



# Appendix B

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# Survey Data



**US Army Corps  
of Engineers**  
Norfolk District

**Chesapeake**  
VIRGINIA

Department of Public Works

**URS**

Project: OAK GROVE  
Node/Point #: 120-118-110-117-116-102  
Location/Nearest Intersection: /

Date: 8-23-09  
Surveyed By: meekins

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
Culvert Depth: \_\_\_\_\_  
Culvert Width: \_\_\_\_\_  
Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Culvert Invert Elev.: \_\_\_\_\_

Flow Direction (circle one):  
← →

Channel Material (circle one):  
Earth / Conc. / Other

Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT DITCH

Ground Elev.: \_\_\_\_\_

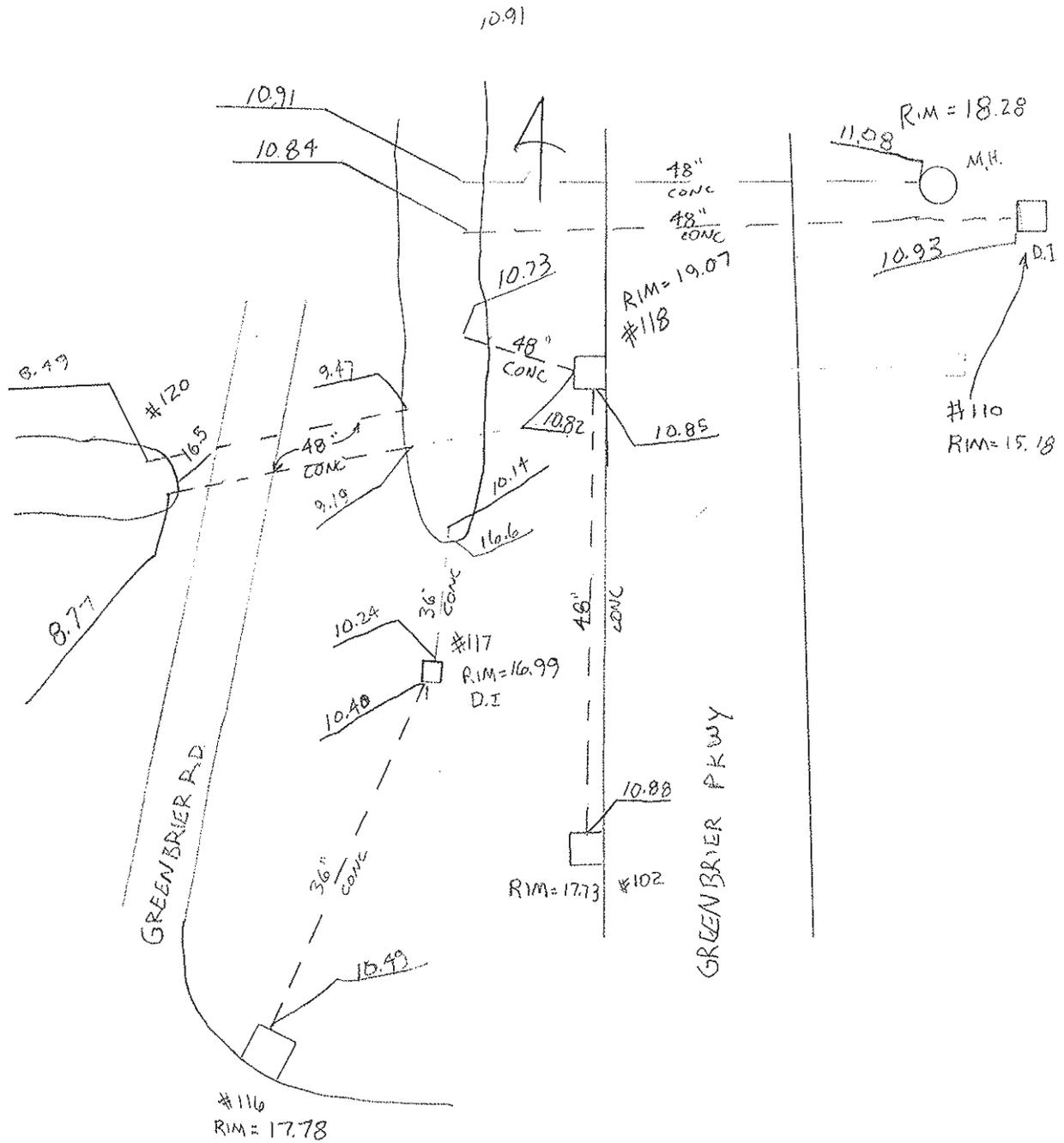
High Shoulder Elev.: \_\_\_\_\_

CULVERT

Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

Additional description of the point location:  
see BACK of sheet



Project: \_\_\_\_\_  
 Node/Point #: 126  
 Location/Nearest Intersection: Z

Date: 8-20-09  
 Surveyed By: Meekins

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

<p>Culvert Material: _____          Culvert Depth: _____          Culvert Width: _____          Culvert Type (circle one):          Circ/ Box/ Arch/ Ellip. /Other</p>	
<u>CULVERT</u>	<u>DITCH</u>

Ground Elev.: 17.53

High Shoulder Elev.: \_\_\_\_\_

CULVERT

Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

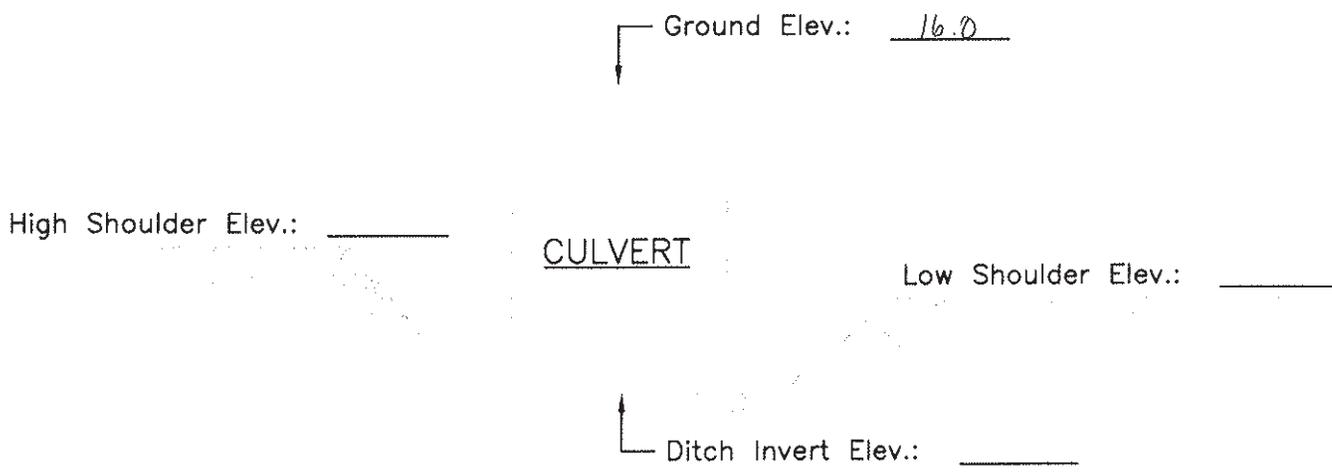
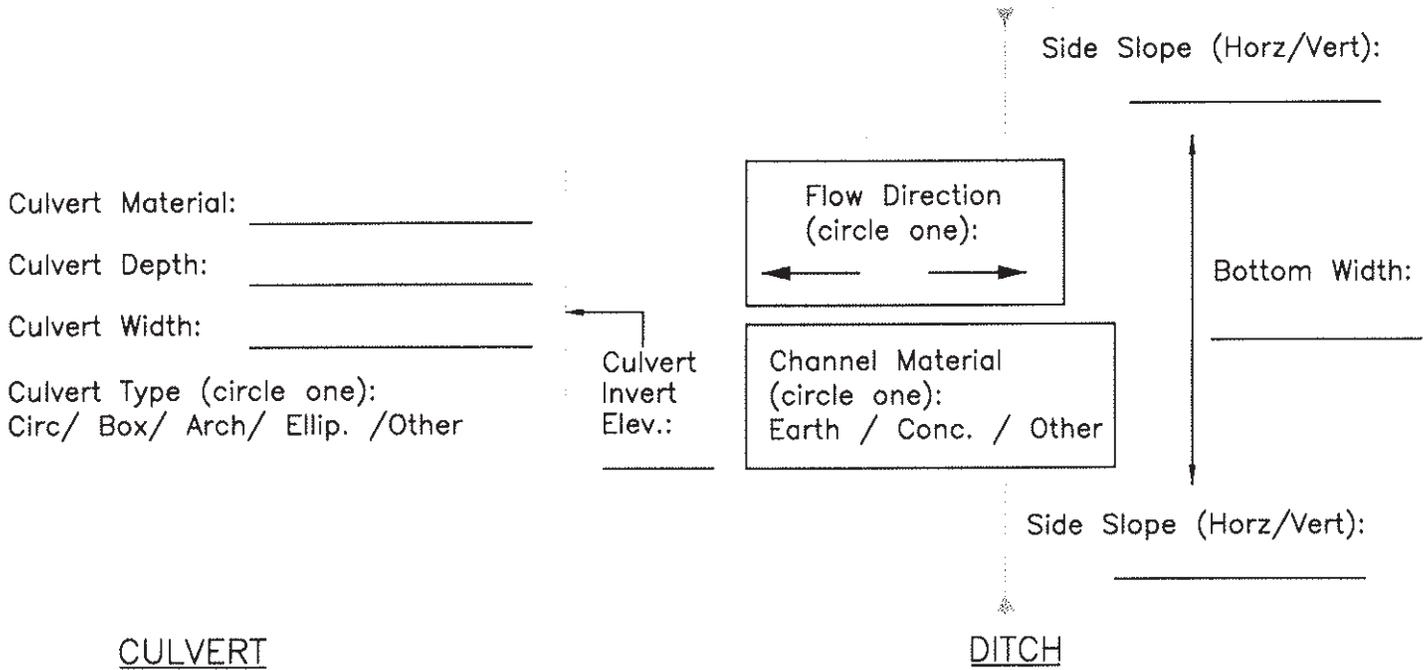
9.58

Additional description of the point location:  
 \_\_\_\_\_  
CONC PIPE  
 \_\_\_\_\_  
24.03

Project: OAK GROVE  
 Node/Point #: 128  
 Location/Nearest Intersection: Z

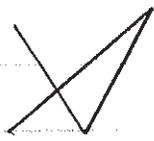
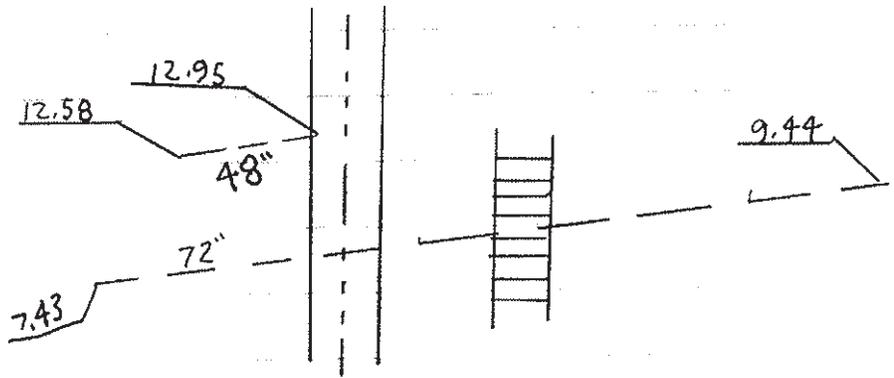
Date: 8-20-09  
 Surveyed By: MOE KAC

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

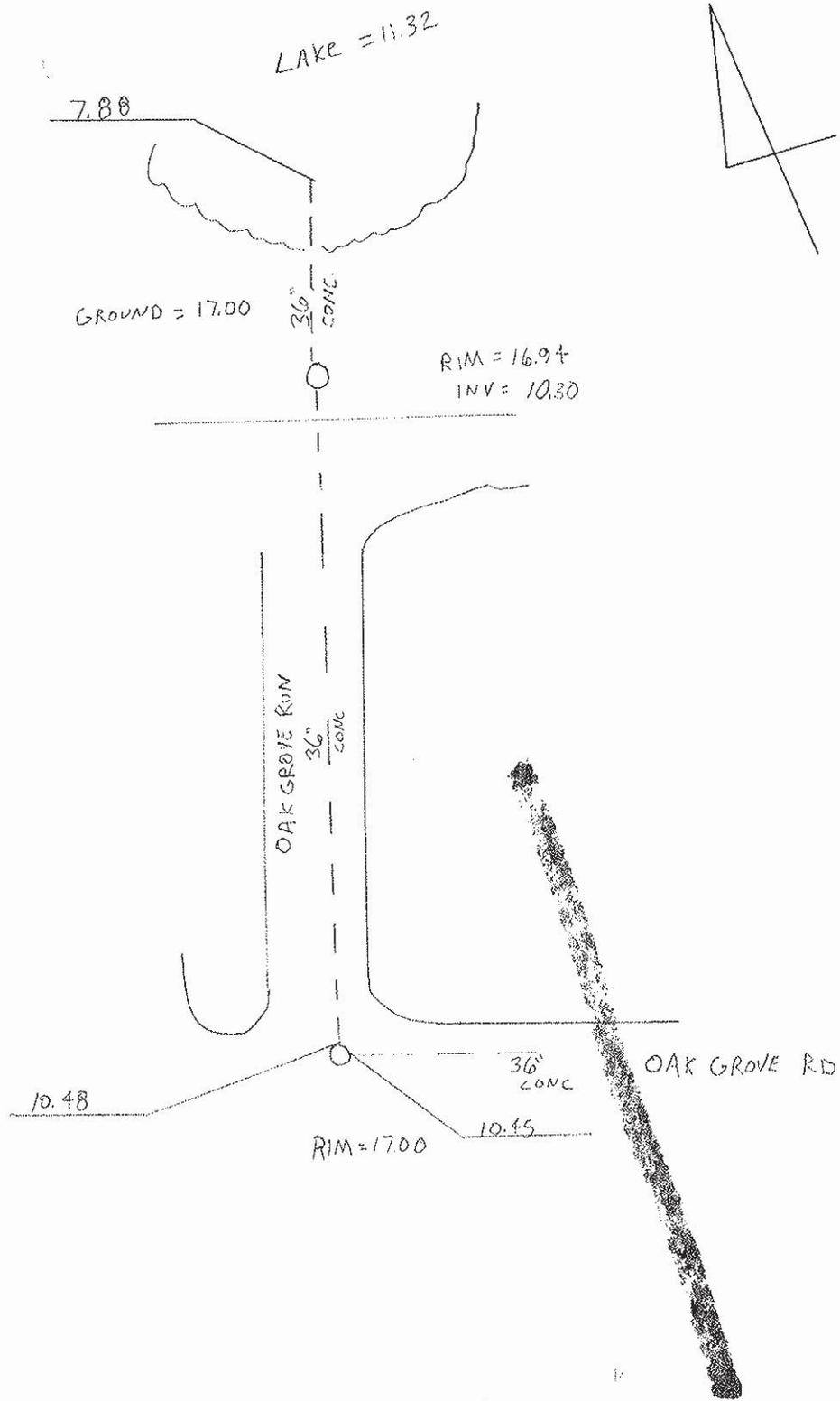


Additional description of the point location:

LAKE ELEV = 1.5  
see back of sheet  
No Ditch To LAKE PIPE (LAKE DITCH NOT VISIBLE OR 90 DEG)



**Location 3**



187.5

Project: OAK GROVE  
 Node/Point #: 169 EAST  
 Location/Nearest  
 Intersection: 4

Date: 8-23-09  
 Surveyed By:  
Meekins

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
 DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

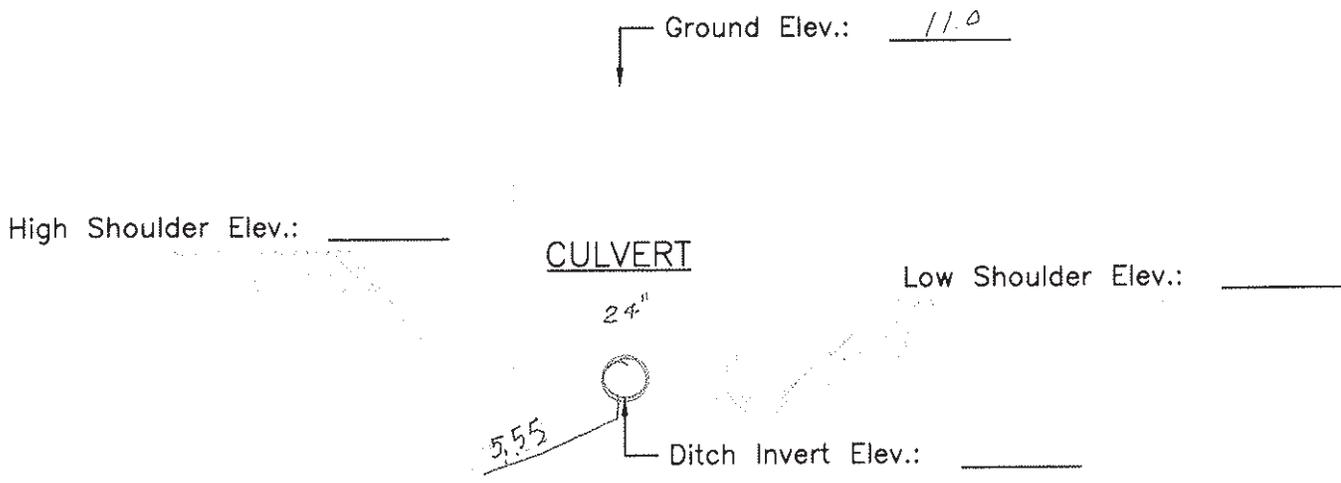
Culvert Invert Elev.: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT DITCH



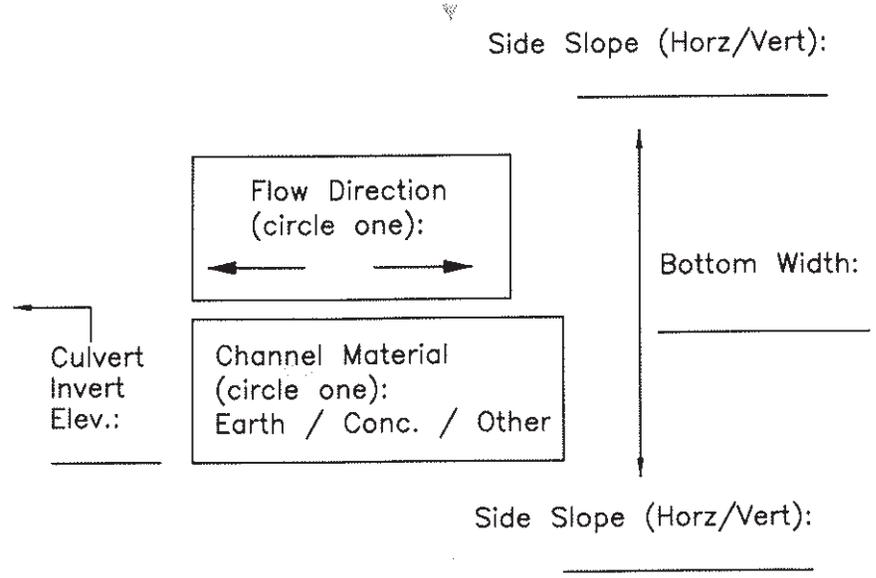
Additional description of the point location:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Project: OAK GROVE  
 Node/Point #: 169 WEST  
 Location/Nearest  
 Intersection: A

Date: 8-23-09  
 Surveyed By: Meekins

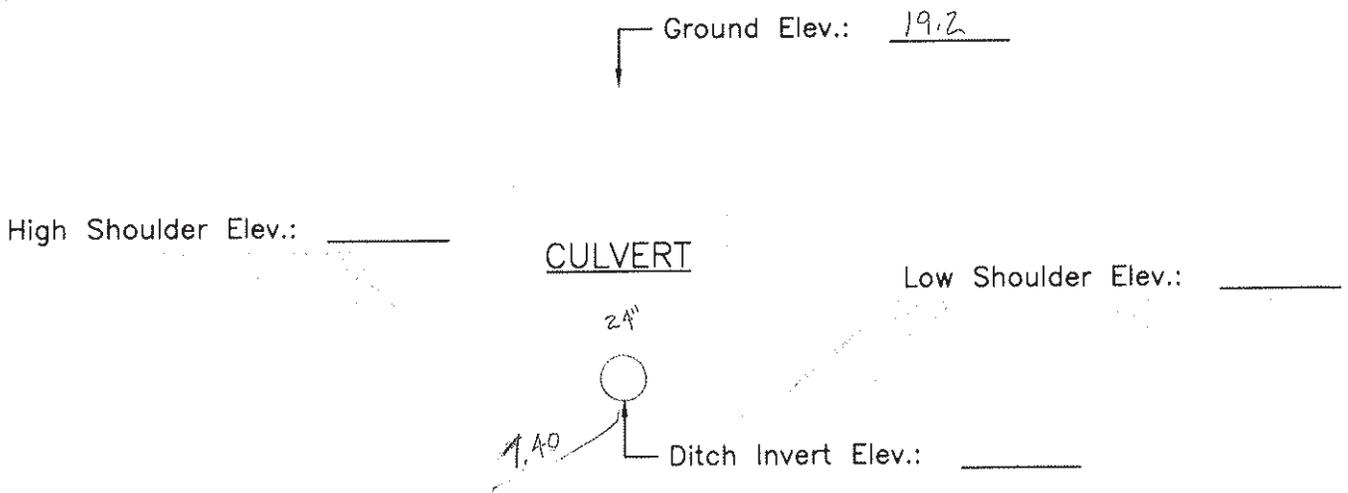
THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
 DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other



CULVERT

DITCH



Additional description of the point location: \_\_\_\_\_

LAKE ELEV = 11.95

11.31      5.6

**Location 5**

UNABLE TO SEE PIPES



RIM: 18.50  
INV: 12.36  
\* 164

RIM: 18.53  
INV: 12.21



BATTLEFIELD BLVD

PIPES NOT  
VISIBLE CAN'T  
BE SEEN FROM  
BOX OFFICE.

RIM: 19.78  
INV: 13.36



CONC. VAULT

#163



D 642

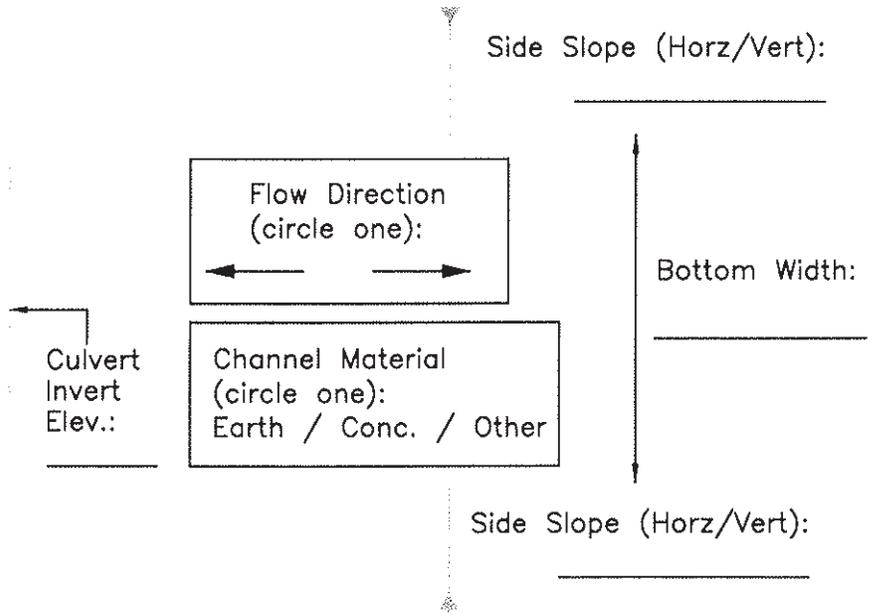
23.76 5.45  
4.43 22.74 5.52 18.31  
17.22

Project: DRILLING  
 Node/Point #: 166 NORTH  
 Location/Nearest  
 Intersection: D

Date: 8-23-09  
 Surveyed By: MARK US

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
 DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

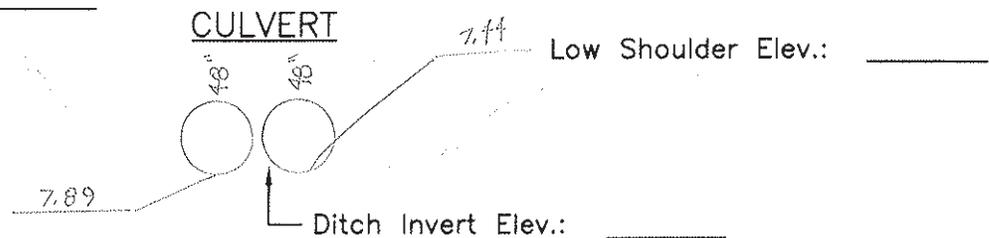


CULVERT

DITCH

Ground Elev.: 16.1

High Shoulder Elev.: \_\_\_\_\_



Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

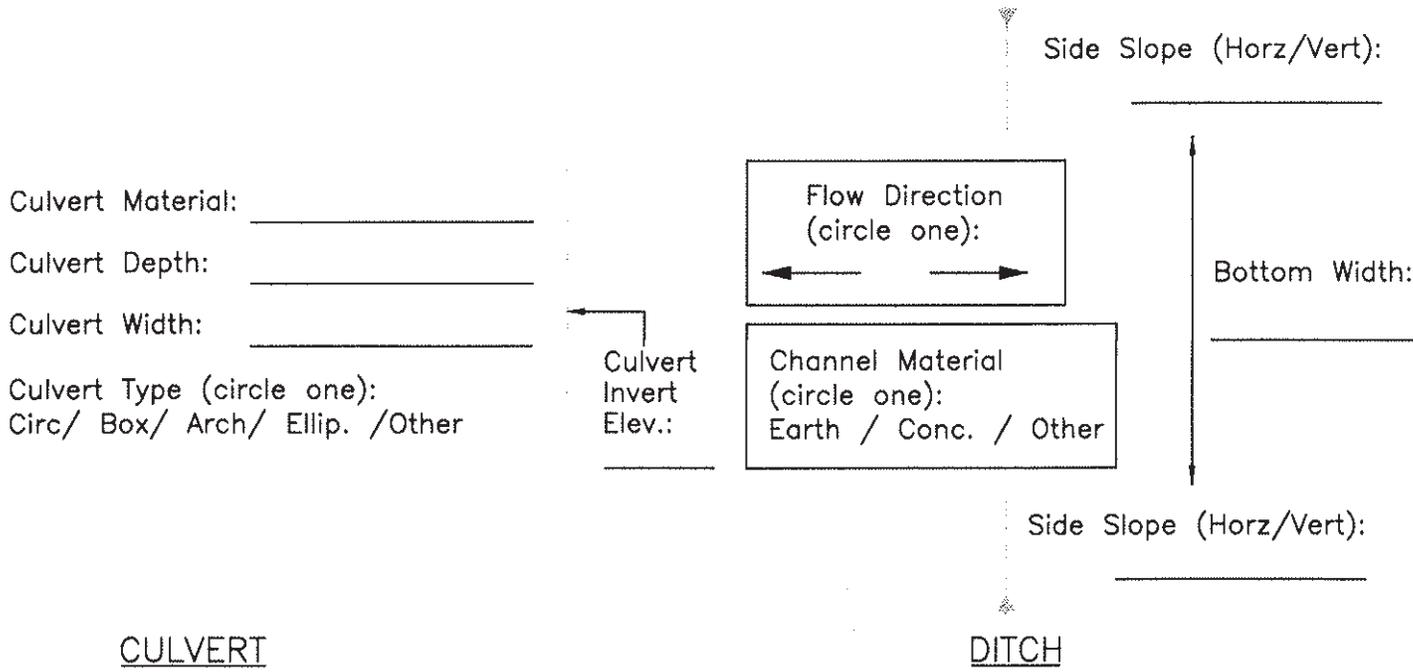
Additional description of the point location:

2 CONC PIPES 48"

Project: OAK GROVE  
 Node/Point #: 166 SOUTH  
 Location/Nearest  
 Intersection: 6

Date: 8-23-09  
 Surveyed By: 1/2/10

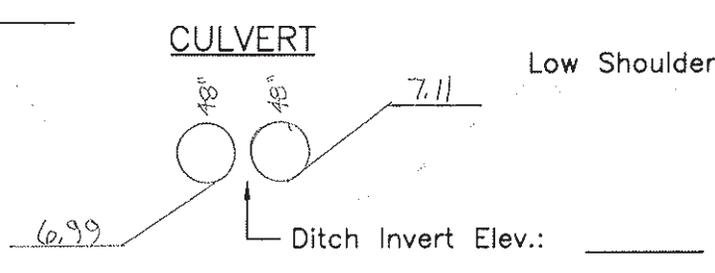
THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
 DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.



Ground Elev.: 16.7

High Shoulder Elev.: \_\_\_\_\_

Low Shoulder Elev.: \_\_\_\_\_



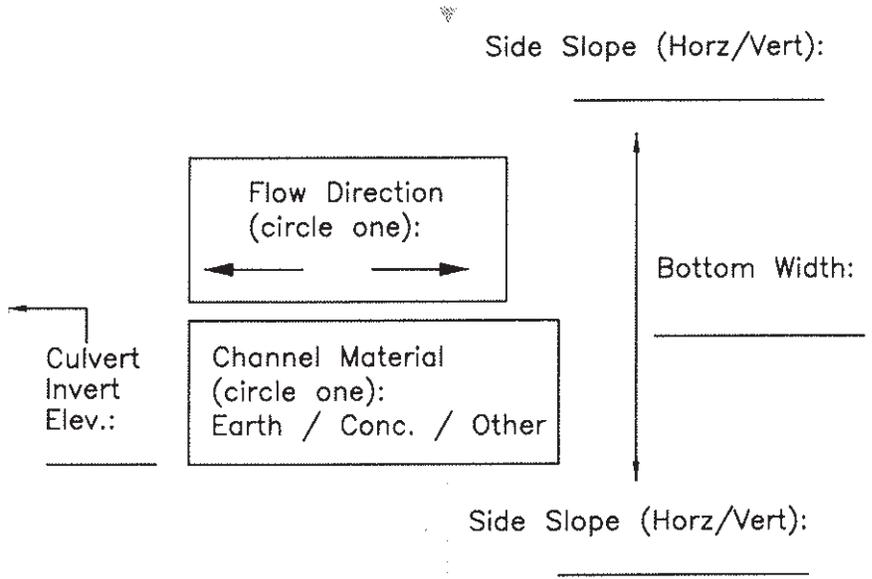
Additional description of the point location:  
2 CONC PIPES 48"  
LAKE ELEV = 11.96

Project: OAK GROVE  
 Node/Point #: NORTH SIDE OF OAK GROVE RD  
 Location/Nearest Intersection: 7

Date: 8-18-09  
 Surveyed By: MM

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other



CULVERT

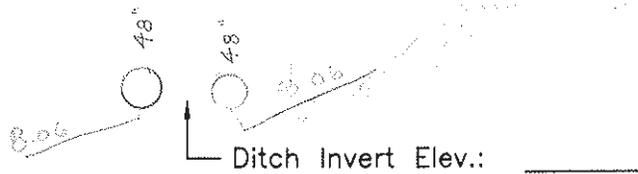
DITCH

Ground Elev.: 16.1

High Shoulder Elev.: \_\_\_\_\_

CULVERT

Low Shoulder Elev.: \_\_\_\_\_



Ditch Invert Elev.: \_\_\_\_\_

Additional description of the point location:

2x 48" CONC PIPES LAKE ELE 12.00

Project: OAK GROVE  
 Node/Point #: SOUTH SIDE OF OAK GROVE RD  
 Location/Nearest  
 Intersection: 7

Date: 8-18-09  
 Surveyed By: MM

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
 DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

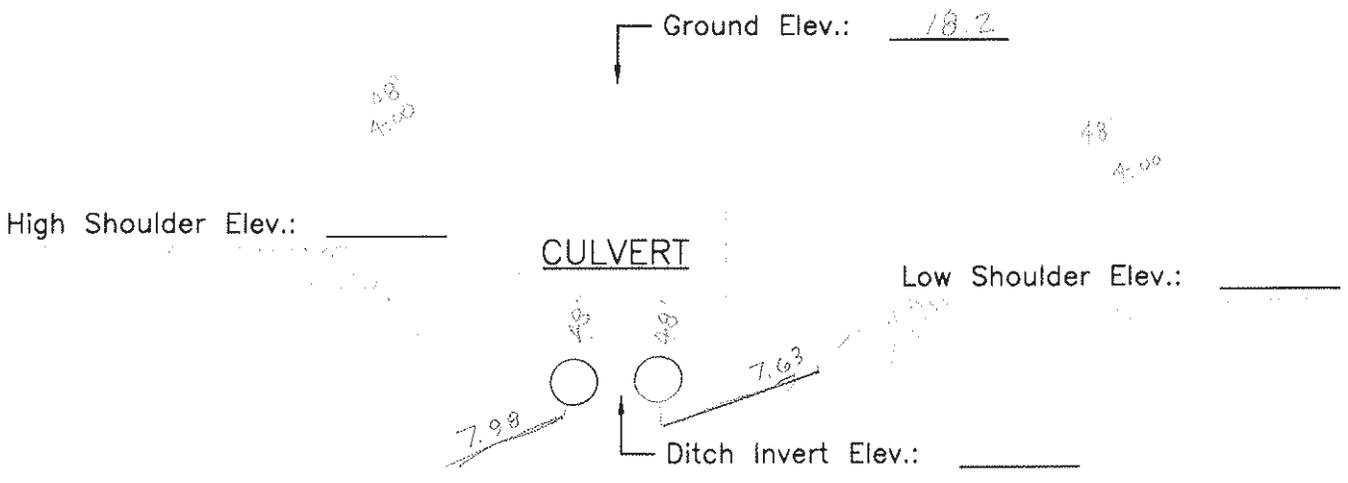
Culvert Invert Elev.: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT DITCH



Additional description of the point location:  
 \_\_\_\_\_  
2x 48" CONC PIPES LAKE EL = 11.98  
 \_\_\_\_\_  
 \_\_\_\_\_

Project: OAK GROVE  
 Node/Point #: 708/210  
 Location/Nearest Intersection: 8

Date: 8-19-09  
 Surveyed By: Meekins

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

<p>Flow Direction ←</p> <p>Culvert Material: _____          Culvert Depth: _____          Culvert Width: _____          Culvert Type (circle one):          Circ/ Box/ Arch/ Ellip. /Other</p>	<p>Rim Elev.: _____</p> <p style="font-size: 2em;">}</p> <p>Invert Out Elev.: _____</p>	<p>Flow Direction ←</p> <p>Culvert Material: _____          Culvert Depth: _____          Culvert Width: _____          Culvert Type (circle one):          Circ/ Box/ Arch/ Ellip. /Other</p> <p>Invert In Elev.: _____</p>
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CULVERT

JUNCTION/INLET

CULVERT

<p>Culvert Material: _____          Culvert Depth: _____          Culvert Width: _____          Culvert Type (circle one):          Circ/ Box/ Arch/ Ellip. /Other</p>	<p>W.S. Elev.: _____</p> <p style="font-size: 2em;">}</p> <p>Invert Out Elev.: _____          Invert Elev.: _____</p>	
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OUTLET CULVERT

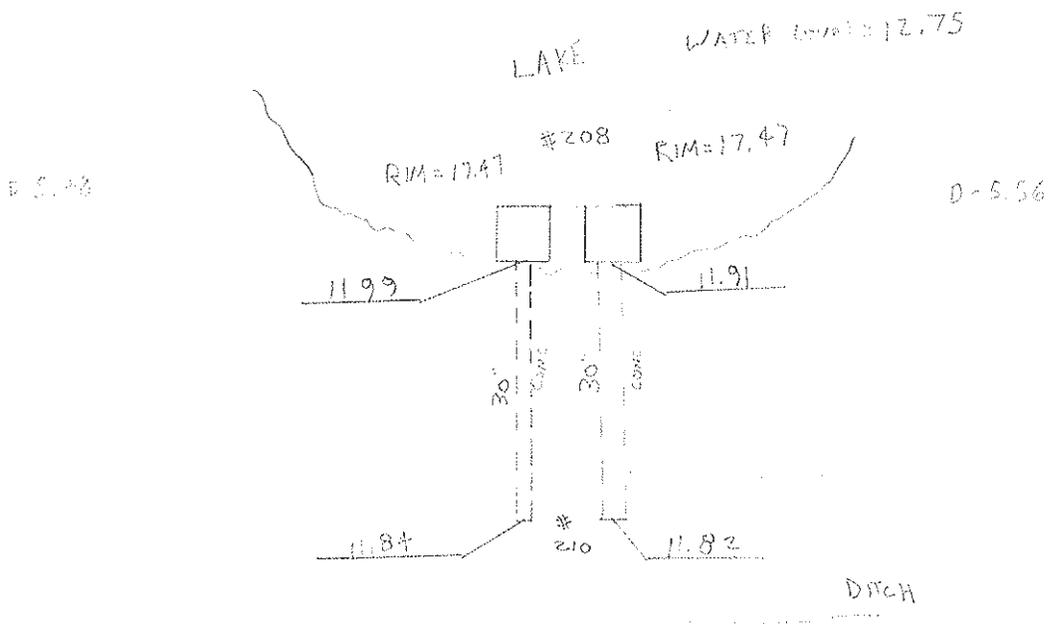
LAKE

Additional description of the point location:

\_\_\_\_\_

\_\_\_\_\_

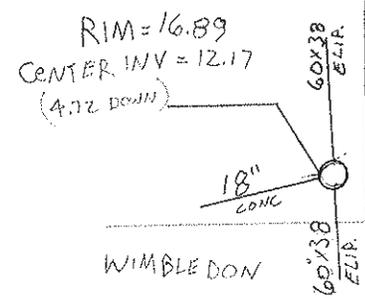
\_\_\_\_\_



23.67 5.16  
 5.46 23.91 6.67 18.51 7.64  
 5.59 23.89 5.67 17.30  
 17.22

**Location 9**

TBM  
1650



WIMBLEDON BLVD

Project: OAK GROVE  
 Node/Point #: 237  
 Location/Nearest Intersection: 10

Date: 8-19-09  
 Surveyed By: Meekins

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC

Culvert Depth: 34 3.0

Culvert Width: 34 40

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Culvert Invert Elev.: \_\_\_\_\_

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

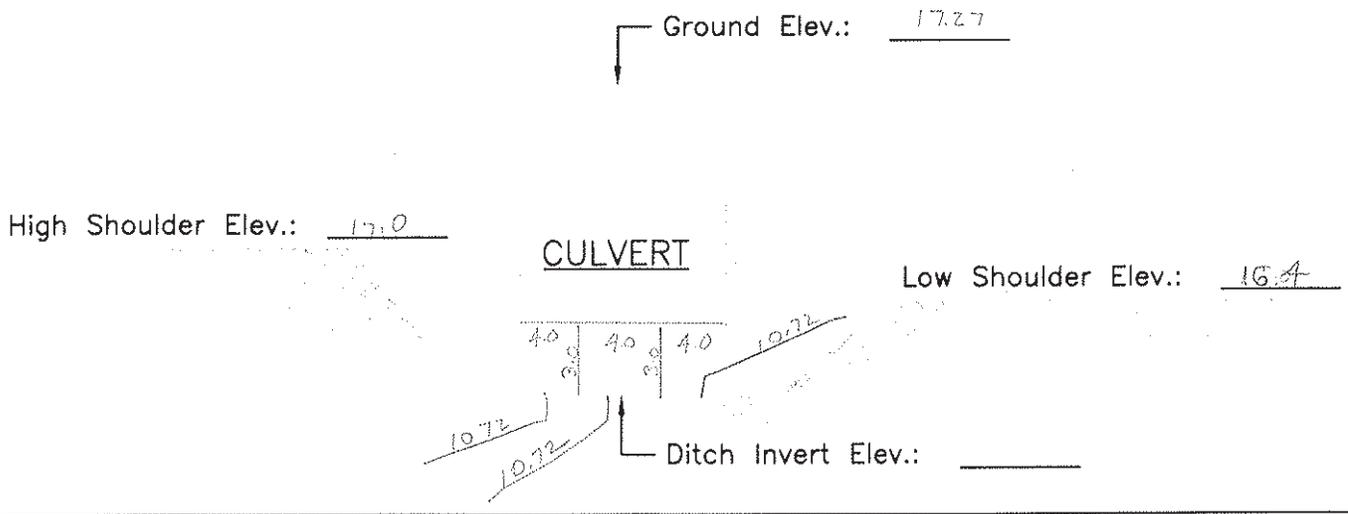
Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT

DITCH



Additional description of the point location: 3 SQUARE P.P.C.

2187

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Project: OAK GROVE  
 Node/Point #: 239 (Hoodie)  
 Location/Nearest Intersection: 10

Date: 8-19-09  
 Surveyed By: Mackin

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: conc  
 Culvert Depth: 3x 3.0  
 Culvert Width: 3x 4.0  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

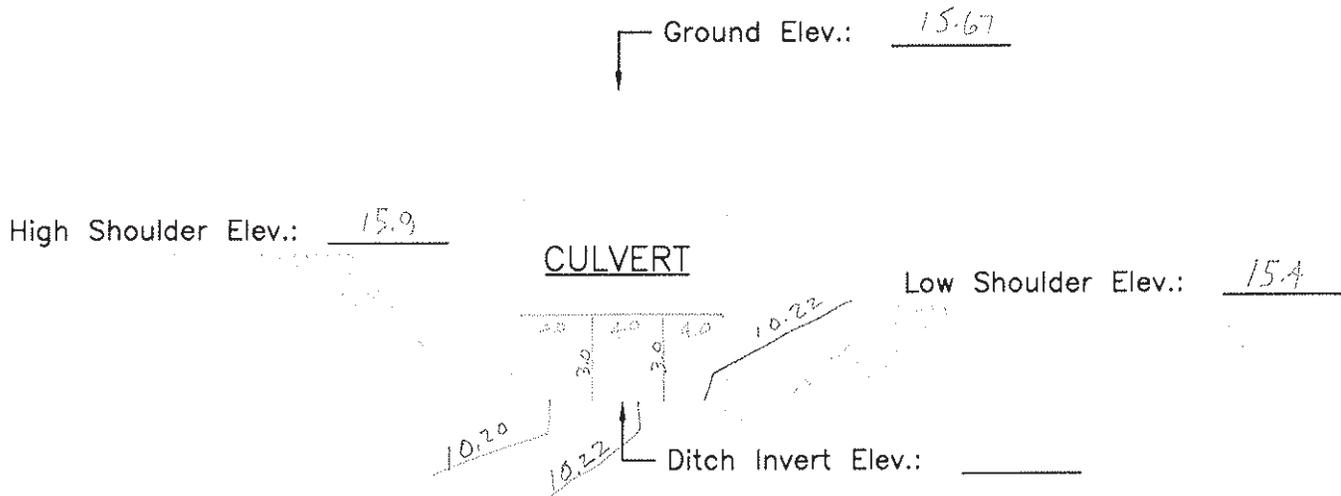
Culvert Invert Elev.: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

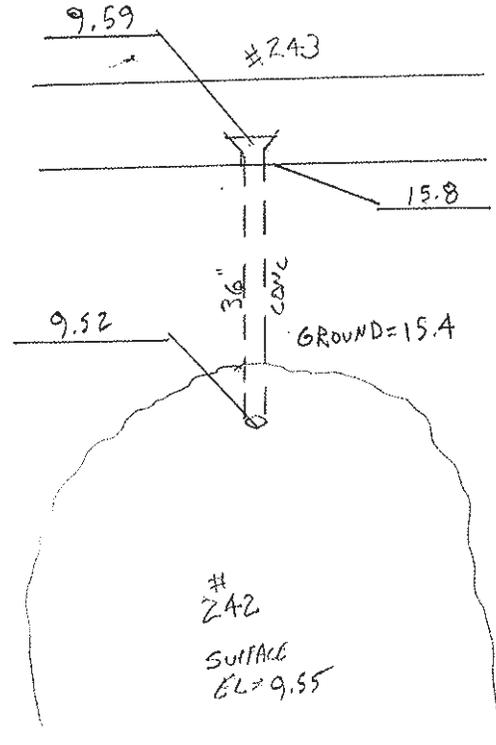
CULVERT DITCH



Additional description of the point location: 3 SQUARE

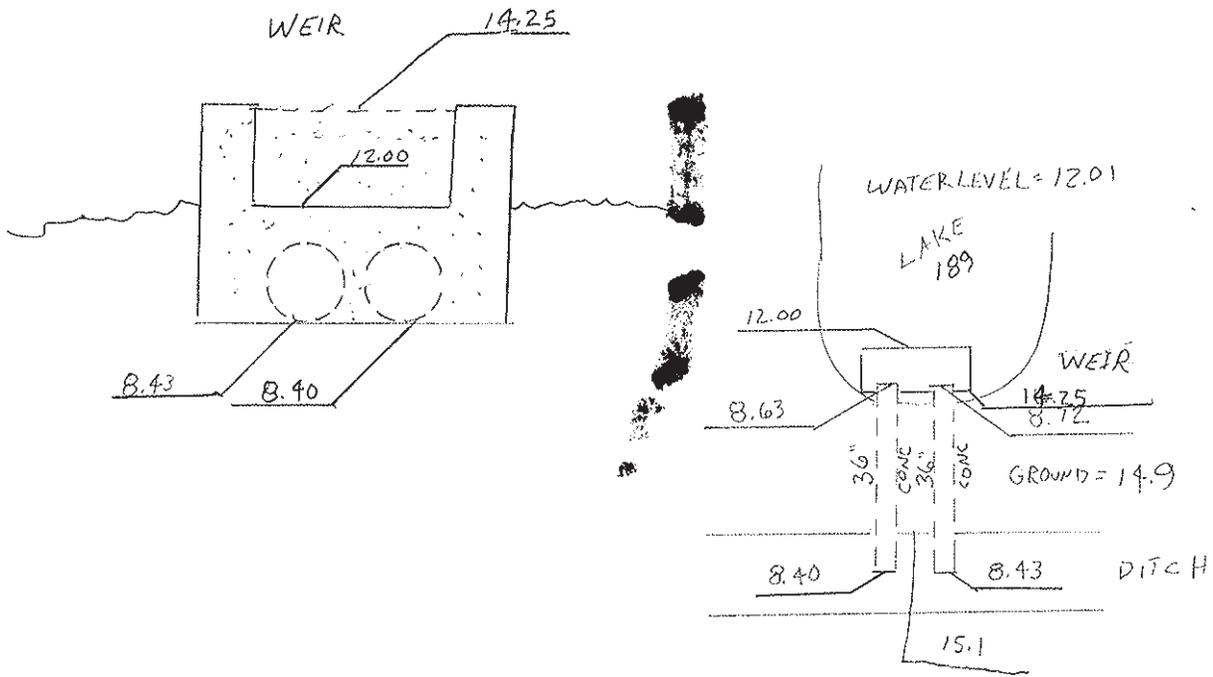
7187

Location 11



**Location 12**

4



WATER LEVEL LAKE 251 11.20

	20.83	4.01	16.82	
5.86	22.68			
5.71	22.00	5.18	16.97 =	< B @ 615 NOT AWAY .
5.65	23.15	3.35	17.50	
5.10	24.90	4.92	19.80	
			19.98	

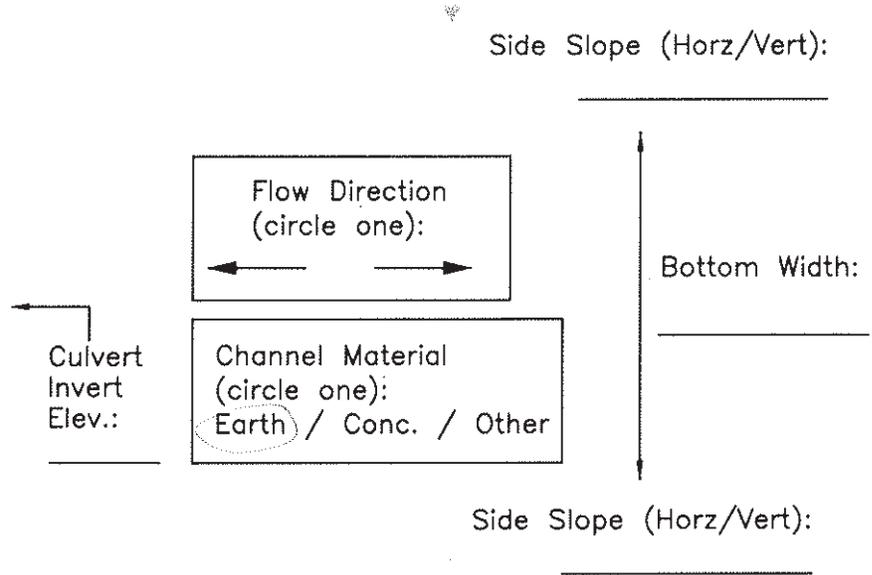


Project: OAK GROVE  
 Node/Point #: 276 (PM)  
 Location/Nearest Intersection: 13

Date: 8-18-09  
 Surveyed By: MAA

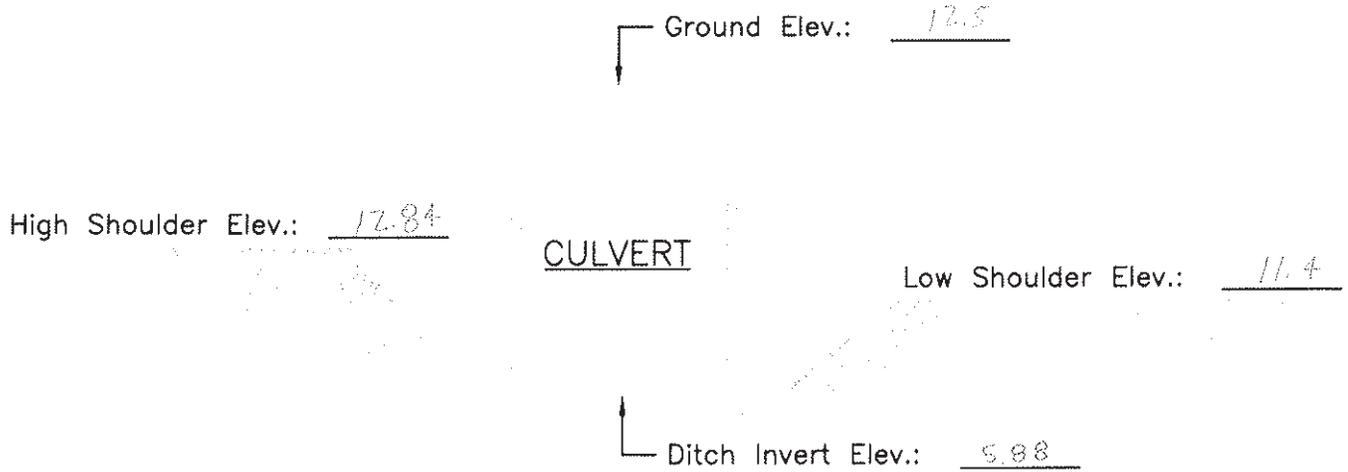
THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC  
 Culvert Depth: 6.0  
 Culvert Width: 14.0  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. / Other  
 SQUARE



CULVERT

DITCH



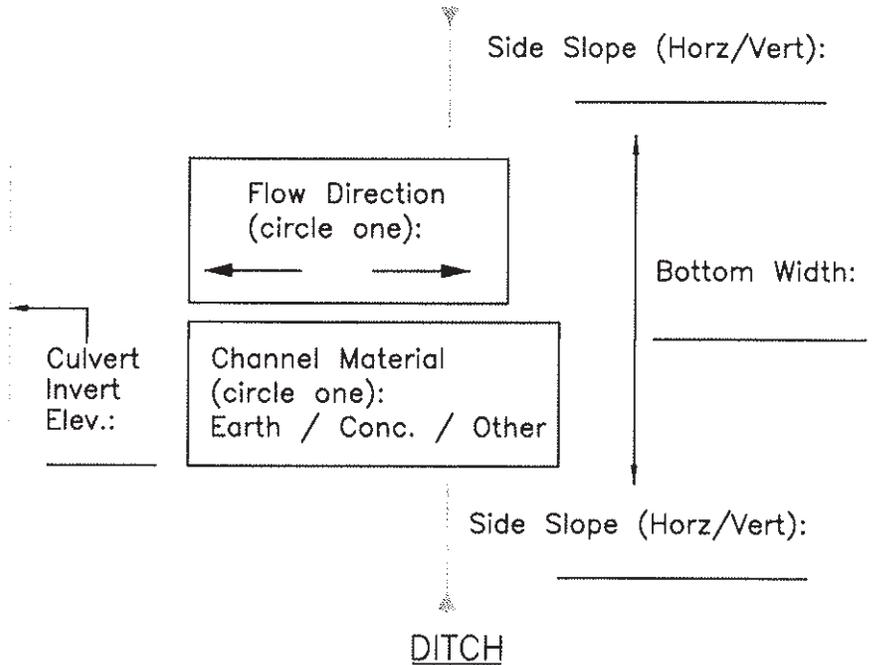
Additional description of the point location:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Project: OAK GROVE  
 Node/Point #: 202/203  
 Location/Nearest  
 Intersection: 14

Date: 8-20-09  
 Surveyed By:  
MCKNS

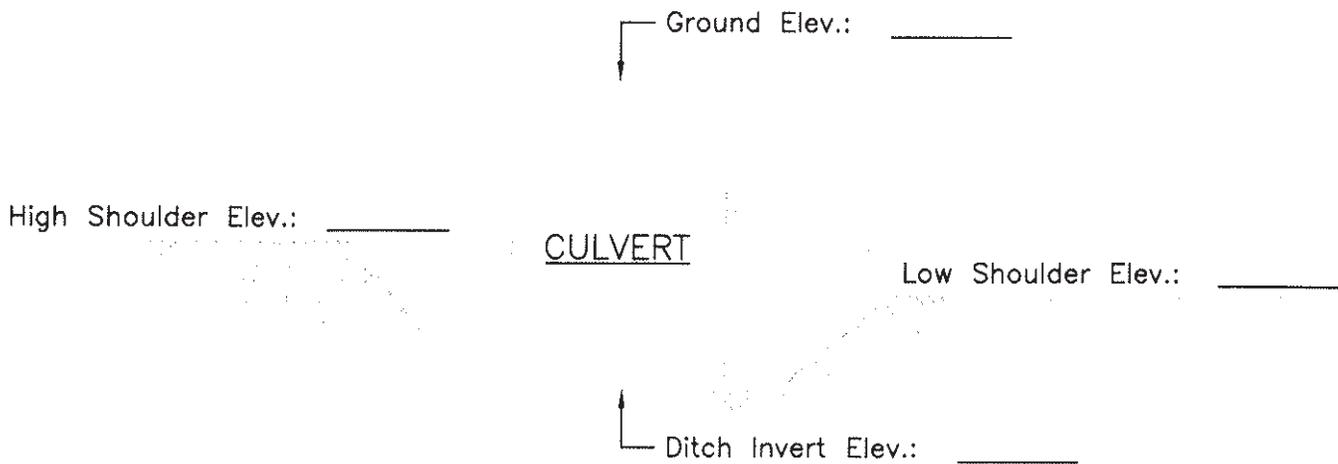
THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
 DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other



CULVERT

DITCH

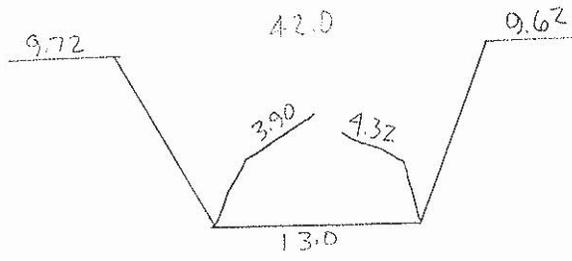


Additional description of the point location: See BACK

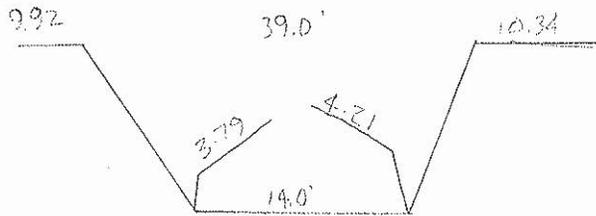
\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

INDIAN CEDAR DR

#282

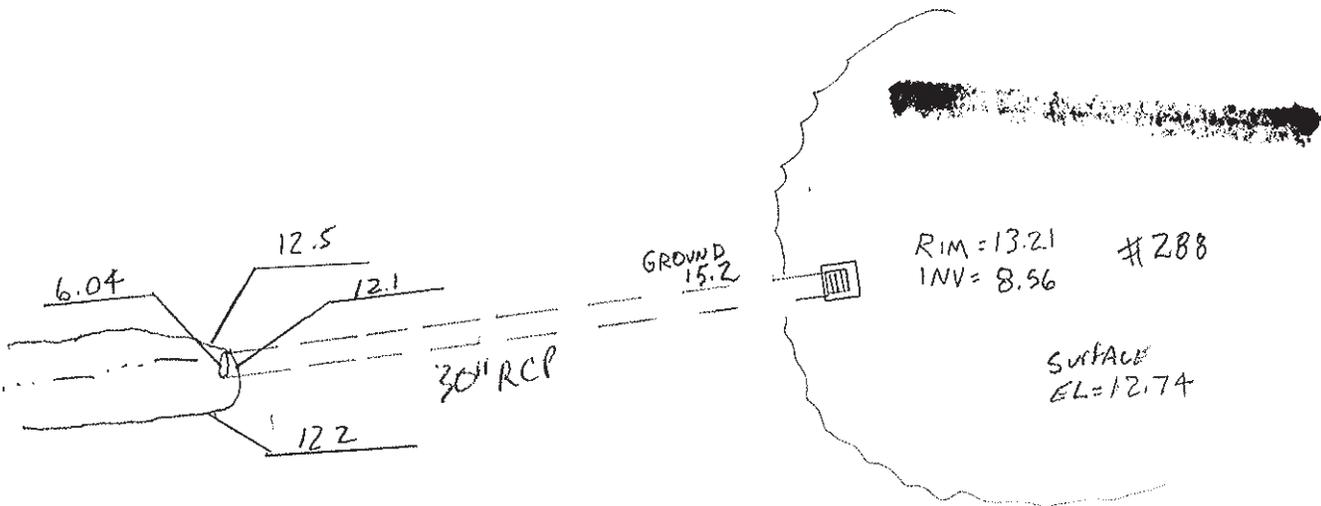


#283



4.49	15.37	4.92	
5.09	14.98	5.45	10.45
4.47	14.60	4.85	9.85
8.45	19.47	3.66	10.13
		2.63	11.02
			16.84

**Location 15**



Project: Oak Grove Watershed  
Node/Point #: Loc 16 Node 302/300  
Location/Nearest  
Intersection: GREENTREE Rd/WoodSpring

Date: 4 Sept 09  
Surveyed By: FAF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert Out Elev.: \_\_\_\_\_

Invert Elev.: \_\_\_\_\_

OUTLET CULVERT

LAKE

Additional description of the point location:

(OVER)

WOODSTOCK  
ARCH

GREEN TREE  
ROAD

OJ RIM = 16187  
Bottom Box = 11175

NODE # 302

CB RIM = 17152  
Bottom Box = 10191

NODE # 300

INU = 11186

36" CONC

48" CONC

36" CONC

OJ 36" CONC



Project: Oak Grove Watershed  
 Node/Point #: Loc 17 Area 311  
 Location/Nearest Intersection: Hidden Falls/Kempville

Date: 4 Sept 09  
 Surveyed By: EAT

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

Culvert Invert Elev.: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT DITCH

Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_ CULVERT Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

Additional description of the point location:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

*OVR*

Project: Oak Grove Watershed  
Node/Point #: Lee 18 Node 317  
Location/Nearest Intersection: Sharonbrook/Freethorn

Date: 4 Sept 09  
Surveyed By: CAF

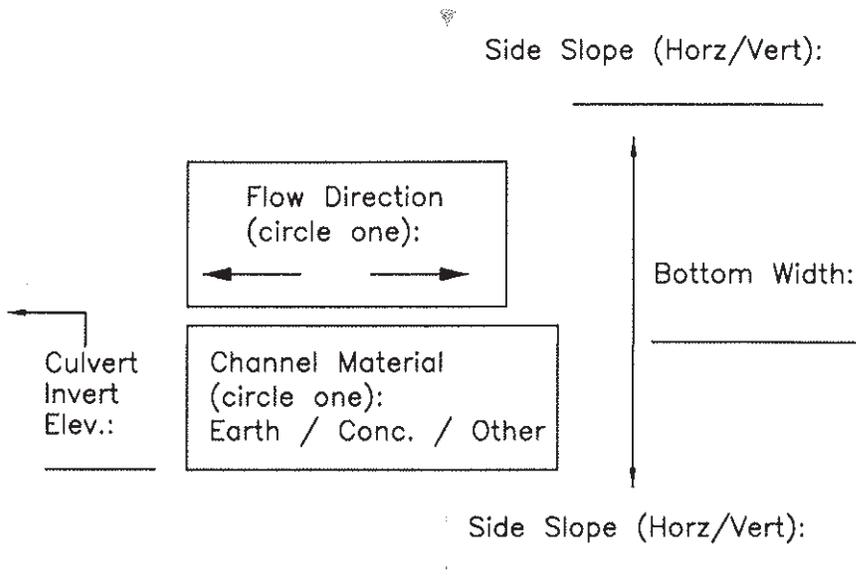
THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: Plastic

Culvert Depth: 24"

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ / Box / Arch / Ellip. / Other



CULVERT

DITCH

Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_

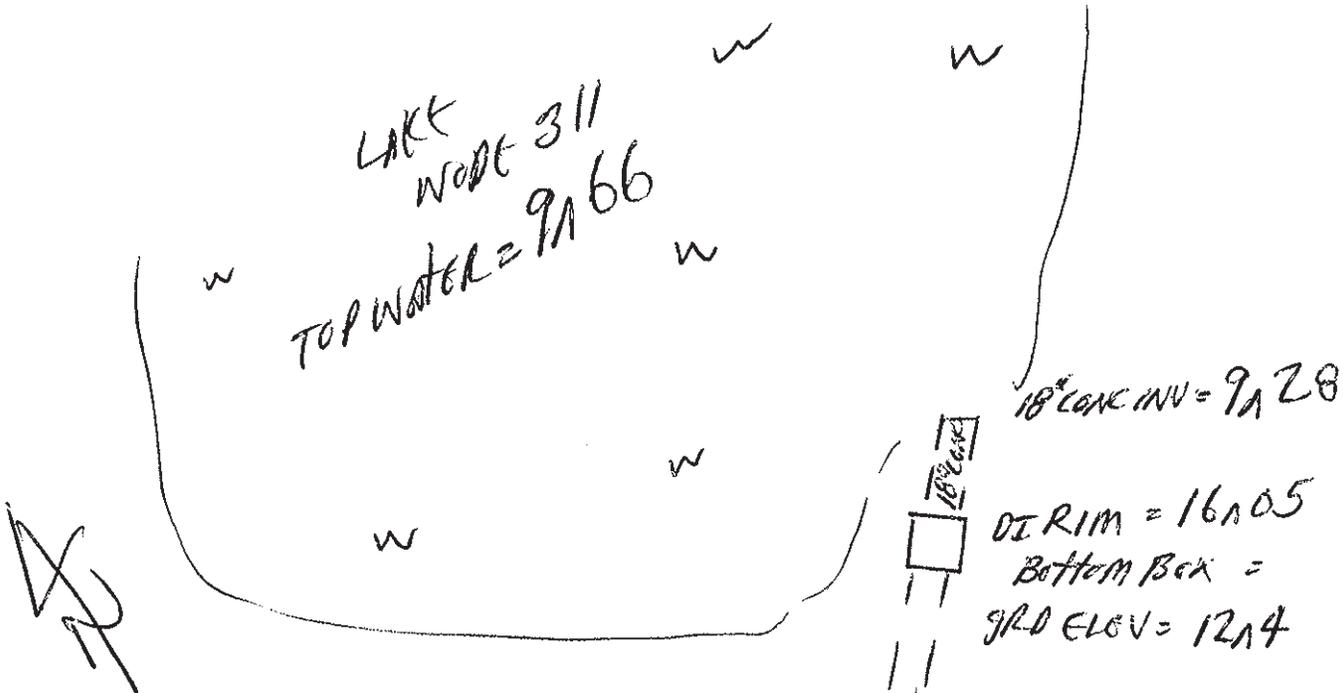
CULVERT

Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

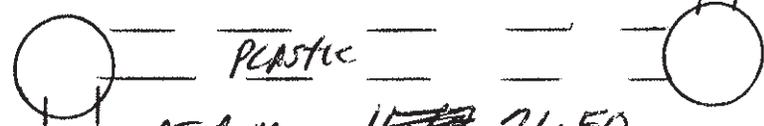
Additional description of the point location:

JUR



18" CONC INV = 9128

DI RIM = 16105  
 Bottom Box =  
 GRD ELEV = 1214



DI RIM = ~~16105~~ 21150  
 Bottom Box = 9188

DI RIM = 19131  
 Bottom Box = 8104

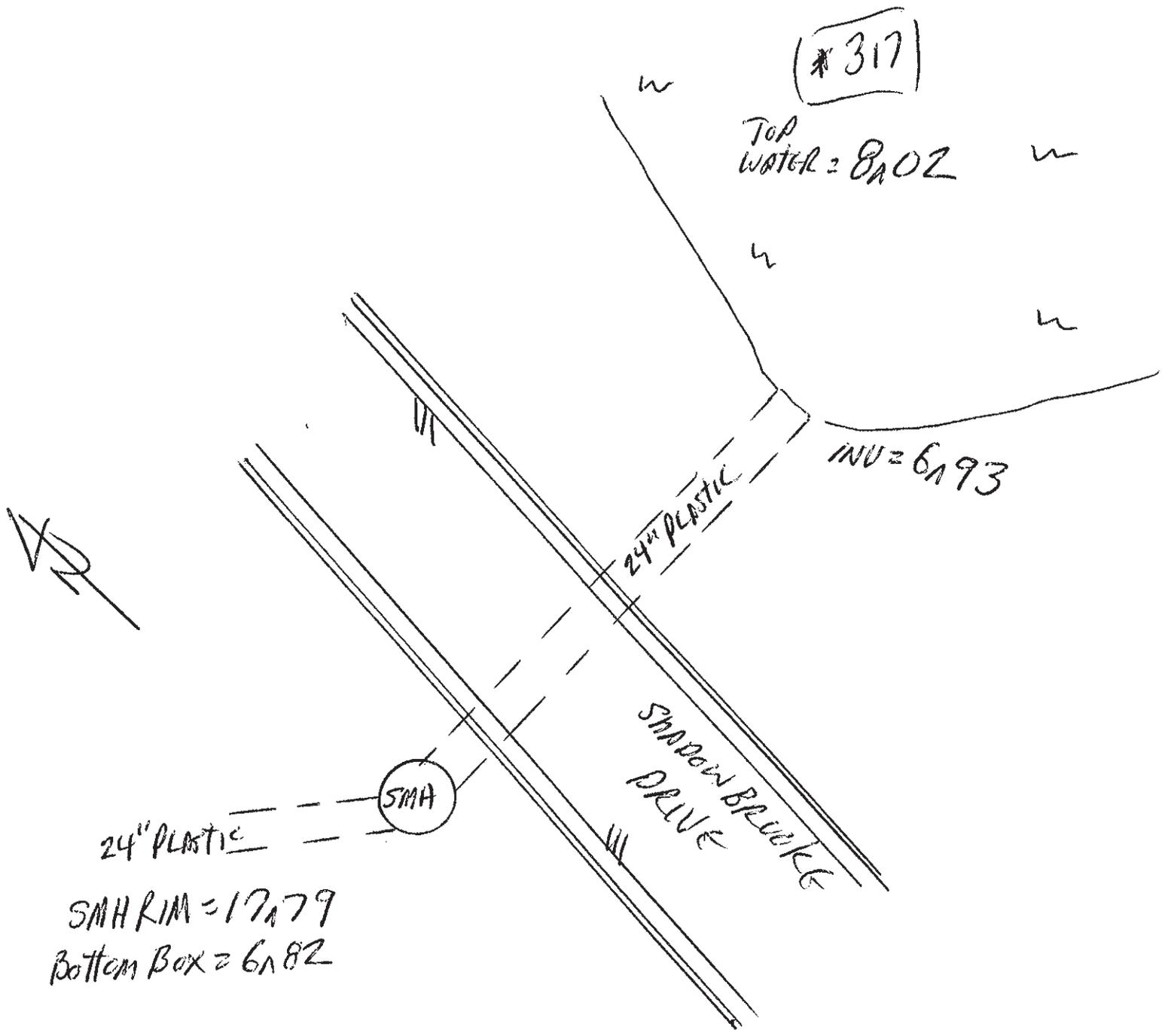


SM# RIM = 20180  
 Bottom Box = 9196

24" PLASTIC

KEMPVILLE RD

HIDDEN FALLS LN



(317)

TOP WATER = 8102

INU = 6193

24" PLASTIC

SHADOW BROOK  
DRIVE

SMH

24" PLASTIC

SMH RIM = 17179

Bottom Box = 6182

Project: Oak Grove Watershed  
 Node/Point #: Loc 19 Node # 360  
 Location/Nearest Intersection: Firethorn Rd

Date: 4 Sept 09  
 Surveyed By: ENF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Invert Out Elev.: \_\_\_\_\_

Invert Elev.: \_\_\_\_\_

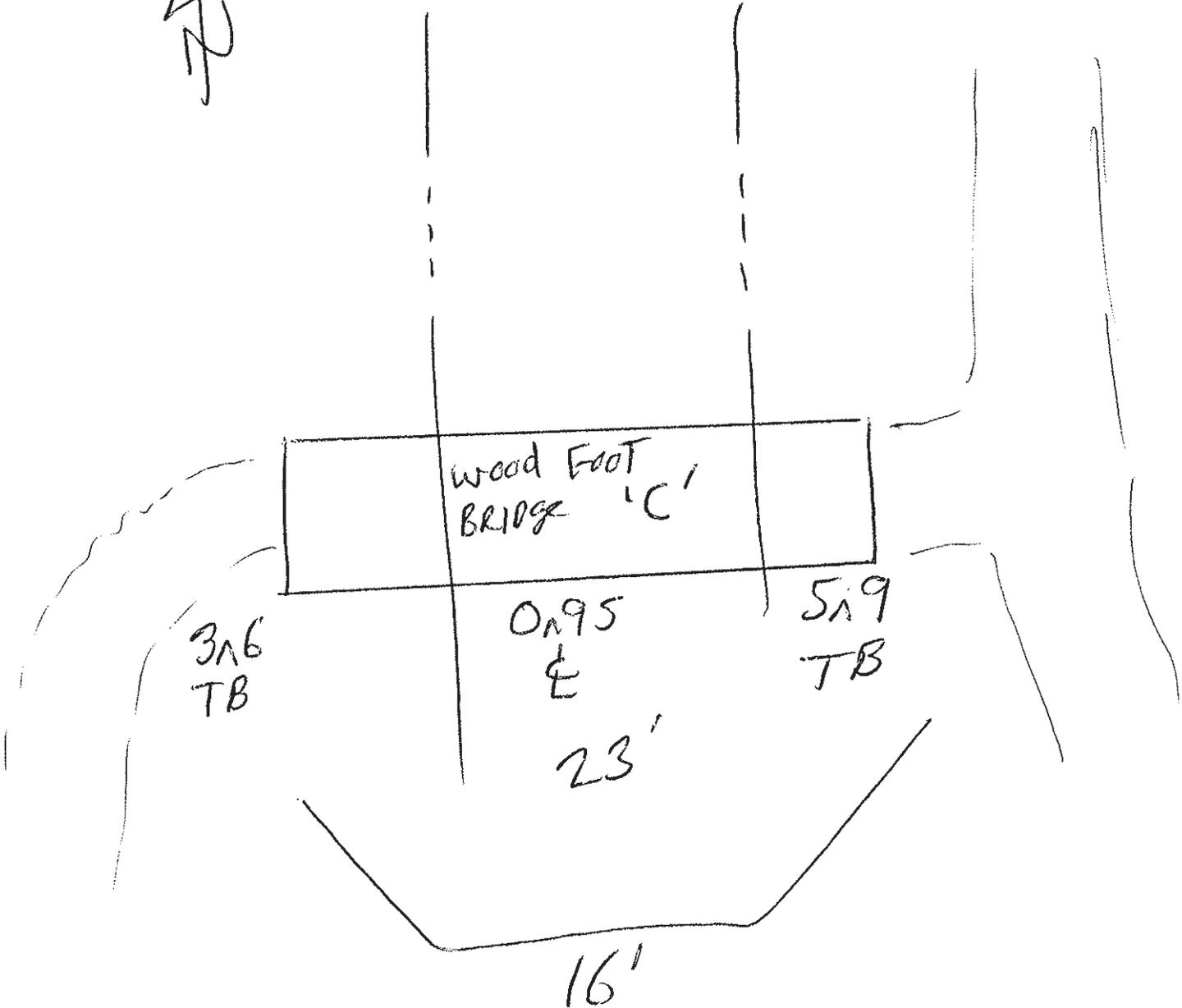
OUTLET CULVERT

LAKE

Additional description of the point location:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(OVER)

A  
N



Project: Oak Grove Watershed  
Node/Point #: Loc 20 Node 364/381  
Location/Nearest  
Intersection: Kempville Rd/ShadowBrooke

Date: 4/27/09  
Surveyed By: ENF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: CONCRETE

Culvert Depth: 8'

Culvert Width: 8'

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert Out Elev.: \_\_\_\_\_

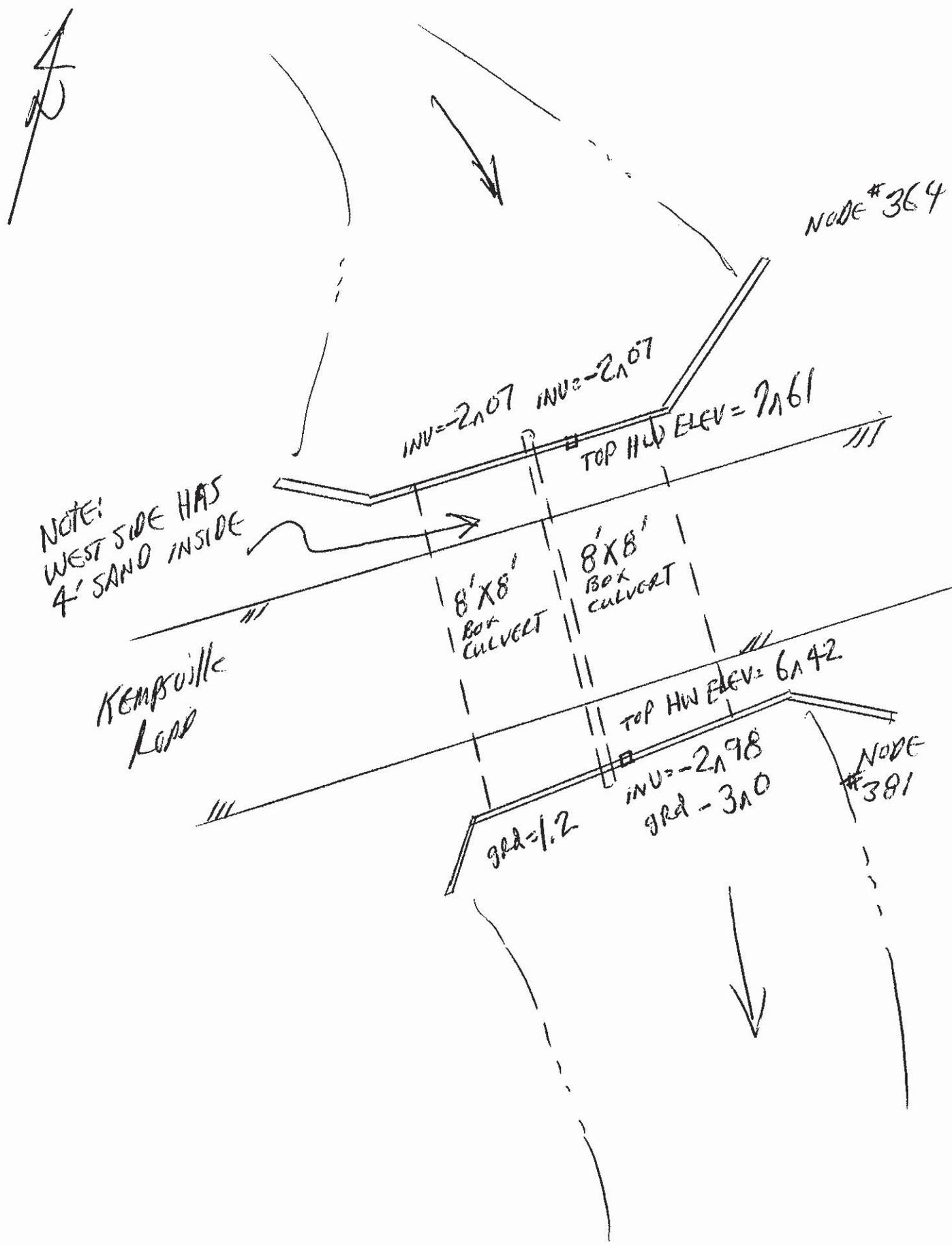
Invert Elev.: \_\_\_\_\_

OUTLET CULVERT

LAKE

Additional description of the point location:

(OVER)



Project: Oak Grove Watershed  
Node/Point #: Loc 21 Node 391  
Location/Nearest  
Intersection: CLEARFIELD/JONES WAY

Date: 4 Sept 09  
Surveyed By: EAF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert Out Elev.: \_\_\_\_\_

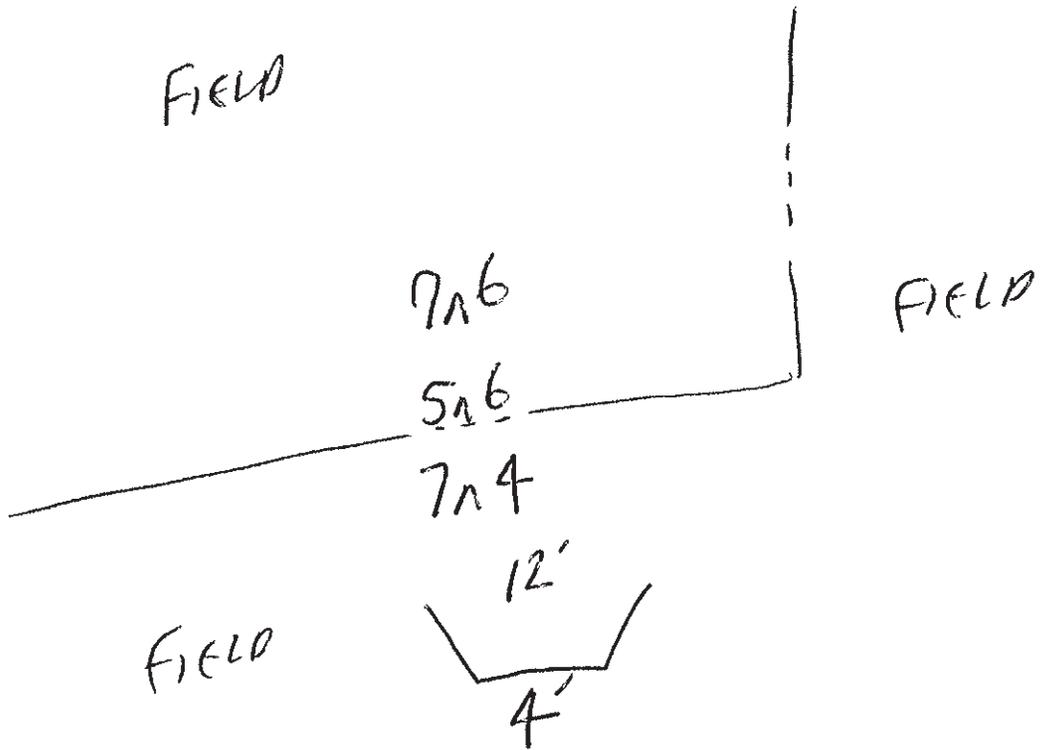
Invert Elev.: \_\_\_\_\_

OUTLET CULVERT

LAKE

Additional description of the point location:

OVER



Project: OAK GROVE WATERSHED  
 Node/Point #: Loc 22 NE26 400/398  
 Location/Nearest  
 Intersection: CHES. EXPRESSWAY / KEMPVILLE Rd

Date: 4 Sept 09  
 Surveyed By: EDF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: CONCRETE

Culvert Depth: 6'

Culvert Width: 8'

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

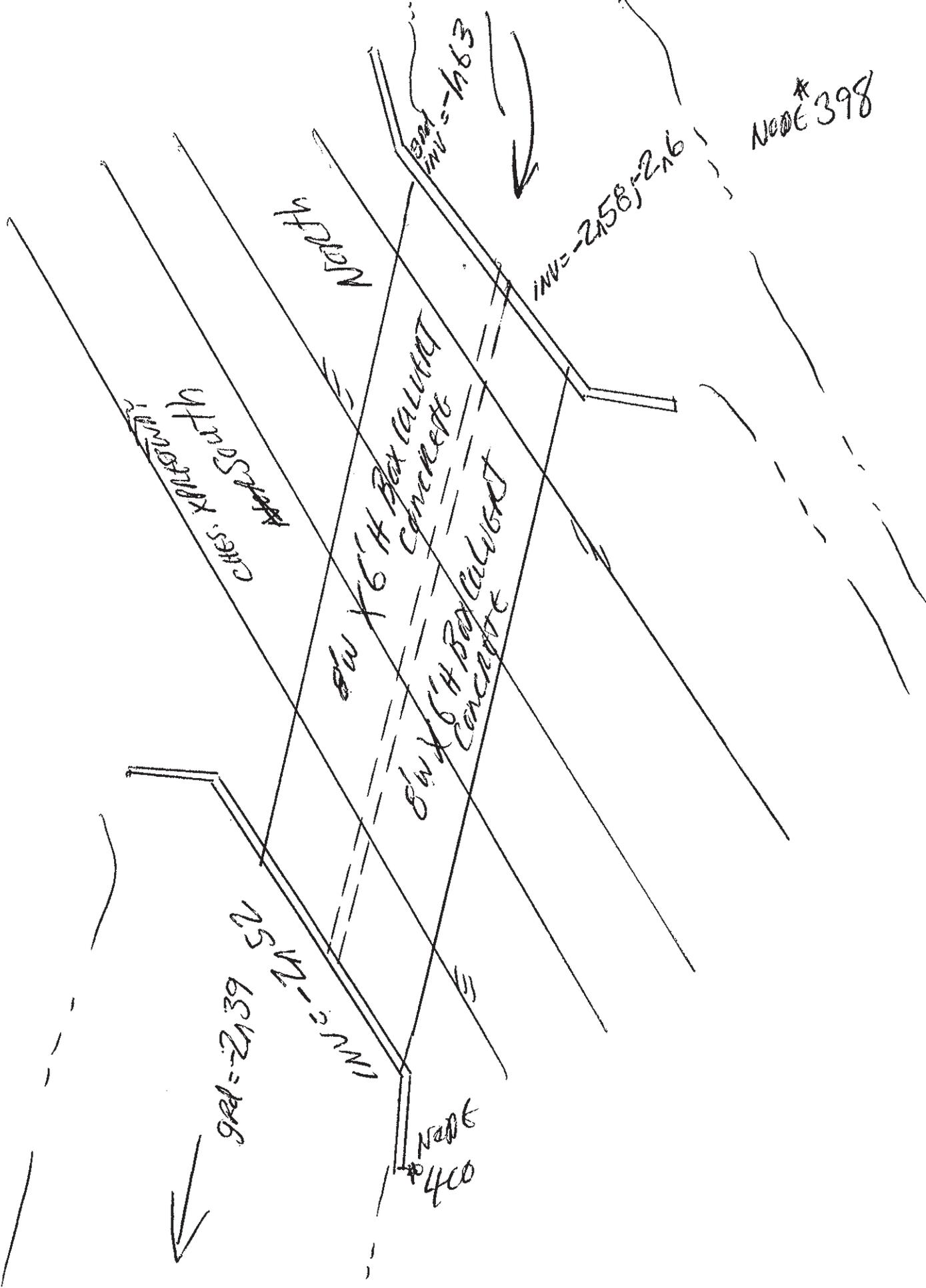
Invert Out Elev.: \_\_\_\_\_

Invert Elev.: \_\_\_\_\_

OUTLET CULVERT

LAKE

Additional description of the point location:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



Project: Oak Grove Watershed  
 Node/Point #: Loc 23 Nepe 415  
 Location/Nearest  
 Intersection: \_\_\_\_\_

Date: 9/09/09  
 Surveyed By: EAT

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
 DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Rim Elev.: \_\_\_\_\_

↓

Invert Out Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

W.S. Elev.: \_\_\_\_\_

↙

Invert Out Elev.: \_\_\_\_\_

Invert Elev.: \_\_\_\_\_

OUTLET CULVERT

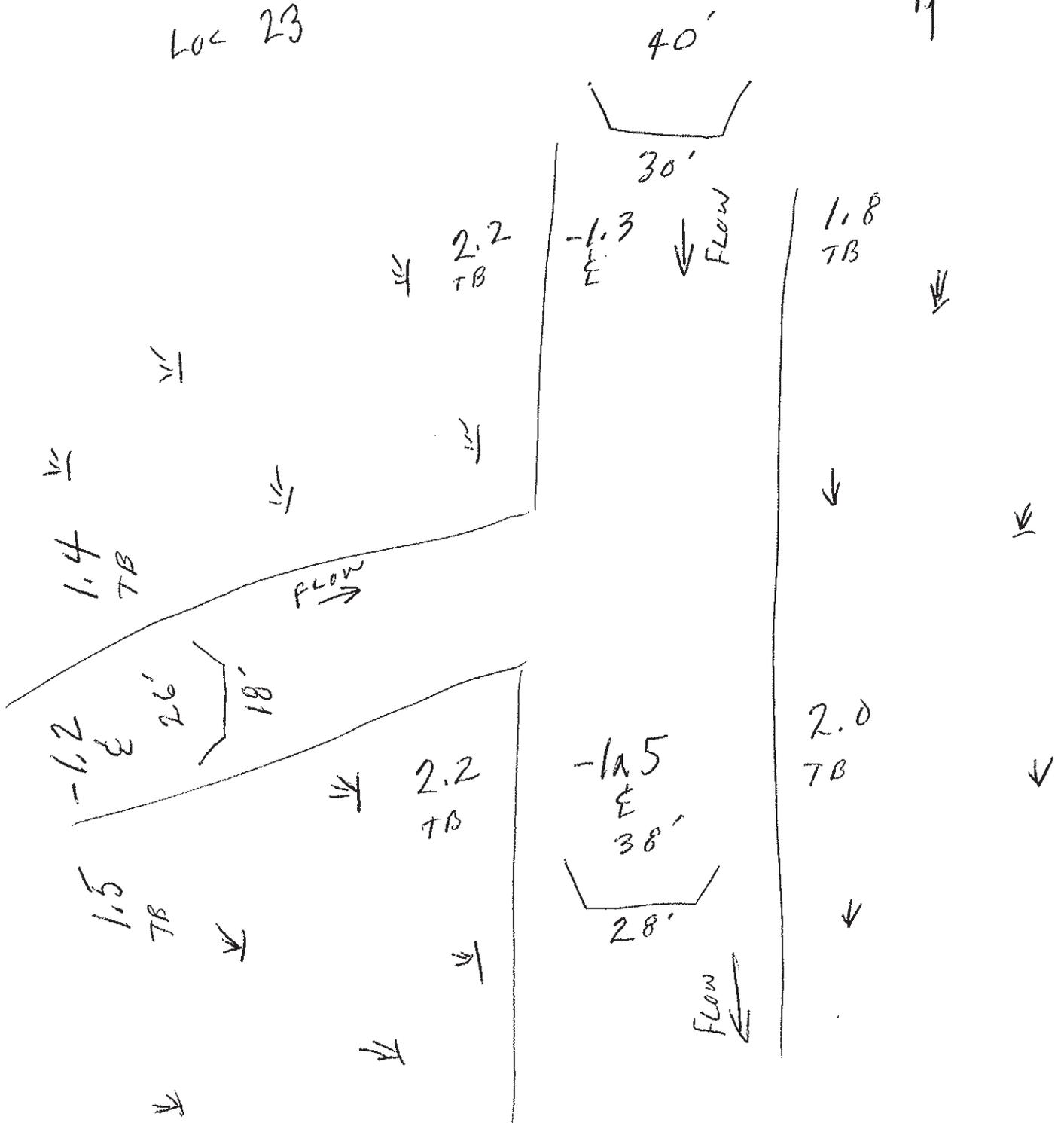
LAKE

Additional description of the point location:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(OVER)

Loc 23



Project: Oak Grove Watershed  
 Node/Point #: Loc 24 Node 455  
 Location/Nearest  
 Intersection: Battlefield Blvd/Welch

Date: 4 Sept 09  
 Surveyed By: CAF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Rim Elev.: \_\_\_\_\_

Flow Direction →

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

W.S. Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

Invert Elev.: \_\_\_\_\_

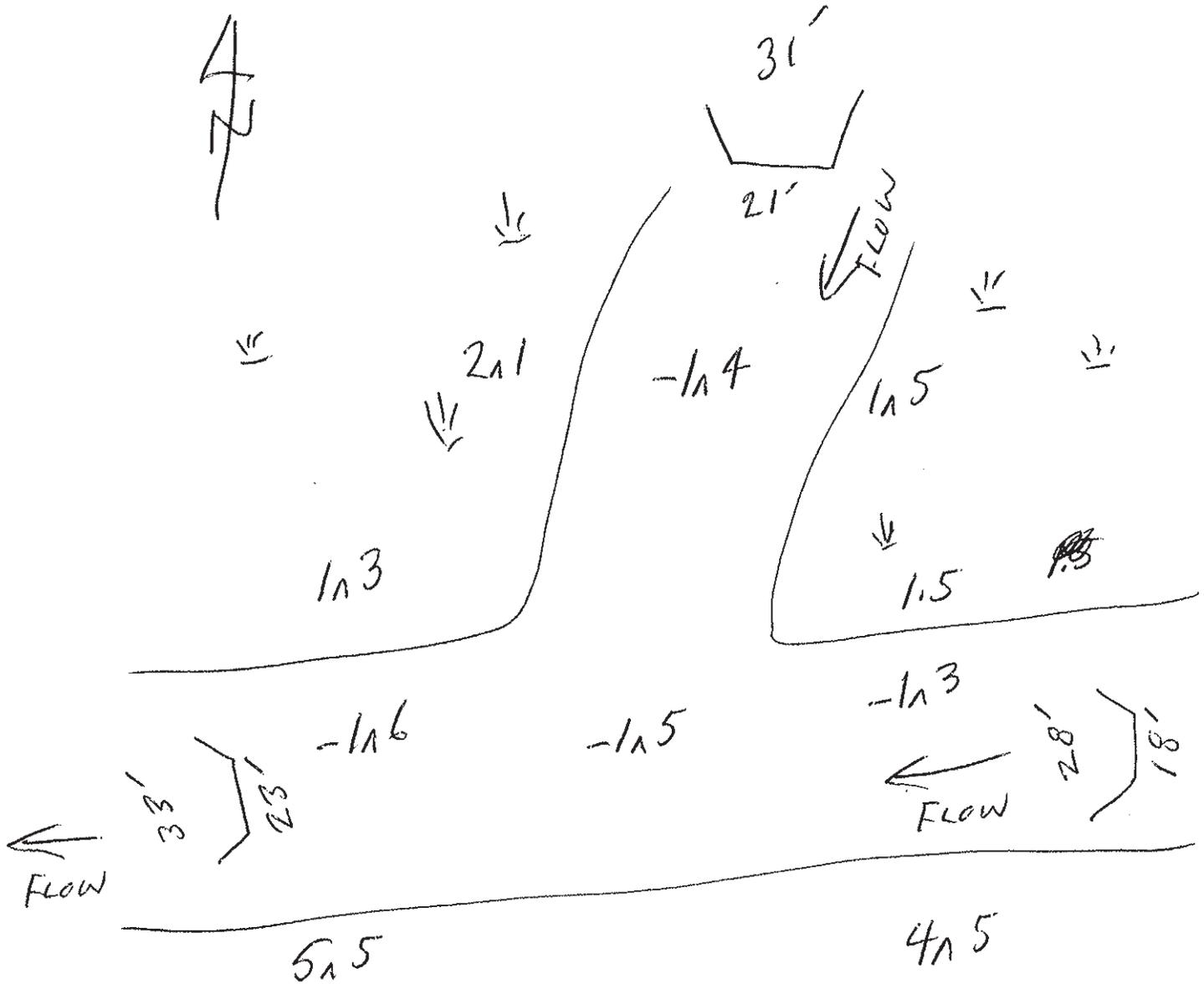
OUTLET CULVERT

LAKE

Additional description of the point location:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(OVER)

# TIDAL



Loc 25

Project: OAK GROVE WATERSHED  
Node/Point #: Loc 25 Node 427/426  
Location/Nearest  
Intersection: BATTLEFIELD BLVD / WELCH

Date: 4 Sept 09  
Surveyed By: EDF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: CONC

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/  Box/  Arch/  Ellip. /  Other

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/  Box/  Arch/  Ellip. /  Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: CONC

Culvert Depth: 36"

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/  Box/  Arch/  Ellip. /  Other

Invert Out Elev.: \_\_\_\_\_

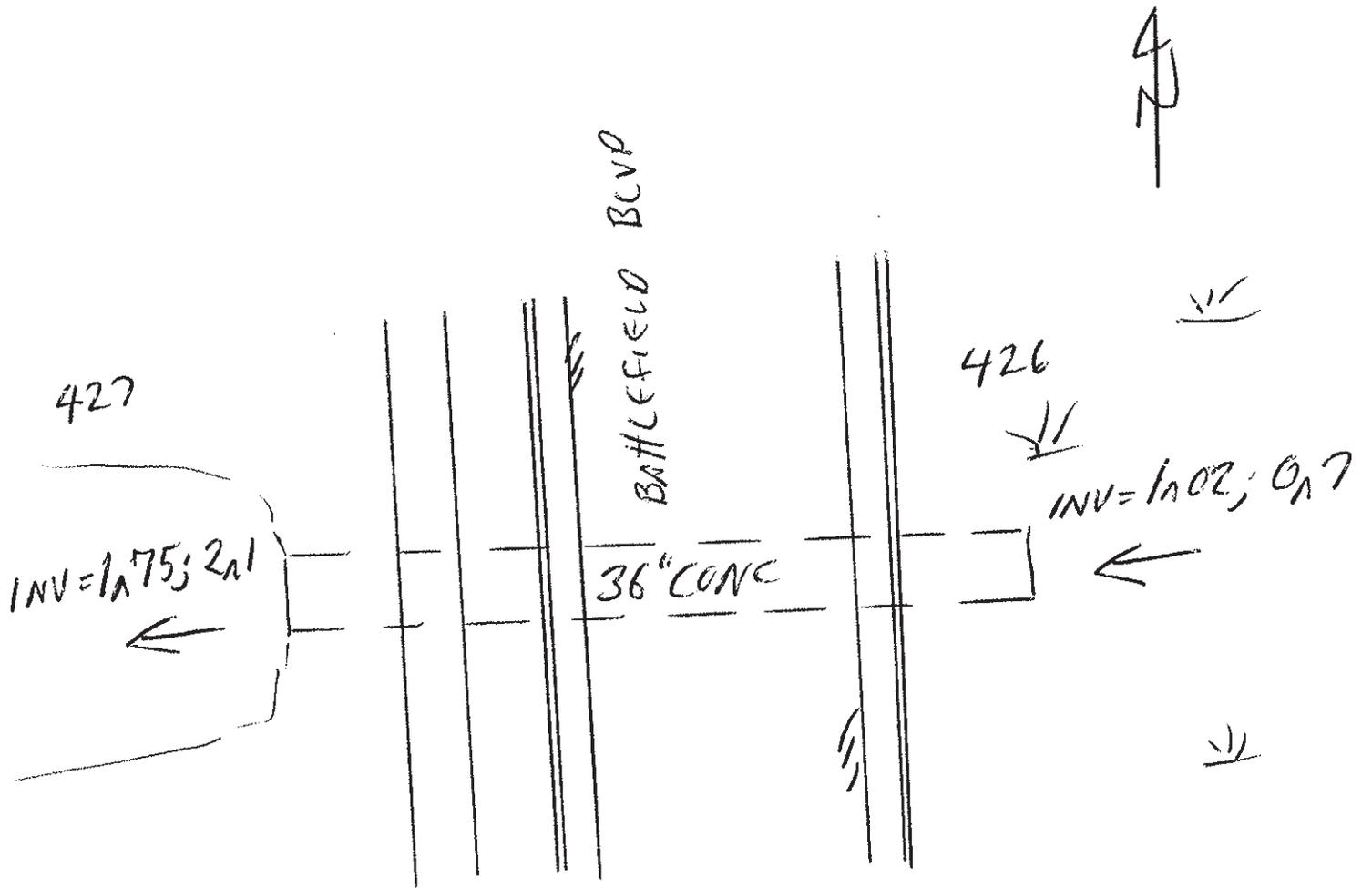
Invert Elev.: \_\_\_\_\_

OUTLET CULVERT

LAKE

Additional description of the point location:

OVER



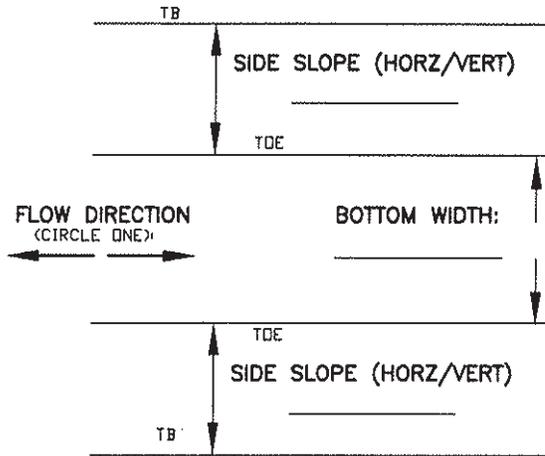
**Location 26**

PROJECT/WATERSHED: Oak Grove  
NODE/POINT #: 424 & 423  
LOCATION/NEAREST INTERSECTION: Battlefield Blvd and Watson Road  
SURVEY LOCATION 10

DATE: 09 2009  
SURVEYED BY: EF

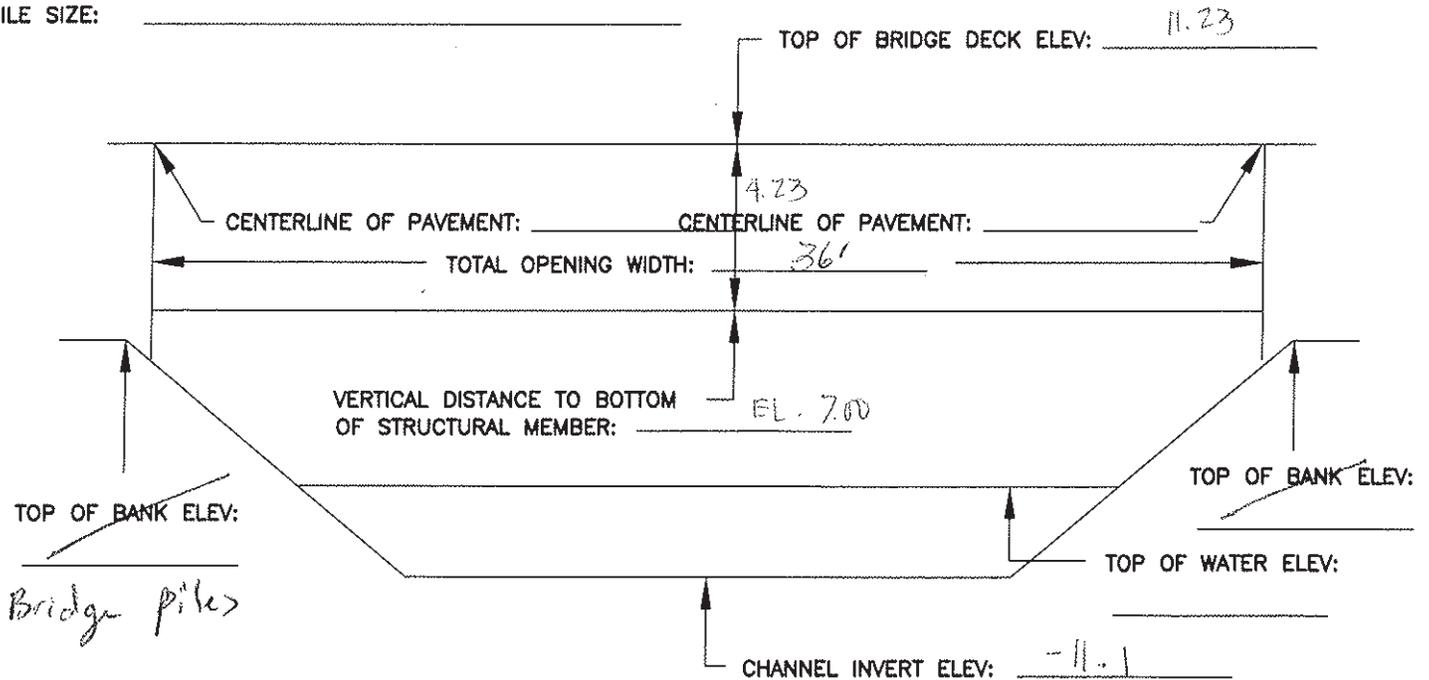
THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

CHANNEL SECTION:



BRIDGE SECTION:

BRIDGE MATERIALS: \_\_\_\_\_  
BRIDGE WIDTH: \_\_\_\_\_  
PILE TYPE: \_\_\_\_\_  
PILE SIZE: \_\_\_\_\_



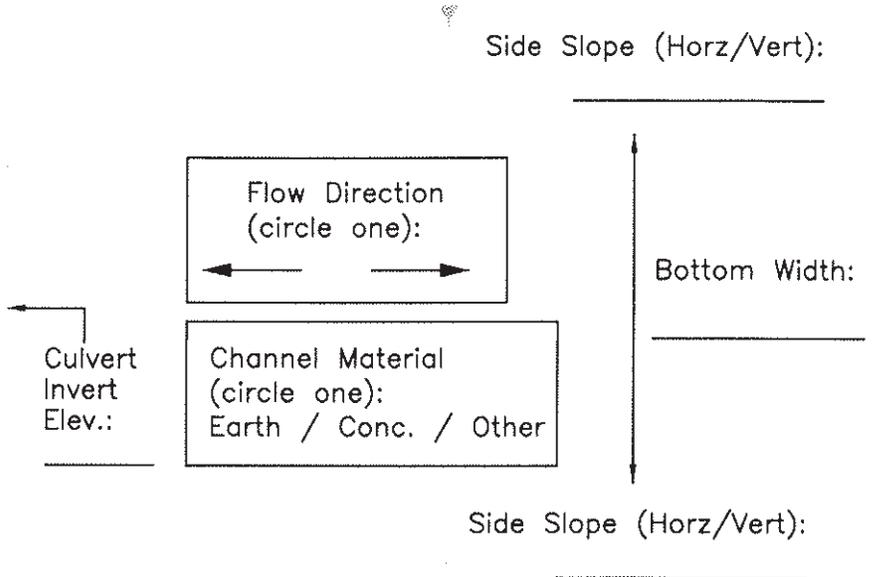
Loc 26

Project: OAK GROVE WATERSHED  
Node/Point #: 424/423  
Location/Nearest Intersection: BATTLEFIELD BLVD/LOCKS RD

Date: 4 Sept 09  
Surveyed By: CAF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
Culvert Depth: \_\_\_\_\_  
Culvert Width: \_\_\_\_\_  
Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other



CULVERT

DITCH

Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_

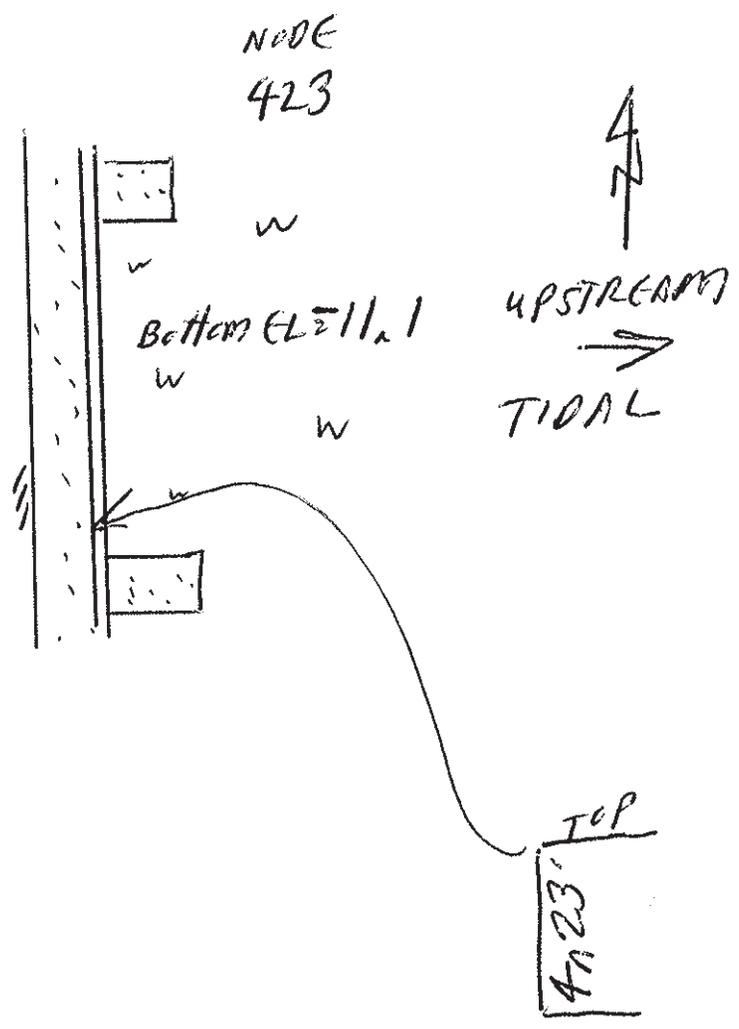
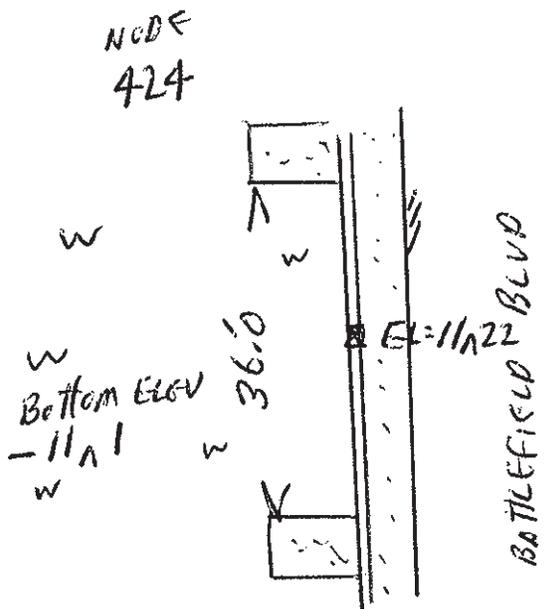
CULVERT

Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

Additional description of the point location:

OVER



Project: Oak Grove Watershed  
 Node/Point #: Loc 27 NAME 823/821  
 Location/Nearest  
 Intersection: Birth Sta Rd / Station Square Ln

Date: 4 Sept 09  
 Surveyed By: EAC

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

<p>Flow Direction ←</p> <p>Culvert Material: <u>concrete</u></p> <p>Culvert Depth: _____</p> <p>Culvert Width: _____</p> <p>Culvert Type (circle one):  <input checked="" type="radio"/> Circ/ <input type="radio"/> Box/ <input type="radio"/> Arch/ <input type="radio"/> Ellip. / <input type="radio"/> Other</p>	<p>Rim Elev.: _____</p> <p style="font-size: 2em;">}</p> <p>Invert Out Elev.: _____</p>	<p>Flow Direction ←</p> <p>Culvert Material: _____</p> <p>Culvert Depth: _____</p> <p>Culvert Width: _____</p> <p>Culvert Type (circle one):  <input type="radio"/> Circ/ <input type="radio"/> Box/ <input type="radio"/> Arch/ <input type="radio"/> Ellip. / <input type="radio"/> Other</p> <p>Invert In Elev.: _____</p>
--	---	---

CULVERT

JUNCTION/INLET

CULVERT

<p>Culvert Material: _____</p> <p>Culvert Depth: _____</p> <p>Culvert Width: _____</p> <p>Culvert Type (circle one):  <input type="radio"/> Circ/ <input type="radio"/> Box/ <input type="radio"/> Arch/ <input type="radio"/> Ellip. / <input type="radio"/> Other</p>	<p>W.S. Elev.: _____</p> <p style="font-size: 2em;">}</p> <p>Invert Out Elev.: _____</p> <p>Invert Elev.: _____</p>	
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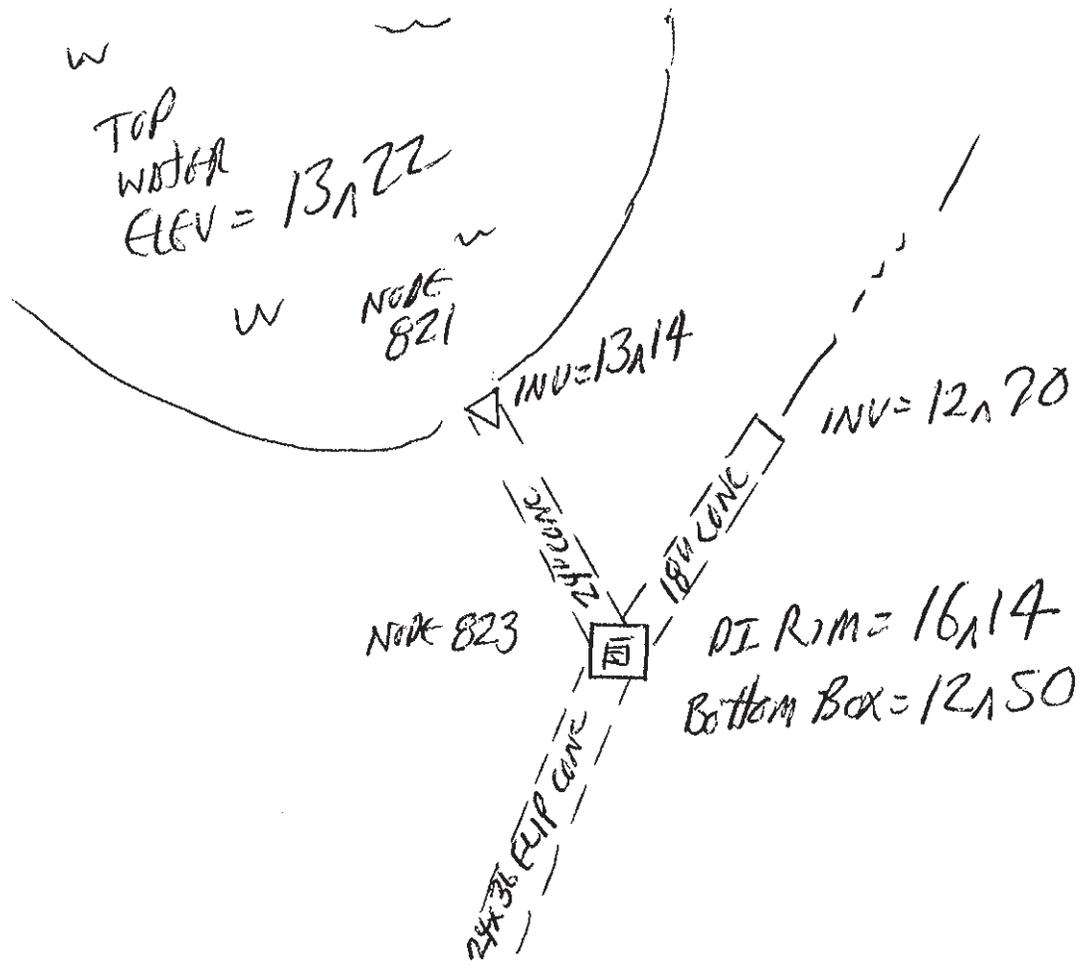
OUTLET CULVERT

LAKE

Additional description of the point location:

OVER

42



Project: OAK GROVE WATERSHED  
 Node/Point #: Loc 28 Node 850/853  
 Location/Nearest Intersection: Batts Sta. Rd / Rainbow Run

Date: 4 Sept 09  
 Surveyed By: EMF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

Culvert Invert Elev.: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT

DITCH

Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_

CULVERT

Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

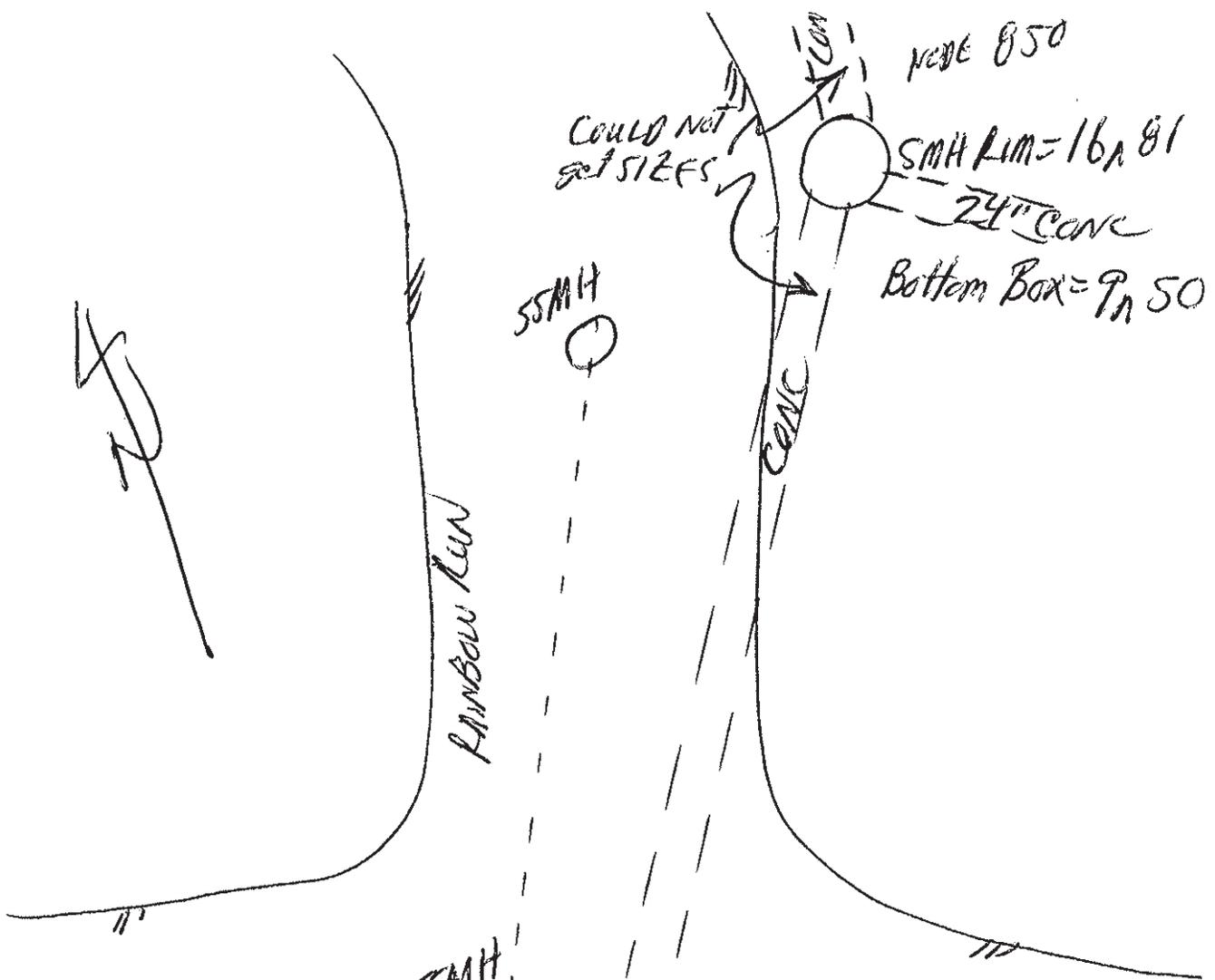
Additional description of the point location:

\_\_\_\_\_

JUR

\_\_\_\_\_

\_\_\_\_\_



COULD NOT GET SIZES

NEDE 850

SMH RIM = 16A 81

24" CONC

Bottom Box = 9A 50

RAINBOW RUN

SSMH

CONC

SSMH

SMH RIM = 18A 02

COULD NOT OPEN

Batts Station Rd

OWV  
MA

Project: Oak Grove Watershed  
 Node/Point #: Loc 29 Node 862/864  
 Location/Nearest Intersection: ARONDALE CRES/MONDALG CT

Date: 4 Sept 09  
 Surveyed By: ENF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC  
 Culvert Depth: 19"  
 Culvert Width: 30"  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip/ Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

Culvert Invert Elev.: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT

DITCH

Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_

CULVERT

Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

Additional description of the point location:

OVER



Project: OAK GROVE WATERSHED  
 Node/Point #: Loc 30  
 Location/Nearest  
 Intersection: CLEARFIELD/RR TRACKS

Date: 4 Sept 09  
 Surveyed By: EDF

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
 DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

Culvert Invert Elev.: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT

DITCH

Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_

CULVERT

Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

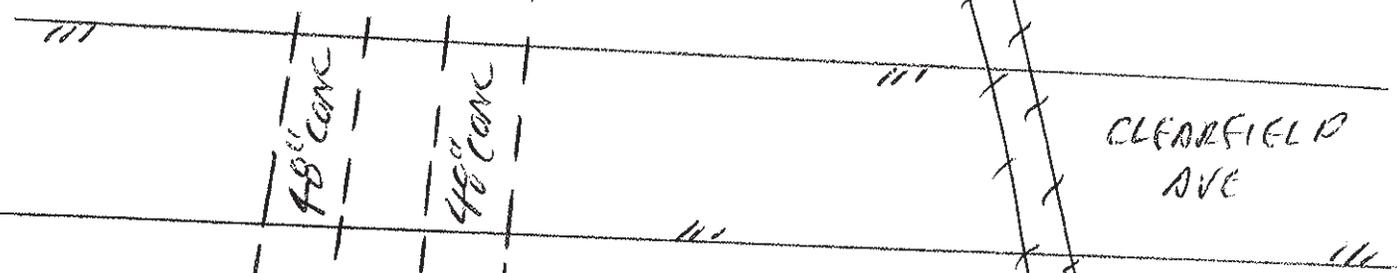
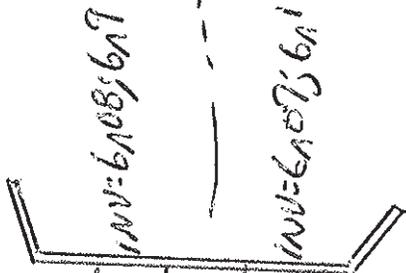
Additional description of the point location:

OVER

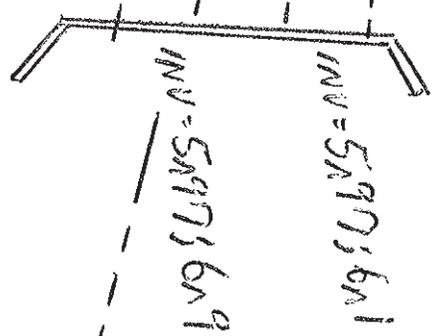
# 879  
 48" INV = 6A57  
 48" INV = 6A64  
 48" INV = 6A63  
 35" INV = 7A13; 7A1

# 877  
 48" INV = 6A82; 7A2  
 48" INV = 6A82  
 48" INV = 6A84  
 35" INV = 6A83; 7A5

# 881



# 882



# 917

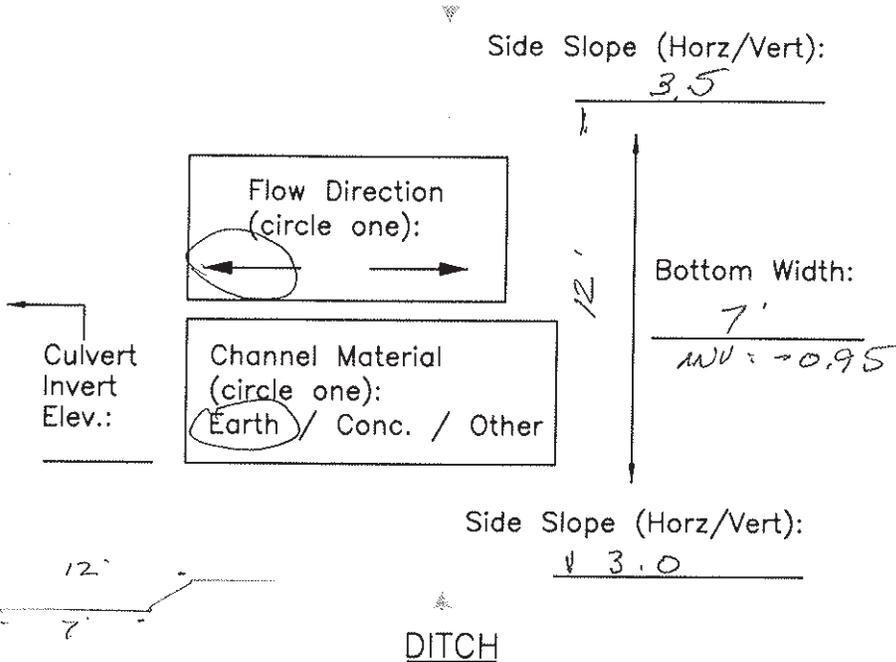


Project: oak GROVE WATERSHED  
 Node/Point #: 509  
 Location/Nearest Intersection: 31

Date: 08-26-09  
 Surveyed By: R. B. WIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other



Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_

CULVERT

Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

Additional description of the point location:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Project: OAK GROVE WATERSHED  
Node/Point #: 553 & 552  
Location/Nearest  
Intersection: 32

Date: 08-24-09  
Surveyed By: R. COWNS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC.  
Culvert Depth: \_\_\_\_\_  
Culvert Width: \_\_\_\_\_  
Culvert Type (circle one):  
Circ Box / Arch / Ellip. / Other

Flow Direction (circle one):  
← →

Channel Material (circle one):  
Earth / Conc. / Other

Culvert Invert Elev.: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT DITCH

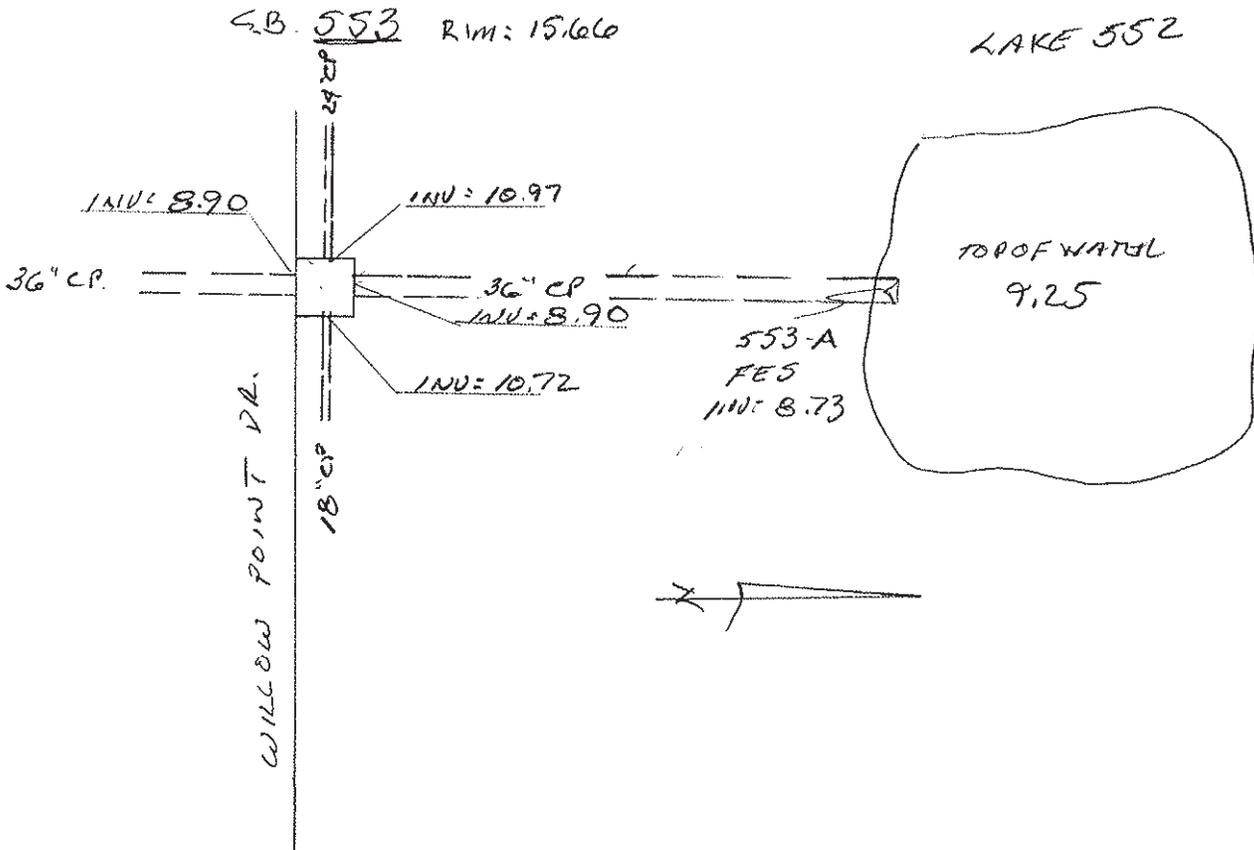
Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_ CULVERT Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

Additional description of the point location:  
SEE BACK OF SHEET

LOCATION # 32



Project: OAK GROVE WATERSHED  
 Node/Point #: 549  
 Location/Nearest Intersection: 33

Date: 08-25-09  
 Surveyed By: R. OWENS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC.  
 Culvert Depth: 4'  
 Culvert Width: 4'  
 Culvert Type (circle one):  
 Circ/ Box Arch/ Ellip. /Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

Culvert Invert Elev.: \_\_\_\_\_

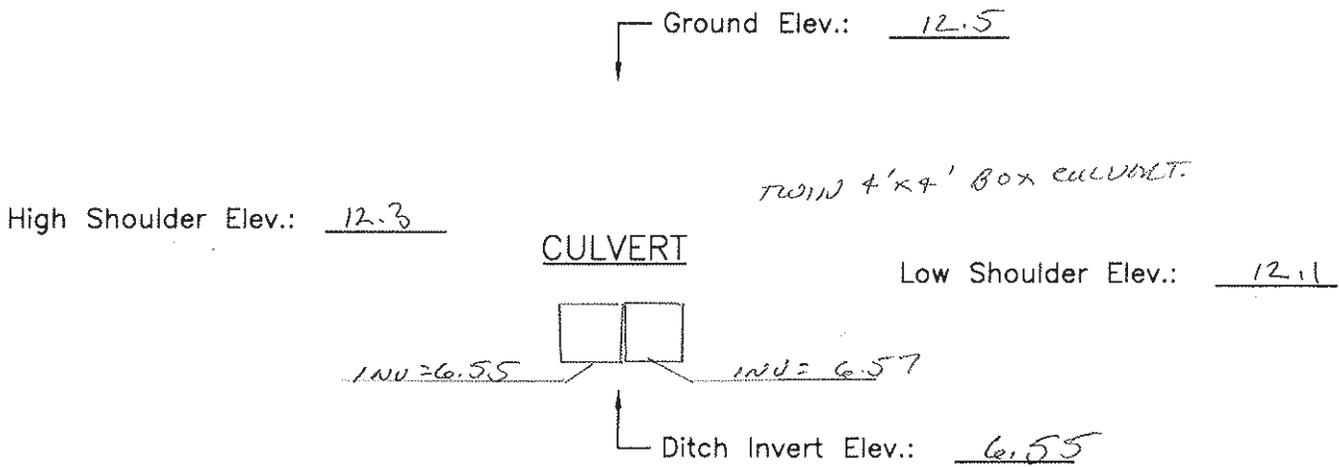
Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT

DITCH



Additional description of the point location:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Project: OAK GROVE WATERSHED  
 Node/Point #: 550  
 Location/Nearest Intersection: 33

Date: 08-25-09  
 Surveyed By: R. HUNNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC  
 Culvert Depth: 4.0'  
 Culvert Width: 4.0'  
 Culvert Type (circle one):  
 Circ/ Box Arch/ Ellip. /Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

Culvert Invert Elev.: \_\_\_\_\_

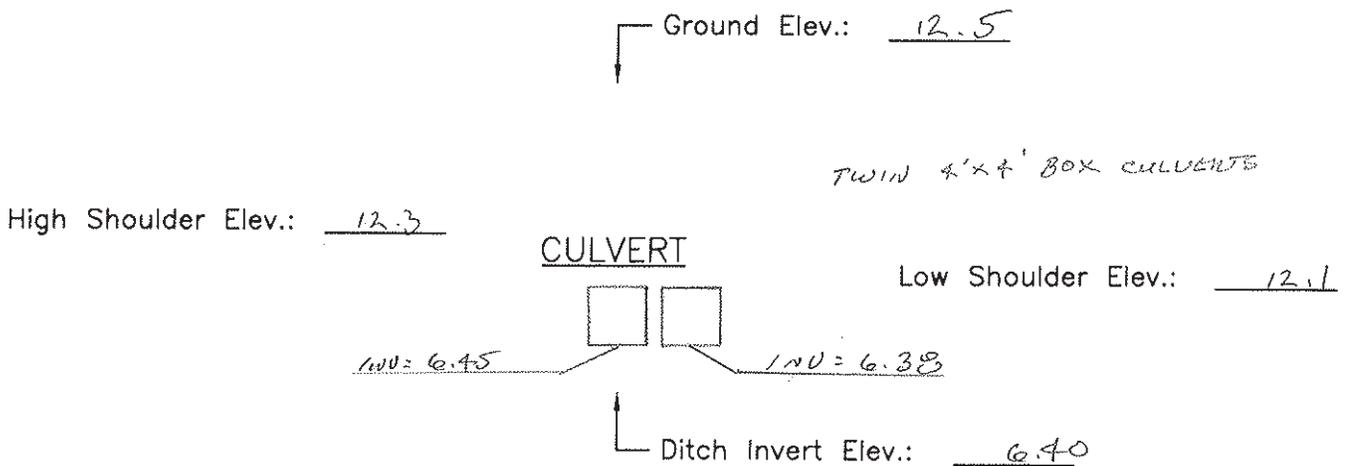
Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT

DITCH



Additional description of the point location:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Project: OAK GROVE WATERSHED  
 Node/Point #: 581  
 Location/Nearest Intersection: 34

Date: 08-24-09  
 Surveyed By: R. GUNNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC. PIPES  
 Culvert Depth: 30"  
 Culvert Width: 30"  
 Culvert Type (circle one): Circ / Box / Arch / Ellip. / Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

Culvert Invert Elev.: 2.74

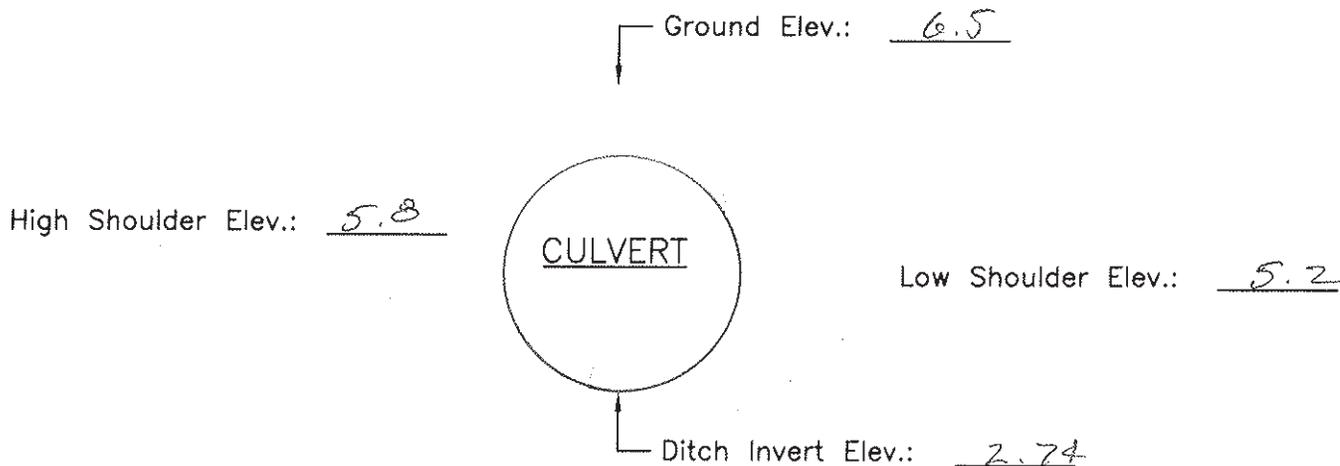
Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT

DITCH



Additional description of the point location:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Project: OAK GROVE WATERSHED  
Node/Point #: 610  
Location/Nearest Intersection: 35

Date: 0-25-09  
Surveyed By: R. EDWARDS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC. PES  
Culvert Depth: 15"  
Culvert Width: 15"  
Culvert Type (circle one):  
Circ / Box / Arch / Ellip. / Other

Flow Direction (circle one):  
← →

Channel Material (circle one):  
Earth / Conc. / Other

Culvert Invert Elev.: 2.97

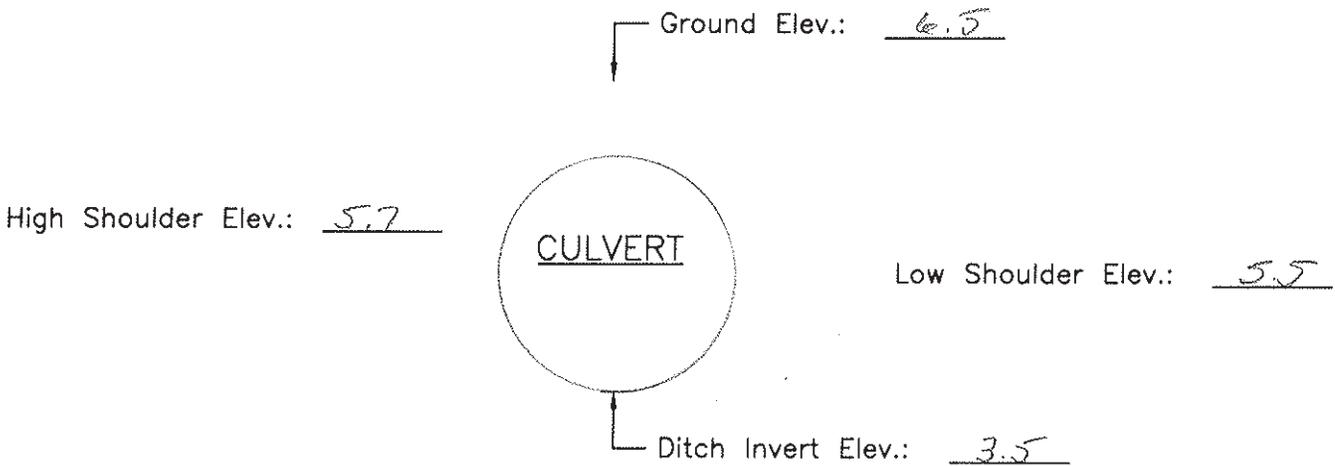
Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT

DITCH



Additional description of the point location:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

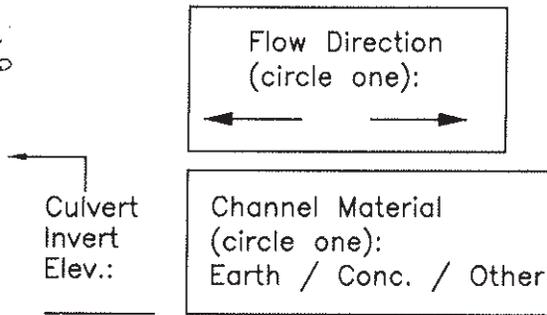
Project: oak GROVE WATERSHED  
Node/Point #: 6.12 ; 6.13  
Location/Nearest Intersection: 35

Date: 08-25-09  
Surveyed By: R. GUNNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

*SEE BACK OF SHEET*

Culvert Material: CONC CB  
Culvert Depth: \_\_\_\_\_  
Culvert Width: \_\_\_\_\_  
Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other



CULVERT

DITCH

Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_

CULVERT

Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

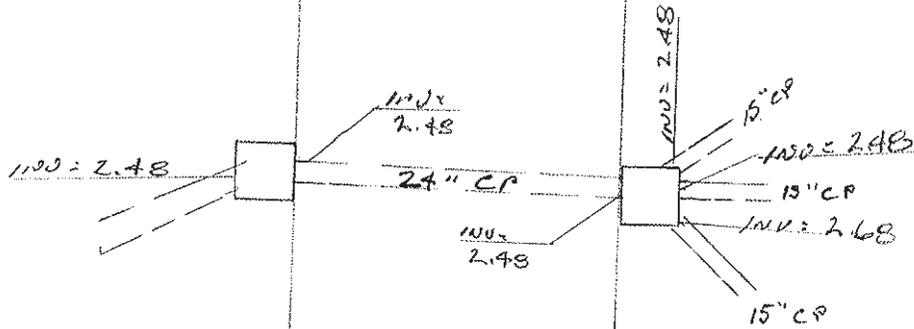
Additional description of the point location:

*SEE BACK OF SHEET*

LOCATION 35

NODE # 613  
CB RIM = 6.07

NODE # 612  
CB RIM = 6.26



RIVERWALK TRWY

Project: OAK GROVE WATERSHED  
 Node/Point #: 614  
 Location/Nearest Intersection: 35

Date: 08-25-09  
 Surveyed By: R. ENNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC. RES.  
 Culvert Depth: 24"  
 Culvert Width: 24"  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

Culvert Invert Elev.: 2.80

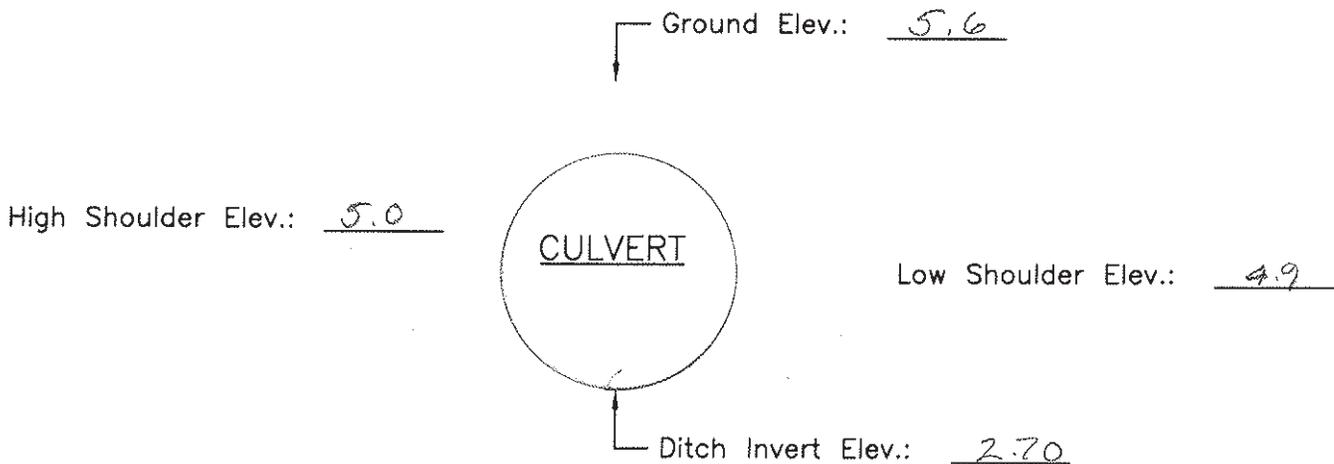
Side Slope (Horz/Vert):  
 \_\_\_\_\_

Bottom Width:  
 \_\_\_\_\_

Side Slope (Horz/Vert):  
 \_\_\_\_\_

CULVERT

DITCH



Additional description of the point location:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

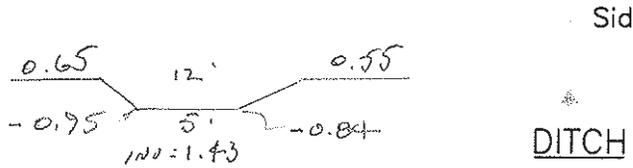
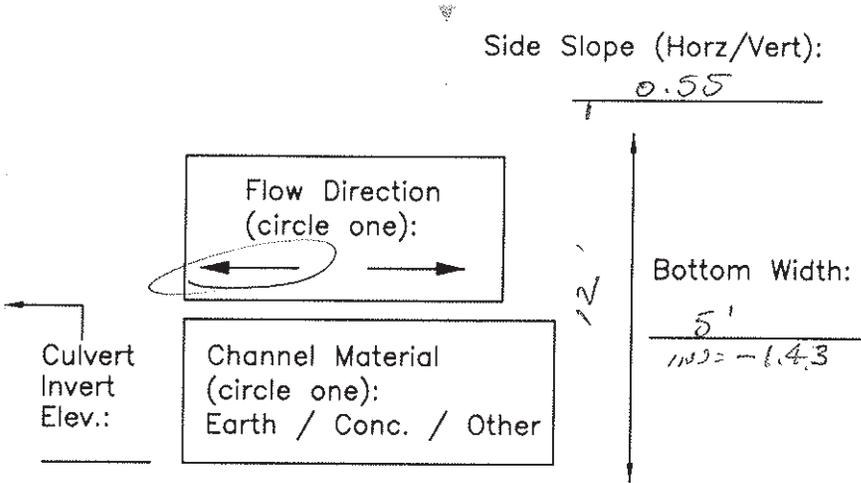
\_\_\_\_\_

Project: OAK GROVE WATERSHED  
 Node/Point #: 629  
 Location/Nearest Intersection: 36

Date: 08-25-09  
 Surveyed By: R. GUNNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other



CULVERT

DITCH

Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_

CULVERT

Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

Additional description of the point location:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Project: OAK GROVE WATERSHED  
Node/Point #: 667  
Location/Nearest  
Intersection: 37

Date: 08-20-09  
Surveyed By: R. OWIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert Out Elev.: \_\_\_\_\_

Invert Elev.: \_\_\_\_\_

LAKE

667

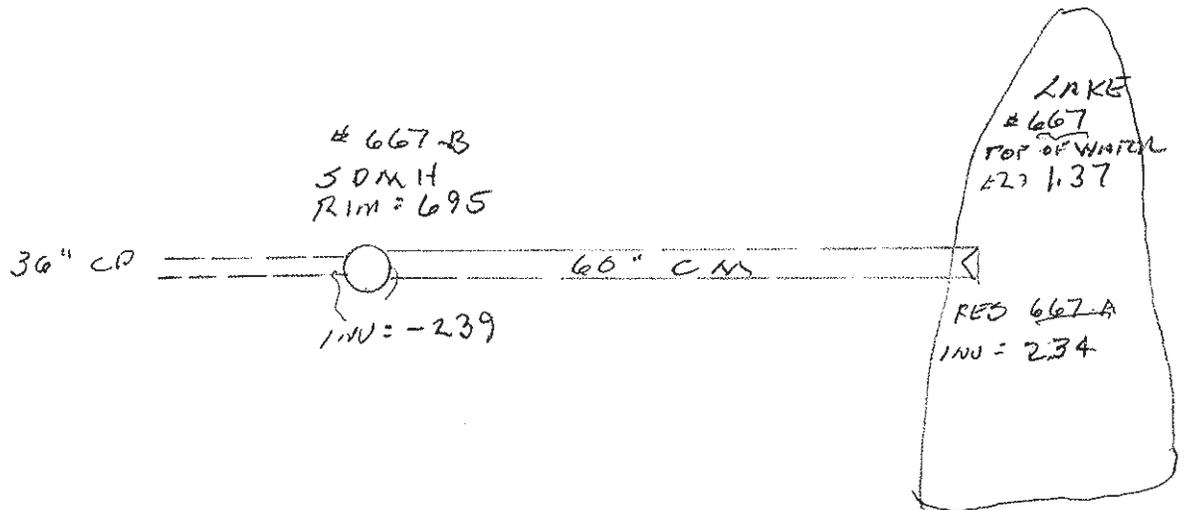
TOP OF WATER  
EL: 1.37

OUTLET CULVERT

LAKE

Additional description of the point location:  
SEE BACK OF THIS SHEET

LOCATION # 37



Project: OAK GROVE WATERSHED  
Node/Point #: 678  
Location/Nearest  
Intersection: 38

Date: 08-24-09  
Surveyed By: R. GUNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert Out Elev.: \_\_\_\_\_

Invert Elev.: \_\_\_\_\_

#678

TOP OF WATER = 1.25

LAKE

OUTLET CULVERT

Additional description of the point location:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project: OAK GROVE WATERSHED  
Node/Point #: 685  
Location/Nearest  
Intersection: 38

Date: 08-24-09  
Surveyed By: R. ANNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

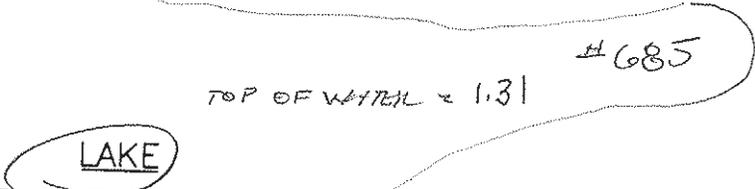
Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert Out Elev.: \_\_\_\_\_

Invert Elev.: \_\_\_\_\_

OUTLET CULVERT



Additional description of the point location:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project: OAK GROVE WATERSHED  
Node/Point #: 687 & 688  
Location/Nearest Intersection: 39

Date: 08-24-09  
Surveyed By: R. ENNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC FES  
Culvert Depth: \_\_\_\_\_  
Culvert Width: \_\_\_\_\_  
Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Flow Direction (circle one):  
← →

Channel Material (circle one):  
Earth / Conc. / Other

Culvert Invert Elev.: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT

DITCH

Ground Elev.: \_\_\_\_\_

High Shoulder Elev.: \_\_\_\_\_

CULVERT

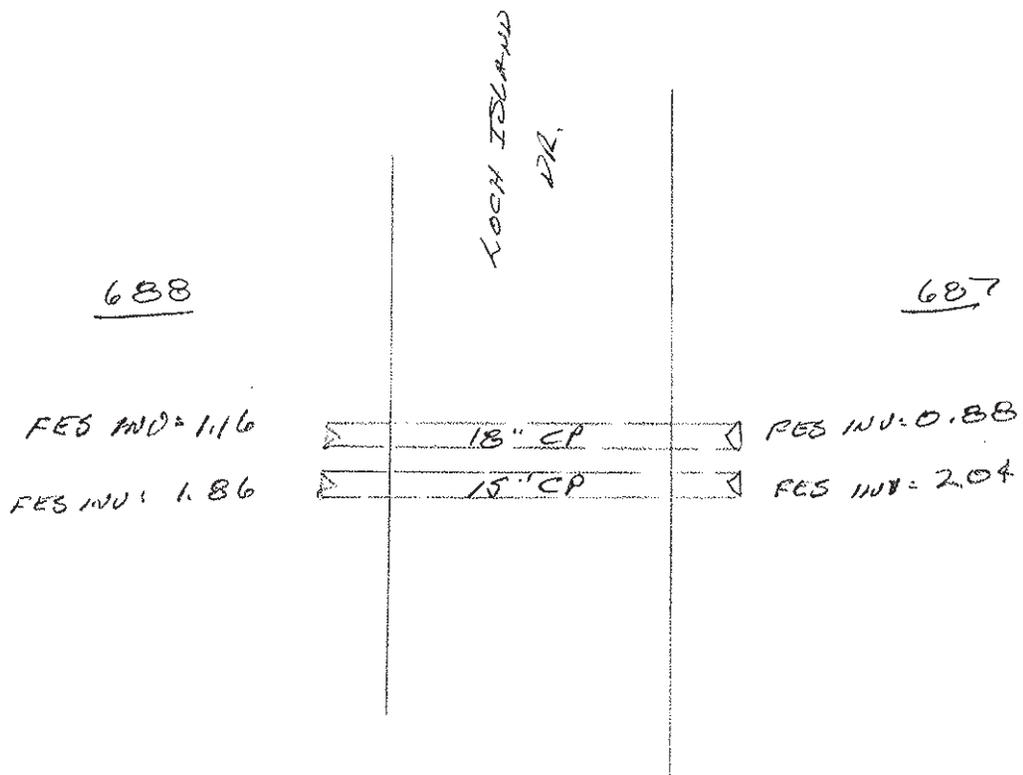
Low Shoulder Elev.: \_\_\_\_\_

Ditch Invert Elev.: \_\_\_\_\_

Additional description of the point location:

SEE BACK OF SHEET

LOCATION 39



Project: OAK GROVE WATERSHED  
Node/Point #: 708 ; 709  
Location/Nearest  
Intersection: 40

Date: 08-26-09  
Surveyed By: R. GUNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert Out Elev.: \_\_\_\_\_

Invert Elev.: \_\_\_\_\_

OUTLET CULVERT

LAKE

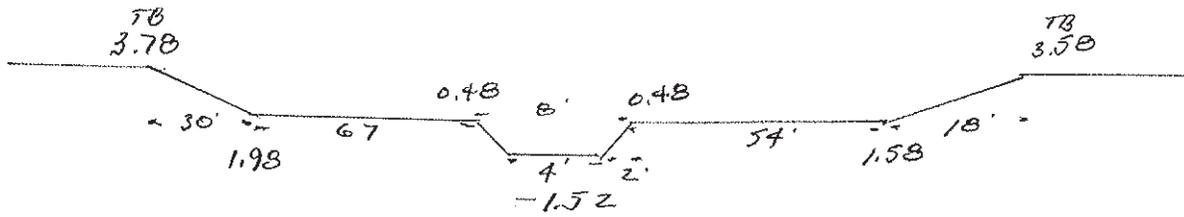
Additional description of the point location:

SEE BACK OF THIS SHEET

LOCATION 40

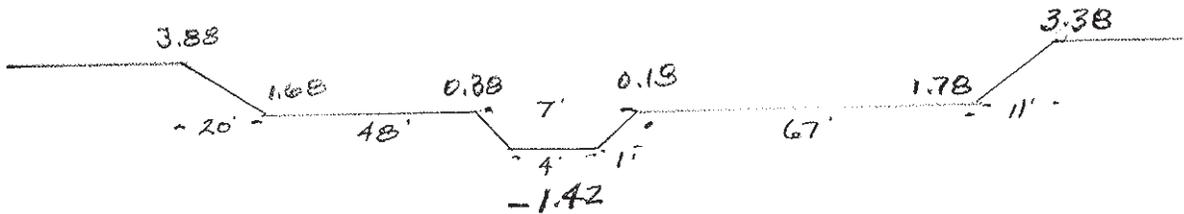
NODE # 708

UP STREAM



NODE # 709

DOWN STREAM



Project: OAK GROVE WATERSHED  
 Node/Point #: 736  
 Location/Nearest Intersection: 41

Date: 08 20-09  
 Surveyed By: R. CUNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC.  
 Culvert Depth: 29"  
 Culvert Width: 45"  
 Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. / Other

Flow Direction (circle one):  
 ← →

Channel Material (circle one):  
 Earth / Conc. / Other

Culvert Invert Elev.: -1.40

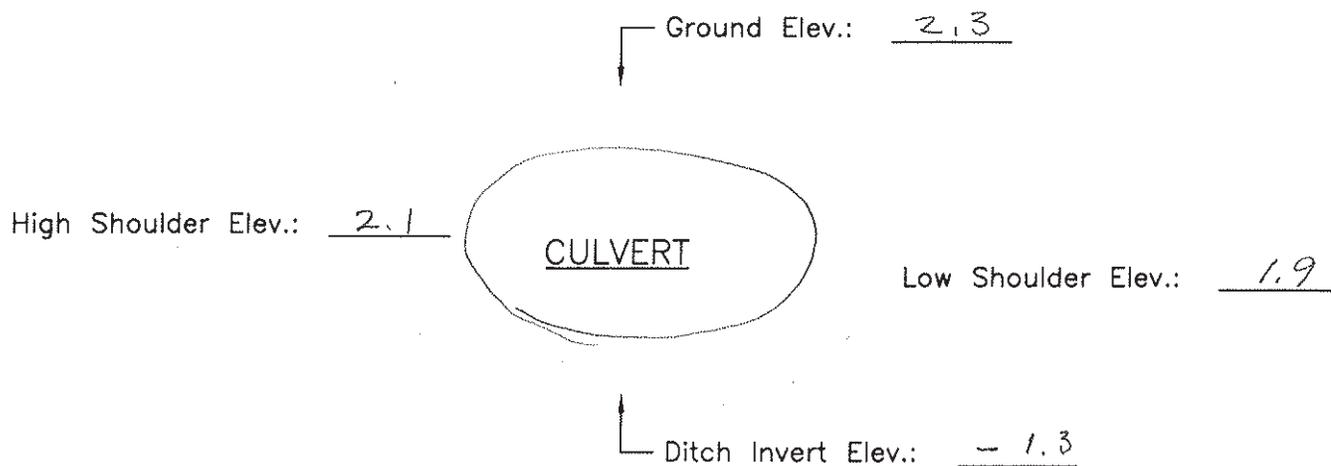
Side Slope (Horz/Vert): \_\_\_\_\_

Bottom Width: \_\_\_\_\_

Side Slope (Horz/Vert): \_\_\_\_\_

CULVERT

DITCH



Additional description of the point location:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Project: OAK GROVE WATERSHED  
 Node/Point #: 728  
 Location/Nearest Intersection: 41

Date: 08-20-09  
 Surveyed By: R. GUNLS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Rim Elev.: 1.94

Flow Direction ←

PI  
COULD NOT OPEN

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: -1.20  
 BOTTOM

Invert Out Elev.: -1.20  
 BOTTOM

CULVERT      JUNCTION/INLET      CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_  
 Culvert Depth: \_\_\_\_\_  
 Culvert Width: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_  
 Invert Elev.: \_\_\_\_\_

Culvert Type (circle one):  
 Circ/ Box/ Arch/ Ellip. /Other

OUTLET CULVERT      LAKE

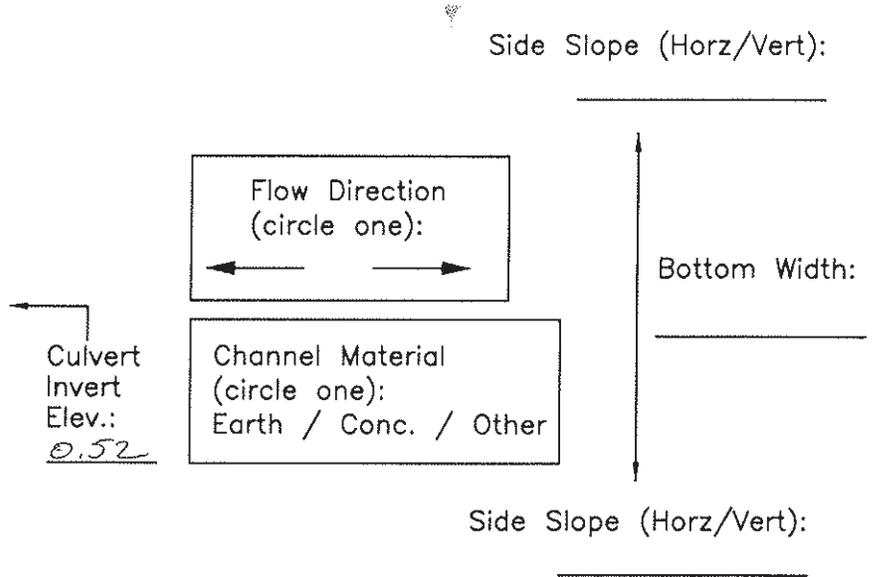
Additional description of the point location:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Project: OAK GROVE WATERSHED  
Node/Point #: 74B  
Location/Nearest Intersection: 42

Date: 08-24-09  
Surveyed By: R. BWNIS

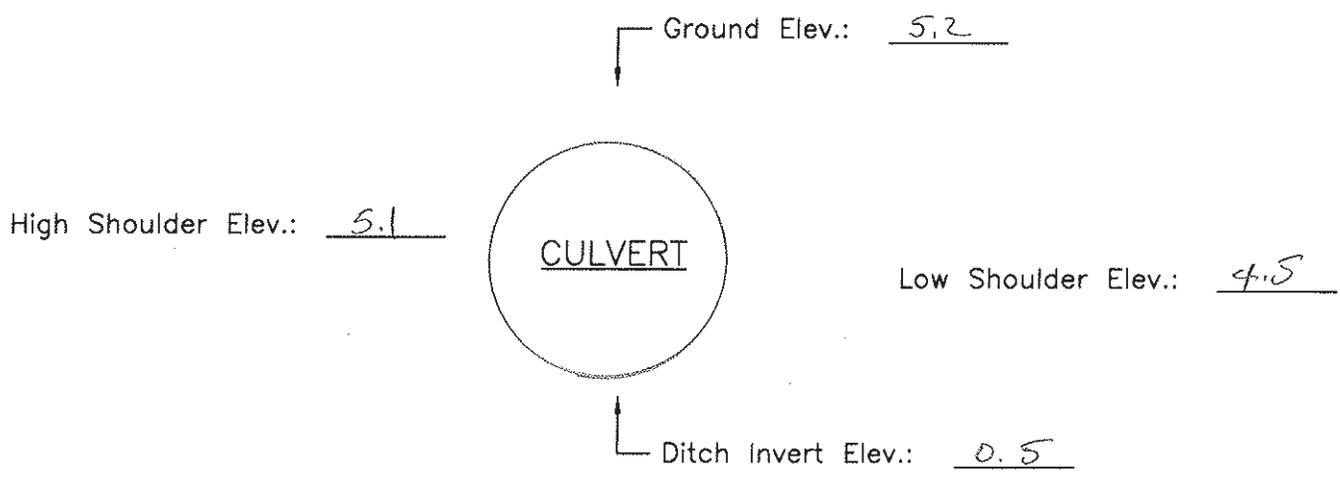
THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION, DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Culvert Material: CONC.  
Culvert Depth: 36" FES  
Culvert Width: 36" FES  
Culvert Type (circle one):  
 Circ/  Box/  Arch/  Ellip. /  Other



CULVERT

DITCH



Additional description of the point location:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project: DAK GROVE WATERSHED  
Node/Point #: 757, 758 ; 759  
Location/Nearest  
Intersection: 43

Date: 08-26-09  
Surveyed By: R. ENNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert Out Elev.: \_\_\_\_\_

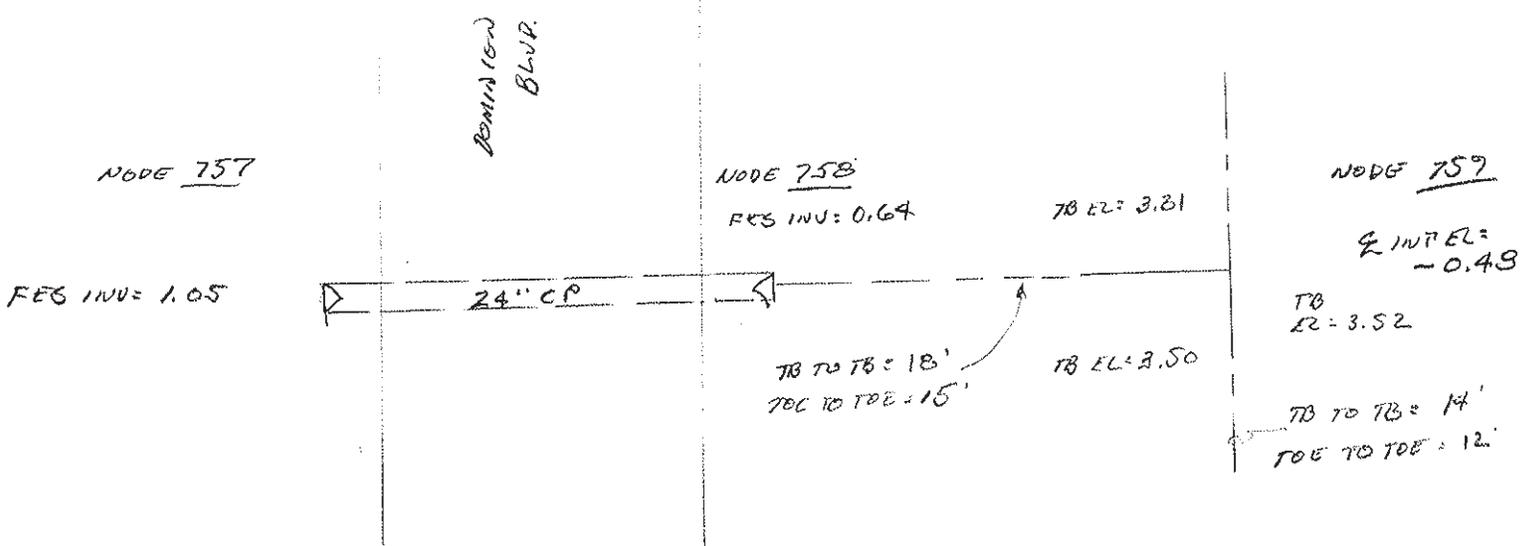
Invert Elev.: \_\_\_\_\_

OUTLET CULVERT

LAKE

Additional description of the point location:  
SEE BACK OF THIS SHEET

LOCATION 43



Project: OAK GROVE WATERSHED  
Node/Point #: 773, 774, 776, 777, 778  
Location/Nearest  
Intersection: 44

Date: 08-24-09  
Surveyed By: R. DENNIS

THIS FORM SHALL BE USED TO DESCRIBE THE CONFIGURATION,  
DIMENSIONS AND ELEVATIONS AT EACH POINT LOCATION.

Flow Direction ←

Rim Elev.: \_\_\_\_\_

Flow Direction ←

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert In Elev.: \_\_\_\_\_

Invert Out Elev.: \_\_\_\_\_

CULVERT

JUNCTION/INLET

CULVERT

W.S. Elev.: \_\_\_\_\_

Culvert Material: \_\_\_\_\_

Culvert Depth: \_\_\_\_\_

Culvert Width: \_\_\_\_\_

Culvert Type (circle one):  
Circ/ Box/ Arch/ Ellip. /Other

Invert Out Elev.: \_\_\_\_\_

Invert Elev.: \_\_\_\_\_

OUTLET CULVERT

LAKE

Additional description of the point location:

SEE BACK OF THIS SHEET

LOCATION 44

