STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

Petition for authorization to construct an elevated public pedestrian bridge over Metra Electric and Canadian National Railroad (formerly Illinois Central Railroad) from the intersection of East 41st Street and Lake Park Avenue to the City's lake front in the City of Chicago, County of Cook and State of Illinois.	)	No. _____

Verified Petition

The City of Chicago ("City"), an Illinois municipal corporation, by its attorney Stephen R. Patton, Corporation Counsel, hereby petitions the Illinois Commerce Commission ("Commission") for authority to construct an elevated public pedestrian bridge from the intersection of East 41st Street and Lake Park Avenue to the Lake Michigan lakefront ("41st Street Pedestrian Bridge") in the City of Chicago, County of Cook, State of Illinois, which will be located over tracks of the Commuter Rail Division of the Regional Transportation Authority ("Metra") and Canadian National Railway Company's Illinois Central Railroad ("CN"). In support of the petition, the City states as follows:

1. The Commission has jurisdiction of the subject matter of this petition and of the petitioner pursuant to Chapter 18 of the Illinois Commercial Transportation Law ("ICTL"). 625 ILCS 5/18c-7401(3).
2. City is a unit of local government and municipal corporation organized and existing under the laws of the state of Illinois with its principal offices in Cook County, Illinois.
3. No overhead pedestrian or vehicular structure currently exists at this location.
4. The proposed elevated public pedestrian bridge would be an overhead structure spanning numerous railroad tracks of Metra and CN.

5. The City desires to construct, in order to promote public safety and convenience, the 41st Street Pedestrian Bridge and hereby seeks authorization from the Commission for this construction project. Drawings of the proposed reconstruction plan have been prepared by AECOM, consulting engineers, and are attached as Group Exhibit A.
6. The proposed 41st Street Pedestrian Bridge will be available for use by City residents and visitors and will facilitate access to lakefront recreational and parkland areas.
7. The City has secured funds for this project pursuant to a U.S. Department of Transportation grant under the Transportation Investment Generating Economic Recovery program.
8. The City does not seek at this time any contribution of funds for this construction project from Metra, CN or from the Grade Crossing Protection Fund.
9. The proposed vertical clearances of the 41st Street Pedestrian Bridge from the bottom of its steel tube to top of rail are attached as Exhibit B.
10. The proposed 41st Street Pedestrian Bridge complies with the Commission's vertical clearance requirements of 92 Ill. Adm. Code Section 1500.
11. The City will be obligated to maintain the new structure in conformance with the requirements of ICTL and 92 Ill. Adm. Code Sections 1535.203 and 1535.206, and all other applicable rulings, standards, rules and regulations.
12. The City will pursue a grant of easement as needed for the construction and maintenance of the proposed bridge from Metra and CN.
13. The City expects to begin the construction of the 41st Street Pedestrian Bridge by spring of 2016 and complete the project by spring 2018.

14. The City agrees to accept service by electronic means as provided for in 83 Ill. Adm. Code Section 200.1050.

WHEREFORE, the City of Chicago prays that the Illinois Commerce Commission enter an Order, without hearings, in which it authorizes the construction of the 41st Street Pedestrian Bridge as follows:

A. Finding that the Commission has jurisdiction over the City and the subject matter of this petition;

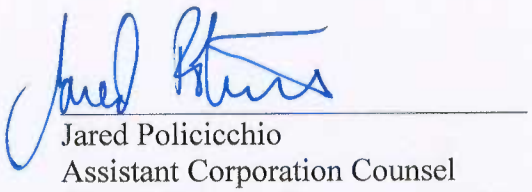
B. Finding that the construction and maintenance of an elevated public pedestrian bridge, in accordance with the plan attached hereto as "Exhibit A", at the intersection of East 41st Street and Lake Park Avenue extending to the Lake Michigan lakefront and crossing over Metra and CN tracks, is necessary to promote and preserve public safety and convenience;

C. Directing CN to assist the City to the extent required to complete installation of the elevated public pedestrian bridge crossing within a reasonable period of time as determined by the Commission;

D. Such other and further relief as the Commission deems appropriate.

Dated: August 25, 2015

Respectfully submitted,
Stephen Patton
Corporation Counsel



Jared Policicchio
Assistant Corporation Counsel
City of Chicago, Department of Law

30 North LaSalle Street
Suite 1400
Chicago, IL 60602
(312) 744-1438
jared.policicchio@cityofchicago.org

STATE OF ILLINOIS)
)
COUNTY OF COOK)

VERIFICATION

I, Jared W. Policicchio, being duly sworn, state that I have read the City of Chicago's Verified Petition for authorization to construct an elevated public pedestrian bridge over Metra Electric and Canadian National Railroad (formerly Illinois Central Railroad) from the intersection of East 41st Street and Lake Park Avenue to the City's lake front in the City of Chicago, County of Cook and State of Illinois, and that the contents therein are true and accurate to the best of my belief and knowledge.

Jared W. Policicchio
Assistant Corporation Counsel
City of Chicago, Department of Law
30 North LaSalle Street
Suite 1400
Chicago, Illinois 60602
(312) 744-1438
jared.policicchio@cityofchicago.org

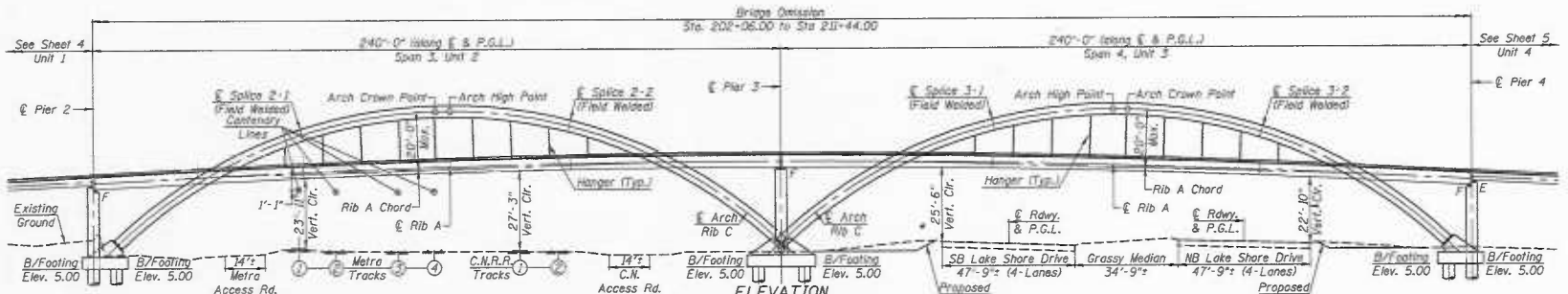
SUBSCRIBED AND SWORN to before me, a Notary Public, on this 25th day of August, 2015.

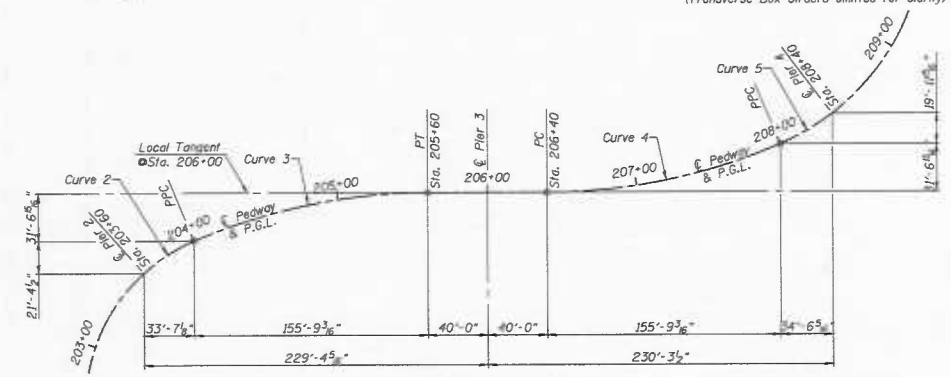
OFFICIAL SEAL
GWENDOLYN A TILLMAN
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:04/03/17

Notary Public

Group Exhibit A

Benchmark: City of Chicago Standard Benchmark 295. Elev. 16.631 Chicago City Datum (CCD). Located at intersection of East 42nd Place and Lake Park Avenue, 12.0' north of south line of East 42nd Place, 4.9' east of east line of Lake Park Avenue. Elevations shown are per CCD Elev. 0.0. CCD equals Elev. 579.88 above sea level at New York 1935 Adjustment.
Existing Structure: None.
Traffic Control: Temporary rail closures on C.N.R.R. and temporary lane closures on L.S.D.
Salvage: None.





CURVE 2 DATA

P.I. Sta. = 203+41.87
Δ = 110° 46' 59" (RT)
D = 47° 44' 47"
R = 120.00'
T = 173.89'
L = 232.02'
E = 91.28'
P.C. Sta. = 201+67.98
P.T. Sta. = 204+00.00

CURVE 3 DATA

P.I. Sta. = 204+81.08
Δ = 22° 55' 06" (RT)
D = 14° 19' 26"
R = 400.00'
T = 81.08'
L = 160.00'
E = 8.14'
P.C. Sta. = 204+00.00
P.T. Sta. = 205+60.00

CURVE 4 DATA

P.I. Sta. = 207+21.08
Δ = 22° 55' 06" (LT)
D = 14° 19' 26"
R = 400.00'
T = 81.08'
L = 160.00'
E = 8.14'
P.C. Sta. = 206+40.00
P.T. Sta. = 208+00.00

CURVE 5 DATA

P.I. Sta. = 209+49.06
Δ = 85° 56' 37" (LT)
D = 35° 48' 36"
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L = 240.00'
E = 58.67'
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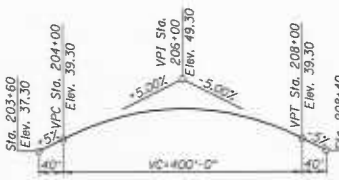
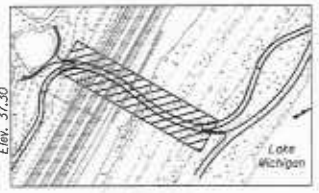
P.T. Sta. = 210+40.00





KEY PLAN

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications
2009 AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges

LOADING H10

Pedestrian Live Load: 100 psf
Vehicular Live Load: H10 (without impact)
No allowance for future wearing surface

DESIGN STRESSES

FIELD UNITS

f'c = 4,000 psi (Concrete)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade HPS 50W or API 5L Grade X52)
fy = 70,000 psi (M270 Grade HPS 70W or API 5L Grade X70)

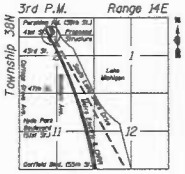
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.087g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.145g
Soil Site Class = D

HIGHWAY CLASSIFICATION

F.A.P. Rte. 341 (U.S. Rte. 41)
South Lake Shore Drive
Functional Class: Principal Urban Arterial
ADT: 97,200 (2009)
ADTT: 0
Design Speed: 45 mph
Posted Speed: 45 mph

LOCATION SKETCH



NO.	BY	DATE	DESCRIPTION

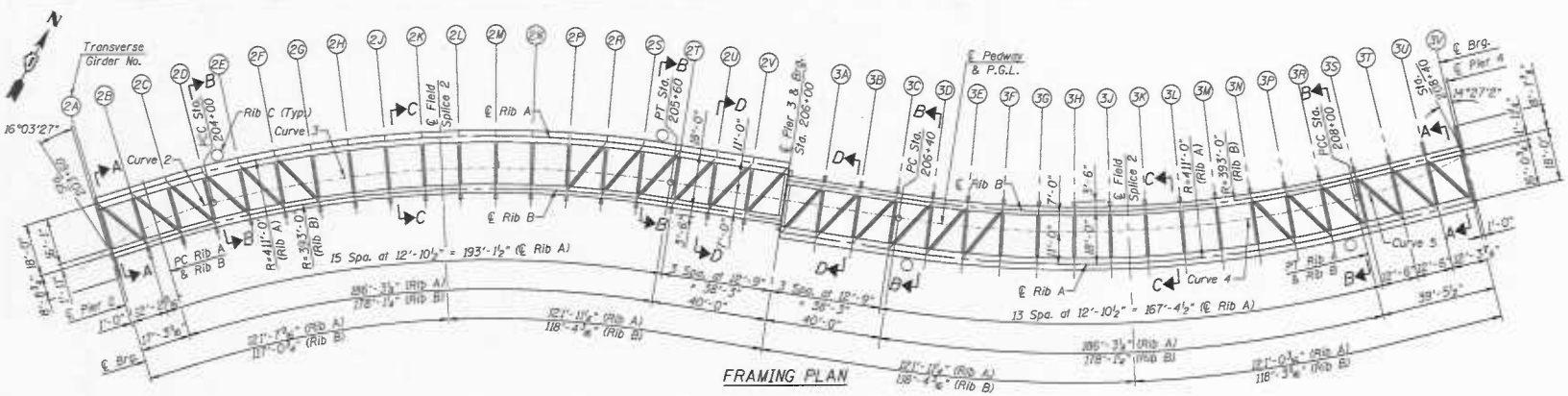
REVISIONS

GENERAL PLAN & ELEVATION (ARCH STRUCTURES)
41st STREET PEDESTRIAN BRIDGE OVER METRA ELECTRIC/C.N. RAILROADS AND SOUTH LAKE SHORE DRIVE
SECTION 05-E5003-00-BR
COOK COUNTY
STATION 206+00.00
STRUCTURE NO. 016-6253

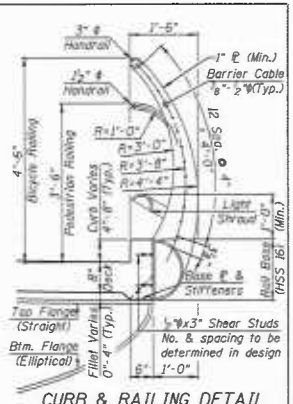
AECOM

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

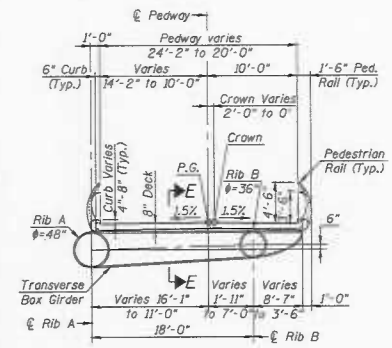
DRAWN	CLS/JKH	SHEET NO.
CHECKED	CLS/JKH	1
APPROVED	MJE	
DATE	FEB 2015	
SCALE	NONE	
CONTRACT NO.	12412	PROJ. NO. CMM-6000(242)



FRAMING PLAN

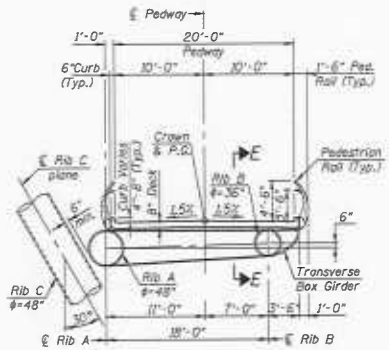


CURB & RAILING DETAIL

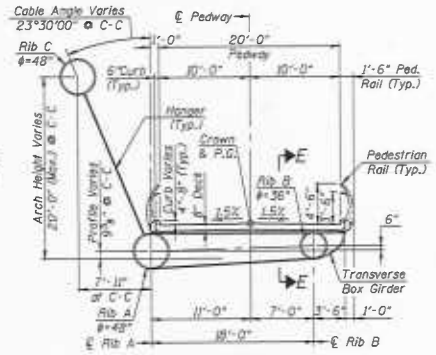


SECTION A-A

(Transverse Box Girders 2A-2D & 3S-3V)

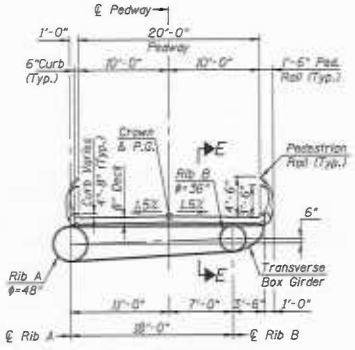


SECTION B-B



SECTION C-C

(Transverse Box Girders 2K & 3K)

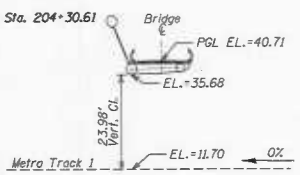


SECTION D-D

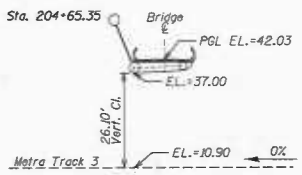
(Transverse Box Girders 2S-2V & 3A-3D)

Notes:

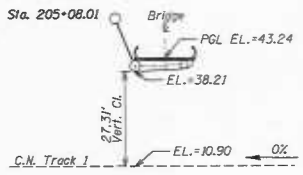
1. Structural steel shall be AASHTO M270 Grade HPS 50W or API 5L Grade X52, unless otherwise noted on the drawings.
2. Steel Piers 3, 4, 6, & 7 and arch ribs below the deck shall be AASHTO M270 Grade HPS 70W or API 5L Grade X70.
3. Rail posts shall be ASTM A36 Grade 36, rail pipes shall be ASTM A500 Grade B, & rail barrier cable shall be ASTM A416 Grade 230, Grade 250, or Grade 270.
4. Structural & rail steel shall be painted, except the barrier cable which shall be epoxy coated according to ASTM A882 or galvanized according to ASTM A475.
5. Light shrouds on railing posts to provide safety lighting along full length of curbs. Additional accent lighting on arch struts shall be determined during final design.
6. Minimum girder flange & web sizes may increase due to strength requirements during final design. All rib thicknesses shall be determined during final design.



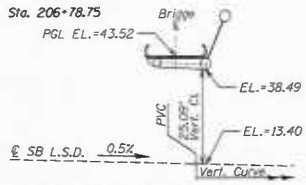
PROFILE GRADE-METRA 1



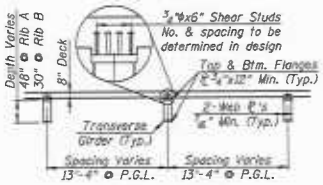
PROFILE GRADE-METRA 3



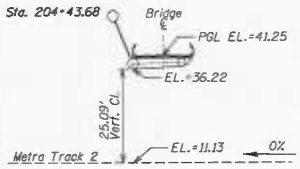
PROFILE GRADE-C.N.R.R. 1



PROFILE GRADE-SB L.S.D.



SECTION E-E



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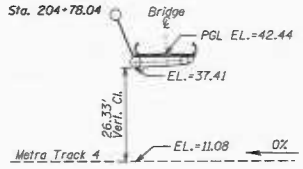

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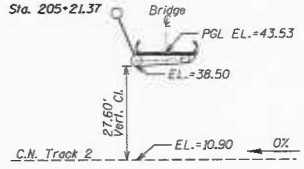

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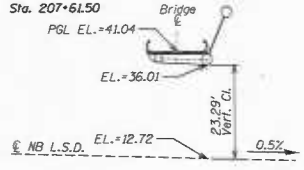
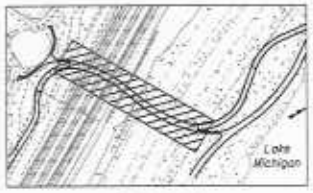


PROFILE GRADE-NB L.S.D.



KEY PLAN

NO.	BY	DATE	DESCRIPTION

REVISIONS

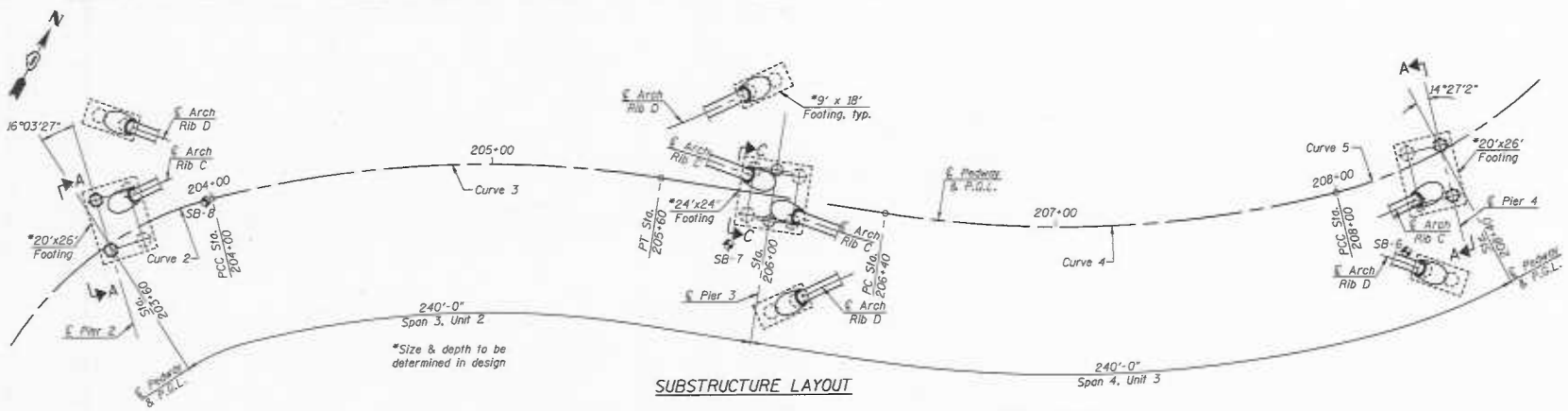
SUPERSTRUCTURE DETAILS
(ARCH STRUCTURES)
41st STREET PEDESTRIAN BRIDGE
OVER METRA ELECTRIC/C.N. RAILROADS
AND SOUTH LAKE SHORE DRIVE
SECTION 05-E5003-00-BR
COOK COUNTY
STATION 206+00.00
STRUCTURE NO. 016-6253

AECOM

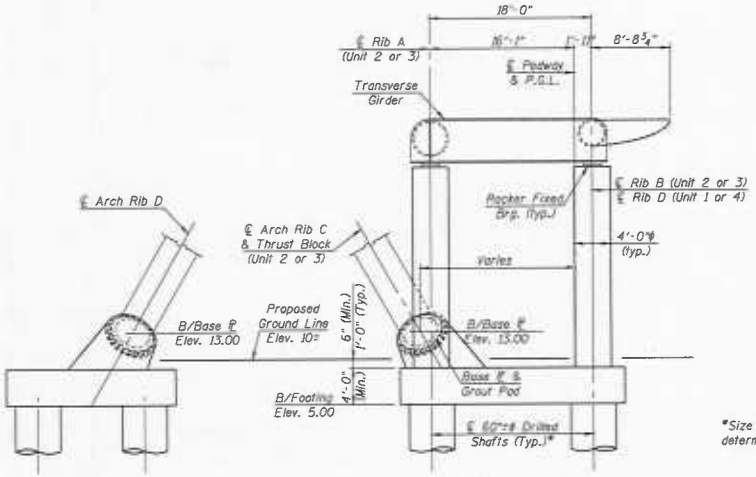
CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

DRAWN	CLS/JXH	SHEET NO.
CHECKED	CLS/JXH	2
APPROVED	MJE	
DATE	FEB 2015	
SCALE	NONE	
CONTRACT NO.	12412	PROJ. NO. CMM-6000(2421)

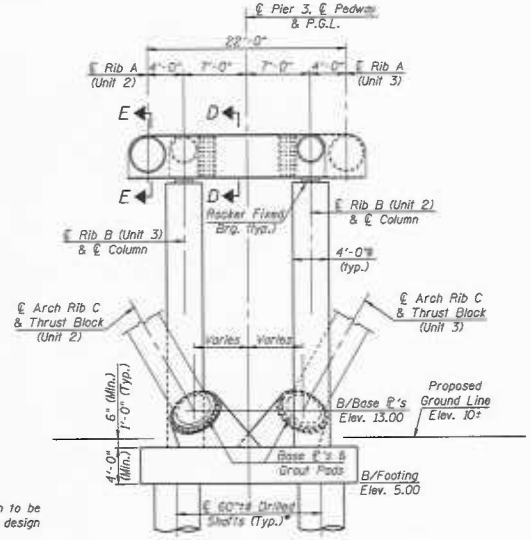
41st_TSBL Sheet2.dgn



SUBSTRUCTURE LAYOUT

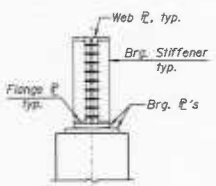


SECTION A-A

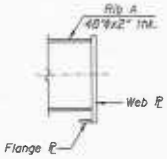


*Size & depth to be determined in design

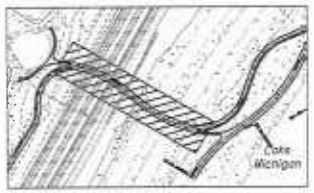
SECTION C-C



SECTION D-D



SECTION E-E



KEY PLAN

Note:
Minimum cap & column dimensions shown may slightly increase due to aesthetic or strength requirements during final design. Size & depth of footings & drilled shafts shall be determined during final design.

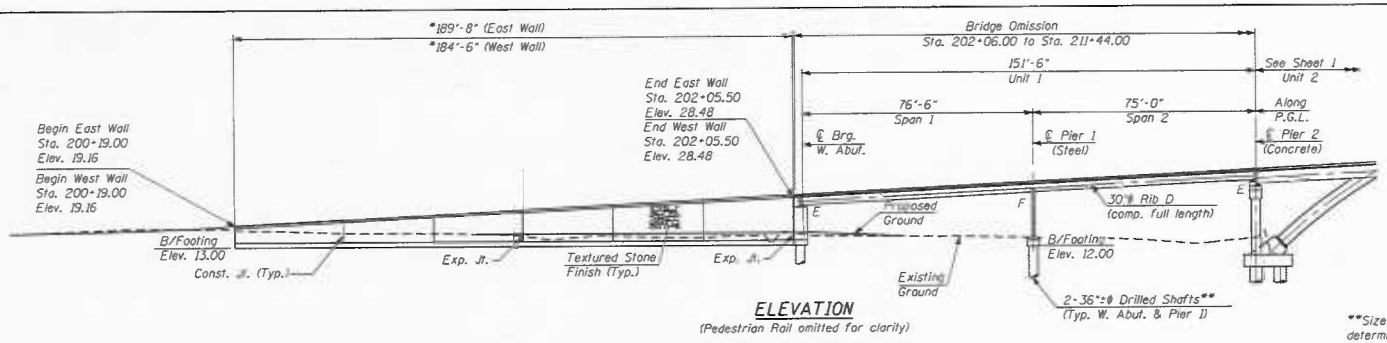
NO.	BY	DATE	DESCRIPTION
			REVISIONS

SUBSTRUCTURE DETAILS (ARCH STRUCTURES)
41st STREET PEDESTRIAN BRIDGE
OVER METRA ELECTRIC/C.N. RAILROADS
AND SOUTH LAKE SHORE DRIVE
SECTION 05-E5003-00-BR
COOK COUNTY
STATION 206+00.00
STRUCTURE NO. 016-6253

AECOM

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

DRAWN	CLS/JXH	SHEET NO.
CHECKED	CLS/JXH	3
APPROVED	MJE	
DATE	FEB 2015	
SCALE	NONE	
CONTRACT NO.	12412	PROJ. NO. CMM-6000(2421)



ELEVATION

(Pedestrian Rail omitted for clarity)

**Size & depth to be determined in design

CURVE 1 DATA

P.I. Sta. = 201+30.11
Δ = 37° 33' 54" (LT)
D = 47° 44' 47"
R = 120.00'
T = 40.81'
L = 78.68'
E = 6.75'
P.C. Sta. = 200+89.30
P.T. Sta. = 201+67.98

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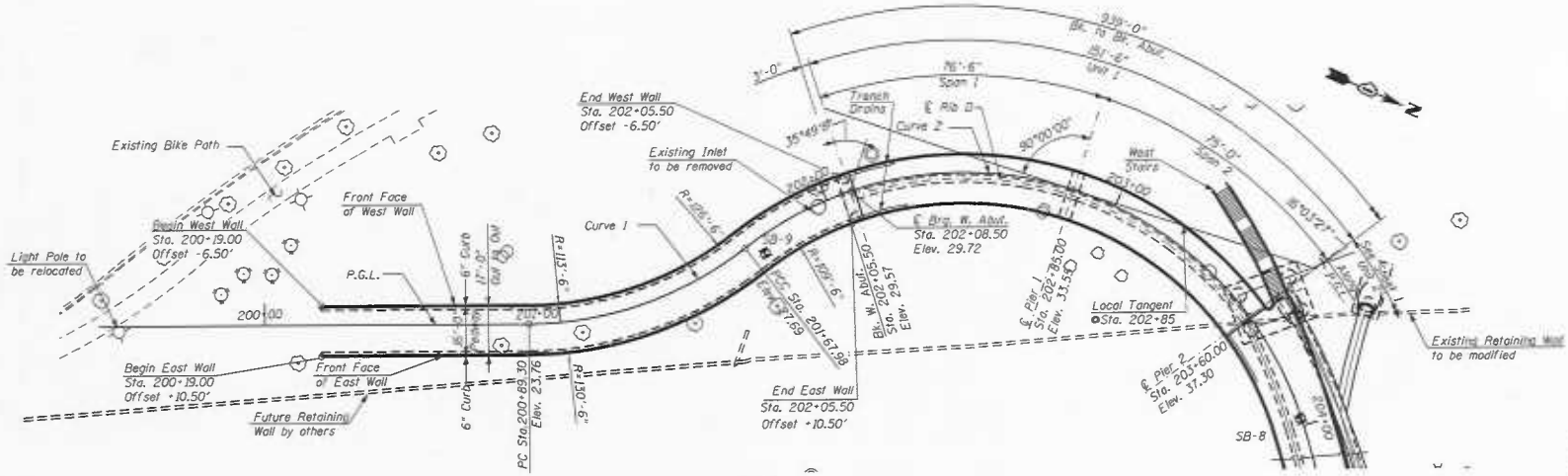
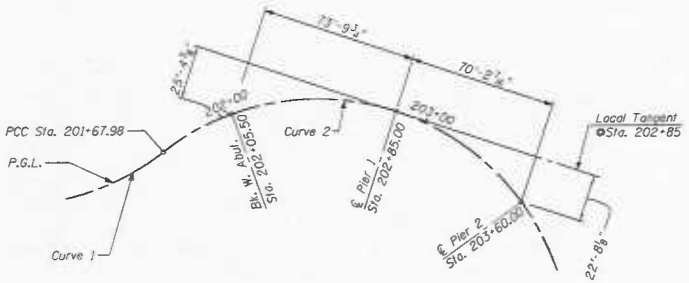
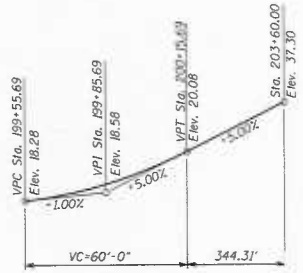


PLAN

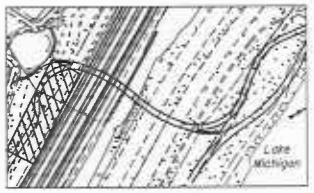
(Transverse Box Girders omitted for clarity)



OFFSET SKETCH



PROFILE GRADE - 41st ST. PEDWAY



KEY PLAN

NO.	BY	DATE	DESCRIPTION

REVISIONS

GENERAL PLAN & ELEVATION
(WEST APPROACH STRUCTURES)
41st STREET PEDESTRIAN BRIDGE
OVER METRA ELECTRIC/C.N. RAILROADS
AND SOUTH LAKE SHORE DRIVE
SECTION 05-E5003-00-BR
COOK COUNTY
STATION 206+00.00
STRUCTURE NO. 016-6253

HBM ENGINEERING GROUP, LLC.
CONSULTING & DESIGN
INSPECTION & RATING
RESEARCH & TESTING
4415 WEST HARRISON ST.
SUITE 231
HILLSIDE, IL 60162
PHONE: (708) 236-0900
FAX: (708) 236-0901

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

DRAWN	TAT	SHEET NO.
CHECKED	DL	4
APPROVED	DL	
DATE	MAR 2015	
SCALE	NONE	
CONTRACT NO.	12412	PROJ. NO. CMM-6000(242)

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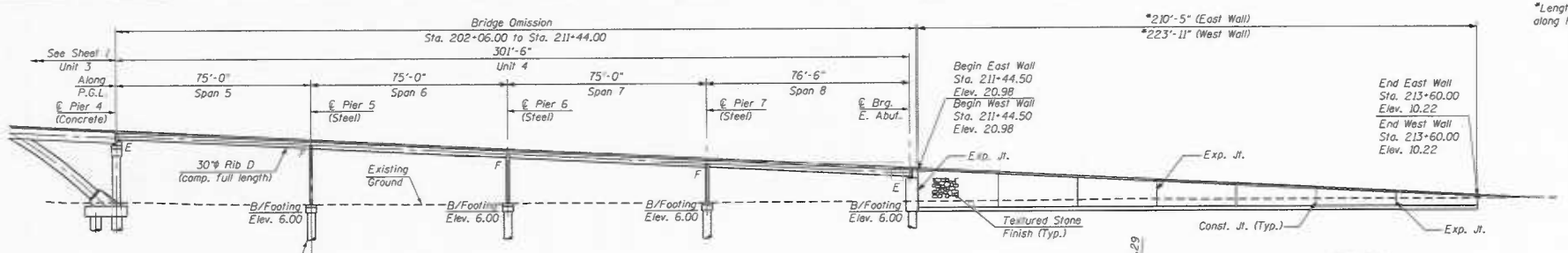
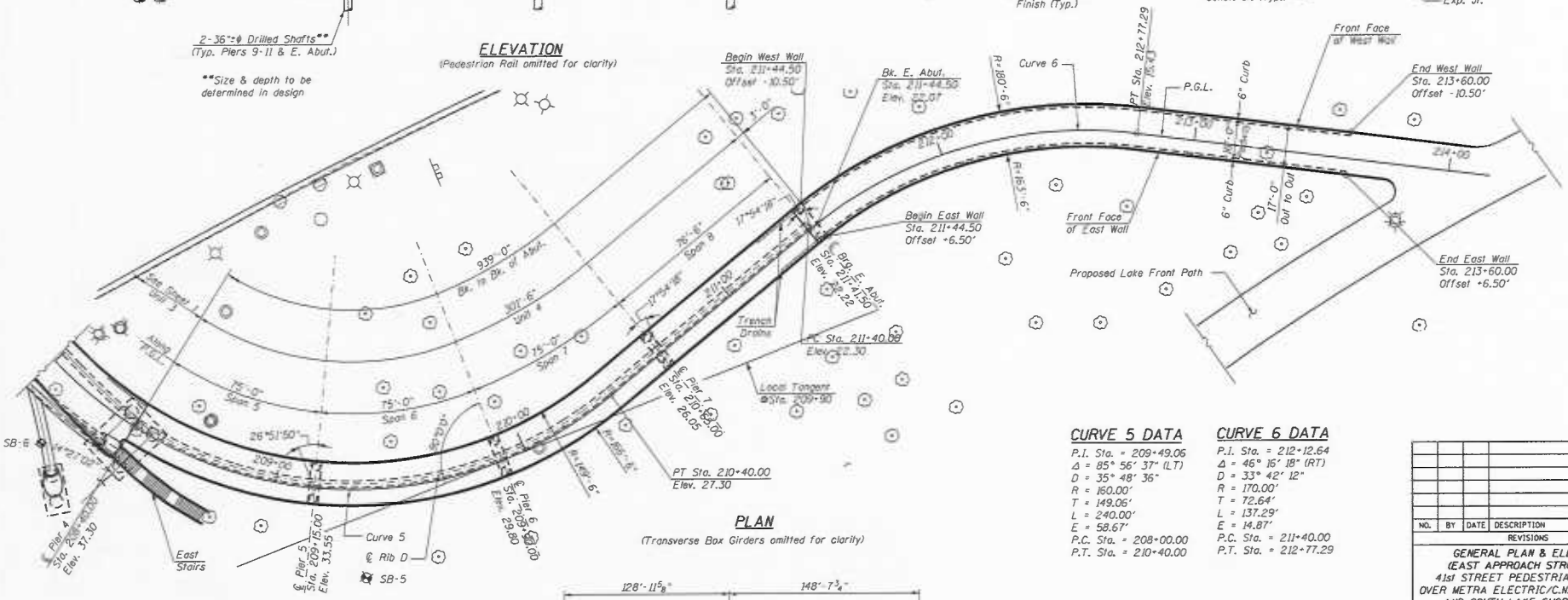


ELEVATION

(Pedestrian Rail omitted for clarity)



PLAN

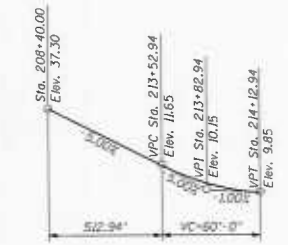
(Transverse Box Girders omitted for clarity)

CURVE 5 DATA

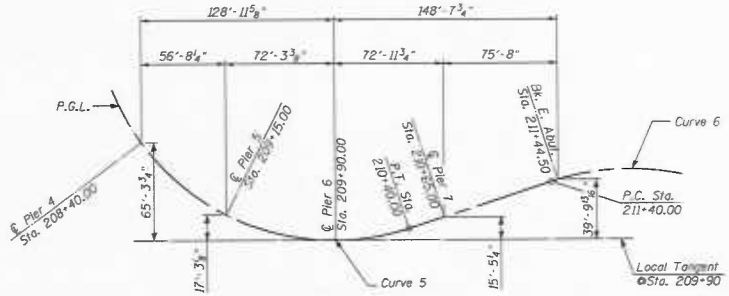
P.I. Sta. = 209+49.06
Δ = 85° 56' 37" (LT)
D = 35° 48' 36"
R = 160.00'
T = 149.06'
L = 240.00'
E = 58.67'
P.C. Sta. = 208+00.00
P.T. Sta. = 210+40.00

CURVE 6 DATA

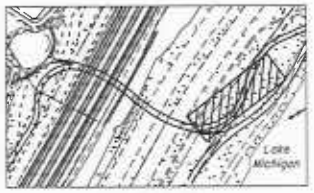
P.I. Sta. = 212+12.64
Δ = 46° 16' 18" (RT)
D = 33° 42' 12"
R = 170.00'
T = 72.64'
L = 137.29'
E = 14.87'
P.C. Sta. = 211+40.00
P.T. Sta. = 212+77.29



PROFILE GRADE-41st ST. PEDWAY



OFFSET SKETCH



KEY PLAN

NO.	BY	DATE	DESCRIPTION

REVISIONS

GENERAL PLAN & ELEVATION
(EAST APPROACH STRUCTURES)
41st STREET PEDESTRIAN BRIDGE
OVER METRA ELECTRIC/C.N. RAILROADS
AND SOUTH LAKE SHORE DRIVE
SECTION 05-E5003-00-BR
COOK COUNTY
STATION 206+00.00
STRUCTURE NO. 016-6253

HBM ENGINEERING GROUP, LLC
CONSULTING & DESIGN
INSPECTION & RATING
RESEARCH & TESTING
4415 WEST HARRISON ST.
SUITE 231
HILLSIDE, IL 60162
PHONE: (708) 236-0900
FAX: (708) 236-0901

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

DRAWN	TAT	SHEET NO.
CHECKED	DL	5
APPROVED	DL	
DATE	MAR 2015	
SCALE	NONE	
CONTRACT NO.	12412	PROJ. NO. CMM-6000(242)

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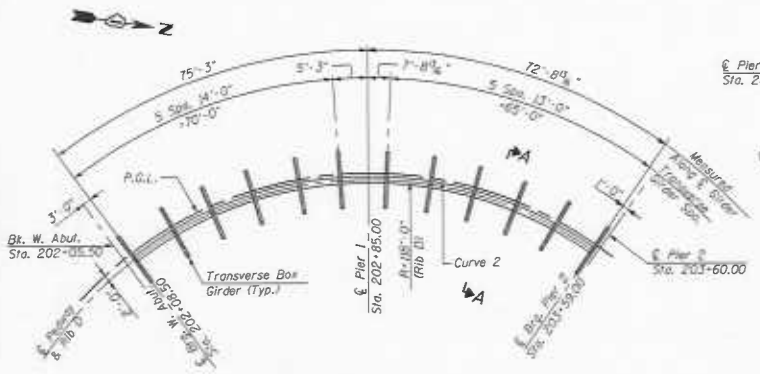
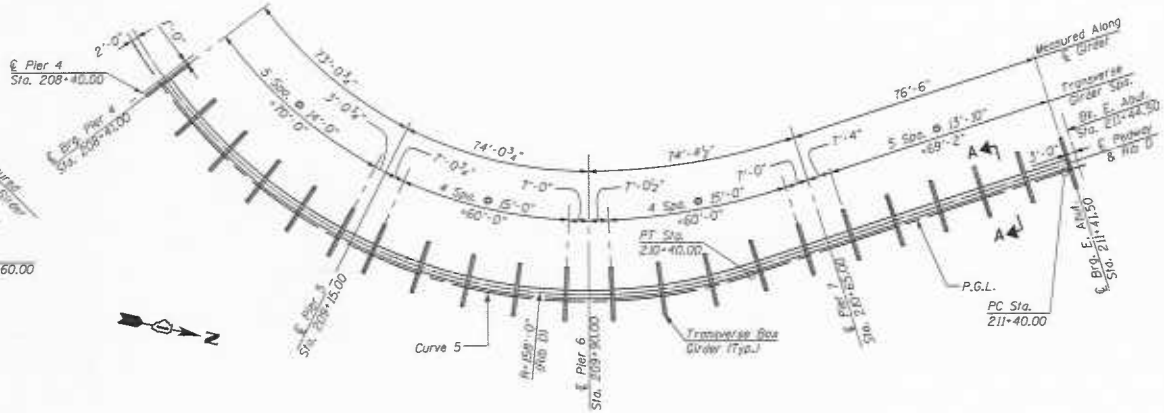
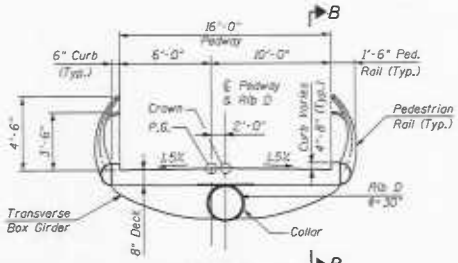


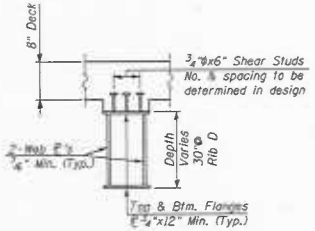
FRAMING PLAN
(Unit 1)



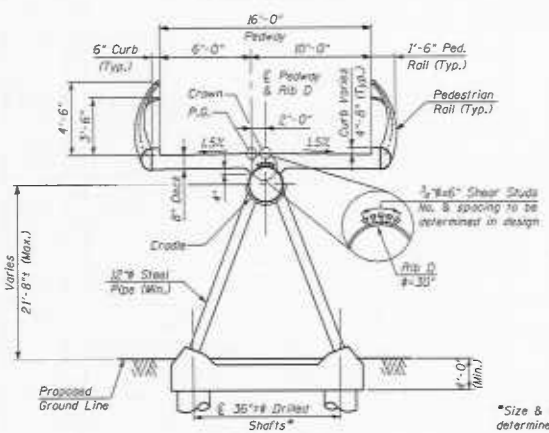
FRAMING PLAN
(Unit 4)



SECTION A-A

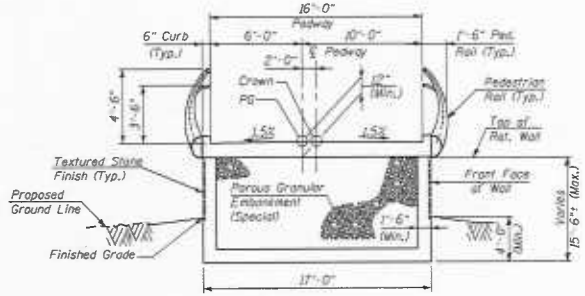


SECTION B-B

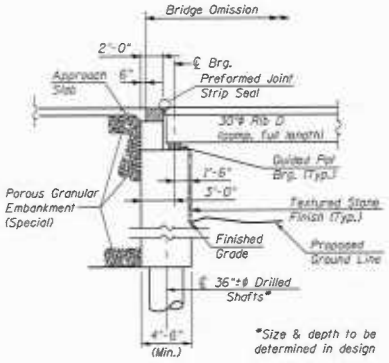


*Size & depth to be determined in design

PIER SKETCH
(Looking North Unit 1)
(Looking South Unit 4)

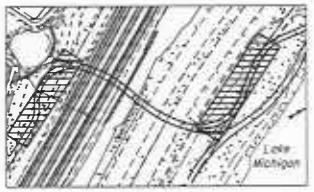


SECTION THRU WALLS
(Looking North Unit 1)
(Looking South Unit 4)



*Size & depth to be determined in design

SECTION THRU ABUTMENT
(Looking West Unit 1)
(Looking East Unit 4)



KEY PLAN

Notes:

1. Structural steel shall be AASHTO M270 Grade HPS 50W or API 5L Grade X52, unless otherwise noted on the drawings.
2. Rail posts shall be ASTM A36 Grade 36, rail pipes shall be ASTM A500 Grade B, & rail barrier cable shall be ASTM A416 Grade 230, Grade 250, or Grade 270.
3. Structural & rail steel shall be painted, except the barrier cable which shall be epoxy coated according to ASTM A882 or galvanized according to ASTM A475.
4. See Sheet 2 for Curb & Railing Details.
5. See Sheet 3 for Piers 2 & 8 Details.
6. Minimum girder, pier, abutment, ret. walls, footing, & drilled shaft dimensions shown may slightly increase due to aesthetic or strength requirements during final design.

NO.	BY	DATE	DESCRIPTION
			REVISIONS

SUPERSTRUCTURE & WALL DETAILS
(APPROACH STRUCTURES)
41st STREET PEDESTRIAN BRIDGE
OVER METRA ELECTRIC/C.N. RAILROADS
AND SOUTH LAKE SHORE DRIVE
SECTION 05-E5003-00-BR
COOK COUNTY
STATION 206+00.00
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DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

DRAWN	TAT	SHEET NO.
CHECKED	DL	6
APPROVED	DL	
DATE	MAR 2015	
SCALE	NONE	
CONTRACT NO.	12412	PROJ. NO. CMM-6000(242)

Exhibit B

41st Street Pedestrian Bridge

	41ST STREET PEDESTRIAN BRIDGE					
	METRA				Illinois Central Railroad	
	TRACK 1	TRACK 2	TRACK 3	TRACK 4	TRACK 1	TRACK 2
STATION LOCATION PEDESTRIAN BRIDGE BL	204+33.38	204+45.93	204+67.65	204+80.48	205+09.60	205+22.57
OFFSET	-11	-11	-11	-11	-11	-11
LOW STEEL ELEVATION	36.34	36.85	37.63	38.03	38.80	39.07
TRACK ELEVATION	11.60	10.93	10.80	10.98	10.74	10.77
VERT CLEARANCE	24.74	25.92	26.83	27.05	28.06	28.30

Note: Track Numbering Starts on the West and Moves to the East