

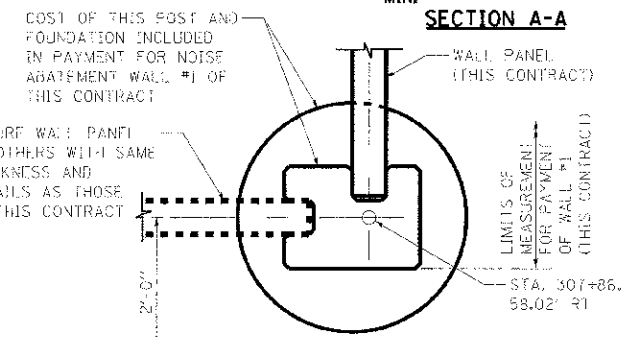
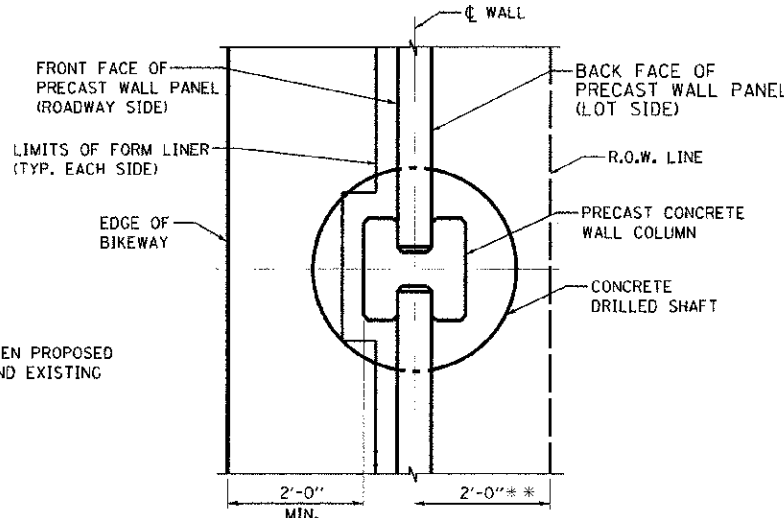
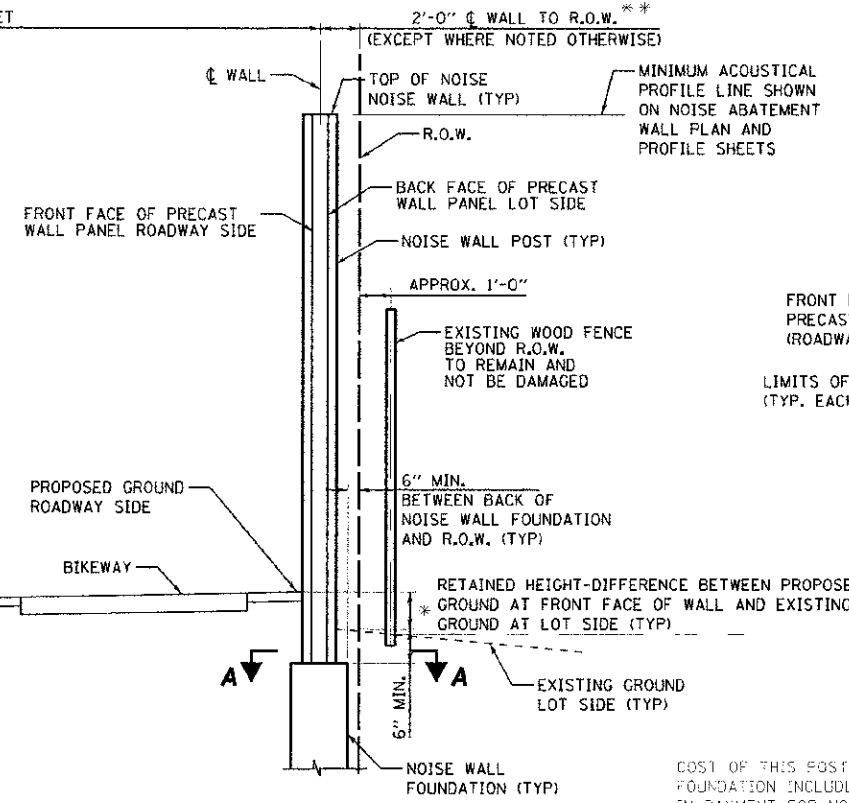
NOTE: PROVIDE 4"Ø DRAIN HOLES IN NOISE ABATEMENT WALL PANELS AT GROUND LEVEL WHERE GROUND ON LOT SIDE IS SLOPED TOWARD NOISE ABATEMENT WALL. SPACING OF DRAIN HOLES SHALL NOT EXCEED 20'.

DRAIN HOLE REQUIRED LOCATIONS
THE STATIONS ARE ALONG CL 95TH STREET

WALL NUMBER	BEG. STATION OF DRAIN HOLES	END STATION OF DRAIN HOLES	LENGTH
WALL # 1	308+50.00	309+25.00	125 FT.
WALL # 2	321+00.00	332+75.00	1,175 FT.
WALL # 3	337+00.00	341+50.00	450 FT.
WALL # 5	318+25.00	318+75.00	50 FT.
WALL # 6	322+00.00	324+25.00	225 FT.
WALL # 6	327+00.00	332+00.00	500 FT.
WALL # 7	335+50.00	339+00.00	350 FT.

ESTIMATED QUANTITIES

WALL	AREA SQ FT
NOISE ABATEMENT WALL #1	8,512
NOISE ABATEMENT WALL #2	9,028
NOISE ABATEMENT WALL #3	8,378
NOISE ABATEMENT WALL #5	3,651
NOISE ABATEMENT WALL #6	12,856
NOISE ABATEMENT WALL #7	10,298
TOTAL	52,723



* NOISE WALL POST & PANEL SHALL BE DESIGNED TO RETAIN DIFFERENCE IN GRADE LINES AND RESULTING EARTH LATERAL PRESSURE AS SHOWN ON NOISE ABATEMENT WALL PLAN AND PROFILE SHEETS.
** CL WALL TO R.O.W. = 2'-0" EXCEPT WHERE SHOWN OTHERWISE BY STATION AND OFFSET ON NOISE ABATEMENT WALL PLAN AND PROFILE SHEETS

ESTIMATED BILL OF MATERIAL

ITEM	UNIT	TOTAL
NOISE ABATEMENT WALL, GROUND MOUNTED	SQ FT	52,723

THE ACTUAL PAY QUANTITY WILL BE BASED ON THE APPROVED SHOP DRAWINGS AND CALCULATED AS SPECIFIED IN THE MEASUREMENT AND PAYMENT SECTION OF THE SPECIAL PROVISION "PERFORMANCE BASED NOISE ABATEMENT WALL".

- NOTES:**
- MINIMUM WALL VERTICAL DIMENSIONS SHOWN ON NOISE ABATEMENT WALL PLAN AND PROFILE SHEETS ARE DISTANCES BETWEEN MINIMUM ACOUSTICAL PROFILE LINE AND PROPOSED GROUND LINE ON ROADWAY SIDE.
 - ALL WALLS SHALL EXTEND BEYOND THIS A MINIMUM OF 6 INCHES BELOW EXISTING GROUND LINE ON LOT SIDE OF WALL.
 - SEE ALIGNMENT & TIE DRAWINGS FOR BENCHMARK INFORMATION.
 - SEE NOISE ABATEMENT WALL PLAN AND PROFILE SHEETS FOR LOCATION OF SOIL BORINGS AND SEE SPECIAL PROVISION "PERFORMANCE BASED NOISE ABATEMENT WALLS" FOR SOIL BORING LOGS..
 - SEE DRAINAGE AND UTILITY SHEETS FOR APPROXIMATE LOCATION OF EXISTING UTILITIES. VERIFY LOCATIONS THROUGH JULIE 800-892-0123. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF THESE UTILITIES AND MAKE NECESSARY NOTIFICATIONS WITH THE UTILITY PRIOR TO COMMENCING FOUNDATION WORK NEAR THEIR FACILITIES.
 - MAINTAIN UNIFORMITY BETWEEN WALL PANEL LENGTH TO GREATEST EXTENT POSSIBLE.
 - PROVIDE TEMPORARY CASING IF NECESSARY TO HOLD AUGURED HOLE OPEN UNTIL PLACING OF CONCRETE FOUNDATION AND TO PREVENT ANY DISTURBANCE TO LAND ON ADJACENT PROPERTIES. COST INCLUDED IN "NOISE ABATEMENT WALL, GROUND MOUNTED".
 - CHAMFER NOISE WALL CAP AT KINK POINTS IN WALL
 - SEE NOISE ABATEMENT WALL PLAN AND PROFILE SHEETS FOR LOCATION OF WALLS.
 - SEE SPECIAL PROVISION "PERFORMANCE BASE NOISE ABATEMENT WALLS" FOR APPLICABLE DESIGN STANDARDS.
 - THE STATIONS PROVIDED FOR THE EXISTING STORM AND SANITARY SEWERS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF THESE UTILITIES IN THE FIELD PRIOR TO LAYING OUT FOUNDATION FOR THE WALLS. NO ADDITIONAL PAYMENT WILL BE MADE DUE TO DISCREPANCY IN THE ACTUAL LOCATIONS AND STATIONS PROVIDED ON THE DRAWINGS.
 - SEE PLAN AND PROFILE SHEETS OF ROADWAY PLANS FOR ROADWAY PROFILES AND ALIGNMENT.
 - CONTRACTOR SHALL FOLLOW REQUIREMENTS OF SPECIAL PROVISION "PERFORMANCE BASED NOISE ABATEMENT WALL" FOR MATERIAL, DESIGN, FABRICATION, CONSTRUCTION AND ERECTION REQUIREMENTS OF THE PROPOSED NOISE WALLS.
 - NO WORK ASSOCIATED WITH CONSTRUCTION OF NOISE ABATEMENT WALLS SHALL BE PERFORMED BEYOND THE HIGHWAY R.O.W. LIMITS.

CONSTRUCTION SPECIFICATIONS
IDOT MANUAL FOR FABRICATION OF PRECAST PRESTRESSED CONCRETE PRODUCTS DECEMBER 10, 2010 WITH ADDENDUM DATED MAY 13, 2011.
IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2012)

DESIGN LOADING
UNBALANCED LATERAL EARTH PRESSURE;
EQUIVALENT FLUID PRESSURE = 40 PCF
LIVE LOAD SURCHARGE = 2 FT HEIGHT OF SOIL
EARTH UNIT WEIGHT = 120 PCF
MINIMUM WIND LOAD ON NOISE ABATEMENT WALL = 25 PSF

SEISMIC LOAD: IN ACCORDANCE WITH SUBSECTION 1.2.1.3 OF THE AASHTO GUIDE SPECIFICATIONS FOR STRUCTURAL DESIGN OF SOUND BARRIERS.

SEISMIC DATA
SEISMIC PERFORMANCE ZONE (SPZ) = 1
DESIGN SPECTRAL ACCELERATION AT 1.0 SEC. (SD1) = 0.045G
DESIGN SPECTRAL ACCELERATION AT 0.2 SEC. (SDS) = 0.11G
SOIL SITE CLASS = B

INDEX OF SHEETS

SHEET NO.	TYPICAL SECTION, INDEX OF SHEETS AND NOTES
1	TYPICAL SECTION, INDEX OF SHEETS AND NOTES
2	NOISE ABATEMENT WALL #1-3
3	NOISE ABATEMENT WALL #1-4
4	NOISE ABATEMENT WALLS #1& #2-1
5	NOISE ABATEMENT WALL #2-2
6	NOISE ABATEMENT WALL #2-3
7	NOISE ABATEMENT WALL #3-1
8	NOISE ABATEMENT WALL #3-2
9	NOISE ABATEMENT WALL #3-3
10	NOISE ABATEMENT WALL #5
11	NOISE ABATEMENT WALL #6-1
12	NOISE ABATEMENT WALL #6-2
13	NOISE ABATEMENT WALL #7-1
14	NOISE ABATEMENT WALL #7-2
15	NOISE ABATEMENT WALL #7-3

URS
100 S. WACKER DR.
SUITE 500
CHICAGO, IL 60606
TEL (312) 939-1000
FAX (312) 939-4198

DESIGNED - JRROT	REVISED -
DRAWN - MRROT	REVISED -
CHECKED - JRPP	REVISED -
DATE - 10/19/2012	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOISE ABATEMENT WALLS
TYPICAL SECTION AND NOTES

SCALE: DRAWING NO. 1 OF 15 STA. TO STA.

F.A.U. R.T.E. 1644	SECTION 01-00181-00-FP	COUNTY WILL	TOTAL SHEETS 328	SHEET NO. 202
CONTRACT NO. 63647				
ILLINOIS FED. AID PROJECT				