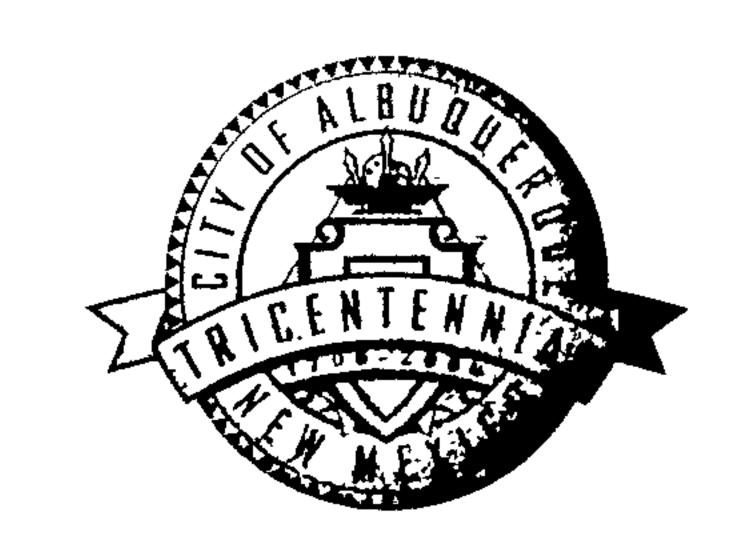
CITY OF ALBUQUERQUE



September 18, 2007

Ray Macy, PE Telck-Hensley Engineering Group 2340 Menaul Blvd NE Ste 200 Albuquerque, NM 87107

Re: Eagle Perch Estates Grading and Draining Plan

Engineer Stamp 7-31-07 (C20/D56A)

Dear Mr. Macy,

Based upon information provided in your submittal dated 8-1-07, the above referenced plan is approved for Preliminary Plat action by the DRB. Once that board approves the grading plan, please submit a mylar copy for my signature in order to obtain a Rough Grading Permit.

Prior to Release of SIA and Financial Guarantees, an Engineer's Certification of this grading plan will be required.

P.O. Box 1293

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. In addition to submitting an NOI to the EPA and preparing a SWPPP, please send a copy of the SWPPP on a CD in .pdf format to the following address:

Albuquerque

Department of Municipal Development Storm Drainage Division P.O. Box 1293, One Civic Plaza, Rm. 301

Attn: Kathy Verhage Albuquerque, NM 87103

New Mexico 87103

www.cabq.gov

If you have any questions about this permit, please feel free to call the Municipal Development Department, Hydrology section at 768-3654.

If you have any other questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE

Principal Engineer, Planning Dept Development and Building Services

C: Kathy Verhage, DMD file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: <u>Eagle's Perch Estates</u> DRB #: <u>1006687</u> EPC#:	ZONE MAP/DRG. FILE #: <u>C-20-Z</u> WORK ORDER#:
LEGAL DESCRIPTION: Lot 11, 12, Block 3, Unit 3, North Albuque CITY ADDRESS:	erque Acres
ENGINEERING FIRM: THE Group ADDRESS: 2340 Menaul Blvd., NE CITY, STATE: Albuquerque, NM	CONTACT: <u>Ray Macy</u> PHONE: <u>888-1900</u> ZIP CODE: <u>87107</u>
OWNER: Esmail Haidari ADDRESS: 2340 Menaul Blvd., NE CITY, STATE: Albuquerque, NM	CONTACT: <u>Adil Rizvi</u> PHONE: <u>888-1900</u> ZIP CODE: <u>87107</u>
ARCHITECT: ADDRESS: CITY, STATE:	CONTACT: PHONE: ZIP CODE:
SURVEYOR: Wayjohn Surveying ADDRESS: 330 Louisiana Blvd., NE CITY, STATE: Albuquerque, NM	CONTACT: <u>Tom Jonston</u> PHONE: <u>255-2052</u> ZIP CODE: <u>87108</u>
CONTRACTOR: ADDRESS: CITY, STATE:	CONTACT: PHONE: ZIP CODE:
CHECK TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
 □ DRAINAGE REPORT □ DRAINAGE PLAN 1st SUBMITTAL, <i>REQUIRES TCL or</i> □ DRAINAGE PLAN RESUBMITTAL □ CONCEPTUAL GRADING & DRAINAGE PLAN □ GRADING PLAN □ EROSION CONTROL PLAN □ ENGINEER'S CERTIFICATION (HYDROLOGY) □ CLOMR/LOMR □ TRAFFIC CIRCULATION LAYOUT (TCL) □ ENGINEERS CERTIFICATION (TCL) □ ENGINEERS CERTIFICATION (DRB APPR. SITE PLA □ OTHER 	S. DEV. PLAN FOR SUB'D. APPROVAL S. DEV. PLAN FOR BLDG. PERMIT APPROVAL SECTOR PLAN APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.)
WAS A PRE-DESIGN CONFERENCE ATTENDED: YES NO COPY PROVIDED	
DATE SUBMITTED: 8-1-07	BY:Ray Macy, PE

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

- Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five
 acres and Sector Plans.
- 2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
- 3. **Drainage Report**: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

Friday, Jul 27 2007, 1.22 PM

10 foot channel

Rectangular

= 9.00Botom Width (ft) = 0.50Total Depth (ft)

= 37.28Invert Elev (ft) = 2.00Slope (%) = 0.012N-Value

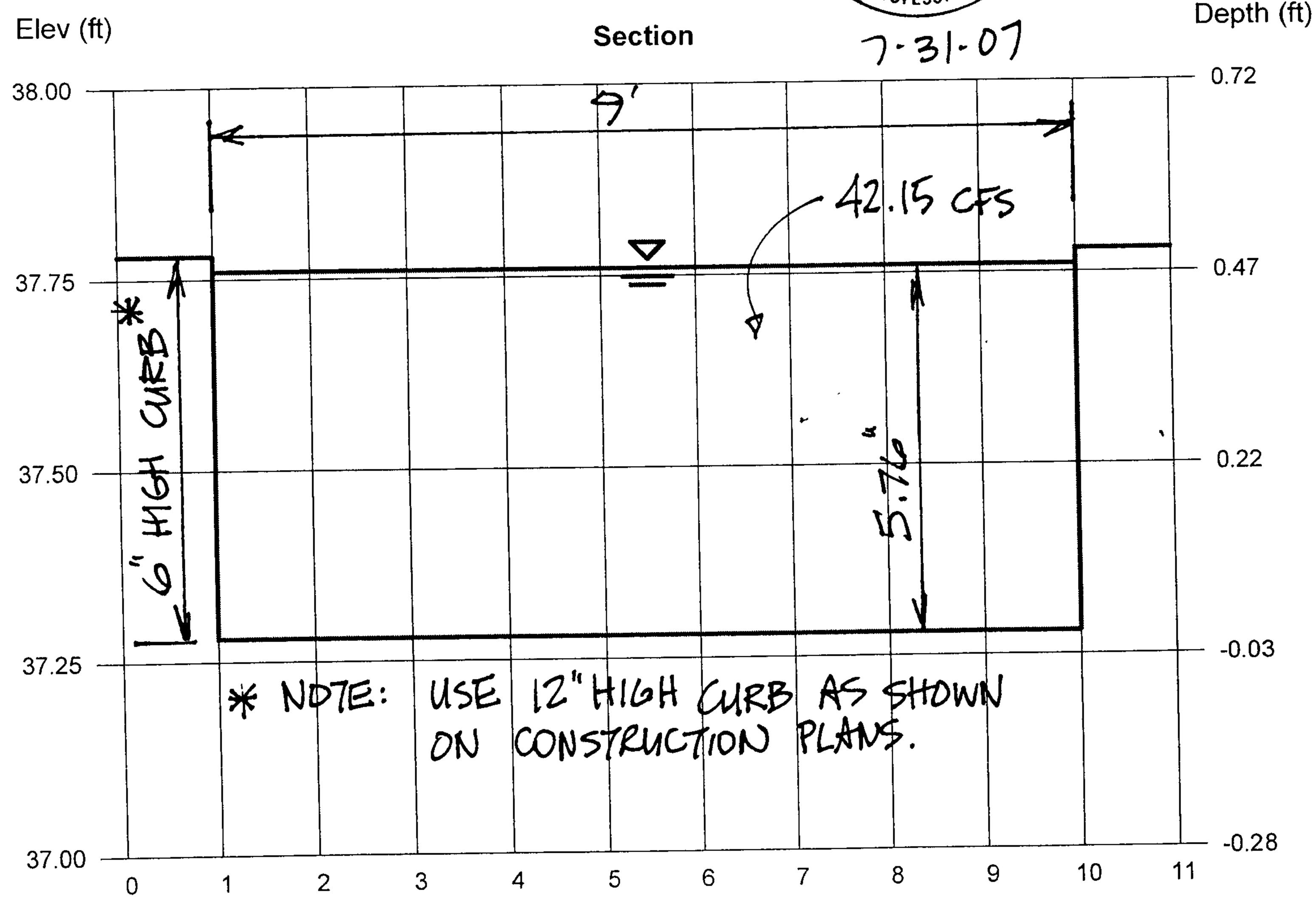
Calculations

Known Q Compute by: = 42.15Known Q (cfs)

Highlighted

= 0.48Depth (ft) = 42.15Q (cfs) = 4.32Area (sqft) = 9.76Velocity (ft/s) = 9.96Wetted Perim (ft) = 0.50Crit Depth, Yc (ft) = 9.00Top Width (ft) = 1.96EGL (ft)





Reach (ft)

Channel Report 28' F/F STREET SECTION (NO GROWN)

Hydraflow Express by Intelisolve

Tuesday, Jul 31 2007, 4 41 PM

28 foot channel (Engle's Perch Court)

Rectangular

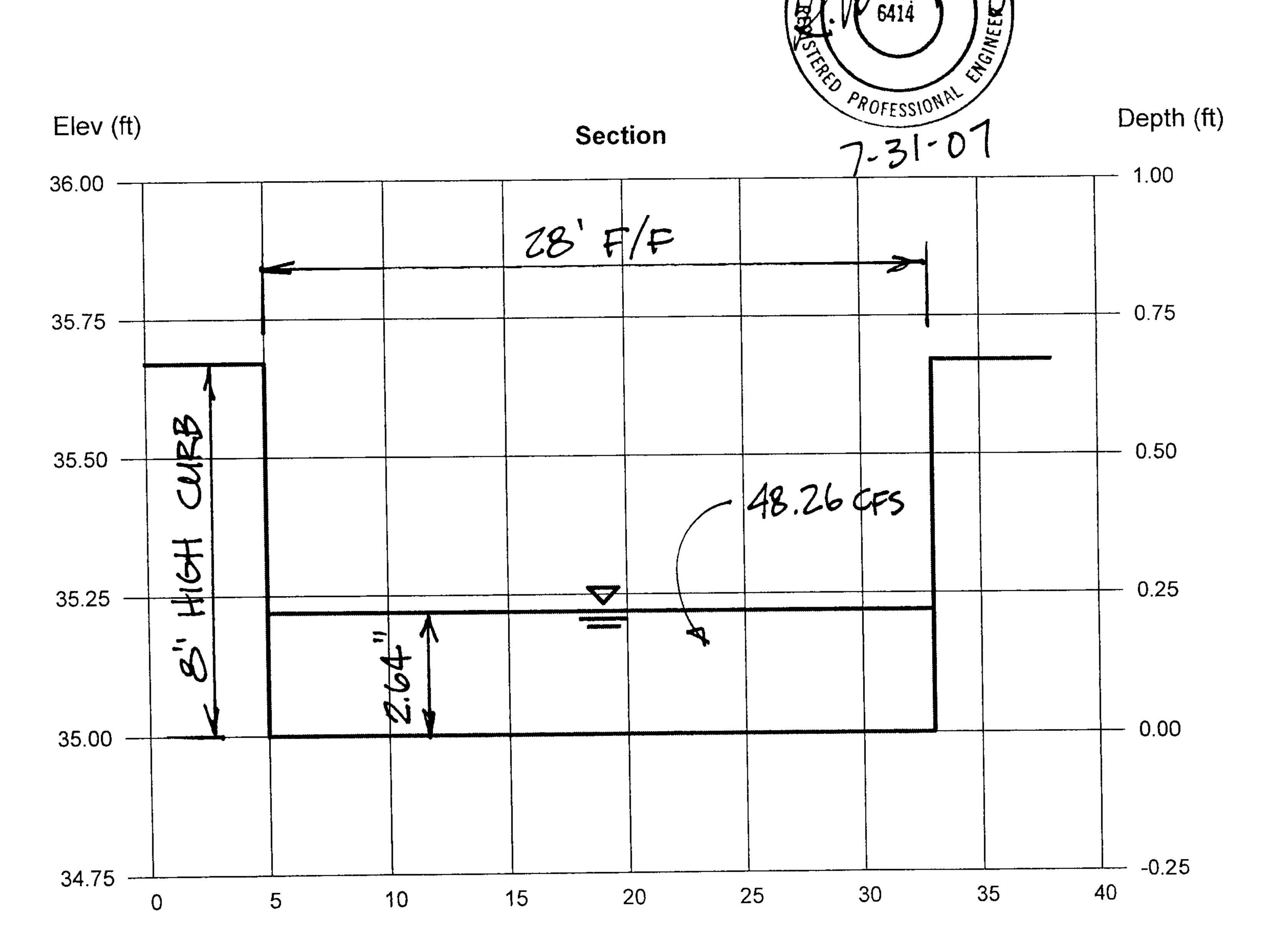
Botom Width (ft) = 28.00Total Depth (ft) = 0.67

Invert Elev (ft) = 35.00 Slope (%) = 3.31 N-Value = 0.012

Calculations

Compute by: Known Q Known Q (cfs) = 48.26 Highlighted

= 0.22Depth (ft) = 48.26Q (cfs) Area (sqft) = 6.16Velocity (ft/s) = 7.83Wetted Perim (ft) = 28.44= 0.46Crit Depth, Yc (ft) = 28.00Top Width (ft) = 1.17EGL (ft)



Reach (ft)

2 OF 6

Tuesday, Jul 31 2007, 5 26 PM

Depth (ft)

Eagle's Perch Court

Triangular

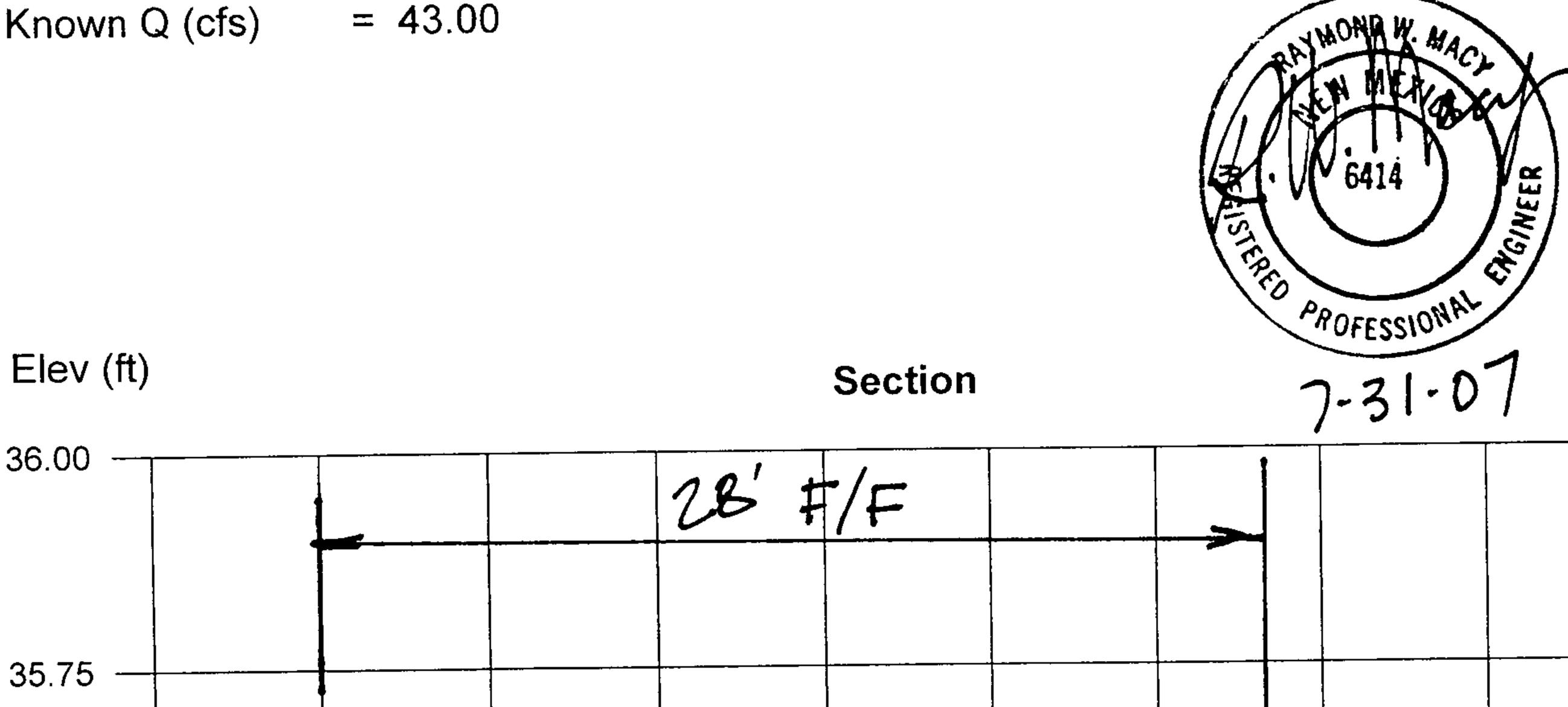
Side Slope (z:1) = 0.00Total Depth (ft) = 0.67

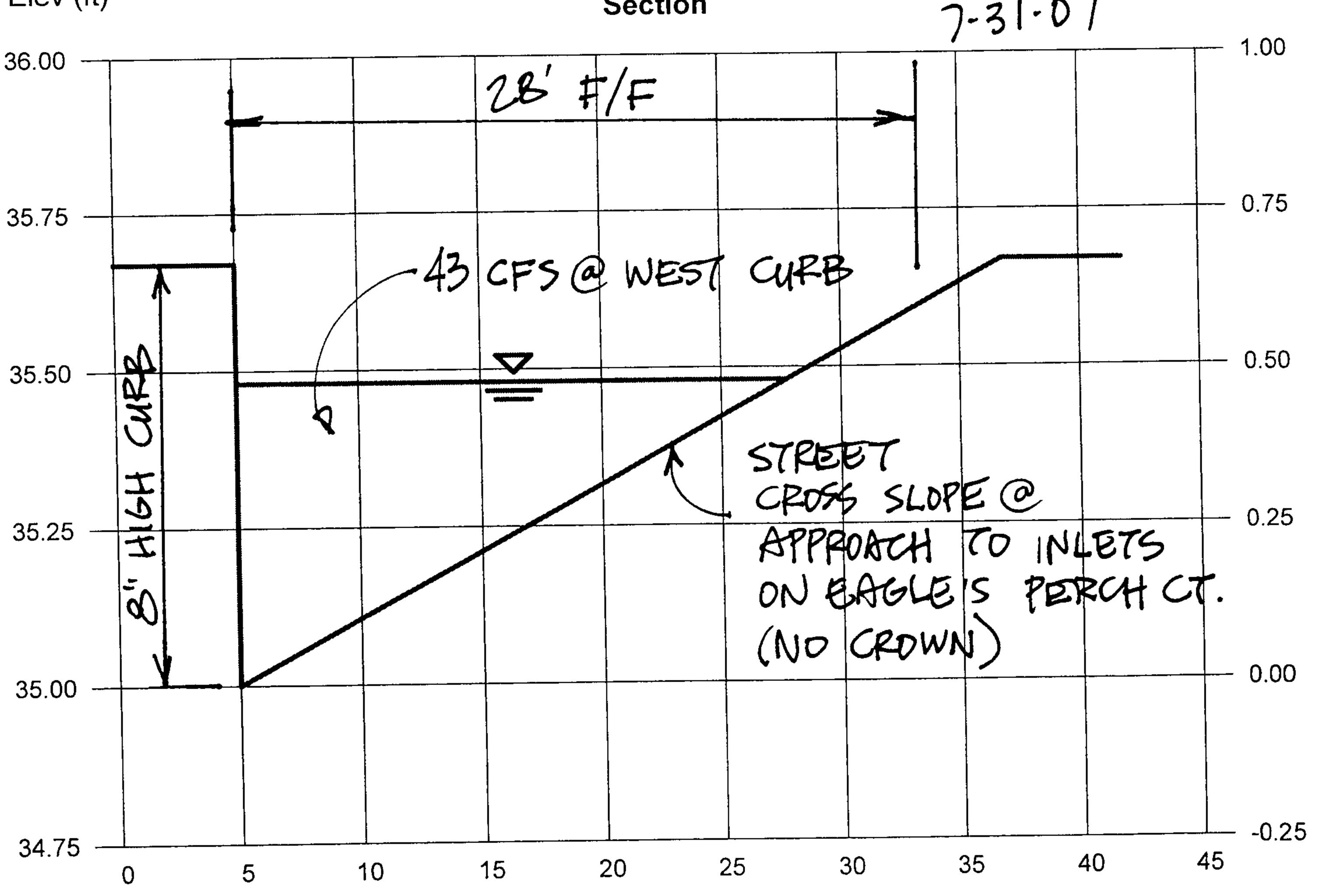
Invert Elev (ft) = 35.00 Slope (%) = 3.30 N-Value = 0.013

Calculations

Compute by: Known Q Known Q (cfs) = 43.00 Highlighted

Depth (ft) = 0.48 Q (cfs) = 43.00 Area (sqft) = 5.47 Velocity (ft/s) = 7.86 Wetted Perim (ft) = 23.27 Crit Depth, Yc (ft) = 0.67 Top Width (ft) = 22.78 EGL (ft) = 1.44





Reach (ft)

3 OF 6

Tuesday, Jul 31 2007, 1 38 PM

WEST TYPE A INLET ON EAGLE'S PERCH CT.

SOLSTERES.

Combination Inlet

On grade Location

= 7.50Curb Length (ft)

= 1.73Throat Height (in)

= -0-Grate Area (sqft) = 2.00Grate Width (ft)

= 2.94Grate Length (ft)

Gutter

= 0.063Slope, Sw (ft/ft)

= 0.020Slope, Sx (ft/ft)

= 3.23Local Depr (in)

= 2.00Gutter Width (ft)

= 4.00Gutter Slope (%)

= 0.013Gutter n-value

Calculations

Known Q Compute by:

= 43.00Q (cfs)

Highlighted

= 43.00Q Total (cfs)

= 16.22Q Capt (cfs)

= 26.78Q Bypass (cfs)

= 8.00Depth at Inlet (in)

Efficiency (%) = 38

= 20.75Gutter Spread (ft)

= 9.79

Gutter Vel (ft/s)

Bypass Spread (ft) = 17.70

Bypass Depth (in) = 5.28

EAST TYPE A INLET ON EAGLE'S PERCH CT WILL COLLECT 1.5 CFS CONTAINED WIT THE

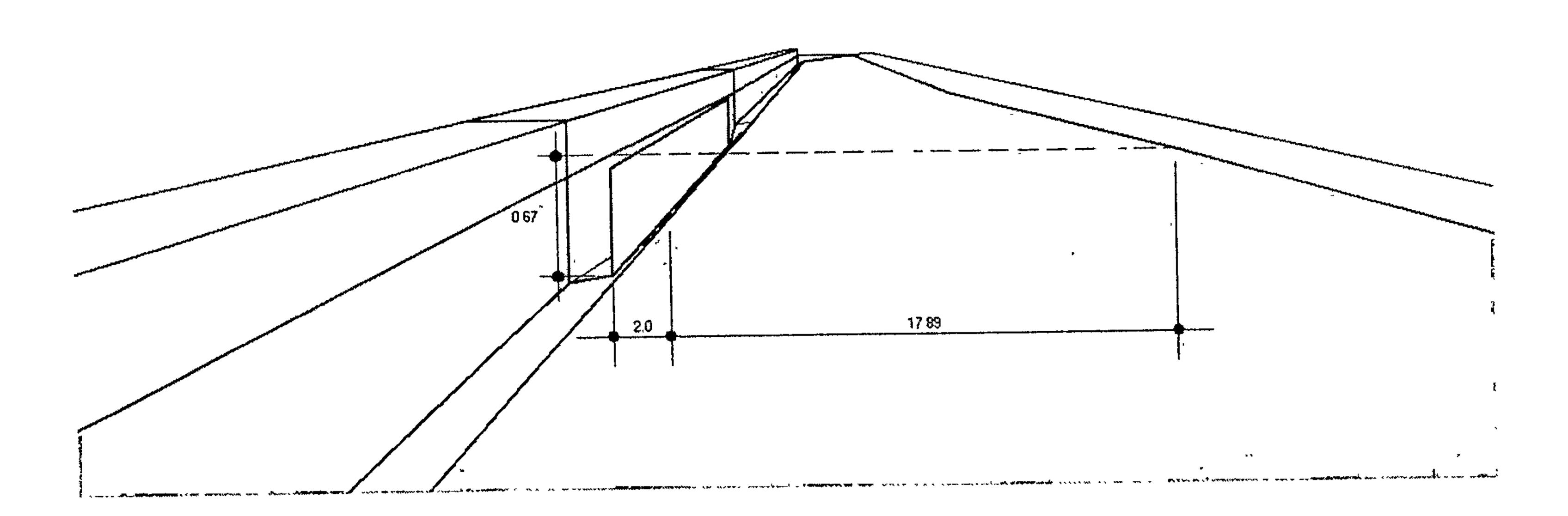
SWOINER

6414

PROFESSIONAL

7.31-07

GUTTER. All dimensions in feet



Tuesday, Jul 31 2007, 1:41 PM

FIRST DOUBLE TYPE A IN OAKLAND

Combination Inlet

Location = On grade
Curb Length (ft) = 12.00
Throat Height (in) = 1.73
Grate Area (sqft) = -0Grate Width (ft) = 2.00
Grate Length (ft) = 8.00

Gutter

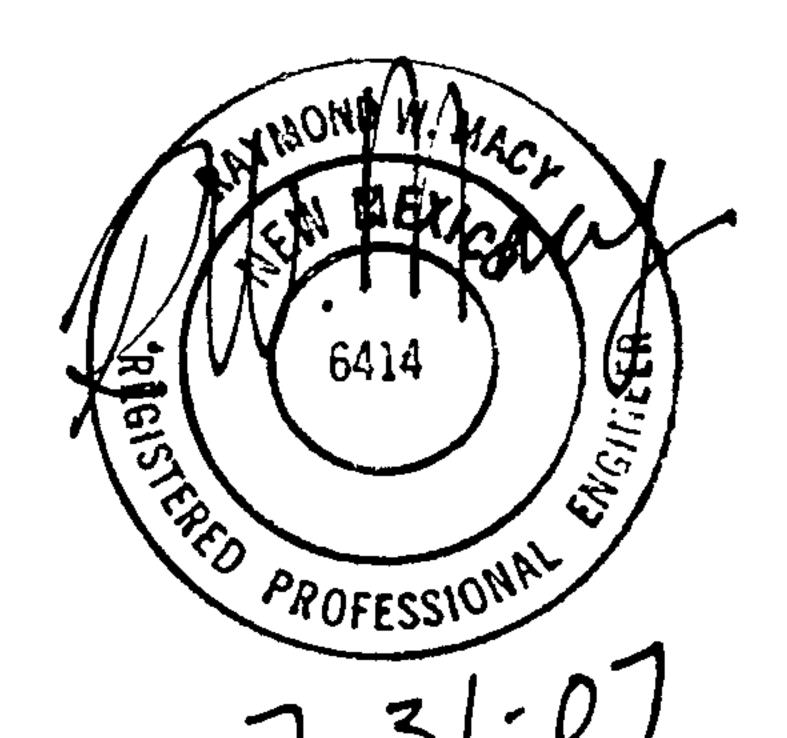
Slope, Sw (ft/ft) = 0.063 Slope, Sx (ft/ft) = 0.020 Local Depr (in) = 3.23 Gutter Width (ft) = 2.00 Gutter Slope (%) = 3.12 Gutter n-value = 0.013 Calculations

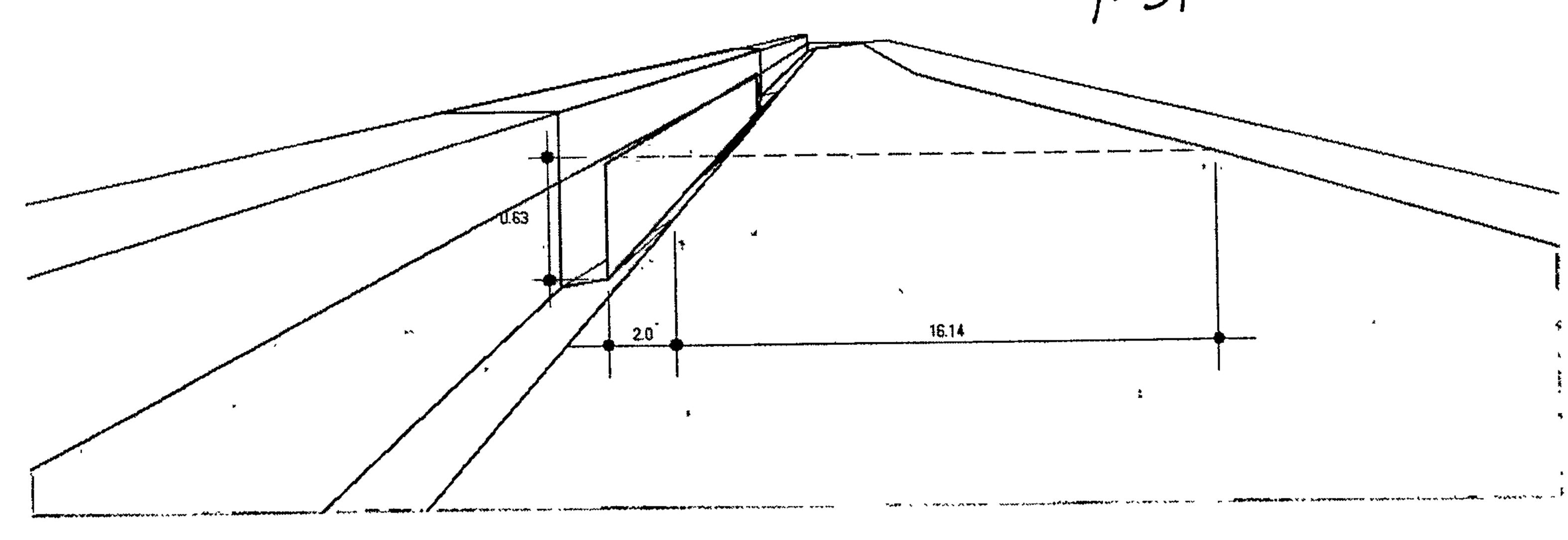
Compute by: Known Q = 30.54

Highlighted

Q Total (cfs) = 30.54
Q Capt (cfs) = 17.15
Q Bypass (cfs) = 13.39
Depth at Inlet (in) = 7.58
Efficiency (%) = 56
Gutter Spread (ft) = 19.10
Gutter Vel (ft/s) = 8.18
Bypass Spread (ft) = 14.20
Bypass Depth (in) = 4.44







Inlet Report

Hydraflow Express by Intelisolve

Tuesday, Jul 31 2007, 1 42 PM

SECOND DOUBLE TYPE A IN OAKLAND

Combination	Inlet
-------------	-------

Location = On grade

Curb Length (ft) = 12.00

Throat Height (in) = 1.73

Grate Area (sqft) = -0
Grate Width (ft) = 2.00

Grate Length (ft) = 8.00

Gutter

Slope, Sw (ft/ft) = 0.063 Slope, Sx (ft/ft) = 0.020 Local Depr (in) = 3.23 Gutter Width (ft) = 2.00 Gutter Slope (%) = 3.12 Gutter n-value = 0.013 Calculations

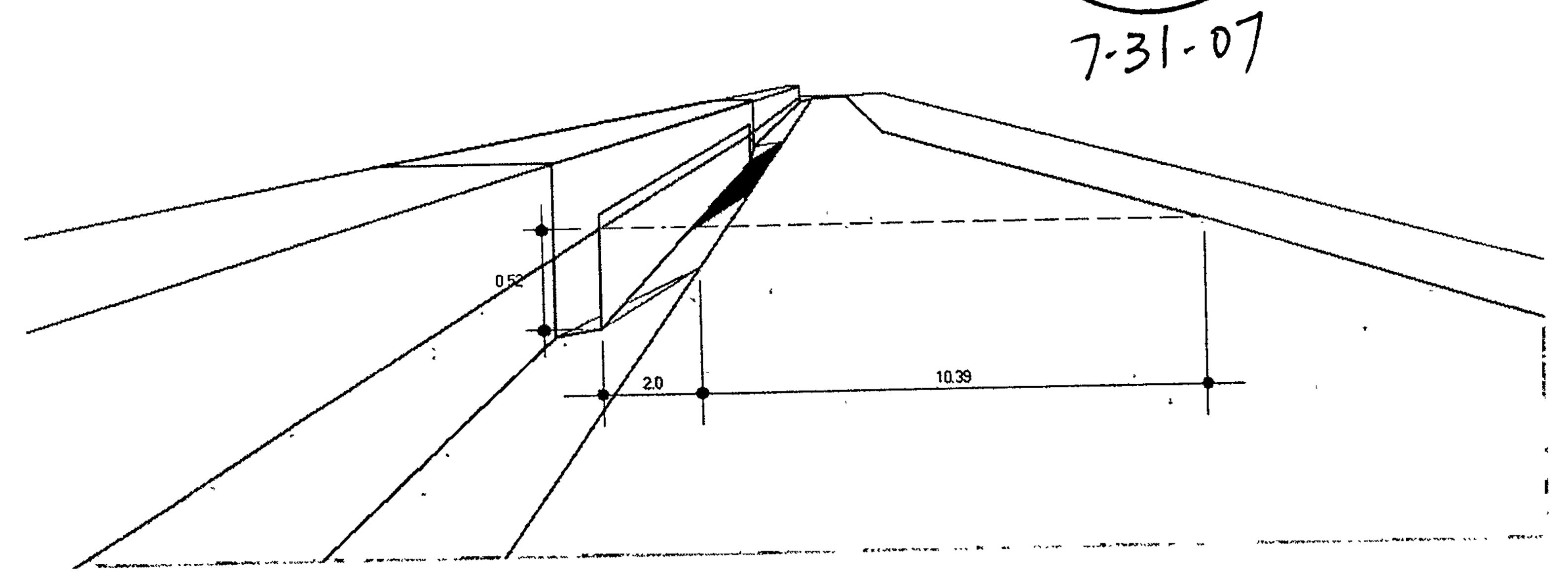
Compute by: Known Q Q (cfs) = 13.39

Highlighted

= 13.39Q Total (cfs) = 9.53Q Capt (cfs) = 3.86Q Bypass (cfs) = 6.20Depth at Inlet (in) = 71 Efficiency (%) = 13.80Gutter Spread (ft) Gutter Vel (ft/s) = 6.73Bypass Spread (ft) = 8.20 Bypass Depth (in) = 3.00



All dimensions in feet



CITY OF ALBUQUERQUE



July 23, 2007

Raymond W. Macy, P.E. THE Group 2340 Menaul Blvd NE Albuquerque, NM 87107

Re: Eagle's View Estates Subdivision PH II Grading and Drainage Plan Engineer's Stamp dated 7-16-07 (C20/D056A)

Dear Mr. Macy,

Based upon the information provided in your submittal dated 7-16-07, the above referenced plan cannot be approved for Preliminary Plat action by the DRB until the following comments are addressed:

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

• This site must be designed to accept the current offsite flows. An alternative may be to build the necessary infrastructure in Ventura Blvd.

• There are proposed grades steeper than 10%, which are categorized as Land Treatment "C" not "B". Please update the Drainage Summary Table and narrative with the new values.

• Provide calculations for channels, storm drains and the sidewalk culvert.

• What is the depth of water in Sahar Court at the inlets?

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, P.E.

Engineering Associate, Planning Dept. Development and Building Services

C: file

Brad Bingham

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJE DRB #:	CT TITLE: <u>Eagle's View Estates Subdivision Phase II</u> 		ZONE MAP/DRG. FILE #:C-20#1) 5 Lest WORK ORDER#:
	DESCRIPTION: Lot 11, 12, Block 3, Unit 3, North Albuquerque	<u>Acres</u>	
ENGINE	ERING FIRM: THE Group ADDRESS: 2340 Menaul Blvd., NE CITY, STATE: <u>Albuquerque</u> , NM		CONTACT: <u>Ray Macy</u> PHONE: <u>888-1900</u> ZIP CODE: <u>87107</u>
OWNER	R: <u>Esmail Haidari</u> ADDRESS: <u>2340 Menaul Blvd., NE</u> CITY, STATE: <u>Albuquerque, NM</u>		CONTACT: <u>Adil Rizvi</u> PHONE: <u>888-1900</u> ZIP CODE: <u>87107</u>
	ECT: ADDRESS: CITY, STATE:		CONTACT: PHONE: ZIP CODE:
SURVE	<u>YOR: Wayjohn Surveying</u> ADDRESS: <u>330 Louisiana Blvd., NE</u> CITY, STATE: <u>Albuquerque, NM</u>		CONTACT: <u>Tom Jonston</u> PHONE: <u>255-2052</u> ZIP CODE: <u>87108</u>
CONTRA	ACTOR: ADDRESS: CITY, STATE:		CONTACT: PHONE: ZIP CODE:
<u>CHECK</u>	TYPE OF SUBMITTAL:	CHECK	TYPE OF APPROVAL SOUGHT:
	DRAINAGE REPORT DRAINAGE PLAN 1st SUBMITTAL, <i>REQUIRES TCL or equal</i> DRAINAGE PLAN RESUBMITTAL CONCEPTUAL GRADING & DRAINAGE PLAN GRADING PLAN EROSION CONTROL PLAN ENGINEER'S CERTIFICATION (HYDROLOGY) CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) ENGINEERS CERTIFICATION (TCL) ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN) OTHER		SIA / FINANCIAL GUARANTEE RELEASE PRELIMINARY PLAT APPROVAL S. DEV. PLAN FOR SUB'D. APPROVAL S. DEV. PLAN FOR BLDG. PERMIT APPROVAL SECTOR PLAN APPROVAL FINAL PLAT APPROVAL FOUNDATION PERMIT APPROVAL BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY (PERM.) CERTIFICATE OF OCCUPANCY (TEMP.) GRADING PERMIT APPROVAL PAVING PERMIT APPROVAL WORK ORDER APPROVAL OTHER (SPECIFY)
WAS A F	PRE-DESIGN CONFERENCE ATTENDED: YES NO COPY PROVIDED	APPLA	CONTROL ON SECTION
DATE SU	JBMITTED: <u>7-16-07</u>	BY: <u>Ray Ma</u>	CY, PE HYDROLOGY SECTIONS HYDROLOGY SECTIONS

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

- 1. Conceptual Grading and Drainage Plan: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
- 2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
- 3. **Drainage Report**: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

Friday, Jul 27 2007, 1.22 PM

10 foot channel

Rectangular = 9.00Botom Width (ft) = 0.50Total Depth (ft)

= 37.28Invert Elev (ft) = 2.00Slope (%) = 0.012N-Value

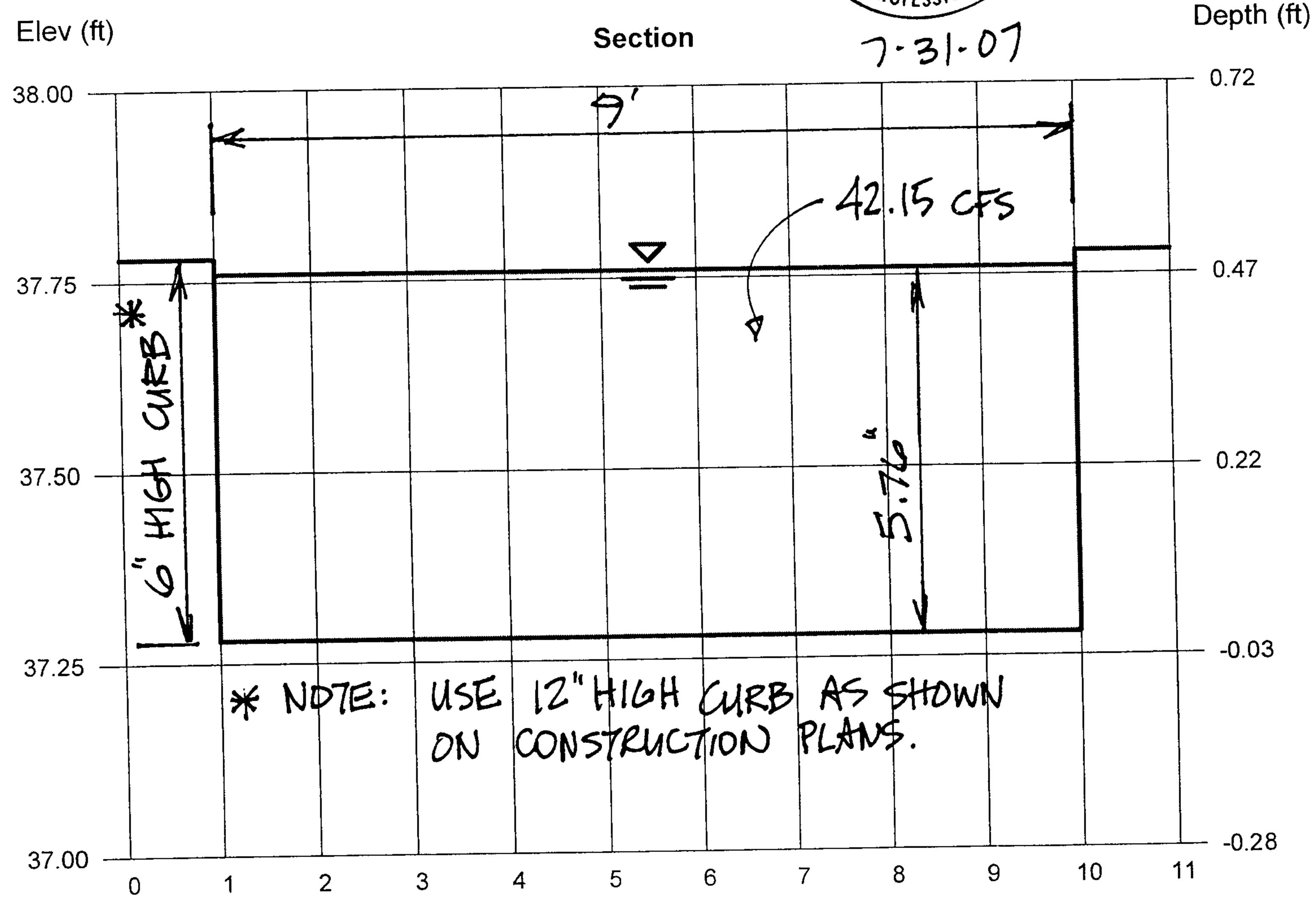
Calculations

Known Q Compute by: = 42.15Known Q (cfs)

Highlighted

= 0.48Depth (ft) = 42.15Q (cfs) = 4.32Area (sqft) = 9.76Velocity (ft/s) = 9.96Wetted Perim (ft) = 0.50Crit Depth, Yc (ft) Top Width (ft) = 9.00= 1.96EGL (ft)





Reach (ft)

Channel Report 28' F/F STREET SECTION (NO CHOWN)

Hydraflow Express by Intelisolve

Tuesday, Jul 31 2007, 4:41 PM

28 foot channel (Emple's Perch Court)

Rectangular

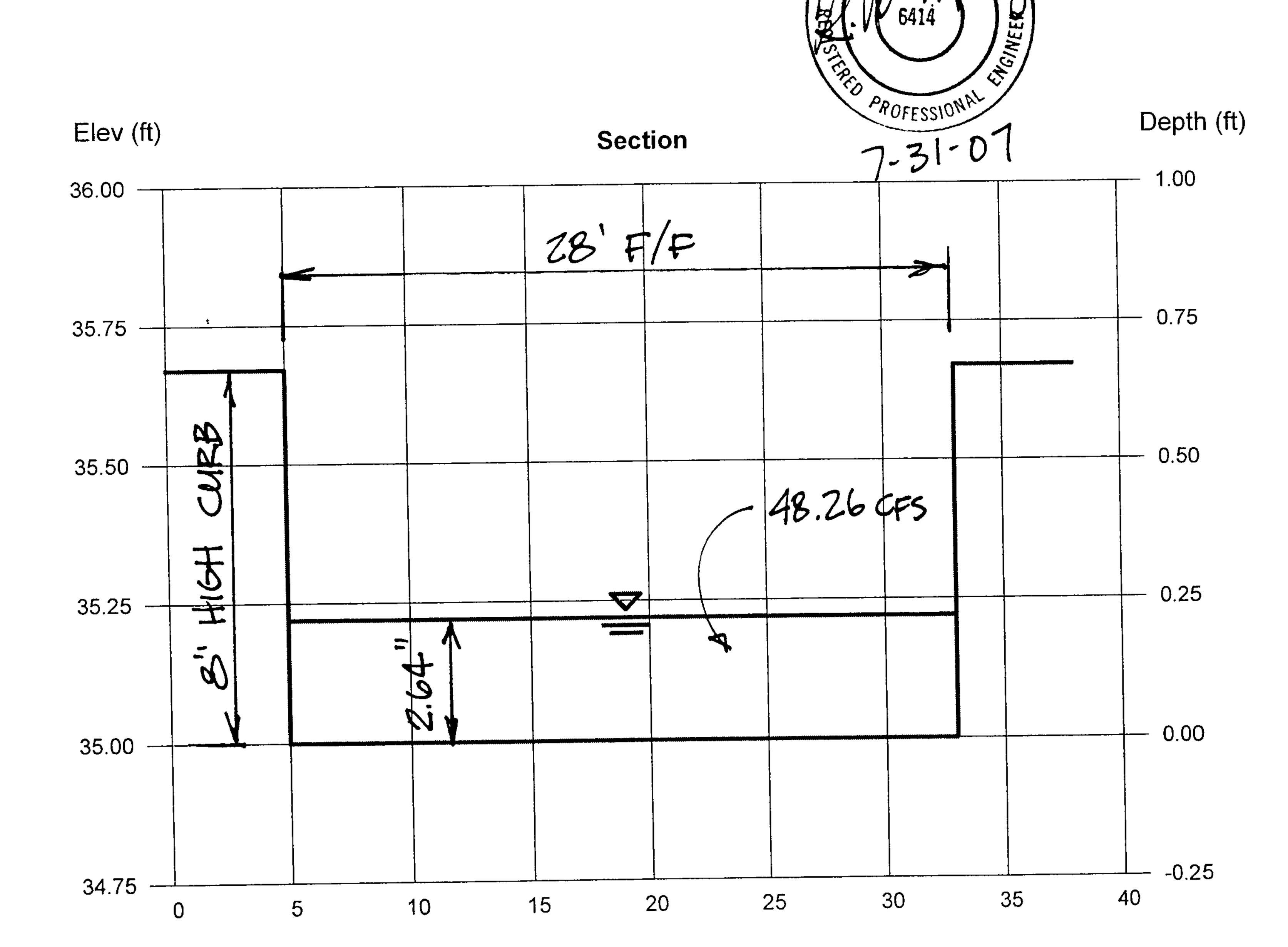
Botom Width (ft) = 28.00Total Depth (ft) = 0.67

Invert Elev (ft) = 35.00 Slope (%) = 3.31 N-Value = 0.012

Calculations

Compute by: Known Q Known Q (cfs) = 48.26 Highlighted

= 0.22Depth (ft) = 48.26 Q (cfs) = 6.16Area (sqft) = 7.83Velocity (ft/s) Wetted Perim (ft) = 28.44= 0.46Crit Depth, Yc (ft) = 28.00Top Width (ft) = 1.17EGL (ft)



Reach (ft)

2 OF 6

Tuesday, Jul 31 2007, 5.26 PM

Eagle's Perch Cour

Triangular

Side Slope (z:1) = 0.00Total Depth (ft) = 0.67

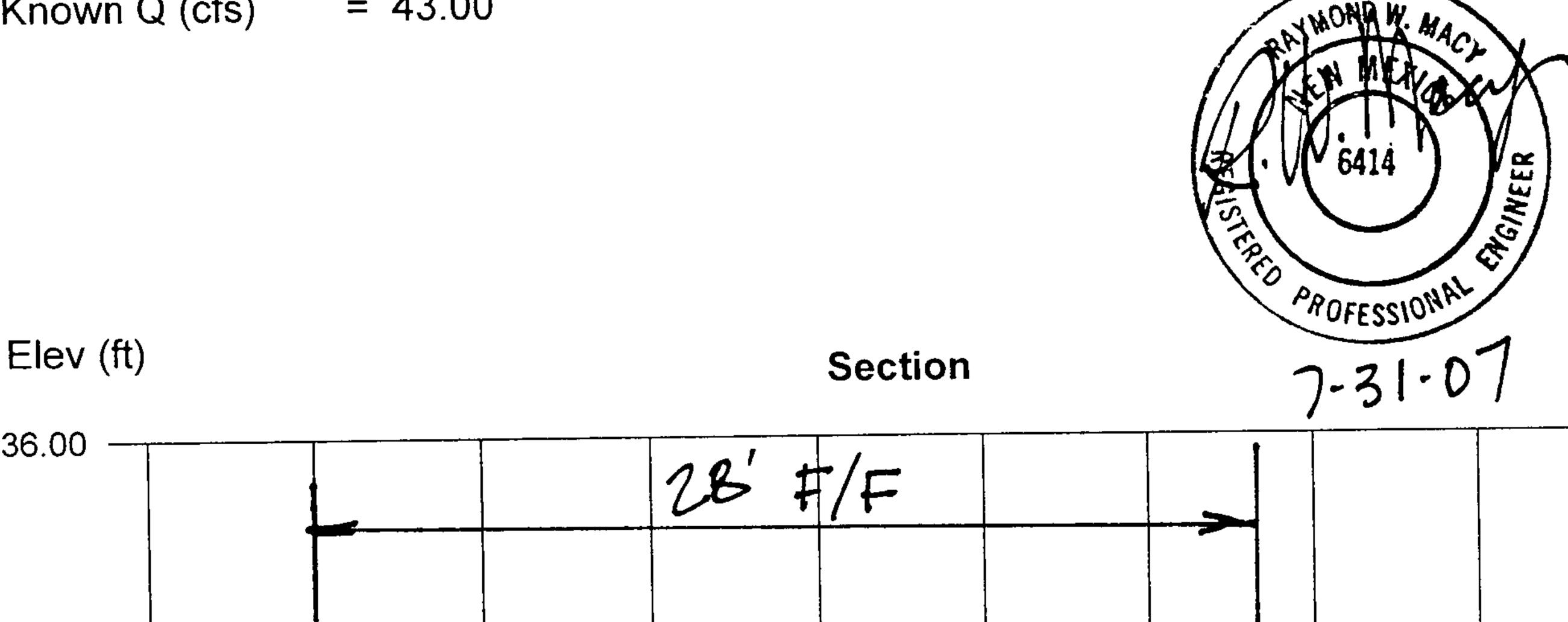
Invert Elev (ft) = 35.00 Slope (%) = 3.30 N-Value = 0.013

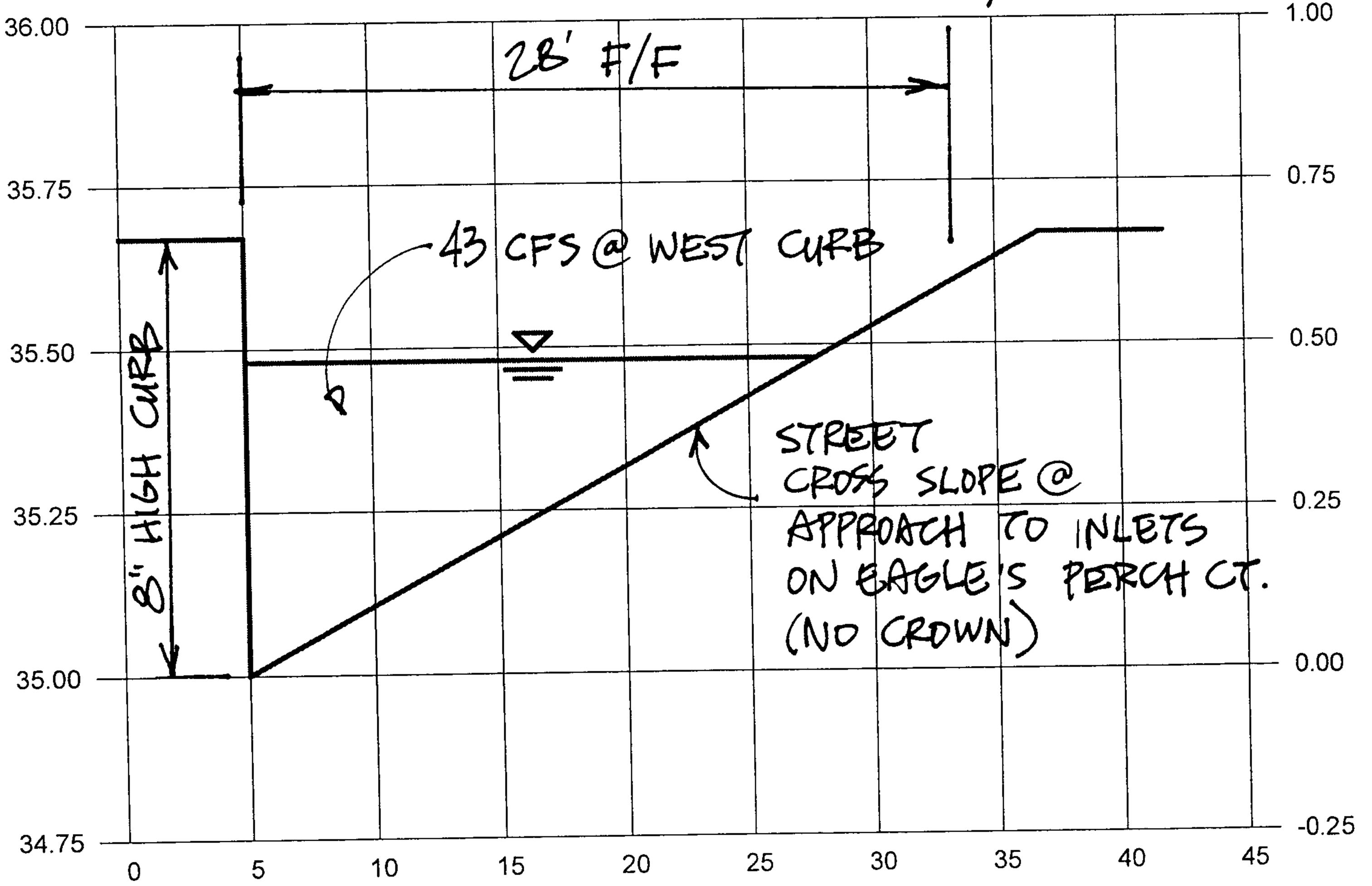
Calculations

Compute by: Known Q Known Q (cfs) = 43.00 Highlighted

Depth (ft) = 0.48
Q (cfs) = 43.00
Area (sqft) = 5.47
Velocity (ft/s) = 7.86
Wetted Perim (ft) = 23.27
Crit Depth, Yc (ft) = 0.67
Top Width (ft) = 22.78

EGL (ft) = 1.44





Reach (ft)

3 of 6

Depth (ft)

Tuesday, Jul 31 2007, 1 38 PM

WEST TYPE A INLET ON EAGLE'S PERCH CT.

Combination Inlet

Location = On grade

Curb Length (ft) = 7.50

Throat Height (in) = 1.73

Grate Area (sqft) = -0

Grate Width (ft) = 2.00

Grate Length (ft) = 2.94

Gutter

Slope, Sw (ft/ft) = 0.063

Slope, Sx (ft/ft) = 0.020

Local Depr (in) = 3.23

Gutter Width (ft) = 2.00

Gutter Slope (%) = 4.00

Gutter n-value = 0.013

Compute by:

Compute by: Known Q

Q (cfs) = 43.00

Highlighted

Calculations

Q Total (cfs) = 43.00

Q Capt (cfs) = 16.22

Q Bypass (cfs) = 26.78

Depth at Inlet (in) = 8.00

Efficiency (%) = 38

Gutter Spread (ft) = 20.75

Gutter Vel (ft/s) = 9.79

Bypass Spread (ft) = 17.70

Bypass Depth (in) = 5.28

NOTE: EAST TYPE A INLET ON EAGLE'S PERCH CT WILL COLLECT 1.5 CFS CONTAINED WIT THE

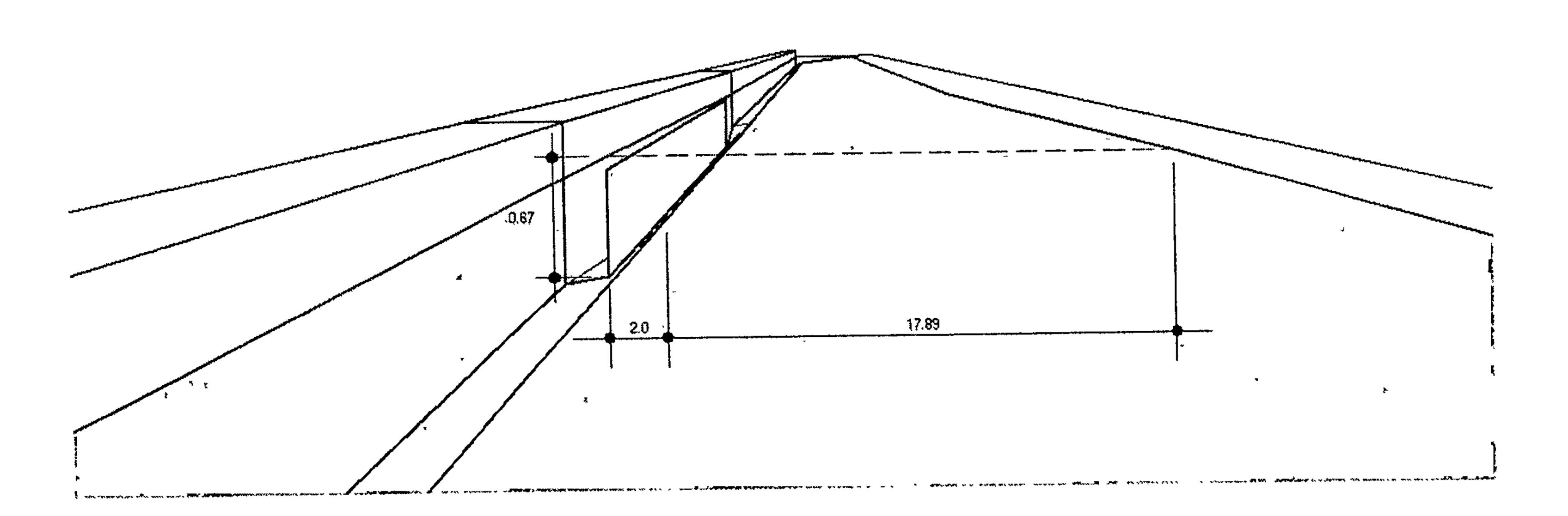
CNG/INEER

6414

PROFESSIONAL

7.31-07

All dimensions in feet GUTTER.



Inlet Report

Hydraflow Express by Intelisolve

Tuesday, Jul 31 2007, 1:41 PM

FIRST DOUBLE TYPE A IN OAKLAND

$C \circ$	mh	ina	tion	Inl	et
UU		HIA	UUII	111	

Location	=	On grade
Curb Length (ft)	<u></u>	12.00
Throat Height (in)	=	1.73
Grate Area (sqft)		-0-
Grate Width (ft)	==	2.00
Grate Length (ft)	=	8.00
-		

Gutter

All dimensions in feet

Slope, Sw (ft/ft)	= 0.063
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= 3.23
Gutter Width (ft)	= 2.00
Gutter Slope (%)	= 3.12
Gutter n-value	= 0.013

Calculations

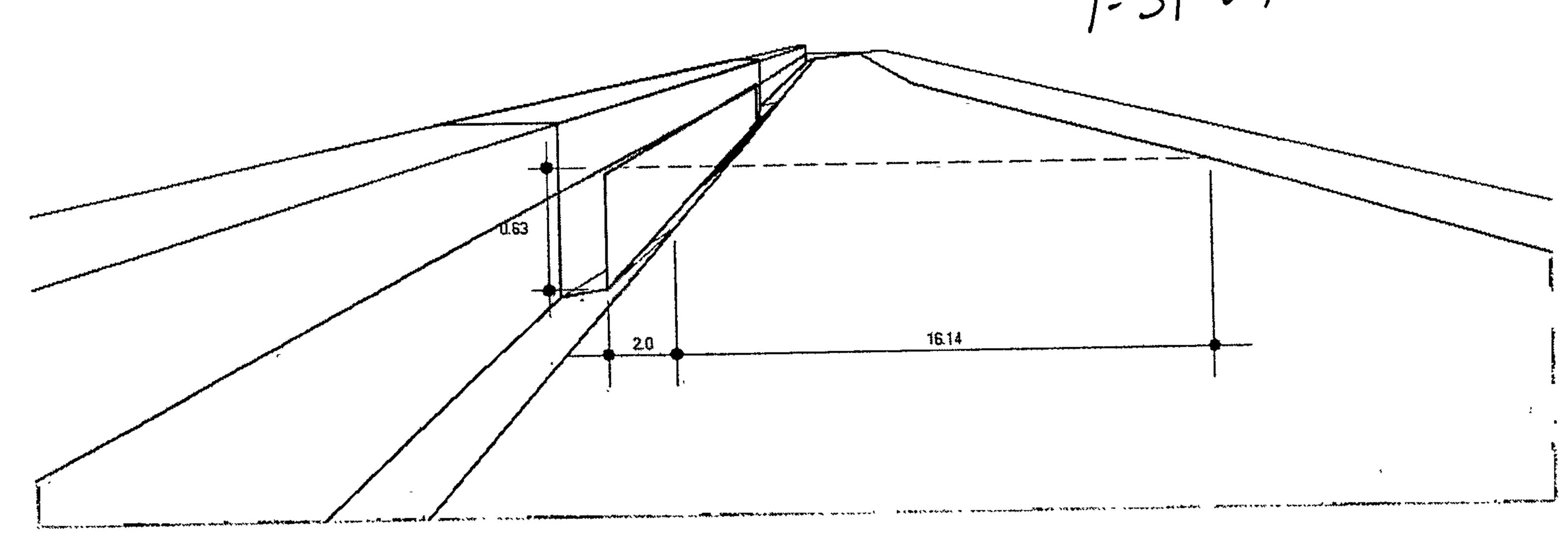
Compute by:	Known Q
Q (cfs)	= 30.54

Highlighted

-		
Q Total (cfs)	=	30.54
Q Capt (cfs)	=	17.15
Q Bypass (cfs)	=	13.39
Depth at Inlet (in)	=	7.58
Efficiency (%)		56
Gutter Spread (ft)		19.10
Gutter Vel (ft/s)	=	8.18
Bypass Spread (ft)) =	14.20
Bypass Depth (in)		4.44



POFESSION 7 21-0



Inlet Report

Hydraflow Express by Intelisolve

Tuesday, Jul 31 2007, 1:42 PM

SECOND DOUBLE TYPE A IN OAKLAND

Combination Inlet

Location = On grade
Curb Length (ft) = 12.00
Throat Height (in) = 1.73
Grate Area (sqft) = -0Grate Width (ft) = 2.00

Grate Length (ft) = 8.00

Gutter

All dimensions in feet

Slope, Sw (ft/ft) = 0.063 Slope, Sx (ft/ft) = 0.020 Local Depr (in) = 3.23 Gutter Width (ft) = 2.00 Gutter Slope (%) = 3.12 Gutter n-value = 0.013 Calculations

Compute by: Known Q Q (cfs) = 13.39

Highlighted

= 13.39Q Total (cfs) = 9.53Q Capt (cfs) = 3.86Q Bypass (cfs) = 6.20Depth at Inlet (in) = 71 Efficiency (%) = 13.80Gutter Spread (ft) = 6.73Gutter Vel (ft/s) Bypass Spread (ft) = 8.20 Bypass Depth (in) = 3.00



