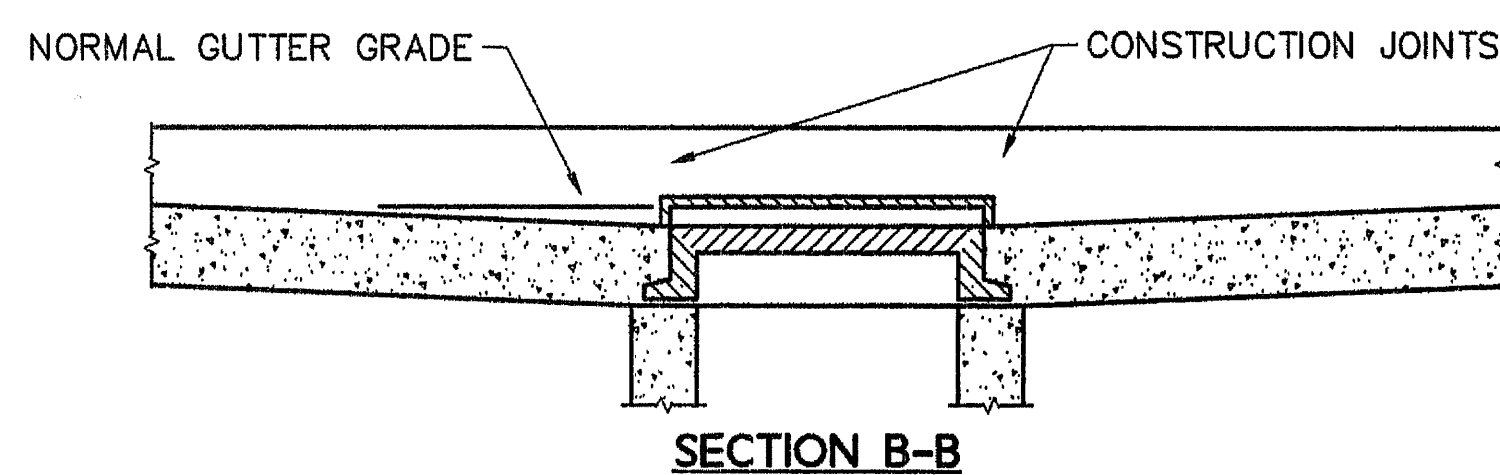
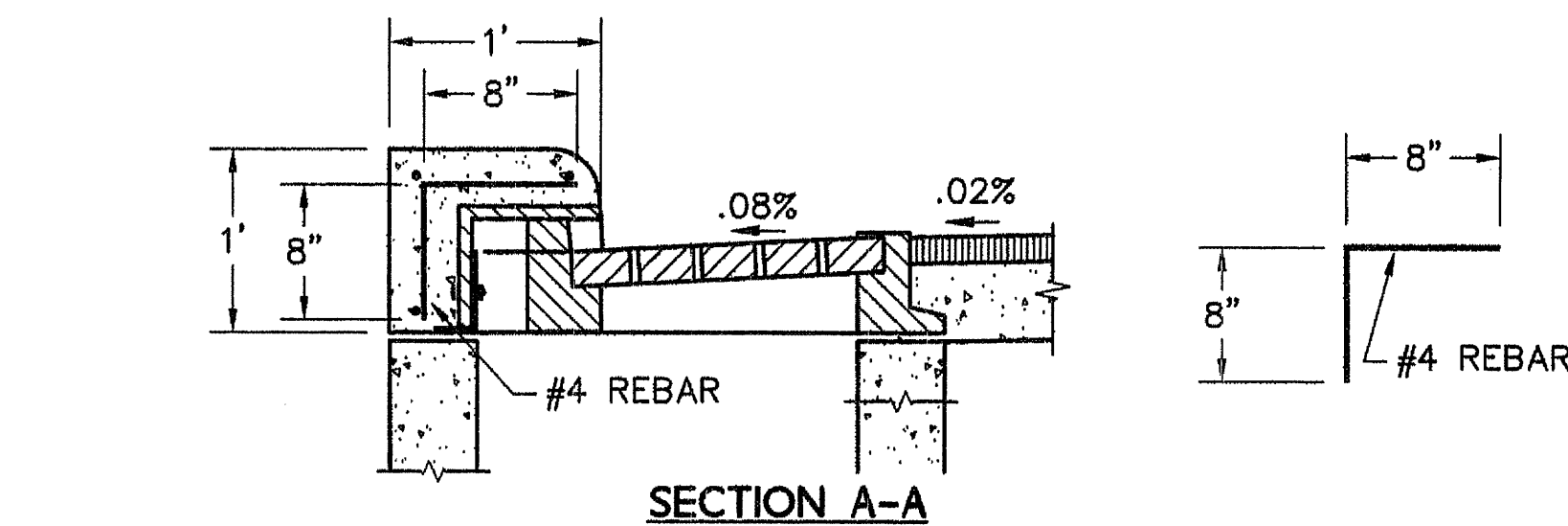
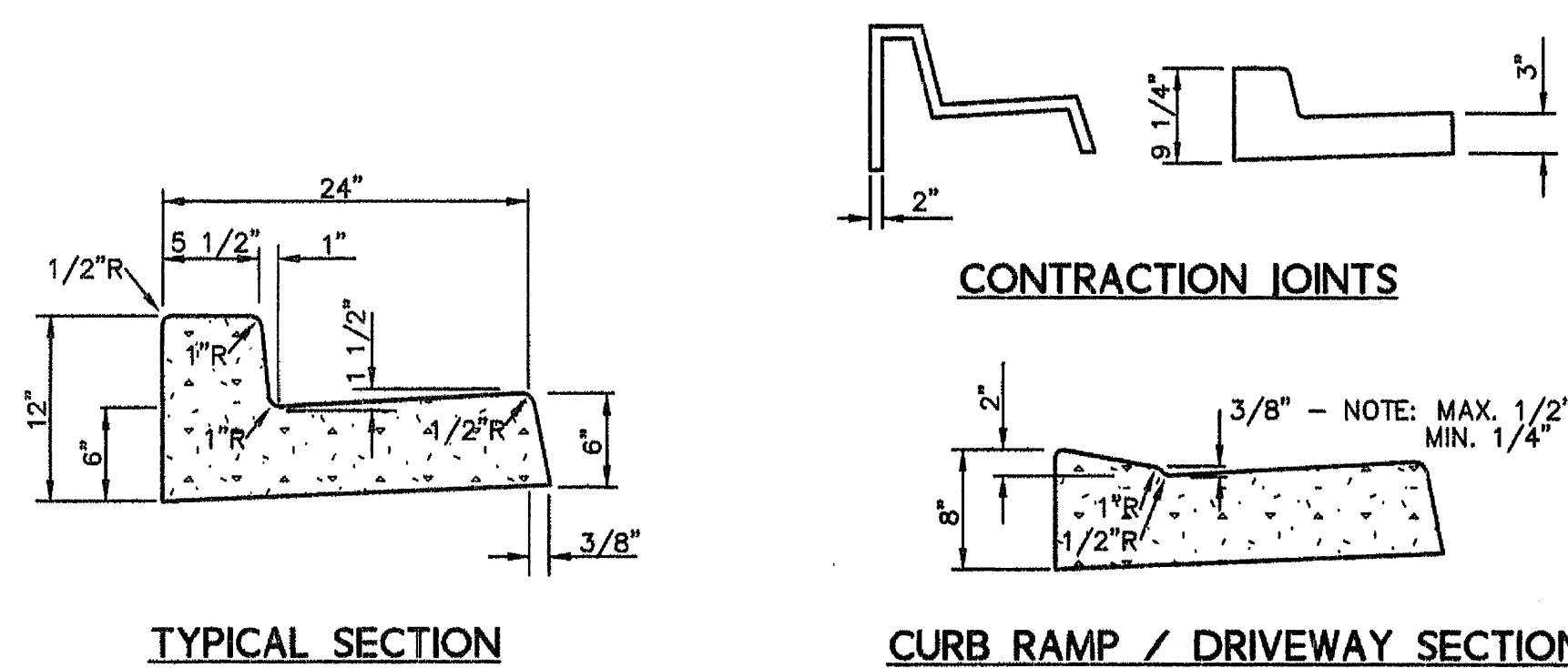




THRU-CURB INLET FRAME & GRATE
WITH VERTICAL CURB INSTALLATION
N.T.S.



NOTES:
CONTRACTION JOINTS OF ONE OF THE TYPES SHOWN ABOVE TO BE PLACED 10' C/C. JOINTS COMPLETELY SEVER THE
STRUCTURE TO THE POINTS SHOWN. JOINTS MAY BE MADE BY INSERTING MIN. 3/16" BITUMINOUS FILLER DUMMY JOINTS.
JOINTS SHALL BE CLEANED AND EDGED

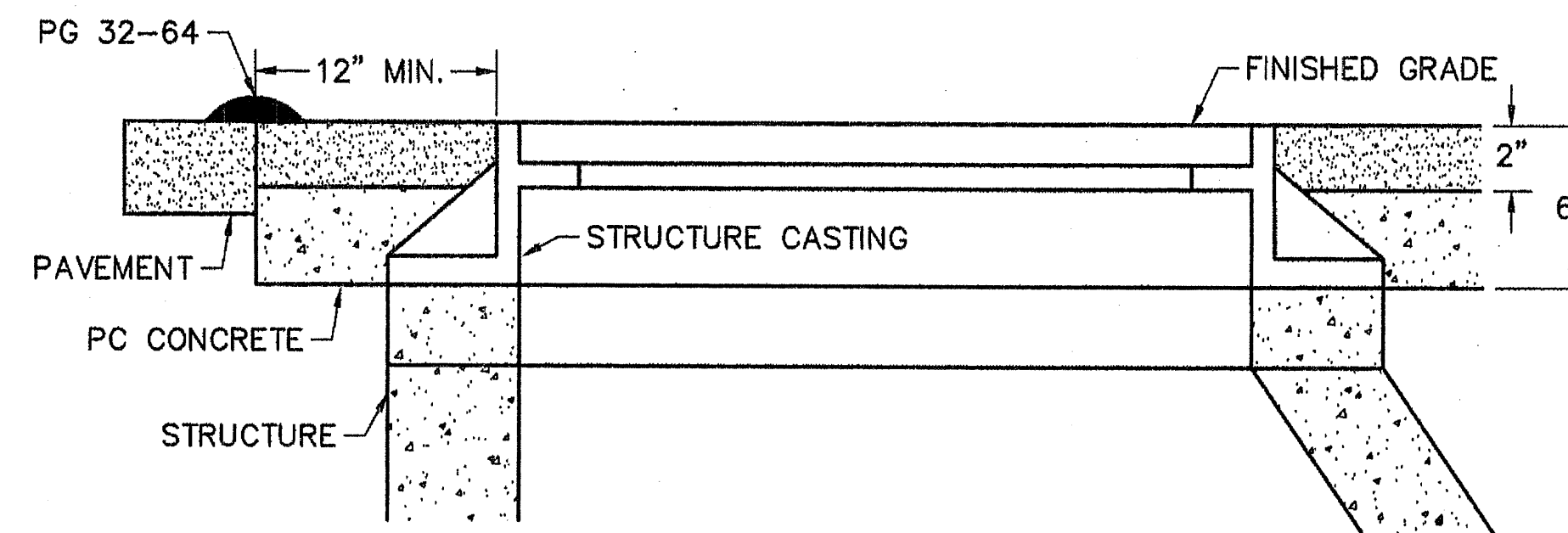
3/4" EXPANSION JOINTS TO BE PLACED AT DRIVEWAY SECTIONS, CURB RETURNS, CURB RAMPS AND COLD JOINTS OR A MAX. OF 80' C/C. EXPANSION JOINTS SHALL PROTRUDE 1" BELOW THE BOTTOM OF THE GUTTER.

TYPE A MODIFIED CURB AND GUTTER
N.T.S.

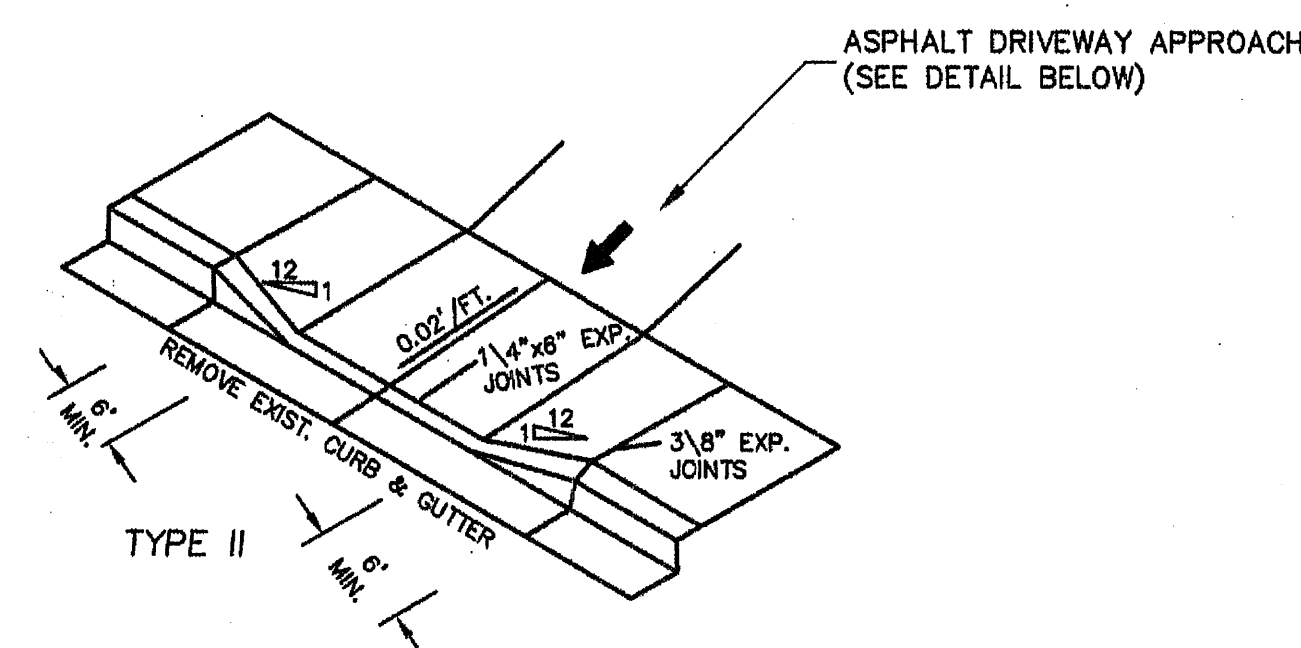
NOTES:

ALL FRAMES, COVERS AND VALVE BOXES SHALL BE RAISED TO FINISHED GRADE AFTER THE FINAL LIFT OF PAVING HAS BEEN COMPLETED. THE FOLLOWING PROCEDURE SHALL BE USED:

1. CUT THE ASPHALT IN AN EVEN CIRCLE AROUND THE STRUCTURE CASTING TO BE ADJUSTED.
2. REMOVE THE FILL MATERIAL WITHIN THE CUT PAVEMENT AREA TO 6 INCHES MIN. BELOW FINISH GRADE.
3. PLACE THE CASTING AT FINISH GRADE.
4. PLACE PORTLAND CEMENT CONCRETE TO WITHIN THE TOP 2 INCHES OF FINISH GRADE.
5. APPLY TACK TO THE STRUCTURE CASTING, CUT PAVEMENT, AND PC CONCRETE.
6. PLACE AND COMPACT 2 INCHES OF ASPHALT CONCRETE CLASS B TO FINISH GRADE.
7. SEAL PAVEMENT JOINTS WITH HOT PG 32-64.



ADJUSTING CASTINGS
TO FINISHED GRADE
N.T.S.



GENERAL NOTES:

FOR DRIVEWAYS 12'-16" WIDE, PLACE 3/4" DEEP "V" GROOVE AT MID PT. FOR DRIVEWAYS 17'-30" WIDE, PLACE 3/4" DEEP "V" GROOVE AT 1/3 PT.

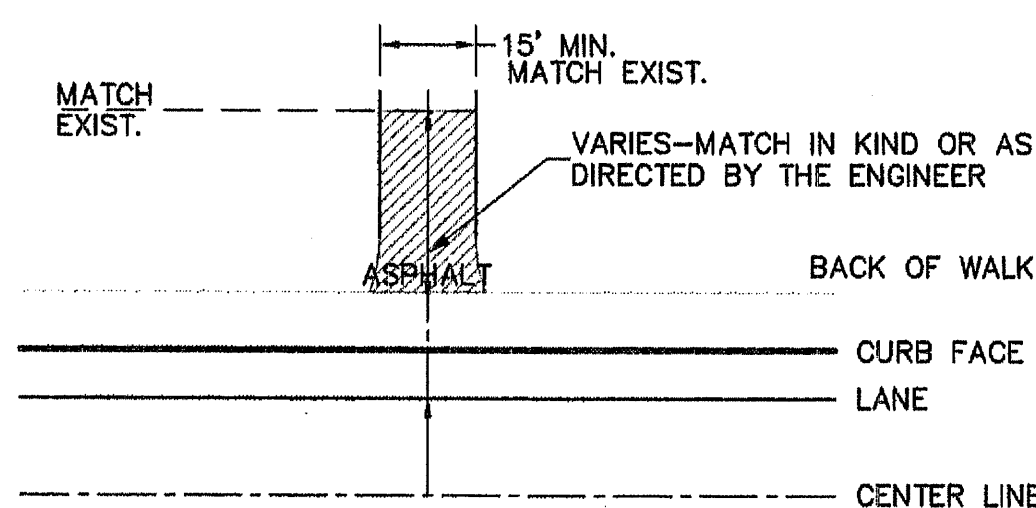
DRIVEWAY SECTIONS SHALL BE 6" THICK MINIMUM.

DRIVEWAY WIDTHS SHALL BE A MINIMUM OF 15' AND A MAXIMUM OF 30' (OR MATCH EXISTING AS DIRECTED.)

ALL JOINTS SHALL BE CLEANED AND EDGED.

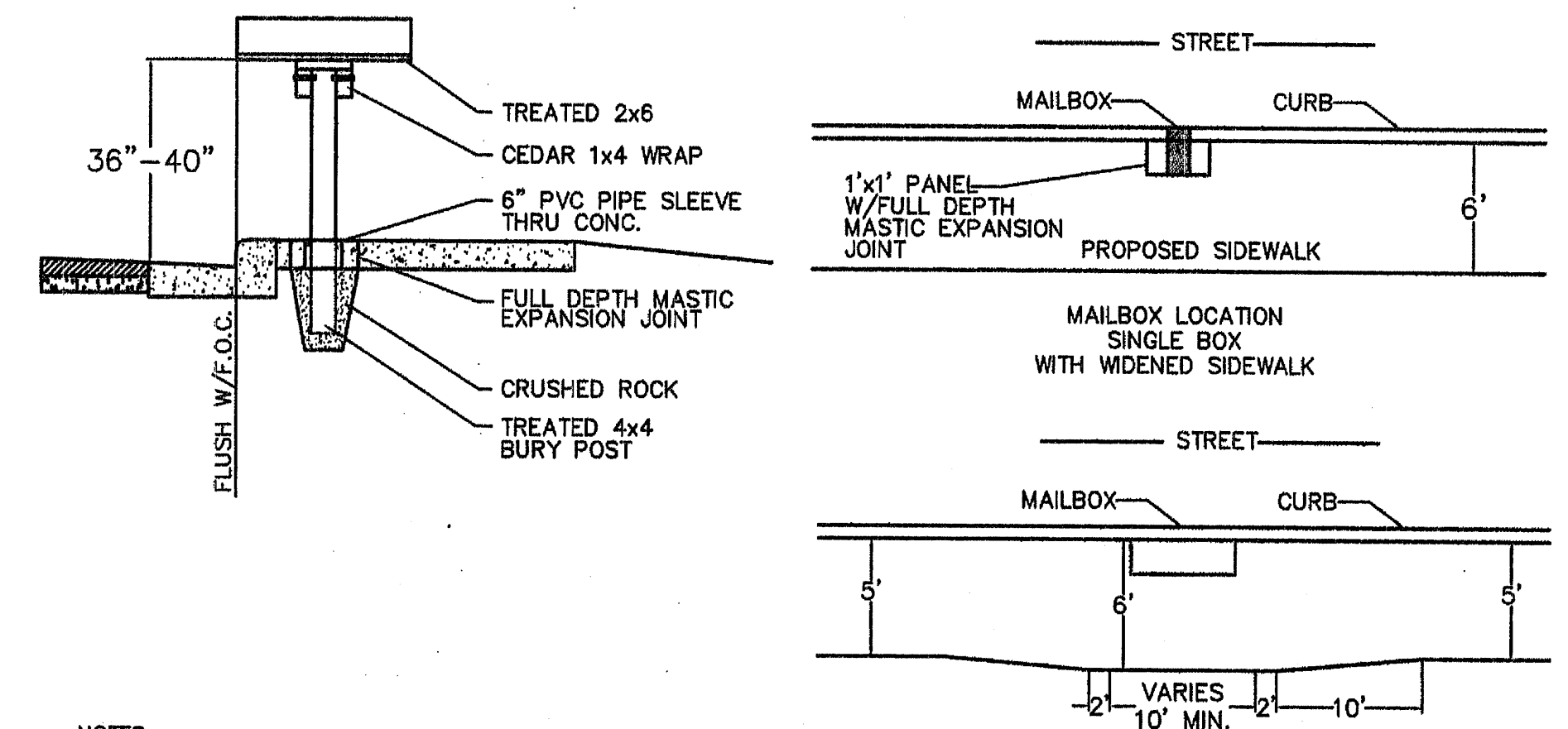
SECTION SHALL BE BRUSH FINISHED (PARALLEL TO STREET) WITH FIBER BRUSH.

DRIVEWAY CUT DETAILS
N.T.S.



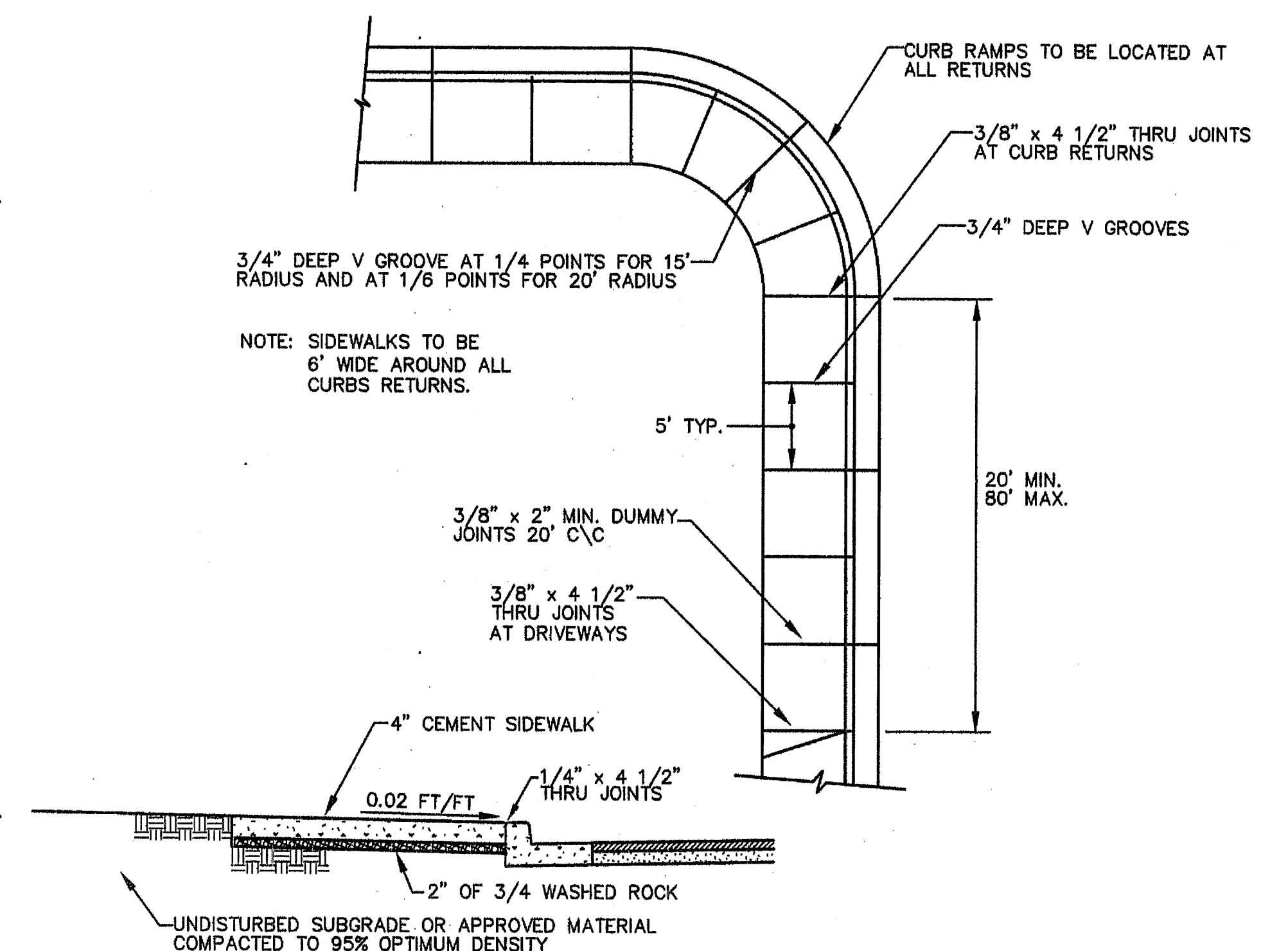
NOTE: DRIVEWAYS SHALL HAVE 0.13' OF CSBC & 0.17' OF ACP CLASS "B" MODIFIED EXTENDING TO THE ROW AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

TYPICAL DRIVEWAY APPROACH
N.T.S.



1. MAILBOX MUST BE TYPE "APPROVED BY THE POSTMASTER GENERAL" WITH A UNIFORM BOX STYLE AND METHOD OF ADDRESS IDENTIFICATION PER EACH STANDARD.
2. LOCATION IS SUBJECT TO APPROVAL BY THE COUNTY FOR PROTECTION OF VIEWS AND ACCESS.
3. THE SKETCH DEPICTS A MIN. STRUCTURAL AND DIMENSIONAL STANDARD. INDICATIVE OF ANY MEETING THE MIN. DIMENSIONAL AND STRUCTURAL REQUIREMENTS ARE ACCEPTABLE.
4. POST MUST BE A TREATED 4"x4" WOODEN POST, UNLESS OTHERWISE APPROVED.

MAILBOX STANDARD
N.T.S.



SIDEWALK
N.T.S.

SIDEWALK WIDTH TABLE

<u>LEFT</u>			<u>RIGHT</u>		
STATION	STATION	WIDTH	STATION	STATION	WIDTH
46+27	52+85.89	5'	46+27	EOP	5'
56+53.54	59+25	5'			
59+50	61+73	6'			
61+90	63+50	5'			
63+75	78+00	6'			
78+50	79+46	5'			



JOSEPH P. RUTAN, P.E.
COUNTY ROAD ENGINEER

PROJECT NAME : WEST SMITH ROAD IMPROVEMENTS
FERNDALE CITY LIMITS TO NORTHWEST DR

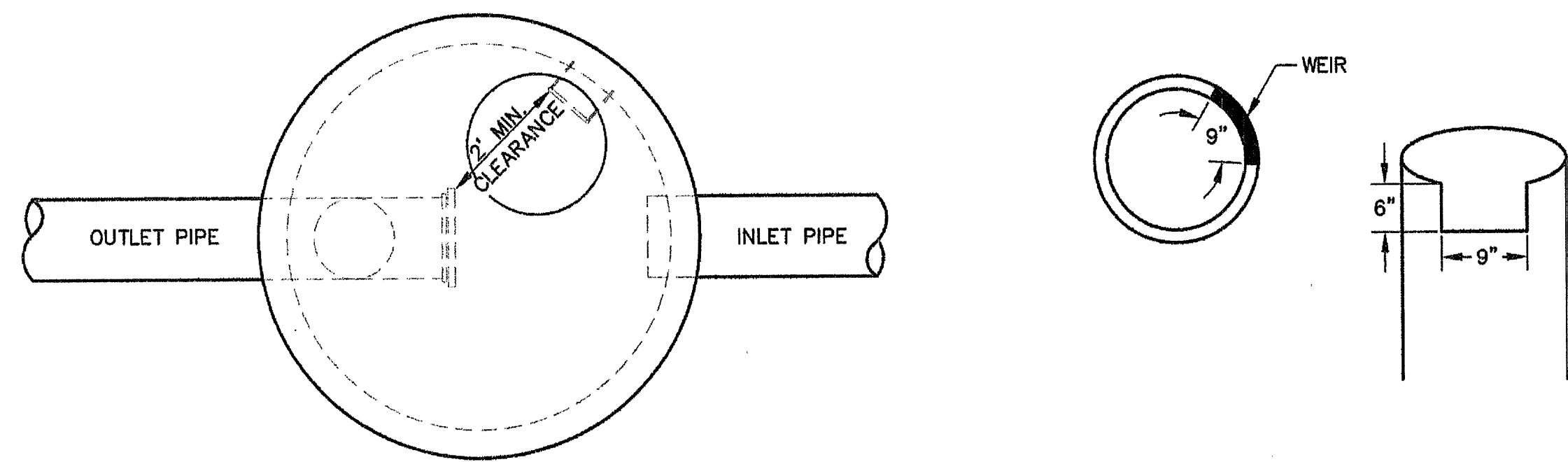
DRAWING NAME : MISC. DETAILS

SHEET : 2

OF : 13

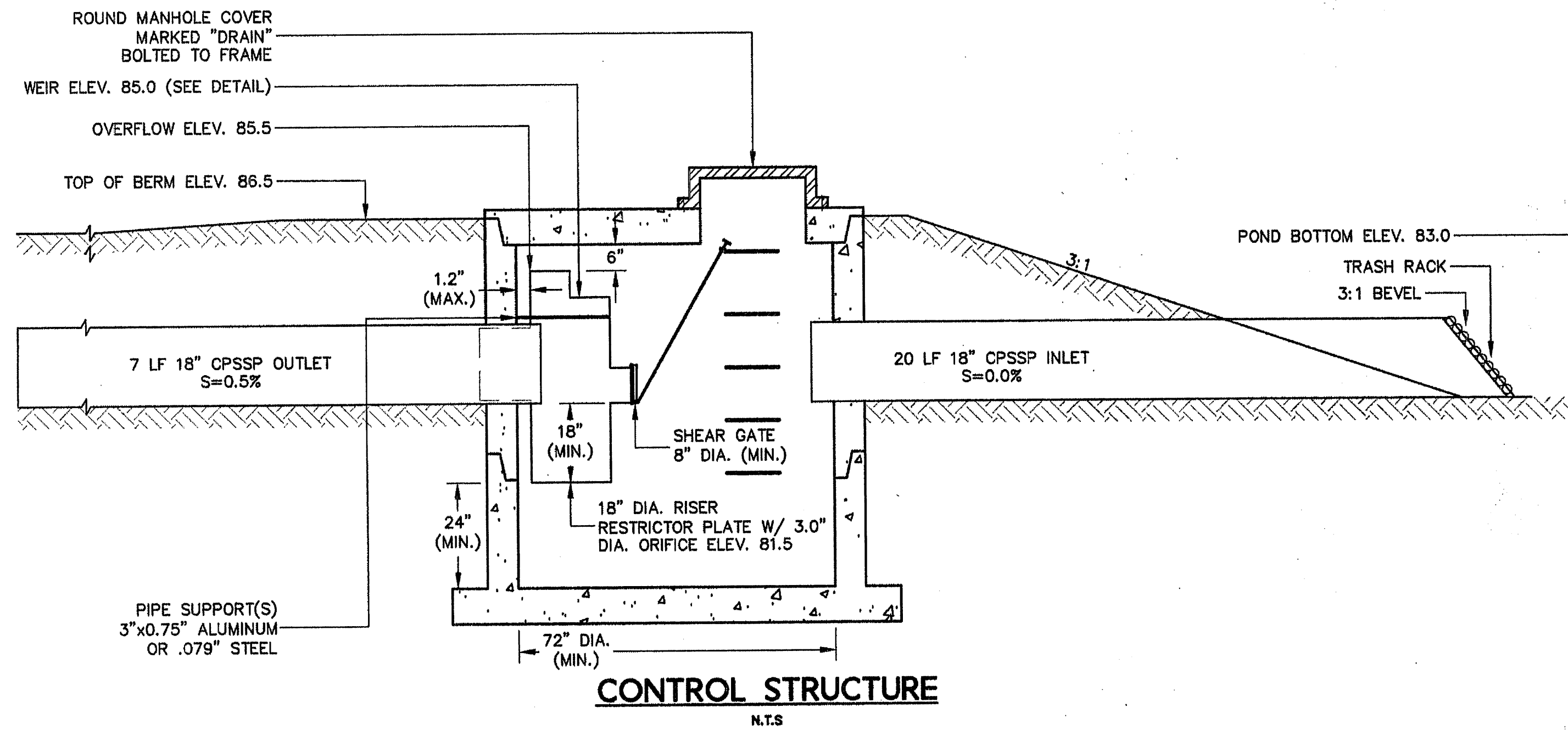
WEST SMITH RD IMPROVEMENTS

CRP #901002

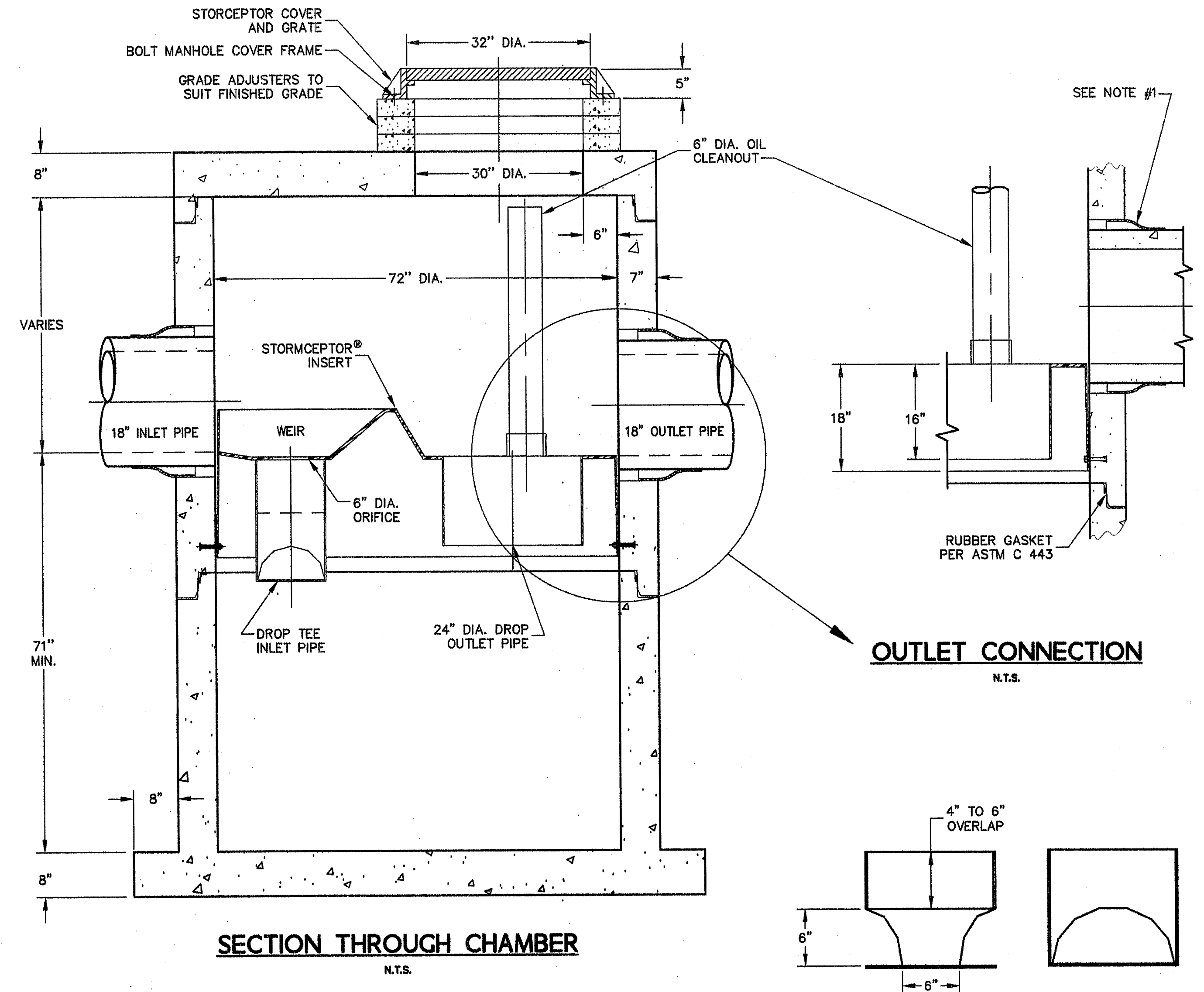


PLAN VIEW
N.T.S.

WEIR
N.T.S.



CONTROL STRUCTURE
N.T.S.



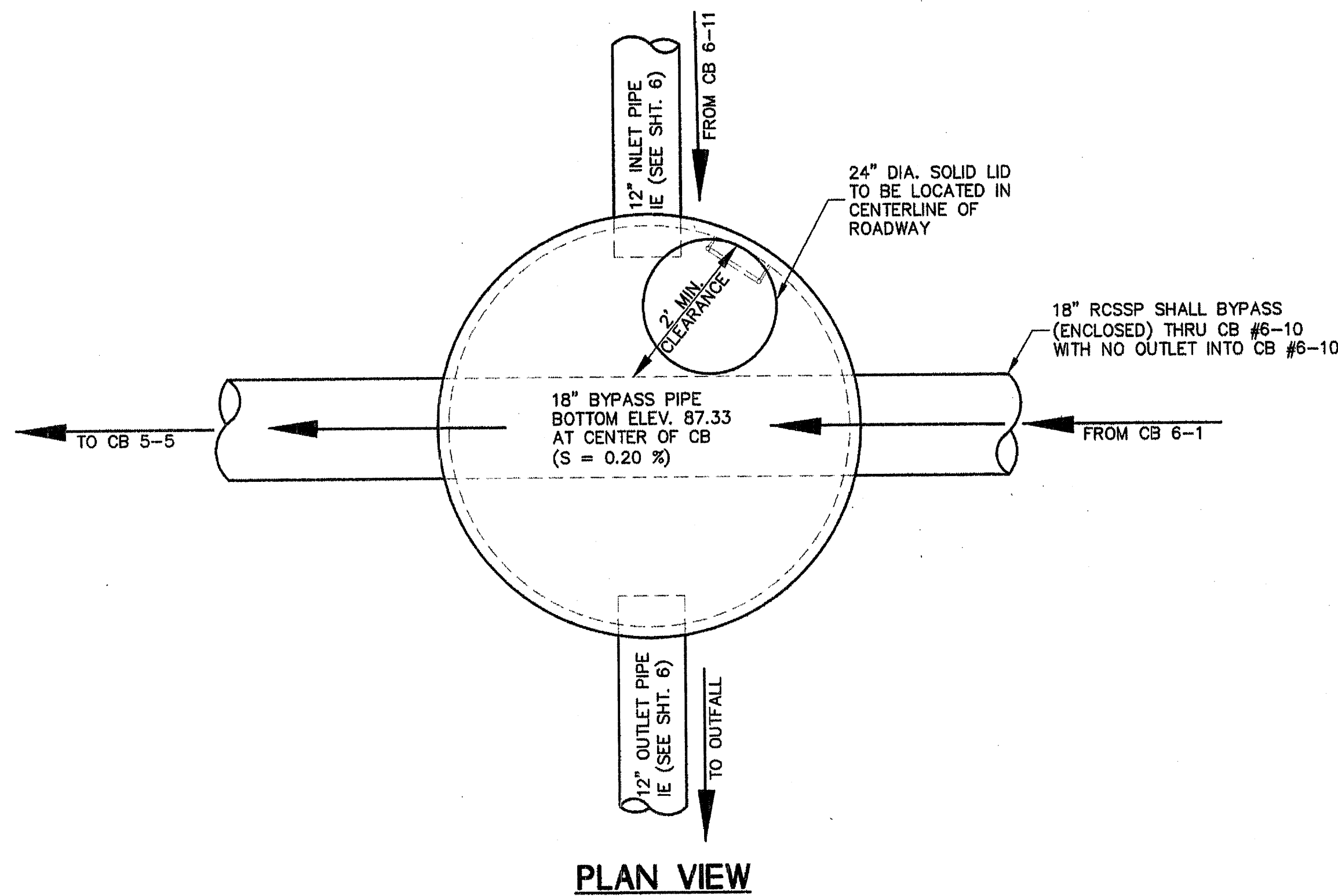
SECTION THROUGH CHAMBER
N.T.S.

OUTLET CONNECTION
N.T.S.

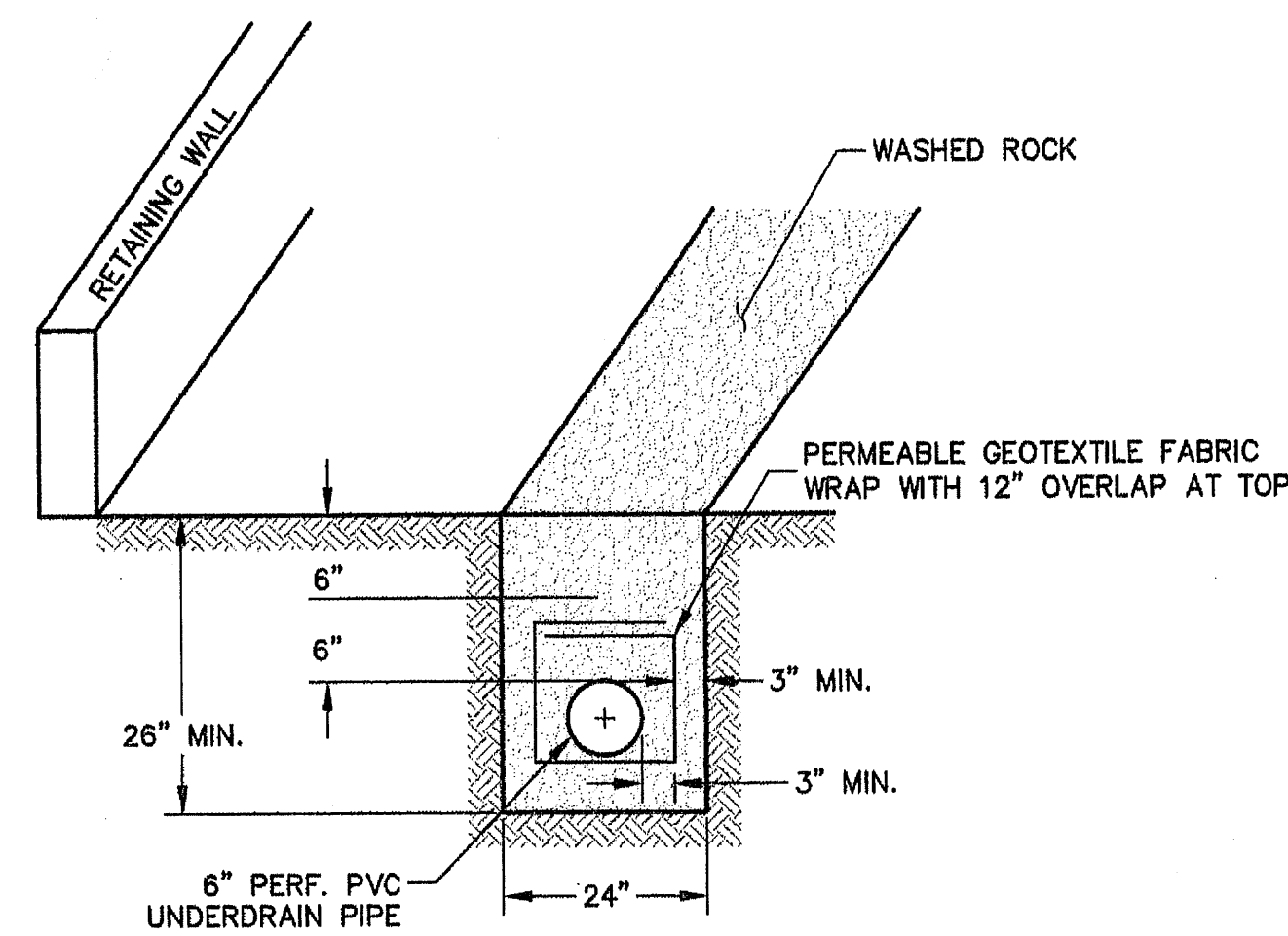
**ENLARGED INLET
TEE DROP PIPE**
N.T.S.

- NOTE:
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. THE COVER SHOULD BE POSITIONED OVER THE OUTLET DROP PIPE AND THE OIL CLEANOUT PIPE.
3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181.

STC 1200 PRECAST CONCRETE STORMCEPTOR® OR EQUIVALENT



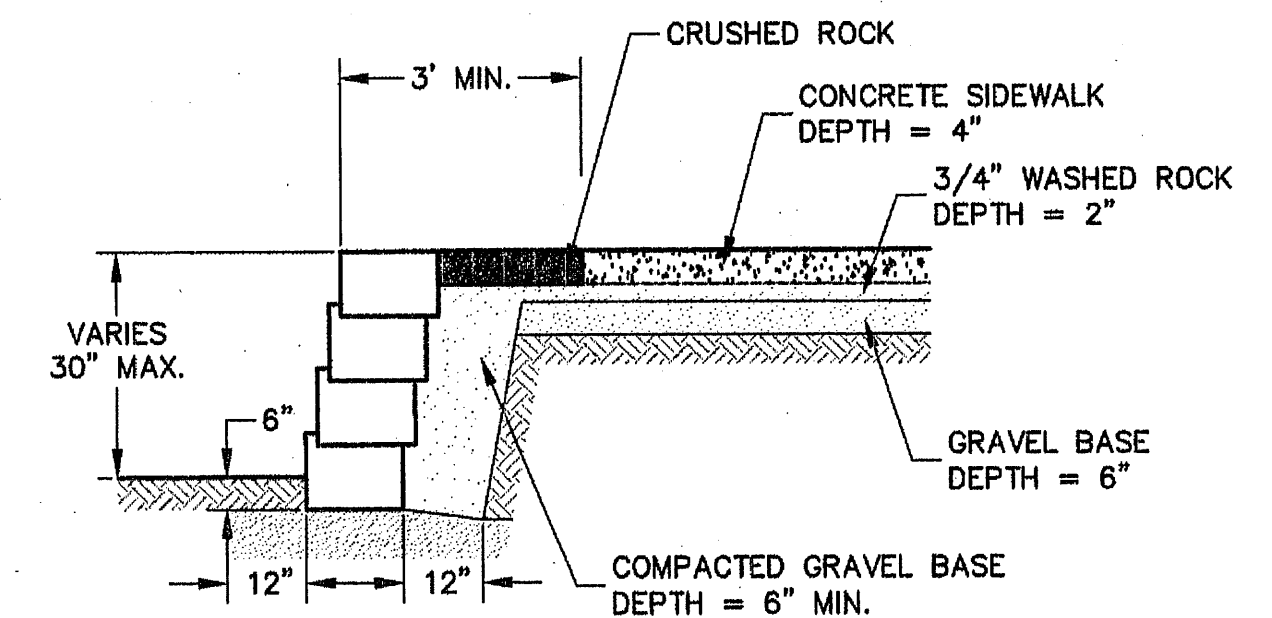
CB #6-10 TYPE 2-72" (W/ 18" BYPASS)
N.T.S.



PERFORATED UNDERDRAIN
N.T.S.

* SEE SHEET 7 FOR UNDERDRAIN LOCATION

- NOTES
THE BLOCK CORES SHALL BE FILLED WITH CRUSHED ROCK.
THE GRAVEL BASE BACKFILL SHALL BE COMPACTED WITH HAND-OPERATED EQUIPMENT.
THE WALL SHALL BE INSTALLED PER THE MANUFACTURERS SPECIFICATION.



GRAVITY BLOCK WALL
N.T.S.



JOSEPH P. RUTAN, P.E.
COUNTY ROAD ENGINEER

DATE	NO.	REVISION	BY
12/19/06	1	RECORD DRAWINGS	CTH

SCALE
HORIZ. AS NOTED
VERT. AS NOTED

CAD
DWG. NAME: WEST SMITH.DWG
PLOT SCALE: 1 = 1

DATE: APRIL 2003
JOB NO.: CRP #901002
FIELD BOOK:

DESIGNED: MKH/CB
DRAWN: H. OTIS
CHECKED: J. KARCHER, P.E.

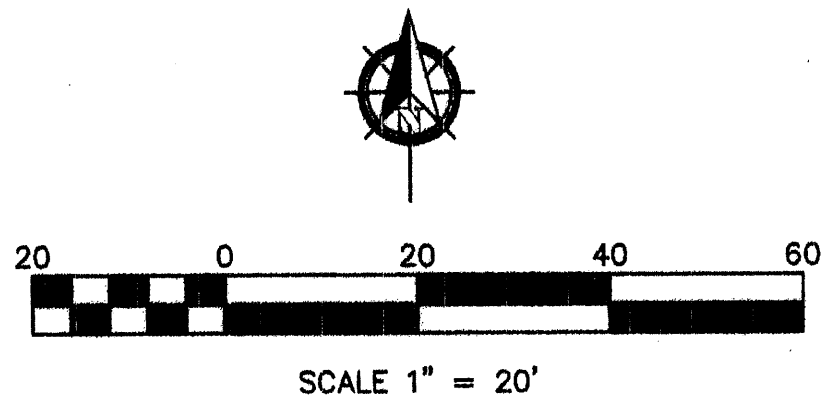
PUBLIC WORKS DIRECTOR: JEFFREY M. MONSEN, P.E.
COUNTY ROAD ENGINEER: JOSEPH P. RUTAN, P.E.
PROJECT ENGINEER: JAMES P. KARCHER, P.E.

WHATCOM COUNTY
DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION
5280 NORTHWEST DRIVE - SUITE C, BELLINGHAM, WA 98226 - (360) 676-6730

PROJECT NAME: WEST SMITH ROAD IMPROVEMENTS FERNDAL CITY LIMITS TO NORTHWEST DR
DRAWING NAME: CONTROL STRUCTURE DETAILS

SHEET: 3
OF: 13

SECS. 27, 28, 33, 34, TWP 39 N., RNG 2 E., W.M.



CONSTRUCTION NOTES

QUARRY SPALLS SHALL BE PLACED AROUND ALL CULVERT ENDS FOR SLOPE PROTECTION. ALL CULVERT ENDS SHALL BE BEVELED AT A 2:1 SLOPE.

ALL QUANTITIES SHOWN ON THESE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY. ACTUAL QUANTITIES MAY VARY DEPENDING ON SITE CONDITIONS.

UTILITY LOCATIONS ARE SHOWN AS PER AS-BUILT DRAWINGS PROVIDED TO WHATCOM COUNTY BY THE VARIOUS UTILITIES.

CENTERLINE, EDGE LINE PAINT STRIPE, AND STOP BARS WILL BE MARKED BY THE ENGINEER AFTER FINAL PAVING.

ALL EXISTING CROSS CULVERTS AND DRIVEWAY CULVERTS WILL BE REMOVED.

ALL CURB CUTS WILL BE MARKED BY THE ENGINEER.

THE TEMPORARY EROSION/SEDIMENT CONTROL SYSTEM SHALL BE INSTALLED PRIOR TO ALL SITE CONSTRUCTION, OR AS DIRECTED BY THE ENGINEER. THE INSPECTOR OR ENGINEER MUST BE PRESENT DURING INSTALLATION OF EROSION CONTROL SYSTEMS.

ALL TREES AND SHRUBS TO BE REMOVED WILL BE FLAGGED BY WHATCOM COUNTY ENGINEERING. REMOVAL WILL BE INCIDENTAL TO CLEARING AND GRUBBING BID ITEM.

SIDEWALK APPROACH RAMPS WILL BE CONSTRUCTED AT THE ENDS OF ALL SIDEWALKS.

CULVERT DRAINAGE NOTES (NOT SHOWN IN PROFILE)

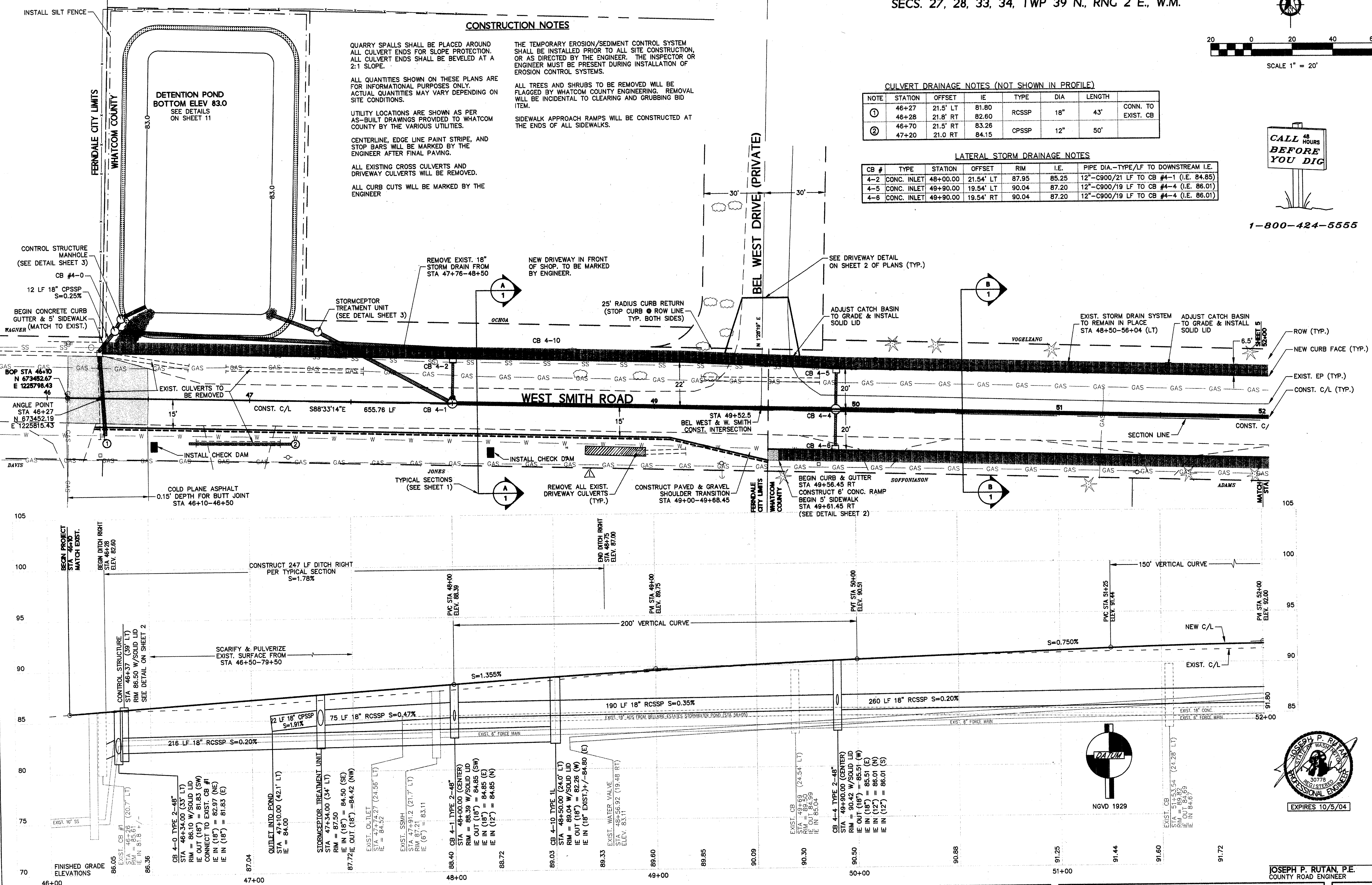
NOTE	STATION	OFFSET	IE	TYPE	DIA	LENGTH	CONN. TO
①	46+27	21.5' LT	81.80	RCSSP	18"	43'	CONN. TO EXIST. CB
②	46+28	21.8' RT	82.60				
	46+70	21.5' RT	83.26	CPSSP	12"	50'	
	47+20	21.0' RT	84.15				

LATERAL STORM DRAINAGE NOTES

CB #	TYPE	STATION	OFFSET	RIM	I.E.	PIPE DIA.-TYPE/LF TO DOWNSTREAM I.E.
4-2	CONC. INLET	48+00.00	21.54' LT	87.95	85.25	12"-C900/21 LF TO CB #4-1 (I.E. 84.85)
4-5	CONC. INLET	49+90.00	19.54' LT	90.04	87.20	12"-C900/19 LF TO CB #4-4 (I.E. 86.01)
4-6	CONC. INLET	49+90.00	19.54' RT	90.04	87.20	12"-C900/19 LF TO CB #4-4 (I.E. 86.01)

CALL 48 HOURS BEFORE YOU DIG

1-800-424-5555



DATE: 12/19/04
NO. 1
REVISION

SCALE
HORIZ. : 1" = 20'
VERT. : 1" = 4'

CAD
DWG. NAME: WEST SMITH.DWG.
PLOT SCALE: 1" = 1'

DESIGNED: GG/MKH
DRAWN: H. OTIS
CHECKED: J. KARCHER, P.E.

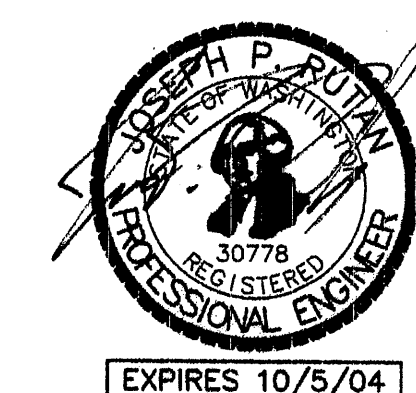
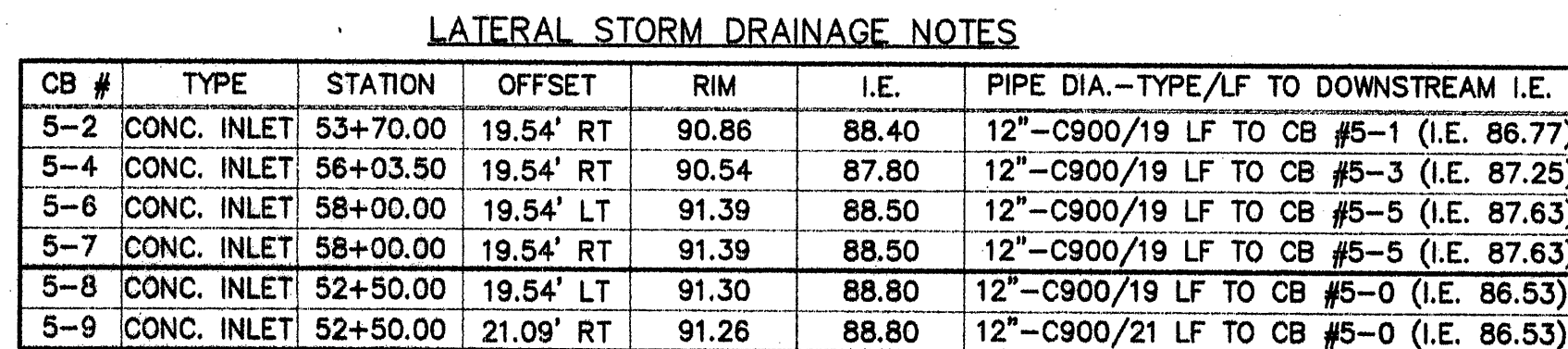
PUBLIC WORKS DIRECTOR: JEFFREY M. MONSEN, P.E.
COUNTY ROAD ENGINEER: JOSEPH P. RUTAN, P.E.
PROJECT ENGINEER: JAMES P. KARCHER, P.E.

WHATCOM COUNTY
DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION
5280 NORTHWEST DRIVE - SUITE C, BELLINGHAM, WA 98226 - (360) 676-6730

PROJECT NAME: WEST SMITH ROAD IMPROVEMENTS
FERNDAL CITY LIMITS TO NORTHWEST DR

DRAWING NAME: PLAN/PROFILE

SHEET: 4
OF: 13



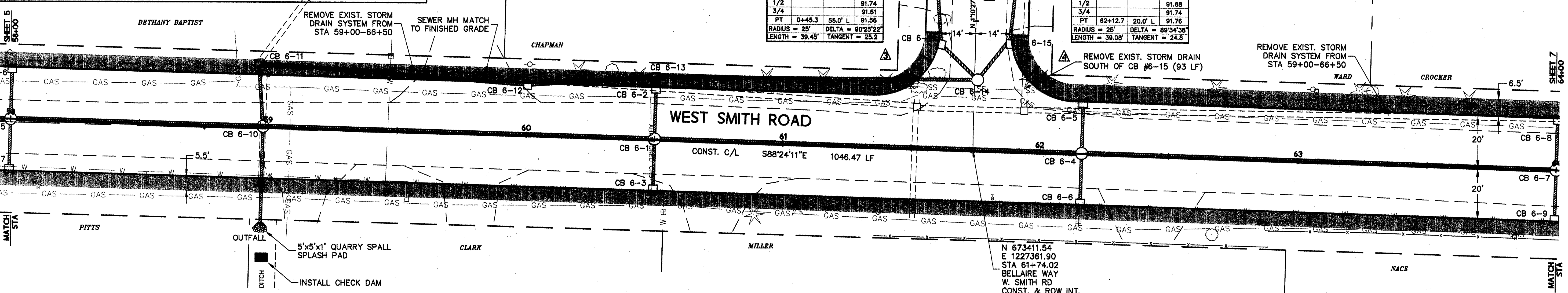
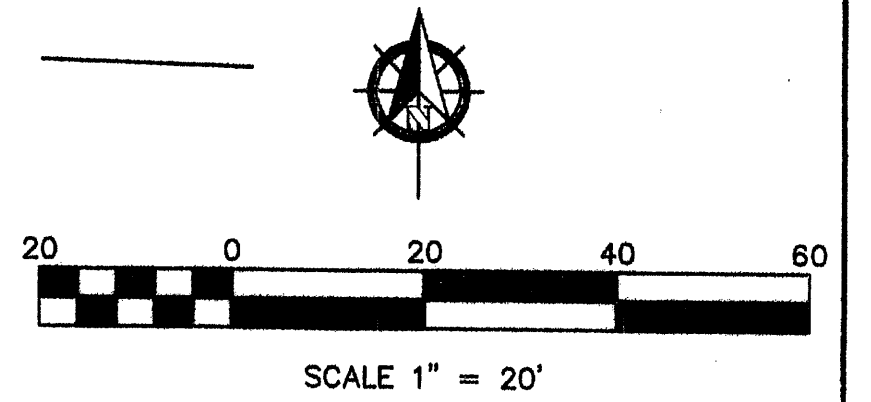
LATERAL STORM DRAINAGE NOTES

CB #	TYPE	STATION	OFFSET	RIM	I.E.	PIPE DIA.-TYPE/LF TO DOWNSTREAM I.E.
6-2	CONC. INLET	60+40.00	19.54' LT	91.80	89.00	12"-C900/19 LF TO CB #6-1 (I.E. 88.13)
6-3	CONC. INLET	60+40.00	19.54' RT	91.80	89.00	12"-C900/19 LF TO CB #6-1 (I.E. 88.13)
6-5	CONC. INLET	62+16.36	19.54' LT	91.33	88.60	12"-C900/19 LF TO CB #6-4 (I.E. 88.47)
6-6	CONC. INLET	62+16.36	19.54' RT	91.33	88.60	12"-C900/19 LF TO CB #6-4 (I.E. 88.47)
6-8	CONC. INLET	64+00.00	19.54' LT	91.91	89.20	12"-C900/19 LF TO CB #6-7 (I.E. 88.89)
6-9	CONC. INLET	64+00.00	19.54' RT	91.91	89.20	12"-C900/19 LF TO CB #6-7 (I.E. 88.89)
6-10	TYPE 2-48"	58+98.00	CENTER	92.31	87.69(N,S)	12"-C900/30 LF TO OUTFALL (I.E. 87.50)
6-11	CONC. INLET	59+95.00	23.50' LT	92.37	87.80(S,E)	12"-C900/23 LF TO CB #6-10 (I.E. 87.69)
6-12	CONC. INLET	60+00.00	19.54' LT	91.97	88.01(W,E)	12"-C900/104 LF TO CB #6-11(I.E. 87.80)
6-13	CONC. INLET	60+50.00	24.00' LT	92.31	88.11(W,E)	12"-C900/50 LF TO CB #6-12 (I.E. 88.01)
6-14	TYPE 2-48"	61+75.00	27.00' LT	91.80	88.36(W,E,N)	12"-C900/125 LF TO CB #6-13(I.E. 88.11)
6-15	CONC. INLET	61+92.38	30.63' LT	91.02	88.40	12"-C900/21 LF TO CB #6-14 (I.E. 88.36)
6-16	CONC. INLET	61+60.47	40.26' LT	91.04	88.40	12"-C900/19 LF TO CB #6-14 (I.E. 88.36)

* EXISTING OUTFALL PIPE FROM BETHANY BAPTIST SHALL CONNECT TO CB #6-11 AT THE EXISTING INVERT ELEVATION.

^ PLACE SOLID LIDS ON CB 6-10, 6-11, 6-13

SECS. 27, 28, 33, 34, TWP 39 N., RNG 2 E., W.M.



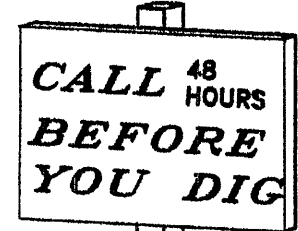
CURB RETURN TABLE

	STATION	OFFSET	ELEV.
PC	61+34.7	20.0' L	91.93
1/4			91.88
1/2			91.74
3/4			91.61
PT	0+45.3	55.0' L	91.56
RADIUS = 25'		DELTA = 90°25'22"	
LENGTH = 39.45'		TANGENT = 25.2'	

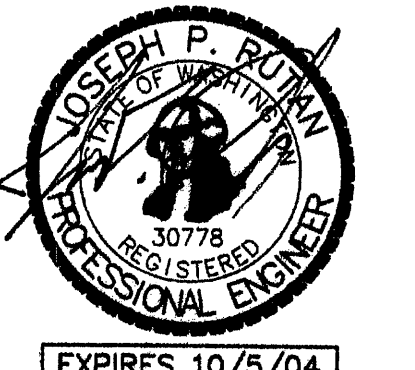
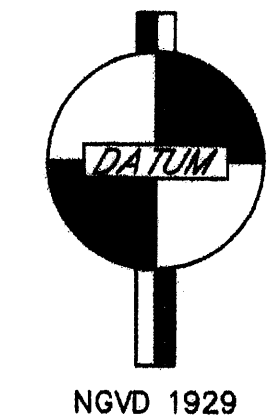
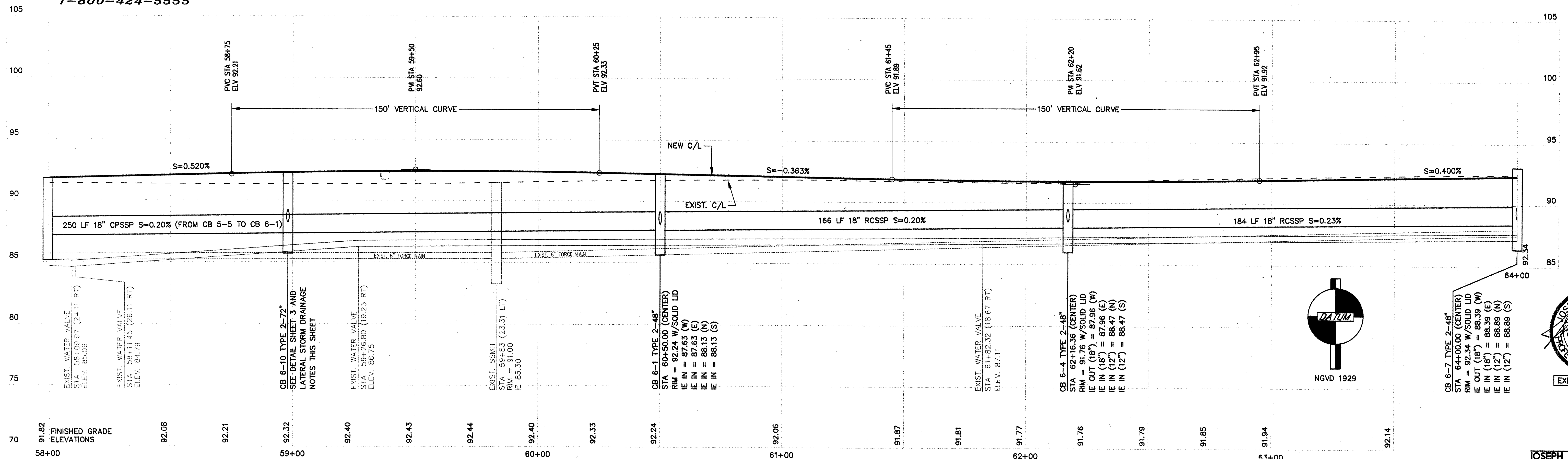
4

CURB RETURN TABLE

	STATION	OFFSET	ELEV.
PC	0+44.71	14.0' R	91.58
1/4			91.60
1/2			91.68
3/4			91.74
PT	62+12.7	20.0' L	91.76
RADIUS = 25' DELTA = 89°34'38"			
LENGTH = 39.08' TANGENT = 24.8'			



1-800-424-5555



DATE	NO.	REVISION	BY
12/1/00	1	RECORD DRAWINGS	CJT

SCALE

HORIZ. 1" = 20'
VERT. 1" = 4'

CAD

DWG. NAME: WEST SMITH.DWG
PLOT SCALE: 1" = 1'

DATE: APRIL 2003

JOB NO.: CRP #901002
FIELD BOOK:

DESIGNED: GG/MKH

DRAWN : H. OTIS
CHECKED : J. KARCHER, P.E.

PUBLIC WORKS DIRECTOR: JEFFREY M. MONSEN, P.E.

COUNTY ROAD ENGINEER : JOSEPH P. RUTAN, P.E.
PROJECT ENGINEER : JAMES P. KARCHER, P.E.

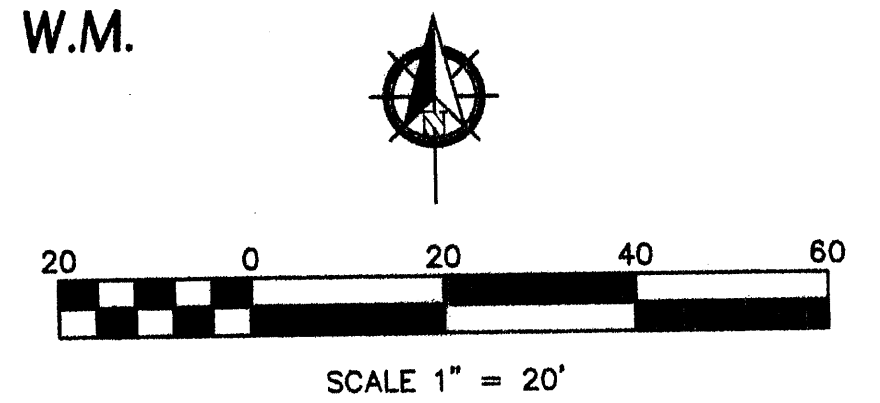
WHATCOM COUNTY
DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION
5280 NORTHWEST DRIVE - SUITE C, BELLINGHAM, WA 98226 - (360) 676-6730

PROJECT NAME: WEST SMITH ROAD IMPROVEMENTS
FERNDAL CITY LIMITS TO NORTHWEST DR

DRAWING NAME: PLAN/PROFILE

SHEET: 6

OF: 13



CURB RETURN TABLE

STATION	OFFSET	ELEV.
PC 64+40.7	20.0' L	92.81
1/4		92.54
1/2		92.56
3/4		92.58
PT 0+45.29	14.0' L	92.62
RADIUS = 25' DELTA = 90°34'22"		
LENGTH = 38.5' TANGENT = 25.2'		

CURB RETURN TABLE

STATION	OFFSET	ELEV.
PC 0+44.71	14.0' R	92.82
1/4		92.59
1/2		92.66
3/4		92.70
PT 65+18.7	20.0' L	92.82
RADIUS = 25' DELTA = 89°34'38"		
LENGTH = 38.08' TANGENT = 24.8'		

CURB RETURN TABLE

STATION	OFFSET	ELEV.
PC 0+45.16	15.0' L	92.77
1/4		92.92
1/2		93.13
3/4		93.33
PT 66+78.2	20.0' R	93.42
RADIUS = 25' DELTA = 90°13'23"		
LENGTH = 39.4' TANGENT = 25.1'		

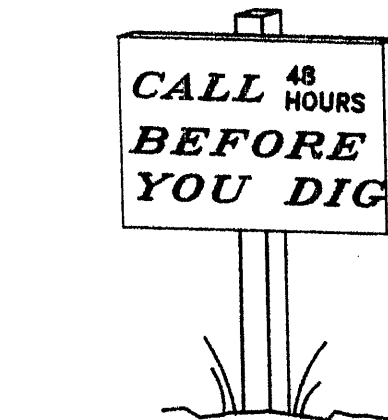
CURB RETURN TABLE

STATION	OFFSET	ELEV.
PC 65+98.2	20.0' R	93.14
1/4		92.18
1/2		92.10
3/4		92.91
PT 0+44.84	15.0' R	92.77
RADIUS = 25' DELTA = 89°46'37"		
LENGTH = 38.17' TANGENT = 24.9'		

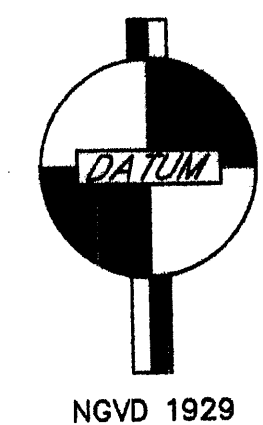
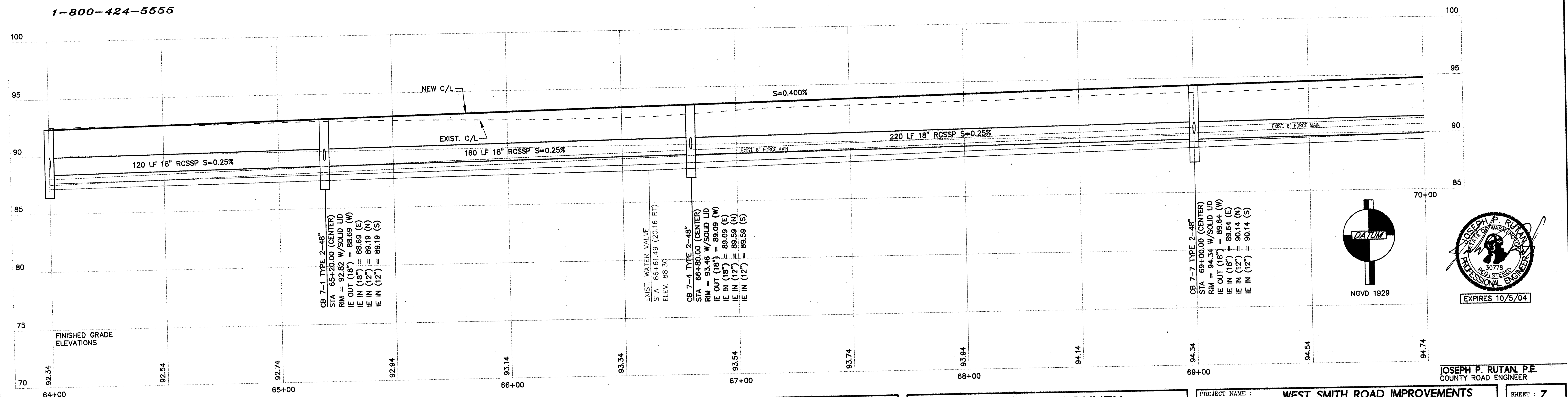
LATERAL STORM DRAINAGE NOTES

CB #	TYPE	STATION	OFFSET	RIM	I.E.	PIPE DIA.-TYPE/LF TO DOWNSTREAM I.E.
7-2	CONC. INLET	65+20.00	19.54' LT	92.39	89.60	12"-C900/19 LF TO CB #7-1 (I.E. 89.19)
7-3	CONC. INLET	65+20.00	19.54' RT	92.39	89.60	12"-C900/19 LF TO CB #7-1 (I.E. 89.19)
7-5	CONC. INLET	66+80.00	19.54' LT	93.03	90.30	12"-C900/19 LF TO CB #7-4 (I.E. 89.59)
7-6	CONC. INLET	66+80.00	19.54' RT	93.03	90.00	12"-C900/19 LF TO CB #7-4 (I.E. 89.59)
7-8	CONC. INLET	69+00.00	19.54' LT	93.91	90.24	12"-C900/19 LF TO CB #7-7 (I.E. 90.14)
7-9	CONC. INLET	69+00.00	19.54' RT	93.91	91.20	12"-C900/19 LF TO CB #7-7 (I.E. 90.14)
7-10	CONC. INLET	64+94.63	35.22' LT	92.09	89.66	12"-C900/30 LF TO CB #7-2 (I.E. 89.60)
7-11*	AREA INLET	0+48.00	17.00' RT	+/- 91.7	90.00	8"-C900/13 LF TO CB #7-10 (I.E. 89.75)
7-12	CONC. INLET	66+53.73	42.26' RT	92.27	90.39	8"-C900/35 LF TO CB #7-6 (I.E. 90.15)
7-13	CONC. INLET	66+24.42	42.99' RT	92.27	90.27	8"-C900/30 LF TO CB #7-12 (I.E. 90.39)
7-14*	AREA INLET	69+10.00	29.00' LT	92.41	90.59	8"-C900/15 LF TO CB #7-8 (I.E. 90.24)
7-15*	AREA INLET	70+00.00	29.00' LT	90.26	90.59	6"-PERF.PE/90 LF TO AT #7-13 (I.E. 90.59)

* INSTALL AREA INLET PER WSDOT STD. PLAN B-20f



1-800-424-5555

JOSEPH P. RUTAN, P.E.
COUNTY ROAD ENGINEER

DATE	NO.	REVISION	BY
12/15/06	4	RECORD DRAWINGS	CJH
8/24/03	3	EXTENDED ROCK WALL	CJH

SCALE

HORIZ. : 1" = 20'
VERT. : 1" = 4'

CAD

DWG. NAME : WEST SMITH RD.
PLOT SCALE : 1" = 1'

DATE

APRIL 2003
JOB NO. : CRP #901002
FIELD BOOK :

DESIGNED

GG/MKH
DRAWN : H. OTIS
CHECKED : J. KARCHER, P.E.

PUBLIC WORKS DIRECTOR

JEFFREY M. MONSEN, P.E.
COUNTY ROAD ENGINEER : JOSEPH P. RUTAN, P.E.
PROJECT ENGINEER : JAMES P. KARCHER, P.E.

WHATCOM COUNTY
DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION
5280 NORTHWEST DRIVE - SUITE C, BELLINGHAM, WA 98226 - (360) 676-6730

PROJECT NAME : WEST SMITH ROAD IMPROVEMENTS
FERDALE CITY LIMITS TO NORTHWEST DR
DRAWING NAME : PLAN/PROFILE

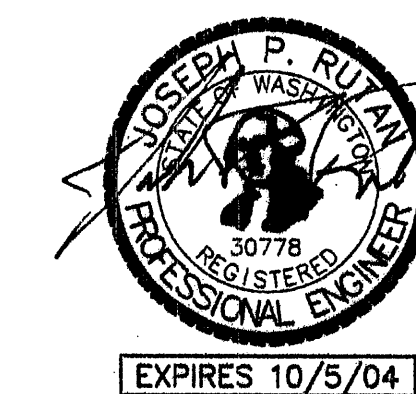
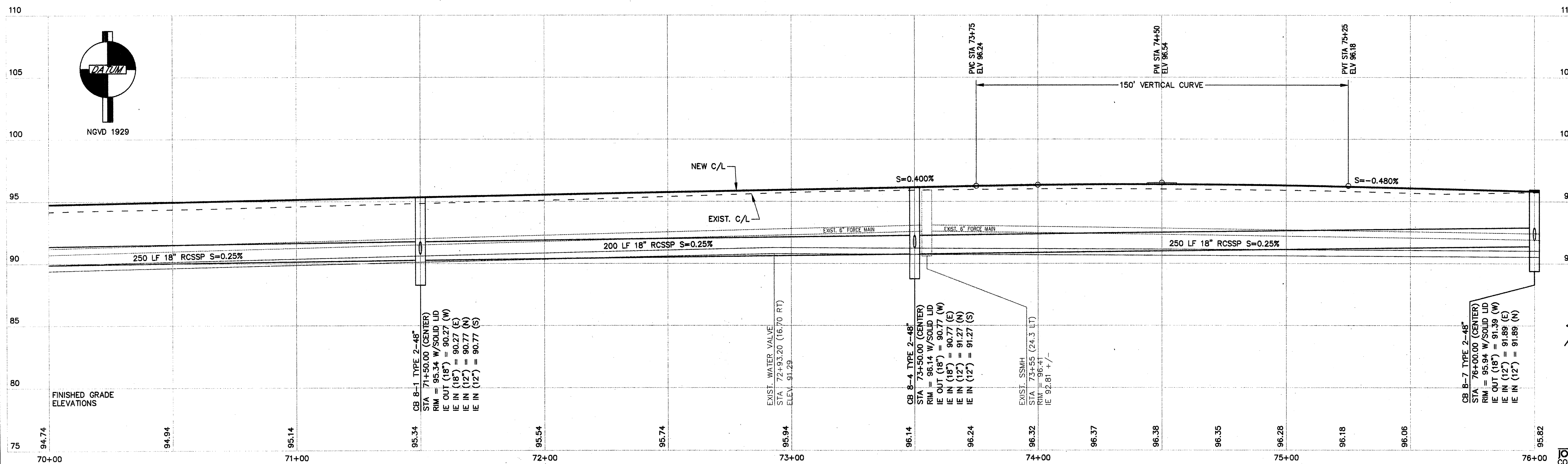
SHEET : 7
OF : 13



CB #	TYPE	STATION	OFFSET	RIM	I.E.	PIPE DIA.—TYPE/LF TO DOWNSTREAM I.E.
8-2	CONC. INLET	71+50.00	19.54' LT	94.91	92.20	12"—C900/19 LF TO CB #8-1 (I.E. 90.77)
8-3	CONC. INLET	71+50.00	19.54' RT	94.91	92.20	12"—C900/19 LF TO CB #8-1 (I.E. 90.77)
8-5	CONC. INLET	73+50.00	19.54' LT	95.71	93.00	12"—C900/19 LF TO CB #8-4 (I.E. 91.27)
8-6	CONC. INLET	73+50.00	19.54' RT	95.71	93.00	12"—C900/19 LF TO CB #8-4 (I.E. 91.27)
8-8	CONC. INLET	76+00.00	19.54' LT	95.51	92.80	12"—C900/19 LF TO CB #8-7 (I.E. 91.89)
8-9	CONC. INLET	76+00.00	19.54' RT	95.51	92.80	12"—C900/19 LF TO CB #8-7 (I.E. 91.89)



1-800-424-5555



JOSEPH P. RUTAN, P.E.
COUNTY ROAD ENGINEER

	4		
	3		
	2		
12/19/06	1	RECORD DRAWINGS	CTH
DATE	NO.	REVISION	BY

SCALE
 HORIZ. : $1'' = 20'$
 VERT. : $1'' = 4'$

CAD
DWG. NAME : WEST SMITH.DWG
PLOT SCALE : 1 = 1

DATE : APRIL 2003
JOB NO. : CRP #901002
FIELD BOOK : _____

DESIGNED : GG/MKH
DRAWN : H. OTIS
CHECKED : J. KARCHER, P.E.

PUBLIC WORKS DIRECTOR : JEFFREY M. MONSEN, P.
COUNTY ROAD ENGINEER : JOSEPH P. RUTAN, P.E.
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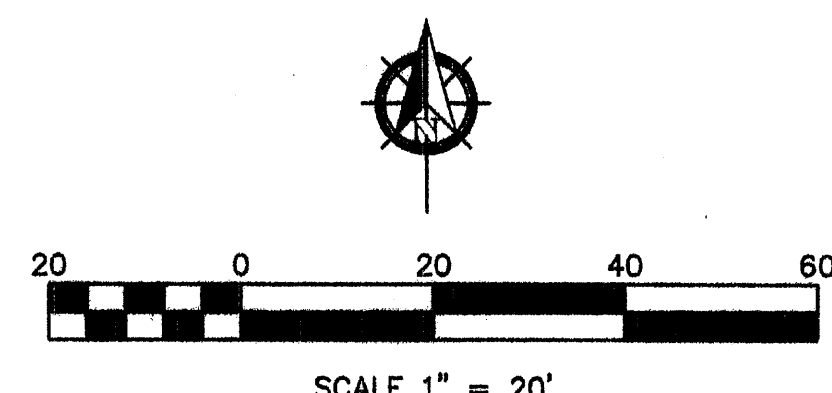
WHATCOM COUNTY
DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION
5280 NORTHWEST DRIVE - SUITE C, BELLINGHAM, WA 98226 - (360) 676-6730

PROJECT NAME : WEST SMITH RD STRUCTURAL OVERLAY
FERNDALE CITY LIMITS TO NORTHWEST DR

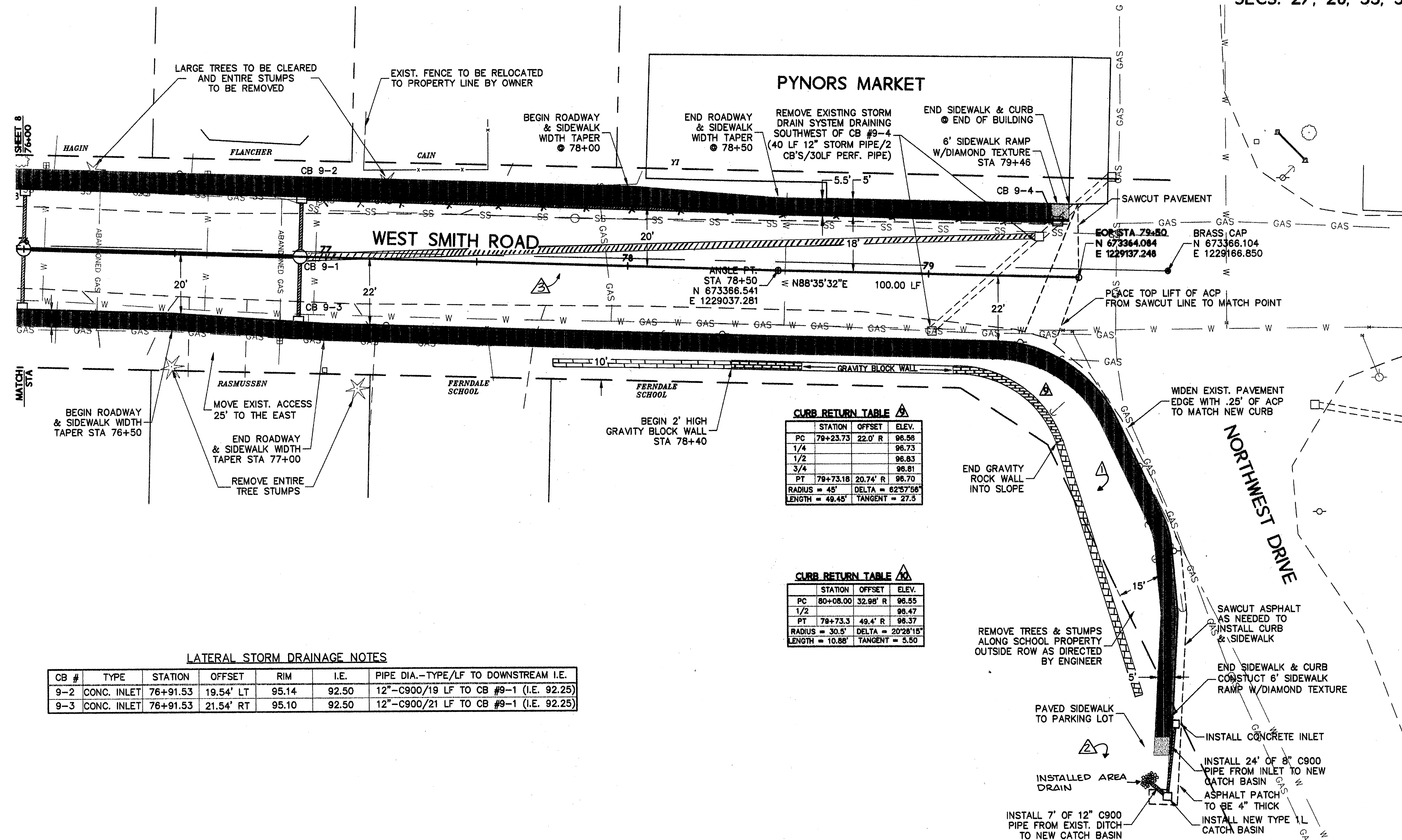
DRAWING NAME : PLAN/PROFILE

SHEET : 8

OF : 13



1-800-424-5555



CURB RETURN TABLE A

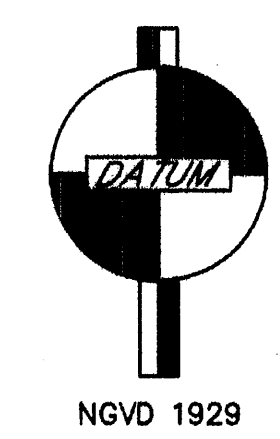
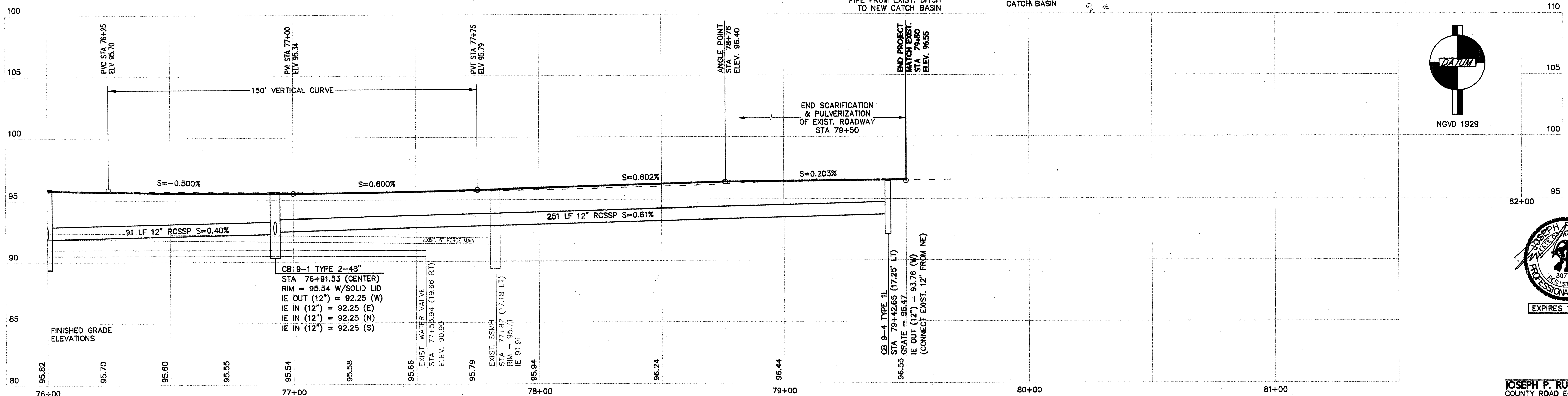
STATION	OFFSET	ELEV.
PC	79+23.73	22.0' R 96.56
1/4		96.73
1/2		96.83
3/4		96.81
PT	79+73.18	20.74' R 96.70
RADIUS = 45' DELTA = 82°57'56"		
LENGTH = 49.45' TANGENT = 27.3		

CURB RETURN TABLE B

STATION	OFFSET	ELEV.
PC	80+08.00	32.98' R 96.55
1/2		96.47
PT	79+73.3	49.4' R 96.37
RADIUS = 30.5' DELTA = 20°28'15"		
LENGTH = 10.86' TANGENT = 5.50		

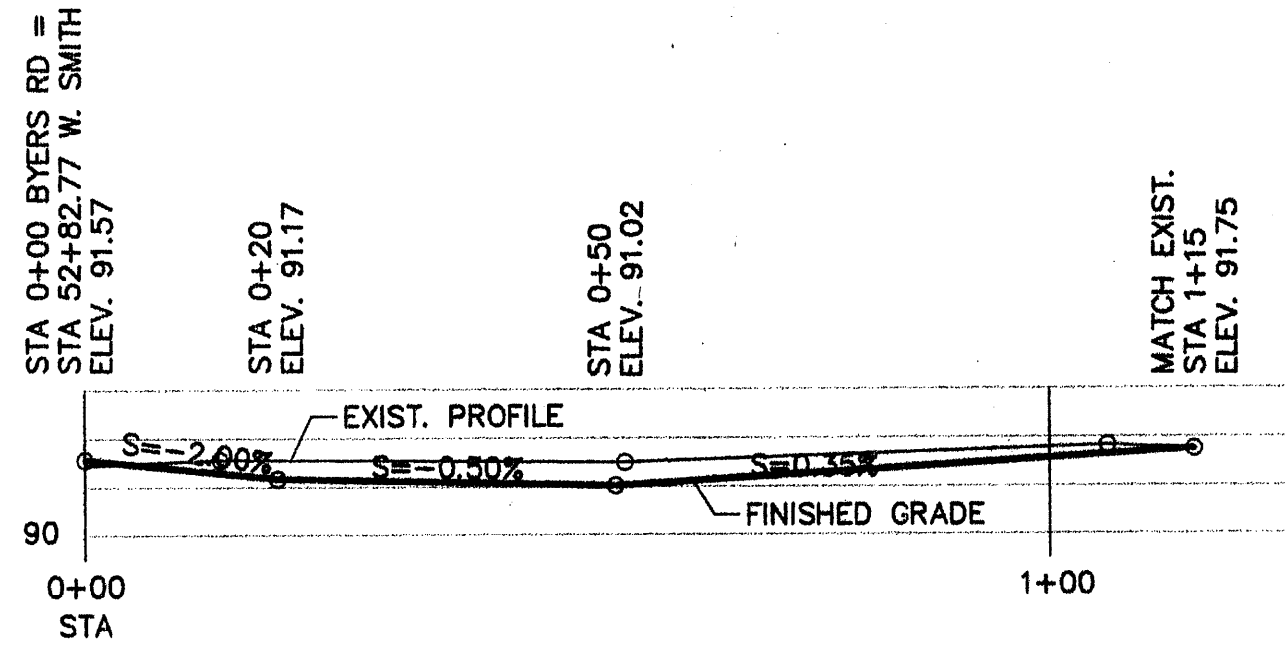
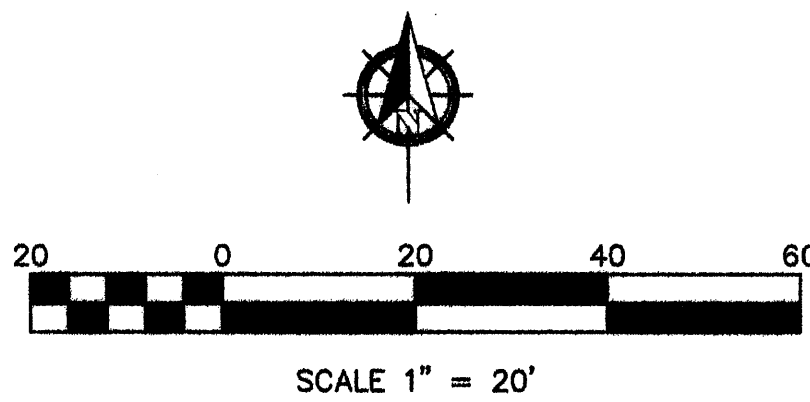
LATERAL STORM DRAINAGE NOTES

CB #	TYPE	STATION	OFFSET	RIM	I.E.	PIPE DIA.-TYPE/LF TO DOWNSTREAM I.E.
9-2	CONC. INLET	76+91.53	19.54' LT	95.14	92.50	12"-C900/19 LF TO CB #9-1 (I.E. 92.25)
9-3	CONC. INLET	76+91.53	21.54' RT	95.10	92.50	12"-C900/21 LF TO CB #9-1 (I.E. 92.25)

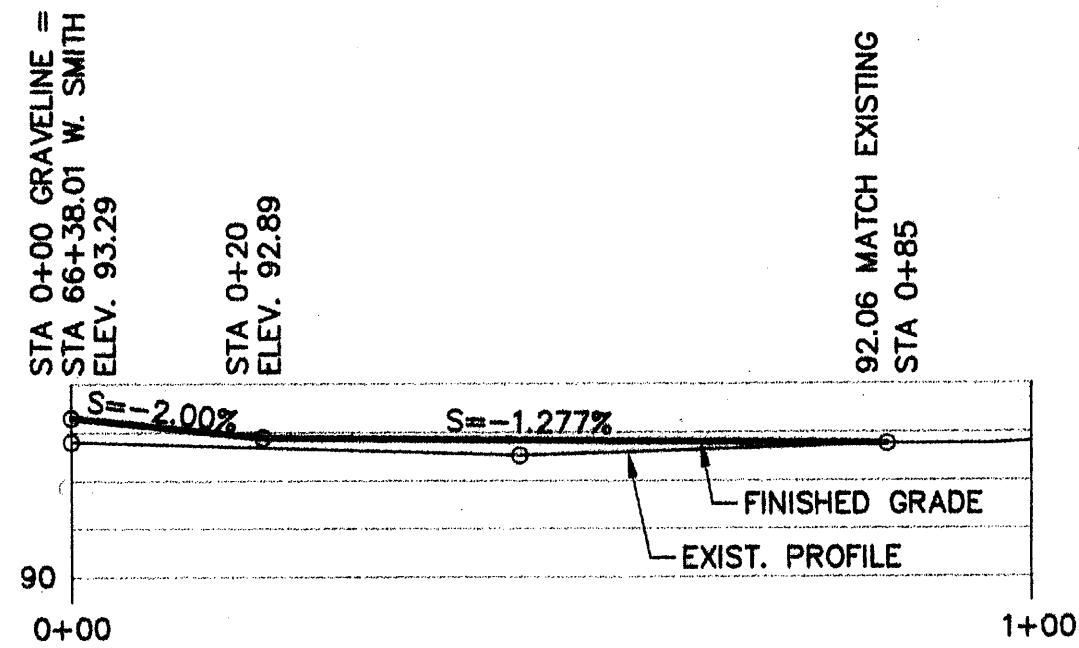


NGVD 1929

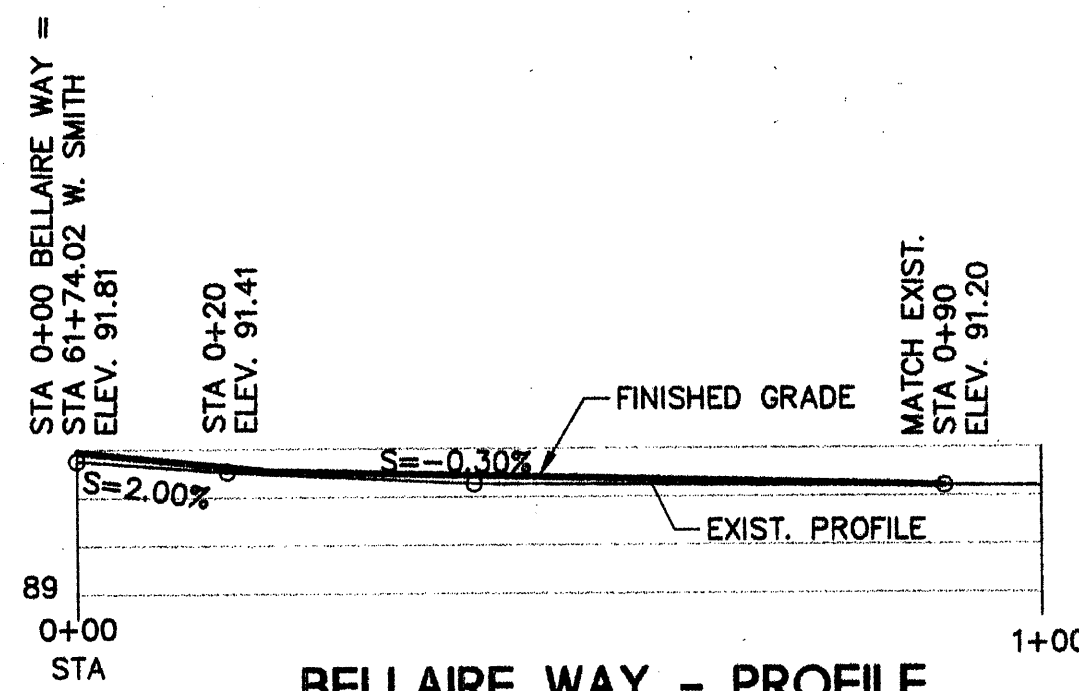




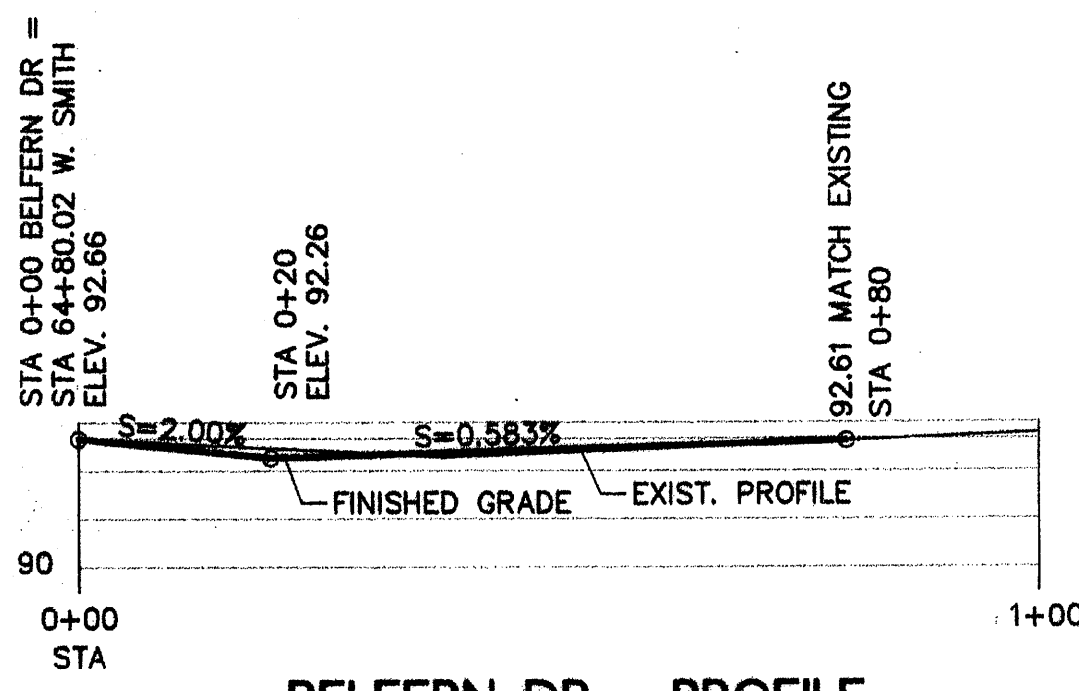
BEYERS ROAD - PROFILE
1"= 20' (HORIZ.)
1"= 4' (VERT.)



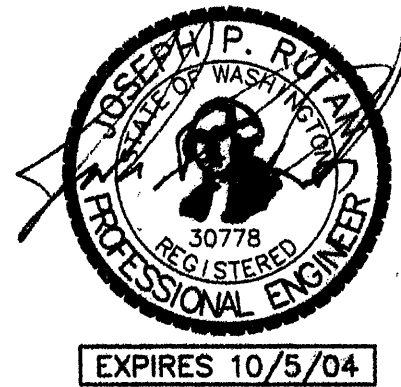
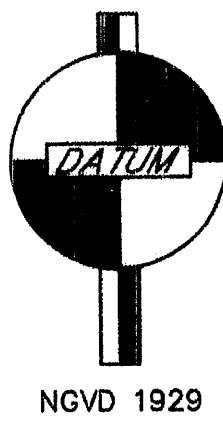
GRAVELINE - PROFILE
1"= 20' (HORIZ.)
1"= 4' (VERT.)



BELLAIRE WAY - PROFILE
1"= 20' (HORIZ.)
1"= 4' (VERT.)



BELFERN DR - PROFILE
1"= 20' (HORIZ.)
1"= 4' (VERT.)



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COUNTY ROAD ENGINEER

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SCALE
HORIZ. : 1"= 20'
VERT. : 1"= 4'

CAD
DWG. NAME : WEST SMITH.DWG
PLOT SCALE : 1"= 1'

DATE : APRIL 2003
JOB NO. : CRP #901002
FIELD BOOK :

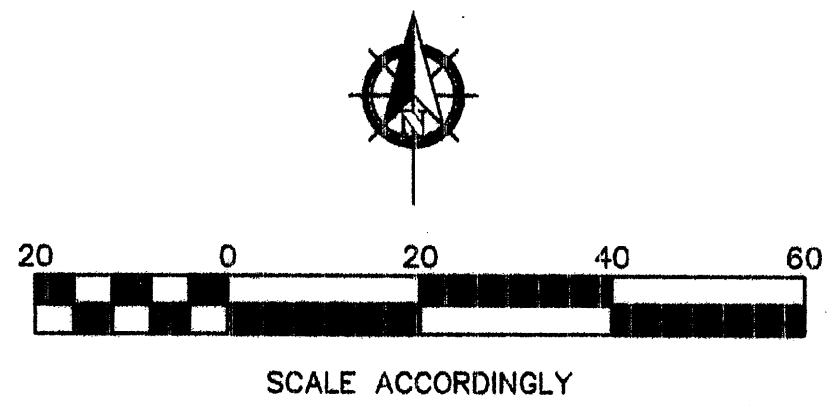
DESIGNED : GG/MKH
DRAWN : H. OTIS
CHECKED : J. KARCHER, P.E.

PUBLIC WORKS DIRECTOR : JEFFREY M. MONSEN, P.E.
COUNTY ROAD ENGINEER : JOSEPH P. RUTAN, P.E.
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WHATCOM COUNTY
DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION
8280 NORTHWEST DRIVE - SUITE C, BELLINGHAM, WA 98226 - (360) 676-6730

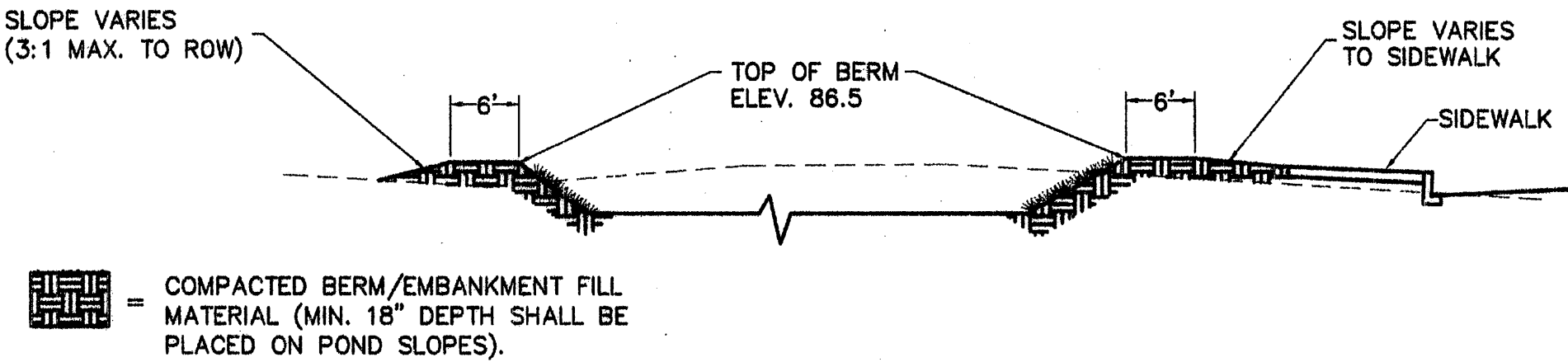
PROJECT NAME : WEST SMITH ROAD IMPROVEMENTS FERNDAL CITY LIMITS TO NORTHWEST DR
DRAWING NAME : INTERSECTION PROFILES

SHEET : 10
OF : 13

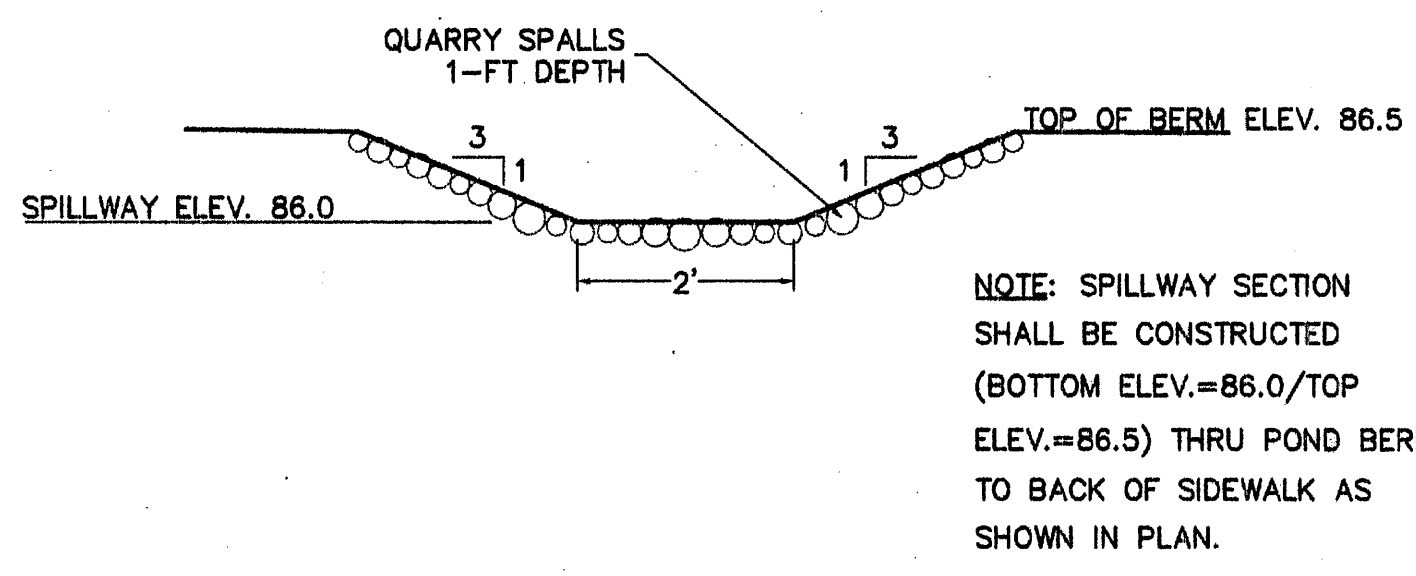


POND DETAIL NOTES

#	STATION	OFFSET	ELEVATION	COMMENTS
1	47+21.89	45.20' LT	86.5	OUTSIDE TOP OF BERM (SLOPE VARIES TO ROW)
2	47+04.47	31.78' LT	86.5	INSIDE TOP OF BERM (3:1 SLOPE TO POND BOTTOM)
3	46+53.98	31.93' LT	86.5	INSIDE TOP OF BERM (3:1 SLOPE TO POND BOTTOM)
4	46+35.02	47.45' LT	86.5	OUTSIDE TOP OF BERM (SLOPE VARIES TO ROW)
5	46+37.08	106.99' LT	86.5	INSIDE TOP OF BERM (3:1 SLOPE TO POND BOTTOM)
6	46+35.14	165.97' LT	86.5	OUTSIDE TOP OF BERM (SLOPE VARIES TO ROW)
7	46+39.25	177.19' LT	86.5	OUTSIDE TOP OF BERM (SLOPE VARIES TO ROW)
8	46+55.11	183.44' LT	86.5	OUTSIDE TOP OF BERM (SLOPE VARIES TO ROW)
9	47+00.59	183.30' LT	86.5	OUTSIDE TOP OF BERM (SLOPE VARIES TO ROW)
10	47+17.99	177.07' LT	86.5	OUTSIDE TOP OF BERM (SLOPE VARIES TO ROW)
11	47+22.14	165.77' LT	86.5	OUTSIDE TOP OF BERM (SLOPE VARIES TO ROW)
12	47+20.08	108.44' LT	86.5	INSIDE TOP OF BERM (3:1 SLOPE TO POND BOTTOM)
13	46+78.69	181.37' LT	86.5	INSIDE TOP OF BERM (3:1 SLOPE TO POND BOTTOM)
14	47+08.12	43.81' LT	83.0	POND BOTTOM (TOE OF 3:1 CUT SLOPE)
15	46+49.12	43.77' LT	83.0	POND BOTTOM (TOE OF 3:1 CUT SLOPE)
16	46+49.46	169.81' LT	83.0	POND BOTTOM (TOE OF 3:1 CUT SLOPE)
17	47+08.31	169.17' LT	83.0	POND BOTTOM (TOE OF 3:1 CUT SLOPE)
18	46+34.00	27.50' LT	86.0	END SPILLWAY SECTION B-B



POND SECTION A-A
N.T.S.



SPILLWAY SECTION B-B
N.T.S.

POND BOTTOM TO REMAIN
UNCOMPACTED
ELEV. 83.0

CONTROL STRUCTURE
(SEE SHEET 3)

CB# 4-0
(SEE SHEET 4)

OVERFLOW
SPILLWAY

QUARRY SPALL
SPLASH PAD
5'x5'x1'

STORMCEPTOR TREATMENT UNIT
(SEE SHEET 3)



DATE	NO.	REVISION	BY
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SCALE
HORIZ. : N.T.S.
VERT. : N.T.S.

CAD
DWG. NAME : WEST SMITH.DWG
PLOT SCALE : 1" = 1'

DATE : APRIL 2003
JOB NO. : CRP #901002
FIELD BOOK :

DESIGNED : GG/MKH/CB
DRAWN : H. OTIS
CHECKED : J. KARCHER, P.E.

PUBLIC WORKS DIRECTOR : JEFFREY M. MONSEN, P.E.
COUNTY ROAD ENGINEER : JOSEPH P. RUTAN, P.E.
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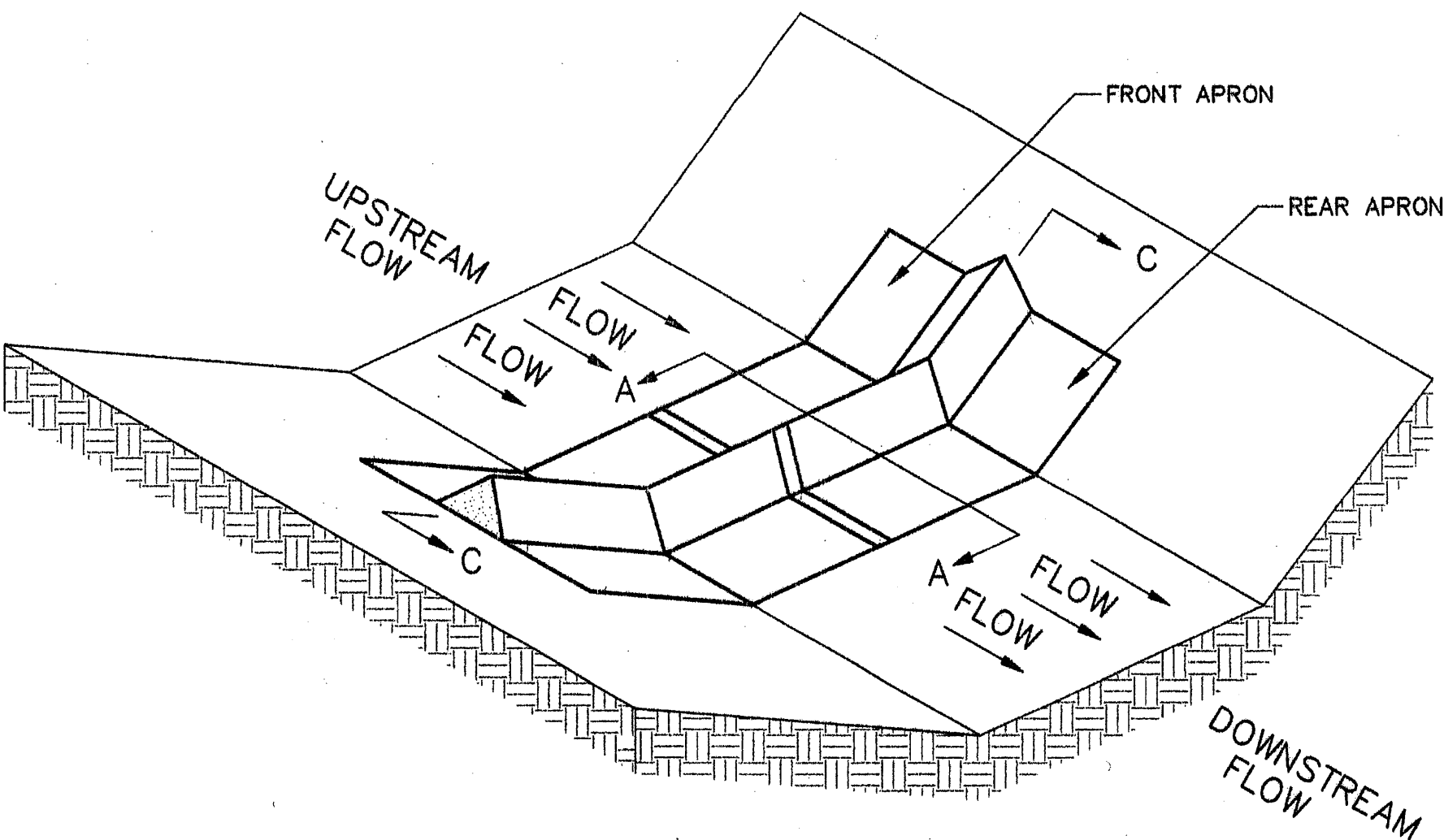
WHATCOM COUNTY
DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION
5280 NORTHWEST DRIVE - SUITE C, BELLINGHAM, WA 98226 - (360) 676-6730

PROJECT NAME : WEST SMITH RD STRUCTURAL OVERLAY
FERNDAL CITY LIMITS TO NORTHWEST DR
DRAWING NAME : DETENTION POND

SHEET : 11
OF : 13

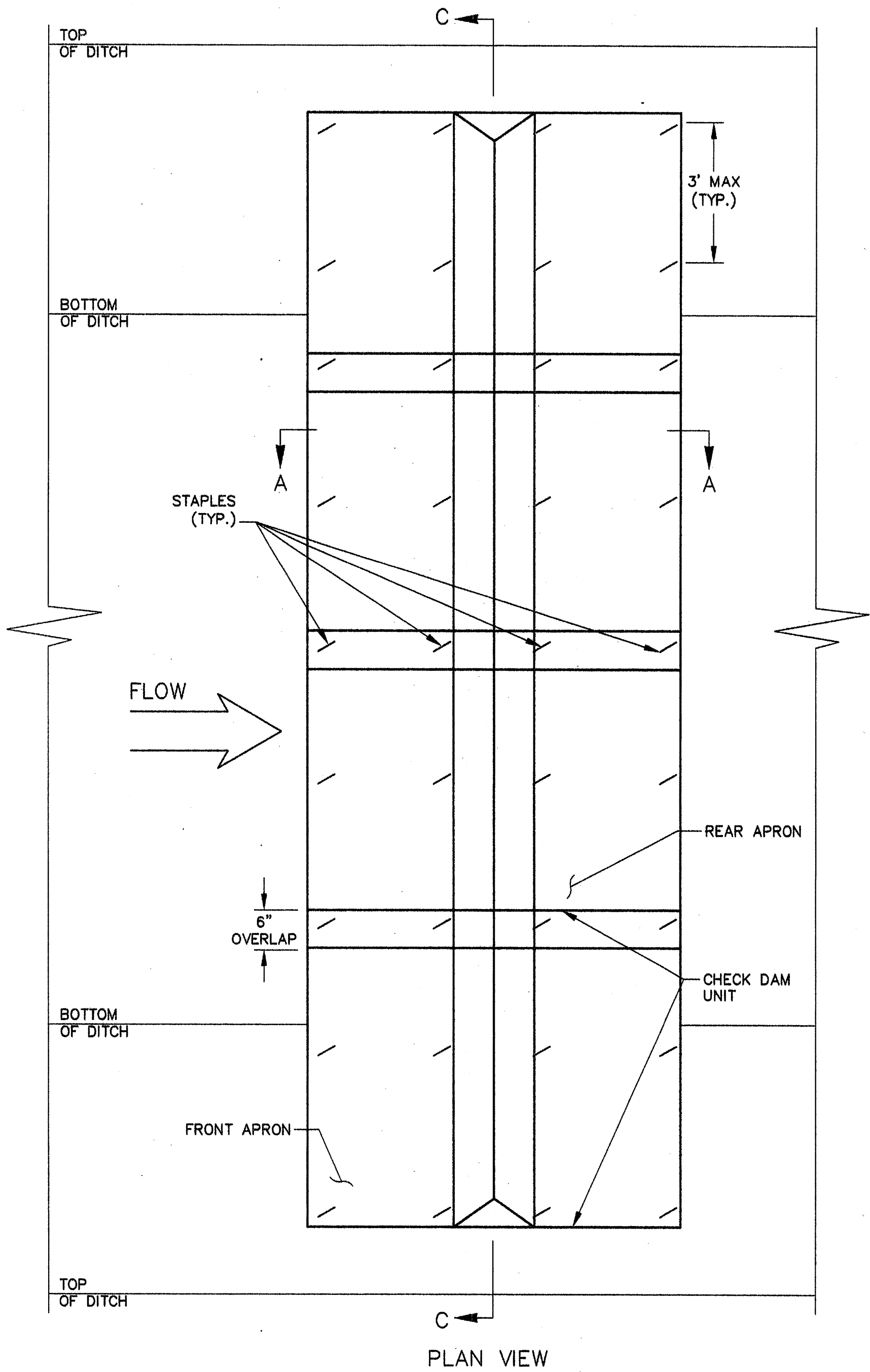
NOTES:

1. DIG TRENCH 20" - 30" UPSTREAM FROM THE SEWN EDGE.
2. PLACE AND STAPLE APPROXIMATELY 3" OF THE FRONT APRON IN THE TRENCH AND BACKFILL. PLACE THE REAR APRON UNDER THE CHECK DAM UNIT EXTENDING OUT THE DOWNSTREAM SIDE.
3. TO ASSEMBLE MORE THAN ONE SECTION, OVERLAP THE FABRIC 6" WITH THE ENDS OF THE UNITS TIGHTLY ABUTTED.
4. STAPLE THE FRONT APRON DOWN IN THE TRENCH AND BACKFILL.
5. FINISH STAPLING USING THE PATTERN AS SHOWN IN PLAN VIEW.

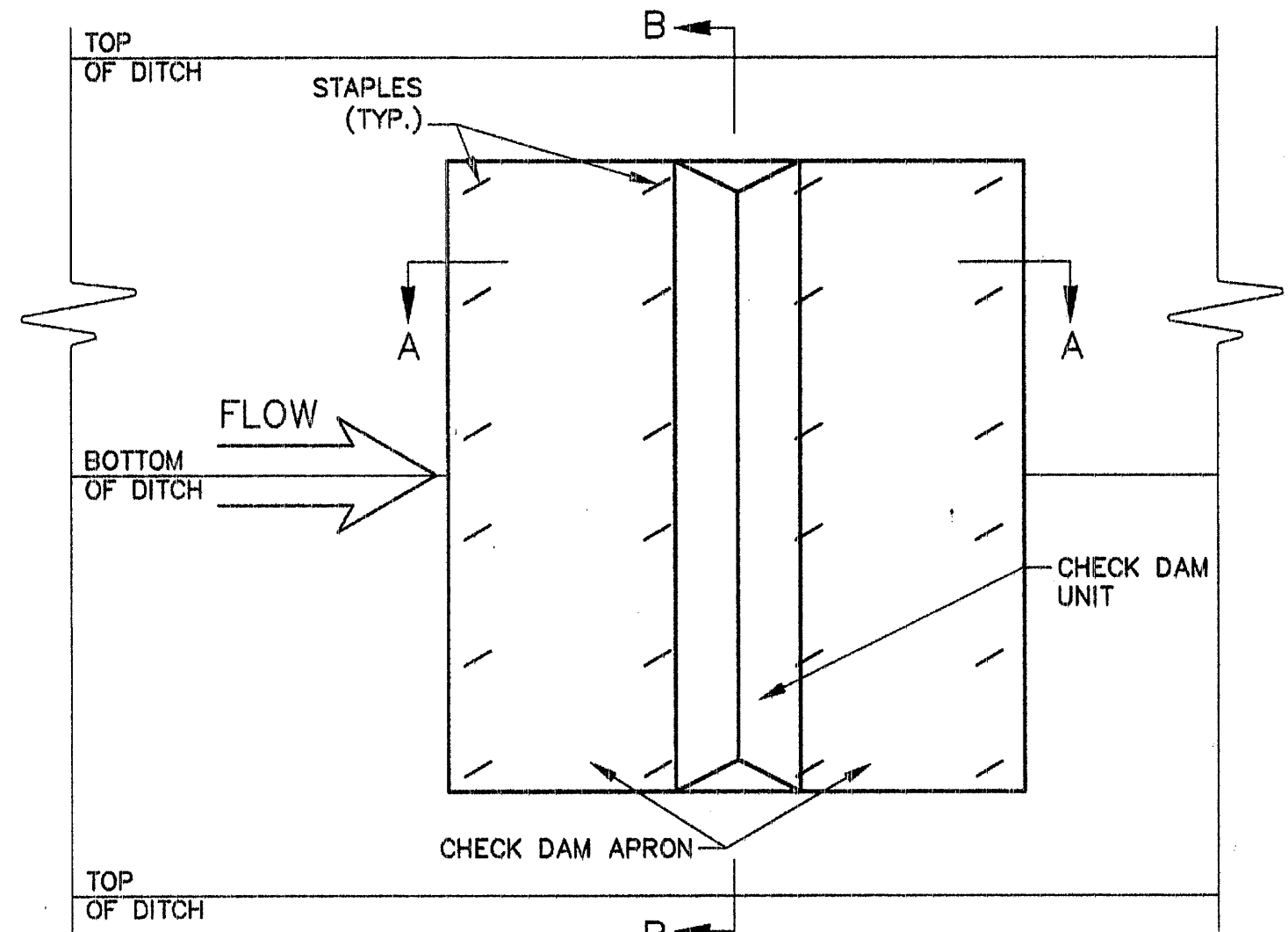


FLAT BOTTOMED DITCH ISOMETRIC VIEW

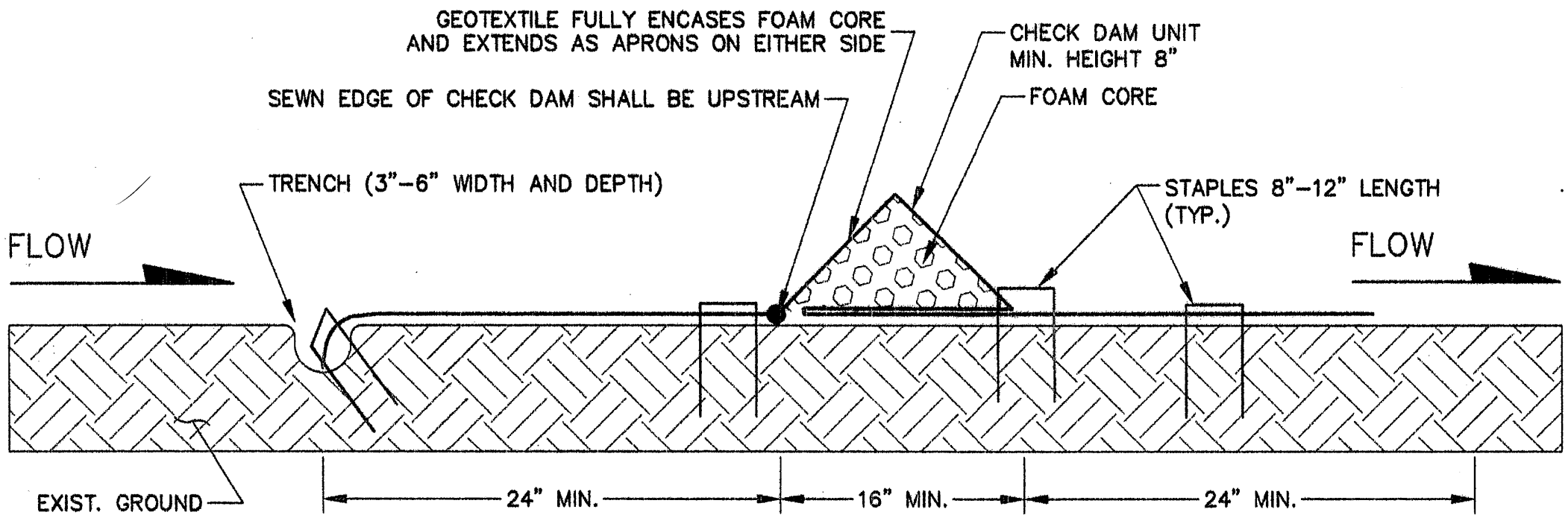
N.T.S.



PLAN VIEW

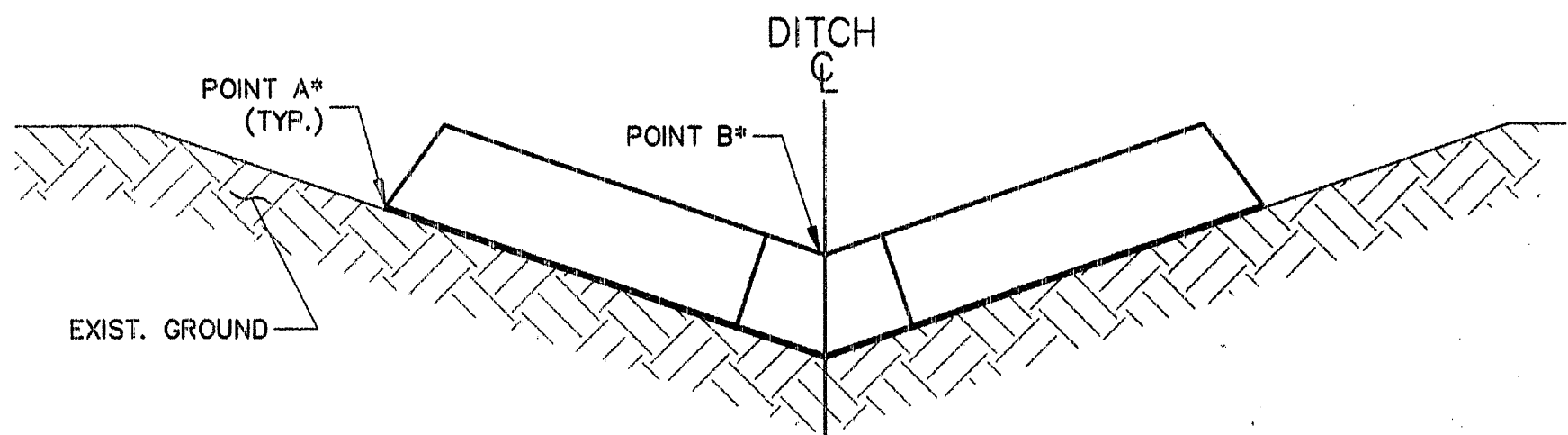


PLAN VIEW



SIDE VIEW

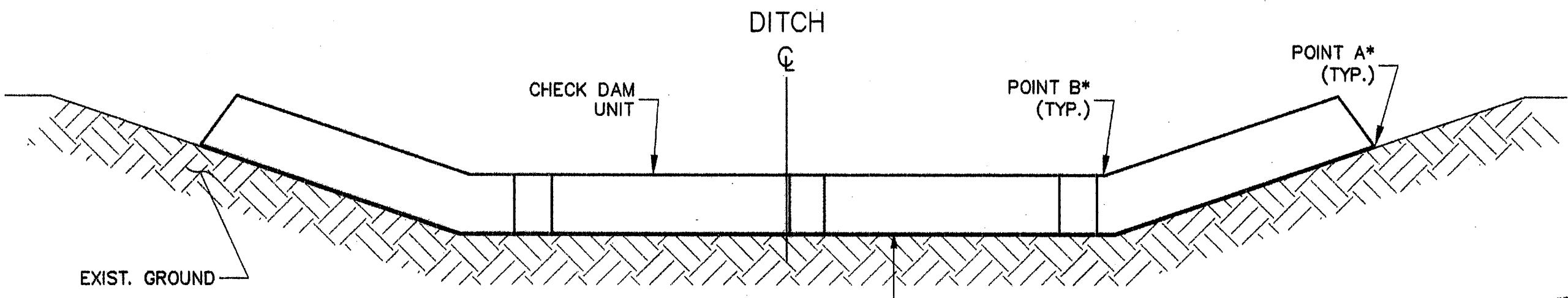
SECTION A-A



FRONT VIEW

SECTION B-B

* POINT A MUST BE A MINIMUM OF 3" HIGHER THAN POINT B TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.



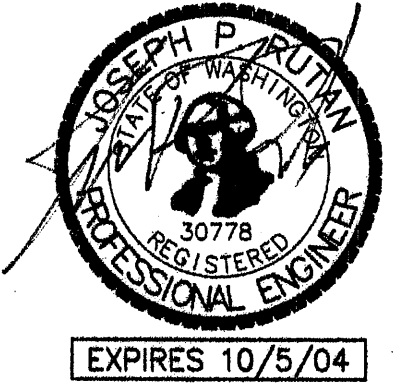
FRONT VIEW

SECTION C-C

GEOTEXTILE ENCASED CHECK DAM INSTALLATION

FOR FLAT BOTTOM DITCH

N.T.S.



JOSEPH P. RUTAN, P.E.
COUNTY ROAD ENGINEER

4					
3					
2					
1	RECORD DRAWINGS				CJH
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SCALE
HORIZ. : N.T.S.
VERT. : N.T.S.

CAD
DWG. NAME : WEST SMITH.DWG.
PLOT SCALE : 1 = 1

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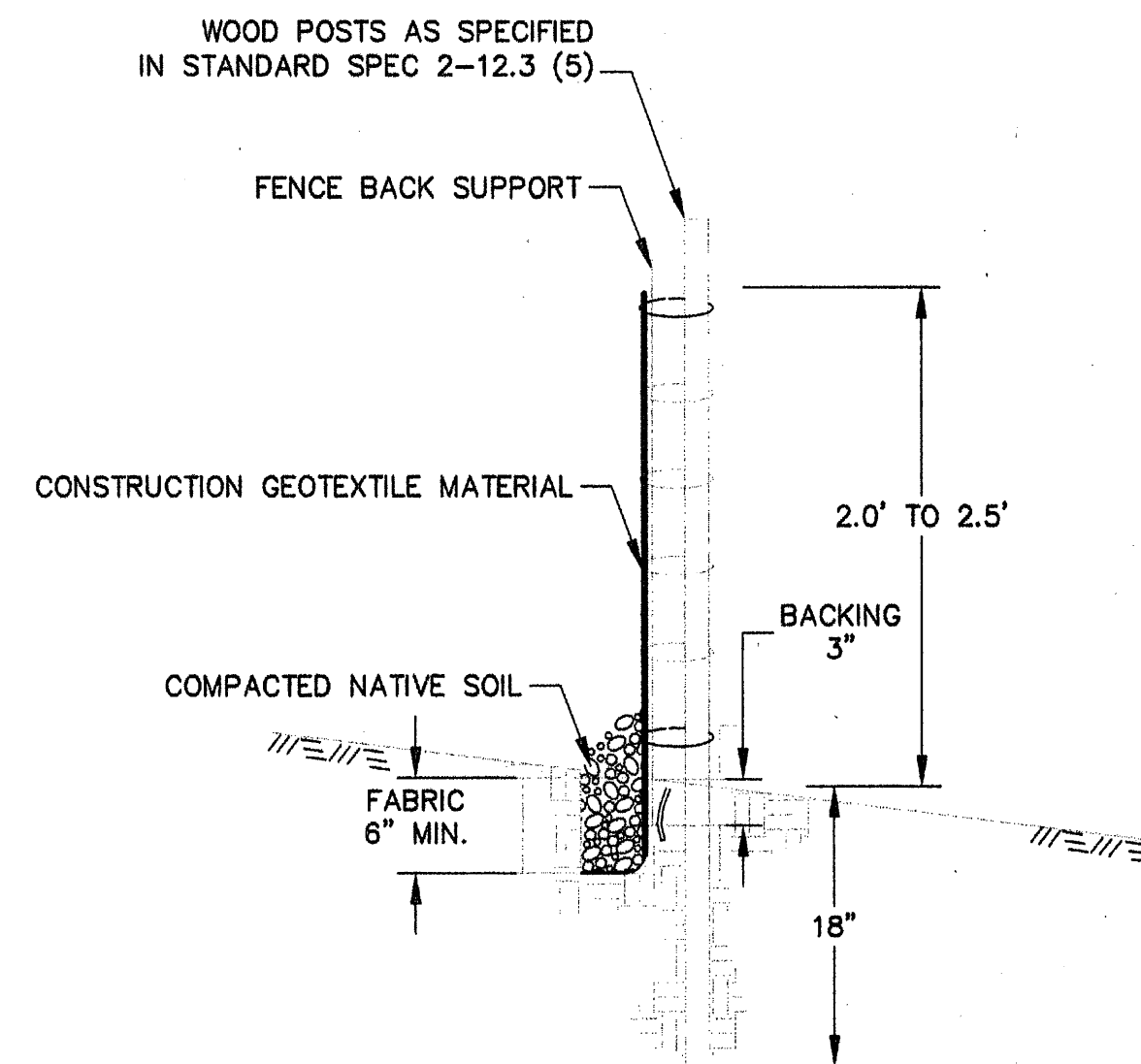
DESIGNED : G. GOODALL
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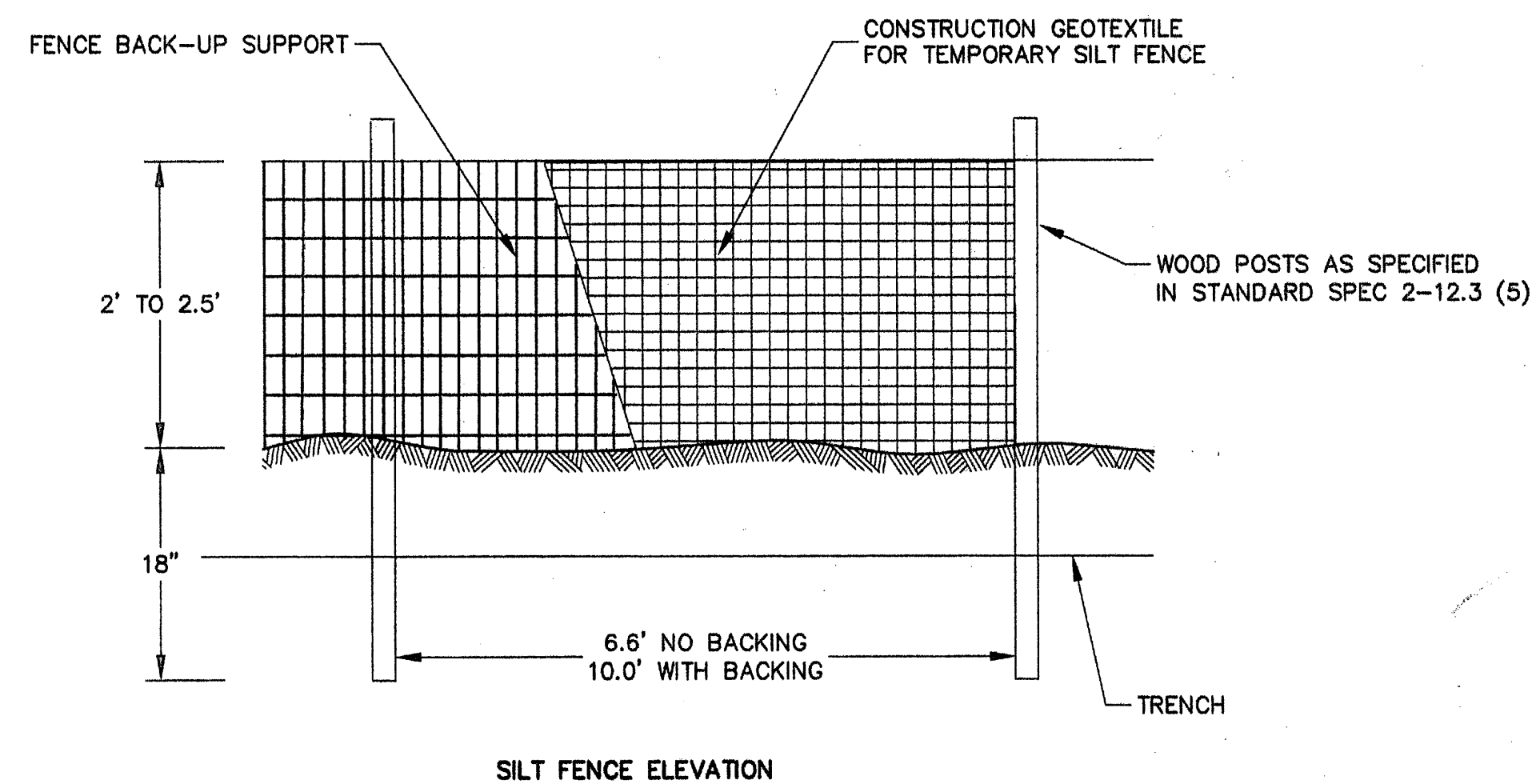
WHATCOM COUNTY
DEPARTMENT OF PUBLIC WORKS - ENGINEERING DIVISION
5280 NORTHWEST DRIVE - SUITE C, BELLINGHAM, WA 98226 - (360) 676-6730

PROJECT NAME : WEST SMITH RD STRUCTURAL OVERLAY FERNDAL CITY LIMITS TO NORTHWEST DR
DRAWING NAME : EROSION CONTROL DETAILS

SHEET : 12
OF : 13



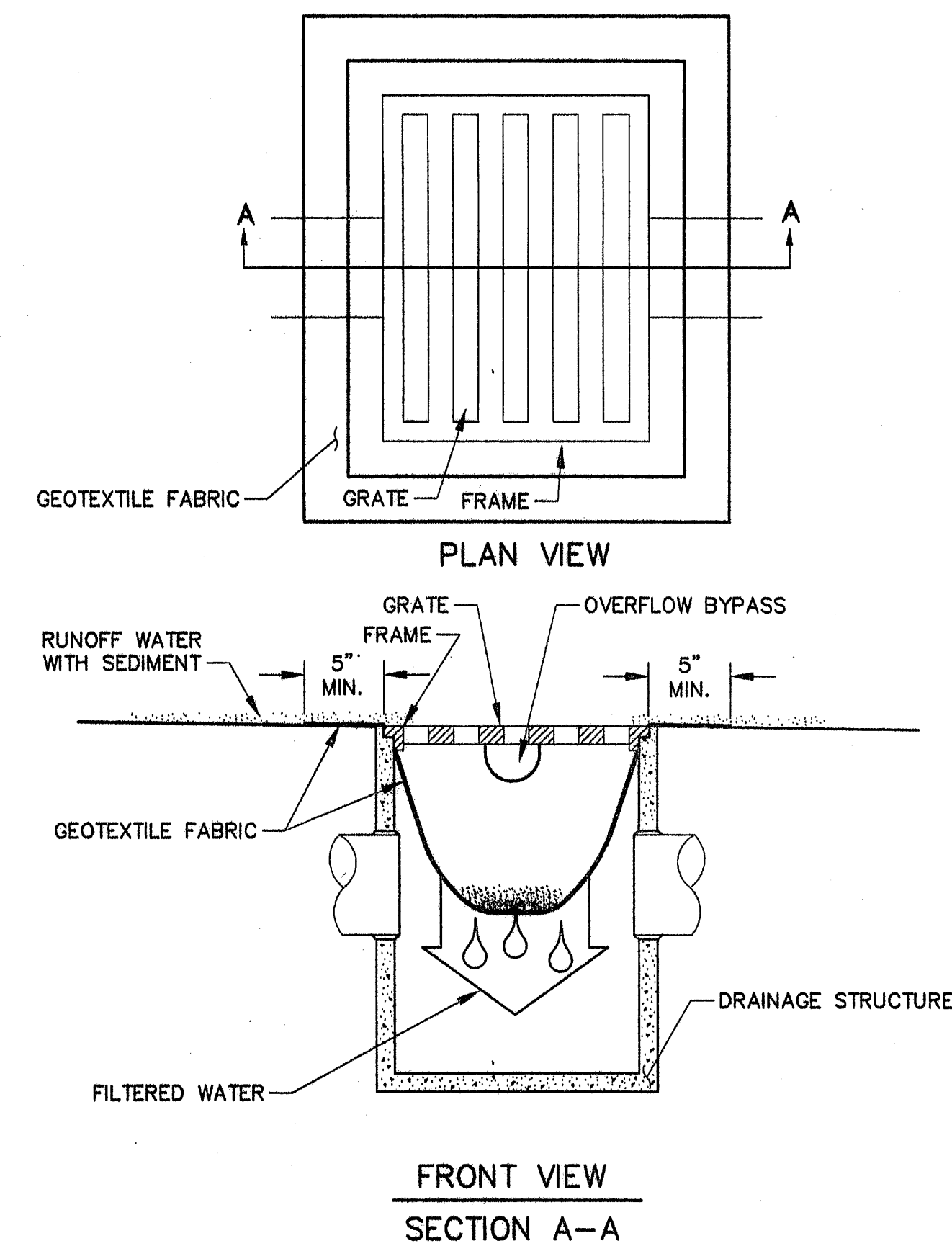
SILT FENCE STAKING DETAIL
N.T.S.



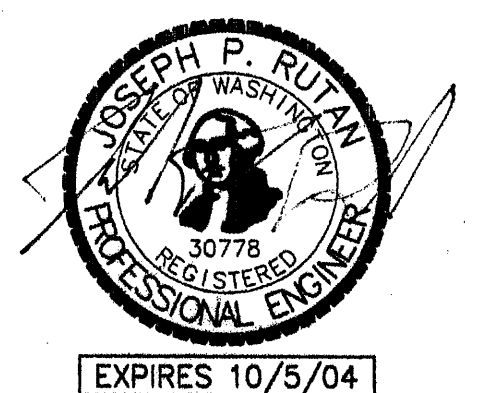
CONSTRUCTION GEOTEXTILE FOR TEMPORARY SILT FENCE
N.T.S.

GENERAL NOTES:

1. THE FILTER FABRIC (CONSTRUCTION GEOTEXTILE FOR TEMPORARY SILT FENCE) SHALL BE PURCHASED IN A CONTINUOUS ROLL, 60 INCHES WIDE, CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, THE FILTER FABRIC SHALL BE SPliced TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 INCHES OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST.
2. THE FENCE POSTS SHALL BE SPACED 6.6' APART WHEN THERE IS NO BACKING AND 10.0' APART WHEN THERE IS BACKING, AND DRIVEN SECURELY INTO THE GROUND (A MINIMUM OF 18").
3. A TRENCH SHALL BE EXCAVATED, UPSLOPE AND ADJACENT TO THE POST TO ALLOW THE FILTER FABRIC TO BE BURIED A MINIMUM OF 6".
4. THE WIRE MESH SUPPORT, OR POLYMERIC MESH FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 3 INCHES AND SHALL NOT EXTEND MORE THAN 2.5 FT. ABOVE THE ORIGINAL GROUND SURFACE.
5. THE TRENCH SHALL BE BACKFILLED WITH NATIVE MATERIAL.
6. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
7. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
8. SILT FENCE PERFORMANCE SHALL BE EVALUATED AND SILT FENCE LOCATIONS SHALL BE EVALUATED AND ADJUSTED AS DIRECTED OR APPROVED BY THE ENGINEER AND THE PERMITTING AUTHORITY.
9. SILT FENCE SHALL BE INSTALLED TO FOLLOW CONTOURS, WHERE FEASIBLE.
10. IF FENCE MUST CROSS CONTOURS, GRAVEL CHECK DAMS SHALL BE INSTALLED AS DESCRIBED IN STANDARD SPECS 2-12.3 (5).
11. MAINTENANCE STANDARDS:
 - A. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY.
 - B. IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT TRAP OR POND.
 - C. SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN THE SEDIMENT IS 1/3 THE HEIGHT OF FENCE.
 - E. IF THE FILTER FABRIC HAS DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED.



STORM DRAIN PROTECTION INSERT
N.T.S.



JOSEPH P. RUTAN, P.E.
COUNTY ROAD ENGINEER

4					
3					
2					
1	RECORD DRAWINGS			CJT	
DATE	NO.	REVISION		BY	

SCALE
HORIZ. AS NOTED
VERT. AS NOTED

CAD
DWG. NAME: WEST SMITH.DWG
PLOT SCALE: 1 = 1

DATE: APRIL 2003
JOB NO.: CRP #901002
FIELD BOOK:

DESIGNED: G. GOODALL
DRAWN: H. OTIS
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PUBLIC WORKS DIRECTOR: JEFFREY M. MONSEN, P.E.
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5280 NORTHWEST DRIVE - SUITE C, BELLINGHAM, WA 98226 - (360) 676-6730

PROJECT NAME: WEST SMITH RD STRUCTURAL OVERLAY FERNDAL CITY LIMITS TO NORTHWEST DR
DRAWING NAME: EROSION CONTROL DETAILS

SHEET : 13
OF : 13