

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	McHENRY	45	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 63409	

INDEX OF SHEETS

- 1 COVER SHEET
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

**FAU ROUTE 4081 (THOMPSON ROAD)
BRIDGE REPLACEMENT OVER NIPPERSINK CREEK
SECTION 06-00005-00-BR
PROJECT NO: BRM-8003-(722)
STRUCTURE NO: 056-6006
McHENRY COUNTY
JOB NO: C-91-075-07**

PROJECT LOCATION MAP
RANGE 7 EAST



STRUCTURE INFORMATION:

EXISTING SN 056-3096
EXISTING 3-SPAN STRUCTURE CONSISTS OF PRECAST, PRESTRESSED CONCRETE DECK BEAMS WITH AN OUT-TO-OUT WIDTH OF 26'-0" AND A TOTAL LENGTH OF 133'-9" BK. TO BK. ABUTMENTS WITH A 15 DEGREE SKEW. THE SUBSTRUCTURE CONSISTS OF METAL SHELL PILE BENT PIERS AND ABUTMENTS. STRUCTURE TO BE REMOVED AS SHOWN WITH NO SALVAGE

PROPOSED SN 056-6006:
PROPOSED 3-SPAN STRUCTURE CONSISTS OF A CAST IN PLACE CONCRETE DECK ON STEEL WIDE FLANGE BEAMS WITH AN OUT-TO-OUT WIDTH OF 43'-0" AND A TOTAL LENGTH OF 148'-8" BK. TO BK. ABUTMENTS WITH A 20 DEGREE SKEW. THE SUBSTRUCTURE CONSISTS OF INTEGRAL ABUTMENTS AND CONCRETE ENCASED METAL SHELL PILE BENT PIERS.

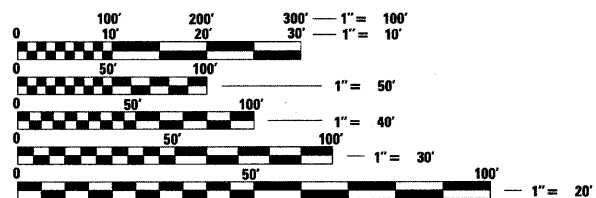
TRAFFIC DATA

ADT:
THOMPSON ROAD 4,400 VPD (2005) 10,000 VPD (2030)

POSTED SPEED 35 MPH (EXISTING)
DESIGN SPEED 40 MPH (PROPOSED)
35 MPH (PROPOSED)

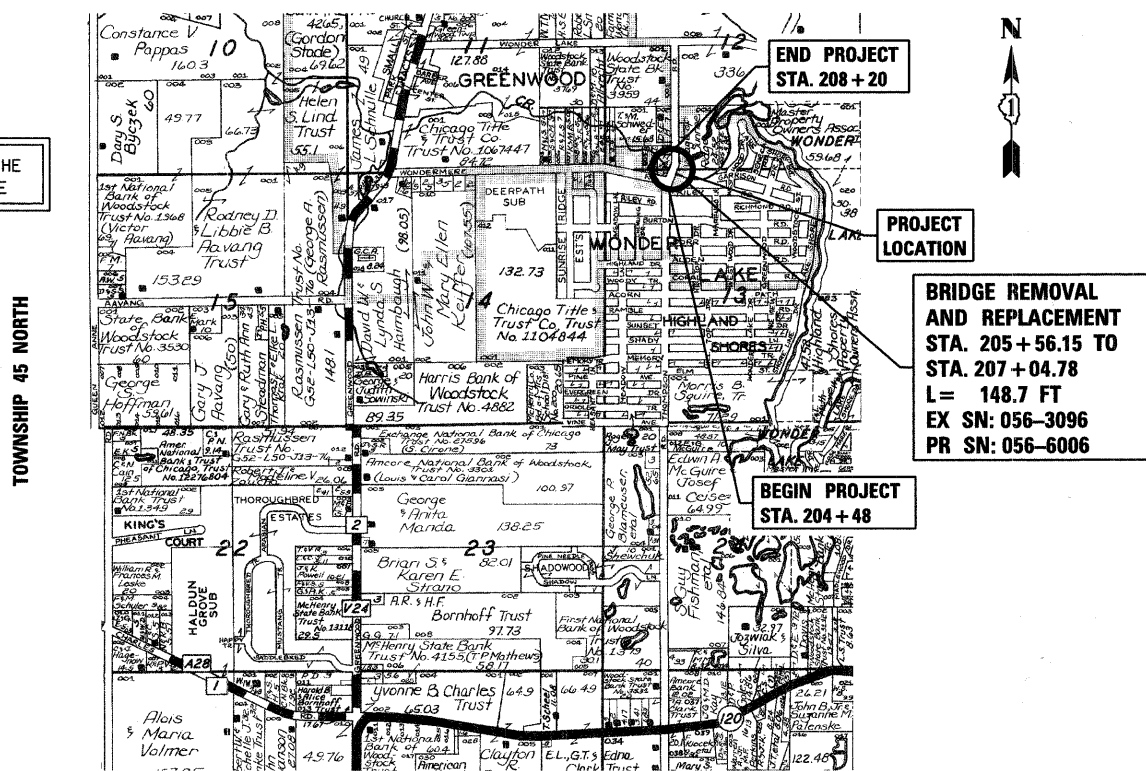
DESIGN DESIGNATION

FUNCTIONAL CLASSIFICATION - COLLECTOR (URBAN)



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

PROJECT IS LOCATED IN THE VILLAGE OF WONDER LAKE



**BRIDGE REMOVAL AND REPLACEMENT
STA. 205 + 56.15 TO
STA. 207 + 04.78
L = 148.7 FT
EX SN: 056-3096
PR SN: 056-6006**

PROJECT LENGTH

NET LENGTH OF PROJECT (THOMPSON ROAD) = 223 FT (0.042 MI)
BRIDGE OMISSION (OR STRUCTURE LENGTH) (056-6006) = 148.7 FT
GROSS LENGTH OF PROJECT = 372 FT (0.071 MI)

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
CALL 811

Illinois Professional Design Firm # 184-000108
SEC Group, Inc.
Engineering
Surveying
Planning
Landscape Architecture
McHenry • Yorkville • New Lenox • Chicago
www.secgroupinc.com

PROJECT ENGINEER: KEVIN M. ARFT, P.E.
PROJECT MANAGER: ROBERT G. DAVIES, S.E., P.E.
CONTRACT NO. 63409

STRUCTURAL ENGINEER'S SIGN & SEAL

ROBERT G. DAVIES, S.E., P.E.
EXPIRES: 11-30-2010

PROFESSIONAL ENGINEER'S SIGN & SEAL

KEVIN M. ARFT, P.E.
EXPIRES: 11-30-2011

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OF THE STATE OF ILLINOIS**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED 11/20/09 20 09
[Signature] DIRECTOR OF PUBLIC WORKS
VILLAGE OF WONDER LAKE

PASSED DECEMBER 3 2009
[Signature]
DISTRICT ONE ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID
BASED ON LIMITED REVIEW DECEMBER 4, 2009
[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

COMPANY NAME: Smith
 PROJECT CONTACT: Robert G. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 11/18/2009 5:02:15 PM
 FILE NAME: 060563-C14-097
 PLOT DRIVER: pd7.plt
 PEN TABLE: STANDARD-TRANS.TBL
 ASSOCIATE FIELD ENGINEER: KEVIN STALLWORTH (847) 705-4169

GENERAL NOTES

1. THE CONTRACTOR WILL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH BARRICADE USED. (TYPE I OR TYPE II (ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.) ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR (4) SANDBAGS PER BARRICADE.
2. FORTY EIGHT HOURS BEFORE STARTING EXCAVATION THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED.
3. THE CONTRACTOR SHALL CONTACT THE VILLAGE OF WONDER LAKE, THE MCHENRY COUNTY DIVISION OF TRANSPORTATION, AND THE MCHENRY TOWNSHIP ROAD DISTRICT AT LEAST 72 HOURS IN ADVANCE OF BEGINNING ANY WORK ON THOMPSON ROAD.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON VILLAGE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE VILLAGE OF WONDER LAKE. THE CONTRACTOR SHALL RESTORE THE FIELD OFFICE SITE TO LIKE ORIGINAL.
5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADE STAKES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO THE ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

6. THE CONTRACTOR SHALL ENSURE THAT ALL STORM SEWER MANHOLES AND SANITARY SEWER MANHOLES AND WATERMAIN VALVES REMAIN READILY ACCESSIBLE TO THE VILLAGE FOR WATERMAIN AND SANITARY FACILITIES SHALL BE MARKED AND READILY VISIBLE AT ALL TIMES.
7. THE LENGTH OF "GUARDRAIL REMOVAL" INCLUDES THE LENGTH OF THE TRAFFIC BARRIER TERMINALS.

8. EXISTING FIELD TILES ENCOUNTERED DURING CONSTRUCTION SHALL BE MAINTAINED IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL."

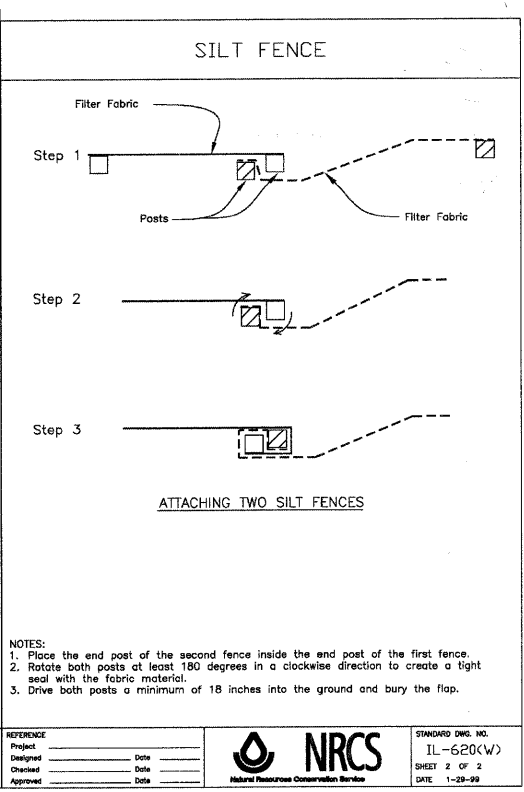
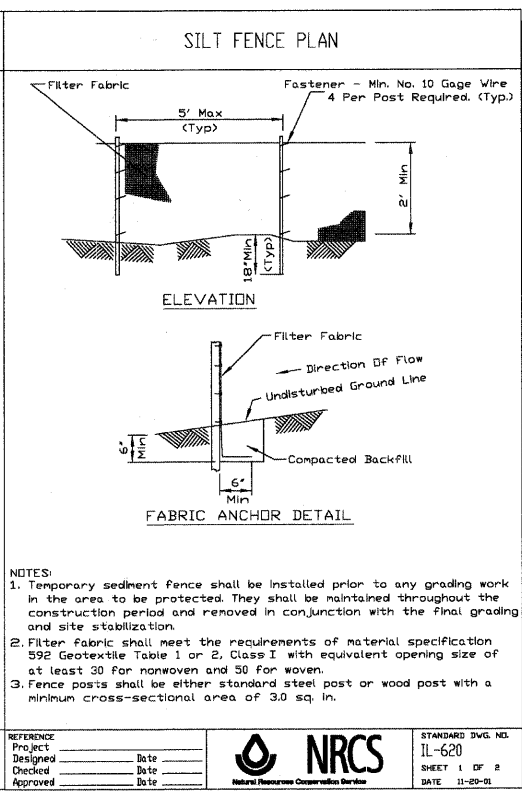
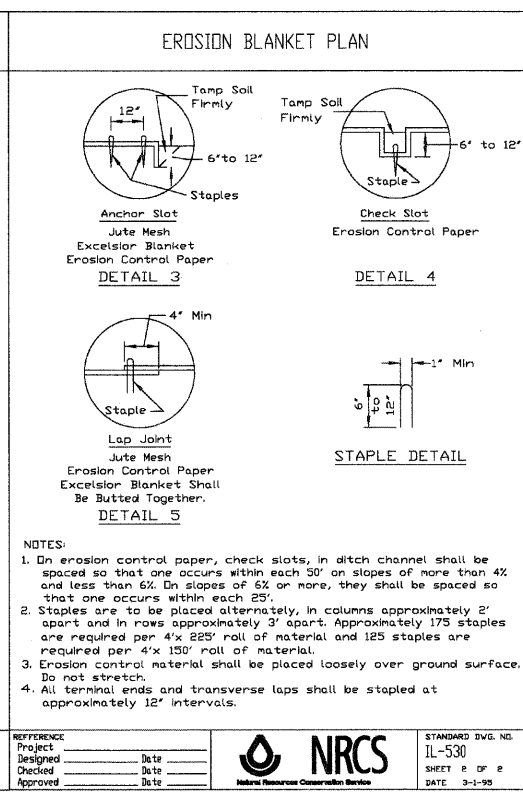
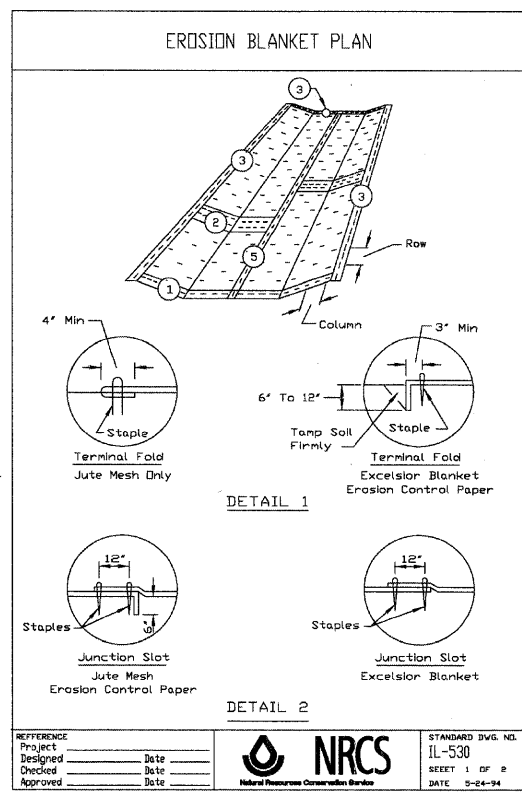
9. PLACING EMBANKMENT SHALL BE IN ACCORDANCE WITH THE "BENCHING DETAIL FOR EMBANKMENT WIDENING" AND THE STANDARD SPECIFICATIONS. EXCAVATION OF THE BENCH CUTS WITHIN EXISTING EMBANKMENT WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL."

10. THE WORK UNDER THIS CONTRACT SHALL CONFORM TO ALL REGULATIONS GIVEN IN THE ARMY CORPS OF ENGINEERS PERMIT ISSUED FOR THE PROJECT AND THE IDOT FLOODWAY PERMIT ISSUED FOR THE PROJECT.

11. THIS PROJECT MAY REQUIRE UP TO 4 CHANGEABLE MESSAGE SIGNS.
12. THE EXISTING BRIDGE PLANS ARE AVAILABLE FOR REVIEW AT THE VILLAGE OF WONDER LAKE.
13. ALL STATIONS AND OFFSETS ARE BASED OFF THE CONSTRUCTION BASELINE.
14. THE GENERAL CONTRACTOR SHALL CONTACT THE ARMY CORPS OF ENGINEERS AND THE MCHENRY COUNTY SOIL AND WATER CONSERVATION DISTRICT TWO (2) WEEKS PRIOR TO CONSTRUCTION.
15. THE CONTRACTOR IS NOT PERMITTED TO ALLOW THE EXISTING DECK MATERIAL, OR OTHER CONSTRUCTION DEBRIS TO FALL INTO THE CREEK DURING DEMOLITION OR CONSTRUCTION.

UTILITY CONTACTS

COMED	MIKE LENOX	(815) 490-2869
COMCAST	TED WYMAN	(630) 600-6349
NICOR	CONSTANCE LANE	(630) 983-8678
VERIZON	PAULO JAVIER	(815) 547-0395
VILLAGE OF WONDER LAKE	STEVE WEIR	(815) 728-0839
USGS	JON HORTNESS	(815) 756-9207



NOTES:

1. An erosion control paper, check slots, in ditch channel shall be spaced so that one occurs within each 50' on slopes of more than 4% and less than 6%. On slopes of 6% or more, they shall be spaced so that one occurs within each 25'.
2. Staples are to be placed alternately, in columns approximately 2' apart and in rows approximately 3' apart. Approximately 175 staples are required per 4' x 225' roll of material and 125 staples are required per 4' x 150' roll of material.
3. Erosion control material shall be placed loosely over ground surface. Do not stretch.
4. All terminal ends and transverse laps shall be stapled at approximately 12" intervals.

NOTES:

1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 50 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

NOTES:

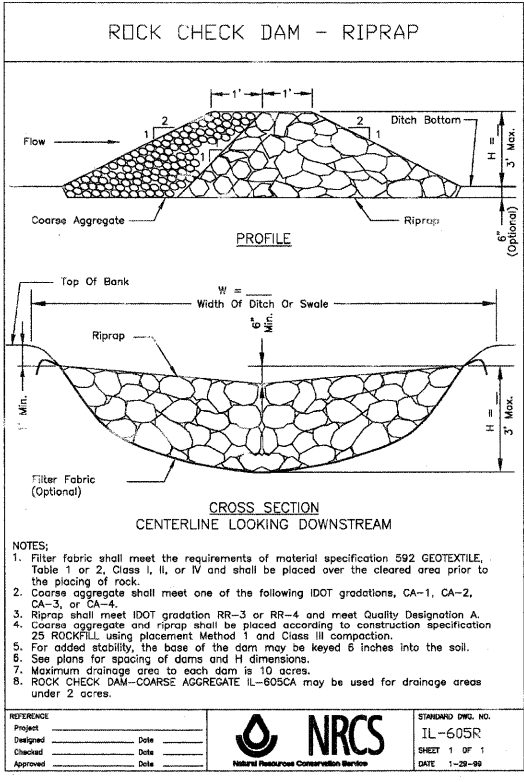
1. Place the end post of the second fence inside the end post of the first fence.
2. Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
3. Drive both posts a minimum of 18 inches into the ground and bury the flap.

REFERENCE Project	DATE	DESIGNED	DATE	CHECKED	DATE	APPROVED	DATE
STANDARD DWG. NO.	IL-530	SHEET 1 OF 2		DATE 0-24-94			

REFERENCE Project	DATE	DESIGNED	DATE	CHECKED	DATE	APPROVED	DATE
STANDARD DWG. NO.	IL-530	SHEET 2 OF 2		DATE 3-1-95			

REFERENCE Project	DATE	DESIGNED	DATE	CHECKED	DATE	APPROVED	DATE
STANDARD DWG. NO.	IL-620	SHEET 1 OF 2		DATE 11-20-01			

REFERENCE Project	DATE	DESIGNED	DATE	CHECKED	DATE	APPROVED	DATE
STANDARD DWG. NO.	IL-620(W)	SHEET 2 OF 2		DATE 1-28-99			



REFERENCE Project	DATE	DESIGNED	DATE	CHECKED	DATE	APPROVED	DATE
STANDARD DWG. NO.	IL-605R	SHEET 1 OF 1		DATE 1-28-99			

STATE STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-05	TEMPORARY EROSION CONTROL SYSTEM
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
515001-03	NAME PLATE FOR BRIDGES
542401-01	METAL END SECTIONS FOR PIPE CULVERTS
609006-05	BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
630001-08	STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631026-05	TRAFFIC BARRIER TERMINAL, TYPE 5
631031-08	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
BLR22-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC)

STANDARD ABBREVIATIONS

B-B	- BACK TO BACK OF CURB
B.C.	- BACK OF CURB
B.O.C.	- BACK OF CURB
B.S.L.	- BUILDING SETBACK LINE
C.B.	- COMMONWEALTH EDISON CO.
C.E.	- COMMONWEALTH EDISON CO.
D.E.	- DRAINAGE EASEMENT
E-E	- EDGE TO EDGE OF PAVEMENT
E.O.P.	- EDGE OF PAVEMENT
E.O.S.	- EDGE OF SHOULDER
E.P.	- EDGE OF PAVEMENT
E.S.	- EDGE OF SHOULDER
F.E.S.	- FLARED END SECTION
I.B.T.	- ILLINOIS BELL TELEPHONE CO.
L.E.	- LANDSCAPE EASEMENT
M.H.	- MANHOLE (TYPE SPECIFIED ON PLANS)
R.O.W.	- RIGHT OF WAY
T.B.F.	- TRENCH BACKFILL
T.C.	- TOP OF CURB
T.C.E.	- TEMPORARY CONSTRUCTION EASEMENT
T.O.B.	- TOP OF BERM
T.O.C.	- TOP OF CURB
U.E.	- UTILITY EASEMENT

COMPANY NAME: Robert G. Doolittle
 PROJECT CONTACT: Village of Wonder Lake
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 12/15/2009 8:46:54 AM
 FILE NAME: 080563.MXD
 PLOT DRIVER: pdfJET-TIF1.drv
 PEN TABLE: STANDARD-TRANS.TBL

SEC Group, Inc.
 Engineering
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 Landscape Architecture
 McHenry • Yorkville • New France • Chicago
 www.secgroupinc.com

USER NAME = wwood	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 12/15/2009	CHECKED - SP	REVISED -
	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

GENERAL NOTES, LISTS OF STATE HIGHWAY STANDARDS, & COMMITMENTS

THOMPSON ROAD

SCALE:	SHEET NO.	OF N/A SHEETS	STA.	TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	MCHENRY	45	2
CONTRACT NO. 63409				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES			URBAN	FUNCTION TYPE CODE	
PAY ITEM NUMBER	PAY ITEMS	UNITS	TOTAL QUANTITY	ROADWAY 80% FEDERAL 20% LOCAL 1000-2A	BRIDGE 80% FEDERAL 20% LOCAL X071-2A
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	12	12	--
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	595	595	--
20400800	FURNISHED EXCAVATION	CU YD	365	365	--
20700400	POROUS GRANULAR EMBANKMENT (SPECIAL)	CU YD	179	--	179
* 21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	650	650	--
* 25000310	SEEDING, CLASS 4	ACRE	0.1	0.1	--
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	13	13	--
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	13	13	--
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	13	13	--
* 25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1,300	1,300	--
* 28000255	TEMPORARY EROSION CONTROL SEEDING	ACRE	0.1	0.1	--
28000315	AGGREGATE DITCH CHECKS	TON	29	29	--
28000400	PERIMETER EROSION BARRIER	FOOT	1,007	1,007	--
28100109	STONE RIPRAP, CLASS A5	SQ YD	907	119	788
28200200	FILTER FABRIC	SQ YD	907	119	788
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	45	45	--
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	160	160	--
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	50	50	--
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	45	45	--
44000100	PAVEMENT REMOVAL	SQ YD	235	235	--
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	245	245	--
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	100	100	--
48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	465	465	--
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	--	1
50200100	STRUCTURE EXCAVATION	CU YD	334	--	334
50300225	CONCRETE STRUCTURES	CU YD	217.3	--	217.3
50300255	CONCRETE SUPERSTRUCTURE	CU YD	327.5	--	327.5
50300260	BRIDGE DECK GROOVING	SQ YD	413	--	413
50300280	CONCRETE ENCASEMENT	CU YD	12.0	--	12.0
50300300	PROTECTIVE COAT	SQ YD	1,068	--	1,068
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	--	1
50500505	STUD SHEAR CONNECTORS	EACH	2,412	--	2,412
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	86,870	--	86,870
50800515	BAR SPLICERS	EACH	58	--	58
50900105	ALUMINUM RAILING, TYPE L	FOOT	281	--	281
51200958	FURNISHING METAL SHELL PILES 14" X 0.250"	FOOT	2,375	--	2,375
51201800	FURNISHING STEEL PILES HP 14 X 73	FOOT	450	--	450
51202305	DRIVING PILES	FOOT	2,825	--	2,825
51203200	TEST PILE METAL SHELLS	EACH	3	--	3
51500100	NAME PLATES	EACH	1	--	1
52100520	ANCHOR BOLTS, 1"	EACH	48	--	48
54215547	METAL END SECTIONS 12"	EACH	1	1	--
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	77	--	77
60100060	CONCRETE HEADWALL FOR PIPE DRAINS	EACH	2	2	--
60100945	PIPE DRAINS 12"	FOOT	34	34	--
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	116	--	116
60900140	TYPE B INLET BOX, STANDARD 609006	EACH	2	2	--
* 63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POST	FOOT	25	25	--
* 63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	2	2	--
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	2	--
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	--
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	--
67100100	MOBILIZATION	L SUM	1	1	--
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	8	8	--
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	1,490	1,490	--
* 78200420	GUARDRAIL MARKERS, TYPE B	EACH	16	16	--
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	--
* A2C022G5	TREE, CARYA ILINOENSIS (NORTHERN MAPLE) CONTAINER GROWN, 5-GALLON	EACH	5	5	--
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	200	200	--
X0325577	UNDERWATER STRUCTURE EXCAVATION PROTECTION, SPECIAL-LOCATION 1	EACH	1	--	1
X0325578	UNDERWATER STRUCTURE EXCAVATION PROTECTION, SPECIAL-LOCATION 2	EACH	1	--	1
X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1	1	--
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.5	0.5
△ Z0076600	TRAINEES	HOURS	500	250	250

* SPECIALTY ITEM
△ Y080

EARTHWORK SCHEDULE		
LOCATION	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (CU YD)	FURNISHED EXCAVATION (CU YD)
THOMPSON ROAD		
STA 204+48.00 TO STA 205+00.00	26	49
STA 205+00.00 TO STA 205+56.15	38	191
STA 205+56.15 TO STA 206+00.00	105	---
STA 206+00.00 TO STA 206+50.00	19	---
STA 206+50.00 TO STA 207+04.81	354	---
STA 207+04.81 TO STA 207+50.00	27	84
STA 207+50.00 TO STA 208+00.00	13	20
STA 208+00.00 TO STA 208+50.00	8	13
STA 208+50.00 TO STA 208+94.00	5	8

COMPANY NAME: Smith
PROJECT CONTACT: Robert G. Davies
CLIENT: Village of Wonder Lake
DATE PLOTTED: 1/15/2010 2:01:40 PM
FILE NAME: 002053.106.dgn
PLOT USER: MCHENRY
REV TABLE: 314260P-TRANS-TOL



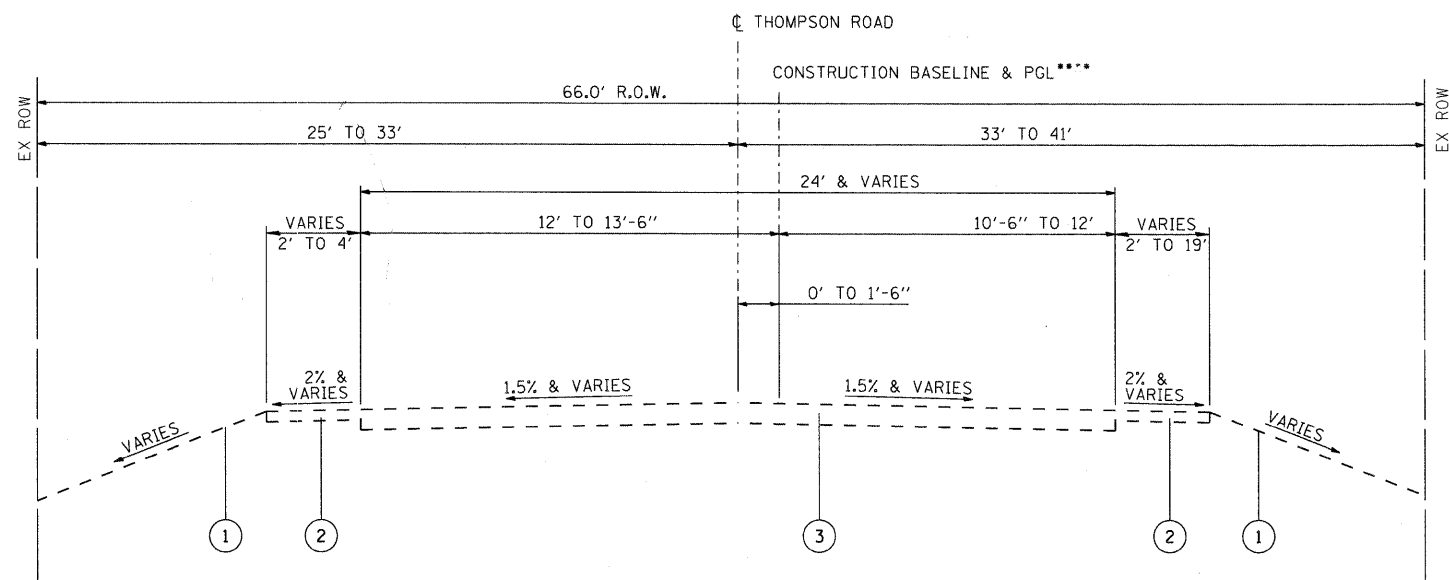
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PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 1/15/2010	CHECKED - SP	REVISED -
	DATE = 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

SUMMARY OF QUANTITIES
THOMPSON ROAD

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	MCHENRY	45	3
CONTRACT NO. 63409				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



**EXISTING ROADWAY TYPICAL SECTION
THOMPSON ROAD**

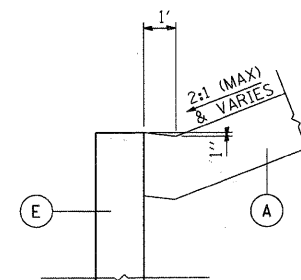
STA. 204+48.00 TO STA. 205+51.56
STA. 206+83.46 TO STA. 208+94.00

EXISTING LEGEND

- ① EXISTING GROUND
- ② AGGREGATE SHOULDER
- ③ ASPHALT SURFACE COURSE (4" - 8")
- ④ EXISTING RAILING
- ⑤ EXISTING STRUCTURE
- ⑥ EXISTING HOT-MIX ASPHALT OVERLAY
- ▨ INDICATES ITEMS TO BE REMOVED

PROPOSED LEGEND

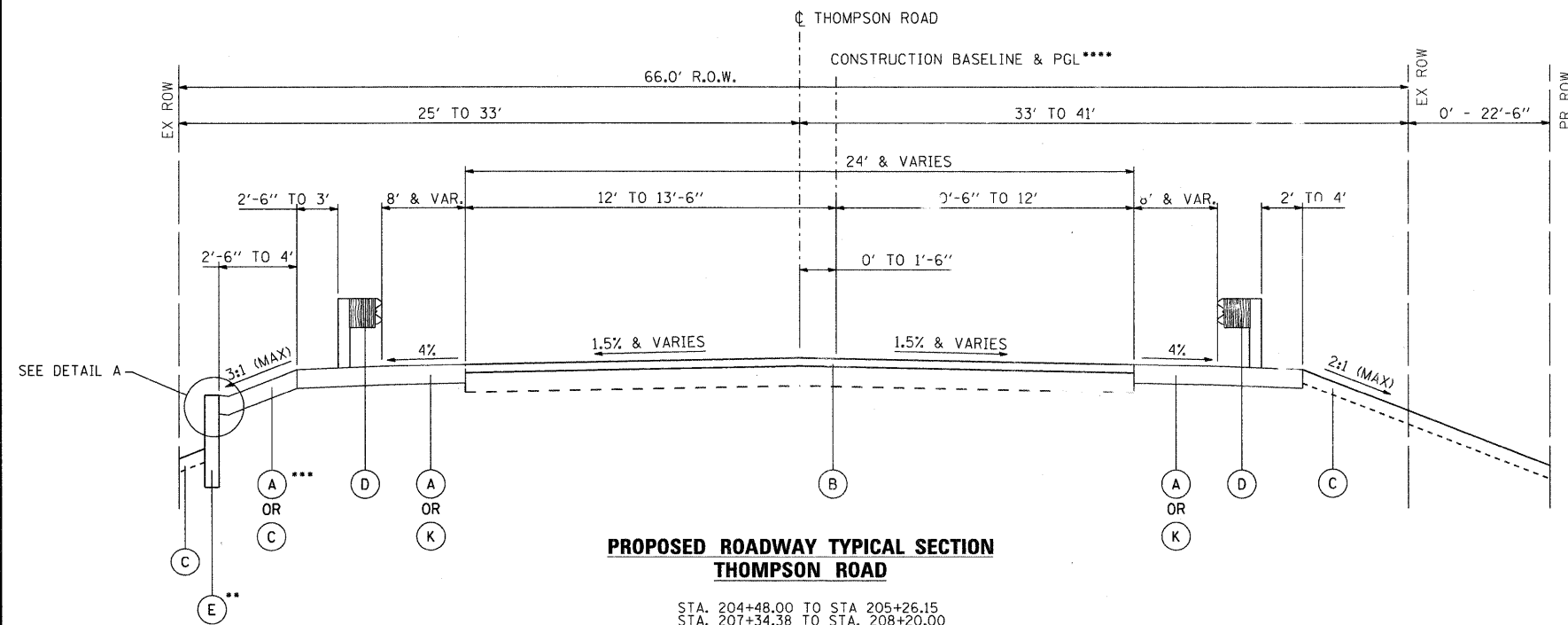
- Ⓐ HOT-MIX ASPHALT SHOULDERS, 6"
- Ⓑ HOT-MIX ASPHALT SURFACE COURSE MIX "D" N70 (2")
- Ⓒ TOPSOIL FURNISH AND PLACE, 4" AND SEEDING, CLASS 4
- Ⓓ STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' FOOT POST
- Ⓔ RETAINING WALL (SEE BRIDGE PLANS)
- Ⓕ SUBBASE GRANULAR MATERIAL, TYPE B, 4" (SEE BRIDGE PLANS)
- Ⓖ CONCRETE SUPERSTRUCTURE (SEE BRIDGE PLANS)
- Ⓗ CONCRETE PARAPET WALL-CONCRETE SUPERSTRUCTURE (SEE BRIDGE PLANS)
- Ⓘ CONCRETE SIDEWALK-CONCRETE SUPERSTRUCTURE (SEE BRIDGE PLANS)
- ⓵ ALUMINUM RAILING TYPE L (SEE BRIDGE PLANS)
- ⓶ AGGREGATE SHOULDERS, TYPE B, 6"



DETAIL A

HOT-MIX ASPHALT REQUIREMENTS		AIR VOIDS @ N _{DES}
PAVEMENT RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE MIX "D" N70 (IL-9.5 mm) (2")		4% @ 70 Gyr.
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5 mm) (2")		4% @ 70 Gyr.
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)		
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 (13")		4% @ 70 Gyr.
HOT-MIX ASPHALT SHOULDERS, 6"		
HMA SHOULEER (HMA BINDER IL-19 mm)		20% @ 30 Gyr.

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SO YD/IN
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



**PROPOSED ROADWAY TYPICAL SECTION
THOMPSON ROAD**

STA. 204+48.00 TO STA. 205+26.15
STA. 207+34.38 TO STA. 208+20.00

** RETAINING WALL LOCATIONS:
STA. 205+03.99 TO STA. 205+65.80 LT
STA. 207+15.50 TO STA. 207+90.32 LT

*** HMA SHOULDER LIMITS:
STA. 204+97 TO STA. 205+65.80 LT
STA. 207+15.50 TO STA. 208+20 LT

**** THE PGL IS AT THE CENTER LINE
OF THOMPSON ROAD AT
STA. 207+04.78 TO STA. 208+20

COMPANY NAME: SEC GROUP, INC.
PROJECT CONTACT: Robert G. Davies
CLIENT: Village of Wonder Lake
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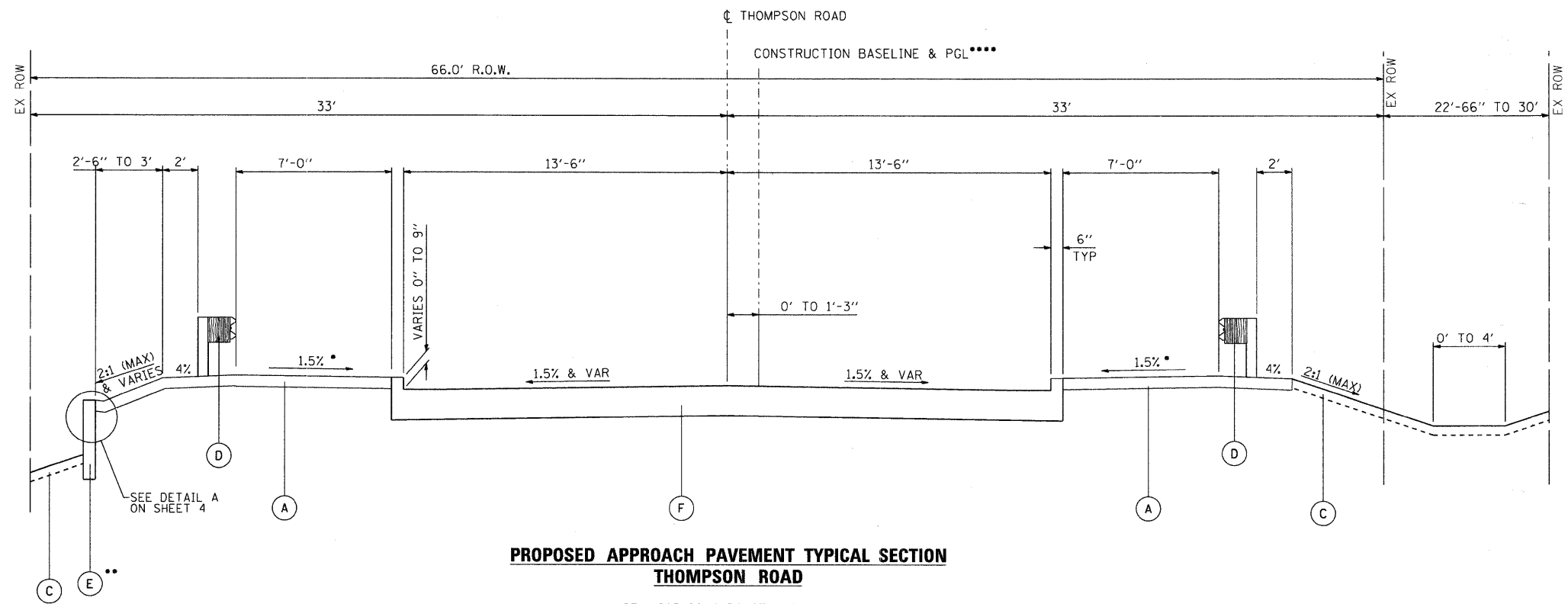
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VILLAGE OF WONDER LAKE

**TYPICAL SECTIONS
THOMPSON ROAD**

SCALE: SHEET NO. OF N/A SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	MCHENRY	45	4
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63409	



**PROPOSED APPROACH PAVEMENT TYPICAL SECTION
THOMPSON ROAD**

• VARIES FROM 1.5% TOWARD ROADWAY AT ENDS OF BRIDGE (STA 205+56.15 AND 207+04.78) TO 4% AWAY FROM ROAD AT ENDS OF APPROACH SLAB (STA 205+26.15 AND 207+34.78)

•• RETAINING WALL LOCATIONS:
STA. 205+03.99 TO STA 205+65.80 LT
STA. 207+15.50 TO STA. 207+90.32 LT

STA. 205+26.18 TO STA 205+56.15
STA. 207+04.78 TO STA. 207+34.78

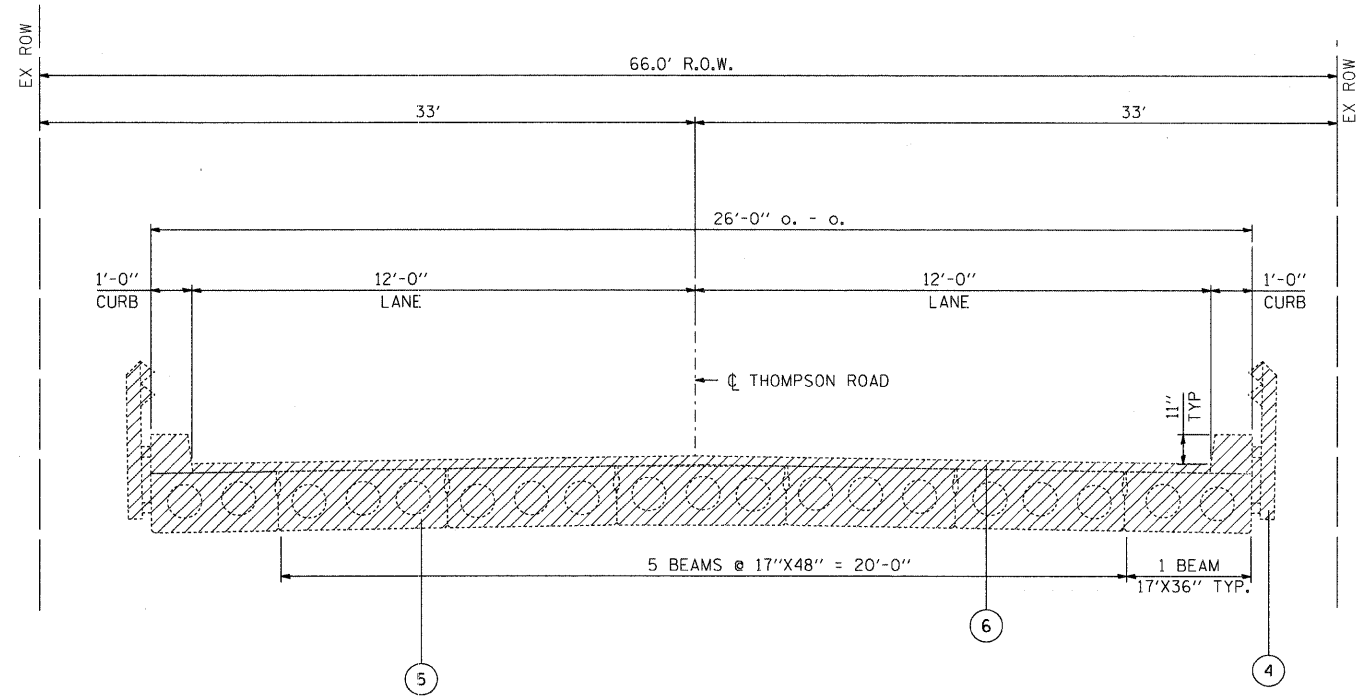
**** THE PGL IS AT THE CENTER LINE OF THOMPSON ROAD AT STA 207+04.78 TO STA 208+20

EXISTING LEGEND

- ① EXISTING GROUND
- ② AGGREGATE SHOULDER
- ③ ASPHALT SURFACE COURSE (4" - 8")
- ④ EXISTING RAILING
- ⑤ EXISTING STRUCTURE
- ⑥ EXISTING HOT-MIX ASPHALT OVERLAY
- ▨ INDICATES ITEMS TO BE REMOVED

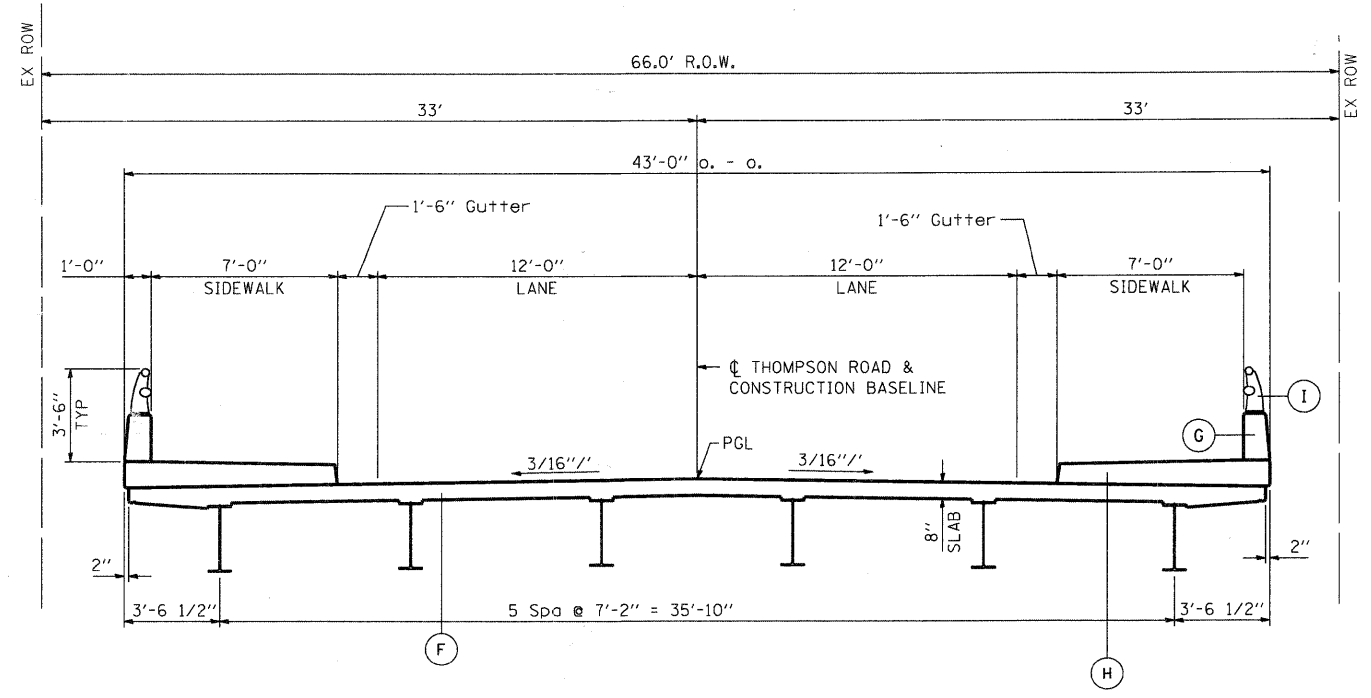
PROPOSED LEGEND

- Ⓐ HOT-MIX ASPHALT SHOULDERS, 6"
- Ⓑ HOT-MIX ASPHALT SURFACE COURSE MIX "D" N70 (2")
- Ⓒ TOPSOIL FURNISH AND PLACE, 4" AND SEEDING, CLASS 4
- Ⓓ STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' FOOT POST
- Ⓔ RETAINING WALL - CONCRETE STRUCTURES & FURNISHED STEEL PILES HP 14 X 73 (SEE BRIDGE PLANS)
- Ⓕ CONCRETE SUPERSTRUCTURE (SEE BRIDGE PLANS)
- Ⓖ CONCRETE PARAPET WALL - CONCRETE SUPERSTRUCTURE (SEE BRIDGE PLANS)
- Ⓗ CONCRETE SIDEWALK - CONCRETE SUPERSTRUCTURE (SEE BRIDGE PLANS)
- Ⓘ ALUMINUM RAILING TYPE L (SEE BRIDGE PLANS)



EXISTING BRIDGE TYPICAL SECTION

STA. 205+51.5 TO STA. 206+83.46



PROPOSED BRIDGE TYPICAL SECTION

STA. 205+56.15 TO STA. 207+04.78

COMPANY NAME: SEC GROUP, INC.
PROJECT CONTACT: Robert G. Davies
CLIENT: Village of Wonder Lake
DATE PLOTTED: 11/20/2009 3:50:00 PM
FILE NAME: 080562.dwg
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PLOT DATE = 11/30/2009	CHECKED - SP	REVISED -
	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

**TYPICAL SECTIONS
THOMPSON ROAD**

SCALE:	SHEET NO. OF N/A SHEETS	STA. TO STA.
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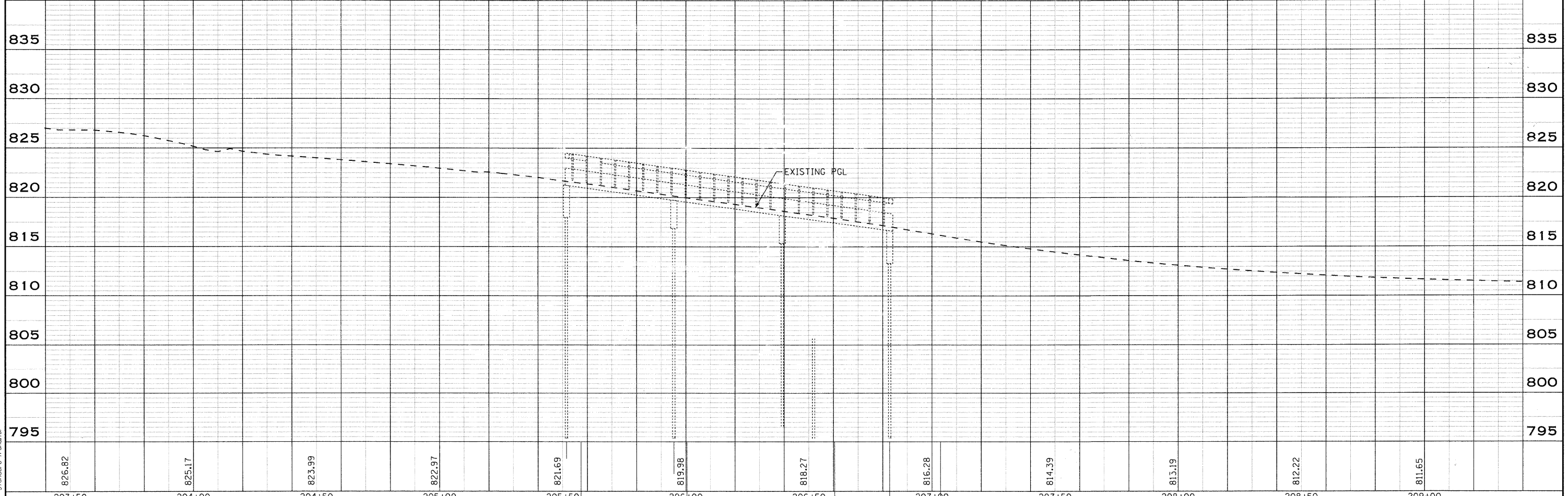
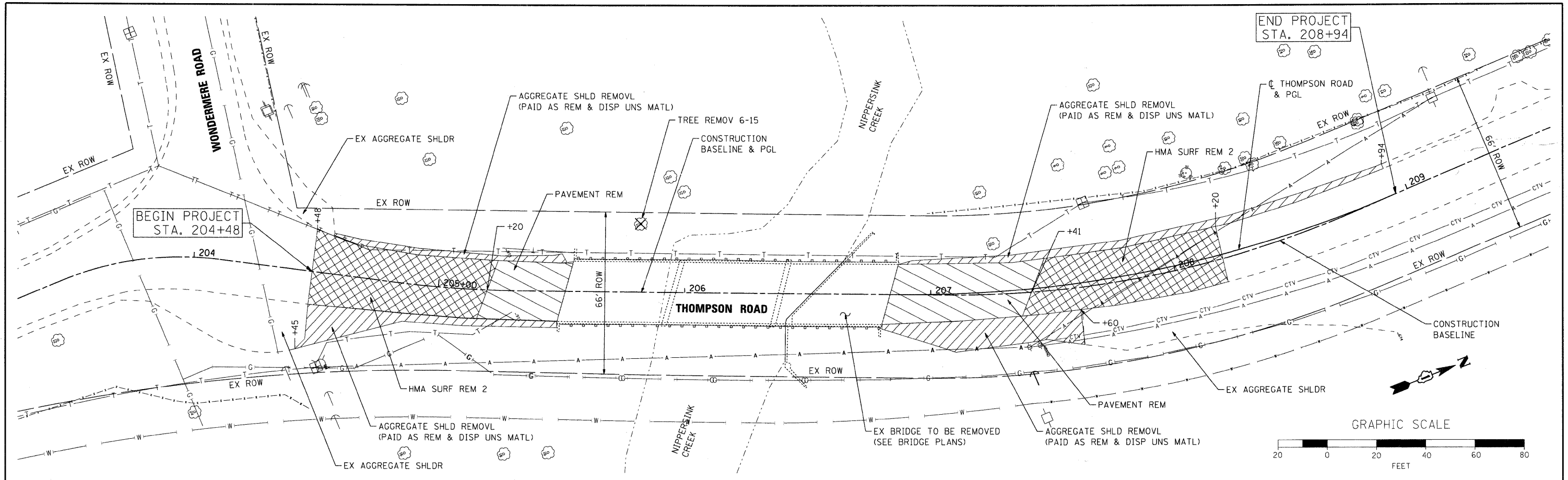
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FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 63409

PLAN	SURVEYED	DATE
	ALIGNED	BY
	RT. OF WAY CHECKED	
	PAID FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	ALIGNED	BY
	RT. OF WAY CHECKED	
	PAID FILE NAME	
	NO.	

SEC GROUP, INC.
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 CLIENT: Village of Wonder Lake
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203+50	204+00	204+50	205+00	205+50	206+00	206+50	207+00	207+50	208+00	208+50	209+00	

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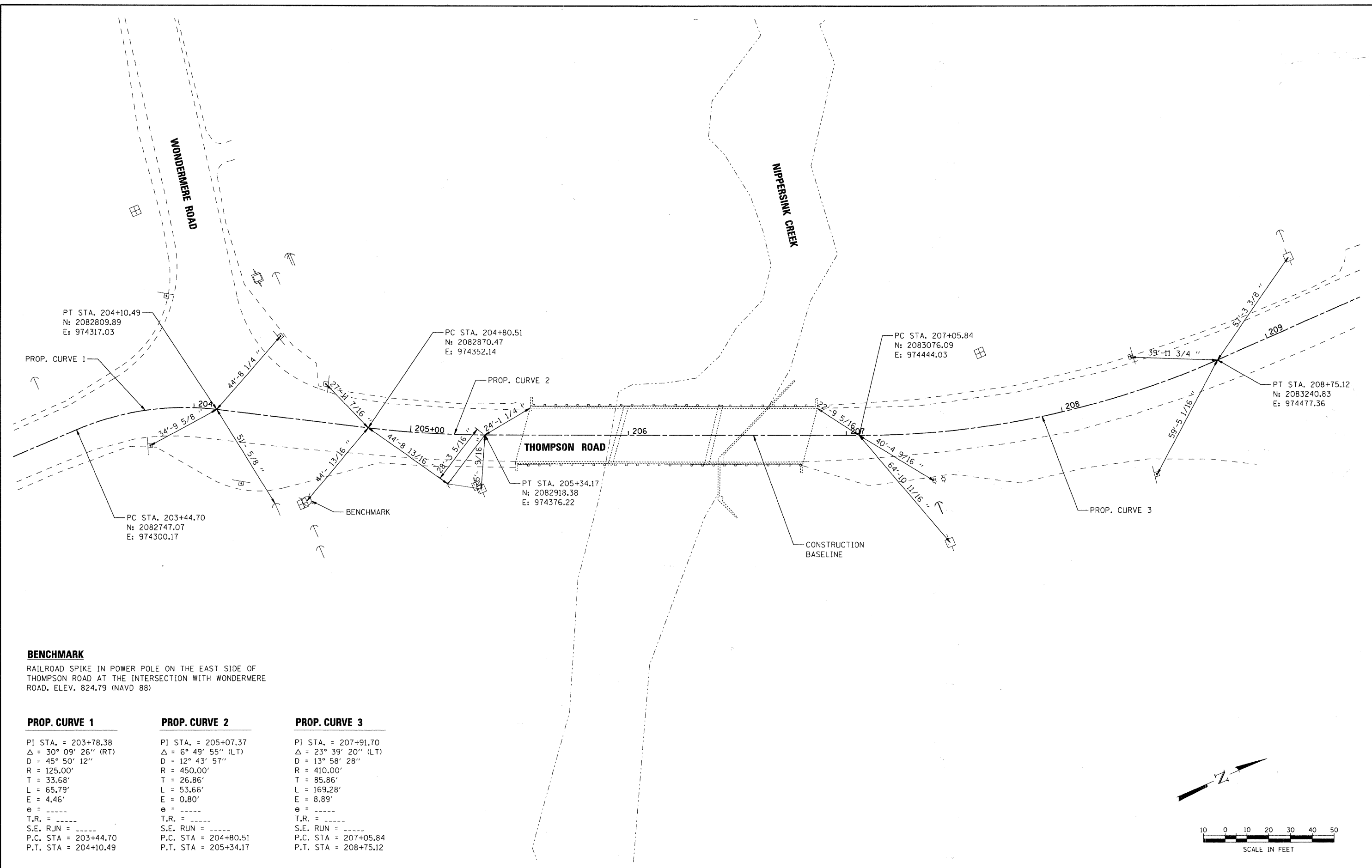
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PLOT DATE = 12/15/2009	CHECKED - SP	REVISED -
	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

**REMOVAL PLAN
 THOMPSON ROAD**

SCALE: 1"=20' SHEET NO. 1 OF 1 SHEETS STA. 204+48 TO STA. 208+94

F.A. RTE. 4081	SECTION 06-00005-00-BR	COUNTY McHENRY	TOTAL SHEETS 45	SHEET NO. 6
CONTRACT NO. 63409			ILLINOIS FED. AID PROJECT	



BENCHMARK

RAILROAD SPIKE IN POWER POLE ON THE EAST SIDE OF THOMPSON ROAD AT THE INTERSECTION WITH WONDERMERE ROAD. ELEV. 824.79 (NAVD 88)

PROP. CURVE 1

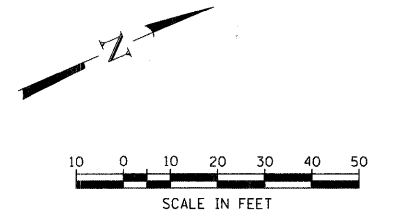
PI STA. = 203+78.38
 $\Delta = 30^\circ 09' 26''$ (RT)
 $D = 45^\circ 50' 12''$
 $R = 125.00'$
 $T = 33.68'$
 $L = 65.79'$
 $E = 4.46'$
 $e = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. \text{ RUN} = \text{-----}$
 $P.C. \text{ STA} = 203+44.70$
 $P.T. \text{ STA} = 204+10.49$

PROP. CURVE 2

PI STA. = 205+07.37
 $\Delta = 6^\circ 49' 55''$ (LT)
 $D = 12^\circ 43' 57''$
 $R = 450.00'$
 $T = 26.86'$
 $L = 53.66'$
 $E = 0.80'$
 $e = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. \text{ RUN} = \text{-----}$
 $P.C. \text{ STA} = 204+80.51$
 $P.T. \text{ STA} = 205+34.17$

PROP. CURVE 3

PI STA. = 207+91.70
 $\Delta = 23^\circ 39' 20''$ (LT)
 $D = 13^\circ 58' 28''$
 $R = 410.00'$
 $T = 85.86'$
 $L = 169.28'$
 $E = 8.89'$
 $e = \text{-----}$
 $T.R. = \text{-----}$
 $S.E. \text{ RUN} = \text{-----}$
 $P.C. \text{ STA} = 207+05.84$
 $P.T. \text{ STA} = 208+75.12$



COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: Robert G. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 11/30/2009 5:52:12 PM
 FILE NAME: 08256317.dgn
 PLOT TABLE: Standard-Trans.tbl



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PLOT SCALE = 1"=20'	DRAWN -	REVISED -
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	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

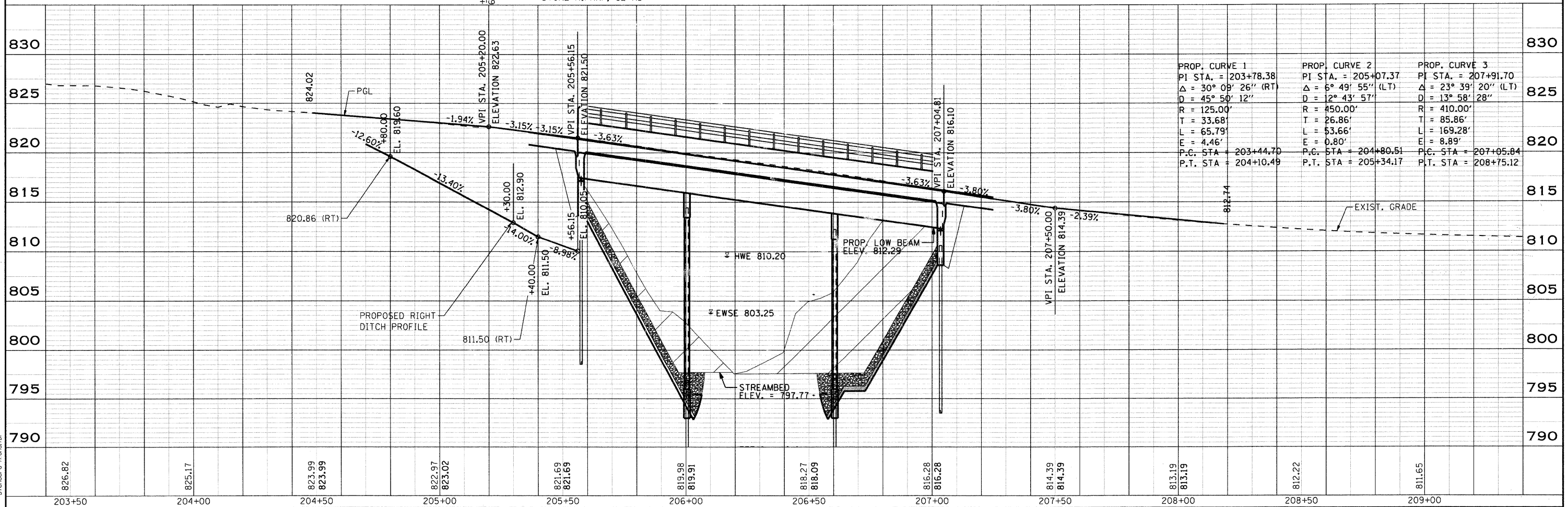
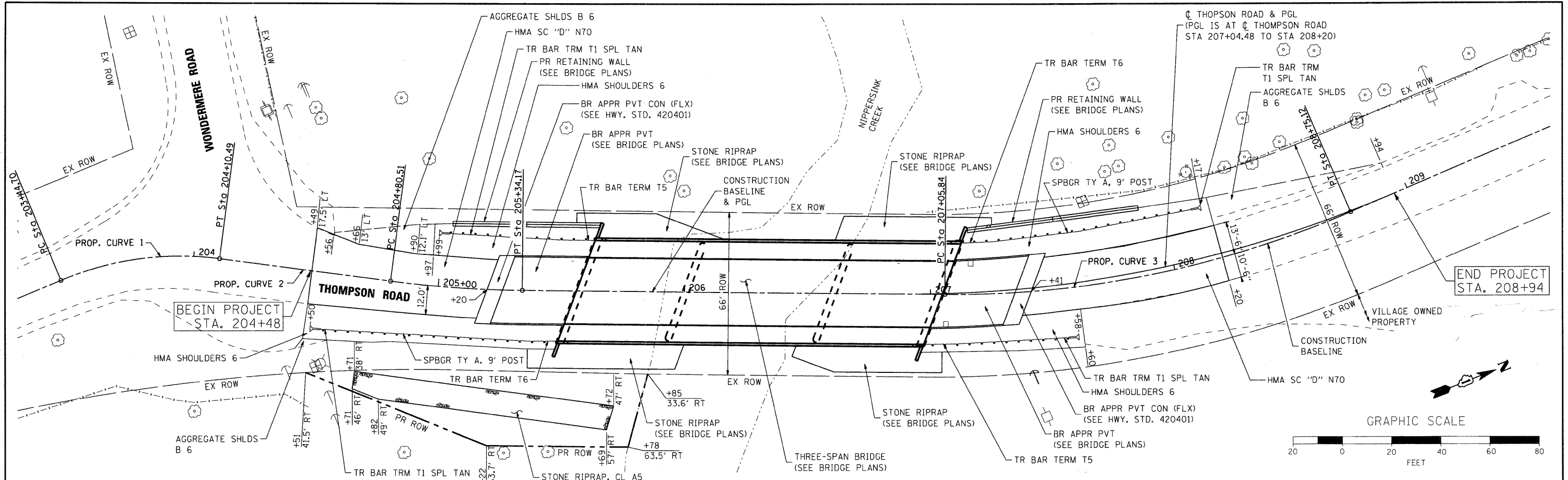
ALIGNMENT AND TIES			
THOMPSON ROAD			
SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE. 4081	SECTION 06-00005-00-BR	COUNTY MCHENRY	TOTAL SHEETS 45	SHEET NO. 7
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PLAN	SURVEYED	DATE
	ALIGNED	BY
	NOTED	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	ALIGNED	BY
	NOTED	
	FILE NAME	
	NO.	

SEC GROUP, INC.
 PROJECT CONTACT
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 12/15/2009 9:56:58 AM
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 PLOT DRIVER: pdfplot
 PEN TABLE: standard-trans.tbl



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826.82	825.17	823.99 823.99	822.97 823.02	821.69 821.69	819.98 819.91	818.27 818.09	816.28 816.28	814.39 814.39	813.19 813.19	812.22	811.65

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PLOT DATE = 12/15/2009	CHECKED - SP	REVISED -
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VILLAGE OF WONDER LAKE

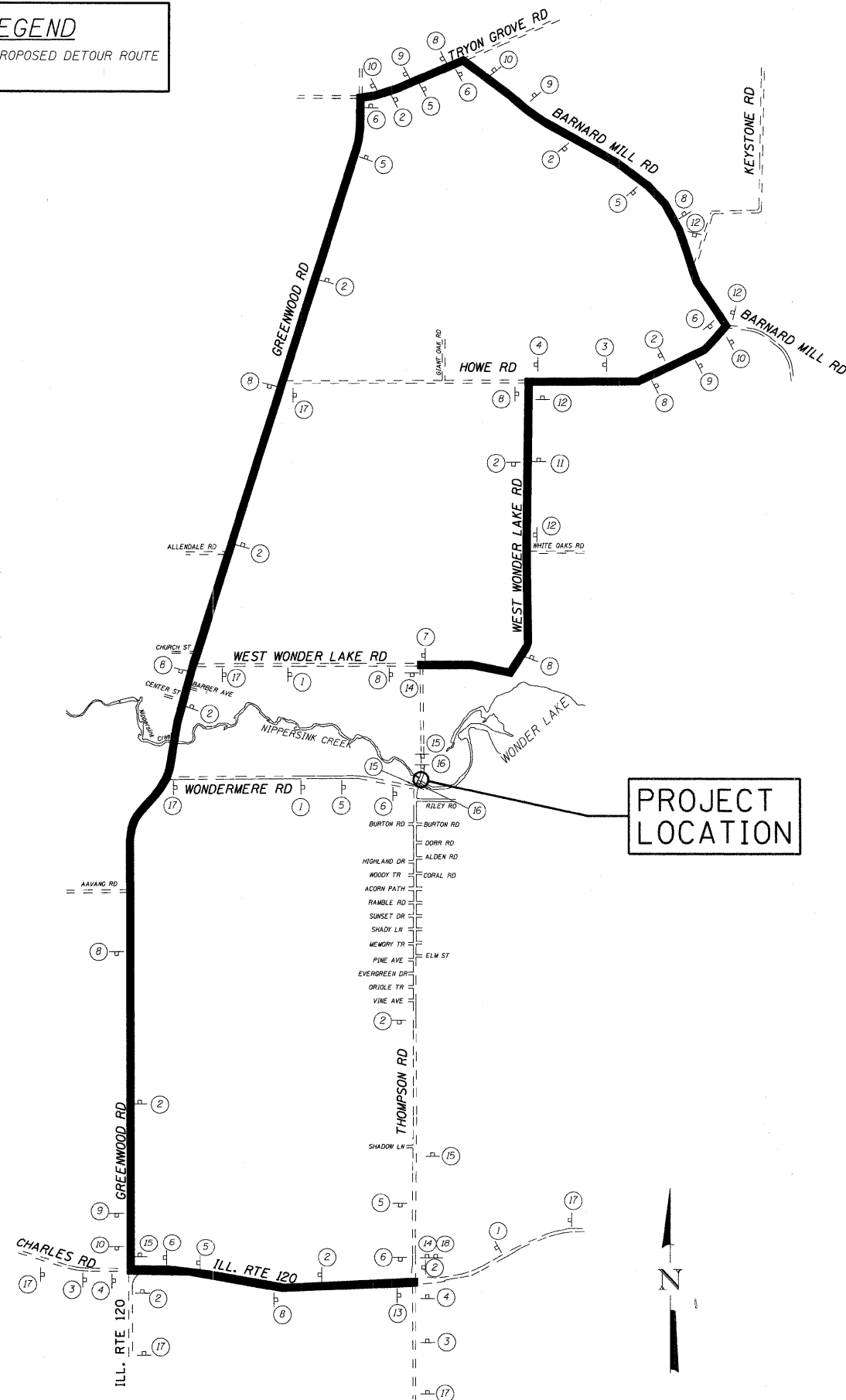
PLAN AND PROFILE THOMPSON ROAD

SCALE: 1"=20' SHEET NO. 1 OF 1 SHEETS STA. 204+48 TO STA. 208+94

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	McHENRY	45	8
CONTRACT NO. 63409			ILLINOIS FED. AID PROJECT	

LEGEND

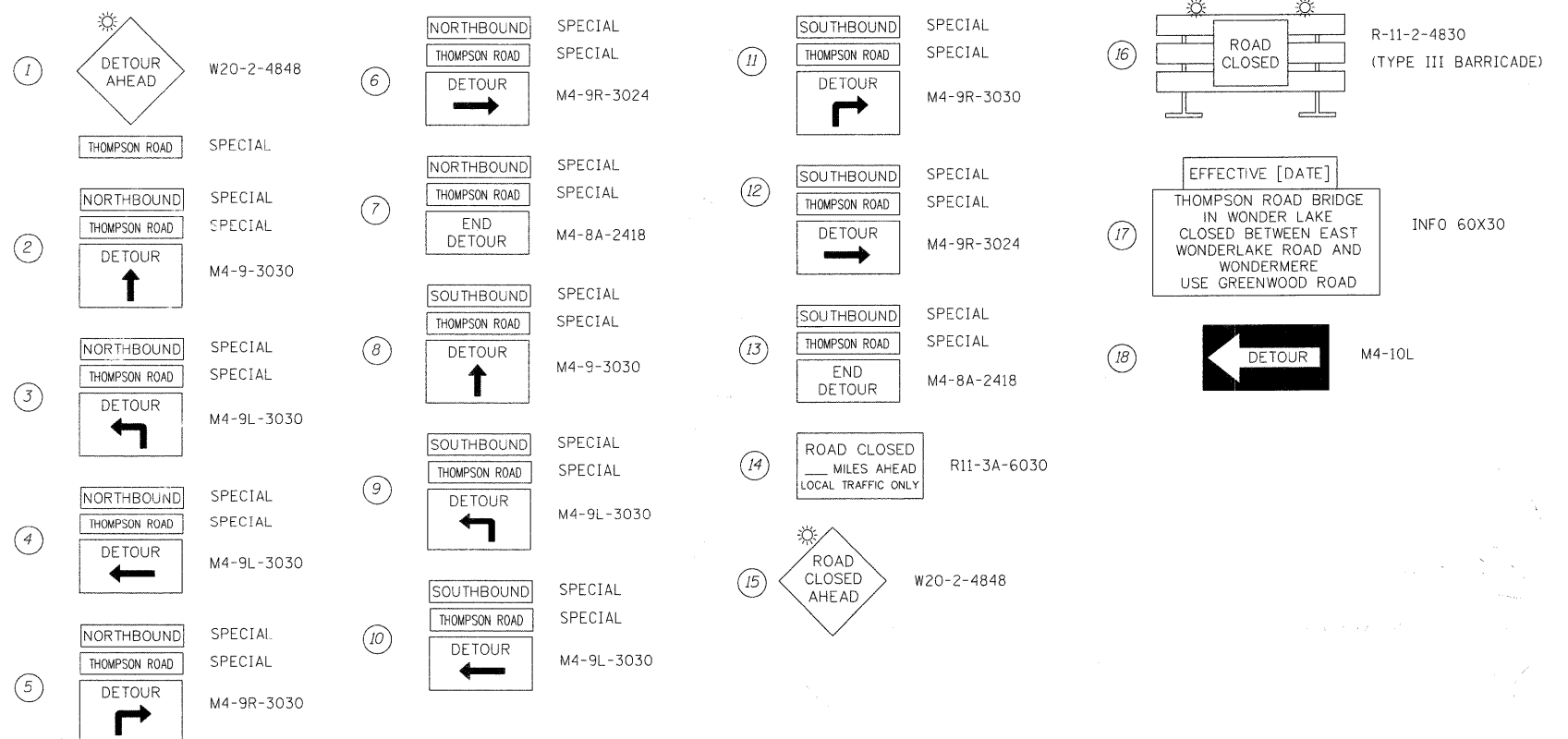
PROPOSED DETOUR ROUTE



DETOUR GENERAL NOTES

1. THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING HAS BEEN ERECTED IN ACCORDANCE WITH THE DETOUR PLAN.
2. THE ENGINEER, VILLAGE OF WONDER LAKE POLICE DEPARTMENT, ILLINOIS DEPARTMENT OF TRANSPORTATION, AND THE MCHENRY COUNTY DIVISION OF TRANSPORTATION SHALL BE NOTIFIED IN WRITING AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
3. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTIONS" ADOPTED JANUARY 1, 2007, THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," AND AS DIRECTED BY THE ENGINEER.
4. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE.
5. ADDITIONAL SIGNING AND/OR BARRICADES DEEMED NECESSARY BY THE ENGINEER SHALL BE PROVIDED AND INSTALLED AT NO ADDITIONAL COST.
6. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE NAMES AND PHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE, (INCLUDING A 24-HR EMERGENCY NUMBER) AND HIS REPRESENTATIVES SHALL BE RESPONSIBLE FOR THE DETOUR SIGNING, PRIOR TO THE START OF WORK AT THE PRECONSTRUCTION CONFERENCE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD LOCATION OF ALL DETOUR AND CONSTRUCTION SIGNING. THE CONTRACTOR MAY REQUEST THE ENGINEER TO FIELD VERIFY THE POSITIONS OF ANY SIGNS.
8. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WITH THE DETOUR IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR IN A MANNER MEETING THE APPROVAL OF THE ENGINEER.
9. ALL DETOUR SIGNING SHALL BE POST MOUNTED.
10. ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF ARTICLE 1084.02 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR IN LIKE-NEW CONDITION. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION OF THE SIGNS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATING 24 HOURS EACH DAY, INCLUDING SUNDAYS AND HOLIDAYS.
12. THE "ROAD CLOSED" (R11-2) SIGN SHALL BE MOUNTED ABOVE THE TOPS OF THE TYPE III BARRICADES. ALL TYPE III BARRICADES SHALL HAVE TWO AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINES OF THE SUPPORTS.
13. THE TYPE III BARRICADES USED AT POINTS OF CLOSURE TO THRU TRAFFIC ONLY SHALL NOT EXCEED 8 FEET IN WIDTH EACH FOR A SINGLE APPROACH LANE. ALL BARRICADES AT THESE LOCATIONS SHALL HAVE REFLECTORIZED STRIPING ON THE BACK SIDES OF THE BARRICADES.
14. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IMMEDIATELY BEHIND THE TYPE III BARRICADES DURING NON-WORKING HOURS. IN ANY EVENT ARTICLE 701.04 OF THE STANDARDS SPECIFICATIONS SHALL APPLY.
15. DURING NON-WORKING HOURS THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE TYPE III BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNS, INCLUDING BRUSHING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.
17. THE ENGINEER SHALL BE NOTIFIED AT LEAST 24 HOURS BEFORE THE ROAD IS TO BE REOPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
18. ALL WORK REQUIRED FOR DETOUR SIGNING SHALL BE PAID FOR AS "TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR."
19. SIDEWALK CLOSED SIGNS SHALL BE PLACED AT ALL FOUR QUADRANTS OF BRIDGE.

SIGN LEGEND



SEC GROUP, INC.
 PROJECT CONTACT: Robert C. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 12/15/2009 8:11:10 AM
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VILLAGE OF WONDER LAKE

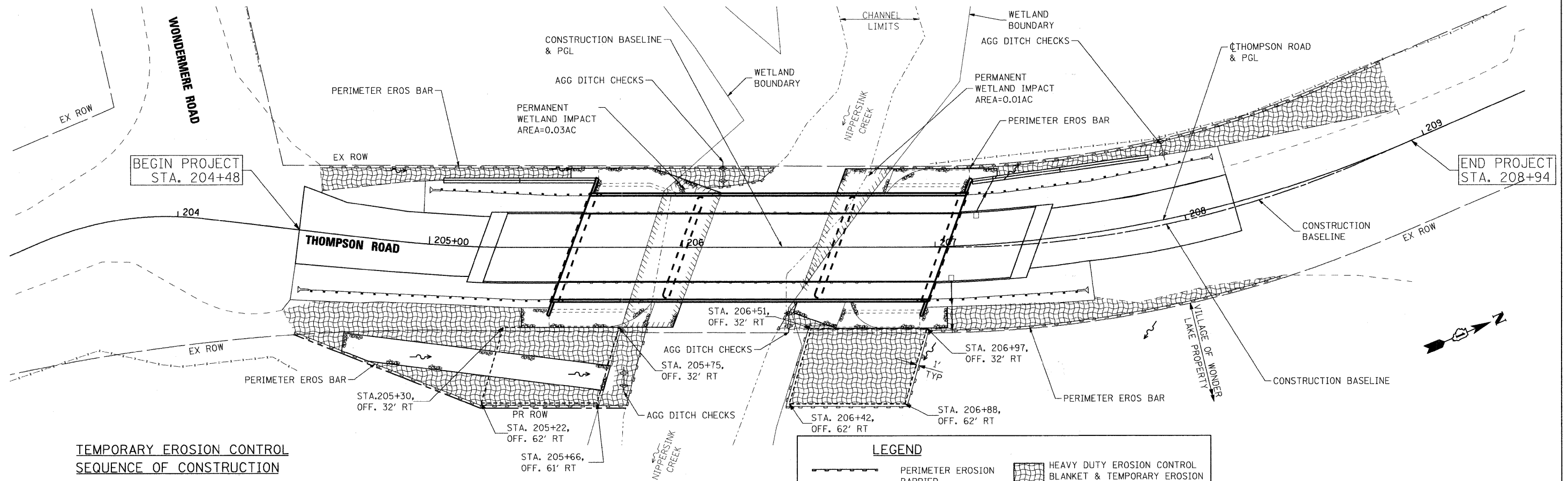
**TEMPORARY DETOUR PLAN
 THOMPSON ROAD**

SCALE:	SHEET NO. OF SHEETS	STA. TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	MCHENRY	45	9
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63409	

EROSION CONTROL NOTES

- THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT AND MAINTAIN EROSION CONTROL MEASURES IMMEDIATELY AFTER STRIPPING OF EXISTING VEGETATION.
- THE QUANTITIES SHOWN FOR AGGREGATE DITCH CHECKS ARE MEASURED AS PER TON, HAY OR STRAW BALES ARE NOT TO BE USED.
- STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN SEVEN (7) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT POLLUTION OF STORM WATER AND SHALL FOLLOW IEPA & IDOT CONSTRUCTION MEMORANDUM NO. 95-60.
- STABILIZATION MEASURES SHALL BE INITIATED WITHIN 7 DAYS OF CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASING IN AREAS WHERE IT WILL NOT OCCUR FOR A PERIOD OF 14 OR MORE CALENDAR DAYS.
- THE CONTRACTOR SHALL APPLY TEMPORARY EROSION CONTROL SEEDING TO ALL ERODIBLE BARE EARTH AREAS WITHIN THE CONTRACT LIMITS EACH WEEK, REGARDLESS OF WEATHER CONDITIONS OR PROGRESS OF THE WORK, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ERODIBLE EMBANKMENT AND EXCAVATION AREAS WHERE WORK IS IN PROGRESS SHALL BE INCLUDED ON THE AREAS TO BE SEEDDED. SEE BDE SPECIAL PROVISION FOR TEMPORARY EROSION CONTROL.
- THE SOIL AND WATER CONSERVATION DISTRICT IS RESPONSIBLE FOR CONDUCTING SITE VISITS AND VERIFYING THAT THE PRACTICES ARE WORKING PROPERLY AND DETERMINE IF ADDITIONAL PRACTICES ARE NEEDED FOR BETTER SOIL EROSION AND SEDIMENT CONTROL. IF ADDITIONAL PRACTICES ARE DEEMED NECESSARY BY THE ENGINEER OR THE SWCD THE CONTRACTOR WILL IMPLEMENT THE PRACTICES IN A TIMELY MANNER.
- THE MCHENRY SOIL AND WATER CONSERVATION DISTRICT MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO FINAL INSPECTION.
- LOW GROUND-PRESSURE EQUIPMENT WILL BE USED FOR ALL WORK WITHIN WETLANDS.
- THE SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2 INCH OF RAIN OR MORE BY THE INDIVIDUAL ON SITE IN CHARGE OF SOIL EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION OF THE PROJECT. THE ENGINEER WILL BE RESPONSIBLE FOR THE EROSION AND SEDIMENT CONTROL INSPECTIONS.
- HEAVY DUTY EROSION CONTROL BLANKET SHALL BE INSTALLED TO ALL DISTURBED AREAS WITH SLOPES EQUAL TO OR GREATER THAN 5H:1V AND IN CRITICAL AREAS (I.E. DETENTION BASIN PERIMETERS, STREAMBANKS, BERMS, ETC.) IMMEDIATELY UPON FINAL GRADING.
- SILT FENCE SHALL BE INSTALLED FOLLOWING THE COMPLETION AND STABILIZATION OF THE STORMWATER FACILITIES WILL REMAIN IN PLACE UNTIL THE CONTRIBUTING AREA IS STABILIZED.
- ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS. INSPECTED DAILY AND CLEANED WHEN NECESSARY OR DIRECTED BY THE ENGINEER.
- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM THE ILLINOIS URBAN MANUAL.
- ALL MATERIALS USED FOR TEMPORARY CONSTRUCTION ACTIVITIES WILL BE REMOVED TO UPLAND AREAS IMMEDIATELY FOLLOWING COMPLETION OF THE CONSTRUCTION ACTIVITY.
- A STAMPED AND SIGNED COPY OF THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES AND BE PRESENTED WHEN REQUESTED BY MCHENRY SWCD, U.S. ARMY CORP OF ENGINEERS OR ANY OTHER AUTHORIZED AGENCY.
- SEEDING MIXTURE SHALL BE CLASS TYPE 4 AS DETAILED IN SECTION 250 OF THE STANDARD SPECIFICATIONS. PLANTING TIMES ARE LIMITED TO EARLY SPRING TO JUNE 1 AND AUGUST 1 TO SEPTEMBER 1.
- THE CONTRACTOR WILL BE REQUIRED TO HAVE A DESIGNATED CONCRETE WASH OUT AREA DURING ALL CONCRETE POURS.
- THE COST FOR DEWATERING SHALL BE INCLUDED IN THE COST OF "UNDERWATER STRUCTURE EXCAVATION PROTECTION, SPECIAL" AT THE LOCATION SPECIFIED.
- OTHER THAN TO INSTALL AND REMOVE THE EXCAVATION PROTECTION, NO WORK SHALL BE PERFORMED IN FLOWING WATER. WORK IN AND NEAR NIPPERSINK CREEK SHALL BE ISOLATED FROM CREEK FLOWS AND DEWATERED PRIOR TO THE COMMENCEMENT OF WORK. THE DIVERSION/ISOLATION OF THE CREEK FLOWS MUST BE CONSTRUCTED FROM NON-ERODIBLE MATERIALS (STEEL SHEETS, AQUA BARRIERS, ETC.)
- THE MCHENRY COUNTY SOIL AND WATER CONSERVATION DISTRICT AND THE ARMY CORPS OF ENGINEERS MUST BE IN AGREEMENT WITH METHOD OF DIVERSION/ISOLATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ONCE WORK IN THIS AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS.
- IF BYPASS PUMPING IS NECESSARY, THE OUTLET SHALL BE PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE PRIOR TO REJOINING THE STREAM FLOW.
- WHEN DEWATERING THE CONSTRUCTION AREA, ALL WATER MUST BE FILTERED PRIOR TO REJOINING THE STREAM FLOW. DEWATERING METHODS SHALL BE CHOSEN BASED ON SITE CONDITIONS, CONSTRAINTS AND SEDIMENT LOADS.
- THE SIDE SLOPES MUST BE RESEEDED AND STABILIZED WITH AN APPROPRIATE HEAVY DUTY EROSION CONTROL BLANKET PRIOR TO ACCEPTING FLOWS.

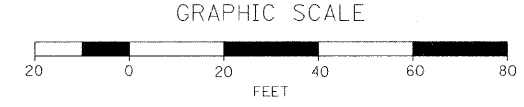


TEMPORARY EROSION CONTROL SEQUENCE OF CONSTRUCTION

- ESTABLISH TEMPORARY EROSION CONTROL MEASURES AND ERECT PERIMETER EROSION BARRIER ALONG SITE BOUNDARIES PRIOR TO EARTHWORK.
- INSTALL DITCH CHECKS IMMEDIATELY AFTER DITCH GRADING IS COMPLETED.
- INSTALL TEMPORARY EROSION CONTROL SEEDING AND EROSION CONTROL BLANKET.

LEGEND

	PERIMETER EROSION BARRIER		HEAVY DUTY EROSION CONTROL BLANKET & TEMPORARY EROSION CONTROL SEEDING
	EXISTING R.O.W.		AGGREGATE DITCH CHECK
	DIRECTION OF FLOW		AREA DESIGNATED FOR DEWATERING
	PERMANENT WETLAND IMPACT AREA		



COMPANY NAME: Smith, Robert G. Davies
 PROJECT CONTACT: Robert G. Davies
 CLIENT: Village of Wonder Lake
 FILE NAME: 4081-06-00005-00-BR
 PLOT DRIVER: pdfplot
 PEN TABLE: STANDARD-TRANS.TBL



USER NAME = rwood	DESIGNED -	REVISED -
PLOT SCALE = 1"=20'	DRAWN -	REVISED -
PLOT DATE = 12/22/2009	CHECKED - SP	REVISED -
	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

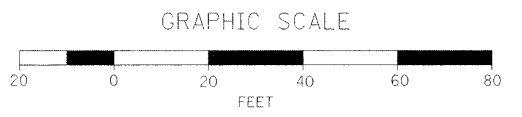
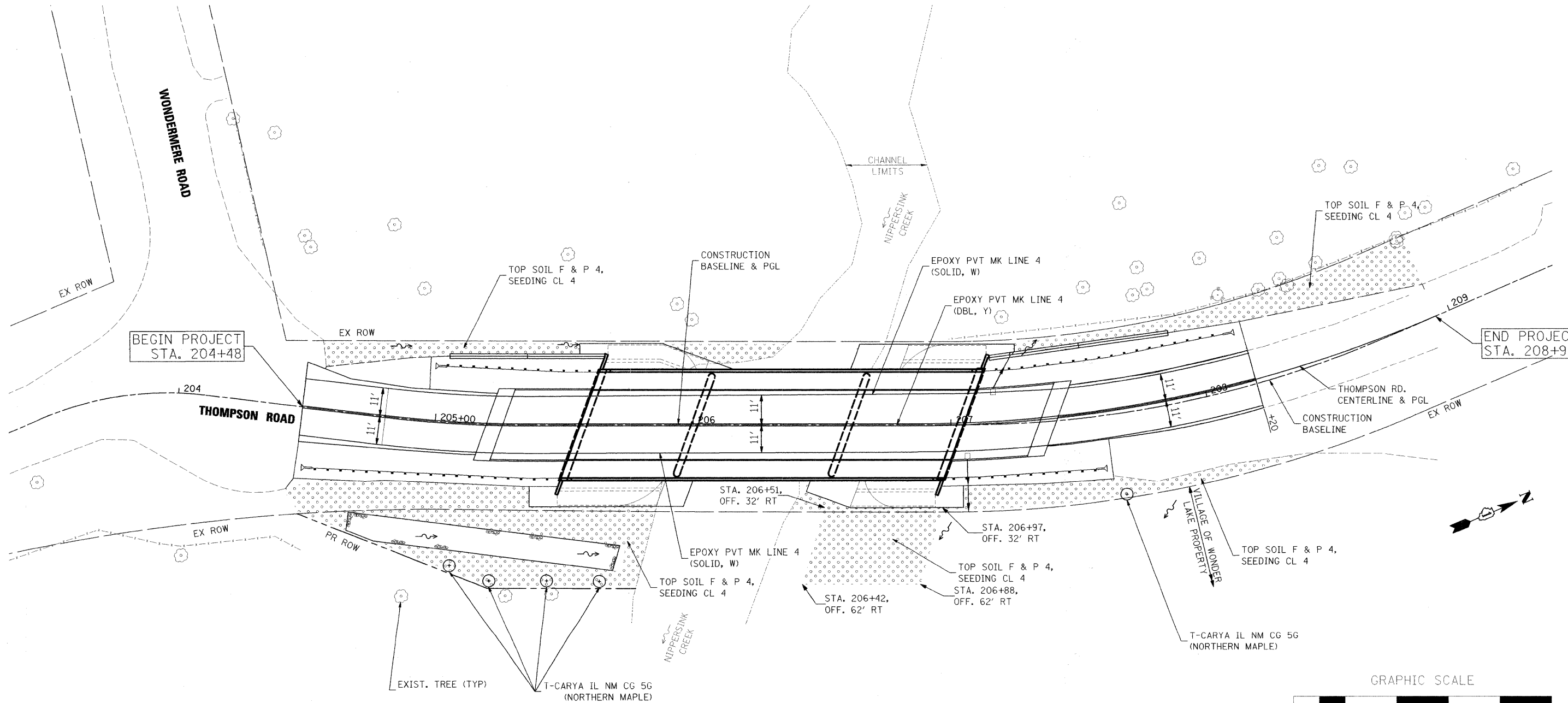
EROSION CONTROL PLAN THOMPSON ROAD

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	MCHENRY	45	10
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 63409

LEGEND	⊙ ⊙ ⊙ ⊙	TOPSOIL FURNISH AND PLACE, 4" SEEDING, CLASS 4 AND HEAVY DUTY EROSION CONTROL BLANKET
—	→	EXISTING R.O.W.
	→	DIRECTION OF FLOW



COMPANY NAME: Smith
 PROJECT CONTACT: Robert G. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 1/15/2010 2:02:36 PM
 PLOT DIVER: McHenry
 PEN TABLE: STANDARD-TRANS-2E



USER NAME = rhood	DESIGNED - SMP	REVISED -
PLOT SCALE = 1"=20'	DRAWN -	REVISED -
PLOT DATE = 1/15/2010	CHECKED - SP	REVISED -
	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

PAVEMENT MARKING AND RESTORATION PLAN			
THOMPSON ROAD			
SCALE: 1"=20'	SHEET NO. 1 OF 1 SHEETS	STA. 204+48	TO STA. 208+94

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	McHENRY	45	11
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63409	

Benchmark: Railroad spike in power pole on the east side of Thompson Road at the intersection with Wondermere Road. Elev. 824.79 (NAVD 88)

Existing Structure: SN 056-3096 built in 1966 as Adams Dam Bridge. Structure consists of three span precast prestressed concrete deck beams with variable thickness bituminous overlay supported by spill-thru abutments and open pile bent piers. Structure measures 133'-9" back to back abutments and 26'-0" out-to-out deck. Structure to be removed and replaced. Road to be closed. Traffic to be maintained with temporary detour route during construction.

See Roadway Plans for detour route.

No Salvage

Total Permanent Wetland Impact = 0.04 AC

LEGEND

- Permanent Wetland Impact (Impact to Waters of the U.S.)
- Removal and Disposal of Unsuitable Material (See Roadway Plans for total quantity)

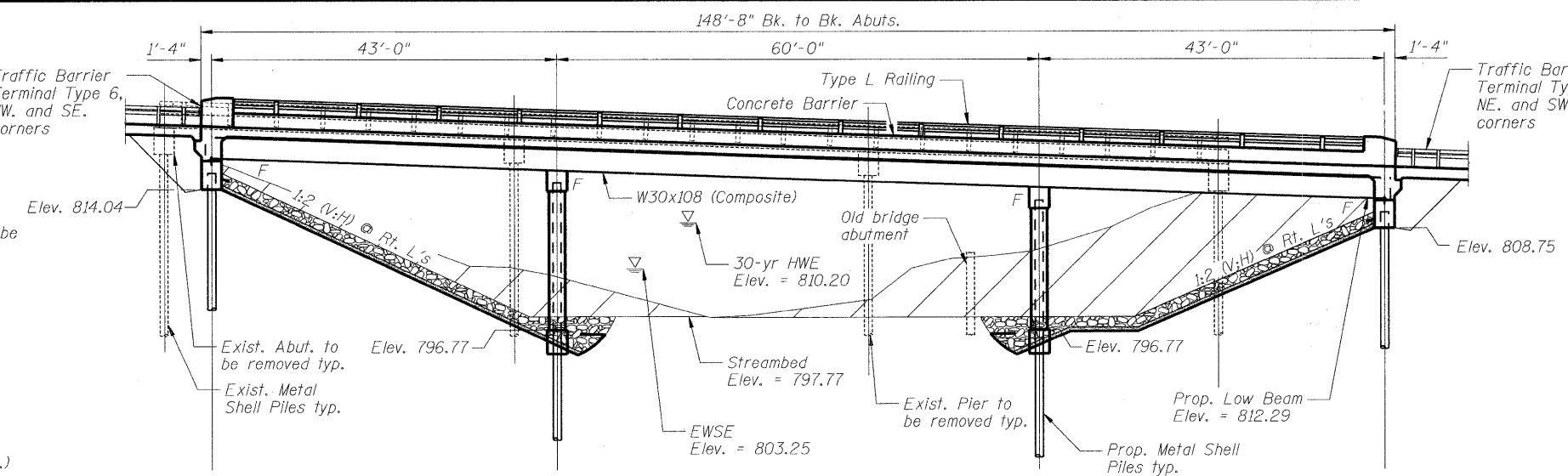
LOADING HL-93
Allow 50# / sq. ft. for future wearing surface.
DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

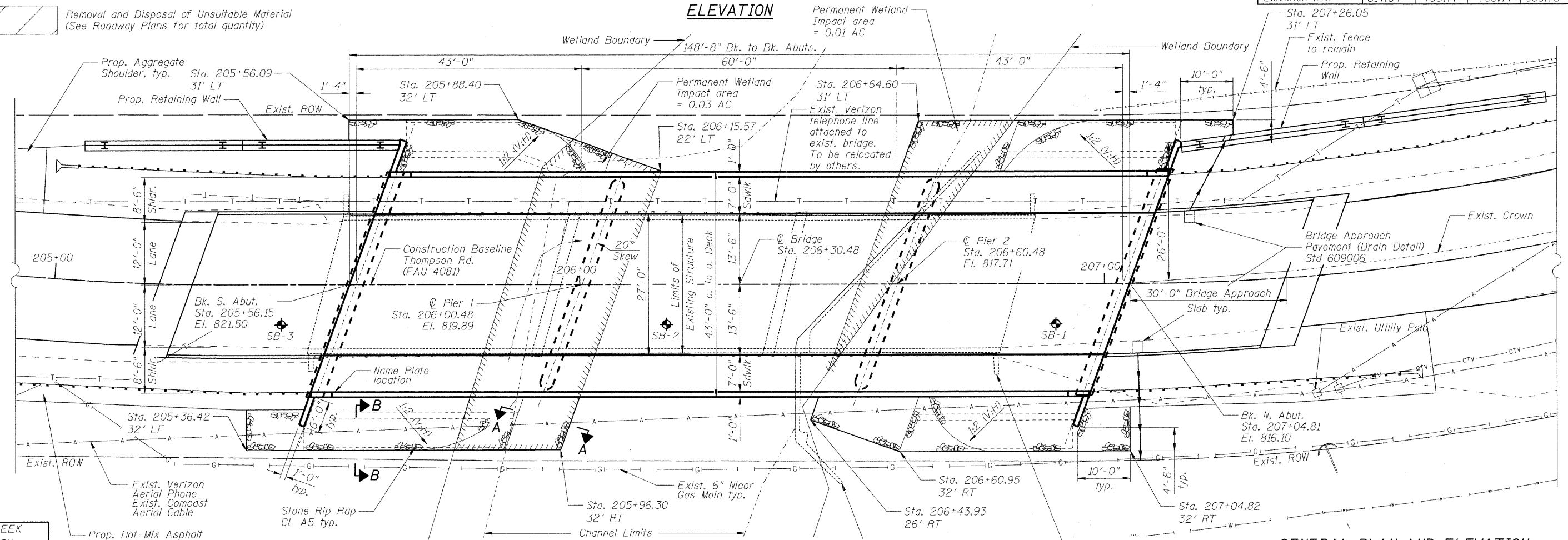
SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S₀₁) = 0.112
Design Spectral Acceleration at 0.2 sec. (S₀₅) = 0.200
Soil Site Class = E

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	S. Abut.	Pier 1	Pier 2	N. Abut.
	814.04	793.77	793.77	808.75



ELEVATION



PLAN

GENERAL PLAN AND ELEVATION

THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

NIPPERSINK CREEK
BUILT 20__ BY
VILLAGE OF WONDER LAKE
SEC 06-00005-00-BR
F.A.U. 4081 STA. 206+30.48
STRUCTURE NO. 056-6006
LOADING HL-93

NAME PLATE
See Sta. 515001

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

WATERWAY INFORMATION

Drainage Area = 85 sq. mi. Low Grade Elev. 812.29 @ Sta. 210+20

Flood Yr.	Freq.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10		3470	597	1391	809.70	1.5	0.8	811.20	810.50
Design	30	4331	666	1495	810.20	1.6	0.9	811.80	811.10
Base	50	5192	744	1562	810.60	1.6	0.8	812.20	811.40
Overtopping		3875	628	1455	809.90	1.6	1.0	811.50	810.90
Max. Calc.	100	6073	824	1624	811.00	1.6	0.7	812.60	811.70

To the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Bridge Design Specifications".

Robert G. Davies 12/15/09
Structural Engineer expires 11/30/2010
SEC Group, Inc.



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SHEET NO. S-1 S-25 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-00005-00-BR	McHENRY	45	12
CONTRACT NO. 63409					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

DATE: 12/15/09

FILE NAME: 060563.DWG DATE: 12/14/2009
PLOT DRIVER: pdfplot
PEN TABLE: STANDARD-TRANS.TBL

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 7/8 in. φ, holes 15/16 in. φ, unless otherwise noted.

Calculated weight of Structural Steel = 111,540 pounds

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

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

Reinforcement bars designated (E) shall be epoxy coated.

If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".

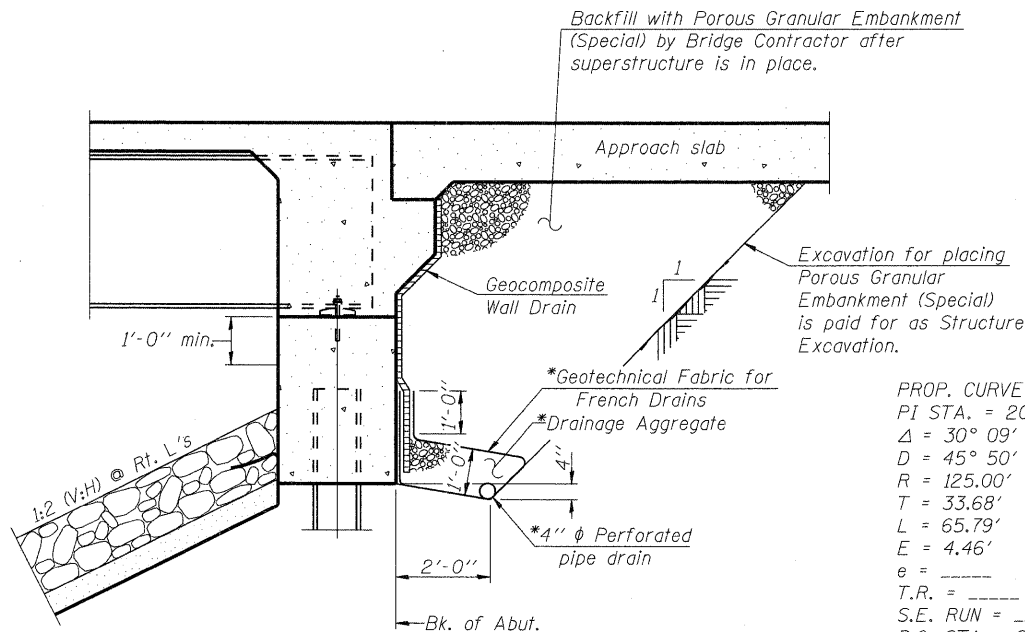
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDOT Floodway permit and ACOE Section 404 permit numbers as shown in the contract documents.

The old bridge abutment shall be removed to 1'-0" below proposed grade. This work is included in the cost of Removal of Existing Structures.

The existing abutment caps, pier caps and piles shall be removed as necessary to construct the new abutments and / or rip rap. Cost included under Removal of Existing Structures.

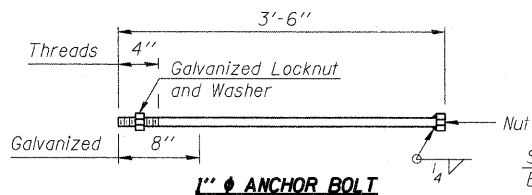


SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures.

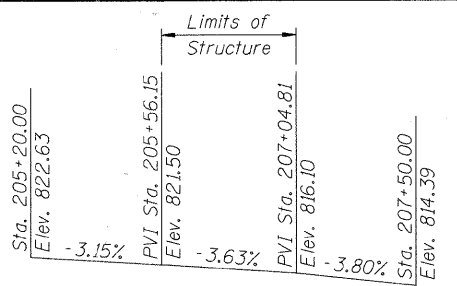
Note: All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes or retaining walls as shown. The pipes on the east side shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 60110).



Cost included in Concrete Superstructure

PROFILE GRADE
(along centerline roadway)

PROP. CURVE THOM 01-1	PROP. CURVE THOM 01-2	PROP. CURVE THOM 01-3
PI STA. = 203+78.38	PI STA. = 205+07.37	PI STA. = 207+91.70
Δ = 30° 09' 26" (RT)	Δ = 6° 49' 55" (LT)	Δ = 23° 39' 20" (LT)
D = 45° 50' 12"	D = 12° 43' 57"	D = 13° 58' 28"
R = 125.00'	R = 450.00'	R = 410.00'
T = 33.68'	T = 26.86'	T = 85.86'
L = 65.79'	L = 53.66'	L = 169.28'
E = 4.46'	E = 0.80'	E = 8.89'
e = -----	e = -----	e = -----
T.R. = -----	T.R. = -----	T.R. = -----
S.E. RUN = -----	S.E. RUN = -----	S.E. RUN = -----
P.C. STA = 203+44.70	P.C. STA = 204+80.51	P.C. STA = 207+05.84
P.T. STA = 204+10.49	P.T. STA = 205+34.17	P.T. STA = 208+75.12



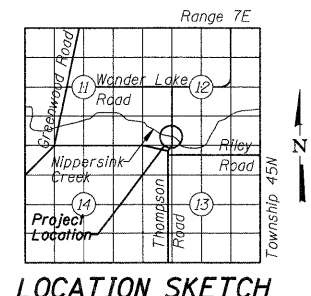
PROFILE GRADE

(along centerline roadway)

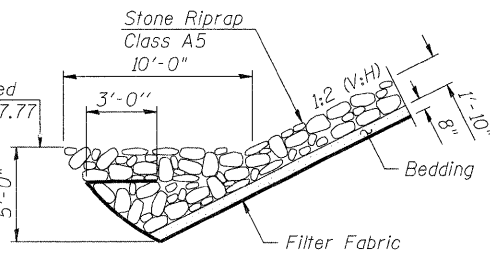
CURVE DATA

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yds.		82	82
Stone Riprap, Class A5	Sq. Yds.		788	788
Filter Fabric	Sq. Yds.		891	891
Removal of Existing Structures	Each	1		1
Structure Excavation	Cu. Yds.		185	185
Concrete Structures	Cu. Yds.		203.4	203.4
Concrete Superstructures	Cu. Yds.	327.5		327.5
Bridge Deck Grooving	Sq. Yds.	413		413
Concrete Encasement	Cu. Yds.		12	12
Protective Coat	Sq. Yds.	168		168
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	2,412		2,412
Reinforcement Bars, Epoxy Coated	Pounds	67,570	18,890	86,460
Bar Splicers	Each	58		58
Aluminum Railing, Type L	Foot	281		281
Furnishing Metal Shell Piles 14x0.25	Foot		2,375	2,375
Furnishing Steel Piles HP 14x73	Foot		450	450
Driving Piles	Foot		2,825	2,825
Test Pile, Metal Shells	Each		3	3
Name Plates	Each	1		1
Anchor Bolts, 1"	Each	48		48
Geocomposite Wall Drain	Sq. Yds.		77	77
Pipe Underdrains for Structures, 4"	Foot		116	116
Underwater Structure Excavation Protection, Special - Location 1	Each		1	1
Underwater Structure Excavation Protection, Special - Location 2	Each		1	1

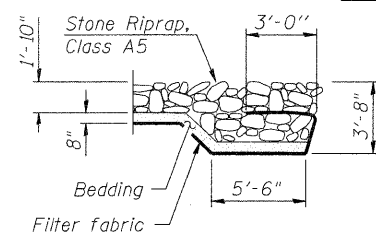


LOCATION SKETCH



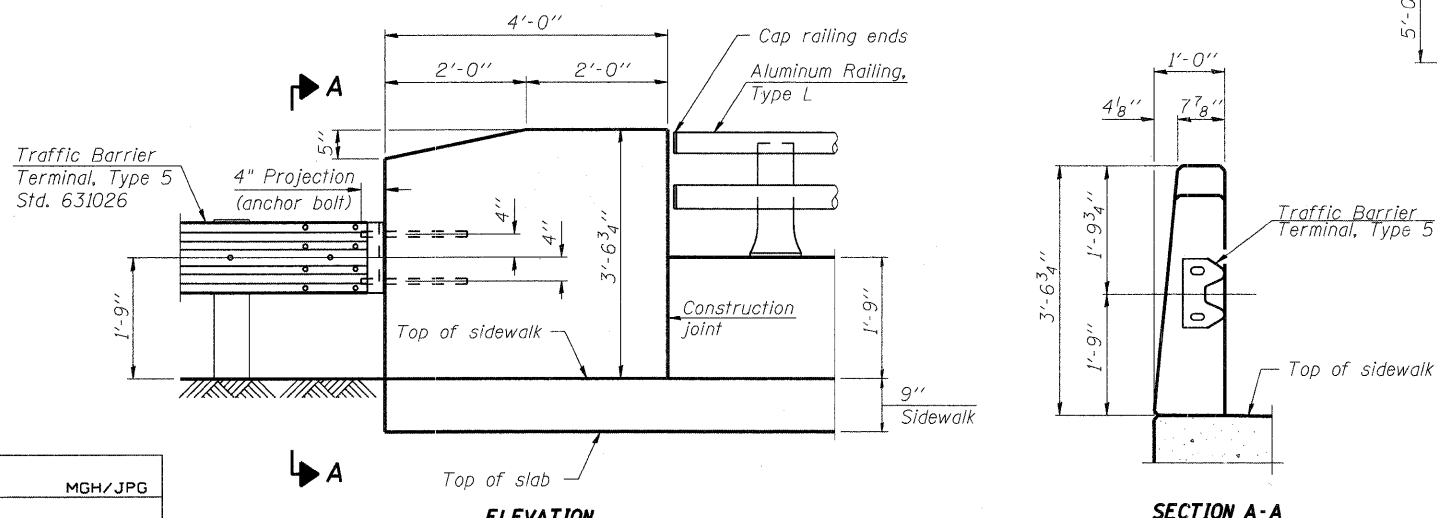
SECTION A-A

(See S-1)



SECTION B-B

(See S-1)



ELEVATION

SECTION A-A

END TREATMENT DETAIL

NOTES: Work this sheet with sheet S-12.

BILL OF MATERIALS AND GENERAL NOTES

THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

DATE: 11/18/09

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

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SHEET NO. S-2	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-00005-00-BR	McHENRY	45	13
S-25 SHEETS				CONTRACT NO. 63409	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

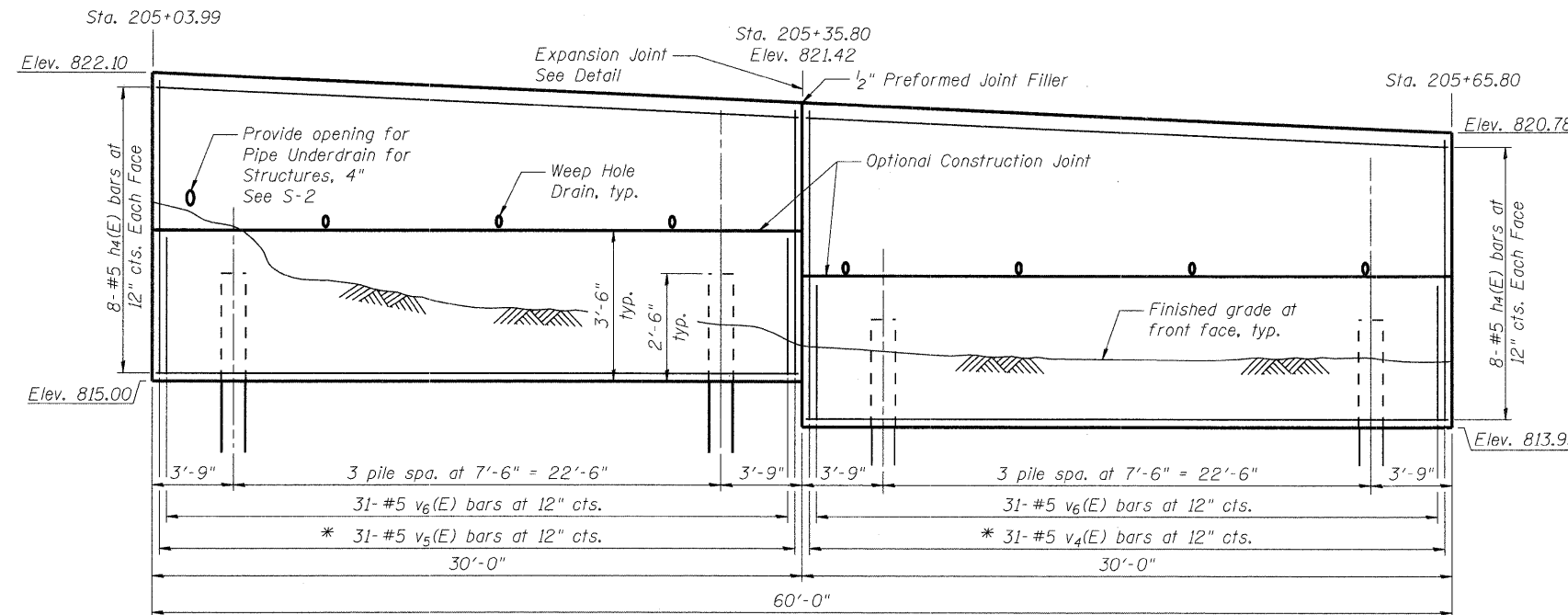
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BILL OF MATERIAL

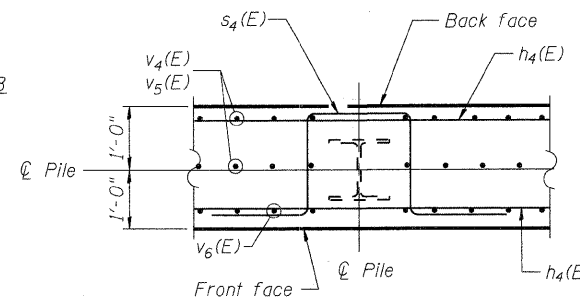
Bar	No.	Size	Length	Shape
h ₄ (E)	32	# 5	29'-8"	—
s ₄ (E)	32	# 5	9'-4"	⌒
v ₄ (E)	31	# 5	13'-8"	—
v ₅ (E)	31	# 5	12'-10"	—
v ₆ (E)	62	# 5	3'-2"	—
Structure Excavation		Cu. Yd.	34.0	
Reinforcement Bars, Epoxy Coated		Pound	2,360	
Concrete Structures		Cu. Yd.	23.0	
Furnishing Steel piles HP 14X73		Foot	200	
Driving Piles		Foot	200	

NOTES:

See Sheet S-14 for Section A-A.
 For details of piles see Sheet S-16.
 Cut h₄(E) bars in field to maintain clear cover from edge of concrete.
 Steel HP Piling shall be driven to the Nominal Required Bearing Capacity indicated but not less than a minimum embedment length of 22'-6".
 Stations and offsets based on Construction Baseline Thompson Road.



ELEVATION

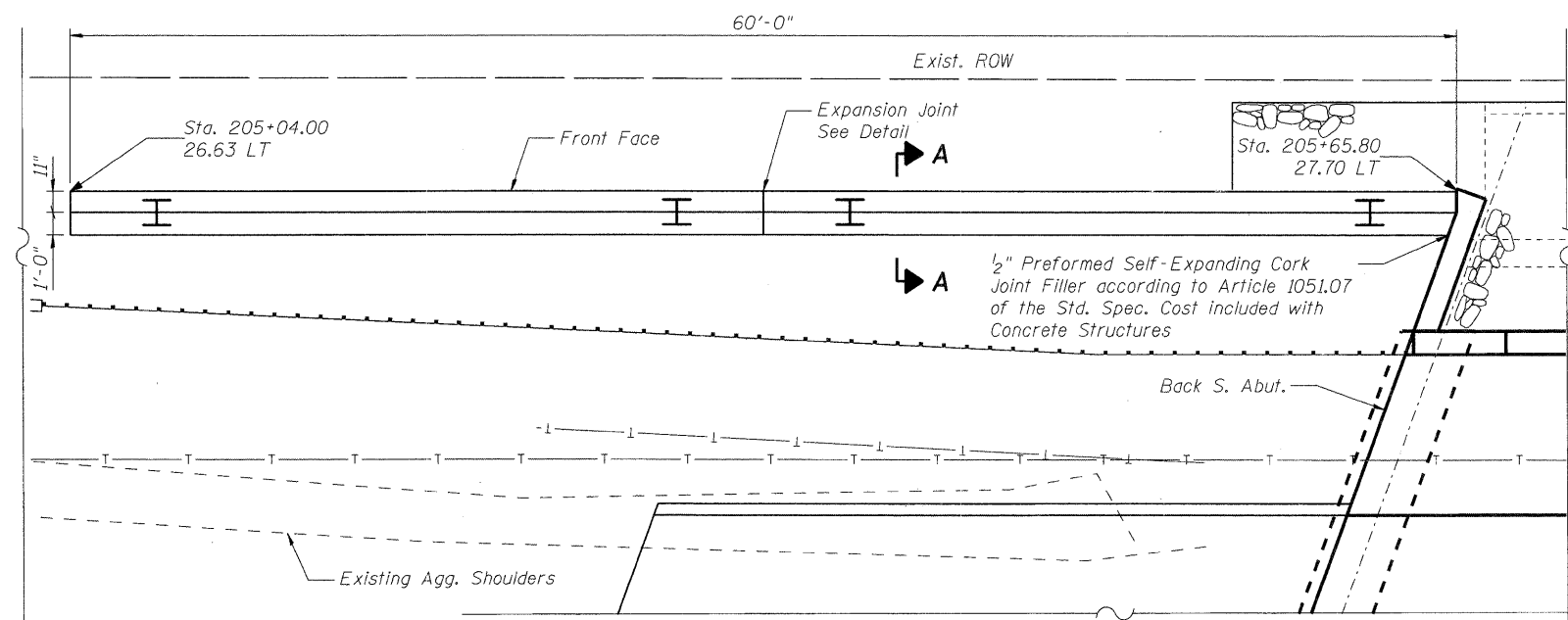


PILE DETAIL

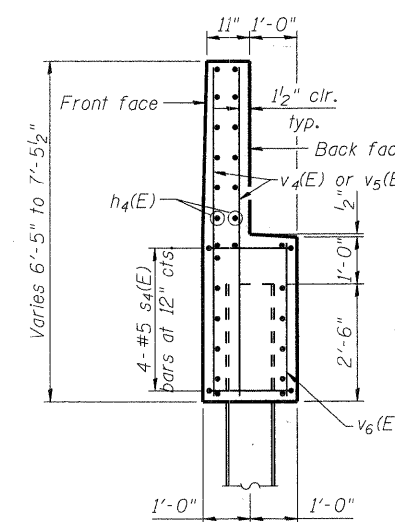
PILE DATA

Type: Steel HP 14X73
 Nominal Required Bearing: 96 kips
 Allowable Resistance Available: 32 kips
 Est. Minimum Length: 25' *
 No. Production Piles: 8
 No. Test Piles: 0
 * Minimum Embedment = 22'-6" regardless of meeting required capacity

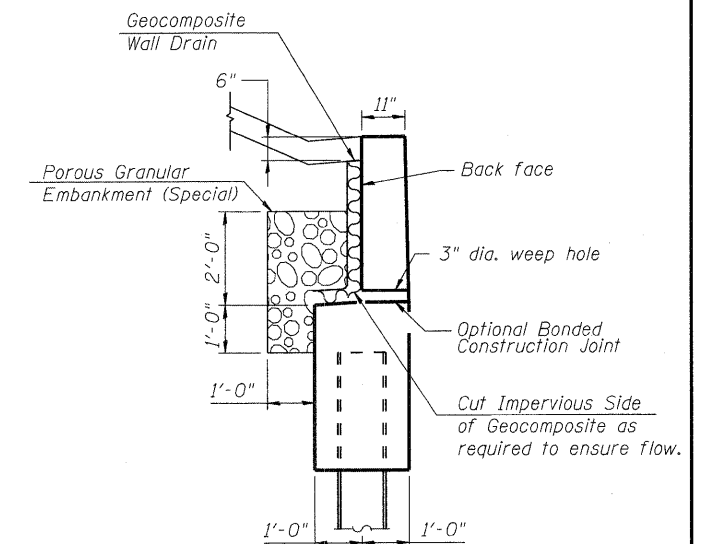
* Cut v₄(E) and v₅(E) bars according to field cut diagram and use remainder in the other face



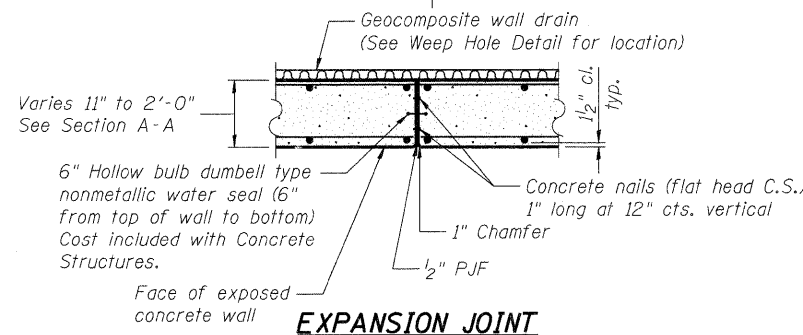
PLAN



SECTION A-A



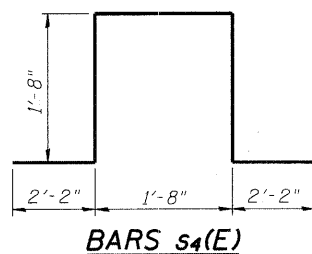
WEEP HOLE DRAIN DETAIL



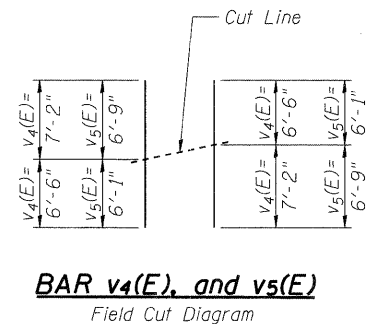
EXPANSION JOINT

Cost included with Concrete Structures

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD



BARS s₄(E)



BAR v₄(E), and v₅(E)
Field Cut Diagram

SOUTH RETAINING WALL DETAILS

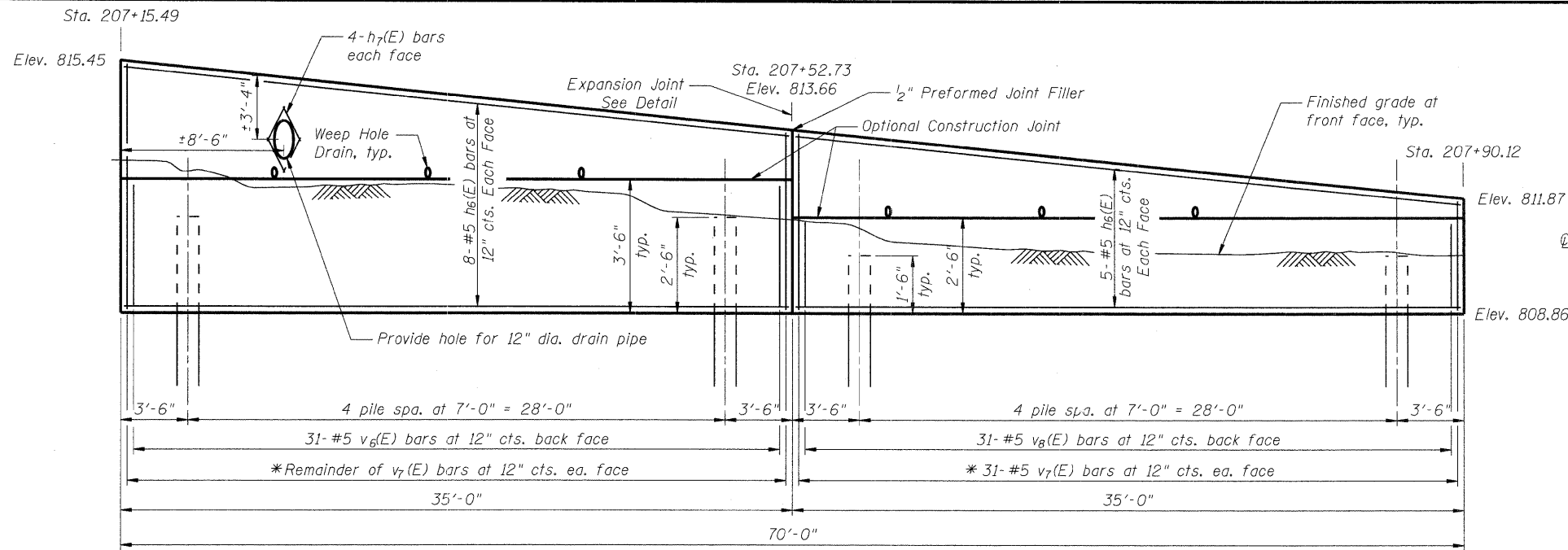
THOMPSON ROAD
 OVER NIPPERSINK CREEK
 SECTION NO. 06-00005-00-BR
 McHENRY COUNTY
 STATION 206+30.48
 STRUCTURE NO. 056-6006

DATE: 11/18/09

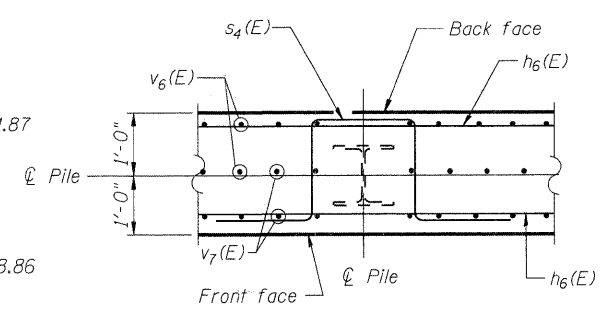
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	4081	06-00005-00-BR	McHENRY	45	14
CONTRACT NO. 63409					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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FILE NAME: 090563_06101.dwg 12/18/2009
 PLOT DRIVER: acadplot
 PEN TABLE: standard.ctb



ELEVATION



PILE DETAIL

PILE DATA

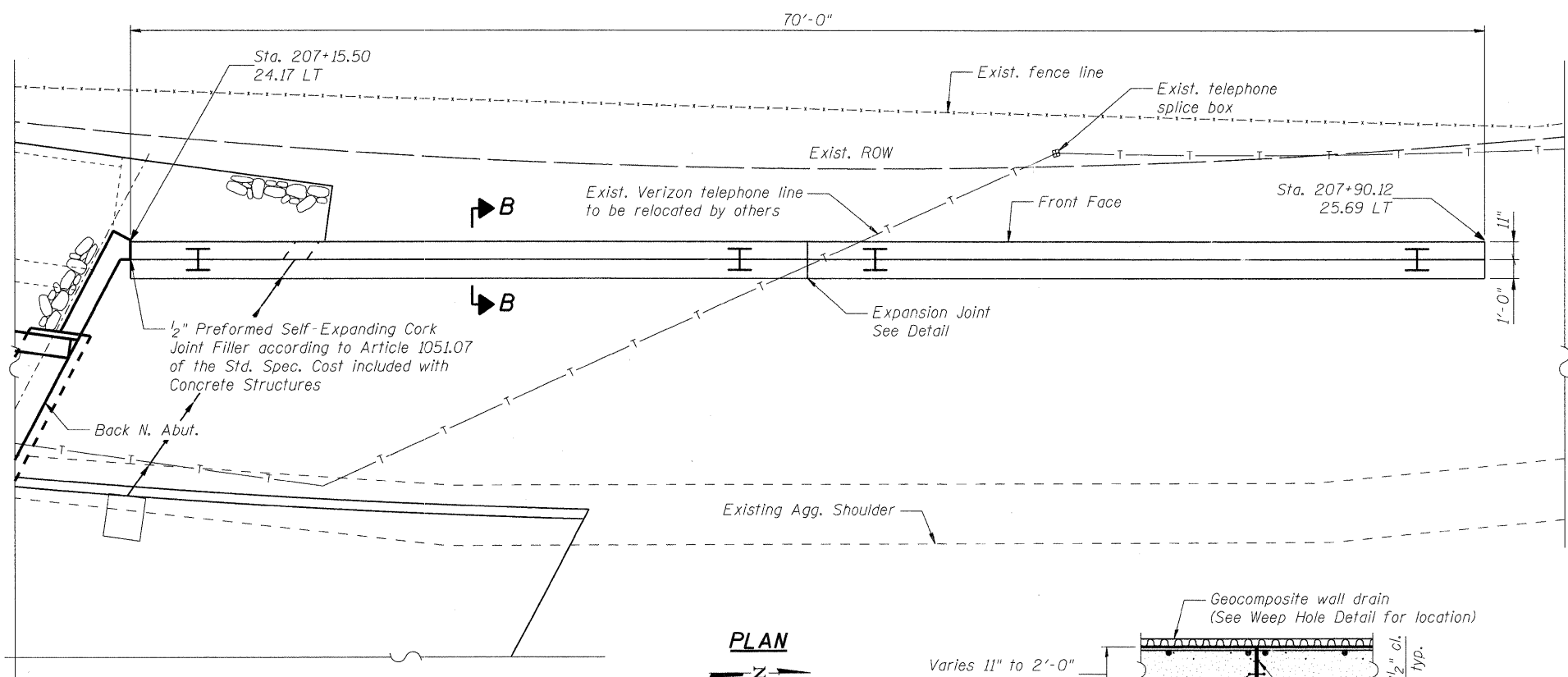
Type: Steel HP 14x73
 Nominal Required Bearing: 96 kips
 Allowable Resistance Available: 32 kips
 Est. Minimum Length: 25' *
 No. Production Piles: 10
 No. Test Piles: 0
 * Minimum Embedment = 22'-6" regardless of meeting required capacity

BILL OF MATERIAL

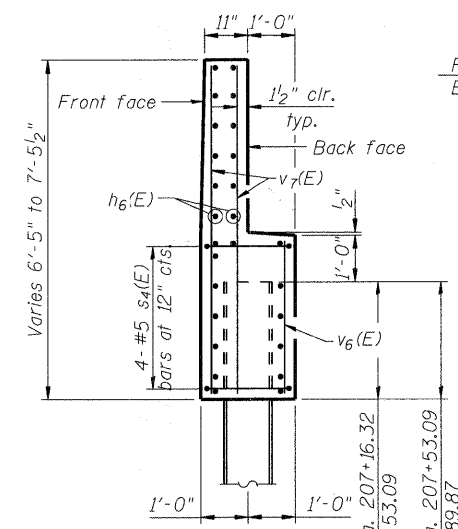
Bar	No.	Size	Length	Shape
h ₆ (E)	26	# 5	34'-8"	—
s ₄ (E)	40	# 5	9'-4"	⌋
v ₆ (E)	31	# 5	3'-2"	—
v ₇ (E)	62	# 5	8'-11"	—
v ₈ (E)	31	# 5	2'-2"	—
Structure Excavation			Cu. Yd.	42
Reinforcement Bars, Epoxy Coated			Pound	2,080
Concrete Structures			Cu. Yd.	20.6
Furnishing Steel Piles HP 14X73			Foot	250
Driving Piles			Foot	250

NOTES:

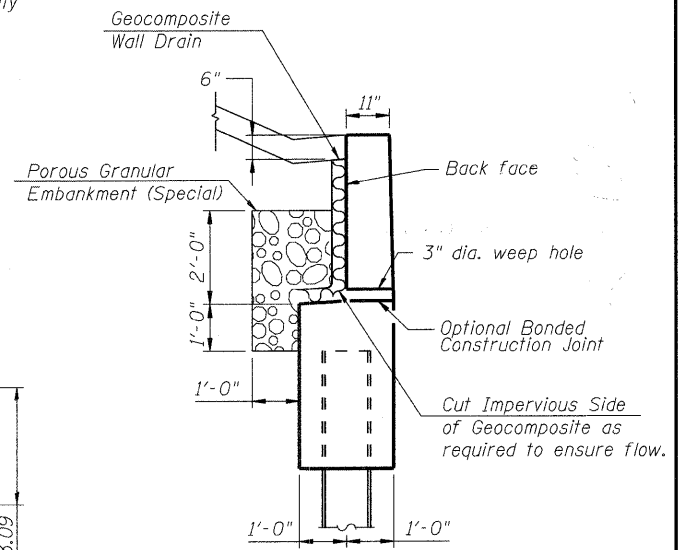
See Sheet S-14 for Section A-A.
 For details of piles see Sheet S-16.
 Cut h₆(E) bars in field to maintain clear cover from edge of concrete.
 Steel HP Piling shall be driven to the Nominal Required Bearing Capacity indicated but not less than a minimum embedment length of 22'-6".
 Stations and offsets based on Construction Baseline Thompson Road.



PLAN



SECTION B-B



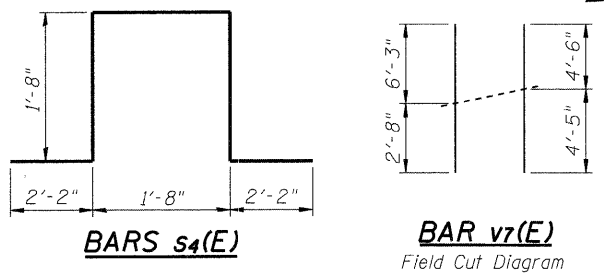
WEEP HOLE DRAIN DETAIL

NORTH RETAINING WALL DETAILS

THOMPSON ROAD
 OVER NIPPERSINK CREEK
 SECTION NO. 06-0005-00-BR
 McHENRY COUNTY
 STATION 206+30.48
 STRUCTURE NO. 056-6006

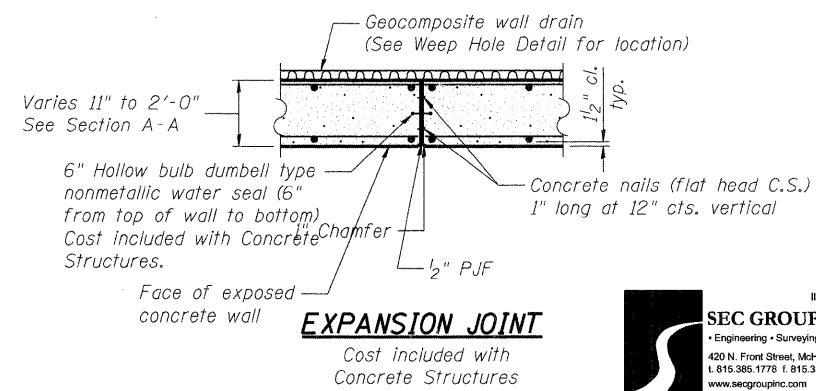
DATE: 11/18/09

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD



BARS s₄(E)

BAR v₇(E)
Field Cut Diagram



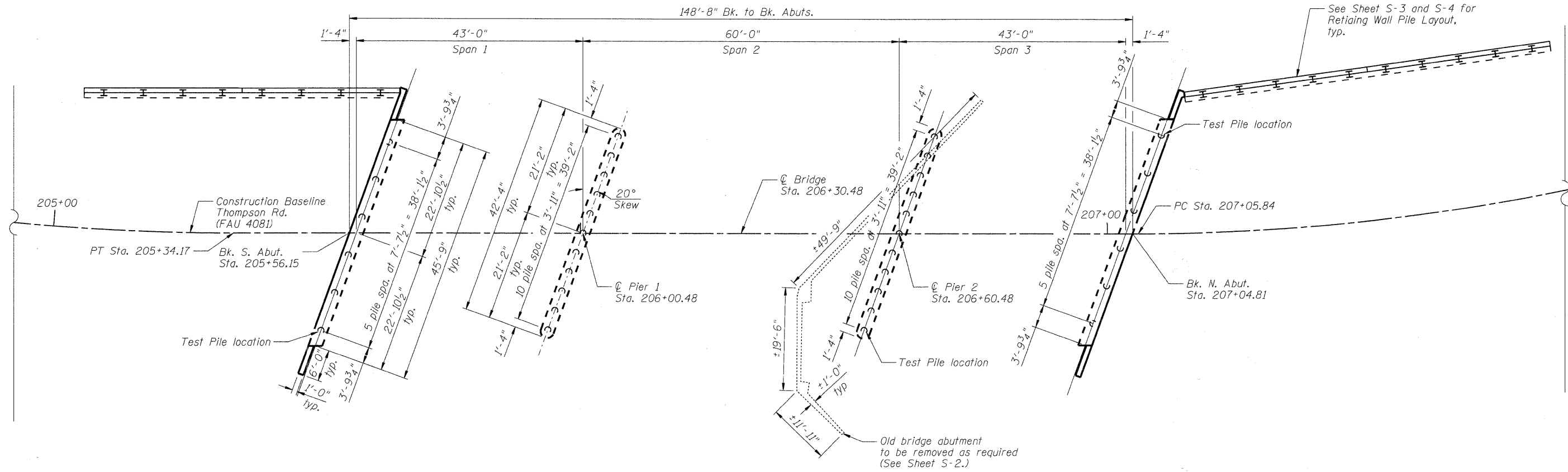
EXPANSION JOINT

Cost included with Concrete Structures

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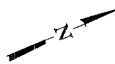
SHEET NO. S-4 S-25 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-0005-00-BR	McHENRY	45	15
CONTRACT NO. 63409					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

FILE NAME: 060563-06102.dwg/12/09
 PLOT DRIVER: standard-trans.tbl
 PEN TABLE: standard-trans.tbl



See Sheet S-3 and S-4 for Retaining Wall Pile Layout, typ.

SUBSTRUCTURE LAYOUT



SUBSTRUCTURE LAYOUT PLAN
THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

DATE: 11/18/09

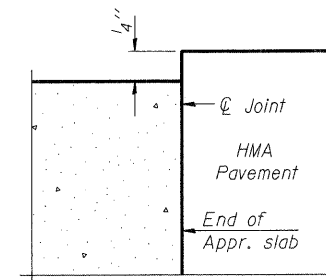
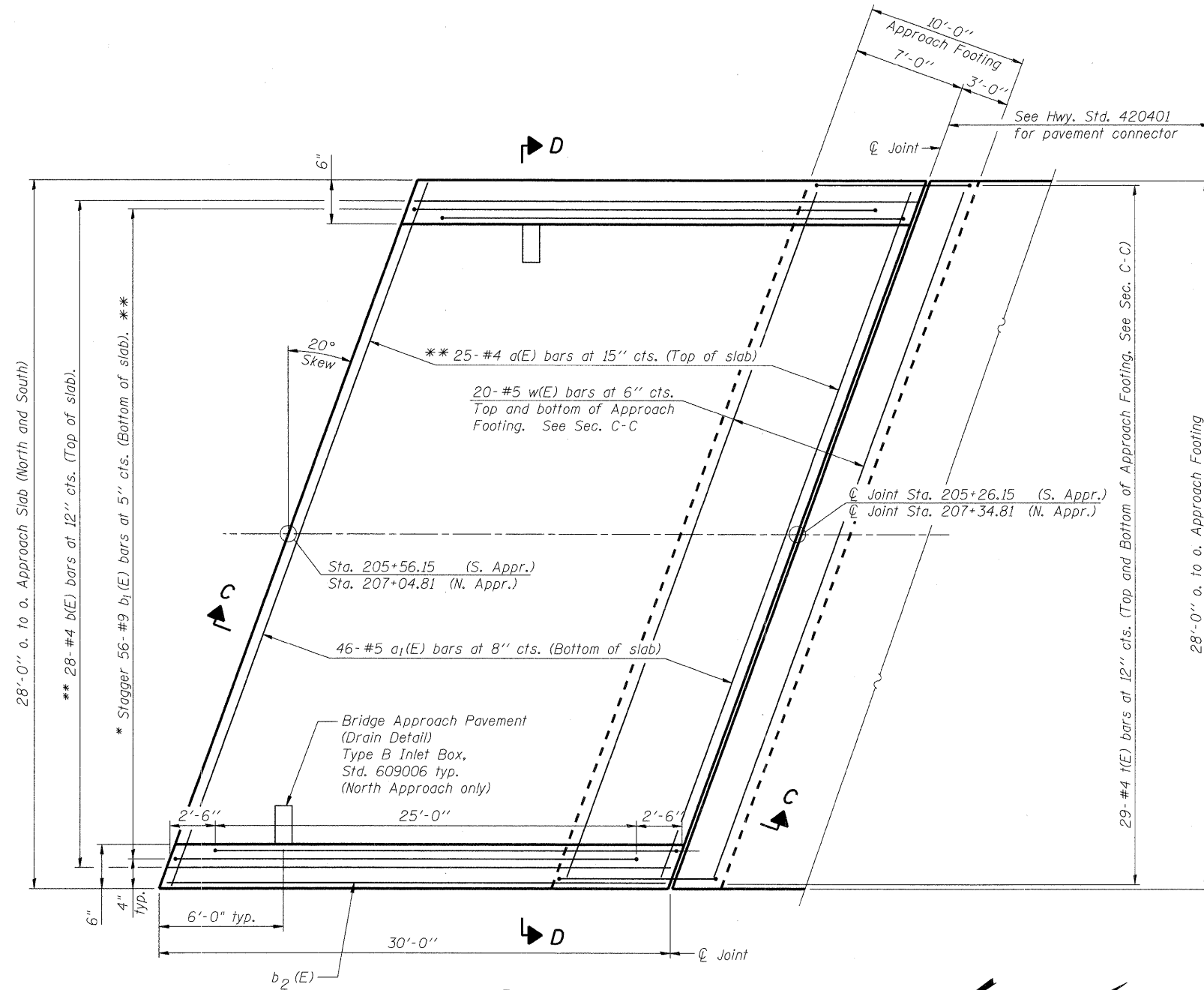
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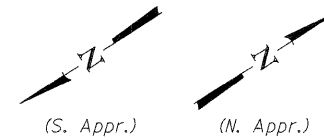
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S-25 SHEETS					
CONTRACT NO. 63409					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

Notes:
 See sheet S-7 of S-25 for Sections C-C & D-D.
 a(E), a₁(E), and w(E) bar spacings measured perpendicular to $\text{\textcircled{C}}$ Rdwy.
 For Bridge Approach layout see Sheet S-8.



FLEXIBLE PAVEMENT
 DETAIL A

* Tilt #9 b₁(E) bars as required to maintain clearance.
 ** Trim bars to maintain clearance to Bridge Approach Pavement Drains



BRIDGE APPROACH SLAB REBAR DETAILS

THOMPSON ROAD
 OVER NIPPERSINK CREEK
 SECTION NO. 06-00005-00-BR
 McHENRY COUNTY
 STATION 206+30.48
 STRUCTURE NO. 056-6006

DATE: 11/18/09

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SHEET NO. S-6	F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 63409					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

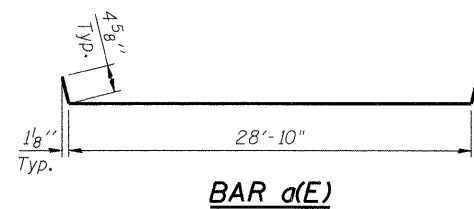
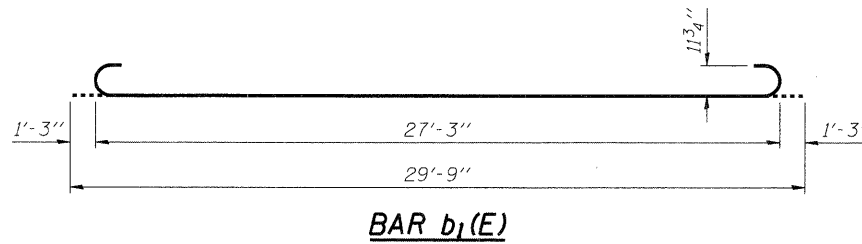
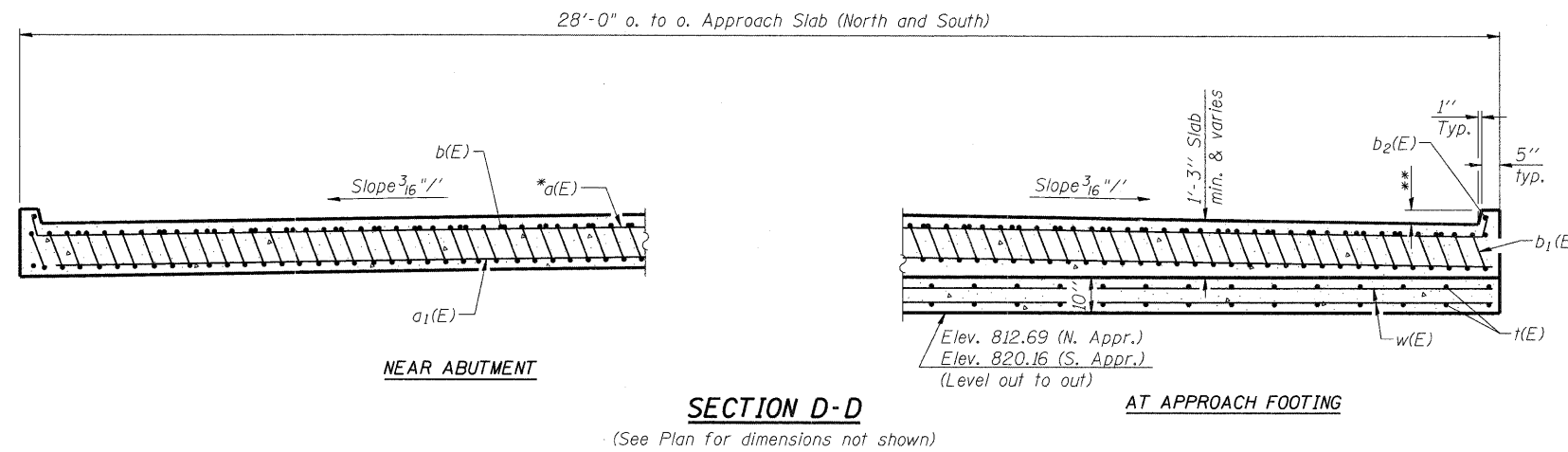
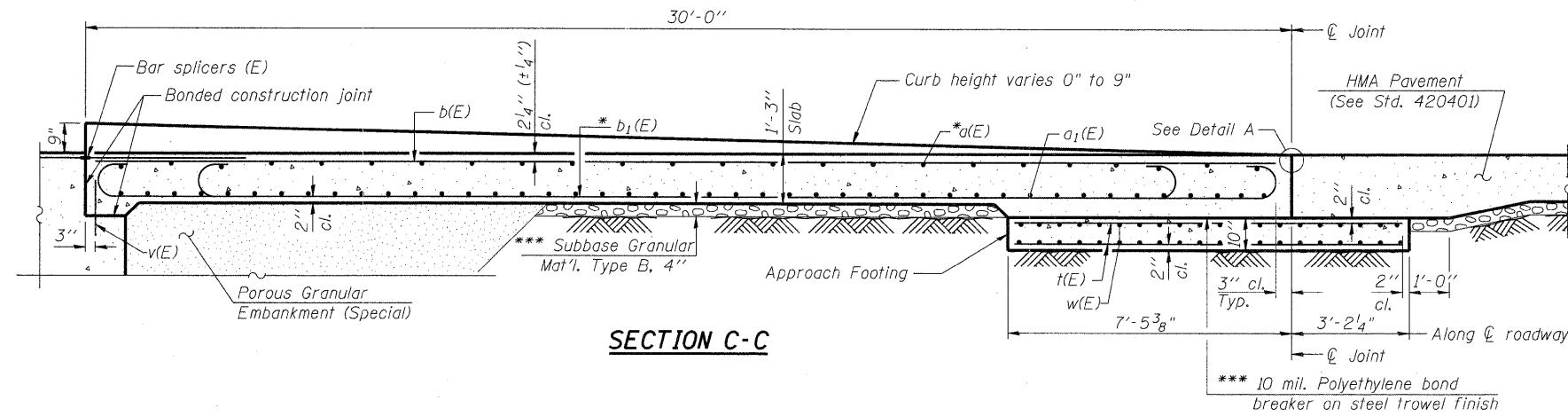
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Notes:
 See sheet S-6 of S-25 for Detail A and View B-B.
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 For bar splicer details, see sheet S-22.
 Cost of excavation for approach footing included with Concrete Structures.
 For Porous Granular Embankment (Special) and drainage treatment details, see sheet S-2.

* Tilt bars as required to maintain clearance
 ** Curb height varies from 0" to 9"
 *** Cost included with Concrete Superstructure

**TWO APPROACHES
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	50	# 4	28'-10"	—
a ₁ (E)	92	# 5	29'-5"	—
b(E)	56	# 7	29'-8"	—
b ₁ (E)	112	# 5	29'-9"	—
b ₂ (E)	4	# 5	29'-8"	—
t(E)	116	# 6	10'-3"	—
w(E)	80	# 5	27'-8"	—
Concrete Superstructure			Cu. Yd.	78.5
Concrete Structures			Cu. Yd.	18.7
Reinforcement Bars, Epoxy Coated			Pound	14,880



BRIDGE APPROACH SLAB REBAR DETAILS

**THOMPSON ROAD
 OVER NIPPERSINK CREEK
 SECTION NO. 06-00005-00-BR
 McHENRY COUNTY
 STATION 206+30.48
 STRUCTURE NO. 056-6006**

DATE: 11/18/09

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SHEET NO. S-7 S-25 SHEETS	F.A.U. RTE. 4081	SECTION 06-00005-00-BR	COUNTY McHENRY	TOTAL SHEETS 45	SHEET NO. .18
	CONTRACT NO. 63409			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

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WEST CURB LINE

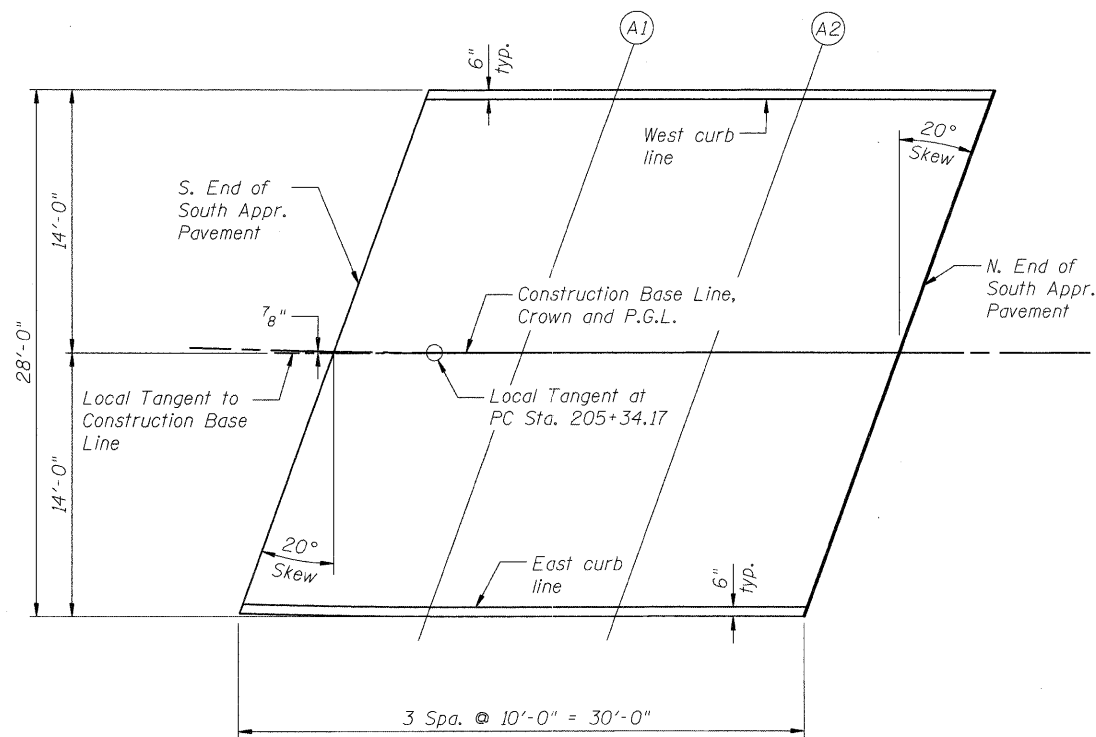
Location	Station	Offset from Construction Baseline	Theoretical Grade Elevations
South End of South Approach	205+30.52	-13.5	822.08
A1	205+40.52	-13.5	821.76
A2	205+50.52	-13.5	821.45
North End of South Approach	205+60.52	-13.5	821.11
South End of North Approach	207+09.81	-13.5	815.71
A3	207+20.19	-13.86	815.32
A4	207+30.82	-14.16	814.92
North End of North Approach	207+41.01	-14.41	814.54

℄. CROWN AND PROFILE GRADE

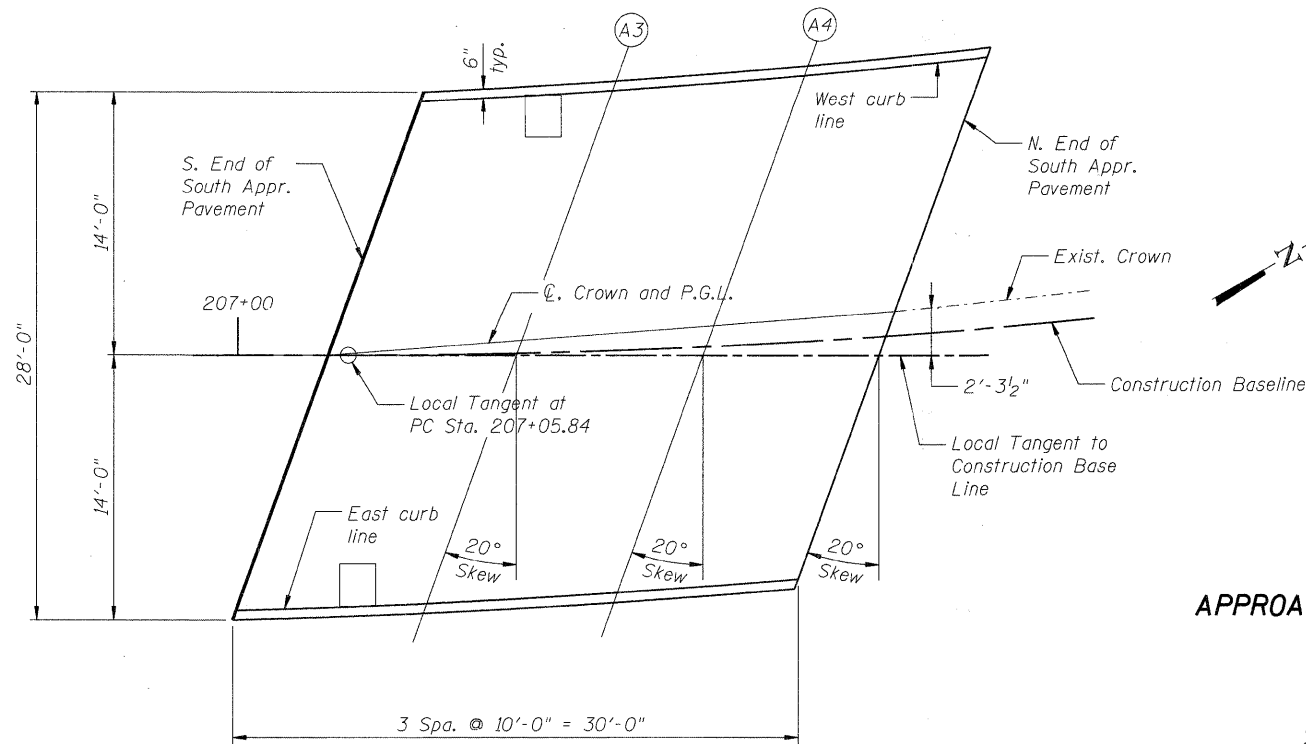
Location	Station	Offset from Construction Baseline	Theoretical Grade Elevations
South End of South Approach	205+26.15	0	822.43
A1	205+36.15	0	822.12
A2	205+46.15	0	821.81
North End of South Approach	205+56.15	0	821.50
South End of North Approach	207+04.78	0	816.10
A3	207+14.89	-0.67	815.72
A4	207+24.95	-1.09	815.34
North End of North Approach	207+34.94	-1.26	814.96

EAST CURB LINE

Location	Station	Offset from Construction Baseline	Theoretical Grade Elevations
South End of South Approach	205+21.78	13.5	822.37
A1	205+31.78	13.5	822.07
A2	205+41.78	13.5	821.76
North End of South Approach	205+51.78	13.5	821.45
South End of North Approach	206+99.89	13.5	816.07
A3	207+09.71	13.18	815.71
A4	207+19.35	12.85	815.34
North End of North Approach	207+28.99	12.56	814.98



SOUTH APPROACH
Skew is relative to Local Tangent



NORTH APPROACH
Skew is relative to Local Tangent

APPROACH PAVEMENT ELEVATIONS & LAYOUT

THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

DATE: 11/18/09

PLAN

Note: Taper North Approach Slab Crown from Construction Baseline and Profile Grade Line at back of abutment to existing crown of Thompson Road as shown

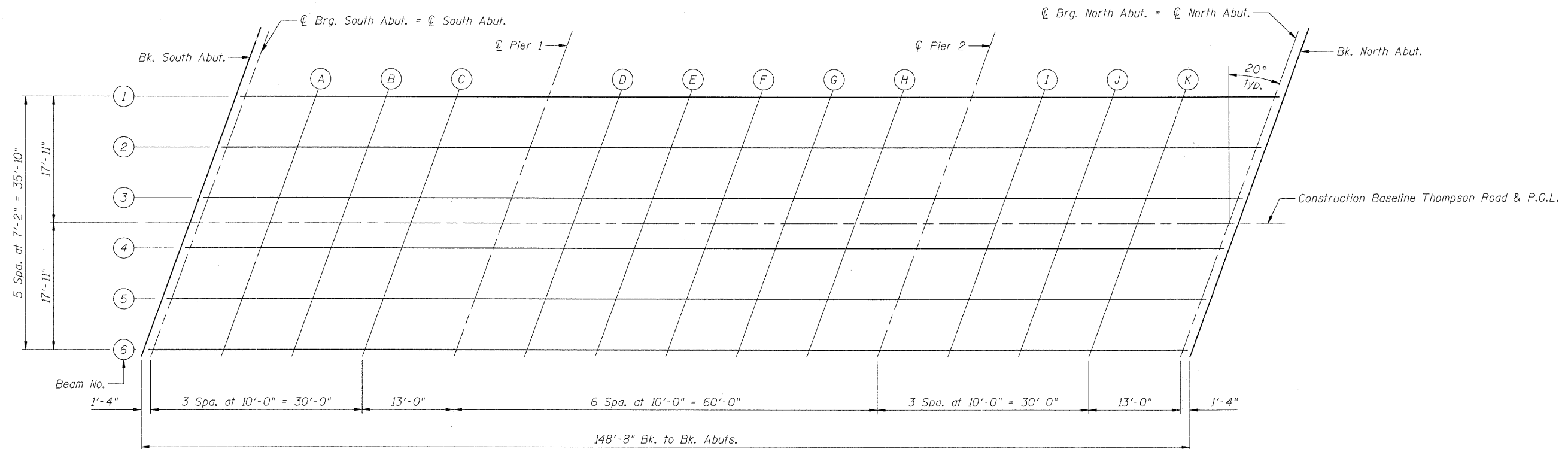
Stations and offsets are given off of the Construction Baseline

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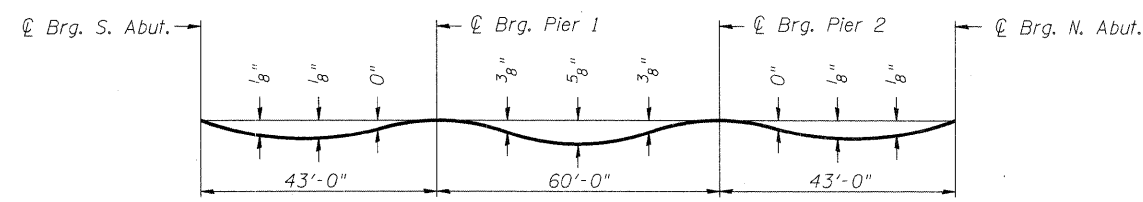
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S-25 SHEETS					
CONTRACT NO. 63409					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

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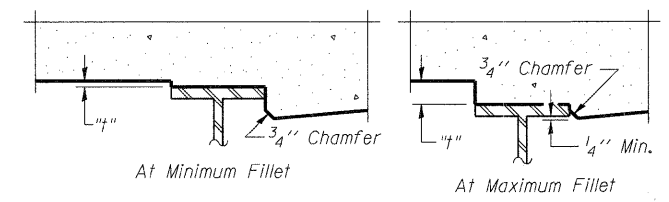
PLAN



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

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



FILLET HEIGHTS

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

TOP OF SLAB ELEVATIONS
THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

DATE: 11/18/09

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SHEET NO. S-9	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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S-25 SHEETS			CONTRACT NO. 63409		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	205+62.67	-17.92	820.98	820.98
☉ of Bearing	205+64.00	-17.92	820.93	820.93
A	205+74.00	-17.92	820.57	820.58
B	205+84.00	-17.92	820.21	820.22
C	205+94.00	-17.92	819.85	819.85
☉ of Pier 1	206+07.00	-17.92	819.37	819.37
D	206+17.00	-17.92	819.01	819.03
E	206+27.00	-17.92	818.65	818.69
F	206+37.00	-17.92	818.29	818.33
G	206+47.00	-17.92	817.92	817.96
H	206+57.00	-17.92	817.56	817.58
☉ of Pier 2	206+67.00	-17.92	817.20	817.20
I	206+77.00	-17.92	816.83	816.84
J	206+87.00	-17.92	816.47	816.48
K	206+97.00	-17.92	816.11	816.12
☉ of Bearing	207+10.00	-17.92	815.63	815.63
Bk. N. Abut.	207+11.33	-17.92	815.57	815.57

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	205+60.06	-10.75	821.19	821.19
☉ of Bearing	205+61.40	-10.75	821.14	821.14
A	205+71.40	-10.75	820.78	820.79
B	205+81.40	-10.75	820.42	820.43
C	205+91.40	-10.75	820.05	820.06
☉ of Pier 1	206+04.39	-10.75	819.58	819.58
D	206+14.39	-10.75	819.22	819.24
E	206+24.39	-10.75	818.85	818.89
F	206+34.39	-10.75	818.49	818.54
G	206+44.39	-10.75	818.13	818.17
H	206+54.39	-10.75	817.77	817.78
☉ of Pier 2	206+64.39	-10.75	817.40	817.40
I	206+74.39	-10.75	817.04	817.04
J	206+84.39	-10.75	816.68	816.69
K	206+94.39	-10.75	816.31	816.33
☉ of Bearing	207+07.39	-10.75	815.84	815.84
Bk. N. Abut.	207+08.72	-10.75	815.78	815.78

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	205+57.45	-3.58	821.40	821.40
☉ of Bearing	205+58.79	-3.58	821.35	821.35
A	205+68.79	-3.58	820.99	821.00
B	205+78.79	-3.58	820.62	820.64
C	205+88.79	-3.58	820.26	820.27
☉ of Pier 1	206+01.78	-3.58	819.79	819.79
D	206+11.78	-3.58	819.42	819.44
E	206+21.78	-3.58	819.06	819.10
F	206+31.78	-3.58	818.70	818.75
G	206+41.78	-3.58	818.34	818.37
H	206+51.78	-3.58	817.97	817.99
☉ of Pier 2	206+61.78	-3.58	817.61	817.61
I	206+71.78	-3.58	817.25	817.25
J	206+81.78	-3.58	816.88	816.90
K	206+91.78	-3.58	816.52	816.53
☉ of Bearing	207+04.78	-3.58	816.05	816.05
Bk. N. Abut.	207+06.11	-3.58	815.99	815.99

PROFILE GRADE LINE AND BASELINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	205+56.15	0.00	821.50	821.50
☉ of Bearing	205+57.48	0.00	821.45	821.45
A	205+67.48	0.00	821.09	821.10
B	205+77.48	0.00	820.73	820.74
C	205+87.48	0.00	820.36	820.37
☉ of Pier 1	206+00.48	0.00	819.89	819.89
D	206+10.48	0.00	819.53	819.55
E	206+20.48	0.00	819.16	819.20
F	206+30.48	0.00	818.80	818.85
G	206+40.48	0.00	818.44	818.48
H	206+50.48	0.00	818.08	818.09
☉ of Pier 2	206+60.48	0.00	817.71	817.71
I	206+70.48	0.00	817.35	817.35
J	206+80.48	0.00	816.99	817.00
K	206+90.48	0.00	816.62	816.64
☉ of Bearing	207+03.48	0.00	816.15	816.15
Bk. N. Abut.	207+04.81	0.00	816.10	816.10

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	205+54.85	3.58	821.48	821.48
☉ of Bearing	205+56.18	3.58	821.44	821.44
A	205+66.18	3.58	821.08	821.09
B	205+76.18	3.58	820.72	820.73
C	205+86.18	3.58	820.35	820.36
☉ of Pier 1	205+99.18	3.58	819.88	819.88
D	206+09.18	3.58	819.52	819.54
E	206+19.18	3.58	819.16	819.20
F	206+29.18	3.58	818.79	818.84
G	206+39.18	3.58	818.43	818.47
H	206+49.18	3.58	818.07	818.09
☉ of Pier 2	206+59.18	3.58	817.70	817.70
I	206+69.18	3.58	817.34	817.34
J	206+79.18	3.58	816.98	816.99
K	206+89.18	3.58	816.62	816.63
☉ of Bearing	207+02.18	3.58	816.14	816.14
Bk. N. Abut.	207+03.51	3.58	816.10	816.10

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	205+52.24	10.75	821.45	821.45
☉ of Bearing	205+53.57	10.75	821.41	821.41
A	205+63.57	10.75	821.06	821.07
B	205+73.57	10.75	820.70	820.71
C	205+83.57	10.75	820.34	820.34
☉ of Pier 1	205+96.57	10.75	819.86	819.86
D	206+06.57	10.75	819.50	819.52
E	206+16.57	10.75	819.14	819.18
F	206+26.57	10.75	818.78	818.82
G	206+36.57	10.75	818.41	818.45
H	206+46.57	10.75	818.05	818.07
☉ of Pier 2	206+56.57	10.75	817.69	817.69
I	206+66.57	10.75	817.32	817.33
J	206+76.57	10.75	816.96	816.97
K	206+86.57	10.75	816.60	816.61
☉ of Bearing	206+99.57	10.75	816.13	816.13
Bk. N. Abut.	207+00.90	10.75	816.08	816.08

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	205+49.63	17.92	821.42	821.42
☉ of Bearing	205+50.96	17.92	821.38	821.38
A	205+60.96	17.92	821.05	821.06
B	205+70.96	17.92	820.68	820.70
C	205+80.96	17.92	820.32	820.33
☉ of Pier 1	205+93.96	17.92	819.85	819.85
D	206+03.96	17.92	819.48	819.50
E	206+13.96	17.92	819.12	819.16
F	206+23.96	17.92	818.76	818.81
G	206+33.96	17.92	818.40	818.43
H	206+43.96	17.92	818.03	818.05
☉ of Pier 2	206+53.96	17.92	817.67	817.67
I	206+63.96	17.92	817.31	817.31
J	206+73.96	17.92	816.94	816.96
K	206+83.96	17.92	816.58	816.59
☉ of Bearing	206+96.96	17.92	816.11	816.11
Bk. N. Abut.	206+98.29	17.92	816.06	816.06

TOP OF SLAB ELEVATIONS
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 STRUCTURE NO. 056-6006

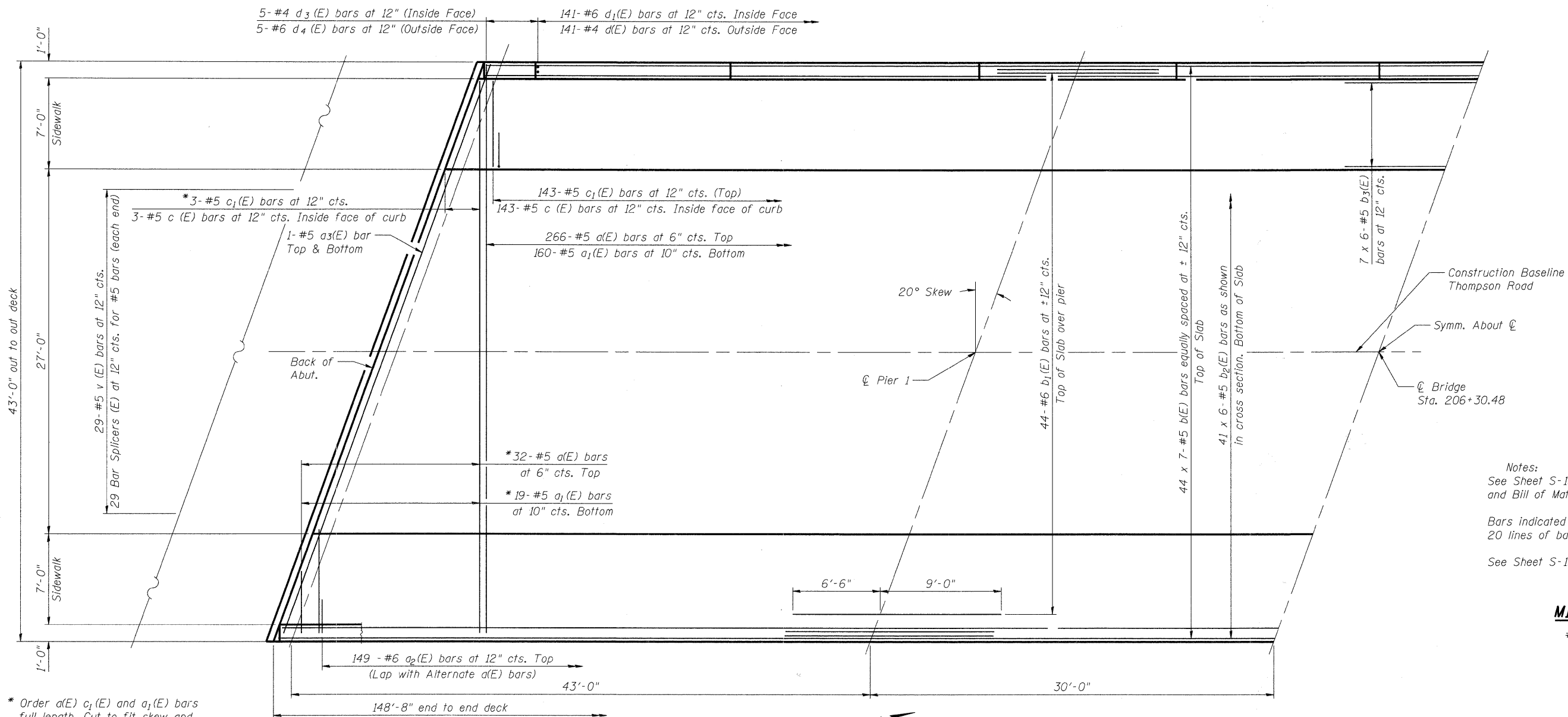
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S-25 SHEETS		CONTRACT NO. 63409			
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT		

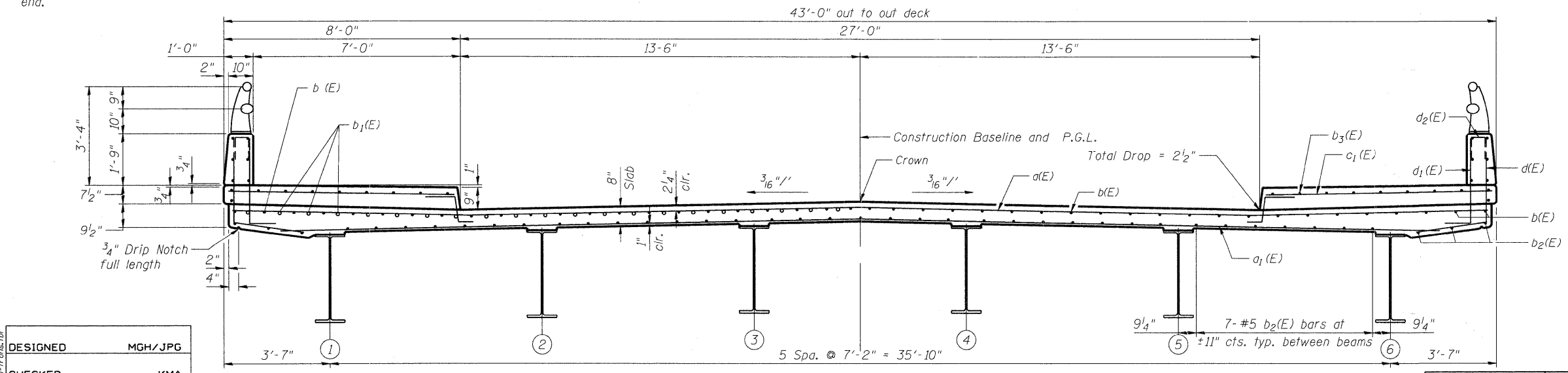
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 PLOT DRIVER: pdf.plt
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* Order a(E) c1(E) and a1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

Notes:
See Sheet S-13 for superstructure details and Bill of Materials.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet S-12 for parapet reinforcement.

MIN. BAR LAP
#5 bar = 2'-2"



DECK PLAN AND CROSS SECTIONS
THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

DATE: 11/18/09

DESIGNED	MGH/JPG
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CHECKED	RGD

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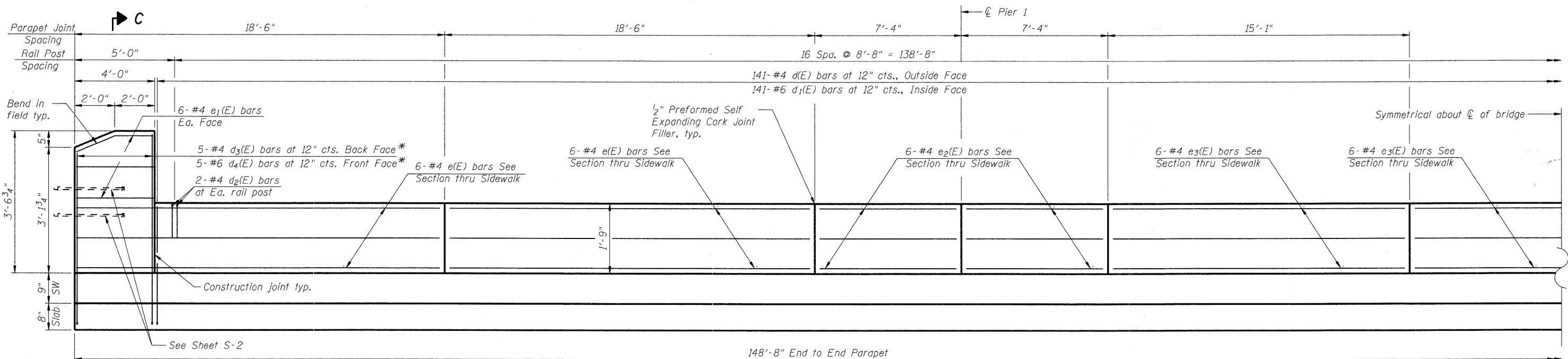
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CROSS SECTION

NEAR MIDSPAN

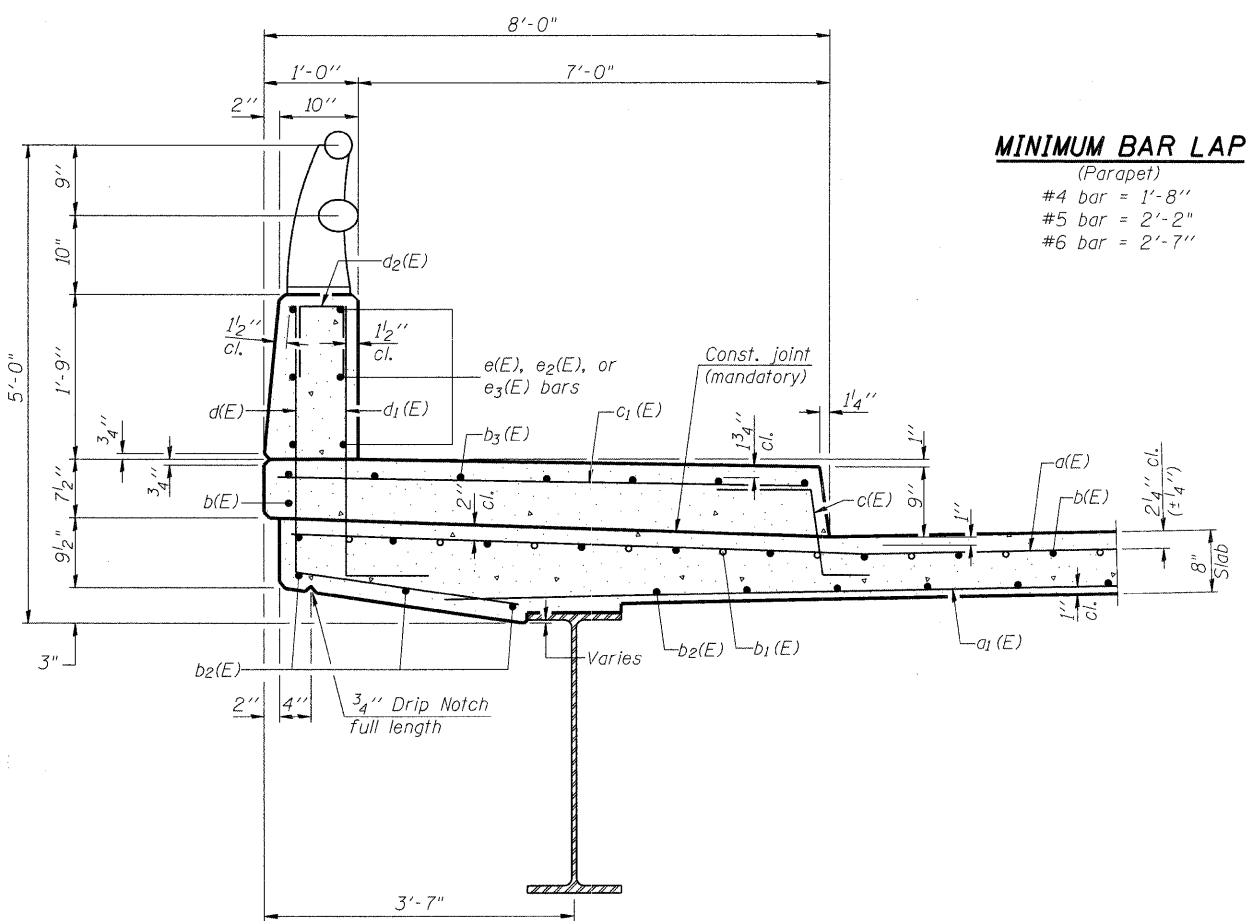


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FED. ROAD DIST. NO. 1 ILLINOIS			FED. AID PROJECT		
CONTRACT NO. 63409					



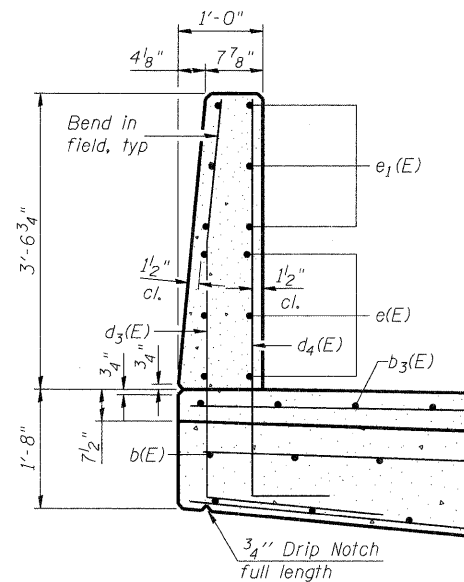
INSIDE ELEVATION OF PARAPET

* Trim bars to fit



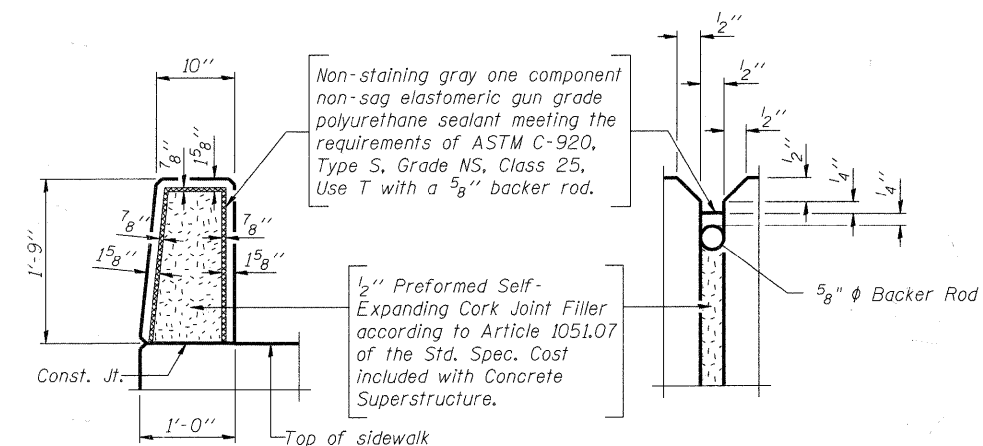
MINIMUM BAR LAP

(Parapet)
 #4 bar = 1'-8"
 #5 bar = 2'-2"
 #6 bar = 2'-7"



SECTION C-C

See Section Thru Sidewalk for additional details.



PARAPET JOINT DETAILS

SUPERSTRUCTURE DETAILS

THOMPSON ROAD
 OVER NIPPERSINK CREEK
 SECTION NO. 06-00005-00-BR
 McHENRY COUNTY
 STATION 206+30.48
 STRUCTURE NO. 056-6006

DATE: 11/18/09

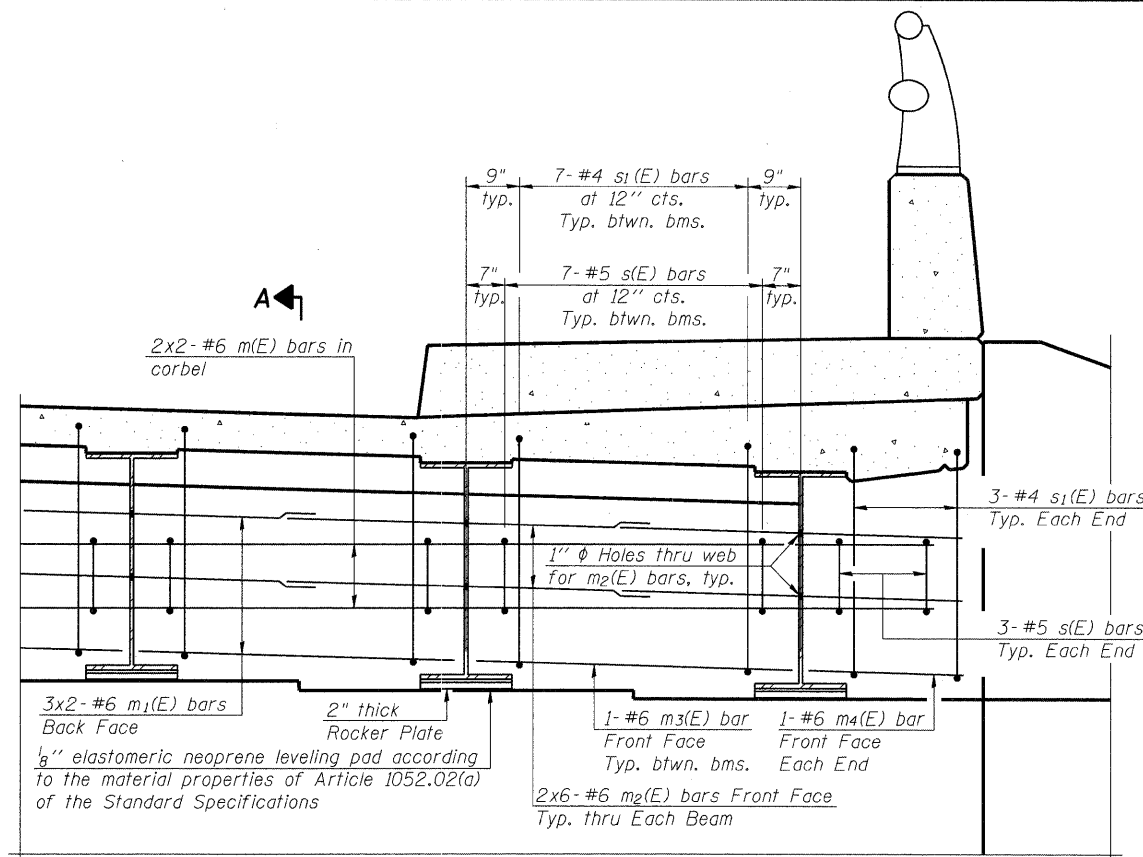
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CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

SECTION THRU SIDEWALK

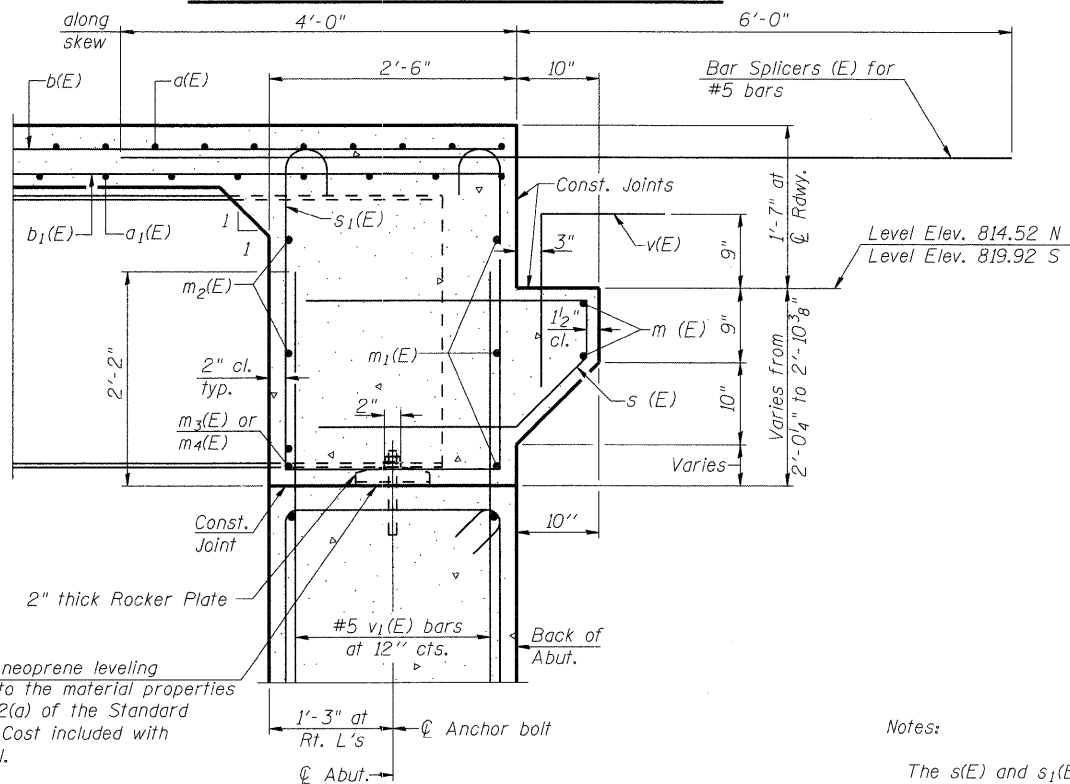
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SHEET NO. S-12	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-00005-00-BR	McHENRY	45	23
S-25 SHEETS		CONTRACT NO. 63409			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

FILE NAME: 060563-S06r101.cdw, 20/2009
 PLOT DRIVER: pnf.plt
 PEN TABLE: standard-trans.tbl



DIAPHRAGM ELEVATION AT ABUTMENT



SECTION A-A

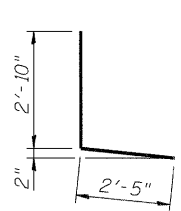
Dimensions at right angles to abutment, except as shown.

Notes:

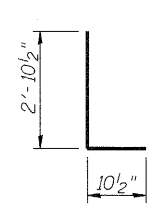
The s(E) and s₁(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

MIN. BAR LAP

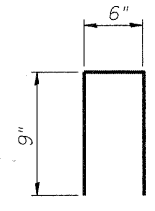
#6 bar = 2'-9"



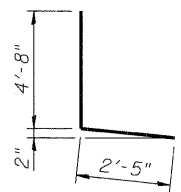
BAR d(E)



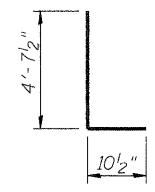
BAR d1(E)



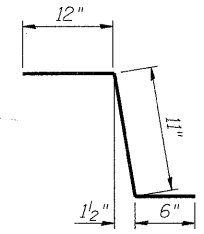
BAR d2(E)



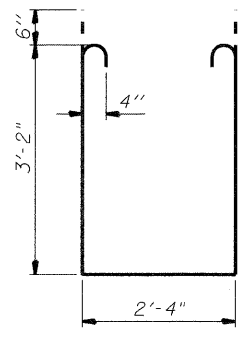
BAR d3(E)



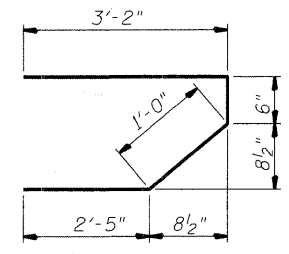
BAR d4(E)



BAR c(E)

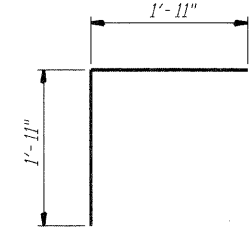


BAR s1(E)



BAR s(E)

(s (E) bars placed parallel to beams)



BAR v(E)

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a (E)	298	# 5	42'-4"	—
a ₁ (E)	179	# 5	39'-2"	—
a ₂ (E)	298	# 6	6'-0"	—
a ₃ (E)	4	# 5	45'-5"	—
b (E)	308	# 5	23'-1"	—
b ₁ (E)	88	# 6	15'-2"	—
b ₂ (E)	246	# 5	26'-7"	—
b ₃ (E)	84	# 5	26'-7"	—
c(E)	292	#5	2'-5"	┌
c ₁ (E)	292	#6	7'-6"	—
d (E)	282	#4	5'-3"	└
d ₁ (E)	282	#6	3'-9"	└
d ₂ (E)	60	# 4	2'-0"	└
d ₃ (E)	20	# 4	7'-1"	└
d ₄ (E)	20	#6	5'-6"	└
e(E)	48	# 4	18'-2"	—
e ₁ (E)	24	# 4	3'-6"	—
e ₂ (E)	48	# 4	7'-0"	—
e ₃ (E)	36	#4	14'-9"	—
m(E)	8	# 6	23'-10"	—
m ₁ (E)	12	# 6	24'-0"	—
m ₂ (E)	24	# 6	9'-10"	—
m ₃ (E)	10	# 6	7'-3"	—
m ₄ (E)	4	# 6	3'-4"	—
s(E)	82	# 5	7'-1"	┌
s ₁ (E)	82	# 4	9'-8"	└
v(E)	58	# 5	3'-10"	┌
Reinforcement Bars, Epoxy Coated			Pound	52,690
Concrete Superstructure			Cu. Yds.	249

Bars indicated thus 1x2-#5 etc. indicates 1 line of bars with 2 lengths per line.

DIAPHRAGM DETAILS

**THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006**

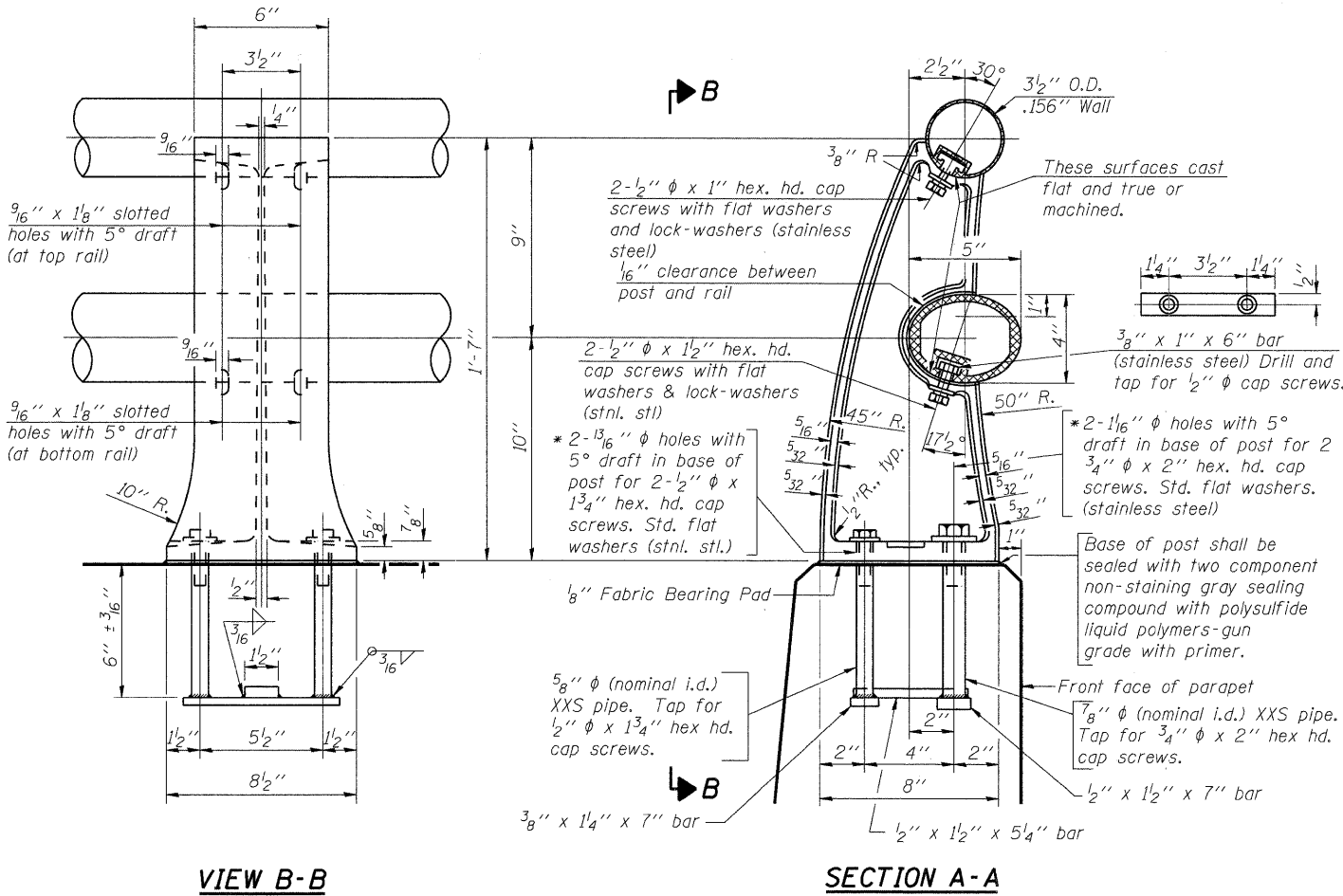
DATE: 11/18/09

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CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

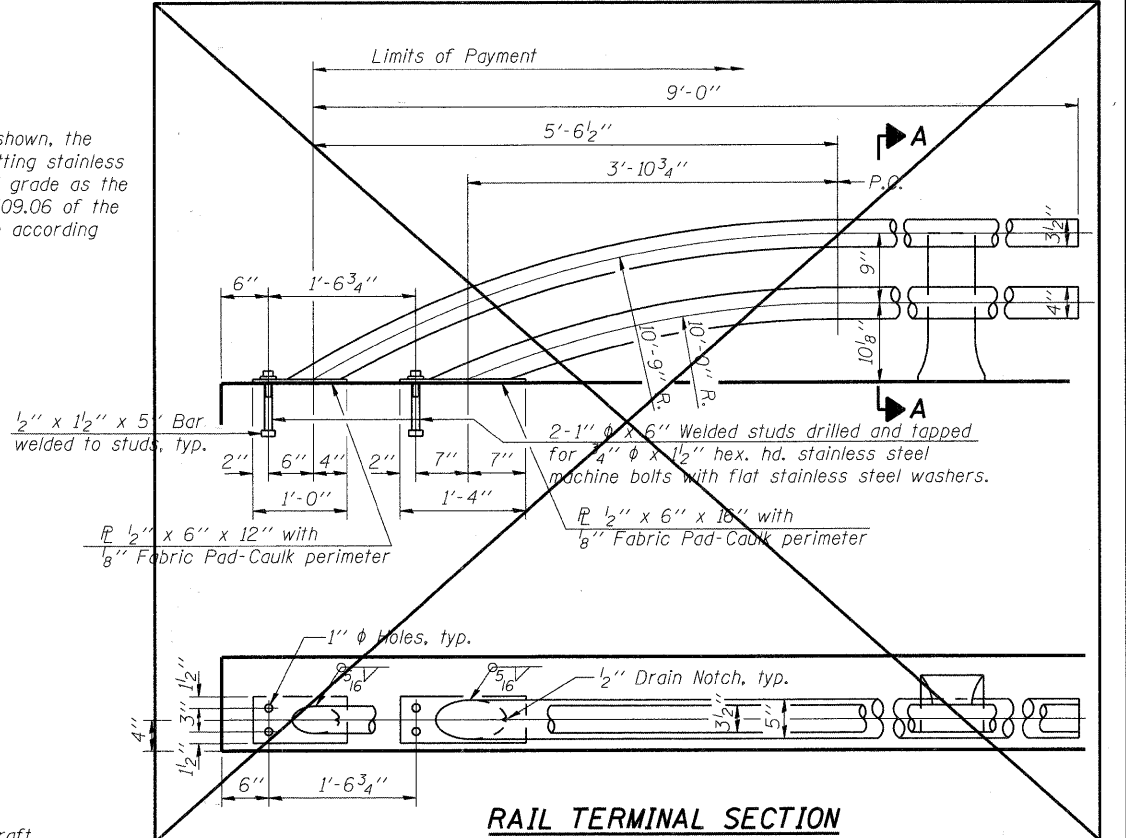
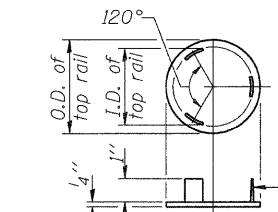
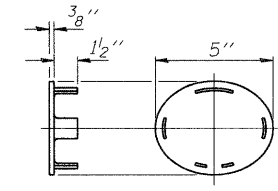
SHEET NO. S-13 S-25 SHEETS	F.A.U R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-00005-00-BR	McHENRY	45	24
FED. ROAD DIST. NO. 1 ILLINOIS			FED. AID PROJECT		
CONTRACT NO. 63409					

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FILE NAME: 060563.Dwg
 PLOT DRIVER: pof.plt
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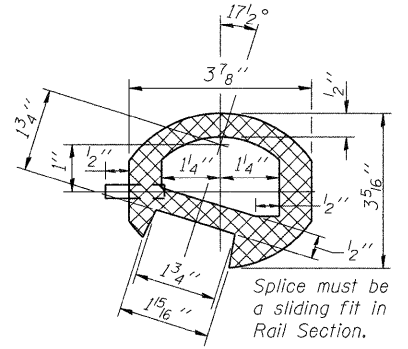
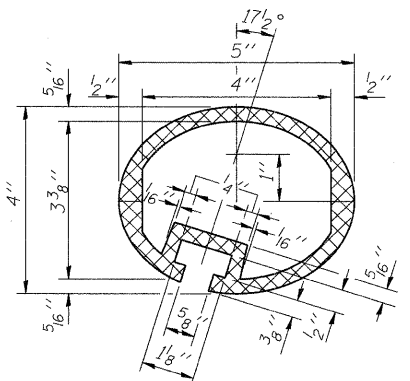
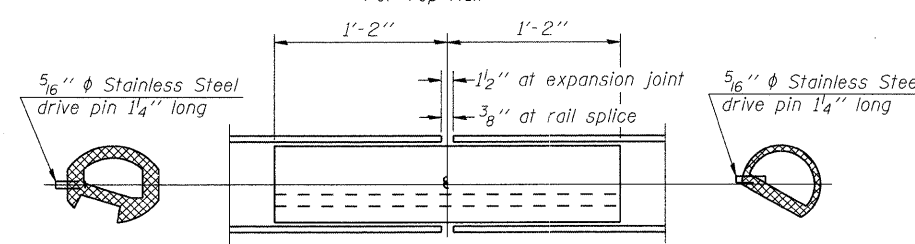
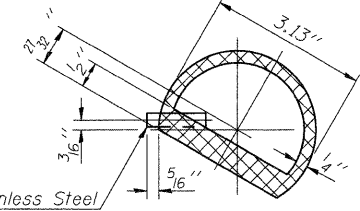
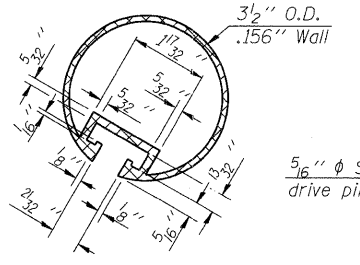
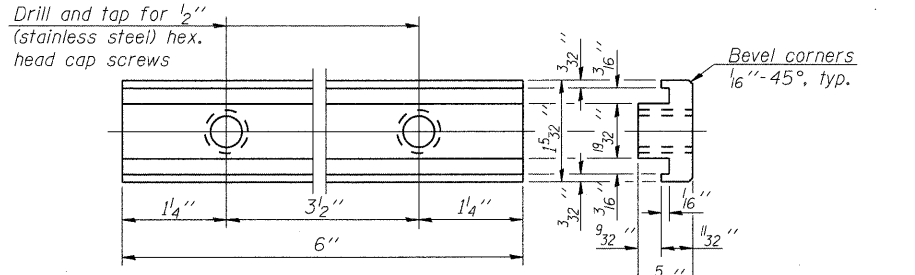
* In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



Note:
The end rail post shall be set back as required for the terminal rail section.

BILL OF MATERIAL

Item	Unit	Quantity
Aluminum Railing, Type L	Foot	281



RAIL END TREATMENT FOR TYPE 5 AND 6 TERMINAL

Notes:
All Posts shall be normal to parapet.
All joints in rail shall be spliced per detail.
All exposed rail ends shall be capped per detail.
Provide 1-1/8" and 2-1/8" Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed.
See sheet S-12 of S-25 for rail post spacing.

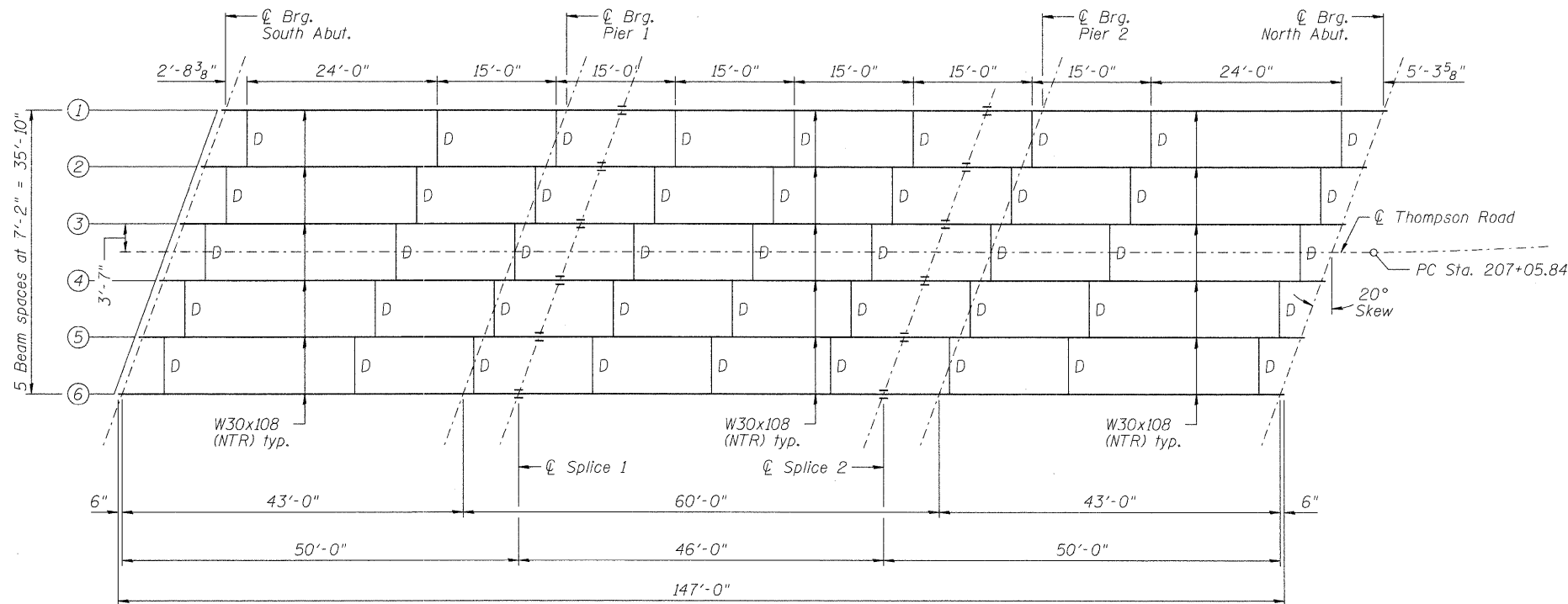
ALUMINUM RAILING TYPE L
THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

SHEET NO. S-14		F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-25 SHEETS		4081	06-00005-00-BR	McHENRY	45	25
FED. ROAD DIST. NO. 1			ILLINOIS	FED. AID PROJECT	CONTRACT NO. 63409	

FILE NAME: 0809563_Rail.dgn 11/30/2009
PLOT DRIVER: pdfplot
PEN TABLE: standard-trans.tbl

DESIGNED	MGH/JPG
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DRAWN	WJH
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FRAMING PLAN —Z—

All beams are W30x108 AASHTO M270, Grade 50 (NTR)

		0.4 Sp. 1 or 0.6 Sp. 3	Pier	0.5 Sp. 2
I_s	(in ⁴)	4,470	4,470	4,470
$I_c(n)$	(in ⁴)	12,882	---	12,882
$I_c(3n)$	(in ⁴)	9,652	---	9,652
S_s	(in ³)	300	300	300
$S_c(n)$	(in ³)	456	---	456
$S_c(3n)$	(in ³)	414	---	414
DC1	(k/ft.)	0.85	0.85	0.85
M_{DC1}	(k)	95	238	147
DC2	(k/ft.)	0.38	0.38	0.38
M_{DC2}	(k)	50	87	84
DW	(k/ft.)	0.23	0.23	0.23
M_{DW}	(k)	29	52	50
M_{LL+IM}	(k)	456	312	631
M_u (Strength I)	(k)	1,023	1,030	1,468
$\phi_r M_n$ $\phi_r M_{nc}$	(k)	2,484	---	2,484
f_s DC1	(k.s.i.)	3.8	9.5	5.9
f_s DC2	(k.s.i.)	1.4	3.5	2.4
f_s DW	(k.s.i.)	0.8	2.1	1.4
f_s 1.3(LL+IM)	(k.s.i.)	15.6	16.2	21.6
f_s (Service II)	(k.s.i.)	21.7	31.3	31.4
f_s (Total)(Strength I)	(k.s.i.)	---	41.2	---
Vf	(k)	23.6	---	22.2

* Compact sections
** Non-Compact sections

I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in⁴ and in³).

$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in⁴ and in³).

DC1: Un-factored non-composite dead load (kips/ft.).
 M_{DC1} : Un-factored moment due to non-composite dead load (kip-ft.).
 DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
 M_{DC2} : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
 DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
 M_{DW} : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
 M_{LL+IM} : Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
 M_u (Strength I): Factored design moment (kip-ft.).
 $1.25(M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{LL+IM}$
 $\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).
 $\phi_r M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).
 f_s (Service II): Sum of stresses as computed from the moments below (ksi).
 $M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_{LL+IM}$
 f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
 $1.25(M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{LL+IM}$
 V_f : Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

NOTES:

All materials shall be AASHTO M270 Grade 50.

"NTR" denotes members to which Notch Toughness Requirements are applicable.

See Sheet S-16 of S-25 for beam elevation and framing details.

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

LOCATION	SOUTH ABUT.	NORTH ABUT.	PIER 1	PIER 2	SPLICE 1	SPLICE 2
BEAM 1	820.22	814.92	818.62	816.44	818.35	816.68
BEAM 2	820.43	815.13	818.83	816.65	818.56	816.89
BEAM 3	820.63	815.33	819.03	816.85	818.77	817.10
BEAM 4	820.73	815.43	819.13	816.95	818.86	817.19
BEAM 5	820.71	815.41	819.11	816.93	818.84	817.17
BEAM 6	820.70	815.40	819.10	816.92	818.83	817.16

	Abut.	Pier
R DC1	(k)	12.9
R DC2	(k)	6.2
R DW	(k)	3.6
R LL + I	(k)	68.9
R Total	(k)	91.6

STEEL FRAMING PLAN
THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

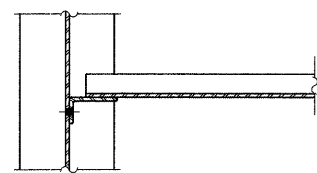
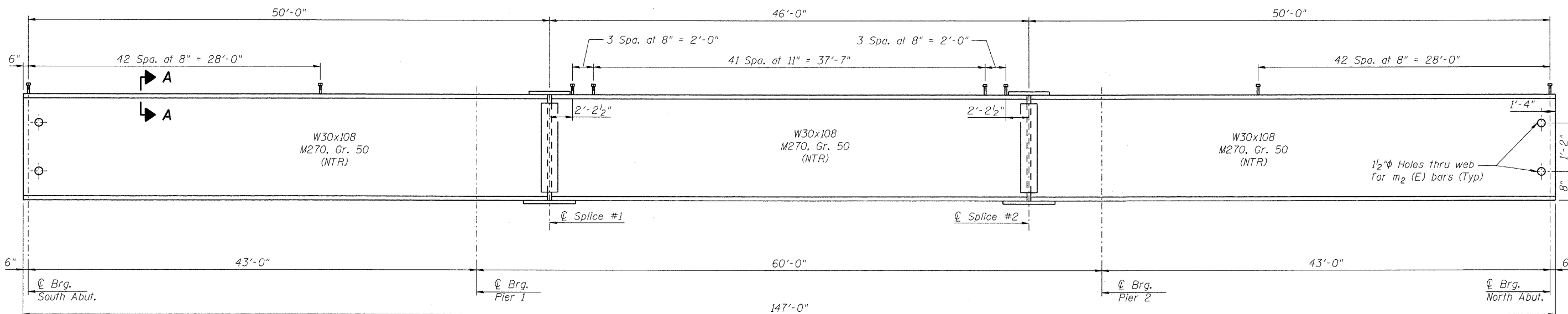
DATE: 11/18/09

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

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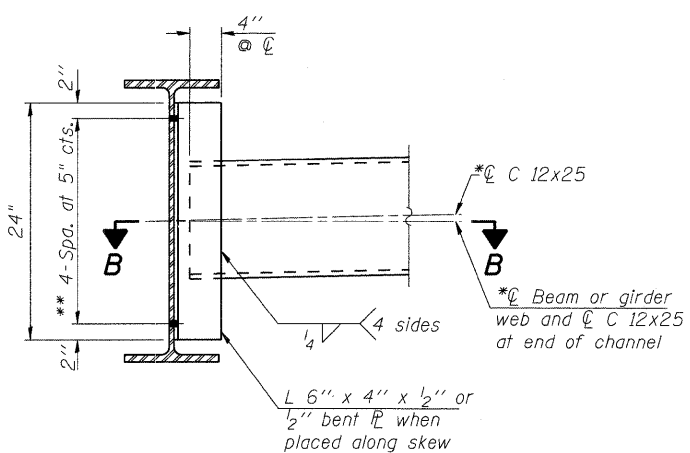
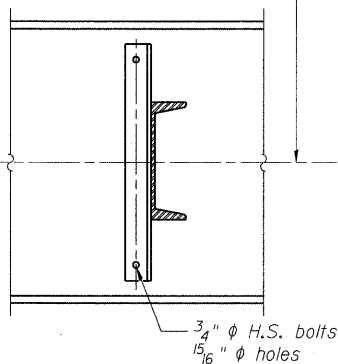
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	4081	06-00005-00-BR	McHENRY	45	26
S-25 SHEETS	CONTRACT NO. 63409				
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT		

FILE NAME: 060563.Stn.dwg 11/30/2009
 PLOT DRIVER: pct.plt
 PEN TABLE: standard-trans.tbl



SECTION B-B

⊕ Beam or girder web and ⊕ C* at end of channel

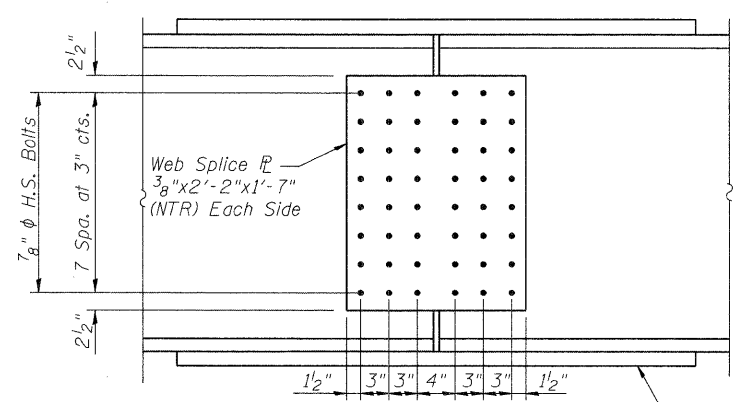
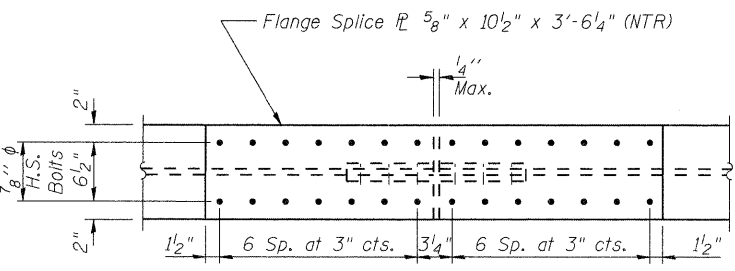


DIAPHRAGM D

Note:
Two hardened washers required for each set of oversized holes.
*Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Owner.
**3/4" φ HS bolts, 1 5/16" φ holes

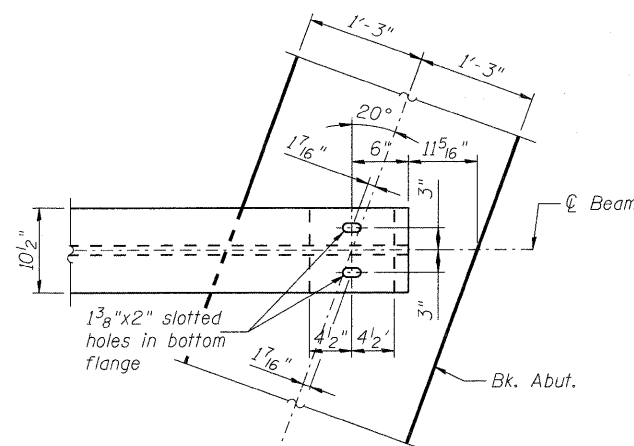
TYPICAL BEAM ELEVATION

"NTR" denotes beams to which Notch Toughness Requirements are applicable

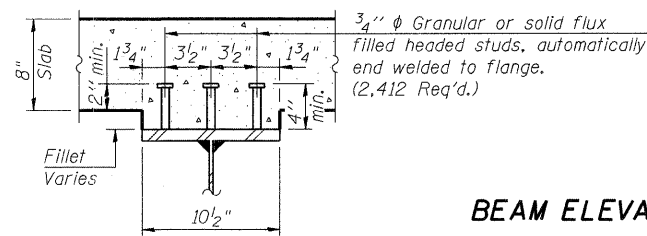


FIELD SPlice DETAIL

(12 Required)



PLAN AT ABUTMENTS



SECTION A-A

BEAM ELEVATION AND DETAILS

THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

DATE: 11/18/09

BILL OF MATERIAL

Item	Unit	Quantity
Furnishing & Erecting Structural Steel	L. Sum	1
Stud Shear Connectors	Each	2412

Notes:

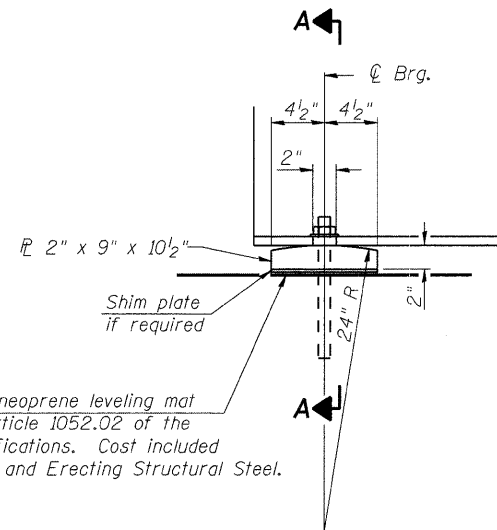
Work this Sheet with Sheets S-15 & S-17.
All splice material shall be M270 Grade 50.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

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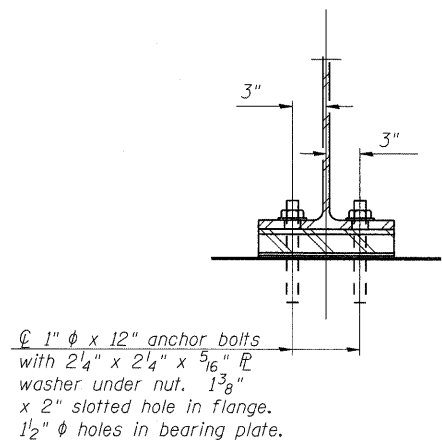
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	4081	06-00005-00-BR	McHENRY	45	27
S-25 SHEETS	CONTRACT NO. 63409				
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT		

FILE NAME: 080563.S76e101.dwg 12/2/2009
PLOT DRIVER: pdfplot
PEN TABLE: standard-trans.tbl



1/8" elastomeric neoprene leveling mat according to Article 1052.02 of the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.

ELEVATION AT ABUTMENTS



1" ϕ x 12" anchor bolts with 2 1/4" x 2 1/4" x 5/16" \mathbb{P} washer under nut. 1 3/8" x 2" slotted hole in flange. 1 1/2" ϕ holes in bearing plate.

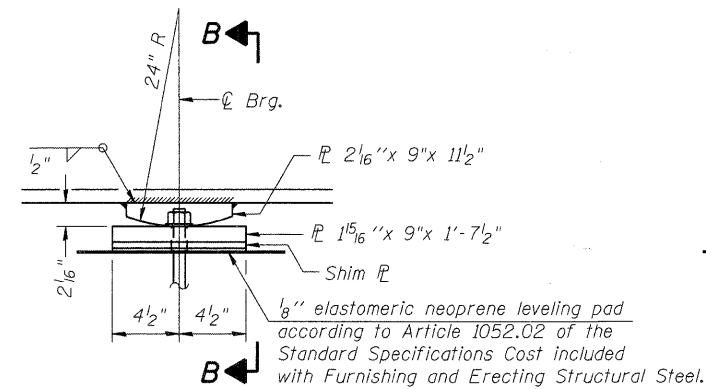
SECTION A-A

FIXED BEARING AT ABUTMENTS
(12 Required)

Notes:
Anchor bolts at fixed bearings may be built into the masonry.

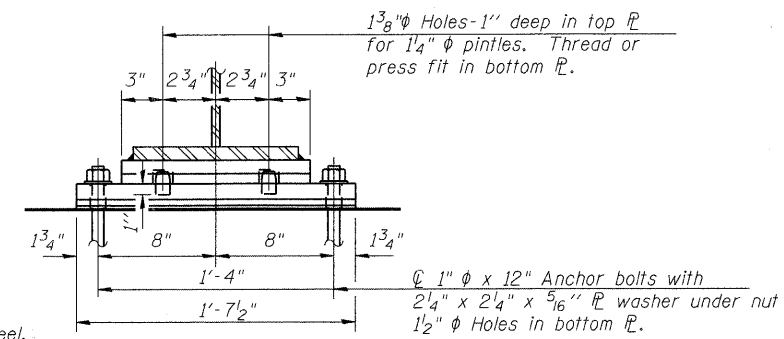
See Article 521.06 of the Standard Specifications for Anchor Bolt installation.

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

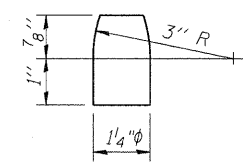


ELEVATION AT PIERS

FIXED BEARING AT PIERS 1 & 2
(12 Required)



SECTION B-B



PINTLE

BEARING DETAILS
THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

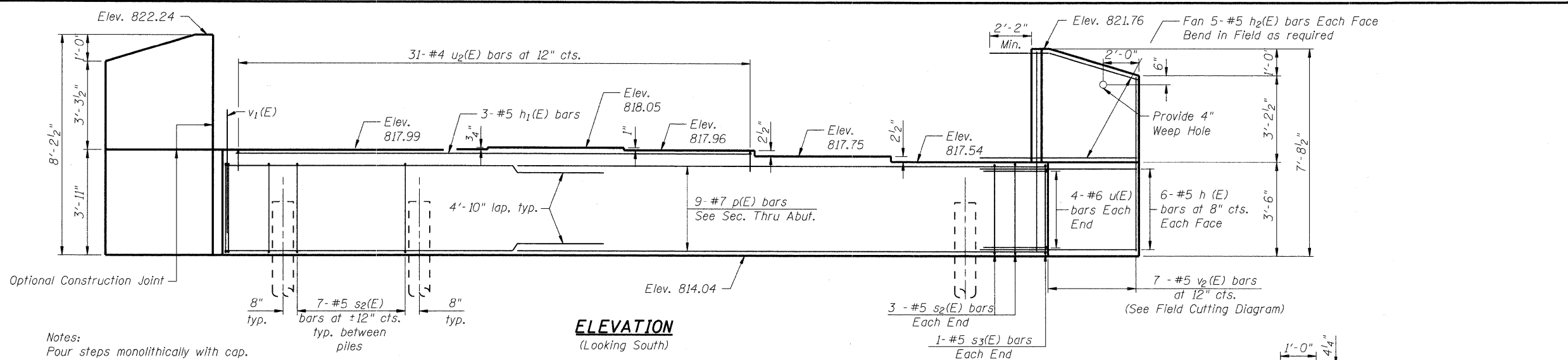
DATE: 11/18/09

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

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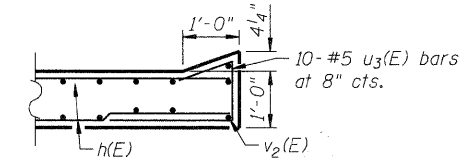
SHEET NO. S-17	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-00005-00-BR	McHENRY	45	28
S-25 SHEETS		CONTRACT NO. 63409			
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT		

FILE NAME: 060563.Brg.dwg
PLOT DRIVER: pcf.plt
PEN TABLE: standard-trans.tbl

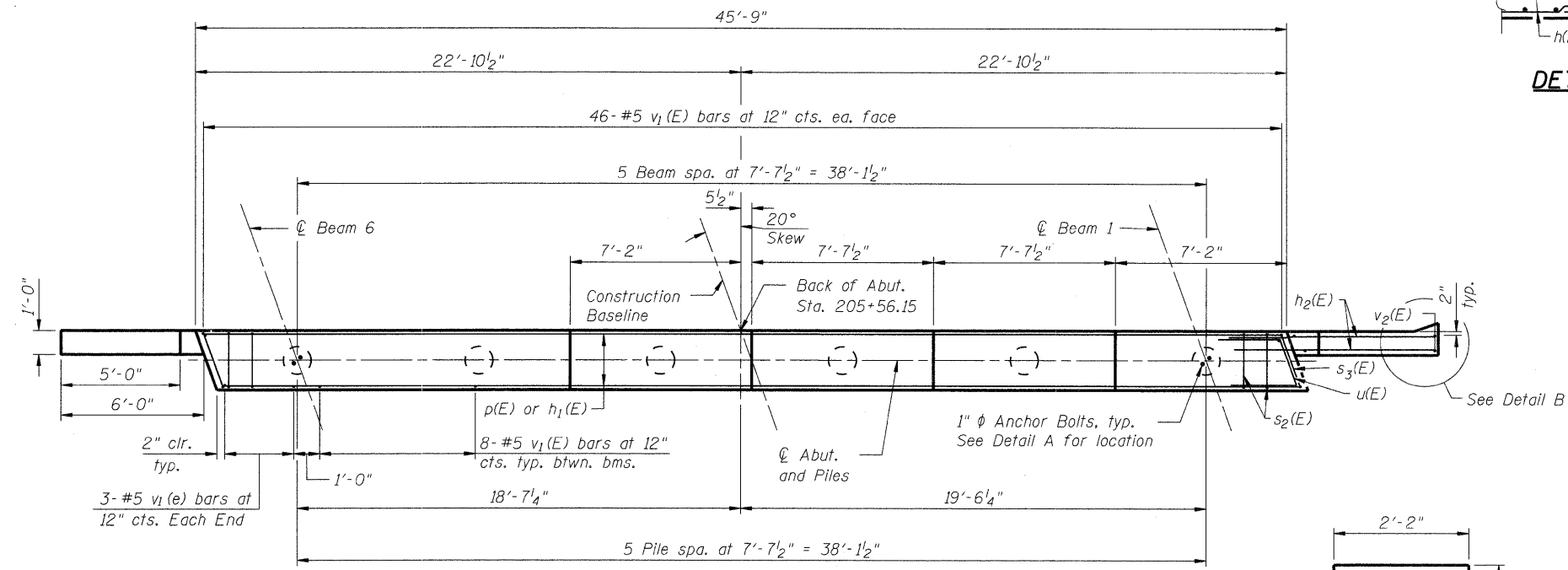


ELEVATION
(Looking South)

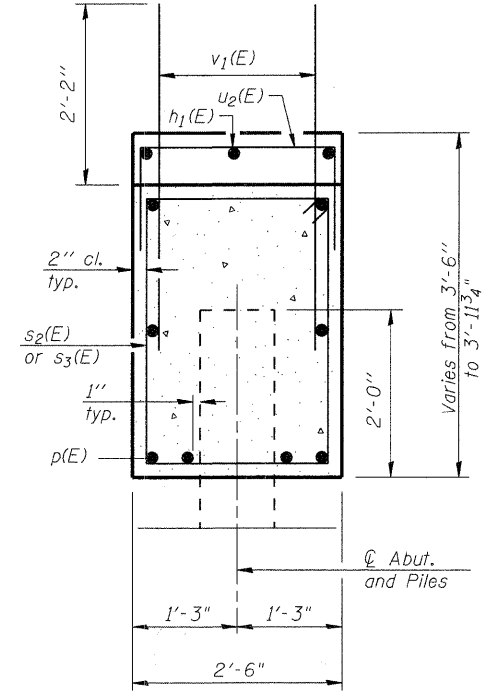
Notes:
Four steps monolithically with cap.



DETAIL B



PLAN



DETAIL A

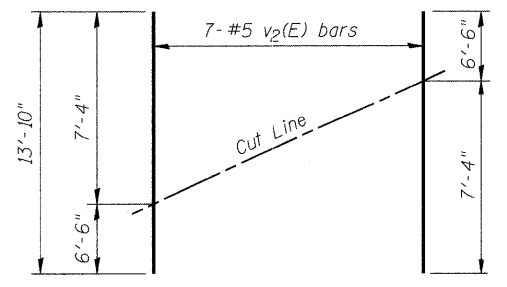
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	24	# 5	8'-0"	—
h1(E)	3	# 5	30'-2"	—
h2(E)	20	# 5	8'-0"	—
p(E)	18	#7	25'-2"	—
s2(E)	41	# 5	11'-7"	□
s3(E)	2	# 5	11'-9"	□
U(E)	8	#6	8'-3"	┌
u2(E)	31	#4	4'-2"	┌
u3(E)	10	#5	4'-4"	┌
v1(E)	92	#5	4'-4"	—
v2(E)	14	#5	13'-10"	—
Structure Excavation		Cu. Yd.	120	
Concrete Structures		Cu. Yd.	19.0	
Reinforcement Bars, Epoxy Coated		Pound	2,760	
Furnishing Metal Shell Piles, 14" x 0.250"		Foot	365	
Driving Piles		Foot	365	
Test Pile, Metal Shell Piles, 14" x 0.250"		Each	1	

For details of Bar Splicers, see sheet S-22.
For details of piles and Concrete Encasement, see sheet S-23.
See sheet S-3 and S-4 for retaining wall details.

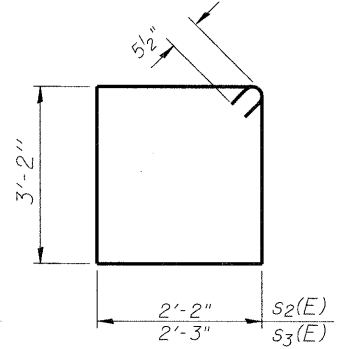
PILE DATA

Type and Size: Metal Shell - 14 in. dia. x 0.25 in. walls
Nominal Required Bearing: 390K
Factored Resistance Available: 130K
Est. Length: 73'
No. Production Piles: 5
No. Test Piles: 1

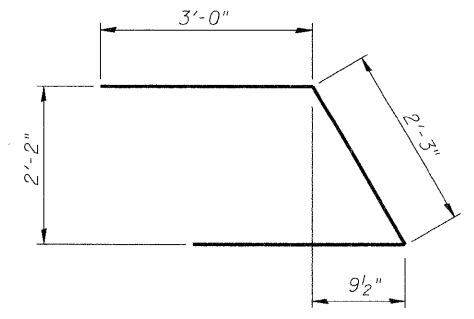


FIELD CUTTING DIAGRAM

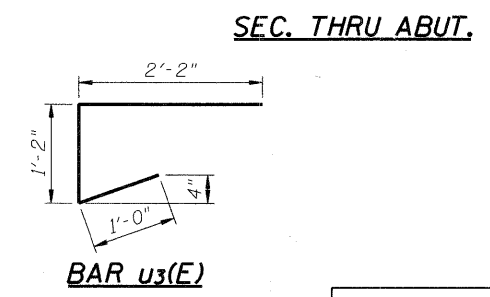
Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s2(E) & s3(E)



BAR u(E)



SEC. THRU ABUT.

SOUTH ABUTMENT DETAILS

THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

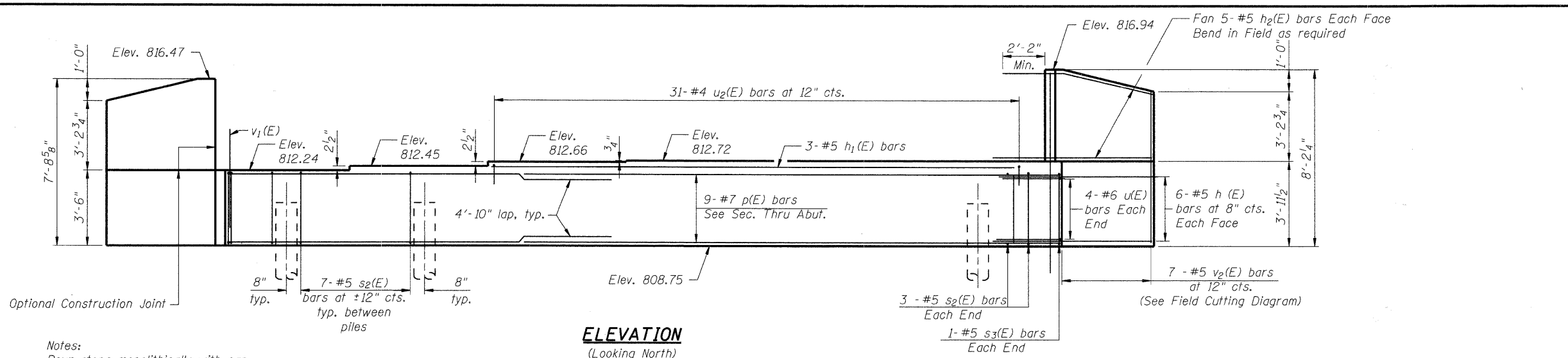
DATE: 11/18/09

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

SHEET NO. S-18	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-00005-00-BR	McHENRY	45	29
S-25 SHEETS	CONTRACT NO. 63409				
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT		

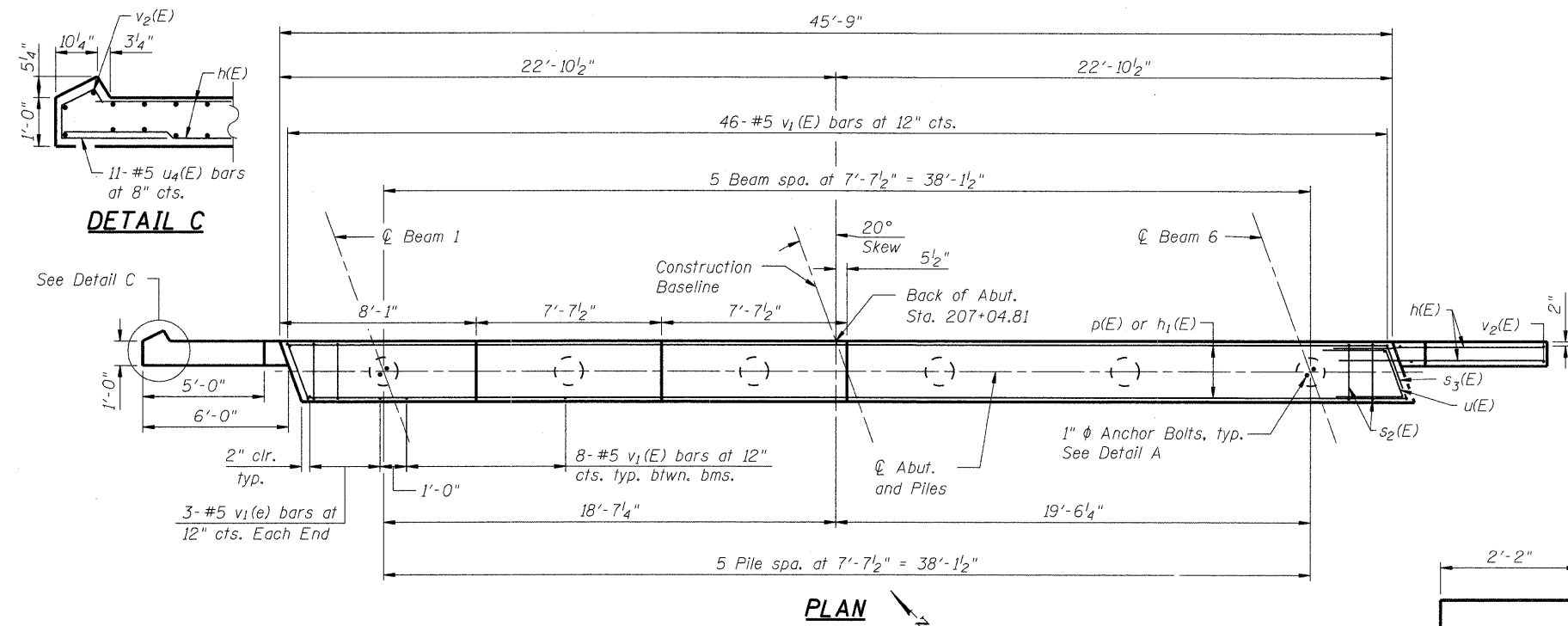
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FILE NAME: 060005-Sub1.dwg/2/10/2009
PLOT DRIVER: pdfplot
PEN TABLE: standard-trans.tbl



ELEVATION
(Looking North)

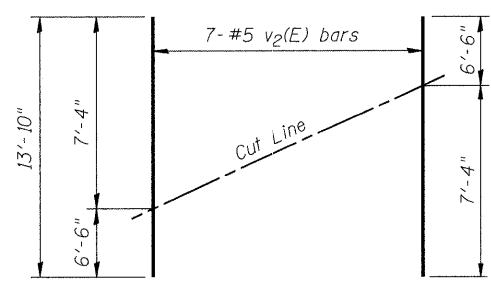
Notes:
Four steps monolithically with cap.



PLAN

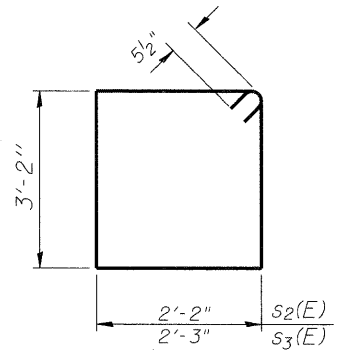
PILE DATA

Type and Size: Metal Shell - 14 in. dia. x 0.25 in. walls
Nominal Required Bearing: 390K
Factored Resistance Available: 130K
Est. Length: 66'
No. Production Piles: 5
No. Test Piles: 1

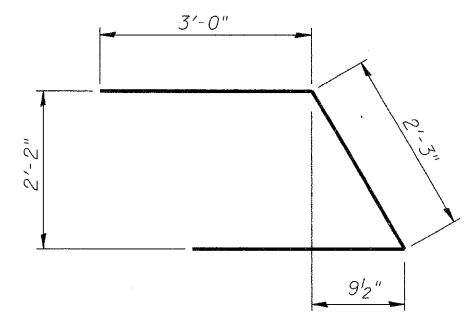


FIELD CUTTING DIAGRAM

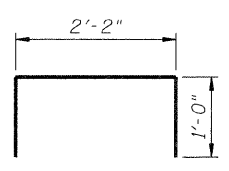
Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



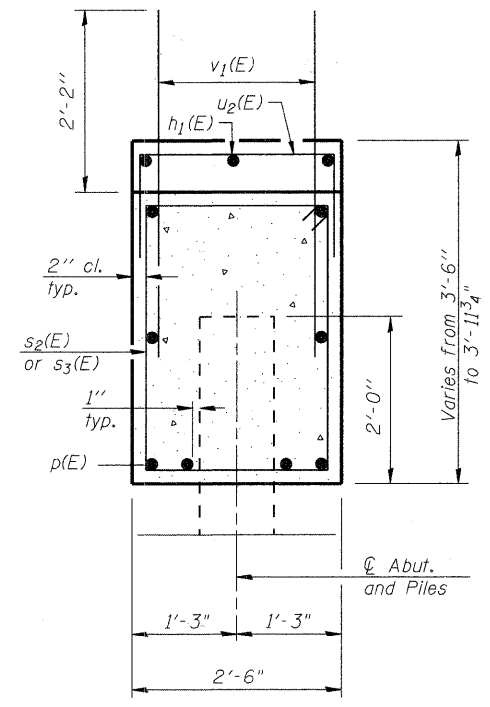
BARS s2(E) & s3(E)



BAR u(E)



BAR u2(E)



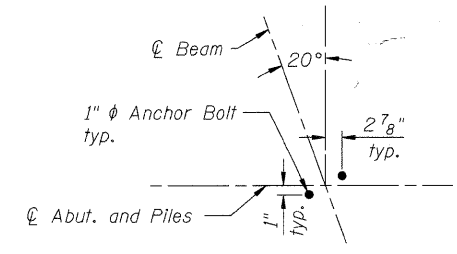
SEC. THRU ABUT.

BAR u4(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	24	# 5	8'-0"	—
h1(E)	3	# 5	30'-2"	—
h2(E)	20	# 5	8'-0"	—
p(E)	18	#7	25'-2"	—
s2(E)	41	# 5	11'-7"	□
s3(E)	2	# 5	11'-9"	□
u(E)	8	#6	8'-3"	┘
u2(E)	31	#4	4'-2"	┘
u4(E)	11	#5	3'-11"	┘
v1(E)	92	#5	4'-4"	—
v2(E)	14	#5	13'-10"	—
Structure Excavation		Cu. Yd.	138	
Concrete Structures		Cu. Yd.	19.1	
Reinforcement Bars, Epoxy Coated		Pound	2,760	
Furnishing Metal Shell Piles, 14" x 0.250"		Foot	330	
Driving Piles		Foot	330	
Test Pile, Metal Shell Pile, 14" x 0.250"		Each	1	

For details of Bar Splicers, see sheet S-22.
For details of piles and Concrete Encasement, see sheet S-23.
See sheet S-3 and S-4 for retaining wall details.



DETAIL A

NORTH ABUTMENT DETAILS
THOMPSON ROAD
OVER NIPPERSINK CREEK
SECTION NO. 06-00005-00-BR
McHENRY COUNTY
STATION 206+30.48
STRUCTURE NO. 056-6006

DATE: 11/18/09

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

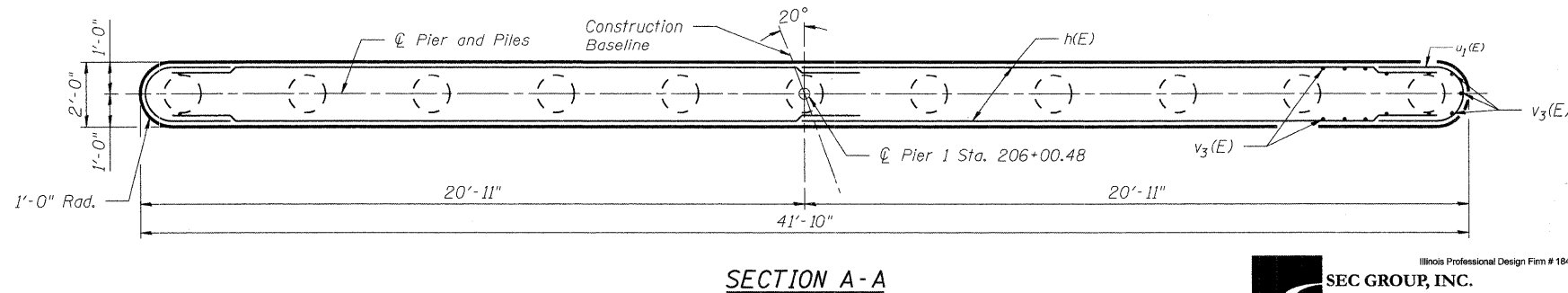
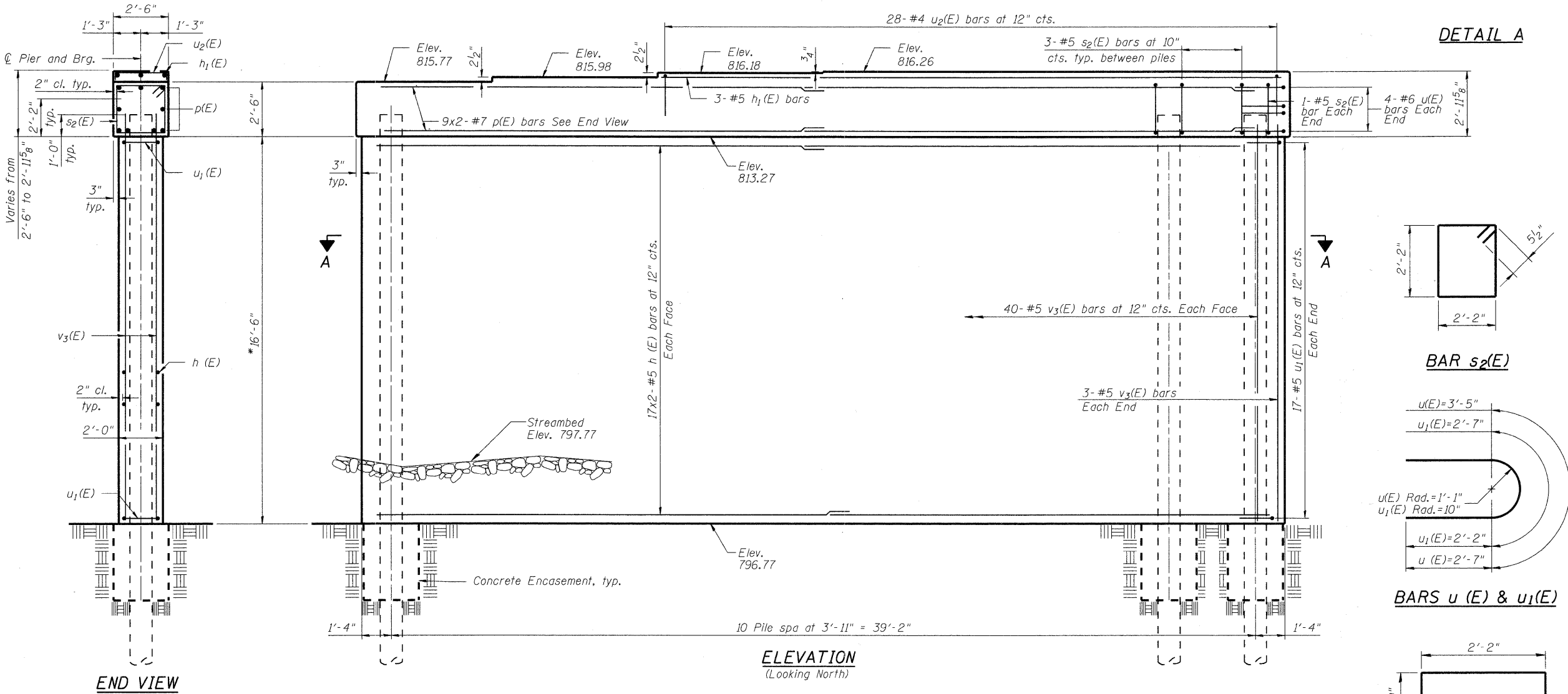
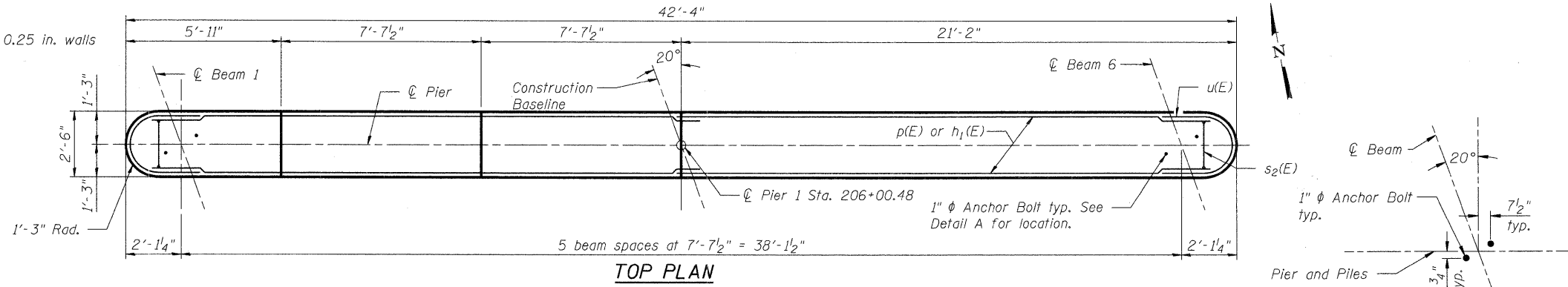
SHEET NO. S-19 S-25 SHEETS	F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-00005-00-BR	McHENRY	45	30
FED. ROAD DIST. NO. 1			ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 63409					

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FILE NAME: 060563.North.dgn; 2/20/2009
PLOT DRIVER: pdfplot
PEN TABLE: standard-trans.tbl

PILE DATA

Type and Size: Metal Shell - 14 in. dia. x 0.25 in. walls
 Nominal Required Bearings: 390K
 Factored Resistance Available: 130K
 Est. Length: 80'
 No. Production Piles: 10
 No. Test Piles: 1



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h (E)	68	# 5	21'-2"	—
h ₁ (E)	3	# 5	27'-2"	—
p(E)	18	#7	23'-5"	—
s ₂ (E)	32	# 5	9'-7"	□
u(E)	8	#6	8'-7"	U
u ₁ (E)	34	#5	6'-11"	U
u ₂ (E)	28	#4	4'-2"	□
v ₃ (E)	86	#5	18'-8"	—
Concrete Structures			Cu. Yd.	61.8
Reinforcement Bars, Epoxy Coated			Pound	4,870
Concrete Encasement			Cu. Yd.	6.0
Furnishing Metal Shell Piles - 14" x 0.250"			Foot	800
Driving Piles			Foot	800
Test Pile, Metal Shell Piles - 14" x 0.250"			Each	1
Underwater Structure Excavation Protection, Special - Location 1			Each	1

Reinforcement Bars designated (E) shall be epoxy coated.

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of pile and Concrete Encasement, see Sheet S-23 of S-25.
 See "Underwater Structure Excavation Protection Special" special provision.

MINIMUM BAR LAP
 #5 bar = 2'-2"
 #7 bar = 4'-10"

PIER 1 DETAILS
 THOMPSON ROAD
 OVER NIPPERSINK CREEK
 SECTION NO. 06-00005-00-BR
 McHENRY COUNTY
 STATION 206+30.48
 STRUCTURE NO. 056-6006

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

FILE NAME: C:\056571\056571.dwg
 PLOT DRIVER: PC424
 PLOT TABLE: STANDARD-TRANS.TBL

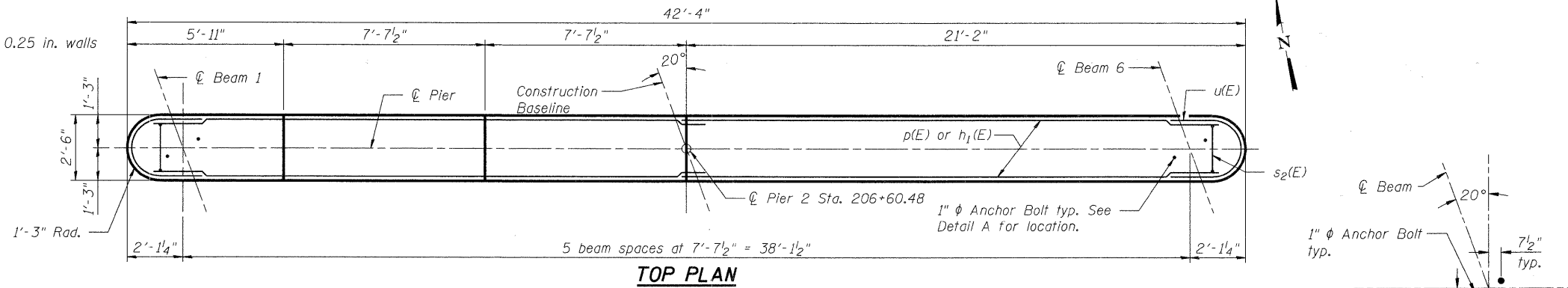
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SHEET NO. S-20	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-00005-00-BR	McHENRY	45	31
S-25 SHEETS			CONTRACT NO. 63409		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

DATE: 11/18/09

PILE DATA

Type and Size: Metal Shell - 14 in. dia. x 0.25 in. walls
 Nominal Required Bearings: 390K
 Factored Resistance Available: 130K
 Est. Length: 80'
 No. Production Piles: 11
 No. Test Piles: 0



TOP PLAN

DETAIL A

BILL OF MATERIAL

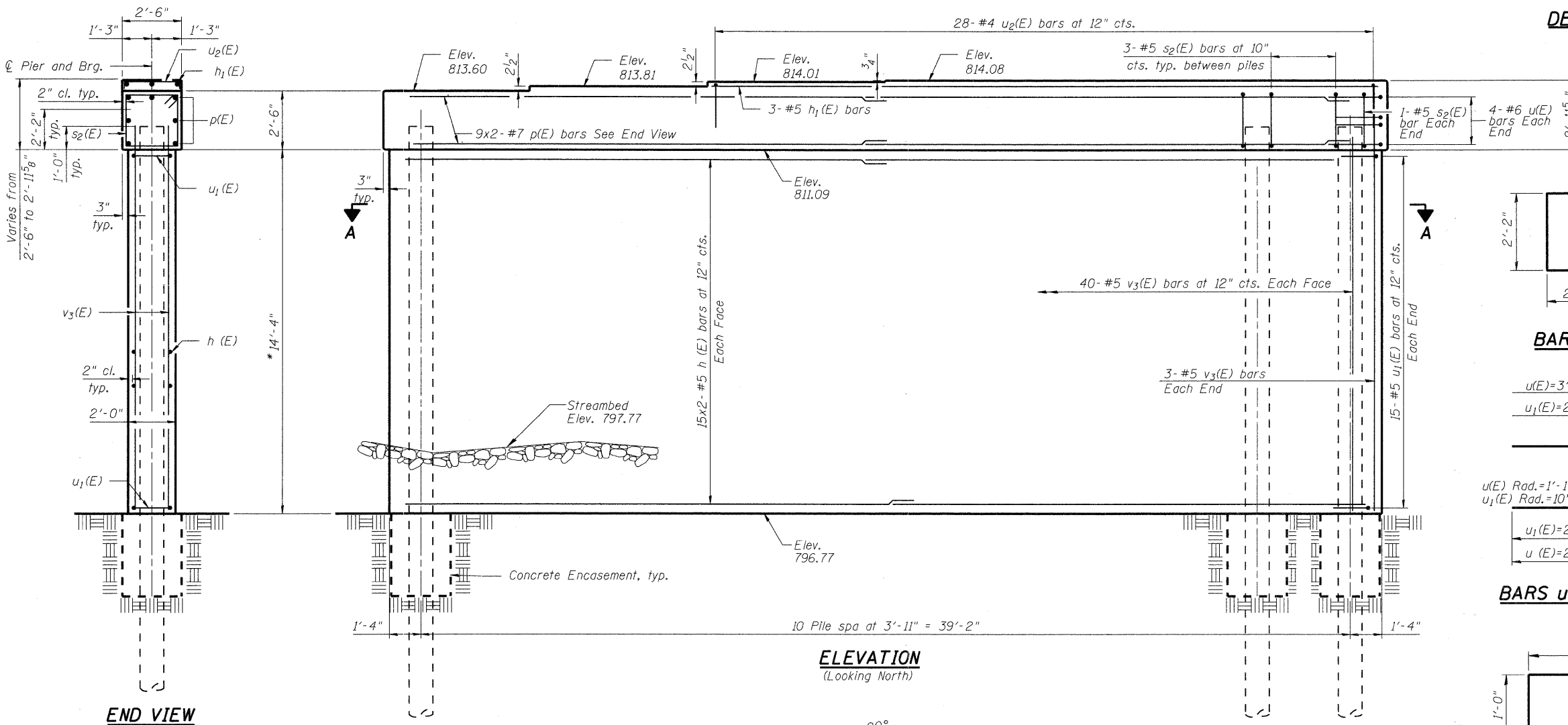
Bar	No.	Size	Length	Shape
h (E)	60	#5	21'-2"	—
h ₁ (E)	3	#5	27'-2"	—
p(E)	18	#7	23'-5"	—
s ₂ (E)	32	#5	9'-7"	□
u(E)	8	#6	8'-7"	U
u ₁ (E)	30	#5	6'-11"	U
u ₂ (E)	28	#4	4'-2"	U
v ₃ (E)	86	#5	16'-6"	—
Concrete Structures			Cu. Yd.	55.1
Reinforcement Bars, Epoxy Coated			Pound	4,470
Concrete Encasement			Cu. Yd.	6.0
Furnishing Metal Shell Piles - 14" x 0.250"			Foot	880
Driving Piles			Foot	880
Underwater Structure Excavation Protection, Special - Location 2			Each	1

Reinforcement Bars designated (E) shall be epoxy coated.

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of pile and Concrete Encasement, see Sheet S-23 of S-25.
 See "Underwater Structure Excavation Protection Special" special provision.

MINIMUM BAR LAP

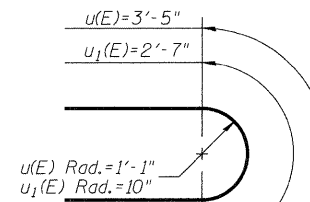
#5 bar = 2'-2"
 #7 bar = 4'-10"



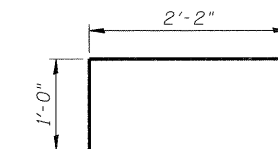
ELEVATION

(Looking North)

BAR s₂(E)



BARS u(E) & u₁(E)



BAR u₂(E)

PIER 2 DETAILS

THOMPSON ROAD
 OVER NIPPERSINK CREEK
 SECTION NO. 06-00005-00-BR
 McHENRY COUNTY
 STATION 206+30.48
 STRUCTURE NO. 056-6006

DATE: 11/18/09

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

FILE NAME: 060561_Pier 2.dwg
 PLOT DRIVER: plot.plt
 PLOT TABLE: standard-trns.tbl

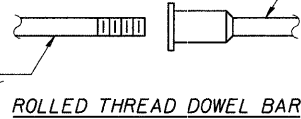
SECTION A-A



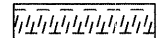
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	4081	06-00005-00-BR	McHENRY	45	32
S-25 SHEETS				CONTRACT NO. 63409	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

The diameter of this part is the same as the diameter of the bar spliced.

The diameter of this part is equal or larger than the diameter of bar spliced.

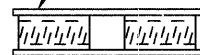


ROLLED THREAD DOWEL BAR



** ONE PIECE

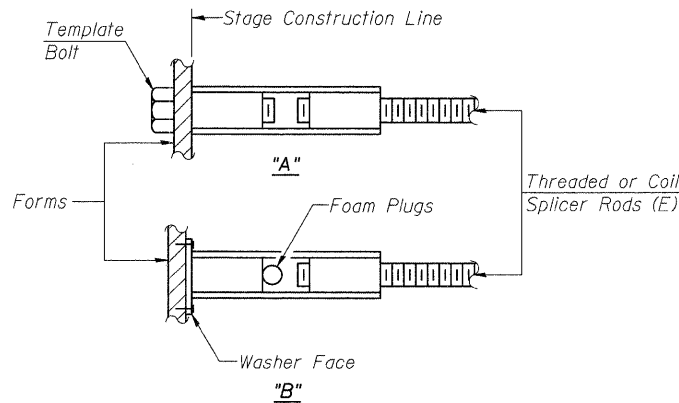
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



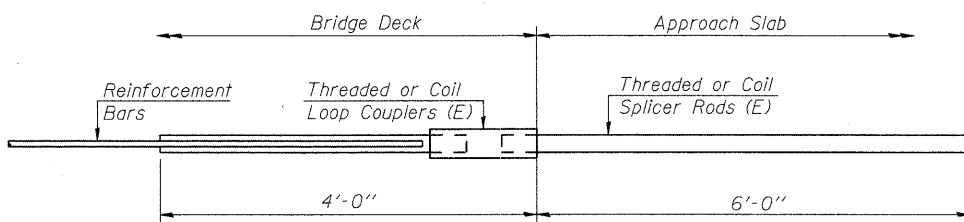
INSTALLATION AND SETTING METHODS

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

NOTES
 Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

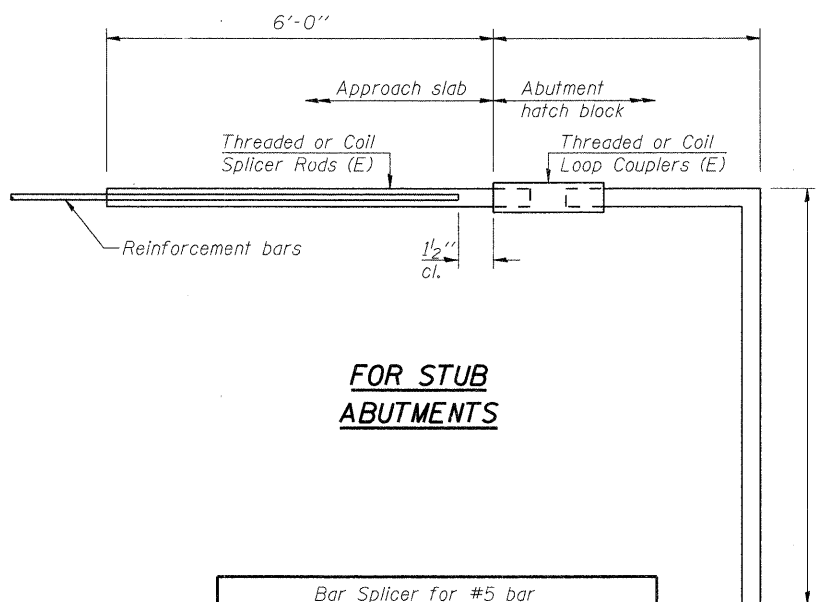
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



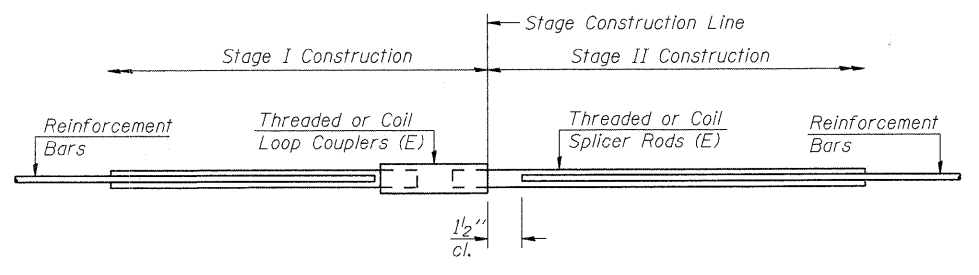
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity = 23.0 kips - tension	
Min. Pull-out Strength = 12.3 kips - tension	
No. Required = 58	



FOR STUB ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity = 23.0 kips - tension	
Min. Pull-out Strength = 12.3 kips - tension	
No. Required = 0	



STANDARD

Bar Size	No. Assemblies Required	Location

BAR SPLICER ASSEMBLY DETAILS

THOMPSON ROAD
 OVER NIPPERSINK CREEK
 SECTION NO. 06-00005-00-BR
 McHENRY COUNTY
 STATION 206+30.48
 STRUCTURE NO. 056-6006

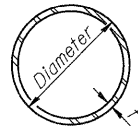
DATE: 11/18/09

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

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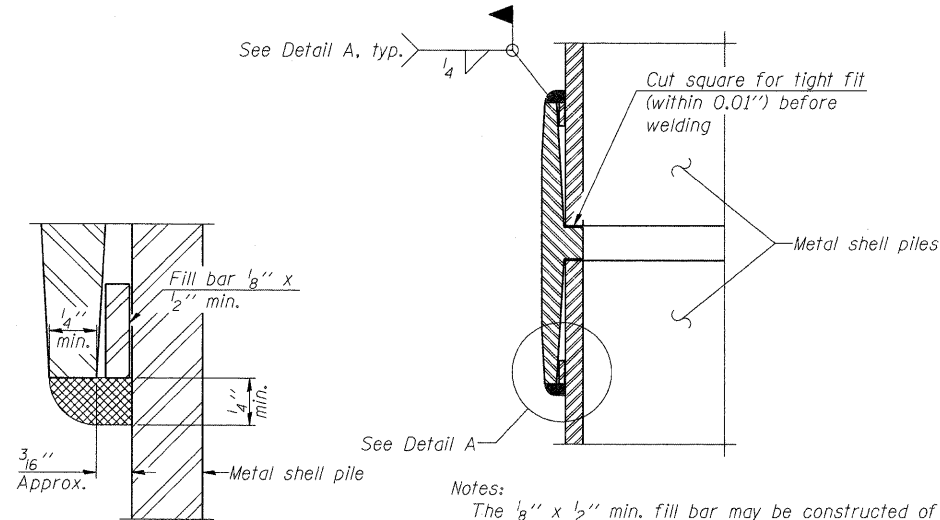
SHEET NO. S-22	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	4081	06-00005-00-BR	McHENRY	45	33
S-25 SHEETS		CONTRACT NO. 63409			
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT	

FILE NAME: 060562.Bar.dgn 11/20/2009
 PLOT DRIVER: pdfplot
 PEN TABLE: standard-trans.tbl



METAL SHELL PILE TABLE

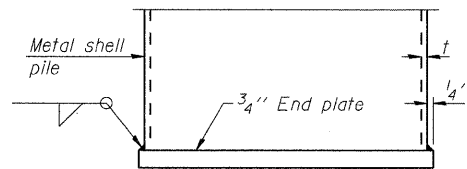
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



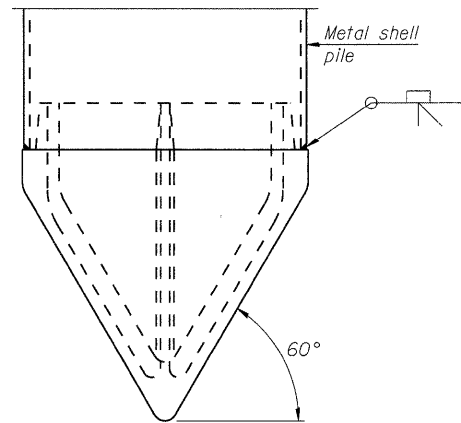
DETAIL A

Notes:
 The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
 Pile segments shall be driven to solid contact with splicer before welding.

WELDED COMMERCIAL SPLICE



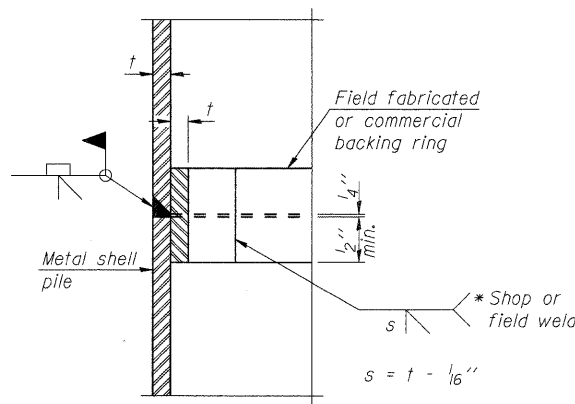
END PLATE ATTACHMENT



METAL SHELL PILE SHOE ATTACHMENT

(See Note A)

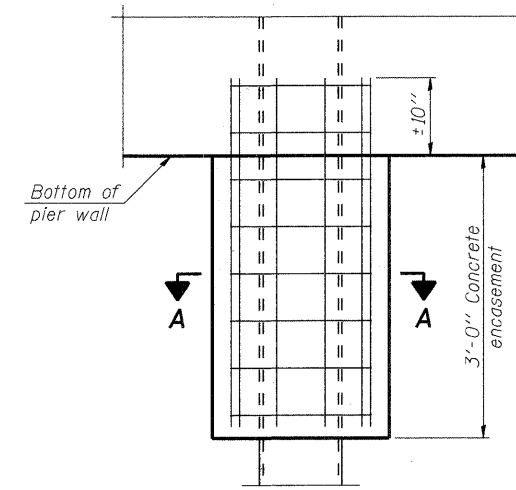
Note A:
 When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.



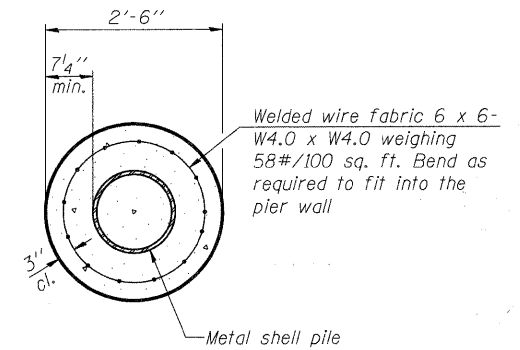
COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.

Note:
 The metal shell piles shall be according to ASTM A 252 Grade 3.



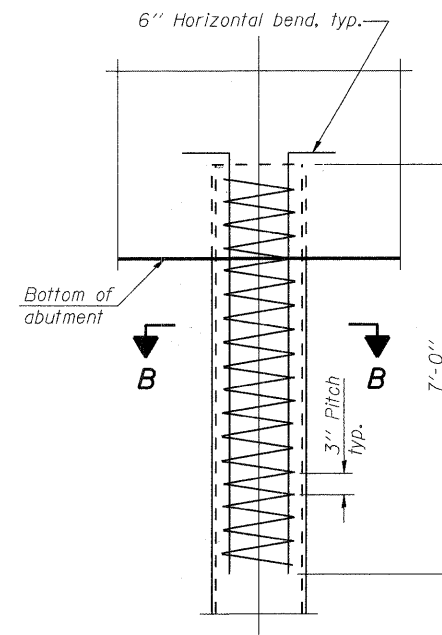
ELEVATION



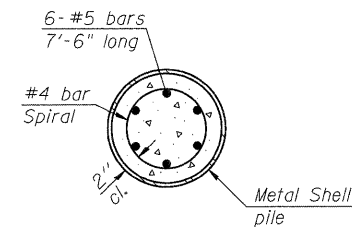
SECTION A-A

Note:
 Forms for encasement may be omitted when soil conditions permit.

CONCRETE ENCASEMENT AT PIERS



ELEVATION



SECTION B-B

METAL SHELL PILE DETAILS

THOMPSON ROAD
 OVER NIPPERSINK CREEK
 SECTION NO. 06-00005-00-BR
 McHENRY COUNTY
 STATION 206+30.48
 STRUCTURE NO. 056-6006

DATE: 11/18/09

DESIGNED	MGH/JPG
CHECKED	KMA
DRAWN	WJH
CHECKED	RGD

F-MS

10-1-08

SEC GROUP, INC.
 Illinois Professional Design Firm # 184-000108
 • Engineering • Surveying • Planning • Landscape Architecture
 420 N. Front Street, McHenry, IL 60050
 t. 815.385.1778 f. 815.385.1781
 www.secgroupinc.com
 • McHenry, IL • Yorkville, IL • New Lenox, IL • Chicago, IL

SHEET NO. S-23	F.A.U. RTE. 4081	SECTION 06-00005-00-BR	COUNTY McHENRY	TOTAL SHEETS 45	SHEET NO. 34
S-25 SHEETS			CONTRACT NO. 63409		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

Illinois Department of Transportation
Division of Highways
S.A.M. Consultants, Inc.

SOIL BORING LOG Page 1 of 2
Date: 5/22/07

ROUTE Thompson Road DESCRIPTION Bridge over Nippersink Creek LOGGED BY AJ Rahman
SECTION Wonder Lake, Illinois LOCATION McHenry County, SEC. 12, TWP. T45N, R9G, R7E
COUNTY McHenry DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 056-3005
Station

BORING NO. SB-1
Station 206+30.48
Offset 4.00ft R
Ground Surface Elev. 810.00 ft

DEPTH (ft)	SOIL DESCRIPTION	SPT (blows)	UCS (psi)	Failure Mode	Elev. (ft)
0	Surface Water Elev. _____ ft				
0	Stream Bed Elev. _____ ft				
0	Groundwater Elev. _____ ft				
0	First Encounter Upon Completion _____ ft				
0	After _____ Hrs. _____ ft				
0	Brown CLAY, with gravel, medium stiff to stiff (A-4) (continued)				
7					
8		3.7			
12					
19					
25					
28					
31					
34					
36					
38					
41					
44					
47					
50					
53					
56					
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500					

Approximately 4 inches of ASPHALT
FILL: Reddish brown SANDY CLAY LOAM, with gravel (A-2)

FILL: Gray CLAY LOAM, with gravel (A-6)

Black CLAY, soil (Buried Topsoil) (A-7)

Gray CLAY LOAM, with gravel, soft to medium stiff (A-6)

Brown CLAY, with gravel, medium stiff to stiff (A-4)

Reddish brown CLAY, with gravel, medium stiff to stiff (A-4)

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T266)
BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
S.A.M. Consultants, Inc.

SOIL BORING LOG Page 2 of 2
Date: 5/22/07

ROUTE Thompson Road DESCRIPTION Bridge over Nippersink Creek LOGGED BY AJ Rahman
SECTION Wonder Lake, Illinois LOCATION McHenry County, SEC. 12, TWP. T45N, R9G, R7E
COUNTY McHenry DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 056-3005
Station

BORING NO. SB-1
Station 206+30.48
Offset 4.00ft R
Ground Surface Elev. 810.00 ft

DEPTH (ft)	SOIL DESCRIPTION	SPT (blows)	UCS (psi)	Failure Mode	Elev. (ft)
0	Surface Water Elev. _____ ft				
0	Stream Bed Elev. _____ ft				
0	Groundwater Elev. _____ ft				
0	First Encounter Upon Completion _____ ft				
0	After _____ Hrs. _____ ft				
0	Reddish brown CLAY, with gravel, medium stiff to stiff (A-4) (continued)				
3					
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99					
100					

Reddish brown CLAY, with gravel, medium stiff to stiff (A-4) (continued)

Brown CLAY, stiff (A-4)

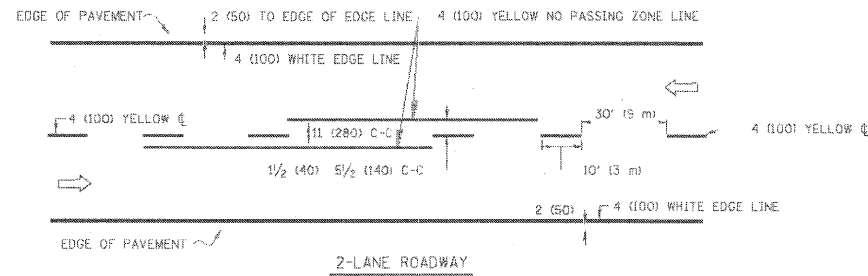
Gray SILTY LOAM, medium dense (A-5)

Gray SILTY CLAY, with gravel, medium stiff to stiff (A-5)

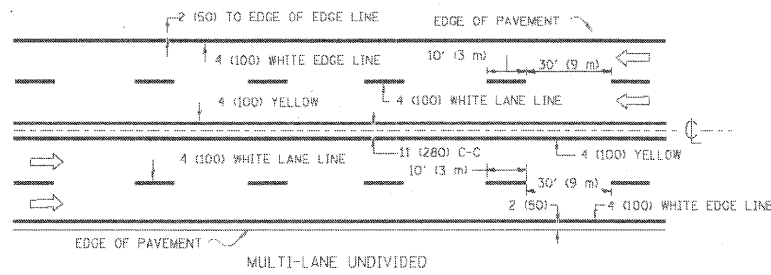
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T266)
BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
S.A.M. Consultants, Inc.

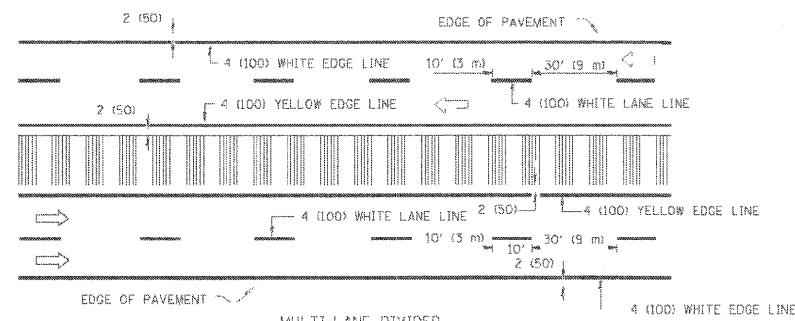
SOIL BORING LOG Page 1 of 3
Date: 5/23/0



2-LANE ROADWAY



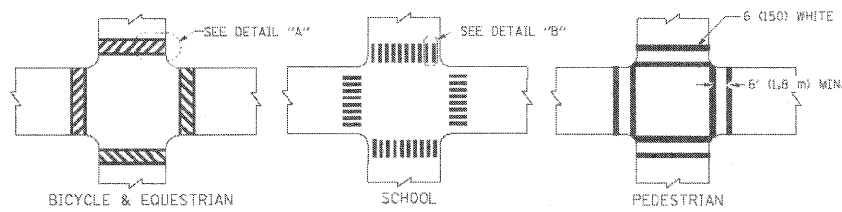
MULTI-LANE UNDIVIDED



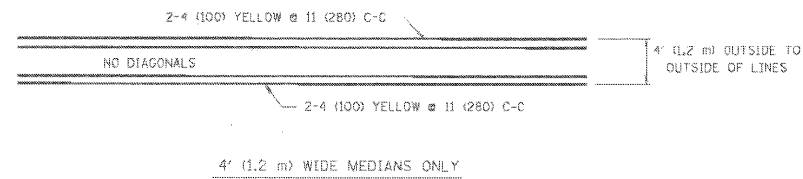
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

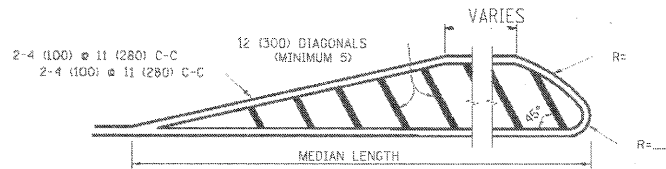
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

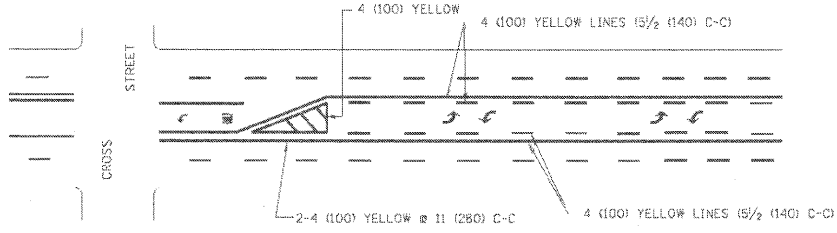


4' (1.2 m) WIDE MEDIANS ONLY



FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
 150' (45 m) C-C (OVER 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

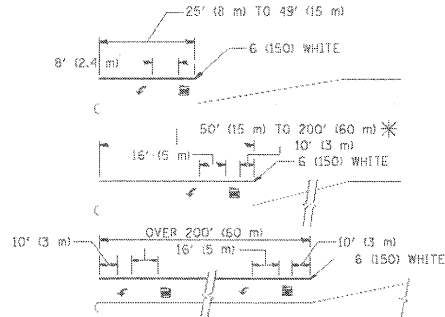


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

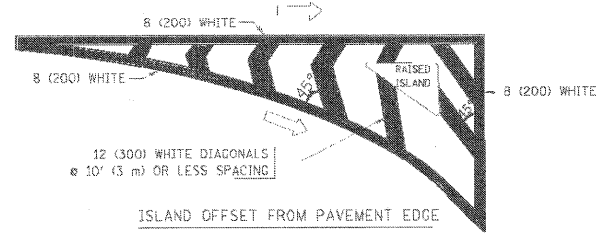
TYPICAL PAINTED MEDIAN MARKING



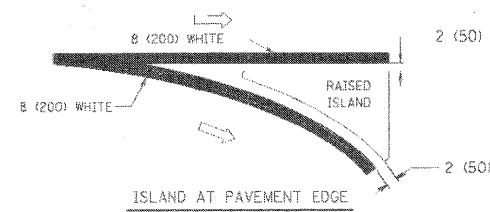
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2' (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C DWT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5 1/2' (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING.
DORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6-m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: Robert G. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 11/30/2009 01:21 PM
 FILE NAME: 060503.dwg
 PLOT DRIVER: plot.drv
 PEN TABLE: standard-trans.tbl

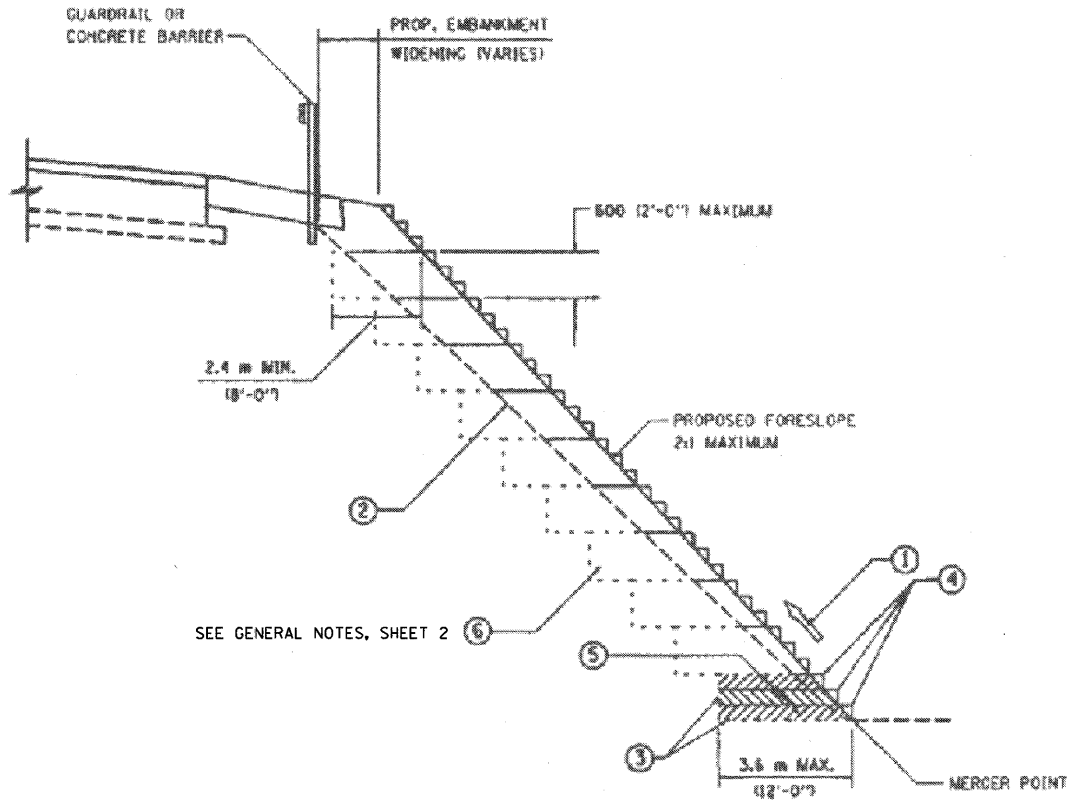


USER NAME = whood	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
	DRAWN -	REVISED - C. JUCIUS 09-09-09
	CHECKED -	REVISED -
PLOT DATE = 11/30/2009	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

DISTRICT ONE				
TYPICAL PAVEMENT MARKINGS				
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

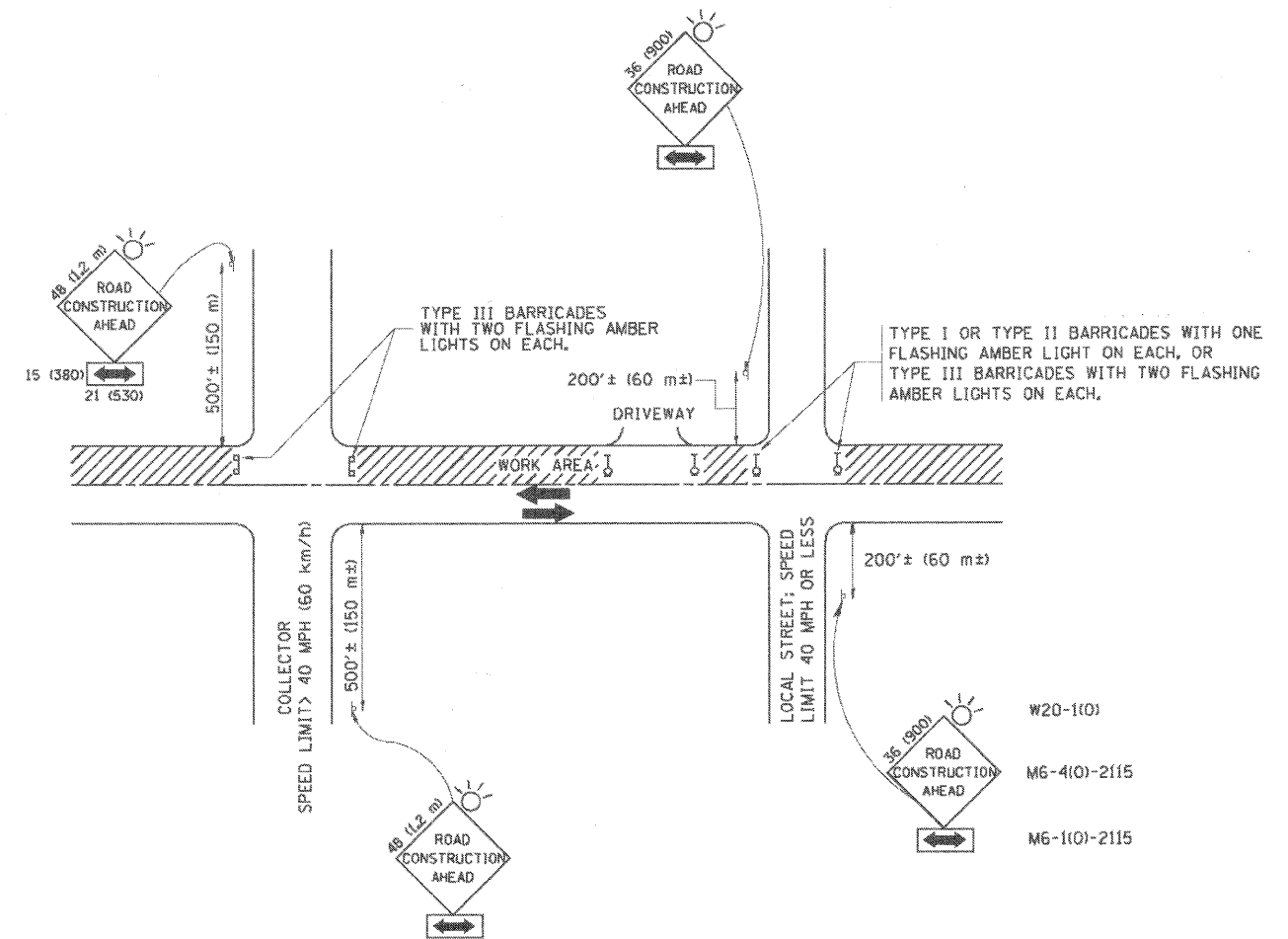
F.A.U. RTE. 4081	SECTION 06-00005-00-BR	COUNTY McHENRY	TOTAL SHEETS 45	SHEET NO. 37
TC-13		CONTRACT NO. 63409		
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				



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 200 (8-INCH) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- 6 EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE INCLUDED IN THE COST FOR "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL".
- 7 SLOPE SHALL BE BENCHING ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5'.



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 70150L, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: Robert C. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 12/15/2009 8:25:27 AM
 FILE NAME: 060563.dwg
 PLOT DRIVER: pcf.plt
 PEN TABLE: s:\standard\trns.tbl



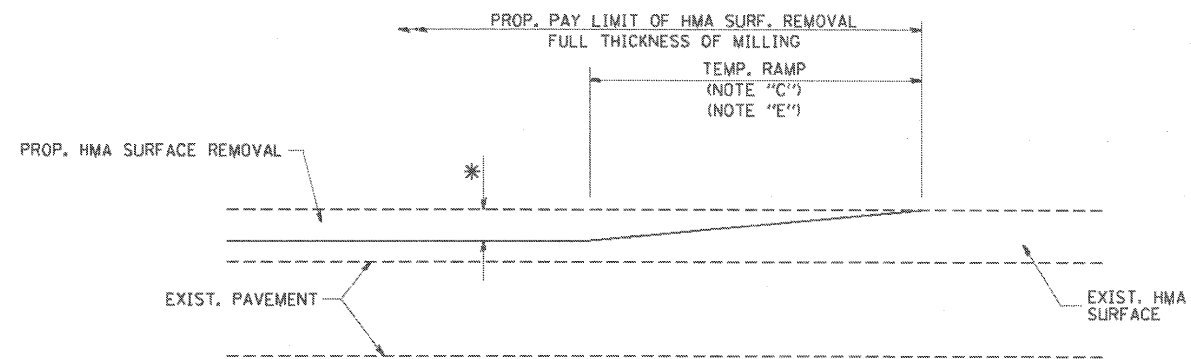
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PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 12/15/2009	CHECKED -	REVISED -
	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

BENCHING DETAIL FOR EMBANKMENT AND TRAFFIC CONTROL PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

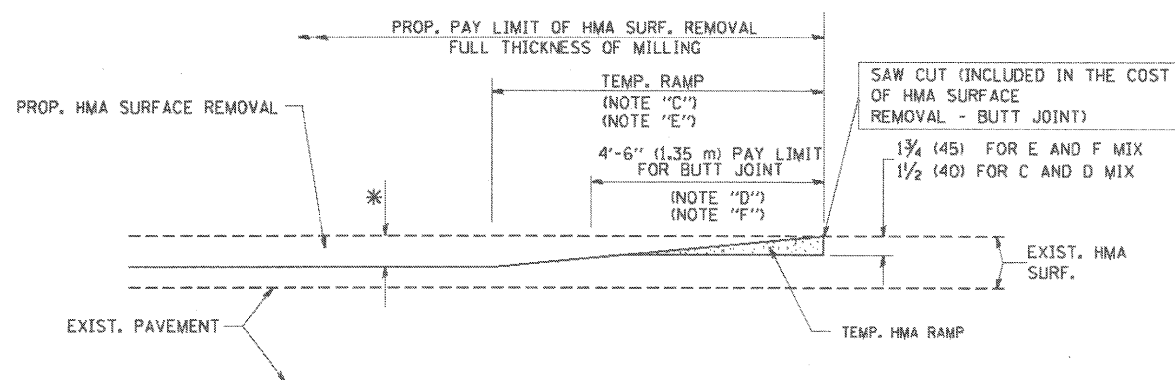
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10			CONTRACT NO. 63409	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



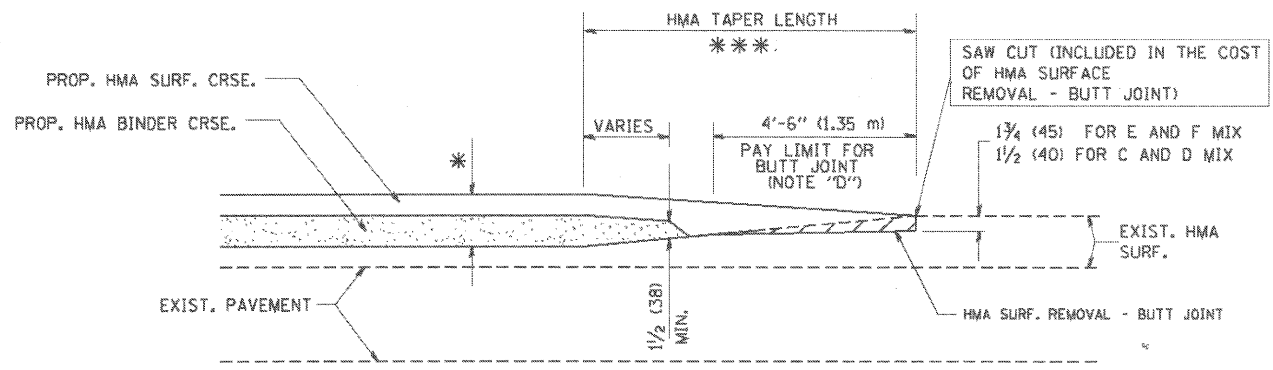
MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

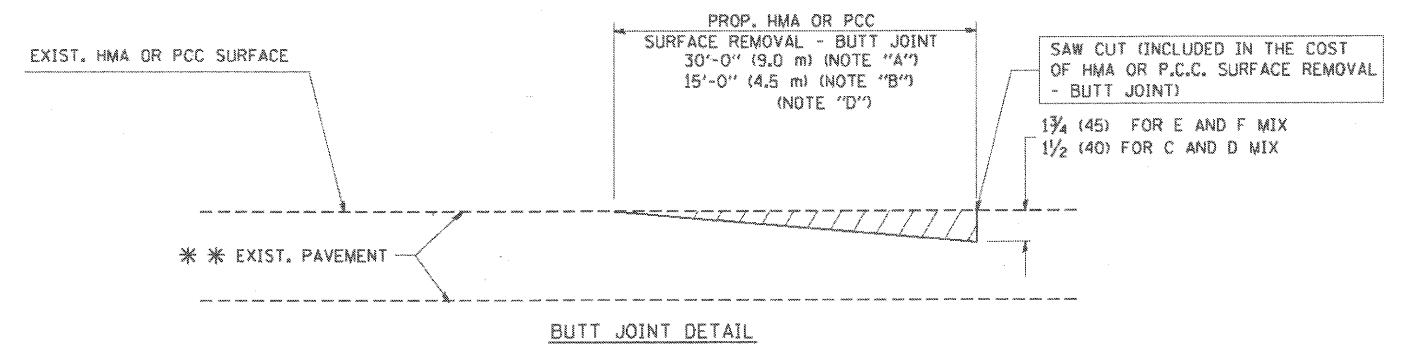


HMA CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

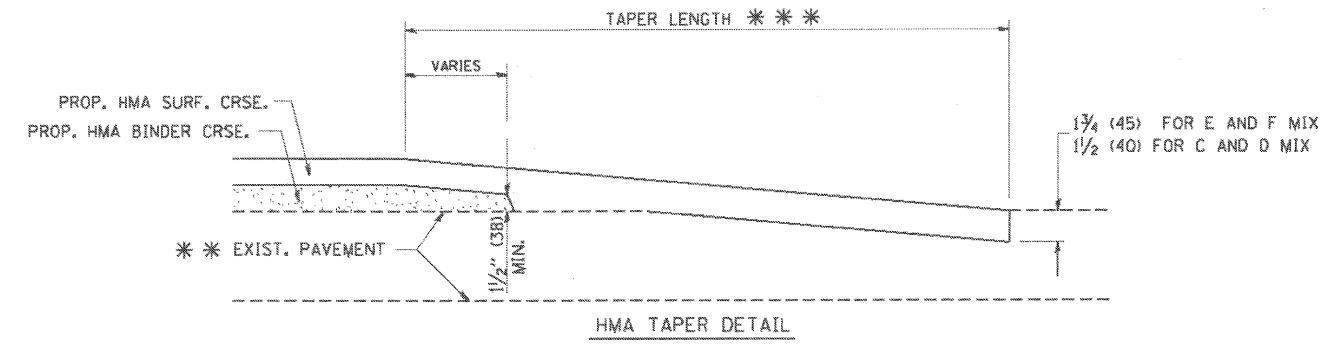
OPTION 2
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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

COMPANY NAME: SEC GROUP, INC.
PROJECT CONTACT: Robert G. Davies
CLIENT: Village of Wonder Lake
DATE PLOTTED: 11/30/2009 01:27 PM
FILE NAME: 0605c3.dwg
PLOT DRIVER: acadplot
PLOT TABLE: standard.ctb



USER NAME = whood	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
	DRAWN -	REVISED - A. ABBAS 03-21-97
PLOT SCALE =	CHECKED -	REVISED - M. GOMEZ 04-06-01
PLOT DATE = 11/30/2009	DATE - 06/18/09	REVISED - R. BORO 01-01-07

VILLAGE OF WONDER LAKE

BUTT JOINT AND HMA TAPER DETAILS

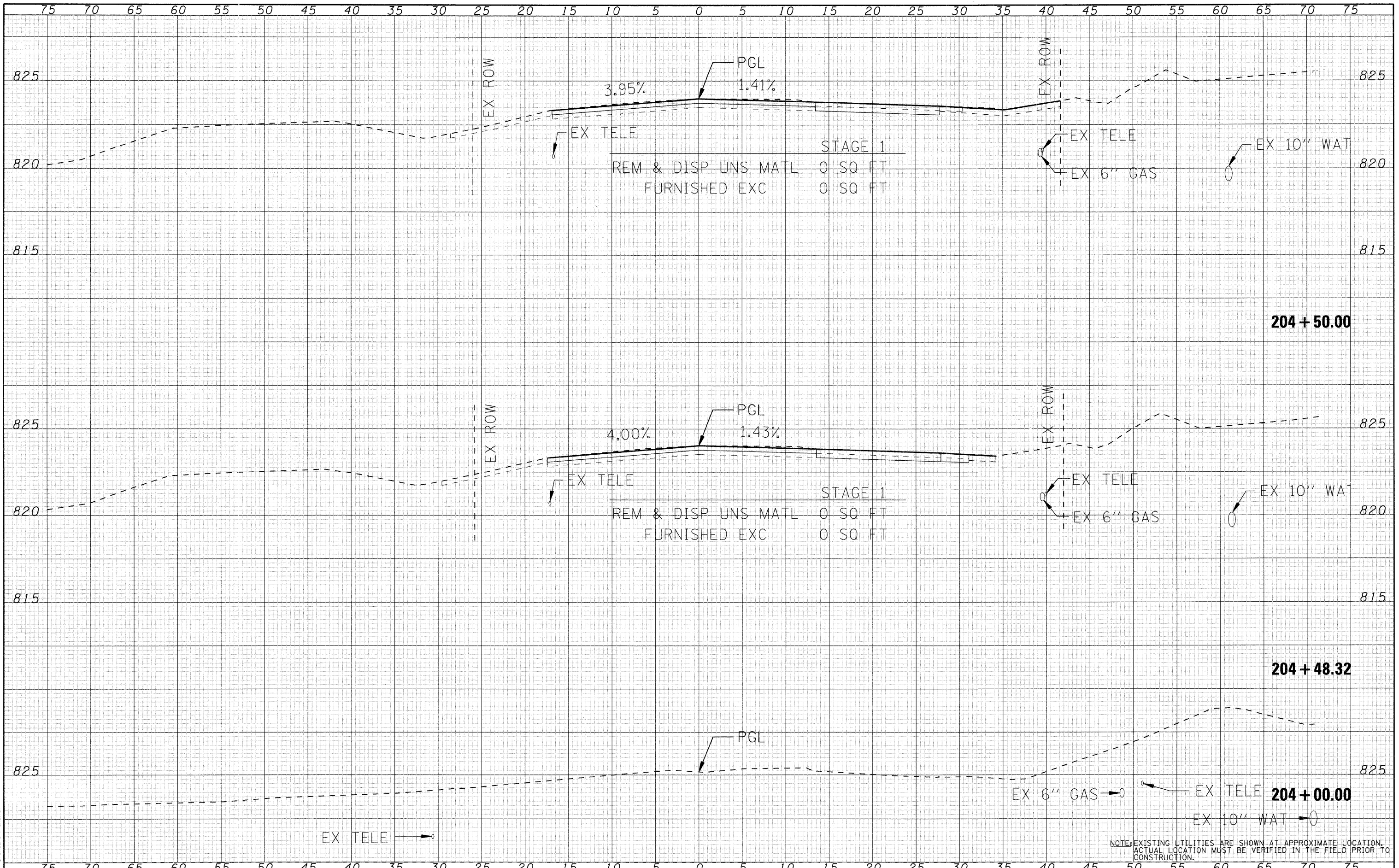
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	MCHENRY	45	39
BD400-05 BD32		CONTRACT NO. 63409		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DATE	
BY	
FINAL SURVEY	
SURVEYED	
PLOTTED	
DATE	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
DATE	
AREAS CHECKED	
NO.	

SEC GROUP, INC.
 PROJECT CONTACT: Robert C. Daplas
 DATE PLOTTED: 12/15/2009 08:32:02 AM
 FILE NAME: 080563.xsec-thom.dgn
 PLOT DRIVER: pdt1b1t
 PEN TABLE: standard-trans.tbl



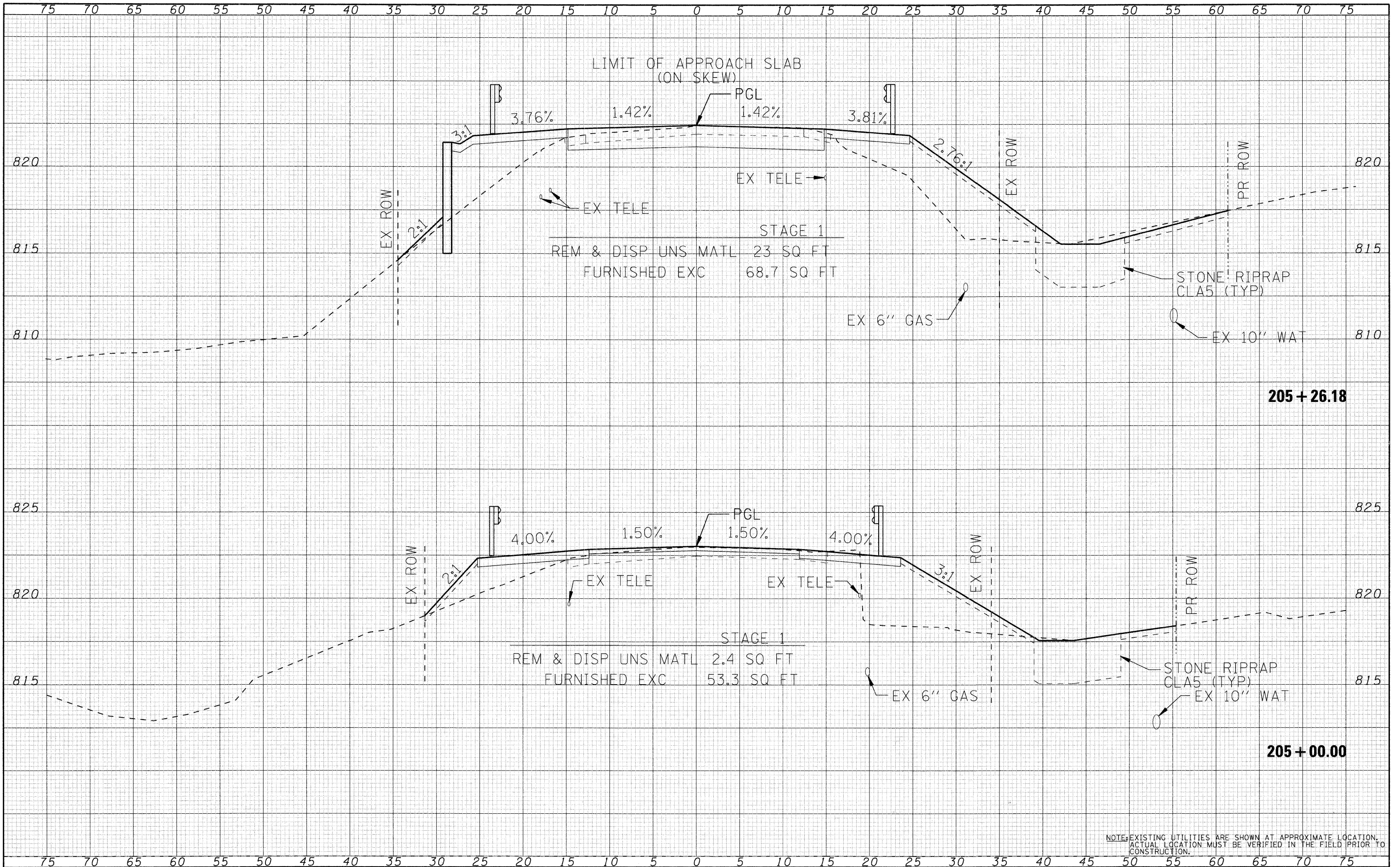
SEC Group, Inc. Engineering Surveying Planning Landscape Architecture McHenry • Yorkville • New Lenox • Chicago www.secgroupinc.com				USER NAME = whood DESIGNED - DRAWN - CHECKED - SP PLOT DATE = 12/15/2009	REVISED - REVISED - REVISED - REVISED -	VILLAGE OF WONDER LAKE	CROSS SECTIONS THOMPSON ROAD	F.A. RTE. 4081 SECTION 06-00005-00-BR COUNTY McHENRY TOTAL SHEETS 45 SHEET NO. 40 CONTRACT NO. 63409
SCALE: 1"=5' SHEET NO. 1 OF 6 SHEETS STA. 204+00.00 TO STA. 204+50.00							ILLINOIS FED. AID PROJECT	

NOTE: EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATION. ACTUAL LOCATION MUST BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.

DATE	
BY	
SURVEYED	
PLANNED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLANNED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: Robert G. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 11/20/2009 3:13:33 PM
 FILE NAME: 060561.xsec-thom.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: s:\standard-trans.tbl



NOTE: EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATION.
 ACTUAL LOCATION MUST BE VERIFIED IN THE FIELD PRIOR TO
 CONSTRUCTION.

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USER NAME = rwho	DESIGNED -	REVISED -
060561.xsec-thom.dgn	DRAWN -	REVISED -
PLOT SCALE = 1"=5'	CHECKED - SP	REVISED -
PLOT DATE = 11/30/2009	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

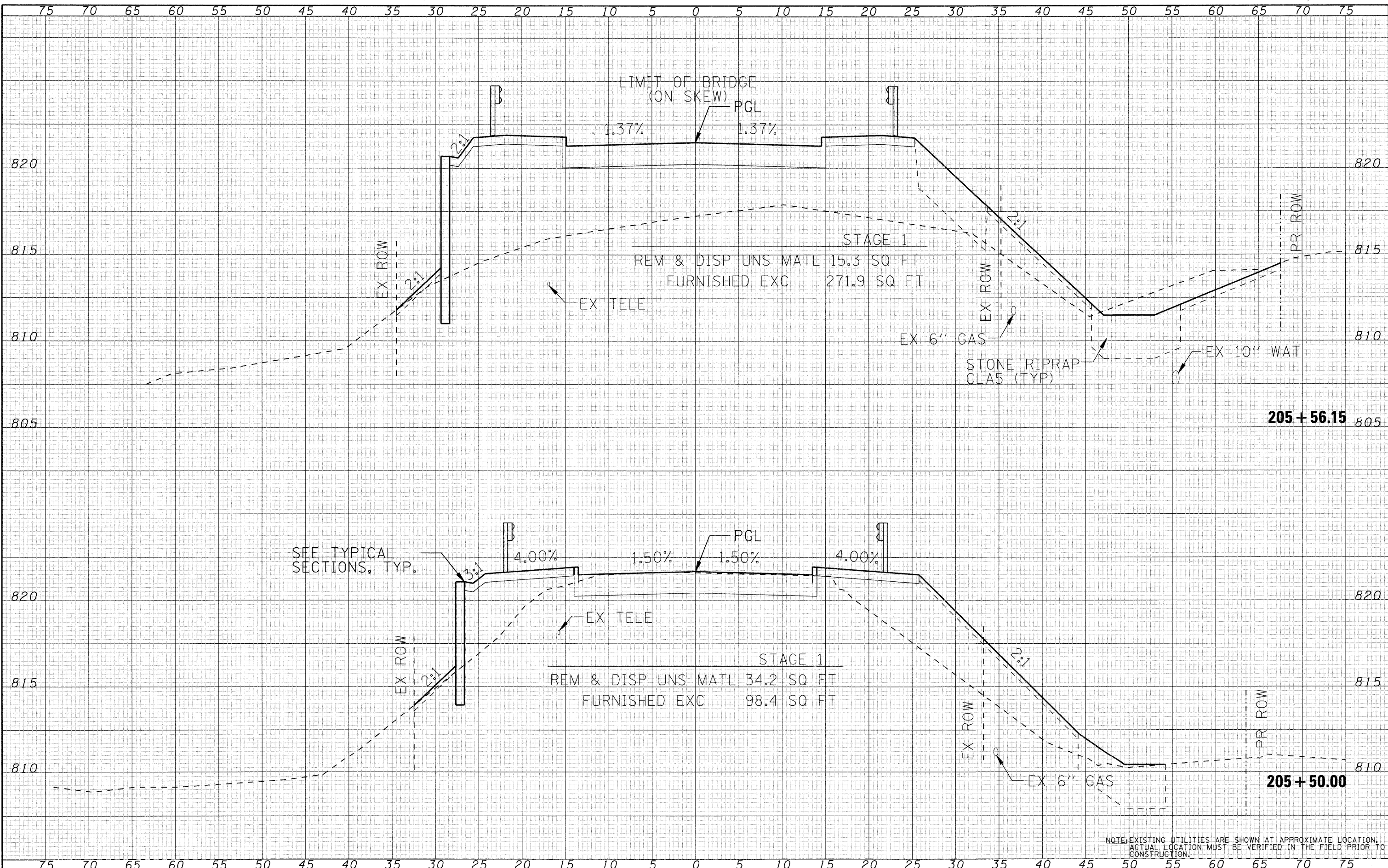
CROSS SECTIONS THOMPSON ROAD	
SCALE: 1"=5'	SHEET NO. 2 OF 6 SHEETS
STA. 205+00.00 TO STA. 205+26.18	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	McHENRY	45	41
CONTRACT NO. 63409				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
NOTE BOOK	
NO.	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	
AREAS CHECKED	

COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: Robert C. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 11/30/2009 11:25 PM
 FILE NAME: 060563.xsec-thom.dgn
 PLOT DRIVER: pdf.plt
 PLOT TABLE: standard-trans.tbl

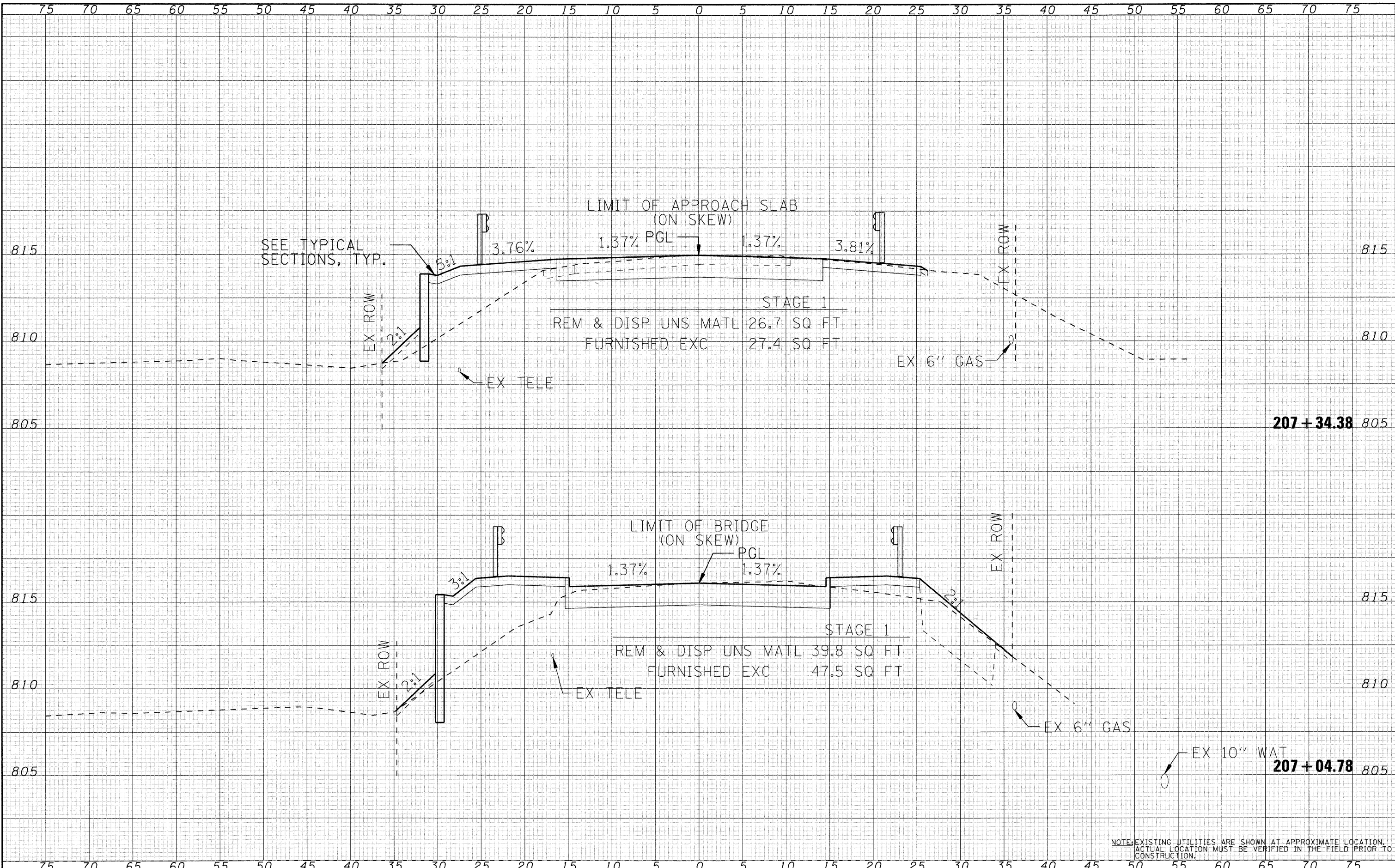


NOTE: EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATION. ACTUAL LOCATION MUST BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.

DATE	
BY	
SURVEYED	
PLANS	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLANS	
TEMPLATE	
AREAS	
CHECKED	
NO.	

SEC GROUP, INC.
 PROJECT CONTACT: Robert G. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 11/20/2009 3:13:37 PM
 FILE NAME: 060561_xsec-thom.dgn
 PLOT DRIVER: pdfr.plt
 PLOT TABLE: c:\randy-d-truss.tbl



NOTE: EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATION. ACTUAL LOCATION MUST BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.

USER NAME = whood DESIGNED - DRAWN - CHECKED - PLOT DATE = 11/30/2009	REVISED - REVISED - REVISED - REVISED -	VILLAGE OF WONDER LAKE	CROSS SECTIONS THOMPSON ROAD	F.A. RTE. 4081 SECTION 06-00005-00-BR COUNTY McHENRY CONTRACT NO. 63409	TOTAL SHEETS 45 SHEET NO. 43
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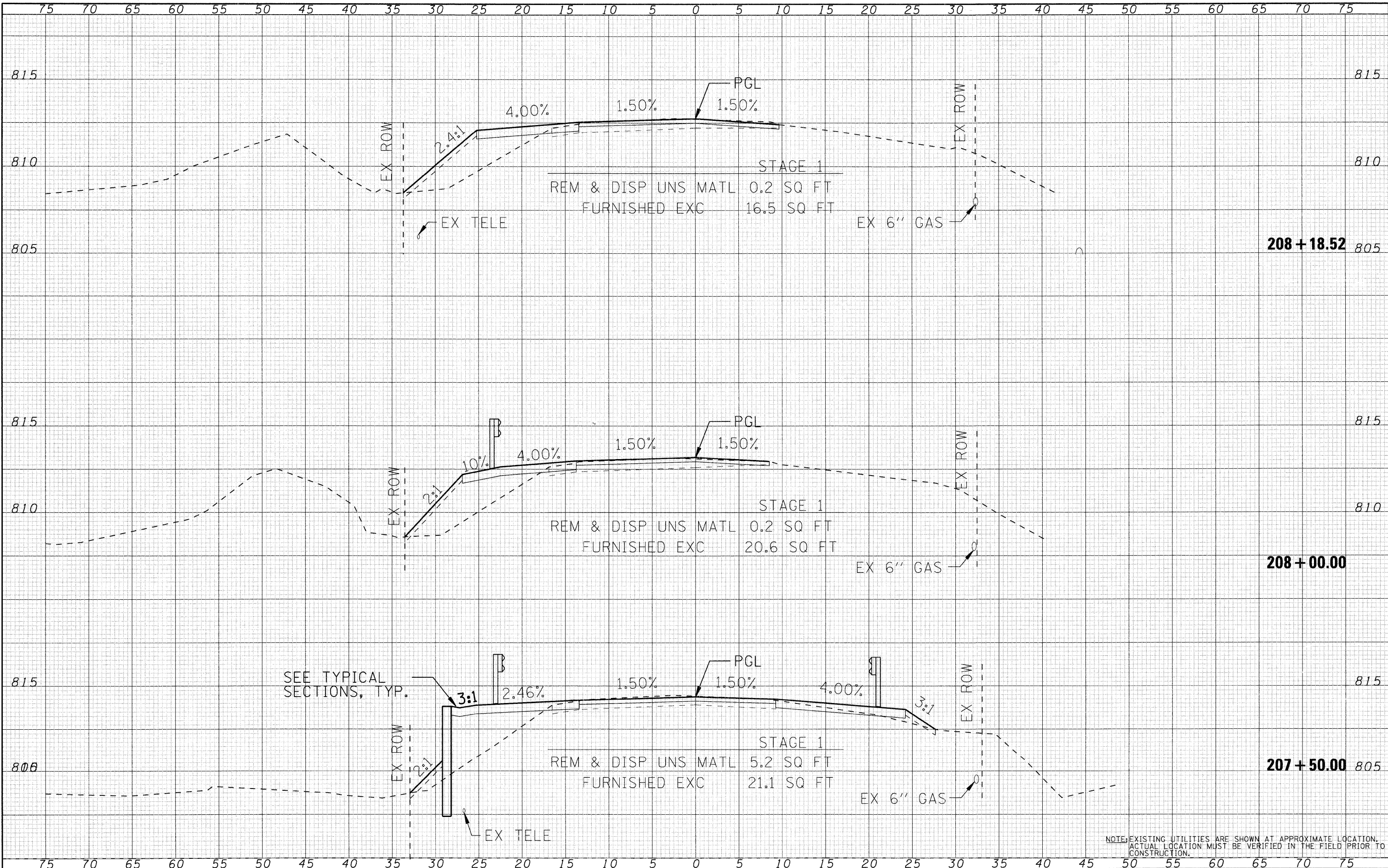
SCALE: 1"=5' SHEET NO. 4 OF 6 SHEETS STA. 207+04.78 TO STA. 207+34.38

ILLINOIS FED. AID PROJECT

DATE	
BY	
SURVEYED	
PLANNED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLANNED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: Robert G. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 11/30/2009 1:40 PM
 FILE NAME: 000563.xsec-thom.dgn
 PLOT DRIVER: pd4.plt
 STANDARD: Trans-1b1



NOTE: EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATION. ACTUAL LOCATION MUST BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.

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 1000 Professional Design Drive # 104-00000
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USER NAME = wwood	DESIGNED -	REVISED -
000563.xsec-thom.dgn	DRAWN -	REVISED -
PLOT SCALE = 1"=5'	CHECKED - SP	REVISED -
PLOT DATE = 11/30/2009	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

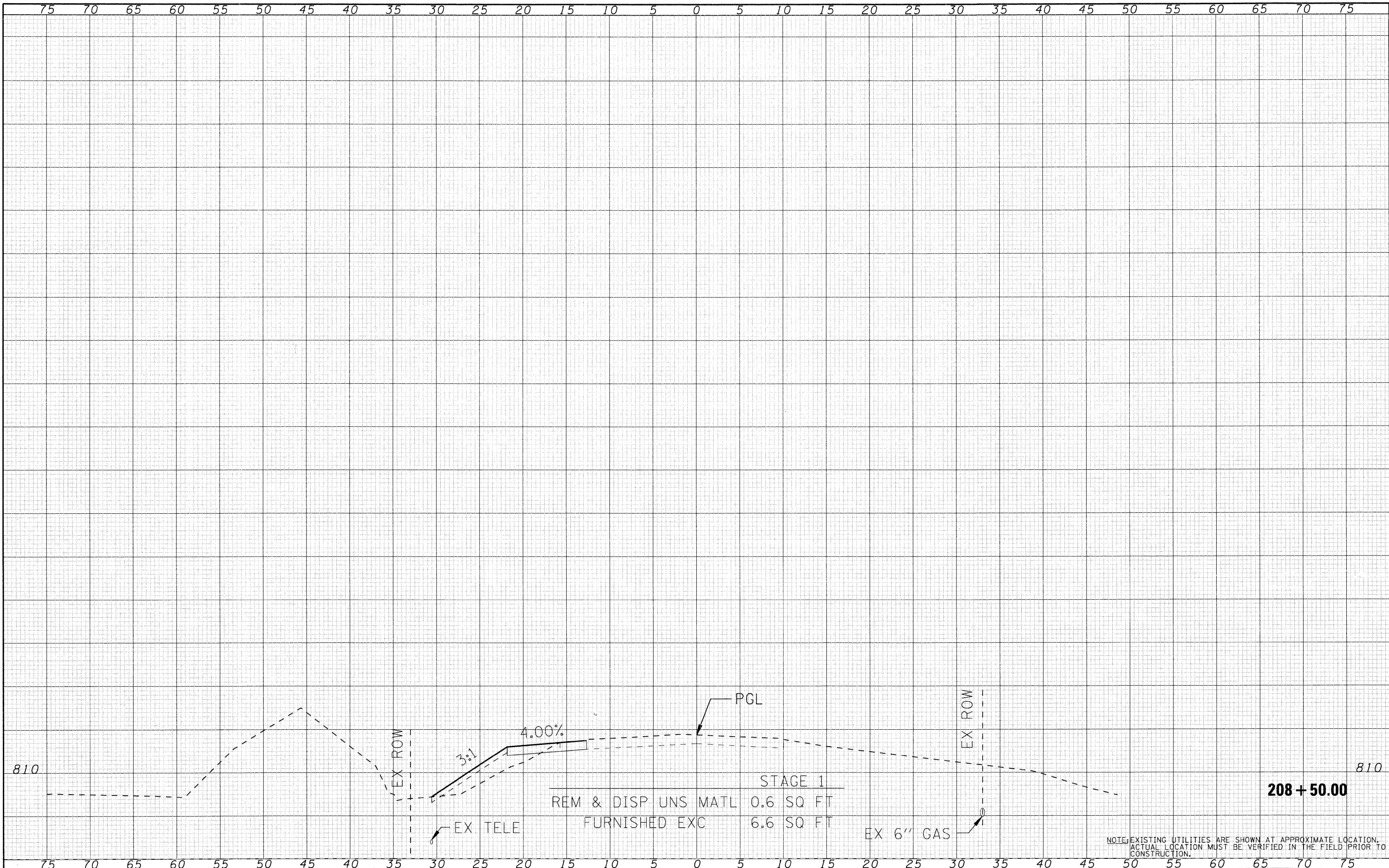
CROSS SECTIONS THOMPSON ROAD
 SCALE: 1"=5' SHEET NO. 5 OF 6 SHEETS STA. 207+50.00 TO STA. 208+18.52

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	McHENRY	45	44
CONTRACT NO. 63409			ILLINOIS FED. AID PROJECT	

FINAL SURVEY	DATE
NOTE BOOK	BY
NO.	
SURVEYED	
TEMPLATE	
AREAS	
CHECKED	

ORIGINAL SURVEY	DATE
NOTE BOOK	BY
NO.	
SURVEYED	
TEMPLATE	
AREAS	
CHECKED	

COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: Robert G. Davies
 CLIENT: Village of Wonder Lake
 DATE PLOTTED: 11/30/2009 3:42 PM
 FILE NAME: 060563.xsec-thom.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: standard-frans.tbl



STAGE 1
 REM & DISP UNS MATL 0.6 SQ FT
 FURNISHED EXC 6.6 SQ FT

NOTE: EXISTING UTILITIES ARE SHOWN AT APPROXIMATE LOCATION.
 ACTUAL LOCATION MUST BE VERIFIED IN THE FIELD PRIOR TO
 CONSTRUCTION.

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USER NAME = whood	DESIGNED -	REVISED -
060563.xsec-thom.dgn	DRAWN -	REVISED -
PLOT SCALE = 1"=5'	CHECKED -	REVISED -
PLOT DATE = 11/30/2009	DATE - 11/18/09	REVISED -

VILLAGE OF WONDER LAKE

**CROSS SECTIONS
 THOMPSON ROAD**
 SCALE: 1"=5' SHEET NO. 6 OF 6 SHEETS STA. 208+50.00 TO STA. 208+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4081	06-00005-00-BR	McHENRY	45	45
CONTRACT NO. 63409				
ILLINOIS FED. AID PROJECT				