2/23/2015

RE: Unmet Need Threshold Documentation

Enclosed is the Meridian Road Engineering Analysis Summary Report prepared by the Williamson County Highway Department and an Engineering Report and Estimates from John H. Crawford and Associates for elevating Meridian Road. The location of this project relative to the target area is the northeastern most corner of census tract 17077010900. Meridian road runs north and south along the eastern boundary of the census tract.

The estimated cost of $1,564,200 to construct Meridian Road in a resilient way well exceeds the cost local jurisdictions could provide. Many organizations and local elected officials have tried repeatedly to obtain funding for this project. Due to the fact that a significant source of funding could not be located all local funds available were spent to repair the road to a near pre-condition. The component of resiliency (road elevation) shown in this engineering report could not be funded so the road is still at risk of flooding.

The funding shortfall for this project is 100% of the project cost or $1,564,200. These funds would have to come entirely from the HUD NDRC as all local resources were spent repairing the road to near pre-flood conditions.

Respectfully,

Cary Minnis

3000 West DeYoung Street · Suite 800B-3 · Marion, IL 62959 · Phone: 618.997.9351 · Fax: 618.997.9354 · www.greateregypt.org

Meridian Road
Engineering Analysis Summary Report

Prepared by
Williamson County Highway Department

Greg Smothers – County Engineer

Meridian Road
Engineering Analysis Summary Report

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2. Exhibits

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Meridian Road
Engineering Analysis Summary Report

a) Location:

This project is located in northwest Williamson County just west of the Village of Cambria. Meridian Road is on the County line. Williamson County has jurisdiction and maintenance for this roadway by agreement with Jackson County.

b) Road Impacted:

The roadway impacted is Meridian Road from Vermont Road north one mile to its end point at the entrance to the Walker's Bluff Development.

c) Description of the Problem:

This roadway continues to be severely and adversely impacted from backwater flooding from the Big Muddy River that impacts ingress and egress from the Walker's Bluff Development and is costing taxpayer's thousands of dollars in continued maintenance and repairs to provide safe access to this facility.

d) Previous Adverse Impacts:

Impacts to this roadway began back in 2008 as the development was opening. Significant rainfall events would back water up onto the roadway and limit vehicle access into the area. It was so serious in 2008 during a spring rainfall event that four wheel drive vehicles were used to get patrons out of the facility because the roadway was completely flooded and impassable. During this rainfall event, the Williamson County Highway Department had to install two 8' corrugated metal pipes and haul thousands of tons of rock to build the highway up enough to allow access to the development throughout the event. These repairs alone cost in excess of $75,000 to mitigate damages from the flooding. In 2011, again the roadway was flooded with 8'-10' of water on the road from extended spring rainfall. The roadway was under water for in excess of a month as the river elevation was such it did not recede to allow vehicle access to the facility at

Walker's Bluff. Following the event, the roadway was severely potholed and scoured requiring weeks of repairs to the surface utilizing bituminous aggregate mixture and shoulder rock. The repairs made were estimated in the $30,000 range.

e) Mitigation Repairs to Date:

In 2008, two 8' corrugated CMP's and thousands of tons of rock were installed to raise the roadway up to allow traffic access in the flooding event that year. In 2011, significant surface repairs were necessary to restore the roadway to a condition suitable for traffic. In 2013 and 2014, small contracts were award to improve the roadway ride ability with hot mix asphalt.

f) Unresolved Issues:

The roadway is still significantly below the floodplain elevation and will be subject to continued flooding of the roadway when the backwaters on the Big Muddy River rise impacting the roadway. This cripples any operations at the Walker's Bluff Development as vehicle access is not possible.

g) Repairs to Eliminate Hazards:

The roadway needs to be elevated above the relevant floodplain elevation to be able to avoid impacts to motorists utilizing this road for access into the Walker's Bluff Development.

h) Costs Estimates:

A preliminary set of plans has been assembled to address these unmet needs. The estimate of cost to complete this project along with the necessary engineering costs is $1,564,200.

i) Summary:

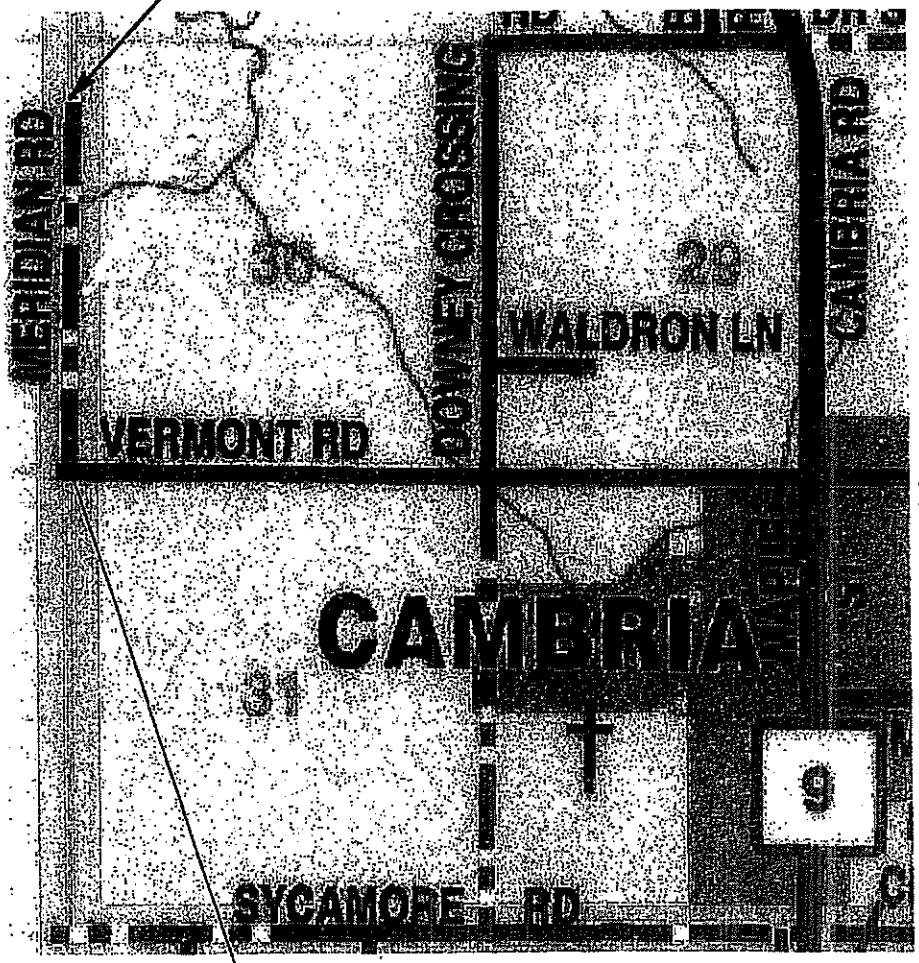
The roadway must be upgraded to raise the roadway elevation above the

floodplain elevation to mitigate against future impacts to vehicular traffic accessing the Walker's Bluff development.

MERIDIAN RD

LOCATION MAP

T.8S., R.1E., 3rd PM



BEGIN TR 169
STATION 0+00

Shipyard

FEMA Field Review
Repair Notes

Meridian Road	BAM & oil/chip	
CLEAN	~~Replace~~ 18" CMP & add rip rap	?
CLEAN	~~Replace~~ 24" CMP	?

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS
LAND SURVEYORS

February 20, 2015

Carrie Minnis
Greater Egypt Regional Planning & Development Commission
3000 West DeYoung Street, Suite 800B-3
Marion, IL 62959

Re: Meridian Road

Dear Carrie:

I am very familiar with Meridian Road and the Walker's Bluff Winery. During completion of a land survey and topographic survey for the winery property, we observed that parts of the area were within the flood plain. After our initial observation was based on up stream and down stream flood elevations we estimated the flood elevation at 380.0.

When the winery project construction started we were asked to complete plans for up grading Meridian Road, the only road access to the property. The preliminary plans showed that parts of Meridian Road were over topped by 6 to 15 feet. During the flood of 2011 we actually observed high water elevation of 383.1.

The 2012 cost estimate I gave you had a contingency added into it for the higher elevation. That cost estimate is now about 3 years old and should be increased by 10% for inflation.

The 2011 flood nesitated the closing of the winery site for six weeks, causing a financial strain on the winery and its employees.

The road was damaged as the water rose over it and fell away from it washing away surface and base. The county did make repairs to the road to make it in a serviceable condition, but the next flood caused damage to it again.

No local governmental funds are available for improvements for the road as the counties also had other flood damaged roads that had to be repaired.

I have enclosed pictures showing flooded parts of the road.

If you have any questions, please do not hesitate to contact me.

Yours very truly,

John H. Crawford, P.E., L.S.

JHC/nfw

x 201 S. Division
Carterville, IL 62918
Phone (618) 985-6370
Fax (618) 985-4692

209 S. Macoupin
Gillespie, IL 62033
Phone (217) 839-2163
Fax (217) 839-4833

ROAD
CLOSED
04.26.2011 13:11

04.27.2011 07:20

04.29.2011 07:00

04.29.2011 16:56

05.05.2011 16:15

05.07.2011 06:47

05.10.2011 16:56

EXHIBIT 4

MERIDIAN ROAD **DATED: 11-Aug-09**
WILLIAMSON & JACKSON COUNTIES **UPDATED: 17-Apr-12**

Cost Estimate

No.	Item	Unit	Unit Price	Amount	Subtotal
201	Tree Removal (Over 15")	Inch	$30.00	325.0	$9,750.00
201	Tree Removal Acres	Acres	$2,875.00	1.0	$2,875.00
202	Earth Excavation	Cubic Yard	$4.75	1,625	$7,719.00
204	Borrow Excavation	Cubic Yard	$5.75	47,070	$270,653.00
208	Trench Backfill	Cubic Yard	$34.50	480	$16,560.00
250	Seeding Class 2	Acre	$2,875.00	3.06	$8,798.00
280	Temporary Ditch Checks	Each	$57.50	40	$2,300.00
280	Perimeter Erosion Barrier	Foot	$2.40	6,000	$14,400.00
280	Inlet & Pipe Protection	Each	$287.50	6	$1,725.00
281	Stone Dumped Riprap, Class A4	Square Yard	$32.20	886.2	$28,536.00
351	Aggregate Base Course, Type A	Ton	$22.00	4,030	$88,660.00
406	Bituminous Materials (Prime Coat)	Gallon	$2.30	3,300	$7,590.00
406	Aggregate (Prime Coat)	Gallon	$2.30	20	$46.00
406	Hot-Mix Asphalt Binder Course	Ton	$95.00	1,010	$95,950.00
406	Hot-Mix Asphalt Surface Course	Ton	$95.00	1,010	$95,950.00
501	Removal of Existing Structure	Each	$1,150.00	1	$1,150.00
501	Pipe Culvert Removal	Foot	$5.75	90	$518.00
503	Concrete Encasement	Cubic Yard	$575.00	20	$11,615.00
503	Concrete Structures	Cubic Yard	$1,035.00	37	$37,778.00
504	PP Concrete Deck Beams	Square Foot	$57.50	600	$34,500.00
508	Reinforcement Bars	Pound	$2.30	3,000	$6,900.00
509	Steel Railing Type S-1	Foot	$115.00	200	$23,000.00
512	Driving Piles	Foot	$5.75	480	$2,760.00
512	Furnishing Steel Piles HP 10x42	Foot	$48.30	480	$23,184.00
515	Name Plates	Each	$460.00	1	$460.00
540	Box Culvert End Sections	Each	$5,920.00	2	$11,840.00
540	Precast Concrete Box Culverts, 12x4	Foot	$975.00	100	$97,500.00
542	Pipe Culvert Type 2 15" RCCP	Foot	$33.00	35	$1,155.00
542	Pipe Culvert Type 2 30" RCCP	Foot	$79.00	85	$6,715.00
542	Pipe Culvert Type I 15" RCCP	Foot	$33.00	135	$4,455.00
542	PR Concrete End Section, 15"	Each	$725.00	8	$5,800.00
542	PR Concrete End Section, 30"	Each	$1,350.00	2	$2,700.00
x107	Mail Box Relocation	Each	$85.00	3	$255.00
x561	Water Main Adjustment	Lump Sum	$865.00	100%	$865.00
	Temporary Access	Lump Sum	$40,000.00	100%	$40,000.00
x701	Traffic Control	Lump Sum	$1,725.00	100%	$1,725.00
Total Estimated Construction Cost					$966,387.00
Contingency				20%	$193,277.00
Total Development Cost					**$1,159,664.00**
Design					$118,370.00
Resident Engineer			$1,600.00	12	$19,200.00
Construction Engineering				8%	$92,773.00
R.O.W. Costs					$15,000.00
Utility Adjustment					$15,000.00
Miscellaneous					$1,993.00
Total					**$1,422,000.00**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED MERIDIAN ROAD IMPROVEMENTS WILLIAMSON COUNTY, ILLINOIS

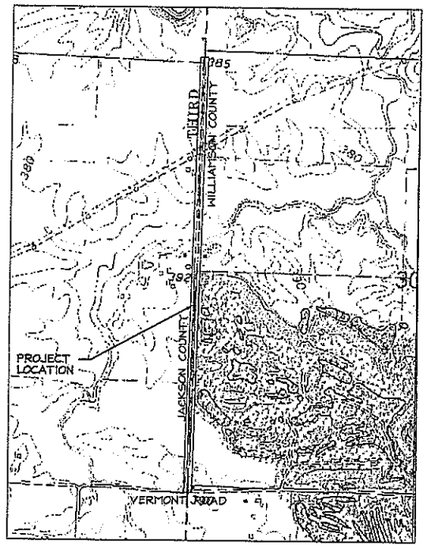
85% PLANS

MERIDIAN ROAD FROM VERMONT ROAD TO END

SCALE IN FEET

PLAN	50'	0	25'	50'
PROFILE HORIZ.	50'	0	25'	50'
PROFILE VERT.	5'	0	2.5'	5'
X-SECTIONS HORIZ.	10'	0	5'	10'
X-SECTIONS VERT.	5'	0	2.5'	5'

LENGTH OF PROJECT: 5,380.3 FEET (1.02 MILES)



PROJECT LOCATION MAP
NORTH

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 2

DESIGN ENGINEER:

STATE OF ILLINOIS
JOHN H. CRAWFORD
CARTERVILLE, IL
NO. 29206
PROFESSIONAL ENGINEER

John H. Crawford
Illinois Professional Engineer No. 29206
Carterville, Illinois

EXP. NOV. 30, 2009

85% PLANS

JULIE 1-800-892-0123
BLAIRSVILLE TOWNSHIP

ADT: 50 (2009)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED _____, 2009

LOCAL AGENCY REPRESENTATIVE

APPROVED _____, 2009

DISTRICT ENGINEER OF LOCAL ROADS & STREETS

APPROVED _____, 2009

DISTRICT ENGINEER

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/17/09
CHECKED	JHC	11/04/09

COVER SHEET
MERIDIAN ROAD
WILLIAMSON COUNTY ILLINOIS

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-6370 FAX (618) 985-4692
PROFESSIONAL DESIGN FIRM # 184-002685

SHEET NO.	
1	
ISSUE	DATE
A	11/04/09

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No.	Item	Amount	Unit
201	Tree Removal (Over 15")	325	Inch
201	Tree Removal Acres	1	Acres
202	Earth Excavation	1,625	Cubic Yard
204	Borrow Excavation	47,070	Cubic Yard
208	Trench Backfill	480	Cubic Yard
250	Seeding Class 2	3.06	Acre
280	Temporary Ditch Checks	40	Each
280	Perimeter Erosion Barrier	6,000	Foot
280	Inlet & Pipe Protection	6	Each
281	Stone Dumped Riprap, Class A4	886.2	Square Yard
351	Aggregate Base Course, Type A	4,030	Ton
501	Removal of Existing Structure	1	Each
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503	Concrete Structures	37	Cubic Yard
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509	Steel Railing Type S-1	200	Foot
512	Driving Piles	480	Foot
512	Furnishing Steel Piles HP 10x42	480	Foot
515	Name Plates	1	Each
540	Box Culvert End Sections	2	Each
540	Precast Concrete Box Culverts, 12x4	100	Foot
542	Pipe Culvert Type 2 15" RCCP	35	Foot
542	Pipe Culvert Type 2 30" RCCP	85	Foot
542	Pipe Culvert Type 1 15" RCCP	135	Foot
542	PR Concrete End Section, 15"	8	Each
542	PR Concrete End Section, 30"	2	Each
x107	Mail Box Relocation	3	Each
x561	Water Main Adjustment	1	Lump Sum
x701	Traffic Control	100%	Lump Sum

STANDARDS

LATEST REVISION

280001-02	TEMPORARY EROSION CONTROL
424001-02	SIDEWALK RAMPS ACCESSIBLE TO THE DISABLED
542301	PRECAST REINFORCED CONCRETE FLARED END SECTION
542306	PRECAST REINFORCED CONCRETE ELLIPTICAL FLARED END SECTION
602301	INLET, TYPE A
602306	INLET, TYPE B
602401	TYPE A MANHOLE
604001-01	FRAME AND LIDS, TYPE 1
604036	GRATE TYPE 8
606001-01	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701001	OFF-RD OPERATION 2L, 2W 4.5M (15') MIN. AWAY FOR SPEEDS > 45 MPH
701006-01	OFF-RD OPERATION 2L, 2W 4.5M (15') MIN. TO PAVEMENT EDGE FOR SPEEDS > 45 MPH
701011	OFF-RD MOVING OPERATIONS 2L, 2W DAY ONLY FOR SPEEDS > 45 MPH
701201-01	LANE CLOSURE 2L, 2W DAY ONLY ON-RD TO 600 mm (24") OFF-RD FOR SPEEDS > 45 MPH
701301-01	LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS
701306	LANE CLOSURE 2L, 2W SLOW MOVING OPERATIONS-DAY ONLY FOR SPEEDS > 45 MPH
701326-01	LANE CLOSURE 2L, 2W PAVEMENT WIDENING FOR SPEEDS > 45 MPH
701501-02	URBAN LANE CLOSURE 2L, 2W UNDIVIDED
702001-02	TRAFFIC CONTROL DEVICES
720001	SIGN PANEL MOUNTING DETAILS
720006	SIGN PANEL ERECTION DETAILS
720011	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
729001	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS AND MARKERS)
780001-01	TYPICAL PAVEMENT MARKINGS
866001	ELECTRICAL SERVICE INSTALLATION DETAILS
878001	CONCRETE FOUNDATION DETAILS
880001	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

BENCH MARKS

INDEX OF SHEETS

1. COVER SHEET
2. GENERAL NOTES, SECTIONS & QUANTITIES
3. DETAILS
4.-7. PLAN & PROFILES
8.-22. CROSS SECTIONS
23.-24. R.O.W
25.-26. EROSION CONTROL

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/17/09
CHECKED	JHC	11/04/09

NOTES, SECTIONS & QUANTITIES
MERIDIAN ROAD
WILLIAMSON COUNTY ILLINOIS

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-8370 FAX (618) 985-4592
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.	
2	
ISSUE	DATE
A	11/04/09

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NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

DESIGNED		
DRAWN	JHC	07/17/09
CHECKED	JHC	11/04/09

DETAILS
MERIDIAN ROAD
WILLIAMSON COUNTY ILLINOIS

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
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PHONE (618) 985-6370 FAX (618) 985-4692
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.
3

ISSUE	DATE
A	11/04/09

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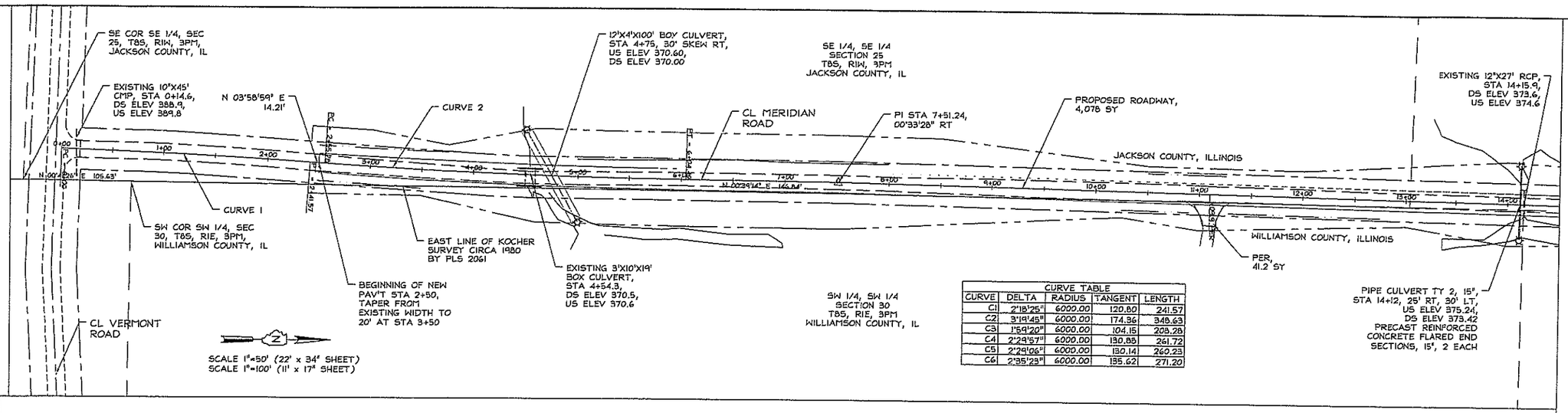
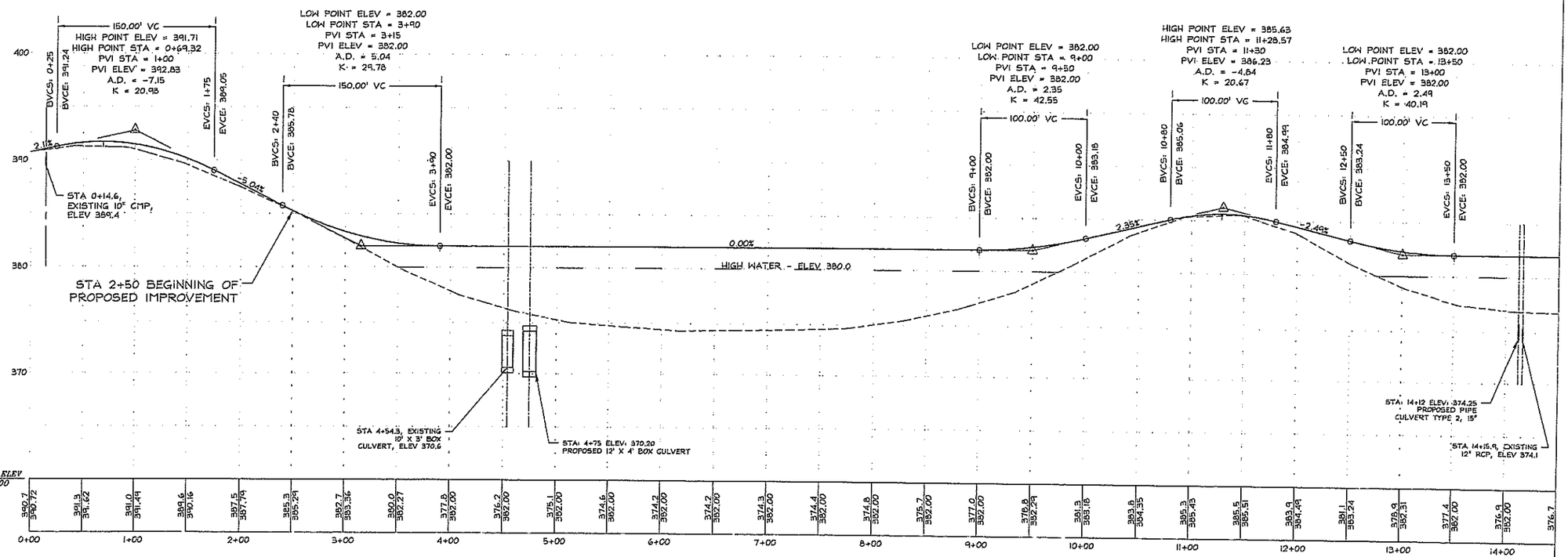


CURVE TABLE				
CURVE	DELTA	RADIUS	TANGENT	LENGTH
C1	2°18'25"	6000.00	120.80	241.57
C2	3°19'45"	6000.00	174.36	348.63
C3	1°59'20"	6000.00	104.15	208.28
C4	2°29'57"	6000.00	130.85	261.72
C5	2°29'06"	6000.00	130.14	260.23
C6	2°35'23"	6000.00	135.62	271.20



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	BY	DATE
DESIGNED		
DRAWN	JHC	07/17/09
CHECKED	JHC	11/04/09

PLAN & PROFILE STA 0+00 TO 15+00
MERIDIAN ROAD
WILLIAMSON COUNTY ILLINOIS

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
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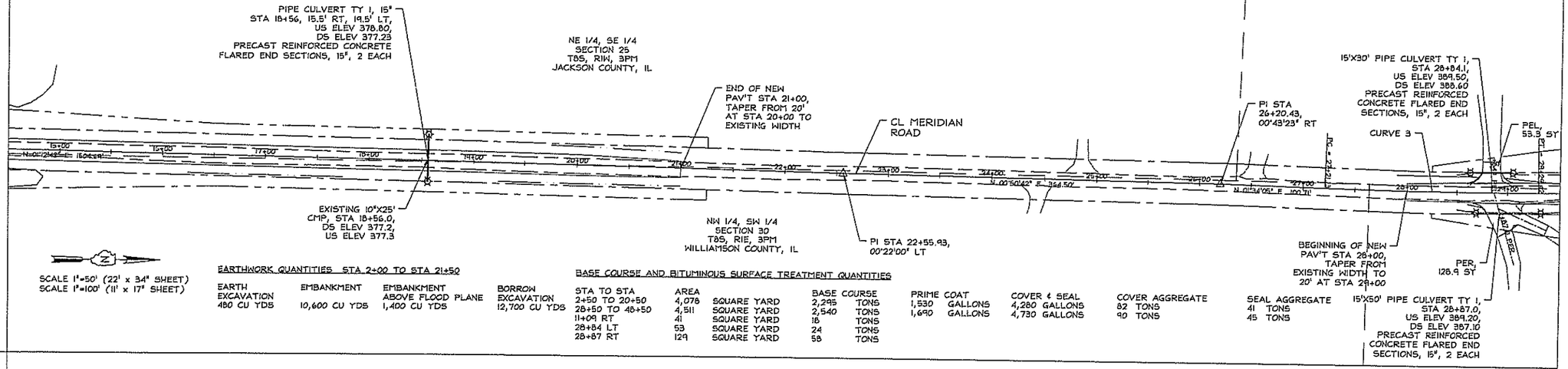
PHONE (618) 985-6370 FAX (618) 985-4892
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.	
4	
ISSUE	DATE
A	11/04/09



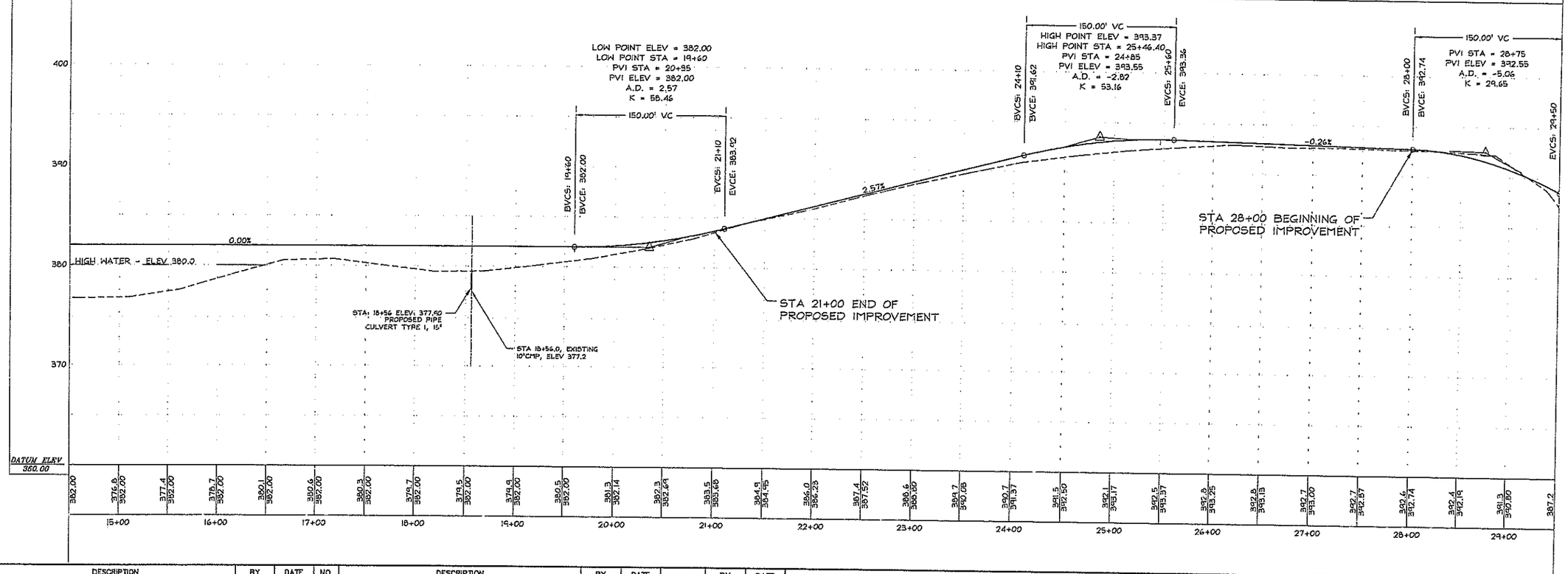
EARTHWORK QUANTITIES STA 2+00 TO STA 21+50

EARTH EXCAVATION	EMBANKMENT	EMBANKMENT ABOVE FLOOD PLANE	BORROW EXCAVATION
480 CU YDS	10,600 CU YDS	1,400 CU YDS	12,700 CU YDS

BASE COURSE AND BITUMINOUS SURFACE TREATMENT QUANTITIES

STA TO STA	AREA		BASE COURSE	
2+50 TO 20+50	4,078	SQUARE YARD	2,295	TONS
20+50 TO 48+50	4,511	SQUARE YARD	2,540	TONS
11+09 RT	41	SQUARE YARD	16	TONS
28+84 LT	53	SQUARE YARD	24	TONS
28+87 RT	129	SQUARE YARD	58	TONS

PRIME COAT		COVER & SEAL	COVER AGGREGATE	SEAL AGGREGATE
1,530	GALLONS	4,280 GALLONS	82 TONS	41 TONS
1,690	GALLONS	4,730 GALLONS	90 TONS	45 TONS



NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/17/09
CHECKED	JHC	11/04/09

PLAN & PROFILE STA 15+00 TO 30+00
MERIDIAN ROAD
WILLIAMSON COUNTY ILLINOIS

JOHN H. CRAWFORD & ASSOCIATES, P.C.
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PHONE (618) 985-8370 FAX (618) 985-4892
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.
5

ISSUE	DATE
A	11/04/09

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CURVE TABLE				
CURVE	DELTA	RADIUS	TANGENT	LENGTH
C1	2°18'25"	6000.00	120.80	241.57
C2	3°19'45"	6000.00	174.36	348.63
C3	1°59'20"	6000.00	104.15	208.28
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C5	2°29'06"	6000.00	130.14	260.23
C6	2°35'23"	6000.00	135.62	271.20

SE 1/4, NE 1/4
SECTION 25
T8S, R1W, 3PM
JACKSON COUNTY, IL

RIPRAP - 442.8 SY

100' 2 SPAN P.P. CONCRETE BRIDGE, STA 34+07, 20° SKEW LT

CL MERIDIAN ROAD

PROPOSED ROADWAY, 4,511 SY

CURVE 5

HI VOLTAGE AERIAL POWER LINE

EXISTING 24"X20' CMP, STA 42+28.9, DS ELEV 373.2, US ELEV 372.4

PI STA 00'48'59

EARTHWORK QUANTITIES STA 28+00 TO STA 48+50

EARTH EXCAVATION	EMBANKMENT	EMBANKMENT ABOVE FLOOD PLANE	BORROW EXCAVATION
900 CU YDS	23,070 CU YDS	4,130 CU YDS	29,020 CU YDS

EXISTING 48"X25' CMP, STA 34+01.0, DS ELEV 359.7, US ELEV 361.0
EXISTING 60"X25' CMP, STA 34+06.9, DS ELEV 359.3, US ELEV 360.5

CURVE 4

SW 1/4, NW 1/4
SECTION 30
T8S, R1E, 3PM
WILLIAMSON COUNTY, IL

PIPE CULVERT TY 2, 30", STA 42+67.9, 45° SKEW LT, 50'RT, 35' LT, US ELEV 375.40, DS ELEV 372.10
PRECAST REINFORCED CONCRETE FLARED END SECTIONS, 30", 2 EACH

SCALE 1"=50' (22" x 34" SHEET)
SCALE 1"=100' (11" x 17" SHEET)

LOW POINT ELEV = 383.25
LOW POINT STA = 31+25
PVI STA = 30+50
PVI ELEV = 383.25
A.D. = 5.31
K = 28.23
150.00' VC
EVCE: 388.56
BVCS: 29+75
BVCE: 387.24
EVCS: 31+25
EVCE: 383.25

CL 60' SPAN X 24' P.P. CONC BRIDGE, STA 33+10

TOP OF P.P. CONCRETE DECK 383.25

HIGH POINT ELEV = 383.25
HIGH POINT STA = 34+50
PVI STA = 35+00
PVI ELEV = 383.25
A.D. = -0.8333
K = 120.0000
100.00' VC
BVCS: 34+50
BVCE: 383.25
EVCS: 35+50
EVCE: 382.83

LOW POINT ELEV = 382.00
LOW POINT STA = 37+00
PVI STA = 36+50
PVI ELEV = 382.00
A.D. = 0.8333
K = 120.0000
100.00' VC
BVCS: 36+00
BVCE: 382.42
EVCS: 37+00
EVCE: 382.00

0.00%
-0.83%
0.00%

HIGH WATER - ELEV 380.0

LOW MEMBER ELEV 380.50

STA 34+01.0, EXISTING 48" CMP, ELEV 360.4

STA 34+06.9, EXISTING 60" CMP, ELEV 359.9

STA 42+28.9, EXISTING 24" CMP, ELEV 372.0

STA: 42+67.90 ELEV: 374.00 PROPOSED PIPE CULVERT, TYPE 2 30"

DATUM ELEV 360.00

30+00	31+00	32+00	33+00	34+00	35+00	36+00	37+00	38+00	39+00	40+00	41+00	42+00	43+00	44+00
388.56	380.6 / 386.02	375.2 / 384.25	371.7 / 383.36	369.7 / 383.25	369.2 / 383.25	366.9 / 383.25	366.5 / 383.25	367.0 / 383.25	367.3 / 383.25	367.5 / 383.25	368.0 / 383.15	368.9 / 382.83	369.9 / 382.42	371.2 / 382.10	372.5 / 382.00	373.9 / 382.00	375.2 / 382.00	376.3 / 382.00	377.6 / 382.00	378.7 / 382.00	378.9 / 382.00	377.4 / 382.00	376.1 / 382.00	376.2 / 382.00	376.1 / 382.00	376.0 / 382.00	376.3 / 382.00	376.3 / 382.00	376.6 / 382.00	376.7

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/17/09
CHECKED	JHC	11/04/09

PLAN & PROFILE STA 30+00 TO 45+00
MERIDIAN ROAD
WILLIAMSON COUNTY ILLINOIS

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-8370 FAX (618) 985-4892
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.	
6	
ISSUE	DATE
A	11/04/09

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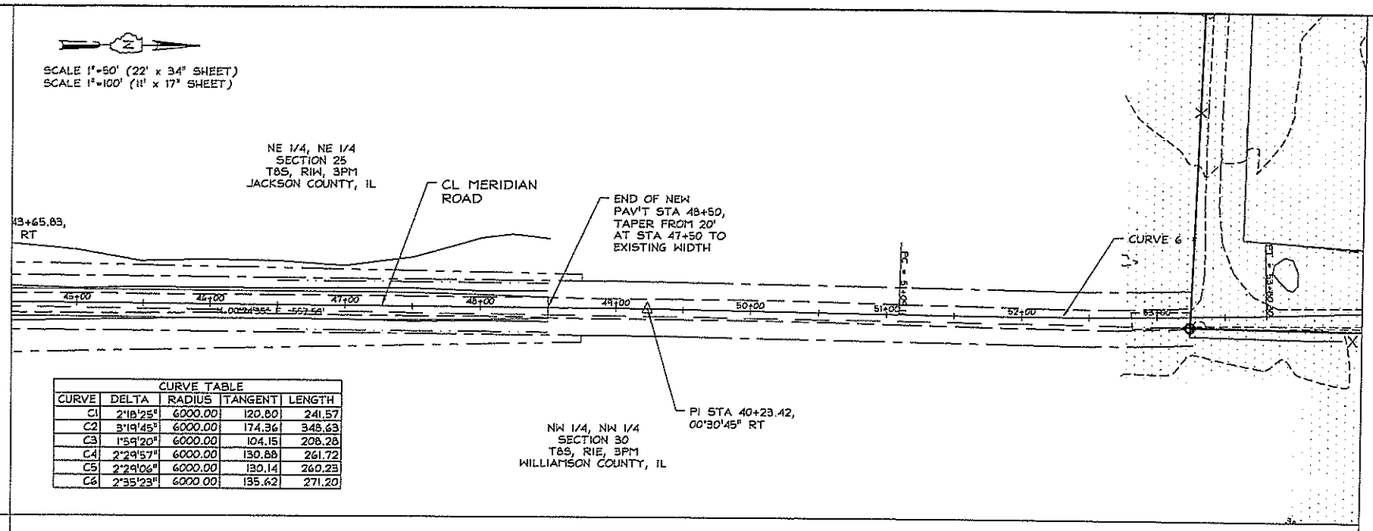
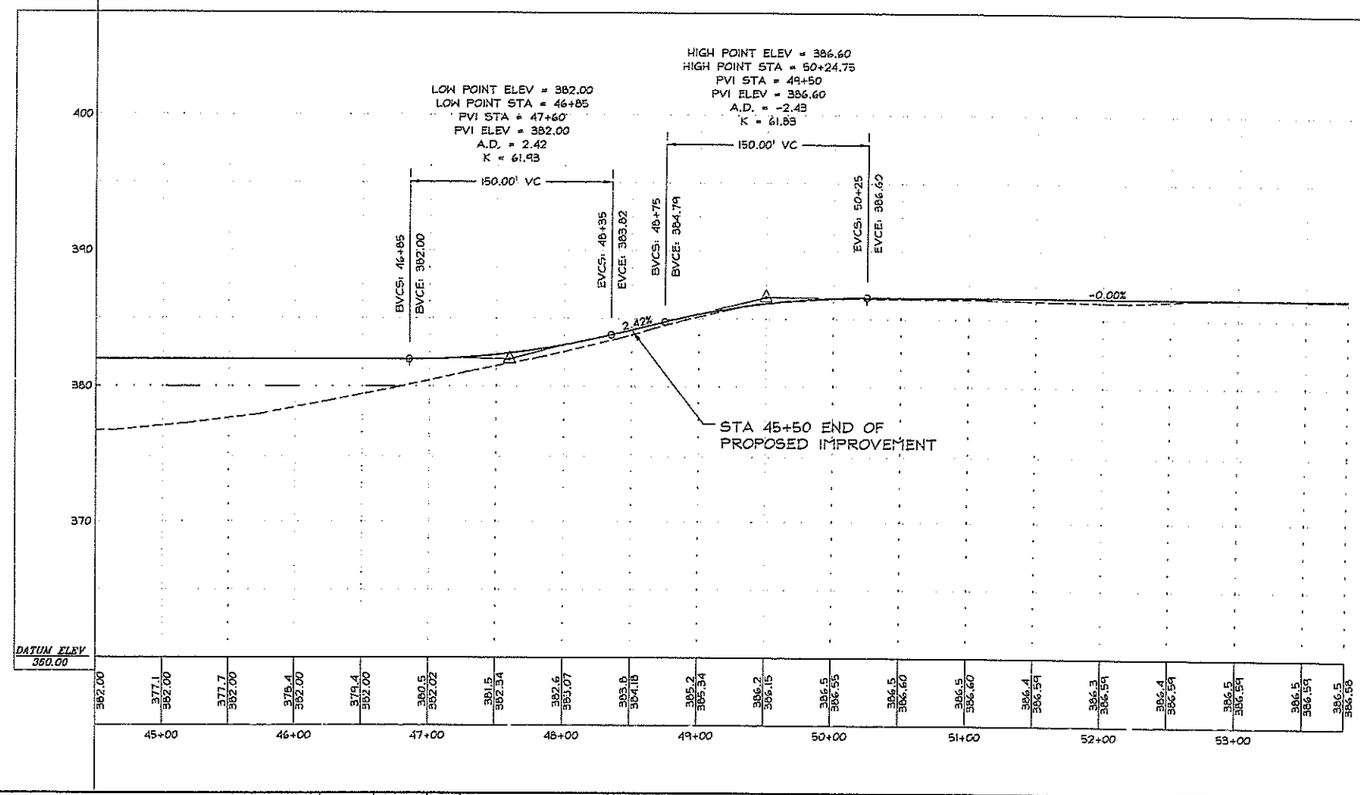
SCALE 1"=50' (22" x 34" SHEET)
SCALE 1"=100' (11" x 17" SHEET)



CURVE TABLE				
CURVE	DELTA	RADIUS	TANGENT	LENGTH
C1	2°18'25"	6000.00	120.80	241.57
C2	3°19'45"	6000.00	174.36	348.63
C3	1°59'20"	6000.00	104.15	208.28
C4	2°29'57"	6000.00	130.86	261.72
C5	2°29'06"	6000.00	130.14	260.23
C6	2°35'23"	6000.00	135.42	271.20



NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/17/09
CHECKED	JHC	11/04/09

PLAN & PROFILE STA 45+00 TO 53+80.5
MERIDIAN ROAD
WILLIAMSON COUNTY ILLINOIS

JOHN H. CRAWFORD & ASSOCIATES, P.C.
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201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
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PROFESSIONAL DESIGN FIRM # 184-002895

SHEET NO.
7

ISSUE	DATE
A	11/04/09

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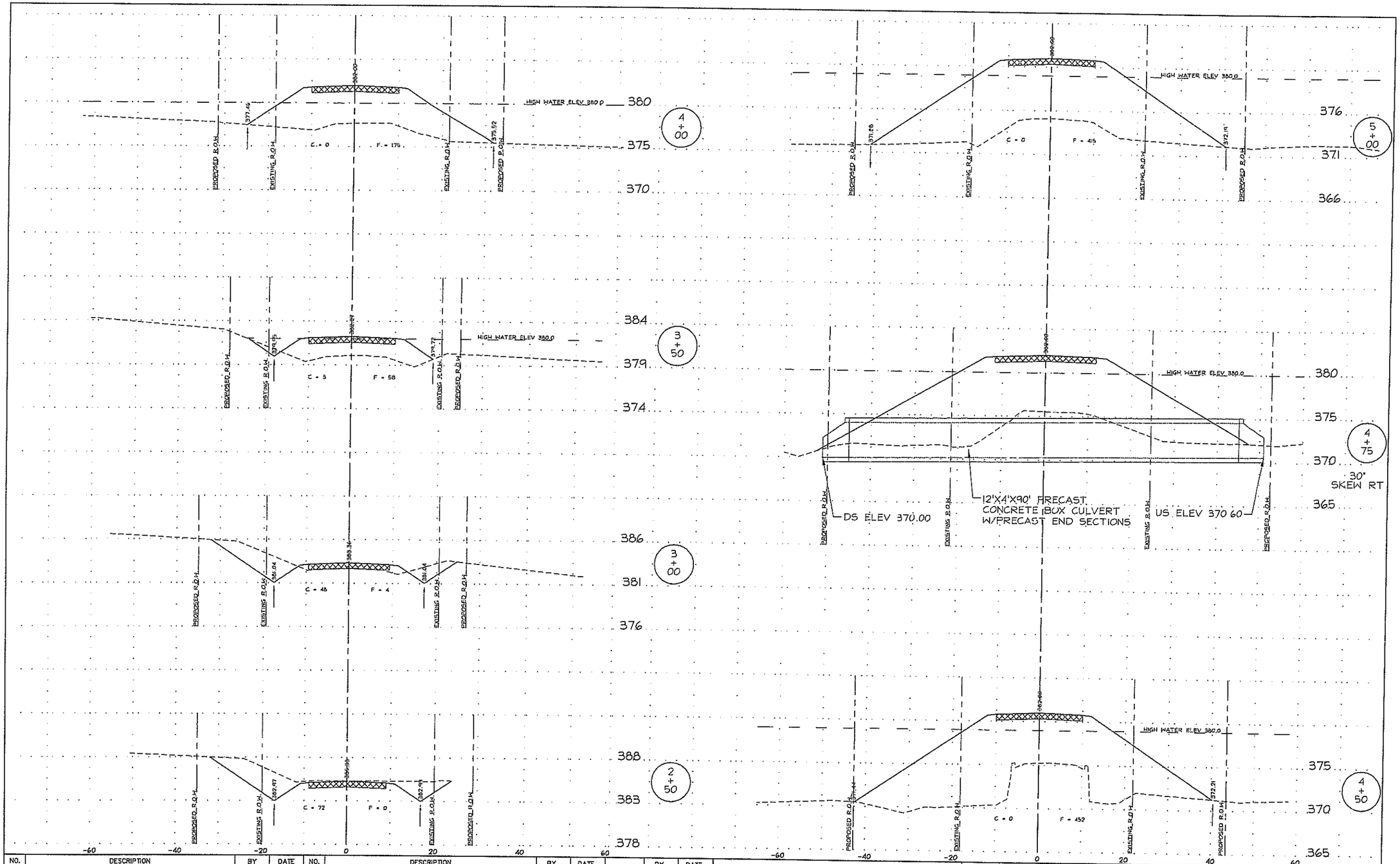

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 2+50 TO STA 5+00
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
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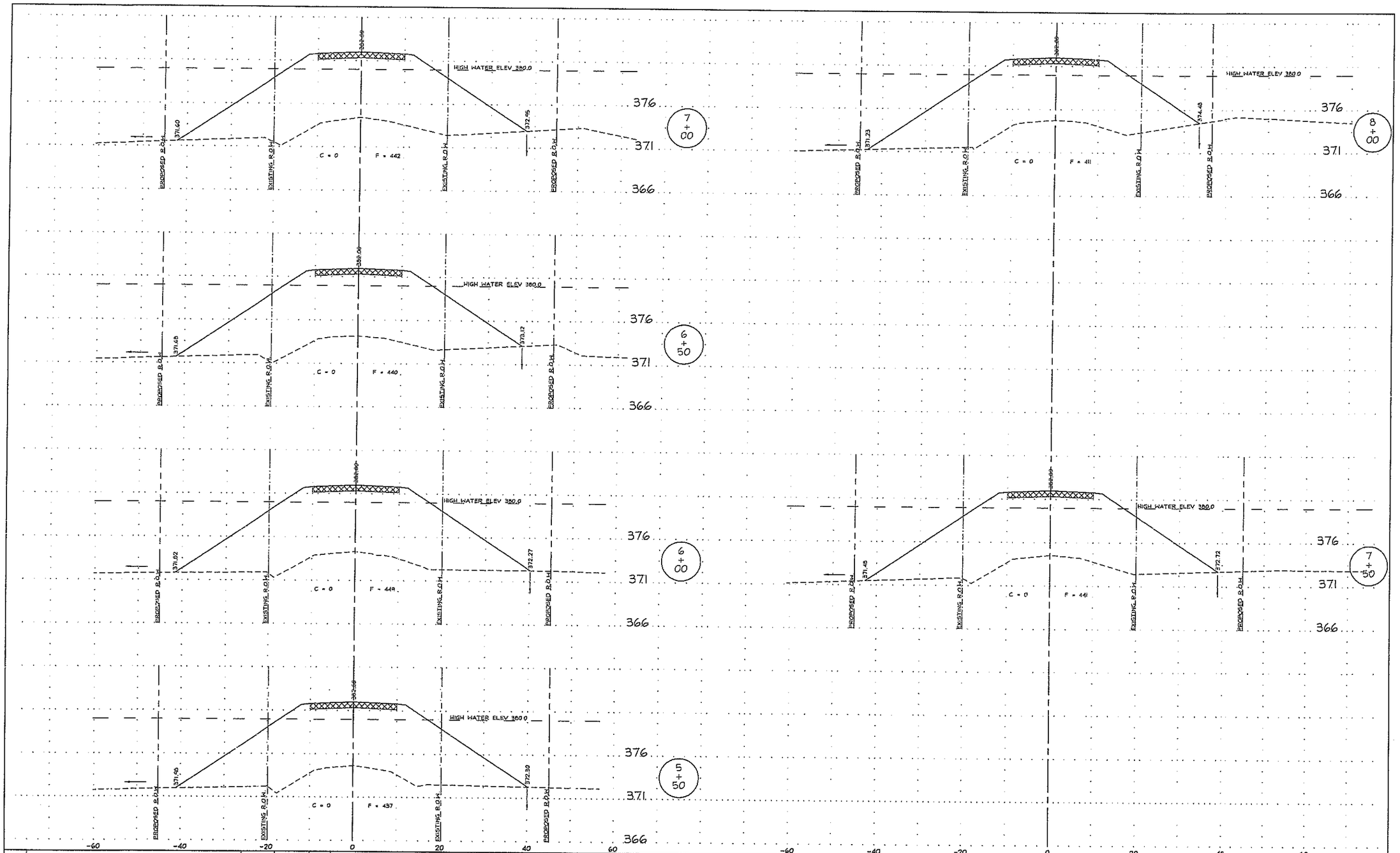
SHEET NO. 8

ISSUE	DATE
A	11/02/09



NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 5+50 TO STA 8+00
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
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SHEET NO.	
9	
ISSUE	DATE
A	11/02/09

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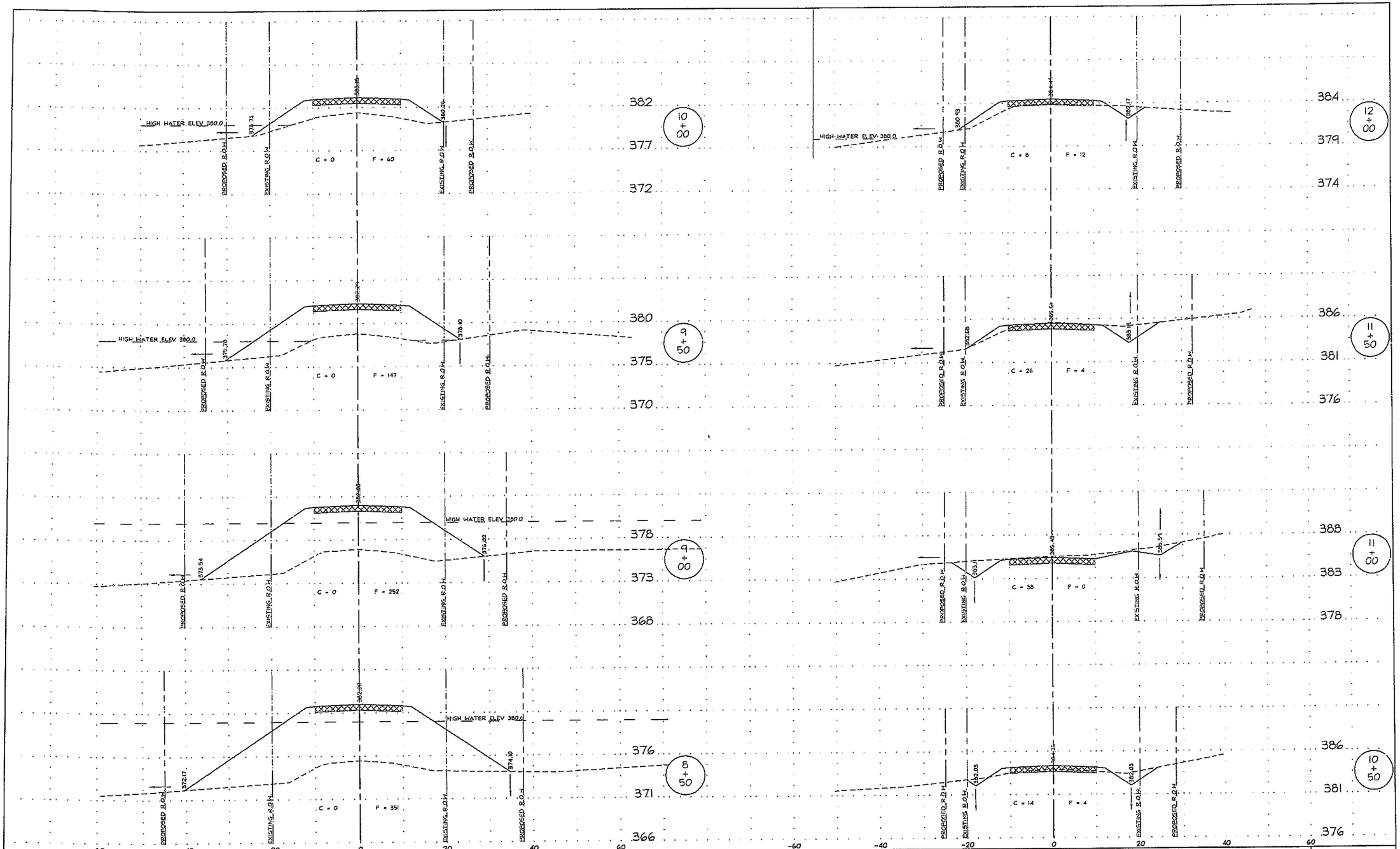

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 8+50 TO STA 12+00
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
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PHONE (618) 985-6370 FAX (618) 985-4592
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SHEET NO.	
10	
ISSUE	DATE
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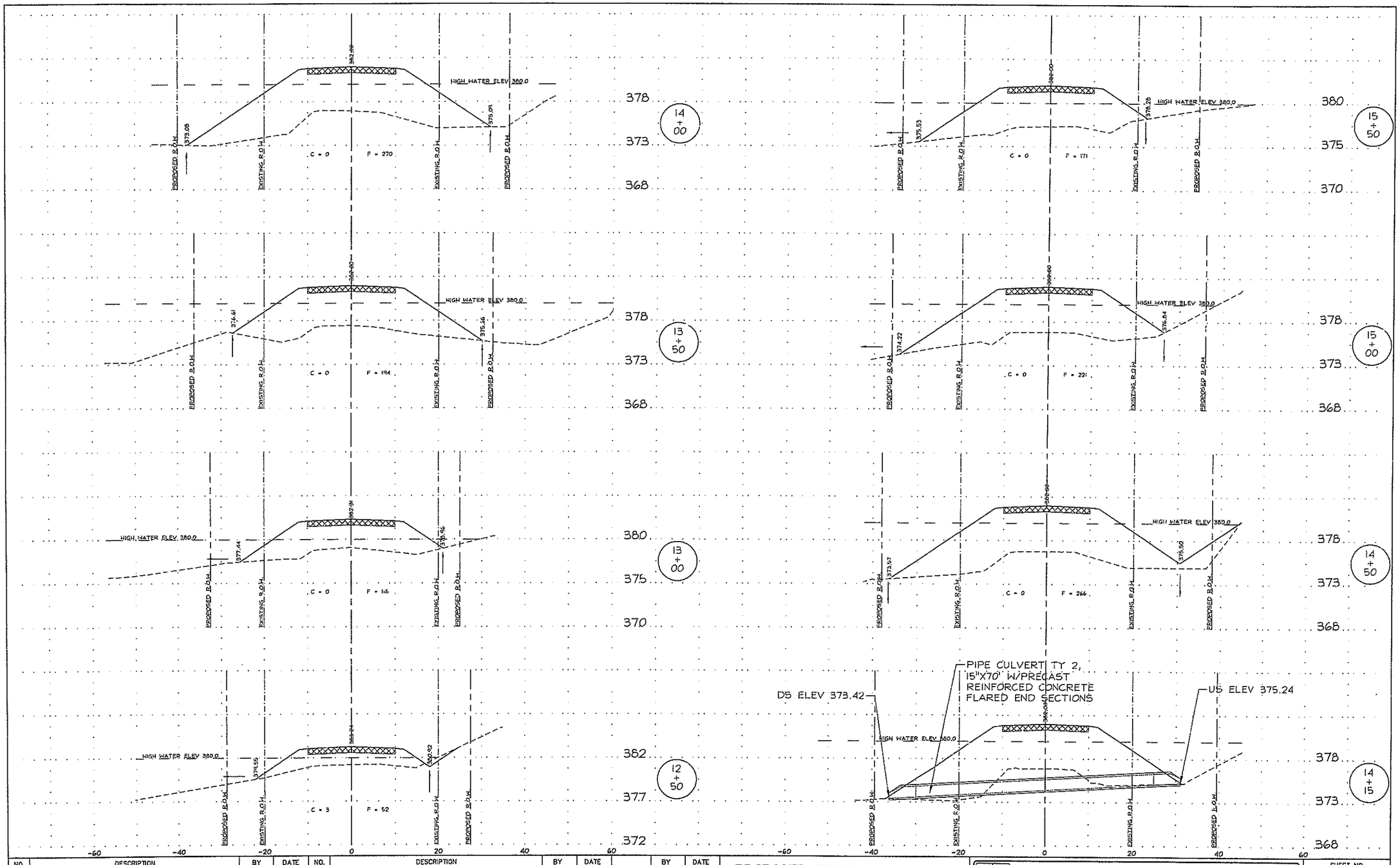

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 12+50 TO STA 15+50
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
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SHEET NO.
11

ISSUE	DATE
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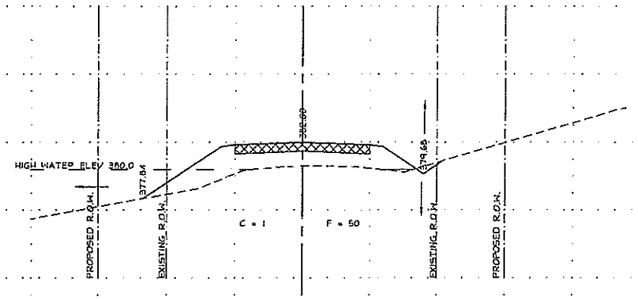
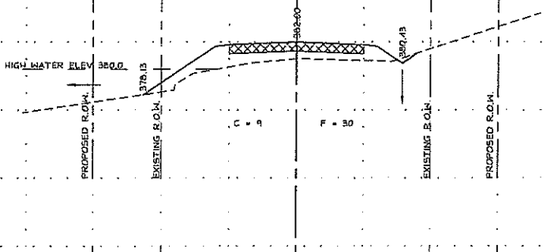
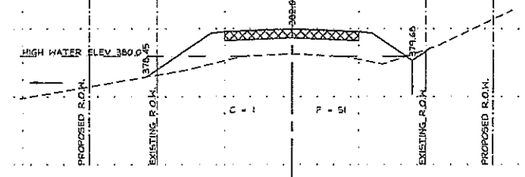
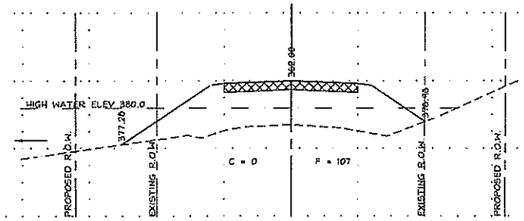
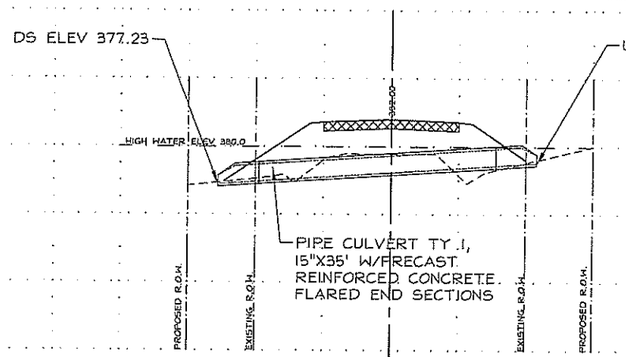
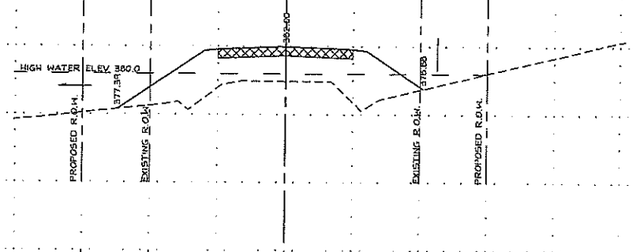


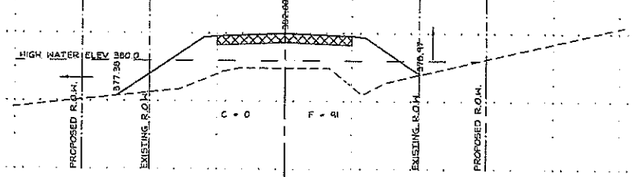


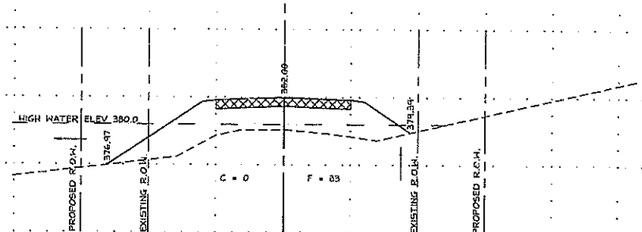


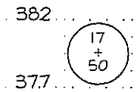


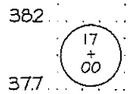


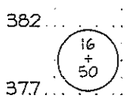


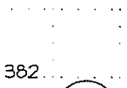


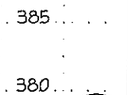


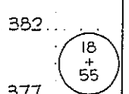


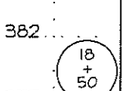


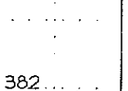


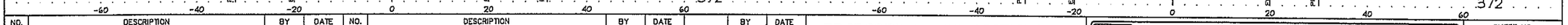












NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

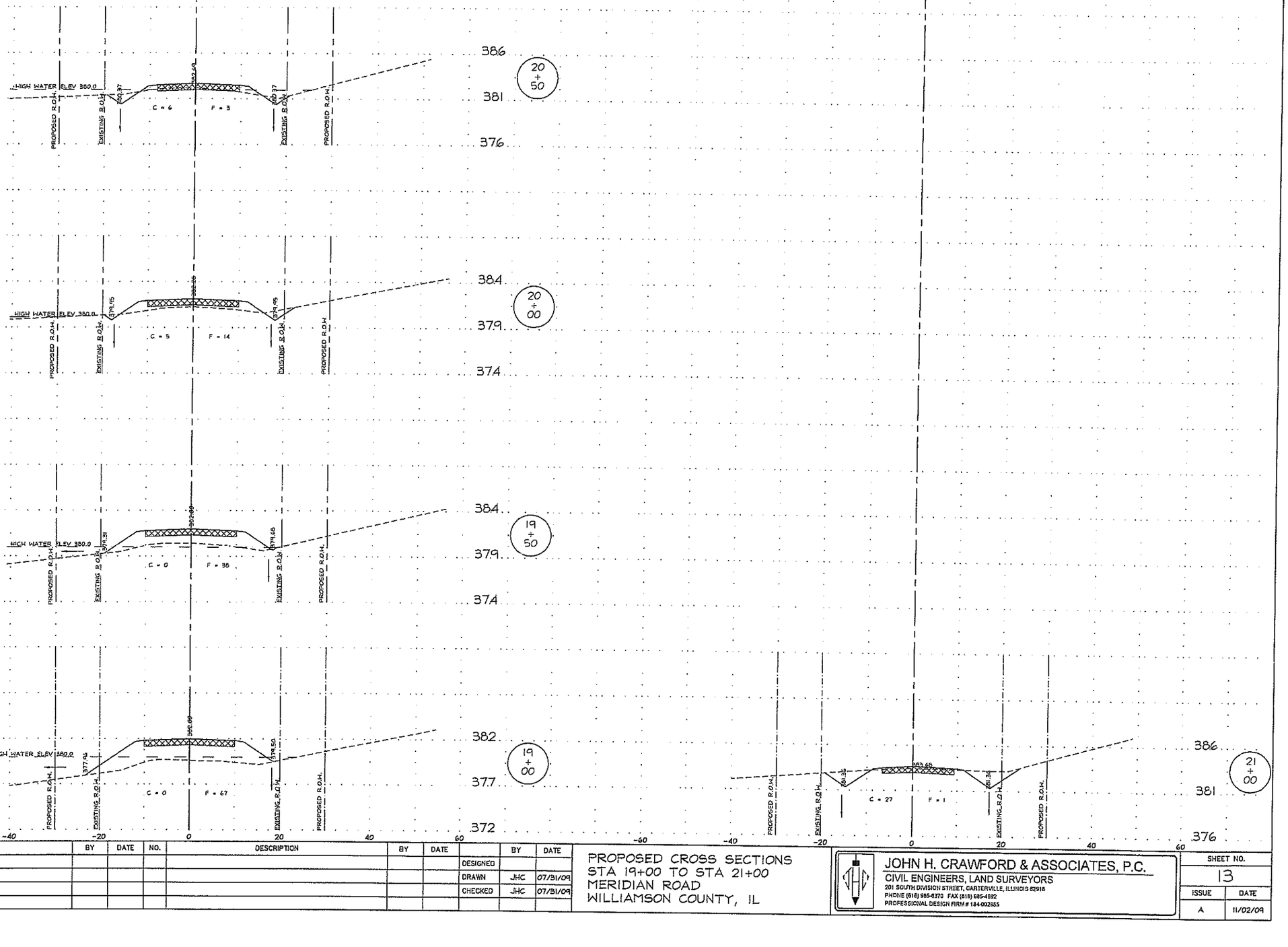
	BY	DATE
DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 2+50 TO STA 5+00
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-8370 FAX (618) 985-4692
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.
12

ISSUE	DATE
A	11/02/09



NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

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DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 19+00 TO STA 21+00
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
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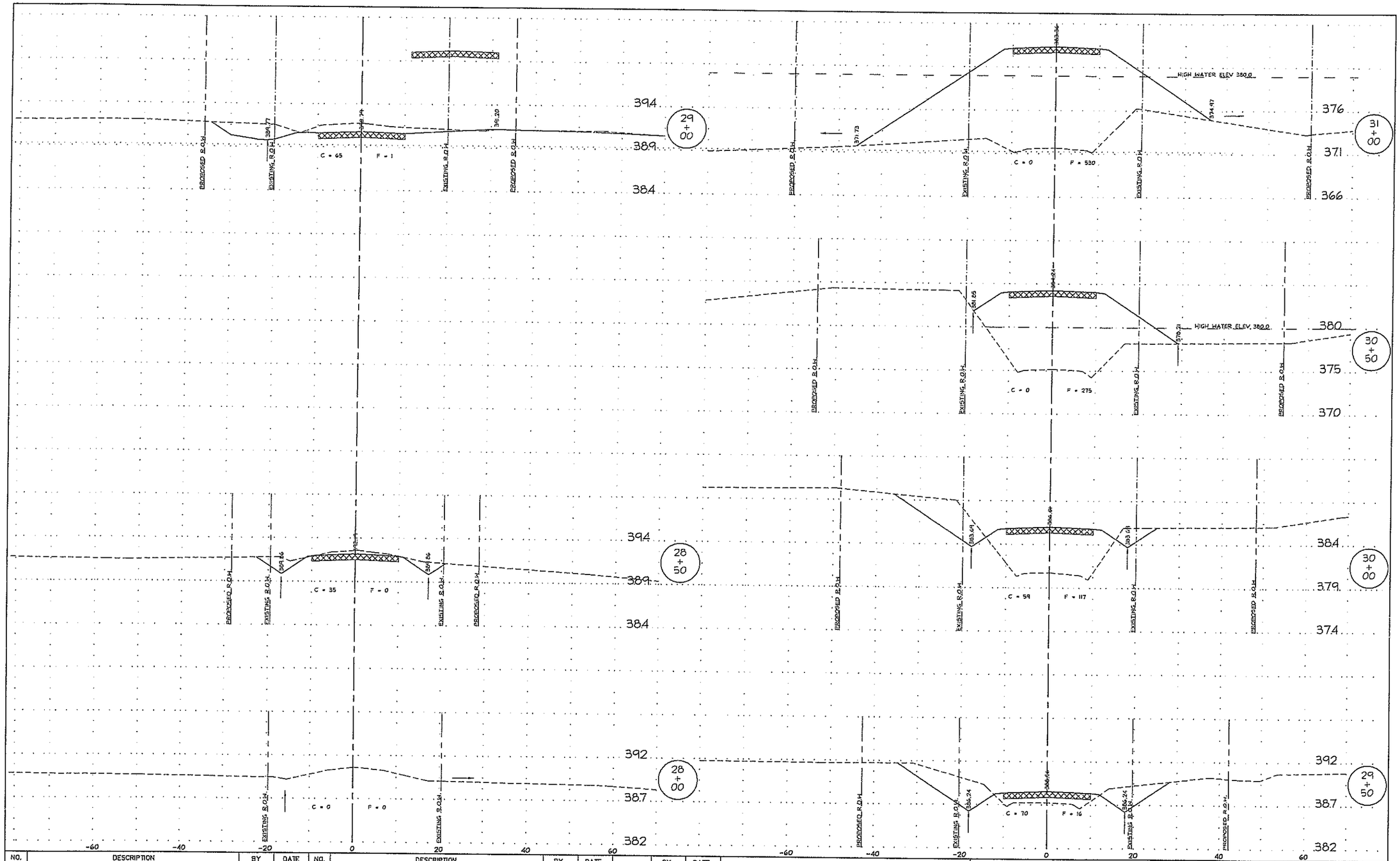
SHEET NO.	
13	
ISSUE	DATE
A	11/02/09



NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

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DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 28+00 TO STA 31+00
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

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PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.
14

ISSUE	DATE
A	11/02/09

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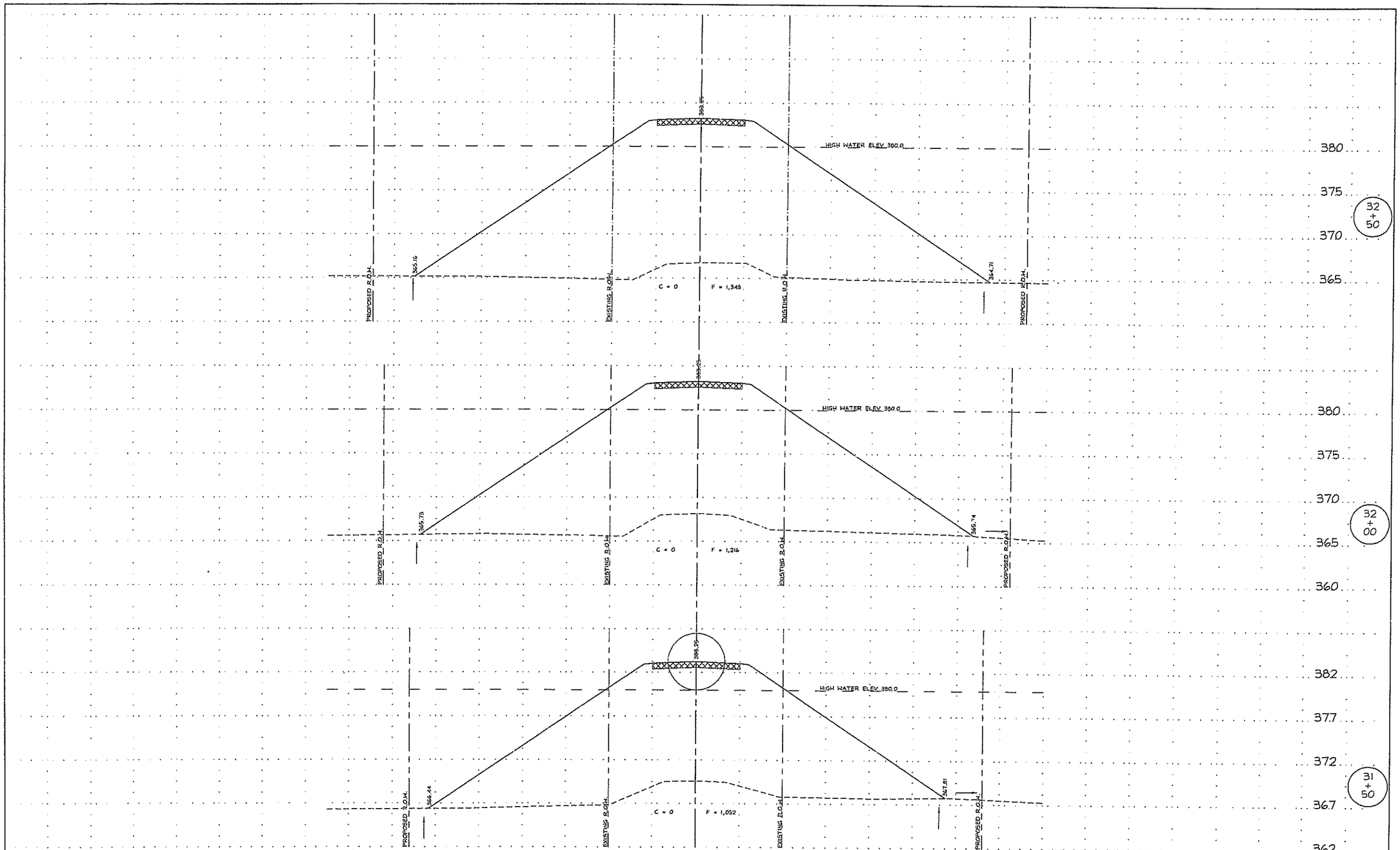

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 31+50 TO STA 832+50
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
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201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
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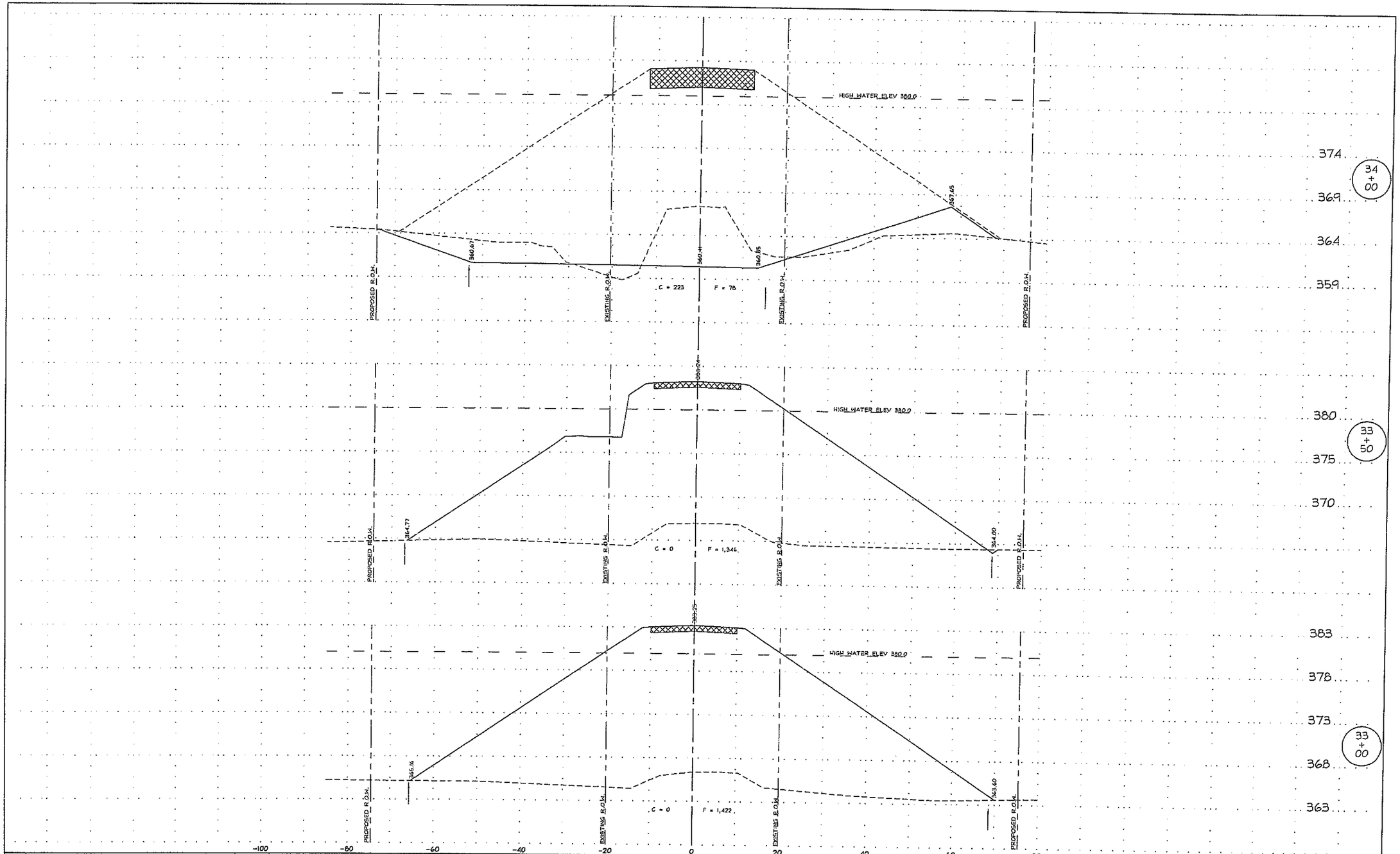
SHEET NO.	
15	
ISSUE	DATE
A	11/02/09



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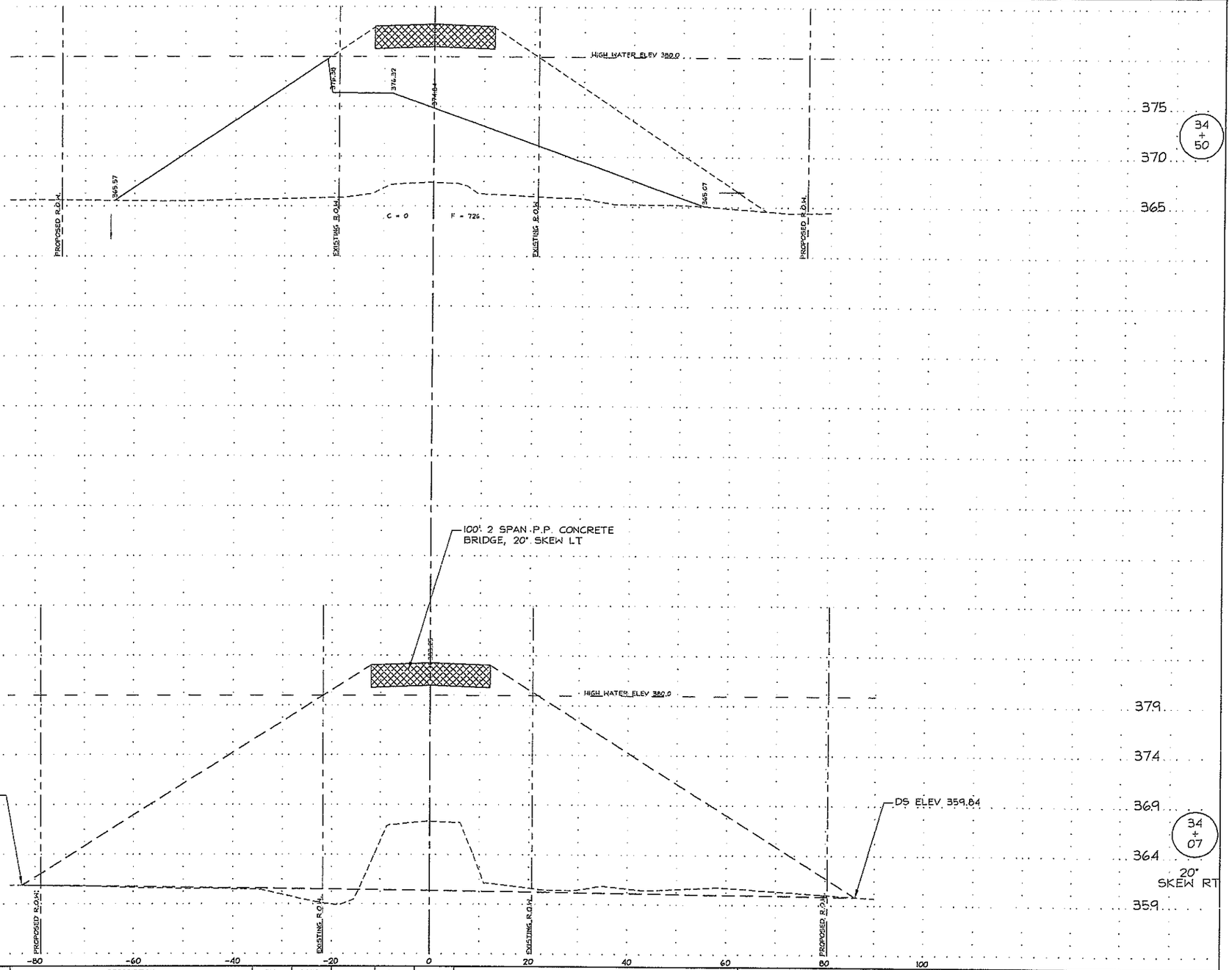
DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 33+00 TO STA 34+00
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-6370 FAX (618) 985-4692
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO. 16

ISSUE	DATE
A	11/02/09



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								DESIGNED		
								DRAWN	JHC	07/31/09
								CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 34+07 TO STA 34+50
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
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201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-8370 FAX (618) 985-4092
PROFESSIONAL DESIGN FIRM # 184-002565

SHEET NO.	
17	
ISSUE	DATE
A	11/02/09

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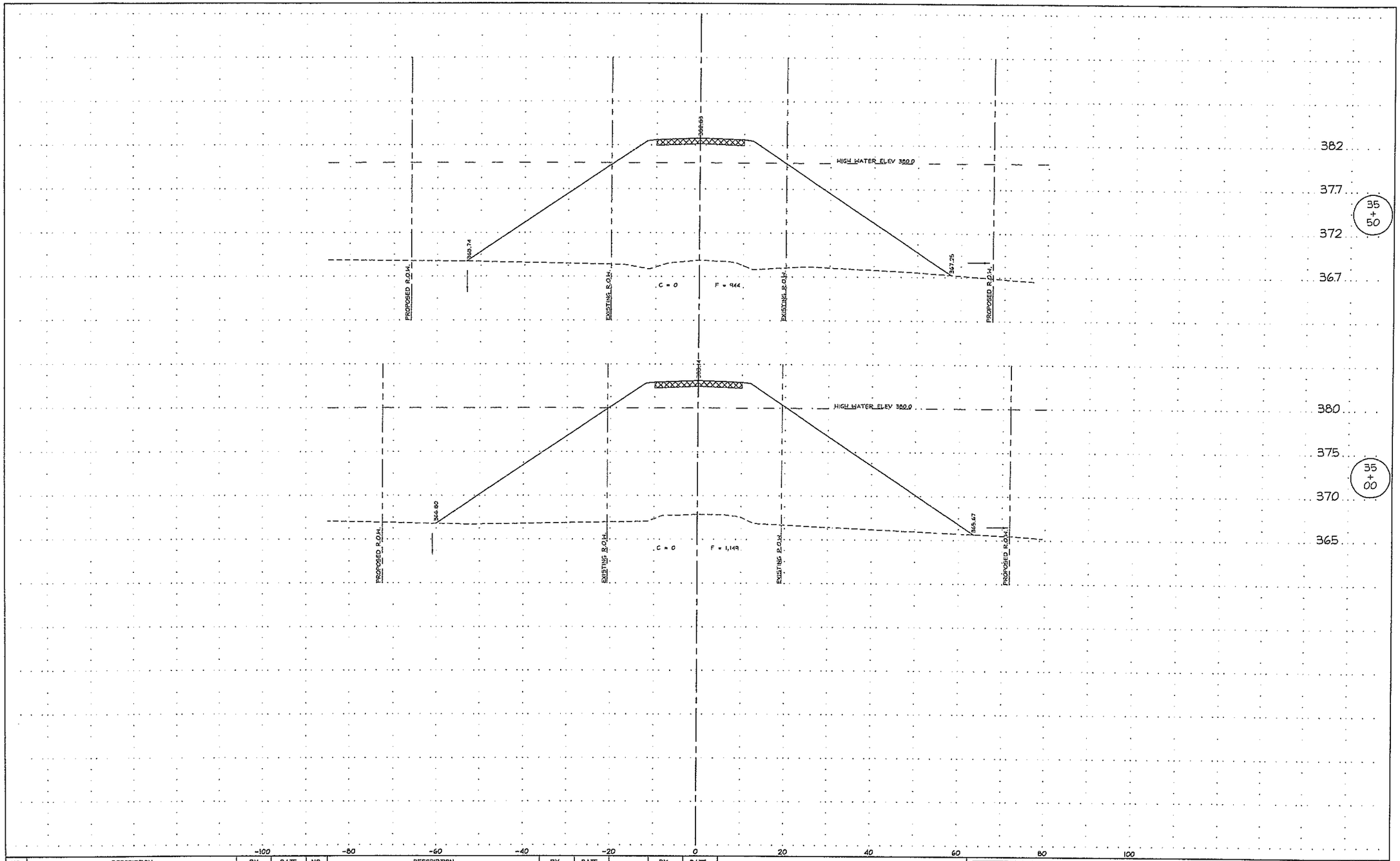

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 35+00 TO STA 35+50
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-5370 FAX (618) 985-4532
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.	
18	
ISSUE	DATE
A	11/02/09

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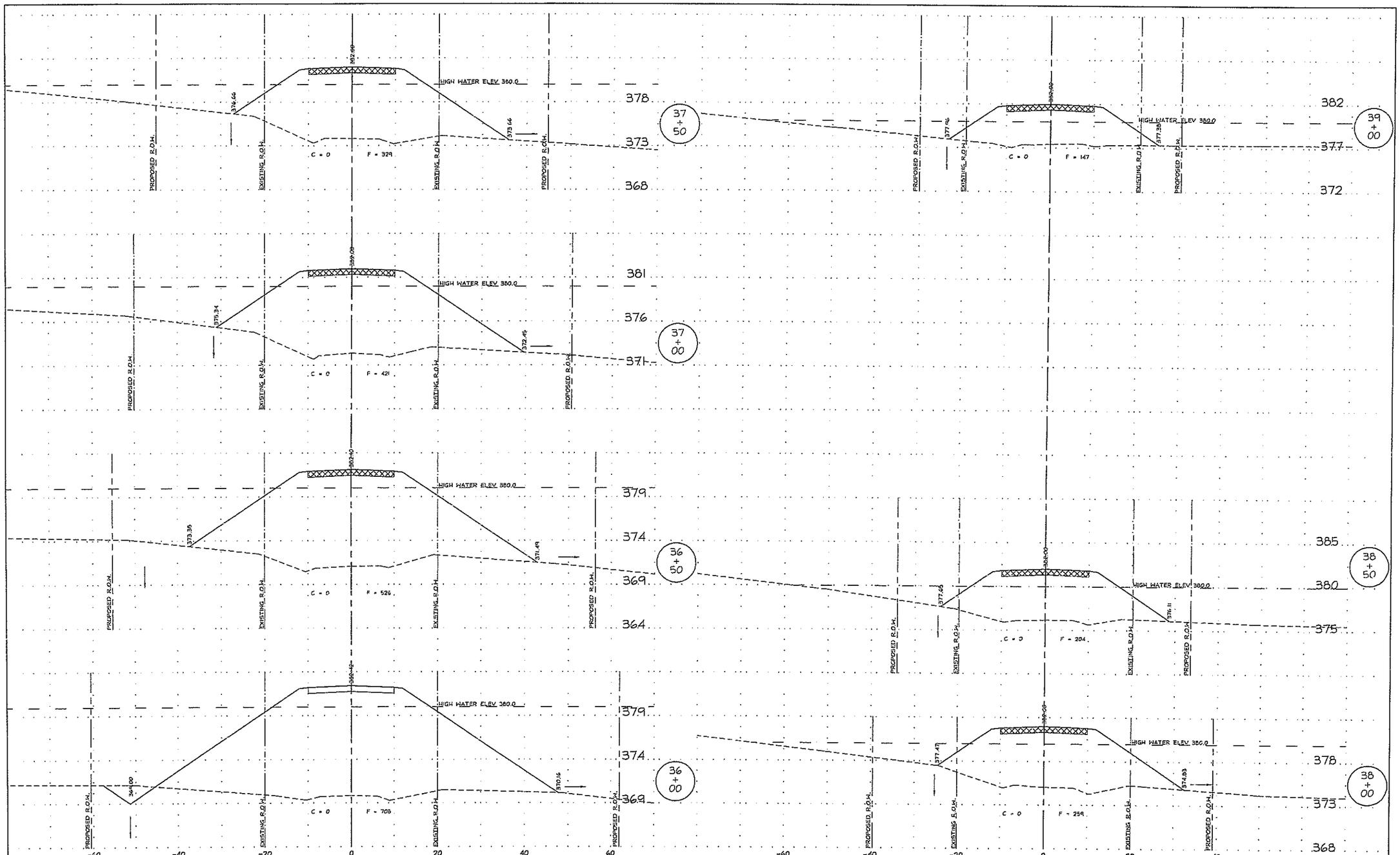

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE		BY	DATE
								DESIGNED		
								DRAWN	JHC	07/31/09
								CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 36+00 TO STA 39+00
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
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PHONE (618) 985-6370 FAX (618) 985-4592
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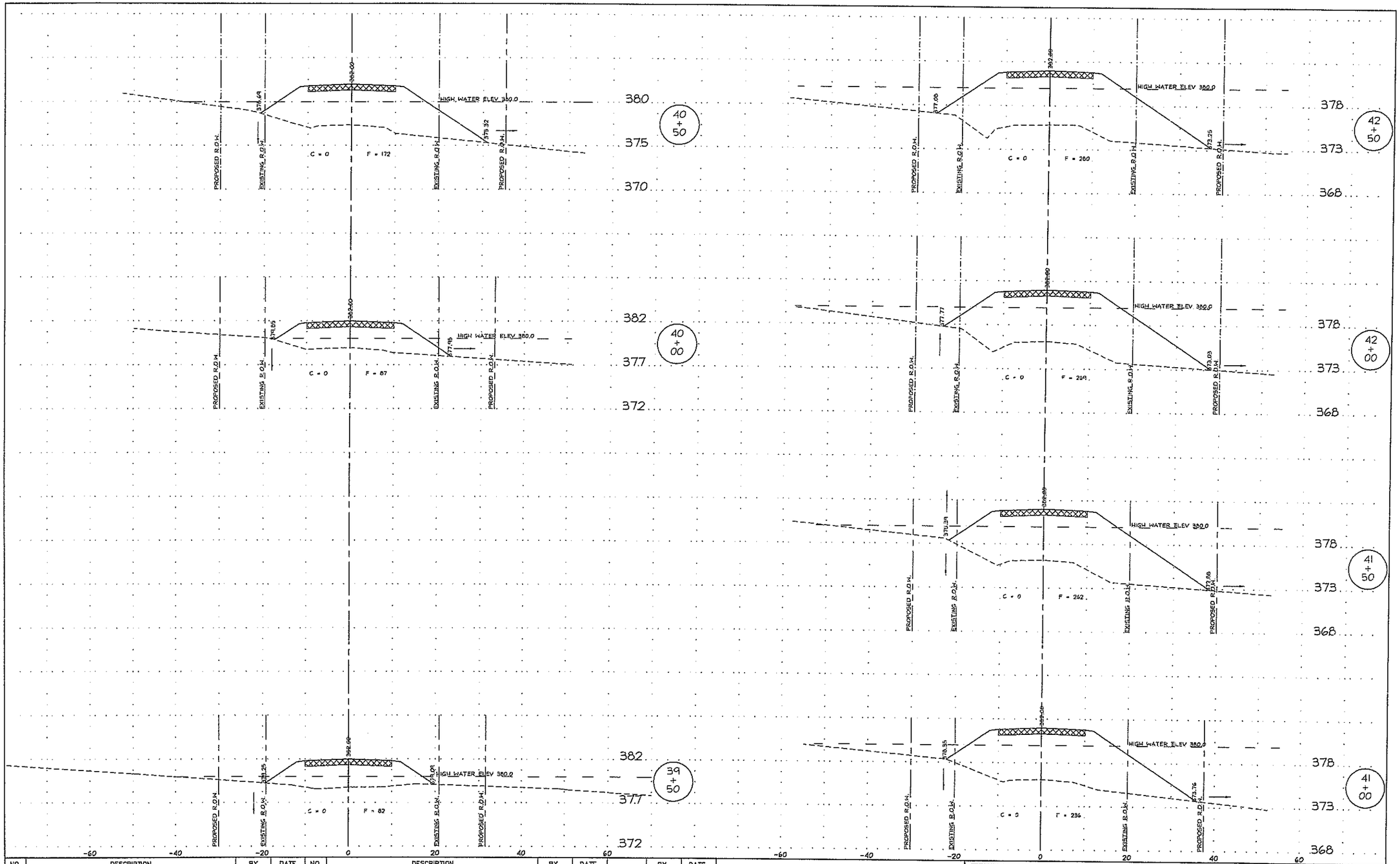
SHEET NO.	
19	
ISSUE	DATE
A	11/02/09

nd Projects\Eng\Meridian Road\dwg\meridian xsec.dwg, Model, 11/5/2009 2:18:02 PM, PDF Complete.pc3, 1:10



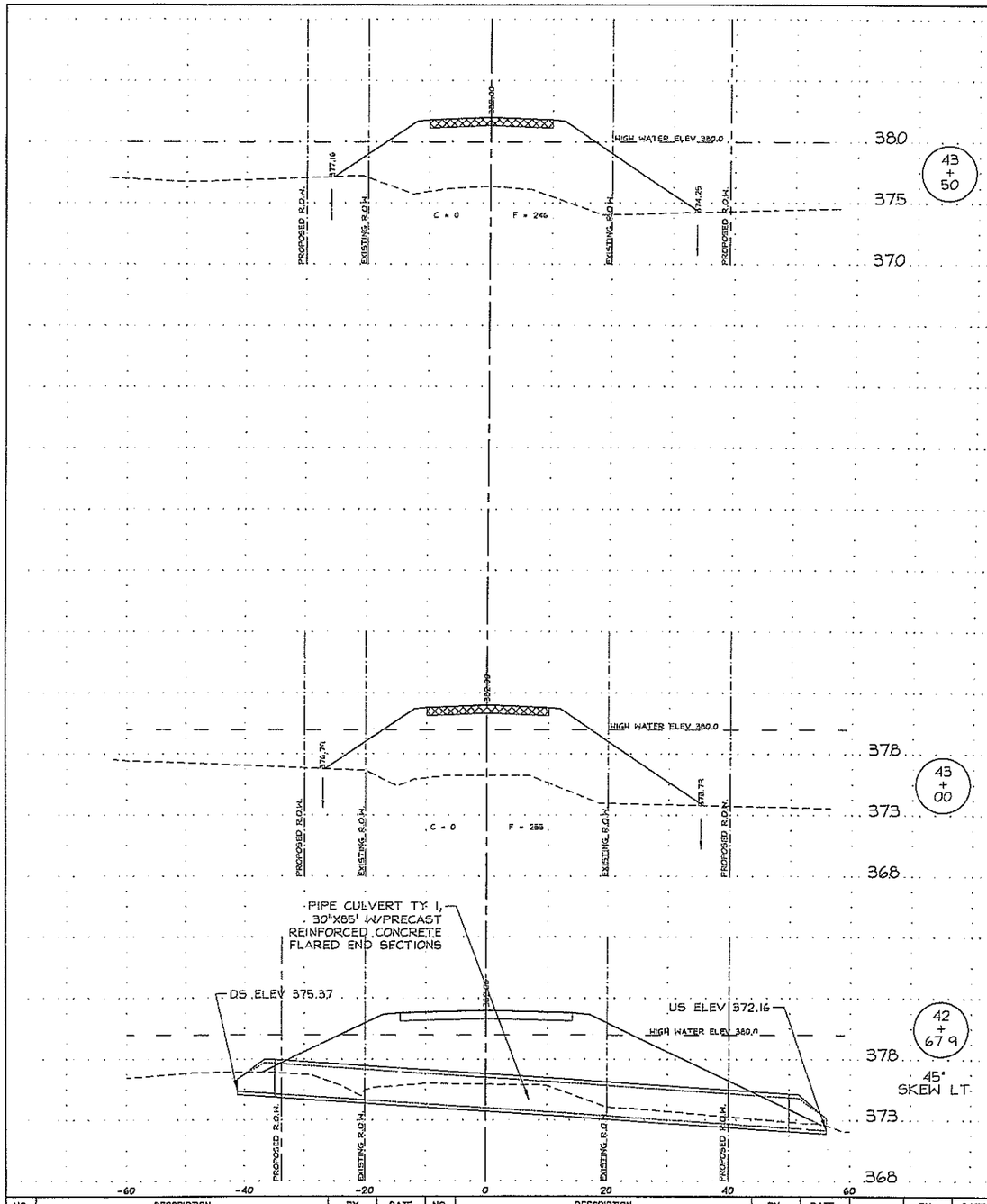
NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE		BY	DATE
								DESIGNED		
								DRAWN	JHC	07/31/09
								CHECKED	JHC	07/31/09

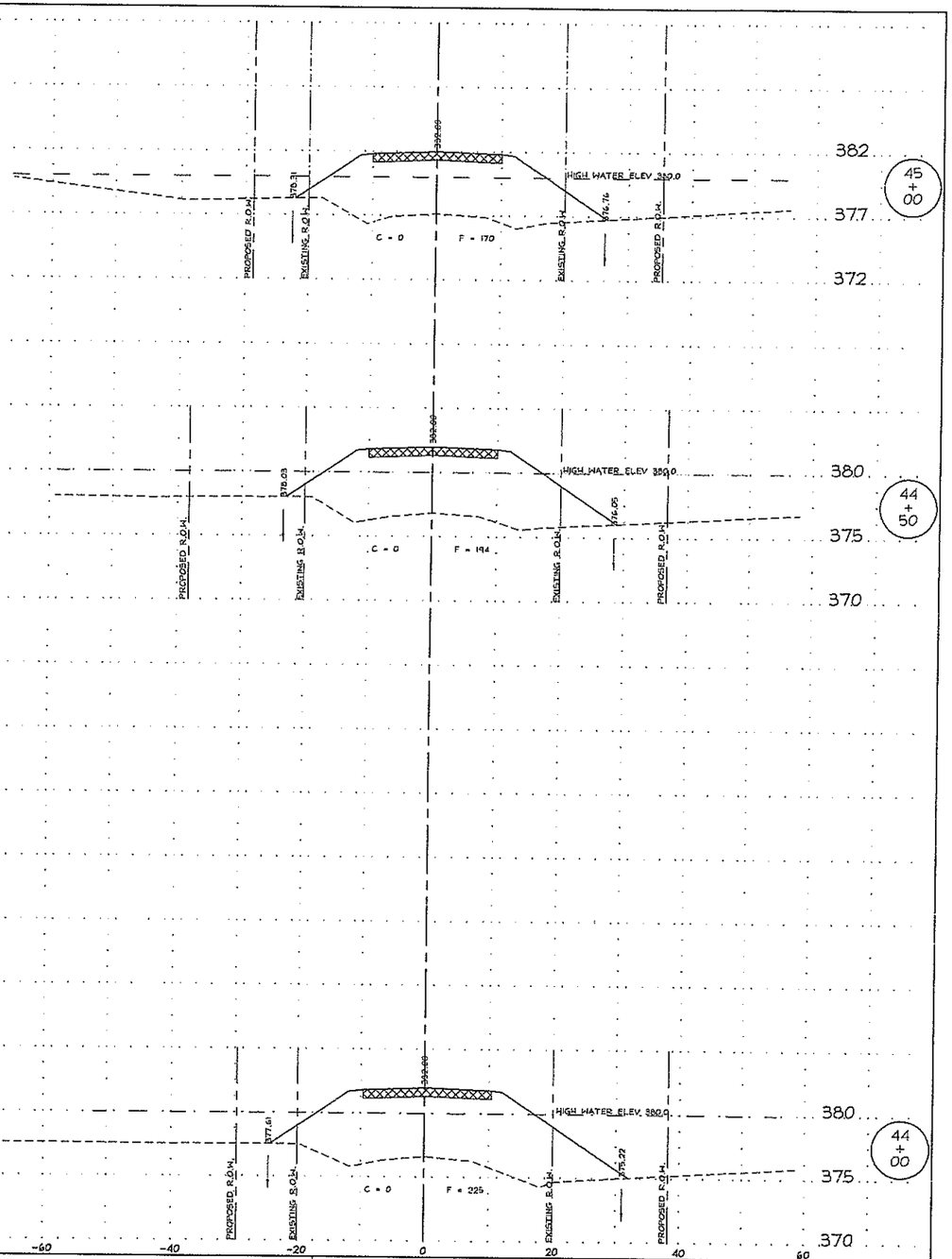
PROPOSED CROSS SECTIONS
STA 39+50 TO STA 42+50
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-4370 FAX (618) 985-4592
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.	
20	
ISSUE	DATE
A	11/02/09

and Projects\Eng\Meridian Road\dwg\meridian xsec.dwg, Model, 11/5/2009 2:18:36 PM, PDF Complete.pc3, 1:10





NO.	DESCRIPTION	BY	DATE

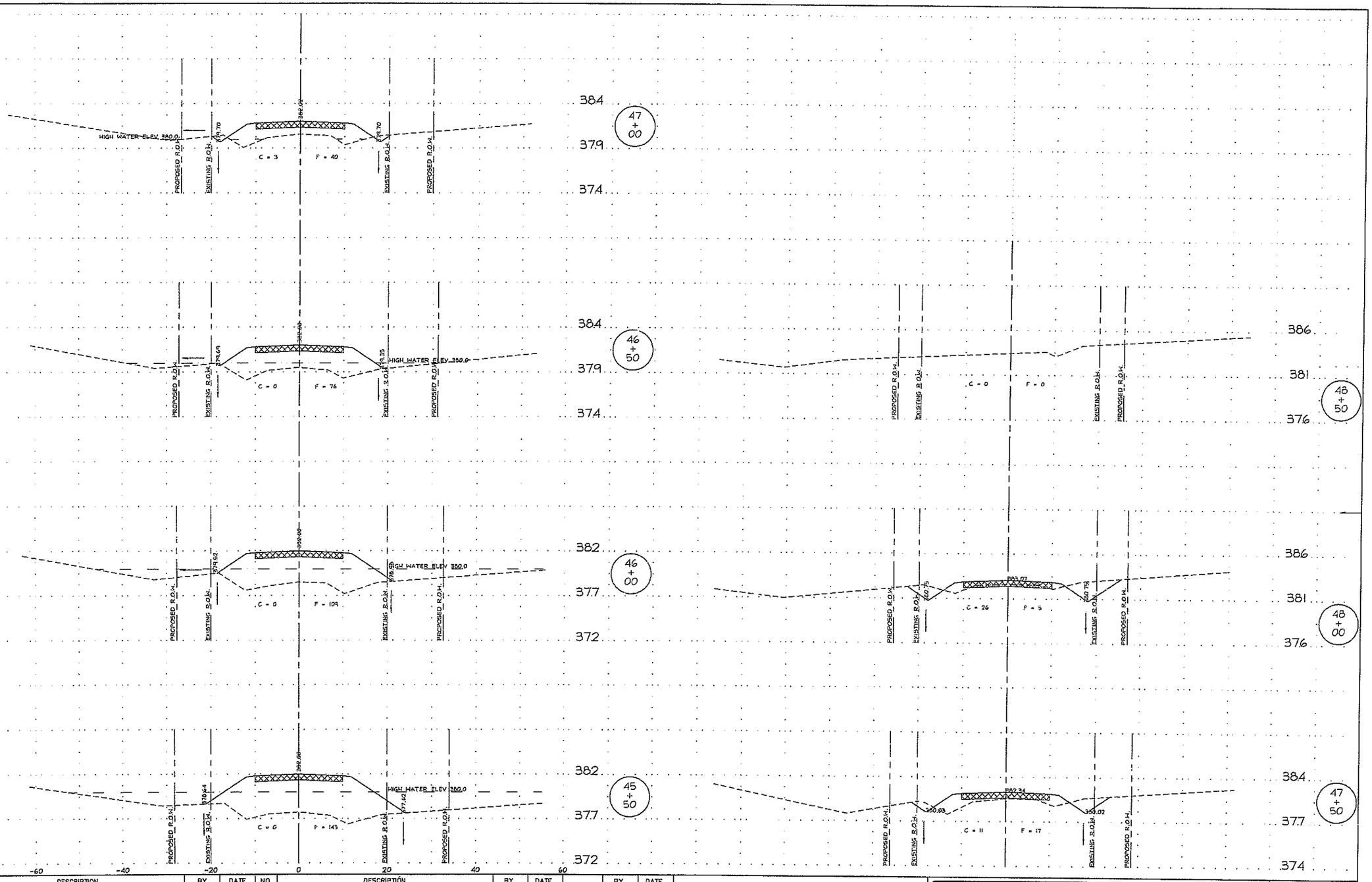
NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA 42+67.9 TO STA 45+00
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-6370 FAX (618) 985-4592
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.	
21	
ISSUE	DATE
A	11/02/09



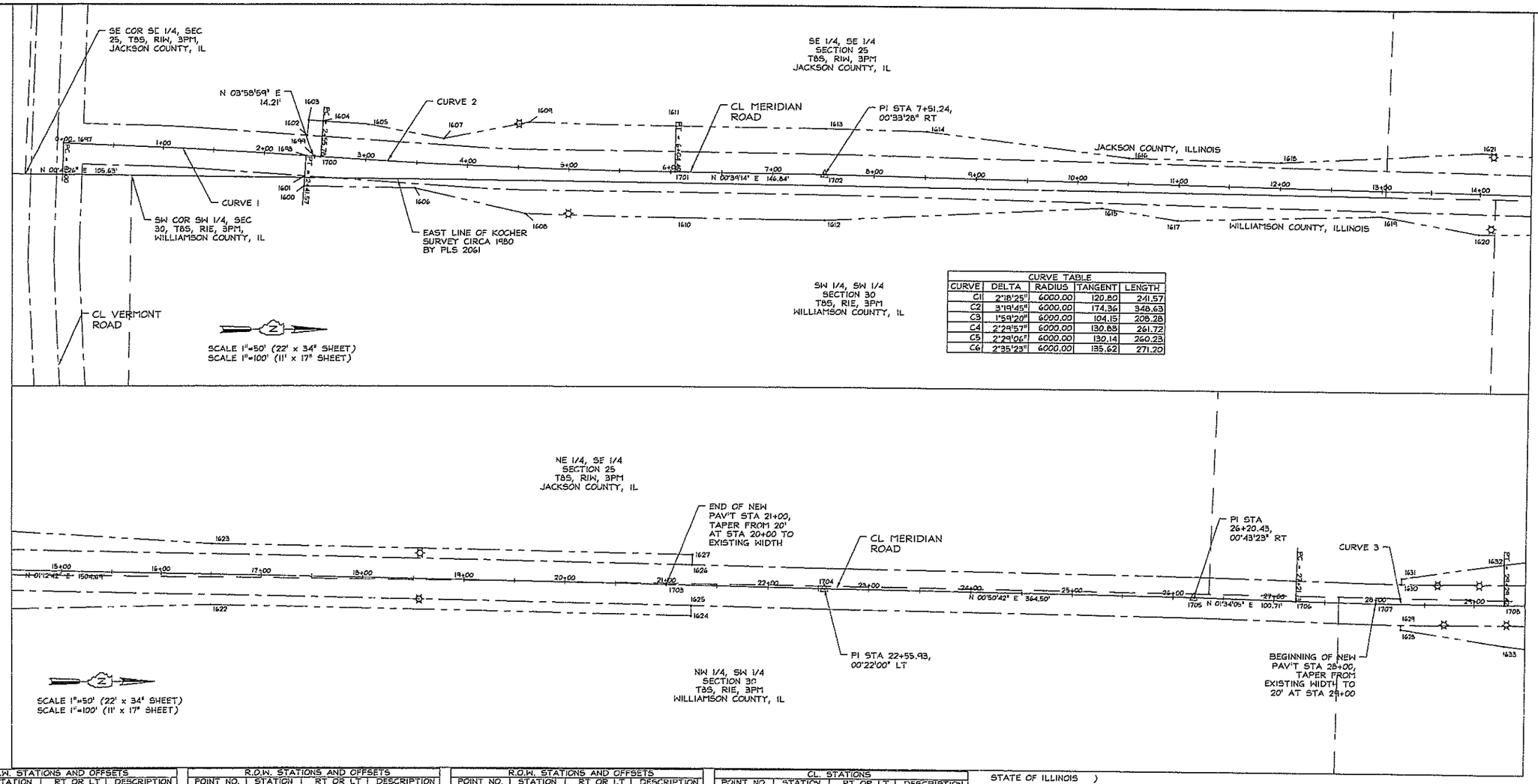
NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/31/09
CHECKED	JHC	07/31/09

PROPOSED CROSS SECTIONS
STA45+50 TO STA 48+50
MERIDIAN ROAD
WILLIAMSON COUNTY, IL

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-8370 FAX (618) 985-4932
PROFESSIONAL DESIGN FIRM # 184-002855

SHEET NO.	
22	
ISSUE	DATE
A	11/02/09



CURVE TABLE				
CURVE	DELTA	RADIUS	TANGENT	LENGTH
C1	2°18'25"	6000.00	120.80	241.57
C2	3°19'45"	6000.00	174.36	348.63
C3	1°59'20"	6000.00	104.15	208.28
C4	2°29'57"	6000.00	130.85	261.72
C5	2°29'06"	6000.00	130.14	260.23
C6	2°35'23"	6000.00	135.62	271.20

R.O.W. STATIONS AND OFFSETS

POINT NO.	STATION	RT OR LT	DESCRIPTION
1600	2+41.57	30.00	ROW
1601	2+41.57	20.00	ROW
1602	2+41.57	-20.00	ROW
1603	2+41.57	-35.00	ROW
1604	2+55.78	-35.00	ROW
1605	3+00.00	-35.00	ROW
1606	3+50.00	25.00	ROW
1607	3+75.00	-25.00	ROW
1608	4+59.13	45.00	ROW
1609	4+59.13	-45.00	ROW
1610	6+04.40	45.00	ROW
1611	6+04.40	-45.00	ROW
1612	7+52.42	44.99	ROW
1614	8+50.00	-45.00	ROW
1615	10+25.00	25.00	ROW
1616	10+50.00	-25.00	ROW
1617	11+00.00	35.00	ROW
1618	12+00.00	-25.00	ROW
1619	13+00.00	25.00	ROW
1620	14+00.00	40.00	ROW

R.O.W. STATIONS AND OFFSETS

POINT NO.	STATION	RT OR LT	DESCRIPTION
1621	14+00.00	-40.00	ROW
1622	16+50.00	30.00	ROW
1623	16+50.00	-30.00	ROW
1624	21+25.00	30.00	ROW
1625	21+25.00	20.00	ROW
1626	21+25.00	-20.00	ROW
1627	21+25.00	-30.00	ROW
1628	28+25.00	25.00	ROW
1629	28+25.00	20.60	ROW
1630	28+25.00	-19.38	ROW
1631	28+25.00	-25.00	ROW
1632	29+29.42	-40.00	ROW
1633	29+29.42	40.00	ROW
1634	32+25.00	-75.00	ROW
1635	32+25.00	75.00	ROW
1636	33+38.66	-104.20	ROW
1637	33+49.09	-74.15	ROW
1638	34+01.29	-104.18	ROW
1639	34+02.80	75.79	ROW
1640	34+12.03	-74.24	ROW

R.O.W. STATIONS AND OFFSETS

POINT NO.	STATION	RT OR LT	DESCRIPTION
1640	34+12.03	-74.24	ROW
1641	34+13.67	105.73	ROW
1642	34+67.32	75.12	ROW
1643	34+75.00	75.00	ROW
1644	34+75.00	-75.00	ROW
1645	34+78.72	104.94	ROW
1646	38+85.00	30.00	ROW
1647	38+85.00	-30.00	ROW
1648	40+57.50	-30.00	ROW
1649	41+50.00	40.00	ROW
1650	42+99.81	40.00	ROW
1652	48+74.81	25.00	ROW
1653	48+74.81	20.00	ROW
1654	48+75.00	-20.00	ROW
1655	48+75.00	-25.00	ROW

CL STATIONS

POINT NO.	STATION	RT OR LT	DESCRIPTION
1697	0+00.00	0.00	CL
1698	2+41.57	0.00	CL
1699	2+50.00	0.00	CL
1700	2+55.78	0.00	CL
1701	6+04.40	0.00	CL
1702	7+51.24	0.00	CL
1703	21+00.00	0.00	CL
1704	22+55.93	0.00	CL
1705	26+20.43	0.00	CL
1706	27+21.13	0.00	CL
1707	27+99.88	0.00	CL
1708	29+29.42	0.00	CL
1709	33+30.19	0.00	CL
1710	35+91.91	0.00	CL
1711	37+97.27	0.00	CL
1712	40+57.50	0.00	CL
1713	43+65.83	0.00	CL
1714	48+49.81	0.00	CL
1715	49+23.42	0.00	CL
1716	51+09.11	0.00	CL
1717	53+80.30	0.00	CL

STATE OF ILLINOIS)
S.S.
COUNTY OF WILLIAMSON)

I, JOHN H. CRAWFORD, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2061, DO HEREBY CERTIFY THAT AT THE REQUEST OF JAMES WEBB, COUNTY ENGINEER FOR THE COUNTY OF WILLIAMSON, STATE OF ILLINOIS, I CAUSED A SURVEY TO BE MADE OF SOUTH MERIDIAN ROAD ACROSS PARTS OF SECTION 25, TOWNSHIP 8 SOUTH, RANGE 1 WEST OF THE THIRD PRINCIPAL MERIDIAN, JACKSON COUNTY, ILLINOIS AND SECTION 30, TOWNSHIP 8 SOUTH, RANGE 1 EAST OF THE THIRD PRINCIPAL MERIDIAN AND PART OF SECTION 1, TOWNSHIP 10 SOUTH, RANGE 2 EAST OF THE THIRD PRINCIPAL MERIDIAN, WILLIAMSON COUNTY, ILLINOIS AND THAT THIS PLAT CORRECTLY DEPICTS A PART OF THAT SURVEY, INCLUDING CENTERLINE, RIGHT OF WAY WIDTHS, AND STATIONING TO THE BEST OF MY KNOWLEDGE AND BELIEF.

I FURTHER CERTIFY THAT THIS IS A TRUE AND CORRECT SURVEY AS PLATTED HEREON. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY. IN WITNESS WHEREOF I HAVE SET MY HAND AND SEAL THIS _____ DAY OF _____, 2009.

JOHN H. CRAWFORD
I.P.L.S. NO. 2061
CARTERVILLE, ILLINOIS

STATE OF ILLINOIS — JOHN H. CRAWFORD — CARTERVILLE, IL — NO. 2061 — PROFESSIONAL LAND SURVEYOR

EXP. NOV. 30, 2010

NO.	DESCRIPTION	BY	DATE

NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/17/09
CHECKED	JHC	11/04/09

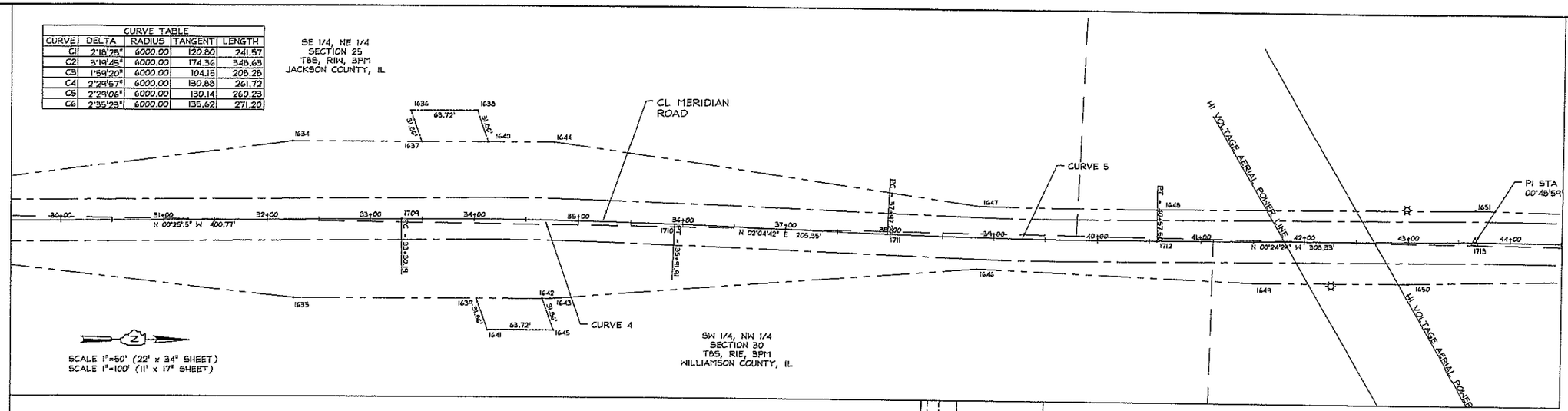
RIGHT OF WAY STA 0+00 TO 29+50
MERIDIAN ROAD
WILLIAMSON COUNTY ILLINOIS

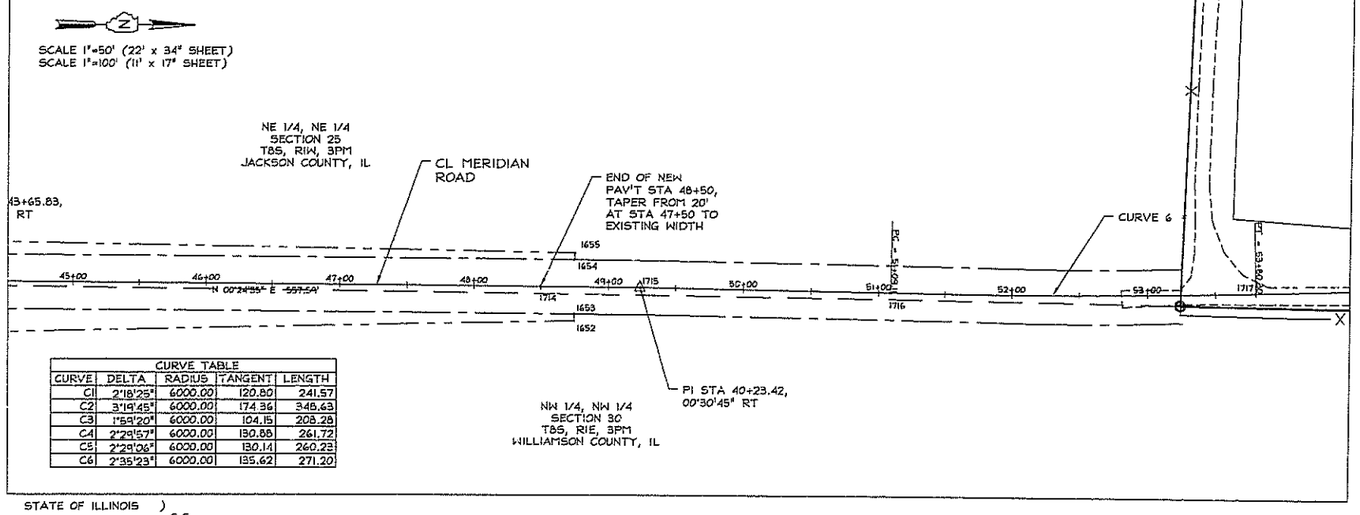
JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-5370 FAX (618) 985-4892
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.	
23	
ISSUE	DATE
A	11/04/09

...Land Projects\Engr\Meridian Road\dwg\Meridian Road 082209.dwg, ROW, 11/4/2009 11:29:35 AM, PDF Complete.ctb, 1:5

CURVE TABLE				
CURVE	DELTA	RADIUS	TANGENT	LENGTH
C1	2°18'25"	6000.00	120.80	241.57
C2	3°19'45"	6000.00	174.36	348.63
C3	1°59'20"	6000.00	104.15	208.28
C4	2°29'57"	6000.00	130.88	261.72
C5	2°29'06"	6000.00	130.14	260.23
C6	2°35'23"	6000.00	135.62	271.20





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C6	2°35'23"	6000.00	135.62	271.20

R.O.W. STATIONS AND OFFSETS			
POINT NO.	STATION	RT OR LT	DESCRIPTION
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1601	2+41.57	20.00	ROW
1602	2+41.57	-20.00	ROW
1603	2+41.57	-35.00	ROW
1604	2+55.78	-35.00	ROW
1605	3+00.00	-35.00	ROW
1606	3+50.00	25.00	ROW
1607	3+75.00	-25.00	ROW
1608	4+59.13	45.00	ROW
1609	4+59.13	-45.00	ROW
1610	6+04.40	45.00	ROW
1611	6+04.40	-45.00	ROW
1612	7+52.42	44.99	ROW
1614	8+50.00	-45.00	ROW
1615	10+25.00	25.00	ROW
1616	10+50.00	-25.00	ROW
1617	11+00.00	35.00	ROW
1618	12+00.00	-25.00	ROW
1619	13+00.00	25.00	ROW
1620	14+00.00	40.00	ROW
1621	14+00.00	-40.00	ROW
1622	16+50.00	30.00	ROW
1623	16+50.00	-30.00	ROW
1624	21+25.00	30.00	ROW
1625	21+25.00	20.00	ROW
1626	21+25.00	-20.00	ROW
1627	21+25.00	-30.00	ROW
1628	28+25.00	25.00	ROW
1629	28+25.00	20.60	ROW
1630	28+25.00	-19.39	ROW
1631	28+25.00	-25.00	ROW
1632	29+29.42	-40.00	ROW
1633	29+29.42	40.00	ROW
1634	32+25.00	-75.00	ROW
1635	32+25.00	75.00	ROW
1636	33+38.66	-104.20	ROW
1637	33+49.09	-74.15	ROW
1638	34+01.29	-104.18	ROW
1639	34+02.80	75.74	ROW
1640	34+12.03	-74.24	ROW
1641	34+13.87	105.73	ROW
1642	34+67.32	75.12	ROW
1643	34+75.00	75.00	ROW
1644	34+75.00	-75.00	ROW
1645	34+78.72	104.94	ROW
1646	38+85.00	30.00	ROW
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1648	40+57.50	-30.00	ROW
1649	41+50.00	40.00	ROW
1650	42+99.81	40.00	ROW
1652	48+74.81	25.00	ROW
1653	48+74.81	20.00	ROW
1654	48+75.00	-20.00	ROW
1655	48+75.00	-25.00	ROW

CL. STATIONS			
POINT NO.	STATION	RT OR LT	DESCRIPTION
1697	0+00.00	0.00	CL
1695	2+41.57	0.00	CL
1698	2+50.00	0.00	CL
1700	2+55.78	0.00	CL
1701	6+04.40	0.00	CL
1702	7+51.24	0.00	CL
1703	21+00.00	0.00	CL
1704	22+55.93	0.00	CL
1705	26+20.43	0.00	CL
1706	27+21.13	0.00	CL
1707	27+99.88	0.00	CL
1708	29+29.42	0.00	CL
1709	33+30.19	0.00	CL
1710	35+91.91	0.00	CL
1711	37+97.37	0.00	CL
1712	40+57.50	0.00	CL
1713	43+65.83	0.00	CL
1714	48+49.81	0.00	CL
1715	49+23.42	0.00	CL
1716	51+09.11	0.00	CL
1717	53+80.30	0.00	CL

STATE OF ILLINOIS)
S.S.
COUNTY OF WILLIAMSON)

I, JOHN H. CRAWFORD, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2061, DO HEREBY CERTIFY THAT AT THE REQUEST OF JAMES WEBB, COUNTY ENGINEER FOR THE COUNTY OF WILLIAMSON, STATE OF ILLINOIS, I CAUSED A SURVEY TO BE MADE OF SOUTH MERIDIAN ROAD ACROSS PARTS OF SECTION 25, TOWNSHIP 8 SOUTH, RANGE 1 WEST OF THE THIRD PRINCIPAL MERIDIAN, JACKSON COUNTY, ILLINOIS AND SECTION 30, TOWNSHIP 8 SOUTH, RANGE 1 EAST OF THE THIRD PRINCIPAL MERIDIAN AND PART OF SECTION 1, TOWNSHIP 10 SOUTH, RANGE 2 EAST OF THE THIRD PRINCIPAL MERIDIAN, WILLIAMSON COUNTY, ILLINOIS AND THAT THIS PLAT CORRECTLY DEPICTS A PART OF THAT SURVEY, INCLUDING CENTERLINE, RIGHT OF WAY WIDTHS, AND STATIONING TO THE BEST OF MY KNOWLEDGE AND BELIEF:

I FURTHER CERTIFY THAT THIS IS A TRUE AND CORRECT SURVEY AS PLATTED HEREON. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY. IN WITNESS WHEREOF I HAVE SET MY HAND AND SEAL THIS _____ DAY OF _____, 2009.

JOHN H. CRAWFORD
I.P.L.S. NO. 2061
CARTERVILLE, ILLINOIS

STATE OF ILLINOIS
JOHN H. CRAWFORD
CARTERVILLE, IL
NO. 2061
PROFESSIONAL LAND SURVEYOR

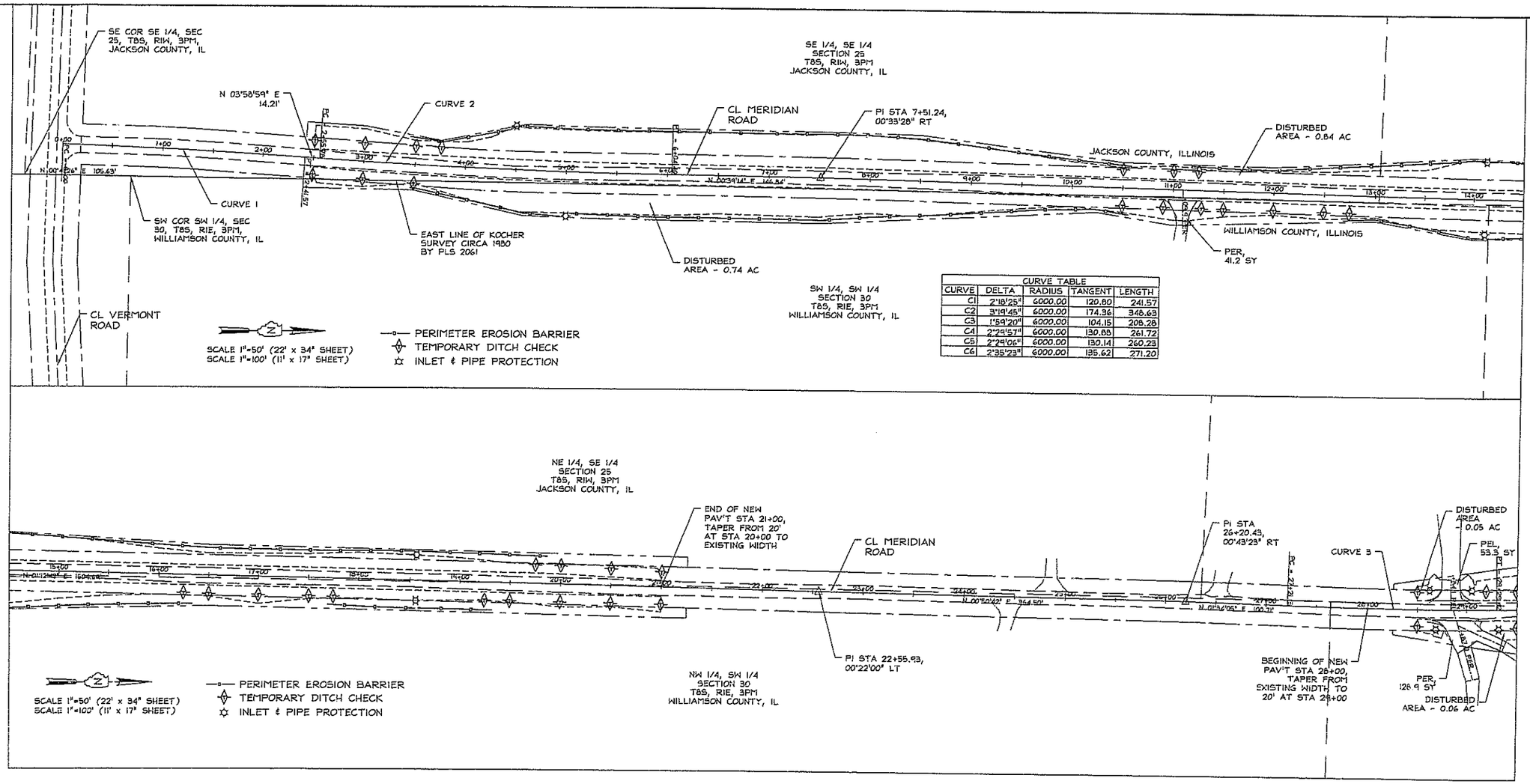
EXP. NOV. 30, 2010

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE		BY	DATE
								DESIGNED		
								DRAWN	JHC	07/17/09
								CHECKED	JHC	11/04/09

RIGHT OF WAY STA 29+50TO 53+80.30 MERIDIAN ROAD WILLIAMSON COUNTY ILLINOIS

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-6370 FAX (618) 985-6972
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.	
24	
ISSUE	DATE
A	11/04/09



CURVE TABLE				
CURVE	DELTA	RADIUS	TANGENT	LENGTH
C1	2°18'25"	6000.00	120.80	241.57
C2	3°19'45"	6000.00	174.36	348.63
C3	1°59'20"	6000.00	104.15	208.28
C4	2°29'57"	6000.00	130.85	261.72
C5	2°29'06"	6000.00	130.14	260.23
C6	2°35'23"	6000.00	135.62	271.20

MERIDIAN ROAD	
INLET & PIPE PROTECTION	
4+50	LT
5+01	RT
14+12	RT
14+12	LT
18+56	RT
18+56	LT
26+64	LT
26+70	RT
29+04	LT
29+30	RT

MERIDIAN ROAD		
PERIMETER EROSION BARRIER		
STATION		LENGTH
3+47	TO 4+95 RT	150 FT
3+45	TO 4+44 LT	100 FT
5+05	TO 10+56 RT	555 FT
4+55	TO 10+58 LT	600 FT
11+17	TO 14+10 LT	295 FT
14+15	TO 16+34 RT	220 FT
14+16	TO 18+54 LT	440 FT
17+70	TO 18+51 RT	85 FT
18+59	TO 19+33 RT	75 FT
18+61	TO 19+86 LT	125 FT

MERIDIAN ROAD			
TEMPORARY DITCH CHECKS PLACED AT 50' INTERVALS BETWEEN THESE STATIONS			
2+50	TO 3+50 RT	3	EACH
2+50	TO 3+50 LT	3	EACH
3+75	LT	1	EACH
10+50	RT	1	EACH
10+91	RT	1	EACH
10+50	TO 11+00 LT	2	EACH
11+25	LT	1	EACH
11+29	RT	1	EACH
11+50	TO 12+50 RT	3	EACH
12+74	RT	1	EACH

MERIDIAN ROAD			
TEMPORARY DITCH CHECKS PLACED AT 50' INTERVALS BETWEEN THESE STATIONS			
16+25	RT	1	EACH
16+50	TO 17+50 RT	3	EACH
17+25	RT	1	EACH
19+25	RT	1	EACH
19+50	TO 21+00 RT	4	EACH
19+75	LT	1	EACH
20+00	TO 21+00 LT	3	EACH
28+50	RT	1	EACH
28+50	LT	1	EACH
29+20	LT	1	EACH

MERIDIAN ROAD							
SEEDING							
STATION	AREA	NITROGEN	PHOSPHORUS	POTASSIUM	LIMESTONE	MULCH	
2+50 TO 21+00 RT	0.84 ACRES	76 POUNDS	76 POUNDS	76 POUNDS	2.5 TONS	0.84	ACRES
2+50 TO 21+00 LT	0.74 ACRES	67 POUNDS	67 POUNDS	67 POUNDS	2.2 TONS	0.74	ACRES
28+50 TO 29+50 RT	0.06 ACRES	5 POUNDS	5 POUNDS	5 POUNDS	0.2 TONS	0.06	ACRES
28+50 TO 29+50 LT	0.05 ACRES	5 POUNDS	5 POUNDS	5 POUNDS	0.2 TONS	0.05	ACRES

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

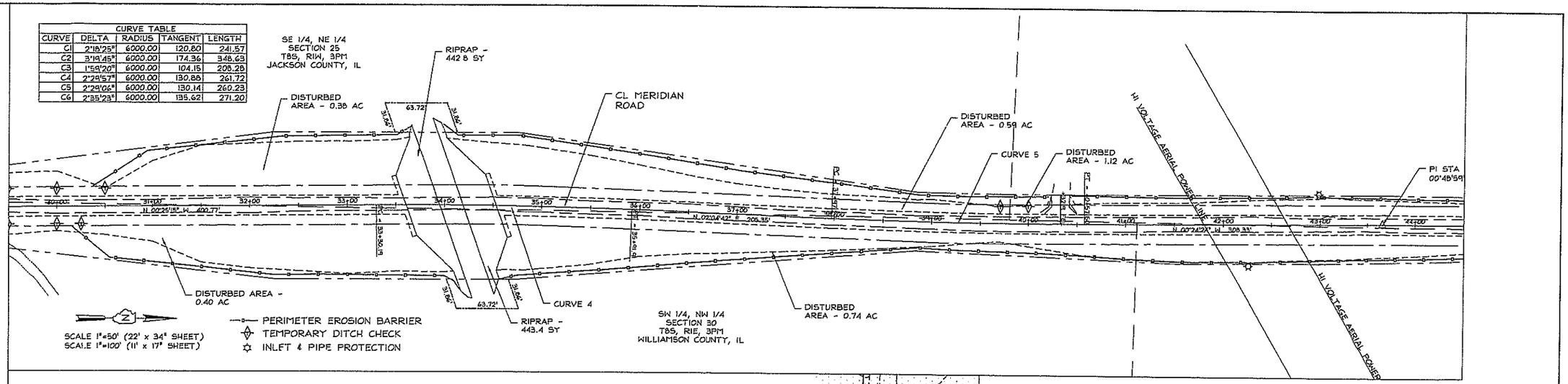
	BY	DATE
DESIGNED		
DRAWN	JHC	07/17/09
CHECKED	JHC	11/04/09

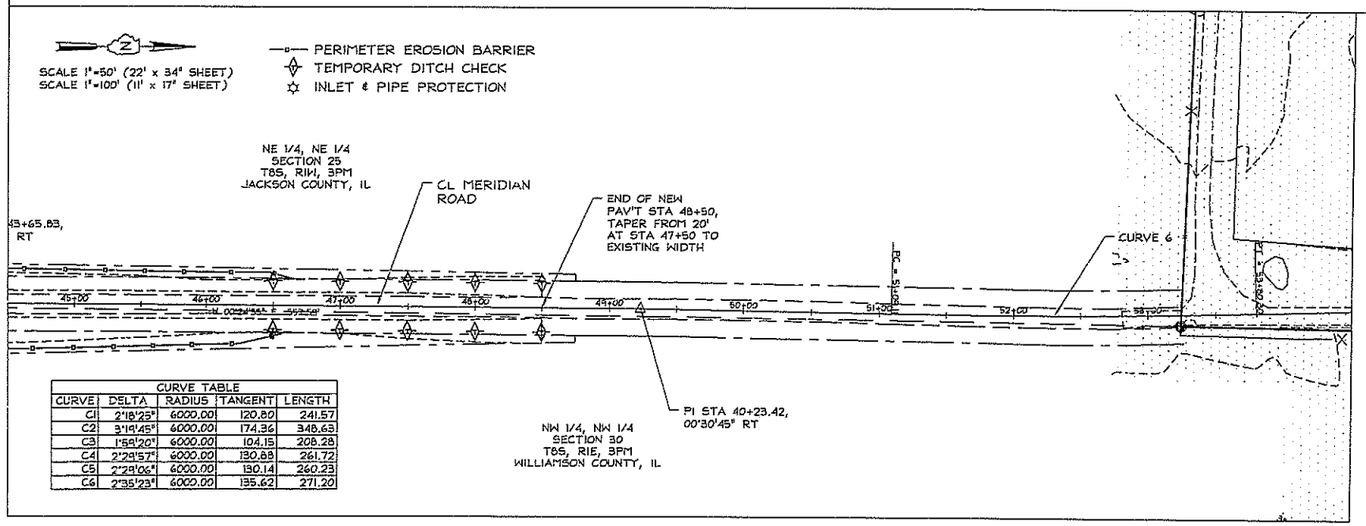
EROSION CONTROL
STA 0+00 TO 29+50
MERIDIAN ROAD
WILLIAMSON COUNTY ILLINOIS

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-1370 FAX (618) 985-4892
PROFESSIONAL DESIGN FIRM # 184-002855

SHEET NO.	
25	
ISSUE	DATE
A	11/04/09

CURVE TABLE				
CURVE	DELTA	RADIUS	TANGENT	LENGTH
C1	2°18'25"	6000.00	120.80	241.57
C2	3°19'48"	6000.00	174.36	348.63
C3	1°59'20"	6000.00	104.15	208.28
C4	2°29'57"	6000.00	130.88	261.72
C5	2°29'06"	6000.00	130.14	260.23
C6	2°35'23"	6000.00	135.62	271.20





CURVE TABLE				
CURVE	DELTA	RADIUS	TANGENT	LENGTH
C1	2°18'25"	6000.00	120.80	241.57
C2	3°19'48"	6000.00	174.36	348.63
C3	1°59'20"	6000.00	104.15	208.28
C4	2°29'57"	6000.00	130.88	261.72
C5	2°29'06"	6000.00	130.14	260.23
C6	2°35'23"	6000.00	135.62	271.20

MERIDIAN ROAD
INLET & PIPE PROTECTION
42+26 RT
42+97 LT

MERIDIAN ROAD	
PERIMETER EROSION BARRIER	
STATION	LENGTH
30+15 TO 34+16 RT	400 FT
30+38 TO 33+64 LT	340 FT
34+00 TO 40+20 LT	610 FT
34+58 TO 42+21 RT	525 FT
40+44 TO 42+92 LT	250 FT
42+33 TO 46+56 RT	425 FT
43+01 TO 46+65 LT	365 FT

MERIDIAN ROAD		
TEMPORARY DITCH CHECKS PLACED AT 50' INTERVALS BETWEEN THESE STATIONS		
29+50 TO 30+50 LT	3	EACH
29+50 TO 30+00 RT	2	EACH
30+25 RT	1	EACH
39+70 LT	1	EACH
40+00 LT	1	EACH
46+50 TO 48+50 RT	5	EACH
46+50 TO 48+50 LT	5	EACH

MERIDIAN ROAD							
SEEDING							
STATION	AREA	NITROGEN	PHOSPHORUS	POTASSIUM	LIMESTONE	MULCH	
29+50 TO 34+00 RT	0.40	ACRES	36	POUNDS	36	POUNDS	36	POUNDS	1.2	TONS	0.40	ACRES
29+50 TO 34+00 LT	0.35	ACRES	34	POUNDS	34	POUNDS	34	POUNDS	1.1	TONS	0.38	ACRES
34+00 TO 48+50 RT	0.74	ACRES	67	POUNDS	67	POUNDS	67	POUNDS	2.2	TONS	0.74	ACRES
34+00 TO 46+50 LT	0.59	ACRES	53	POUNDS	53	POUNDS	53	POUNDS	1.8	TONS	0.59	ACRES

NO.	DESCRIPTION	BY	DATE	NO.	DESCRIPTION	BY	DATE

	BY	DATE
DESIGNED		
DRAWN	JHC	07/17/09
CHECKED	JHC	11/04/09

EROSION CONTROL
STA 29+50 TO 53+80.30
MERIDIAN ROAD
WILLIAMSON COUNTY ILLINOIS

JOHN H. CRAWFORD & ASSOCIATES, P.C.
CIVIL ENGINEERS, LAND SURVEYORS
201 SOUTH DIVISION STREET, CARTERVILLE, ILLINOIS 62918
PHONE (618) 985-5370 FAX (618) 985-4592
PROFESSIONAL DESIGN FIRM # 184-002885

SHEET NO.	
26	
ISSUE	DATE
A	11/04/09

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