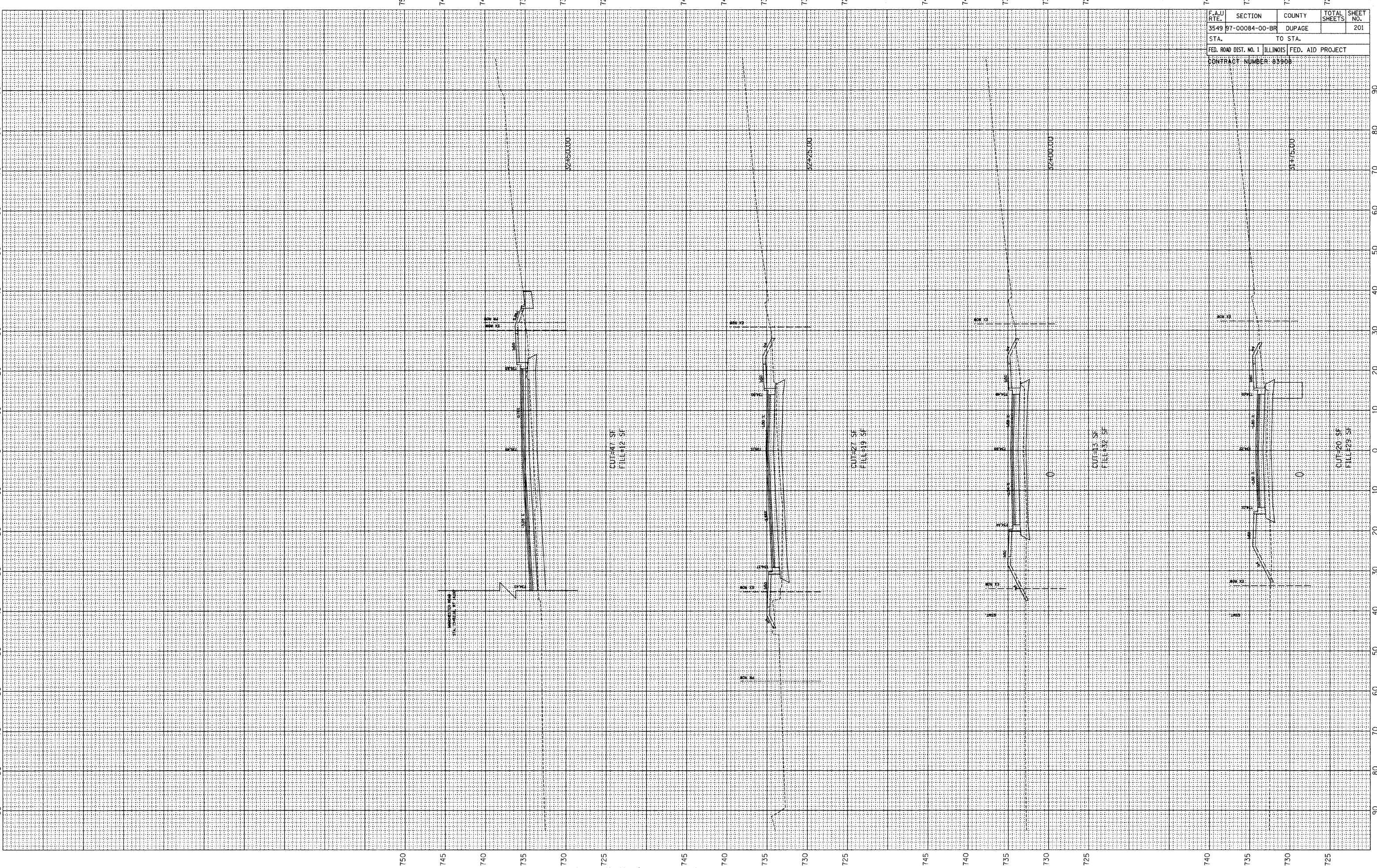


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3549	97-00084-00-BR	DUPAGE		201
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 85908				

ORIGINAL SURVEY	SURVEYED
PLOTTED	PLOTTED
REPLATE	REPLATE
NO. 40	AREAS CHECKED

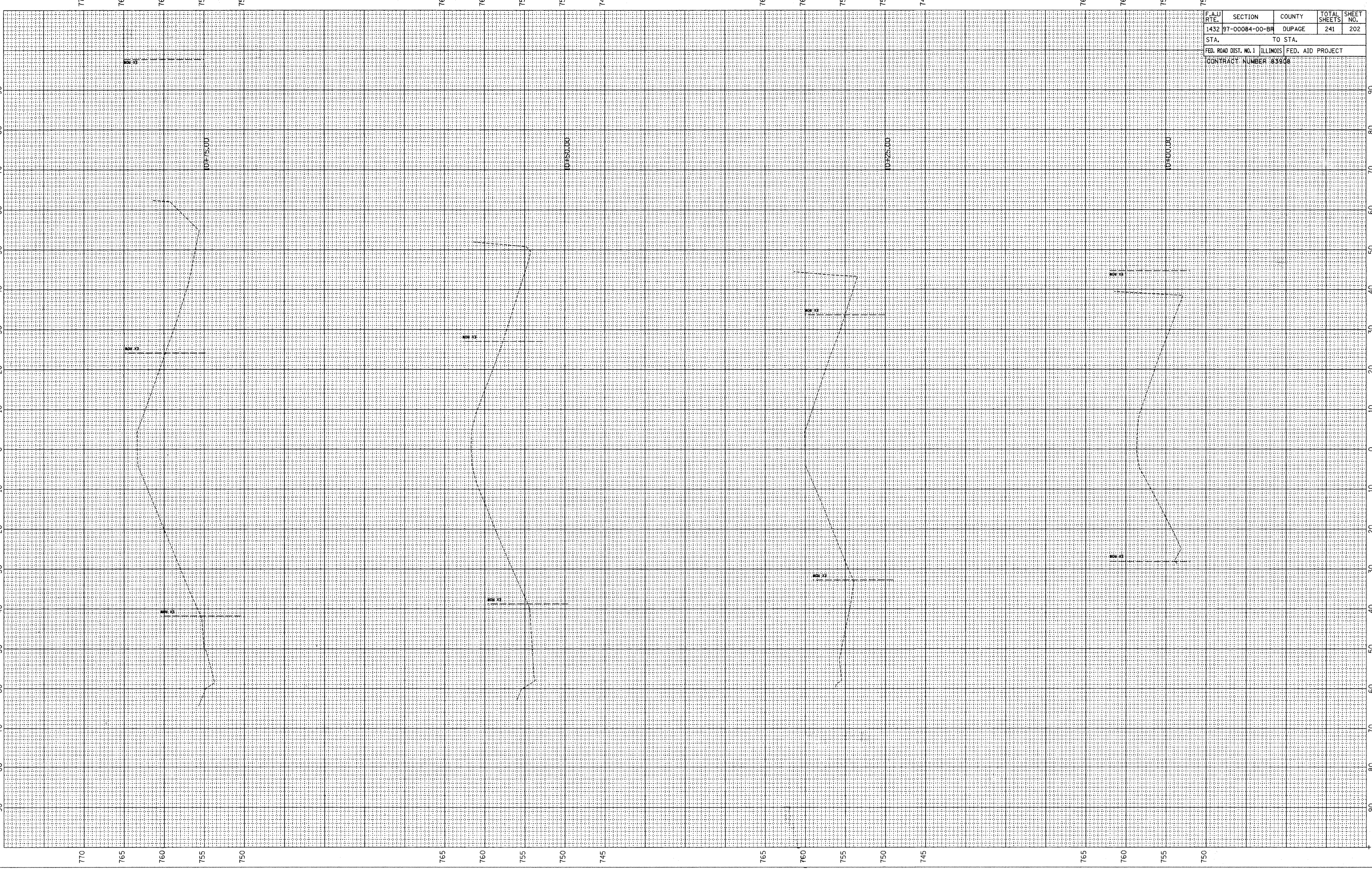
ORIGINAL SURVEY	SURVEYED
PLOTTED	PLOTTED
REPLATE	REPLATE
NO. 40	AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BR	DUPAGE	241	202
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				

ORIGINAL SURVEY	SURVEYED
SURVEY	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

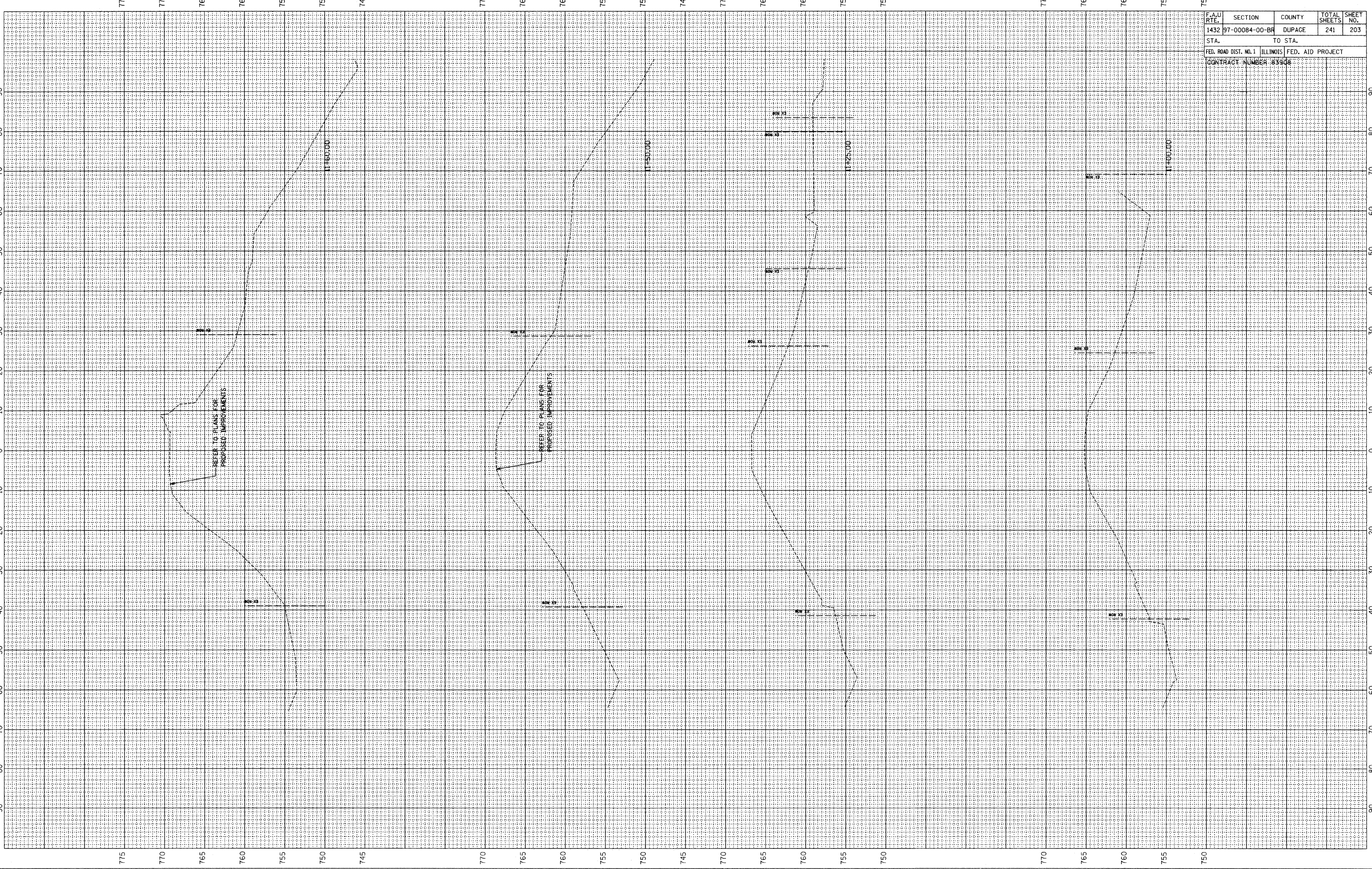
ORIGINAL SURVEY	SURVEYED
SURVEY	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-0084-00-BF	DUPAGE	241	203
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				

FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

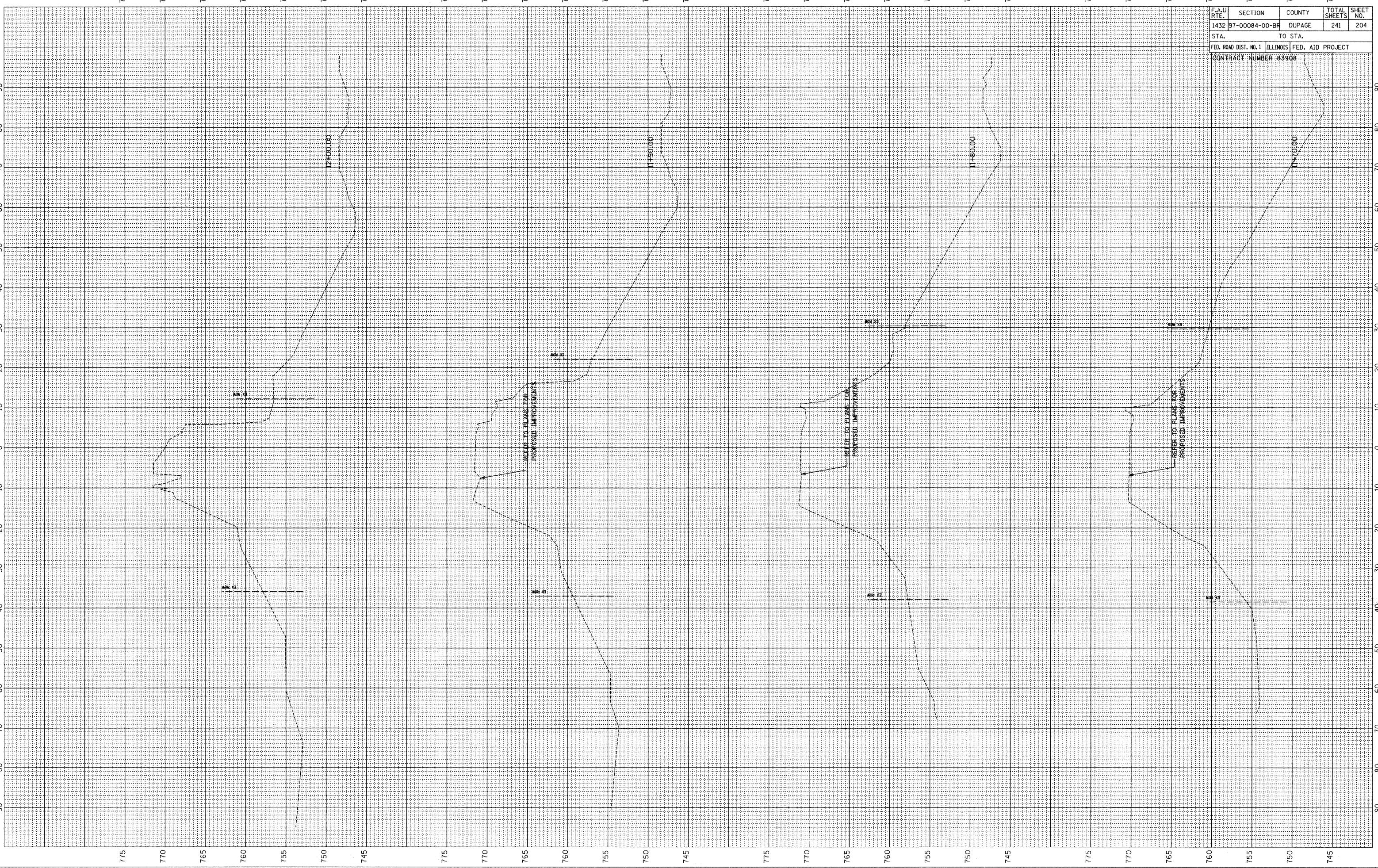
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BF	DUPAGE	241	204
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				

FINAL SURVEY	SURVEYED	
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	

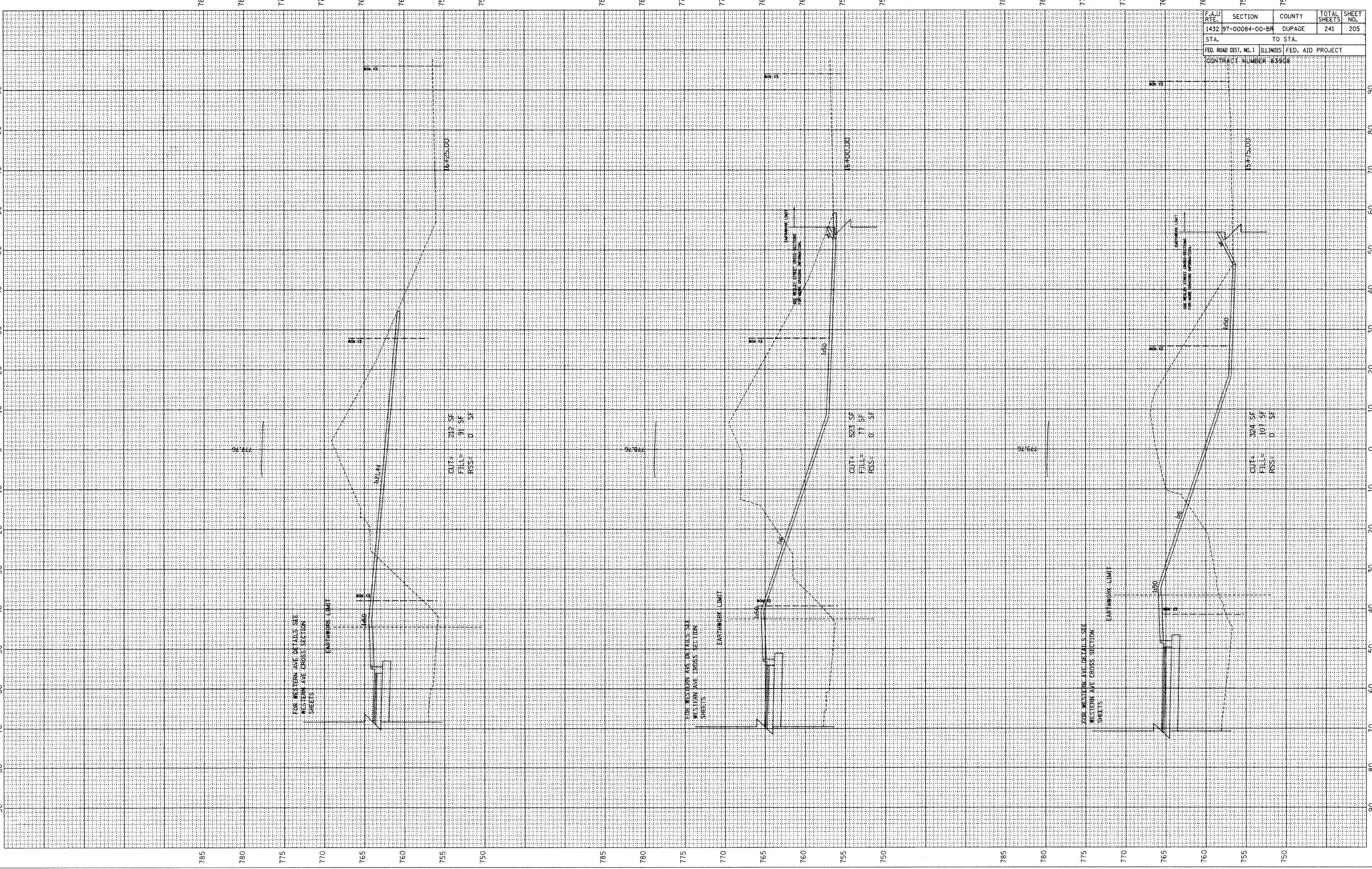
ORIGINAL SURVEY	SURVEYED	
NOTE BOOK	PLOTTED	
NO.	TEMPLATE	
	AREAS CHECKED	



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BF	DUPAGE	241	205
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				

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PLOTTED	PLOTTED
TEMPLATE	TEMPLATE
NOTE BOOK	NOTE BOOK
AREAS CHECKED	AREAS CHECKED

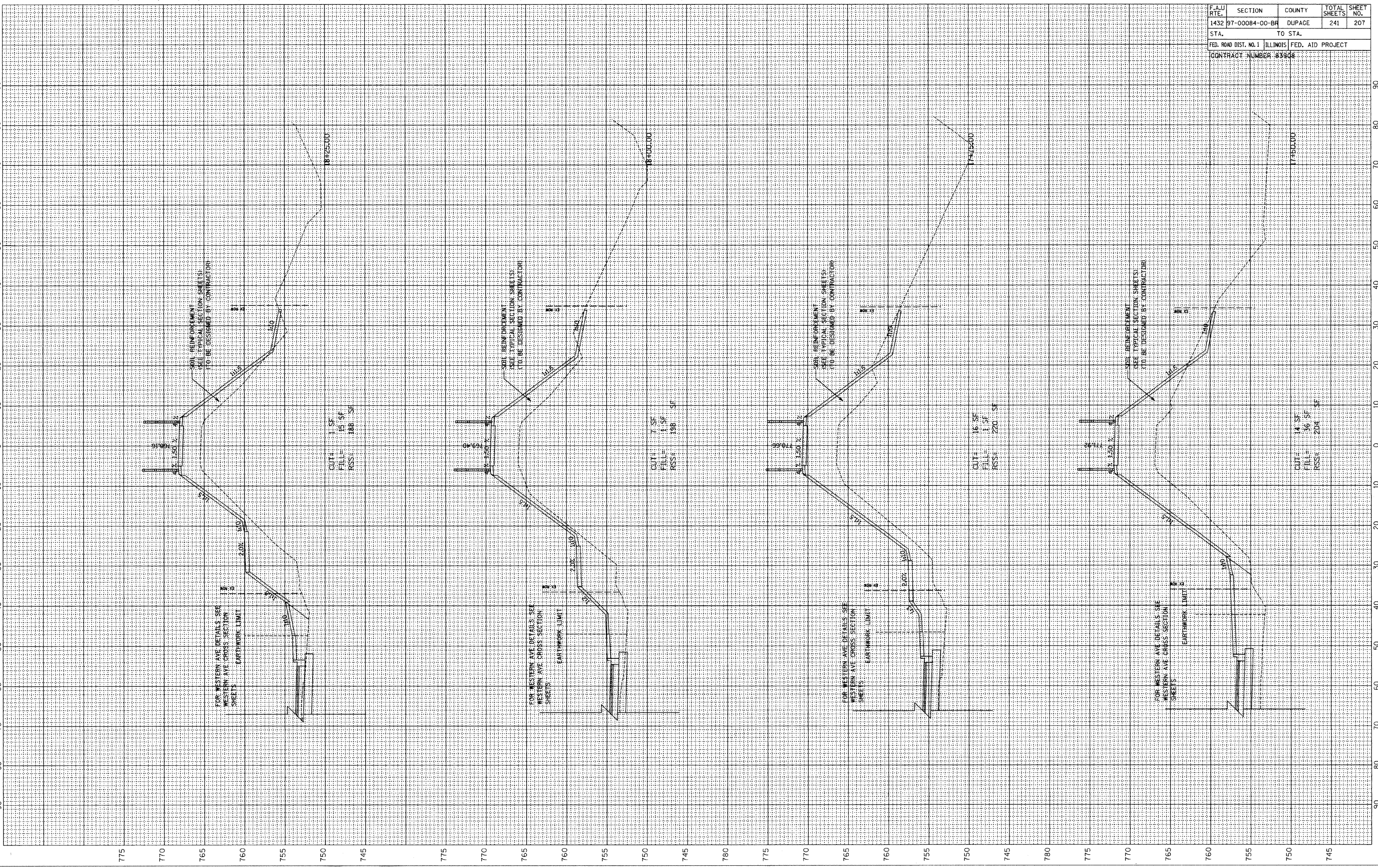
ORIGINAL SURVEY	SURVEYED
PLOTTED	PLOTTED
TEMPLATE	TEMPLATE
NOTE BOOK	NOTE BOOK
AREAS CHECKED	AREAS CHECKED



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BB	DUPAGE	241	207
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				

NO.	40	50	60	70
ORIGINAL SURVEY	SURVEYED	PLOTTED	TEMPLATE	AREAS CHECKED
NO.				

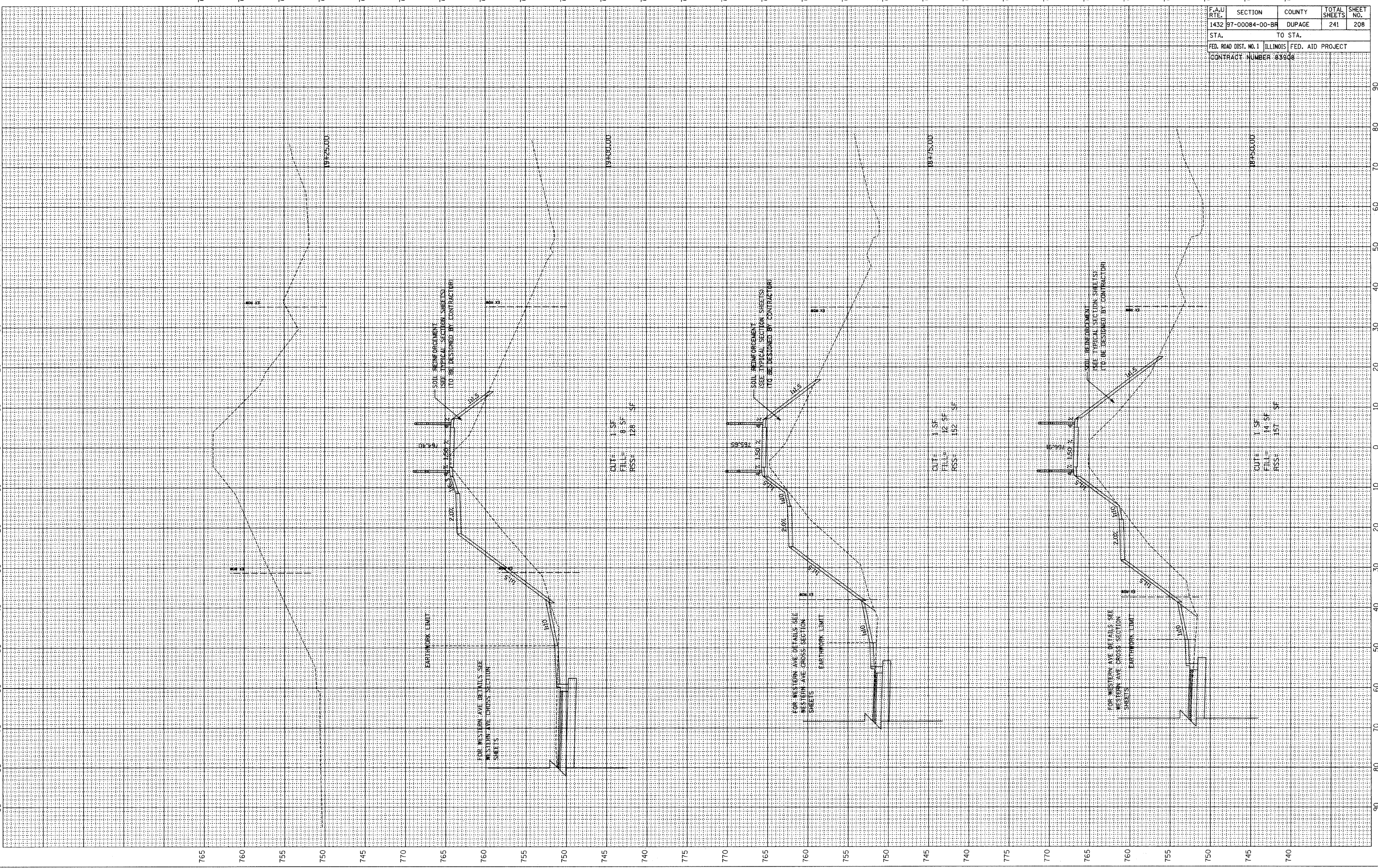
NO.	40	50	60	70
ORIGINAL SURVEY	SURVEYED	PLOTTED	TEMPLATE	AREAS CHECKED
NO.				



FINAL SURVEY	SURVEYED
PLOTTED	PLOTTED
NOTE BOOK	NOTE BOOK
AREAS CHECKED	AREAS CHECKED
NO.	NO.

ORIGINAL SURVEY	SURVEYED
PLOTTED	PLOTTED
NOTE BOOK	NOTE BOOK
AREAS CHECKED	AREAS CHECKED
NO.	NO.

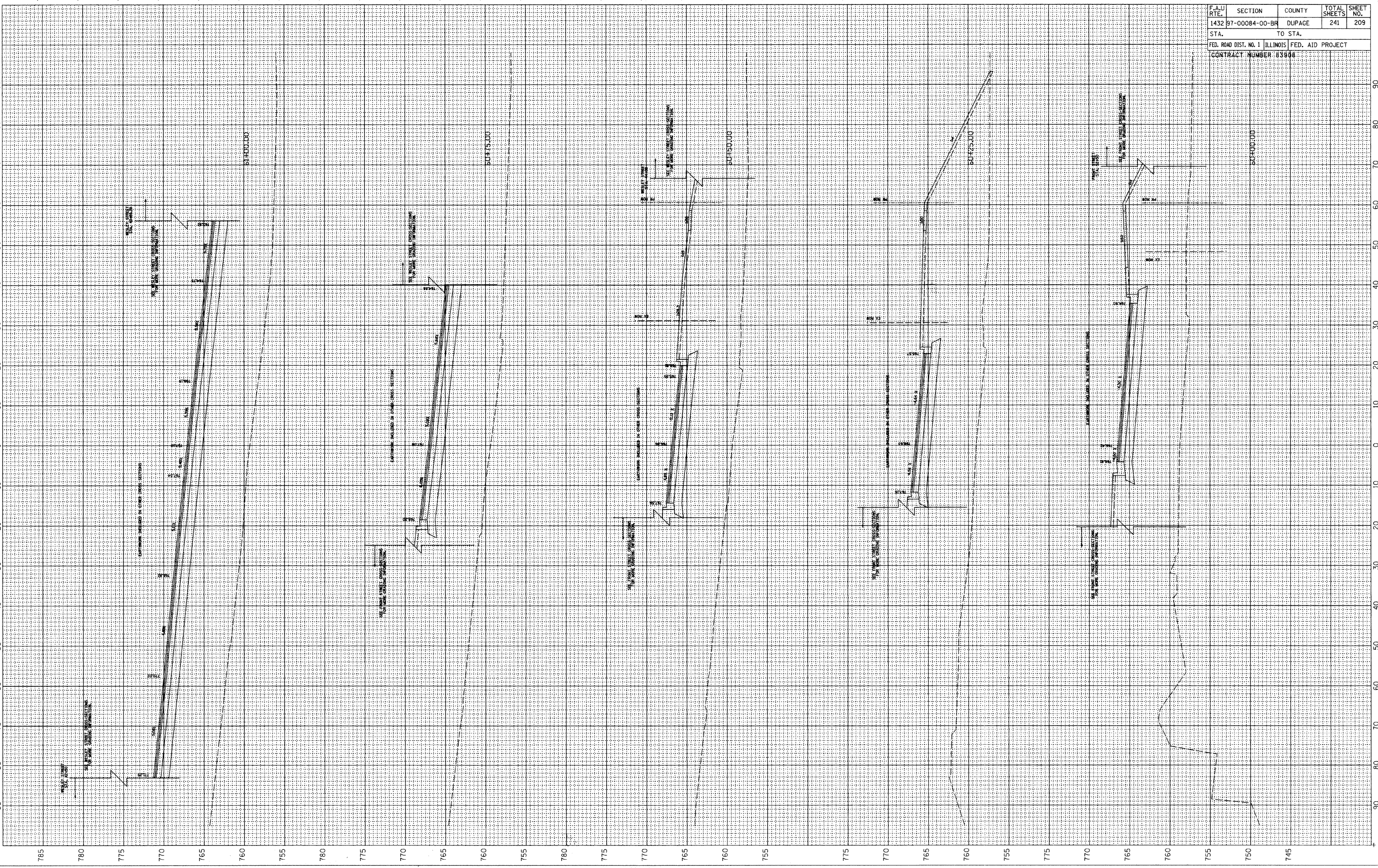
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BB	DUPAGE	241	208
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				



ORIGINAL SURVEY PLOTTED IN NOTE BOOK NO. 40
 SURVEYED PLOTTED IN NOTE BOOK NO. 40
 AREAS CHECKED

ORIGINAL SURVEY PLOTTED IN NOTE BOOK NO. 40
 SURVEYED PLOTTED IN NOTE BOOK NO. 40
 AREAS CHECKED

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BR	DUPAGE	241	209
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83808				

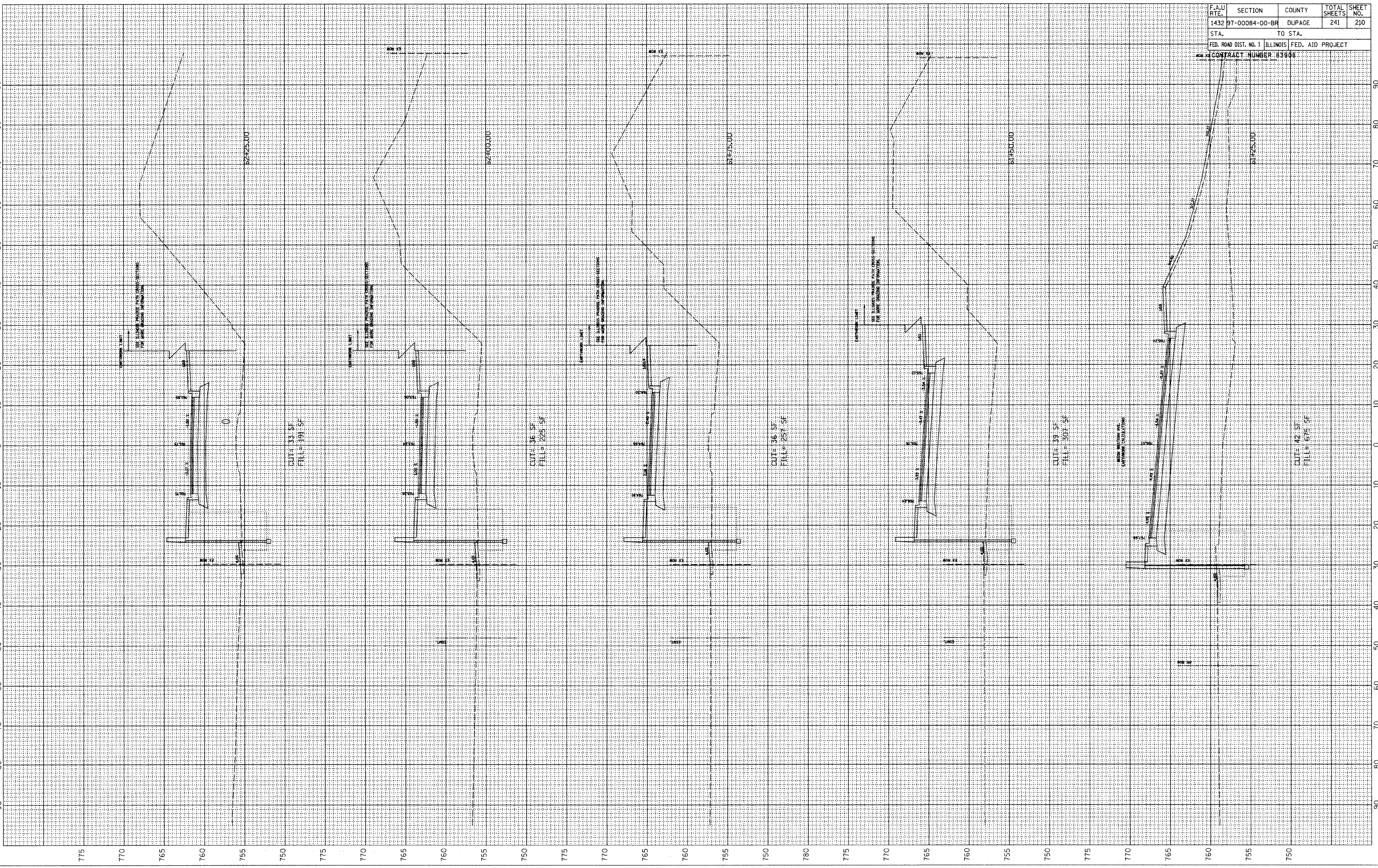


WESTERN AVENUE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BR	DUPAGE	241	210
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				

ORIGINAL SURVEY	SURVEYED	PLOTTED	REPLATE	AREAS CHECKED
NO.				

ORIGINAL SURVEY	SURVEYED	PLOTTED	REPLATE	AREAS CHECKED
NO.				

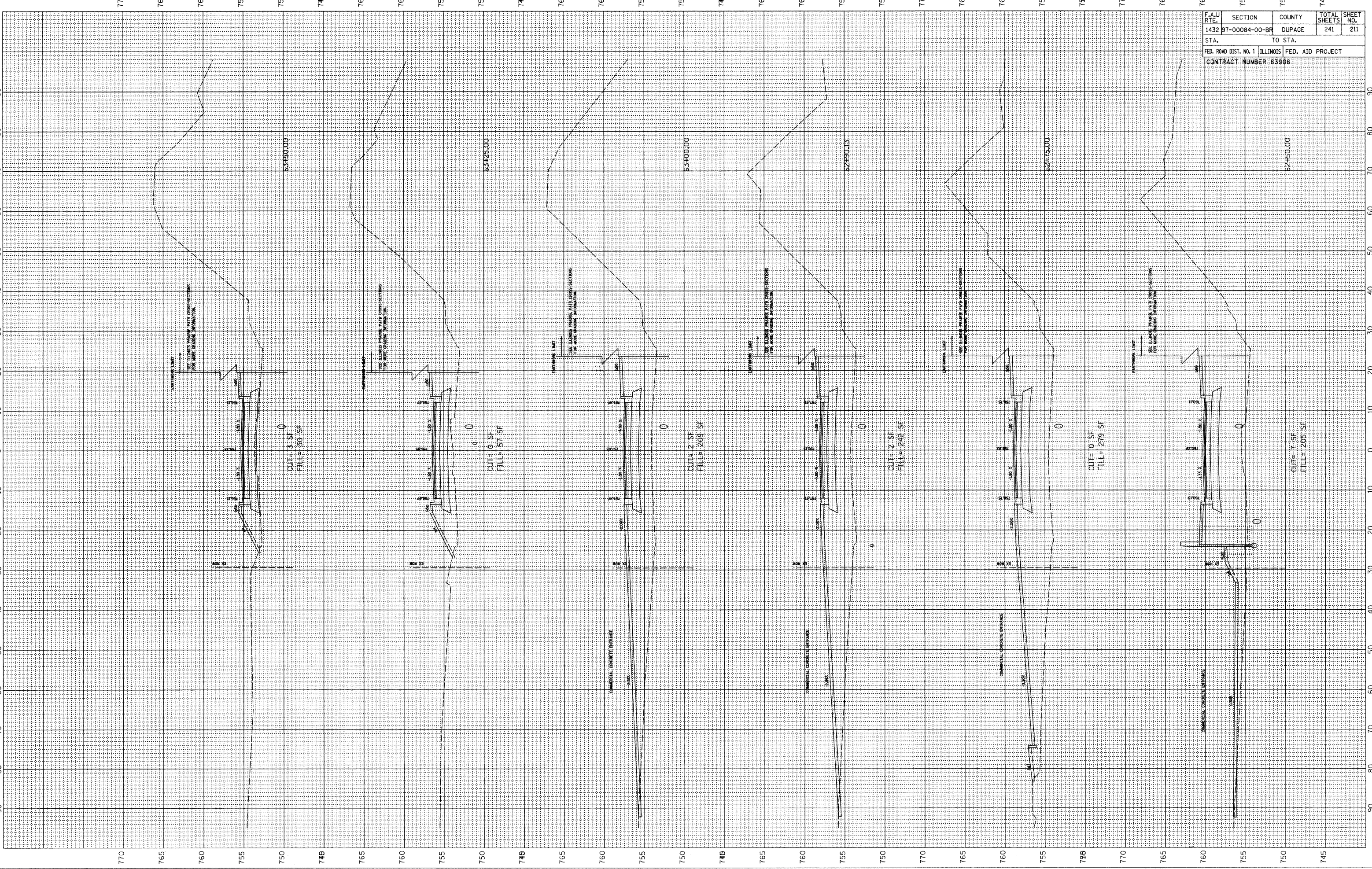


WESTERN AVENUE

F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BF	DUPAGE	241	211
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER 83908				

NO.	40	50	60	70
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS CHECKED				

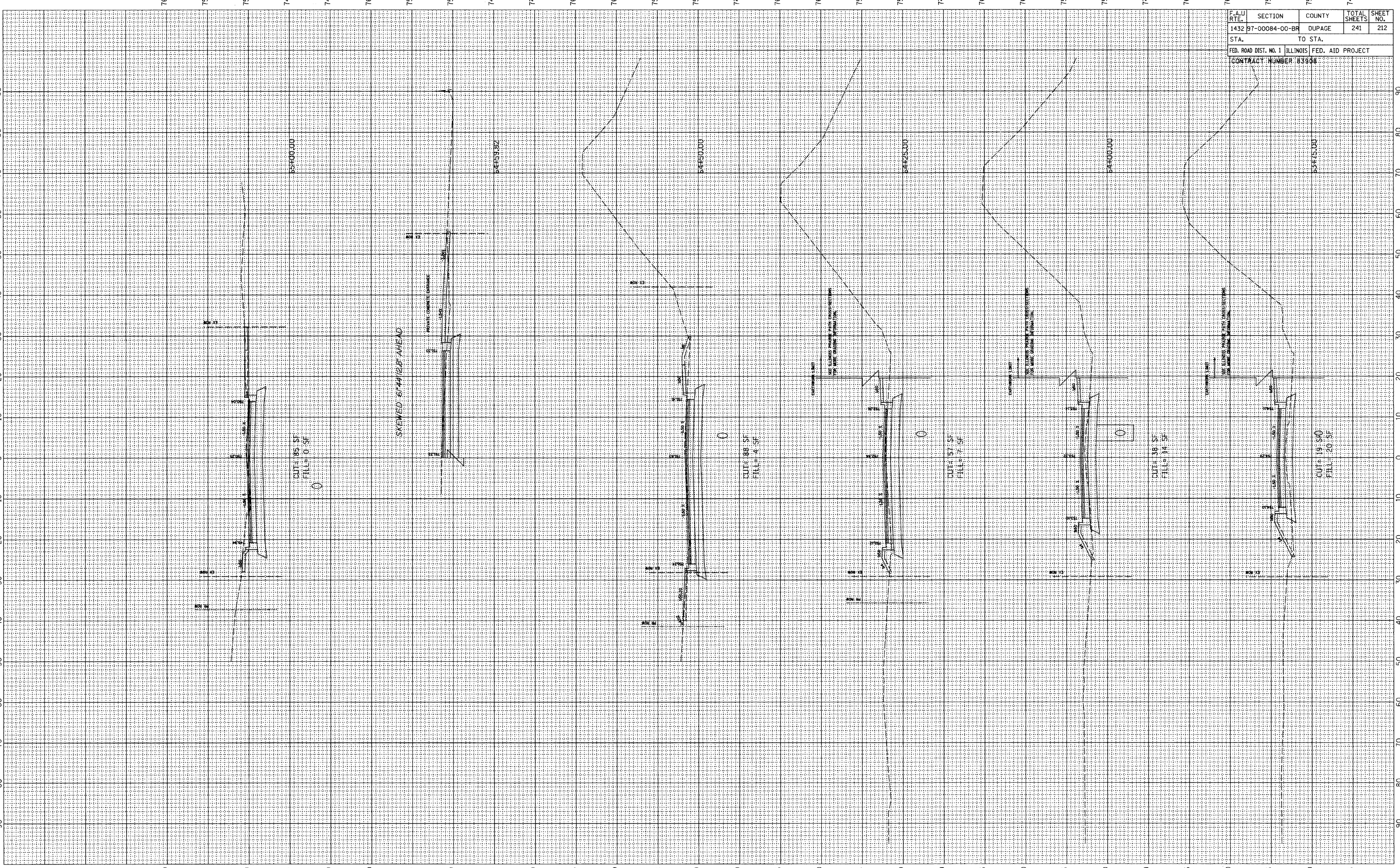
NO.	20	30	40	50	60	70
SURVEYED						
PLOTTED						
TEMPLATE						
AREAS CHECKED						



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	07-00084-00-BR	DUPAGE	241	212
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83908				

ORIGINAL SURVEYED	SURVEYED
SURVEY	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

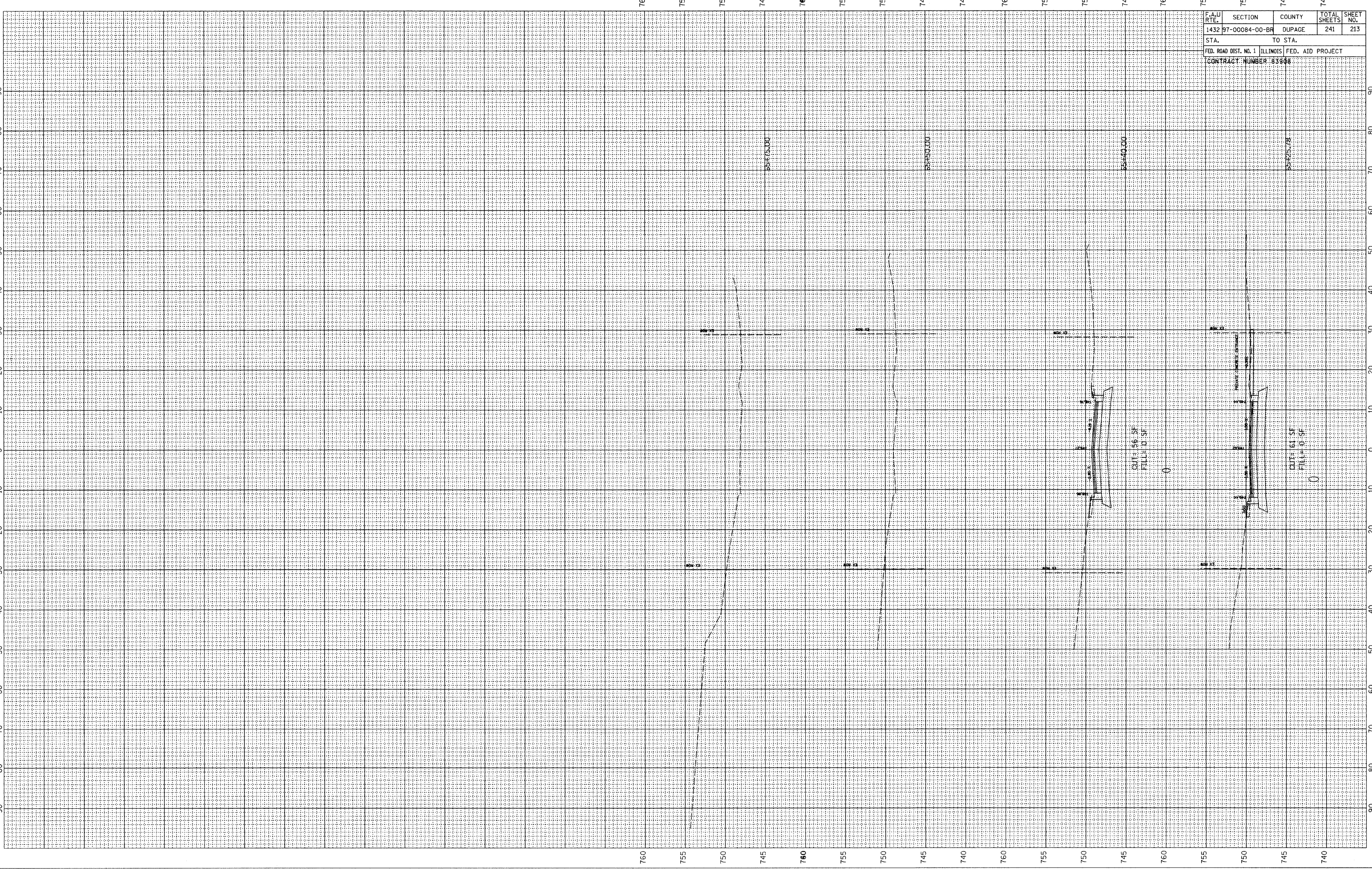
ORIGINAL SURVEYED	SURVEYED
SURVEY	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED



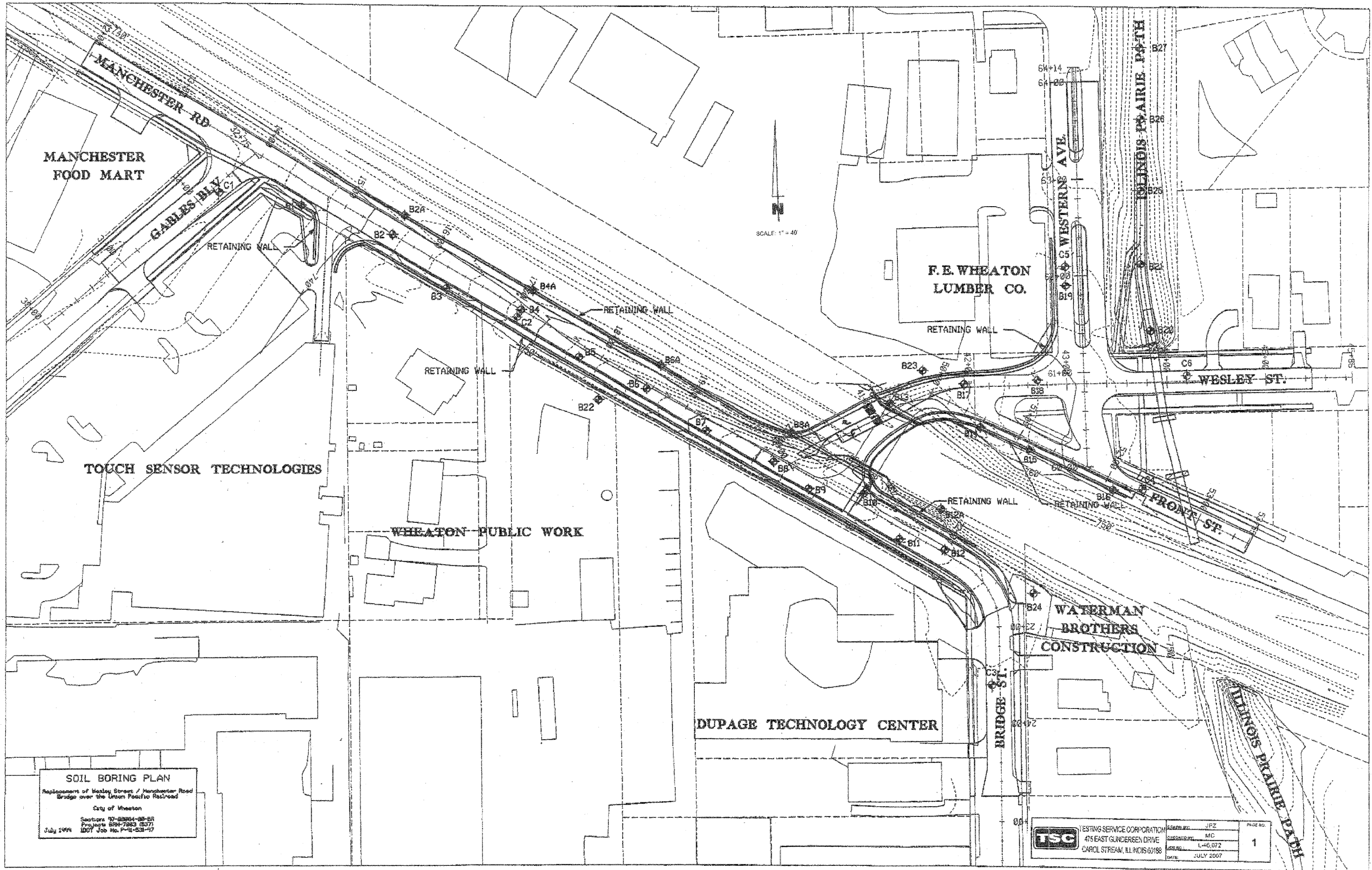
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1432	97-00084-00-BF	DUPAGE	241	213
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		
CONTRACT NUMBER: 83808				

FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED



WESTERN AVENUE



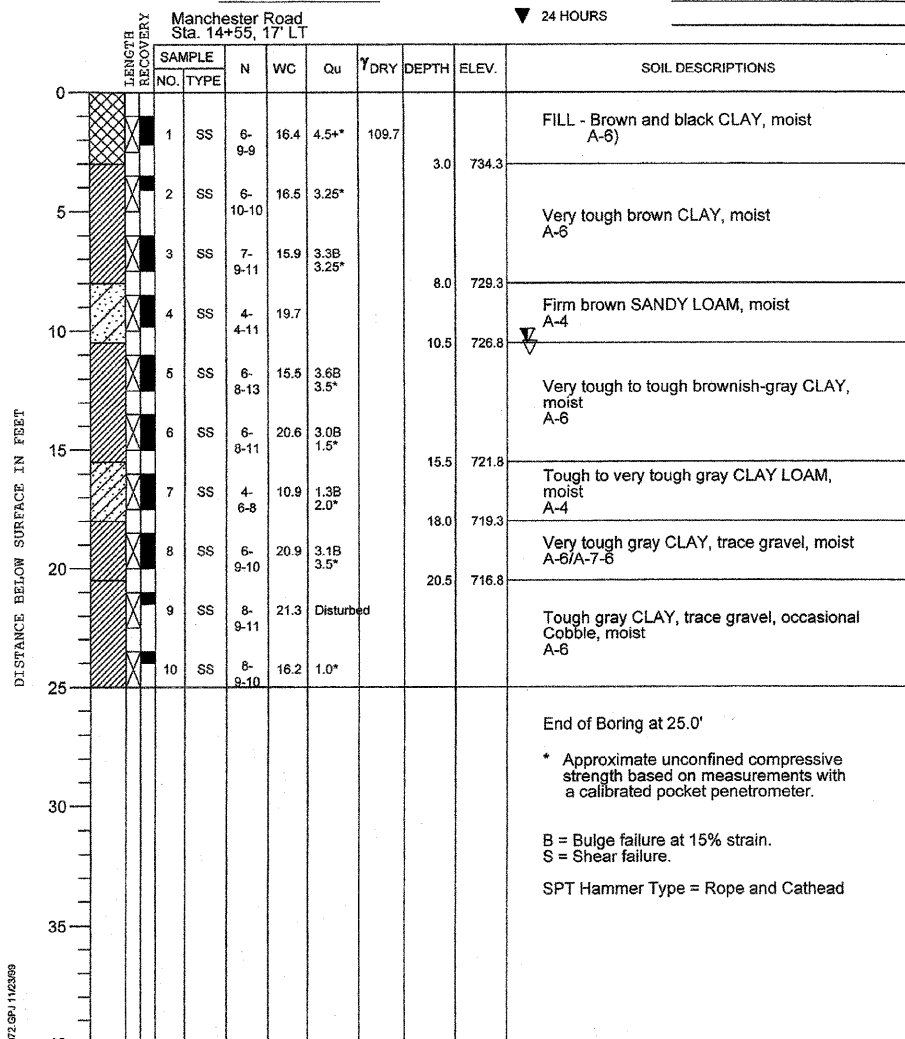
SOIL BORING PLAN
 Replacement of Wesley Street / Manchester Road
 Bridge over the Union Pacific Railroad
 City of Wheaton
 Sections 97-22804-05-BR
 Project 894-7883 (837)
 8307 Job No. P-2-53-97
 July 1999

	TESTING SERVICE CORPORATION	DATE: JULY 2007	PAGE NO. 1
	475 EAST GUNDERSEN DRIVE	DESIGNED BY: L-6,072	
	CAROL STREAM, ILLINOIS 60188	CHECKED BY: MC	
		DATE: JULY 2007	

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **1** DATE STARTED **9-1-99** DATE COMPLETED **9-1-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **737.3** WHILE DRILLING **10.5'**
 END OF BORING **712.3** AT END OF BORING **11.0'**
 24 HOURS



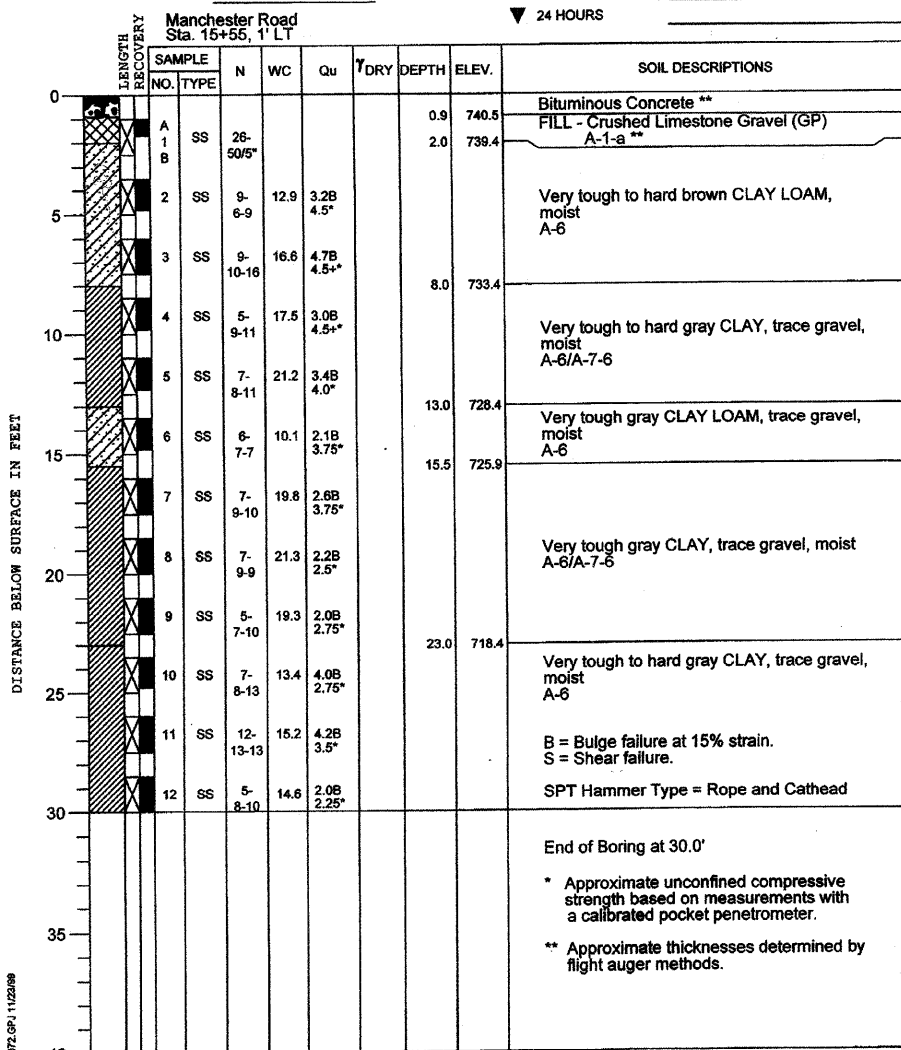
TSC 46072.GPJ 11/23/99
 DRILL RIG NO. **217**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **2** DATE STARTED **9-15-99** DATE COMPLETED **9-15-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **741.4** WHILE DRILLING **Dry**
 END OF BORING **711.4** AT END OF BORING **Dry**
 24 HOURS



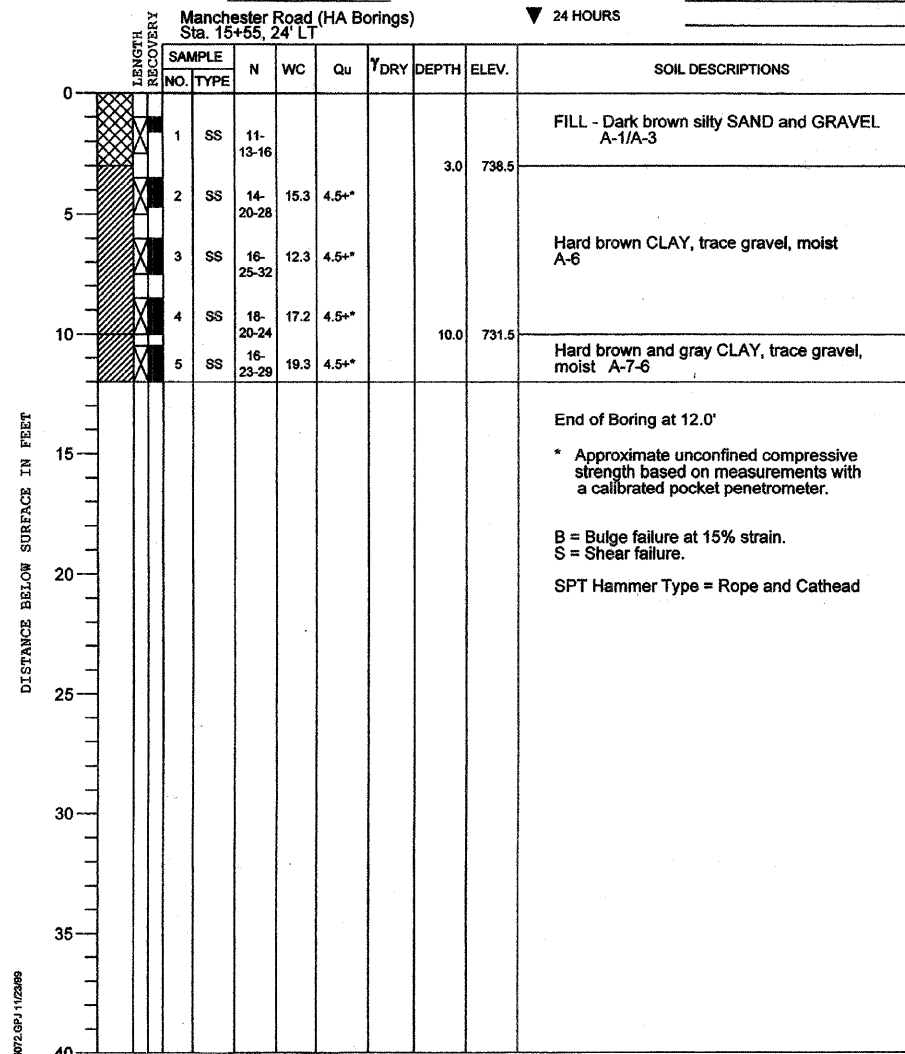
TSC 46072.GPJ 11/23/99
 DRILL RIG NO. **217**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **2A** DATE STARTED **9-14-99** DATE COMPLETED **9-14-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **741.5** WHILE DRILLING **Dry**
 END OF BORING **729.5** AT END OF BORING **Dry**
 24 HOURS



TSC 46072.GPJ 11/23/99
 DRILL RIG NO. **138**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

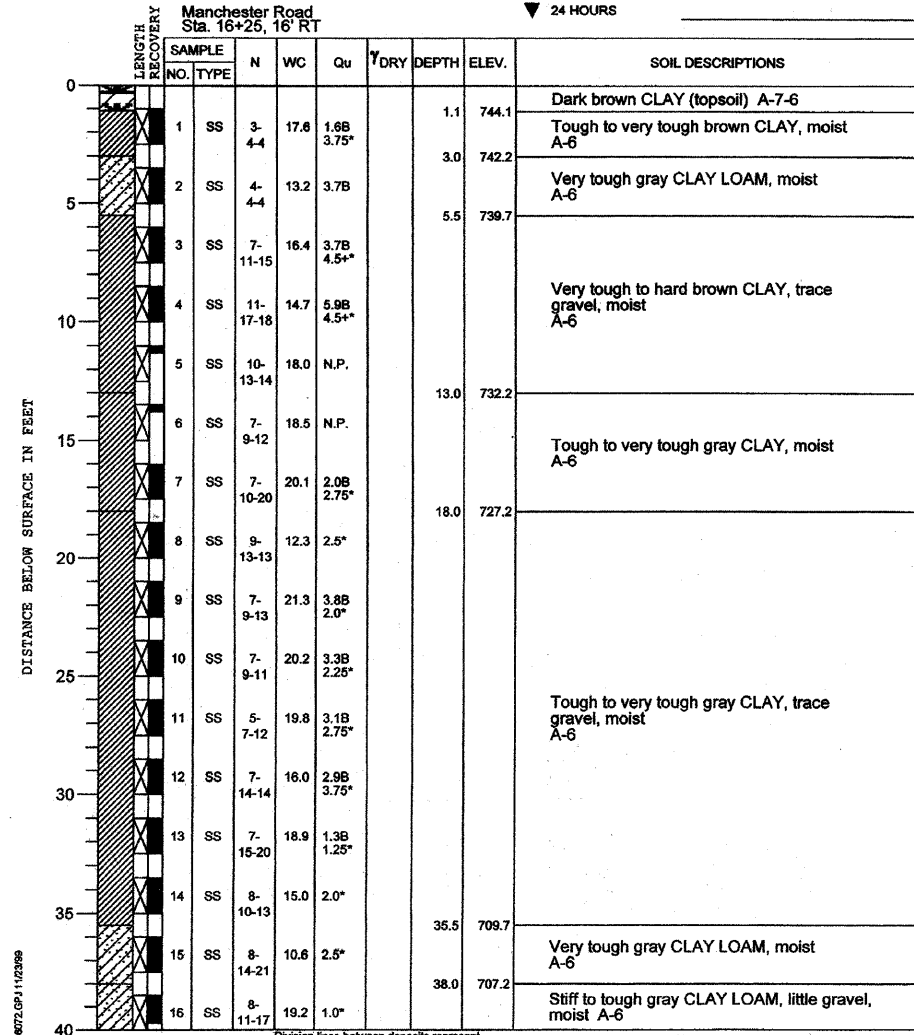
VERT. SCALE: 1" = 10'
 HORIZ. SCALE: 1" = 10'
 DATE 6/4/2008

DRAWN BY ML
 CHECKED BY VS

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **3** DATE STARTED **9-1-99** DATE COMPLETED **9-1-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **745.2** WHILE DRILLING **Dry to 10.5'**
 END OF BORING **675.2** AT END OF BORING **Mud Rotary Used Below 10.5'**
 24 HOURS

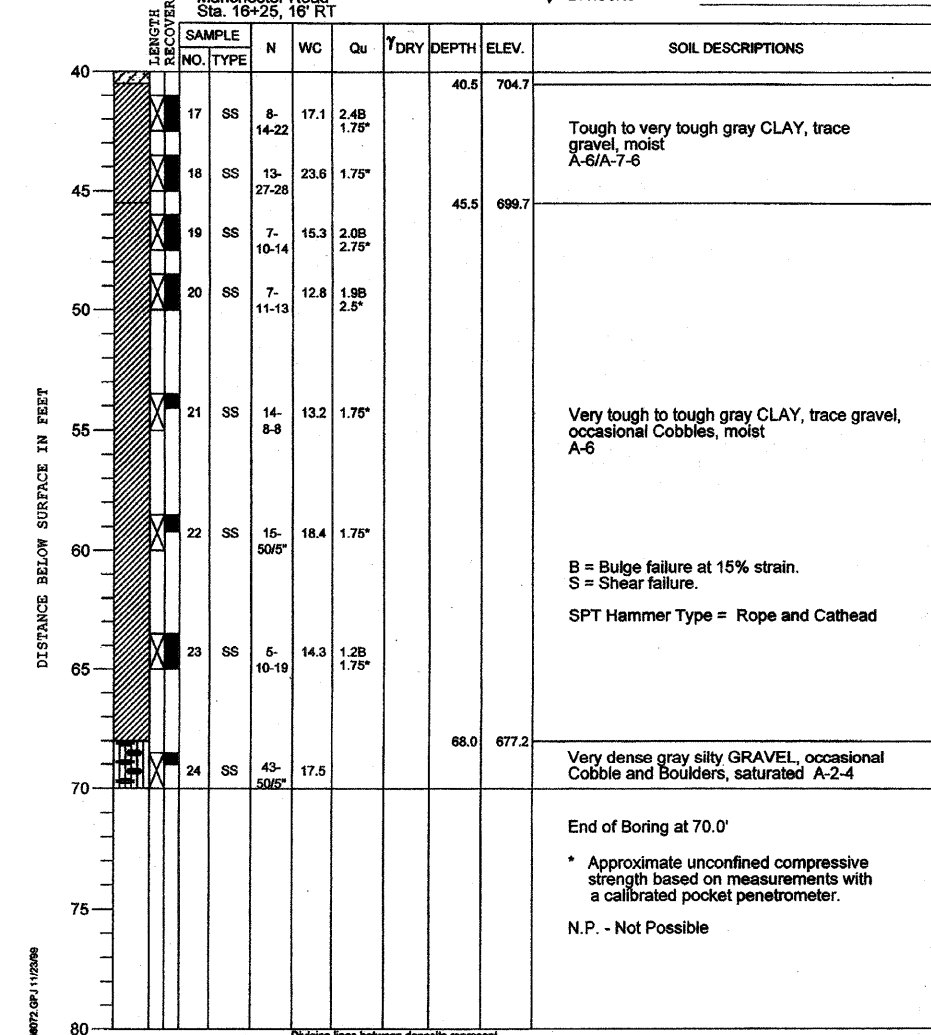


DRILL RIG NO. **217** Page 1 of 2

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **3** DATE STARTED **9-1-99** DATE COMPLETED **9-1-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **745.2** WHILE DRILLING **Dry to 10.5'**
 END OF BORING **675.2** AT END OF BORING **Mud Rotary Used Below 10.5'**
 24 HOURS

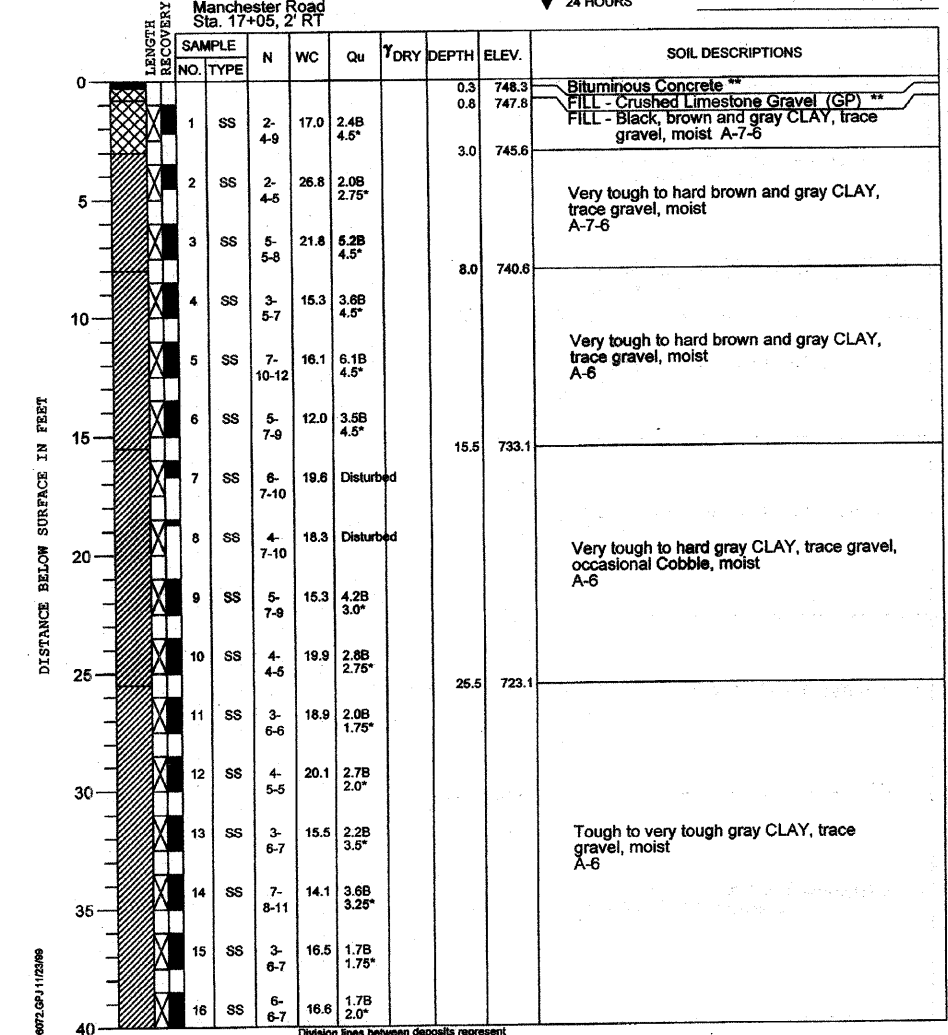


DRILL RIG NO. **217** Page 2 of 2

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **4** DATE STARTED **9-15-99** DATE COMPLETED **9-15-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **748.6** WHILE DRILLING **Dry to 10.0'**
 END OF BORING **678.6** AT END OF BORING **Mud Rotary Used Below 10.0'**
 24 HOURS



DRILL RIG NO. **144** Page 1 of 2

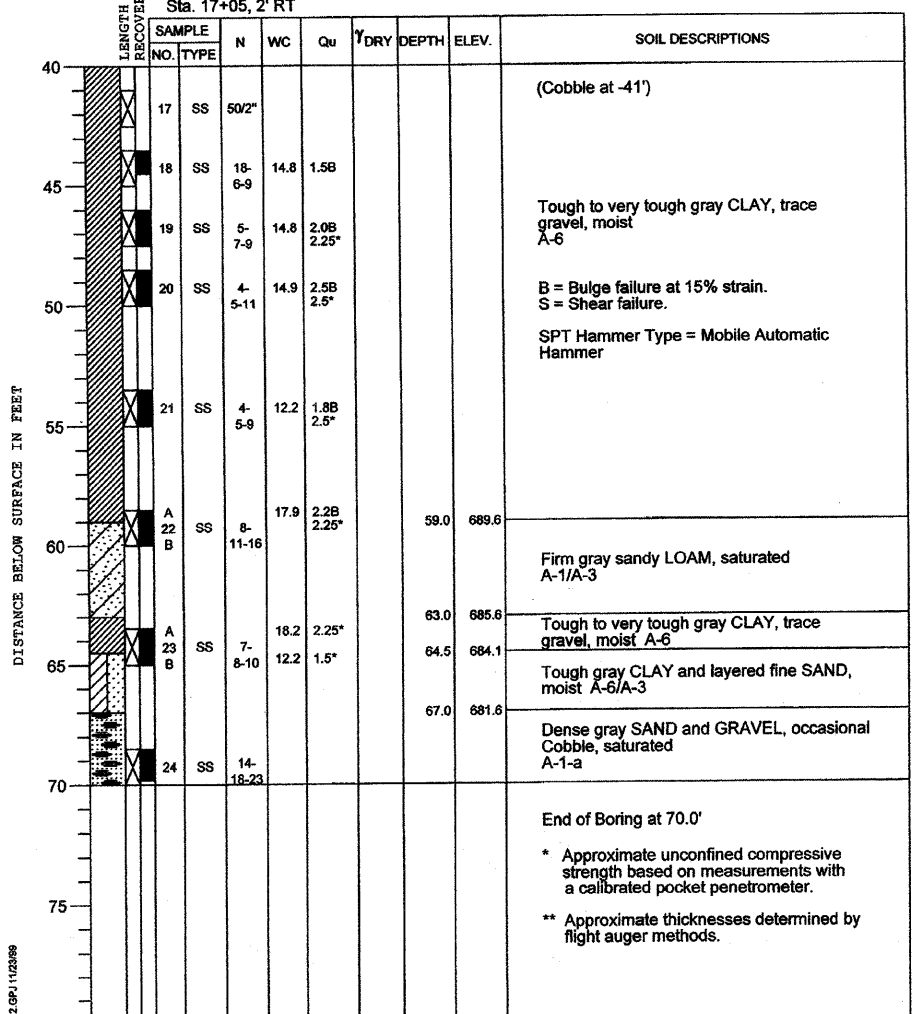
REVISIONS		CITY OF WHEATON MANCHESTER ROAD / WESLEY STREET OVER UNION PACIFIC RAILROAD
NAME	DATE	
		SOIL BORING LOG

VERT. SCALE: DATE 6/4/2008
 HORIZ. SCALE: DRAWN BY ML
 CHECKED BY VS

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **4** DATE STARTED **9-16-99** DATE COMPLETED **9-15-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **748.6** WHILE DRILLING **Dry to 10.0'**
 END OF BORING **678.6** AT END OF BORING **Mud Rotary Used Below 10.0'**
 24 HOURS

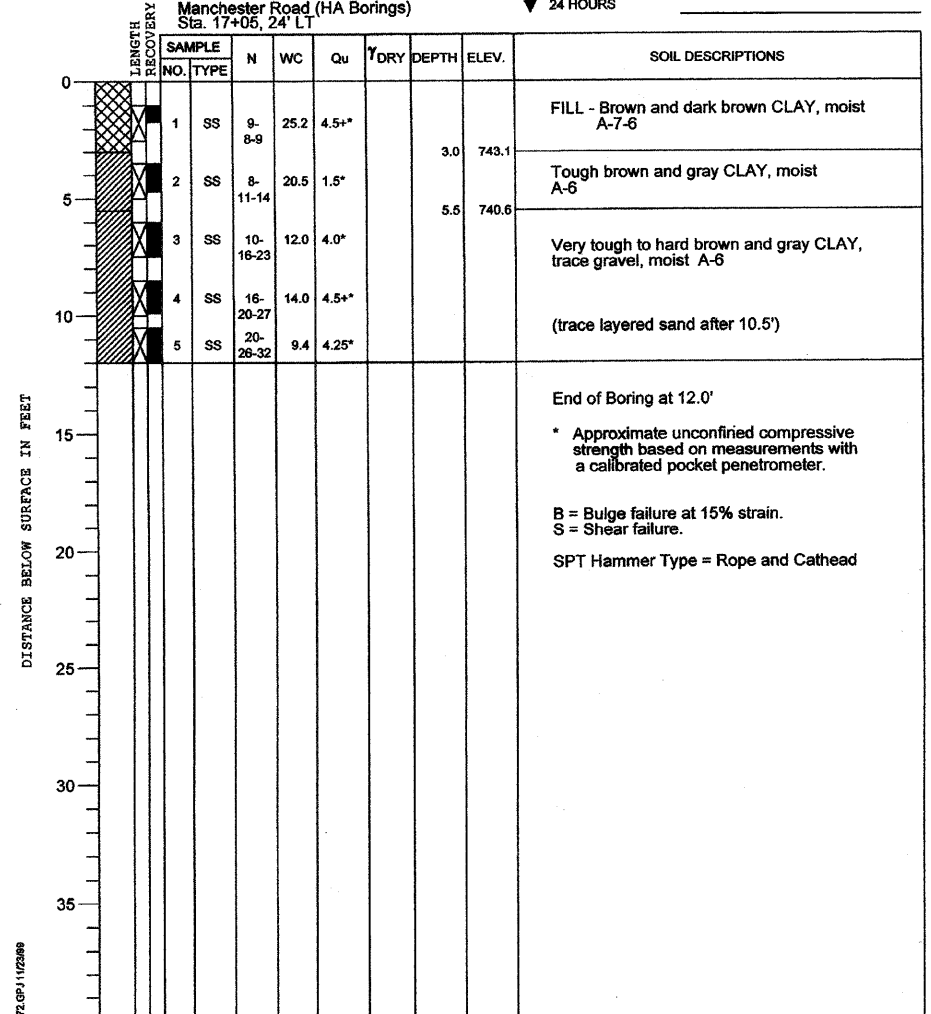


DRILL RIG NO. **144** Page 2 of 2
 Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **4A** DATE STARTED **9-14-99** DATE COMPLETED **9-14-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **746.1** WHILE DRILLING **Dry**
 END OF BORING **734.1** AT END OF BORING **Dry**
 24 HOURS

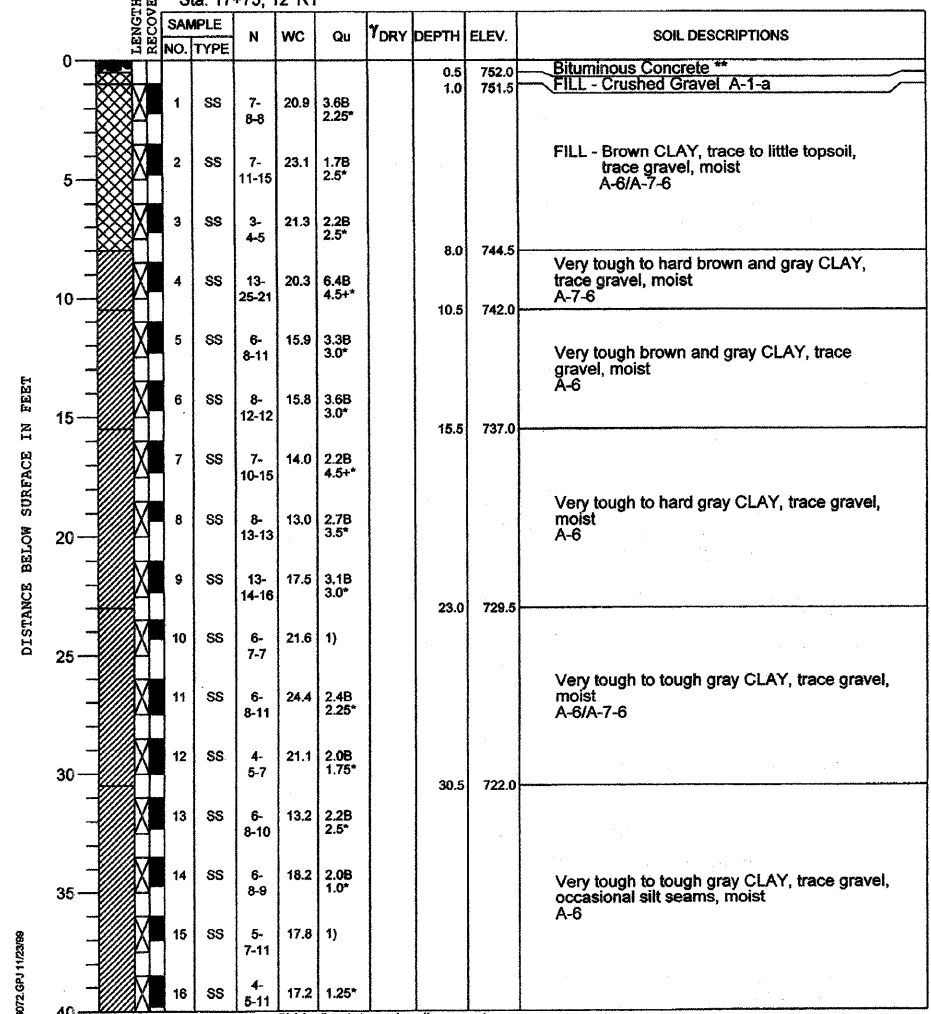


DRILL RIG NO. **138** Page 1 of 2
 Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **5** DATE STARTED **9-15-99** DATE COMPLETED **9-15-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **752.5** WHILE DRILLING **Rotary Wash**
 END OF BORING **682.5** AT END OF BORING **Rotary Wash**
 24 HOURS



DRILL RIG NO. **217** Page 1 of 2
 Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

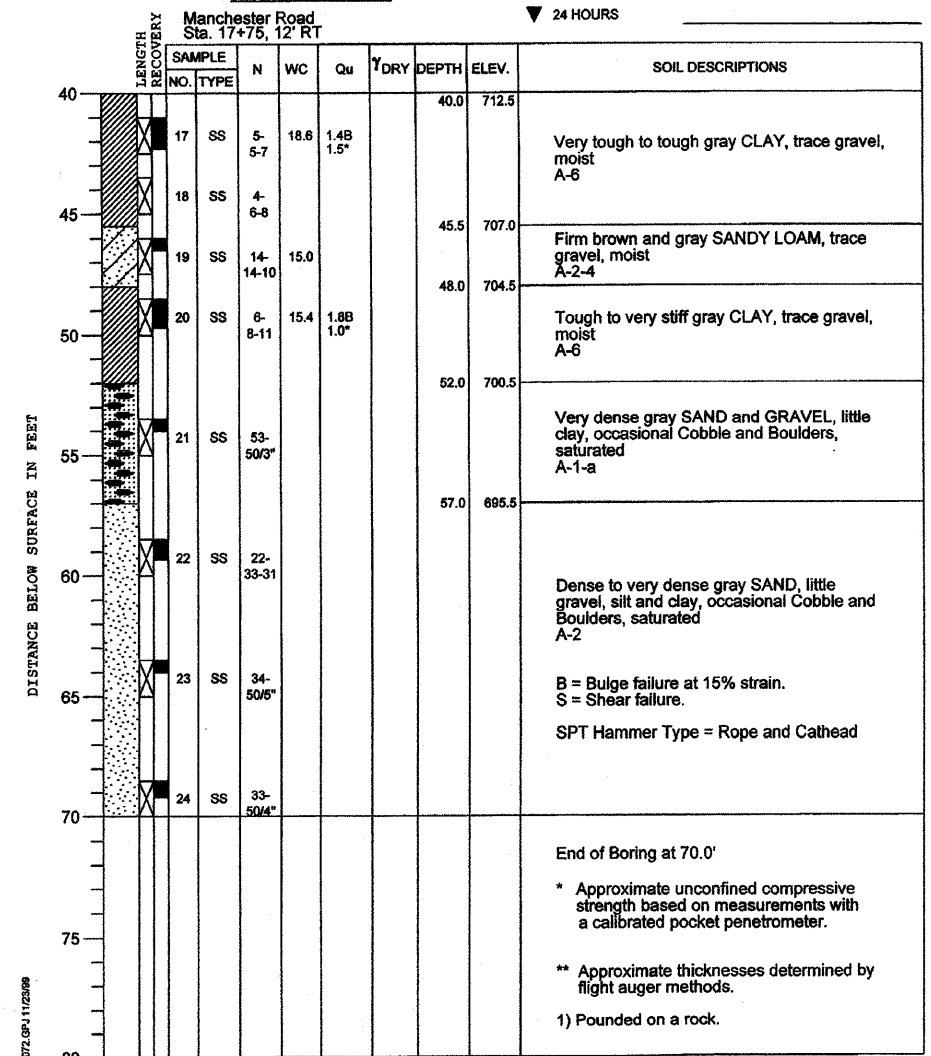
VERT. SCALE: DATE 6/4/2008
 HORIZ. SCALE: DATE 6/4/2008
 DRAWN BY ML
 CHECKED BY VS

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **5** DATE STARTED **9-15-99** DATE COMPLETED **9-15-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **752.5**
 END OF BORING **682.5**

WATER TABLE
 WHILE DRILLING **Rotary Wash**
 AT END OF BORING **Rotary Wash**
 24 HOURS



Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

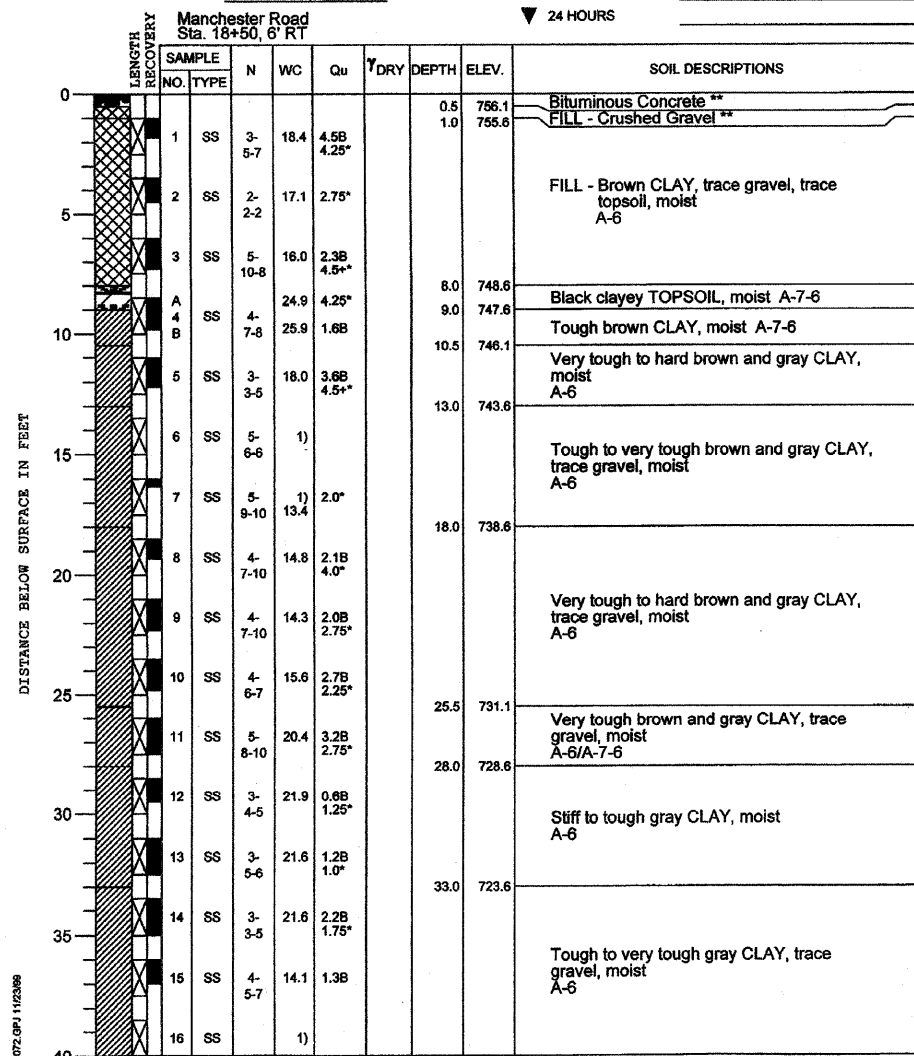
* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.
 ** Approximate thicknesses determined by flight auger methods.
 1) Pounded on a rock.

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **6** DATE STARTED **9-14-99** DATE COMPLETED **9-14-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **756.6**
 END OF BORING **681.6**

WATER TABLE
 WHILE DRILLING **Rotary Wash**
 AT END OF BORING **Rotary Wash**
 24 HOURS



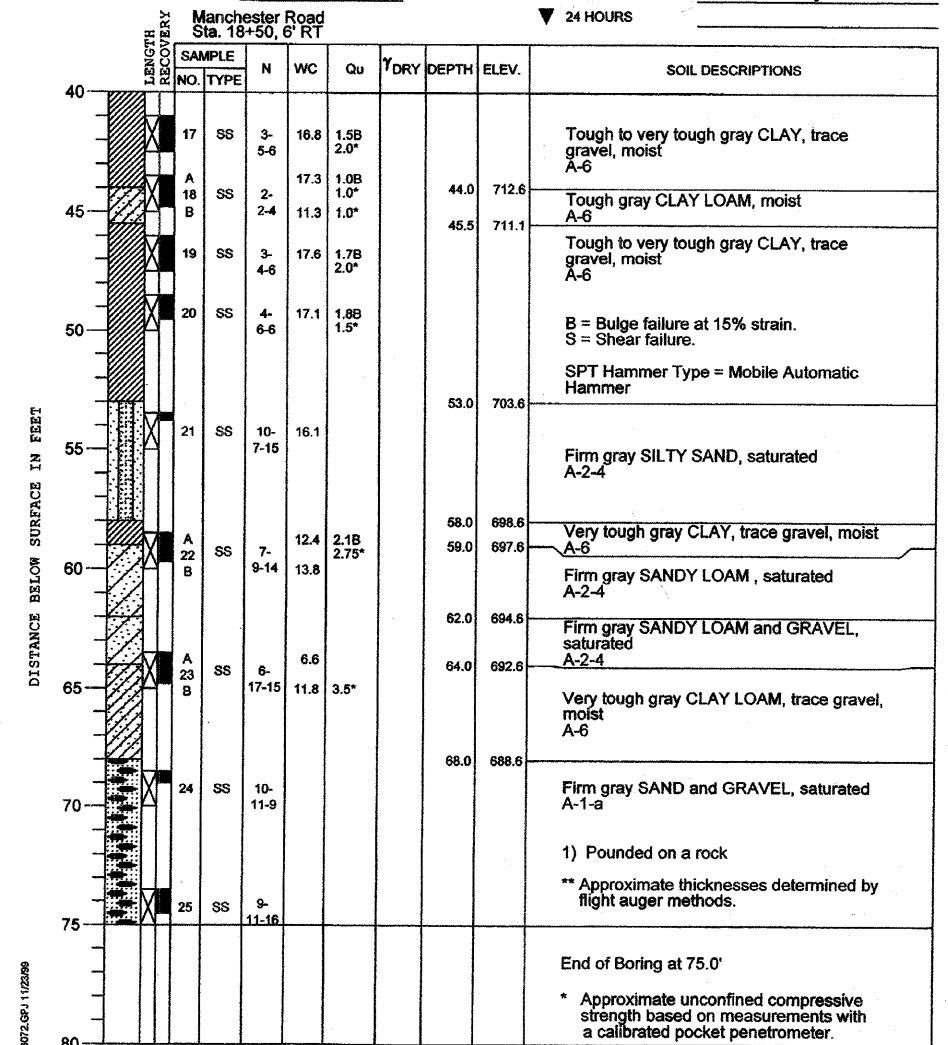
Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **6** DATE STARTED **9-14-99** DATE COMPLETED **9-14-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **756.6**
 END OF BORING **681.6**

WATER TABLE
 WHILE DRILLING **Rotary Wash**
 AT END OF BORING **Rotary Wash**
 24 HOURS



Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

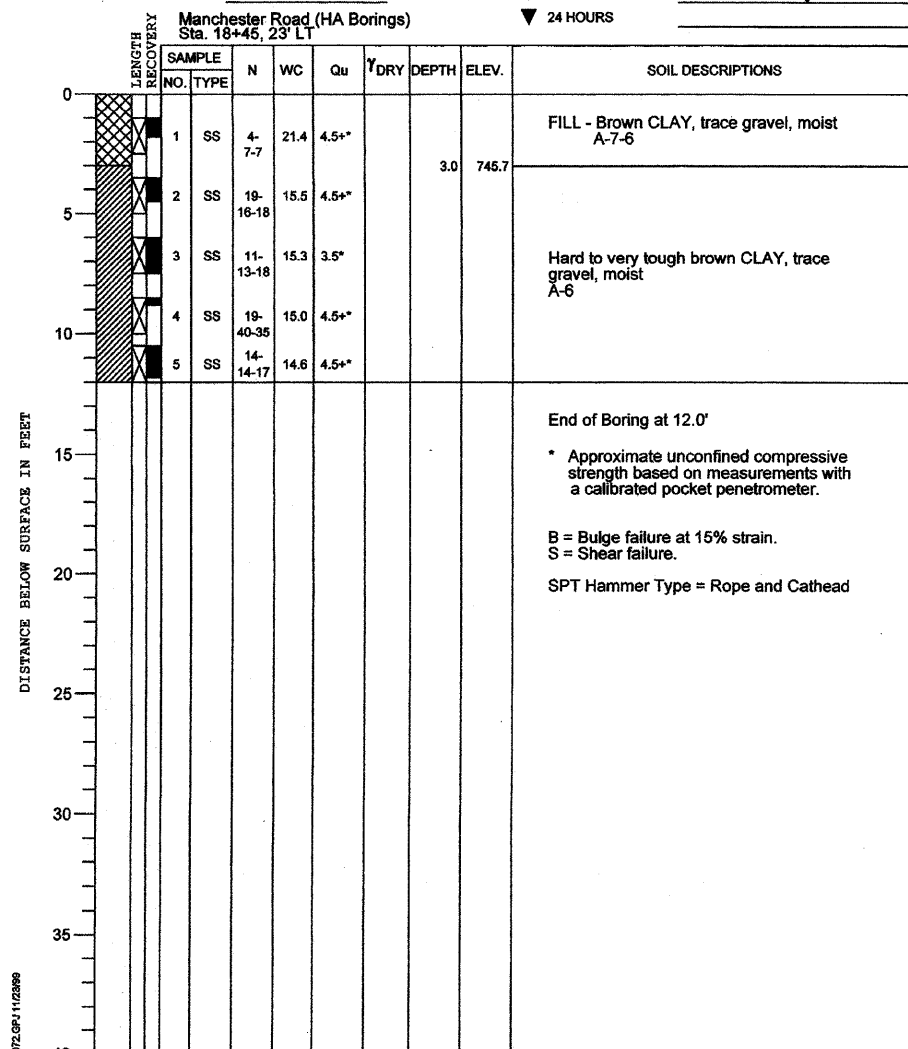
VERT. SCALE: 1" = 10'
 HORIZ. SCALE: 1" = 10'
 DATE: 6/4/2008

DRAWN BY: ML
 CHECKED BY: VS

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **6A** DATE STARTED **9-14-99** DATE COMPLETED **9-14-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **748.7** WHILE DRILLING **Dry**
 END OF BORING **736.7** AT END OF BORING **Dry**
 24 HOURS



TSC 46072.GP1 11/23/99

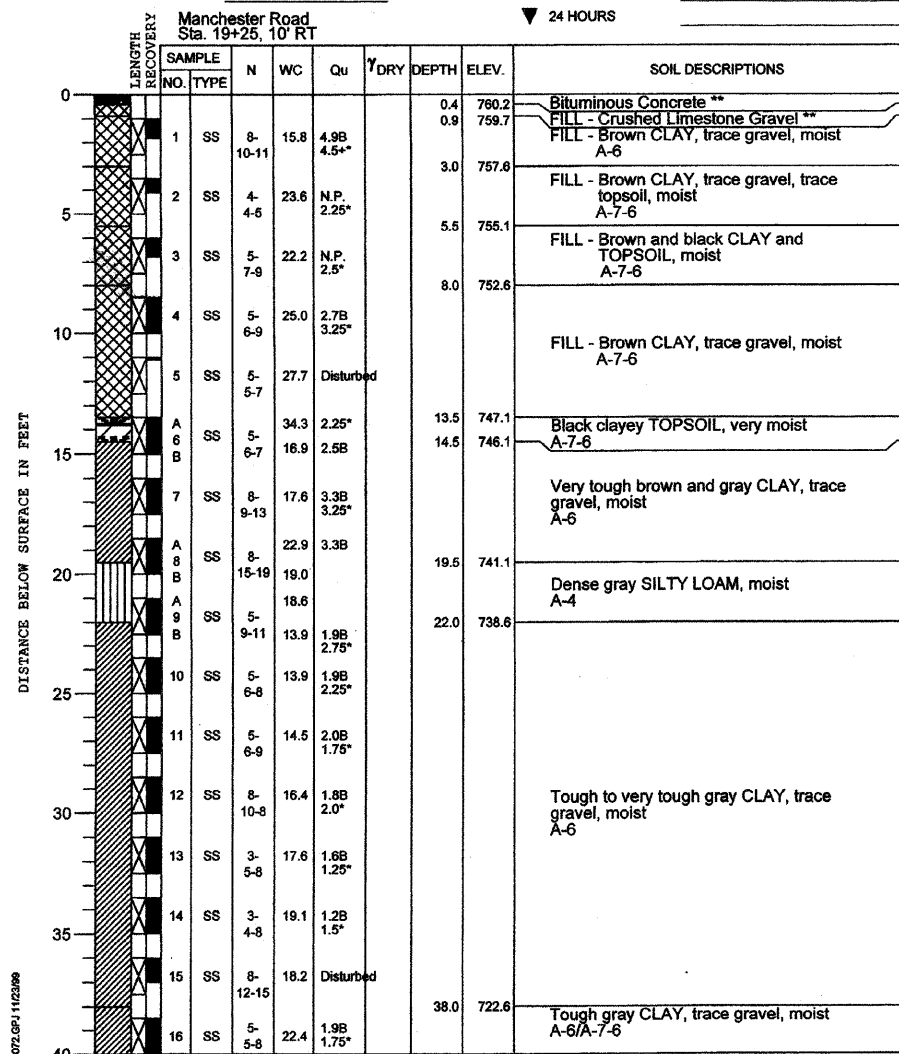
DRILL RIG NO. 138

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **7** DATE STARTED **9-14-99** DATE COMPLETED **9-14-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **760.6** WHILE DRILLING **Dry to 10.0'**
 END OF BORING **685.6** AT END OF BORING **Mud Rotary After 10.0'**
 24 HOURS



TSC 46072.GP1 11/23/99

DRILL RIG NO. 217

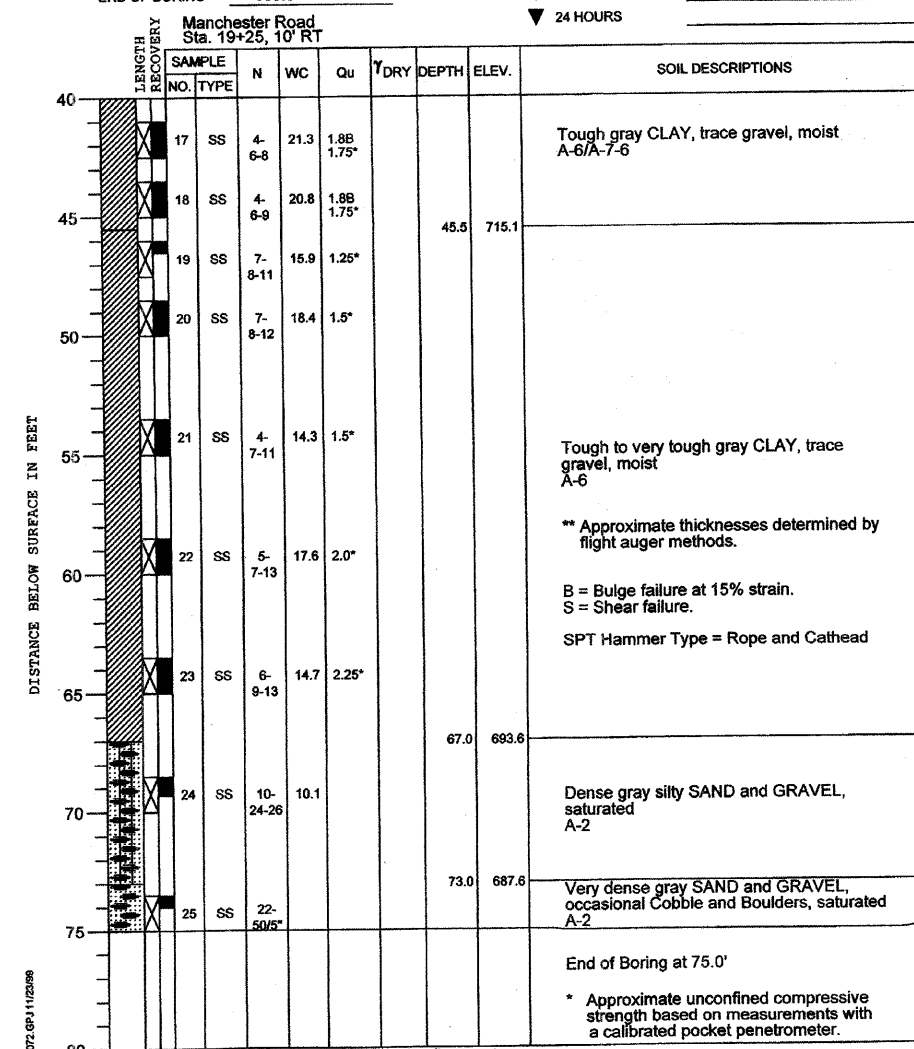
Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

Page 1 of 2

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **7** DATE STARTED **9-14-99** DATE COMPLETED **9-14-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **760.6** WHILE DRILLING **Dry to 10.0'**
 END OF BORING **685.6** AT END OF BORING **Mud Rotary After 10.0'**
 24 HOURS



TSC 46072.GP1 11/23/99

DRILL RIG NO. 217

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

Page 2 of 2

SHEET 5 OF 18

REVISIONS	
NAME	DATE

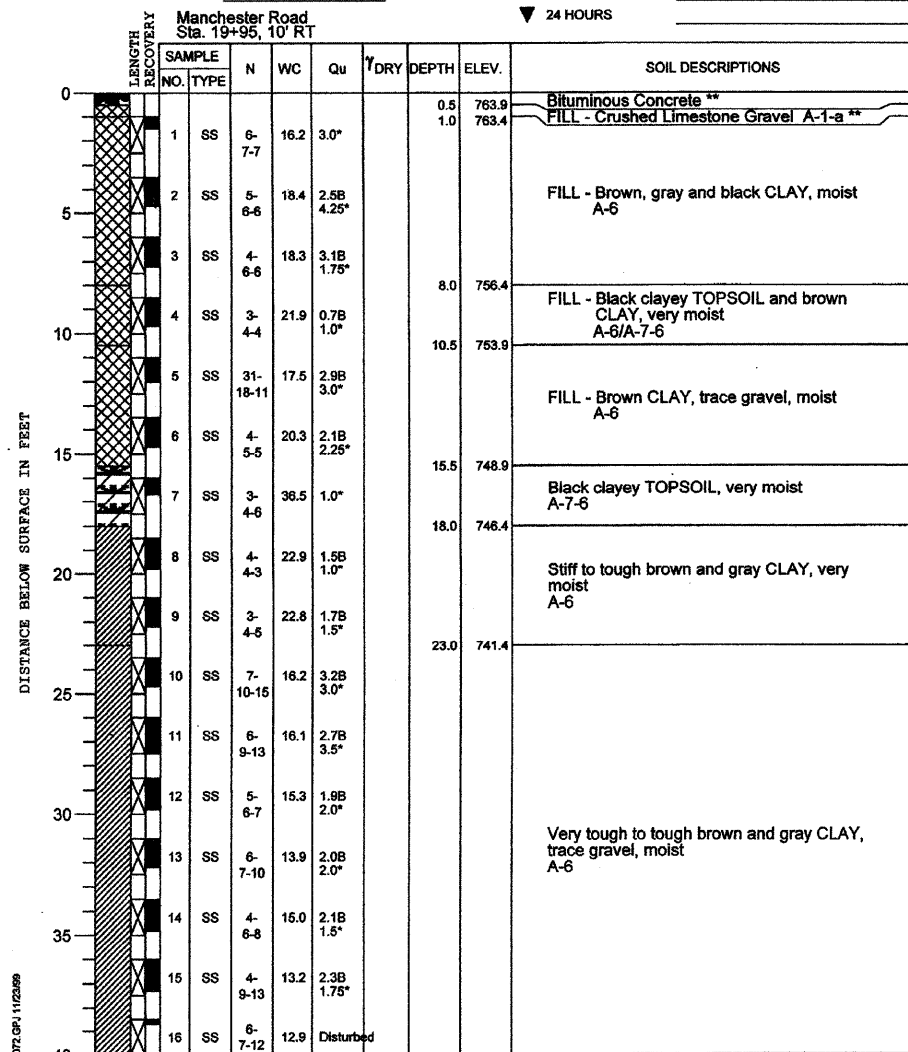
CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

SCALE: VERT. _____
 HORIZ. _____
 DATE 6/4/2008

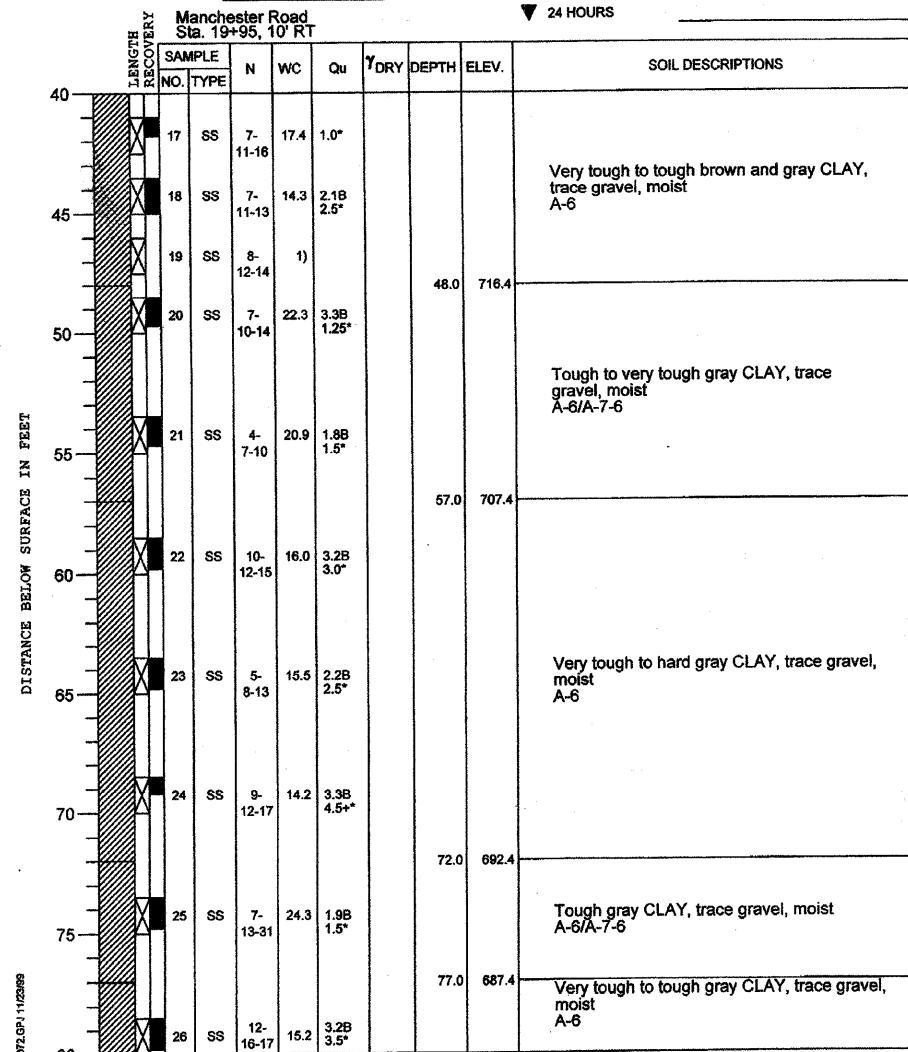
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 CHECKED BY VS

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **8** DATE STARTED **9-13-99** DATE COMPLETED **9-13-99** JOB **L-46,072**
 ELEVATIONS WATER TABLE
 GROUND SURFACE **764.4** WHILE DRILLING **Rotary Wash**
 END OF BORING **679.4** AT END OF BORING **Rotary Wash**
 24 HOURS



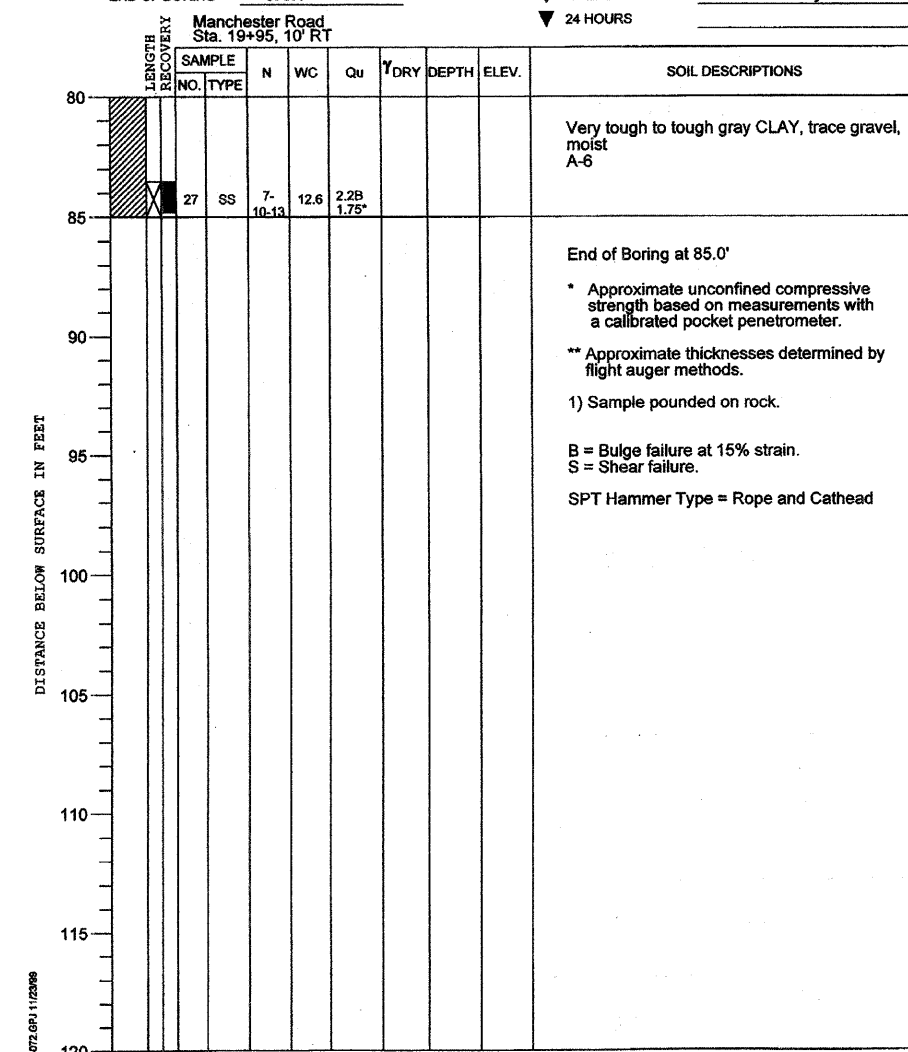
DRILL RIG NO. **217** Page 1 of 3

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **8** DATE STARTED **9-13-99** DATE COMPLETED **9-13-99** JOB **L-46,072**
 ELEVATIONS WATER TABLE
 GROUND SURFACE **764.4** WHILE DRILLING **Rotary Wash**
 END OF BORING **679.4** AT END OF BORING **Rotary Wash**
 24 HOURS



DRILL RIG NO. **217** Page 2 of 3

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **8** DATE STARTED **9-13-99** DATE COMPLETED **9-13-99** JOB **L-46,072**
 ELEVATIONS WATER TABLE
 GROUND SURFACE **764.4** WHILE DRILLING **Rotary Wash**
 END OF BORING **679.4** AT END OF BORING **Rotary Wash**
 24 HOURS



DRILL RIG NO. **217** Page 3 of 3

REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

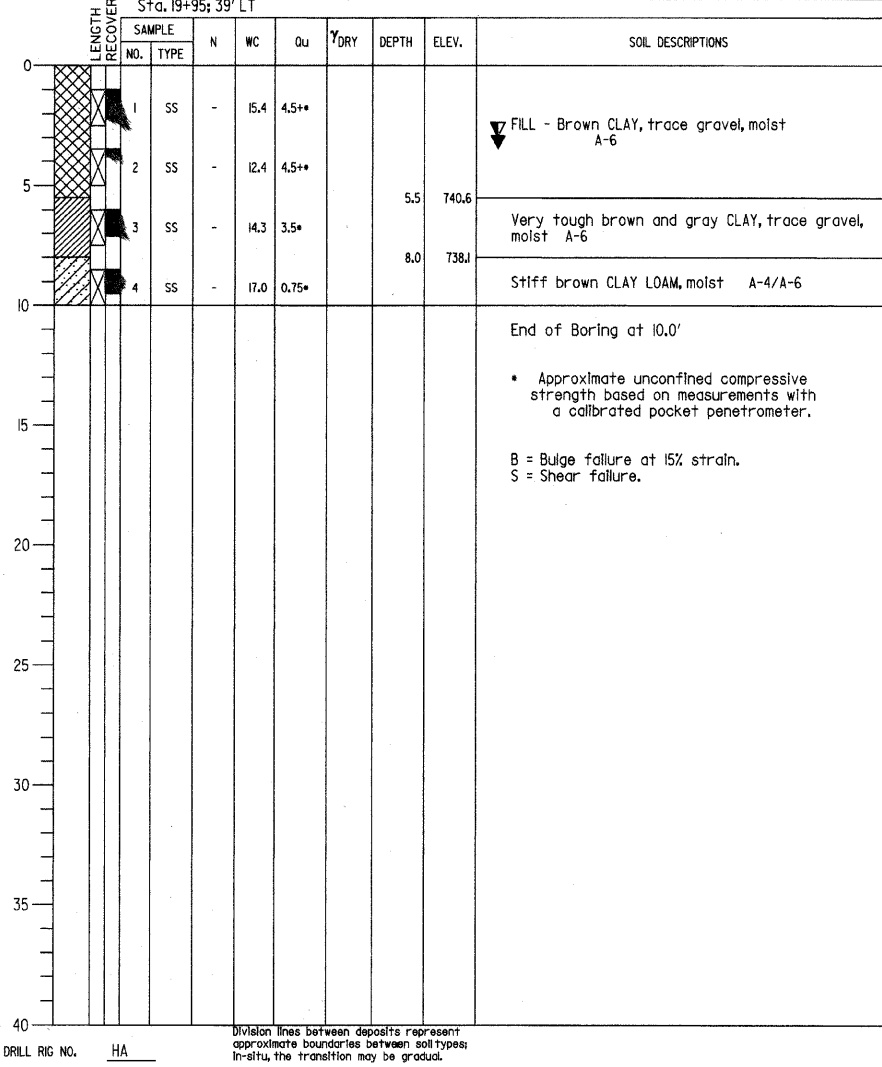
SCALE: VERT. 1"=10'
 HORIZ. 1"=10'
 DATE 6/4/2008

DRAWN BY ML
 CHECKED BY VS

PROJECT Wesley/Manchester Bridge Replacement, Wheaton, IL
 CLIENT HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois
 BORING 8A DATE STARTED 8-14-99 DATE COMPLETED 8-14-99 JOB L-46,072

ELEVATIONS
 GROUND SURFACE 746.1
 END OF BORING 736.1

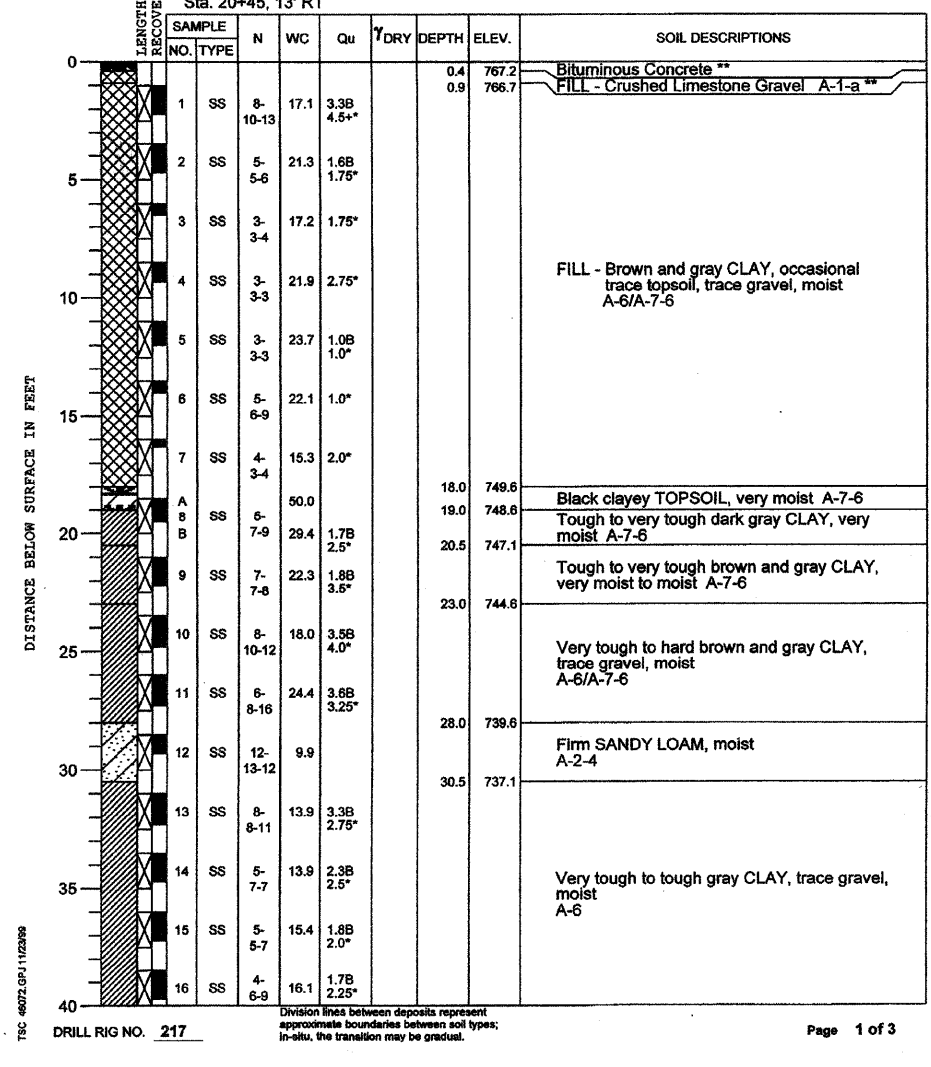
WATER LEVEL OBSERVATIONS
 WHILE DRILLING 3.0'
 AT END OF BORING 3.5'
 24 HOURS 3.5'



PROJECT Wesley/Manchester Bridge Replacement, Wheaton, IL
 CLIENT HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois
 BORING 9 DATE STARTED 9-10-99 DATE COMPLETED 9-10-99 JOB L-46,072

ELEVATIONS
 GROUND SURFACE 767.6
 END OF BORING 677.6

WATER TABLE
 WHILE DRILLING Rotary Wash
 AT END OF BORING Rotary Wash
 24 HOURS Rotary Wash

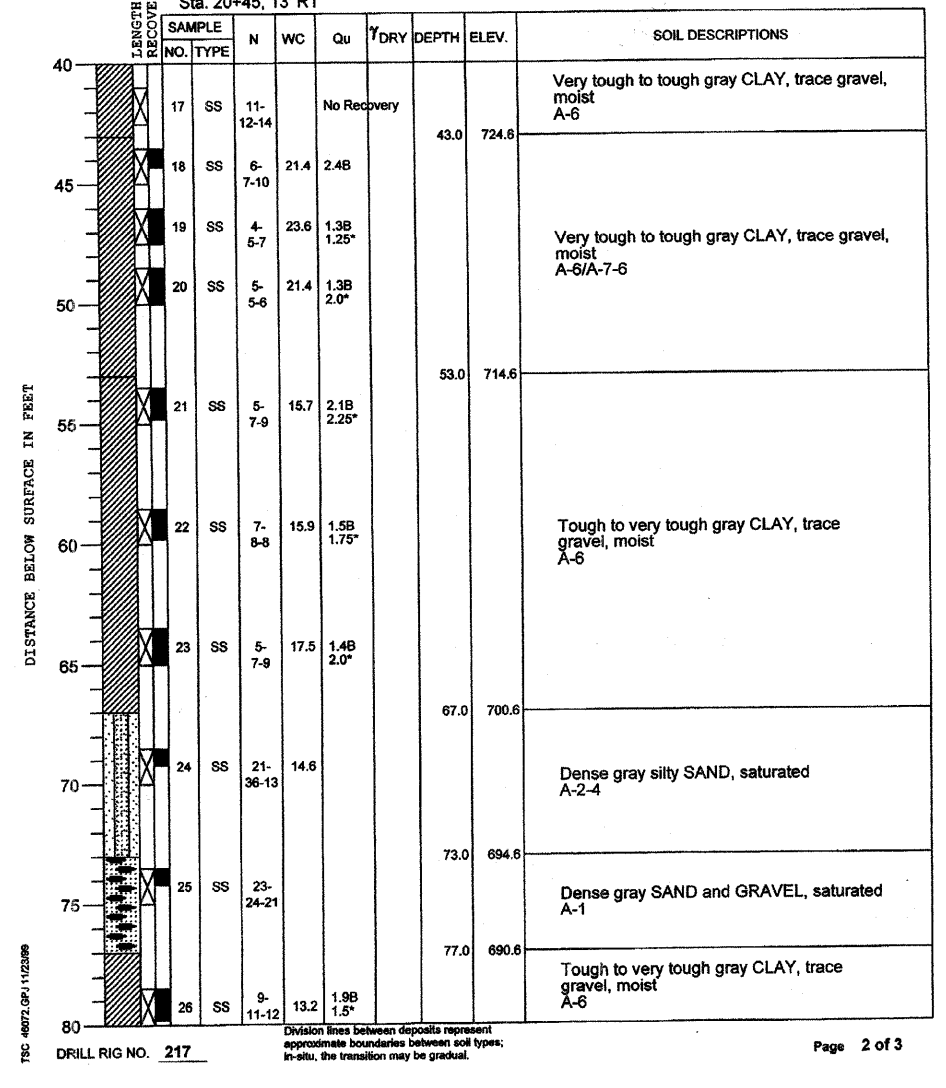


PROJECT Wesley/Manchester Bridge Replacement, Wheaton, IL
 CLIENT HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois
 BORING 9 DATE STARTED 9-10-99 DATE COMPLETED 9-10-99 JOB L-46,072



ELEVATIONS
 GROUND SURFACE 767.6
 END OF BORING 677.6

WATER TABLE
 WHILE DRILLING Rotary Wash
 AT END OF BORING Rotary Wash
 24 HOURS Rotary Wash



TSC 46072P9 TSC-ALUB9 7/17/01

TSC 46072P9 TSC-ALUB9 7/17/01

TSC 46072P9 TSC-ALUB9 7/17/01

REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

VERT. SCALE: 1" = 10'
 HORIZ. SCALE: 1" = 10'
 DATE: 6/4/2008

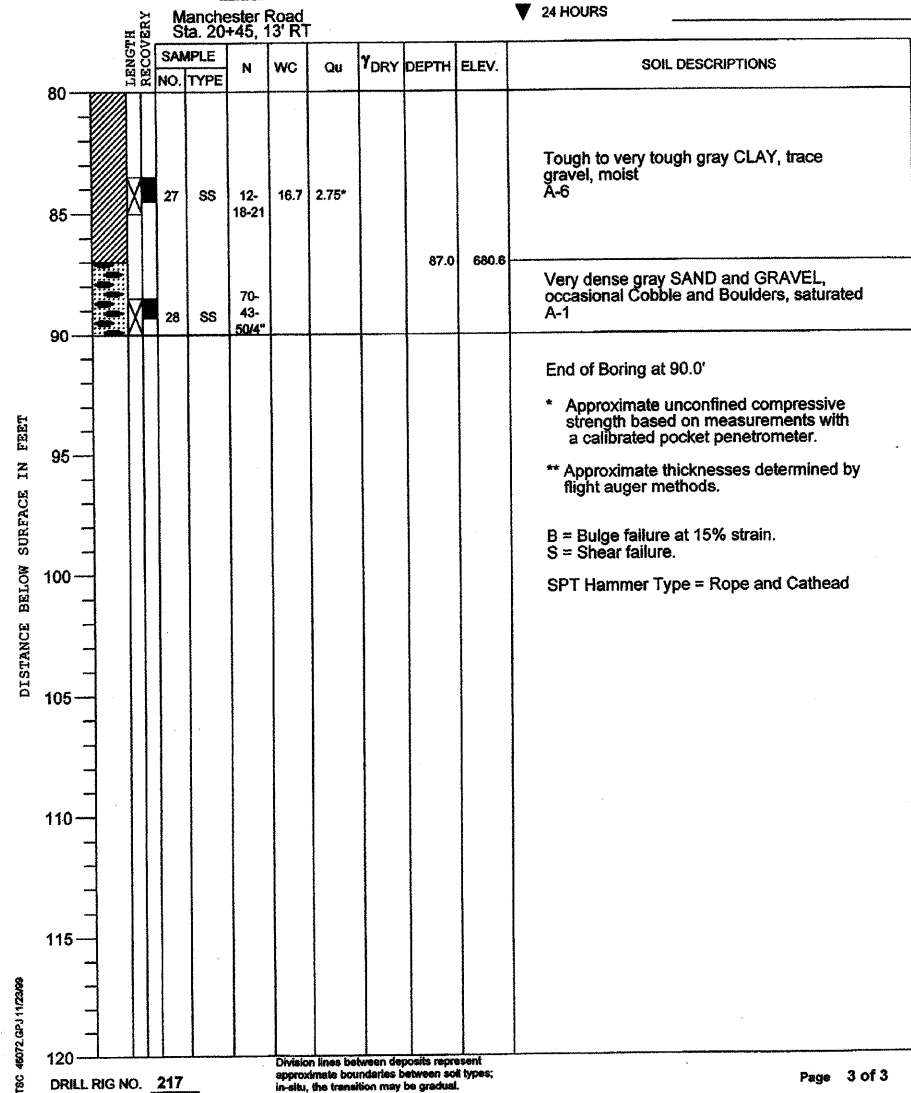
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PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **9** DATE STARTED **9-10-99** DATE COMPLETED **9-10-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **767.6**
 END OF BORING **677.6**

WATER TABLE
 WHILE DRILLING **Rotary Wash**
 AT END OF BORING **Rotary Wash**
 24 HOURS

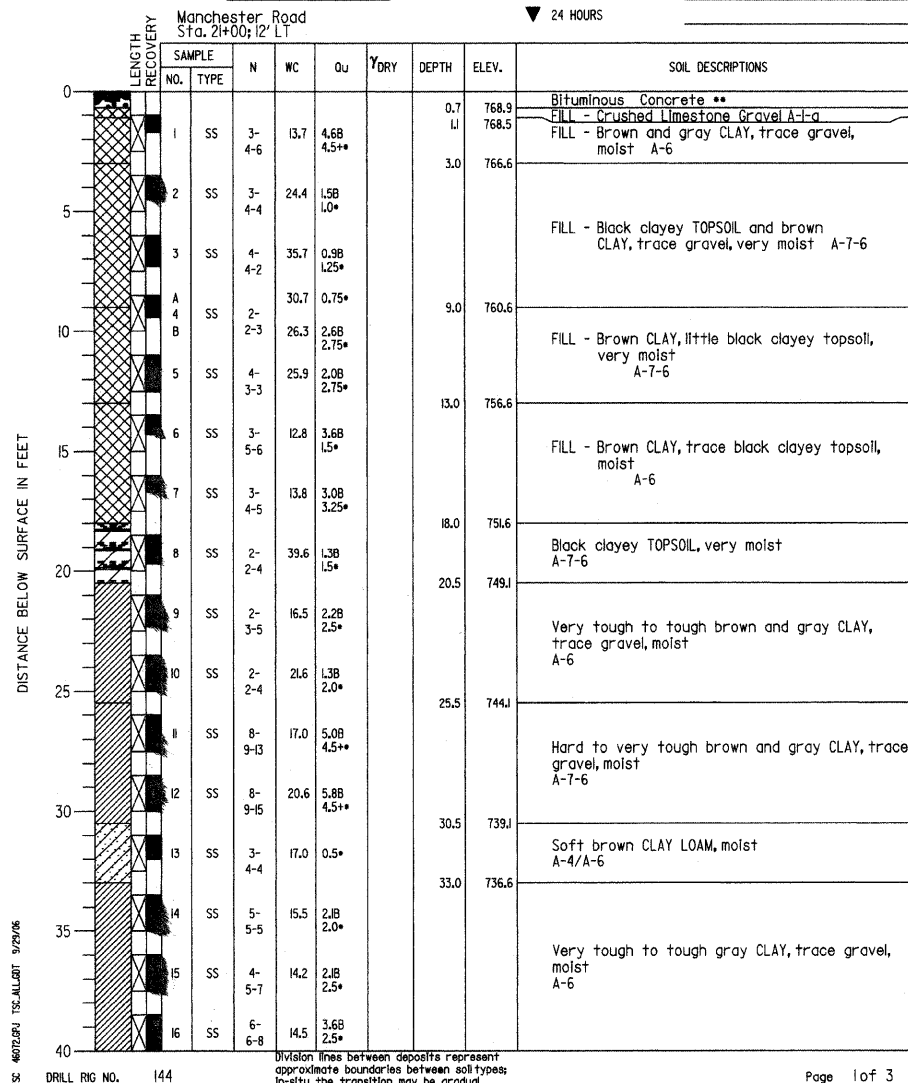


PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **10** DATE STARTED **9-7-99** DATE COMPLETED **9-1-74** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **769.6**
 END OF BORING **679.6**

WATER LEVEL OBSERVATIONS
 WHILE DRILLING **Dry to 10.0'**
 AT END OF BORING **Mud Rotary Below 10.0'**
 24 HOURS

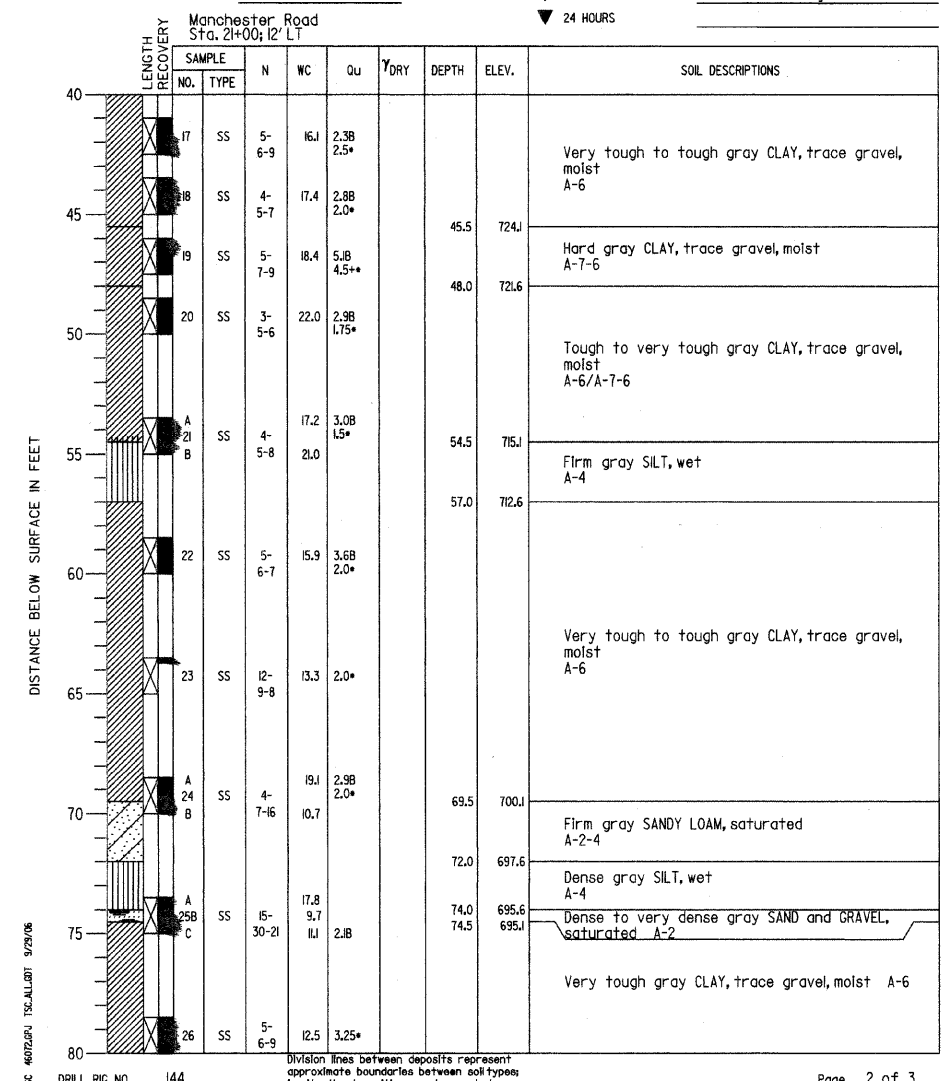


PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **10** DATE STARTED **9-7-99** DATE COMPLETED **9-1-74** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **769.6**
 END OF BORING **679.6**

WATER LEVEL OBSERVATIONS
 WHILE DRILLING **Dry to 10.0'**
 AT END OF BORING **Mud Rotary Below 10.0'**
 24 HOURS



TSC #6072 GP/11/2009

DRILL RIG NO. **217**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC #6072 GP/11/2009

DRILL RIG NO. **144**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

TSC #6072 GP/11/2009

DRILL RIG NO. **144**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

REVISIONS	
NAME	DATE

CITY OF WHEATON
MANCHESTER ROAD / WESLEY STREET
OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

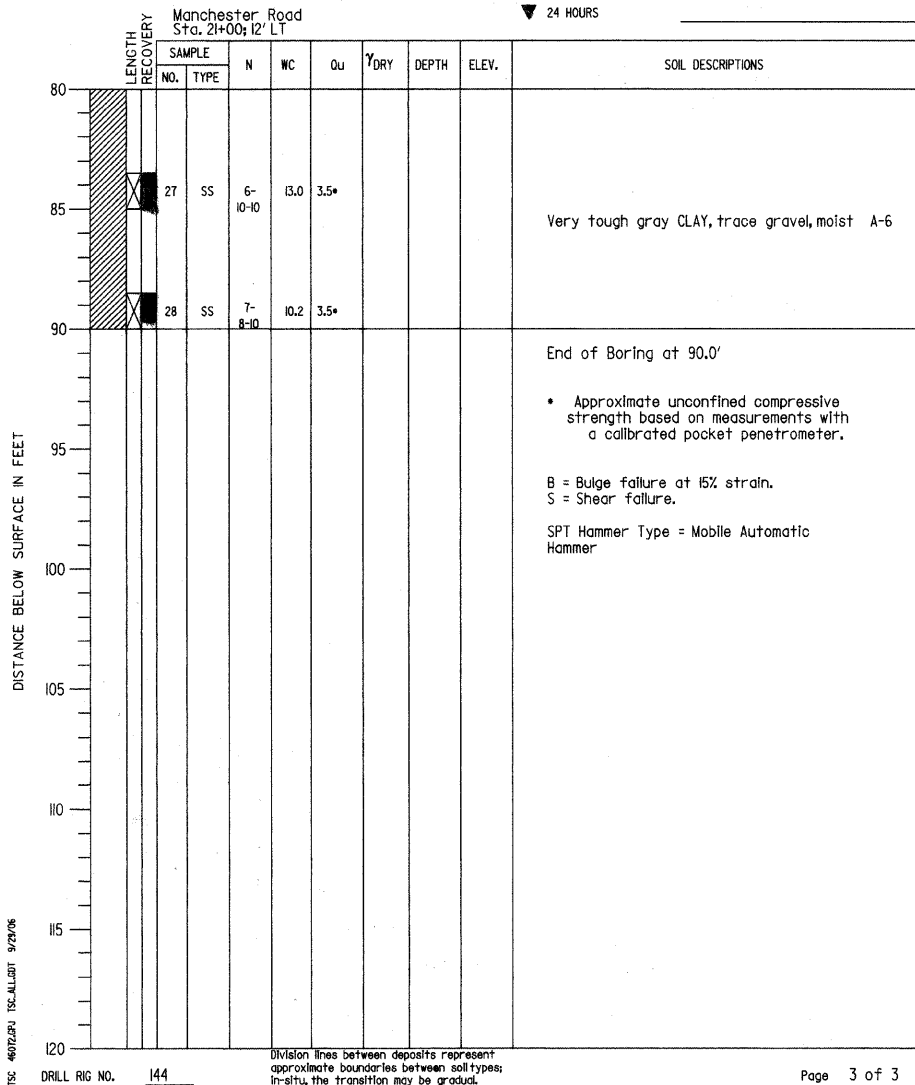
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 HORIZ. _____
 DATE **6/4/2008**

DRAWN BY **ML**
 CHECKED BY **VS**

PROJECT Wesley/Manchester Bridge Replacement, Wheaton, IL
 CLIENT HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois
 BORING 10 DATE STARTED 9-7-99 DATE COMPLETED 9-1-74 JOB L-46,072



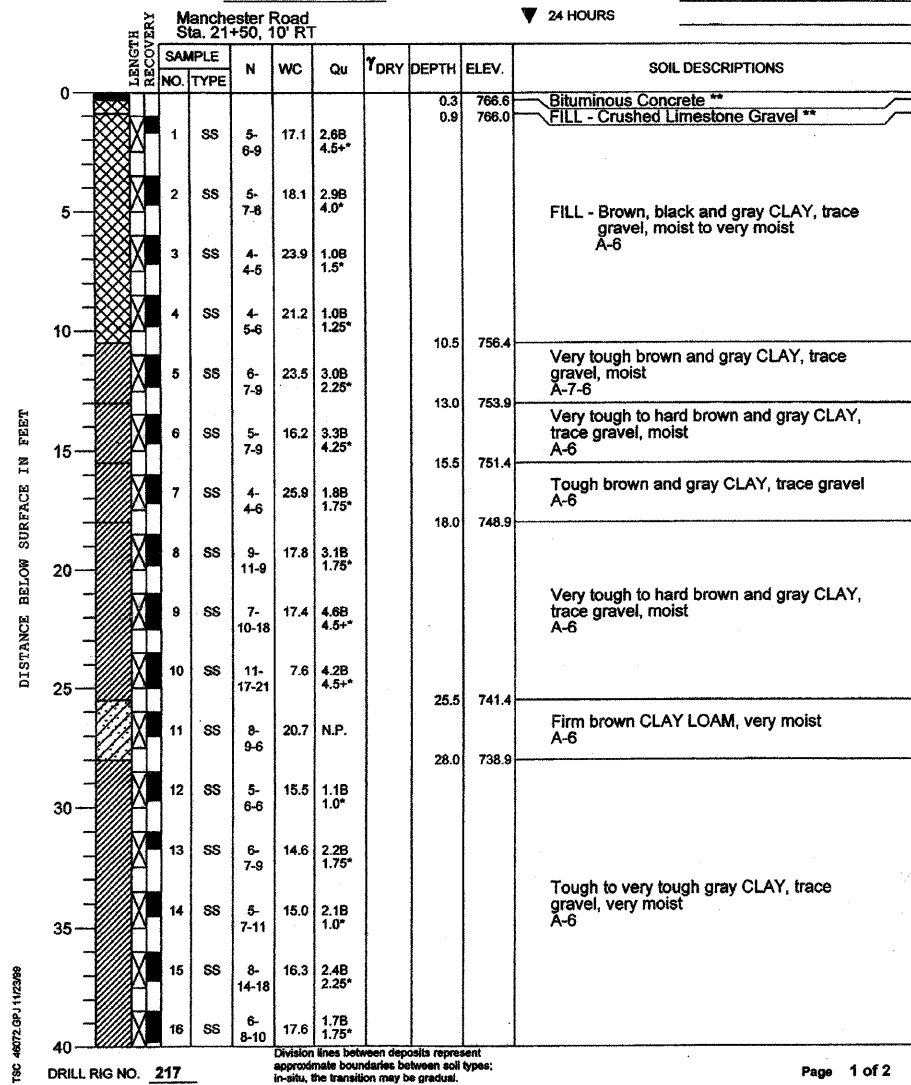
ELEVATIONS WATER LEVEL OBSERVATIONS
 GROUND SURFACE 769.6 WHILE DRILLING Dry to 10.0'
 END OF BORING 679.6 AT END OF BORING Mud Rotary Below 10.0'
 24 HOURS



PROJECT Wesley/Manchester Bridge Replacement, Wheaton, IL
 CLIENT HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois
 BORING 11 DATE STARTED 9-9-99 DATE COMPLETED 9-9-99 JOB L-46,072



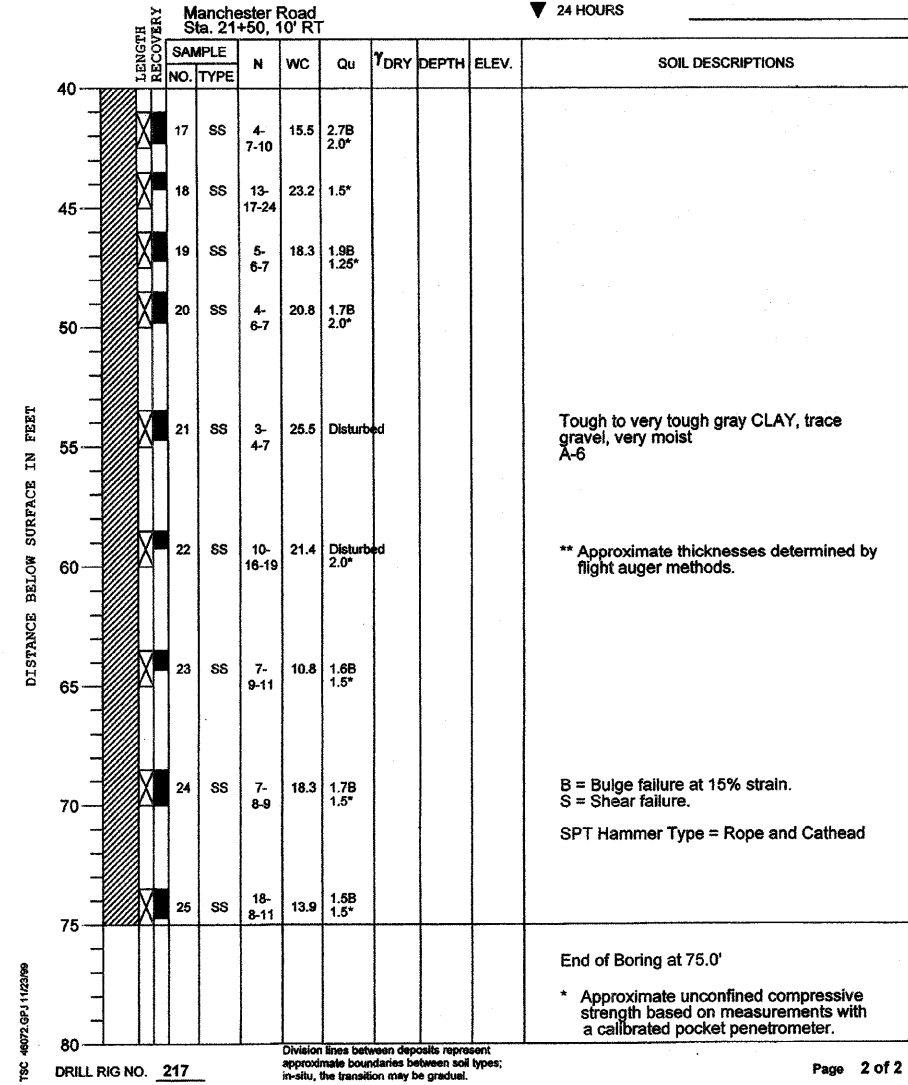
ELEVATIONS WATER TABLE
 GROUND SURFACE 766.9 WHILE DRILLING Rotary Wash
 END OF BORING 691.9 AT END OF BORING Rotary Wash
 24 HOURS



PROJECT Wesley/Manchester Bridge Replacement, Wheaton, IL
 CLIENT HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois
 BORING 11 DATE STARTED 9-9-99 DATE COMPLETED 9-9-99 JOB L-46,072



ELEVATIONS WATER TABLE
 GROUND SURFACE 766.9 WHILE DRILLING Rotary Wash
 END OF BORING 691.9 AT END OF BORING Rotary Wash
 24 HOURS



REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

VERT. SCALE: 1" = 10'
 HORIZ. SCALE: 1" = 10'
 DATE 6/4/2008

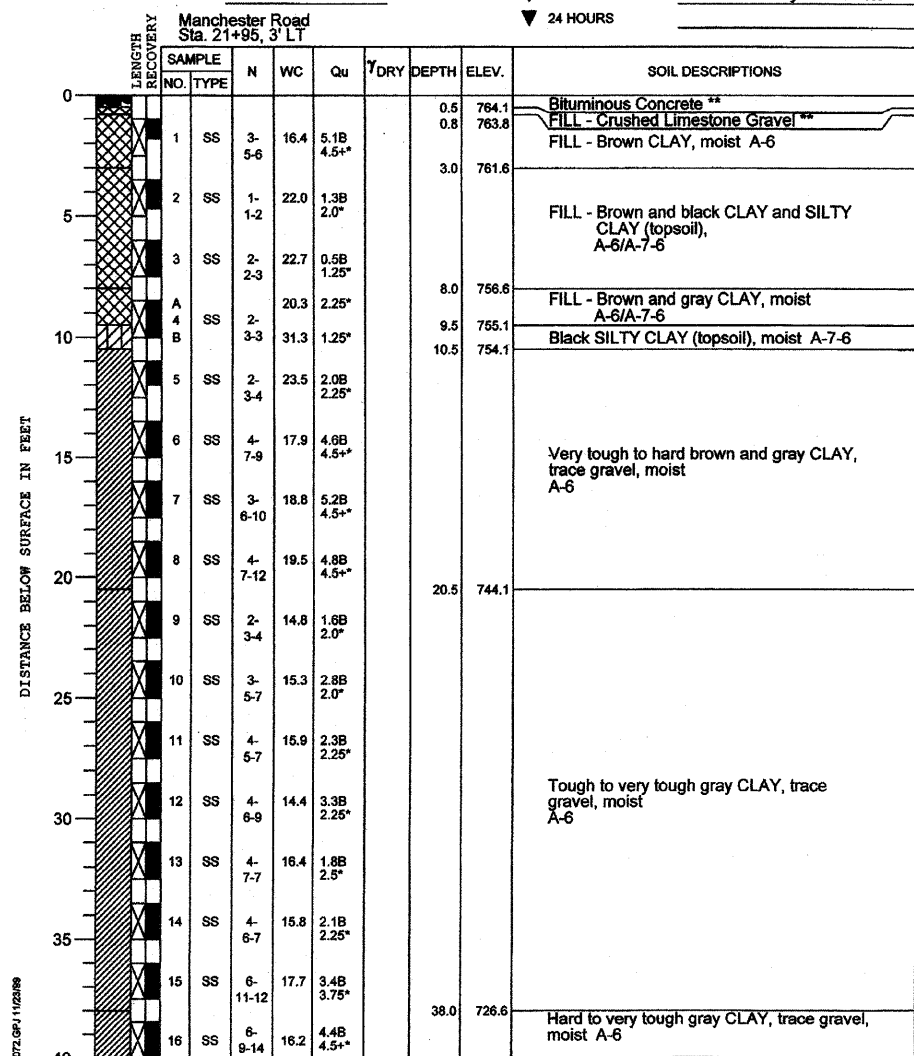
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PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **12** DATE STARTED **9-9-99** DATE COMPLETED **9-9-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **764.6**
 END OF BORING **689.6**

WATER TABLE
 WHILE DRILLING **Dry to 10.0'**
 AT END OF BORING **Mud Rotary Below 10.0'**
 24 HOURS



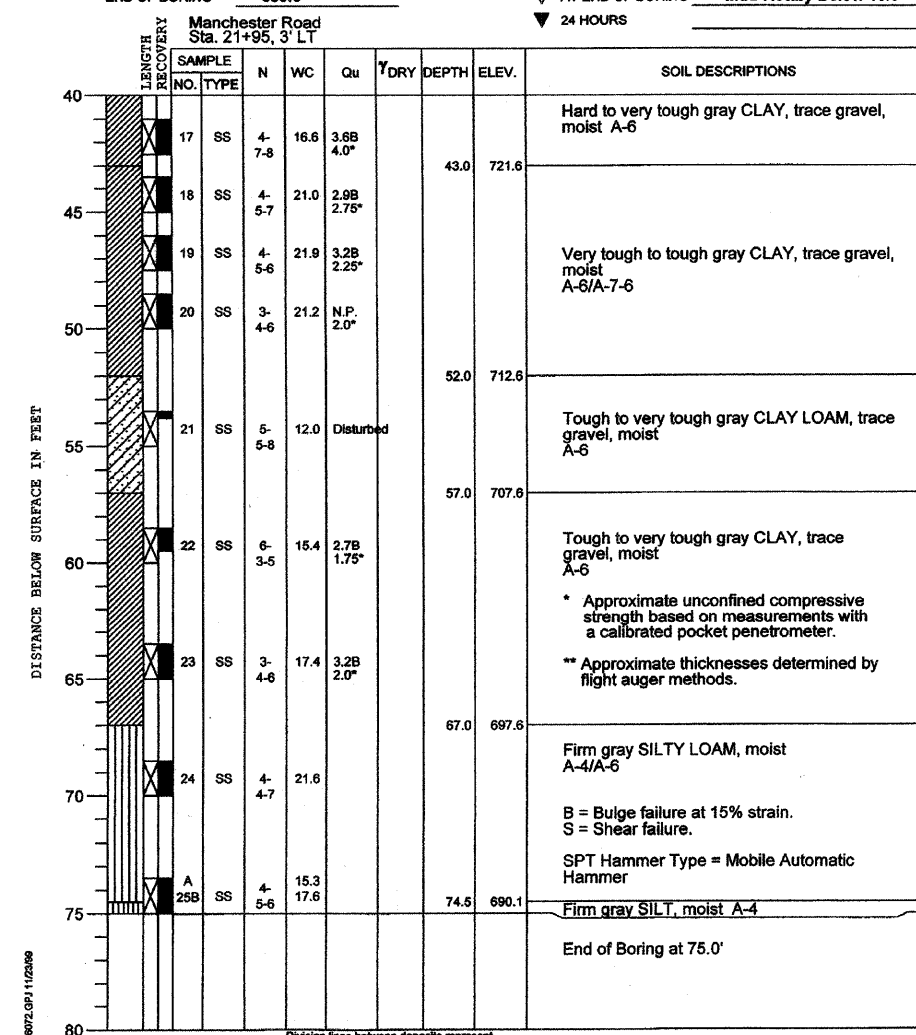
DRILL RIG NO. **144** Page 1 of 2

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **12** DATE STARTED **9-9-99** DATE COMPLETED **9-9-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **764.6**
 END OF BORING **689.6**

WATER TABLE
 WHILE DRILLING **Dry to 10.0'**
 AT END OF BORING **Mud Rotary Below 10.0'**
 24 HOURS



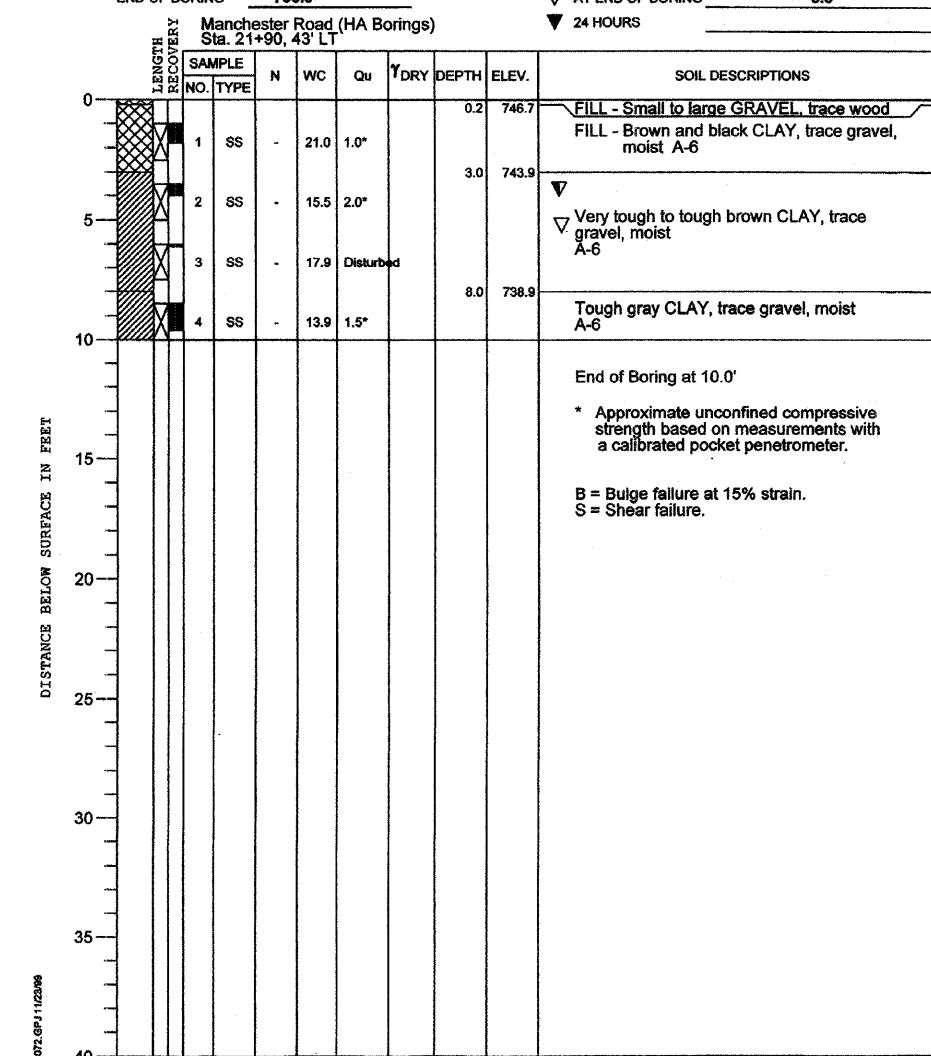
DRILL RIG NO. **144** Page 2 of 2

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **12A** DATE STARTED **8-14-99** DATE COMPLETED **8-14-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **746.9**
 END OF BORING **736.9**

WATER TABLE
 WHILE DRILLING **4.0'**
 AT END OF BORING **5.5'**
 24 HOURS



DRILL RIG NO. **HA**

REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

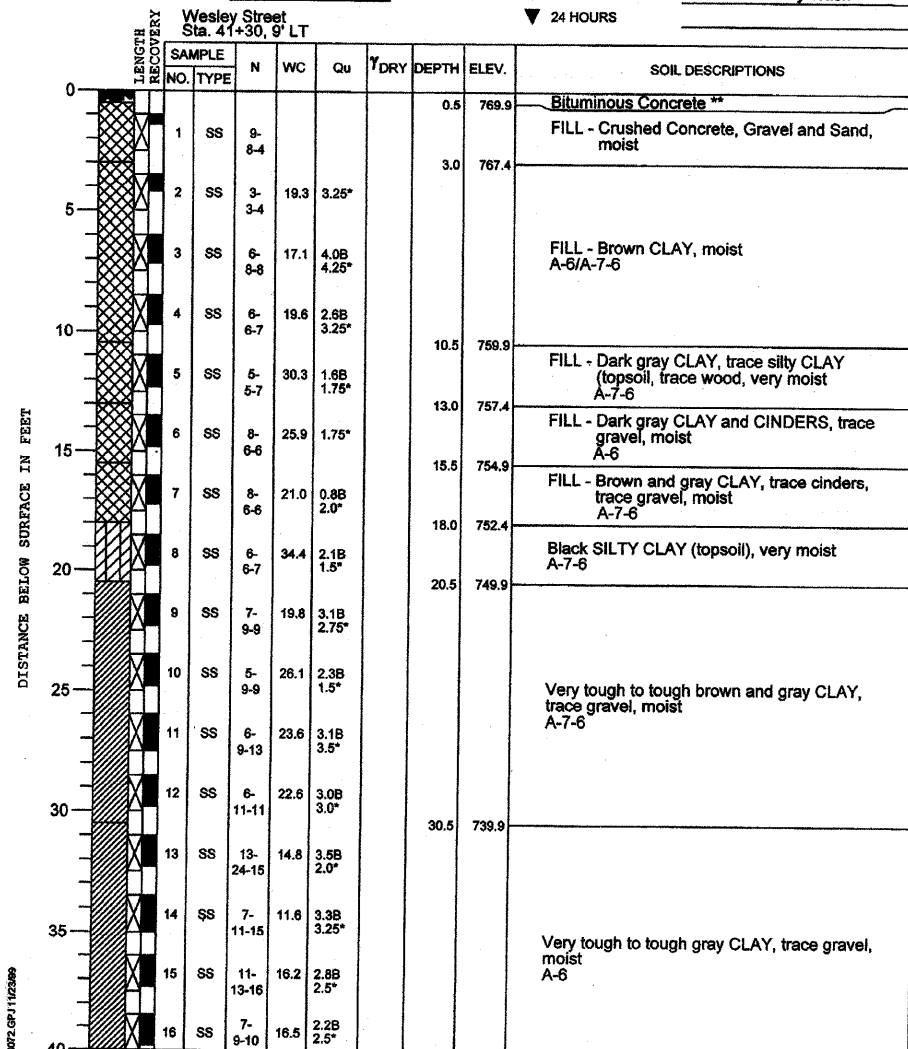
SCALE: VERT. DATE 6/4/2008
 HORIZ. DRAWN BY ML
 CHECKED BY VS

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **13** DATE STARTED **9-7-99** DATE COMPLETED **9-7-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **770.4**
 END OF BORING **680.4**

WATER TABLE
 WHILE DRILLING **Rotary Wash**
 AT END OF BORING **Rotary Wash**
 24 HOURS



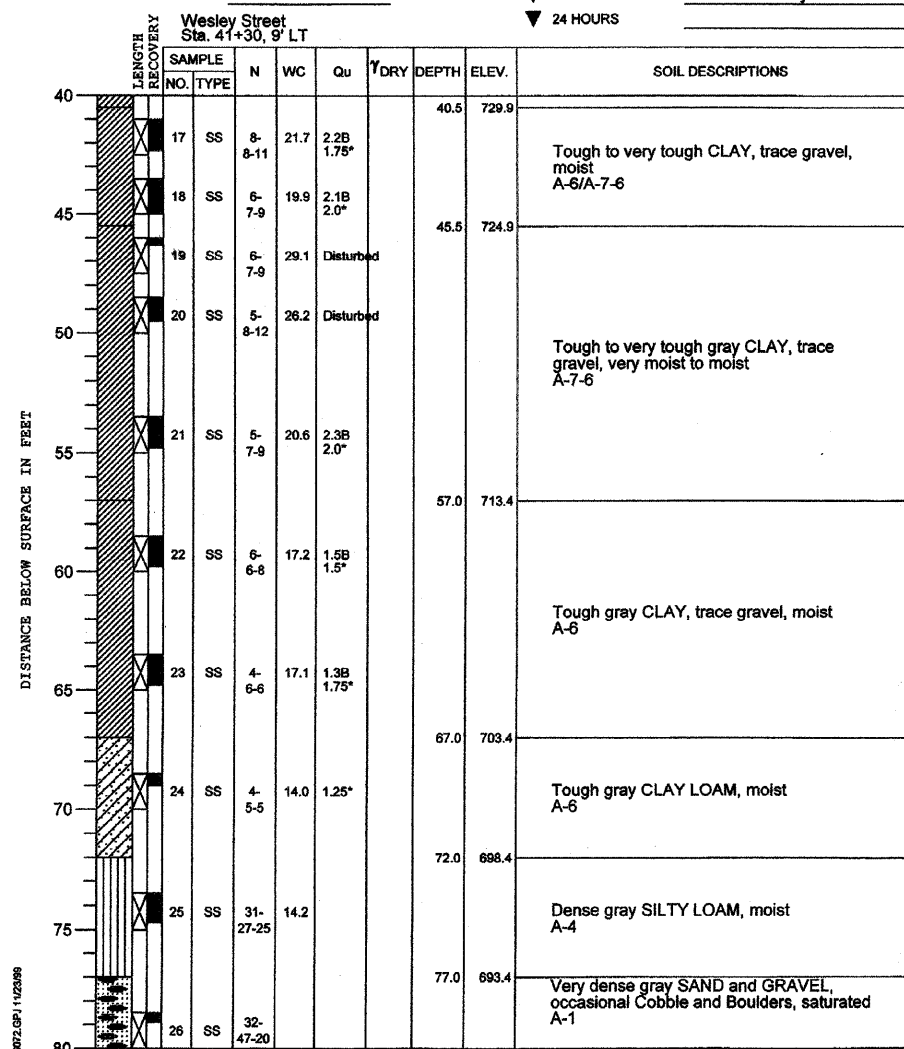
DRILL RIG NO. **217** Page 1 of 3

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **13** DATE STARTED **9-7-99** DATE COMPLETED **9-7-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **770.4**
 END OF BORING **680.4**

WATER TABLE
 WHILE DRILLING **Rotary Wash**
 AT END OF BORING **Rotary Wash**
 24 HOURS



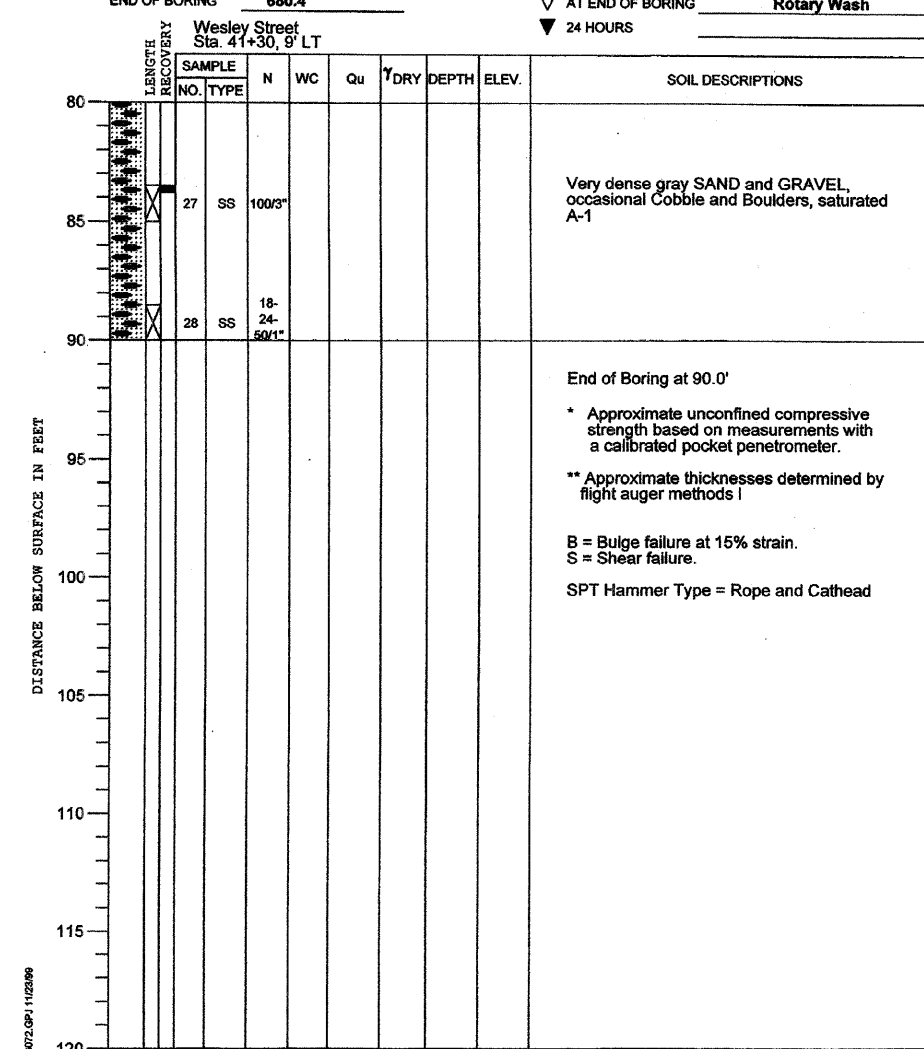
DRILL RIG NO. **217** Page 2 of 3

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **13** DATE STARTED **9-7-99** DATE COMPLETED **9-7-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **770.4**
 END OF BORING **680.4**

WATER TABLE
 WHILE DRILLING **Rotary Wash**
 AT END OF BORING **Rotary Wash**
 24 HOURS



DRILL RIG NO. **217** Page 3 of 3

REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

SCALE: VERT. _____
 HORIZ. _____
 DATE 6/4/2008

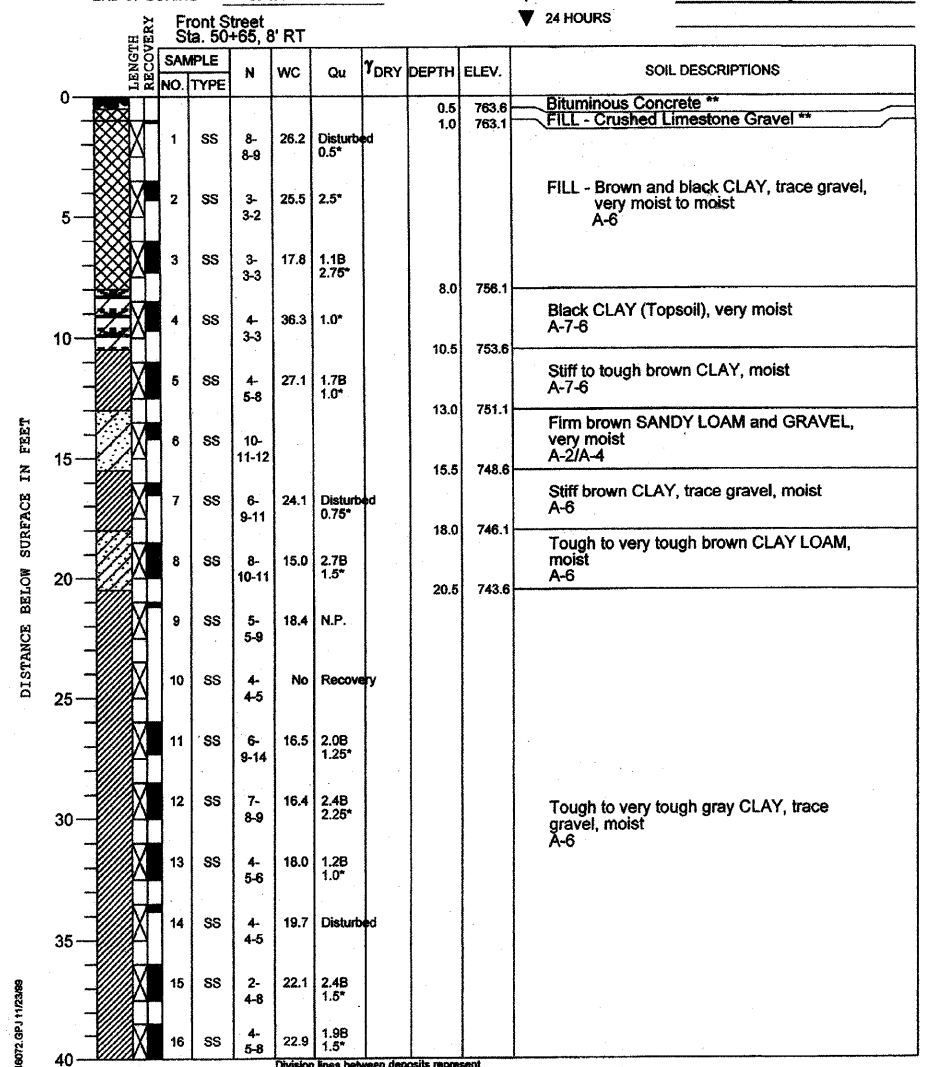
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 CHECKED BY VS

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **14** DATE STARTED **8-31-99** DATE COMPLETED **8-31-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **764.1**
 END OF BORING **674.1**

WATER TABLE
 WHILE DRILLING **Dry to 10.0'**
 AT END OF BORING **Mud Rotary Below 10.0'**
 24 HOURS



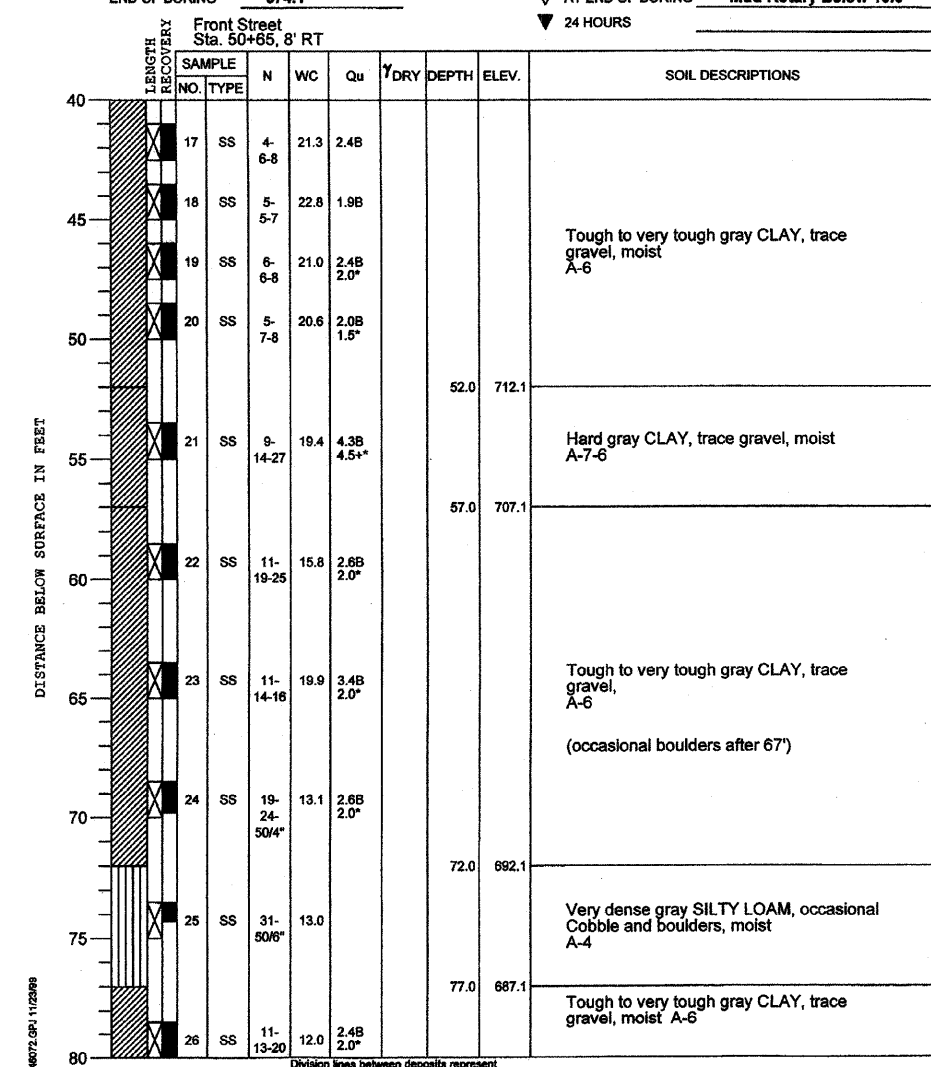
DRILL RIG NO. **217**
 Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.
 Page 1 of 3

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **14** DATE STARTED **8-31-99** DATE COMPLETED **8-31-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **764.1**
 END OF BORING **674.1**

WATER TABLE
 WHILE DRILLING **Dry to 10.0'**
 AT END OF BORING **Mud Rotary Below 10.0'**
 24 HOURS



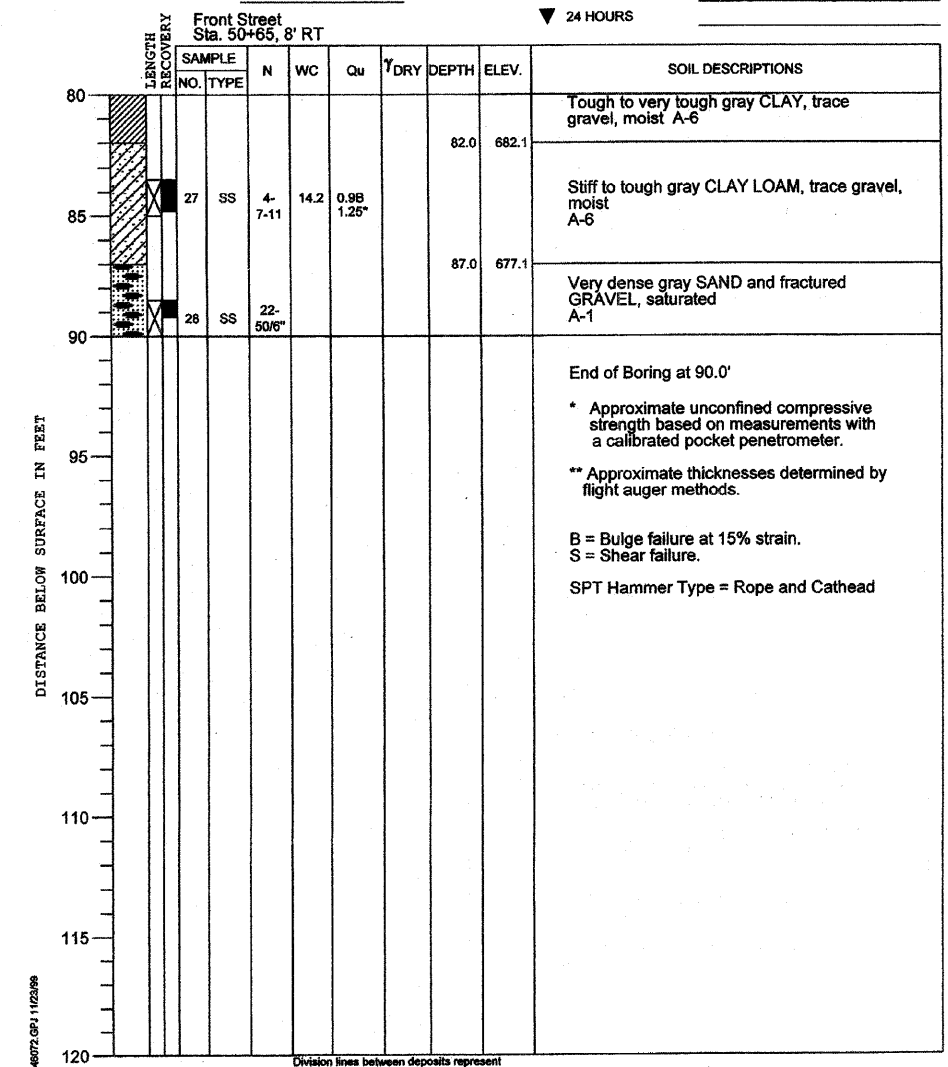
DRILL RIG NO. **217**
 Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.
 Page 2 of 3

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **14** DATE STARTED **8-31-99** DATE COMPLETED **8-31-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **764.1**
 END OF BORING **674.1**

WATER TABLE
 WHILE DRILLING **Dry to 10.0'**
 AT END OF BORING **Mud Rotary Below 10.0'**
 24 HOURS



DRILL RIG NO. **217**
 Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.
 Page 3 of 3

REVISIONS	
NAME	DATE

CITY OF WHEATON
**MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD**

SOIL BORING LOG

VERT. SCALE: 1" = 10'
 HORIZ. SCALE: 1" = 10'
 DATE: 6/4/2008

DRAWN BY: ML
 CHECKED BY: VS

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**

CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**

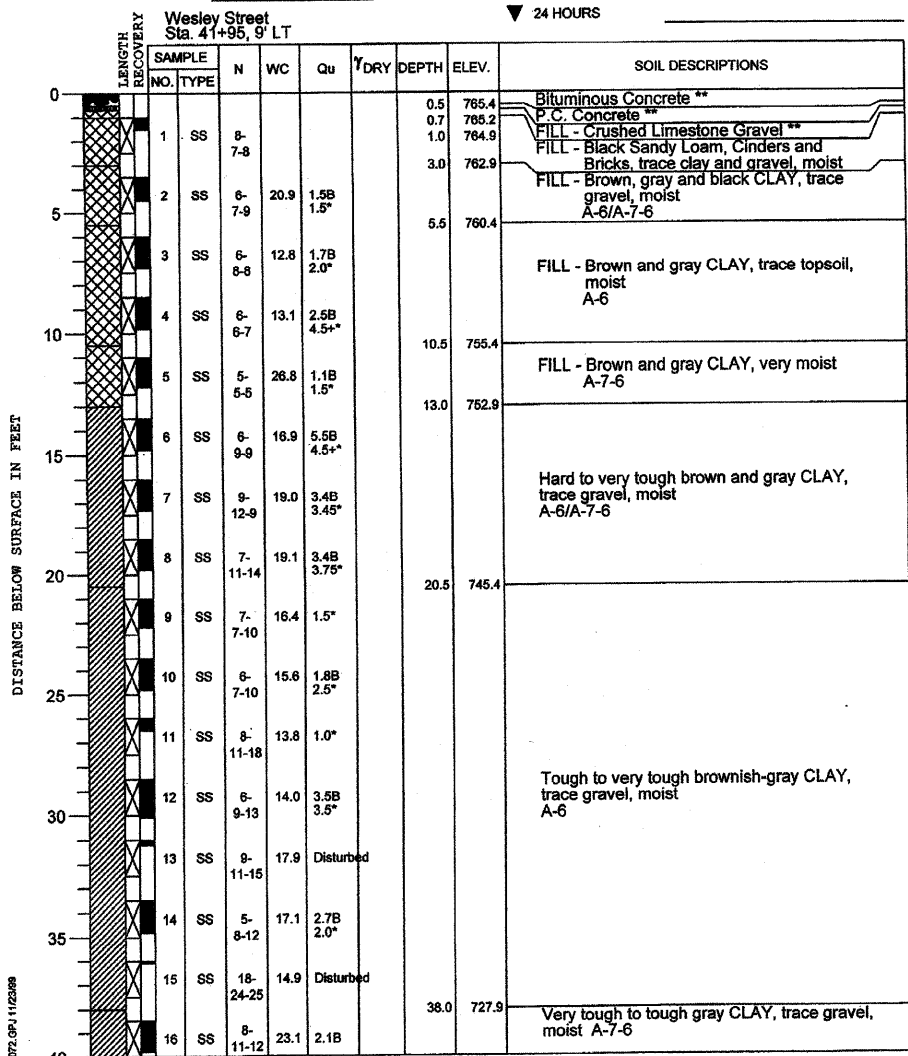
BORING **17** DATE STARTED **9-8-99** DATE COMPLETED **9-8-99** JOB **L-46,072**

ELEVATIONS WATER TABLE

GROUND SURFACE **765.9** WHILE DRILLING **Rotary Wash**

END OF BORING **690.9** AT END OF BORING **Rotary Wash**

24 HOURS



DRILL RIG NO. **217**

Page 1 of 2

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**

CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**

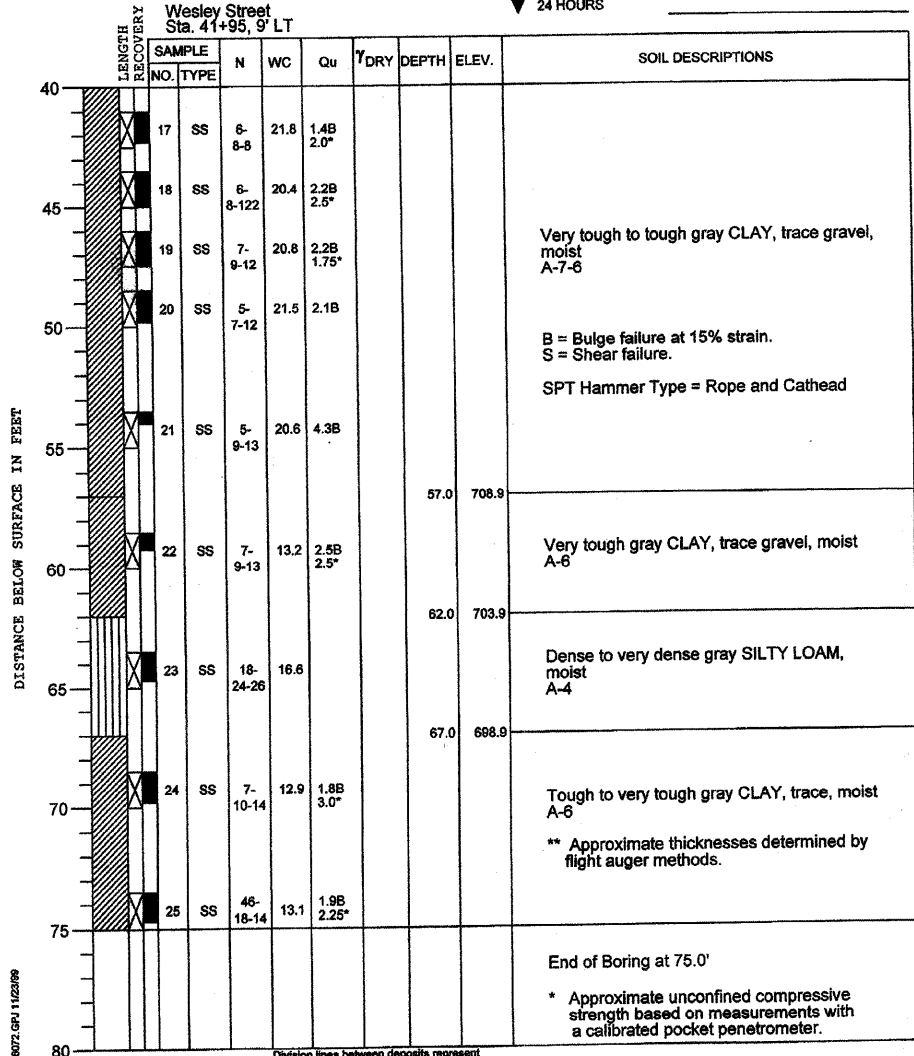
BORING **17** DATE STARTED **9-8-99** DATE COMPLETED **9-8-99** JOB **L-46,072**

ELEVATIONS WATER TABLE

GROUND SURFACE **765.9** WHILE DRILLING **Rotary Wash**

END OF BORING **690.9** AT END OF BORING **Rotary Wash**

24 HOURS



DRILL RIG NO. **217**

Page 2 of 2

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**

CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**

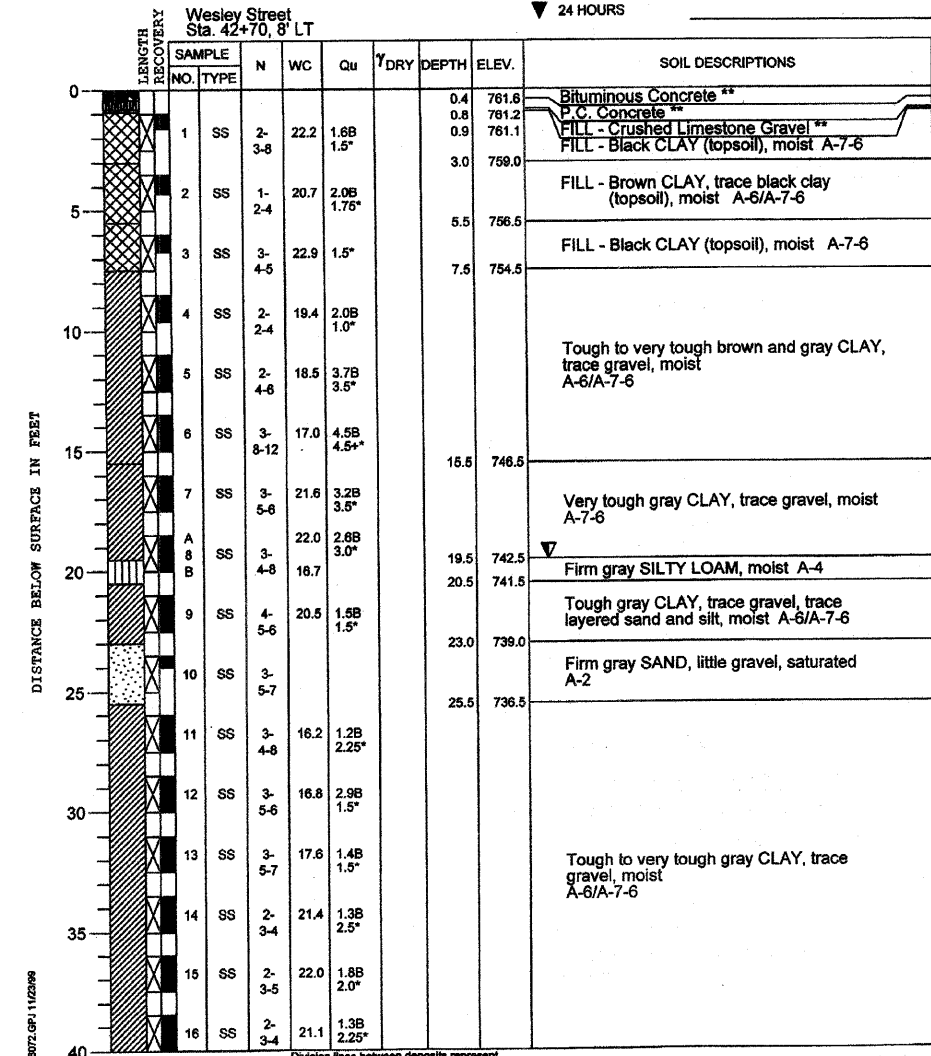
BORING **18** DATE STARTED **9-8-99** DATE COMPLETED **9-8-99** JOB **L-46,072**

ELEVATIONS WATER TABLE

GROUND SURFACE **762.0** WHILE DRILLING **19.5'**

END OF BORING **702.0** AT END OF BORING **Rotary Wash**

24 HOURS



DRILL RIG NO. **144**

Page 1 of 2

REVISIONS	
NAME	DATE

CITY OF WHEATON

MANCHESTER ROAD / WESLEY STREET
OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

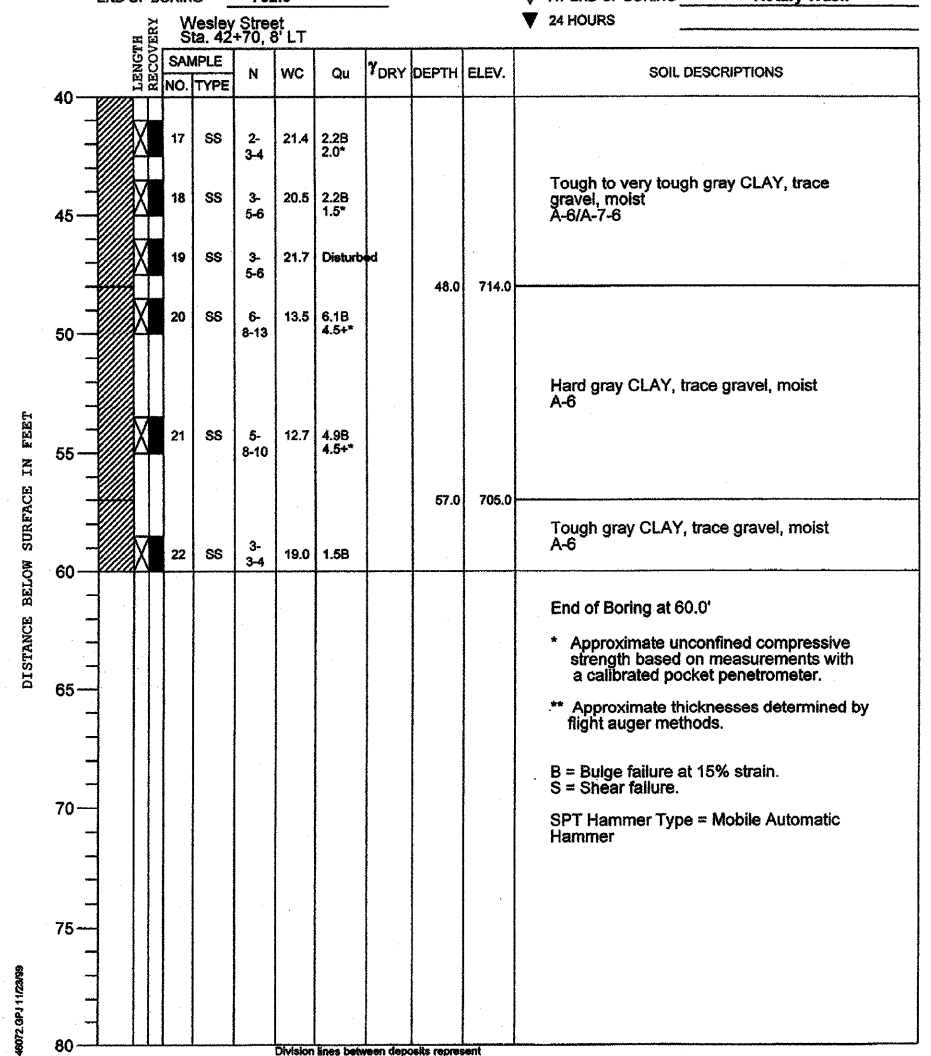
SCALE: VERT. DATE 6/4/2008

DRAWN BY ML
CHECKED BY VS

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **18** DATE STARTED **9-8-99** DATE COMPLETED **9-8-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **762.0** WHILE DRILLING **19.5'**
 END OF BORING **702.0** AT END OF BORING **Rotary Wash**
 24 HOURS

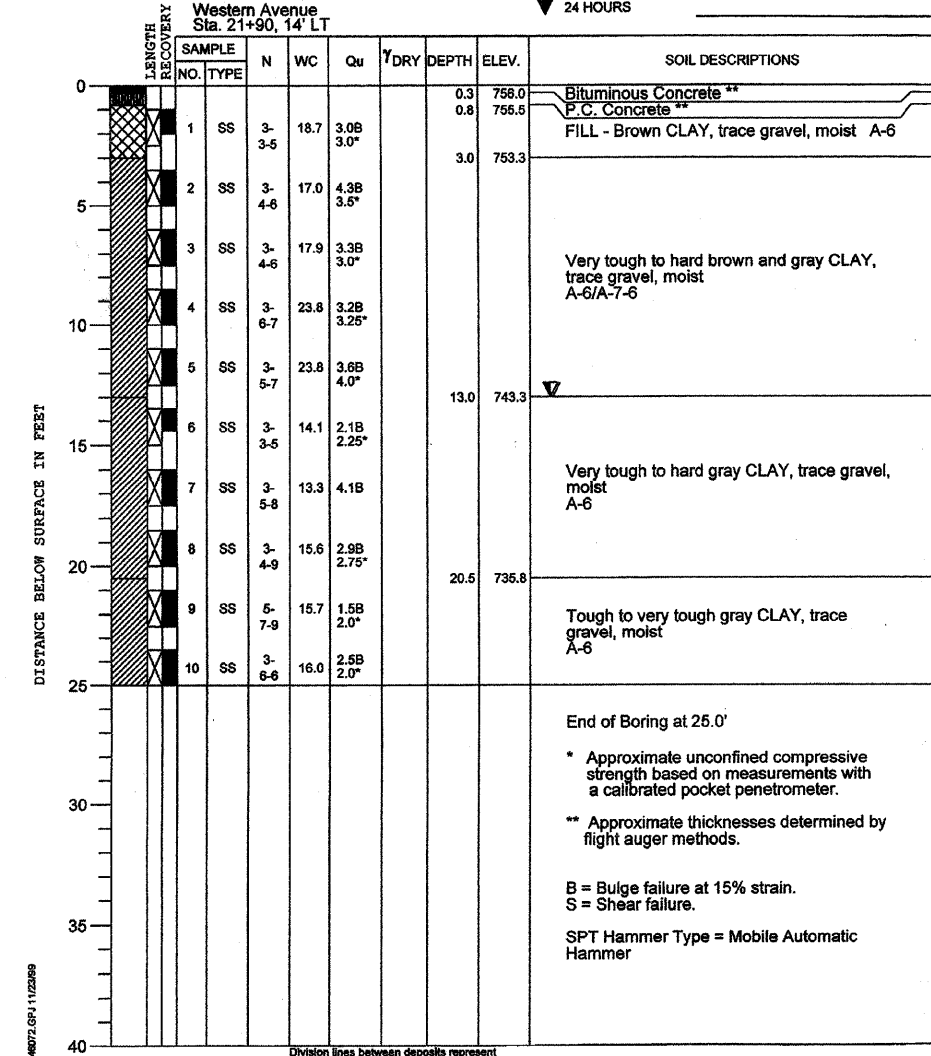


DRILL RIG NO. **144** Page 2 of 2

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **19** DATE STARTED **9-8-99** DATE COMPLETED **9-8-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **756.3** WHILE DRILLING **13.0'**
 END OF BORING **731.3** AT END OF BORING **13.0'**
 24 HOURS

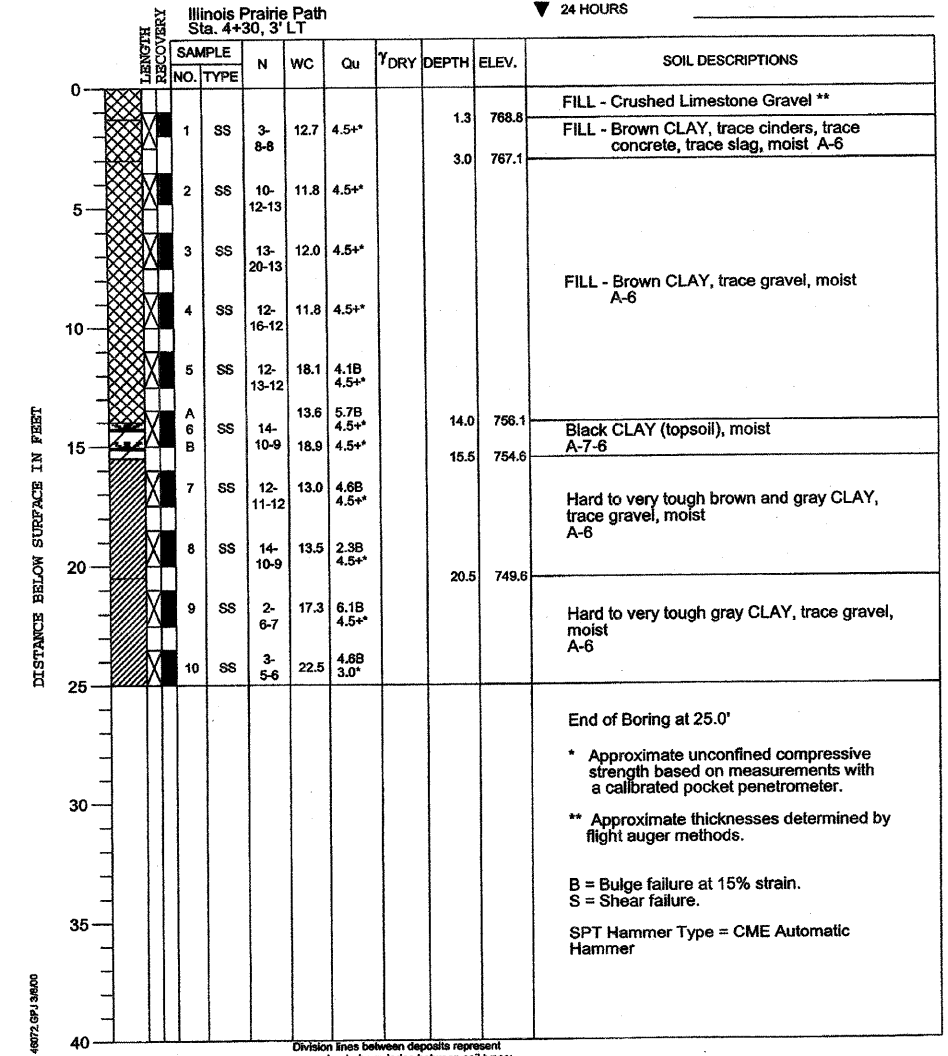


DRILL RIG NO. **144**

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **20** DATE STARTED **9-13-99** DATE COMPLETED **9-13-99** JOB **L-46,072**



ELEVATIONS WATER TABLE
 GROUND SURFACE **770.1** WHILE DRILLING **Dry**
 END OF BORING **745.1** AT END OF BORING **Dry**
 24 HOURS



DRILL RIG NO. **243**

REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

SCALE: VERT. _____
 HORIZ. _____
 DATE 6/4/2008

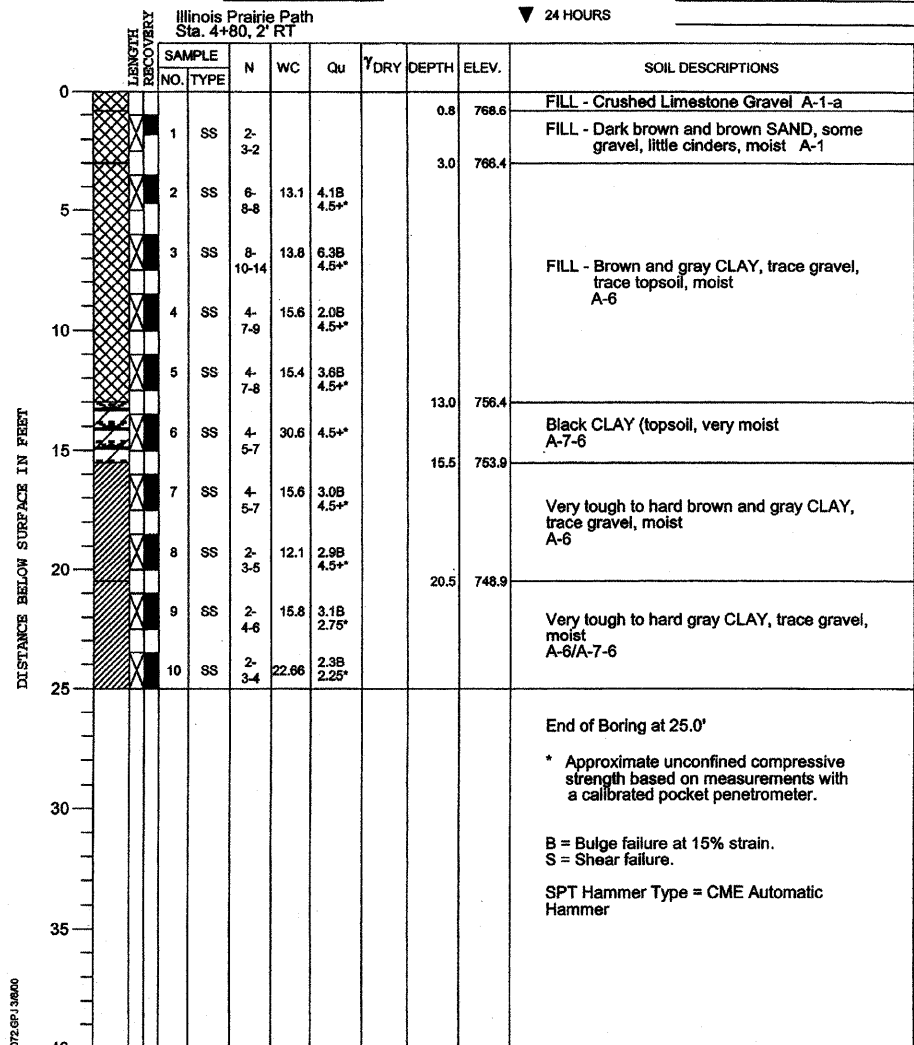
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PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **21** DATE STARTED **9-13-99** DATE COMPLETED **9-13-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **769.4**
 END OF BORING **744.4**

WATER TABLE
 WHILE DRILLING **Dry**
 AT END OF BORING **Dry**
 24 HOURS



TSC 46072.GPJ 3/8/00
 DRILL RIG NO. **243**

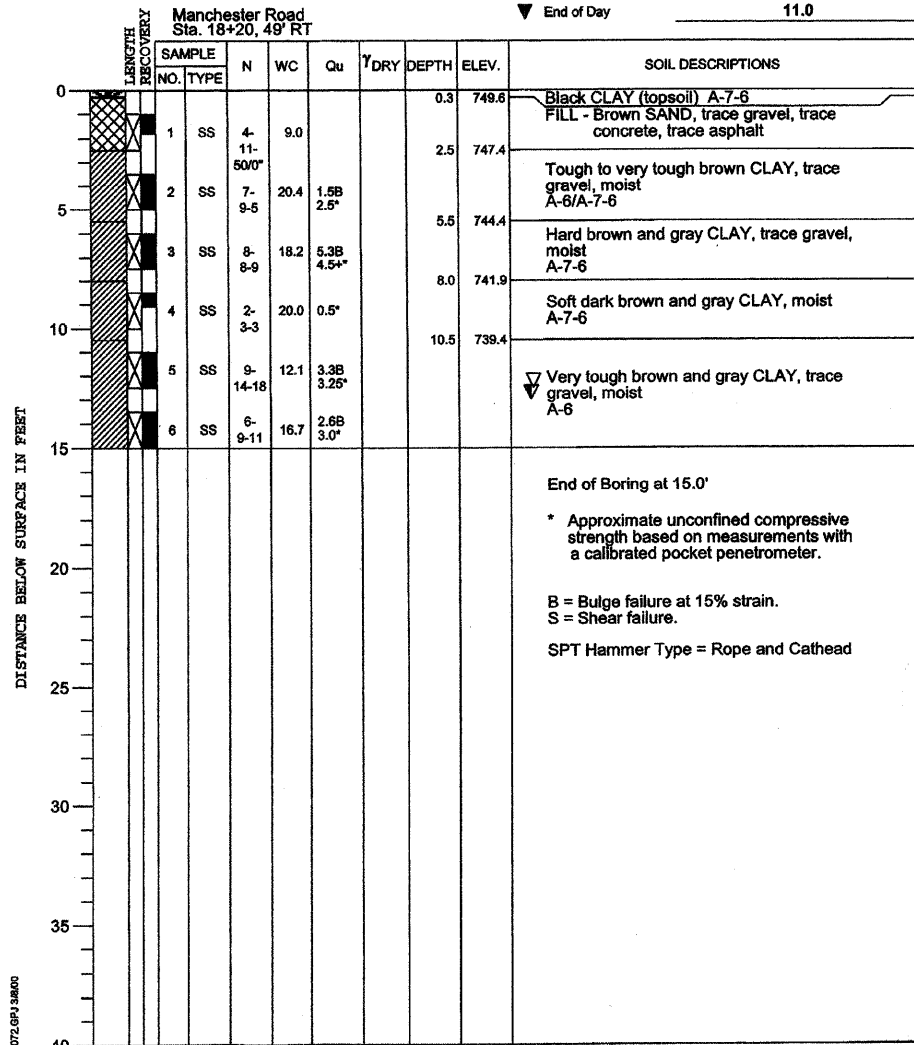
Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **22** DATE STARTED **9-1-99** DATE COMPLETED **9-1-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **749.9**
 END OF BORING **734.9**

WATER TABLE
 WHILE DRILLING **13.0'**
 AT END OF BORING **12.5'**
 End of Day **11.0**



TSC 46072.GPJ 3/8/00
 DRILL RIG NO. **217**

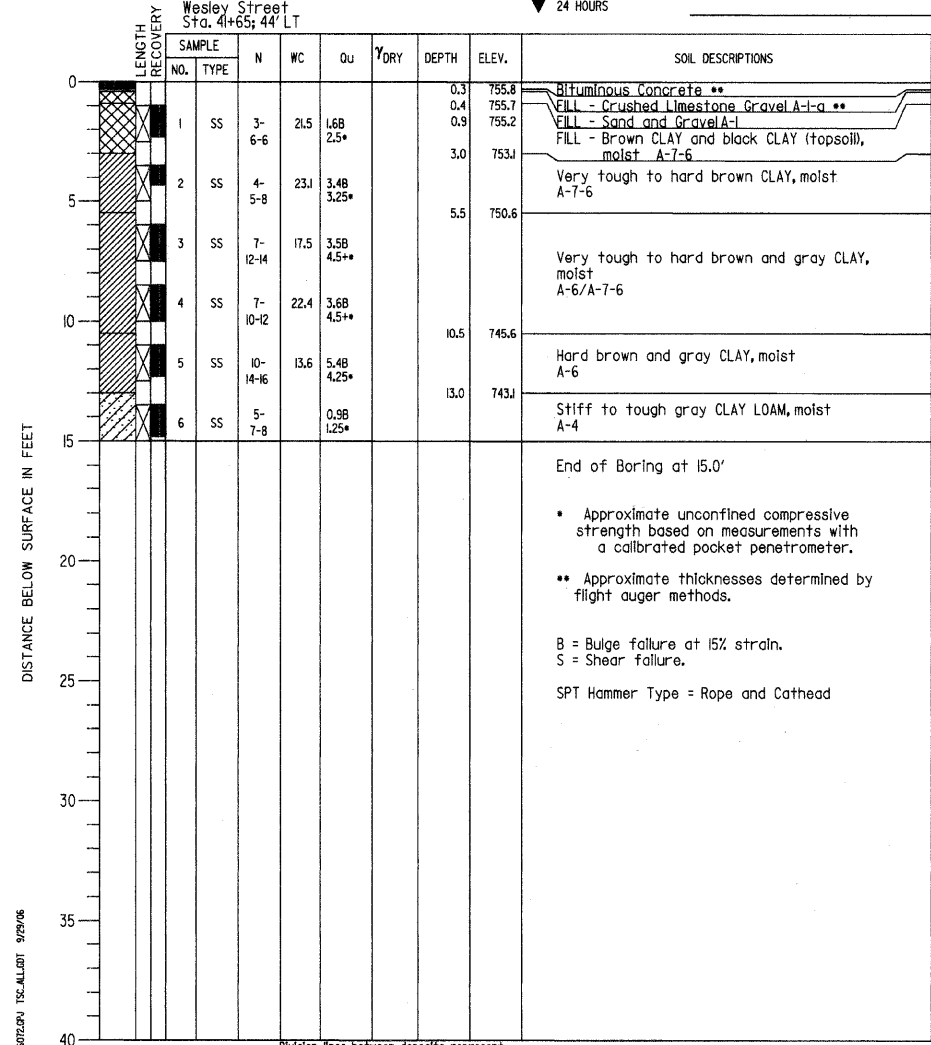
Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

PROJECT **Wesley/Manchester Bridge Replacement, Wheaton, IL**
 CLIENT **HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois**
 BORING **23** DATE STARTED **9-8-99** DATE COMPLETED **9-8-99** JOB **L-46,072**



ELEVATIONS
 GROUND SURFACE **756.1**
 END OF BORING **741.1**

WATER LEVEL OBSERVATIONS
 WHILE DRILLING **Dry**
 AT END OF BORING **Dry**
 24 HOURS



TSC 46072.GPJ 3/8/00
 DRILL RIG NO. **217**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

REVISIONS	
NAME	DATE

CITY OF WHEATON
MANCHESTER ROAD / WESLEY STREET
OVER UNION PACIFIC RAILROAD

SOIL BORING LOG

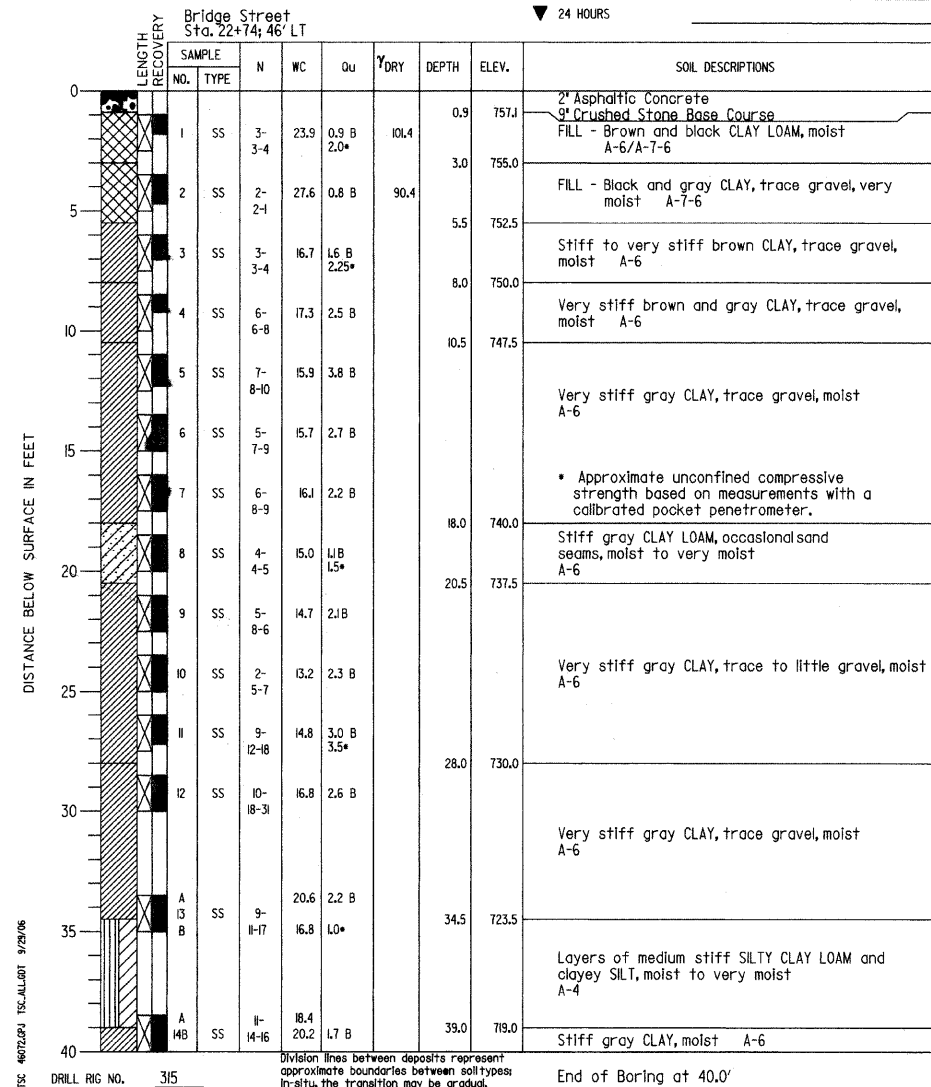
VERT. SCALE: 1" = 10'
 HORIZ. SCALE: 1" = 10'
 DATE: 6/4/2008

DRAWN BY ML
 CHECKED BY VS

PROJECT Wesley/Manchester Bridge Replacement, Wheaton, IL
 CLIENT HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois
 BORING 24 DATE STARTED 8-18-06 DATE COMPLETED 8-18-06 JOB L-46,072



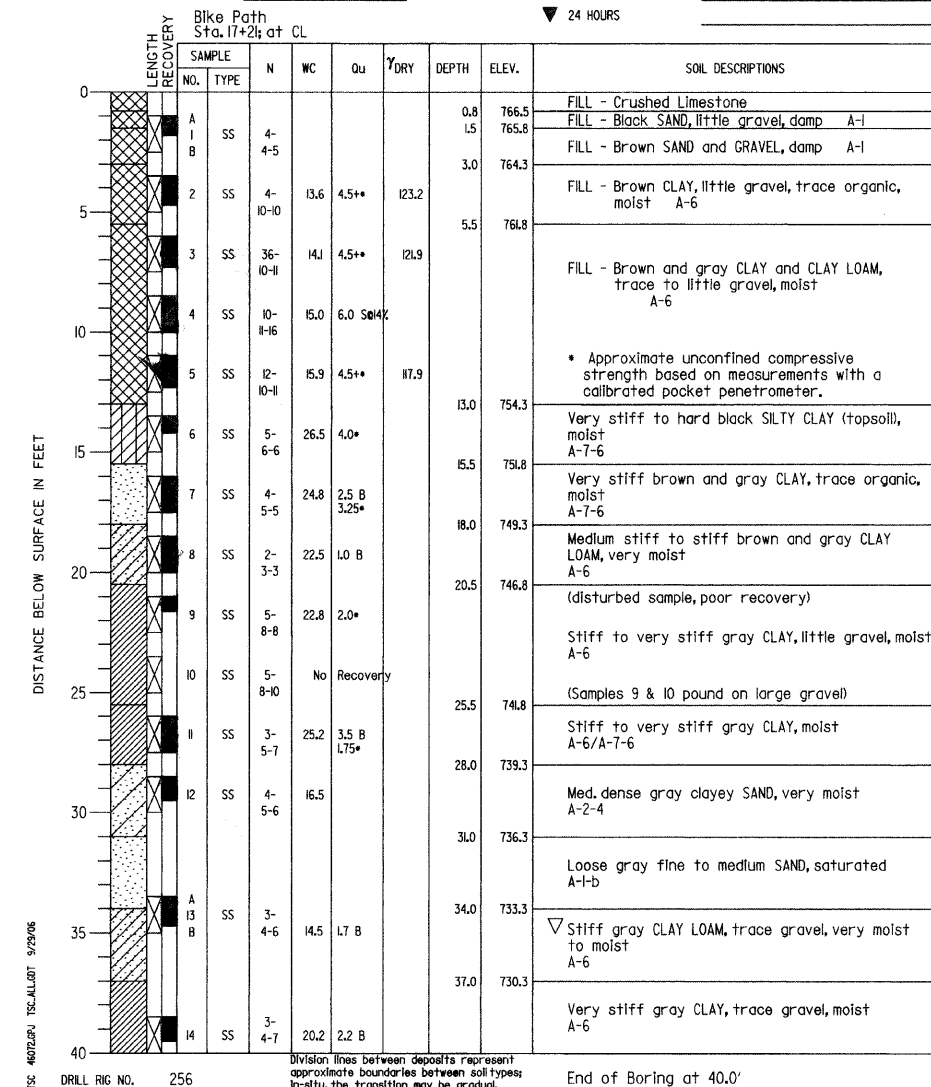
ELEVATIONS
 GROUND SURFACE 758.0
 END OF BORING 718.0
 WATER LEVEL OBSERVATIONS
 WHILE DRILLING Dry
 AT END OF BORING Dry
 24 HOURS



PROJECT Wesley/Manchester Bridge Replacement, Wheaton, IL
 CLIENT HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois
 BORING 25 DATE STARTED 8-23-06 DATE COMPLETED 8-23-06 JOB L-46,072



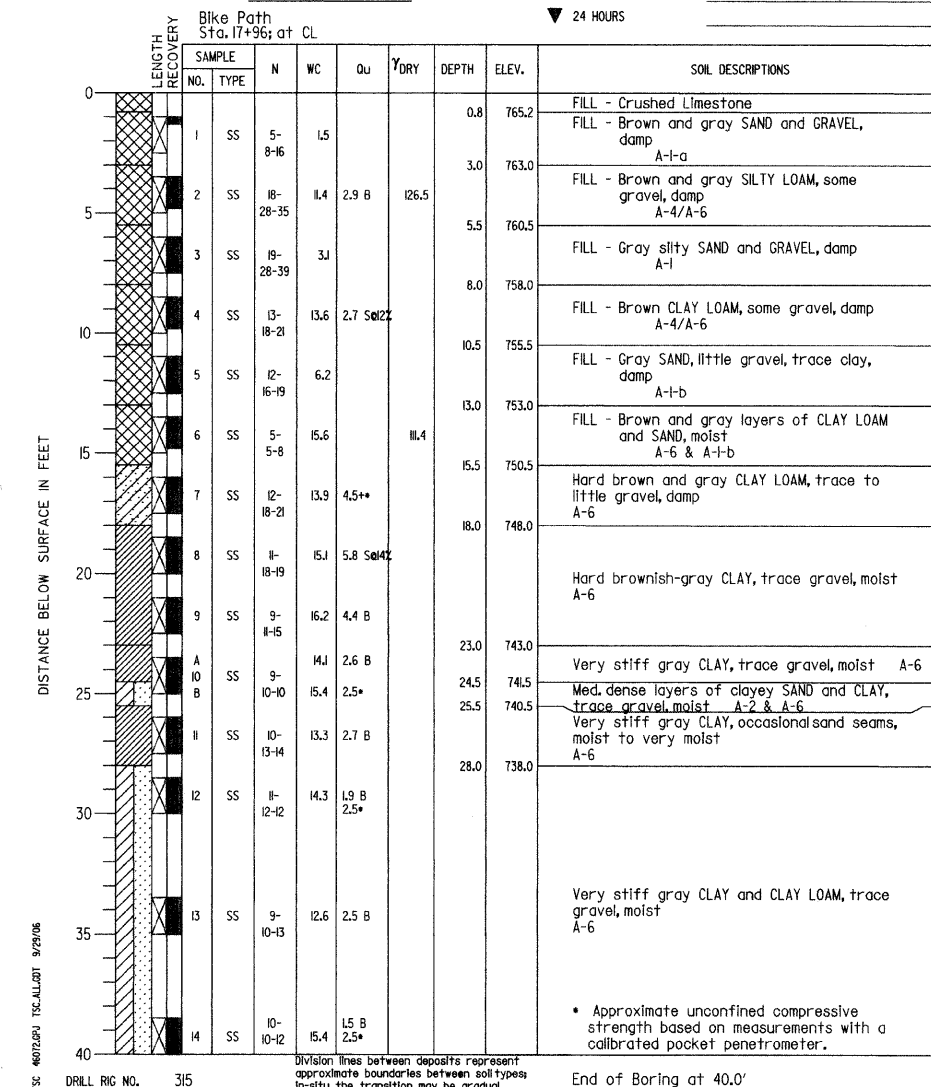
ELEVATIONS
 GROUND SURFACE 767.3
 END OF BORING 727.3
 WATER LEVEL OBSERVATIONS
 WHILE DRILLING 31.0'
 AT END OF BORING 35.0'
 24 HOURS



PROJECT Wesley/Manchester Bridge Replacement, Wheaton, IL
 CLIENT HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois
 BORING 26 DATE STARTED 8-18-06 DATE COMPLETED 8-18-06 JOB L-46,072



ELEVATIONS
 GROUND SURFACE 766.0
 END OF BORING 726.0
 WATER LEVEL OBSERVATIONS
 WHILE DRILLING Dry
 AT END OF BORING Dry
 24 HOURS



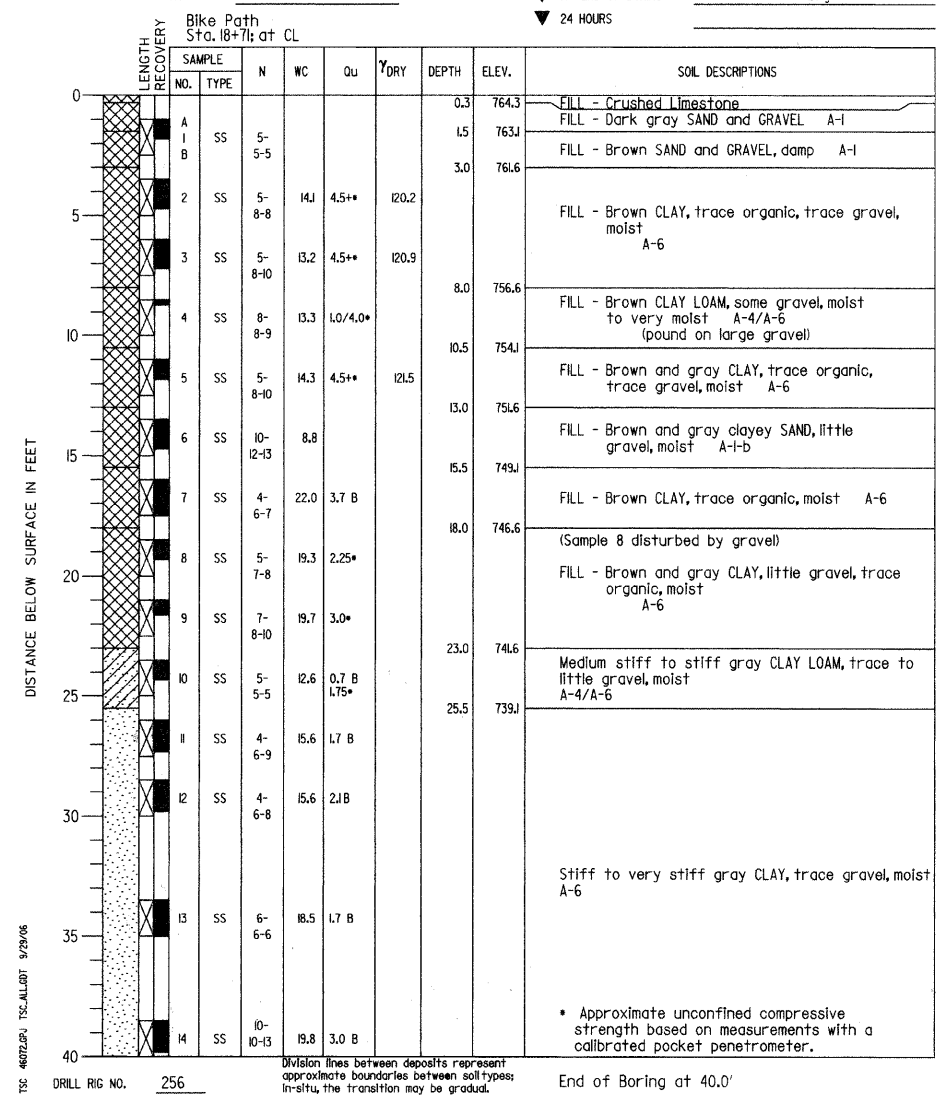
REVISIONS	
NAME	DATE

CITY OF WHEATON
 MANCHESTER ROAD / WESLEY STREET
 OVER UNION PACIFIC RAILROAD
 SOIL BORING LOG

SCALE: VERT. 1"=10'
 HORIZ. 1"=40'
 DATE 6/4/2008

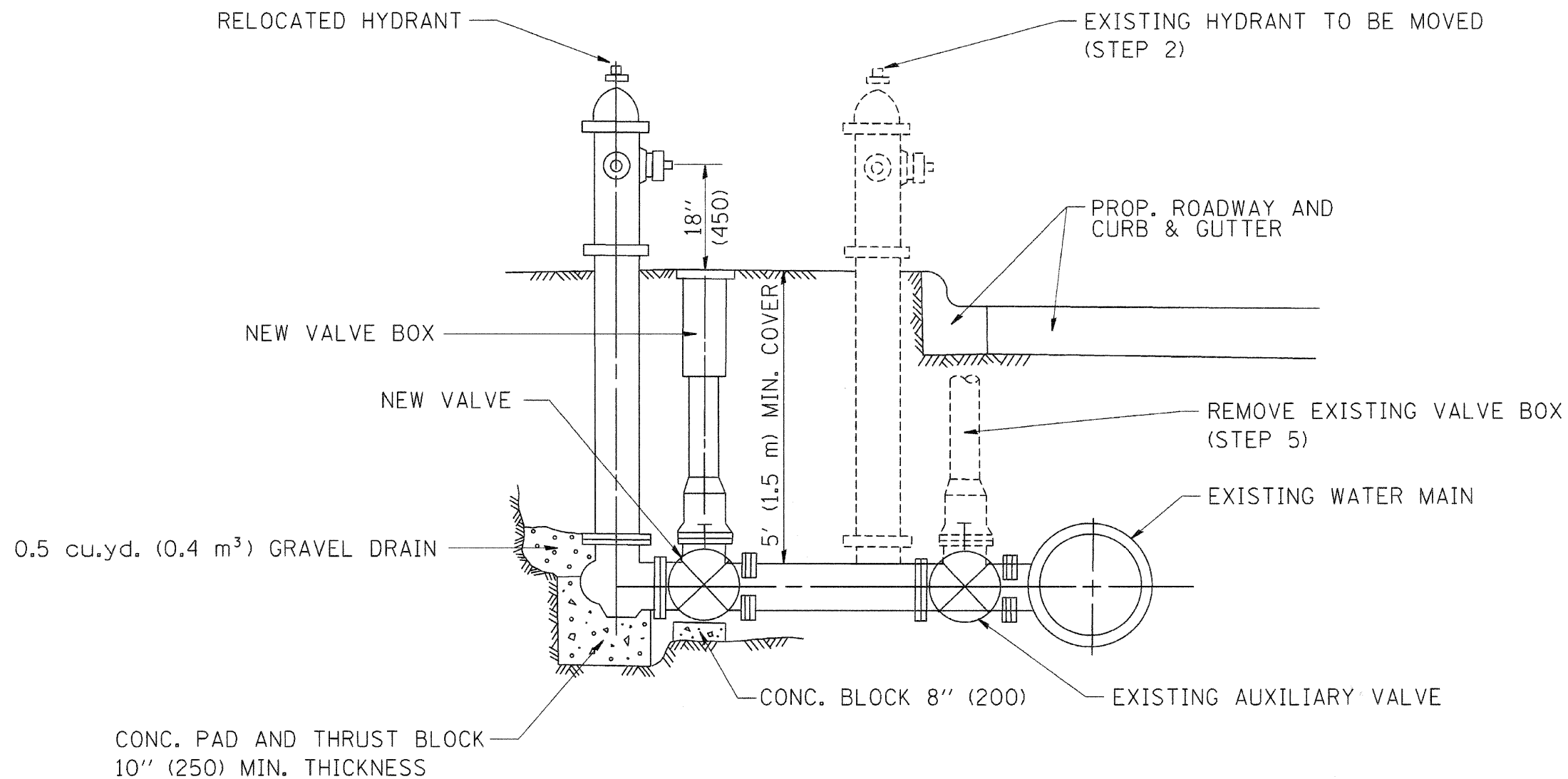
DRAWN BY ML
 CHECKED BY VS

PROJECT Wesley/Manchester Bridge Replacement, Wheaton, IL
 CLIENT HDR Engineering, Inc., 8420 W. Bryn Mawr Ave., Chicago, Illinois
 BORING 27 DATE STARTED 8-23-06 DATE COMPLETED 8-23-06 JOB L-46,072
 ELEVATIONS WATER LEVEL OBSERVATIONS
 GROUND SURFACE 764.6 WHILE DRILLING Dry
 END OF BORING 724.6 AT END OF BORING Dry
 ▼ 24 HOURS



REVISIONS		CITY OF WHEATON MANCHESTER ROAD / WESLEY STREET OVER UNION PACIFIC RAILROAD SOIL BORING LOG
NAME	DATE	
		SCALE: VERT. HORIZ. DATE 6/4/2008
DRAWN BY ML CHECKED BY VS		

CONTRACT NO.			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS
			241
			234
STA.		TO STA.	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	



SEQUENCE OF CONSTRUCTION:

1. CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. RELOCATE EXISTING HYDRANT.
5. OPEN EXISTING VALVE, REMOVE BOX.
6. BACKFILL.
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

FIRE HYDRANT TO BE MOVED

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

REVISIONS	
NAME	DATE
R. SHAH	09/09/94
R. SHAH	10/25/94

ILLINOIS DEPARTMENT OF TRANSPORTATION

FIRE HYDRANT
TO BE MOVED

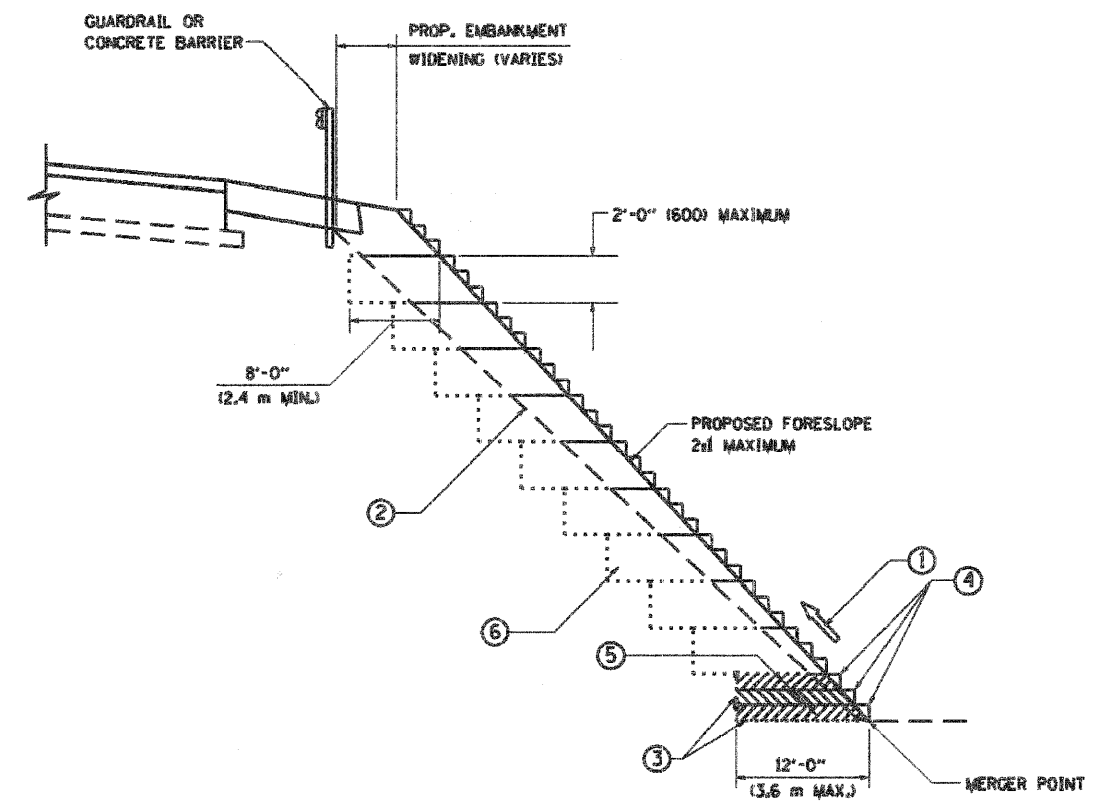
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DRAWN BY
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BD500-03 (BD-36)

PLT DATE : 3/6/2007
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CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			241	235
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m)

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

REVISIONS	
NO.	DATE

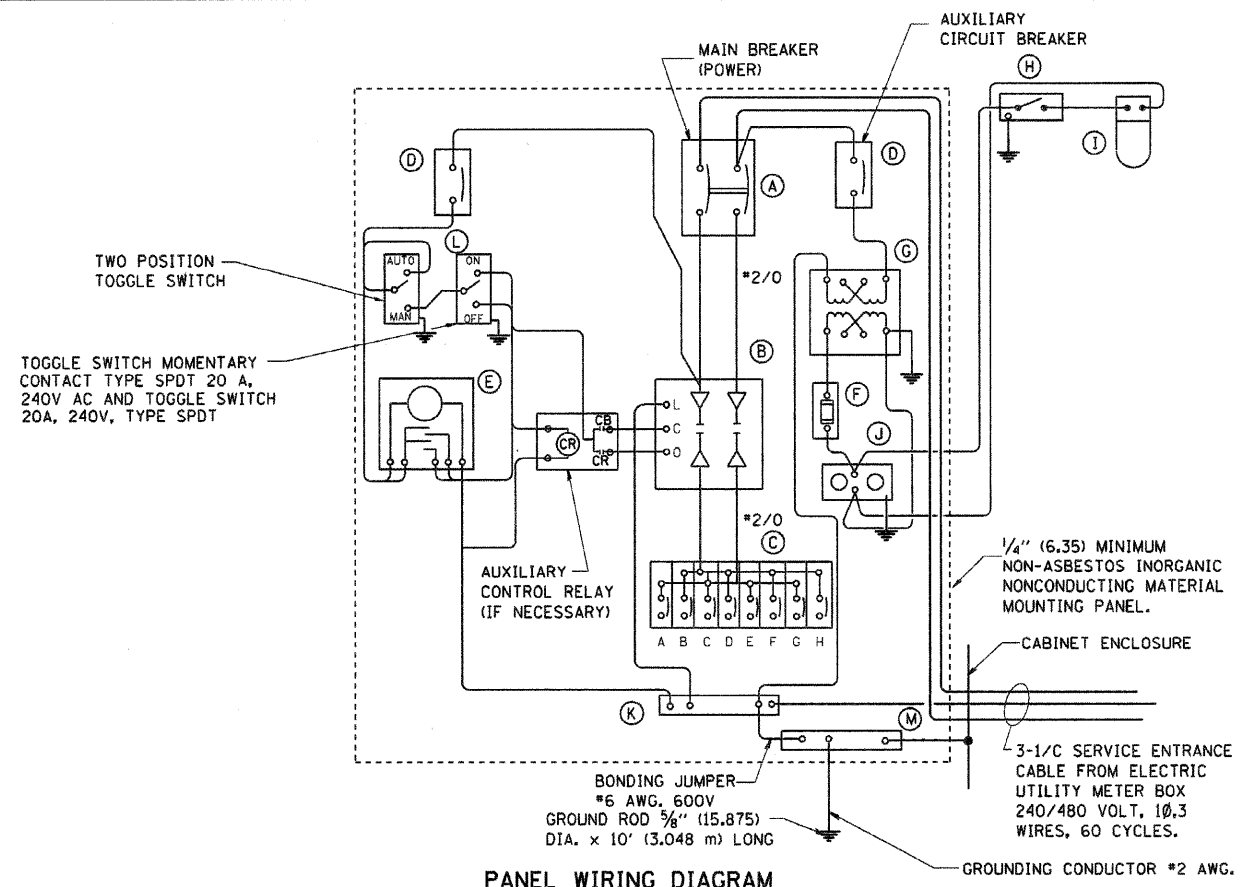
ILLINOIS DEPARTMENT OF TRANSPORTATION

**BENCHING DETAIL
FOR EMBANKMENT
WIDENING**

SCALE: VERT.
HORIZ.
DATE: 1/18/2007

DRAWN BY: CADD
CHECKED BY: S.E.B.
BD-51

PLAT DATE: 1/18/2007
PLAT SCALE: AS SHOWN
DESIGN: S.E.B.
CHECKED: S.E.B.



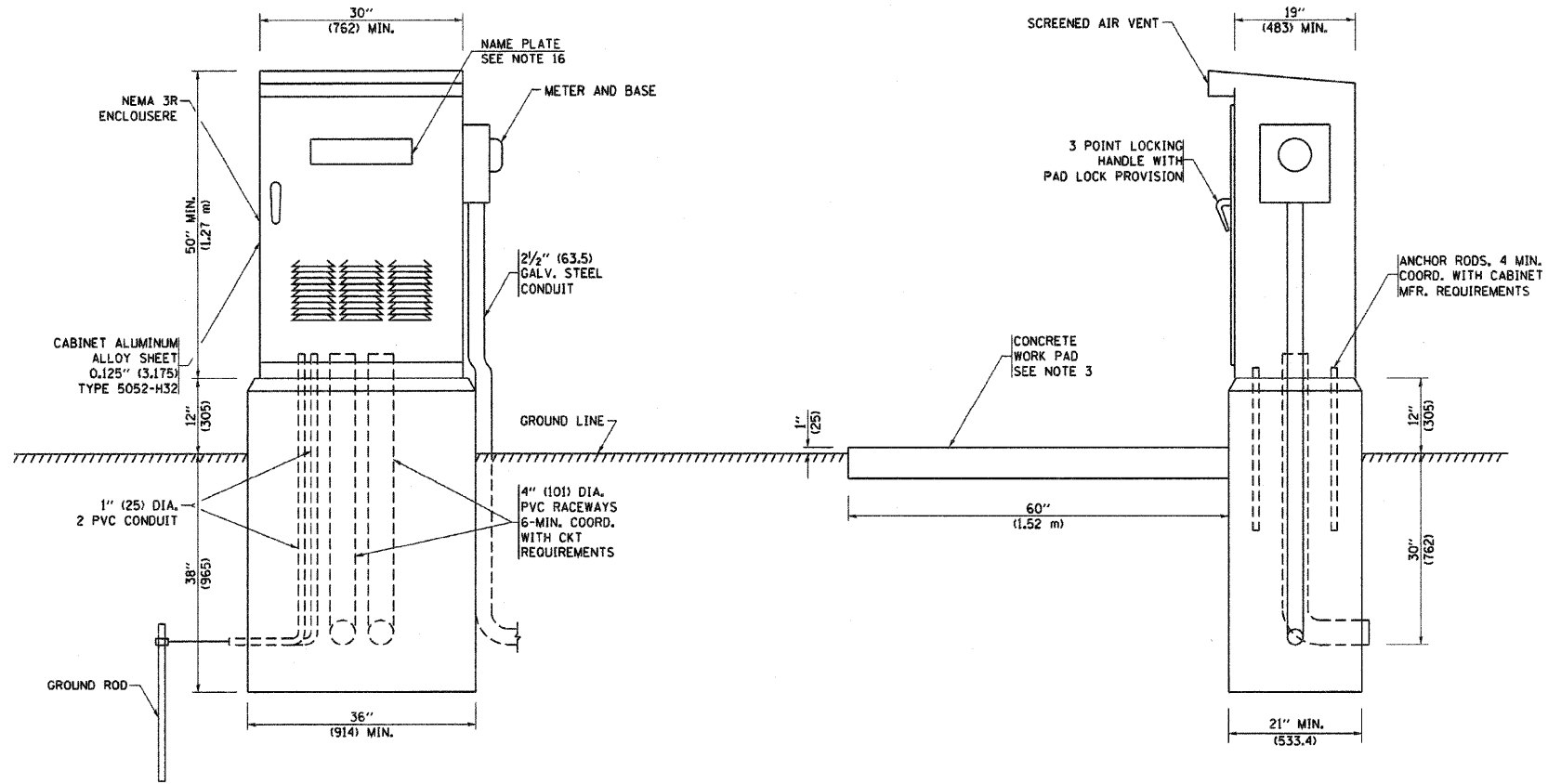
PANEL WIRING DIAGRAM

PANEL EQUIPMENT

BILL OF MATERIAL		
ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100AMP. FRAME, 100AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.
C	8	CIRCUIT BREAKERS, 1 POLE, 100AMP. FRAME, 50 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 V., 100AMP. FRAME, 15AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER [TIME SWITCH].
F	1	20 A., 120 V. FUSE.
G	1	1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 HZ.
H	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN.
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
K	1	COPPER GROUND BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
L	1	TOGGLE SWITCHES MOUNTED IN 4" (101.6) X 4" (101.6 mm) BOX.
M	1	COPPER GROUND BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS

NOTES:

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
- IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL. LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 36" (914.4 mm) X 60" (18.288 m) X 4" (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
- DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
- ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
- CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER.
- METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
- CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED
- THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.
R = RED BL = BLUE W = WHITE
B = BLACK Y = YELLOW G = GREEN
- PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL"
- 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED



PLOT DATE = 1/9/2007
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 PLOT SCALE = 4/32000 / IN.
 USER NAME = jlr-1044

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**LIGHTING CONTROLLER
 SINGLE DOOR**

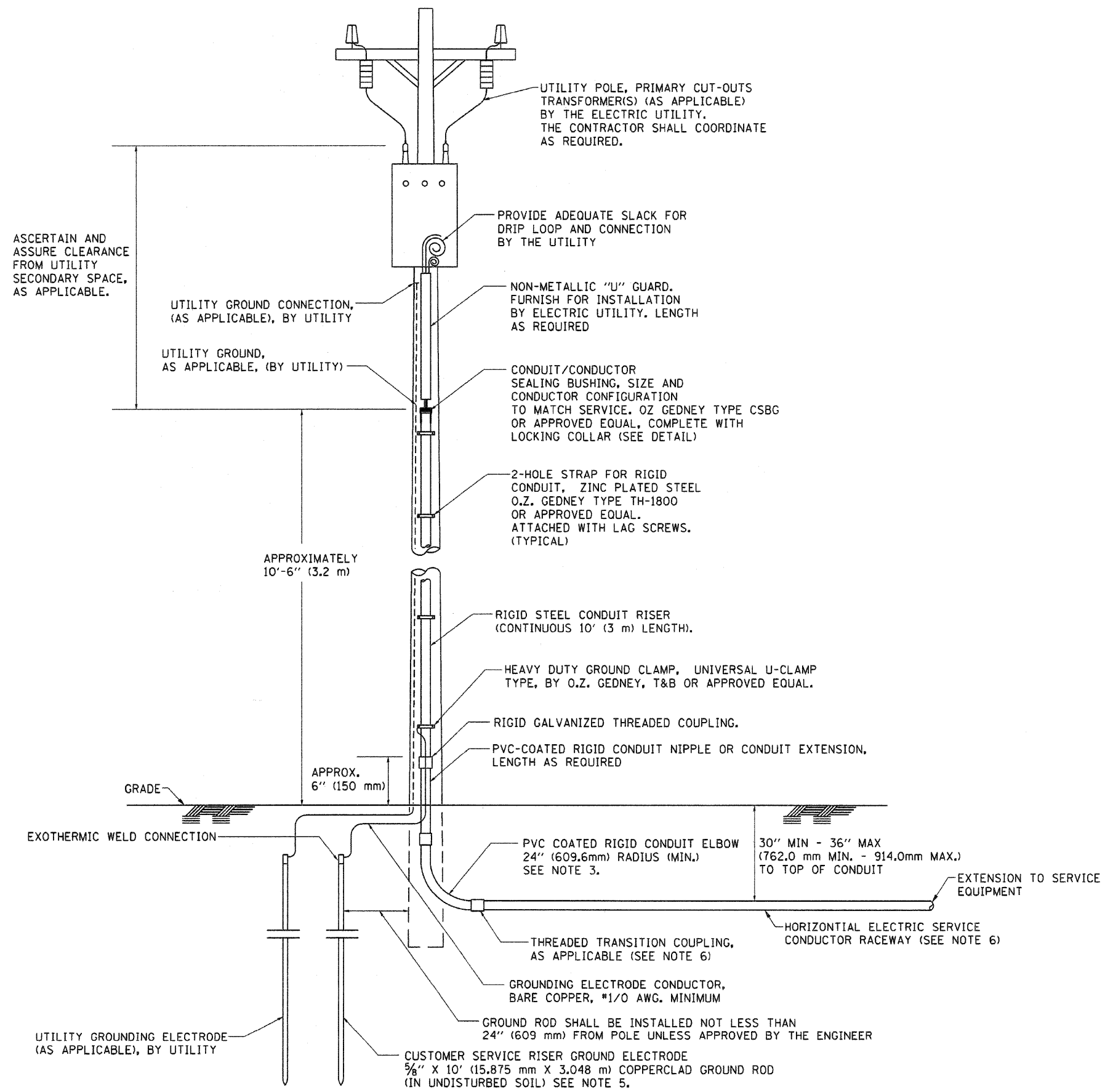
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DRAWN BY jls
 CHECKED BY
 BE-215

REVISION DATE: 01/01/07

BE-215

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

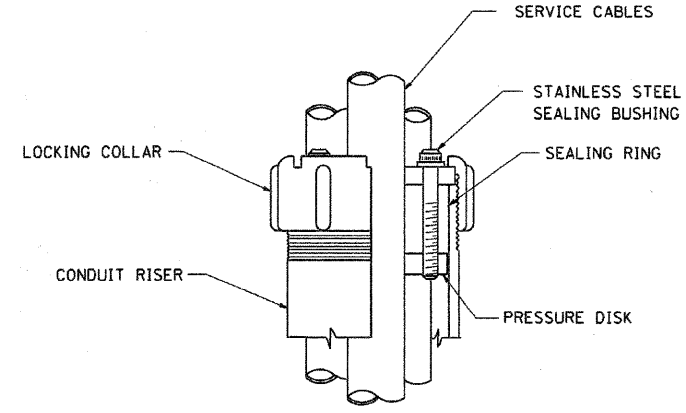


APPLICATION

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

NOTES

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



SEALING BUSHING DETAIL

PLOT DATE = 1/9/2007
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 USER NAME = ulr-ohnd

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**ELECTRIC SERVICE INSTALLATION
AERIAL, REMOTE DISCONNECT
BE - 220**

SCALE: NONE
DATE: 1/9/2007

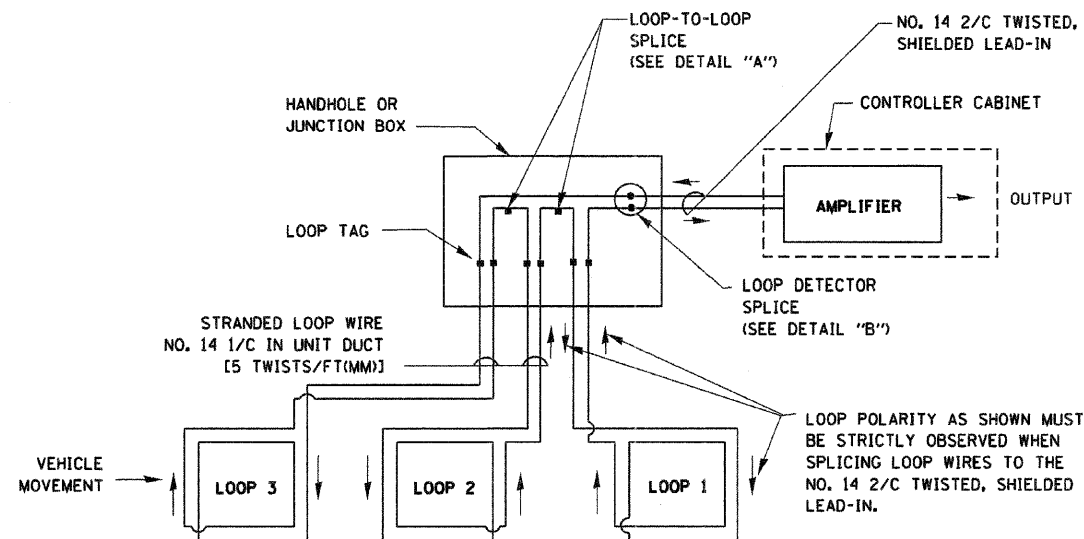
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BE-220

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			241	238
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

LOOP DETECTOR NOTES

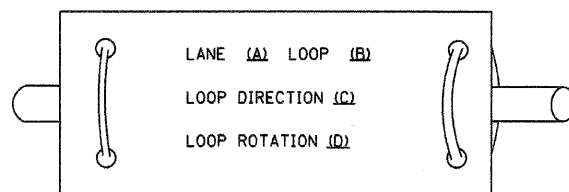
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



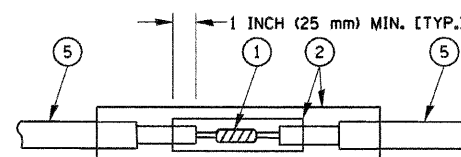
DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

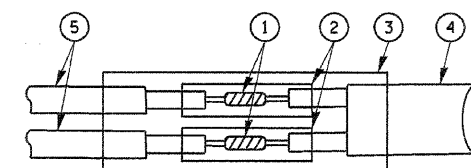
LOOP LEAD-IN CABLE TAG



- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

LOOP DETECTOR SPLICE

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS**

SCALE: NONE

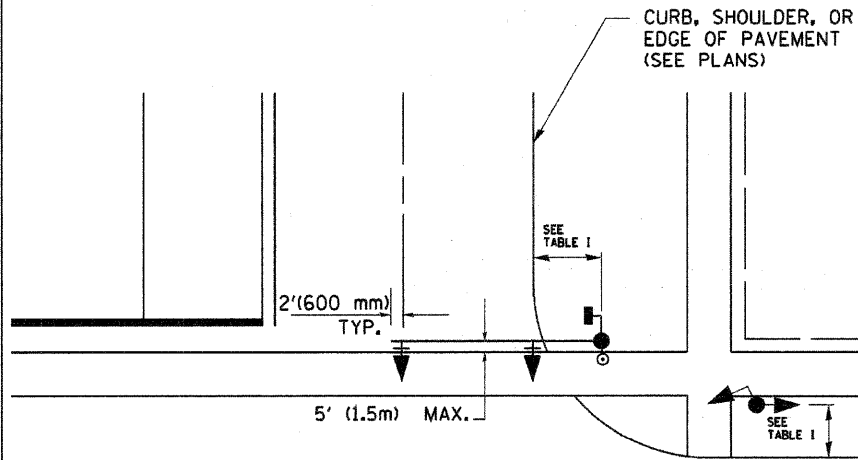
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DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 1 OF 4

TS05

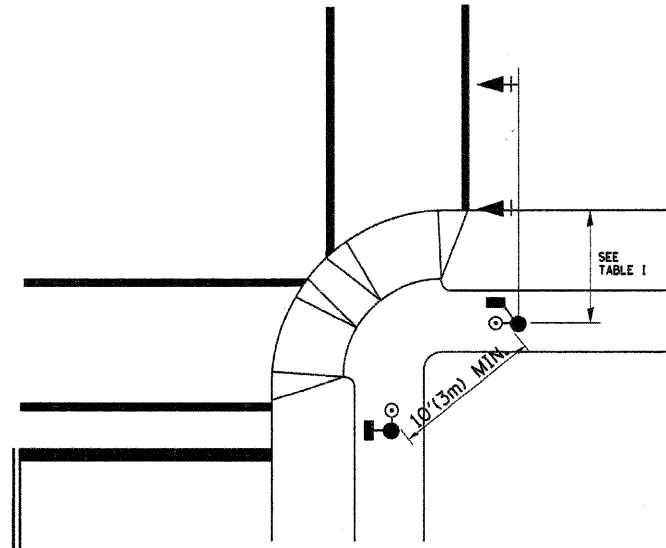
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			241	239
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.
 AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.
 PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

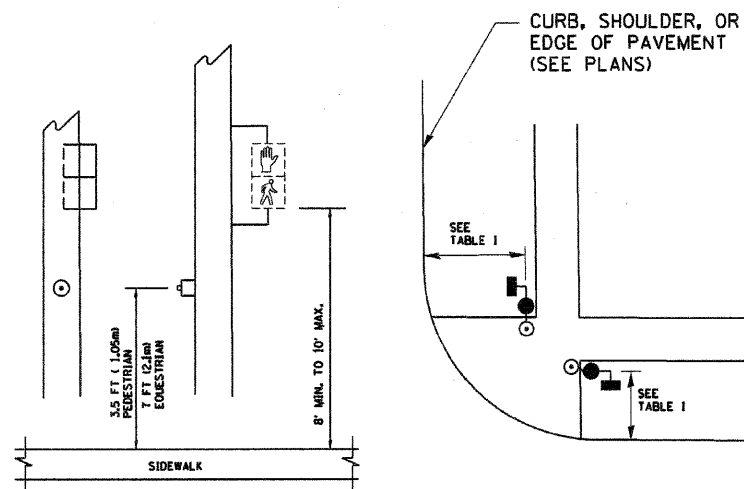


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

PLT DATE = 3/7/2007
 FILE NAME = 4301010101.dwg
 PLT SCALE = 1/8" = 1'-0"
 USER NAME = bboard01

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02

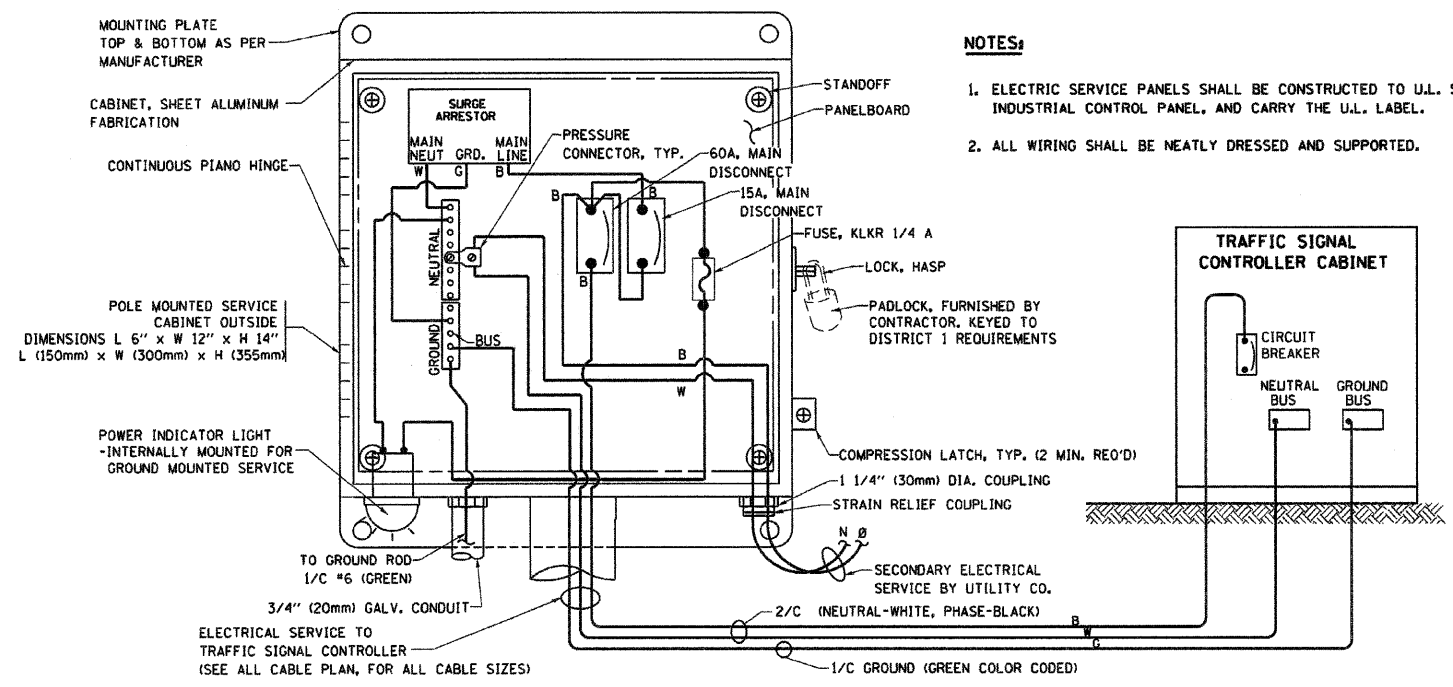
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT 1
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

SCALE: NONE

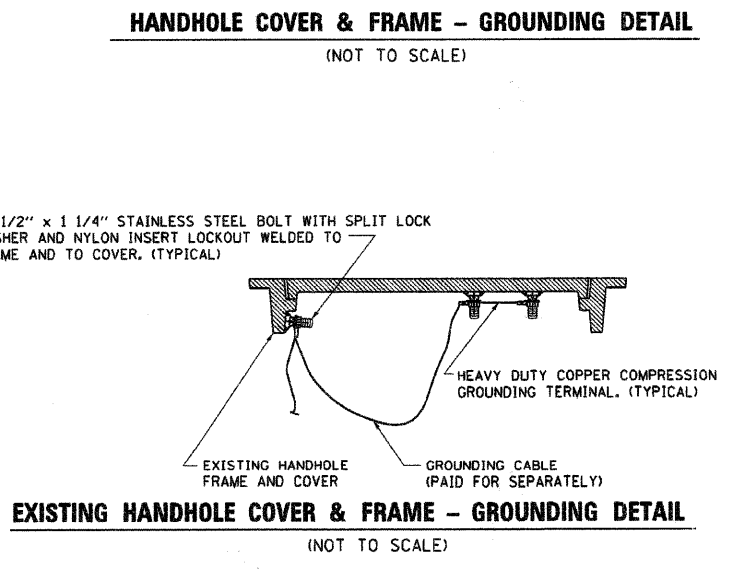
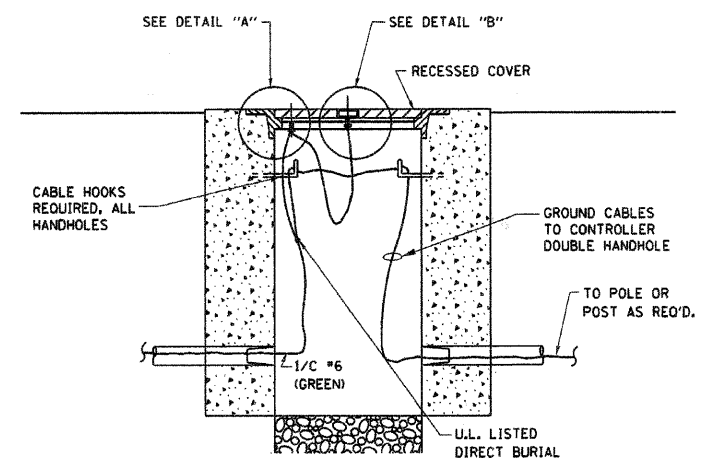
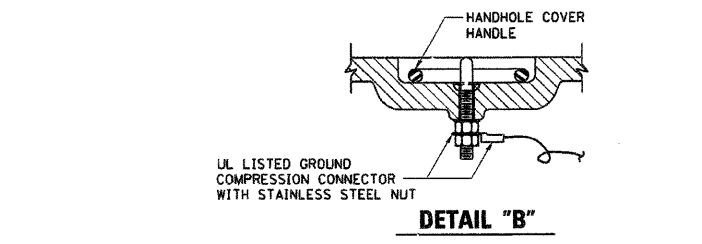
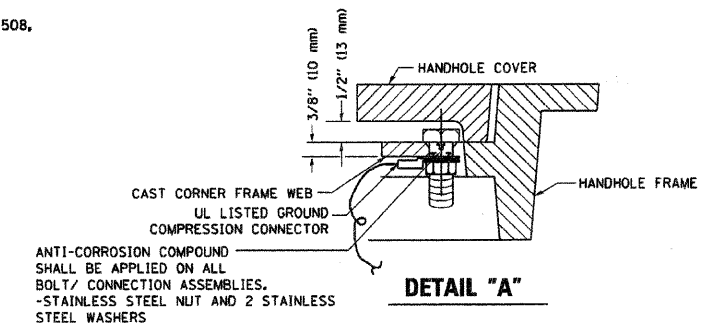
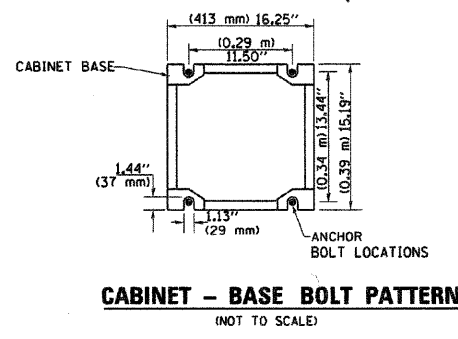
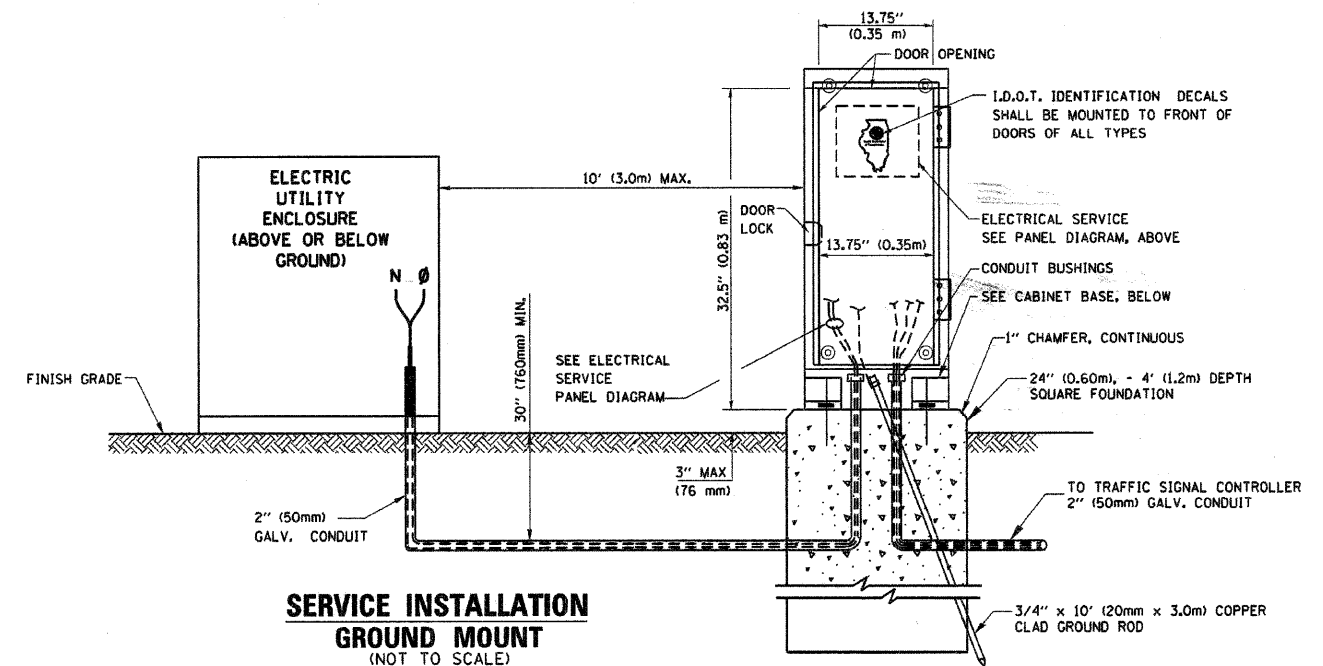
DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 2 OF 4

TS05

CONTRACT NO.			
F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
			241 240
STA.		TO STA.	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	



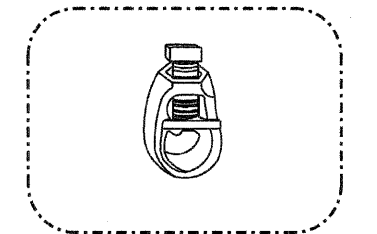
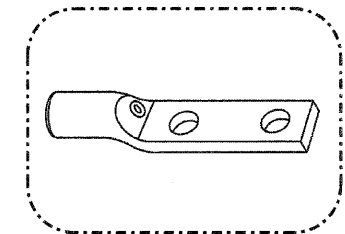
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



NOTES:

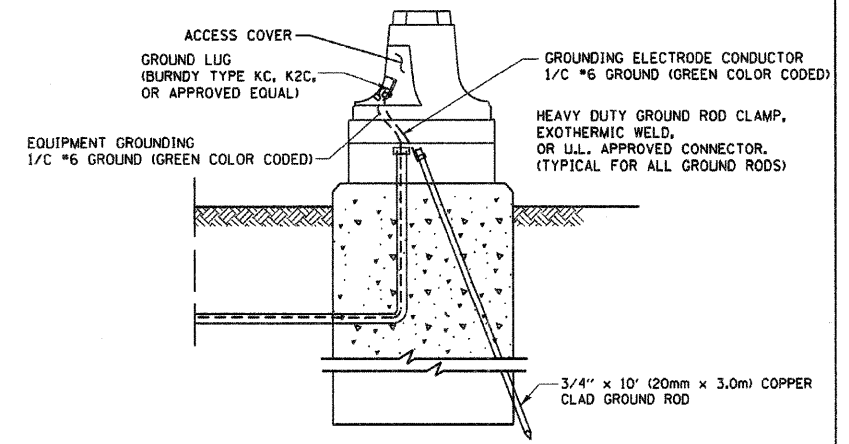
GROUNDING SYSTEM

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



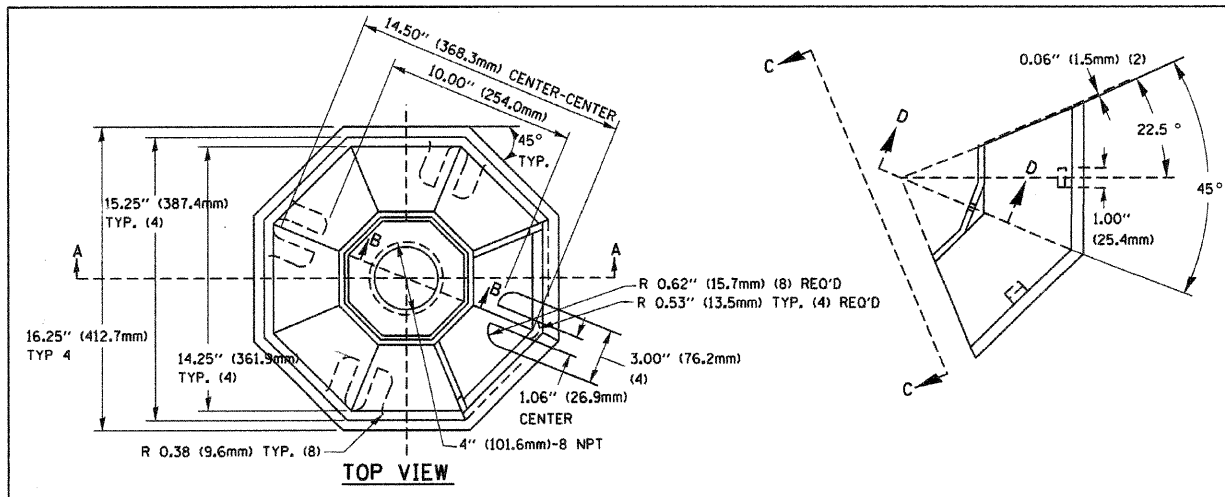
REVISIONS	
NAME	DATE
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

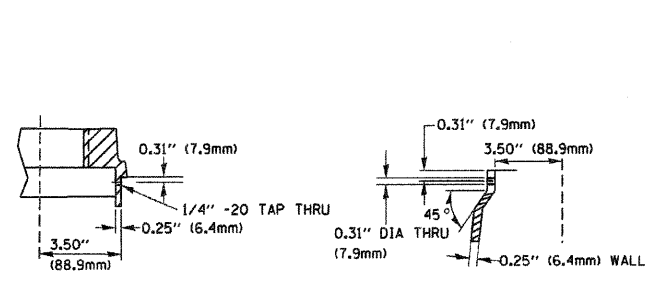
SCALE: NONE

DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

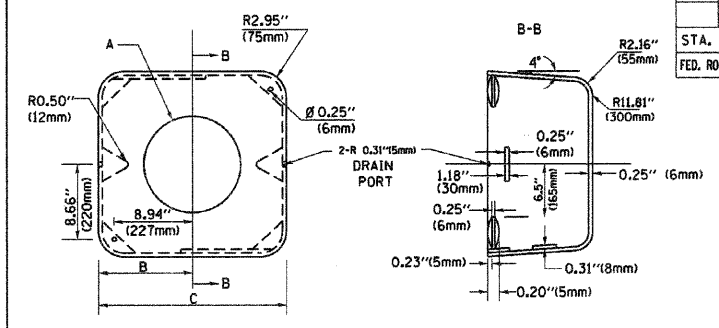
TS05



SECTION B-B



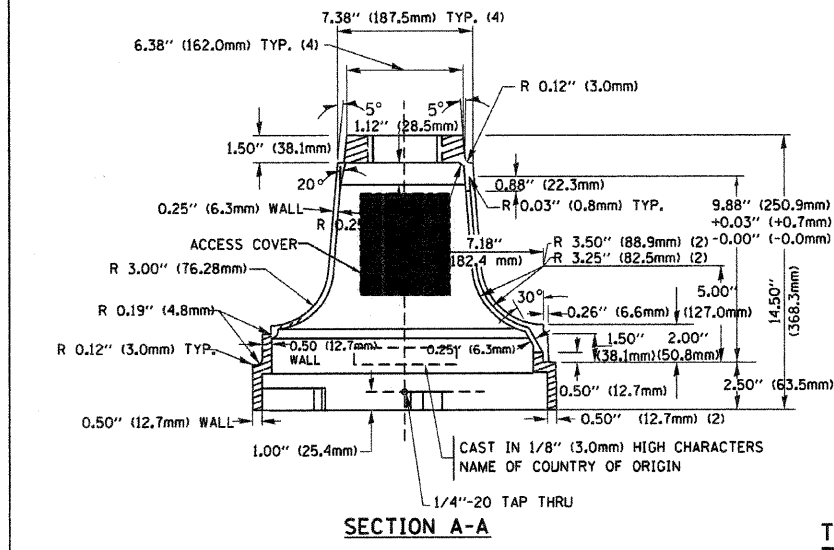
SECTION D-D



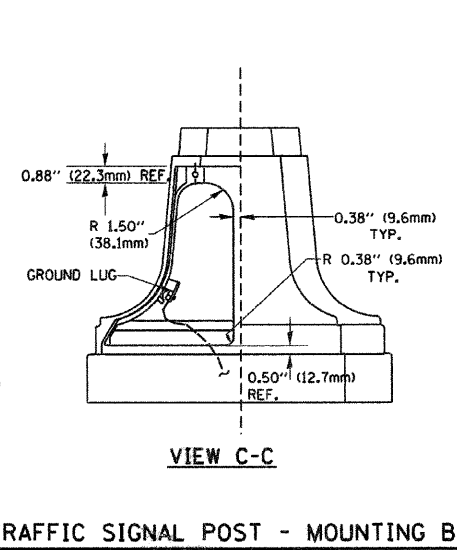
TYPE	A	B	C	HEIGHT	WEIGHT
I	Ø 10.125\" (257mm)	9.5\" (241mm)	19\" (483mm)	12\" (300mm)	24kg
II	Ø 11.125\" (283mm)	10.75\" (273mm)	21.5\" (546mm)	12\" (300mm)	26kg

SHROUD DETAIL

MATERIAL:
 - ASTM A48 CLASS 30 GREY IRON
 - ASTM A123 HOT DIPPED GALVANIZED

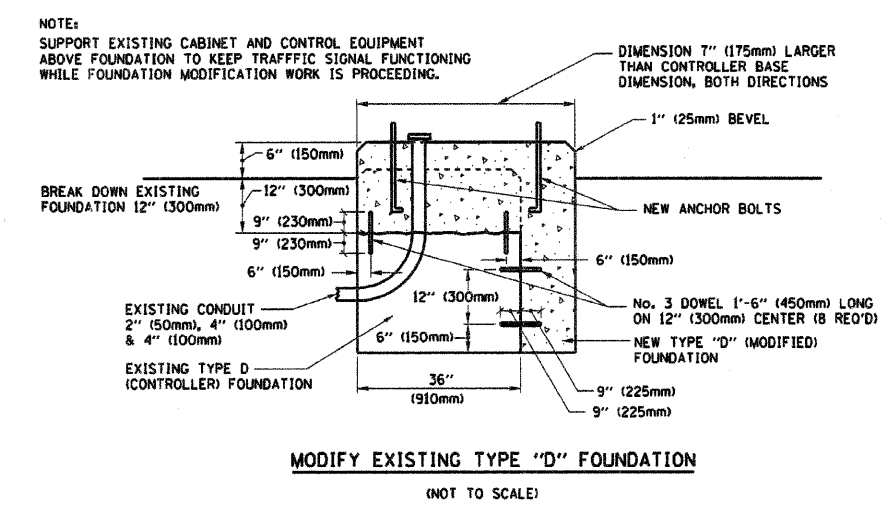
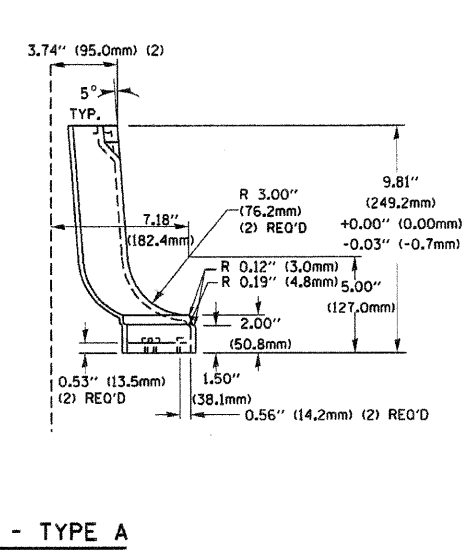


SECTION A-A



VIEW C-C

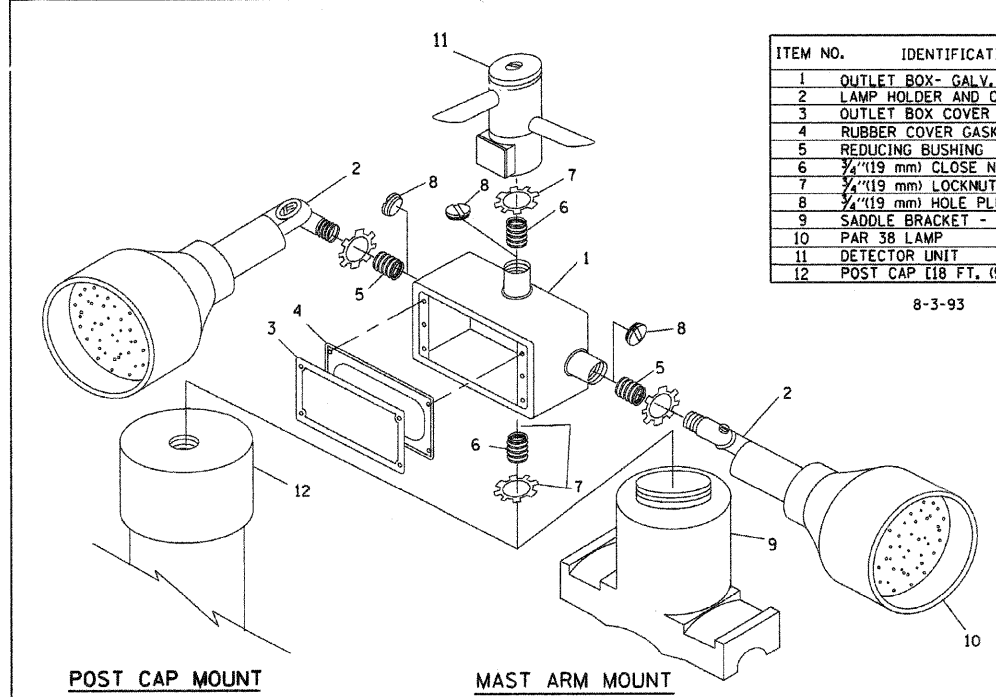
TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)

NOTE:
 SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.

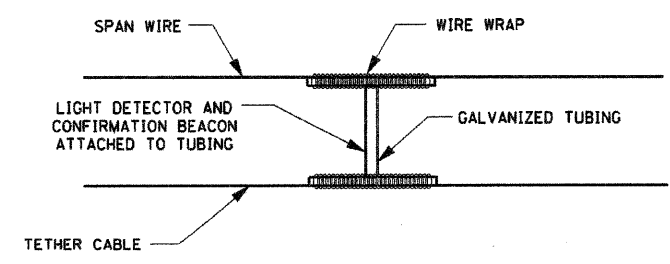


EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

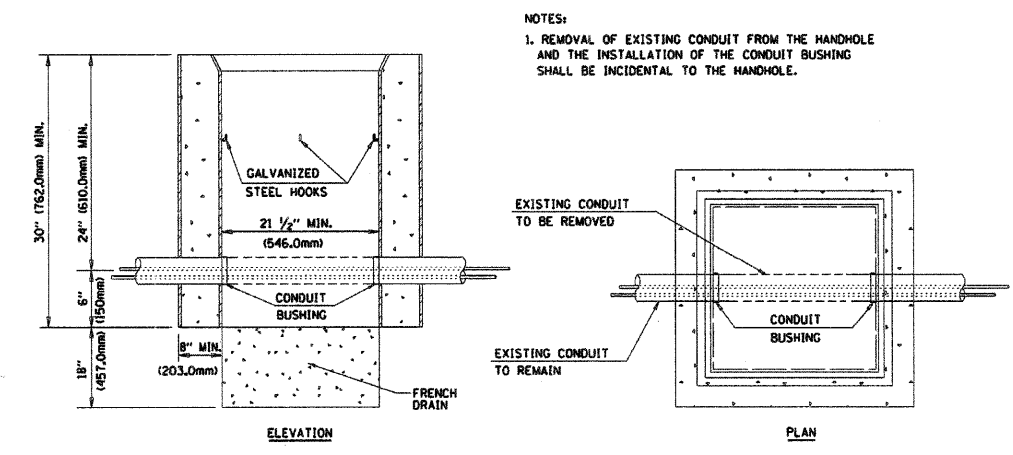
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU. IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\" (19 mm) CLOSE NIPPLE
7	3/4\" (19 mm) LOCKNUT
8	3/4\" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS (NOT TO SCALE)



DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT N.T.S.

REVISIONS	NAME	DATE
1	BUREAU OF TRAFFIC	5/30/00
2	BUREAU OF TRAFFIC	3/15/01
3	BUREAU OF TRAFFIC	11/12/01
4	BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS
 SCALE: NONE
 DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 4 OF 4