

FOR INDEX OF SHEETS, SEE SHEET NO. 2

09-20-2019 LETTING ITEM 005

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	1
		ILLINOIS	CONTRACT NO. 61E69	

BY: *Eric Neubauer* DATE: 06/20/2019
 HDR, INC.
 DWGS. 1-12, 25-37
 LICENSE EXPIRES NOV. 30, 2019

BY: *Maria Krich* DATE: 06/20/2019
 HDR, INC.
 DWGS. 13-15, 20-21, 24
 LICENSE EXPIRES NOV. 30, 2020

BY: *Jane Chen* DATE: 06/20/2019
 ALTAMARU, INC.
 DWGS. 16-19, 22-23
 LICENSE EXPIRES AUG. 31, 2019

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP 345A IL ROUTE 390
 (ELGIN O'HARE WESTERN ACCESS TOLLWAY)
 AT VARIOUS LOCATIONS
 LANDSCAPING AND SCENIC BEAUTIFICATION
 SECTION 14-00245-05-LS
 PROJECT USYC(144)

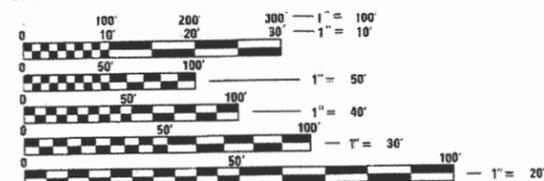
COOK AND DUPAGE COUNTIES
 JOB NO.: C-91-400-16



PROJECT LOCATED IN THE VILLAGES
 OF HANOVER PARK, ROSELLE, AND ITASCA

DESIGN DESIGNATION:
 IL-390: EXPRESSWAY
 US ROUTE 20: OTHER PRINCIPAL ARTERIAL
 ROSELLE ROAD: OTHER PRINCIPAL ARTERIAL

TRAFFIC DATA (ADT) (2016)	POSTED / DESIGN SPEED
IL-390: 69,200 VPD	IL-390: 55 / 60 MPH
US ROUTE 20: 38,000 VPD	US ROUTE 20: 40 / 45 MPH
ROSELLE ROAD: 25,700 VPD	ROSELLE ROAD: 40 / 45 MPH
PLUM GROVE ROAD: 8,200 VPD	PLUM GROVE ROAD: 30 / 35 MPH
ROHLWING ROAD: 18,500 VPD	ROHLWING ROAD: 40 / 45 MPH

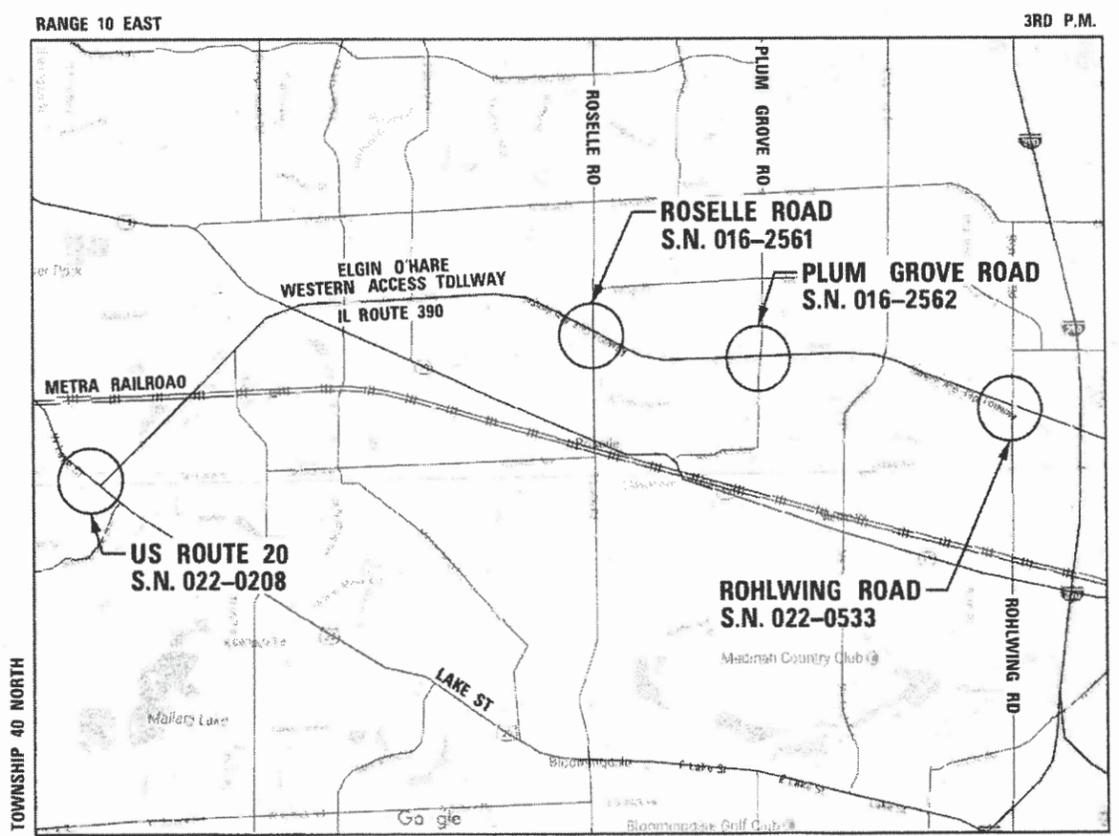


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123
 OR 811
 MEAOE ELECTRIC CO. DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR
 LOCATES IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES
 1-773-287-7672

HDR
 HDR Inc.
 9450 W. Bryn Mawr Ave., Suite 400
 Rosemont, IL 60018
 773-380-7900
 DESIGN FIRM REGISTRATION NUMBER 184.001070

CONTRACT NO. 61E69



LOCATION MAP
 SCALE = N.T.S.
 GROSS LENGTH = N/A
 NET LENGTH = N/A

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

APPROVED *June 26 2019*
Christopher Snyder
 DUPAGE COUNTY

PASSED *June 27 2019*
S.M. Travnal
 DISTRICT 1 ENGINEER OF LOCAL ROADS

RELEASED FOR BID
 BASED ON LIMITED
 REVIEW *June 27 2019*
Anthony J. Dunphy
 REGIONAL ENGINEER

PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS

FEDERAL AID PROGRAM ENGINEER: CARMEN E. RAMOS, P.E. SCHAUMBURG, ILLINOIS

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GENERAL CONSTRUCTION NOTES

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A FIELD OFFICE WITHIN CONTRACT LIMITS ON STATE, ILLINOIS TOLLWAY OR OTHER PUBLIC RIGHT OF WAY WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.

THE CONTRACTOR'S SUPERINTENDENT OR DESIGNEE MUST BE ON THE CONSTRUCTION SITE DURING THE WORKING HOURS WHILE THIS PROJECT IS IN PROGRESS. THE CONTRACTOR'S SUPERINTENDENT MUST BE THE DESIGNATED RESPONSIBLE CONTRACTOR REPRESENTATIVE AND MUST BE AVAILABLE IN CASE OF EMERGENCIES ON A TWENTY-FOUR (24) HOUR BASIS.

THE CONTRACTOR MUST COORDINATE OFF-SITE HAUL AND ACCESS ROUTES WITH THE PARTY HAVING JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE HAUL AND ACCESS ROUTES MUST BE MAINTAINED BY THE CONTRACTOR AND MUST BE RESTORED TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. FENCING, DRAINAGE, GRADING, RESURFACING, OR OTHER WORK NECESSARY TO CONSTRUCT AND MAINTAIN HAUL ROUTES IS THE CONTRACTOR'S RESPONSIBILITY AND MUST BE APPROVED BY THE ENGINEER PRIOR TO THE WORK. ANY RESTORATION SEEDING MUST INCLUDE THE USE OF SEED MIXES DEVELOPED FOR THE CORRIDOR AND APPROVED BY THE USDA.

STOCKPILES AND MATERIAL STORAGE ARE PROHIBITED IN SPECIAL MANAGEMENT AREAS INCLUDING WETLANDS, WETLAND BUFFERS, AND FLOOD PLAINS. LOCATIONS OF STOCKPILES MUST BE APPROVED BY THE ENGINEER AND HAVE PROPER EROSION CONTROL MEASURES.

ALL STORM SEWER FACILITIES WITH OPEN LIDS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED OR FILTERED. ALL DRAINAGE STRUCTURES THAT HAVE OPEN LIDS IN PAVEMENT AREAS SHALL BE PROTECTED WITH INLET FILTERS (28000510).

THE CONTRACTOR MUST CLEAN UP, GRADE THE WORK AREAS AS THE PROJECT PROTECTION TO ELIMINATE THE CONCENTRATION OF RUNOFF, OR MUST INSTALL APPROPRIATE SEDIMENT CONTROL DEVICES TO TRAP SEDIMENT. PAVEMENT MUST BE CLEANED DAILY OR AS NECESSARY TO REMOVE TRACK-OUT MATERIAL.

CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING PAVEMENT OR PROPERTY DAMAGED DURING CONSTRUCTION OPERATIONS BY CONTRACTOR'S FORCES INCLUDING SUBCONTRACTORS.

THE CONTRACTOR SHALL BE MADE AWARE THAT ALL CONSTRUCTION VEHICLES SHALL BE LIMITED TO A MAXIMUM OF 15 FEET ABOVE EXISTING GRADE WHILE CROSSING UNDER COMMONWEALTH EDISON'S TRANSMISSION LINES AND COMPLY WITH OSHA AND COMED CLEARANCE REQUIREMENTS.

FENCE: EXISTING FENCE THAT HAS TO BE DISCONNECTED AND/OR REMOVED FOR THE CONTRACTOR'S OPERATION SHALL BE RECONNECTED AND/OR REPLACED BY THE CONTRACTOR IN KIND AT NO ADDITIONAL COST TO THE ILLINOIS TOLLWAY. TEMPORARY FENCE SHOULD BE INSTALLED IF EXISTING FENCE IS TO BE REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 664 OF THE STANDARD SPECIFICATIONS. ANY RIGHT-OF-WAY MARKERS DISTURBED BY THE CONTRACTOR'S OPERATION SHOULD BE REESTABLISHED BY A REGISTERED LAND SURVEYOR.

ALL ELEVATIONS ARE BASED ON UNITED STATES COAST AND GEODETIC SURVEY DATUM.

AT THE TIME OF THE PRECONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL, THE PROPOSED CONCRETE TRUCK WASHOUT LOCATIONS. RUNOFF FROM WASH AREAS SHALL BE CONTAINED IN DESIGNATED AREAS SO THAT RUNOFF DOES NOT REACH THE STORM SEWER OR DITCH SYSTEMS.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL FIBER OPTIC UTILITIES PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL INITIATE THE LOCATE PROCESS FOR THE FIBER OPTIC CABLE BY COMPLETING A "REQUEST TOLLWAY UTILITIES LOCATE" FORM FILLED ON-LINE ON THE ILLINOIS TOLLWAY WEBSITE UNDER "DOING BUSINESS / CONSTRUCTION AND ENGINEERING / PERMITS AND UTILITY INFORMATION" AT LEAST FOUR (4) DAYS PRIOR TO STARTING ANY UNDERGROUND OPERATIONS, EXCAVATIONS OR DIGGING OF ANY TYPE IN GENERAL AREA OF THE FIBER OPTIC CABLE.

EXISTING TOPSOIL DEPTH IS ESTIMATED TO BE SIX (6) INCHES. THE PROPOSED TOPSOIL SHALL BE PLACED TO A DEPTH OF SIX (6) INCHES. THE ACTUAL DEPTH OF TOPSOIL SHALL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER.

TREE AND BRANCHES

THE CONTRACTOR SHALL NOT REMOVE ANY TREES OR BRANCHES ON TOLLWAY RIGHT-OF-WAY WITHOUT PRIOR APPROVAL BY THE ILLINOIS TOLLWAY LANDSCAPE ARCHITECT.

CONTRACTOR SHALL NOT DAMAGE ANY TREES OUTSIDE OF THE WORK LIMITS. IF ANY EXISTING TREES ARE DAMAGED DUE TO CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL REPLACE THE TREE IN KIND.

USE OF WATER

THE INDISCRIMINATE USE OF FIRE HYDRANTS, EXISTING STREAMS, CREEKS, WETLANDS, OR PONDS IS STRICTLY PROHIBITED. THE CONSTRUCTION SHALL PROVIDE A WATER TRUCK AND DRIVER AS REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER FROM AN APPROVED SOURCE. IF THIS WATER IS FROM A SOURCE OTHER THAN HIS/HER YARD, WRITTEN APPROVAL FROM THE AGENCY HAVING JURISDICTION FOR THE SOURCE OF THE WATER MUST BE RECEIVED BY THE CONTRACTOR PRIOR TO USE OF THE WATER.

SPECIAL PROJECT NOTES

THE CONTRACTOR SHALL BE ALERT TO POST ALL NECESSARY SIGNAGE, HAVE FLAGGERS AT LOCATIONS OF RESTRICTED LANE OPERATIONS, AND TAKE DOWN THE SIGNAGE WHEN THE WORK IS COMPLETED IN ACCORDANCE WITH THE TRAFFIC CONTROL PROVISIONS OF SECTION 700, 701 AND 702.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITIY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IF NECESSARY.

ALL UTILITY OWNERS SHALL BE NOTIFIED AT LEAST 3 DAYS PRIOR TO THE START OF CONSTRUCTION.

THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTION MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWERS, AND APPURTENANCES THAT MUST BE KEPT IN OPERATION.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR FOR ARTERIALS AT Kalpana.Kannan-Hosadurga@illinois.gov AT LEAST 72 HOURS IN ADVANCE OF BEGINNING WORK.

ROADWAY JURISDICTIONS:

- ELGIN O'HARE WESTERN ACCESS TOLLWAY (IL-390): ILLINOIS STATE TOLL HIGHWAY AUTHORITY
- US-20/LAKE STREET: IDOT
- ROSELLE ROAD: COOK COUNTY
- PLUM GROVE ROAD: COOK COUNTY
- ROHLWING ROAD: IDOT

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED - AS	REVISED -
DRAWN - RR	REVISED -
CHECKED - EN	REVISED -
DATE - 6/10/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE: NTS

**INDEX OF SHEETS
AND GENERAL NOTES**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	2
			CONTRACT NO. 61E69	
ILLINOIS FED. AID PROJECT				

SPECIALTY ITEM	SPECIAL PROVISIONS	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
		20101100	TREE TRUNK PROTECTION	EACH	1
		20200100	EARTH EXCAVATION	CU YD	23
		21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	3
		28000305	TEMPORARY DITCH CHECKS	FOOT	10
		28000400	PERIMETER EROSION BARRIER	FOOT	485
		28000510	INLET FILTERS	EACH	6
		50200100	STRUCTURE EXCAVATION	CU YD	81
		50300225	CONCRETE STRUCTURES	CU YD	30
		50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	7,280
+		50901730	BRIDGE FENCE RAILING	FOOT	300
		51603000	DRILLED SHAFT IN SOIL	CU YD	17
		58700300	CONCRETE SEALER	SQ FT	707
		67100100	MOBILIZATION	L SUM	1
	*	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1
	*	70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1
	*	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
		70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
		70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	5,000
+		A2004520	TREE, GINKGO BILOBA PRINCETON SENTRY (PRINCETON SENTRY GINKGO), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	10
+		A2006520	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	7
+		A2006618	TREE, QUERCUS IMBRICARIA (SHINGLE OAK), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	19
+		A2008470	TREE, ULMUS AMERICANA PRINCETON (PRINCETON AMERICAN ELM), 2-1/2" CALIPER, BALLED AND BURLAPPED	EACH	10
+		C2C00524	SHRUB, ARONIA MELANOCARPA (BLACK CHOKE BERRY), 2' HEIGHT, CONTAINER	EACH	108
+		C2C01120	SHRUB, CEPHALANTHUS OCCIDENTALIS (BUTTON BUSH), 2' HEIGHT, CONTAINER	EACH	22

SPECIALTY ITEM	SPECIAL PROVISIONS	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY
+		C2C03620	SHRUB, HYDRANGEA PANICULATA LITTLE LIME (LITTLE LIME HYDRANGEA), 2' HEIGHT, CONTAINER GROWN	EACH	90
+		C2C03724	SHRUB, HYPERICUM KALMIANUM (KALM ST. JOHNSWORT), 2' HEIGHT, CONTAINER	EACH	264
+		C2C04865	SHRUB, PHYSOCARPUS OPULIFOLIUS (COMMON NINEBARK), CONTAINER GROWN, 5-GALLON	EACH	40
+		C2C05862	SHRUB, RHUS AROMATICA GRO-LOW (GRO-LOW FRAGRANT SUMAC), CONTAINER GROWN, 2-GALLON	EACH	18
+		D2C03524	EVERGREEN, TAXUS X MEDIA DENSIFORMIS (DENSE ANGLOJAPANESE YEW), 2' WIDTH, CONTAINER	EACH	74
+		D2001988	EVERGREEN, PICEA GLAUCA DENSATA (BLACK HILLS SPRUCE), 8' HEIGHT, BALLED AND BURLAPPED	EACH	10
+		K0012992	PERENNIAL PLANTS, ORNAMENTAL TYPE, 2-GALLON POT	UNIT	7
+	*	K0029632	WEED CONTROL, NON-SELECTIVE AND NON-RESIDUAL	GALLON	0.2
+	*	K0029634	WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	75
	*	X0320015	MAINTENANCE OF TRAFFIC (ILLINOIS TOLLWAY)	LSUM	1
+	*	X0320060	GATEWAY MONUMENT SIGN COMPLETE	EACH	1
+	*	X0322955	WEED CONTROL SELECTIVE (WOODY PLANTS & BROADLEAF)	GALLON	0.2
+	*	X1400225	SOLAR LED LIGHTING UNIT COMPLETE	EACH	7
	*	X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	1,700
+	*	XX007181	VERTICAL IDENTIFIER	EACH	4
+	*	XX007465	STEEL FENCE PANELS	FOOT	1,204
	*	Z0013798	CONSTRUCTION LAYOUT	L SUM	1
	*	Z0022800	FENCE REMOVAL	FOOT	300
	*	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	130
+	*	Z0064800	SELECTIVE CLEARING	UNIT	10
	*	Z0076600	TRAINEES	HOUR	500
	*	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500
+		D2C01120	Evergreen, <i>Juniperus Horizontalis</i> , <i>Andorra</i> (<i>Andorra Creeping Juniper</i>), 24" width, container	EACH	67

0042

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED - AS
DRAWN - RR
CHECKED - EN
DATE - 6/10/2019

REVISED -
REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

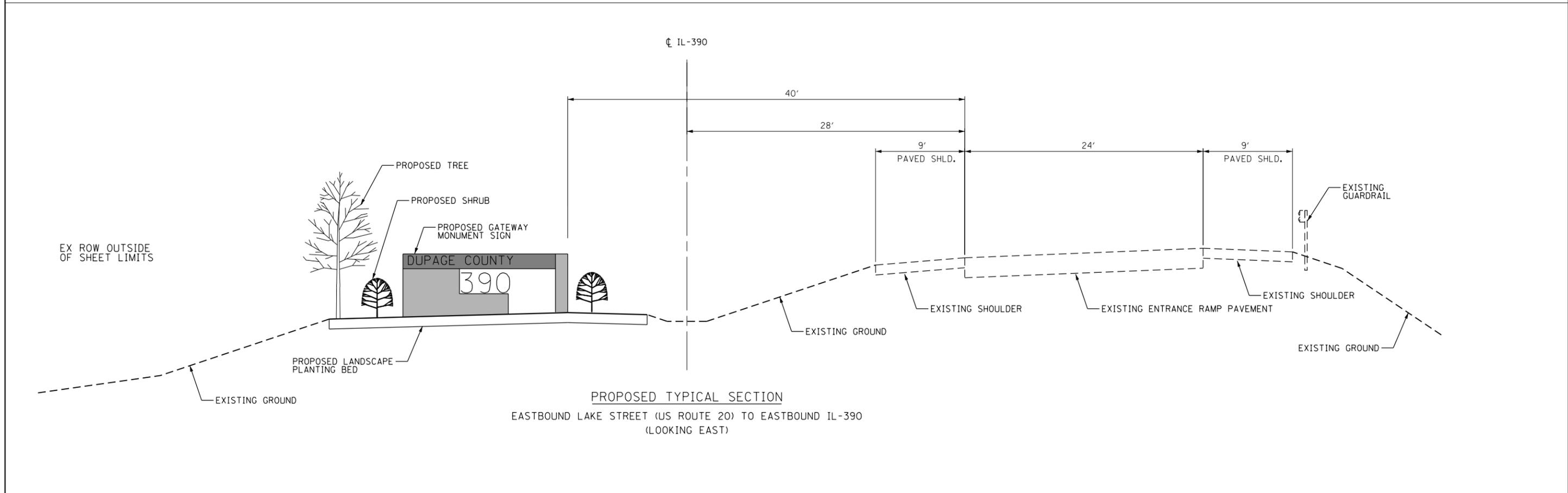
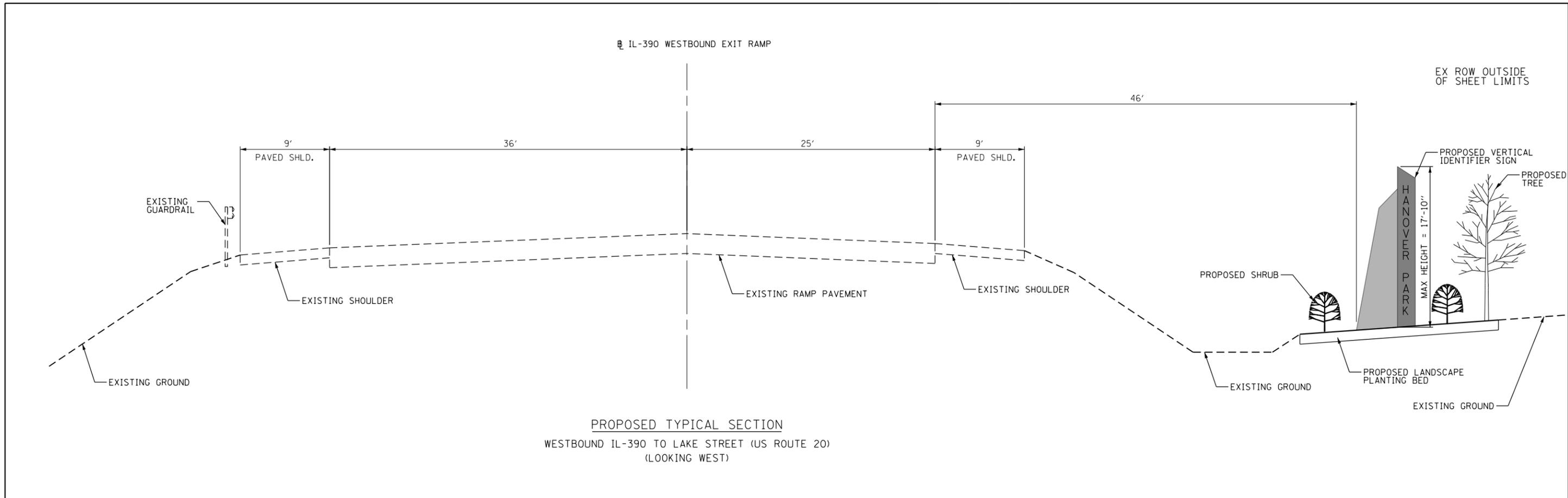
SUMMARY OF QUANTITIES

SCALE: NTS

F.A.P. RTE. 345A	SECTION 14-00245-05-LS	COUNTY COOK/DUPAGE	TOTAL SHEETS 37	SHEET NO. 3
CONTRACT NO. 61E69			ILLINOIS FED. AID PROJECT	

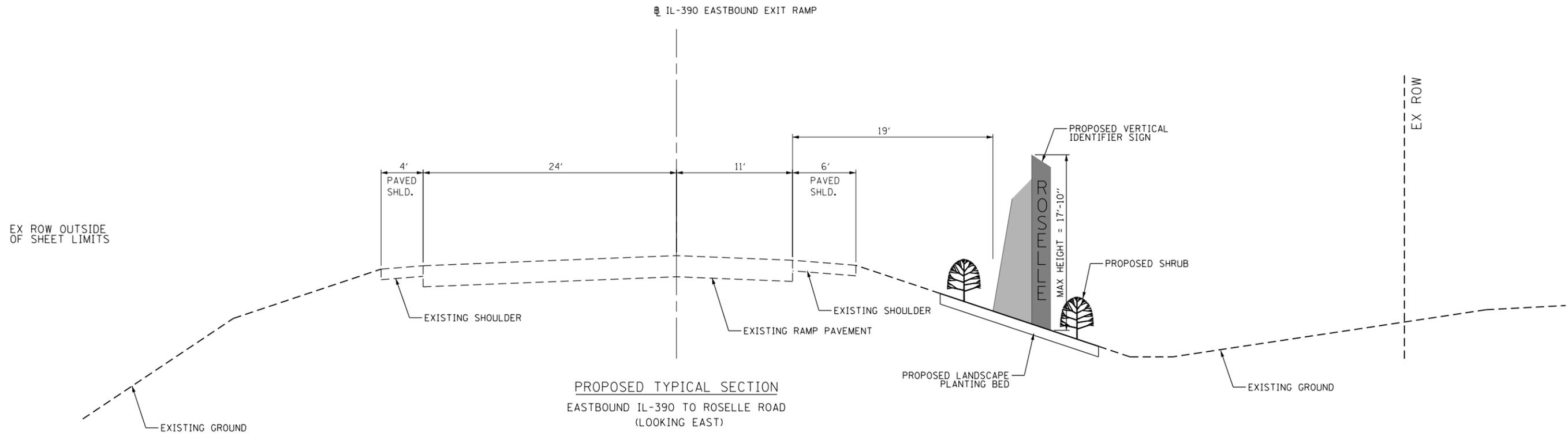
EARTHWORK SCHEDULE		
LOCATION	EARTH EXCAVATION (20200100) (CU YD)	TOPSOIL EXCAVATION AND PLACEMENT (21101505) (CU YD)
WB IL-390 EXIT RAMP AT LAKE STREET (US ROUTE 20)	2.4	0.3
EB IL-390 ENTRANCE RAMP AT LAKE STREET (US ROUTE 20)	13.3	1.4
EB IL-390 EXIT RAMP AT ROSELLE ROAD	2.4	0.3
WB IL-390 EXIT RAMP AT ROSELLE ROAD	2.4	0.3
WB IL-390 AT ROHLWING ROAD	2.4	0.3
TOTAL	23	3

NOTE: EXCAVATED MATERIAL SHALL NOT BE HAULED OFF SITE. EXCAVATED MATERIAL SHALL REMAIN ON SITE AND BE PLACED BEHIND THE PROPOSED SIGNS OR AT A LOCATION APPROVED BY THE ENGINEER.

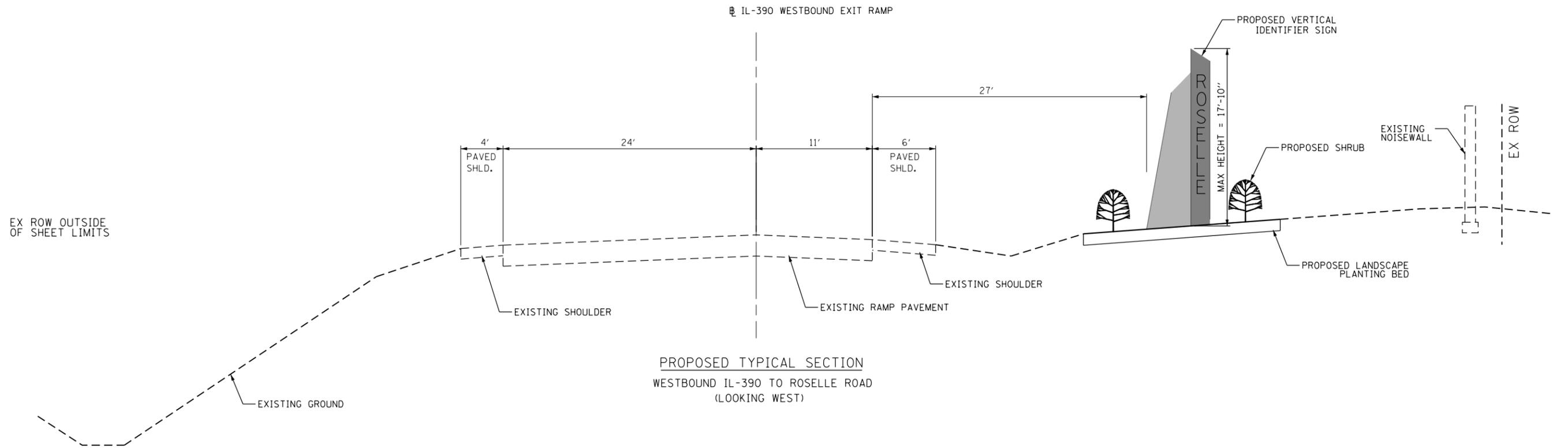


DUPAGE COUNTY DIVISION OF TRANSPORTATION 421 COUNTY FARM ROAD WHEATON, IL	DESIGNED - AS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED TYPICAL SECTIONS LAKE STREET (US-20)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	DRAWN - RR	REVISED -			345A	14-00245-05-LS	COOK/DUPAGE	37	5		
	CHECKED - EN	REVISED -			CONTRACT NO. 61E69						
	DATE - 6/10/2019	REVISED -			ILLINOIS FED. AID PROJECT						

SCALE: NTS



PROPOSED TYPICAL SECTION
EASTBOUND IL-390 TO ROSELLE ROAD
(LOOKING EAST)



PROPOSED TYPICAL SECTION
WESTBOUND IL-390 TO ROSELLE ROAD
(LOOKING WEST)

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

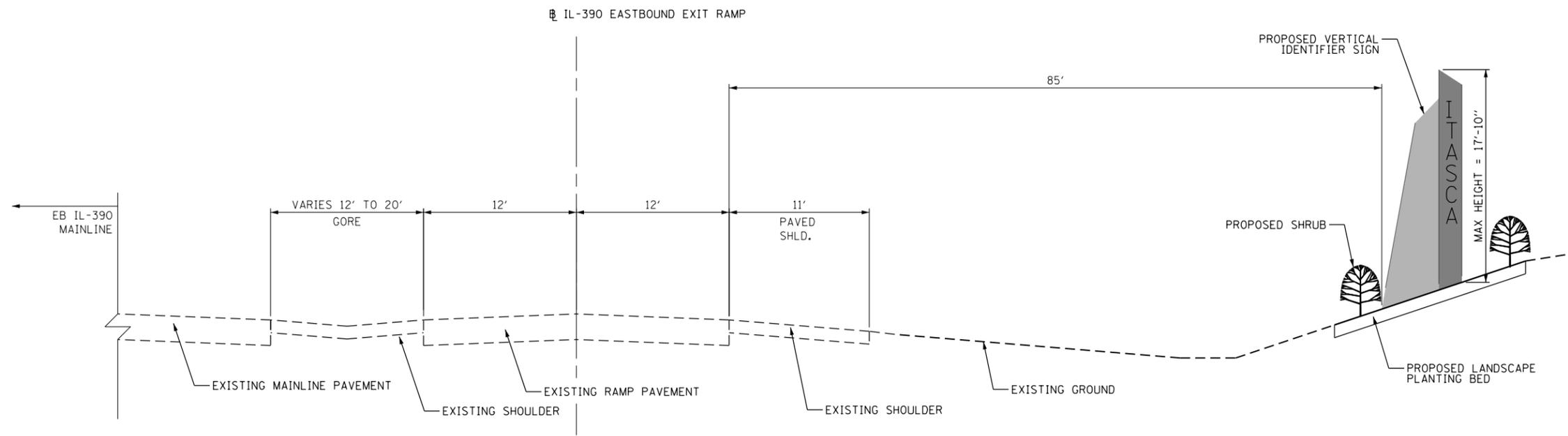
SCALE: NTS

PROPOSED TYPICAL SECTIONS
ROSELLE ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	6
CONTRACT NO. 61E69				

ILLINOIS FED. AID PROJECT

EX ROW OUTSIDE
OF SHEET LIMITS



PROPOSED TYPICAL SECTION
EASTBOUND IL-390 TO SOUTHBOUND I-290
(LOOKING EAST)

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

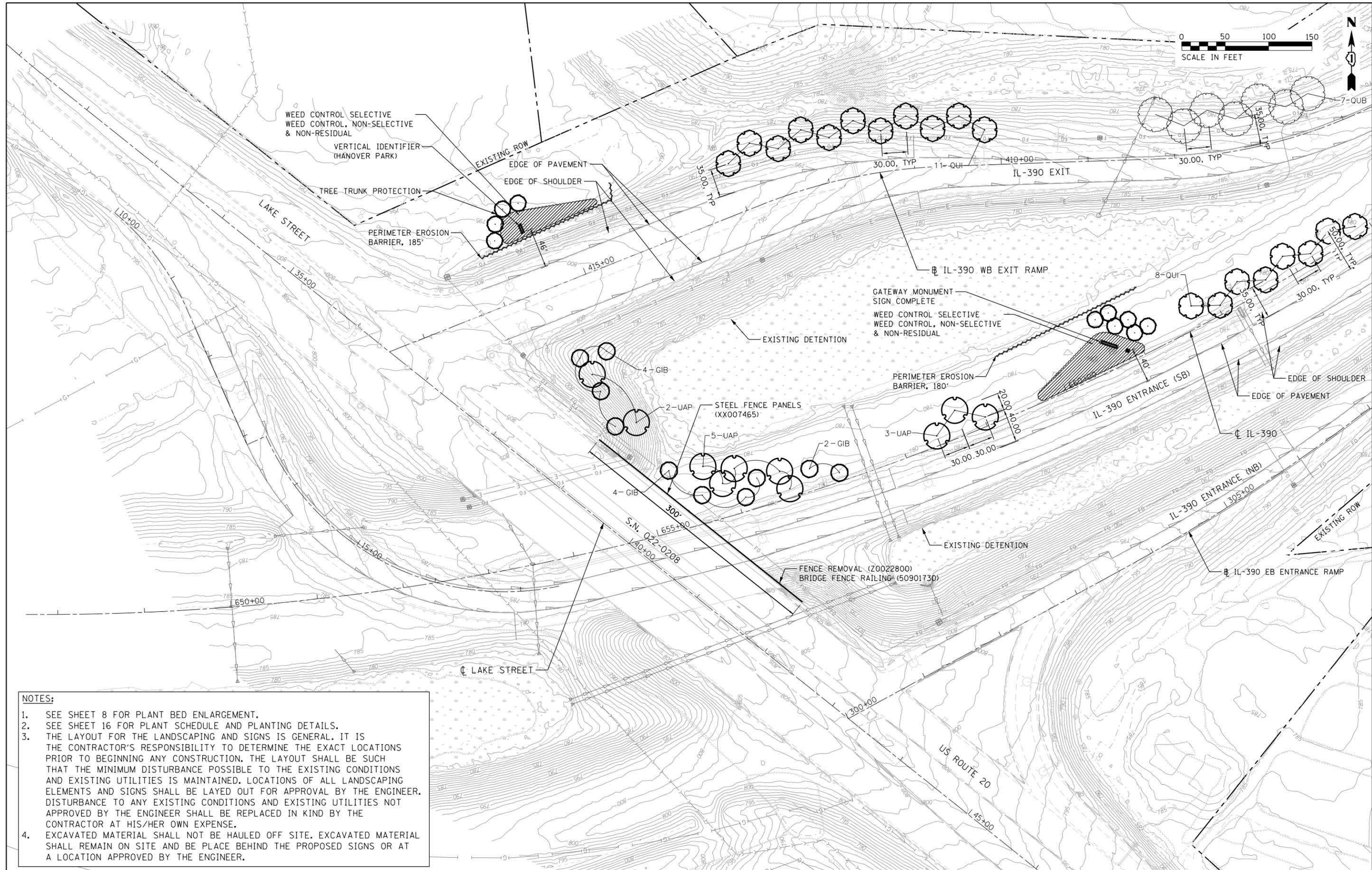
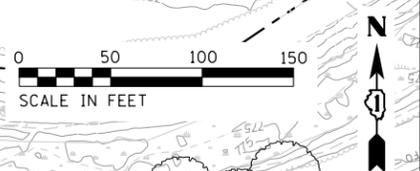
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS
ROHLWING ROAD

SCALE: NTS

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345A	14-00245-05-LS	COOK/DUPAGE	37	7
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ILLINOIS FED. AID PROJECT				



- NOTES:**
- SEE SHEET 8 FOR PLANT BED ENLARGEMENT.
 - SEE SHEET 16 FOR PLANT SCHEDULE AND PLANTING DETAILS.
 - THE LAYOUT FOR THE LANDSCAPING AND SIGNS IS GENERAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATIONS PRIOR TO BEGINNING ANY CONSTRUCTION. THE LAYOUT SHALL BE SUCH THAT THE MINIMUM DISTURBANCE POSSIBLE TO THE EXISTING CONDITIONS AND EXISTING UTILITIES IS MAINTAINED. LOCATIONS OF ALL LANDSCAPING ELEMENTS AND SIGNS SHALL BE LAYED OUT FOR APPROVAL BY THE ENGINEER. DISTURBANCE TO ANY EXISTING CONDITIONS AND EXISTING UTILITIES NOT APPROVED BY THE ENGINEER SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.
 - EXCAVATED MATERIAL SHALL NOT BE HAULED OFF SITE. EXCAVATED MATERIAL SHALL REMAIN ON SITE AND BE PLACE BEHIND THE PROPOSED SIGNS OR AT A LOCATION APPROVED BY THE ENGINEER.

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

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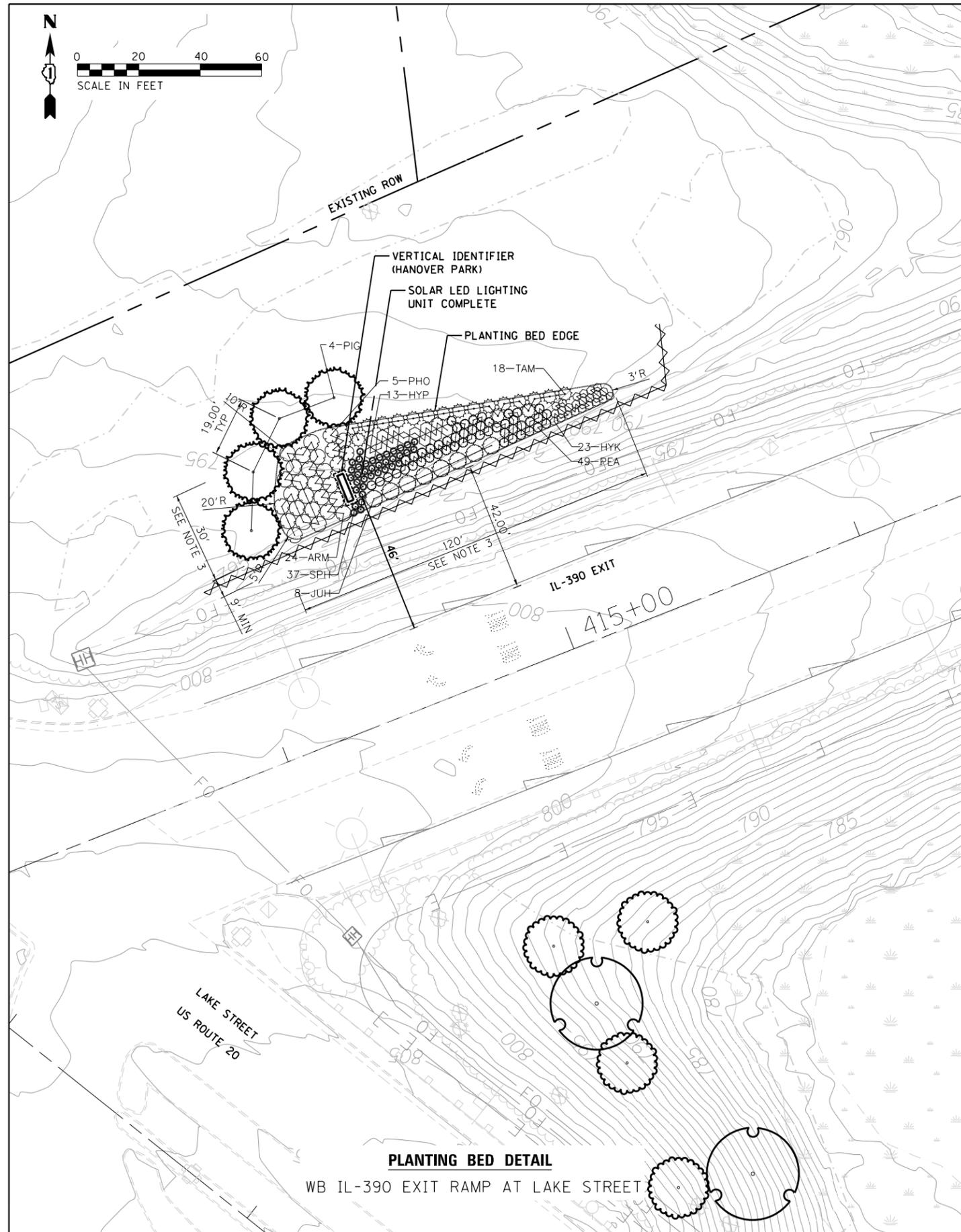
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPE PLAN
LAKE STREET (US-20)**

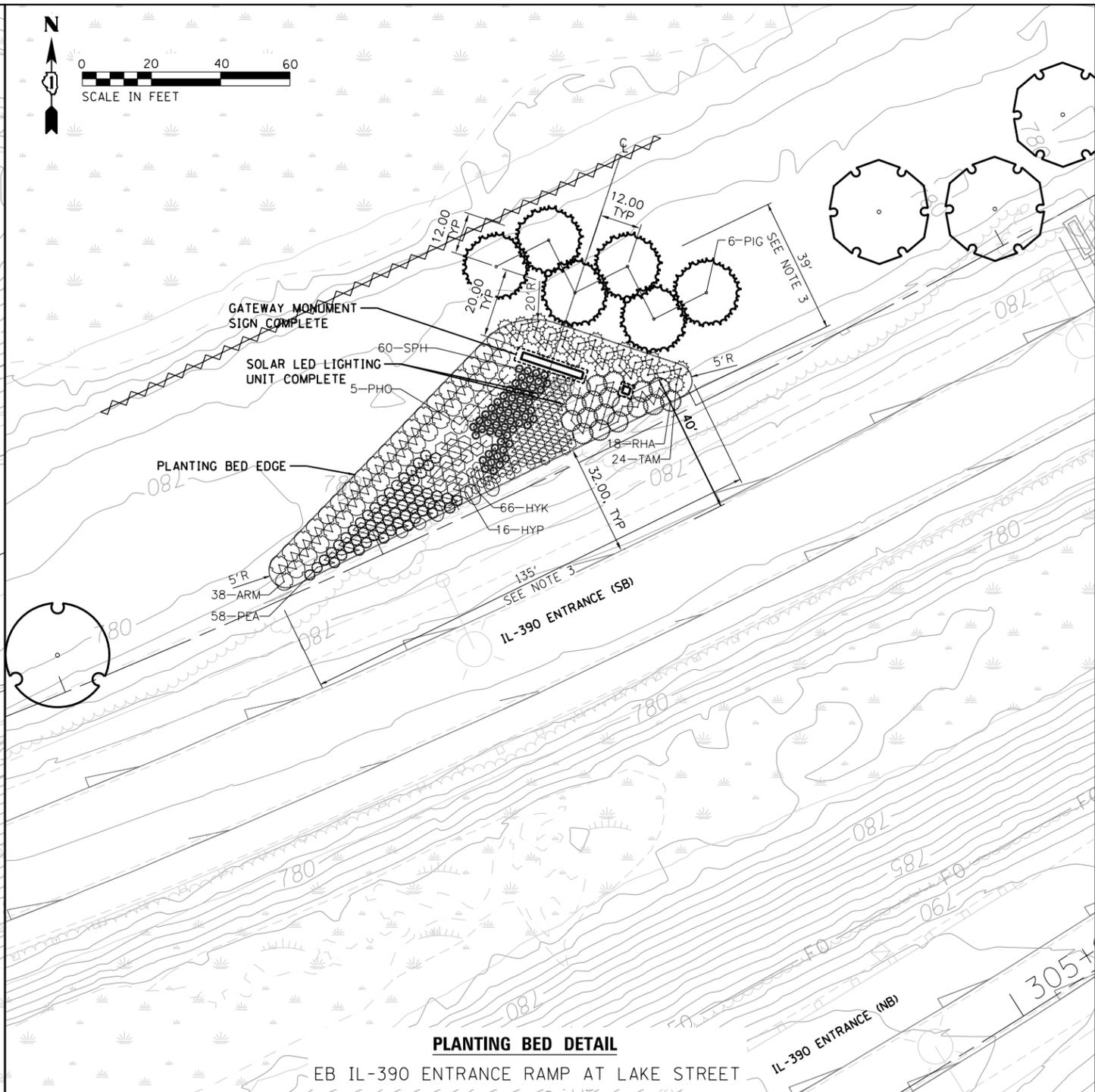
SCALE: 1" = 50'

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	8
CONTRACT NO. 61E69				
ILLINOIS FED. AID PROJECT				



PLANTING BED DETAIL

WB IL-390 EXIT RAMP AT LAKE STREET



PLANTING BED DETAIL

EB IL-390 ENTRANCE RAMP AT LAKE STREET

NOTES:

1. SEE SHEET 16 FOR PLANT SCHEDULE AND PLANTING DETAILS.
2. THE LAYOUT FOR THE LANDSCAPING AND SIGNS IS GENERAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATIONS PRIOR TO BEGINNING ANY CONSTRUCTION. THE LAYOUT SHALL BE SUCH THAT THE MINIMUM DISTURBANCE POSSIBLE TO THE EXISTING CONDITIONS AND EXISTING UTILITIES IS MAINTAINED. LOCATIONS OF ALL LANDSCAPING ELEMENTS AND SIGNS SHALL BE LAYED OUT FOR APPROVAL BY THE ENGINEER. DISTURBANCE TO ANY EXISTING CONDITIONS AND EXISTING UTILITIES NOT APPROVED BY THE ENGINEER SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.
3. PLANT BEDDING DIMENSION AREAS ARE APPROXIMATE. ACTUAL DIMENSIONS TO BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER.
4. EXCAVATED MATERIAL SHALL NOT BE HAULED OFF SITE. EXCAVATED MATERIAL SHALL REMAIN ON SITE AND BE PLACE BEHIND THE PROPOSED SIGNS OR AT A LOCATION APPROVED BY THE ENGINEER.

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED - AS
DRAWN - RR
CHECKED - EN
DATE - 6/10/2019

REVISED -
REVISED -
REVISED -
REVISED -

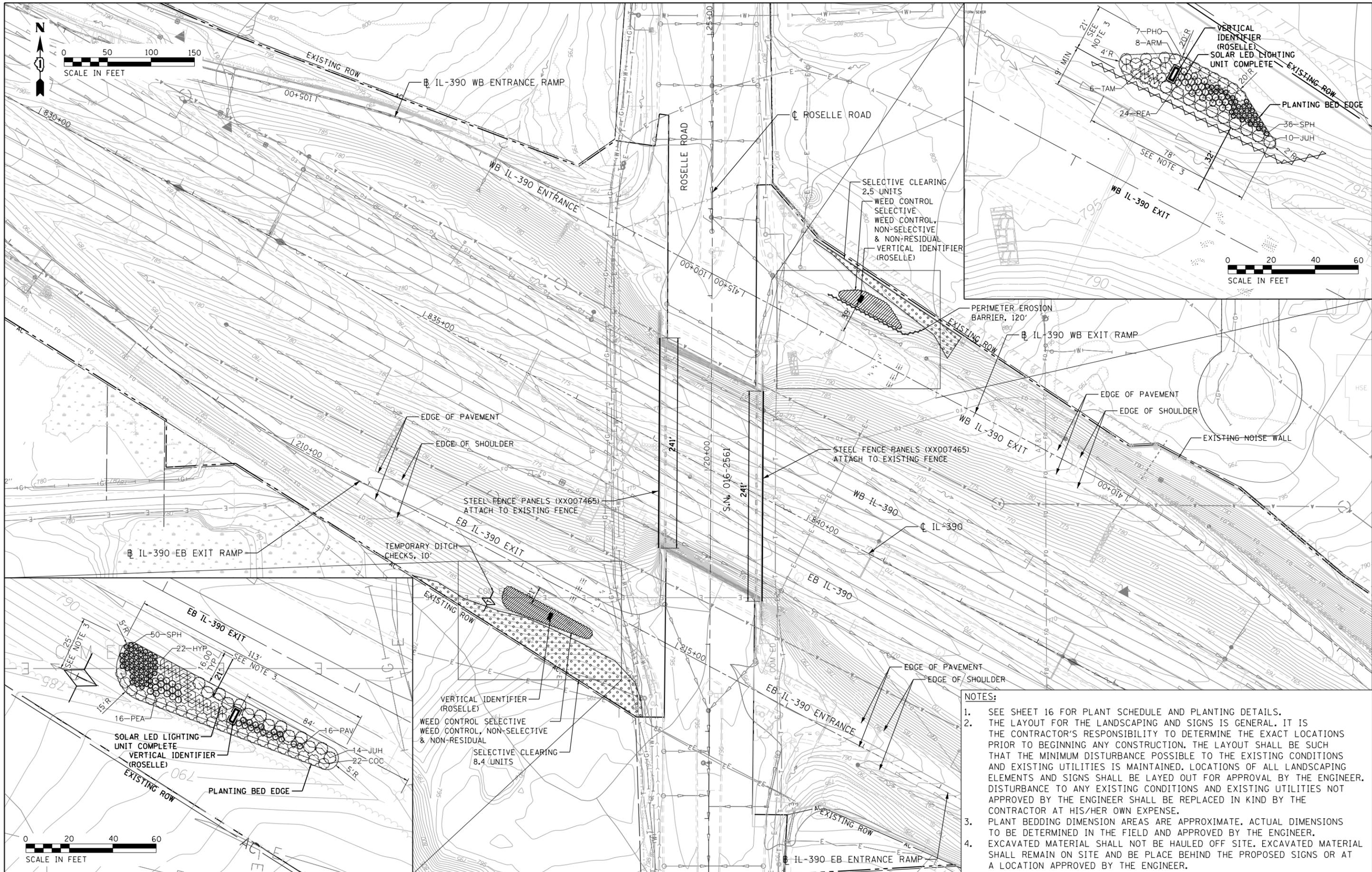
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPE PLAN
LAKE STREET (US-20) DETAILS**

SCALE: 1" = 20'

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	9
CONTRACT NO. 61E69				

ILLINOIS FED. AID PROJECT



- NOTES:**
- SEE SHEET 16 FOR PLANT SCHEDULE AND PLANTING DETAILS.
 - THE LAYOUT FOR THE LANDSCAPING AND SIGNS IS GENERAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATIONS PRIOR TO BEGINNING ANY CONSTRUCTION. THE LAYOUT SHALL BE SUCH THAT THE MINIMUM DISTURBANCE POSSIBLE TO THE EXISTING CONDITIONS AND EXISTING UTILITIES IS MAINTAINED. LOCATIONS OF ALL LANDSCAPING ELEMENTS AND SIGNS SHALL BE LAYED OUT FOR APPROVAL BY THE ENGINEER. DISTURBANCE TO ANY EXISTING CONDITIONS AND EXISTING UTILITIES NOT APPROVED BY THE ENGINEER SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.
 - PLANT BEDDING DIMENSION AREAS ARE APPROXIMATE. ACTUAL DIMENSIONS TO BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER.
 - EXCAVATED MATERIAL SHALL NOT BE HAULED OFF SITE. EXCAVATED MATERIAL SHALL REMAIN ON SITE AND BE PLACE BEHIND THE PROPOSED SIGNS OR AT A LOCATION APPROVED BY THE ENGINEER.

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED - AS	REVISED -
DRAWN - RR	REVISED -
CHECKED - EN	REVISED -
DATE - 6/10/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPE PLAN
ROSELLE ROAD**

SCALE: SCALE: 1" = 50'

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	10
CONTRACT NO. 61E69				
ILLINOIS FED. AID PROJECT				



DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED - AS	REVISED -
DRAWN - RR	REVISED -
CHECKED - EN	REVISED -
DATE - 6/10/2019	REVISED -

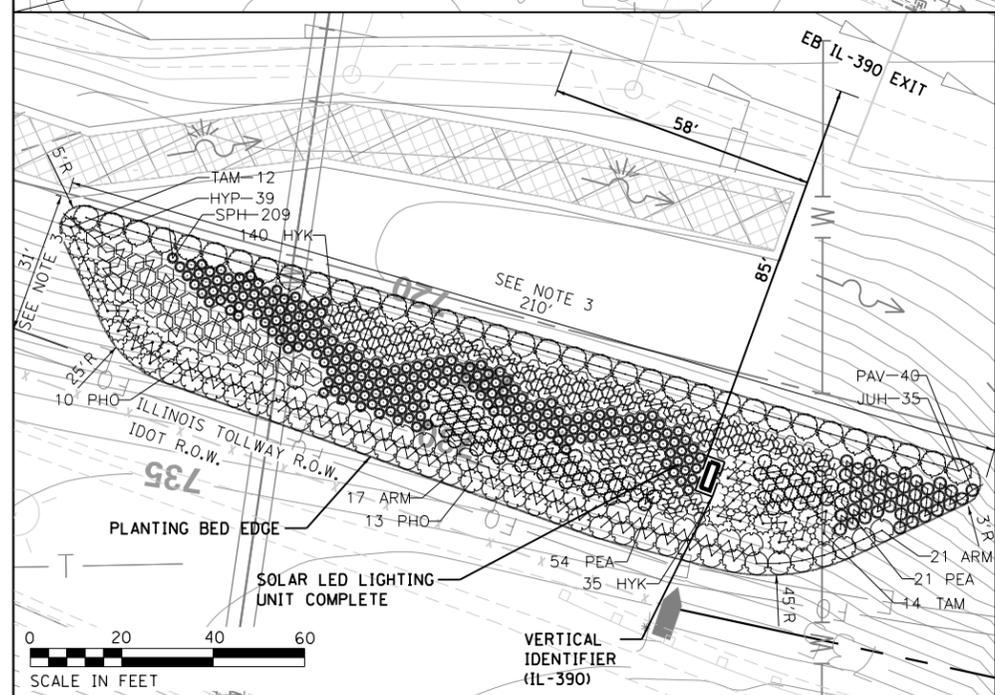
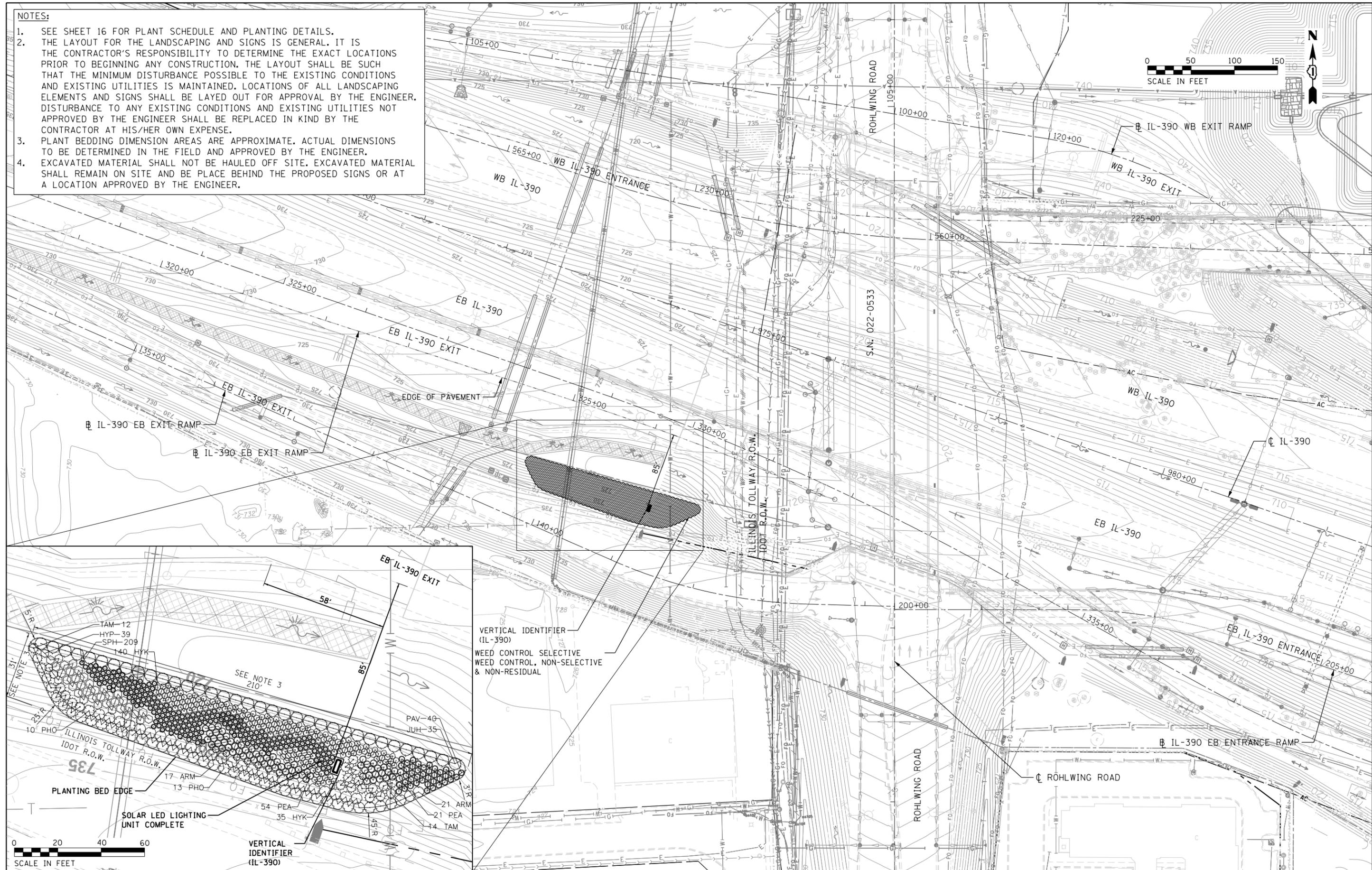
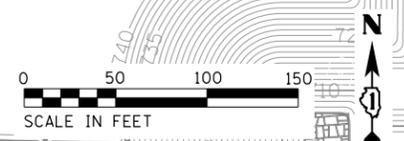
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPE PLAN
PLUM GROVE ROAD**

SCALE: 1" = 50'

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	11
CONTRACT NO. 61E69				
ILLINOIS FED. AID PROJECT				

- NOTES:**
- SEE SHEET 16 FOR PLANT SCHEDULE AND PLANTING DETAILS.
 - THE LAYOUT FOR THE LANDSCAPING AND SIGNS IS GENERAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATIONS PRIOR TO BEGINNING ANY CONSTRUCTION. THE LAYOUT SHALL BE SUCH THAT THE MINIMUM DISTURBANCE POSSIBLE TO THE EXISTING CONDITIONS AND EXISTING UTILITIES IS MAINTAINED. LOCATIONS OF ALL LANDSCAPING ELEMENTS AND SIGNS SHALL BE LAYED OUT FOR APPROVAL BY THE ENGINEER. DISTURBANCE TO ANY EXISTING CONDITIONS AND EXISTING UTILITIES NOT APPROVED BY THE ENGINEER SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.
 - PLANT BEDDING DIMENSION AREAS ARE APPROXIMATE. ACTUAL DIMENSIONS TO BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER.
 - EXCAVATED MATERIAL SHALL NOT BE HAULED OFF SITE. EXCAVATED MATERIAL SHALL REMAIN ON SITE AND BE PLACE BEHIND THE PROPOSED SIGNS OR AT A LOCATION APPROVED BY THE ENGINEER.



0 20 40 60
SCALE IN FEET

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED - AS	REVISED -
DRAWN - RR	REVISED -
CHECKED - EN	REVISED -
DATE - 6/10/2019	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

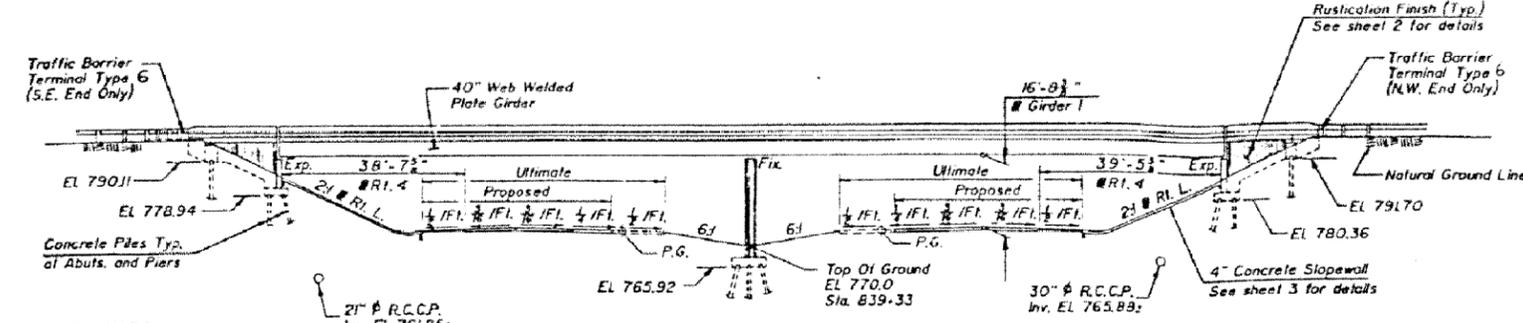
**LANDSCAPE PLAN
ROHLWING ROAD**

SCALE: 1" = 50'

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	12
CONTRACT NO. 61E69				

ILLINOIS FED. AID PROJECT

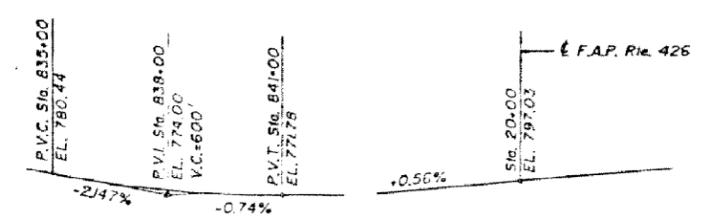
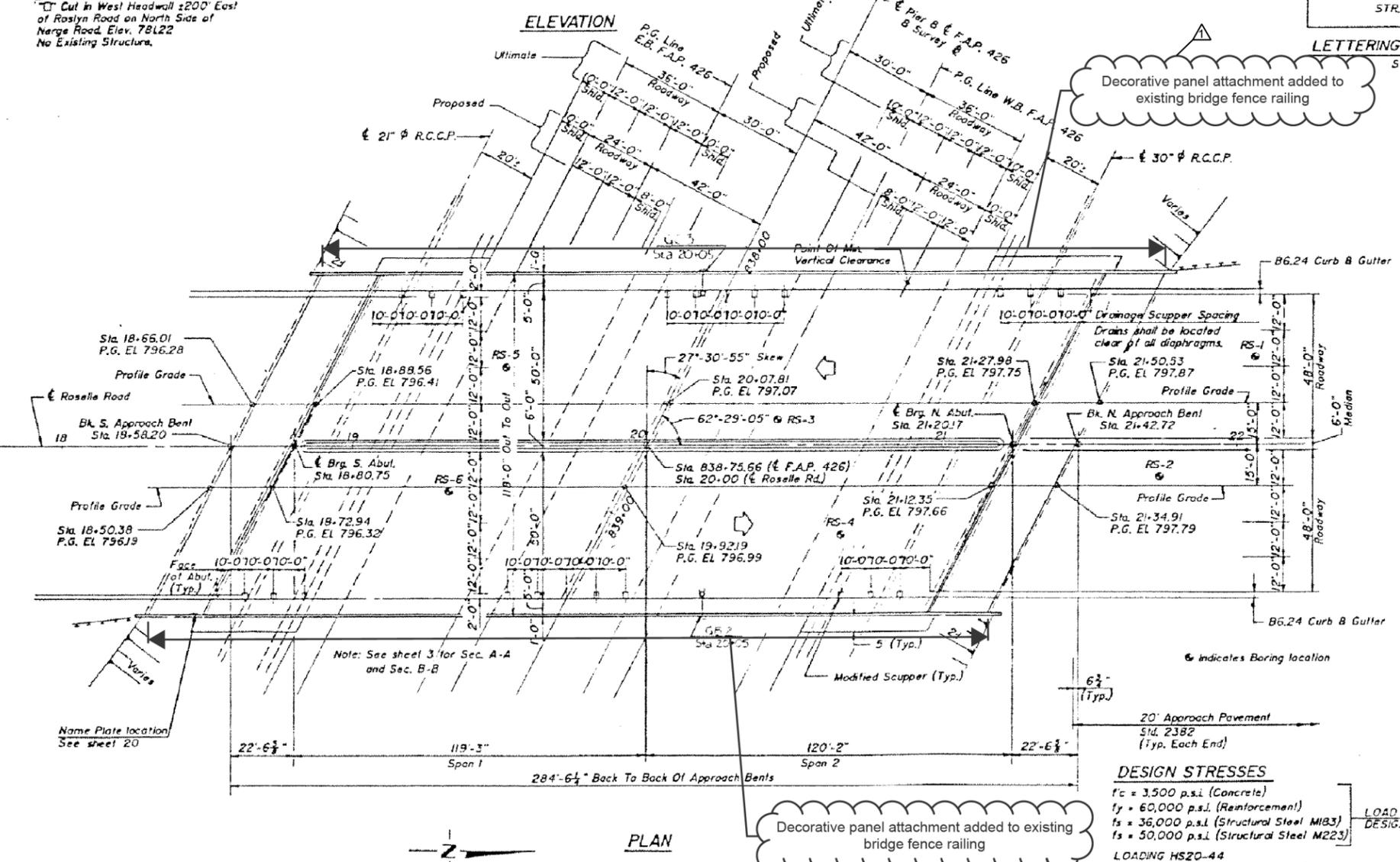
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
16-2-2H8-1	COOK	333	267
Sheet 1 of 23			



BENCH MARK
 □ Cut in West Headwall ±200' East of Roslyn Road on North Side of Narge Road, Elev. 781.22
 No Existing Structure.

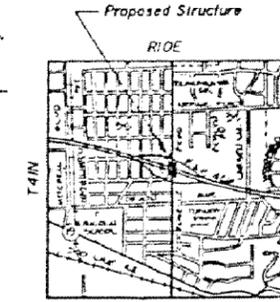
STATION 838 + 75.66
 BUILT 199- BY
 STATE OF ILLINOIS
 F.A.P. RT. 345 SEC. 16-2-2
 PROJECT IX-345 (1)
 LOADING HS20
 STR. NO. 016-2561

- INDEX OF SHEETS**
1. General Plan & Elevation
 2. General Notes & Bill Of Material
 3. Substructure Layout
 - 4-7. Deck Elevations
 - 8-9. Superstructure
 10. Approach Slabs
 - 11-12. Drainage Details
 13. Pedestrian Railing
 - 14-15. Steel Framing And Girder Details
 16. Bearing Details
 17. Anchor Bolt Details
 - 18-20. Abutments
 - 21-22. Pier
 23. File Alternates



PROFILE GRADE
 F.A.P. 426
PROFILE GRADE
 ROSELLE ROAD

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
 T. D. Cahill
 STATE ENGINEER



LOCATION PLAN

DESIGN STRESSES
 $f_c = 3,500$ p.s.i. (Concrete)
 $f_y = 60,000$ p.s.i. (Reinforcement)
 $f_s = 36,000$ p.s.i. (Structural Steel M183)
 $f_s = 50,000$ p.s.i. (Structural Steel M223)
 LOAD FACTOR DESIGN
 LOADING HS20-44
 Design Specifications: 1983 AASHTO and 1984-1988 Interims.
 25 #/sq. Ft. included in dead load for future wearing surface

REVISIONS	
NAME	DATE
REV.	6/10/19

ILLINOIS DEPARTMENT OF TRANSPORTATION
 GENERAL PLAN & ELEVATION
 ROSELLE ROAD OVER F.A.P. 426
 SEC. 16-2-2
 STATION 838-75.66
 STR. NO. 016-2561 COOK COUNTY
 DESIGNED: JKK DRAWN BY: KJK
 DATE: CHECKED BY: MLC

PLANS PREPARED BY:
 HARRY O. WEFER ASSOC., INC.
 180 N. WABASH AVENUE
 CHICAGO, ILLINOIS 60601

DESIGNED - AS	REVISED -
DRAWN - RR	REVISED -
CHECKED - EN	REVISED -
DATE - 6/10/2019	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
 ROSELLE ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	14
				CONTRACT NO. 61E69
ILLINOIS FED. AID PROJECT				

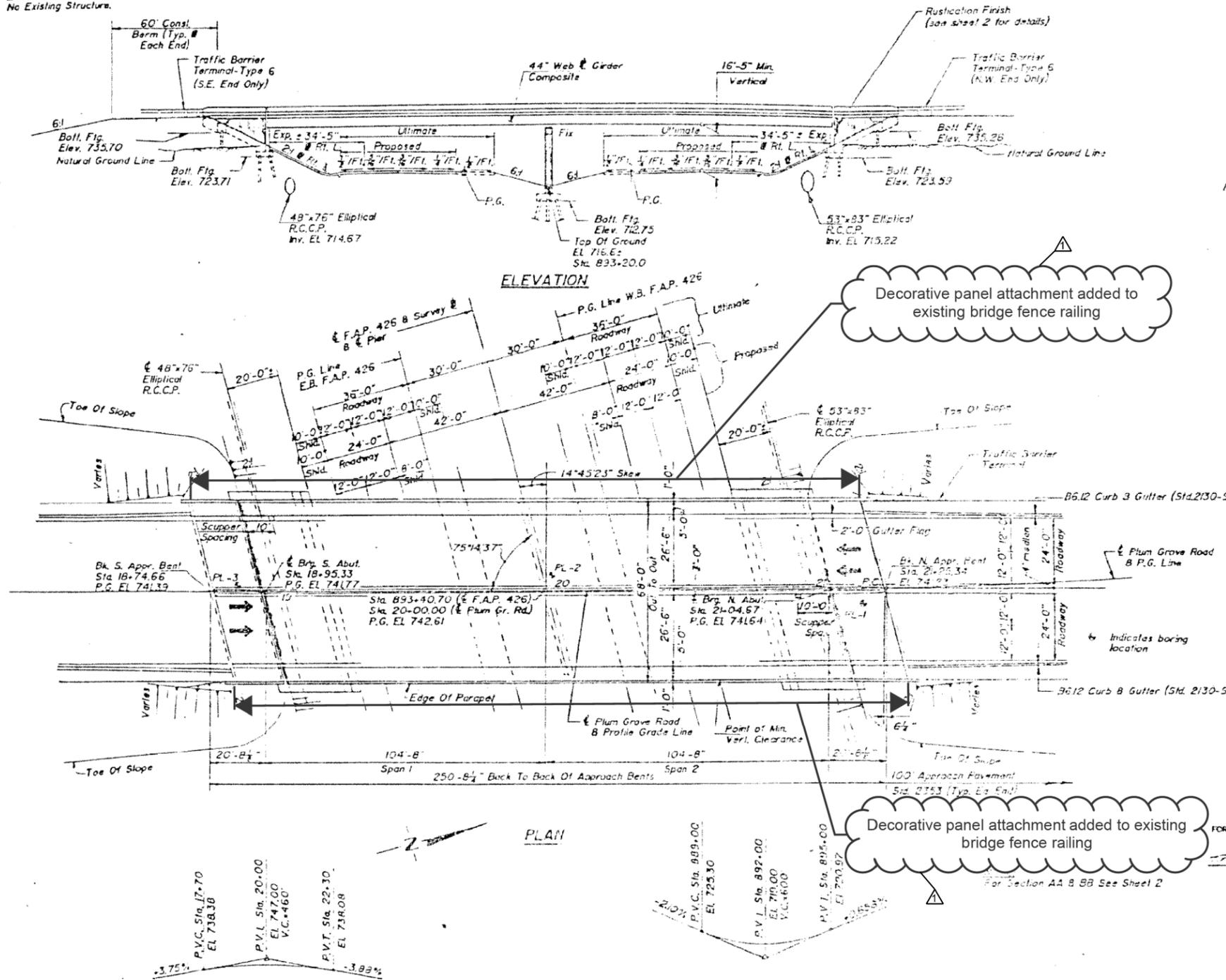
DUPAGE COUNTY
 DIVISION OF TRANSPORTATION
 421 COUNTY FARM ROAD
 WHEATON, IL

SCALE: NTS

BENCH MARK
 E.N.E. Upper Flange Bolt Of Fire Hydrant
 At S.W. Corner Of Narge Road and
 Plum Grove Road.
 Elev. 734.43
 No Existing Structure.

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
16-2	COOK	333	313
SHEET 1 OF 21			

- INDEX OF SHEETS:**
- 1 GENERAL PLAN & ELEVATION
 - 2 GENERAL NOTES & TOTAL BILL OF MATERIAL
 - 3-5 DECK ELEVATIONS
 - 6 SUPERSTRUCTURE
 - 7 APPROACH SLABS
 - 8 PARAPET DETAILS
 - 9 STEEL DRAINAGE SCUPPERS
 - 10 ALTERNATE CAST IRON DRAINAGE SCUPPER
 - 11 PEDESTRIAN RAILING
 - 12 FRAMING PLAN
 - 13 FRAMING DETAILS
 - 14 BEARINGS
 - 15 ANCHOR BOLTS
 - 16 SOUTH ABUTMENT
 - 17 NORTH ABUTMENT
 - 18 ABUTMENT DETAILS
 - 19-20 PIER
 - 21 PILES



HORIZONTAL CURVE #1 DATA
 (Along Plum Grove Road)

PL Sta	16+62.62
Δ	9° 34' 57" RL
D	4' 00' 00"
R	1432.40'
L	239.56'
E	5.02'
T	120.00'
S.E.	0.0371/Ft.
P.C. Sta	15+42.56
P.T. Sta	17+82.12

Transition from normal crown to full super-elevation from Sta. 14+22.56 to Sta. 16+02.56, and from Sta. 19+02.12 to Sta. 17+22.17.

HORIZONTAL CURVE #2 DATA
 (Along Plum Grove Road)

PL Sta	22+27.07
Δ	1° 23' 48" LT
D	5' 15' 00"
R	1096.35'
L	217.08'
E	3.42'
T	102.90'
S.E.	0.0341/Ft.
P.C. Sta	21+18.17
P.T. Sta	23+35.25

Transition from normal crown to full super-elevation from Sta. 19+98.17 to Sta. 21+78.17 and from Sta. 24+55.25 to Sta. 22+75.25.

DESIGN CRITERIA

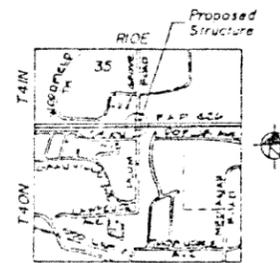
SPECIFICATIONS:
 AASHTO 1989 Standard Specifications for Highway Bridges

DESIGN LOADING:
 Live load for Highway Bridges - HS20-44
 Future Wearing Surface - 25 psf.

DESIGN STRESSES:
 Load Factor Design Methods shall be used for all structural elements.

CONCRETE:
 f_c = 3500 psi (concrete)
 f_y = 60,000 psi (reinforcement)

STRUCTURAL STEEL:
 AASHTO M270 - Gr. 36, F_y = 36,000 psi
 AASHTO M270 - Gr. 50, F_y = 50,000 psi



APPROVED FOR STRUCTURAL ADOPTION ONLY



Don L. Ortman
 DATE: 6/10/19
 LICENSE: 013924

REVISIONS	
NAME	DATE
REV.	6/10/19

ILLINOIS DEPARTMENT OF TRANSPORTATION
 GENERAL PLAN AND ELEVATION
 PLUM GROVE ROAD OVER F.A.P. 425
 SEC. 16-2-2
 STATION 893+40.70
 STR. NO. 06-2562 COOK COUNTY

DESIGNED: JJK
 DATE: 6/10/19
 DRAWN BY: REV
 CHECKED BY: MLC

PLANS PREPARED BY:
 HARRY O. HEFTER ASSOC., INC.
 180 N. WABASH AVENUE
 CHICAGO, ILLINOIS 60601

PROFILE GRADE
 PLUM GROVE RD

PROFILE GRADE
 F.A.P. 425

DUPAGE COUNTY
 DIVISION OF TRANSPORTATION
 421 COUNTY FARM ROAD
 WHEATON, IL

DESIGNED - AS
 DRAWN - RR
 CHECKED - EN
 DATE - 6/10/2019

REVISED -
 REVISED -
 REVISED -
 REVISED -

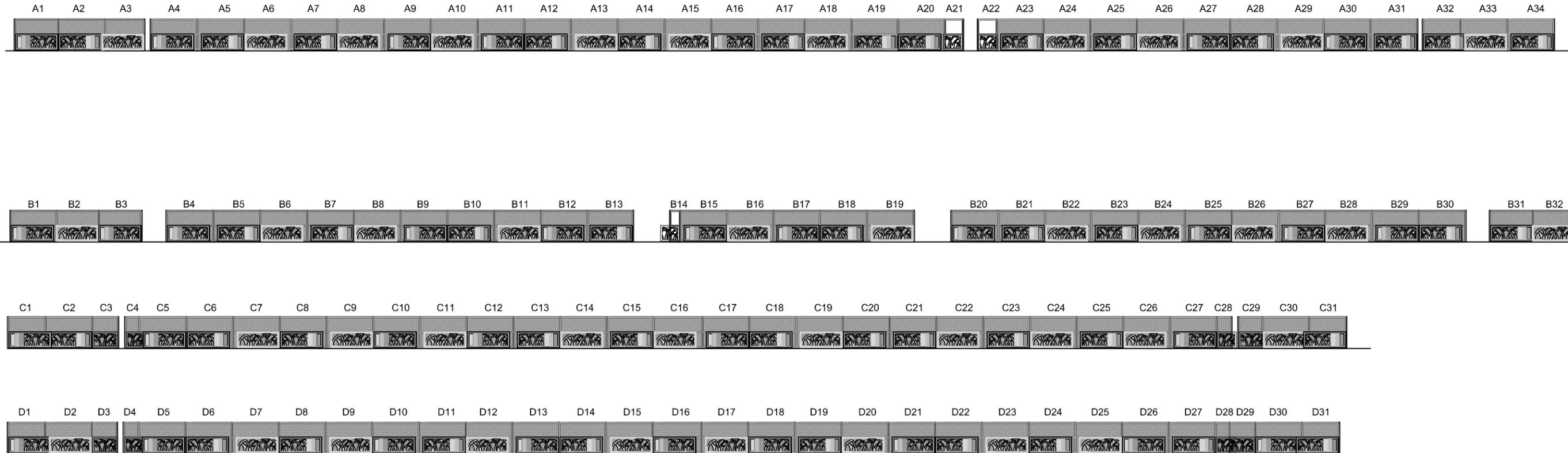
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: NTS

GENERAL PLAN AND ELEVATION
 PLUM GROVE ROAD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	15
CONTRACT NO. 61E69				

ILLINOIS FED. AID PROJECT



1 STEEL FENCE PANELS

1" = 10' - 0"

NOTES

- ELEVATIONS AND DIMENSIONS SHOWN ARE TAKEN FROM EXISTING FENCE SHOP DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, COORDINATES, AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCY IMMEDIATELY.
- SUBMIT SHOP DRAWINGS FOR DECORATIVE PANELS AND ALL ASSOCIATED CONNECTIONS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY AN ILLINOIS LICENSED STRUCTURAL ENGINEER.

ROSELLE

Fence Panel Schedule

ITEM		SIZE
Panel 1	A	8'-0"
Panel 2	A	8'-7 5/8"
Panel 3	A	7'-2 1/8"
GAP	A	1'-0"
Panel 4	A	8'-7 1/8"
Panel 5	A	8'-8"
Panel 6	A	8'-7 6/8"
Panel 7	A	8'-6"
Panel 8	A	8'-8 1/8"
Panel 9	A	8'-7 5/16"
Panel 10	A	8'-7 7/8"
Panel 11	A	8'-7 1/4"
Panel 12	A	8'-7 1/2"
Panel 13	A	8'-7 5/8"
Panel 14	A	8'-7 6/8"
Panel 15	A	8'-7 1/2"
Panel 16	A	8'-7 3/4"
Panel 17	A	8'-7 1/4"
Panel 18	A	8'-7 3/4"
Panel 19	A	8'-6 3/4"
Panel 20	A	8'-7 3/4"
Panel 21	A	8'-2 1/2"
GAP	A	2' 2"
Panel 22	A	8'-4 1/2"
Panel 23	A	8'-7 1/4"
Panel 24	A	8'-7 1/4"
Panel 25	A	8'-7 1/2"
Panel 26	A	8'-7 1/4"
Panel 27	A	8'-7 3/8"
Panel 28	A	8'-7 3/4"
Panel 29	A	8'-7 1/4"
Panel 30	A	8'-8"
Panel 31	A	8'-7 1/4"
GAP	A	0'-10"
Panel 32	A	6'-10 1/2"
Panel 33	A	8'-7 7/8"
Panel 34	A	8'-7 1/4"

ROSELLE

Fence Panel Schedule

ITEM		SIZE
Panel 1	B	8'-5 1/2"
Panel 2	B	7'-9 1/2"
Panel 3	B	7'-10"
GAP	B	1'-1"
Panel 4	B	8'-8"
Panel 5	B	8'-7 1/4"
Panel 6	B	8'-8"
Panel 7	B	8'-7 1/2"
Panel 8	B	8'-7 1/2"
Panel 9	B	8'-7 1/2"
Panel 10	B	8'-8 1/4"
Panel 11	B	8'-7 1/4"
Panel 12	B	8'-7 1/4"
Panel 13	B	8'-4 1/4"
LIGHT POST	B	2'-5 3/4"
Panel 14	B	1'-7 3/4"
Panel 15	B	8'-7 1/2"
Panel 16	B	8'-7 1/4"
Panel 17	B	8'-6 1/2"
Panel 18	B	8'-8 1/4"
Panel 19	B	8'-8 1/8"
Panel 20	B	8'-7 3/4"
Panel 21	B	8'-7 1/2"
Panel 22	B	8'-5 3/4"
Panel 23	B	8'-8 7/8"
Panel 24	B	8'-7 1/2"
Panel 25	B	8'-7 5/8"
Panel 26	B	8'-7 5/8"
Panel 27	B	8'-7 1/4"
Panel 28	B	8'-7 1/2"
Panel 29	B	8'-7 3/4"
Panel 30	B	8'-7 1/2"
GAP	B	1'-10"
Panel 31	B	7'-10 3/8"
Panel 32	B	7'-10"
Panel 33	B	7'-10 1/8"

PLUM GROVE

Fence Panel Schedule

ITEM		SIZE
Panel 1	C	6'-10 1/8"
Panel 2	C	8'-7 1/8"
Panel 3	C	4'-8 3/8"
GAP	C	1'-19/16"
Panel 4	C	2'-4 1/14"
Panel 5	C	8'-8 7/8"
Panel 6	C	8'-7 5/8"
Panel 7	C	8'-7 3/8"
Panel 8	C	8'-7 3/8"
Panel 9	C	8'-7 1/2"
Panel 10	C	8'-7 1/4"
Panel 11	C	8'-7 11/14"
Panel 12	C	8'-7 3/4"
Panel 13	C	8'-7 1/2"
Panel 14	C	8'-7 1/4"
Panel 15	C	8'-7 1/2"
Panel 16	C	9'-0"
Panel 17	C	8'-7 1/2"
Panel 18	C	8'-7 7/8"
Panel 19	C	8'-7 3/4"
Panel 20	C	8'-7 1/4"
Panel 21	C	8'-7 3/4"
Panel 22	C	8'-7 3/4"
Panel 23	C	8'-8"
Panel 24	C	8'-7 3/16"
Panel 25	C	8'-7 3/8"
Panel 26	C	8'-7 1/2"
Panel 27	C	8'-7 1/2"
Panel 28	C	2'-6 1/2"
GAP	C	1'-15/16"
Panel 29	C	4'-4"
Panel 30	C	8'-7 1/4"
Panel 31	C	6'-9 3/8"

PLUM GROVE

Fence Panel Schedule

ITEM		SIZE
Panel 1	D	6'-9 1/2"
Panel 2	D	8'-7 1/2"
Panel 3	D	4'-6 1/4"
GAP	D	1'-5/8"
Panel 4	D	2'-6 3/4"
Panel 5	D	8'-7 1/2"
Panel 6	D	8'-7 1/2"
Panel 7	D	8'-7 1/2"
Panel 8	D	8'-7 1/2"
Panel 9	D	8'-7 1/2"
Panel 10	D	8'-7 1/2"
Panel 11	D	8' 7/3/4"
Panel 12	D	8'-7 1/8"
Panel 13	D	8'-7 3/4"
Panel 14	D	8'-7 1/8"
Panel 15	D	8'-8 1/4"
Panel 16	D	9'-0"
Panel 17	D	8'-7 1/2"
Panel 18	D	8'-7 1/4"
Panel 19	D	8'-7 3/4"
Panel 20	D	8'-7 3/4"
Panel 21	D	8'-7 3/8"
Panel 22	D	8'-7 1/2"
Panel 23	D	8'-7 3/4"
Panel 24	D	8'-7"
Panel 25	D	8'-7 3/4"
Panel 26	D	8'-7 1/2"
Panel 27	D	8'-7 3/4"
Panel 28	D	2'-4 3/4"
Panel 29	D	4'-8"
Panel 30	D	8'-7 1/2"
Panel 31	D	6'-9 1/2"

FILE NAME =
SFILES
SNOELMANES

DUPAGE COUNTY
D.U. OF TRANS
421 COUNTY FARM ROAD
WHEATON, IL

USER NAME = \$USERS	DESIGNED - JB	REVISED -
PLOT SCALE = \$\$SCALE\$	DRAWN - JC	REVISED -
PLOT DATE = \$DATES	CHECKED - JB	REVISED -
	DATE - 06/10/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

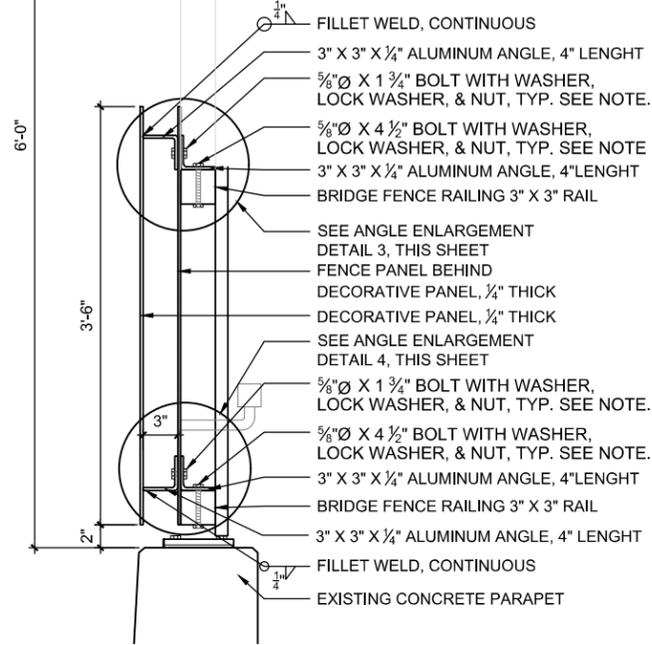
FENCE AFFIXMENT DETAILS

SCALE: AS SHOWN

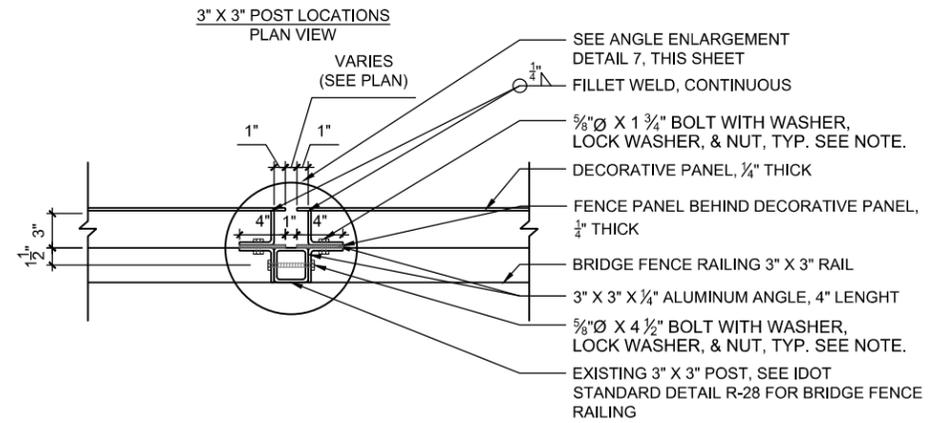
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	16
CONTRACT NO. 61E69				
ILLINOIS FED. AID PROJECT				

NOTE:

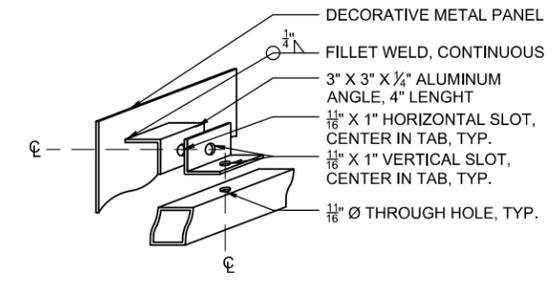
- IT MAY BE POSSIBLE TO REMOVE THE EXISTING FENCE FABRIC IN ORDER TO INSTALL THE DECORATIVE FENCE PANELS ALONG PEDESTRIAN SIDE AND REINSTALL THE FABRIC BACK ONCE THE INSTALLATION IS COMPLETE. CONTRACTOR SHALL EVALUATE EXISTING FENCE FABRIC CONDITION TO FIND OUT THE BEST SOLUTION TO INSTALL THE DECORATIVE FENCE PANELS.
- CONTRACTOR SHALL PROTECT EXISTING FENCE POSTS, FABRIC AND RAILING DURING CONSTRUCTION.



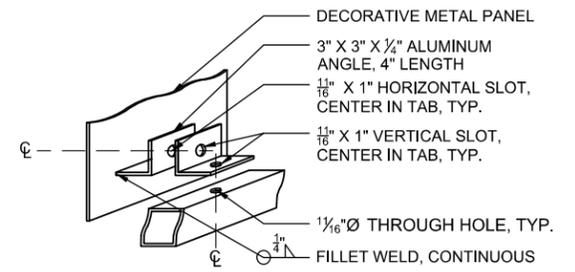
1 DECORATIVE METAL PANEL & RAIL CONNECTIONS
1 1/2\"/>



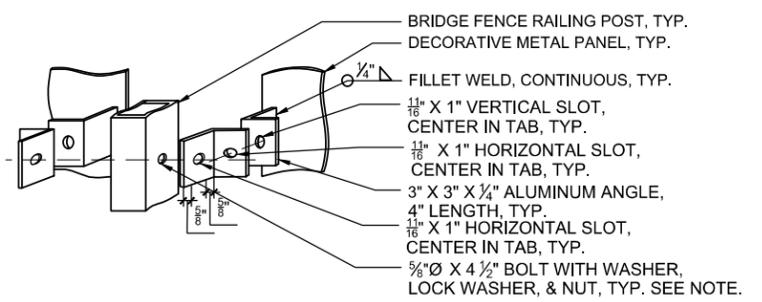
2 DECORATIVE METAL PANEL & POST CONNECTIONS
1 1/2\"/>



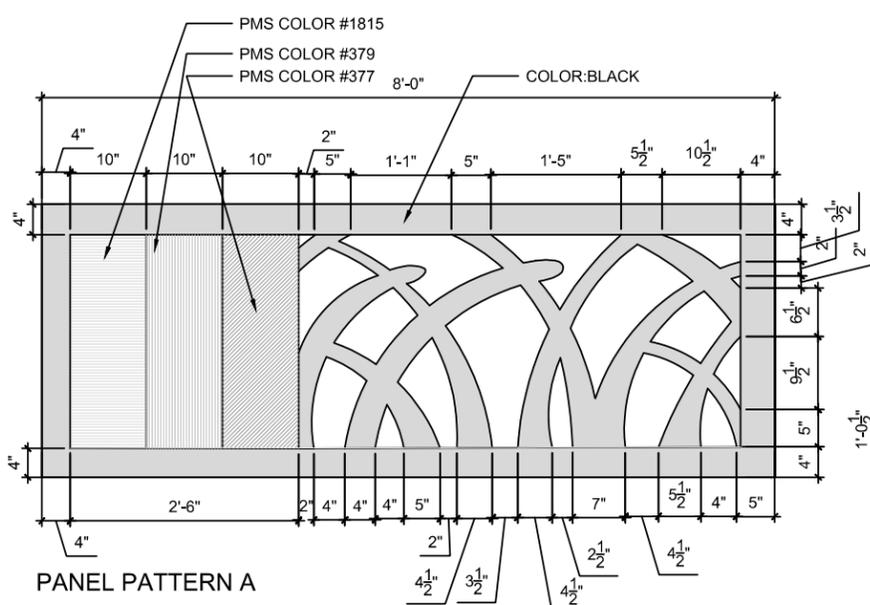
3 DECORATIVE METAL PANEL MOUNTING BRACKET ENLARGEMENT ISOMETRIC - TOP RAIL 1 1/2\"/>



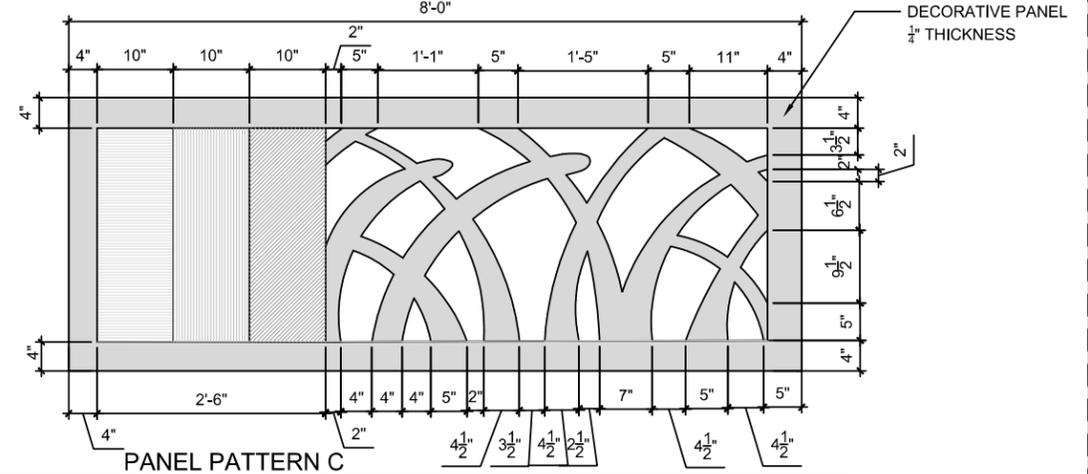
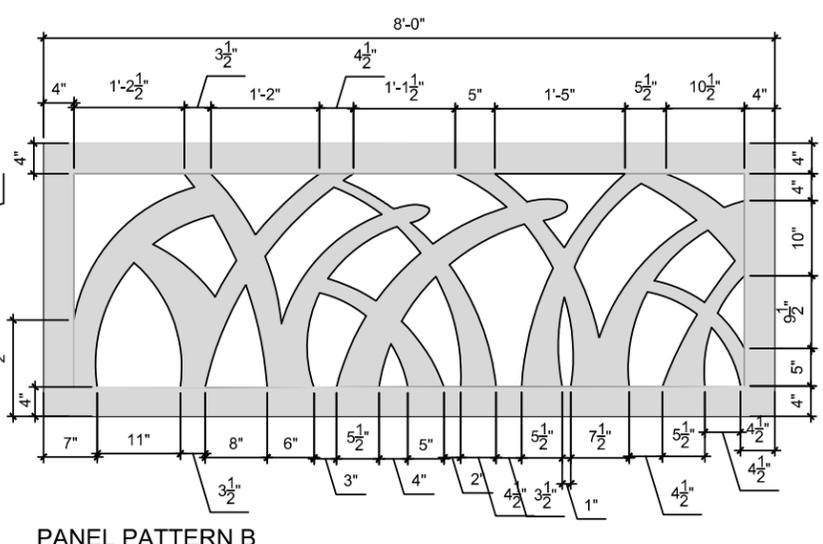
4 DECORATIVE METAL PANEL MOUNTING BRACKET ENLARGEMENT ISOMETRIC - BOTTOM RAIL 1 1/2\"/>



5 DECORATIVE METAL PANEL MOUNTING BRACKET ENLARGEMENT ISOMETRIC - POST 1 1/2\"/>



6 DECORATIVE METAL PANEL
3/4\"/>



FILE NAME =
SFILES
SMODELNAME\$

DUPAGE COUNTY
D.U. OF TRANS
421 COUNTY FARM ROAD
WHEATON, IL

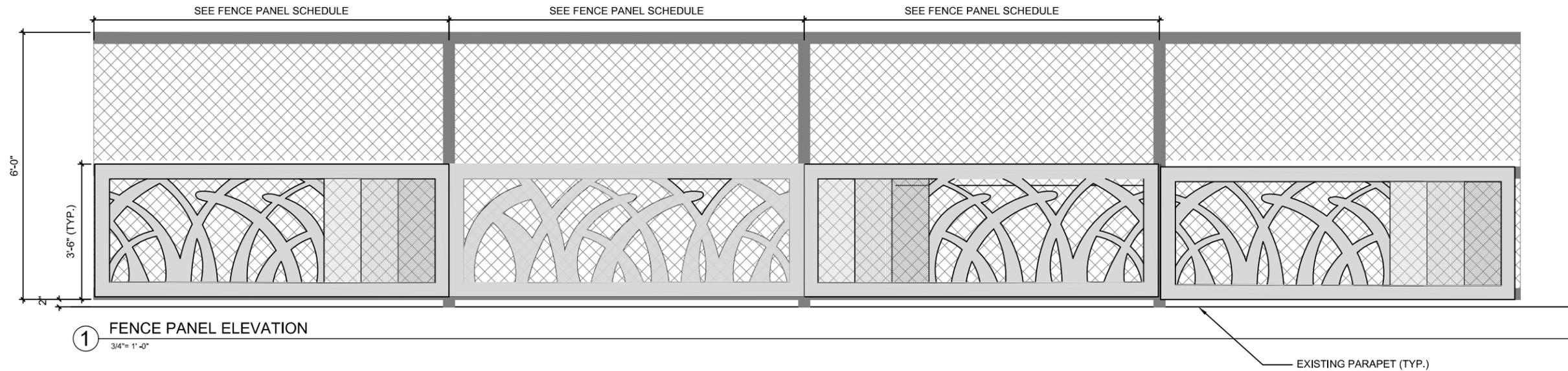
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PLOT SCALE = \$SCALE\$	DRAWN - JC	REVISED -
PLOT DATE = \$DATES	CHECKED - JB	REVISED -
	DATE - 06/10/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FENCE AFFIXMENT DETAILS

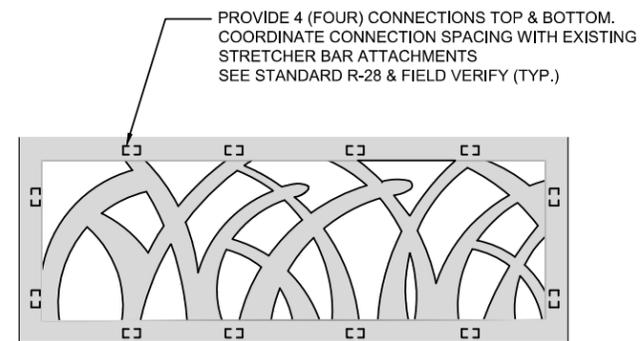
SCALE: AS SHOWN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	17
CONTRACT NO. 61E69				
ILLINOIS FED. AID PROJECT				

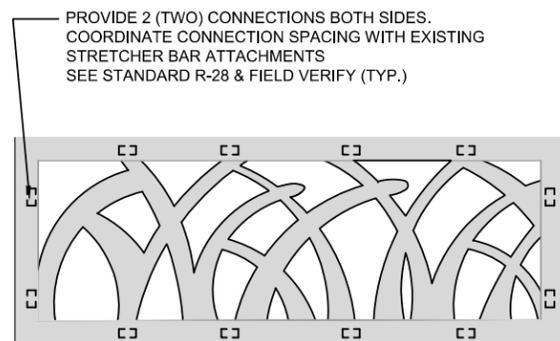


1 FENCE PANEL ELEVATION
3/4" = 1'-0"

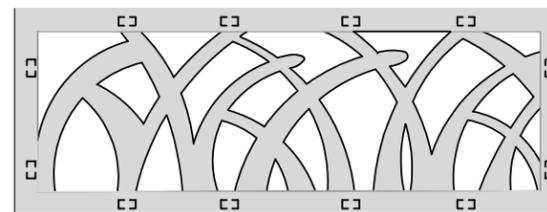
EXISTING PARAPET (TYP.)



PROVIDE 4 (FOUR) CONNECTIONS TOP & BOTTOM. COORDINATE CONNECTION SPACING WITH EXISTING STRETCHER BAR ATTACHMENTS SEE STANDARD R-28 & FIELD VERIFY (TYP.)



PROVIDE 2 (TWO) CONNECTIONS BOTH SIDES. COORDINATE CONNECTION SPACING WITH EXISTING STRETCHER BAR ATTACHMENTS SEE STANDARD R-28 & FIELD VERIFY (TYP.)



2 DECORATIVE FENCE PANEL MOUNTING BRACKET SPACING
3/4" = 1'-0"

GENERAL NOTES

- CONTRACTOR SHALL VERIFY EXISTING CONDITIONS WHERE APPLICABLE TO THE WORK, AND SHALL NOTIFY THE ENGINEER OF DISCREPANCIES IN THE FIELD CONDITIONS IN WRITING PRIOR TO FABRICATION OR MOBILIZATION OF WORK FORCE. WRITTEN NOTICE SHALL INCLUDE, BUT NOT BE LIMITED TO, DATE, REFERENCES TO CONSTRUCTION DOCUMENTS, AND CONTRACTOR'S RECOMMENDATION FOR RECTIFYING DISCREPANCIES.
- DRAWINGS DESCRIBE THE DESIGN INTENT FOR FINAL SIZE, APPEARANCE AND CONFIGURATION OF ELEMENTS. CONTRACTOR SHALL PROVIDE, INSTALL AND BE RESPONSIBLE FOR: THE FINAL ENGINEERING OF THE ELEMENTS, CONNECTIONS AND ANCHORAGE SYSTEMS FOR THE ELEMENTS, AND FINAL ASSEMBLY TO ACHIEVE ORIGINAL DESIGN INTENT.

- MANUFACTURER WILL PROVIDE DESIGN AND SHOP DRAWINGS OF PANEL ITEMS:
 - INDICATING DIMENSIONS, MATERIALS, FINISHES, FASTENINGS, ANCHORAGE, JOINING, SEALING, BACKING
 - INDICATING ALL GRAPHIC ELEMENTS
 - ADDITIONAL ELEMENTS REQUIRED TO CLEARLY CONVEY THE FABRICATION AND INSTALLATION REQUIREMENTS
 - DESIGN CALCULATIONS
- NO FABRICATION SHALL BEGIN PRIOR TO RECEIVING APPROVAL BY THE ENGINEER.
- CONTRACTOR TO PROVIDE MOCK UP PLAN OF PANEL ASSEMBLIES
- ALL HARDWARE SHALL BE PAINTED TO MATCH COLOR OF THE PAINTED METAL WORK/ GRAPHIC BEING ATTACHED OR AS OTHERWISE INDICATED IN DRAWINGS

- ALL WELDS TO BE GROUND SMOOTH FOR A SEAMLESS APPEARANCE
- APPLY ALL PAINT FINISHES IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

GRAPHIC PANEL NOTES:

- GRAPHICS PANEL SHALL BE THERMAL OR WATER JET CUT 1/4" ALUMINUM PANEL.
- DIGITAL VECTOR GRAPHICS FILE OF ARTWORK CAN BE PROVIDED BY COMMISSIONER AT CONTRACTOR'S REQUEST.
- CONTRACTOR TO SUBMIT SCALED MOCKUP OF GRAPHICS PANEL CONTAINING ALL COLORS TO BE UTILIZED IN FINAL FULL SIZE GRAPHICS FOR APPROVAL PRIOR TO FINAL PRODUCTION. SIZE OF MOCKUP SHALL BE AS APPROVED BY THE ENGINEER.

FILE NAME =
\$FILES
\$MODELNAMES

DUPAGE COUNTY
D.U. OF TRANS
421 COUNTY FARM ROAD
WHEATON, IL

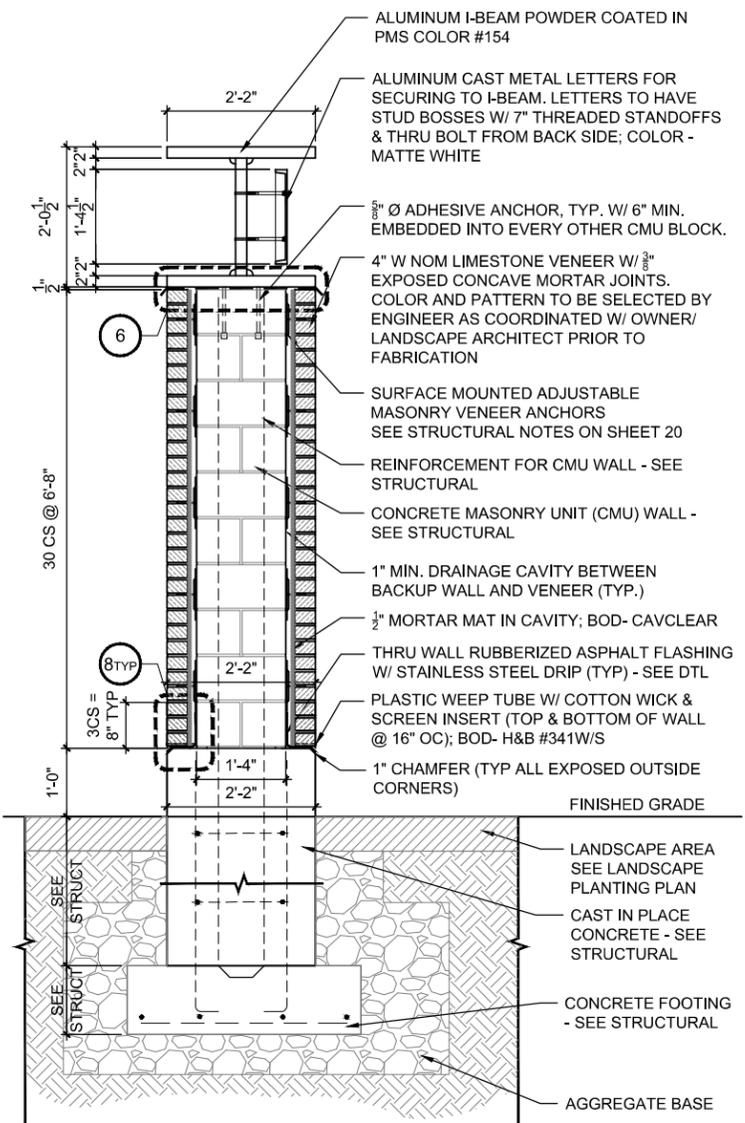
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	DATE - 06/10/2019	REVISED -

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DEPARTMENT OF TRANSPORTATION

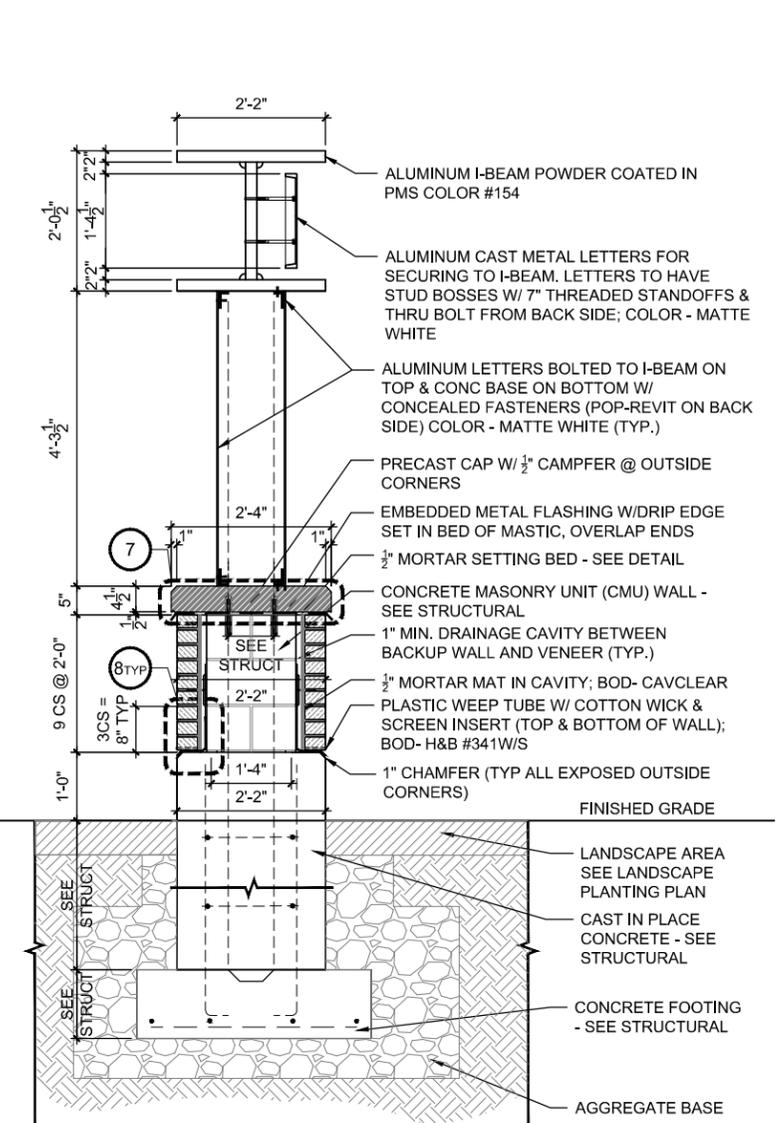
FENCE AFFIXMENT DETAILS

SCALE: AS SHOWN

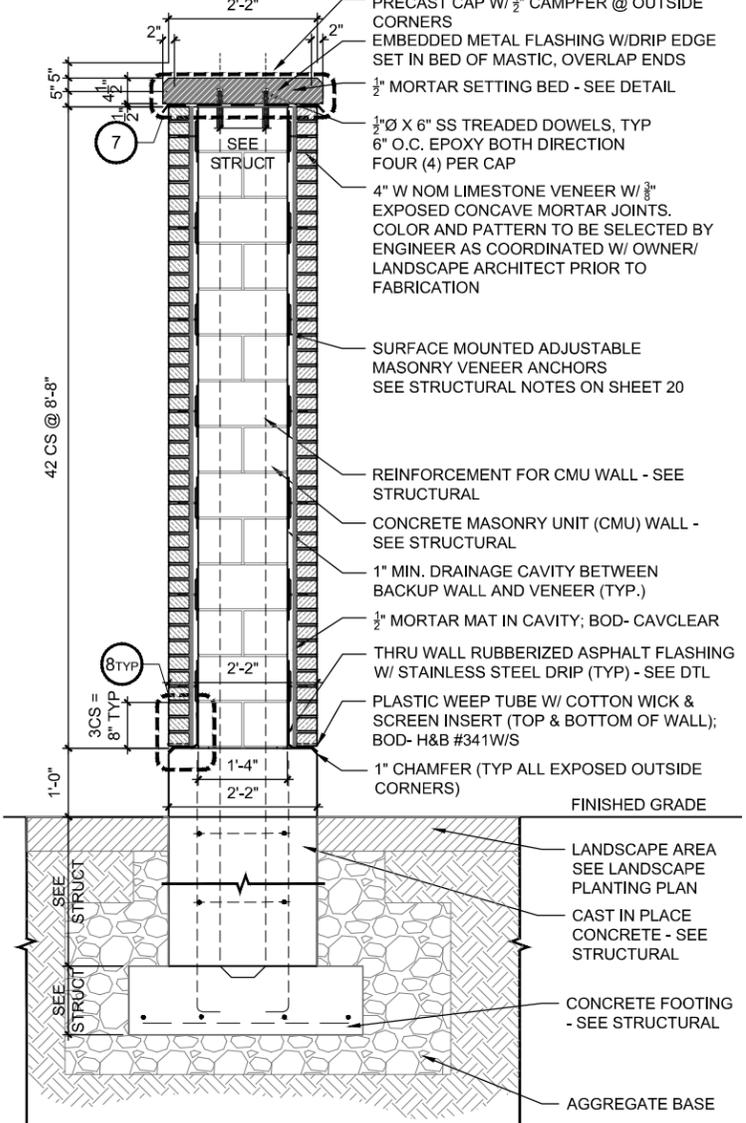
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	18
CONTRACT NO. 61E69				
ILLINOIS FED. AID PROJECT				



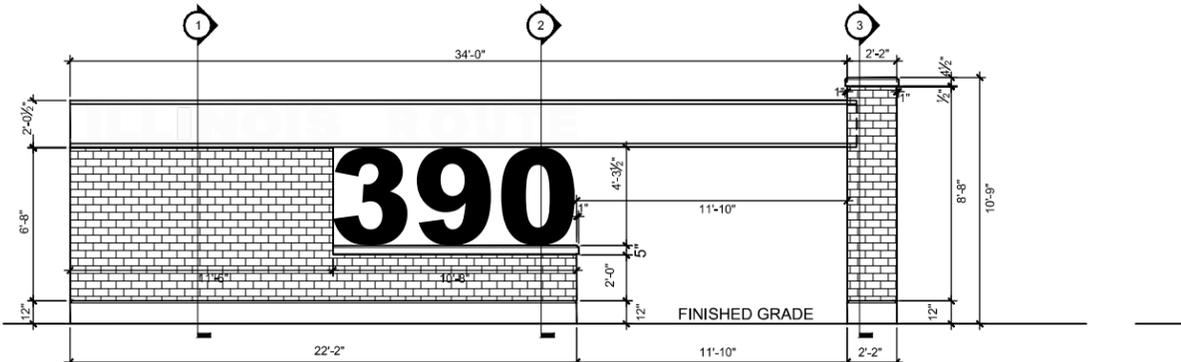
1 MONUMENT SIGN SECTION 1
3/4" = 1'-0"



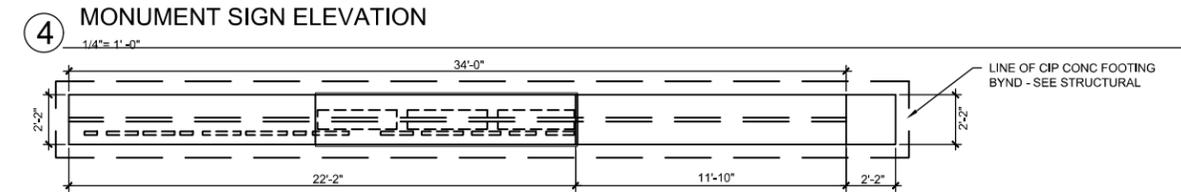
2 MONUMENT SIGN SECTION 2
3/4" = 1'-0"



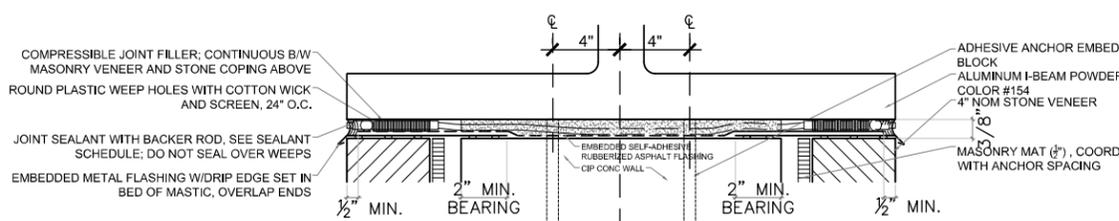
3 MONUMENT SIGN SECTION 3 (COLUMN)
3/4" = 1'-0"



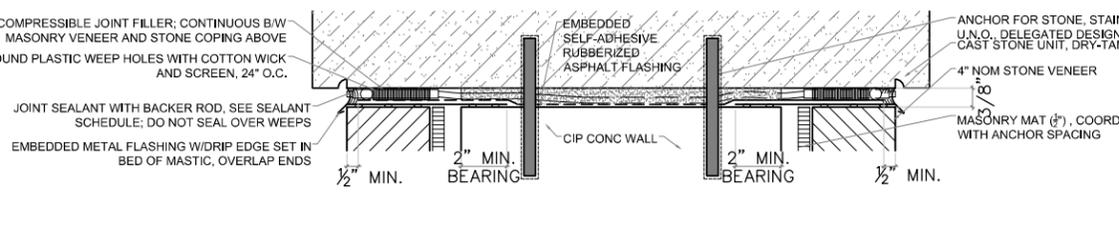
4 MONUMENT SIGN ELEVATION
1/4" = 1'-0"



5 MONUMENT SIGN PLAN
1/4" = 1'-0"



6 FLASHING DETAIL @ ALUMINUM BEAM
3" = 1'-0"



7 FLASHING DETAIL @ CAST COPING
3" = 1'-0"

GENERAL NOTES
STRUCTURAL CONNECTION OF I-BEAM TO COLUMN. SEE STRUCTURAL DRAWINGS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

- GENERAL SIGN NOTES
- CONTRACTOR SHALL VERIFY EXISTING CONDITIONS WHERE APPLICABLE TO THE WORK, AND SHALL NOTIFY THE COMMISSIONER OF DISCREPANCIES IN THE FIELD CONDITIONS IN WRITING PRIOR TO FABRICATION OR MOBILIZATION OF WORK FORCE. WRITTEN NOTICE SHALL INCLUDE, BUT NOT BE LIMITED TO, DATE, REFERENCES TO CONSTRUCTION DOCUMENTS, AND CONTRACTOR'S RECOMMENDATION FOR RECTIFYING DISCREPANCIES.
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 - DESIGN CALCULATIONS
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 - CONTRACTOR TO PROVIDE MOCK UPS OF PANEL ASSEMBLIES
 - ALL HARDWARE SHALL BE PAINTED TO MATCH COLOR OF THE PAINTED METAL WORK/ GRAPHIC BEING ATTACHED OR AS OTHERWISE INDICATED IN DRAWINGS
 - ALL WELDS TO BE GROUND SMOOTH FOR A SEAMLESS APPEARANCE
 - APPLY ALL PAINT FINISHES IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

8 TYPICAL FLASHING DETAIL
3" = 1'-0"

FILE NAME =
SFILES
SMODELNAME

DUPAGE COUNTY
D.U. OF TRANS
421 COUNTY FARM ROAD
WHEATON, IL

USER NAME = \$USERS	DESIGNED - JB	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - JC	REVISED -
PLOT DATE = \$DATES	CHECKED - JB	REVISED -
	DATE - 06/10/2019	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MONUMENT SIGN DETAILS

SCALE: AS SHOWN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/ DUPAGE	37	19
CONTRACT NO. 61E69				

ILLINOIS FED. AID PROJECT

GENERAL NOTES

Reinforcement bars shall conform to the requirements ASTM A 706 GR 60. Reinforcement bars designated (E) shall be epoxy coated. A normal surface finish followed by Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Anchor studs shall be installed in accordance with article 509.06 of the Standard Specifications and shall be included in the cost of Concrete Structures. Steel shapes shall be AASHTO M270 Grade 36 in accordance with article 1006.04 of the Standard Specifications. Steel shapes, bolts, nuts and washers shall be hot-dipped galvanized in accordance with AASHTO M232 or M111. Concrete masonry units shall be 8" wide, 1 1/4" face shell thickness, ground face block. Limestone veneer to be directly anchored to concrete masonry units. Anchoring with wire ties to the mortar bed will not be permitted. Veneer anchors shall be hot-dipped galvanized. Provide at least one anchor for each 2.67 Sq. Ft. of wall area. Spacing of veneer anchors shall not exceed 32" horizontally and 25" vertically. Contractor shall submit veneer anchoring system to the Engineer for approval. Cost of veneer anchors shall be included with Gateway Monument Sign Complete. See Gateway Monument Sign Detail on sheet 16 for Aluminum I-Beam, architectural components and details. Cost of steel shapes, bolts, nuts, anchors and washers shall be included in the cost of Concrete Structures. W1.7 ties and hoops to be hot-dipped galvanized. Cost included with Gateway Monument Sign Complete.

DESIGN SPECIFICATIONS

ACI 530-11: Building Code Requirements and Specifications for Masonry Structures.
2017 AASHTO LRFD Bridge Design Specifications, 8th Edition.

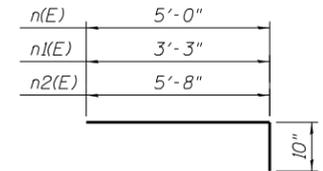
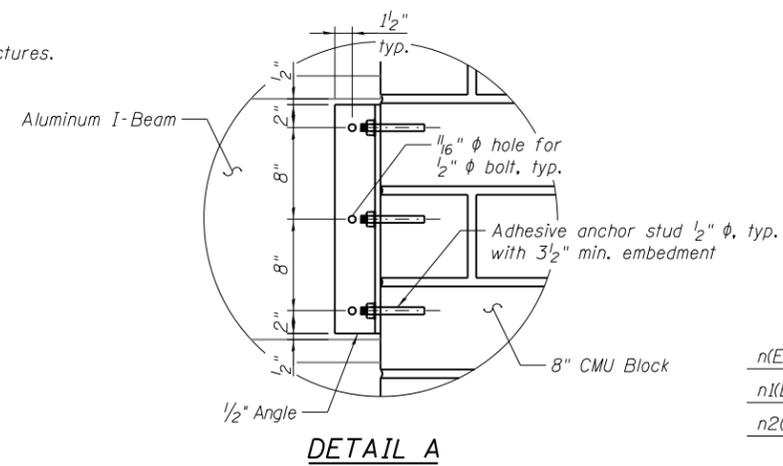
DESIGN STRESSES

MASONRY UNITS

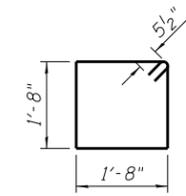
$f'_m = 1,500$ psi
 $F_b = 500$ psi
 $F_s = 32,000$ psi
 $n = 21.5$

FIELD UNITS

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



BARS n(E), n1(E) and n2(E)

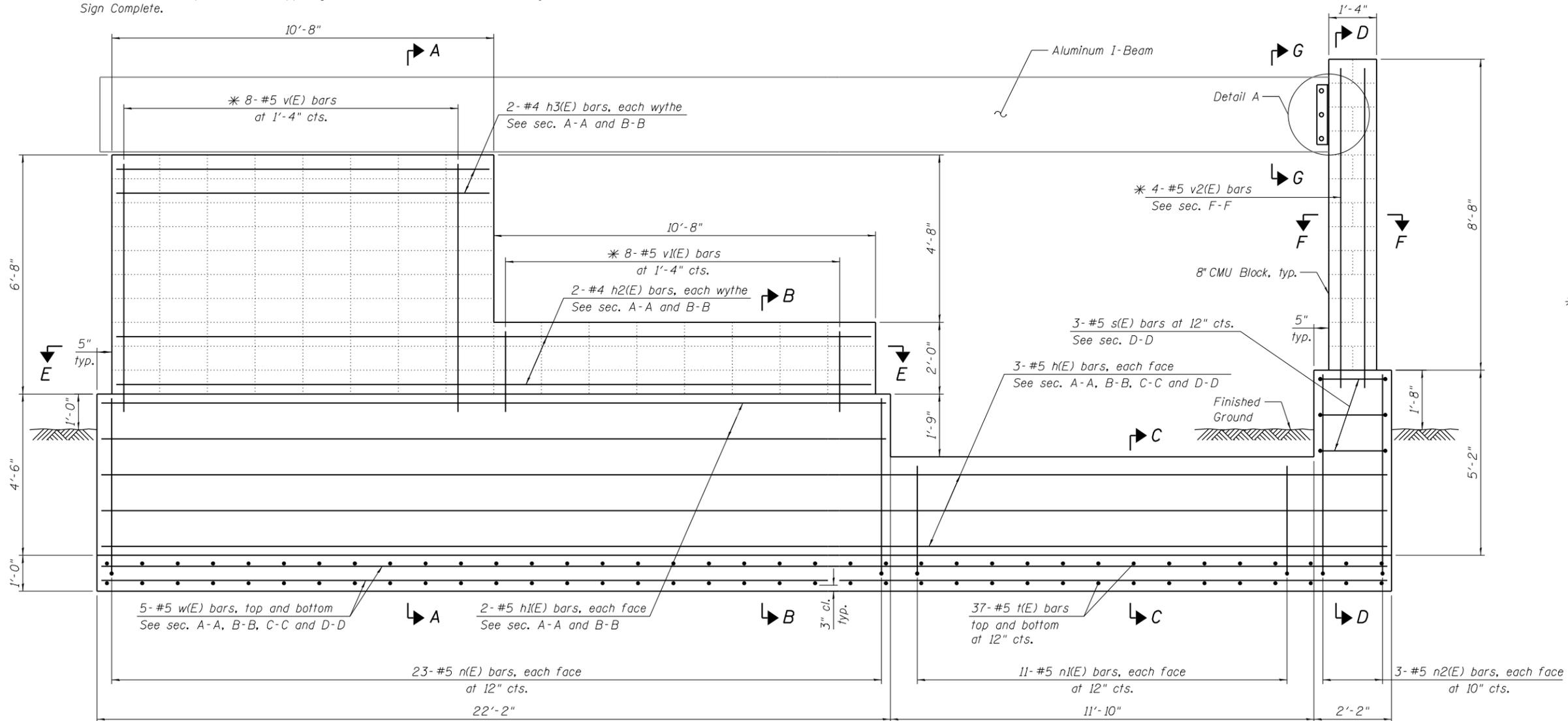


BAR s(E)

**** GATEWAY MONUMENT SIGN BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	6	#5	35'-8"	—
h1(E)	4	#5	21'-8"	—
h2(E)	4	#4	21'-0"	—
h3(E)	4	#4	10'-4"	—
n(E)	46	#5	5'-10"	—
n1(E)	22	#5	4'-1"	—
n2(E)	6	#5	6'-6"	—
s(E)	3	#5	7'-7"	□
t(E)	74	#5	4'-6"	—
v(E)	16	#5	7'-6"	—
v1(E)	16	#5	2'-6"	—
v2(E)	4	#5	9'-2"	—
w(E)	10	#5	35'-8"	—
Structure Excavation		Cu. Yd.	61.0	
Concrete Structures		Cu. Yd.	18.3	
Reinforcement Bars, Epoxy Coated		Pound	1,760	
Concrete Sealer		Sq. Ft.	171	
Gateway Monument Sign Complete		Each	1	

** Quantities shown are for one gateway monument.



GATEWAY MONUMENT SIGN ELEVATION

(Architectural components not shown for clarity)

* Core and set bar according to article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufactures recommendations. Depth of hole shall be 10" minimum. Cost shall be included with Reinforcement Bars, Epoxy Coated.

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED - RGB
DRAWN - AMN
CHECKED - RGB
DATE - 6/10/2019

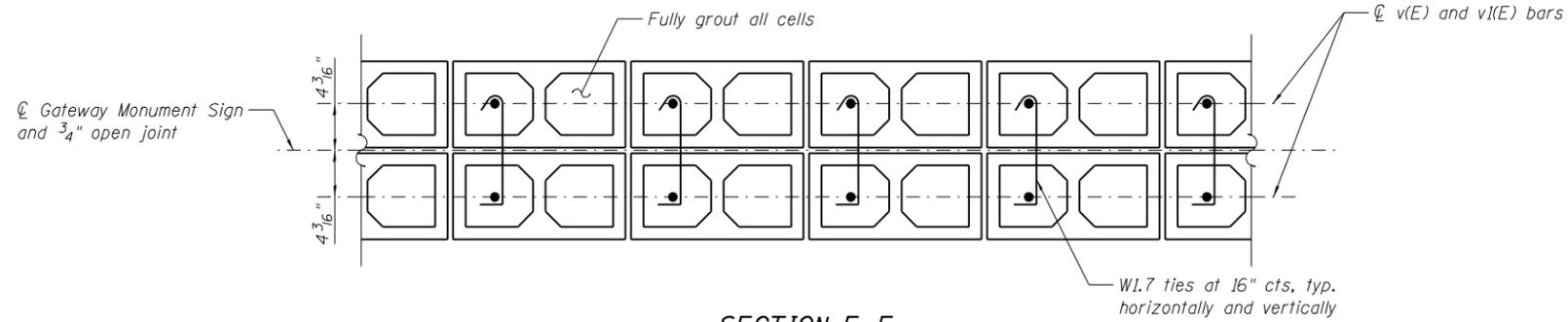
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

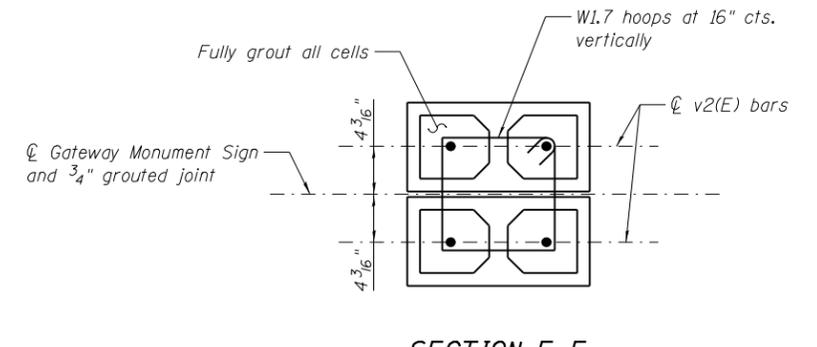
GATEWAY MONUMENT SIGN STRUCTURAL DETAIL

SCALE:

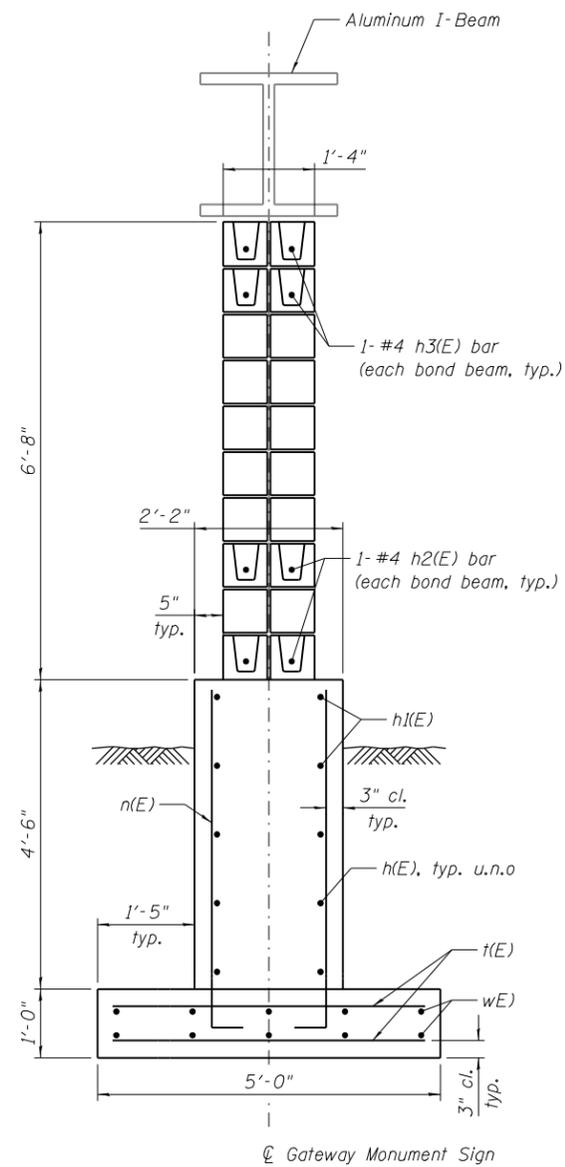
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 61E69	
ILLINOIS FED. AID PROJECT				



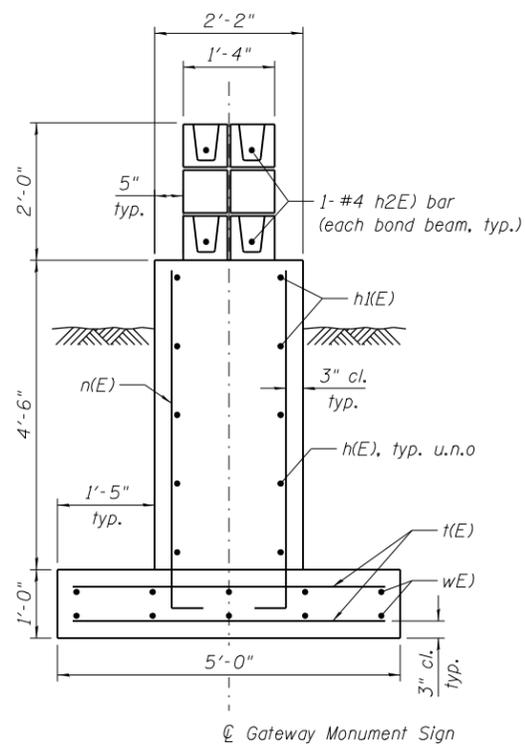
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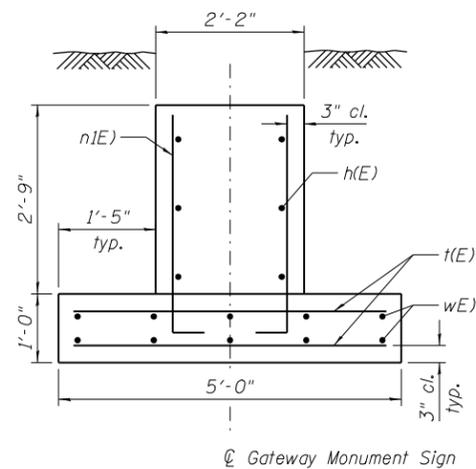
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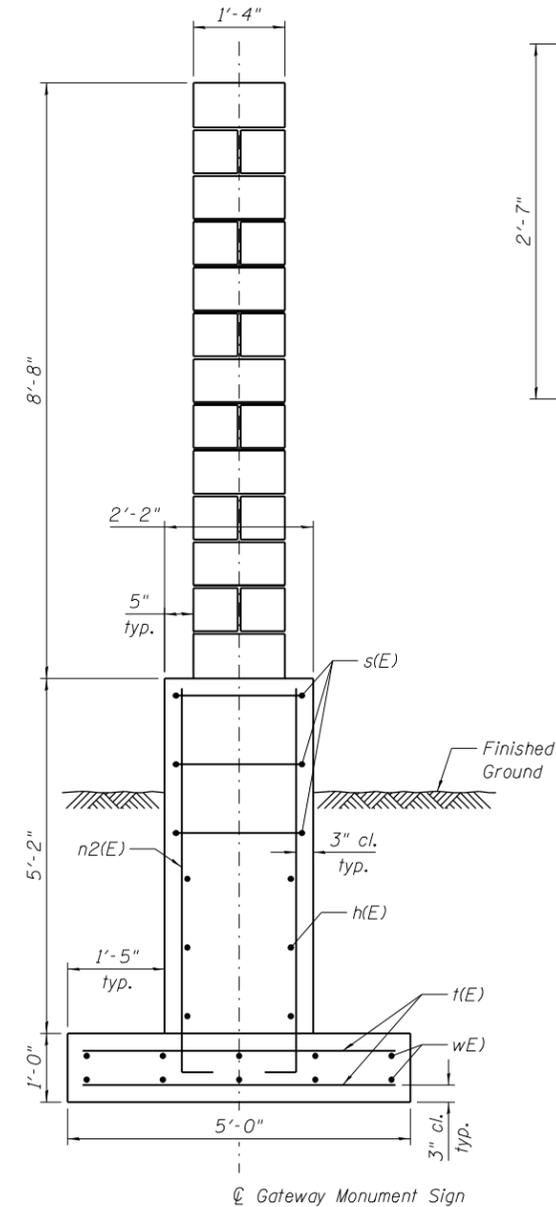
SECTION A-A



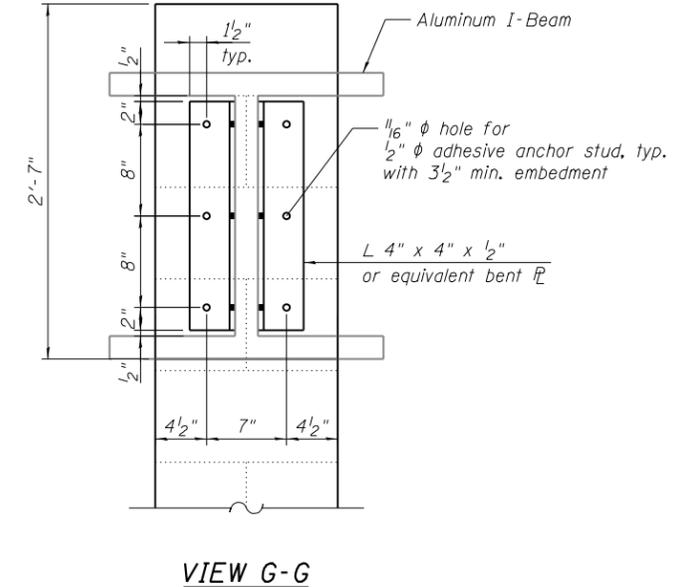
SECTION B-B



SECTION C-C



SECTION D-D



VIEW G-G

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED - RGB
DRAWN - AMN
CHECKED - RGB
DATE - 6/10/2019

REVISED -
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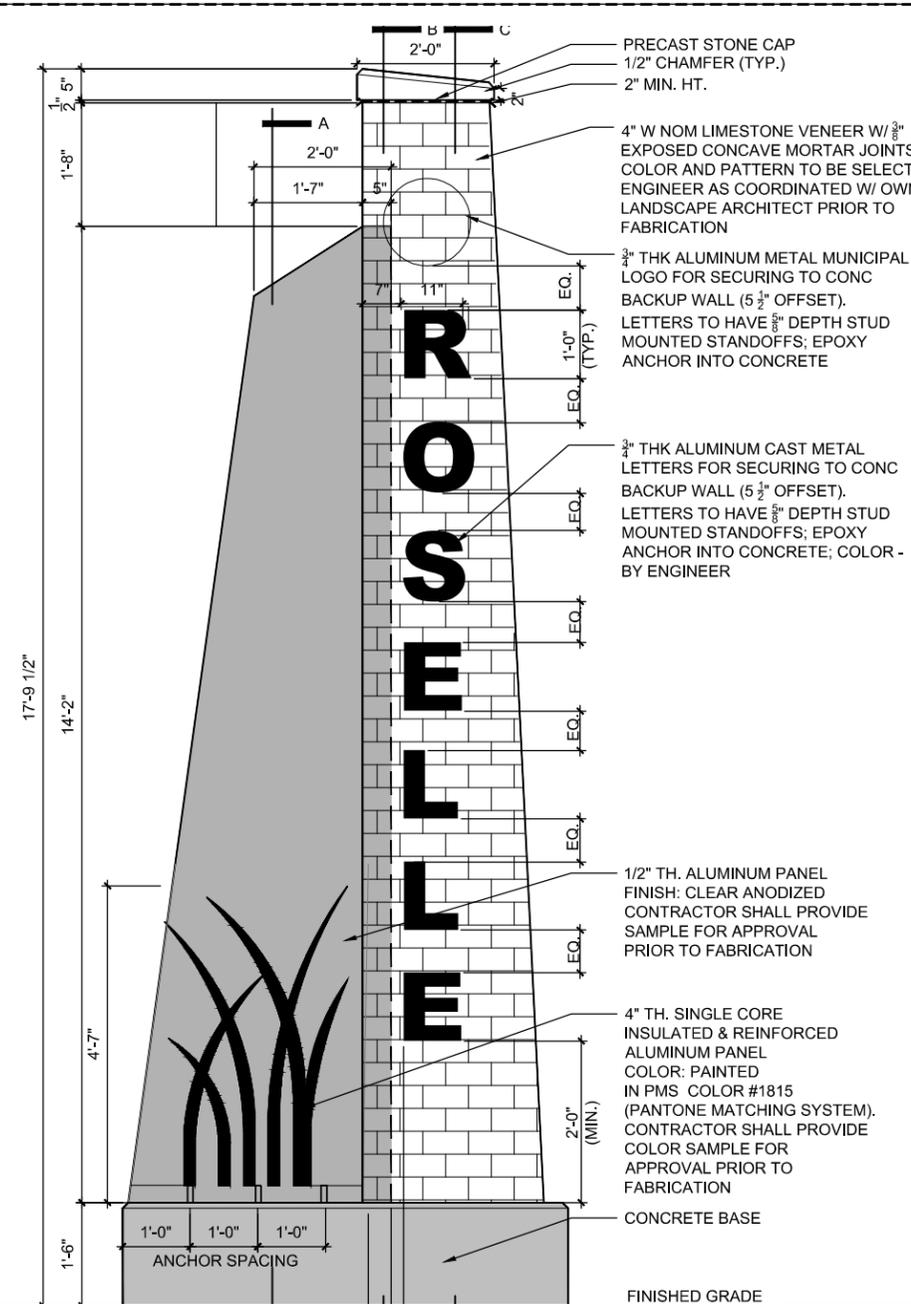
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GATEWAY MONUMENT SIGN STRUCTURAL DETAIL

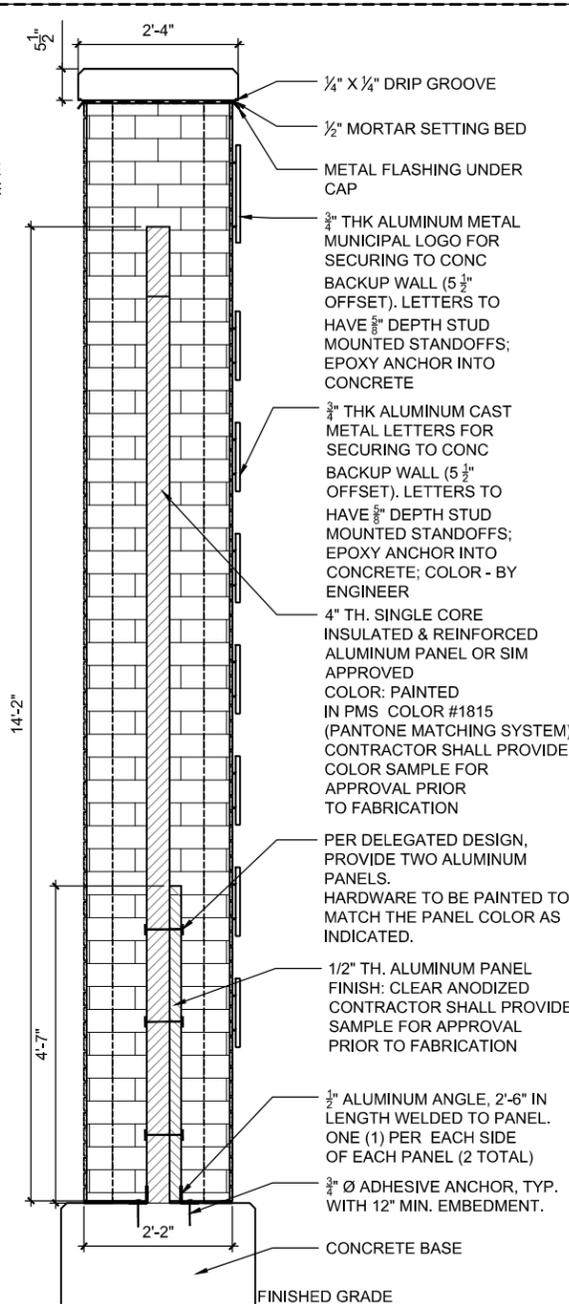
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	21
CONTRACT NO. 61E69				

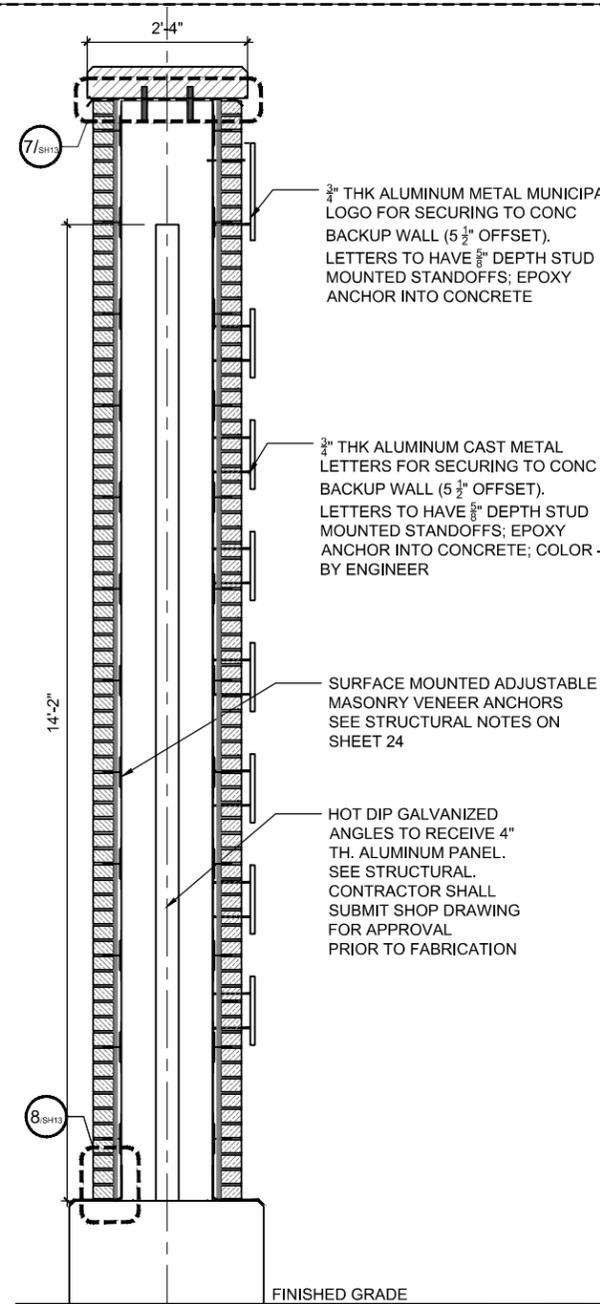
ILLINOIS FED. AID PROJECT



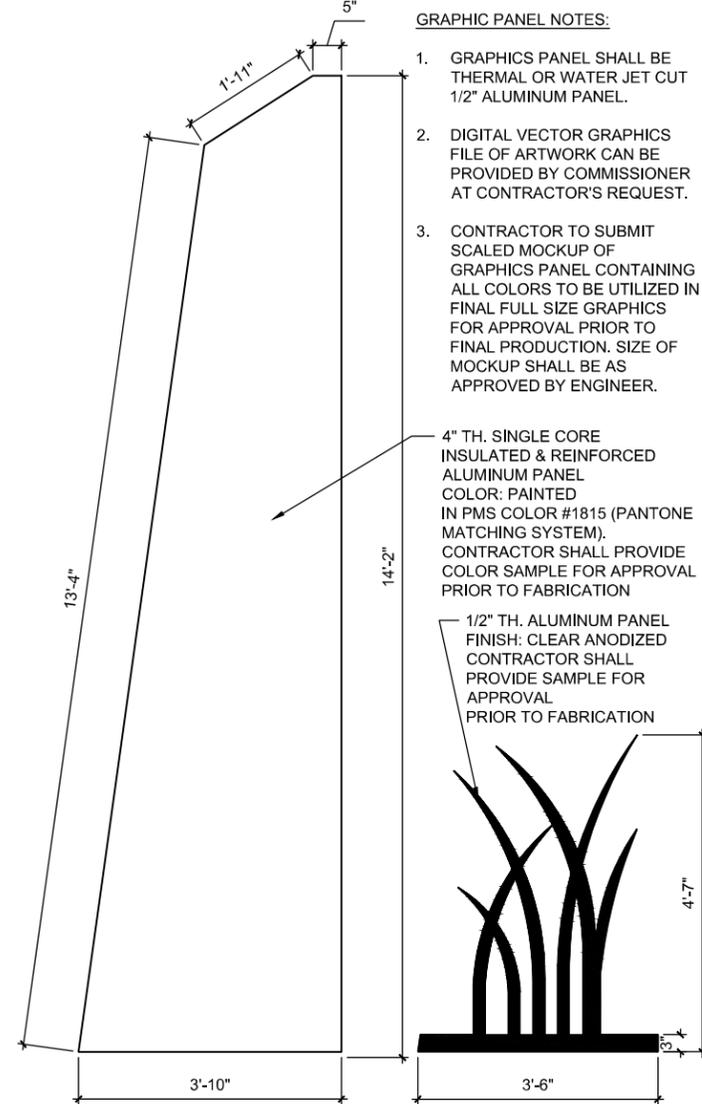
1 VERTICAL SIGN ELEVATION
3/4" = 1'-0"



2 VERTICAL SIGN SECTION A - A
3/4" = 1'-0"



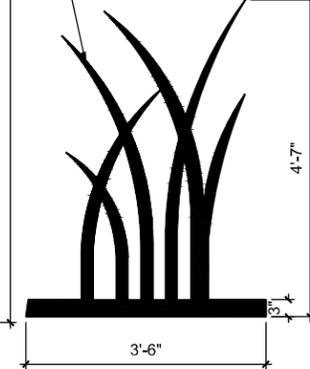
3 VERTICAL SIGN SECTION B - B
3/4" = 1'-0"



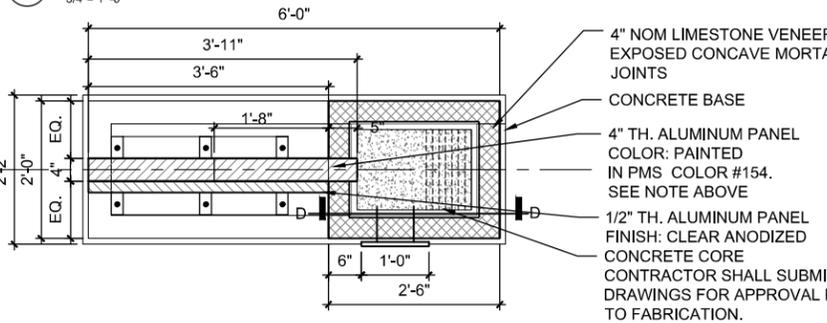
4 VERTICAL SIGN METAL SIGN DETAIL
3/4" = 1'-0"

- GRAPHIC PANEL NOTES:**
1. GRAPHICS PANEL SHALL BE THERMAL OR WATER JET CUT 1/2" ALUMINUM PANEL.
 2. DIGITAL VECTOR GRAPHICS FILE OF ARTWORK CAN BE PROVIDED BY COMMISSIONER AT CONTRACTOR'S REQUEST.
 3. CONTRACTOR TO SUBMIT SCALED MOCKUP OF GRAPHICS PANEL CONTAINING ALL COLORS TO BE UTILIZED IN FINAL FULL SIZE GRAPHICS FOR APPROVAL PRIOR TO FINAL PRODUCTION. SIZE OF MOCKUP SHALL BE AS APPROVED BY ENGINEER.

4. 4" TH. SINGLE CORE INSULATED & REINFORCED ALUMINUM PANEL COLOR: PAINTED IN PMS COLOR #1815 (PANTONE MATCHING SYSTEM). CONTRACTOR SHALL PROVIDE COLOR SAMPLE FOR APPROVAL PRIOR TO FABRICATION



1/2" TH. ALUMINUM PANEL FINISH: CLEAR ANODIZED CONTRACTOR SHALL PROVIDE SAMPLE FOR APPROVAL PRIOR TO FABRICATION



5 VERTICAL SIGN PLAN
3/4" = 1'-0"

GENERAL SIGN NOTES

1. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS WHERE APPLICABLE TO THE WORK, AND SHALL NOTIFY THE COMMISSIONER OF DISCREPANCIES IN THE FIELD CONDITIONS IN WRITING PRIOR TO FABRICATION OR MOBILIZATION OF WORK FORCE. WRITTEN NOTICE SHALL INCLUDE, BUT NOT BE LIMITED TO, DATE, REFERENCES TO CONSTRUCTION DOCUMENTS, AND CONTRACTOR'S RECOMMENDATION FOR RECTIFYING DISCREPANCIES.
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 - 3.4. DESIGN CALCULATIONS
4. NO FABRICATION SHALL BEGIN PRIOR TO RECEIVING APPROVAL BY COMMISSIONER.
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8. APPLY ALL PAINT FINISHES IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS

FILE NAME =
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DUPAGE COUNTY
D.U. OF TRANS
421 COUNTY FARM ROAD
WHEATON, IL

USER NAME = \$USERS
DESIGNED - JB
DRAWN - JC
CHECKED - JB
DATE - 06/10/2019

REVISIONS
REVISED -
REVISED -
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REVISED -

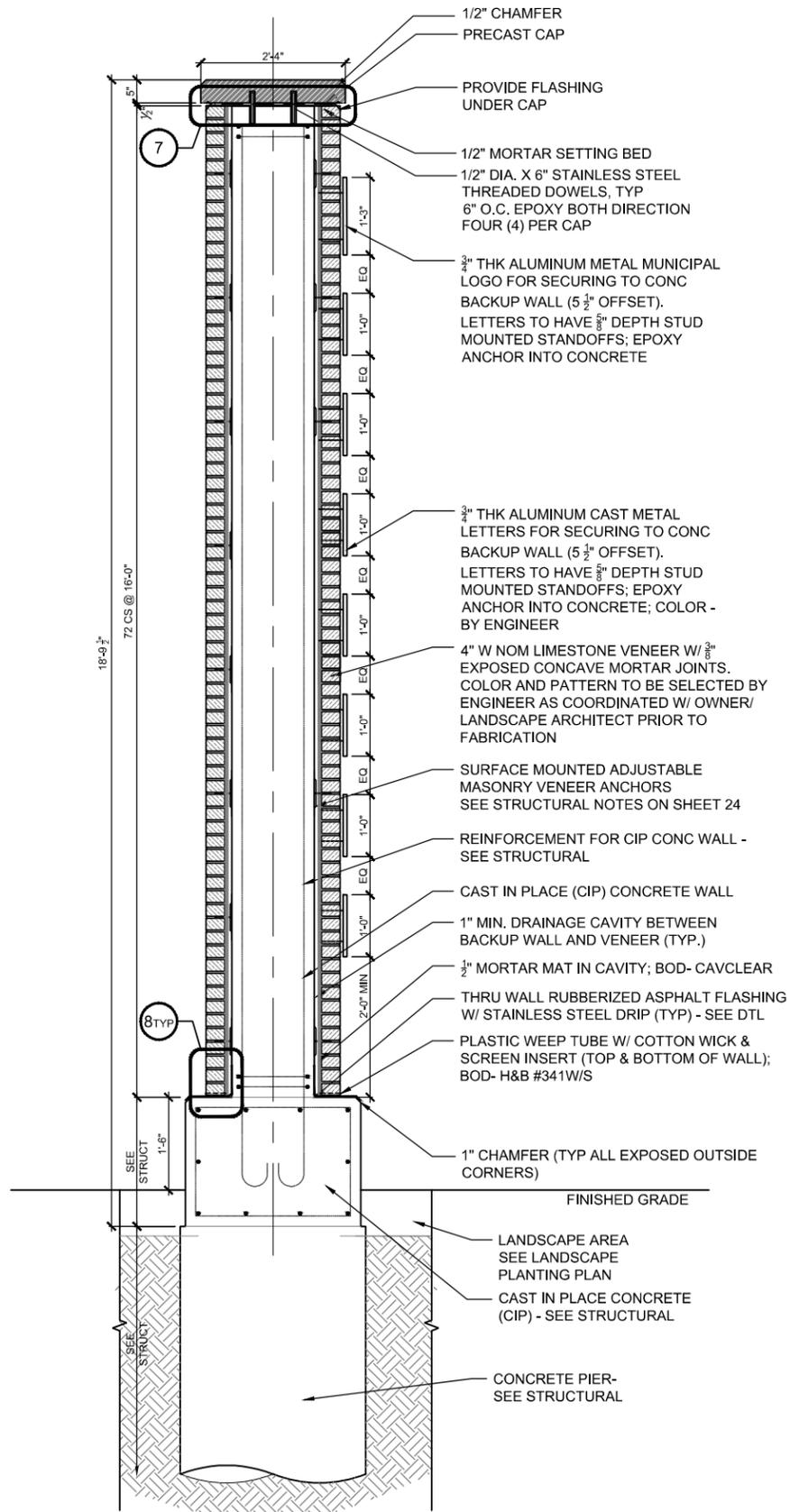
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERTICAL SIGN DETAIL 1

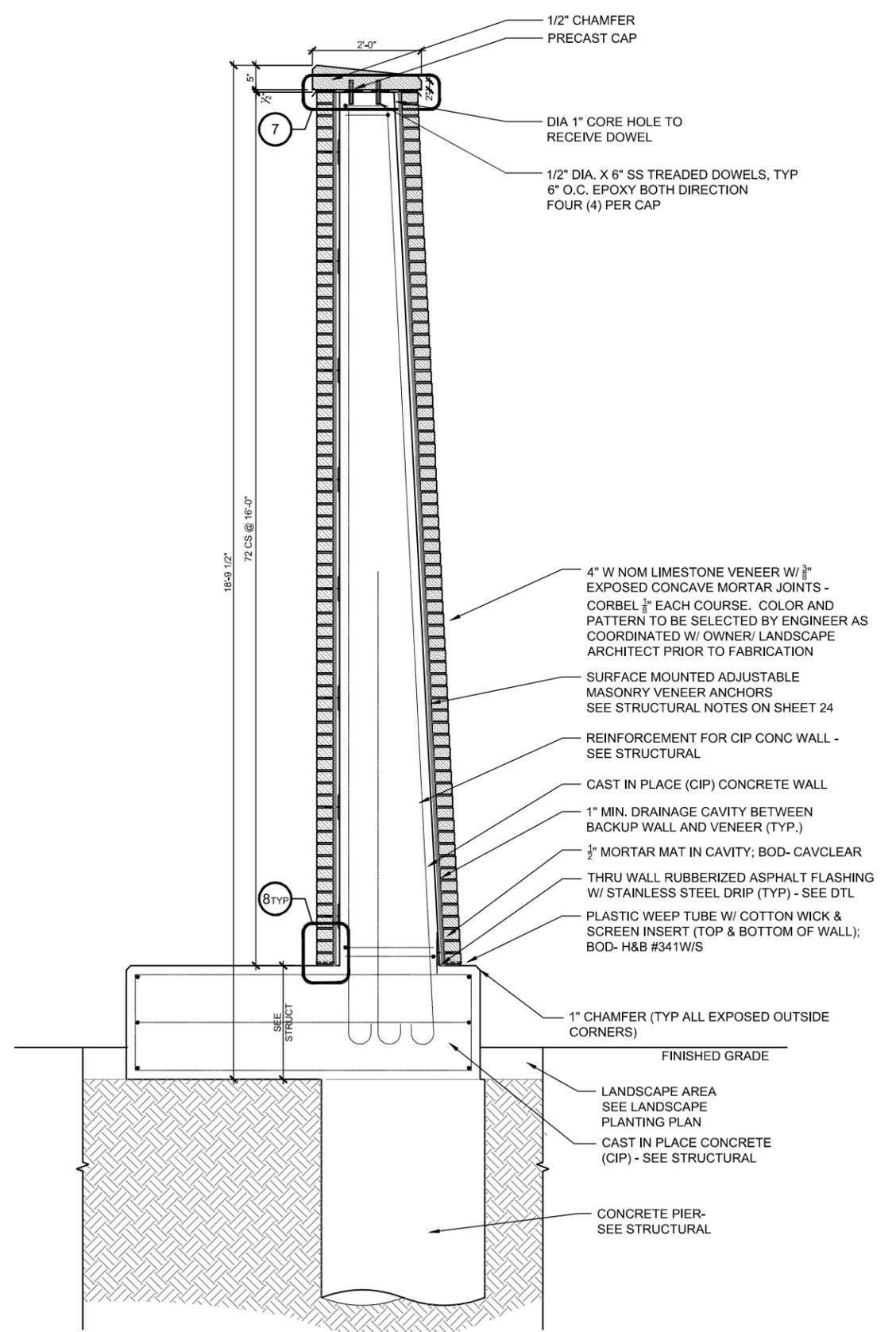
SCALE: AS SHOWN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/ DUPAGE	37	22
CONTRACT NO. 61E69				

ILLINOIS | FED. AID PROJECT



1 VERTICAL SIGN SECTION C-C
3/4" = 1'-0"



2 VERTICAL SIGN SECTION D-D
3/4" = 1'-0"

FILE NAME =
\$FILES
SMODELNAME\$

DUPAGE COUNTY
D.U. OF TRANS
421 COUNTY FARM ROAD
WHEATON, IL

USER NAME = \$USERS
PLOT SCALE = \$SCALE\$
PLOT DATE = \$DATES

DESIGNED - JB
DRAWN - JC
CHECKED - JB
DATE - 06/10/2019

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REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VERTICAL SIGN DETAIL 1

SCALE: AS SHOWN

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	23
CONTRACT NO. 61E69				
ILLINOIS			FED. AID PROJECT	

GENERAL NOTES

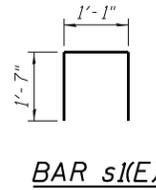
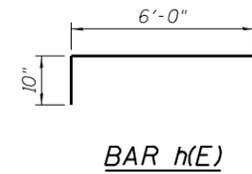
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 Reinforcement bars designated (E) shall be epoxy coated.
 A normal surface finish followed by Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line.
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 Steel shapes shall be AASHTO M270 Grade 36 in accordance with article 1006.04 of the Standard Specifications.
 Steel shapes, bolts, nuts and washers shall be hot-dipped galvanized in accordance with AASHTO M232 or M111.
 Limestone veneer to be directly anchored to concrete. Anchoring with wire ties to the mortar bed will not be permitted. Veneer anchors shall be hot-dipped galvanized. Provide at least one anchor for each 2.67 Sq. Ft. of wall area. Spacing of veneer anchors shall not exceed 32" horizontally and 25" vertically.
 Contractor shall submit veneer anchoring system to the Engineer for approval. Cost of veneer anchors shall be included with Vertical Identifier Sign Complete.
 See Vertical Identifier Sign Details on sheets 19 and 20 for architectural components and details.
 Cost of steel shapes, bolts, nuts, anchors and washers shall be included in the cost of Concrete Structures.

DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

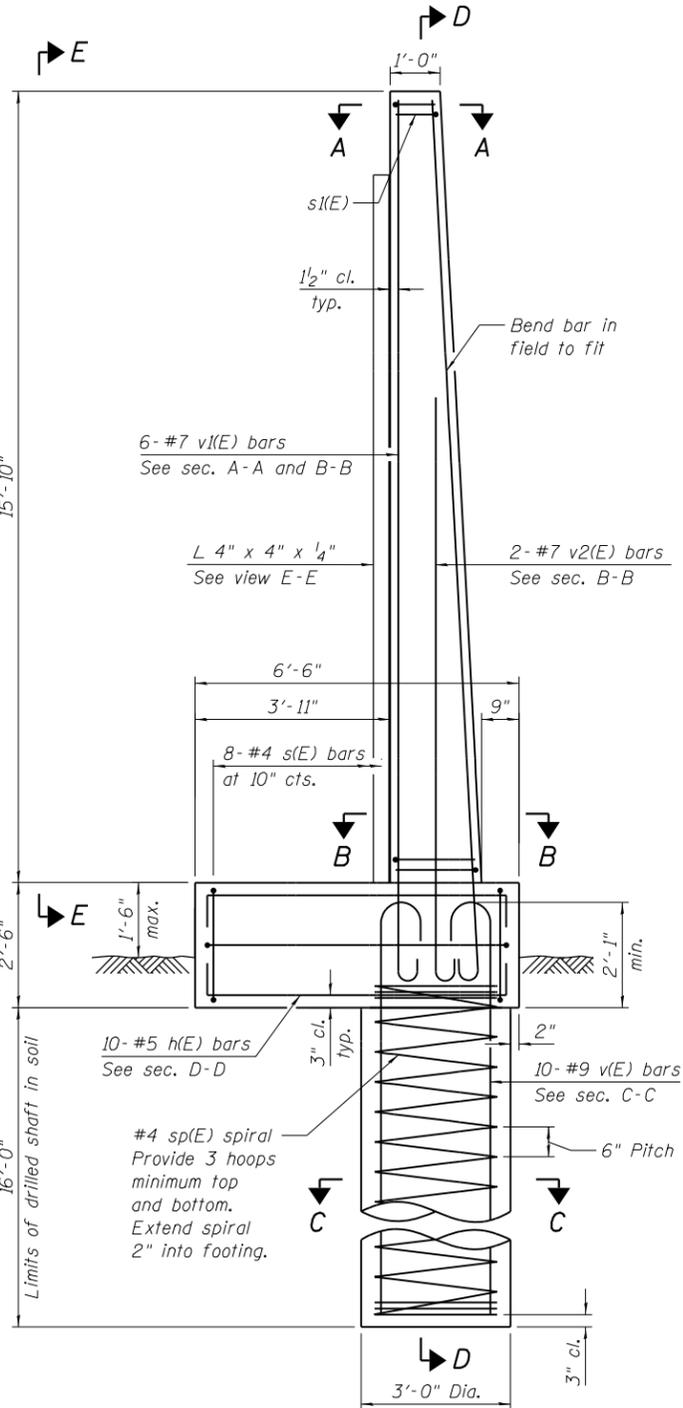
DESIGN STRESSES

FIELD UNITS
 $f'c = 3,500 \text{ psi}$
 $f_y = 60,000 \text{ psi (Reinforcement)}$



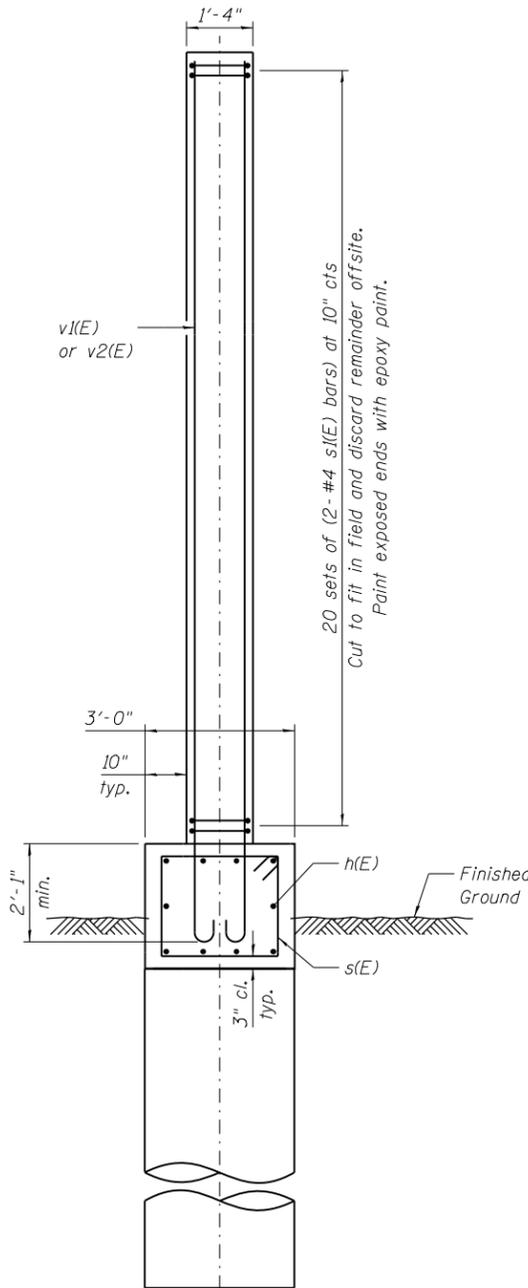
BAR h(E)

BAR s1(E)



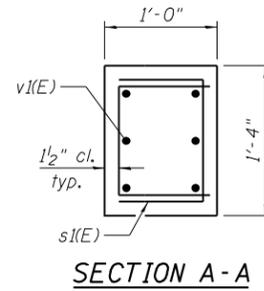
VERTICAL IDENTIFIER

(Architectural components not shown for clarity)

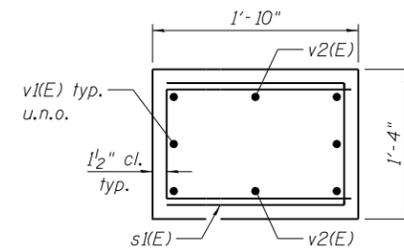


SECTION D-D

(Bars v(E) and sp(E) not shown for clarity)

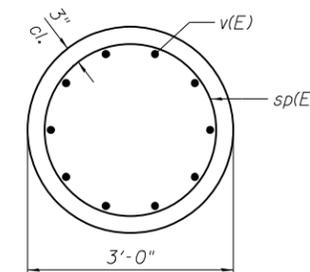


SECTION A-A

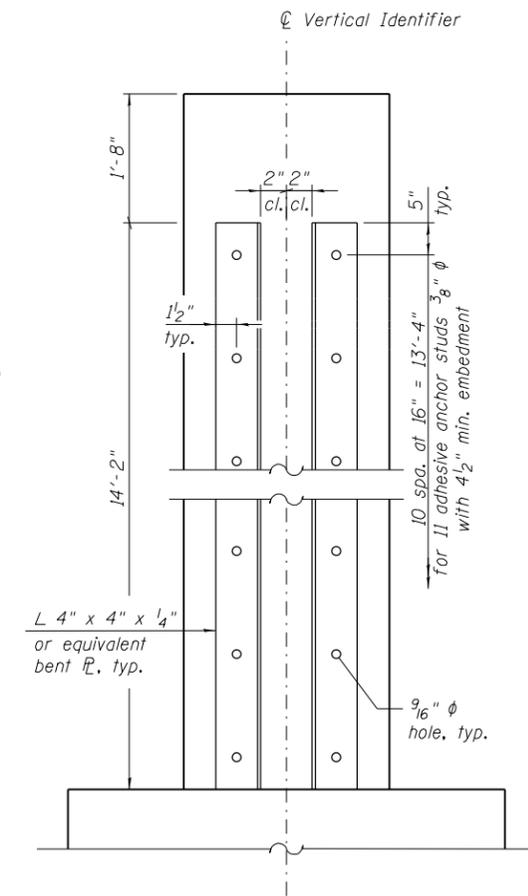


SECTION B-B

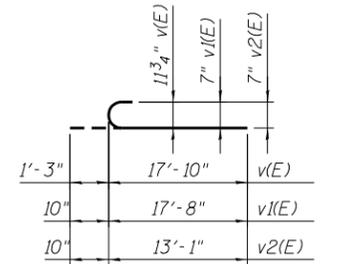
(Steel plate and anchors not shown for clarity)



SECTION C-C



VIEW E-E

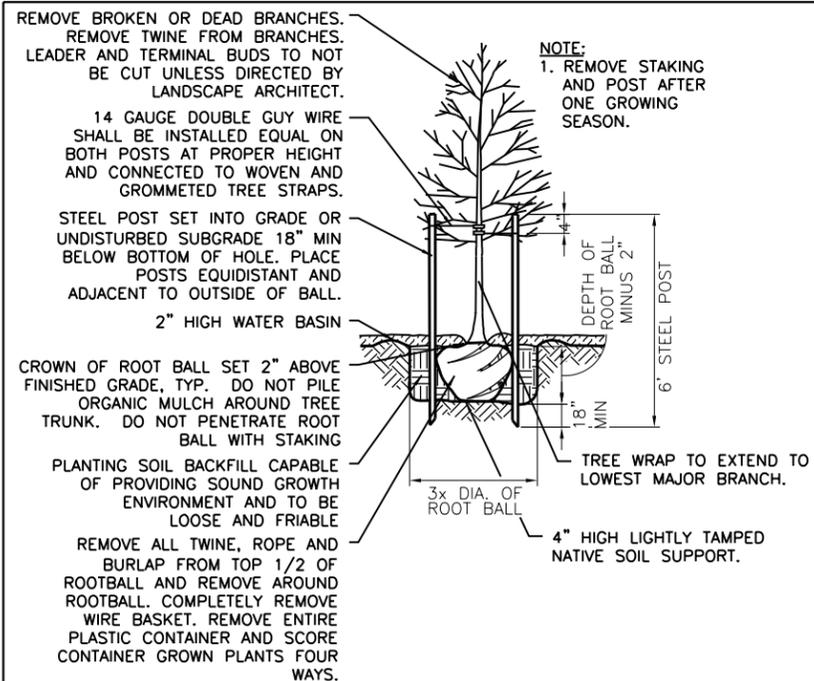


BARS v(E), v1(E) and v2(E)

*** VERTICAL IDENTIFIER SIGN BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	10	#5	7'-8"	┌
s(E)	8	#4	9'-9"	└
s1(E)	40	#4	4'-3"	┌
sp(E)	1	#4	15'-11"	⋈
v(E)	10	#9	19'-1"	┌
v1(E)	6	#7	18'-6"	┌
v2(E)	2	#7	13'-11"	┌
Structure Excavation		Cu. Yd.	5.0	
Concrete Structures		Cu. Yd.	3.0	
Reinforcement Bars, Epoxy Coated		Pound	1,380	
Drilled Shaft in Soil		Cu. Yd.	4.2	
Concrete Sealer		Sq. Ft.	134	
Vertical Identifier Sign Complete		Each	1	

* Quantities shown are for one vertical identifier.
 ** Length is height of spiral.



DECIDUOUS TREE

NOT TO SCALE

A

PLANT SCHEDULE

DECIDUOUS TREES	QTY	LAKE STREET	ROSELLE ROAD	ROWLING ROAD	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING	REMARKS
GIB	10	10			GINKGO BILOBA 'PRINCETON SENTRY'	PRINCETON SENTRY GINKGO	2 1/2" CAL	B&B	VARIES, SEE PLANS	MATCHING SPECIMEN
QUB	7	7			QUERCUS BICOLOR	SWAMP WHITE OAK	2 1/2" CAL	B&B	VARIES, SEE PLANS	MATCHING SPECIMEN
QUI	19	19			QUERCUS IMBRICARIA	SHINGLE OAK	2 1/2" CAL	B&B	VARIES, SEE PLANS	MATCHING SPECIMEN
UAP	10	10			ULMUS AMERICANA 'PRINCETON'	PRINCETON ELM	2 1/2" CAL	B&B	VARIES, SEE PLANS	MATCHING SPECIMEN
EVERGREEN TREES	QTY	LAKE STREET	ROSELLE ROAD	ROWLING ROAD	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING	REMARKS
PIG	10	10			PICEA GLAUCA 'DENSATA'	BLACK HILLS SPRUCE	8' HT.	B&B	VARIES, SEE PLANS	MATCHING SPECIMEN
SHRUBS	QTY	LAKE STREET	ROSELLE ROAD	ROWLING ROAD	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING	REMARKS
ARM	108	62	8	38	ARONIA MELANOCARPA	BLACK CHOKEBERRY	2' HT.	CG	5 FT O.C.	
COC	22		22		CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	2' HT.	CG	5 FT O.C.	
HYP	264	89		175	HYPERICUM KALMIANUM	KALM ST. JOHNSWORT	2' HT.	CG	2.5 FT O.C.	
HYP	90	29	22	39	HYDRANGEA PANICULATA 'LITTLE LIME'	LITTLE LIME HYDRANGEA	2' HT.	CG	4 FT O.C.	
PHO	40	10	7	23	PHYSOCARPUS OPULIFOLIUS	COMMON NINEBARK	5 GAL	CG	5 FT O.C.	
RHA	18	18			RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	2 GAL	CG	5 FT O.C.	
EVERGREEN SHRUBS	QTY	LAKE STREET	ROSELLE ROAD	ROWLING ROAD	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING	REMARKS
JUH	67	8	24	35	JUNIPERUS HORIZONTALIS	CREeping JUNIPER	2' W	CG	6 FT O.C.	
TAM	74	42	6	26	TAXUS x MEDIA 'DENSIFORMIS'	DENSE YEW	2' W	CG	5 FT O.C.	
ORNAMENTAL GRASSES	QTY	LAKE STREET	ROSELLE ROAD	ROWLING ROAD	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING	REMARKS
PAV	56		16	40	PANICUM VIRGATUM	SWITCH GRASS	2 GAL	CG	3 FT O.C.	
SPH	392	97	86	209	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	2 GAL	CG	2.5 FT O.C.	
PERENNIALS	QTY	LAKE STREET	ROSELLE ROAD	ROWLING ROAD	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING	REMARKS
PEA	222	107	40	75	PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SAGE	2 GAL	CG	3 FT O.C.	

EVERGREEN TREE

NOT TO SCALE

C

EVERGREEN TREE ON SLOPE

NOT TO SCALE

D

SHRUB

NOT TO SCALE

E

TREE PRESERVATION DETAIL

NOT TO SCALE

F

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED - AS
DRAWN - RR
CHECKED - EN
DATE - 6/10/2019

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NTS

PLANTING DETAILS
AND SCHEDULE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	25
CONTRACT NO. 61E69			ILLINOIS FED. AID PROJECT	



FL10 Solar Sign Light System



This sign light system is supplied with one light fixture offered in 5W, 10W, 20W, or 30W. Increasing the power (Wattage) of the light fixture increases the light spread, as well as the light intensity. Each light fixture is capable of illuminating signs with the dimensions as follows:

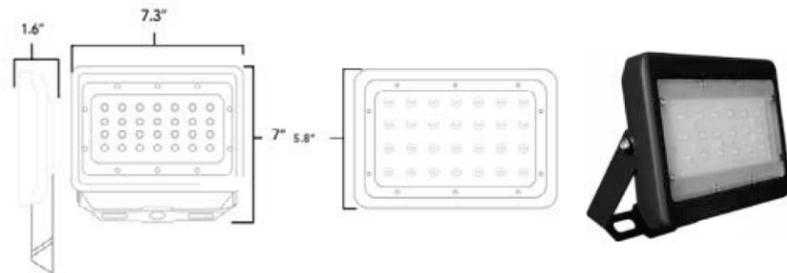
5W: Up to 8' x 8' 20W: Up to 14' x 12'
10W: Up to 12' x 10' 30W: Up to 18' x 12'

The above sign dimensions are based on the light fixture mounted approx. 6' from the face of the sign.

Illumination time is up to 8 hours, or dusk to dawn. Additional illumination times are available upon request.



Color Temperature	5700k	Waterproof Rating	IP65
CRI	>70	LED Brand	LUMILEDS
Input Power	5W, 10W, 20W or 30W	LED Type	LUXEON 3030 2D
Lumens	5W 665 lm	Cable Length	20'
	10W 1330 lm	PF	>0.9
	20W 2660 lm	Housing	Aluminum, PC, Steel
	30W 3990 lm	Housing Color	Brown / Bronze
Viewing Angle	7H7V	Operating Temperature	-4° to 113°F
Input Voltage	24V DC	Safety Certification	UL, cUL, DLC
Driver Model	Meanwell		



Lowest Price Guarantee 20 Year Panel Warranty 5 Year Product Warranty Lifetime Tech Support Worldwide Shipping

5611 Halifax Avenue • Fort Myers • FL • 33912 • USA • Phone: 239-461-5522 • Fax: 239-337-7887
MONDAY - FRIDAY 8.00AM - 5.00PM (US EASTERN TIME)

www.solarilluminations.com • sales@solarilluminations.com

SUBJECT TO OUR TERMS & CONDITIONS AND RETURNS POLICY

0402019M12



FL10 Solar Sign Light System



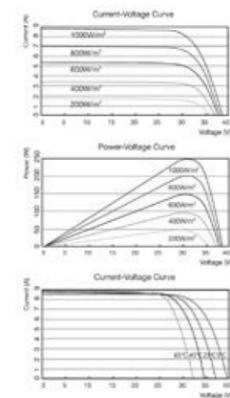
Solar Panel

Systems are supplied with high quality monocrystalline or polycrystalline solar panels with the highest performance and efficiency. They are designed to endure the harshest environments, and are guaranteed to provide power for well over 20 years. Typically manufactured in the USA, Canada, or Germany. The solar panel power is subject to LED consumption, installation location, and illumination period. Please consult with our engineers for specific details and solar power recommendations.

Photovoltaic Module

- Highly efficient monocrystalline or polycrystalline solar panel with aluminum frame, anti-aging, and encapsulated membrane.
- Anti-reflective and anti-soiling surface that reduces power losses from dirt and dust.
- Certified to withstand high wind loads (340PSI) and snow loads (780PSI); and resistance to high salt and ammonia.
- Manufactured to international standards, verified and certified by independent testing laboratories. (UL, ETL, IEC, MCS, & TUV)
- Assembled to strict quality control standards; international standards ISO 9001 and ISO 14001.
- Range of solar panel power available from 45W to +500W.
- The solar panel power is subject to LED consumption, installation location, and illumination period. Please consult our engineers for specific solar power requirements.
- Solar panels can be supplied in a single or dual format (2 x 70W = 140W, 2 x 100W = 200W etc.)
- Typical solar panel life is over 30 years, subject to environmental factors.
- 45W panel dimensions: 34.25" x 20.13" x 1.5"
- 70W panel dimensions: 32.35" x 26.22" x 1.5"
- 90W panel dimensions: 40.25" x 26.25" x 1.5"
- 100W panel dimensions: 47.87" x 26.43" x 1.5"
- 140W panel dimensions: 44" x 38.7" x 1.5" (or may be supplied as two 70W panels).
- 240W panel dimensions: 64.38" x 39" 1.5"
- 280W panel consists of two 140W panels.

MC4 Connector



Lowest Price Guarantee 20 Year Panel Warranty 5 Year Product Warranty Lifetime Tech Support Worldwide Shipping

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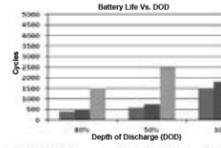
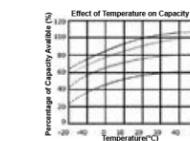
0402019M12



FL10 Solar Sign Light System



"EastPenn batteries are engineered and tested to provide reliable, long-lasting power for Photovoltaic (PV) and renewable energy applications where frequent deep cycles are required and minimum maintenance is desirable."



Battery

- Manufactured by: East Penn Manufacturing Co. Inc.
- 100% made in the USA.
- System supplied standard with two 12 Volt batteries. Batteries are wired in series to make a 24 Volt system.
- Available battery capacities range from 12Ah to 245Ah (per battery).
- Choice of two battery types: Absorbed Glass Mat (AGM) or Gel Cell.
- Please consult our engineers for specific battery capacity requirements.
- Classified as Non-spillable (defined by DOT, ICAO and IATA), NonHAZMAT, and valve regulate.
- Conforms to ISO9001, ISO/TS 16949, and ISO14001 standards.
- Typical battery life is approximately 5 to 7 years, subject to environmental factors.

VRLA Technology

VRLA batteries are maintenance free for life. VRLA stands for Valve Regulated Lead Acid, which means the batteries are sealed. Gas will only escape through the safety valves in the case of overcharging or cell failure.

AGM and Gel batteries have exceptional discharge recovery, even after deep or prolonged discharge. However, it should be noted that repetitive deep discharge and prolonged deep discharge have a negative influence on the service life of all lead acid batteries.

Gel batteries in general have a longer service life and better cycle capacity than AGM batteries.

Please Note: The rated capacity of our AGM or gel deep cycle batteries refer to 20 hour discharge rate (i.e. 0.05CA). Most products actually operate near, or at a 100 hour discharge rate (i.e. 0.01CA) and thus actual available battery capacity is slightly higher than the advertised rate.

The total available battery power is measured in watt-hour (Wh) or V*Ah. When comparing our total battery capacity with competitor's, please note that the battery capacity from a 12V system is not interchangeable with the battery capacity of a 24V system. However, the total battery power (i.e. watt-hours) is always comparable provided the correct system voltage is considered during calculation.

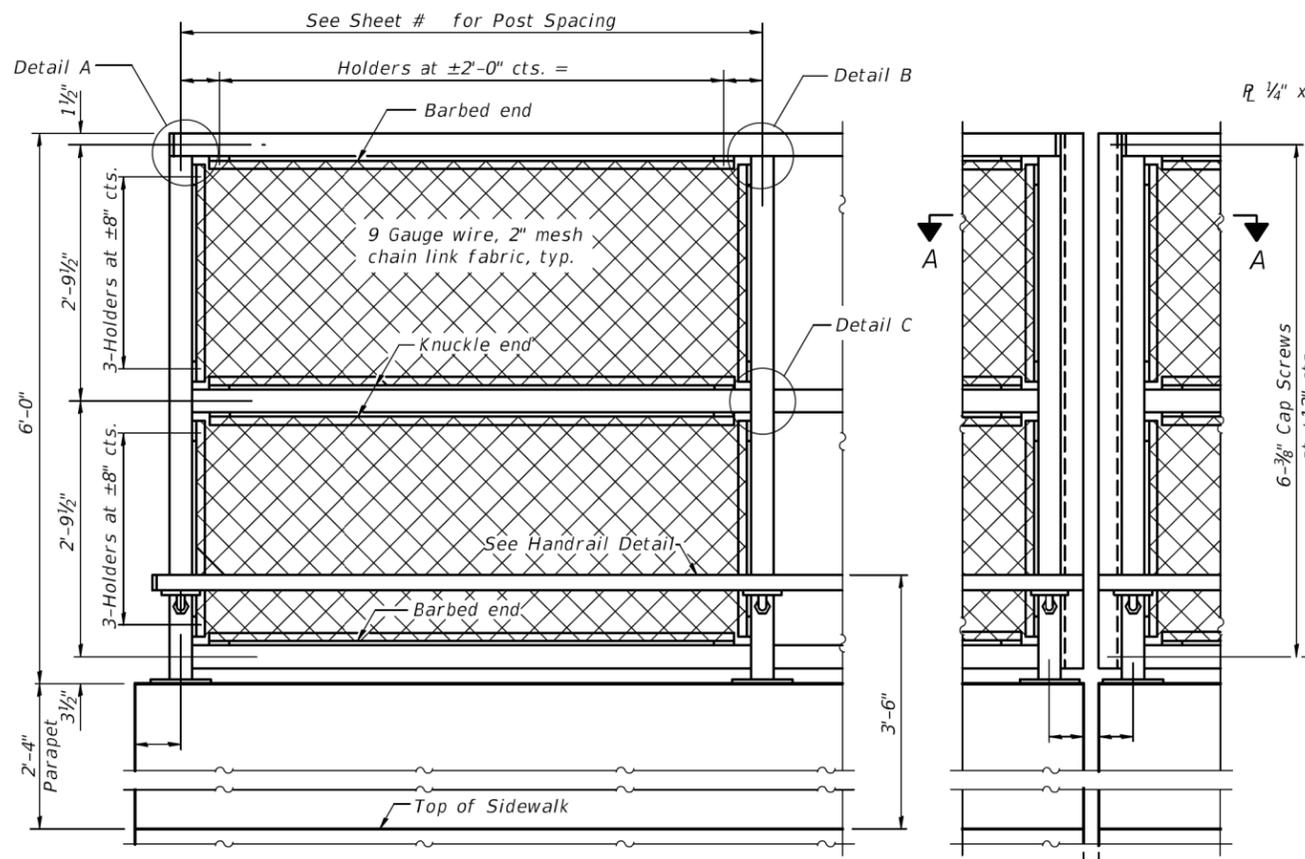
Lowest Price Guarantee 20 Year Panel Warranty 5 Year Product Warranty Lifetime Tech Support Worldwide Shipping

5611 Halifax Avenue • Fort Myers • FL • 33912 • USA • Phone: 239-461-5522 • Fax: 239-337-7887
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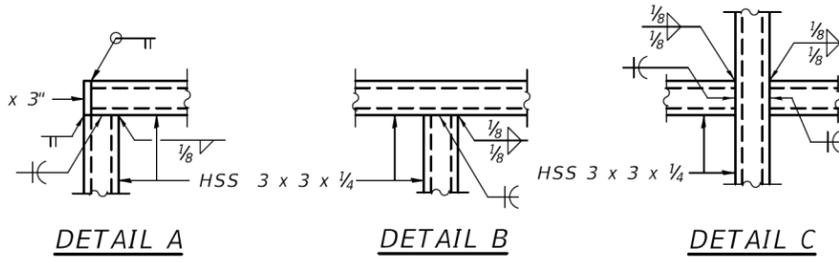
SUBJECT TO OUR TERMS & CONDITIONS AND RETURNS POLICY

0402019M12



ELEVATION
(Inside Face)

ELEVATION
(At Expansion Joint)

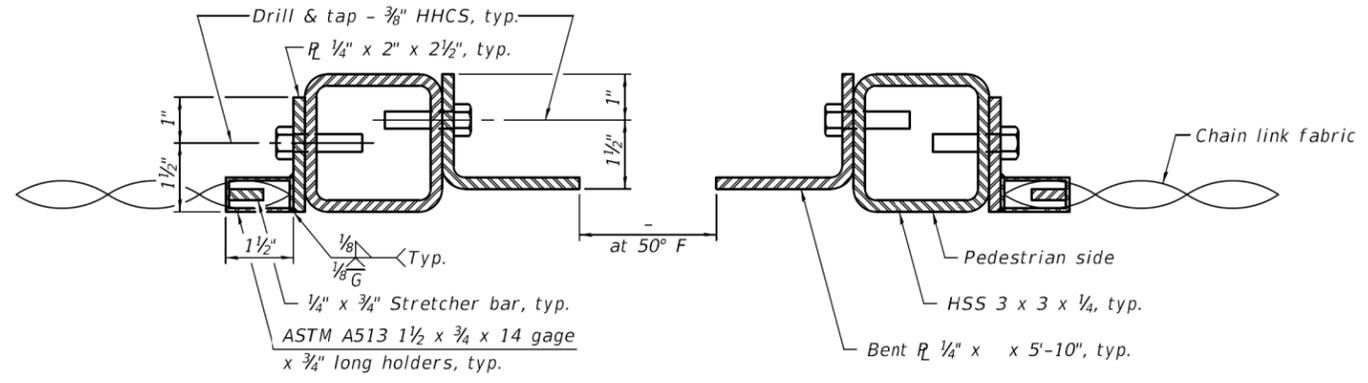


DETAIL A

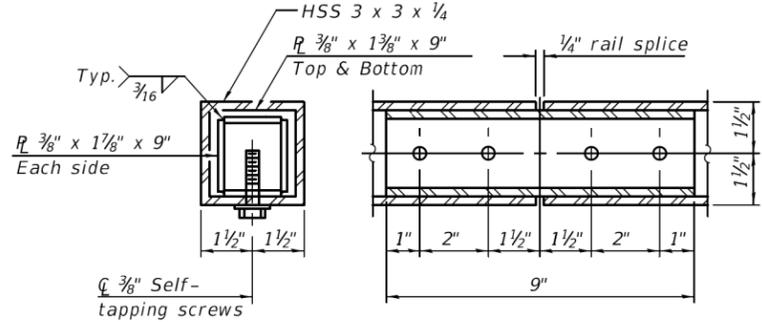
DETAIL B

DETAIL C

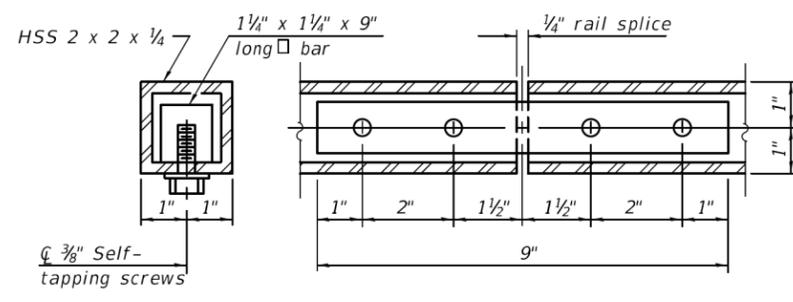
NOTE:
ALL STEEL RAIL ELEMENTS SHALL BE GALVANIZED ACCORDING TO ARTICLE 509.05 OF THE STANDARD SPECIFICATIONS.



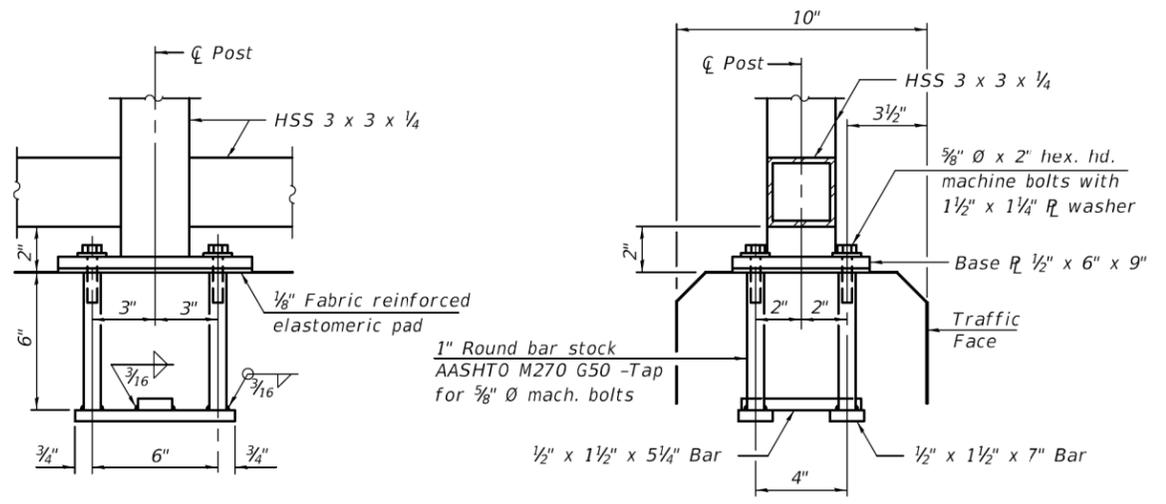
SECTION A-A



RAIL SPLICE



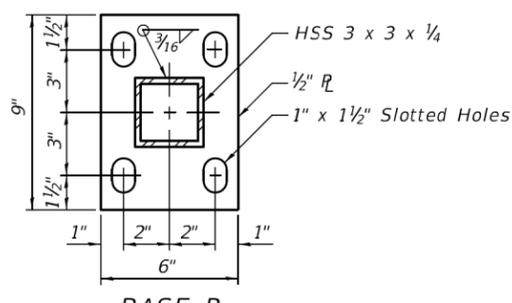
HANDRAIL SPLICE



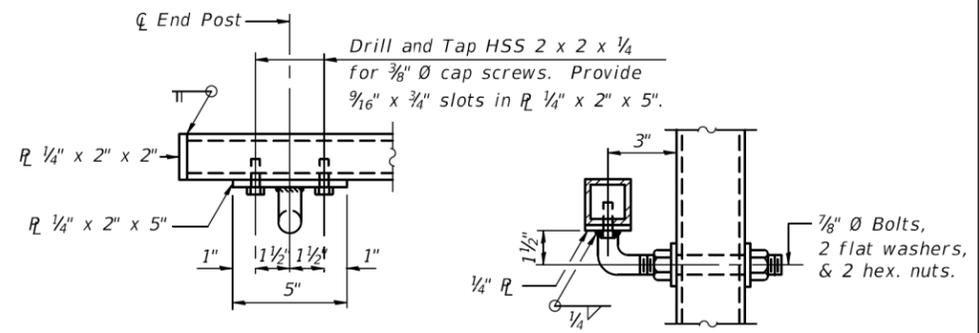
ANCHOR BOLT DETAILS

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

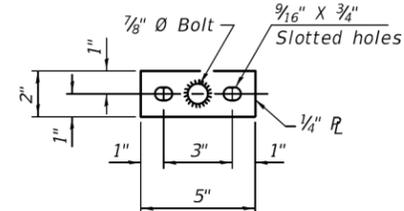
Note:
CVN testing may be omitted for the railing.



BASE R



HANDRAIL DETAIL



BASE R
(Handrail)

R-28

8-11-2017 (10'-0" Maximum Post Spacing)

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED	- AS	REVISED	-
DRAWN	- RR	REVISED	-
CHECKED	- EN	REVISED	-
DATE	- 6/10/2019	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE FENCE RAILING, PARAPET MOUNTED DETAIL

SCALE: NTS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	27
CONTRACT NO. 61E69				

ILLINOIS FED. AID PROJECT

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

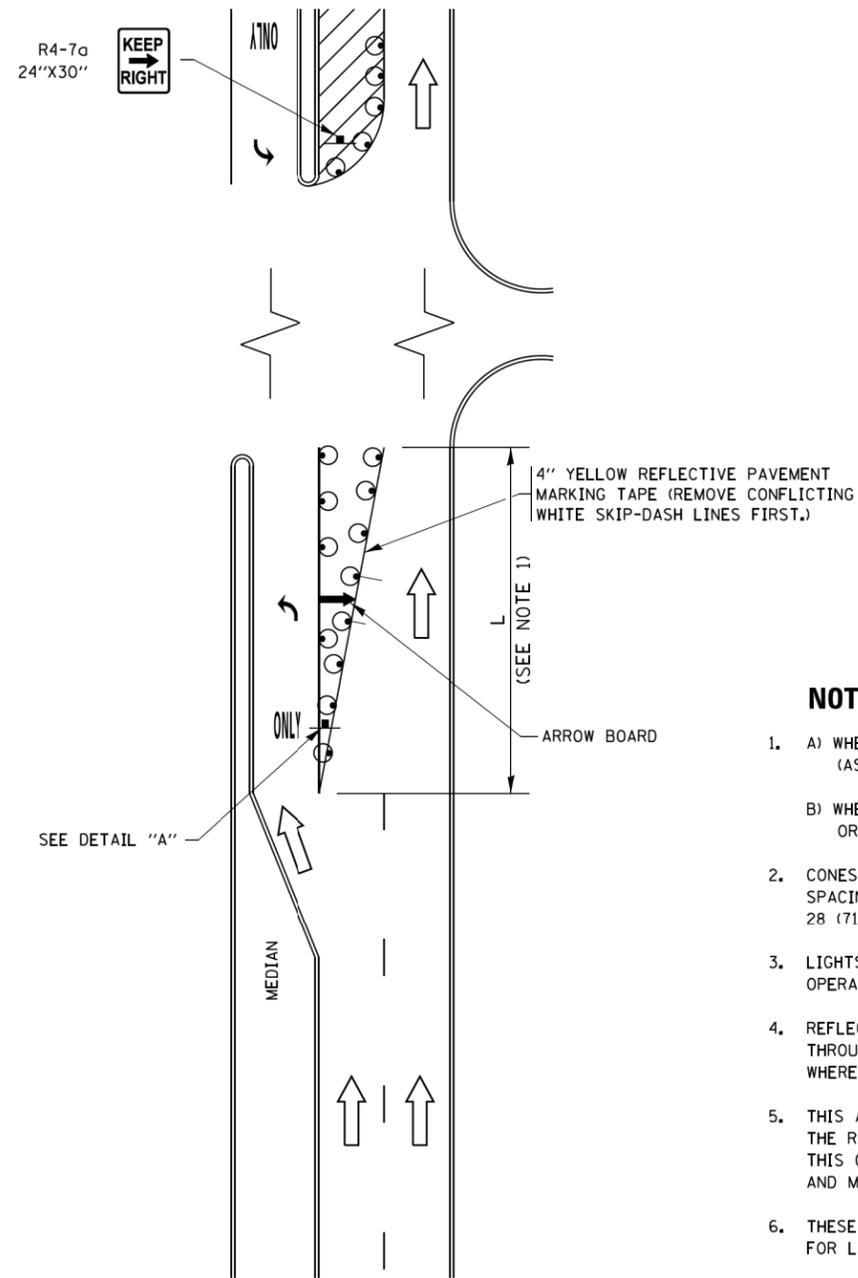


FIGURE 1

TURN BAY ENTRANCE WITHIN A LANE CLOSURE

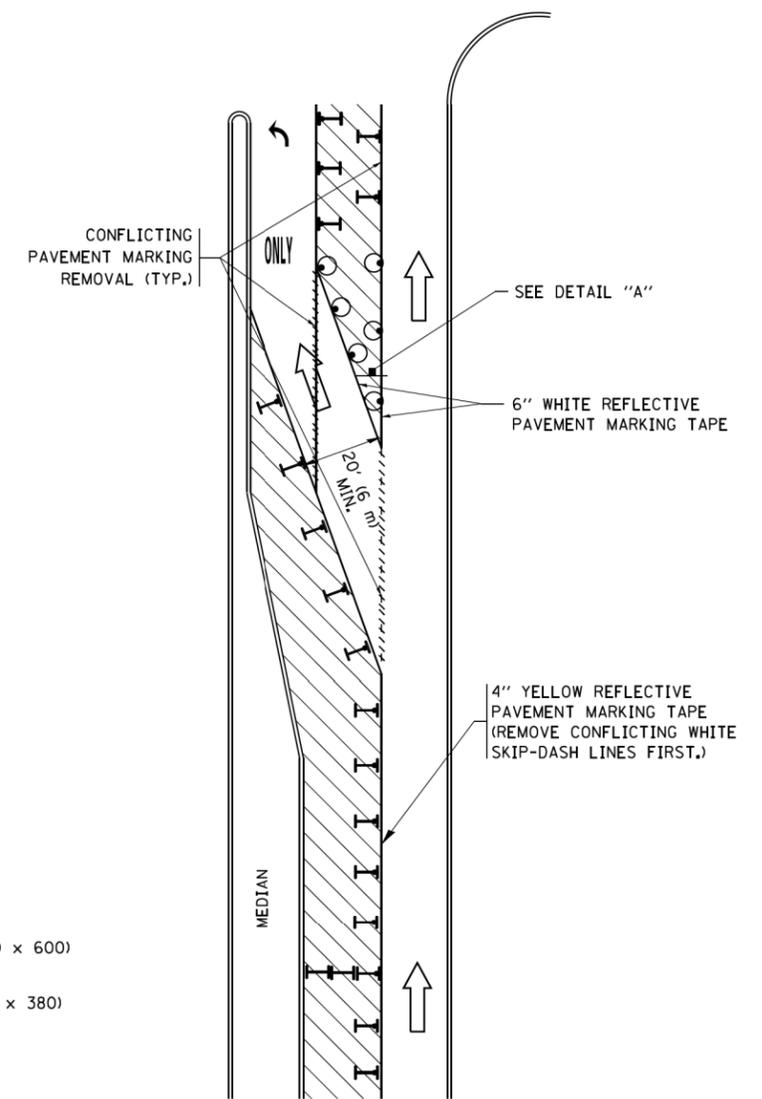


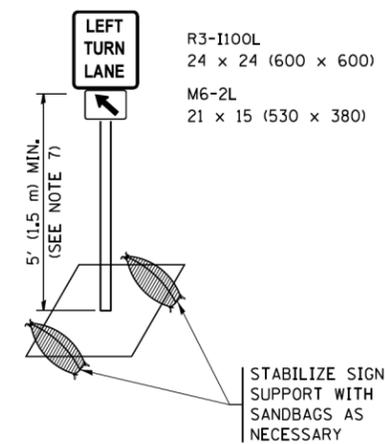
FIGURE 2

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  ARROW BOARD
-  TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  SIGN ASSEMBLY
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

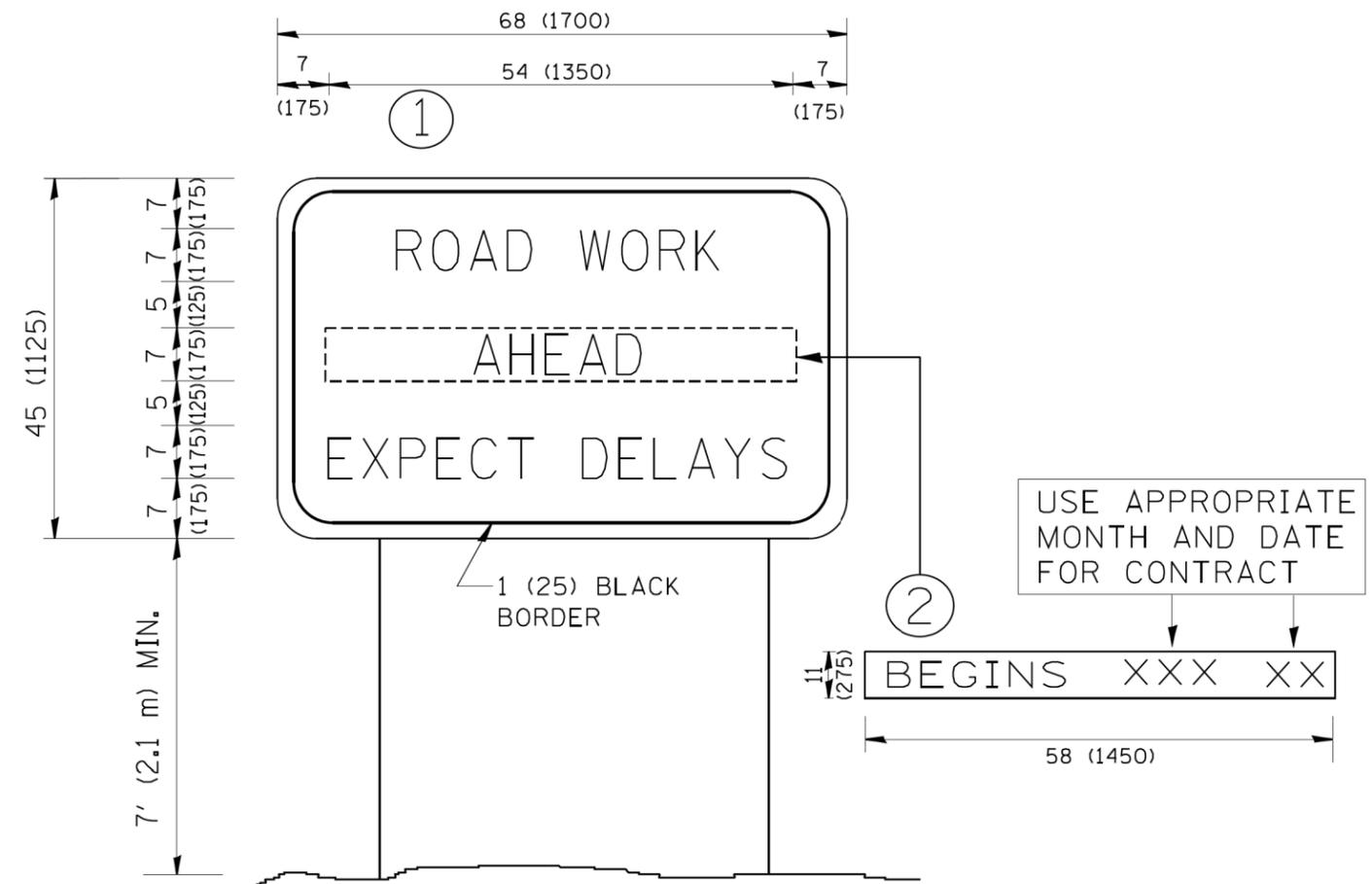
1. A) WHEN "L" IS \leq THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
B) WHEN "L" IS $>$ THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PRE REQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



DETAIL A

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

FILE NAME =	USER NAME = footemj	REVISED - T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	Default	REVISED - A. HOUSEH 10-07-95	REVISED - A. SCHUETZE 07-01-13					345	14-00245-05-LS	COOK	37	29
	PLOT SCALE = 50,0000' / 1m.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16		TC-14			CONTRACT NO. 61E69				
	PLOT DATE = 9/15/2016	REVISED - T. RAMMACHER 01-06-00	REVISED -		ILLINOIS FED. AID PROJECT							



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

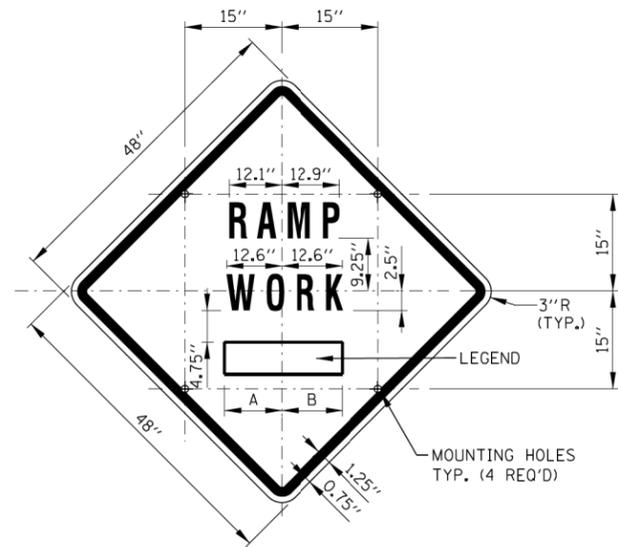
FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = geglanoht	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

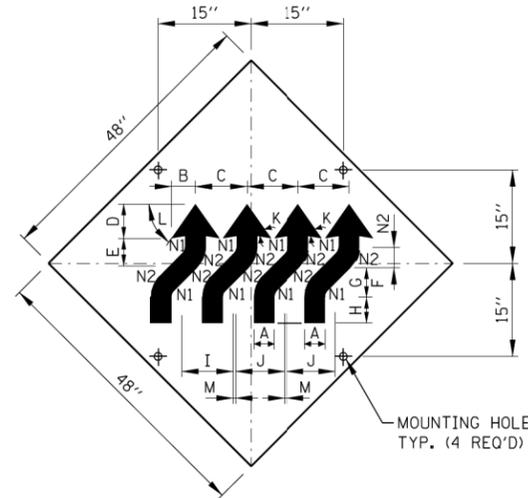
F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	14-00245-05-LS	COOK	37	30
TC-22		CONTRACT NO. 61E69		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SIGN TS-2 (O)

COLOR: BACKGROUND - FLUORESCENT ORANGE (O)
 BORDER AND SYMBOL - BLACK
 SIZE: 48"x48"
 LETTERING: 7" FEDERAL SERIES D
 MOUNTING HOLES: 7/16" DIA., 4 HOLES SPACED AS SHOWN

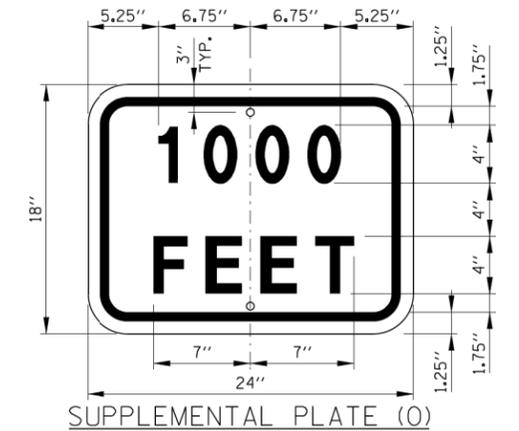
SIGN NO.	LEGEND	A	B
TS-2A	AHEAD	15.50"	15.50"
TS-2B	500 FT	14.25"	15.13"
TS-2C	1000 FT	14.88" L2	15.75" L2
TS-2D	1500 FT	14.88" L2	15.75" L2
TS-2E	1/2 MILE	15.75" L3	15.75" L3
TS-2F	1 MILE	13.06"	13.06"



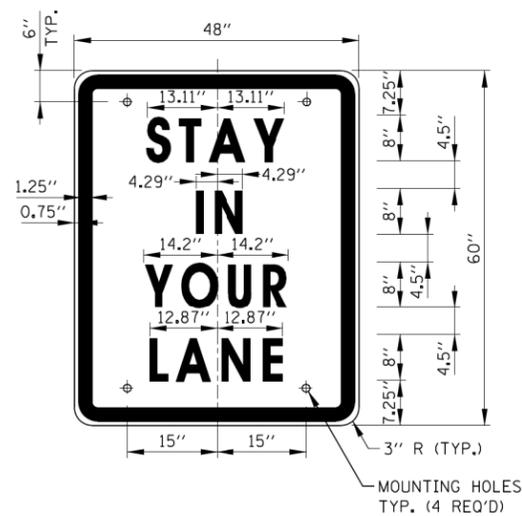
SIGN W1-4dR (O)

COLOR: BACKGROUND-FLUORESCENT ORANGE (O)
 TYPE A REFLECTIVE
 SHEETING PER STANDARD SPECIFICATIONS (*A)
 BORDER AND LETTERS-BLACK
 SIZE: 48"x48"
 MOUNTING HOLES: 7/16" DIA., 4 HOLES SPACED AS SHOWN.

A	4 1/2"
B	5 3/4"
C	12 1/2"
D	7 3/4"
E	6 1/2"
F	4 1/2"
G	6 1/2"
H	6"
I	12 3/4"
J	12"
K	45°
L	55°
M	3/4"
N1	2"
N2	6 1/2"

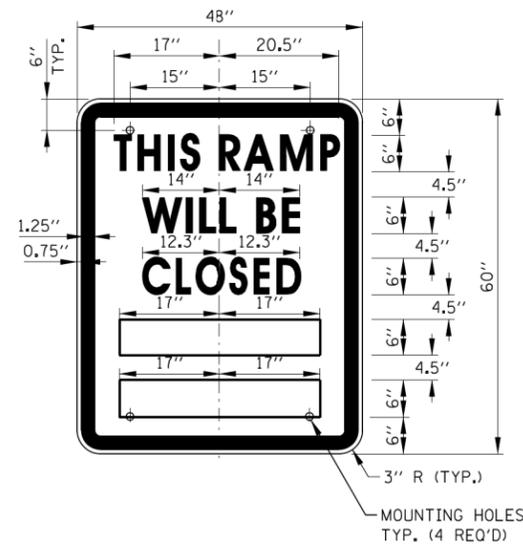


COLOR: BACKGROUND - FLUORESCENT ORANGE (O)
 BORDER AND LETTERS - BLACK
 SIZE: 24"x18"
 LETTERING: 4" FEDERAL SERIES D
 MOUNTING HOLES: 7/16" DIA., 2 HOLES SPACED AS SHOWN



SIGN TS-3

COLOR: BACKGROUND - WHITE (REFLECTORIZED) (*A)
 BORDER AND LETTERS - BLACK
 SIZE: 48"x60"
 LETTERING: LEGEND - 8" FEDERAL SERIES D
 MOUNTING HOLES: 7/16" DIA., 4 HOLES, SPACED AS SHOWN

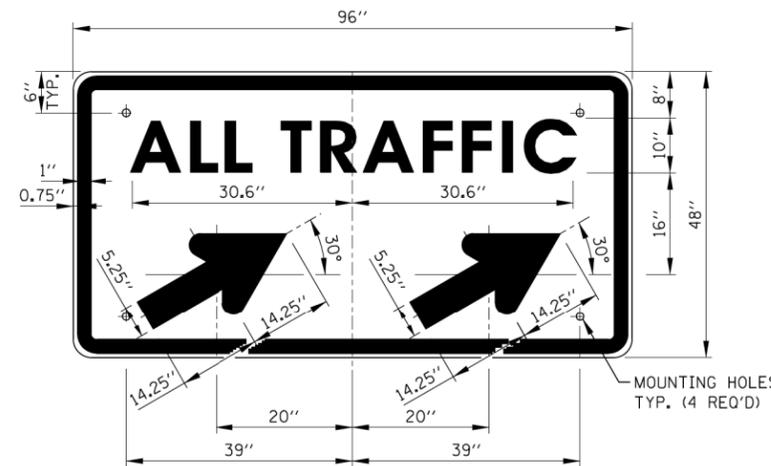


SIGN TS-4

COLOR: BACKGROUND - WHITE (REFLECTORIZED) (*A)
 BORDER AND LETTERS - BLACK
 SIZE: 48"x60"
 LETTERING: LEGEND - 6" FEDERAL SERIES C
 MOUNTING HOLES: 7/16" DIA., 4 HOLES, SPACED AS SHOWN

RAMP CLOSURE ADVANCE INFORMATION SIGN

THE VARIABLE MESSAGE WITH DATES FOR THE BOTTOM TWO LINES SHALL BE DETERMINED BY THE ENGINEER AND GIVEN TO THE CONTRACTOR BEFORE THE REQUIRED FIELD ERECTION DATE.



SIGN TS-5a & TS-5b

COLOR: BACKGROUND - WHITE (REFLECTORIZED) (*A)
 BORDER AND LETTERS - BLACK
 ARROW - BLACK
 SIZE: 96"x48"
 LETTERING: 10" FEDERAL SERIES D
 MOUNTING HOLES: 7/16" DIA., 4 HOLES, SPACED AS SHOWN
 NOTE: SIGN TS-5a IS SHOWN, SUBSTITUTE LEGEND "▲" FOR "▲" FOR SIGN TS-5b

NOTES:

- ALL LETTERING IS DESIGNATED BY SIZE AND SERIES IN ACCORDANCE WITH THE LATEST EDITION OF "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AS PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION. LETTERING SPACING SHALL BE IN ACCORDANCE WITH THIS GUIDE EXCEPT WHERE NOTED.
- SYMBOLS AND ARROWS SHALL CONFORM TO THE DETAILS SHOWN IN THE LATEST EDITION OF "STANDARD HIGHWAY SIGNS" AS PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION.
- SEE THE CONTRACT REQUIREMENTS FOR ADDITIONAL NOTES AND SPECIFICATIONS.
 (O) FLUORESCENT ORANGE REFLECTIVE SHEETING PER THE STANDARD SPECIFICATIONS.
 (*A) - REFLECTIVE SHEETING PER THE STANDARD SPECIFICATIONS.
- DIMENSIONS INDICATED THUS L ARE BASED ON A REDUCTION IN STANDARD LETTERING SPACING AS SHOWN BELOW:
 L1 SPACING REDUCED BY 25%
 L2 SPACING REDUCED BY 40%
 L3 SPACING REDUCED BY 50%

SHEET 1 OF 2

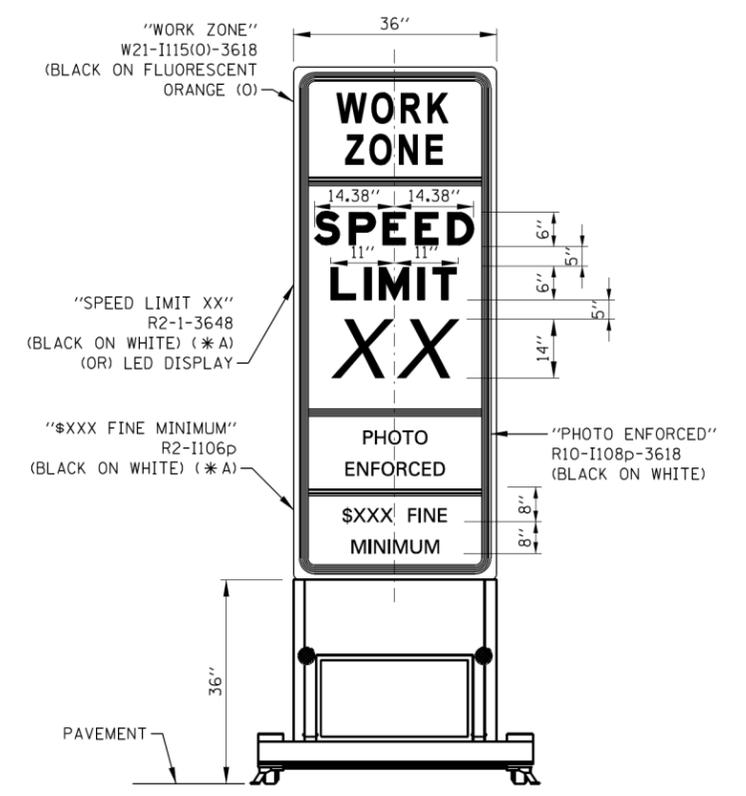
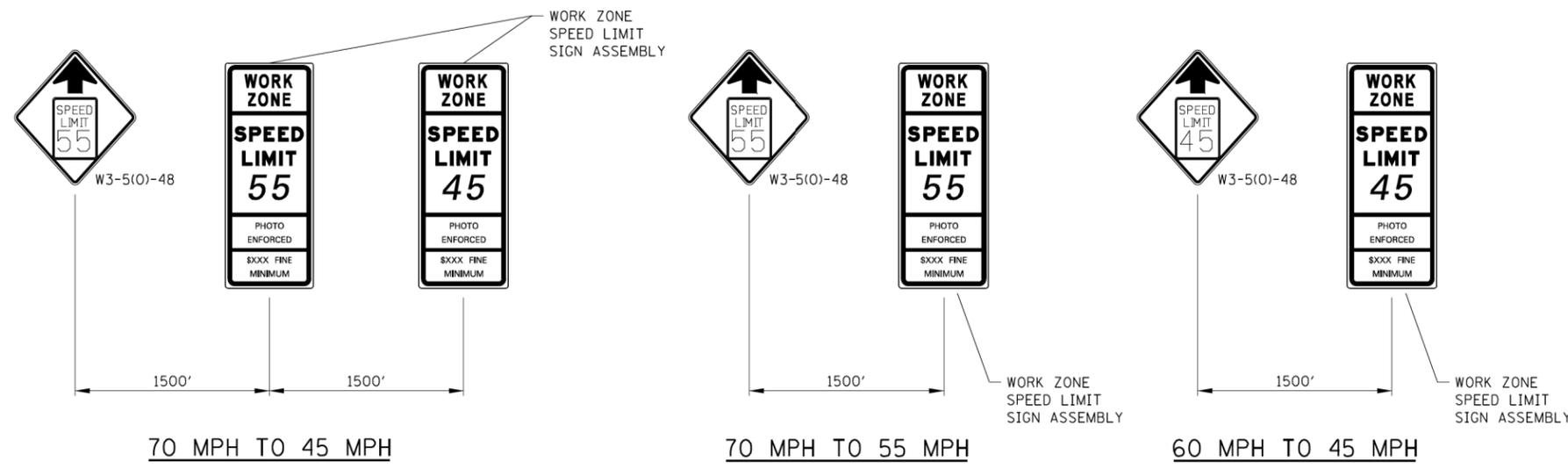
APPROVED: *Paul Kovacs* DATE: 5-1-2009
 CHIEF ENGINEERING OFFICER

DATE	REVISIONS
11-01-12	DELETED SIGN TS-1
03-31-14	REVISED FINE SIGN NUMBER AND ADDED LED SPEED LIMIT DISPLAY
3-11-2015	REVISED NOTES
3-31-2017	REVISED END WZSL SIGN COLOR
3-01-2019	REMOVED STANDARD IDOT SIGNS, REVISED WZSL ASSEMBLY, ADDED WZSL TRANSITION

Illinois Tollway

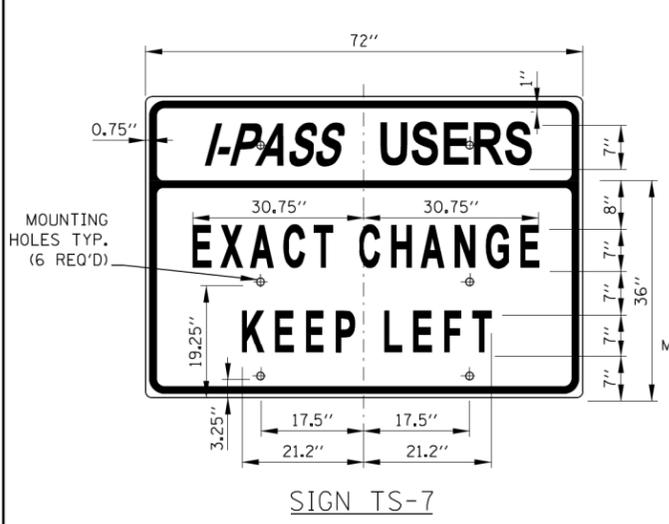
CONSTRUCTION SIGNS

STANDARD E1-07

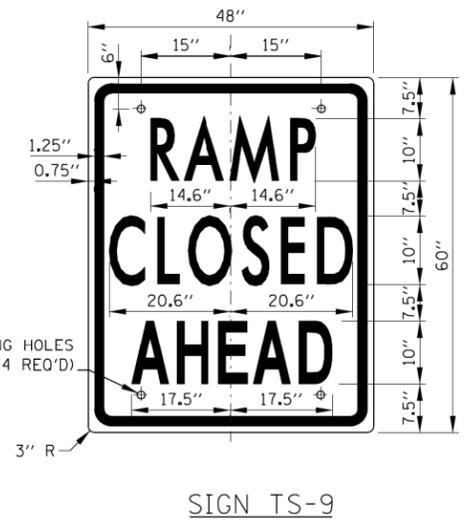


WORK ZONE SPEED LIMIT TRANSITION SIGNAGE

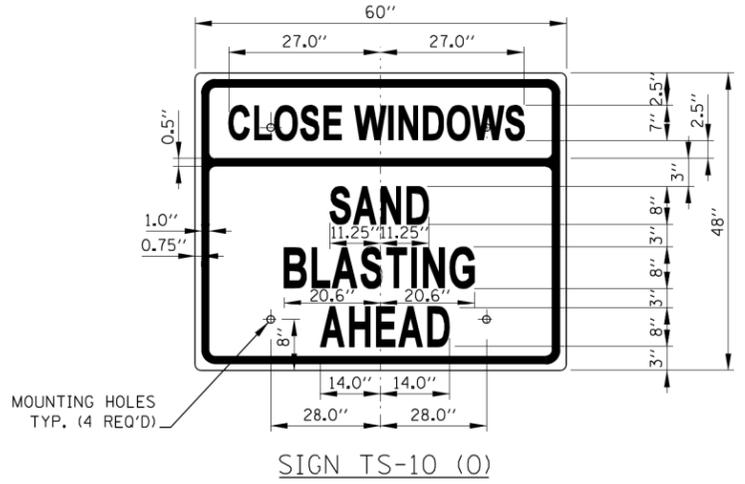
WORK ZONE SPEED LIMIT SIGN ASSEMBLY



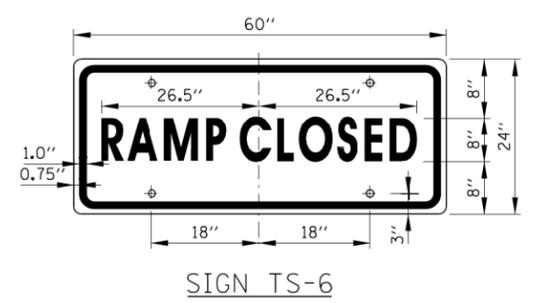
SIGN TS-7
 COLOR: BACKGROUND - WHITE (REFLECTORIZED) (*A)
 BORDER AND LETTERS - BLACK
 SIZE: 72"x36"
 LETTERING: 7" FEDERAL SERIES C
 MOUNTING HOLES: 1/16" DIA., 4 HOLES SPACED AS SHOWN



SIGN TS-9
 COLOR: BACKGROUND - WHITE (REFLECTORIZED) (*A)
 BORDER AND LETTERS - BLACK
 SIZE: 48"x60"
 LETTERING: 10" FEDERAL SERIES C
 MOUNTING HOLES: 1/16" DIA., 4 HOLES SPACED AS SHOWN



SIGN TS-10 (O)
 COLOR: BACKGROUND - FLUORESCENT ORANGE (O)
 BORDER AND LETTERS - BLACK
 SIZE: 60"x48"
 LETTERING: 8" FEDERAL SERIES C, 7" FEDERAL SERIES B
 MOUNTING HOLES: 1/16" DIA., 4 HOLES SPACED AS SHOWN



SIGN TS-6
 COLOR: BACKGROUND - WHITE (REFLECTORIZED) (*A)
 BORDER AND LETTERS - BLACK
 SIZE: 60"x24"
 LETTERING: 8" FEDERAL SERIES C
 MOUNTING HOLES: 1/16" DIA., 4 HOLES SPACED AS SHOWN



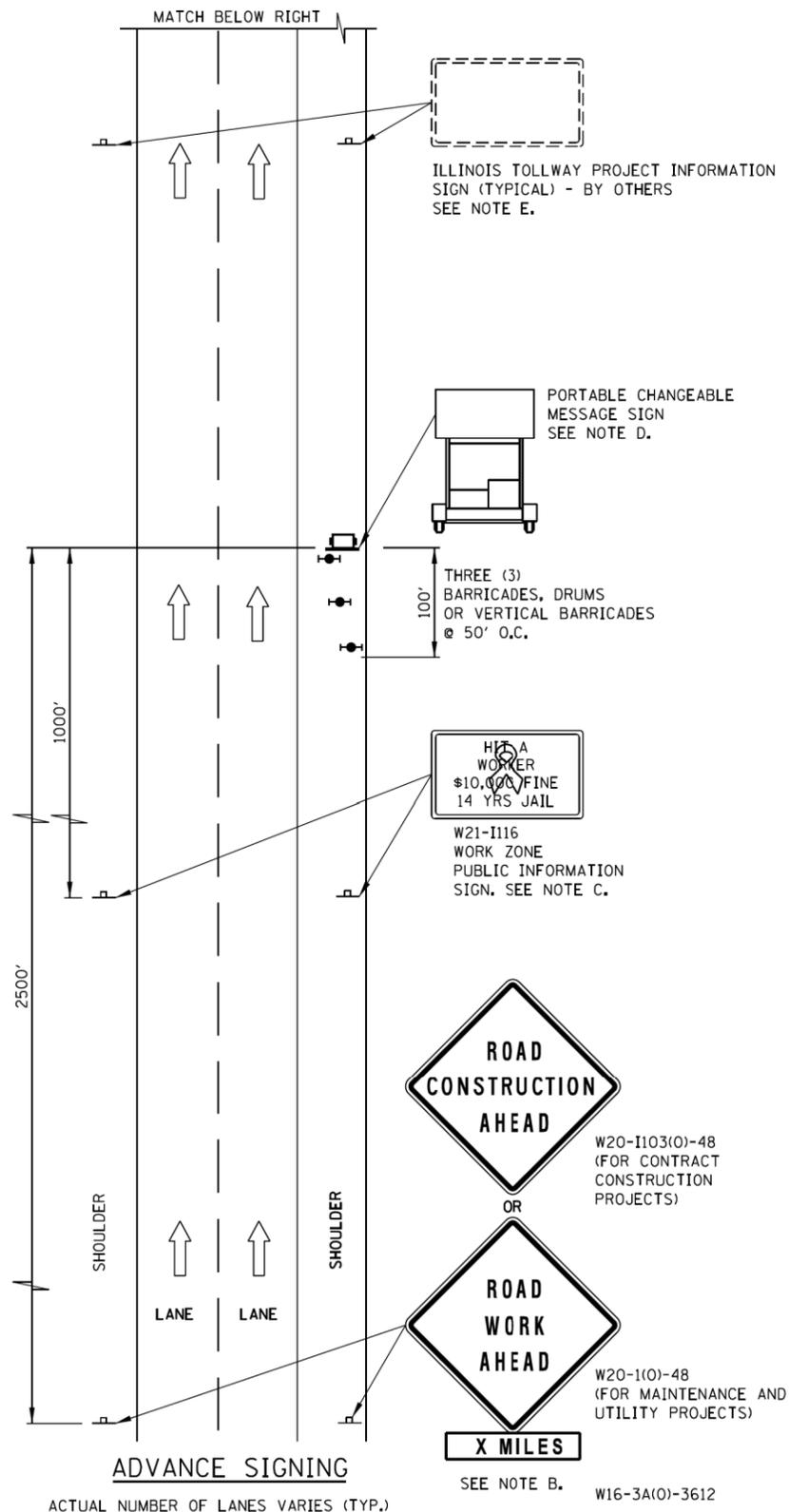
CONSTRUCTION SIGNS

STANDARD E1-07

NOTE:
SEE SHEET 1 OF THIS SERIES FOR NOTES.

Paul Kovacs
 APPROVED, CHIEF ENGINEERING OFFICER DATE 5-1-2009

DUPAGE COUNTY DIVISION OF TRANSPORTATION 421 COUNTY FARM ROAD WHEATON, IL	DESIGNED - AS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOLLWAY DETAILS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	DRAWN - RR	REVISED -			345A	14-00245-05-LS	COOK/DUPAGE	37	32	
	CHECKED - EN	REVISED -			CONTRACT NO. 61E69					
	DATE - 6/10/2019	REVISED -			ILLINOIS FED. AID PROJECT					



ADVANCE SIGNING NOTES:

- A. THE ADVANCE SIGNING SHOWN ON THIS STANDARD SHALL APPLY ANY TIME THE CONTRACTOR CLOSES ONE OR MORE LANES, OR IS REQUIRED TO SHIFT THE LANE ALIGNMENT. THE "ROAD WORK AHEAD" OR "ROAD CONSTRUCTION AHEAD" SIGNS, WORK ZONE PUBLIC INFORMATION SIGNS AND PORTABLE CHANGEABLE MESSAGE ARE STATIONARY.
- B. THE ROAD CONSTRUCTION AHEAD SIGN (W20-1A, WITH W16-3a SUPPLEMENTAL PLATE) OR ROAD WORK AHEAD SIGN (W20-1, WITH W16-3A SUPPLEMENTAL PLATE) SHALL BE LOCATED UP TO 5 MILES IN ADVANCE OF THE PROJECT LIMITS, WITH THE LOCATION BEING DETERMINED BY THE ENGINEER.
- C. THE WORK ZONE PUBLIC INFORMATION SIGN IS 60" WIDE BY 48" HIGH. THE CONTRACTOR SHALL OBTAIN THE CAMERA-READY ARTWORK REQUIRED FOR THE SIGN MESSAGE BY CONTACTING IDOT'S CENTRAL BUREAU OF OPERATIONS.
- D. THE PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE USED TO DISPLAY THE STATUS OF LANE WITHIN THE CONTRACT LIMITS. THE PRIMARY MESSAGES SHALL BE: "RIGHT LANE(S) CLOSED" / "X MILES AHEAD", "LEFT LANE(S) CLOSED" / "X MILES AHEAD", "LANE(S) SHIFT" / "X MILES AHEAD", "ALL LANES OPEN". THE PORTABLE CHANGEABLE MESSAGE SIGN MAY BE MOVED TO THE MEDIAN SHOULDER WHEN THE LANE CLOSURES ARE ON THE LEFT, PROVIDED THE EXISTING SHOULDER WIDTH IS ADEQUATE.
- E. THE ILLINOIS TOLLWAY WILL FURNISH AND INSTALL STATIC PROJECT INFORMATION SIGNS IN ADVANCE, THROUGH AND AT THE END OF THE WORK ZONE. THESE SIGNS WILL BE INSTALLED ALONG THE OUTSIDE SHOULDER WITH THE ADVANCE SIGNS LOCATED BEYOND THE PORTABLE CHANGEABLE MESSAGE SIGN. THE ENGINEER AND CONTRACTOR SHALL COORDINATE WITH THE ILLINOIS TOLLWAY REGARDING THE LOCATION OF THESE SIGNS AND NOTIFY THE ILLINOIS TOLLWAY OF ANY DAMAGE TO THE SIGNS OR SUPPORTS.

LEGEND

- ➔ ARROW BOARD
- ▨ WORK AREA
- ┆ SIGN
- ⬆️ DIRECTION INDICATOR BARRICADE WITH SEQUENTIAL FLASHING WARNING LIGHT
- ⬆️ TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- FLAGGER WITH TRAFFIC CONTROL SIGN
- ⚧ WORKER
- ✕ LANE CLOSED
- 🚧 CHECK BARRICADE
- 🚚 TRUCK MOUNTED ATTENUATOR

SHEET 1 OF 3



LANE CLOSURE DETAILS

STANDARD E2-08

DATE	REVISIONS
3-31-2016	ADDED LANE CLOSURE WITH BARRIER AND ADDED SEQUENTIAL FLASHING WARNING LIGHT.
3-31-2017	ADDED TAPER RATE TABLE
3-01-2019	RE-ARRANGED DETAILS, REVISED NOTE 17, ADDED NOTES 18 & 19, ADDED TMA

Paul Kovacs
 APPROVED... CHIEF ENGINEERING OFFICER DATE 5-1-2009

DUPAGE COUNTY
 DIVISION OF TRANSPORTATION
 421 COUNTY FARM ROAD
 WHEATON, IL

DESIGNED - AS
 DRAWN - RR
 CHECKED - EN
 DATE - 6/10/2019

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

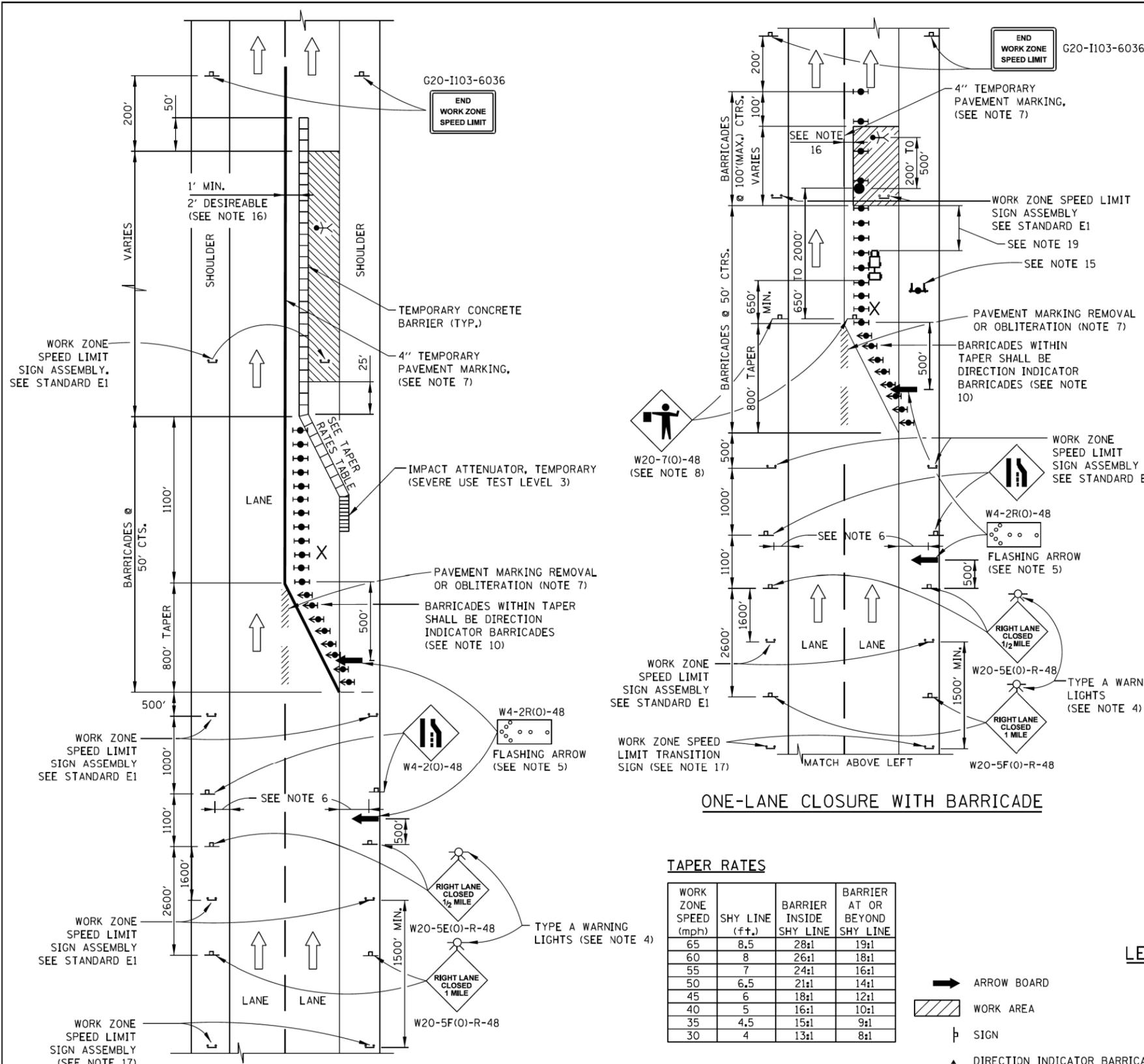
TOLLWAY DETAILS

SCALE: NTS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	33
CONTRACT NO. 61E69				
ILLINOIS FED. AID PROJECT				

LANE CLOSURE NOTES:

- IF CLOSURES ARE EXPECTED TO PRODUCE TRAFFIC BACKUPS EXTENDING BEYOND THE FIRST WARNING SIGN SHOWN ON THE DETAILS, ADDITIONAL UPSTREAM SIGNS SHALL BE PLACED SO THAT THE TRAFFIC CONTROL ZONE ENCOMPASSES THE ANTICIPATED BACKUP ZONE.
- LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.
- THESE DETAILS ALSO APPLY TO OPPOSITE HAND LANE CLOSURES BY CHANGING SIGN LEGENDS AND ARROW DIRECTIONS TO INDICATE THE APPROPRIATE CLOSURE.
- FOR NIGHT TIME CLOSURES, ONE TYPE A WARNING LIGHT SHALL BE INSTALLED ABOVE EACH OF THE 1 MILE AND 1/2 MILE ADVANCE WARNING SIGNS. FOR DAYLIGHT-ONLY CLOSURES, THE LIGHTS MAY BE OMITTED.
- FOR ANY LANE CLOSURE, FLASHING ARROW BOARDS SHALL BE REQUIRED AND IN OPERATION AT ALL TIMES. THE FLASHING ARROW BOARD IN ADVANCE OF THE TAPER SHALL BE PROTECTED WITH THREE TYPE II BARRICADES AT 50' O.C.
- CONSTRUCTION SIGNS SHALL GENERALLY BE POST-MOUNTED OR ATTACHED TO PORTABLE SUPPORTS AND SHALL BE INSTALLED 8' TO 12' FROM ADJACENT TRAVEL LANE WHEREVER POSSIBLE. IN NO CASE SHALL SIGNS BE LOCATED TO PROVIDE LESS THAN 2' CLEARANCE BETWEEN EDGE OF SIGN AND ADJACENT TRAVEL LANE.
- PAVEMENT MARKING TAPE AND REMOVAL OR OBLITERATION OF EXISTING MARKINGS SHALL BE REQUIRED WHEN THE CLOSURE TIME EXCEEDS FOUR DAYS. THIS WORK SHALL BE MEASURED AND PAID FOR SEPARATELY.
- WHEN A FLAGGER IS NOT ON STATION, THE FLAGGER SIGN SHALL BE PROMPTLY REMOVED, COVERED OR TURNED TO FACE AWAY FROM TRAFFIC. FLAGGER SIGNS SHALL BE MOVED AS NECESSARY TO MAINTAIN THE REQUIRED SPACING BETWEEN THE SIGNS AND THE WORKERS IN EACH SEPARATE WORK ACTIVITY, PER THE ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS.
- WORK ZONE SPEED LIMIT SIGN ASSEMBLIES, SHALL BE PLACED ADJACENT TO THE OPEN TRAFFIC LANE(S). WORK ZONE SPEED SIGNS SHALL BE MOVED AS NECESSARY TO MAINTAIN THE REQUIRED SPACING BETWEEN SIGNS AND THE WORKERS IN EACH SEPARATE WORK ACTIVITY PER THE ILLINOIS TOLLWAY SUPPLEMENTAL SPECIFICATIONS.
- DIRECTION INDICATOR BARRICADES SHALL BE USED IN LANE TAPERS.
- FOR CLOSURES OTHER THAN SHORT TERM (SUNRISE TO ONE HOUR BEFORE SUNSET), THE MINIMUM HEIGHT OF THE SIGN FROM SHOULDER ELEVATION SHALL BE 7'-0".
- CONES MAY BE USED IN LIEU OF BARRICADES IN THE BUFFER AND WORK AREAS, WHEN THE CLOSURE IS FOR MAINTENANCE OPERATIONS.
- BARRICADES ARE TO BE LOCATED AT JOINT LINE WHEN WORK AREA EXTENDS UP TO JOINT UNLESS OTHERWISE SHOWN ON THE PLANS.
- SEE MAINTENANCE OF TRAFFIC DRAWINGS FOR ADDITIONAL SIGNING IN THIS AREA.
- CHECK BARRICADES SHALL BE PLACED IN EACH CLOSED LANE AND SHOULDER AT 1000 FOOT CENTERS.
- A 1'-0" MINIMUM/2'-0" DESIRABLE SHY DISTANCE SHALL BE PROVIDED, MEASURED BETWEEN EDGE OF PAVEMENT LANE MARKING TO THE EDGE OF THE TRAFFIC CONTROL DEVICE.
- SEE STANDARD E1 FOR ADDITIONAL SIGNAGE REQUIRED WHEN WORK ZONE SPEED LIMIT IS REDUCED BY MORE THAN 10 MPH. THE SPEED LIMIT SHALL BE TRANSITIONED TO THE SPECIFIED WORK ZONE SPEED LIMIT 2600 FEET BEFORE THE FIRST W4-2 SIGN.
- WHEN NO POSITIVE PROTECTION IS PROVIDED AND WORKERS OR EQUIPMENT ENCROACH WITHIN 2'-0" OR LESS FROM THE EDGE OF TRAVELED WAY, THE LANE OPEN TO TRAFFIC SHALL BE TEMPORARILY CLOSED OR SHIFTED DURING WORK ACTIVITIES.
- IN WORK ZONES WITH NO POSITIVE PROTECTION, A TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE PROVIDED 100' TO 200' IN ADVANCE OF EACH WORK AREA. WHERE MULTIPLE CREWS ARE PRESENT, A TMA SHALL BE PROVIDED AT EACH WORK AREA.



TAPER RATES

WORK ZONE SPEED (mph)	SHY LINE (ft.)	BARRIER INSIDE SHY LINE	BARRIER AT OR BEYOND SHY LINE
65	8.5	28:1	19:1
60	8	26:1	18:1
55	7	24:1	16:1
50	6.5	21:1	14:1
45	6	18:1	12:1
40	5	16:1	10:1
35	4.5	15:1	9:1
30	4	13:1	8:1

LEGEND

- ARROW BOARD
- ▨ WORK AREA
- ⊥ SIGN
- ⬇ DIRECTION INDICATOR BARRICADE WITH SEQUENTIAL FLASHING WARNING LIGHT
- ⬇ TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- FLAGGER WITH TRAFFIC CONTROL SIGN
- ⊠ WORKER
- ⊗ LANE CLOSED
- ⊠ CHECK BARRICADE
- ⊠ TRUCK MOUNTED ATTENUATOR

APPROVED: *Paul Kovacs* DATE: 5-1-2009
 CHIEF ENGINEERING OFFICER

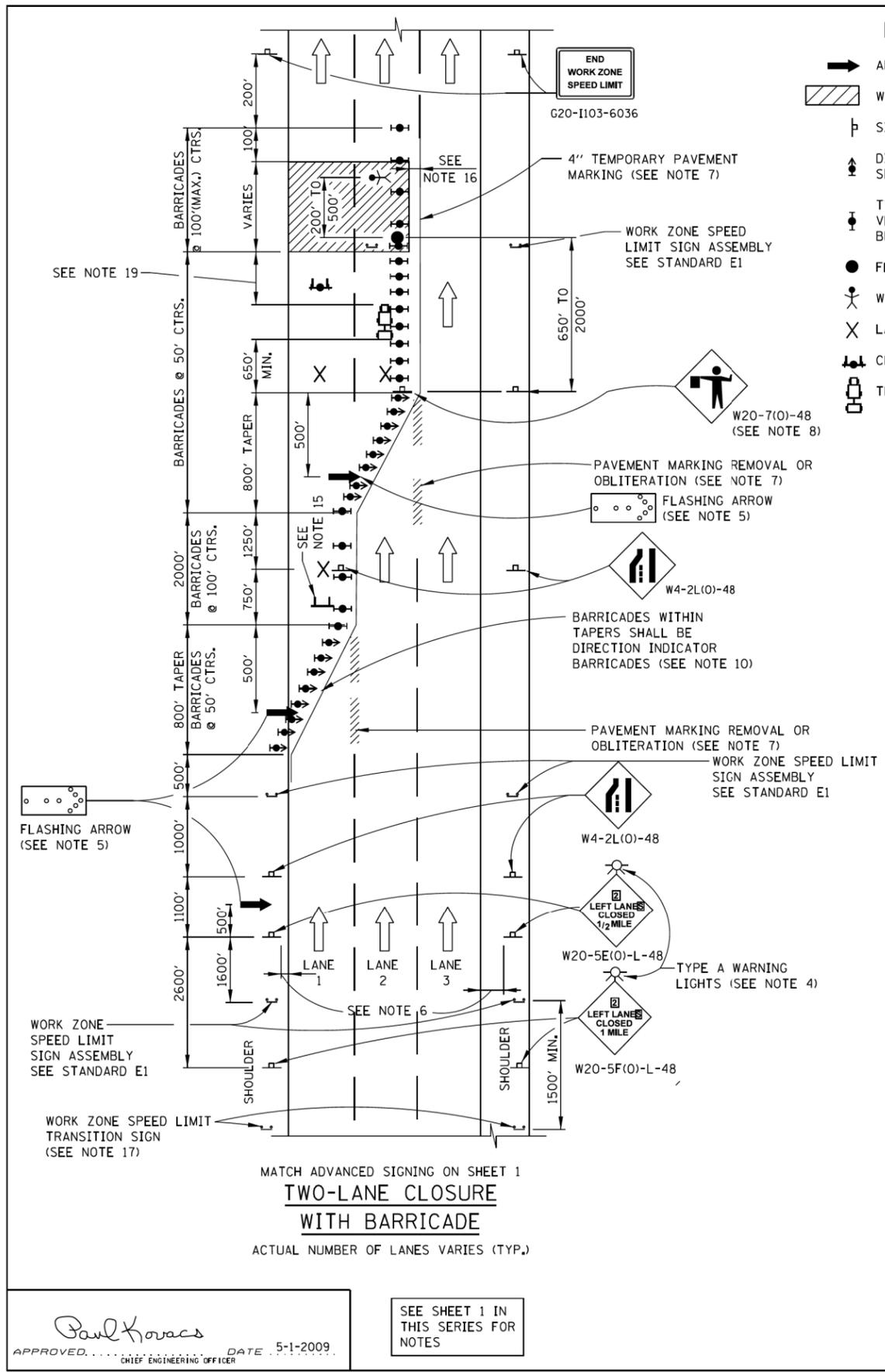
Illinois Tollway

LANE CLOSURE DETAILS

STANDARD E2-08

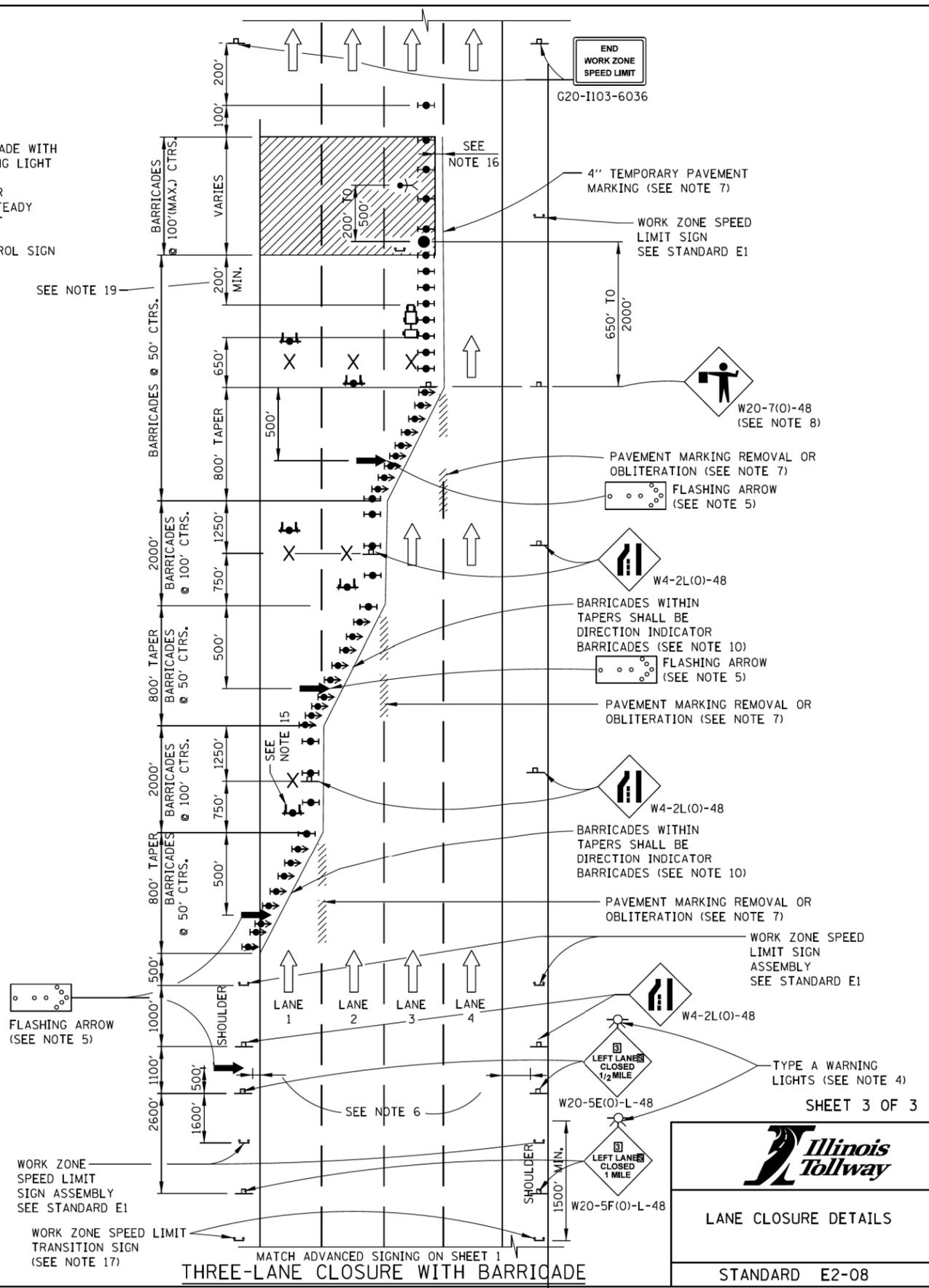
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DRAWN - RR	REVISED -
CHECKED - EN	REVISED -
DATE - 6/10/2019	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	34
CONTRACT NO. 61E69				
ILLINOIS FED. AID PROJECT				



LEGEND

- ➔ ARROW BOARD
- ▨ WORK AREA
- ♣ SIGN
- ⬆ DIRECTION INDICATOR BARRICADE WITH SEQUENTIAL FLASHING WARNING LIGHT
- ⬆ TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- FLAGGER WITH TRAFFIC CONTROL SIGN
- ♣ WORKER
- ✕ LANE CLOSED
- ♣ CHECK BARRICADE
- ♣ TRUCK MOUNTED ATTENUATOR



SHEET 3 OF 3

LANE CLOSURE DETAILS

STANDARD E2-08

Paul Kovacs
APPROVED... CHIEF ENGINEERING OFFICER
DATE: 5-1-2009

SEE SHEET 1 IN THIS SERIES FOR NOTES

DUPAGE COUNTY
DIVISION OF TRANSPORTATION
421 COUNTY FARM ROAD
WHEATON, IL

DESIGNED - AS	REVISED -
DRAWN - RR	REVISED -
CHECKED - EN	REVISED -
DATE - 6/10/2019	REVISED -

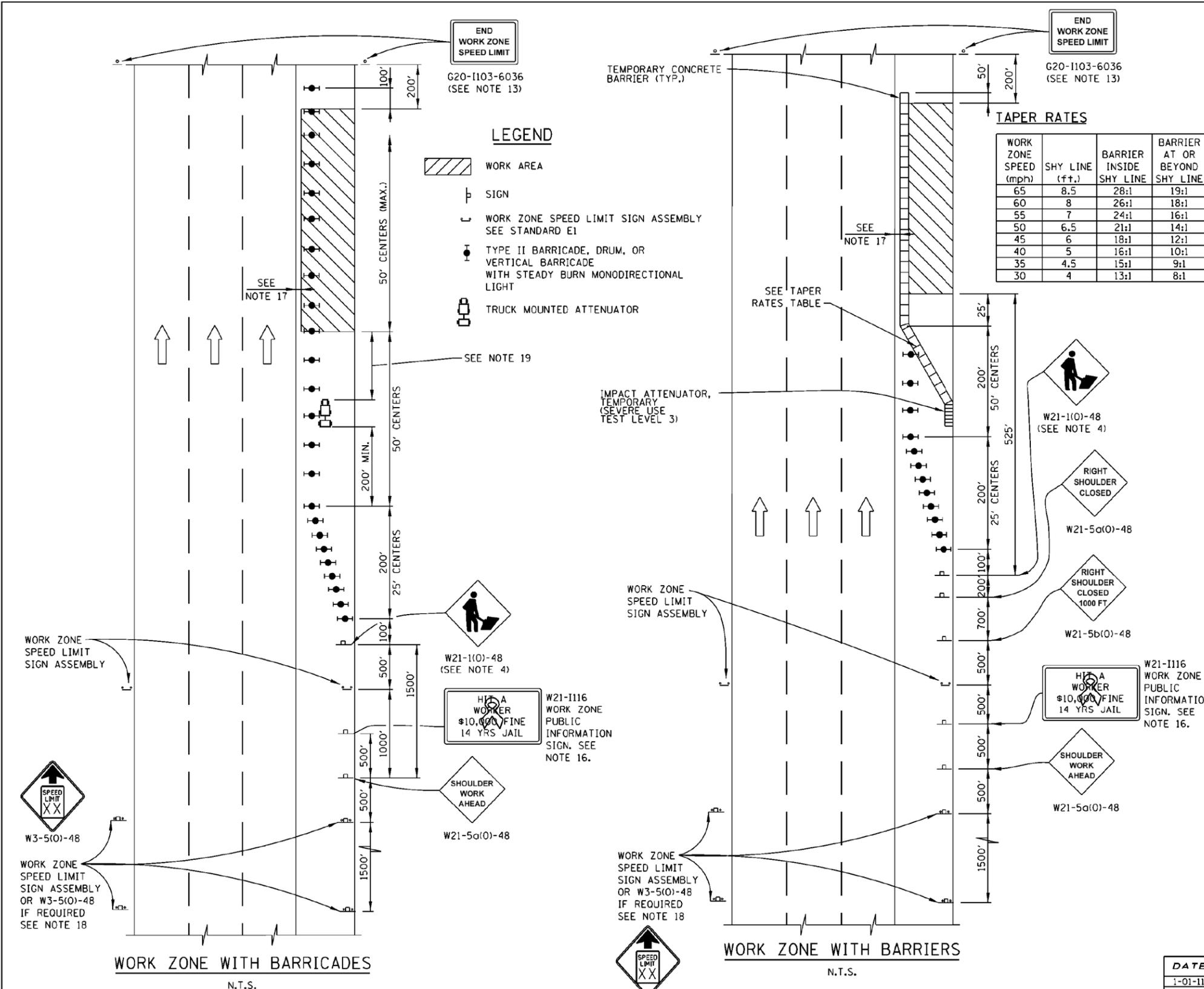
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TOLLWAY DETAILS

SCALE: NTS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	35
CONTRACT NO. 61E69				

ILLINOIS FED. AID PROJECT



TAPER RATES

WORK ZONE SPEED (mph)	SHY LINE (ft.)	BARRIER INSIDE SHY LINE	BARRIER AT OR BEYOND SHY LINE
65	8.5	28:1	19:1
60	8	26:1	18:1
55	7	24:1	16:1
50	6.5	21:1	14:1
45	6	18:1	12:1
40	5	16:1	10:1
35	4.5	15:1	9:1
30	4	13:1	8:1

GENERAL NOTES:

1. THE SHOULDER SHALL BE CLOSED WHEN A WORK ACTIVITY REQUIRING 15 OR MORE MINUTES IS PERFORMED AT A DISTANCE WHICH IS LESS THAN 15 FEET BUT NO CLOSER THAN 2 FEET FROM THE EDGE OF PAVEMENT.
2. THE ADJACENT EXTERIOR LANE SHALL BE CLOSED WHEN WORK IS PERFORMED WITHIN 2 FEET FROM THE EDGE OF PAVEMENT.
3. THE CHANNELIZING DEVICES WHICH SEPARATE THE WORK SPACE FROM THE ADJACENT TRAVEL LANE SHALL BE SPACED AT 25' FOR (200 FEET) AND AT A MAXIMUM OF 50' FOR ALL ADDITIONAL DEVICES.
4. WHEN THE WORKSITE IS UNATTENDED, SUBSTITUTE - "SHOULDER WORK AHEAD" SIGN.
5. WORKER SIGNS OR SHOULDER WORK SIGNS AND CHANNELIZATION DEVICES ARE PLACED ONLY ON THE SIDE OF THE ROADWAY ON WHICH THE ACTIVITY IS PERFORMED.
6. FOR SHOULDER CLOSURE EXTENDING OVERNIGHT, BARRICADE TYPE II WITH STEADY BURNING LIGHT, TYPE C SHALL BE USED.
7. FOR SHORT TERM CLOSURE (SUNRISE TO ONE HOUR BEFORE SUNSET) NOT EXTENDING INTO DARKNESS, CONES MAY BE USED.
8. ONE WORK ZONE SPEED LIMIT SIGN ASSEMBLY SHALL BE PLACED AT A DISTANCE OF 500' TO 2,500' MAXIMUM IN ADVANCE OF WORKERS THROUGHOUT THE SHOULDER CLOSURE. MOVING OPERATIONS MAY REQUIRE CONTINUOUS ADJUSTMENT OF THE SIGN ASSEMBLY LOCATION TO MAINTAIN THE ABOVE INTERVAL.
9. AN ADDITIONAL SIGN ASSEMBLY SHALL BE PLACED 500' BEYOND THE LAST ENTRANCE RAMP FOR EACH INTERCHANGE THAT FALLS WITHIN THE 2,500'.
10. THE SIGN ASSEMBLY SHALL BE PLACED NO CLOSER THAN 500' TO ANY OTHER SIGN.
11. THE WORK ZONE SPEED LIMIT SIGNS AND SIGN ASSEMBLY SHALL BE PROMPTLY REMOVED OR COVERED WHEN SHOULDER CLOSURE IS REMOVED.
12. ALL CONFLICTING SPEED LIMIT SIGNS SHALL BE COVERED OR REMOVED.
13. "END WORK ZONE SPEED LIMIT" SIGNS SHALL BE IN PLACE ONLY WHEN THE EXISTING POSTED SPEED > 55MPH.
14. FOR SHOULDER REPAIRS OR REPLACEMENT THE CHANNELIZING DEVICES SHALL BE PLACED AT THE EDGE OF PAVEMENT WHENEVER THE WORK ACTIVITIES RESULT IN A DROPOFF AT THE EDGE OF PAVEMENT.
15. ANY UNATTENDED OBSTACLE OR EXCAVATION LEFT ON THE SHOULDER OVERNIGHT SHALL BE IN COMPLIANCE WITH THE ROADWAY TRAFFIC CONTROL AND COMMUNICATIONS MANUAL.
16. THE WORK ZONE PUBLIC INFORMATION SIGN IS 60" WIDE BY 48" HIGH. THE CONTRACTOR SHALL OBTAIN THE CAMERA-READY ARTWORK REQUIRED FOR THE SIGN MESSAGE BY CONTACTING IDOT'S CENTRAL BUREAU OF OPERATIONS.
17. A 1'-0" MINIMUM/2'-0" DESIRABLE SHY DISTANCE SHALL BE PROVIDED, MEASURED BETWEEN EDGE OF PAVEMENT LANE MARKING TO THE EDGE OF THE TRAFFIC CONTROL DEVICE.
18. SEE STANDARD E1 FOR ADDITIONAL SIGNAGE REQUIRED WHEN WORK ZONE SPEED LIMIT IS REDUCED BY MORE THAN 10 MPH.
19. IN WORK ZONES WITH NO POSITIVE PROTECTION, A TRUCK MOUNTED ATTENUATOR (TMA) SHALL BE PROVIDED 100' TO 200' IN ADVANCE OF EACH WORK AREA. WHERE MULTIPLE CREWS ARE PRESENT, A TMA SHALL BE PROVIDED AT EACH WORK AREA.

DATE	REVISIONS
1-01-11	CHANGED SYMBOL DESIGNATION
	REVISED NOTES
3-31-14	REVISED WORKER SIGN NUMBERS PER "MUTCD" AND REVISED NOTES.
3-11-2015	REVISED NOTES
3-31-2016	ADD WORK ZONE WITH BARRIERS.
3-31-2017	ADDED TAPER RATE TABLE.
3-01-2019	DELETED W21-1a. ADJUSTED SIGN SPACING, ADDED TMA, REVISED NOTES

Illinois Tollway

SHOULDER CLOSURE DETAILS

STANDARD E3-07

Paul Kovacs
 APPROVED: CHIEF ENGINEERING OFFICER DATE: 5-1-2009

DUPAGE COUNTY
 DIVISION OF TRANSPORTATION
 421 COUNTY FARM ROAD
 WHEATON, IL

DESIGNED - AS	REVISED -
DRAWN - RR	REVISED -
CHECKED - EN	REVISED -
DATE - 6/10/2019	REVISED -

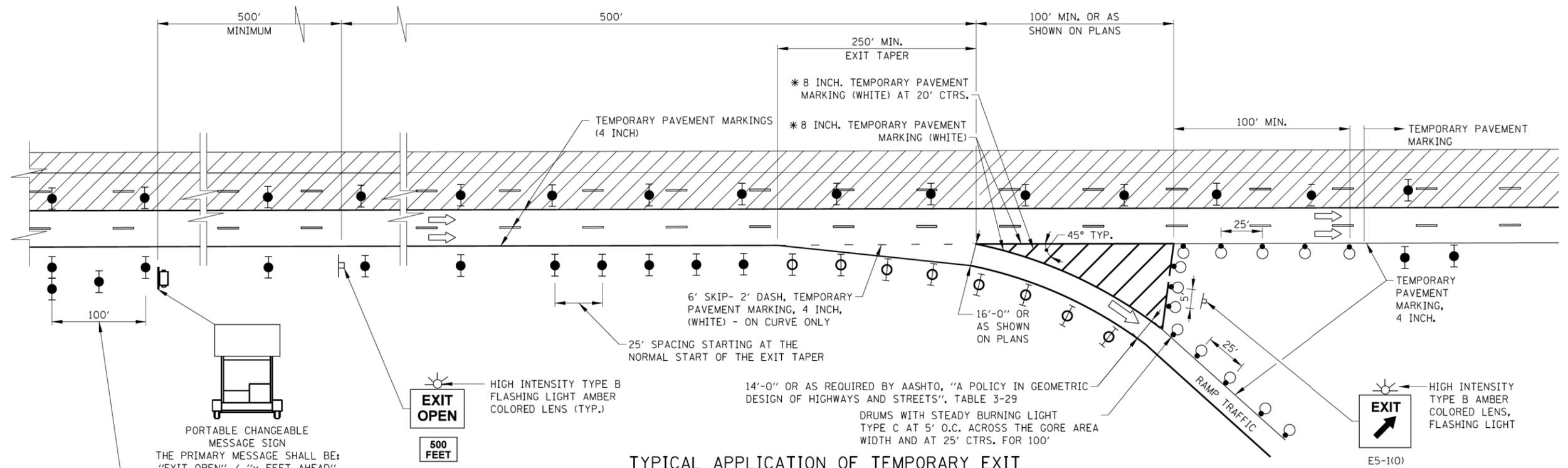
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TOLLWAY DETAILS

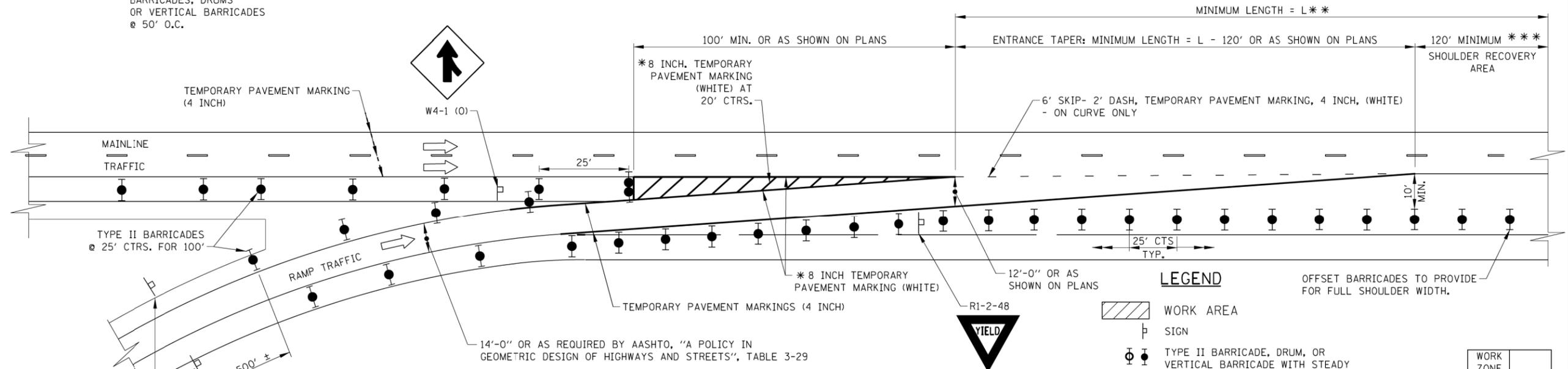
SCALE: NTS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	36
CONTRACT NO. 61E69				

ILLINOIS FED. AID PROJECT



TYPICAL APPLICATION OF TEMPORARY EXIT GORE DELINEATION AND SIGNING



TYPICAL APPLICATION OF TEMPORARY ENTRANCE GORE DELINEATION AND SIGNING

LEGEND

	WORK AREA
	SIGN
	TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT - DIFFERENT TYPE USED IN TAPER THAN ON MAINLINE
	DRUM WITH STEADY BURN LIGHT

- NOTES:**
- * 8 INCH TEMPORARY PAVEMENT MARKING IS TO BE MADE OF 2-TEMPORARY PAVEMENT MARKING 4 INCH, WHITE OF THE TYPE SPECIFIED.
 - ** REFER TO TABLE - TAPER LENGTHS ARE BASED ON 12'-0" RAMP WIDTH AT START OF ENTRANCE TAPER
 - *** WHERE VIABLE WITH STAGED CONSTRUCTION

1. WHEN TEMPORARY PAVEMENT MARKING IS NOT REQUIRED, TEMPORARY GORES MAY BE DELINEATED BY DRUMS WITH STEADY BURN LIGHTS AT 25' C-C ACCORDING TO THE CONFIGURATIONS SHOWN.
2. THE TAPER LENGTHS ARE MINIMUMS. EXISTING ACCELERATION, DECELERATION, AND TAPER LENGTHS SHOULD BE PRESERVED TO THE EXTENT POSSIBLE.

DATE	REVISIONS
2-07-2012	REVISED MERGE SIGN.
3-31-2014	ADDED 45 MPH SPEED TO ENTRANCE TAPER.
3-11-2015	REVISED EXIT/ENTRANCE DETAIL LAYOUTS. REMOVED DETAILS NOT NEEDED.
3-31-2016	REVISED ENTRANCE GORE DETAIL.
3-31-2017	REVISED EXIT GORE DRUM LAYOUT
3-01-2018	REVISED DIMENSIONS FOR ENTRANCE TAPER.
3-01-2019	REVISED EXIT BARRICADES, ADDED EXIT OPEN 1000 FT SIGN

TEMPORARY GORE DETAILS

STANDARD E5-08

Paul Kovacs
 APPROVED... CHIEF ENGINEERING OFFICER DATE: 5-1-2009

DUPAGE COUNTY
 DIVISION OF TRANSPORTATION
 421 COUNTY FARM ROAD
 WHEATON, IL

DESIGNED - AS	REVISED -
DRAWN - RR	REVISED -
CHECKED - EN	REVISED -
DATE - 6/10/2019	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TOLLWAY DETAILS

SCALE: NTS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345A	14-00245-05-LS	COOK/DUPAGE	37	37
CONTRACT NO. 61E69				

ILLINOIS FED. AID PROJECT