

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED
HIGHWAY PLANS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST CLAIR	162	1
		ILLINOIS	CONTRACT NO. 76D59	

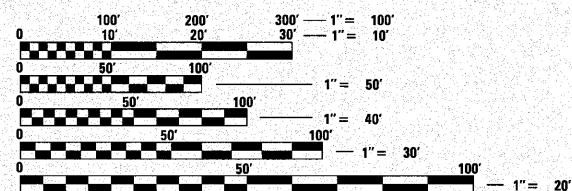
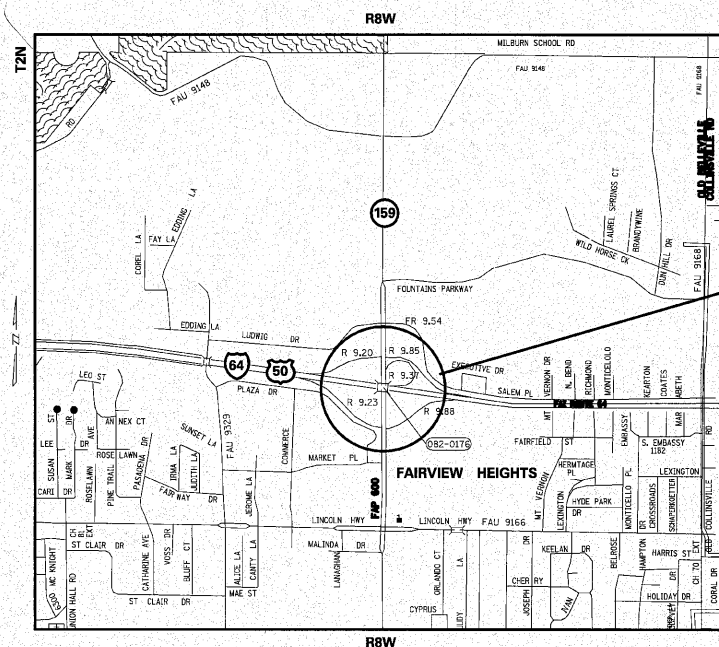
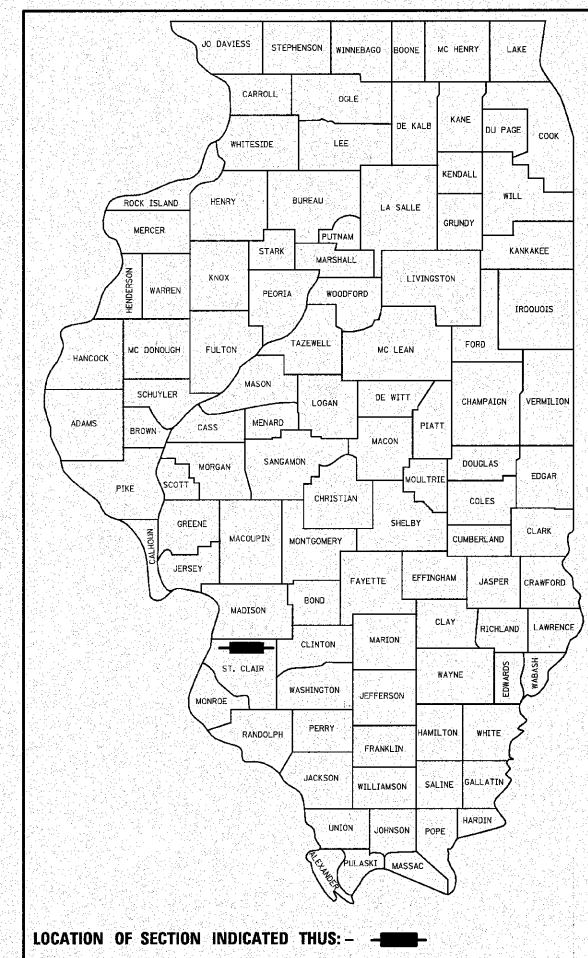
FOR INDEX OF SHEETS, SEE SHEET NO. 2

FAI ROUTE 64 (I-64)
SECTION 82-5K-2
I-64 AND IL 159 INTERCHANGE
RAMP & INTERSECTION IMPROVEMENTS
ST. CLAIR COUNTY

PROJECT: ACIM-064-1(128)009

C-98-037-10

D-98-024-10



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

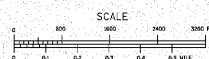
J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123
 OR 811

PROJECT ENGINEER : TIM PADGETT (618) 346-3325
PROJECT MANAGER : LIZ BURNSIDE (618) 346-3196

CONTRACT NO. 76D59

DESIGN DESIGNATION:
 81400(31) INTERSTATE
 49200(31) OTHER PRINCIPAL ARTERIAL

GROSS LENGTH = 1741 FT. = 0.33 MILE
 NET LENGTH = 1741 FT. = 0.33 MILE



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 3/11 20 10

Max Ramirez
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 10 20 10
Scott E. Stitt, P.E.
 acting ENGINEER OF DESIGN AND ENVIRONMENT

December 10 20 10
Christine M. Reed
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

INDEX OF SHEETS	
1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS, NOTES AND COMMITMENTS
3-4	SWPPP PLAN
5-11	SUMMARY OF QUANTITY SHEETS
12-15	TYPICAL SECTIONS
16-20	SCHEDULE OF QUANTITIES
21-25	ALIGNMENT, TIES AND BENCHMARKS SHEETS
26-31	PLAN AND PROFILE SHEETS
32-34	TRAFFIC CONTROL SHEETS
35-38	REMOVAL SHEETS
39-42	EROSION CONTROL SHEETS
43-44	DRAINAGE SHEETS
45-46	INTERSECTION DETAILS
47-50	PAVEMENT MARKING SHEETS
51-59	TRAFFIC SIGNAL SHEETS
60-69	LIGHTING SHEETS
70-81	SIGN PANEL AND TRUSS DETAILS
82-83	MISC. DETAILS
84-117	STRUCTURAL SHEETS
118	RAMP RESURFACING SCHEDULE OF QUANTITIES
119-120	RAMP RESURFACING TYPICALS
121	RAMP RESURFACING SCHEDULES
122-126	RAMP RESURFACING PLAN SHEETS
127	RAMP RESURFACING DETAILS
128-162	CROSS SECTIONS

HIGHWAY STANDARDS

000001-05	637006-02
001006	701101-02
420001-07	701106-02
442001-04	701400-04
482011-03	701401-05
542301-02	701406-05
601001-03	701411-06
601101-01	701421-02
606001-04	701426-03
606301-04	701456
630001-08	701601-06
630301-05	701701-06
631031-08	701901-01
635001-01	780001-02
635011-02	781001-03
635006-03	

COMMITMENTS

NONE

GENERAL NOTES

- ① EXCEPT WHERE DESIGNATED OTHERWISE, THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM OFFICE RECORD INFORMATION FURNISHED BY THE UTILITY OWNERS AND MUST BE CONSIDERED APPROXIMATE.
- ② ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR ON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

UTILITY	ABOVE GROUND	BELOW GROUND
* AMERENIP GAS AND ELECTRIC	X	X
* AMERENUE ELECTRIC	X	X
* AT&T ILLINOIS		X
* CASEYVILLE TOWNSHIP ADVANCED WASTEWATER TREATMENT SYSTEM - SANITARY SEWER		X
* CHARTER COMMUNICATIONS, INC. - CABLE		X
* CONOCO PHILLIPS COMPANY HARDFORD TERMINAL - PIPELINE		X
* CITY OF FAIRVIEW HEIGHTS - SANITARY SEWER		X
* CITY OF O'FALLON - WATER AND SANITARY SEWER		X

MEMBERS OF J.U.L.I.E. (800)-892-0123 ARE INDICATED BY *. NON J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

- ③ THE THICKNESS OF THE BITUMINOUS MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.
- ④ "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE PLACED AT THE BEGINNING AND END OF THE PROJECT PLUS THE INTERSECTING SIDE ROADS, AND WILL BE INCLUDED IN THE TRAFFIC CONTROL PAY ITEMS. ALL CONSTRUCTION SIGNS SHALL BE FLUORESCENT ORANGE. (48"X48")
- ⑤ FLAGGERS SHALL BE PRESENT DURING ALL CLOSURE HOURS, INCLUDING LUNCH HOUR, AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- ⑥ EXCAVATION ADJACENT TO EDGE OF PAVEMENT SHALL BE PROTECTED WITH EXTENDED LEG BARRICADES WITH APPROPRIATE LIGHTS.
- ⑦ THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- ⑧ ALL AREAS DISTURBED FOR ANY REASON SHALL BE PERMANENTLY SEEDED AS DIRECTED BY THE ENGINEER. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDED AT THE CONTRACTOR'S EXPENSE.
- ⑨ SHORT-TERM PAVEMENT MARKING SHALL BE APPLIED TO THE MILLED, PRIMED, AND LEVELING BINDER SURFACES. A QUANTITY FOR TEMPORARY PAVEMENT MARKING EQUAL TO THE AMOUNT OF PERMANENT PAVEMENT MARKINGS HAS BEEN ADDED TO THE PLANS.
- ⑩ WHERE PROPOSED CONSTRUCTION ABUTS EXISTING APPURTENANCES, A SAW CUT SHALL BE MADE TO ACHIEVE A NEAT BUTT JOINT. SAW CUTS WILL NOT BE PAID FOR SEPARATELY. COST OF SAW CUTS SHALL BE INCLUDED IN THE TYPE OF WORK ENCOUNTERED.
- ⑪ AN ADDITIONAL 20 PRISMATIC CURB REFLECTORS HAVE BEEN ADDED TO THE QUANTITY FOR REPLACING EXISTING PRISMATIC CURB MARKERS THAT HAVE BEEN BROKEN OR NOT REFLECTING.
- ⑫ EXISTING RIPRAP WILL BE HAULED AWAY AND DUMPED AT THE ILLINOIS DEPARTMENT OF TRANSPORTATION SCOTT DOME. ALL COST ASSOCIATED WITH THE REMOVAL WILL BE INCLUDED IN THE "EARTH EXCAVATION" PAY ITEM.
- ⑬ THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE	POLY-SURFACE	BINDER/BASE CRS	LEVEL BINDER	INCIDENTAL SURF	Partial Depth Patch
AC/PG	SBS 76-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
RAP % (MAX)	10%	10%	10%	10%	10%
DESIGN AIR VOIDS	4.0% @ Ndes=90	4.0% @ Ndes=90	4.0% @ Ndes=90	4.0% @ Ndes=90	4.0% @ Ndes=90
MIX COMPOSITION					
(GRADATION MIXTURE)		IL 19.0	9.5		
FRICTION AGG	MIXTURE "E"	MIXTURE "B"	MIXTURE "C"	MIXTURE "E"	MIXTURE "C"

MIXTURE USE	SHOULDERS	TOP/LIFT SHOULDER			
AC/PG	PG 64-22	PG 64-22			
RAP % (MAX)	30%	30%			
DESIGN AIR VOIDS	2.0% @ Ndes=30	**2.0% @ Ndes=30			
MIX COMPOSITION					
(GRADATION MIXTURE)					
FRICTION AGG	BAM	BAM			

** Top Lift Shoulders - Design this mix at 2.0% voids and add asphalt to reduce voids to 1.5%.
Plan quantities for Bituminous Concrete Surface Course Items are calculated using a unit weight of 112 lb/sq yd/1n (59.8 kg/sq m/25 mm thickness).

- ⑭ IF THE PREFORMED PLASTIC PAVEMENT MARKING TYPE B - INLAID IS NOT PUT IN WHEN THE FINAL HMA LIFT IS APPLIED, NO ADDITIONAL COMPENSATION WILL BE GIVEN TO COME BACK AND GROOVE THE PAVEMENT MARKING.
- ⑮ SIGN SHEETING SHALL BE TYPE ZZ.

FILE NAME =	USER NAME = burnsideam	DESIGNED -	REVISED - 4-20-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS/HIGHWAY STANDARDS/COMMITMENTS/GENERAL NOTES	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
st:\pw_work\pwsdot\burnsideam\02166363\0875d99-shit-plan.dgn	DRAWN -	REVISED -	64			82-5K-2	ST. CLAIR	162	2	
PLOT SCALE = 50.0000' / 1" IN.	CHECKED -	REVISED -	CONTRACT NO. 76D59							
PLOT DATE = 8/10/2010	DATE -	REVISED -	SCALE:			SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES.

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

MARY C. LAMIE
PRINT NAME
DEPUTY DIRECTOR OF HIGHWAYS
REGION FIVE ENGINEER
TITLE
IL DEPT. OF TRANSPORTATION
AGENCY

Mary Lamie
SIGNATURE
8/14/10
DATE

I. SITE DESCRIPTION:

A. THE FOLLOWING IS A DESCRIPTION OF THE PROJECT LOCATION:

THE PROJECT CONSISTS OF THE PROPOSED CONSTRUCTION OF A NEW LOOP RAMP AND INTERSECTION MODIFICATIONS AT THE INTERCHANGE OF I-64 AND IL ROUTE 159.

B. THE FOLLOWING IS A DESCRIPTION OF THE CONSTRUCTION ACTIVITY WHICH IS THE SUBJECT OF THIS PLAN: CONSTRUCTION WILL INCLUDE A NEW LOOP RAMP FOR TRAFFIC GOING SOUTH ON IL 159 TO EXIT EASTBOUND I-64, WIDENING THE STRUCTURE CARRYING IL ROUTE 159 OVER I-64; WIDENING IL 159 FOR A RIGHT TURN LANE FOR TRAFFIC GOING NORTH ON IL 159 TO TAKE THE EASTBOUND ENTRANCE RAMP TO I-64; AND WIDENING RAMPS B AND C FOR ADDITIONAL LEFT TURN LANES ONTO IL 159. THIS WORK WILL INCLUDE NEW PAVEMENT CONSTRUCTION, SHOULDER REMOVAL AND REPLACEMENT, MEDIAN REMOVAL AND REPLACEMENT, CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT, BRIDGE WORK, RETAINING WALL WORK, GUARDRAIL, PAVEMENT MARKING, SIGNAL MODIFICATIONS, LIGHTING MODIFICATIONS, LANDSCAPING AND ALL INCIDENTAL AND COLLATERAL WORK NECESSARY TO COMPLETE THE PROJECT AS SHOWN ON THE PLANS.

C. THE FOLLOWING IS A DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE, SUCH AS GRUBBING, EXCAVATION AND GRADING:

STAGE 1: BEGIN REMOVAL OF THE PAVEMENT FOR THE CONSTRUCTION OF THE WIDENING AREAS AND SHOULDER WORK NORTH OF THE BRIDGE. REMOVE THE EXISTING SLOPE WALL AT THE SOUTH END OF THE BRIDGE FOR THE CONSTRUCTION OF THE BRIDGE ADDITION AND NEW RETAINING WALL. START THE NEW LOOP RAMP WITH THE DIRT WORK AND NEW PIPE CULVERT.

STAGE 2: CONTINUE CONSTRUCTION OF THE WIDENING AREAS NORTH OF THE BRIDGE WITH THE MEDIAN AND CURB AND GUTTER WORK. START THE CONSTRUCTION OF THE BRIDGE WIDENING. CONTINUE WITH THE NEW RAMP DIRTWORK AND PAVEMENT.

STAGE 3: COMPLETE THE WIDENING OF THE AREAS NORTH OF THE BRIDGE AND START THE WIDENING AND SHOULDER WORK OF THE AREAS SOUTH OF THE BRIDGE. CONTINUE WITH THE BRIDGE WIDENING AND NEW LOOP PAVEMENT.

STAGE 4: CONTINUE WITH THE CONSTRUCTION OF THE WIDENING AREAS SOUTH OF THE BRIDGE WITH THE MEDIAN AND CURB AND GUTTER WORK. FINISH THE BRIDGE WIDENING AND THE LOOP RAMP PAVEMENT.

STAGE 5: COMPLETE THE WIDENING OF THE AREAS SOUTH OF THE BRIDGE.

D. THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE ____ ACRES.

THE TOTAL AREA OF THE SITE THAT IS ESTIMATED WILL BE DISTURBED BY EXCAVATION, GRADING OR OTHER ACTIVITIES IS ____ ACRES.

E. THE FOLLOWING IS A WEIGHTED AVERAGE OF THE RUNOFF COEFFICIENT FOR THIS PROJECT AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED: ____

F. THE FOLLOWING IS A DESCRIPTION OF THE SOIL TYPES FOUND AT THE PROJECT SITE FOLLOWED BY INFORMATION REGARDING THEIR EROSIVITY:

TWO SOIL TYPES ARE LOCATED WITHIN THE PROJECT AREA OF THE I-64 AND IL ROUTE 159 INTERCHANGE. THESE ARE:

FAYETTE SILT LOAM (280B2) - THIS SOIL GENERALLY HAS AREAS LONG AND IRREGULAR IN SHAPE. RUNOFF IS MODERATE AND WELL SUITED TO MOST CROPS GROWN IN THE COUNTY. THIS SOIL HAS SLOPES THAT ARE BETWEEN THREE AND SIX PERCENT.

FAYETTE SILTY CLAY LOAM (280C3) - THIS SOIL HAS AREAS OF LESS ERODED SOIL, AREAS WHERE EROSION HAS REMOVED ALL OF THE SURFACE AND SUBSURFACE LAYERS AND AREAS THAT ARE LESS WELL DRAINED. THIS SOIL HAS A STRONG SLOPING SOIL BETWEEN SIX AND TWELVE PERCENT.

G. THE FOLLOWING IS A DESCRIPTION OF POTENTIALLY ERODIBLE AREAS ASSOCIATED WITH THIS PROJECT:

THERE ARE TWO POTENTIALLY CRITICAL ERODIBLE AREAS IN THE PROJECT AREA SINCE BOTH SOILS TEND TO BE HARD TO CONTROL THE EROSION. THE FIRST IS IN THE SOUTHWEST QUADRANT DUE TO THE CONSTRUCTION OF THE NEW RAMP. THE SECOND IS IN THE NORTHWEST QUADRANT DUE TO THE WIDENING OF IL ROUTE 159.

H. THE FOLLOWING IS A DESCRIPTION OF SOIL DISTURBING ACTIVITIES, THEIR LOCATIONS, AND THEIR ERODIBLE FACTORS (E.G. STEEPNESS OF SLOPES, LENGTH OF SLOPES, ETC.):

THE NATURE AND PURPOSE OF LAND DISTURBING ACTIVITIES ON THIS PROJECT IS TO ADD A NEW RAMP IN THE SOUTHWEST QUADRANT OF THE INTERCHANGE. THIS REQUIRES WIDENING THE STRUCTURE CARRYING IL ROUTE 159 ACROSS I-64 (SN 082-0176), WIDENING IL ROUTE 159 AND RAMPS B AND C. EROSION CONTROL PLANS ARE PROVIDED TO PREVENT EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION OF THE PROJECT. THE TWO SOIL TYPES HAVE ERODIBLE CHARACTERISTICS - FAYETTE SILT LOAM (280B2) AND FAYETTE SILTY CLAY LOAM (280C3)

FAYETTE SILT LOAM (280B2) HAS A MODERATE HAZARD OF EROSION BUT WHEN CULTIVATED IT IS SUBJECT TO SEVERE EROSION. FAYETTE SILTY CLAY LOAM (280C3) HAS A MODERATELY SEVERE HAZARD OF EROSION. THIS SOIL HAS THE HIGHEST SLOPES IN THE PROJECT AREA. BOTH SOILS HAVE CONCERNS OF CONTROLLING EROSION AND MAINTAINING FERTILITY AND TILTH.

I. SEE THE EROSION CONTROL PLANS AND/OR DRAINAGE PLANS FOR THIS CONTRACT FOR INFORMATION REGARDING DRAINAGE PATTERNS, APPROXIMATE SLOPES ANTICIPATED BEFORE AND AFTER MAJOR GRADING ACTIVITIES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AND CONTROLS TO PREVENT OFF SITE SEDIMENT TRACKING (TO BE ADDED AFTER CONTRACTOR IDENTIFIES LOCATIONS), AREAS OF SOIL DISTURBANCE, THE LOCATION OF MAJOR STRUCTURAL AND NON-STRUCTURAL CONTROLS IDENTIFIED IN THE PLAN, THE LOCATION OF AREAS WHERE STABILIZATION PRACTICES ARE EXPECTED TO OCCUR, SURFACE WATERS (INCLUDING WETLANDS) AND LOCATIONS WHERE STORM WATER IS DISCHARGED TO SURFACE WATER INCLUDING WETLANDS.

J. THE FOLLOWING IS A LIST OF RECEIVING WATER(S) AND THE ULTIMATE RECEIVING WATER(S), AND AERIAL EXTENT OF WETLAND ACREAGE AT THE SITE. THE LOCATION OF THE RECEIVING WATERS CAN BE FOUND ON THE EROSION AND SEDIMENT CONTROL PLANS:

NONE

K. THE FOLLOWING POLLUTANTS OF CONCERN WILL BE ASSOCIATED WITH THIS CONSTRUCTION PROJECT: (CHECK ALL THAT APPLY)

- SOIL SEDIMENT
- CONCRETE
- CONCRETE TRUCK WASTE
- CONCRETE CURING COMPOUNDS
- SOLID WASTE DEBRIS
- PAINTS
- SOLVENTS
- FERTILIZERS / PESTICIDES
- PETROLEUM (GAS, DIESEL, OIL, KEROSENE, HYDRAULIC OIL/FLUIDS)
- ANTIFREEZE / COOLANTS
- WASTE WATER FROM CLEANING CONSTRUCTION EQUIPMENT
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....

II. CONTROLS

THIS SECTION OF THE PLAN ADDRESSES THE CONTROLS THAT WILL BE IMPLEMENTED FOR EACH OF THE MAJOR CONSTRUCTION ACTIVITIES DESCRIBED IN I.C. ABOVE AND FOR ALL USE AREAS, BORROW SITES, AND WASTE SITES. FOR EACH MEASURE DISCUSSED, THE CONTRACTOR WILL BE RESPONSIBLE FOR ITS IMPLEMENTATION AS INDICATED. THE CONTRACTOR SHALL PROVIDE TO THE RESIDENT ENGINEER A PLAN FOR THE IMPLEMENTATION OF THE MEASURES INDICATED. THE CONTRACTOR, AND SUBCONTRACTORS, WILL NOTIFY THE RESIDENT ENGINEER OF ANY PROPOSED CHANGES, MAINTENANCE, OR MODIFICATIONS TO KEEP CONSTRUCTION ACTIVITIES COMPLIANT WITH THE PERMIT. EACH SUCH CONTRACTOR HAS SIGNED THE REQUIRED CERTIFICATION ON FORMS WHICH ARE ATTACHED TO, AND ARE A PART OF THIS PLAN:

A. EROSION AND SEDIMENT CONTROL

1. STABILIZED PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF INTERIM AND PERMANENT STABILIZATION PRACTICES, INCLUDING SITE SPECIFIC SCHEDULING OF THE IMPLEMENTATION OF THE PRACTICES. SITE PLANS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, GEOTEXTILES, SODDING, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, PRESERVATION OF MATURE VEGETATION, AND OTHER APPROPRIATE MEASURES. EXCEPT AS PROVIDED BELOW IN II(A)(1)(d) AND II(A)(3), STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASES ON ALL DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION WILL NOT OCCUR FOR A PERIOD OF 14 OR MORE CALENDAR DAYS.

G. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE THEREAFTER.

THE FOLLOWING STABILIZATION PRACTICES WILL BE USED FOR THIS PROJECT: (CHECK ALL THAT APPLY)

- PRESERVATION OF MATURE VEGETATION
- VEGETATED BUFFER STRIPS
- PROTECTION OF TREES
- TEMPORARY EROSION CONTROL SEEDING
- TEMPORARY TURF (SEEDING, CLASS 7)
- TEMPORARY MULCHING
- PERMANENT SEEDING
- EROSION CONTROL BLANKET / MULCHING
- SODDING
- GEOTEXTILES
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....

DESCRIBE HOW THE STABILIZATION PRACTICES LISTED ABOVE WILL BE UTILIZED:

1. TEMPORARY EROSION CONTROL SEEDING - THIS ITEM WILL BE APPLIED TO ALL BARE AREAS EVERY SEVEN DAYS TO MINIMIZE THE AMOUNT OF EXPOSED SURFACE AREAS.

EARTH STOCKPILES SHALL BE TEMPORARILY SEEDDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN 14 DAYS.

WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.

BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDDED AT THE BEGINNING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN 7 DAYS.

2. PERMANENT SEEDING - SEEDING, CLASS 2 WILL BE INSTALLED PER IDOT SPECIFICATIONS.

3. EROSION CONTROL BLANKETS/MULCHING - EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES AND IN HIGH VELOCITY AREAS (I.E. DITCHES) THAT HAVE BEEN BROUGHT TO FINAL GRADE AND SEEDDED TO PROTECT SLOPES FROM EROSION AND ALLOW SEEDS TO GERMINATE. MULCH, METHOD 2 WILL BE APPLIED IN RELATIVELY FLAT AREAS TO PROTECT THE DISTURBED AREAS AND PREVENT FURTHER EROSION.

MULCH AS APPLIED TO TEMPORARY EROSION CONTROL SEEDING SHALL BE BY THE METHOD SPECIFIED IN THE CONTRACT AND AT THE DIRECTION OF THE ENGINEER. MULCH WILL BE PAID SEPARATELY AND SHALL CONFORM TO SECTION 251 OF THE STANDARD SPECIFICATIONS.

4. PROTECTION OF TREES/TEMPORARY TREE PROTECTION - THIS ITEM SHALL CONSIST OF ITEMS "TEMPORARY FENCING" AND "TREE TRUCK PROTECTION" AS SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER AND IN ACCORDANCE WITH ARTICLE 201.05 OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

PERMANENT STABILIZATION - ALL AREAS DISTURBED BY CONSTRUCTION WILL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING THE FINISHED GRADING. EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION AND ALLOW SEED TO GERMINATE PROPERLY. MULCH, METHOD 2 WILL BE USED ON RELATIVELY FLAT AREAS.

2. STRUCTURAL PRACTICES: PROVIDED BELOW IS A DESCRIPTION OF STRUCTURAL PRACTICES THAT WILL BE IMPLEMENTED, TO THE DEGREE ATTAINABLE, TO DIVERT FLOWS FROM EXPOSED SOILS, STORE FLOWS OR OTHERWISE LIMIT RUNOFF AND THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. SUCH PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: PERIMETER EROSION BARRIER, EARTH DIKES, DRAINAGE SWALES, SEDIMENT TRAPS, DITCH CHECKS, SUBSURFACE DRAINS, PIPE SLOPE DRAINS, LEVEL SPREADERS, STORM DRAIN INLET PROTECTION, ROCK OUTLET PROTECTION, REINFORCED SOIL RETAINING SYSTEMS, GABIONS, AND TEMPORARY OR PERMANENT SEDIMENT BASINS. THE INSTALLATION OF THESE DEVICES MAY BE SUBJECT TO SECTION 404 OF THE CLEAN WATER ACT.

THE FOLLOWING STRUCTURAL PRACTICES WILL BE USED FOR THIS PROJECT:

- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- STORM DRAIN INLET PROTECTION
- SEDIMENT TRAP
- TEMPORARY PIPE SLOPE DRAIN
- TEMPORARY SEDIMENT BASIN
- TEMPORARY STREAM CROSSING
- STABILIZED CONSTRUCTION EXITS
- TURF REINFORCEMENT MATS
- PERMANENT CHECK DAMS
- PERMANENT SEDIMENT BASIN
- AGGREGATE DITCH
- PAVED DITCH
- ROCK OUTLET PROTECTION
- RIPRAP
- GABIONS
- SLOPE MATTRESS
- RETAINING WALLS
- SLOPE WALLS
- CONCRETE REVETMENT MATS
- LEVEL SPREADERS
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....
- OTHER (SPECIFY).....

DESCRIBE HOW THE STRUCTURAL PRACTICES LISTED ABOVE WILL BE UTILIZED:

1. PERIMETER EROSION BARRIER - SILT FENCES WILL BE PLACED ALONG THE EDGE OF CONSTRUCTION OF THE NEW LOOP RAMP AND WIDENING AREAS IN AN EFFORT TO CONTAIN SILT AND RUNOFF FROM LEAVING THE SITE.

CONSTRUCT AT BEGINNING OF CONSTRUCTION. REMOVE AT END OF CONSTRUCTION.

2. STORM DRAIN INLET PROTECTION - INLET AND PIPE PROTECTION WILL BE PROVIDED FOR STORM SEWERS AND CULVERTS. SEDIMENT FILTERS WILL BE PLACED IN ALL INLETS, CATCH BASINS AND MANHOLES DURING CONSTRUCTION AND WILL BE CLEANED ON A REGULAR BASIS.

3. TEMPORARY DITCH CHECKS - DITCH CHECKS WILL BE PLACED IN SWALES WHERE RUNOFF VELOCITY IS HIGH. ALL STRUCTURAL PRACTICES ARE SHOWN IN DETAIL ON THE EROSION CONTROL PLANS.

TEMPORARY DITCH CHECKS SHALL BE LOCATED AT EVERY 2 FT. FALL/RISE IN DITCH GRADE.

TEMPORARY DITCH CHECKS, AGGREGATE USES GRADING NO. 3- REMOVE AT END OF CONSTRUCTION.

STRAW BALES, HAY BALES, PERIMETER EROSION BARRIER AND SILT FENCE WILL NOT BE PERMITTED FOR TEMPORARY OR PERMANENT DITCH CHECKS. DITCH CHECKS SHALL BE COMPOSED OF AGGREGATE (IF SPECIFIED), ENVIROBERM, TRIANGULAR SILT DIKES, GEORIDGE AND ROLLED EXCELSIOR.

4. RIPRAP - STONE RIPRAP WITH FILTER FABRIC WILL BE USED AS PROTECTION AT THE DISCHARGE END OF ALL CULVERT END SECTIONS AND AS INLET/OUTLET PROTECTION TO PREVENT SCOURING AT THE END OF PIPES AND PREVENT DOWNSTREAM EROSION.

AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS, INLET AND PIPE PROTECTION, AND PERIMETER EROSION BARRIER SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN AND DIRECTED BY THE ENGINEER.

ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED - 4-20-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SWPPP PLAN	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
or:\pw\work\pwwdot\burnsideem\d0166363\d076959\shtr-plan.dgn	DRAWN -	REVISED -	64			82-5K-2	ST CLAIR	162	3		
PLOT SCALE = 5/8"=1'-0"	CHECKED -	REVISED -	CONTRACT NO. 76D59								
PLOT DATE = 8/10/2010	DATE -	REVISED -	ILLINOIS FED. AID PROJECT								
						SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.

3. STORM WATER MANAGEMENT: PROVIDED BELOW IS A DESCRIPTION OF MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL POLLUTANTS IN STORM WATER DISCHARGES THAT WILL OCCUR AFTER CONSTRUCTION OPERATIONS HAVE BEEN COMPLETED. THE INSTALLATION OF THESE DEVICES MAY BE SUBJECT TO SECTION 404 OF THE CLEAN WATER ACT.

a. SUCH PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: STORM WATER DETENTION STRUCTURES (INCLUDING WET PONDS), STORM WATER RETENTION STRUCTURES, FLOW ATTENUATION BY USE OF OPEN VEGETATED SWALES AND NATURAL DEPRESSIONS, INFILTRATION OF RUNOFF ON SITE, AND SEQUENTIAL SYSTEMS (WHICH COMBINE SEVERAL PRACTICES).
THE PRACTICES SELECTED FOR IMPLEMENTATION WERE DETERMINED ON THE BASIS OF THE TECHNICAL GUIDANCE IN SECTION 59-8 (EROSION AND SEDIMENT CONTROL) IN CHAPTER 59 (LANDSCAPE DESIGN AND EROSION CONTROL) OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION BUREAU OF DESIGN AND ENVIRONMENT MANUAL. IF PRACTICES OTHER THAN THOSE DISCUSSED IN SECTION 59-8 ARE SELECTED FOR IMPLEMENTATION OR IF PRACTICES ARE APPLIED TO SITUATIONS DIFFERENT FROM THOSE COVERED IN SECTION 59-8, THE TECHNICAL BASIS FOR SUCH DECISIONS WILL BE EXPLAINED BELOW.

b. VELOCITY DISSIPATION DEVICES WILL BE PLACED AT DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNEL AS NECESSARY TO PROVIDE A NON-EROSIVE VELOCITY FLOW FROM THE STRUCTURE TO A WATER COURSE SO THAT THE NATURAL PHYSICAL AND BIOLOGICAL CHARACTERISTICS AND FUNCTIONS ARE MAINTAINED AND PROTECTED (E.G. MAINTENANCE OF HYDROLOGIC CONDITIONS SUCH AS THE HYDROPERIOD AND HYDRODYNAMICS PRESENT PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES).

DESCRIPTION OF STORM WATER MANAGEMENT CONTROLS:

THE PHASE 1 LOCATION DRAINAGE STUDY, PERFORMED BY BURNS & MCDONNELL HAS DETERMINED THAT NO STORM WATER DETENTION IS REQUIRED FOR THE PROPOSED STORM SEWER OUTLETS TO BE CONSTRUCTED FOR THIS PROJECT.

4. OTHER CONTROLS:

a. VEHICLE ENTRANCES AND EXITS - STABILIZED CONSTRUCTION ENTRANCES AND EXITS MUST BE CONSTRUCTED TO PREVENT TRACKING OF SEDIMENTS ONTO ROADWAYS.

THE CONTRACTOR WILL PROVIDE THE RESIDENT ENGINEER WITH A WRITTEN PLAN IDENTIFYING THE LOCATION OF STABILIZED ENTRANCES AND EXITS AND THE PROCEDURES (SHE WILL USE TO CONSTRUCT AND MAINTAIN THEM.

b. MATERIAL DELIVERY, STORAGE, AND USE - THE FOLLOWING BMPs SHALL BE IMPLEMENTED TO HELP PREVENT DISCHARGES OF CONSTRUCTION MATERIALS DURING DELIVERY, STORAGE, AND USE:

- ALL PRODUCTS DELIVERED TO THE PROJECT SITE MUST BE PROPERLY LABELED.
- WATER TIGHT SHIPPING CONTAINERS AND/OR SEMI TRAILERS SHALL BE USED TO STORE HAND TOOLS, SMALL PARTS, AND MOST CONSTRUCTION MATERIALS THAT CAN BE CARRIED BY HAND, SUCH AS PAINT CANS, SOLVENTS, AND GREASE.
- A STORAGE/CONTAINMENT FACILITY SHOULD BE CHOSEN FOR LARGER ITEMS SUCH AS DRUMS AND ITEMS SHIPPED OR STORED ON PALLETS. SUCH MATERIAL IS TO BE COVERED BY A TIN ROOF OR LARGE SHEETS OF PLASTIC TO PREVENT PRECIPITATION FROM COMING IN CONTACT WITH THE PRODUCTS BEING STORED.
- LARGE ITEMS SUCH AS LIGHT STANDS, FRAMING MATERIALS AND LUMBER SHALL BE STORED IN THE OPEN IN A GENERAL STORAGE AREA. SUCH MATERIAL SHALL BE ELEVATED WITH WOOD BLOCKS TO MINIMIZE CONTACT WITH STORM WATER RUNOFF.
- SPILL CLEAN-UP MATERIALS, MATERIAL SAFETY DATA SHEETS, AN INVENTORY OF MATERIALS, AND EMERGENCY CONTACT NUMBERS SHALL BE MAINTAINED AND STORED IN ONE DESIGNATED AREA AND EACH CONTRACTOR IS TO INFORM HIS/HER EMPLOYEES AND THE RESIDENT ENGINEER OF THIS LOCATION.

c. STOCKPILE MANAGEMENT - BMPs SHALL BE IMPLEMENTED TO REDUCE OR ELIMINATE POLLUTION OF STORM WATER FROM STOCKPILES OF SOIL AND PAVING MATERIALS SUCH AS BUT NOT LIMITED TO PORTLAND CEMENT CONCRETE RUBBLE, ASPHALT CONCRETE, ASPHALT CONCRETE RUBBLE, AGGREGATE BASE, AGGREGATE SUB BASE, AND PRE-MIXED AGGREGATE. THE FOLLOWING BMPs MAY BE CONSIDERED:

- PERIMETER EROSION BARRIER
- TEMPORARY SEEDING
- TEMPORARY MULCH
- PLASTIC COVERS
- SOIL BINDERS
- STORM DRAIN INLET PROTECTION

THE CONTRACTOR WILL PROVIDE THE RESIDENT ENGINEER WITH A WRITTEN PLAN OF THE PROCEDURES (SHE WILL USE ON THE PROJECT AND HOW THEY WILL BE MAINTAINED.

d. WASTE DISPOSAL. NO MATERIALS, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED INTO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

e. THE PROVISIONS OF THIS PLAN SHALL ENSURE AND DEMONSTRATE COMPLIANCE WITH APPLICABLE STATE AND/OR LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS.

f. THE CONTRACTOR SHALL PROVIDE A WRITTEN AND GRAPHIC PLAN TO THE RESIDENT ENGINEER IDENTIFYING WHERE EACH OF THE ABOVE AREAS WILL BE LOCATED AND HOW THEY ARE TO BE MANAGED.

5. APPROVED STATE OR LOCAL LAWS

THE MANAGEMENT PRACTICES, CONTROLS AND PROVISIONS CONTAINED IN THIS PLAN WILL BE IN ACCORDANCE WITH IDOT SPECIFICATIONS, WHICH ARE AT LEAST AS PROTECTIVE AS THE REQUIREMENTS CONTAINED IN THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S ILLINOIS URBAN MANUAL, 1995. PROCEDURES AND REQUIREMENTS SPECIFIED IN APPLICABLE SEDIMENT AND EROSION SITE PLANS OR STORM WATER MANAGEMENT PLANS APPROVED BY LOCAL OFFICIALS SHALL BE DESCRIBED OR INCORPORATED BY REFERENCE IN THE SPACE PROVIDED BELOW. REQUIREMENTS SPECIFIED IN SEDIMENT AND EROSION SITE PLANS, SITE PERMITS, STORM WATER MANAGEMENT SITE PLANS OR SITE PERMITS APPROVED BY LOCAL OFFICIALS THAT ARE APPLICABLE TO PROTECTING SURFACE WATER RESOURCES ARE, UPON SUBMITTAL OF AN NOI, TO BE AUTHORIZED TO DISCHARGE UNDER PERMIT ILRIO INCORPORATED BY REFERENCE AND ARE ENFORCEABLE UNDER THIS PERMIT EVEN IF THEY ARE NOT SPECIFICALLY INCLUDED IN THE PLAN.

DESCRIPTION OF PROCEDURES AND REQUIREMENTS SPECIFIED IN APPLICABLE SEDIMENT AND EROSION SITE PLANS OR STORM WATER MANAGEMENT PLANS APPROVED BY LOCAL OFFICIALS:

ALL MANAGEMENT PRACTICES, CONTROLS, AND OTHER PROVISIONS PROVIDED IN THIS PLAN ARE IN ACCORDANCE WITH IDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION AND THE ILLINOIS URBAN MANUAL.

III. MAINTENANCE:

THE FOLLOWING IS A DESCRIPTION OF PROCEDURES THAT WILL BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITIONS, THE VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN. THE RESIDENT ENGINEER WILL PROVIDE MAINTENANCE GUIDES TO THE CONTRACTOR FOR THE PRACTICES ASSOCIATED WITH THIS PROJECT.

1. SEEDING - ALL ERODIBLE BARE EARTH WILL BE TEMPORARILY SEEDED ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERODIBLE SURFACE WITHIN THE CONTRACT LIMITS.
2. PERIMETER EROSION BARRIER - SEDIMENT WILL BE REMOVED IF THE INTEGRITY OF THE FENCING IS IN JEOPARDY AND ANY FENCING KNOCKED DOWN WILL BE REPAIRED IMMEDIATELY.
3. EROSION CONTROL BLANKET/MULCHING - ANY AREAS THAT FAIL WILL BE REPAIRED IMMEDIATELY.
4. PROTECTION OF TREES/TEMPORARY TREE PROTECTION - ANY PROTECTIVE MEASURES WHICH ARE KNOCKED DOWN WILL BE REPAIRED IMMEDIATELY.
5. DITCH CHECKS - SEDIMENT WILL BE REMOVED IF THE INTEGRITY OF THE DITCH CHECK IS IN JEOPARDY. ANY DITCH CHECKS WHICH FAIL WILL BE REPAIRED OR REPLACED IMMEDIATELY.

ALL MAINTENANCE OF EROSION CONTROL SYSTEMS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETE AND ACCEPTED BY IDOT AFTER FINAL INSPECTION. ALL LOCATIONS WHERE VEHICLES ENTER AND EXIT THE CONSTRUCTION SITE AND ALL OTHER AREAS SUBJECT TO EROSION SHOULD ALSO BE INSPECTED PERIODICALLY.

INSPECTION OF THESE AREAS SHALL BE MADE AT LEAST ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS OF THE END OF EACH 0.5 INCHES OR GREATER RAINFALL, OR AN EQUIVALENT SNOWFALL. THE PROJECT SHALL ADDITIONALLY BE INSPECTED BY THE CONSTRUCTION FIELD ENGINEER ON A BI-WEEKLY BASIS TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER EROSION CONTROL WORK IS NECESSARY.

THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER USE IS NO LONGER NEEDED. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE TEMPORARY EROSION CONTROL SYSTEM.

IV. INSPECTIONS

QUALIFIED PERSONNEL SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE WHICH HAVE NOT YET BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES AND EQUIPMENT ENTER AND EXIT THE SITE. SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER OR EQUIVALENT SNOWFALL.

A. DISTURBED AREAS, USE AREAS (STORAGE OF MATERIALS, STOCKPILES, MACHINE MAINTENANCE FUELING, ETC.), BORROW SITES, AND WASTE SITES SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. DISCHARGE LOCATIONS OR POINTS THAT ARE ACCESSIBLE, SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF SITE SEDIMENT TRACKING.

B. BASED ON THE RESULTS OF THE INSPECTION, THE DESCRIPTION OF POTENTIAL POLLUTANT SOURCES IDENTIFIED IN SECTION I ABOVE AND POLLUTION PREVENTION MEASURES IDENTIFIED IN SECTION II ABOVE SHALL BE REVISED AS APPROPRIATE AS SOON AS PRACTICABLE AFTER SUCH INSPECTION. ANY CHANGES TO THIS PLAN RESULTING FROM THE REQUIRED INSPECTIONS SHALL BE IMPLEMENTED WITHIN 1/2 HOUR TO 1 WEEK BASED ON THE URGENCY OF THE SITUATION. THE RESIDENT ENGINEER WILL NOTIFY THE CONTRACTOR OF THE TIME REQUIRED TO IMPLEMENT SUCH ACTIONS THROUGH THE WEEKLY INSPECTION REPORT.

C. A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THIS STORM WATER POLLUTION PREVENTION PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH SECTION IV(B) SHALL BE MADE AND RETAINED AS PART OF THE PLAN FOR AT LEAST THREE (3) YEARS AFTER THE DATE OF THE INSPECTION. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART VI. G OF THE GENERAL PERMIT.

D. IF ANY VIOLATION OF THE PROVISIONS OF THIS PLAN IS IDENTIFIED DURING THE CONDUCT OF THE CONSTRUCTION WORK COVERED BY THIS PLAN, THE RESIDENT ENGINEER SHALL NOTIFY THE APPROPRIATE I.E.P.A. FIELD OPERATIONS SECTION OFFICE BY EMAIL OF: epa.swnoncomp@illinois.gov, TELEPHONE OR FAX WITHIN 24 HOURS OF THE INCIDENT. THE RESIDENT ENGINEER SHALL THEN COMPLETE AND SUBMIT AN "INCIDENCE OF NON-COMPLIANCE" (ION) REPORT FOR THE IDENTIFIED VIOLATION WITHIN 5 DAYS OF THE INCIDENT. THE RESIDENT ENGINEER SHALL USE FORMS PROVIDED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AND SHALL INCLUDE SPECIFIC INFORMATION ON THE CAUSE OF NONCOMPLIANCE, ACTIONS WHICH WERE TAKEN TO PREVENT ANY FURTHER CAUSES OF NONCOMPLIANCE, AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT WHICH MAY HAVE RESULTED FROM THE NONCOMPLIANCE. ALL REPORTS OF NONCOMPLIANCE SHALL BE SIGNED BY A RESPONSIBLE AUTHORITY IN ACCORDANCE WITH PART VI. G OF THE GENERAL PERMIT.

THE INCIDENCE OF NONCOMPLIANCE SHALL BE MAILED TO THE FOLLOWING ADDRESS:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL
ATTN: COMPLIANCE ASSURANCE SECTION
1021 NORTH GRAND EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

V. NON-STORM WATER DISCHARGES:

EXCEPT FOR FLOWS FROM FIRE FIGHTING ACTIVITIES, SOURCES OF NON-STORM WATER THAT IS COMBINED WITH STORM WATER DISCHARGES ASSOCIATED WITH THE INDUSTRIAL ACTIVITY ADDRESSED IN THIS PLAN MUST BE DESCRIBED BELOW. APPROPRIATE POLLUTION PREVENTION MEASURES, AS DESCRIBED BELOW, WILL BE IMPLEMENTED FOR THE NON-STORM WATER COMPONENT(S) OF THE DISCHARGE.

A. SPILL PREVENTION AND CONTROL - BMPs SHALL BE IMPLEMENTED TO CONTAIN AND CLEAN-UP SPILLS AND PREVENT MATERIAL DISCHARGES TO THE STORM DRAIN SYSTEM. THE CONTRACTOR SHALL PRODUCE A WRITTEN PLAN STATING HOW HIS/HER COMPANY WILL PREVENT, REPORT, AND CLEAN UP SPILLS AND PROVIDE A COPY TO ALL OF HIS/HER EMPLOYEES AND THE RESIDENT ENGINEER. THE CONTRACTOR SHALL NOTIFY ALL OF HIS/HER EMPLOYEES ON THE PROPER PROTOCOL FOR REPORTING SPILLS. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER OF ANY SPILLS IMMEDIATELY.

B. CONCRETE RESIDUALS AND WASHOUT WASTES - THE FOLLOWING BMPs SHALL BE IMPLEMENTED TO CONTROL RESIDUAL CONCRETE, CONCRETE SEDIMENTS, AND RINSE WATER:

1. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED FOR RINSING OUT CONCRETE TRUCKS. SIGNS SHALL BE INSTALLED DIRECTING CONCRETE TRUCK DRIVERS WHERE DESIGNATED WASHOUT FACILITIES ARE LOCATED.
2. THE CONTRACTOR SHALL HAVE THE LOCATION OF TEMPORARY CONCRETE WASHOUT FACILITIES APPROVED BY THE RESIDENT ENGINEER.
3. ALL TEMPORARY CONCRETE WASHOUT FACILITIES ARE TO BE INSPECTED BY THE CONTRACTOR AFTER EACH USE AND ALL SPILLS MUST BE REPORTED TO THE RESIDENT ENGINEER AND CLEANED UP IMMEDIATELY.
4. CONCRETE WASTE SOLIDS/LIQUIDS SHALL BE DISPOSED OF PROPERLY.

C. LITTER MANAGEMENT - A PROPER NUMBER OF DUMPSTERS SHALL BE PROVIDED ON SITE TO HANDLE DEBRIS AND LITTER ASSOCIATED WITH THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING HIS/HER EMPLOYEES PLACE ALL LITTER INCLUDING MARKING PAINT CANS, SODA CANS, FOOD WRAPPERS, WOOD LATHE, MARKING RIBBON, CONSTRUCTION STRING, AND ALL OTHER CONSTRUCTION RELATED LITTER IN THE PROPER DUMPSTERS.

D. VEHICLE AND EQUIPMENT CLEANING - VEHICLES AND EQUIPMENT ARE TO BE CLEANED IN DESIGNATED AREAS ONLY, PREFERABLY OFF SITE.

E. VEHICLE AND EQUIPMENT FUELING - A VARIETY OF BMPs CAN BE IMPLEMENTED DURING FUELING OF VEHICLES AND EQUIPMENT TO PREVENT POLLUTION. THE CONTRACTOR SHALL INFORM THE RESIDENT ENGINEER AS TO WHICH BMPs WILL BE USED ON THE PROJECT. THE CONTRACTOR SHALL INFORM THE RESIDENT ENGINEER HOW (SHE WILL BE INFORMING HIS/HER EMPLOYEES OF THESE BMPs (I.E. SIGNS, TRAINING, ETC.). BELOW ARE A FEW EXAMPLES OF THESE BMPs:






1. CONTAINMENT
2. SPILL PREVENTION AND CONTROL
3. USE OF DRIP PANS AND ADSORBENTS
4. AUTOMATIC SHUT-OFF NOZZLES
5. TOPPING OFF RESTRICTIONS
6. LEAK INSPECTION AND REPAIR

F. VEHICLE AND EQUIPMENT MAINTENANCE - ON SITE MAINTENANCE MUST BE PERFORMED IN ACCORDANCE WITH ALL ENVIRONMENTAL LAWS SUCH AS PROPER STORAGE AND NO DUMPING OF OLD ENGINE OIL OR OTHER FLUIDS ON SITE.

VI. FAILURE TO COMPLY:

FAILURE TO COMPLY WITH ANY PROVISIONS OF THIS STORM WATER POLLUTION PREVENTION PLAN WILL RESULT IN THE IMPLEMENTATION OF AN EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION AGAINST THE CONTRACTOR AND/OR PENALTIES UNDER THE NPDES PERMIT WHICH COULD BE PASSED ONTO THE CONTRACTOR.

LEGEND

-  TEMPORARY DITCH CHECK- ROLLED EXCELSIOR, SILT WEDGES/PANELS
-  TEMPORARY DITCH CHECK- AGGREGATE
-  EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER- SILT FILTER FENCE OR OTHER AS APPROVED BY THE ENGINEER
-  INLET AND PIPE PROTECTION- STRAW BALES, FILTER FABRIC, AGGREGATES

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED - 4-20-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SWPPP PLAN				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
or\pw_work\pw\dot\burnsideem\d0166363\ad	76d99-shtrplan.dgn	DRAWN -	REVISED -						64	82-5K-2	ST CLAIR	162	4
		CHECKED -	REVISED -						CONTRACT NO. 76D59				
		DATE -	REVISED -						ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.				

WRB

ILLINOIS DEPARTMENT OF TRANSPORTATION			90% FED. 10% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		0005	0011	0021	0021	0005
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	450	450				
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	68	68				
20200100	EARTH EXCAVATION	CU YD	2489	2489				
20400800	FURNISHED EXCAVATION	CU YD	43032	43032				
20700220	POROUS GRANULAR EMBANKMENT	CU YD	12	12				
25000200	SEEDING, CLASS 2	ACRE	6.3	6.3				
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	564	564				
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	564	564				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	564	564				
25100105	MULCH, METHOD 1	ACRE	6.3	6.3				
25100630	EROSION CONTROL BLANKET	SQ YD	18717	18717				
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	1253	1253				
28000305	TEMPORARY DITCH CHECKS	FOOT	286	286				
28000400	PERIMETER EROSION BARRIER	FOOT	2487	2487				
28000500	INLET AND PIPE PROTECTION	EACH	4	4				
28100707	STONE DUMPED RIPRAP, CLASS A4	SQ YD	1060	1060				
28200200	FILTER FABRIC	SQ YD	1060	1060				
35101100	AGGREGATE BASE COURSE, TYPE A 12"	SQ YD	6358	6358				
35300410	PORTLAND CEMENT CONCRETE BASE COURSE 9 1/2"	SQ YD	1187	1187				
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	32.6	24.5			8.1	
40600300	AGGREGATE (PRIME COAT)	TON	90.8	52.3			38.5	
40600645	LEVELING BINDER (MACHINE METHOD), N90	TON	1259	808			451	
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	270				270	
40600990	TEMPORARY RAMP	SQ YD	345	300			45	
40603090	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	TON	1095	1095				
40603570	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N90	TON	2252	1576			676	
40702001	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 16"	SQ YD	3705	3705				
42001200	PAVEMENT FABRIC	SQ YD	890	890				
42001300	PROTECTIVE COAT	SQ YD	1047	1047				
44000100	PAVEMENT REMOVAL	SQ YD	66	66				
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	1038	1038				
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	14014	14014				
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1175	1175				
X4401980	CONCRETE BARRIER REMOVAL	FOOT	52	52				
44003100	MEDIAN REMOVAL	SQ FT	4935	4935				

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
ca:\pwork\pwork\burnsideem\2166363\176499-shr-plan.dgn		DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	64	82-5K-2	ST. CLAIR	162	5
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -						CONTRACT NO. 76D59						
PLOT DATE = 8/11/2010		DATE -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT										

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

90% FED.
 10% STATE
 TOTAL
 QUANTITIES

CONSTRUCTION TYPE CODE

CODE NO	ITEM	UNIT	0005	0011	0021	0021	0005
44004250	PAVED SHOULDER REMOVAL	SQ YD	3343	3343			
44200569	CLASS A PATCHES, TYPE III, 11 INCH	SQ YD	25	25			
44200571	CLASS A PATCHES, TYPE IV, 11 INCH	SQ YD	586	586			
44200970	CLASS B PATCHES, TYPE II, 10 INCH	SQ YD	495	213			282
44200974	CLASS B PATCHES, TYPE III, 10 INCH	SQ YD	18	18			
44200976	CLASS B PATCHES, TYPE IV, 10 INCH	SQ YD	387	387			
44213200	SAW CUTS	FOOT	5819	3850			1969
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	4028	4028			
48100500	AGGREGATE SHOULDERS, TYPE A 6"	SQ YD	745	745			
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	183	47			136
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	3685	3685			
48203100	HOT-MIX ASPHALT SHOULDERS	TON	844	171			673
50102400	CONCRETE REMOVAL	CU YD	23.2	23.2			
50104650	SLOPE WALL REMOVAL	SQ YD	372.7	372.7			
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1	1			
50157300	PROTECTIVE SHIELD	SQ YD	106	106			
50200100	STRUCTURE EXCAVATION	CU YD	332	332			
50300225	CONCRETE STRUCTURES	CU YD	190.5	190.5			
50300255	CONCRETE SUPERSTRUCTURE	CU YD	225.5	225.5			
50300260	BRIDGE DECK GROOVING	SQ YD	513	513			
50300300	PROTECTIVE COAT	SQ YD	648	648			
XX008423	PRECAST CONCRETE LAGGING	SQ FT	863	863			
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1			
50500505	STUD SHEAR CONNECTORS	EACH	1,790	1,790			
Z0007118	UNTREATED TIMBER LAGGING	SQ FT	1049	1049			
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	87,270	87,270			
50800515	BAR SPLICERS	EACH	32	32			
50901730	BRIDGE FENCE RAILING	FOOT	223	223			
51200957	FURNISHING METAL SHELL PILES 12" X 0.250"	FOOT	1068	1068			
Z0026402	FURNISHING SOLDIER PILES (HP SECTION)	FOOT	1,517	1,517			
51202305	DRIVING PILES	FOOT	1,068	1,068			
51203200	TEST PILE METAL SHELLS	EACH	3	3			
51500100	NAME PLATES	EACH	1	1			
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	4	4			
52100520	ANCHOR BOLTS, 1"	EACH	14	14			
52100530	ANCHOR BOLTS, 1 1/4"	EACH	12	12			

FILE NAME =
 USER NAME = burnsdeem
 DESIGNED -
 DRAWN -
 PLOT SCALE = 50.0000' / IN.
 PLOT DATE = 8/11/2010

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST CLAIR	162	6
CONTRACT NO. 76D59				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

40% FED.
 10% STATE
 TOTAL
 QUANTITIES

CONSTRUCTION TYPE CODE

CODE NO	ITEM	UNIT	TOTAL	0003	0011	0021	0021	0005
54213447	END SECTIONS 12"	EACH	2	2				
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	2	2				
542A1900	PIPE CULVERTS, CLASS A, TYPE 3 15"	FOOT	116	116				
58600100	SAND BACKFILL	CU YD	94		94			
58700300	CONCRETE SEALER	SQ FT	2835		2835			
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	195		195			
60100060	CONCRETE HEADWALL FOR PIPE DRAINS	EACH	17	17				
60100945	PIPE DRAINS 12"	FOOT	216	216				
60107700	PIPE UNDERDRAINS 6"	FOOT	5858	5858				
60108200	PIPE UNDERDRAINS 6" (SPECIAL)	FOOT	150	150				
20046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	275		275			
60500060	REMOVING INLETS	EACH	2	2				
60600605	CONCRETE CURB, TYPE B	FOOT	12	12				
60602800	CONCRETE GUTTER, TYPE B	FOOT	275		275			
60603500	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06	FOOT	147	147				
60607400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.24	FOOT	1102	1102				
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	6551	6551				
60621200	CONCRETE MEDIAN, TYPE SB-9.24	SQ FT	60	60				
60900240	TYPE C INLET BOX, STANDARD 609006	EACH	2		2			
60900515	CONCRETE THRUST BLOCKS	EACH	2	2				
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	175	175				
* 63000003	STEEL PLATE BEAM GUARD RAIL, TYPE A, 9 FOOT POSTS	FOOT	150	150				
* 63000015	STEEL PLATE BEAM GUARD RAIL, TYPE D	FOOT	350	350				
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	3	3				
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3	3				
63200310	GUARDRAIL REMOVAL	FOOT	400	400				
63500105	DELINEATORS	EACH	36	36				
X6370279	CONCRETE BARRIER, SINGLE FACE, 42 INCH HEIGHT (SPECIAL)	FOOT	28	28				
63700805	CONCRETE BARRIER TRANSITION	FOOT	38	38				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12				
67100100	MOBILIZATION	L SUM	1	1				
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	2	2				
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	1	1				

* Specialty Items

FILE NAME =	USER NAME = burnsideam	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
er\pe_work\psidot\burnsideam\20166363\76d59-shr-plen.dgn		DRAWN -	REVISED -		64	82-5K-2	ST. CLAIR	162	7				
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 76D59		
PLOT DATE = 8/11/2010		DATE -	REVISED -										

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

90% PED.
 10% STATE
 TOTAL
 QUANTITIES

CONSTRUCTION TYPE CODE

CODE NO	ITEM	UNIT		0005	0011	0021	0021	0005			
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	1							
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	1	1							
70100430	TRAFFIC CONTROL AND PROTECTION, STANDARD 701446	EACH	1	1							
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1							
70100820	TRAFFIC CONTROL AND PROTECTION, STANDARD 701451	L SUM	1	1							
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1	1							
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1							
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1							
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1							
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	365	365							
70300100	SHORT TERM PAVEMENT MARKING	FOOT	6720	4380				2340			
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	483.6	483.6							
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	24502	15921				8581			
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	2034	2034							
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	779	779							
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	270	270							
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	745	485				260			
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1474	1474							
72000100	SIGN PANEL - TYPE 1	SQ FT	107.25	107.25							
72000200	SIGN PANEL - TYPE 2	SQ FT	44	44							
72000300	SIGN PANEL - TYPE 3	SQ FT	660.75	660.75							
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	11	11							
72400200	REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	8	8							
72400330	REMOVE SIGN PANEL - TYPE 3	SQ FT	1	1							
73000100	WOOD SIGN SUPPORT	FOOT	181	181							
73302170	OVERHEAD SIGN STRUCTURE - CANTILEVER, TYPE II-C-A (36" X 5' - 6")	FOOT	30	30							
73305000	OVERHEAD SIGN STRUCTURE WALKWAY	FOOT	30	30							
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	6.1	6.1							
78004200	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LETTERS AND SYMBOLS	SQ FT	483.6	483.6							
78004210	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 4"	FOOT	24502	15921				8581			

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*Specialty items

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -
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	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 8/11/2010	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST CLAIR	162	8
CONTRACT NO. 76D59				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

90% FED.
 10% STATE
 TOTAL

CONSTRUCTION TYPE CODE

CODE NO	ITEM	UNIT	QUANTITIES	0005	0011	0021	0021	0005			
78004240	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 8"	FOOT	2034	2034							
78004250	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 12"	FOOT	779	779							
78004280	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 24"	FOOT	270	270							
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	188	188							
78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	16	16							
78200300	PRISMATIC CURB REFLECTOR	EACH	92	92							
78200410	GUARDRAIL MARKERS, TYPE A	EACH	22	22							
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3							
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	151	151							
80300100	LOCATING UNDERGROUND CABLE	FOOT	5240			1125		4115			
81000500	CONDUIT IN TRENCH, 1 1/2" DIA., GALVANIZED STEEL	FOOT	16					16			
81012300	CONDUIT IN TRENCH, 1" DIA., PVC	FOOT	94					94			
81012400	CONDUIT IN TRENCH, 1 1/4" DIA., PVC	FOOT	6					6			
81012500	CONDUIT IN TRENCH, 1 1/2" DIA., PVC	FOOT	6					6			
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	396					396			
81012700	CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	313					313			
81013000	CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	20					20			
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	506			506					
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	526			526					
81021550	CONDUIT, AUGERED 2" DIA., PVC	FOOT	575					575			
81021570	CONDUIT, AUGERED 3" DIA., PVC	FOOT	542					542			
81030100	CONDUIT SPLICE	EACH	5					5			
81100300	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	60			60					
81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	188			20		168			
81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	1			1					
81400100	HANDHOLE	EACH	8					8			
81400105	HANDHOLE (SPECIAL)	EACH	2					2			
81400205	HEAVY-DUTY HANDHOLE (SPECIAL)	EACH	3					3			
81400305	DOUBLE HANDHOLE (SPECIAL)	EACH	2					2			
81603025	UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 4 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	2872			2872					

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*Specialty Items

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT
c:\pw\work\pwsdot\burnsideem\08166363\	76d59-sht-plan.dgn	DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
		CHECKED -	REVISED -		64	82-5K-2			ST. CLAIR	162
		DATE -	REVISED -						CONTRACT NO.	76D59

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

90% FED.
 10% STATE
 TOTAL
 QUANTITIES

CONSTRUCTION TYPE CODE

CODE NO	ITEM	UNIT	QUANTITIES	0005	0011	0021	0021	0005
81603035	UNIT DUCT, 600V, 2-1C NO. 6, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	1581			1581		
81603065	UNIT DUCT, 600V, 2-1C NO. 2, 1/C NO. 2 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	2218			2218		
81702415	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 6	FOOT	60			60		
81800190	AERIAL CABLE, 2-1/C NO. 2 WITH MESSENGER WIRE	FOOT	2500			2500		
81800200	AERIAL CABLE, 2-1/C NO. 4 WITH MESSENGER WIRE	FOOT	3500			3500		
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	5623			4772	851	
82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	4			4		
83057220	LIGHT POLE, WOOD, 40 FOOT, CLASS 4	EACH	6			6		
83057440	LIGHT POLE, WOOD, 80 FOOT, CLASS 4	EACH	4			4		
83060550	LIGHT POLE, GALVANIZED STEEL, 50 FT. M. H., 15 FT. MAST ARM	EACH	4			4		
83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	85			85		
83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	4			4		
84200804	REMOVAL OF POLE FOUNDATION	EACH	9			9		
84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	9			9		
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2419				2419	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4591				4591	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	9106				9106	
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	60				60	
87502700	TRAFFIC SIGNAL POST, ALUMINUM 16 FT.	EACH	3				3	
87700150	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1				1	
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1				1	
87700280	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1				1	
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	9				9	
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	7				7	
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10				10	
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26				26	
87900200	DRILL EXISTING HANDHOLE	EACH	9				9	
88020160	SIGNAL HEAD, POLYCARBONATE, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	7				7	

**Specialty Items*

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST CLAIR	162	10

CONTRACT NO. 76D59

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

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -
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PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 8/11/2010		DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

90% FED.
 10% STATE
 TOTAL
 QUANTITIES

CONSTRUCTION TYPE CODE

CODE NO	ITEM	UNIT		0005	0011	0021	0021	0005			
* 88020170	SIGNAL HEAD, POLYCARBONATE, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8				8				
* 88200300	TRAFFIC SIGNAL BACKPLATE, PLASTIC	EACH	10				10				
* 88500500	INDUCTION LOOP DETECTOR AMPLIFIER	EACH	2				2				
* 88600100	DETECTOR LOOP, TYPE I	FOOT	1572				1572				
* 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2				2				
* 89501100	RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	2				2				
* 89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1				1				
* 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1439				1439				
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2				2				
* 89502380	REMOVE EXISTING HANDHOLE	EACH	6				6				
* 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	3				3				
X0301271	REMOVE EXISTING UNDERDRAINS	FOOT	2705	2705							
X2020502	BRACED EXCAVATION	CU YD	64		64						
Z0021908	SILICONE JOINT SEALER, 2"	FOOT	17.7		17.7						
X0321809	PERMANENT GROUND ANCHOR	EACH	26		26						
Z0021906	SILICONE JOINT SEALER, 1.5"	FOOT	17.7		17.7						
Z0033084	ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	3765				3765				
X0323360	WOODEN POLE REMOVAL	EACH	10			10					
X0323586	PIPE DRAIN REMOVAL	FOOT	96	96							
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1048				1048				
* X0324455	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	2111		2111						
X0325751	DRIVING SOLDIER PILES	FOOT	844		844						
X7240605	REMOVE AND RE-ERECT BRIDGE MOUNTED SIGN	EACH	1		1						
X7800200	PAINT PAVEMENT MARKING CURB	FOOT	585	585							
Z0017202	DOWEL BARS 1 1/2"	EACH	1455	710				745			
Z0018900	DRILL AND GROUT DOWEL BARS	EACH	2014	2014							
Z0025100	FURNISHING AND INSTALLING CABLE SPLICES	EACH	54	28			26				
Z0030020	IMPACT ATTENUATORS (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2							
Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	4	4							
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4							
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	1		1						
Z0075310	TIE BARS 3/4"	EACH	342	342							
© Z0076600	TRAINERS	HOUR	1500	1500							

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 *Specialty Items

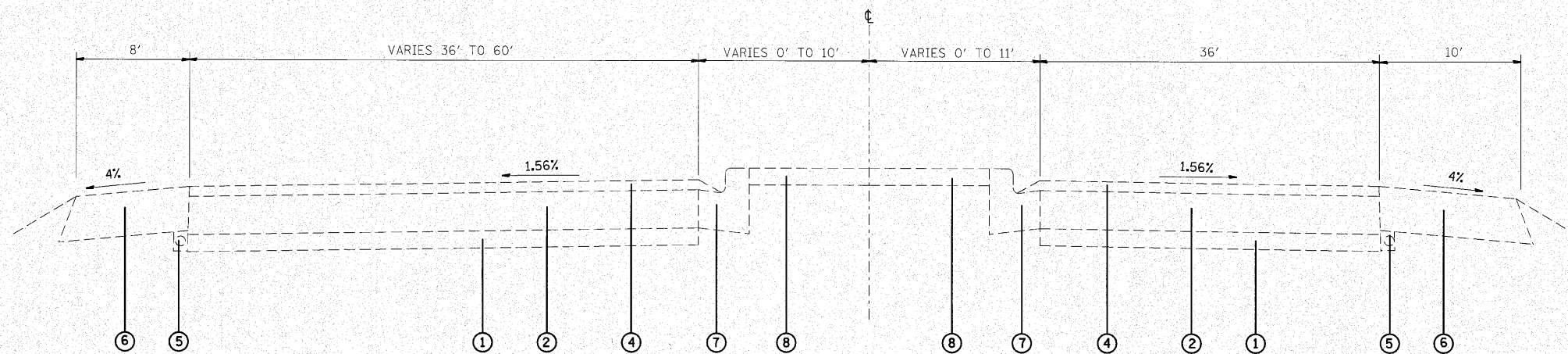
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	PLOT SCALE = 50.0000 * / IN.	CHECKED -	REVISED -
	PLOT DATE = 8/11/2018	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

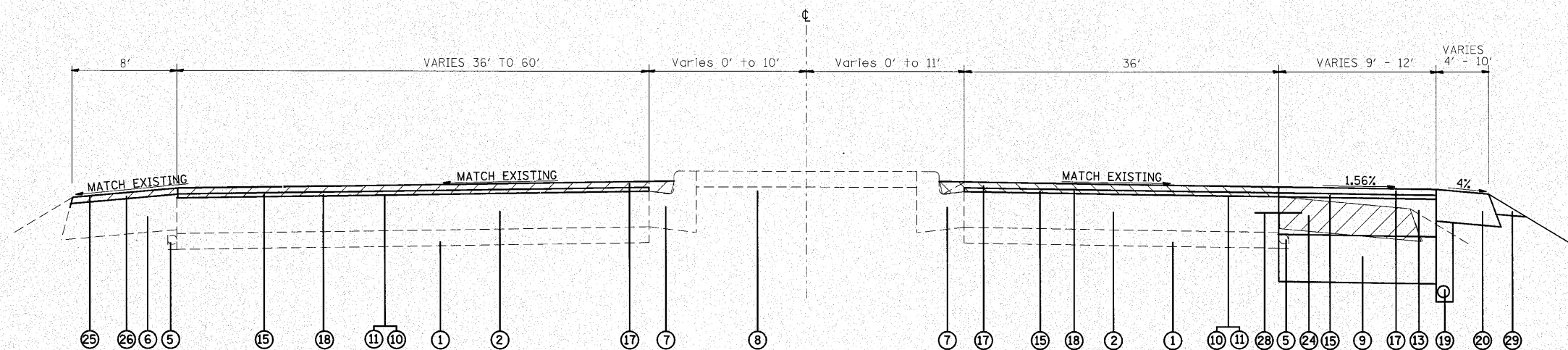
SUMMARY OF QUANTITIES

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST CLAIR	162	11
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D59	



EXISTING TYPICAL SECTION IL 159
STA. 23+44 TO STA. 29+56

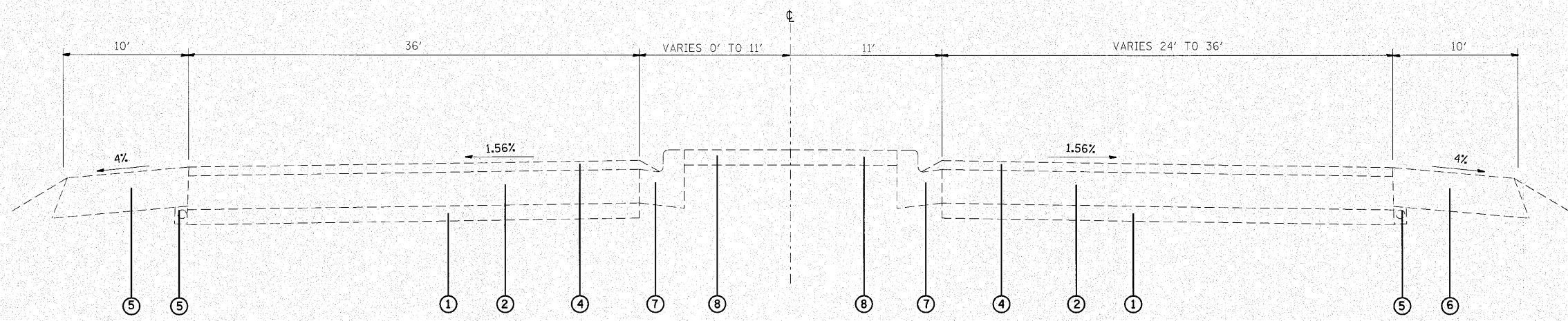


PROPOSED TYPICAL SECTION IL 159
STA. 23+44 TO STA. 29+56

LEGEND

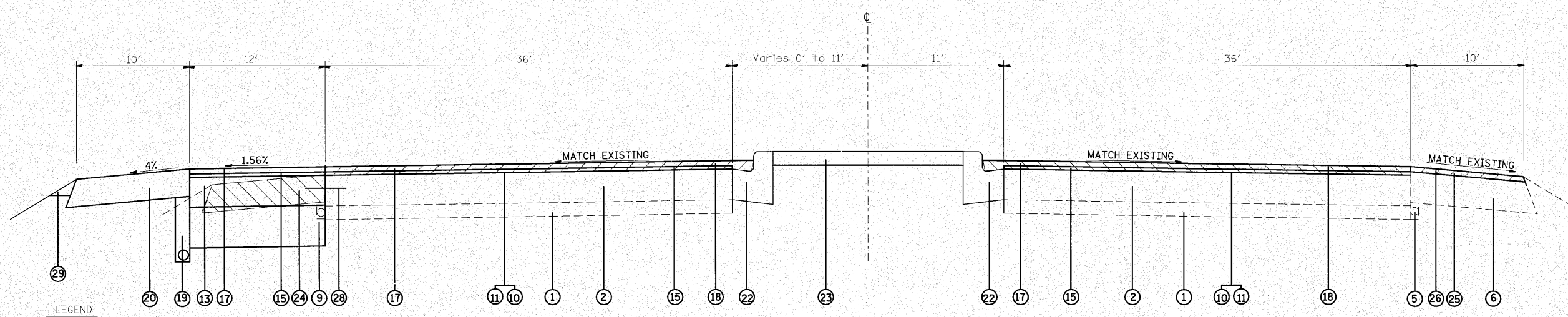
- 1 EXISTING STABILIZED SUB-BASE, 4"
- 2 EXISTING CONTINUOUS RPCC PAVEMENT, 8"
- 3 EXISTING PCC PAVEMENT, 10"
- 4 EXISTING BITUMINOUS OVERLAY, 2 1/2"
- 5 EXISTING PIPE UNDERDRAIN
- 6 EXISTING BITUMINOUS SHOULDER, 8"
- 7 EXISTING CONCRETE CURB AND GUTTER, TYPE B9.24
- 8 EXISTING CONCRETE MEDIAN
- 9 PROPOSED AGGREGATE BASE COURSE, TYPE A, 12"
- 10 PROPOSED BITUMINOUS MATERIAL (PRIME COAT)
- 11 PROPOSED AGGREGATE (PRIME COAT)
- 12 PROPOSED HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 16"
- 13 PROPOSED PORTLAND CEMENT BASE COURSE, 9 1/2"
- 14 PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 13 3/4"
- 15 PROPOSED LEVELING BINDER (MACHINE METHOD), N90, 3/4"
- 16 PROPOSED LEVELING BINDER (MACHINE METHOD), N90, 1"
- 17 PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX E, N90, 1 1/2"
- 18 PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- 19 PROPOSED PIPE UNDERDRAIN, 6"
- 20 PROPOSED HOT-MIX ASPHALT SHOULDER, 8"
- 21 PROPOSED AGGREGATE SHOULDERS, TYPE A, 6"
- 22 PROPOSED CONCRETE CURB AND GUTTER, TYPE B9.24
- 23 PROPOSED CONCRETE MEDIAN SURFACE, 4"
- 24 PROPOSED BITUMINOUS SHOULDER REMOVAL
- 25 PROPOSED HOT-MIX ASPHALT SHOULDER REMOVAL, 1 1/2"
- 26 PROPOSED HOT-MIX ASPHALT SHOULDER, 1 1/2"
- 27 PROPOSED HOT-MIX ASPHALT SHOULDER, 2 1/2"
- 28 PROPOSED DOWEL BARS (#6X24" @ 2' CENTERS)
- 29 PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
at:\pwwork\pwwork\burnsideem\vd0166363\vd0166363.sht	76d59-sht\plan\dgn	DRAWN -	REVISED -					64	82-5K-2	ST CLAIR	162	12
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		CONTRACT NO. 76D59			ILLINOIS FED. AID PROJECT				
PLOT DATE = 8/18/2012		DATE -	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.					



EXISTING TYPICAL SECTION IL 159

STA. 29+56 TO STA. 33+84.25



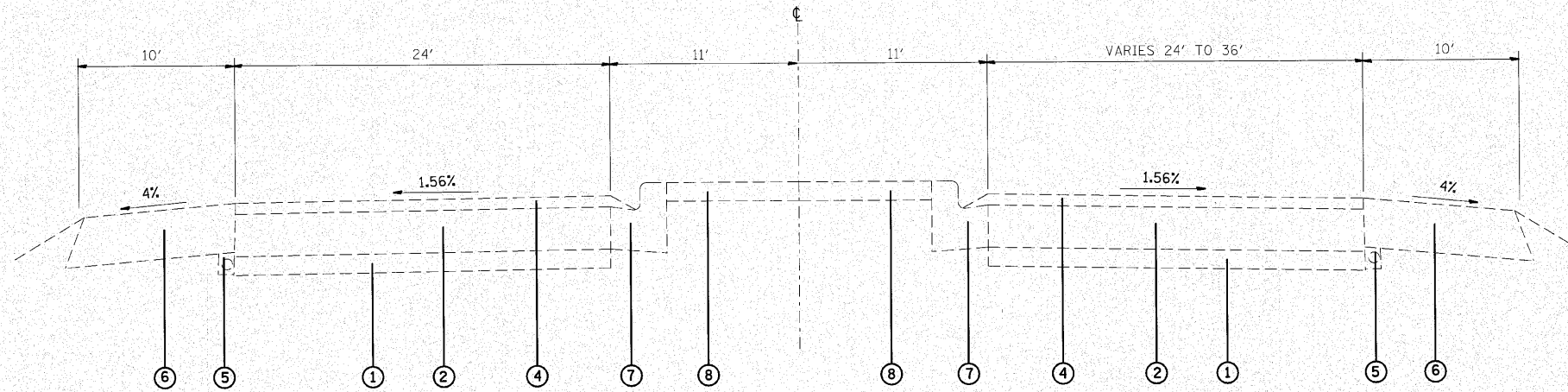
PROPOSED TYPICAL SECTION IL 159

STA. 29+56 TO STA. 33+84.25

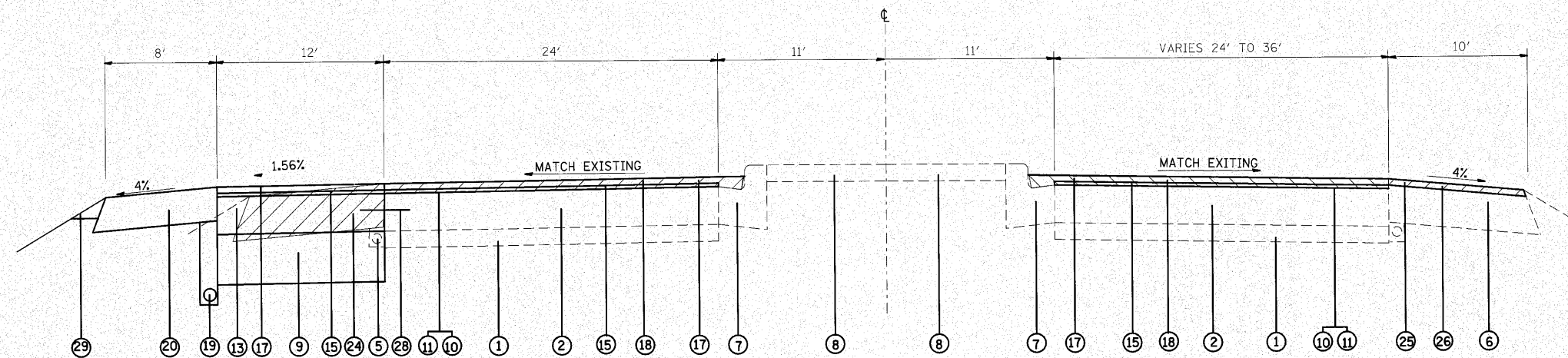
LEGEND

- 1 EXISTING STABILIZED SUB-BASE, 4"
- 2 EXISTING CONTINUOUS RPCC PAVEMENT, 8"
- 3 EXISTING PCC PAVEMENT, 10"
- 4 EXISTING BITUMINOUS OVERLAY, 2 1/2"
- 5 EXISTING PIPE UNDERDRAIN
- 6 EXISTING BITUMINOUS SHOULDER, 8"
- 7 EXISTING CONCRETE CURB AND GUTTER, TYPE B9.24
- 8 EXISTING CONCRETE MEDIAN
- 9 PROPOSED AGGREGATE BASE COURSE, 12"
- 10 PROPOSED BITUMINOUS MATERIAL (PRIME COAT)
- 11 PROPOSED AGGREGATE (PRIME COAT)
- 12 PROPOSED HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 16"
- 13 PROPOSED PORTLAND CEMENT BASE COURSE, 9 1/2"
- 14 PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 13 3/4"
- 15 PROPOSED LEVELING BINDER (MACHINE METHOD), N90, 3/4"
- 16 PROPOSED LEVELING BINDER (MACHINE METHOD), N90, 1"
- 17 PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX E, N90, 1 1/2"
- 18 PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- 19 PROPOSED PIPE UNDERDRAIN, 6"
- 20 PROPOSED HOT-MIX ASPHALT SHOULDER, 8"
- 21 PROPOSED AGGREGATE SHOULDERS, TYPE A, 6"
- 22 PROPOSED CONCRETE CURB AND GUTTER, TYPE B9.24
- 23 PROPOSED CONCRETE MEDIAN SURFACE, 4"
- 24 PROPOSED BITUMINOUS SHOULDER REMOVAL
- 25 PROPOSED HOT-MIX ASPHALT SHOULDER REMOVAL, 1 1/2"
- 26 PROPOSED HOT-MIX ASPHALT SHOULDER, 1 1/2"
- 27 PROPOSED HOT-MIX ASPHALT SHOULDER, 2 1/2"
- 28 PROPOSED DOWEL BARS (#6X24" @ 2' CENTERS)
- 29 PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

FILE NAME =	USER NAME = burnsideam	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\burnsideam\d0166363.dwg	76d59-sh1-p1en.dgn	DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	ST CLAIR	162	13
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -						CONTRACT NO. 76059				
	PLOT DATE = 8/18/2010	DATE -	REVISED -						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



EXISTING TYPICAL SECTION IL 159
STA. 36+25 TO STA. 39+85.27

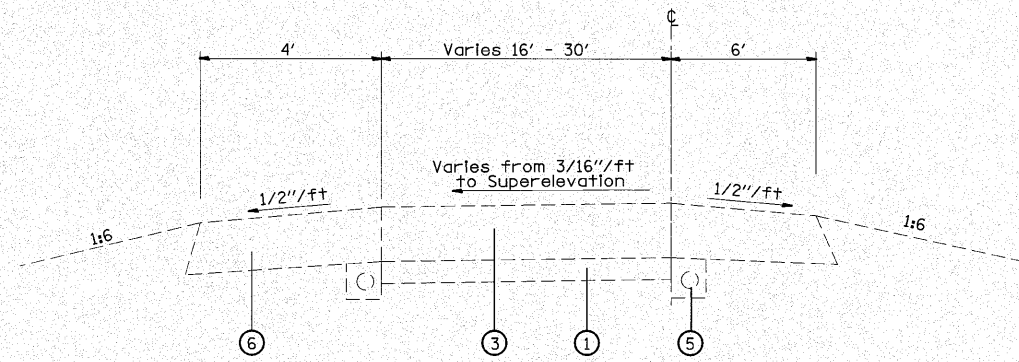


PROPOSED TYPICAL SECTION IL 159
STA. 36+25 TO STA. 39+85.27

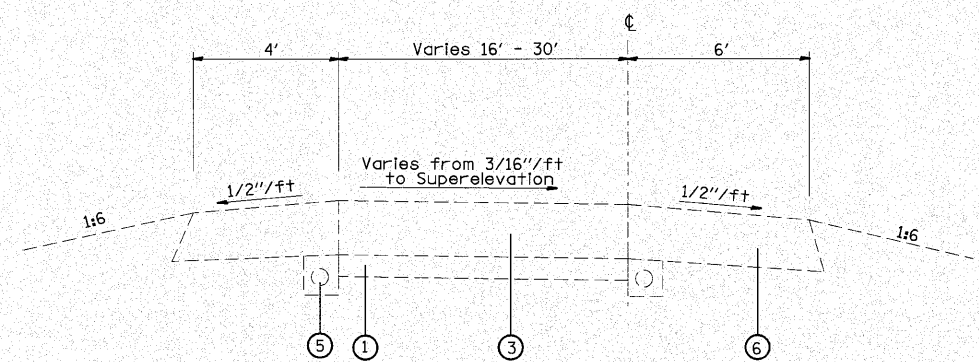
LEGEND

- 1 EXISTING STABILIZED SUB-BASE, 4"
- 2 EXISTING CONTINUOUS RPCC PAVEMENT, 8"
- 3 EXISTING PCC PAVEMENT, 10"
- 4 EXISTING BITUMINOUS OVERLAY, 2 1/2"
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- 6 EXISTING BITUMINOUS SHOULDER, 8"
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- 15 PROPOSED LEVELING BINDER (MACHINE METHOD), N90, 3/4"
- 16 PROPOSED LEVELING BINDER (MACHINE METHOD), N90, 1"
- 17 PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX E, N90, 1 1/2"
- 18 PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- 19 PROPOSED PIPE UNDERDRAIN, 6"
- 20 PROPOSED HOT-MIX ASPHALT SHOULDER, 8"
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- 22 PROPOSED CONCRETE CURB AND GUTTER, TYPE B9.24
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- 24 PROPOSED BITUMINOUS SHOULDER REMOVAL
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- 26 PROPOSED HOT-MIX ASPHALT SHOULDER, 1 1/2"
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- 28 PROPOSED DOWEL BARS (#6X24" @ 2' CENTERS)
- 29 PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

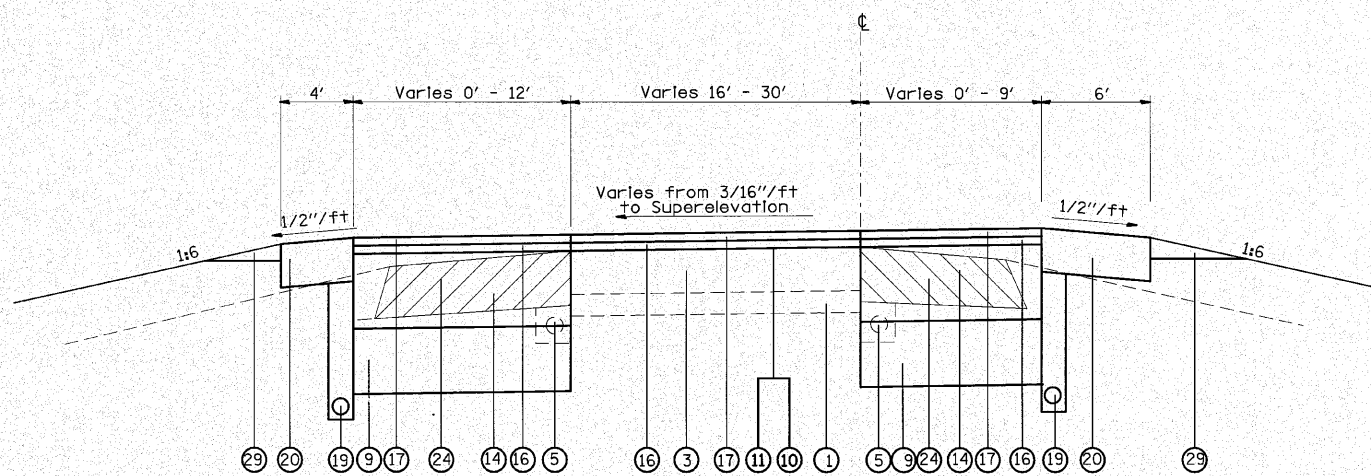
FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
ct:\pw_work\p\dot\burnsideem\ad\166363\d876d59-sh1-plan.dgn	DRAWN -	REVISD -	SCALE: _____		SHEET NO.	OF	SHEETS	STA.	TO STA.	64	82-5K-2	ST CLAIR	162	14
PLOT SCALE = 50,0000' / IN.	CHECKED -	REVISD -												
PLOT DATE = 8/10/2010	DATE -	REVISD -												
CONTRACT NO. 76D59											ILLINOIS FED. AID PROJECT			



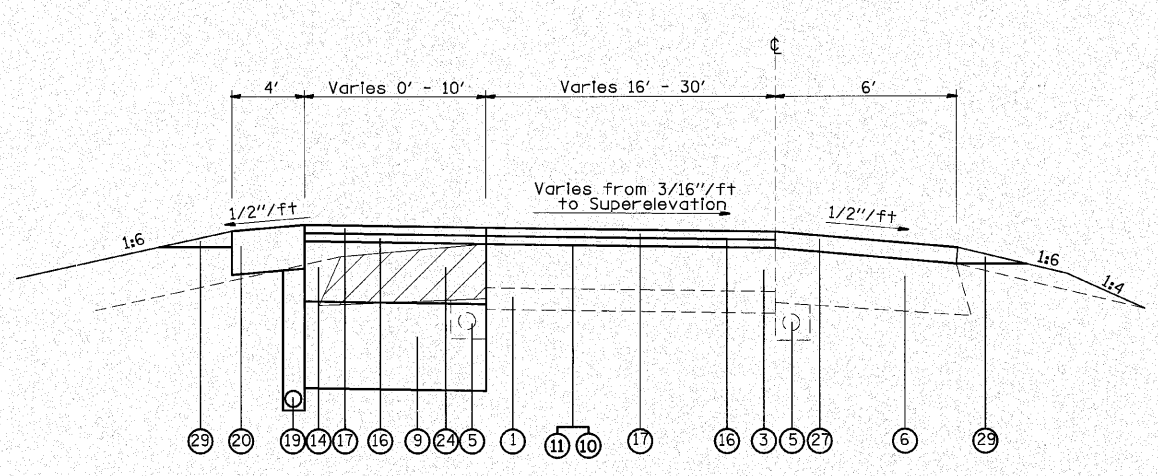
EXISTING TYPICAL SECTION RAMP B
STA. 14+32.74 TO STA. 19+59.4



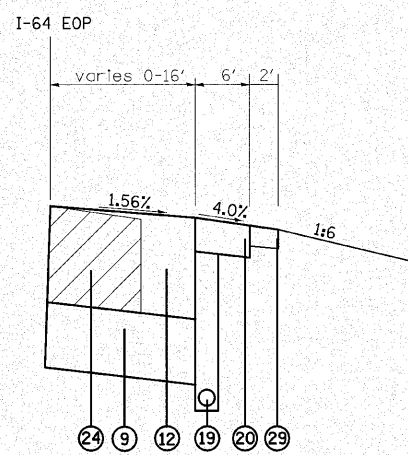
EXISTING TYPICAL SECTION RAMP C
STA. 13+14.61 TO STA. 19+12.6



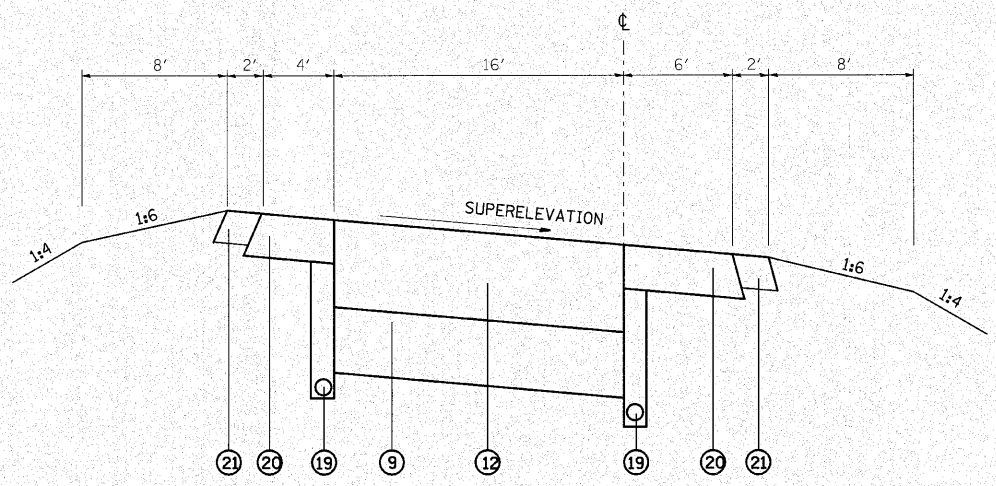
PROPOSED TYPICAL SECTION RAMP B
STA. 14+32.74 TO STA. 19+59.4



PROPOSED TYPICAL SECTION RAMP C
STA. 13+14.61 TO STA. 19+12.6



PROPOSED TYPICAL SECTION NEW LOOP RAMP F
STA. 11+94.34 TO STA. 24+50



PROPOSED TYPICAL SECTION NEW LOOP RAMP F
STA. 0+00 TO STA. 11+94.34

LEGEND

- 1 EXISTING STABILIZED SUB-BASE, 4"
- 2 EXISTING CONTINUOUS RPCC PAVEMENT, 8"
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- 15 PROPOSED LEVELING BINDER (MACHINE METHOD), N90, 3/4"
- 16 PROPOSED LEVELING BINDER (MACHINE METHOD), N90, 1"
- 17 PROPOSED POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX E, N90, 1 1/2"
- 18 PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- 19 PROPOSED PIPE UNDERDRAIN, 6"
- 20 PROPOSED HOT-MIX ASPHALT SHOULDER, 8"
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- 22 PROPOSED CONCRETE CURB AND GUTTER, TYPE B9.24
- 23 PROPOSED CONCRETE MEDIAN SURFACE, 4"
- 24 PROPOSED BITUMINOUS SHOULDER REMOVAL
- 25 PROPOSED HOT-MIX ASPHALT SHOULDER REMOVAL, 1 1/2"
- 26 PROPOSED HOT-MIX ASPHALT SHOULDER, 1 1/2"
- 27 PROPOSED HOT-MIX ASPHALT SHOULDER, 2 1/2"
- 28 PROPOSED DWEL BARS (#6X24" @ 2' CENTERS)
- 29 PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
76359-shit-plan.dgn	76359-shit-plan.dgn	DRAWN -	REVISED -		64	82-5K-2	ST CLAIR	162	15			
PLOT SCALE = 5/8" = 1' IN.	PLOT SCALE = 5/8" = 1' IN.	CHECKED -	REVISED -		CONTRACT NO. 76D59							
PLOT DATE = 8/12/2013	PLOT DATE = 8/12/2013	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

NEW PAVEMENT SCHEDULE										
LOCATION		BITUMINOUS MATERIALS (PRIME COAT)	LEVELING BINDER (MACHINE METHOD) N90, 3/4"	HMA FULL DEPTH 16"	POLYMERIZED HMA SURFACE COURSE, 1 1/2"	PCC BASE COURSE 9 1/2"	HMA BINDER COURSE IL 19.0, N90, 13 3/4"	AGGREGATE BASE COURSE TYPE A 12"	DRILL AND GROUT DOWEL BARS	STRIP REFLECTIVE CRACK CONTROL TREATMENT
		(TON)	(TON)	(SQ YD)	(TON)	(SQ YD)	(TON)	(SQ YD)	(EACH)	(FOOT)
IL 159										
23+59.8	TO	1+88(RAMP D)	1.3	25	51	606		606	297	593
29+20.9	TO	33+84.5	0.4	8	15	184		184	233	465
36+20.2	TO	39+85.27	0.9	17	33	397		397	183	365
RAMP "B"										
14+32.74	TO	18+77.30	1.2	22	44		393	526	223	445
17+21	TO	19+59.4	0.8	16	32		288	385	119	238
RAMP "C"										
13+14.61	TO	19+24.53	1.2	23	47		415	555	305	610
RAMP F										
0+00	TO	24+50	8.1					3705	656	1312
TOTAL:			13.9	111	3705	223	1187	1095	2014	4028

AGGREGATE SHOULDERS					
LOCATION			RT/LT	AGGREGATE SHOULDERS TYPE A, 6"	AGGREGATE WEDGE SHOULDER, TYPE B
STA	TO	STA		(SQYD)	(TON)
IL 159					
23+44	TO	29+56	RT		17
29+22	TO	31+39.39	LT		6
36+25	TO	39+85.27	LT		10
RAMP "B"					
14+32.74	TO	18+77.30	RT		9
14+32.74	TO	17+21	LT		6
17+21	TO	19+59.4	LT		5
RAMP "C"					
13+09.61	TO	19+12.6	RT		12
13+09.61	TO	19+12.6	LT		12
17+21	TO	19+59.4	LT		5
RAMP F					
0+00	TO	24+50	RT	544	
2+37.48	TO	11+38.08	LT	200	
TOTAL :				745	47

CURB AND GUTTER						
LOCATION			CONCRETE CURB & GUTTER TYPE B9.24	CONCRETE CURB & GUTTER TYPE B6.06	CONCRETE CURB TYPE B	PROTECTIVE COAT
STA	TO	STA	(FOOT)	(FOOT)	(FOOT)	(SQ YD)
IL 159						
28+39.73	TO	29+04.71	128			28
28+63.89	TO	28+92.67		89		20
29+55.71	TO	33+84.25	854			190
38+50.27	TO	39+11.46	120			27
RAMP B						
19+52.45	TO	19+70		58		13
RAMP F						
11+01.25	TO	12+57.5			12	3
TOTAL :			1102	147	12	280

CONCRETE MEDIAN					
LOCATION			CONCRETE MEDIAN SURFACE 4"	CONCRETE MEDIAN TYPE SB-9.24	PROTECTIVE COAT
STA	TO	STA	(SQ FT)	(SQ FT)	(SQ YD)
IL 159					
28+39.73	TO	29+02.47	825	20	94
28+63.89	TO	28+92.67	310	20	37
29+58.48	TO	33+84.25	4135		459
38+50.27	TO	39+12.25	775	20	88
RAMP "B"					
19+52.45	TO	19+70	190		21
I-64					
536+35	TO	536+73	143		16
TOTAL			6378	60	715

HOT-MIX ASPHALT SHOULDERS, 8"				
LOCATION			RT/LT	AREA
STA	TO	STA		(SQ YD)
IL 159				
23+81.92	TO	1+88 (RAMP D)	RT	262
29+20.9	TO	33+33.72	LT	397
36+20.2	TO	39+85.27	LT	325
RAMP "B"				
14+32.74	TO	18+77.30	RT	296
17+21	TO	19+59.4	LT	106
RAMP "C"				
13+09.61	TO	19+12.6	LT	266
RAMP F				
0+00	TO	24+50	RT	1633
2+37.48	TO	11+38.08	LT	400
TOTAL :				3685

RAISED PAVEMENT MARKERS						
LOCATION			RAISED REFLECTOR PAVEMENT MARKER ONE WAY CRYSTAL	RAISED REFLECTOR PAVEMENT MARKER REMOVAL	RAISED REFLECTOR PAVEMENT MARKER ONE WAY CRYSTAL (BRIDGE)	PRISMATIC CURB REFLECTOR
STA	TO	STA	(EACH)	(EACH)	(EACH)	(EACH)
IL 159						
23+44	TO	30+00	48	47		36
30+00	TO	36+00	33	28	16	28
36+00	TO	40+85	39	34		17
RAMP B						
14+27.74	TO	18+00	17	14		
18+00	TO	19+75	13	13		11
RAMP C						
13+09.61	TO	19+22	18	15		
RAMP F						
1+52	TO	12+75	13			
12+75	TO	24+50	7			
TOTAL:			188	151	16	92

RESURFACING SCHEDULE					
LOCATION	HMA SURFACE REMOVAL 2"	BITUMINOUS MATERIALS (PRIME COAT)	AGGREGATE (PRIME COAT)	LEVELING BINDER (MACHINE METHOD) IL-9.5FG, N90, 3/4"	POLYMERIZED HMA SURFACE COURSE, 1 1/2"
LOCATION	(SQ YD)	(TON)	(TON)	(TON)	(TON)
IL 159					
23+44 TO 30+00	6608	4.1	19.8	278	555
30+00 TO 36+00	2914	1.8	8.7	122	245
36+00 TO 40+85	3575	2.2	10.7	150	300
RAMP B					
14+32.74 TO 18+00		0.8	3.7	51	103
18+00 TO 19+81.83	411	0.3	2.7	38	35
RAMP C					
13+14.61 TO 19+24.53	506	0.9	4.1	58	116
TOTAL:					
	14014	10.1	49.8	697	1353

BRIDGE APPROACH SHOULDER DRAIN				
LOCATION	TYPE C INLET BOX, STANDARD 609006	PIPE DRAINS 12"	END SECTIONS 12"	CONCRETE THRUST BLOCKS
STA	RT/LT	(EACH)	(FOOT)	(EACH)
IL 159				
33+74.12	LT	1	120	1
36+64.62	LT	1	96	1
TOTAL :				
		2	216	2

DELINEATORS				
LOCATION	RT/LT	QUANTITY		
STA	TO	STA	(EACH)	
RAMP "B"				
15+00	TO	18+00	RT	4
RAMP "C"				
14+00	TO	18+00	RT	6
RAMP F				
2+75	TO	10+80	LT	26
TOTAL :				
				36

SHOULDER RESURFACING SCHEDULE						
LOCATION	HMA SURFACE REMOVAL 1 1/2"	BITUMINOUS MATERIALS (PRIME COAT)	AGGREGATE (PRIME COAT)	HMA SHOULDERS, 1 1/2"	HMA SHOULDERS, 2 1/2"	
STA	TO	STA	(SQ YD)	(TON)	(TON)	(TON)
IL 159						
23+53.7	TO	27+27	332	0.10	0.5	28
28+91.8	TO	33+61.9	209	0.07	0.3	18
36+23.7	TO	39+21	447	0.14	0.7	38
40+13	TO	41+85	50	0.02	0.1	4
RAMP "B"						
14+27.74	TO	17+21		0.04	0.2	18
RAMP "C"						
13+09.61	TO	19+22.95		0.13	0.6	60
RAMP "D"						
0+90.8	TO	1+88		0.01	0.1	6
TOTAL:						
			1038	0.5	2.5	87

TRAFFIC CONTROL				
LOCATION	RT/LT	TEMPORARY CONCRETE BARRIER (FOOT)	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2 (EACH)	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 (EACH)
STA	TO	STA		
IL 159				
31+39.39	TO	38+51.89	LT	709.5
38+51.89				1
FAI ROUTE 64				
534+83	TO	546+90	RT	1207
536+10	TO	536+97	MEDIAN	87
536+15	FO	537+12	MEDIAN	97
535+06	FO	535+89	LT	83
TOTAL :				
			1474	4

CONCRETE BARRIER							
LOCATION	RT/LT	CONCRETE BARRIER REMOVAL (FOOT)	PROTECTIVE COAT (SQ YD)	CONCRETE BARRIER TRANSITION (FOOT)	CONCRETE BARRIER, SINGLE FACE, 42" (FOOT)	POROUS GRANULAR EMBANKMENT (CU YD)	CONCRETE MEDIAN SURFACE 4" (SQ FT)
STA	TO	STA					
FAI ROUTE 64							
536+35	TO	536+87	MEDIAN	52			
536+35	TO	536+73	MEDIAN	36	38	12	173
536+73	TO	536+87	MEDIAN	15	28		
TOTAL :							
				52	52	38	28

TEMPORARY RAMPS	
LOCATION	TEMPORARY RAMPS (SQ YD)
IL 159	
STA. 23+44	53
STA. 40+85	42
RAMP A	
STA. 0+89	17
RAMP B	
STA. 19+83.60	82
RAMP C	
STA. 19+24.53	80
RAMP D	
STA. 1+93	12
RAMP E	
STA. 2+58	14
TOTAL:	
	300

PAVEMENT MARKING SCHEDULE

LOCATION			TEMPORARY PAVEMENT MARKING								PREFORMED PLASTIC PAVEMENT MARKING, TYPE B-INLAID								PAINT PAVEMENT MARKING - CURB SOLID (YELLOW)	SHORT-TERM PAVEMENT MARKING (3 LIFTS) (WHITE)	SHORT-TERM PAVEMENT MARKING (3 LIFTS) (YELLOW)	WORKZONE PAVEMENT MARKING REMOVAL
			LINE, 4" SOLID (WHITE)	LINE, 4" SOLID (YELLOW)	LINE 4" SKIP DASH (WHITE)	LINE, 8" SOLID (WHITE)	LINE, 8" SKIP DASH (WHITE)	LINE, 12" SOLID (WHITE)	LINE, 24" SOLID (WHITE)	LETTERS& SYMBOLS (WHITE)	LINE, 4" SOLID (WHITE)	LINE, 4" SOLID (YELLOW)	LINE 4" SKIP DASH (WHITE)	LINE 8" SOLID (WHITE)	LINE 8" SKIP DASH (WHITE)	LINE 12" SOLID (WHITE)	LINE, 24" SOLID (WHITE)	LETTERS& SYMBOLS (WHITE)				
STA	TO	STA	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	FOOT	FOOT	FOOT	SQ FT	
LOOP RAMP F																						
0+00	TO	12+00	1200	982		275				1200	982		275									
12+00	TO	24+50	1250		130					1250		130										
IL 159																						
23+44	TO	30+00	1707	1263	776	211		176	132	140.4	1707	1263	776	211		176	132	140.4	183	1152	360	168
30+00	TO	36+00	2010	1200	341	147		145		62.4	2010	1200	341	147		145		62.4		750	360	123
36+00	TO	40+85	1295	876	223	457		267	48	31.2	1295	876	223	457		267	48	31.2	254	594	264	95
RAMP B																						
14+26	TO	18+00	374	374	87	263	46			78.0	374	374	87	263	46					282		31
18+00	TO	19+84	256	173	93	284	5	95	48	62.4	256	173	93	284	5	95	48	62.4	58	174		19
RAMP C																						
13+09.61	TO	19+25	657	604	50	285	61	96	42	109.2	657	604	50	285	61	96	42	109.2	90	444		49
SUB TOTAL:			8749	5472	1700	1922	112	779	270	483.6	8749	5472	1700	1922	112	779	270	483.6	585	3396	984	485
TOTAL:				15921		2034	779	270	483.6		15921		2034	779	270	483.6		585		4380		485

GUARDRAIL

LOCATION			STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	STEEL PLATE BEAM GUARDRAIL, TYPE D	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL, TYPE 6	IMPACT ATTENUATORS, (FULLY REDIRECTIVE NARROW) TL 2	GUARDRAIL MARKERS, TYPE A	TERMINAL MARKERS - DIR. APPLIED
STA	TO	STA	(FOOT)	(FOOT)	(FOOT)	(EACH)	(EACH)	(FOOT)	(EACH)	(EACH)
IL 159										
STA. 31+83.75	TO	STA. 33+77.5 RT		150		1	1		2	1
STA. 36+21	TO	STA. 38+27.25 LT	112.5			1	1		3	1
RAMP "E"										
TO STA. 2+79	TO	STA. 6+42 LT			350			2	14	
RAMP F										
STA. 11+01.25	TO	STA.12+57.5 RT	62.5			1	1		3	1
TOTAL :			175	150	350	3	3	2	22	3

SEEDING & EROSION CONTROL SCHEDULE

LOCATION			TEMPORARY DITCH CHECKS	PERIMETER EROSION BARRIER	INLET AND PIPE PROTECTION	TEMPORARY EROSION CONTROL SEEDING	MULCH METHOD 1	EROSION CONTROL BLANKET	SEEDING CLASS 2	NITROGEN FERTILIZER NUTRIENTS	PHOSPHORUS FERTILIZER NUTRIENTS	POTASSIUM FERTILIZER NUTRIENTS
STA	TO	STA	(FOOT)	(FOOT)	(EACH)	(LB)	(ACRE)	(SQ YD)	(ACRE)	(LB)	(LB)	(LB)
IL 159												
23+44	TO	29+00				33	0.2		0.2	15	15	15
36+00	TO	40+00	16	478	1	201	1.0	3945	1.0	90	90	90
RAMP B												
14+27.74	TO	19+59.4				32	0.2		0.2	14	14	14
RAMP C												
13+14.61	TO	19+24.53	160	579		98	0.5	1462	0.5	44	44	44
RAMP F												
0+00	TO	13+00	110	1430	1	823	4.1	13310	4.1	370	370	370
14+25	TO	24+50			2	67	0.3		0.3	30	30	30
TOTAL:			286	2487	4	1253	6.3	18717	6.3	564	564	564

RIPRAP

LOCATION	STONE DUMPED RIPRAP, CLASS A4	EARTH EXCAVATION	FILTER FABRIC
	(SQ YD)	(CU YD)	(SQ YD)
IL 159			
STA 29+25 LT		152	
STA 32+00 LT		45	
STA 33+15 LT	204	146	204
STA 36+25 LT	193	235	193
STA 37+00 LT	194	112	194
STA 38+00 LT	198	117	198
STA 39+45 LT	184	166	184
RAMP F			
STA 9+40 LT	87		87
TOTAL:	1060	974	1060

SIGNING												
LOCATION			REMOVE SIGN PANEL ASSEMBLY TYPE A	REMOVE SIGN PANEL ASSEMBLY TYPE B	REMOVE SIGN PANEL TYPE 3	WOOD SIGN SUPPORT	OVERHEAD SIGN STRUCTURE - CANTILEVER TYPE II-C-A	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	DRILLED SHAFT CONCRETE FOUNDATIONS	SIGN PANEL TYPE 1	SIGN PANEL TYPE 2	SIGN PANEL TYPE 3
STA	LT/RT	OFFSET	(EACH)	(EACH)	(SQ FT)	(FOOT)	(FOOT)	(FOOT)	(CU YDS)	(SQ FT)	(SQ FT)	(SQ FT)
IL 159												
23+60	MEDIAN		1							5		
23+60	MEDIAN					12.0						
24+87	RT	69'										156
28+40	RT	79'		1								
28+80	MEDIAN			1								
28+95	MEDIAN					12.0				5		
28+95	MEDIAN									9		
29+20	LT	54'	1									
29+49	LT	64'		1								
29+50	LT	48'	1									
29+59	MEDIAN			1								
29+67	MEDIAN					12.0				5		
29+67	MEDIAN									9		
33+40	MEDIAN			1								
33+45	LT	48'	1									
33+90	LT	61.3'					30	30	6.1			156
36+22	MEDIAN			1								
38+99	MEDIAN					12.0				5		
38+99	MEDIAN									9		
39+81	MEDIAN		1									
39+81	MEDIAN					12.0				5		
41+50	LT	77'			348.75							348.75
RAMP B												
17+98	LT	40'	1									
18+02	LT	44'				13.4				8.75		
17+98	RT	35'	1									
18+02	RT	35'				13.4				8.75		
19+00	LT	40'	1									
19+00	LT	46'				13.4				9		
RAMP C												
17+00	LT	30'	1									
17+00	LT	32'				13.2				8.75		
18+00	LT	41'	1							9		
18+00	LT	45'				14.3						
19+05	MEDIAN			1								
RAMP F												
0+90	RT	60'				13.6				5		
10+75	LT	32'				14.0					16	
19+89	RT	7.5'	1								12	
19+89	RT	16'				13.0				6		
20+82	RT	10'		1								
20+82	RT	16'				13.0					16	
TOTAL :			11	8	348.75	181.0	30.0	30.0	6.1	107.25	44	660.75

PIPE UNDERDRAINS, 6" (SPECIAL)			
STA	RT/LT	PIPE UNDERDRAINS, 6" (SPECIAL) (FOOT)	CONCRETE HEADWALL (EACH)
IL 159			
27+00	RT	3.5	1
29+50	LT	16.5	1
37+50	LT	11.5	1
RAMP B			
14+32.74	RT	6.5	1
14+32.74	LT	3.5	1
17+21	LT	3.5	1
18+50	RT	9.5	1
RAMP C			
13+14.61	LT	4.5	1
16+00	LT	11.5	1
RAMP D			
1+88	RT	16.5	1
LOOP RAMP F			
4+50	LT	7.5	1
5+00	RT	9.5	1
9+50	RT	8.5	1
10+00	LT	8.5	1
12+50	RT	9.5	1
17+00	RT	9.5	1
22+00	RT	9.5	1
TOTAL:		150	17

PIPE UNDERDRAINS, 6"				
LOCATION			RT/LT	FOOT
STA	TO	STA		
IL 159				
23+81.92	TO	1+88 (RAMP D)	RT	593
29+22.15	TO	32+33.72	LT	312
36+20.2	TO	39+85.27	LT	365
RAMP "B"				
14+32.74	TO	18+77.30	RT	418
17+21	TO	19+59.54	LT	239
RAMP "C"				
13+14.61	TO	19+12.6	LT	598
LOOP RAMP F				
0+00	TO	23+63	RT	2350
1+54.4	TO	11+38	LT	984
TOTAL :				5858

CLASS B PAVEMENT PATCHING 10" INCH SCHEDULE										
LOCATION	LANE	LENGTH	LANE WIDTH	CLASS B PATCH TYPE II	CLASS B PATCH TYPE III	CLASS B PATCH TYPE IV	DOWEL BARS 1 1/2"	TIE BARS 3/4"	PAVEMENT FABRIC	SAWCUT
		(FT)	(FT)	(SQ YD)	(SQ YD)	(SQ YD)	(EACH)		(SQ YD)	(FT)
RAMP A							20			
0 + 10		50.0	6.0			33.3	20	25	33.3	124.0
RAMP B										
14 + 30	LT	6.0	12.0	8.0			20			60.0
14 + 32	RT	150.0	4.0			66.7	20	75	66.7	316.0
15 + 30	RT	6.0	12.0	8.0			20			60.0
16 + 50	RT	6.0	16.0	10.7			28			76.0
16 + 50	LT	6.0	16.0	10.7			28			76.0
17 + 50	RT	6.0	17.0	11.3			28			80.0
17 + 50	LT	6.0	17.0	11.3			28			80.0
18 + 20	RT	6.0	18.0	12.0			28			84.0
18 + 20	LT	6.0	18.0	12.0			28			84.0
19 + 65		25.0	30.0			83.3	28	13	83.3	170.0
RAMP C							20			
13 + 30		6.0	16.0	10.7			28			76.0
13 + 90		6.0	16.0	10.7			28			76.0
15 + 20		6.0	19.0	12.7			28			88.0
15 + 50		6.0	21.0	14.0			28			96.0
16 + 20	RT	6.0	12.0	8.0			20			60.0
16 + 20	LT	6.0	12.0	8.0			20			60.0
16 + 75	RT	6.0	12.0	8.0			20			60.0
16 + 75	LT	6.0	12.0	8.0			20			60.0
16 + 90	RT	280.0	6.0			186.7	20	140	186.7	584.0
17 + 00	RT	6.0	16.0	10.7			28			76.0
18 + 00	RT	8.0	18.0		16.0		28		16.0	88.0
RAMP D							20			
1 + 50		6.0	16.0	10.7			28			76.0
SUBTOTAL:				185.3	16.0	336.7	592.0	227.5	352.7	2486.0
ANTICIPATED FAILURES (15%):				27.8	2.4	50.5	3.0	3.0	3.0	372.9
TOTAL:				213	18	387	595	231	356	2859

CLASS A PAVEMENT PATCHING 11" INCH SCHEDULE									
LOCATION	LANE	LENGTH	LANE WIDTH	CLASS A PATCH TYPE III	CLASS A PATCH TYPE IV	DOWEL BARS 1 1/2"	TIE BARS 3/4"	PAVEMENT FABRIC	SAWCUT
		(FT)	(FT)	(SQ YD)	(SQ YD)	(EACH)		(SQ YD)	(FT)
IL 159									
28 + 63	MIDDLE	130.0	20.0		288.9	28	65	288.9	340.0
36 + 15	NB	8.0	36.0		32.0	28		32.0	160.0
36 + 15	SB	8.0	24.0	21.3		28		21.3	112.0
38 + 75	MIDDLE	85.0	20.0		188.9	28	43	188.9	250.0
SUBTOTAL:				21.3	509.8	112.0	107.5	531.1	862.0
ANTICIPATED FAILURES (15%):				3.2	76.5	3.0	3.0	3.0	129.3
TOTAL:				25	586	115	111	534	991

GUARDRAIL REMOVAL				
LOCATION			RT/LT	GUARDRAIL REMOVAL (FOOT)
STA	TO	STA		
IL 159				
32+40	TO	33+77.5	RT	137.5
32+74	TO	33+86.55	LT	112.5
36+20.9	TO	37+70.9	LT	150
TOTAL :				400

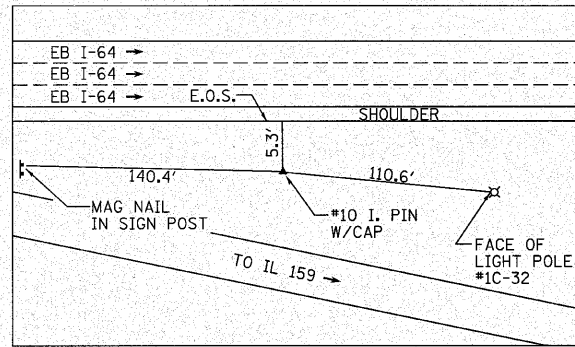
TREE REMOVAL				
LOCATION			TREE REMOVAL (6 TO 15 UNITS)	TREE REMOVAL (6 TO 15 UNITS)
			(UNITS)	(UNITS)
IL 159				
23+44	TO	30+00	14	
36+00	TO	40+00	230	50
RAMP F				
0+00	TO	24+50	206	18
TOTAL:			450	68

COMBINATION CURB AND GUTTER REMOVAL				
LOCATION			AREA	REMOVAL (FOOT)
STA	TO	STA		
IL 159				
28+41.15	TO	28+87.54	MEDIAN	103
29+52	TO	33+84.25	MEDIAN	865
38+49.89	TO	39+18.89	MEDIAN	142
RAMP "B"				
19+63	TO	19+77	ISLAND	65
TOTAL:				1175

MEDIAN REMOVAL				
LOCATION			AREA	REMOVAL (SQ FT)
STA	TO	STA		
IL 159				
28+41.7	TO	28+87.54		486
29+52	TO	33+84.6		3325
38+50.4	TO	39+18.89		929
RAMP "B"				
19+63	TO	19+77 (ISLAND)		195
TOTAL:				4935

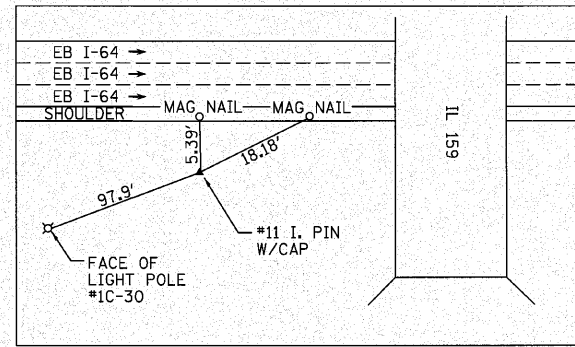
REMOVING EXISTING UNDERDRAINS				
LOCATION			RT/LT	FOOT
STA	TO	STA		
IL 159				
23+81.92	TO	1+88 (RAMP D)	RT	593
29+4.5	TO	33+84.25	LT	480
36+20.2	TO	39+85.27	LT	365
RAMP "B"				
14+32.74	TO	18+77.30	RT	418
17+21	TO	19+71.27	LT	250
RAMP "C"				
13+14.61	TO	19+13.23	LT	599
TOTAL :				2705

PAVED SHOULDER REMOVAL				
LOCATION			RT/LT	AREA (SQ YD)
STA	TO	STA		
IL 159				
23+81.92	TO	1+88 (RAMP D)	RT	539
29+4.5	TO	33+84.25	LT	140
36+20.2	TO	39+85.27	LT	404
RAMP B				
14+32.74	TO	18+77.30	RT	270
17+21	TO	19+71.27	LT	139
RAMP C				
13+14.61	TO	19+24.53	LT	290
RAMP F				
11+38	TO	24+50	RT	1469
FAI ROUTE 64				
536+35	TO	536+87	MEDIAN	92
TOTAL :				3343



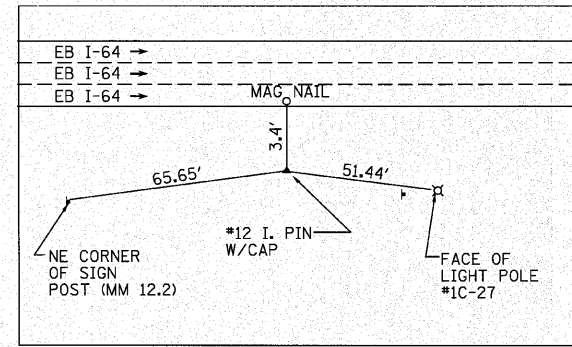
TIES TO CONTROL POINT 10
REBAR WITH IDOT CAP
STA. 528+27.01 72.84' RT.

N 703779.5968
E 347791.7343



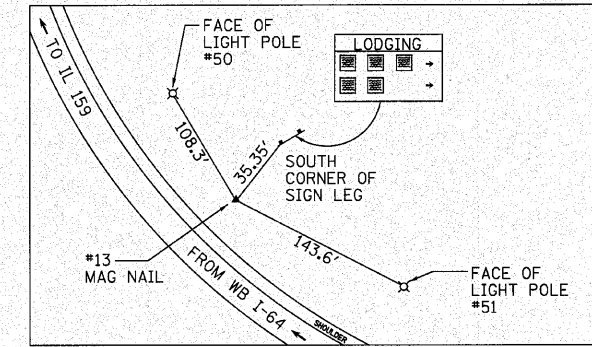
TIES TO CONTROL POINT 11
REBAR WITH IDOT CAP
STA. 535+86.01 72.62' RT.

N 703693.1628
E 348545.7985



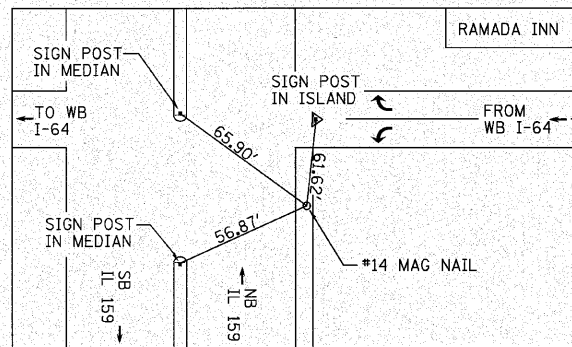
TIES TO CONTROL POINT 12
REBAR WITH IDOT CAP
STA. 544+28.28 70.84' RT.

N 703598.7601
E 349382.7658



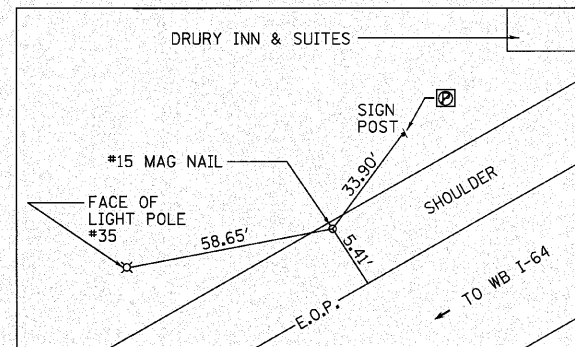
TIES TO CONTROL POINT 13
MAG NAIL
STA. 11+31.40 5.72' RT.

N 703929.4856
E 349395.3156



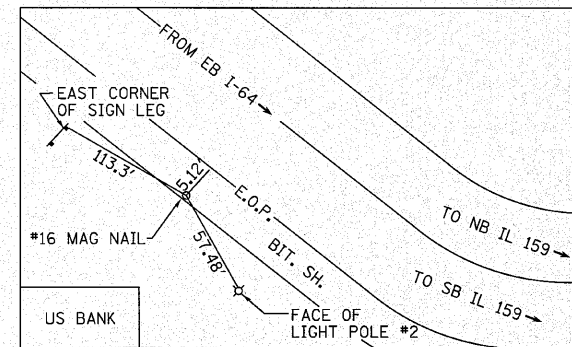
TIES TO CONTROL POINT 14
MAG NAIL
STA. 39+41.74 46.94' RT.

N 704191.4132
E 348736.5186



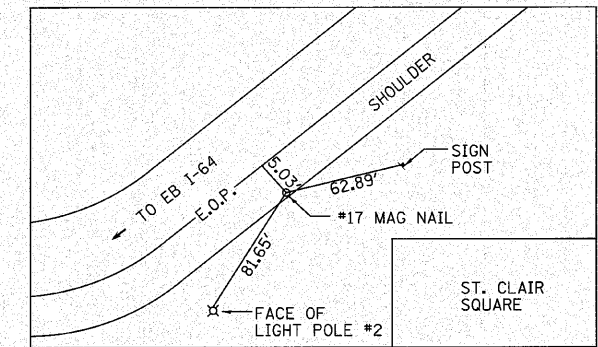
TIES TO CONTROL POINT 15
MAG NAIL
STA. 6+12.89 5.36' RT.

N 704134.2067
E 348098.9720



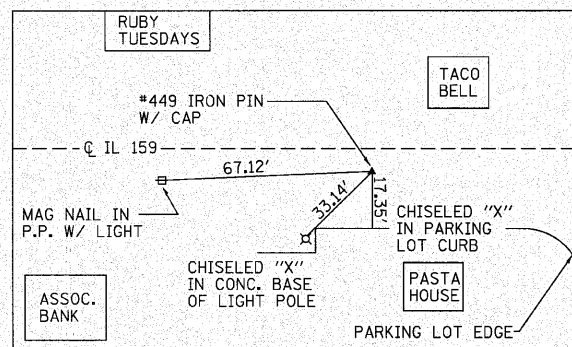
TIES TO CONTROL POINT 16
MAG NAIL
STA. 14+05.68 5.76' RT.

N 703364.8545
E 348149.1538



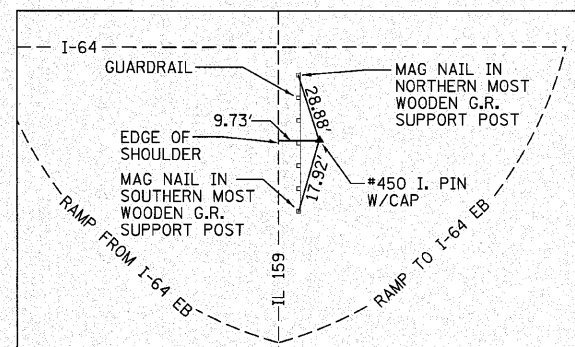
TIES TO CONTROL POINT 17
MAG NAIL
STA. 4+20.58 4.88' RT.

N 703251.6597
E 349091.4044



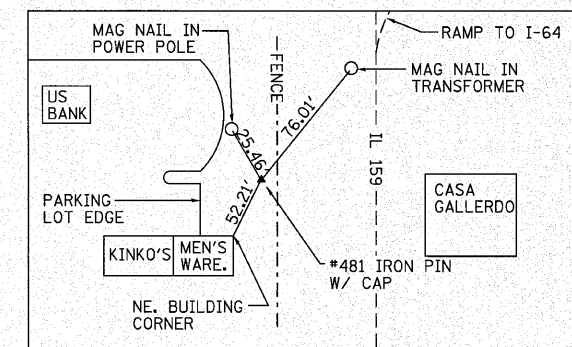
TIES TO CONTROL POINT 449
REBAR WITH IDOT CAP

N 702315.7065
E 348759.4013



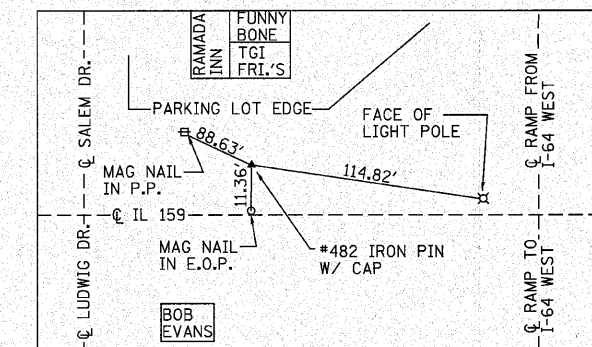
TIES TO CONTROL POINT 450
REBAR WITH IDOT CAP
STA. 32+63.10 61.39' RT.

N 703512.9487
E 348751.6860



TIES TO CONTROL POINT 481
REBAR WITH IDOT CAP
STA. 26+26.45 93.30' RT.

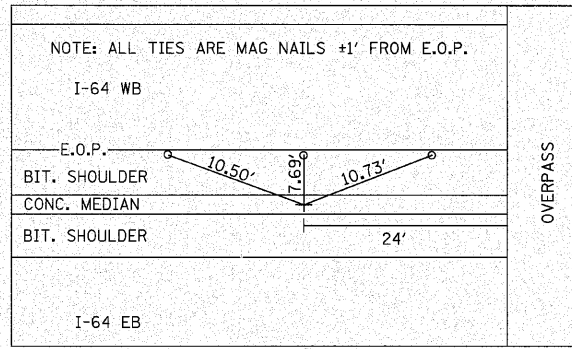
N 702874.8008
E 348609.3083



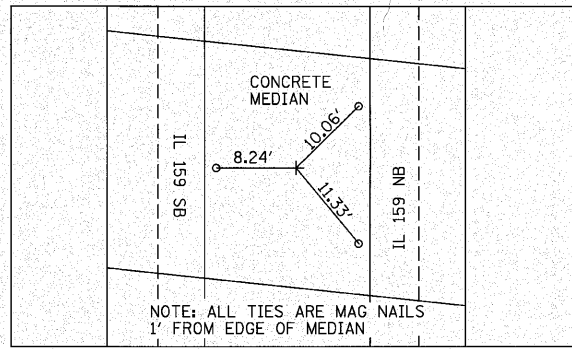
TIES TO CONTROL POINT 482
REBAR WITH IDOT CAP
STA. 41+92.56 56.42' RT.

N 704442.3155
E 348743.5070

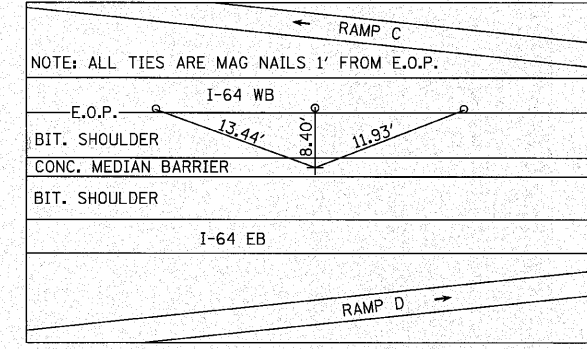
FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENT, TIES AND BENCHMARK SHEET	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
at:\pwork\p\dot\burnsideem\d0166363\d	76d59-ATB.dgn	DRAWN -	REVISED -			64	82-5K-2	ST CLAIR	162	21	
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 76D59					
PLOT DATE = 9/10/2010		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



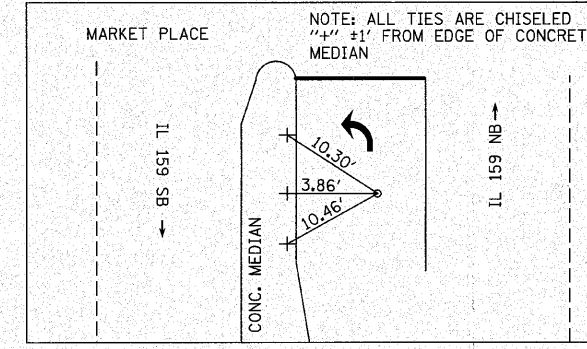
BEGIN PROJECT
STA 506+76.79
(SET CHISELED "+" IN SIDE OF CONC. MEDIAN)



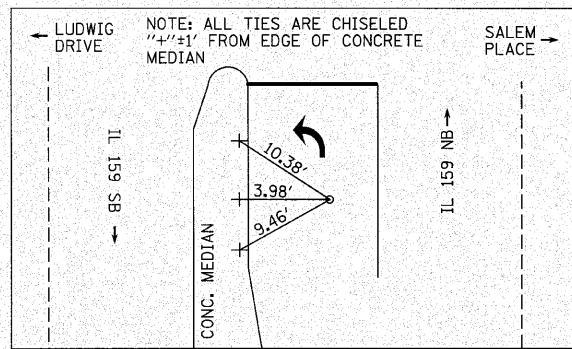
CENTER OF STRUCTURE, C & C IL 159/I-64
IL 159 STA. 35+00, I-64 STA. 537+26.79
(FND. CHISELED "+")



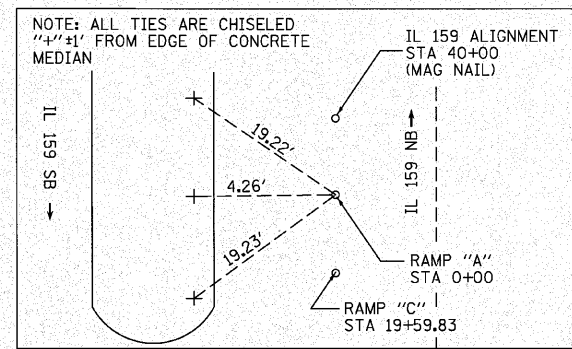
PC I-64
STA. 549+94.25
(CHISELED "+" IN SIDE OF CONC. MEDIAN)



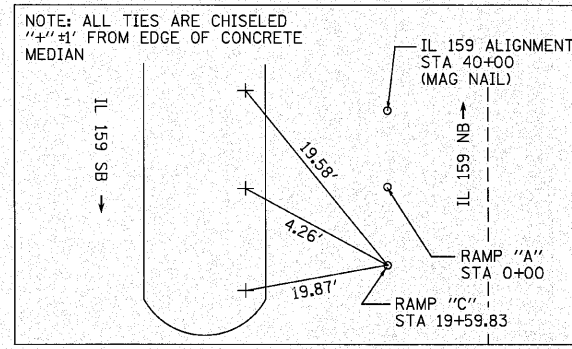
BEGINNING OF PROJECT IL 159
STA. 21+50
(SET MAG NAIL)



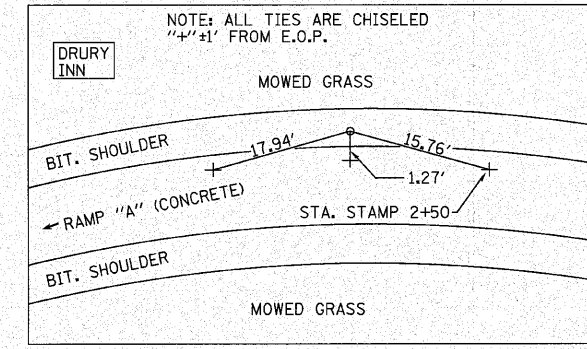
END OF PROJECT IL 159
STA. 42+50
(SET MAG NAIL)



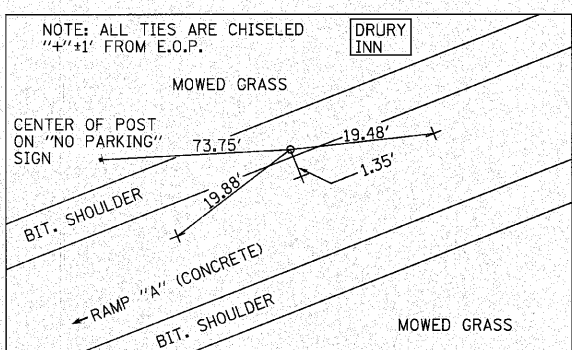
BEGIN ALIGNMENT RAMP "A"
STA. 0+00
(SET MAG NAIL)



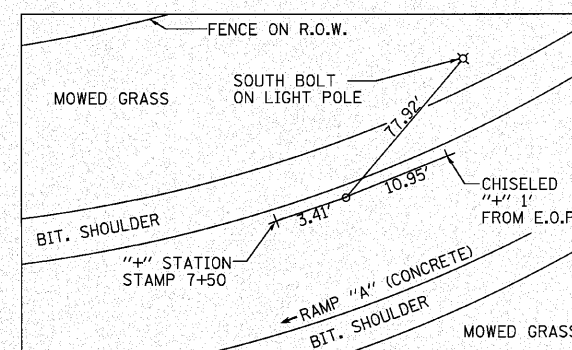
END ALIGNMENT RAMP "C"
STA. 19+59.83
(SET MAG NAIL)



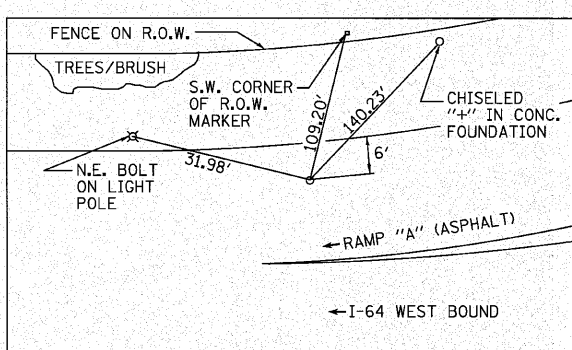
PC CURVE A-1, RAMP "A"
STA. 2+66.66
(SET MAG NAIL)



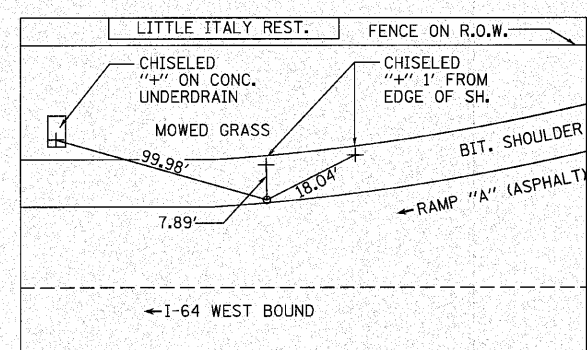
PT CURVE A-1, RAMP "A"
STA. 54+07.08
(SET MAG NAIL)



PC CURVE A-2, RAMP "A"
STA. 7+47.08
(SET MAG NAIL)

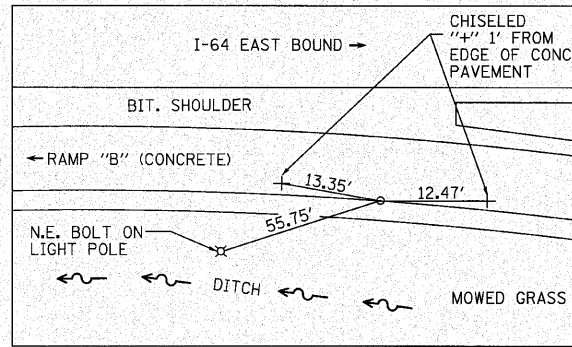


PT CURVE, RAMP "A"
STA. 12+21.95
(SET MAG NAIL)

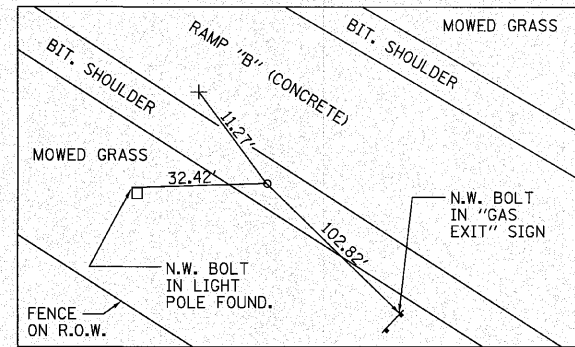


END ALIGNMENT, RAMP A
STA. 22+71.95
(SET MAG NAIL)

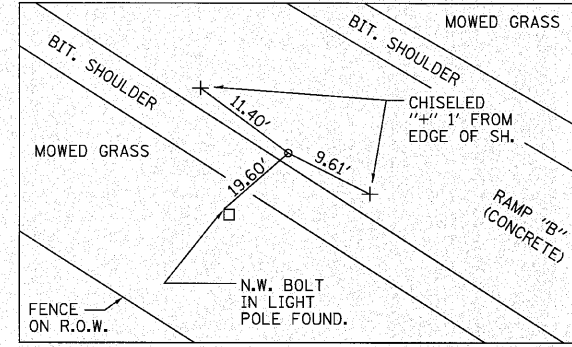
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ca\p\work\p\dot\burnsideem\d2166363\d	76d59-ATB.dgn	DRAWN -	REVISED -			64	82-5K-2	ST CLAIR	162	22
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 76D59				
PLOT DATE = 8/18/2010		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



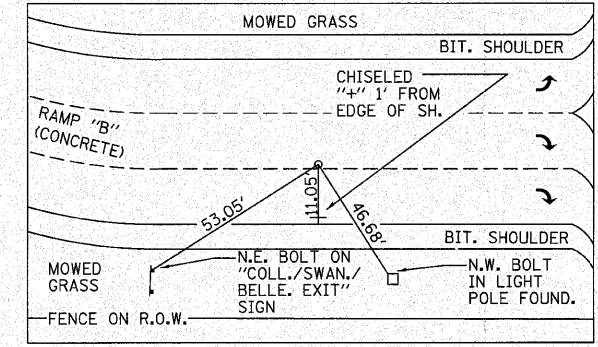
CURVE B-1 PC, RAMP "B"
STA. 6+62.40
(SET MAG NAIL)



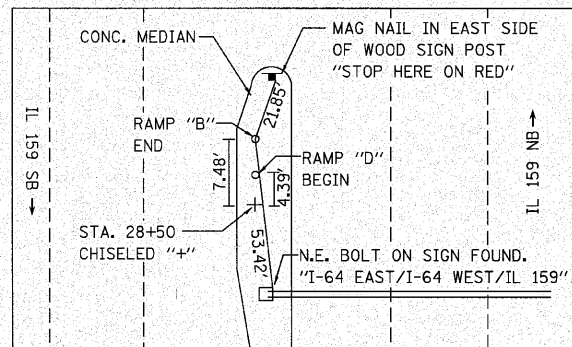
CURVE B-2 PT, RAMP "B"
STA. 11+97.55
(SET MAG NAIL)



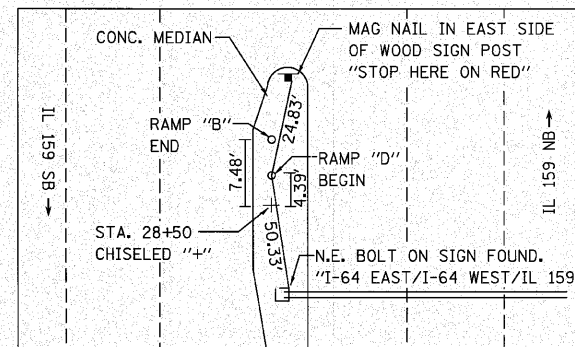
CURVE B-2 PC, RAMP "B"
STA. 14+63.31
(SET MAG NAIL)



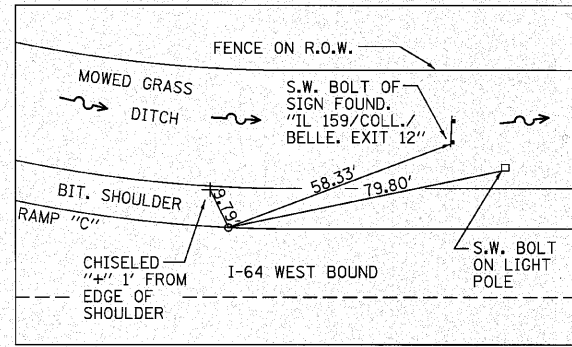
CURVE B-2 PT, RAMP "B"
STA. 17+38.77
(SET MAG NAIL)



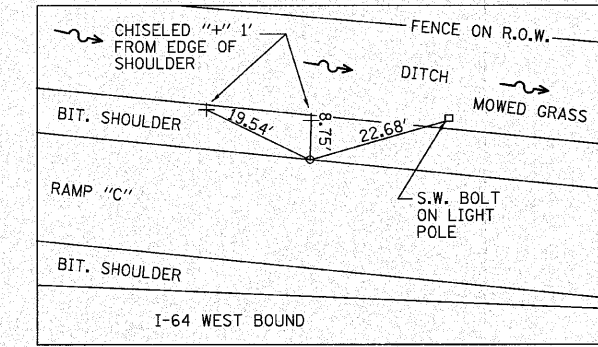
END RAMP "B" ALIGNMENT
STA. 20+28.22
(SET MAG NAIL)



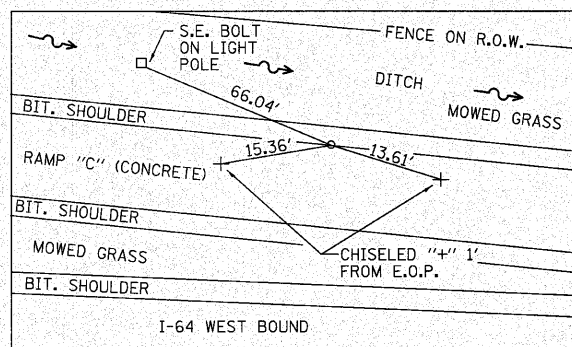
BEGIN RAMP "D" ALIGNMENT
STA. 0+00
(SET MAG NAIL)



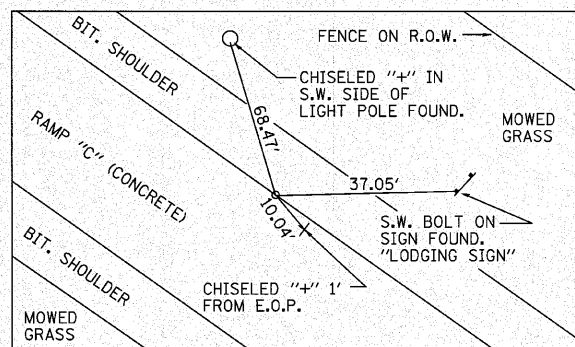
CURVE C-1 PC, RAMP "C"
STA. 0+00
(SET MAG NAIL)



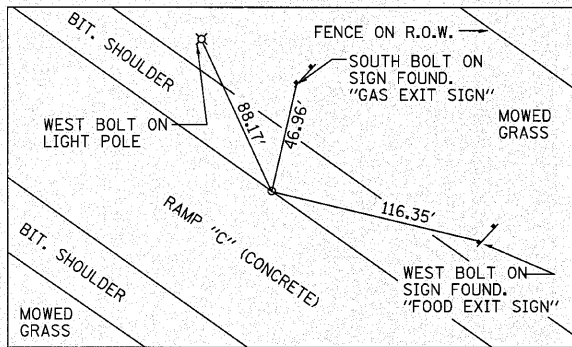
CURVE C-1 PT, RAMP "C"
STA. 4+99.58
(SET MAG NAIL)



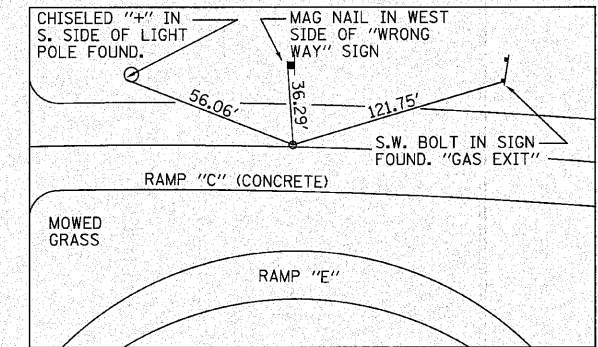
CURVE C-2 PC, RAMP "C"
STA. 6+66.88
(SET MAG NAIL)



CURVE C-2 PT, RAMP "C"
STA. 11+73.74
(SET MAG NAIL)

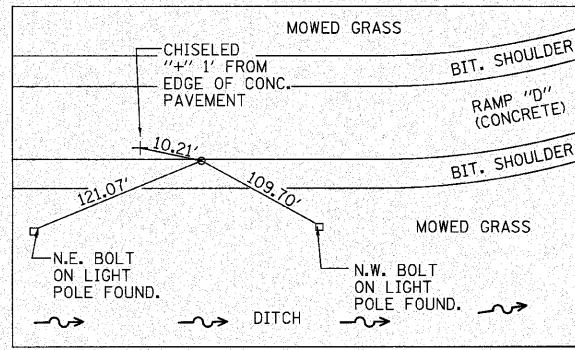


CURVE C-3 PC, RAMP "C"
STA. 14+14.61
(SET MAG NAIL)

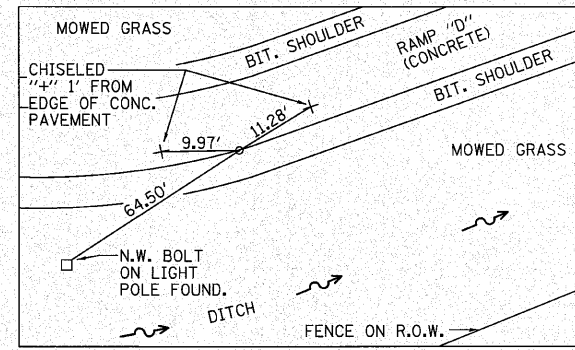


CURVE C-3 PT, RAMP "C"
STA. 17+11.31
(SET MAG NAIL)

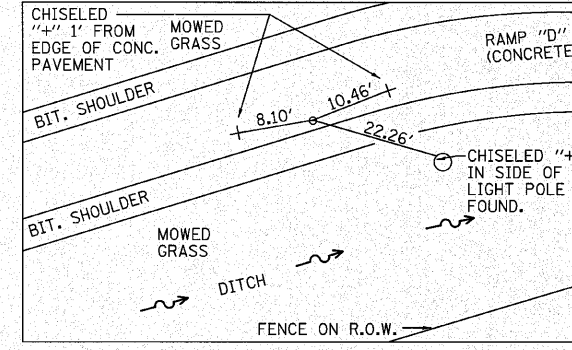
FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENT, TIES AND BENCHMARK SHEET	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca:\pwwork\pwwork\burnsideem\d2166383\d	76d59-ATB.dgn	DRAWN -	REVISED -			64	82-5K-2	ST CLAIR	162	23	
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 76D59					
PLOT DATE = 8/10/2010		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



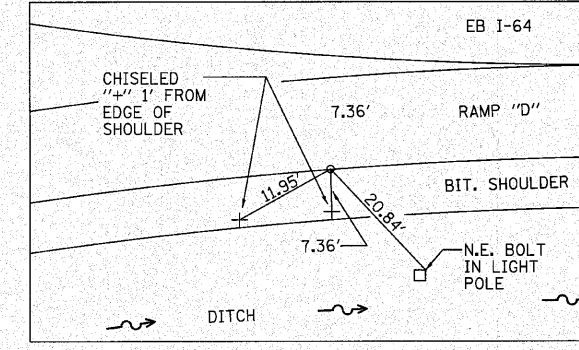
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STA. 2+35.49
(SET MAG NAIL)



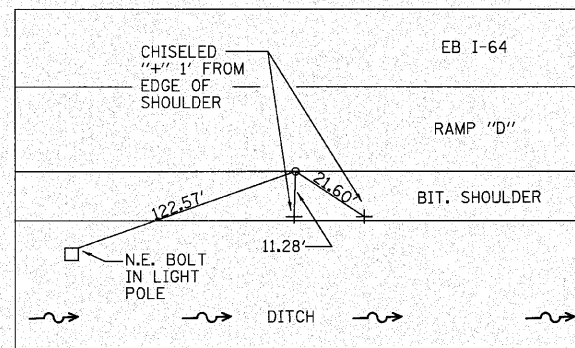
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STA. 4+01.55
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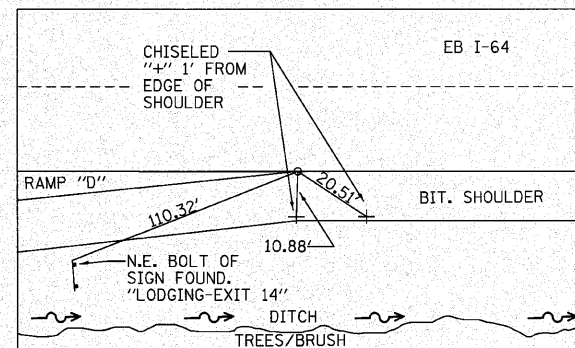
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STA. 6+18.22
(SET MAG NAIL)



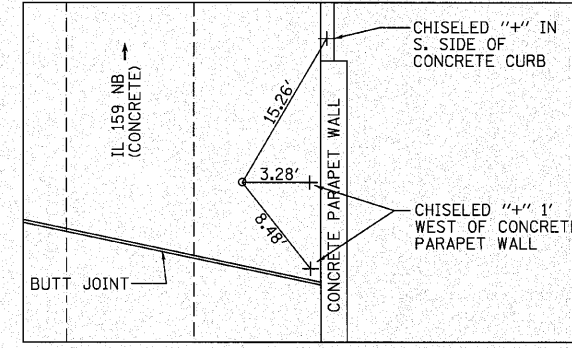
CURVE D-2 PT, RAMP "D"
STA. 11+89.48
(SET MAG NAIL)



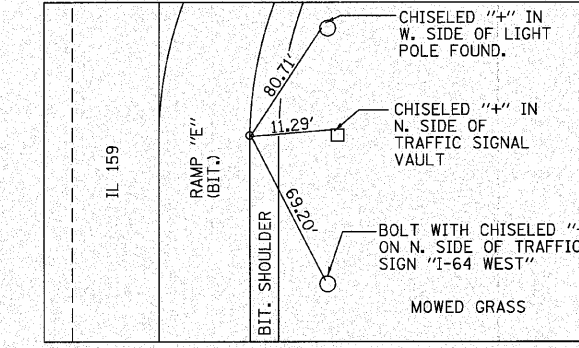
CURVE D-3 PC, RAMP "D"
STA. 15+66.39
(SET MAG NAIL)



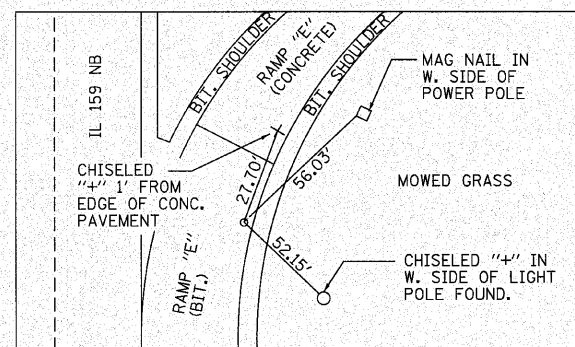
CURVE D-3 PT, RAMP "D"
STA. 19+83.86
(SET MAG NAIL)



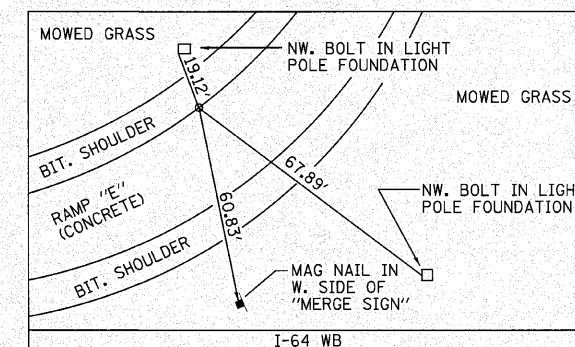
BEGIN RAMP "E" ALIGNMENT
STA. 0+00
(SET MAG NAIL)



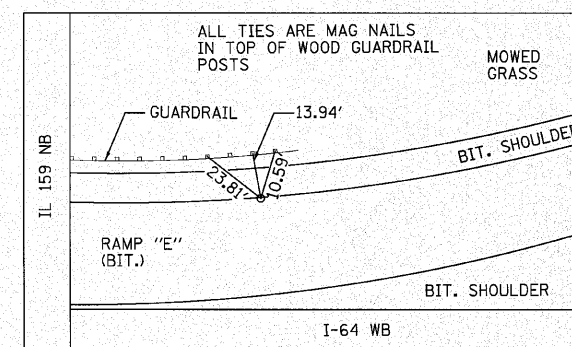
CURVE E-1 PC, RAMP "E"
STA. 1+00
(SET MAG NAIL)



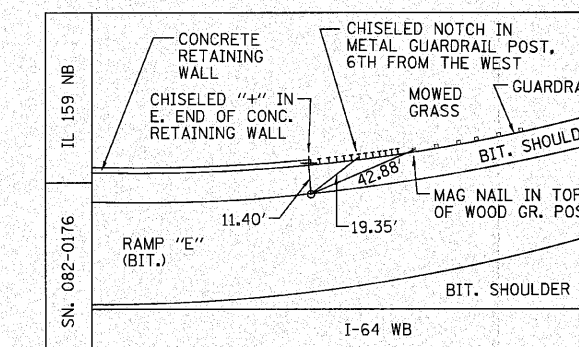
CURVE E-1 PT/CURVE E-2 PC, RAMP "E"
STA. 2+29.98
(SET MAG NAIL)



CURVE E-2 PT/CURVE E-3 PC, RAMP "E"
STA. 9+36.91
(SET MAG NAIL)



CURVE E-3 PT, RAMP "E"
STA. 11+04.65
(SET MAG NAIL)



END RAMP "E"
STA. 11+93.15
(SET MAG NAIL)

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENT, TIES AND BENCHMARK SHEET	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca\pwork\pwidot\burnsideem\d0166363\d07659-ATB.dgn	DRAWN -	REVISED -	64			82-5K-2	ST CLAIR	162	24	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	CONTRACT NO. 76059							
PLOT DATE = 8/18/2010	DATE -	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

BM# 2 - ELEV. 589.808'
 STA. 44+84 (IL 159)
 OFFSET - 59' RT.

CUT "□" ON WEST SIDE OF MAST ARM
 SIGNAL FOUNDATION @ SE CORNER OF IL 159
 & SALEM PLACE.

BM# 105 - ELEV. 574.833'
 STA. 525+46 (I-64)
 OFFSET - 108' RT.

CUT "X" ON THE NORTHEAST ANCHOR BOLT
 FOR STREET LIGHT POLE #1B-5 ON THE SOUTH
 SIDE OF I-64 AT THE BEGINNING OF THE
 SOUTHWEST I-64 EXIT RAMP TO IL 159.

BM# 100 - ELEV. 592.270'
 STA. 39+35 (IL 159)
 OFFSET - 52' LT.

CUT "□" ON SOUTH CORNER OF CONCRETE
 FOUNDATION FOR TRAFFIC SIGNAL CONTROL
 BOX ON THE SW CORNER OF IL 159 & RAMPS
 ON THE NORTH SIDE OF I-64.

BM# 134 - ELEV. 572.046'
 STA. 528+05 (I-64)
 OFFSET - 148' LT.

CUT "X" ON THE SOUTHEAST ANCHOR BOLT
 FOR STREET LIGHT POLE #34 ON THE NORTH
 SIDE OF I-64 AT THE END OF THE NORTHWEST
 ENTRANCE RAMP FROM IL 159 JUST EAST OF
 THE ST. CLAIR 10 CINE.

BM# 64 - ELEV. 578.948'
 STA. 536+89 (I-64)
 OFFSET - 2' RT.

CUT "□" ON THE I-64 CENTER MEDIAN
 BARRIER WALL ON THE SOUTH SIDE OF THE
 WEST PIER FOR IL 159 OVERPASS, BELOW
 STRUCTURE PLACE INSCRIBED "STA. 537+26.79"
 & "FAI RT. 64 - SEC. 82-5HB-3."

BM# 125 - ELEV. 573.314
 STA. 550+79 (I-64)
 OFFSET - 93' RT.

CUT "X" ON THE NORTHWEST ANCHOR BOLT FOR
 STREET LIGHT POLE #1C-25 ON THE SOUTH SIDE
 OF I-64 AT THE END OF THE SOUTHEAST I-64
 ENTRANCE RAMP IL 159.

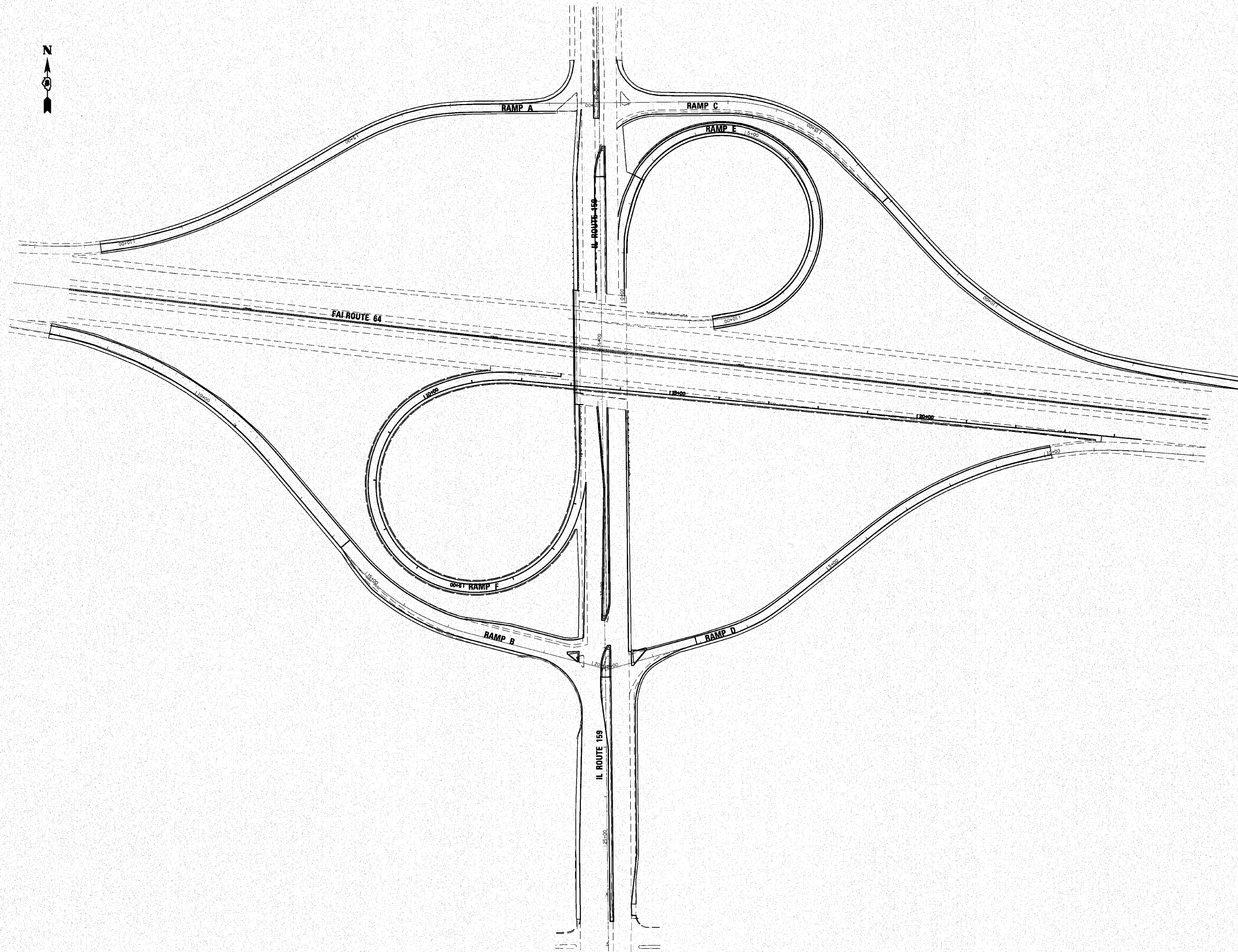
BM# 119 - ELEV. 572.889'
 STA. 550+06 (I-64)
 OFFSET - 102' LT.

CUT "X" ON THE SOUTHWEST ANCHOR BOLT FOR
 STREET LIGHT POLE #1A-19 ON THE NORTH SIDE
 OF I-64 AT THE BEGINNING OF THE NORTHEAST
 EXIT RAMP TO IL 159.

BM# 102 - ELEV. 581.745'
 STA. 20+32 (IL-159)
 OFFSET - 88' LT.

RAILROAD SPIKE DRIVEN IN THE EAST SIDE OF
 POWER POLE ON THE WEST SIDE OF IL 159
 NORTHEAST OF RUBY TUESDAY RESTAURANT AND
 SOUTHEAST OF TACO BELL RESTAURANT.

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENT, TIES AND BENCHMARK SHEET	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\burnsideem\d0166363\d0166363.dgn	75d59-ATB.dgn	DRAWN -	REVISED -			64	82-5K-2	ST. CLAIR	162	25	
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 76D59					
	PLOT DATE = 9/12/2010	DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
					SCALE: _____	SHEET NO. ___ OF ___ SHEETS		STA. _____ TO STA. _____			



FILE NAME =
 c:\pwwork\pwwork\burnsideem\00166363\0976a59-shs\plan.dgn

USER NAME = burnsideem
 FLOT SCALE = 100.0000' / IN.
 FLOT DATE = 8/10/2010

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

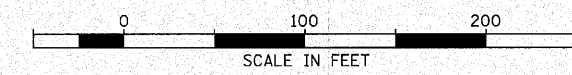
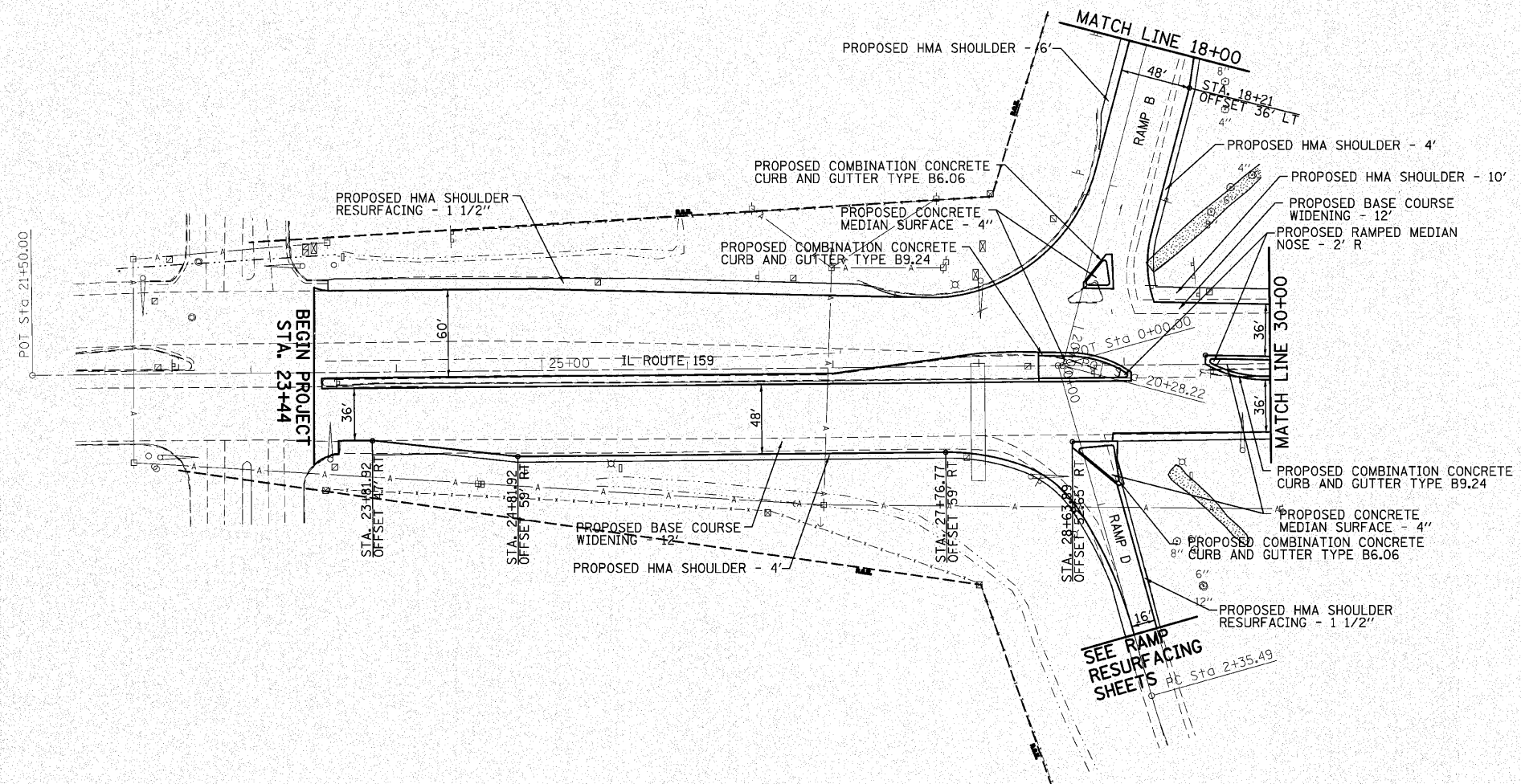
REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PLAN SHEET

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

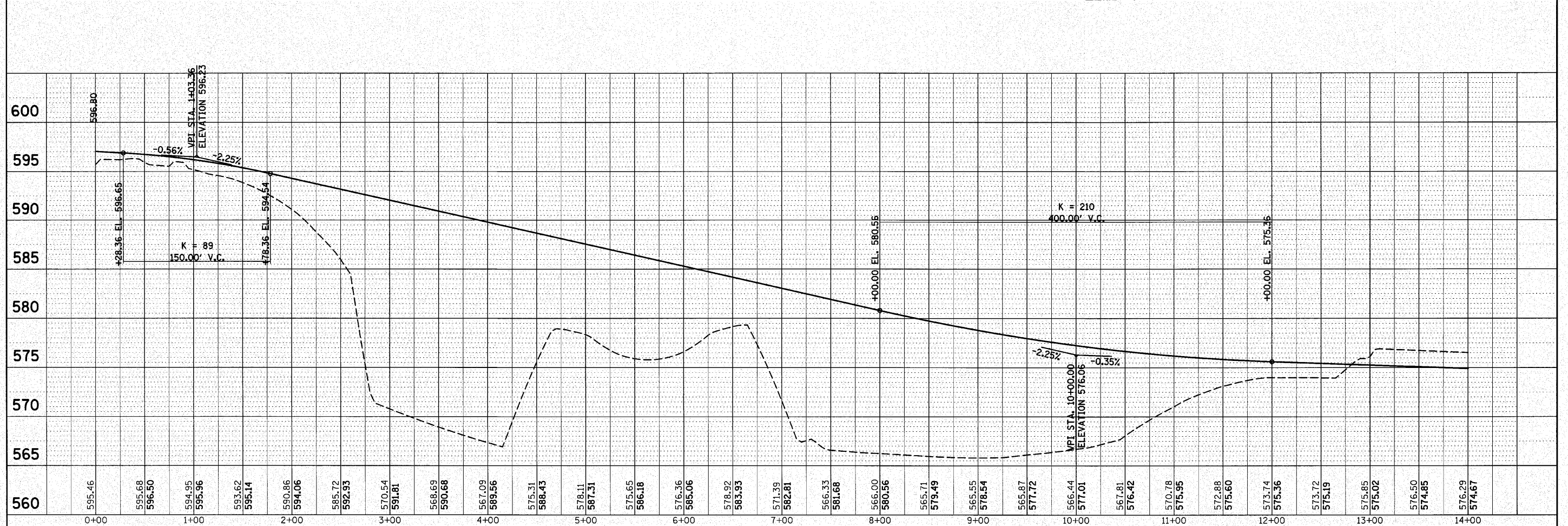
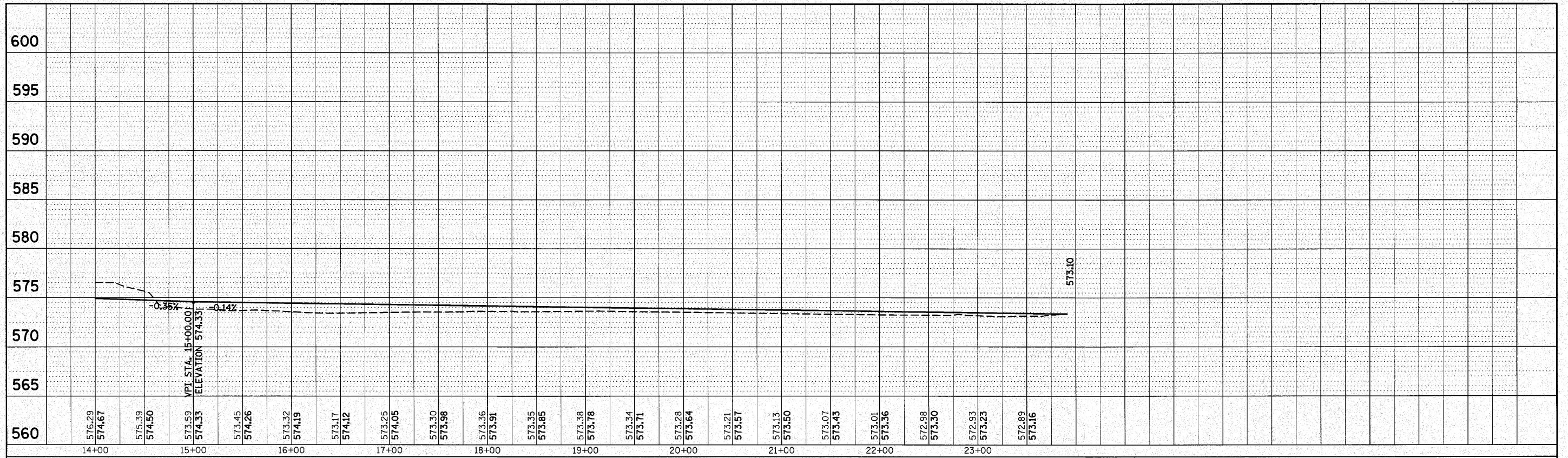
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST CLAIR	162	26
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D59	



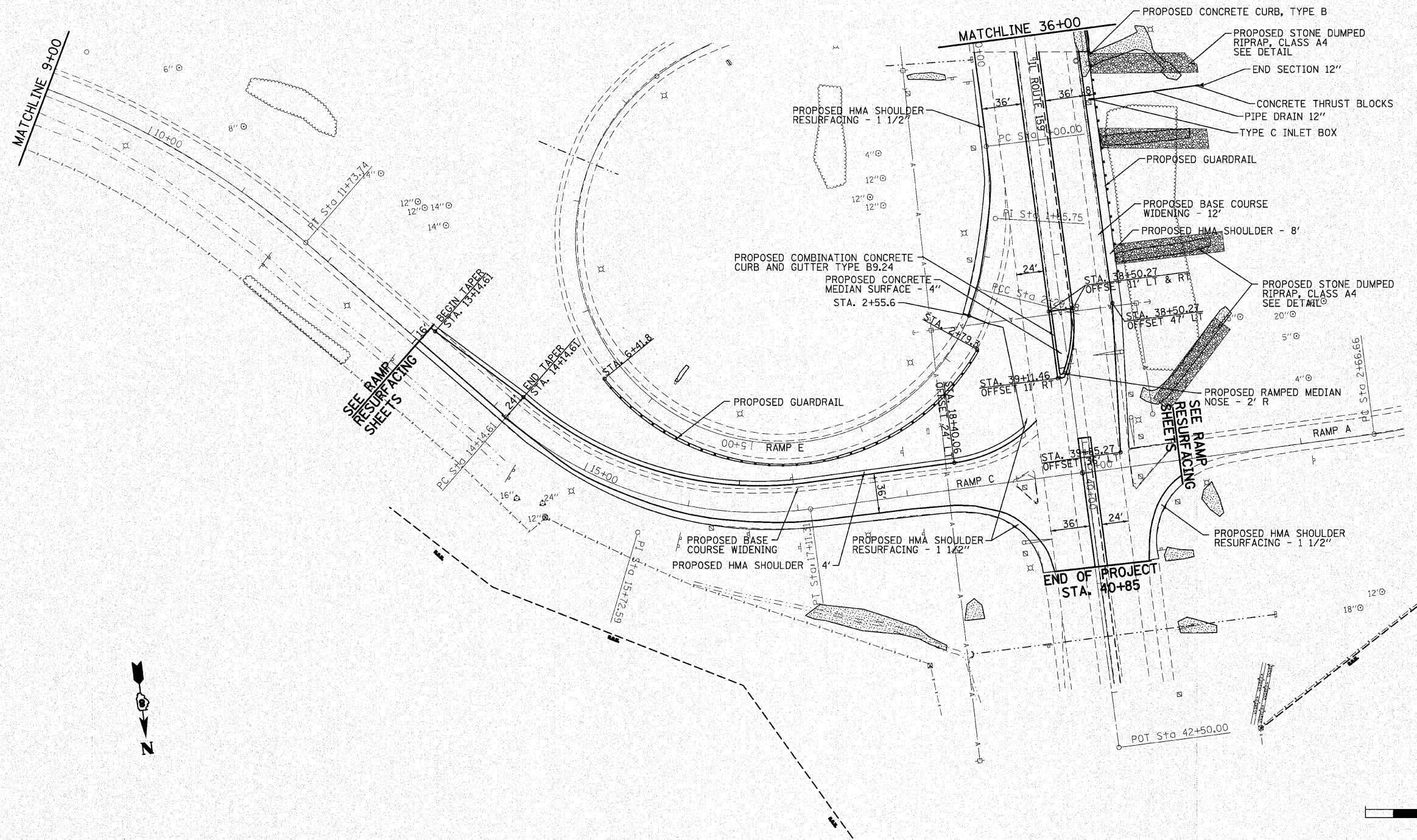
FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN SHEET				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
c:\pwork\awidot\burnsideem\d0166363\d8	76d59-shit-plan.dgn	DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	64	82-5K-2	ST CLAIR	162	27
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -		CONTRACT NO. 76D59										
	PLOT DATE = 8/12/2012	DATE -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT										

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	NO. OF WAY CHECKED		
	CADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	CHECKED		
	NO. OF WAY CHECKED		
	STRUCTURE NOTATIONS CHECKED		



FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RAMP F PROFILE			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
as\pwwork\pwwork\burnsideem\0166363\077859-sht-plan.dgn		DRAWN -	REVISED -		64	82-5K-2	ST CLAIR	162	29			
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		CONTRACT NO. 76D59							
PLOT DATE = 8/18/2010		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							



FILE NAME =
 c:\pwork\pwork\burnsideem\gd0166363\gd

USER NAME = burnsideem
 76d59-shr-plan.dgn
 PLOT SCALE = 50.0000' / IN.
 PLOT DATE = 8/18/2012

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

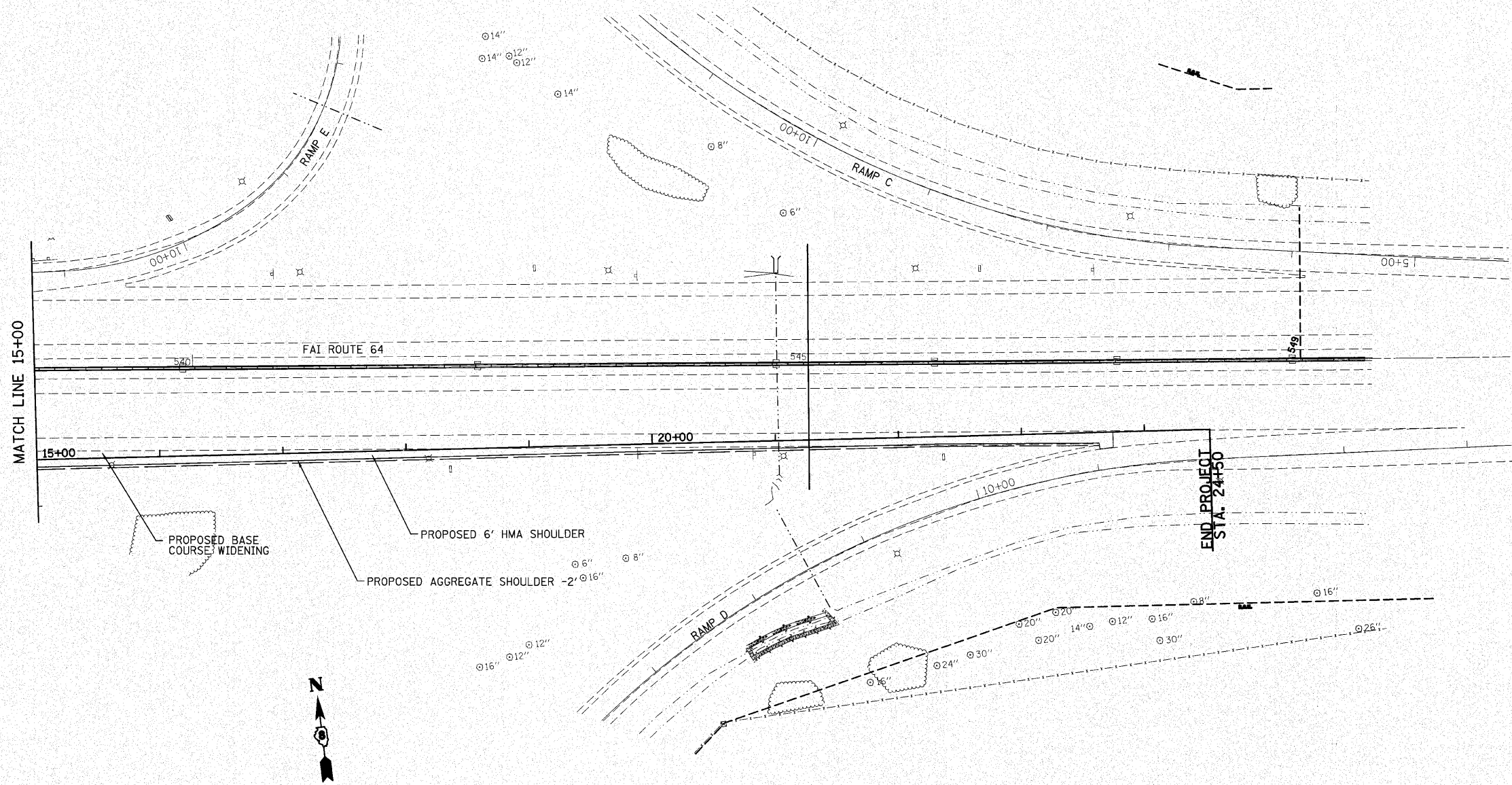
REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PLAN SHEET

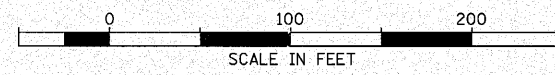
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST. CLAIR	162	30
CONTRACT NO. 76D59				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



MATCH LINE 15+00

END PROJECT STA. 24+50



FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -
c:\pwwork\spw\dot\burnsideem\d07166363\d076d59-sh-tr-plan.dgn		DRAWN -	REVISED -
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -
PLOT DATE = 8/10/2010		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN SHEET

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST CLAIR	162	31
CONTRACT NO. 76D59				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BEGIN TEMPORARY CONCRETE BARRIER
STA. 31+39.39

TEMPORARY CONCRETE BARRIER

TEMPORARY CONCRETE BARRIER

IMPACT ATTENUATORS, TEMPORARY
(FULLY REDIRECTIVE-NARROW),
TEST LEVEL 3

FAI ROUTE 64

IMPACT ATTENUATORS, TEMPORARY
(FULLY REDIRECTIVE-NARROW), TEST LEVEL 3

STA. 36+00

5+00

RAMP B

16'

36'

36'

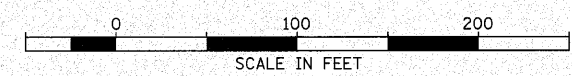
IL ROUTE 159

RAMP F

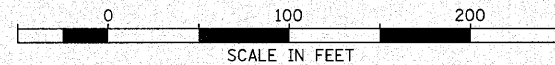
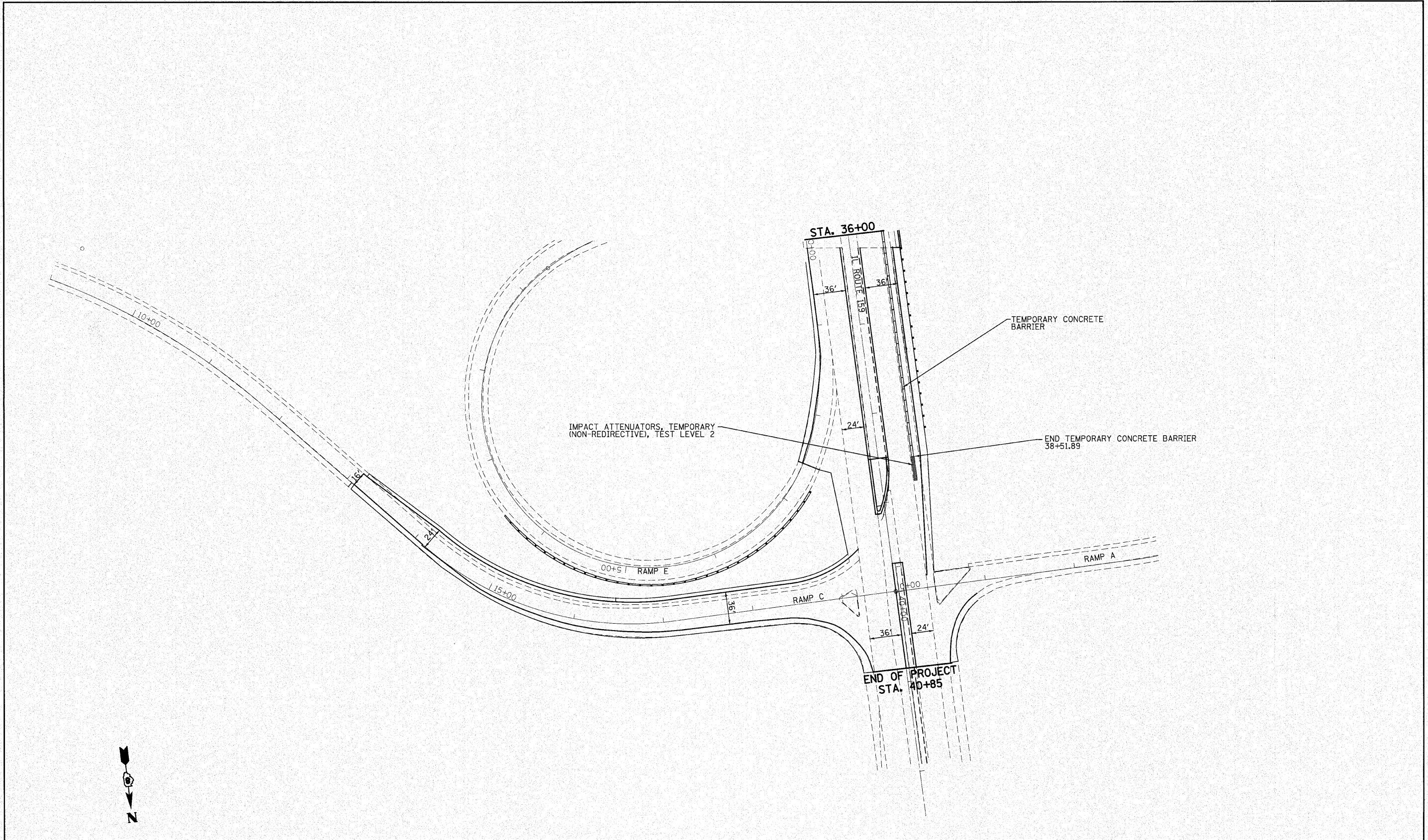
24'

00+00

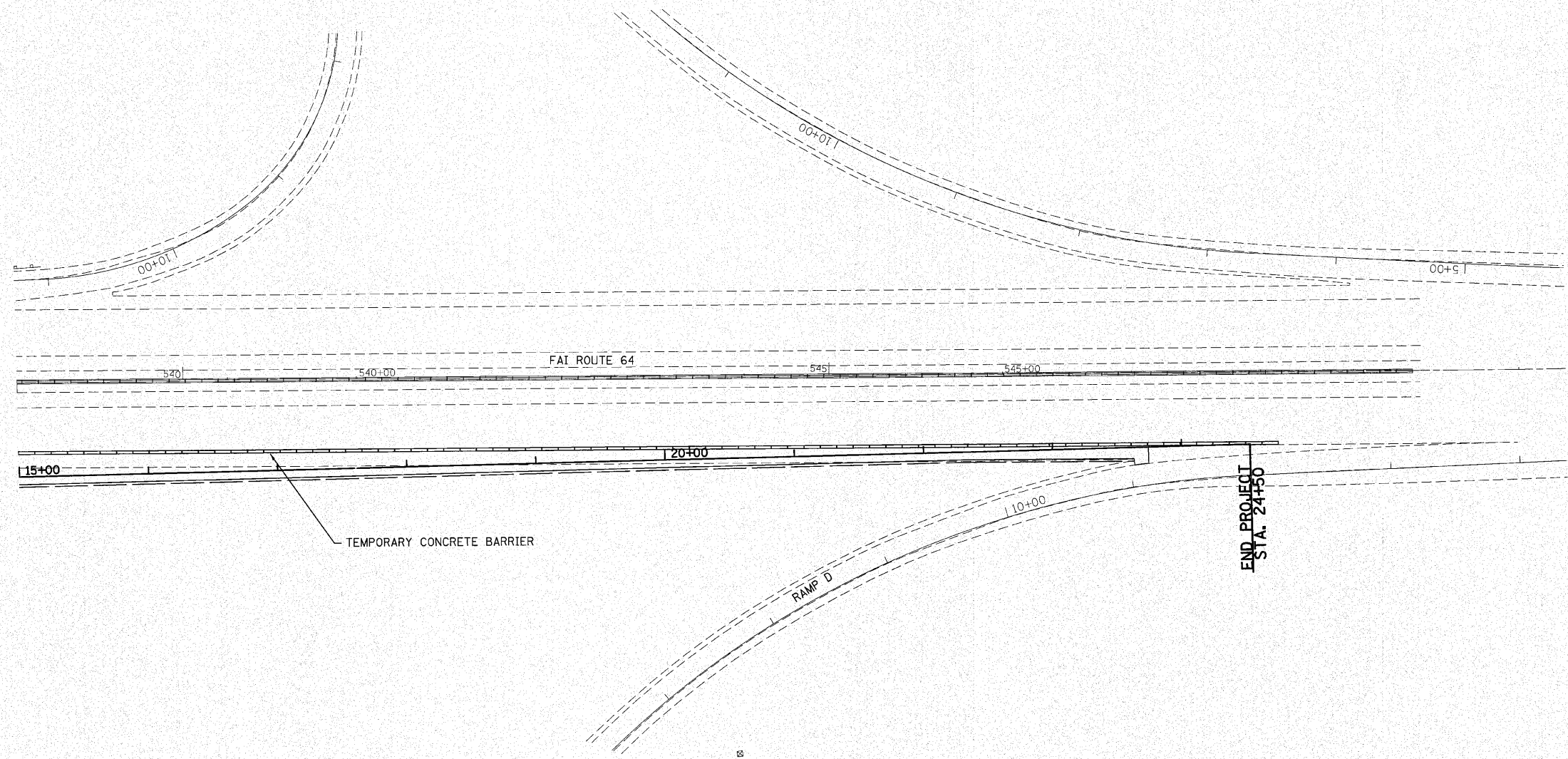
00+00



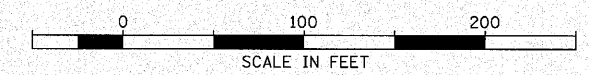
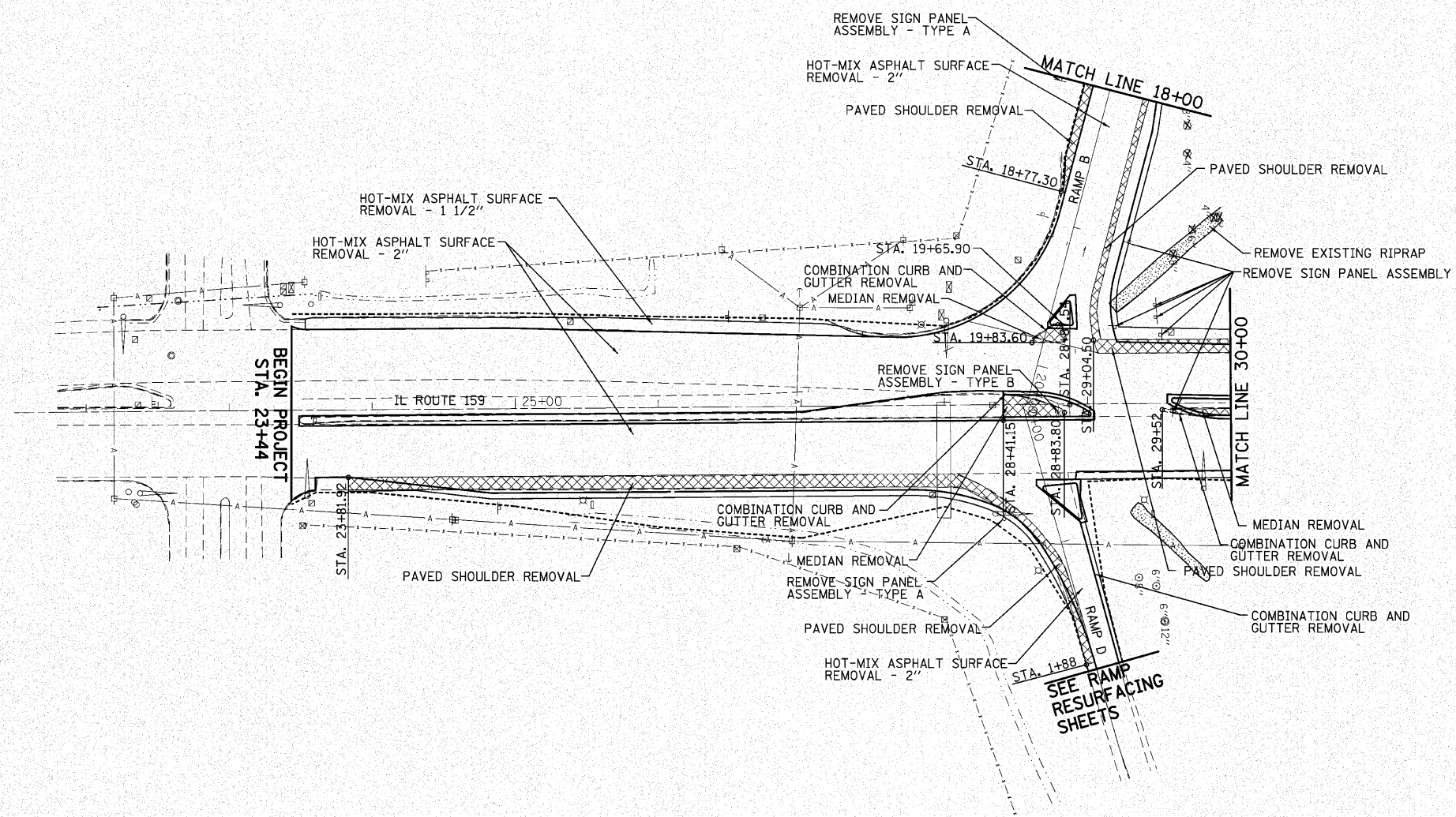
FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL SHEET			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\burnsideem\d0166383\d	76d59-5ht-staging.dgn	DRAWN -	REVISED -		64	82-5K-2	ST. CLAIR	162	32			
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	REVISED -		CONTRACT NO. 76D59							
PLOT DATE = 8/18/2010	DATE -	REVISED -	REVISED -		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT						
				SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.			



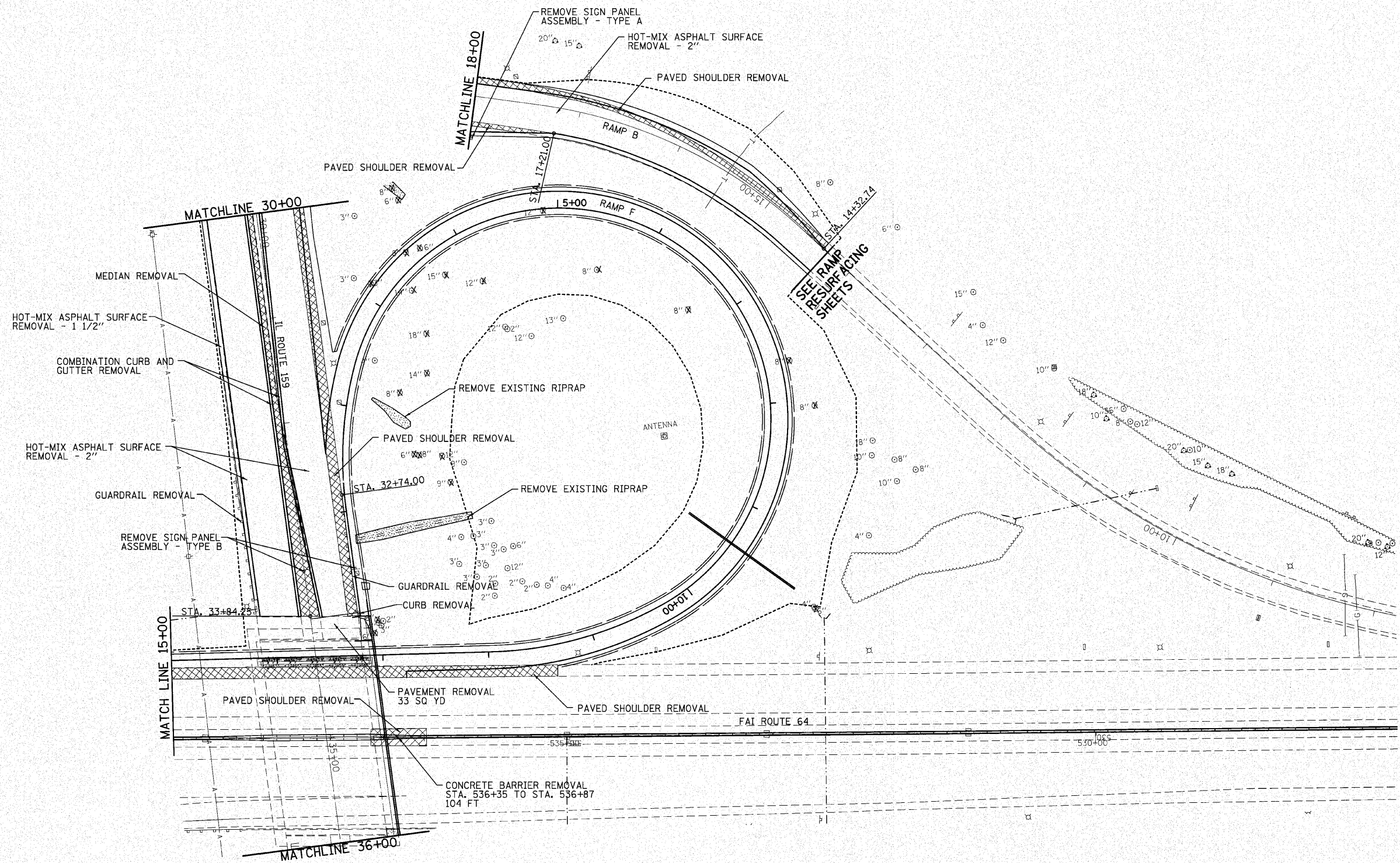
FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL SHEET				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwsidot\burnsideem\166363\d8	76d59-shr-staging.dgn	DRAWN -	REVISED -		64	82-5k-2	ST. CLAIR	162	33				
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -		CONTRACT NO. 76D59				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 8/18/2010	DATE -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.				



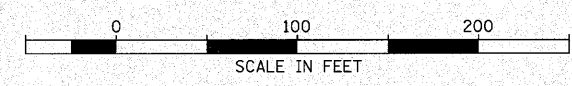
FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL SHEET				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cd\pwork\pwork\burnsideem\vd\166383\ds	76d59-shc-staging.dgn	DRAWN -	REVISED -		64	82-5K-2	ST CLAIR	162	34				
	PLOT SCALE = 58.0000' / IN.	CHECKED -	REVISED -		CONTRACT NO. 76D59				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 8/10/2010	DATE -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.			



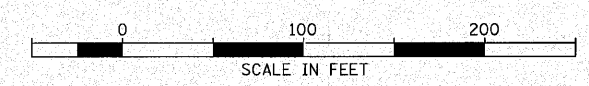
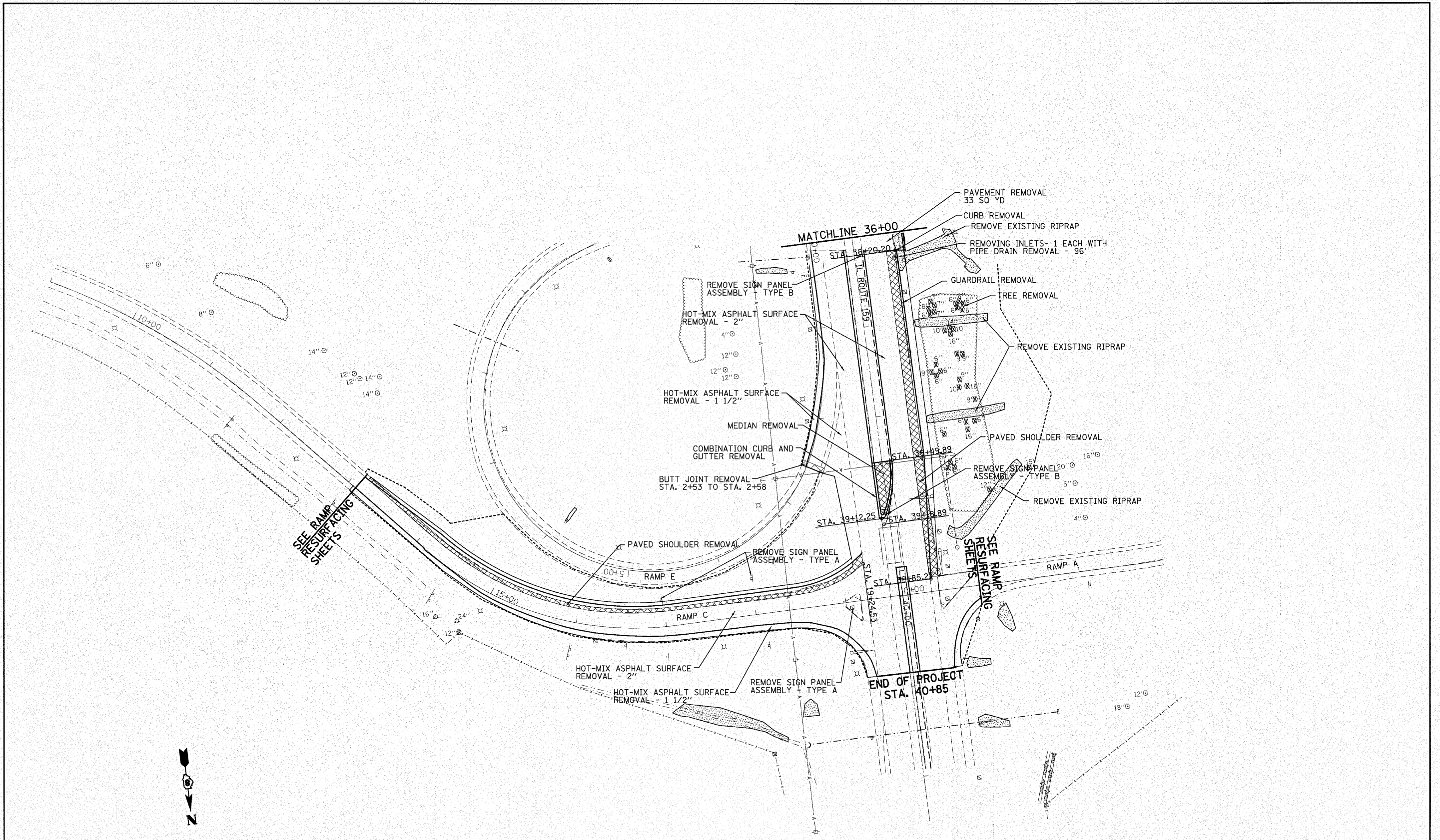
FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVAL SHEETS				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pw_work\pwidot\burnsideem\gd2166363\vd	76d59-shr-removal.dgn	DRAWN -	REVISED -						64	82-5K-2	ST CLAIR	162	35
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -		CONTRACT NO. 76D59				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 8/10/2010	DATE -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.			



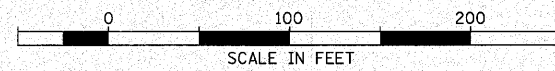
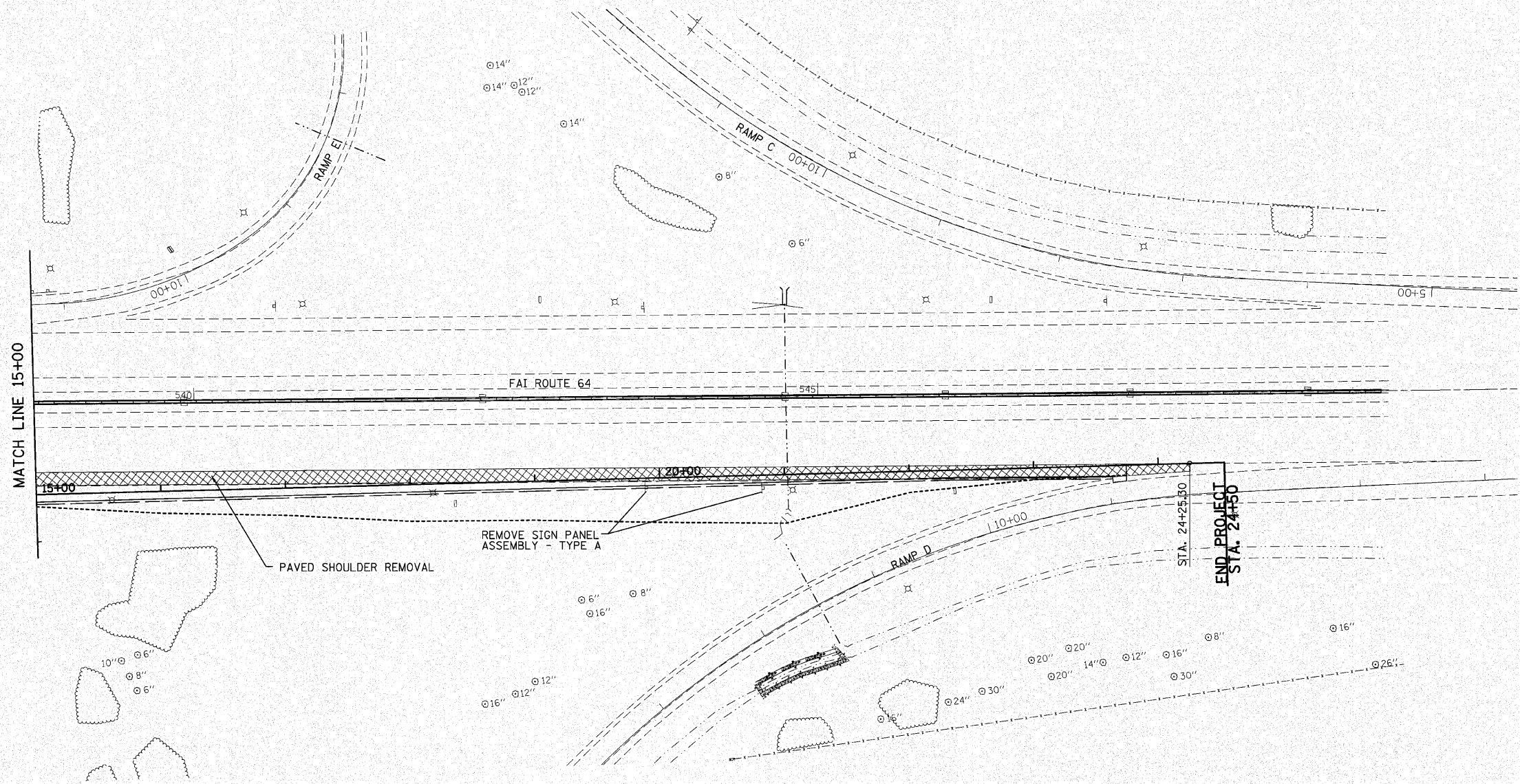
X = TREE REMOVAL



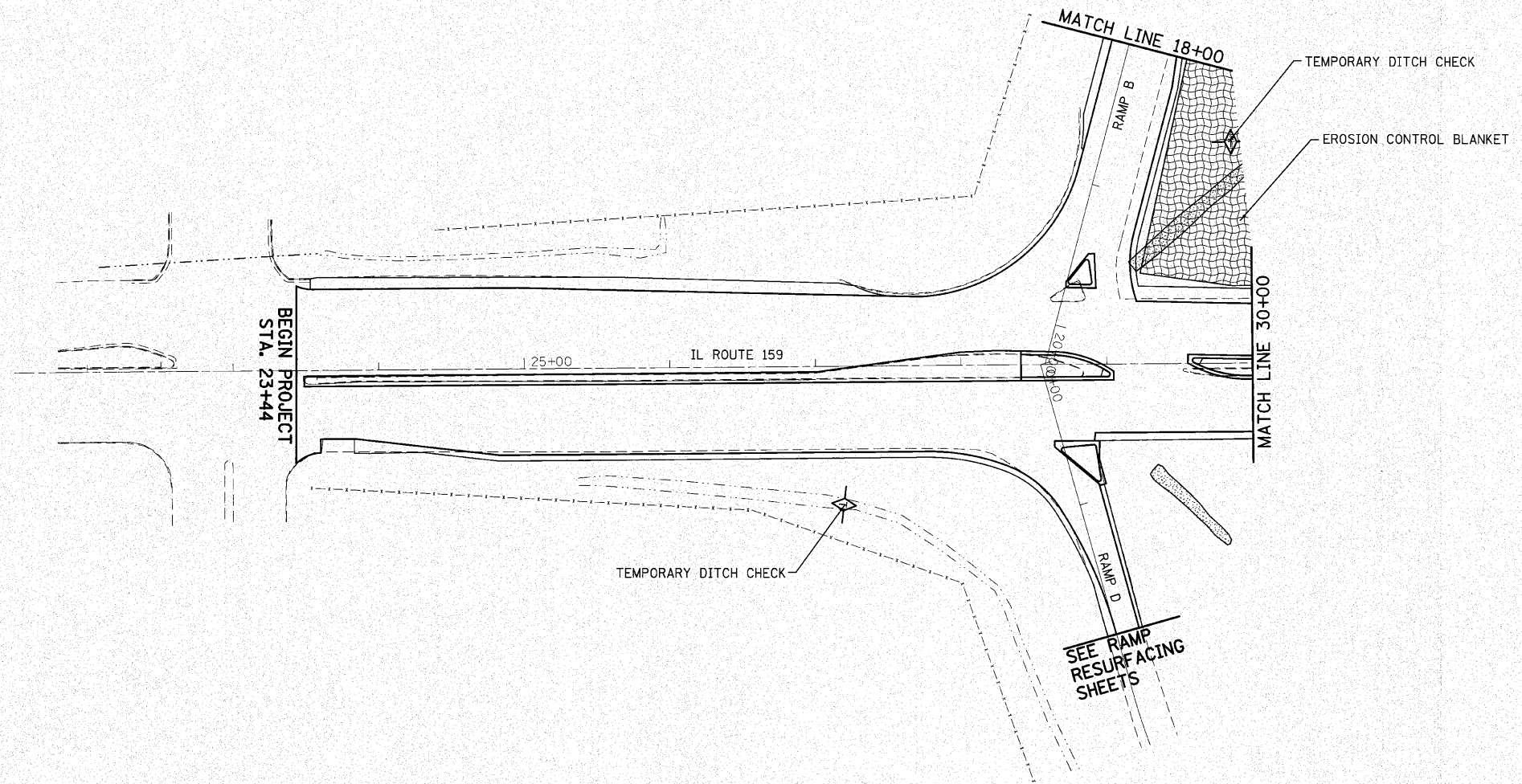
FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVAL SHEETS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\burnsideem\d2166363\d2166363	76d59-sh-t-removal.dgn	DRAWN -	REVISED -					64	82-5K-2	ST CLAIR	162	36
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -	REVISED -		CONTRACT NO. 76D59			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
PLOT DATE = 8/19/2010	DATE -	REVISED -	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.			







FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVAL SHEETS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw_work\pwwdot\burnsideem\d0186363\d	76d59-shr-removal.dgn	DRAWN -	REVISED -					64	82-5K-2	ST CLAIR	162	37
PLOT SCALE = 50,0000 ' / IN.	CHECKED -	REVISED -	REVISED -		CONTRACT NO. 76D59							
PLOT DATE = 9/10/2010	DATE -	REVISED -	REVISED -		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT						

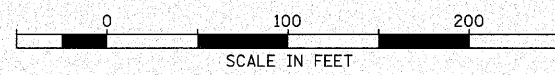


FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVAL SHEETS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwork\pwidot\burnsideem\d0166363\d	76d59-shr-removal.dgn	DRAWN -	REVISED -					64	82-5K-2	ST CLAIR	162	38
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO. 76D59				
	PLOT DATE = 8/10/2010	DATE -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							







LEGEND

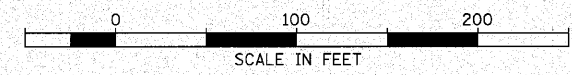
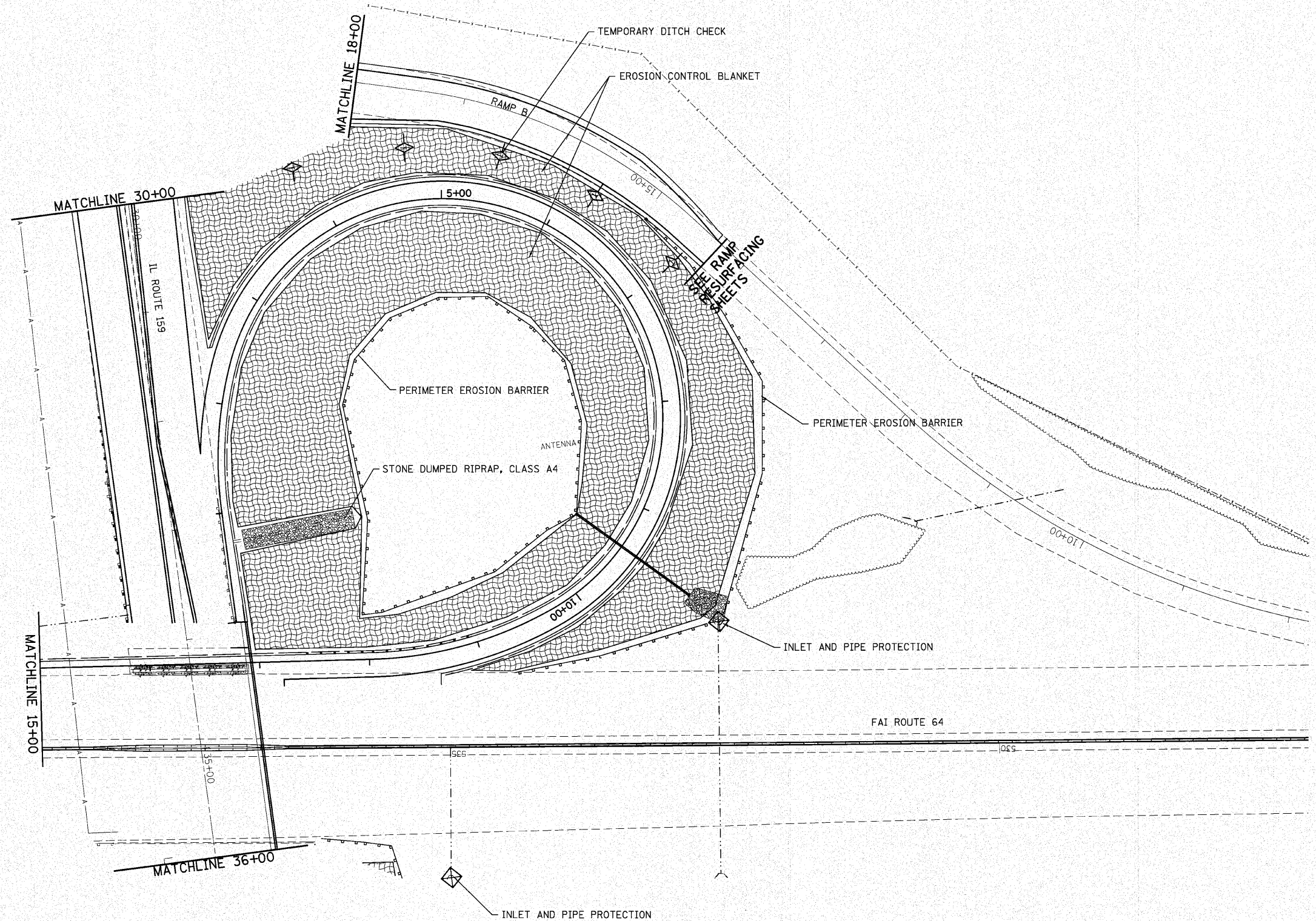
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-  EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER- SILT FILTER FENCE OR OTHER AS APPROVED BY THE ENGINEER
-  INLET AND PIPE PROTECTION- STRAW BALES, FILTER FABRIC, AGGREGATES



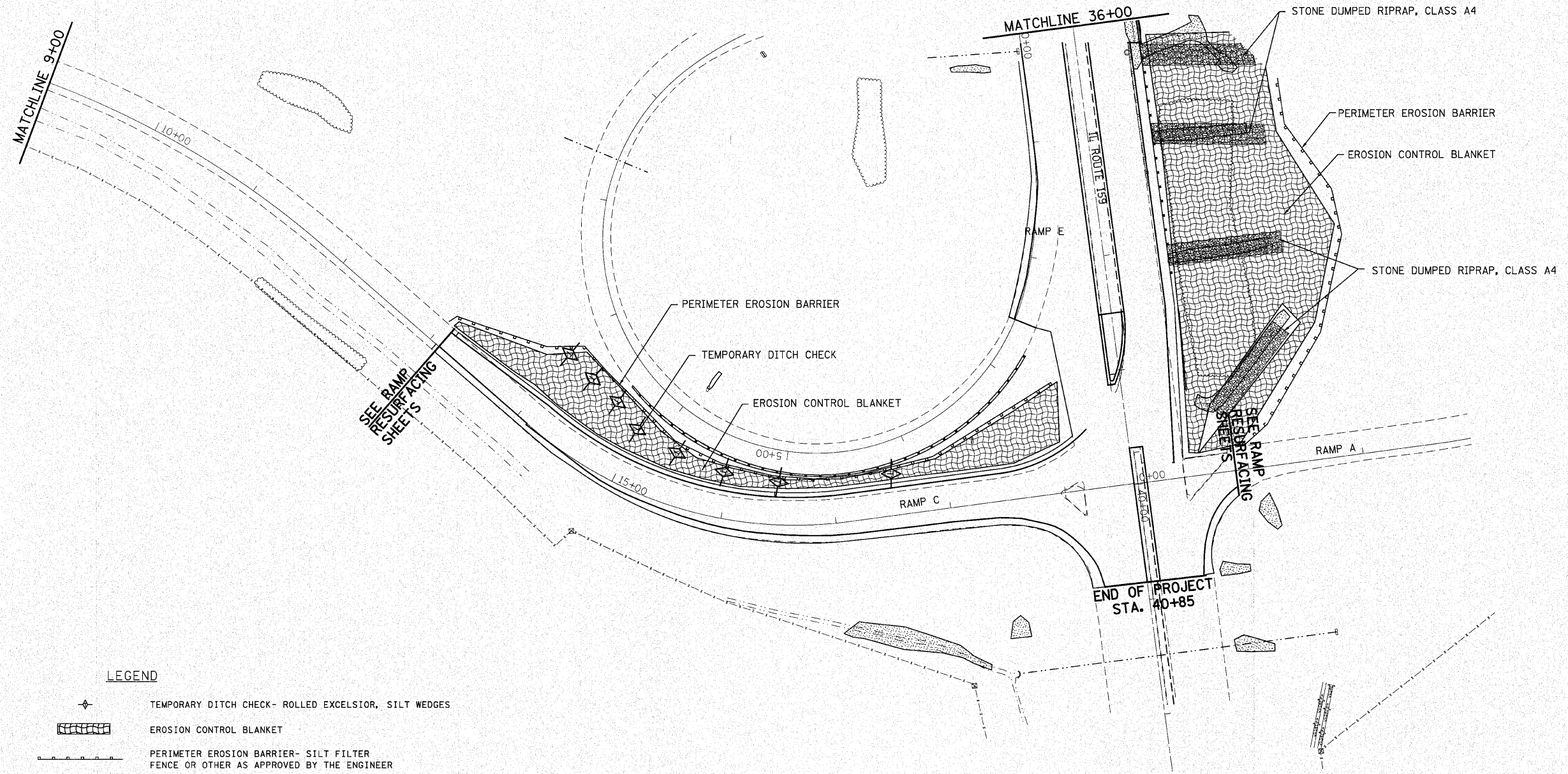
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at\pwwork\pwwdot\burnsideem\00166363\d	76d59-shr-nos.dgn	DRAWN -	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	64	82-5K-2	ST CLAIR	162	39	
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	PLOT DATE = 8/12/2010	DATE -	REVISED -						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

LEGEND





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-  EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER- SILT FILTER FENCE OR OTHER AS APPROVED BY THE ENGINEER
-  INLET AND PIPE PROTECTION- STRAW BALES, FILTER FABRIC, AGGREGATES

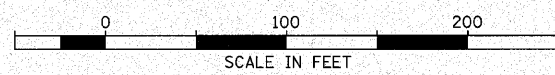


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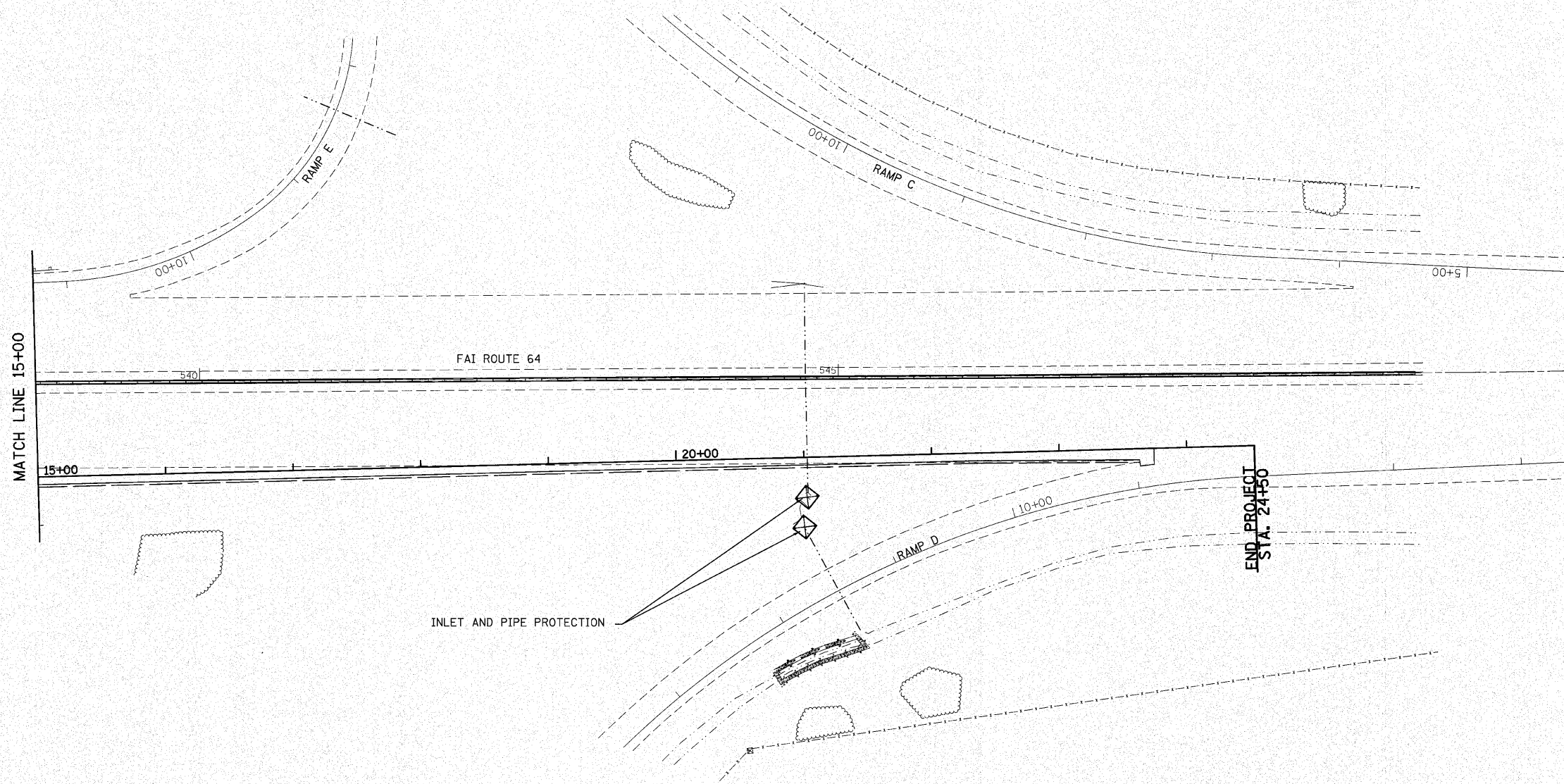


LEGEND





-  TEMPORARY DITCH CHECK- ROLLED EXCELSIOR, SILT WEDGES
-  EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER- SILT FILTER FENCE OR OTHER AS APPROVED BY THE ENGINEER
-  INLET AND PIPE PROTECTION- STRAW BALES, FILTER FABRIC, AGGREGATES

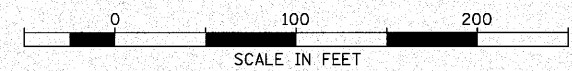


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c:\pwwork\pwwork\burnsideem\d0186363\1.dwg	76d59-shit-eros.dgn	DRAWN =	REVISED =			64	82-5K-2	ST. CLAIR	162	41
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	PLOT DATE = 8/18/2018	DATE =	REVISED =			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

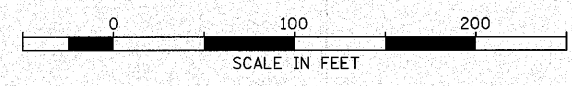
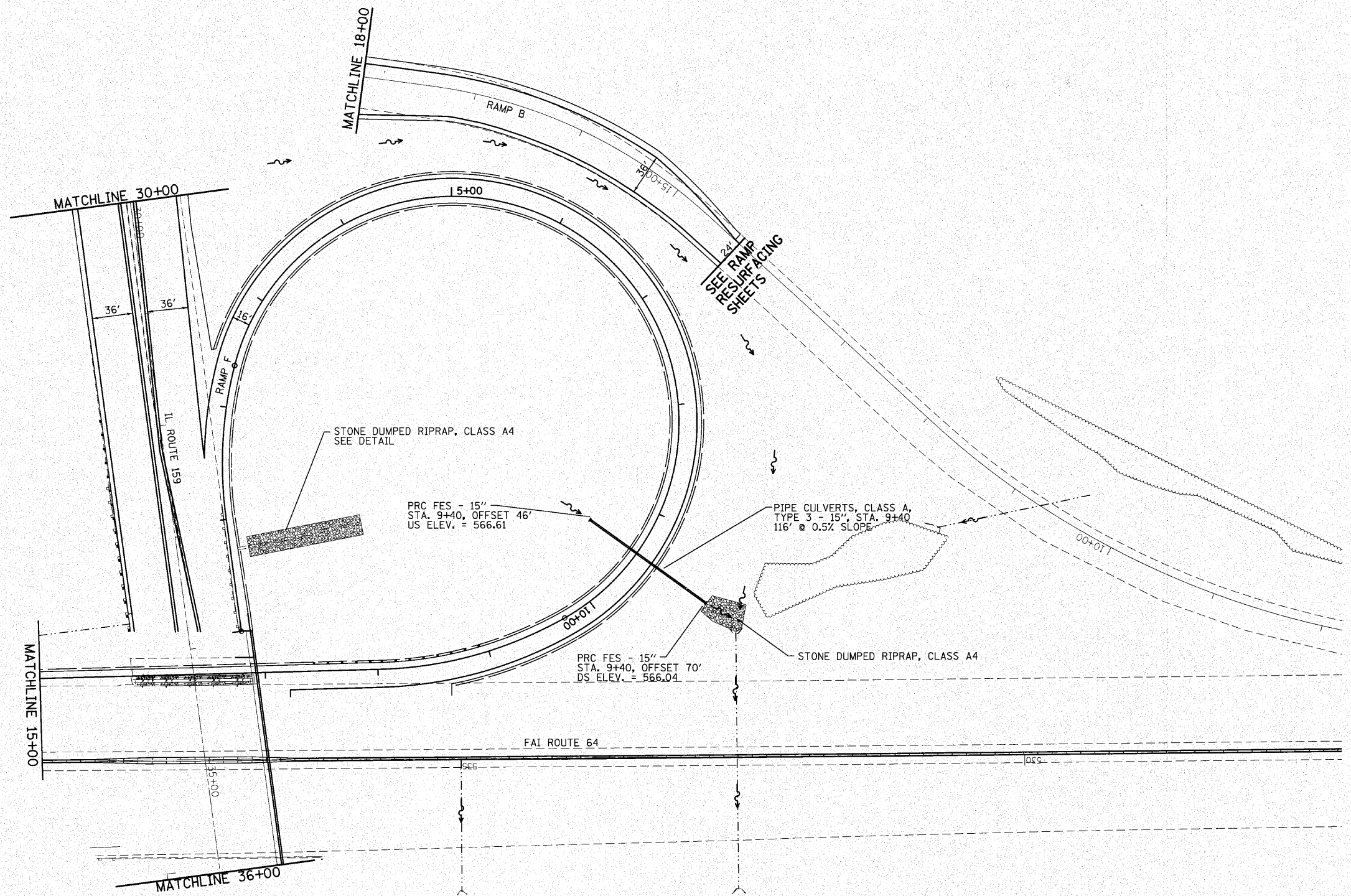


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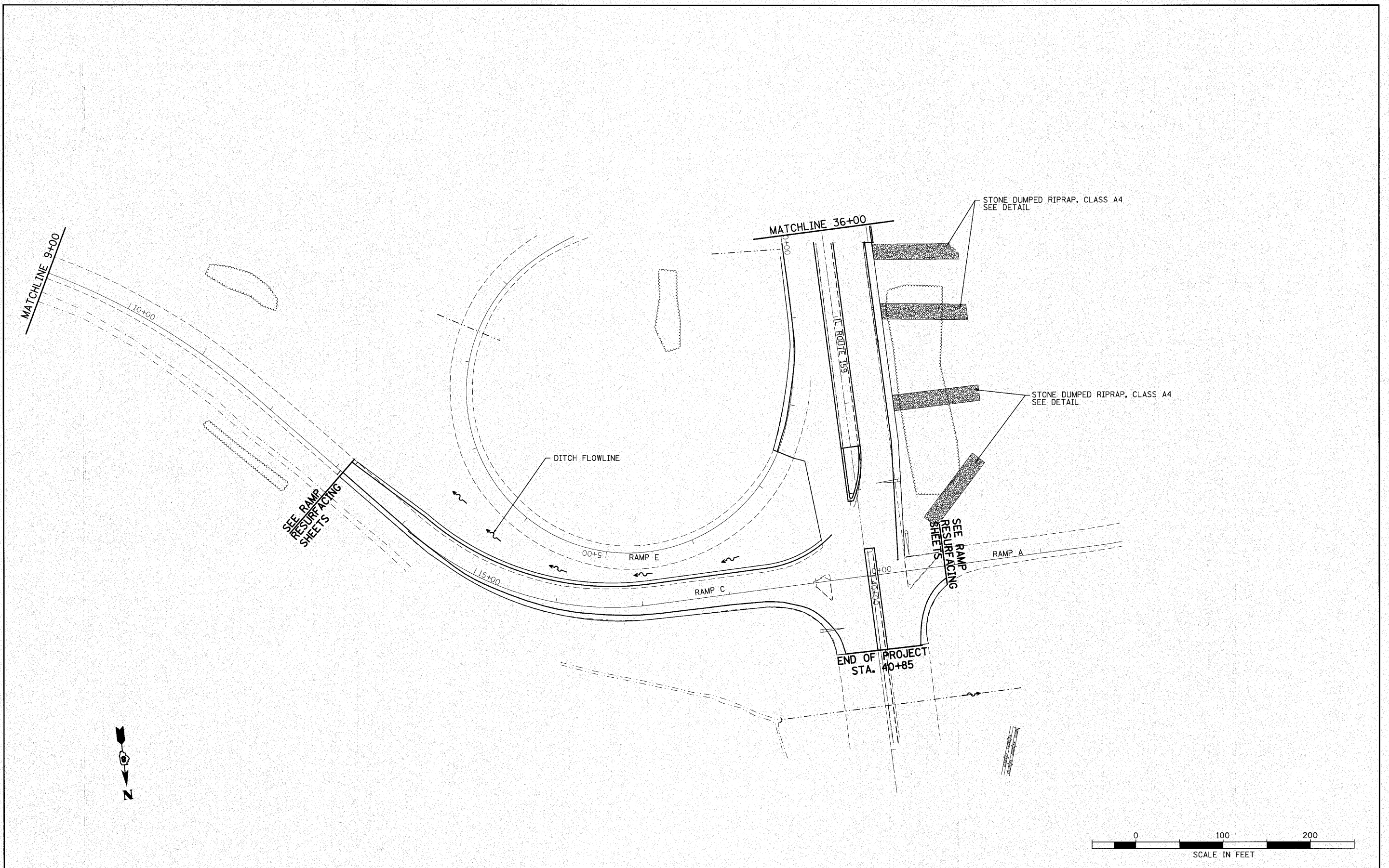
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-  EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER- SILT FILTER FENCE OR OTHER AS APPROVED BY THE ENGINEER
-  INLET AND PIPE PROTECTION- STRAW BALES, FILTER FABRIC, AGGREGATES



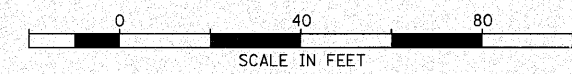
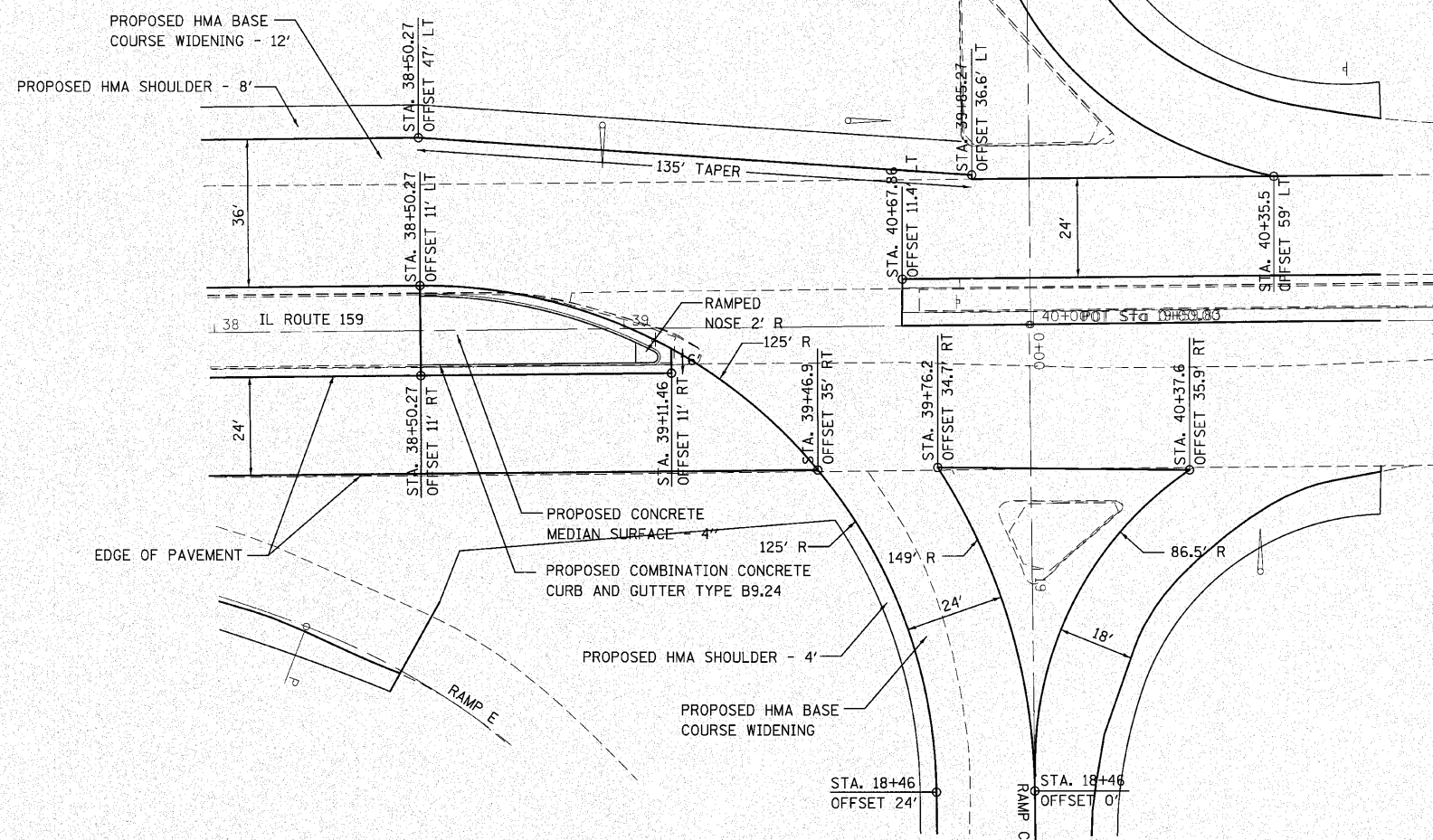
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FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE SHEET				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\dot\burnsideem\02166363\d	75d59-sht-drainudgn	DRAWN -	REVISED -		64	ST CLAIR	ST CLAIR	162	43				
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FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE SHEET			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 8/18/2018		DATE -	REVISED -					FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



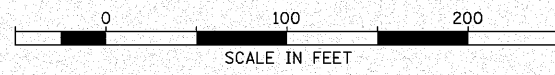
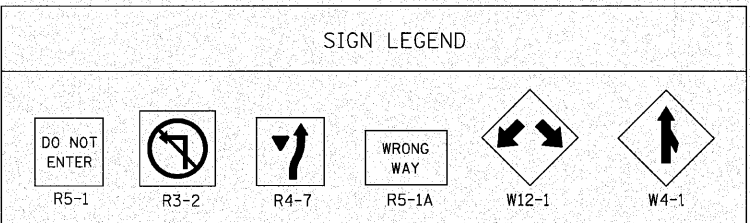
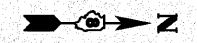
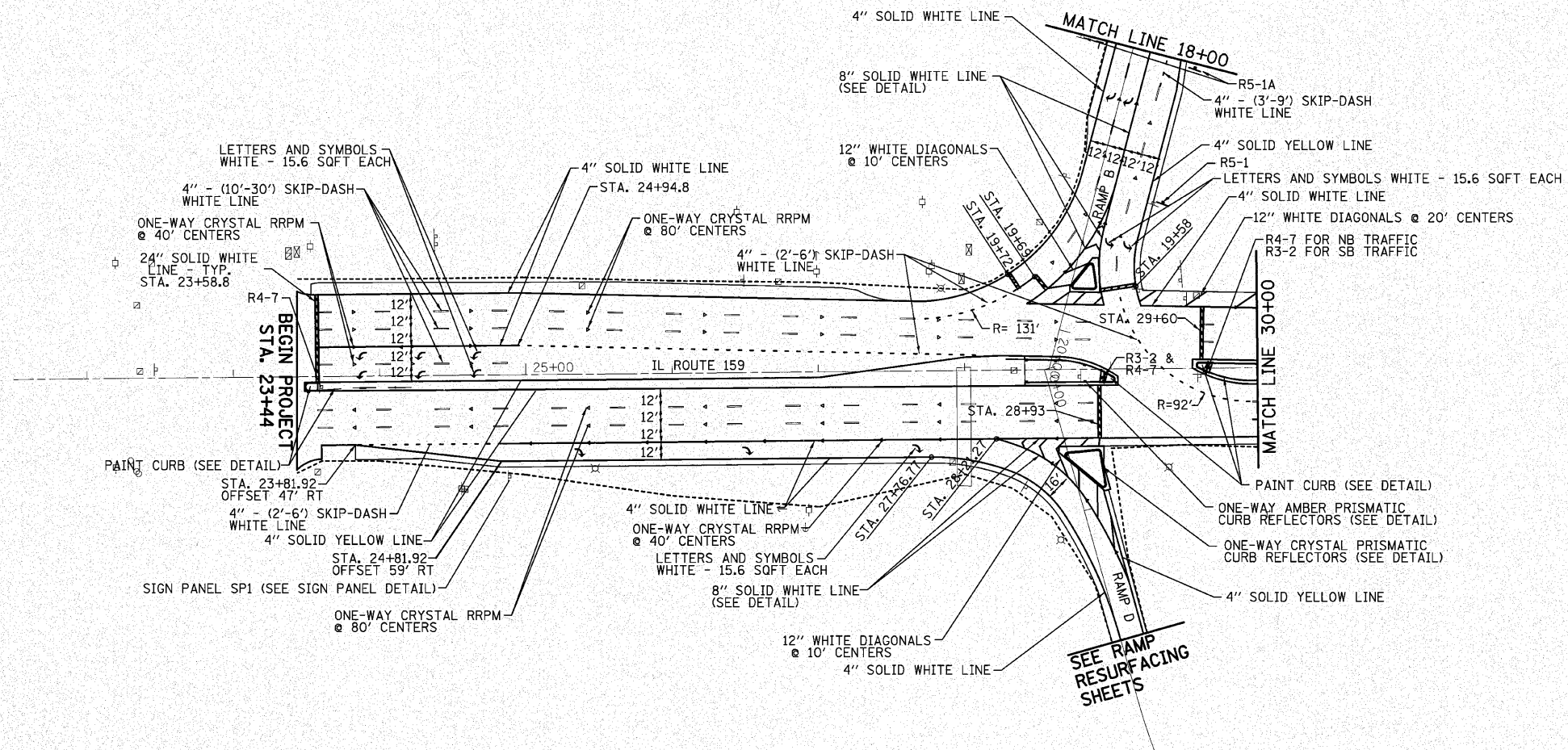
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

INTERSECTION DETAILS

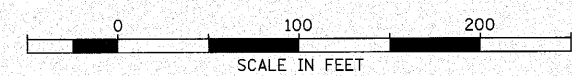
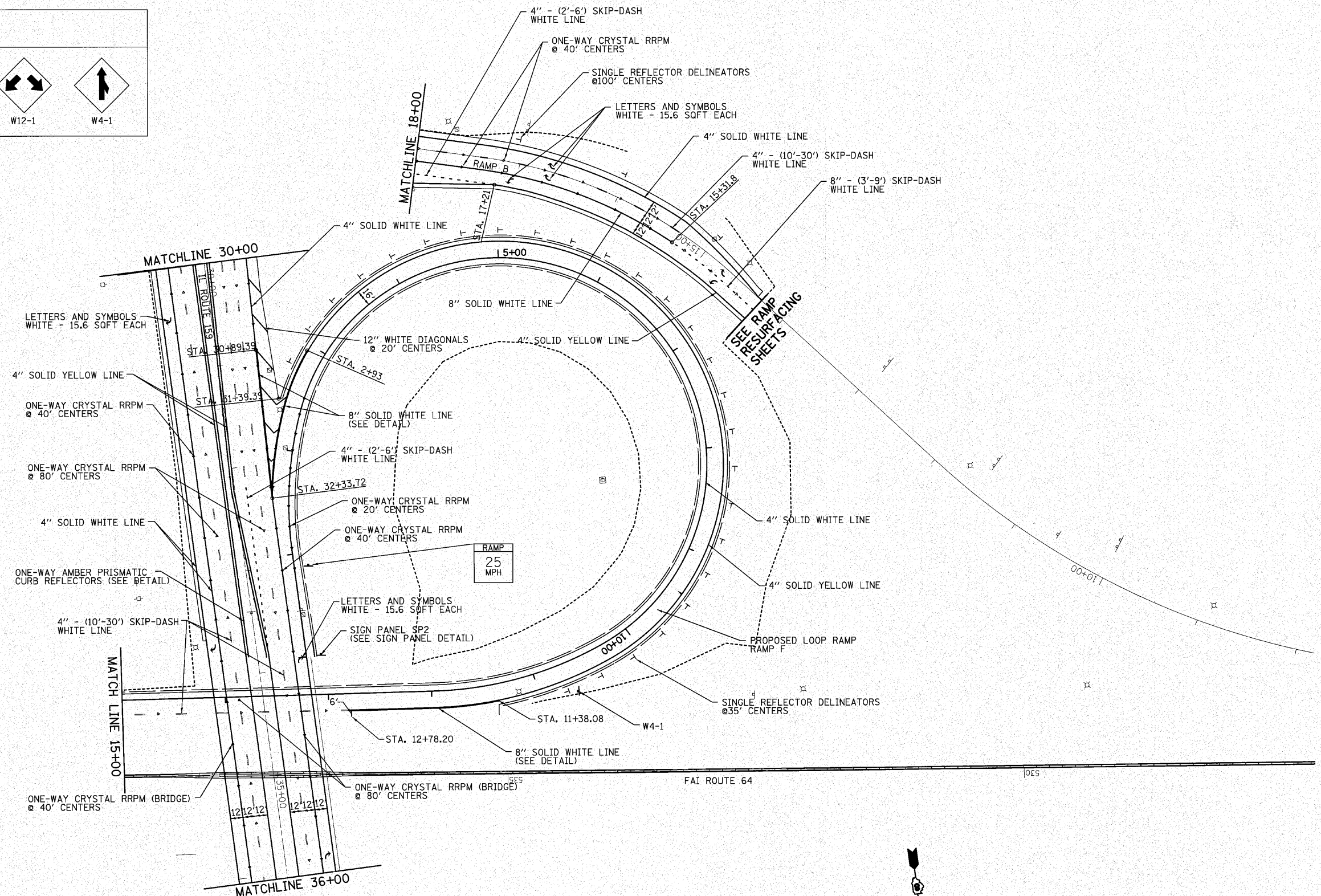
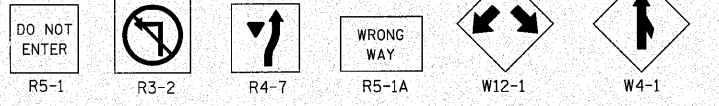
SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST CLAIR	162	46
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D59	



FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT DATE = 8/10/2010	DATE -	REVISED -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

SIGN LEGEND



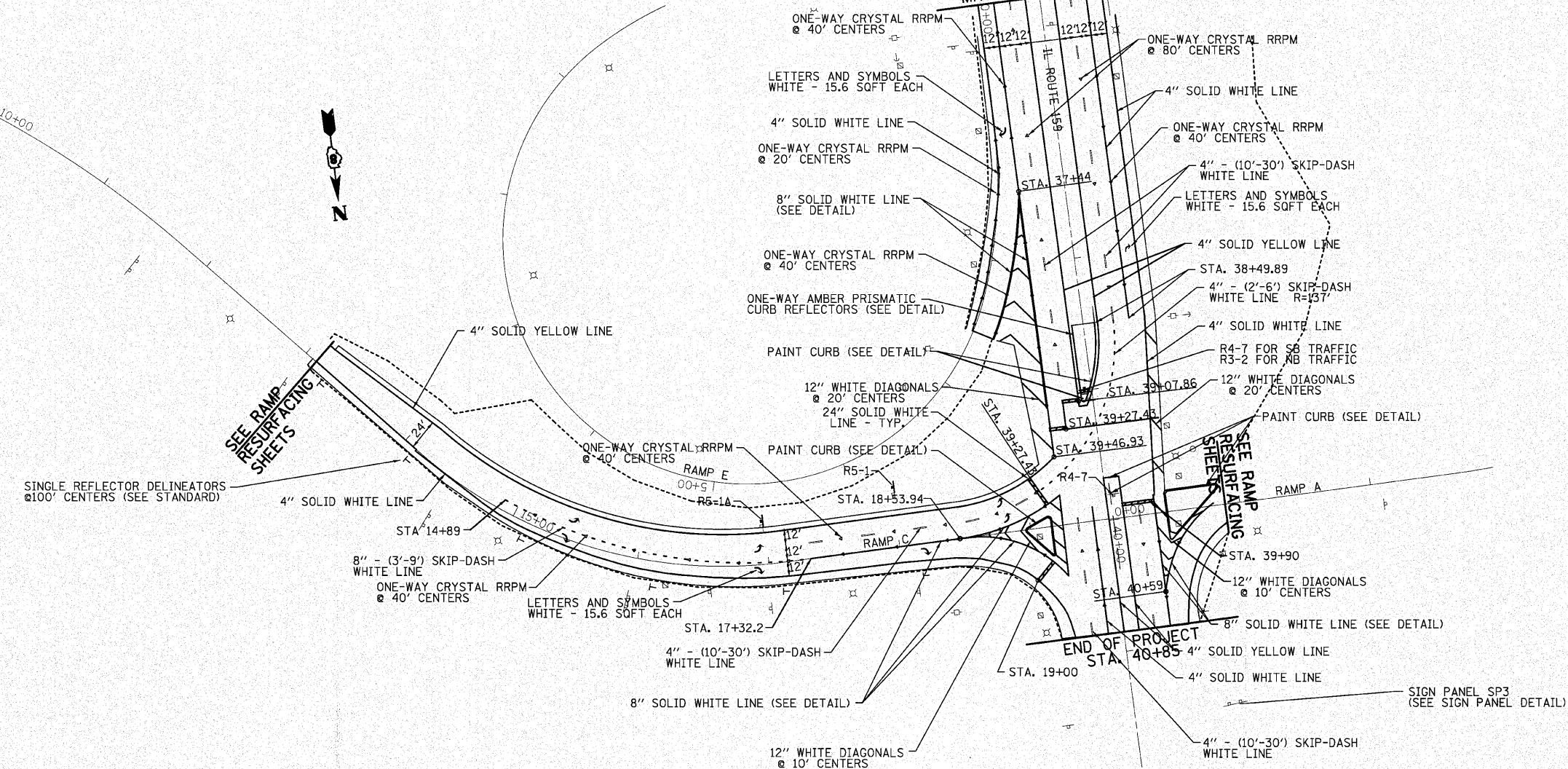
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c:\pwwork\pwwork\burnsideem\2165363\d075d59+shz\pk.dgn	PLOT SCALE = 50.0000' / 1"	DRAWN -	REVISED -					64	82-5K-2	ST. CLAIR	162	48
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		DATE -	REVISED -									

MATCHLINE 9+00

110+00



MATCHLINE 36+00

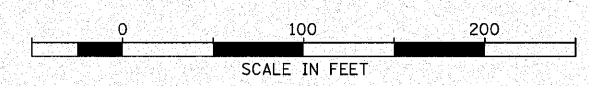


SEE RAMP RESURFACING SHEETS

SEE RAMP RESURFACING SHEETS

SINGLE REFLECTOR DELINEATORS @ 100' CENTERS (SEE STANDARD)

SIGN LEGEND					
R5-1	R3-2	R4-7	R5-1A	W12-1	W4-1



FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING SHEETS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pwork\pwork\burnsideem\166363\	76d59-shk-prkvdgn	DRAWN -	REVISED -					64	82-5K-2	ST CLAIR	162	49
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PLT DATE = 8/10/2010		DATE	REVISED -					ILLINOIS FED. AID PROJECT				

ELECTRICAL GENERAL NOTES























1. ALL VEHICLES AND PEDESTRIAN SIGNAL HEADS SHALL HAVE 12 INCH SECTIONS. MOUNTING HARDWARE SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, NUTS AND WASHERS SHALL BE STAINLESS STEEL. ANTI-SEIZE PASTE COMPOUND SHALL BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
2. BACKPLATES SHALL BE ABS PLASTIC.
3. THE LOCATION OF MAST ARM SUPPORTS SHALL BE APPROVED BY THE ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT OR 2 FEET FROM THE EDGE OF SHOULDER, WHICHEVER DISTANCE IS GREATER. IN CURBED SECTIONS, THE MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 6 FEET FROM THE FACE OF THE CURB. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLE.
4. ALL TRAFFIC SIGNAL CABLES SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED. TERMINAL ENDS SHALL HAVE CRIMPED-ON RING TONGUE CONNECTORS. GROUNDING CONDUCTOR SHALL BE TYPE XLP NO. 6 A. W. G. STRANDED COPPER AND IN ACCORDANCE WITH IDOT STANDARD 873001.
5. CONDUIT AND CABLE LENGTHS SHOWN IN THE PLANS ARE ESTIMATED QUANTITIES. FINAL QUANTITIES SHALL BE MEASURED IN THE FIELD PER IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
6. THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWED IN THE PAVEMENT.
7. CENTER TO CENTER DISTANCE BETWEEN CONDUITS, WHERE TWO OR MORE LOOP LEAD-IN CONDUITS ARE INSTALLED FROM THE EDGE OF PAVEMENT TO THE NEAREST HANDHOLE, SHALL BE SIX INCHES MINIMUM AT THE EDGE OF PAVEMENT.
8. DETECTOR LOOP LEAD-IN SPLICES SHALL BE MADE IN A HANDHOLE PER SECTION 873 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. CONDUCTORS SHALL BE SPLICED IN A RIGID MOLD. ROSIN-CORE SOLDER SHALL BE USED.
9. CALL DELAY SHALL NOT FUNCTION WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
10. CALL CARRY-OVER SHALL FUNCTION ONLY WHEN THE RELATED PHASES ARE IN THE GREEN MODE.
11. ALL INDUCTION LOOP DETECTOR AMPLIFIERS SUPPLIED FOR THIS PROJECT SHALL BE RACK MOUNTED AND SHALL HAVE THE CAPACITY OF OPERATING WITH BOTH DELAY AND EXTENSION MODES ACTIVE, IF A TIME SETTING IS PROGRAMMED.
12. SLOPE HANDHOLE COVERS TO MATCH PROPOSED GRADE ELEVATIONS.
13. THE CONDUIT ATTACHED TO THE BRIDGE STRUCTURE SHALL BE INSTALLED ON THE TOP OF THE BOTTOM FLANGE ALONG THE INSIDE FACE OF THE WESTERN-MOST WIDE-FLANGE BEAM.
14. ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY ATTEMPT TO CONSTRUCT ANY COMPONENT OF THE VARIOUS TRAFFIC SIGNAL INSTALLATIONS. AGENCIES KNOWN TO HAVE UNDERGROUND FACILITIES WITHIN THE LIMITS OF THIS IMPROVEMENT ARE THE FOLLOWING: (MEMBERS OF J. U. L. I. E. PHONE (800)-489-0123 ARE INDICATED BY *)
 - ILLINOIS BELL TELEPHONE
 - UNION ELECTRIC
 - AMEREN IP (GAS)
 - CROWN CABLE TV
 - CITY OF O•FALLON • WATER
15. LOCATE UNDERGROUND CABLES PRIOR TO ATTEMPTING TO CONSTRUCT THIS PROJECT.
16. THE ACTUAL DEPTHS OF THE CONCRETE FOUNDATIONS FOR THE MAST ARM SUPPORT POLES ARE AS FOLLOWS:
 - SOUTH JUNCTION
 - STA 29+10, 58.6' RT, 22 FT ARM, 10 FT DEEP
 - NORTH JUNCTION
 - STA 38 +91.2, 62.8• LT, 48 FT ARM, 13 FT DEEP
 - STA 39 +90.4, 51.2• LT, 44 FT ARM, 13 FT DEEP
17. INSTALLATION OF THE DETECTOR LOOP ON OR NEAR THE PAVEMENT MARKING AREA SHALL BE DONE WITH EXTREME CARE. THE CONTRACTOR SHALL ALSO TAKE EXTRA CARE IN APPLYING SEALER SO THAT IT WILL NOT SPILL OVER THE PAVEMENT MARKINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE PAVEMENT MARKING AS A RESULT OF NEGLIGENCE OR POOR WORKMANSHIP. DAMAGE SHALL BE REPAIRED AT HIS/HER EXPENSE TO THE SATISFACTION OF THE ENGINEER.
18. LIGHT DETECTOR AMPLIFIERS MAY BE INSTALLED INTO THE EXISTING DETECTOR RACK OR AN INDEPENDENT CHASSIS PROVIDED BY THE MANUFACTURER. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
19. THE REMOVED TRAFFIC SIGNAL EQUIPMENT SHALL REMAIN THE PROPERTY OF THE STATE OF ILLINOIS. UPON REMOVAL, THE CONTRACTOR SHALL DELIVER SUCH EQUIPMENT TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC AND MAINTENANCE YARD, 9601 ST. CLAIR AVE, FAIRVIEW HEIGHTS, IL.

HIGHWAY STANDARDS FOR TRAFFIC SIGNALS

THE FOLLOWING ILLINOIS DEPARTMENT OF TRANSPORTATION HIGHWAY STANDARDS SHALL APPLY TO THIS PROJECT:

701701-06	URBAN LANE CLOSURE MULTI-LANE INTERSECTION
701901-01	TRAFFIC CONTROL DEVICES
805001-01	ELECTRIC SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS PHASING SEQUENCE
873001-02	TRAFFIC SIGNAL GROUND AND BOND
877001-04	STEEL MAST ARM ASSEMBLY AND POLE 16' THRU 55'
878001-08	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

TRAFFIC SIGNALS LEGEND

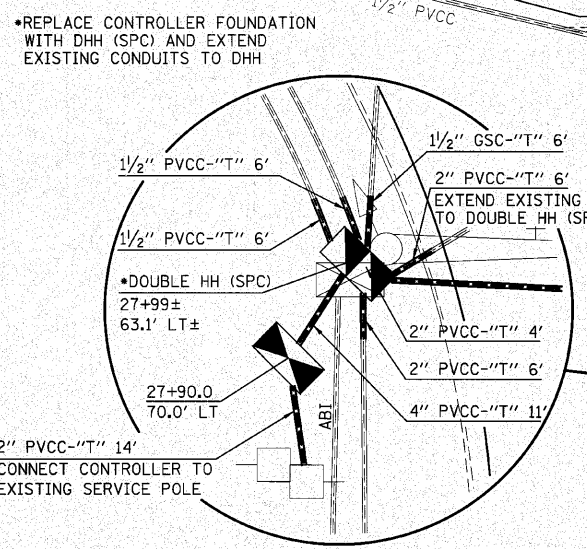
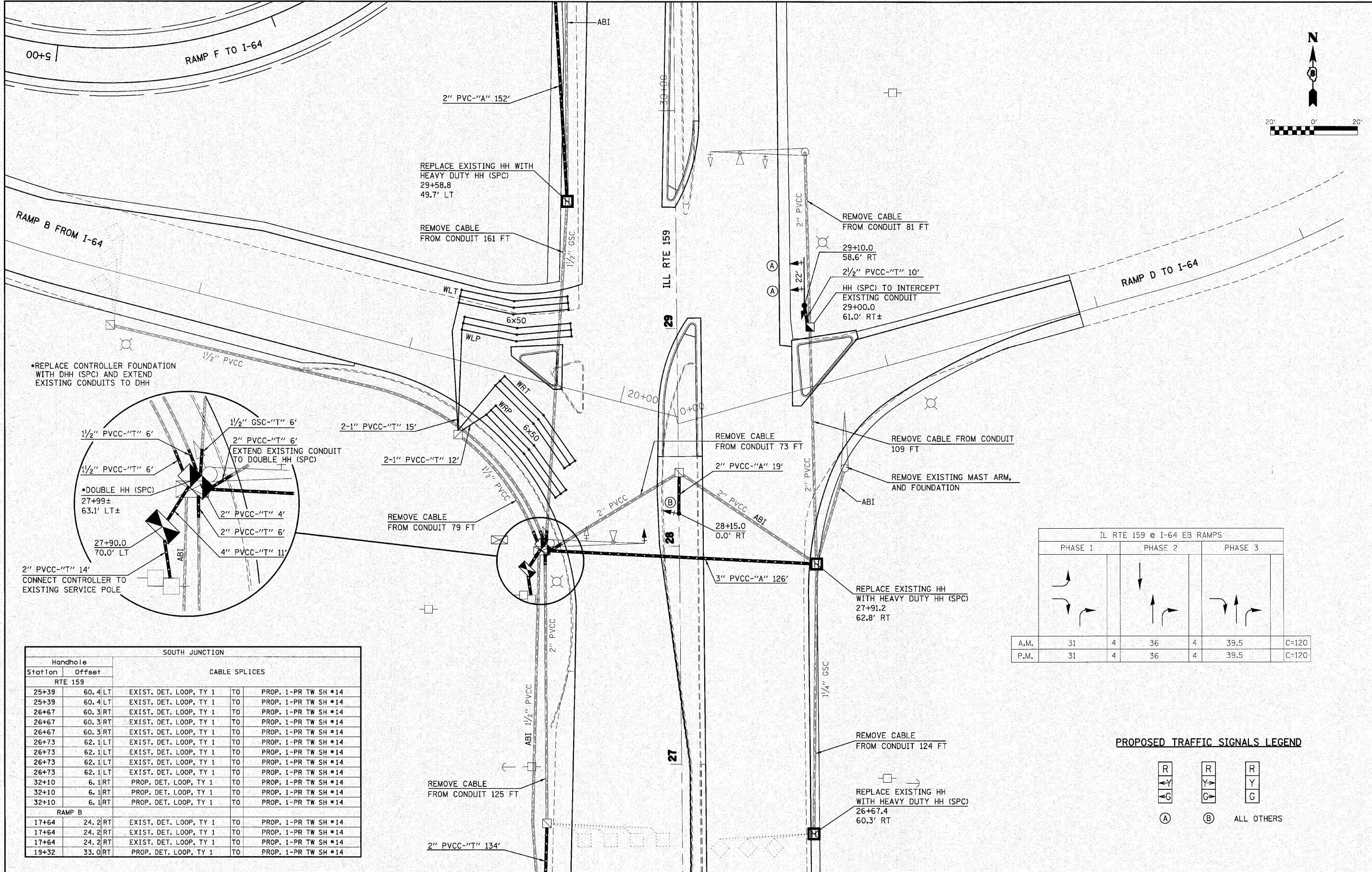
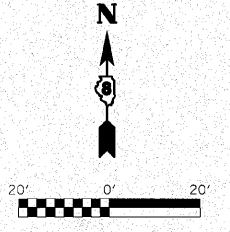
EVPS	EMERGENCY VEHICLE PRIORITY SYSTEM
GSC	GALVANIZED STEEL CONDUIT
PVCC	POLYVINYL CHLORIDE CONDUIT
ABI	ABANDON IN PLACE
	EXISTING SIGNAL POST
	EXISTING HIGHWAY LIGHTING
	EXISTING TRAFFIC SIGNAL MAST ARM
	EXISTING HANDHOLE
	EXISTING LIGHTED SIGN
	EXISTING DETECTOR LOOP
	EXISTING CONTROLLER
	EXISTING STREET NAME SIGN/TRAFFIC SIGN
	EXISTING SERVICE INSTALLATION
	EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM DETECTOR (EVPS)
	EXISTING CONDUIT
	PROPOSED SIGNAL HEAD
	PROPOSED SIGNAL HEAD WITH BACKPLATE, MAST ARM MOUNTED
	PROPOSED SIGNAL HEAD WITH BACKPLATE
	PROPOSED EMERGENCY VEHICLE PRIORITY SYSTEM DETECTOR (EVPS)
	PROPOSED HANDHOLE
	PROPOSED DOUBLE HANDHOLE
	PROPOSED DETECTOR LOOP
	PROPOSED CONDUIT: "T" TRENCH, "P" PUSH, "A" AUGERED, SIZE SPECIFIED
	PROPOSED SIGNAL POST
	PROPOSED CONTROLLER
	PROPOSED HEAVY-DUTY HANDHOLE

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES AND LEGEND	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cd\p\work\p\dot\burnsideem\0218578\03	76d59-ah-t-sldgn	DRAWN -	REVISED -			64	82-5K-2	ST. CLAIR	162	51
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	PLOT DATE = 6/9/2010	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO. 1 OF 9 SHEETS	STA.	TO STA.			

DETECTOR LOOP REQUIREMENTS & CALCULATIONS						
LOCATION	LOOP	PHASE	LOOP SIZE	REQUIRED NUMBER OF TURNS	CALCULATED INDUCTANCE MICROHENRIES @ CONTROLLER (mH)	CALCULATED RESISTANCE @ CONTROLLER (OHMS)
SOUTH JUNCTION						
SB MAIN LINE	NRF	6	6' x 6'	4	182	2.38
SB MAIN LINE	NMF	6	6' x 6'	4	180	2.31
SB MAIN LINE	NLF	6	6' x 6'	4	177	2.15
EB EXIT RAMP	WLT	7	6' x 50'	2 - 4 - 2	437	2.31
EB EXIT RAMP	WLP	7	6' x 50'	2 - 4 - 2	434	2.24
EB EXIT RAMP	WRT	B	6' x 50'	2 - 4 - 2	428	2.09
EB EXIT RAMP	WRP	B	6' x 50'	2 - 4 - 2	426	2.05
NORTH JUNCTION						
WB EXIT RAMP	ERT	D	6' x 50'	2 - 4 - 2	437	3.09
WB EXIT RAMP	ELP	3	6' x 50'	2 - 4 - 2	438	3.13
WB EXIT RAMP	ELT	3	6' x 50'	2 - 4 - 2	442	3.21

SCHEDULE OF QUANTITIES

SP	ITEM	UNIT	QUANTITY
	LOCATING UNDERGROUND CABLE	FOOT	4,115
	CONDUIT IN TRENCH, 1 1/2" DIA, GALVANIZED STEEL	FOOT	16
	CONDUIT IN TRENCH, 1" DIA, PVC	FOOT	94
	CONDUIT IN TRENCH, 1 1/4" DIA., PVC	FOOT	6
	CONDUIT IN TRENCH, 1 1/2" DIA, PVC	FOOT	6
	CONDUIT IN TRENCH, 2" DIA, PVC	FOOT	396
	CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	313
	CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	20
	• CONDUIT, AUGERED, 2" DIA., PVC	FOOT	575
	• CONDUIT, AUGERED, 3" DIA., PVC	FOOT	542
	• CONDUIT SPLICE	EACH	5
	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	168
	HANDHOLE	EACH	8
	• HANDHOLE (SPECIAL)	EACH	2
	• HEAVY-DUTY HANDHOLE (SPECIAL)	EACH	3
	• DOUBLE HANDHOLE (SPECIAL)	EACH	2
	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	851
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2,419
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4,591
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	9,106
	ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	60
	TRAFFIC SIGNAL POST, ALUMINUM 16 FT.	EACH	3
	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
	CONCRETE FOUNDATION, TYPE A	FOOT	9
	CONCRETE FOUNDATION, TYPE D	FOOT	7
	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26
	DRILL EXISTING HANDHOLE	EACH	9
	SIGNAL HEAD, POLYCARBONATE, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	7
	SIGNAL HEAD, POLYCARBONATE, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
	TRAFFIC SIGNAL BACKPLATE, PLASTIC	EACH	10
	• INDUCTION LOOP DETECTOR AMPLIFIER	EACH	2
	DETECTOR LOOP, TYPE 1	FOOT	1,572
	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2
	RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	2
	• RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,439
	• REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2
	• REMOVE EXISTING HANDHOLE	EACH	6
	• REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
	• FURNISHING AND INSTALLING CABLE SPLICES	EACH	28
	• ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	3,765
	• EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1,048
	• SEE SPECIAL PROVISION FOR THIS ITEM		

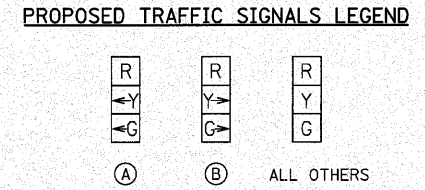


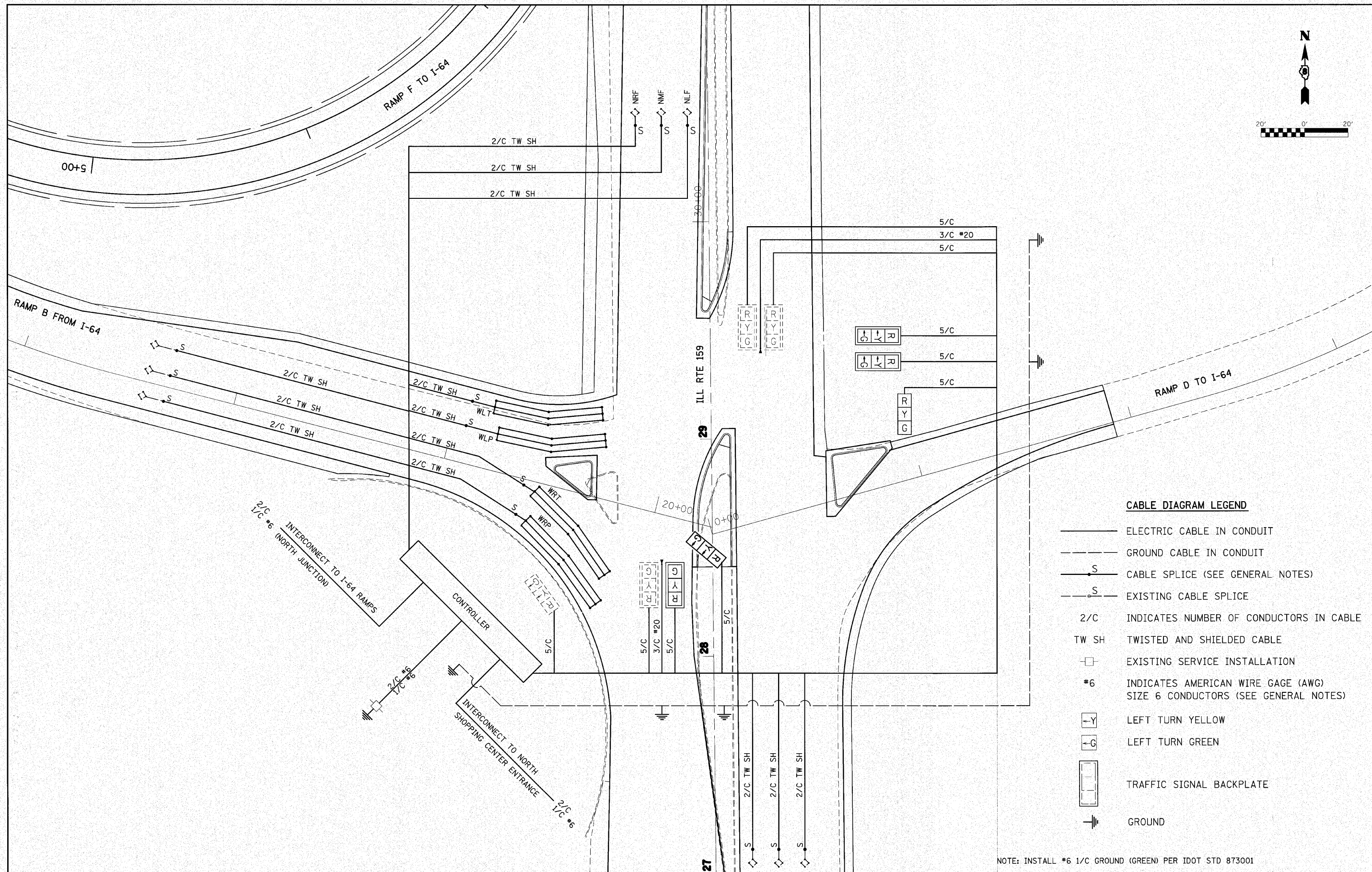
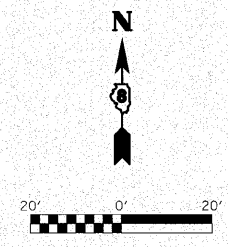
IL RTE 159 @ I-64 EB RAMP

	PHASE 1	PHASE 2	PHASE 3		
A.M.	31	4	36	4	39.5
P.M.	31	4	36	4	39.5
					C=120

SOUTH JUNCTION

Station	Offset	CABLE SPLICES			
RTE 159					
25+39	60.4 LT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
25+39	60.4 LT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
26+67	60.3 RT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
26+67	60.3 RT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
26+67	60.3 RT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
26+73	62.1 LT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
26+73	62.1 LT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
26+73	62.1 LT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
26+73	62.1 LT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
32+10	6.1 RT	PROP. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
32+10	6.1 RT	PROP. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
32+10	6.1 RT	PROP. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
RAMP B					
17+64	24.2 RT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
17+64	24.2 RT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
17+64	24.2 RT	EXIST. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	
19+32	33.0 RT	PROP. DET. LOOP, TY 1	TO	PROP. 1-PR TW SH #14	

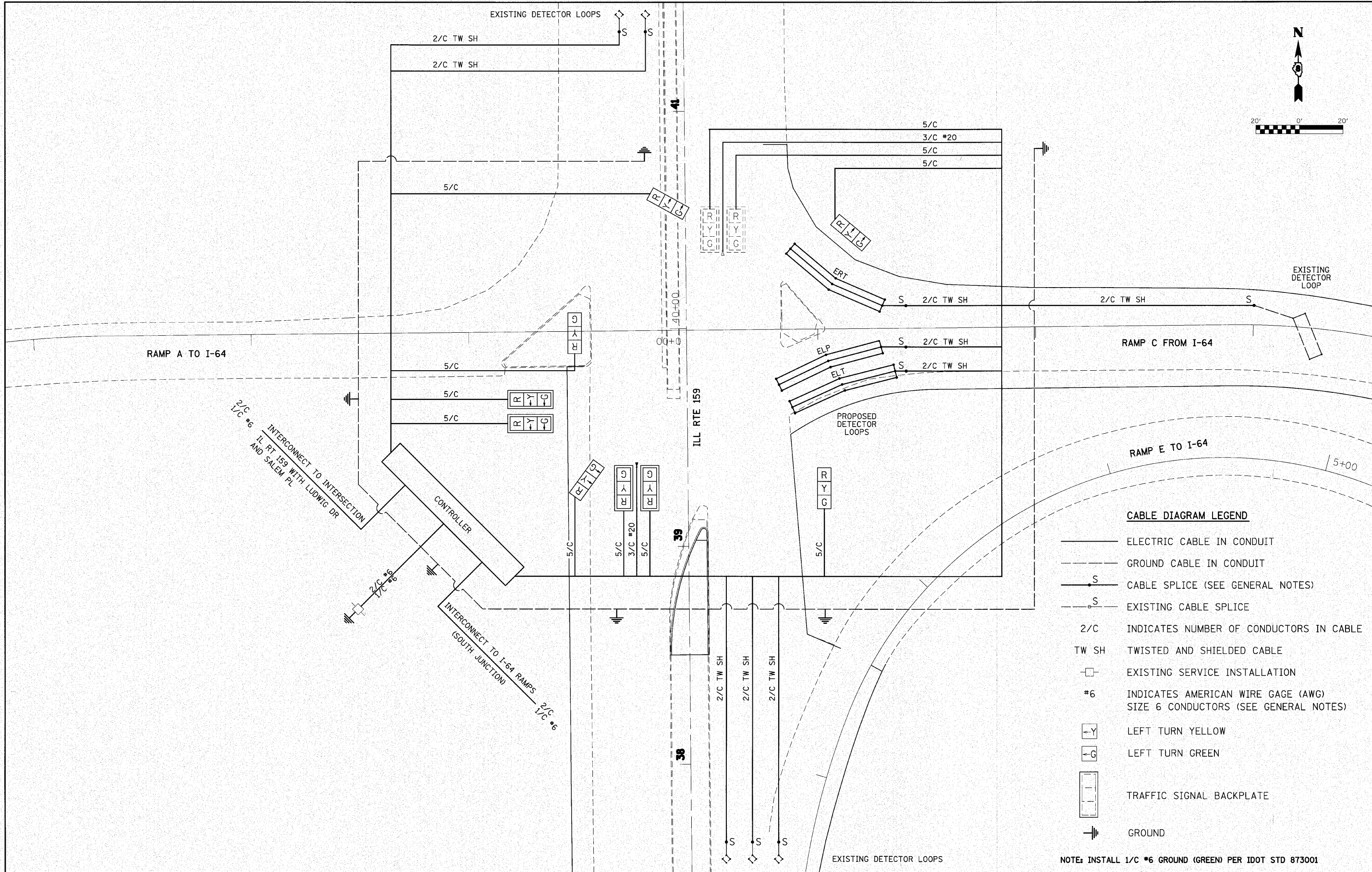
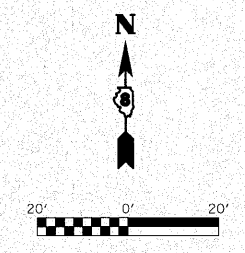




- CABLE DIAGRAM LEGEND**
- ELECTRIC CABLE IN CONDUIT
 - GROUND CABLE IN CONDUIT
 - S — CABLE SPLICE (SEE GENERAL NOTES)
 - S — EXISTING CABLE SPLICE
 - 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
 - TW SH TWISTED AND SHIELDED CABLE
 - EXISTING SERVICE INSTALLATION
 - *6 INDICATES AMERICAN WIRE GAGE (AWG) SIZE 6 CONDUCTORS (SEE GENERAL NOTES)
 - Y— LEFT TURN YELLOW
 - G— LEFT TURN GREEN
 - TRAFFIC SIGNAL BACKPLATE
 - GROUND

NOTE: INSTALL #6 1/C GROUND (GREEN) PER IDOT STD 873001

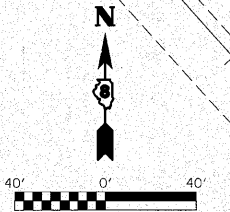
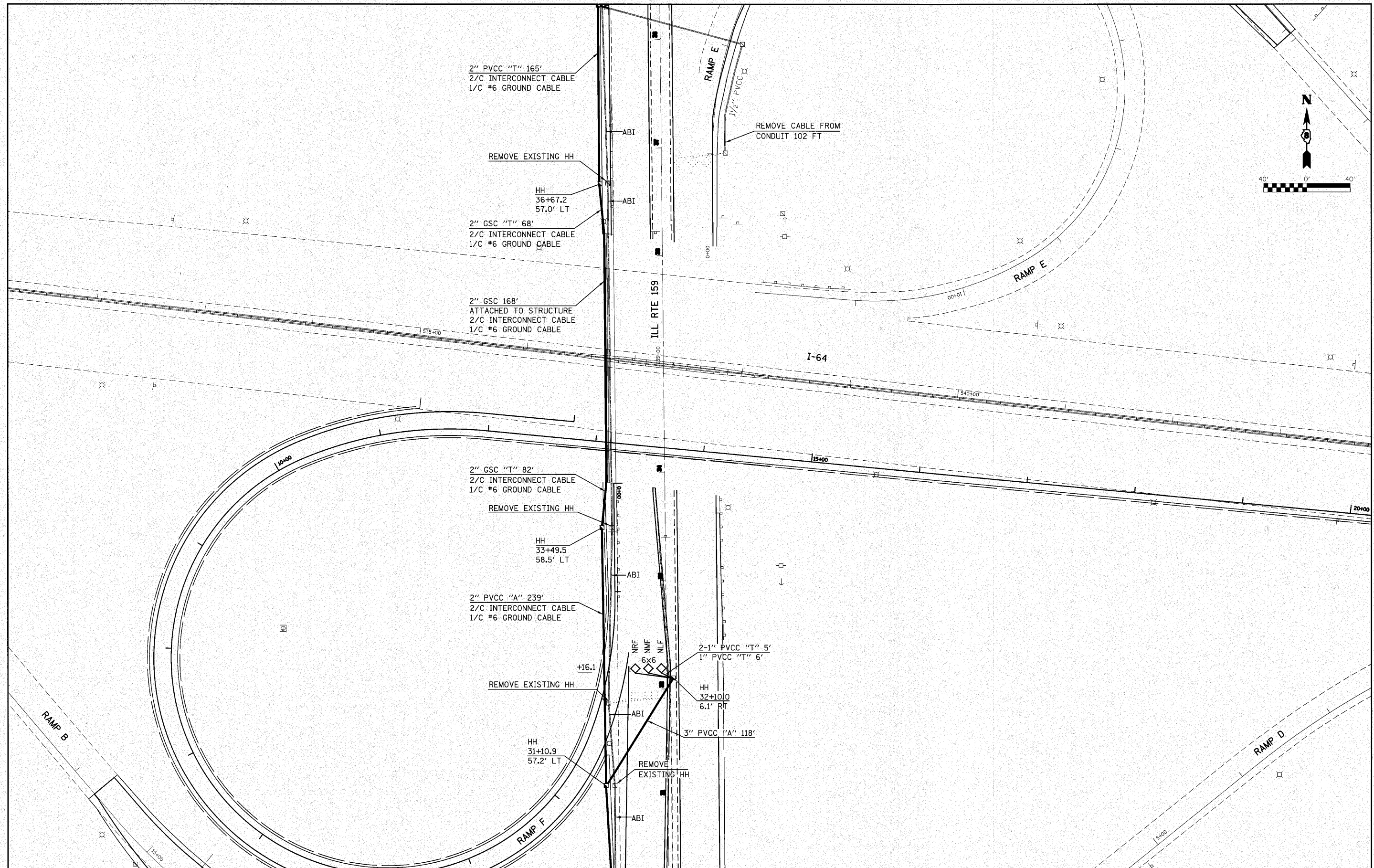
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PLDT DATE = 8/18/2010	DATE -	CHECKED -	REVISED -			CONTRACT NO. 76D59					
						ILLINOIS FED. AID PROJECT					



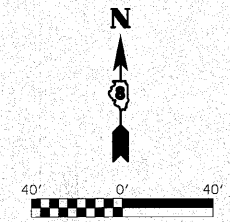
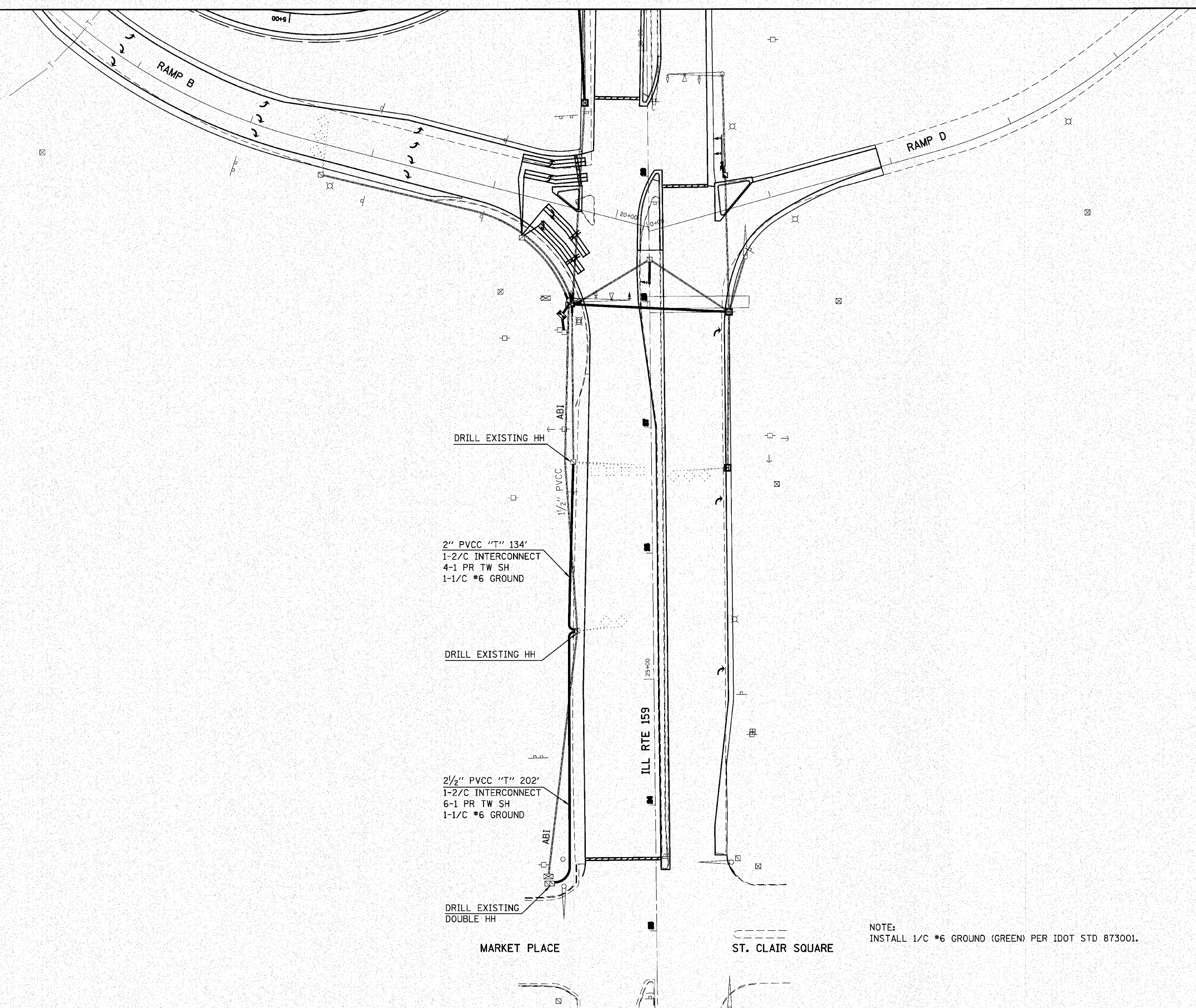
- CABLE DIAGRAM LEGEND**
- ELECTRIC CABLE IN CONDUIT
 - GROUND CABLE IN CONDUIT
 - S — CABLE SPLICE (SEE GENERAL NOTES)
 - S — EXISTING CABLE SPLICE
 - 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
 - TW SH TWISTED AND SHIELDED CABLE
 - EXISTING SERVICE INSTALLATION
 - *6 INDICATES AMERICAN WIRE GAGE (AWG) SIZE 6 CONDUCTORS (SEE GENERAL NOTES)
 - Y — LEFT TURN YELLOW
 - G — LEFT TURN GREEN
 - TRAFFIC SIGNAL BACKPLATE
 - GROUND

NOTE: INSTALL 1/C #6 GROUND (GREEN) PER IDOT STD 873001

FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NORTH JUNCTION CABLE LAYOUT PLAN	F.A.I. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT DATE = 8/10/2010		DATE -	REVISED -			CONTRACT NO. 76D59 ILLINOIS FED. AID PROJECT					



FILE NAME =	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE SIGNAL LAYOUT PLAN	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT SCALE = 40.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 76D59					
PLOT DATE = 8/18/2010		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
						SCALE: 1" = 40'		SHEET NO. 7 OF 9 SHEETS		STA. TO STA.	



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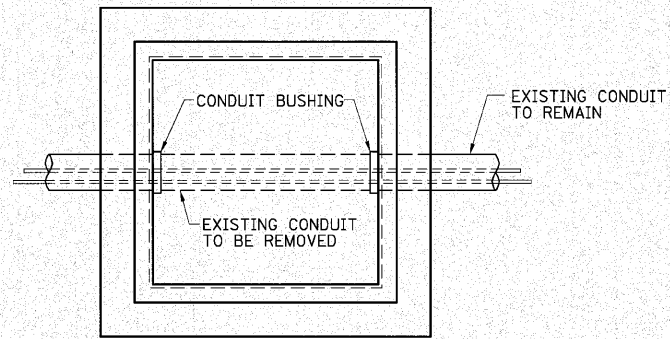
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DRAWN -	REVISED -
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DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BRIDGE SIGNAL LAYOUT PLAN

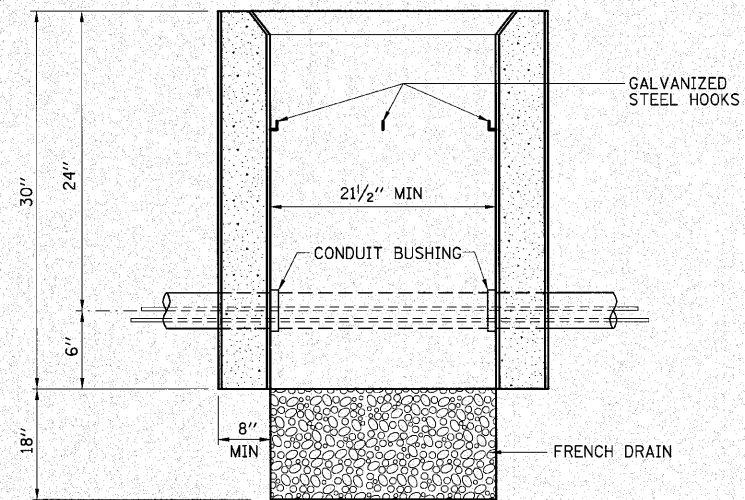
SCALE: 1" = 40' SHEET NO. 8 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	B2-5K-2	ST. CLAIR	162	58
CONTRACT NO. 76D59				
ILLINOIS FED. AID PROJECT				



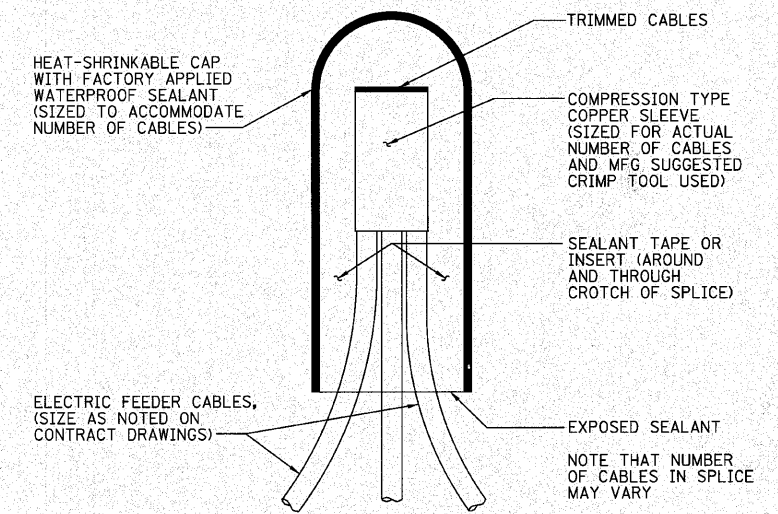
PLAN

NOTE:
REMOVAL OF EXISTING CONDUIT FROM THE
HANDHOLE AND THE INSTALLATION OF THE
CONDUIT BUSHING SHALL BE INCLUDED
IN THE COST OF THE HANDHOLE



ELEVATION

HANDHOLE AND DOUBLE HANDHOLE TO INTERCEPT EXISTING CONDUIT DETAIL



SPLICING DETAIL

FILE NAME = c:\pw_work\pwsdot\burnsideem\c210578\076d59-shr-ts9.dgn	USER NAME = burnsideem	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL DETAILS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 8/10/2010	DATE -	REVISED -	CONTRACT NO. 76D59							
ILLINOIS FED. AID PROJECT										

SCALE: SHEET NO. 9 OF 9 SHEETS STA. TO STA.

LIGHTING GENERAL NOTES

- SPLICING OF CONDUCTORS SHALL BE IN POLE BASES OR WEATHER TIGHT J-BOXES ONLY. SPLICES BELOW GRADE WILL NOT BE PERMITTED.
- LEVELING NUTS SHALL BE INSTALLED FOR PLUMBING THE POLES. ALL POLES SHALL BE ERECTED PLUMB.
- LIGHTING CIRCUITS SHALL BE WIRED IN ACCORDANCE WITH THE WIRING DIAGRAMS SHOWN IN THE PLANS. DEVIATIONS WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- THE COST OF NUTS AND WASHERS REQUIRED FOR MOUNTING LIGHT POLES ON NEW AND EXISTING CONCRETE FOUNDATIONS SHALL BE INCIDENTAL TO THE CONTRACT UNIT PRICE FOR LIGHT POLES.
- A SURGE PROTECTOR, FUSE BLOCK AND FUSES SHALL BE INSTALLED IN EACH LIGHT POLE AND SHALL BE WIRED AS SHOWN IN THE WIRING SCHEMATICS.
- NEW LIGHT POLE FOUNDATIONS SHALL BE SET BACK FROM THE ROADWAY SO THAT THERE IS 20' BETWEEN THE EDGE OF PAVEMENT AND THE NEAR FACE OF THE ASSOCIATED LIGHT POLE TRANSFORMER BASE.
- LIGHT POLE FOUNDATIONS SHALL BE CONCRETE AND CONSTRUCTED IN ACCORDANCE WITH IDOT STANDARD 836001.
- PROPOSED LIGHT POLES SHALL BE PROVIDED WITH TRANSFORMER BASES.
- BURIED UTILITY LOCATIONS SHOWN ON THE PLAN SHEETS ARE APPROXIMATE ONLY. THE UTILITY OWNERS SHALL BE CONTACTED AND LOCATION ASSISTANCE REQUESTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- TRENCHED CABLE RUNS SHALL BE IN A STRAIGHT LINE BETWEEN TERMINAL POINTS WHERE FEASIBLE. TO PREVENT EROSION OF EMBANKMENTS INVOLVING HIGH FILLS AND STEEP SIDE SLOPES, THE CONTRACTOR SHALL NOT TRENCH DIRECTLY FROM POLE TO POLE, RATHER, AS DIRECTED BY THE ENGINEER, THE TRENCH SHALL EXTEND FROM THE POLE STRAIGHT DOWN THE SIDE SLOPE RUN, ALONG THE TOE OF THE SLOPE, AND THEN STRAIGHT UP THE SIDE SLOPE TO THE NEXT POLE. THE CONTRACTOR WILL BE COMPENSATED FOR THIS ADDITIONAL UNIT DUCT AT ITS AGREED CONTRACT UNIT PRICE.
- ALL CONDUIT TO BE PUSHED UNDER EXISTING PAVEMENT OR TRENCHED UNDER PROPOSED PAVEMENT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 3'-6" TO AVOID CONFLICTS WITH EXISTING OR PROPOSED UNDER DRAIN. THE COST OF INSTALLING THE CONDUIT AT THIS DEPTH SHALL BE INCIDENTAL TO THE CONDUIT.
- THE CONTRACTOR WILL BE PAID TO LOCATE APPLICABLE CABLE RUNS OF THE EXISTING LIGHTING SYSTEM THAT WILL REMAIN IN SERVICE DURING AND UPON THE COMPLETION OF THIS PROJECT. THE CONTRACTOR SHALL NOT LOCATE ANY CABLE RUNS THAT ARE TO BE ABANDONED UPON THE COMPLETION OF THIS PROJECT. IN THE EVENT THE CONTRACTOR DISRUPTS A CABLE THAT IS TO BE ABANDONED BUT IS CURRENTLY SERVICING AN EXISTING LUMINAIRE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SPLICING THE CABLE. IN THIS CASE SPLICES BELOW GRADE WILL BE PERMITTED.
- ALL NEW UNIT DUCT AND UNDERGROUND CONDUIT SHALL BE PLACED A MINIMUM OF 2'-6" BELOW THE FLOWLINE OF EXISTING DITCHES AND A MINIMUM OF 2'-0" BENEATH THE GROUND SURFACE AT OTHER LOCATIONS.
- IN ALL LOCATIONS WHERE NEW UNIT DUCT AND CONDUIT WILL BE INSTALLED, THE EXISTING UNIT DUCT AND CONDUIT SHALL BE ABANDONED IN PLACE.
- THE EXISTING SIGN LUMINAIRE, S-4, SHALL BE RELOCATED ALONG WITH THE BRIDGE MOUNTED SIGN STRUCTURE. THE COST FOR THIS WORK SHALL BE INCLUDED AS PART OF THE SIGN STRUCTURE RELOCATION.

LEGEND

	EXISTING SERVICE INSTALLATION
	GROUND CABLE AND GROUND ROD
	GROUND CONNECTION
REL	RELOCATE EXISTING LIGHTING UNIT
	EXISTING LIGHTING UNIT
	EXISTING LIGHTING CONTROLLER
	EXISTING UNIT DUCT
	EXISTING SPAN TRUSS
	RELOCATED LIGHTING UNIT
	PROPOSED 400W HPS, HORIZONTAL MOUNT LUMINAIRE WITH 50' POLE
	PROPOSED JUNCTION BOX
	PROPOSED UNIT DUCT
	PROPOSED PUSHED GALVANIZED STEEL CONDUIT
	2-#2 XLP, 1-#2 XLP-G-1.25P
	2-#4 XLP, 1-#4 XLP-G-1P
	2-#6 XLP, 1-#6 XLP-G-1P
	2-#6 XLP-USE, 1-#6 XLP-G IN CONDUIT, ATTACHED TO STRUCTURE, 1" DIA.
	EXISTING LIGHT POLE AND LUMINAIRE USE IN PLACE
	EXISTING LIGHT POLE AND LUMINAIRE TO BE RELOCATED
	PROPOSED LIGHT POLE AND LUMINAIRE
	EXISTING SIGN
	EXISTING SIGN LIGHTING LUMINAIRE 150W HPS
	TEMPORARY WOOD POLE

CIRCUIT DESIGNATION B-XX
 FIXTURE NUMBER

SCHEDULE OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES
80300100	LOCATING UNDERGROUND CABLE	FOOT	1,125
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	506
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	526
81100300	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., GALVANIZED STEEL	FOOT	60
81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	20
81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	1
81603025	UNIT DUCT, 600V, 2-1C NO.4, 1/C NO.4 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	2,872
81603035	UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	1,581
81603065	UNIT DUCT, 600V, 2-1C NO.2, 1/C NO.2 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	2,218
81702415	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 6	FOOT	60
81800190	AERIAL CABLE, 2-1/C NO. 2 WITH MESSENGER WIRE	FOOT	2,500
81800200	AERIAL CABLE, 2-1/C NO. 4 WITH MESSENGER WIRE	FOOT	3,500
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	4,772
82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	4
83057220	LIGHT POLE, WOOD, 40 FOOT, CLASS 4	EACH	6
83057440	LIGHT POLE, WOOD, 80 FOOT, CLASS 4	EACH	4
83060550	LIGHT POLE, GALVANIZED STEEL, 50 FT. M.H., 15 FT. MAST ARM	EACH	4
83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	91
83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	4
84200804	REMOVAL OF POLE FOUNDATION	EACH	9
84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	9
X0323360	WOODEN POLE REMOVAL	EACH	10

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		CHECKED - SRF	REVISED -
		DATE - 5-21-10	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES LIGHTING GENERAL NOTES AND LEGEND

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

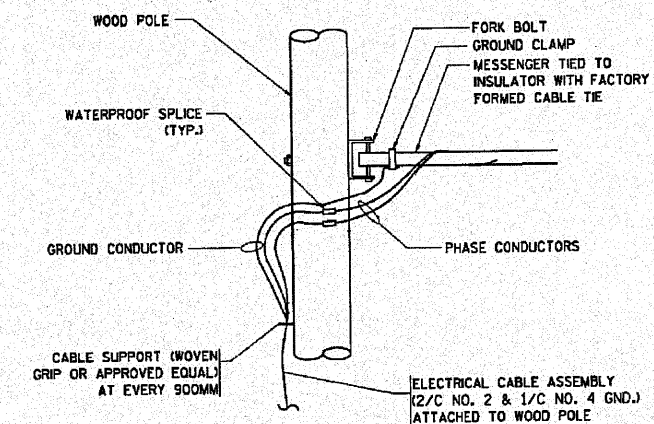
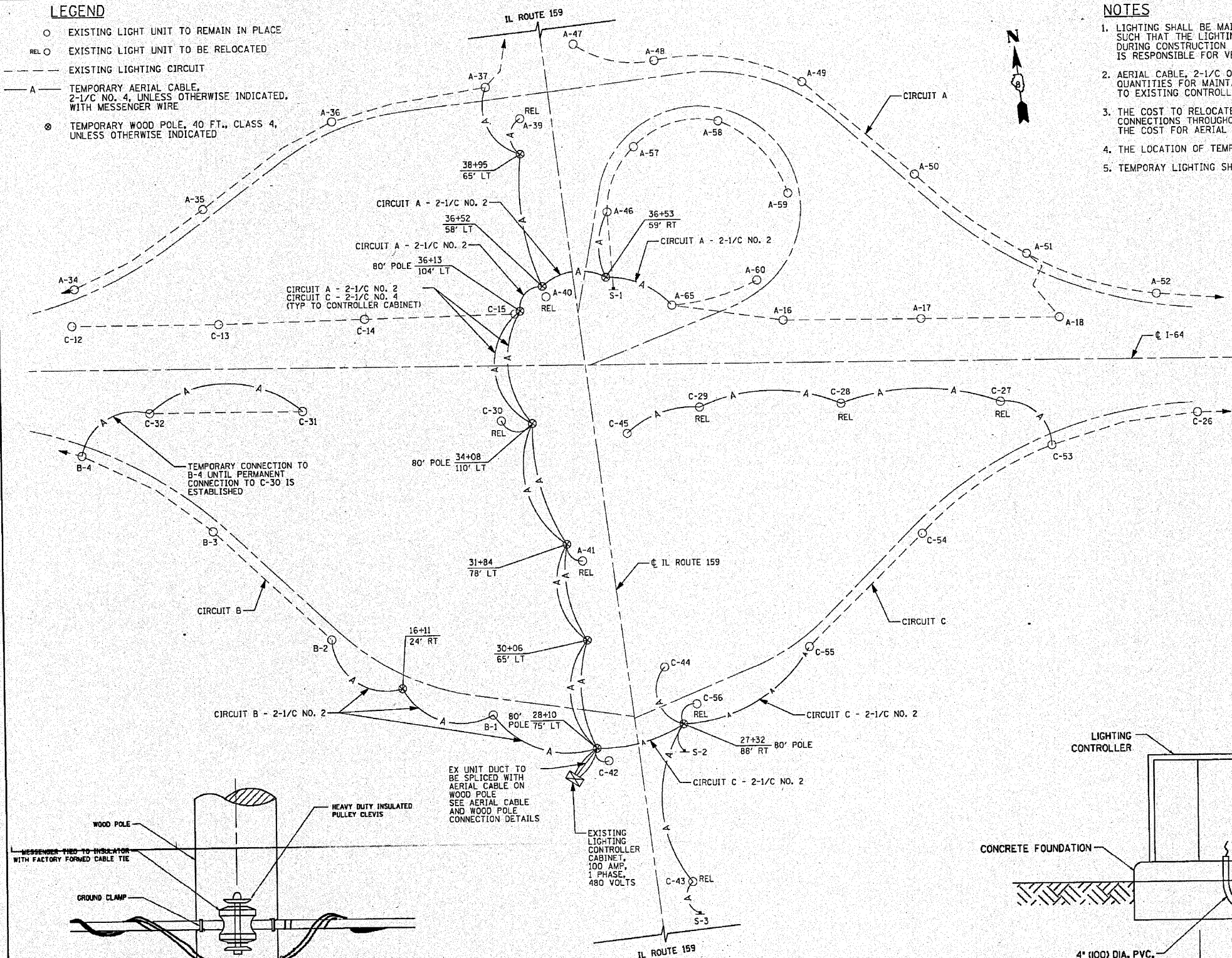
F.W. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	B2-5K-2	ST. CLAIR	162	60
JOB NO. D-98-024-10		PTB NO. 153/053		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

LEGEND

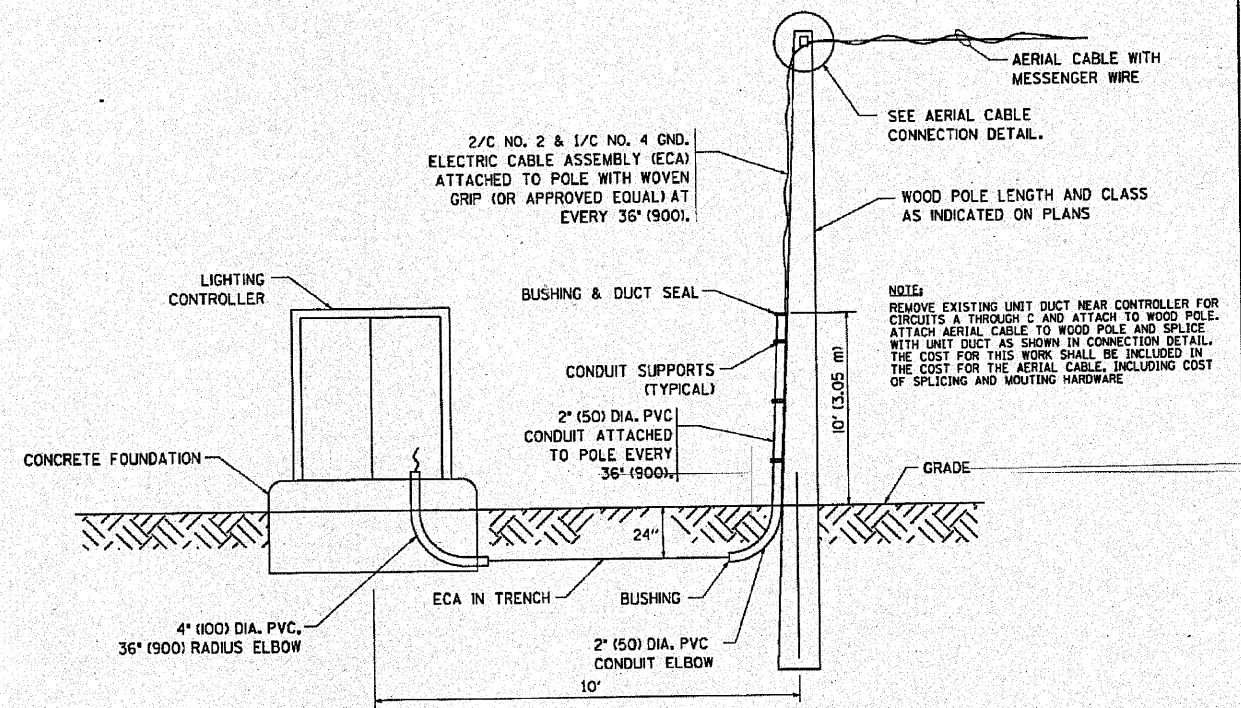
- EXISTING LIGHT UNIT TO REMAIN IN PLACE
- REL ○ EXISTING LIGHT UNIT TO BE RELOCATED
- - - EXISTING LIGHTING CIRCUIT
- A - - - TEMPORARY AERIAL CABLE, 2-1/C NO. 4, UNLESS OTHERWISE INDICATED, WITH MESSENGER WIRE
- ⊙ TEMPORARY WOOD POLE, 40 FT., CLASS 4, UNLESS OTHERWISE INDICATED

NOTES

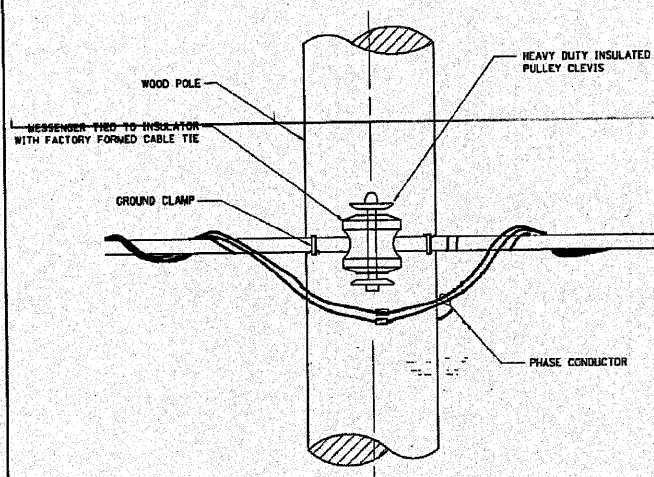
1. LIGHTING SHALL BE MAINTAINED DURING CONSTRUCTION BY THE CONTRACTOR. CONTRACTOR SHALL STAGE WORK SUCH THAT THE LIGHTING SYSTEM IS OPERATIONAL AT THE END OF EACH DAY. ANY DAMAGE INCURRED DURING CONSTRUCTION SHALL BE PROMPTLY REPAIRED SO SERVICE IS NOT DISRUPTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS.
2. AERIAL CABLE, 2-1/C OF THE SIZE SPECIFIED WITH MESSENGER WIRE AND WOOD POLES ARE INCLUDED IN THE QUANTITIES FOR MAINTAINING ELECTRICAL CONNECTIONS. THE COST TO PROVIDE TEMPORARY CONNECTIONS TO EXISTING CONTROLLERS AND SPLICING SHALL BE INCLUDED IN THE BID UNIT PRICE FOR AERIAL CABLE.
3. THE COST TO RELOCATE AND RECONNECT AERIAL CABLE INCLUDING WOOD POLES TO MAINTAIN ELECTRICAL CONNECTIONS THROUGHOUT CONSTRUCTION SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST FOR AERIAL CABLE OR WOOD POLE.
4. THE LOCATION OF TEMPORARY WOOD POLES SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
5. TEMPORARY LIGHTING SHALL NOT BE REMOVED UNTIL THE PERMANENT LIGHTING IS INSTALLED AND OPERATIONAL.



AERIAL CABLE CONNECTION DETAIL
N.T.S.



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



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

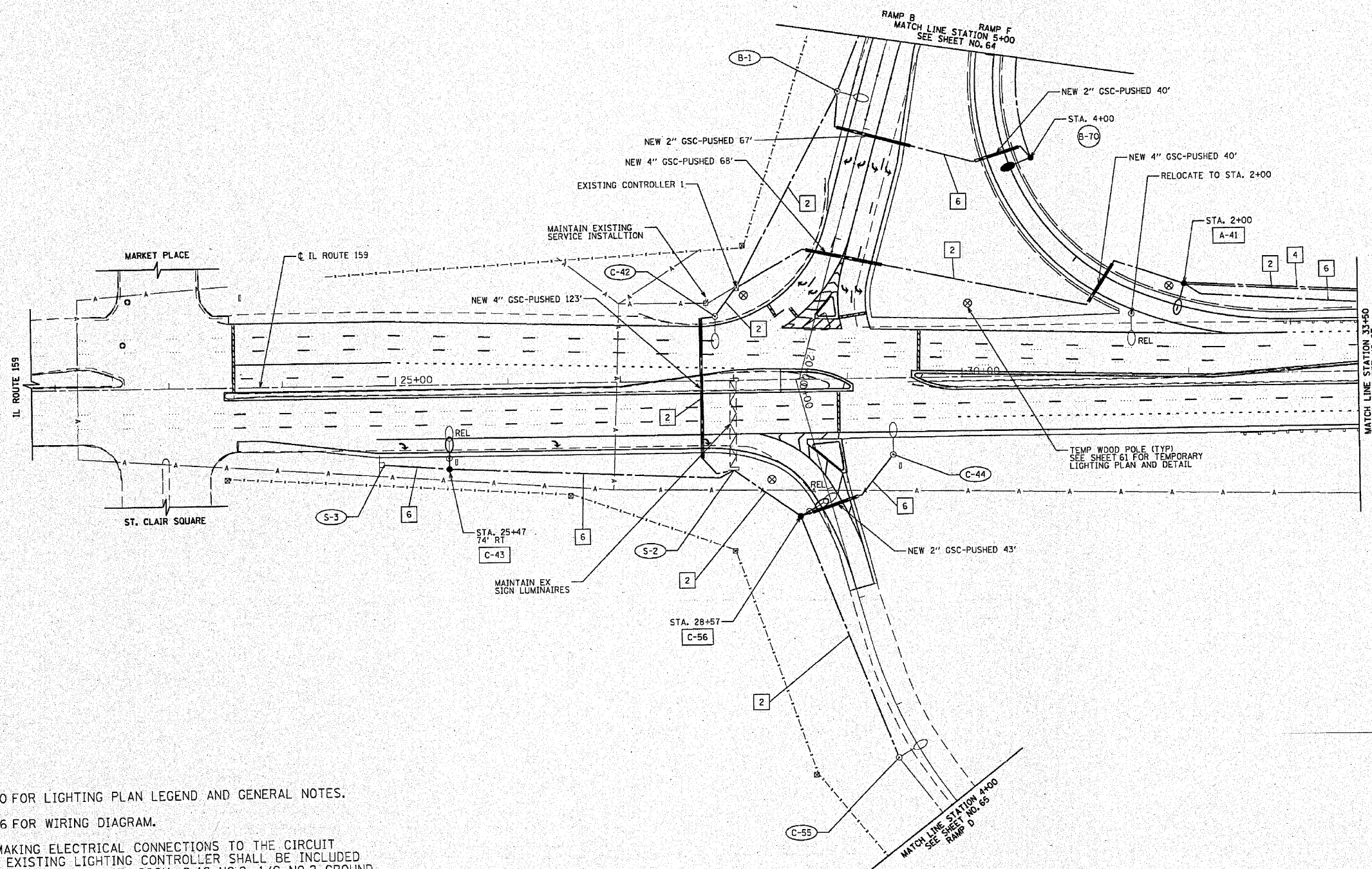
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		DATE - 5-21-10	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING PLAN

SCALE: NONE	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST. CLAIR	162	61
JOB NO. D-98-024-10			PTB NO. 153/053	
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



NOTES:

1. SEE SHEET NO. 60 FOR LIGHTING PLAN LEGEND AND GENERAL NOTES.
2. SEE SHEET NO. 66 FOR WIRING DIAGRAM.
3. THE COST FOR MAKING ELECTRICAL CONNECTIONS TO THE CIRCUIT BREAKER IN THE EXISTING LIGHTING CONTROLLER SHALL BE INCLUDED IN THE UNIT COST FOR UNIT DUCT, 600V, 2-1C NO.2, 1/C NO.2 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE.
4. SEE SHEET NO. 61 FOR TEMPORARY LIGHTING DETAILS.

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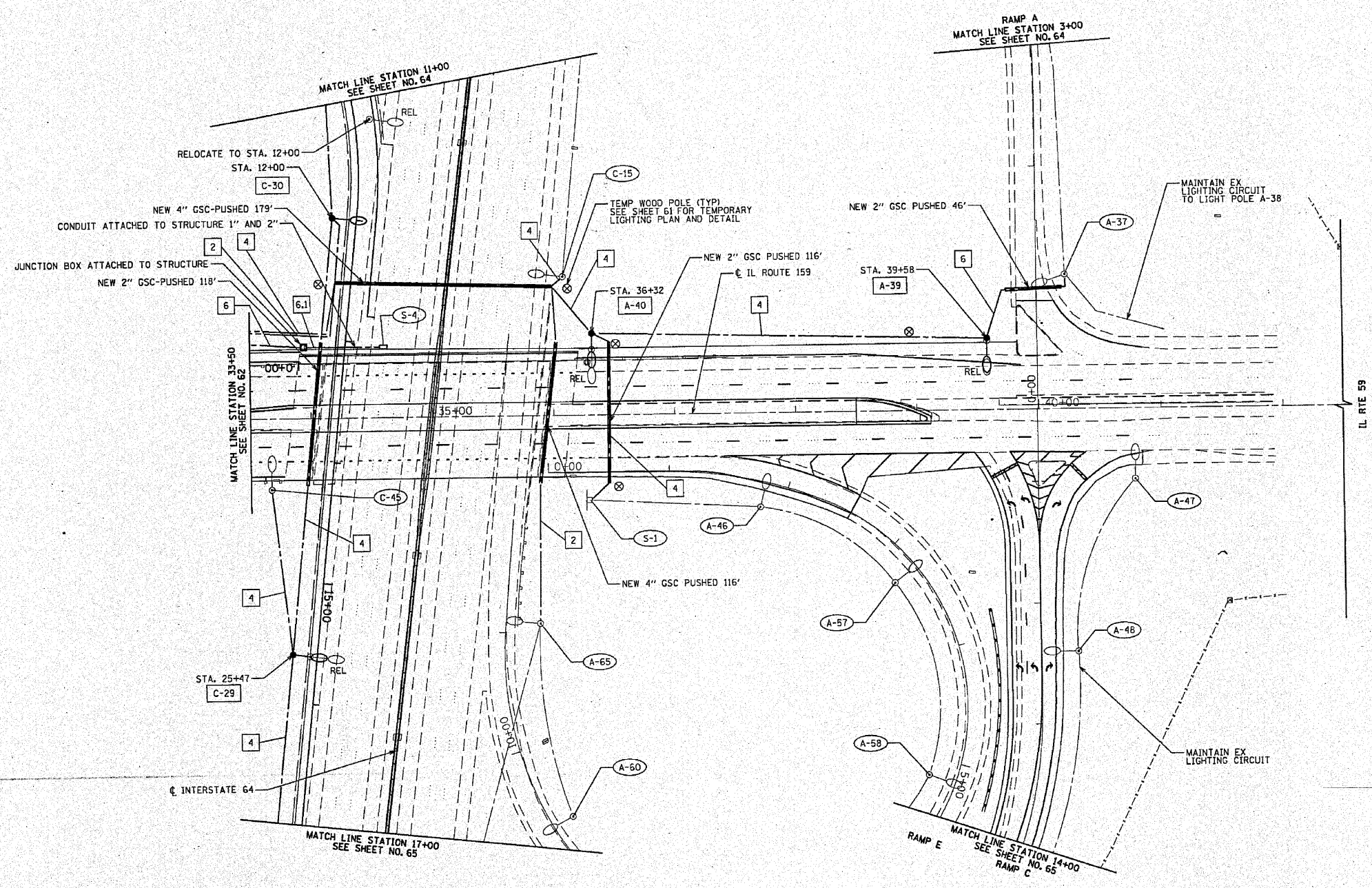
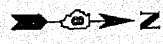
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	DATE - 5-21-10	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LIGHTING
PROPOSED IMPROVEMENT PLAN**

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

IL RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
159	B2-5K-2	ST. CLAIR	162	62
JOB NO. D-98-024-10			PTB NO. 153/053	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



NOTES:

1. SEE SHEET NO. 60 FOR LIGHTING PLAN LEGEND AND GENERAL NOTES.
2. SEE SHEET NO. 66 FOR WIRING DIAGRAM.
3. SEE SHEET NO. 61 FOR TEMPORARY LIGHTING DETAILS.

FILENAME * gr\ch10\047\road\AC-CU-102.dgn	USER NAME * a.j.pandexter	DESIGNED - KB	REVISED -
	PLOT DATE = 10/19/2010 2:30:46 PM	DRAWN - AJP	REVISED -
		CHECKED - SRF	REVISED -
		DATE - 5-21-10	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

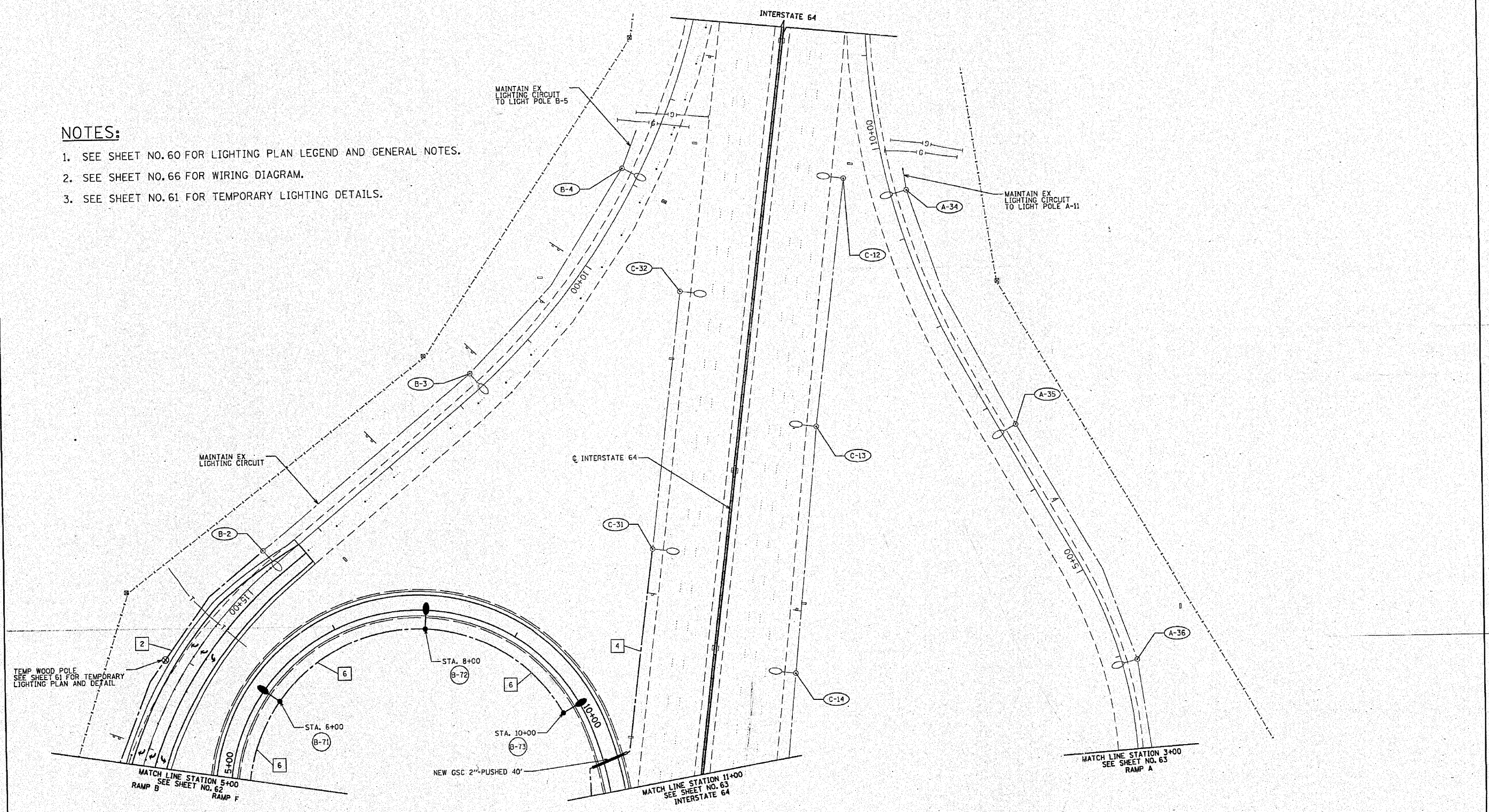
PROPOSED LIGHTING IMPROVEMENT PLAN			
SCALE: 1"=50'	SHEET NO.	OF SHEETS	STA. TO STA.

IL RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
159	82-5K-2	ST. CLAIR	162	63
JOB NO. D-98-024-10		PTB NO. 153/053		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



NOTES:

1. SEE SHEET NO. 60 FOR LIGHTING PLAN LEGEND AND GENERAL NOTES.
2. SEE SHEET NO. 66 FOR WIRING DIAGRAM.
3. SEE SHEET NO. 61 FOR TEMPORARY LIGHTING DETAILS.



FILENAME =
g:\ch10\8047\road\C-CU-183.dgn

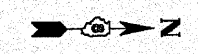
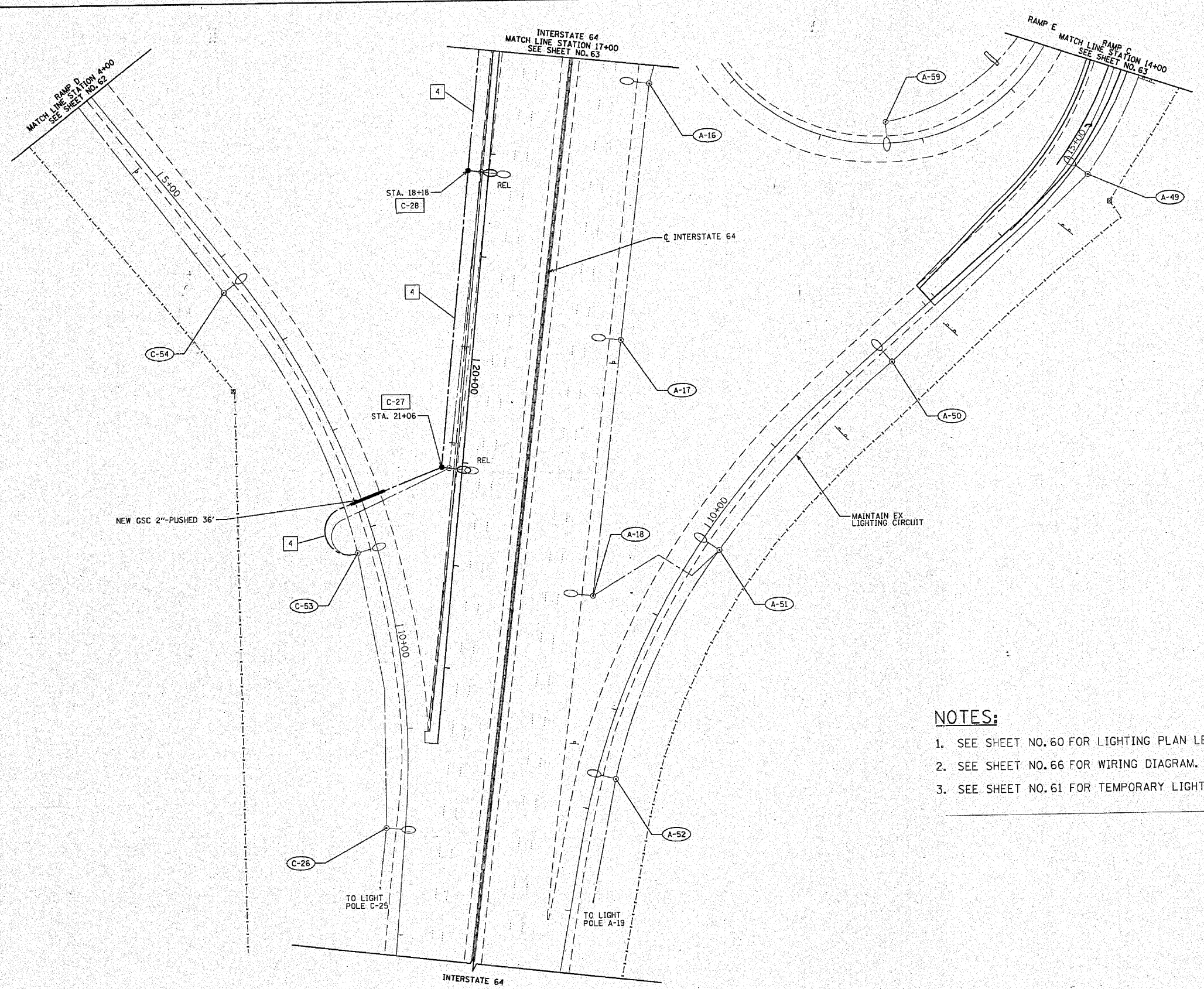
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PLOT DATE = 10/19/2010 2:30:47 PM	DRAWN - AJP	REVISED -
	CHECKED - SRF	REVISED -
	DATE - 5-21-10	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LIGHTING
PROPOSED IMPROVEMENT PLAN**

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	B2-5K-2	ST. CLAIR	162	64
JOB NO. D-98-024-10		PTB NO. 153/053		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

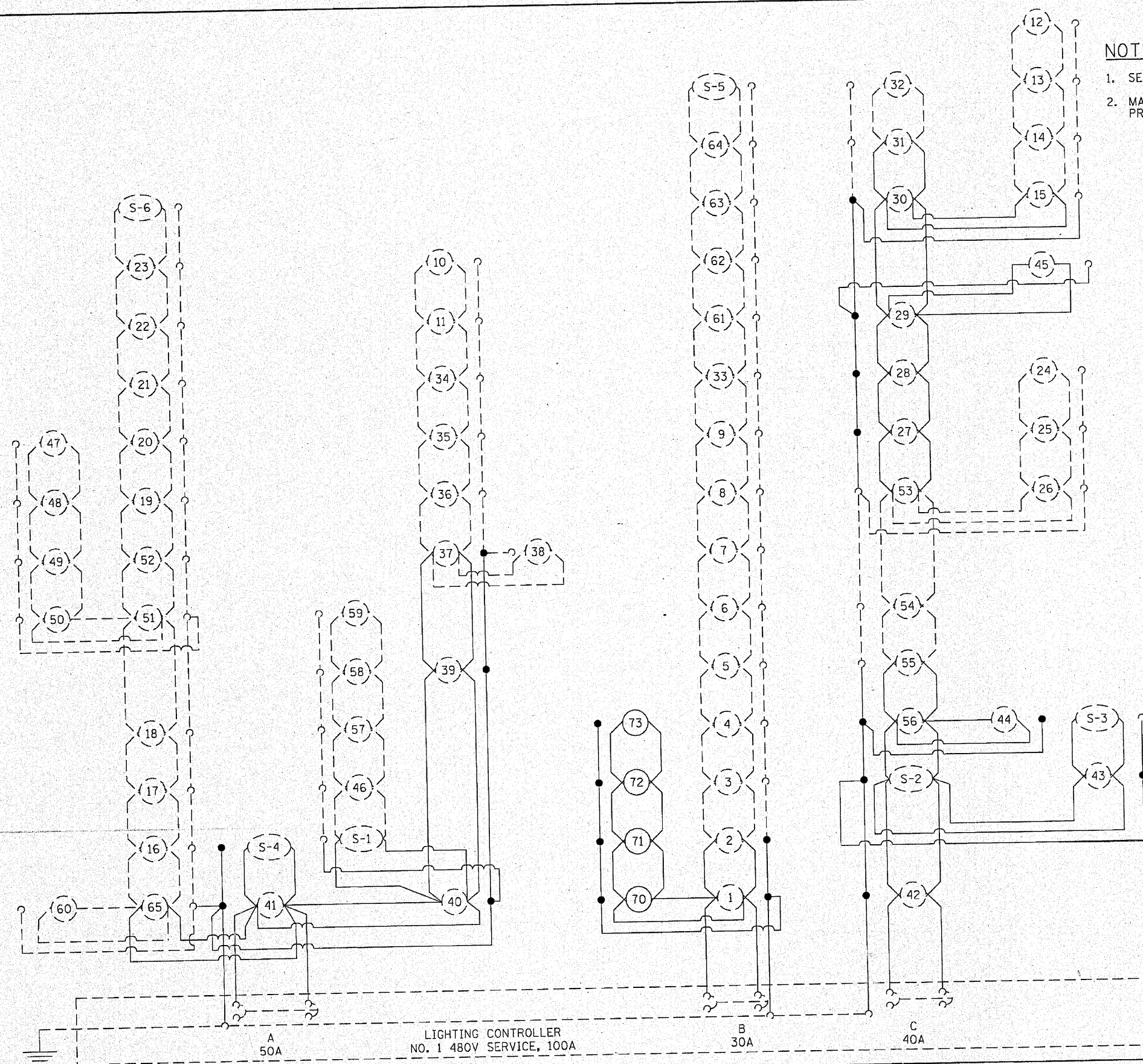


- NOTES:**
1. SEE SHEET NO. 60 FOR LIGHTING PLAN LEGEND AND GENERAL NOTES.
 2. SEE SHEET NO. 66 FOR WIRING DIAGRAM.
 3. SEE SHEET NO. 61 FOR TEMPORARY LIGHTING DETAILS.

FILENAME = gr\eh10\2047\road\C-CU-104.dgn	USER NAME = a.jondexter	DESIGNED - KB	REVISED -
PLOT DATE = 10/19/2010 2:38:48 PM	DRAWN - AJP	REVISIONS	REVISIONS
	CHECKED - SRF	REVISIONS	REVISIONS
	DATE - 5-21-10	REVISIONS	REVISIONS

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	F.A.I. RTE. 64	SECTION 82-5K-2	COUNTY ST. CLAIR	TOTAL SHEETS 162	SHEET NO. 65
			JOB NO. D-98-024-10		PTB NO. 153/053		
			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



NOTES:

1. SEE SHEET NO.'S 62- 65 FOR PROPOSED LIGHTING PLANS.
2. MAINTAIN EXISTING SIGN LUMINAIRES FOR PROPOSED CONDITIONS.

FILENAME *
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 PLOT DATE = 10/19/2010 2:38:43 PM

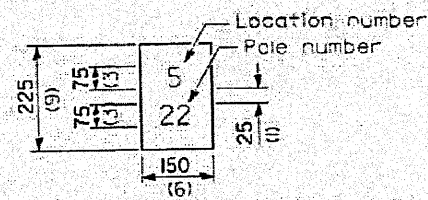
DESIGNED - KB	REVISED -
DRAWN - AJF	REVISED -
CHECKED - SRF	REVISED -
DATE - 5-21-10	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**LIGHTING
 CIRCUIT DIAGRAM**

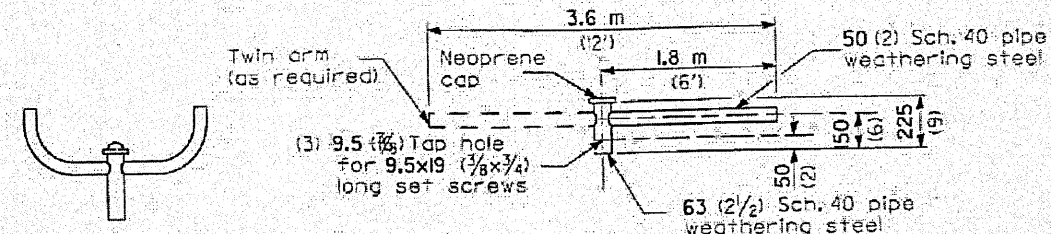
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

IL. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
159	82-5K-2	ST. CLAIR	162	66
JOB NO. D-98-024-10		PTB NO. 153/053		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



The contractor shall furnish and install a light pole identification of each new light pole, as shown above, incidental to the respective light pole pay item. The numerals shall be 75(3) series 'D', black, screened on silver-white type B pressure sensitive reflective sheeting conforming to the requirements of section T602.01 of the Standard Specifications for Traffic Control Items. The numerals shall conform to the FHWA 'Standard Alphabets for Highway Signs'.

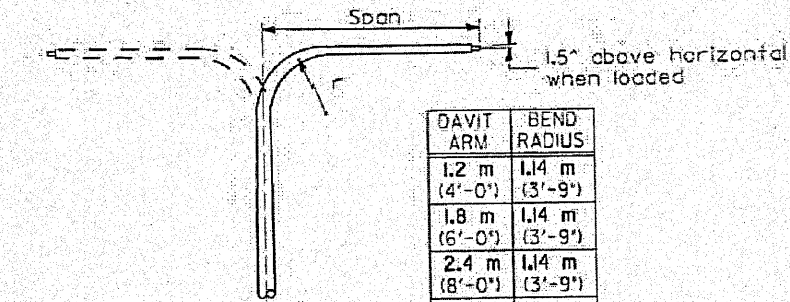
The light pole identification shall be applied to sign base materials specified in section 1063.06 of the Standard Specifications, approximately 180 (7) above the adjacent pavement grade visible to approaching traffic in accordance with Highway Standard 720001.



TWIN TENON

TENON MOUNT BRACKET ARM

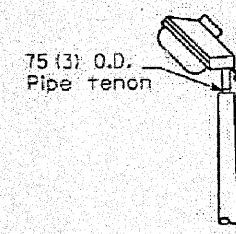
NOTE: Single or twin arm assembly shall be tilted 3° above horizontal.



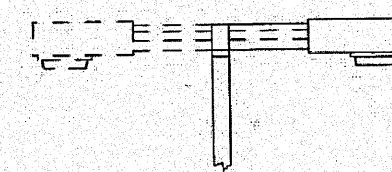
DAVIT ARM

DAVIT ARM-TWIN

DAVIT ARM	BEND RADIUS
1.2 m (4'-0")	1.4 m (3'-9")
1.8 m (6'-0")	1.4 m (3'-9")
2.4 m (8'-0")	1.4 m (3'-9")
3.6 m (12'-0")	1.4 m (3'-9")

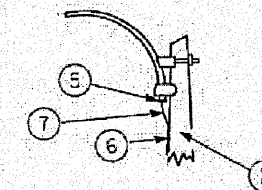


TENON

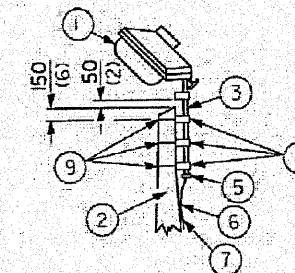


SHORT BRACKET

SHORT BRACKET - TWIN

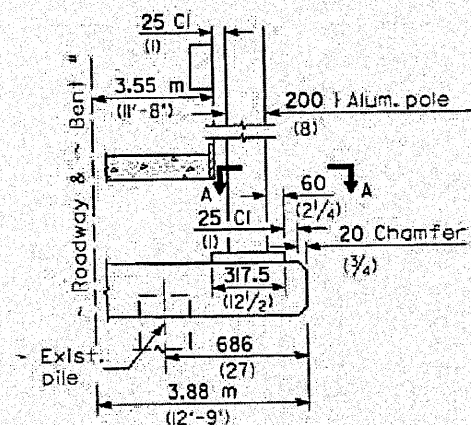


MAST ARM

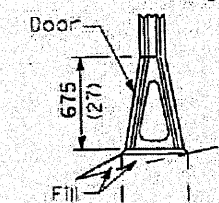


TENON

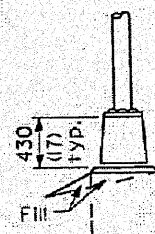
- ① Luminaire
- ② Wood pole, class 3 or better
- ③ 63 (2 1/2) Galv. steel conduit
- ④ Single offset pole band
- ⑤ Conduit bushing
- ⑥ Cable clamps on 600 (24) centers
- ⑦ 2/c #12 type use cable
- ⑧ 25 (1) Galv. steel conduit 3.0 m (10') in length
- ⑨ 16 (5/8) Hot dipped galvanized bolt with flat washer & locknut (3 req'd)
- ⑩ Conduit clamps on 900 (36) centers
- ⑪ Unit duct
- ⑫ Threaded reducer
- ⑬ 1" C Conduit, threaded
- ⑭ 40 (1 1/2) Galv. steel conduit for unit duct or 75 (3) galv. steel conduit for 2 or 3 unit ducts.



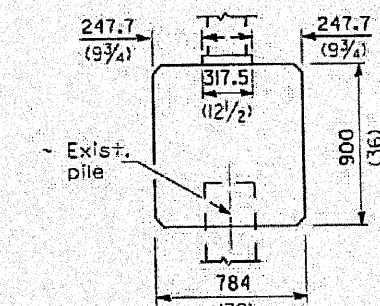
BENT # (Looking)



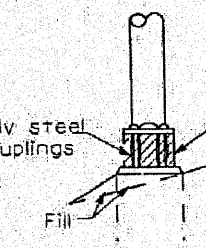
STAINLESS STEEL FLAIR BASE



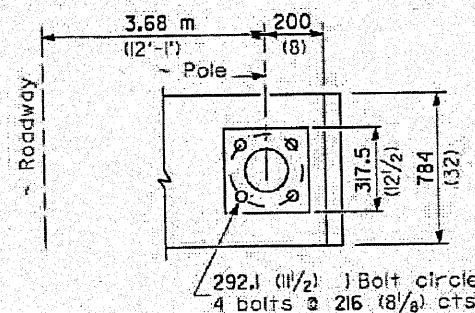
TRANSFORMER BASE



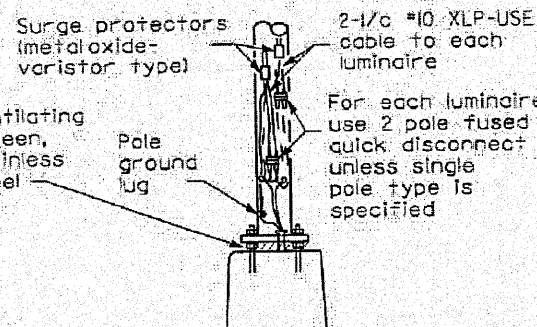
BRIDGE PIER MOUNT



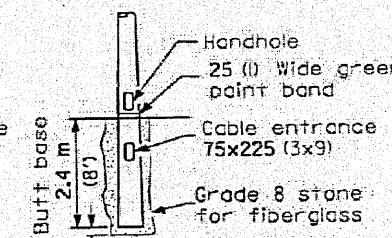
BREAKAWAY COUPLING



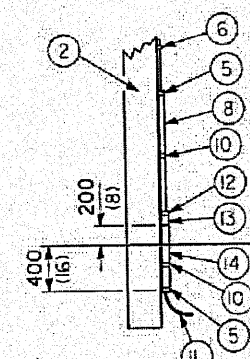
SECTION A-A



ANCHOR



BUTT BASE



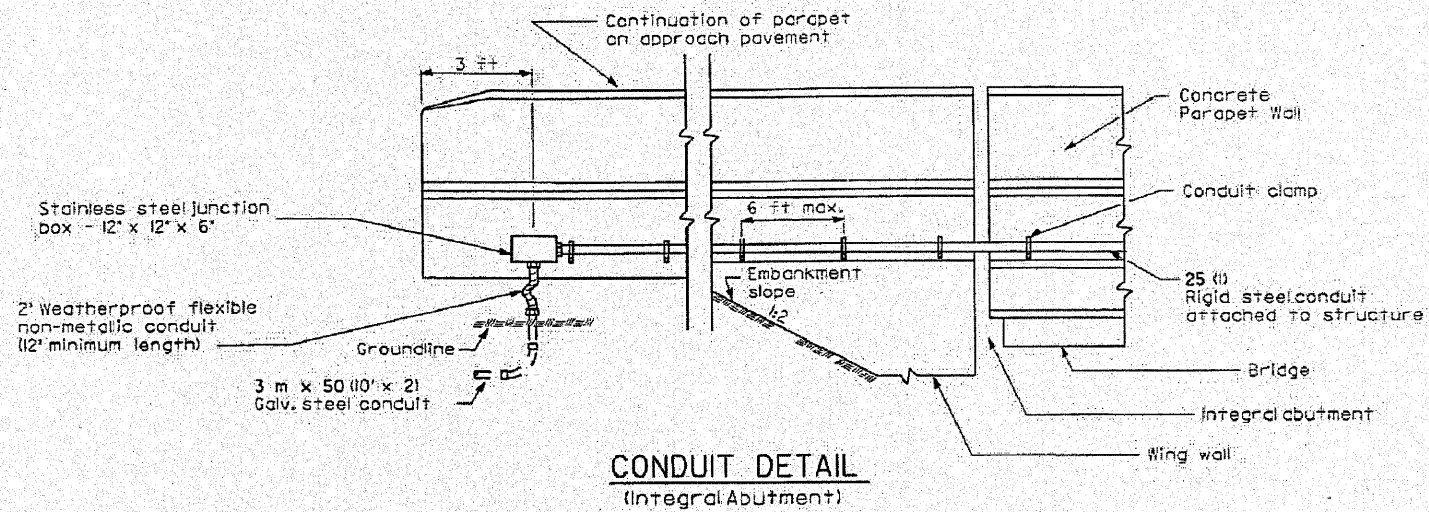
POLE, WOOD

POLE LENGTH	DEPTH IN GROUND
19.8 m (65')	3.6 m (12')
18.0 m (60')	3.0 m (10')
16.8 m (55')	2.7 m (9')
16.0 m (50')	2.4 m (8')
13.7 m (45')	2.1 m (7')
12.0 m (40')	2.0 m (6.5')
10.7 m (35')	1.8 m (6')
9.0 m (30')	1.7 m (5.5')

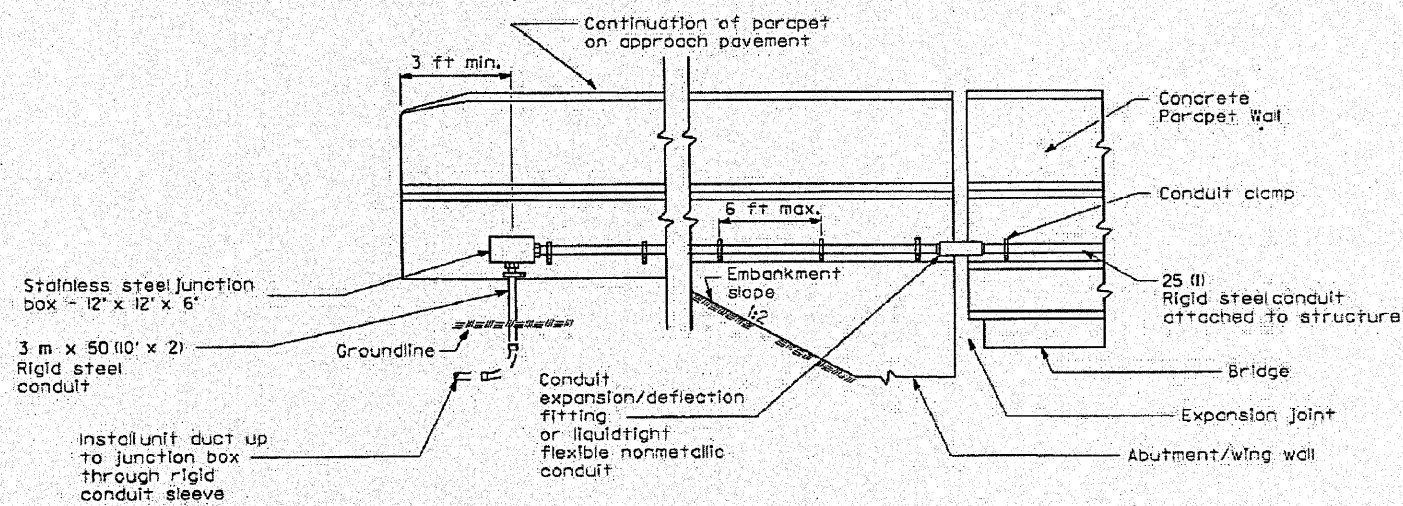
All dimensions are in millimeters (Inches) unless otherwise shown.

METAL OR CONCRETE

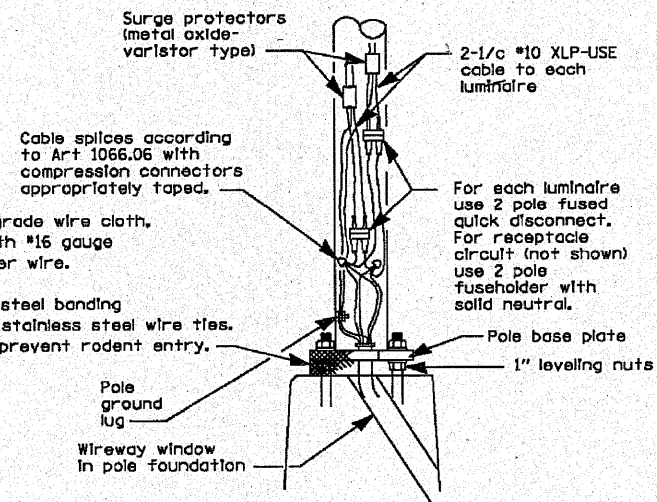
Details for underground distribution if required



CONDUIT DETAIL
(Integral Abutment)



CONDUIT DETAIL
(Open Abutment)



WIRING DETAIL

NO SCALE

Stainless steel standard grade wire cloth, 6x6 (1/4") mesh or less with #16 gauge (0.062") diameter or heavier wire.

Attach with 1/2" stainless steel banding or tie back and self with stainless steel wire ties. Finished installation must prevent rodent entry.

GENERAL NOTES

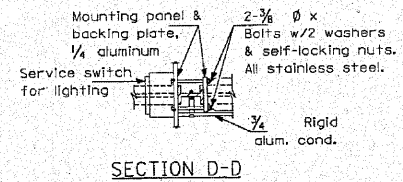
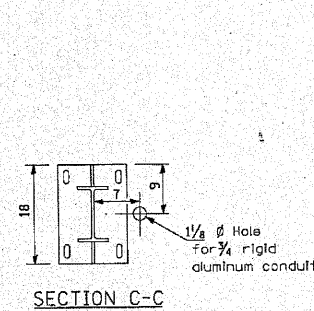
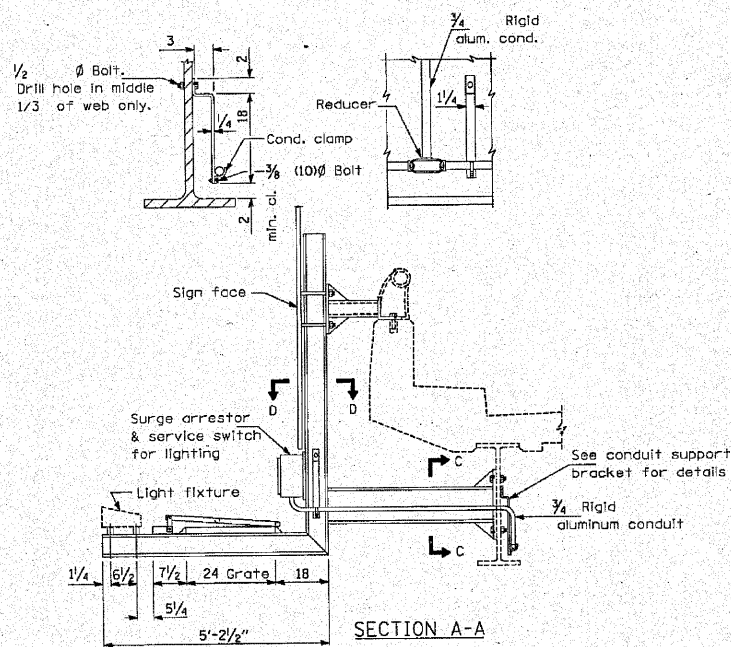
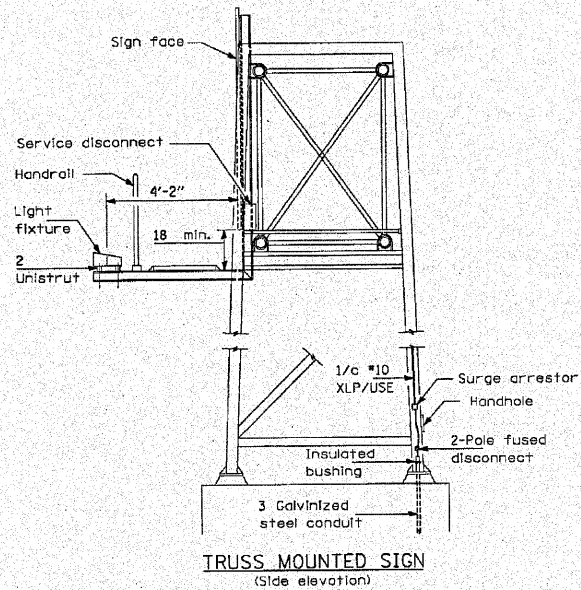
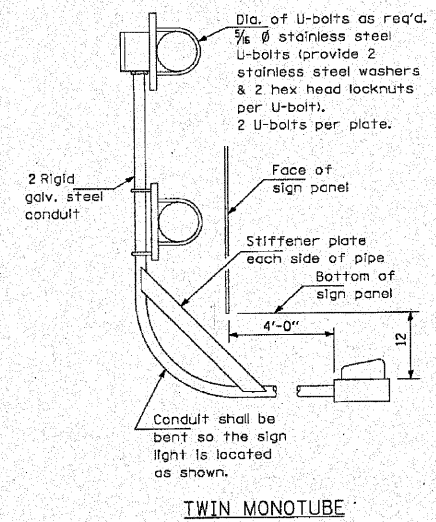
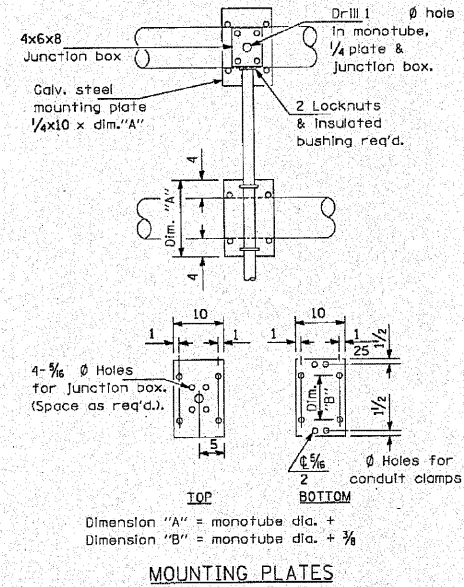
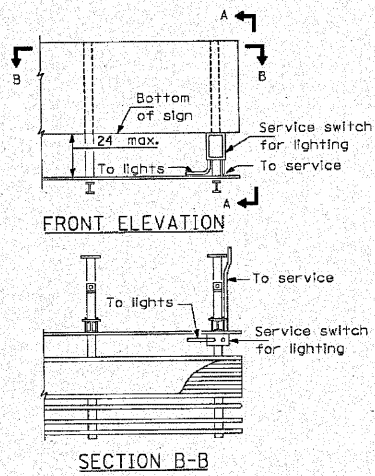
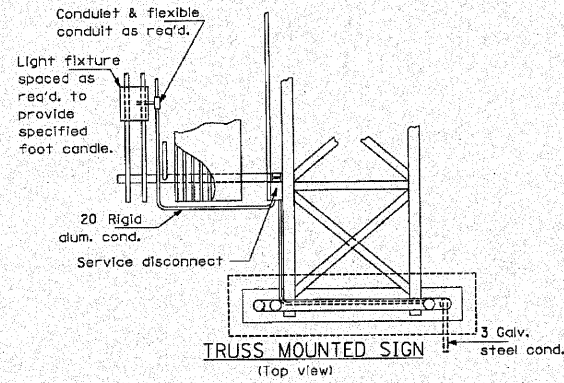
All taped splices shall use 2 layers of electrical tape over 3 layers of rubber tape as required by the Standard Specifications. Coat the finished taped splice with bonding compound.

All cable splices shall be taped unless another method has been specifically approved by the Engineer.

For example purposes the pole is shown on an anchor base. If the pole is required to be set on a breakaway base, consult the Standard Specifications.

All dimensions are in millimeters (inches) unless otherwise shown.

FILENAME * g:\ch10\0047\road\CC-CU-585-.dgn	USER NAME * ajpandexter	DESIGNED - KB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING DETAILS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	PLOT DATE * 18/19/2010 2:32:54 PM	DRAWN - AJP	REVISED -		SCALE: NONE	SHEET NO.	OF	SHEETS	STA.	TO STA.	64	82-5K-2	ST. CLAIR	162
		CHECKED - SRF	REVISED -											
		DATE - 5-21-10	REVISED -											
											JOB NO. D-98-024-10 PTB NO. 153/053			
											FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			



GENERAL NOTES

All sign lighting fixtures shall have a minimum of 3 mounting points.
All mounting hardware shall be stainless steel.

FILENAME *
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USER NAME = sjoondexter
PLOT DATE = 10/19/2010 2:30:54 PM

DESIGNED - KB
DRAWN - AJP
CHECKED - SRF
DATE - 5-21-10

REVISED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

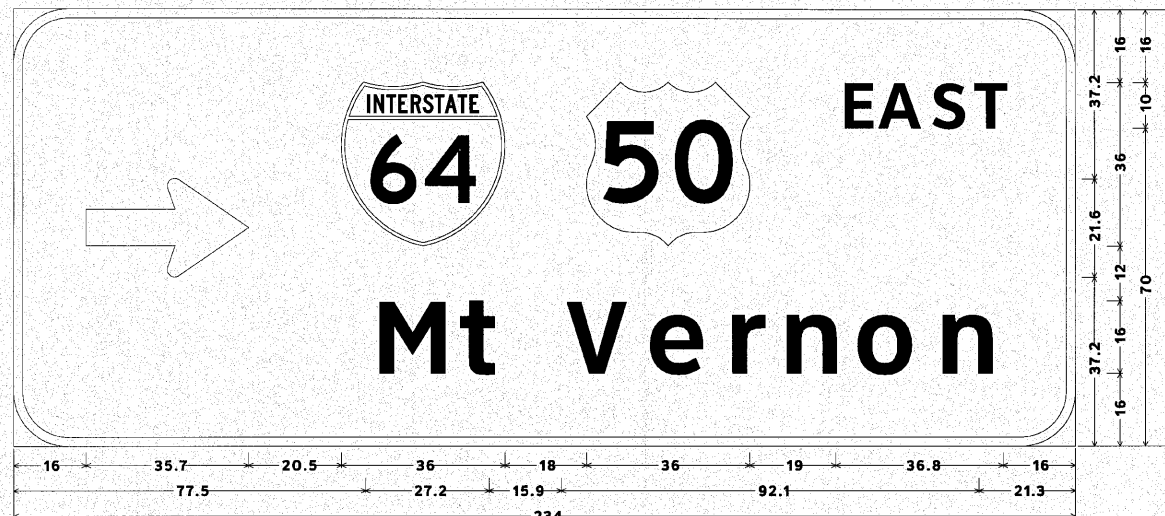
**SIGN LIGHTING
DETAILS**

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	B2-5K-2	ST. CLAIR	162	69
JOB NO. D-98-024-10			PTB NO. 153/053	
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

NOTE:

ALL GUIDE SIGNS SHALL HAVE ZZ SHEETING.

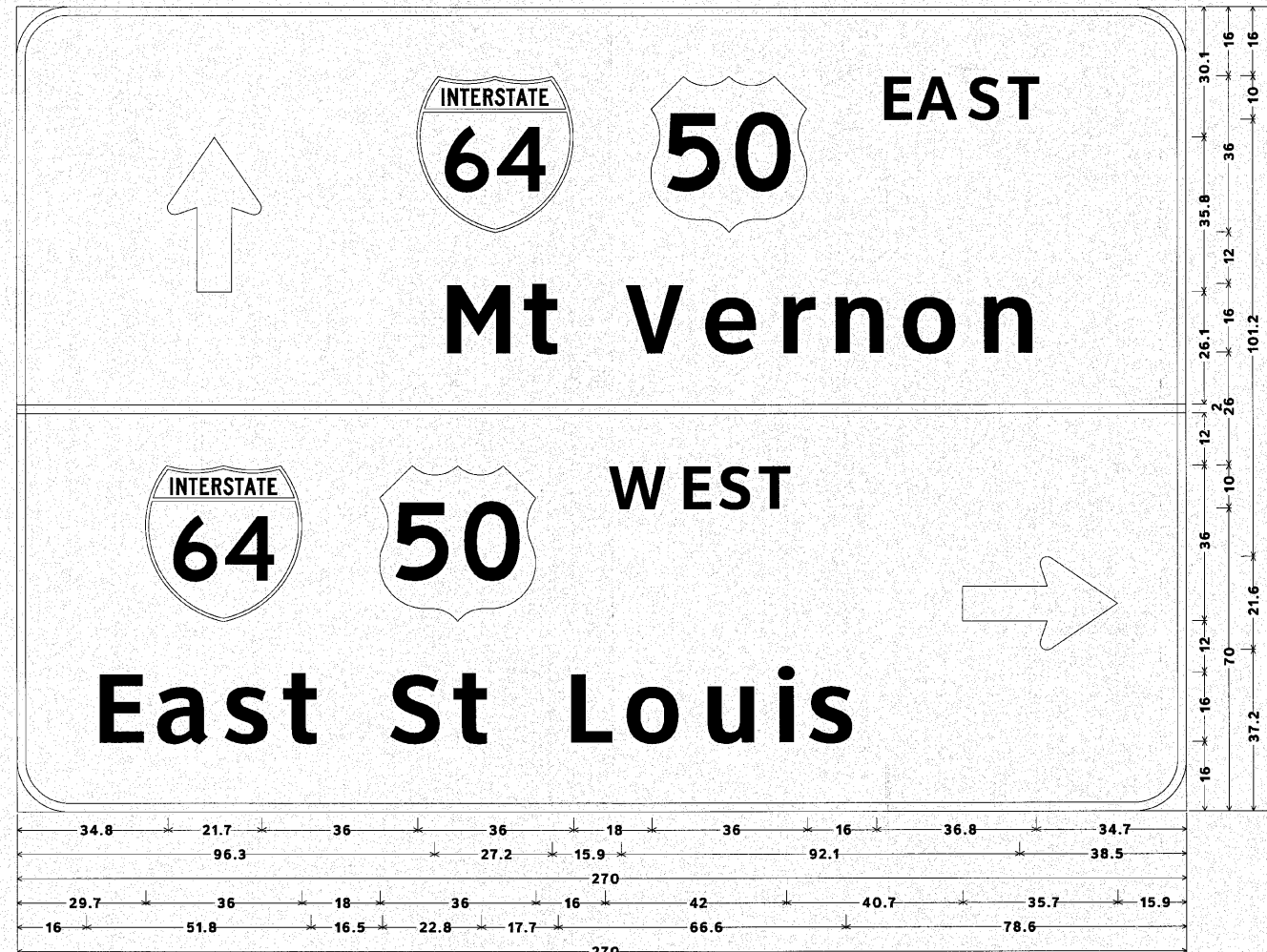


12.0" Radius, 2.0" Border, White on Green;
Standard Arrow Custom 35.8" X 21.6" 0; [EAST] ClearviewHwy-5-W; [Mt Vernon] ClearviewHwy-5-W;
Table of widths and spaces.

⇨	Ⓢ	Ⓢ	E	A	S	T	
16.0	35.7	20.5	36.0	18.0	36.0	19.0	36.8
M	t	V	e	r	n	o	n
77.5	14.7	4.7	7.8	15.9	13.6	3.9	11.7

SIGN PANEL SP1 & SP2

SIGNING SCHEDULE					
STA	LT / RT	SIGN PANEL NUMBER	HEIGHT (IN)	WIDTH (IN)	72000300 SIGN PANEL - TYPE 3 (SQ FT)
IL RTE 159					
25+00	RT	SP1	96	234	156.00
33+75	LT	SP2	96	234	156.00
41+50	LT	SP3	186	270	348.75
TOTALS					660.75
USE					661



12.0" Radius, 2.0" Border, White on Green;
Standard Arrow Custom 35.8" X 21.6" 90; [EAST] ClearviewHwy-5-W; [Mt Vernon] ClearviewHwy-5-W; [WEST] ClearviewHwy-5-W; [East St Louis] ClearviewHwy-5-W;
Standard Arrow Custom 35.8" X 21.6" 0;
Table of widths and spaces.

⇧	Ⓢ	Ⓢ	E	A	S	T	
34.8	21.7	36.0	36.0	18.0	36.0	16.0	34.7
M	t	V	e	r	n	o	n
96.3	14.7	4.6	7.9	15.9	13.5	3.9	11.8
-0.0270.00.0							
Ⓢ	Ⓢ	W	E	S	T	⇨	
29.7	36.0	18.0	36.0	13.3	3.0	6.4	2.6
E	a	s	t	S	t	L	o
16.0	10.2	4.3	11.9	3.8	10.2	3.5	7.9

SIGN PANEL SP3

NOTE:

ALL GUIDE SIGNS SHALL HAVE ZZ SHEETING.

FILE NAME = G:\S09017-7\IL 159\CAD\Sign Panels.dgn	USER NAME = IE Consultants	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGN PANEL DETAILS			F.A.I. RTE. 64	SECTION 82-5K-2	COUNTY ST CLAIR	TOTAL SHEETS 162	SHEET NO. 70
PLOT SCALE = 0.5000' / IN.	CHECKED -	REVISED -	SCALE:					SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 76D59		
PLOT DATE = 7/7/2010	DATE -	REVISED -	FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT									

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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.
 $f_y = 60,000$ 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 Specifications.

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 AASHTO M314 Gr. 105 with a minimum Charpy V-Notch (CVN) energy of 15 lb.-ft. at 10° F.

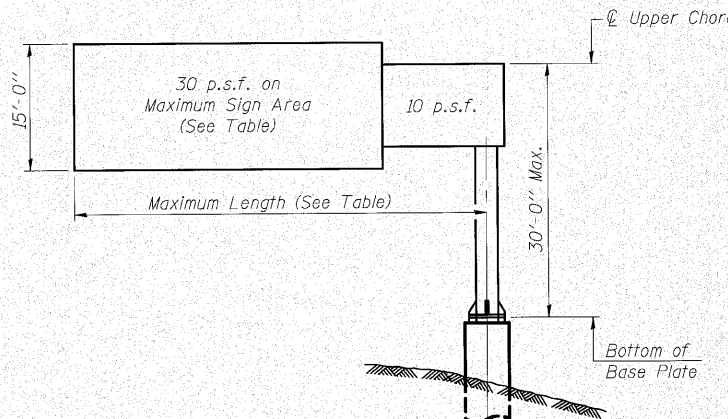
CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

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.

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	D _s	Total Sign Area
8C082S159L020.4	33+90, 61.3' LT.	II-C-A	30 ft.	597.23	12'-3"	8 ft.	156 sq. ft.

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.

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.

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.

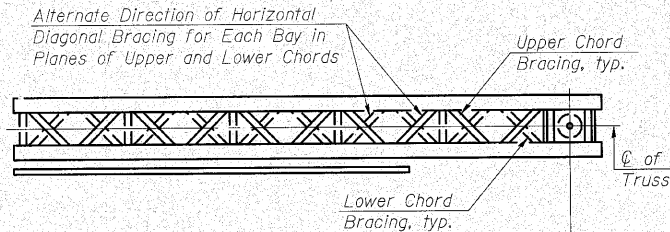
* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

TOTAL BILL OF MATERIAL

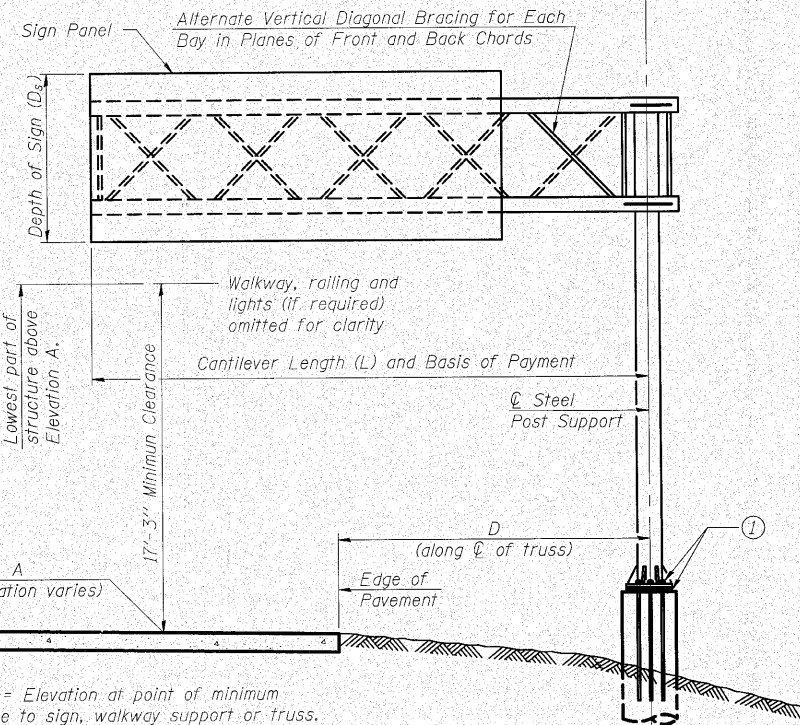
ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE II-C-A	Foot	30
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	30
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	6.1

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

SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11 SHEETS	64	82-5K-2	ST. CLAIR	162	71
CONTRACT NO. 76D59					
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			



TYPICAL PLAN
(Walkway not shown)



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.

NUMBER	REVISION	DATE

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(217) 483-9457
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12-1-08

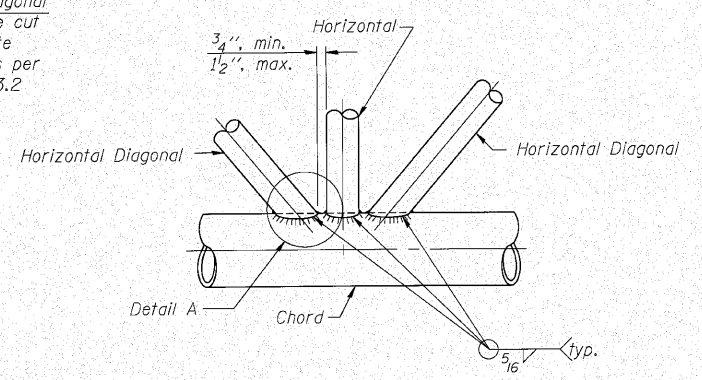
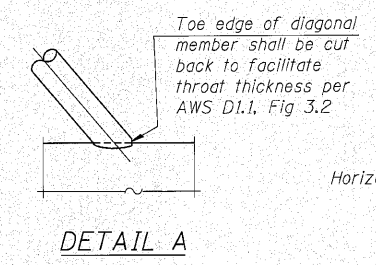
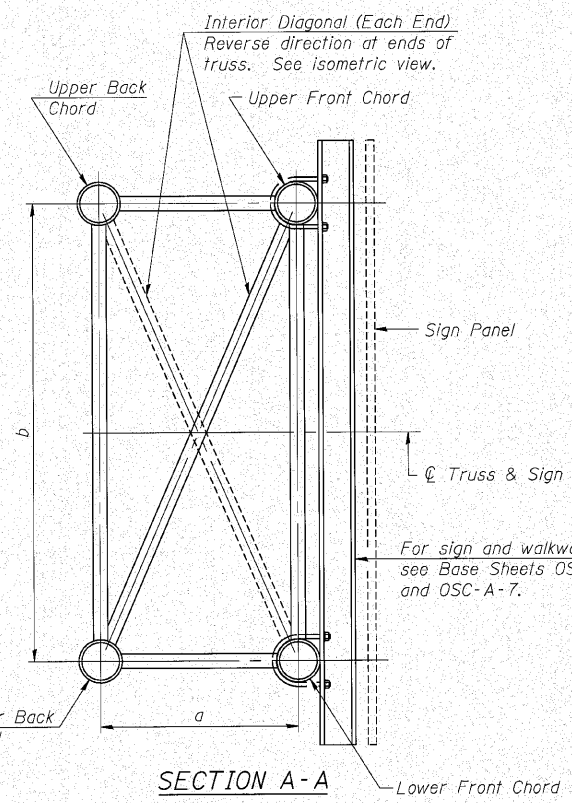
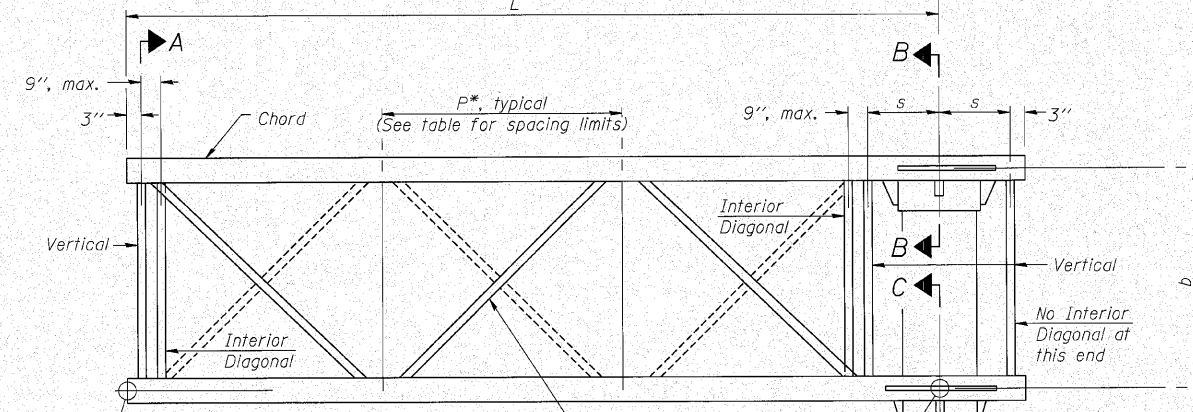
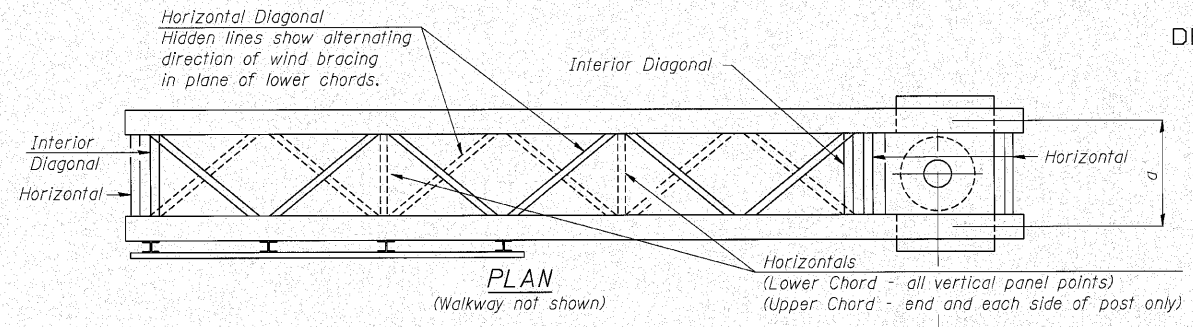
Operator: burnsideem

Date: 8/10/2010 \$TIMES

Filename: \$FILES

Operator: gjameson
 Date: 9/13/2010 10:48:01 AM
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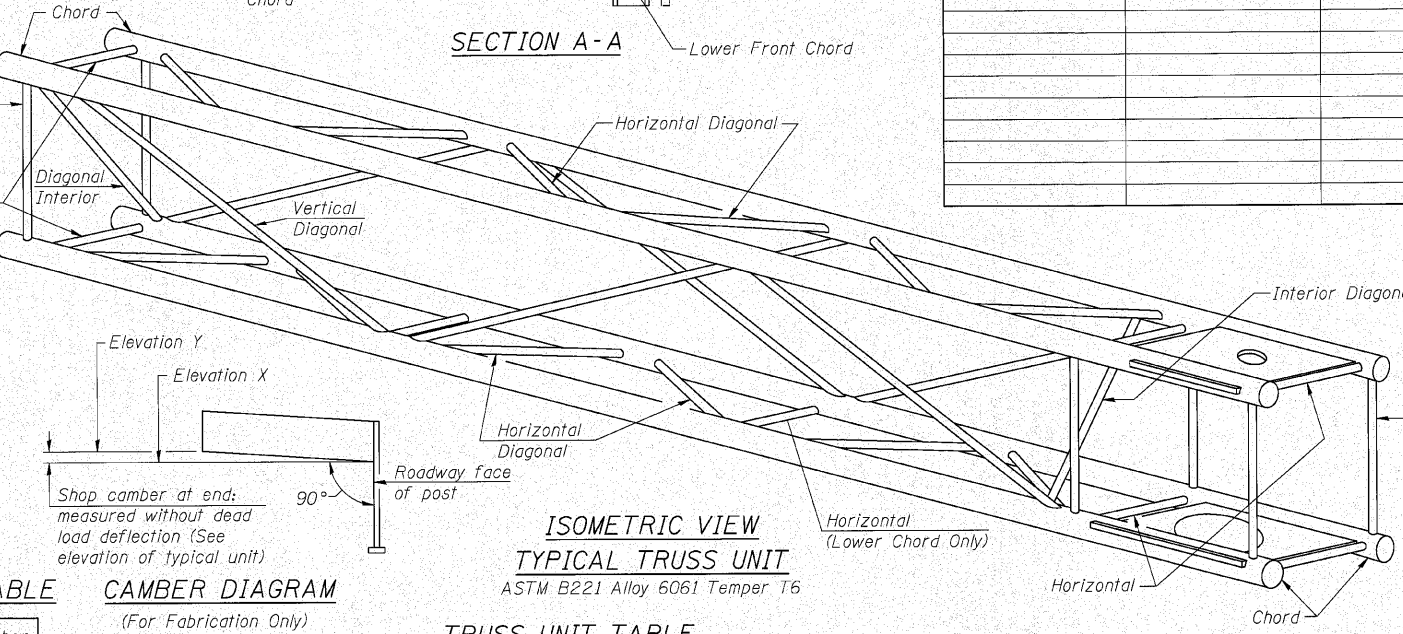
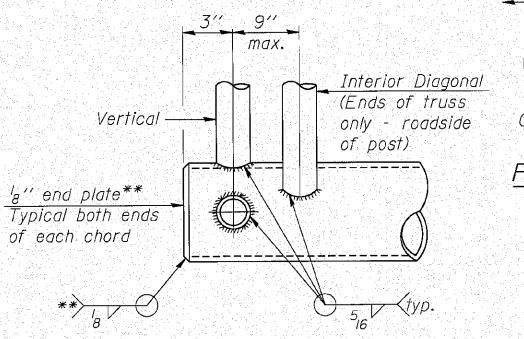
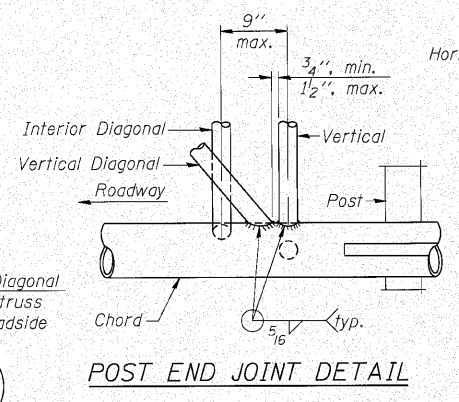
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DEPARTMENT OF TRANSPORTATION



Structure Number	Station	Truss Type	Design Length (L)	Number of Panels Per Unit	Panel Length (P)*
8C082S159L020.4	33+90, 61.3' LT.	II-C-A	30 ft.	7	4'-0"

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.



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"

CAMBER DIAGRAM
(For Fabrication Only)

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

NUMBER	REVISION	DATE

CANTILEVER SIGN STRUCTURES
TRUSS DETAILS
ALUMINUM TRUSS & STEEL POST

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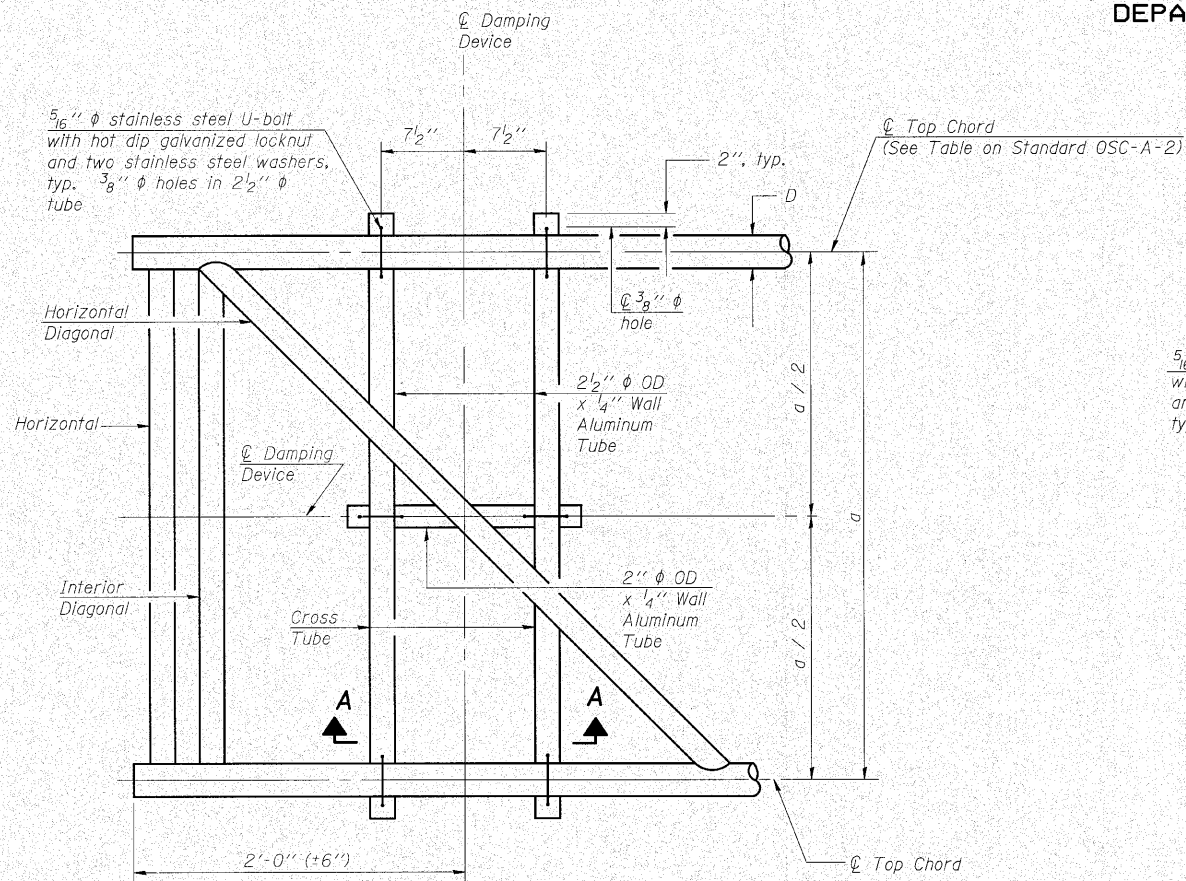
SHEET NO. 2	F.A.I. RTE. 64	SECTION 82-5K-2	COUNTY ST. CLAIR	TOTAL SHEETS 162	SHEET NO. 72
11 SHEETS	CONTRACT NO. 76D59		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

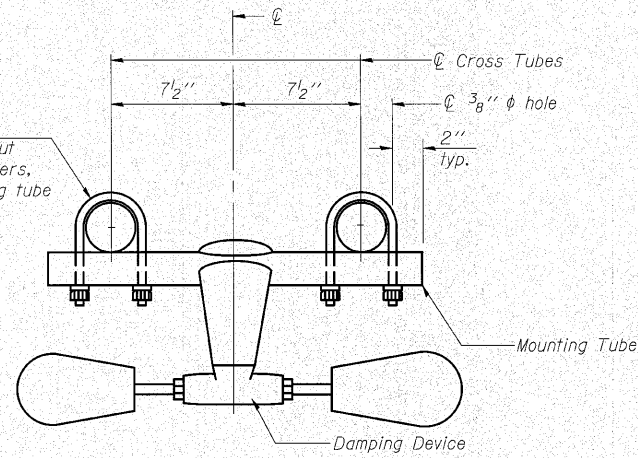
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Date: 8/10/2010 \$TIMES

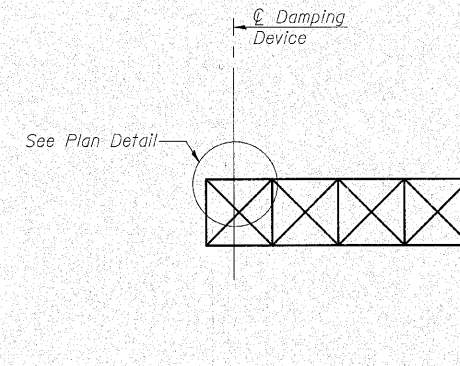
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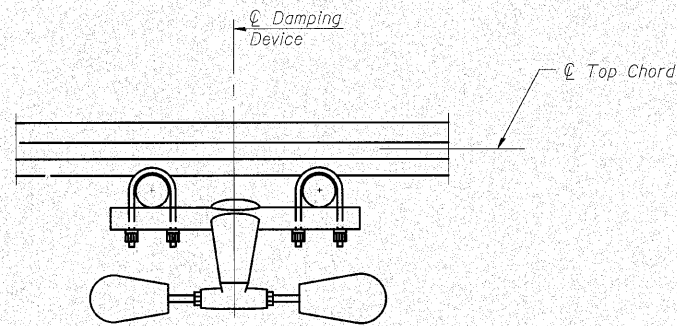
PLAN DETAIL



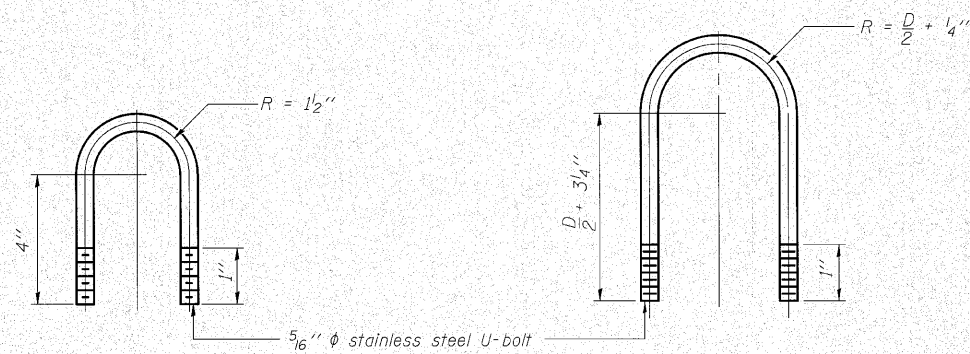
TRUSS DAMPING
DEVICE CONNECTION DETAIL



ELEVATION
Aluminum Cantilever
Sign Structure



SECTION A-A



DAMPING DEVICE MOUNTING
TUBE U-BOLT DETAIL
(Typical)

TOP CHORD TO CROSS TUBE
U-BOLT DETAIL
(Typical)

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

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CANTILEVER SIGN STRUCTURE
DAMPING DEVICE

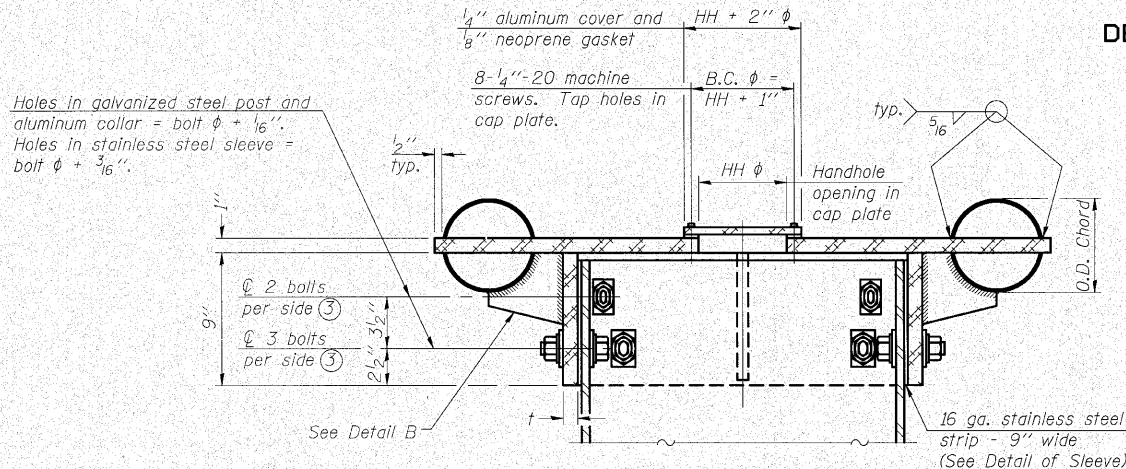
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	CONTRACT NO. 76059				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

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Operator: burnsideern

Date: 8/10/2010 \$TIMES

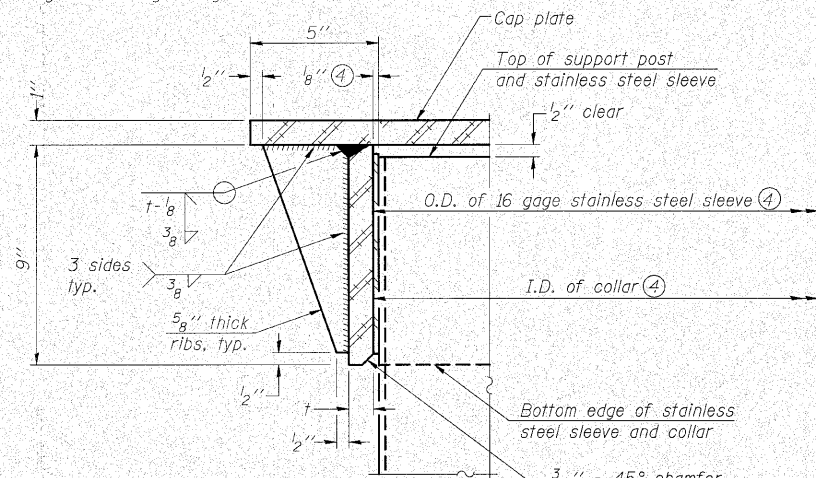
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SECTION B-B

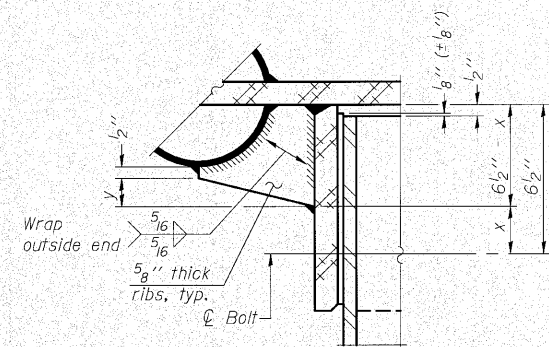
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

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.



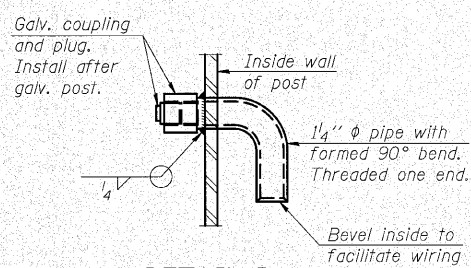
DETAIL A

(Two locations)

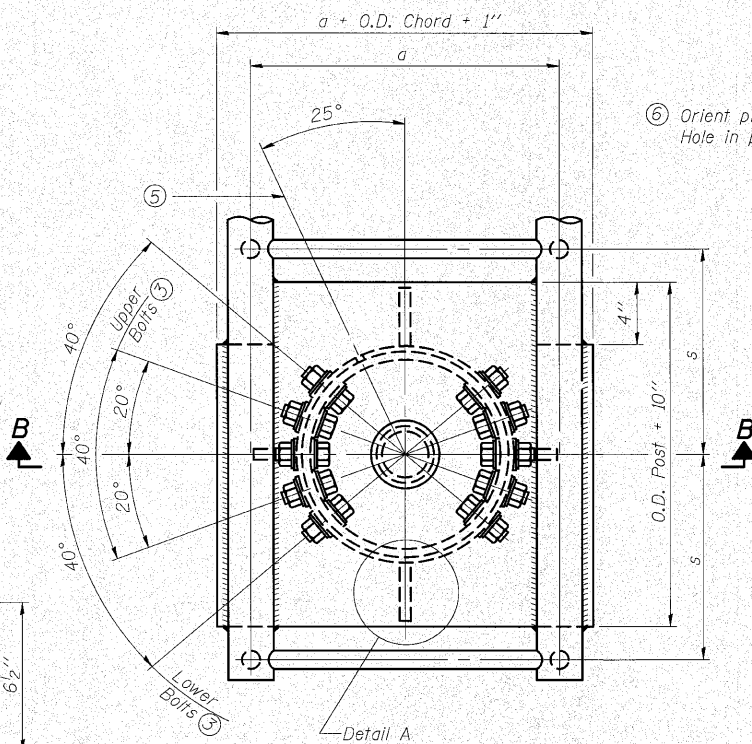


DETAIL B

Two locations (For details not shown, see Detail C)

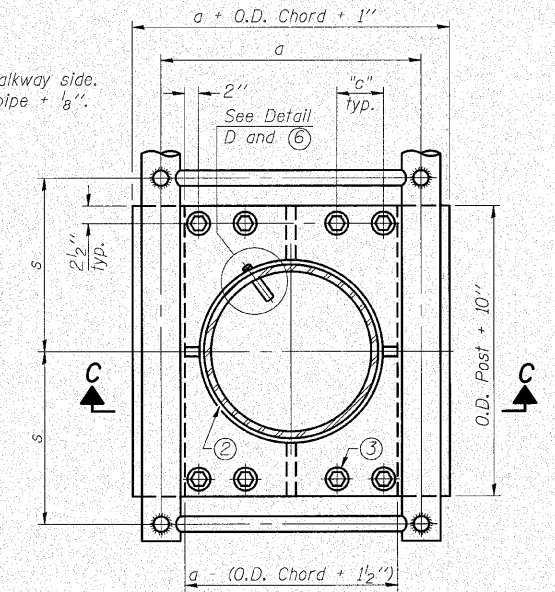


DETAIL D



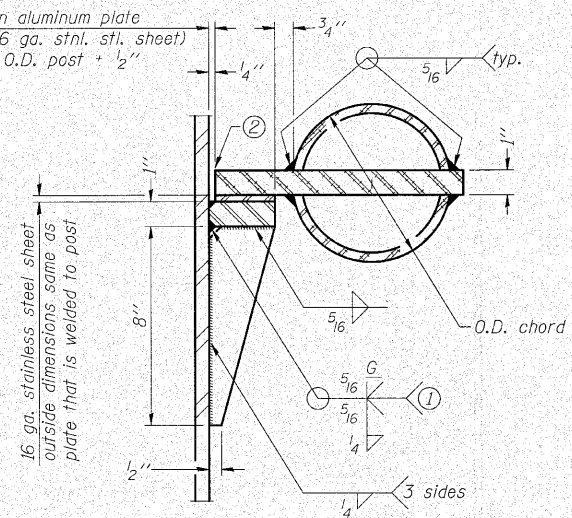
PLAN VIEW - TOP OF COLUMN

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



SECTION THRU POST ABOVE LOWER CHORDS

Hole in aluminum plate (and 16 ga. stnl. stl. sheet) to be O.D. post + 1/2"



DETAIL C

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.

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 1/2" long at 6" cts. along top edge and at 1/4" opening.

NUMBER	REVISION	DATE

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" phi (83#/1)	7/8"	3 1/4"	8"	5/8"	1 3/4"	2 1/4"
II-C-A	24" phi (125#/1)	1"	3 1/2"	12"	7/8"	2"	1 1/4"
III-C-A (35' max.)	24" phi (125#/1)	1 1/4"	3 1/2"	12"	7/8"	2"	1"
III-C-A (>35' to 40')	24" phi (171#/1)	1 1/4"	3 1/2"	12"	7/8"	2"	1"

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.

**CANTILEVER SIGN STRUCTURES
JUNCTURE DETAILS
ALUMINUM TRUSS & STEEL POST**

SHEET NO. 4 11 SHEETS	F.A.I. RTE. 64	SECTION 82-5K-2	COUNTY ST. CLAIR	TOTAL SHEETS 162	SHEET NO. 74
	CONTRACT NO. 76D59				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

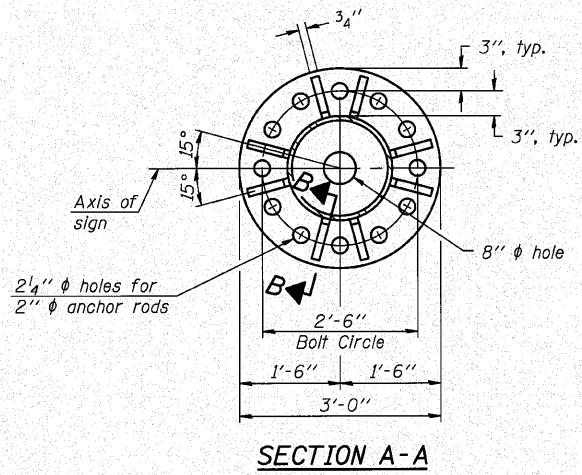
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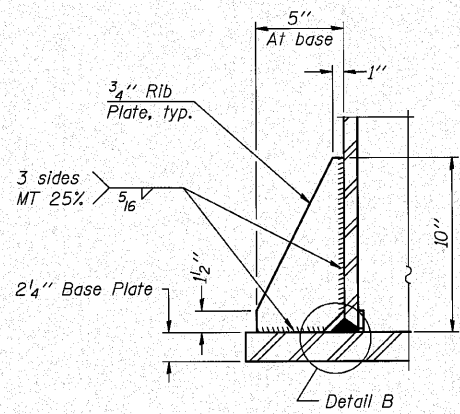
OSC-A-3 12-1-08

Operator: gjameson
 Date: 9/13/2010 10:55:35 AM
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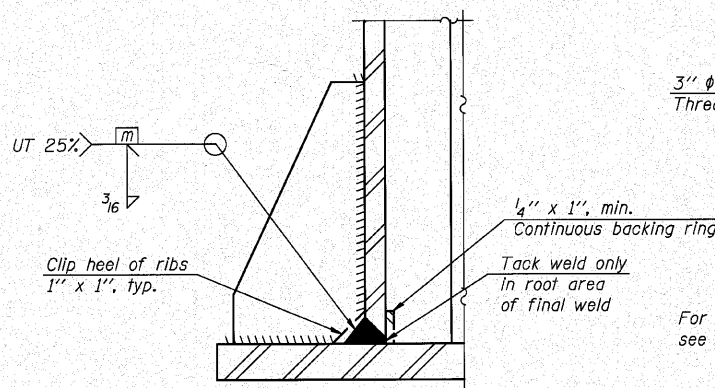
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



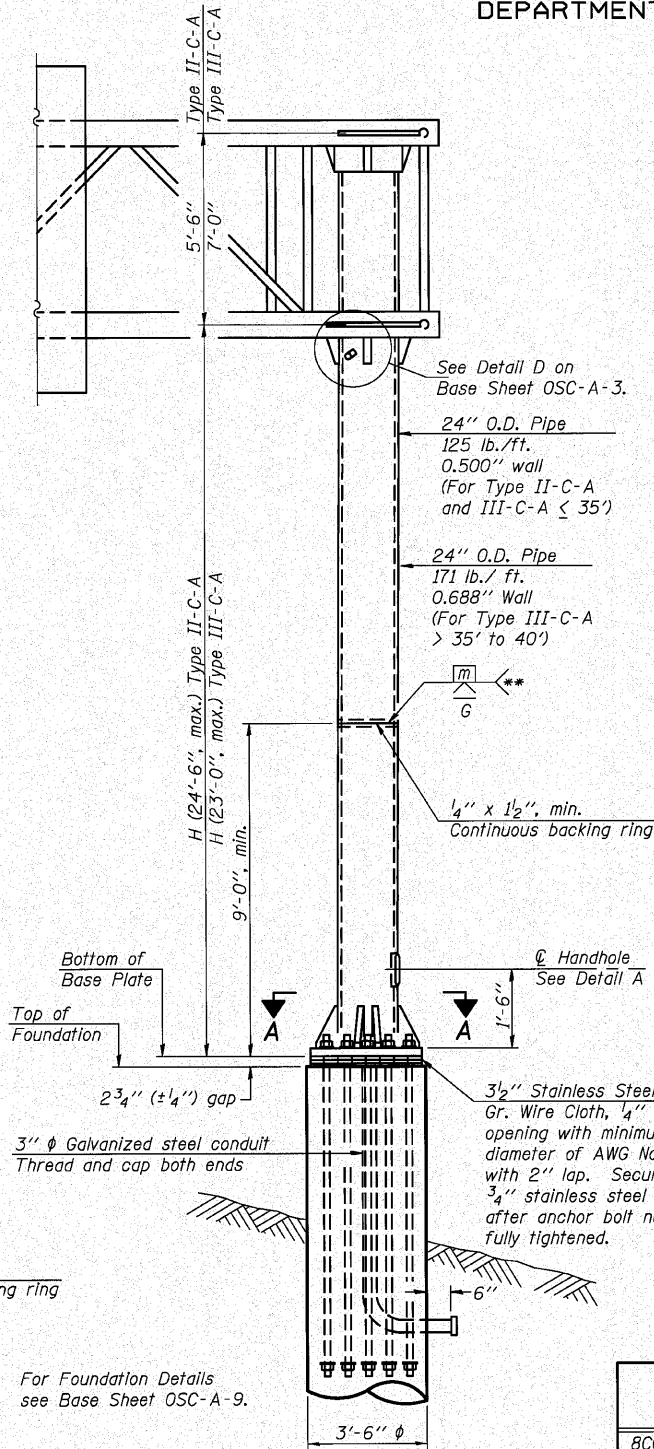
SECTION A-A



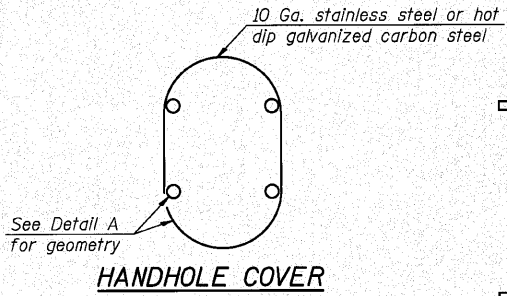
SECTION B-B



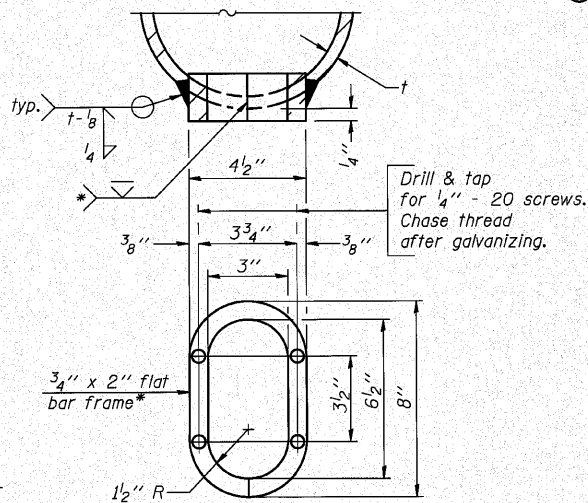
DETAIL B
(Typical rib)



FRONT ELEVATION



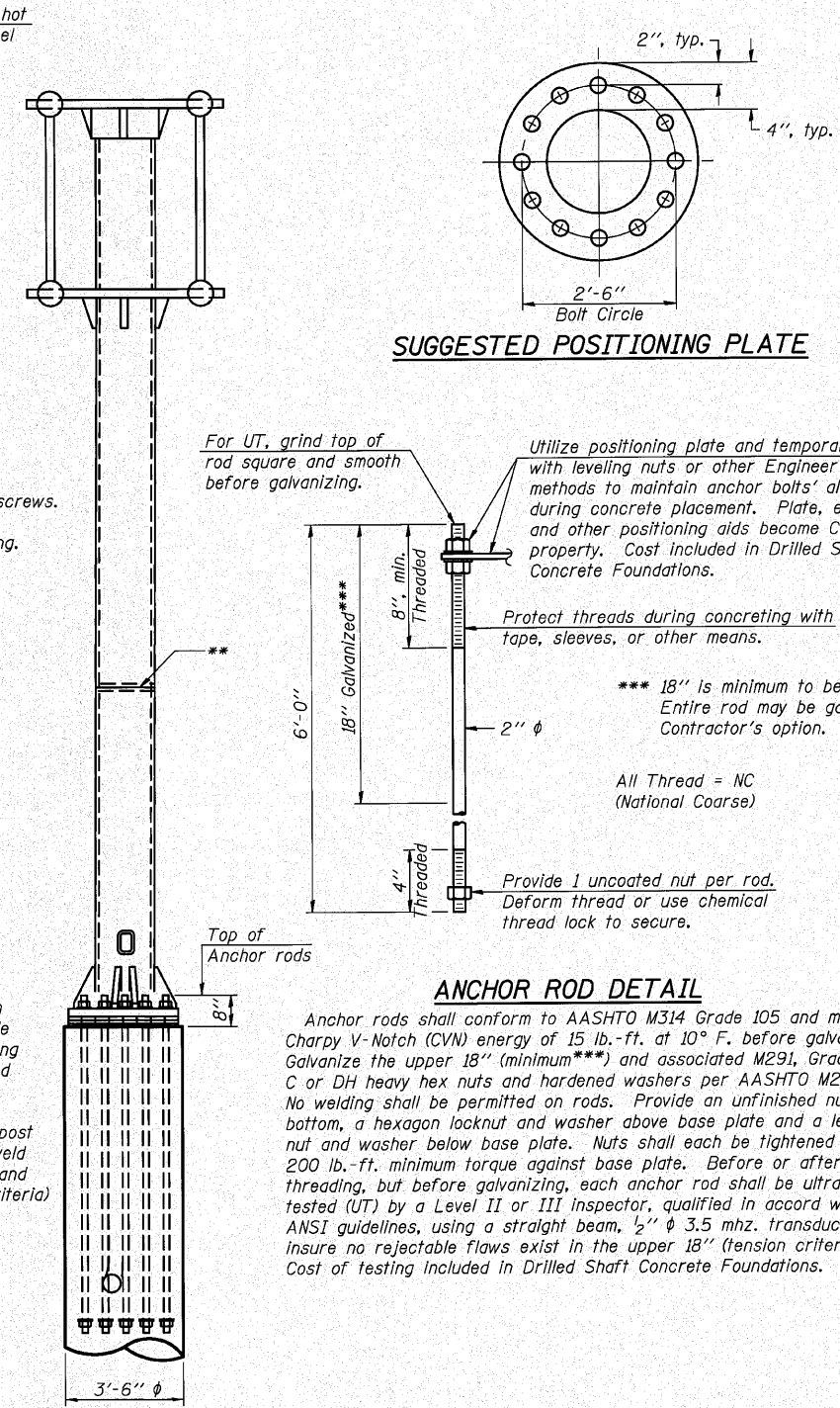
HANDHOLE COVER



DETAIL A

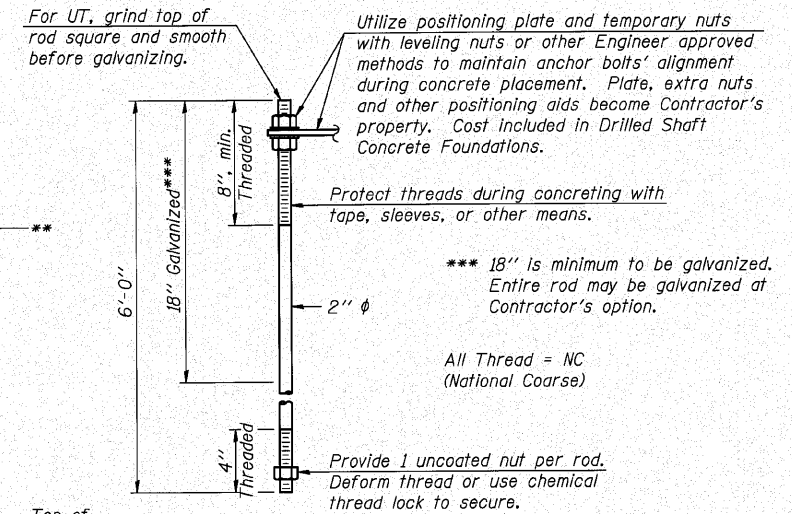
* Bent bars may be butt welded top and bottom or bottom only. In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μ in or less.

** 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

SUGGESTED POSITIONING PLATE



ANCHOR ROD DETAIL

Anchor rods shall conform to AASHTO M314 Grade 105 and meet Charpy V-Notch (CVN) energy of 15 lb.-ft. at 10° F. before galvanizing. Galvanize the upper 18" (minimum***) and associated M291, Grade A, C or DH heavy hex nuts and hardened washers per AASHTO M232. No welding shall be permitted on rods. Provide an unfinished nut at bottom, a hexagon locknut and washer above base plate and a leveling nut and washer below base plate. Nuts shall each be tightened with 200 lb.-ft. minimum torque against base plate. Before or after threading, but before galvanizing, each anchor rod shall be ultrasonically tested (UT) by a Level II or III inspector, qualified in accord with ANSI guidelines, using a straight beam, 1/2" ϕ 3.5 mhz. transducer, to insure no rejectable flaws exist in the upper 18" (tension criteria). Cost of testing included in Drilled Shaft Concrete Foundations.

Structure Number	Station	H
8C082S159L020.4	33+90, 61.3' LT.	23'-8"

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

NUMBER	REVISION	DATE

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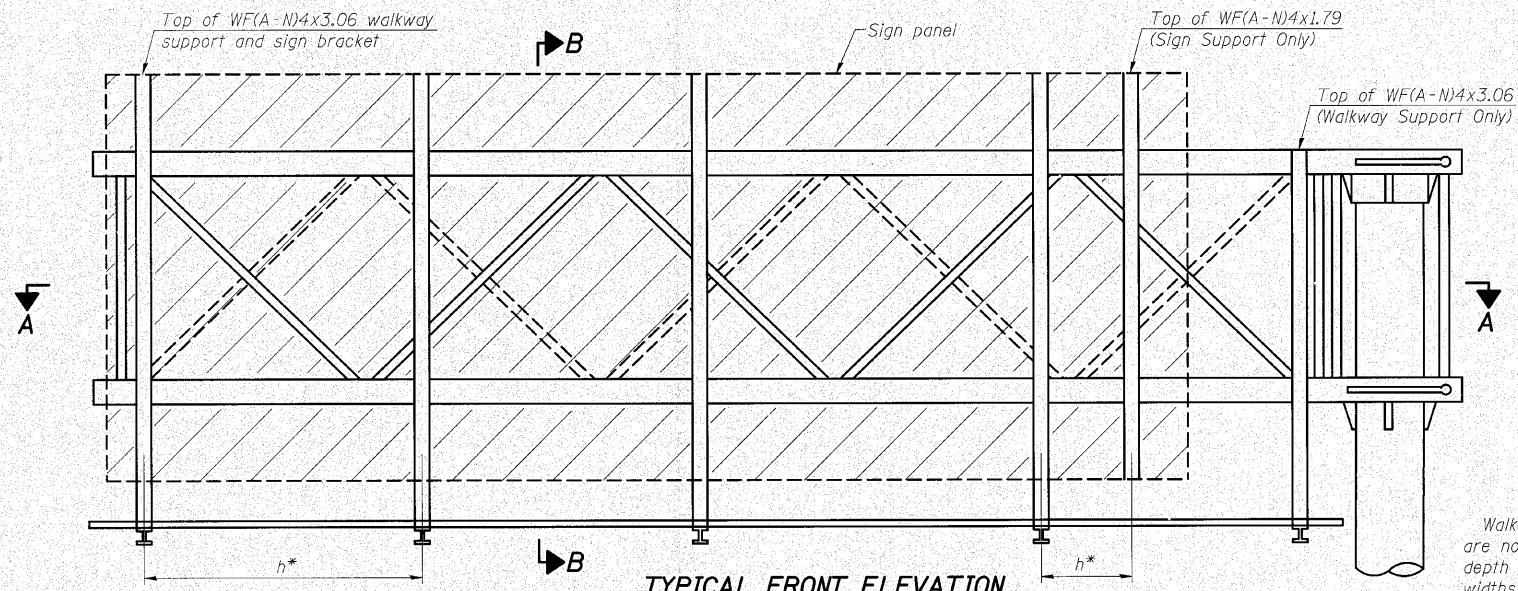
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OSC-A-5 12-1-08

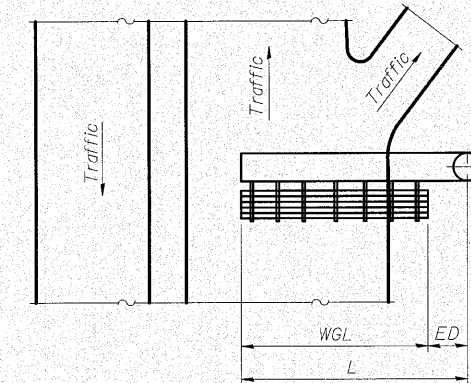
CANTILEVER SIGN STRUCTURES
TYPE II-C-A & III-C-A TRUSS SUPPORT POST
ALUMINUM TRUSS & STEEL POST

SHEET NO. 5 11 SHEETS	F.A.I. RTE. 64	SECTION 82-5K-2	COUNTY ST. CLAIR	TOTAL SHEETS 162	SHEET NO. 75
	CONTRACT NO. 76D59				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TYPICAL FRONT ELEVATION
With lights and handrail omitted for clarity.



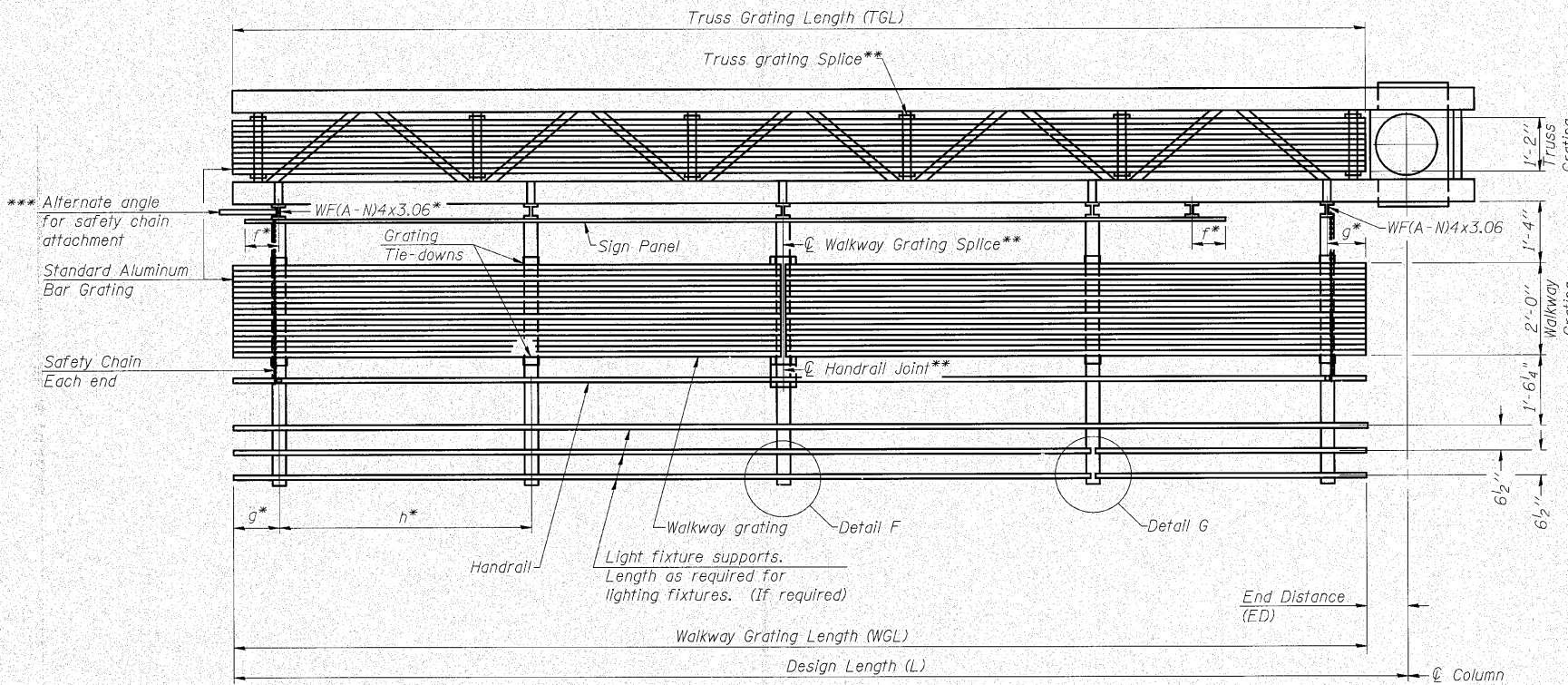
PLAN WALKWAY AND HANDRAIL SKETCH
(Road plan beneath truss varies)

Structure Number	Station	WGL	ED	TGL
8C082S159L020.4	33+90, 61.3' LT.	27'-6"	2'-6"	27'-6"

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 center of nearest bracket)
 g = 12" maximum, 4" minimum (End of walkway to center of nearest bracket)
 h = 6'-0" maximum (center to center 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.



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.

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

NUMBER	REVISION	DATE

BRACKET TABLE

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

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

SHEET NO. 6 11 SHEETS	F.A.I. RTE. 64	SECTION 82-5K-2	COUNTY ST. CLAIR	TOTAL SHEETS 162	SHEET NO. 76
	CONTRACT NO. 76D59				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

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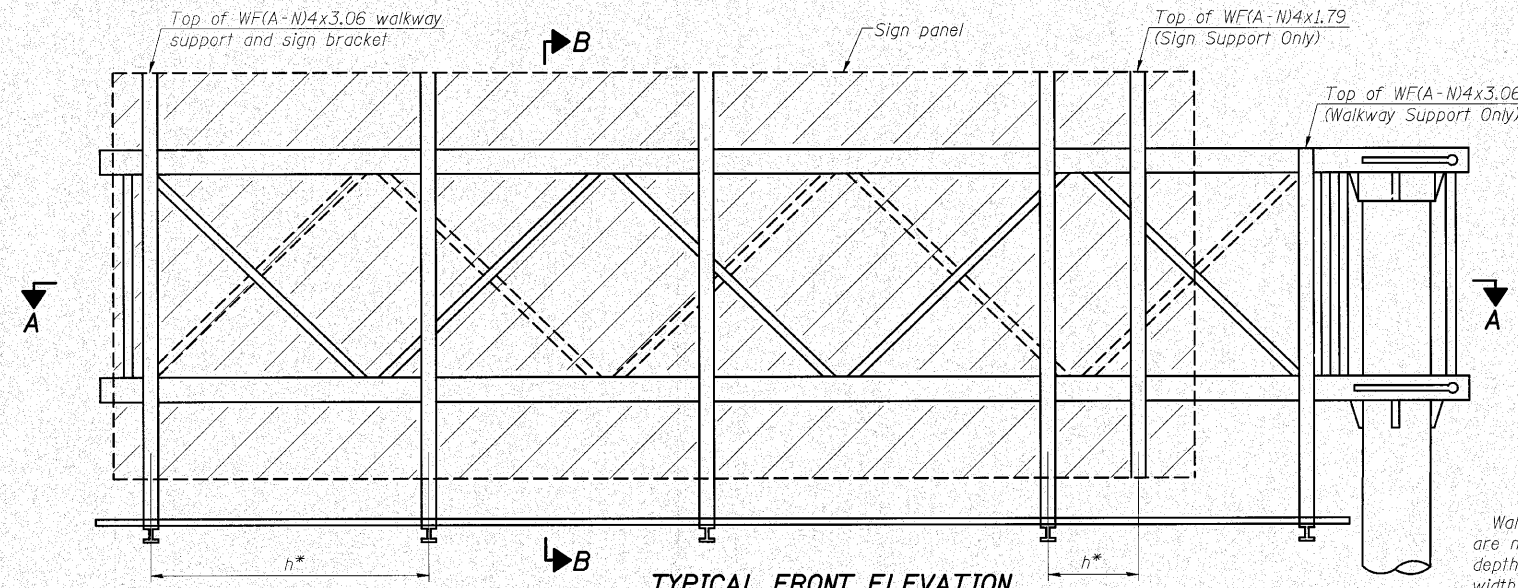
WHKS & CO.
ENGINEERING
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SPRINGFIELD, IL
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DESIGN FIRM #184001036

OSC-A-6

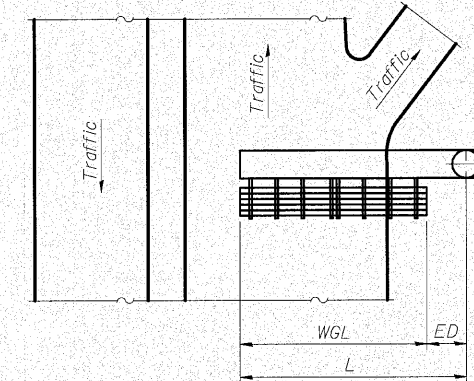
12-1-08

Operator: burrisideem Date: 8/10/2010 \$TIMES\$ Filename: \$FILE\$

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TYPICAL FRONT ELEVATION
With lights and handrail omitted for clarity.



PLAN WALKWAY AND HANDRAIL SKETCH
(Road plan beneath truss varies)

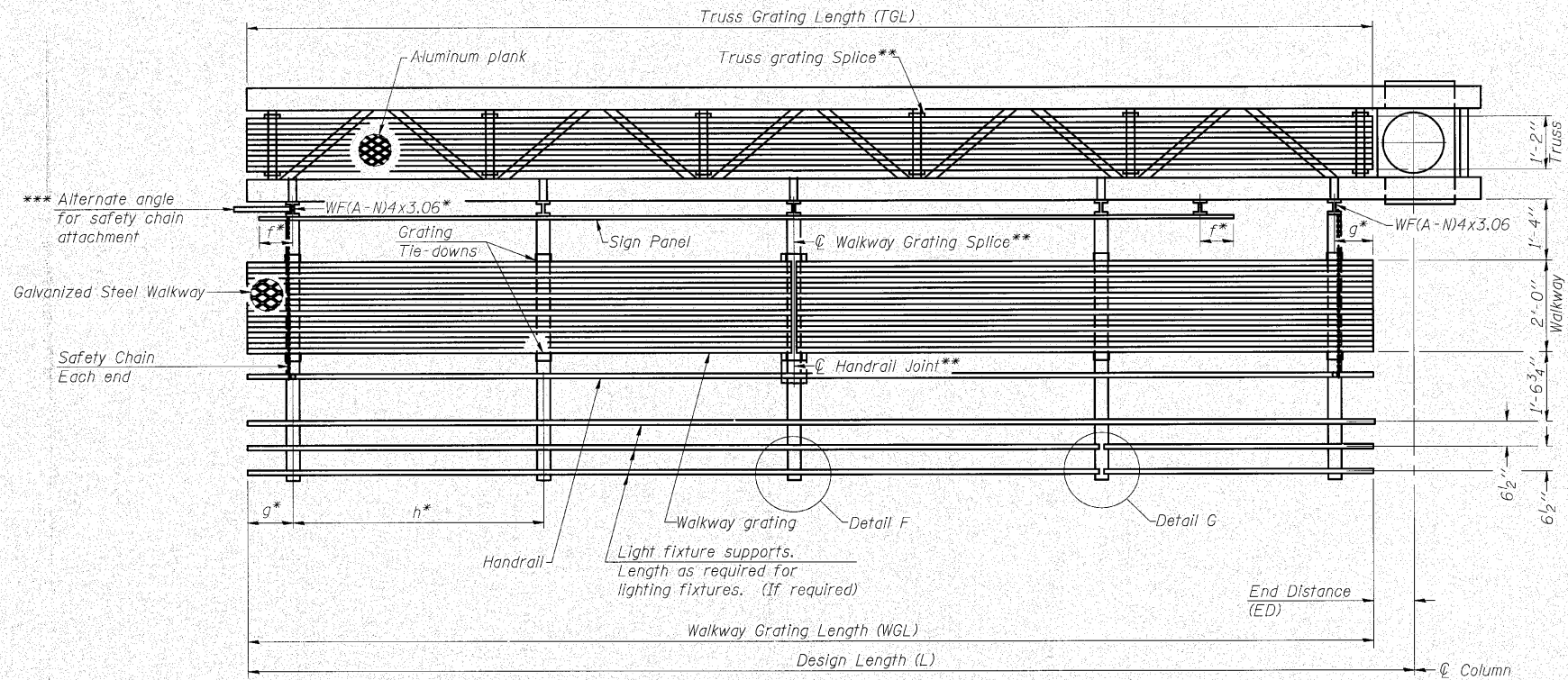
Walkway and truss grating dimensions are nominal and may vary (width ± 1/2", depth ± 1/2") based on available standard widths.

Structure Number	Station	WGL	ED	TGL
8C082S159L020.4	33+90, 61.3' LT.	27'-6"	2'-6"	27'-6"

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 C of nearest bracket)
 $g = 12''$ maximum, $4''$ minimum (End of walkway to C of nearest bracket)
 $h = 6'-0''$ maximum (C to C 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.



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.

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

NUMBER	REVISION	DATE

BRACKET TABLE

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

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

SHEET NO. 7 11 SHEETS	F.A.I. RTE. 64	SECTION 82-5K-2	COUNTY ST. CLAIR	TOTAL SHEETS 162	SHEET NO. 77
	CONTRACT NO. 76D59				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

Operator: burnsideem Date: 8/10/2010 \$TIMES\$ Filename: \$FILES\$

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12-1-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars (MBB) shall be $\frac{3}{16}$ " x $\frac{1}{2}$ " on $1\frac{3}{16}$ " centers and conform to ASTM B211 Alloy 6061-T6.
Cross bars (CB) shall be $\frac{3}{16}$ " x $\frac{1}{2}$ " 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:

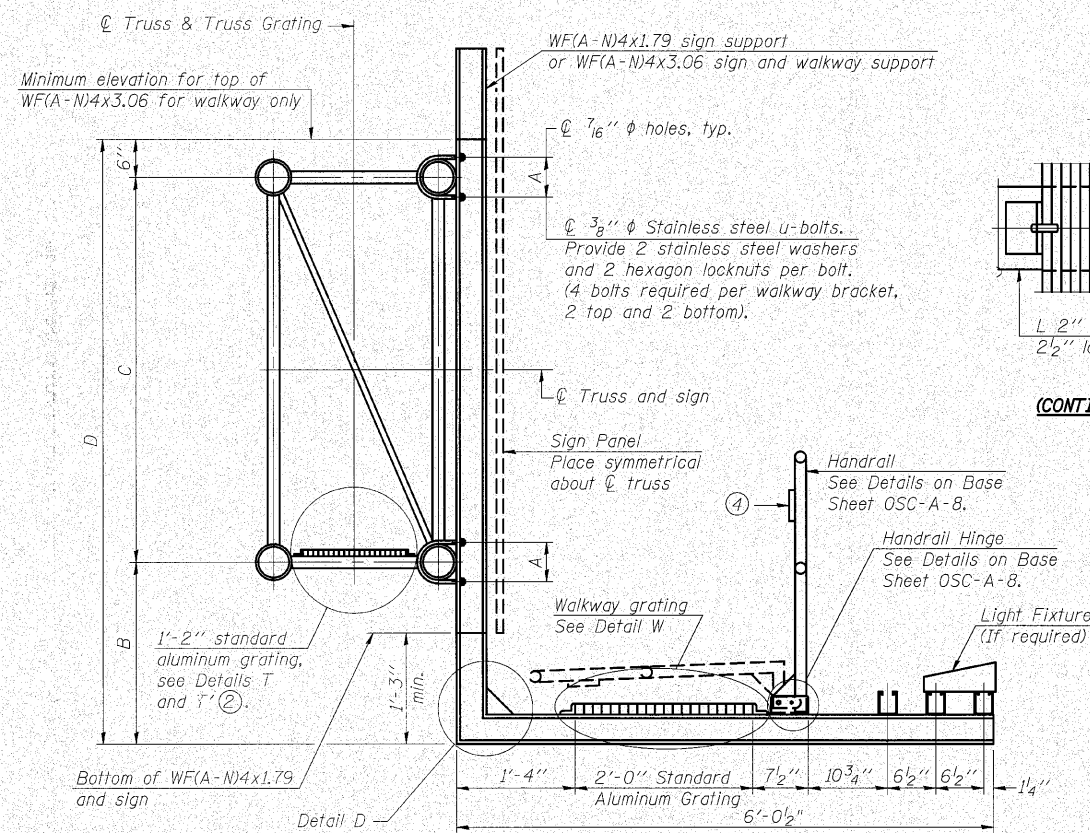
Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of $\frac{1}{2}$ ", spaced on $1\frac{3}{16}$ " centers.

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

Operator

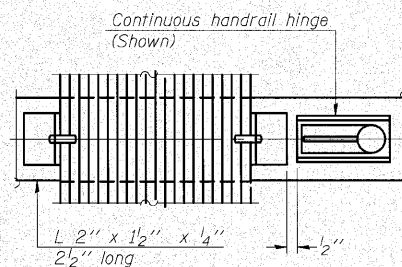
Date: 8/10/2010 \$TIMES

Filename: \$FILES



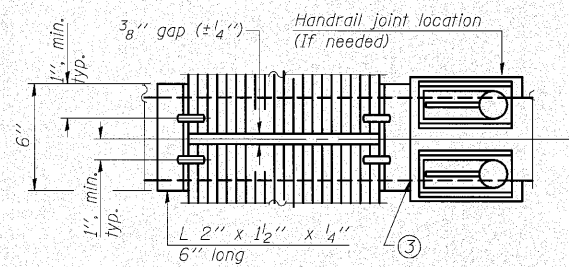
SECTION B-B

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.



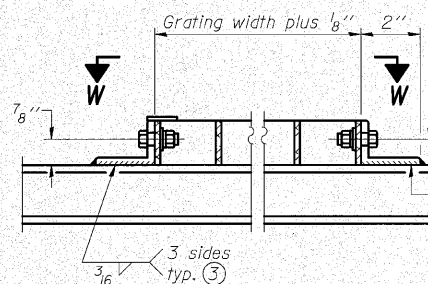
(CONTINUOUS WALKWAY GRATING)

SECTION W-W

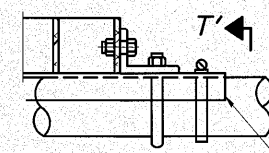


(AT WALKWAY GRATING SPLICE)

Drill ① $\frac{3}{8}$ " ϕ holes in walkway for $\frac{5}{16}$ " ϕ bolts, 1" long, each with one locknut and two stainless steel flat washers.



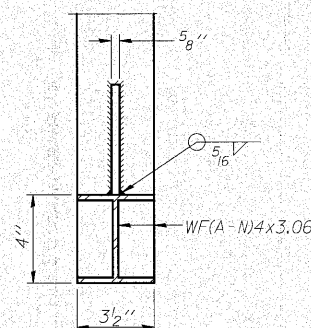
DETAIL W
(Walkway grating)



DETAIL T'

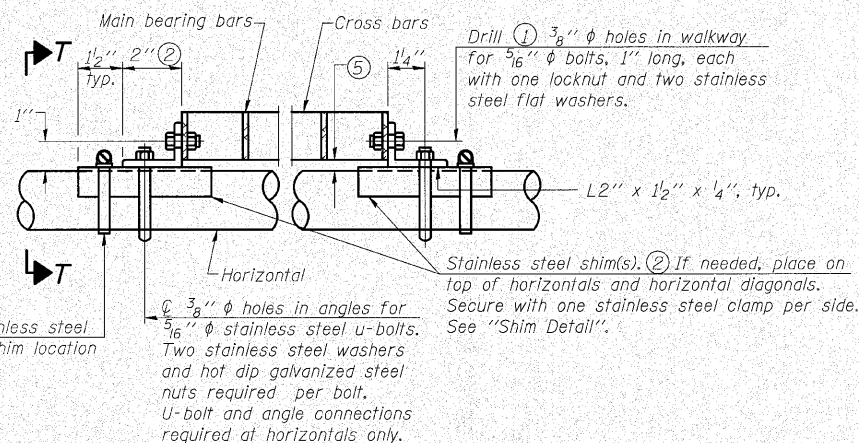
(Truss grating splice)

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



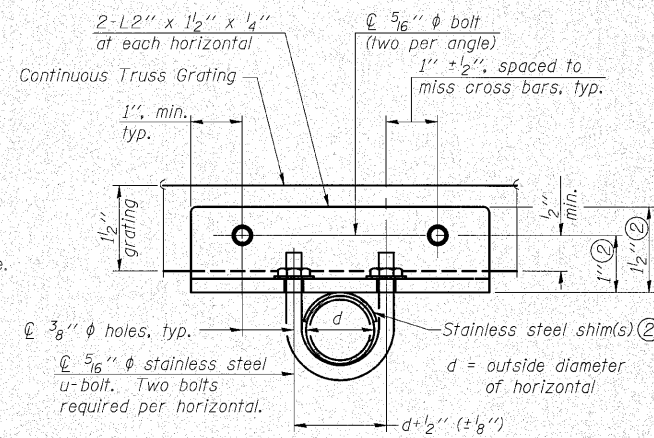
SECTION D-D

Screw type stainless steel tube clamp at shim location



DETAIL T

(Continuous Truss grating)

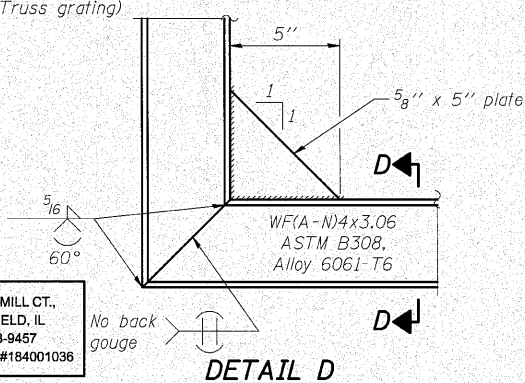


SECTION T-T

NUMBER	REVISION	DATE

DESIGNED
CHECKED
DRAWN
CHECKED
OSC-A-7

WHKS & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

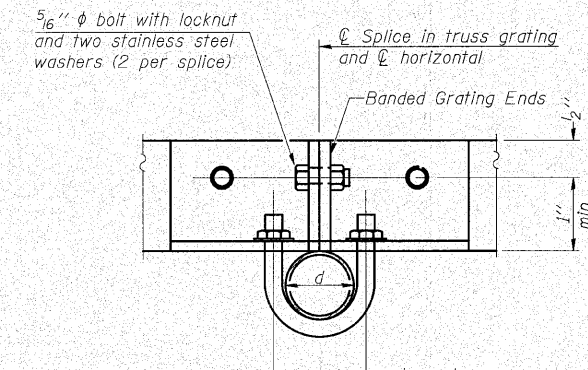


DETAIL D

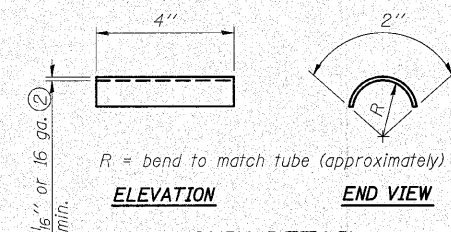
Structure Number	Station	A	⑥ B	C	⑥ D
8C082S159L020.4	33+90, 61.3' LT.	6 7/8"	30"	66"	102"

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

SHEET NO. 8	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11 SHEETS	64	82-5K-2	ST. CLAIR	162	78
CONTRACT NO. 76D59					
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			



SECTION T'-T'

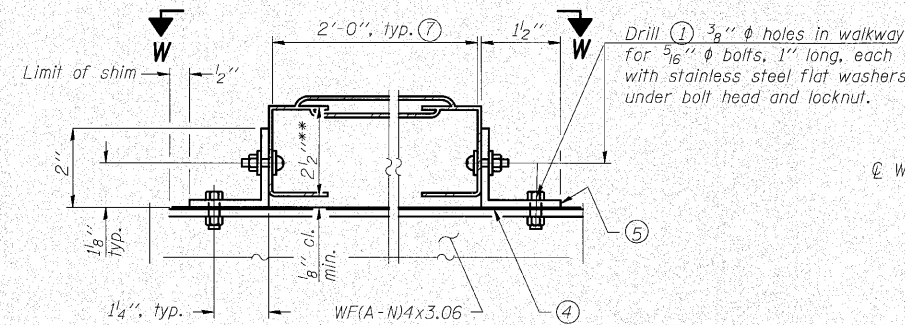


SHIM DETAIL

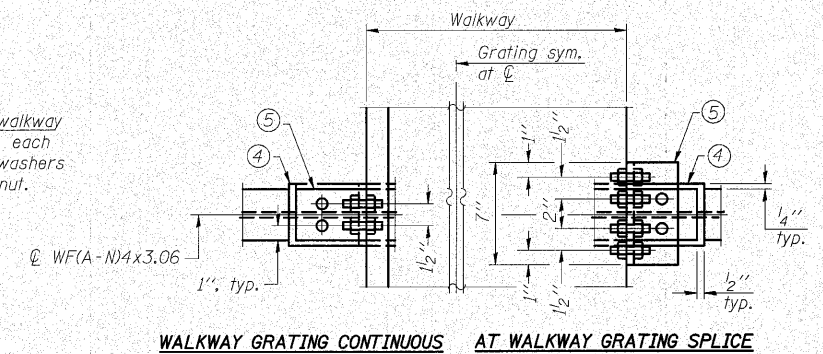
- ① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- ② Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided 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 $\frac{1}{8}$ " x $\frac{1}{2}$ " 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. Ds, given on OSC-A-1.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

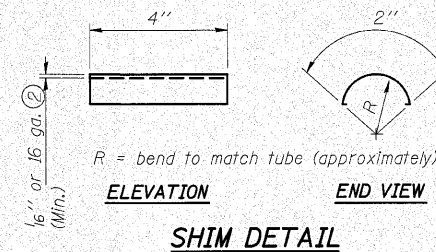
Sign shall be even with the top of the bracket, but it may extend no more than 6" above the top of the bracket for field adjustments.



DETAIL W
GALVANIZED STEEL WALKWAY GRATING

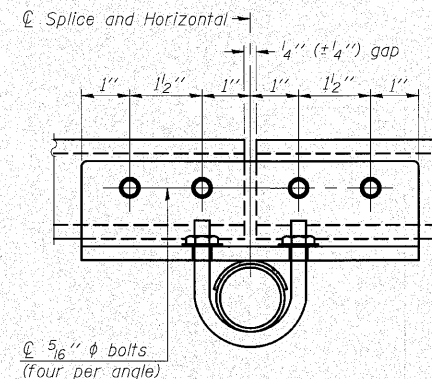


SECTION W-W



SHIM DETAIL

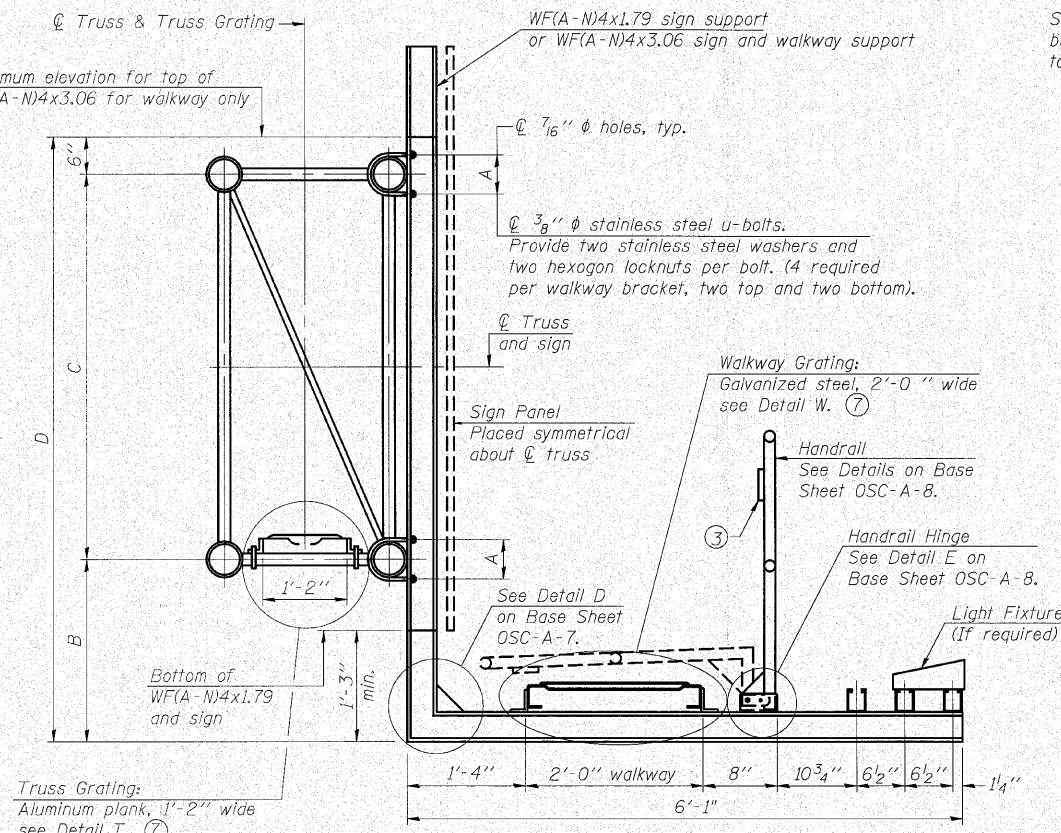
- ① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- ② Stainless steel shims shall be placed under angles at horizontals and horizontal diagonals if needed to compensate for alignment variations and differences in horizontal diagonal pipe sizes beyond adjustment provided by angles. Secure with one stainless steel clamp per location, see "Shim Detail". Thicker shim plates may be used when needed subject to shims performing properly.
- ③ $1/8" \times 1/2" \times 2"$ welded to handrail posts to protect locations that contact grating.
- ④ $1/16"$ (or 16 ga.) $\times 2 1/2" \times 4"$ 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" $\times 2" \times 1/4"$, 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 $\pm 1/2"$, depth $\pm 1/2"$) 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.



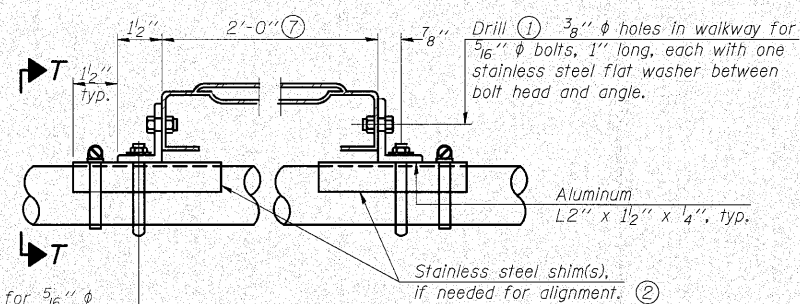
SECTION T-T

(Truss Grating Splice)
Alternate splice details and locations may be used subject to the Engineer's review and approval.

ALUMINUM TRUSS GRATING



SECTION B-B



DETAIL T

(Truss grating at horizontal)

$3/8"$ holes in angles for $5/16"$ stainless steel u-bolts. Two stainless steel washers and hot dip galvanized steel nuts required per bolt. U-bolt and angle connections required at horizontals only.

NUMBER	REVISION	DATE

Structure Number	Station	A	⑧ B	C	⑧ D
8C082S159L020.4	33+90, 61.3' LT.	6' 8"	30"	66"	102"

**CANTILEVER SIGN STRUCTURES
ALTERNATE WALKWAY DETAILS**

SHEET NO. 9 11 SHEETS	F.A.I. RTE. 64	SECTION 82-5K-2	COUNTY ST. CLAIR	TOTAL SHEETS 162	SHEET NO. 79
	CONTRACT NO. 76D59				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

Operator: burnsideem Date: 8/10/2010 \$TIMES \$FILES

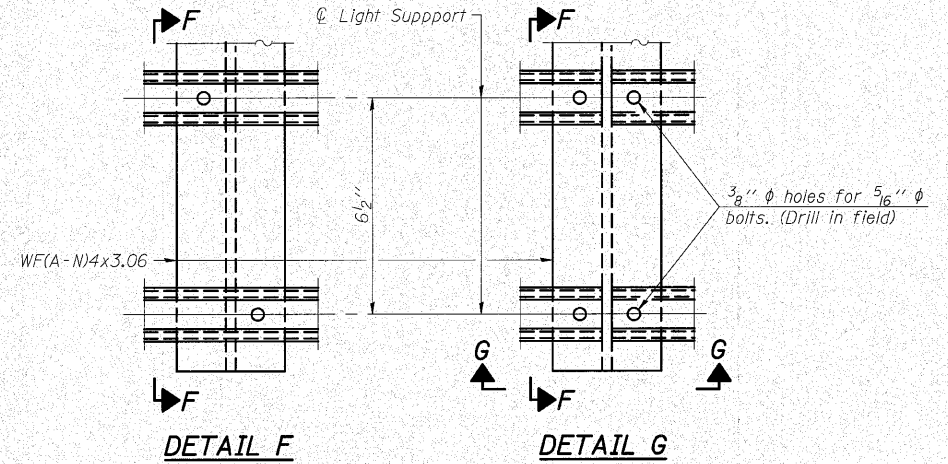
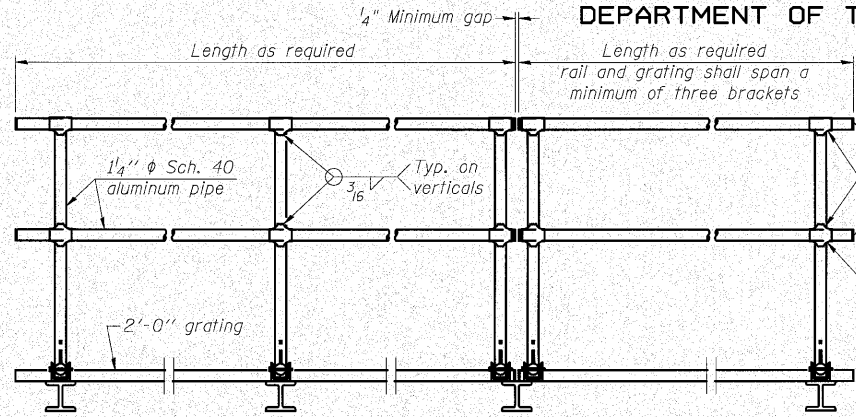
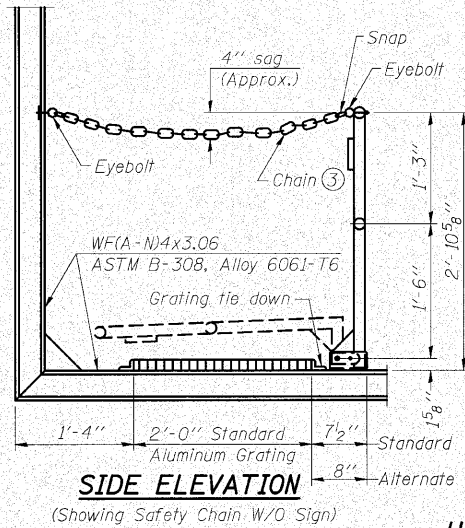
DESIGNED
CHECKED
DRAWN
CHECKED

WHKS & co.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

OSC-A-7S

6-1-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SIDE ELEVATION
(Showing Safety Chain W/O Sign)

FRONT ELEVATION

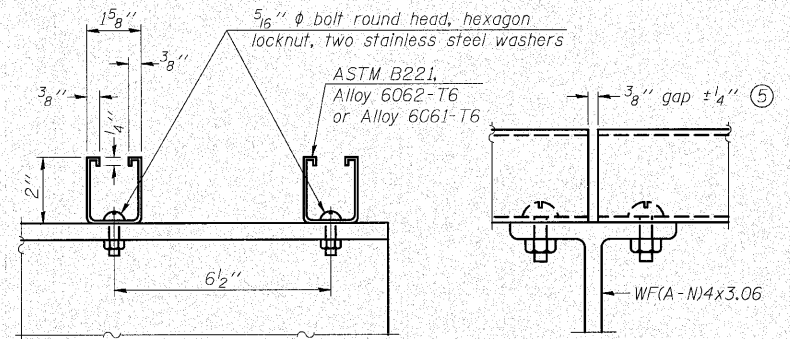
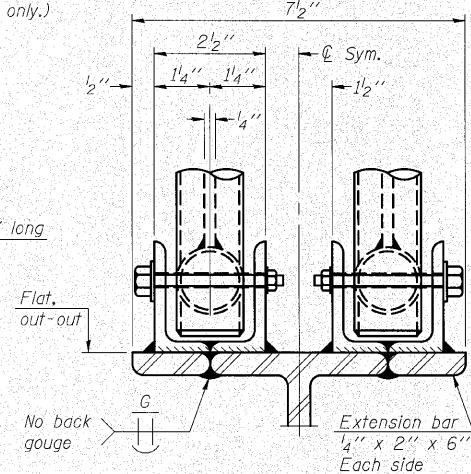
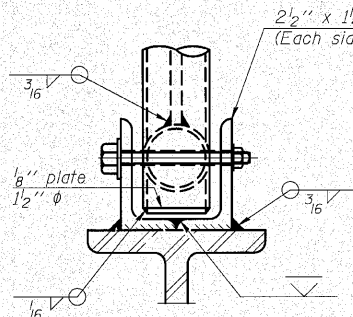
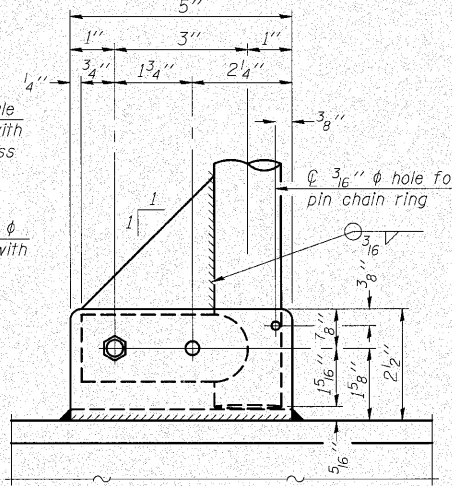
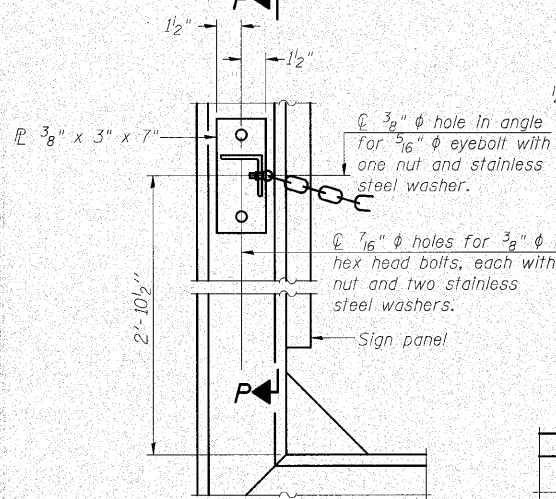
DETAIL F

DETAIL G

HANDRAIL DETAILS

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

① Horizontal handrail member shall be continuous thru fitting. Provide 7/16" hole in fitting for 3/8" bolt. Field drill 7/16" hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/16" eyebolts in 7/16" holes on top rail at ends only.)

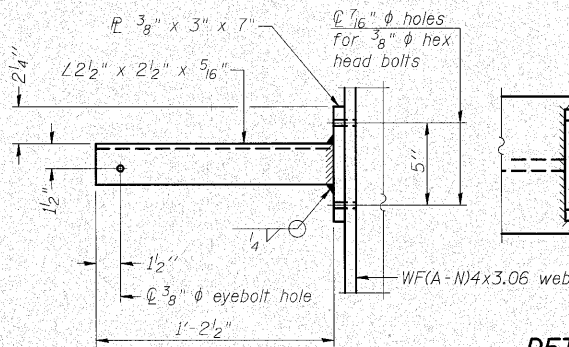


SECTION F-F and SECTION G-G
LIGHTING FIXTURE MOUNTS (IF REQUIRED)

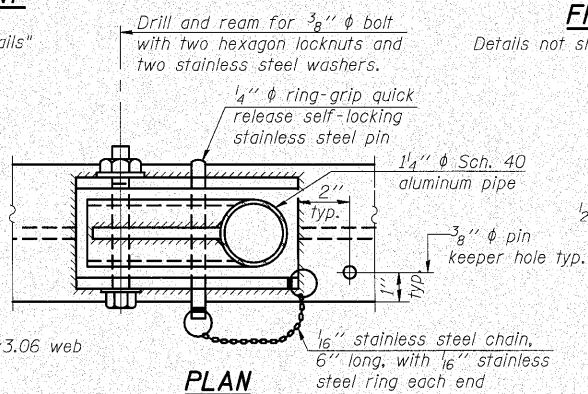
⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)
Items not shown same as "Side Elevation" of "Handrail Details"

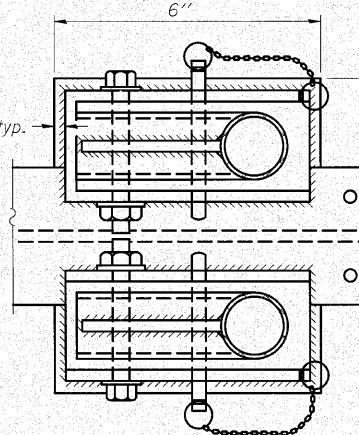


SIDE ELEVATION of Handrail Hinge



FRONT ELEVATION of Handrail Hinge

Details not shown same as "ELEVATION" at right.

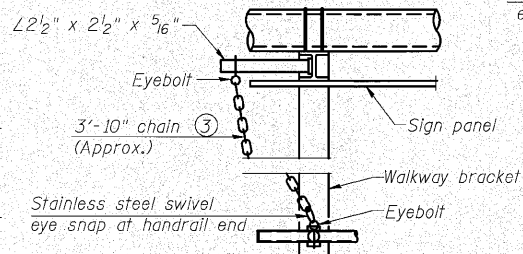


PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"

ELEVATION AT HANDRAIL JOINT

Details not shown same as "FRONT ELEVATION"

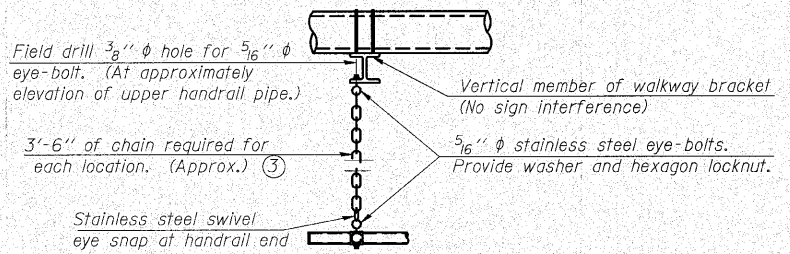


ALTERNATE SAFETY CHAIN ATTACHMENT

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

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.



SAFETY CHAIN

One required for each end of each walkway.

**CANTILEVER SIGN STRUCTURES
HANDRAIL DETAILS
ALUMINUM TRUSS & STEEL POST**

DESIGNED
CHECKED
DRAWN
CHECKED

WHKS & CO. ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

NUMBER	REVISION	DATE

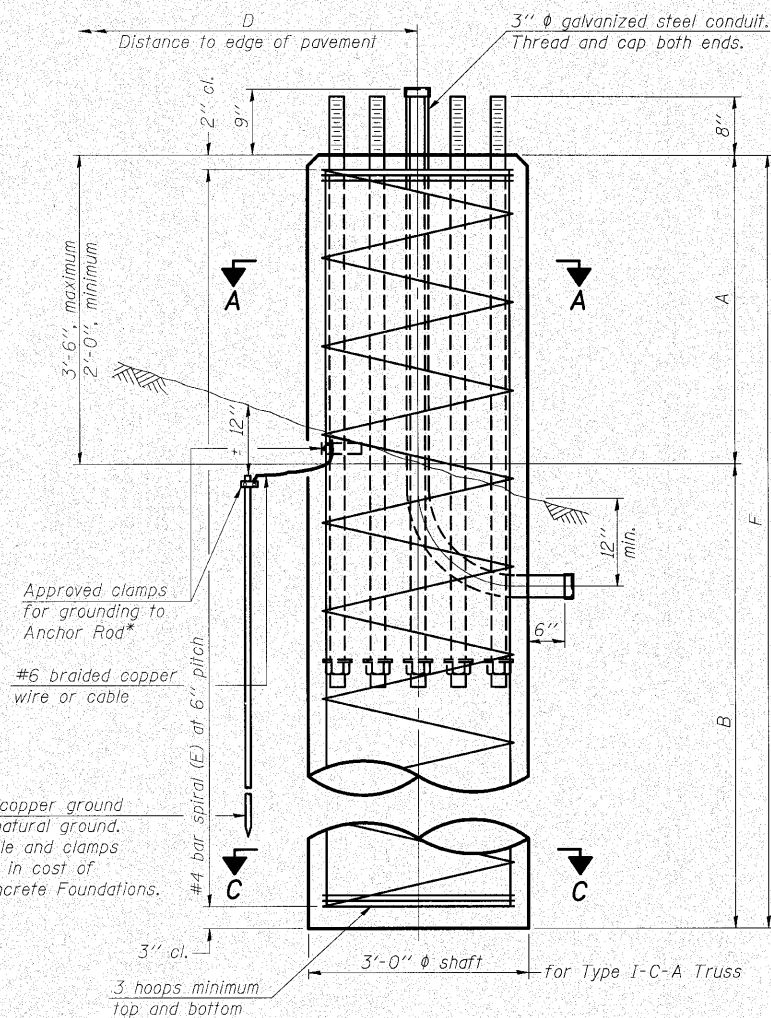
OSC-A-8 12-1-08

SHEET NO. 10	F.A.I. RTE. 64	SECTION 82-5K-2	COUNTY ST. CLAIR	TOTAL SHEETS 162	SHEET NO. 80
CONTRACT NO. 76D59					
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

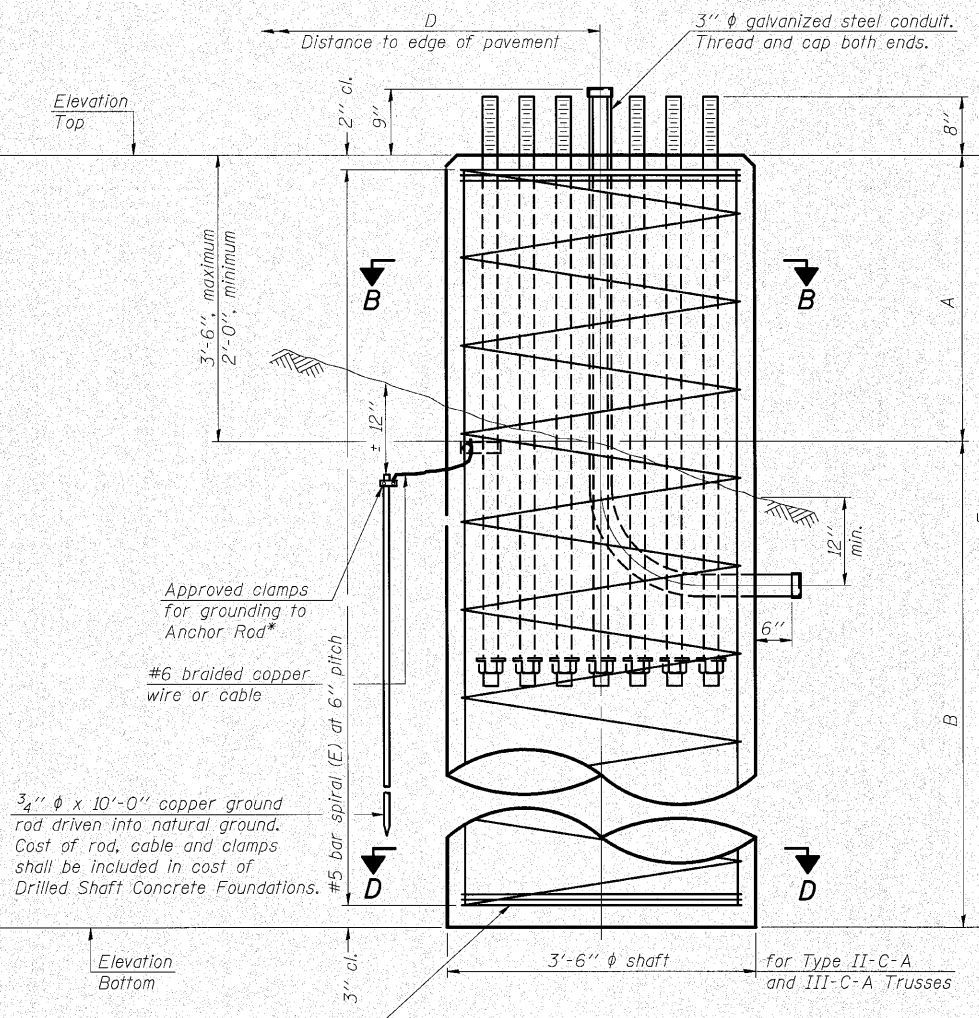
Operator: burnsideem Date: 8/10/2010 \$TIMES \$FILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

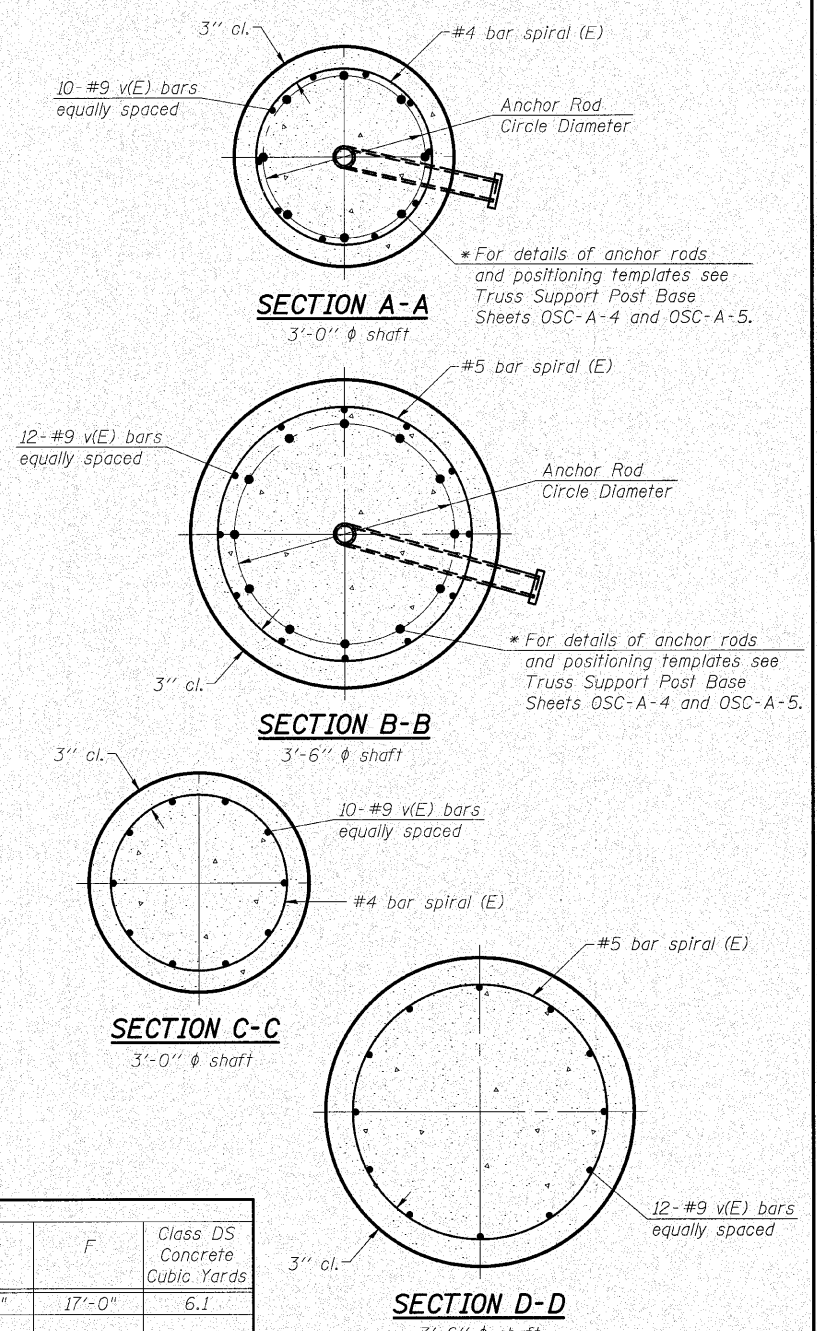
* Grind anchor rod to bright finish at ground clamp location before installing clamp.



ELEVATION



ELEVATION



NOTES:
The foundation dimensions shown in the Foundation Design Table are based on the presence of mostly cohesive soils with an average unconfined compressive strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown in the Foundation Data Table will be the result of site specific designs.
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.
No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.
Concrete shall be placed monolithically, without construction joints.
Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.
A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

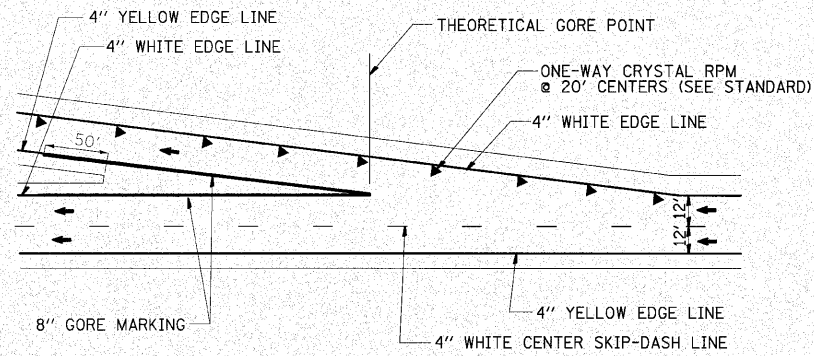
Structure Number	Station	Truss Type	Shaft Diameter	Elevation Top	Elevation Bottom	Qu	A	B	F	Class DS Concrete Cubic Yards
8C082S159L020.4	33+90, 61.3' LT.	II-C-A	3.5 ft.	596.58	579.58	1.25 tsf	2'-0"	15'-0"	17'-0"	6.1

Truss Type	Post Base Sheet	Maximum Cantilever Length (ft)	Maximum Total Sign Area (sq ft)	Shaft Diameter (in)	"B" Depth (ft)	Anchor Rods No.	Anchor Rod Diameter (in)	Anchor Rod Circle Diameter (in)
I-C-A	OSC-A-4	25	170	3.0	16.0	8	2	22
II-C-A	OSC-A-5	30	170	3.5	17.0	12	2	30
II-C-A	OSC-A-5	30	340	3.5	21.5	12	2	30
III-C-A	OSC-A-5	35	170	3.5	19.0	12	2	30
III-C-A	OSC-A-5	35	250	3.5	22.5	12	2	30
III-C-A	OSC-A-5	35	400	3.5	26.5	12	2	30
III-C-A	OSC-A-5	40	400	3.5	32.0	12	2	30

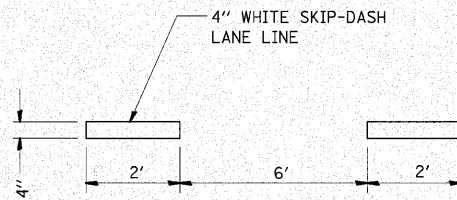
**CANTILEVER SIGN STRUCTURES
DRILLED SHAFT
ALUMINUM TRUSS & STEEL POST**

SHEET NO. 11	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	81
11 SHEETS					
CONTRACT NO. 76D59					
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

Operator: burmsideem Date: 8/10/2010 \$TIMES \$FILES OSC-A-9 12-1-08

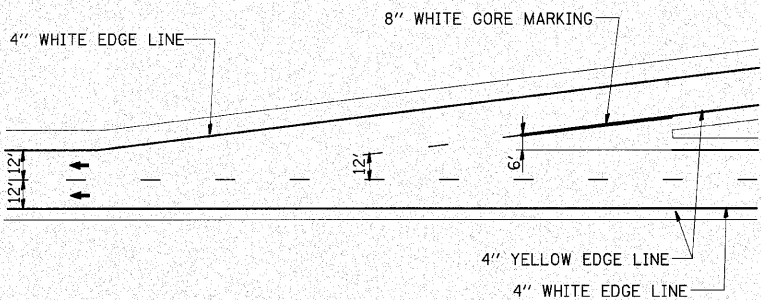


TYPICAL EXIT RAMP MARKINGS

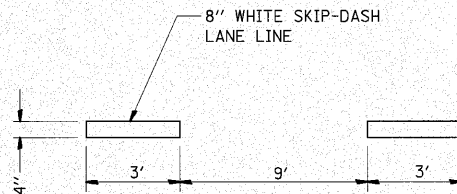


TYPICAL APPLICATION FOR WHITE SKIP-DASH LANE LINES

4" - (2'-6') SKIP-DASH WHITE LINE DETAIL

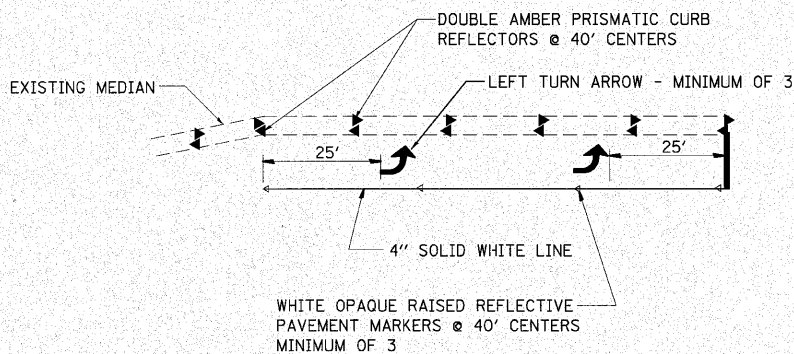


TYPICAL ENTRANCE RAMP MARKINGS

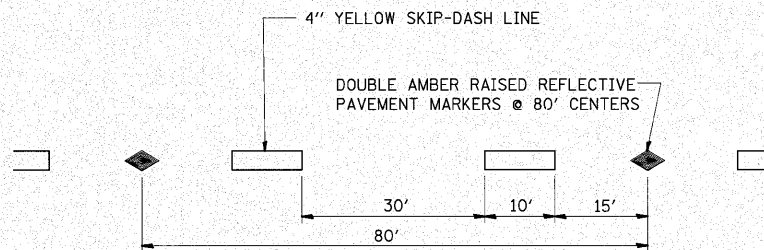


TYPICAL APPLICATION FOR WHITE SKIP-DASH LANE LINES

4" - (3'-9') SKIP-DASH WHITE LINE DETAIL

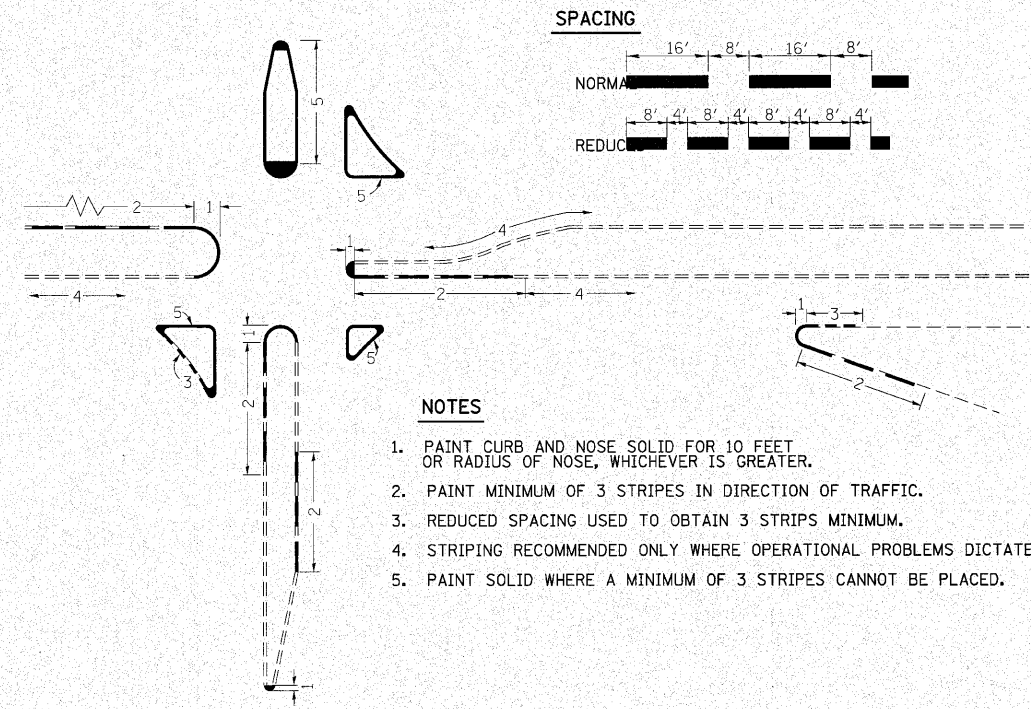


LEFT TURN ARROW DETAIL

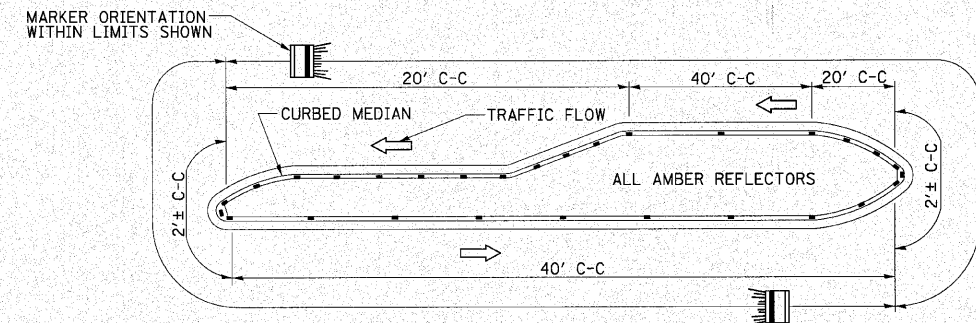


TYPICAL APPLICATION FOR YELLOW SKIP-DASH LINES WITH RAISED REFLECTIVE PAVEMENT MARKERS

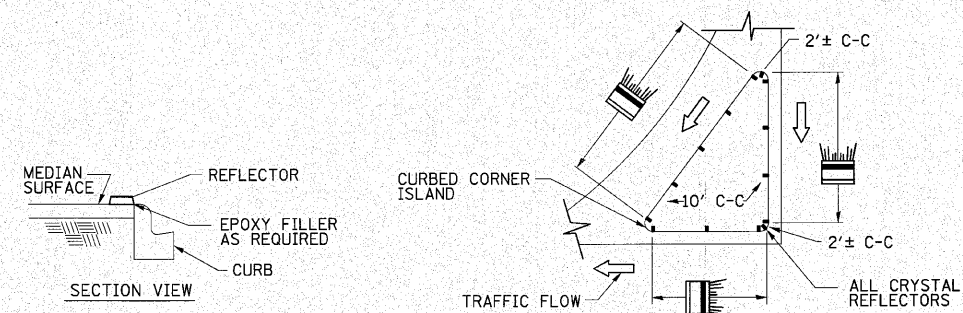
4" - (10'-30') SKIP-DASH WHITE LINE DETAIL



CURB MARKING



- NOTES
1. PRISMATIC REFLECTORS SHALL BE MONO-DIRECTIONAL AND POSITIONED SO THAT THE REFLECTIVE FACE IS FACING THE APPROACHING TRAFFIC.
 2. PRISMATIC REFLECTORS SHALL BE SECURED IN PLACE WITH AN EPOXY ADHESIVE.
 3. PRISMATIC REFLECTORS SHALL BE EITHER AMBER OR CRYSTAL IN COLOR.



TYPICAL PLACEMENT OF PRISMATIC REFLECTORS ON CURBS

(NO SCALE)

FILE NAME =	USER NAME = burrisdeem	DESIGNED -	REVISED -
ca:\pwork\pwork\dot\burrisdeem\10166363\10166363.dgn	76d59-shl-plan.dgn	DRAWN -	REVISED -
PLOT SCALE = 50,0000 "/ IN.		CHECKED -	REVISED -
PLOT DATE = 8/18/2010		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-5K-2	ST CLAIR	162	82
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D59	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

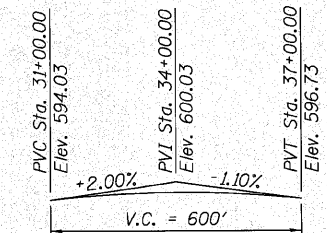
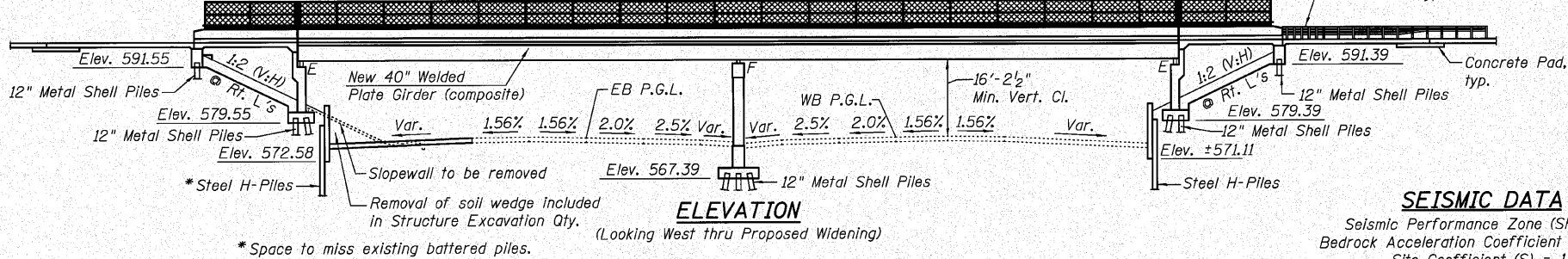
Benchmark: BM #2 Chiseled "□" on West side of mast arm signal foundation ● S.E. corner of IL 159 and Salem Place. Elev. 589.80 (NAVD 88)

Existing Structure: S.N. 082-0176 built as F.A.I. 64 Section 82-5HB-3 in 1972 and widened in 1998 as F.A.P. Rte. 600 Section 82-5K-1. Existing Structure is a two span reinforced concrete deck on continuous welded plate girders supported on sand filled vaulted abutments and pile supported multi-column pier. 231'-6" Bk.-Bk. Approach Bents, 98'-0" Out.-Out. Deck. Structure is to be widened on the West side and a retaining wall is to be constructed on the South side utilizing stage construction.

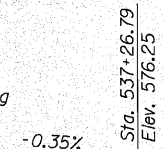
Salvage: Approx. 6 panels of the existing bridge fence railing, See Special Provisions

Bridge Fence Railing, Parapet Mounted

Traffic Barrier Terminal Std. 631031 Type 6



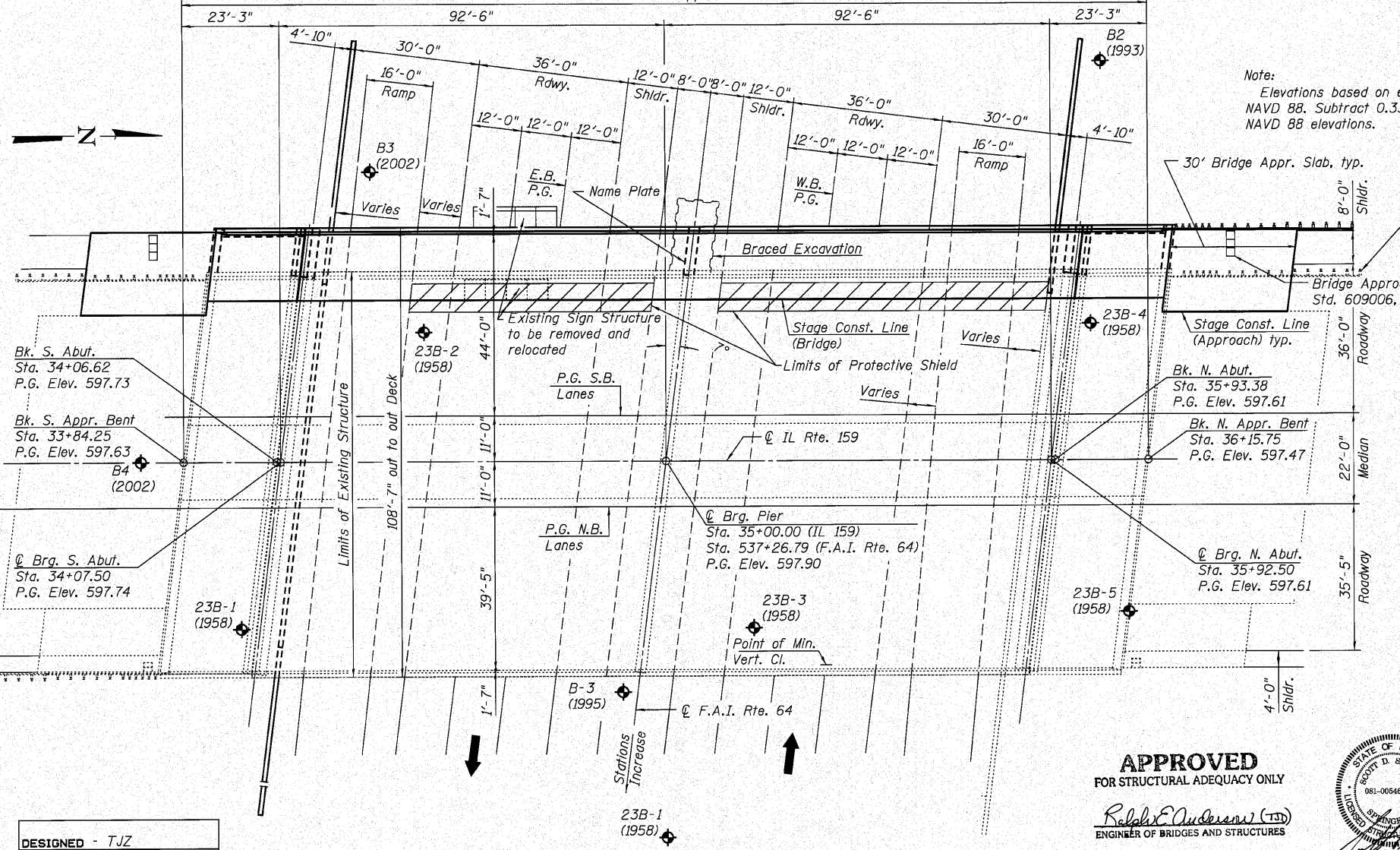
PROFILE GRADE IL 159
Profile adjusted for Datum difference and existing overlay



PROFILE GRADE F.A.I. 64

SEISMIC DATA
Seismic Performance Zone (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.11g
Site Coefficient (S) = 1.0

Note:
Elevations based on existing plan information adjusted to NAVD 88. Subtract 0.33 feet from existing plans to get NAVD 88 elevations.



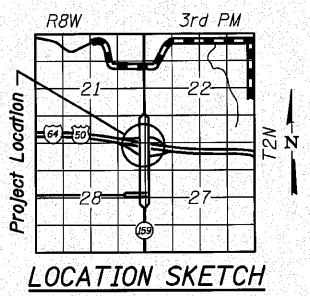
Note:
Elevations based on existing plan information adjusted to NAVD 88. Subtract 0.33 feet from existing plans to get NAVD 88 elevations.

Existing Traffic Barrier Terminal to be removed (Typ. Ea. End) See Roadway Plans.

Bridge Approach Pavement Drain Std. 609006, typ.

STATION 537+26.79
RE-BUILT BY
STATE OF ILLINOIS
F.A.I. RTE. 64 SEC. 82-5K-2
LOADING HS20
STR. NO. 082-0176

NAME PLATE
See Std. 515001
Note:
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with "Name Plates".



- INDEX OF SHEETS
1. General Plan and Elevation
2. General Data and Details
3. Stage Construction Details
4. Temporary Concrete Barrier for Stage Construction
5. Top of Approach & Vaulted Slab Elevations
6. Top of Slab Elevations
7. Approach Slabs
8. Vaulted Slabs
9. Bar Splicer Assembly Details
10. Superstructure
11. Superstructure Details
12. Bridge Fence Railing Parapet Mounted
13. Framing Plan and Girder Details
14. Structural Steel and Bearing Details
15. Bridge Mounted Sign Structure
16. South Abutment
17. North Abutment
18. Pier
19. Metal Shell Pile Details
20. South Retaining Wall
21. South Retaining Wall Details
22. North Retaining Wall
23. North Retaining Wall Details
24. Solder Pile Wall Details
25. H-Piles Details
26. Concrete Removal
27.-34. Boring Logs

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS 20-44
Future wearing surface not allowed.

DESIGN STRESSES
FIELD UNITS

ORIGINAL CONSTRUCTION
f'c = 1,200 psi (Deck Slab Spans 2 and 3)
f'c = 1,400 psi (Deck Slab Spans 1 and 4, Substructure)
fs = 20,000 psi (Structural Steel A-36)
fs = 20,000 psi (Reinforcement)
v = 75 psi (Footings)

1996 REHABILITATION
f'c = 3,500 psi
fy = 36,000 psi (Structural Steel)
fy = 60,000 psi (Reinforcement)

NEW CONSTRUCTION
f'c = 3,500 psi (Concrete)
f'c = 4,000 psi (Grout)
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (AASHTO M270 Grade 36)
fy = 270 ksi (0.6" φ Strands)

GENERAL PLAN AND ELEVATION
IL 159 OVER I-64
F.A.I. RTE. 64 - SEC. 82-5K-2
ST. CLAIR COUNTY
STATION 537+26.79
STRUCTURE NO. 082-0176

DESIGNED - TJZ
CHECKED - CWC
DRAWN - DLH
CHECKED - CWC, SDS

WHKS & CO. ENGINEERING
7018 KINGSMILL CT., SPRINGFIELD, IL (217) 483-9457 DESIGN FIRM #184001036

APPROVED FOR STRUCTURAL ADEQUACY ONLY
Relax Anderson, (TJD) ENGINEER OF BRIDGES AND STRUCTURES

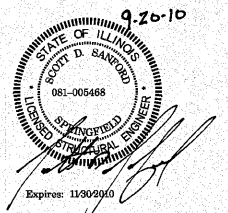


Table with columns: SHEET NO., F.A. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO. 76D59, ILLINOIS FED. AID PROJECT.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

Fasteners shall be AASHTO M164 Type I, mechanically galvanized bolts. Bolts 7/8 in. ϕ , holes 9/16 in. ϕ , unless otherwise noted.

Calculated weight of Structural Steel = 68,850 lb.

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

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Field welding of construction accessories will not be permitted to the bottom flange of the beams or girders not to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

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, pier, and retaining walls.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. 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 Interstate Green, Munsell No. 7.5 G 4/8. See Special Provision for "Cleaning and Painting New Metal Structures".

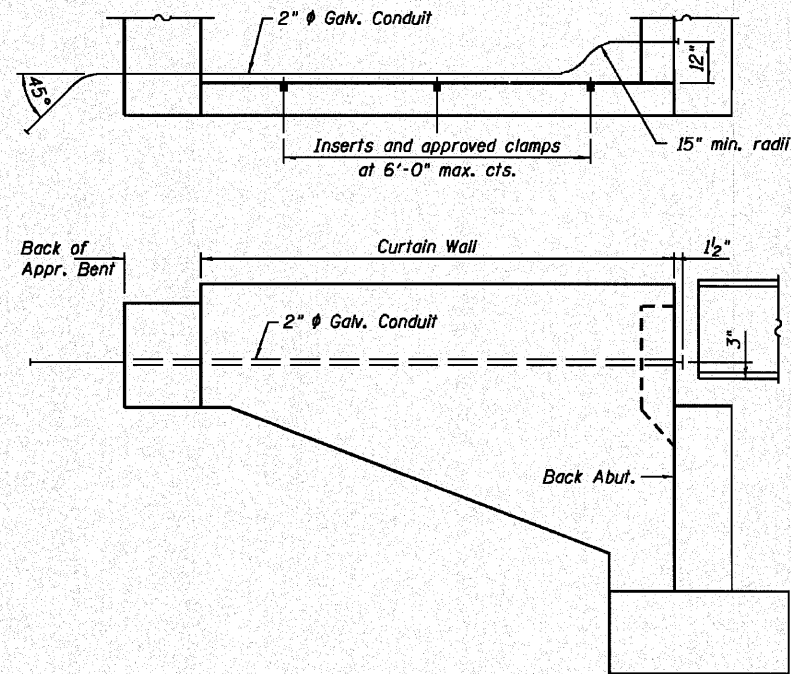
Existing structural steel shall only be cleaned and painted as required by the Special Provision for "Cleaning and Painting Contact Surface Areas of Existing Steel Structures."

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

The Contractor shall be responsible for maintaining the stability and structural integrity of the existing structure, during construction of Tied Back Soldier Pile Walls.

Slipforming of the parapets is not allowed.

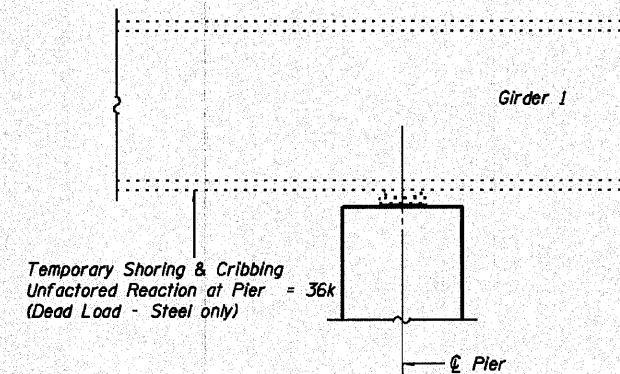


ELECTRICAL CONDUIT DETAILS

Notes:
Existing conduit on S.W. Curtain Wall and E. Fascia beam to be removed and relocated. See Electrical Plans for details and quantities.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.		23.2	23.2
Slope Wall Removal	Sq. Yd.		372.7	372.7
Removal of Existing Concrete Deck	Each	1		1
Protective Shield	Sq. Yd.	106		106
Structure Excavation	Cu. Yd.		332	332
Concrete Structures	Cu. Yd.		190.5	190.5
Concrete Superstructure	Cu. Yd.	225.5		225.5
Bridge Deck Grooving	Sq. Yd.	513		513
Protective Coat	Sq. Yd.	648		648
Precast Concrete Lagging	Sq. Ft.		863	863
Furnishing and Erecting Structural Steel	L Sum	1		1
Stud Shear Connectors	Each	864	926	1,790
Untreated Timber Lagging	Sq. Ft.		1,049	1,049
Reinforcement Bars, Epoxy Coated	Pound	62,210	25,060	87,270
Bar Splicers	Each	32		32
Bridge Fence Railing	Foot	223		223
Furnishing Metal Shell Piles 12" x 0.250"	Foot		1,068	1,068
Furnishing Soldier Piles (HP Section)	Foot		1,517	1,517
Driving Piles	Foot		1,068	1,068
Test Pile Metal Shells	Each		3	3
Name Plates	Each		1	1
Elastomeric Bearing Assembly, Type I	Each	4		4
Anchor Bolts, 1"	Each	14		14
Anchor Bolts, 1 1/4"	Each	12		12
Sand Backfill	Cu. Yd.		94	94
Concrete Sealer	Sq. Ft.		2,835	2,835
Geocomposite Wall Drain	Sq. Yd.		195	195
Pipe Underdrains for Structures 4"	Foot		275	275
Concrete Gutter, Type B	Foot		275	275
Braced Excavation	Cu. Yd.		64	64
Silicone Joint Sealer, 2"	Foot	17.7		17.7
Permanent Ground Anchor	Each		26	26
Silicone Joint Sealer, 1 1/2"	Foot	17.7		17.7
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.		2,111	2,111
Driving Soldier Piles	Foot		844	844
Remove and Re-Erect Bridge Mounted Sign	Each	1		1
Temporary Shoring and Cribbing	Each		1	1



TEMPORARY SHORING AND CRIBBING ELEVATION

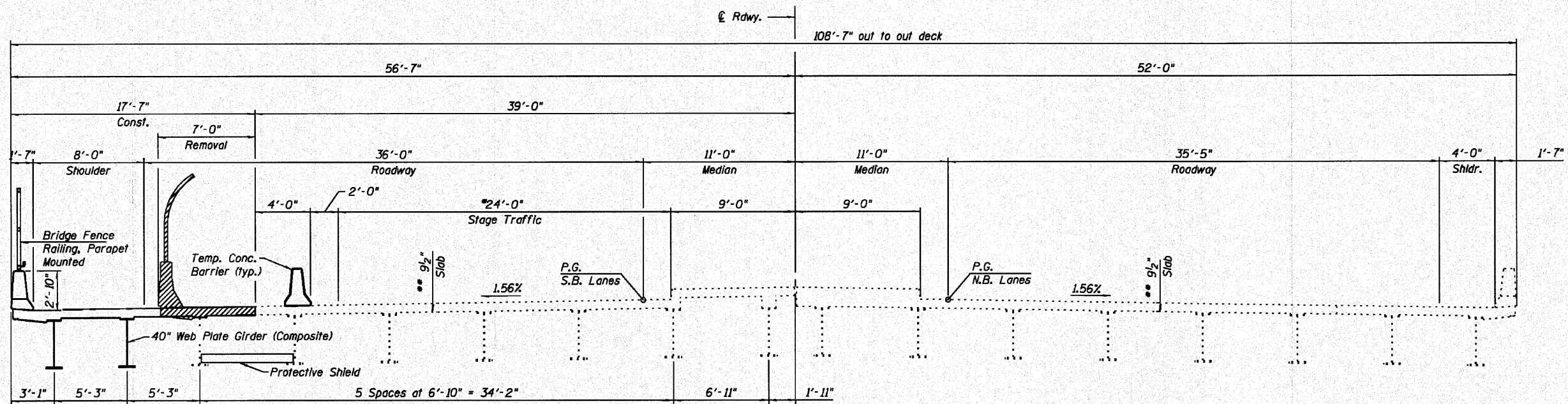
**GENERAL DATA AND DETAILS
STRUCTURE NO. 082-0176**

SHEET NO. 2	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
34 SHEETS	64	82-5K-2	ST. CLAIR	162	85
			CONTRACT NO. 76D59		
			ILLINOIS FED. AID PROJECT		

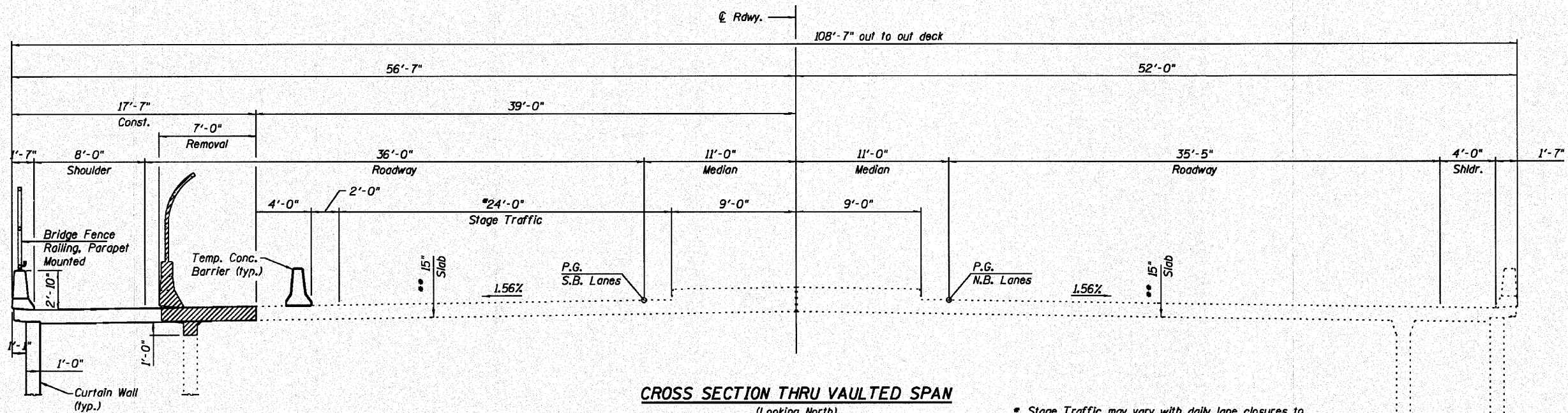
DESIGNED - T.J.Z
CHECKED - C.W.C
DRAWN - D.L.H
CHECKED - C.W.C, S.D.S

WHKS & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION




CROSS SECTION THRU BRIDGE DECK
(Looking North)



CROSS SECTION THRU VAULTED SPAN
(Looking North)

- * Stage Traffic may vary with daily lane closures to accommodate removal procedures.
- ** Original thickness - Scarified 1/2" and placed 2 1/2" Microsilica Concrete Overlay in 1998.

 Indicates area to be removed.

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 082-0176

DESIGNED - T.J.Z
CHECKED - C.W.C
DRAWN - D.L.H
CHECKED - C.W.C, S.D.S

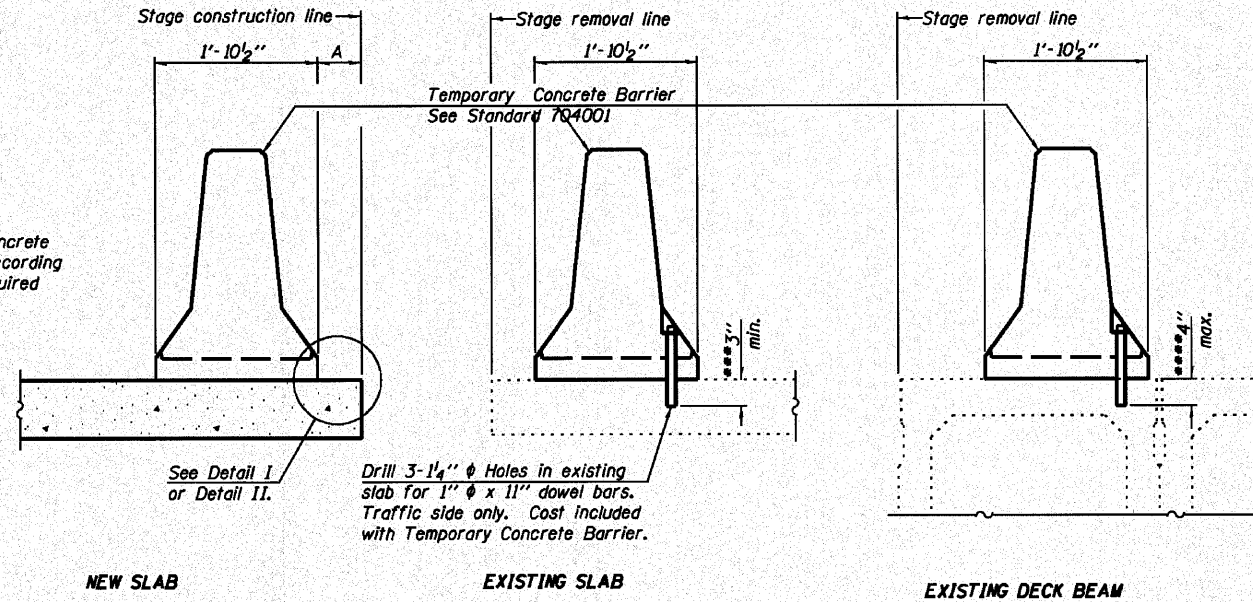
W.H.K.S. & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

Notes:
Removal and salvage of existing bridge fence railing and parapet to be included in the cost of "Removal of Existing Concrete Deck".

SHEET NO. 3 34 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	86
			CONTRACT NO. 76D59		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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".



Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel \bar{r} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{c} of each barrier panel.

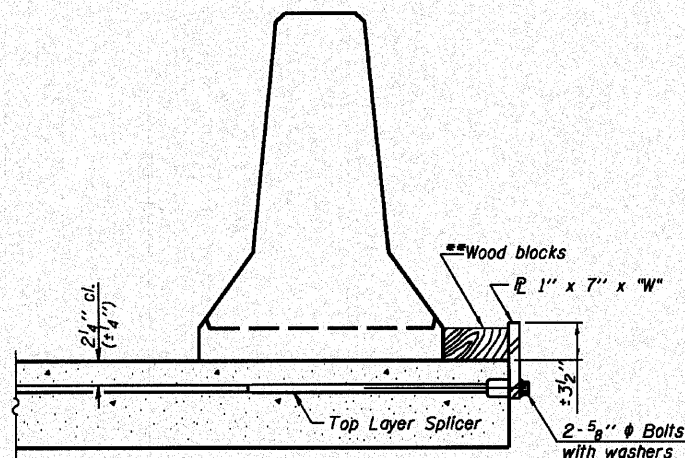
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel \bar{r} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place Inserts spaced between the top layer of reinforcement at approximate \bar{c} of each barrier panel.

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.

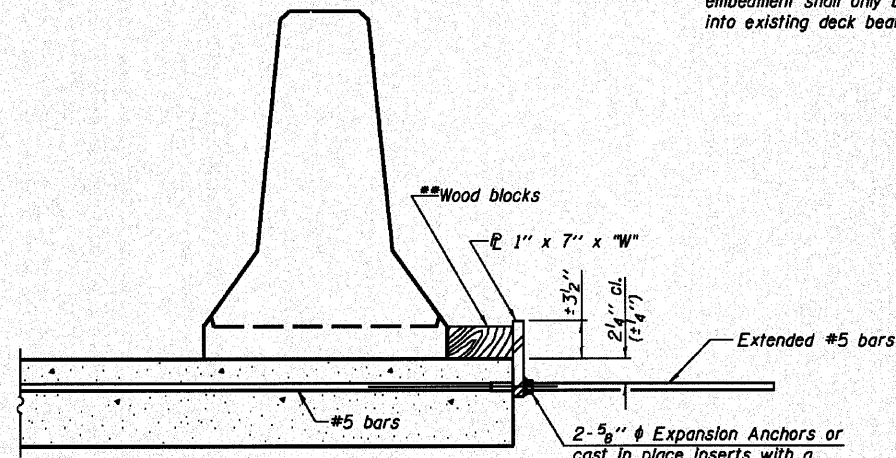
SECTIONS THRU SLAB OR DECK BEAM

*** 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.



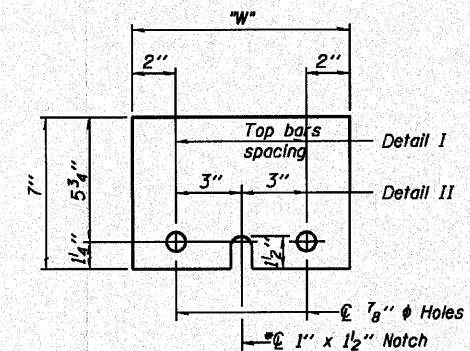
DETAIL I



DETAIL II

** 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"



STEEL RETAINER \bar{r} 1" x 7" x "W"

* Required only with Detail II

**TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
STRUCTURE NO. 082-0176**

DESIGNED - T.J.Z
CHECKED - C.W.C
DRAWN - D.L.H
CHECKED - C.W.C, S.D.S

WHKS & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

SHEET NO. 4	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	87
34 SHEETS			CONTRACT NO. 76D59		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	33+59.12	35.00'	597.10
A1	33+69.12	35.00'	597.17
A2	33+79.12	35.00'	597.22
N. End of S. Appr. Slab	33+89.12	35.00'	597.28

CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Vaulted Slab	33+89.63	39.00'	597.22
A3	33+99.63	39.00'	597.27
N. End of S. Vaulted Slab	34+11.49	39.00'	597.32

CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Vaulted Slab	35+98.25	39.00'	597.14
P1	36+08.25	39.00'	597.08
N. End of N. Vaulted Slab	36+20.11	39.00'	597.01

CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Appr. Slab	36+19.62	35.00'	597.07
P2	36+29.62	35.00'	597.00
P3	36+39.62	35.00'	596.93
N. End of N. Appr. Slab	36+49.62	35.00'	596.84

EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	33+61.63	55.00'	596.81
A1	33+71.63	55.00'	596.87
A2	33+81.63	55.00'	596.93
N. End of S. Appr. Slab	33+91.63	55.00'	596.98

EDGE OF SHOULDER

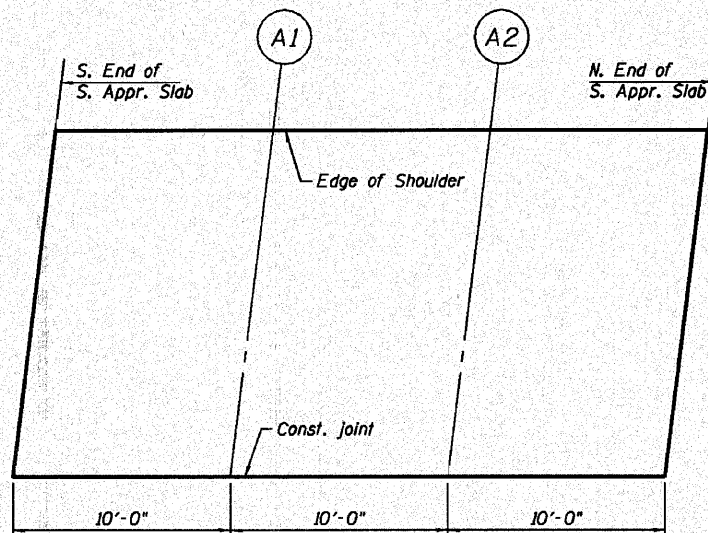
Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Vaulted Slab	33+91.63	55.00'	596.98
A3	34+01.63	55.00'	597.02
N. End of S. Vaulted Slab	34+13.49	55.00'	597.07

EDGE OF SHOULDER

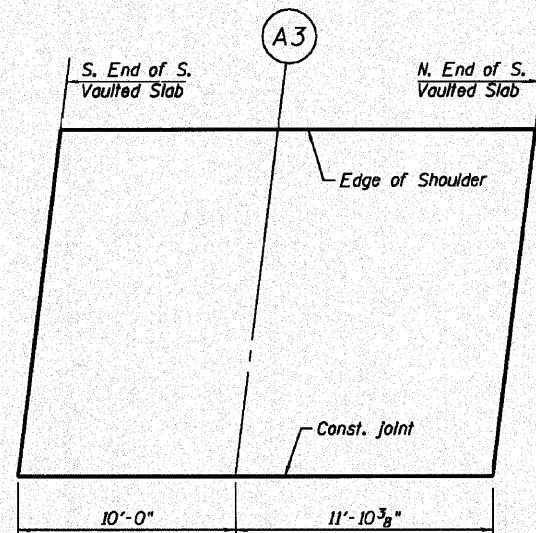
Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Vaulted Slab	36+00.25	55.00'	596.88
P1	36+10.25	55.00'	596.82
N. End of N. Vaulted Slab	36+22.11	55.00'	596.74

EDGE OF SHOULDER

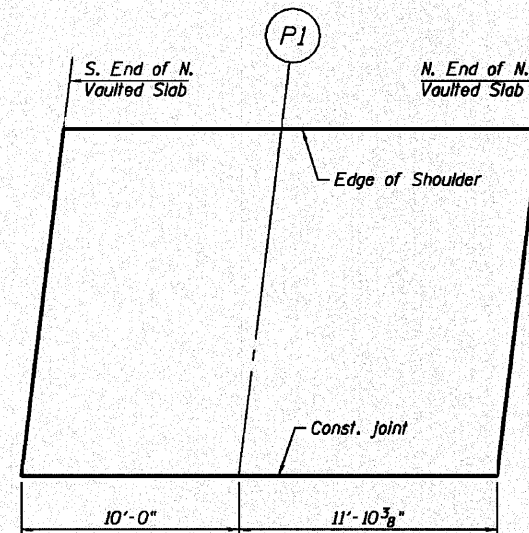
Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Appr. Slab	36+22.12	55.00'	596.74
P2	36+32.12	55.00'	596.67
P3	36+42.12	55.00'	596.59
N. End of N. Appr. Slab	36+52.12	55.00'	596.51



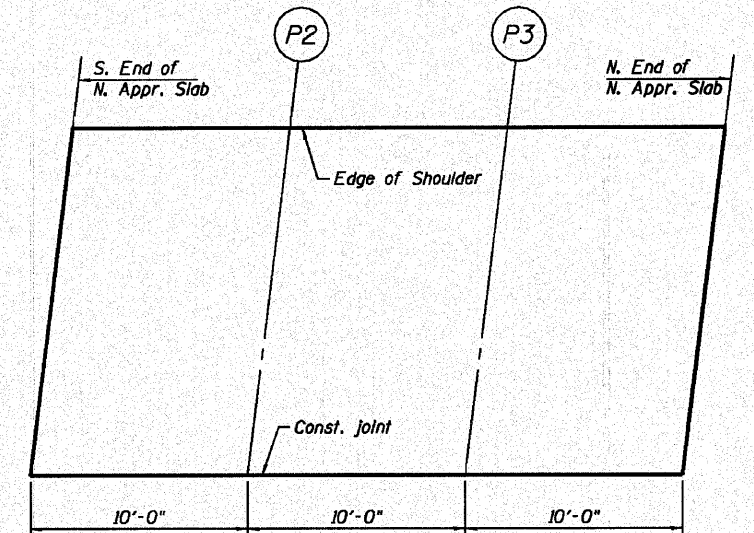
SOUTH APPROACH PLAN



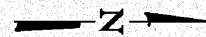
SOUTH VAULTED SLAB PLAN



NORTH VAULTED SLAB PLAN



NORTH APPROACH PLAN



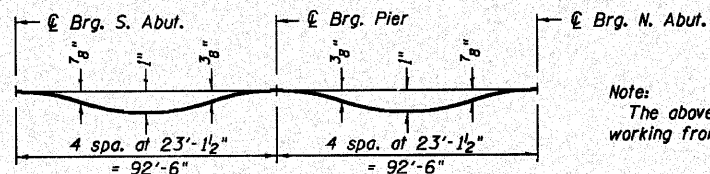
**TOP OF APPROACH AND VAULTED
SLAB ELEVATIONS
STRUCTURE NO. 082-0176**

DESIGNED - T.JZ
CHECKED - CWC
DRAWN - DLH
CHECKED - CWC, SDS

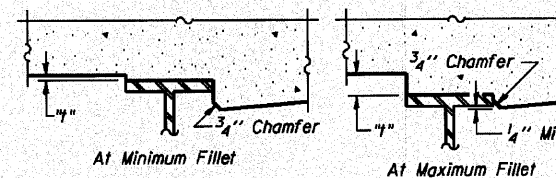
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SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

SHEET NO. 5 34 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	88
			CONTRACT NO. 76D59		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



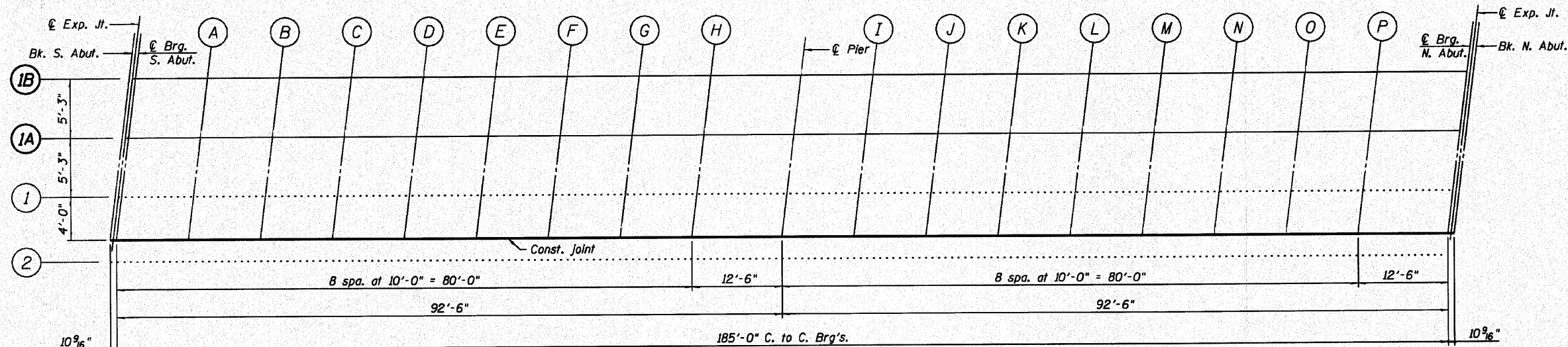
Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "f": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted For Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "f" above top flange of beams.

DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)



PLAN

GIRDER IB

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S Abut	34+13.30	53.50	597.10	597.10
CL Exp Jt	34+13.43	53.50	597.10	597.10
CL Brg S Abut	34+14.18	53.50	597.10	597.10
A	34+24.18	53.50	597.13	597.17
B	34+34.18	53.50	597.16	597.23
C	34+44.18	53.50	597.19	597.27
D	34+54.18	53.50	597.21	597.29
E	34+64.18	53.50	597.22	597.30
F	34+74.18	53.50	597.23	597.29
G	34+84.18	53.50	597.24	597.27
H	34+94.18	53.50	597.24	597.25
CL Brg Pier	35+06.68	53.50	597.23	597.23
I	35+16.68	53.50	597.21	597.22
J	35+26.68	53.50	597.20	597.22
K	35+36.68	53.50	597.17	597.22
L	35+46.68	53.50	597.15	597.22
M	35+56.68	53.50	597.11	597.19
N	35+66.68	53.50	597.07	597.16
O	35+76.68	53.50	597.03	597.10
P	35+86.68	53.50	596.98	597.02
CL Brg N Abut	35+99.18	53.50	596.91	596.91
CL N Exp Jt	35+99.93	53.50	596.91	596.91
Bk N Abut	36+00.06	53.50	596.91	596.91

GIRDER IA

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S Abut	34+12.65	48.25	597.18	597.18
CL Exp Jt	34+12.77	48.25	597.18	597.18
CL Brg S Abut	34+13.53	48.25	597.18	597.18
A	34+23.53	48.25	597.21	597.25
B	34+33.53	48.25	597.24	597.31
C	34+43.53	48.25	597.27	597.35
D	34+53.53	48.25	597.29	597.37
E	34+63.53	48.25	597.30	597.38
F	34+73.53	48.25	597.31	597.37
G	34+83.53	48.25	597.32	597.35
H	34+93.53	48.25	597.32	597.33
CL Brg Pier	35+06.03	48.25	597.31	597.31
I	35+16.03	48.25	597.30	597.31
J	35+26.03	48.25	597.28	597.31
K	35+36.03	48.25	597.26	597.31
L	35+46.03	48.25	597.23	597.30
M	35+56.03	48.25	597.20	597.28
N	35+66.03	48.25	597.16	597.24
O	35+76.03	48.25	597.11	597.18
P	35+86.03	48.25	597.07	597.11
CL Brg N Abut	35+98.53	48.25	597.00	597.00
CL N Exp Jt	35+99.28	48.25	596.99	596.99
Bk N Abut	35+99.41	48.25	596.99	596.99

GIRDER I

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S Abut	34+11.99	43.00	597.26	597.26
CL Exp Jt	34+12.12	43.00	597.26	597.26
CL Brg S Abut	34+12.87	43.00	597.26	597.26
A	34+22.87	43.00	597.29	597.33
B	34+32.87	43.00	597.33	597.39
C	34+42.87	43.00	597.35	597.43
D	34+52.87	43.00	597.37	597.45
E	34+62.87	43.00	597.39	597.46
F	34+72.87	43.00	597.40	597.45
G	34+82.87	43.00	597.40	597.43
H	34+92.87	43.00	597.40	597.41
CL Brg Pier	35+05.37	43.00	597.39	597.39
I	35+15.37	43.00	597.38	597.39
J	35+25.37	43.00	597.36	597.39
K	35+35.37	43.00	597.34	597.39
L	35+45.37	43.00	597.31	597.38
M	35+55.37	43.00	597.28	597.36
N	35+65.37	43.00	597.24	597.33
O	35+75.37	43.00	597.20	597.27
P	35+85.37	43.00	597.15	597.19
CL Brg N Abut	35+97.87	43.00	597.08	597.08
CL N Exp Jt	35+98.62	43.00	597.08	597.08
Bk N Abut	35+98.75	43.00	597.08	597.08

CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk S Abut	34+11.49	39.00	597.32	597.32
CL Exp Jt	34+11.62	39.00	597.32	597.32
CL Brg S Abut	34+12.37	39.00	597.32	597.32
A	34+22.37	39.00	597.36	597.39
B	34+32.37	39.00	597.39	597.45
C	34+42.37	39.00	597.41	597.49
D	34+52.37	39.00	597.43	597.51
E	34+62.37	39.00	597.45	597.52
F	34+72.37	39.00	597.46	597.51
G	34+82.37	39.00	597.46	597.50
H	34+92.37	39.00	597.46	597.48
CL Brg Pier	35+04.87	39.00	597.46	597.46
I	35+14.87	39.00	597.44	597.45
J	35+24.87	39.00	597.43	597.45
K	35+34.87	39.00	597.40	597.45
L	35+44.87	39.00	597.38	597.45
M	35+54.87	39.00	597.34	597.42
N	35+64.87	39.00	597.31	597.39
O	35+74.87	39.00	597.26	597.33
P	35+84.87	39.00	597.22	597.26
CL Brg N Abut	35+97.37	39.00	597.15	597.15
CL N Exp Jt	35+98.12	39.00	597.15	597.15
Bk N Abut	35+98.25	39.00	597.14	597.14

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 082-0176**

DESIGNED - T.JZ
CHECKED - CWC
DRAWN - DLH
CHECKED - CWC, SDS

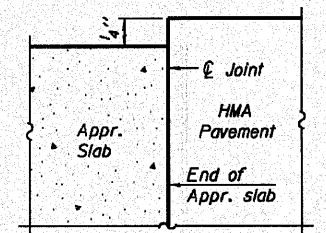
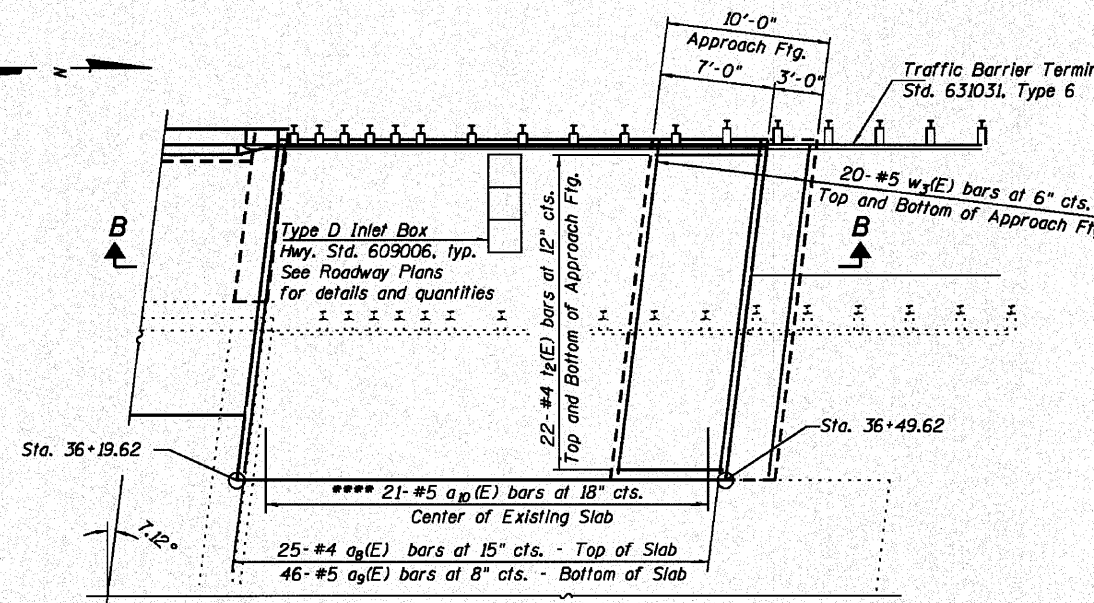
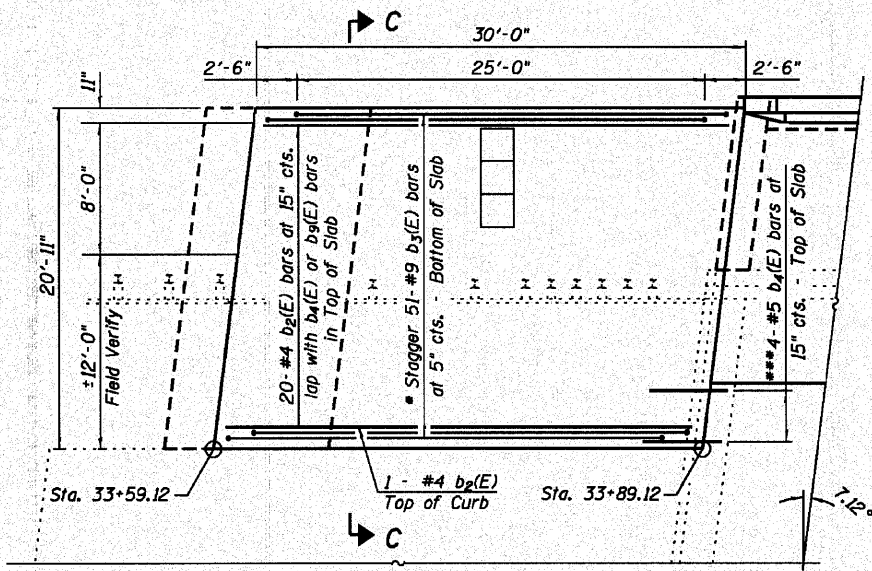
WHKS & Co.
ENGINEERING
7018 KINGSMILL CT.
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

SHEET NO. 6 34 SHEETS	F.A. RTE. 64	SECTION 82-5K-2	COUNTY ST. CLAIR	TOTAL SHEETS 162	SHEET NO. 89
	CONTRACT NO. 76D59				ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:

- Bars $a_8(E)$ and $a_9(E)$ spacing measured along C Rdwy.
- Approach slab shall be paid for as Concrete Superstructure.
- Approach footing concrete shall be paid for as Concrete Structures.
- Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
- For $v_7(E)$ bar details, see sheet 16 of 34.
- The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
- For bar splicer details, see sheet 9 of 34.
- Cost of excavation for approach footing included with Concrete Structures.
- The Contractor shall verify $a_9(E)$ bars will have greater than 2" cl. in the proposed slab before drilling and grouting.
- The grout and method of application shall be according to Section 584 in the Standard Specifications and shall develop capacity of the bar.



MINIMUM BAR LAP
#4 bar = 2'-7"

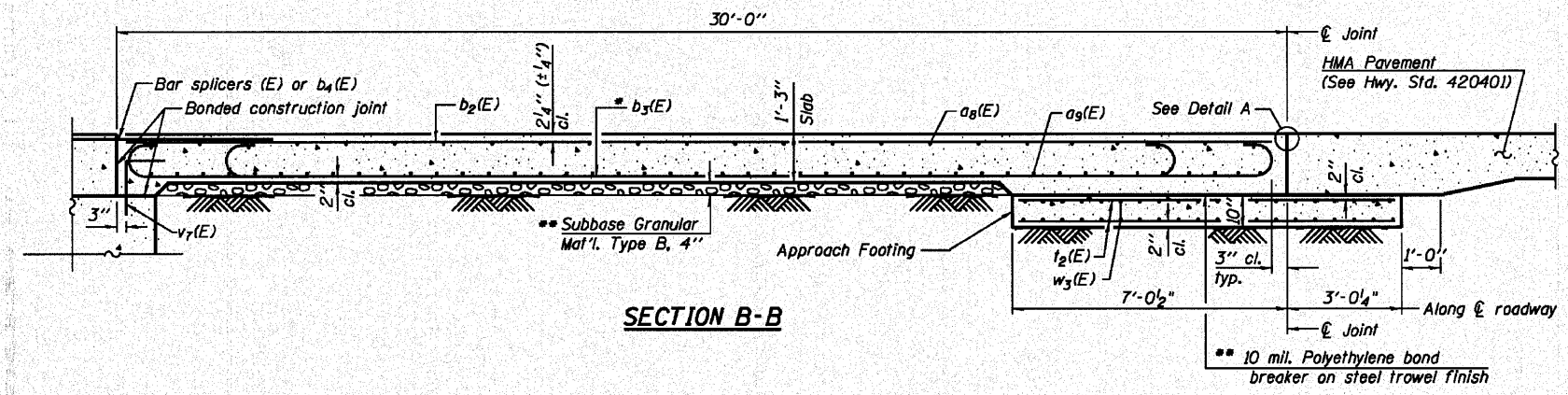
FLEXIBLE PAVEMENT
DETAIL A

SOUTH APPROACH SLAB PLAN

(For $a_8(E)$, $a_9(E)$, $a_{10}(E)$, $w_3(E)$, and $t_2(E)$ bars, See North Approach Slab Plan)

NORTH APPROACH SLAB PLAN

(For $b_2(E)$, $b_3(E)$, and $b_4(E)$ bars, See South Approach Slab Plan)

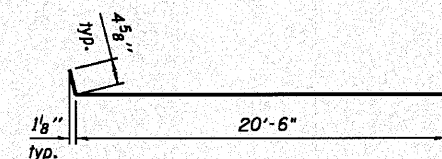


SECTION B-B

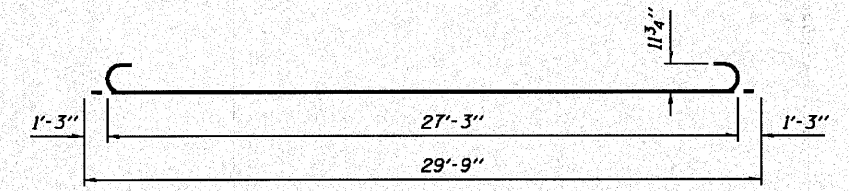
- *** Till #9 $b_3(E)$ bars as required to maintain clearance.
- *** Cost of Subbase Granular Material Type B, 4" and excavation for approach slab and Subbase Granular Material type B, 4" Band Breaker included with "Concrete Superstructure".
- *** #4 bars drilled and epoxy grouted into 3/4" ϕ x 9" holes (min.).
- *** #5 bars drilled and epoxy grouted into 7/8" ϕ x 9" holes (min.).

**TWO APPROACH SLABS
BILL OF MATERIAL**

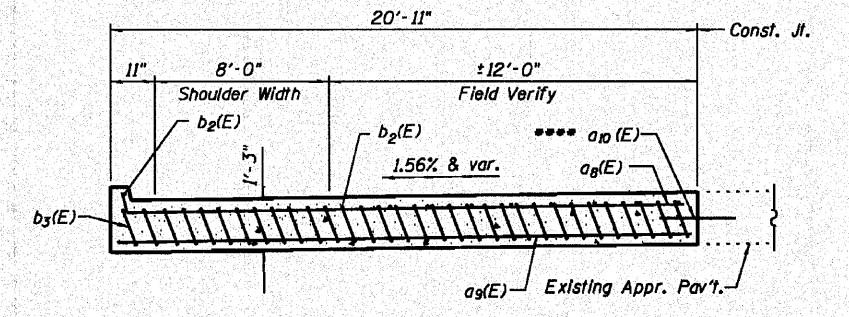
Bar	No.	Size	Length	Shape
$a_8(E)$	50	#4	20'-10"	—
$a_9(E)$	92	#5	20'-7"	—
$t_2(E)$	42	#5	1'-6"	—
$b_2(E)$	42	#4	29'-8"	—
$b_3(E)$	102	#9	29'-9"	—
$b_4(E)$	8	#5	3'-10"	—
$t_2(E)$	88	#4	9'-8"	—
$w_3(E)$	80	#5	20'-7"	—
Concrete Superstructure		Cu. Yd.	62.0	
Concrete Structures		Cu. Yd.	13.0	
Reinforcement Bars, Epoxy Coated		Pound	16,200	



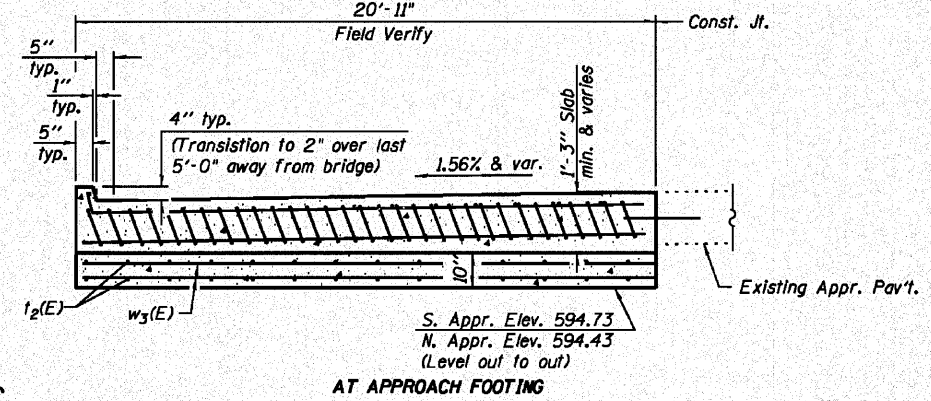
BAR $a_8(E)$



BAR $b_3(E)$



NEAR ABUTMENT



SECTION C-C

(See Plan for dimensions not shown)

AT APPROACH FOOTING

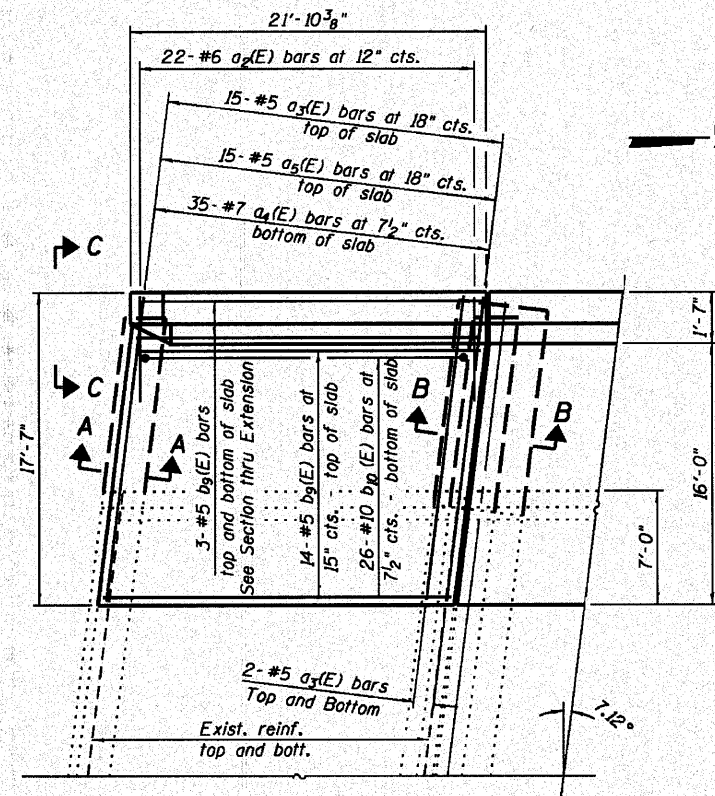
DESIGNED - T.J.Z
CHECKED - C.W.C
DRAWN - D.L.H
CHECKED - C.W.C, S.D.S

WHS & CO. ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

**APPROACH SLABS
STRUCTURE NO. 082-0176**

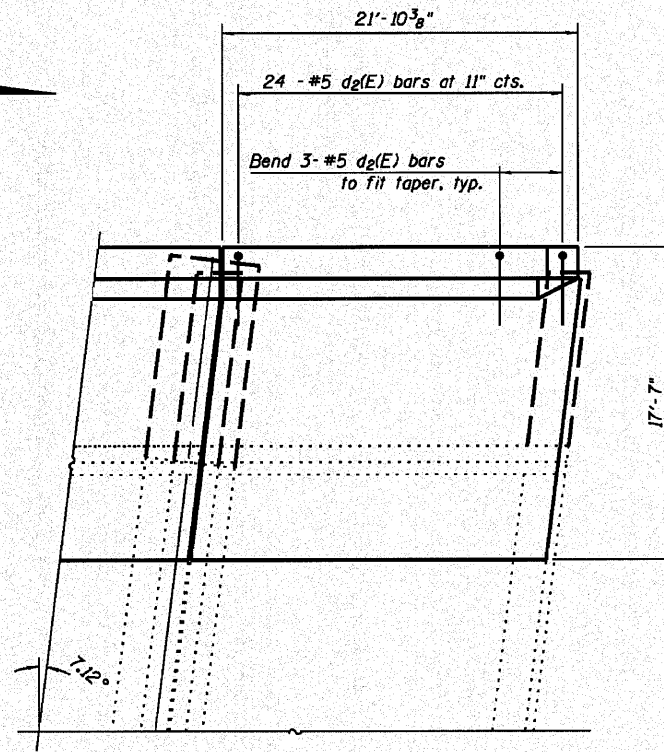
SHEET NO. 7 34 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	90
			CONTRACT NO. 76D59		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



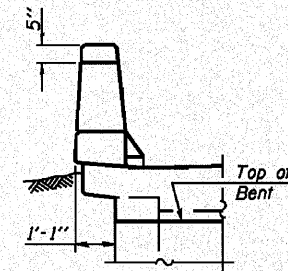
SOUTH VAULTED SLAB PLAN

(For parapet reinforcement see North Vaulted Slab Plan and Parapet Elevation).



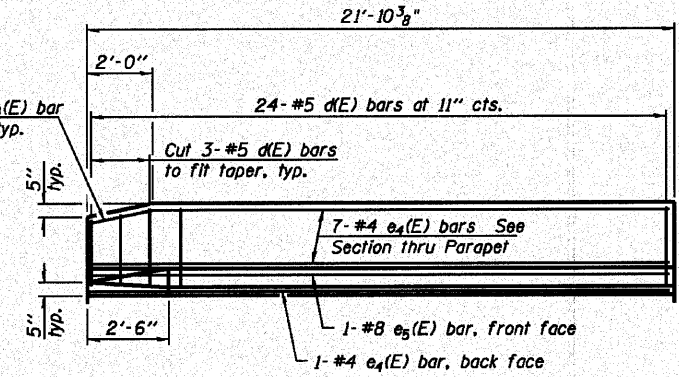
NORTH VAULTED SLAB PLAN

(For deck reinforcement see South Vaulted Slab Plan).

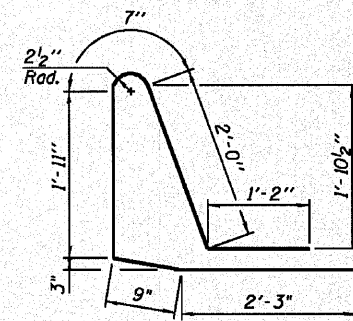


VIEW C-C

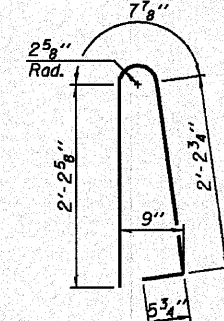
Bend 1-#4 e₄(E) bar to fit taper, typ.



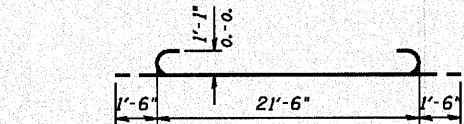
INSIDE ELEVATION OF PARAPET



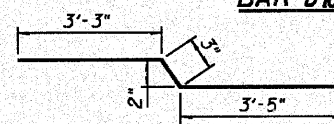
BAR d₂(E)



BAR d(E)



BAR b₁₀(E)



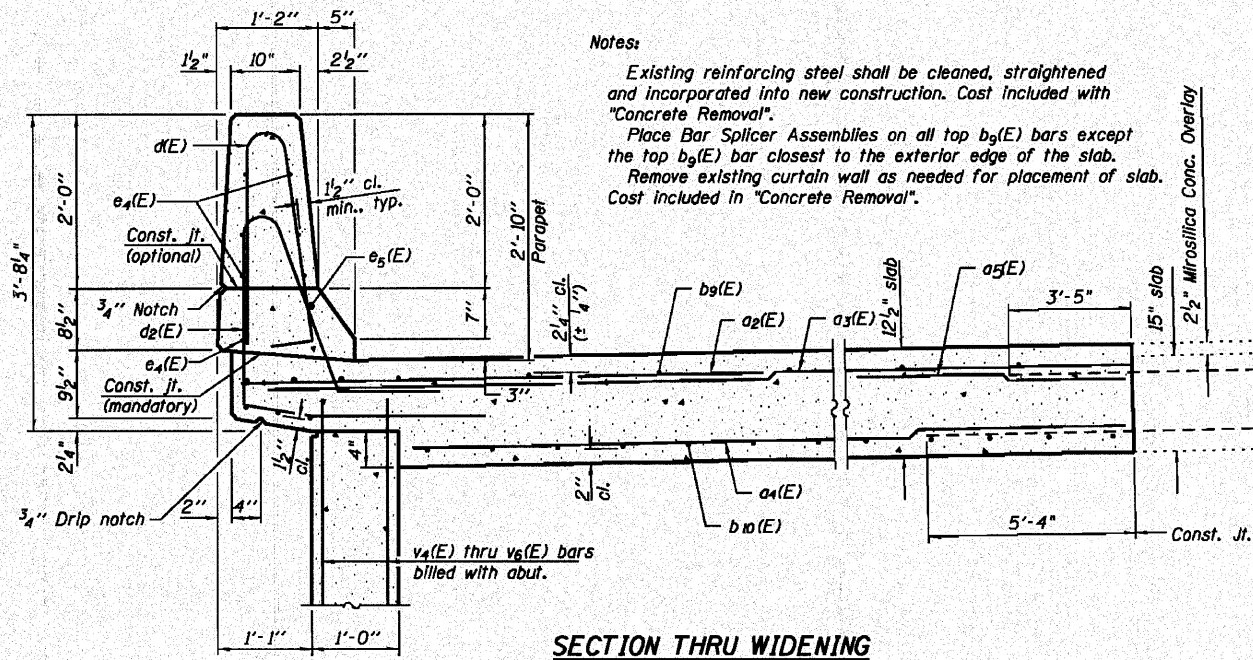
BAR a₅(E)

**TWO VAULTED SLABS
BILL OF MATERIAL**

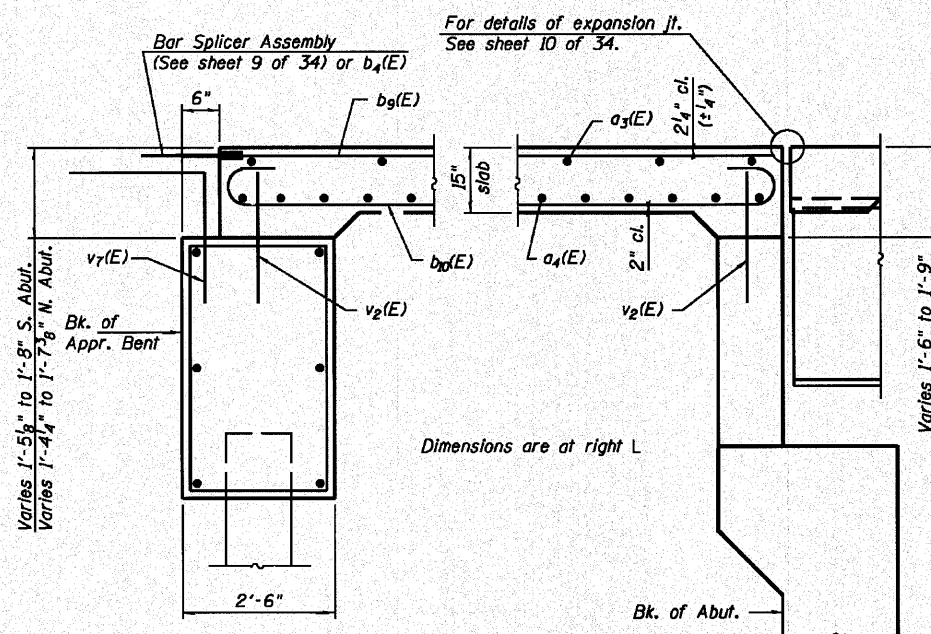
Bar	No.	Size	Length	Shape
a ₂ (E)	44	#6	6'-6"	—
a ₃ (E)	38	#5	17'-2"	—
a ₄ (E)	70	#7	15'-3"	—
a ₅ (E)	30	#5	6'-11"	—
b ₉ (E)	40	#5	21'-6"	—
b ₁₀ (E)	52	#10	24'-6"	—
d(E)	48	#5	5'-7"	—
d ₂ (E)	48	#5	8'-8"	—
e ₄ (E)	16	#4	21'-6"	—
e ₅ (E)	2	#8	21'-6"	—
Concrete Superstructure			Cu. Yd.	40.6
Reinforcement Bars, Epoxy Coated			Pound	10,950

Notes:

Existing reinforcing steel shall be cleaned, straightened and incorporated into new construction. Cost included with "Concrete Removal".
Place Bar Splicer Assemblies on all top b₉(E) bars except the top b₉(E) bar closest to the exterior edge of the slab.
Remove existing curtain wall as needed for placement of slab. Cost included in "Concrete Removal".



SECTION THRU WIDENING



SECTION A-A

SECTION B-B

MINIMUM BAR LAP

#5 bar = 3'-3"
#7 bar = 5'-2"

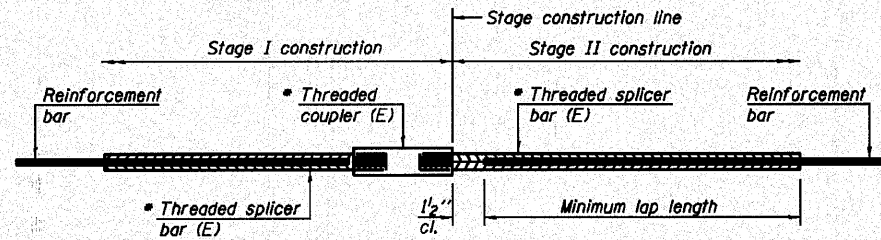
**VAULTED SLABS
STRUCTURE NO. 082-0176**

DESIGNED - T.J.Z
CHECKED - C.W.C.
DRAWN - D.L.H.
CHECKED - C.W.C., S.D.S.

WHS & Co.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

SHEET NO. 8 34 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	91
			CONTRACT NO. 76D59		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

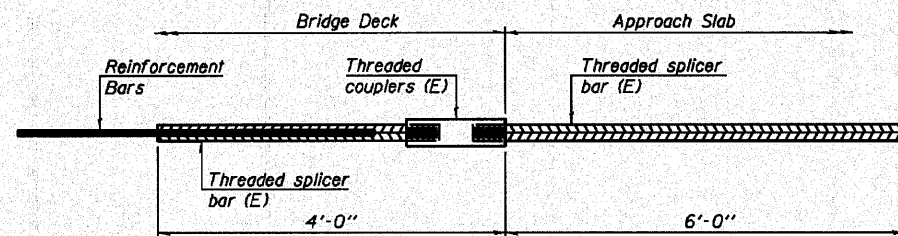
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1/2" + thread length

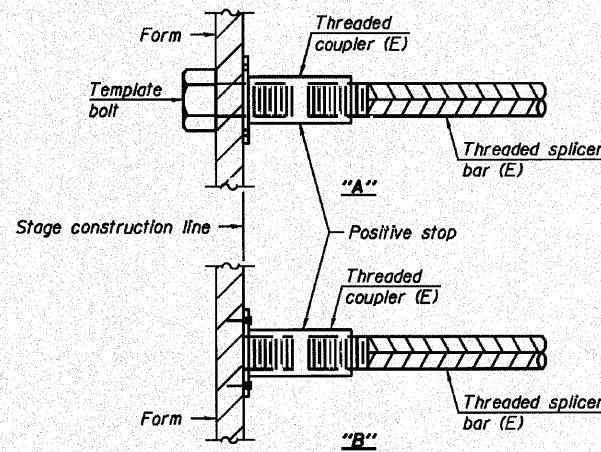
- Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



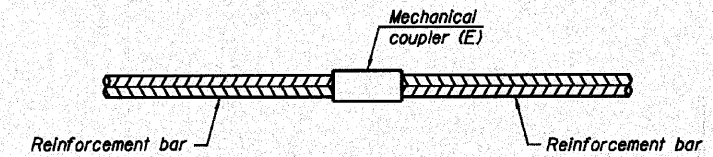
BAR SPLICER ASSEMBLY FOR #5 BAR ON VAULTED ABUTMENTS

No. required = 32



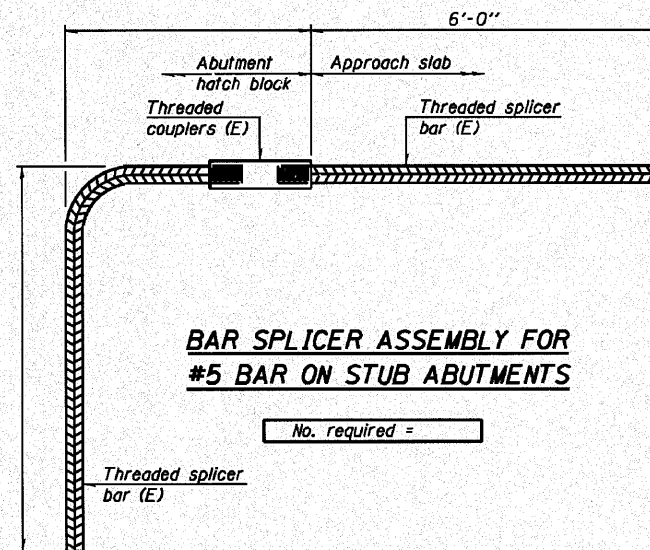
INSTALLATION AND SETTING METHODS

- "A": Set bar splicer assembly by means of a template bolt.
- "B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
- (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

- Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
- All reinforcement shall be lapped and tied to the splicer bars.
- Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
- See special provision for Mechanical Splicers.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.

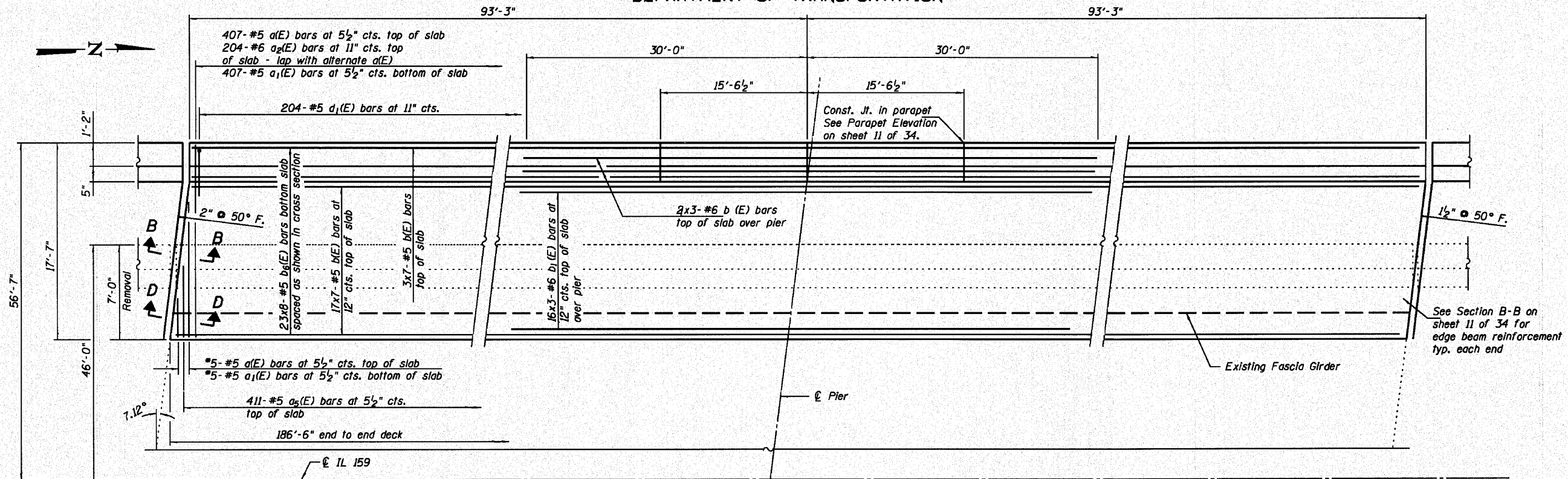
**BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NO. 082-0176**

DESIGNED - T.J.Z
CHECKED - C.W.C
DRAWN - D.L.H
CHECKED - C.W.C, S.D.S

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ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
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DESIGN FIRM #184001036

SHEET NO. 9 34 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	92
			CONTRACT NO. 76D59		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

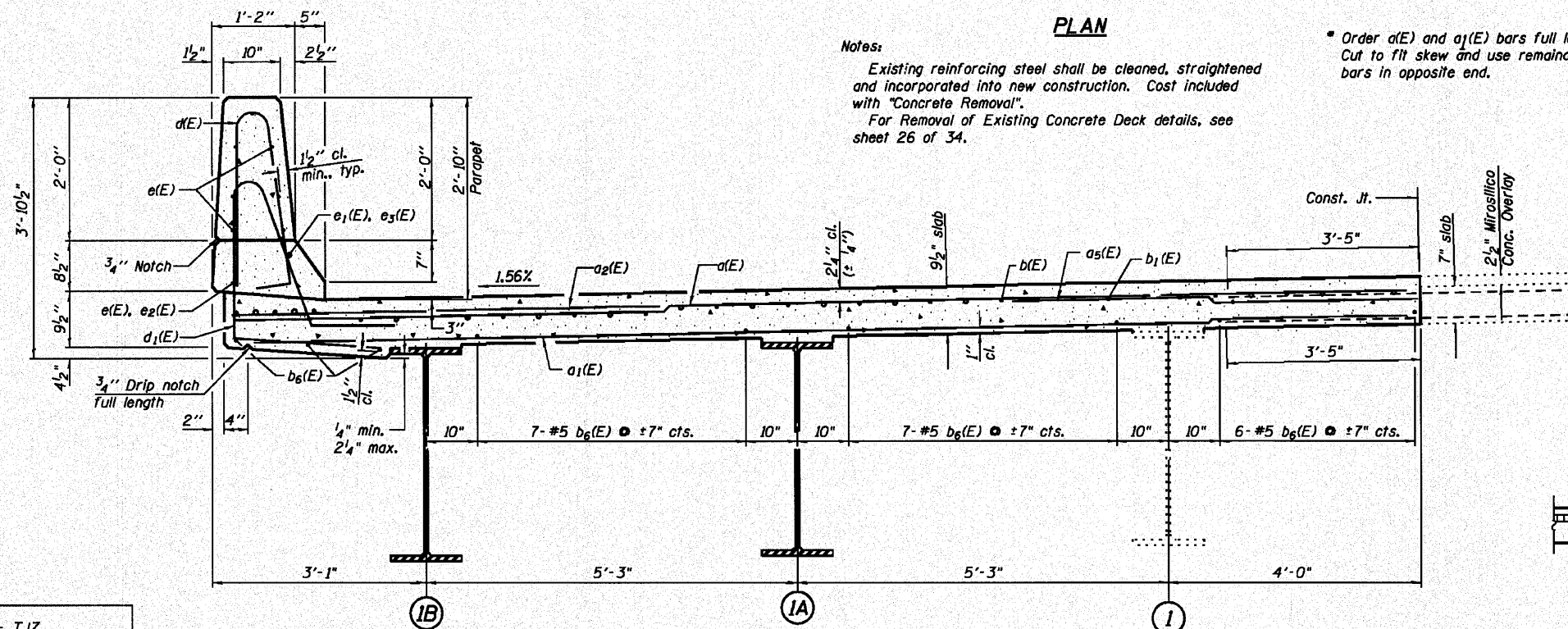


PLAN

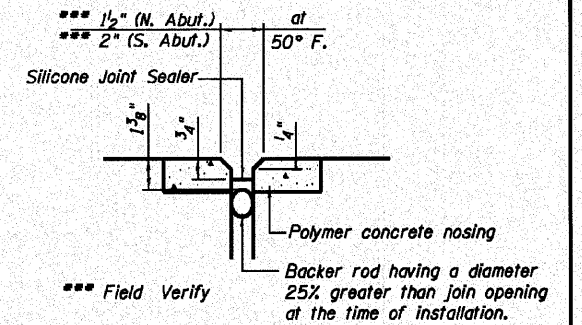
Notes:

Existing reinforcing steel shall be cleaned, straightened and incorporated into new construction. Cost included with "Concrete Removal".
For Removal of Existing Concrete Deck details, see sheet 26 of 34.

Order a(E) and a1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

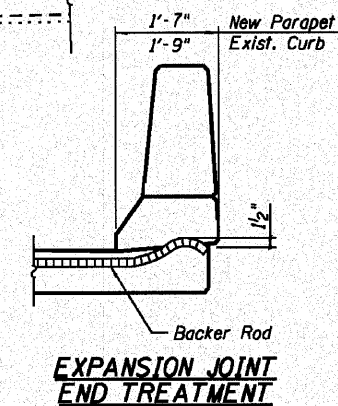


SECTION THRU WIDENING
(Looking North)



EXPANSION JOINT DETAIL

Match existing Expansion Joint Detail as determined in field.



EXPANSION JOINT END TREATMENT

MINIMUM BAR LAP

#5 bar = 3'-3"
#6 bar = 3'-10"

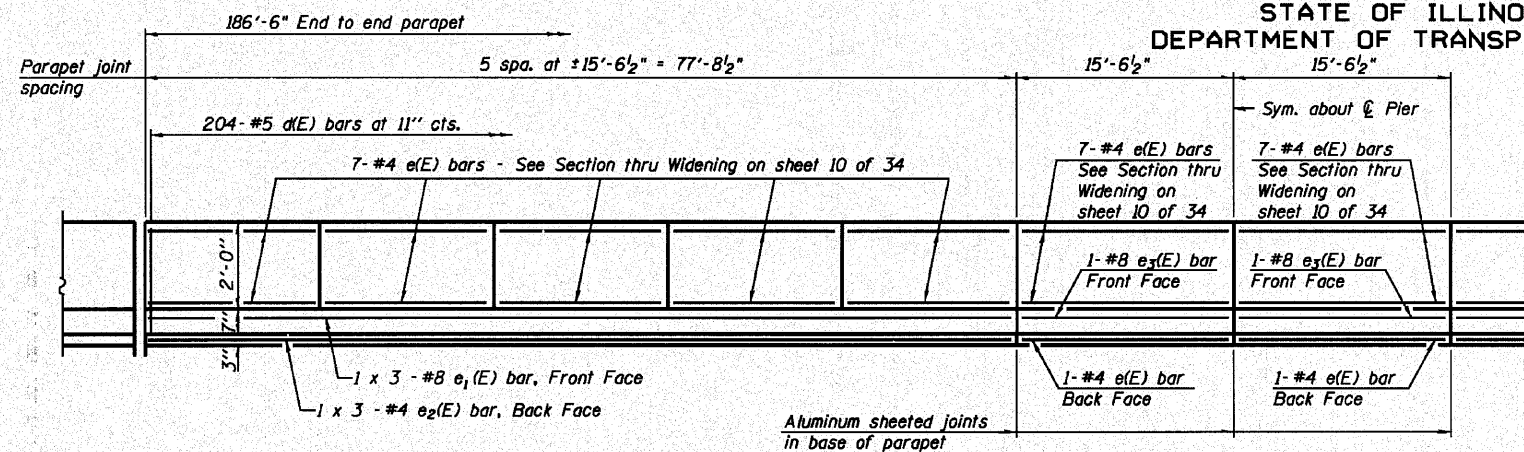
SUPERSTRUCTURE
STRUCTURE NO. 082-0176

DESIGNED - T.J.Z
CHECKED - C.W.C
DRAWN - D.L.H
CHECKED - C.W.C, S.D.S

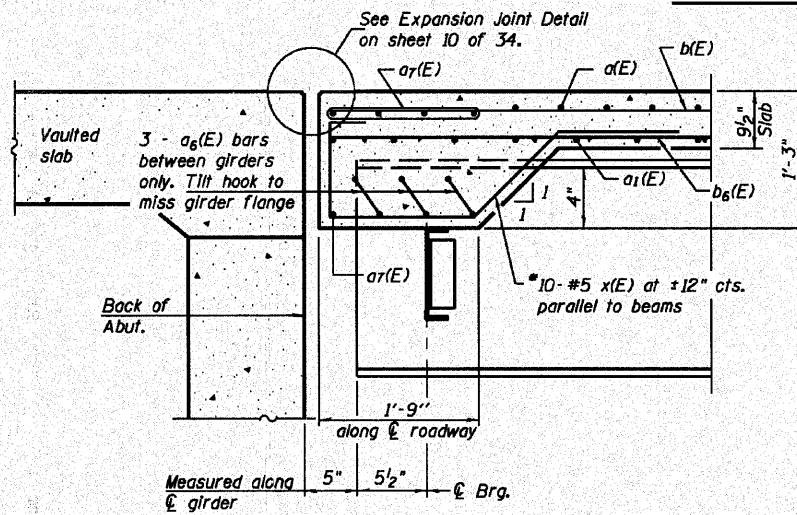
WHKS & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

SHEET NO. 10 34 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	93
			CONTRACT NO. 76D59		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

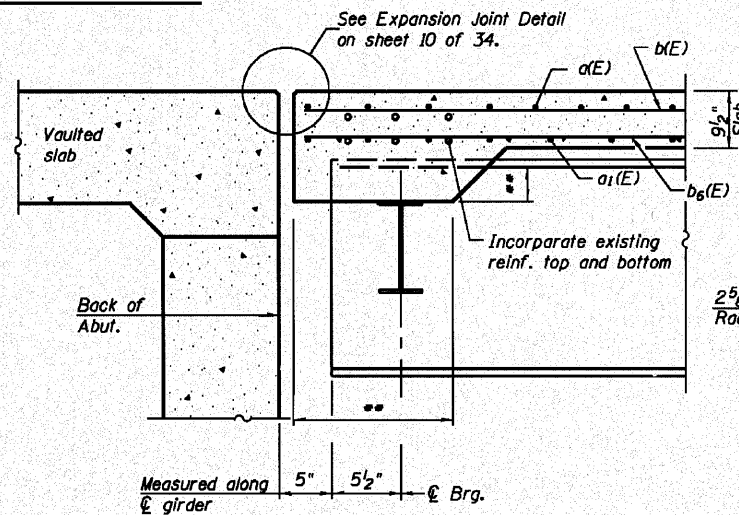


INSIDE ELEVATION OF PARAPET



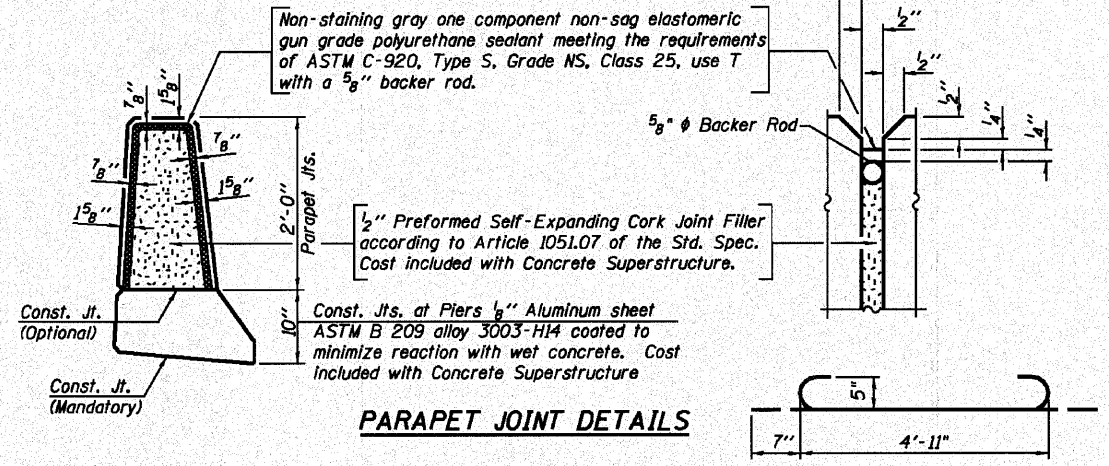
SECTION B-B

(Between Girders 1-1A and 1A-1B)



SECTION D-D

(Between Girders 1-2)

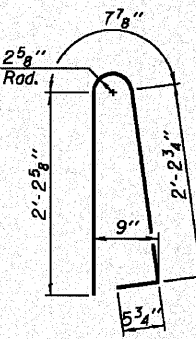


PARAPET JOINT DETAILS

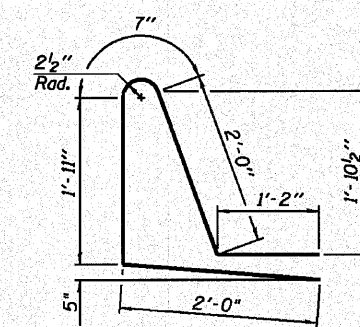
a6(E) BAR

MINIMUM BAR LAP

(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"



BAR d(E)

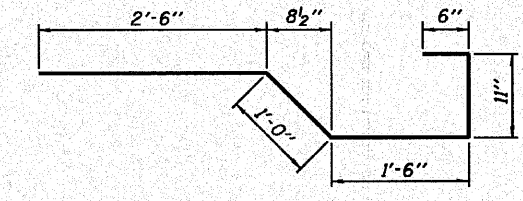


BAR d1(E)

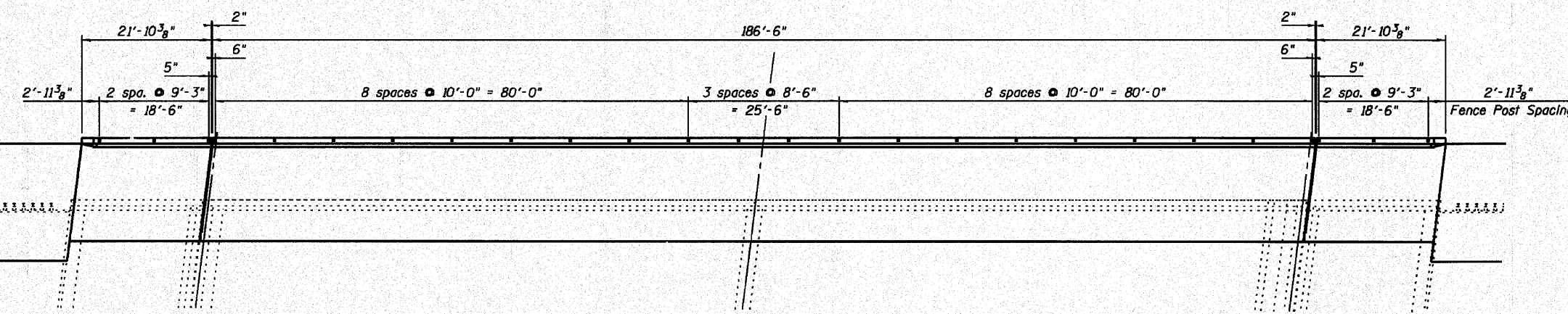
SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	412	#5	17'-1"	—
a1(E)	412	#5	16'-9"	—
a2(E)	204	#6	6'-6"	—
a5(E)	411	#5	6'-11"	—
a6(E)	12	#5	5'-1"	—
a7(E)	10	#5	10'-3"	—
b(E)	140	#5	29'-5"	—
b1(E)	54	#6	22'-7"	—
b6(E)	184	#5	26'-2"	—
d(E)	204	#5	5'-7"	—
d1(E)	204	#5	6'-6"	—
e(E)	86	#4	15'-2"	—
e1(E)	6	#8	29'-3"	—
e2(E)	6	#4	27'-2"	—
e3(E)	2	#8	15'-2"	—
x(E)	20	#5	6'-5"	—
Concrete Superstructure		Cu. Yd.	122.9	
Reinforcement Bars, Epoxy Coated		Pound	35,060	
Silicone Joint Sealer, 2"		Foot	17.7	
Silicone Joint Sealer, 1 1/2"		Foot	17.7	

Bars indicated thus 1 x 3-#8 etc. indicates 1 line of bars with 3 lengths per line. See sheet 8 for a5(E) bar detail.



BAR x(E)



FENCE POST SPACING PLAN

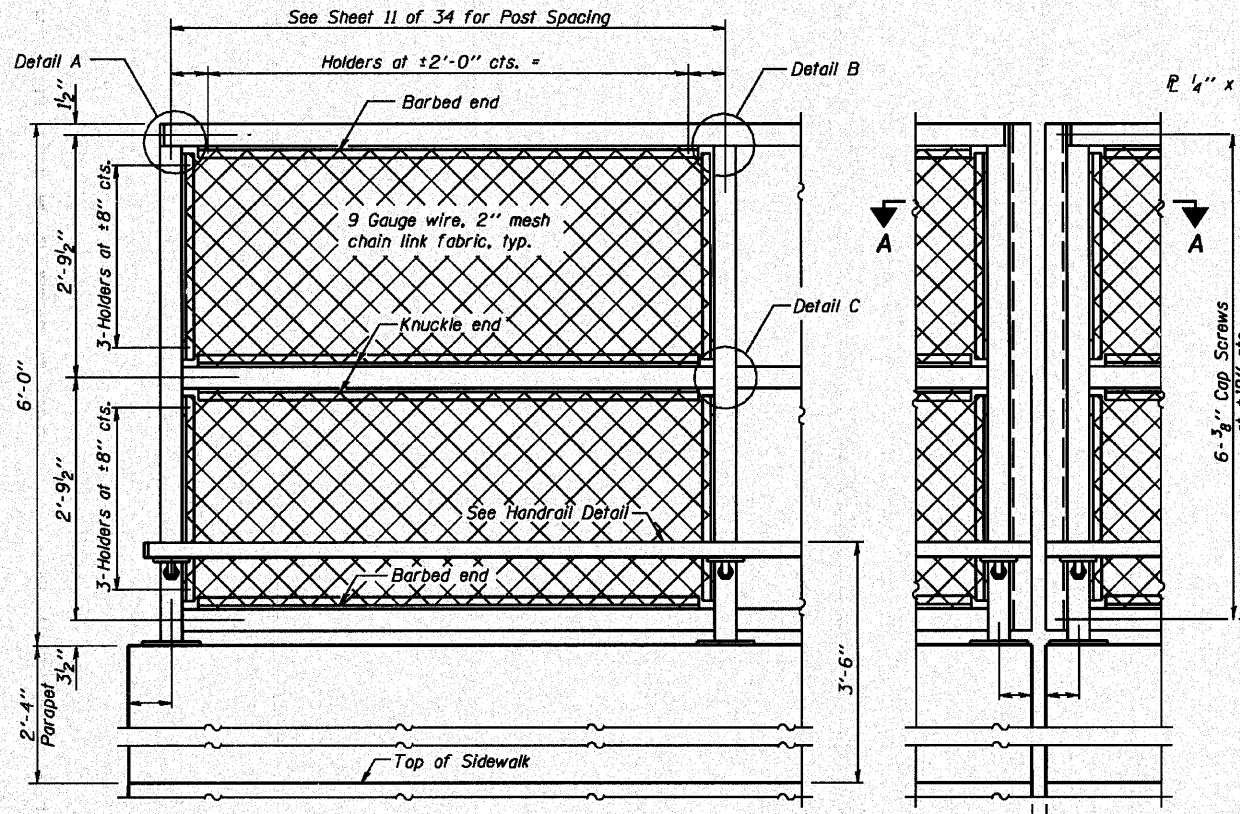
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 082-0176

DESIGNED - T.J.Z.
CHECKED - C.W.C.
DRAWN - D.L.H.
CHECKED - C.W.C., S.D.S.

WHKS & Co.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9487
DESIGN FIRM #184001036

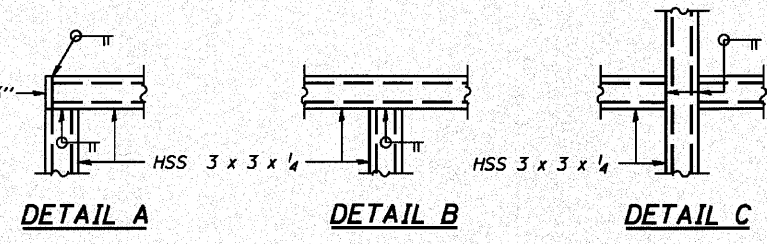
SHEET NO. 11 34 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	94
			CONTRACT NO. 76D59		
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



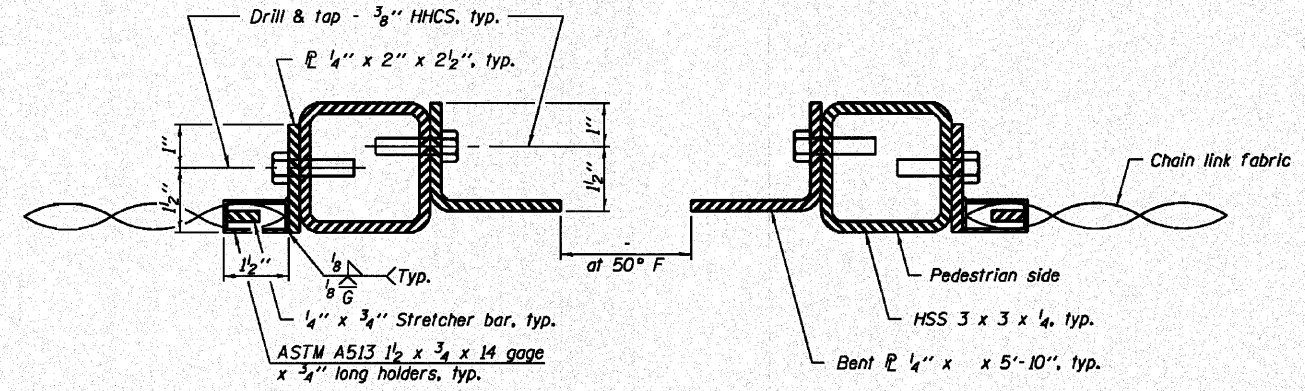
ELEVATION
(Inside Face)

ELEVATION
(At Expansion Joint)

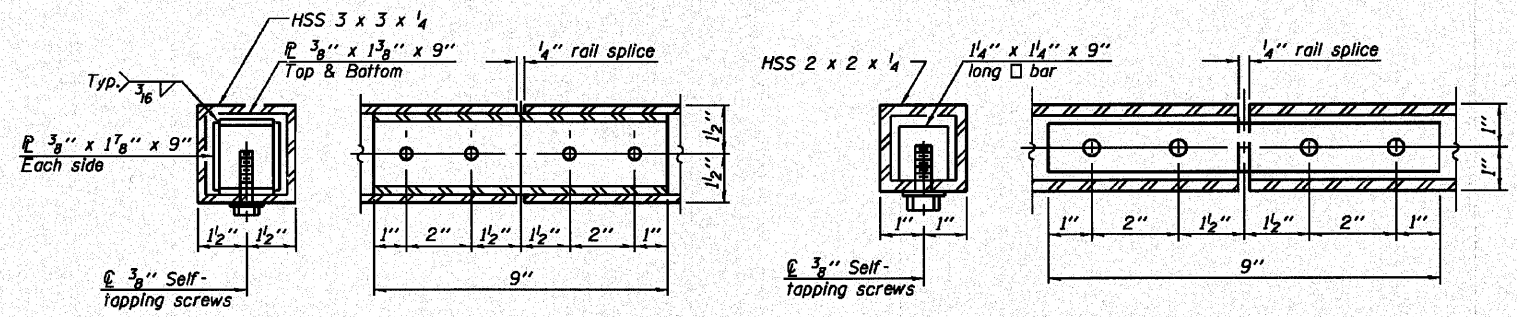


DETAIL A **DETAIL B** **DETAIL C**

Notes:
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

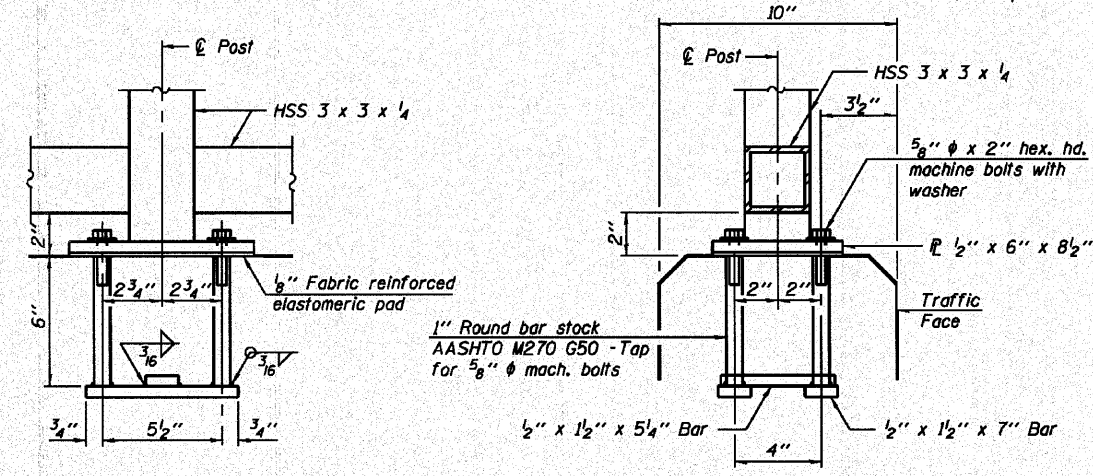


SECTION A-A



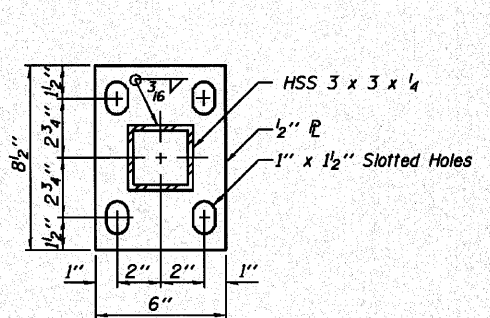
RAIL SPLICE

HANDRAIL SPLICE

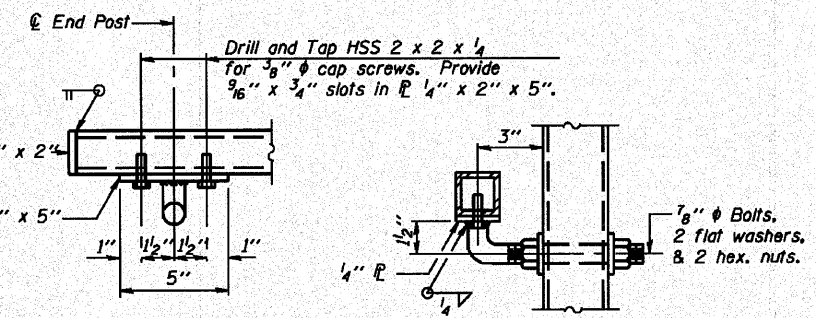


ANCHOR BOLT DETAILS

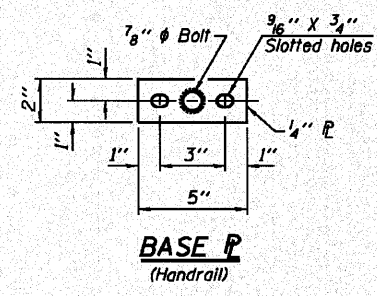
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



BASE P



HANDRAIL DETAIL



BASE P
(Handrail)

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing	Foot	223

BRIDGE FENCE RAILING
PARAPET MOUNTED
STRUCTURE NO. 082-0176

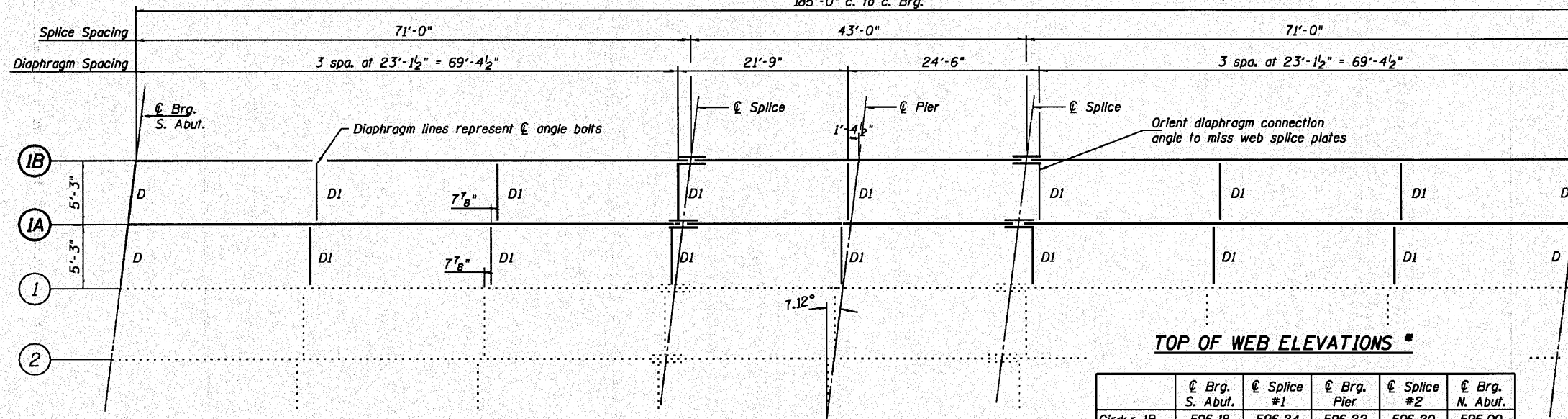
SHEET NO. 12	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
34 SHEETS	64	82-5K-2	ST. CLAIR	162	95
CONTRACT NO. 76D59					
ILLINOIS FED. AID PROJECT					

DESIGNED - T.J.Z.
CHECKED - C.W.C.
DRAWN - DLH
CHECKED - C.W.C., SDS

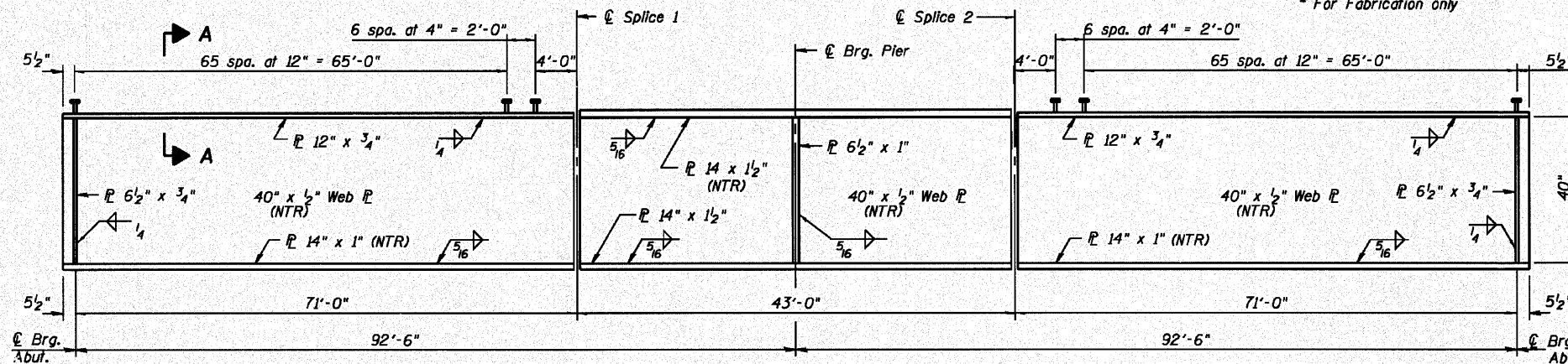
WHKS & CO.
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SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001038

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

185'-0" c. to c. Brg.



FRAMING PLAN



GIRDER ELEVATION

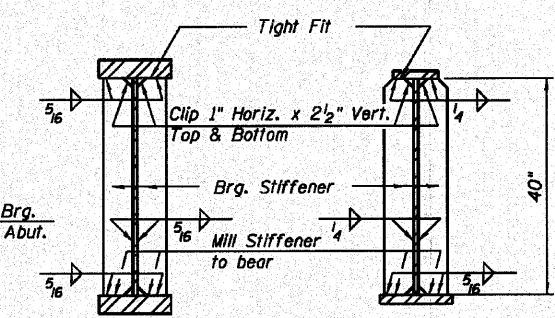
"NTR" denotes plates to which notch toughness requirements are applicable. The main load carrying members components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

- M_{SD} : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
- M_L : Un-factored live load moment (kip-ft.).
- M_I : Un-factored moment due to impact (kip-ft.).
- M_a : Factored design moment (kip-ft.).
- $1.5 [M_D + M_{SD} + \frac{2}{3} (M_L + M_I)]$
- M_u : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
- f_s (Overload): Sum of stresses as computed from the moments below (ksi).
- $M_D + M_{SD} + \frac{2}{3} (M_L + M_I)$
- VR: Maximum $\frac{1}{2}$ impact shear range within the composite portion of the span for stud shear connector design (kips).

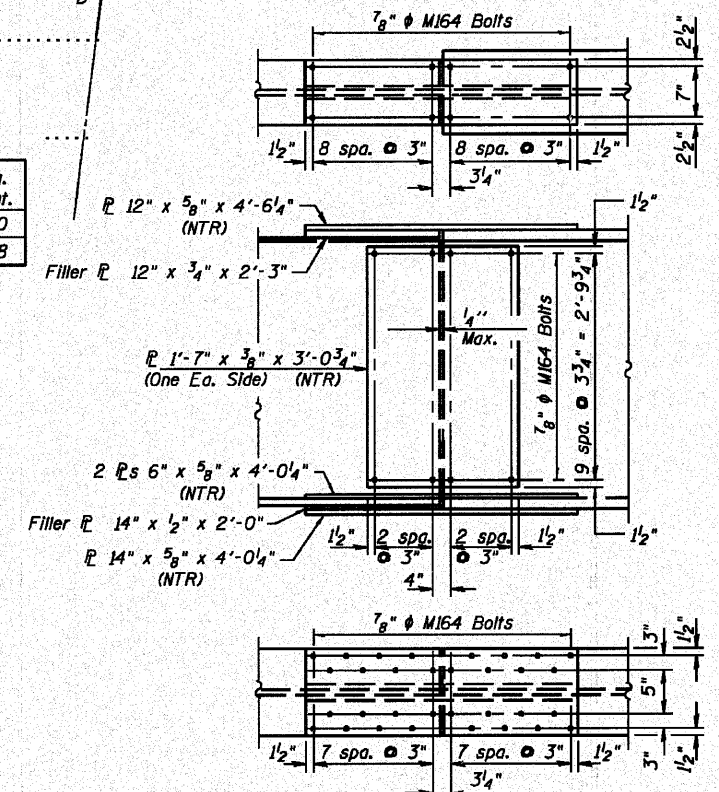
	Abut.	Pier
R_D (k)	33.8	119.8
R_L (k)	30.2	46.8
R_I (k)	7.0	7.5
R_{Total} (k)	71.0	174.1

	0.4 Sp. 1 or 0.6 Sp. 2	Pier
I_s (in ⁴)	12038	20758
$I_c(n)$ (in ⁴)	30698	
$I_c(3n)$ (in ⁴)	21809	
S_s (in ³)	647.6	966
$S_c(n)$ (in ³)	904.7	
$S_c(3n)$ (in ³)	818.0	
Z (in ³)		1072
ρ (k/')	0.842	1.084
M_D (k)	435	1194
s_D (k/')	0.175	
M_{SD} (k)	108	
M_L (k)	540	412
M_I (k)	142	97
$\frac{2}{3} [M_L + M_I]$ (k)	1137	848
M_a (k)	2184	2655
M_u (k)	3408	3215
f_s non-comp (ksi)	8.1	14.8
f_s comp (ksi)	1.6	
f_s $\frac{2}{3} [M_L + M_I]$ (ksi)	15.1	10.5
f_s (Overload) (ksi)	24.7	25.4
VR (k)	41.5	

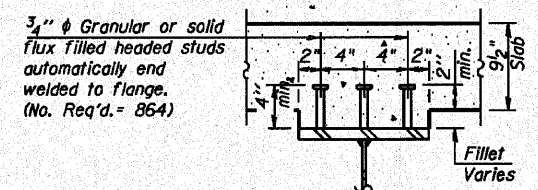
* Compact section



SECTION AT PIER SECTION AT ABUTMENT



FIELD SPLICE DETAIL



SECTION A-A

FRAMING PLAN AND GIRDER DETAILS
STRUCTURE NO. 082-0176

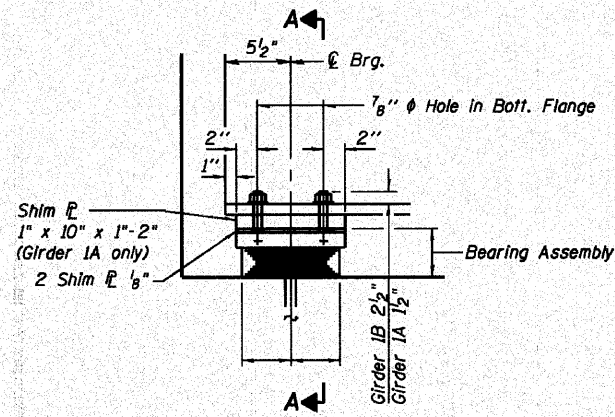
SHEET NO. 13	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
34 SHEETS	64	82-5K-2	ST. CLAIR	162	96
CONTRACT NO. 76D59					
ILLINOIS FED. AID PROJECT					

- I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in. 4 and in. 3).
- $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in. 4 and in. 3).
- $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in. 4 and in. 3).
- Z: Plastic Section Modulus of the steel section in non-composite areas (in. 3).
- ρ : Un-factored non-composite dead load (kips/ft.).
- M_D : Un-factored moment due to non-composite dead load (kip-ft.).
- s_D : Un-factored long-term composite (superimposed) dead load (kips/ft.).

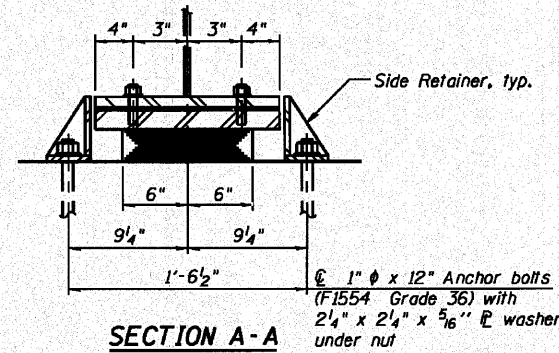
DESIGNED - T.J.Z.
CHECKED - C.W.C.
DRAWN - DLH
CHECKED - C.W.C., SDS

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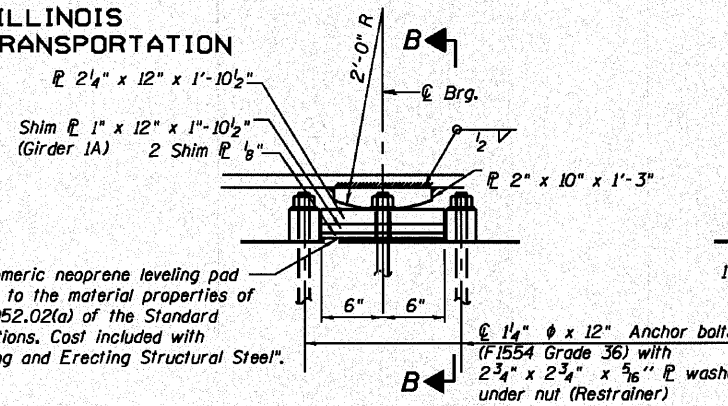
STATE OF ILLINOIS
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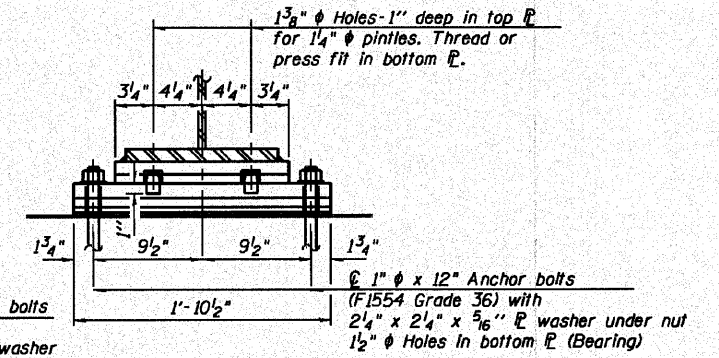
ELEVATION AT ABUTS.



SECTION A-A

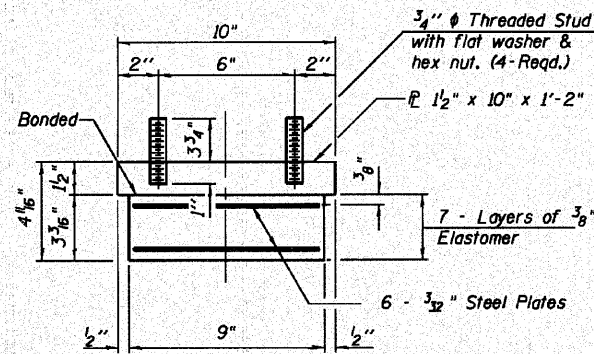


ELEVATION AT PIER



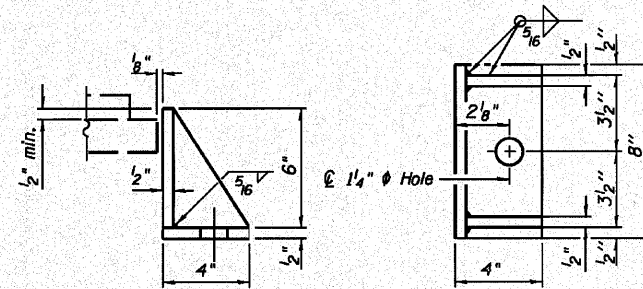
SECTION B-B

TYPE I ELASTOMERIC EXP. BRG.



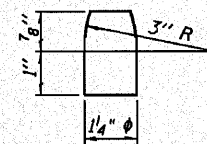
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



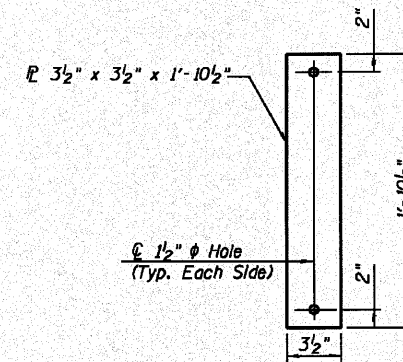
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PINTLE

FIXED BEARING



LONGITUDINAL RESTRAINER AT FIXED PIER

Longitudinal restrainer plates placed flushed next to base plate (Typ. each side) and shall be included with the cost of "Furnishing and Erecting Structural Steel". Space anchor bolts to miss reinforcement.

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

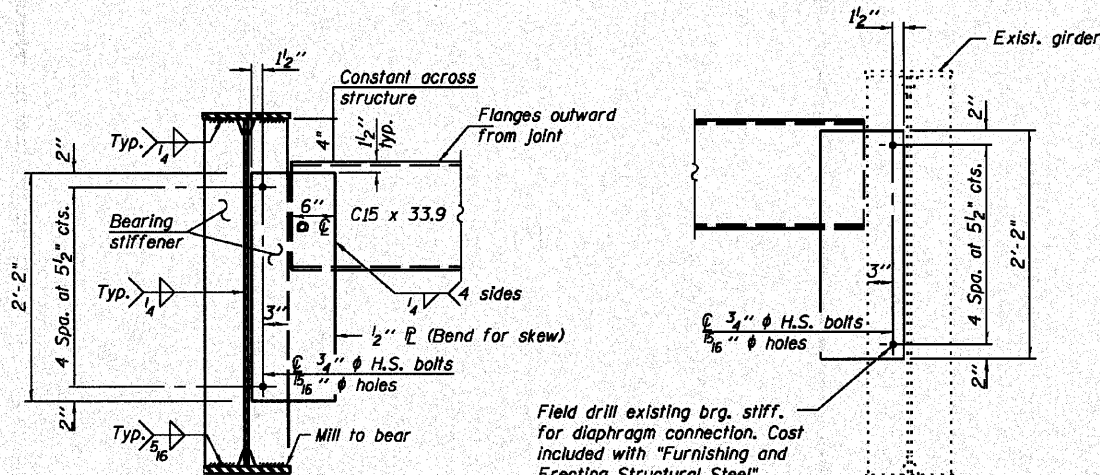
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the bearing assembly shall be included in the cost of "Elastomeric Bearing Assembly, Type I".

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

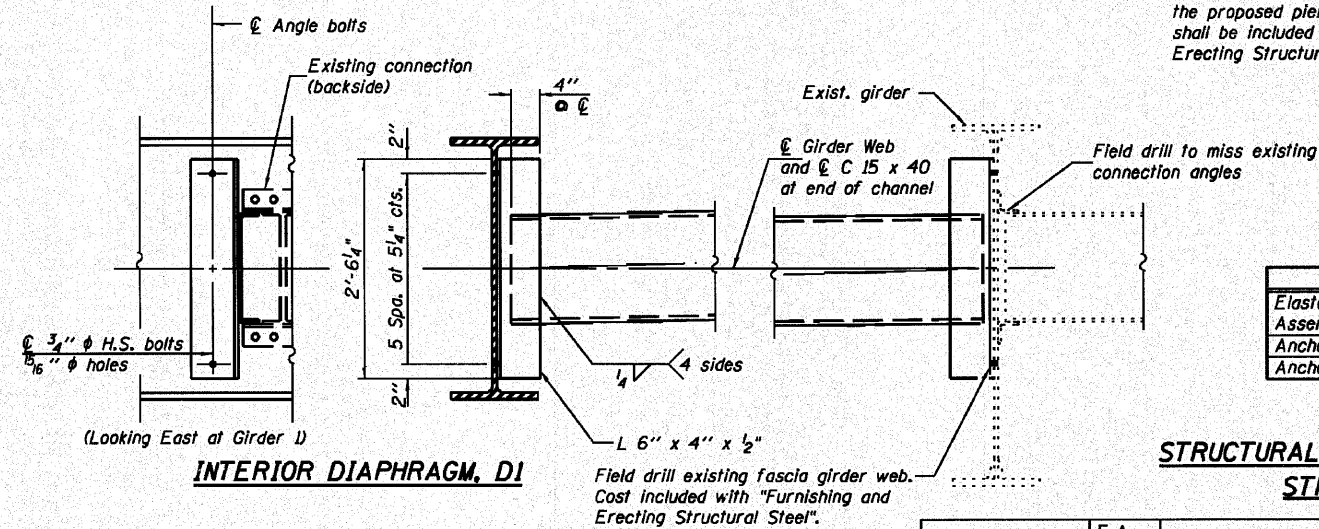
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Existing Girder 1 fixed bearing and longitudinal restrainer to be removed and reassembled with new anchor bolts on the proposed pier cap. Cost of removal and reassembly shall be included with the cost of "Furnishing and Erecting Structural Steel".



END DIAPHRAGM, D

Note: Two hardened washers required for each set of oversized holes.



INTERIOR DIAPHRAGM, DI

Note:
Two hardened washers required for each set of oversized holes. Alternate channels [15 x 50 are permitted to facilitate material acquisition. Calculated weight of structural steel based on [15 x 40 sections. The alternate, if utilized shall be provided at no additional cost to the Department.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	4
Anchor Bolts, 1"	Each	14
Anchor Bolts, 1/4"	Each	12

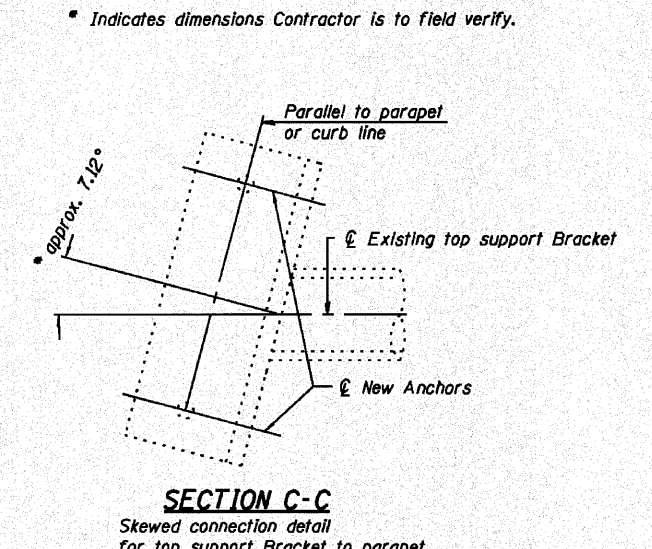
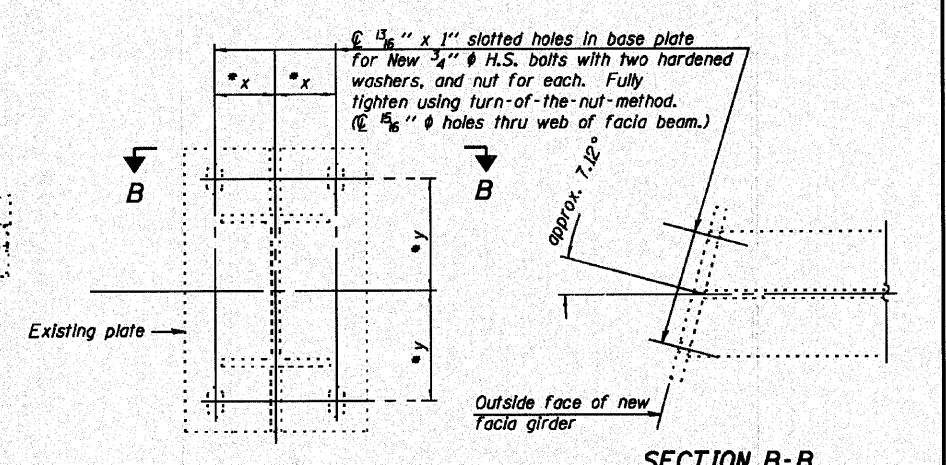
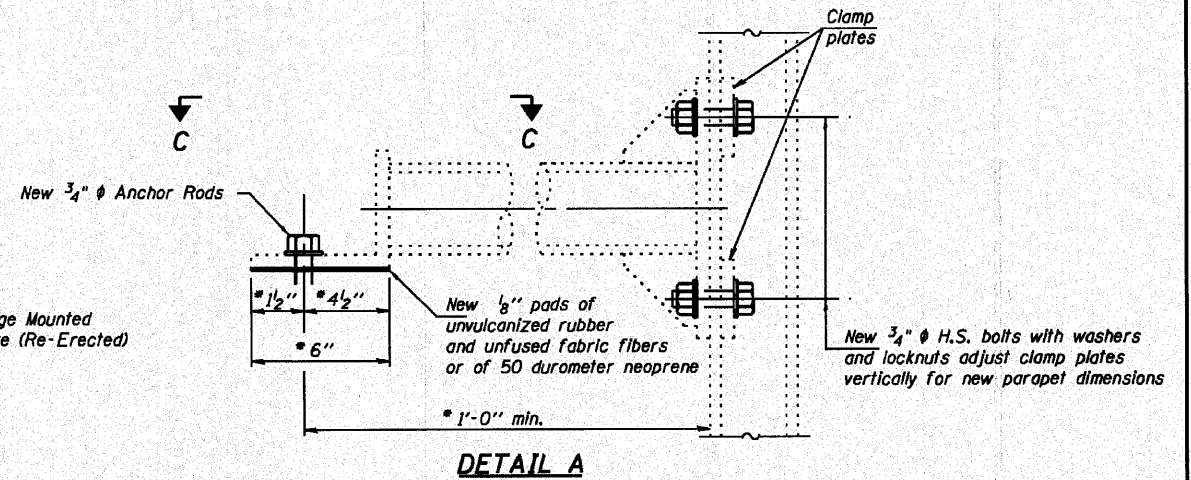
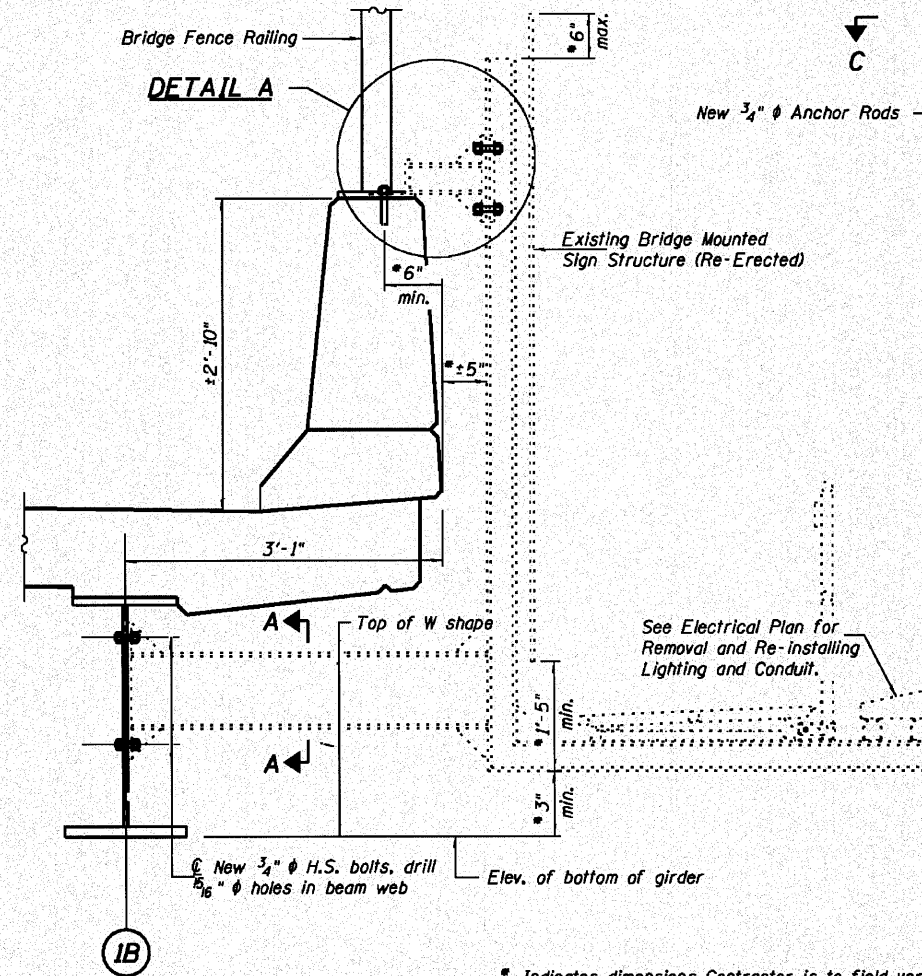
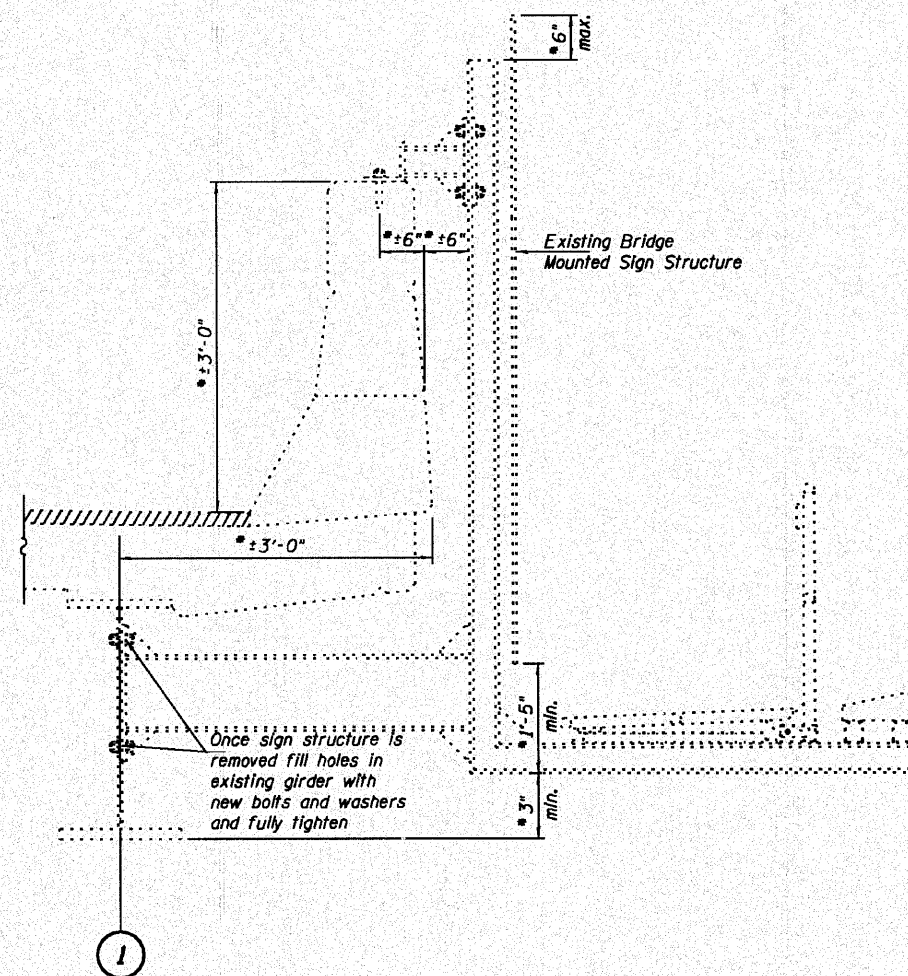
STRUCTURAL STEEL AND BEARING DETAILS
STRUCTURE NO. 082-0176

SHEET NO. 14	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
34 SHEETS	64	82-5K-2	ST. CLAIR	162	97
ILLINOIS FED. AID PROJECT					

DESIGNED - TJZ
CHECKED - CWC
DRAWN - DLH
CHECKED - CWC, SDS

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Notes:
Contractor shall field check all pertinent existing dimensions prior to removing sign structure.
All holes in bridge beams or girders should be located in the middle half of the member. There shall be no holes drilled in the lower quarter of the member's depth. Proposed exceptions must be approved by the Bureau of Bridges and Structures.
The Engineer may adjust dimension "1" to meet the above condition and to keep the sign level. Sign shall not extend more than 6" above top of bracket, and this dimension may vary to keep sign level if bridge is on grade or vertical curve.
Holes in new steel members may be drilled in the fabrication shop or in the field. Field drill existing members.
Contractor shall coordinate upper bracket installation with bridge fence rail post spacing and installation.
HIGH STRENGTH BOLTS: All bolts, washers, nuts and locknuts shall satisfy the requirements of ASTM designation A307 unless noted as "H.S." which shall require AASHTO M164 (A325), ASTM A449, or approved alternate. All fasteners shall be hot dip galvanized per AASHTO M232 unless otherwise specified.
ANCHOR RODS: All threaded rod conforming to ASTM A307, 3/4" x 12" long, each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be either cast into the concrete or epoxy grouted in accordance with Section 5B4 of the Standard Specifications. Minimum embedment in concrete shall be 9".
Material not covered by Special Provision shall be according to Section 733 of Standard Specifications.

DESIGNED - T.J.Z
CHECKED - C.W.C
DRAWN - DLH
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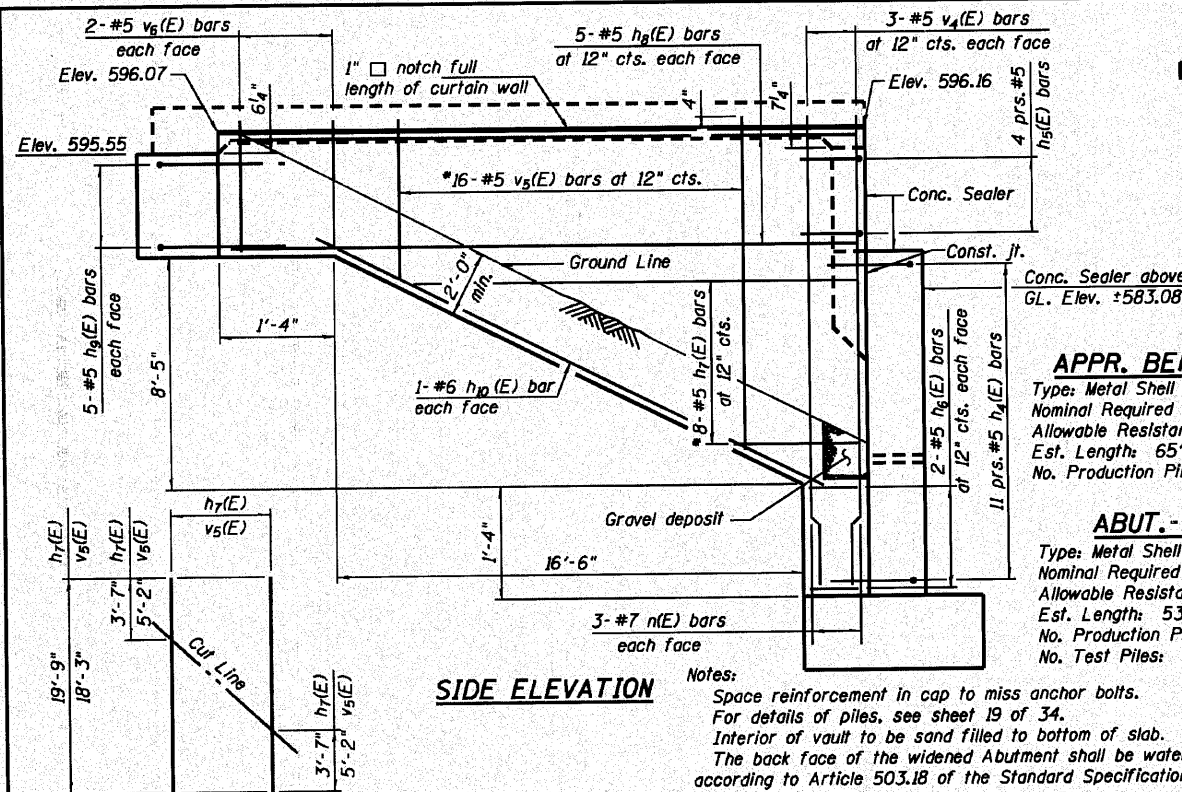
BILL OF MATERIAL

Remove and Re-Erect Bridge Mounted Sign	Each	1
---	------	---

**BRIDGE MOUNTED SIGN STRUCTURE
STRUCTURE NO. 082-0176**

SHEET NO. 15 34 SHEETS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	64	82-5K-2	ST. CLAIR	162	98
CONTRACT NO. 76D59					
ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



APPR. BENT-PILE DATA

Type: Metal Shell Piles 12" x 0.250" Walls
Nominal Required Bearing: 210 k
Allowable Resistance Available: 70k
Est. Length: 65'
No. Production Piles: 2

ABUT.- PILE DATA

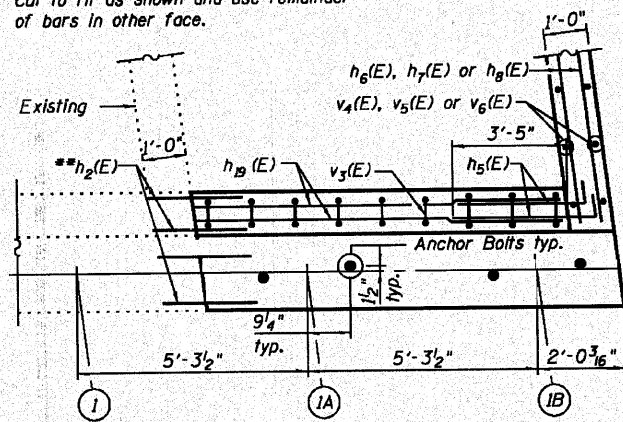
Type: Metal Shell Piles 12" x 0.250" Walls
Nominal Required Bearing: 210 k
Allowable Resistance Available: 70k
Est. Length: 53'
No. Production Piles: 5
No. Test Piles: 1

Notes:
Space reinforcement in cap to miss anchor bolts.
For details of piles, see sheet 19 of 34.
Interior of vault to be sand filled to bottom of slab.
The back face of the widened Abutment shall be waterproofed according to Article 503.18 of the Standard Specifications.

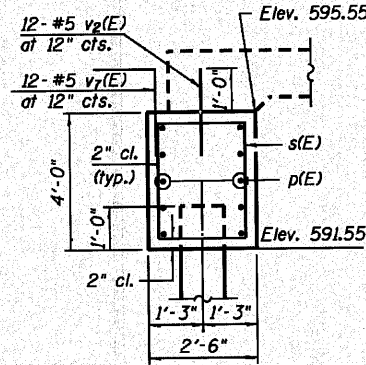
** #5 h2(E) bars drilled and epoxy grouted into 1/8" φ by 9" holes (min.)
* #6 h3(E) bars drilled and epoxy grouted into 1" φ by 9" holes (min.)
* #7 p2(E) bars drilled and epoxy grouted into 1/8" φ by 9" holes (min.)
The grout and method of application shall be according to Section 584 of the Standard Specifications and shall develop capacity of bar.

FIELD CUTTING DIAGRAM

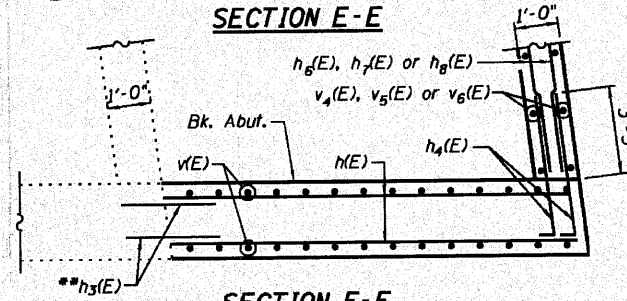
Order h7(E) and v5(E) bars full length.
Cut to fit as shown and use remainder of bars in other face.



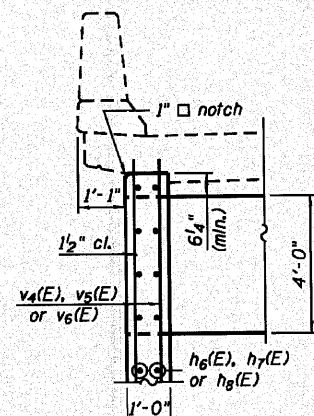
SECTION E-E



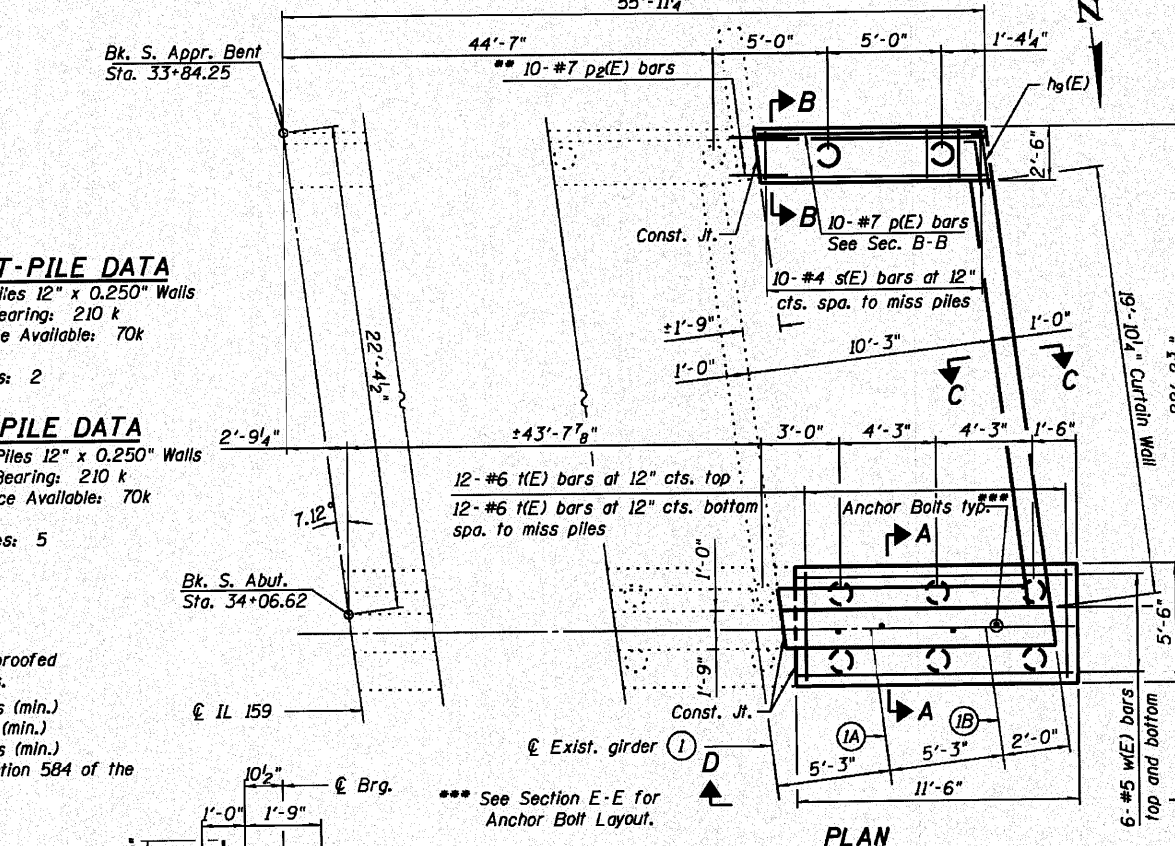
SECTION B-B



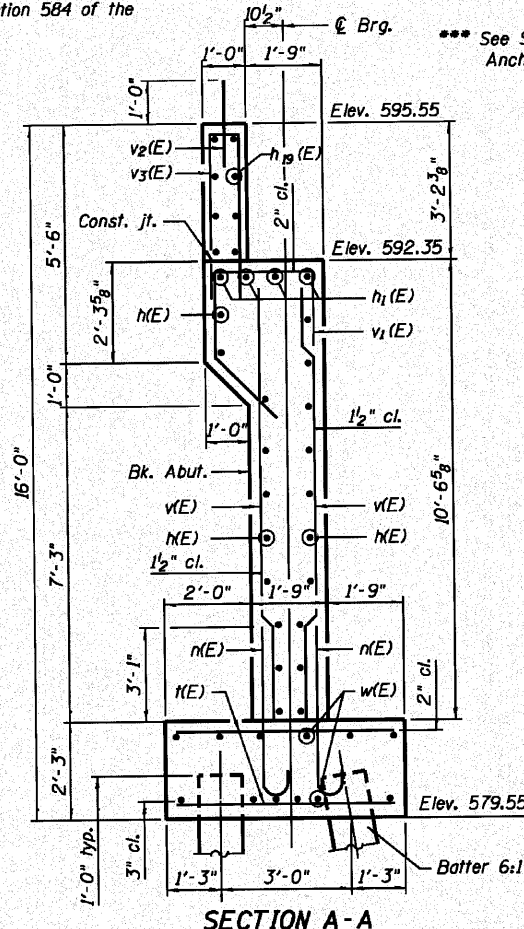
SECTION F-F



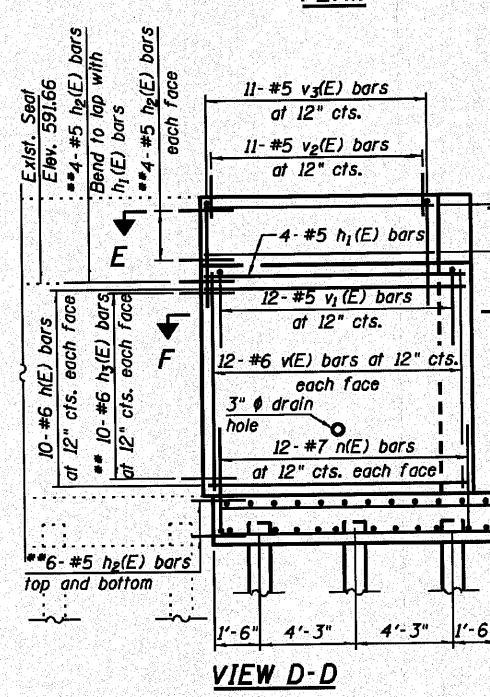
SECTION C-C



PLAN



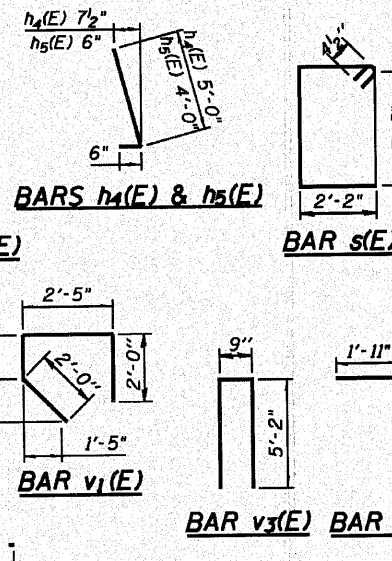
SECTION A-A



VIEW D-D

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	20	#6	11'-1"	
h2(E)	4	#5	11'-1"	
h3(E)	24	#5	4'-2"	
h4(E)	20	#6	4'-9"	
h5(E)	22	#5	5'-6"	1
h6(E)	8	#5	4'-6"	1
h7(E)	4	#5	1'-8"	
h8(E)	8	#5	19'-9"	
h9(E)	10	#5	19'-6"	
h10(E)	10	#5	6'-3"	1
h11(E)	2	#6	19'-9"	
h12(E)	8	#5	10'-1"	
n(E)	30	#7	5'-11"	
p(E)	10	#7	9'-3"	
p2(E)	10	#7	6'-1"	
s(E)	10	#4	12'-5"	
k(E)	24	#6	5'-2"	
v(E)	24	#6	10'-5"	
v1(E)	12	#5	8'-5"	1
v2(E)	23	#5	2'-3"	
v3(E)	11	#5	11'-1"	
v4(E)	6	#5	14'-8"	
v5(E)	16	#5	18'-3"	
v6(E)	4	#5	4'-8"	
v7(E)	12	#5	4'-2"	
w(E)	12	#5	11'-2"	
Structure Excavation			Cu. Yd.	23
Concrete Structures			Cu. Yd.	25.7
Reinforcement Bars, Epoxy Coated			Pound	3,590
Furnishing Metal Shell Piles 12" x 0.250"			Foot	395
Driving Piles			Foot	395
Test Pile Metal Shells			Each	1
Sand Backfill			Cu. Yd.	47
Concrete Sealer			Sq. Ft.	163



SOUTH ABUTMENT
STRUCTURE NO. 082-0176

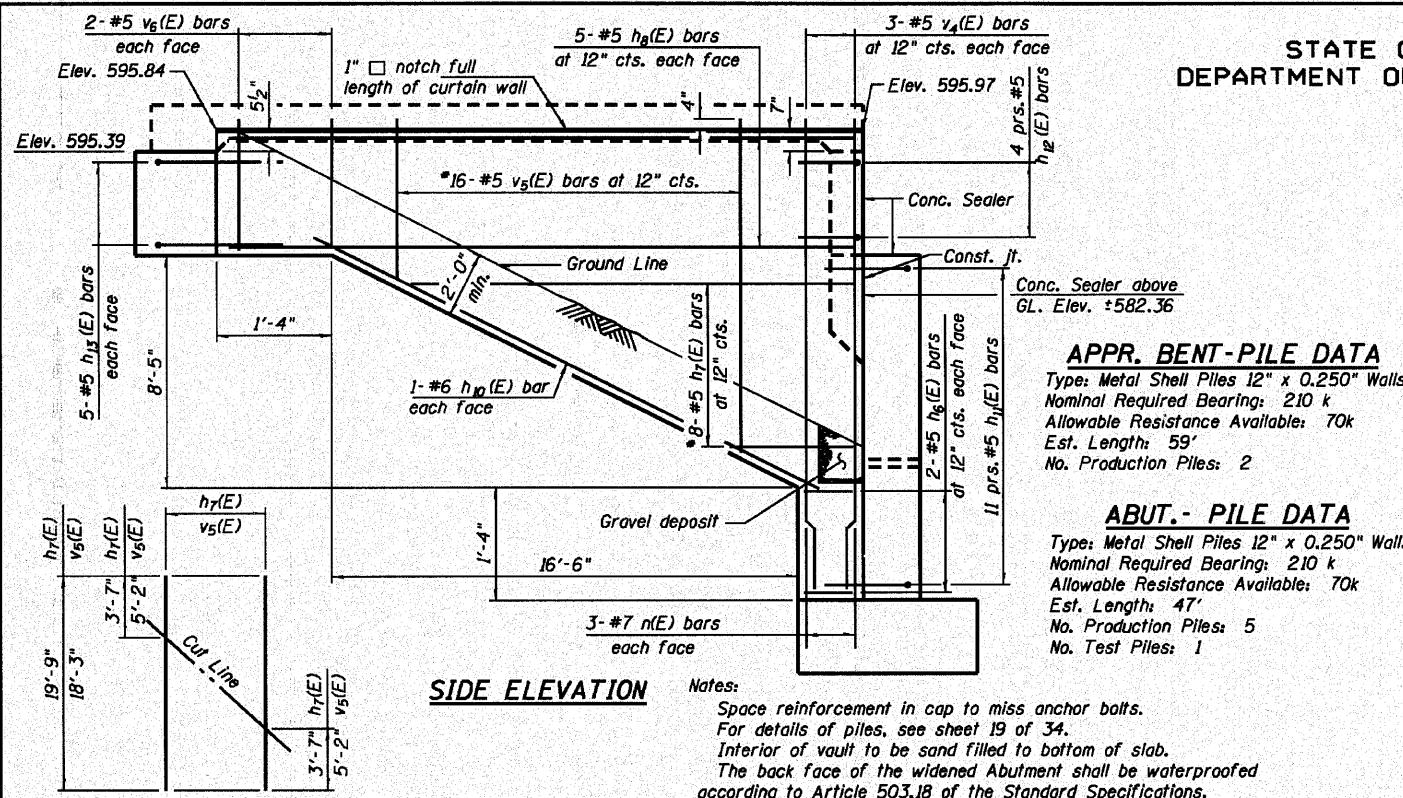
DESIGNED - TJZ
CHECKED - CWC
DRAWN - DLH
CHECKED - CWC, SDS

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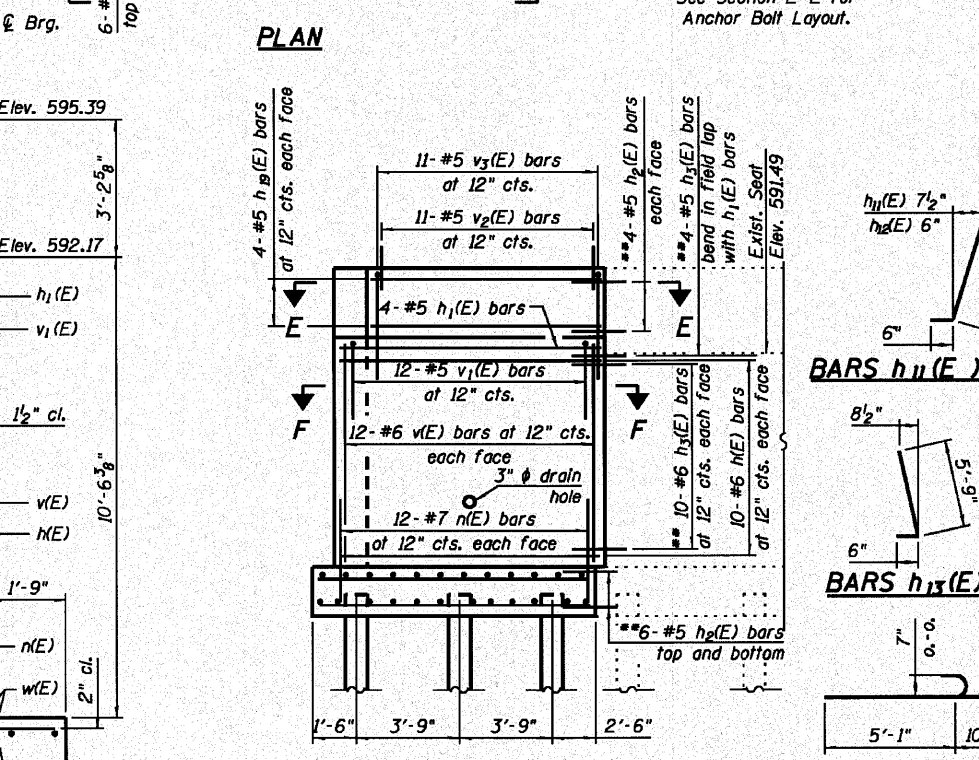
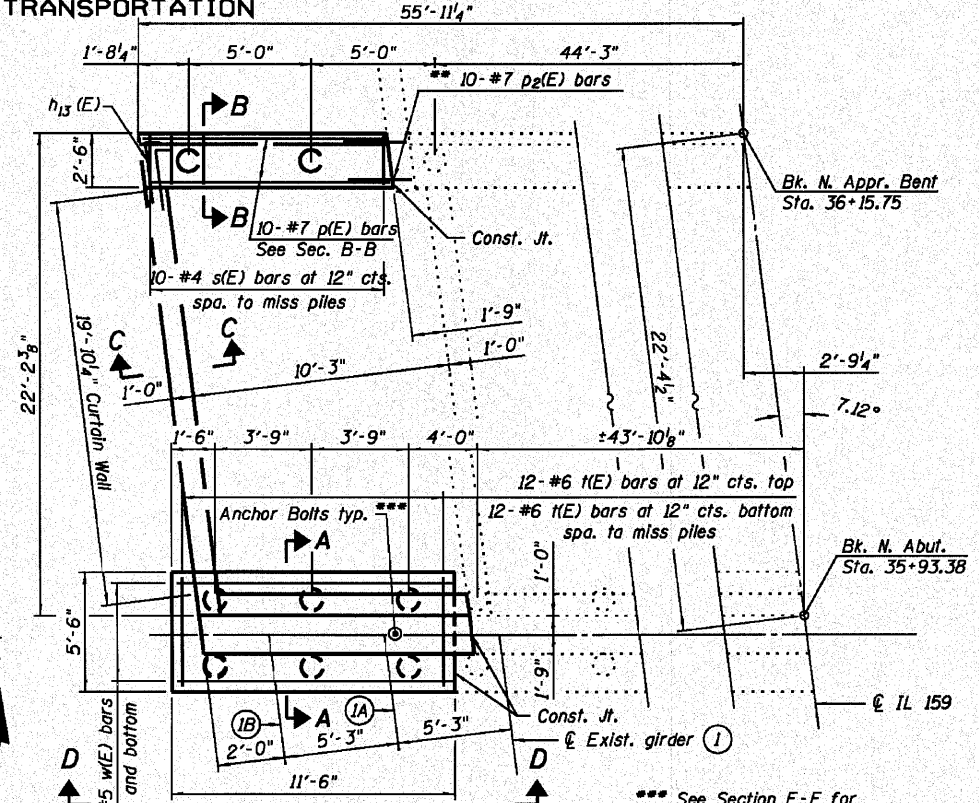
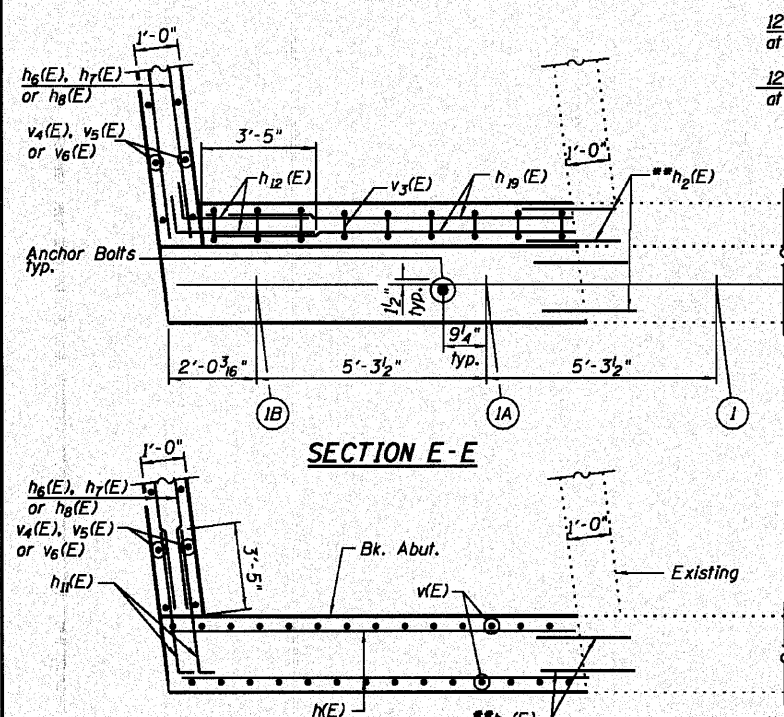
MINIMUM BAR LAP
#5 bar = 2'-7"
#6 bar = 3'-1"

SHEET NO. 16	F.A. RTE. 64	SECTION 82-5K-2	COUNTY ST. CLAIR	TOTAL SHEETS 162	SHEET NO. 99
34 SHEETS	CONTRACT NO. 76D59		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

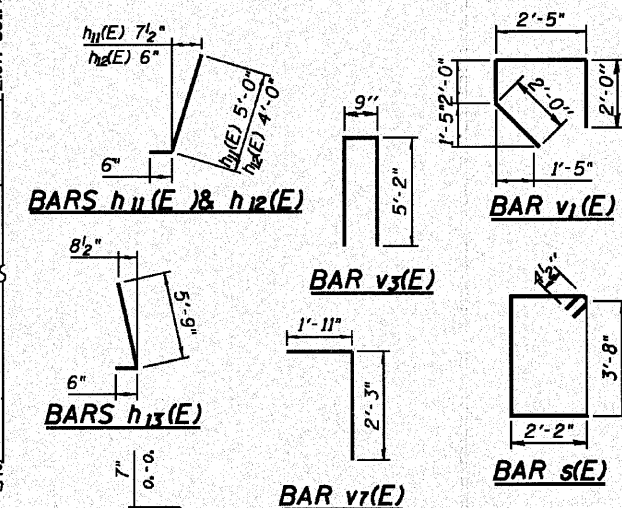


FIELD CUTTING DIAGRAM
Order $h_7(E)$ and $v_5(E)$ bars full length. Cut to fit as shown and use remainder of bars in other face.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_1(E)$	20	#6	11'-1"	—
$h_2(E)$	4	#5	11'-1"	—
$h_3(E)$	24	#5	4'-2"	—
$h_4(E)$	20	#6	4'-9"	—
$h_5(E)$	4	#5	1'-8"	—
$h_7(E)$	8	#5	19'-9"	—
$h_8(E)$	10	#5	19'-6"	—
$h_9(E)$	2	#6	19'-8"	—
$h_{11}(E)$	22	#5	5'-6"	—
$h_{12}(E)$	8	#5	4'-6"	—
$h_{13}(E)$	10	#5	6'-3"	—
$h_{14}(E)$	8	#5	10'-1"	—
$n(E)$	30	#7	5'-11"	—
$p(E)$	10	#7	9'-3"	—
$p_2(E)$	10	#7	6'-1"	—
$s(E)$	10	#4	12'-5"	—
$t(E)$	24	#6	5'-2"	—
$v(E)$	24	#6	10'-5"	—
$v_1(E)$	12	#5	8'-5"	—
$v_2(E)$	23	#5	2'-3"	—
$v_3(E)$	11	#5	11'-1"	—
$v_4(E)$	6	#5	14'-3"	—
$v_5(E)$	16	#5	18'-3"	—
$v_6(E)$	4	#5	4'-8"	—
$v_7(E)$	12	#5	4'-2"	—
$w(E)$	12	#5	11'-2"	—
Structure Excavation			Cu. Yd.	23
Concrete Structures			Cu. Yd.	25.7
Reinforcement Bars, Epoxy Coated			Pound	3,590
Furnishing Metal Shell Piles 12" x 0.250"			Foot	353
Driving Piles			Foot	353
Test Pile Metal Shells			Each	1
Sand Backfill			Cu. Yd.	47
Concrete Sealer			Sq. Ft.	169



DESIGNED - T.J.Z
CHECKED - CWC
DRAWN - DLH
CHECKED - CWC, SDS

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DESIGN FIRM #184001036

MINIMUM BAR LAP
#5 bar = 2'-7"
#6 bar = 3'-1"

SHEET NO. 17	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
34 SHEETS	64	82-5K-2	ST. CLAIR	162	100
			CONTRACT NO. 76D59		
ILLINOIS FED. AID PROJECT					