
|--|------------|
| GRADING AND DRAINAGE SITE PLAN BAIRD TO CONGRESS | 25253-004B |
| CLLVERT AND RIP RAP DETAILS                      | 25253-005  |
| EROSION CONTROL SITE PLAN                        | 25253-006  |
| EROSION CONTROL DETAILS                          | 25253-007  |
| SURFACING AND FENCING PLAN                       | 25253-008  |
| 15 FT SUBSTATION FENCE SECTIONS AND DETAILS      | 25253-C14A |
| CONSTRUCTION FACILITIES PLAN                     | 25253-005  |

**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

<b>BLACK &amp; VEATCH</b> Building a world of difference®							
DESIGNER	SMR	DRAWN	JTG				
CHECKED	-	DATE					
PROJECT #	186535						
NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.	
D	11/20/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BRH		SMR	MAV	
C	10/28/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	JDL		SMR	MAV	
B	10/23/15	ISSUED FOR UI REVIEW-CSC DRAWINGS-PROJECT 186535-BAIRD REPLACEMENT	JDL		SMR	MAV	
A	10/12/15	ISSUED FOR CSC APPLICATION	JDL		SMR	MAV	

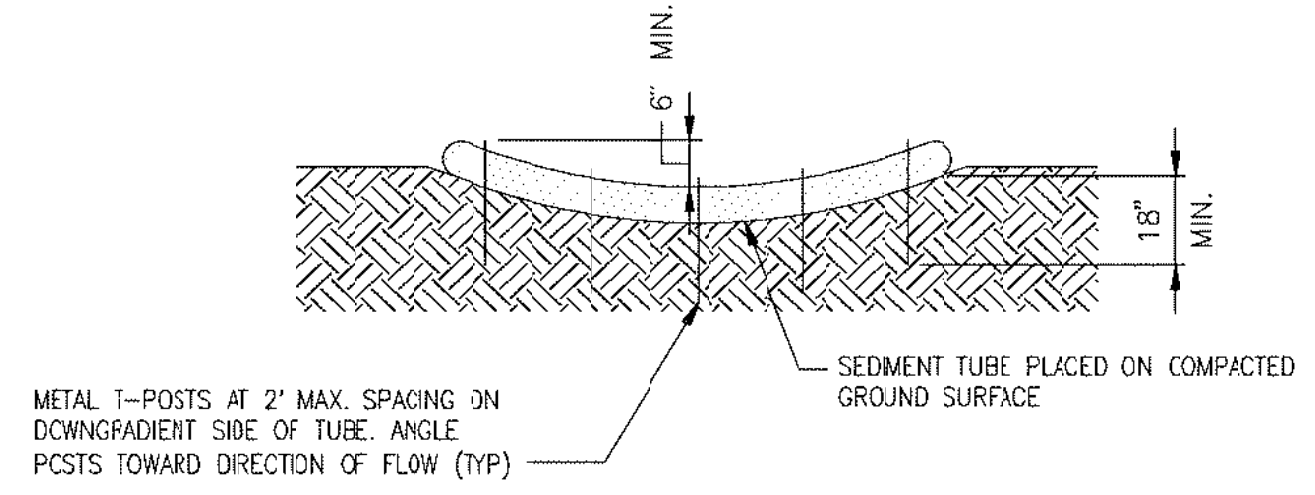
**NEW DRAWING**

No	Date	Revision	By	Chkd.	Engr.	Supv.
1	11/2015	BAIRD REPLACEMENT SUBSTATION	JDL		SMR	MAV

**The United Illuminating Company**

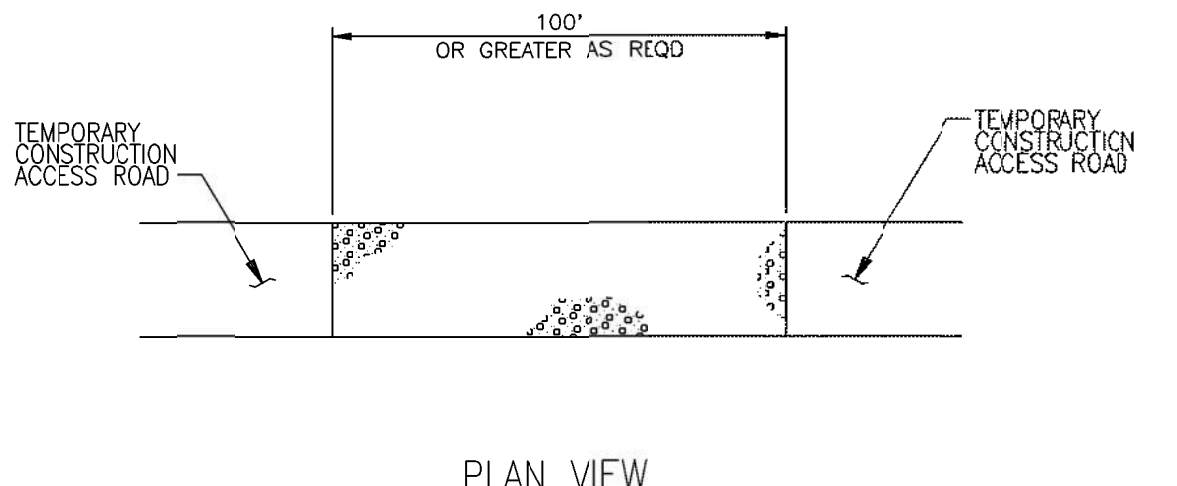
Drwn	JDL	Date	11/18/15	Scale:	1"=30'
Chkd.	-	Design Engr.	SMR	Design Supr.	MAV

EROSION CONTROL SITE PLAN BAIRD SUBSTATION		
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
		25253-006A

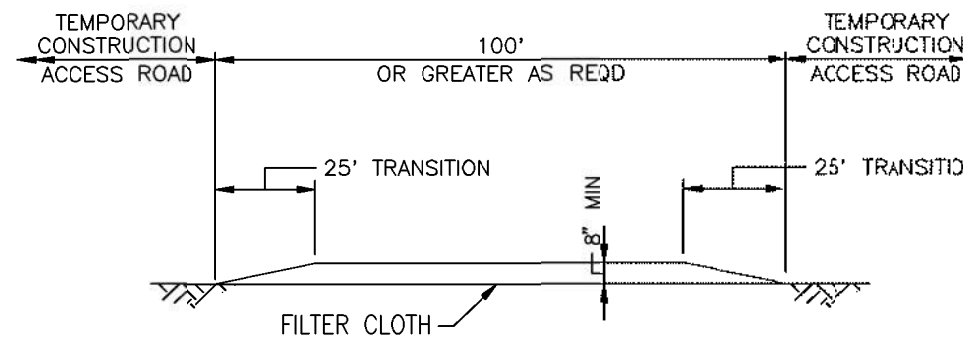


**WEIGHTED SEDIMENT FILTER TUBE INSTALLATION DETAIL**

NOT TO SCALE  
SEE NOTE 12



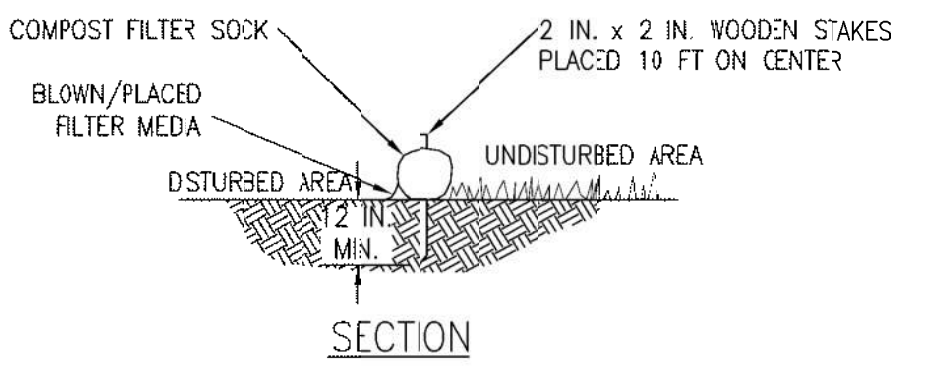
**PLAN VIEW**



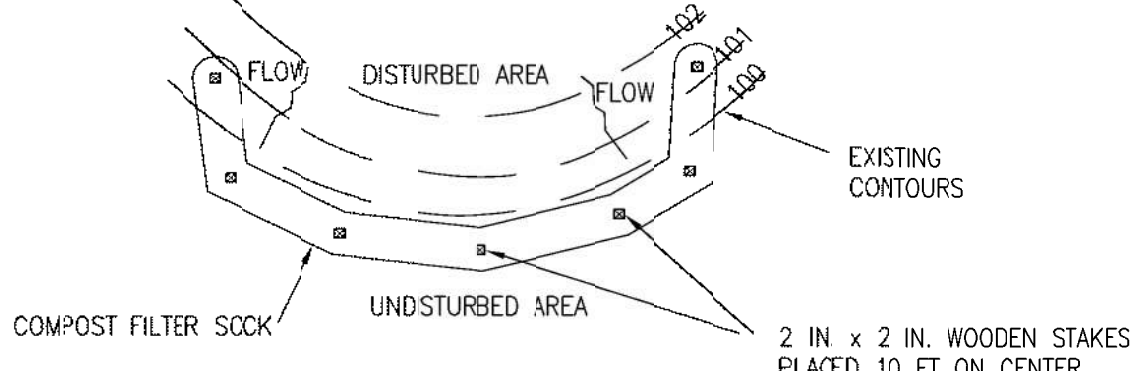
**PROFILE**

**TYPICAL STABILIZED CONSTRUCTION ENTRANCE**

NO SCALE  
SEE NOTES 5 & 6



**SECTION**



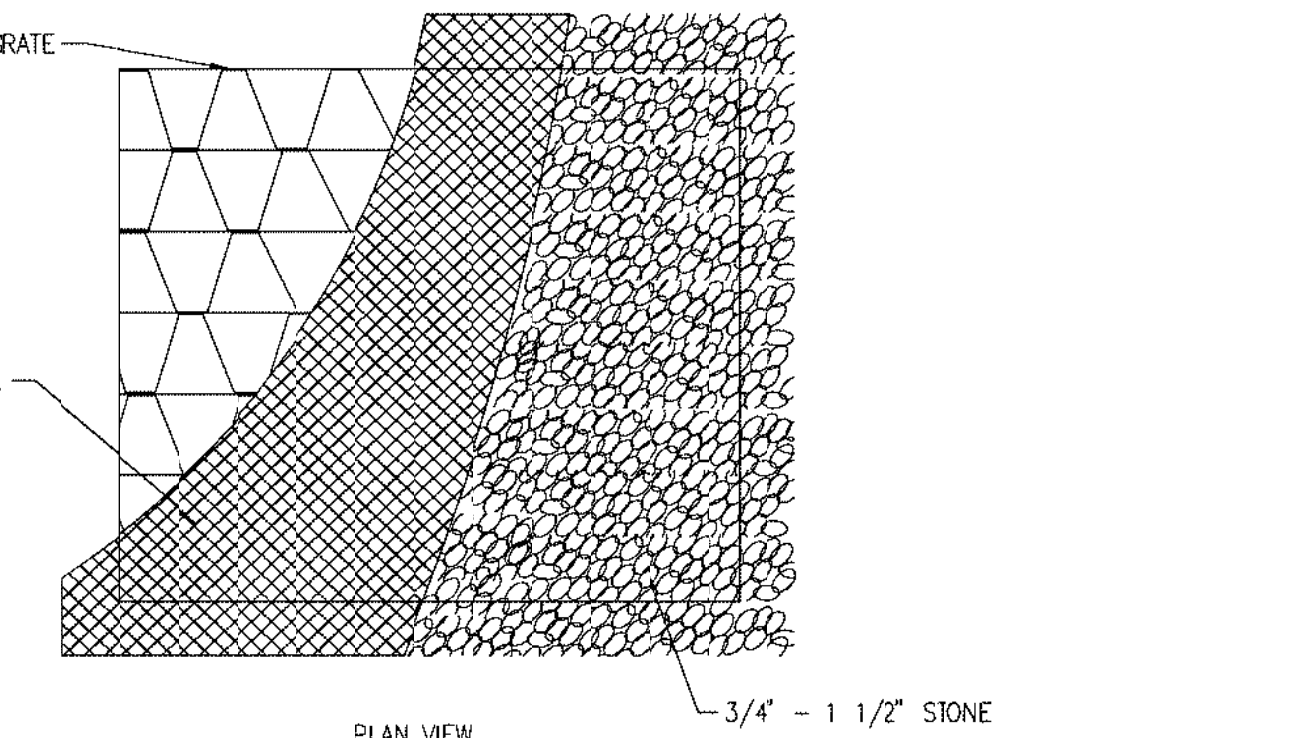
**PLAN VIEW**

**COMPOST FILTER SOCK**

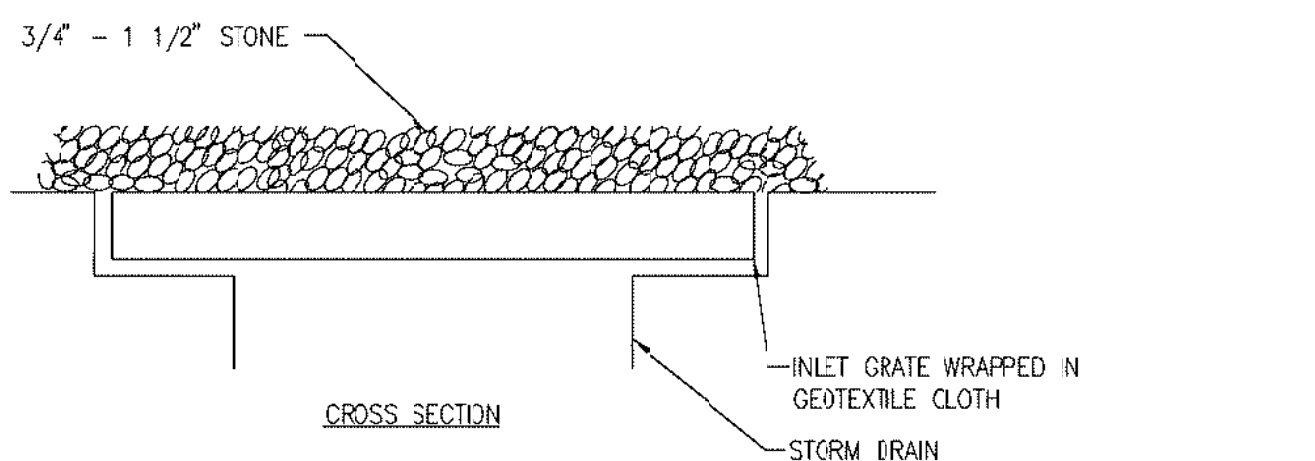
NO SCALE  
SEE NOTES 8-10  
SEE FILTER SOCK TABLE

**GENERAL NOTES:**

- 1. SEE DDC 25253-004 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.
- 2. THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONING AROUND THE STRUCTURE.
- 3. THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.
- 4. THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.
- 5. PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC P.O.W.
- 6. DESIGN CRITERIA FOR STABILIZED CONSTRUCTION ENTRANCE:
  - A. STONE SIZE - USE ASTM C-33, SIZE NO 2 OR 3, USE CRUSHED STONE.
  - B. THICKNESS - NOT LESS THAN 8 INCHES.
  - C. WIDTH - NOT LESS THAN FULL WIDTH OF POINTS OF INGRESS OR EGRESS.
  - D. LENGTH - 50 FEET MINIMUM WHERE THE SOILS ARE SANDS OR GRAVEL OR 100 FEET MINIMUM WHERE SOILS ARE CLAYS OR SILTS, EXCEPT WHERE THE TRAVELED LENGTH IS LESS THAN 50 OR 100 FEET RESPECTIVELY, THESE LENGTHS MAY BE INCREASED WHERE FIELD CONDITIONS DICTATE.
  - E. FILTER CLOTH - WILL BE PLACED OVER ENTIRE AREA PRIOR TO PLACING OF STONE.
  - F. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ON TO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 7. 18" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
- 8. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE, BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT.
- 9. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
- 10. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED, THE SOCK MAY BE LEFT IN PLACE AND VEGETATED, OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MESH SPREAD AS A SOIL SUPPLEMENT.
- 11. CONTRACTOR SHALL CUT AND REMOVE EXISTING ASPHALT PAVEMENT TO INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- 12. METAL T-POSTS SHALL BE INSTALLED AT THE CENTER AND AT EACH END OF THE TUBE. ADDITIONAL T-POSTS SHALL BE INSTALLED AS NEEDED TO MEET THE MAXIMUM 2-FOOT SPACING.



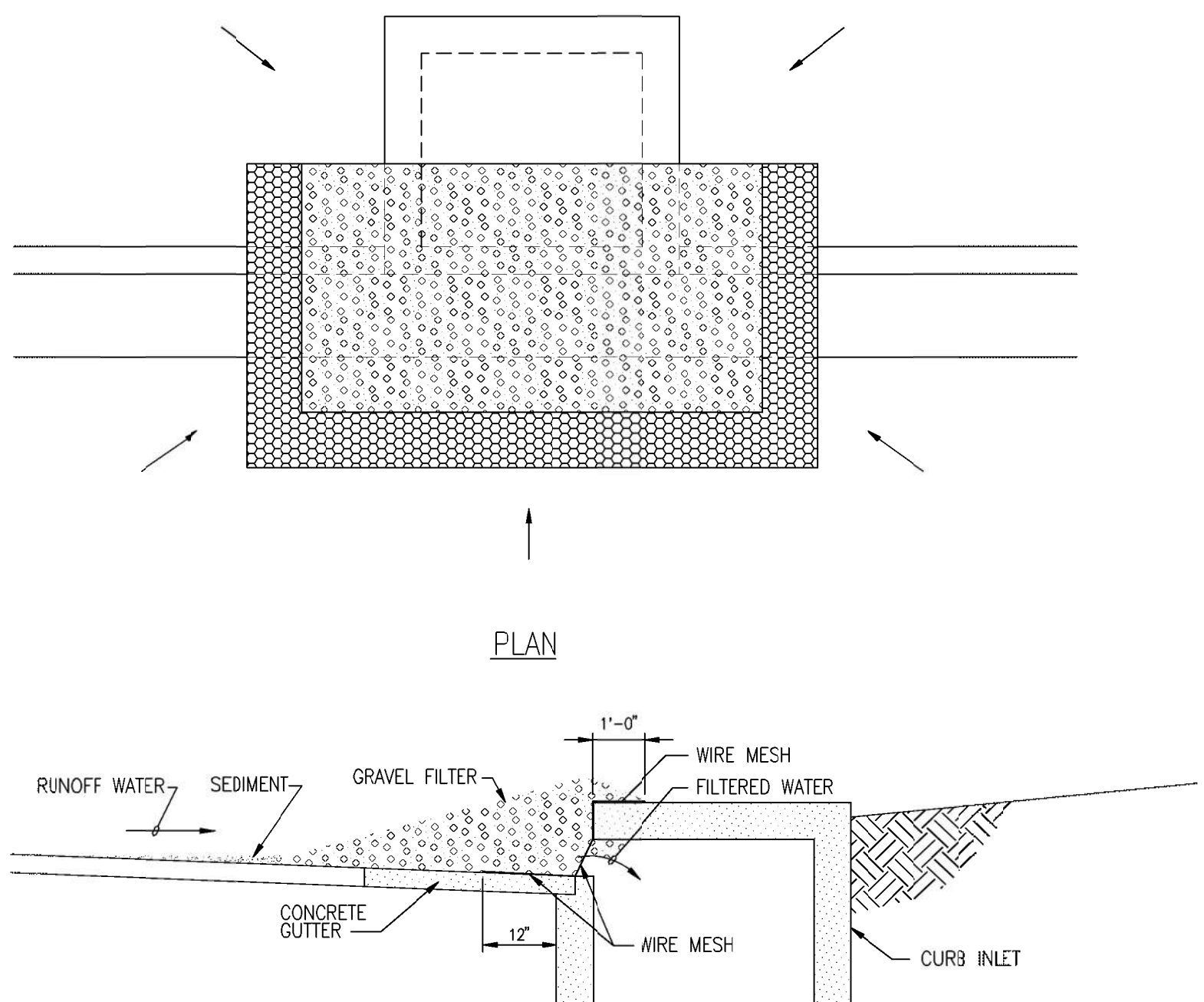
**PLAN VIEW**



**CROSS SECTION**

**GRADE INLET PROTECTION DETAIL**

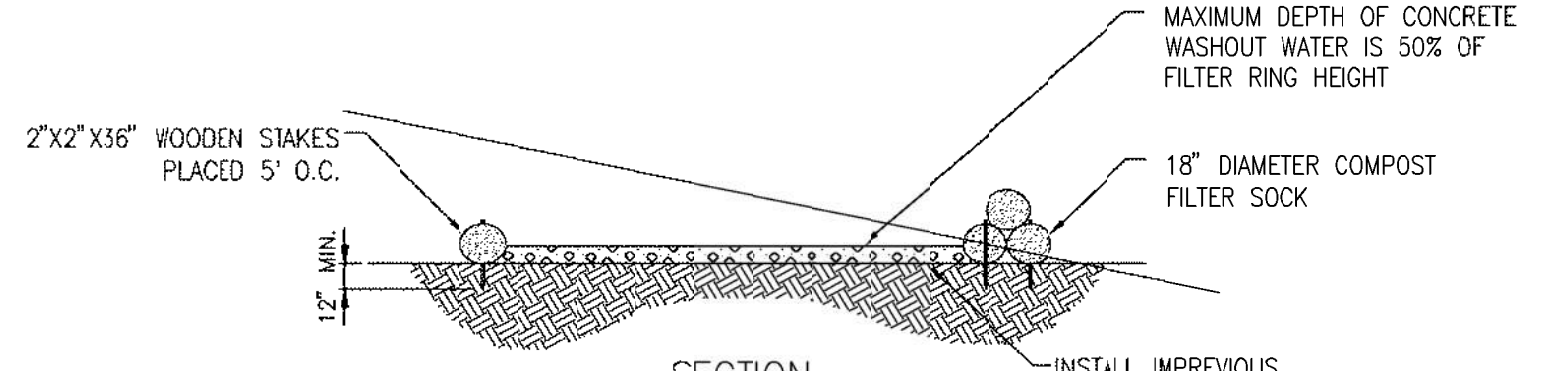
NOT TO SCALE



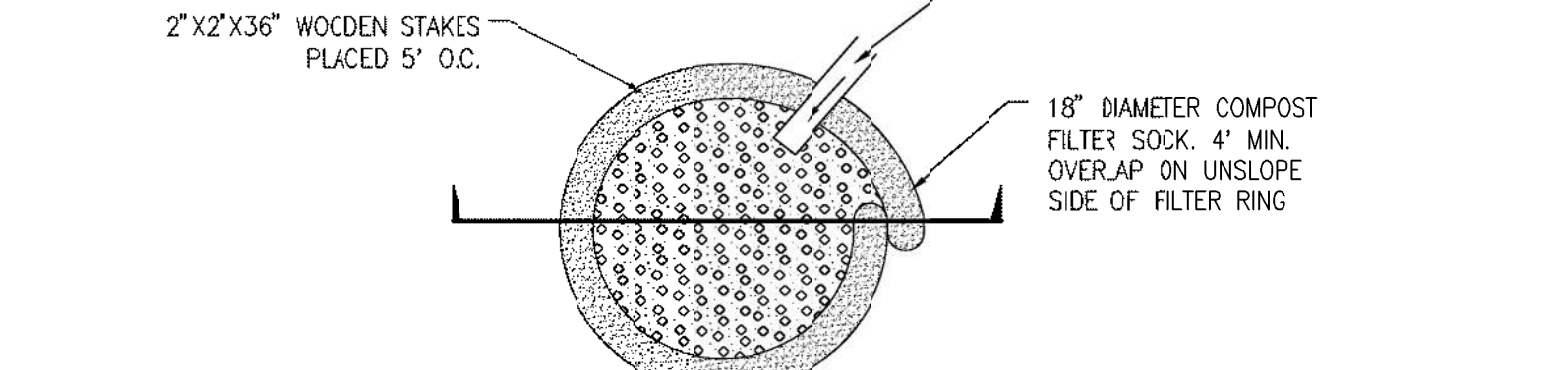
**ELEVATION**

**GRAVEL CURB INLET SEDIMENT FILTER**

NO SCALE  
SEE NOTE 4



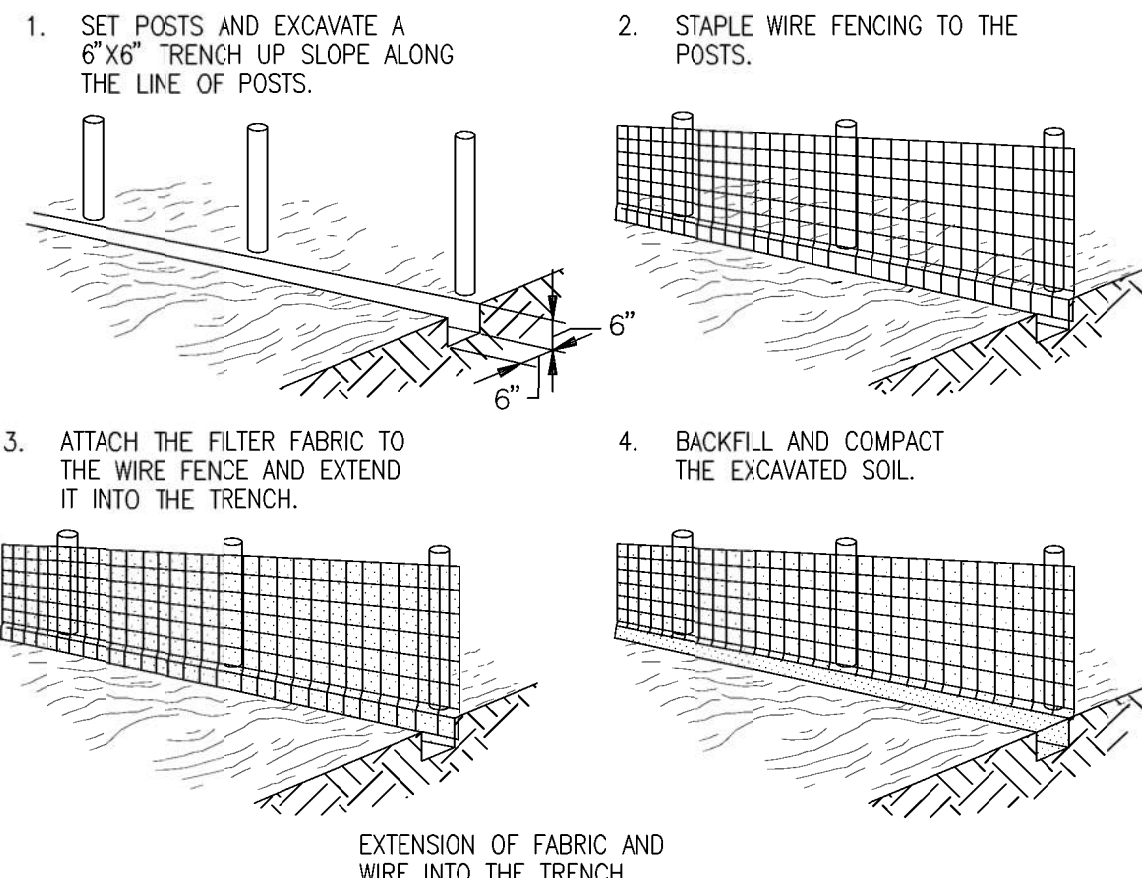
**SECTION**



**PLAN VIEW**

**TYPICAL COMPOST SOCK WASHOUT INSTALLATION**

NO SCALE  
SEE NOTE 7



**SILT FENCE DETAIL**

NO SCALE

**REFERENCE DRAWINGS:**

- ERODING AND DRAINAGE SITE PLAN BAIRD TO CONGRESS 25253-004B
- CULVERT AND RP R/P DETAILS 25253-005
- EROSION CONTROL SITE PLAN 25253-006
- EROSION CONTROL SITE PLAN BAIRD TO CONGRESS 25253-006A
- SURFACING AND FENCING PLAN 25253-008
- 15 FT SUBSTATION FENCE SECTIONS AND DETAILS 25253-014A
- CONSTRUCTION FACILITIES PLAN 25253-805

ID NO.	NORTH		EAST		ID NO.	NORTH		EAST	
	NORTH	EAST	NORTH	EAST		NORTH	EAST	NORTH	EAST
CFS-2	628582.80	891465.93	CFS-9	628944.00	891829.60				
	628578.93	891465.93		628921.00	891796.50				
	628573.75	891475.24		628915.50	891786.60				
	628561.90	891484.07		628877.50	891759.50				
	628562.61	891498.14		628879.50	891741.60				
CFS-3	628563.47	891491.33	628863.00	891718.60					
	628561.72	891492.84	628853.50	891707.60					
	628561.00	891495.53	628852.00	891703.60					
	628553.21	891501.54	628847.60	891700.41					
	628553.25	891504.43	628841.50	891696.87					
CFS-4	628381.46	891561.73	628835.19	891689.13					
	628379.03	891566.57	628829.69	891679.33					
	628395.83	891694.43	628826.18	891675.35					
	628401.77	891397.31	628816.61	891661.69					
	628403.59	891629.15	628809.13	891655.77					
CFS-5	628401.30	891633.12	628805.68	891651.64					
	628471.21	891318.91	628802.06	891643.80					
	628475.28	891821.84	628783.38	891625.40					
	628693.39	891781.93	628762.19	891622.01					
	628707.55	891782.55	628747.43	891748.65					
CFS-6	628757.54	891747.07	CFS-10	628776.93	891759.41				
	628757.54	891741.91		628763.43	891773.17				
	628705.27	891473.53		628808.38	891803.28				
	628704.72	891475.47		628812.26	891812.45				
	628709.74	891483.73		628818.18	891816.45				
	628711.35	891488.83		628819.52	891822.78				
	628714.17	891492.24		628822.70	891823.63				
	628715.28	891497.11		628824.80	891827.56				
	628715.54	891498.41		628828.36	891831.12				
	628723.28	891509.55		628832.91	891851.76				
CFS-7	628723.39	891512.21	628846.83	891880.55					
	628727.58	891512.72	628843.98	891903.69					
	628728.38	891514.71	628850.41	891910.67					
	628730.16	891515.77	628905.00	891821.60					
	628732.80	891519.63	628900.00	891828.60					
	628733.78	891524.23	628904.50	891818.00					
	628761.07	891566.95	628909.00	891825.60					
	628763.64	891563.34	628902.00	891796.60					
	628767.05	891566.13	628901.00	891804.00					
	628783.26	891596.83	628906.50	891778.60					
	628783.91	891599.61	628907.00	891782.60					
628793.89	891611.03	628909.50	891785.60						
628803.99	891613.65	629006.00	891785.60						

**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

EROSION CONTROL DETAILS  
BAIRD SUBSTATION

<b>BLACK &amp; VEATCH</b> Building a world of difference®		DESIGNER: SMR, JTG	DRAWN: JTG
CHECKED: DAE	PROJECT # 186535	NO.	DATE
E 11/20/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	JTG	SMR N/AV
D 10/28/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	JDL	SMR N/AV
C 10/23/15	ISSUED FOR UI REVIEW-CSC DRAWINGS-PROJECT 186535-BAIRD REPLACEMENT	JDL	SMR N/AV
B 10/09/15	ISSUED FOR CSC APPLICATION	JDL	SMR N/AV
A 07/28/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	JTG	SMR N/AV
NO.	DATE	REVISION	DRN CHD DESN SUPR.

**NEW DRAWING**

1	11/2015	BAIRD REPLACEMENT SUBSTATION	JDL	SMR	MAV
NO.	DATE	REVISION	BY	CHKD.	ENGR. SUPR.

**ui**  
The United Illuminating Company

Drwn JDL Date 11/18/15 Scae: NO SCALE  
 Chkd. - Design Engr. SMR Design Supr. MAV

SAD FILE NAME	SEQUENCE NO.	DRAWING NUMBER
-	-	25253-007





- GENERAL NOTES:**
1. REMOVE EXISTING BITUMINOUS PAVEMENT. DISPOSAL OF PAVEMENT SHALL BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
  2. THE SURFACE COURSE IS CRUSHER RUN TRAP ROCK UNIFORMLY GRADED FROM 3/4" TO CRUSHER FINES. THE BASE COURSE IS TRAP ROCK THAT PASSES A 1 1/2" SIEVE AND IS RETAINED ON A 1" SIEVE.
  3. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF SUBSTATION FENCE TO PRE-EXISTING SURFACE CONDITIONS.
  4. ALL WORK SHOWN ON THIS DRAWING SHALL BE FURNISHED AND INSTALLED BY CONTRACT 186535.71.0200 UNLESS NOTED OTHERWISE.

POST-CONSTRUCTION IMPERVIOUS/PERVIOUS AREAS		
DESCRIPTION	SQUARE FEET	REMARKS
STRUCTURES, PAVEMENT AND FOUNDATIONS	18348.50	-
VEGETATED	32183.50	-
TRAP ROCK	36456.50	-
EXISTING SUBSTATION AREA	30315.60	-

**LEGEND**

	PROPERTY LINE
	BOUNDARY LINE
	NEW SUBSTATION FENCE
	NEW CONTOUR
	EXISTING FENCE
	EXISTING CONTOUR
	15' WIDE STORMWATER EASEMENT
	GRASS
	AGGREGATE
	ASPHALT PAVEMENT
	WETLANDS
	LEDGE
	EXISTING WATER
	EXISTING TRAFFIC
	EXISTING ELECTRICAL
	EXISTING GAS
	EXISTING SANITARY
	EXISTING STRUCTURES
	E24N TRANSMISSION LINE POLE

**REFERENCE DRAWINGS:**

GRADING AND DRAINAGE SITE PLAN BAIRD TO CONGRESS	25253-0048
CULVERT AND RIP RAP DETAILS	25253-005
EROSION CONTROL SITE PLAN	25253-006
EROSION CONTROL SITE PLAN BAIRD TO CONGRESS	25253-006A
EROSION CONTROL DETAILS	25253-007
15' F' SUBSTATION FENCE SECTIONS AND DETAILS	25253-014A
CONSTRUCTION FACILITIES PLAN	25253-805

**PRELIMINARY**  
NOT TO BE USED FOR CONSTRUCTION

<b>BLACK &amp; VEATCH</b> Building a world of difference®							
DESIGNER	SMR	DRAWN	JTG				
CHECKED	-	DATE					
PROJECT #	186535						
NO	DATE	REVISION	DRN	CHKD	DES	SUPR.	
D	11/18/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	JTG		SMR	NAV	
C	10/28/15	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	JDL		SMR	NAV	
B	10/23/15	ISSUED FOR UI REVIEW-CSC DRAWINGS-PROJECT 186535-BAIRD REPLACEMENT	JDL		SMR	NAV	
A	10/09/15	ISSUED FOR CSC APPLICATION	JDL		SMR	NAV	

30' 20' 10' 0' 30' 60'

1"=30'

**NEW DRAWING**

1	11/2015	BAIRD REPLACEMENT SUBSTATION	JDL	SMR	NAV
No	Date	Revision	By	Chkd.	Engr. Supr.

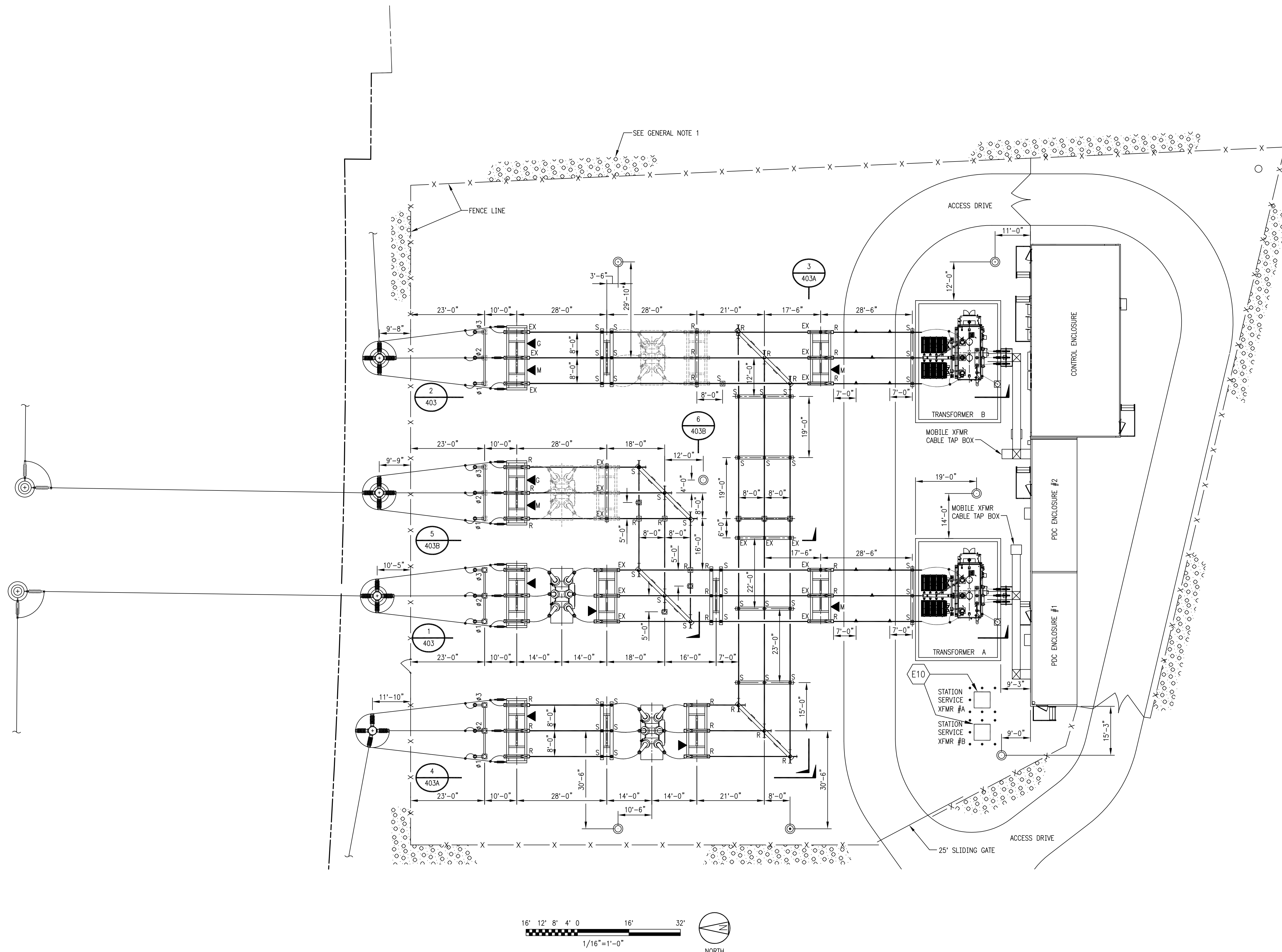
**ui**  
The United Illuminating Company

Drwn JDL Date 11/18/15 Scae: 1"=30'

Chkd. - Design Engr. SMR Design Supr. MAV

SURFACING AND FENCING PLAN BAIRD SUBSTATION		
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
		25253-008



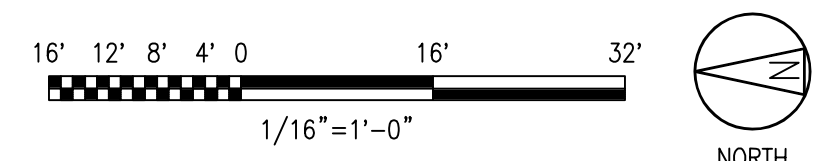


- LEGEND:**
- MOBILE TRANSFORMER 115KV TAP
  - R RIGID (FIXED) BUS CONNECTION
  - S SLIP BUS CONNECTION
  - EX EXPANSION BUS CONNECTION
  - SURGE ARRESTER
  - COUPLING CAPACITOR VOLTAGE TRANSFORMER
  - LIGHTNING MAST
  - LIGHTING POLE
  - COMMUNICATION POLE
  - DISCONNECT SWITCH MOTOR OPERATOR
  - GROUNDING SWITCH MANUAL OPERATOR
  - DISCONNECT SWITCH MANUAL OPERATOR
  - WHITE ROCK SURFACING

**GENERAL NOTE:**  
 1. WHITE ROCK SURFACING SHALL BE INSTALLED 6'-0" OUTSIDE SUBSTATION FENCE.

**REFERENCE DRAWINGS:**

SECTIONS 1 & 2	25253-403
SECTIONS 3 & 4	25253-403A
SECTIONS 5 & 6	25253-403B
FOUNDATION PLAN	25253-407
GROUNDING PLAN	25253-412
RACEWAY PLAN	25253-413
BILL OF MATERIALS	25253-499



**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

<b>BLACK &amp; VEATCH</b> Building a world of difference®							
DESIGNER	TKD	DRAWN	WDS				
CHECKED		DATE					
PROJECT #	186535						
NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.	
F	11/16/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BD	JDG	TKD	MAV	
E	10/28/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	SLC	JDG	DRJ	MAV	
D	10/09/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BGG/CRE	JDG	TKD	MAV	
C	07/27/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	TKD	MAV	
B	06/19/2015	ISSUED FOR EMF STUDY-PROJECT 186535-BAIRD REPLACEMENT	WDS/BJF	JDG	TKD	MAV	
A	04/30/2015	ISSUED FOR UI 30% REVIEW-PROJECT 186535-BAIRD REPLACEMENT	WDS	TKD	BES	MAV	

**NEW DRAWING**

1	11/2015	BAIRD REPLACEMENT SUBSTATION	CRE	-	TKD	MAV
No	Date	Revision	By	Chkd.	Engr.	Supv.

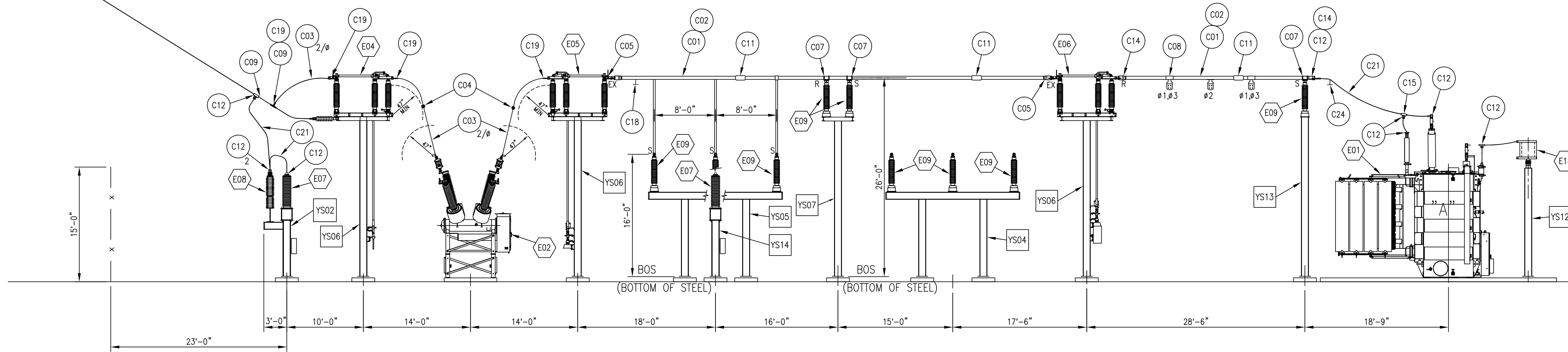


Drawn \_\_\_\_\_ Date 03/24/2015 Scale: 1/16"=1'-0"  
 Chkd. \_\_\_\_\_ Design Engr. \_\_\_\_\_ Design Supv. \_\_\_\_\_

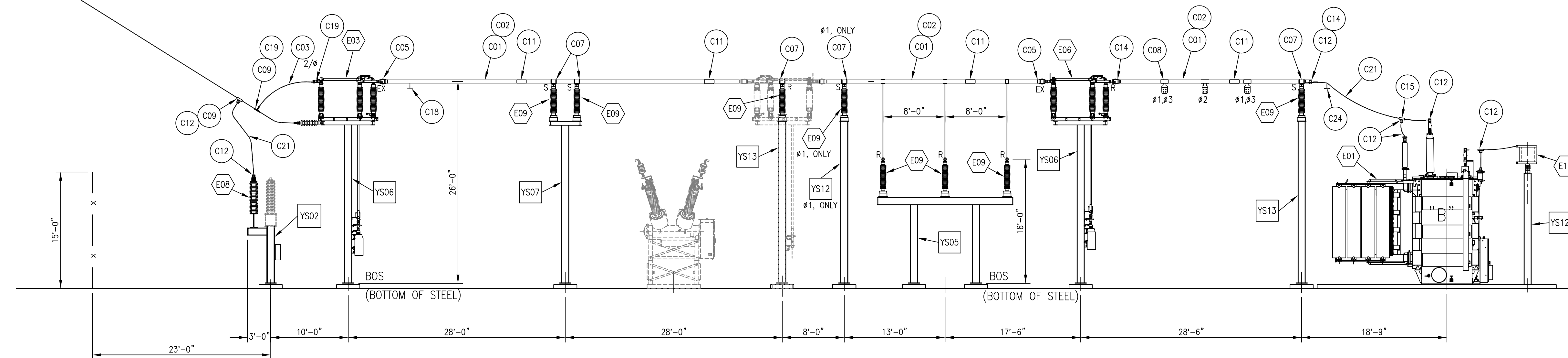
SUBSTATION PLAN

BAIRD SUBSTATION

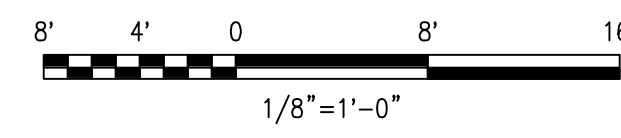
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
	-	25253-402



SECTION 1



SECTION 2



NOTES:  
 1. SEE BILL OF MATERIALS FOR DESCRIPTIONS OF EQUIPMENT, STRUCTURES AND FITTINGS.

REFERENCE DRAWINGS:  
 SUBSTATION PLAN 25253-402  
 SECTIONS 3 AND 4 25253-403A  
 SECTIONS 5 AND 6 25253-403B  
 BILL OF MATERIALS 25253-499

**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

SECTIONS 1 AND 2

BAIRD SUBSTATION

<b>BLACK &amp; VEATCH</b> Building a world of difference®										
DESIGNER	TKD	DRAWN	BGG	F 11/16/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BD	JDG	TKD	MAV	
CHECKED				E 10/28/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	SLC	JDG	DRJ	MAV	
				D 10/09/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BGG/CRE	JDG	TKD	MAV	
				C 07/27/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	TKD	MAV	
				B 06/19/2015	ISSUED FOR EMF STUDY -PROJECT 186535 -BAIRD REPLACEMENT	WDS/BJF	JDG	TKD	MAV	
				A 04/30/2015	ISSUED FOR UI 30% REVIEW-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	ASV	MAV	
PROJECT #	186535			NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.

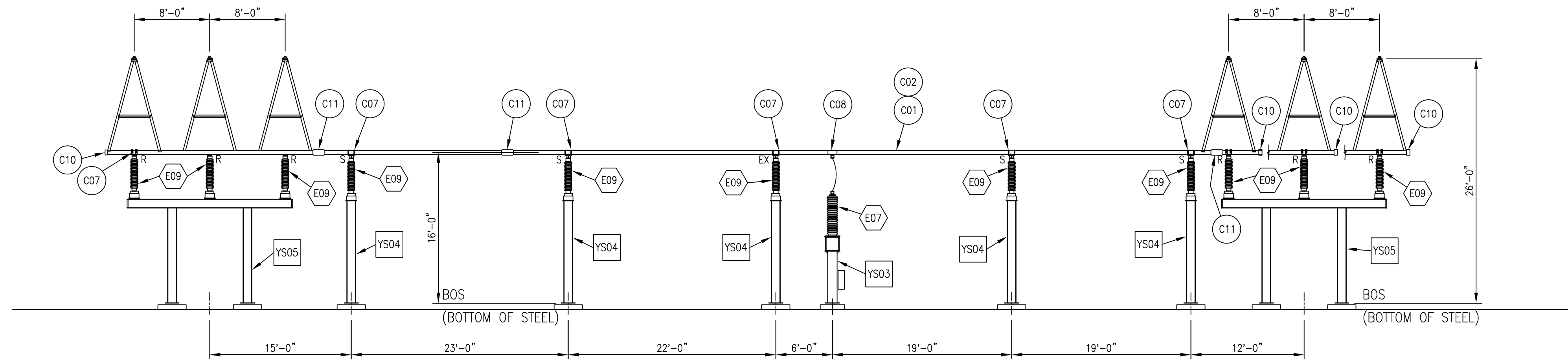
**NEW DRAWING**

1	11/2015	BAIRD REPLACEMENT	SLC	-	DRJ	MAV
No	Date	Revision	By	Chkd.	Engr.	Supv.

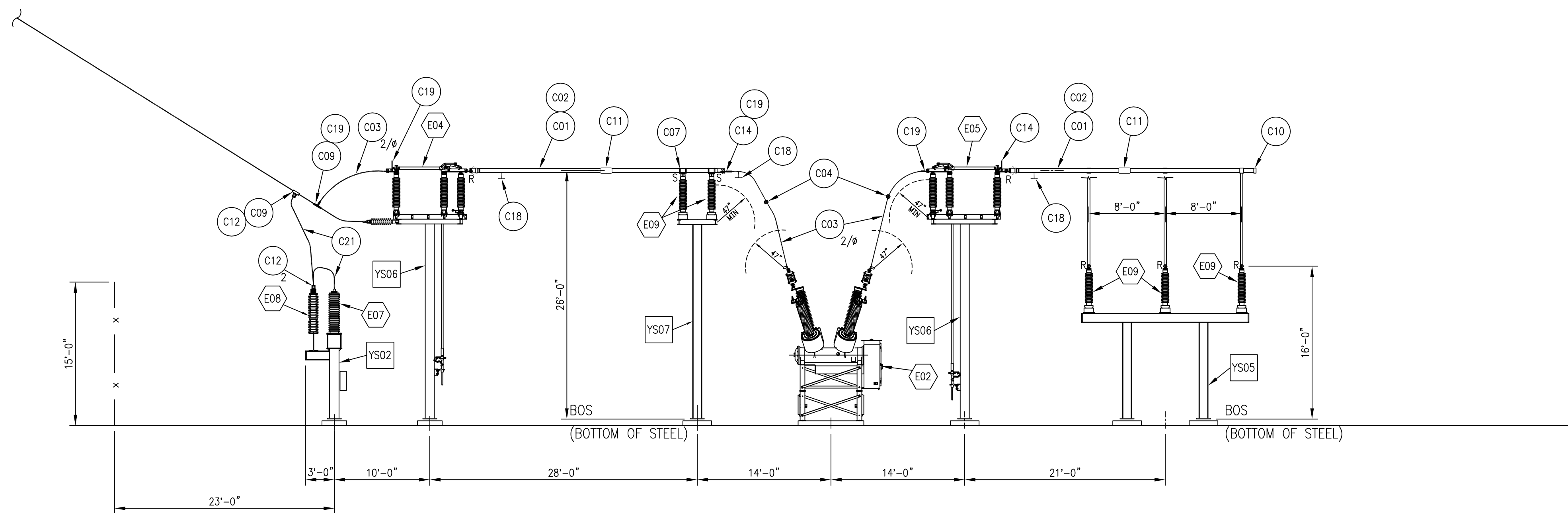


Drawn \_\_\_\_\_ Date 03/27/2015 Scale: 1/8"=1'-0"  
 Chkd. \_\_\_\_\_ Design Engr. \_\_\_\_\_ Design Supv. \_\_\_\_\_

CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
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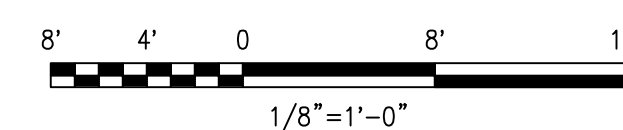
SECTION 3



SECTION 4

NOTES:  
1. SEE BILL OF MATERIALS FOR DESCRIPTIONS OF EQUIPMENT, STRUCTURES AND FITTINGS.

REFERENCE DRAWINGS:  
SUBSTATION PLAN 25253-402  
SECTIONS 1 AND 2 25253-403  
SECTIONS 5 AND 6 25253-403B  
BILL OF MATERIALS 25253-499



**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

SECTIONS 3 AND 4

BAIRD SUBSTATION

<b>BLACK &amp; VEATCH</b> Building a world of difference®										
DESIGNER	TKD	DRAWN	WDS	F 11/16/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BD	JDG	DRJ	MAV	
CHECKED		DATE		E 10/28/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	SLC	JDG	DRJ	MAV	
				D 10/09/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BGG/CRE	JDG	TKD	MAV	
				C 07/27/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	TKD	MAV	
				B 06/19/2015	ISSUED FOR EMF STUDY -PROJECT 186535 -BAIRD REPLACEMENT	WDS/BJF	JDG	TKD	MAV	
				A 04/30/2015	ISSUED FOR UI 30% REVIEW-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDS	ASV	MAV	
PROJECT #	186535			NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.

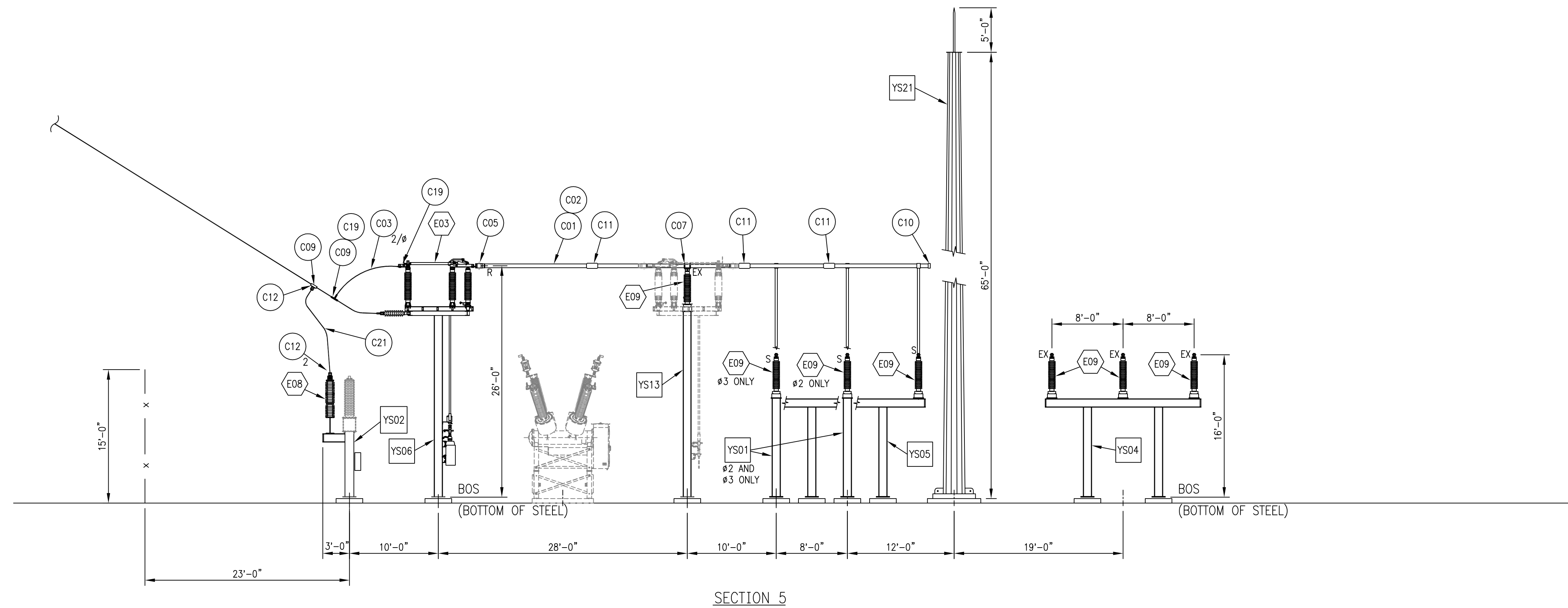
**NEW DRAWING**

1	11/2015	BAIRD REPLACEMENT SUBSTATION	CRE	-	TKD	MAV
No	Date	Revision	By	Chkd.	Engr.	Supv.

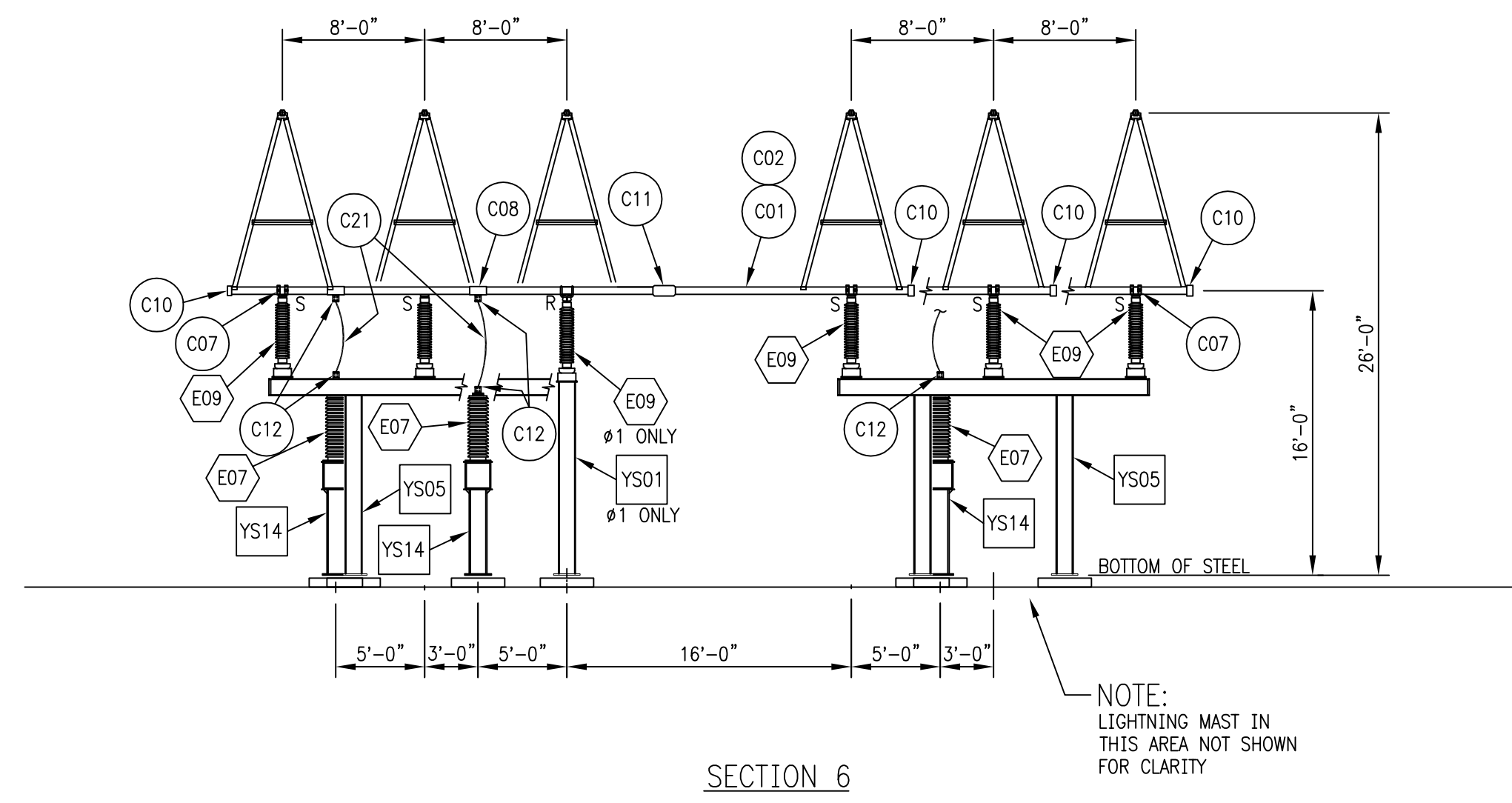


Drawn \_\_\_\_\_ Date 04/10/2015 Scale: 1/8"=1'-0"  
Chkd. \_\_\_\_\_ Design Engr. \_\_\_\_\_ Design Supv. \_\_\_\_\_

CAD FILE NAME \_\_\_\_\_ SEQUENCE No. \_\_\_\_\_ DRAWING NUMBER 25253-403A



SECTION 5



SECTION 6

NOTES:  
1. SEE BILL OF MATERIALS FOR DESCRIPTIONS OF EQUIPMENT, STRUCTURES AND FITTINGS.

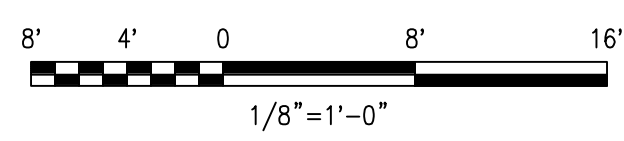
REFERENCE DRAWINGS:  
SUBSTATION PLAN 25253-402  
SECTIONS 1 AND 2 25253-403  
SECTIONS 3 AND 4 25253-403A  
BILL OF MATERIALS 25253-499

**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

SECTIONS 5 AND 6

BAIRD SUBSTATION



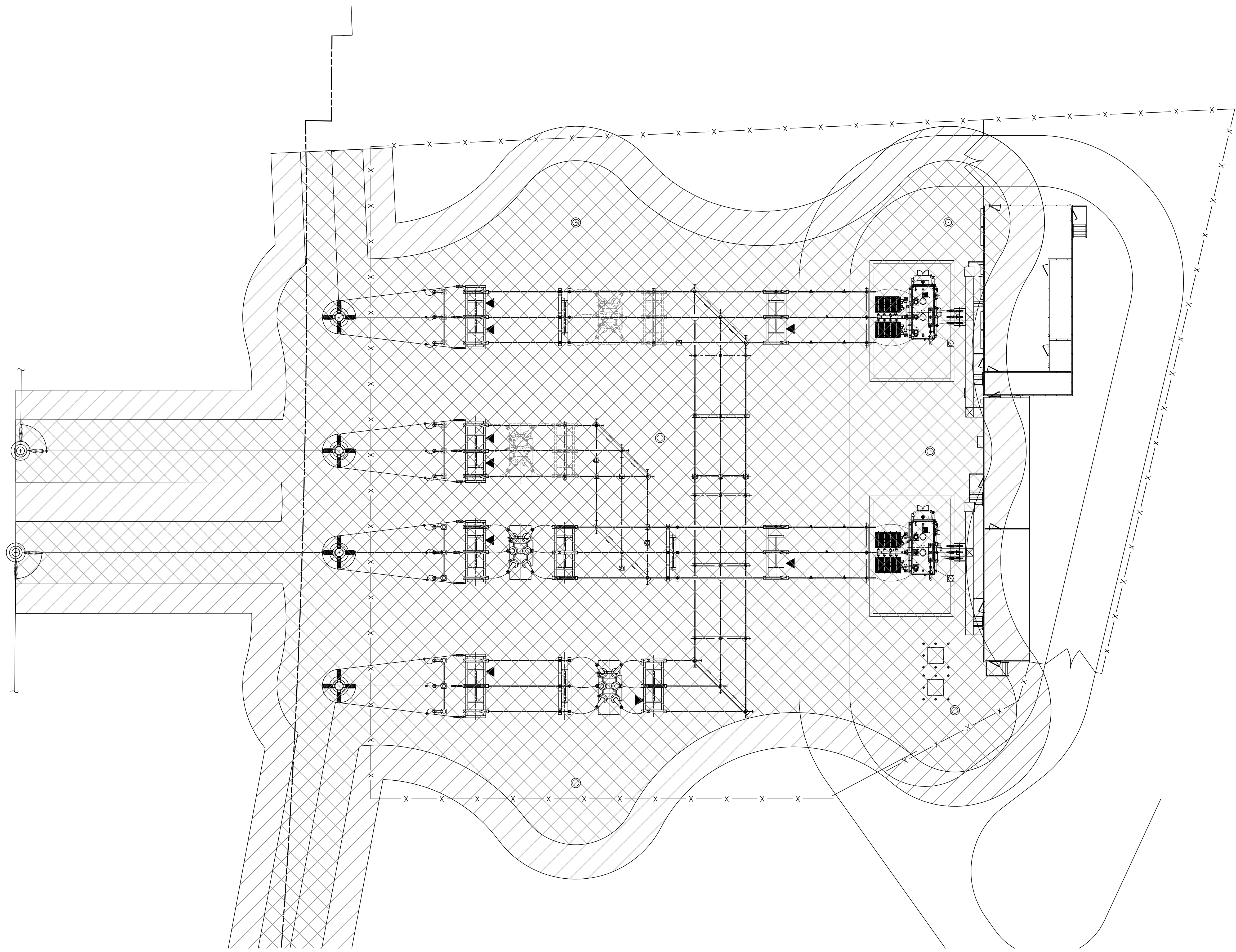
**NEW DRAWING**

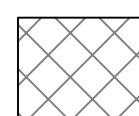
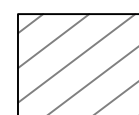
<b>BLACK &amp; VEATCH</b> Building a world of difference®										
DESIGNER	TKD	DRAWN	WDS	F 11/16/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BD	JDG	DRJ	MAV	
CHECKED		DATE		E 10/28/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	SLC	JDG	DRJ	MAV	
				D 10/09/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BGG/CRE	JDG	TKD	MAV	
				C 07/27/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	TKD	MAV	
				B 06/19/2015	ISSUED FOR EMF STUDY -PROJECT 186535 -BAIRD REPLACEMENT	WDS/BJF	JDG	TKD	MAV	
				A 04/30/2015	ISSUED FOR UI 30% REVIEW-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	ASV	MAV	
PROJECT #	186535			NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.

1	11/2015	BAIRD REPLACEMENT	SLC	-	DRJ	MAV	Drawn	Date 04/10/2015	Scale: 1/8"=1'-0"
No	Date	Revision	By	Chkd.	Engr.	Supv.	Chkd.	Design Engr.	Design Supv.

**The United Illuminating Company**

CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
	-	25253-403B



- LEGEND:**
-  PROTECTED AREA AT HIGH BUS HEIGHT (ELEV. 26 FT.)
  -  PROTECTED AREA AT LOW BUS HEIGHT (ELEV. 16 FT.)

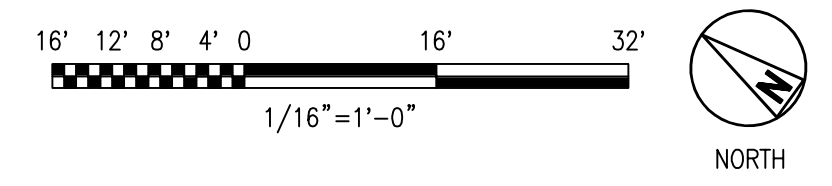
**LIGHTNING SHIELDING DESIGN SUMMARY:**

- INPUT PARAMETERS
 

BIL:	550 KV
LOW BUS HEIGHT:	16 FEET
HIGH BUS HEIGHT:	26 FEET
MAST HEIGHT:	70 FEET
SHIELD WIRE HEIGHT:	85 FEET
SURGE IMPEDANCE:	300 OHMS
- CALCULATED VALUES
 

STROKE CURRENT:	4.03 KA
PROTECTED AREA RADIUS:	
HIGH BUS:	19.44 FEET
LOW BUS:	30.25 FEET

REFERENCE DRAWINGS:  
SUBSTATION PLAN 25253-402



**PRELIMINARY**  
NOT TO BE USED FOR CONSTRUCTION

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DESIGNER	TKD	DRAWN	DRJ				
CHECKED		DATE					
PROJECT #	186535						
NO.	DATE	REVISION	DRN	CHKD	DESN	SUPR.	
F	11/16/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BD	JDG	DRJ	MAV	
E	10/28/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	SLC	JDG	DRJ	MAV	
D	10/09/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BGG/CRE	JDG	TKD	MAV	
C	07/27/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	ASV	MAV	
B	06/19/2015	RE-ISSUED FOR UI 30% REVIEW-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	ASV	MAV	
A	04/30/2015	ISSUED FOR UI 30% REVIEW-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	ASV	MAV	

**NEW DRAWING**

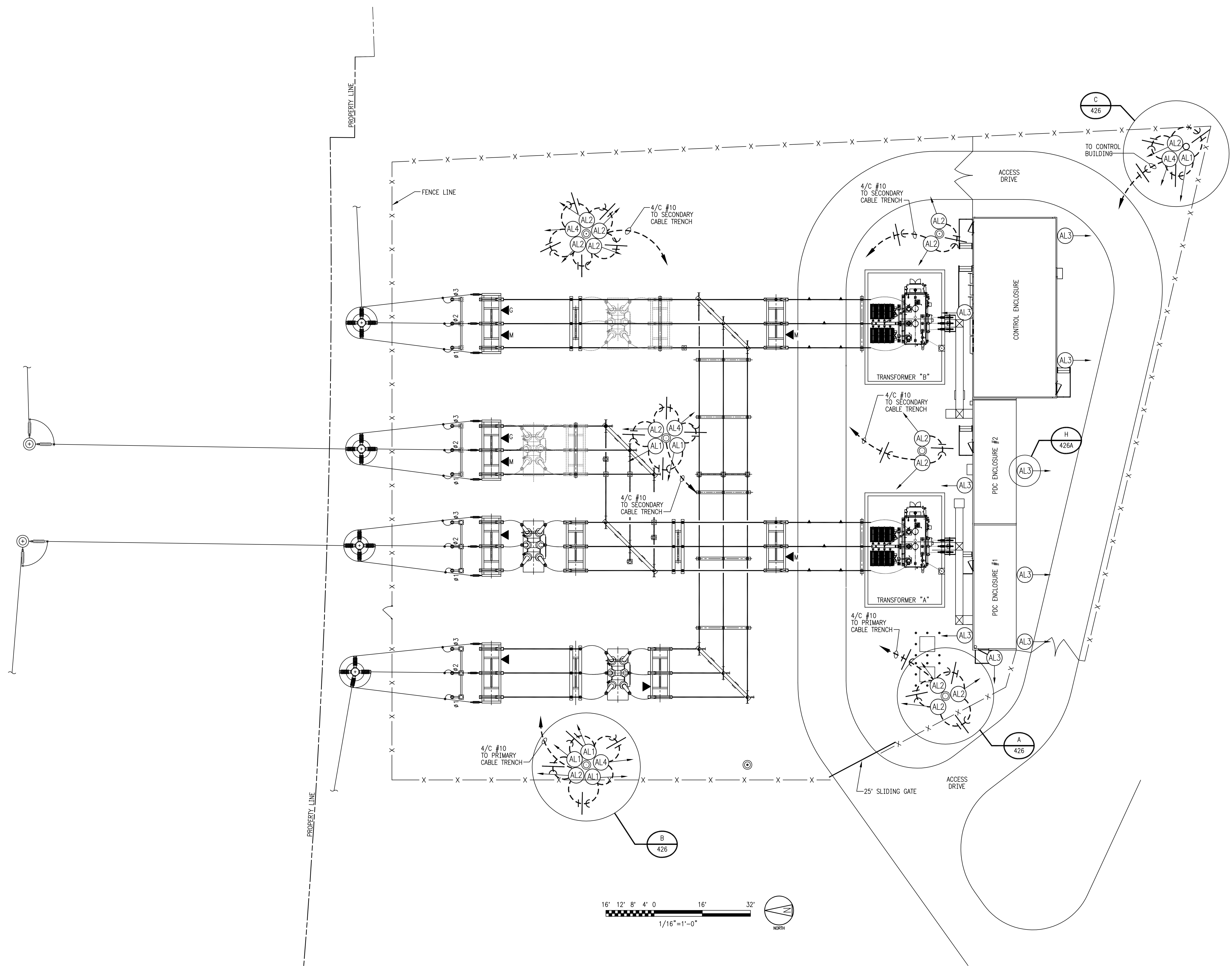
1	11/2015	BAIRD REPLACEMENT	SLC	-	DRJ	MAV
No	Date	Revision	By	Chkd.	Engr.	Supv.

**ui**  
The United Illuminating Company

Drawn	Date	03/24/2015	Scale:	1/16"=1'-0"
Chkd.	Design Engr.		Design Supv.	

LIGHTNING PROTECTION PLAN		
BAIRD SUBSTATION		
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
	-	25253-406

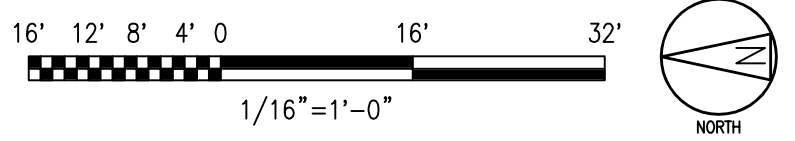
FIXTURE LIST			
SYMBOL	FIXTURE TYPE	MOUNTING ELEVATION	DESCRIPTION
L01	(AL1) 267W, 120V, LED LUMINAIRE, 15 DEGREE	30'-0"	CREE FLD-EHQ-15-XX-12-E-UL-XX-700-50K
L02	(AL2) 267W, 120V, LED LUMINAIRE, 40 DEGREE	30'-0"	CREE FLD-EHQ-40-XX-12-E-UL-XX-700-50K
L03	(AL3) 42W, LED WALL PACK	12'-0"	CREE XSPWAX3MC-U
L04	(AL4) 134W LED DOWNLIGHT	15'-0"	CREE SEC-EDC-4M-06-D-UL-700-40K



**LEGEND:**  
 CIRCUITING DESIGNATION WITH CONDUCTOR SIZE AND QUANTITY INDICATED ON DRAWING  
 CONDUCTOR CODE:  
 SHORT DASH - PHASE OR SWITCHED CONDUCTOR  
 LONG DASH - NEUTRAL CONDUCTOR  
 ARC - GROUND CONDUCTOR  
 (AL) FIXTURE TYPE WITHOUT PHOTOCELL CONTROL

**CONSTRUCTION NOTES:**  
 1. THE CONTRACTOR (186535.73.0601) SHALL AIM THE LIGHTS IN THE GENERAL DIRECTION OF THE FIXTURE ARROWS, SUBJECT TO FINAL ACCEPTANCE BY THE OWNER.  
 2. THE CONTRACTOR (186535.73.0601) SHALL CONFIRM THAT THE MOUNTING ELEVATION OF THE FLOODLIGHT PROVIDES A MINIMUM MAINTENANCE CLEARANCE OF 10'-8" BETWEEN FLOODLIGHT AND ANY ENERGIZED EQUIPMENT. THE FLOODLIGHT ELEVATION SHALL BE ADJUSTED, IF REQUIRED, TO PROVIDE MINIMUM CLEARANCE.

**REFERENCE DRAWINGS:**  
 SUBSTATION PLAN 25253-402  
 RACEWAY PLAN 25253-413  
 YARD LIGHTING DETAILS 25253-426  
 BILL OF MATERIALS 25253-426A  
 25253-499



**PRELIMINARY**  
 NOT TO BE USED FOR CONSTRUCTION

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DESIGNER	ASV	DRAWN	WDS				
CHECKED		DATE					
PROJECT #	186535						
NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.	
E	11/16/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BD	JDG	DJR	MAV	
D	10/28/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	SLC	JDG	DJR	MAV	
C	10/09/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BGG/CRE	JDG	TKD	MAV	
B	07/27/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	TKD	MAV	
A	04/30/2015	ISSUED FOR UI 30% REVIEW-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	ASV	MAV	

**NEW DRAWING**

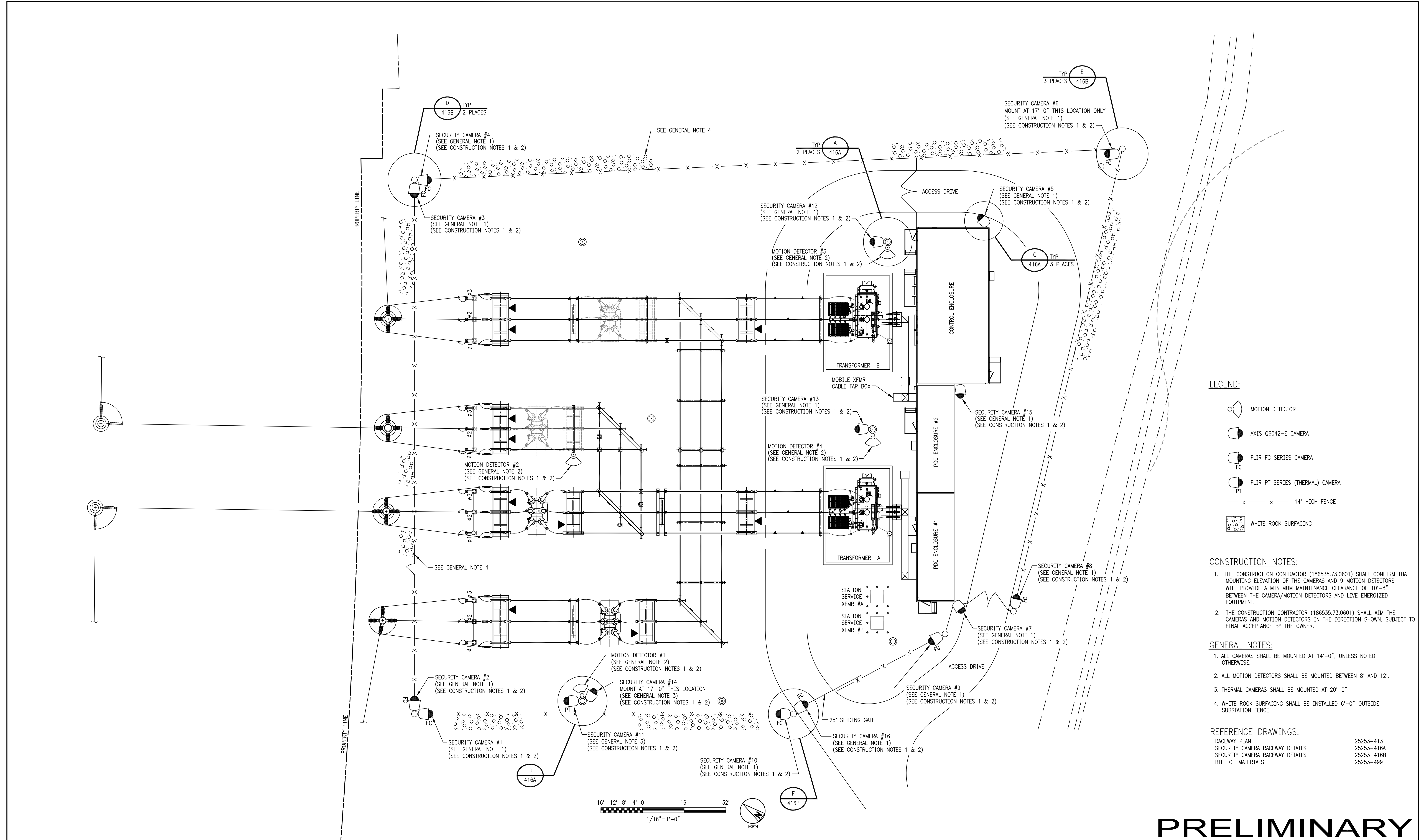
1	11/2015	BAIRD REPLACEMENT	SLC	-	DJR	MAV
No	Date	Revision	By	Chkd.	Engr.	Supr.

**ui**  
 The United Illuminating Company

Drawn: \_\_\_\_\_ Date: 04/16/2015 Scale: 1/16"=1'-0"  
 Chkd.: \_\_\_\_\_ Design Engr.: \_\_\_\_\_ Design Supv.: \_\_\_\_\_

LIGHTING PLAN		
BAIRD SUBSTATION		
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
	-	25253-415



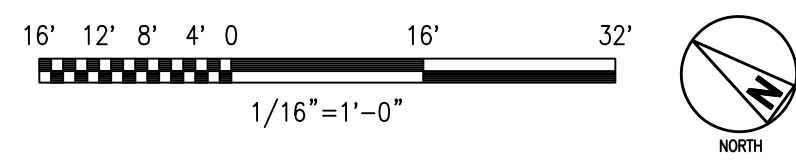


- LEGEND:**
- MOTION DETECTOR
  - AXIS 06042-E CAMERA
  - FLIR FC SERIES CAMERA
  - FLIR PT SERIES (THERMAL) CAMERA
  - 14' HIGH FENCE
  - WHITE ROCK SURFACING

- CONSTRUCTION NOTES:**
1. THE CONSTRUCTION CONTRACTOR (186535.73.0601) SHALL CONFIRM THAT MOUNTING ELEVATION OF THE CAMERAS AND 9 MOTION DETECTORS WILL PROVIDE A MINIMUM MAINTENANCE CLEARANCE OF 10'-8" BETWEEN THE CAMERA/MOTION DETECTORS AND LIVE ENERGIZED EQUIPMENT.
  2. THE CONSTRUCTION CONTRACTOR (186535.73.0601) SHALL AIM THE CAMERAS AND MOTION DETECTORS IN THE DIRECTION SHOWN, SUBJECT TO FINAL ACCEPTANCE BY THE OWNER.

- GENERAL NOTES:**
1. ALL CAMERAS SHALL BE MOUNTED AT 14'-0", UNLESS NOTED OTHERWISE.
  2. ALL MOTION DETECTORS SHALL BE MOUNTED BETWEEN 8' AND 12'.
  3. THERMAL CAMERAS SHALL BE MOUNTED AT 20'-0"
  4. WHITE ROCK SURFACING SHALL BE INSTALLED 6'-0" OUTSIDE SUBSTATION FENCE.

- REFERENCE DRAWINGS:**
- |                                 |            |
|---------------------------------|------------|
| RACEWAY PLAN                    | 25253-413  |
| SECURITY CAMERA RACEWAY DETAILS | 25253-416A |
| SECURITY CAMERA RACEWAY DETAILS | 25253-416B |
| BILL OF MATERIALS               | 25253-499  |



**PRELIMINARY**

NOT TO BE USED FOR CONSTRUCTION

CONTAINS CRITICAL ENERGY INFRASTRUCTURE INFORMATION SUBJECT TO NON-DISCLOSURE PROVISIONS OF ISO-NE SCHEDULE 22 AND NEW ENGLAND POLICIES PERTAINING TO CONFIDENTIAL INFORMATION (CEI) DO NOT DISTRIBUTE DATE OF REVIEW: 07/29/2015 BY: MPC

NEW DRAWING

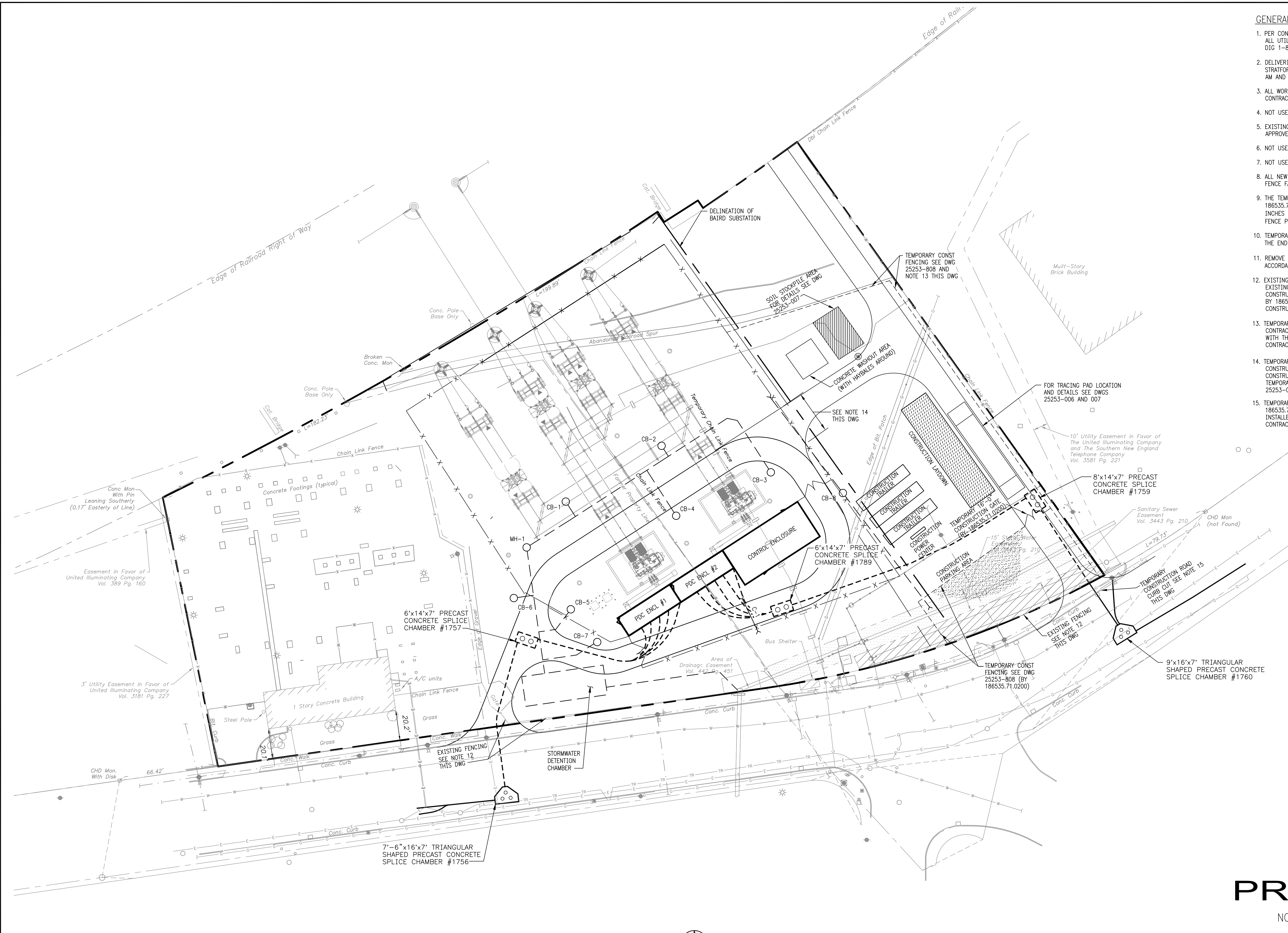
<b>BLACK &amp; VEATCH</b> Building a world of difference®							
DESIGNER	DRJ	DRAWN	WDS				
CHECKED		DATE					
PROJECT #	186535						
NO	DATE	REVISION	DRN	CHKD	DESN	SUPR.	
E	11/16/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BD	JDG	DJR	MAV	
D	10/28/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	SLC	JDG	DJR	MAV	
C	10/09/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BGC/CRE	JDG	TKD	MAV	
B	07/27/2015	ISSUED FOR MCF APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	TKD	MAV	
A	04/30/2015	ISSUED FOR UI REVIEW-PROJECT 186535-BAIRD REPLACEMENT	WDS	JDG	BES	MAV	

1	11/2015	BAIRD REPLACEMENT	SLC	-	DJR	MAV	
No	Date	Revision	By	Chkd.	Engr.	Supv.	

**The United Illuminating Company**

Drawn	Date 04/20/2015	Scale: 1/16"=1'-0"
Chkd.	Design Engr.	Design Supv.

YARD SECURITY PLAN		
BAIRD SUBSTATION		
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
	-	25253-416



- GENERAL NOTES:**
- PER CONNECTICUT STATE LAW THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF EXCAVATION. CALL BEFORE YOU DIG 1-800-922-4455.
  - DELIVERIES FOR THE BAIRD SUBSTATION AT 1770 STRATFORD AVENUE ROUTE 30, STRATFORD, CONNECTICUT MAY ONLY BE RECEIVED BETWEEN THE HOURS OF 8:00 AM AND 3:00 PM, MONDAY THRU FRIDAY.
  - ALL WORK SHOWN ON THIS DRAWING SHALL BE FURNISHED AND INSTALLED BY CONTRACT 186535.71.0200, UNLESS NOTED OTHERWISE.
  - NOT USED.
  - EXISTING FENCE SHALL REMAIN UNTIL THE BVCI CONSTRUCTION MANAGER APPROVES THE REMOVAL BY CONTRACT 186535.73.0601, UNLESS NOTED OTHERWISE.
  - NOT USED.
  - NOT USED.
  - ALL NEW PERMANENT FENCING SHALL HAVE GREEN WINGED SLATS THRU THE CHAIN LINK FENCE FABRIC.
  - THE TEMPORARY CONSTRUCTION FENCE SHALL BE GROUNDED BY CONTRACTOR 186535.71.0200. THE GROUND CONDUCTOR (4/0AWG CU) SHALL BE BURIED AT 18 INCHES BELOW GRADE AND SHALL EXTEND 3'-0" BEYOND THE FENCE. GROUND FENCE POSTS AT 40'-0" SPACING.
  - TEMPORARY CONSTRUCTION PARKING AREA ROCK SURFACING SHALL BE REMOVED AT THE END OF CONSTRUCTION CONTRACTOR 186535.73.0601 SHALL RE-SEED AREA.
  - REMOVE EXISTING BITUMINOUS PAVEMENT. DISPOSAL OF PAVEMENT SHALL BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
  - EXISTING FENCE ALONG STRATFORD AVENUE (ROUTE 130) AND TYING INTO THE EXISTING SUBSTATION SHALL BE REPAIRED AND MAINTAINED DURING CONSTRUCTION BY 186535.71.0200. AFTER NEW SUBSTATION FENCING IS INSTALLED BY 186535.71.0221 AND AT THE APPROVAL OF THE BVCI CONSTRUCTION MANAGER CONSTRUCTION CONTRACTOR 186535.73.0601 SHALL REMOVE THE EXISTING FENCE.
  - TEMPORARY CONSTRUCTION FENCE SHALL BE INSTALLED BY CONSTRUCTION CONTRACTOR 186535.71.0200 AND REMOVED AT THE END OF CONSTRUCTION AND WITH THE APPROVAL OF THE BVCI CONSTRUCTION MANAGER BY CONSTRUCTION CONTRACTOR 186535.73.0601.
  - TEMPORARY CONSTRUCTION OPENING BY CONTRACT 186535.71.0221. AFTER CONSTRUCTION COMPLETION AND AT THE APPROVAL OF THE BVCI FIELD CONSTRUCTION MANAGER CONTRACTOR 186535.73.0601 SHALL CLOSE THE TEMPORARY OPENING WITH PERMANENT FENCING MATERIAL AS SHOWN ON DRAWING 25253-014A.
  - TEMPORARY CONSTRUCTION ACCESS ROAD CURB CUT SHALL BE BY CONTRACTOR 186535.71.0200. AFTER COMPLETION OF CONSTRUCTION NEW CURB SHALL BE INSTALLED TO MATCH EXISTING CURB AND MEETING ALL CITY STANDARDS BY CONTRACTOR 186535.73.0601.

**LEGEND**

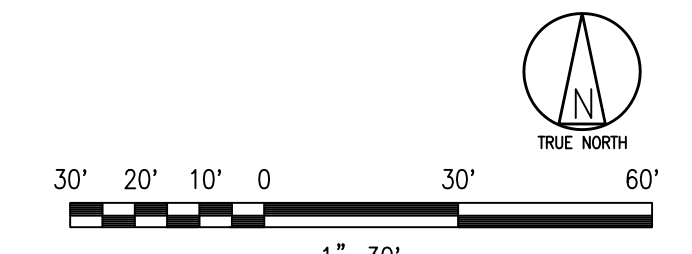
	SOIL STOCKPILE AREA
	CONSTRUCTION LAYDOWN
	TEMP CONSTRUCTION PARKING (TO BE REMOVED AFTER CONST)
	PROPERTY LINE
	BOUNDARY LINE
	NEW SUBSTATION FENCE
	EXISTING FENCE
	TEMP CONSTRUCTION FENCING
	CULVERT
	CATCH BASIN
	15' WIDE STORMWATER EASEMENT
	FENCE TO BE REMOVED
	FUTURE ROAD IMPROVEMENT (BY OTHERS)
	EXISTING WATER
	EXISTING TRAFFIC
	EXISTING ELECTRICAL
	EXISTING GAS
	EXISTING SANITARY
	EXISTING STRUCTURES

**PRELIMINARY**  
NOT TO BE USED FOR CONSTRUCTION

<b>BLACK &amp; VEATCH</b> Building a world of difference®	
DESIGNER SMR	DRAWN JTG
CHECKED -	DATE
PROJECT # 186535	

A	11/16/2015	ISSUED FOR CSC APPLICATION-PROJECT 186535-BAIRD REPLACEMENT	BD	SMR	MAV
NO	DATE	REVISION	DRN	CHKD	DESN

**NEW DRAWING**



A	10/2015	BAIRD REPLACEMENT SUBSTATION	BD	SMR	MAV
No	Date	Revision	By	Chkd.	Engr. Supv.

**The United Illuminating Company**

Drawn: \_\_\_\_\_ Date: 10/01/2015 Scale: 1"=30'  
 Chkd.: \_\_\_\_\_ Design Engr.: \_\_\_\_\_ Design Supv.: \_\_\_\_\_

CONSTRUCTION FACILITIES PLAN		
BAIRD SUBSTATION		
CAD FILE NAME	SEQUENCE No.	DRAWING NUMBER
		25253-805

Appendix A - DR.5 - Existing and Historic Aerial Photographs of the Project Site



Scale 1" = 1,000'

Source: Bing Maps, July 2015



Project Site

Project Site Circa 1991

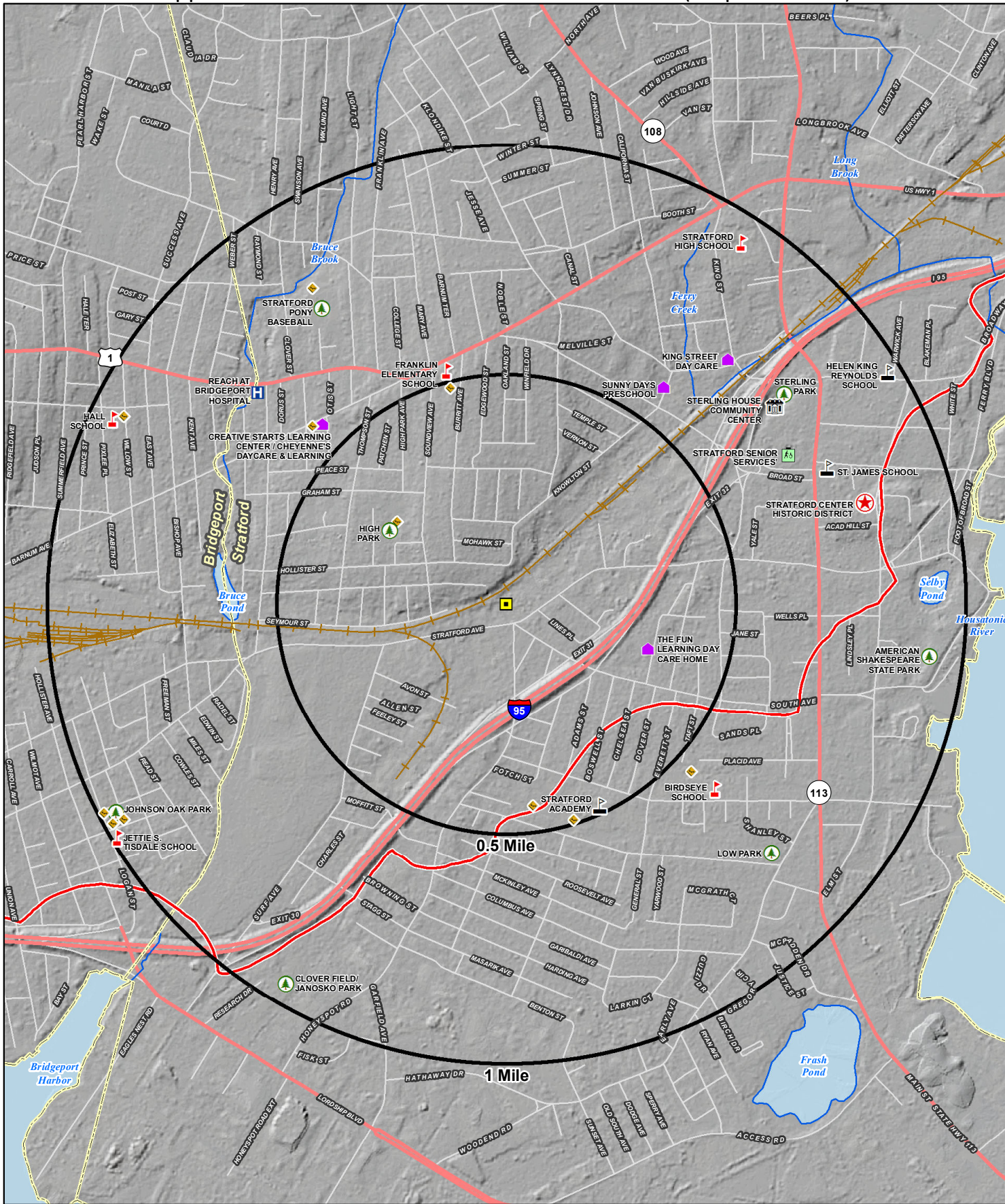


## Appendix A - DR.6 - Public Facilities and Resources (Map and Table)

### UI - Stratford Avenue Public Facilities and Resources

Resource Type	Name	Address (all locations in Stratford, except where noted)	Distance from Substation
<b>Daycare</b>			
	Sunny Days Preschool	61 California Street	0.58 mile northeast
	King Street Day Care	105 King Street	0.72 mile northeast
	The Fun Learning Day Care Home	47 Evelyn Street	0.32 mile southeast
	Creative Starts Learning Center / Cheyenne's Daycare & Learning	2189 Barnum Ave	0.56 mile northwest
<b>Community Center</b>			
	Sterling House Community Center	2283 Main Street	0.72 mile northeast
<b>Historic District</b>			
	Stratford Center Historic District	Main Street Area	0.81 mile northeast
<b>Senior Center</b>			
	Stratford Senior Services	1000 W Broad Street	0.69 mile northeast
<b>Hospital</b>			
	Reach At Bridgeport Hospital	305 Boston Avenue # 1	0.71 mile northwest
<b>School</b>			
	Birdseye School	Birdseye Street	0.60 mile southeast
	Franklin Elementary School	1895 Barnum Avenue	0.52 mile northwest
	Hall School	290 Clermont Ave, Bridgeport	0.94 mile northwest
	Helen King Reynolds School	868 E Broadway	0.97 mile northeast
	Jettie S. Tisdale School	250 Hollister Ave, Bridgeport	0.98 mile southwest
	St. James School	50 Harvey Place	0.76 mile northeast
	Stratford Academy	719 Birdseye Street	0.48 mile southeast
	Stratford High School	45 N Parade Street	0.94 mile northeast
<b>Recreational / Park</b>			
	American Shakespeare State Park		0.93 mile east
	Clover Field/Janosko Park	409 Cannon Road	0.95 mile southwest
	High Park	Graham St	0.30 mile northwest
	Johnson Oak Park	Bridgeport	0.96 mile southwest
	Low Park	Woodend Road/Sedgeick Avenue	0.79 mile southeast
	Sterling Park	2283 Main Street	0.76 mile northeast
	Stratford Pony Baseball	4140 Main Street	0.76 mile northwest
<b>Youth Camp</b>			
	None		

Map Date: 2015



- Legend**
- Proposed Substation Site
  - + Railroad
  - ~ Watercourse
  - Open Water
  - CTDEEP Coastal Boundary
  - Municipal Boundary

- Surrounding Features**
- Park
  - H Hospital
  - ★ Historic District
  - Community Center
  - Senior Center
  - Private School
  - Public School
  - ◆ Public Playground
  - Daycare

**Surrounding Features**

Baird Substation  
 Stratford Avenue  
 Stratford, Connecticut

Base Map Source: ESRI & CTECO Shaded Relief  
 Map Scale: 1 inch = 1,500 feet  
 Map Date: May 2015

