PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com

WHISKEY CREEK PLAT

CITY OF FERNDALE, WASHINGTON

SITUATE IN A PORTION OF THE SE 1/4 OF SECTION 17, TOWNSHIP 39 NORTH,
RANGE 2 EAST, W.M., CITY OF FERNDALE, WHATCOM COUNTY, WASHINGTON

ROADWAY & UTILITY IMPROVEMENT PLANS

SURVEY NOTES

1) DATA FOR THIS SURVEY WAS GATHERED BY FIELD TRAVERSE UTILIZING ELECTRONIC DATA COLLECTION.

2) EQUIPMENT USED: THEOMAT 00'01.5"
EDM: ± 2 PPM, ± 3 MM

3) HORIZONTAL DATUM: CITY OF FERNDALE COMPREHENSIVE MAPPING
BASIS OF BEARINGS: NAD 83/91 WA. ST. NORTH ZONE
MEASURED BEARING BETWEEN CITY OF FERNDALE PRIMARY CONTROL MONUMENTS "FERN 06" AND "FERN 03".
BEARING: N00°45'53"E

4) VERTICAL DATUM: NGVD 29 (CITY OF FERNDALE)
BENCH MARK: WSDOT GP37005-33, ELEV.=71.21' (NGVD 29)

TBM ON SITE: POWER POLE #9317 IN E. SIDE OF PORTAL WAY, ADJACENT TO PROJECT SITE. ELEV.= 50.26' (NGVD 29)

5) CONTOUR INTERVAL IS ONE-FOOT AND ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.

6) EXTERIOR BOUNDARY INFORMATION IS SHOWN DIRECTLY FROM THE "WHISKEY CREEK LOT LINE ADJUSTMENT," AS PER THE MAP THEREOF, RECORDED UNDER WHATCOM COUNTY AUDITOR'S FILE NUMBER 2050404305. (PSE HAS NOT REVIEWED SAID LOT LINE ADJUSTMENT, NOR IS IT WITHIN OUR SCOPE OF WORK, AND THEREBY CAN ASSUME NO LIABILITY FOR THE CONTENT THEREON)

7) PSE FIELD CREWS LOCATED THE BASE FLOOD ELEVATION CONTOUR LINE AND WETLANDS FLAGGING IN FEBRUARY AND APRIL 2005, RESPECTIVELY.

8) WETLANDS SHOWN HEREON ARE AS DELINEATED IN THE FIELD BY AQUA TERR SERVICES INC. IN APRIL 2005.

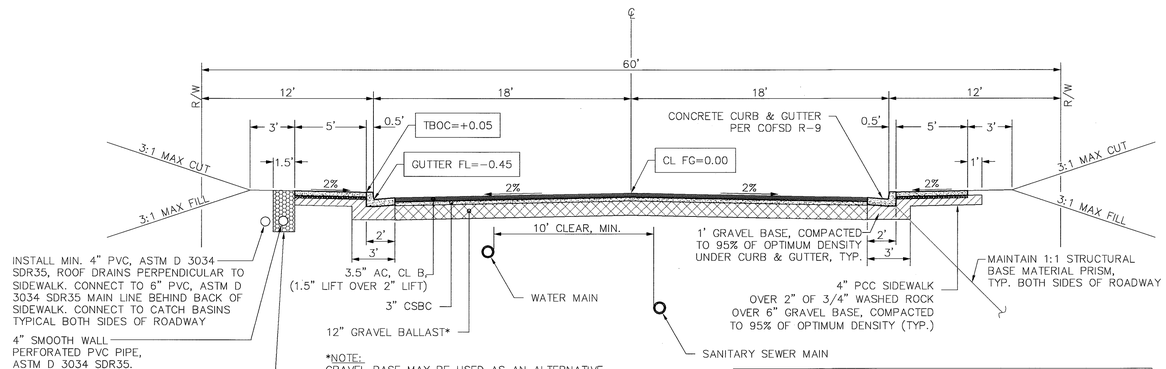
7) PACIFIC SURVEYING AND ENGINEERING INC., ASSUMES NO LIABILITY FOR ANY SUBSURFACE CONDITIONS OR FEATURES THAT MAY EXIST THAT ARE UNDETECTABLE AND/OR NOT VISIBLE.

ROAD INTERSECTION EQUATIONS

STA 10+00.00 'A' STREET = STA 3+00.00 PORTAL WAY
STA 13+21.80 'A' STREET = STA 90+00.00 NORTH STUB
STA 19+23.82 'A' STREET = STA 40+00.00 'B' STREET
STA 43+72.75 'B' STREET = STA 60+00.00 'C' COURT
STA 46+86.37 'B' STREET = STA 80+00.00 'D' COURT

ABBREVIATIONS

AC	ASPHALT CONCRETE	PRC	POINT OF REVERSE CURVATURE
B/C	BACK OF CURB	PT	POINT OF TANGENCY = END CURVE
BCR	BEGIN CURB RETURN	PVI	POINT OF VERTICAL INTERSECTION
BOW	BACK OF SIDEWALK	PVMT	PAVEMENT
BVC	BEGIN VERTICAL CURVE	R	CURVE RADIUS
C&G	CURB AND GUTTER	R/W	RIGHT OF WAY
CL	CENTERLINE OR CLASS	RT	RIGHT
COFSD	CITY OF FERNDALE STANDARD DRAWING	SD	STORM DRAIN
CPP	CORRUGATED POLYETHYLENE PIPE	SDCB	STORM DRAIN CATCH BASIN
D	CURVE DELTA	SSCO	SANITARY SEWER CLEAN-OUT
ECR	END CURB RETURN	SSMH	SANITARY SEWER MANHOLE
EG	EXISTING GRADE	SWK	SIDEWALK
EP	EDGE OF PAVEMENT	STA	STATION
EVC	END VERTICAL CURVE	STD	STANDARD
EXST	EXISTING	TBC	TOP BACK OF CURB
F&G	FRAME AND GRATE	TFC	TOP FACE OF CURB
FH	FIRE HYDRANT	TC	TOP OF CURB
F/C	FACE OF CURB	T/P	TOP OF PIPE
FF	FINISH FLOOR	TYP.	TYPICAL
FG	FINISH GRADE	WL	WATER LINE
FL	FLOWLINE OR FLANGE		
I.E.	INVERT ELEVATION	STREET NAME ABBREVIATIONS:	
INV	INVERT		
L	CURVE LENGTH	PRTL	PORTAL WAY
LT	LEFT	'A'	'A' STREET = McKINLEY ST/CT
MJ	MECHANICAL JOINT	'B'	'B' STREET = NICKLES STREET
NTS	NOT TO SCALE	'C'	'C' COURT = EVELYN COURT
PC	POINT OF CURVATURE = BEGIN CURVE	'D'	'D' COURT = BILLIE COURT
PCC	POINT OF COMPOUND CURVATURE		



ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE PROVISIONS OF APPLICABLE SECTIONS OF THE A.P.W.A. "STANDARD SPECIFICATIONS" AND SHALL CONFORM TO THE REQUIREMENTS OF THE CITY ENGINEER..

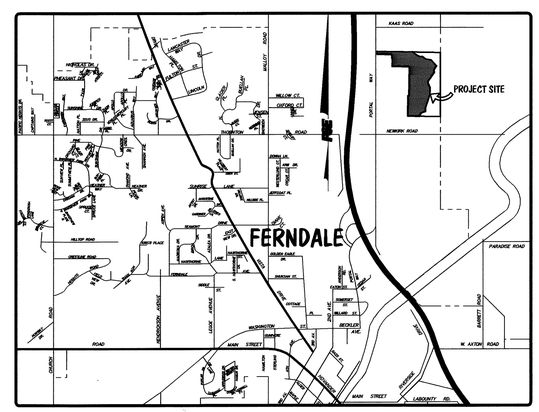
TYPICAL ROADWAY SECTION ~ RESIDENTIAL STREETS
NOT TO SCALE

PROPOSED FEATURE SYMBOL LEGEND

- = PROPOSED SURVEY MONUMENT
- = PROPOSED STORM DRAIN CATCH BASIN, TYPE 2
- = PROPOSED STORM DRAIN CATCH BASIN, TYPE 1
- = PROPOSED SANITARY SEWER MANHOLE
- SSCO = PROPOSED SANITARY SEWER CLEANOUT
- = PROPOSED DOUBLE WATER SERVICE
- = PROPOSED SINGLE WATER SERVICE
- = PROPOSED GATE VALVE
- = PROPOSED WATER BLOW-OFF ASSEMBLY
- = PROPOSED REDUCER
- = PROPOSED FIRE HYDRANT
- = PROPOSED STREETLIGHT
- = PROPOSED STREET SIGN
- = PROPOSED TYPE 3 BARRICADE
- = PROPOSED SINGLE SANITARY SEWER SERVICE
- = PROPOSED DRIVEWAY
- = PROPOSED TEE, MJ x FL
- = PROPOSED TEE, FL
- = PROPOSED 22.5° BEND, MJ
- = PROPOSED 22.5° BEND, FL
- = PROPOSED 11.25° BEND, FL
- = PROPOSED FL x MJ ADAPTER

PROPOSED LINE LEGEND

- = PROPOSED ROADWAY CENTERLINE
- = PROPOSED RIGHT OF WAY LINE
- = PROPOSED EASEMENT LINE
- = PROPOSED EDGE OF ASPHALT
- = PROPOSED CURB & GUTTER
- = PROPOSED BACK OF SIDEWALK
- = PROPOSED STORM DRAIN LINE
- = PROPOSED SANITARY SEWER LINE
- = PROPOSED WATER LINE
- = PROPOSED BACK OF WALK DRAIN
- = PROPOSED EDGE OF GRAVEL
- = PROPOSED CUT/FILL SLOPES



VICINITY MAP
NOT TO SCALE

AS BUILT CERTIFICATION
I hereby certify that the improvements in Whiskey Creek have been inspected by Pacific Survey and Engineering, Inc., and constructed in conformance with the plans approved by the Public Works Director for said development and the general specifications adopted by the City of Ferndale Department of Public Works.

JEFFREY A. VANDER YACHT, P.E.

SHEET INDEX

1 COVER SHEET
2 EXISTING CONDITIONS MAP
3 PROJECT OVERVIEW MAP
ROADWAY & STORM DRAINAGE IMPROVEMENTS:
4 PORTAL WAY
5 'A' STREET ~ STATIONS 10+00 to 13+75
6 'A' STREET ~ STATIONS 13+75 to 18+00
7 'A' STREET ~ STATIONS 18+00 to 22+00
8 'B' STREET ~ STATIONS 40+00 to 43+00
9 'B' STREET ~ STATIONS 43+00 to 47+50
10 'B' STREET TO SOUTH POND
11 OFFSITE STORM DRAINAGE INTERCEPTION
12 'C' COURT
13 'D' COURT
14 'D' COURT STORM DRAIN BYPASS
WATER & SANITARY SEWER IMPROVEMENTS:
15 'A' STREET ~ STATIONS 10+00 to 13+75
16 'A' STREET ~ STATIONS 13+75 to 18+00
17 'A' STREET ~ STATIONS 18+00 to 22+00
18 'B' STREET ~ STATIONS 40+00 to 43+00
19 'B' STREET ~ STATIONS 43+00 to 47+50
20 'C' COURT
21 'D' COURT
22 CONNECTION TO OFFSITE WATER MAIN
STORMWATER MANAGEMENT FACILITY DETAILS:
23 STORMWATER MANAGEMENT FACILITY DETAILS ~ NORTH POND
24 STORMWATER MANAGEMENT FACILITY DETAILS ~ SOUTH POND
25 STORMWATER MANAGEMENT FACILITY DETAILS ~ SOUTH POND
SANITARY SEWER LIFT STATION DETAILS:
26 SANITARY SEWER LIFT STATION DETAILS
27 SANITARY SEWER LIFT STATION DETAILS
28 SANITARY SEWER LIFT STATION DETAILS
TEMPORARY EROSION & SEDIMENT CONTROL:
29 TEMPORARY EROSION & SEDIMENT CONTROL PLAN
30 TEMPORARY EROSION & SEDIMENT CONTROL DETAILS
NOTES & DETAILS:
31 ROADWAY & SURFACE IMPROVEMENT DETAILS
32 SANITARY SEWER & STORM DRAINAGE DETAILS
33 WATER SYSTEM DETAILS
34 GENERAL CONSTRUCTION NOTES

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
MAY 21, 2008
BY CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: N.A.
DESIGN	BEA	JVY	VERT: N.A.
XREF:			
DWG: P:\PSE Project\2005054\DWGS\COVER_NOTES_DETAILS_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
COVER SHEET

JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 1 OF 34

JEFFREY A. VANDER YACHT, STATE OF WASHINGTON, 37432, REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/07

00390.001 7.10.09 DA

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com

EXISTING FEATURE SYMBOL LEGEND

- = EXISTING MONUMENT (AS NOTED)
- = EXISTING/SET TEMPORARY BENCHMARK/BENCHMARK
- = EXISTING STORM DRAIN CATCH BASIN MANHOLE
- = EXISTING CATCH BASIN
- = EXISTING SANITARY SEWER MANHOLE
- = EXISTING SANITARY SEWER SERVICE
- = EXISTING GATE VALVE
- = EXISTING WATER METER
- = EXISTING FIRE HYDRANT
- = EXISTING POWER POLE
- = EXISTING POWER POLE W/DROP
- = EXISTING GROUND GUY
- = EXISTING TELEPHONE PEDESTAL/RISER
- = EXISTING LANDSCAPE TREE/UNKNOWN SPECIES TREE
- = EXISTING FRUIT TREE

EXISTING LINE LEGEND

- = EXISTING ROADWAY CENTERLINE
- = EXISTING RIGHT OF WAY LINE
- = EXISTING EDGE OF ASPHALT
- = EXISTING EDGE OF CONCRETE
- = EXISTING CONCRETE PAD
- = EXISTING EDGE OF GRAVEL ROAD
- = EXISTING EDGE OF DIRT ROAD
- = EXISTING STORM CULVERT
- SD = EXISTING STORM DRAIN LINE
- SS = EXISTING SANITARY SEWER LINE
- W = EXISTING WATER LINE
- OHE = EXISTING OVERHEAD ELECTRIC LINES
- UGE = EXISTING UNDERGROUND POWER
- UTV = EXISTING UNDERGROUND TV CABLE LINE
- OTV = EXISTING OVERHEAD TV CABLE LINE
- UCM = EXISTING UNDERGROUND COMMUNICATIONS LINE
- OCM = EXISTING OVERHEAD COMMUNICATIONS LINE
- UPH = EXISTING UNDERGROUND TELEPHONE LINE
- OPH = EXISTING OVERHEAD TELEPHONE LINE
- UTR = EXISTING UNDERGROUND TRAFFIC SIGNAL LINE
- UFO = EXISTING UNDERGROUND FIBER OPTIC LINE
- OFO = EXISTING OVERHEAD FIBER OPTIC LINE
- G = EXISTING UNDERGROUND GAS LINE
- UFL = EXISTING UNDERGROUND FUEL LINE
- = EXISTING FLOW LINE
- = EXISTING EDGE OF TREES & BRUSH
- = EXISTING EDGE OF LANDSCAPED AREA
- = EXISTING CHAINLINK FENCE
- X = EXISTING WOOD FENCE

SURVEY NOTES

1) DATA FOR THIS SURVEY WAS GATHERED BY FIELD TRAVERSE UTILIZING ELECTRONIC DATA COLLECTION.

2) EQUIPMENT USED: THEOMAT 00'01.5"
EDM: ± 2 PPM, ± 3 MM

3) HORIZONTAL DATUM: CITY OF FERNDALE COMPREHENSIVE MAPPING
BASIS OF BEARINGS: NAD 83/91 WA. ST. NORTH ZONE
MEASURED BEARING BETWEEN CITY OF FERNDALE PRIMARY CONTROL MONUMENTS "FERN 06" AND "FERN 03".
BEARING: N00°45'53"E

4) VERTICAL DATUM: NGVD 29 (CITY OF FERNDALE)
BENCH MARK: WSDOT GP37005-33, ELEV.=71.21' (NGVD 29)

TBM ON SITE: POWER POLE #9317 IN E. SIDE OF PORTAL WAY, ADJACENT TO PROJECT SITE. ELEV.= 50.26' (NGVD 29)

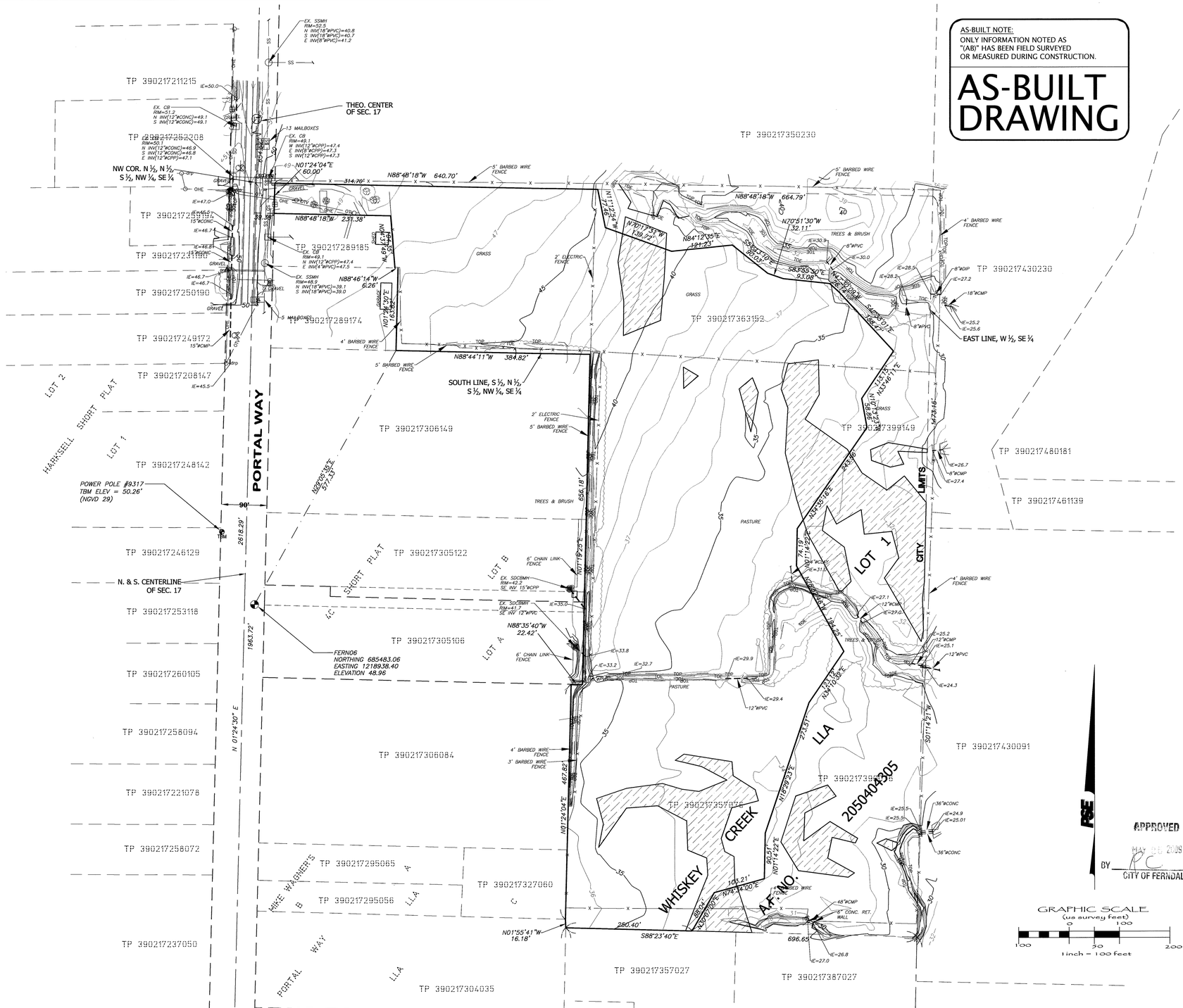
5) CONTOUR INTERVAL IS ONE-FOOT AND ARE COMPUTER GENERATED FROM GROUND FIELD TOPOGRAPHY GATHERED FOR THIS SURVEY UTILIZING ELECTRONIC DATA COLLECTION.

6) EXTERIOR BOUNDARY INFORMATION IS SHOWN DIRECTLY FROM THE "WHISKEY CREEK LOT LINE ADJUSTMENT," AS PER THE MAP THEREOF, RECORDED UNDER WHATCOM COUNTY AUDITOR'S FILE NUMBER 2050404305. (PSE HAS NOT REVIEWED SAID LOT LINE ADJUSTMENT, NOR IS IT WITHIN OUR SCOPE OF WORK, AND THEREBY CAN ASSUME NO LIABILITY FOR THE CONTENT THEREON)

7) PSE FIELD CREWS LOCATED THE BASE FLOOD ELEVATION CONTOUR LINE AND WETLANDS FLAGGING IN FEBRUARY AND APRIL 2005, RESPECTIVELY.

8) WETLANDS SHOWN HEREON ARE AS DELINEATED IN THE FIELD BY AQUA TERR SERVICES INC. IN APRIL 2005.

7) PACIFIC SURVEYING AND ENGINEERING INC., ASSUMES NO LIABILITY FOR ANY SUBSURFACE CONDITIONS OR FEATURES THAT MAY EXIST THAT ARE UNDETECTABLE AND/OR NOT VISIBLE.



AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
MAY 26 2009
BY RC
CITY OF FERNDALE

GRAPHIC SCALE
(us survey feet)
0 100
100 50 200
1 inch = 100 feet

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: N.A.
DESIGN	BEA	JVY	VERT: N.A.
XREF:			
DWG: P:\Pse Project\2005054\DWGS\x-PSE_TOPO_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS

EXISTING CONDITIONS MAP

JOB #: 2005054
SHEET 2 OF 34

BRENDA A. VANDERHAAR
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/09

DD 10-11-07 00340.002

PSE
PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com

CONSTRUCTION NOTES:

1) THE SITE SHALL BE CLEARED TO THE CLEARING LIMITS SHOWN ON THE TEMPORARY EROSION AND SEDIMENT CONTROL PLAN (SHEET 29) EXCEPT WHERE PRESERVATION OF NATURAL VEGETATION IS NOTED.

2) GRUBBING SHALL BE LIMITED TO AREAS REQUIRED FOR CONSTRUCTION OF ROADWAYS, PONDS, AND UTILITIES IN ADDITION TO THE GRUBBING OF LOTS 12 THROUGH 37 THAT IS REQUIRED FOR PREPARATION OF EMBANKMENT FILL.

3) STRUCTURES AND OBSTRUCTIONS WITHIN THE CLEARING LIMITS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

EASEMENT NOTES:

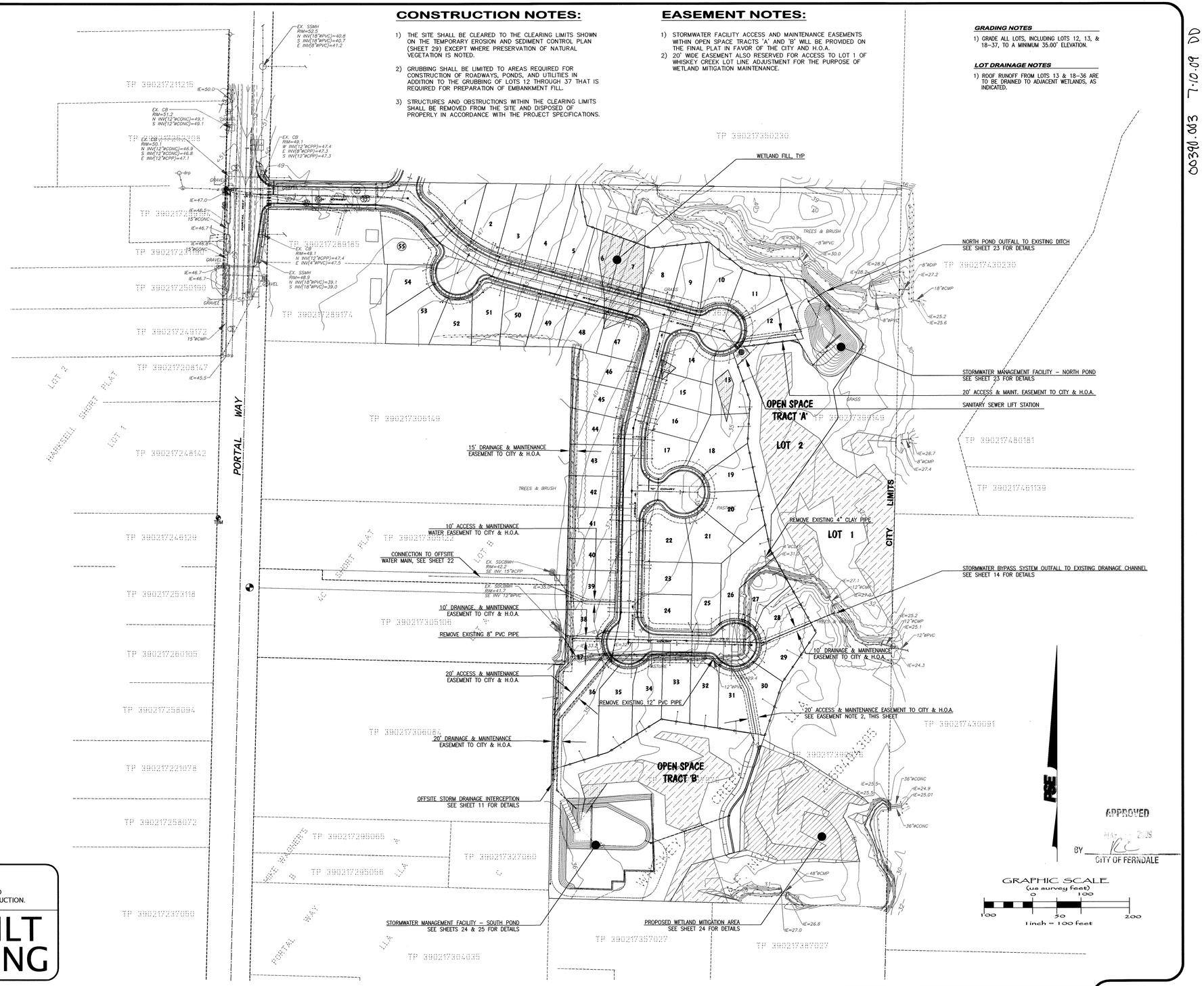
1) STORMWATER FACILITY ACCESS AND MAINTENANCE EASEMENTS WITHIN OPEN SPACE TRACTS 'A' AND 'B' WILL BE PROVIDED ON THE FINAL PLAT IN FAVOR OF THE CITY AND H.O.A.
2) 20' WIDE EASEMENT ALSO RESERVED FOR ACCESS TO LOT 1 OF WHISKEY CREEK LOT LINE ADJUSTMENT FOR THE PURPOSE OF WETLAND MITIGATION MAINTENANCE.

GRADING NOTES

1) GRADE ALL LOTS, INCLUDING LOTS 12, 13, & 18-37, TO A MINIMUM 35.00' ELEVATION.

LOT DRAINAGE NOTES

1) ROOF RUNOFF FROM LOTS 13 & 18-36 ARE TO BE DRAINED TO ADJACENT WETLANDS, AS INDICATED.



APPROVED
BY
CITY OF FERNDALE

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 50'
DESIGN	BEA	JVY	VERT: N.A.
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

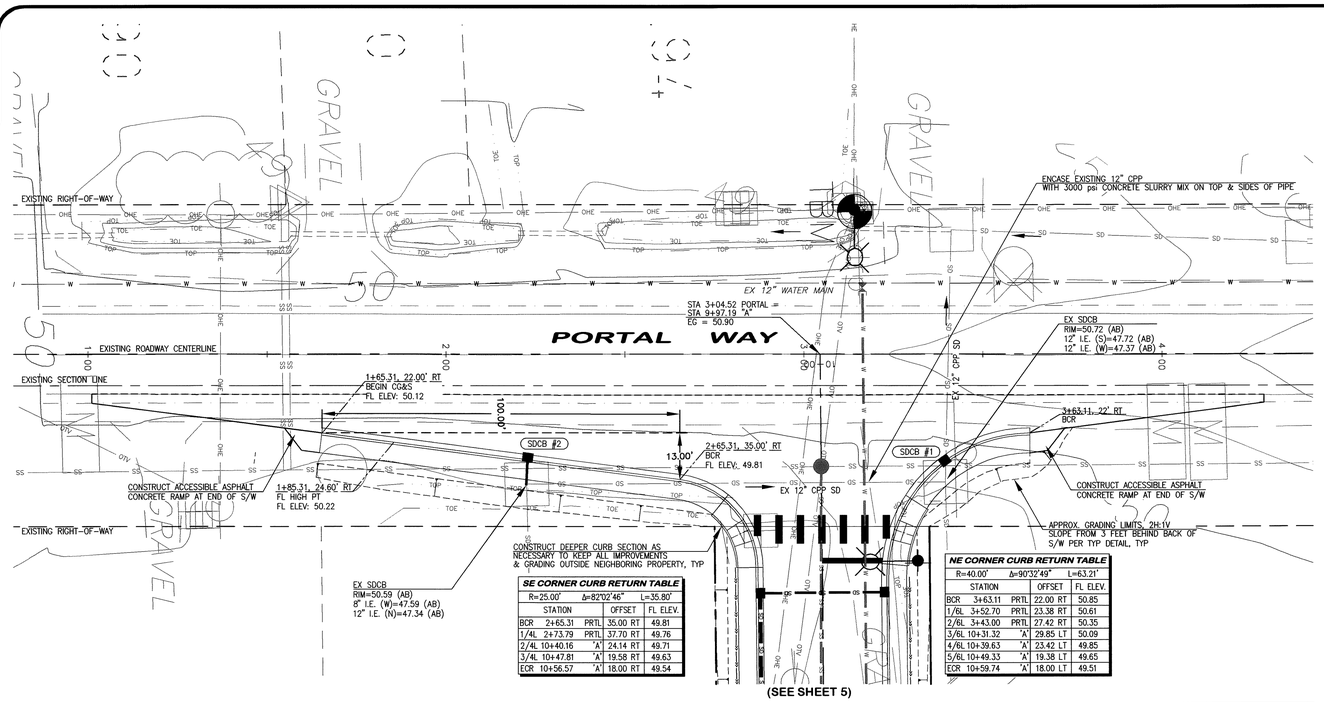
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
PROJECT OVERVIEW MAP

JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 3 OF 34

BRYAN E. VANDERHOEF
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/07

00390.003 7-10-09 DD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



SE CORNER CURB RETURN TABLE

R=25.00'		Δ=82°02'46"		L=35.80'
STATION			OFFSET	FL ELEV.
BCR	2+65.31	PRTL	35.00 RT	49.81
1/4L	2+73.79	PRTL	37.70 RT	49.76
2/4L	10+40.16	'A'	24.14 RT	49.71
3/4L	10+47.81	'A'	19.58 RT	49.63
ECR	10+56.57	'A'	18.00 RT	49.54

NE CORNER CURB RETURN TABLE

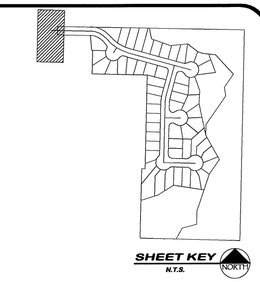
R=40.00'		Δ=90°32'49"		L=63.21'
STATION			OFFSET	FL ELEV.
BCR	3+63.11	PRTL	22.00 RT	50.85
1/6L	3+52.70	PRTL	23.38 RT	50.61
2/6L	3+43.00	PRTL	27.42 RT	50.35
3/6L	10+31.32	'A'	29.85 LT	50.09
4/6L	10+39.63	'A'	23.42 LT	49.85
5/6L	10+49.33	'A'	19.38 LT	49.65
ECR	10+59.74	'A'	18.00 LT	49.51

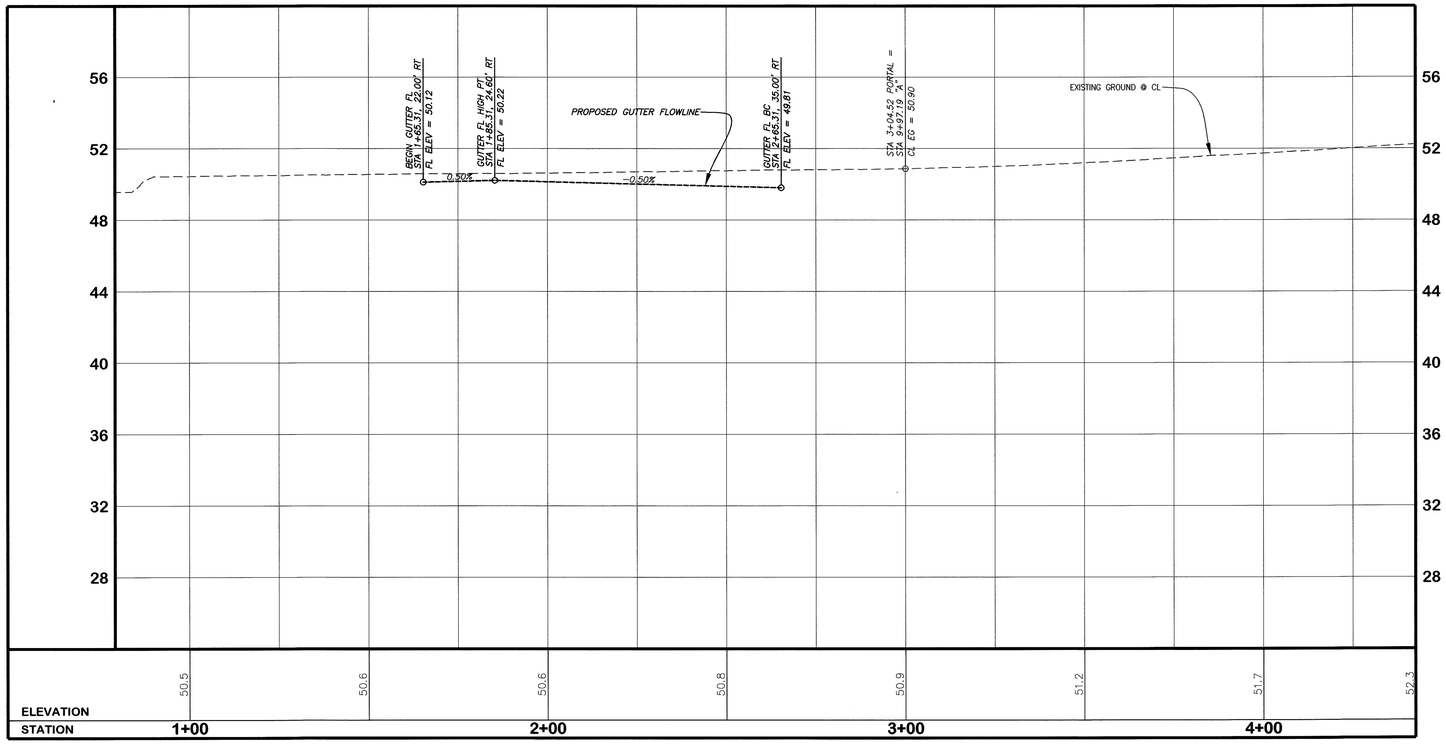
GRAPHIC SCALE
(us survey feet)
20 10 0 10 20 40
1 inch = 20 feet

STORM DRAINAGE NOTES

SDCB #1
3+39.69, 30.24' RT @ FL
TYPE 1 W/ THRU CURB F&G
RIM=50.17 (AB)
12" I.E. (E)=47.17 (AB)
12" I.E. (W)=47.07 (AB)

SDCB #2
2+22.77, 29.45' RT @ FL
TYPE 1 W/ THRU CURB F&G
RIM=49.98 (AB)
8" I.E. (E)=47.88 (AB)





HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RC
CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS

PORTAL WAY

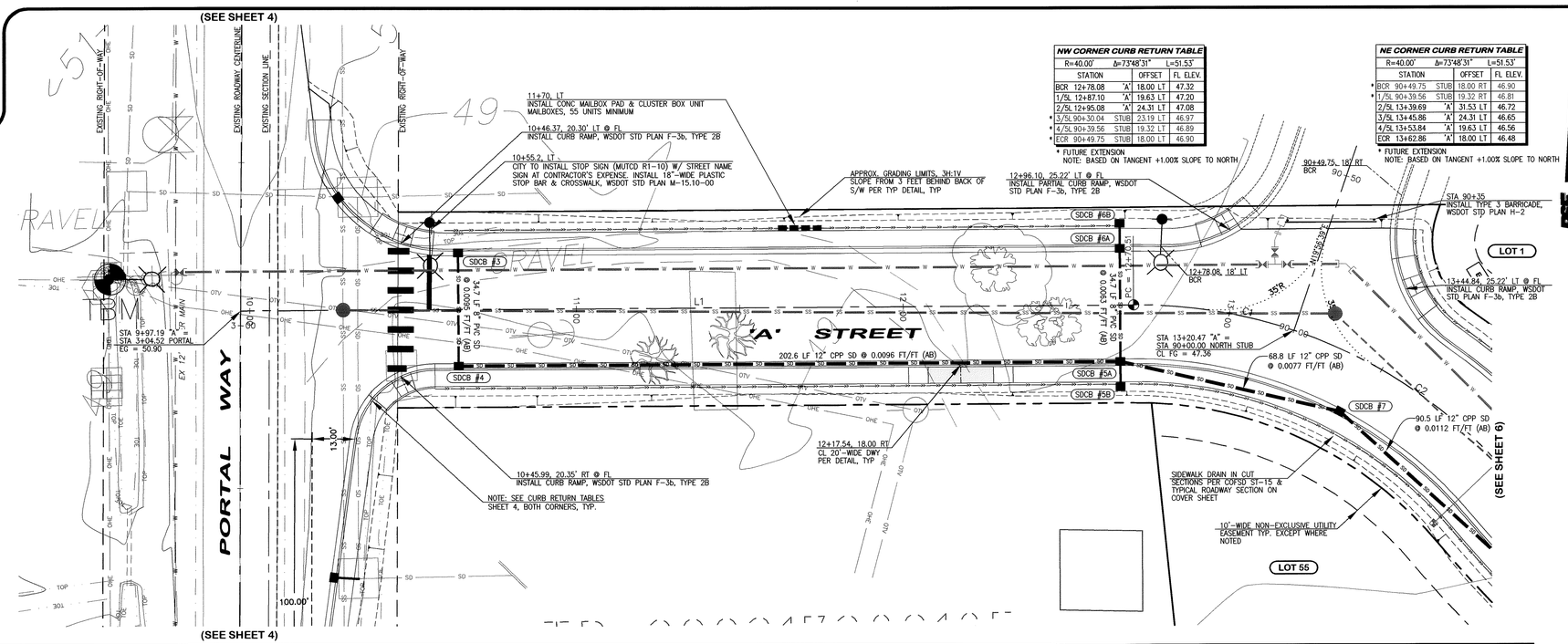
ROADWAY & STORM DRAINAGE IMPROVEMENTS

JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 4 OF 34

JEFFREY A. VANDERHAM
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

0039C.004 7-10-09 DD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



NW CORNER CURB RETURN TABLE

R=40.00' Δ=73°48'31" L=51.53'

	STATION		OFFSET	FL ELEV.
	BCR 12+78.08	"A"	18.00 LT	47.32
	1/5L 12+87.10	"A"	19.63 LT	47.20
	2/5L 12+95.08	"A"	24.31 LT	47.08
*	3/5L 90+30.04	STUB	23.19 LT	46.97
*	4/5L 90+39.56	STUB	19.32 LT	46.89
*	ECR 90+49.75	STUB	18.00 LT	46.90

* FUTURE EXTENSION
NOTE: BASED ON TANGENT +1.00% SLOPE TO NORTH

NE CORNER CURB RETURN TABLE

R=40.00' Δ=73°48'31" L=51.53'

	STATION		OFFSET	FL ELEV.
*	BCR 90+49.75	STUB	18.00 RT	46.90
*	1/5L 90+39.56	STUB	19.32 RT	46.81
	2/5L 13+39.69	"A"	31.53 LT	46.72
	3/5L 13+45.86	"A"	24.31 LT	46.65
	4/5L 13+53.84	"A"	19.63 LT	46.56
	ECR 13+62.86	"A"	18.00 LT	46.48

* FUTURE EXTENSION
NOTE: BASED ON TANGENT +1.00% SLOPE TO NORTH

GRAPHIC SCALE
(us survey feet)
1 inch = 20 feet

SHEET KEY
N.T.S.

STORM DRAINAGE NOTES

SDCB #3
10+63.85, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=49.97
RIM=49.34 (AB)
8" I.E. (S)=46.94 (AB)

SDCB #4
10+63.85, 18.00' RT @ FL
TYPE 1, W/ THRU CURB F&G
TFC=49.97
RIM=49.41 (AB)
8" I.E. (N)=46.61 (AB)
12" I.E. (E)=46.16 (AB)

SDCB #5A
12+66.41, 18.00' RT @ FL
TYPE 1, W/ THRU CURB F&G
TFC=47.94
RIM=47.42 (AB)
8" I.E. (N)=44.52 (AB)
8" I.E. (S)=44.72 (AB)
12" I.E. (W)=44.22 (AB)
12" I.E. (E)=44.12 (AB)

SDCB #5B
12+66.41, 25.04' RT @ CTR
TYPE 1 W/ STD F&G
RIM=48.08 (AB)
8" I.E. (N)=44.68 (AB)

SDCB #6A
12+66.41, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=47.94
RIM=47.54 (AB)
8" I.E. (N)=45.14 (AB)
8" I.E. (S)=44.74 (AB)

SDCB #6B
12+66.41, 25.04' LT @ CTR
TYPE 1 W/ STD F&G
RIM=47.99 (AB)
8" I.E. (S)=45.14 (AB)

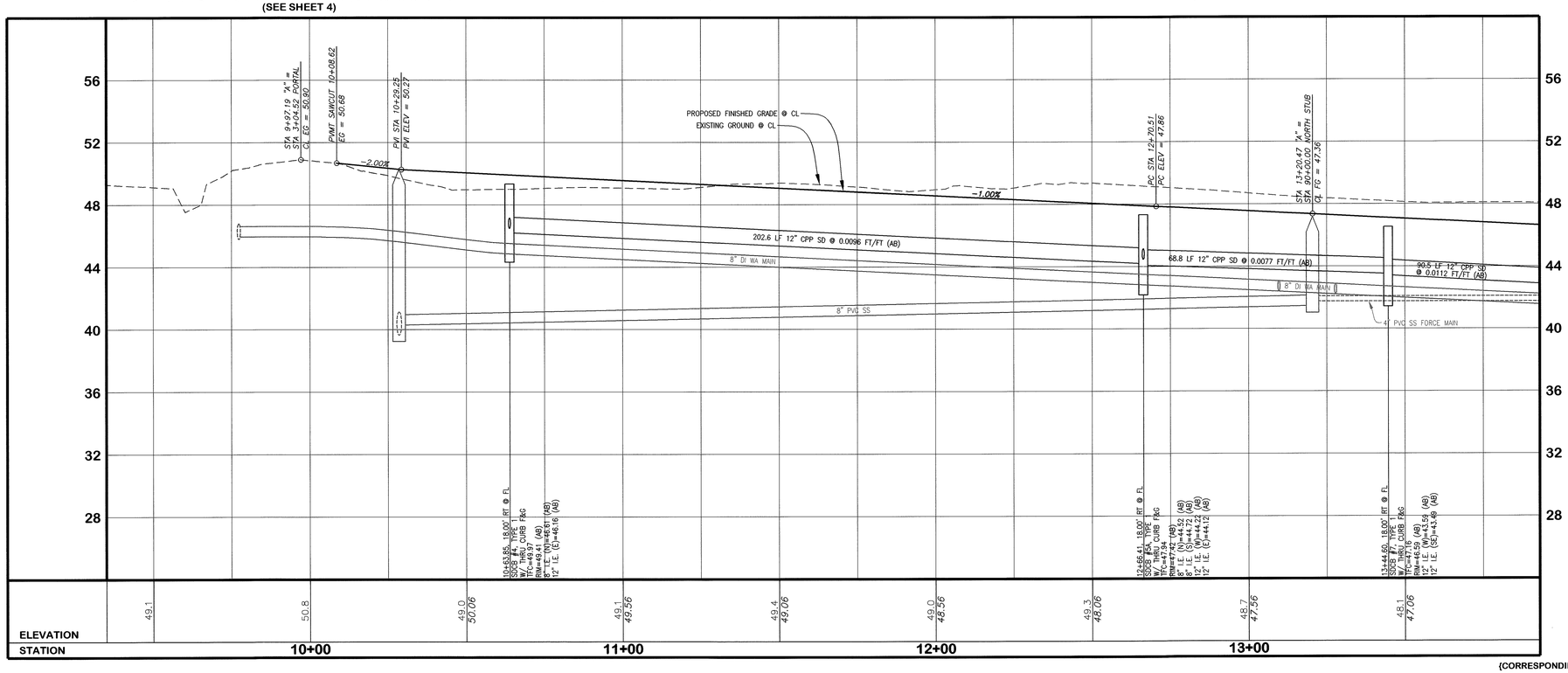
SDCB #7
13+44.60, 18.00' RT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=47.16
RIM=46.59 (AB)
12" I.E. (W)=43.59 (AB)
12" I.E. (SE)=43.49 (AB)

LINE TABLE ~ ROADWAY CENTERLINE

LINE	LENGTH	BEARING	DESCRIPTION
L1	273.33'	S89°08'19"E	"A" STREET

CURVE TABLE ~ ROADWAY CENTERLINE

CURVE	DELTA	RADIUS	LENGTH	DESCRIPTION
C1	19°04'58"	150.00'	49.96'	"A" STREET
C2	31°23'36"	150.00'	82.19'	"A" STREET



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RC
CITY OF FERNDALE

{CORRESPONDING WATER & SANITARY SEWER IMPROVEMENTS SEE SHEET 15}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

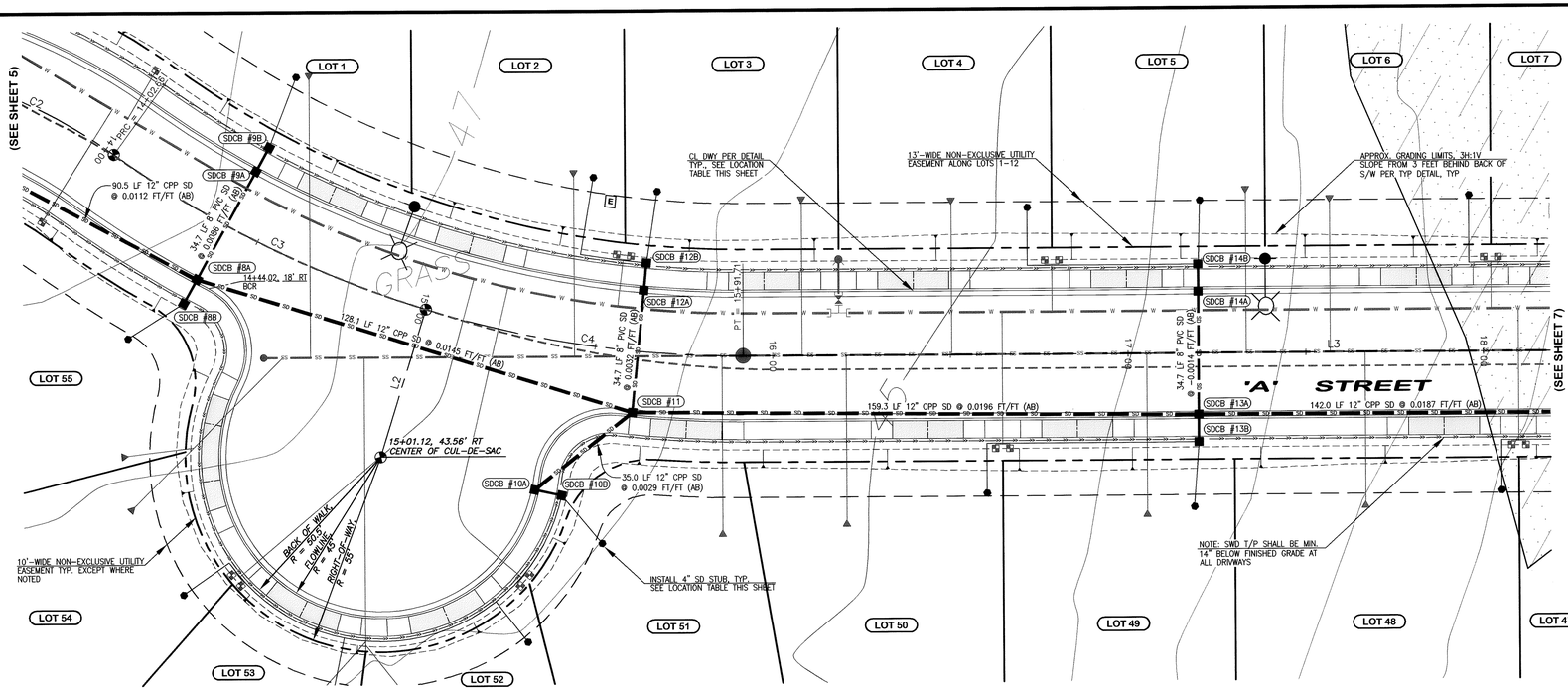
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

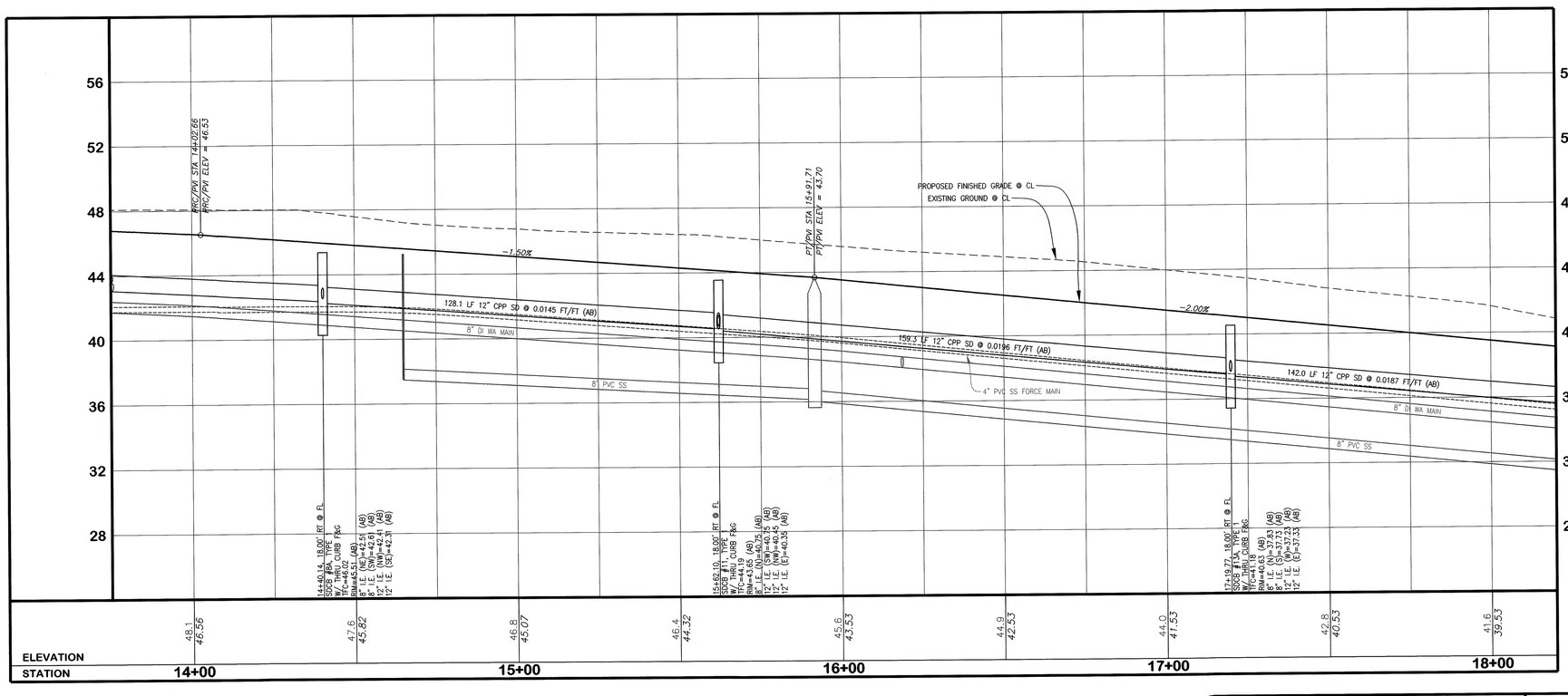
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'A' STREET ~ STATIONS
10+00 to 13+75
ROADWAY & STORM DRAINAGE IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 5 OF 34

STEPHEN A. VANDER STOEP
STATE OF WASHINGTON
374.32
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

2005054 PSE 7-10-07 DD

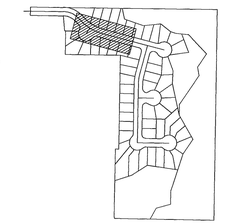
PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com





HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 4'

GRAPHIC SCALE
(us survey feet)
0 10 20 40
1 inch = 20 feet



SHEET KEY
N.T.S.

STORM DRAINAGE NOTES

SDCB #8A
14+40.14, 18.00' RT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=46.02
RIM=45.51 (AB)
8" I.E. (NE)=42.51 (AB)
8" I.E. (SW)=42.61 (AB)
12" I.E. (NW)=42.41 (AB)
12" I.E. (SE)=42.31 (AB)

SDCB #8B
14+40.14, 25.04' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=46.04 (AB)
8" I.E. (NE)=42.84 (AB)

SDCB #9A
14+40.14, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=46.02
RIM=45.51 (AB)
8" I.E. (NE)=42.81 (AB)
8" I.E. (SW)=42.81 (AB)

SDCB #9B
14+40.14, 25.04' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=46.03 (AB)
8" I.E. (SW)=42.88 (AB)

SDCB #10A
15+40.49, 42.56' RT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=44.51
RIM=43.65 (AB)
8" I.E. (E)=40.75 (AB)
12" I.E. (NE)=40.85 (AB)

SDCB #10B
15+46.64, 42.94' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=44.47 (AB)
8" I.E. (W)=41.17 (AB)

SDCB #11
15+62.10, 18.00' RT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=44.19
RIM=43.65 (AB)
8" I.E. (N)=40.75 (AB)
12" I.E. (SW)=40.75 (AB)
12" I.E. (NW)=40.45 (AB)
12" I.E. (E)=40.35 (AB)

SDCB #12A
15+62.10, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=44.19
RIM=43.56 (AB)
8" I.E. (N)=40.96 (AB)
8" I.E. (S)=40.86 (AB)

SDCB #12B
15+62.10, 25.04' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=44.27 (AB)
8" I.E. (S)=41.27 (AB)

SDCB #13A
17+19.77, 18.00' RT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=41.18
RIM=40.63 (AB)
8" I.E. (N)=37.83 (AB)
8" I.E. (S)=37.73 (AB)
12" I.E. (W)=37.23 (AB)
12" I.E. (E)=37.33 (AB)

SDCB #13B
17+19.77, 25.04' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=41.15 (AB)
8" I.E. (N)=37.65 (AB)

SDCB #14A
17+19.77, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=41.18
RIM=40.58 (AB)
8" I.E. (N)=38.18 (AB)
8" I.E. (S)=37.78 (AB)

SDCB #14B
17+19.77, 25.04' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=41.30 (AB)
8" I.E. (S)=38.60 (AB)

STORM STUB LOCATION TABLE

LOT No.	STREET	STA & OFFSET @ STUB			DESIGN STUB I.E.	AS-BUILT STUB I.E.	
1	"A" STREET	14+34.3	45.0	LT	43.3	44.3	(AB)
2	"A" STREET	15+46.9	45.0	LT	41.7	43.4	(AB)
3	"A" STREET	15+62.1	45.0	LT	41.4	41.7	(AB)
4	"A" STREET	16+72.9	45.0	LT	39.4	40.7	(AB)
5	"A" STREET	17+19.8	45.0	LT	38.4	39.8	(AB)
6	"A" STREET	17+95.6	45.0	LT	36.7	38.6	(AB)
48	"A" STREET	18+04.6	45.0	RT	36.3	38.3	(AB)
49	"A" STREET	17+19.8	45.0	RT	38.2	39.8	(AB)
50	"A" STREET	16+57.2	45.0	RT	39.4	40.6	(AB)
51	"A" STREET	15+60.4	55.8	RT	41.6	42.8	(AB)
52	"A" STREET	15+44.0	85.2	RT	41.8	43.5	(AB)
53	"A" STREET	15+06.2	113.3	RT	42.0	44.0	(AB)
54	"A" STREET	14+62.4	101.3	RT	42.3	44.6	(AB)
55	"A" STREET	14+26.6	45.0	RT	43.1	44.5	(AB)

DRIVEWAY CENTERLINE TABLE

LOT No.	STREET	STA & OFFSET @ FL			WIDTH
1	"A" STREET	14+63.82	18.00	LT	20.00
2	"A" STREET	15+08.51	18.00	LT	20.00
3	"A" STREET	15+97.67	18.00	LT	20.00
4	"A" STREET	16+39.67	18.00	LT	20.00
5	"A" STREET	16+99.67	18.00	LT	20.00
6	"A" STREET	17+81.17	18.00	LT	20.00
48	"A" STREET	17+88.82	18.00	RT	20.00
49	"A" STREET	16+85.62	18.00	RT	20.00
50	"A" STREET	16+43.62	18.00	RT	20.00
51	"A" STREET	15+76.61	18.00	RT	20.00
52	"A" STREET	15+23.80	79.34	RT	20.00
53	"A" STREET	14+95.12	87.97	RT	20.00
54	"A" STREET	14+64.70	58.18	RT	30.00
55	"A" STREET				

LINE TABLE ~ ROADWAY CENTERLINE

LINE	LENGTH	BEARING	DESCRIPTION
L2	43.56'	N32°32'02"E	"A" ST CUL-DE-SAC
L3	332.11'	S74°46'01"E	"A" STREET

CURVE TABLE ~ ROADWAY CENTERLINE

CURVE	DELTA	RADIUS	LENGTH	DESCRIPTION
C2	31°23'36"	150.00'	82.19'	"A" STREET
C3	18°48'14"	300.00'	98.46'	"A" STREET
C4	17°18'03"	300.00'	90.59'	"A" STREET

'A' STREET CUL-DE-SAC CURB RETURN TABLE

R=20.00' Δ=89°26'02" L=31.22'			
STATION		OFFSET	FL ELEV.
BCR 14+44.02	'A'	18.00 RT	45.46
1/3L 14+53.32	'A'	20.80 RT	45.35
2/3L 14+59.79	'A'	28.34 RT	45.27
ECR 14+61.76	'A'	38.39 RT	45.21
R=45.00'	Δ=200°40'42"		L=157.61'
STATION		OFFSET	FL ELEV.
BCR 14+61.76	'A'	38.39 RT	45.21
1/15L 14+62.37	'A'	48.85 RT	45.16
2/15L 14+64.95	'A'	58.89 RT	45.10
3/15L 14+69.22	'A'	68.00 RT	45.02
4/15L 14+74.89	'A'	75.79 RT	44.94
5/15L 14+81.62	'A'	81.92 RT	44.85
6/15L 14+89.12	'A'	86.14 RT	44.76
7/15L 14+97.07	'A'	88.29 RT	44.65
8/15L 15+05.17	'A'	88.29 RT	44.54
9/15L 15+13.12	'A'	86.14 RT	44.44
10/15L 15+20.61	'A'	81.92 RT	44.34
11/15L 15+27.35	'A'	75.79 RT	44.25
12/15L 15+33.01	'A'	68.00 RT	44.17
13/15L 15+37.29	'A'	58.89 RT	44.10
14/15L 15+39.87	'A'	48.85 RT	44.04
ECR 15+40.48	'A'	38.39 RT	43.99
R=20.00' Δ=89°26'02" L=31.22'			
STATION		OFFSET	FL ELEV.
BCR 15+40.48	'A'	38.39 RT	43.99
1/3L 15+42.45	'A'	28.34 RT	43.93
2/3L 15+48.92	'A'	20.80 RT	43.85
ECR 15+58.22	'A'	18.00 RT	43.74

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RC
CITY OF FERNDALE

{CORRESPONDING WATER & SANITARY SEWER IMPROVEMENTS SEE SHEET 16}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	01/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

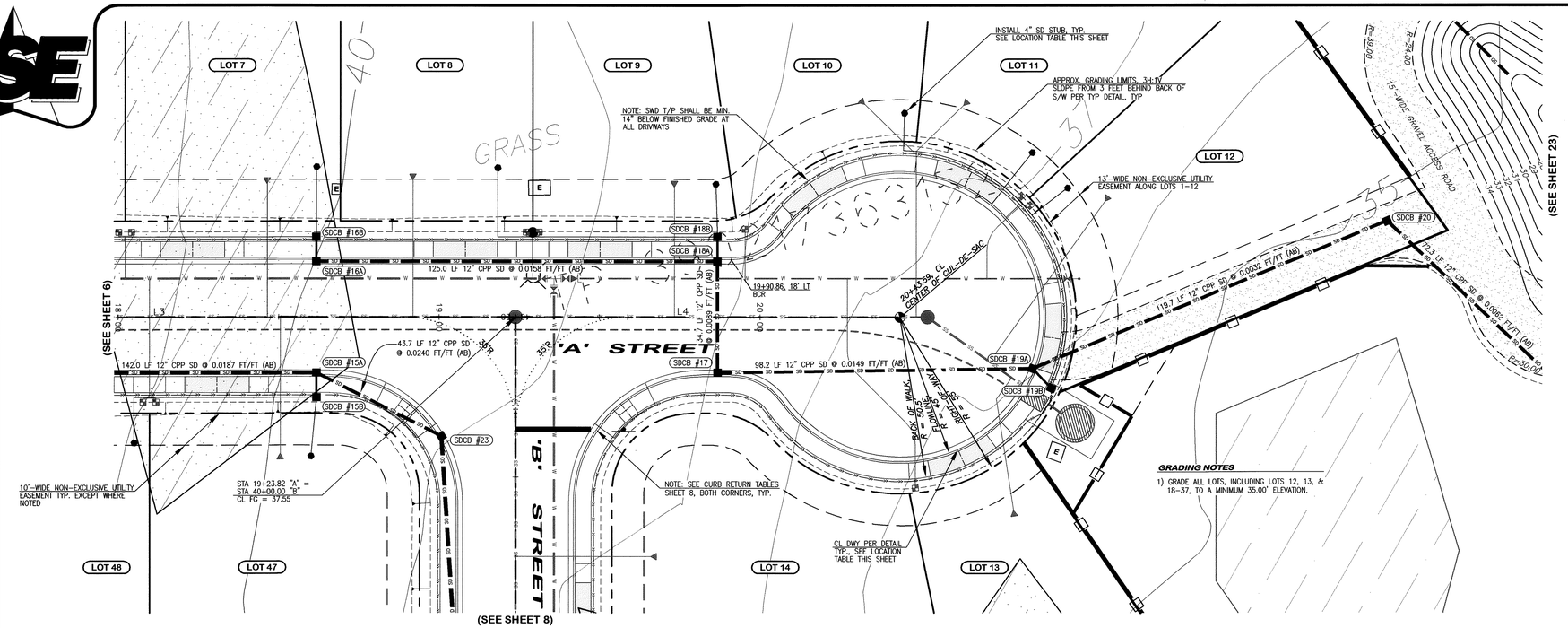
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

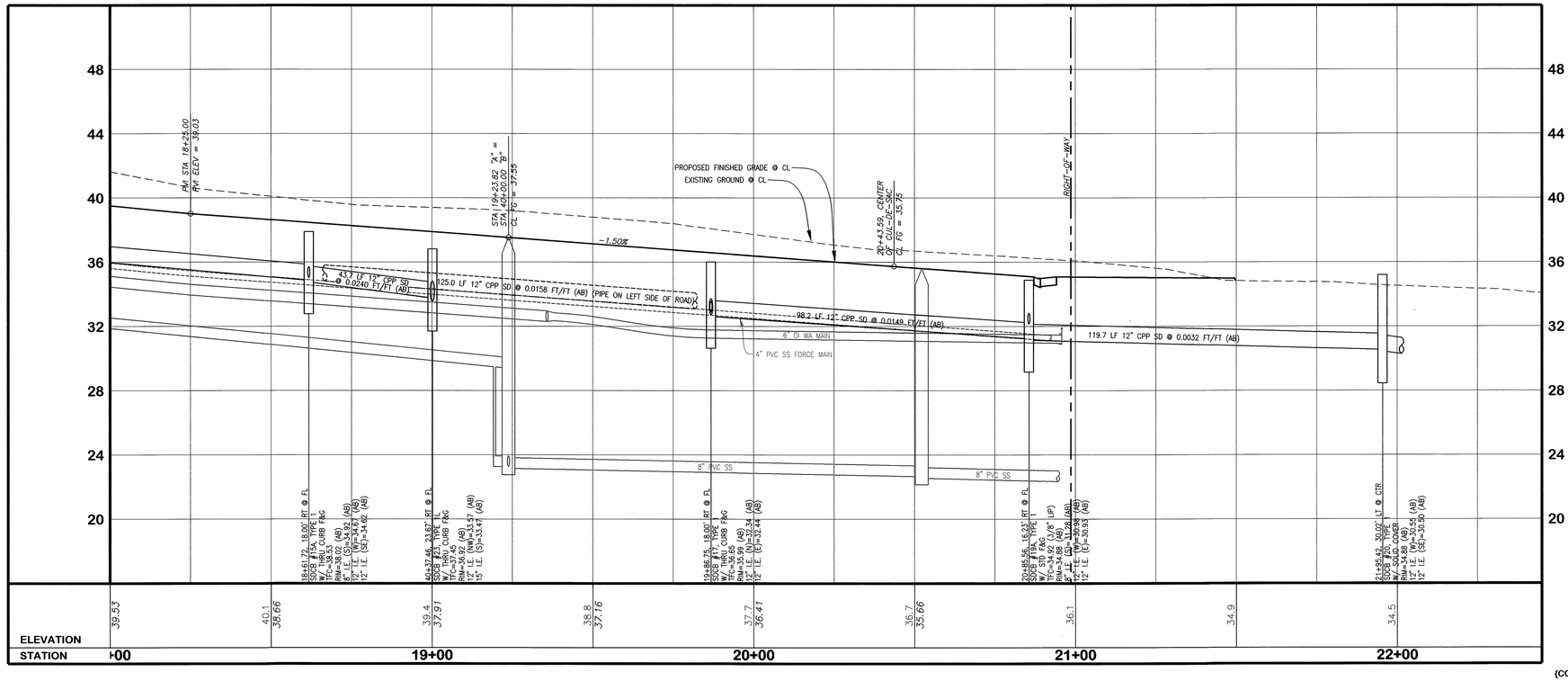
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'A' STREET ~ STATIONS 13+75 to 18+00
ROADWAY & STORM DRAINAGE IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 6 OF 34

BRENDA A. VANDERHAM
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/09

00340.006 7-10-09 DD

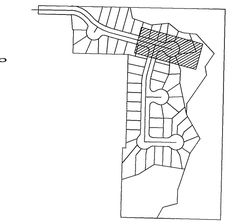
PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com





HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

GRAPHIC SCALE (us survey feet)
1 inch = 20 feet



STORM DRAINAGE NOTES

SDCB #15A
18+61.72, 18.00' RT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=38.53
RIM=38.02 (AB)
8" I.E. (S)=34.92 (AB)
12" I.E. (W)=34.67 (AB)
12" I.E. (SE)=34.62 (AB)

SDCB #15B
18+61.72, 25.04' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=38.62 (AB)
8" I.E. (N)=35.32 (AB)

SDCB #16A
18+61.72, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=38.53
RIM=37.87 (AB)
8" I.E. (N)=34.82 (AB)
12" I.E. (E)=34.77 (AB)

SDCB #16B
18+61.72, 25.04' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=38.48 (AB)
8" I.E. (S)=35.38 (AB)

SDCB #17
19+86.75, 18.00' RT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=36.65
RIM=35.99 (AB)
12" I.E. (N)=32.34 (AB)
12" I.E. (E)=32.44 (AB)

SDCB #18A
19+86.75, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=36.65
RIM=36.10 (AB)
8" I.E. (N)=32.90 (AB)
12" I.E. (W)=32.80 (AB)
12" I.E. (S)=32.65 (AB)

SDCB #18B
19+86.75, 25.04' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=36.80 (AB)
8" I.E. (S)=33.25 (AB)

SDCB #19A
20+85.56, 16.23' RT @ FL
TYPE 1 W/ STD F&G
TFC=34.92 (3/8" LIP)
RIM=34.88 (AB)
8" I.E. (S)=31.28 (AB)
12" I.E. (W)=30.98 (AB)
12" I.E. (E)=30.93 (AB)

SDCB #19B
20+90.73, 22.06' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=35.48 (AB)
8" I.E. (N)=31.43 (AB)

SDCB #20
21+95.42, 30.02' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=34.88 (AB)
12" I.E. (W)=30.55 (AB)
12" I.E. (SE)=30.50 (AB)

SDCB #23
40+37.46, 23.67' RT @ FL
TYPE 1L W/ THRU CURB F&G
TFC=37.45
RIM=36.92 (AB)
12" I.E. (NW)=33.57 (AB)
15" I.E. (S)=33.47 (AB)

STORM STUB LOCATION TABLE

LOT No.	STREET	STA & OFFSET @ STUB			DESIGN STUB I.E.	AS-BUILT STUB I.E.	
7	"A" STREET	18+61.7	45.0	LT	35.6	36.6	(AB)
8	"A" STREET	19+22.9	45.0	LT	34.6	36.4	(AB)
9	"A" STREET	19+79.7	45.0	LT	33.7	35.0	(AB)
10	"A" STREET	20+42.6	70.0	LT	33.4	34.7	(AB)
11	"A" STREET	20+89.6	52.8	LT	33.2	34.2	(AB)
12	"A" STREET	21+06.6	30.5	LT	33.0	34.5	(AB)
13	"B" STREET	41+43.6	200.3	LT	*	35.0	(AB)
14	"B" STREET	41+98.2	45.0	LT	33.9	35.8	(AB)
47	"A" STREET	18+61.7	45.0	RT	35.5	36.5	(AB)
48	"A" STREET	18+04.6	45.0	RT	36.3	38.3	(AB)

* NOTE: STUB DEPTHS WERE NOT IDENTIFIED ON THE DESIGN PLANS. AS-BUILT INFO SHOWN REFERS TO PORTION OF PIPE STUBBED TO LOTS. PIPE DISCHARGES TO GROUND SURFACE BEYOND SPLIT-RAIL FENCE.

DRIVEWAY CENTERLINE TABLE

LOT No.	STREET	STA & OFFSET @ FL			WIDTH
7	"A" STREET	18+23.17	18.00	LT	20.00
8	"A" STREET	19+08.17	18.00	LT	20.00
9	"A" STREET	19+50.17	18.00	LT	20.00
10	"A" STREET	20+18.53	37.37	LT	20.00
11	"A" STREET	20+63.52	40.35	LT	20.00
12	"A" STREET	20+87.94	7.63	RT	20.00
13	"A" STREET	20+61.70	41.19	RT	20.00
47	"A" STREET	18+30.82	18.00	RT	20.00

LINE TABLE ~ ROADWAY CENTERLINE

LINE	LENGTH	BEARING	DESCRIPTION
L3	332.11'	S74°46'01"E	"A" STREET
L4	119.77'	S74°46'01"E	"A" STREET

'A' STREET CUL-DE-SAC CURB RETURN TABLE

R=20.00' Δ=54°13'27" L=18.93'				
STATION			OFFSET	FL ELEV.
BCR	19+90.86	'A'	18.00 LT	36.09
1/2L	19+99.97	'A'	20.20 LT	35.95
ECR	20+07.08	'A'	26.31 LT	35.80
R=45.00' Δ=288°26'54" L=226.55'				
STATION			OFFSET	FL ELEV.
BCR	20+07.08	'A'	26.31 LT	35.80
1/22L	20+14.00	'A'	33.90 LT	35.68
2/22L	20+22.46	'A'	39.73 LT	35.57
3/22L	20+32.03	'A'	43.49 LT	35.47
4/22L	20+42.19	'A'	44.98 LT	35.37
5/22L	20+52.43	'A'	44.12 LT	35.28
6/22L	20+62.21	'A'	40.97 LT	35.19
7/22L	20+71.02	'A'	35.67 LT	35.10
8/22L	20+78.40	'A'	28.52 LT	35.01
9/22L	20+83.96	'A'	19.88 LT	34.93
10/22L	20+87.42	'A'	10.21 LT	34.92
11/22L	20+88.59	'A'	CL	35.98
12/22L	20+87.42	'A'	10.21 RT	35.04
13/22L	20+83.96	'A'	19.88 RT	35.10
14/22L	20+78.40	'A'	28.52 RT	35.16
15/22L	20+71.02	'A'	35.67 RT	35.23
16/22L	20+62.21	'A'	40.97 RT	35.30
17/22L	20+52.43	'A'	44.12 RT	35.38
18/22L	20+42.19	'A'	44.98 RT	35.45
19/22L	20+32.03	'A'	43.49 RT	35.53
20/22L	20+22.46	'A'	39.73 RT	35.61
21/22L	20+14.00	'A'	33.90 RT	35.70
ECR	20+07.08	'A'	26.31 RT	35.81
R=20.00' Δ=54°13'27" L=18.93'				
STATION			OFFSET	FL ELEV.
BCR	20+07.08	'A'	26.31 RT	35.81
1/2L	19+99.97	'A'	20.20 RT	35.96
ECR	19+90.86	'A'	18.00 RT	36.09

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY _____ CITY OF FERNDALE

{CORRESPONDING WATER & SANITARY SEWER IMPROVEMENTS SEE SHEET 13}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

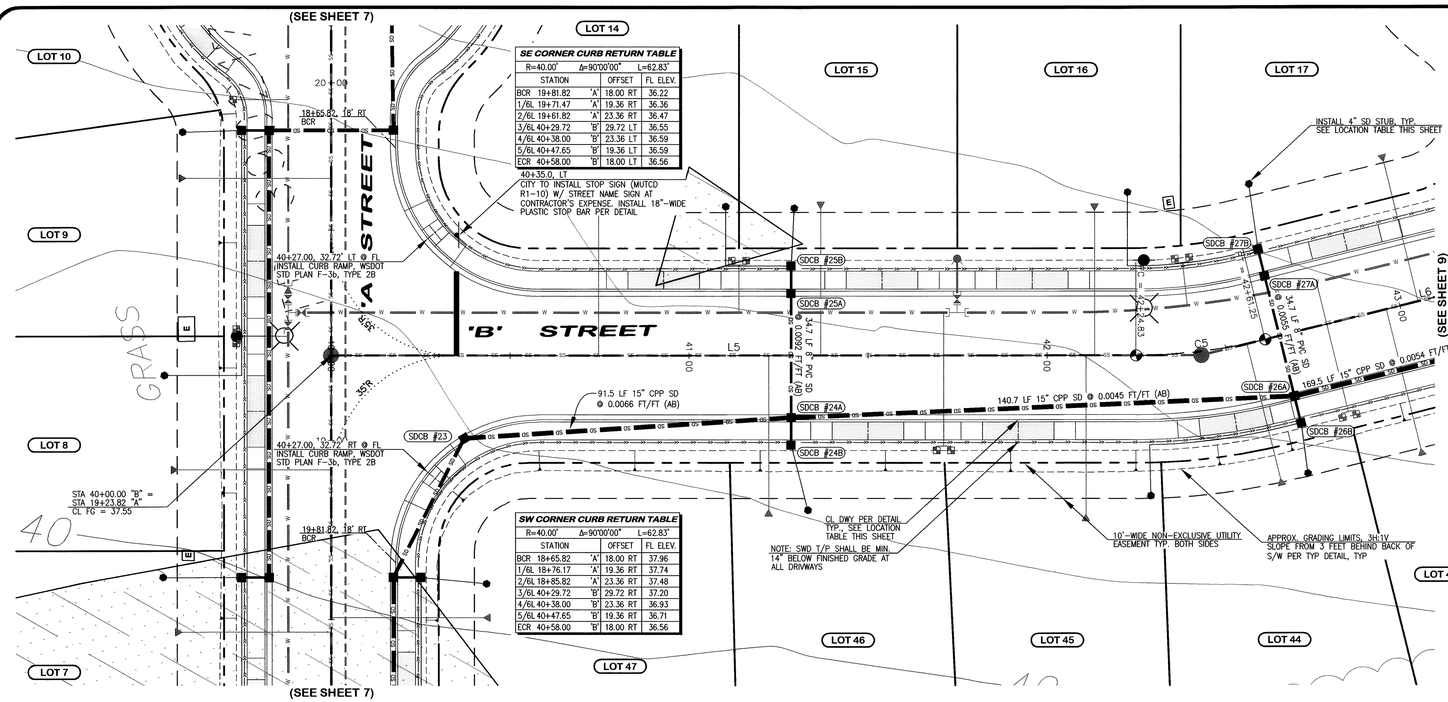
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'A' STREET ~ STATIONS 18+00 to 22+00
ROADWAY & STORM DRAINAGE IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 7 OF 34

SABRINA A. VANDERHAEGE, STATE OF WASHINGTON, 37432, REGISTERED PROFESSIONAL ENGINEER, 10-11-07
EXPIRES: 10/10/09

00390.007 7-10-09 DD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



SE CORNER CURB RETURN TABLE

R=40.00' Δ=90°00'00" L=62.83'

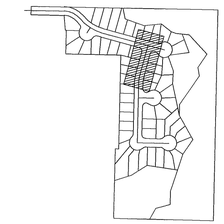
STATION		OFFSET	FL ELEV.
BCR 19+81.82	'A'	18.00 RT	36.22
1/6L 19+71.47	'A'	19.36 RT	36.36
2/6L 19+61.82	'A'	23.36 RT	36.47
3/6L 40+29.72	'B'	29.72 LT	36.55
4/6L 40+38.00	'B'	23.36 LT	36.59
5/6L 40+47.65	'B'	19.36 LT	36.59
ECR 40+58.00	'B'	18.00 LT	36.56

SW CORNER CURB RETURN TABLE

R=40.00' Δ=90°00'00" L=62.83'

STATION		OFFSET	FL ELEV.
BCR 18+65.82	'A'	18.00 RT	37.96
1/6L 18+76.17	'A'	19.36 RT	37.74
2/6L 18+85.82	'A'	23.36 RT	37.48
3/6L 40+29.72	'B'	29.72 RT	37.20
4/6L 40+38.00	'B'	23.36 RT	36.93
5/6L 40+47.65	'B'	19.36 RT	36.71
ECR 40+58.00	'B'	18.00 RT	36.56

GRAPHIC SCALE (us survey feet)
1 inch = 20 feet



SHEET KEY
N.T.S.

STORM DRAINAGE NOTES

SDCB #23
40+37.46, 23.67' RT @ FL
TYPE 1L W/ THRU CURB F&G
TFC=37.45
RIM=36.92 (AB)
12" I.E. (NW)=33.57 (AB)
15" I.E. (S)=33.47 (AB)

SDCB #24A
41+28.47, 18.00' RT @ FL
TYPE 1L W/ THRU CURB F&G
TFC=36.70
RIM=36.07 (AB)
8" I.E. (W)=33.47 (AB)
8" I.E. (E)=33.02 (AB)
15" I.E. (N)=32.87 (AB)
15" I.E. (S)=32.77 (AB)

SDCB #24B
41+28.47, 25.04' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=36.75 (AB)
8" I.E. (E)=33.75 (AB)

SDCB #25A
41+28.47, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=36.70
RIM=36.14 (AB)
8" I.E. (E)=33.39 (AB)
8" I.E. (W)=33.34 (AB)

SDCB #25B
41+28.47, 25.04' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=36.69 (AB)
8" I.E. (W)=33.44 (AB)

SDCB #26A
42+65.35, 18.00' RT @ FL
TYPE 1L W/ THRU CURB F&G
TFC=36.02
RIM=35.43 (AB)
8" I.E. (W)=32.58 (AB)
8" I.E. (E)=32.33 (AB)
15" I.E. (N)=32.13 (AB)
15" I.E. (S)=32.13 (AB)

SDCB #26B
42+65.35, 25.04' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=35.79 (AB)
8" I.E. (E)=33.59 (AB)

SDCB #27A
42+65.35, 18.00' LT @ CTR
TYPE 1 W/ THRU CURB F&G
TFC=36.02
RIM=35.42 (AB)
8" I.E. (E)=32.57 (AB)
8" I.E. (W)=32.52 (AB)

SDCB #27B
42+65.35, 25.04' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=36.01 (AB)
8" I.E. (W)=32.96 (AB)

STORM STUB LOCATION TABLE

LOT No.	STREET	STA & OFFSET @ STUB			DESIGN STUB I.E.	AS-BUILT STUB I.E.	
15	"B" STREET	41+28.5	45.0	LT	33.7	34.5	(AB)
16	"B" STREET	42+31.5	45.0	LT	33.2	35.0	(AB)
17	"B" STREET	42+65.4	45.0	LT	32.9	34.4	(AB)
44	"B" STREET	42+65.4	45.0	RT	33.0	34.5	(AB)
45	"B" STREET	42+19.3	45.0	RT	33.2	34.9	(AB)
46	"B" STREET	41+28.5	45.0	RT	33.7	35.5	(AB)

DRIVEWAY CENTERLINE TABLE

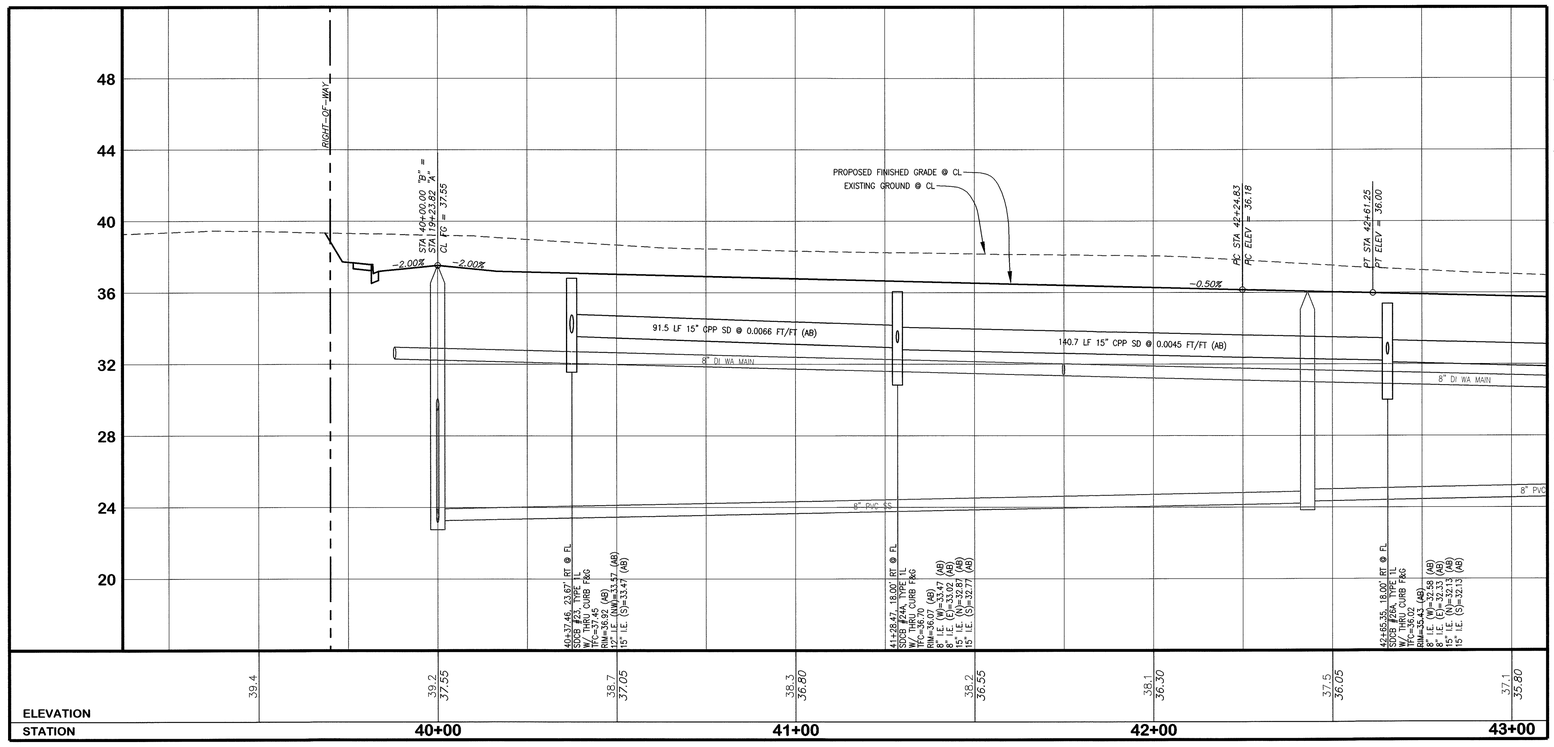
LOT No.	STREET	STA & OFFSET @ FL			WIDTH
14	"B" STREET	40+92.89	18.00	LT	20.00
15	"B" STREET	41+53.89	18.00	LT	20.00
16	"B" STREET	41+95.89	18.00	LT	20.00
17	"B" STREET	42+89.50	18.00	LT	20.00
44	"B" STREET	42+49.38	18.00	RT	20.00
45	"B" STREET	41+91.98	18.00	RT	20.00
46	"B" STREET	41+49.98	18.00	RT	20.00

LINE TABLE ~ ROADWAY CENTERLINE

LINE	LENGTH	BEARING	DESCRIPTION
L5	224.83'	S15°13'59"W	"B" STREET
L6	111.50'	S01°19'25"W	"B" STREET

CURVE TABLE ~ ROADWAY CENTERLINE

CURVE	DELTA	RADIUS	LENGTH	DESCRIPTION
C5	13°54'34"	150.00'	36.41'	"B" STREET



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RC
CITY OF FERNDALE

{CORRESPONDING WATER & SANITARY SEWER IMPROVEMENTS SEE SHEET 18}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

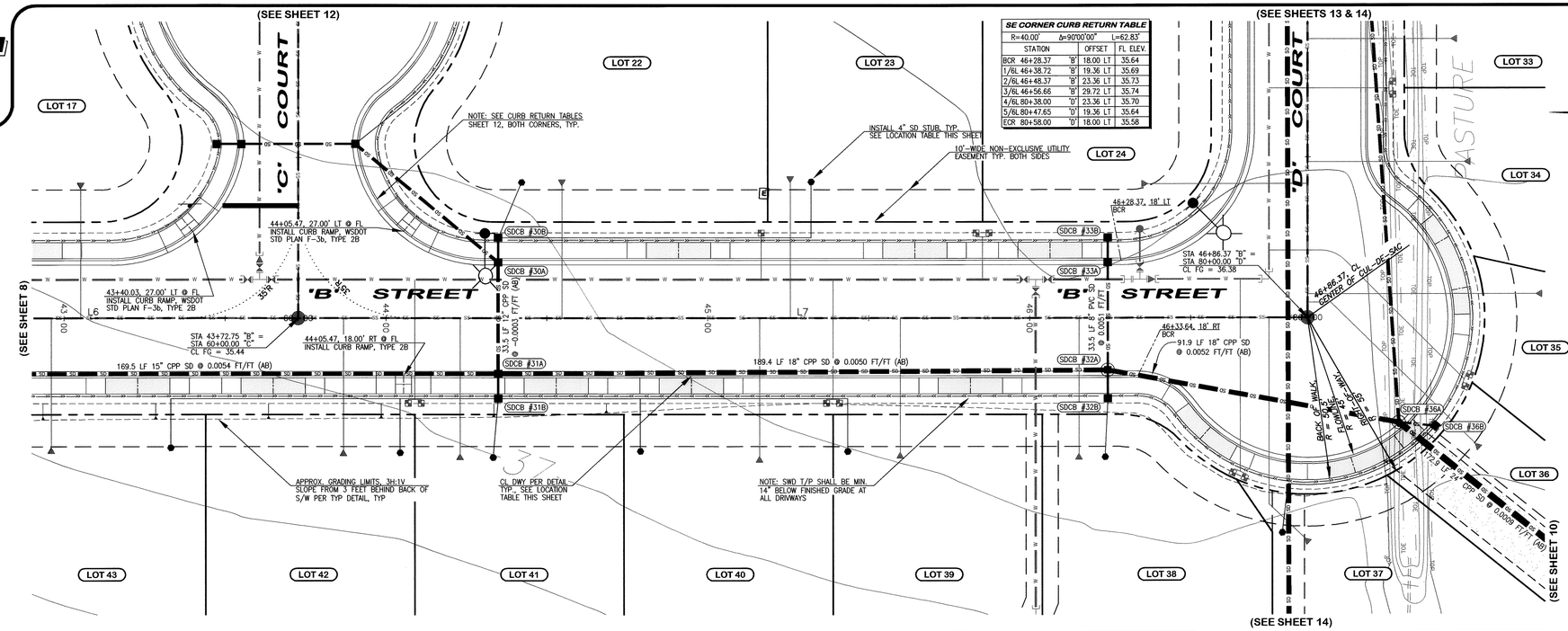
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'B' STREET ~ STATIONS 40+00 to 43+00
ROADWAY & STORM DRAINAGE IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 8 OF 34

STEPHEN A. VANDERWEELE
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

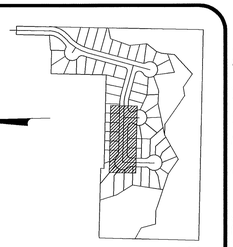
00390.008 7/09/09 DD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



SE CORNER CURB RETURN TABLE			
R=40.00'	Δ=90°00'00"	L=62.83'	
STATION		OFFSET	FL ELEV.
BCR 46+28.37	"B"	18.00 LT	35.64
1/6L 46+38.72	"B"	19.36 LT	35.69
2/6L 46+48.37	"B"	23.36 LT	35.73
3/6L 46+56.66	"B"	29.72 LT	35.74
4/6L 80+38.00	"D"	23.36 LT	35.70
5/6L 80+47.65	"D"	19.36 LT	35.64
ECR 80+58.00	"D"	18.00 LT	35.58

GRAPHIC SCALE
(us survey feet)
1 inch = 20 feet



SHEET KEY
N.T.S.

GRADING NOTES

1) GRADE ALL LOTS, INCLUDING LOTS 12, 13, & 18-37, TO A MINIMUM 35.00' ELEVATION.

STORM DRAINAGE NOTES

SDCB #30A
44+34.85, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=35.17
RIM=34.60 (AB)
8" I.E. (E)=31.20 (AB)
12" I.E. (NE)=31.30 (AB)
12" I.E. (W)=31.30 (AB)

SDCB #30B
44+34.85, 25.04' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=35.28 (AB)
8" I.E. (W)=31.83 (AB)

SDCB #31A
44+34.85, 18.00' RT @ FL
TYPE 1L W/ THRU CURB F&G
TFC=35.17
RIM=34.61 (AB)
8" I.E. (W)=31.61 (AB)
12" I.E. (E)=31.31 (AB)
15" I.E. (N)=31.21 (AB)
18" I.E. (S)=31.16 (AB)

SDCB #31B
44+34.85, 25.04' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=35.27 (AB)
8" I.E. (E)=31.77 (AB)

SDCB #32A
46+24.27, 18.00' RT @ FL
TYPE 2 W/ THRU CURB F&G
TFC=36.12
RIM=35.51 (AB)
8" I.E. (W)=32.65
8" I.E. (E)=32.51 (AB)
18" I.E. (N)=30.21 (AB)
18" I.E. (S)=30.11 (AB)

SDCB #32B
46+24.27, 25.04' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=36.27 (AB)
8" I.E. (E)=32.72 (AB)

SDCB #33A
46+24.27, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=36.12
RIM=35.49 (AB)
8" I.E. (E)=32.74 (AB)
8" I.E. (W)=32.69 (AB)

SDCB #33B
46+24.27, 25.04' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=36.04 (AB)
8" I.E. (W)=33.49 (AB)

SDCB #36A
47+15.88, 33.97' RT @ FL
TYPE 2 W/ STD F&G
TFC=35.47 (3/8" LIP)
RIM=35.48 (AB)
8" I.E. (S)=32.77
12" I.E. (E)=31.78 (AB)
18" I.E. (N)=29.63 (AB)
24" I.E. (SW)=29.18 (AB)

SDCB #36B
47+25.99, 33.75' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=36.03 (AB)
8" I.E. (N)=32.88 (AB)

STORM STUB LOCATION TABLE						
LOT No.	STREET	STA & OFFSET @ STUB		DESIGN STUB I.E.	AS-BUILT STUB I.E.	
22	"B" STREET	44+45.7	45.0 LT	31.9	33.6	(AB)
23	"B" STREET	45+37.2	45.0 LT	32.4	34.0	(AB)
24	"B" STREET	81+11.3	45.0 LT	32.6	33.9	(AB)
37	"B" STREET	46+90.4	69.9 RT	33.5	34.8	(AB)
38	"B" STREET	46+24.3	45.0 RT	32.9	33.7	(AB)
39	"B" STREET	45+53.1	45.0 RT	32.8	34.2	(AB)
40	"B" STREET	44+81.9	45.0 RT	32.4	33.8	(AB)
41	"B" STREET	44+34.9	45.0 RT	32.2	33.3	(AB)
42	"B" STREET	43+92.6	45.0 RT	32.4	34.2	(AB)
43	"B" STREET	43+36.0	45.0 RT	32.7	34.1	(AB)

DRIVEWAY CENTERLINE TABLE				
LOT No.	STREET	STA & OFFSET @ FL		WIDTH
22	"B" STREET	44+90.93	18.00 LT	20.00
23	"B" STREET	45+64.37	18.00 LT	20.00
24	"B" STREET	46+06.37	18.00 LT	20.00
36	"B" STREET	47+06.56	40.22 RT	30.00
37	"B" STREET			
38	"B" STREET	46+56.56	33.71 RT	20.00
39	"B" STREET	45+81.64	18.00 RT	20.00
40	"B" STREET	44+94.92	18.00 RT	20.00
41	"B" STREET	44+52.92	18.00 RT	20.00
42	"B" STREET	43+64.92	18.00 RT	20.00
43	"B" STREET	43+22.92	18.00 RT	20.00

LINE TABLE ~ ROADWAY CENTERLINE			
LINE	LENGTH	BEARING	DESCRIPTION
L6	111.50'	S01°19'25"W	"B" STREET
L7	113.62'	S01°19'25"W	"B" STREET

'B' STREET CUL-DE-SAC CURB RETURN TABLE			
R=20.00' Δ=54°13'27" L=18.93'			
STATION		OFFSET	FL ELEV.
BCR 46+33.64	"B"	18.00 RT	35.67
1/2L 46+42.75	"B"	20.20 RT	35.72
ECR 46+49.86	"B"	26.31 RT	35.76
R=45.00' Δ=198°26'54" L=155.86'			
STATION		OFFSET	FL ELEV.
BCR 46+49.86	"B"	26.31 RT	35.76
1/15L 46+56.85	"B"	33.96 RT	35.82
2/15L 46+65.41	"B"	39.82 RT	35.87
3/15L 46+75.08	"B"	43.56 RT	35.91
4/15L 46+85.35	"B"	44.99 RT	35.93
5/15L 46+95.67	"B"	44.03 RT	35.80
6/15L 47+05.50	"B"	40.73 RT	35.61
7/15L 47+14.31	"B"	35.27 RT	35.45
8/15L 47+21.65	"B"	27.94 RT	35.51
9/15L 47+27.10	"B"	19.13 RT	35.67
10/15L 47+30.40	"B"	9.30 RT	35.83
11/15L 47+31.36	"B"	1.02 LT	35.94
12/15L 47+29.93	"B"	11.29 LT	35.90
13/15L 47+26.19	"B"	20.96 LT	35.85
14/15L 47+20.34	"B"	29.52 LT	35.79
ECR 80+36.51	"D"	26.31 RT	35.72
R=20.00' Δ=54°13'27" L=18.93'			
STATION		OFFSET	FL ELEV.
BCR 80+36.51	"D"	26.31 RT	35.72
1/2L 80+43.62	"D"	20.20 RT	35.67
ECR 80+52.74	"D"	18.00 RT	35.61

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RC
CITY OF FERNDALE

{CORRESPONDING WATER & SANITARY SEWER IMPROVEMENTS SEE SHEET 19}

HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JYY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

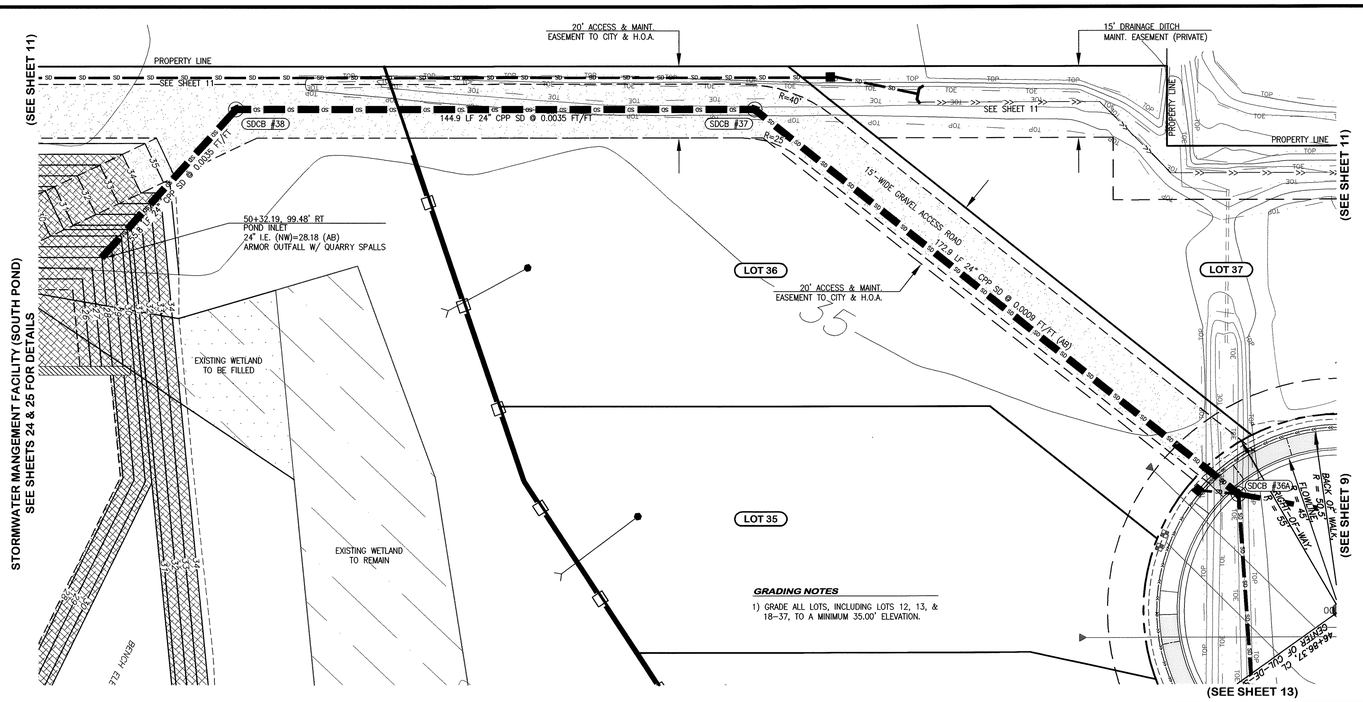
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

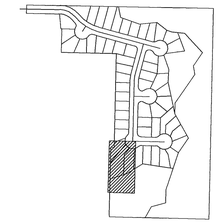
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'B' STREET ~ STATIONS 43+00 to 47+50
ROADWAY & STORM DRAINAGE IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 9 OF 34

BEREKA A. VANDERHAAK
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

00390.009 7-10-09 DP

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com





GRAPHIC SCALE
(us survey feet)
0 20
20 10 40
1 inch = 20 feet

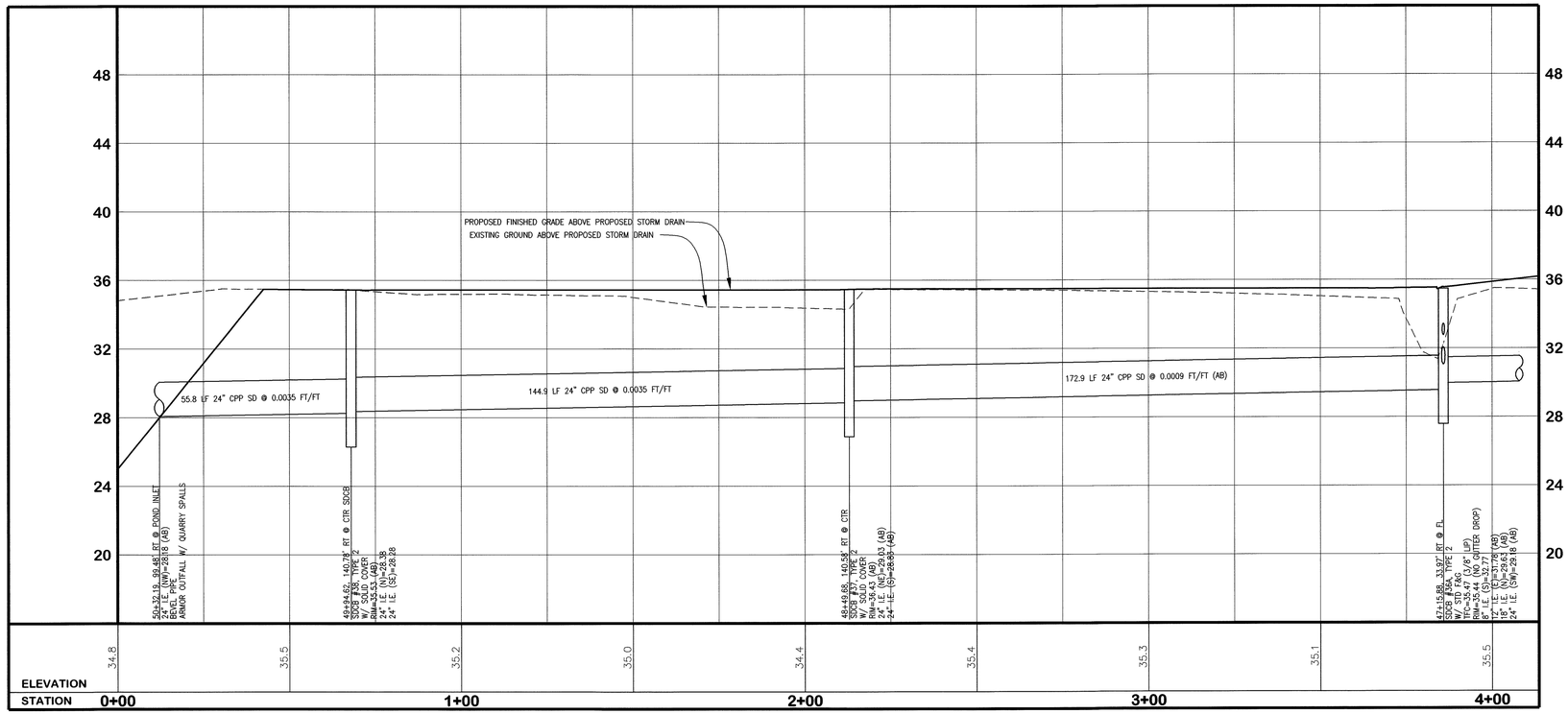
PSE

STORM DRAINAGE NOTES

SDCB #36A
47+15.88, 33.97' RT @ FL
TYPE 2 W/ STD F&G
TFC=35.47 (3/8" LIP)
RIM=35.48 (AB)
8" I.E. (S)=32.77
12" I.E. (E)=31.78 (AB)
18" I.E. (N)=29.63 (AB)
24" I.E. (SW)=29.18 (AB)

SDCB #37
48+49.68, 140.58' RT @ CTR
TYPE 2 W/ SOLID COVER
RIM=36.43 (AB)
24" I.E. (NE)=29.03 (AB)
24" I.E. (S)=28.83 (AB)

SDCB #38
49+94.62, 140.78' RT @ CTR
TYPE 2 W/ SOLID COVER
RIM=35.53 (AB)
24" I.E. (W)=28.38
24" I.E. (SE)=28.28



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED BY RC CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

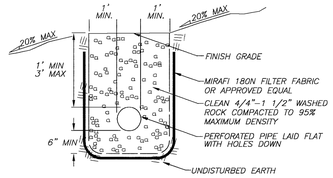
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'B' STREET TO SOUTH POND
ROADWAY & STORM DRAINAGE IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 10 OF 34

STEPHEN A. VANDERHOEK STATE OF WASHINGTON 37432 REGISTERED PROFESSIONAL ENGINEER 10-11-07
EXPIRES: 10/10/07

C039.0/0 7/09/07 D

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



INTERCEPTOR TRENCH

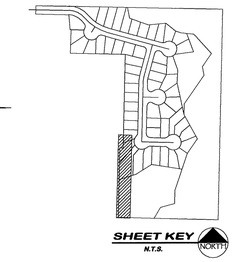
NOT TO SCALE

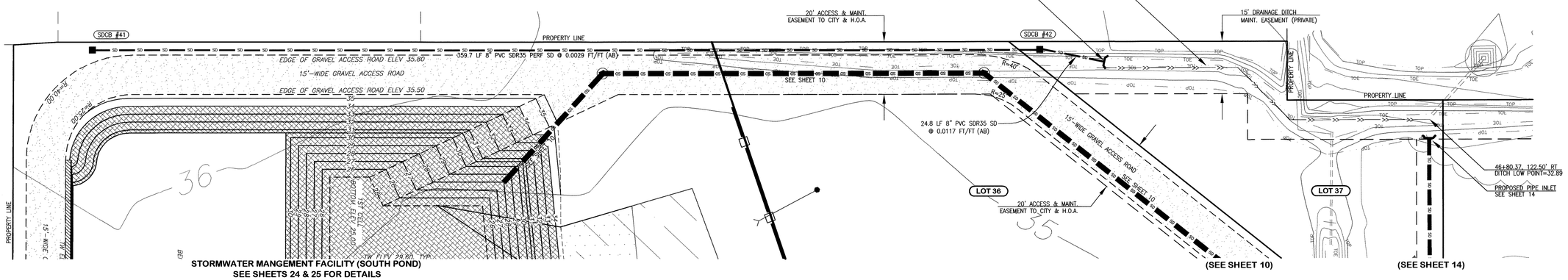
GRAPHIC SCALE
(us survey feet)
0 20
20 10 40
1 inch = 20 feet

STORM DRAINAGE NOTES

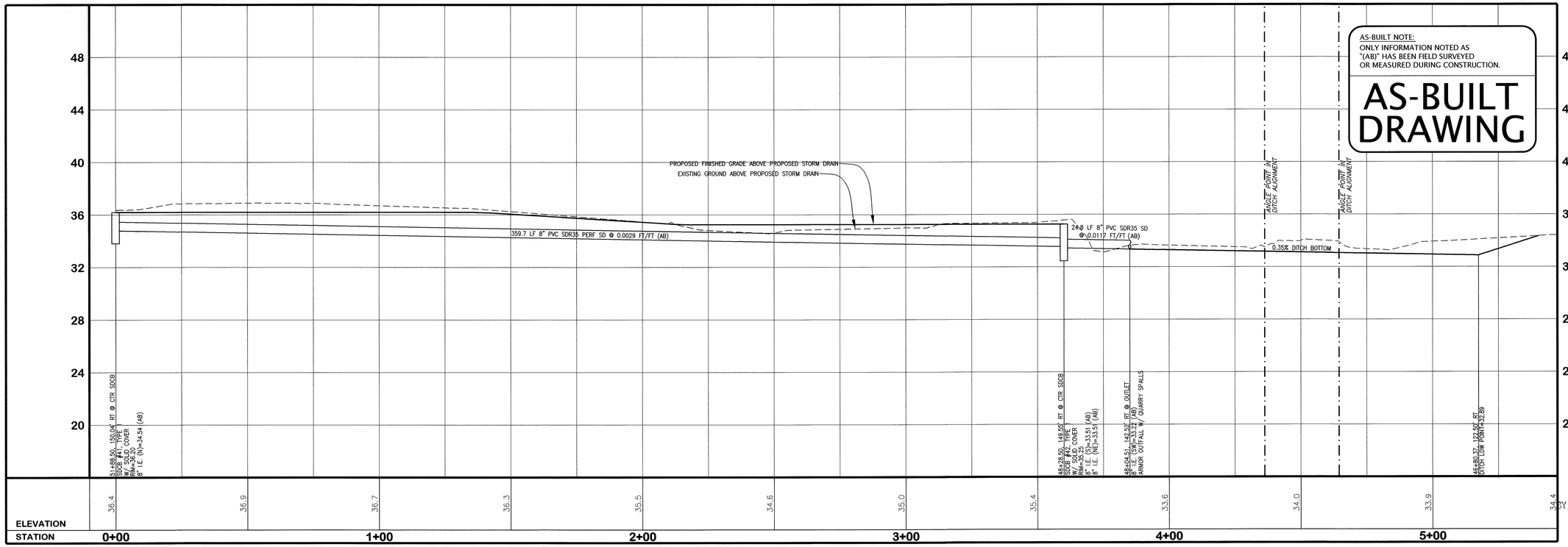
SDCB #41
51+88.50, 150.04' RT @ CTR SDCB
TYPE 1 W/ SOLID COVER
RIM=36.20
8" I.E. (N)=34.54 (AB)

SDCB #42
48+28.50, 149.55' RT @ CTR SDCB
TYPE 1 W/ SOLID COVER
RIM=35.25
8" I.E. (S)=33.51 (AB)
8" I.E. (NE)=33.51 (AB)





STORMWATER MANGEMENT FACILITY (SOUTH POND)
SEE SHEETS 24 & 25 FOR DETAILS



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

APPROVED
MAY 21 2008
BY
CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS

OFFSITE STORM DRAINAGE INTERCEPTION

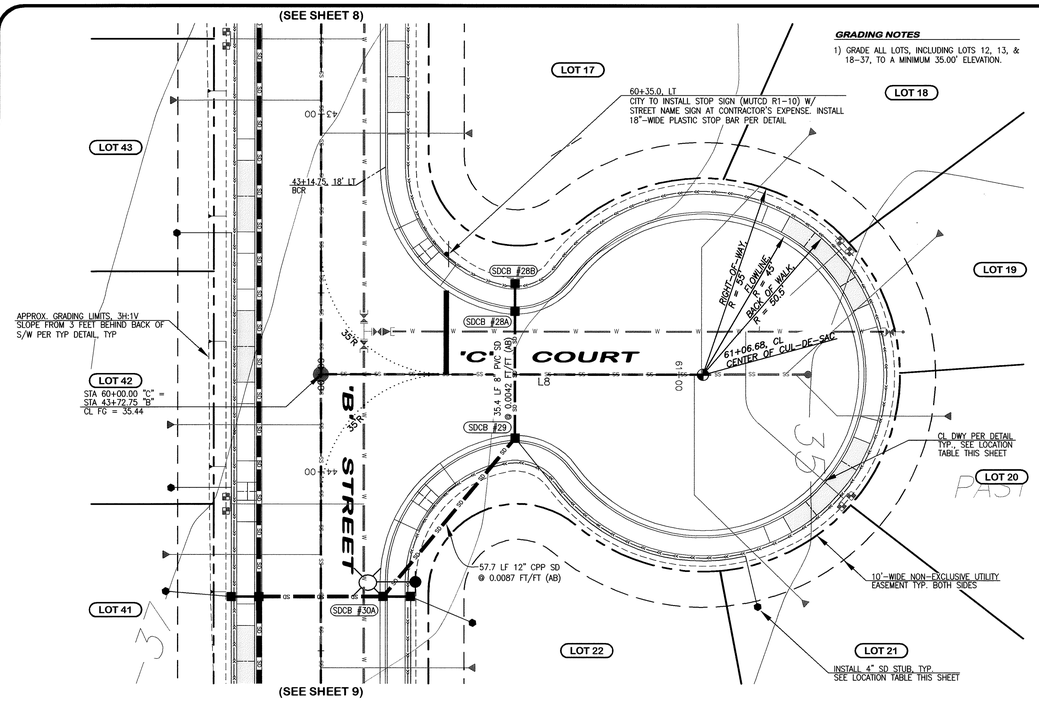
ROADWAY & STORM DRAINAGE IMPROVEMENTS

JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 11 OF 34

STEPHEN A. VANDERHAM
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

D 10-01-07
0030.011

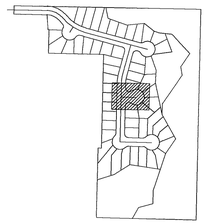
PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685 EMAIL: pse@psesurvey.com www.psesurvey.com



GRADING NOTES

1) GRADE ALL LOTS, INCLUDING LOTS 12, 13, & 18-37, TO A MINIMUM 35.00' ELEVATION.

GRAPHIC SCALE
(us survey feet)
20 0 20
20 10 40
1 inch = 20 feet



SHEET KEY
N.T.S.

STORM DRAINAGE NOTES

SDCB #28A
60+54.21, 18.36' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=35.52
RIM=35.00 (AB)
8" I.E. (N)=32.15 (AB)
8" I.E. (S)=32.05 (AB)

SDCB #28B
60+54.21, 25.40' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=35.63 (AB)
8" I.E. (S)=33.48 (AB)

SDCB #29
60+54.21, 18.36' RT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=35.52
RIM=35.00 (AB)
8" I.E. (N)=31.90 (AB)
12" I.E. (SW)=31.80 (AB)

SDCB #30A
44+34.85, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=35.17
RIM=34.60 (AB)
8" I.E. (E)=31.20 (AB)
12" I.E. (NE)=31.30 (AB)
12" I.E. (W)=31.30 (AB)

STORM STUB LOCATION TABLE

LOT No.	STREET	STA & OFFSET @ STUB		DESIGN STUB I.E.	AS-BUILT STUB I.E.	
18	'B' STREET	41+83.3	208.8 LT	*	35.4	(AB)
19	'B' STREET	43+23.8	228.4 LT	*	35.2	(AB)
20	'B' STREET	44+05.9	248.4 LT	*	34.3	(AB)
21	"C" COURT	61+22.0	68.3 RT	32.6	34.6	(AB)

* NOTE: STUB DEPTHS WERE NOT IDENTIFIED ON THE DESIGN PLANS. AS-BUILT INFO SHOWN REFERS TO PORTION OF PIPE STUBBED TO LOTS. PIPES DISCHARGE TO GROUND SURFACE BEYOND SPLIT-RAIL FENCE.

DRIVEWAY CENTERLINE TABLE

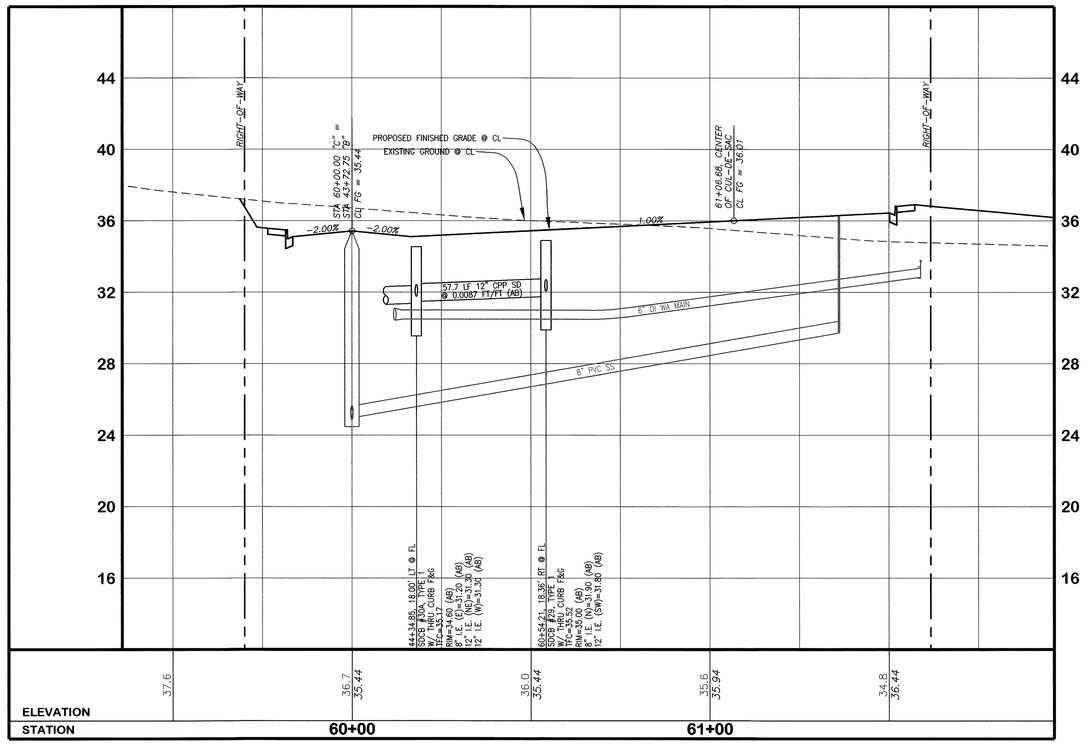
LOT No.	STREET	STA & OFFSET @ FL		WIDTH
18	"C" COURT	61+40.01	30.24 LT	30.00
19	"C" COURT			
20	"C" COURT	61+40.43	29.77 RT	30.00
21	"C" COURT			

LINE TABLE - ROADWAY CENTERLINE

LINE	LENGTH	BEARING	DESCRIPTION
L8	106.68'	S88°40'35"E	"C" COURT

"C" COURT CUL-DE-SAC CURB RETURN TABLE

R=40.00' Δ=79°04'43" L=55.21'				
STATION		OFFSET		FL ELEV.
BCR	43+14.75	'B'	18.00 LT	35.27
1/6L	43+14.75	'B'	19.05 LT	35.23
2/6L	43+32.51	'B'	22.16 LT	35.19
3/6L	43+40.21	'B'	27.15 LT	35.15
4/6L	60+33.77	'C'	26.17 LT	35.11
5/6L	60+41.67	'C'	21.49 LT	35.08
ECR	60+50.42	'C'	18.72 LT	35.04
R=20.00' Δ=64°45'03" L=22.60'				
STATION		OFFSET		FL ELEV.
BCR	60+50.42	'C'	18.72 LT	35.04
1/2L	60+61.53	'C'	19.75 LT	35.06
ECR	60+70.36	'C'	26.56 LT	35.14
STATION		OFFSET		FL ELEV.
BCR	60+70.36	'C'	26.56 LT	35.14
1/22L	60+77.31	'C'	34.09 LT	35.25
2/22L	60+85.78	'C'	39.85 LT	35.37
3/22L	60+95.34	'C'	43.55 LT	35.49
4/22L	61+05.48	'C'	44.98 LT	35.62
5/22L	61+15.69	'C'	44.09 LT	35.75
6/22L	61+25.43	'C'	40.91 LT	35.87
7/22L	61+34.20	'C'	35.61 LT	36.00
8/22L	61+41.54	'C'	28.46 LT	36.12
9/22L	61+47.08	'C'	19.83 LT	36.22
10/22L	61+50.52	'C'	10.18 LT	36.29
11/22L	61+51.68	'C'	CL	36.32
12/22L	61+50.52	'C'	10.18 RT	36.29
13/22L	61+47.08	'C'	19.83 RT	36.22
14/22L	61+41.54	'C'	28.46 RT	36.12
15/22L	61+34.20	'C'	35.61 RT	36.00
16/22L	61+25.43	'C'	40.91 RT	35.87
17/22L	61+15.69	'C'	44.09 RT	35.75
18/22L	61+05.48	'C'	44.98 RT	35.62
19/22L	60+95.34	'C'	43.55 RT	35.49
20/22L	60+85.78	'C'	39.85 RT	35.37
21/22L	60+77.31	'C'	34.09 RT	35.25
ECR	60+70.36	'C'	26.56 RT	35.14
R=20.00' Δ=64°45'03" L=22.60'				
STATION		OFFSET		FL ELEV.
BCR	60+70.36	'C'	26.56 RT	35.14
1/2L	60+61.53	'C'	19.75 RT	35.06
ECR	60+50.42	'C'	18.72 RT	35.00
R=40.00' Δ=79°04'43" L=55.21'				
STATION		OFFSET		FL ELEV.
BCR	60+50.42	'C'	18.72 RT	35.00
1/6L	60+41.67	'C'	21.49 RT	34.95
2/6L	60+33.77	'C'	26.17 RT	34.90
3/6L	44+05.28	'A'	27.15 LT	34.84
4/6L	44+12.99	'A'	22.16 LT	34.79
5/6L	44+21.63	'A'	19.05 LT	34.74
ECR	44+30.75	'A'	18.00 LT	34.69



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
AS-BUILTS
BY RC
CITY OF FERNDALE

{CORRESPONDING WATER & SANITARY SEWER IMPROVEMENTS SEE SHEET 20}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

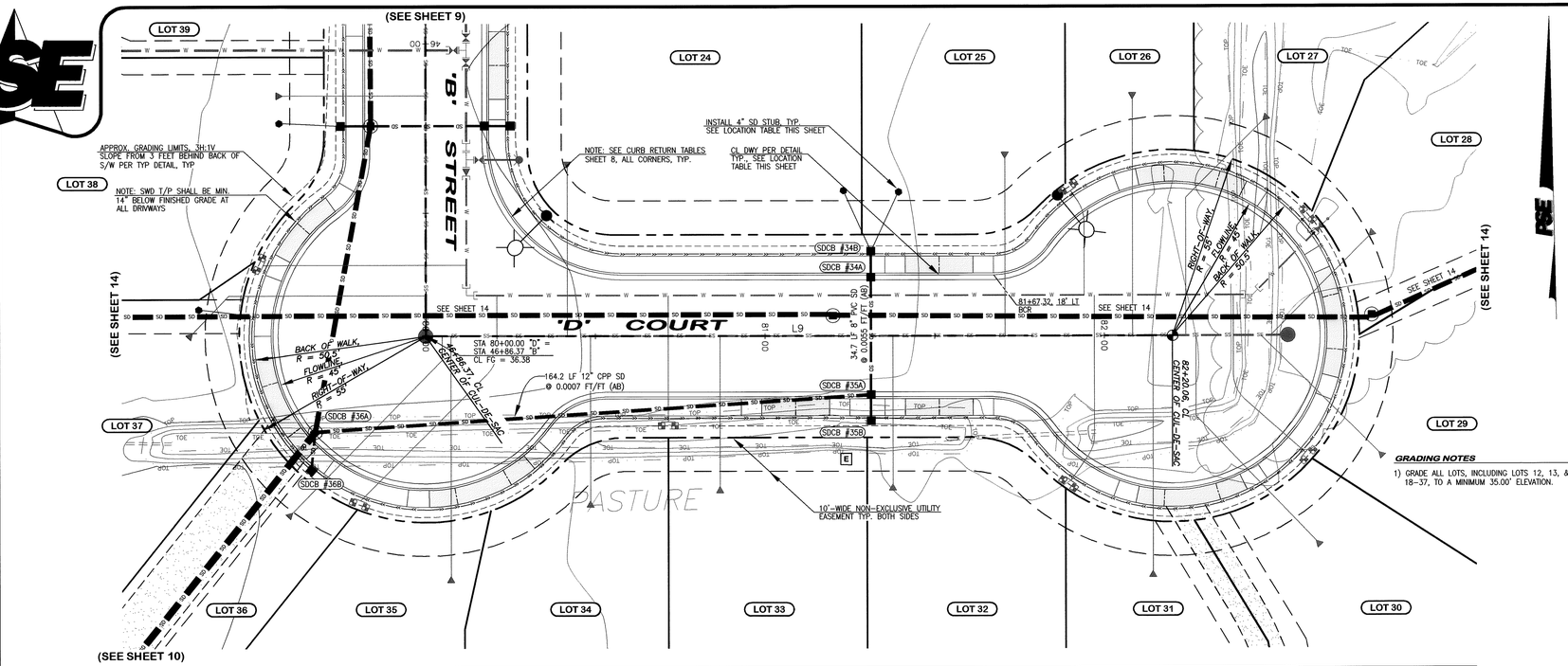
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'C' COURT
ROADWAY & STORM DRAINAGE IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 12 OF 34

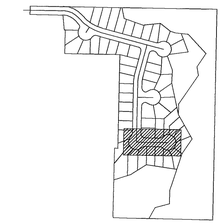
STEPHEN A. VANDERHAGEN
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/09

00390.012 7-10-09 DD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



GRAPHIC SCALE
(us survey feet)
1 inch = 20 feet



SHEET KEY
N.T.S.

STORM DRAINAGE NOTES

SDCB #34A
81+31.22, 18.00' LT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=35.64
RIM=35.14 (AB)
8" I.E. (N)=32.24 (AB)
8" I.E. (S)=32.19 (AB)

SDCB #34B
81+31.22, 25.04' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=35.72 (AB)
8" I.E. (S)=32.47 (AB)

SDCB #35A
81+31.22, 18.00' RT @ FL
TYPE 1 W/ THRU CURB F&G
TFC=35.64
RIM=35.10 (AB)
8" I.E. (N)=31.90 (AB)
8" I.E. (S)=32.00 (AB)
12" I.E. (W)=31.90 (AB)

SDCB #35B
81+31.22, 25.04' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=35.79 (AB)
8" I.E. (N)=33.19 (AB)

SDCB #36A
47+15.88, 33.97' RT @ FL
TYPE 2 W/ STD F&G
TFC=35.47 (3/8" LIP)
RIM=35.48 (AB)
8" I.E. (S)=32.77
12" I.E. (E)=31.78 (AB)
18" I.E. (N)=29.63 (AB)
24" I.E. (SW)=29.18 (AB)

SDCB #36B
47+25.99, 33.75' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=36.03 (AB)
8" I.E. (N)=32.88 (AB)

GRADING NOTES

1) GRADE ALL LOTS, INCLUDING LOTS 12, 13, & 18–37, TO A MINIMUM 35.00' ELEVATION.

STORM STUB LOCATION TABLE

LOT No.	STREET	STA & OFFSET @ STUB			DESIGN STUB I.E.	AS-BUILT STUB I.E.	
24	"B" STREET	81+11.3	45.0	LT	32.6	33.9	(AB)
25	"D" COURT	81+31.2	45.0	LT	32.6	33.7	(AB)
26	"B" STREET	44+76.5	267.4	LT	*	34.0	(AB)
27	"B" STREET	45+40.1	295.3	LT	*	33.6	(AB)
28	"B" STREET	46+09.2	336.0	LT	*	33.5	(AB)
29	"B" STREET	46+94.9	327.9	LT	*	33.9	(AB)
30	"B" STREET	47+97.5	279.8	LT	*	33.3	(AB)
31	"B" STREET	48+44.4	225.5	LT	*	33.1	(AB)
32	"B" STREET	48+33.6	162.9	LT	*	33.6	(AB)
33	"B" STREET	48+27.4	105.0	LT	*	33.8	(AB)
34	"B" STREET	48+49.1	26.9	LT	*	33.7	(AB)
35	"B" STREET	48+82.6	26.8	RT	*	33.6	(AB)
36	"B" STREET	49+13.3	96.3	RT	*	34.1	(AB)

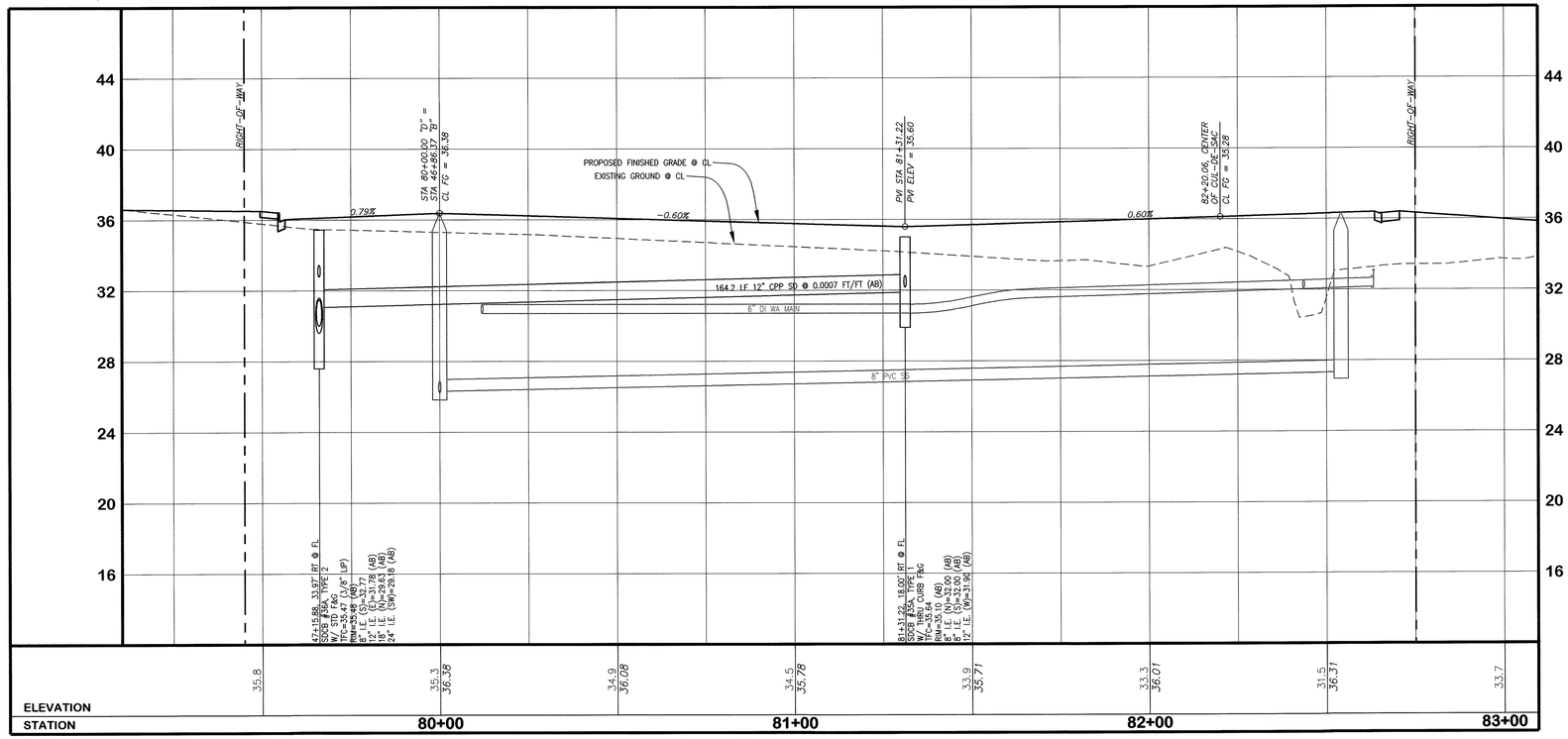
* NOTE: STUB DEPTHS WERE NOT IDENTIFIED ON THE DESIGN PLANS. AS-BUILT INFO SHOWN REFERS TO PORTION OF PIPE STUBBED TO LOTS. PIPES DISCHARGE TO GROUND SURFACE BEYOND SPLIT-RAIL FENCE.

DRIVEWAY CENTERLINE TABLE

LOT No.	STREET	STA & OFFSET @ FL			WIDTH
25	"D" COURT	81+51.32	18.00	LT	20.00
26	"D" COURT	82+25.28	44.70	LT	30.00
27	"D" COURT				
28	"D" COURT	82+64.92	3.53	LT	30.00
29	"D" COURT				
30	"D" COURT	82+25.28	44.70	RT	30.00
31	"D" COURT				
32	"D" COURT	81+51.32	18.00	RT	20.00
33	"D" COURT	81+08.99	18.00	RT	20.00
34	"D" COURT				
35	"D" COURT	80+15.59	42.21	RT	30.00
36	"B" STREET				
37	"B" STREET	47+06.56	40.22	RT	30.00

LINE TABLE – ROADWAY CENTERLINE

LINE	LENGTH	BEARING	DESCRIPTION
L9	220.06'	S88°40'35"E	"D" COURT



HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 4'

"D" COURT CUL-DE-SAC CURB RETURN TABLE

R=20.00' Δ=54°13'27" L=18.93'				
STATION			OFFSET	FL ELEV.
BCR	81+67.32	"D"	18.00 LT	35.36
1/2L	81+76.44	"D"	20.20 LT	35.44
ECR	81+83.55	"D"	26.31 LT	35.53
R=45.00' Δ=288°26'54" L=226.55'				
STATION			OFFSET	FL ELEV.
BCR	81+83.55	"D"	26.31 LT	35.53
1/22L	81+90.47	"D"	33.90 LT	35.64
2/22L	81+98.93	"D"	39.73 LT	35.74
3/22L	82+08.49	"D"	43.49 LT	35.84
4/22L	82+18.66	"D"	44.98 LT	35.92
5/22L	82+28.90	"D"	44.12 LT	36.01
6/22L	82+38.68	"D"	40.97 LT	36.08
7/22L	82+47.49	"D"	35.67 LT	36.14
8/22L	82+54.86	"D"	28.52 LT	36.19
9/22L	82+60.43	"D"	19.88 LT	36.23
10/22L	82+63.88	"D"	10.21 LT	36.25
11/22L	82+65.06	"D"	CL	36.27
12/22L	82+63.88	"D"	10.21 RT	36.25
13/22L	82+60.43	"D"	19.88 RT	36.23
14/22L	82+54.86	"D"	28.52 RT	36.19
15/22L	82+47.49	"D"	35.67 RT	36.14
16/22L	82+38.68	"D"	40.97 RT	36.08
17/22L	82+28.90	"D"	44.12 RT	36.01
18/22L	82+18.66	"D"	44.98 RT	35.92
19/22L	82+08.49	"D"	43.49 RT	35.84
20/22L	81+98.93	"D"	39.73 RT	35.74
21/22L	81+90.47	"D"	33.90 RT	35.64
ECR	81+83.55	"D"	26.31 RT	35.53
R=20.00' Δ=54°13'27" L=18.93'				
STATION			OFFSET	FL ELEV.
BCR	81+83.55	"D"	26.31 RT	35.53
1/2L	81+76.44	"D"	20.20 RT	35.44
ECR	81+67.32	"D"	18.00 RT	35.36

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY _____
CITY OF FERNDALE

{CORRESPONDING WATER & SANITARY SEWER IMPROVEMENTS SEE SHEET 21}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

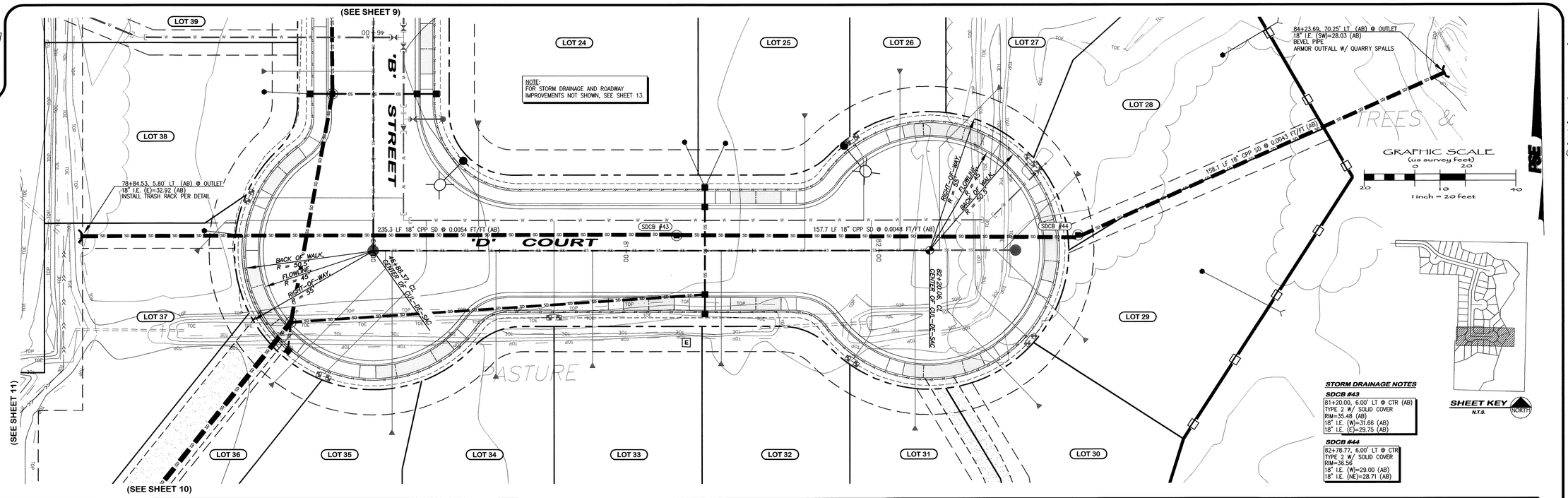
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'D' COURT

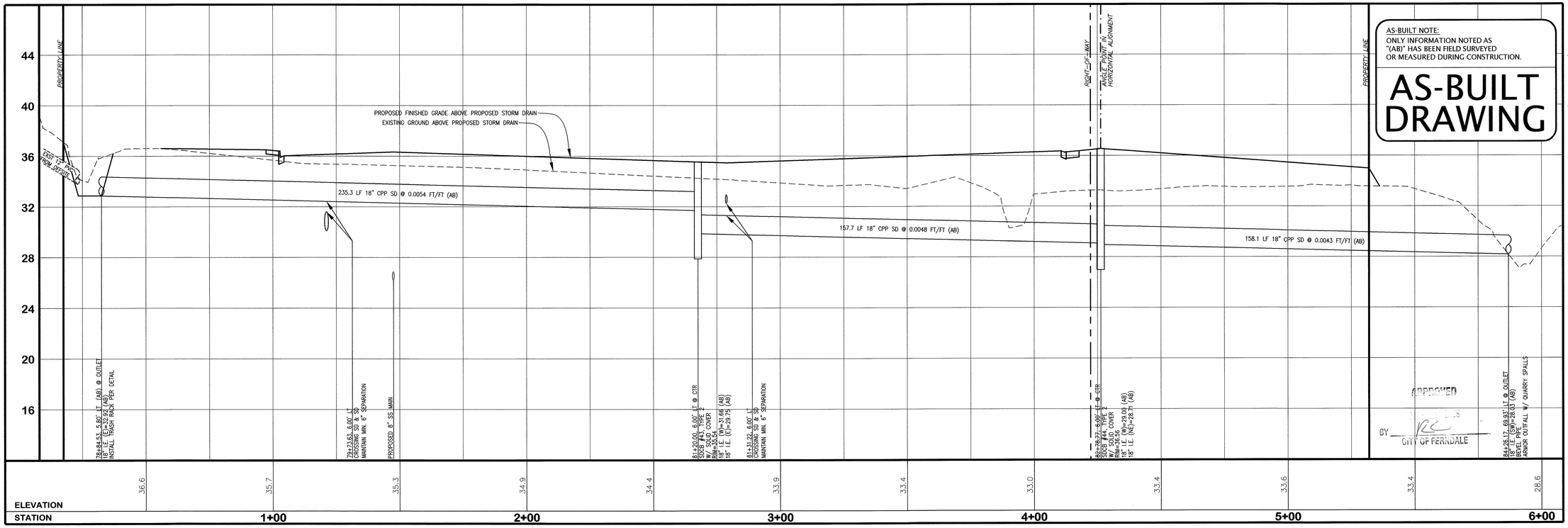
ROADWAY & STORM DRAINAGE IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 13 OF 34

STEVEN A. VANDEVANTER
STATE OF WASHINGTON
374.32
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

07-10-07
0038.013

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com





HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

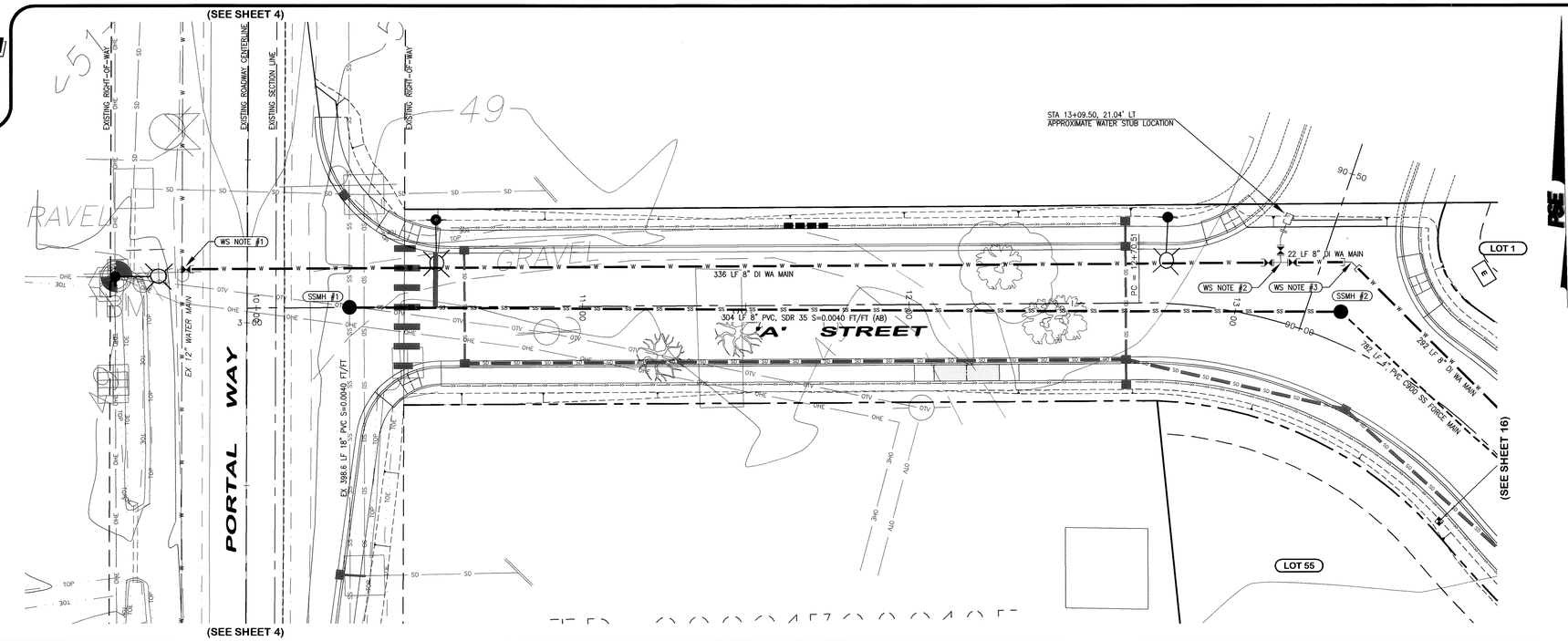
CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

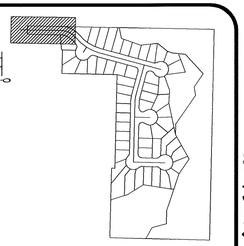
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'D' COURT STORM DRAIN BYPASS
ROADWAY & STORM DRAINAGE IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 14 OF 34

SUPPLEMENTAL TO SHEET 14 OF 34
10-11-07
EXPIRES: 10/10/08

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com
www.psesurvey.com



GRAPHIC SCALE
(us survey feet)
1 inch = 20 feet



SANITARY SEWER NOTES

SSMH #1
3+04.82, 31.38 RT PORTAL = 10+28.57, CL "A" (AB)
RIM=50.22 (AB)
EX 18" I.E. (N)=39.82 (AB)
EX 18" I.E. (S)=39.72 (AB)
8" I.E. (E)=40.42 (AB)
INSTALL KOR-N-SEAL BOOTS

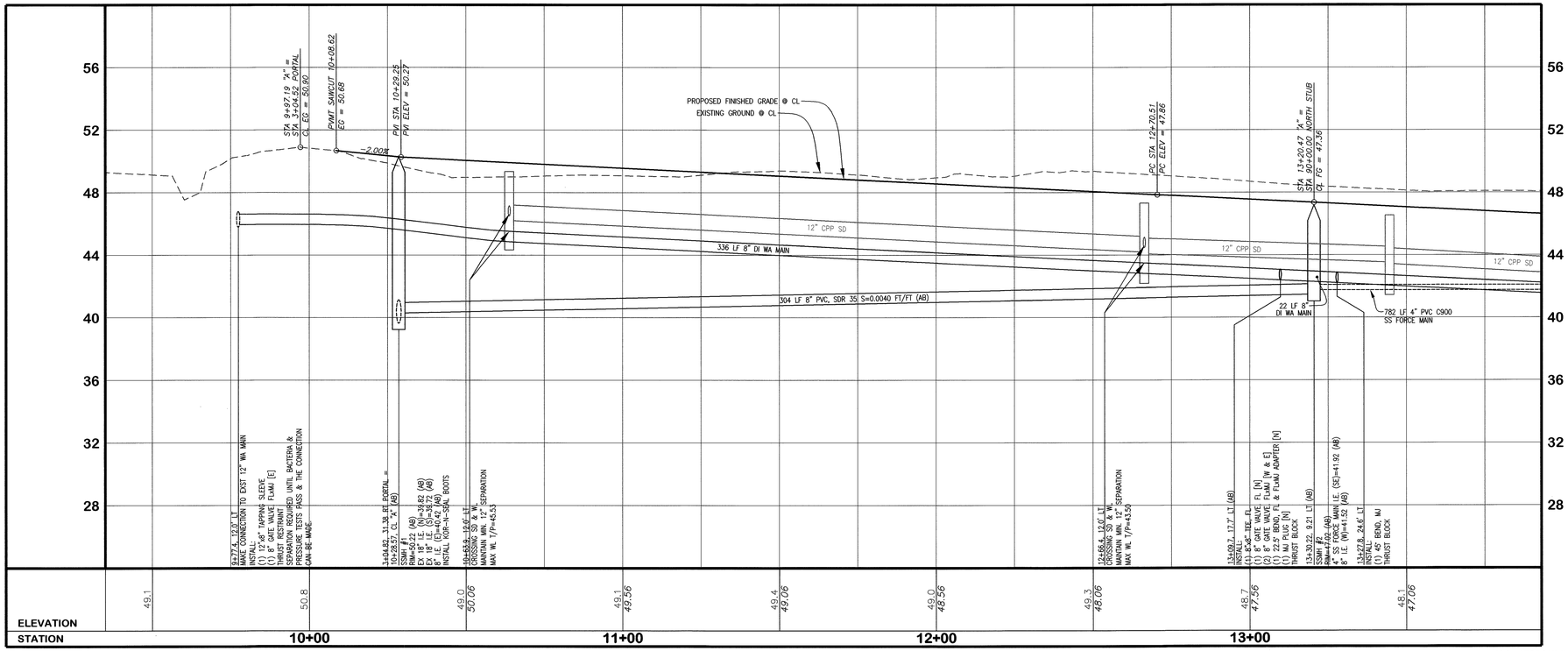
SSMH #2
13+30.22, 9.21 LT (AB)
RIM=47.02 (AB)
4" SS FORCE MAIN I.E. (SE)=41.92 (AB)
8" I.E. (W)=41.52 (AB)

WATER SYSTEM NOTES

WS NOTE #1
9+77.4, 12.0' LT
MAKE CONNECTION TO EXST 12" WA MAIN
INSTALL:
(1) 12"x8" TAPPING SLEEVE
(1) 8" GATE VALVE, FLxMJ [E]
THRUST RESTRAINT
SEPARATION REQUIRED UNTIL BACTERIA & PRESSURE TESTS PASS & THE CONNECTION CAN BE MADE.

WS NOTE #2
13+09.7, 17.7' LT (AB)
INSTALL:
(1) 8"x8" TEE, FL
(1) 8" GATE VALVE, FL [N]
(2) 8" GATE VALVE, FLxMJ [W & E]
(1) 22.5° BEND, FL & FLxMJ ADAPTER [N]
(1) MJ PLUG [N]
THRUST BLOCK

WS NOTE #3
13+27.8, 24.6' LT
INSTALL:
(1) 45° BEND, MJ
THRUST BLOCK



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RC
CITY OF FERNDALE

{CORRESPONDING ROADWAY & STORM DRAINAGE IMPROVEMENTS SEE SHEET 5}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

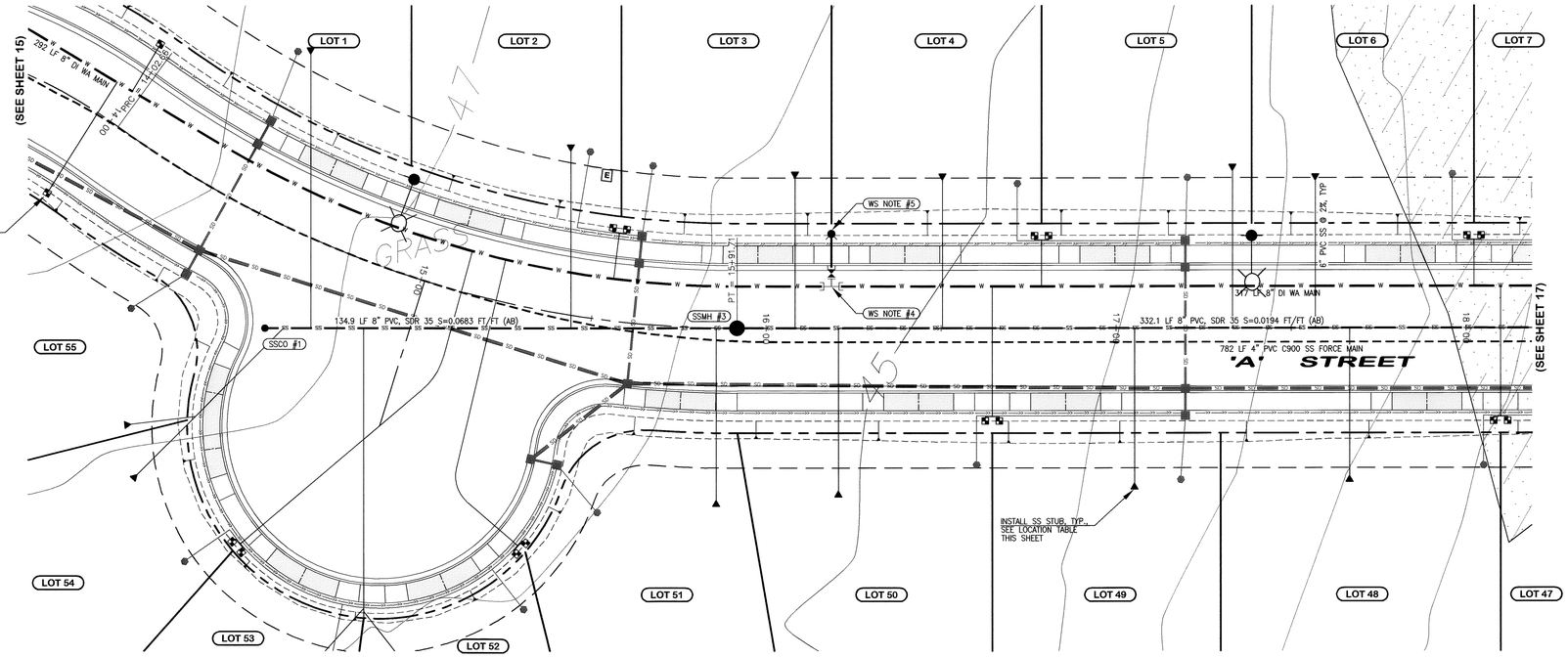
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'A' STREET ~ STATIONS 10+00 to 13+75
WATER & SANITARY SEWER IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 15 OF 34

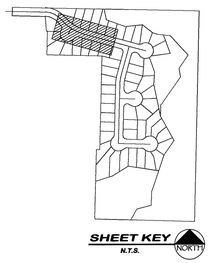
STEPHEN A. VANDERHAM STATE OF WASHINGTON 37432 REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/09

00390.015 7/10-09 AD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



GRAPHIC SCALE
(us survey feet)
1 inch = 20 feet



SEWER STUB LOCATION TABLE

LOT No.	STREET	STA & OFFSET @ MAIN		TYPE	STA & OFFSET @ STUB		STUB I.E.	
1	"A" STREET	14+76.0	23.8	RT	SINGLE	14+40.9	40.9 LT	40.1 (AB)
2	"A" STREET	15+44.7	3.7	RT	SINGLE	15+35.3	41.9 LT	41.9 (AB)
3	"A" STREET	16+08.3	0.0	CL	SINGLE	16+08.3	40.2 LT	40.2 (AB)
4	"A" STREET	16+50.4	0.0	CL	SINGLE	16+50.4	42.5 LT	39.9 (AB)
5	"A" STREET	17+33.2	0.0	CL	SINGLE	17+33.2	45.0 LT	39.0 (AB)
6	"A" STREET	17+56.9	0.0	CL	SINGLE	17+56.9	42.3 LT	37.5 (AB)
48	"A" STREET	17+66.6	0.0	CL	SINGLE	17+66.6	42.2 RT	37.0 (AB)
49	"A" STREET	17+05.23	0.0	CL	SINGLE	17+05.3	44.3 RT	38.7 (AB)
50	"A" STREET	16+20.7	0.0	CL	SINGLE	16+20.7	46.5 RT	37.8 (AB)
51	"A" STREET	15+85.8	0.1	RT	SINGLE	15+86.6	49.2 RT	42.6 (AB)
52	"A" STREET	14+89.2	18.4	RT	DUAL	15+24.5	111.0 RT	40.4 (AB)
53	"A" STREET					15+03.1	112.8 RT	41.6 (AB)
54	"A" STREET	14+69.4	26.8	RT	DUAL	14+52.3	82.3 RT	43.2 (AB)
55	"A" STREET					14+45.8	70.4 RT	43.4 (AB)

WATER SVC LOCATION TABLE

LOT No.	STREET	STA & OFFSET			TYPE
1	"A" STREET	14+00.3	26.5	LT	3/4" SINGLE
2	"A" STREET	15+52.7	26.5	LT	1" DUAL
3	"A" STREET	15+57.1	26.5	LT	
4	"A" STREET	16+76.7	26.5	LT	1" DUAL
5	"A" STREET	16+80.7	26.5	LT	
6	"A" STREET	18+00.2	26.5	LT	1" DUAL
7	"A" STREET	18+04.2	26.5	LT	
47	"A" STREET	18+11.8	26.5	RT	1" DUAL
48	"A" STREET	18+07.8	26.5	RT	
49	"A" STREET	16+66.6	26.5	RT	1" DUAL
50	"A" STREET	16+62.6	26.5	RT	
51	"A" STREET	15+42.0	66.5	RT	1" DUAL
52	"A" STREET	15+40.3	69.9	RT	
53	"A" STREET	14+80.4	90.7	RT	1" DUAL
54	"A" STREET	14+77.7	88.8	RT	
55	"A" STREET	13+94.5	26.5	RT	3/4" SINGLE

SANITARY SEWER NOTES

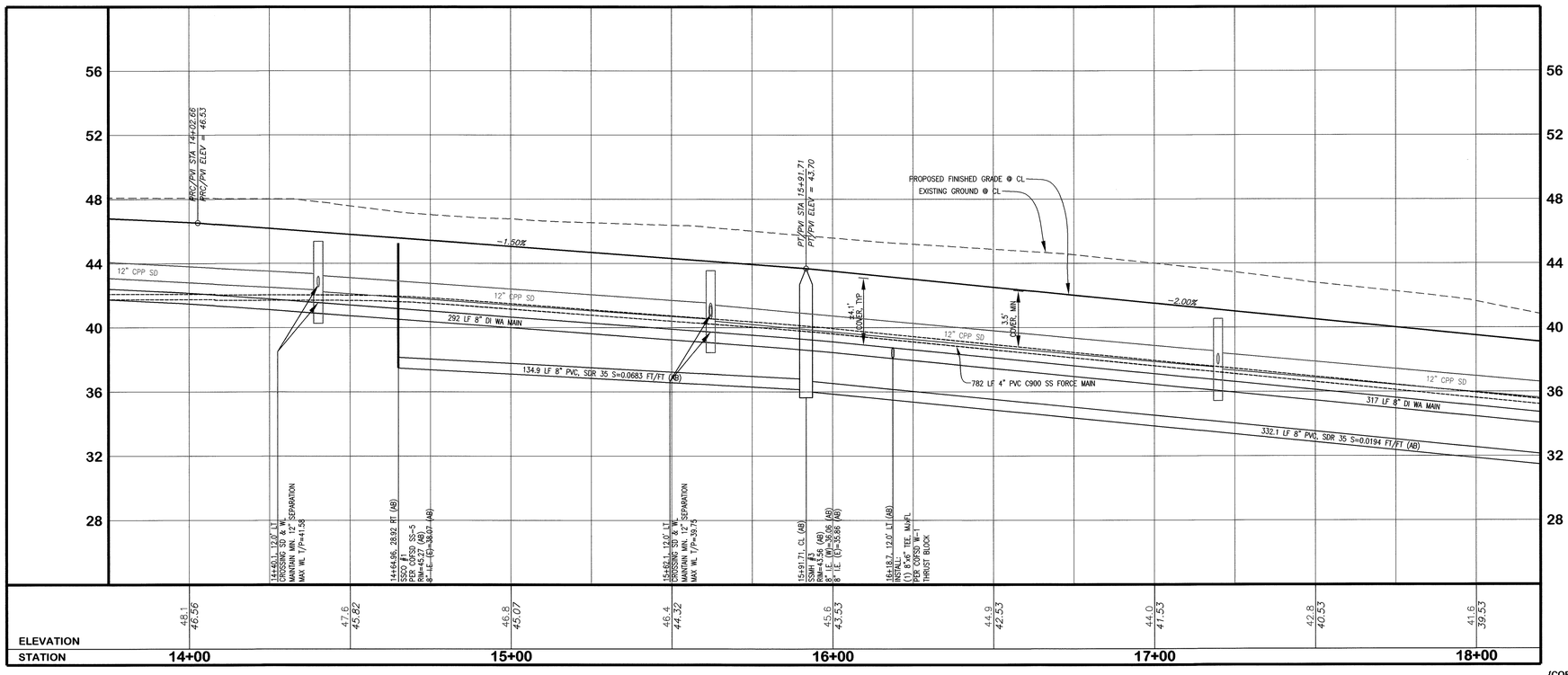
SSCO #1
14+64.96, 28.92 RT (AB)
RIM=45.27 (AB)
8" I.E. (E)=38.07 (AB)
CLEANOUT PER COFSD SS-5

SSMH #3
15+91.71, CL (AB)
RIM=43.56 (AB)
8" I.E. (W)=36.06 (AB)
8" I.E. (E)=35.86 (AB)

WATER SYSTEM NOTES

WS NOTE #4
16+18.7, 12.0' LT (AB)
INSTALL:
(1) 8"x6" TEE, MJxFL
PER COFSD W-1
THRUST BLOCK

WS NOTE #5
16+18.7, 27.0' LT
INSTALL:
(1) HYDRANT ASSEMBLY
PER DETAIL
FG 43.36 AT FH



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RC
CITY OF FERNDALE

{CORRESPONDING ROADWAY & STORM DRAINAGE IMPROVEMENTS SEE SHEET 6}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

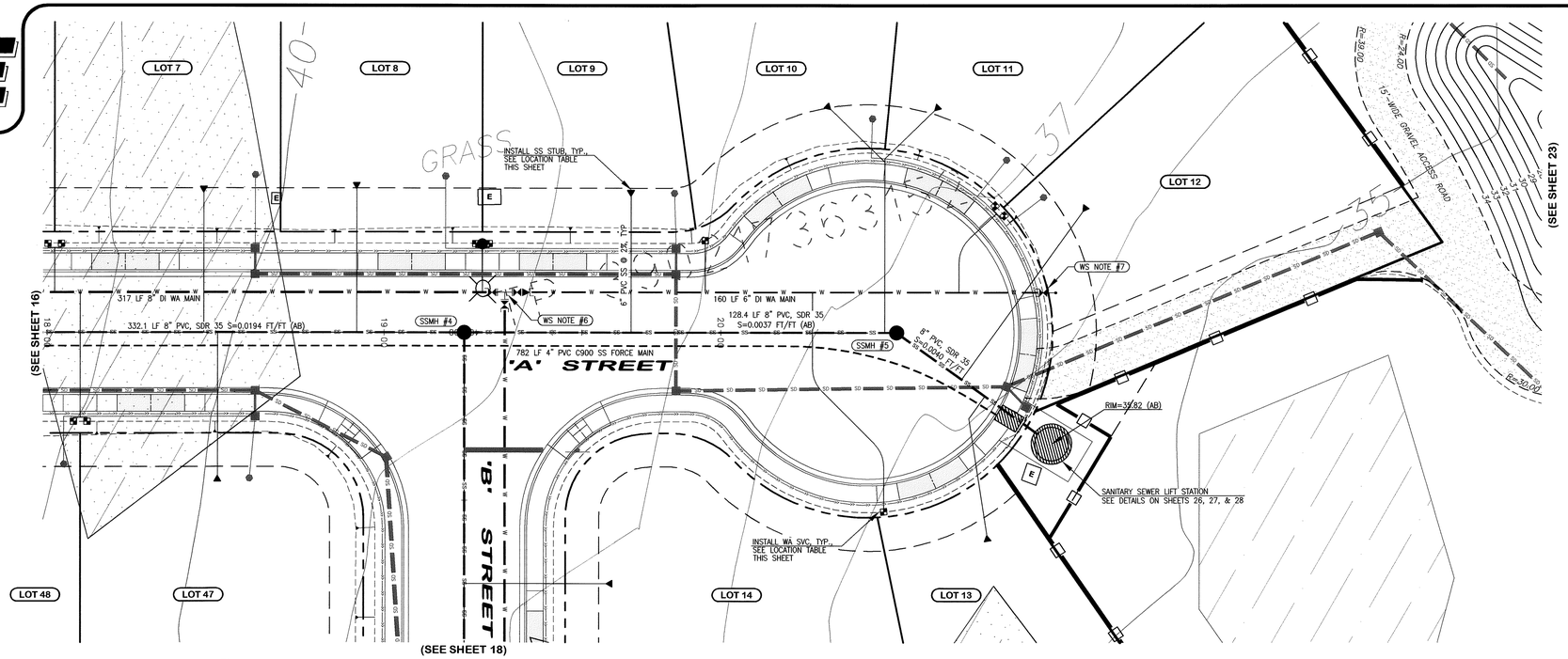
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'A' STREET ~ STATIONS 13+75 to 18+00
WATER & SANITARY SEWER IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 16 OF 34

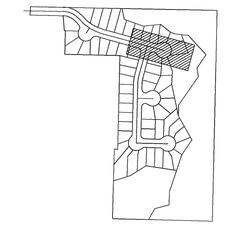
REGISTERED PROFESSIONAL ENGINEER
BRENDA A. VANDERHAM
STATE OF WASHINGTON
37432
10-11-07
EXPIRES: 10/10/08

D 0030016 910.0047

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



GRAPHIC SCALE (us survey feet)
1 inch = 20 feet



SEWER STUB LOCATION TABLE

LOT No.	STREET	STA & OFFSET @ MAIN			TYPE	STA & OFFSET @ STUB		STUB I.E.	
7	"A" STREET	18+46.4	0.0	CL	SINGLE	18+46.4	41.7	LT	36.4 (AB)
8	"A" STREET	18+91.8	0.0	CL	SINGLE	18+91.8	42.8	LT	35.8 (AB)
9	"A" STREET	19+73.3	0.0	CL	SINGLE	19+73.3	40.6	LT	32.9 (AB)
10	"A" STREET	20+48.7	0.0	CL	DUAL	20+32.6	66.5	LT	33.8 (AB)
11	"A" STREET					20+63.5	66.2	LT	33.6 (AB)
12	"A" STREET	20+71.5	13.9	RT	SINGLE	21+07.5	36.2	LT	32.9 (AB)
13	"A" STREET	20+78.6	18.7	RT	SINGLE	20+79.1	60.2	RT	31.9 (AB)
47	"A" STREET	18+50.5	0.0	CL	SINGLE	18+50.5	42.6	RT	34.8 (AB)

WATER SVC LOCATION TABLE

LOT No.	STREET	STA & OFFSET			TYPE
6	"A" STREET	18+00.2	26.5	LT	1" DUAL
7	"A" STREET	18+04.2	26.5	LT	
8	"A" STREET	19+27.2	26.5	LT	1" DUAL
9	"A" STREET	19+31.2	26.5	LT	
10	"A" STREET	19+95.3	26.5	LT	3/4" SINGLE
11	"A" STREET	20+81.4	37.8	LT	1" DUAL
12	"A" STREET	20+84.2	34.9	LT	
13	"A" STREET	20+48.4	53.3	RT	3/4" SINGLE
47	"A" STREET	18+11.8	26.5	RT	1" DUAL
48	"A" STREET	18+07.8	26.5	RT	

SANITARY SEWER NOTES

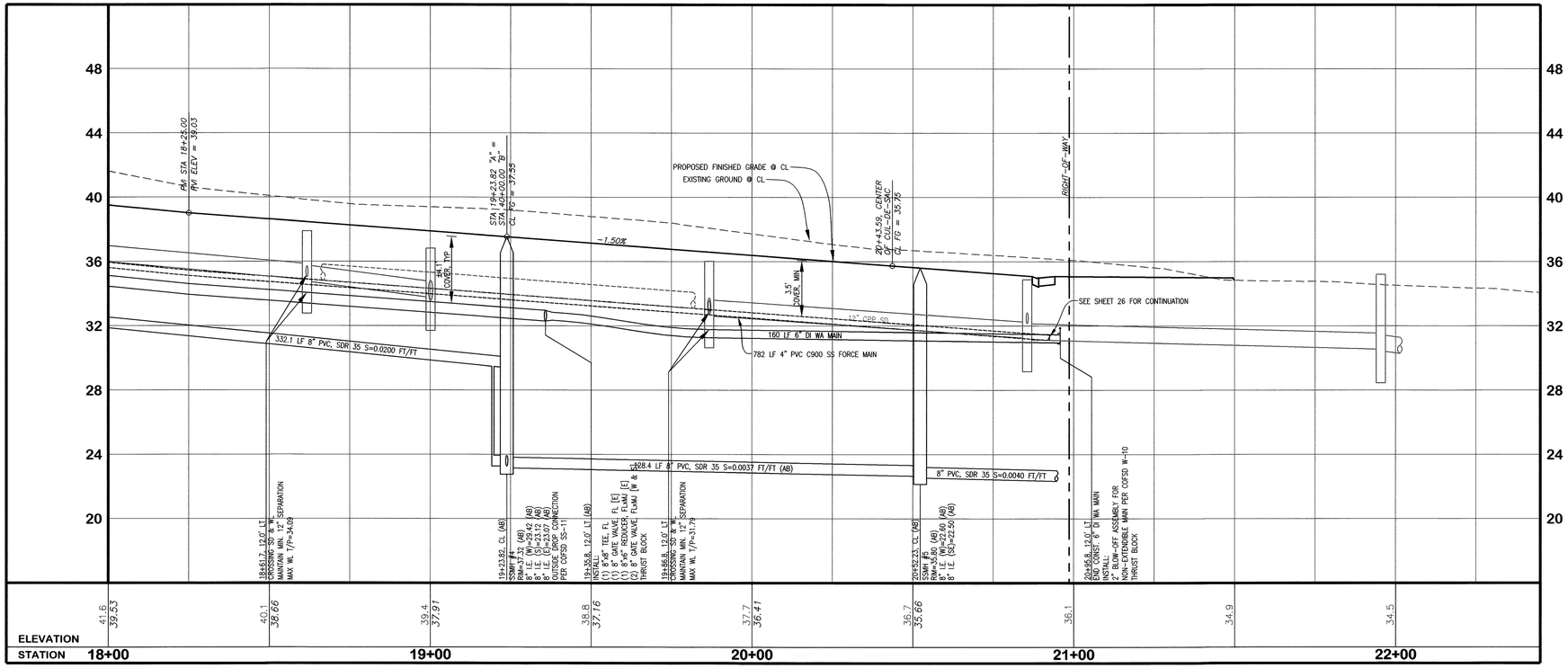
SSMH #4
19+23.82, CL (AB)
RIM=37.32 (AB)
8" I.E. (W)=29.42 (AB)
8" I.E. (S)=23.12 (AB)
8" I.E. (E)=23.07 (AB)
OUTSIDE DROP CONNECTION PER COFSD SS-11

SSMH #5
20+52.23, CL (AB)
RIM=35.80 (AB)
8" I.E. (W)=22.60 (AB)
8" I.E. (SE)=22.50 (AB)

WATER SYSTEM NOTES

WS NOTE #6
19+35.8, 12.0' LT (AB)
INSTALL:
(1) 8"x8" TEE, FL
(1) 8" GATE VALVE, FL [E]
(1) 8"x6" REDUCER, FLxMJ [E]
(2) 8" GATE VALVE, FLxMJ [W & S]
THRUST BLOCK

WS NOTE #7
20+95.8, 12.0' LT
END CONST. 6" DI WA MAIN
INSTALL:
2" BLOW-OFF ASSEMBLY FOR NON-EXTENDIBLE MAIN PER COFSD W-10
THRUST BLOCK



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RC
CITY OF FERNDALE

{CORRESPONDING ROADWAY & STORM DRAINAGE IMPROVEMENTS SEE SHEET 7}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

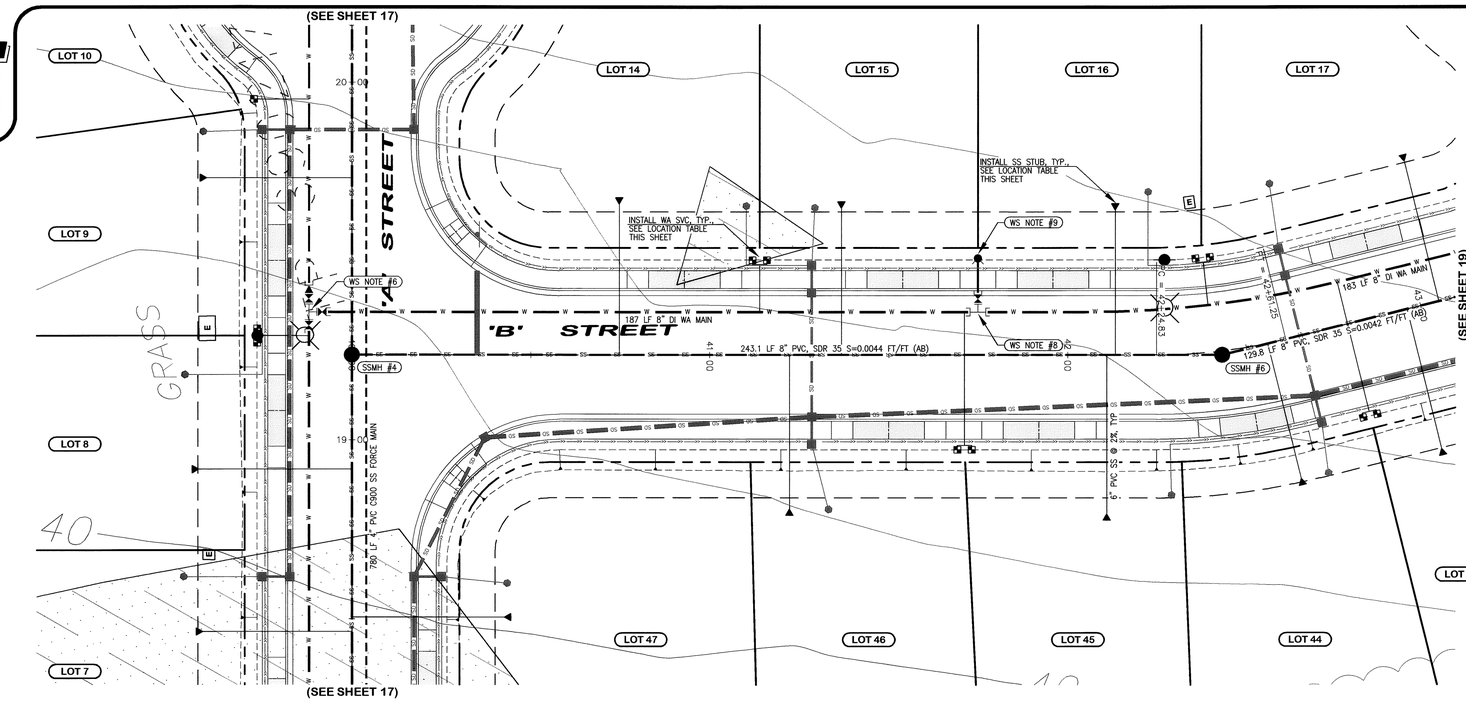
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

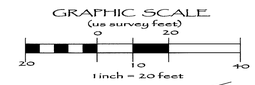
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'A' STREET ~ STATIONS 18+00 to 22+00
WATER & SANITARY SEWER IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 17 OF 34

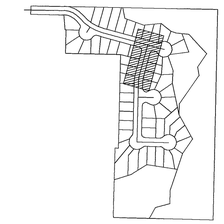
BRENDA A. VANDERFORD, STATE OF WASHINGTON, 37432, REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

07-10-07 BEA

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com







SANITARY SEWER NOTES

SSMH #4
40+00.00, CL (AB)
RIM=37.32 (AB)
8" I.E. (W)=29.42 (AB)
8" I.E. (S)=23.12 (AB)
8" I.E. (E)=23.07 (AB)
OUTSIDE DROP CONNECTION PER COFSD SS-11

SSMH #6
42+43.04, 1.11 RT (AB)
RIM=35.99 (AB)
8" I.E. (S)=24.29 (AB)
8" I.E. (N)=24.19 (AB)

WATER SYSTEM NOTES

WS NOTE #6
39+88.0, 12.0' LT (AB)
INSTALL:
(1) 8"x8" TEE, FL
(1) 8" GATE VALVE, FL [E]
(1) 8"x6" REDUCER, FLxMJ [E]
(2) 8" GATE VALVE, FLxMJ [W & S]
THRUST BLOCK

WS NOTE #8
41+74.9, 12.0' LT (AB)
INSTALL:
(1) 8"x6" TEE, MJxFL
PER COFSD W-1
THRUST BLOCK

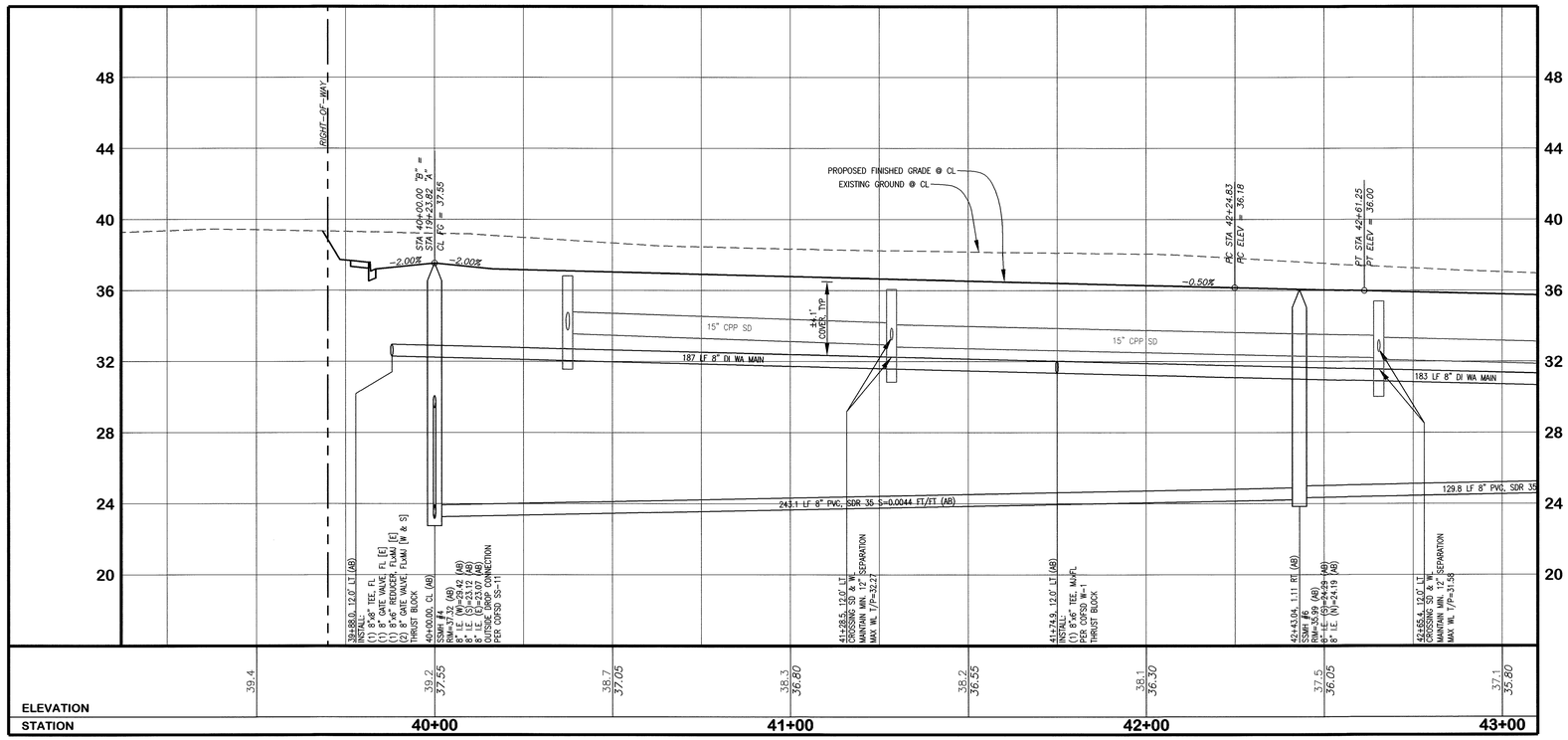
WS NOTE #9
41+74.9, 27.0' LT
INSTALL:
(1) HYDRANT ASSEMBLY
PER DETAIL
FG 36.63 AT FH

SEWER STUB LOCATION TABLE

LOT No.	STREET	STA & OFFSET @ MAIN			TYPE	STA & OFFSET @ STUB			STUB I.E.	
14	"B" STREET	40+74.7	0.0	CL	SINGLE	40+74.7	42.2	LT	31.1	(AB)
15	"B" STREET	41+36.8	0.0	CL	SINGLE	41+36.8	41.1	LT	30.9	(AB)
16	"B" STREET	42+13.3	0.0	CL	SINGLE	42+13.3	40.5	LT	31.4	(AB)
17	"B" STREET	43+05.3	0.0	CL	SINGLE	43+05.3	40.4	LT	30.4	(AB)
44	"B" STREET	42+56.0	0.0	CL	SINGLE	42+57.1	39.0	RT	32.4	(AB)
45	"B" STREET	42+10.9	0.0	CL	SINGLE	42+10.9	44.5	RT	34.7	(AB)
46	"B" STREET	41+22.2	0.0	CL	SINGLE	41+22.2	43.2	RT	32.9	(AB)
47	"A" STREET	18+50.5	0.0	CL	SINGLE	18+50.5	42.6	RT	34.8	(AB)

WATER SVC LOCATION TABLE

LOT No.	STREET	STA & OFFSET			TYPE
14	"B" STREET	41+11.9	26.5	LT	1" DUAL
15	"B" STREET	41+15.9	26.5	LT	
16	"B" STREET	42+38.0	26.5	LT	1" DUAL
17	"B" STREET	42+42.9	26.5	LT	
43	"B" STREET	42+80.9	26.5	RT	1" DUAL
44	"B" STREET	42+76.9	26.5	RT	
45	"B" STREET	41+73.1	26.5	RT	1" DUAL
46	"B" STREET	41+69.1	26.5	RT	



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RS
CITY OF FERNDALE

{CORRESPONDING ROADWAY & STORM DRAINAGE IMPROVEMENTS SEE SHEET 8}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

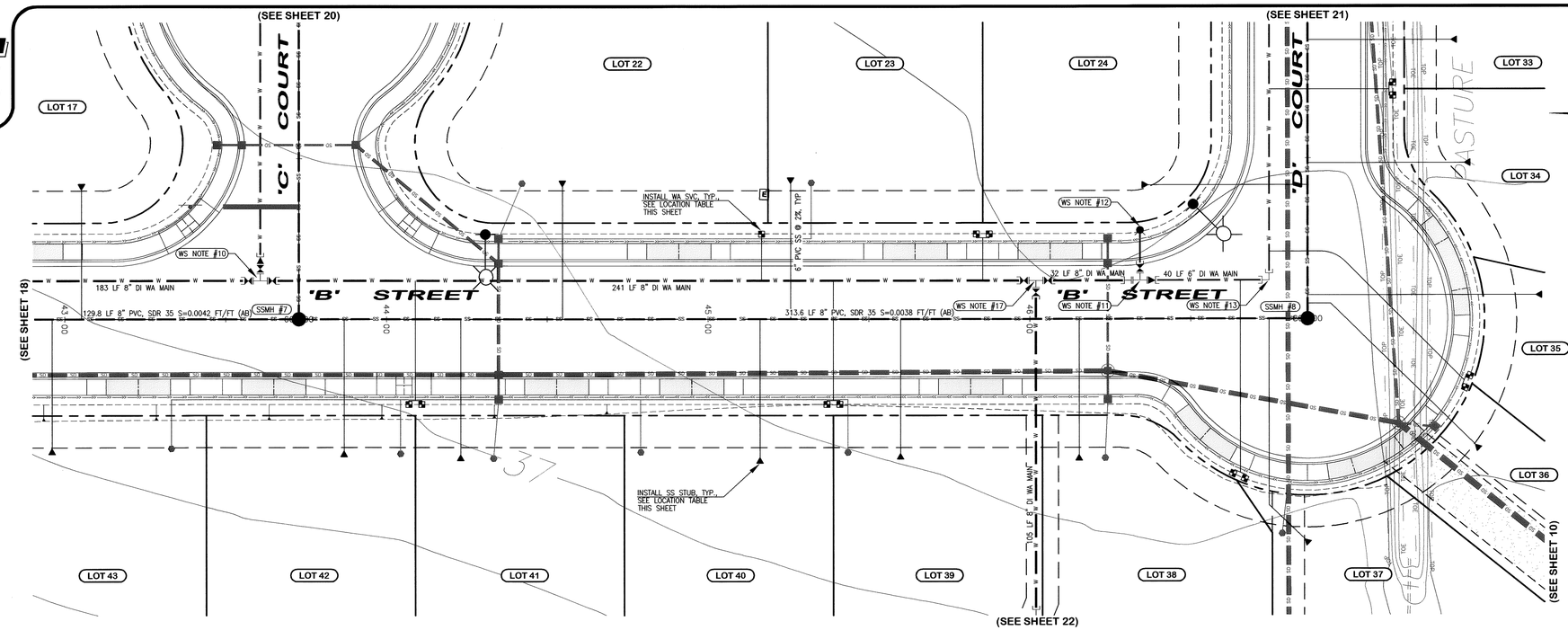
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'B' STREET ~ STATIONS
40+00 to 43+00
WATER & SANITARY SEWER IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 18 OF 34

BRENDA A. VANDERKAMP
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

00380 610.0769 DD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



SEWER STUB LOCATION TABLE									
LOT No.	STREET	STA & OFFSET @ MAIN			TYPE	STA & OFFSET @ STUB		STUB LE.	
17	"B" STREET	43+05.3	0.0	CL	SINGLE	43+05.3	40.4	LT	30.4 (AB)
22	"B" STREET	44+54.7	0.0	CL	SINGLE	44+54.7	41.3	LT	31.1 (AB)
23	"B" STREET	45+25.6	0.0	CL	SINGLE	45+25.6	42.3	LT	31.3 (AB)
24	"D" COURT	80+41.7	0.0	CL	SINGLE	80+41.7	49.7	LT	30.8 (AB)
36	"D" COURT	80+04.8	0.0	CL	SINGLE	79+60.7	52.7	RT	31.6 (AB)
37	"B" STREET	46+74.4	0.0	CL	SINGLE	46+85.5	68.7	RT	29.8 (AB)
38	"B" STREET	46+15.3	0.0	CL	SINGLE	46+15.3	42.3	RT	28.5 (AB)
39	"B" STREET	45+59.8	0.0	CL	SINGLE	45+59.8	41.8	RT	29.5 (AB)
40	"B" STREET	45+16.1	0.0	CL	SINGLE	45+16.1	43.1	RT	31.6 (AB)
41	"B" STREET	44+23.1	0.0	CL	SINGLE	44+23.1	42.3	RT	32.0 (AB)
42	"B" STREET	43+86.8	0.0	CL	SINGLE	43+86.8	41.1	RT	33.3 (AB)
43	"B" STREET	42+96.1	0.0	CL	SINGLE	42+96.1	40.3	RT	32.2 (AB)

WATER SVC LOCATION TABLE					
LOT No.	STREET	STA & OFFSET			TYPE
22	"B" STREET	45+16.6	26.5	LT	3/4" SINGLE
23	"B" STREET	45+83.4	26.5	LT	>1" DUAL
24	"B" STREET	45+87.4	26.5	LT	
37	"B" STREET	46+66.8	49.8	RT	>1" DUAL
38	"B" STREET	46+63.1	48.2	RT	
39	"B" STREET	45+40.9	26.5	RT	>1" DUAL
40	"B" STREET	45+36.9	26.5	RT	
41	"B" STREET	44+10.9	26.5	RT	>1" DUAL
42	"B" STREET	44+06.9	26.5	RT	

SANITARY SEWER NOTES

SSMH #7
43+72.75, CL (AB)
RIM=35.43 (AB)
8" I.E. (S)=24.93 (AB)
8" I.E. (E)=24.93 (AB)
8" I.E. (N)=24.83 (AB)

SSMH #8
46+86.37, CL (AB)
RIM=36.33 (AB)
8" I.E. (E)=26.23 (AB)
8" I.E. (N)=26.13 (AB)

WATER SYSTEM NOTES

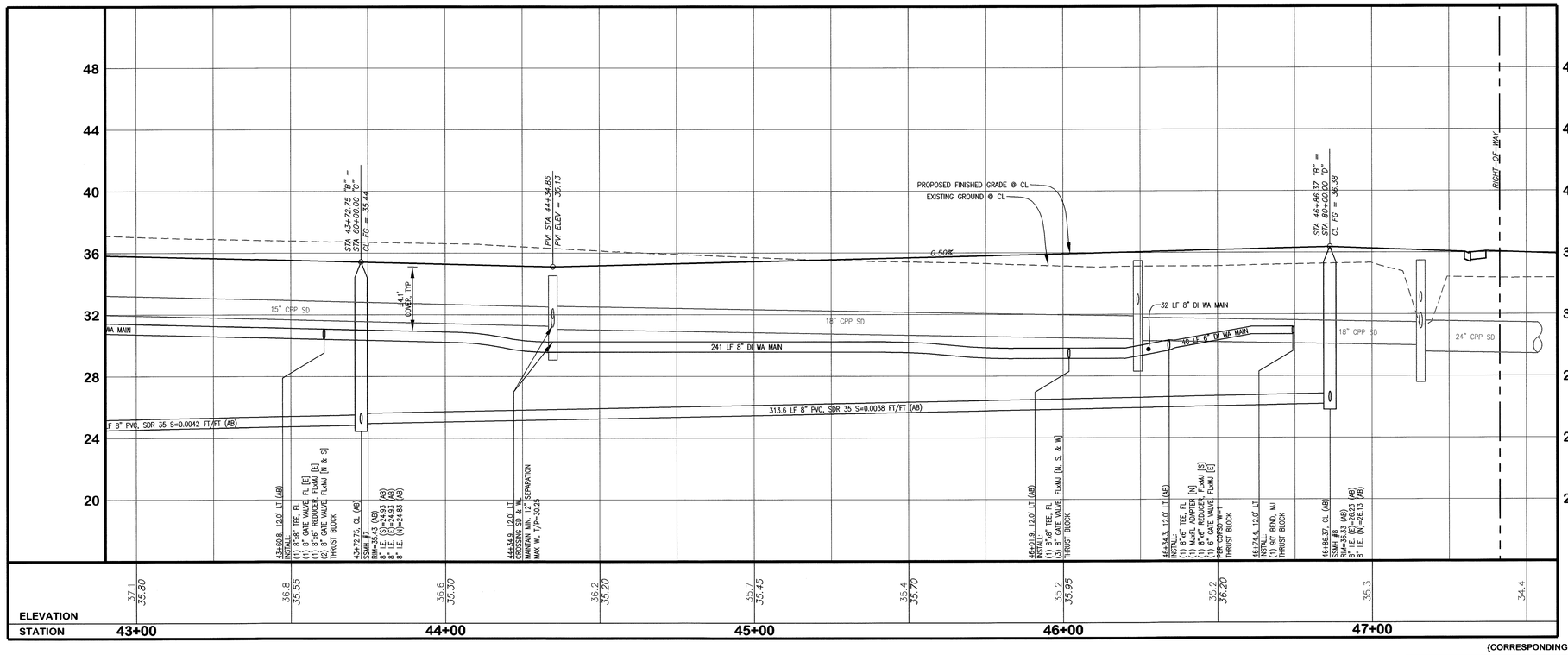
WS NOTE #10
43+60.8, 12.0' LT (AB)
INSTALL:
(1) 8"x8" TEE, FL
(1) 8" GATE VALVE, FL [E]
(1) 8"x6" REDUCER, FLxMJ [E]
(2) 8" GATE VALVE, FLxMJ [N & S]
THRUST BLOCK

WS NOTE #11
46+34.3, 12.0' LT (AB)
INSTALL:
(1) 8"x6" TEE, FL
(1) MJxFL ADAPTER [N]
(1) 8"x6" REDUCER, FLxMJ [S]
(1) 6" GATE VALVE, FLxMJ [E]
PER COFSD W-1
THRUST BLOCK

WS NOTE #12
46+34.3, 27.6' LT
INSTALL:
(1) HYDRANT ASSEMBLY
PER DETAIL
FG 36.34 AT FH

WS NOTE #13
46+74.4, 12.0' LT
INSTALL:
(1) 90° BEND, MJ
THRUST BLOCK

WS NOTE #17
46+01.9, 12.0' LT (AB)
INSTALL:
(1) 8"x8" TEE, FL
(3) 8" GATE VALVE, FLxMJ [N, S, & W]
THRUST BLOCK



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED AS BUILTS
BY RC
CITY OF FERNDALE

{CORRESPONDING ROADWAY & STORM DRAINAGE IMPROVEMENTS SEE SHEET 9}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

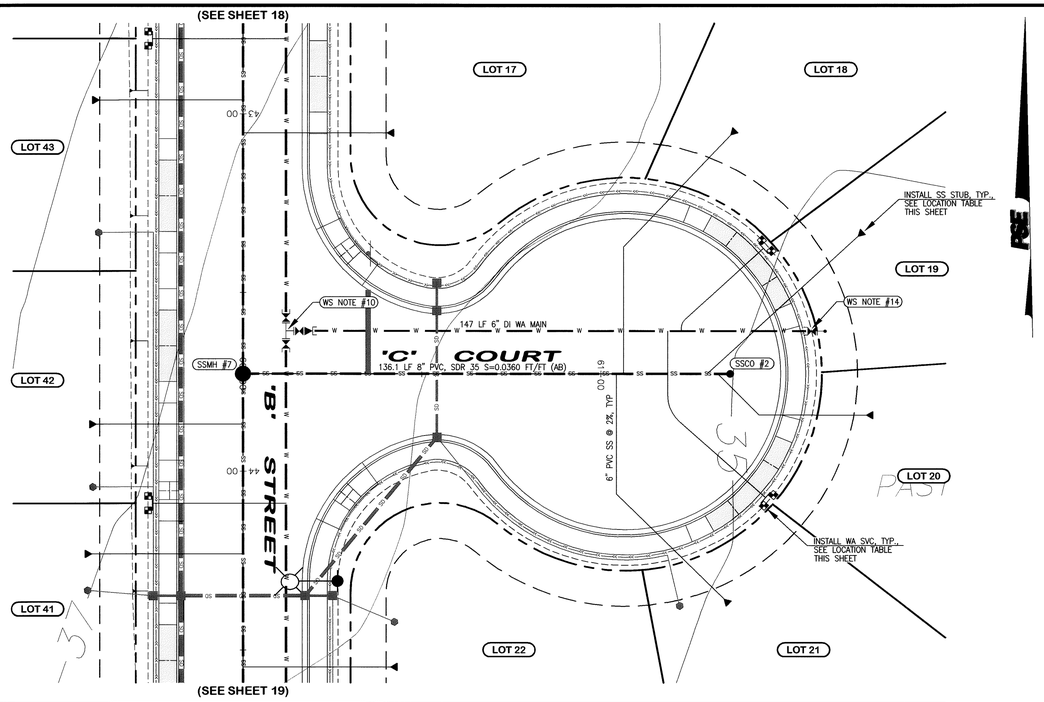
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'B' STREET ~ STATIONS
43+00 to 47+50
WATER & SANITARY SEWER IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 19 OF 34

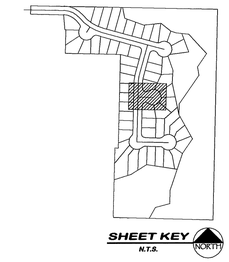
BRIAN A. VANDERHAAK
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

PA 0001.7
0030.01 4

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685 EMAIL: pse@psesurvey.com www.psesurvey.com



GRAPHIC SCALE
(us survey feet)
1 inch = 20 feet



00390.020 7/10/09 DD

SANITARY SEWER NOTES

SSMH #7
43+72.75, CL (AB)
RIM=35.43 (AB)
8" I.E. (S)=24.93 (AB)
8" I.E. (E)=24.93 (AB)
8" I.E. (N)=24.83 (AB)

SSCO #2
61+36.09, CL (AB)
RIM=36.43 (AB)
8" I.E. (W)=29.83 (AB)
CLEANOUT PER COFSD SS-5

WATER SYSTEM NOTES

WS NOTE #10
43+60.8, 12.0' LT (AB)
INSTALL:
(1) 8"x8" TEE, FL
(1) 8" GATE VALVE, FL [E]
(1) 8"x6" REDUCER, FLxMJ [E]
(2) 8" GATE VALVE, FLxMJ [N & S]
THRUST BLOCK

WS NOTE #14
61+58.9, 12.0' LT
END CONST. 6" DI WA MAIN
INSTALL:
2" BLOW-OFF ASSEMBLY FOR NON-EXTENDIBLE MAIN PER COFSD W-10
THRUST BLOCK

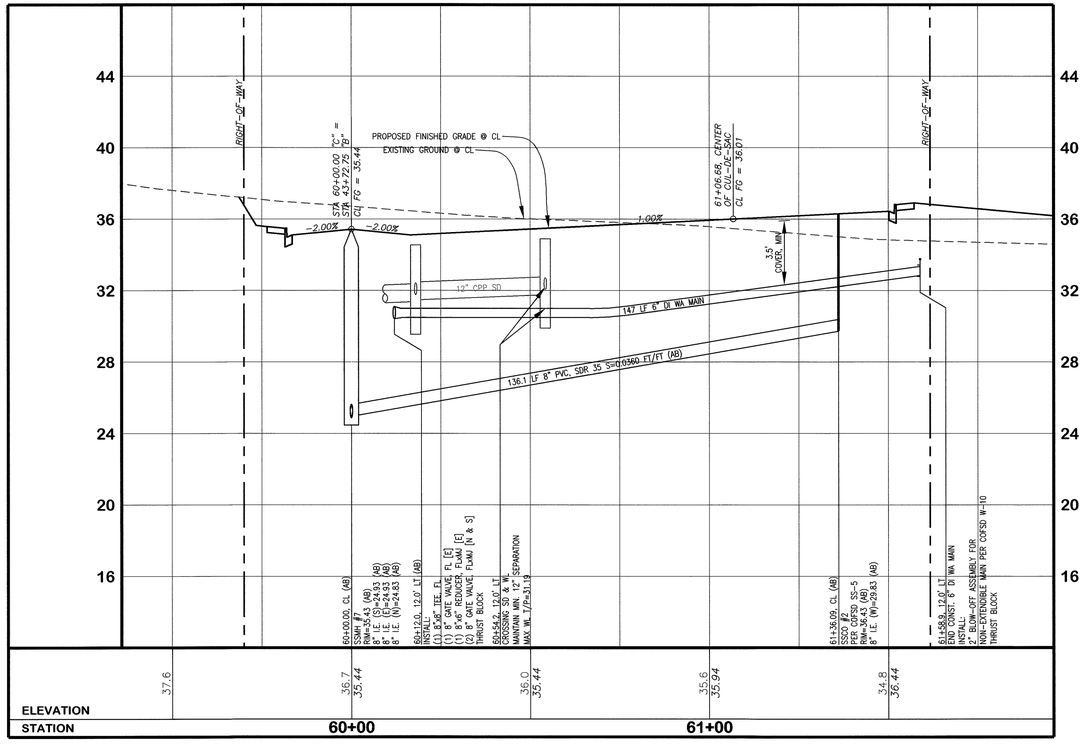
SEWER STUB LOCATION TABLE

LOT No.	STREET	STA & OFFSET @ MAIN			TYPE	STA & OFFSET @ STUB			STUB I.E.	
17	"B" STREET	43+05.3	0.0	CL	SINGLE	43+05.3	40.4	LT	30.4	(AB)
18	"C" COURT	61+06.3	0.0	CL	SINGLE	61+36.3	67.0	LT	32.4	(AB)
19	"C" COURT	61+29.6	0.0	CL	SINGLE	61+71.9	38.6	LT	32.0	(AB)
20	"C" COURT	61+32.6	0.0	CL	SINGLE	61+74.2	11.5	RT	31.6	(AB)
21	"C" COURT	61+04.3	0.0	CL	SINGLE	61+34.4	63.0	RT	31.1	(AB)
22	"B" STREET	44+54.7	0.0	CL	SINGLE	44+54.7	41.3	LT	31.1	(AB)

WATER SVC LOCATION TABLE

LOT No.	STREET	STA & OFFSET			TYPE
18	"C" COURT	61+44.9	37.4	LT	1" DUAL
19	"C" COURT	61+47.6	34.5	LT	
20	"C" COURT	61+48.1	33.8	RT	1" DUAL
21	"C" COURT	61+45.5	36.8	RT	

* WATER METER BOXES FOR LOTS 18 THROUGH 21 SHALL BE TRAFFIC RATED.



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RC
CITY OF FERNDALE

{CORRESPONDING ROADWAY & STORM DRAINAGE IMPROVEMENTS SEE SHEET 12}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	SCALE	REV	DATE	DESCRIPTION	BY
DESIGN: SEE SURVEY NOTES, SHEET 1				BASE	BEA	BEA	HORIZ: 1" = 20'				
STAKING:				DESIGN	BEA	JVY	VERT: 1" = 4'				
ASBUILT:				XREF:							
				DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg							
SURVEY REFERENCE	VERTICAL DATUM			PLAN CHECK				REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07

ISSUE

CALL BEFORE YOU DIG
1-800-424-5555

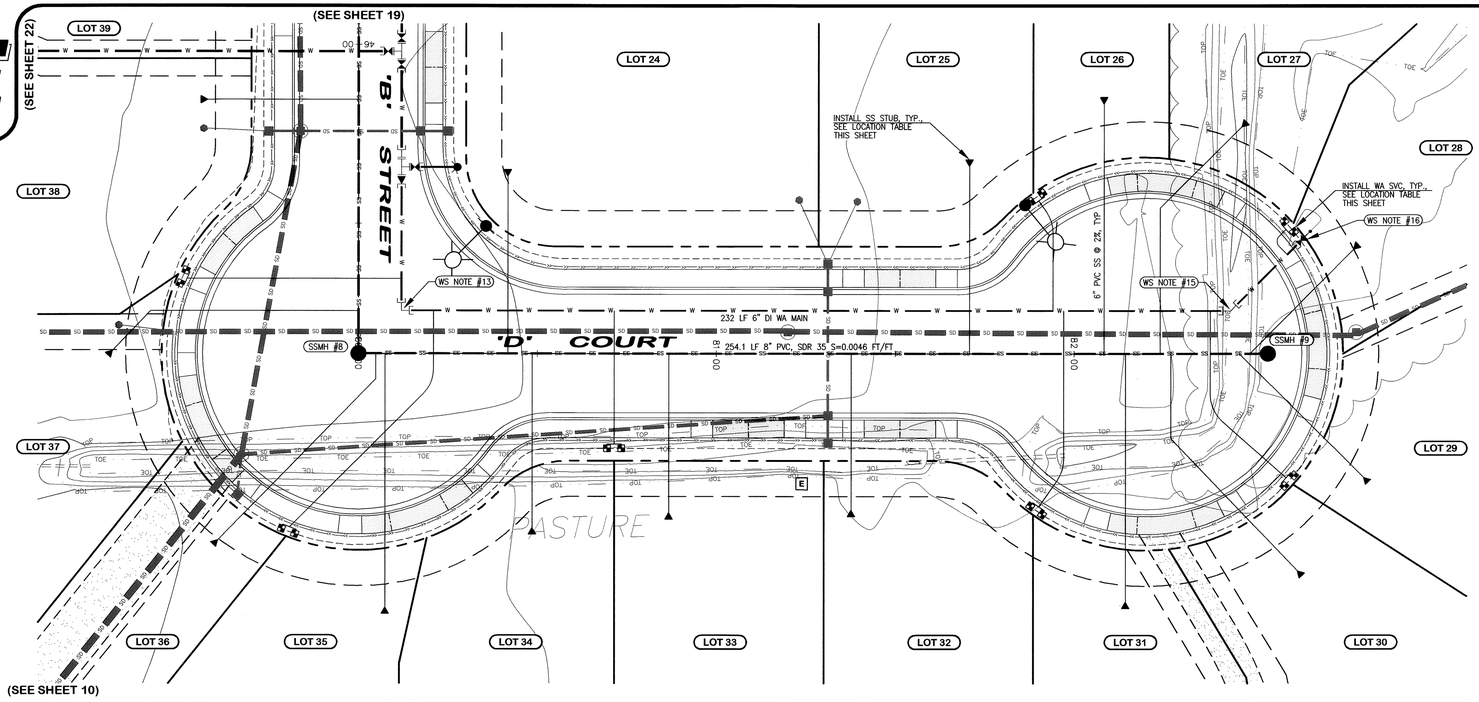
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'C' COURT

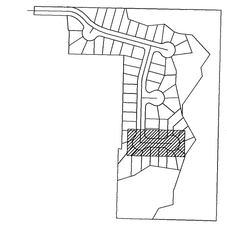
WATER & SANITARY SEWER IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 20 OF 34

REGISTERED PROFESSIONAL ENGINEER
BERNARD A. VANDERHOEK
STATE OF WASHINGTON
37432
10-11-07
EXPIRES: 10/10/09

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



GRAPHIC SCALE
(us survey feet)
1 inch = 20 feet



SANITARY SEWER NOTES

SSMH #8
46+86.37, CL (AB)
RIM=36.33 (AB)
8" I.E. (E)=26.23 (AB)
8" I.E. (N)=26.13 (AB)

SSMH #9
82+54.08, CL (AB)
RIM=36.50 (AB)
8" I.E. (W)=27.40 (AB)

WATER SYSTEM NOTES

WS NOTE #13
46+74.4, 12.0' LT
INSTALL:
(1) 90° BEND, MJ
THRUST BLOCK

WS NOTE #15
82+43.7, 12.0' LT
INSTALL:
(1) 45° BEND, MJ
THRUST BLOCK

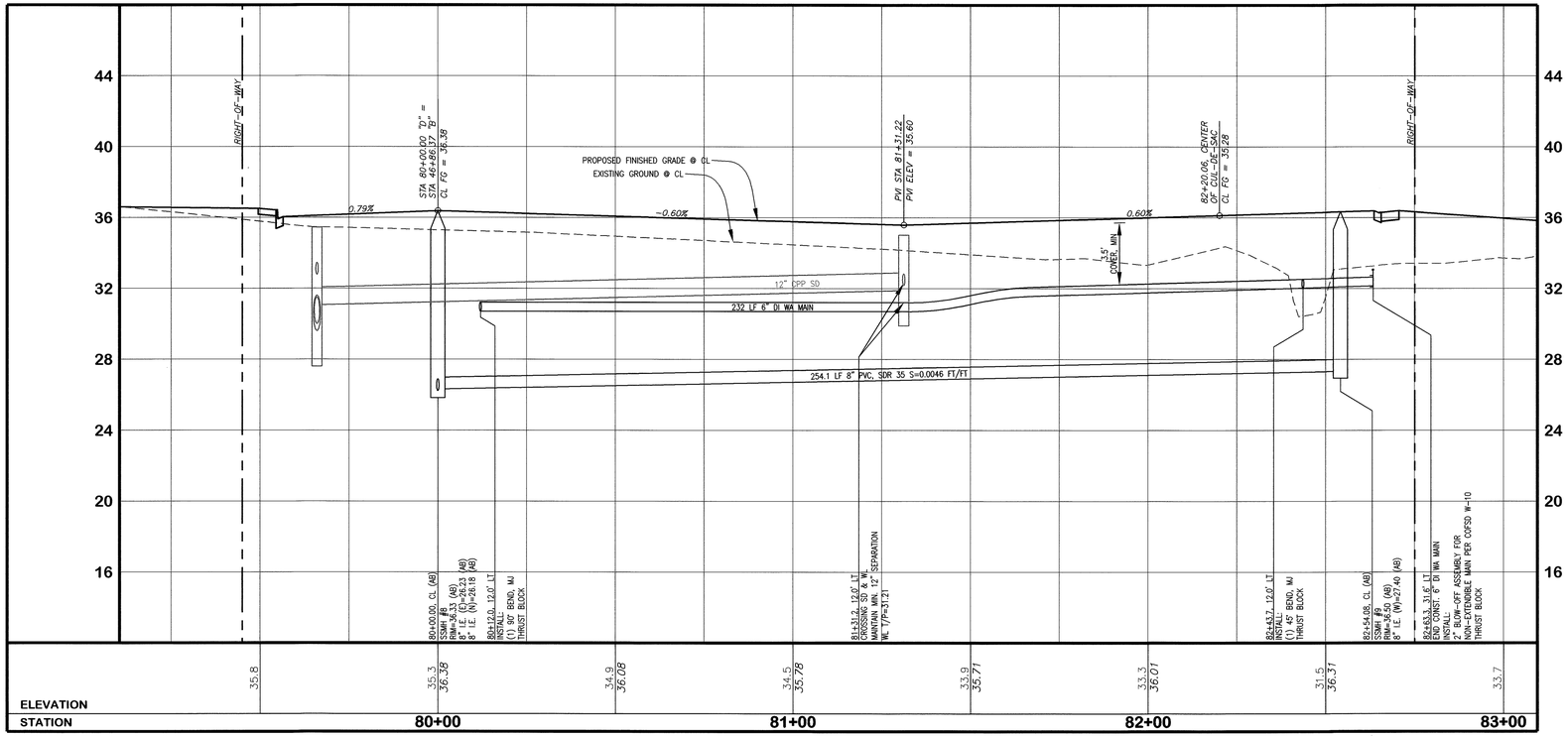
WS NOTE #16
82+63.3, 31.6' LT
END CONST. 6" DI WA MAIN
INSTALL:
2" BLOW-OFF ASSEMBLY FOR
NON-EXTENDIBLE MAIN PER COFSD W-10
THRUST BLOCK

SEWER STUB LOCATION TABLE

LOT No.	STREET	STA & OFFSET @ MAIN			TYPE	STA & OFFSET @ STUB			STUB I.E.	
24	"D" COURT	80+41.7	0.0	CL	SINGLE	80+41.7	49.7	LT	30.8	(AB)
25	"D" COURT	81+70.7	0.0	CL	SINGLE	81+70.7	52.5	LT	30.5	(AB)
26	"D" COURT	82+08.3	0.0	CL	SINGLE	82+08.3	70.0	LT	30.6	(AB)
27	"D" COURT	82+24.0	0.0	CL	SINGLE	82+46.9	63.6	LT	31.3	(AB)
28	"D" COURT	82+49.0	0.0	CL	SINGLE	82+78.0	29.3	LT	30.5	(AB)
29	"D" COURT	82+46.1	0.0	CL	SINGLE	82+80.8	34.6	RT	30.1	(AB)
30	"D" COURT	82+27.0	0.0	CL	SINGLE	82+62.4	60.8	RT	31.1	(AB)
31	"D" COURT	82+14.3	0.0	CL	SINGLE	82+14.3	69.5	RT	29.8	(AB)
32	"D" COURT	81+37.6	0.0	CL	SINGLE	81+37.6	43.9	RT	28.1	(AB)
33	"D" COURT	80+86.8	0.0	CL	SINGLE	80+86.8	44.5	RT	29.5	(AB)
34	"D" COURT	80+48.5	0.0	CL	SINGLE	80+48.5	48.8	RT	30.4	(AB)
35	"D" COURT	80+07.4	0.0	CL	SINGLE	80+07.4	71.0	RT	31.6	(AB)
36	"D" COURT	80+04.8	0.0	CL	SINGLE	79+60.7	52.2	RT	31.6	(AB)
37	"B" STREET	46+74.4	0.0	CL	SINGLE	46+85.5	68.7	RT	29.8	(AB)
38	"B" STREET	46+15.3	0.0	CL	SINGLE	46+15.3	42.3	RT	28.5	(AB)

WATER SVC LOCATION TABLE

LOT No.	STREET	STA & OFFSET			TYPE
25	"D" COURT	81+87.7	42.6	LT	1" DUAL
26	"D" COURT	81+91.0	44.9	LT	
27	"D" COURT	82+58.6	37.1	LT	1" DUAL
28	"D" COURT	82+61.3	34.1	LT	
29	"D" COURT	82+61.4	34.0	RT	1" DUAL
30	"D" COURT	82+58.7	37.0	RT	
31	"D" COURT	81+91.0	44.9	RT	1" DUAL
32	"D" COURT	81+87.7	42.6	RT	
33	"D" COURT	80+73.5	26.5	RT	1" DUAL
34	"D" COURT	80+69.5	26.5	RT	
35	"D" COURT	47+36.8	17.8	RT	1" DUAL
36	"D" COURT	47+35.4	21.5	RT	



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY _____ CITY OF FERNDALE

{CORRESPONDING ROADWAY & STORM DRAINAGE IMPROVEMENTS SEE SHEET 13}

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

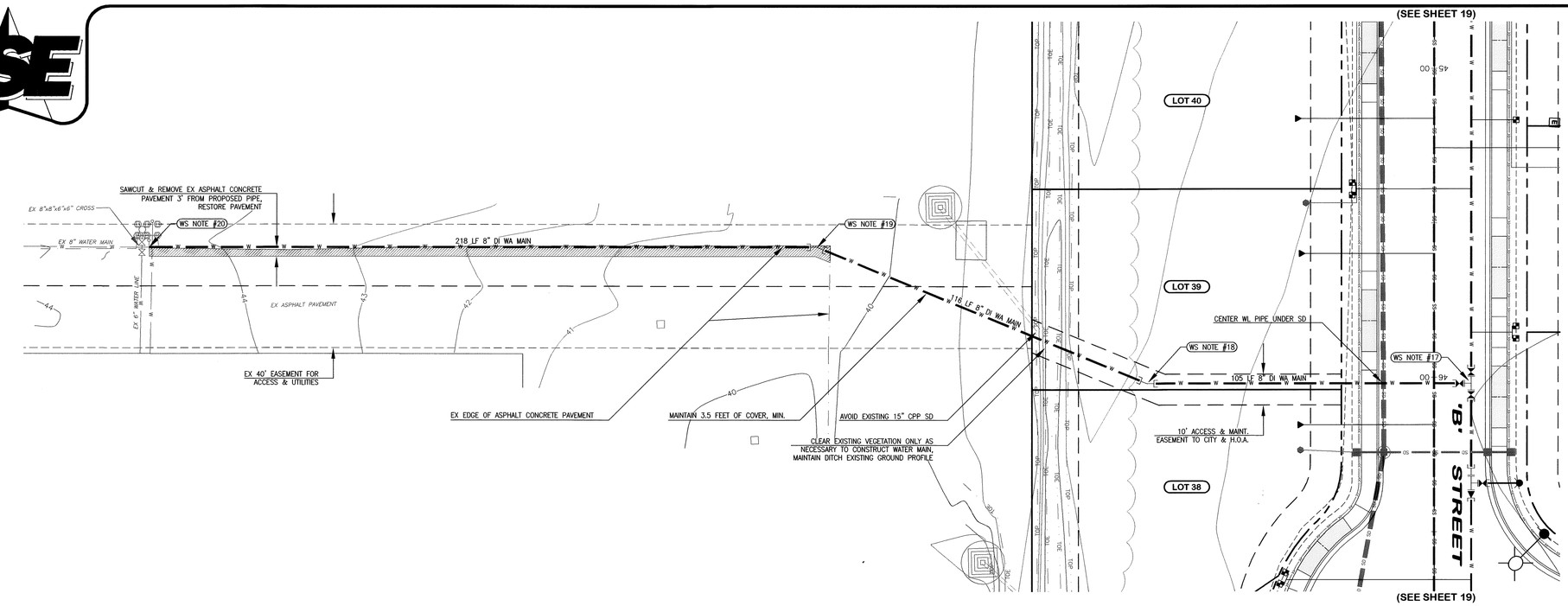
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

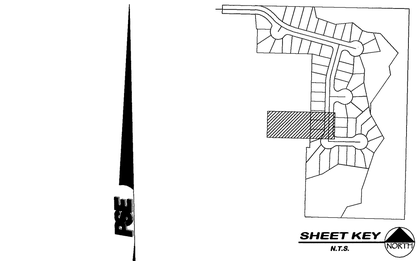
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
'D' COURT
WATER & SANITARY SEWER IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 21 OF 34

STEPHEN A. VANDERHAM, STATE OF WASHINGTON, 37432, REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/09

00396.001 7-10-09 DD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com





GRAPHIC SCALE
(us survey feet)
0 10 20 40
1 inch = 20 feet

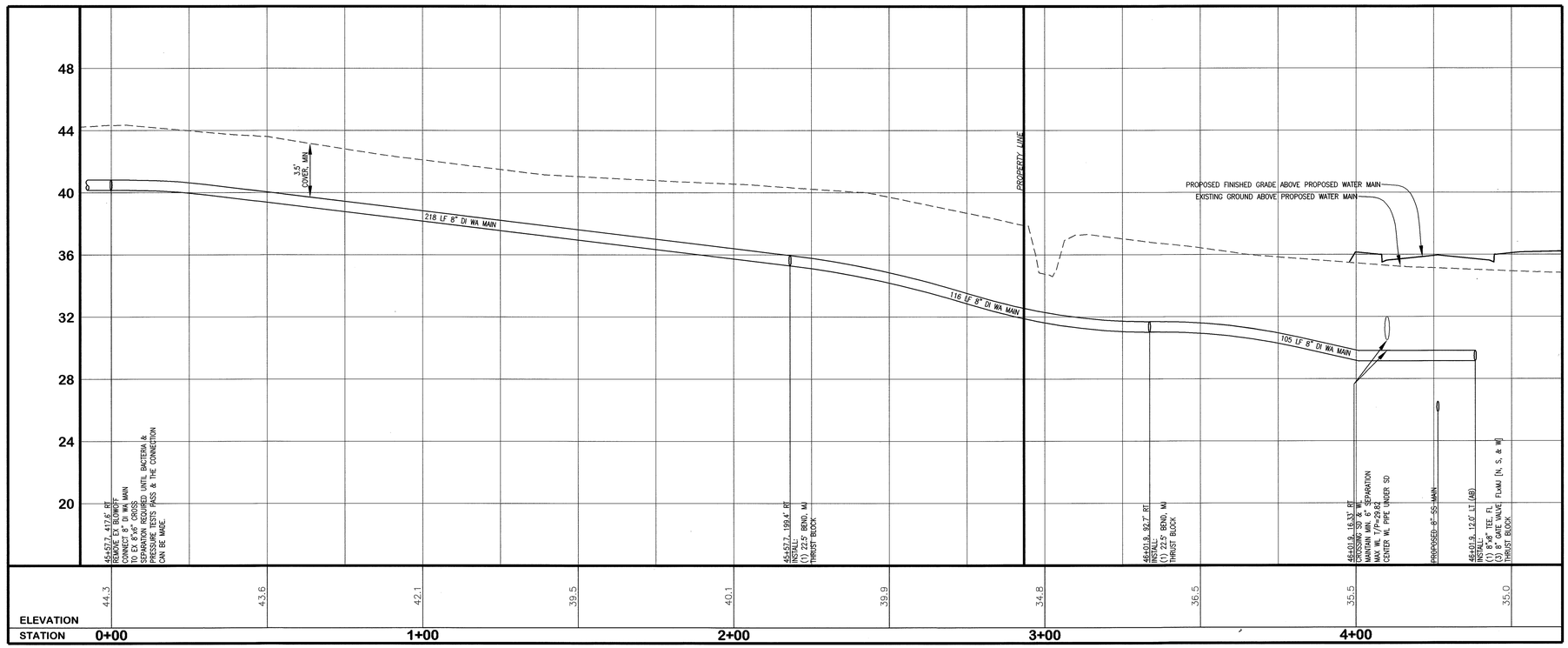
WATER SYSTEM NOTES

WS NOTE #17
46+01.9, 12.0' LT (AB)
INSTALL:
(1) 8"x8" TEE, FL
(3) 8" GATE VALVE, FLxMJ [N, S, & W]
THRUST BLOCK

WS NOTE #18
46+01.9, 92.7' RT
INSTALL:
(1) 22.5° BEND, MJ
THRUST BLOCK

WS NOTE #19
45+57.7, 199.4' RT
INSTALL:
(1) 22.5° BEND, MJ
THRUST BLOCK

WS NOTE #20
45+57.7, 417.6' RT
REMOVE EX BLOWOFF
CONNECT 8" DI WA MAIN TO EX 8"x6" CROSS
SEPARATION REQUIRED UNTIL BACTERIA & PRESSURE TESTS PASS & THE CONNECTION CAN BE MADE.



HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
CY RC
CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

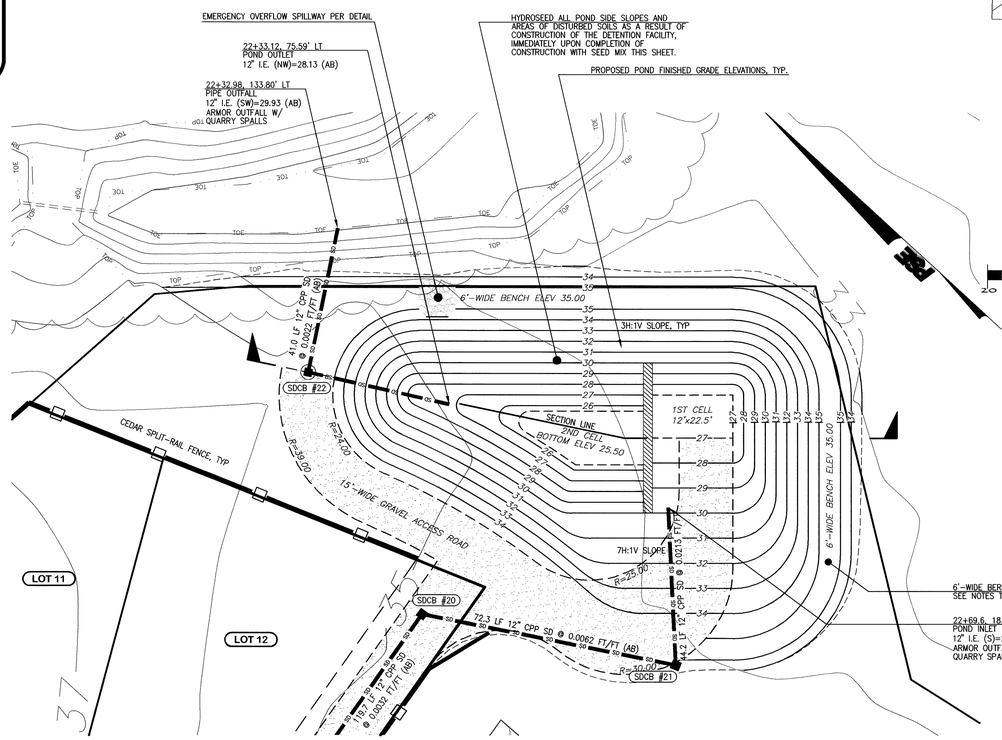
CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

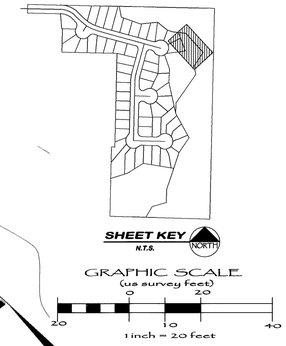
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
CONNECTION TO OFFSITE WATER MAIN
WATER & SANITARY SEWER IMPROVEMENTS
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 22 OF 34

BRENDA A. VANDERHAM
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

00390.022 7-10-09 DD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com





STORM DRAINAGE NOTES

SDCB #20
21+95.42, 30.02' LT @ CTR
TYPE 1 W/ SOLID COVER
RIM=34.88 (AB)
12" I.E. (W)=30.55 (AB)
12" I.E. (SE)=30.50 (AB)

SDCB #21
22+98.17, 34.73' RT @ CTR
TYPE 1 W/ SOLID COVER
RIM=35.05 (AB)
12" I.E. (NW)=30.05 (AB)
12" I.E. (NE)=30.12 (AB)

SDCB #22
22+04.55, 104.19' LT @ CTR
INSTALL CONTROL STRUCTURE, TYPE 2-54" W/ FRAME & SOLID LID, PER DETAIL
RIM=36.17 (AB)
12" I.E. (SE)=30.07 (AB)
12" I.E. (NE)=30.02 (AB)

6'-WIDE BERM IN FILL AREA SEE NOTES THIS SHEET

22+69.6, 18.64' LT
POND INLET
12" I.E. (S)=29.18 (AB)
ARMOR OUTFALL W/
QUARRY SPALLS

STORM DETENTION POND SLOPES SEED MIX CONSTITUENTS

ALL POND SIDE SLOPES AND AREAS DISTURBED AS A RESULT OF CONSTRUCTION OF THE DETENTION POND FACILITY SHALL BE HYDOSEEDED WITH THE FOLLOWING "LOW GROW" SEED MIX AT A RATE OF 2.5# PER 1000 SF:

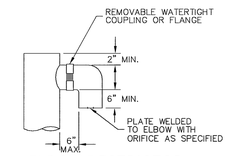
SEED NAME	% OF MIX
DWARF TALL FESCUE	40%
DWARF PERENNIAL RYE "BARCLAY"	30%
RED FESCUE	25%
COLONIAL BENTGRASS	5%

POND DESIGN INFORMATION:

WETPOND DEAD STORAGE
BOTTOM CELL 1 ELEV. = 28.00'
(OVER-EXCAVATE 1.0' TO ELEV. 27.00' FOR SEDIMENT STORAGE)
BOTTOM CELL 2 ELEV. = 26.00'
(OVER-EXCAVATE 0.5' TO ELEV. 25.50' FOR SEDIMENT STORAGE)
TOP ELEV. = 30.00'
VOLUME CELL 1 = 1,813 CF (25%)
VOLUME CELL 2 = 5,510 CF (75%)
TOTAL = 7,323 CF (100%)

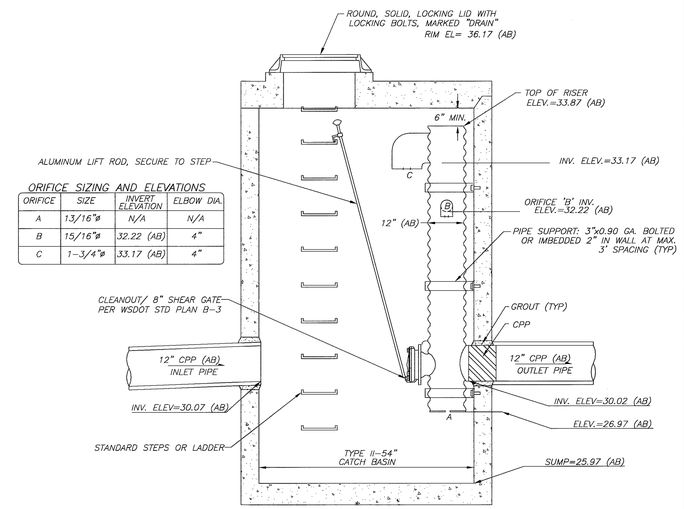
DETENTION ACTIVE STORAGE
VOLUME (30.00' to 33.84') = 22,281 CF
BOTTOM ELEV. = 30.00'
TOP ELEV. = 33.84'
OVERFLOW SPILLWAY ELEV. = 34.27'
MAX. OVERFLOW ELEV. = 34.45'
TOP BERM ELEV. = 35.00'

POND BERM EMBANKMENT NOTES
1) POND BERM EMBANKMENT SHALL BE CONSTRUCTED ON NATIVE CONSOLIDATED SOIL (OR ADEQUATELY COMPACTED AND STABLE FILL SOILS ANLAYZED BY A GEOTECHNICAL ENGINEER) FREE OF LOOSE SURFACE MATERIALS, ROOTS, AND OTHER ORGANIC DEBRIS.
2) EMBANKMENT COMPACTION SHALL BE ACCOMPLISHED IN SUCH A MANNER AS TO PRODUCE A DENSE, LOW PERMEABILITY ENGINEERED FILL THAT CAN TOLERATE POST-CONSTRUCTION SETTLEMENTS WITH A MINIMUM OF CRACKING. THE EMBANKMENT FILL SHALL BE PLACED ON A STABLE SUBGRADE AND COMPACTED TO 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY, ASTM PROCEDURE D698. PLACEMENT MOISTURE CONTENT SHALL LIE WITHIN 1% DRY TO 3% WET OF THE OPTIMUM MOISTURE CONTENT.
3) THE BERM EMBANKMENT SHALL BE CONSTRUCTED OF SOILS WITH THE FOLLOWING CHARACTERISTICS PER THE UNITED STATES DEPT. OF AGRICULTURE'S TEXTURAL TRIANGLE: A MINIMUM OF 20% SILT AND CLAY, A MAXIMUM OF 60% SAND, A MAXIMUM OF 60% SILT, WITH NOMINAL GRAVEL AND COBBLE CONTENT.



ELBOW RESTRICTOR

NOTES:
1. ALL ORIFICES TO BE FABRICATED BY SHOP DRILLING HOLES OF APPROPRIATE DIAMETER IN METAL PLATE, AND WELDING IT INTO PLACE AT THE BOTTOM OF THE MAIN RISER AND THE THREE ELBOWS.
2. PIPE SUPPORT BRACKETS AND THE RESTRICTOR/SEPARATOR SHALL BE OF THE SAME MATERIAL, AND BE ANCHORED AT 3' MAXIMUM SPACING.
3. ALL METAL PARTS SHALL BE CORROSION RESISTANT. ALL GALVANIZED STEEL PARTS SHALL BE ASPHALT TREATMENT 1 COATED.
4. THE RESTRICTOR/SEPARATOR STANDPIPE SHALL BE FABRICATED FROM 0.060" ALUMINUM, 0.064" ALUMINIZED STEEL, OR 0.064" GALVANIZED STEEL, IN ACCORDANCE WITH AASHTO M36, M196, M197 AND M274. GALVANIZED STEEL SHALL BE ASPHALT TREATMENT 1 COATED.
5. IF A METAL OUTLET PIPE CONNECTS TO A CEMENT CONCRETE PIPE, THE OUTLET PIPE SHALL HAVE A SMOOTH OUTSIDE DIAMETER EQUAL TO THE INSIDE DIAMETER OF THE CONCRETE PIPE LESS 1/4".
6. THE FRAME AND LADDER (OR STEPS) SHALL OFFSET SO THAT:
   A: THE CLEANOUT GATE IS VISIBLE FROM THE TOP.
   B: THE CLIMB DOWN CLEAR SPACE OF 2 FEET IS BETWEEN THE RISER AND CLEANOUT GATE.
   C: THE FRAME IS CLEAR OF THE CURB. (IF APPLICABLE)

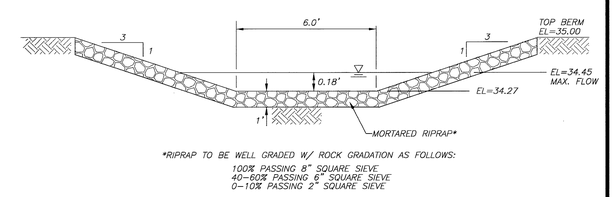


ORIFICE SIZING AND ELEVATIONS

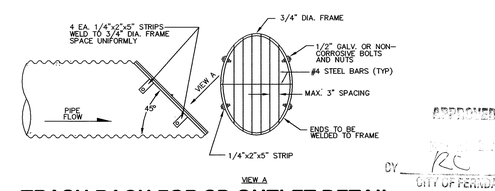
ORIFICE	SIZE	INVERT ELEVATION	ELBOW DIA.
A	13/16"ø	N/A	N/A
B	15/16"ø	32.22 (AB)	4"
C	1-3/4"ø	33.17 (AB)	4"

SECTION VIEW

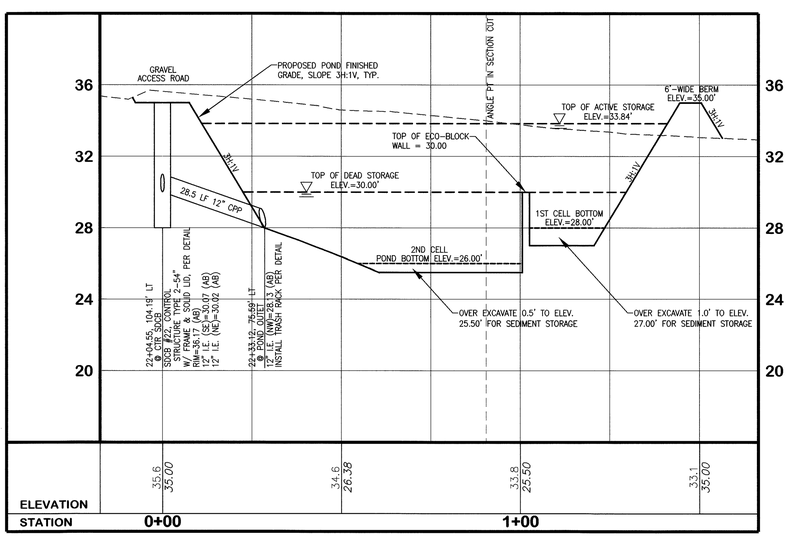
CONTROL STRUCTURE TYPE II - 54"
NOT TO SCALE



EMERGENCY OVERFLOW SPILLWAY DETAIL
NOT TO SCALE



TRASH RACK FOR SD OUTLET DETAIL
NOT TO SCALE



HORIZONTAL SCALE: 1" = 20' **VERTICAL SCALE: 1" = 4'**

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
CY RC
CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

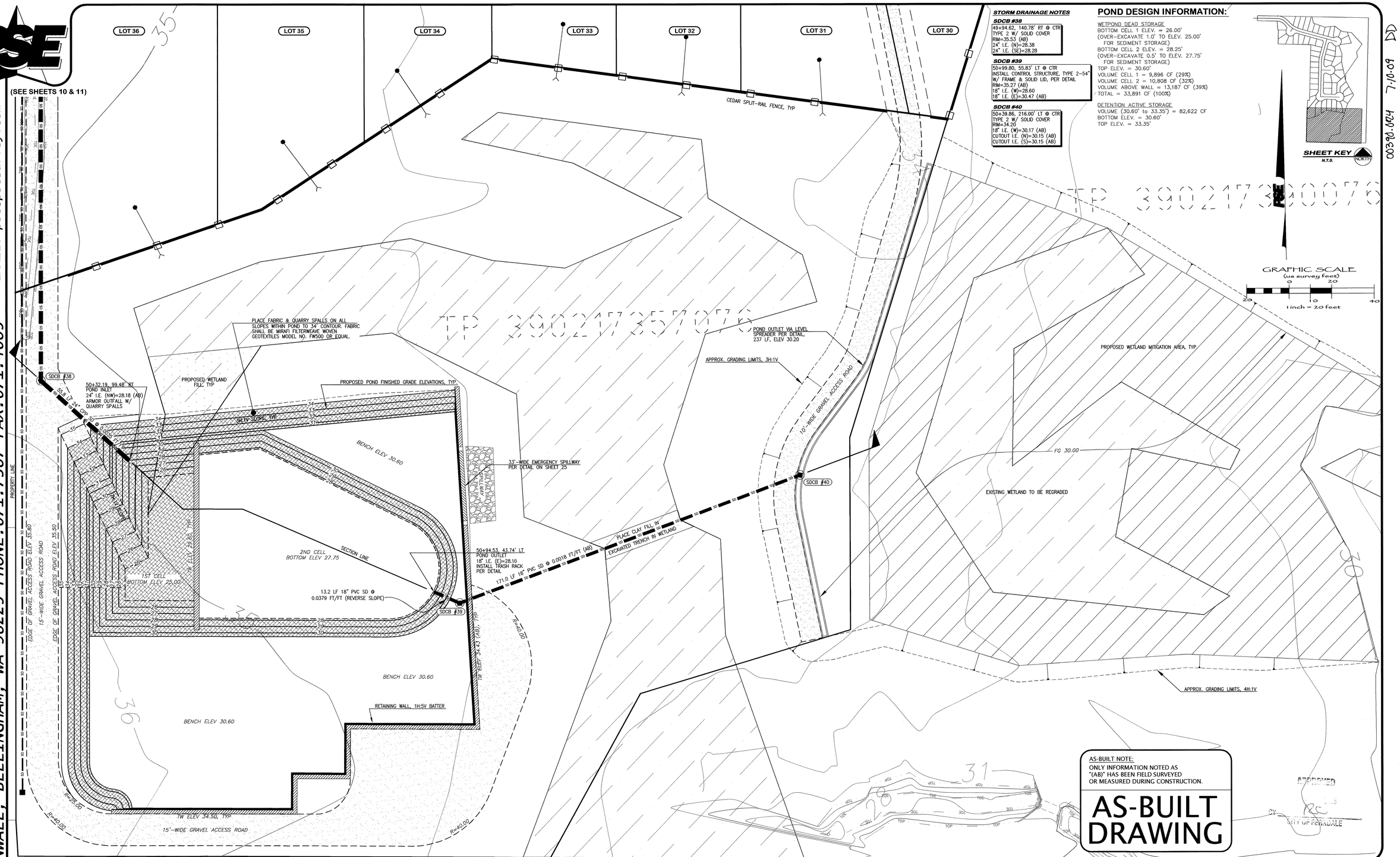
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
STORMWATER MANAGEMENT FACILITY DETAILS ~ NORTH POND

JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 23 OF 34

JEFFREY A. VANDERHAAR
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

7-10-09 DD
00390.023

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



STORM DRAINAGE NOTES

SDCB #38
49+94.62, 140.78' RT @ CTR
TYPE 2 W/ SOLID COVER
RIM=35.53 (AB)
24" I.E. (N)=28.38
24" I.E. (SE)=28.28

SDCB #39
50+99.80, 55.83' LT @ CTR
INSTALL CONTROL STRUCTURE, TYPE 2-54" W/ FRAME & SOLID LID, PER DETAIL
RIM=35.27 (AB)
18" I.E. (W)=28.60
18" I.E. (E)=30.47 (AB)

SDCB #40
50+39.86, 216.00' LT @ CTR
TYPE 2 W/ SOLID COVER
RIM=34.20
18" I.E. (W)=30.17 (AB)
CUTOUT I.E. (N)=30.15 (AB)
CUTOUT I.E. (S)=30.15 (AB)

POND DESIGN INFORMATION:

WETPOND DEAD STORAGE
BOTTOM CELL 1 ELEV. = 26.00'
(OVER-EXCAVATE 1.0' TO ELEV. 25.00' FOR SEDIMENT STORAGE)
BOTTOM CELL 2 ELEV. = 28.25'
(OVER-EXCAVATE 0.5' TO ELEV. 27.75' FOR SEDIMENT STORAGE)
TOP ELEV. = 30.60'
VOLUME CELL 1 = 9,896 CF (29%)
VOLUME CELL 2 = 10,808 CF (32%)
VOLUME ABOVE WALL = 13,187 CF (39%)
TOTAL = 33,891 CF (100%)

DETENTION ACTIVE STORAGE
VOLUME (30.60' to 33.35') = 82,622 CF
BOTTOM ELEV. = 30.60'
TOP ELEV. = 33.35'

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

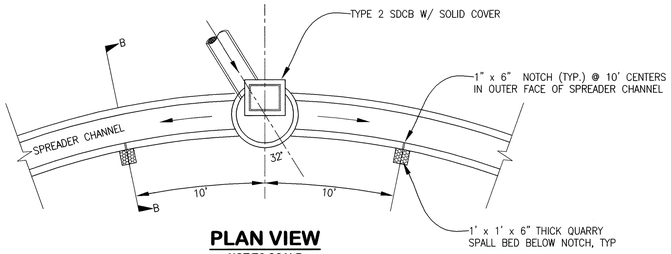
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS

STORMWATER MANAGEMENT FACILITY DETAILS ~ SOUTH POND

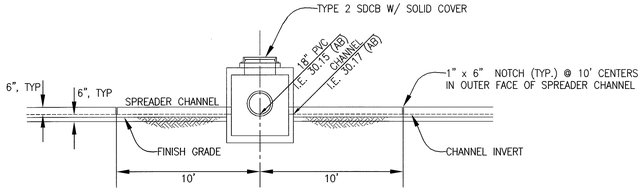
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 24 OF 34

BEA 37432 REGISTERED PROFESSIONAL ENGINEER 10-11-07
EXPIRES: 10/10/09

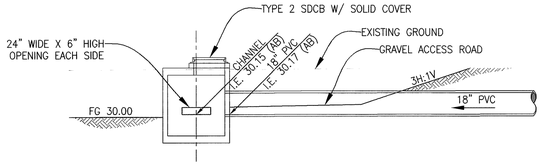
PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com



PLAN VIEW
NOT TO SCALE



FRONT ELEVATION
NOT TO SCALE

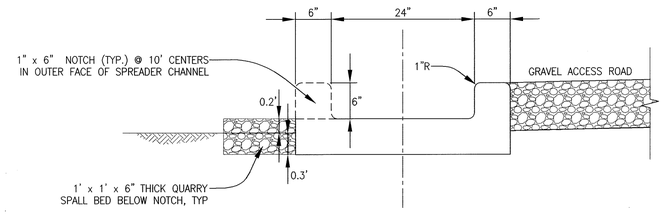


RIGHT SIDE ELEVATION
NOT TO SCALE

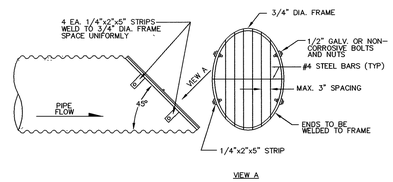
LEVEL SPREADER DETAIL
NOT TO SCALE

NOTES:

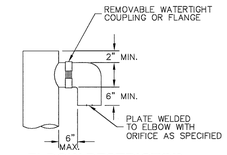
1) 3/8" EXPANSION MATERIAL THRU JOINTS SHALL BE PLACED AT 90' TO FACE OF LEVEL SPREADER AND NO MORE THAN 15 FT. APART.
2) FORM AND SUBGRADE INSPECTION REQUIRED BEFORE POURING CONCRETE.
3) CONCRETE SHALL BE AIR ENTRAINED TYPE II PORTLAND CEMENT CLASS 3000.
4) ALL EDGES AND JOINTS SHALL BE FINISHED AND EXPOSED CORNERS ROUNDED TO 1" RADIUS.



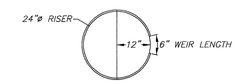
SECTION B-B
NOT TO SCALE



TRASH RACK FOR SD OUTLET DETAIL
NOT TO SCALE



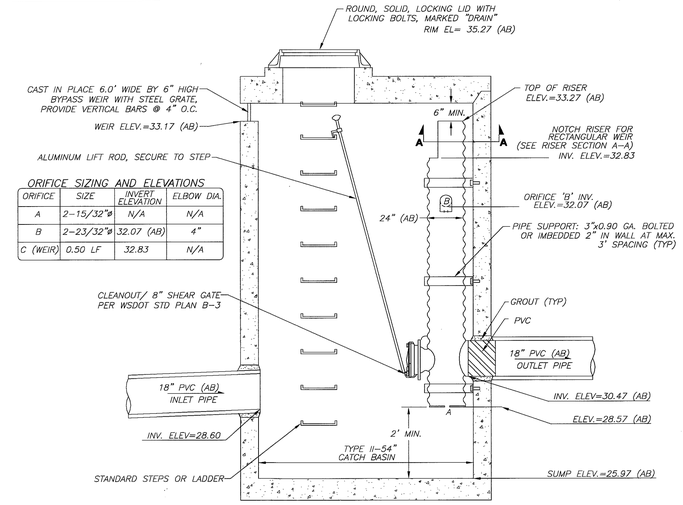
ELBOW RESTRICTOR



RISER SECTION A-A

NOTES:

1. ALL ORIFICES TO BE FABRICATED BY SHOP DRILLING HOLES OF APPROPRIATE DIAMETER IN METAL PLATE, AND WELDING IT INTO PLACE AT THE BOTTOM OF THE MAIN RISER AND THE THREE ELBOWS.
2. PIPE SUPPORT BRACKETS AND THE RESTRICTOR/SEPARATOR SHALL BE OF THE SAME MATERIAL, AND BE ANCHORED AT 3' MAXIMUM SPACING.
3. ALL METAL PARTS SHALL BE CORROSION RESISTANT. ALL GALVANIZED STEEL PARTS SHALL BE ASPHALT TREATMENT 1 COATED.
4. THE RESTRICTOR/SEPARATOR STANDPIPE SHALL BE FABRICATED FROM 0.060" ALUMINUM, 0.064" ALUMINIZED STEEL, OR 0.064" GALVANIZED STEEL, IN ACCORDANCE WITH AASHTO M36, M196, M197 AND M274. GALVANIZED STEEL SHALL BE ASPHALT TREATMENT 1 COATED.
5. IF A METAL OUTLET PIPE CONNECTS TO A CEMENT CONCRETE PIPE, THE OUTLET PIPE SHALL HAVE A SMOOTH OUTSIDE DIAMETER EQUAL TO THE INSIDE DIAMETER OF THE CONCRETE PIPE LESS 1/4".
6. THE FRAME AND LADDER (OR STEPS) SHALL OFFSET SO THAT:
   A: THE CLEANOUT GATE IS VISIBLE FROM THE TOP.
   B: THE CLIMB DOWN CLEAR SPACE OF 2 FEET IS BETWEEN THE RISER AND CLEANOUT GATE.
   C: THE FRAME IS CLEAR OF THE CURB. (IF APPLICABLE)

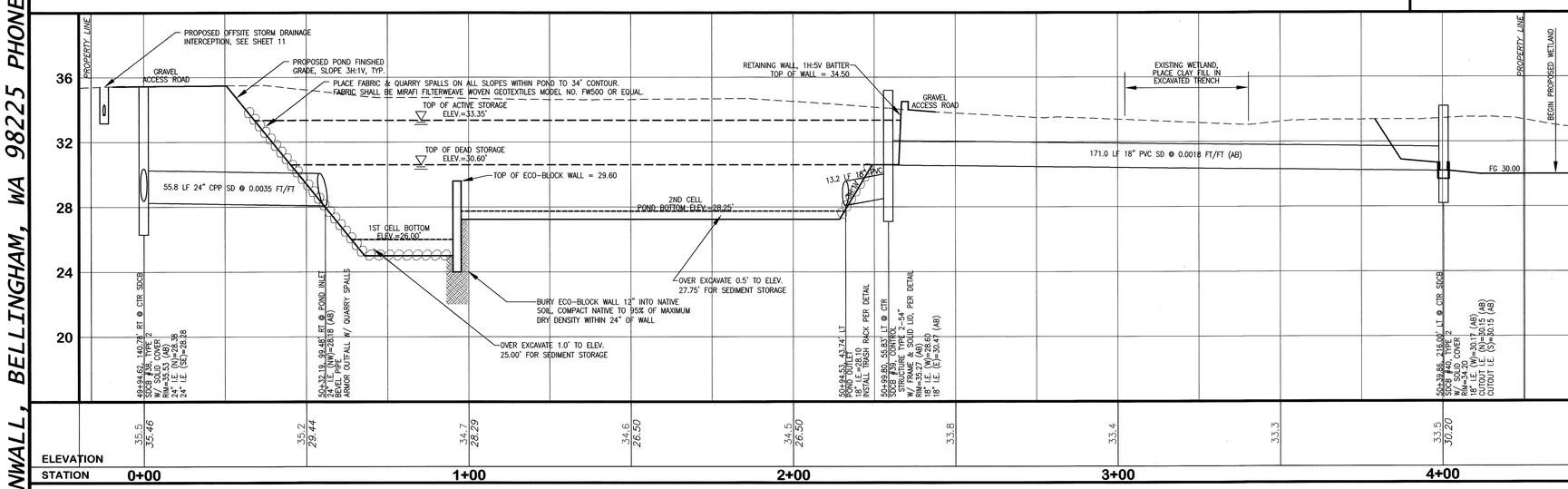


ORIFICE SIZING AND ELEVATIONS

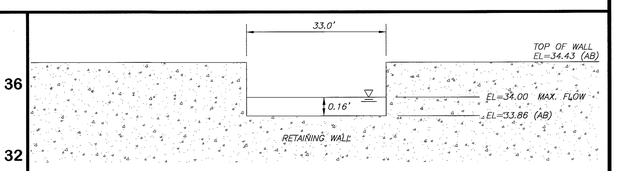
ORIFICE	SIZE	INVERT ELEVATION	ELBOW DIA.
A	2-15/32"ø	N/A	N/A
B	2-23/32"ø	32.07 (AB)	4"
C (WEIR)	0.50 LF	32.83	N/A

SECTION VIEW

CONTROL STRUCTURE TYPE II - 54"
NOT TO SCALE



HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 4'



EMERGENCY OVERFLOW SPILLWAY DETAIL
NOT TO SCALE

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
BY RC
CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 20'
DESIGN	BEA	JVY	VERT: 1" = 4'
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

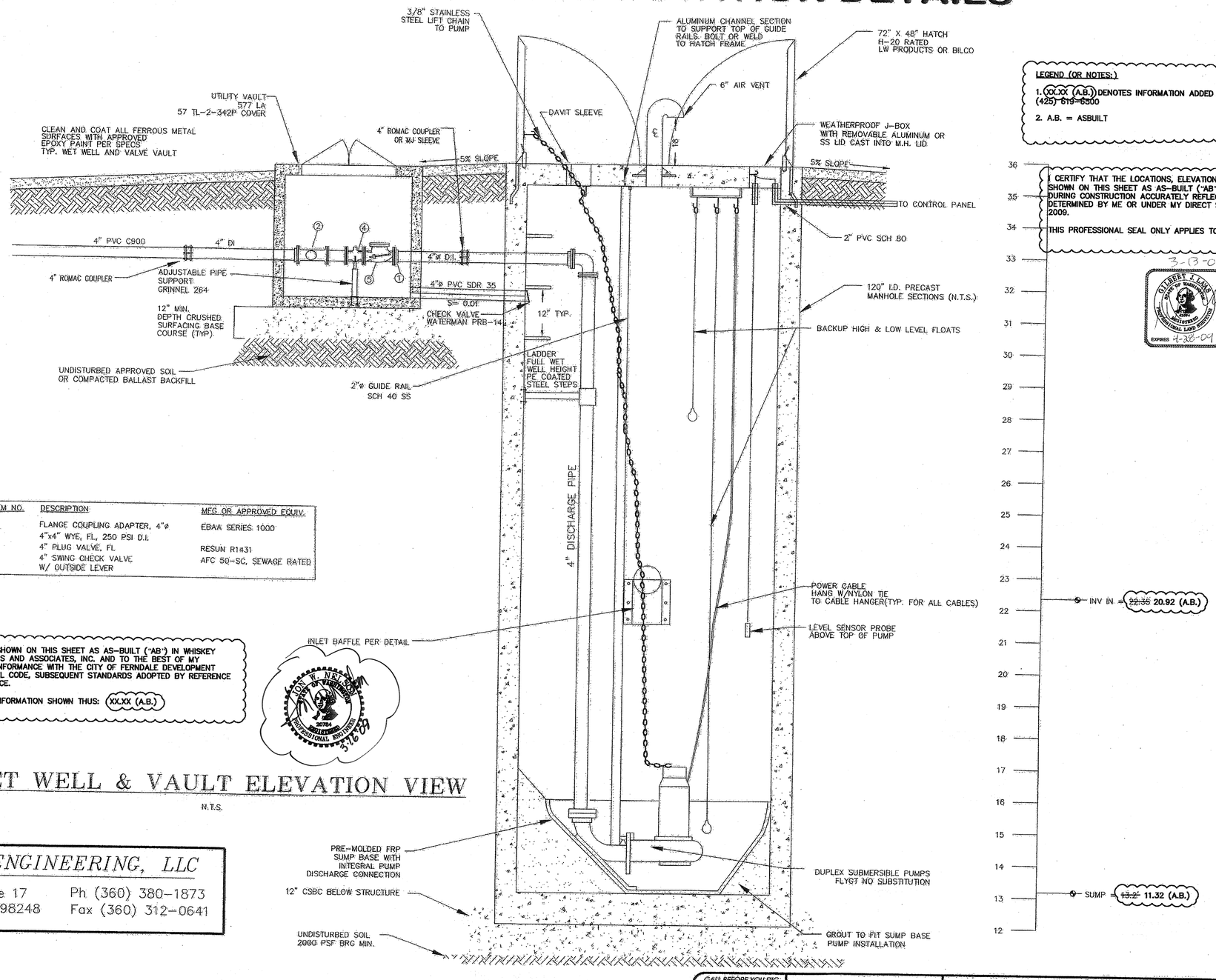
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
STORMWATER MANAGEMENT FACILITY DETAILS ~ SOUTH POND

JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 25 OF 34

JEFFREY A. VANDERHAGEN, STATE OF WASHINGTON, 37432, REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/08

00390.025 7-10-09 DD

SANITARY SEWER LIFT STATION DETAILS



ITEM NO.	DESCRIPTION	MFG OR APPROVED EQUIV.
1	FLANGE COUPLING ADAPTER, 4"ø	EBAA SERIES 1000
2	4"x4" WYE, FL, 250 PSI D.I.	
4	4" PLUG VALVE, FL	RESUN R1431
5	4" SWING CHECK VALVE W/ OUTSIDE LEVER	AFC 50-SC, SEWAGE RATED

LEGEND (OR NOTES:)

1. XX.XX (A.B.) DENOTES INFORMATION ADDED BY DAVID EVANS & ASSOCIATES (425) 519-6500
2. A.B. = ASBUILT

I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS AND AS-BUILT COMMENTS SHOWN ON THIS SHEET AS AS-BUILT ("AB") REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: MARCH 3, 2009.

THIS PROFESSIONAL SEAL ONLY APPLIES TO INFORMATION SHOWN THUS: XX.XX (A.B.)

3-13-09

GILBERT J. LUCAS — STATE OF WASHINGTON — 29744 — REGISTERED PROFESSIONAL LAND SURVEYOR — EXPIRES 4-28-09

I HEREBY CERTIFY THAT THE IMPROVEMENTS SHOWN ON THIS SHEET AS AS-BUILT ("AB") IN WHISKEY CREEK HAVE BEEN INSPECTED BY DAVID EVANS AND ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERNDALE DEVELOPMENT STANDARDS, THE CITY OF FERNDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

THIS PROFESSIONAL SEAL ONLY APPLIES TO INFORMATION SHOWN THUS: XX.XX (A.B.)

JON W. NELSON — STATE OF WASHINGTON — 20784 — REGISTERED PROFESSIONAL ENGINEER — 3-16-09

WET WELL & VAULT ELEVATION VIEW

N.T.S.

APPROVED
JUN 29 2006
BY KC
CITY OF FERNDALE

TELEGRAPH ENGINEERING, LLC
1920 Main Street, Suite 17 Ph (360) 380-1873
Ferndale, Washington 98248 Fax (360) 312-0641

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	SCALE	REV	DATE	DESCRIPTION	BY	No.		DATE
DESIGN: SEE SURVEY NOTES, SHEET 1				BASE			HORIZ: N.A.					1	ISSUED FOR REVIEW	03/21/06
STAKING:				DESIGN			VERT: N.A.					2	ISSUED FOR REVIEW	06/12/06
ASBUILT:				XREF:								3	ISSUED FOR REVIEW	06/28/06
				DWG:										
SURVEY REFERENCE	VERTICAL DATUM			PLAN CHECK				REVISIONS				ISSUE		

CALL BEFORE YOU DIG 1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

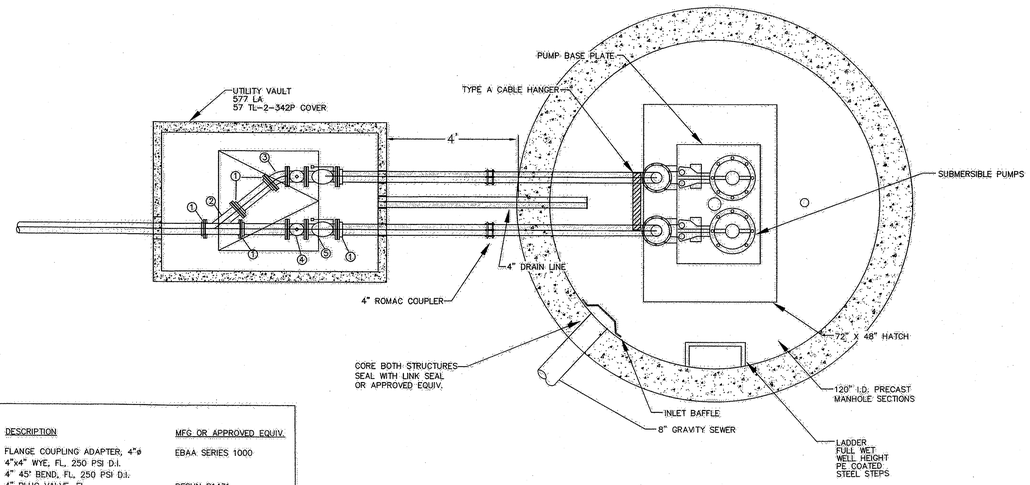
WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
SANITARY SEWER LIFT STATION DETAILS

JOB #: 2005054 SHEET 26 OF 34

RICHARD W. HERGERT — STATE OF WASHINGTON — 29744 — REGISTERED PROFESSIONAL ENGINEER — 6/28/06 — EXPIRES: 12/18/07

00390.026 7/10/09 DA

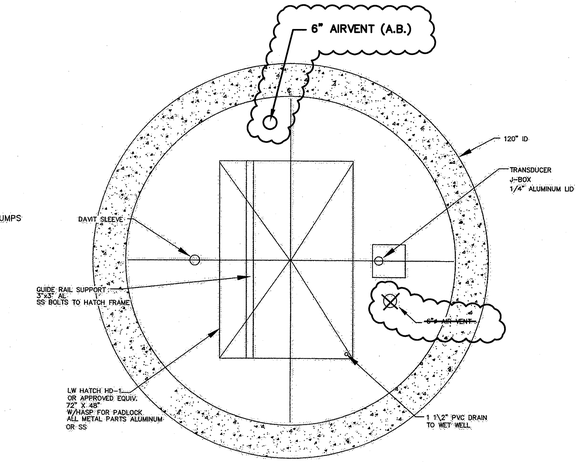
SANITARY SEWER LIFT STATION DETAILS



ITEM NO.	DESCRIPTION	MFG OR APPROVED EQUIV.
1.	FLANGE COUPLING ADAPTER, 4"ø	EBAA SERIES 1000
2.	4"x4" WYE, FL, 250 PSI D.I.	
3.	4" 45° BEND, FL, 250 PSI D.I.	
4.	4" PLUG VALVE, FL	RESUN R1431
5.	4" SWING CHECK VALVE W/OUTSIDE LEVER & WEIGHT	AFC 50-SC, SEWAGE RATED

WET WELL AND VALVE VAULT PLAN VIEW

nts

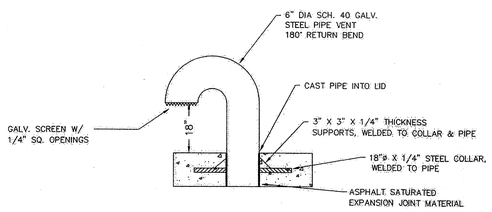


WET WELL LID DETAIL

nts

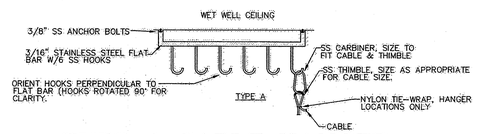
LEGEND (OR NOTES:)

1. XX.XX (A.B.) DENOTES INFORMATION ADDED BY DAVID EVANS & ASSOCIATES (425) 619-6500
2. A.B. = ASBUILT



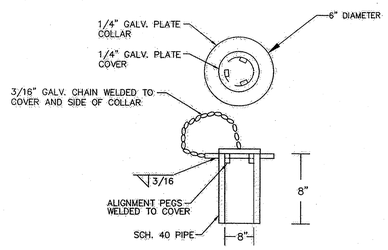
AIR INTAKE/EXHAUST VENT

N.T.S.



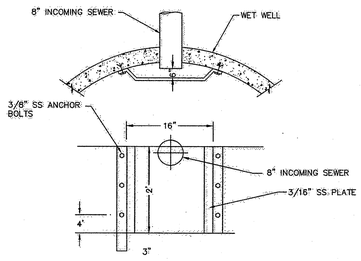
TYPE A CABLE HANGER

N.T.S.



DAVIT SLEEVE

NTS



INLET BAFFLE

N.T.S.

I HEREBY CERTIFY THAT THE IMPROVEMENTS SHOWN ON THIS SHEET AS AS-BUILT ("AB") IN WHISKEY CREEK HAVE BEEN INSPECTED BY DAVID EVANS AND ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERNDALE DEVELOPMENT STANDARDS, THE CITY OF FERNDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

THIS PROFESSIONAL SEAL ONLY APPLIES TO INFORMATION SHOWN THUS: XX.XX (A.B.)

TELEGRAPH ENGINEERING, LLC

1920 Main Street, Suite 17 — Ph (360) 380-1873
Ferndale, Washington 98248 — Fax (360) 312-0641

APPROVED
JUN 29 2006
BY TCC
CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE			HORIZ: N.A.
DESIGN			VERT: N.A.
XREF:			
DWG:			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	ISSUED FOR REVIEW	03/21/06
2	ISSUED FOR REVIEW	06/12/06
3	ISSUED FOR REVIEW	06/28/06
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
SANITARY SEWER LIFT STATION DETAILS

JOB #: 2005054 — SHEET 27 OF 34

SCOTT D. WENGER, STATE OF WASHINGTON, 29744, REGISTERED PROFESSIONAL ENGINEER — 6/20/06 — EXPIRES: 12/18/07

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com

DD 7/10/06 L20060027

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685 EMAIL: pse@psesurvey.com www.psesurvey.com

SANITARY SEWER LIFT STATION DETAILS

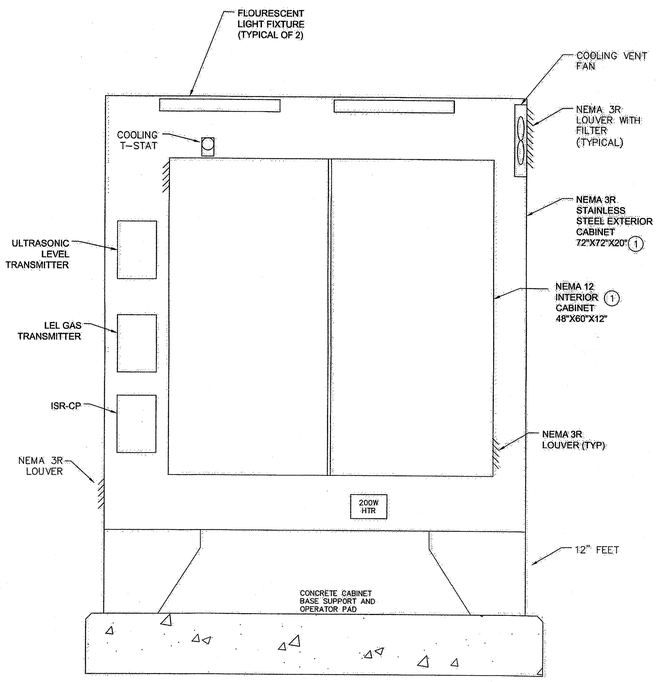
KEY NOTES:

1. CABINET SIZES SHOWN ARE THE EXPECTED SIZE FOR EQUIPMENT INSTALLED – CONTRACTOR SHALL UPSIZE OR DOWN SIZE IF NECESSARY FOR SPACE REQUIRED IF FIRST APPROVED BY THE ENGINEER.
2. 7'X7' PRECAST CONCRETE BUILDING BY BODE'S PRECAST MAY BE USED TO ENCLOSE ELECTRICAL WITH CORRESPONDING CHANGES IN ENCLOSURE RATINGS. APPROVAL FROM THE CITY IS REQUIRED.
3. PROVIDE TWO INCANDESCENT FLOOD LIGHTS, ALUMINUM DIECAST HOUSING WITH SHIELD, ROW LAPE, STOWCO CO. MODEL 40L OR EQUAL. POINT LIGHTS AT WET WELL

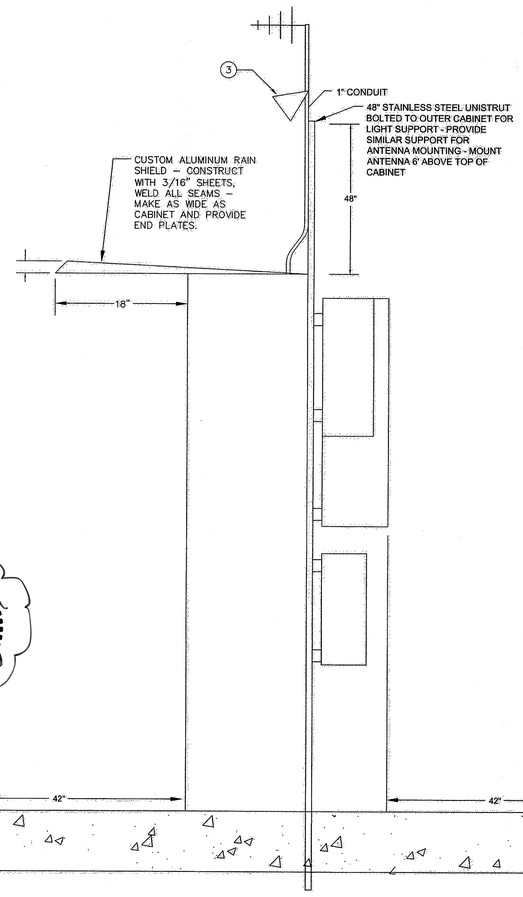
ONE PROVIDED

GENERAL NOTES:

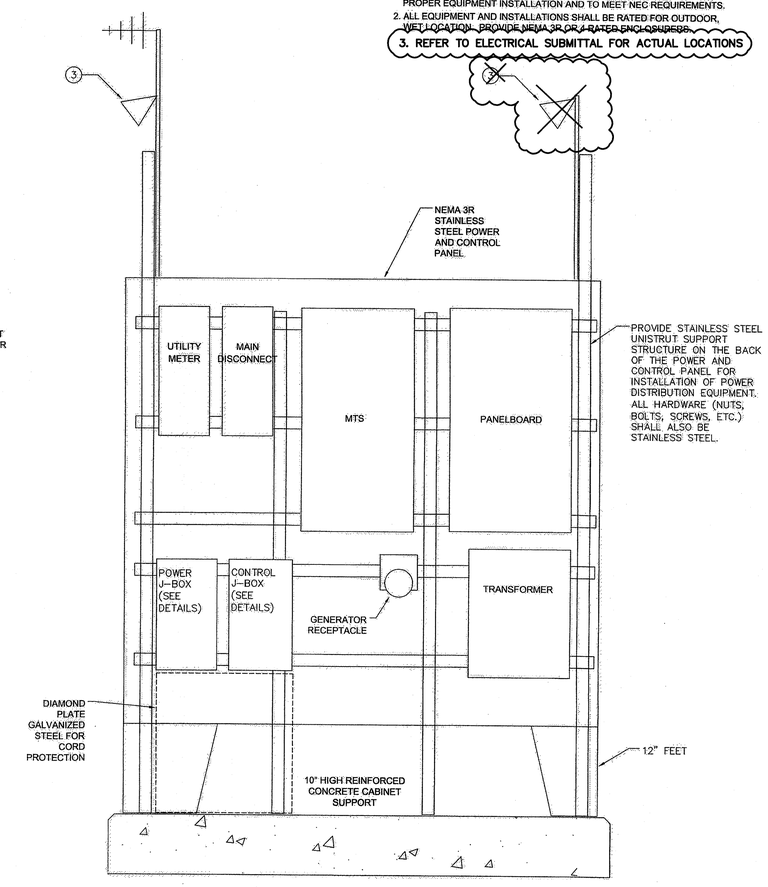
1. LAYOUT IS GENERAL - CONTRACTOR SHALL ADJUST AS REQUIRED FOR PROPER EQUIPMENT INSTALLATION AND TO MEET NEC REQUIREMENTS.
2. ALL EQUIPMENT AND INSTALLATIONS SHALL BE RATED FOR OUTDOOR, WET LOCATION. PROVIDE NEMA 3R OR 4 RATED ENCLOSURES.
3. REFER TO ELECTRICAL SUBMITTAL FOR ACTUAL LOCATIONS



POWER & CONTROL PANEL ELEVATION
NTS



POWER & CONTROL PANEL ELEVATION SIDE VIEW
NTS



ELECTRICAL EQUIPMENT ELEVATION
NTS

LEGEND (OR NOTES:)

1. XX.XX (A.B.) DENOTES INFORMATION ADDED BY DAVID EVANS & ASSOCIATES (425) 619-6500
2. A.B. = ASBUILT

I HEREBY CERTIFY THAT THE IMPROVEMENTS SHOWN ON THIS SHEET AS AS-BUILT ("AB") IN WHISKEY CREEK HAVE BEEN INSPECTED BY DAVID EVANS AND ASSOCIATES, INC. AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE CITY OF FERNDALE DEVELOPMENT STANDARDS, THE CITY OF FERNDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

THIS PROFESSIONAL SEAL ONLY APPLIES TO INFORMATION SHOWN THUS: XX.XX (A.B.)

JON W. NELSON, STATE OF WASHINGTON, 30784, REGISTERED PROFESSIONAL ENGINEER, 6-16-06

FOLLETT ENGINEERING
ELECTRICAL ENGINEERING & CONSULTING
REDMOND, WA
425-836-3333

SEE ADDITIONAL ELECTRICAL DRAWINGS IN THE SPECIFICATIONS

APPROVED
JUN 29 2006
BY RC
CITY OF FERNDALE

SCOTT D. WEYER, STATE OF WASHINGTON, 35244, REGISTERED PROFESSIONAL ENGINEER, 6/28/06, EXPIRES 12/18/07

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE			HORIZ: N.A.
DESIGN			VERT: N.A.
XREF:			
DWG:			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	ISSUED FOR REVIEW	03/21/06
2	ISSUED FOR REVIEW	06/12/06
3	ISSUED FOR REVIEW	06/28/06
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
SANITARY SEWER LIFT STATION DETAILS
JOB #: 2005054
SHEET 28 OF 34

VINCENT M. FOLLETT, STATE OF WASHINGTON, 26947, REGISTERED PROFESSIONAL ENGINEER, EXPIRES 1/8/07

DD 7/01/09 B20'03 00390

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com

EROSION CONTROL NOTES

1) COVER ALL DIRT/GRAVEL PILES WITH PLASTIC SHEETING DURING CONSTRUCTION WHEN NOT IN USE.
2) NATIVE SOILS AREA CLASSIFIED AS "TROMP LOAM" HYDROLOGIC GROUP C AND "EDMONDS-WOODLYN" HYDROLOGIC GROUP D PER "SOIL SURVEY OF WHATCOM COUNTY," SCS 1992.
3) CONSTRUCTION SCHEDULE- PENDING APPROVAL OF PLANS FROM CITY OF FERNDALE, BEGINNING SPRING 2006.
4) INLET PROTECTION SHALL BE PROVIDED FOR ALL NEW DRAINAGE STRUCTURES IN ADDITION TO WHERE INDICATED ON PLANS.
5) SILT FENCING SHALL BE INSTALLED ALONG PROJECT BOUNDARY IN ADDITION TO WHERE INDICATED ON PLANS.
6) SEE SHEET 30 FOR ADDITIONAL EROSION CONTROL NOTES & DETAILS.

EROSION CONTROL LEGEND

- VEG — WSDOE BMP C101 PRESERVING NATURAL VEGETATION
- CE — WSDOE BMP C105 STABILIZED CONSTRUCTION ENTRANCE
- PS — WSDOE BMP C120 TEMPORARY AND PERMANENT SEEDING
- MU — WSDOE BMP C121 MULCHING
- DC — WSDOE BMP C140 DUST CONTROL
- IP — WSDOE BMP C220 STORM DRAIN INLET PROTECTION (SEE NOTE 4)
- SB — WSDOE BMP C241 TEMPORARY SEDIMENT POND
- FF — WSDOE BMP C233 SILT FENCE (SEE NOTE 5)
- —CL—CL— INDICATES CLEARING LIMITS
- DRAINAGE FLOW DIRECTION ARROWS (SHEET FLOW OR SHALLOW CHANNEL FLOW)

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
JAN 17 2008
BY
CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: 1" = 50'
DESIGN	BEA	JVY	VERT: N.A.
XREF:			
DWG: P:\PSE Project\2005054\DWGS\ENG_BASE_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS

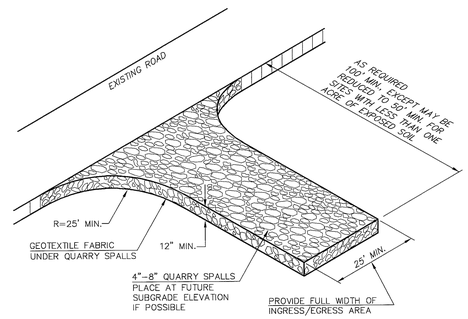
TEMPORARY EROSION & SEDIMENT CONTROL PLAN

JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 29 OF 34

STEVEN A. VANDERWEELE STATE OF WASHINGTON 37432 REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/07

LD 07-029
00390-029

TEMPORARY EROSION & SEDIMENT CONTROL DETAILS



ROCK STABILIZATION CONSTRUCTION ROAD ENTRANCE

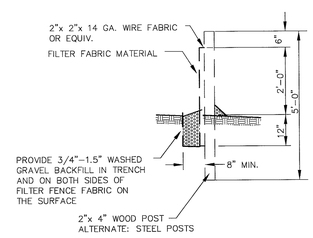
NOT TO SCALE

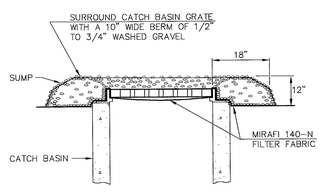
MAINTENANCE:

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 4 TO 8-INCH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

MULCH SPECIFICATIONS

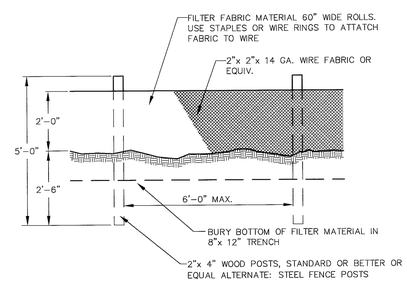
Mulch Material	Quality Standards	Application Rates	Remarks
Straw	Air-dried; free from undesirable seed and coarse material	2"-3" thick; 2-3 bales per 1000 sq. ft. or 2-3 tons per acre	Cost-effective protection when applied with adequate thickness. Hand-application generally requires greater thickness than blown straw. Straw should be crimped to avoid wind blow. The thickness of straw may be reduced by half when used in conjunction with seeding.
Wood Fiber Cellulose	No growth inhibiting factors	Approx. 25-30 lbs. per 1000 sq. ft. or 1000-1500 lbs per acre	Shall be applied with hydromulcher. Shall not be used without seed and tackifier unless the application rate is at least doubled. Some wood fiber with very long fibers can be effective at lower application rates and without seed or tackifier.
Compost	No visible water or dust during handling. Must be purchased from supplier with Solid Waste Handling Permit.	2" thick min.; approx. 100 tons per acre (approx. 800 lbs per yard)	More effective control can be obtained by increasing thickness to 3". Excellent mulch for protecting final grades until landscaping because it can be directly seeded or tilled into soil as an amendment. Sources for compost are available from the King County Commission for Marketing Recyclable Materials at 296-4439.
Chipped Site Vegetation	Average size shall be several inches.	2" minimum thickness	This is a cost-effective way to dispose of debris from clearing and grubbing and eliminates the problems associated with burning. It should generally not be used on slpoes above approx. 10% because of its tendency to be transported by runoff. It is not recommended within 200 feet of surface waters. If seeding is expected shortly after munch, the decomposition of the chipped vegetation may tie up nutrients important to grass establishment.





INTERIM CATCH BASIN GRATE PROTECTION

NOT TO SCALE



SILT FILTER FENCE DETAIL

NOT TO SCALE

TEMPORARY EROSION/SEDIMENTATION CONTROL

1. A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
2. APPROVAL OF THESE TEMPORARY EROSION/SEDIMENTATION CONTROL (TESC) PLANS DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
3. THE IMPLEMENTATION OF THESE TESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING OF THESE TESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS APPROVED.
4. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
5. THE TESC FACILITIES SHOWN ON THE PLANS MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.
6. THE TESC FACILITIES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE TESC FACILITIES SHALL BE UPGRADED (E.G., ADDITIONAL SUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.) AS NEEDED FOR UNEXPECTED STORM EVENTS.
7. THE TESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
8. ANY AREA STRIPPED OF VEGETATION, INCLUDING ROADWAY EMBANKMENTS, WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 7 DAYS, SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED TESC METHODS (E.G., SEEDING, MULCHING, NETTING, EROSION BLANKETS, ETC.).
9. ANY AREA NEEDING TESC MEASURES, NOT REQUIRING IMMEDIATE ATTENTION, SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
10. THE TESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.
11. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
12. STABILIZED CONSTRUCTION ENTRANCES AND WASH PADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
13. DURING THE TIME PERIOD OF OCTOBER 1 THROUGH APRIL 30, ALL PROJECT DISTURBED AREAS GREATER THAN 5,000 SQUARE FEET, THAT ARE TO BE LEFT UNWORKED FOR MORE THAN 12 HOURS, SHALL BE COVERED BY ONE OF THE FOLLOWING COVER MEASURES: MULCH, SODDING OR PLASTIC COVERING.
14. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE PERMANENT FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION OR DISPERSION SYSTEM, THE FACILITY SHALL NOT BE USED AS A TEMPORARY SETTLING BASIN. NO UNDERGROUND DETENTION TANK, DETENTION VAULT, OR SYSTEM WHICH BACKS UNDER OR INTO A POND SHALL BE USED AS A TEMPORARY SETTLING BASIN.
15. WHERE SEEDING FOR TEMPORARY EROSION CONTROL IS REQUIRED, FAST GERMINATING GRASSES SHALL BE APPLIED AT AN APPROPRIATE RATE (E.G. ANNUAL OR PERENNIAL RYE APPLIED AT APPROXIMATELY 80 POUNDS PER ACRE).
16. WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF TWO INCHES.
17. ALL EROSION/SEDIMENTATION CONTROL PONDS WITH A DEAD STORAGE DEPTH EXCEEDING 6 INCHES MUST HAVE SLOPES NOT STEEPER THAN 3H:1V.
18. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
19. EROSION/SEDIMENTATION CONTROL FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS IN THESE PLANS LOCATIONS MAY BE MOVED TO SUIT FIELD CONDITIONS, SUBJECT TO APPROVAL BY THE ENGINEER AND THE CITY INSPECTOR.

NPDES NOTES

1. THE CONTRACTOR SHALL KEEP A RECORD OF THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND WHEN STABILIZATION MEASURES ARE IMPLEMENTED.
2. ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED, MAINTAINED AND REPAIRED BY THE CONTRACTOR AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL ON SITE EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES PER 24 HOUR PERIOD. AN INSPECTION REPORT FILE SHALL BE MAINTAINED BY THE CONTRACTOR.

FILTER FENCE NOTES

1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-INCH OVERLAP AND BOTH ENDS SECURELY FASTENED TO THE POST.
2. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS (WHERE FEASIBLE). THE FENCE POSTS SHALL BE SPACED AT A MAXIMUM OF 6 FEET APART AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 30 INCHES).
3. A TRENCH SHALL BE EXCAVATED, ROUGHLY 8 INCHES WIDE AND 12 INCHES DEEP, UPSLOPE AND ADJACENT TO THE WOOD POST TO ALLOW THE FILTER FABRIC TO BE BURIED.
4. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT 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 4 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
5. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE AND 20 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
6. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF STANDARD NOTE 5 APPLYING.
7. THE TRENCH SHALL BE BACKFILLED WITH 3/4-INCH MINIMUM DIAMETER WASHED GRAVEL.
8. FILTER FABRIC FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
9. FILTER FABRIC FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SEEDING NOTES

1. SEEDBED PREPARATION MAY INCLUDE THE FOLLOWING:
   - A. IF INFERTILE OR COURSE TEXTURED SUBSOIL WILL BE EXPOSED DURING GRADING, STOCKPILE TOPSOIL AND RE-SPREAD IT OVER THE FINISHED SLOPE AND ROLL IT TO PROVIDE A FIRM BASE.
   - B. IF CONSTRUCTION FILLS HAVE LEFT SOIL EXPOSED WITH A LOOSE, ROUGH OR IRREGULAR SURFACE, TRACK WALK UP SLOPE.
   - C. IF CUTS OR CONSTRUCTION EQUIPMENT HAVE LEFT A TIGHTLY COMPACTED SURFACE, BREAK WITH CHISEL PLOW OR OTHER SUITABLE EQUIPMENT.
   - D. PERFORM ALL CULTURAL OPERATIONS ACROSS OR AT RIGHT ANGLES TO THE SLOPES (CONTOURED), THE SEEDBED SHOULD BE FIRM WITH A FAIRLY FINE SURFACE AFTER ROUGHENING.
2. FERTILIZATION - AS PER SUPPLIER'S RECOMMENDATIONS. DEVELOPMENTS ADJACENT TO WATER BODIES MUST USE NON-PHOSPHOROUS FERTILIZER.
3. HYDROSEEDING APPLICATIONS WITH APPROVED SEED-MULCH-FERTILIZER MIXTURES MAY ALSO BE USED.
4. SEEDING - APPLY APPROPRIATE MIXTURE TO THE PREPARED SEEDBED AT A RATE OF 120 LBS/ACRE. COVER THE SEED WITH TOPSOIL OR MULCH NO DEEPER THAN ONE-HALF INCH.

TEMPORARY EROSION CONTROL SEED MIX	PROPORTIONS BY WEIGHT	PERCENT PURITY	PERCENT GERMINATION
CHEWINGS OR RED FESCUE	40%	98	90
ANNUAL OR PERENNIAL RYE	40%	98	90
REDTOP OR COLONIAL BENTGRASS	10%	92	85
WHITE DUTCH CLOVER	10%	98	90

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
JAN 17 2006
BY
CITY OF FERNDALE

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: N.A.
DESIGN	BEA	JVY	VERT: N.A.
XREF:			
DWG: P:\PSE Project\2005054\DWGS\COVER_NOTES_DETAILS_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
TEMPORARY EROSION & SEDIMENT CONTROL DETAILS

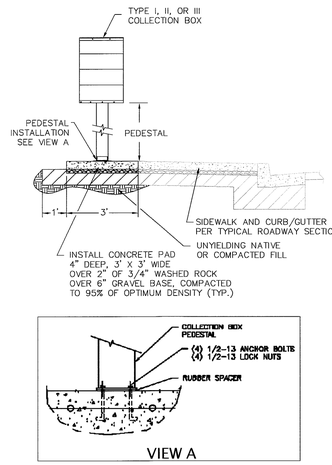
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 30 OF 34

REGISTERED PROFESSIONAL ENGINEER
BECKY A. VANDER ARK
STATE OF WASHINGTON
37432
10-11-07
EXPIRES: 10/10/08

00390.030 7-10-06 DD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE: 671.7387 FAX: 671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com

ROADWAY & SURFACE IMPROVEMENT DETAILS

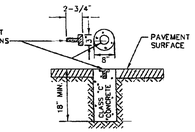


NOTES:

1. MAILBOXES SHALL BE TYPE I, II, AND/OR III – CBU (CENTRAL BOX UNIT), USPS APPROVED.
2. FINAL LOCATION AS DETERMINED BY USPS AND APPROVED BY CITY OF FERNDALE.

MAILBOX IMPROVEMENT DETAIL

NOT TO SCALE



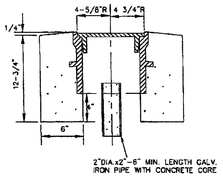
NOTE: THE HOLE FOR THE MONUMENT SHALL BE CUT AFTER THE NEW PAVEMENT HAS BEEN CONSTRUCTED THE UPPER 3" OF THE MONUMENT ENCASEMENT SHALL BE SHAPED TO A TRUE DIAMETER OF 8" CLASS "C" CONCRETE SHALL BE USED FOR ENCASEMENT. THE BRONZE MONUMENT WILL BE SET SIMULTANEOUSLY WITH THE POURING OF CONCRETE IN THE ENCASEMENT

SURVEY MONUMENT DETAIL

NOTES: MONUMENT CASE AND COVER AS PER WASHINGTON STATE DEPT. OF TRANSPORTATION STANDARD PLAN H-7

THE CASINGS SHALL BE GRAY IRON, ASTM A48 CLASS 40. THE COVER AND SEAT SHALL BE MACHINED SO AS TO HAVE PERFECT CONTACT AROUND ENTIRE BEARINGS SURFACE

WHEN THE MONUMENT CASE AND COVER ARE PLACED IN CEMENT CONCRETE PAVEMENT THE CONCRETE BASE WILL NOT BE NECESSARY

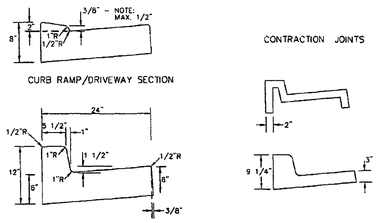


SURVEY MONUMENT AND CASE DETAILS

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director / Date	SURVEY MONUMENTS FOR ON-ROAD USE	S-2

JUNE 1995 — 2091S1A/S-2



GENERAL NOTES:

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

2" WEEP HOLES TO BE PLACED ON EACH SIDE OF DRIVEWAY SECTION AND A MAXIMUM 80' C/C IN CUT SECTIONS WHERE SIDEWALK DRAIN NOT REQUIRED BY CITY PUBLIC WORKS DIRECTOR.

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

CONCRETE SHALL BE CEMENT CONCRETE CLASS 3000.

FINISHED WORK SHALL NOT VARY MORE THAN 1/8" IN GRADE AND 1/4" IN ALIGNMENT WHEN CHECKED WITH 10' STRAIGHT EDGE.

EXPOSED SURFACES SHALL BE BRUSHED WITH A FIBER BRUSH.

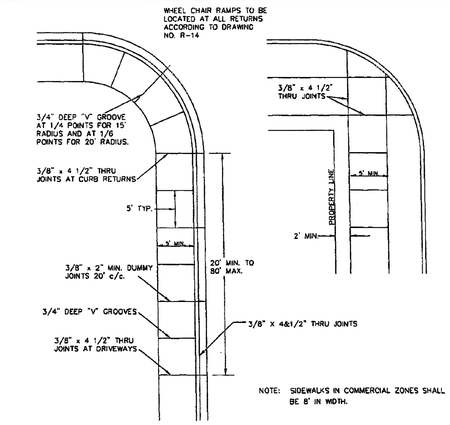
WHITE PIGMENTED OR TRANSPARENT CURING COMPOUND SHALL BE APPLIED AS OUTLINED IN THE STANDARD SPECIFICATIONS.

FURTHER REQUIREMENTS SHALL BE AS SPECIFIED IN THE STANDARD SPECIFICATIONS.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director / Date	CURB AND GUTTER	R-9

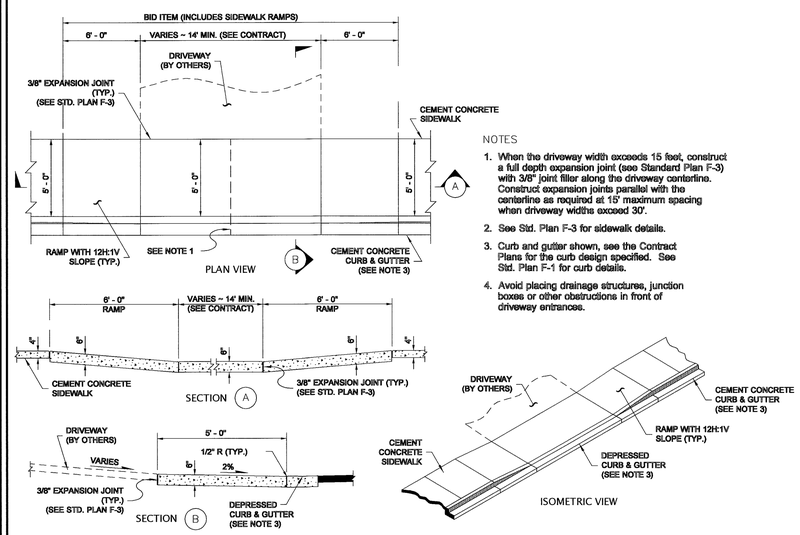
JUNE 1995 — 2091RD2A/R-9



NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director / Date	TYPICAL SIDEWALK PLAN AND CROSS SECTION	R-12

JUNE 1995 — 2091RD2A/R-12



NOTES

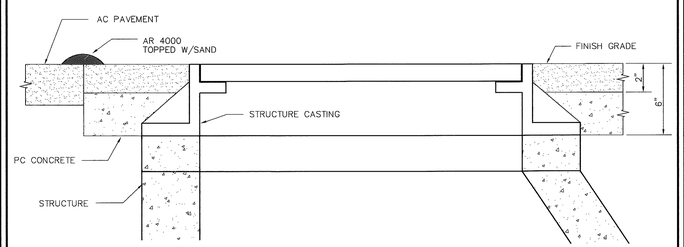
1. When the driveway width exceeds 15 feet, construct a full depth expansion joint (see Standard Plan F-3) with 3/8" joint filler along the driveway centerline. Construct expansion joints parallel with the centerline as required at 15' maximum spacing when driveway widths exceed 30'.
2. See Std. Plan F-3 for sidewalk details.
3. Curb and gutter shown, see the Contract Plans for the curb design specified. See Std. Plan F-1 for curb details.
4. Avoid placing drainage structures, junction boxes or other obstructions in front of driveway entrances.

CONCRETE DRIVEWAY APPROACH DETAIL

NOTES:

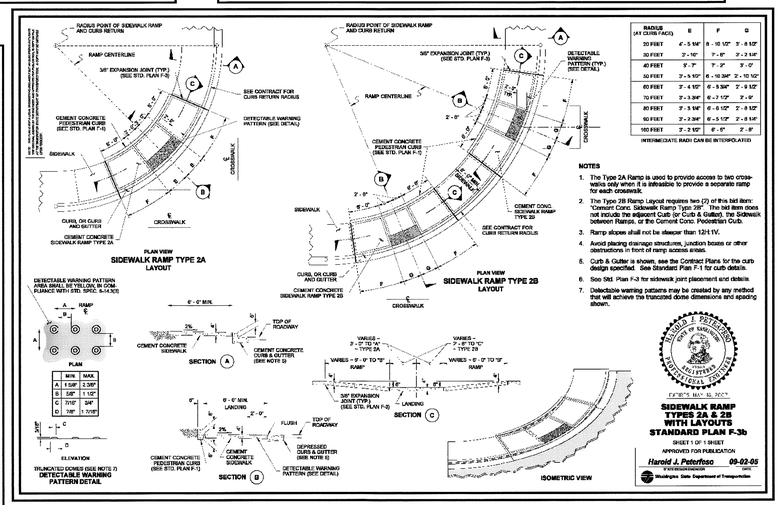
ALL FRAMES, COVERS AND VALVE BOXES SHALL BE RAISED TO FINISHED GRADE AFTER THE FINAL LIFT OF PAVING HAS BEEN COMPLETED. THE FOLLOWING PROCEDURE SHALL BE USED:

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. 6. PLACE AND COMPACT 2 INCHES OF ASPHALT CONCRETE CLASS B TO FINISH GRADE.
7. SEAL PAVEMENT JOINTS WITH HOT AR4000 AND TOP WITH SAND.



ADJUSTING CASTINGS TO FINISHED GRADE

NTS



RADIUS (AT CURB FACE)	E	F	G
20 FEET	4' - 5 1/4"	8' - 10 1/2"	3' - 8 1/2"
30 FEET	3' - 10"	7' - 5"	3' - 3 1/4"
40 FEET	3' - 7"	7' - 2"	3' - 0"
50 FEET	3' - 5 1/2"	6' - 10 3/4"	2' - 10 1/2"
60 FEET	3' - 4 1/2"	6' - 5 3/4"	2' - 9 1/2"
70 FEET	3' - 3 3/4"	6' - 3 1/2"	2' - 9"
80 FEET	3' - 3 1/4"	6' - 0 1/2"	2' - 8 1/2"
90 FEET	3' - 2 3/4"	6' - 0 1/2"	2' - 8 1/4"
100 FEET	3' - 2 1/2"	6' - 0"	2' - 8"

INTERMEDIATE RADII CAN BE INTERPOLATED

NOTES

1. The Type 2A Ramp is used to provide access to two crosswalks only when it is infeasible to provide a separate ramp for each crosswalk.
2. The Type 2B Ramp Layout requires two (2) of this bid item: "Cement Conc. Sidewalk Ramp Type 2B". The bid item does not include the adjacent Curb (or Curb & Gutter), the Sidewalk between Ramps, or the Cement Conc. Pedestrian Curb.
3. Ramp slopes shall not be steeper than 12H:1V.
4. Avoid placing drainage structures, junction boxes or other obstructions in front of ramp access areas.
5. Curb & Gutter is shown, see the Contract Plans for the curb design specified. See Standard Plan F-1 for curb details.
6. See Std. Plan F-3 for sidewalk joint placement and details.
7. Detectable warning patterns may be created by any method that will achieve the truncated dome dimensions and spacing shown.

STATE OF WASHINGTON — HAROLD J. PETERHESS — 37432 — REGISTERED PROFESSIONAL ENGINEER

12"&"S MIN. SL 2CC"

SIDEWALK RAMP TYPES 2A & 2B WITH LAYOUTS STANDARD PLAN F-3b

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Harold J. Peterhess 09-02-05
ENGINEER DATE

Washington State Department of Transportation

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
JAN 17 2008
BY _____
CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: N.A.
DESIGN	BEA	JVY	VERT: N.A.
XREF:			
DWG: P:\PSE Project\2005054\DWGS\COVER_NOTES_DETAILS_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS

ROADWAY & SURFACE IMPROVEMENT DETAILS

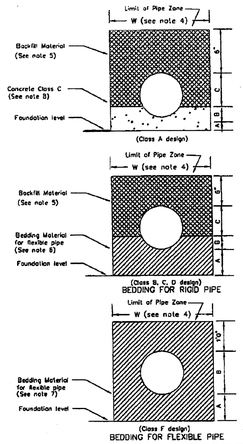
JOB #: 2005054 — COF PROJECT NO. LP 2006-03 — SHEET 31 OF 34

STATE OF WASHINGTON — REGINALD A. VANDERHOEK — 37432 — REGISTERED PROFESSIONAL ENGINEER — 10-11-07 — EXPIRES: 10/10/07

00530.031 7.10.09 PD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685
EMAIL: pse@psesurvey.com www.psesurvey.com

SANITARY SEWER & STORM DRAINAGE DETAILS



NOTES:

1. Provide uniform support under barrel.
2. Hand tamp under haunches.
3. Compact bedding material to 95% MAX density except directly over pipe, hand tamp only.
4. See "Excavation and Preparation of Trench" in the Sanitary Sewers section of the Standard Specifications for trench width "W" and trenching options. The pipe zone will be the actual trench width, except for Class A bedding. The minimum concrete width shall be 1 1/2" I.D. + 18".
5. Trench backfill shall conform to "Backfilling Sewer Trenches" in the Sanitary Sewers section of the Standard Specifications; except that rocks or lumps larger than 1" per foot of pipe diameter shall not be used in the backfill material.
7. See "Bedding Material for Flexible Pipe" in the Aggregates section of the Standard Specifications for the material specifications.
8. Pipe must be anchored in such a manner as to ensure flow line is maintained.

BEDDING CLASS DESIGN

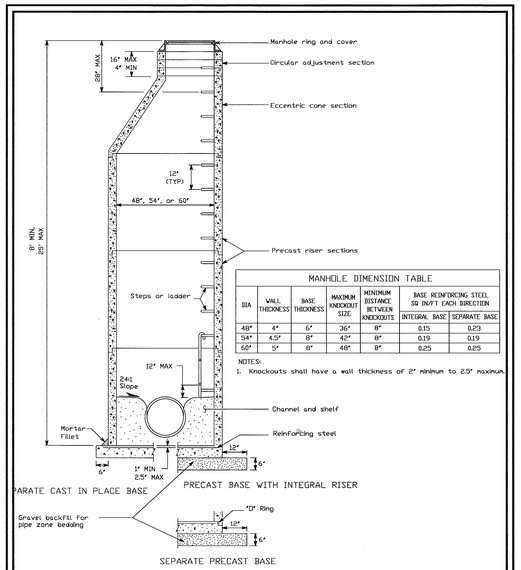
DIMENSION	CLASS A	CLASS B	CLASS C	CLASS D	CLASS F
A	6" MIN. 1/4 I.D. 12" MAX	*	*	*	*
B	1/4 O.D.	1/2 O.D.	1/8 O.D.	Zero	O.D.
C	3/4 O.D.	1/2 O.D.	1/8 O.D.	O.D.	-

*A = 4" MIN. 27" I.D. and under; 6" MIN. over 27" I.D.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	PIPE BEDDING FOR SANITARY SEWERS	SS-1

JUNE 1995



MANHOLE DIMENSION TABLE

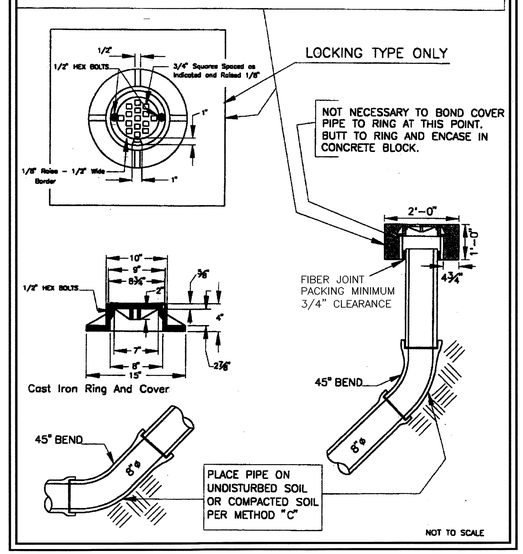
DIA	WALL THICKNESS	BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS	BASE REINFORCING STEEL SQ INCH EACH DIRECTION INTEGRAL BASE	SEPARATE BASE
48"	4"	6"	36"	8"	0.15	0.23
54"	4.5"	8"	42"	8"	0.19	0.19
60"	5"	8"	48"	8"	0.25	0.25

NOTES:
1. Knockouts shall have a wall thickness of 2" minimum to 2.5" maximum.

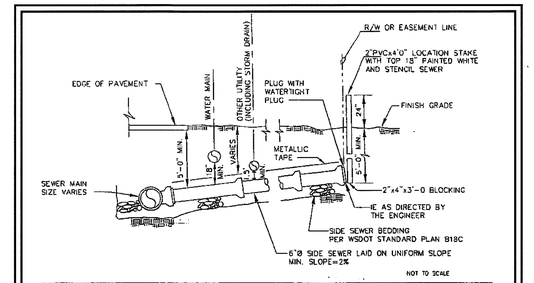
TYPE 1 MANHOLE DETAIL

NOT TO SCALE

2' SQUARE CONCRETE BLOCK TO ENCASE CLEAN-OUT. IF CLEAN-OUT IS IN ASPHALT, THE BLOCK IS TO BE LEFT APPROX. 1 1/2" LOW TO ALLOW FOR AN ASPHALT TOPPING OF LIKE MIXTURE AS THE SURROUNDING AREA. IN ALL CASES THE CONCRETE BLOCK WILL BE 1' THICK.

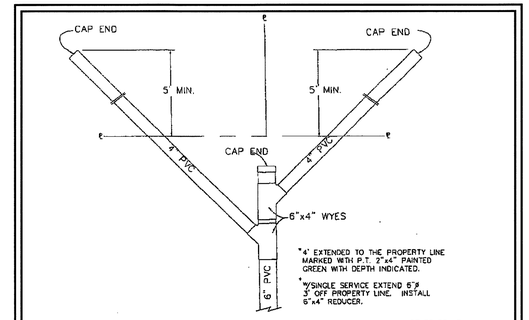


NOT TO SCALE



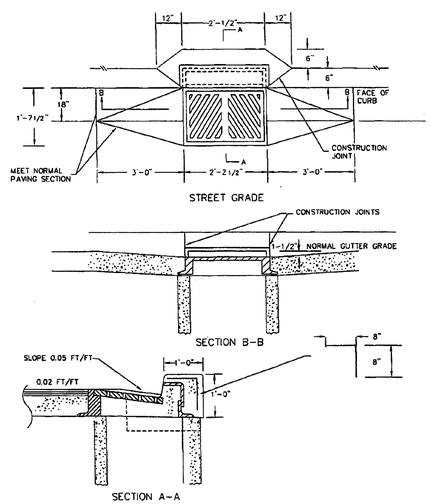
NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	NORMAL INSTALLATION 15" AND SMALLER SEWER MAINS	SS-6



NOT TO SCALE

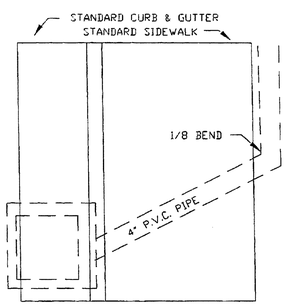
APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	DOUBLE SANITARY SEWER SERVICE	SS-13



NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	THRU-CURB INLET FRAME & GRATE WITH VERTICAL CURB INSTALLATION	R-8

JUNE 1995 2091STSA/R-8



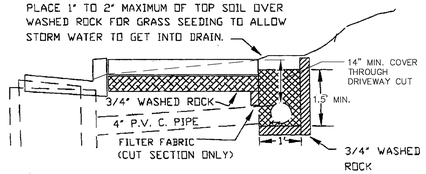
SIDEWALK DRAIN TO BE USED WHENEVER SIDEWALK IS IN A CUT SECTION UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DIRECTOR.

USE PERFORATED PIPE AND FILTER FABRIC IN CUT SECTIONS.

USE NONPERFORATED PIPE WITHOUT FILTER FABRIC WHEN CARRIED THROUGH NON-CUT AREAS.

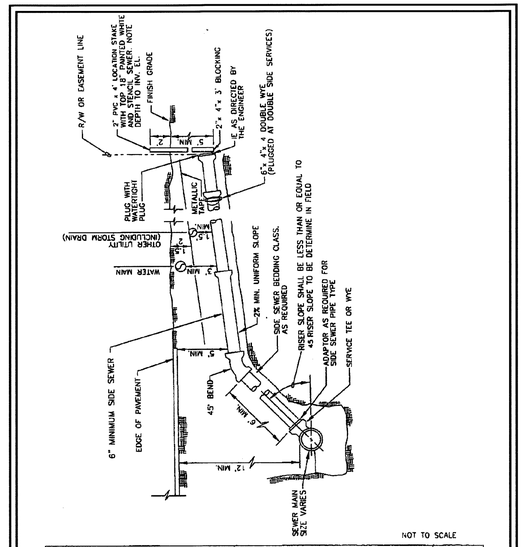
FILTER FABRIC TO BE INSTALLED BETWEEN THE SOIL AND THE 3/4" WASHED ROCK.

PLACE 1" TO 2" MAXIMUM OF TOP SOIL OVER WASHED ROCK FOR GRASS SEEDING TO ALLOW STORM WATER TO GET INTO DRAIN.



APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	SIDEWALK DRAIN	ST-15

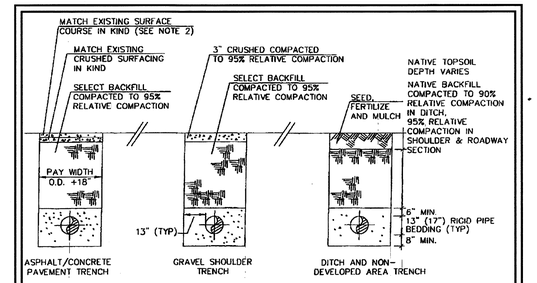
JUNE 1995



NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	SANITARY SEWER SIDE SERVICE INSTALLATION DEEP MAINS	SS-8

JUNE 1995 2091SE4A/SS-8



NOTES:
1. NATIVE BACKFILL SHALL BE COMPACTED TO 90% RELATIVE COMPACTION.
2. SELECT BACKFILL/CRUSHED SURFACE COURSE SHALL BE COMPACTED TO 95% COMPACTION.
3. PAVEMENT SHALL BE SAW CUT, TACKED, AND COMPACTED TO 92% OF ABSOLUTE DENSITY.
4. P.C.C. REPLACEMENT SHALL BE 2" GREATER THAN EXISTING COURSE, 7" MINIMUM, 6.5 P.C.C. (HES - AIR ENTRAINED)
5. ALL TRENCH RESTORATION SHALL MEET CITY STANDARDS.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	TRENCHING DETAIL	W-11

JUNE 1995

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
JAN 17 2008
BY _____
CITY OF FERNDALE

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: N.A.
DESIGN	BEA	JVY	VERT: N.A.
XREF:			
DWG: P:\PSE Project\2005054\DWGS\COVER_NOTES_DETAILS_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG

1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS

SANITARY SEWER & STORM DRAINAGE DETAILS

JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 32 OF 34

STEVEN A. VANDERPOL STATE OF WASHINGTON 37432 REGISTERED PROFESSIONAL ENGINEER 10-11-07
EXPIRES: 10/10/09

00390.032 7-10-09 PD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685 EMAIL: pse@psesurvey.com
www.psesurvey.com

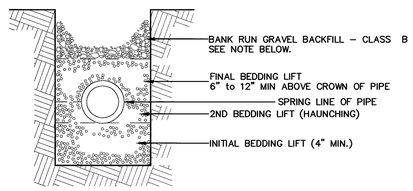
WATER SYSTEM DETAILS

BEDDING SPECIFICATIONS FOR D.I.P. WATERLINE

THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS ARE TO BE USED IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, CURRENT EDITION:

BEDDING FOR DUCTILE IRON PIPE WATERLINE–

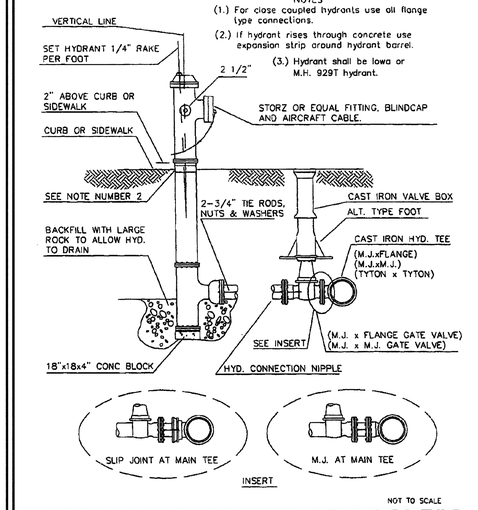
BEDDING MATERIAL FOR THE DUCTILE IRON PIPE SHALL BE SELECT GRANULAR MATERIAL FREE FROM WOOD WASTE, ORGANIC MATERIAL, OR OTHER EXTRANEOUS OR OJECTIONALBLE MATERIALS AND SHALL HAVE A MAXIMUM DIMENSION OF 1–1/2 INCHES OR APPROVED PIPE BEDDING PER WSDOT SPECIFICATION SECTION 7–10.3(9). MATERIAL SHALL BE PLACED TO A MIMIMUM DIPETH OF 4 INCHES UNDER THE PIPE AND 6 INCHES OVER THE TOP OF THE PIPE. THE BEDDING MATERIAL SHALL BE RAMMED AND TAMPED AROUND THE PIPE TO 95 PERCENT OF MAXIMUM DENSITY BY APPROVED HAND–HELD TOOLS, SO AS TO PROVIDE FIRM AND UNIFORM SUPPORT FOR THE FULL LENGTH OF THE PIPE, VALVES, AND FITTINGS. CARE SHALL BE TAKEN TO PREVENT ANY DAMAGE TO THE PIPE OR ITS PROTECTIVE COATING. PEA GRAVEL AND BUCKSHOT ARE NOT ACCEPTABLE BEDDING MATERIAL.



BACKFILL – WHEREVER A TRENCH IS EXCAVATED IN THE EXISTING OR PROPOSED ROADWAY, SIDEWALK OR OTHER AREAS WHERE SETTLEMENT WOULD BE DETRIMENTAL, THE ENTIRE TRENCH SHALL BE BACKFILLED WITH IMPORTED GRAVEL AND COMPACTED TO 95% OF MAXIMUM DENSITY.

DIP WATERLINE BEDDING DETAIL

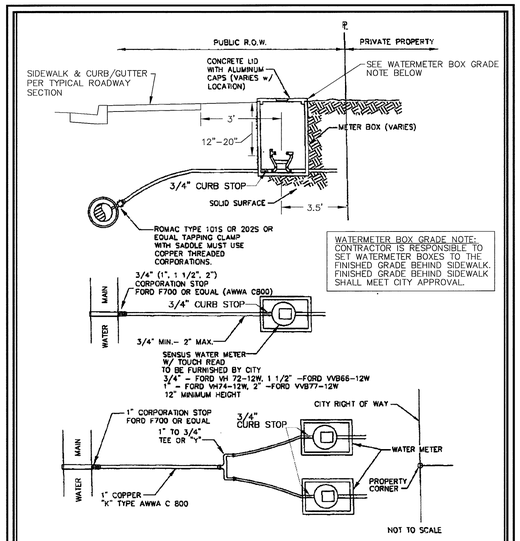
NOTES
(1.) For close coupled hydrants use all flange type connections.
(2.) If hydrant rises through concrete use expansion strip around hydrant barrel.
(3.) Hydrant shall be Iowa or M.H. 929T hydrant.



NOT TO SCALE

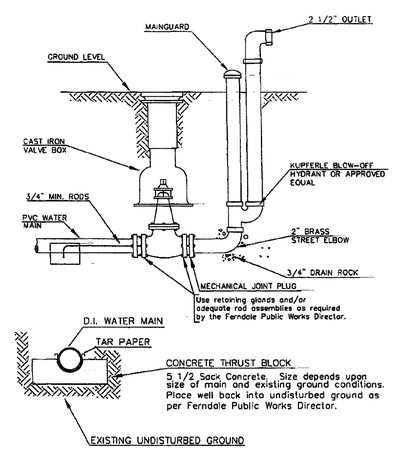
APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	FIRE HYDRANT ASSEMBLY	W–1

JUNE 1995



WATERMETER BOX GRADE NOTE: CONTRACTOR IS RESPONSIBLE TO SET WATERMETER BOXES TO THE FINISHED GRADE BEHIND SIDEWALK. FINISHED GRADE BEHIND SIDEWALK SHALL MEET CITY APPROVAL.

TYPICAL WATER SERVICE (3/4" TO 2")

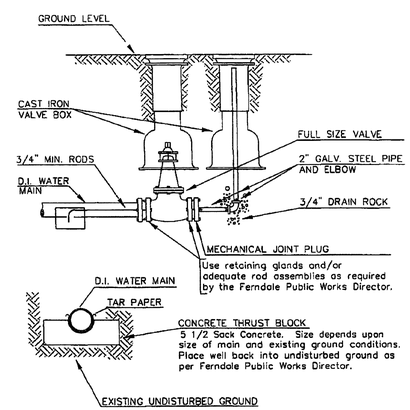


2" blow–off, non–extendable main to be used where mains will not be extended. For mains with future extension, refer to 2" blow–off.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	2" BLOW–OFF NON–EXTENDABLE MAIN	W–10

JUNE 1995 2091WA1A/W-10

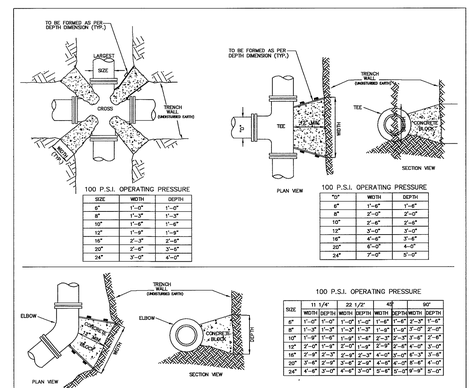


2" blow–off to be used where the main will extended in the future. For mains with no further extension, refer to 2" blowoff, non–extendable main.

NOT TO SCALE

APPROVED	CITY OF FERNDALE	DRAWING
Public Works Director Date	2" BLOW–OFF WATER MAIN EXTENSION	W–9

JUNE 1995



100 P.S.I. OPERATING PRESSURE

SIZE	WIDTH	DEPTH
6"	1'–0"	1'–0"
8"	1'–3"	1'–3"
10"	1'–6"	1'–6"
12"	1'–9"	1'–9"
16"	2'–3"	2'–6"
20"	2'–6"	3'–0"
24"	3'–0"	4'–0"

100 P.S.I. OPERATING PRESSURE

"D"	WIDTH	DEPTH
6"	1'–6"	1'–6"
8"	2'–0"	2'–0"
10"	2'–6"	2'–6"
12"	3'–0"	3'–0"
16"	4'–6"	3'–6"
20"	6'–0"	4'–0"
24"	7'–0"	5'–0"

100 P.S.I. OPERATING PRESSURE

SIZE	11 1/4°		22 1/2°		45°		90°	
	WIDTH	DEPTH	WIDTH	DEPTH	WIDTH	DEPTH	WIDTH	DEPTH
6"	1'–0"	1'–0"	1'–0"	1'–0"	1'–6"	1'–6"	2'–3"	1'–6"
8"	1'–0"	1'–0"	1'–0"	1'–0"	1'–6"	1'–6"	2'–3"	2'–0"
10"	1'–0"	1'–6"	1'–0"	1'–6"	2'–3"	2'–3"	3'–6"	2'–6"
12"	1'–0"	1'–6"	1'–0"	1'–6"	2'–3"	2'–6"	3'–6"	3'–0"
16"	2'–0"	1'–6"	2'–0"	1'–6"	2'–6"	3'–0"	4'–6"	3'–0"
20"	2'–6"	2'–0"	2'–6"	2'–0"	3'–0"	3'–6"	5'–0"	3'–6"
24"	3'–0"	2'–0"	3'–0"	2'–0"	3'–6"	4'–0"	6'–0"	4'–0"

1. PLACE 8 MIL. POLYETHYLENE BETWEEN CONCRETE AND FITTING.
2. ALL THRUST BLOCKING SHALL BE CAST–IN–PLACE CONCRETE HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
3. THRUST BLOCKING SHALL BE CAST AGAINST UNDISTURBED EARTH. THRUST BLOCK ORIENTATION SHALL BE SUCH THAT THE CENTER OF THE FITTING CORRESPONDS WITH THE CENTER OF THE THRUST BLOCK.
4. ALL DIMENSIONS APPLY TO STABLE TRENCH WALLS, UNDER VARIABLE SOIL CONDITIONS SIZE OF THRUST BLOCK SHALL BE DETERMINED BY CITY ENGINEER.

APPROVED
JAN 17 2006
BY
CITY OF FERNDALE

THRUST BLOCK DETAILS
NTS

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: N.A.
DESIGN	BEA	JVY	VERT: N.A.
XREF:			
DWG: P:\PSE Project\2005054\DWGS\COVER_NOTES_DETAILS_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
REVISIONS			

No.		DATE
1	AS–BUILT DRAWINGS	04/03/07
2	AS–BUILT DRAWINGS	07/02/07
3	AS–BUILT DRAWINGS	10/01/07
ISSUE		

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
WATER SYSTEM DETAILS

JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 33 OF 34

JEFFREY VANDERHAEGEN
STATE OF WASHINGTON
37432
REGISTERED PROFESSIONAL ENGINEER
10-11-07
EXPIRES: 10/10/07

0390.033 7-10-09 DD

PACIFIC SURVEY & ENGINEERING INC
1812 CORNWALL, BELLINGHAM, WA 98225 PHONE:671.7387 FAX:671.4685 EMAIL: pse@psesurvey.com www.psesurvey.com

GENERAL CONSTRUCTION NOTES

GENERAL REQUIREMENTS

1. ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND TO THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE STATE OF WASHINGTON, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. WORK AND MATERIALS SHALL ALSO CONFORM TO THE CITY OF FERNDALE DEVELOPMENT STANDARDS. IN CASE OF A CONFLICT BETWEEN PLANS, REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.

2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER CONSTRUCTION DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.

3. THE CONTRACTOR SHALL OBTAIN REVOCABLE ENCROACHMENT PERMITS FROM THE CITY OF FERNDALE AND WHATCOM COUNTY PRIOR TO COMMENCING WORK WITHIN PUBLIC RIGHTS-OF-WAY.

4. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH REPRESENTATIVES OF THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT AND THE PROJECT ENGINEER A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

5. ALL WORK AND MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE. REPRESENTATIVES FROM THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT MUST INSPECT ALL WORK. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS AS FOLLOWS:
   - A. PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES.
   - B. PLACEMENT OF WATER MAIN AND BACKFILLING OF WATER MAIN TRENCH WITHIN ROAD RIGHTS-OF-WAY OR IN WATERLINE EASEMENTS TO BE DEDICATED TO THE CITY OF FERNDALE.
   - C. PLACEMENT AND BACKFILLING OF UNDERGROUND UTILITIES, STORM SEWER AND SANITARY SEWER WITHIN ROAD RIGHTS-OF-WAY OR IN EASEMENTS TO BE DEDICATED TO THE CITY OF FERNDALE.
   - D. GRADING OF PUBLIC ROADWAY AT:
     - 1) COMPLETION OF EXCAVATION TO SUBGRADE.
     - 2) COMPLETION OF BALLAST COURSE PLACEMENT.
     - 3) COMPLETION OF CRUSHED SURFACING COURSE PLACEMENT.
   - E. POURING OF CURB AND GUTTER AND SIDEWALK IN PUBLIC ROADWAY.
   - F. ASPHALT PAVING IN PROGRESS IN PUBLIC ROADWAY.
   - G. OVERALL INSPECTION FOR FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING AND MONUMENT PLACEMENT.
   - H. END OF MAINTENANCE PERIOD.

6. SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL ABOVE GROUND AND BURIED DEBRIS AND WASTE THAT MAY BE PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING SUB-SURFACE CONDITIONS AND SOILS TYPES.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS 1-07.23-TRAFFIC CONTROL, SHALL APPLY.

8. A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

9. THE CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF ANY PROPOSED DEVIATIONS FROM THE APPROVED PLANS PRIOR TO CONSTRUCTION OF THE REVISED IMPROVEMENTS. THE CONTRACTOR SHALL KEEP RECORDS OF ALL DEVIATIONS AND SHALL FORWARD THEM TO THE ENGINEER AND TO THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT.

10. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE BASED UPON A COMBINATION OF FIELD RECONNAISSANCE, FIELD SURVEY AND UTILITY COMPANY RECORDS AND ARE SHOWN ON THESE PLANS IN AN APPROXIMATE WAY ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL OF THE VARIOUS UTILITY COMPANIES TO ARRANGE FOR FIELD LOCATIONS OF ALL EXISTING UTILITY FACILITIES PRIOR TO STARTING CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COSTS INCURRED BECAUSE OF DAMAGE DONE TO EXISTING FACILITIES BY THE CONTRACTOR'S WORK FORCE, INCLUDING COSTS FOR REPAIRS, WHICH WILL BE CONTRACTOR'S SOLE RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL EXISTING UTILITIES AND TO NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT BETWEEN THE APPROVED PLANS AND THE LOCATION OF ANY EXISTING UTILITIES.
THE CONTRACTOR SHALL CONTACT UTILITY LOCATION SERVICE AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION. PHONE: 1-800-424-5555.

11. THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION.

12. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF ANY DISCREPANCIES EXIST BETWEEN ACTUAL FIELD CONDITIONS AND THE ASSUMED CONDITIONS SHOWN ON THE APPROVED PLANS PRIOR TO PROCEEDING WITH CONSTRUCTION, SO THAT NECESSARY PLAN OR DESIGN CHANGES CAN BE MADE. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR EXTRA WORK, INCLUDING REMOVAL AND RECONSTRUCTION OF NEWLY BUILT IMPROVEMENTS, MADE NECESSARY BY ERRORS OF DIMENSION OR GRADE ON THE APPROVED PLANS, UNLESS SUCH NOTIFICATION WAS GIVEN.

13. THROUGHOUT THE PERIOD OF CONSTRUCTION, CONTRACTOR SHALL COMPLY WITH THE TERMS OF ALL PERMITS.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING.

15. ALL MATERIALS TESTING REQUIREMENTS FOR THE IMPROVEMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED IN ACCORDANCE WITH THE INSTRUCTIONS OF THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR. CONTRACTOR SHOULD DETERMINE THESE REQUIREMENTS PRIOR TO THE START OF CONSTRUCTION.

16. ALL PORTLAND CEMENT CONCRETE SHALL BE APWA CLASS 3000, PER APWA STANDARD SPECIFICATIONS, SECTION 6-02.3(2)B.

17. UNDERGROUND UTILITIES CONSTRUCTION
   - A. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ENGINEER TO ASSURE ACCURATE AND TIMELY COLLECTION OF ALL REQUIRED AS-BUILT DATA. THIS DATA MUST ACCURATELY REFLECT THE LOCATIONS OF ALL UNDERGROUND UTILITIES, BOTTOM OF PIPE ELEVATIONS, INVERT ELEVATIONS, MANHOLE LOCATIONS, BLOW-OFF LOCATIONS AND INVERTS OF SERVICE CONNECTIONS (BOTH AT PIPE AND AT PROPERTY LINE), VERTICAL AND HORIZONTAL BENDS, SERVICE BOXES AND METERS, VALVES AND HYDRANTS. CALL AT LEAST 48-HOURS BEFORE BURYING UNDERGROUND PIPE TO ASSURE AND FACILITATE REQUIRED AS-BUILT SURVEY. THE ENGINEER WILL PROVIDE CERTIFIED AS-BUILT MYLARS TO PUBLIC WORKS UPON PROVISIONAL ACCEPTANCE OF ROAD AND UTILITY IMPROVEMENTS.
   - B. THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE SUBJECT TO THE FOLLOWING CRITERIA:
     - i. NO MORE THAN 500 FEET OF TRENCH SHALL BE OPENED AT ONE TIME.
     - ii. WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF DITCHES.
     - iii. TRENCH DEWATERING DEVICES SHALL DISCHARGE INTO SEDIMENT TRAPS OR SEDIMENT PONDS.
     - iv. WHERE PRACTICAL, INSTALL GRAVITY PIPE UTILITIES PRIOR TO INSTALLATION OF OTHER UTILITIES.
   - C. UTILITY CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.
   - D. TESTING OF NEW WATER LINES, SANITARY SEWER LINES, AND STORM SEWER SYSTEMS SHALL NOT BE PERFORMED UNTIL ALL OTHER ADJACENT UTILITIES HAVE BEEN INSTALLED.

ROAD

1. THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF THE STANDARD STREET SECTION:

TYPICAL STREET SECTION	TYPICAL SECTION ON SHEET 1 OF THESE PLANS
PCC CURB AND GUTTER	CITY OF FERNDALE STANDARD DETAIL (COFSD) R-9
PCC SIDEWALKS	COFSD R-12 & TYP. SECTION ON SHEET 1
PCC CURB RAMPS, ADA APPROACHES	WSDOT STD. DETAIL F-3
SIDEWALK DRAINS	COFSD ST-15
MONUMENTS	COFSD S-2

2. ALTERNATE PAVEMENT SECTIONS, WHEN DESIGNED BY A LICENSED GEOTECHNICAL ENGINEER, MAY BE SUBMITTED TO THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR FOR CONSIDERATION AND, IF APPROVED, USED IN PLACE OF THE PAVEMENT SECTION SHOWN ON THESE PLANS.

3. PROJECT SURVEYOR OR THEIR DESIGNEE SHALL SURVEY THE ELEVATION OF THE COMPLETED SUBGRADE ALONG THE ROADWAY CENTERLINE AT 25-FOOT INTERVALS. THE PROJECT SURVEYOR SHALL SUBMIT THE SURVEY DATA TO THE CITY OF FERNDALE AND THE ENGINEER FOR REVIEW. ALL SUBGRADE ELEVATIONS SHALL BE AT OR BELOW THE DESIGN SUBGRADE ELEVATION. NO TOLERANCE IS PROVIDED FOR SUBGRADE ABOVE THE DESIGN SUBGRADE ELEVATION. OTHER METHODS OF SUBGRADE CERTIFICATION MAY BE USED IF MUTUALLY AGREED UPON BY THE CITY, CONTRACTOR, AND ENGINEER.

4. ROADWAY EXCAVATION WITHIN THE ROADWAY PRISM SHALL BE CUT TO A UNIFORM GRADE. THE COMPLETED SUBGRADE SURFACE SHALL NOT VARY MORE THAN 0.10-FOOT FROM THE LOWER EDGE OF A 15-FOOT STRAIGHTEDGE PLACED ON THE SUBGRADE PARALLEL TO THE CENTERLINE UNLESS APPROVED BY THE ENGINEER.

5. EARTHWORK
   - A. THE CONTRACTOR SHALL CLEAR, GRUB AND CLEAN UP THOSE AREAS SHOWN ON THE PLANS.
   - B. THE CONTRACTOR SHALL RAZE, REMOVE AND DISPOSE OF ALL BUILDING AND FOUNDATIONS, STRUCTURES, FENCES AND OTHER OBSTRUCTIONS THAT LIE WHOLLY OR PARTIALLY WITHIN THE PROJECT LIMITS.
   - C. THE CONTRACTOR SHALL REMOVE AND REPLACE ALL EXISTING UNCOMPACTED OR POORLY COMPACTED FILL SOILS WITHIN THE THE ROAD PRISM AT THE DIRECTION OF THE ENGINEER.
   - D. THE CONTRACTOR SHALL EXCAVATE AND GRADE TO THE ALIGNMENT, GRADE AND CROSS-SECTIONS SHOWN IN THE PLANS OR ESTABLISHED BY THE ENGINEER.
   - E. MAXIMUM DENSITY AND OPTIMUM MOISTURE FOR GRANULAR MATERIALS WILL BE DETERMINED USING ASTM D-1557 TEST METHOD.
   - F. UNSUITABLE MATERIAL NOT FIT FOR USE AS A SUB-GRADE SHALL BE EXCAVATED TO THE BOUNDARIES SET BY THE ENGINEER AND REPLACED WITH A SUITABLE BACKFILL MATERIAL.
   - G. THE ENGINEER IS REQUIRED TO CERTIFY SUBGRADE, IN WRITING, PRIOR TO PAVING.
6. BASE COURSES
   - A. GRAVEL BASES AND BALLAST SHALL NOT HAVE THE PERCENT PASSING THE U.S. NO. 200 SIEVE EXCEED 5%.
   - B. BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY.
   - C. OWNER SHALL BE RESPONSIBLE FOR ALL COMPACTION TESTING. ALL TESTING SHALL BE THROUGH ENG. REV. ACCOUNT AND PAID FOR BY OWNER.
7. PAVEMENTS
   - A. SOIL RESIDUAL HERBICIDE SHALL BE PLACED WITHIN 24 HOURS OF PAVING.
   - B. A TACK COAT OF ASPHALT SHALL BE APPLIED BETWEEN ALL COURSES OF ASPHALT.
   - C. ALL PAVEMENT REPAIR SHALL BE SAW-CUT BEFORE REMOVAL. AR-4000W SHALL BE APPLIED TO ALL EDGES OF EXISTING PAVEMENT.
   - D. WHERE NEWLY CONSTRUCTED PAVING MEETS EXISTING PAVING, THE APPLICANT SHALL PROVIDE A SMOOTH TRANSITION FROM EXISTING TO PROPOSED PAVING. CONTRACTOR SHALL COLD PLANE PER DIMENSIONS SPECIFIED ON THE PLANS, AND INSTALL A MINIMUM 2-FOOT WIDE PETROTAC PAVING FABRIC, OR EQUIVALENT, OVER JOINT BETWEEN PAVING LIFTS.
   - E. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF THE MUTCD.
8. STREET LIGHTING
   - A. CONTRACTOR SHALL PROVIDE STREET ILLUMINATION IN ACCORDANCE WITH THE PROVISIONS OF SECTION 707 OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS. 100-WATT HIGH PRESSURE SODIUM LAMPS SHALL BE INSTALLED ON STANDARD CONCRETE OCTAGONAL OR ROUND POLES NO LESS THAN 25 FEET HIGH AND SPACED NO MORE THAN 250' APART, MEASURED ALONG THE PAVEMENT CENTERLINE. POLE LOCATIONS ARE SHOWN ON THESE PLANS.
   - B. FINAL LOCATIONS OF STREET LIGHTS IS TO BE COORDINATED WITH PUGET SOUND ENERGY.
   - C. CONTRACTOR IS TO COMPLY WITH THE SPECIFICATIONS SHOWN ON WSDOT STANDARD DETAIL J-11A, STANDARD JUNCTION BOX, UNLESS OTHERWISE DIRECTED BY THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR.
   - D. CONTRACTOR MUST INFORM THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF A PROPOSED CONNECTION AT LEAST FOUR (4) WORKING DAYS IN ADVANCE.
9. MAILBOXES
   - A. MAILBOX STRUCTURES SHALL BE IN ACCORDANCE WITH DETAIL SHEET 15. FINAL LOCATION AS DETERMINED BY USPS AND APPROVED BY CITY OF FERNDALE.
   - B. MAILBOXES SHALL BE TYPE I, II, AND/OR III - CBU (CENTRAL BOX UNIT), USPS APPROVED.

STORM DRAINAGE

1. THE FOLLOWING STANDARD DETAILS SHALL BE USED FOR CONSTRUCTION OF STORM DRAIN IMPROVEMENTS:

"MAIN LINE" CATCH BASINS	TYPE 1, 1L OR 2, WSDOT STD. DETAILS B-1, B-1A OR B-1E
"RESIDENTIAL SERVICE LINE" CATCH BASINS	CITY OF FERNDALE STANDARD DETAIL (COFSD) ST-7
THRU-CURB INLET FRAME AND GRATE	CITY OF FERNDALE STANDARD DETAIL (COFSD) ST-8
SIDEWALK DRAINS	COFSD ST-15

2. ALL PIPE AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS SECTION 7-08.3(1). THIS SHALL INCLUDE LEVELING AND COMPACTING THE TRENCH BOTTOM, THE TOP OF THE FOUNDATION MATERIAL AND ANY REQUIRED PIPE BEDDING TO A UNIFORM GRADE SO THAT THE ENTIRE PIPE IS SUPPORTED BY A UNIFORMLY DENSE UNYIELDING BASE. DRAINAGE MATERIALS SHALL CONFORM TO WSDOT STANDARD SPECIFICATIONS SECTION 9-05.

3. STORM SEWER PIPE HAVING DIAMETERS GREATER THAN 8" SHALL BE CORRUGATED POLYETHYLENE PIPE (CPEP) AND SHALL CONFORM TO WSDOT STANDARD SPECIFICATIONS, SECTION 9-05.20. STORM SEWER PIPE HAVING DIAMETERS 8" AND SMALLER SHALL BE POLYVINYL CHLORIDE (PVC) PIPE AND SHALL CONFORM TO WSDOT STANDARD SPECIFICATIONS, SECTION 9-05.12.

4. BACK OF WALK DRAIN SHALL BE 4" SMOOTH WALL PERFORATED PVC PIPE, ASTM D 3034 SDR35, INSTALLED IN CUT SECTIONS PER COFSD ST-15.

5. ALL CATCH BASIN GRATES SHALL INCLUDE THE STAMPING "OUTFALL TO STREAM, DUMP NO POLLUTANTS".

6. UNLESS OTHERWISE SPECIFIED, CAST IRON PRODUCTS SHALL CONFORM TO ASTM DESIGNATION "A 48 CLASS 30" AND DUCTILE IRON PRODUCTS TO ASTM DESIGNATION "A 536 GRADE 80-55-06".

7. ALL DRAINAGE STRUCTURES, SUCH AS CATCH BASINS AND MANHOLES, NOT LOCATED WITHIN A TRAVELED ROADWAY OR SIDEWALK, SHALL HAVE SOLID LOCKING LIDS. ALL DRAINAGE STRUCTURES ASSOCIATED WITH A PERMANENT RETENTION/DETENTION FACILITY SHALL HAVE SOLID LOCKING LIDS.

8. EACH DRAINAGE SERVICE STUB SHALL BE CAPPED WITH A WATERTIGHT PLUG. EACH STUB SHALL BE MARKED FOR LOCATION WITH A 2" DIA. WHITE PVC PIPE (MIN. SCHEDULE 40) WITH THE TOP 18" STENCILED WITH THE WORD "STORM" AND THE PIPE INVERT INDICATED. THE LOCATION MARKER SHALL BE CONNECTED TO THE SERVICE STUB BY A #12 COPPER WIRE.

9. LOT/ROOF DRAIN SERVICES SHALL BE MIN. 4" PVC PIPE, ASTM D 3034 SDR35.
MULTIPLE RESIDENTIAL STORM DRAIN SERVICES SHALL BE 6" PVC PIPE, DRAINING TO A COFSD ST-7 INLET.
8" PVC PIPE SHALL BE USED TO CONNECT EACH ST-7 INLET TO A NEARBY TYPE 1, TYPE 1L, OR TYPE 2 CATCH BASIN.

10. ALL STORM STUB INVERT ELEVATIONS SHALL BE CONSTRUCTED TO FACILITATE POSITIVE FLOW TO CATCH BASIN.

SANITARY SEWER

1. THE FOLLOWING STANDARD DETAILS SHALL BE USED IN CONSTRUCTING SANITARY SEWER IMPROVEMENTS:

PIPE BEDDING	CITY OF FERNDALE STANDARD DETAIL (COFSD) SS-1
TRENCH BACKFILL	COFSD SS-15 & SS-1 & WSDOT STD. SPEC. SEC. 9-03.12
SS MANHOLE, TYPE 1-48"	COFSD SS-2
SSMH RING & COVER, TYPE 2	COFSD SS-9 (BOLT DOWN/WATERTIGHT)
SS CLEANOUTS	COFSD SS-5
SIDE SEWERS	COFSD SS-6, SS-8 & SS-13

2. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH A.P.W.A. STANDARD SPECIFICATIONS, 1996 EDITION, AND SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE.

3. ALL WORK MUST BE INSPECTED TO THE SATISFACTION OF THE CITY OF FERNDALE. 24 HOUR NOTICE MUST BE GIVEN PRIOR TO STARTING WORK. TESTING OF THE SEWER SYSTEM AND ALL CONNECTIONS TO EXISTING MAINS SHALL BE DONE IN THE PRESENCE AND UNDER THE SUPERVISION OF A CITY OF FERNDALE REPRESENTATIVE.

4. SANITARY SEWER MAINS SHALL BE A MINIMUM 8 INCH DIAMETER PVC PIPE (SDR-35) CONFORMING TO THE PROVISIONS OF ASTM D 3034 AND INSTALLED TO CITY SPECIFICATIONS.

5. SANITARY SEWER PIPE BEDDING SHALL BE PEA GRAVEL PER COFSD SS-1. ALL TRENCHES SHALL BE BACKFILLED WITH CLASS B BANK RUN GRAVEL OR SUITABLE NATURAL MATERIAL AS DIRECTED BY THE ENGINEER, AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY.

6. ALL MANHOLES SHALL BE INSTALLED PER CITY OF FERNDALE SS-2, SS-3 OR SS-4, AND SHALL BE BE PRE-CHANNELED. MANHOLE CONES ARE TO BE OFFSET SUCH THAT LADDER RUNGS ARE PARALLEL TO THE FLOW.

7. ALL SIDE SEWERS SHALL BE INSTALLED PER CITY OF FERNDALE STANDARD DETAILS SS-6, SS-8 OR SS-13, EXCEPT THAT SINGLE SIDE SEWERS SHALL HAVE A MINIMUM DIAMETER OF 4".

8. CONTRACTOR SHALL EXTEND SEWER STUBS 5 FEET BEYOND UTILITY CORRIDOR OR 15 FEET BEYOND RIGHT-OF-WAY LINE.

9. EACH SIDE SEWER STUB SHALL BE CAPPED WITH A WATERTIGHT PLUG. EACH STUB SHALL BE MARKED FOR LOCATION WITH A 2" DIA. PVC PIPE (MIN. SCHEDULE 40) WITH THE TOP 18" PAINTED GREEN AND STENCILED WITH THE WORD "SEWER" AND THE PIPE INVERT INDICATED. THE LOCATION MARKER SHALL BE CONNECTED TO THE SERVICE STUB BY A #12 COPPER WIRE.

WATER

1. THE FOLLOWING STANDARD DETAILS SHALL BE USED IN CONSTRUCTING WATER SUPPLY SYSTEM IMPROVEMENTS:

PIPE BEDDING	SEE DETAIL, SHEET 16
TRENCH BACKFILL	COFSD W-11 & WSDOT STD. SPEC. SEC. 9-03.12
BLOW-OFF ASSEMBLY	COFSD W-9 & W-10
FIRE HYDRANT ASSEMBLY	COFSD W-1
THRUST BLOCKING	COFSD W-2, W-3 & W-4
WATER SERVICE	COFSD W-6, & DETAIL SHEET 16

2. ALL WATER MAIN PIPE SHALL BE DUCTILE IRON, MINIMUM CLASS 50, PER AWWA STANDARDS H3-71 AND C151-71, WITH CEMENT LINING PER AWWA STANDARD C104-71. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS, SECTIONS 702 AND 705.

3. MATERIAL FOR FITTINGS SUCH AS CROSSES, TEES, BENDS, REDUCERS AND SLEEVES SHALL BE DUCTILE IRON. JOINTS SHALL BE M.J., FLANGED OR PUSH-ON JOINTS AND SHALL CONFORM TO AWWA SPECIFICATIONS C-110-71 AND C-104-71.

4. CONCRETE BLOCKING SHALL BE AS SPECIFIED IN CITY OF FERNDALE STANDARD DETAILS W-2, W-3 AND W-4, OR AS DIRECTED BY THE PROJECT ENGINEER. BLOCKS SHALL BE INSTALLED AS SPECIFIED IN SECTION 7-11.3(13) OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE OR MUNICIPAL CONSTRUCTION. NO PRE-CAST BLOCKS ARE ALLOWED.

5. CONNECTIONS TO EXISTING WATER MAINS - THE CONTRACTOR MUST NOTIFY THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF A PROPOSED CONNECTION AT LEAST FOUR WORKING DAYS IN ADVANCE. ALL CONNECTIONS SHALL BE DONE BY THE CONTRACTOR. CONNECTION TO EXISTING CITY WATER SYSTEM SHALL BE PAID IN ADVANCE BY A DEPOSIT.

6. ALL HYDROSTATIC TESTING AND DISINFECTION OF WATER MAINS SHALL CONFORM TO SECTION 7-09.3 OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE OR MUNICIPAL CONSTRUCTION - CURRENT EDITION. HYDROSTATIC TEST PRESSURE FOR WATER MAIN ACCEPTANCE SHALL BE 225 PSI AND SHALL BE DONE ACCORDING TO CITY OF FERNDALE REQUIREMENTS. ALL DISINFECTION AND BACTERIOLOGICAL TESTS SHALL BE CONDUCTED BY THE CITY OF FERNDALE LABORATORY. THE PIPE WILL NOT PASS TESTING UNLESS A ZERO BACTERIAL COUNT IS MEASURED ON TWO CONSECUTIVE TESTS, CONDUCTED 24 HOURS APART.

7. BACKFILL SHALL BE GRAVEL BASE, CLASS B, IN ALL STREET RIGHTS-OF-WAY, COMPACTED TO MINIMUM 95% OPTIMUM DENSITY. IN UNIMPROVED AREAS, MINIMUM COMPACTION SHALL BE 90% OF OPTIMUM DENSITY.

8. ALL PIPE SHALL HAVE A MINIMUM COVER OF 42".

9. ALL VALVES SHALL BE EITHER GATE OR BUTTERFLY TYPE VALVES AND SHALL BE INSTALLED WITH SLIP TYPE CAST IRON VALVE BOXES.

   GATE VALVES SHALL BE USED FOR LINES 2 INCHES THROUGH 10 INCHES IN DIAMETER. SHORT-BODY VALVES SUITABLE FOR A NON-SHOCK SHUT-OFF PRESSURE OF 130 PSI AND SUITABLE FOR DIRECT BURIAL ARE SPECIFIED. GATE VALVES SHALL BE RESILIENT SEATED IRON-BODY, FULL-BRONZE MOUNTED VALVES CONFORMING TO AWWA C509 AND SUITABLE FOR SERVICE WITH THE TYPE AND CLASS OF PIPE USED.

   ALL VALVES SHALL HAVE NON-RISING STEMS AND SHALL OPEN COUNTERCLOCKWISE AND SHALL BE EQUIPPED WITH A 2 INCH SQUARE OPERATING NUT. VALVES WILL BE FLANGE OR M.J. JOINTS.

   VALVE MARKERS SHALL BE LOCATED OUTSIDE OF PAVEMENT SECTIONS.

10. WATER SERVICE TAP INSTALLATIONS SHALL MEET THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS. ALL WATER SERVICE STUB ENDS SHALL BE MARKED FOR LOCATION WITH A 4' LONG 2" X 4" TIMBER, PAINTED BLUE.

11. CONTRACTOR IS RESPONSIBLE TO SET WATERMETER BOXES TO THE FINISHED GRADE BEHIND SIDEWALK. FINISHED GRADE BEHIND SIDEWALK SHALL MEET CITY APPROVAL.

12. FIRE HYDRANTS AND FIRE MAINS MUST CONFORM TO COF STANDARD DETAIL W-1 (WSDOT B-19) AND THE FOLLOWING STANDARDS:
   - A. FIRE HYDRANTS SHALL HAVE TWO INDIVIDUALLY-VALVED 2-1/2" PORTS AND ONE 5-1/4" MAIN VALVE OPENING. A 4-1/2" NST PUMPER NOZZLE AND A 5" STORZ PORT WITH CAP AND AIRCRAFT CABLE SHALL BE SUPPLIED. HYDRANTS SHALL EITHER BE IOWA OR M.H. 929T HYDRANTS.
   - B. FIRE HYDRANTS SHALL HAVE THE STORZ PORT FACING THE REQUIRED ACCESS AND THE BASE FLANGE OF THE HYDRANT MUST NOT VARY MORE THAN 1 FOOT IN ELEVATION FROM THE GRADE LEVEL OF THE REQUIRED ACCESS. THE LOWEST STEM SHALL BE A MINIMUM OF 14" ABOVE THE GROUND.
   - C. IF THE PUBLIC WORKS DIRECTOR DETERMINES THAT FIRE HYDRANTS ARE VULNERABLE TO VEHICULAR DAMAGE, APPROPRIATE CRASH POSTS SHALL BE PROVIDED. NO OBSTRUCTIONS SHALL EXIST WITHIN A 3-FOOT WORKING AREA OF EACH REQUIRED ACCESS. CRASH POSTS SHALL BE 4" CEMENT-FILLED PIPE A MIN. OF 3' IN HEIGHT WITH A MIN. OF 2' OF PIPE BELOW GRADE. HYDRANT SHUTOFF VALVES SHALL BE LOCATED BETWEEN 5' AND 20' FROM THE HYDRANT.
   - D. UNDERGROUND SUPPLIES TO FIRE HYDRANTS MUST BE INSPECTED. SUCH INSPECTION SHALL INCLUDE VISUAL INSPECTION OF PIPING AND HYDROSTATIC PRESSURE TESTING TO A MIN. OF 200 PSI OR 50 PSI IN EXCESS OF STREET MAIN PRESSURE, WHICHEVER IS GREATER. A FLOW TEST WILL BE REQUIRED WHEN INSTALLATION IS COMPLETE.
   - E. FIRE HYDRANTS MUST BE MAINTAINED IN AN OPERABLE CONDITION AT ALL TIMES AND MUST BE REPAIRED OR REPLACED WHEN DEFECTIVE. HYDRANTS SHALL BE FULLY OPERABLE BEFORE CONSTRUCTION COMMENCES ABOVE GRADE LEVEL.

AS-BUILT NOTE:
ONLY INFORMATION NOTED AS "(AB)" HAS BEEN FIELD SURVEYED OR MEASURED DURING CONSTRUCTION.

AS-BUILT DRAWING

APPROVED
JAN 17 2008
BY RC
CITY OF FERNDALE

00390.034 7-10-09 DD

FIELD BOOKS	TBM. NO.	LOCATION	ELEV.
DESIGN: SEE SURVEY NOTES, SHEET 1			
STAKING:			
ASBUILT:			
SURVEY REFERENCE	VERTICAL DATUM		

DATA	DRAWN BY	CHECKED BY	SCALE
BASE	BEA	BEA	HORIZ: N.A.
DESIGN	BEA	JVY	VERT: N.A.
XREF:			
DWG: P:\PSE Project\2005054\DWGS\COVER_NOTES_DETAILS_AB.dwg			
PLAN CHECK			

REV	DATE	DESCRIPTION	BY
		REVISIONS	

No.		DATE
1	AS-BUILT DRAWINGS	04/03/07
2	AS-BUILT DRAWINGS	07/02/07
3	AS-BUILT DRAWINGS	10/01/07
	ISSUE	

CALL BEFORE YOU DIG
1-800-424-5555

CROWN POINT HOLDINGS, INC.
6540 NORTH STAR ROAD
FERNDALE, WASHINGTON 98248

WHISKEY CREEK PLAT
ROADWAY & UTILITY IMPROVEMENT PLANS
GENERAL CONSTRUCTION NOTES
JOB #: 2005054 COF PROJECT NO. LP 2006-03 SHEET 34 OF 34

STEVEN A. VANDERLAAN STATE OF WASHINGTON 37432 REGISTERED PROFESSIONAL ENGINEER 10-11-07
EXPIRES: 10/10/08