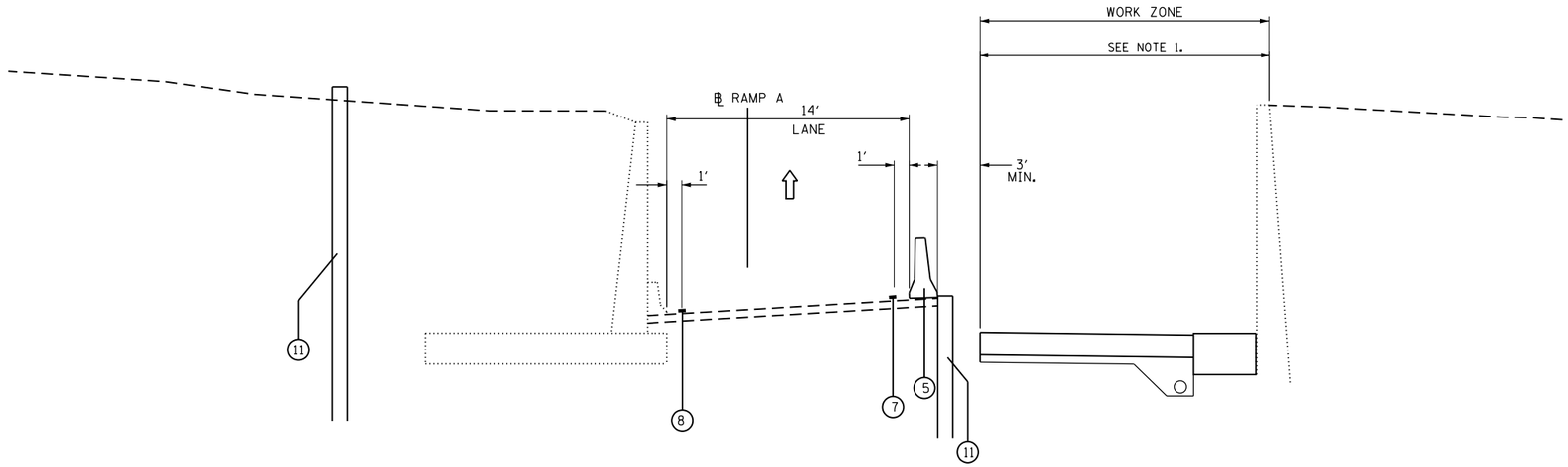
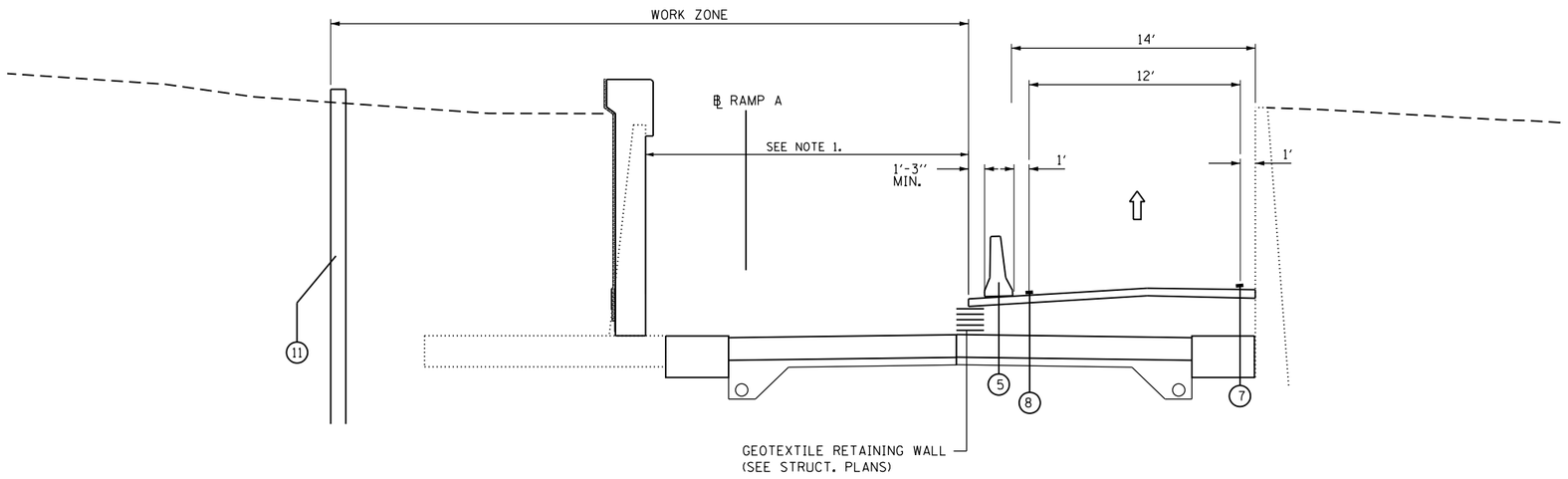


TYPICAL SECTION - SUBSTAGE A

RAMP A



TYPICAL SECTION - SUBSTAGE B

RAMP A

PROPOSED LEGEND:

1. TEMPORARY PAVEMENT, 8"
2. AGGREGATE SUBGRADE IMPROVEMENT, 4"
3. AGGREGATE SHOULDERS, TYPE B, 6"
4. TEMPORARY EROSION CONTROL SEEDING
5. TEMPORARY CONCRETE BARRIER
6. TEMPORARY CONCRETE BARRIER, RELOCATE
7. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" WHITE
8. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" YELLOW
9. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" WHITE (2' DASH - 6' SKIP)
10. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 8" WHITE
11. TEMPORARY SOIL RETENTION SYSTEM

NOTES:

1. SEE STRUCTURAL PLANS FOR LOCATION OF STAGE CONSTRUCTION LINE AND TEMP. SOIL RETENTION DETAILS.
2. RAMP C PAVEMENT AND SN 016-2573 SUPERSTRUCTURE OMITTED FOR CLARITY.
3. THE TEMPORARY CONCRETE BARRIER SHALL BE SECURED TO THE PAVEMENT USING THREE (3) ANCHORING PINS ON THE TRAFFIC SIDE OF THE BARRIER AT LOCATIONS WHERE A HAZARD OR SLOPE STEEPER THAN 1V:10H EXISTS WITHIN 3 FEET TO THE BARRIER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR "TEMPORARY CONCRETE BARRIER", OR "RELOCATE TEMPORARY CONCRETE BARRIER", AS APPLICABLE.
4. PRISMATIC BARRIER WALL REFLECTORS SHALL BE INSTALLED ON BOTH THE FACE AND THE TOP OF THE WALL ADJACENT TO TRAFFIC. THE COLOR OF THE REFLECTORS SHALL MATCH THE COLOR OF THE EDGELINES. SEE TRAFFIC CONTROL AND PROTECTION (EXPRESSWAY) SPECIAL PROVISION.

FILE NAME = i:\7000 - I94 at Ohio Street\CADD\CADD SHEETS\MOT\D160F63-sht-staging-typ-stg3-tunnel.dgn

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
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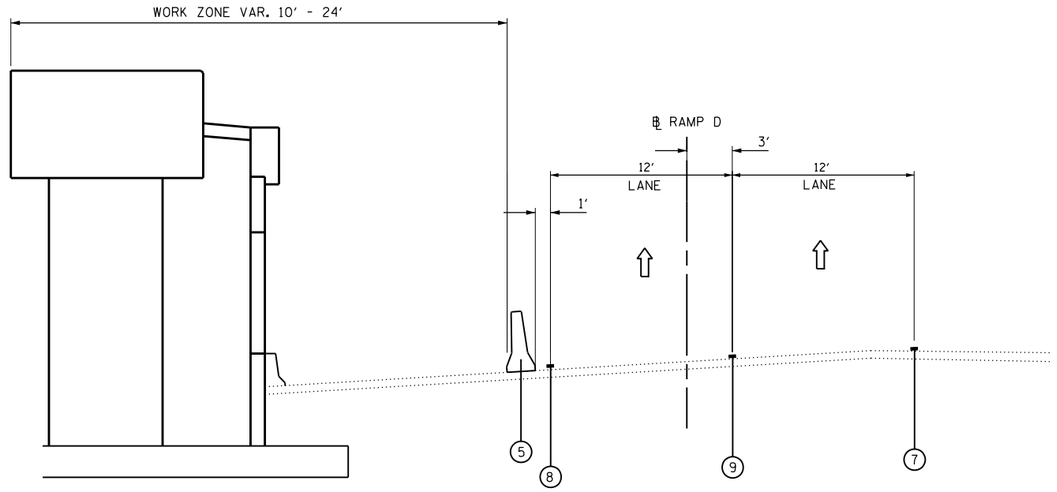
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

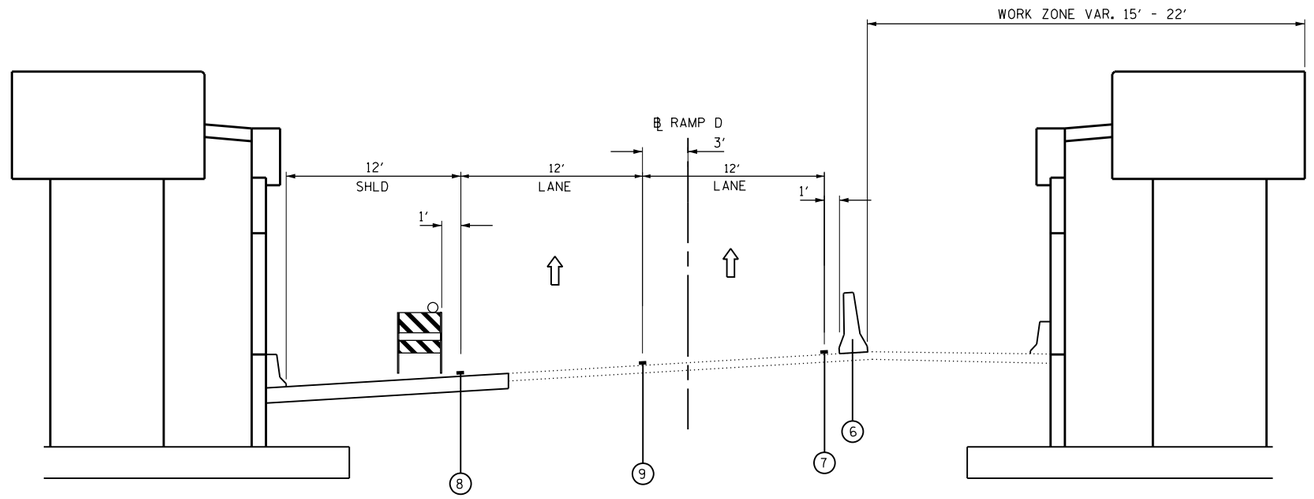
STAGING AND TRAFFIC CONTROL
RAMP A TYPICAL SECTIONS
STAGE III

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	101
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



RAMP D
SUBSTAGE IIIA



RAMP D
SUBSTAGE IIIB

PROPOSED LEGEND:

1. TEMPORARY HMA PAVEMENT, 8"
2. TEMPORARY HMA SHOULDERS, 8"
3. TEMPORARY AGGREGATE SHOULDERS, TYPE B, 6"
4. TEMPORARY EROSION CONTROL SEEDING
5. TEMPORARY CONCRETE BARRIER
6. TEMPORARY CONCRETE BARRIER, RELOCATE
7. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" WHITE
8. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" YELLOW
9. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 5" WHITE (10' DASH - 30' SKIP)
10. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 8" WHITE
11. TEMPORARY SHEET PILING

NOTES:

1. SEE STRUCTURAL PLANS FOR ADDITIONAL DETAILS
2. THE TEMPORARY CONCRETE BARRIER SHALL BE SECURED TO THE PAVEMENT USING THREE (3) ANCHORING PINS ON THE TRAFFIC SIDE OF THE BARRIER AT LOCATIONS WHERE A HAZARD OR SLOPE STEEPER THAN 1V:10H EXISTS WITHIN 3 FEET TO THE BARRIER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR "TEMPORARY CONCRETE BARRIER", OR "RELOCATE TEMPORARY CONCRETE BARRIER", AS APPLICABLE.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
RAMP D TYPICAL SECTIONS
STAGE III

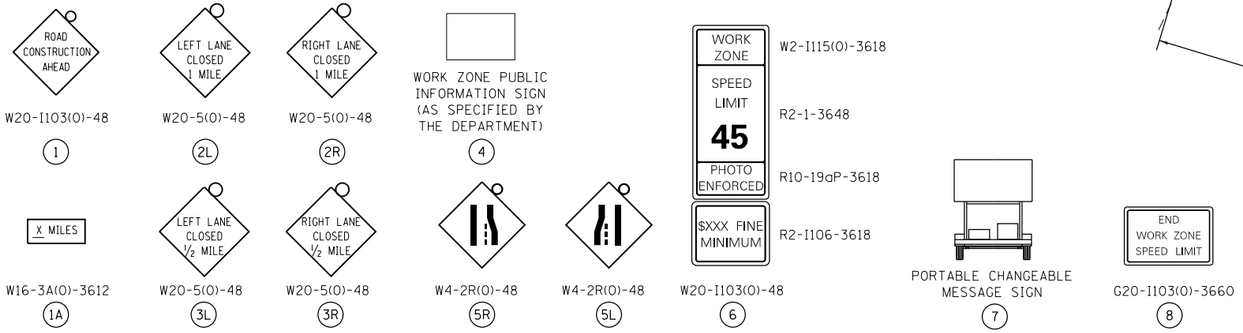
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

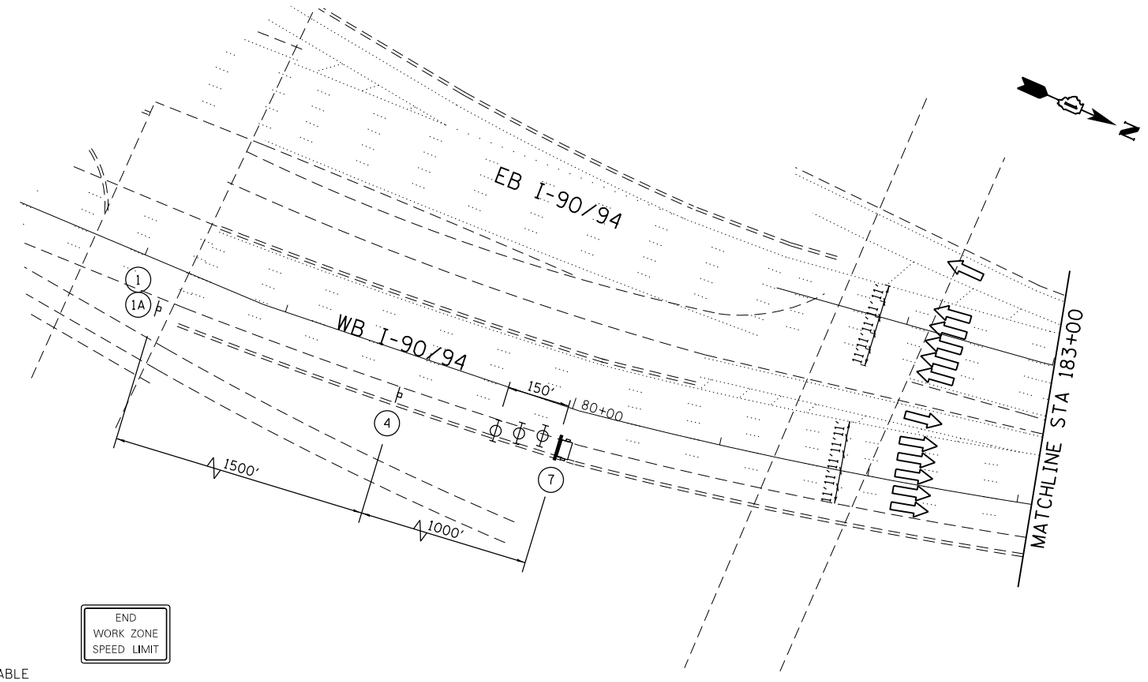
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	102
		CONTRACT NO. 60F63		

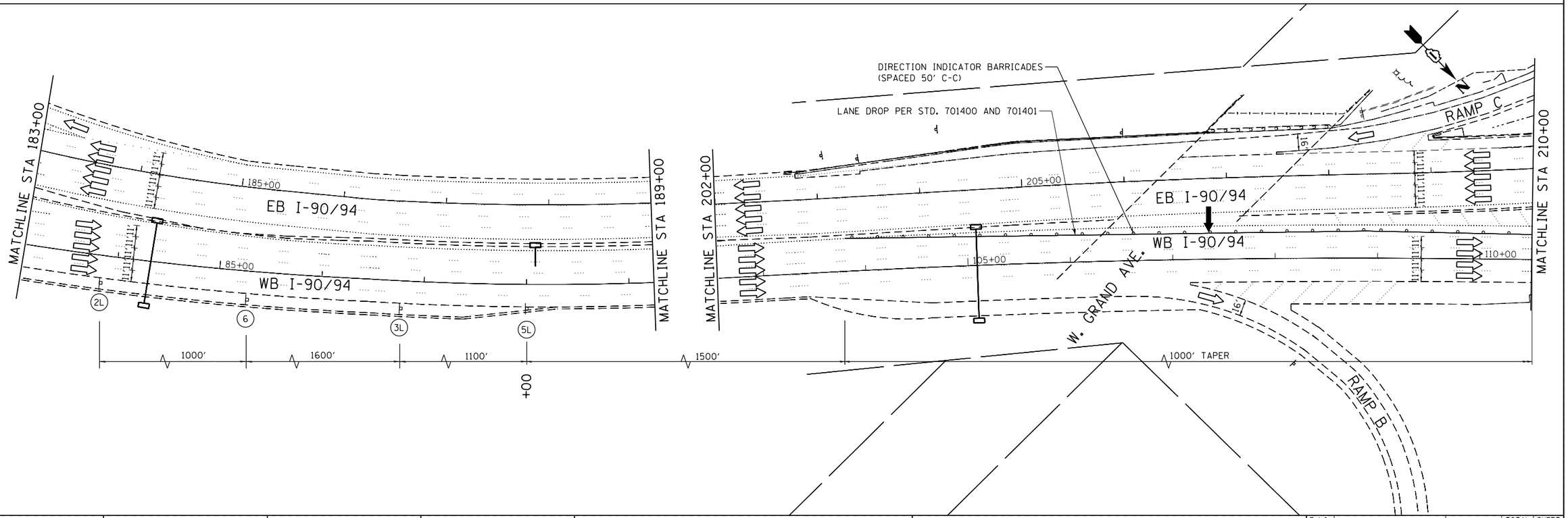
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN MONODIRECTIONAL LIGHT (AT SPECIFIED SPACING)
- DIRECTION OF TRAFFIC FLOW
- SIGN
- VERTICAL PANELS WITH STEADY BURNING LIGHTS (AT SPECIFIED SPACING)
- ARROW BOARD
- TYPE III BARRICADE
- BARRIER WALL MARKERS (AT SPECIFIED SPACING)
- TEMPORARY PAVEMENT, CURRENT STAGE
- TEMPORARY PAVEMENT, PREVIOUS STAGE







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COLLINS ENGINEERS INC

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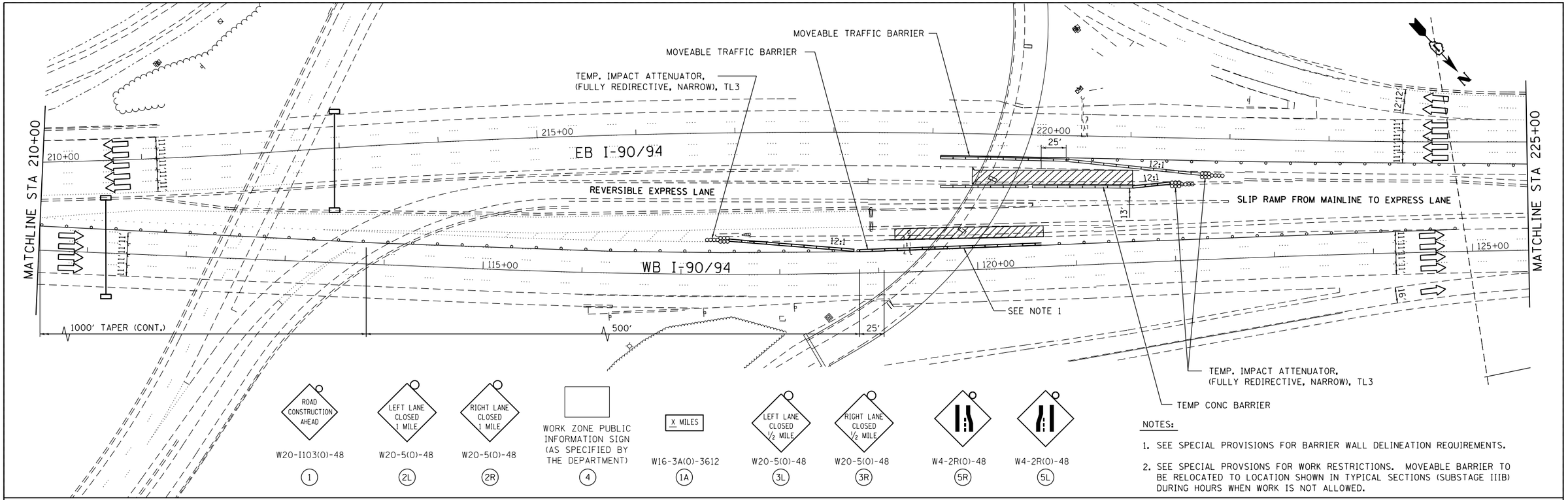
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
I-90/94 (KENNEDY EXPRESSWAY)
STAGE III – SUBSTAGE A

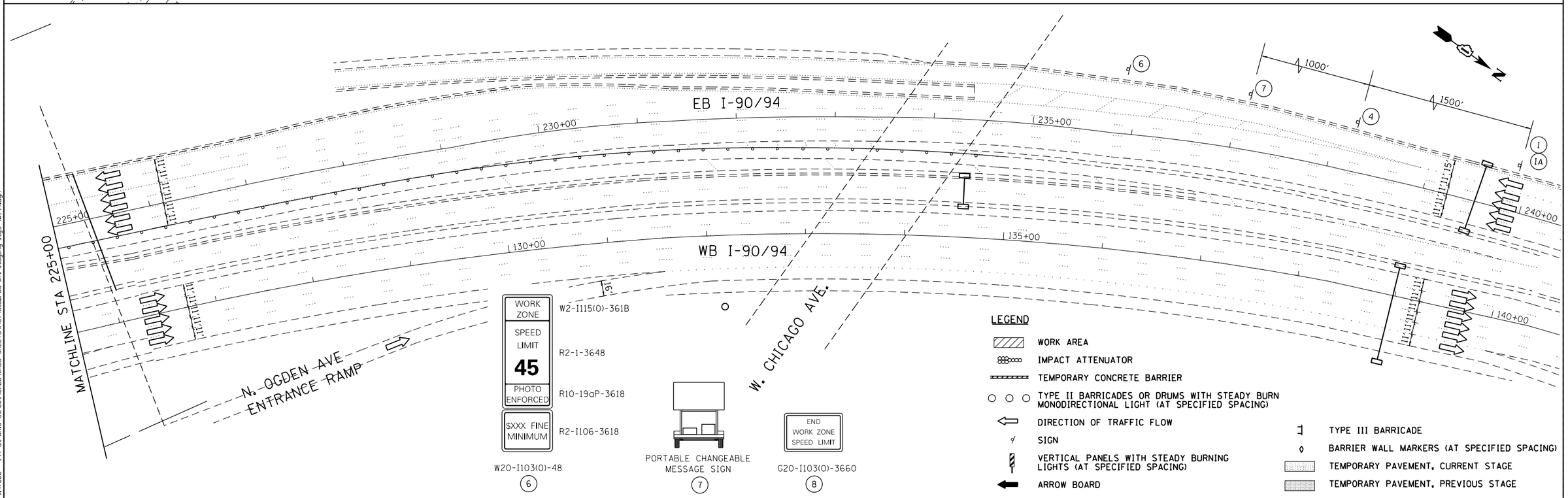
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	103
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. SEE SPECIAL PROVISIONS FOR BARRIER WALL DELINEATION REQUIREMENTS.
2. SEE SPECIAL PROVSIONS FOR WORK RESTRICTIONS. MOVEABLE BARRIER TO BE RELOCATED TO LOCATION SHOWN IN TYPICAL SECTIONS (SUBSTAGE IIIB) DURING HOURS WHEN WORK IS NOT ALLOWED.



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COLLINS ENGINEERS INC.

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	DATE -	REVISED -

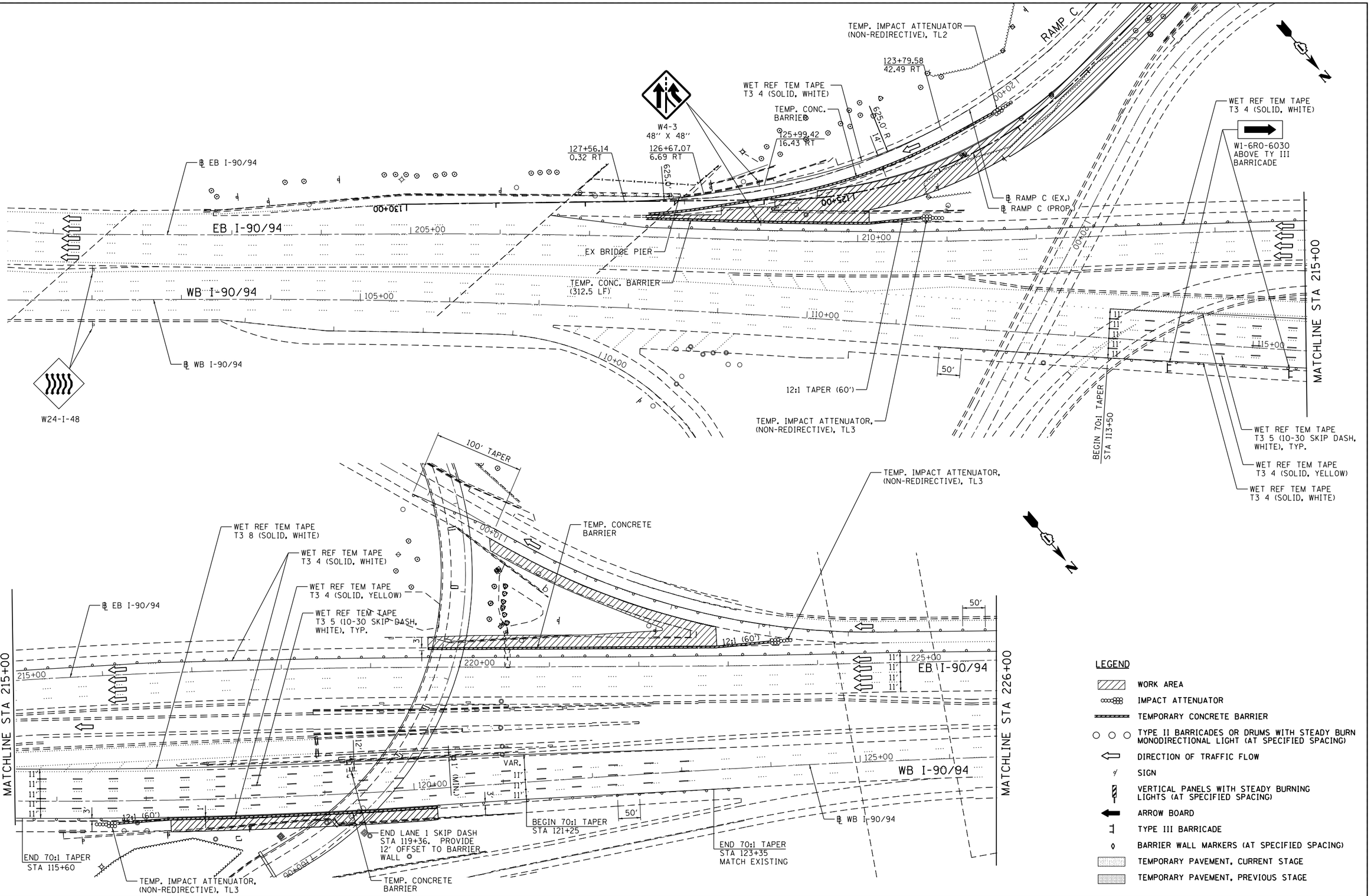
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
I-90/94 (KENNEDY EXPRESSWAY)
STAGE III – SUBSTAGE A

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	104
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



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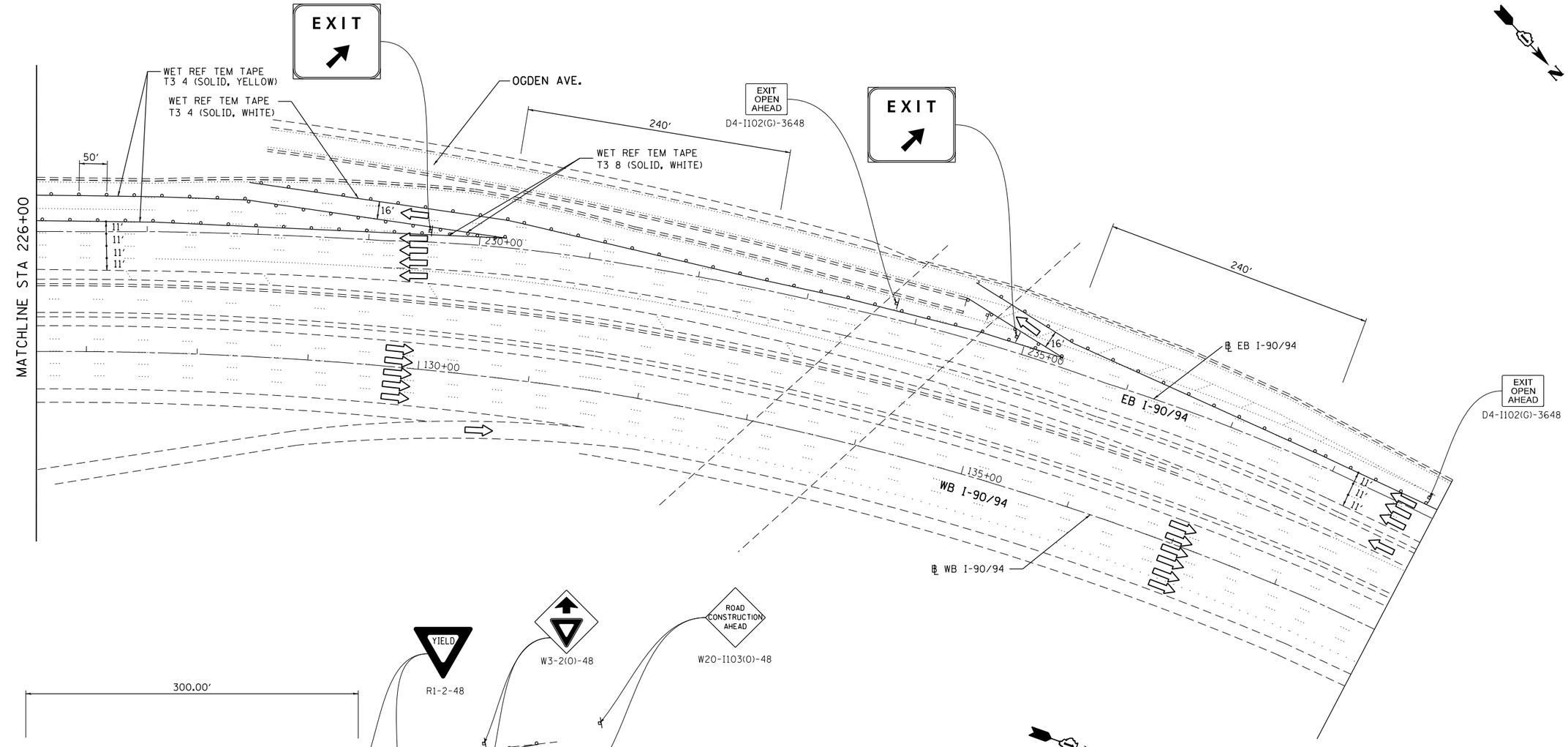
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
I-90/94
STAGE III – SUBSTAGE C

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	105
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. INSTALL 6" EDGE LINE AND BARRIER WALL REFLECTORS PER TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS) SPECIAL PROVISION.

2. FOR ADDITIONAL TRAFFIC CONTROL AND SIGN DETAILS SEE HIGHWAY STANDARDS 701400, 701401, & 701411.

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN MONODIRECTIONAL LIGHT (AT SPECIFIED SPACING)
- DIRECTION OF TRAFFIC FLOW
- SIGN
- VERTICAL PANELS WITH STEADY BURNING LIGHTS (AT SPECIFIED SPACING)
- ARROW BOARD
- TYPE III BARRICADE
- BARRIER WALL MARKERS (AT SPECIFIED SPACING)
- TEMPORARY PAVEMENT, CURRENT STAGE
- TEMPORARY PAVEMENT, PREVIOUS STAGE

FILE NAME = i:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\MOT\0160F63-aht-staging-stg3-Ramp0_20.dgn

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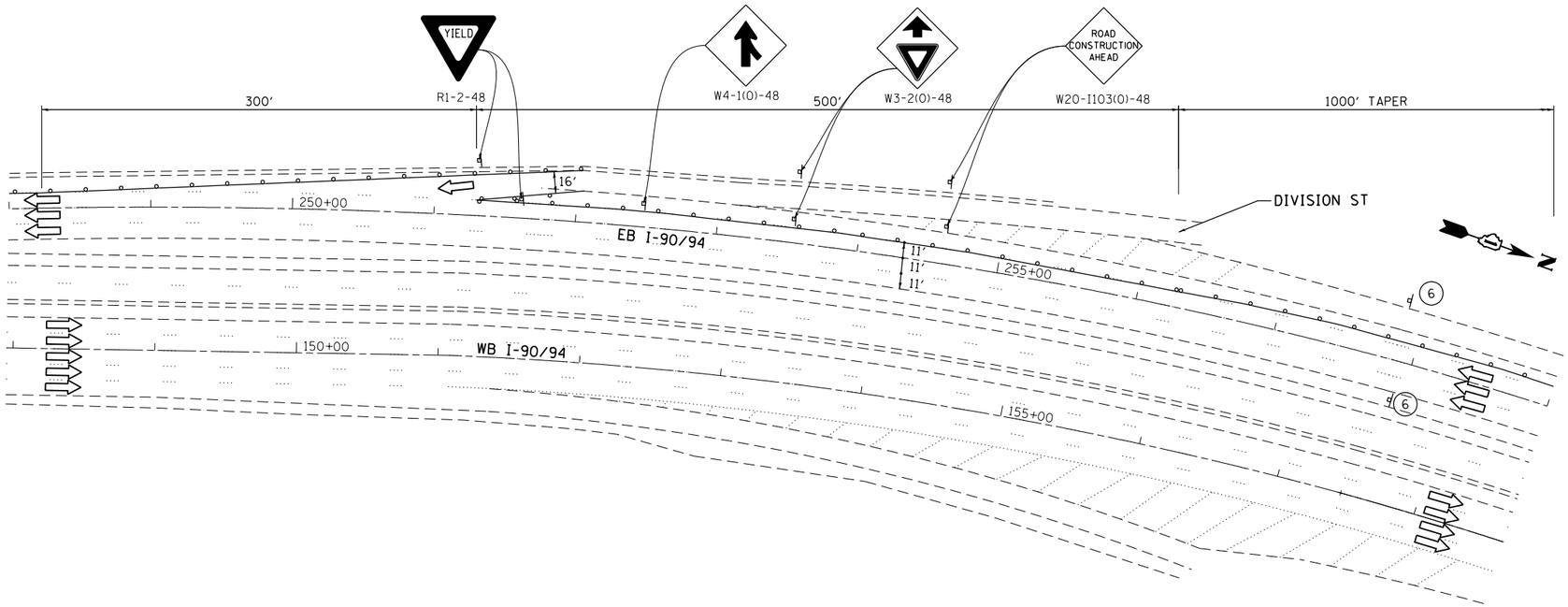
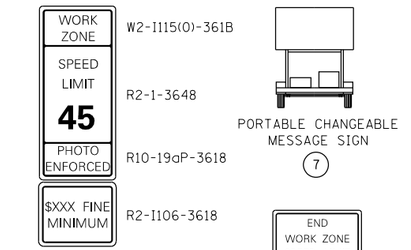
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

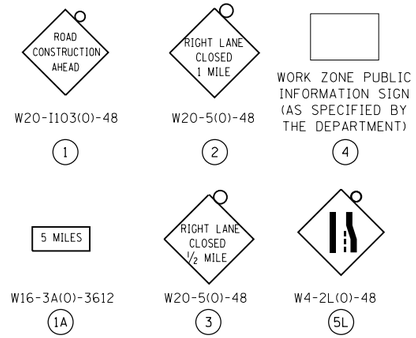
STAGING AND TRAFFIC CONTROL
I-90/94
STAGE III – SUBSTAGE C

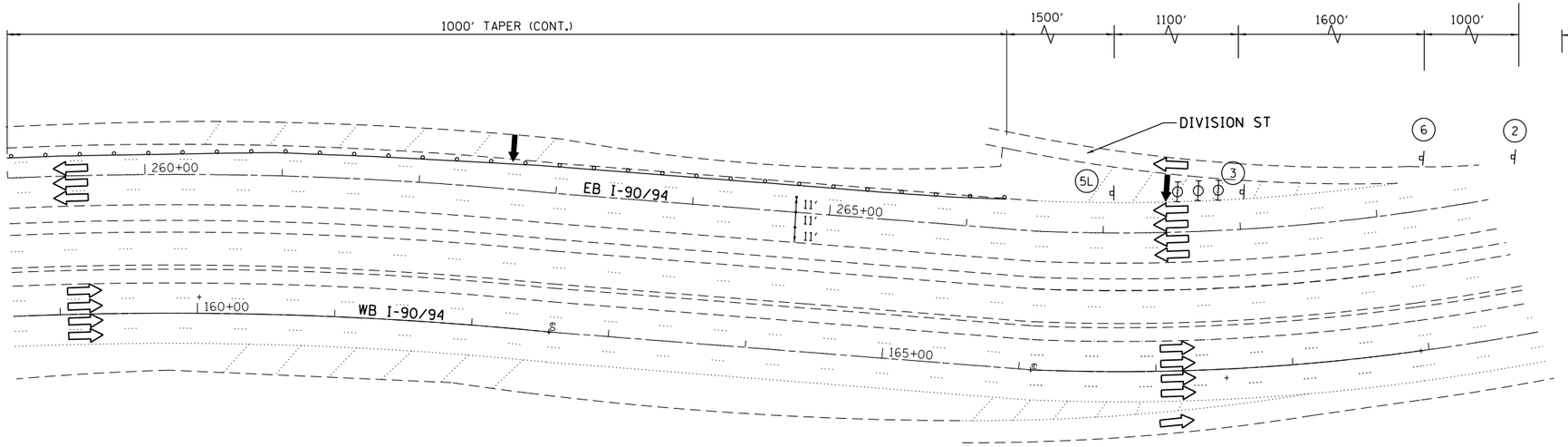
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

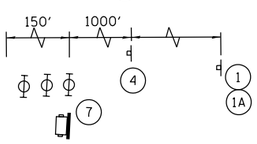
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	106
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		











LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN MONODIRECTIONAL LIGHT (AT SPECIFIED SPACING)
- DIRECTION OF TRAFFIC FLOW
- SIGN
- VERTICAL PANELS WITH STEADY BURNING LIGHTS (AT SPECIFIED SPACING)
- ARROW BOARD
- TYPE III BARRICADE
- BARRIER WALL MARKERS (AT SPECIFIED SPACING)
- TEMPORARY PAVEMENT, CURRENT STAGE
- TEMPORARY PAVEMENT, PREVIOUS STAGE

NOTES:

1. INSTALL 6″ EDGE LINE AND BARRIER WALL REFLECTORS PER TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS) SPECIAL PROVISION.

2. FOR ADDITIONAL TRAFFIC CONTROL AND SIGN DETAILS SEE HIGHWAY STANDARDS 701400, 701401, & 701411.

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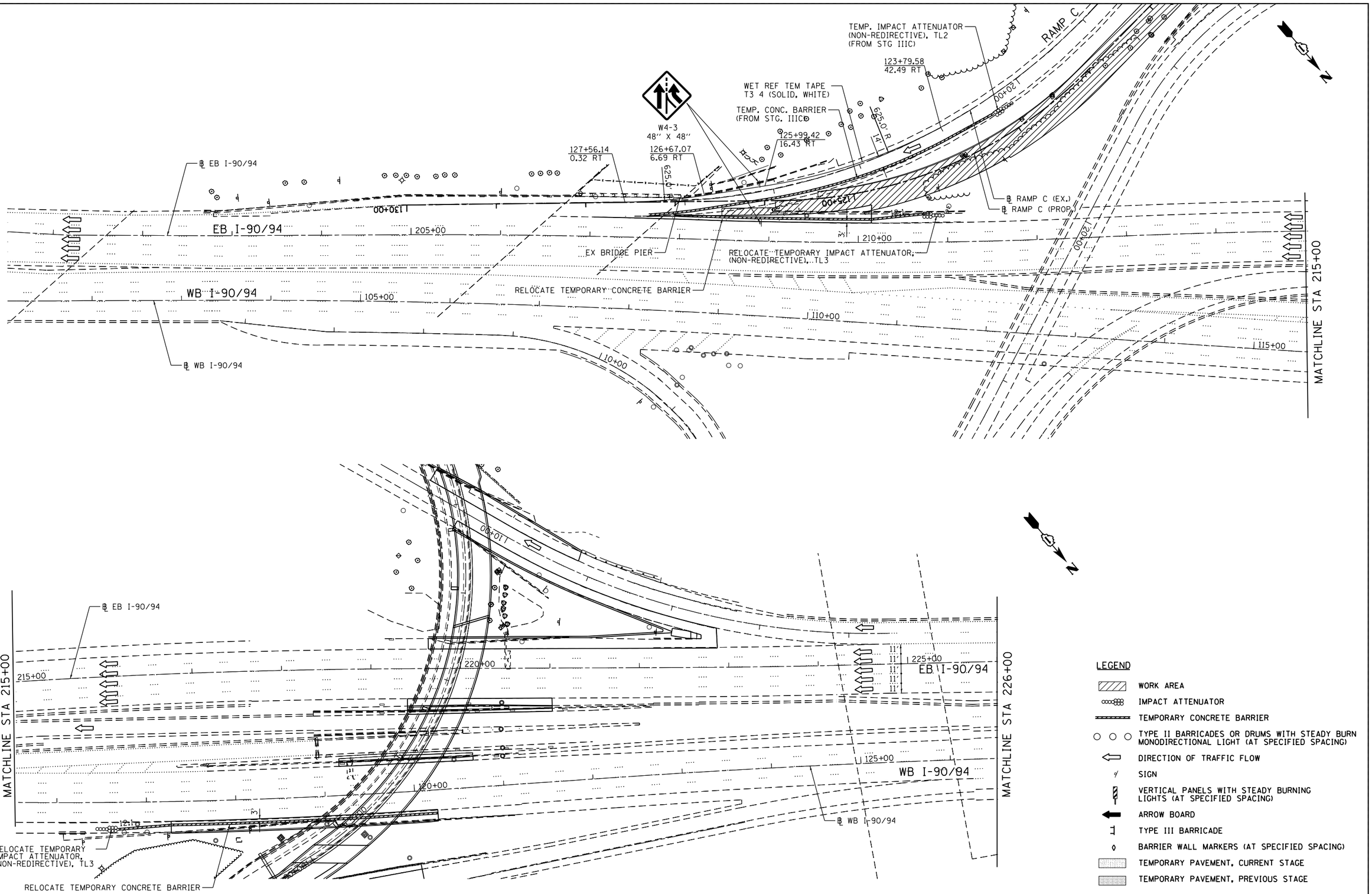
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
I-90/94
STAGE III – SUBSTAGE C

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	107
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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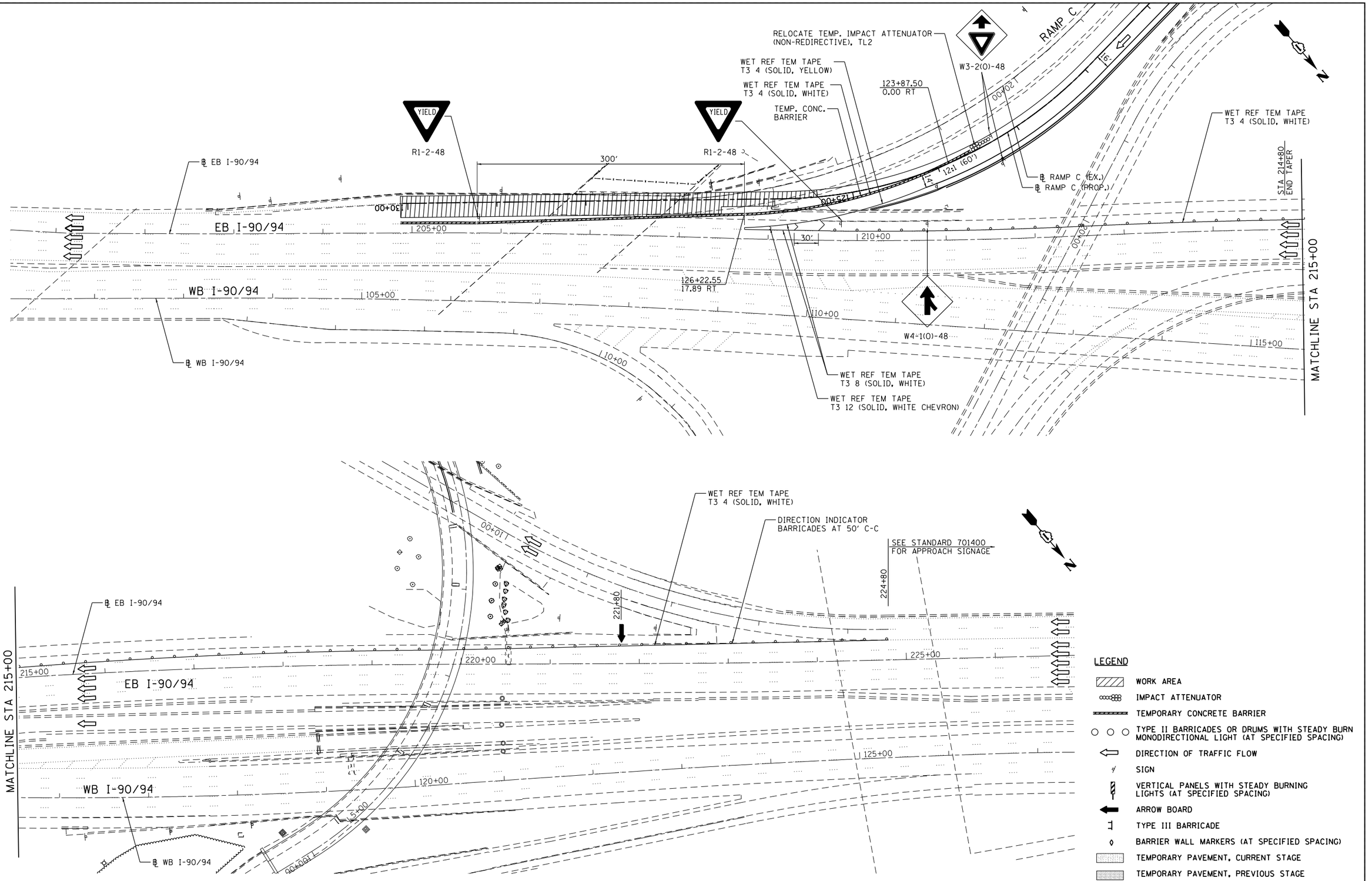
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
I-90/94
STAGE III – SUBSTAGE D

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	108
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



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	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
I-90/94
STAGE III – SUBSTAGE E

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	109
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

N

WB I-90/94

EB I-90/94

CONSTRUCTED IN STAGE I

WET REF TEMP TAPE T3 4 (SOLID, WHITE)

WET REF TEMP TAPE T3 4 (SOLID, YELLOW)

EX ROW

25' C-C

PR ℄ TEMPORARY RUNAROUND

TEMP CONCRETE BARRIER

17' F-F

309+00

310+00

305+00

+14

12"

EX EAST ABUTMENT

DRAIN TO EXISTING CATCH BASIN

REVERSIBLE EXPRESS LANE

SLIP RAMP FROM MAINLINE TO EXPRESS LANE

RAMP TO WB I-90/94 (RAMP A)

30 MPH

1000'

EX ROW

℄ PR RAMP C

+71

+93

300+00

TEMP IMPACT ATTENUATOR, (FULLY REDIRECTIVE, NARROW), TL2

℄ RAMP C

℄ TEMP RAMP C (STG III)

14' F-F

312+19

SEE DETAIL A

EX PIERS (TYP)

EX WEST ABUTMENT

15"

12"

16' LANE

313+97

EX LIGHT TOWER

315+00

15"

TEMP CONCRETE BARRIER

12"

320+00

+51

12"

50' C-C

93' P CUL CL A 1 12 TEMP
PIPE SLOPE = 1.00%

EB I-90/94

ENTRANCE RAMP CONSTRUCTION SHALL BE STAGED PER I-90/94 STAGING SUBSTAGES C-E (SHEETS 105-109).

INLETS TA T8G
STA 124+00, 10.5' RT
RIM =574.70
INV.=569.93
(TEMPORARY)

14' F-F

WET REF TEMP TAPE T3 4 (SOLID, WHITE)

WET REF TEMP TAPE T3 4 (SOLID, YELLOW)

TEMPORARY CONCRETE BARRIER

PR PARAPET WALL CONSTRUCTED IN STAGE I

14' F-F

16' LANE

EXISTING ABUTMENT

PR ℄ TEMPORARY RUNAROUND

1' SHLD

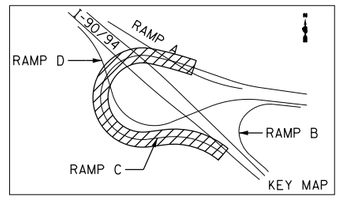
1' SHLD

DETAIL A
N.T.S.

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN MONODIRECTIONAL LIGHT (AT SPECIFIED SPACING)
- DIRECTION OF TRAFFIC FLOW
- SIGN
- VERTICAL PANELS WITH STEADY BURNING LIGHTS (AT SPECIFIED SPACING)
- ARROW BOARD
- TYPE III BARRICADE
- BARRIER WALL MARKERS (AT SPECIFIED SPACING)
- TEMPORARY PAVEMENT, CURRENT STAGE
- TEMPORARY PAVEMENT, PREVIOUS STAGE

NOTE: FOR ADDITIONAL SIGNING DETAILS SEE SHEET 96



NOTES:

1. ALL DIMENSIONS SHOWN ARE FROM EDGE TO EDGE OF PAVEMENT, UNLESS OTHERWISE SHOWN
2. SEE ELECTRICAL PLANS FOR LAYOUT OF TEMPORARY LIGHTING

FILE NAME = $FILE$

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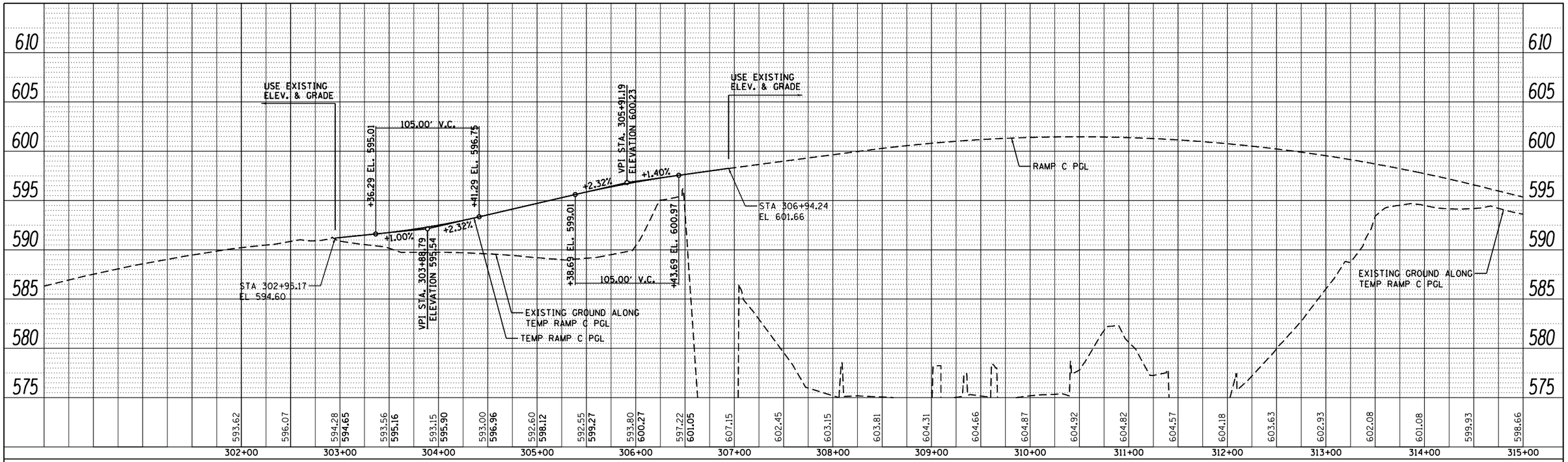
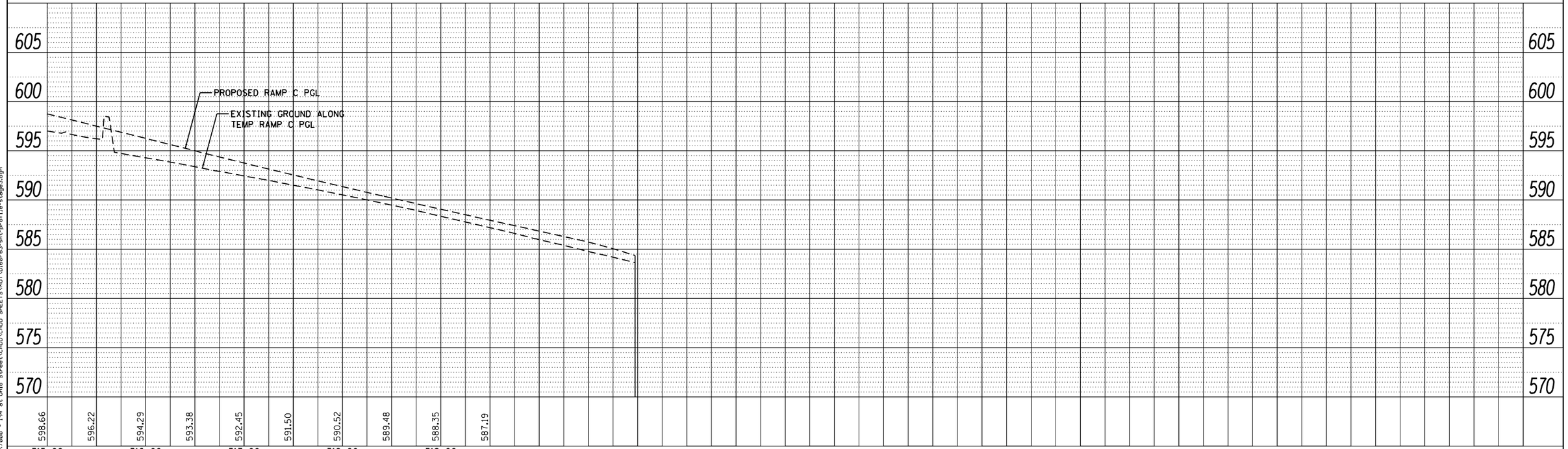
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
RAMP C
STAGE III

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	110
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





PLAN
SURVEYED
PLOTTED
ADDENDUM CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
CROSS SECTIONS CHECKED
S.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.

FILE NAME = i:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\MDT\D160F63-sht-profiles-stage3.dgn

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.000 ' / in.	DRAWN -	REVISED -
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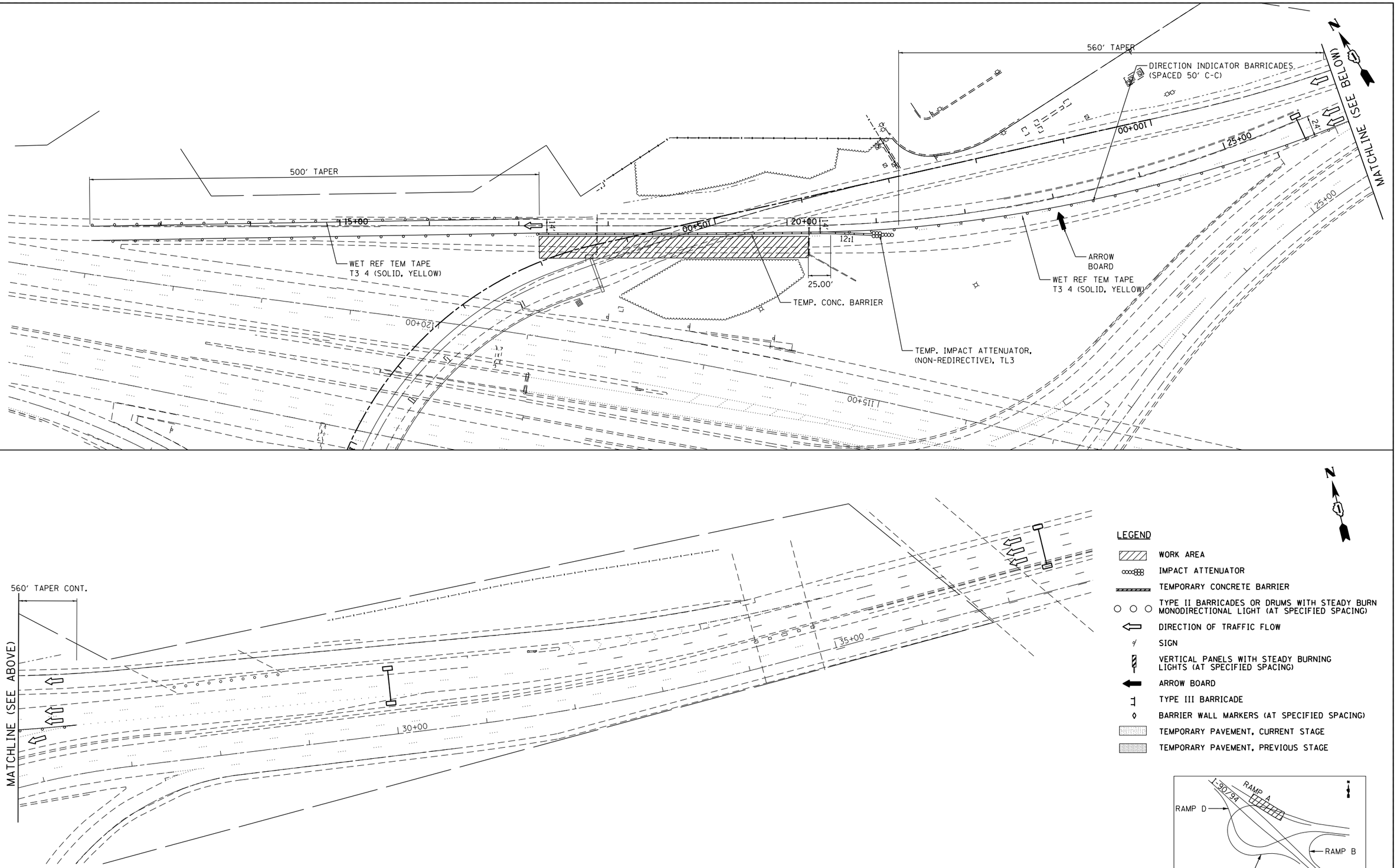
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
TEMPORARY RAMP C PROFILE
STAGE III

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	111
		CONTRACT NO. 60F63		
	ILLINOIS	FED. AID PROJECT		



FILE NAME = i:\7800 - 194 at Ohio Street\CADD\CADD SHEETS\MOT\D160F63-sht-staging-stg3-RampA.dgn

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
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	DATE -	REVISED -

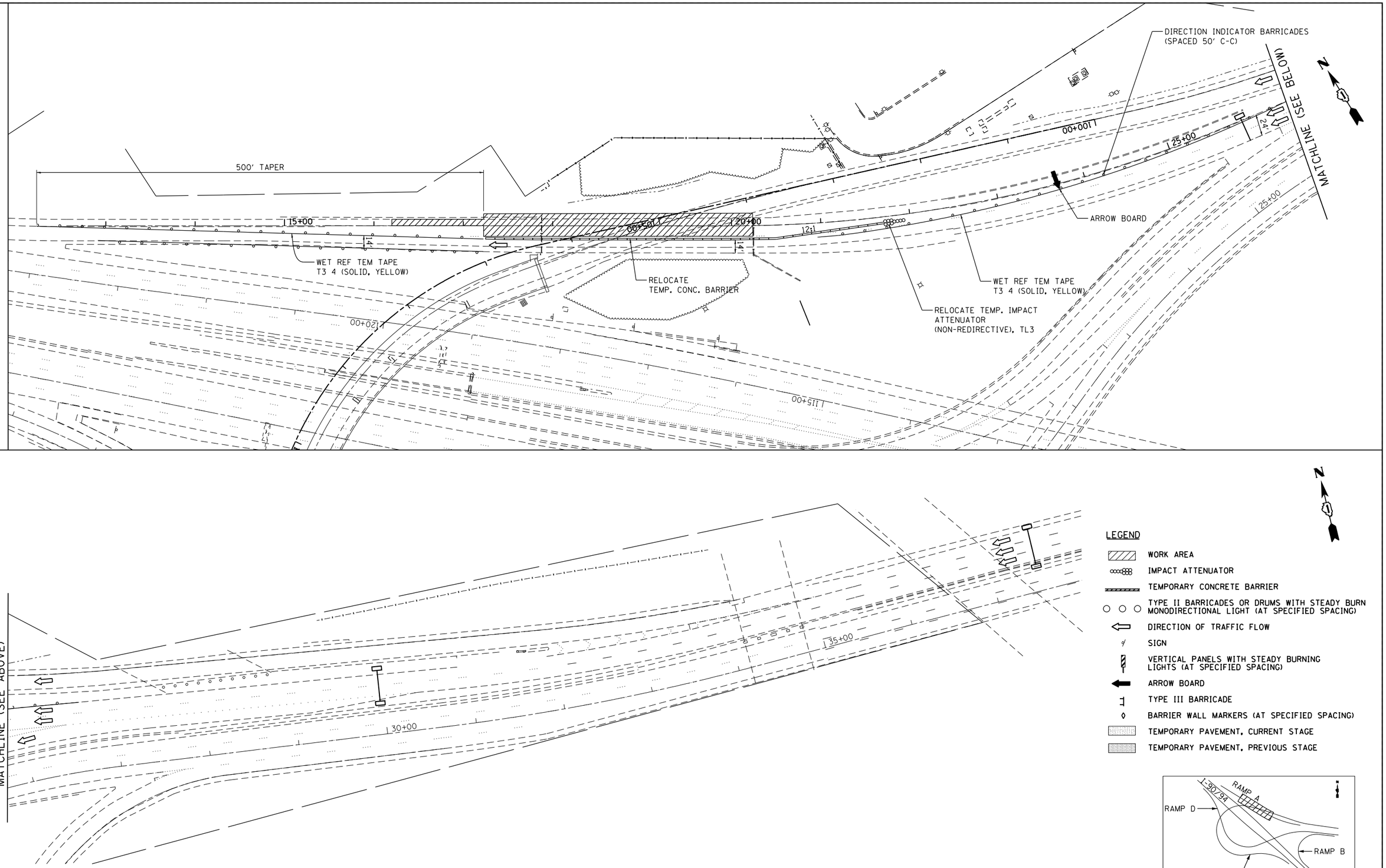
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
RAMP A STAGE III
SUBSTAGE A

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	112
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



FILE NAME = i:\7800 - 194 at Ohio Street\CADD\CADD SHEETS\MOT\I60F63-sht-staging-stg3-RampA.2.dgn

COLLINS ENGINEERS INC

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PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
RAMP A STAGE III
SUBSTAGE B

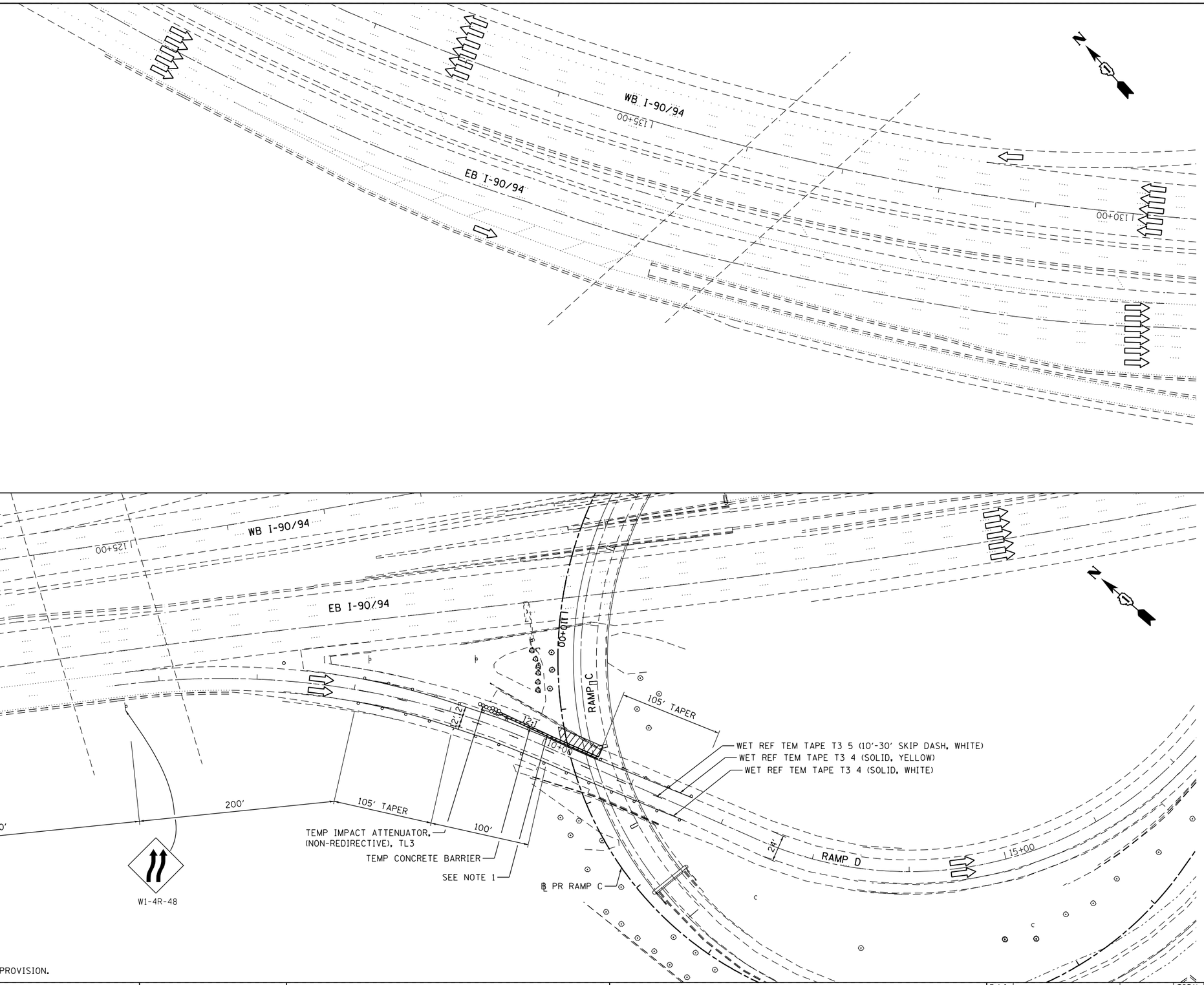
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	113
			CONTRACT NO. 60F63	

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN MONODIRECTIONAL LIGHT (AT SPECIFIED SPACING)
- DIRECTION OF TRAFFIC FLOW
- SIGN
- VERTICAL PANELS WITH STEADY BURNING LIGHTS (AT SPECIFIED SPACING)
- ARROW BOARD
- TYPE III BARRICADE
- BARRIER WALL MARKERS (AT SPECIFIED SPACING)
- TEMPORARY PAVEMENT, CURRENT STAGE
- TEMPORARY PAVEMENT, PREVIOUS STAGE



NOTES:

1. INSTALL 6" EDGE LINE AND BARRIER WALL REFLECTORS PER TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS) SPECIAL PROVISION.

FILE NAME = I:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\MOT\0160F63-sht-staging-stg3-Ramp0_2.dgn

COLLINS ENGINEERS INC

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	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

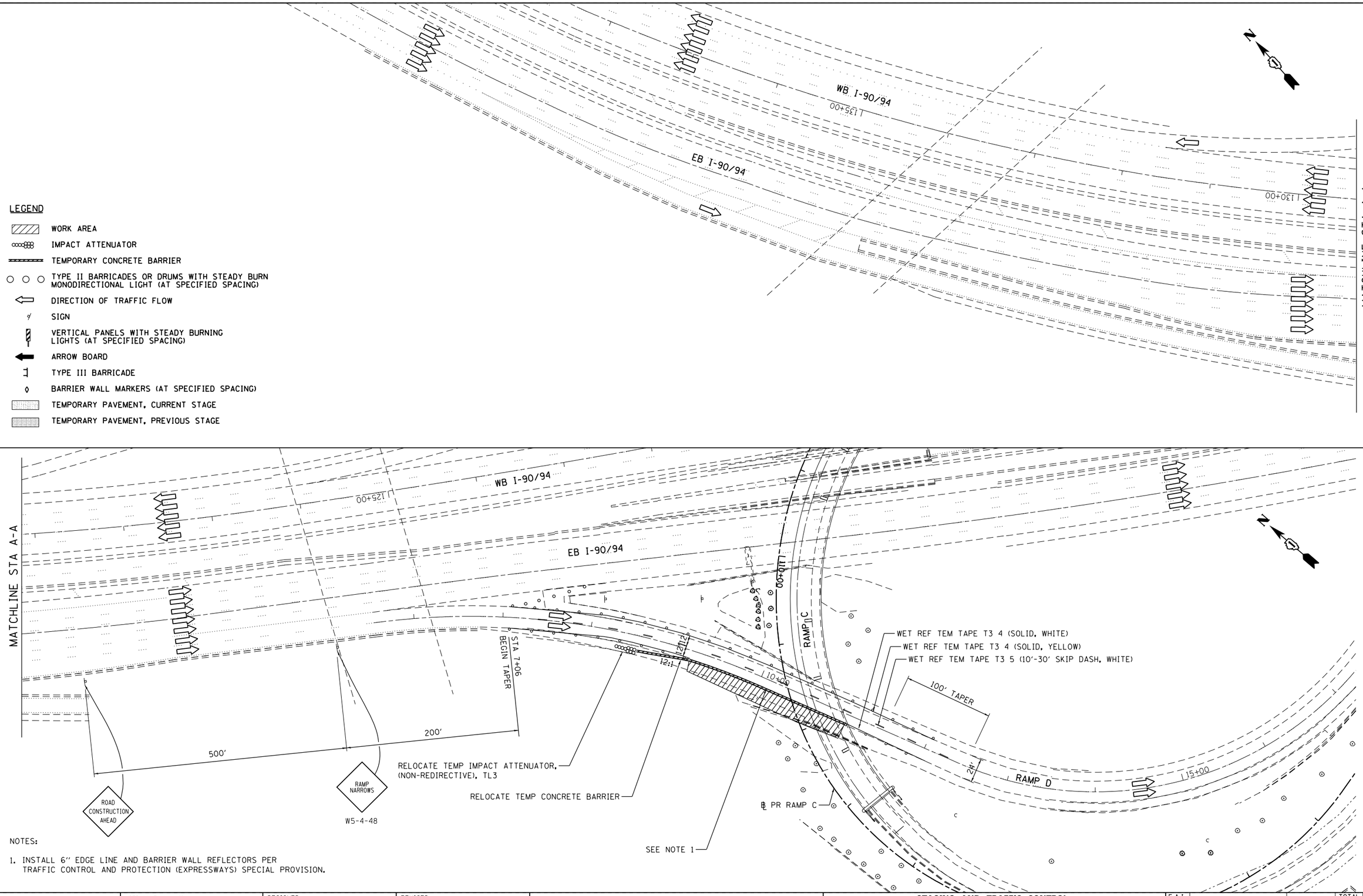
STAGING AND TRAFFIC CONTROL
RAMP D STAGE III
SUBSTAGE A

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	114
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN MONODIRECTIONAL LIGHT (AT SPECIFIED SPACING)
- DIRECTION OF TRAFFIC FLOW
- SIGN
- VERTICAL PANELS WITH STEADY BURNING LIGHTS (AT SPECIFIED SPACING)
- ARROW BOARD
- TYPE III BARRICADE
- BARRIER WALL MARKERS (AT SPECIFIED SPACING)
- TEMPORARY PAVEMENT, CURRENT STAGE
- TEMPORARY PAVEMENT, PREVIOUS STAGE



NOTES:

1. INSTALL 6" EDGE LINE AND BARRIER WALL REFLECTORS PER TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS) SPECIAL PROVISION.

FILE NAME = i:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\MOT\0160F63-aht-staging-stg3-Ramp0_1.dgn

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
RAMP D STAGE III
SUBSTAGE B

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	115
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

WORK ZONE. CONSTRUCT PROPOSED EMBANKMENT AND PROTECTIVE CONCRETE SURFACE.

EB I-90/94

WB I-90/94

EX ROW

℄ PR RAMP C

RAMP TO EB I-90/94 (RAMP C)

RAMP TO WB I-90/94 (RAMP A)

EX ROW

℄ PR RAMP A

REVERSIBLE EXPRESS LANE

SLIP RAMP FROM MAINLINE TO EXPRESS LANE

100+00

105+00

110+00

115+00

120+00

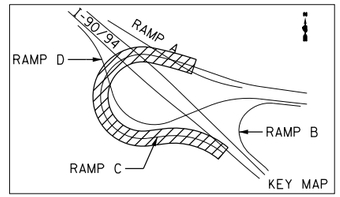
125+00

16'

N

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN MONODIRECTIONAL LIGHT (AT SPECIFIED SPACING)
- DIRECTION OF TRAFFIC FLOW
- SIGN
- VERTICAL PANELS (AT SPECIFIED SPACING)
- ARROW BOARD
- TYPE III BARRICADE
- BARRIER WALL MARKERS (AT SPECIFIED SPACING)
- TEMPORARY PAVEMENT, CURRENT STAGE
- TEMPORARY PAVEMENT, PREVIOUS STAGE



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COLLINS ENGINEERS INC

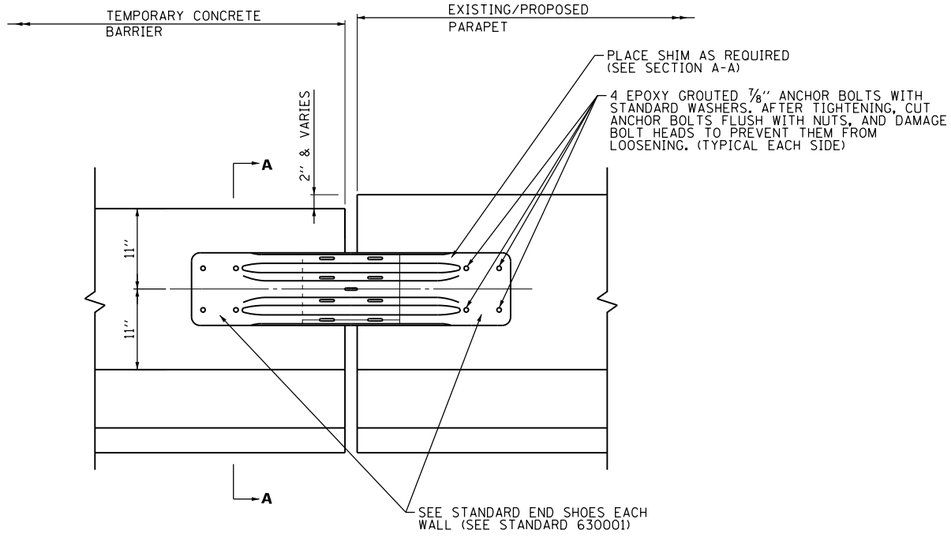
USER NAME = rgall	DESIGNED - NJH	REVISED -	
PLOT SCALE = 100.0000 ' / in.	DRAWN - NJH	REVISED -	
PLOT DATE = 3/25/2013	CHECKED - SWANG	REVISED -	
	DATE - JUNE 21, 2010	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING PLAN
I-90/94 (RAMP C) – STAGE IV

SCALE: 1"=50' | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

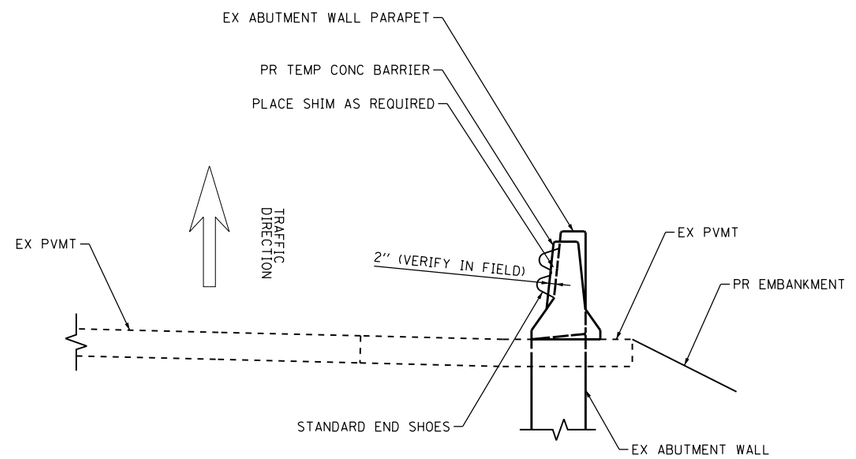
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	116
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



CONNECTION DETAIL

CONNECTION OF TEMPORARY CONCRETE BARRIER WALL TO THE EXISTING/PROPOSED PARAPET WILL NOT BE PAID FOR SEPARATELY. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR TEMPORARY CONCRETE BARRIER OR RELOCATE TEMPORARY CONCRETE BARRIER AS APPLICABLE.

NOTE: DETAIL IS SHOWN FOR INSTANCE WHEN TRAFFIC IS TO THE RIGHT OF THE CONNECTION. USE OPPOSITE HAND WHEN TRAFFIC IS TO THE LEFT OF THE CONNECTION.



SECTION A–A

CONNECTION BETWEEN TEMPORARY CONCRETE BARRIER AND EXISTING ABUTMENT WALL PARAPET

FILE NAME = i:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\01660F63-TempBarrierConnectionDetail.dgn

COLLINS ENGINEERS INC.

USER NAME = rgall	DESIGNED -	REVISED -
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	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
TEMPORARY CONCRETE BARRIER CONNECTION DETAILS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	117
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES AND SEDIMENTATION AND EROSION CONTROL REQUIREMENTS:

1. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.

2. NO RUNOFF FROM STRIPPED AREAS WILL LEAVE THE SITE OTHER THAN THROUGH AN EROSION CONTROL SYSTEM FOLLOWING STANDARD 280001. THE CONTRACTOR WILL ADJUST HIS OPERATIONS AND IMPLEMENT EROSION CONTROL MEASURES ACCORDINGLY.

3. THE CONTRACTOR SHALL SURROUND ALL EARTH STOCKPILES WITH SILT FILTER FENCE. STOCKPILES TO REMAIN IN PLACE FOR 30 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING. IF PARTS OF A SITE ARE INACTIVE FOR 14 DAYS, STABILIZATION SHALL BE APPLIED BY THE 7TH DAY.

4. NOT USED

5. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PRIME CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR; THE CONTRACTOR SHALL INSPECT ALL SOIL EROSION CONTROL MEASURES ON A WEEKLY BASIS OR AFTER A 1/2 INCH OF PRECIPITATION AND REPLACE, REPAIR OR CLEAN THEM ON A TIMELY BASIS.

6. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENT SET FORTH BY THE ILLINOIS EPA.

7. THE CONSTRUCTION LIMITS WILL BE STAKED BY THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION. THE CONSTRUCTION LIMITS MAY BE ADJUSTED BY THE ENGINEER TO PRESERVE TREES AND NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR CHANGED CONSTRUCTION LIMITS.

8. PERIMETER EROSION BARRIER SHALL BE ERECTED ADJACENT TO THE CONSTRUCTION LIMITS. THE RESIDENT ENGINEER SHALL MAKE THE FINAL DETERMINATION ON THE PLACEMENT AND LOCATION OF THE PERIMETER EROSION BARRIER.

9. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON SITE. ALL CHANGES TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN SHALL BE NOTED ON THE SITE PLAN.

10. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF THE YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.

11. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES BY THE 7TH DAY AFTER THE END OF ACTIVE HYDROLOGIC DISTURBANCE, OR RE-DISTURBANCE. A QUANTITY OF TEMPORARY EROSION CONTROL SEEDING IS INCLUDED FOR AREAS THAT ARE DISTURBED BUT WILL NOT BE RESTORED WITHIN 7 DAYS.

12. ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.

13. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, AS APPROVED BY THE ENGINEER. PERIMETER EROSION BARRIER-SILT FENCE AND STORM DRAIN PROTECTION WILL BE REMOVED FOLLOWING PERMANENT STABILIZATION. IF ROLLED EXCELSIOR BLANKET IS USED AS TEMP DITCH CHECK, IT CAN BE LEFT IN PLACE TO DECOMPOSE.

14. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. ALL PRECAUTIONS SHALL BE TAKEN TO AVOID TRACKING DURING CONSTRUCTION.

GENERAL NOTES AND SEDIMENTATION AND EROSION CONTROL REQUIREMENTS (CONT.):

15. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (E.G. SEDIMENT TRAP, SEDIMENT BASIN, SILT FILTER BAG (SPECIAL) OR OTHER APPROPRIATE MEASURE.

16. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.

17. THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER ARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVED TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON.

18. TEMPORARY MULCH SHALL BE USED INSTEAD OF TEMPORARY EROSION CONTROL SEEDING WHEN GRADING WILL OCCUR AFTER SEPTEMBER 30TH IN THE WINTER WHEN TEMPORARY SEED WILL NOT GERMINATE AND PROVIDE EROSION CONTROL PROTECTION UNTIL THE FOLLOWING SPRING. TEMPORARY MULCH INCLUDES MULCH METHOD 4.

19. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE LATEST EDITION OF THE STANDARDS AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

20. PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS), A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE OWNER FOR REVIEW.

21. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE ENGINEER.

22. NOT USED.

23. THE CONTRACTOR SHALL UTILIZE A STABILIZED CONSTRUCTION ENTRANCE PER THE NRCS DETAIL SHOWN ON THE EROSION CONTROL DETAILS.

24. THE CONTRACTOR SHALL UTILIZE THE GENERAL MAINTENANCE GUIDELINES AS OUTLINED IN THE SWPPP TO ENSURE GOOD AND EFFECTIVE OPERATING CONDITION OF THE VEGETATION AND EROSION AND SEDIMENT CONTROL MEASURES.

FILE NAME = i:\2000 - 194 at Ohio Street\CADD\CADD SHEETS\D160F63-EROSION Gen Notes.dgn

COLLINS ENGINEERS INC

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PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
EROSION CONTROL NOTES

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	118
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LEGEND

- EXISTING RIGHT-OF-WAY
- PERIMETER EROSION BARRIER
- xxx — xxx - TEMPORARY FENCE
- INLET FILTERS
- TEMPORARY DITCH CHECK
- WORK ZONE, CURRENT STAGE
- TEMPORARY PAVEMENT, 8"
- MULCH METHOD 2 AND TEMPORARY EROSION CONTROL SEEDING

PROJECT ENDS
RAMP C
STA 127+90.44

PROJECT BEGINS
RAMP C
STA 103+00

EXIST. R.O.W.

GRAND AVE.

MILWAUKEE AVE.

ERIE ST.

N. MAY ST.

EB I-90/94

WB I-90/94

RAMP D

RAMP C

RAMP A

℄ TEMPORARY RAMP C
(STAGE I)

TEMPORARY INLET AND PIPE
(SEE STAGING AND TRAFFIC
CONTROL PLANS)

TEMPORARY EROSION
CONTROL SEEDING

TEMPORARY FENCE

EX. ℄ RAMP D

EX. ℄ EB I-90/94

EX. ℄ WB I-90/94

EX. ℄ RAMP C
PROP. ℄ RAMP C

EX. / PROP.
℄ RAMP A

100' (TYP.)

10+00 15+00 20+00 25+00 100+00 105+00 110+00 115+00 120+00 125+00 200+00 205+00 210+00 215+00

FILE NAME = I:\7000 - I94 at Ohio Street\CADD\CADD SHEETS\D60F63-EROSION_STGI.dgn

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
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PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
EROSION CONTROL PLAN
STAGE I

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	119
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

LEGEND

- EXISTING RIGHT-OF-WAY
- PERIMETER EROSION BARRIER
- TEMPORARY FENCE
- INLET FILTERS
- TEMPORARY DITCH CHECK
- WORK ZONE, CURRENT STAGE
- TEMPORARY PAVEMENT, 8"
- MULCH METHOD 2 AND TEMPORARY EROSION CONTROL SEEDING

PROJECT ENDS
RAMP C
STA 127+90.44

PROJECT BEGINS
RAMP C
STA 103+00

TEMPORARY EROSION CONTROL SEEDING

LOCATION OF BRIDGE DEMOLITION UNIT 1

LOCATION OF BRIDGE DEMOLITION UNIT 2

LOCATION OF BRIDGE DEMOLITION UNIT 3

EXIST. R.O.W.

GRAND AVE.

EB I-90/94

WB I-90/94

RAMP D

RAMP C

RAMP A

EX. ℄ RAMP D

EX. ℄ EB I-90/94

EX. ℄ WB I-90/94

EX. ℄ RAMP C
PROP. ℄ RAMP C

EX. / PROP. ℄ RAMP A

N. MAY ST.

ERIE ST.

MILWAUKEE AVE.

FILE NAME = i:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\D160F63-EROSION_STG11.dgn

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

COLLINS ENGINEERS INC

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
EROSION CONTROL PLAN
STAGE II

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	120
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LEGEND

- EXISTING RIGHT-OF-WAY
- PERIMETER EROSION BARRIER
- xxx — xxx - TEMPORARY FENCE
- INLET FILTERS
- TEMPORARY DITCH CHECK
- WORK ZONE, CURRENT STAGE
- TEMPORARY PAVEMENT, 8"
- MULCH METHOD 2 AND TEMPORARY EROSION CONTROL SEEDING

PROJECT ENDS
RAMP C
STA 127+90.44

TEMPORARY INLET AND PIPE
(SEE STAGING AND TRAFFIC CONTROL PLANS)

100' (TYP.)

EXIST. R.O.W.

GRAND AVE.

RAMP D

EB I-90/94

WB I-90/94

EX. ℄ RAMP D

EX. ℄ EB I-90/94

EX. ℄ WB I-90/94

N. MAY ST.

PROJECT BEGINS
RAMP C
STA 103+00

RAMP C

EX. ℄ RAMP C
PROP. ℄ RAMP C

EX. / PROP.
℄ RAMP A

RAMP A

EXIST. R.O.W.

ERIE ST.

MILWAUKEE AVE.

TEMPORARY EROSION CONTROL SEEDING

FILE NAME = I:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\D160F63-EROSION_STGIII.dgn

COLLINS ENGINEERS INC	USER NAME = rgall	DESIGNED -	REVISED -
	PLOT SCALE = 100.000000 ' / in.	DRAWN -	REVISED -
	PLOT DATE = 3/25/2013	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
EROSION CONTROL PLAN
STAGE III

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	121
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES:

1. TEMPORARY FENCE TO PROTECT EXISTING GATEWAY GREEN LANDSCAPED AREA. EXACT LOCATION OF TEMPORARY FENCE TO BE DETERMINED BY THE ENGINEER.

LEGEND

- EXISTING RIGHT-OF-WAY
- PERIMETER EROSION BARRIER
- xxx — xxx - TEMPORARY FENCE
- INLET FILTERS
- TEMPORARY DITCH CHECK
- WORK ZONE, CURRENT STAGE
- TEMPORARY PAVEMENT, 8"
- MULCH METHOD 2 AND TEMPORARY EROSION CONTROL SEEDING

PROJECT ENDS
RAMP C
STA 127+90.44

PROJECT BEGINS
RAMP C
STA 103+00

GRAND AVE.

MILWAUKEE AVE.

ERIE ST.

N. MAY ST.

EB I-90/94

WB I-90/94

RAMP D

RAMP C

RAMP A

EXIST. R.O.W.

SEE DETAIL A (TYP)

30' TYP

SUGGESTED LOCATIONS FOR EARTHWORK STOCKPILES.

EX. ℄ RAMP D

EX. ℄ EB I-90/94

EX. ℄ WB I-90/94

EX. ℄ RAMP C

PROP. ℄ RAMP C

EX. / PROP. ℄ RAMP A

SEE NOTE 1.

TURF REINFORCEMENT MAT, 67 SY
CONNECT EXISTING RAMP B DITCH
TO EXISTING RAMP D DITCH.

80'

55'

20'

100+00 105+00 110+00 115+00 120+00 125+00 127+90.44 130+00 135+00 140+00 145+00 150+00 155+00 160+00 165+00 170+00 175+00 180+00 185+00 190+00 195+00 200+00 205+00 210+00 215+00 220+00

FILE NAME = \\collinsengr.com\IL\data-il\Poseidon\DOCS\79000 - 194 at Ohio Street\CADD\CADD SHEETS\D160F63-EROSION.dgn

COLLINS ENGINEERS INC	USER NAME = rgall	DESIGNED -	REVISED -
	PLOT SCALE = 100.000000 ' / in.	DRAWN -	REVISED -
	PLOT DATE = 3/25/2013	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

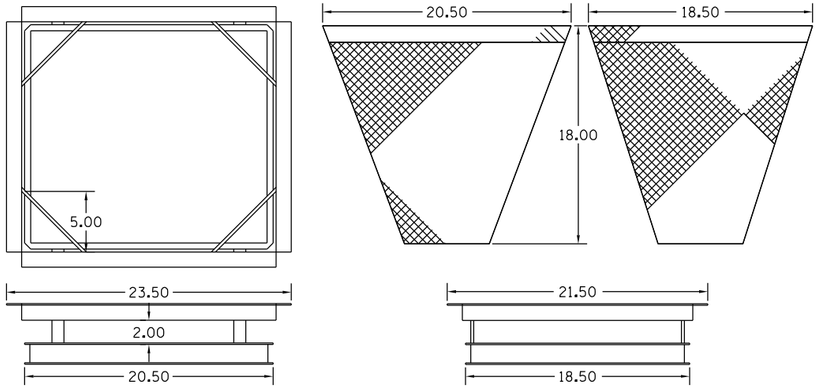
I-90/94 AT OHIO STREET
EROSION CONTROL PLAN

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	122
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

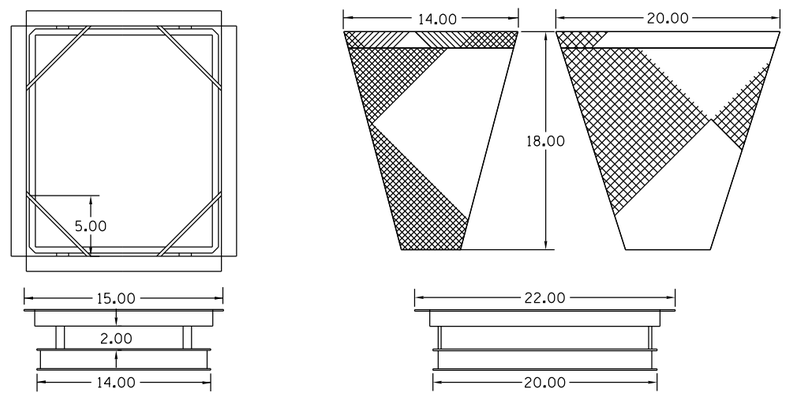
TYPE 24 INLET FILTER

NOTES:
FRAME: Top piece shall be fabricated from 1 1/4" x 1 1/4" x 1/8" angle. Base piece shall be fabricated from 1 1/2" x 1/2" x 1/8" channel. Handles and suspension brackets shall be fabricated from 1 1/4" x 1 /4" flat stock. Domestic steel conforming to ASTM-A36.
SEDIMENT BAG: Shall be fabricated from 4 oz./sq. yd. non-woven polypropylene geotextile and shall be reinforced with polyester mesh. The bag shall be secured to the base piece with a stainless steel strap and lock.

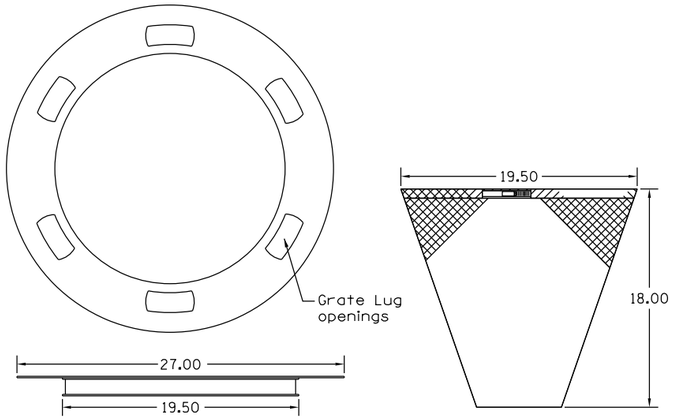


TYPE 3 INLET FILTER

NOTES:
FRAME: Top piece shall be fabricated from 1 1/4" x 1 1/4" x 1/8" angle. Base piece shall be fabricated from 1 1/2" x 1/2" x 1/8" channel. Handles and suspension brackets shall be fabricated from 1 1/4" x 1 /4" flat stock. Domestic steel conforming to ASTM-A36.
SEDIMENT BAG: Shall be fabricated from 4 oz./sq. yd. non-woven polypropylene geotextile and shall be reinforced with polyester mesh. The bag shall be secured to the base piece with a stainless steel strap and lock.



TYPE 8 INLET FILTER



NOTES:
FRAME: Flange shall be fabricated from 1/8" flat stock. Base ring shall be fabricated from 1 1/2" x 1/2" x 1/8" channel. Domestic steel conforming to ASTM-A36.
SEDIMENT BAG: Shall be fabricated from 4 oz./sq. yd. non-woven polypropyle ne geotextile and shall be reinforced with polyester mesh. The bag shall be secured to the base ring with a stainless steel strap and lock.

NOTE: ALL UNITS ARE IN INCHES UNLESS OTHERWISE NOTED

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USER NAME = rgall	DESIGNED -	REVISED -
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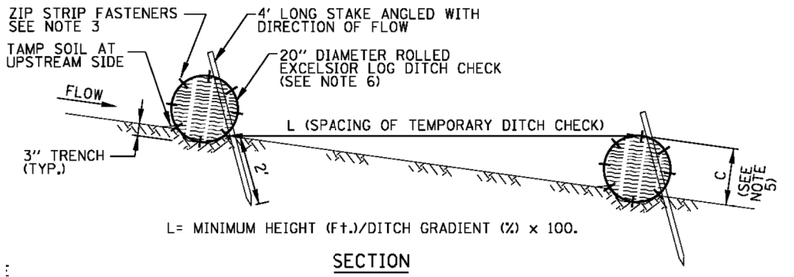
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
EROSION CONTROL DETAILS

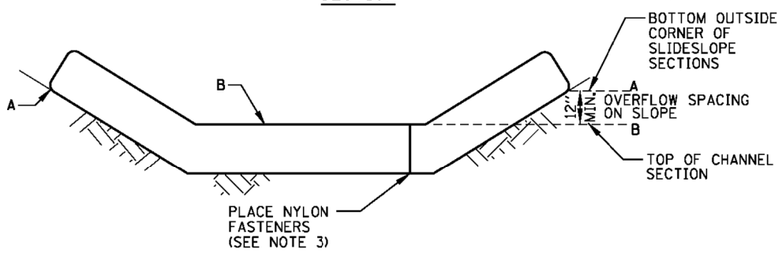
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	123
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



L= MINIMUM HEIGHT (Ft.)/DITCH GRADIENT (%) x 100.

SECTION



ELEVATION

NOTES:

1. ROLLED EXCELSIOR LOG SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 3" AND SOIL SHALL BE TAMPED AGAINST THE UPSTREAM SIDE TO ASSURE THAT STORM WATER IS FORCED THROUGH THE LOG, RATHER THAN UNDER IT.

2. STAKES SHALL BE 4' LONG, DRIVEN AT A SPACING OF 2' ON CENTER, 2' INTO THE GROUND. STAKES SHALL BE ENTWINED WITH THE MESH COVERING OF THE ROLL ON THE DOWNSTREAM SIDE AND ANGLED WITH THE DIRECTION OF FLOW. WOOD STAKES TO BE A MINIMUM OF 1" SQUARE. METAL STAKES SHALL BE A MINIMUM OF 1" DIAMETER.

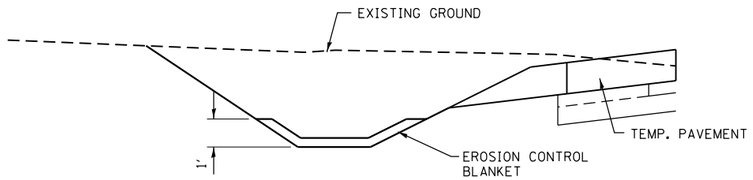
3. WHEN MORE THAN ONE LOG IS REQUIRED TO SPAN THE DITCH, BUTT LOGS TIGHTLY TOGETHER END TO END AND FASTEN TOGETHER WITH A MINIMUM OF EIGHT EQUALLY SPACED ZIP STRIP NYLON FASTENERS.

4. ROLLED EXCELSIOR LOG DITCH CHECKS ARE SUPPLIED IN STANDARD 10 FOOT LENGTHS AND SHOULD NOT BE CUT.

5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT SHALL BE REMOVED WHEN IT REACHES 50% OF ROLL HEIGHT. WHEN EXCELSIOR LOG HEIGHT BECOMES LESS THAN 10", IT SHALL BE REPLACED.

6. TEMPORARY DITCH CHECK TO BE USED TO CONTROL FLOW IN DITCHES. THE DITCH CHECK IS NOT A SUBSTITUTE FOR SEDIMENT TRAPS OR BASINS. PLACE UPSTREAM OF TRAPS OR BASINS AND MAINTAIN IN PLACE UNTIL SEEDING IS ESTABLISHED.

TEMPORARY DITCH CHECK DETAIL



EROSION CONTROL BLANKET DETAIL

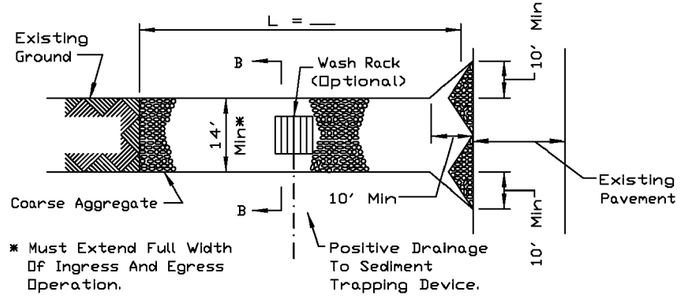
PLACEMENT IN TEMPORARY DITCH

NOTES:

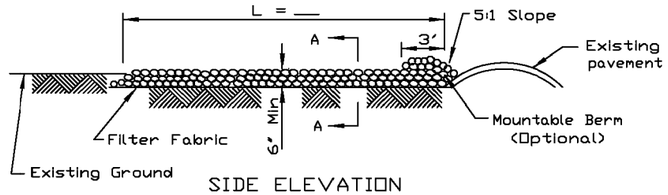
1. EROSION CONTROL BLANKET SHALL BE APPLIED ALONG DITCH BOTTOMS AND UP 1 FOOT VERTICALLY (TO A MAXIMUM OF 3 FEET) ALONG THE SIDESLOPES.

2. TO BE USED DURING STAGE CONSTRUCTION FOR TEMPORARY DITCHES.

STABILIZED CONSTRUCTION ENTRANCE PLAN



PLAN VIEW



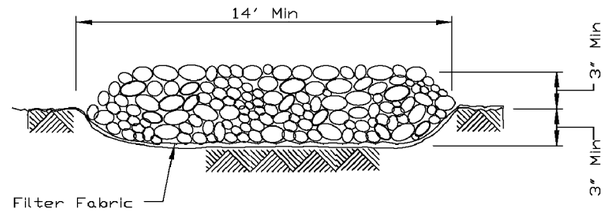
SIDE ELEVATION

NOTES:

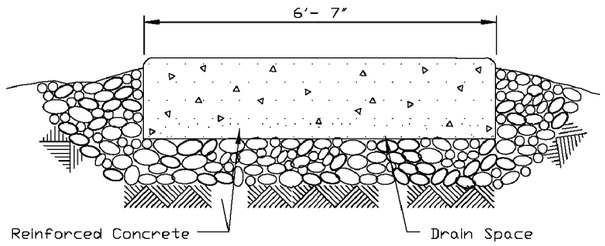
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE		STANDARD DWG. NO.
Project ____	NRCS Natural Resources Conservation Service	IL-630
Designed ____ Date ____		SHEET 1 OF 2
Checked ____ Date ____		DATE 8-18-94
Approved ____ Date ____		

STABILIZED CONSTRUCTION ENTRANCE PLAN



SECTION A-A



SECTION B-B

REFERENCE		STANDARD DWG. NO.
Project ____	NRCS Natural Resources Conservation Service	IL-630
Designed ____ Date ____		SHEET 2 OF 2
Checked ____ Date ____		DATE 8-18-94
Approved ____ Date ____		

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PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
EROSION CONTROL DETAILS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

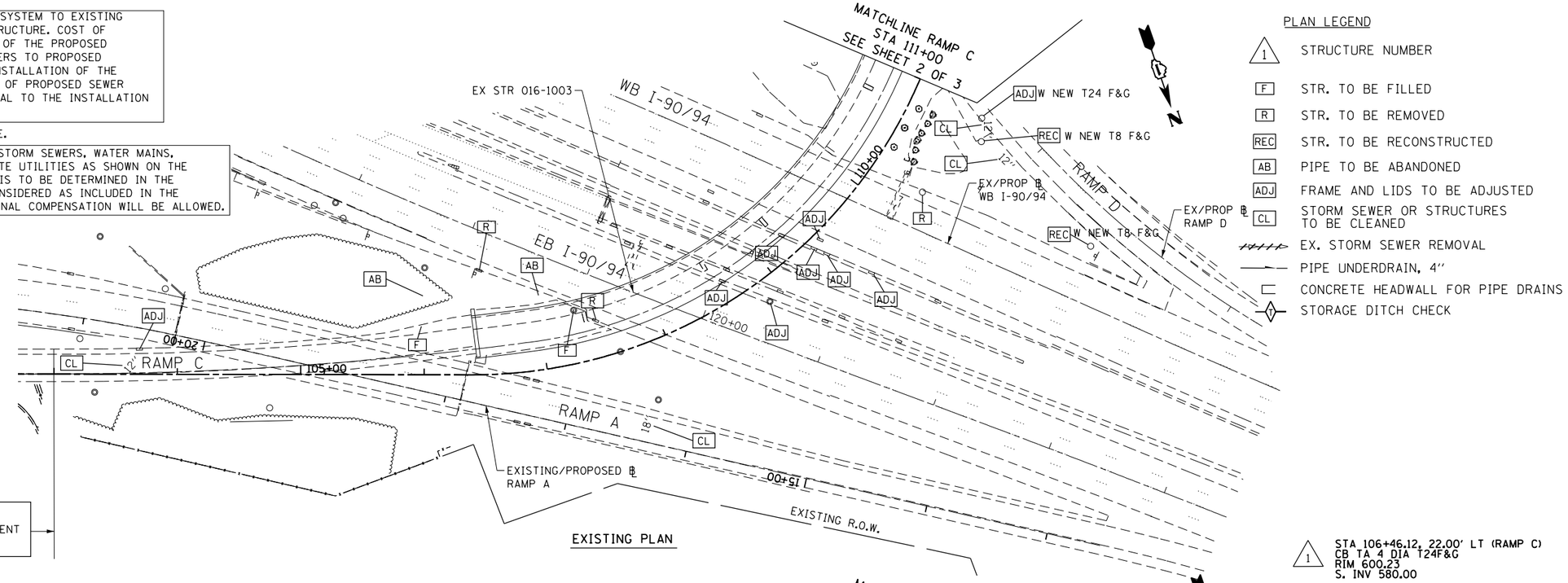
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	124
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES:

1. CONTRACTOR SHALL CONNECT PROPOSED UNDERDRAIN SYSTEM TO EXISTING UNDERDRAIN SYSTEM AND OR PROPOSED DRAINAGE STRUCTURE. COST OF CONNECTION SHALL BE INCIDENTAL TO INSTALLATION OF THE PROPOSED UNDERDRAIN. COST OF CONNECTION OF EXISTING SEWERS TO PROPOSED STORM STRUCTURES SHALL BE INCIDENTAL TO THE INSTALLATION OF THE PROPOSED STORM STRUCTURE. COST OF CONNECTION OF PROPOSED SEWER TO EXISTING STORM STRUCTURES SHALL BE INCIDENTAL TO THE INSTALLATION OF THE PROPOSED SEWER.

2. SEE STRUCTURE PLANS FOR REMOVALS ON STRUCTURE.

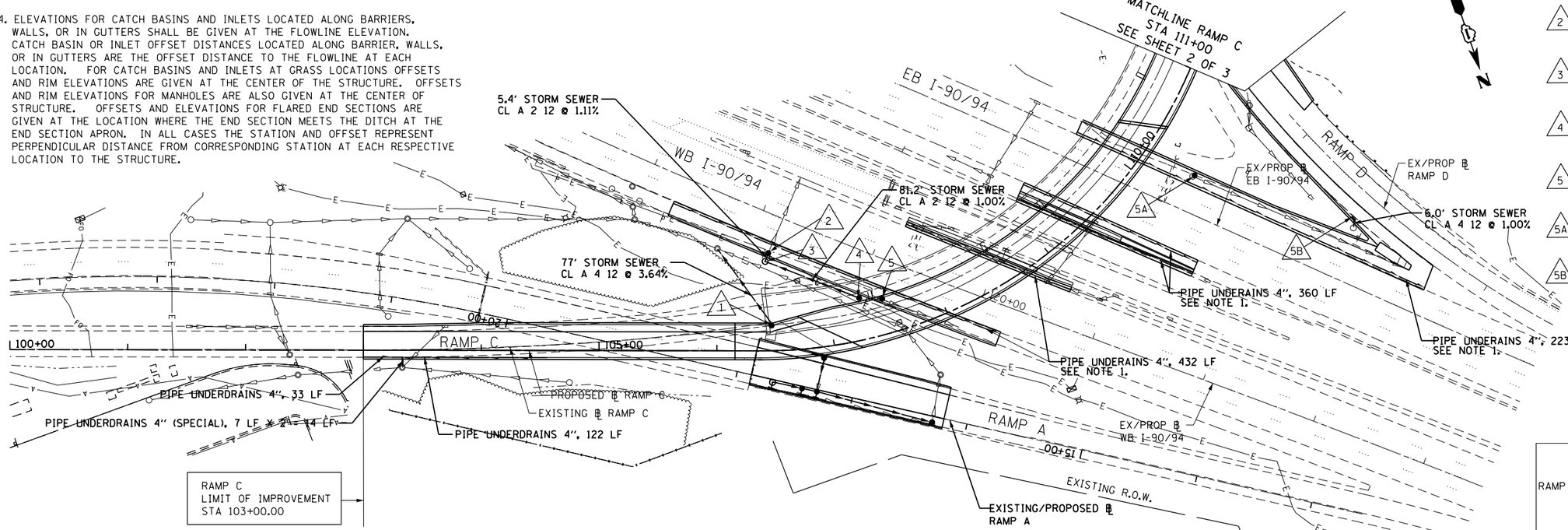
3. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.



EXISTING PLAN

NOTES: (CONT)

4. ELEVATIONS FOR CATCH BASINS AND INLETS LOCATED ALONG BARRIERS, WALLS, OR IN GUTTERS SHALL BE GIVEN AT THE FLOWLINE ELEVATION. CATCH BASIN OR INLET OFFSET DISTANCES LOCATED ALONG BARRIER, WALLS, OR IN GUTTERS ARE THE OFFSET DISTANCE TO THE FLOWLINE AT EACH LOCATION. FOR CATCH BASINS AND INLETS AT GRASS LOCATIONS OFFSETS AND RIM ELEVATIONS ARE GIVEN AT THE CENTER OF THE STRUCTURE. OFFSETS AND RIM ELEVATIONS FOR MANHOLES ARE ALSO GIVEN AT THE CENTER OF STRUCTURE. OFFSETS AND ELEVATIONS FOR FLARED END SECTIONS ARE GIVEN AT THE LOCATION WHERE THE END SECTION MEETS THE DITCH AT THE END SECTION APRON. IN ALL CASES THE STATION AND OFFSET REPRESENT PERPENDICULAR DISTANCE FROM CORRESPONDING STATION AT EACH RESPECTIVE LOCATION TO THE STRUCTURE.



PROPOSED PLAN

PLAN LEGEND

- 1 — STRUCTURE NUMBER
- F — STR. TO BE FILLED
- R — STR. TO BE REMOVED
- REC — STR. TO BE RECONSTRUCTED
- AB — PIPE TO BE ABANDONED
- ADJ — FRAME AND LIDS TO BE ADJUSTED
- CL — STORM SEWER OR STRUCTURES TO BE CLEANED
- EX. STORM SEWER REMOVAL
- PIPE UNDERDRAIN, 4"
- CONCRETE HEADWALL FOR PIPE DRAINS
- STORAGE DITCH CHECK

1 STA 106+46.12, 22.00' LT (RAMP C)
CB TA 4 DIA T24F&G
RIM 600.23
S. INV 580.00

2 STA 118+17.42, 34.05' RT (90/94 WB)
CB TA 4 DIA T24F&G
RIM 577.72
N. INV 573.05

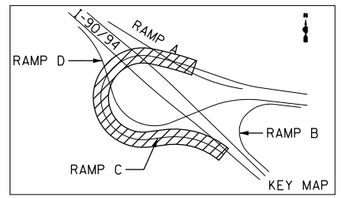
3 STA 118+17.50, 39.25' RT (90/94 WB)
MH TA 4 DIA T1F&G CL
RIM 582.00
S. INV 573.11
W. INV 573.19

4 STA 119+02.82, 38.50' RT (90/94 WB)
CB TA 4 DIA T8G
RIM 579.00
E. INV=574.00

5 STA 119+21.22, 33.99' RT (90/94 WB)
CB TA 4 DIA T24F&G
RIM 578.01
W. INV=574.00

5A STA 220+70.24, 33.74' LT (90/94 EB)
CB TA 4 DIA T24F&G
RIM 578.43
W. INV=574.00

5B STA 8+24.07, 24.43' LT (RAMP D)
INLET TA T24F&G
RIM 577.64
N. INV=574.26



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	DATE -	REVISED -

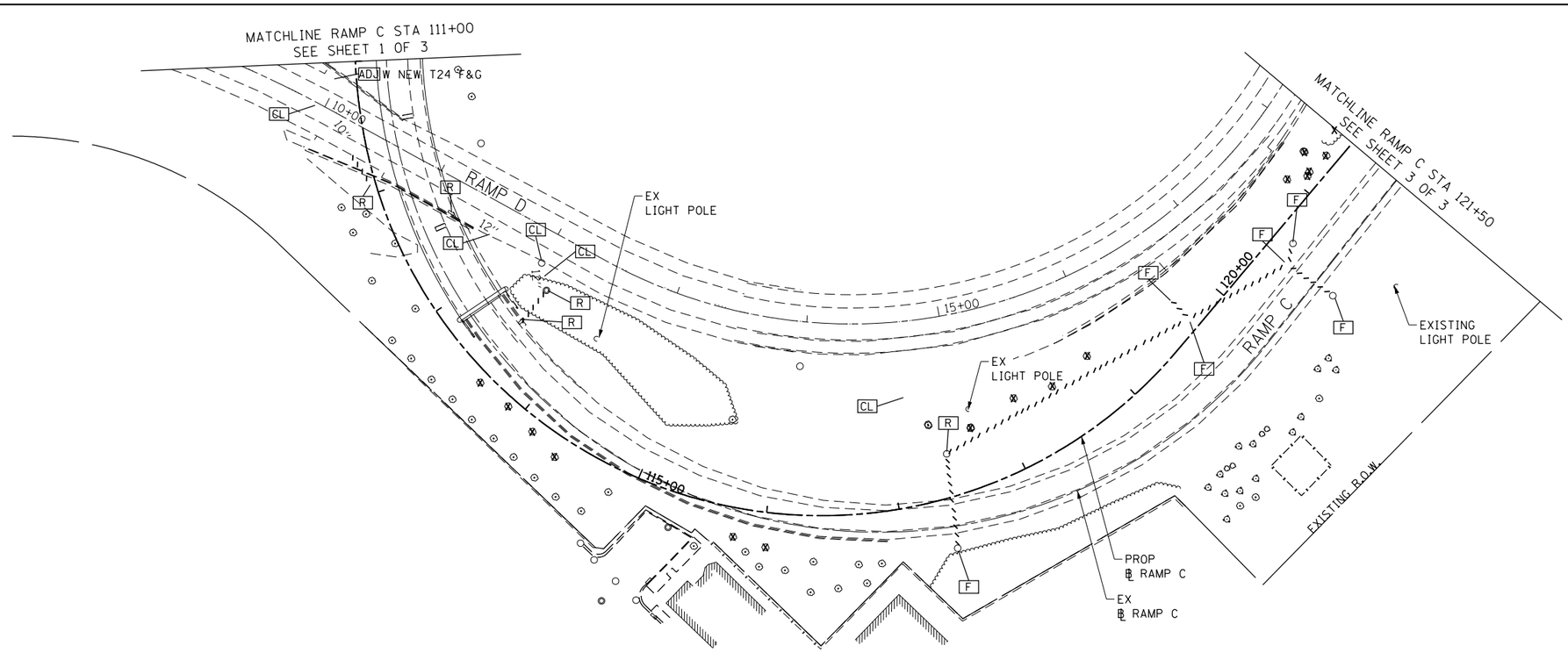
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP C
EXISTING AND PROPOSED DRAINAGE PLAN

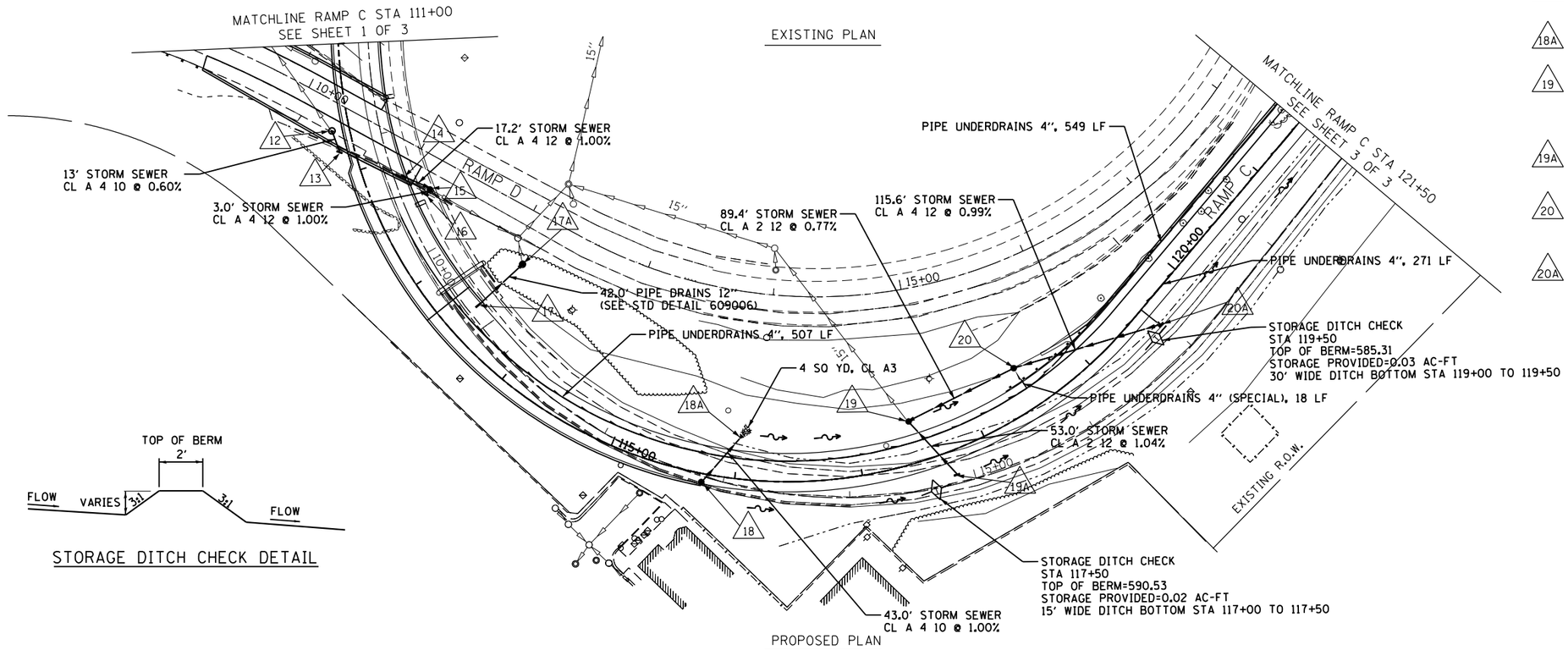
SCALE: | SHEET NO. 1 OF 5 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	125
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



EXISTING PLAN



PROPOSED PLAN

STORAGE DITCH CHECK DETAIL

12 STA. 10+32.2', 21.0' RT (RAMP D)
MH TA 4 DIA T1F&G CL
RIM 577.11
EX. N INV 574.41+/- (CONTRACTOR TO FIELD VERIFY)
S INV 574.49

13 STA. 10+45.56, 33.06' RT (RAMP D)
INLET TA T8G
RIM 577.80
INV 574.57

14 STA. 10+99.88, 27.37' RT (RAMP D)
INLET TA T24F&G
RIM 577.98SE
INV 575.30

15 STA. 11+21.07, 27.05' RT (RAMP D)
CB TA 4 DIA T24F&G
RIM 578.23
NW INV 575.10
SW INV 575.10
SE INV 575.03 (APPROX EX INV)

16 STA. 11+19.82, 29.44' RT (RAMP D)
INLET TA T8G
RIM 578.50
NE INV 575.13

17 STA. 113+44.35, 31.00' LT (RAMP C)
TYPE D INLET BOX, STANDARD 609006
RIM 599.89

17A STA. 113+42.73, 75.82' LT (RAMP C)
CB TA 4 DIA T1F&G CL
RIM 584.70
W INV 580.00
NE INV 576.00 (APPROX FOR EX 12")

18 STA. 115+73.60, 8.00' RT (RAMP C)
CB TA 4 DIA T24F&G
RIM 596.03
INV 592.41

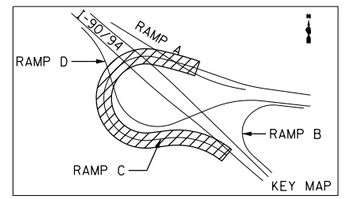
18A STA. 116+00, 31.00' LT (RAMP C)
PRC FLAR END SEC 12
INV=591.98

19 STA. 117+47, 32.30' LT (RAMP C)
CB TA 5 DIA T8G
RIM 588.22
N. INV (EX 15") 577.42
S. INV 583.31
E. INV 578.33

19A STA. 117+70, 18.50' RT (RAMP C)
INLET TA T8G
RIM 588.73
INV 583.88

20 STA. 118+50, 34.50' LT (RAMP C)
CB TA 4 DIA T8G
RIM 585.58
S.E. INV 579.02
W. INV 579.02

20A STA. 119+50, 20.00' RT (RAMP C)
CB TA 4 DIA T8G
RIM 584.01
N.W. INV 580.25



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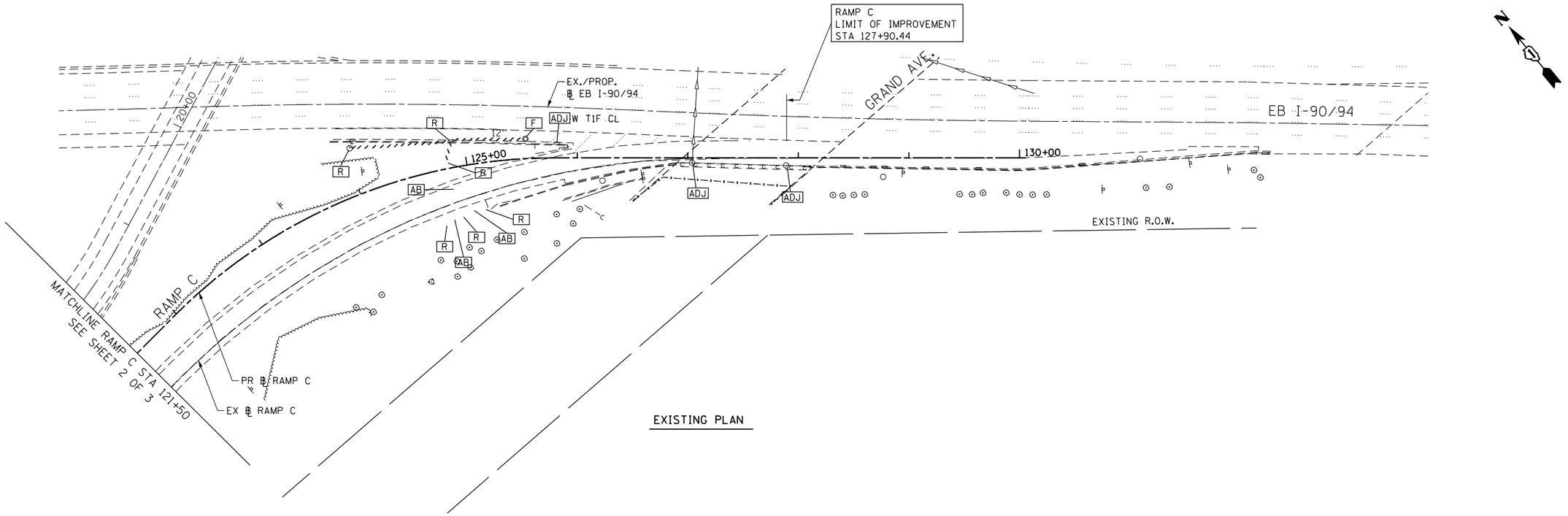
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

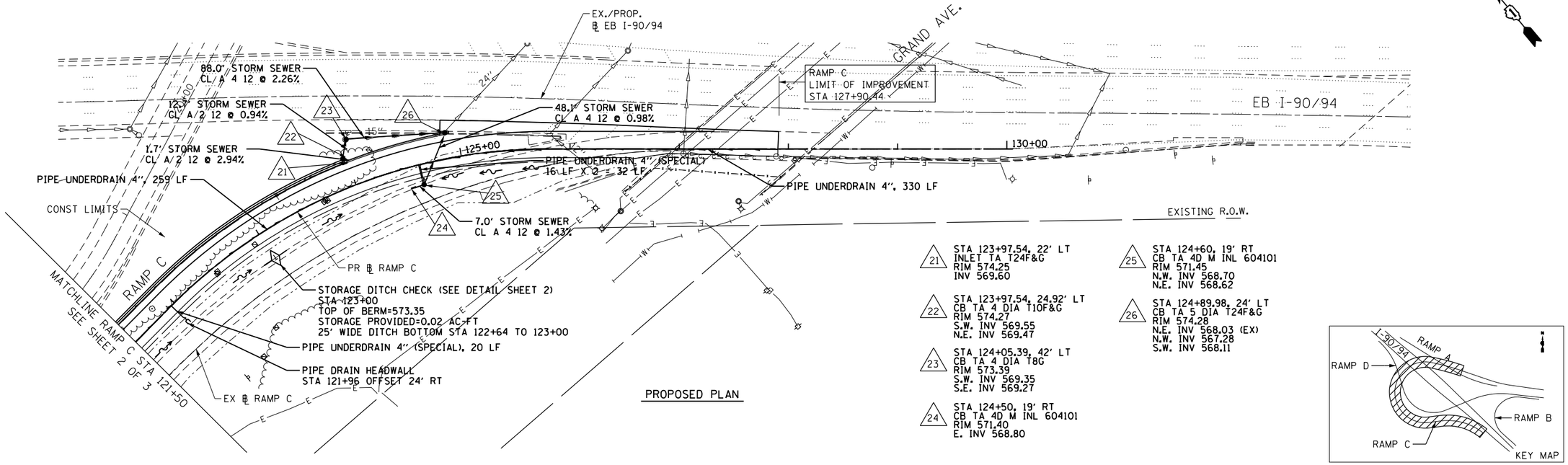
RAMP C
EXISTING AND PROPOSED DRAINAGE PLAN

SCALE: | SHEET NO. 2 OF 5 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	126
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



EXISTING PLAN



PROPOSED PLAN

21 STA 123+97.54, 22' LT
INLET TA T24F&G
RIM 574.25
INV 569.60

22 STA 123+97.54, 24.92' LT
CB TA 4 DIA T10F&G
RIM 574.27
S.W. INV 569.55
N.E. INV 569.47

23 STA 124+05.39, 42' LT
CB TA 4 DIA T8G
RIM 573.39
S.W. INV 569.35
S.E. INV 569.27

24 STA 124+50, 19' RT
CB TA 4D M INL 604101
RIM 571.40
E. INV 568.80

25 STA 124+60, 19' RT
CB TA 4D M INL 604101
RIM 571.45
N.W. INV 568.70
N.E. INV 568.62

26 STA 124+89.98, 24' LT
CB TA 5 DIA T24F&G
RIM 574.28
N.E. INV 568.03 (EX)
N.W. INV 567.28
S.W. INV 568.11

FILE NAME = I:\7000 - I94 at Ohio Street\CADD\CADD SHEETS\D160F63-DRN3.dgn

COLLINS ENGINEERS INC

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	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

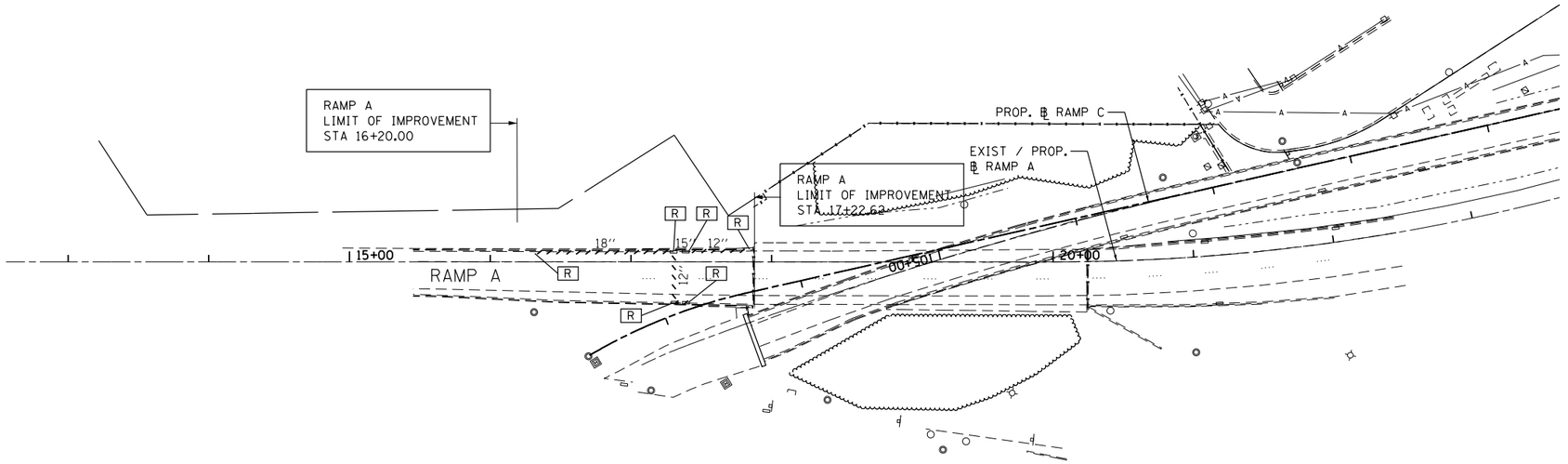
RAMP C
EXISTING AND PROPOSED DRAINAGE PLAN

SCALE: | SHEET NO. 3 OF 5 SHEETS | STA. | TO STA.

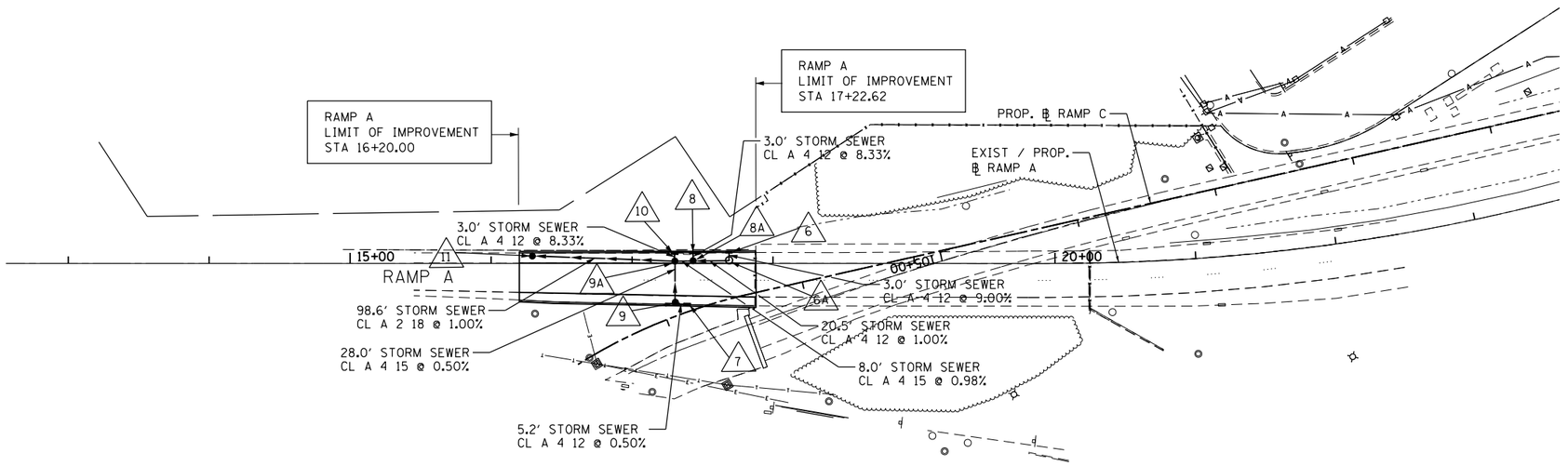
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	127
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES:

1. SUMP ON CATCH BASIN 8A SHALL DEVIATE FROM STANDARD DETAIL AS REQUIRED BY APPROACH SLAB UNDERNEATH.



EXISTING PLAN



PROPOSED PLAN

6 STA 17+68.86, 7.67' LT
INLET TA T24F&G •
RIM 573.00
S INV 570.67

6A STA 17+68.86, 2.00' LT
MH TA 4 DIA T1F&G CL
RIM 573.23
N INV 570.40
W INV 570.32

7 STA 17+39.50, 27.27' RT
INLET TA T3F&G
RIM 573.52
W INV 570.46

8 STA 17+43.43, 7.63' LT
INLET TA T3F&G •
RIM 573.01
S INV 570.85

8A STA 17+43.43, 2.0' LT
CB TA 4 DIA T1F&G OL
RIM 573.26
N INV 570.60
E INV 570.12
W INV 570.04

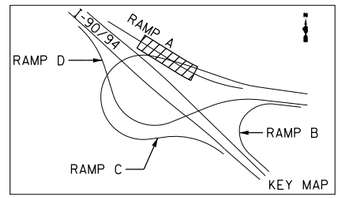
9 STA 17+30.43, 28.94' RT
CB TA 4 DIA T3F&G
RIM 573.48
N INV 567.81
E INV 570.41

9A STA 17+30.47, 2.00' LT
CB TA 5 DIA T1F&G OL
RIM 573.21
N INV 570.55
S INV 567.67
E INV 569.96
W INV 567.09

10 STA 17+30.47, 7.61' LT
INLET TA T3F&G •
RIM 572.96
S INV 570.80

11 STA 16+29.11, 8.112' LT
CB TA 4 DIA T24F&G
RIM 573.71
E INV 566.10
S INV 565.95

• PRECAST INLET REQUIRED



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COLLINS ENGINEERS INC

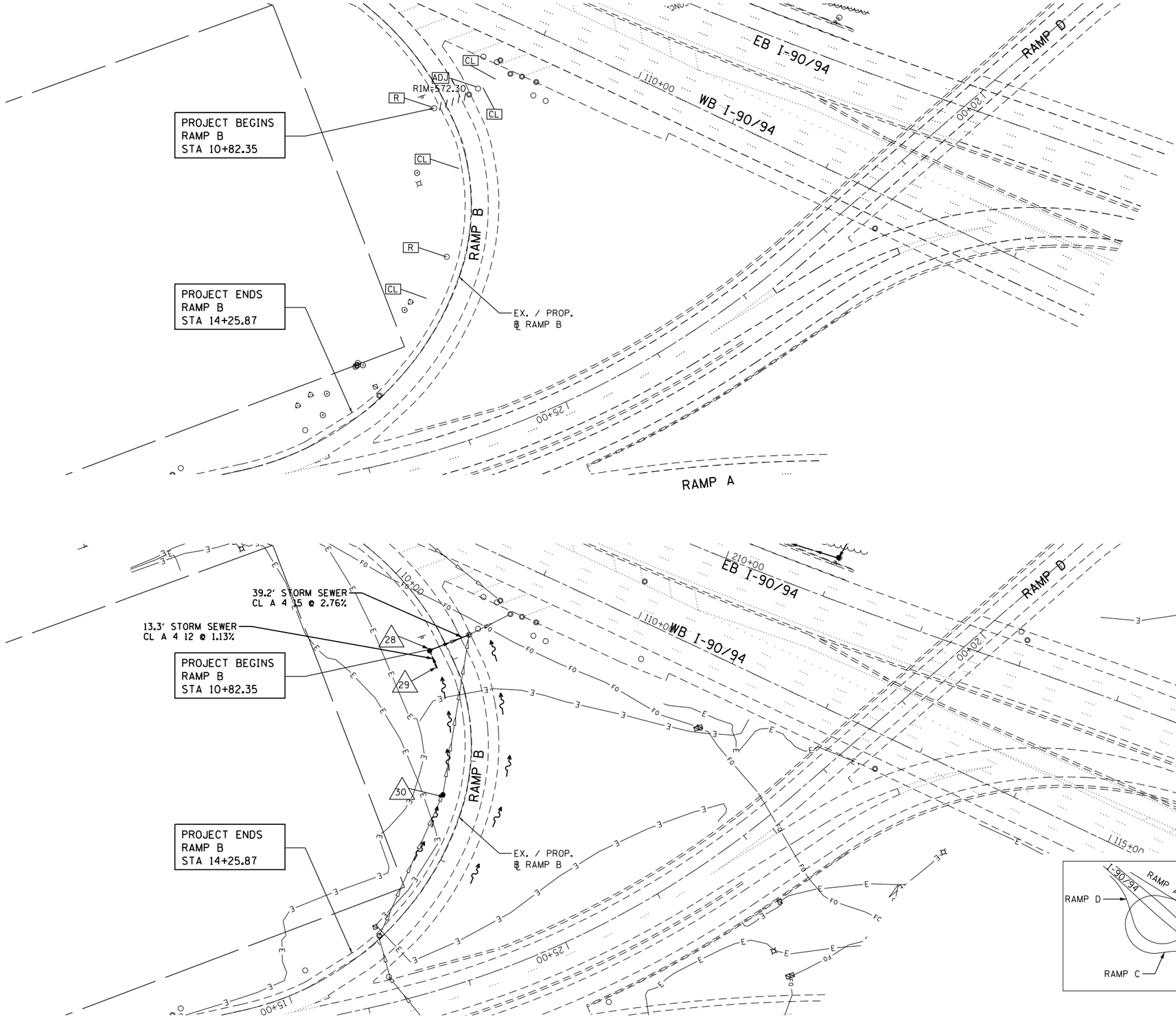
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP A
EXISTING AND PROPOSED DRAINAGE PLAN

SCALE: | SHEET NO. 4 OF 5 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	128
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



28 STA 10+82, 17.0' RT (RAMP B)
CB TA 4 DIA T8G
RIM 570.65
N. INV 567.59
W. INV 566.87

29 STA 11+00, 17.0' RT (RAMP B)
INLET TA T8G
RIM 571.18
S. INV 567.74

30 STA 12+39.6, 20.0' RT (RAMP B)
CB TA 4 DIA T8G
RIM 575.26
S. INV 559.61 (EX)
N. INV 559.61 (EX)

FILE NAME = s:\collinsengr.com\1\data-1\Poseidon\DOCS\72000 - 194 at Ohio Street\CADD\CADD SHEETS\D160F63-ORN5 RAMP B.dgn

COLLINS ENGINEERS INC

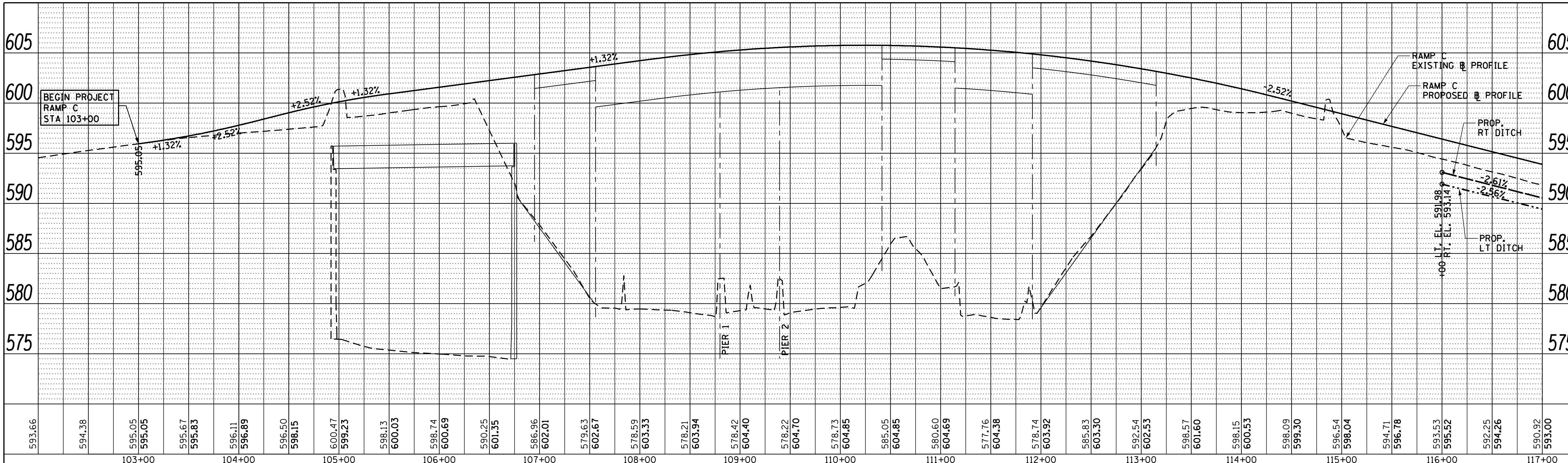
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

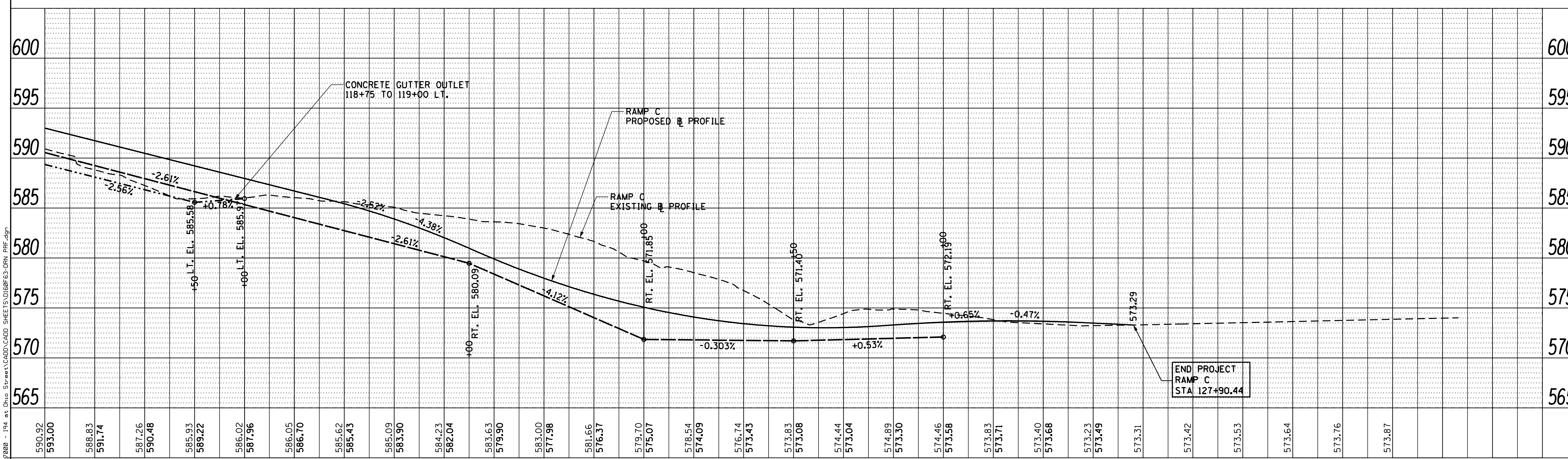
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP B
EXISTING AND PROPOSED DRAINAGE PLAN

SCALE: | SHEET NO. 5 OF 5 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	129
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





FILE NAME = I:\7000 - I94 at Ohio Street\CADD\CADD SHEETS\D160F63-DRN PRF.dgn

COLLINS ENGINEERS INC.

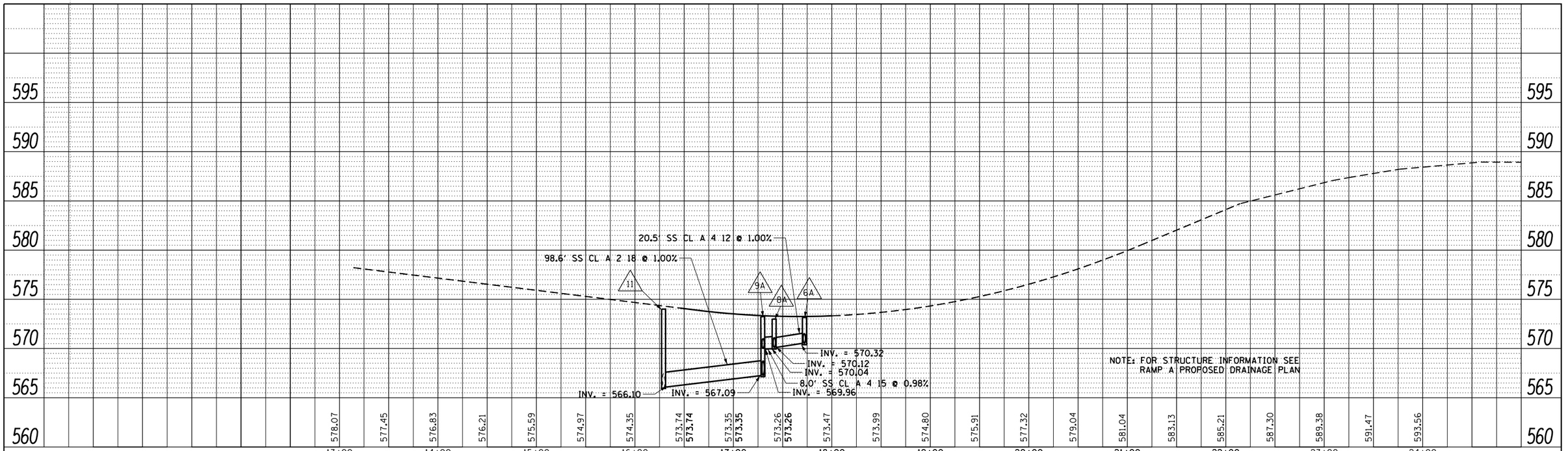
USER NAME = rgall	DESIGNED -	REVISED -	
PLOT SCALE = 100.000 ' / in.	DRAWN -	REVISED -	
PLOT DATE = 3/25/2013	CHECKED -	REVISED -	
	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED DRAINAGE PROFILE
RAMP C

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	130
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



PLAN
SURVEYED
PLOTTED
JOINT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
JOINT CHECKED
R.O.W. CHECKED
S.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.

FILE NAME = i:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\D160F63-DRN PRF RAMP A.dgn

COLLINS ENGINEERS INC

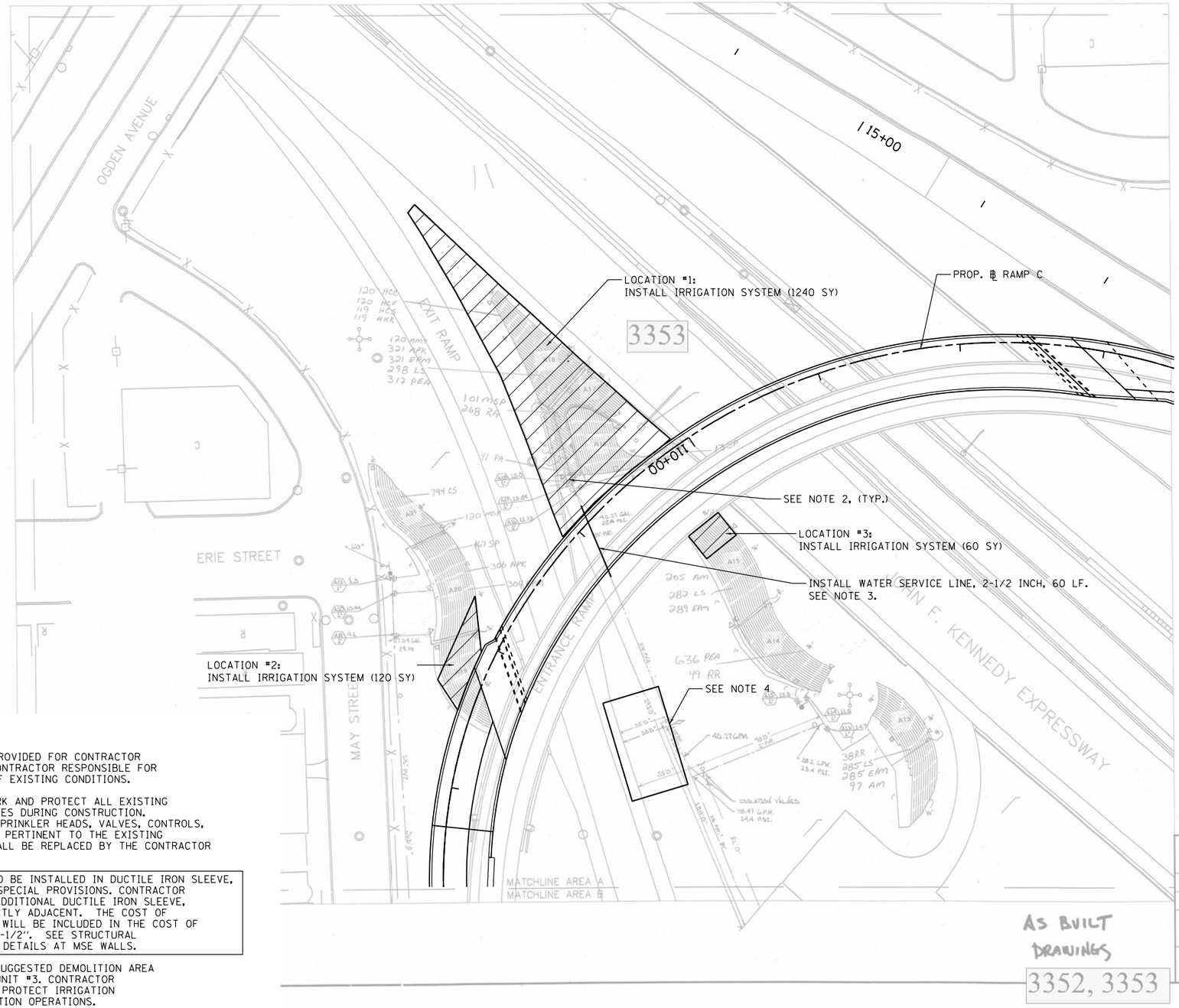
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED DRAINAGE PROFILE
RAMP A

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	131
		CONTRACT NO. 60F63		
	ILLINOIS FED. AID PROJECT			



LEGEND

- WATER SERVICE LINE D.I.P.
- IRRIGATION SERVICE LINE P.V.C.
- DRIP HEADER LINE P.V.C.
- DRIP LINE UNITAFIM
- ISOLATION VALVE
- MASTER VALVE
- ELECTRIC SOLENOID VALVE
- IRRIGATION CONTROLLER
- HANDY HOSE CONNECTION QCV.
- FLUSH VALVE (INSTALL AT LOW POINT)
- AIR VACUUM RELIEF VALVE (INSTALL AT HIGHEST POINT)
- AIR RELEASE AND VACUUM VALVE.
- MANUAL DRAIN VALVE

CONTROLLER "A"

Zone #1 on clock Section #1,2,3 are working for 1hr 33.67 GPM = 2020.2 GPH
Zone #2 on clock Section #4,5,6 are working for 1hr 39.09 GPM = 2345.4 GPH
Zone #3 on clock Section # 7,8 are working for 1hr 22.63 GPM = 1357.8 GPH
Zone #4 on clock Section # 9,10 are working for 1hr 28.41 GPM = 1704.6 GPH
Zone #5 on clock Section #11,12 are working for 1hr 18.97 GPM = 1138.2 GPH
Zone #6 on clock Section #13,14,15 are working for 1hr 38.0 GPM = 2280. GPH
Zone #7 on clock Section # 16,17,18 are working for 1hr 40.27 GPM = 2416.2 GPH
Zone #8 on clock Section # 19,20,21 are working for 1hr 27.54 GPM = 1652.4 GPH

SPRINKLER HEAD LEGEND

KEY	NAME	NO.	S.P.	QUAN.	G.P.M.	TOTAL G.P.M.
— —	UNITAFIM DRIPPER LINE	LT MM	18"	8,940 L.F.	89.94	
⊕	RAIN BIRD ELECTRIC VALVE	PEB		9		
○	QUICK COUPLING VALVE	V-100N		4		
⊠	ISOLATION VALVE 2 PTC			2		

LAWN SPRINKLER CONTRACTORS OF ILLINOIS ENGINEERS ASSOCIATION ILSCEA

PLUMBING CONTRACTORS
LIC.#15978

ANDREW McCANN
Lawn Sprinkling Systems

SCALE: 1"=30'-0	APPROVED BY:		DRAWN BY: T.M.O.
DATE: 01-24-04	"AS BUILT"		REVISED: 11/23/04

EXPRESSWAY GATEWAY BEAUTIFICATION PROJECT

OHIO STREET INTERCHANGE
CHICAGO, IL

DRAWING NUMBER 2004-01A

AS BUILT DRAWINGS

3352, 3353

NOTES:

1. AS-BUILT PLANS ARE PROVIDED FOR CONTRACTOR INFORMATION ONLY. CONTRACTOR RESPONSIBLE FOR VERIFYING ACCURACY OF EXISTING CONDITIONS.
2. CONTRACTOR SHALL MARK AND PROTECT ALL EXISTING VALVES AND VALVE BOXES DURING CONSTRUCTION. ALL DAMAGED PIPING, SPRINKLER HEADS, VALVES, CONTROLS, OR OTHER ACCESSORIES PERTINENT TO THE EXISTING IRRIGATION SYSTEM SHALL BE REPLACED BY THE CONTRACTOR AT HIS/HER EXPENSE.
3. WATER SERVICE LINE TO BE INSTALLED IN DUCTILE IRON SLEEVE, 6 INCH DIAMETER PER SPECIAL PROVISIONS. CONTRACTOR SHALL CONSTRUCT AN ADDITIONAL DUCTILE IRON SLEEVE, 6 INCH DIAMETER DIRECTLY ADJACENT. THE COST OF THE AUXILIARY SLEEVE WILL BE INCLUDED IN THE COST OF WATER SERVICE LINE, 2-1/2". SEE STRUCTURAL PLANS FOR ADDITIONAL DETAILS AT MSE WALLS.
4. BOXED AREA DENOTES SUGGESTED DEMOLITION AREA FOR SUPERSTRUCTURE UNIT #3. CONTRACTOR TO LOCATE, MARK, AND PROTECT IRRIGATION VALVES DURING DEMOLITION OPERATIONS. ANY DAMAGE TO EXISTING IRRIGATION SYSTEM DUE TO CONSTRUCTION OPERATIONS SHALL BE REPLACED BY THE CONTRACTOR AT HIS/HER EXPENSE.

FILE NAME = I:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\D160F63-sht-irrigation.dgn

COLLINS ENGINEERS INC

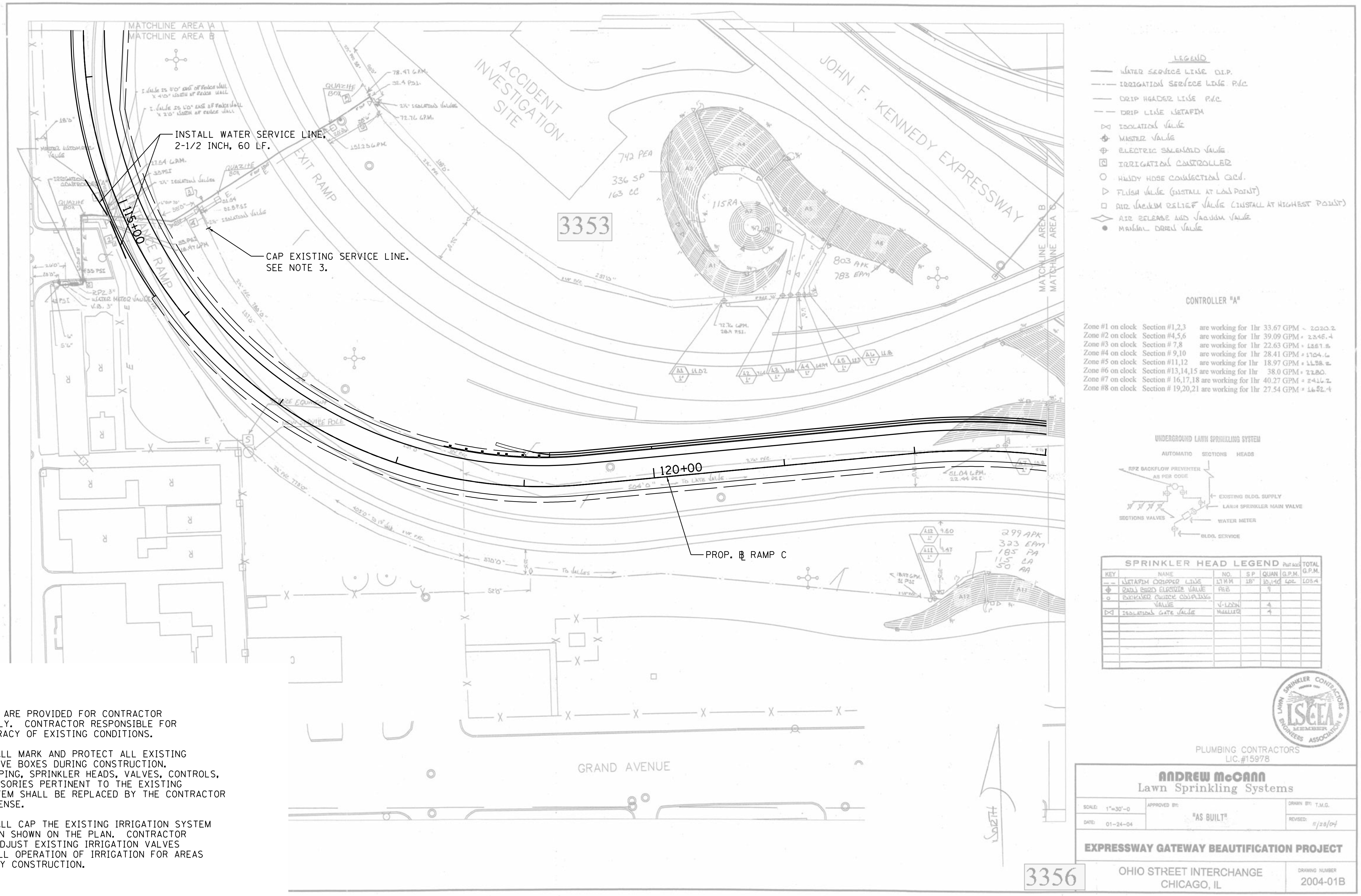
USER NAME = rgall	DESIGNED -	REVISED -	
PLOT SCALE = 80.000000 ' / in.	DRAWN -	REVISED -	
PLOT DATE = 3/25/2013	CHECKED -	REVISED -	
	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
MODIFICATIONS TO EXISTING IRRIGATION SYSTEM

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	132
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. AS-BUILT PLANS ARE PROVIDED FOR CONTRACTOR INFORMATION ONLY. CONTRACTOR RESPONSIBLE FOR VERIFYING ACCURACY OF EXISTING CONDITIONS.

2. CONTRACTOR SHALL MARK AND PROTECT ALL EXISTING VALVES AND VALVE BOXES DURING CONSTRUCTION. ALL DAMAGED PIPING, SPRINKLER HEADS, VALVES, CONTROLS, OR OTHER ACCESSORIES PERTINENT TO THE EXISTING IRRIGATION SYSTEM SHALL BE REPLACED BY THE CONTRACTOR AT HIS/HER EXPENSE.

3. CONTRACTOR SHALL CAP THE EXISTING IRRIGATION SYSTEM AT THE LOCATION SHOWN ON THE PLAN. CONTRACTOR SHALL ADD OR ADJUST EXISTING IRRIGATION VALVES TO MAINTAIN FULL OPERATION OF IRRIGATION FOR AREAS NOT IMPACTED BY CONSTRUCTION.

FILE NAME = I:\7000 - I94 at Ohio Street\CADD\CADD SHEETS\D160F63-sht-irrigation.dgn

COLLINS ENGINEERS INC.

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PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

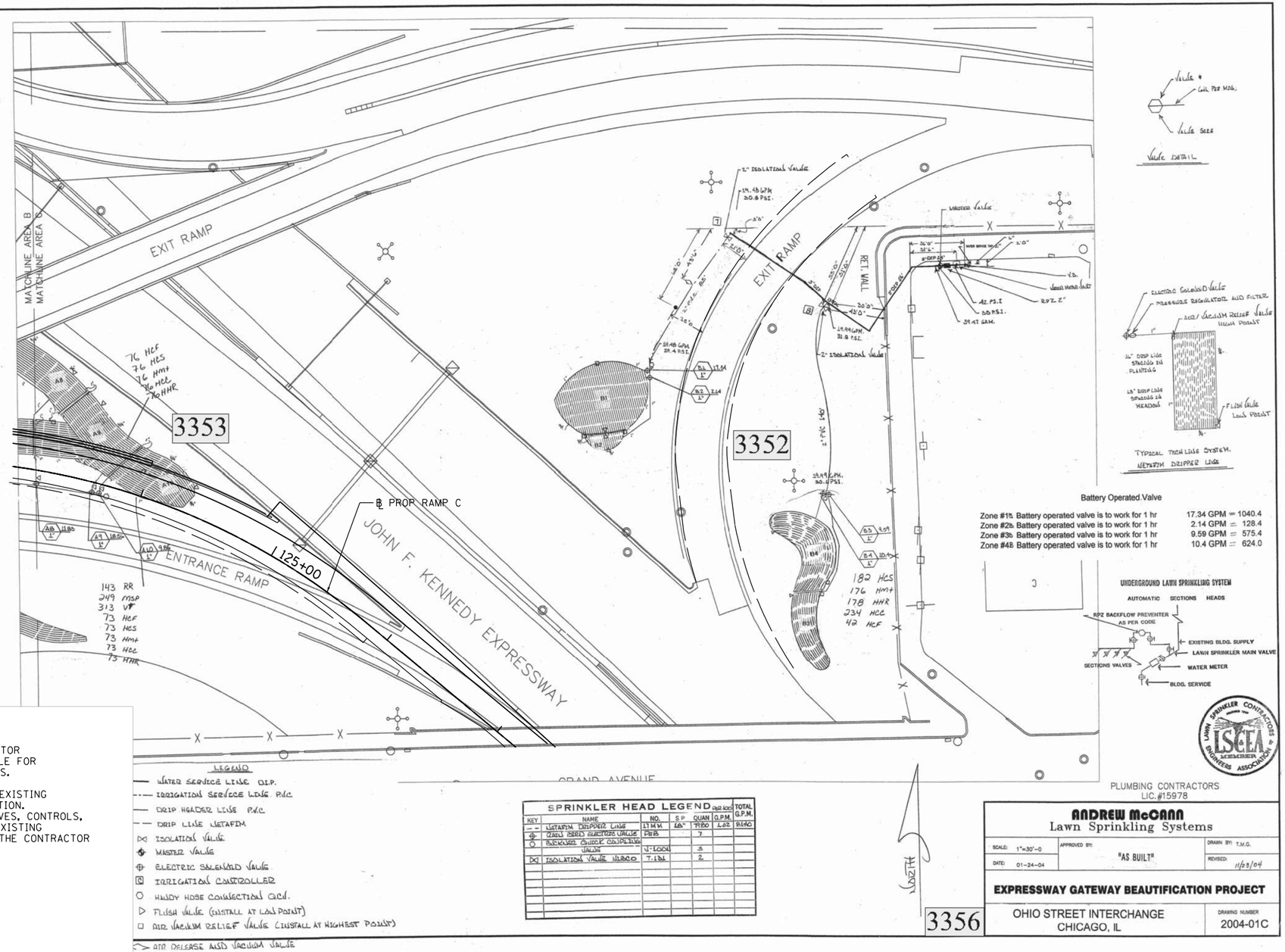
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–90/94 AT OHIO STREET
MODIFICATIONS TO EXISTING IRRIGATION SYSTEM

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	133
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



NOTES:

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COLLINS ENGINEERS INC

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	DATE -	REVISED -	

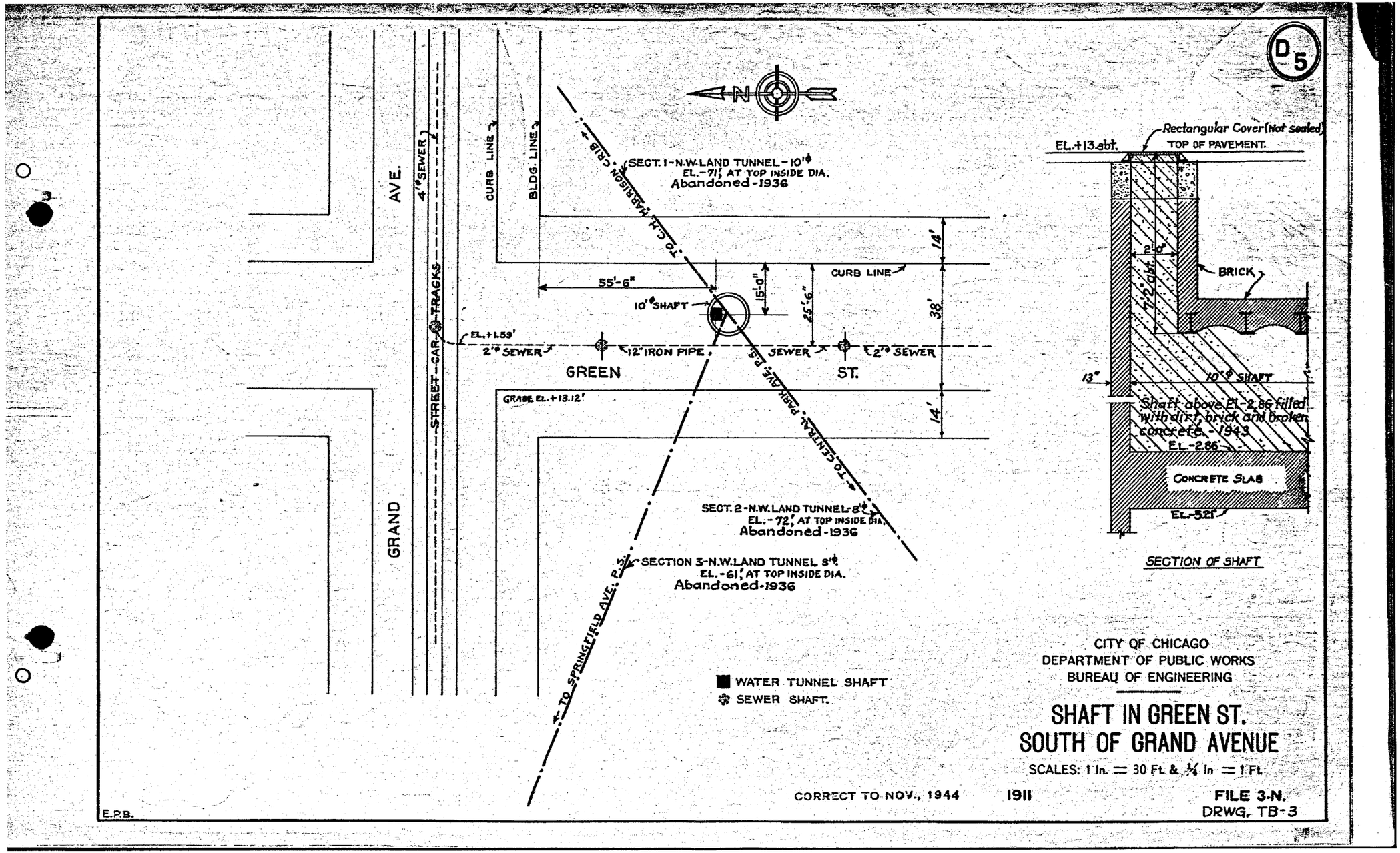
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
MODIFICATIONS TO EXISTING IRRIGATION SYSTEM

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	134
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



NOTES:

1. AS BUILT PLANS OF THE TUNNEL DROPSHAFTS ARE INCLUDED IN THE CONTRACT PLANS FOR CONTRACTOR INFORMATION ONLY. THE CONTRACTOR MAY UTILIZE THIS INFORMATION TO LOCATE THE TUNNEL ENDPOINTS TO ASSIST IN FIELD LOCATING THE EXISTING TUNNEL THROUGH THE PROJECT AREA.

2. THE CONTRACTOR SHOULD BE ADVISED THAT THE TUNNEL DROP SHAFTS ARE PAVED OVER AND MAY NOT BE ABLE TO BE VISUALLY LOCATED.

FOR INFORMATION ONLY

FILE NAME = I:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\D160F63-Bulkhead Detail.dgn

COLLINS ENGINEERS INC.

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 40.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
EXISTING WATER TUNNEL
BULKHEAD NOTES AND DETAILS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	135
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

D 7

AVE.

4" Sewer

STREET-CAR-TRACKS

W. CHICAGO

ALLEY

GRADE + 14.0'

BUILDING LINE

CURB LINE

10'

(KEITH) N. ELIZABETH ST.

1' SEWER

30'

EL. + 3.45'

8' TUNNEL EL.- 61' AT TOP INSIDE DIA.

10' DIA.

18'-0"

18"

CURB LINE

BUILDING LINE

10'

92'-0"

16'-0"

181'-6"

SEC. 3 NORTH-WEST LAND TUNNEL EL. - 61'

10'-0" Dia.

2'-6"

2'-11"

2'-6"

3'-4"

9"I-21#, 4'-0" Lg. 18" Ctrs.

W. CURB LINE

℄ OF STREET

13'-6" TO ℄ OF STREET

1'-6"

ASPHALT PAVEMENT

3'-6"

GRADE EL. + 14.0'

1'-6"

11'-5"

3½"

3'-3⅝"

Note:

Shaft filled with Clay - Feb. 1937
Gate left open.

CITY OF CHICAGO
DEPARTMENT OF PUBLIC WORKS
BUREAU OF ENGINEERING

SHAFT IN KEITH ST. Changed to N. ELIZABETH ST. SOUTH OF WEST CHICAGO AVE.

SCALES: 1 In. = 30 Ft. & ¼ In. = 1 Ft.

1911

FILE 3-N.
DRWG. TB-5

CORRECT TO NOV., 1944

L-M-B

NOTES:

1. AS BUILT PLANS OF THE TUNNEL DROPSHAFTS ARE INCLUDED IN THE CONTRACT PLANS FOR CONTRACTOR INFORMATION ONLY. THE CONTRACTOR MAY UTILIZE THIS INFORMATION TO LOCATE THE TUNNEL ENDPOINTS TO ASSIST IN FIELD LOCATING THE EXISTING TUNNEL THROUGH THE PROJECT AREA.

2. THE CONTRACTOR SHOULD BE ADVISED THAT THE TUNNEL DROP SHAFTS ARE PAVED OVER AND MAY NOT BE ABLE TO BE VISUALLY LOCATED.

FOR INFORMATION ONLY

FILE NAME = I:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\D1&6F63-Bulkhead Detail.dgn

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
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PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
EXISTING WATER TUNNEL
BULKHEAD NOTES AND DETAILS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	136
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES:

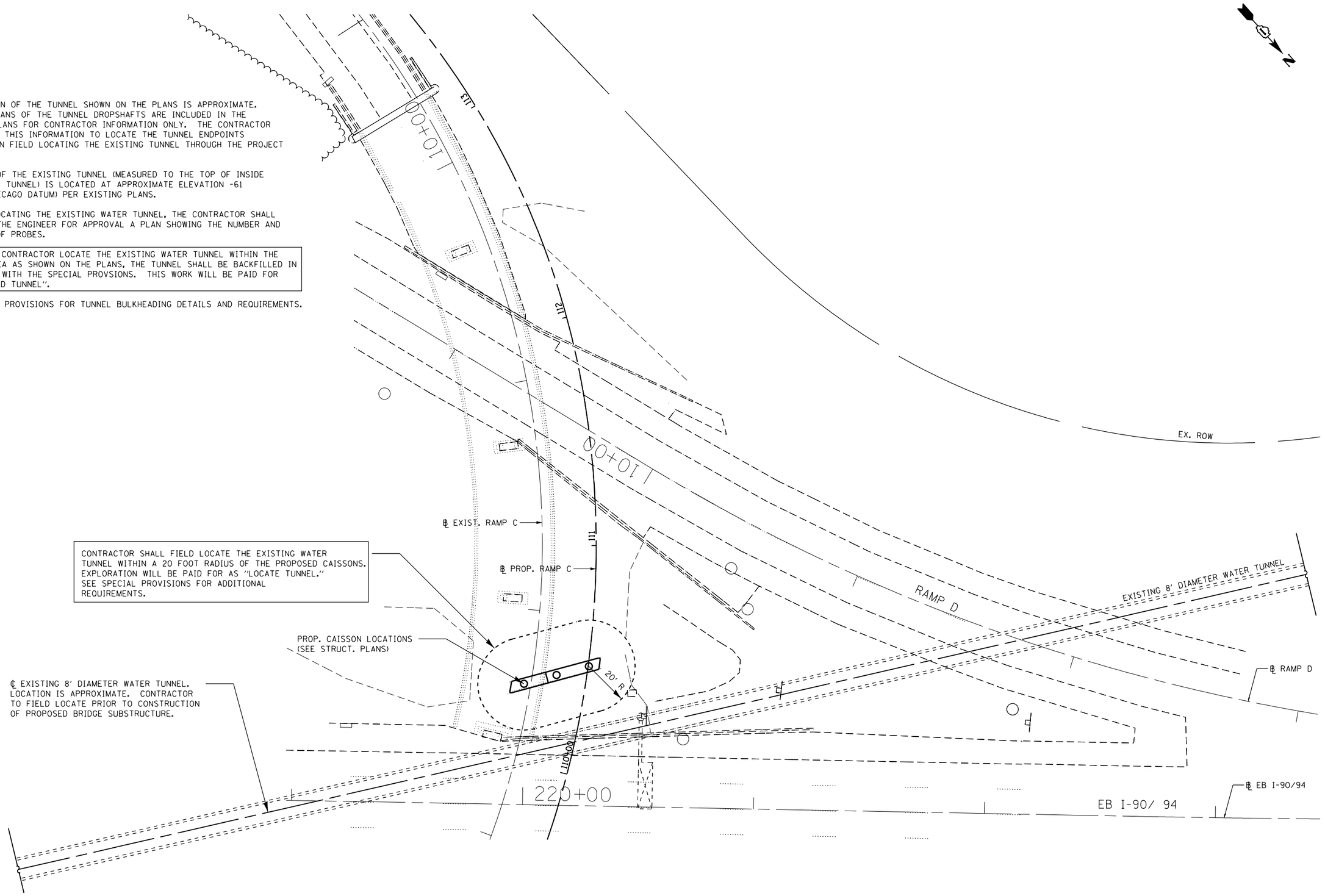
1. THE LOCATION OF THE TUNNEL SHOWN ON THE PLANS IS APPROXIMATE. AS BUILT PLANS OF THE TUNNEL DROPSHAFTS ARE INCLUDED IN THE CONTRACT PLANS FOR CONTRACTOR INFORMATION ONLY. THE CONTRACTOR MAY UTILIZE THIS INFORMATION TO LOCATE THE TUNNEL ENDPOINTS TO ASSIST IN FIELD LOCATING THE EXISTING TUNNEL THROUGH THE PROJECT AREA.

2. THE DEPTH OF THE EXISTING TUNNEL (MEASURED TO THE TOP OF INSIDE DIAMETER OF TUNNEL) IS LOCATED AT APPROXIMATE ELEVATION -61 (CITY OF CHICAGO DATUM) PER EXISTING PLANS.

3. PRIOR TO LOCATING THE EXISTING WATER TUNNEL, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A PLAN SHOWING THE NUMBER AND LOCATIONS OF PROBES.

4. SHOULD THE CONTRACTOR LOCATE THE EXISTING WATER TUNNEL WITHIN THE DENOTED AREA AS SHOWN ON THE PLANS, THE TUNNEL SHALL BE BACKFILLED IN ACCORDANCE WITH THE SPECIAL PROVSIONS. THIS WORK WILL BE PAID FOR AS "BULKHEAD TUNNEL".

5. SEE SPECIAL PROVISIONS FOR TUNNEL BULKHEADING DETAILS AND REQUIREMENTS.



FILE NAME = I:\7000 - I94 at Ohio Street\CADD\CADD SHEETS\D160F63-Bulkhead Detail.dgn

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 40.000000 '/ in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
EXISTING WATER TUNNEL
BULKHEAD NOTES AND DETAILS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	136A
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

——— A ——— A ———	AERIAL
— — — — — — —	UNKNOWN
——— CTV ——— CTV ———	CABLE TV
——— T ——— T ———	TELEPHONE
——— G ———	GAS
——— E ——— E ———	ELECTRIC
——— W ———	WATER
——— FO ——— FO ———	FIBER OPTIC
⌖	TBE TEST HOLE

UTILITY OWNERS

AT&T = TELEPHONE
CHICAGO WATER = WATER
CITY ELECTRIC= ELECTRIC
COM-ED = ELECTRIC
IDOT ELECTRIC = ELECTRIC
IDOT FIBER = FIBER OPTIC
IDOT LIGHTING = ELECTRIC

Utilities shown on these plans as depicted in the legend have been investigated by Cardno TBE in accordance with SUE Industry Standards. All other information shown has been provided to Cardno TBE by others. Cardno TBE's QL"B" SUE field investigation was performed 6/11/12 through 7/10/12. Changes to utilities after 7/10/12 may have been made and therefore may result in variances from this plan. Consideration should be given to updating this plan if deemed advisable prior to final design and construction.

ALL UTILITIES SHOWN QUALITY LEVEL "B"
UNLESS NOTED OTHERWISE.

20 0 METERS 20 40
50 0 FEET 50 100

LICENSED PROFESSIONAL ENGINEER
KENNETH F. SLANINKA, Jr.
062-055488
STATE OF ILLINOIS

signature
8/6/12
date
license expires 11-30-13

Cardno TBE
CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL * PLANNING * UTILITY ENGINEERING/LOCATING

Dynasty Group
Engineers & Surveyors

TBE Job No. IL09510482
SUE Plan Page: COVER

Utility Quality Level "A" : visually verified Test Hole
Utility Quality Level "B" : Designating/non Visually Verified Test Hole
Utility Quality Level "C" : Research with Survey
Utility Quality Level "D" : Records Research

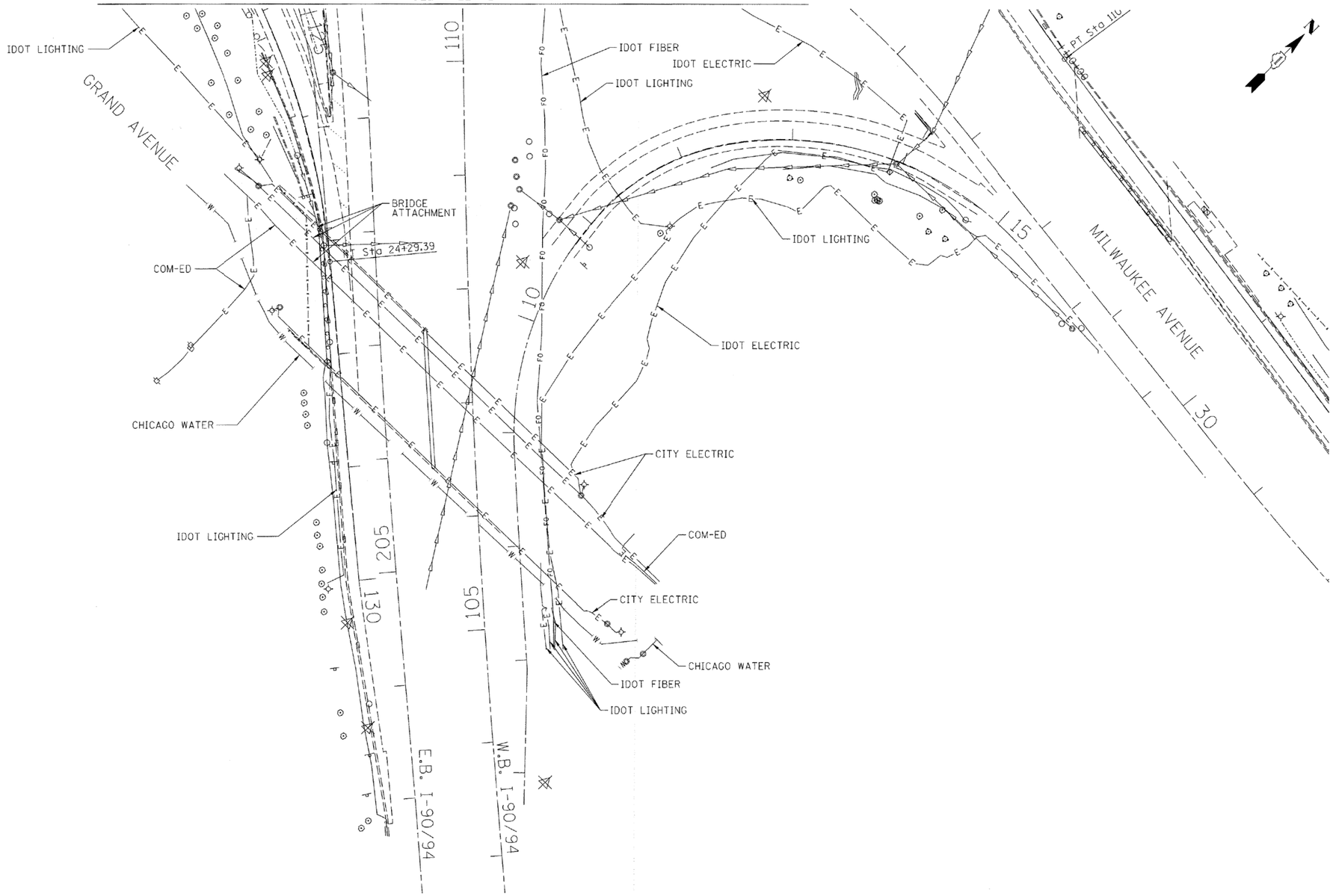
DESIGNED	LP	REVISED
DRAWN	SRK	REVISED
CHECKED	JB	REVISED
DATE	8/3/12	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–90 at Ohio Street
Chicago, Illinois

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0303-474 HB-R	Cook	368	137
		Contract No. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	IDOT Project No.		

SEE SHEET 2



A — A — AERIAL
UNKNOWN
CTV — CTV — CABLE TV
T — T — TELEPHONE
G — G — GAS
E — E — ELECTRIC
W — W — WATER
FO — FO — FIBER OPTIC
TBE TEST HOLE

UTILITY OWNERS
AT&T = TELEPHONE
CHICAGO WATER = WATER
CITY ELECTRIC= ELECTRIC
COM-ED = ELECTRIC
IDOT ELECTRIC = ELECTRIC
IDOT FIBER = FIBER OPTIC
IDOT LIGHTING = ELECTRIC

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ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.

20 0 METERS 20 40
50 0 FEET 50 100

LICENSED PROFESSIONAL ENGINEER
KENNETH F. SLANINKA, Jr.
062-055488
STATE OF ILLINOIS
signature
8/24/12
date
license expires 11-30-13

Cardno TBE
CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL * PLANNING * UTILITY ENGINEERING/LOCATING

Dynasty Group
Engineers & Surveyors

TBE Job No. IL09510482
SUE Plan Page: 1 of 3

Utility Quality Level "A" : visually verified Test Hole
Utility Quality Level "B" : Designating/non Visually Verified Test Hole
Utility Quality Level "C" : Research with Survey
Utility Quality Level "D" : Records Research

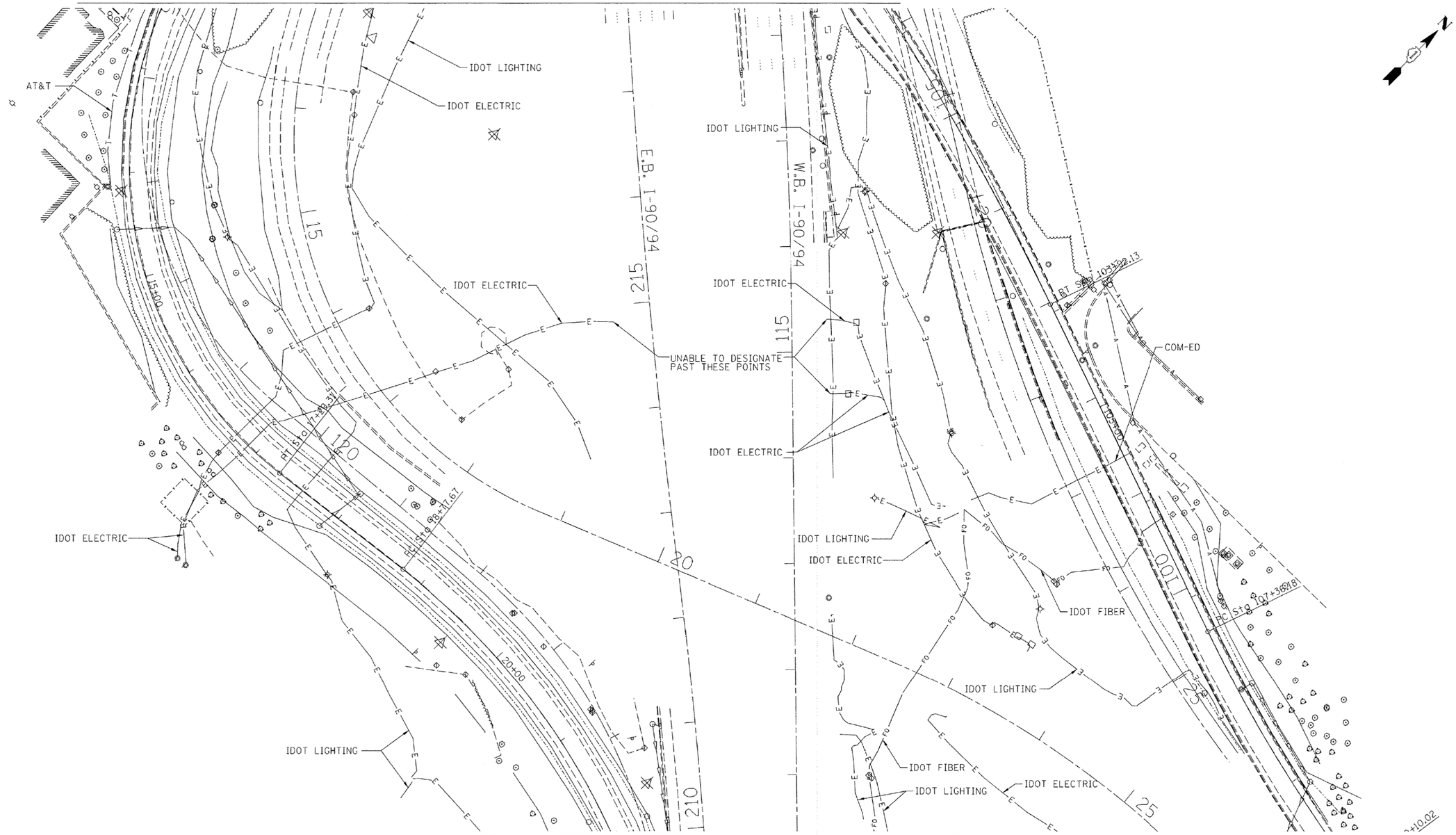
DESIGNED	LP	REVISED
DRAWN	SRK	REVISED
CHECKED	JB	REVISED
DATE	8/3/12	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90 at Ohio Street
Chicago, Illinois

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0303-474 HB-R	Cook	368	138
		Contract No. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	IDOT Project No.		

SEE SHEET 3



SEE SHEET 1

AERIAL	A
UNKNOWN	
CABLE TV	CTV
TELEPHONE	T
GAS	G
ELECTRIC	E
WATER	W
FIBER OPTIC	FO
TBE TEST HOLE	

UTILITY OWNERS

AT&T = TELEPHONE
CHICAGO WATER = WATER
CITY ELECTRIC= ELECTRIC
COM-ED = ELECTRIC
IDOT ELECTRIC = ELECTRIC
IDOT FIBER = FIBER OPTIC
IDOT LIGHTING = ELECTRIC

Utilities shown on these plans as depicted in the legend have been investigated by Cardno TBE in accordance with SUE Industry Standards. All other information shown has been provided to Cardno TBE by others. Cardno TBE's QL"B" SUE field investigation was performed 6/11/12 through 7/10/12. Changes to utilities after 7/10/12 may have been made and therefore may result in variances from this plan. Consideration should be given to updating this plan if deemed advisable prior to final design and construction.

ALL UTILITIES SHOWN QUALITY LEVEL "B" UNLESS NOTED OTHERWISE.

20 0 METERS 20 40
50 0 FEET 50 100

KENNETH F. SLANINKA, Jr. 062-055488 LICENSED PROFESSIONAL ENGINEER STATE OF ILLINOIS
signature
8/6/12
date
license expires 11-30-13

Cardno TBE
CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL * PLANNING * UTILITY ENGINEERING/LOCATING

Dynasty Group
Engineers & Surveyors

TBE Job No. IL09510482
SUE Plan Page: 2 of 3

Utility Quality Level "A" : visually verified Test Hole
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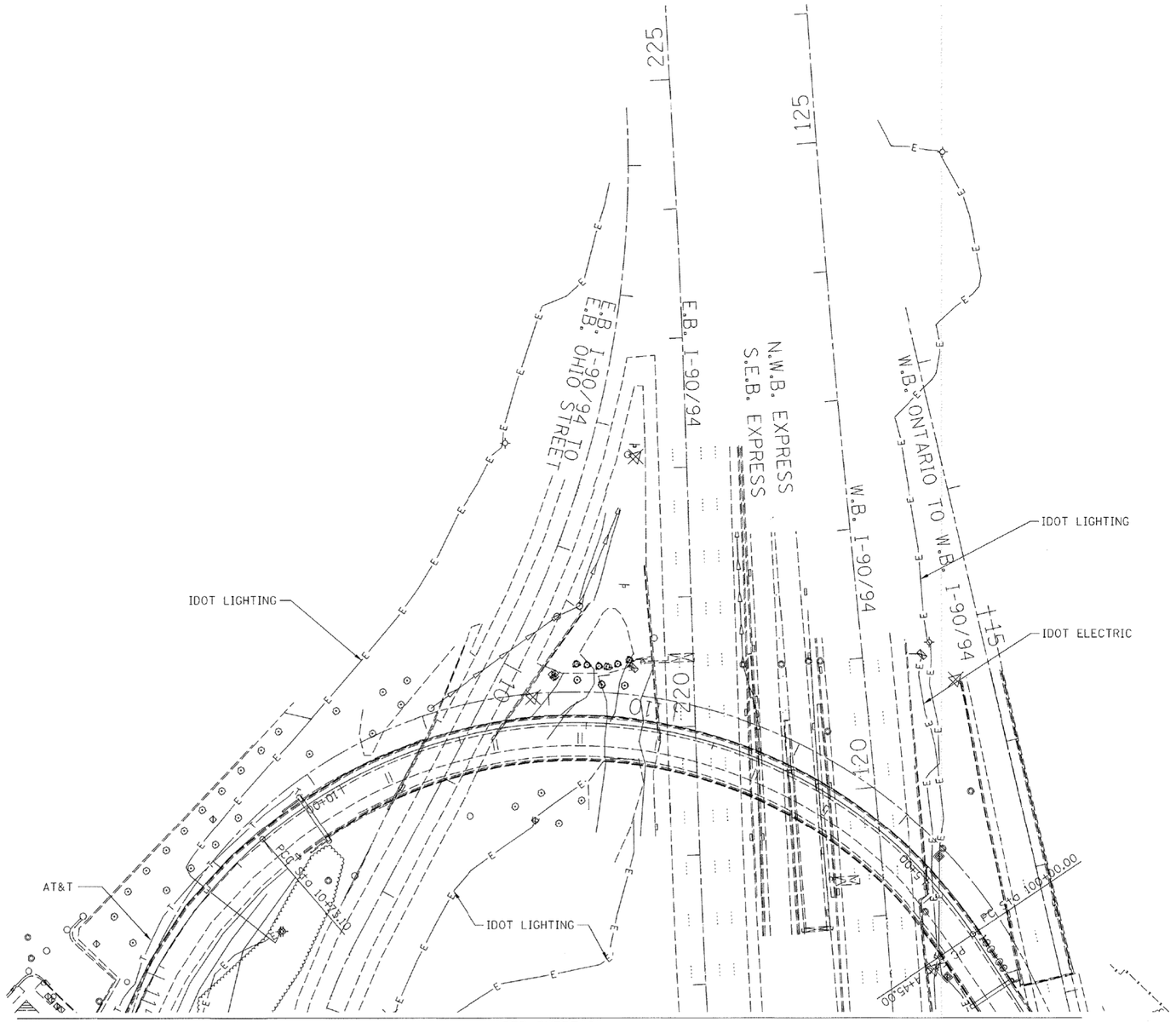
Utility Quality Level "D" : Records Research

DESIGNED	LP	REVISED
DRAWN	SRK	REVISED
CHECKED	JB	REVISED
DATE	8/3/12	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90 at Ohio Street
Chicago, Illinois

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0303-474 HB-R	Cook	368	139
		Contract No. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	IDOT Project No.		



AERIAL
UNKNOWN
CABLE TV
TELEPHONE
GAS
ELECTRIC
WATER
FIBER OPTIC
TBE TEST HOLE

Utility Quality Level "A" : visually verified Test Hole
Utility Quality Level "B" : Designating/non Visually Verified Test Hole
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UTILITY OWNERS

AT&T = TELEPHONE
CHICAGO WATER = WATER
CITY ELECTRIC= ELECTRIC
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20 0 METERS 20 40
50 0 FEET 50 100

KENNETH F. SLANINKA, Jr. 062-055488 LICENSED PROFESSIONAL ENGINEER STATE OF ILLINOIS
signature
8/6/13
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Cardno TBE
CIVIL ENGINEERING * TRANSPORTATION * ENVIRONMENTAL * PLANNING * UTILITY ENGINEERING/LOCATING

Dynasty Group
Engineers & Surveyors

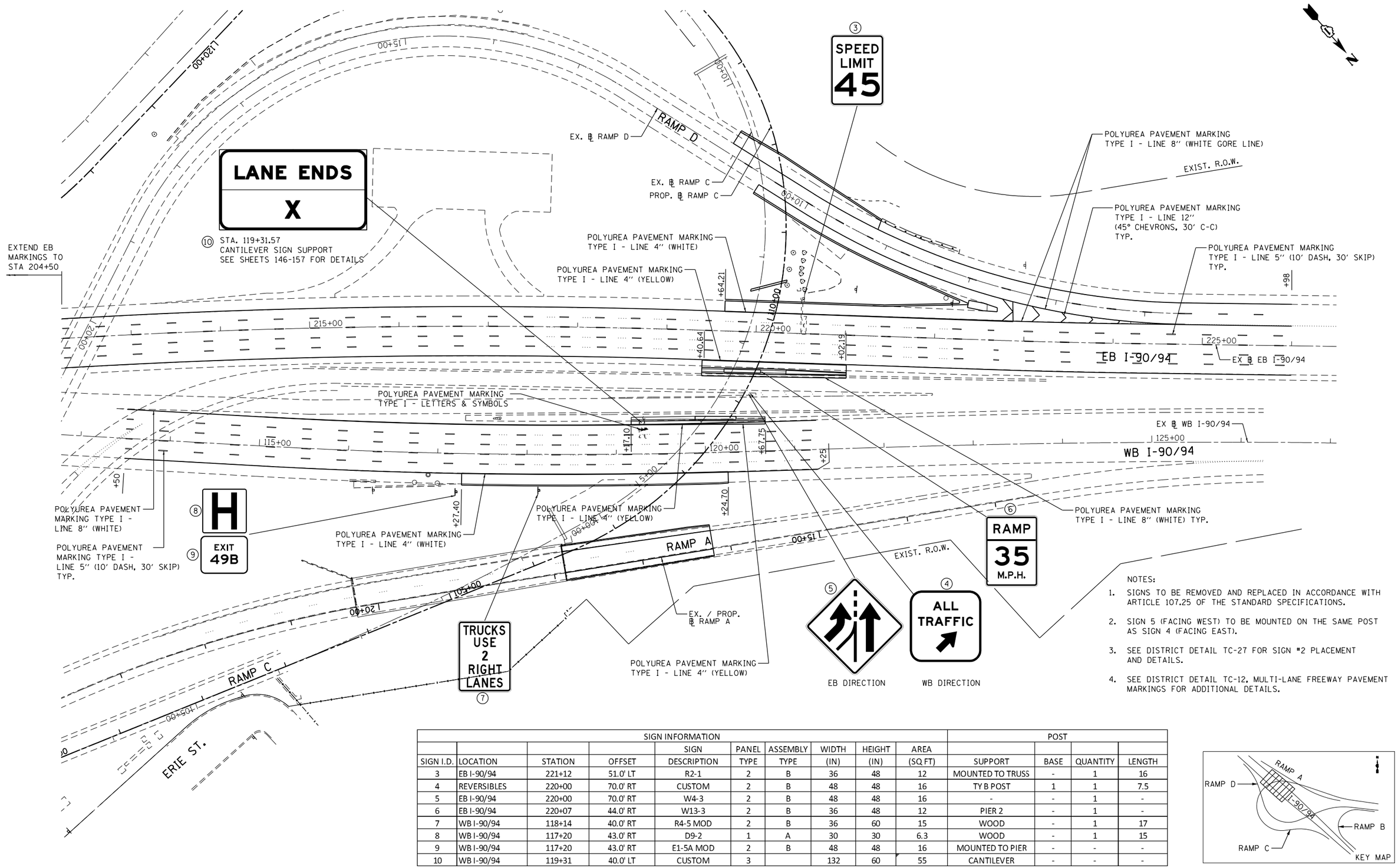
TBE Job No. IL09510482
SUE Plan Page: 3 of 3

DESIGNED	LP	REVISED
DRAWN	SRK	REVISED
CHECKED	JB	REVISED
DATE	8/3/12	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90 at Ohio Street
Chicago, Illinois

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0303-474 HB-R	Cook	368	140
		Contract No. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	IDOT Project No.		



NOTES:

1. SIGNS TO BE REMOVED AND REPLACED IN ACCORDANCE WITH ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
2. SIGN 5 (FACING WEST) TO BE MOUNTED ON THE SAME POST AS SIGN 4 (FACING EAST).
3. SEE DISTRICT DETAIL TC-27 FOR SIGN #2 PLACEMENT AND DETAILS.
4. SEE DISTRICT DETAIL TC-12, MULTI-LANE FREEWAY PAVEMENT MARKINGS FOR ADDITIONAL DETAILS.

SIGN INFORMATION										POST			
SIGN I.D.	LOCATION	STATION	OFFSET	SIGN DESCRIPTION	PANEL TYPE	ASSEMBLY TYPE	WIDTH (IN)	HEIGHT (IN)	AREA (SQ FT)	SUPPORT	BASE	QUANTITY	LENGTH
3	EB I-90/94	221+12	51.0' LT	R2-1	2	B	36	48	12	MOUNTED TO TRUSS	-	1	16
4	REVERSIBLES	220+00	70.0' RT	CUSTOM	2	B	48	48	16	TY B POST	1	1	7.5
5	EB I-90/94	220+00	70.0' RT	W4-3	2	B	48	48	16	-	-	1	-
6	EB I-90/94	220+07	44.0' RT	W13-3	2	B	36	48	12	PIER 2	-	1	-
7	WB I-90/94	118+14	40.0' RT	R4-5 MOD	2	B	36	60	15	WOOD	-	1	17
8	WB I-90/94	117+20	43.0' RT	D9-2	1	A	30	30	6.3	WOOD	-	1	15
9	WB I-90/94	117+20	43.0' RT	E1-5A MOD	2	B	48	48	16	MOUNTED TO PIER	-	-	-
10	WB I-90/94	119+31	40.0' LT	CUSTOM	3		132	60	55	CANTILEVER	-	-	-

FILE NAME = i:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\D160F63-PVMN.dgn

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94
PAVEMENT MARKING AND SIGNING

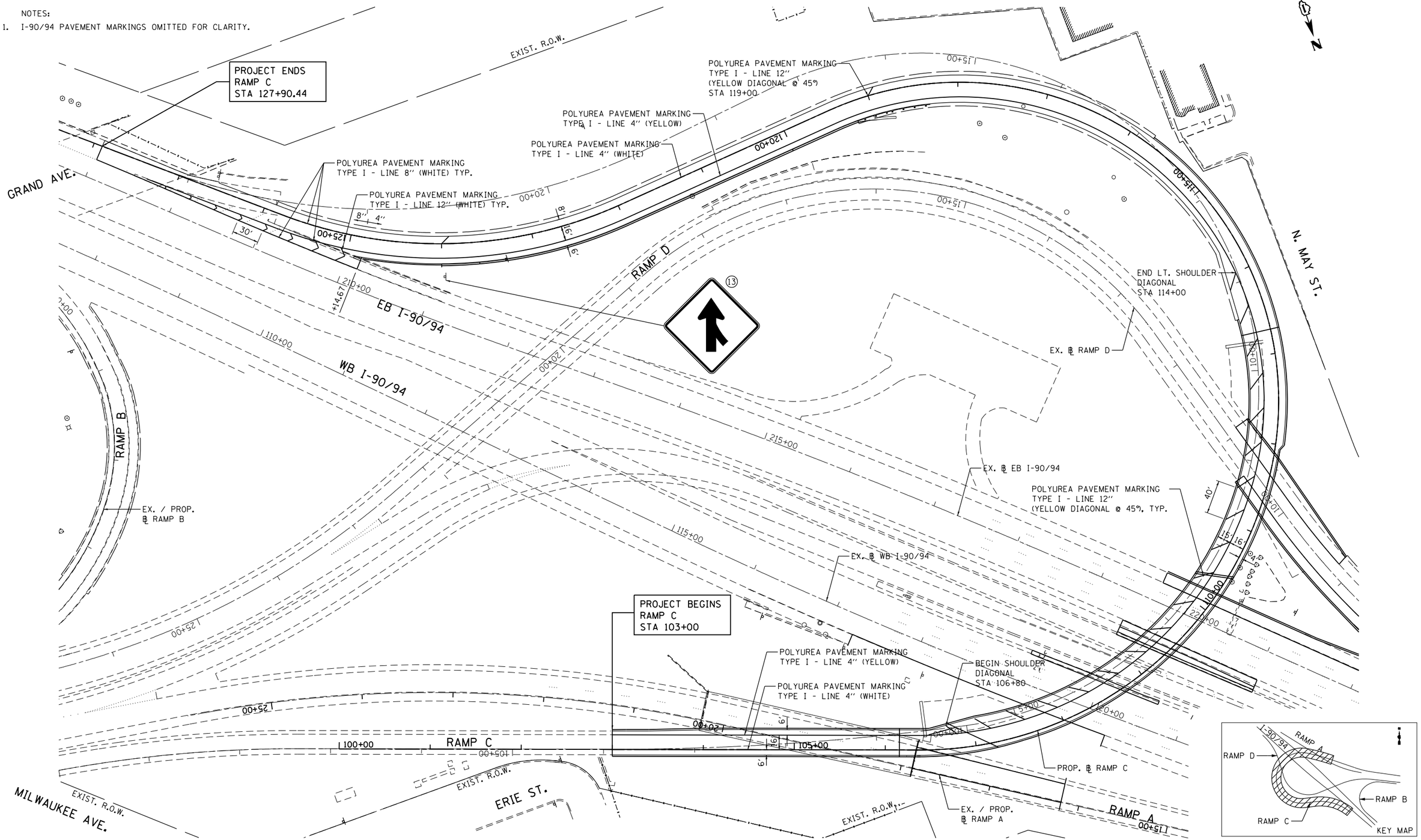
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	141
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SIGN INFORMATION										POST			
				SIGN	PANEL	ASSEMBLY	WIDTH	HEIGHT	AREA				
SIGN I.D.	LOCATION	STATION	OFFSET	DESCRIPTION	TYPE	TYPE	(IN)	(IN)	(SQ FT)	SUPPORT	BASE	QUANTITY	LENGTH
13	RAMP C	124+00	36.0' LT	W4-1	2	B	48	48	16	WOOD	-	1	16

NOTES:

1. I-90/94 PAVEMENT MARKINGS OMITTED FOR CLARITY.



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PLOT SCALE = 100.000000 ' / in.	DRAWN -	REVISED -	
PLOT DATE = 3/25/2013	CHECKED -	REVISED -	
	DATE -	REVISED -	

COLLINS ENGINEERS INC

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP C
PAVEMENT MARKING AND SIGNING

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	142
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

PROJECT BEGINS
RAMP A
STA 16+20.00

EXIST. R.O.W.

℄ WB I-90/94

15+00

RAMP A

POLYUREA PAVEMENT MARKING
TYPE I - LINE 4" (YELLOW)

POLYUREA PAVEMENT MARKING
TYPE I - LINE 4" (WHITE)

EXIST. R.O.W.

℄ EB I-90/94

00+50

20+00

RAMP C

00+00

25+00

EX. / PROP.
℄ RAMP A

PROJECT ENDS
RAMP A
STA 20+24.45

WB I-90/94

EB I-90/94

EXIST. R.O.W.

10+00

PROP. ℄ RAMP C

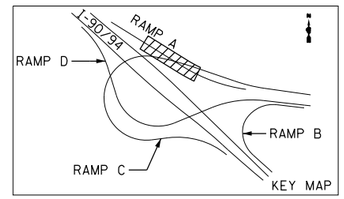
EX. ℄ RAMP C

EX. ℄ RAMP D

RAMP D

11+00

20+00



KEY MAP

FILE NAME = i:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\SD160F63-PVMTA.dgn

COLLINS ENGINEERS INC.

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP A
PAVEMENT MARKING AND SIGNING

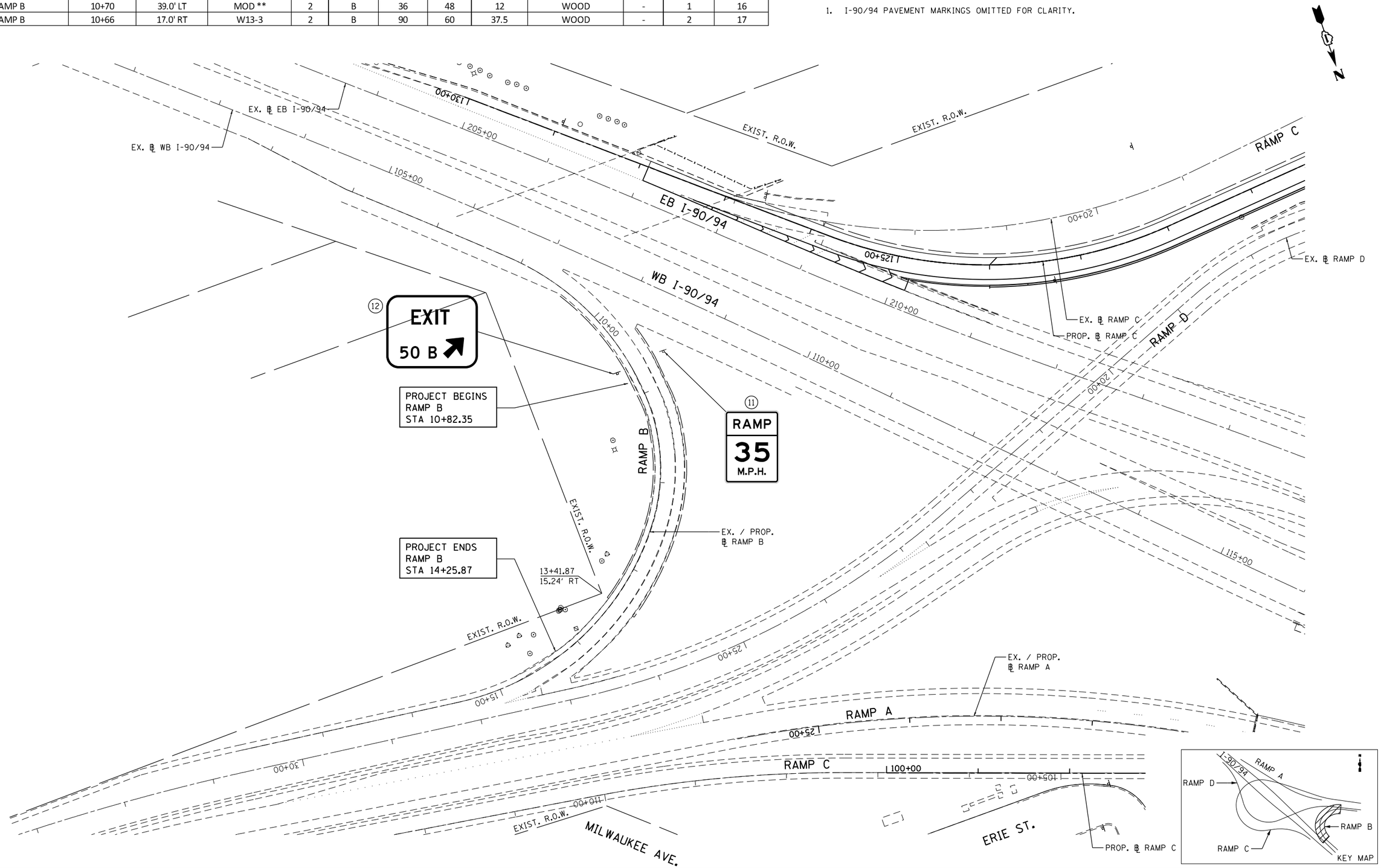
SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	143
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

SIGN INFORMATION										POST			
				SIGN	PANEL	ASSEMBLY	WIDTH	HEIGHT	AREA				
SIGN I.D.	LOCATION	STATION	OFFSET	DESCRIPTION	TYPE	TYPE	(IN)	(IN)	(SQ FT)	SUPPORT	BASE	QUANTITY	LENGTH
11	RAMP B	10+70	39.0' LT	MOD **	2	B	36	48	12	WOOD	-	1	16
12	RAMP B	10+66	17.0' RT	W13-3	2	B	90	60	37.5	WOOD	-	2	17

NOTES:
1. I-90/94 PAVEMENT MARKINGS OMITTED FOR CLARITY.



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COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP B
PAVEMENT MARKING AND SIGNING

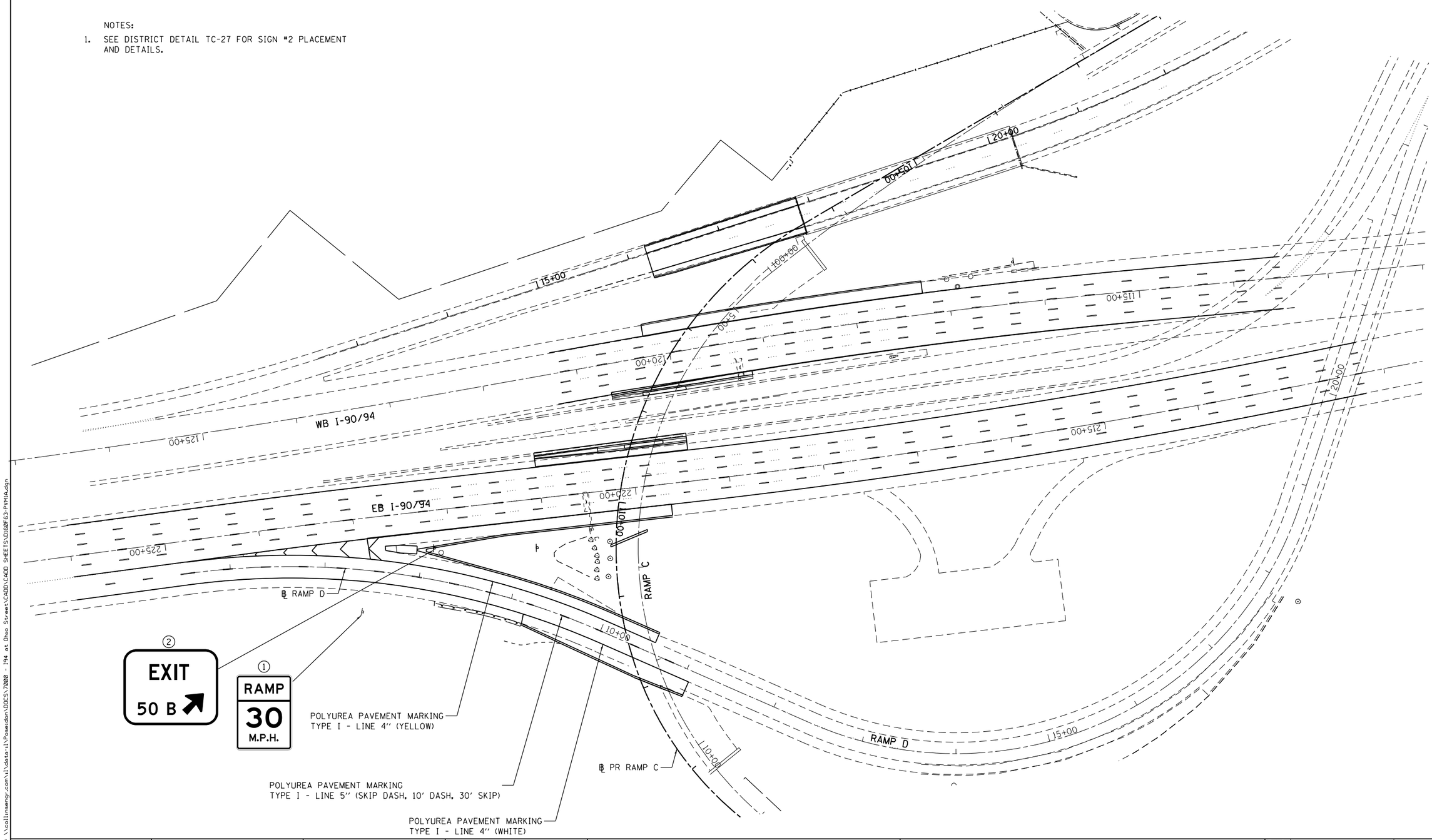
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	144
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SIGN INFORMATION										POST			
				SIGN	PANEL	ASSEMBLY	WIDTH	HEIGHT	AREA				
SIGN I.D.	LOCATION	STATION	OFFSET	DESCRIPTION	TYPE	TYPE	(IN)	(IN)	(SQ FT)	SUPPORT	BASE	QUANTITY	LENGTH
1	RAMP D	222+98	85.0' LT	W13-3	2	B	36	48	12	WOOD	-	1	16
2	RAMP D	222+20	36.0' LT	MOD **	3	B	90	60	37.5	WOOD	-	2	17

NOTES:

1. SEE DISTRICT DETAIL TC-27 FOR SIGN #2 PLACEMENT AND DETAILS.



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COLLINS ENGINEERS INC

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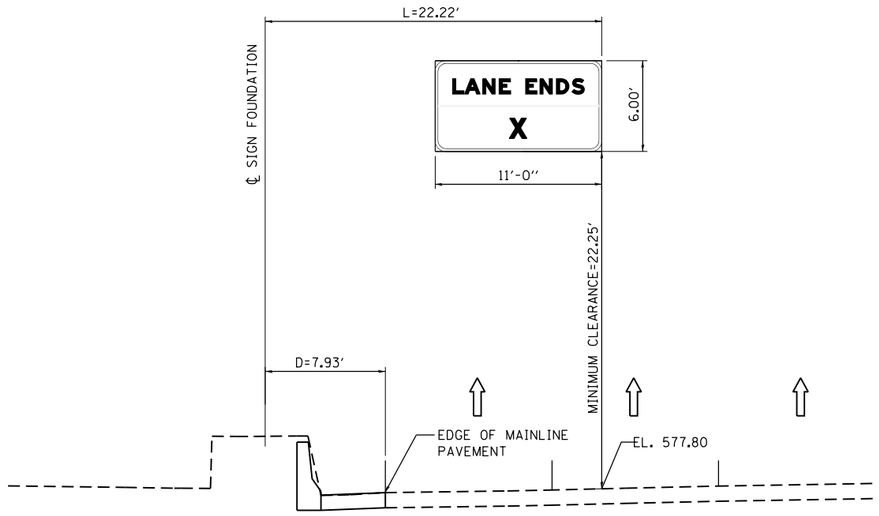
PLOT SCALE = 100.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP D
PAVEMENT MARKING AND SIGNING

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	145
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



WB I-90/94 (SIGN ID # 10)
STA 119+31.57

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COLLINS ENGINEERS INC

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PLOT SCALE = 10.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

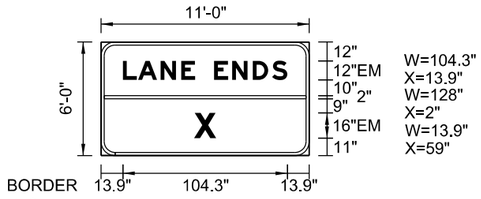
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL
LAYOUT DETAILS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	146
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SIGN DETAIL
1:75



Panel Style: guide_exp_overhead.ssi
M.U.T.C.D.: 2009 Edition

Panel Style: guide_exp_overhead.ssi
Dimensions are in inches.tenths

NOTES:

1. TOP PORTION OF SIGN BACKGROUND (ABOVE DOULBE LINE) IS REFLECTIVE YELLOW. BOTTOM PORTION IS REFLECTIVE WHITE.
2. THE "LANE ENDS" LEGEND IS REFLECTIVE BLACK. THE SYMBOL "X" IS REFLECTIVE RED.
3. LETTER LOCATIONS ARE PANEL EDGE TO LOWER LEFT CORNER.

SIGN NUMBER	SIGN I.D. #10
WIDTH x HGHT.	11'–0" x 6'–0"
BORDER WIDTH	2"
CORNER RADIUS	9"
MOUNTING	OVERHEAD
BACKGROUND	TYPE: REFLECTIVE
	COLOR: VARIES *
LEGEND/BORDER	TYPE: REFLECTIVE
	COLOR: VARIES */BLACK

SYMBOL	ROT	X	Y	WID	HT

LETTER POSITIONS (X)

L	A	N	E		E	N	D	S																									LENGTH	SERIES/SIZE
13.9	23.5	37.7	50.8	59.7	71.7	83.1	96.2	108.4																									104.3	EM 2000 12
X																																		EM 2000
59																																	13.9	16

COLLINS ENGINEERS INC

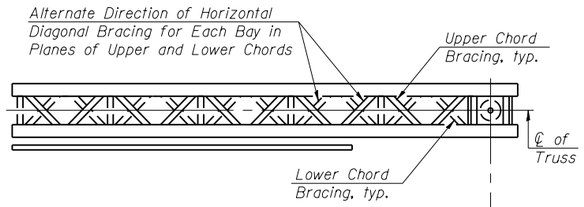
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 8.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

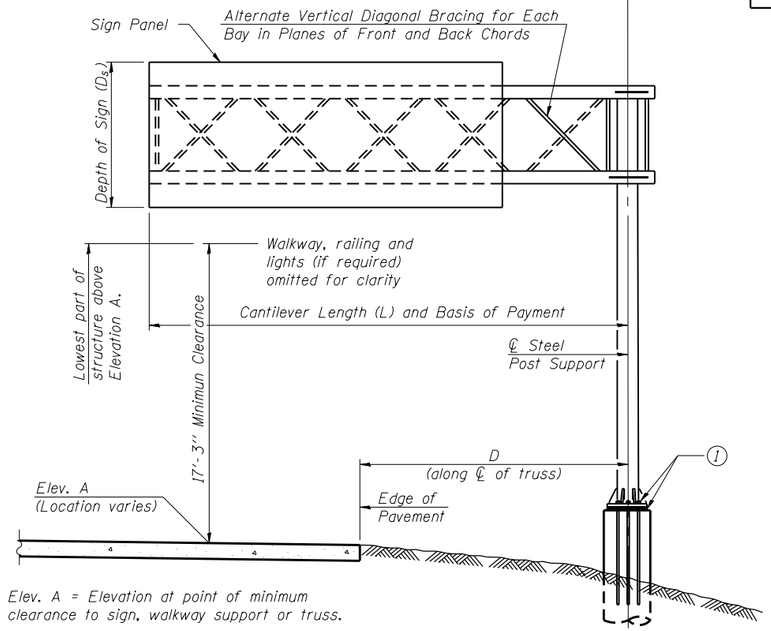
SIGN PANEL LAYOUT DETAILS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	147
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TYPICAL PLAN
(Walkway not shown)



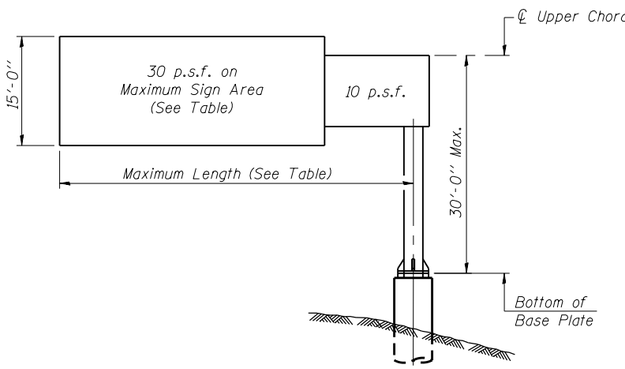
Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

TYPICAL ELEVATION
Looking in Direction of Traffic

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to the structure.

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	D_s	Total Sign Area
IC016I094L050.4-000	119+31.57	I-C-A	22'-0"	577.95	3'-1½"	6'-0"	66'-0"

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	170 Sq. Ft.	25 Ft.
II-C-A	340 Sq. Ft.	30 Ft.
III-C-A	400 Sq. Ft.	40 Ft.



DESIGN WIND LOADING DIAGRAM
Parameters shown are basis for I.D.O.T. Standards Installations not within dimensional limits shown require special analysis for all components.

Note:
Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of the trusses.

(1) After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.

* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f'_c = 3,500 p.s.i.
fy = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specificiations.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.
All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.
The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE I-C-A	Foot	22.0

OSC-A-1 6-1-12

FILE NAME = \\collinseng.com\il\data-il\Poseidon\DOCS\7000 - 194 at Ohio Street\CADD\CADD Structures\Sign Structures\olum_cantilever-sign_7000.dgn

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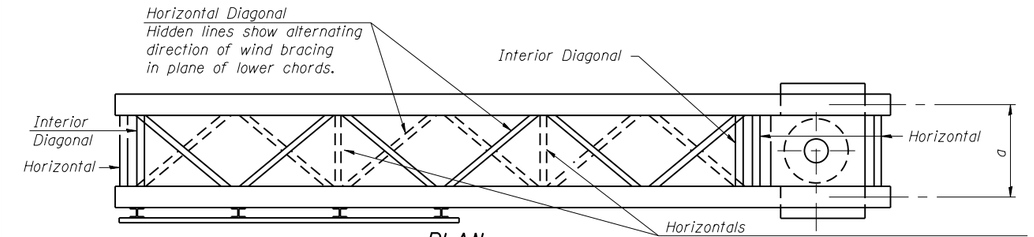
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

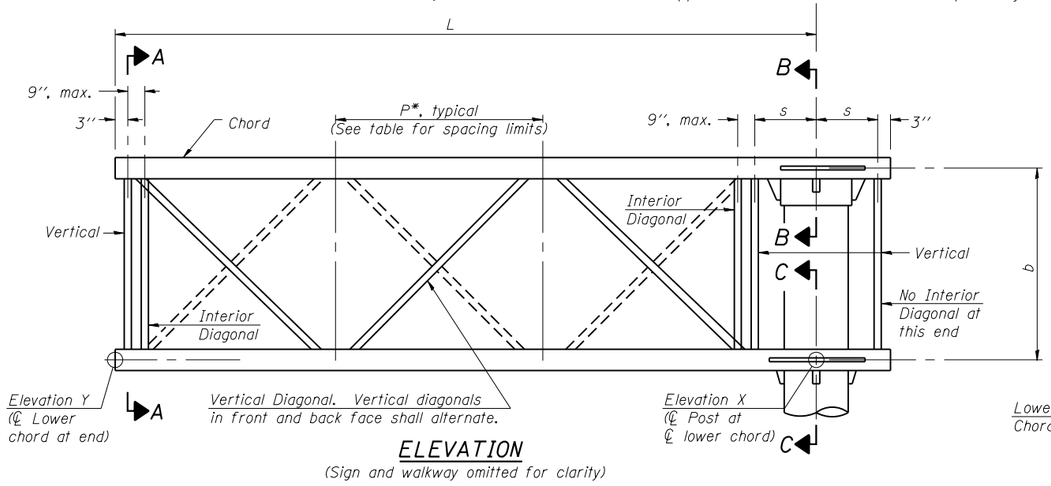
CANTILEVER SIGN STRUCTURES – GENERAL PLAN & ELEVATION
ALUMINUM TRUSS & STEEL POST

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

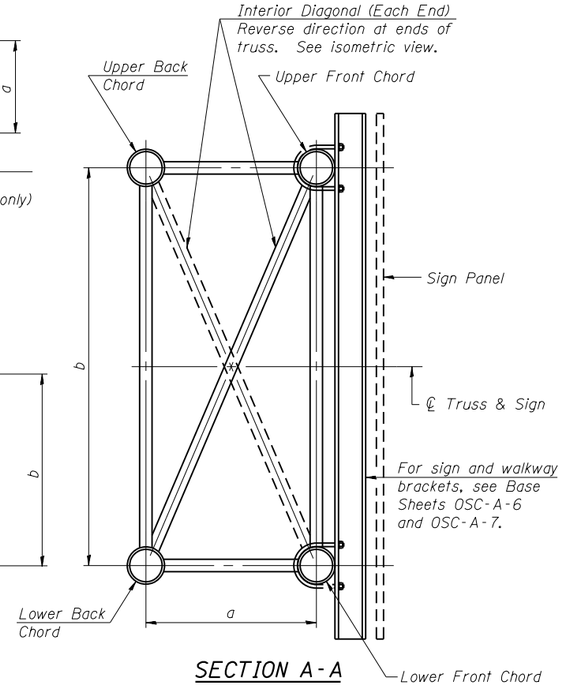
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	148
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



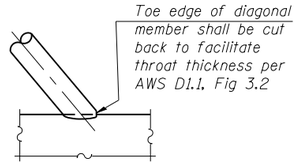
PLAN
(Walkway not shown)



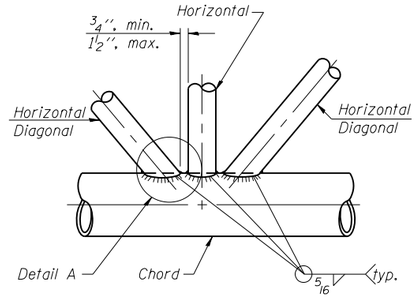
ELEVATION
(Sign and walkway omitted for clarity)



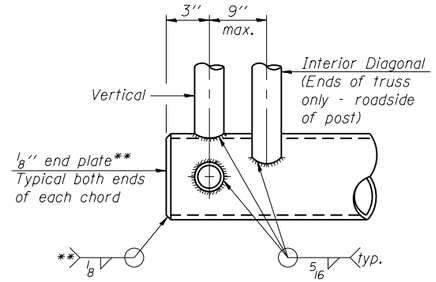
SECTION A-A



DETAIL A

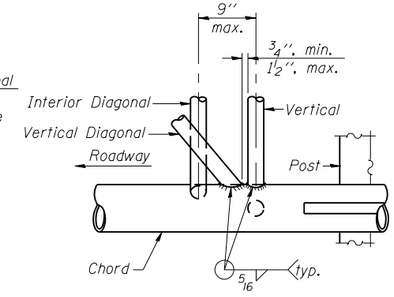


TRUSS INTERIOR JOINT DETAIL

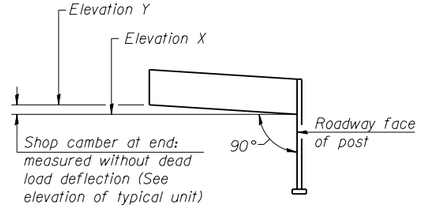


CANTILEVER END JOINT DETAIL

** Contractor may alternatively use standard aluminum drive-fit cap to close ends. 1/2" ϕ Drain hole in end plate / drive-fit cap.



POST END JOINT DETAIL



CAMBER DIAGRAM
(For Fabrication Only)

ISOMETRIC VIEW
TYPICAL TRUSS UNIT
ASTM B221 Alloy 6061 Temper T6

TYPICAL TRUSS UNIT

For Section B-B and Section C-C, see Base Sheet OSC-A-3.

Note:
There are twice as many horizontal diagonals as there are vertical diagonals.

TRUSS UNIT TABLE

Truss Type	Dimension "a"	Dimension "b"	Dimension "s"	Limits for Panel Spacing (P)*	Up. & Low. Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals	
					O.D.	Wall	O.D.	Wall
I-C-A	24"	54"	16"	36" min. to 48" max.	5"	5/16"	2 1/2"	5/16"
II-C-A	36"	66"	21"	42" min. to 54" max.	6 1/2"	5/16"	3 1/4"	5/16"
III-C-A (35' Max.)	36"	84"	21"	48" min. to 66" max.	7"	3/8"	3 1/2"	3/8"
III-C-A (>35' to 40')	36"	84"	21"	48" min. to 66" max.	8"	3/8"	3 1/2"	3/8"

$$*P = \frac{L - s - 3''}{\#\ Panels}$$

Structure Number	Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
1C016I094L050.4-000	119+31.57	I-C-A	22'-0"	6	3"-6 1/8"

SHOP CAMBER TABLE

Unit Length (L)	Shop Camber at End
15'	1 1/2"
16'-17'	1 3/4"
18'-20'	2"
21'-22'	2 1/4"
23'-25'	2 1/2"
26'-27'	2 3/4"
28'-30'	3"
31'-32'	3 1/4"
33'-35'	3 1/2"
36'-37'	4"
38'-40'	4 1/2"

OSC-A-2 6-1-12

FILE NAME = \\collinseng-corp\il\data-il\Poseidon\DOCSV2000 - 194 at Ohio Street\CADD\CADD Structures\Sign Structures\sign_cantilever_sign_7000.dgn

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	DATE -	REVISED -

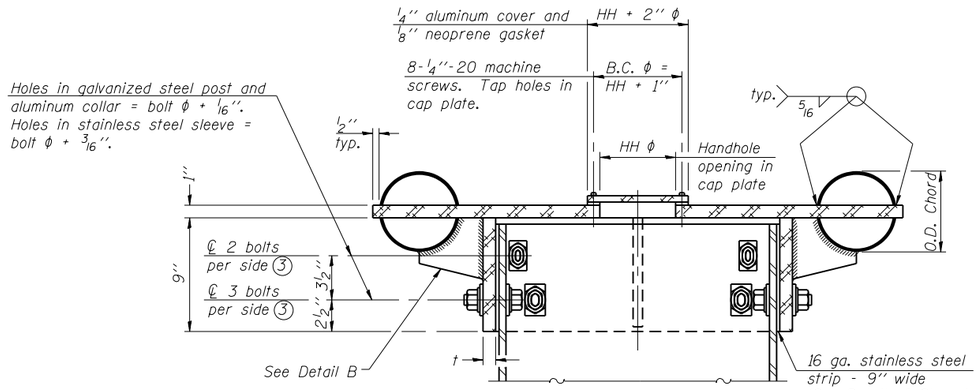
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – TRUSS DETAILS
ALUMINUM TRUSS & STEEL POST

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	149
		CONTRACT NO. 60F63		

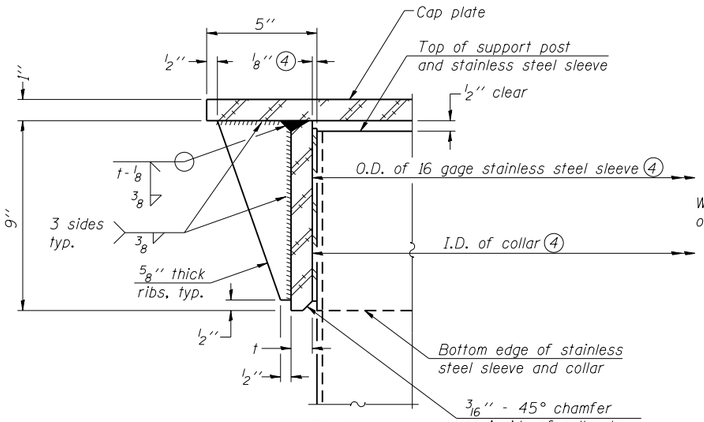
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



SECTION B-B

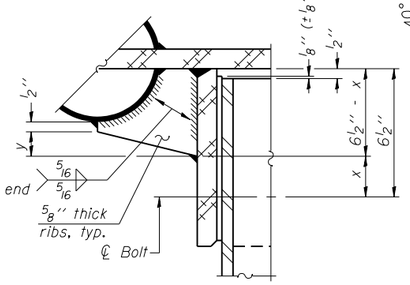
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

④ Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 1/8" (±1/16"). Maximum gap between post and collar at any location equals 1/8" before tightening bolts.



DETAIL A

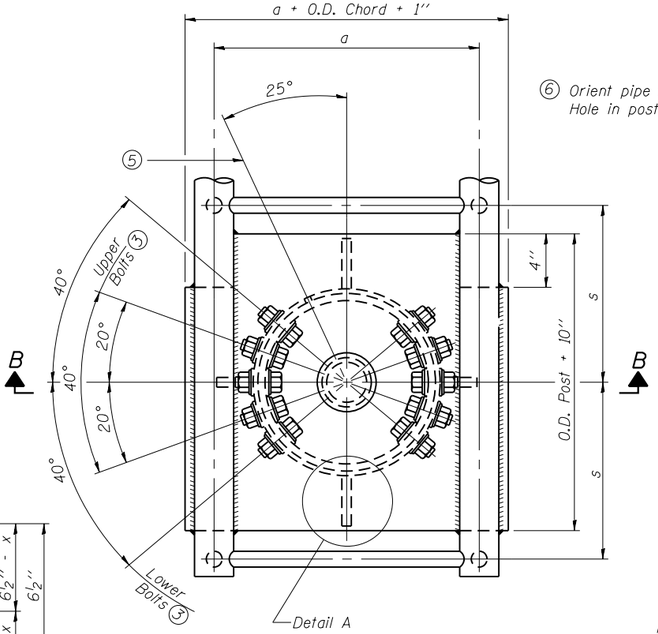
(Two locations)



DETAIL B

Two locations

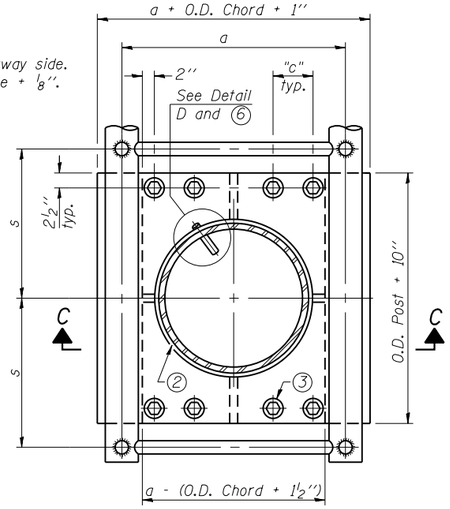
(For details not shown, see Detail C)



PLAN VIEW - TOP OF COLUMN

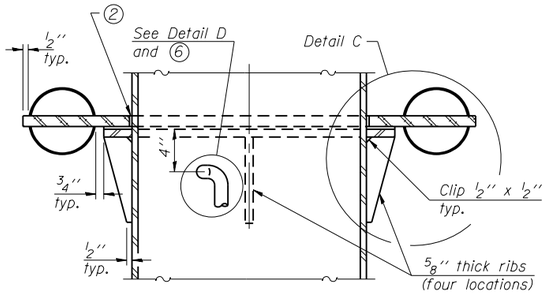
⑤ Optional full penetration weld in collar. (Two locations maximum....(180° apart)....X-ray or UT 100%)

⑥ Orient pipe toward walkway side. Hole in post = O.D. pipe + 1/8".

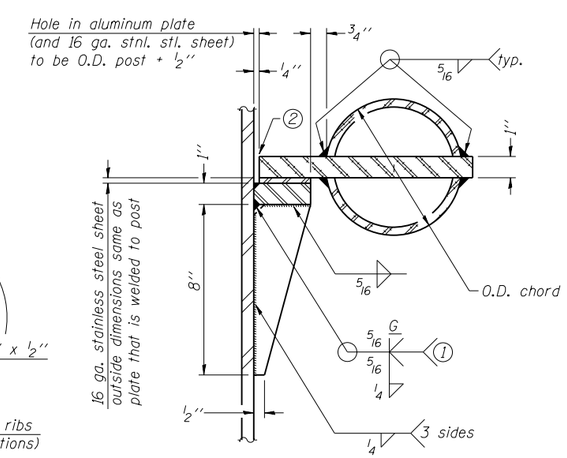


SECTION THRU POST ABOVE LOWER CHORDS

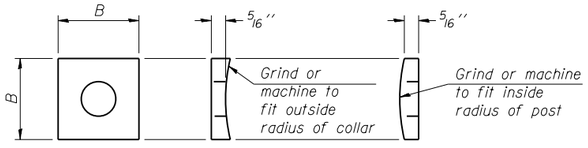
DETAIL D



SECTION C-C

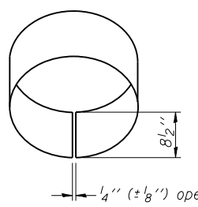


DETAIL C



CONTOURED WASHERS

Bolt Size	Contoured Washers	
	Hole Dia.	B
7/8"	1"	2 1/2"
1"	1 1/8"	3"
1 1/4"	1 3/8"	3 1/4"



DETAIL OF STAINLESS STEEL SLEEVE

Weld to post after galvanizing. (Prepare post surface to insure tight, uniform fit and allow welding.) Welds to be 1 1/2" long at 6" cts. along top edge and at 1/4" opening.

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter ③	Lower Juncture Bolt Spacing Dimension "c" ③	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-C-A	16" ϕ (83#/')	7/8"	3 1/4"	8"	5/8"	1 3/4"	2 1/4"
II-C-A	24" ϕ (125#/')	1"	3 1/2"	12"	7/8"	2"	1 1/4"
III-C-A (35' max.)	24" ϕ (125#/')	1 1/4"	3 1/2"	12"	7/8"	2"	1"
III-C-A (>35' to 40')	24" ϕ (171#/')	1 1/4"	3 1/2"	12"	7/8"	2"	1"

① Grind top if required to fully seat aluminum plate and stainless steel sheet.

② After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in Overhead Sign Structure Cantilever.

③ Upper and lower connection bolts in collar and bolts at lower chord connection shall be high strength with matching locknuts. Connection bolts shall have 2 stainless steel flat washers each.

OSC-A-3 6-1-12

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – JUNCTURE DETAILS
ALUMINUM TRUSS & STEEL POST

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	150
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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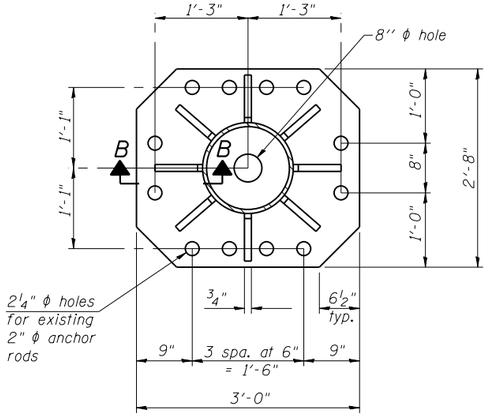
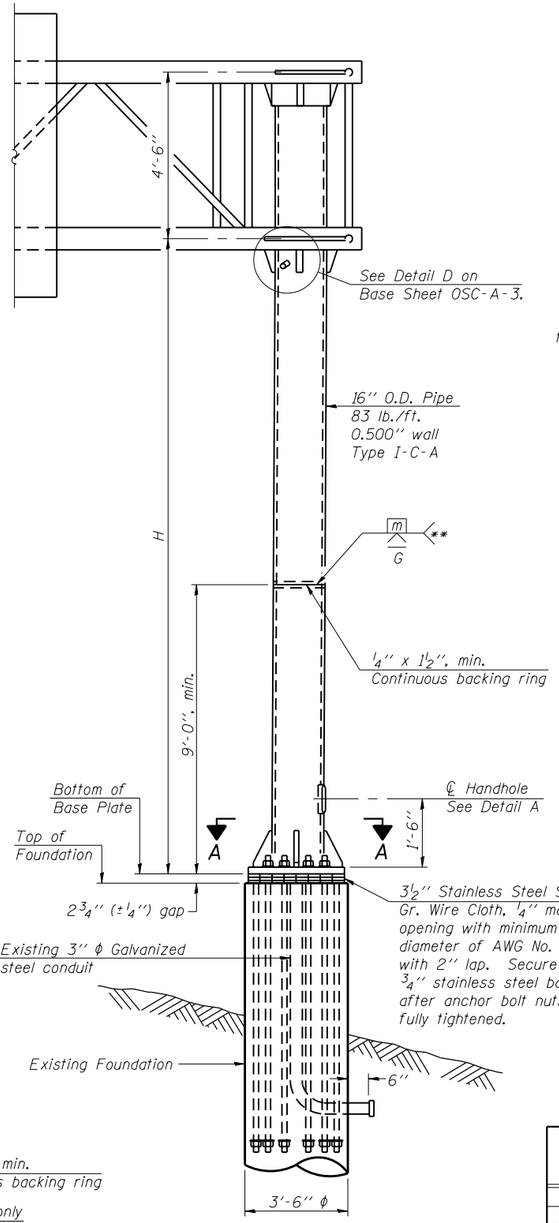


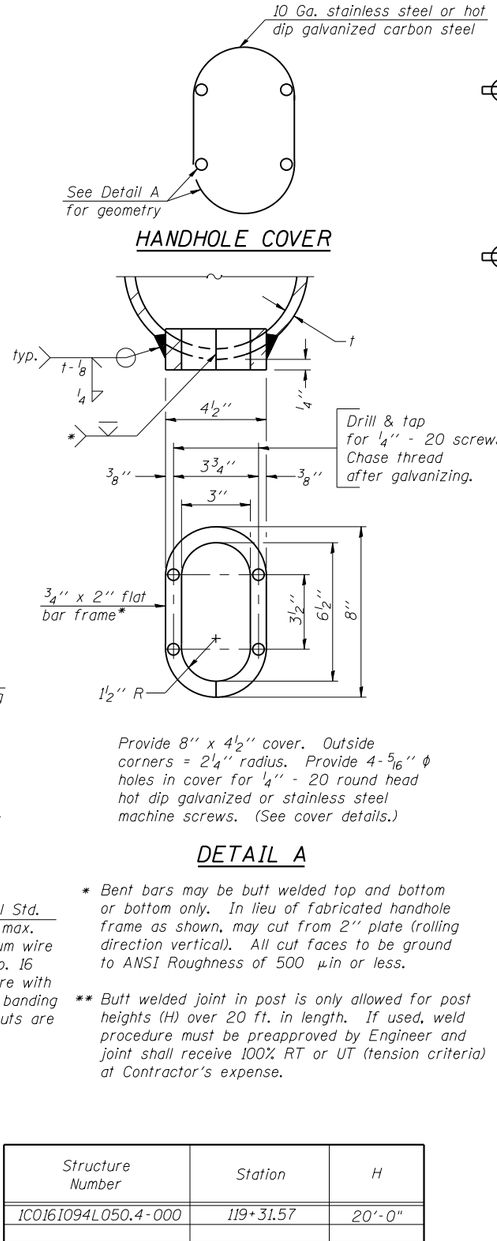
SECTION A-A

Use existing plate for a template.



FRONT ELEVATION

Existing Foundation to remain.

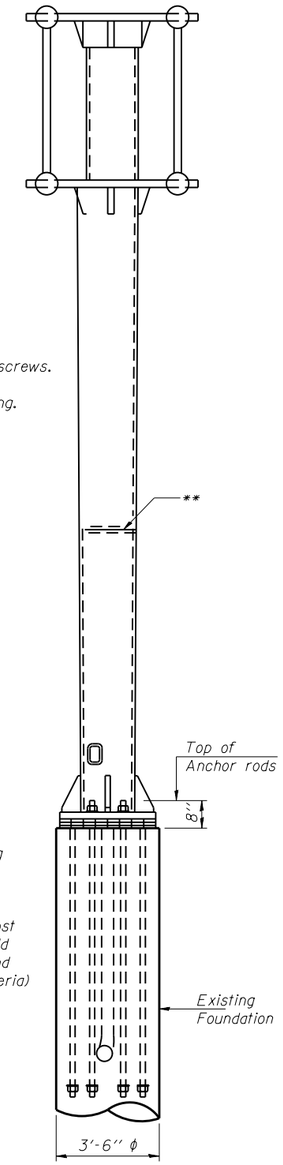


Provide 8" x 4½" cover. Outside corners = 2¼" radius. Provide 4-$\frac{5}{16}$" ϕ holes in cover for ¼" - 20 round head hot dip galvanized or stainless steel machine screws. (See cover details.)

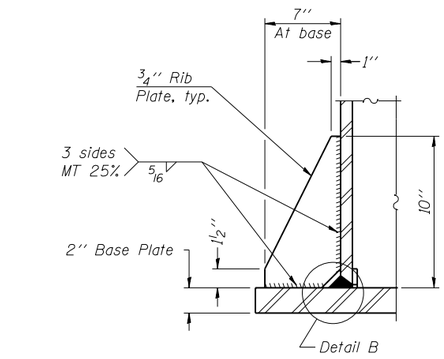
DETAIL A

* Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 µin or less.

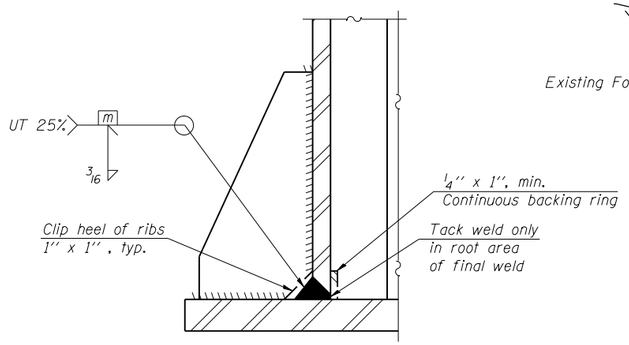
** Butt welded joint in post is only allowed for post heights (H) over 20 ft. in length. If used, weld procedure must be preapproved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.



SIDE ELEVATION



SECTION B-B

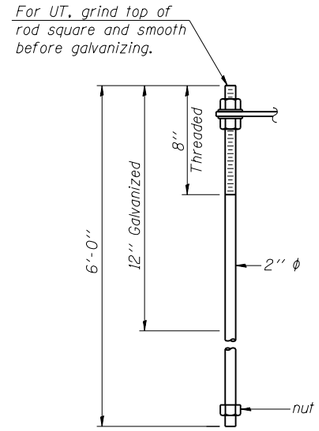


DETAIL B

(Typical rib)

Structure Number	Station	H
IC0161094L050.4-000	119+31.57	20'-0"

Note: "H" based on 15'-0" or actual sign height, whichever is greater.



EXISTING ANCHOR ROD DETAIL

ASTM F1554 Fy = 55,000psi

NOTE: Existing foundation will be used for this sign structure. The existing sign is a Vierendeel cantilever. An alternative base plate will be utilized, so the bolt pattern will match the exisiting.

FILE NAME = \\collinseng-com\il\data-il\Pasadon\DOCS\7020 - 194 at Ohio Street\CADD\CADD Structures\Sign Structures\alum_cantilever_sign_7020.dgn

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	DATE -	REVISED -

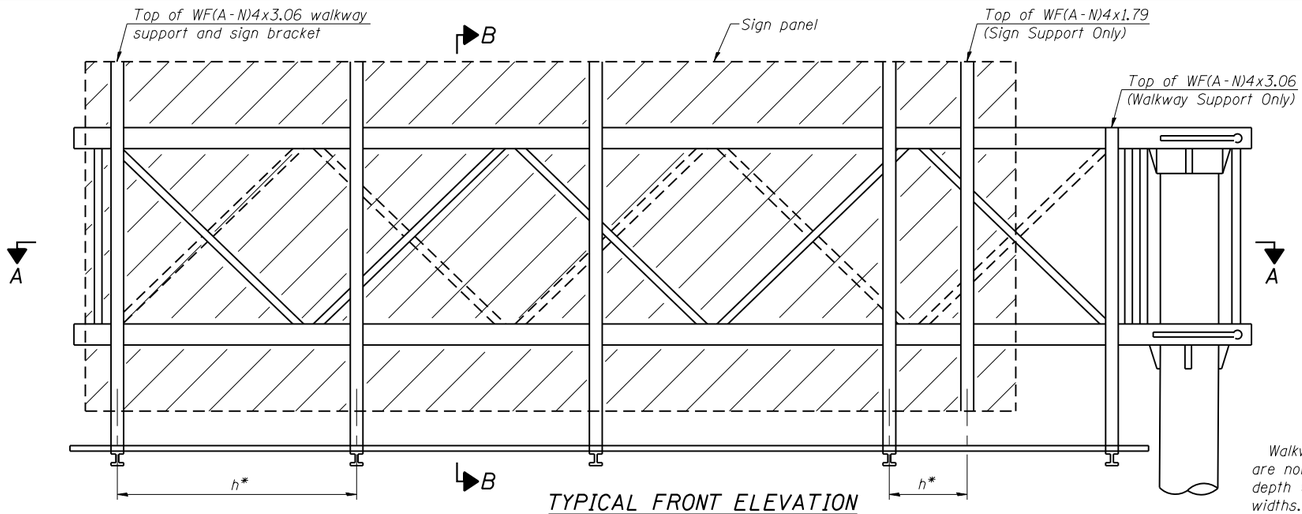
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – TYPE I-C-A TRUSS
SUPPORT POST – ALUMINUM TRUSS & STEEL POST

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	151
		CONTRACT NO. 60F63		

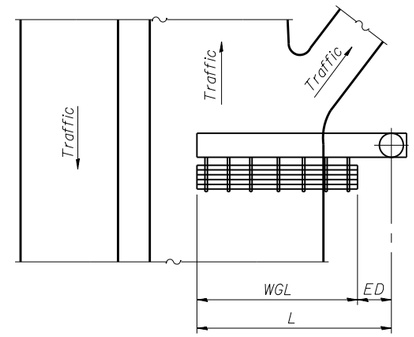
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



TYPICAL FRONT ELEVATION

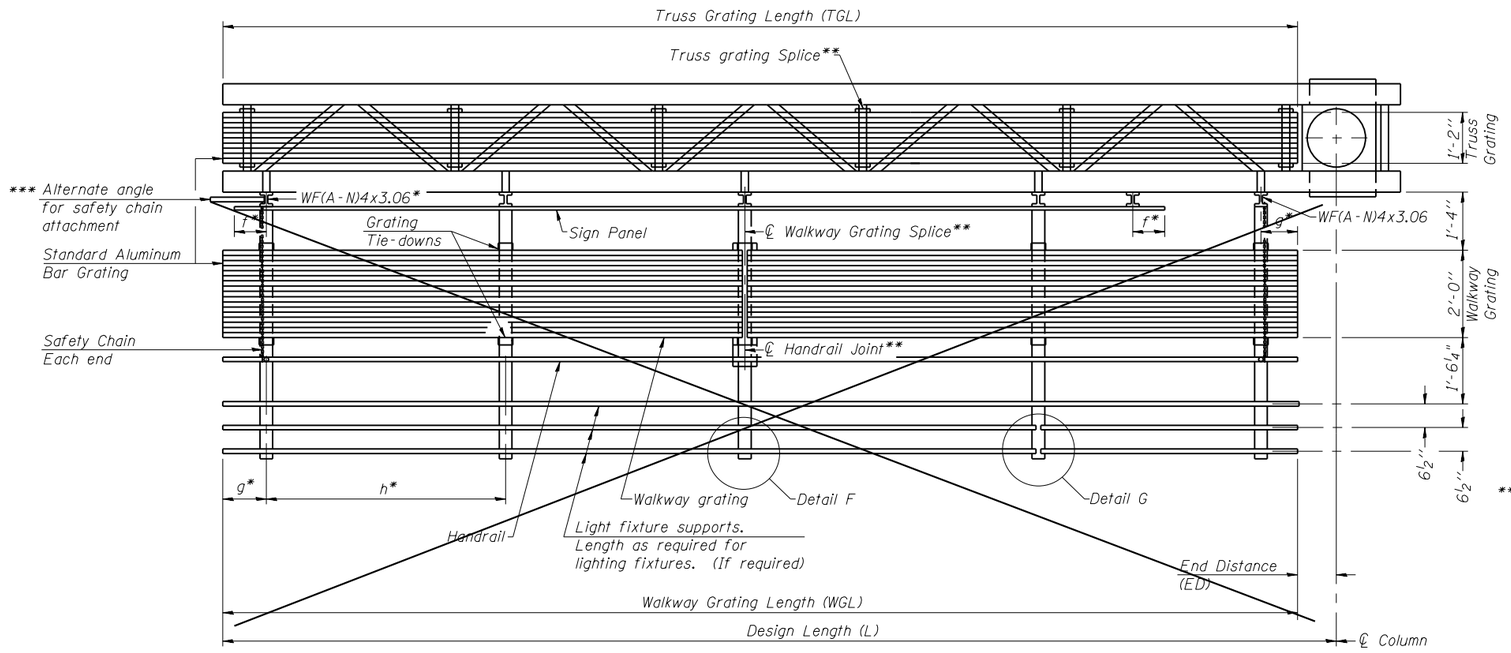
With lights and handrail omitted for clarity.

Walkway and truss grating dimensions are nominal and may vary (width ±½", depth ±½") based on available standard widths.



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)



SECTION A-A

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in Overhead Sign Structure Cantilever.

Handrail and walkway grating shall span a minimum of three brackets between splices.

** Use and location of handrail joints or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left(\frac{\text{Post O.D.}}{2} + 6''\right)$$

Structure Number	Station	WGL	ED	TGL
1C0161094L050.4-000	119+31.57	18'-10½"	3'-1½"	20'-10"

Notes:

* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway to ℄ of nearest bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)

*** If walkway bracket at safety chain location is behind sign, add angle to bracket. See alternate safety chain attachment on base sheet OSC-A-8

For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7.

For details of handrail, handrail joint, safety chain and Details F and G, see Base Sheet OSC-A-8.

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06
ASTM B308, Alloy 6061-T6

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

OSC-A-6 6-1-12

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	DATE -	REVISED -

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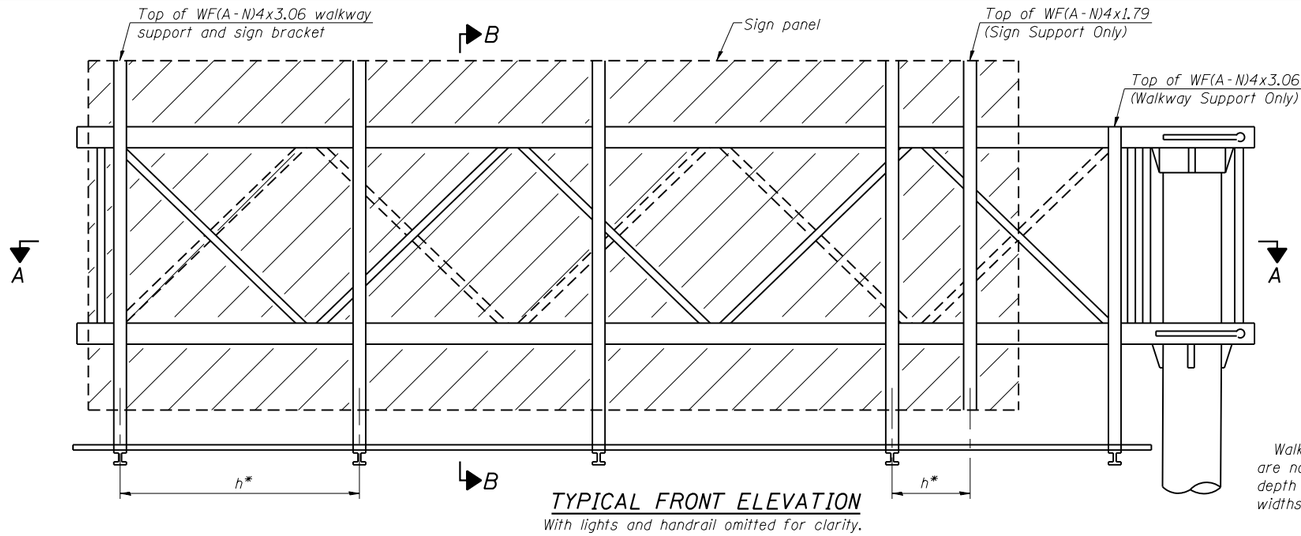
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – ALUMINUM WALKWAY
DETAILS – ALUMINUM TRUSS & STEEL POST

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	152
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

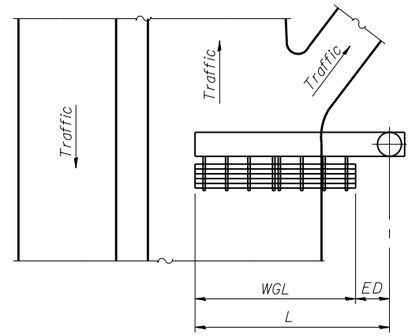
FILE NAME = \\collinseng-com\vl\data-vl\Poseidon\DOCS\70808 - 194 at Ohio Street\CADD\CADD Structures\Sign Structures\alum_cantilever_sign_70808.dgn



TYPICAL FRONT ELEVATION

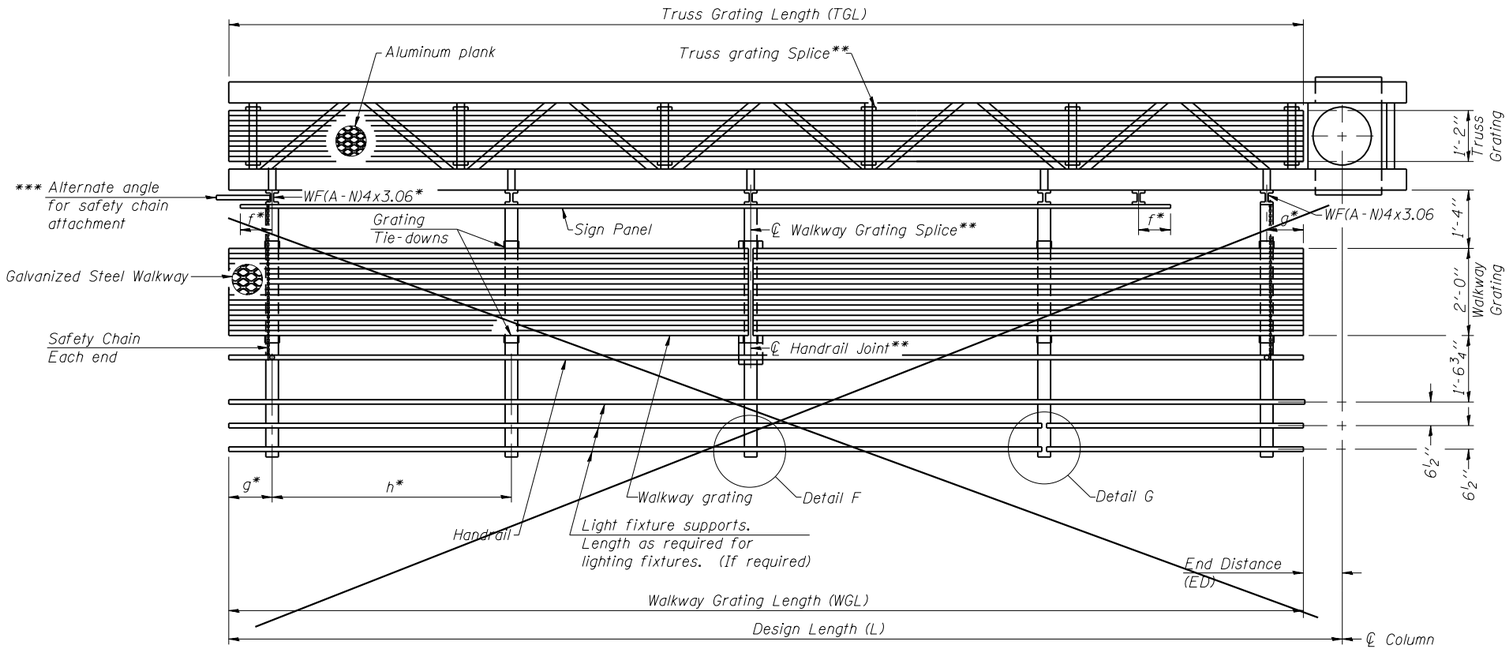
With lights and handrail omitted for clarity.

Walkway and truss grating dimensions are nominal and may vary (width ±½", depth ±½") based on available standard widths.



PLAN
WALKWAY AND HANDRAIL SKETCH

(Road plan beneath truss varies)



SECTION A-A

Truss grating to facilitate inspection shall run full length of cantilevers. Cost of truss grating is included in Overhead Sign Structure Cantilever.

Handrail and walkway grating shall span a minimum of three brackets between splices.

** Use and location of handrail joints or grating splices are optional, based on lengths needed and material availability.

$$TGL = L - \left(\frac{\text{Post O.D.}}{2} + 6''\right)$$

Structure Number	Station	WGL	ED	TGL
IC016I094L050.4-000	119+31.57	18'-10½"	3'-1½"	20'-10"

Notes:

* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ℄ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway to ℄ of nearest bracket)
h = 6'-0" maximum (℄ to ℄ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)

*** If walkway bracket at safety chain location is behind sign, add angle to bracket. See alternate safety chain attachment on base sheet OSC-A-8.

For details of sign placement, sign/walkway brackets, truss and walkway gratings, grating splices and Section B-B, see Base Sheet OSC-A-7S.

For details of handrail, handrail joint, safety chain and Details F and G, see Base Sheet OSC-A-8.

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06
ASTM B308, Alloy 6061-T6

Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

OSC-A-6S 6-1-12

FILE NAME = \\collinseng-com\vl\data-vl\Poseidon\DOCS\72808 - 194 at Ohio Street\CADD\CADD Structures\Sign Structures\olum_cantilever_sign_72808.dgn

COLLINS ENGINEERS INC

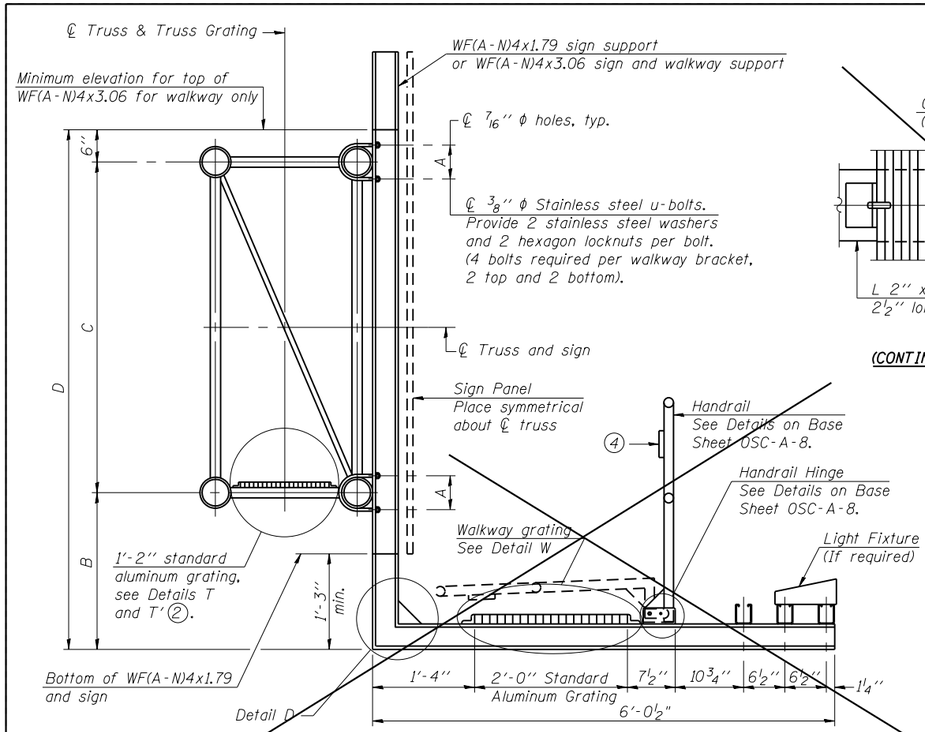
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 0:2.0000 '' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – ALTERNATE STEEL
WALKWAY DETAILS – ALUMINUM TRUSS & STEEL POST

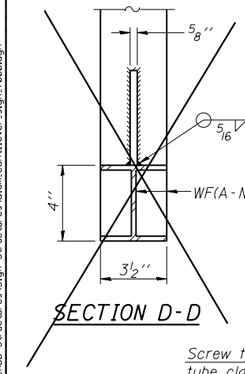
SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	153
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

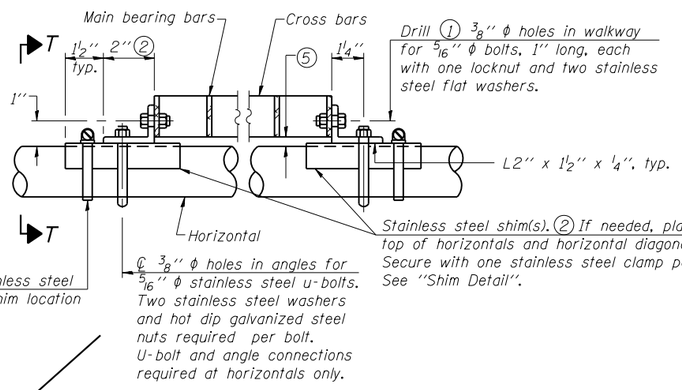


SECTION B-B

Sign shall be even with the top of the bracket, but it may extend no more than 6" above the top of the bracket for field adjustments.

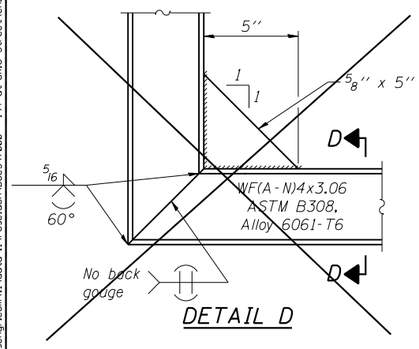


SECTION D-D

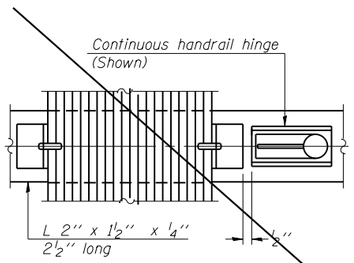


DETAIL T

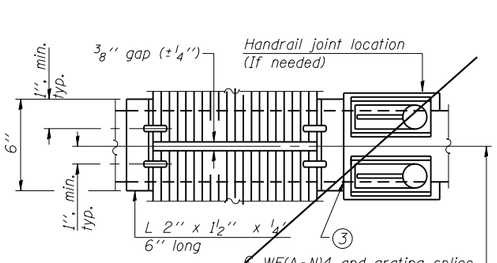
(Continuous Truss grating)



DETAIL D

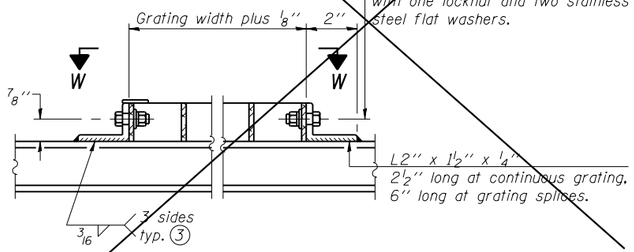


(CONTINUOUS WALKWAY GRATING)



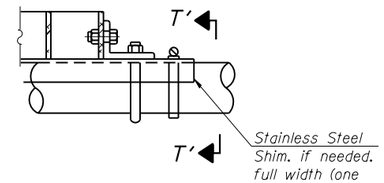
(AT WALKWAY GRATING SPLICE)

SECTION W-W



DETAIL W

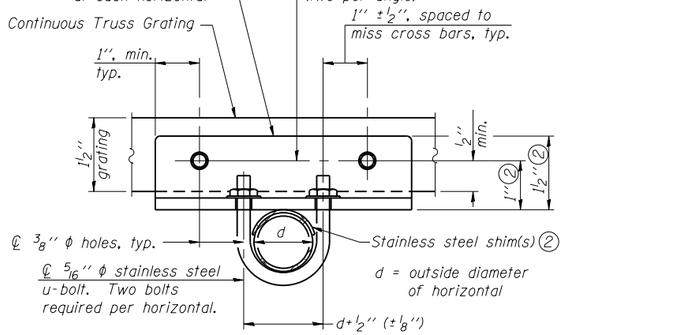
(Walkway grating)



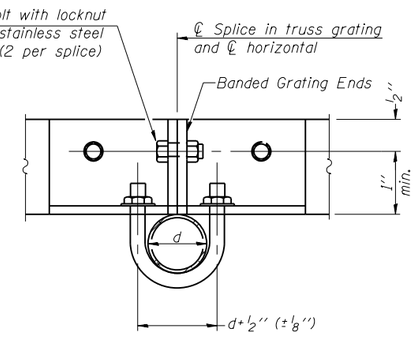
DETAIL T'

(Truss grating splice)

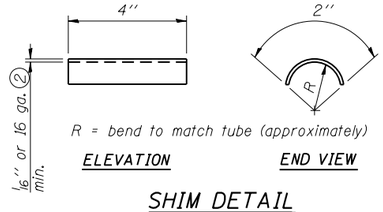
Details not shown same as Detail T. Alternate materials may be used subject to the Engineer's review and approval.



SECTION T-T



SECTION T'-T'



SHIM DETAIL

Structure Number	Station	A	(6) B	C	(6) D
1C0161094L050.4-000	119+31.57	0'-5 3/8"	2'-9"	4'-6"	7'-9"

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars (MBB) shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B211 Alloy 6061-T6.

Cross bars (CB) shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "t" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1 1/2", spaced on 1 3/16" centers.

Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

(1) Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

(2) Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.

(3) If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OSC-A-8.)

(4) PL 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.

(5) Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.

(6) Based on actual sign height. D_S, given on OSC-A-1.

OSC-A-7 6-1-12

FILE NAME = \\collinsengr.com\ilData-il\Poseidon\DOCS\70000 - 194 at Ohio Street\CADD\CADD Structures\Sign Structures\alum_cantilever-sign-70000.dgn

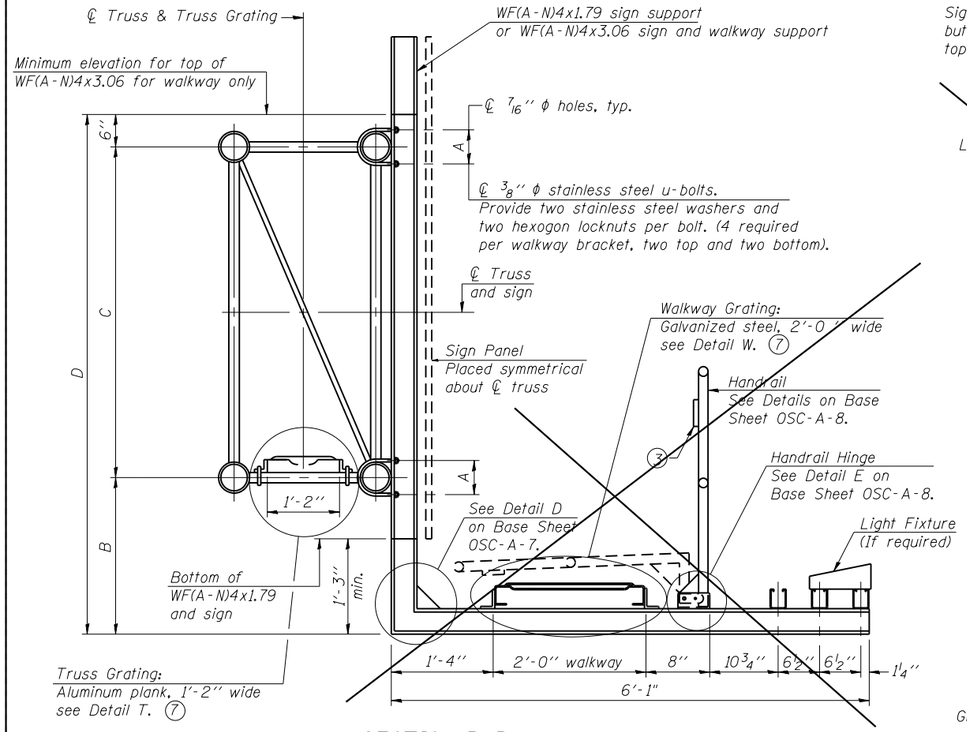
COLLINS ENGINEERS INC	USER NAME = rgall	DESIGNED -	REVISED -
	PLOT SCALE = 0.2.0000 '/ in.	DRAWN -	REVISED -
	PLOT DATE = 3/25/2013	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – WALKWAY DETAILS
ALUMINUM TRUSS & STEEL POST

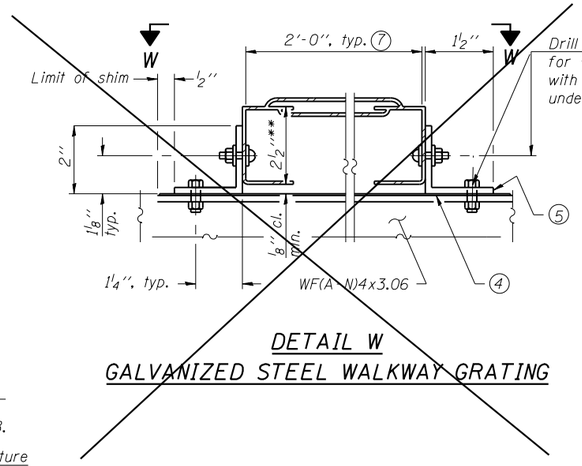
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	154
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

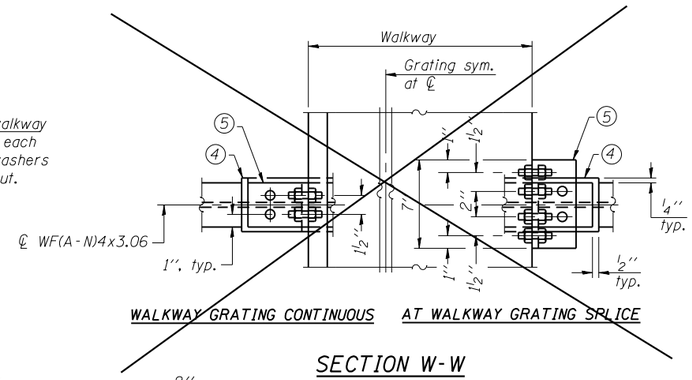


SECTION B-B

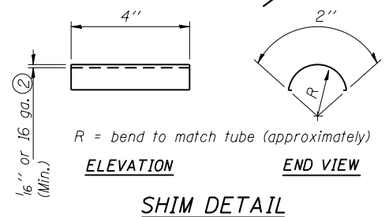
Sign shall be even with the top of the bracket, but it may extend no more than 6" above the top of the bracket for field adjustments.



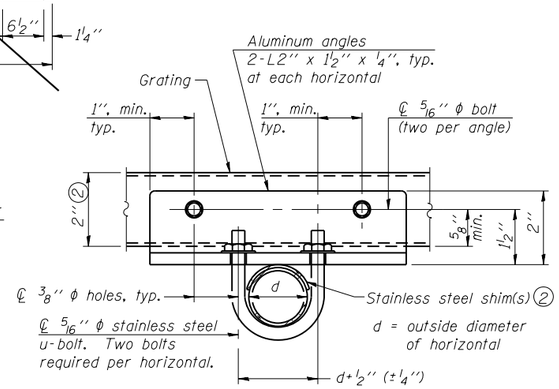
DETAIL W
GALVANIZED STEEL WALKWAY GRATING



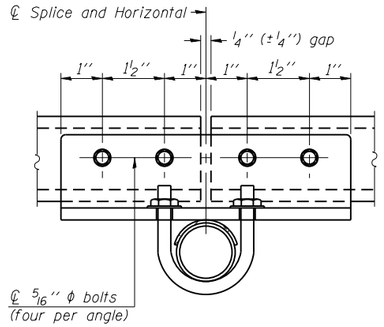
SECTION W-W



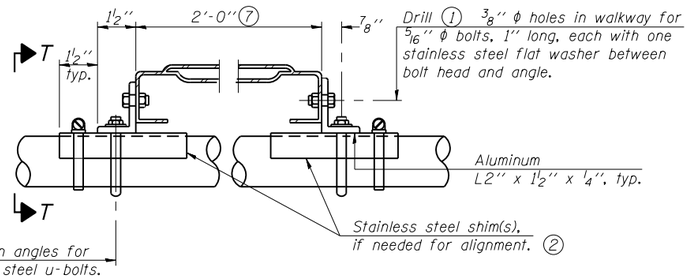
SHIM DETAIL



SECTION T-T
(Truss Grating Continuous)



SECTION T-T
(Truss Grating Splice)
Alternate splice details and locations may be used subject to the Engineer's review and approval.



DETAIL T
(Truss grating at horizontal)

ALUMINUM TRUSS GRATING

Structure Number	Station	A	(8) B	C	(8) D
IC016I094L050.4-000	119+31.57	0'-5 3/8"	2'-9"	4'-6"	7'-9"

(1) Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.

(2) Stainless steel shims shall be placed under angles at horizontals and horizonal diagonals if needed to compensate for alignment variations and differences in horizontal diagonal pipe sizes beyond adjustment provided by angles. Secure with one stainless steel clamp per location, se "Shim Detail". Thicker shim plates may be used when needed subject to shims performing properly.

(3) PL 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.

(4) 1/16" (or 16 ga.) x 2 1/2" x 4" stainless steel shim adhered to top of WF(A-N)4x3.06 beneath each galvanized angle, typ. Adhesives for shims shall be suitable for materials joined and full exposure conditions.

(5) Galvanized steel L2" x 2" x 1/4", 3 1/2" long with continuous grating 7" long at grating splice.

(6) Details shown are considered equal alternatives to Aluminum Walkway Details and may be substituted by Contractor at no charge in contract cost.

(7) Perforated or expanded metal grating providing a skid resistant (non-serrated) surface and capable of supporting a 500 pound concentrated load with a 6'-0" clear span. Walkway and truss grating dimensions are nominal and may vary (width ±1/2", depth 1/2") based on available standard sizes. Cut ends of grating shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

(8) Based on actual sign height, Ds, given on OSC-A-1.

OSC-A-7S 6-1-12

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 0:2.0000 '' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

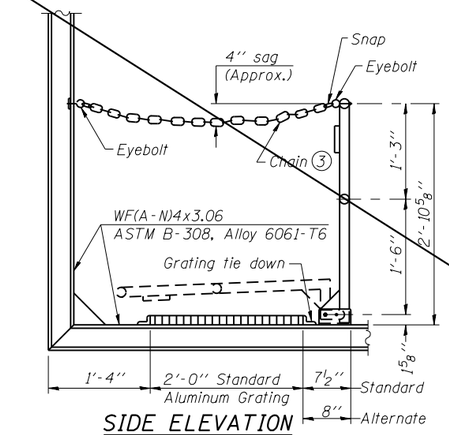
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES
ALTERNATE WALKWAY DETAILS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

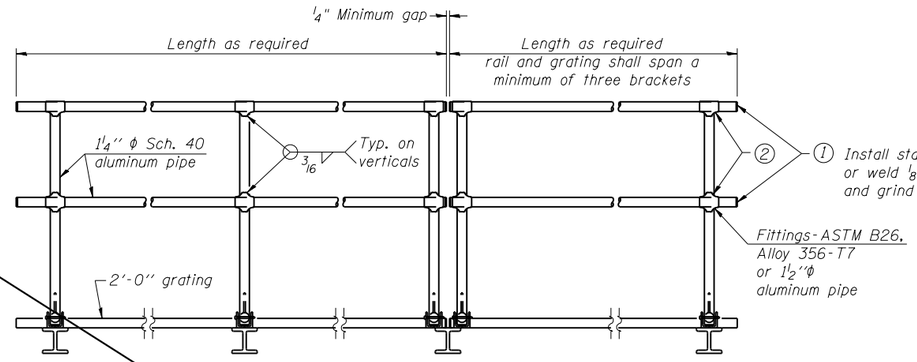
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	155
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FILE NAME = \\collinseng-com\il\data-il\Poseidon\DOCS\7000 - 194 at Ohio Street\CADD\CADD Structures\Sign Structures\alum_cantilever-sign_7000.dgn

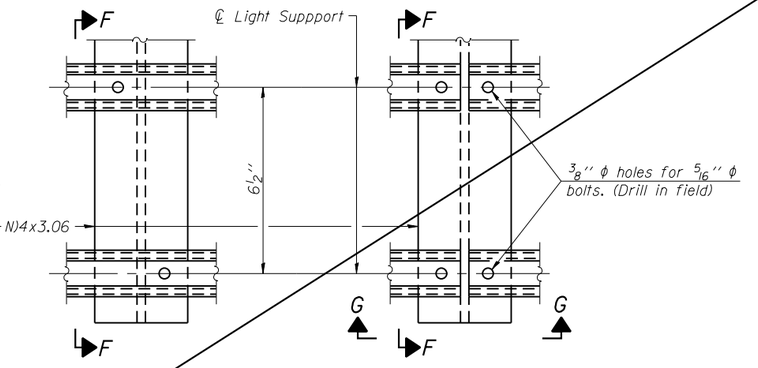


SIDE ELEVATION

(Showing Safety Chain W/O Sign)



FRONT ELEVATION



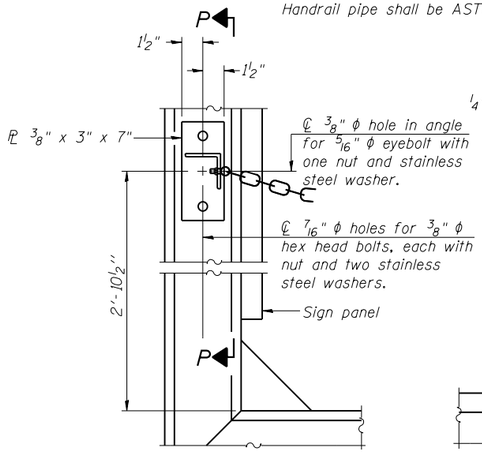
DETAIL F

DETAIL G

HANDRAIL DETAILS

Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.

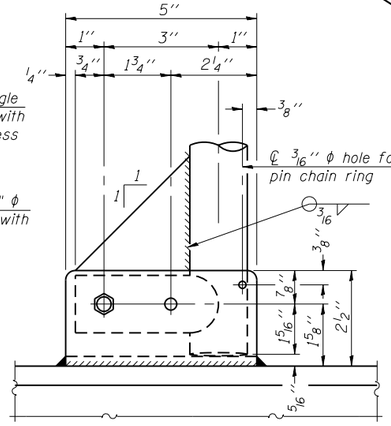
(2) Horizontal handrail member shall be continuous thru fitting. Provide 7/16" ϕ hole in fitting for 3/8" ϕ bolt. Field drill 7/16" ϕ hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/16" eyebolts in 7/16" ϕ holes on top rail at ends only.)



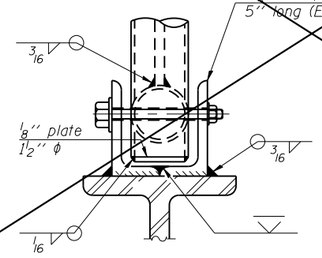
ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"

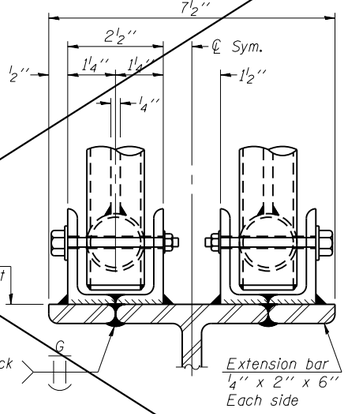


SIDE ELEVATION



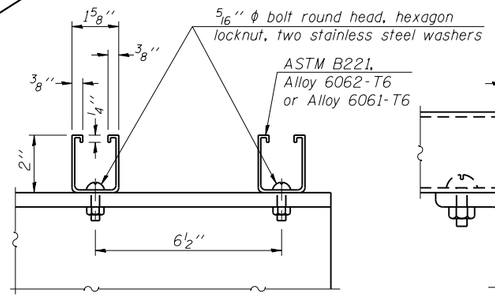
FRONT ELEVATION

Details not shown same as "ELEVATION" at right.

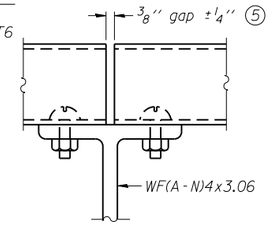


ELEVATION AT HANDRAIL JOINT (4)

Details not shown same as "FRONT ELEVATION"



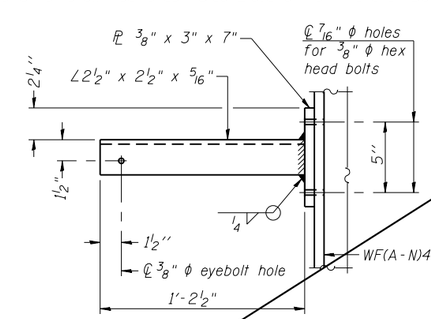
SECTION F-F



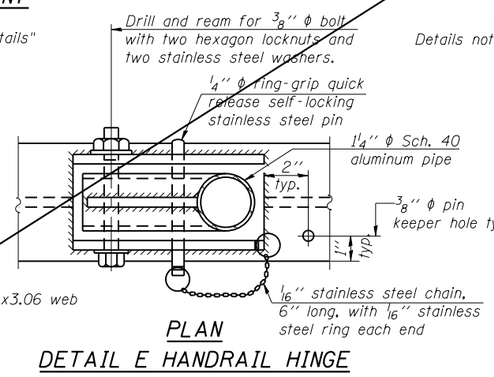
SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

(5) Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

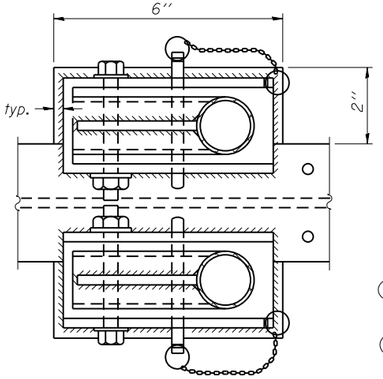


SECTION P-P



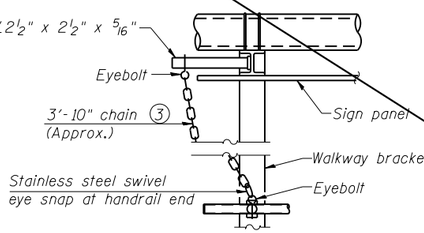
PLAN

DETAIL E HANDRAIL HINGE



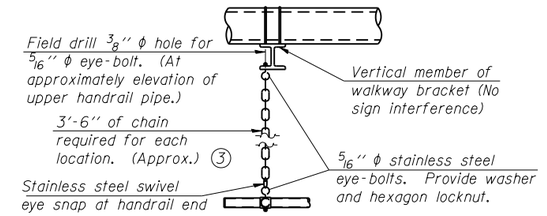
PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details
(Walkway omitted for clarity)



SAFETY CHAIN

One required for each end of each walkway.

(3) 3/16" Type 304L stainless steel chain, approximately 12 links per foot.

(4) Extrusions may be used in lieu of the details shown, with approval of the Engineer.

OSC-A-8 6-1-12

FILE NAME = \\collinseng.com\il\data-il\Poseidon\DOCS\7000 - 194 at Ohio Streets\CADD\CADD Structures\Sign Structures\alum_cantilever_sign_7000.dgn

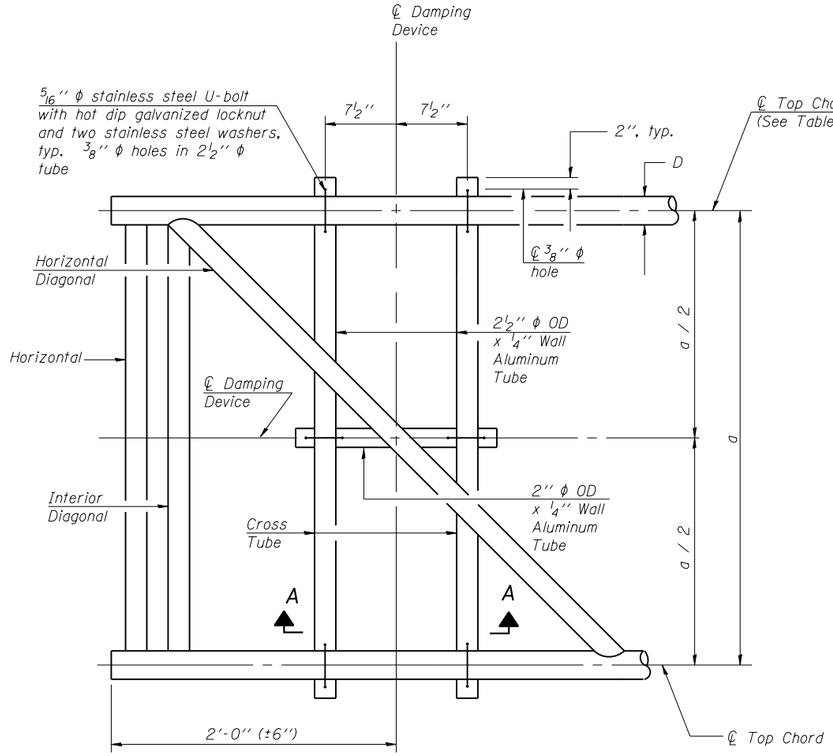
COLLINS ENGINEERS INC	USER NAME = rgall	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	PLOT SCALE = 02.0000 '' / in.	DRAWN -	REVISED -	
	PLOT DATE = 3/25/2013	CHECKED -	REVISED -	
		DATE -	REVISED -	

CANTILEVER SIGN STRUCTURES – HANDRAIL DETAILS
ALUMINUM TRUSS & STEEL POST

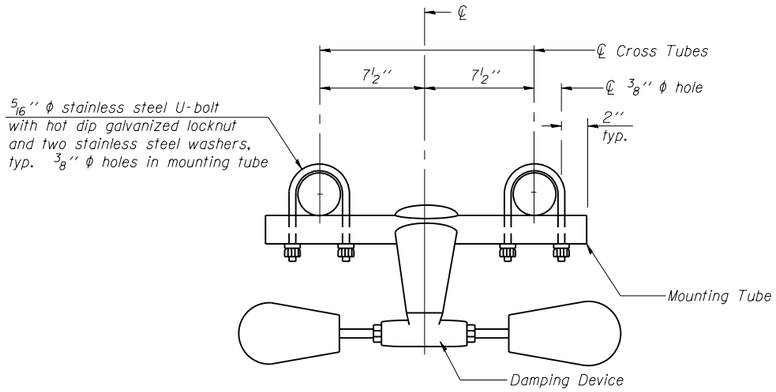
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	156
		CONTRACT NO. 60F63		

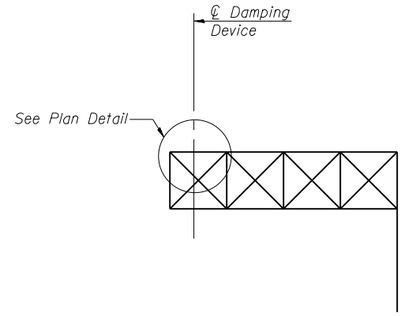
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



PLAN DETAIL



TRUSS DAMPING DEVICE CONNECTION DETAIL



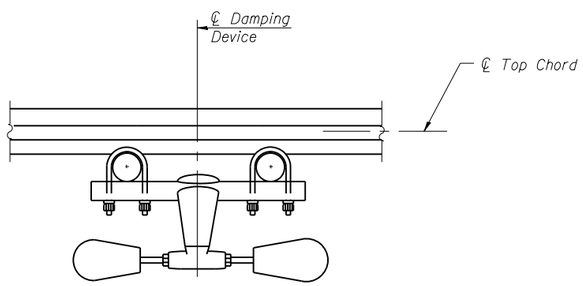
ELEVATION

Aluminum Cantilever Sign Structure

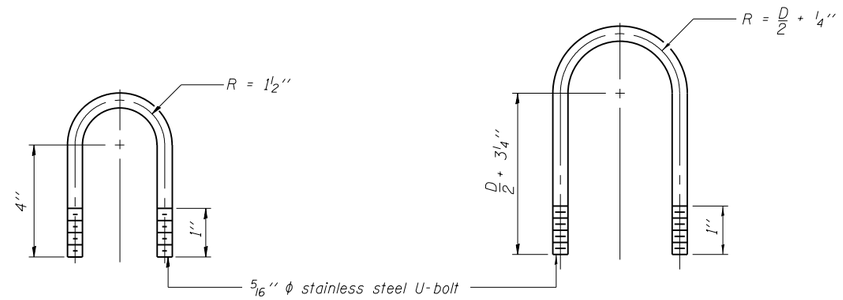
GENERAL NOTES

Damper: One damper per truss. (31 lbs. Stockbridge-Type Aluminum-29'' minimum between ends of weights)

Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6



SECTION A-A



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL

(Typical)

TOP CHORD TO CROSS TUBE U-BOLT DETAIL

(Typical)

OSC-A-D 6-1-12

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	PLOT DATE = 3/25/2013	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURE
DAMPING DEVICE

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	157
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

LEGEND:

EROSION CONTROL BLANKET
SEEDING CLASS 2A
NITROGEN, PHOSPHORUS, AND
POTASSIUM FERTILIZER NUTRIENTS
TOPSOIL FURNISH AND PLACE, 4"

PROJECT ENDS
RAMP C
STA 127+90.44

EXIST. R.O.W.

(350) SMOOTH SUMAC
3' O.C. STAGGERED ROWS,
MULCHED BED, SPADED EDGE

(5) KENTUCKY COFFEETREE

(8) SWAMP WHITE OAK,
CLUMP

GRAND AVE.

125+00

120+00

115+00

RAMP D

N. MAY ST.

EB I-90/94

110+00

WB I-90/94

120+00

EX. ℄ RAMP D

PROJECT BEGINS
RAMP B
STA 10+92.14

(200) STAGHORN SUMAC,
3' O.C. STAGGERED ROWS
AMONG EXISTING SUMAC

EX. ℄ EB I-90/94

PROJECT ENDS
RAMP B
STA 13+41.88

115+00

(16) YELLOW BUCKEYE (16) HACKBERRY
(2) GROUPS OF (8) FOR EACH SPECIE,
20' O.C. STAGGERED, MULCHED RING

EX. ℄ WB I-90/94

SEE SHEET 153
FOR DETAILS

110+00

PROJECT BEGINS
RAMP C
STA 103+00

(13) VANDERWOLF'S
PYRAMID LIMBER PINE,
20' O.C., STAGGERED

25+00

100+00

RAMP C

105+00

EX. ℄ RAMP C
PROP. ℄ RAMP C

EXIST. R.O.W.

ERIE ST.

MILWAUKEE AVE.

EXIST. R.O.W.

EXIST. R.O.W.

EX. / PROP.
℄ RAMP A

RAMP A

00+51

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COLLINS ENGINEERS INC

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PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

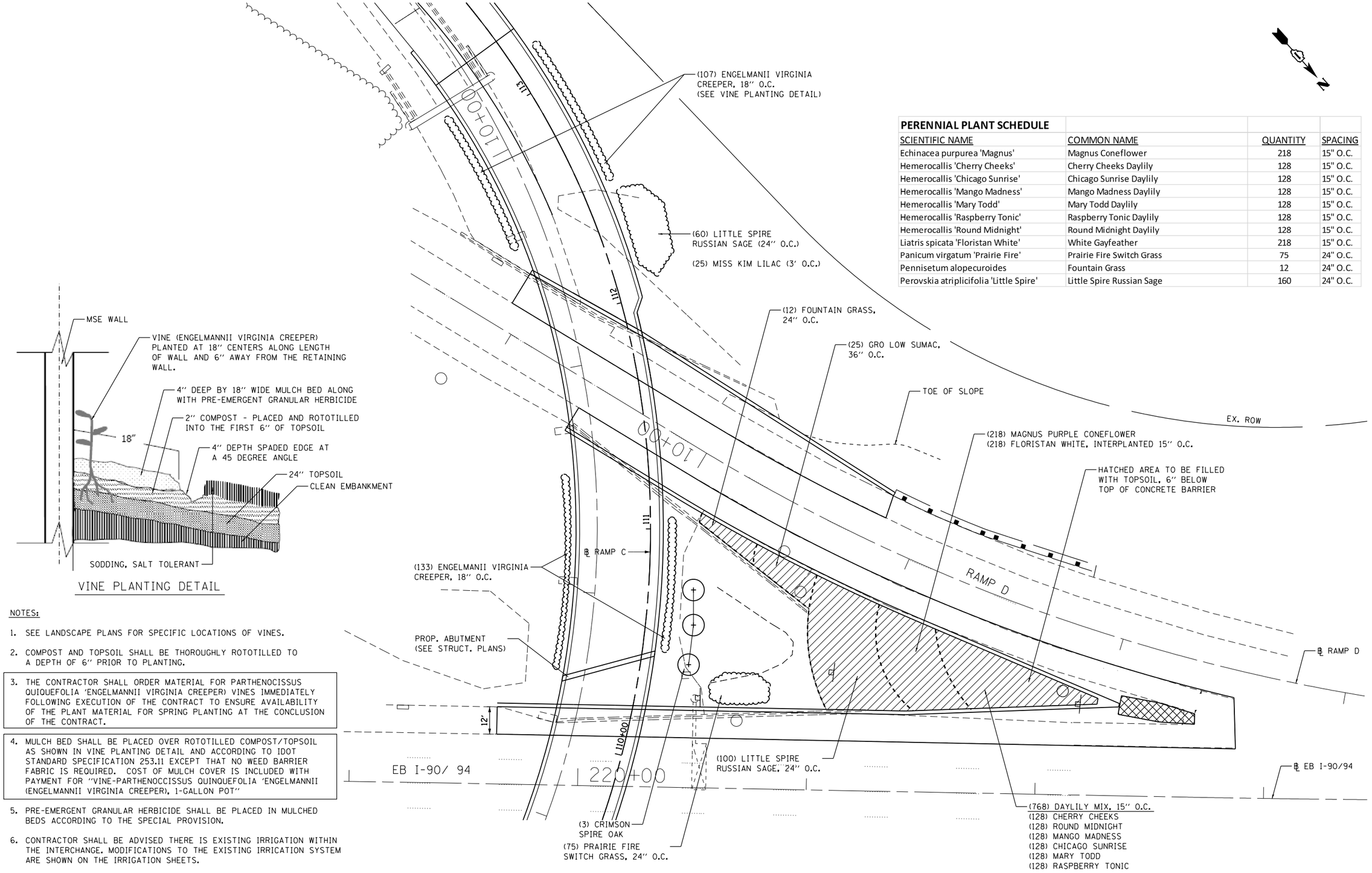
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
LANDSCAPING PLAN

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	158
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



PERENNIAL PLANT SCHEDULE			
SCIENTIFIC NAME	COMMON NAME	QUANTITY	SPACING
Echinacea purpurea 'Magnus'	Magnus Coneflower	218	15" O.C.
Hemerocallis 'Cherry Cheeks'	Cherry Cheeks Daylily	128	15" O.C.
Hemerocallis 'Chicago Sunrise'	Chicago Sunrise Daylily	128	15" O.C.
Hemerocallis 'Mango Madness'	Mango Madness Daylily	128	15" O.C.
Hemerocallis 'Mary Todd'	Mary Todd Daylily	128	15" O.C.
Hemerocallis 'Raspberry Tonic'	Raspberry Tonic Daylily	128	15" O.C.
Hemerocallis 'Round Midnight'	Round Midnight Daylily	128	15" O.C.
Liatris spicata 'Floristan White'	White Gayfeather	218	15" O.C.
Panicum virgatum 'Prairie Fire'	Prairie Fire Switch Grass	75	24" O.C.
Pennisetum alopecuroides	Fountain Grass	12	24" O.C.
Perovskia atriplicifolia 'Little Spire'	Little Spire Russian Sage	160	24" O.C.

VINE PLANTING DETAIL

NOTES:

1. SEE LANDSCAPE PLANS FOR SPECIFIC LOCATIONS OF VINES.
2. COMPOST AND TOPSOIL SHALL BE THOROUGHLY ROTOTILLED TO A DEPTH OF 6'' PRIOR TO PLANTING.
3. THE CONTRACTOR SHALL ORDER MATERIAL FOR PARTHENOCISSUS QUIQUEFOLIA 'ENGELMANNII VIRGINIA CREEPER) VINES IMMEDIATELY FOLLOWING EXECUTION OF THE CONTRACT TO ENSURE AVAILABILITY OF THE PLANT MATERIAL FOR SPRING PLANTING AT THE CONCLUSION OF THE CONTRACT.
4. MULCH BED SHALL BE PLACED OVER ROTOTILLED COMPOST/TOPSOIL AS SHOWN IN VINE PLANTING DETAIL AND ACCORDING TO IDOT STANDARD SPECIFICATION 253.11 EXCEPT THAT NO WEED BARRIER FABRIC IS REQUIRED. COST OF MULCH COVER IS INCLUDED WITH PAYMENT FOR ''VINE-PARTHENOCCISSUS QUINQUEFOLIA 'ENGELMANNII (ENGELMANNII VIRGINIA CREEPER), 1-GALLON POT''
5. PRE-EMERGENT GRANULAR HERBICIDE SHALL BE PLACED IN MULCHED BEDS ACCORDING TO THE SPECIAL PROVISION.
6. CONTRACTOR SHALL BE ADVISED THERE IS EXISTING IRRIGATION WITHIN THE INTERCHANGE. MODIFICATIONS TO THE EXISTING IRRICATION SYSTEM ARE SHOWN ON THE IRRIGATION SHEETS.

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COLLINS ENGINEERS INC

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PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
LANDSCAPING PLAN

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	159
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

APPROXIMATE LOCATION OF BRIDGE UNIT 2 DEMOLITION SITE

APPROXIMATE LOCATION OF BRIDGE UNIT 2 DEMOLITION SITE

TEMPORARY WORK PAD (40' X 70');
TEMPORARY PAVEMENT, 8"
AGGREGATE SUBGRADE IMPROVEMENT, 4"
STA 115+37.43 TO STA 116+07.23

CONTRACTOR SHALL PROTECT EXISTING LIGHTING CONTROLLER DURING DEMOLITION. COST OF THIS WORK SHALL BE INCIDENTAL TO STRUCTURE DEMOLITION.

APPROXIMATE LOCATION OF BRIDGE UNIT 3 DEMOLITION SITE

TEMPORARY WORK PAD (40' X 70');
TEMPORARY PAVEMENT, 8"
AGGREGATE SUBGRADE IMPROVEMENT, 4"
STA 11+21.70 TO STA 11+92.40 - EB I-90/94
STA 216+75.31 TO STA 216+04.93 - RAMP D

RAMP C

WB I-90/94

EB I-90/94

RAMP D

L100+00 L105+00 L110+00 L115+00 L120+00 L125+00

15+00 20+00

A A B B C C

15" 18" 24" 30" 60" 12"

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COLLINS ENGINEERS INC

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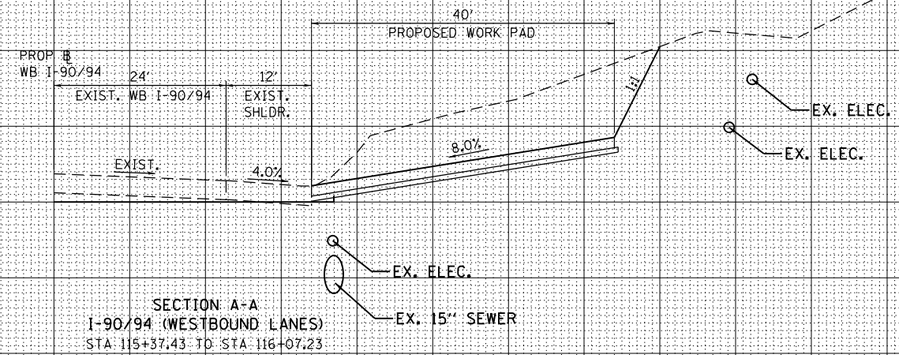
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

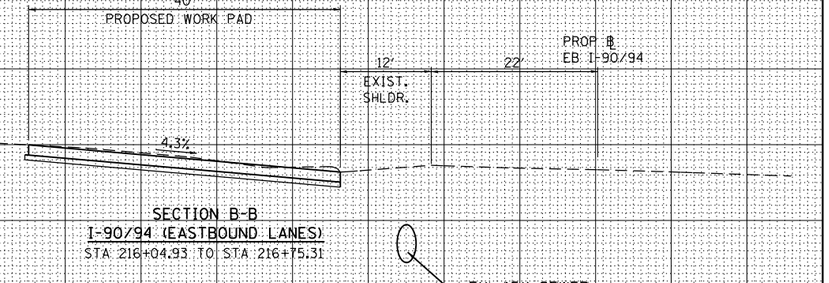
TEMPORARY GRADING PLAN FOR STRUCTURE DEMOLITION

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

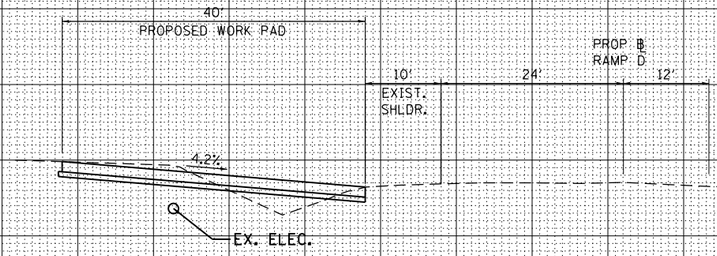
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	160
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SECTION A-A
I-90/94 (WESTBOUND LANES)
STA 115+37.43 TO STA 116+07.23



SECTION B-B
I-90/94 (EASTBOUND LANES)
STA 216+04.93 TO STA 216+75.31



SECTION C-C
RAMP D
STA 11+21.70 TO STA 11+92.40

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ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

FINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

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COLLINS ENGINEERS INC

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY GRADING PLAN
FOR STRUCTURE DEMOLITION

SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	161
		CONTRACT NO. 60F63		
	ILLINOIS FED. AID PROJECT			

SHEET INDEX

SHEET NO.	TITLE
E-1	LEGEND, SYMBOLS, SCHEDULE OF QUANTITIES & GENERAL NOTES
E-2	UNDERPASS LIGHTING PLAN - EXISTING AND DEMOLITION
E-3	UNDERPASS LIGHTING PLAN - TEMPORARY
E-4	UNDERPASS LIGHTING PLAN - PROPOSED
E-5	UNDERPASS LIGHTING PLAN - PROPOSED
E-6	RELOCATION PLAN - HIGH MAST LIGHTING CIRCUITS
E-7	LIGHTING DETAILS
E-8	LIGHTING DETAILS
E-9	UNDERPASS LIGHTING WIRING DIAGRAM
E-10	LIGHTING CONTROLLER
E-11	LIGHTING CONTROLLER
E-12	LIGHTING CONTROLLER
E-13	LIGHTING CONTROLLER

IDOT DISTRICT 1 STANDARD DETAILS

SHEET NO.	IDOT DIST 1 DETAIL NO.	TITLE
E-14	BE-220	ELECTRIC SERVICE INSTALLATION AERIAL REMOTE DISCONNECT
E-15	BE-702 MODIFIED	MISC. DETAILS, SHEET A - CABLE SPLICE, TRENCH DETAIL
E-16	BE-800	TEMPORARY LIGHT POLE DETAILS
E-17	BE-801	TEMPORARY AERIAL CABLE INSTALLATION

GENERAL NOTES - UNDERPASS LIGHTING

1. SPLICING OF CONDUCTORS WEATHER TIGHT JUNCTION BOXES ONLY. SPLICES BELOW GRADE WILL NOT BE PERMITTED.
2. LIGHTING CIRCUITS SHALL BE WIRED IN ACCORDANCE WITH THE PLANS. DEVIATIONS WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
3. THE CONTRACTOR SHALL REQUEST A FORMAL MAINTENANCE TRANSFER BEFORE ANY WORK BEGINS. THE CONTRACTOR SHALL CONTACT THE ILLINOIS DEPARTMENT OF TRANSPORTATION AT (708) 524-2145.
4. ALL WORK SHALL CONFORM TO THE LATEST IDOT, IDOT DISTRICT 1 STANDARDS, SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS, CITY OF CHICAGO ELECTRICAL CODE, AND THE NATIONAL ELECTRICAL SAFETY CODE.
5. ALL ELECTRICAL EQUIPMENT SHALL BE NEW, UL LISTED AND LABELED.
6. ALL CONDUITS SHALL BE SEALED.
7. ALL CIRCUIT WIRES SHALL BE LABELED WITH CIRCUIT IDENTIFICATION.
8. ALL LAMPS SHALL BE FURNISHED AS PART OF THE CONTRACT.
9. CIRCUITS SHALL BE TESTED PER SPECIFICATION.
10. THE LOCATIONS OF ALL PROPOSED EQUIPMENT ARE ILLUSTRATED DIAGRAMMITICALLY. THE ACTUAL LOCATION IN THE FIELD SHALL MEET THE APPROVAL OF THE ENGINEER.
11. ALL MEASUREMENTS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY MEASUREMENTS IN THE FIELD.
12. THE EXISTING LIGHTING SYSTEM VOLTAGE IS 240/480 VOLT, 1-PHASE 3-WIRE. THE LUMINAIRES ARE 240 VOLT.
13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING INSTALLATIONS AND DATA PRIOR TO BIDDING.
14. GROUNDING CONDUCTORS SHALL BE CONTINUOUS, INSULATED AND RUN TOGETHER WITH THE CIRCUIT CONDUCTORS.
15. BURIED UTILITY LOCATIONS SHOWN ON THE PLAN SHEETS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES BEFORE STARTING WORK.
16. ALL NEW UNIT DUCTS AND UNDERGROUND CONDUITS SHALL BE PLACED A MINIMUM OR 30" BENEATH THE GROUND SURFACE (FINAL GRADE), UNLESS NOTED OTHERWISE.
17. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUITS WITH THE WORK OF OTHER CONTRACTORS.
18. TEMPORARY LIGHTING SHALL REMAIN IN SERVICE UNTIL THE PERMANENT LIGHTING IS IN OPERATION.
19. FAULT TESTING AND ENERGIZING OF THE NEW CIRCUIT IS INCLUDED IN THE COST OF THE CABLE. ALL CABLE MUST BE FAULT FREE PRIOR TO ENERGIZATION.
20. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING (DECORATIVE ROCKS, PLANTS, ETC.).

BILL OF MATERIALS - LIGHTING

DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	1
ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 1" DIA.	FOOT	210
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	360
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	160
CONDUIT ATTACHED TO STRUCTURE 1 1/2" DIA. PVC COATED GALVANIZED STEEL	FOOT	320
CONDUIT ATTACHED TO STRUCTURE, 2" DIA., PVC COATED GALVANIZED STEEL	FOOT	650
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 8" X 6" X 4"	EACH	8
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 8" X 6"	EACH	56
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 18" X 8"	EACH	3
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	2,000
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	5,000
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	3,200
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	8,580
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 3/0	FOOT	350
AERIAL CABLE, 3-1/C NO. 4 WITH MESSENGER WIRE	FOOT	110
AERIAL CABLE, 3-1/C NO. 8 WITH MESSENGER WIRE	FOOT	530
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	2
UNDERPASS LUMINAIRE, 70 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	8
UNDERPASS LUMINAIRE, 400 WATT, HIGH PRESSURE SODIUM VAPOR	EACH	100
LIGHTING CONTROLLER, SPECIAL	EACH	1
LIGHT POLE, WOOD, 60 FOOT, CLASS 3	EACH	2
LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	2
REMOVAL OF UNDERPASS LIGHTING UNIT, NO SALVAGE	EACH	56
REMOVAL OF UNDERGROUND CABLE	FOOT	4,200
REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1
REMOVAL OF LIGHTING CONTROLLER	EACH	1
REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1
MAINTENANCE OF LIGHTING SYSTEM	CAL MO	18

SYMBOL LIST

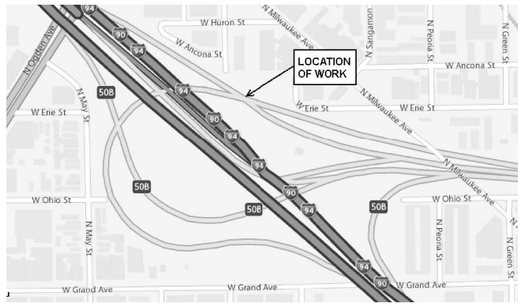
DESCRIPTION	PROPOSED	EXISTING TO BE REMOVED	TEMPORARY
LIGHTING CONTROLLER			
UNDERPASS LUMINAIRE, HPS, WATTS AS INDICATED ON PLANS	OR		
JUNCTION BOX			
CONDUIT, ATTACHED TO STRUCTURE			
CONDUIT, UNDERGROUND			— L —
LIQUID TIGHT FLEXIBLE METAL CONDUIT			
TEMPORARY WOOD POLE (SIZE AND CLASS AS INDICATED ON PLANS)			
TEMPORARY WOOD POLE (SIZE AND CLASS AS INDICATED ON PLANS), WITH 15' MAST ARM, 400W, 240 VOLT, MC-III HPS LUMINAIRE AND PHOTOCELL CONTROL			
AERIAL CABLE WITH MESSENGER WIRE (CONDUCTORS AS INDICATED ON PLANS)			— A —
GROUND ROD, 5/8" DIA. X 10'			

ABBREVIATIONS

A	AMPS
A.G.	ABOVE GRADE
C	CONDUCTOR
CDOT	CHICAGO DEPARTMENT OF TRANSPORTATION
DIA	DIAMETER
GND	GROUND
EPR	ETHYLENE PROPOLYENE RUBBER
FT	FEET
HPS	HIGH PRESSURE SODIUM
IDOT	ILLINOIS DEPARTMENT OF TRANSPORTATION
P	PUSHED
PH	PHASE
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
RGSC	RIGID GALVANIZED STEEL CONDUIT
STA	STATION
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
XLP	CROSS-LINKED POLYETHYLENE
V	VOLTS
W	WATTS
W	WIRES

CONDUIT/CABLE TAGS

A	2" PVC SCHEDULE 40 CONDUIT, IN TRENCH WITH 3-1/C #3/0 600 VOLT (XLP TYPE USE)
B	2" RGS CONDUIT, IN TRENCH WITH 6-1/C #4, 3-1/C #10 AND 1-1/C #8 GROUND (XLP TYPE USE)
C	2" PVC COATED RGS CONDUIT, ATTACHED TO STRUCTURE WITH 6-1/C #4 AND 1-1/C #8 GROUND (XLP TYPE USE)
D	1 1/2" PVC COATED RGS CONDUIT, ATTACHED TO STRUCTURE WITH 3-1/C #10 AND 1-1/C #10 GROUND ((XLP TYPE USE)
E	1" PVC COATED RGS CONDUIT, ATTACHED TO STRUCTURE WITH ILLUMINANCE SENSOR CONDUCTORS PER MANUFACTURER'S REQUIREMENTS
F	1" RGS CONDUIT, IN TRENCH WITH ILLUMINANCE SENSOR CONDUCTORS PER MANUFACTURER'S REQUIREMENTS



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FILE NAME = E-01.dgn

SPAAN TECH, INC.
311 S. Wacker Drive, Suite 2400 phone 312.277.8000
Chicago, IL 60606 fax 312.277.8005
web www.SpaanTech.com

COLLINS ENGINEERS INC

USER NAME = CDOT - City of Chicago	DESIGNED - IAB	REVISED -
PLOT SCALE = 2.000000 ' / in.	DRAWN - DL/TM	REVISED -
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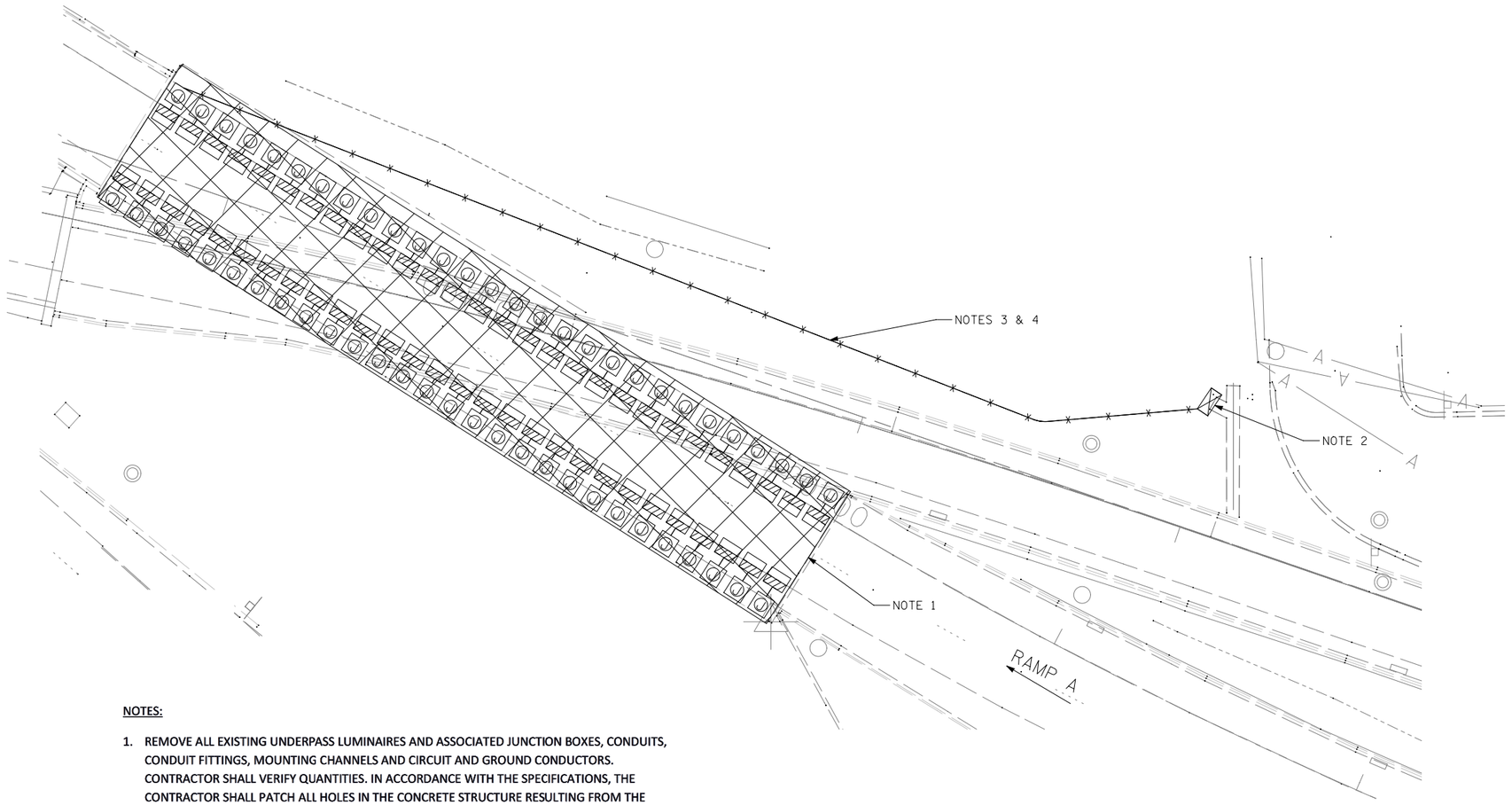
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
LEGEND, SYMBOLS, SCHEDULE OF QUANTITIES, AND GENERAL NOTES

SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

E-1

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	162
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. REMOVE ALL EXISTING UNDERPASS LUMINAIRES AND ASSOCIATED JUNCTION BOXES, CONDUITS, CONDUIT FITTINGS, MOUNTING CHANNELS AND CIRCUIT AND GROUND CONDUCTORS. CONTRACTOR SHALL VERIFY QUANTITIES. IN ACCORDANCE WITH THE SPECIFICATIONS, THE CONTRACTOR SHALL PATCH ALL HOLES IN THE CONCRETE STRUCTURE RESULTING FROM THE REMOVALS. THE FOLLOWING IS AN ESTIMATE OF THE QUANTITIES TO BE REMOVED. CONTRACTOR SHALL VERIFY MATERIALS AND QUANTITIES. THEE COST OF REMOVALS SHALL BE INCLUDED IN THE PRICE FOR PAY ITEM "REMOVAL OF UNDERPASS LIGHTING UNIT, NO SALVAGE".

44	EA	400 WATT HPS LUMINAIRES ATTACHED TO CHANNEL
12	EA	250 WATT HPS LUMINAIRES ATTACHED TO CHANNEL
56	EA	10" X 8" X 6" STAINLESS STEEL JUNCTION BOXES ATTACHED TO STRUCTURE
1000	FT	1 ½" DIA. PVC COATED RGS CONDUIT ATTACHED TO CHANNEL
400	FT	1" DIA. PVC COATED RGS CONDUIT ATTACHED TO CHANNEL
350	FT	¾" DIA. LIQUID TIGHT FLEX CONDUIT
1800	FT	1/C #2, 600 VOLT CONDUCTOR IN 1 ½" CONDUIT
1500	FT	1/C #12, 600 VOLT CONDUCTOR IN 1" CONDUIT
1700	FT	1/C #10, 600 VOLT CONDUCTOR IN ¾" LIQUID TIGHT FLEX CONDUIT
1	LOT	1-5/8" STAINLESS STEEL CHANNEL AND FITTINGS ATTACHED TO STRUCTURE

2. EXISTING LIGHTING CONTROLLER AND FEEDS TO UNDERPASS LUMINAIRES TO BE USED FOR TEMPORARY UNDERPASS LIGHTING DURING CONSTRUCTION. REMOVE CONTROLLER, FOUNDATION AND FEEDS WHEN NEW PERMANENT UNDERPASS LIGHTING IS IN OPERATION.

3. REMOVE CIRCUIT CONDUCTORS AND ABANDON CONDUITS.

4. CONTRACTOR TO VERIFY LOCATIONS OF EXISTING CONDUITS FROM CONTROLLER TO UNDERPASS.

LEGEND

ALL LUMINAIRES, CONDUITS, MOUNTING MATERIALS, JUNCTION BOXES AND CONDUCTORS IN THIS AREA ARE TO BE REMOVED

PEN TABLE = HDR Fullerton Parkway.tbl

FILE NAME = E-02.dgn

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400 phone 312.277.6800 fax 312.277.6808 web www.SpaanTech.com
Chicago, IL 60606

COLLINS ENGINEERS INC

E-2

USER NAME = CDOT - City of Chicago	DESIGNED - IAB	REVISED -
PLOT SCALE = 40.000000 ' / in.	DRAWN - DL/TM	REVISED -
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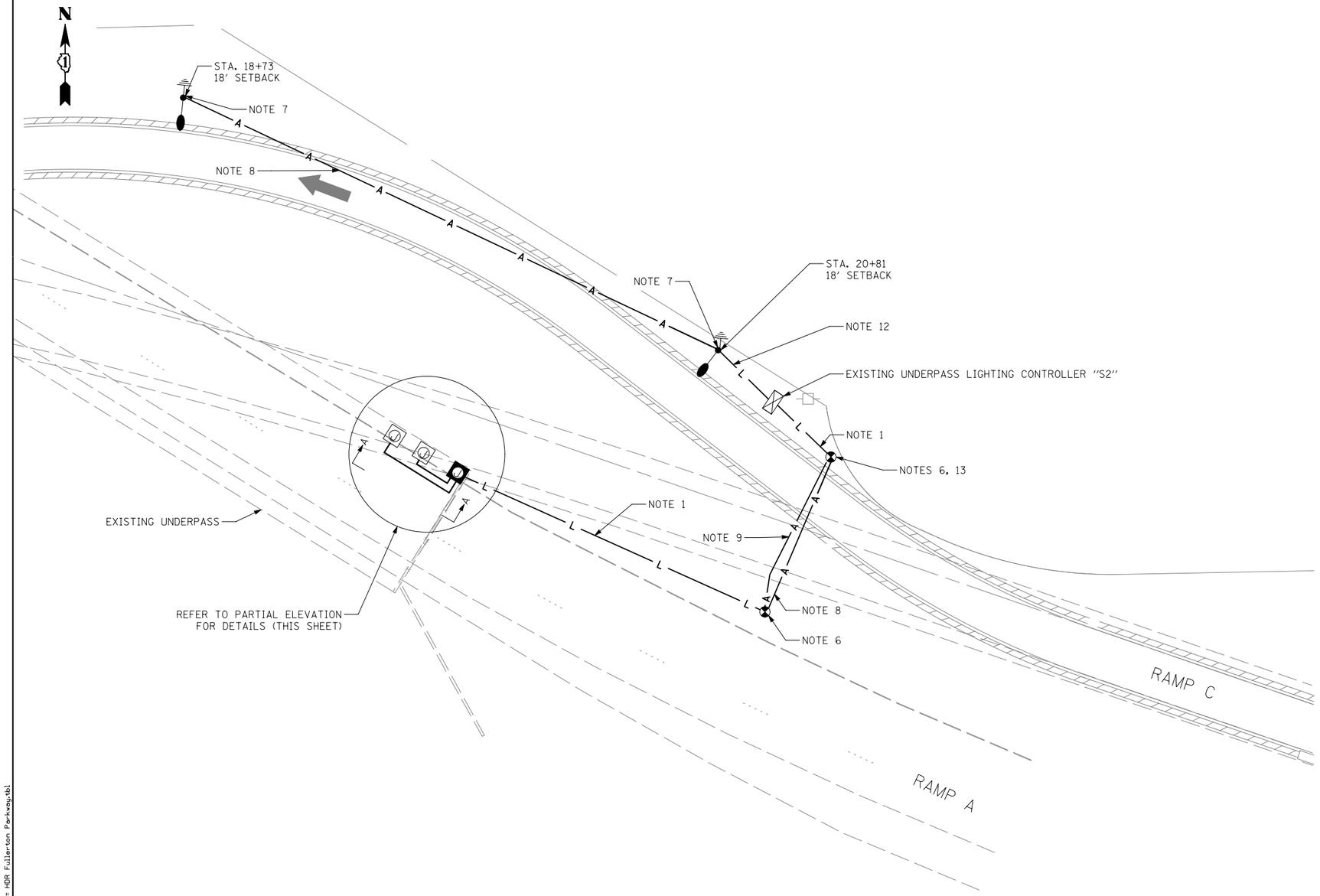
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
UNDERPASS LIGHTING PLAN – EXISTING AND DEMOLITION

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	163
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES

1. 2" RGSC DIRECT BURIED 30" BELOW GRADE (MINIMUM) TO WOOD POLE WITH 3-1/C #4, 3-1/C #8 AND 1-1/C #8 GROUND.
2. 2" RGSC ATTACHED TO EXISTING CONCRETE STRUCTURE WITH 3-1/C #4 AND 1-1/C #8 GROUND.
3. 1" RGSC ATTACHED TO EXISTING CONCRETE STRUCTURE WITH 3-1/C #8 AND 1-1/C #10 GROUND.
4. 1" RGSC ATTACHED TO EXISTING CONCRETE STRUCTURE WITH 3-1/C #4 AND 1-1/C #8 GROUND.
5. 12" x 8" x 6" NEMA 3R JUNCTION BOX ATTACHED TO STRUCTURE.
6. PROVIDE 60 FOOT WOOD POLE. CABLE ATTACHMENT POINTS SHALL PROVIDE A MINIMUM AERIAL CABLE CLEARANCE OF 50' ABOVE GRADE AT ANY POINT IN THE SPAN.
7. 50' LUMINAIRE MOUNTING HEIGHT.
8. 3-1/C #8 AERIAL CABLE WITH MESSENGER WIRE.
9. 3-1/C #4 AERIAL CABLE WITH MESSENGER WIRE AND 3-1/C #8 AERIAL CABLE WITH MESSENGER WIRE.
10. THIS DRAWING CONCEPTUAL ONLY. CONTRACTOR TO DETERMINE REQUIREMENTS FOR PROVIDING POWER TO EXISTING UNDERPASS LUMINAIRES ON WEST SIDE OF UNDERPASS.
11. TEMPORARY WOOD LIGHT POLE LOCATIONS ARE REFERENCED TO THE RAMP C RUNAROUND.
12. 2" RGSC DIRECT BURIED 30" BELOW GRADE (MINIMUM) WITH 3-1/C #8 AND 1-1/C #10 GROUND.
13. PROVIDE CRASH PROTECTION FOR WOOD POLE.

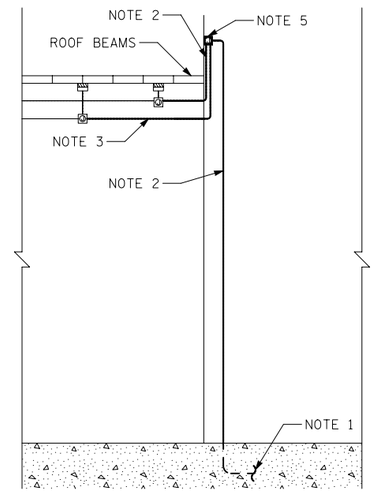
TEMPORARY UNDERPASS LIGHTING STAGING

STAGE 1 – EXTENSION OF WEST ABUTMENT

1. EXISTING LIGHTING CONTROLLER AND EXISTING LIGHTING ON EAST ABUTMENT TO REMAIN IN SERVICE DURING STAGE 1.
2. EXISTING LIGHTING ON WEST ABUTMENT TO BE TEMPORARILY FED FROM THE SOUTH END OF THE UNDERPASS TO ALLOW FOR CONSTRUCTION TO BEGIN ON THE NORTH END OF THE UNDERPASS.
3. PROVIDE TEMPORARY UNDERGROUND CONDUIT CONNECTIONS TO TEMPORARY AERIAL CABLES AS SHOWN ON PLANS. INSTALL WOOD POLESFROM EXISTING LIGHTING CONTROLLER TO EXISTING JUNCTION BOXES ON SOUTH SIDE OF THE EAST ABUTMENT. DISCONNECT CONNECTION FROM EXISTING CONTROLLER TO JUNCTION BOXES ON NORTH SIDE OF EAST ABUTMENT.
4. REMOVE EXISTING UNDERPASS LIGHTING FROM WEST ABUTMENT.
5. INSTALL NEW UNDERPASS LIGHTING ON EXISTING WEST ABUTMENT AND NEW EXTENSION OF WEST ABUTMENT PER PROPOSED LIGHTING PLANS.
6. INSTALL NEW CONTROLLER AND CONNECT NEW LIGHTING ON WEST ABUTMENT TO NEW CONTROLLER PER PROPOSED LIGHTING PLANS.

STAGE 2 – EXTENSION OF WEST ABUTMENT

1. PLACE NEW UNDERPASS LIGHTING ON WEST ABUTMENT IN SERVICE.
2. REMOVE EXISTING UNDERPASS LIGHTING FROM EAST ABUTMENT.



SECTION A-A

TEMPORARY CONNECTION TO EXISTING UNDERPASS LIGHTING

PARTIAL ELEVATION - LOOKING SOUTHWEST (NOT TO SCALE)

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400
Chicago, IL 60606
phone 312.277.8000
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web www.SpaanTech.com

COLLINS ENGINEERS INC

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
UNDERPASS LIGHTING PLAN – TEMPORARY

SCALE: 1" = 20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	164
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

E-3

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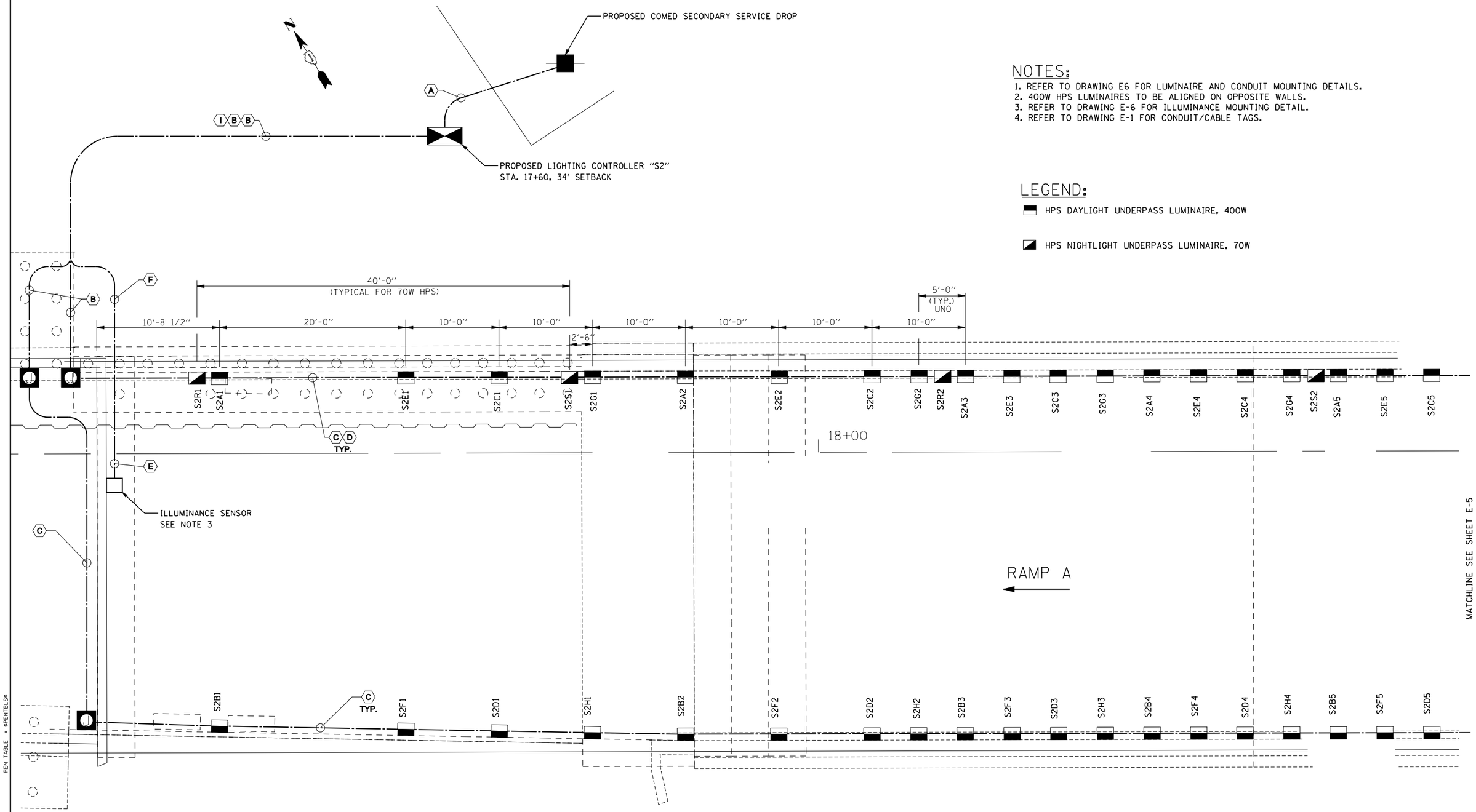
FILE NAME = E-03.dgn



NOTES:

1. REFER TO DRAWING E6 FOR LUMINAIRE AND CONDUIT MOUNTING DETAILS.
2. 400W HPS LUMINAIRES TO BE ALIGNED ON OPPOSITE WALLS.
3. REFER TO DRAWING E-6 FOR ILLUMINANCE MOUNTING DETAIL.
4. REFER TO DRAWING E-1 FOR CONDUIT/CABLE TAGS.

LEGEND:

HPS DAYLIGHT UNDERPASS LUMINAIRE, 400W

HPS NIGHTLIGHT UNDERPASS LUMINAIRE, 70W

PEN TABLE = $PENTBL$$

FILE NAME = $FILE$

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Chicago, IL 60606 web www.SpaanTech.com

COLLINS ENGINEERS INC

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PLOT DATE = $DATE$ $TIME$	CHECKED - YK	REVISED -
PLOT DRIVER= $PLTDRVS$	DATE - DEC 2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
UNDERPASS LIGHTING PLAN – PROPOSED

SCALE: 1" = 10' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	165
		CONTRACT NO. 60F63		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

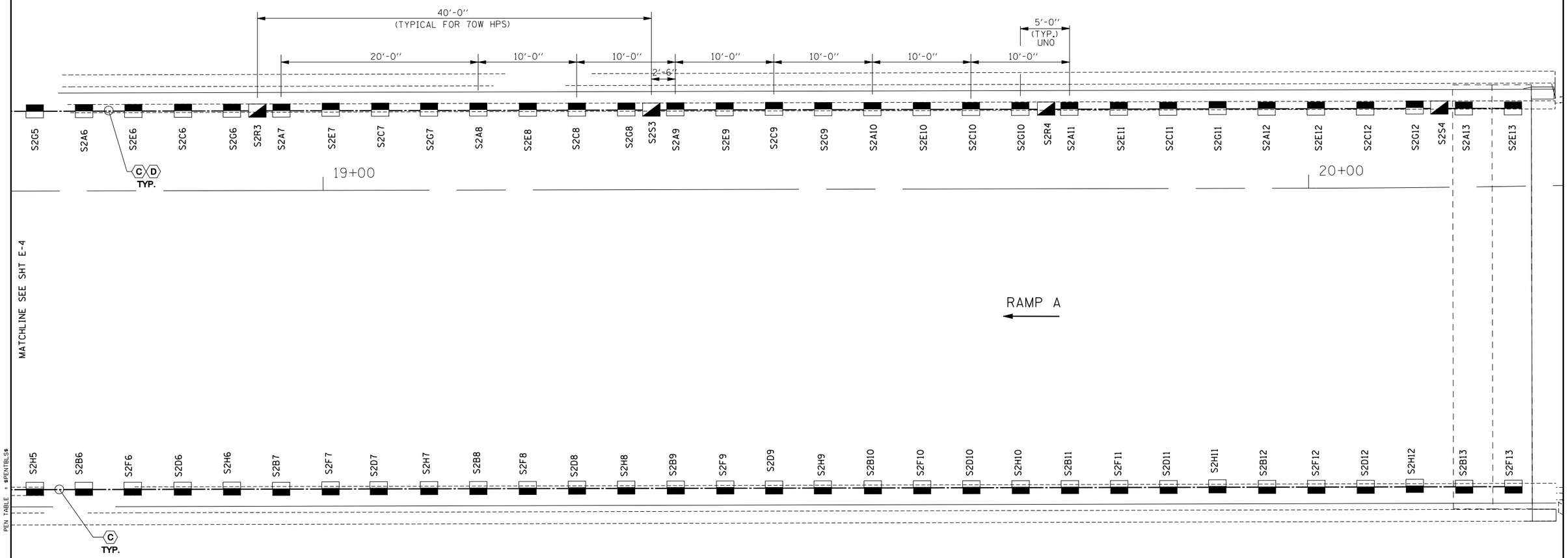
NOTES:

1. REFER TO DRAWING E6 FOR LUMINAIRE AND CONDUIT MOUNTING DETAILS.
2. 400W HPS LUMINAIRES TO BE ALIGNED ON OPPOSITE WALLS.
3. REFER TO DRAWING E-6 FOR ILLUMINANCE MOUNTING DETAIL.
4. REFER TO DRAWING E-1 FOR CONDUIT/CABLE TAGS.

LEGEND:

HPS DAYLIGHT UNDERPASS LUMINAIRE, 400W

HPS NIGHTLIGHT UNDERPASS LUMINAIRE, 70W



PEN TABLE = $PENTBL$

FILE NAME = $FILE$

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PLOT DRIVER= $PLTDRVS$	DATE - DEC 2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
UNDERPASS LIGHTING PLAN – PROPOSED

SCALE: 1" = 10' | SHEET NO. OF SHEETS | STA. TO STA.

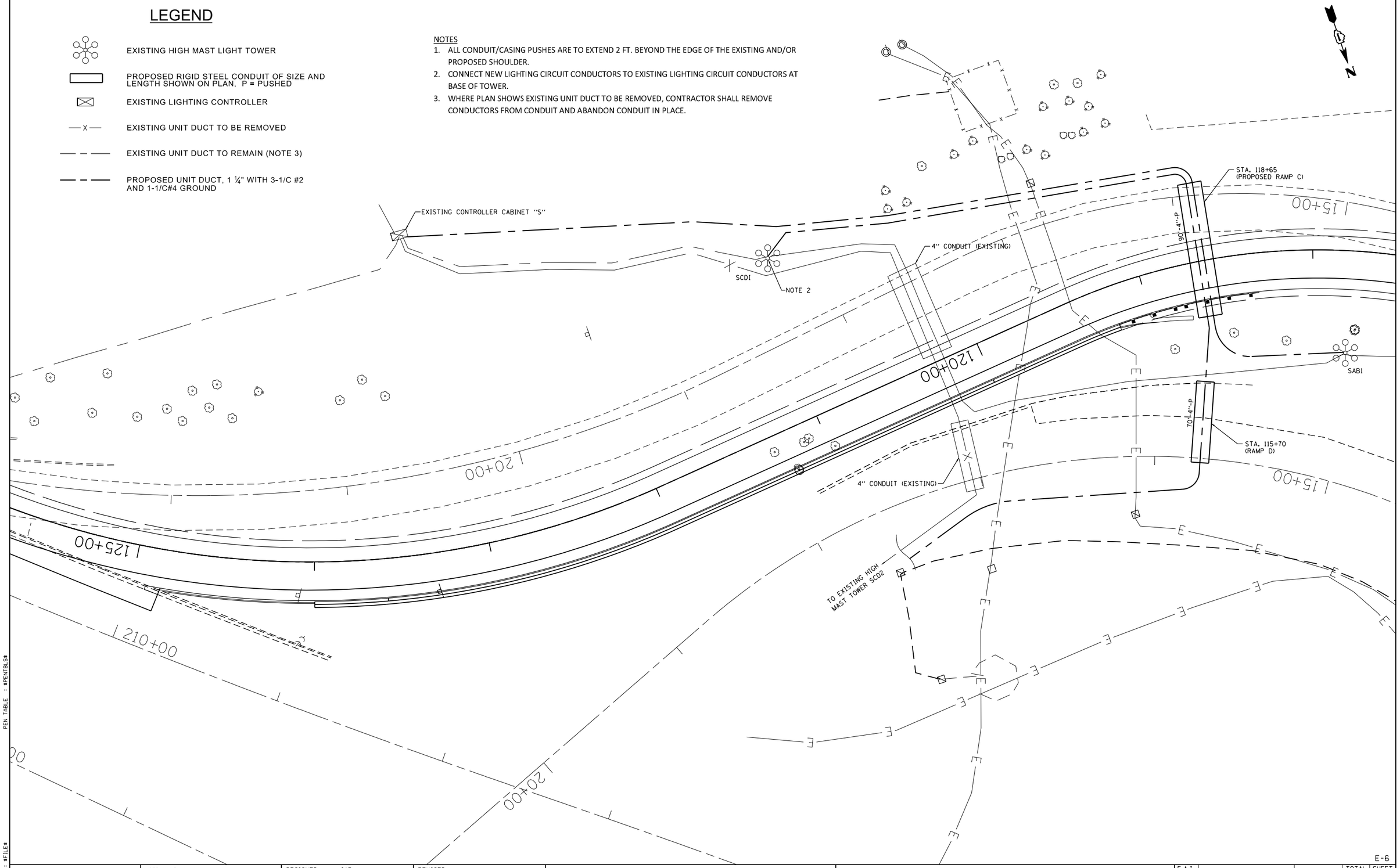
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	166
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LEGEND

- EXISTING HIGH MAST LIGHT TOWER
- PROPOSED RIGID STEEL CONDUIT OF SIZE AND LENGTH SHOWN ON PLAN. P = PUSHED
- EXISTING LIGHTING CONTROLLER
- —X— EXISTING UNIT DUCT TO BE REMOVED
- — — — EXISTING UNIT DUCT TO REMAIN (NOTE 3)
- — — — PROPOSED UNIT DUCT, 1 ¼" WITH 3-1/C #2 AND 1-1/C#4 GROUND

NOTES

1. ALL CONDUIT/CASING PUSHES ARE TO EXTEND 2 FT. BEYOND THE EDGE OF THE EXISTING AND/OR PROPOSED SHOULDER.
2. CONNECT NEW LIGHTING CIRCUIT CONDUCTORS TO EXISTING LIGHTING CIRCUIT CONDUCTORS AT BASE OF TOWER.
3. WHERE PLAN SHOWS EXISTING UNIT DUCT TO BE REMOVED, CONTRACTOR SHALL REMOVE CONDUCTORS FROM CONDUIT AND ABANDON CONDUIT IN PLACE.



E-6

COLLINS ENGINEERS INC	USER NAME = ejohnson	DESIGNED - IAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-90/94 AT OHIO STREET RELOCATION PLAN - HIGH MAST LIGHTING CIRCUITS
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	167
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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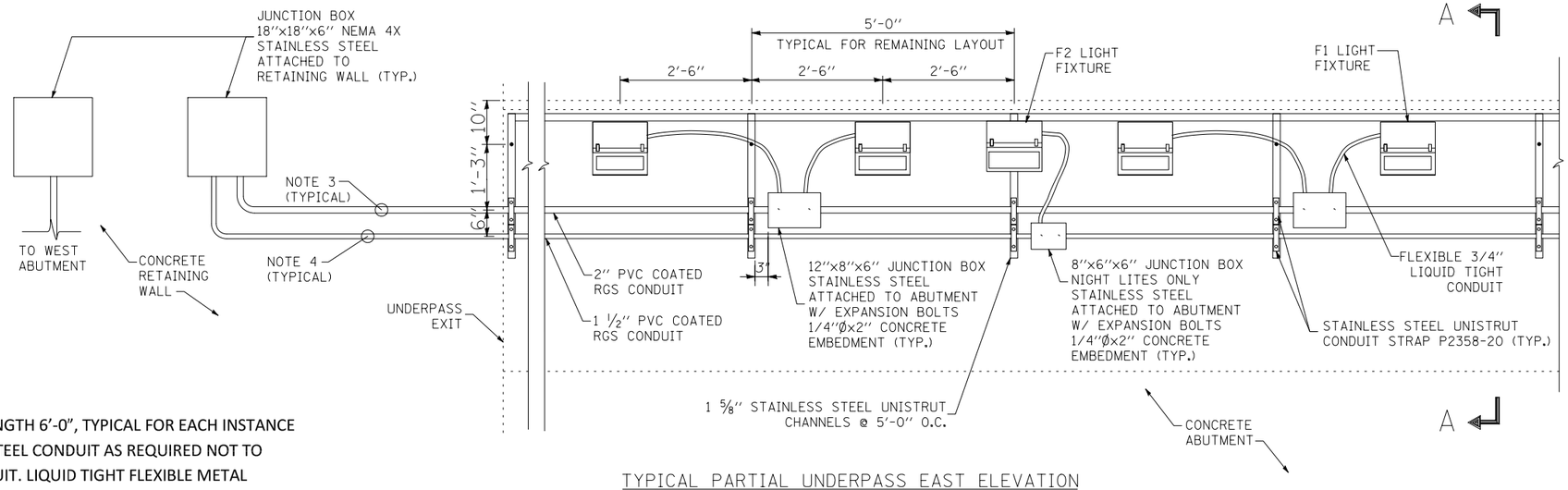
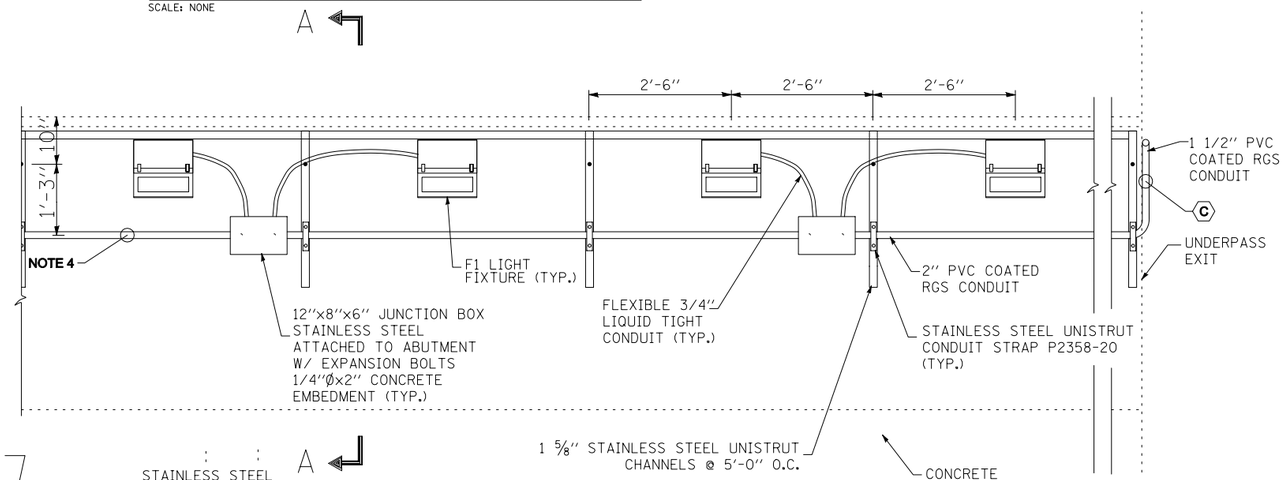


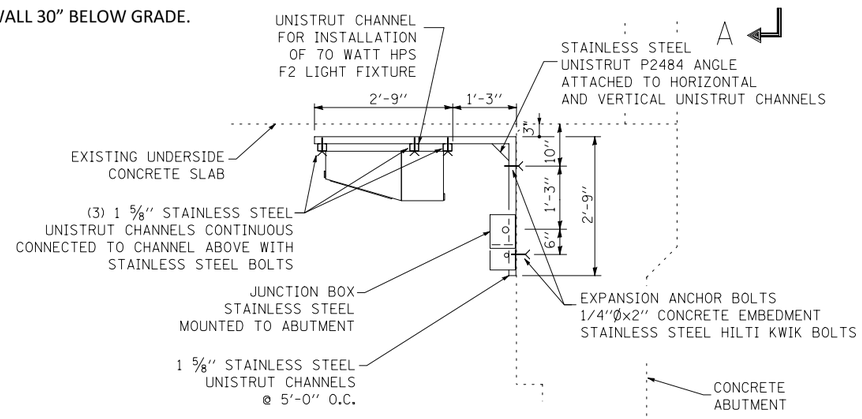
TYPICAL PARTIAL UNDERPASS EAST ELEVATION

SCALE: NONE



TYPICAL PARTIAL UNDERPASS WEST ELEVATION

SCALE: NONE



SECTION A-A

SCALE: NONE

ELEVATION NOTES

1. LIQUID TIGHT FLEXIBLE METAL CONDUIT, MAXIMUM LENGTH 6'-0", TYPICAL FOR EACH INSTANCE AS SHOWN. PROVIDE PVC COATED RIGID GALVANIZED STEEL CONDUIT AS REQUIRED NOT TO EXCEEN 6'-0" OF FLEXIBLE LIGQUID TIGHT METAL CONDUIT. LIQUID TIGHT FLEXIBLE METAL CONDUIT WILL BE INCLUDED IN THE COST OF THE CONDUIT ATTACHED TO THE STRUCTURE OF THE CORRESPONDING DIAMETER GALVANIZED STEEL, PVC COATED PAY ITEM, EXCEPT THAT THE COST OF THE ¾" DIA. RIGID STEEL CONDUIT AND ¾" DIA. FLEXIBLE CONDUIT SHALL BE INCLUDED IN THE LUMINAIRE INSTALLATION.
2. UNDERPASS LUMINAIRE MOUNTED TO THE FACE OF THE ABUTMENT WALL. MOUNTING HEIGHT OF 3" BELOW THE TOP OF THE ABUTMENT WALL TYPICAL FOR ALL PIER/ABUTMENT MOUNTED LUMINAIRES UNLESS OTHERWISE NOTED.
3. EXPANSION ANCHOR, POWDER ACTUATED FASTENERS WILL NOT BE ALLOWED. EXPANSION ANCHOR MUST BE SIZED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
4. SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS SHALL BE INCLUDED WITH THE COST OF THE "CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL PVC COATED" PAY ITEM.
5. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC) TYPICAL.
6. PVC COATED CONDUITS PENETRATE UPPER PORTION OF RETAINING WALL 30" BELOW GRADE.

PEN TABLE = CRA Pentable.tbl

FILE NAME = E-07.dgn

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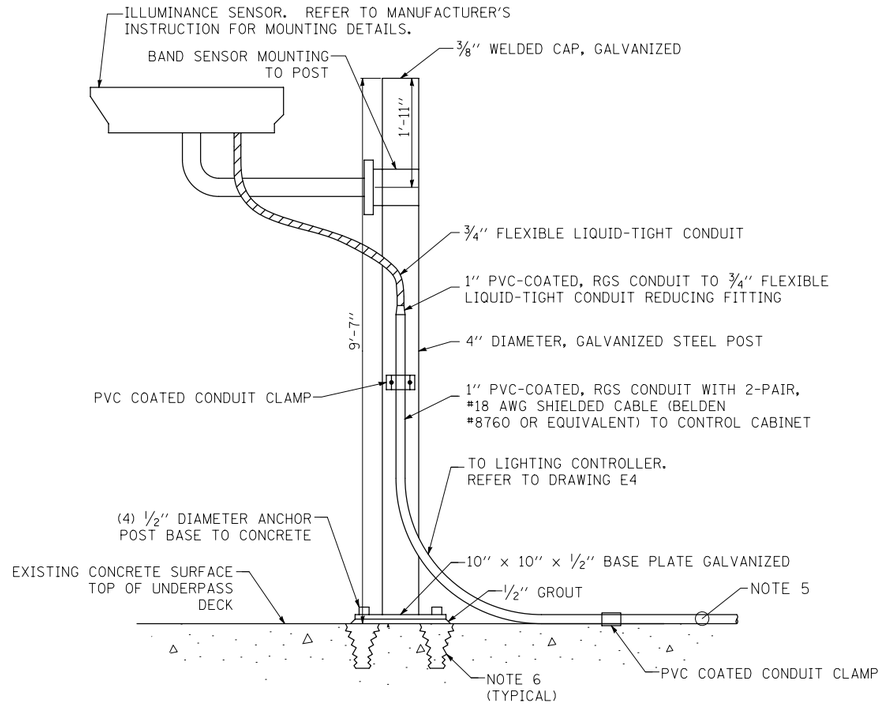
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
LIGHTING DETAILS

SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	168
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



ILLUMINANCE SENSOR MOUNTING DETAIL

SCALE: NONE

NOTES:

1. COST OF SENSOR MOUNTING STRUCTURES ARE INCIDENTAL TO THE PAY ITEMS FOR LIGHTING CONTROLLERS.
2. REFER TO DRAWING E-1 FOR CONDUIT/CABLE TAG LEGEND.
3. 2" PVC COATED RGS CONDUIT WITH 4-1/C#4, 4-1/C#10 AND 1-1/C#8 GROUND (XLP-TYPE USE).
4. 1 1/2" PVC COATED RGS CONDUIT WITH 4-1/C#10 AND 1-1/C#10 GROUND (XLP-TYPE USE).
5. 1" RGS CONDUIT IN TRENCH WITH ILLUMINATION SENSOR CABLES.
6. ANCHOR BASE PLATE TO EXISTING CONCRETE SURFACE, 4 CORNERS.

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PLOT SCALE = 2.000000 ' / in.	DRAWN - DL/TM	REVISED -
PLOT DATE = 3/5/2013 10:36:39 AM	CHECKED - YK	REVISED -
PLOT DRIVER= CRA - PDF.plt	DATE - DEC 2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
LIGHTING DETAILS

SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	169
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

E-8

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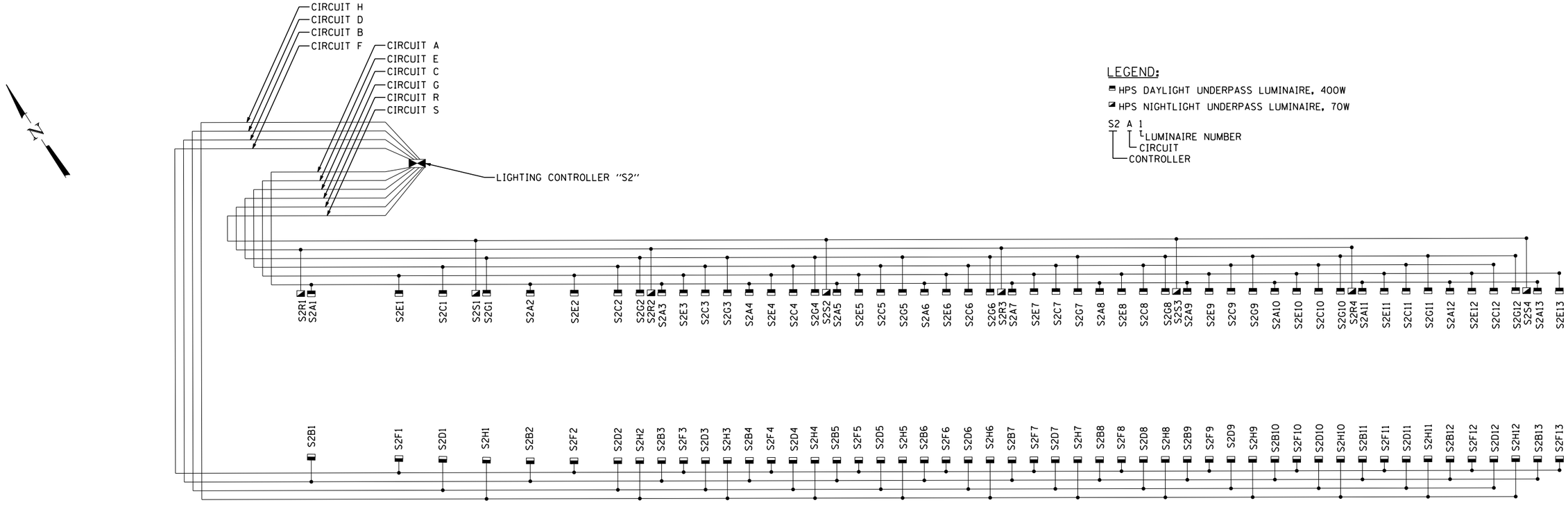

NOTE:

1. NEUTRAL CONDUCTORS (4) FOR CIRCUITS A/E, B/F, C/G, D/H AND R/S NOT SHOWN.

PANEL SCHEDULE AND LOAD TABULATION
LIGHTING CONTROLLER S2
240/480 VOLTS, 1-PHASE 3-WIRE
MAIN BREAKER: 200A

CIRCUIT	BREAKER TRIP AMPS	KW BLACK	KW RED	AMPS
A	70	–	6.2	25.8
B	70	6.2	–	25.8
C	70	–	6.2	25.8
D	70	6.2	–	25.8
E	70	–	6.2	25.8
F	70	6.2	–	25.8
G	70	–	6.2	25.8
H	70	6.2	–	25.8
I	70	–		
J	70		–	
K	70	–		
L	70		–	
M	70	–		
R	15	0.4	–	1.6
S	15	–	0.4	1.6
	SUBTOTAL	25.2	25.2	–
	TOTAL	50.4		105.0

ALL UNDERPASS LUMINAIRES ARE CONNECTED 240V PHASE-NEUTRAL.

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PLOT DATE = $DATE$ $TIME$	CHECKED - YK	REVISED -	
PLOT DRIVER= $PLTDRVS$	DATE - DEC 2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
UNDERPASS LUMINAIRE WIRING DIAGRAM

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	170
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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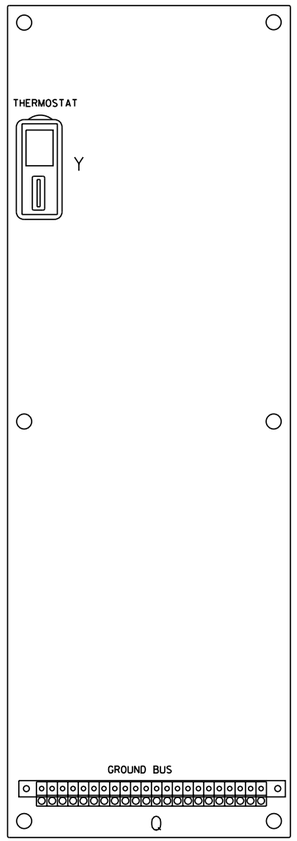
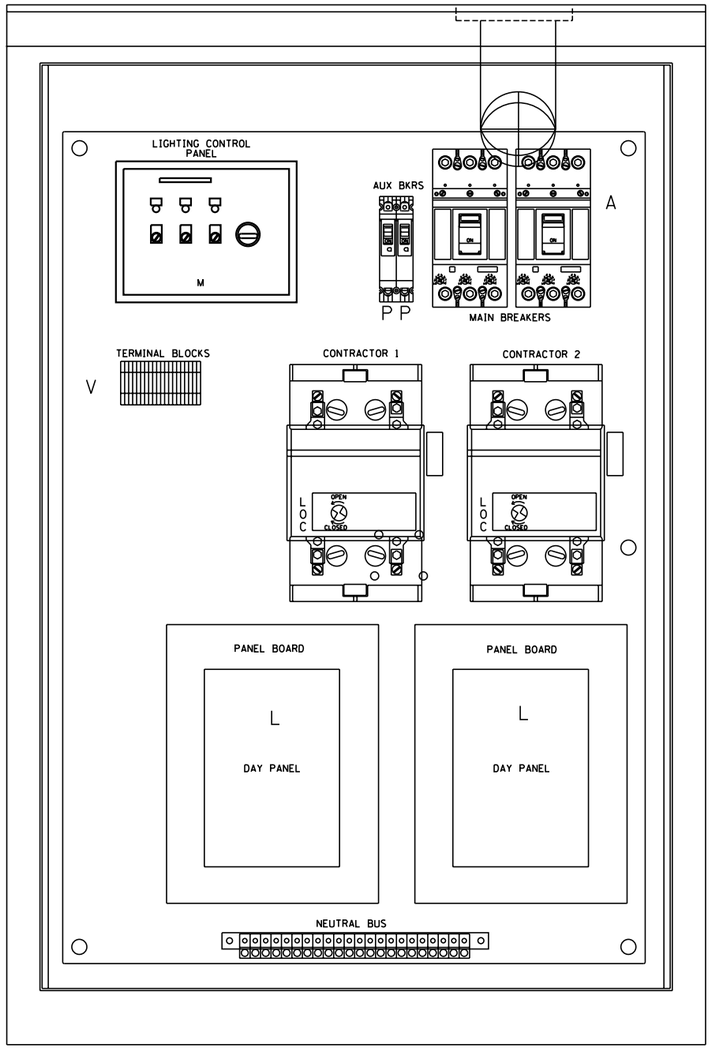
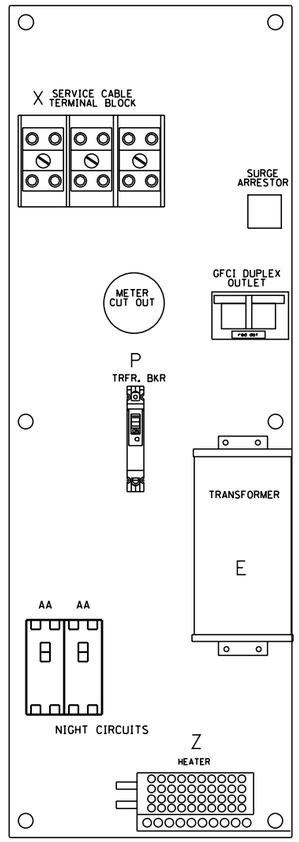


LEFT SIDE PANEL





RIGHT SIDE PANEL

BILL OF MATERIALS

ITEM	QTY	DESCRIPTION
A	2	FXD62B175 BREAKERS 2 POLE 175 AMP WITH AUX CONTACT
C1, C2	2	MECHANICAL CONTRACTOR 8903PBV10X11V39 2 POLE 200 AMP 240V COIL WITH AUX CONTACTS
D	3	SECTIONAL FUSE HOLDER
E	1	1.5 KVA 277V-240/120 TRANSFORMER
G	1	15 AMP GFCI
H	2	DOOR SWITCH
I	1	LIGHT FIXTURE
J	1	METER FITTING 1 PHASE 3 WIRE 200 AMP
K	1	SURGE ARRESTER
L	2	PANEL BOARD 480/240V 1 PHASE, 250 AMP COPPER BUS
M	1	LIGHTING CONTROL PANEL
N		
D		
P	3	BREAKER 1P 15A
Q	2	COPPER GROUND AND NEUTRAL BUS 1 X 16 X 1/4
T		
V	20	TERMINAL BLOCKS
X	1	620 AMP SPLICE BLOCK
Y	1	CHROMALOX WR 80, 40-80 DEC THERMOSTAT
Z	1	HEATREX 276-10 375 WATT HEATER
AA	4	1-POLE, 15-AMP CIRCUIT BREAKER

PEN TABLE = $PENTBL$$

FILE NAME = $FILE$$

COLLINS ENGINEERS INC

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PLOT DATE = $DATE$ $TIME$	CHECKED - YK	REVISED -	
PLOT DRIVER= $PLTDRVS$	DATE - DEC 2012	REVISED -	

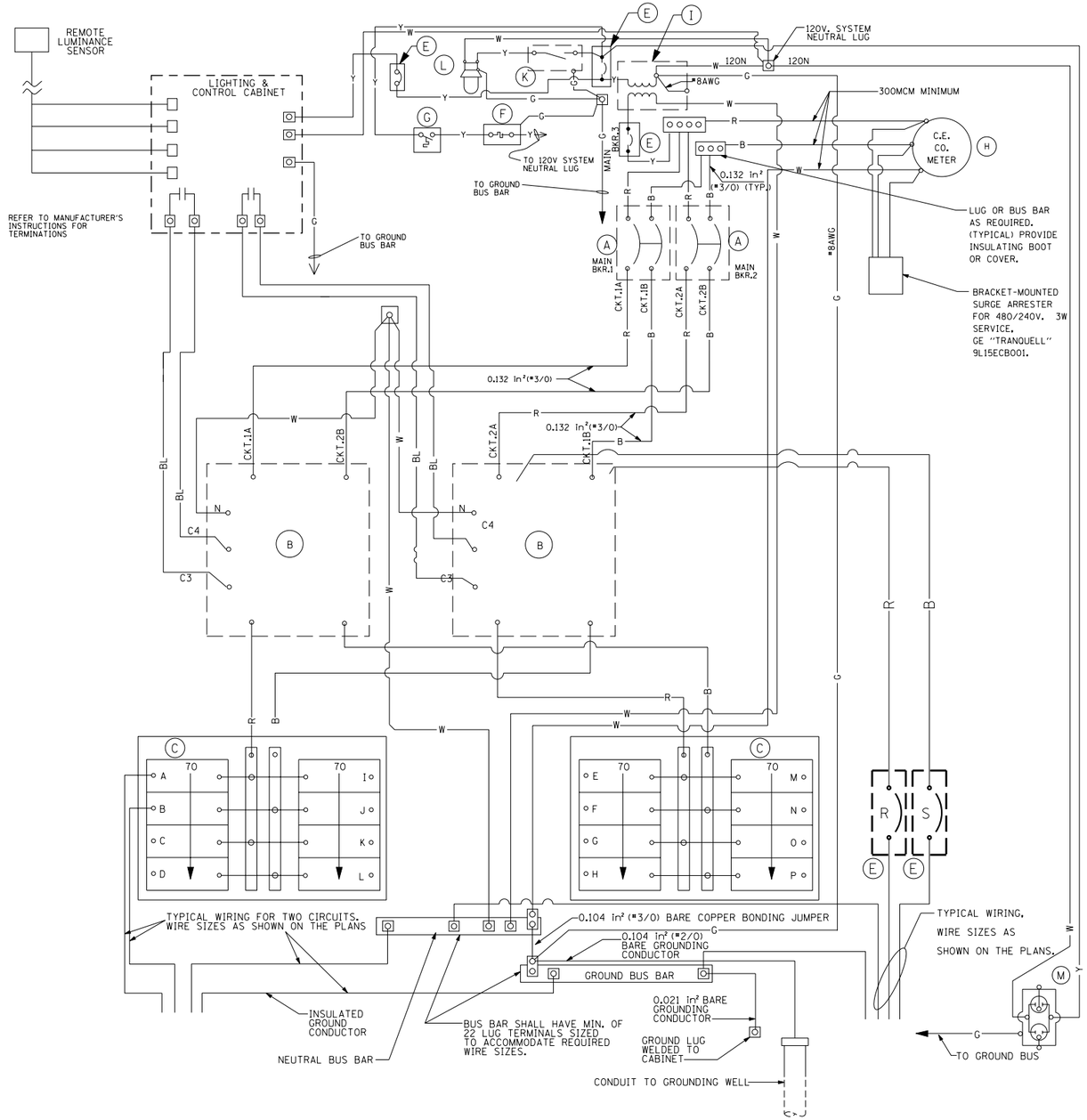
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
LIGHTING CONTROLLER, DUPLEX TYPE, SHEET NO. 1 OF 4

SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	171
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

DEVICE SCHEDULE		
ITEM	QUANT.	DESCRIPTION
(A)	2	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE, 600V. A.C., 225A. FRAME, 175A. NON-INTERCHANGABLE TRIP, BOLT-ON TYPE; INTERRUPTING CAPACITY OF NOT LESS THAN 22,000 RMS SYMMETRICAL AMPERES AT 480V.
(B)	2	LIGHTING CONTACTOR (REMOTE CONTROL SWITCH) MECHANICALLY HELD, ASCO 920, MOUNTED ON SUB PANEL 200A., 2P., 600V. WITH 240V. COIL.
(C)	2	PANEL BOARD (INTERIOR ONLY) 480/240V, SINGLE PHASE WITH 200A. COPPER MAINS AND EIGHT IP-70A BOLT-ON BRANCH BREAKERS EACH RATED 277V. WITH INTERRUPTING CAPACITY OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277V.
(D)	1	LIGHTING ADJUSTABLE CONTROL PANEL W/3-SET POINTS & 3-NO CONTACT OUTPUTS W/HOA SWITCHES AND INDICATING LIGHTS FOR EACH OUTPUT & INTERPOSING RELAYS. NEMA 1 ENCLOSURE. PLC MULTIPOINT MODEL T3X-1.
(E)	3	CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1-POLE, 277V., BOLT-ON TYPE, 15A WITH AN INTERRUPTING RATING OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277V.
(F)	1	HEATER, 120V, 375 WATT HEATREX 276-10.
(G)	1	THERMOSTAT, 40-80 DEG. F. CHROMALOX WR-80.
(H)	1	SOCKET FOR ELECTRIC UTILITY COMPANY METER.
(I)	1	STEP DOWN TRANSFORMER 240V.-120V., 1.5 KVA
(J)	3	FUSE HOLDER 15A., 250V., 5A. FUSE
(K)	1	20A. SPST MICRO SWITCH (MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR OPENED)
(L)	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE AND GUARD AND MOUNTING BOX.
(M)	1	GFI RECEPTACLE, 120V., 20A., PREMIUM SPEC. GRADE, NEMA REFERENCE 5-15R IN WEATHER-PROOF BOX WITH FLAP-TYPE COVER.
(N)	1	LUMINANCE SENSOR, 24 VAC INPUT POWER, 4-20MA OUTPUT, PLC MULTI-POINT MODEL TLUM.



NOTES:

1. ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2-COLOR LAMINATED PLASTIC NAMEPLATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS. INTERNAL CABINET WIRING SHALL BE IDENTIFIED AS INDICATED OR AS DIRECTED BY THE ENGINEER BY MEANS OF SELF-STICKING TAGS APPLIED AT EACH CONNECTED END. IDENTIFICATION SHALL BE MADE BY THE CABINET MANUFACTURER.
2. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
   R = RED BL = BLUE W = WHITE
   B = BLACK Y = YELLOW G = GREEN
3. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
4. ALL 120 VOLT SYSTEM AND ALL CONTROL WIRING SHALL BE #12AWG STRANDED UNLESS OTHERWISE INDICATED.
5. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
6. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL"
7. SEE CABINET AND FOUNDATION DETAIL SHEET FOR SCHEMATIC DIAGRAM AND DEVICE LAYOUT.
8. SEE SHEET E-8 FOR PANEL LAYOUT.

PEN TABLE = $PENTBL$

FILE NAME = $FILE$

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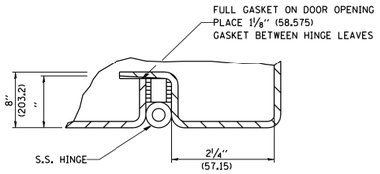
USER NAME = $USER$	DESIGNED - IAB	REVISED -	
PLOT SCALE = $SCALE$	DRAWN - DL/TM	REVISED -	
PLOT DATE = $DATE$ $TIME$	CHECKED - YK	REVISED -	
PLOT DRIVER= $PLTDRVS$	DATE - DEC 2012	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

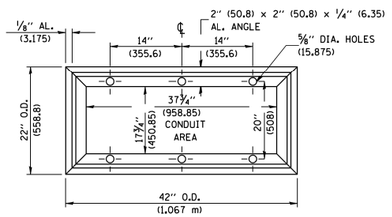
I-90/94 AT OHIO STREET
LIGHTING CONTROLLER, DUPLEX TYPE, SHEET NO. 2 OF 4

SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

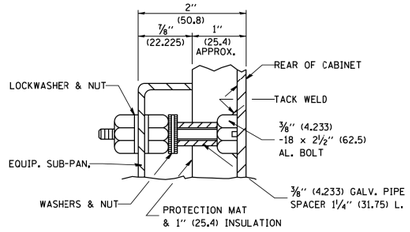
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	172
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



DETAIL "Y"



BASE MTG. DETAIL



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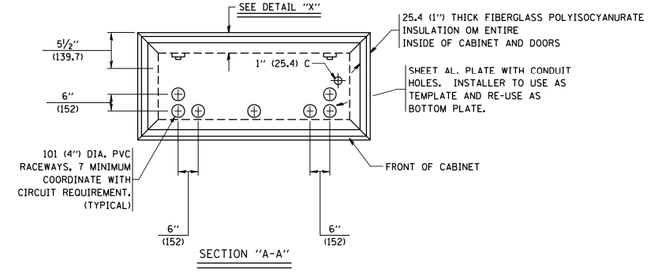
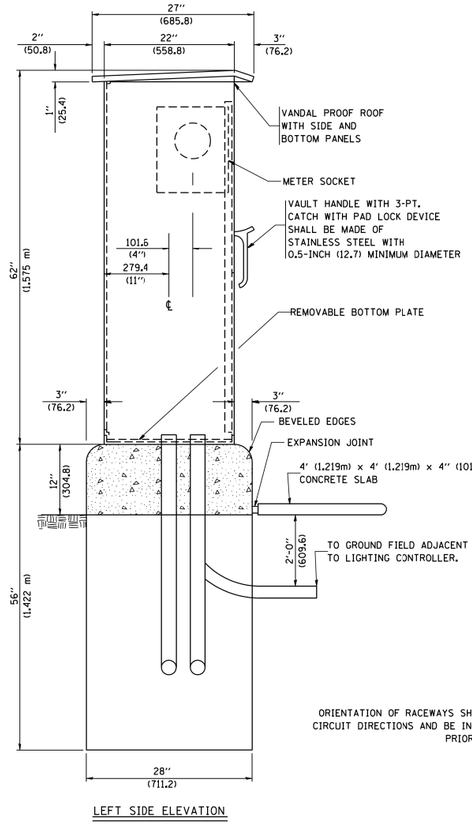
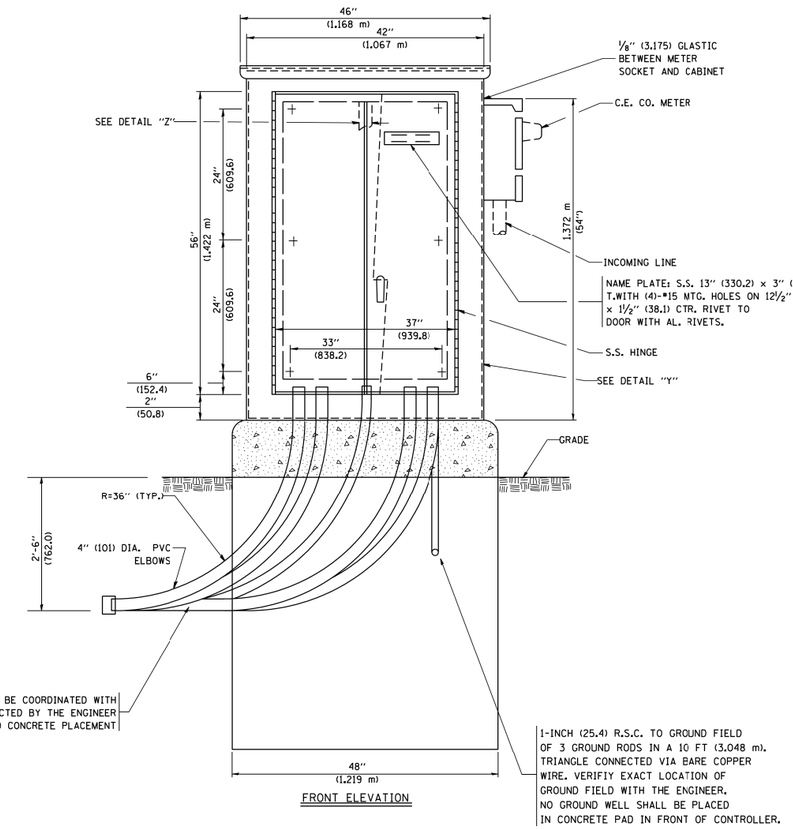


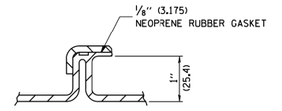
SECTION "A-A"



LEFT SIDE ELEVATION



FRONT ELEVATION



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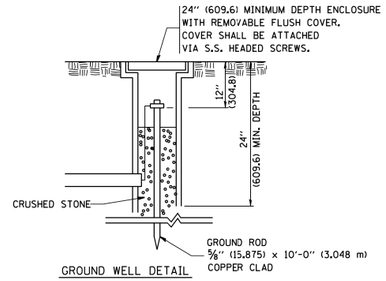
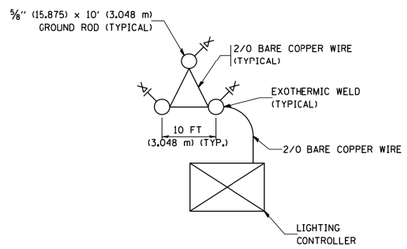


GROUND WELL DETAIL



GROUND FIELD DETAIL
(N.T.S.)

THE CONTRACTOR SHALL
VERIFY EXACT LOCATION
WITH THE ENGINEER

PEN TABLE = CRA Pentable.tbl

FILE NAME = E-12.dgn

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web www.SpaanTech.com

E-12

COLLINS ENGINEERS INC

USER NAME = tmickey	DESIGNED - IAB	REVISED -
PLOT SCALE = 2.000000 ' / in.	DRAWN - DL/TM	REVISED -
PLOT DATE = 3/5/2013 11:30:47 AM	CHECKED - YK	REVISED -
PLOT DRIVER= CRA - PDF.plt	DATE - DEC 2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
LIGHTING CONTROLLER, SHEET NO. 3 OF 4

SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	173
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES

1. CABINET SHALL BE FABRICATED FROM 0.125-INCH (3.175) SHEET ALUMINUM #3003H14, FORMED AND ARC WELDED ASSEMBLY.
2. ALL SCREWS AND HARDWARE SHALL BE PLATED, GALVANIZED, OR MADE OF BRASS, ALUMINUM OR STAINLESS STEEL.
3. NAME PLATE SHALL HAVE ENGRAVED 0.75-INCH (19.05) HIGH LETTERS FILLED IN BLACK: "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
4. ONE INCH THICK POLYISOCYANURATE INSULATION SHALL BE INSTALL AND PERMANENTLY CEMENTED ON ALL SIDES OF THE CABINET AND DOORS.
5. CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED.
6. ELECTRIC UTILITY METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET AS SHOWN ON THE PANEL LAYOUT DIAGRAM.
7. THE COMPLETED CONTROLLER SHALL BE U.L. LISTED AS AN INDUSTRIAL CONTROL PANEL UNDER UL508.
8. METAL MOUNTING PANEL SHALL BE #10 GAUGE GALVANIZED SHEET STEEL FLANGED BACK 0.75-INCHES I.D. ON 4 SIDES.
9. CIRCUIT BREAKERS AND CONTACTORS AND OTHER COMPONENTS SHALL BE MOUNTED ON 0.125-INCH (3.175) THICK GLASTIC INSULATION BACK PANEL.
10. ALL DEVICES SHALL BE FRONT REMOVABLE.
11. TIME CLOCK CHANNEL 1 N.O. CONTACT IS CLOSED NIGHT AND OPEN DAY.
12. SET "ON TIME" TO 30 MINUTES AFTER ASTRONOMICAL SUNSET.
13. BUS BAR SHALL HAVE 22 LUG TERMINALS SIZED TO ACCOMMODATE REQUIRED WIRE SIZES.
    NEUTRAL BUS SHALL BE PAINTED WHITE.
    GROUND BUS SHALL BE PAINTED GREEN.
14. ALL LUGS SHALL BE OF COPPER SCREWS AND CONNECTORS, SPRING HELD.
15. ALL WIRING TERMINATIONS SHALL BE RATED NOT LESS THAN 75 DEGREE CENTIGRADE.
16. ALL CONTROL WIRING SHALL BE 600V MACHINE TOOL WIRE TYPE MTW.
17. ALL POWER WIRING SHALL BE 600V TYPE RHH/RHW.
18. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED:

R - RED	Y - YELLOW
B - BLACK	W - WHITE
BL- BLUE	G - GREEN

19. ALL DIMENSIONS ARE IN MILIMETERS (INCHES) UNLESS OTHERWISE INDICATED.
20. SCHEMATIC SHOWN WITH BREAKER OPEN, CONTACTOR OPEN, CABINET DOOR CLOSED, CLOCK NOT ACTIVE.
21. A LAMINATED COPY OF THE CIRCUIT SCHEMATIC AND SCADA I/O DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE CONTROLLER.

PEN TABLE = CRA Pentable.tbl

FILE NAME = E-13.dgn

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COLLINS ENGINEERS INC

E-13

USER NAME = tmickey	DESIGNED - IAB	REVISED -
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PLOT DATE = 3/5/2013 10:42:25 AM	CHECKED - YK	REVISED -
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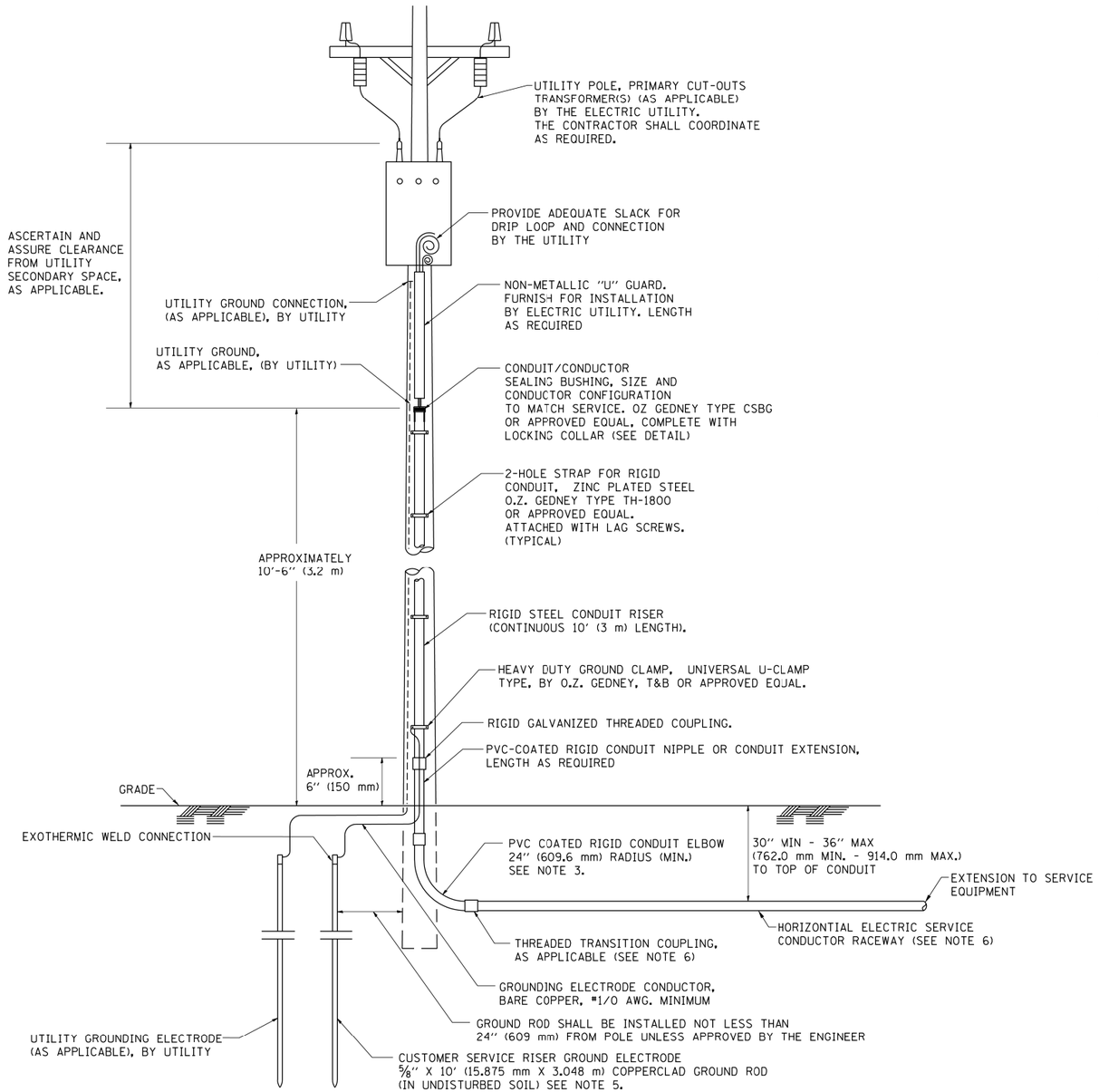
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
LIGHTING CONTROLLER, DUPLEX TYPE, SHEET NO. 4 OF 4

SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	174
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

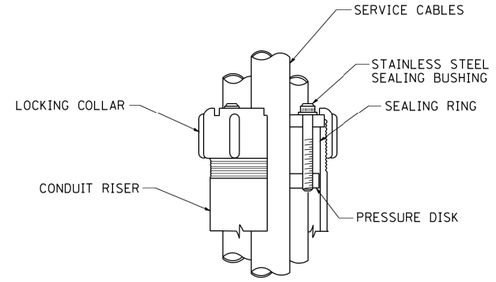


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

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PEN TABLE = HDR Fullerton Parkway.tbl

FILE NAME = E-14.dgn

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311 S. Wacker Drive, Suite 2400 phone 312.277.6800 fax 312.277.6808 web www.SpaanTech.com
Chicago, IL 60606

COLLINS ENGINEERS INC

USER NAME = CDOT - City of Chicago	DESIGNED - IAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-90/94 AT OHIO STREET ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 3/5/2013 8:59:55 AM	CHECKED - YK	REVISED -						CONTRACT NO. 60F63	
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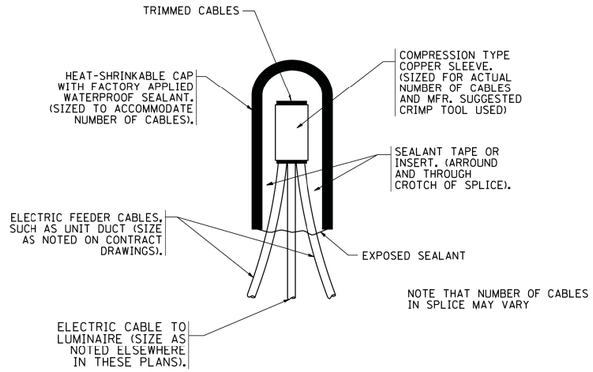
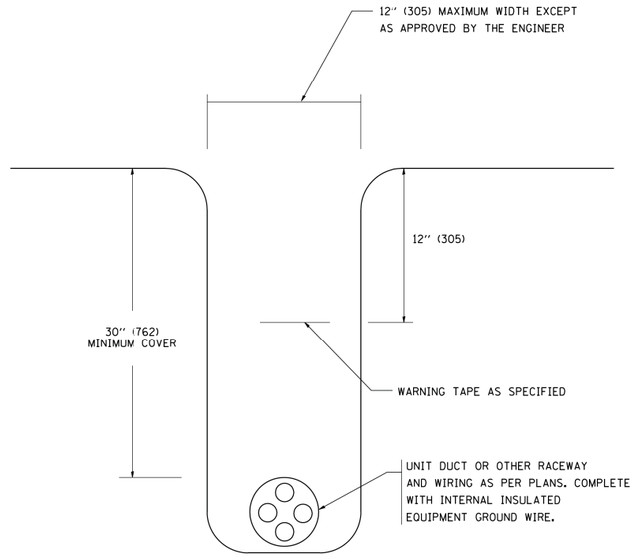


TYPICAL SPLICE DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.

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PEN TABLE = HDR Fullerton Parkway.tbl

FILE NAME = E-15.dgn

SPAAN Tech, Inc.
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COLLINS ENGINEERS INC

E-15

USER NAME = CDOT - City of Chicago	DESIGNED - IAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-90/94 AT OHIO STREET MISC. ELECTRICAL DETAILS, SHEET A – CABLE SPLICE, TRENCH DETAIL	F.A.I. RTE.	SECTION	COUNTY / TOTAL SHEETS / SHEET NO.
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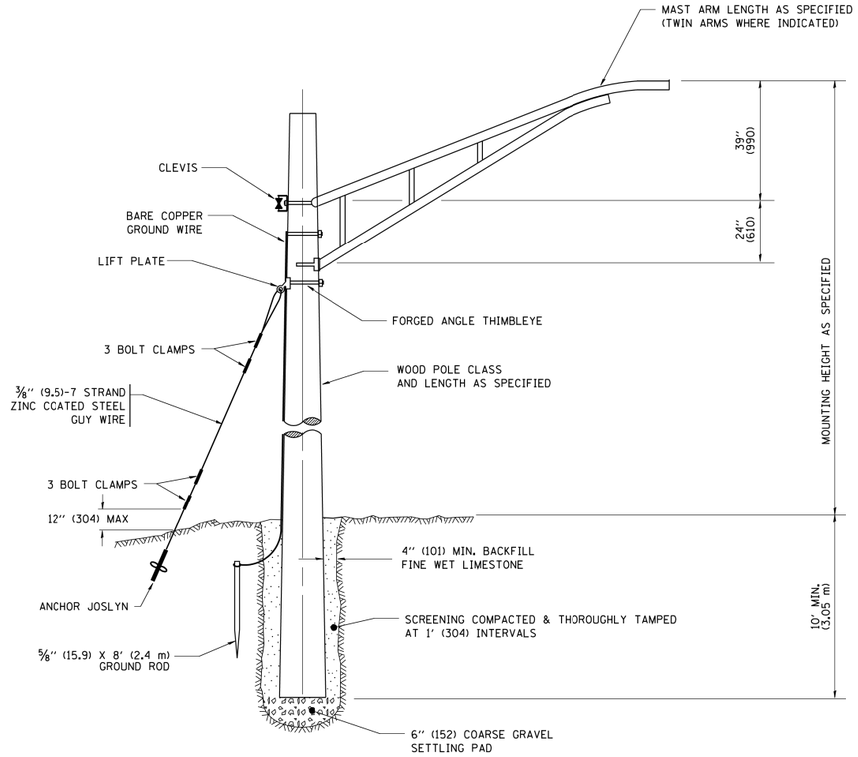
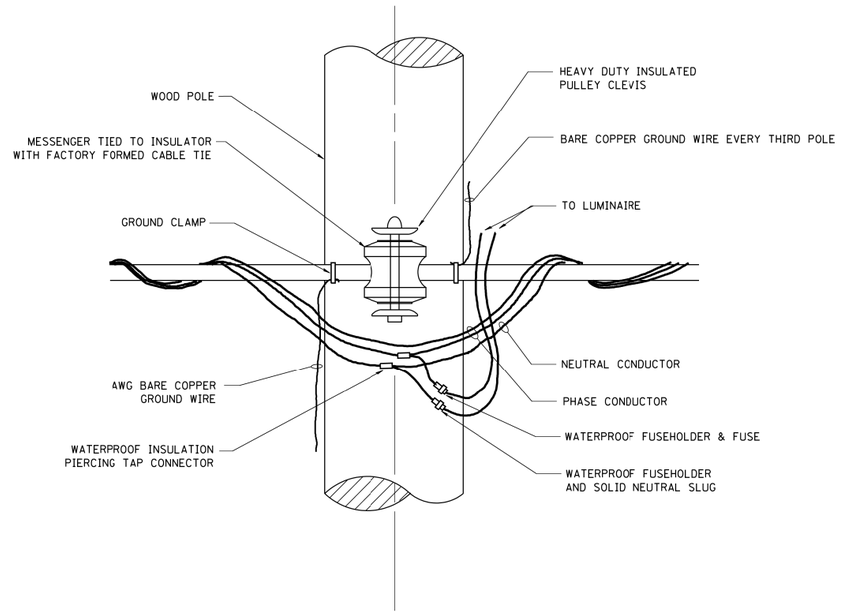


TEMPORARY LIGHT POLE DETAIL



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-800	CONTRACT NO.		
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT				

PEN TABLE = HDR Fullerton Parkway.tbl

FILE NAME = E-16.dgn

SPAAN Tech, Inc.
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Chicago, IL 60606

COLLINS ENGINEERS INC

E-16

USER NAME = CDOT - City of Chicago	DESIGNED - IAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-90/94 AT OHIO STREET TEMPORARY LIGHT POLE DETAILS	
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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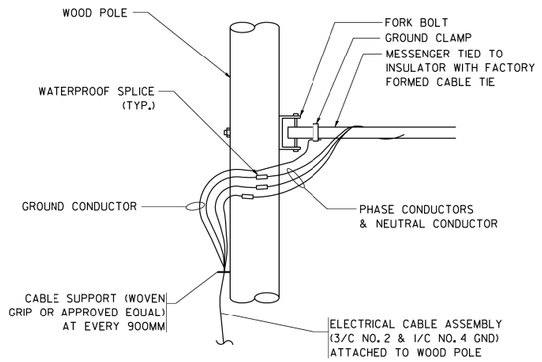
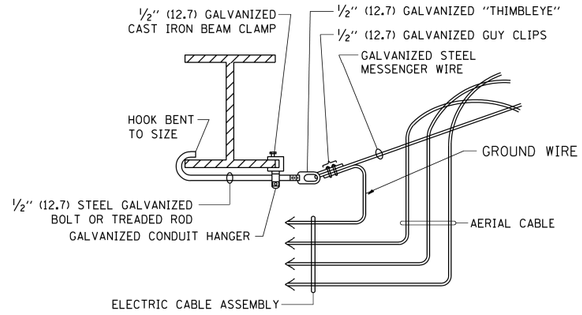
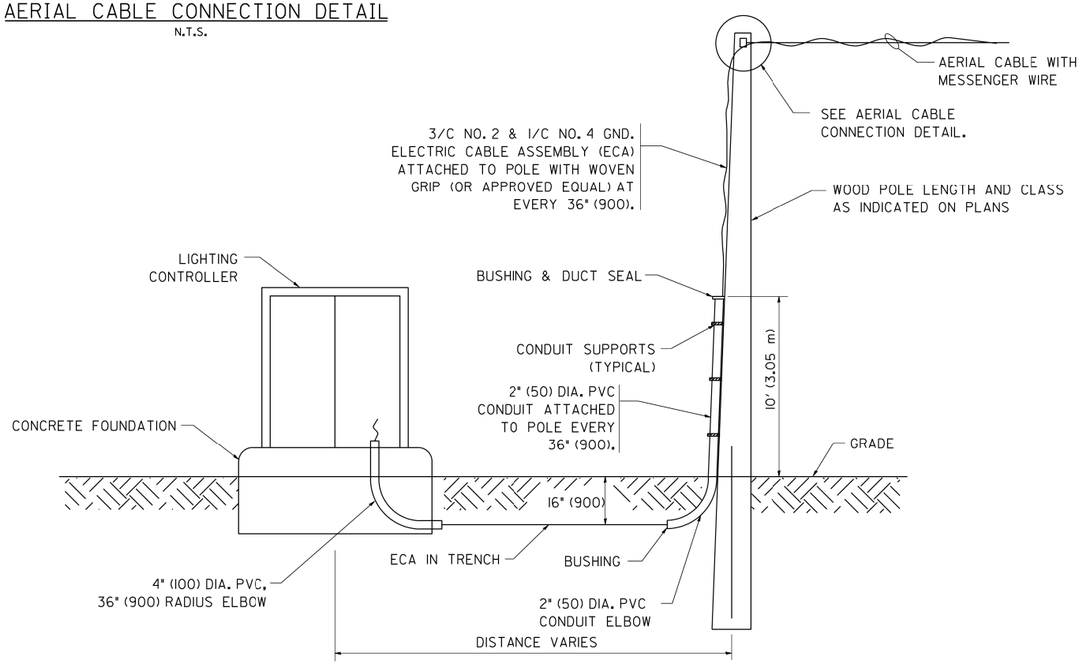
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT				



AERIAL CABLE CONNECTION DETAIL
N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE
NOT TO SCALE



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL
N.T.S.

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

FILE NAME = W:\diststd\22x34\be80.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY AERIAL CABLE INSTALLATION		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PEN TABLE = HDR Fullerton Parkway.tbl

FILE NAME = E-17.dgn

SPAAN Tech, Inc.
311 S. Wacker Drive, Suite 2400 phone 312.277.8900 fax 312.277.8905 web www.SpaanTech.com
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COLLINS ENGINEERS INC

E-17

USER NAME = CDOT - City of Chicago	DESIGNED - IAB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-90/94 AT OHIO STREET TEMPORARY AERIAL CABLE INSTALLATION		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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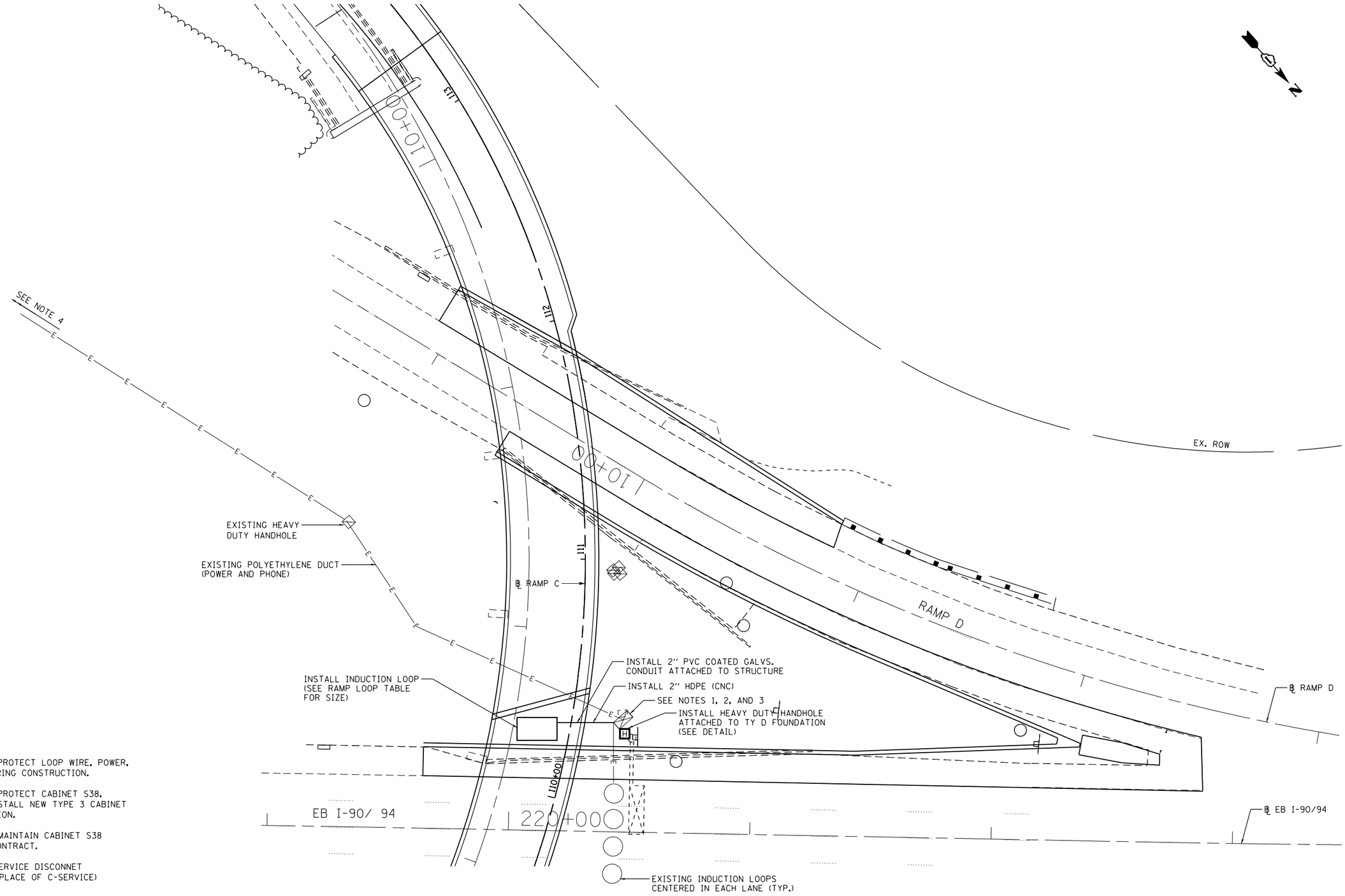

NOTES:

1. CONTRACTOR SHALL PROTECT LOOP WIRE, POWER, AND PHONE WIRE DURING CONSTRUCTION.
2. CONTRACTOR SHALL PROTECT CABINET S38, REMOVE CABINET, INSTALL NEW TYPE 3 CABINET ON TYPE D FOUNDATION.
3. CONTRACTOR SHALL MAINTAIN CABINET S38 FOR DURATION OF CONTRACT.
4. INSTALL ELECTRIC SERVICE DISCONNET ON POWER POLE (IN PLACE OF C-SERVICE)

FILE NAME = i:\7000 - 194 at Ohio Street\CADD\CADD SHEETS\D160F63-Surveillance.dgn

USER NAME = rgall	DESIGNED -	REVISED -	
PLOT SCALE = 40.000000 ' / in.	DRAWN -	REVISED -	
PLOT DATE = 3/25/2013	CHECKED -	REVISED -	
	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-90/94 AT OHIO STREET
TRAFFIC SURVEILLANCE
PROPOSED INSTALLATION

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	179
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

F. A. RTE.	SECTION	COUNTY	TOTAL SHEETS	
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

(E)TELEPHONE SERVICE
TF-DOC 11645
(E)TYPE C SERVICE
(E)160FT OF 2IN P-DUCT IN TRENCH
(E)150FT OF 2IN GS-CONDUIT PUSHED(R)
STA. 16+75
(E)HDHH(S) STA. 16+75
RAMP C
(E)HDHH(S) STA. 16+75
(E)HDHH(R)
RAMP D
(E)170FT OF 2IN P-DUCT IN TRENCH
(E)172FT OF 2IN GS-CONDUIT PUSHED
STA. 16+10
(E)HDHH(R)
(E)HDHH(S)
PP36
(E)225FT OF 2IN P-DUCT IN TRENCH(S)
(E)HDHH(S)
(E)180FT OF 2IN P-DUCT IN TRENCH
(E)170FT OF 2IN P-DUCT IN TRENCH
(E)6" 4XIDUCTLINE (REVLAC)
(E)6X8FT. INDUCTION LOOP CENTERED ON RAMP(S)
(E)CABINET S38
(E)TYPE 3 CABINET ON TYPE D FOUNDATION
(E)20FT. OF 2IN. P-DUCT
(E)6FT DIA. INDUCTION LOOPS CENTERED IN EACH LANE
(E)20FT OF 2IN GS-CONDUIT ATTACHED TO STRUCTURE
(E)40FT OF 1¼IN P-DUCT
(E)20FT. OF 2IN. P-DUCT
(E)90FT OF 2IN GS-CONDUIT PUSHED
(E)4IN SURVEILLANCE DUCT IN BARRIER WALL
(E)J-BOX AT STA. 15+55
(E)4IN SURVEILLANCE DUCT IN BARRIER WALL(R)
(E)J-BOX AT STA. 11+15(R)
(E)135FT OF 4IN GS-CONDUIT IN TRENCH
(E)J-BOX AT STA. 19+48
(E)20FT OF 4IN GS-CONDUIT IN TRENCH
(E)J-BOX AT STA. 19+48
(E)4IN SURVEILLANCE DUCT IN BARRIER WALL
(E)J-BOX AT STA. 15+55
(E)HDHH
STA. 20+45
(E)6X14FT. INDUCTION LOOP CENTERED IN LANE
(E)6X14FT. INDUCTION LOOP CENTERED IN LANE
(E)HDHH
(E)2IN. GS-CONDUIT NWB PAVEMENT (STA. 20+95)
(E)85FT OF 2IN GS-CONDUIT PUSHED
(E)HDHH
(E)6X19FT. INDUCTION LOOP CENTERED IN LANE
(E)85FT OF 2IN GS-CONDUIT PUSHED
(E)6FT DIA. INDUCTION LOOPS CENTERED IN EACH LANE
(E)22FT OF 2IN P-DUCT
(E)140FT OF 1¼IN P-DUCT IN TRENCH
(E)HDHH
(E)CABINET S33
(E)117OFT OF 2IN P-DUCT IN TRENCH
(E)6X8FT. INDUCTION LOOP CENTERED ON RAMP
(E)90FT OF 2IN GS-CONDUIT PUSHED
(E)TYPE 3 CABINET ON TYPE 'D' FOUNDATION
(E)6X12FT. INDUCTION LOOP CENTERED ON RAMP
(E)8FT OF 2IN OF GS-CONDUIT PUSHED
(E)155FT OF 2IN GS-CONDUIT PUSHED
(E)16FT DIA. INDUCTION LOOPS CENTERED IN LANES
(E)HDHH
(E)110 FT OF 2IN GS-CONDUIT PUSHED
(E)TYPE 3 CABINET ON TYPE D FOUNDATION
(E)CABINET S31
(E)230 FT OF 1¼IN P-DUCT IN TRENCH
(E)12FT OF 2IN P-DUCT
(E)HDHH
(E)100FT OF 2IN GS-CONDUIT PUSHED STA. 23+10, RAMP 'D'
RAMP B
4IN. G.S. PUSHED STA. 13+70
W=2 LOOP CENTERED ON RAMP
(E)4IN SURVEILLANCE DUCT IN BARRIER WALL
(E)25FT OF 2IN GS-CONDUIT PUSHED
(E)6X12FT. INDUCTION LOOP CENTERED ON RAMP
(E)HDHH
(E)145FT OF 4IN GS-CONDUIT IN TRENCH
SS J-BOX ATT. TO BARRIER WALL & CONNECTED TO SS J-BOX EMBEDDED IN WALL.
(E)35FT OF 2IN GS-CONDUIT PUSHED
(E)J-BOX AT STA. 406+23
(E)J-BOX BEHIND BARRIER WALL
(E)HDHH(R)
(E)4" OSC CONDUIT IN TRENCH
(E)285FT OF 2IN P-DUCT IN TRENCH
BLDG. A
PP2
(E)6" 4XIDUCTLINE (REVLAC)
PP5
(E)6" 4XIDUCTLINE (REVLAC)
(E)325FT OF 2IN P-DUCT IN TRENCH
(E)HDHH
(E)HDHH
(E)4" 4XIDUCTLINE (REVLAC)
(E)16-1¼IN. P-DUCTS IN TRENCH TO SERVICE AT-GRADE PIN LOOPS
RAMP E
RAMP F
N

FOR INFORMATION ONLY

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

FOR INFORMATION ONLY

SCALE: VERT. 50:1
HORIZ. 50:1
DRAWN BY G.M.
DATE
CHECKED BY

TRAFFIC SYSTEMS CENTER

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COLLINS ENGINEERS INC

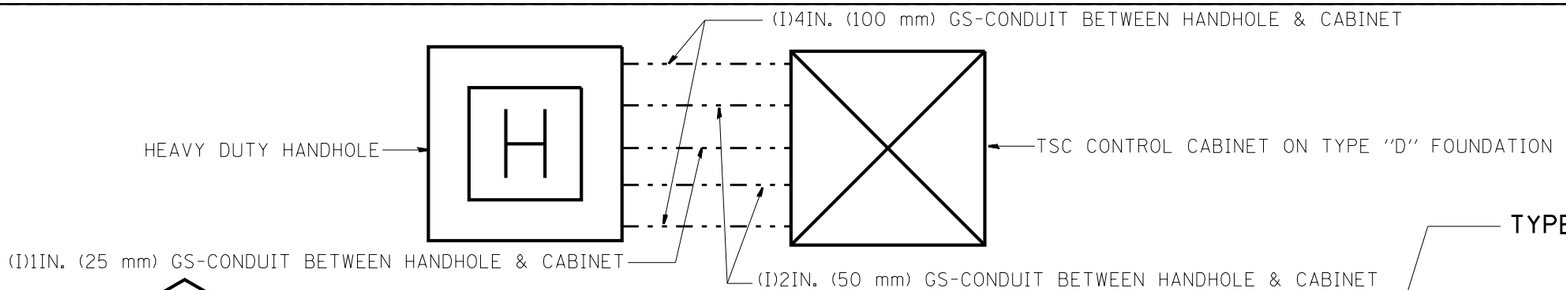
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 40.000000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2013	CHECKED -	REVISED -
	DATE -	REVISED -

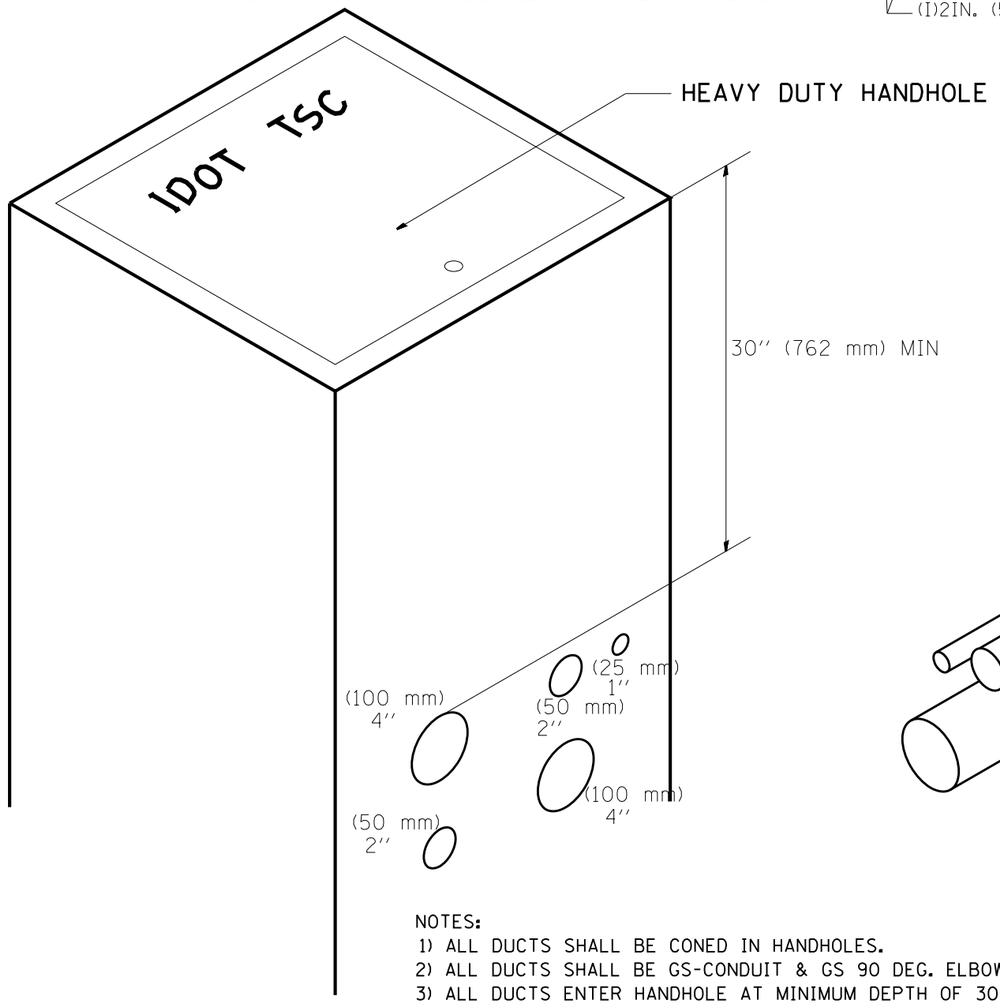
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

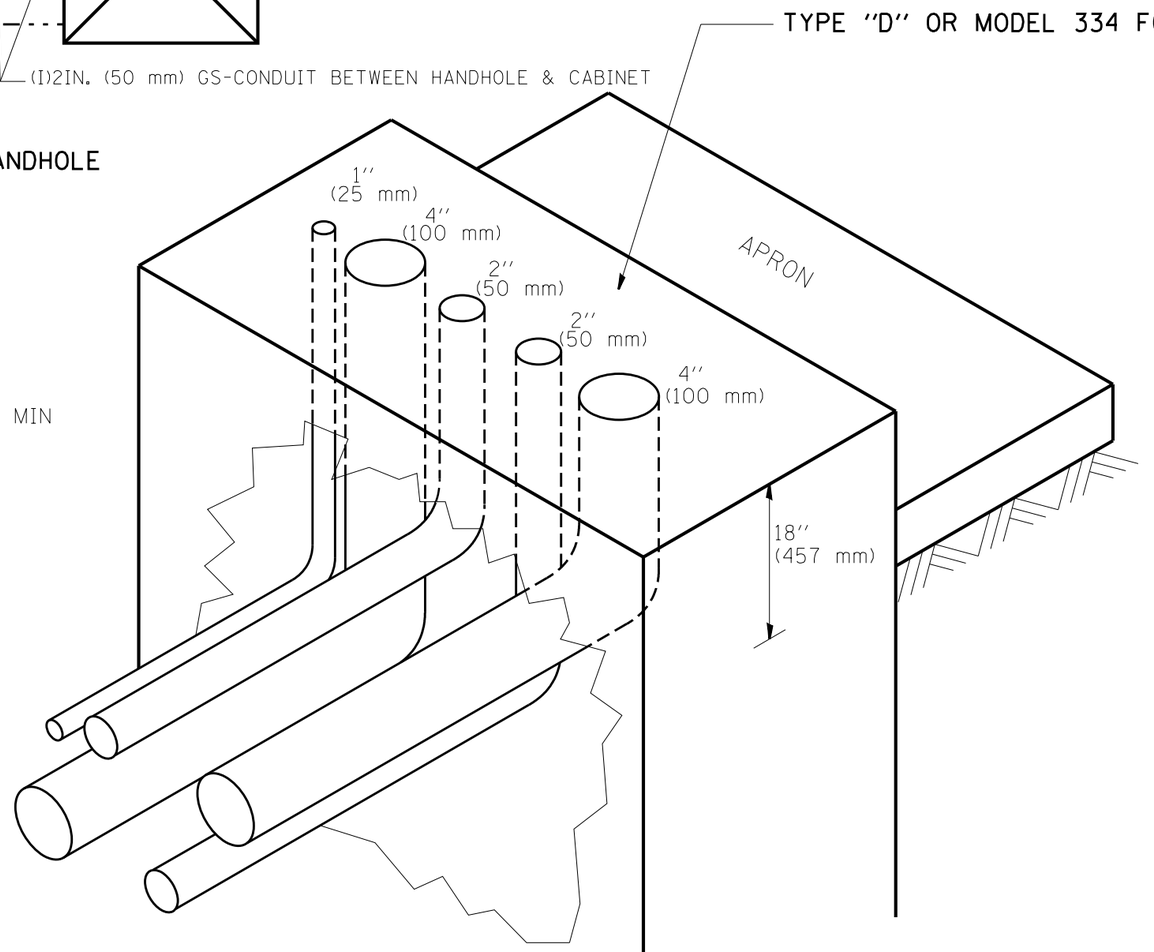
I-90/94 AT OHIO STREET
TRAFFIC SURVEILLANCE
AS-BUILT PLANS

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	180
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		







NOTES:

1) ALL DUCTS SHALL BE CONED IN HANDHOLES.
2) ALL DUCTS SHALL BE GS-CONDUIT & GS 90 DEG. ELBOWS USED WHERE NEEDED.
3) ALL DUCTS ENTER HANDHOLE AT MINIMUM DEPTH OF 30 INCH (762 mm)
4) ALL HANDHOLE COVERS SHALL READ "IDOT TSC".
5) ALL CABINET HANDHOLES SHALL BE HEAVY DUTY.
6) DUCTS SHALL BE CENTERED IN CABINET FOUNDATION/HANDHOLE AS SHOWN.
7) CONDUITS SHALL BE SPACED 305 mm (1 FOOT) CENTER TO CENTER IN HEAVY DUTY HANDHOLE.
8) INSTALL 3/4" X 10' (20 mm X 3 m) COPPER CLAD STEEL GROUND ROD IN HDHH PROVIDED AS CABINET PAD. EXOTHERMIC WELD CONNECTION FROM GROUND ROD TO #6 GROUND WIRE INSULATED (GREEN).
9) BOND ALL GSC CONDUITS IN CABINET FOUNDATION.
10) INSTALL #6 GROUND WIRE IN 1IN. (25 mm) GSC FROM HANDHOLE TO CABINET.
11) TYPE "D" FOUNDATION SHALL BE 18" FROM TOP OF FOUNDATION TO FINISHED GRADE.

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		DRAWN - G.M.	REVISED - 03/99
	PLOT SCALE = 100.0000 ' / in.	CHECKED - R.L.	REVISED - 04/99
	PLOT DATE = 7/26/2012	DATE - 06/05/95	REVISED - 07/2010

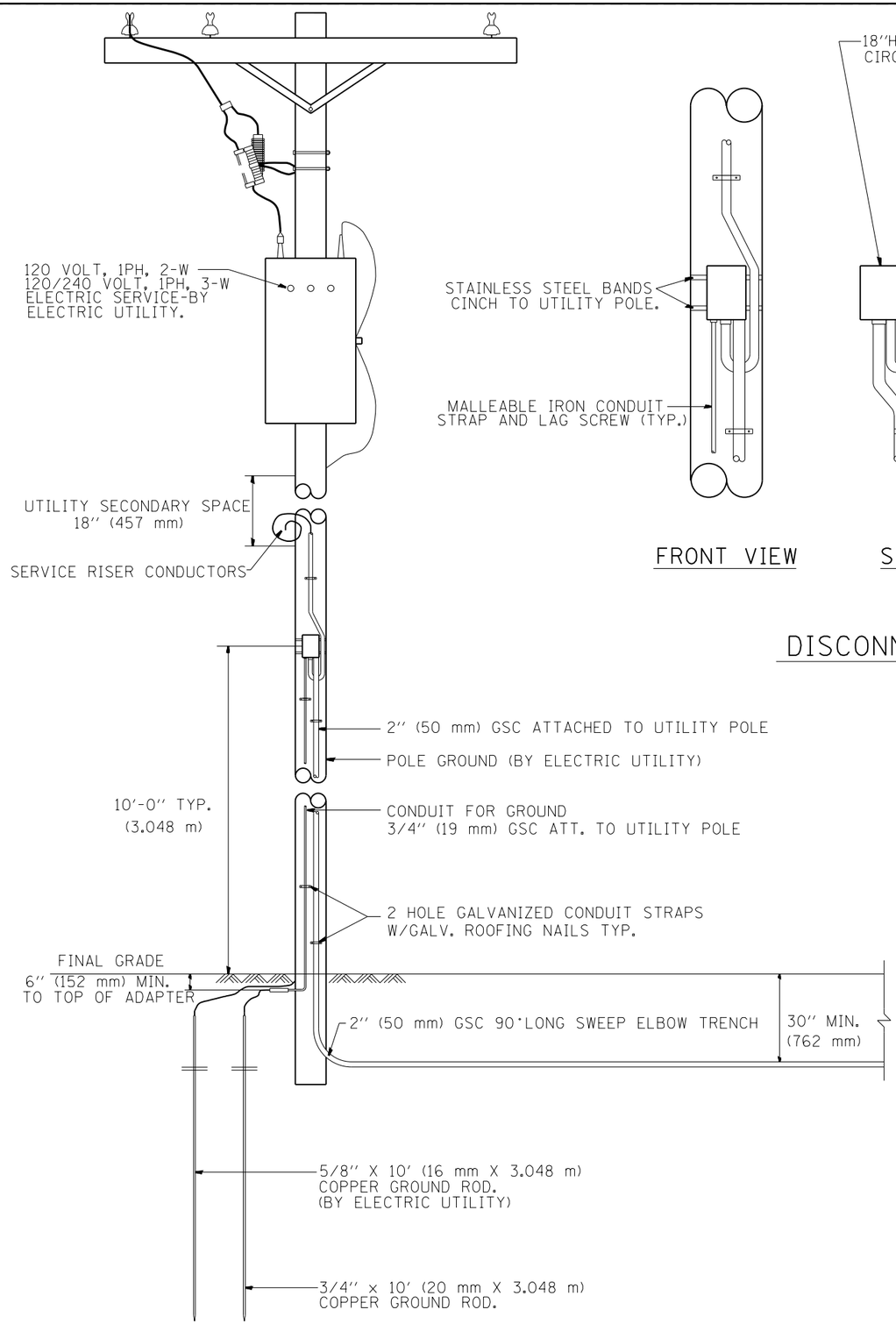
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

CABINET - HANDHOLE CONDUIT DETAIL

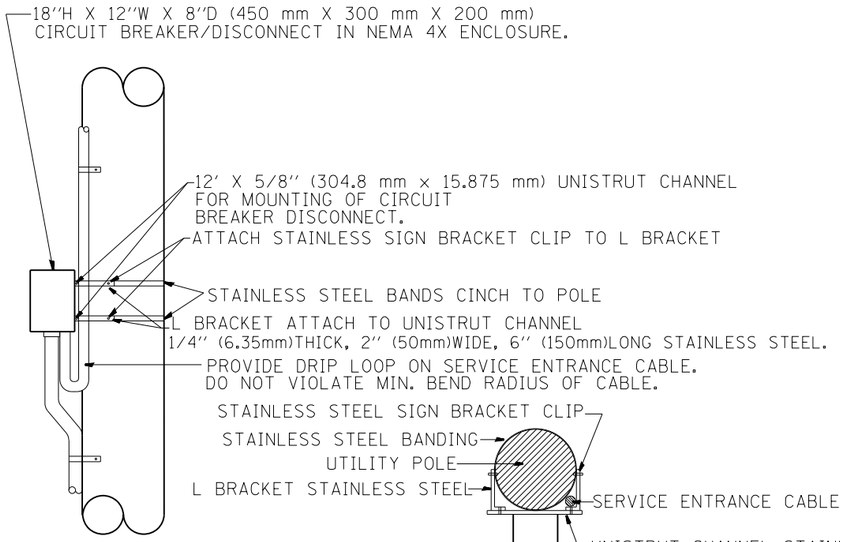
SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	181
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC SYSTEMS CENTER (TY-1TSC-400#11)



FRONT VIEW



SIDE VIEW

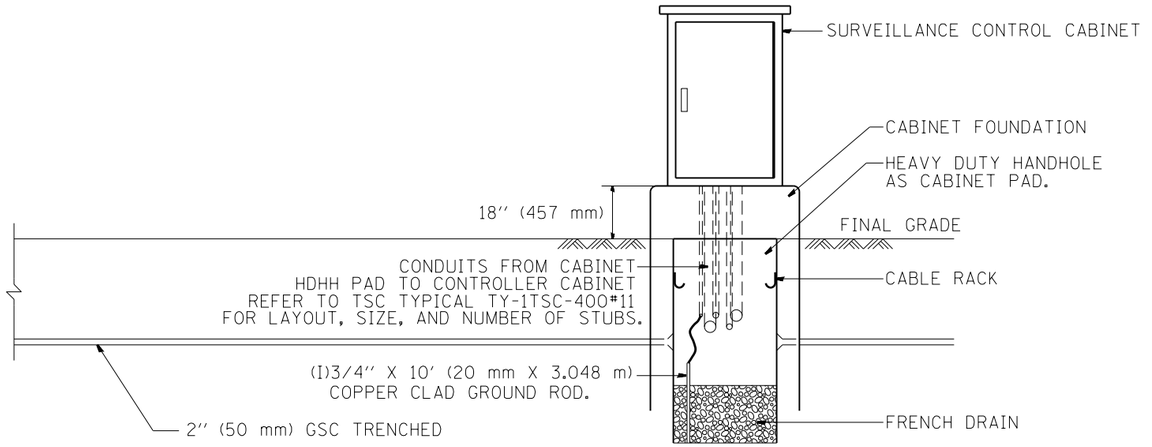
TOP VIEW

NOTES:

1.- ALL CONDUIT BUSHINGS SHALL HAVE AN ISOLATED THROAT.
2.- PROVIDE HEAT SHRINK BOOT AT THE TOP OF THE SERVICE ENTRANCE CABLE FOR MOISTURE PROOFING.
3.- ALL CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC UNLESS OTHERWISE NOTED.
4.- ATTACH INCOMING ELECTRIC SERVICE CABLE TO UTILITY POLE EVERY 5 FEET USING INSULATED U-NAIL.
5.- PROVIDE CABLE RACK IN HANDHOLES.
6.- ALL CONDUCTORS SHALL BE COPPER.
7.- PROVIDE STAINLESS STEEL HARDWARE TO ATTACH L BRACKETS TO UNISTRUT AND TO SIGN HANGER.

NTS

DISCONNECT MOUNTING DETAIL



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

POLE MOUNTED
DISCONNECT MOUNTING DETAILS

SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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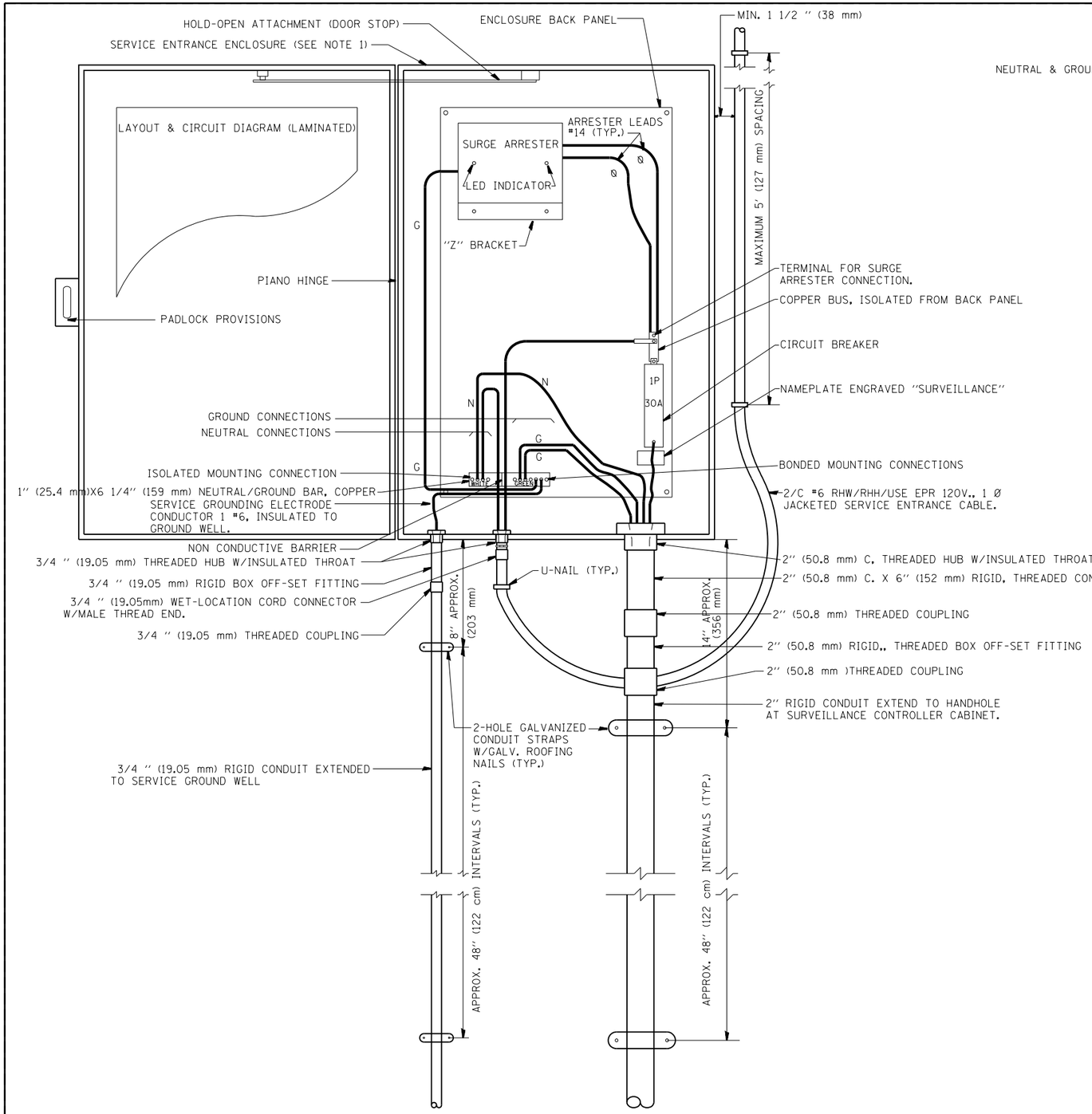
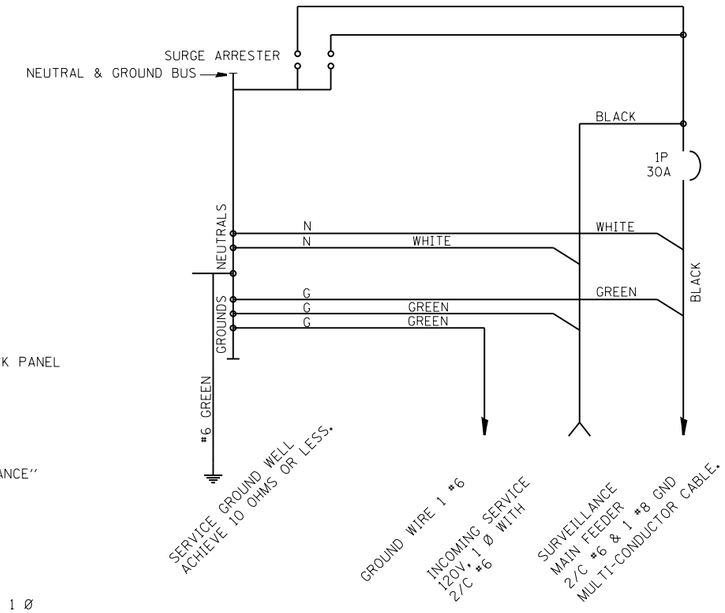
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ELECTRIC SERVICE GENERAL LAYOUT DIAGRAM



SCHEMATIC DIAGRAM

NOTES:

1.- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED. WHERE 120-VOLT SERVICE IS INDICATED, SERVICE DROP CABLE SHALL BE INSTALLED ACCORDINGLY AND LIGHTING MAIN FEEDER CABLE SHALL BE OMITTED.

2.- THE ELECTRIC SERVICE BOX SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12" (305 mm) X 18" (457 mm) X 8" (203 mm), WITH PIANO HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS, DOOR STOP KIT AND STEEL BACK PANEL, HOFFMAN CATALOG A-16H1208SS6LP/A-16P2/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.

3.- THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LABELED, SUITABLE FOR USE AS SERVICE EQUIPMENT.

4.- CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE ⚠ TRIP FREE.

5.- THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240/120 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE ENERGY CAPABILITY OF >3600 JOULES OR BETTER AT 8/20 MICROSECONDS, RATED -40 TO 65 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CMOV 230L065XST OR APPROVED EQUAL. SURGE PROTECTOR SHALL BE WIRED FOR 120 V SERVICE. FOLLOW MANUFACTURER RECOMMENDED WIRING SPECIFICATIONS.

6.- BUS BARS, CONNECTORS AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS.

7.- THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE.

8.- A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE AFFIXED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.

9.- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.

10.- PROVIDE ON LAYOUT AND CIRCUIT DIAGRAM A BILL OF MATERIALS USED WITH CATALOG NUMBERS.

11.- REFER TO T.S.C. TYPICAL DRAWING TY-1TSC-400#20 FOR POLE MOUNTED DISCONNECT MOUNTING DETAILS.

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	PLOT DATE = 7/26/2012	DATE - 02/24/99	REVISED - 04/12/99 ⚠

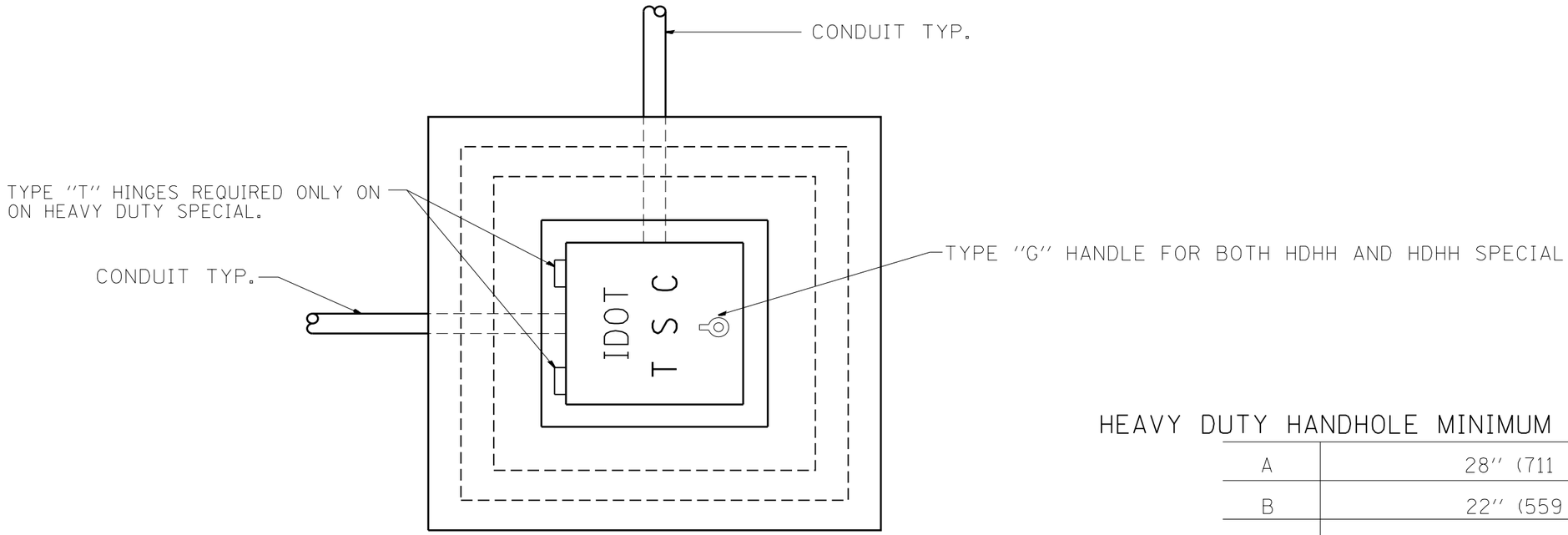
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

DISTRICT 1
SURVEILLANCE POLE-MOUNTED
ELECTRIC SERVICE BOX DETAIL

SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	183
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC SYSTEMS CENTER (TY-1TSC-400#19)



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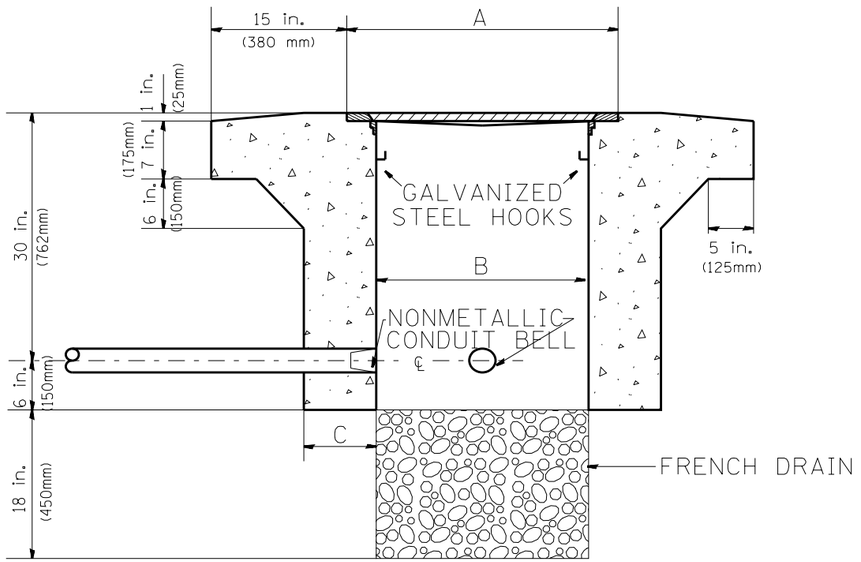

ELEVATION

HEAVY DUTY HANDHOLE MINIMUM DIMENSIONS (UNHINGED)

A	28" (711 mm)
B	22" (559 mm)
C	8" (200 mm)

(FRAME AND COVER 260 LBS. (118 Kg.) MIN.)

HEAVY DUTY HANDHOLE SPECIAL MINIMUM DIMENSIONS

A	31.5" (800 mm)
B	30.0" (762 mm)
C	10.0" (250 mm)

(FRAME AND COVER 405 LBS. (184 Kg. (405))

PC CONCRETE - HEAVY DUTY HAND HOLE

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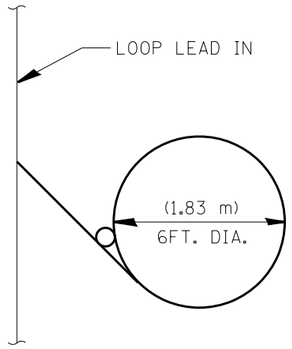
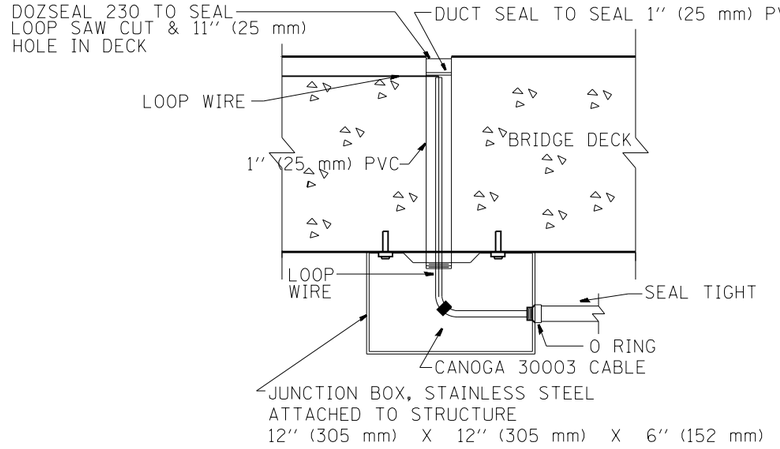
		DATE - 09/11/96	REVISED -		SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

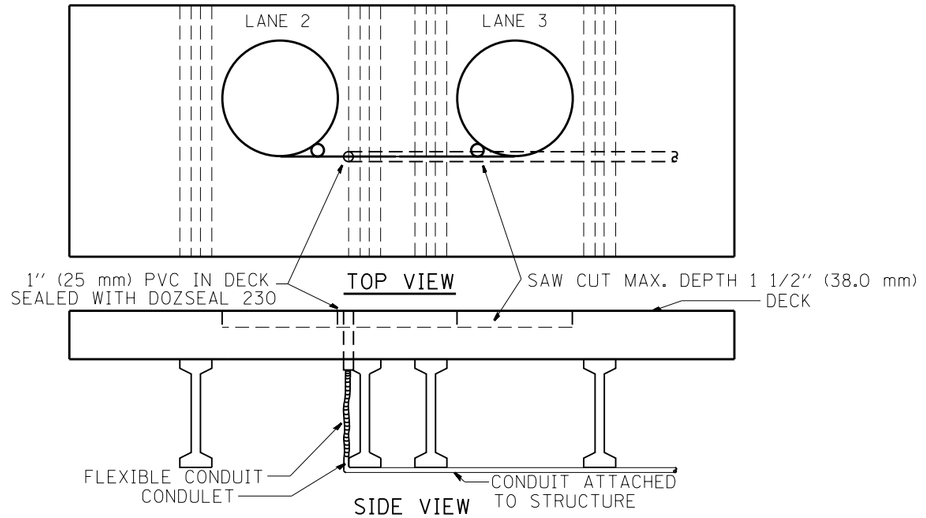
TRAFFIC SYSTEMS CENTER (TY-1TSC-400#15)



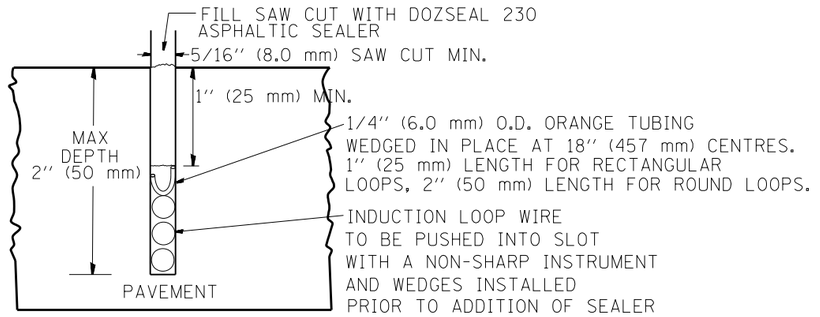
TYPICAL LOOP SAWCUT LAYOUT



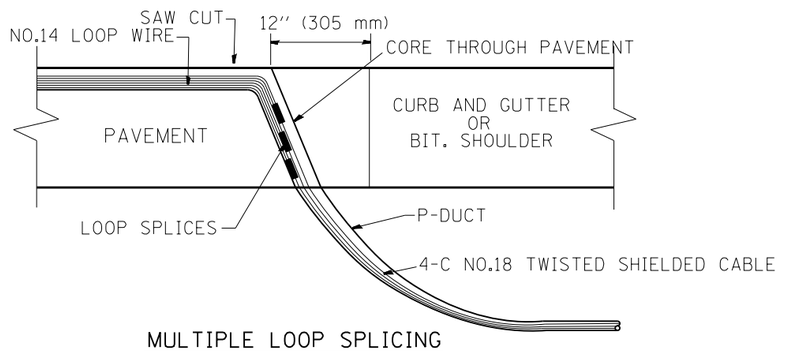
LOOP JUNCTION BOX UNDER BRIDGE DECK



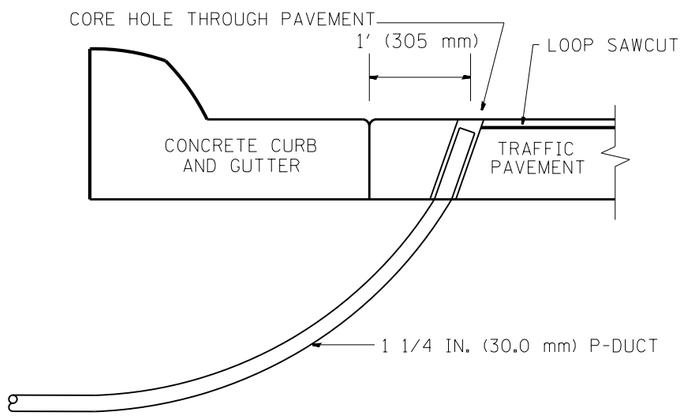
LOOP TRANSITION IN BRIDGE DECK



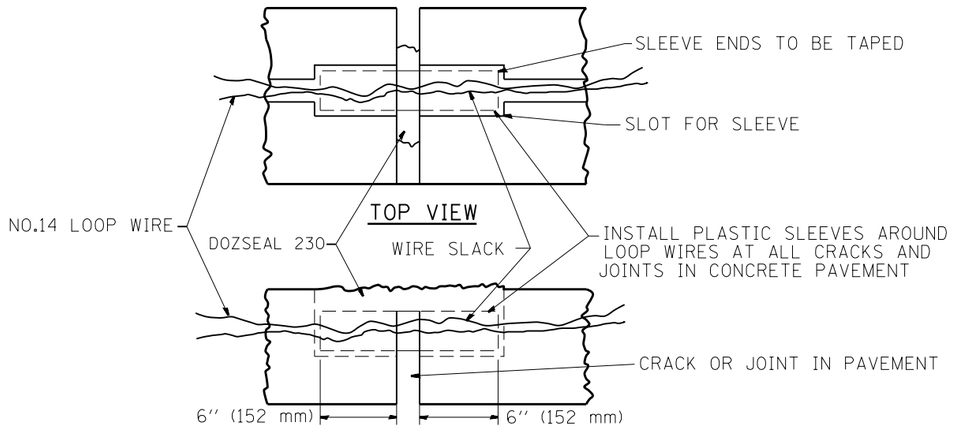
LOOP CROSS SECTION IN PAVEMENT



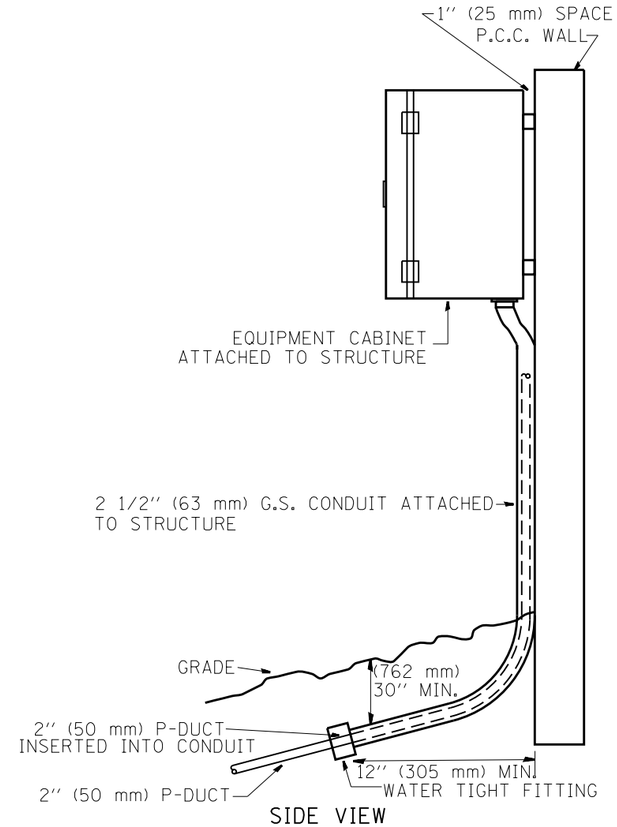
MULTIPLE LOOP SPLICING



SIDE SECTION LOOP LEAD-IN
TRANSITION DETAIL



SIDE SECTION
PAVEMENT CRACK TRANSVERSE SLEEVE



SIDE VIEW
POLYETHYLENE DUCT/GS. CONDUIT TRANSITION

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	PLOT DATE = 7/26/2012	DATE - 06/22/94	REVISED - 10/96

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

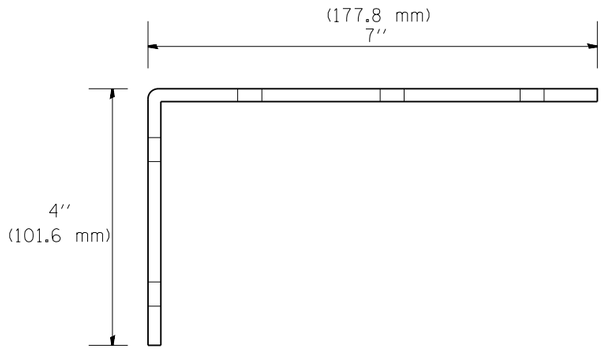
LOOP, CONDUIT & DUCT INSTALLATION DETAILS

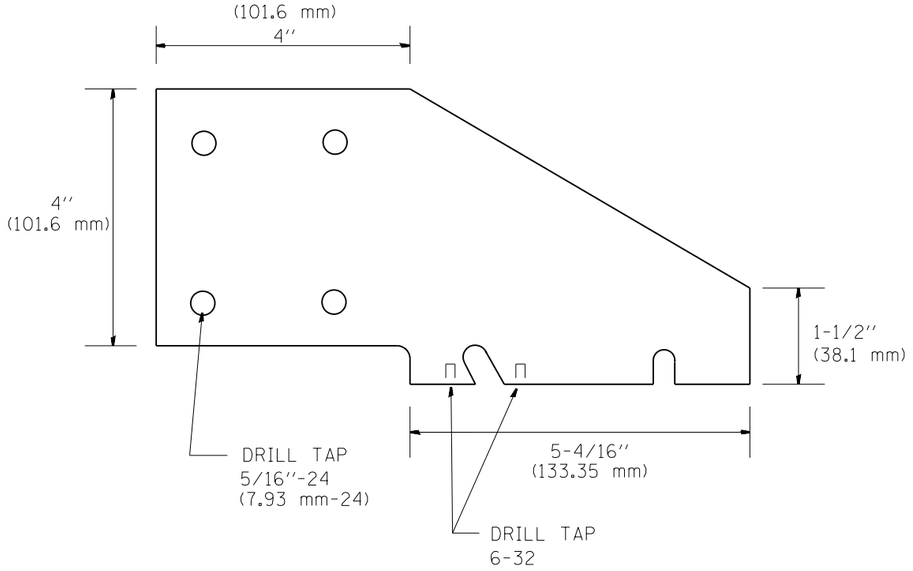
SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

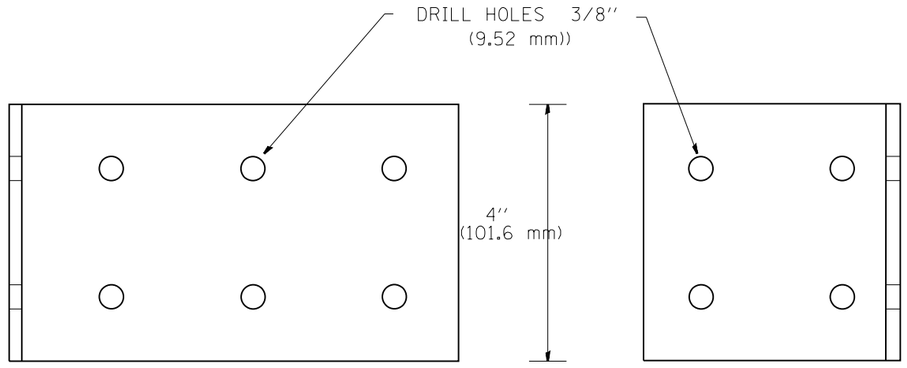
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	185
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

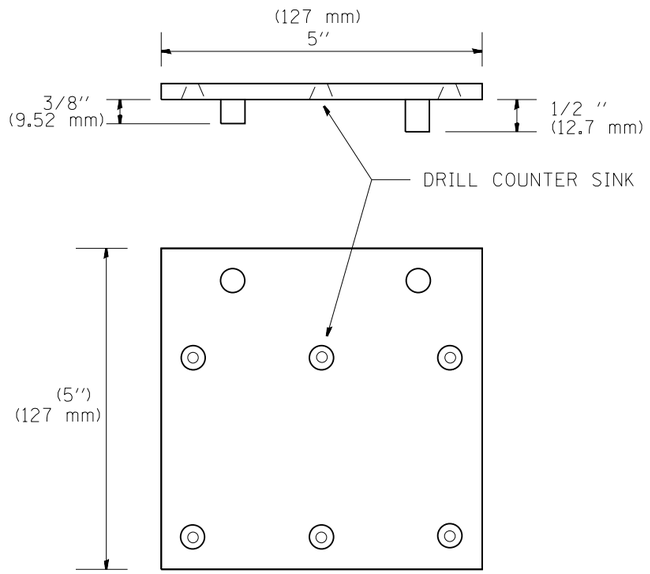
TRAFFIC SYSTEMS CENTER (TY-1TSC-418#4)

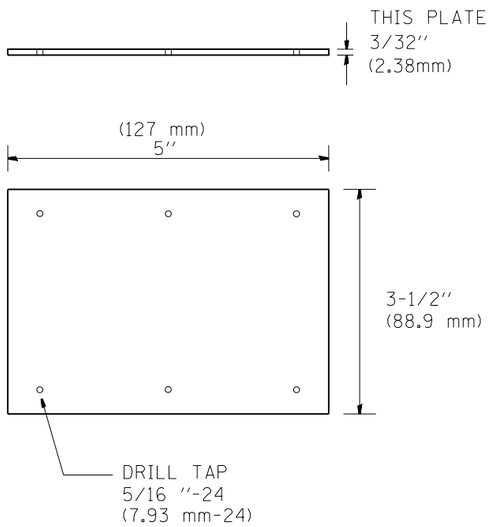
TSCTYP.dgn 7/26/2012 1:28:41 PM User=mezag

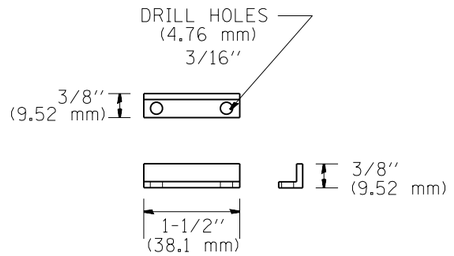












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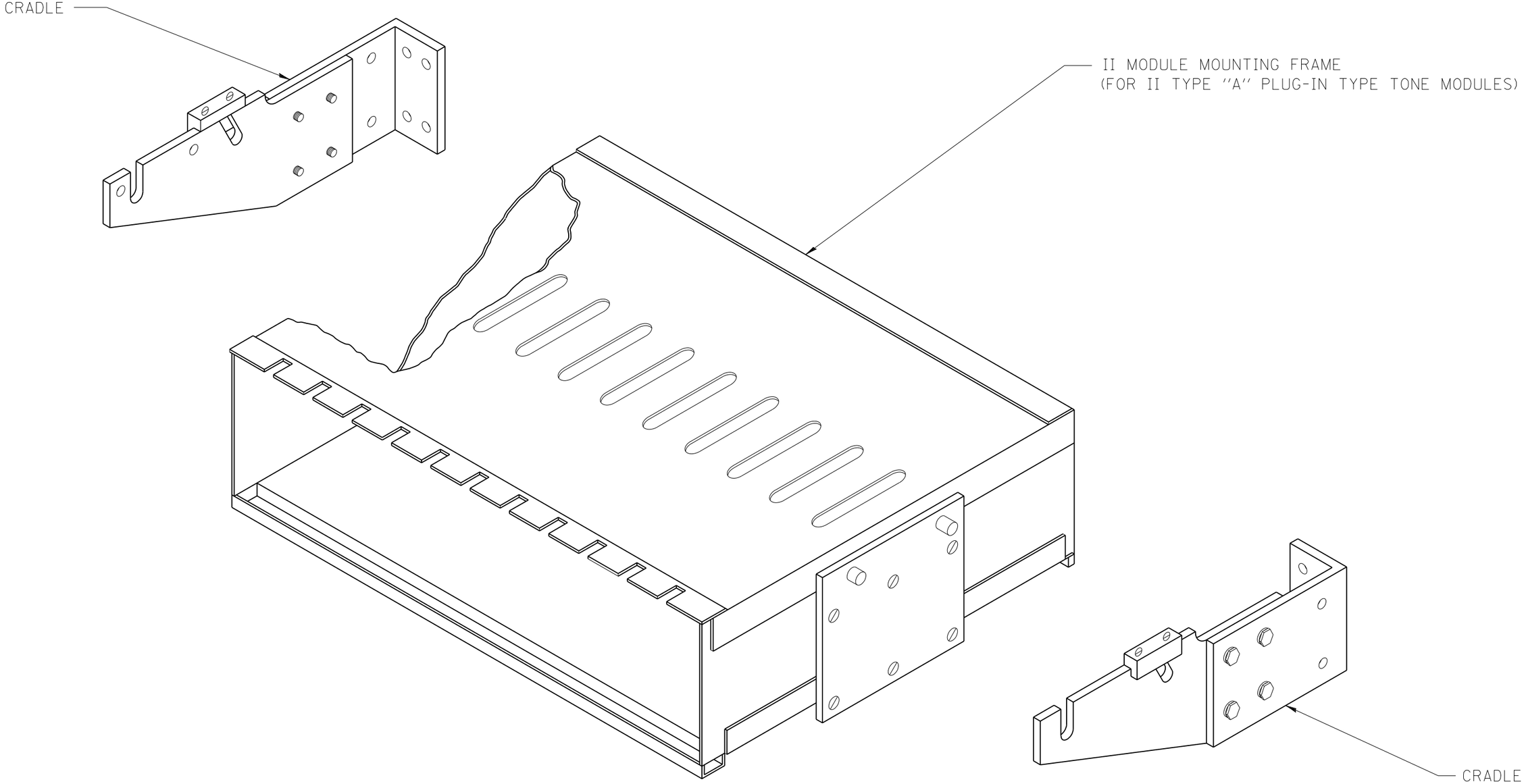
		DRAWN - G.M.	REVISED - 09/96						90/94	0303-474HB-R	COOK	368	186
	PLOT SCALE = 100.0000 '/ in.	CHECKED - R.L.	REVISED -								CONTRACT NO. 60F63		
	PLOT DATE = 7/26/2012	DATE - 06/21/94	REVISED -		SCALE: NONE	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC SYSTEMS CENTER (TY-1TSC-400#7)



NOTE:

TYPE ''A'' TONE MODULES ARE PLUG
IN UNIT MEASURING 5-7/32'' (132.55 mm) X 1.5'' (38.1 mm) X 13-3/4'' (349.25 mm)

FILE NAME = c:\pw_work\pwidot\mezag\d0287541\TSCTYP.dgn	USER NAME = mezag	DESIGNED - R.L.	REVISED - 06/94
		DRAWN - G.M.	REVISED - 09/96
	PLOT SCALE = 100.0000 '/ in.	CHECKED - R.L.	REVISED -
	PLOT DATE = 7/26/2012	DATE - 06/21/94	REVISED -

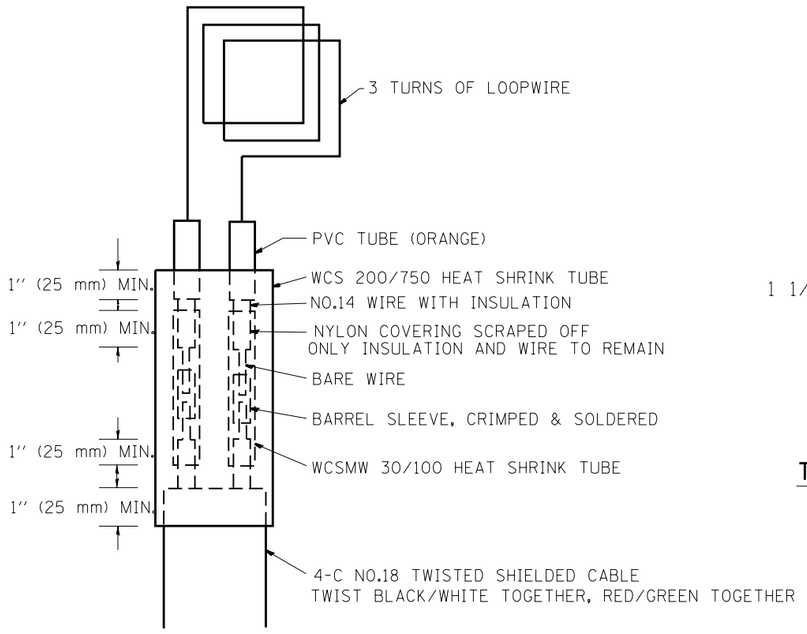
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

FIELD MOUNTING FRAME WITH CRADLE ASSEMBLY

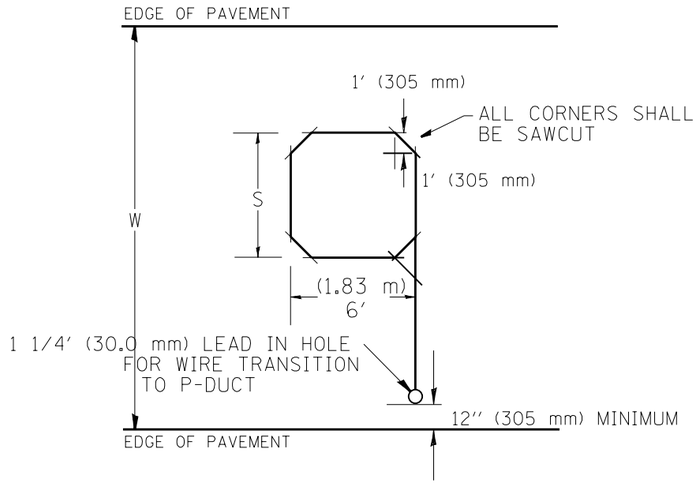
SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	187
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

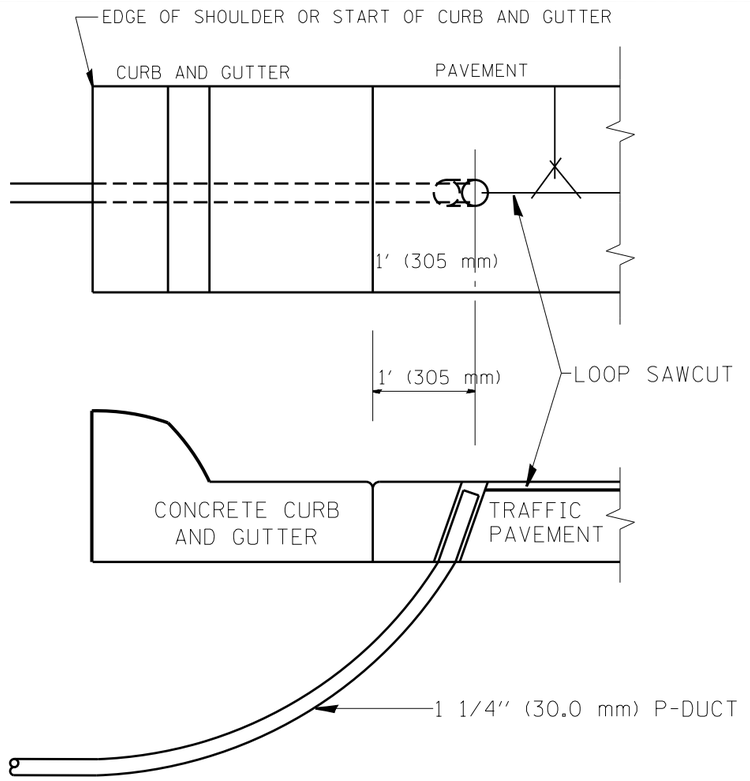
TRAFFIC SYSTEMS CENTER (TY-1TSC-400#6)



LOOP SPLICING REQUIREMENTS



TYPICAL "S" FT. BY 6' (1.83 m) INDUCTION LOOP SAWCUT LAYOUT FOR RAMPS



CURB AND GUTTER LOOP LEAD-IN TRANSITION DETAIL

TABLE 1	
WIDTH (W)	WIDTH (S)
12' (3.7 m)	8' (2.5 m)
13' (4.0 m)	9' (2.8 m)
14' (4.3 m)	10' (3.1 m)
15' (4.6 m)	11' (3.4 m)
16' (4.9 m)	12' (3.7 m)
17' (5.2 m)	13. (4.0 m)
18' (5.5 m)	14' (4.3 m)
19' (5.8 m)	15' (4.6 m)
20' (6.1 m)	18' (4.9 m)
21' (6.4 m)	17' (5.2 m)
22' (6.7 m)	18' (5.5 m)
23' (7.0 m)	19' (5.8 m)
24' (7.3 m)	20' (6.1 m)
25' (7.6 m)	21' (6.4 m)

NOTES

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150' (45 m) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

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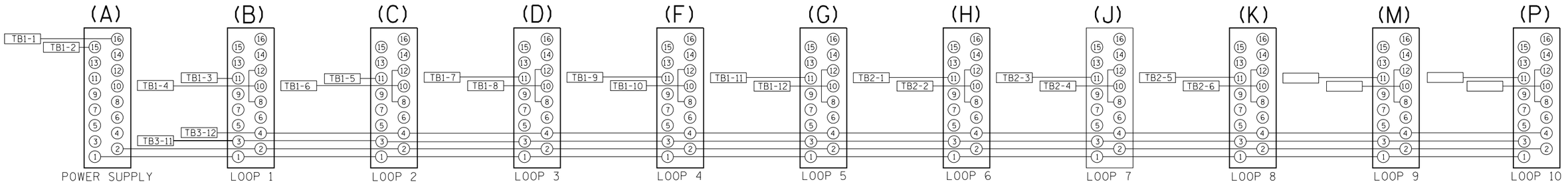
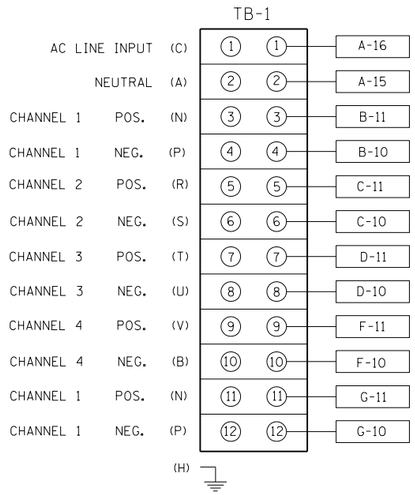
	PLOT SCALE = 100.0000 '/ in.	DRAWN - G.M.	REVISED - 11/95		
	PLOT DATE = 7/26/2012	CHECKED - R.L.	REVISED - 05/96		
		DATE - 6-22-94	REVISED - 10/96		SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

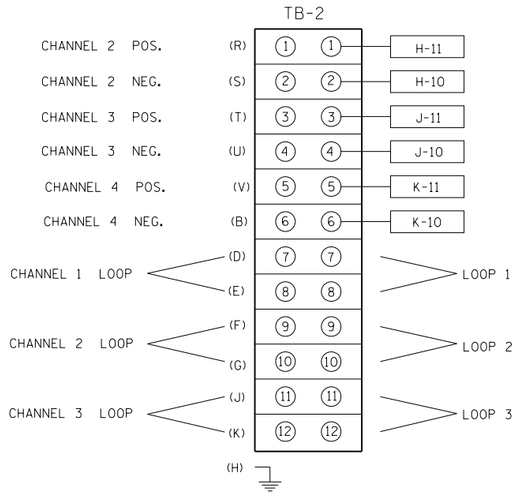
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	188
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

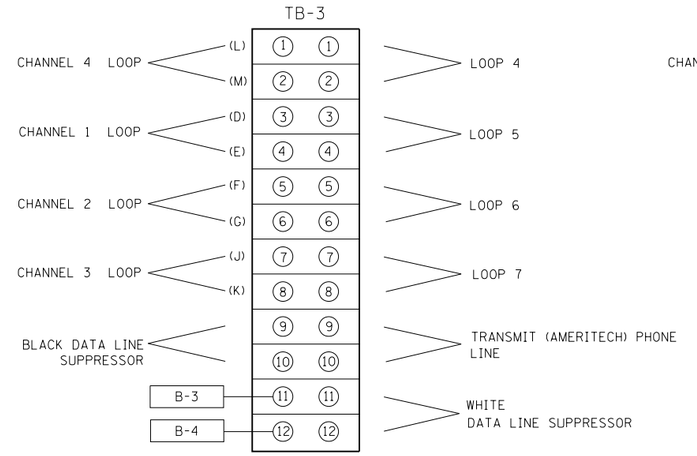
TRAFFIC SYSTEMS CENTER (TY-1TSC-418#3)

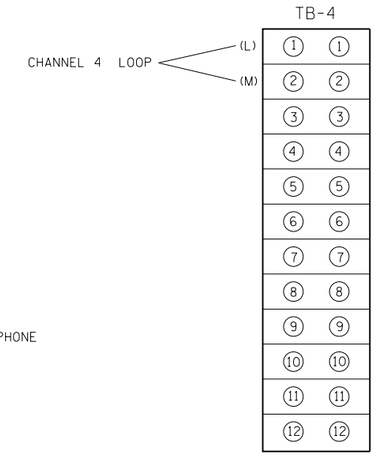
BACK VIEW OF TONE RACK

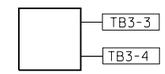


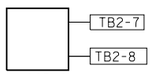


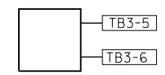


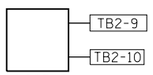


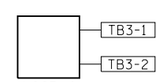


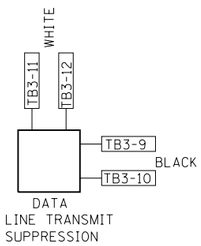


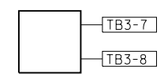


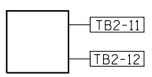


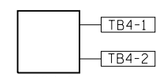


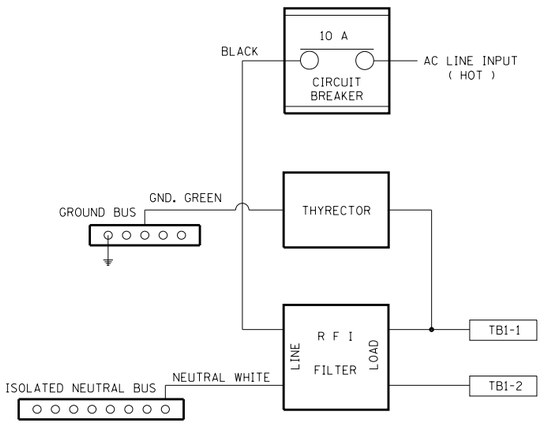












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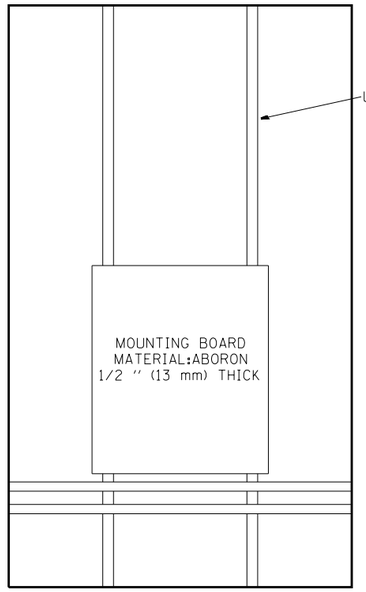
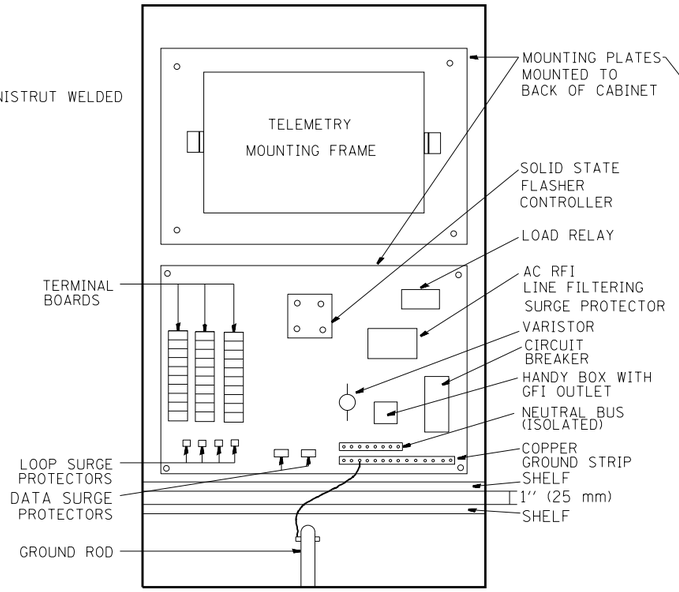
	PLOT SCALE = 100.0000 ' / in.	DRAWN - G.M.	REVISED - 05-99			90/94	0303-474HB-R	COOK	368	189
	PLOT DATE = 7/26/2012	CHECKED - R.L	REVISED -					CONTRACT NO. 60F63		
		DATE - 10-17-95	REVISED -		SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

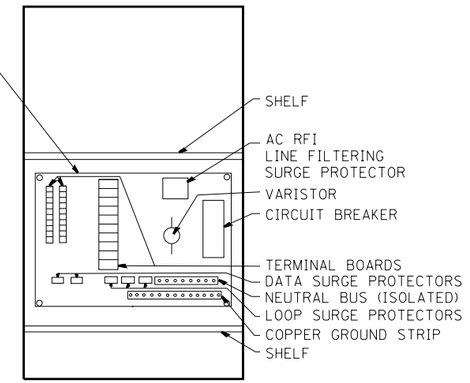
TRAFFIC SYSTEMS CENTER (TY-1TSC-400#13)



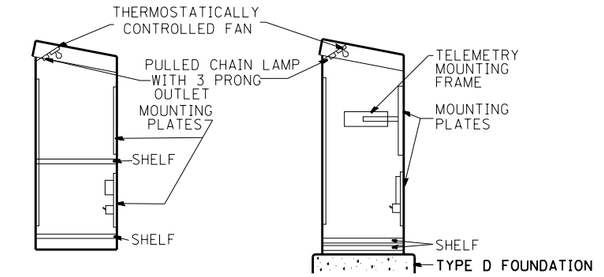
SIDE VIEW ESP 3 & 4 CABINET



ESP 3 CABINET



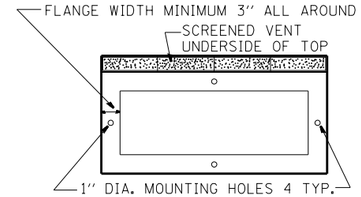
ESP 2 CABINET



ESP 2 CABINET ESP 3 CABINET

PROFILE VIEWS

NOTE: MOUNTING PLATES TO BE MOUNTED TO BACK PANEL OF CABINET



BOTTOM VIEW
MOUNTING PATTERN

TYPICAL CABINET INTERIORS

STANDARD TRAFFIC SYSTEMS CENTER CABINETS

MINIMUM DIMENSIONS INSIDE

TYPE	HEIGHT (IN-mm)	WIDTH (IN-mm)	DEPTH (IN-mm)	THICKNESS (IN-mm)	MATERIAL
ESP1	22.5'' (571.5 mm)	14.25'' (361.95mm)	9.75'' (247.65mm)	3/16 '' (4.76mm)	FABRICATED ALUMINUM
ESP2	36'' (914.4mm)	20'' (508.0mm)	15'' (381.0mm)	73/16'' (4.76mm)	FABRICATED ALUMINUM
ESP3	49.5'' (1.26 m)	30'' (762.0mm)	17'' (431.8mm)	3/16 '' (4.76mm)	FABRICATED ALUMINUM
ESP4	55'' (1.4 m)	44'' (1.12 m)	26'' (660.4mm)	3/16'' (4.76mm)	FABRICATED ALUMINUM

NOTES:

1. CABINETS, CABINET POSTS AND CABINET PEDESTALS SHALL BE PRIMED AND PAINTED IN ACCORDANCE WITH SECTION T637 OF THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS". THE FINAL COAT SHALL BE (X) IN COLOR. THE INTERIOR SHALL BE PAINTED WHITE. SIGNAL POSTS AND HEADS TO BE FEDERAL YELLOW 89-19(MAUTZ).

2. CABINETS SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION T400 OF THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS".

3. ALL CABINETS WHICH ARE SERVICED BY 117 VOLTS A.C. POWER SHALL BE EQUIPPED WITH A 10 AMP CIRCUIT BREAKER, A.C. R.F.I. LINE FILTERING SURGE PROTECTOR, VARISTOR, DATA SURGE AND LOOP SURGE PROTECTORS AS INCIDENTAL TO THE COST OF THE CABINET. CMS CABINETS TYPE IV SHALL HAVE A 60 AMP. CIRCUIT BREAKER MINIMUM.

4. ESP 2/3/4 CABINETS SHALL BE FITTED WITH A THERMOSTATICALLY CONTROLLED FAN. IT SHALL BE MOUNTED AT THE TOP OF THE CABINET. THE FAN SHALL BE CAPABLE OF OPERATING AT 130 CPM AT 160' (48.8 m) OF STATIC WATER PRESSURE. A PORCLAIN BASED PULL CHAIN FIXTURE WITH 3 PRONG OUTLET SHALL ALSO BE PROVIDED.

5. RAMP METERING ESP 3 TYPE CABINETS SHALL ALSO BE EQUIPPED WITH A LOAD RELAY AND 2 CIRCUIT FLASHER. LAMPS, FAN, LOAD RELAY, AND 2 CIRCUIT FLASHER SHALL BE INCIDENTAL TO THE COST OF THE CABINET

6. INCIDENTAL TO THE COST OF EACH CABINET THE CONTRACTOR SHALL CONSTRUCT A 5 INCH (130mm) PCC SIDEWALK OF A RECTANGULAR AREA 3 FEET (915 mm) BY 4 FEET (1.25 m) IMMEDIATELY ADJACENT TO THE CABINET FOUNDATION ON THE SAME SIDE OF THE FOUNDATION AS THE CABINET DOOR TO PROVIDE FOOTING DURING INSTALLATION AND MAINTENANCE.

7. ANCHOR BOLTS FOR PEDESTAL AND BASE MOUNTED CABINETS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CABINET.

8. ALL CABINETS SHALL HAVE TERMINAL BLOCKS AND SHELVES AS SHOWN. THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CABINET.

9. THE CABINET DOOR SHALL BE HINGED ON THE RIGHT SIDE WHEN FACING THE CABINET. THE DOOR SHALL BE FURNISHED WITH A GASKET THAT SHALL FORM A WEATHER TIGHT SEAL BETWEEN THE CABINET AND DOOR. THE HINGES SHALL BE CONTINUOUS AND BOLTED TO THE CABINET AND DOOR UTILIZING 1/4-20 STAINLESS STEEL CARRIAGE BOLTS AND NY-LOCK NUTS. THE HINGES WILL BE MADE OF STAINLESS STEEL WITH A 0.25 INCH (6.35 mm) DIAMETER STAINLESS STEEL HINGE PIN. THE HINGE PIN SHALL BE CAPPED TOP AND BOTTOM BY WELD TO RENDER IT TAMPER PROOF.

10. THE LATCHING MECHANISM SHALL BE A 3 POINT DRAW ROLLER TYPE. THE CENTER CATCH AND PUSHRODS SHALL BE EITHER CADMIUM OR ZINC PLATED, TYPE II CLASS I. PUSHRODS WILL BE TURNED EDGEWISE AT THE OUTWARD SUPPORTS AND SHALL BE 0.25 INCH (6.35 mm) BY 0.75 INCH (19.05 mm), MINIMUM. ROLLERS SHALL HAVE A MINIMUM DIAMETER OF 0.875 INCH (22.22 mm) AND WILL BE MADE OF NYLON. THE CENTER CATCH SHALL BE FABRICATED FROM 0.14 INCH (3.55 mm) STEEL, MIMIMUM. WHEN THE DOOR IS CLOSED AND LATCHED, IT WILL BE LOCKED. THE LATCHING HANDLE SHALL HAVE A PROVISION FOR PADLOCKING IN THE CLOSED POSITION. AN OPERATING HANDLE SHALL BE FURNISHED WITH EACH LOCK. THE HANDLE WILL BE STAINLESS STEEL WITH A 0.75 INCH (19.05 mm) DIAMETER SHANK.

11. THE ENCLOSURE SHALL BE EQUIPPED WITH TWO ADJUSTABLE "C" MOUNTING CHANNELS WELDED ON BOTH SIDE WALLS AND BACK WALL OF THE ENCLOSURE, ALLOWING VERSATILE POSITIONING OF SHELVES OR PANELS. MOUNTING CHANNELS SHALL BE FACTORY PAINTED SAME COLOR AS INTERIOR OF CABINET.

12. CABINET DOOR SHALL NOT HAVE COMPARTMENT DOORS OR LOUVERS.

13. ALL FIELD CABINETS SHALL BE FITTED WITH BRASS LOCKS.

14. ESP TYPE 2 & 3 CABINETS FITTED WITH TWO SHELVES AS SHOWN.

15. POST TOP MOUNTED CABINETS, SHALL HAVE A 0.25 INCH (6.3 mm) BOTTOM OF CABINET WELDED.

16. THE CONTROL CABINET SHALL BE SET PLUMB ON THE FOUNDATION AND FASTENED TO THE ANCHOR BOLTS WITH NUTS AND WASHERS. FLAT WASHERS SHALL BE INSTALLED BELOW AND ABOVE THE BASE PLATE OF THE CONTROL CABINET. LOCKWASHERS SHALL BE INSTALLED ON TOP OF THE TOP FLAT WASHER.

(X)

EDENS	WALNUT •
KENNEDY	BLUE STREAK ••
EISENHOWER	CARIBBEAN BLUE •
I-290/IL53/I-355	POST OFFICE BLUE ••
RYAN	YELLOW STONE II ••
I-55	MEDIUM BRONZE •
I-57	RED BARON ••
CAL-KING	BLUE STREAK ••
LAKE SHORE DR.	GREEN •
I-80	STATUARY BRONZE ••

ALL RAMP METERING CABINETS LIME GREEN ***. ALL POSTS, T.S. HEADS AND SERVICES WILL BE PAINTED FEDERAL YELLOW.

• MORTON POWDER PAINT COLOR OR EQUIVALENT.
•• O'BRIEN POWDER PAINT COLOR OR EQUIVALENT.
*** BENJAMIN MOORE ENAMEL COLOR OR EQUIVALENT.

NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR CONFORMING TO COLOR REQUIREMENTS

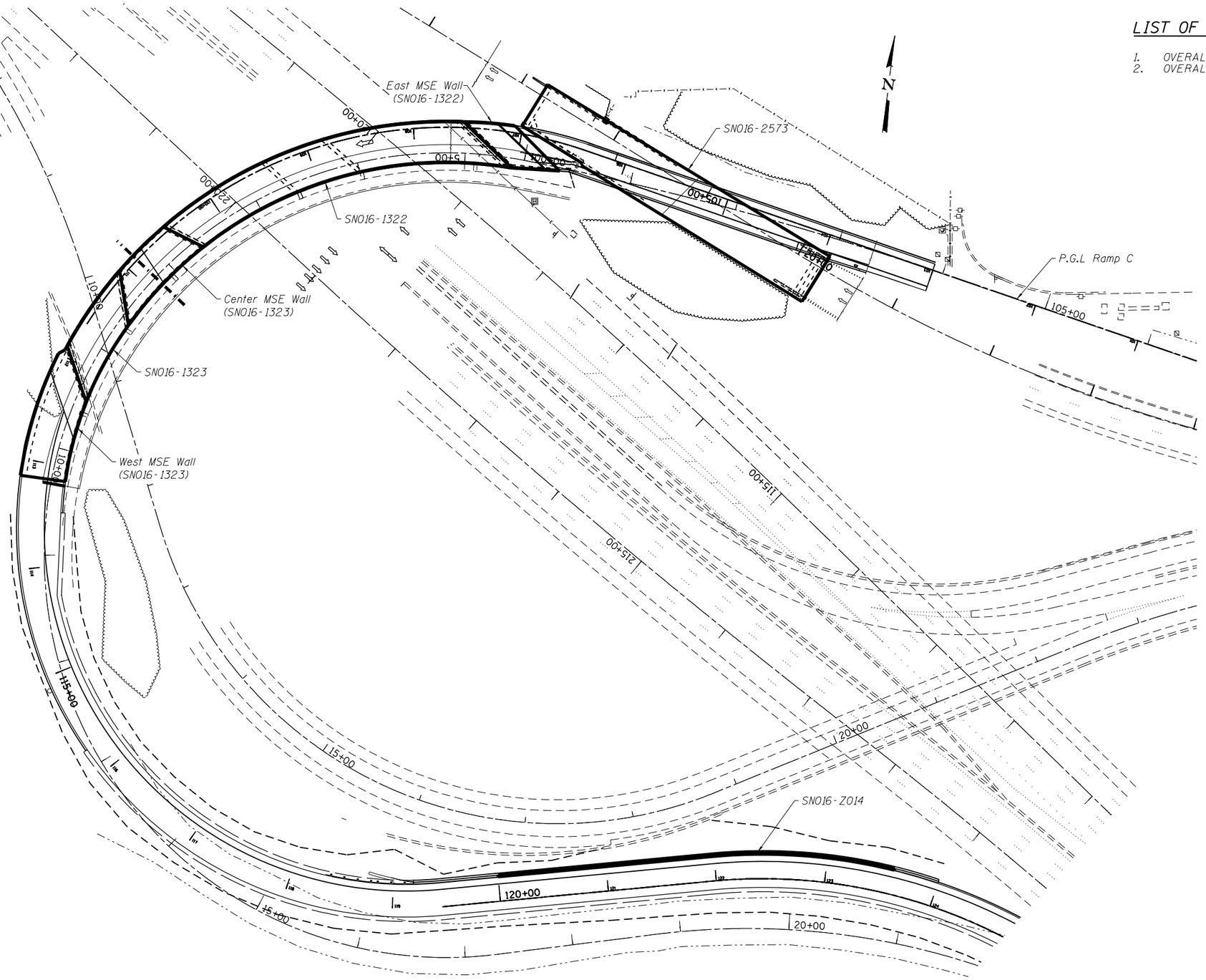
FILE NAME = c:\pw_work\pwidot\mezag\d0287541\TSCTYP.dgn	USER NAME = mezag	DESIGNED - R.L.	REVISED - 12/94	
		DRAWN - G.M.	REVISED - 09/96	
	PLOT SCALE = 100.0000 '/ in.	CHECKED - R.L.	REVISED - 02/98	
	PLOT DATE = 7/26/2012	DATE - 06/21/94	REVISED - 03/99	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

CABINET
DETAIL SHEET

SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	0303-474HB-R	COOK	368	190
		CONTRACT NO. 60F63		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LIST OF SHEETS

LOCATION SKETCH

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

LOADING HL-93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.085g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.143g
Soil Site Class = D

OVERALL GENERAL PLAN
ONTARIO STREET OVER F.A.I. RT. 90/94
F.A.P. RT. 0383 - SEC. 0303-474HB-R
COOK COUNTY
STATION 109+09.65
STRUCTURE NO. 016-1322

PLAN

COLLINS ENGINEERS
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ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000893

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERALL GENERAL PLAN
STRUCTURE NO. 016-1322, 016-1323, 016-2573 & 016-Z014
SHEET NO. SP1 OF SP2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-R	COOK	368	191
		CONTRACT NO. 60F63		
	ILLINOIS FED. AID PROJECT			

OVERALL TOTAL BILL OF MATERIAL

		OVERALL	(SN016-1322)			(SN016-1323)			(SN016-2573)			(SN016-Z014)		
ITEM	UNIT	TOTAL	SUPER	SUB	TOTAL	SUPER	SUB	TOTAL	SUPER	SUB	TOTAL	SUPER	SUB	TOTAL
REMOVAL OF EXISTING SUPERSTRUCTURES NO. 1	EACH	1							1		1			
CONCRETE REMOVAL	CU YD	173.5								173.5	173.5			
STRUCTURE EXCAVATION	CU YD	832.1								321.4	321.4		510.7	510.7
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	1323.6		298.2	298.2		1025.4	1025.4						
CONCRETE STRUCTURES	CU YD	889.3		261.4	261.4		108	108		375	375		144.9	144.9
CONCRETE SUPERSTRUCTURE	CU YD	1181.5	591.3		591.3	397.6		397.6	192.6		192.6			
BRIDGE DECK GROOVING	SQ YD	1921	1345		1345	576		576						
FORM LINER TEXTURED SURFACE	SQ FT	1447								1447	1447			
PROTECTIVE COAT	SQ YD	3910	2475		2475	1435		1435						
PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1371							1371		1371			
PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	11480							11480		11480			
FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	0.81		0.81	0.19		0.19						
STUD SHEAR CONNECTORS	EACH	13928	9903		9903	2853		2853					1172	1172
REINFORCEMENT BARS	POUND	65240		50870	50870		14370	14370						
REINFORCEMENT BARS, EPOXY COATED	POUND	460676	140360	90380	230740	77230	41420	118650	34420	54700	89120		22166	22166
BAR SPLICERS	EACH	2138	1069	310	1379	438	213	651	50	58	108			
MECHANICAL SPLICERS	EACH	1464	918	132	1050	276		276	0	138	138			
BRIDGE FENCE RAILING	FOOT	126							126		126			
FURNISHING METAL SHELL PILES 12" X 0.250"	FOOT	396								396	396			
DRIVING PILES	FOOT	396								396	396			
TEST PILE METAL SHELLS	EACH	1								1	1			
NAME PLATES	EACH	3	1		1	1		1		1	1			
PERMANENT CASING	FOOT	1864		1109	1109		755	755						
DRILLED SHAFT IN SOIL	CU YD	344.6		218.4	218.4		126.2	126.2						
PREFORMED JOINT STRIP SEAL	FOOT	205.0	104.0		104.0	101.0		101.0						
ANCHOR BOLTS, 1"	EACH	168	112		112	56		56						
WATERPROOFING MEMBRANE SYSTEM	SQ YD	1770			0				1770		1770			
CONCRETE SEALER	SQ FT	8347		2020	2020		1030	1030		2279	2279		3018	3018
EPOXY CRACK INJECTION	FOOT	10								10	10			
GEOCOMPOSITE WALL DRAIN	SQ YD	427							24	286	310		117	117
CONTROLLED LOW-STRENGTH MATERIAL	CU YD	13.3								13.3	13.3			
UNTREATED TIMBER LAGGING	SQ FT	2743											2743	2743
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCH)	SQ FT	110								110	110			
DRAINAGE SCUPPERS, DS-12	EACH	2	1		1	1		1						
DRAINAGE SYSTEM	L SUM	1	0.5		0.5	0.5		0.5						
FURNISHING SOLDIER PILES (W SECTION)	FOOT	3992											3992	3992
GEOTEXTILE RETAINING WALL	SQ FT	190								190	190			
MECHANICALLY STABILIZED EARTH RETAINING WALL	SQ FT	12826		2930	2930		9896	9896						
PIPE UNDERDRAIN FOR STRUCTURES 4"	FOOT	518							150		150		368	368
PIPE UNDERDRAINS FOR STRUCTURES 6"	FOOT	308								308	308			
TEMPORARY SOIL RETENTION SYSTEM	SQ FT	2410								2410	2410			
TEMPORARY MECHANICALLY STABILIZED EARTH RETAINING WALL	SQ FT	5841		1464	1464		4377	4377						
DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	28183											28183	28183
AGGREGATE COLUMN GROUND IMPROVEMENT	L SUM	1		0.23	0.23		0.77	0.77						
REMOVAL OF EXISTING STRUCTURES, SPECIAL	L SUM	1	1		1									
CONCRETE WEARING SURFACE, 6"	SQ YD	1620							1620		1620			
HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 150K	EACH	7	7		7									
HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 200K	EACH	7				7		7						
HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION, 250K	EACH	14	14		14									
HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED - 150K	EACH	7				7		7						
HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED - 400K	EACH	7	7		7									
GRANULAR BACKFILL FOR STRUCTURES	CU YD	410.7								410.7	410.7			
PROTECTIVE CONCRETE SLAB	SQ YD	956							956		956			
LOCATE TUNNEL	L SUM	1		1	1									
BULKHEAD TUNNEL	L SUM	1		1	1									

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

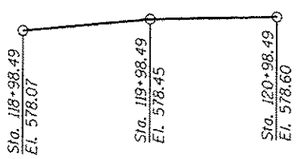
OVERALL TOTAL BILL OF MATERIAL
STRUCTURE NO. 016-1322, 016-1323, 016-2573 & 016-Z014
SHEET NO. SP2 of SP2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-R	COOK	368	192
		CONTRACT NO. 60F63		
	ILLINOIS FED. AID PROJECT			

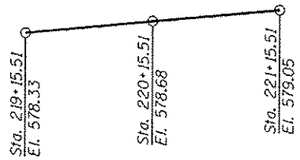
Bench Mark: BM-12 N. 1,904,392.510 E. 1,168,864.965 El. 581.496 Cut "Square" at SW corner, end of conc. barrier wall at SW corner of conc. support pier for Ontario feeder to I-90/94 EB overpass at left shoulder for EB I-90/94 exit 50B. At SW corner, top of barrier wall, 8.20 Ft. Westerly of SE corner of pier and 3.20 Ft. Southerly of NW corner of pier.

Existing Structure: S.N. 016-1003 was originally built in 1959 as F.A.I. Route 94, Section 0303-477-HB and rehabilitated in 1994. The existing structure consists of 8-span cast-in-place concrete curved box girders supported on stub abutments on pile supported footings and single-column rectangular piers (monolithic with the box girder structure). The back to back of abutments measures 637'-0¾" and the out-to-out of deck is 34'-8". The structure is to be removed and replaced with a three span bridge (S.N. 016-1322), a single span bridge (S.N. 016-1323) and three MSE walls. Traffic is to be maintained utilizing stage construction. Temporary detour of I-90/94 will be utilized during setting of beams.

No Salvage.



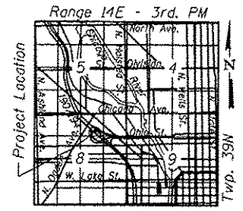
PROFILE GRADE
(Along ℄ W.B. F.A.I. Rt. 90/94)



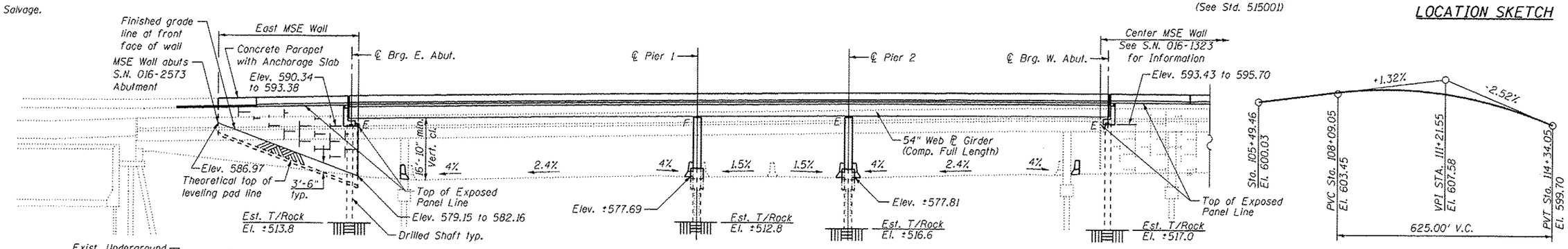
PROFILE GRADE
(Along ℄ E.B. F.A.I. Rt. 90/94)

STATION 109+09.65
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 0383 SEC. 0303-474HB-R
LOADING HL-93
STR. NO. 016-1322

NAME PLATE
(See Std. 515001)



LOCATION SKETCH



ELEVATION

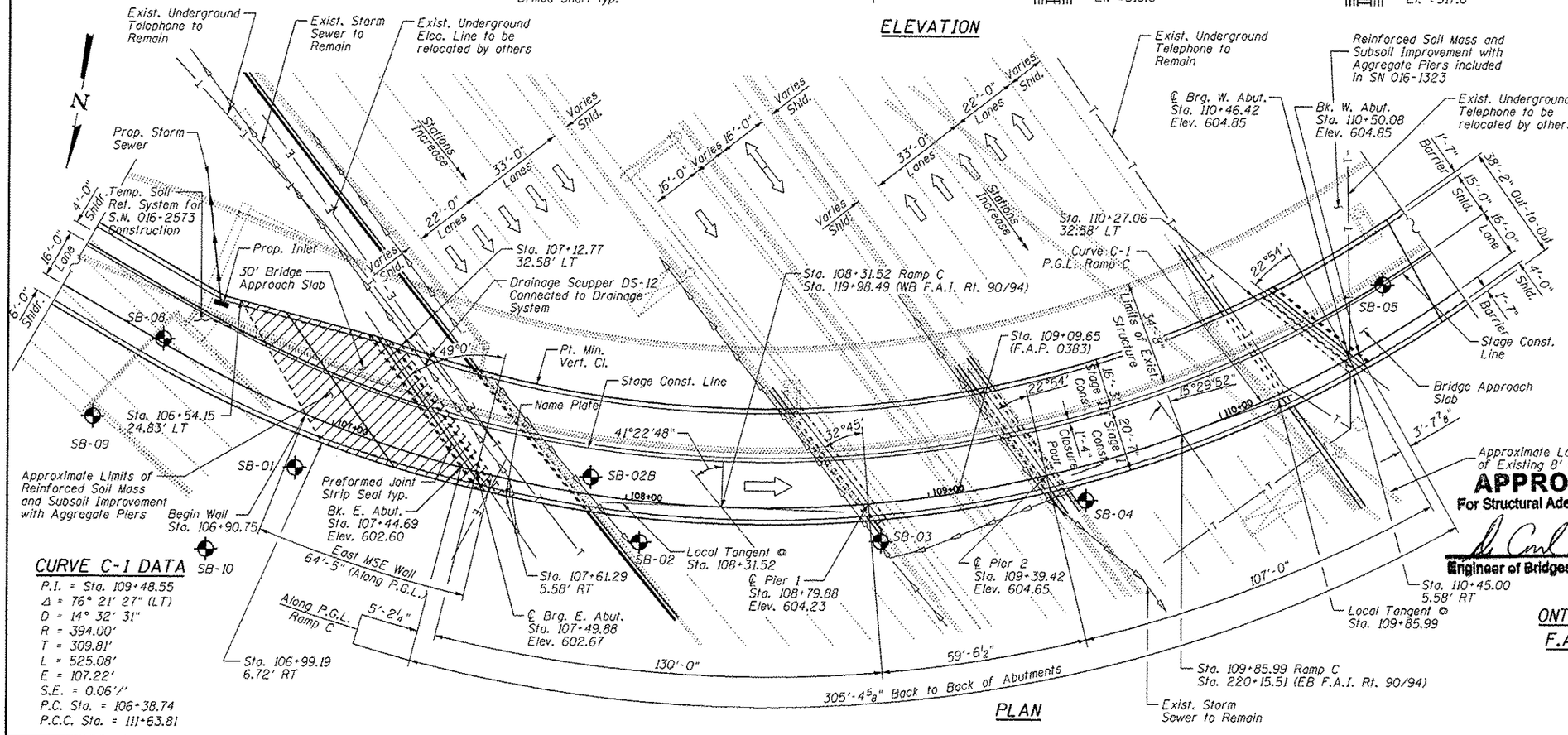
PROFILE GRADE
(Along PGL Ramp C)

DESIGN SPECIFICATIONS
2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.085g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.143g
Soil Site Class = D



PLAN

CURVE C-1 DATA
P.I. = Sta. 109+48.55
Δ = 76° 21' 27" (LT)
D = 14° 32' 31"
R = 394.00'
T = 309.81'
L = 525.08'
E = 107.22'
S.E. = 0.06'/'
P.C. Sta. = 106+38.74
P.C.C. Sta. = 111+63.81

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

COLLINS ENGINEERS, INC.
JAMES M. HAMELKA
NO. 81-6116
EXPIRES 11-30-2014

GENERAL PLAN
ONTARIO STREET OVER F.A.I. RT. 90/94
F.A.P. RT. 0383 - SEC. 0303-474HB-R
COOK COUNTY
STATION 109+09.65
STRUCTURE NO. 016-1322

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 016-1322
SHEET NO. 51 OF 549 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-R	COOK	368	193
		CONTRACT NO. 60F63		
		ILLINOIS FED. AID PROJECT		

INDEX OF SHEETS

GENERAL NOTES

Except as otherwise noted fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$-in. ϕ, holes $\frac{15}{16}$-in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel: AASHTO M 270 Grade 50 = 628,720 lbs.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

Concrete Sealer shall be applied to the designated areas of the abutments and piers.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.

The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.

The Contractor shall retain the services of an engineering firm, pre qualified in the IDOT consultant selection category of Highway Bridges (Complex), for preparation of the Structural Assessment Report(s). Contractor's pre approval shall not be applicable for this project. See Special Provision.

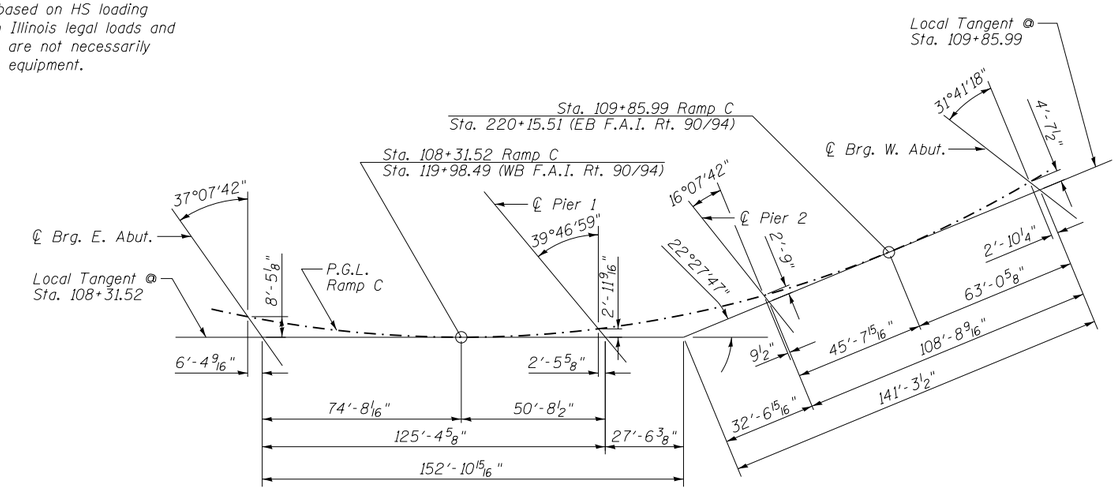
Current Ratings on File for Existing Structure
Inventory: HS 9.5
Operating: HS 15.8
Live Load Restrictions: No

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live Load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

Slipforming of the parapet is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.		298.2	298.2
Concrete Structures	Cu. Yd.		261.4	261.4
Concrete Superstructure	Cu. Yd.	591.3		591.3
Bridge Deck Grooving	Sq. Yd.	1,345		1,345
Protective Coat	Sq. Yd.	2,475		2,475
Furnishing and Erecting Structural Steel	L. Sum	0.81		0.81
Stud Shear Connectors	Each	9,903		9,903
Reinforcement Bars	Pound		50,870	50,870
Reinforcement Bars, Epoxy Coated	Pound	140,360	90,380	230,740
Bar Splicers	Each	1,069	310	1,379
Mechanical Splicers	Each	918	132	1,050
Name Plates	Each	1		1
Permanent Casing	Foot		1,109	1,109
Drilled Shaft in Soil	Cu. Yd.		218.4	218.4
Preformed Joint Strip Seal	Foot	104.0		104.0
Anchor Bolts, 1"	Each	112		112
Concrete Sealer	Sq. Ft.		2,020	2,020
Drainage Scuppers, DS-12	Each	1		1
Drainage System	L. Sum	0.5		0.5
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.		2,930	2,930
Temporary Mechanically Stabilized Earth Retaining Wall	Sq. Ft.		1,464	1,464
Aggregate Column Ground Improvement	L. Sum		0.23	0.23
Removal of Existing Structures, Special	L. Sum	1		1
High Load Multi-Rotational Bearings, Guided Expansion, 150 kips	Each	7		7
High Load Multi-Rotational Bearings, Guided Expansion, 250 kips	Each	14		14
High Load Multi-Rotational Bearings, Fixed, 400 kips	Each	7		7
Locate Tunnel	L. Sum		1	1
Bulkhead Tunnel	L. Sum		1	1



OFFSET SKETCH

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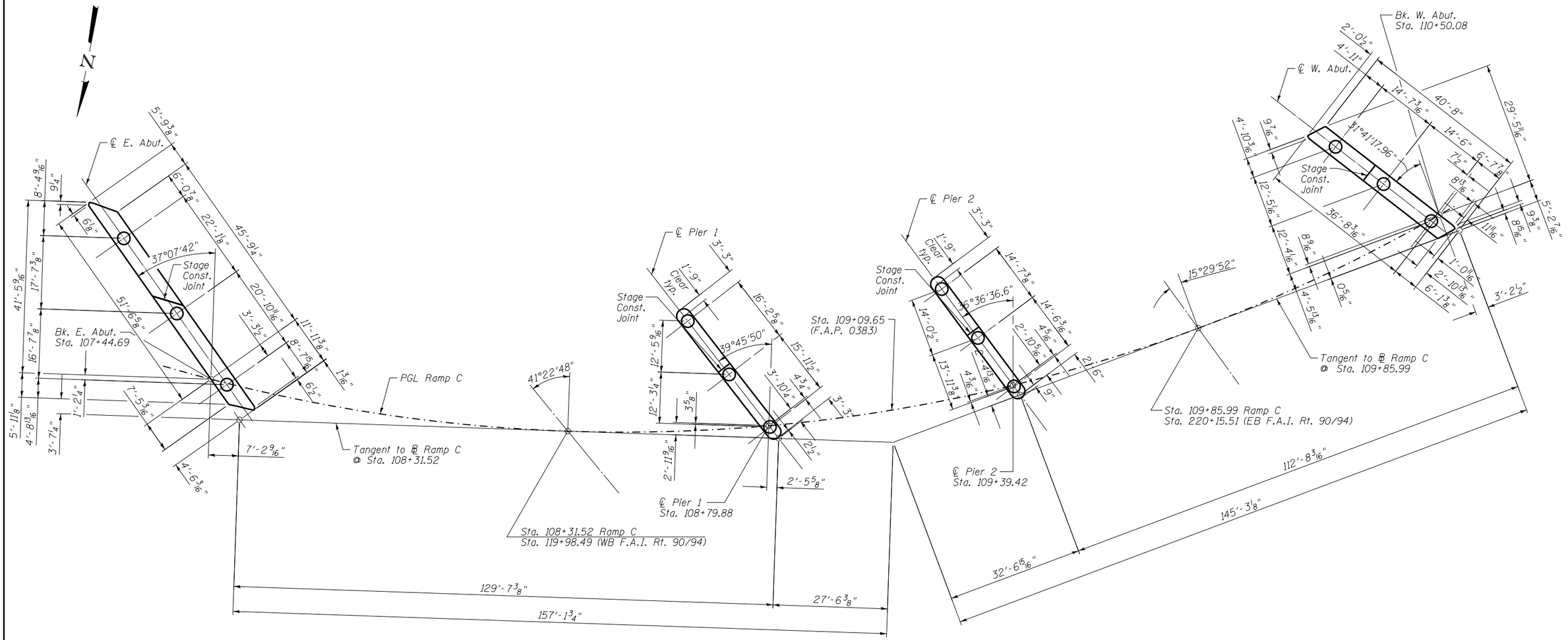
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, SHEET INDEX AND TOTAL BILL OF MATERIAL
STRUCTURE NO. 016-1322
SHEET NO. S2 OF S49 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-R	COOK	368	194
		CONTRACT NO. 60F63		
	ILLINOIS FED. AID PROJECT			



SUBSTRUCTURE LAYOUT PLAN

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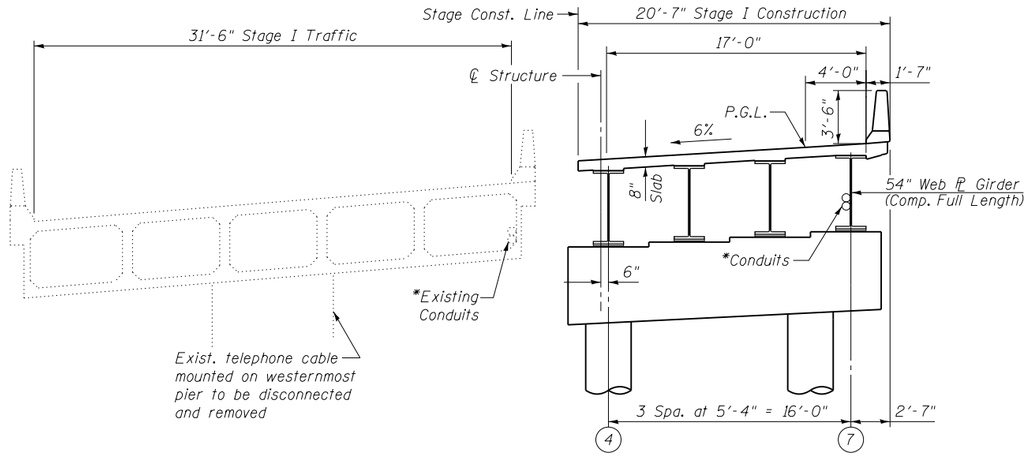
	PLOT DATE =	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

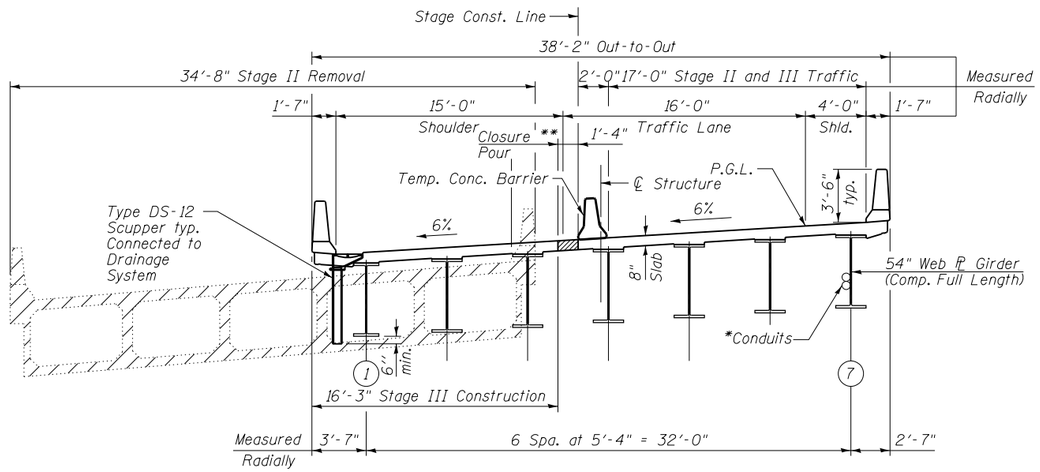
SUBSTRUCTURE LAYOUT
STRUCTURE NO. 016-1322
SHEET NO. S3 OF S49 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-R	COOK	368	195
		CONTRACT NO. 60F63		
	ILLINOIS	FED. AID PROJECT		



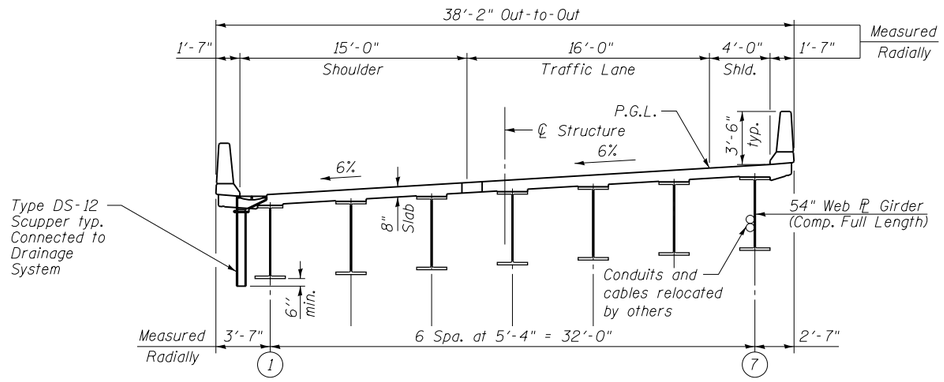
TYPICAL CROSS SECTION - STAGE I

(Looking West)



TYPICAL CROSS SECTION - STAGE II and III

(Looking West)



TYPICAL CROSS SECTION - FINAL

(Looking West)

* Existing Conduits presumed to be empty and shall be removed. Contractor to verify prior to removal by opening these ducts first to confirm. If the ducts are not empty, they shall be protected, temporarily supported and/or relocated and mounted to the new structures. This work shall be included in the pay item for Removal of Existing Structures, Special.

** Closure pour to be completed following Stage III deck pour to account for differential deflections of Stage I and Stage III structures.

Notes:

See sheet S19 of S49 for Drainage System Details.

Stage construction line of individual substructure units vary with respect to deck and approach stage construction line.

See sheets S5 and S6 of S49 for proposed demolition plan of existing structure.

Refer to Roadway Plans for quantity of Temporary Concrete Barriers.

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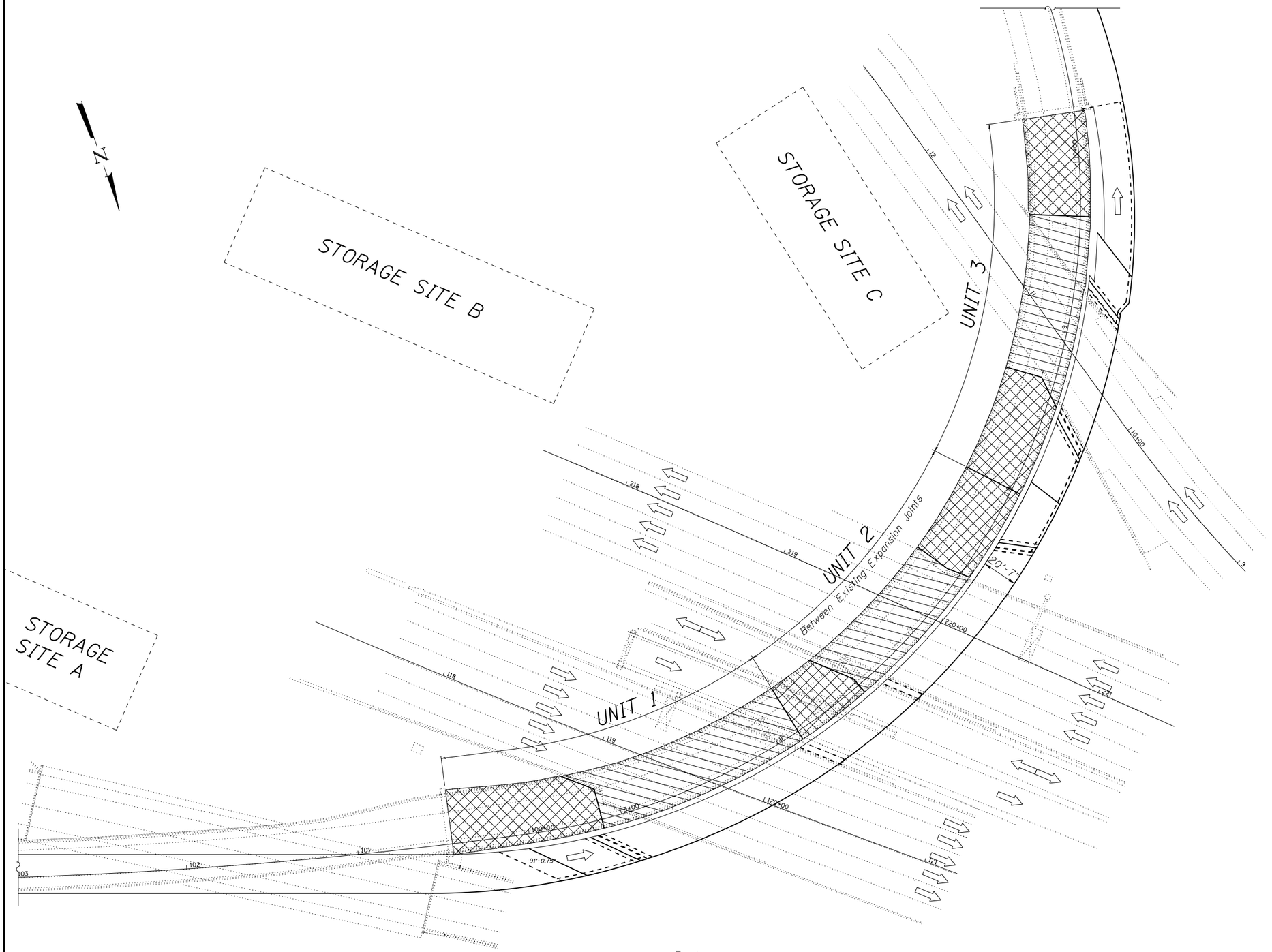
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 016-1322

SHEET NO. S4 OF S49 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-R	COOK	368	196
		CONTRACT NO. 60F63		
		ILLINOIS	FED. AID PROJECT	



PLAN

Notes:

Plan shows suggested demolition procedure which can be accomplished within the specified roadway closures.

Location of storage sites are approximate and shall be verified by Contractor. See civil plans for information about storage sites.

Contractor shall obtain the services of an Illinois Licensed Structural Engineer to evaluate the condition of the existing structure, stability during demolition and ability to be moved if SPMT's are used.

Dimensions of sections to be moved by SPMT are approximate. Exact dimensions shall be specified in demolition plan by Contractor.

Unit 1 section to be moved with SPMT on west bound I90/94 mainline and placed in Storage Site A for demolition and removal.

Unit 2 section to be moved with SPMT on east bound I90/94 mainline and placed in Storage Site B for demolition and removal.

Unit 3 section to be moved with SPMT on ramp D mainline and placed in Storage Site C for demolition and removal.

In-place demolition portion of unit sections to occur prior to SPMT section move of that unit.

The sequencing of demolition identified as "Move with SPMT" shall be submitted to the engineer for approval.

Cantilever traffic sign on west bound I90/194 to be removed prior to demo with SPMT. See civil plans for details.

Refer to Special Provisions for additional requirements for demolition.

Legend:

Demo in Place

Move with SPMT

BILL OF MATERIAL

Item	Unit	Total
Removal of Existing Structures, Special	L. Sum	1

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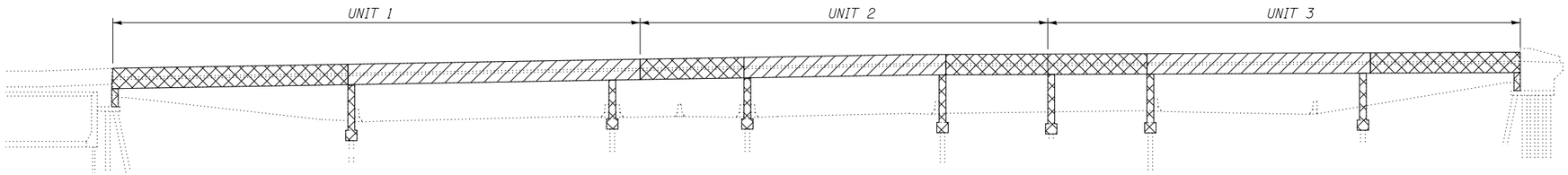
	CHECKED - LDB	REVISED
PLOT SCALE =	DRAWN - DR	REVISED
PLOT DATE =	CHECKED - JMH	REVISED

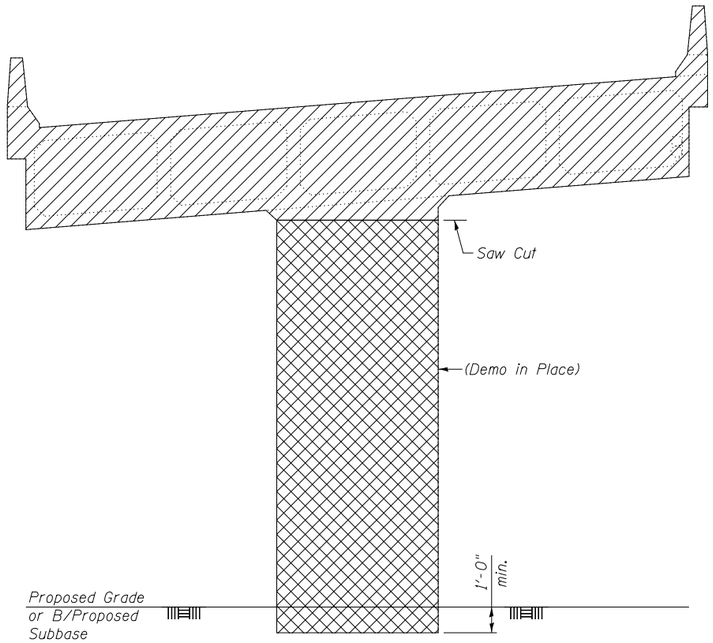
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED DEMOLITION PLAN
STRUCTURE NO. 016-1003
SHEET NO. S5 OF S49 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-1	COOK	368	197
		CONTRACT NO. 60F63		
	ILLINOIS FED. AID PROJECT			



ELEVATION
(Looking South)



TYPICAL SECTION AT PIER WITH SPMT REMOVAL OF SUPERSTRUCTURE

Note:
Sawcut location on pier to be determined by the Contractor based on demolition requirements.

Legend:

Demo in Place

Move with SPMT

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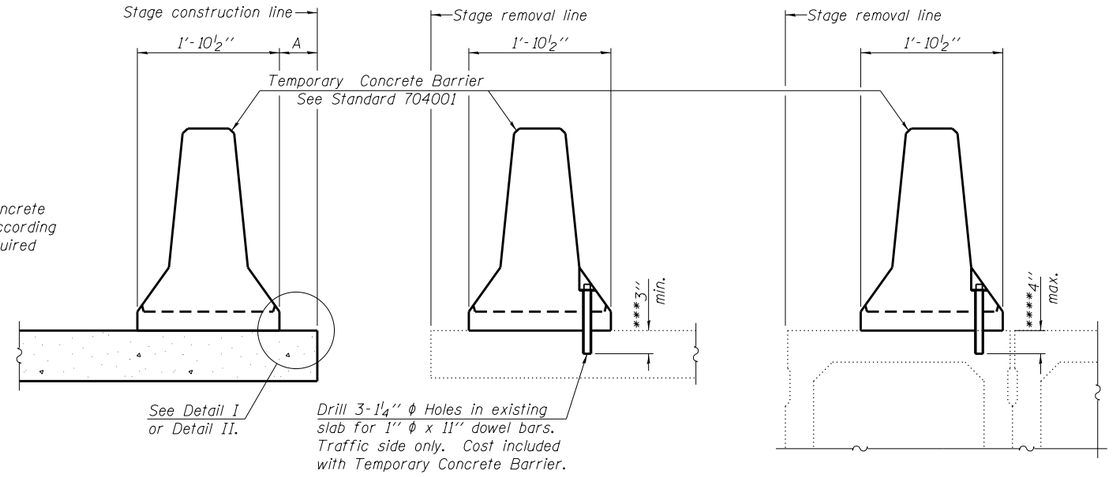
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED DEMOLITION PLAN
STRUCTURE NO. 016-1003
SHEET NO. S6 OF S49 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-1	COOK	368	198
		CONTRACT NO. 60F63		
	ILLINOIS	FED. AID PROJECT		

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1'' x 7' 'x ''W'' steel PL to the top layer of couplers with 2-⅝'' ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1'' x 7'' x ''W'' steel PL to the concrete slab or concrete wearing surface with 2-⅝'' ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

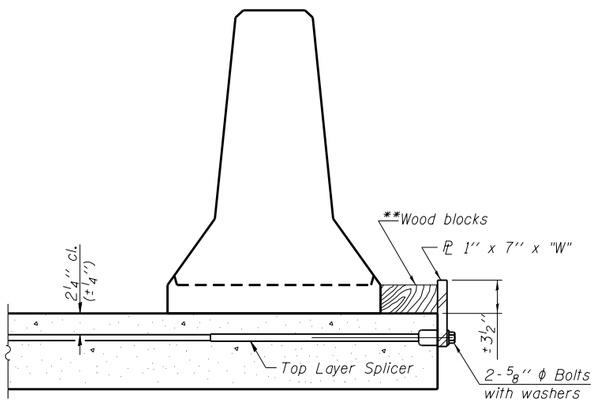
Cost of anchorage is included with Temporary Concrete Barrier.

The 1'' x 7'' x ''W'' plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

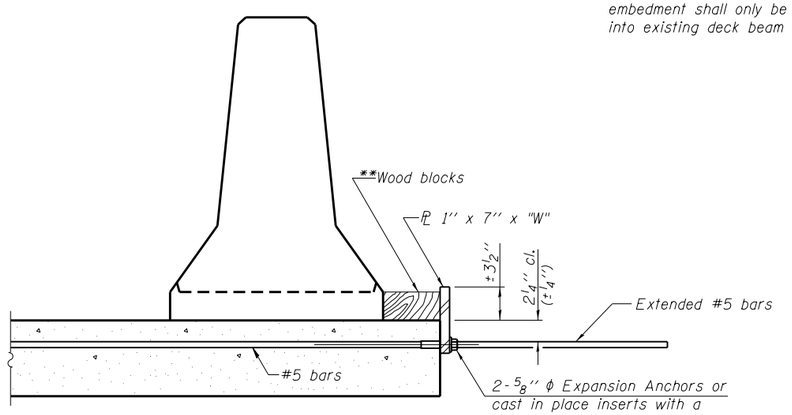
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

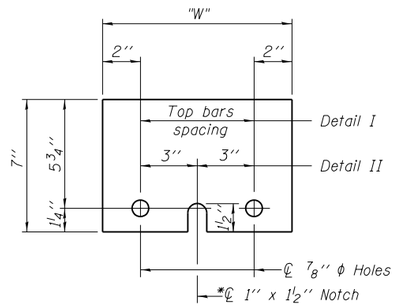
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER PL 1'' x 7'' x ''W''

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4''

R-27

7-1-10

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STATE OF ILLINOIS
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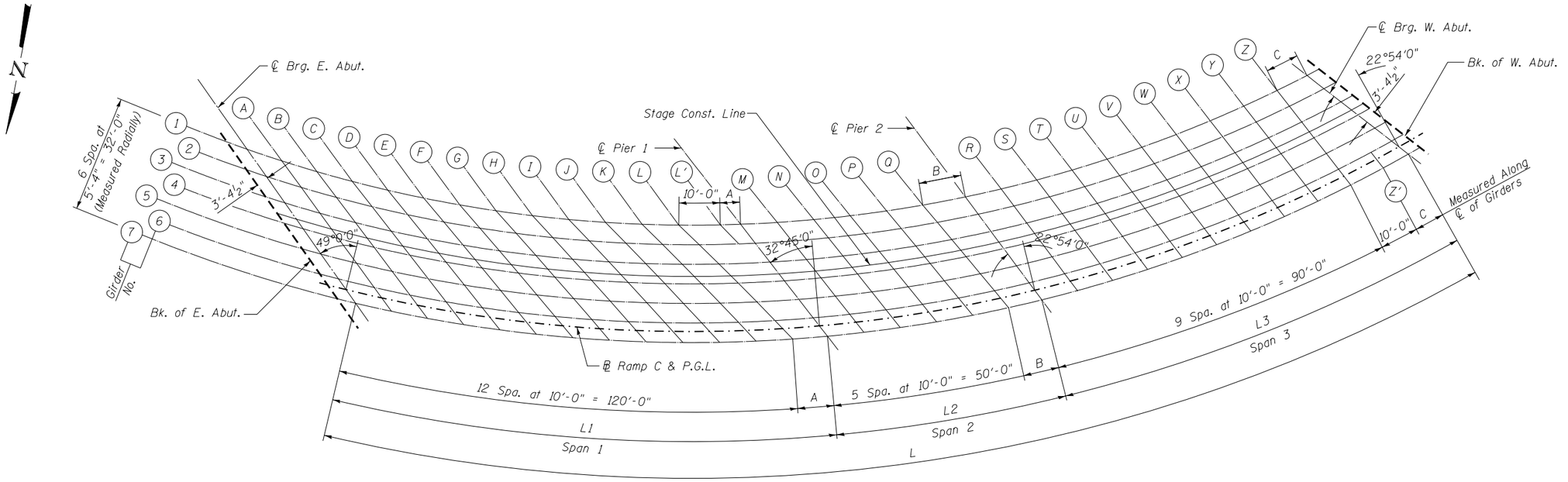
TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-1322
SHEET NO. 57 OF 549 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-R	COOK	368	199
		CONTRACT NO. 60F63		
	ILLINOIS FED. AID PROJECT			



PLAN

SCREED DIMENSION LAYOUT

Girder	A	B	C	L	L1	L2	L3	L1/4	L2/4	L3/4
1	6'-10 1/4"	11'-9 3/4"	9'-1 1/2"	297'-9 1/8"	136'-10 1/4"	61'-9 3/4"	99'-1 1/2"	34'-2 1/2"	15'-5 1/2"	24'-9 3/8"
2	5'-3 3/8"	11'-4 1/8"	10'-6 7/8"	297'-2 1/4"	135'-3 3/8"	61'-4 1/8"	100'-6 7/8"	33'-9 7/8"	15'-4"	25'-1 3/4"
3	13'-10 1/2"	10'-10 7/8"	12'-0 1/4"	296'-9 1/2"	133'-10 1/2"	60'-10 7/8"	102'-0 1/4"	33'-5 5/8"	15'-2 3/4"	25'-6 1/8"
4	12'-7 1/4"	10'-5 7/8"	13'-5 5/8"	296'-6 3/4"	132'-7 1/4"	60'-5 7/8"	103'-5 5/8"	33'-1 7/8"	15'-1 1/2"	25'-10 1/2"
5	11'-5 1/2"	10'-1 1/8"	14'-11"	296'-5 5/8"	131'-5 1/2"	60'-1 1/8"	104'-11"	32'-10 3/8"	15'-0 1/4"	26'-2 3/4"
6	10'-5 1/8"	9'-8 1/2"	6'-4 3/8"	296'-6"	130'-5 1/8"	59'-8 1/2"	106'-4 3/8"	32'-7 3/8"	14'-11 1/8"	26'-7 1/8"
7	9'-5 7/8"	9'-4"	7'-9 3/4"	296'-7 5/8"	129'-5 7/8"	59'-4"	107'-9 3/4"	32'-4 1/2"	14'-10"	26'-11 1/2"

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TOP OF SLAB PLAN
STRUCTURE NO. 016-1322
SHEET NO. 58 OF 549 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0383	0303-474HB-R	COOK	368	200
		CONTRACT NO. 60F63		
	ILLINOIS FED. AID PROJECT			